



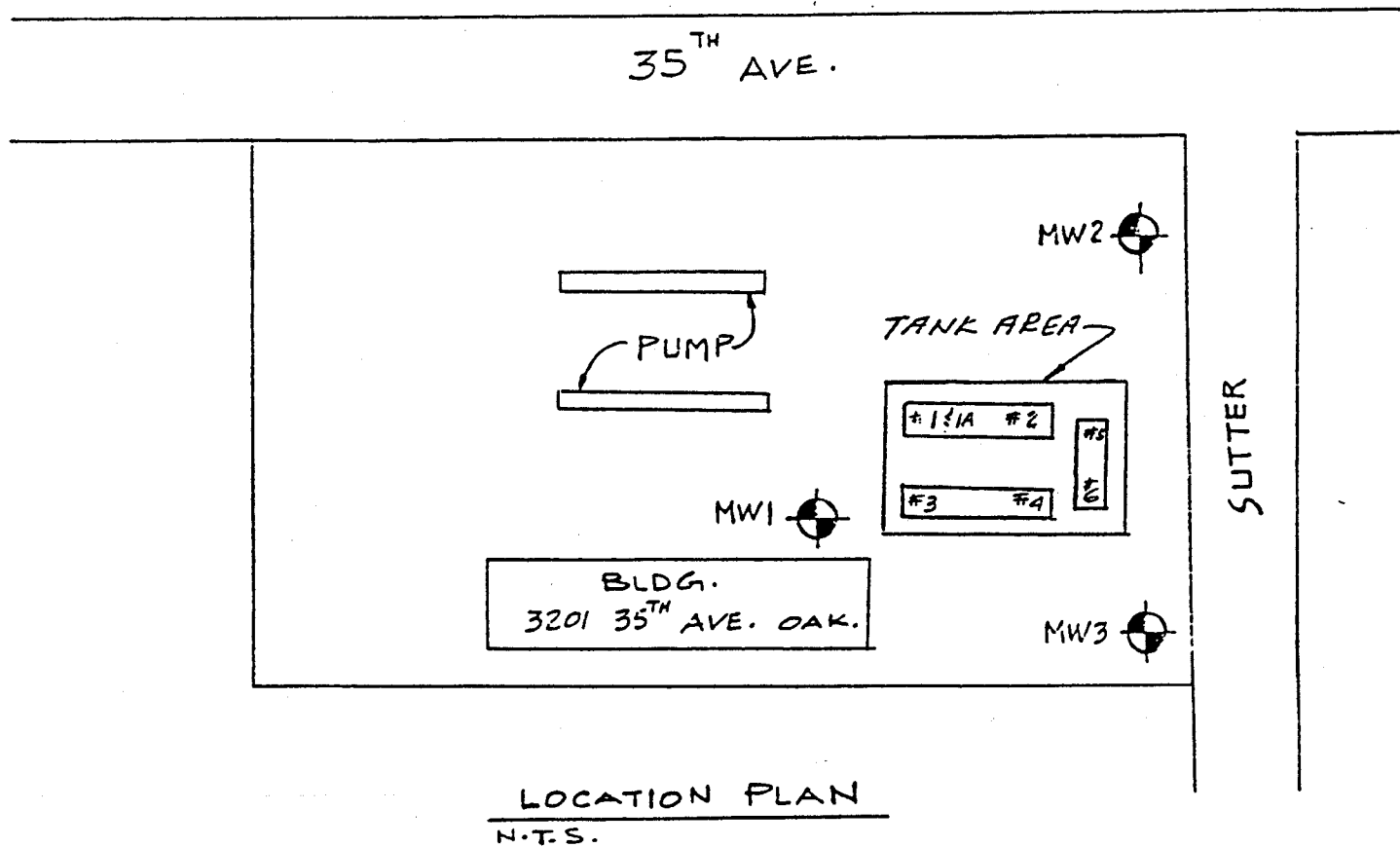
# KAPREALIAN ENGINEERING, INC.

Consulting Engineers

535 Main Street

Martinez, Ca. 94553

(415) 372-5444



 MW (MONITORING WELL)



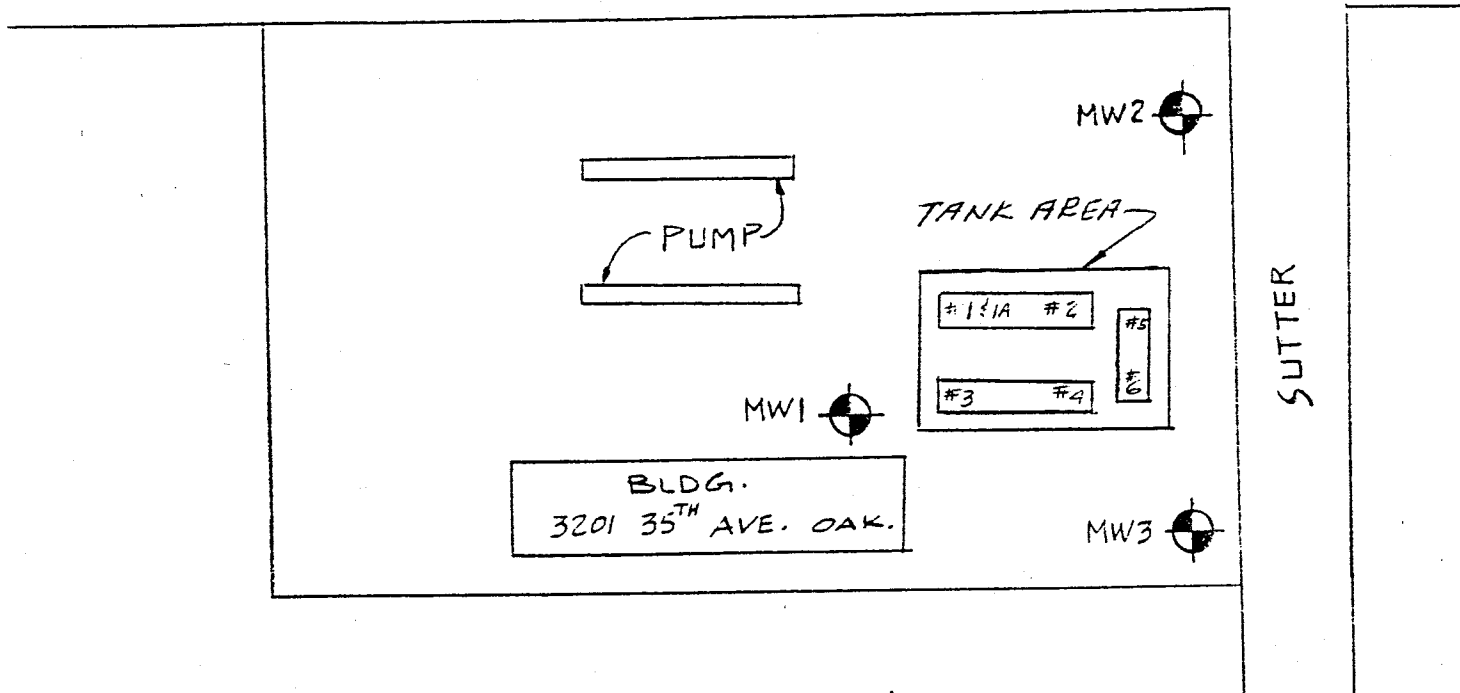
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535 Main Street  
Martinez, Ca. 94553  
(415) 372-5444



35<sup>TH</sup> AVE.



LOCATION PLAN  
N.T.S.

 MW (MONITORING WELL)

11/22/94

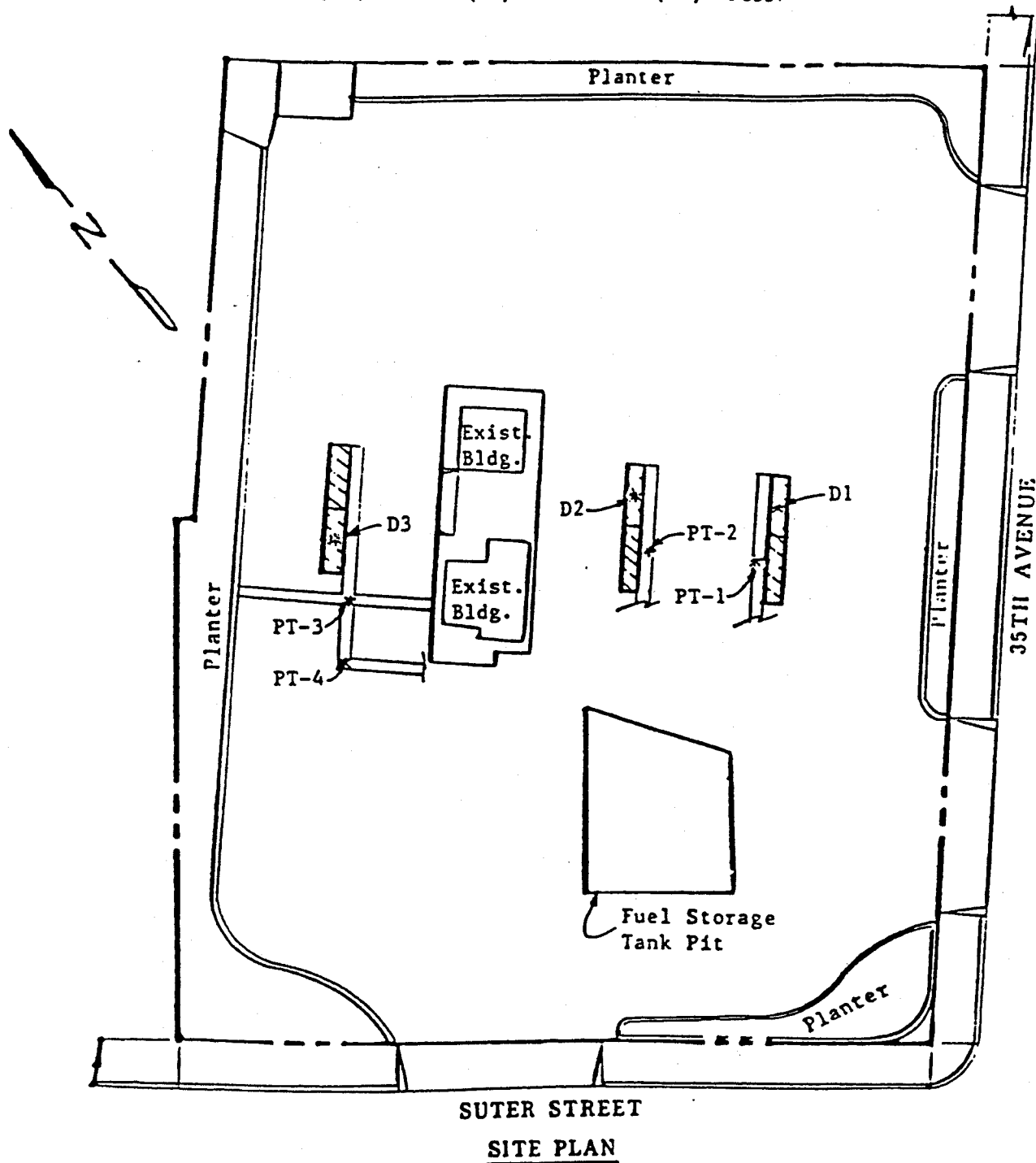


# KAPREALIAN ENGINEERING, INC.

Consulting Engineers

PO BOX 996 • BENICIA, CA 94510

(707) 746-6915 • (707) 746-6916 • FAX (707) 746-5581



## LEGEND

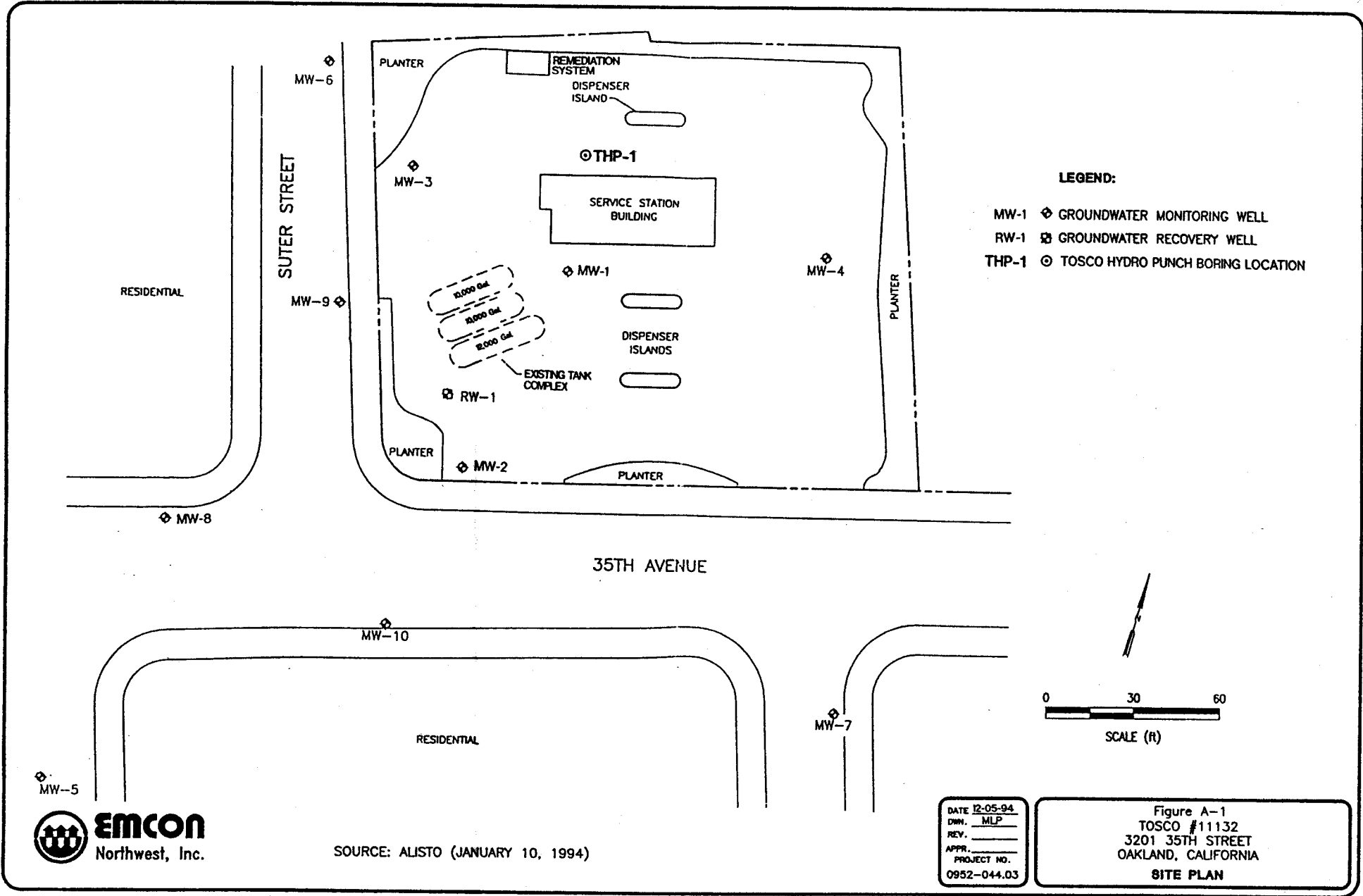
\* Sample Point Location

0 30 60  
Approx. scale feet

BP Service Station  
3201 35th Avenue  
Oakland, CA

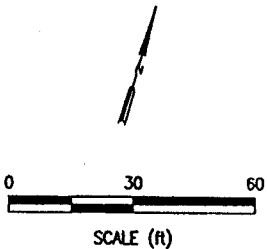
Source: KEI, October 11, 1990a

Figure C-4



**LEGEND:**

- MW-1 ◊ GROUNDWATER MONITORING WELL
- RW-1 ◻ GROUNDWATER RECOVERY WELL
- THP-1 ⊗ TOSCO HYDRO PUNCH BORING LOCATION



SOURCE: ALISTO (JANUARY 10, 1994)

DATE 12-05-94  
 DWN. MLP  
 REV. \_\_\_\_\_  
 APPR. \_\_\_\_\_  
 PROJECT NO.  
 0952-044.03

Figure A-1  
 TOSCO #11132  
 3201 35TH STREET  
 OAKLAND, CALIFORNIA  
**SITE PLAN**

MOBIL OIL CORPORATION  
OAKLAND, CALIFORNIA

MW-3

Well completed to 35.0 feet in depth with 2-inch Class 160 PVC casing, flush-threaded joints. Screen (.020-inch slot) set from 10.0 to 35.0 feet. No. 3 Monterey sand placed from 5.5 to 35.0 feet, bentonite pellets placed from 5.0 to 5.5 feet, and concrete seal placed from 0 to 5.0 feet.

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081 DATE DRILLED 1/29/90  
CLIENT BP OIL COMPANY  
LOCATION 3201 35TH AVENUE, OAKLAND, CA  
LOGGED BY M. TAYLOR APPROVED BY \_\_\_\_\_

BORING NO.

WELL NO.

MW-4

FIELD SKETCH OF BORING LOCATION

DRILLING METHOD HOLLOW-STEM AUGER HOLE DIAM. 8"  
SAMPLER TYPE MODIFIED SPLIT SPOON  
CASING DATA SEE MONITORING WELL CONSTRUCTION DETAIL  
DRILLER WEST HAZMAT

TOP OF CASING ELEVATION 170.34

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BOREHOLE CLOSURE	UBCS	PROFILE	DESCRIPTION
							WATER LEVEL 26.87
							DATE July 9, 1990
							TIME
							DESCRIPTION
			0	Christy Box			ASPHALT
			2	Portland Cement			
			4		CL		SILTY CLAY; greenish brown; damp, high plasticity stiff
3,4,6	0		6	Bentonite Pellets			
			8		CL		
10,28,35	0		10	2" sch. 40 PVC Casing			SILTY CLAY; gravelly, greenish brown with rust stain residue, dry to damp, low to medium plasticity, hard
			12		CL		
			14		CL		SILTY CLAY; gravelly, brown, dry to damp, low to medium plasticity hard
10,17,28	0		16		CL		
			18	2" sch. 40 PVC .020 Slot			SILTY CLAY; gravelly, brown rust residue, dry to damp, low plasticity, hard
14,28,35	0		20		CL		
			22		CL		
			24	Sand #3 Lonestar			SILTY CLAY; gravelly, brown, moist medium plasticity, hard
7,15,26	0		26		CL		
			28		CL		
			30		CL		
11,17,25	0		32		CL		SILTY CLAY; very gravelly, brown wet, medium plasticity
			34		CL		

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081 DATE DRILLED 1/29/90  
CLIENT BP OIL COMPANY  
LOCATION 3201 35TH AVENUE, OAKLAND, CA  
LOGGED BY M. TAYLOR APPROVED BY \_\_\_\_\_

BORING NO.

WELL NO.

MW-4

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION \_\_\_\_\_

DRILLING METHOD HOLLOW-STEM AUGER HOLE DIAM. 8"  
SAMPLER TYPE MODIFIED SPLIT SPOON  
CASING DATA SEE MONITORING WELL CONSTRUCTION DETAIL  
DRILLER WEST HAZMAT

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL
							DATE
							TIME
							DESCRIPTION
8, 18, 34	0		36	2" sch. 40 PVC .020 Slot	CL		SILTY CLAY; gravelly, brown, dry to damp
15, 28, 38	0		40	End Cap			SILTY CLAY; gravelly, brown, moist, medium plasticity
			42				
			44				
			46				
			48				
			50				

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081 DATE DRILLED 2/1/90  
CLIENT BP OIL COMPANY  
LOCATION 3201 35TH AVENUE, OAKLAND, CA  
LOGGED BY M. TAYLOR APPROVED BY \_\_\_\_\_

BORING NO.


WELL NO.

MW-5

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 165.14

DRILLING METHOD HOLLOW-STEM AUGER HOLE DIAM. 8"  
SAMPLER TYPE MODIFIED SPLIT SPOON  
CASING DATA SEE MONITORING WELL CONSTRUCTION DETAIL  
DRILLER WEST HAZMAT

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	UBCS	PROFILE	WATER LEVEL	DATE	TIME	DESCRIPTION
							24.75	July 9, 1990		
			0	Christy Box						ASPHALT
			2	Portland Cement						
13,23, 35	0		6	Bentonite Pellets		CL				SANDY CLAY; gravelly, brown, damp, low plasticity hard
11,25, 39	0		10	2" sch. 40 PVC Casing		CL				SILTY CLAY; gravelly, greenish brown, damp, low plasticity, gas odor present hard
8,11, 21	0		16	2" sch. 40 PVC .020 Slot		CL				SILTY CLAY; gravelly, greenish brown, moist medium plasticity, gas odor hard
8,23, 33	0		20			CL				SILTY CLAY; sandy and gravel, greenish brown, moist medium plasticity, gas odor hard
4,7,13	0		24	Sand #3 Lonestar		CL				 SILTY CLAY; gravelly, reddish brown, moist to saturated medium plasticity very stiff
4,5,8	0		30			CL				SILTY CLAY; with fine sand, tan, damp to medium high plasticity, stiff
14,17, 22	0		34	End Cap		CL				SILTY CLAY; gravelly, reddish brown moist high plasticity, hard



ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081 DATE DRILLED 2/1/90  
CLIENT BP OIL COMPANY  
LOCATION 3201 35TH AVENUE, OAKLAND, CA  
LOGGED BY M. TAYLOR APPROVED BY \_\_\_\_\_

BORING NO.

WELL NO.

MW-6

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 165.38

DRILLING METHOD HOLLOW-STEM AUGER HOLE DIAM. 8"  
SAMPLER TYPE MODIFIED SPLIT SPOON  
CASING DATA SEE MONITORING WELL CONSTRUCTION DETAIL  
DRILLER WEST HAZMAT

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BOPING CLOSURE	U9CS	PROFILE	DESCRIPTION
							WATER LEVEL 24.75
							DATE July 9, 1990
							TIME
							DESCRIPTION
			0	Christy Box			ASPHALT
			2	Portland Cement			
10,12, 15	0		4		CH		SILTY CLAY; gravelly, redish brown, damp, high plasticity, very stiff
			6	Bentonite Pellets			
8,15, 23	0		8		CH		SILTY CLAY; gravelly, reddish brown moist, high plasticity, hard
			10				
			12	2" sch. 40 PVC Casing			
5,12, 18	0		14		CH		SILTY CLAY; gravelly, brown, moist medium high plasticity, very stiff
			16	2" sch. 40 PVC .020 Slot			
11,15, 15	0		18		CH		SILTY CLAY; gravelly, brown, moist to saturated very stiff
			20				
			22				
23-30, 50/4"	0		24	Sand #3 Lonestar			NO RECOVERY; large cobble or rock obstruction
			26				
			28				
6,13,17	0		30				NO RECOVERY; same
			32				
21,29, 35	0		34	End Cap	CL		drilled to 35' w/o sample recovery SILTY CLAY; gravelly saturated moist, brown, hard

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081 DATE DRILLED 2/1/9  
CLIENT BP OIL COMPANY  
LOCATION 3201 35TH AVENUE, OAKLAND, CA  
LOGGED BY M. TAYLOR APPROVED BY \_\_\_\_\_

BORING NO.

WELL NO.

MW-7

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 167.61

DRILLING METHOD HOLLOW-STEM AUGER HOLE DIAM. 8"  
SAMPLER TYPE MODIFIED SPLIT  
CASING DATA SEE MONITORING WELL CONSTRUCTION DETAIL  
DRILLER WEST HAZMAT

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL 27.29	
							DATE JULY 9, 1990	
							DESCRIPTION	
			0	Christy Box				ASPHALT
			2	Portland Cement				
14,14, 15	0		6	Bentonite Pellets	CH			SILTY CLAY; brown, damp, high plasticity, very stiff
11,27, 39	0		10	2" sch. 40 PVC Casing	CL			SILTY CLAY; gravelly, reddish brown damp medium plasticity, hard
15,21, 29	0		16	2" sch. 40 PVC .020 Slot	CL			SILTY CLAY; gravelly, reddish brown, damp, hard
36,15, 50/5"	0		20		CL			SILTY CLAY; gravelly, brown, moist medium plasticity, hard
8,15,21	0		24	Sand #3 Lonestar	CL			SILTY CLAY; gravelly, brown, moist medium plasticity, hard
5,8,12	0		30		CL			SILTY CLAY; gravelly, brown, saturated medium plasticity, very stiff
4,7,10	0		34		CH			SILTY CLAY; tannish brown, moist high plasticity, very stiff

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081 DATE DRILLED 1/29/90  
CLIENT BP OIL COMPANY  
LOCATION 3201 35TH AVENUE, OAKLAND, CA  
LOGGED BY M. TAYLOR APPROVED BY \_\_\_\_\_

BORING NO.

WELL NO.

RW-1

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 168.01

DRILLING METHOD HOLLOW-STEM AUGER HOLE DIAM. 12"  
SAMPLER TYPE \_\_\_\_\_  
CASING DATA SEE MONITORING WELL CONSTRUCTION DETAIL  
DRILLER WEST HAZMAT

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	DESCRIPTION
			0	Christy Box			ASPHALT
			2	Portland Cement			SILTY CLAY; gravels, brown, damp, backfill
9,19,33	0		6	Bentonite Pellets	CL		SILTY CLAY; gravelly, greenish brown, dry to damp, low plasticity, odor present
16,33,40	0		10		CL		SILTY CLAY; gravelly, greenish brown, dry to damp, medium plasticity, odor present
			12	6" sch. 40 PVC Casing			
15,36,43	0		16		CL		SILTY CLAY; gravelly, brown, damp, medium odor present
			18	6" sch. 40 PVC .020 Slot			
11,16,25	0		20		CL		SILTY CLAY; gravelly, brown, damp, medium plasticity, odor present
			22				
6,7,16	0		24	Sand #3 Lonestar	CL		SILTY CLAY; sandy gravelly, greenish brown, medium plasticity
			26		CL		
			28				
6,13,17	0		30		CL		SILTY CLAY; gravelly, sandy (fine) brown, saturated very stiff
			32				
			34				

WATER LEVEL 27.93

DATE July 9, 1990

TIME \_\_\_\_\_

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081 DATE DRILLED 1/29/90  
CLIENT BP OIL COMPANY  
LOCATION 3201 35TH AVENUE, OAKLAND, CA  
LOGGED BY M. TAYLOR APPROVED BY \_\_\_\_\_

BORING NO.

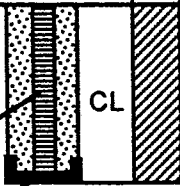
WELL NO.

RW-1

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION \_\_\_\_\_

DRILLING METHOD HOLLOW-STEM AUGER HOLE DIAM. 10"  
SAMPLER TYPE MODIFIED SPLIT SPOON  
CASING DATA SEE MONITORING WELL CONSTRUCTION DETAIL  
DRILLER WEST HAZMAT

BLOWS PER FOOT (M)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL
							DATE
							TIME
							DESCRIPTION
6, 16, 29	0		36	2" sch. 40 PVC .020 Slot	CL		SILTY CLAY; gravelly, sandy (fine) brown, saturated, medium high plasticity, hard
6, 15, 28			40	End Cap		SAME	

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2-25-91

CLIENT BP Oil Company

LOCATION 3201 35th Ave, Oakland

LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.

SB-8

WELL NO.

MW-8

Page 1 of 2

FIELD SKETCH OF BORING LOCATION

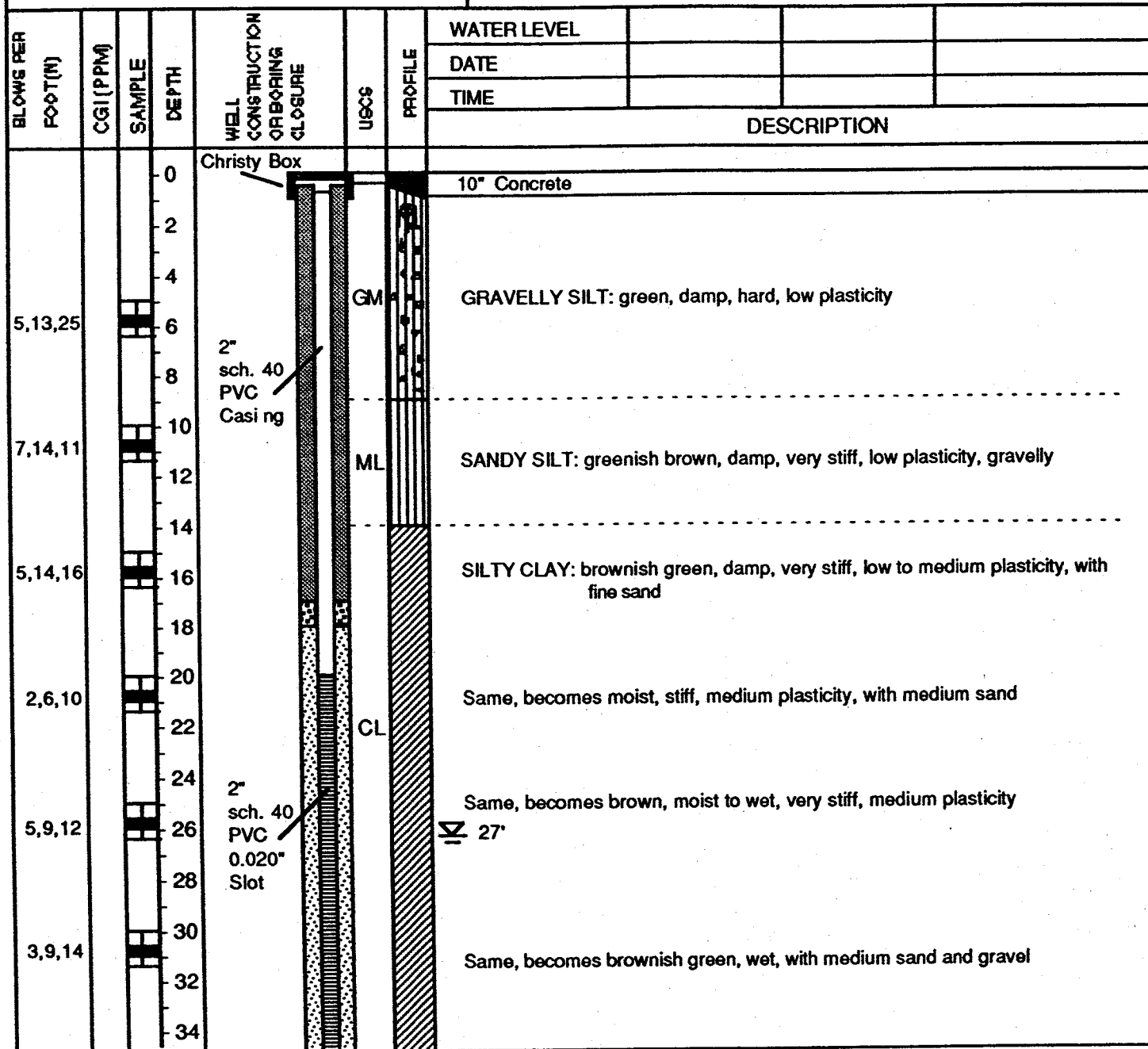
DRILLING METHOD Hollow stem auger HOLE DIAM. 8"

SAMPLER TYPE Modified split spoon

CASING DATA See well construction details

DRILLER Soils Exploration Services, Inc.

TOP OF CASING ELEVATION 165.74'



ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2/25/91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave., Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.  
SB-8  
WELL NO.  
MW-8  
Page 2 of 2

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 165.74'

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction detail  
DRILLER Soils Explorations Services, Inc.

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL			
							DATE			
							TIME			
							DESCRIPTION			
7,11,14			36							
			38		CL					SILTY CLAY: brown, wet, very stiff, medium to high plasticity, with medium sand and gravel
11,20, 20			40	End Cap						Same, becomes moist to wet, hard, medium plasticity
			42							BORING TERMINATED AT 41.5 FEET BELOW GRADE
			44							
			46							
			48							
			50							
			52							
			54							
			56							
			58							
			60							



Portland Cement



Sand #3 Lonestar



Bentonite Pellets



Sample



Driven interval



Water level encountered during drilling

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2-26-91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave, Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.  
SB-9  
WELL NO.  
MW-9  
Page 1 of 2

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 166.20

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction details  
DRILLER Soils Exploration Services, Inc.

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL		
							DATE		
							TIME		
							DESCRIPTION		
			0	Christy Box					
			2						
			4						
6,11,14			6						6" Asphalt (street)
			8		ML				SANDY SILT: reddish brown, damp, very stiff, low plasticity, with gravel
4,5,13			10	2" sch. 40 PVC Casing					Same, becomes brown, no gravel
			12						
5,12,14			14						SILTY CLAY: brown with green streaks, moist, very stiff, medium plasticity
			16						
			18						
2,6,9			20						Same, becomes moist to wet, stiff
			22		CL				
			24						
5,8,10			26	2" sch. 40 PVC 0.020" Slot					Same, becomes brown, wet to saturated, very stiff
			28						
			30						
3,5,10			32						Same, becomes saturated, stiff, with fine to medium sand
			34	End Cap					

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2/26/91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave., Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.  
SB-9  
WELL NO.  
MW-9  
Page 2 of 2

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 166.20'

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction detail  
DRILLER Soils Explorations Services, Inc.

BLOWS PER FOOT(M)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL			
							DATE			
							TIME			
							DESCRIPTION			
6,12,17			36		CL		SILTY CLAY: reddish brown, saturated to wet, very stiff, medium plasticity			
			38				BORING TERMINATED AT 36.5 FEET BELOW GRADE			
			40							
			42							
			44							
			46							
			48							
			50							
			52							
			54							
			56							
			58							
			60							

Portland Cement	Sample
Sand #3 Lonestar	Driven interval
Bentonite Pellets	Water level encountered during drilling



ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



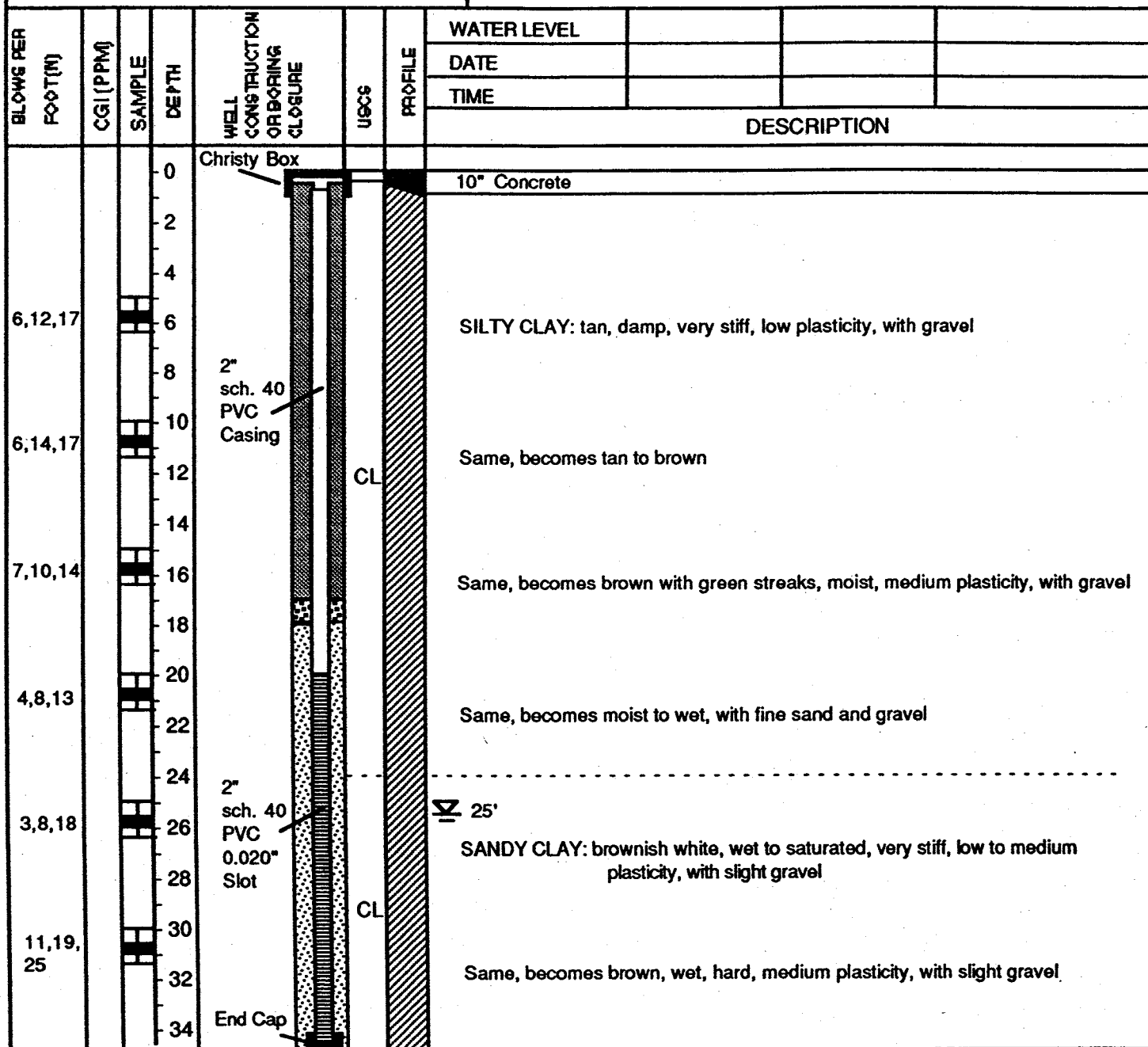
PROJECT NO. 30-081-01 DATE DRILLED 2-27-91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave, Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.  
SB-10  
WELL NO.  
MW-10  
Page 1 of 2

FIELD SKETCH OF BORING LOCATION

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction details  
DRILLER Soils Exploration Services, Inc.

TOP OF CASING ELEVATION 167.01'



ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2/27/91

CLIENT BP Oil Company

LOCATION 3201 35th Ave., Oakland

LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.

SB-10

WELL NO.

MW-10

Page 2 of 2

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 167.01'

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"

SAMPLER TYPE Modified split spoon

CASING DATA See well construction detail

DRILLER Soils Explorations Services, Inc.

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL			
							DATE			
							TIME			
							DESCRIPTION			
7,8,11			36		CL		SILTY CLAY: brown, wet, very stiff, medium plasticity, with some fine sand			
			38				BORING TERMINATED AT 36.5 FEET BELOW GRADE			
			40							
			42							
			44							
			46							
			48							
			50							
			52							
			54							
			56							
			58							
			60							



Portland Cement



Sand #3 Lonestar



Bentonite Pellets



Sample



Driven interval



Water level encountered during drilling

10/13/03 → BcA

October 6, 2003

Mr. Paul Supple  
BP Oil  
PO Box 6549  
Moraga, CA 94570

Dear Mr. Supple:

Subject: Fuel Leak Case No. RO0000014, BP Station #11132, 3201 35<sup>th</sup> Ave., Oakland, CA

Alameda County Environmental Health (ACEH) staff has reviewed "Soil and Groundwater Investigation Workplan Amendment" dated May 28, 2003 by URS Corporation (URS). We generally concur with the work proposed. We request that you address the following technical comments and send us the technical reports requested below.

#### TECHNICAL COMMENTS

1. Corrective Action Plan – The California Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB)'s "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (Interim Final - July 2003)" is acceptable for risk evaluation. The Oakland Risk-Based Corrective Action (RBCA) approach to evaluate risk may also be used for Benzene, Toluene, Ethyl Benzene, Xylene (BTEX).
2. Contaminant Source Characterization – Proposed borings UB-7 and UB-8 are located downgradient of the underground tanks. We would like them moved as close to the tanks as possible but in native soil. There may have been releases since the tanks were replaced in 1986. Please locate borings UB-7 and UB-8 closer to the tanks.
3. Preferential Pathway Survey – In addition to the map(s) to be submitted, please use cross-sections showing the location and depth of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s). Evaluate the probability of the contaminant plumes encountering preferential pathways and conduits that could spread the contamination, particularly in the vertical direction to deeper water aquifers. Please submit.
4. Well Survey – Locate ~~all~~ wells within a quarter mile radius of the site. Show the location of the wells on a map and list well construction details for each well. Indicate which of the wells may be potential receptors.
5. Missing reports
  - a. 1986 - removal of underground tanks
  - b. September 4, 1990 – installation of MW4, MW5, MW6, MW7, RW1
  - c. October 11, 1990 – sampling of D1, D2, D3, PT-1, 2, 3, 4

~~Messrs. Hooten and DeWitt~~

~~March 20, 2003~~

Page 2 of 2

d. December 16, 1994 - sampling of THP1-S-4-4.5

e. March 1991 - SB 8, 9, 10

Please submit.

#### TECHINCAL REPORT REQUEST

Please submit technical reports to the Alameda County Environmental Health (Attention: Don Hwang), according to the following schedule:

December 6, 2003 – Site plan showing borings UB-7 and UB-8 closer to the tanks.

December 6, 2003 – Preferential Pathway Survey

December 6, 2003 – Well Survey

December 6, 2003 – Missing reports

These reports are being requested pursuant to the Regional Water Quality Control Board's (Regional Board) authority under Section 13267 of the California Water Code. If you have any questions, please call me at (510) 567-6746.

Sincerely,

Don Hwang  
Hazardous Materials Specialist  
Local Oversight Program

C: Leonard Niles, URS Corporation, 500-12<sup>th</sup> St., Suite 200, Oakland, CA 94607-4014  
Donna Drogos  
File

**Table 1-1. Comparison of RWQCB and Oakland Risk-Based Approaches**

		<b>RWQCB</b>	<b><sup>1</sup>Oakland</b>
<b>General Approach</b>	Tiers	One tier of look-up tables. Includes separate screening levels for indoor air concerns based on soil type.	Two tiers of look-up tables: Tier 1 table applicable at any Oakland site; Tier 2 tables (3) account for site-specific soil types (Merritt Sands, sandy silts, and clayey silts) and alternate target risk. Tier 3 spreadsheets provided.
	Target Cancer Risk Level	10 <sup>-6</sup>	10 <sup>-6</sup> for Tier 1; 10 <sup>-5</sup> for Tier 2.
	Target Noncancer Hazard Quotient	0.2 (with option for site specific adjustment)	1.0 (with requirement to address cumulative risk as necessary)
	Ceiling/Nuisance Levels	"Ceiling levels" to address gross contamination concerns, nuisances, free-product mobility, and general resource quality	No "ceiling levels"; recommends removal of mobile or potentially-mobile free product.
	Total Petroleum Hydrocarbons	Screening levels for TPH included	No TPH screening levels.
<b>Soil Pathways</b>	Definition of "Shallow" Soils	0-3 meters below ground surface.	0-1 meter below ground surface.
	Direct Exposure, Inhalation of Volatiles	USEPA PRG model (USEPA 2002). Assumes "infinite" source thickness for volatile organic compounds.	ASTM (1995) model. Assumes infinite source unless mass balance conditions violated based on 1.0 m thick source.
	Ecological Concerns	Screening levels for terrestrial biota included (shallow soils only).	Recommends site-specific analysis when significant ecological habitats are threatened.
	Deep Soils	Direct-exposure soil screening levels for Construction/ Trench Worker exposure scenario.	No screening levels for this scenario; recommends a site-specific analysis as warranted.
<b>Groundwater</b>	Leaching Model	Employs the SESOIL model.	Employs the ASTM (1995) model.
	Leaching of Inorganic Compounds	No soil screening levels; recommends laboratory tests.	Soil screening levels for inorganic compounds, based on a neutral pH.
	Surface Water Protection	Groundwater screening levels for the ecological and aesthetic protection of surface water.	Screening levels for recreational use of groundwater and surface water. Recommends site-specific analysis of ecological and aesthetic concerns as warranted.
<b>Indoor Air</b>	Thickness of Soil Source	Assumes five meters. Recommends site-specific analysis as warranted.	Assumes "infinite" source thickness.
	Convective Flow	Incorporates convective flow in indoor-air impact model.	Does not incorporate convective flow (i.e., assumes no pressure differential) in indoor-air impact model.
	Surface Soil Screening Levels	Includes screening levels for protection of indoor air for both surface and subsurface soils.	Recommends site-specific analysis and controls for shallow soils (<1m) and use of screening levels for deeper soils.
	Soil Gas	Includes screening levels for soil gas.	Not included.

1. *Oakland Risk-Based Corrective Action: Technical Background Document: City of Oakland, Environmental Services Division, January 2000 (and updates), [www.oaklanddpw.com/urprogram](http://www.oaklanddpw.com/urprogram).*

As discussed in the USEPA Region IX document, the PRGs are intended to address human direct-exposure with impacted soil and "...do not consider impact to groundwater or address ecological concerns." (USEPA 2002). Expansion of the USEPA PRGs in the lookup tables presented in this document includes:

- Modification of soil PRGs to reflect CalEPA-specific toxicity factors;
- Adjustment of PRGs for noncarcinogens to reflect a target hazard quotient of 0.2 to address potential cumulative health concerns;
- Addition of direct-exposure screening levels for construction and trench workers' exposure to subsurface soils;
- Addition of soil and groundwater screening levels for indoor-air impact concerns;
- Addition of groundwater screening levels for the protection of aquatic habitats/surface water quality;
- Use of a more rigorous leaching model to develop soil screening levels for protection of groundwater quality;
- Addition of soil screening levels for urban area, ecological concerns;
- Addition of soil and groundwater "ceiling levels" to address gross contamination and general resource degradation concerns; and
- Addition of soil and groundwater screening levels for Total Petroleum Hydrocarbons (TPH).

Use of the USEPA Region IX PRGs in the RWQCB lookup tables is discussed further in Section 3.2 of Appendix 1. A copy of the PRG background document is provided in Appendix 2.

### 1.3.2 City of Oakland Screening Levels

A brief comparison of the RWQCB and the City of Oakland approaches to the development of environmental screening levels is provided in Table 1-1. Since 1999, the City of Oakland has presented environmental screening levels for soil and groundwater through its Urban Land Redevelopment (ULR) Program. The ULR Program is a collaborative effort by the City of Oakland and the principal agencies charged with enforcing environmental regulations in Oakland to facilitate the cleanup and redevelopment of contaminated properties (Oakland 2000). It includes innovative institutional mechanisms for tracking residual contamination and ensuring long-term compliance with risk management plans. The ULR Program is coordinated by the City and is specific to Oakland sites.

The City of Oakland approach is based on the guidelines prescribed in *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites* (ASTM 1995). The Guidance Document, Technical Background Document and other information on the Oakland ULR program is available on the internet at [www.oaklandpw.com/ulrprogram](http://www.oaklandpw.com/ulrprogram). Modifications have been made to better address child exposure and recreational water use scenarios. In addition, many input values reflect Oakland-specific geologic, hydrogeologic and climatic conditions (Oakland Technical Background 2000 and

updates). These values may not be appropriate for other areas within the RWQCB's jurisdiction.

The RWQCB has agreed that the Oakland look-up tables are appropriate for use at Oakland sites under the conditions and limitations discussed in the ULR Program Guidance (memo dated August 3, 2001; RWQCBSF 2001b). In particular, sites where surface or groundwater conditions present ecological, aesthetic, taste or odor concerns may require additional analysis. Active remediation to address these concerns may not be necessary at most sites in Oakland that are not near sensitive water bodies, however, due to its highly-developed, urban setting

### 1.3.3 Hazardous Waste Regulations

California Total Threshold Limit Concentrations (TTLC) criteria for solids and Soluble Threshold Limit Concentration (STLC) criteria for liquids should not in most cases be used as soil and groundwater screening or cleanup levels. The TTLC and STLC criteria are intended to determine the type of landfill a waste material must be sent to (Title 22, Section 66699 - Persistent and Bioaccumulative Toxic Waste). Where TTLC or STLC criteria are exceeded, the waste must in general be sent to a Class I, hazardous waste landfill. The criteria, developed in the 1980s, are only loosely based on human health and environmental considerations. STLC values in general reflect drinking water or surface water goals of the time, although some are clearly out-of-date (e.g. trichloroethylene STLC value of 204 mg/L). TTLC values were derived by simply multiplying the STLC value by ten (organic substances) or one hundred (metals).

In most cases, TTLC values exceed the most conservative environmental screening levels presented in this document. In the case of Endrin and DDT/DDE/DDD, however, the TTLC is somewhat lower than the screening levels for human health concerns. For example, the TTLC for combined DDT/DDE/DDD is 1.0 mg/kg while the residential, direct-exposure soil screening is 1.7 mg/kg. This presents the enigma that while soil impacted below 1.7 mg/kg is not considered to pose a significant risk to human health, it could be classified as a "hazardous waste" if it were excavated and transported offsite for disposal. Again, this is not a difference of opinion about the potential toxic effects of these chemicals, it is merely a reflection of the less rigorous development of the TTLC values.

Unfortunately, it is not anticipated that the TTLC and STLC values will be revised in the near future. To avoid potential future problems with soil disposal and even public perception, it may be prudent to use TTLCs as final cleanup values for sites where the TTLC is less than cleanup values based on actual risk to human health and the environment.

RO0000014 - Site History

BP Oil No. 11132  
3201 35<sup>th</sup> Avenue  
Oakland, CA 94619

The site is currently an operating BP Oil service station with three USTs (2-10K and 1-12K?) that were installed in 1987 after the first generation USTs were removed. The dispensers and product lines were not removed and upgraded until August 1990.

When the first generation tanks were removed, soil samples collected from beneath the tanks contained up to 420ppm TPHg. Prior, in July 1986, three groundwater monitoring wells (MW-1 through MW-3) were installed at the site. Dissolved petroleum hydrocarbons were detected in the water samples. To date, ten wells (MW-1 through MW-10) and one recovery well (RW-1) have been installed on- and off-site to delineate the vertical and lateral extent of the contaminant plume. Free product has been detected in wells MW-1, MW-2 and in the recovery well. Recently, free product is still measured in wells MW-1, MW-8, and MW-10.

In August 1992, an interim remediation system was installed. Groundwater and separate phase hydrocarbons was extracted from RW-1 and treated by 2-2,000 pound activated carbon vessels. The treated water was discharged to the sanitary sewer system. Groundwater extraction terminated on November 25, 1992.

Hydrocarbon-impacted soil is present in the vicinity of the UST complex at a depth interval from 13 to 27 feet bgs.

An aquifer pump test was performed in April 1991. The average transmissivity of the aquifer beneath the site was calculated to be 0.392 ft<sup>2</sup>/min. Soil typed encountered generally consisted of silty clay.

- 9/02 - Why wasn't well MW-5 sampled, need to delineate plume, control plume migration, <sup>identify</sup> section soil isopach + redetermine GW gradient, contaminants same with <sup>investigation</sup> CAP
- 7/02 - Requested reports of subsurface investigation  
- would like to see another well SW of MW-8 - along 35<sup>th</sup> - another 60-100 feet away.



BP, 3201 - 35th Ave

2/31/03

grad

5/22/03

S

1/2/03

S-SE

11/2/02

SW

9/11/02

SW

6/20/02

SW

2/20/02

SW SE

11/30/01

SW, S, SE

9/17/03

~~incl at hand~~

don't incl right core al  
1 sand box  
S MW 9, 6

2 2 borings

www

geoprobe  
cal leaves

UB 8/7 closer to UST 1/2 forward

10/2/03

conduit - incl X sec

mis removal '86

mis 10/11/90 - P1, 2, 3, PT-1, 2, 3, 4

mis <sup>9/4/90</sup> instal MW 4, RW-1, MW 5, MW 6, MW 7

mis 12/16/94 - THP 1-S-4-4.5 collected 11/12/94

mis SB 8, 9, 10 3/91

BP, 3201-35th Ave

7/31/03

5/28/03 WP

~~2 T contents~~

CAP

UAS - ~~will~~ will only use  
RWQCB RBSL

~~also~~  
disagree - <sup>use</sup> RWQCB RBSL for  
TPH, + 5 mg/l MTBE,  
and RBCA

? boring locations

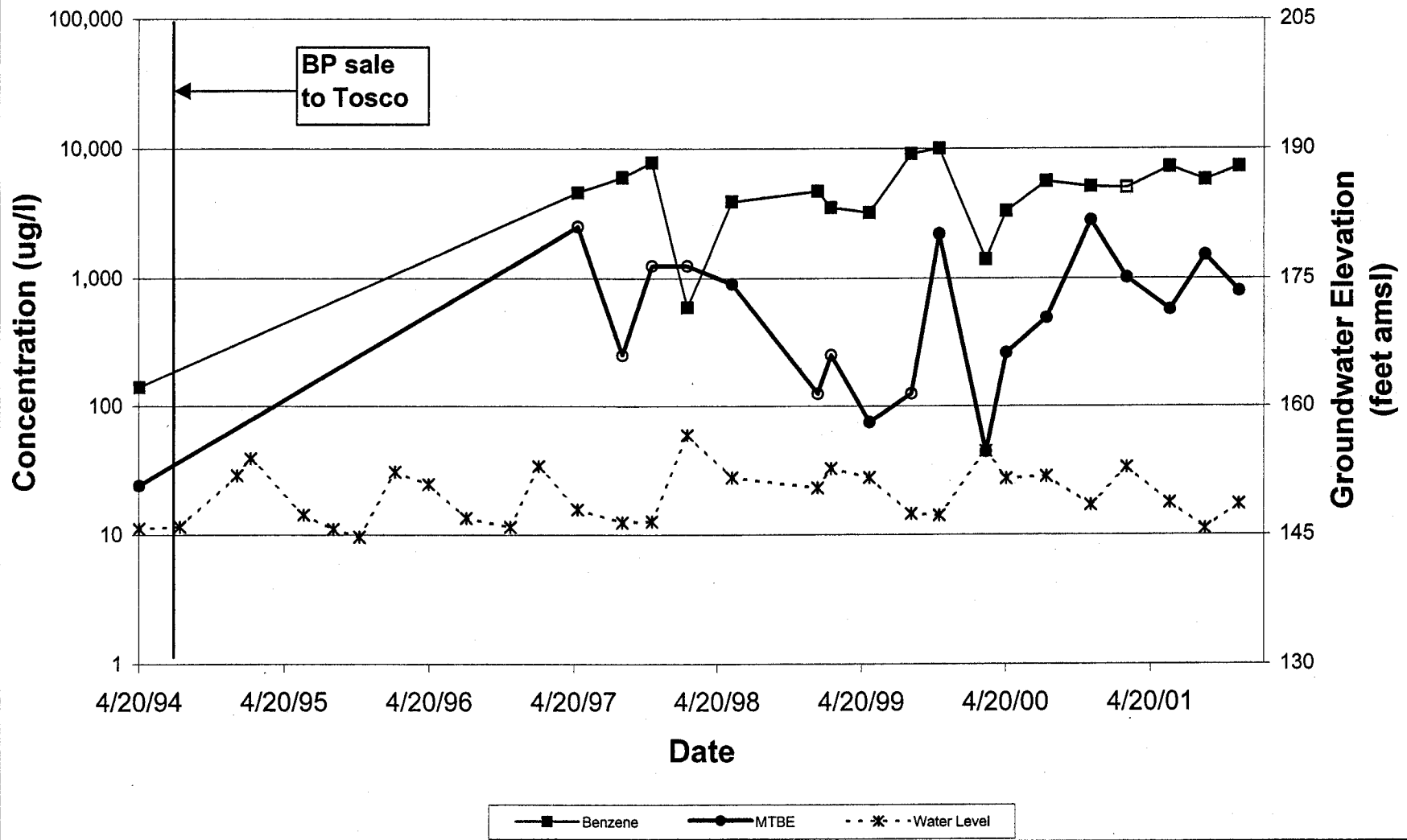
? ✓ depth 20-30' below  
1st encountered W

8/21/03

5/28/03 WP

proposed borings loc appear ok

# Concentration and Water Level Trends Well MW-2



BP Oil Site 11132  
3201 35th Street  
Oakland, California

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-1	07/09/90	169.75	--	0.22	--	--	--	--	--	--	--	--	--
MW-1	12/21/90	169.75	--	0.58	--	--	--	--	--	--	--	--	--
MW-1	03/07/91	169.75	20.59	--	--	--	--	--	--	--	--	--	--
MW-1	06/27/91	169.75	--	0.18	--	--	--	--	--	--	--	--	--
MW-1	09/27/91	169.75	--	0.27	--	--	--	--	--	--	--	--	--
MW-1	12/18/91	169.75	--	0.28	--	--	--	--	--	--	--	--	--
MW-1	04/01/91	169.75	16.51	0.15	153.35	--	--	--	--	--	--	--	--
MW-1	07/03/92	169.75	22.30	0.27	147.65	--	--	--	--	--	--	--	--
MW-1	10/05/92	169.75	23.98	0.24	145.95	--	--	--	--	--	--	--	--
MW-1	01/13/93	169.75	17.03	0.24	152.90	--	--	--	--	--	--	--	--
MW-1	04/23/93	169.75	18.10	0.42	151.97	--	--	--	--	--	--	--	--
MW-1	07/12/93	169.75	22.02	0.49	148.10	--	--	--	--	--	--	--	--
MW-1	10/21/93	169.75	25.12	1.09	145.45	--	--	--	--	--	--	--	--
MW-1	01/21/94	169.75	23.02	0.76	147.30	--	--	--	--	--	--	--	--
MW-1	04/20/94	169.75	24.54	1.80	146.56	--	--	--	--	--	--	--	--
MW-1	08/01/94	169.75	24.11	0.35	145.90	--	--	--	--	--	--	--	--
MW-1	12/23/94	169.75	18.19	0.29	151.78	--	--	--	--	--	--	--	--
MW-1	01/26/95	169.75	16.25	1.10	154.33	--	--	--	--	--	--	--	--
MW-1	06/08/95	169.75	22.92	1.20	147.73	--	--	--	--	--	--	--	--
MW-1	08/22/95	169.75	24.45	0.85	145.94	--	--	--	--	--	--	--	--
MW-1	10/27/95	169.75	25.41	0.69	144.86	--	--	--	--	--	--	--	--
MW-1	01/25/96	169.75	18.20	1.40	152.60	--	--	--	--	--	--	--	--
MW-1	04/19/96	169.75	19.06	1.22	151.61	--	--	--	--	--	--	--	--
MW-1	07/23/96	169.75	22.98	0.89	147.44	--	--	--	--	--	--	--	--
MW-1	11/11/96	169.75	23.99	0.98	146.50	--	--	--	--	--	--	--	--
MW-1	01/21/97	169.75	16.80	0.90	153.63	--	--	--	--	--	--	--	--
MW-1	04/29/97	169.75	21.90	0.85	148.49	--	--	--	--	--	--	--	--
MW-1	04/30/97	169.75	--	--	--	100000	3600	8000	4000	21300	7700	5.2	SPL
QC-1 (c)	04/30/97	--	--	--	--	92000	3500	8100	4400	23800	6900	--	SPL
MW-1	08/21/97	169.75	23.40	0.87	147.00	140000	3000	8500	3900	22100	5700	5.3	SPL
QC-1 (c)	08/21/97	--	--	--	--	120000	3200	8100	3800	19600	5200	--	SPL
MW-1	11/05/97	169.75	23.70	0.54	146.46	68000	6200	4400	3300	14300	8000	4.7	SPL
QC-1 (c)	11/05/97	--	--	--	--	88000	7300	4800	3600	16900	8200	--	SPL
MW-1	02/03/98	169.75	13.63	0.32	156.36	--	--	--	--	--	--	--	--
MW-1	02/04/98	--	--	--	--	190000	2200	10000	5600	32000	ND<10000	5.3	SPL
QC-1 (c)	02/04/98	--	--	--	--	160000	2300	8400	5000	29400	ND<10000	--	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-1	05/28/98	169.75	18.03	0.17	151.85	87000	980	3900	3600	19000	2900	3.8	SPL
MW-1	12/30/98	169.75	19.50	0.08	150.31	70000	530	3200	2900	16000	3600	---	SPL
MW-1	02/02/99	169.75	18.93	0.03	150.84	79000	480	3100	3500	21000	3500	---	SPL
MW-1	05/10/99	169.75	18.28	0.03	151.49	110000	160	1900	3700	24000	3000	---	SPL
MW-1	08/24/99	169.75	20.13	0.06	149.67	110000	850	1300	1900	19000	ND<50	---	SPL
MW-1	11/03/99	169.75	22.27	0.36	147.77	65000	6300	1100	3300	9500	8900	---	PAGE
MW-1 (h)	03/01/00	169.75	14.79	0.23	155.14	---	---	---	---	---	---	---	---
MW-1	04/21/00	169.75	18.10	0.33	151.91	61000	330	780	2700	17000	1300	---	PAGE
MW-1	07/31/00	169.75	21.60	0.53	148.57	1500000	340	2100	24000	120000	2700	---	PAGE
MW-1	11/20/00	169.75	21.69	0.37	148.36	1700000	1800	2300	19000	93000	3900	---	PAGE
MW-1	02/18/01	169.75	16.70	0.13	153.15	---	---	---	---	---	---	---	---
MW-1	02/26/01	169.75	14.38	0.15	155.49	100000	658	466	4210	15000	1890	---	PAGE
MW-1	06/07/01	169.75	20.78	0.00	148.97	70000	705	440	3870	12200	2720	---	PAGE
MW-1 (j)	09/05/01	169.75	23.36	0.35	146.67	---	---	---	---	---	---	---	---
MW-1 (k)	11/30/01	169.75	20.85	0.41	149.23	---	---	---	---	---	---	---	---
MW-1	12/06/01	169.75	18.72	0.27	151.25	39000	3500	237	2150	4500	5400	---	PAGE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-2	07/09/90	168.14	---	0.10	---	---	---	---	---	---	---	---	---
MW-2	12/21/90	168.14	---	0.48	---	---	---	---	---	---	---	---	---
MW-2	03/07/91	168.14	19.18	---	---	---	---	---	---	---	---	---	---
MW-2	06/27/91	168.14	---	0.19	---	---	---	---	---	---	---	---	---
MW-2	09/27/91	168.14	---	0.15	---	---	---	---	---	---	---	---	---
MW-2	12/18/91	168.14	---	0.36	---	---	---	---	---	---	---	---	---
MW-2	04/01/91	168.14	15.21	0.10	153.01	---	---	---	---	---	---	---	---
MW-2	07/03/92	168.14	20.93	0.03	147.23	---	---	---	---	---	---	---	---
MW-2	10/05/92	168.14	22.74	0.21	145.56	---	---	---	---	---	---	---	---
MW-2	01/13/93	168.14	15.55	0.02	152.61	---	---	---	---	---	---	---	---
MW-2	04/23/93	168.14	16.54	0.21	151.76	---	---	---	---	---	---	---	---
MW-2	07/12/93	168.14	20.46	0.06	147.73	---	---	---	---	---	---	---	---
MW-2	10/21/93	168.14	24.91	0.31	143.46	---	---	---	---	---	---	---	---
MW-2	01/21/94	168.14	21.20	---	146.94	---	---	---	---	---	---	---	---
MW-2	04/20/94	168.14	22.44	---	145.70	1800	140	370	54	290	24	(i) 1.7	PACE
MW-2	08/01/94	168.14	22.24	0.04	145.93	---	---	---	---	---	---	---	---
MW-2	12/23/94	168.14	16.25	0.03	151.91	---	---	---	---	---	---	---	---
MW-2	01/26/95	168.14	14.55	0.39	153.88	---	---	---	---	---	---	---	---
MW-2	06/08/95	168.14	21.18	0.43	147.28	---	---	---	---	---	---	---	---
MW-2	08/22/95	168.14	22.76	0.36	145.65	---	---	---	---	---	---	---	---
MW-2	10/27/95	168.14	23.61	0.30	144.76	---	---	---	---	---	---	---	---
MW-2	01/25/96	168.14	15.95	0.15	152.30	---	---	---	---	---	---	---	---
MW-2	04/19/96	168.14	17.33	0.07	150.86	---	---	---	---	---	---	---	---
MW-2	07/23/96	168.14	21.25	0.05	146.93	---	---	---	---	---	---	---	---
MW-2	11/11/96	168.14	22.27	0.01	145.88	---	---	---	---	---	---	---	---
MW-2	01/21/97	168.14	15.19	0.01	152.96	---	---	---	---	---	---	---	---
MW-2	04/29/97	168.14	20.22	0.01	147.93	---	---	---	---	---	---	---	---
MW-2	04/30/97	168.14	---	---	---	130000	4600	15000	6000	37000	ND<5000	5.0	SPL
MW-2	08/21/97	168.14	21.74	0.01	146.41	110000	6000	16000	4700	28000	ND<500	4.6	SPL
MW-2	11/05/97	168.14	21.61	0.01	146.54	120000	7800	18000	4900	28100	ND<2500	4.6	SPL
MW-2	02/03/98	168.14	11.51	---	156.63	75000	590	1500	1800	12800	ND<2500	4.5	SPL
MW-2	05/28/98	168.14	16.51	---	151.63	79000	3900	3100	3100	18000	900	4.3	SPL
MW-2	12/30/98	168.14	17.70	---	150.44	95000	4700	3500	3700	21000	ND<250	---	SPL
MW-2	02/02/99	168.14	15.46	---	152.68	170000	3500	1500	5200	34000	ND<500	---	SPL
MW-2	05/10/99	168.14	16.52	---	151.62	84000	3200	3200	3700	20000	75	---	SPL
MW-2	08/24/99	168.14	20.73	---	147.41	130000	9100	9200	4700	27000	ND<250	---	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-2	11/03/99	168.14	20.93	---	147.21	120000	10000	21000	4700	30200	2200	---	PACE
MW-2	03/01/00	168.14	13.37	---	154.77	39000	1400	1500	1700	8100	44	---	PACE
MW-2	04/21/00	168.14	16.59	---	151.55	68000	3300	2500	3100	20000	260	---	PACE
MW-2	07/31/00	168.14	16.37	---	151.77	99000	5600	1400	4300	22000	490	---	PACE
MW-2	11/20/00	168.14	19.71	---	148.43	37000	5100	1500	1300	4800	2800	---	PACE
MW-2	02/18/01	168.14	15.29	---	152.85	54000	5020	3880	2850	15400	1010	---	PACE
MW-2	06/07/01	168.14	19.43	---	148.71	110000	7240	4380	4160	22100	567	---	PACE
MW-2	09/05/01	168.14	22.44	---	145.70	69000	5750	5790	2770	14200	1510	---	PACE
MW-2	11/30/01	168.14	19.58	---	148.56	120000	7270	6540	4590	23000	794	---	PACE



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-3	07/09/90	167.17	--	--	--	140	5.3	4.6	2.0	3.8	--	--	--
MW-3	12/21/90	167.17	--	--	--	0.19	100	6.0	0.9	27	--	--	--
MW-3	03/07/91	167.17	17.40	--	149.77	0.4	69	22	6.1	57	--	--	--
MW-3	06/27/91	167.17	--	--	--	380	28	26	13	46	--	--	--
MW-3	09/27/91	167.17	--	--	--	0.07	7.9	ND	0.4	1.1	--	--	--
MW-3	12/18/91	167.17	--	--	--	0.26	34	24	0.8	28	--	--	--
MW-3	04/01/91	167.17	13.69	--	153.48	ND	ND	ND	ND	ND	--	--	--
MW-3	07/03/92	167.17	19.59	--	147.58	71	9.4	0.9	5.0	13	--	--	ANA
MW-3	10/05/92	167.17	21.22	--	145.95	67	5.1	1.1	6.1	8.1	--	--	ANA
QC-1 (c)	10/05/92	--	--	--	--	ND<50	2.2	ND<0.5	1.5	2.8	--	--	ANA
MW-3	01/13/93	167.17	13.63	--	153.54	830	50	34	42	89	--	(i)	PACE
MW-3	04/23/93	167.17	15.02	--	152.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	(i)	PACE
QC-1 (c)	04/23/93	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	(i)	PACE
MW-3	07/12/93	167.17	19.16	--	148.01	250	12	4.2	12	16	ND<5.0	(i)	PACE
MW-3	10/21/93	167.17	21.81	--	145.36	52	4.4	1.4	4.7	3.3	ND<5.0	(i)	PACE
QC-1 (c)	10/21/93	--	--	--	--	65	7.4	1.0	6.9	4.2	--	--	PACE
MW-3	01/21/94	167.17	19.94	--	147.23	57	3.0	3.4	3.6	9.0	ND<5.0	(i)	PACE
MW-3	04/20/94	167.17	20.24	--	146.93	600	26	23	33	88	28.7	(i)	1.8 PACE
MW-3	08/01/94	167.17	20.74	--	146.43	99	6.2	1.1	4.5	5.2	ND<5.0	(i)	1.4 PACE
QC-1 (c)	08/01/94	--	--	--	--	120	7.7	1.6	5.9	6.7	5.43	(i)	-- PACE
MW-3	12/23/94	167.17	14.70	--	152.47	ND<50	ND<0.5	0.78	ND<0.5	ND<0.5	9.8	(i)	1.7 PACE
QC-1 (c)	12/23/94	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	PACE
MW-3	01/26/95	167.17	12.89	--	154.28	190	16	0.5	35	24	--	6.6	ATI
MW-3	06/08/95	167.17	19.95	--	147.22	330	21	4.0	34	32	--	7.0	ATI
MW-3	08/22/95	167.17	21.41	--	145.76	150	14	ND<0.50	ND<0.50	1.6	ND<5.0	(d)	6.6 ATI
MW-3	10/27/95	167.17	22.43	--	144.74	--	--	--	--	--	--	--	--
MW-3	10/30/95	167.17	--	--	--	51	2.4	ND<0.50	ND<0.50	ND<1.0	ND<5.0	6.9	ATI
MW-3	01/25/96	167.17	14.03	--	153.14	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	5.1	--	CEI
MW-3	04/19/96	167.17	15.26	--	151.91	460	55	4	33	63	ND<10	9.4	SPL
MW-3	07/23/96	167.17	19.19	--	147.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<10	9.2	SPL
MW-3	11/11/96	167.17	20.24	--	146.93	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	8.4	SPL
MW-3	01/21/97	167.17	13.09	--	154.08	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	5.4	SPL
MW-3	04/29/97	167.17	18.14	--	149.03	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.3	SPL
MW-3	08/21/97	167.17	19.64	--	147.53	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.9	SPL
MW-3	11/05/97	167.17	19.95	--	147.22	ND<250	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	4.5	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-3	02/03/98	167.17	10.57	--	156.60	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<10	4.7	SPL
MW-3	05/28/98	167.17	14.65	--	152.52	330	ND<2.5	ND<5.0	ND<5.0	ND<5.0	ND<50	4.2	SPL
MW-3	12/30/98	167.17	16.63	--	150.54	--	--	--	--	--	--	--	--
MW-3	02/02/99	167.17	13.12	--	154.05	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--	SPL
MW-3	05/10/99	167.17	14.21	--	152.96	--	--	--	--	--	--	--	--
MW-3	08/24/99	167.17	14.36	--	152.81	--	--	--	--	--	--	--	--
MW-3	11/03/99	167.17	19.21	--	147.96	--	--	--	--	--	--	--	--
MW-3	03/01/00	167.17	15.17	--	152.00	ND<50	ND<0.5	0.57	ND<0.5	0.62	ND<0.5	--	PACE
MW-3	04/21/00	167.17	14.88	--	152.29	--	--	--	--	--	--	--	--
MW-3	07/31/00	167.17	15.29	--	151.88	--	--	--	--	--	--	--	--
MW-3	11/20/00	167.17	17.31	--	149.86	--	--	--	--	--	--	--	--
MW-3	02/18/01	167.17	12.85	--	154.32	160	1.95	1.31	10.2	9.09	1.0	--	PACE
MW-3	06/07/01	167.17	18.00	--	149.17	--	--	--	--	--	--	--	--
MW-3	09/05/01	167.17	20.32	--	146.85	--	--	--	--	--	--	--	--
MW-3	11/30/01	167.17	16.94	--	150.23	--	--	--	--	--	--	--	--

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-4	07/09/90	170.36	--	--	--	ND	ND	ND	ND	ND	--	--	--
MW-4	12/21/90	170.36	--	--	--	ND	ND	ND	ND	0.8	--	--	--
MW-4	03/07/91	170.36	20.72	--	149.64	ND	2.2	3.8	1.5	2.8	--	--	--
MW-4	06/27/91	170.36	--	--	--	ND	6.3	1.8	0.4	1.0	--	--	--
MW-4	09/27/91	170.36	--	--	--	ND	ND	ND	ND	ND	--	--	--
MW-4	12/18/91	170.36	--	--	--	ND	ND	ND	ND	ND	--	--	--
MW-4	04/01/91	170.36	17.49	--	152.87	ND	ND	ND	ND	ND	--	--	--
MW-4	07/03/92	170.36	22.16	--	148.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	ANA
MW-4	10/05/92	170.36	23.38	--	146.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	ANA
MW-4	01/13/93	170.36	17.58	--	152.78	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	(i)	PACE
MW-4	04/23/93	170.36	15.72	--	154.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	(i)	PACE
MW-4	07/12/93	170.36	21.74	--	148.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-4	10/21/93	170.36	23.84	--	146.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-4	01/21/94	170.36	22.42	--	147.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-4	04/20/94	170.36	22.66	--	147.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-4	08/01/94	170.36	23.01	--	147.35	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-4	12/23/94	170.36	17.03	--	153.33	--	--	--	--	--	--	--	--
MW-4	01/26/95	170.36	17.42	--	152.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	--	7.5	ATI
MW-4	06/08/95	170.36	21.55	--	148.81	--	--	--	--	--	--	--	--
MW-4	08/22/95	170.36	23.47	--	146.89	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	(d)	ATI
MW-4	10/27/95	170.36	24.50	--	145.86	--	--	--	--	--	--	--	--
MW-4	01/25/96	170.36	18.74	--	151.62	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	58	--	CEI
MW-4	04/19/96	170.36	18.63	--	151.73	--	--	--	--	--	--	--	--
MW-4	07/23/96	170.36	22.56	--	147.80	--	--	--	--	--	--	--	--
MW-4	11/11/96	170.36	23.63	--	146.73	ND<50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	34	8.2	SPL
MW-4	01/21/97	170.36	16.59	--	153.77	--	--	--	--	--	--	--	--
MW-4	04/29/97	170.36	21.43	--	148.93	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.7	SPL
MW-4	08/21/97	170.36	22.91	--	147.45	--	--	--	--	--	--	--	--
MW-4	11/05/97	170.36	22.34	--	148.02	60	ND<0.5	ND<1.0	ND<1.0	ND<1.0	76	4.9	SPL
MW-4	02/03/98	170.36	12.26	--	158.10	--	--	--	--	--	--	--	SPL
MW-4	05/28/98	170.36	18.50	--	151.86	70	ND<0.5	ND<1.0	ND<1.0	ND<1.0	160	4.2	SPL
MW-4	12/30/98	170.36	19.69	--	150.67	--	--	--	--	--	--	--	--
MW-4	02/02/99	170.36	18.26	--	152.10	70	ND<1.0	ND<1.0	ND<1.0	ND<1.0	130	--	SPL
MW-4	05/10/99	170.36	17.86	--	152.50	--	--	--	--	--	--	--	--
MW-4	08/24/99	170.36	17.93	--	152.43	--	--	--	--	--	--	--	--
MW-4	11/03/99	170.36	22.78	--	147.58	--	--	--	--	--	--	--	--

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-4	03/01/00	170.36	18.04	---	152.32	ND<50	ND<0.5	0.67	ND<0.5	0.7	110	---	PACE
MW-4	04/21/00	170.36	17.36	---	153.00	---	---	---	---	---	---	---	---
MW-4	07/31/00	170.36	17.83	---	152.53	---	---	---	---	---	---	---	---
MW-4	11/20/00	170.36	18.91	---	151.45	---	---	---	---	---	---	---	---
MW-4	02/18/01	170.36	17.72	---	152.64	88	ND<0.5	ND<0.5	ND<0.5	ND<0.5	97.3	---	PACE
MW-4	06/07/01	170.36	20.23	---	150.13	---	---	---	---	---	---	---	---
MW-4	09/05/01	170.36	22.76	---	147.60	---	---	---	---	---	---	---	---
MW-4	11/30/01	170.36	21.30	---	149.06	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-5	07/09/90	165.14	--	--	--	280	200	210	46	290	--	--	--
MW-5	12/21/90	165.14	--	--	--	0.69	300	34	8.4	39	--	--	--
MW-5	03/07/91	165.14	16.60	--	148.54	ND	17	0.9	0.7	1.6	--	--	--
MW-5	06/27/91	165.14	--	--	--	330	120	10	12	8	--	--	--
MW-5	09/27/91	165.14	--	--	--	0.73	230	16	20	22	--	--	--
MW-5	12/18/91	165.14	--	--	--	ND	ND	ND	ND	ND	--	--	--
MW-5	04/01/91	165.14	11.99	--	153.15	800	250	54	11	60	--	--	--
MW-5	07/03/92	165.14	18.65	--	146.49	150	36	ND<0.5	ND<0.5	1.1	--	--	ANA
MW-5	10/05/92	165.14	20.32	--	144.82	270	79	4	1.7	2.9	--	--	ANA
MW-5	01/13/93	165.14	13.03	--	152.11	180	59	6.0	1.8	7.6	--	(i)	PACE
MW-5	04/23/93	165.14	13.51	--	151.63	8700	440	96	35	136	--	(i)	PACE
MW-5	07/12/93	165.14	18.06	--	147.08	250	57	2.9	2.1	6.0	ND<5.0	(i)	PACE
MW-5	10/21/93	165.14	20.41	--	144.73	210	82	1.5	ND<0.5	1.4	--	(i)	PACE
MW-5	01/21/94	165.14	18.86	--	146.28	110	36	1.2	ND<0.5	0.7	ND<5.0	(i)	PACE
MW-5	04/20/94	165.14	17.30	--	147.84	690	230	4.5	1.6	11	21.2	(i)	1.3 PACE
MW-5	08/01/94	165.14	17.53	--	147.61	170	44	1.6	0.9	2.7	ND<5.0	(i)	0.9 PACE
MW-5	12/23/94	165.14	11.63	--	153.51	630	180	1.9	0.66	1.9	7.81	(i)	1.4 PACE
MW-5	01/26/95	165.14	11.25	--	153.89	160	68	ND<0.5	ND<0.5	22	--	--	5.9 ATI
MW-5	06/08/95	165.14	16.80	--	148.34	2000	630	58	61	180	--	--	6.5 ATI
QC-1 (c)	06/08/95	--	--	--	--	1700	560	51	55	170	--	--	ATI
MW-5	08/22/95	165.14	19.02	--	146.12	3700	1100	18	27	59	ND<130	(d)	7.3 ATI
MW-5	10/27/95	165.14	20.94	--	144.20	--	--	--	--	--	--	--	--
MW-5	10/30/95	165.14	--	--	--	6500	2200	55	180	270	ND<250	7.5	ATI
MW-5	01/25/96	165.14	13.30	--	151.84	590	37	0.70	ND<0.50	ND<1.0	ND<5.0	--	CEI
QC-1 (c)	01/25/96	--	--	--	--	540	37	0.66	ND<0.50	ND<1.0	ND<5.0	--	CEI
MW-5	04/19/96	165.14	13.63	--	151.51	1500	470	38	49	210	ND<50	8.1	SPL
MW-5	07/23/96	165.14	17.61	--	147.53	140	4.6	ND<0.5	ND<0.5	ND<0.5	ND<10	8.0	SPL
MW-5	11/11/96	165.14	18.70	--	146.44	140	40	ND<1.0	ND<1.0	ND<1.0	ND<10	7.9	SPL
MW-5	01/21/97	165.14	11.63	--	153.51	730	300	ND<5.0	7.8	26	ND<50	5.0	SPL
MW-5	04/29/97	165.14	16.74	--	148.40	340	530	ND<5.0	ND<5.0	ND<5.0	ND<50	4.8	SPL
MW-5	08/21/97	165.14	18.26	--	146.88	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.9	SPL
MW-5	11/05/97	165.14	18.84	--	146.30	120	13	ND<1.0	ND<1.0	ND<1.0	ND<10	4.4	SPL
MW-5	02/03/98	165.14	9.49	--	155.65	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<10	4.3	SPL
MW-5	05/28/98	165.14	13.57	--	151.57	4900	1500	34	180	311	ND<10	4.1	SPL
MW-5	12/30/98	165.14	14.65	--	150.49	--	--	--	--	--	--	--	--

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-5	02/02/99	165.14	12.56	--	152.58	100	ND<1.0	ND<1.0	ND<1.0	ND<1.0	9.1	--	SPL
MW-5	05/10/99	165.14	13.36	--	151.78	--	--	--	--	--	--	--	--
MW-5	08/24/99	165.14	13.50	--	151.64	--	--	--	--	--	--	--	--
MW-5	11/03/99	165.14	18.48	--	146.66	--	--	--	--	--	--	--	--
MW-5	03/01/00	165.14	9.59	--	155.55	ND<50	ND<0.5	0.58	ND<0.5	0.54	2.9	--	PACE
MW-5	04/21/00	165.14	13.52	--	151.62	--	--	--	--	--	--	--	--
MW-5	07/31/00	165.14	14.04	--	151.10	--	--	--	--	--	--	--	--
MW-5	11/20/00	165.14	15.89	--	149.25	--	--	--	--	--	--	--	--
MW-5	02/18/01	165.14	11.88	--	153.26	560	161	2.38	6.11	13	5.67	--	PACE
MW-5	06/07/01	165.14	15.30	--	149.84	--	--	--	--	--	--	--	--
MW-5	09/05/01	165.14	19.32	--	145.82	--	--	--	--	--	--	--	--
MW-5	11/30/01	165.14	17.44	--	147.70	--	--	--	--	--	--	--	--

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-6	07/09/90	165.40	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-6	12/21/90	165.40	---	---	---	0.17	2.6	7.0	4.9	26	---	---	---
MW-6 (e)	03/07/91	165.40	---	---	---	---	---	---	---	---	---	---	---
MW-6 (e)	06/27/91	165.40	---	---	---	---	---	---	---	---	---	---	---
MW-6 (e)	09/27/91	165.40	---	---	---	---	---	---	---	---	---	---	---
MW-6	12/18/91	165.40	---	---	---	ND	1.3	22	ND	2.7	---	---	---
MW-6	04/01/91	165.40	11.79	---	153.61	ND	ND	ND	ND	ND	---	---	---
MW-6	07/03/92	165.40	17.77	---	147.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	10/05/92	165.40	19.46	---	145.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-6	01/13/93	165.40	11.34	---	154.06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(i)	PACE
MW-6	04/23/93	165.40	12.92	---	152.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(i)	PACE
MW-6	07/12/93	165.40	17.36	---	148.04	ND<50	ND<0.5	ND<0.5	ND<0.5	0.7	ND<5.0	(i)	PACE
MW-6	10/21/93	165.40	19.98	---	145.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(i)	PACE
MW-6	01/21/94	165.40	18.10	---	147.30	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-6	04/20/94	165.40	18.68	---	146.72	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17.4	(i)	2.0 PACE
MW-6	08/01/94	165.40	18.90	---	146.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.66	(i)	1.5 PACE
MW-6	12/23/94	165.40	12.94	---	152.46	---	---	---	---	---	---	---	---
MW-6	01/26/95	165.40	10.46	---	154.94	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	7.3	ATI
MW-6	06/08/95	165.40	16.84	---	148.56	---	---	---	---	---	---	---	---
MW-6	08/22/95	165.40	19.48	---	145.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	(d)	6.7 ATI
MW-6	10/27/95	165.40	20.39	---	145.01	---	---	---	---	---	---	---	---
MW-6	01/25/96	165.40	12.24	---	153.16	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	9.9	---	CEI
MW-6	04/19/96	165.40	13.90	---	151.50	---	---	---	---	---	---	---	---
MW-6	07/23/96	165.40	17.83	---	147.57	---	---	---	---	---	---	---	---
MW-6	11/11/96	165.40	18.90	---	146.50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	7.7	SPL
MW-6	01/21/97	165.40	11.97	---	153.43	---	---	---	---	---	---	---	---
MW-6	04/29/97	165.40	17.04	---	148.36	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	4.5	SPL
MW-6	08/21/97	165.40	18.58	---	146.82	---	---	---	---	---	---	---	---
MW-6	11/05/97	165.40	19.17	---	146.23	70	ND<0.5	ND<1.0	ND<1.0	ND<1.0	85	4.3	SPL
MW-6	02/03/98	165.40	16.50	---	155.53	---	---	---	---	---	---	---	---
MW-6	05/28/98	165.40	13.38	---	152.02	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	3.7	SPL
MW-6	12/30/98	165.40	14.45	---	150.95	---	---	---	---	---	---	---	---
MW-6	02/02/99	165.40	18.29	---	147.11	---	---	---	---	---	---	---	---
MW-6	05/10/99	165.40	17.49	---	147.91	---	---	---	---	---	---	---	---
MW-6	08/24/99	165.40	17.61	---	147.79	---	---	---	---	---	---	---	---
MW-6	11/03/99	165.40	16.26	---	149.14	---	---	---	---	---	---	---	---

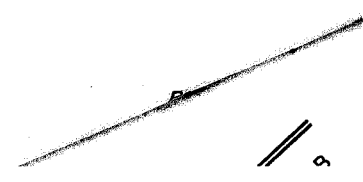


TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-6	03/01/00	165.40	17.43	--	147.97	--	--	--	--	--	--	--	--
MW-6	04/21/00	165.40	13.32	--	152.08	--	--	--	--	--	--	--	--
MW-6	07/31/00	165.40	13.46	--	151.94	--	--	--	--	--	--	--	--
MW-6	11/20/00	165.40	14.78	--	150.62	--	--	--	--	--	--	--	--
MW-6	02/18/01	165.40	11.33	--	154.07	--	--	--	--	--	--	--	--
MW-6	06/07/01	165.40	16.36	--	149.04	--	--	--	--	--	--	--	--
MW-6	09/05/01	165.40	18.61	--	146.79	--	--	--	--	--	--	--	--
MW-6	11/30/01	165.40	15.20	--	150.20	--	--	--	--	--	--	--	--



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-7	07/09/90	167.61	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-7	12/21/90	167.61	---	---	---	ND	ND	ND	ND	ND	---	---	---
MW-7	03/07/91	167.61	19.04	---	148.57	ND	ND	0.4	0.3	2.4	---	---	---
MW-7	06/27/91	167.61	---	---	---	70	17	4	0.8	2.2	---	---	---
MW-7	09/27/91	167.61	---	---	---	ND	0.4	ND	ND	0.4	---	---	---
MW-7	12/18/91	167.61	---	---	---	ND	0.7	2.9	0.8	3.3	---	---	---
MW-7	04/01/91	167.61	15.18	---	152.43	ND	ND	ND	ND	ND	---	---	---
MW-7	07/03/92	167.61	20.28	---	147.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	ANA
MW-7	10/05/92	167.61	21.56	---	146.05	ND<50	ND<0.5	ND<0.5	ND<0.5	1.5	---	---	ANA
MW-7	01/13/93	167.61	15.41	---	152.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	04/23/93	167.61	15.84	---	151.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(i)	PACE
MW-7	07/12/93	167.61	19.84	---	147.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(i)	PACE
MW-7	10/21/93	167.61	21.61	---	146.00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-7	01/21/94	167.61	20.49	---	147.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	(i)	PACE
QC-1 (c)	01/21/94	---	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-7	04/20/94	167.61	20.54	---	147.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	PACE
MW-7	08/01/94	167.61	20.99	---	146.62	ND<50	0.7	ND<0.5	ND<0.5	ND<0.5	ND<5.0	(i)	PACE
MW-7	12/23/94	167.61	15.00	---	152.61	---	---	---	---	---	---	---	---
MW-7	01/26/95	167.61	14.69	---	152.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	---	---	---
MW-7	06/08/95	167.61	19.87	---	147.74	---	---	---	---	---	---	7.0	ATI
MW-7	08/22/95	167.61	21.49	---	146.12	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---
MW-7	10/27/95	167.61	22.53	---	145.08	---	---	---	---	---	ND<5.0	(d)	ATI
MW-7	01/25/96	167.61	17.21	---	150.40	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---
MW-7	04/19/96	167.61	17.09	---	150.52	---	---	---	---	---	ND<5.0	---	CEI
MW-7	07/23/96	167.61	21.02	---	146.59	---	---	---	---	---	---	---	---
MW-7	11/11/96	167.61	22.03	---	145.58	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	---	---	---
MW-7	01/21/97	167.61	15.06	---	152.55	---	---	---	---	---	---	7.8	SPL
MW-7	04/29/97	167.61	20.11	---	147.50	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	---	---	---
MW-7	08/21/97	167.61	21.59	---	146.02	---	---	---	---	---	---	4.4	SPL
MW-7	11/05/97	167.61	20.05	---	147.56	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	---	---	---
MW-7	02/03/98	167.61	9.97	---	157.64	---	---	---	---	---	---	4.4	SPL
MW-7	05/28/98	167.61	13.52	---	154.09	ND<50	ND<0.5	ND<1.0	ND<1.0	ND<1.0	---	---	SPL
MW-7	12/30/98	167.61	18.33	---	149.28	---	---	---	---	---	---	---	---
MW-7	02/02/99	167.61	12.33	---	149.28	---	---	---	---	---	---	---	---
MW-7	05/10/99	167.61	13.52	---	154.09	---	---	---	---	---	---	---	---
MW-7	08/24/99	167.61	14.01	---	153.60	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-7	11/03/99	167.61	19.91	--	147.70	--	--	--	--	--	--	--	--
MW-7	03/01/00	167.61	19.89	--	147.72	--	--	--	--	--	--	--	--
MW-7	04/21/00	167.61	17.94	--	149.67	--	--	--	--	--	--	--	--
MW-7	07/31/00	167.61	17.33	--	150.28	--	--	--	--	--	--	--	--
MW-7	11/20/00	167.61	18.41	--	149.20	--	--	--	--	--	--	--	--
MW-7	02/18/01	167.61	15.13	--	152.48	--	--	--	--	--	--	--	--
MW-7	06/07/01	167.61	18.75	--	148.86	--	--	--	--	--	--	--	--
MW-7	09/05/01	167.61	20.48	--	147.13	--	--	--	--	--	--	--	--
MW-7	11/30/01	167.61	20.11	--	147.50	--	--	--	--	--	--	--	--

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-8	03/07/91	165.74	16.72	---	149.02	2.7	780	450	64	310	---	---	---
MW-8	06/27/91	165.74	---	---	---	12000	3400	1100	240	750	---	---	---
MW-8	09/27/91	165.74	---	---	---	41	5700	5200	1100	4300	---	---	---
MW-8	12/18/91	165.74	---	---	---	3.2	990	150	120	250	---	---	---
MW-8	04/01/91	165.74	12.54	---	153.20	15000	3600	2600	410	1900	---	---	---
MW-8	07/03/92	165.74	18.78	---	146.96	72000	19000	32000	3000	15000	---	---	ANA
MW-8	10/05/92	165.74	20.48	0.01	145.27	---	---	---	---	---	---	---	---
MW-8	01/13/93	165.74	12.87	0.01	152.88	---	---	---	---	---	---	---	---
MW-8	04/23/93	165.74	13.90	SHEEN	151.84	---	---	---	---	---	---	---	---
MW-8	07/12/93	165.74	18.30	SHEEN	147.44	---	---	---	---	---	---	---	---
MW-8	10/21/93	165.74	21.91	0.95	144.54	---	---	---	---	---	---	---	---
MW-8	01/21/94	165.74	19.12	0.03	146.64	---	---	---	---	---	---	---	---
MW-8	04/20/94	165.74	19.28	0.03	146.48	26000	1700	4100	960	4000	632	(i) 1.1	PACE
MW-8	08/01/94	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8	12/23/94	165.74	13.81	0.03	151.95	---	---	---	---	---	---	---	---
MW-8	01/26/95	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8	06/08/95	165.74	17.82	0.29	148.14	---	---	---	---	---	---	---	---
MW-8	08/22/95	165.74	19.41	0.20	146.48	---	---	---	---	---	---	---	---
MW-8	10/27/95	165.74	20.47	0.14	145.38	---	---	---	---	---	---	---	---
MW-8	01/25/96	165.74	13.35	0.22	152.56	---	---	---	---	---	---	---	---
MW-8	04/19/96	165.74	14.40	0.20	151.49	---	---	---	---	---	---	---	---
MW-8	07/23/96	165.74	18.35	0.14	147.50	---	---	---	---	---	---	---	---
MW-8	11/11/96	165.74	19.41	0.02	146.35	---	---	---	---	---	---	---	---
MW-8	01/21/97	165.74	12.29	0.01	153.46	---	---	---	---	---	---	---	---
MW-8 (e)	04/29/97	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8	08/21/97	165.74	19.61	---	146.13	240000	1100	9300	4100	31100	ND<1000	5.2	SPL
MW-8	11/05/97	165.74	19.45	0.10	146.37	57000	790	2700	2300	15200	ND<1000	5.0	SPL
MW-8	02/03/98	165.74	9.33	0.03	156.43	---	---	---	---	---	---	---	---
MW-8	02/04/98	---	---	---	---	94000	570	1500	2100	15200	ND<2500	5.5	SPL
MW-8 (e)	05/28/98	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8	12/30/98	165.74	15.48	0.05	150.30	120000	460	2300	2200	15000	150	---	SPL
MW-8	02/02/99	165.74	18.29	---	147.45	82000	450	2200	3700	26000	ND<500	---	SPL
MW-8	05/10/99	165.74	15.62	---	150.12	28000	740	1800	1100	5800	ND<25	---	SPL
MW-8	08/24/99	165.74	18.41	---	147.33	75000	530	1400	3300	21000	150	---	SPL
MW-8	11/03/99	165.74	18.71	---	147.03	70000	600	1300	3600	20500	750	---	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-8	03/01/00	165.74	19.37	---	146.37	27000	1600	1200	2600	6600	120	---	PACE
MW-8 (e)	04/21/00	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8 (e)	07/31/00	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8	11/20/00	165.74	17.42	---	148.32	1300000	1400	1700	20000	16000	5700	---	PACE
MW-8 (e)	02/18/01	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8 (e)	06/07/01	165.74	---	---	---	---	---	---	---	---	---	---	---
MW-8 (j)	09/05/01	165.74	21.45	0.04	144.32	---	---	---	---	---	---	---	---
MW-8 (h)	11/30/01	165.74	18.31	---	147.43	---	---	---	---	---	---	---	---
MW-8 (e)	12/06/01	165.74	---	---	---	---	---	---	---	---	---	---	---

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-9	03/07/91	166.20	16.79	--	149.41	7.1	220	4	2.4	2400	--	--	--
MW-9	06/27/91	166.20	--	--	--	3600	520	400	85	310	--	--	--
MW-9	09/27/91	166.20	--	--	--	3.2	720	150	50	180	--	--	--
MW-9	12/18/91	166.20	--	--	--	ND	2.5	1.1	0.3	5.8	--	--	--
MW-9	04/01/91	166.20	12.89	--	153.31	12000	2000	2600	360	1600	--	--	--
MW-9	07/03/92	166.20	18.89	--	147.31	5700	17000	840	230	800	--	--	ANA
MW-9	10/05/92	166.20	20.52	--	145.68	1400	440	17	14	100	--	--	ANA
MW-9	01/13/93	166.20	12.92	--	153.28	11000	1200	1700	340	1400	--	(i)	PACE
QC-1 (c)	01/13/93	--	--	--	--	11000	1200	1600	330	1300	--	(i)	PACE
MW-9	04/23/93	166.20	14.08	--	152.12	24000	2800	4500	730	3400	--	(i)	PACE
MW-9	07/12/93	166.20	18.44	--	147.76	13000	1400	1100	360	1400	20.8	(i)	PACE
QC-1 (c)	07/12/93	--	--	--	--	10000	1200	900	310	1200	--	--	PACE
MW-9	10/21/93	166.20	21.81	0.89	145.06	--	--	--	--	--	--	--	--
MW-9	01/21/94	166.20	19.28	--	146.92	--	--	--	--	--	--	--	--
MW-9	04/20/94	166.20	19.72	--	146.48	43000	2800	6800	1300	7900	768	(i)	1.7 PACE
QC-1 (c)	04/20/94	--	--	--	--	45000	2700	6800	1200	8200	740	(d)	PACE
MW-9	08/01/94	166.20	20.18	0.05	146.06	--	--	--	--	--	--	--	--
MW-9	12/23/94	166.20	14.22	0.02	152.00	--	--	--	--	--	--	--	--
MW-9	01/26/95	166.20	11.85	0.13	154.45	--	--	--	--	--	--	--	--
MW-9	06/08/95	166.20	18.33	0.80	148.47	--	--	--	--	--	--	--	--
MW-9	08/22/95	166.20	19.95	0.01	146.26	--	--	--	--	--	--	--	--
MW-9	10/27/95	166.20	20.88	0.01	145.33	--	--	--	--	--	--	--	--
MW-9	01/25/96	166.20	13.84	0.07	152.41	--	--	--	--	--	--	--	--
MW-9 (e)	04/19/96	166.20	--	--	--	--	--	--	--	--	--	--	--
MW-9	07/23/96	166.20	18.84	0.03	147.38	--	--	--	--	--	--	--	--
MW-9	11/11/96	166.20	19.91	0.01	146.30	--	--	--	--	--	--	--	--
MW-9	01/21/97	166.20	12.93	0.01	153.28	--	--	--	--	--	--	--	--
MW-9	04/29/97	166.20	18.03	SHEEN	148.17	--	--	--	--	--	--	--	--
MW-9	04/30/97	166.20	--	--	--	78000	1900	3600	3100	20600	ND<5000	5.5	SPL
MW-9	08/21/97	166.20	19.56	0.01	146.65	110000	2100	3400	2300	18800	ND<500	5.1	SPL
MW-9	11/05/97	166.20	20.59	0.01	145.62	59000	1400	1700	2200	17000	ND<500	4.5	SPL
MW-9	02/03/98	166.20	10.56	--	155.64	55000	490	1200	1400	10200	ND<1000	4.9	SPL
MW-9	05/28/98	166.20	14.21	0.01	152.00	41000	250	1200	1500	11400	ND<250	3.8	SPL
QC-1 (c)	05/28/98	--	--	--	--	53000	290	830	1400	10500	ND<500	--	SPL
MW-9	12/30/98	166.20	15.61	--	150.59	83000	860	1300	2400	21000	180	--	SPL

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-9	02/02/99	166.20	12.33	--	153.87	75000	530	960	1900	17000	ND<50	--	SPL
MW-9	05/10/99	166.20	15.67	--	150.53	22000	600	1500	1100	4400	72	--	SPL
MW-9	08/24/99	166.20	19.10	--	147.10	85000	850	1300	1700	20000	ND<250	--	SPL
MW-9	11/03/99	166.20	19.58	--	146.62	72000	700	780	1900	19000	ND<5.0	--	PACE
MW-9	03/01/00	166.20	13.19	--	153.01	34000	78	490	1100	8200	63	--	PACE
MW-9	04/21/00	166.20	14.29	--	151.91	55000	260	920	1500	16000	ND<5.0	--	PACE
MW-9	07/31/00	166.20	15.01	--	151.19	1200000	1500	6300	15000	120000	1600	--	PACE
MW-9	11/20/00	166.20	18.23	--	147.97	320000	3500	19000	5000	40000	3900	--	PACE
MW-9	02/18/01	166.20	13.14	--	153.06	32000	290	417	1180	10400	121	--	PACE
MW-9	06/07/01	166.20	17.41	--	148.79	96000	421	704	2330	17300	223	--	PACE
MW-9	09/05/01	166.20	20.56	--	145.64	39000	445	323	1240	8940	310	--	PACE
MW-9	11/30/01	166.20	17.42	--	148.78	60000	310	586	1890	14200	285	--	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-10	03/07/91	167.01	18.09	--	148.92	1.6	120	190	32	230	--	--	--
MW-10	06/27/91	167.01	--	--	--	12000	7300	500	150	300	--	--	--
MW-10	09/27/91	167.01	--	--	--	57	12000	7200	1400	4600	--	--	--
MW-10	12/18/91	167.01	--	--	--	5.3	2500	120	36	79	--	--	--
MW-10	04/01/91	167.01	13.92	--	153.09	ND	ND	ND	ND	ND	--	--	--
MW-10	07/03/92	167.01	19.92	--	147.09	8600	5100	1300	180	690	--	--	ANA
MW-10	10/05/92	167.01	21.92	0.19	145.23	--	--	--	--	--	--	--	--
MW-10	01/13/93	167.01	14.43	0.03	152.60	--	--	--	--	--	--	--	--
MW-10	04/23/93	167.01	15.26	0.06	151.80	--	--	--	--	--	--	--	--
MW-10	07/12/93	167.01	19.78	0.45	147.57	--	--	--	--	--	--	--	--
MW-10	10/21/93	167.01	22.90	0.69	144.63	--	--	--	--	--	--	--	--
MW-10	01/21/94	167.01	20.25	0.06	146.81	--	--	--	--	--	--	--	--
MW-10	04/20/94	167.01	20.74	--	146.27	100000	12000	24000	2400	14000	1577	(d)(i) 1.0	PACE
MW-10	08/01/94	167.01	22.00	0.28	145.22	--	--	--	--	--	--	--	--
MW-10	12/23/94	167.01	16.08	0.25	151.12	--	--	--	--	--	--	--	--
MW-10	01/26/95	167.01	13.68	0.80	153.93	--	--	--	--	--	--	--	--
MW-10	06/08/95	167.01	19.08	0.75	148.49	--	--	--	--	--	--	--	--
MW-10	08/22/95	167.01	20.73	0.70	146.81	--	--	--	--	--	--	--	--
MW-10	10/27/95	167.01	21.69	0.63	145.79	--	--	--	--	--	--	--	--
MW-10	01/25/96	167.01	15.05	0.81	152.57	--	--	--	--	--	--	--	--
MW-10	04/19/96	167.01	16.26	0.58	151.19	--	--	--	--	--	--	--	--
MW-10	07/23/96	167.01	20.18	0.62	147.30	--	--	--	--	--	--	--	--
MW-10	11/11/96	167.01	21.20	0.20	145.96	--	--	--	--	--	--	--	--
MW-10	01/21/97	167.01	13.66	0.14	153.46	--	--	--	--	--	--	--	--
MW-10	04/29/97	167.01	18.71	0.21	148.46	--	--	--	--	--	--	--	--
MW-10	04/30/97	167.01	--	--	--	170000	9700	38000	4700	30500	ND<5000	5.6	SPL
MW-10	08/21/97	167.01	20.19	0.14	146.93	170000	9500	35000	4300	27100	ND<5000	5.3	SPL
MW-10	11/05/97	167.01	20.52	0.02	146.51	80000	3800	12000	2700	15700	ND<500	4.4	SPL
MW-10	02/03/98	167.01	10.62	0.01	156.40	--	--	--	--	--	--	--	--
MW-10	02/04/98	--	--	--	--	72000	500	1300	1700	12000	ND<1000	5.1	SPL
MW-10	05/28/98	167.01	15.46	--	151.55	220000	3200	24000	5200	43000	ND<1000	4.8	SPL
MW-10	12/30/98	167.01	16.65	--	150.36	110000	3500	14000	5800	50000	ND<50	--	SPL
MW-10	02/02/99	167.01	14.58	--	152.43	74000	1000	2800	1000	26000	860	--	SPL
MW-10	05/10/99	167.01	15.72	--	151.29	81000	2800	2800	3000	17000	220	--	SPL
MW-10	08/24/99	167.01	19.85	--	147.16	54000	3500	3800	1500	9100	ND<250	--	SPL
MW-10	11/03/99	167.01	20.00	--	147.01	30000	3000	3500	1200	5000	31	--	PACE

LAB

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
MW-10	03/01/00	167.01	14.62	---	152.39	62000	320	1200	1100	26000	4400	---	PACE
MW-10	04/21/00	167.01	15.46	---	151.55	88000	2700	7400	3700	35000	2400	---	PACE
MW-10 (e)	07/31/00	167.01	---	---	---	---	---	---	---	---	---	---	---
MW-10	11/20/00	167.01	18.74	---	148.27	78000	3800	5500	2800	13000	450	---	PACE
MW-10	02/18/01	167.01	14.10	---	152.91	39000	1050	1160	1550	14700	4180	---	PACE
MW-10	06/07/01	167.01	18.78	---	148.23	76000	2460	2840	3330	20700	635	---	PACE
MW-10	09/05/01	167.01	21.40	0.01	145.62	25000	2510	2070	1090	4540	189	---	PACE
MW-10	11/30/01	167.01	18.50	---	148.51	100000	2480	5720	3890	22800	325	---	PACE



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
RW-1	07/09/90	168.01	--	1.21	--	--	--	--	--	--	--	--	--
RW-1	12/21/90	168.01	--	0.01	--	--	--	--	--	--	--	--	--
RW-1	03/07/91	168.01	17.62	SHEEN	150.39	--	--	--	--	--	--	--	--
RW-1	06/27/91	168.01	--	0.04	--	--	--	--	--	--	--	--	--
RW-1	09/27/91	168.01	--	0.02	--	--	--	--	--	--	--	--	--
RW-1	12/18/91	168.01	--	0.02	--	--	--	--	--	--	--	--	--
RW-1	04/01/91	168.01	14.40	0.11	153.69	--	--	--	--	--	--	--	--
RW-1	07/03/92	168.01	20.66	SHEEN	147.35	--	--	--	--	--	--	--	--
RW-1	10/05/92	168.01	23.34	0.08	144.73	--	--	--	--	--	--	--	--
RW-1	01/13/93	168.01	16.59	0.05	151.46	--	--	--	--	--	--	--	--
RW-1	04/23/93	168.01	16.17	0.18	151.98	--	--	--	--	--	--	--	--
RW-1	07/12/93	168.01	20.18	0.06	147.88	--	--	--	--	--	--	--	--
RW-1	10/21/93	168.01	25.70	0.56	142.73	--	--	--	--	--	--	--	--
RW-1	01/21/94	168.01	21.24	0.40	147.07	--	--	--	--	--	--	--	--
RW-1	04/20/94	168.01	32.20	--	135.81	--	--	--	--	--	--	--	--
RW-1	08/01/94	168.01	21.70	--	146.31	29000	580	950	300	7800	1200	(d) 1.1	PAGE
RW-1	12/23/94	168.01	16.02	--	151.99	1300	25	8.6	1.4	69	616	(i) 1.8	PAGE
RW-1	01/26/95	168.01	13.78	--	154.23	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	--	--	ATI
QC-1 (c)	01/26/95	--	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	--	--	ATI
RW-1	06/08/95	168.01	20.05	--	147.96	1300	130	ND<1.0	ND<1.0	36	--	--	ATI
RW-1	08/22/95	168.01	21.74	--	146.27	3300	230	13	4.9	280	ND<25	(d) 6.6	ATI
QC-1 (c)	08/22/95	--	--	--	--	2800	210	9.3	4.3	250	ND<25	(d) --	ATI
RW-1	10/27/95	168.01	32.00	--	136.01	--	--	--	--	--	--	--	--
RW-1	10/30/95	168.01	--	--	--	230	1.4	ND<1.0	ND<1.0	ND<2.0	650	6.9	ATI
QC-1 (c)	10/30/95	--	--	--	--	240	1.6	ND<1.0	ND<1.0	ND<2.0	630	--	ATI
RW-1	01/25/96	168.01	15.41	--	152.60	15000	3400	930	330	2500	5300	--	CEI
RW-1	04/19/96	168.01	16.83	--	151.18	35000	5500	3300	1700	9400	14000	7.6	SPL
QC-1 (c)	04/19/96	--	--	--	--	33000	5600	3200	1700	8800	15000	--	SPL
RW-1	07/23/96	168.01	20.76	--	147.25	46000	3600	2300	900	5100	36000	7.4	SPL
QC-1 (c)	07/23/96	--	--	--	--	47000	3700	2500	930	5300	35000	--	SPL
RW-1	11/11/96	168.01	21.73	--	146.28	34000	3000	1200	880	4600	22000	8.3	SPL
QC-1 (c)	11/11/96	--	--	--	--	31000	2900	1000	860	4600	22000	--	SPL
RW-1	01/21/97	168.01	14.20	--	153.81	260	40	16	2.7	34	1500	6.1	SPL
QC-1 (c)	01/21/97	--	--	--	--	270	42	17	2.7	36	1500	--	SPL
RW-1	04/29/97	168.01	19.15	--	148.86	32000	3100	590	1300	6000	46000	5.3	SPL
RW-1	08/21/97	168.01	20.67	--	147.34	7600	730	58	370	1780	9500	4.7	SPL

LAB

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	DO (ppm)	LAB
RW-1	11/05/97	168.01	21.01	---	147.00	39000	2300	86	1300	3840	56000	4.5	SPL
RW-1	02/03/98	168.01	10.68	---	157.33	3400	31	11	29	161	3200	5.1	SPL
RW-1	05/28/98	168.01	15.55	---	152.46	2000	90	15	60	305	2700	4.3	SPL
RW-1	12/30/98	168.01	17.35	---	150.66	---	---	---	---	---	---	---	---
RW-1	02/02/99	168.01	14.58	---	153.43	82000	2300	120	2000	3200	51000/78000 (g)	---	SPL
RW-1	05/10/99	168.01	16.00	---	152.01	15000	620	88	340	660	61000	---	SPL
RW-1	08/24/99	168.01	20.00	---	148.01	52000	1400	170	2200	2900	37000	---	SPL
RW-1	11/03/99	168.01	20.39	---	147.62	17000	2500	86	1500	970	54000	---	PACE
RW-1	03/01/00	168.01	12.97	---	155.04	17000	580	78	790	1100	13000	---	PACE
RW-1	04/21/00	168.01	16.02	---	151.99	31000	2100	100	1400	1100	39000	---	PACE
RW-1	07/31/00	168.01	21.89	---	146.12	47000	1300	170	2700	2300	30000	---	PACE
RW-1 (h)	11/20/00	168.01	19.15	---	148.86	---	---	---	---	---	---	---	---
RW-1	02/18/01	168.01	15.35	---	152.66	14000	589	89	600	712	13000	---	PACE
RW-1	06/07/01	168.01	19.09	---	148.92	28000	1140	68.2	504	530	19100	---	PACE
RW-1 (j)	09/05/01	168.01	22.06	0.02	145.97	---	---	---	---	---	---	---	PACE
RW-1	11/30/01	168.01	19.53	---	148.48	20000	405	39.4	545	740	8260	---	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITERING

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
DO	Dissolved oxygen
ug/L	Micrograms per liter
ppm	Parts per million
—	Not analyzed/available/applicable/measurable
ND	Not detected above reported detection limit
PACE	Pace, Inc.
ANA	Anamatrix, Inc.
ATI	Analytical Technologies, Inc.
CEI	Ceimic Corporation
SPL	Southern Petroleum Laboratories

NOTES:

- (a) Casing elevations surveyed to the nearest 0.01 foot relative to mean sea level.
- (b) Groundwater elevations adjusted assuming a specific gravity of 0.75 for free product.
- (c) Blind duplicate.
- (d) A copy of the documentation for this data is included in Alisto report 10-024-10-001.
- (e) Well inaccessible.
- (f) Travel blank.
- (g) EPA Methods 8020/8260 used.
- (h) Unable to sample.
- (i) A copy of the documentation for this data can be found in Blaine Tech Services report 010607-M-3. MTBE data for the January 13, 1993 and April 23, 1993 sampling events has been destroyed. No chromatograms could be located for MTBE data from wells MW-5, MW-6, and MW-7, sampled on October 21, 1993.
- (j) Well not sampled due to presence of SPH.
- (k) Could not purge and sample; Waste drum full.

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



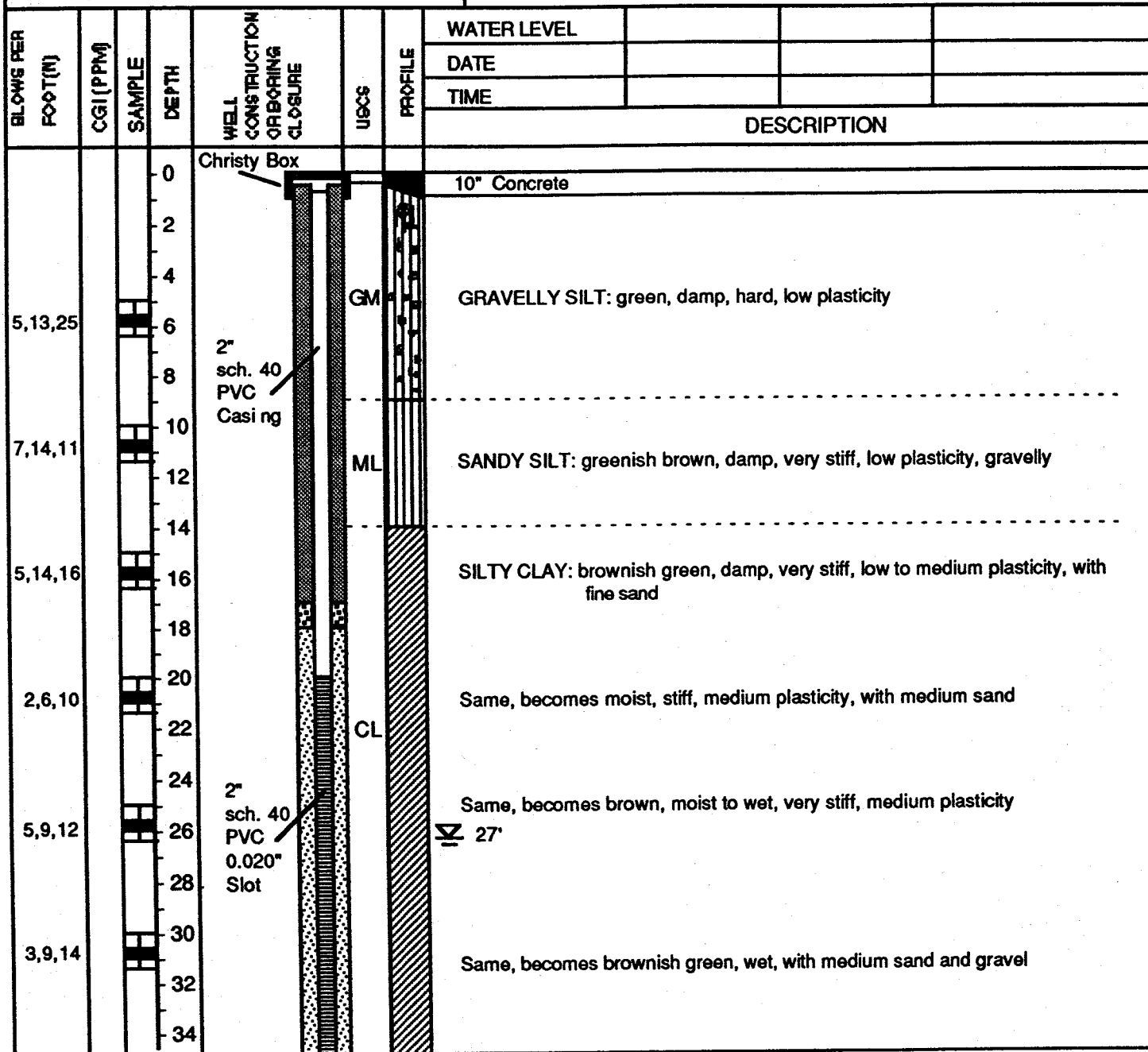
PROJECT NO. 30-081-01 DATE DRILLED 2-25-91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave, Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.  
SB-8  
WELL NO.  
MW-8  
Page 1 of 2

FIELD SKETCH OF BORING LOCATION

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction details  
DRILLER Soils Exploration Services, Inc.

TOP OF CASING ELEVATION 165.74'



ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2/25/91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave., Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.  
SB-8  
WELL NO.  
MW-8  
Page 2 of 2

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 165.74'

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction detail  
DRILLER Soils Explorations Services, Inc.

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL			
							DATE			
							TIME			
							DESCRIPTION			
7,11,14			36							
			38							
11,20, 20			40	End Cap	CL					SILTY CLAY: brown, wet, very stiff, medium to high plasticity, with medium sand and gravel
			42							Same, becomes moist to wet, hard, medium plasticity
			44							BORING TERMINATED AT 41.5 FEET BELOW GRADE
			46							
			48							
			50							
			52							
			54							
			56							
			58							
			60							



Portland Cement

Sand #3 Lonestar

Bentonite Pellets



Sample

Driven interval

Water level encountered during drilling

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



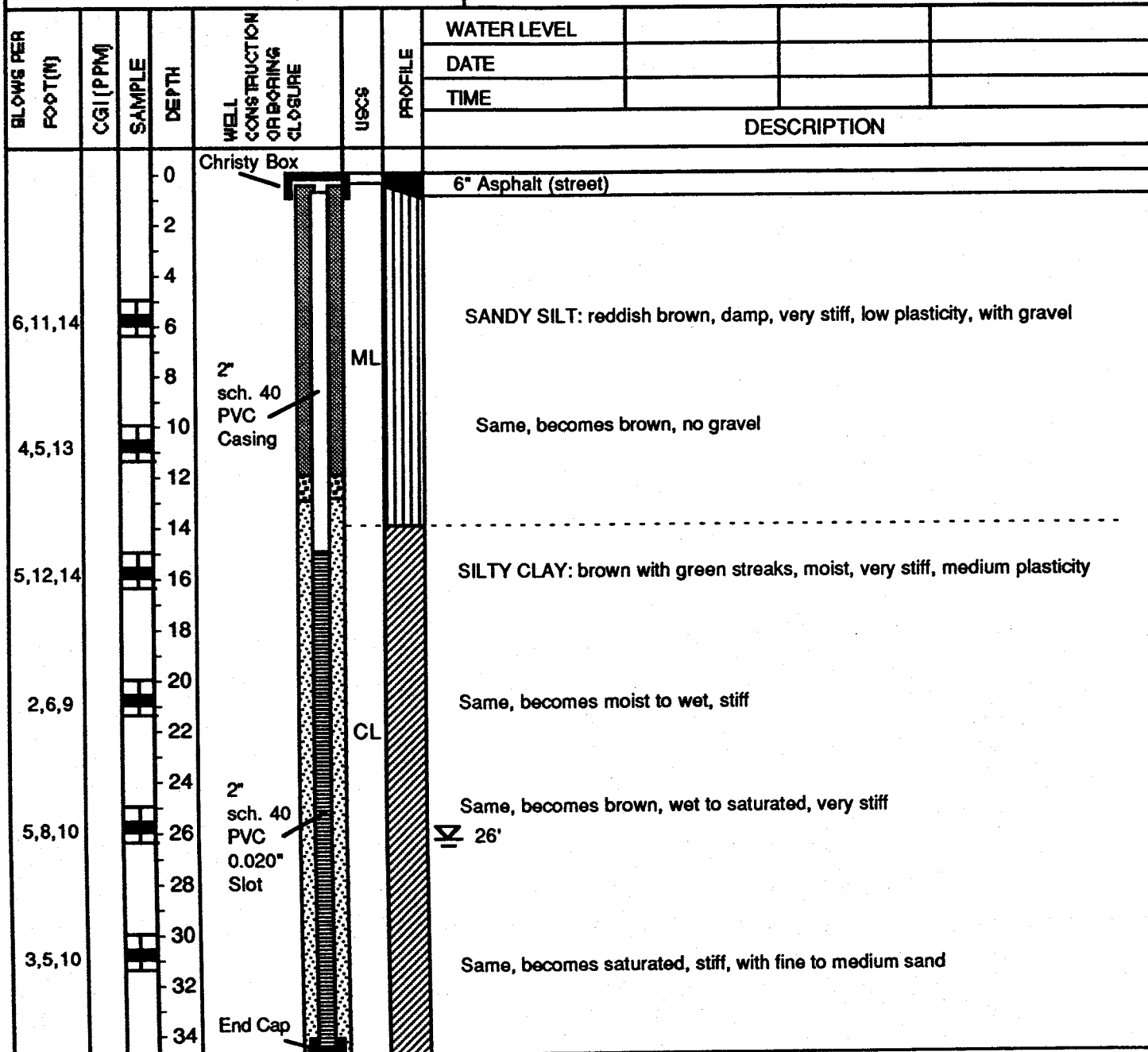
PROJECT NO. 30-081-01 DATE DRILLED 2-26-91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave, Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.  
SB-9  
WELL NO.  
MW-9  
Page 1 of 2

FIELD SKETCH OF BORING LOCATION

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction details  
DRILLER Soils Exploration Services, Inc.

TOP OF CASING ELEVATION 166.20



ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2/26/91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave., Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood







BORING NO.  
SB-9  
WELL NO.  
MW-9  
Page 2 of 2

FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 166.20'

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction detail  
DRILLER Soils Explorations Services, Inc.

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL			
							DATE			
							TIME			
							DESCRIPTION			
6,12,17			36		CL		SILTY CLAY: reddish brown, saturated to wet, very stiff, medium plasticity			
			38				BORING TERMINATED AT 36.5 FEET BELOW GRADE			
			40							
			42							
			44							
			46							
			48							
			50							
			52							
			54							
			56							
			58							
			60							

	Portland Cement		Sample
	Sand #3 Lonestar		Driven interval
	Bentonite Pellets		Water level encountered during drilling

ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2-27-91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave, Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood

BORING NO.  
SB-10  
WELL NO.  
MW-10  
Page 1 of 2

FIELD SKETCH OF BORING LOCATION

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction details  
DRILLER Soils Exploration Services, Inc.

TOP OF CASING ELEVATION 167.01'

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL		
							DATE		
							TIME		
							DESCRIPTION		
			0	Christy Box					
			2						10" Concrete
			4						
6,12,17			6						SILTY CLAY: tan, damp, very stiff, low plasticity, with gravel
			8						
			10	2" sch. 40 PVC Casing					Same, becomes tan to brown
6,14,17			12		CL				
			14						
7,10,14			16						Same, becomes brown with green streaks, moist, medium plasticity, with gravel
			18						
4,8,13			20						Same, becomes moist to wet, with fine sand and gravel
			22						
			24						
3,8,18			26	2" sch. 40 PVC 0.020" Slot					SANDY CLAY: brownish white, wet to saturated, very stiff, low to medium plasticity, with slight gravel
			28						
			30		CL				
11,19,25			32						Same, becomes brown, wet, hard, medium plasticity, with slight gravel
			34	End Cap					



ALTON GEOSCIENCE, Inc.  
LOG OF EXPLORATORY  
BORING



PROJECT NO. 30-081-01 DATE DRILLED 2/27/91  
CLIENT BP Oil Company  
LOCATION 3201 35th Ave., Oakland  
LOGGED BY M. Taylor APPROVED BY M. Hopwood




BORING NO.  
SB-10  
WELL NO.  
MW-10  
Page 2 of 2




FIELD SKETCH OF BORING LOCATION

TOP OF CASING ELEVATION 167.01'

DRILLING METHOD Hollow stem auger HOLE DIAM. 8"  
SAMPLER TYPE Modified split spoon  
CASING DATA See well construction detail  
DRILLER Soils Explorations Services, Inc.

BLOWS PER FOOT (N)	CGI (PPM)	SAMPLE	DEPTH	WELL CONSTRUCTION OR BORING CLOSURE	USCS	PROFILE	WATER LEVEL			
							DATE			
							TIME			
							DESCRIPTION			
7,8,11			36		CL		SILTY CLAY: brown, wet, very stiff, medium plasticity, with some fine sand			
			38				BORING TERMINATED AT 36.5 FEET BELOW GRADE			
			40							
			42							
			44							
			46							
			48							
			50							
			52							
			54							
			56							
			58							
			60							

 Portland Cement  
 Sand #3 Lonestar  
 Bentonite Pellets

 Sample  
 Driven interval  
 Water level encountered during drilling

" want well ~ 100' W/SW of  
 MW-8 along 35th Ave  
 (my wells at 201K STOP 2' and  
 2' find)

**CASE CLOSURE SUMMARY**  
**UNDERGROUND FUEL STORAGE TANK LOCAL OVERSIGHT PROGRAM**

- Need to find MW monitor rpts for MW-1-MW-7 (RW-1)
  - Need rpts for TWS and other SBEs adjoined at site
  - Need USE removal rgt (1987)
- Date: ---/---/---

**I. AGENCY INFORMATION**

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502	Phone: (510) 567-6700
Responsible Staff Person: Eva Chu	Title: Hazardous Materials Specialist

**II. CASE INFORMATION**

Site Facility Name: BP Oil Facility 11132		
Site Facility Address: 3201 35th Ave Oak CA 94619		
RB LUSTIS Case No.: ---	Local Case No.:	LOP Case No.: 20-014
URF Filing Date:	SWEEPS No.: ---	APN:
Responsible Parties	Addresses	Phone Number
Scott Hootan BP Oil	295 SW 41st St Bldg 13 Sten Renton WA 98055-4931	(425) 251-0667

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1				6/1/87
2				"
3				"
Piping				

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and Type of Release:	
Tank 1	
Tank 2	
Tank 3	

Site characterization complete? Yes	Date Approved By Oversight Agency:
-------------------------------------	------------------------------------

Contaminant	Soil (ppm)		Water (ppb)	
	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>3</sup>	After <sup>4</sup>
TPH (Gas)				
TPH (Diesel)				
Oil & Grease				
Benzene				
Toluene				
Ethyl Benzene				
Xylenes				
MtBE				
Metals				
Other)				

Site History and Description of Corrective Actions:

The site is currently an operating BP oil service station w/ 3-10k USTs installed in 1987. In July 1986 3 GW MWs (MW-1 through MW-3) were installed at the site. Dissolved PHC were detected in the water samples. The 1st generation USTs (size 7-10K + 1-12K) were removed and replaced with 2nd generation USTs in Aug 1990. Soil samples collected beneath the tanks contained up to 420 ppm TPH to date, 10 groundwater monitoring wells (MW-1 through MW-10) and one recovery well (RW-1) have been installed on- and off-site to delineate the vertical & lateral extent of the contaminant plume. FP has been detected in MW-1 and MW-2.

In Aug 1992 an interim remediation system was installed. GW & separate phase hydrocarbons was extracted from RW-1 and treated by 2-2,000:10 activated carbon vessels. The treated water was discharged to the sanitary sewer system. GW extraction terminated on Nov 25, 1992.

HC are present in soils in the vicinity of the UST complex at a depth interval from 13 to 27 feet bgs. (In the vicinity of well MW-8, adsorbed HCs are present only at depth interval from 13 to 17 feet bgs.)

An aquifer pump test was performed in April 1991. The average transmissivity of the aquifer beneath the site was calculated to be 0.392 ft<sup>2</sup>/min. The average hydraulic conductivity was determined to be 0.016 ft/min. Soil types encountered generally consisted of silty clay.

FP is still measured on MW-1, MW-8, MW-10

Monitoring wells installed? Yes No		Number:		
Proper Screened interval? Yes				
Well No.	Screen Interval (depth in feet)	Highest GW Depth (Mo/Yr to Mo/Yr)	Lowest GW Depth	Comment
MW-1				2"
MW-2				2"
MW-3				2"
MW-4 <del>damaged</del>				4"
MW-5 - MW-10				2"
				<del>2"</del>
RW-1				6"
Flow Direction south at ~ .003 A/F but plume conc suggest GW flows more SW				
Most Sensitive Current Use:				
Are drinking water wells affected?		Aquifer Name: Peralta Creek is the nearest surface		
Is Surface water affected		Nearest affected SW name water, ~ 500 feet north of the site		
Off-site beneficial use impacts (addresses/locations):				
Summary of production wells in vicinity There are no known municipal or private water wells within a 1/2 mile radius of the site.				

Reports on file?	Where are reports?
Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502	

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank			
Piping			
Free Product			
Soil			
Groundwater			

**IV. CLOSURE**

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes No		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes No		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health.		
Site Management Requirements:		
Should corrective action be reviewed if land use changes? Yes No		
Monitoring Wells Decommissioned: Yes No	Number Decommissioned:	Number Retained:
List Enforcement Actions Taken:		
List Enforcement Actions Rescinded:		

**V. ADDITIONAL COMMENTS, DATA, ETC.**

Considerations and/or Variances:
Conclusion:

**VI. LOCAL AGENCY REPRESENTATIVE DATA**

Prepared by: Eva Chu	Title: Hazardous Materials Specialist
Signature:	Date:
Reviewed by:	Title: Hazardous Materials Specialist
Signature:	Date:
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature:	Date:

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

BP, 3201-35th Ave

10/6/03 cont

9 UB-7,8

---

10/10/03

2, well survey

BP, 3201 - 35th Ave

3/20/03

1903

MW-1 his FP / hi

MW-2 his hi tphg, B

MW-3 his lo / ND

MW-4 his lo / ND

MW-5 big ↑ for Cast Q  
7,900 mg/l tphg  
1,400 mg/l B  
his mostly lo

MW-6 not sampled since '98 no FP  
↑  
pre + '98 ND

MW-7 not sampled since '98 no FP  
↑  
pre + '98 ND

MW-8 his hi

MW-9 his hi / FP

MW-10 has FP/hi

RW-1 has FP/hi



BP, 3201-35th Ave

1/30/03

9/9/03, 9/15/03 PPRS

no description

10/25/04

tentative

diag not specific

2/5/03

10/28/02 WP

MW 11, 12 proposed

? req sub-gw's to locate wells

2/14/03

9/9/02 box

? isopack

2/28/03

? why MW 6?

not sampled

1/30/03

	flow dir
9/11/02	SW
6/20/02	SW
2/20/02	SE
11/30/01	S, SE
9/15/01	SW
6/17/01	SW
2/18/01	SE
11/20/00	SW
7/31/00	SW
4/21/00	SE
3/1/00	W
11/13/99	SE
8/24/99	SW
7/12/99	NW
2/2/99	SE
12/30/98	SE
5/28/98	W
2/13/98	W
11/5/97	SW
8/21/97	SE
4/29-30/97	SE
1/21/97	SE
11/11/96	S
7/23/96	SE
4/19/96	SE
1/25/96	E

BP, 3201 35th St

1/30 103 cont

	flow dir
10/27/95	NW
8/22/95	N
6/18/95	SW
12/23/94	S
1/28/95	SE
8/1/94	S
4/20/94	S

3P, 3201-35th Ave

1/29/03

? tranom 392 ft/m

9/11/02 samples

free prod MW-1, RW-1

also his

RW1 is dngrad for MW-1, T's

his hi - MW2

his lo - MW-3, 4

MW-5 ↑ recently to 4200 ft  
940 B

is dngrad of RW1, T's

MW-6, This ND

is dngrad + away for T's

MW8 ↑ + hi

dngrad of RW1

MW9 ↑, his hi

dngrad of T's

1/29/03 cont

MW 10 his hi

RW 1 his hi

dn grad T's + disp

5/25/90 TW's

Two W diagrams but descriptors  
✓ working logs

no W " for MW 1-3  
✓ working

2/5/03

8/21/91 MW 8, 9, 10

? pumping test

? some recep survey  
no map

(ppb) as measured in MW-1 in January 2000. TPH-g concentration reported during the latest sampling event of this well in February 2002 noted the levels to decrease to 52,000 ppb. Benzene, toluene, ethylbenzene and xylenes (BTEX compounds) and MTBE have also been reported in the groundwater. Benzene was reported at a maximum concentration of 19,000 ppb in a groundwater sample collected from MW-1 in February 1998 but was noted to attenuate to 465 ppb during the February 2002 sampling event. MTBE was reported at a maximum concentration of 61,000 ppb from the sample collected from RW-1 during the February 1999 monitoring event. The concentration of MTBE was noted to decrease to 7,240 ppb in a sample collected from RW-1 during the February 2002 monitoring event. These decreases indicate that natural attenuation is occurring in the shallow groundwater of the subject property and surrounding area.

The down gradient extent of dissolved phase hydrocarbons have been monitored through the sampling of the down gradient wells MW-5 and MW-8. During the September 2002 sampling event, TPH-g, benzene and MTBE were reported in a groundwater collected from MW-8 located approximately 80 feet down gradient of the subject property at 190,000 ppb, 1,500 ppb and 1,200 ppb, respectively. Considerable lower concentrations were reported in the groundwater sample collected from MW-5 located approximately 100 feet further down (and slightly cross gradient) with respect to MW-8. During the February 2002 sampling event, a groundwater sample collected from MW-5 was reported to contain TPH-g, benzene and MTBE at 4,200 ppb, 940 and 55.6 ppb, respectively. This decrease in concentrations indicates that the amount of dissolved phase hydrocarbons is naturally attenuating through advection and dispersion and also likely by chemical and biological degradation as it migrates in the down gradient direction.

A sensitive receptor survey was completed in 1991 by Alton Geosciences. The survey revealed that the nearest residence is 50 feet from the subject property, the nearest hospital was 11,000 feet, and the nearest school was 11,000 feet from the subject property.

A groundwater remediation system was activated on the property in 1992 and operated intermittently through the 1990s. The treated groundwater was discharged into the sanitary sewer system under permit from the East Bay Municipal Utility District (EBMUD).

#### **PROPOSED SCOPE OF WORK**

The proposed scope of work responds to the ACHCS request for a work plan to further characterize the nature, extent and associated risks with hydrocarbon contamination. The scope of work includes:

- Completion of a Conduit Study;
- Contaminant Plume Definition;
- Contaminant Source Characterization;
- Groundwater Contaminant Plume Monitoring; and
- Corrective Action Plan.

### **Conduit Study**

URS proposes to complete a conduit study to identify potential migration pathways and conduits to assess the probability of the plume encountering preferential pathways and conduits that may promote the migration of petroleum hydrocarbons. A map showing location and depth of utility lines, trenches, sewers, storm drains, wells, creeks and underground water channels will be prepared at the conclusion of this study.

The data from the conduit study and data from previous investigations at the site and surrounding area will be used to develop the initial conceptual site model (CSM) for the site which will be used to assess future sampling points for the soil and groundwater sampling portions of this workplan.

### **Contaminant Plume Definition**

The purpose of the assessing the contaminant plume is to develop a three-dimensional model of the nature and extent of the remaining petroleum hydrocarbons in the soil and groundwater. The initial task will be the installation of two new groundwater monitoring wells near the down gradient extent of the known hydrocarbon plume. As shown on Figure 1, MW-11 is proposed to be located approximately 100 feet west and down gradient of MW-8.

As presented in Attachment B, standard well drilling, installation, develop and sampling procedures will be followed. However, as requested by he ACHCS, the well selection of the well screened interval will be carefully determined to allow specific groundwater zones to be monitored. In order to assess the proper screened interval, the borings for the wells will be continuous cored. At the conclusion of well installation activities, the new wells will be surveyed in by a State Licensed Surveying following State Tank Geotracker lateral and vertical reporting requirements.

A State Certified Laboratory will analyze the groundwater samples for TPH-g, BTEX and MTBE using EPA Method 8021. In addition, ether oxygenates, ethanol, EDB and 1,2-DCA using EPA Method 8260 will be included in the initial two rounds of groundwater sampling.

The groundwater sampling program and CSM model will be refined based on on-site measurements and observations, and the results of recent monitoring events. The proposed scope of work will remain flexible so that the field manager can adjust the location, quantity, depth and type of samples based on the developing conceptual model to expedite data collection.

### **Contaminant Source Characterization**

The purpose of the contaminant source characterization is to assess the nature and extent of separate and dissolved phase hydrocarbons in the soil and groundwater in the vicinity of the former and current USTs. The initial step in the task is to incorporate all existing soil data into the CSM to assess locations and depths of soil and groundwater sampling points. Once the data is plotted and evaluated, soil and groundwater samples will be collected by continuous coring direct-push drilling methods. The US EPA protocol "Expedited Site Assessment Tools for Underground Storage Tanks Sites: A Guide for Regulator" (EPA 510-B-97-001) dated March 1997 will be evaluated to provide a cost-effective approach to assess the nature and extent of the remaining petroleum hydrocarbons in the soil and groundwater.

### Groundwater Contaminant Plume Monitoring

The purpose of the groundwater monitoring is to assess the nature and extent over time of the remaining petroleum hydrocarbons in groundwater of the subject property and surrounding area. In order to achieve this objective, groundwater monitoring for all wells will continue on the current schedule except for change in the sampling schedule for MW-5 from annual to quarterly as requested by Ms. Chu on October 28, 2002. In addition, as previously noted, two proposed wells, MW-11 and MW-12 will be added to the monitoring program and be sampled on a quarterly basis.

As quarterly groundwater data is evaluated, the CSM will be updated on regular basis and will include cross-sections, structural contours and concentration isopachs maps.

*of additional analysis*

### Corrective Action Plan

The purpose for the Corrective Action Plan (CAP) is to evaluate data obtained during investigative activities to propose a cost-effective final cleanup objective for the remaining petroleum hydrocarbons in the soil and groundwater. The CAP will also select a final remedial alternative for soil and groundwater that will adequately address human health and safety, the environment, eliminate nuisance conditions, and protect water resources. The CAP will evaluate at least two technically and economically feasible methods to restore and protect the beneficial uses of water and to meet the cleanup objectives for each contaminant established in the CAP. The CAP will also propose verification monitoring to confirm completion of the correction actions and evaluate the CAP implementation effectiveness.

To identify and manage potential health and environmental risks, address impacts to water resources, and manage nuisance conditions, URS proposes to utilize the Oakland Risk-Based Correction Action (RBCA) approach in the decision-making process following the "Oakland Urban Land Redevelopment Program: Guidance Document, January 1, 2002".

*APR, in the - resource*

### SCHEDULE AND PROJECT MANAGEMENT

The schedule for the above noted work is as follows:

- Soil and Water Investigation Report – 110 days after the approval of this workplan;
- Soil and Water Investigation Completion Report – 180 days after the completion of the Soil and Water Investigation Report; and
- Corrective Action Plan – 90 days after the completion of the Soil and Water Investigation Completion Report.

In addition, quarterly groundwater monitoring reports will be completed within 30 days of the end of each quarter.

The Project Manager for this proposed work will be Mr. Robert M. Horwath, A State Registered Geologist. Mr. Horwath will oversee all technical aspects of this work and act as liaison between ACHCS



1st phase

① Conduct Study → develop CSM

① conduct Expedited Site Assessment  
(contaminant source characterization  
contaminant plume delineation

② MW installation

SWT

Collection Wines

6557

Ro-622

SHD 4039

NEA date  
April 6, 1994

Ro-908

SHD 4369

12/18/01

DA 0037612

Drawing RA#

340

2458

lvmpres@aol.com

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

RO0000014

September 9, 2002 ✓

Mr. Scott Hooton  
BP Oil  
295 SW 41<sup>st</sup> Street, Bldg 13, Suite N  
Renton, CA 98055-4931

Mr. Dave DeWitt  
Tosco Marketing Co  
2000 Crow Canyon Pl, Ste 400  
San Ramon, CA 95118-3686

**RE: SWI and CAP for BP Station #11132 at 3201 35<sup>th</sup> Ave, Oakland, CA**

Dear Messrs. Hooton and DeWitt:

I have completed review of the fuel leak case file for the above referenced site. Up to 1,700,000 ppb TPHg, 19,000 ppb benzene and 56,000 ppb MTBE has been detected in groundwater. Separate phase hydrocarbon has been noted in wells RW-1 and MW-1 since July 1990. This letter presents a request for full three-dimensional definition, investigation, and a proposal for cleanup of soil and groundwater contamination from the unauthorized release at the site. You are hereby required to complete a Soil and Water investigation and prepare a Corrective Action Plan (CAP) for the subject site in accordance with California Code of Regulations, Title 23, Division 3, Chapter 16, Article 11, "Corrective Action Requirements; State Water Resources Control Board Resolution 92-49, "Policies and Procedure for Investigation, Cleanup and Abatement of Discharges Under Water Code Section 13304"; and with the Regional Water Quality Control Board Water Quality Control Plan for the basin.

The following technical comments address investigation and cleanup performance objectives that shall be considered as part of the required Soil and Water Investigation and CAP. A workplan for the Soil and Water Investigation is **due by October 28, 2002** that addresses each of the following technical comments.

**TECHNICAL COMMENTS**

**1. Conduit Study** *+ SWI Report*

The purpose of the conduit study is to locate potential migration pathways and potential conduits and determine the probability of the plume encountering preferential pathways and conduits that could spread the contamination. Please provide a map showing the location and depth of all utility lines and trenches (including sewers and storm drains), wells (water supply, irrigation, monitoring, abandoned and improperly-destroyed), and creeks (former and present) or underground water channels.

Using the results of the conduit study and data from previous investigations at the site, you are to develop the initial three-dimensional conceptual model of site conditions. You are to use this initial conceptual model to determine the appropriate configuration for samplings points in the SWI phase of work at this site. Discuss your analysis and interpretation of the results of the conduit study and explain your rationale for the configuration of sampling points in the SWI work plan requested below.

## 2. Contaminant Plume Definition *Sw 1*

The purpose of contaminant plume definition is to determine the three-dimensional extent of contamination in soil and groundwater. The plume extent at the site is undefined. In July 2002, up to 86,000 ppb TPHg, 7,310 ppb benzene and 2,520 ppb MTBE was detected in groundwater. Free phase product is currently present at the site.

MTBE is more mobile in soil and groundwater than the typical petroleum hydrocarbon compounds, is highly soluble in groundwater, and is not readily biodegradable. MTBE plumes can be long, narrow, and erratic. Because of these characteristics, conventional investigation techniques and monitoring well networks currently used at fuel leak sites are generally insufficient to adequately characterize MTBE contamination. Therefore, it is recommended that you propose an investigation that will include depth discrete soil and groundwater sampling. Soil and groundwater samples should be collected at 5 feet intervals, areas of obvious contamination, the soil/groundwater interface, and at each unit of lithology change. It is recommended that your investigation incorporate expedited site assessment techniques and borings installed along transects to define and quantify the full three-dimensional extent of MTBE. The borings should be continuously cored. Detailed cross sections, fence diagrams, structural contours, isopachs, and rose diagrams for groundwater should be subsequently incorporated in the SWI completion report. Discuss your proposal for performing this work in the SWI work plan requested below.

Expedited site assessment tools and methods are a scientifically valid and cost-effective approach to fully define the three-dimensional extent of the plume. Technical protocol for expedited site assessments are provide in the US EPA "Expedited Site Assessment Tools for Underground Storage Tank Sites: A guide for Regulators" (EPA 510-B-97-001), dated March 1997.

## 3. Contaminant Source Characterization *Sw 1*

The purpose of contaminant source characterization is to determine the nature and extent of free product (liquid phase), petroleum saturate soils (residual phase), hydrocarbons dissolved in groundwater (aqueous phase), and high concentrations of soil vapor (vapor phase) that will continue to increase the concentration and mass of the dissolved phase contaminant plume.

It is requested that source area characterization be initiated at the start of the Soil and Water Investigation phase of work. Source area characterization and contaminant mass estimations are needed to determine the necessity and aggressiveness of interim source cleanup and/or dissolved phase mass removal. Report the results of your work in the Soil and Water Investigation Report requested below.

## 4. Groundwater Contaminant Plume Monitoring *Sw 1 Completion Report*

The purpose of groundwater monitoring is to determine the three-dimensional movement of the plume, the rate of plume growth, and the effectiveness of cleanup activities.

Once the extent of the plume is defined, we request that you install permanent monitoring wells to monitor the three-dimensional movement of the plume. Multi-depth discrete wells may be required. We request that you use the detailed cross section, structural contours, isopachs, and rose diagrams for groundwater gradient developed during Task 2 above, to determine the appropriate locations and designs for monitoring

wells that are necessary to appropriately monitor the movement of the plume. Please submit your proposal for the installation of monitoring wells in the Soil and Water Investigation Report and report on the installation of the wells in the Soil and Water Investigation Completion Report.

Quarterly groundwater monitoring should continue at the site. Analysis for ether oxygenates, ethanol, EDB and 1,2-DCA (using EPA Method 8260) should be included for the next two quarters, at a minimum.

#### **5. Corrective Action Plan**

The purpose of the CAP is to use the information obtained during investigation activities to propose cost-effective **final cleanup objective for the entire contaminant plume and remedial alternative for soil and groundwater** that will adequately protect human health and safety, the environment, eliminate nuisance conditions, and protect water resources.

A CAP for the final cleanup of contamination in soil and groundwater caused by an unauthorized release at the site will be requested upon completion of the Soil and Water Investigation in accordance with the schedule specified below. The CAP shall address at least two technically and economically feasible methods to restore and protect beneficial uses of water and to meet the cleanup objectives for each contaminant established in the CAP. The CAP must propose verification monitoring to confirm completion of corrective actions and evaluate CAP implementation effectiveness.

#### **TECHINCAL REPORT REQUEST**

Please submit technical reports according to the following schedule:

**October 28, 2002** – Work plan for Soil and Water Investigation

**110 Days from Work Plan Approval** – Soil and Water Investigation (Results of Expedited Site Assessment) Report

**180 Days from Submittal of Soil and Water Investigation Report** – Soil and Water Investigation Completion Report

**90 Days after Submittal of Soil and Water Investigation Completion Report** - Corrective Action Plan

**October 30, 2002** – Quarterly Report for the Third Quarter 2002

**January 30, 2003** – Quarterly Report for the Fourth Quarter 2002

**April 30, 2003** – Quarterly Report for the First Quarter 2003

These reports are being requested pursuant to the Regional Board's authority under Section 13267 of the California Water Code. **Each report shall include conclusions and recommendations for the next phases of work required at the site.** It is requested that all required work be performed in a prompt and timely manner. I have proposed a schedule for the submittal of the Soil and Water Investigation Report and the CAP. Revisions to the proposed schedule shall be requested in writing with appropriate justification for anticipated delays.

If you have any questions, I can be reached at (510) 567-6762.

Sincerely,



eva chu  
Hazardous Materials Specialist

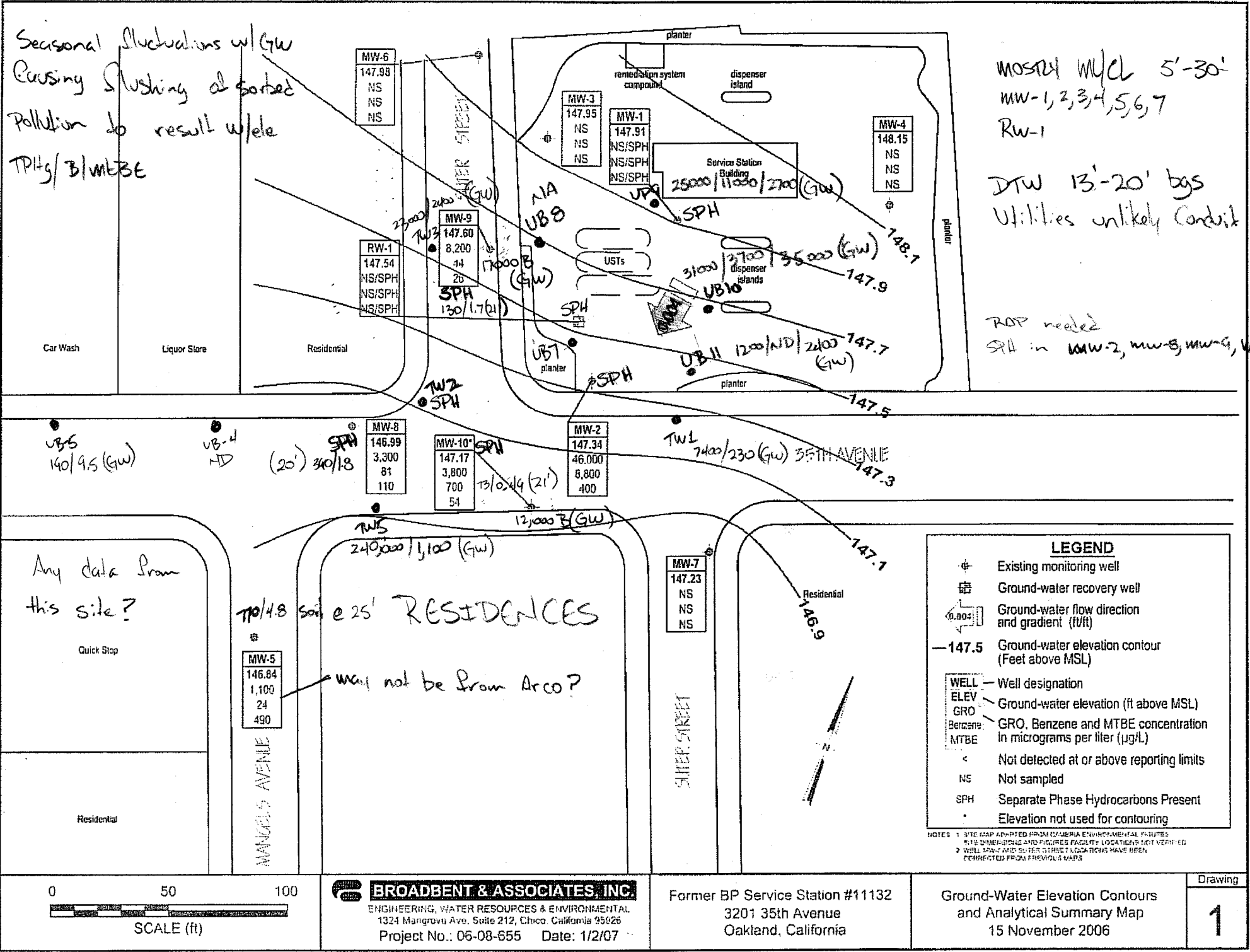
bp11132-1

Seasonal fluctuations w/ GW  
 Causing flushing of sorbed  
 Pollution to result w/ele  
 TPHg/B/MTBE

Mostly MYCL 5'-30'  
 MW-1,2,3,4,5,6,7  
 RW-1

DTW 13'-20' bgs  
 Utilities unlikely Conduct

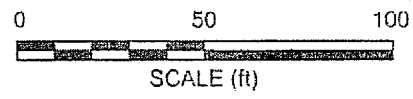
ROP needed  
 SPH in MW-2, MW-8, MW-9, MW-10



**LEGEND**

- ⊕ Existing monitoring well
- ⊞ Ground-water recovery well
- ← Ground-water flow direction and gradient (ft/ft)
- 147.5 Ground-water elevation contour (Feet above MSL)
- WELL - Well designation
- ELEV - Ground-water elevation (ft above MSL)
- GRO - GRO, Benzene and MTBE concentration in micrograms per liter (µg/L)
- Benzene
- MTBE
- < Not detected at or above reporting limits
- NS Not sampled
- SPH Separate Phase Hydrocarbons Present
- Elevation not used for contouring

NOTES: 1. SITE MAP ADAPTED FROM CALIFORNIA ENVIRONMENTAL FEATURES  
 2. THE SPHERICAL AND FIGURED FACILITY LOCATIONS NOT VERIFIED  
 3. WELL SPH-2 AND SPH-3 (TRIP) LOCATIONS HAVE BEEN  
 CORRECTED FROM PREVIOUS MAPS



**BROADBENT & ASSOCIATES, INC.**  
 ENGINEERING, WATER RESOURCES & ENVIRONMENTAL  
 1324 Mangrove Ave, Suite 212, Chico, California 95926  
 Project No.: 06-08-655 Date: 1/2/07

Former BP Service Station #11132  
 3201 35th Avenue  
 Oakland, California

Ground-Water Elevation Contours  
 and Analytical Summary Map  
 15 November 2006

Table I. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1		SOURCE AREA													
7/9/1990	--	169.75	--	0.22	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	169.75	--	0.58	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--	169.75	20.59	0	149.16	--	--	--	--	--	--	--	--	--	
4/1/1991	--	169.75	16.51	0.15	153.24	--	--	--	--	--	--	--	--	--	
6/27/1991	--	169.75	--	0.18	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--	169.75	--	0.27	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	169.75	--	0.28	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	169.75	22.30	0.27	147.45	--	--	--	--	--	--	--	--	--	
10/5/1992	--	169.75	23.98	0.24	145.77	--	--	--	--	--	--	--	--	--	
1/13/1993	--	169.75	17.03	0.24	152.72	--	--	--	--	--	--	--	--	--	
4/23/1993	--	169.75	18.10	0.42	151.65	--	--	--	--	--	--	--	--	--	
7/12/1993	--	169.75	22.02	0.49	147.73	--	--	--	--	--	--	--	--	--	
10/21/1993	--	169.75	25.12	1.09	144.63	--	--	--	--	--	--	--	--	--	
1/21/1994	--	169.75	23.02	0.76	146.73	--	--	--	--	--	--	--	--	--	
4/20/1994	--	169.75	24.54	1.8	145.21	--	--	--	--	--	--	--	--	--	
8/1/1994	--	169.75	24.11	0.35	145.64	--	--	--	--	--	--	--	--	--	
12/23/1994	--	169.75	18.19	--	151.56	--	--	--	--	--	--	--	--	--	
1/26/1995	--	169.75	16.25	1.1	153.50	--	--	--	--	--	--	--	--	--	
6/8/1995	--	169.75	22.92	--	146.83	--	--	--	--	--	--	--	--	--	
8/22/1995	--	169.75	24.45	0.85	145.30	--	--	--	--	--	--	--	--	--	
10/27/1995	--	169.75	25.41	--	144.34	--	--	--	--	--	--	--	--	--	
1/25/1996	--	169.75	18.20	--	151.55	--	--	--	--	--	--	--	--	--	
4/19/1996	--	169.75	19.06	1.22	150.69	--	--	--	--	--	--	--	--	--	
7/23/1996	--	169.75	22.98	0.89	146.77	--	--	--	--	--	--	--	--	--	
11/11/1996	--	169.75	23.99	0.89	145.76	--	--	--	--	--	--	--	--	--	
1/21/1997	--	169.75	16.80	0.9	152.95	--	--	--	--	--	--	--	--	--	
4/29/1997	--	169.75	21.90	0.85	147.85	--	--	--	--	--	--	--	--	--	
4/30/1997	--	169.75	--	--	--	92,000	3,500	8,100	4,400	23,800	6,900	--	--	--	c
4/30/1997	--	169.75	--	--	--	100,000	3,600	8,000	4,000	21,300	7,700	5.2	--	--	
8/21/1997	--	169.75	--	--	--	120,000	3,200	8,100	3,800	19,600	5,200	--	--	--	c
8/21/1997	--	169.75	23.40	--	146.35	140,000	3,000	8,500	3,900	22,100	5,700	5.3	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1 Cont.															
11/5/1997	--	169.75	--	--	--	88,000	7,300	4,800	3,600	16,900	8,200	--	--	--	c
11/5/1997	--	169.75	23.70	--	146.05	68,000	6,200	4,400	3,300	14,300	8,000	4.7	--	--	
2/3/1998	--	169.75	13.63	0.32	156.12	--	--	--	--	--	--	--	--	--	c
2/4/1998	--	169.75	--	--	--	160,000	2,300	8,400	5,000	29,400	<10000	--	--	--	
2/4/1998	--	169.75	--	--	--	190,000	2,200	10,000	5,600	32,000	<10000	5.3	--	--	
5/28/1998	--	169.75	18.03	0.17	151.72	87,000	980	3,900	3,600	19,000	2,900	3.8	--	--	
12/30/1998	--	169.75	19.50	0.08	150.25	70,000	530	3,200	2,900	16,000	3,600	--	--	--	
2/2/1999	--	169.75	18.93	0.03	150.82	79,000	480	3,100	3,500	21,000	3,500	--	--	--	
5/10/1999	--	169.75	18.28	0.03	151.47	110,000	160	1,900	3,700	24,000	3,000	--	--	--	
8/24/1999	--	169.75	20.13	0.06	149.62	110,000	850	1,300	1,900	19,000	<50	--	--	--	
11/3/1999	--	169.75	22.27	0.36	147.48	65,000	6,300	1,100	3,300	9,500	8,900	--	--	--	
3/1/2000	--	169.75	14.79	0.23	154.96	--	--	--	--	--	--	--	--	--	b
4/21/2000	--	169.75	18.10	0.33	151.65	61,000	330	780	2,700	17,000	1,300	--	--	--	
7/31/2000	--	169.75	21.60	0.53	148.15	1,500,000	340	2,100	24,000	120,000	2,700	--	--	--	
11/20/2000	--	169.75	21.69	0.37	148.06	1,700,000	1,800	2,300	19,000	93,000	3,900	--	--	--	
2/18/2001	--	169.75	16.70	0.13	153.05	--	--	--	--	--	--	--	--	--	
2/26/2001	--	169.75	14.38	0.15	155.37	100,000	658	466	4,210	15,000	1,890	--	--	--	
6/7/2001	--	169.75	20.78	0	148.97	70,000	705	440	3,870	12,200	2,720	--	--	--	
9/5/2001	--	169.75	23.36	0.35	146.39	--	--	--	--	--	--	--	--	--	k
11/30/2001	--	169.75	20.85	0.41	148.90	--	--	--	--	--	--	--	--	--	
12/6/2001	--	169.75	18.72	0.27	151.03	39,000	3,500	237	2,150	4,500	5,400	--	--	--	
2/20/2002	--	169.75	17.43	0.15	152.32	52,000	465	271	1,600	11,400	106	--	--	--	
6/20/2002	--	169.75	21.18	0.34	148.57	--	--	--	--	--	--	--	--	--	j
9/11/2002	--	169.75	22.86	0.4	146.89	--	--	--	--	--	--	--	--	--	j
11/12/2002	--	169.75	22.65	0.37	147.10	--	--	--	--	--	--	--	--	--	j
1/29/2003	--	169.75	18.15	0.3	151.60	--	--	--	--	--	--	--	--	--	j,n
5/22/2003	--	169.75	18.49	0.2	151.26	--	--	--	--	--	--	--	--	--	j
6/24/2003	--	169.75	21.44	0.35	148.31	--	--	--	--	--	--	--	--	--	o
7/28/2003	--	169.75	22.72	0.35	147.03	--	--	--	--	--	--	--	--	--	j
8/12/2003	--	169.75	22.64	0.23	147.11	--	--	--	--	--	--	--	--	--	o
9/12/2003	--	169.75	20.70	0.24	149.05	--	--	--	--	--	--	--	--	--	o



Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1 Cont.															
11/13/2003	NP	169.75	21.70	--	148.05	--	--	--	--	--	--	--	--	--	
02/23/2004	NP	169.75	16.34	--	153.41	--	--	--	--	--	--	--	--	--	
05/04/2004	NP	169.75	21.28	--	148.47	--	--	--	--	--	--	--	--	--	
08/04/2004	--	169.75	22.54	--	147.21	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	169.75	22.76	--	146.99	--	--	--	--	--	--	--	--	--	
11/10/2004	--	169.75	20.19	--	149.56	--	--	--	--	--	--	--	--	--	
01/13/2005	--	169.75	14.58	0.03	155.17	--	--	--	--	--	--	--	--	--	
02/15/2005	--	169.75	16.13	0.04	153.62	--	--	--	--	--	--	--	--	--	
03/07/2005	--	169.75	13.31	0.01	156.44	--	--	--	--	--	--	--	--	--	
05/16/2005	--	169.75	15.74	--	154.01	--	--	--	--	--	--	--	--	--	j
08/17/2005	--	169.75	21.15	--	148.60	--	--	--	--	--	--	--	--	--	j
11/18/2005	--	169.75	20.15	--	149.60	--	--	--	--	--	--	--	--	--	j
02/07/2006	--	169.75	15.19	--	154.56	--	--	--	--	--	--	--	--	--	j
5/19/2006	P	169.75	17.42	--	152.33	44,000	73	510	3,300	5,300	86	--	SEQM	6.9	u, t
8/23/2006	--	169.75	22.01	0.14	147.85	--	--	--	--	--	--	--	--	--	b, j
11/15/2006	--	169.75	21.98	0.18	147.91	--	--	--	--	--	--	--	--	--	b, j
MW-2		SW EDGE OF SITE DG OF SOURCE													
7/9/1990	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--	168.14	19.18	--	148.96	--	--	--	--	--	--	--	--	--	
4/1/1991	--	168.14	15.21	--	152.93	--	--	--	--	--	--	--	--	--	
6/27/1991	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	168.14	20.93	--	147.21	--	--	--	--	--	--	--	--	--	
10/5/1992	--	168.14	22.74	--	145.40	--	--	--	--	--	--	--	--	--	
1/13/1993	--	168.14	15.55	--	152.59	--	--	--	--	--	--	--	--	--	
4/23/1993	--	168.14	16.54	--	151.60	--	--	--	--	--	--	--	--	--	
7/12/1993	--	168.14	20.46	--	147.68	--	--	--	--	--	--	--	--	--	
10/21/1993	--	168.14	24.91	--	143.23	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses  
Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-2 Cont.															
1/21/1994	--	168.14	21.20	--	146.94	--	--	--	--	--	--	--	--	--	
4/20/1994	--	168.14	22.44	--	145.70	1,800	140	370	54	290	24	1.7	--	--	i
8/1/1994	--	168.14	22.24	--	145.90	--	--	--	--	--	--	--	--	--	
12/23/1994	--	168.14	16.25	--	151.89	--	--	--	--	--	--	--	--	--	
1/26/1995	--	168.14	14.55	--	153.59	--	--	--	--	--	--	--	--	--	
6/8/1995	--	168.14	21.18	--	146.96	--	--	--	--	--	--	--	--	--	
8/22/1995	--	168.14	22.76	--	145.38	--	--	--	--	--	--	--	--	--	
10/27/1995	--	168.14	23.61	--	144.53	--	--	--	--	--	--	--	--	--	
1/25/1996	--	168.14	15.95	--	152.19	--	--	--	--	--	--	--	--	--	
4/19/1996	--	168.14	17.33	--	150.81	--	--	--	--	--	--	--	--	--	
7/23/1996	--	168.14	21.25	--	146.69	--	--	--	--	--	--	--	--	--	
11/11/1996	--	168.14	22.27	--	145.87	--	--	--	--	--	--	--	--	--	
1/21/1997	--	168.14	15.19	--	152.95	--	--	--	--	--	--	--	--	--	
4/29/1997	--	168.14	20.22	--	147.92	--	--	--	--	--	--	--	--	--	
4/30/1997	--	168.14	--	--	--	130,000	4,600	15,000	6,000	37,000	<5000	5	--	--	
8/21/1997	--	168.14	21.74	--	146.40	110,000	6,000	16,000	4,700	28,000	<500	4.6	--	--	
11/5/1997	--	168.14	21.61	--	146.53	120,000	7,800	18,000	4,900	28,100	<2500	4.6	--	--	
2/3/1998	--	168.14	11.51	--	156.63	75,000	590	1,500	1,800	12,800	<2500	4.5	--	--	
5/28/1998	--	168.14	16.51	--	151.63	79,000	3,900	3,100	3,100	18,000	900	4.3	--	--	
12/30/1998	--	168.14	17.70	--	150.44	95,000	4,700	3,500	3,700	21,000	<250	--	--	--	
2/2/1999	--	168.14	15.46	--	152.68	170,000	3,500	1,500	5,200	34,000	<500	--	--	--	
5/10/1999	--	168.14	16.52	--	151.62	84,000	3,200	3,200	3,700	20,000	75	--	--	--	
8/24/1999	--	168.14	20.73	--	147.41	130,000	9,100	9,200	4,700	27,000	<250	--	--	--	
11/3/1999	--	168.14	20.93	--	147.21	120,000	10,000	21,000	4,700	30,200	2,200	--	--	--	
3/1/2000	--	168.14	13.37	--	154.77	39,000	1,400	1,500	1,700	8,100	44	--	--	--	
4/21/2000	--	168.14	16.59	--	151.55	68,000	3,300	2,500	3,100	20,000	260	--	--	--	
7/31/2000	--	168.14	16.37	--	151.77	99,000	5,600	1,400	4,300	22,000	490	--	--	--	
11/20/2000	--	168.14	19.71	--	148.43	37,000	5,100	1,500	1,300	4,800	2,800	--	--	--	
2/18/2001	--	168.14	15.29	--	152.85	54,000	5,020	3,880	2,850	15,400	1,010	--	--	--	
6/7/2001	--	168.14	19.43	--	148.71	110,000	7,240	4,380	4,160	22,100	567	--	--	--	
9/5/2001	--	168.14	22.44	--	145.70	69,000	5,750	5,790	2,770	14,200	1,510	--	--	--	

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Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-2 Cont.															
11/30/2001	--	168.14	19.58	--	148.56	120,000	7,270	6,540	4,550	23,000	794	--	--	--	
2/20/2002	--	168.14	16.39	--	151.75	56,000	2,410	2,270	2,910	14,300	160	--	--	--	
6/20/2002	--	168.14	19.77	--	148.37	86,000	7,310	6,490	3,080	14,600	659	--	--	--	
9/11/2002	--	168.14	21.60	--	146.54	130,000	7,600	13,000	5,400	30,000	<5000	--	--	--	
11/12/2002	--	168.14	21.34	--	146.80	46,000	4,100	4,300	1,900	10,000	1,900	--	--	--	
1/29/2003	--	168.14	16.80	--	151.34	77,000	4,700	2,600	2,800	13,000	820	--	--	--	n,t
5/22/2003	--	168.14	17.15	--	150.99	52,000	6,400	2,600	1,800	7,400	1,000	--	--	--	t
7/28/2003	--	168.14	21.47	--	146.67	31,000	6,900	5,500	2,200	12,000	1,700	--	--	--	p
11/18/2003	P	168.14	20.50	--	147.64	23,000	3,300	800	500	2,000	500	--	SEQM	6.6	
02/23/2004	P	168.14	14.77	--	153.37	84,000	14,000	6,200	3,100	14,000	790	--	SEQM	6.6	t
05/04/2004	P	168.14	20.09	--	148.05	120,000	15,000	17,000	4,900	24,000	780	--	SEQM	6.6	t
08/04/2004	P	168.14	21.39	--	146.75	38,000	9,100	3,300	1,900	5,800	430	--	SEQM	6.69	t
11/10/2004	P	168.14	18.98	--	149.16	22,000	4,400	2,600	940	3,600	310	--	SEQM	7.5	
02/15/2005	P	168.14	15.62	--	152.52	67,000	11,000	4,200	3,000	11,000	690	--	SEQM	7.1	t
05/16/2005	P	168.14	14.71	--	153.43	94,000	11,000	7,600	4,100	17,000	560	--	SEQM	6.5	
08/17/2005	P	168.14	20.00	--	148.14	110,000	13,000	8,000	4,300	18,000	480	--	SEQM	6.6	
11/18/2005	P	168.14	20.89	--	147.25	37,000	11,000	2,400	1,500	4,600	340	--	SEQM	6.6	
02/07/2006	P	168.14	13.31	--	154.83	74,000	8,900	5,800	3,600	14,000	440	--	SEQM	6.7	
5/19/2006	P	168.14	16.30	--	151.84	78,000	11,000	3,700	4,500	14,000	430	--	SEQM	6.6	t
8/23/2006	P	168.14	20.83	--	147.31	100,000	12,000	9,100	5,800	25,000	480	--	TAMC	6.6	
11/15/2006	--	168.14	20.80	--	147.34	46,000	8,800	3,600	2,500	8,500	400	0.70	TAMC	6.73	
MW-3															
7/9/1990	--	167.17	--	--	--	140	5.3	4.6	2	3.8	--	--	--	--	
12/21/1990	--	167.17	--	--	--	0.19	100	6	0.9	27	--	--	--	--	
3/7/1991	--	167.17	17.40	--	149.77	0.4	69	22	6.1	57	--	--	--	--	
4/1/1991	--	167.17	13.69	--	153.48	--	--	--	--	--	--	--	--	--	
6/27/1991	--	167.17	--	--	--	380	28	26	13	46	--	--	--	--	
9/27/1991	--	167.17	--	--	--	0.07	7.9	--	0.4	1.1	--	--	--	--	
12/18/1991	--	167.17	--	--	--	0.26	34	24	0.8	28	--	--	--	--	
7/3/1992	--	167.17	19.59	--	147.58	71	9.4	0.9	5	13	--	--	--	--	

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Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-3 Cont.															
10/5/1992	--	167.17		--	--	<50	2.2	<0.5	1.5	2.8	--	--	--	--	c
10/5/1992	--	167.17	21.22	--	145.95	67	5.1	1.1	6.1	8.1	--	--	--	--	
7/13/1993	--	167.17	13.63	--	153.54	830	50	34	42	89	--	--	--	--	
4/23/1993	--	167.17	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	c,i
4/23/1993	--	167.17	15.02	--	152.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
7/12/1993	--	167.17	19.16	--	148.01	250	12	4.2	12	16	<5.0	--	--	--	i
10/21/1993	--	167.17	--	--	--	65	7.4	1	6.9	4.2	--	--	--	--	c
10/21/1993	--	167.17	21.81	--	145.36	52	4.4	1.4	4.7	3.3	<5.0	--	--	--	i
1/21/1994	--	167.17	19.94	--	147.23	57	3	3.4	3.6	9	<5.0	--	--	--	i
4/20/1994	--	167.17	20.24	--	146.93	600	26	23	33	88	28.7	1.8	--	--	i
8/1/1994	--	167.17	--	--	--	120	7.0	1.6	5.9	6.7	5.43	--	--	--	c,i
8/1/1994	--	167.17	20.74	--	146.43	99	6.2	1.1	4.5	5.2	<5.0	1.4	--	--	i
12/23/1994	--	167.17	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	c
12/23/1994	--	167.17	14.70	--	152.47	<50	<0.5	0.78	<0.5	<0.5	9.8	1.7	--	--	i
1/26/1995	--	167.17	12.89	--	154.28	190	16	0.5	85	24	--	6.6	--	--	d
6/8/1995	--	167.17	19.95	--	147.22	330	21	4	34	32	--	7	--	--	
8/22/1995	--	167.17	21.41	--	145.76	150	14	<0.50	<0.50	1.6	<5.0	6.6	--	--	d
10/27/1995	--	167.17	22.43	--	144.74	--	--	--	--	--	--	--	--	--	
10/30/1995	--	167.17	--	--	--	51	2.4	<0.50	<0.50	<1.0	<5.0	6.9	--	--	
1/25/1996	--	167.17	14.03	--	153.14	<50	<0.50	<0.50	<0.50	<1.0	5.1	--	--	--	
4/19/1996	--	167.17	15.26	--	151.91	460	55	4	33	63	<10	9.4	--	--	
7/23/1996	--	167.17	19.19	--	147.98	<50	<0.5	<0.5	<0.5	<0.5	<10	9.2	--	--	
11/11/1996	--	167.17	20.24	--	146.93	<250	<2.5	<5.0	<5.0	<5.0	<50	8.4	--	--	
1/21/1997	--	167.17	13.09	--	154.08	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	--	--	
4/29/1997	--	167.17	18.14	--	149.03	<50	<0.5	<1.0	<1.0	<1.0	<10	4.3	--	--	
8/21/1997	--	167.17	19.64	--	147.53	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	--	
11/5/1997	--	167.17	19.95	--	147.22	<250	<2.5	<5.0	<5.0	<5.0	<50	4.5	--	--	
2/3/1998	--	167.17	10.57	--	156.60	<50	<0.50	<1.0	<1.0	<1.0	<10	4.7	--	--	
5/28/1998	--	167.17	14.65	--	152.52	330	<2.5	<5.0	<5.0	<5.0	<50	4.2	--	--	
12/30/1998	--	167.17	16.63	--	150.54	--	--	--	--	--	--	--	--	--	
2/2/1999	--	167.17	13.12	--	154.05	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-3 Cont.															
5/10/1999	--	167.17	14.21	--	152.96	--	--	--	--	--	--	--	--	--	
8/24/1999	--	167.17	14.36	--	152.81	--	--	--	--	--	--	--	--	--	
11/3/1999	--	167.17	19.21	--	147.96	--	--	--	--	--	--	--	--	--	
3/1/2000	--	167.17	15.17	--	152.00	<50	<0.5	0.57	<0.5	0.62	<0.5	--	--	--	
4/21/2000	--	167.17	14.88	--	152.29	--	--	--	--	--	--	--	--	--	
7/31/2000	--	167.17	15.29	--	151.88	--	--	--	--	--	--	--	--	--	
11/20/2000	--	167.17	17.31	--	149.86	--	--	--	--	--	--	--	--	--	
2/18/2001	--	167.17	12.85	--	154.32	160	1.95	1.31	10.2	9.09	1	--	--	--	
6/7/2001	--	167.17	18.00	--	149.17	--	--	--	--	--	--	--	--	--	
9/5/2001	--	167.17	20.32	--	146.85	--	--	--	--	--	--	--	--	--	
11/30/2001	--	167.17	16.94	--	150.25	--	--	--	--	--	--	--	--	--	
2/20/2002	--	167.17	14.84	--	152.33	86	<0.5	0.845	6.58	5.75	<0.5	--	--	--	
6/20/2002	--	167.17	18.40	--	148.77	--	--	--	--	--	--	--	--	--	
9/11/2002	--	167.17	20.06	--	147.11	--	--	--	--	--	--	--	--	--	
11/13/2002	--	167.17	19.84	--	147.33	--	--	--	--	--	--	--	--	--	
1/27/2003	--	167.17	14.83	--	152.34	850	20	9.7	24	45	0.76	--	--	--	n
5/22/2003	--	167.17	15.60	--	151.57	--	--	--	--	--	--	--	--	--	
7/28/2003	--	167.17	20.12	--	147.05	--	--	--	--	--	--	--	--	--	
11/18/2003	--	167.17	19.15	--	148.02	--	--	--	--	--	--	--	--	--	
02/23/2004	--	167.17	13.53	--	153.64	160	<0.50	1.1	9.6	12	<0.50	--	SEQM	6.7	
05/04/2004	--	167.17	18.61	--	148.56	--	--	--	--	--	--	--	--	--	
08/04/2004	--	167.17	19.21	--	147.96	--	--	--	--	--	--	--	--	--	
11/10/2004	--	167.17	17.48	--	149.69	--	--	--	--	--	--	--	--	--	
02/15/2005	P	167.17	14.31	--	152.86	500	7.8	1.8	9.2	9.6	1.7	--	SEQM	7.5	
05/16/2005	--	167.17	13.11	--	154.06	--	--	--	--	--	--	--	--	--	
08/17/2005	--	167.17	18.53	--	148.64	--	--	--	--	--	--	--	--	--	
11/18/2005	--	167.17	19.34	--	147.83	--	--	--	--	--	--	--	--	--	
02/07/2006	P	167.17	11.64	--	155.53	65	<0.50	<0.50	1.4	2.3	<0.50	--	SEQM	7.1	
5/19/2006	--	167.17	14.88	--	152.29	--	--	--	--	--	--	--	--	--	
8/23/2006	--	167.17	19.43	--	147.74	--	--	--	--	--	--	--	--	--	
11/15/2006	--	167.17	19.22	--	147.95	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-3															
MW-4			UPGRADIENT												
7/9/1990	--	170.36	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	170.36	--	--	--	--	--	--	--	0.8	--	--	--	--	
3/7/1991	--	170.36	20.72	--	149.64	--	2.2	3.8	1.5	2.8	--	--	--	--	
4/1/1991	--	170.36	17.49	--	152.87	--	--	--	--	--	--	--	--	--	
6/27/1991	--	170.36	--	--	--	--	6.3	1.8	0.4	1	--	--	--	--	
9/27/1991	--	170.36	--	--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	170.36	--	--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	170.36	22.16	--	148.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/5/1992	--	170.36	23.38	--	146.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
1/13/1993	--	170.36	17.58	--	152.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
4/23/1993	--	170.36	15.72	--	154.64	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
7/12/1993	--	170.36	21.74	--	148.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	
10/21/1993	--	170.36	23.84	--	146.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
1/21/1994	--	170.36	22.42	--	147.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
4/20/1994	--	170.36	22.66	--	147.70	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.2	--	--	i
8/1/1994	--	170.36	23.01	--	147.35	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.9	--	--	i
12/23/1994	--	170.36	17.03	--	153.33	--	--	--	--	--	--	--	--	--	
1/26/1995	--	170.36	17.42	--	152.94	<50	<0.5	<0.5	<0.5	<1	--	7.5	--	--	
6/8/1995	--	170.36	21.55	--	148.81	--	--	--	--	--	--	--	--	--	
8/22/1995	--	170.36	23.47	--	146.89	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.4	--	--	d
10/27/1995	--	170.36	24.50	--	145.86	--	--	--	--	--	--	--	--	--	
1/25/1996	--	170.36	18.74	--	151.62	<50	<0.50	<0.50	<0.50	<1.0	--	--	--	--	
4/19/1996	--	170.36	18.63	--	151.73	--	--	--	--	--	--	--	--	--	
7/23/1996	--	170.36	22.56	--	147.80	--	--	--	--	--	--	--	--	--	
11/11/1996	--	170.36	23.63	--	146.73	<50	<1.0	<1.0	<1.0	<1.0	34	8.2	--	--	
1/21/1997	--	170.36	16.59	--	155.77	--	--	--	--	--	--	--	--	--	
4/29/1997	--	170.36	21.43	--	148.93	<50	<0.5	<1.0	<1.0	<1.0	<10	4.7	--	--	
8/21/1997	--	170.36	20.91	--	147.45	--	--	--	--	--	--	--	--	--	
11/5/1997	--	170.36	22.34	--	148.02	60	<0.5	<1.0	<1.0	<1.0	76	4.9	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-4 Cont.															
2/3/1998	--	170.36	12.26	--	158.10	--	--	--	--	--	--	--	--	--	--
5/28/1998	--	170.36	18.50	--	151.86	70	<0.5	<1.0	<1.0	<1.0	160	42	--	--	
12/30/1998	--	170.36	19.69	--	150.67	--	--	--	--	--	--	--	--	--	
2/2/1999	--	170.36	18.26	--	152.10	70	<1.0	<1.0	<1.0	<1.0	130	--	--	--	
5/10/1999	--	170.36	17.86	--	152.50	--	--	--	--	--	--	--	--	--	
8/24/1999	--	170.36	17.93	--	152.43	--	--	--	--	--	--	--	--	--	
11/3/1999	--	170.36	22.78	--	147.58	--	--	--	--	--	--	--	--	--	
3/17/2000	--	170.36	18.04	--	152.32	<50	<0.5	0.67	<0.5	0.7	110	--	--	--	
4/21/2000	--	170.36	17.36	--	153.00	--	--	--	--	--	--	--	--	--	
7/31/2000	--	170.36	17.83	--	152.55	--	--	--	--	--	--	--	--	--	
11/20/2000	--	170.36	18.91	--	151.45	--	--	--	--	--	--	--	--	--	
2/18/2001	--	170.36	17.72	--	152.64	88	<0.5	<0.5	<0.5	<0.5	97.3	--	--	--	
6/7/2001	--	170.36	20.23	--	150.13	--	--	--	--	--	--	--	--	--	
9/5/2001	--	170.36	22.76	--	147.60	--	--	--	--	--	--	--	--	--	
11/30/2001	--	170.36	21.30	--	149.06	--	--	--	--	--	--	--	--	--	
2/20/2002	--	170.36	19.32	--	151.04	76	<0.5	<0.5	<0.5	<1.0	81	--	--	--	
6/20/2002	--	170.36	20.71	--	149.65	--	--	--	--	--	--	--	--	--	
9/11/2002	--	170.36	22.22	--	148.14	--	--	--	--	--	--	--	--	--	
11/12/2002	--	170.36	22.22	--	148.14	--	--	--	--	--	--	--	--	--	
1/29/2003	--	170.36	19.80	--	150.56	100	<0.5	<0.5	<0.5	<0.5	66	--	--	--	D
5/22/2003	--	170.36	19.35	--	151.01	--	--	--	--	--	--	--	--	--	
7/28/2003	--	170.36	22.18	--	148.18	--	--	--	--	--	--	--	--	--	P
11/18/2003	--	170.36	21.65	--	148.71	--	--	--	--	--	--	--	--	--	
02/23/2004	P	170.36	17.53	--	152.83	75	<0.50	<0.50	<0.50	<0.50	65	--	SEQM	6.8	
05/04/2004	--	170.36	20.62	--	149.74	--	--	--	--	--	--	--	--	--	
08/04/2004	--	170.36	21.30	--	149.06	--	--	--	--	--	--	--	--	--	
11/10/2004	--	170.36	20.65	--	149.71	--	--	--	--	--	--	--	--	--	
02/15/2005	P	170.36	18.91	--	151.45	<50	<0.50	<0.50	<0.50	<0.50	62	--	SEQM	7.6	
05/16/2005	--	170.36	17.34	--	153.02	--	--	--	--	--	--	--	--	--	
08/17/2005	--	170.36	21.31	--	149.05	--	--	--	--	--	--	--	--	--	
11/18/2005	--	170.36	21.67	--	148.69	--	--	--	--	--	--	--	--	--	

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Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPH	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-4 Cont.															
02/07/2006	P	170.36	16.74	--	153.62	100	<0.50	<0.50	1.0	3.0	29	--	SEQM	6.8	
5/19/2006	--	170.36	18.22	--	152.14	--	--	--	--	--	--	--	--	--	
8/23/2006	--	170.36	20.95	--	149.41	--	--	--	--	--	--	--	--	--	
11/15/2006	--	170.36	22.21	--	148.15	--	--	--	--	--	--	--	--	--	
MW-5			~ 150'	DS OF SOURCE AREA											
7/9/1990	--	165.14	--	--	--	280	200	210	46	290	--	--	--	--	
12/21/1990	--	165.14	--	--	--	0.69	300	34	8.4	39	--	--	--	--	
3/7/1991	--	165.14	16.60	--	148.54	--	17	0.9	0.7	1.6	--	--	--	--	
4/1/1991	--	165.14	11.99	--	153.15	800	250	54	6	60	--	--	--	--	
6/27/1991	--	165.14	--	--	--	330	120	10	12	8	--	--	--	--	
9/27/1991	--	165.14	--	--	--	0.73	230	16	20	22	--	--	--	--	
12/18/1991	--	165.14	--	--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	165.14	18.65	--	146.49	150	36	<0.5	<0.5	11	--	--	--	--	
10/5/1992	--	165.14	20.32	--	144.82	270	79	4	1.7	2.9	--	--	--	--	
1/13/1993	--	165.14	13.03	--	152.11	180	59	6	1.8	7.6	--	--	--	--	
4/23/1993	--	165.14	13.51	--	151.63	8,700	440	96	35	136	--	--	--	--	i
7/12/1993	--	165.14	18.06	--	147.08	250	57	2.9	2.1	6	<5.0	--	--	--	
10/21/1993	--	165.14	20.41	--	144.73	210	82	1.5	<0.5	1.4	--	--	--	--	i
1/21/1994	--	165.14	18.86	--	146.28	110	36	1.2	<0.5	0.7	<5.0	--	--	--	
4/20/1994	--	165.14	17.30	--	147.84	690	230	4.5	1.6	11	21.2	1.3	--	--	i
8/1/1994	--	165.14	17.53	--	147.61	170	44	1.6	0.9	2.7	<5.0	0.9	--	--	
12/23/1994	--	165.14	11.63	--	153.51	630	180	1.9	0.66	1.9	7.81	1.4	--	--	i
1/26/1995	--	165.14	11.25	--	153.69	160	68	<0.5	<0.5	22	--	5.9	--	--	
6/8/1995	--	165.14	16.80	--	148.34	2,000	630	58	61	180	--	6.5	--	--	
6/8/1995	--	165.14	--	--	--	1,700	560	51	55	170	--	--	--	--	c
8/22/1995	--	165.14	19.02	--	146.12	3,700	1,100	18	27	59	<130	7.3	--	--	d
10/27/1995	--	165.14	20.94	--	144.20	--	--	--	--	--	--	--	--	--	
10/30/1995	--	165.14	--	--	--	6,500	2,200	55	180	270	<250	7.5	--	--	
1/25/1996	--	165.14	--	--	--	540	37	0.66	<0.50	<1.0	<5.0	--	--	--	e
1/25/1996	--	165.14	13.30	--	151.84	590	37	0.7	<0.50	<1.0	<5.0	--	--	--	



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Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-5 Cont.															
4/19/1996	--	165.14	13.63	--	151.51	1,500	470	38	49	210	<50	8.1	--	--	
7/23/1996	--	165.14	17.61	--	147.55	140	4.6	<0.5	<0.5	<0.5	<10	8	--	--	
11/11/1996	--	165.14	18.70	--	146.44	140	40	<1.0	<1.0	<1.0	<10	7.9	--	--	
1/21/1997	--	165.14	11.63	--	153.51	730	300	<5.0	7.8	26	<50	5	--	--	
4/29/1997	--	165.14	16.74	--	148.40	340	530	<5.0	<5.0	<5.0	<50	4.8	--	--	
8/21/1997	--	165.14	18.26	--	146.88	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	--	
11/5/1997	--	165.14	18.84	--	146.30	120	13	<1.0	<1.0	<1.0	<10	4.4	--	--	
2/3/1998	--	165.14	9.49	--	155.65	<50	<0.50	<1.0	<1.0	<1.0	<10	4.3	--	--	
5/28/1998	--	165.14	13.57	--	151.57	4,900	1,500	34	180	311	<10	4.1	--	--	
12/30/1998	--	165.14	14.65	--	150.49	--	--	--	--	--	--	--	--	--	
2/2/1999	--	165.14	12.56	--	152.58	100	<1.0	<1.0	<1.0	<1.0	9.1	--	--	--	
5/10/1999	--	165.14	13.36	--	151.78	--	--	--	--	--	--	--	--	--	
8/24/1999	--	165.14	13.50	--	151.64	--	--	--	--	--	--	--	--	--	
11/3/1999	--	165.14	18.48	--	146.66	--	--	--	--	--	--	--	--	--	
3/1/2000	--	165.14	9.59	--	155.55	<50	<0.5	0.58	<0.5	0.54	2.9	--	--	--	
4/21/2000	--	165.14	13.52	--	151.62	--	--	--	--	--	--	--	--	--	
7/31/2000	--	165.14	14.04	--	151.10	--	--	--	--	--	--	--	--	--	
11/20/2000	--	165.14	15.89	--	149.25	--	--	--	--	--	--	--	--	--	
2/18/2001	--	165.14	11.88	--	153.26	560	161	2.38	6.11	13	5.67	--	--	--	
6/7/2001	--	165.14	15.30	--	149.84	--	--	--	--	--	--	--	--	--	
9/5/2001	--	165.14	19.32	--	145.82	--	--	--	--	--	--	--	--	--	
11/30/2001	--	165.14	17.44	--	147.70	--	--	--	--	--	--	--	--	--	
2/20/2002	--	165.14	13.88	--	151.26	4,200	940	18.7	98.2	176	55.6	--	--	--	
6/20/2002	--	165.14	16.20	--	148.94	--	--	--	--	--	--	--	--	--	
9/11/2002	--	165.14	19.15	--	145.99	--	--	--	--	--	--	--	--	--	
11/12/2002	--	165.14	19.01	--	146.15	390	55	0.89	3.4	3.5	210	--	--	--	
1/29/2003	--	165.14	16.33	--	148.81	7,900	1,400	34	220	350	82	--	--	--	n
5/22/2003	--	165.14	14.35	--	150.79	9,900	2,300	91	400	690	<50	--	--	--	p
7/28/2003	--	165.14	18.90	--	146.24	3,200	690	14	81	100	120	--	--	--	
11/18/2003	--	165.14		--											Well inaccessible c, q
02/23/2004	P	165.14	12.21	--	152.93	7,500	1,500	100	190	350	100	--	SEQM	6.7	

Table I. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-5 Cont.															
05/04/2004	P	165.14	17.12	--	148.02	5,900	1,500	57	200	280	42	--	SEQM	6.6	
08/04/2004	P	165.14	19.05	--	146.09	<2,500	<25	<25	<25	<25	390	--	SEQM	6.69	
11/10/2004	P	165.14	16.95	--	148.19	870	80	<5.0	<5.0	<5.0	530	--	SEQM	7.5	
02/15/2005	P	165.14	12.75	--	152.39	1,600	330	3.0	37	67	260	--	SEQM	7.2	
05/16/2005	P	165.14	15.46	--	149.68	<500	<5.0	<5.0	<5.0	<5.0	370	--	SEQM	6.7	
08/17/2005	P	165.14	17.00	--	148.14	7,000	1,000	17	110	130	51	--	SEQM	6.6	
11/18/2005	P	165.14	18.33	--	146.81	1,900	91	<5.0	33	29	340	--	SEQM	7.3	
02/07/2006	P	165.14	10.27	--	154.87	2,100	590	9.6	86	110	200	--	SEQM	6.9	
5/19/2006	P	165.14	13.08	--	152.06	3,200	720	9.7	150	170	44	--	SEQM	6.8	
8/23/2006	P	165.14	17.02	--	148.12	1,400	69	<5.0	20	24	230	--	TAMC	7.11	
11/15/2006	P	165.14	18.30	--	146.84	1,100	24	<2.5	10	8.6	490	0.85	TAMC	6.82	
MW-6				UP GRADIENT											
7/9/1990	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	--
12/21/1990	--	165.40	--	--	--	0.17	2.6	7	4.9	26	--	--	--	--	
3/7/1991	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	
4/1/1991	--	165.40	11.79	--	153.61	--	--	--	--	--	--	--	--	--	
6/27/1991	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	165.40	--	--	--	--	13	22	--	27	--	--	--	--	
7/3/1992	--	165.40	17.77	--	147.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/5/1992	--	165.40	19.46	--	145.94	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
1/13/1993	--	165.40	11.34	--	154.06	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
4/23/1993	--	165.40	12.92	--	152.48	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
7/12/1993	--	165.40	17.36	--	148.04	<50	<0.5	<0.5	<0.5	0.7	<5.0	--	--	--	
10/27/1993	--	165.40	19.98	--	145.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
1/21/1994	--	165.40	18.10	--	147.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	
4/20/1994	--	165.40	18.68	--	146.72	<50	<0.5	<0.5	<0.5	<0.5	7.4	2	--	--	
8/1/1994	--	165.40	18.90	--	146.50	<50	<0.5	<0.5	<0.5	<0.5	8.66	1.5	--	--	i
12/23/1994	--	165.40	12.94	--	152.46	--	--	--	--	--	--	--	--	--	
1/26/1995	--	165.40	10.46	--	154.94	<50	<0.5	<0.5	<0.5	<1	--	7.3	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-6 Cont.															
6/8/1995	--	165.40	16.84	--	148.56	--	--	--	--	--	--	--	--	--	
8/22/1995	--	165.40	19.48	--	145.92	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.7	--	--	d
10/27/1995	--	165.40	20.39	--	145.01	--	--	--	--	--	--	--	--	--	
1/25/1996	--	165.40	12.24	--	153.16	<50	<0.50	<0.50	<0.50	<1.0	9.9	--	--	--	
4/19/1996	--	165.40	13.90	--	151.50	--	--	--	--	--	--	--	--	--	
7/23/1996	--	165.40	17.83	--	147.37	--	--	--	--	--	--	--	--	--	
11/11/1996	--	165.40	18.90	--	146.50	<50	<0.5	<1.0	<1.0	<1.0	<10	7.7	--	--	
1/21/1997	--	165.40	11.97	--	153.43	--	--	--	--	--	--	--	--	--	
4/29/1997	--	165.40	17.04	--	148.36	<50	<0.5	<1.0	<1.0	<1.0	<10	4.5	--	--	
8/21/1997	--	165.40	18.58	--	146.89	--	--	--	--	--	--	--	--	--	
11/5/1997	--	165.40	19.17	--	146.23	70	<0.5	<1.0	<1.0	<1.0	85	4.3	--	--	
2/3/1998	--	165.40	9.87	--	155.53	--	--	--	--	--	--	--	--	--	
5/28/1998	--	165.40	13.38	--	152.02	<50	<0.5	<1.0	<1.0	<1.0	<10	3.7	--	--	
12/30/1998	--	165.40	14.45	--	150.95	--	--	--	--	--	--	--	--	--	
2/2/1999	--	165.40	18.29	--	147.11	--	--	--	--	--	--	--	--	--	
5/10/1999	--	165.40	17.49	--	147.91	--	--	--	--	--	--	--	--	--	
8/24/1999	--	165.40	17.61	--	147.79	--	--	--	--	--	--	--	--	--	
11/3/1999	--	165.40	16.26	--	149.14	--	--	--	--	--	--	--	--	--	
3/1/2000	--	165.40	17.43	--	147.97	--	--	--	--	--	--	--	--	--	
4/21/2000	--	165.40	13.52	--	152.08	--	--	--	--	--	--	--	--	--	
7/31/2000	--	165.40	13.46	--	151.94	--	--	--	--	--	--	--	--	--	
11/20/2000	--	165.40	14.78	--	150.62	--	--	--	--	--	--	--	--	--	
2/18/2001	--	165.40	11.33	--	154.07	--	--	--	--	--	--	--	--	--	
6/7/2001	--	165.40	16.36	--	149.04	--	--	--	--	--	--	--	--	--	
9/5/2001	--	165.40	18.61	--	146.79	--	--	--	--	--	--	--	--	--	
11/30/2001	--	165.40	15.20	--	150.20	--	--	--	--	--	--	--	--	--	
2/20/2002	--	165.40	12.74	--	152.66	--	--	--	--	--	--	--	--	--	
6/20/2002	--	165.40	16.68	--	148.72	--	--	--	--	--	--	--	--	--	
9/11/2002	--	165.40	18.38	--	147.02	--	--	--	--	--	--	--	--	--	
11/12/2002	--	165.40	18.70	--	146.62	--	--	--	--	--	--	--	--	--	
1/29/2003	--	165.40	14.45	--	150.95	--	--	--	--	--	--	--	--	--	n

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-6 Cont.															
5/22/2003	--	165.40	14.36	--	151.04	--	--	--	--	--	--	--	--	--	
7/28/2003	--	165.40	18.43	--	146.97	--	--	--	--	--	--	--	--	--	P
11/18/2003	--	165.40	17.48	--	147.92	--	--	--	--	--	--	--	--	--	
02/23/2004	--	165.40	11.54	--	153.86	--	--	--	--	--	--	--	--	--	
05/04/2004	--	165.40	16.58	--	148.82	--	--	--	--	--	--	--	--	--	
08/04/2004	--	165.40	18.12	--	147.28	--	--	--	--	--	--	--	--	--	
11/10/2004	--	165.40	15.75	--	149.65	--	--	--	--	--	--	--	--	--	
02/15/2005	--	165.40	12.50	--	152.90	--	--	--	--	--	--	--	--	--	
05/16/2005	P	165.40	11.51	--	153.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	
08/17/2005	--	165.40	16.85	--	148.55	--	--	--	--	--	--	--	--	--	
11/18/2005	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e
02/07/2006	P	165.40	9.93	--	155.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.1	
5/19/2006	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e
8/23/2006	--	165.40	16.35	--	149.05	--	--	--	--	--	--	--	--	--	
11/15/2006	--	165.40	17.42	--	147.98	--	--	--	--	--	--	--	--	--	
MW-7				CROSS GRADIENT											
7/9/1990	--	167.61	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	167.61	--	--	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--	167.61	19.04	--	148.57	--	--	0.4	0.3	2.4	--	--	--	--	
4/1/1991	--	167.61	15.18	--	152.43	--	--	--	--	--	--	--	--	--	
6/27/1991	--	167.61	--	--	--	70	17	4	0.8	2.2	--	--	--	--	
9/27/1991	--	167.61	--	--	--	--	0.4	--	--	0.4	--	--	--	--	
12/18/1991	--	167.61	--	--	--	--	0.7	2.9	0.8	3.3	--	--	--	--	
7/3/1992	--	167.61	20.28	--	147.33	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/5/1992	--	167.61	11.56	--	146.05	<50	<0.5	<0.5	<0.5	1.5	--	--	--	--	
1/13/1993	--	167.61	15.41	--	152.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
4/23/1993	--	167.61	15.84	--	151.77	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
7/12/1993	--	167.61	19.84	--	147.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
10/21/1993	--	167.61	21.61	--	146.00	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
1/21/1994	--	167.61	20.49	--	147.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-7 Cont.															
1/21/1994	--	167.61	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	c
4/20/1994	--	167.61	20.54	--	147.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.5	--	--	i
8/1/1994	--	167.61	20.99	--	146.62	<50	0.7	<0.5	<0.5	<0.5	<5.0	1.9	--	--	j
12/23/1994	--	167.61	15.00	--	152.61	--	--	--	--	--	--	--	--	--	
1/26/1995	--	167.61	14.69	--	152.92	<50	<0.5	<0.5	<0.5	<1	--	7	--	--	
6/8/1995	--	167.61	19.87	--	147.74	--	--	--	--	--	--	--	--	--	
8/22/1995	--	167.61	21.49	--	146.12	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.4	--	--	d
10/27/1995	--	167.61	22.53	--	145.08	--	--	--	--	--	--	--	--	--	
1/25/1996	--	167.61	17.21	--	150.40	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	
4/19/1996	--	167.61	17.09	--	150.52	--	--	--	--	--	--	--	--	--	
7/23/1996	--	167.61	21.02	--	146.59	--	--	--	--	--	--	--	--	--	
11/11/1996	--	167.61	22.03	--	145.58	<50	<0.5	<1.0	<1.0	<1.0	<1.0	7.8	--	--	
1/21/1997	--	167.61	15.06	--	152.55	--	--	--	--	--	--	--	--	--	
4/29/1997	--	167.61	20.11	--	147.50	<50	<0.5	<1.0	<1.0	<1.0	<1.0	4.4	--	--	
8/21/1997	--	167.61	21.59	--	146.02	--	--	--	--	--	--	--	--	--	
1/75/1997	--	167.61	20.05	--	147.56	<50	<0.5	<1.0	<1.0	<1.0	<1.0	4.4	--	--	
2/3/1998	--	167.61	9.97	--	157.64	--	--	--	--	--	--	--	--	--	
5/28/1998	--	167.61	13.52	--	154.09	<50	<0.5	<1.0	<1.0	<1.0	<1.0	4.3	--	--	
12/30/1998	--	167.61	18.33	--	149.28	--	--	--	--	--	--	--	--	--	
2/2/1999	--	167.61	12.33	--	155.28	--	--	--	--	--	--	--	--	--	
5/10/1999	--	167.61	13.52	--	154.09	--	--	--	--	--	--	--	--	--	
8/24/1999	--	167.61	14.01	--	153.60	--	--	--	--	--	--	--	--	--	
11/3/1999	--	167.61	19.91	--	147.70	--	--	--	--	--	--	--	--	--	
3/1/2000	--	167.61	19.89	--	147.72	--	--	--	--	--	--	--	--	--	
4/21/2000	--	167.61	17.94	--	149.67	--	--	--	--	--	--	--	--	--	
7/31/2000	--	167.61	17.33	--	150.28	--	--	--	--	--	--	--	--	--	
11/20/2000	--	167.61	18.41	--	149.20	--	--	--	--	--	--	--	--	--	
2/18/2001	--	167.61	15.13	--	152.48	--	--	--	--	--	--	--	--	--	
6/7/2001	--	167.61	18.75	--	148.86	--	--	--	--	--	--	--	--	--	
9/5/2001	--	167.61	20.48	--	147.13	--	--	--	--	--	--	--	--	--	
11/30/2001	--	167.61	20.11	--	147.50	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-7 Cont.															
2/20/2002	--	167.61	18.40	--	149.21	--	--	--	--	--	--	--	--	--	
6/20/2002	--	167.61	18.62	--	148.99	--	--	--	--	--	--	--	--	--	
9/11/2002	--	167.61	20.05	--	147.56	--	--	--	--	--	--	--	--	--	
11/12/2002	--	167.61	21.13	--	146.48	--	--	--	--	--	--	--	--	--	n
1/29/2003	--	167.61	19.10	--	148.51	--	--	--	--	--	--	--	--	--	
5/22/2003	--	167.61	18.83	--	148.78	--	--	--	--	--	--	--	--	--	p
7/28/2003	--	167.61	19.88	--	147.73	--	--	--	--	--	--	--	--	--	
11/16/2003	--	168.08	20.50	--	147.58	--	--	--	--	--	--	--	--	--	s
11/18/2003	--	167.61	20.50	--	147.11	--	--	--	--	--	--	--	--	--	
02/23/2004	--	168.08	15.92	--	152.16	--	--	--	--	--	--	--	--	--	
05/04/2004	--	168.08	18.86	--	149.22	--	--	--	--	--	--	--	--	--	
08/04/2004	--	168.08	19.10	--	148.98	--	--	--	--	--	--	--	--	--	
11/10/2004	--	168.08	20.25	--	147.83	--	--	--	--	--	--	--	--	--	
02/15/2005	--	168.08	16.37	--	151.91	--	--	--	--	--	--	--	--	--	
05/16/2005	--	168.08	--	--	--	--	--	--	--	--	--	--	--	--	e
08/17/2005	--	168.08	19.74	--	148.34	--	--	--	--	--	--	--	--	--	
11/18/2005	--	168.08	20.82	--	147.26	--	--	--	--	--	--	--	--	--	
02/07/2006	P	168.08	14.26	--	153.82	<500	<5.0	<5.0	<5.0	<5.0	270	--	ISEM	7.3	
5/19/2006	--	168.08	16.51	--	151.57	--	--	--	--	--	--	--	--	--	
8/23/2006	--	168.08	20.30	--	147.78	--	--	--	--	--	--	--	--	--	
11/15/2006	--	168.08	20.85	--	147.23	--	--	--	--	--	--	--	--	--	
MW-8			~ 75	DG OF SOURCE AREA											
3/7/1991	--	165.74	16.72	--	149.02	2.7	780	450	64	310	--	--	--	--	
4/1/1991	--	165.74	12.54	--	153.20	15,000	3,600	2,600	410	1,900	--	--	--	--	
6/27/1991	--	165.74	--	--	--	12,000	3,400	1,100	240	750	--	--	--	--	
9/27/1991	--	165.74	--	--	--	41	5,700	5,200	1,100	4,300	--	--	--	--	
12/18/1991	--	165.74	--	--	--	3.2	990	150	120	250	--	--	--	--	
7/3/1992	--	165.74	18.78	--	146.96	72,000	19,000	32,000	3,000	15,000	--	--	--	--	
10/5/1992	--	165.74	20.48	--	145.26	--	--	--	--	--	--	--	--	--	
1/13/1993	--	165.74	12.87	--	152.87	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-8 Cont.															
4/23/1993	--	165.74	13.90	--	151.84	--	--	--	--	--	--	--	--	--	
7/12/1993	--	165.74	18.30	--	147.44	--	--	--	--	--	--	--	--	--	
10/21/1993	--	165.74	21.91	--	143.83	--	--	--	--	--	--	--	--	--	
1/21/1994	--	165.74	19.12	--	146.62	--	--	--	--	--	--	--	--	--	
4/20/1994	--	165.74	19.28	--	146.46	26,000	1,700	4,100	960	4,000	632	1.1	--	--	i
8/1/1994	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	
12/23/1994	--	165.74	13.81	--	151.93	--	--	--	--	--	--	--	--	--	
1/26/1995	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	
6/8/1995	--	165.74	17.82	--	147.92	--	--	--	--	--	--	--	--	--	
8/22/1995	--	165.74	19.41	--	146.33	--	--	--	--	--	--	--	--	--	
10/27/1995	--	165.74	20.47	--	145.27	--	--	--	--	--	--	--	--	--	
1/25/1996	--	165.74	13.35	--	152.39	--	--	--	--	--	--	--	--	--	
4/19/1996	--	165.74	14.40	--	151.34	--	--	--	--	--	--	--	--	--	
7/23/1996	--	165.74	18.35	--	147.30	--	--	--	--	--	--	--	--	--	
11/11/1996	--	165.74	19.41	--	146.33	--	--	--	--	--	--	--	--	--	
1/21/1997	--	165.74	12.29	--	153.45	--	--	--	--	--	--	--	--	--	
4/29/1997	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
8/21/1997	--	165.74	19.61	--	146.13	240,000	1,100	9,300	4,100	31,100	<1000	5.2	--	--	
11/3/1997	--	165.74	19.45	--	146.29	57,000	790	2,700	2,300	15,200	<1000	5	--	--	
2/3/1998	--	165.74	9.33	--	156.41	--	--	--	--	--	--	--	--	--	
2/4/1998	--	165.74	--	--	--	94,000	570	1,500	2,100	15,200	<2500	5.5	--	--	
5/28/1998	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
12/30/1998	--	165.74	15.48	--	150.26	120,000	460	2,300	2,200	15,000	150	--	--	--	
2/2/1999	--	165.74	18.29	--	147.45	82,000	450	2,200	3,700	26,000	<500	--	--	--	
5/10/1999	--	165.74	15.62	--	150.12	28,000	740	1,800	1,100	5,800	<25	--	--	--	
8/24/1999	--	165.74	18.41	--	147.33	75,000	530	1,400	3,300	21,000	150	--	--	--	
11/3/1999	--	165.74	18.71	--	147.03	70,000	600	1,300	3,600	20,500	750	--	--	--	
3/1/2000	--	165.74	19.37	--	146.37	27,000	1,600	1,200	2,600	6,600	120	--	--	--	
4/21/2000	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
7/31/2000	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
11/20/2000	--	165.74	17.42	--	148.32	1,300,000	1,400	1,700	20,000	16,000	5,700	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-8 Cont.															
2/18/2001	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	c
6/7/2001	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	c
9/5/2001	--	165.74	21.45	0.04	144.29	--	--	--	--	--	--	--	--	--	j
11/30/2001	--	165.74	18.31	--	147.45	--	--	--	--	--	--	--	--	--	h
12/6/2001	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	c
2/20/2002	--	165.74	14.02	--	151.72	20,000	163	114	403	5,810	80.4	--	--	--	
6/20/2002	--	165.74	17.56	--	148.18	28,000	466	141	962	5,850	2,520	--	--	--	
9/11/2002	--	165.74	19.45	--	146.29	190,000	500	670	4,500	23,000	1,200	--	--	--	
11/12/2002	--	165.74	19.15	--	146.59	420	6.4	2.9	16	110	31	--	--	--	t
1/29/2003	--	165.74	15.02	--	150.72	200,000	810	<500	2,000	11,000	<500	--	--	--	n
5/22/2003	--	165.74	15.07	--	150.67	--	--	--	--	--	--	--	--	--	t
6/24/2003	--	165.74	17.95	--	147.79	43,000	860	300	2,100	9,600	46	--	--	--	
7/28/2003	--	165.74	19.45	--	146.29	62,000	690	230	1,800	15,000	2,100	--	--	--	
8/12/2003	--	165.74	19.40	<0.01	146.34	--	--	--	--	--	--	--	--	--	o
9/12/2003	--	165.74	19.34	--	146.40	--	--	--	--	--	--	--	--	--	o
11/18/2003	P	165.74	18.80	<0.01	146.94	8,800	500	37	530	930	1,700	--	SEQM	--	o,p
02/23/2004	P	165.74	12.82	<0.01	152.92	32,000	840	360	1,000	7,100	110	--	SEQM	6.6	t
05/04/2004	P	165.74	18.87	<0.01	146.87	42,000	570	230	1,700	8,400	2,000	--	SEQM	7.0	t
08/04/2004	--	165.74	19.37	--	146.37	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	165.74	19.60	--	146.14	--	--	--	--	--	--	--	--	--	
11/10/2004	P	165.74	16.58	--	149.16	11,000	790	61	1,000	830	74	--	SEQM	7.3	t
02/15/2005	P	165.74	12.85	--	152.89	38,000	1,300	390	2,300	7,900	<50	--	SEQM	7.2	
05/16/2005	P	165.74	12.22	--	153.52	31,000	1,000	360	2,500	7,500	<50	--	SEQM	6.5	
08/17/2005	P	165.74	17.80	--	147.94	60,000	540	240	2,500	8,600	<50	--	SEQM	6.7	
11/18/2005	P	165.74	21.02	--	144.72	33,000	340	120	1,400	4,900	140	--	SEQM	6.9	
02/07/2006	P	165.74	10.75	--	155.01	5,700	94	27	260	820	75	--	SEQM	6.6	
5/19/2006	P	165.74	13.89	--	151.85	40,000	1,100	320	2,900	6,000	<25	--	SEQM	6.6	t
8/23/2006	P	165.74	18.85	--	146.89	21,000	520	150	1,800	6,300	82	--	TAMC	7.35	
11/15/2006	P	165.74	18.75	--	146.99	3,300	81	<25	130	430	110	0.81	TAMC	6.91	
MW-9															



Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-9 Cont.		CROSS DOWN		GRADIENT											
3/7/1991	--	166.20	16.79	--	149.41	7.1	220	4	2.4	2,400	--	--	--	--	
4/1/1991	--	166.20	12.89	--	153.31	12,000	2,000	2,600	360	1,600	--	--	--	--	
6/27/1991	--	166.20	--	--	--	3,600	520	400	85	310	--	--	--	--	
9/27/1991	--	166.20	--	--	--	3.2	720	150	50	180	--	--	--	--	
12/18/1991	--	166.20	--	--	--	--	2.5	1.1	0.3	5.8	--	--	--	--	
7/3/1992	--	166.20	18.89	--	147.31	5,700	17,000	440	230	800	--	--	--	--	
10/5/1992	--	166.20	20.52	--	145.68	1,400	440	17	14	100	--	--	--	--	
1/13/1993	--	166.20	--	--	--	11,000	1,200	1,600	330	1,300	--	--	--	--	
1/13/1993	--	166.20	12.92	--	153.28	11,000	1,200	1,700	340	1,400	--	--	--	--	i
4/23/1993	--	166.20	14.08	--	152.12	24,000	2,800	4,500	730	3,400	--	--	--	--	i
7/12/1993	--	166.20	--	--	--	10,000	1,200	900	310	1,200	--	--	--	--	c
7/12/1993	--	166.20	18.44	--	147.76	13,000	1,400	1,100	360	1,400	20.8	--	--	--	
10/21/1993	--	166.20	21.81	--	144.39	--	--	--	--	--	--	--	--	--	
1/21/1994	--	166.20	19.28	--	146.92	--	--	--	--	--	--	--	--	--	
4/20/1994	--	166.20	--	--	--	45,000	2,700	6,800	1,200	8,200	740	--	--	--	c,d
4/20/1994	--	166.20	19.72	--	146.48	43,000	2,800	6,800	1,300	7,900	768	1.7	--	--	
8/1/1994	--	166.20	20.18	--	146.02	--	--	--	--	--	--	--	--	--	
12/23/1994	--	166.20	14.22	--	151.98	--	--	--	--	--	--	--	--	--	
1/26/1995	--	166.20	11.85	--	154.35	--	--	--	--	--	--	--	--	--	
6/8/1995	--	166.20	18.33	--	147.87	--	--	--	--	--	--	--	--	--	
8/22/1995	--	166.20	19.95	--	146.25	--	--	--	--	--	--	--	--	--	
10/27/1995	--	166.20	20.88	--	145.32	--	--	--	--	--	--	--	--	--	
1/25/1996	--	166.20	13.84	--	152.36	--	--	--	--	--	--	--	--	--	
4/19/1996	--	166.20	--	--	--	--	--	--	--	--	--	--	--	--	
7/23/1996	--	166.20	18.84	--	147.36	--	--	--	--	--	--	--	--	--	
11/11/1996	--	166.20	19.91	--	146.29	--	--	--	--	--	--	--	--	--	
1/21/1997	--	166.20	12.93	--	153.27	--	--	--	--	--	--	--	--	--	
4/29/1997	--	166.20	18.03	0.1	148.17	--	--	--	--	--	--	--	--	--	
4/30/1997	--	166.20	--	--	--	78,000	1,900	3,600	3,100	20,600	<5000	5.5	--	--	
8/21/1997	--	166.20	19.56	--	146.64	110,000	2,100	3,400	2,300	18,800	<500	5.1	--	--	
11/5/1997	--	166.20	20.59	0.01	145.61	59,000	1,400	1,700	2,200	17,000	<500	4.5	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations In (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-9 Cont.															
2/3/1998	--	166.20	10.56	--	155.64	55,000	490	1,200	1,400	10,200	<1000	4.9	--	--	
5/28/1998	--	166.20	--	--	--	53,000	290	830	1,400	10,500	<500	--	--	--	
5/28/1998	--	166.20	14.21	--	151.99	41,000	250	1,200	1,500	11,400	<250	3.8	--	--	
12/30/1998	--	166.20	15.61	--	150.59	83,000	860	1,300	2,400	21,000	180	--	--	--	
2/2/1999	--	166.20	12.33	--	153.87	75,000	530	960	1,900	17,000	<50	--	--	--	
5/10/1999	--	166.20	13.67	--	150.53	22,000	600	1,500	1,100	4,400	72	--	--	--	
8/24/1999	--	166.20	19.10	--	147.10	85,000	850	1,300	1,700	20,000	<250	--	--	--	
11/3/1999	--	166.20	19.58	--	146.69	72,000	700	780	1,900	19,000	<50	--	--	--	
3/1/2000	--	166.20	13.19	--	153.01	34,000	78	490	1,100	8,200	63	--	--	--	
4/21/2000	--	166.20	14.29	--	151.91	55,000	260	920	1,500	16,000	<50	--	--	--	
7/31/2000	--	166.20	15.01	--	151.19	1,200,000	1,500	6,300	15,000	120,000	1,600	--	--	--	
11/20/2000	--	166.20	18.23	--	147.97	320,000	3,500	19,000	5,000	40,000	3,900	--	--	--	
2/18/2001	--	166.20	13.14	--	153.06	32,000	290	417	1,180	10,400	121	--	--	--	
6/7/2001	--	166.20	17.41	--	148.79	96,000	421	704	2,330	17,300	223	--	--	--	
9/5/2001	--	166.20	20.56	--	145.64	39,000	445	323	1,240	8,940	310	--	--	--	
11/30/2001	--	166.20	17.42	--	148.78	60,000	310	586	1,890	14,200	285	--	--	--	
2/20/2002	--	166.20	13.87	--	152.33	14,000	64	122	897	2,650	293	--	--	--	
6/20/2002	--	166.20	18.22	--	147.98	29,000	307	168	1,100	5,670	308	--	--	--	
9/11/2002	--	166.20	20.27	--	145.93	230,000	1,400	680	3,600	23,000	<2500	--	--	--	
11/12/2002	--	166.20	19.40	--	146.80	830	5.8	3.6	28	160	21	--	--	--	
1/29/2003	--	166.20	14.30	0.1	151.90	--	--	--	--	--	--	--	--	--	j,n
5/22/2003	--	166.20	15.16	--	151.04	23,000	260	<50	1,000	2,900	<50	--	--	--	e
6/24/2003	--	166.20	--	--	--	--	--	--	--	--	--	--	--	--	
7/28/2003	--	166.20	19.55	<0.01	146.65	1,500,000	<500	<500	9,800	79,000	<500	--	--	--	
8/12/2003	--	166.20	19.60	<0.01	146.60	--	--	--	--	--	--	--	--	--	a,t
9/12/2003	--	166.20	19.60	<0.01	146.60	--	--	--	--	--	--	--	--	--	a,t
11/18/2003	P	166.20	18.98	<0.01	147.22	19,000	250	18	690	2,400	45	--	SEQM	6.8	o,p
02/23/2004	P	166.20	13.91	<0.01	152.29	91,000	<250	440	2,200	13,000	<250	--	SEQM	6.8	t
05/04/2004	P	166.20	18.11	<0.01	148.09	39,000	230	44	1,100	4,200	<25	--	SEQM	6.9	t
08/04/2004	--	166.20	18.90	--	147.90	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	166.20	19.69	--	146.51	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-9 Cont.															
11/10/2004	NP	166.20	16.95	--	149.25	31,000	300	<50	1,100	3,800	<50	--	SEQM	7.3	l
02/15/2005	P	166.20	12.95	--	153.25	19,000	200	<50	720	2,000	<50	--	SEQM	7.3	
05/16/2005	P	166.20	12.53	--	153.67	17,000	99	15	770	2,500	<10	--	SEQM	6.7	
08/17/2005	P	166.20	18.03	--	148.17	28,000	160	26	1,000	2,700	<12	--	SEQM	6.8	
11/18/2005	P	166.20	19.04	--	147.16	12,000	98	<5.0	410	510	19	--	SEQM	7.1	
02/07/2006	P	166.20	10.95	--	155.25	18,000	110	8.7	770	1,500	<5.0	--	SEQM	6.9	
5/19/2006	--	166.20	--	--	--	--	--	--	--	--	--	--	--	--	e
8/23/2006	P	166.20	18.91	--	147.29	28,000	84	<50	1,600	6,200	<50	--	TAMC	7.3	
11/15/2006	P	166.20	18.60	--	147.60	8,200	44	<25	190	370	26	0.92	TAMC	6.88	
MW-10															
3/7/1991	--	167.01	14.09	--	148.92	1.6	120	190	32	230	--	--	--	--	
4/1/1991	--	167.01	13.92	--	153.09	--	--	--	--	--	--	--	--	--	
6/27/1991	--	167.01	--	--	--	12,000	7,300	500	150	300	--	--	--	--	
9/27/1991	--	167.01	--	--	--	57	12,000	7,200	1,400	4,600	--	--	--	--	
12/18/1991	--	167.01	--	--	--	5.3	2,500	120	36	79	--	--	--	--	
7/3/1992	--	167.01	19.92	--	147.09	8,600	5,100	1,300	180	690	--	--	--	--	
10/5/1992	--	167.01	21.92	--	145.09	--	--	--	--	--	--	--	--	--	
1/13/1993	--	167.01	14.43	--	152.58	--	--	--	--	--	--	--	--	--	
4/23/1993	--	167.01	15.26	--	151.75	--	--	--	--	--	--	--	--	--	
7/12/1993	--	167.01	19.78	--	147.23	--	--	--	--	--	--	--	--	--	
10/21/1993	--	167.01	22.90	--	144.13	--	--	--	--	--	--	--	--	--	
1/21/1994	--	167.01	20.25	--	146.76	--	--	--	--	--	--	--	--	--	
4/20/1994	--	167.01	20.74	--	146.27	100,000	12,000	24,000	2,400	14,000	6,377	1	--	--	d
8/1/1994	--	167.01	22.00	--	145.01	--	--	--	--	--	--	--	--	--	
12/23/1994	--	167.01	16.08	--	150.93	--	--	--	--	--	--	--	--	--	
1/26/1995	--	167.01	13.68	--	153.33	--	--	--	--	--	--	--	--	--	
6/8/1995	--	167.01	19.08	--	147.95	--	--	--	--	--	--	--	--	--	
8/22/1995	--	167.01	20.73	--	146.28	--	--	--	--	--	--	--	--	--	
10/27/1995	--	167.01	21.69	--	145.32	--	--	--	--	--	--	--	--	--	
1/25/1996	--	167.01	15.05	--	151.96	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses  
 Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-10 Cont.															
4/19/1996	--	167.01	16.26	--	150.75	--	--	--	--	--	--	--	--	--	--
7/23/1996	--	167.01	20.18	--	146.83	--	--	--	--	--	--	--	--	--	--
11/11/1996	--	167.01	21.20	--	145.81	--	--	--	--	--	--	--	--	--	--
1/21/1997	--	167.01	13.66	--	153.35	--	--	--	--	--	--	--	--	--	--
4/29/1997	--	167.01	18.71	--	148.30	--	--	--	--	--	--	--	--	--	--
4/30/1997	--	167.01	--	--	--	170,000	9,700	38,000	4,700	30,500	<5000	5.6	--	--	--
8/21/1997	--	167.01	20.19	--	146.82	170,000	9,500	35,000	4,300	27,100	<5000	5.3	--	--	--
11/5/1997	--	167.01	20.52	--	146.49	80,000	3,800	12,000	2,700	15,700	<500	4.4	--	--	--
2/3/1998	--	167.01	10.62	--	156.39	--	--	--	--	--	--	--	--	--	--
2/4/1998	--	167.01	--	--	--	72,000	500	1,300	1,700	12,000	<1000	5.1	--	--	--
5/28/1998	--	167.01	15.46	--	151.55	220,000	3,200	24,000	5,200	43,000	<1000	4.8	--	--	--
12/30/1998	--	167.01	16.65	--	150.86	110,000	3,500	14,000	5,800	50,000	<50	--	--	--	--
2/2/1999	--	167.01	14.58	--	152.43	74,000	1,000	2,800	1,000	26,000	860	--	--	--	--
5/10/1999	--	167.01	15.72	--	151.29	81,000	2,800	2,800	8,000	17,000	220	--	--	--	--
8/24/1999	--	167.01	19.85	--	147.16	54,000	3,500	3,800	1,500	9,100	<250	--	--	--	--
11/3/1999	--	167.01	20.00	--	147.03	30,000	3,000	3,500	1,200	5,000	31	--	--	--	--
3/1/2000	--	167.01	14.62	--	152.39	62,000	320	1,200	1,100	26,000	4,400	--	--	--	--
4/21/2000	--	167.01	15.46	--	151.55	88,000	2,700	7,400	5,700	35,000	2,400	--	--	--	--
7/31/2000	--	167.01	--	--	--	--	--	--	--	--	--	--	--	--	e
11/20/2000	--	167.01	18.74	--	148.27	78,000	3,800	5,500	2,800	13,000	450	--	--	--	--
2/18/2001	--	167.01	14.10	--	152.91	39,000	1,050	1,160	1,550	14,700	4,180	--	--	--	--
6/7/2001	--	167.01	18.78	--	148.23	76,000	2,460	2,840	3,350	20,700	635	--	--	--	--
9/5/2001	--	167.01	21.40	0.01	145.61	25,000	2,510	2,070	1,090	4,540	189	--	--	--	--
11/30/2001	--	167.01	18.50	--	148.51	100,000	2,480	5,720	3,890	22,800	325	--	--	--	--
2/20/2002	--	167.01	14.39	--	152.62	49,000	2,170	3,070	1,960	12,300	1,090	--	--	--	--
6/20/2002	--	167.01	18.80	--	148.21	44,000	2,040	3,650	1,690	8,430	224	--	--	--	--
9/11/2002	--	167.01	20.52	--	146.49	28,000	1,200	2,700	1,400	6,800	<250	--	--	--	--
11/12/2002	--	167.01	20.37	0.07	146.64	--	--	--	--	--	--	--	--	--	j
1/29/2003	--	167.01	16.33	0.03	150.68	--	--	--	--	--	--	--	--	--	j,n
5/22/2003	--	167.01	16.32	--	150.69	13,000	2,100	850	630	1,600	300	--	--	--	l
6/24/2003	--	167.01	18.73	0.04	148.28	--	--	--	--	--	--	--	--	--	o

**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses**  
**Station #11132, 3201 35th Ave, Oakland, CA**

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-10 Cont.</b>															
7/28/2003	--	167.01	20.39	0.04	146.62	--	--	--	--	--	--	--	--	--	j
8/12/2003	--	167.01	20.43	<0.01	146.58	--	--	--	--	--	--	--	--	--	o
9/12/2003	--	167.01	20.41	--	146.60	--	--	--	--	--	--	--	--	--	o
11/18/2003	P	167.01	19.55	<0.01	147.46	9,900	2,200	530	320	860	<50	--	SEQM	6.8	o,p
02/23/2004	P	167.01	15.45	<0.01	151.56	46,000	1,900	2,000	1,800	9,000	180	--	SEQM	6.7	t
05/04/2004	P	167.01	18.81	<0.01	148.20	35,000	3,100	3,600	1,400	5,600	<25	--	SEQM	7.1	t
08/04/2004	--	167.01	18.90	--	148.11	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	167.01	20.60	--	146.41	--	--	--	--	--	--	--	--	--	
11/10/2004	P	167.01	17.95	--	149.06	9,800	470	91	450	1,700	230	--	SEQM	7.3	t
01/13/2005	--	167.01	12.21	--	154.80	--	--	--	--	--	--	--	--	--	
02/15/2005	P	167.01	14.19	--	152.82	30,000	510	330	1,800	7,200	77	--	SEQM	7.2	
05/16/2005	P	167.01	13.85	--	153.16	37,000	540	730	2,100	9,200	<50	--	SEQM	6.7	
08/17/2005	P	167.01	19.01	--	148.00	15,000	1,100	420	1,200	4,100	<50	--	SEQM	6.7	
11/18/2005	P	167.01	19.95	--	147.06	12,000	1,200	240	550	1,300	16	--	SEQM	6.8	
02/07/2006	P	167.01	12.28	--	154.73	22,000	340	580	1,300	4,500	73	--	SEQM	6.8	t
5/19/2006	P	167.01	15.12	--	151.89	40,000	690	430	2,600	4,900	<25	--	SEQM	6.9	t
8/23/2006	P	167.01	20.00	--	147.01	13,000	1,500	540	1,200	3,000	<10	--	TAMC	6.97	
11/15/2006	P	167.01	19.84	--	147.17	13,800	700	22	67	160	54	0.65	TAMC	6.78	
<b>QC-2</b>															
10/5/1992	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
1/13/1993	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f,i
4/23/1993	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f,i
7/12/1993	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
10/21/1993	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
1/21/1994	--	168.01	--	--	--	<50	<0.5	2.1	<0.5	2.1	--	--	--	--	f
4/20/1994	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
12/23/1994	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
1/26/1995	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	f
6/8/1995	--	168.01	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--	--	f
8/22/1995	--	168.01	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	d,f

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
QC-2 Cont.															
10/30/1995	--	168.01	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	f
1/25/1996	--	168.01	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	f
4/19/1996	--	168.01	--	--	--	<50	<0.5	<1	<1	<1	<10	--	--	--	f
RW-1															
7/9/1990	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
5/7/1991	--	168.01	17.62	--	150.39	--	--	--	--	--	--	--	--	--	
4/1/1991	--	168.01	14.40	--	153.61	--	--	--	--	--	--	--	--	--	
6/27/1991	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	168.01	20.66	--	147.35	--	--	--	--	--	--	--	--	--	t
10/5/1992	--	168.01	23.34	--	144.67	--	--	--	--	--	--	--	--	--	
1/13/1993	--	168.01	16.59	--	151.42	--	--	--	--	--	--	--	--	--	
4/23/1993	--	168.01	16.17	--	151.84	--	--	--	--	--	--	--	--	--	
7/12/1993	--	168.01	20.18	--	147.83	--	--	--	--	--	--	--	--	--	
10/21/1993	--	168.01	25.70	--	142.31	--	--	--	--	--	--	--	--	--	
1/21/1994	--	168.01	21.24	--	146.77	--	--	--	--	--	--	--	--	--	
4/20/1994	--	168.01	32.20	--	135.81	--	--	--	--	--	--	--	--	--	
8/1/1994	--	168.01	21.70	--	146.31	29,000	580	950	300	7,800	1,200	1.1	--	--	d
12/23/1994	--	168.01	16.02	--	151.99	1,300	25	8.6	1.4	69	616	1.8	--	--	
1/26/1995	--	168.01	13.78	--	154.23	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	
1/26/1995	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	
6/8/1995	--	168.01	20.05	--	147.96	1,300	130	<1.0	<1.0	36	--	--	--	--	
8/22/1995	--	168.01	--	--	--	2,800	210	9.3	4.3	250	<25	--	--	--	c
8/22/1995	--	168.01	21.74	--	146.27	3,300	230	13	4.9	280	<25	6.6	--	--	d
10/27/1995	--	168.01	32.00	--	136.01	--	--	--	--	--	--	--	--	--	
10/30/1995	--	168.01	--	--	--	230	1.4	<1.0	<1.0	<2.0	650	6.9	--	--	
10/30/1995	--	168.01	--	--	--	240	1.6	<1.0	<1.0	<2.0	630	--	--	--	e
1/25/1996	--	168.01	15.41	--	152.60	15,000	3,400	930	330	2,500	5,300	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
RW-1 Cont.															
4/19/1996	--	168.01	--	--	--	33,000	5,600	3,200	1,700	8,800	15,000	--	--	--	c
4/19/1996	--	168.01	16.83	--	151.18	35,000	5,500	3,300	1,700	9,400	14,000	7.6	--	--	
7/23/1996	--	168.01	20.76	--	147.25	46,000	3,600	2,300	900	5,100	36,000	7.4	--	--	
7/23/1996	--	168.01	--	--	--	47,000	3,700	2,500	930	5,300	35,000	--	--	--	c
11/11/1996	--	168.01	--	--	--	31,000	2,900	1,000	860	4,600	22,000	--	--	--	c
11/11/1996	--	168.01	21.73	--	146.28	34,000	3,000	1,200	880	4,600	22,000	8.3	--	--	
1/21/1997	--	168.01	--	--	--	270	42	17	2.7	36	1,500	--	--	--	c
1/21/1997	--	168.01	14.20	--	153.81	260	40	16	2.7	34	1,500	6.1	--	--	
4/29/1997	--	168.01	19.15	--	148.86	32,000	3,100	590	1,300	6,000	46,000	5.3	--	--	
8/21/1997	--	168.01	20.67	--	147.34	7,600	730	58	370	1,780	9,500	4.7	--	--	
11/5/1997	--	168.01	21.01	--	147.00	39,000	2,300	86	1,300	3,840	56,000	4.5	--	--	
2/3/1998	--	168.01	10.68	--	157.33	3,400	31	11	29	161	3,200	5.1	--	--	
5/28/1998	--	168.01	15.55	--	152.46	2,000	90	15	60	305	2,700	4.3	--	--	
12/30/1998	--	168.01	17.35	--	150.66	--	--	--	--	--	--	--	--	--	
2/2/1999	--	168.01	14.58	--	153.43	82,000	2,300	120	2,000	3,200	51000/78000	--	--	--	g
5/10/1999	--	168.01	16.00	--	152.01	15,000	620	88	340	660	61,000	--	--	--	
8/24/1999	--	168.01	20.00	--	148.01	52,000	1,400	170	2,200	2,900	37,000	--	--	--	
11/3/1999	--	168.01	20.39	--	147.62	17,000	2,500	86	1,500	970	54,000	--	--	--	
3/1/2000	--	168.01	12.97	--	155.04	17,000	580	78	790	1,100	13,000	--	--	--	
4/21/2000	--	168.01	16.02	--	151.99	31,000	2,100	1100	1,400	1,100	39,000	--	--	--	
7/31/2000	--	168.01	21.89	--	146.12	47,000	1,300	170	2,700	2,300	30,000	--	--	--	
11/20/2000	--	168.01	19.15	--	148.86	--	--	--	--	--	--	--	--	--	h
2/18/2001	--	168.01	15.35	--	152.66	14,000	589	89	600	712	13,000	--	--	--	
6/7/2001	--	168.01	19.09	--	148.92	28,000	1,140	682	504	530	19,100	--	--	--	
9/5/2001	--	168.01	22.06	0.02	145.95	--	--	--	--	--	--	--	--	--	j
11/30/2001	--	168.01	19.53	--	148.48	20,000	405	394	545	740	8,260	--	--	--	
2/20/2002	--	168.01	15.99	--	152.02	13,000	469	29	434	655	7,240	--	--	--	
6/20/2002	--	168.01	19.31	--	148.70	--	--	--	--	--	--	--	--	--	j
9/11/2002	--	168.01	21.07	0.03	146.94	--	--	--	--	--	--	--	--	--	j
11/12/2002	--	168.01	20.92	0.02	147.09	--	--	--	--	--	--	--	--	--	j,n
1/29/2003	--	168.01	16.31	0.04	151.70	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						(mg/L) DO	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
RW-1 Cont.															
5/22/2003	--	168.01	16.68	--	151.33	--	--	--	--	--	--	--	--	--	j, l
6/24/2003	--	168.01	19.76	0.07	148.25	--	--	--	--	--	--	--	--	--	o
7/28/2003	--	168.01	21.04	0.04	146.97	--	--	--	--	--	--	--	--	--	j
8/12/2003	--	168.01	21.41	<0.01	146.60	--	--	--	--	--	--	--	--	--	o, l
9/12/2003	--	168.01	21.10	0.07	146.91	--	--	--	--	--	--	--	--	--	o
11/18/2003	P	168.01	20.10	<0.01	147.91	12,000	770	<50	320	250	6,100	--	SEOM	6.6	o, p
02/23/2004	--	168.01	14.35	--	153.66	--	--	--	--	--	--	--	--	--	
05/04/2004	--	168.01	19.58	--	148.43	--	--	--	--	--	--	--	--	--	
08/04/2004	--	168.01	22.05	--	145.96	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	168.01	21.28	0.06	146.73	--	--	--	--	--	--	--	--	--	
11/10/2004	--	168.01	18.56	--	149.45	--	--	--	--	--	--	--	--	--	
01/13/2005	--	168.01	12.51	0.01	155.50	--	--	--	--	--	--	--	--	--	
02/15/2005	--	168.01	15.24	0.03	152.77	--	--	--	--	--	--	--	--	--	
03/07/2005	--	168.01	11.90	0.02	156.11	--	--	--	--	--	--	--	--	--	
05/16/2005	--	168.01	14.39	--	153.62	--	--	--	--	--	--	--	--	--	j
08/17/2005	--	168.01	19.91	--	148.10	--	--	--	--	--	--	--	--	--	j
11/18/2005	--	168.01	20.36	--	147.65	--	--	--	--	--	--	--	--	--	b, j
02/07/2006	--	168.01	12.87	--	155.14	--	--	--	--	--	--	--	--	--	j
5/19/2006	--	168.01	15.87	0.04	152.17	--	--	--	--	--	--	--	--	--	b
8/23/2006	--	168.01	20.50	0.07	147.56	--	--	--	--	--	--	--	--	--	b, j
11/15/2006	--	168.01	20.52	0.07	147.54	--	--	--	--	--	--	--	--	--	b, j



**SYMBOLS AND ABBREVIATIONS:**

-- = Not analyzed/applicable/measured/available  
< = Not detected at or above specified laboratory reporting limit  
DO = Dissolved oxygen  
DTW = Depth to water in ft bgs  
ft bgs = Feet below ground surface  
ft MSL = Feet above mean sea level  
GRO = Gasoline range organics  
GWE = Groundwater elevation measured in ft MSL  
mg/L = Milligrams per liter  
MTBE = Methyl tert-butyl ether  
NP = Well not purged prior to sampling  
P = Well purged prior to sampling  
TOC = Top of casing measured in ft MSL  
TPH-g = Total petroleum hydrocarbons as gasoline  
µg/L = Micrograms per liter  
SEQ/SEQM = Sequoia Analytical/Sequoia Analytical Morgan Hill (Laboratories)  
SPH = Separate phase hydrocarbons

**FOOTNOTES:**

a = Casing elevations surveyed to the nearest 0.01 ft MSL.  
b = GWE adjusted assuming a specific gravity of 0.75 for free product (FP).  
c = Blind duplicate.  
d = A copy of the documentation for this data is included in Appendix C of Alisto report 10-024-10-001.  
e = Well inaccessible.  
f = Travel blank.  
g = EPA Methods 8020/8260 used.  
h = Unable to sample.  
i = A copy of the documentation for this data can be found in Blaine Tech Services report 010607-M-3. MTBE data for the January 13, 1993 and April 23, 1993 sampling events has been destroyed. No chromatograms could be located for MTBE data from wells MW-5, MW-6, and MW-7, sampled on October 21, 1993.  
j = Well not sampled due to presence of SPH and nature of the product.  
k = Could not purge and sample; waste drum full.  
l = Value represents the depth to product. Unable to determine depth to water, product disabled the interface probe.  
m = Discrete peak @ C6-7.  
n = TPH-g, BTEX, and MTBE analyzed by EPA method 8260 B beginning on 1st quarter 2003 sampling event (1/29/03).  
o = Groundwater samples are not collected during FP bailing event.  
p = Well not included in the monthly FP bailing program.  
q = Well not sampled in November 2003 due to the presence of a pile of gravel dumped over the well box.  
r = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.  
s = MW-7 TOC elevation raised +0.47 ft during well repair on January 20, 2004.  
t = Sheen in well.

**NOTES:**

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported.

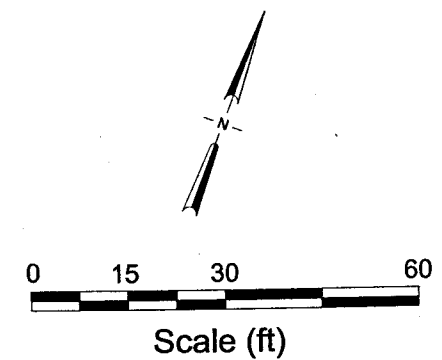
Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12.

Values for DO and pH were obtained through field measurements.

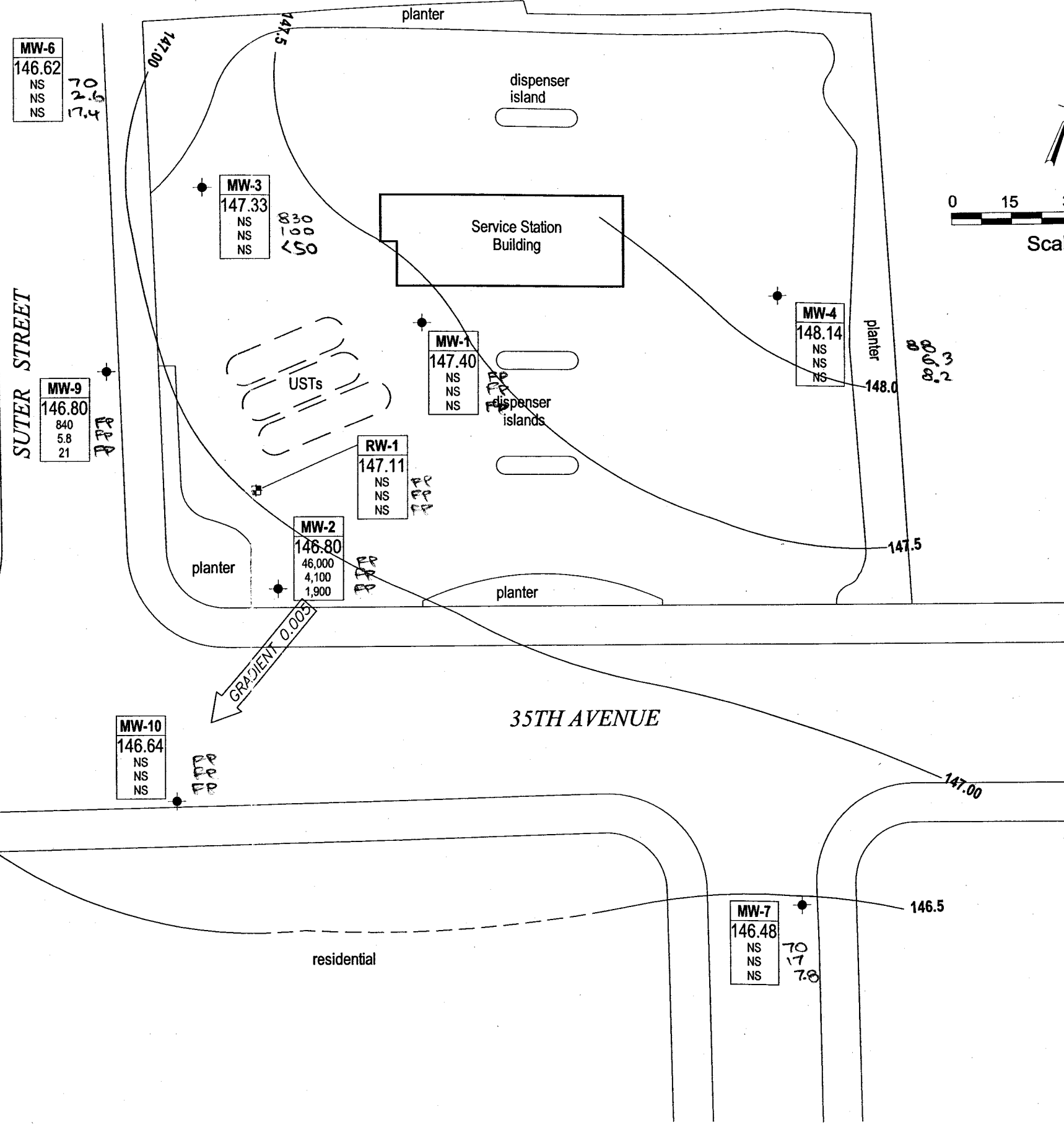
Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

**EXPLANATION**

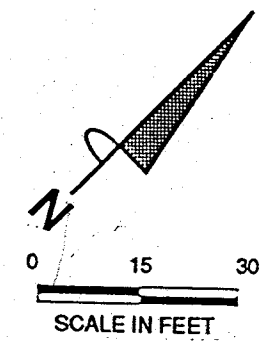
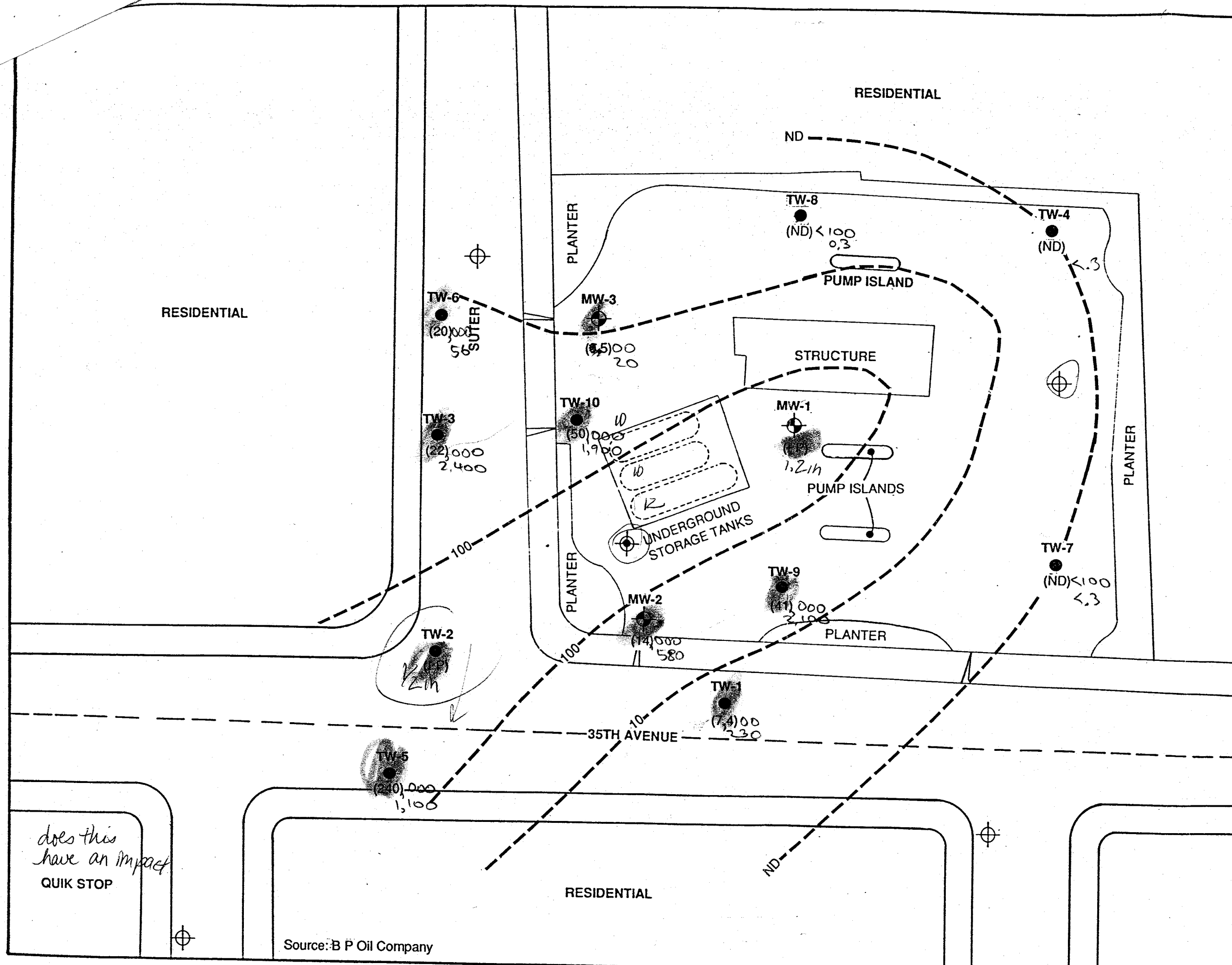
- Existing monitoring well location
  - Proposed monitoring well location
  - Groundwater recovery well location
  - Groundwater gradient (ft/ft)
  - Groundwater elevation contour in feet above MSL, dashed where inferred
- |             |   |
|-------------|---|
| <b>Well</b> | Well designation  |
| <b>ELEV</b> | Groundwater elevation (MSL)   |
| TPH-g       | TPH-g, Benzene and MTBE concentrations are in micrograms per liter (µg/L) |
| Benzene     |   |
| MTBE        |   |



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<b>URS</b>	Project No. 38485986	<b>GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP</b> Fourth Quarter 2002 (November 12, 2002)	FIGURE <b>1</b>
	Former BP Service Station #11132 3201 35th Avenue Oakland, California		



- LEGEND:**
- MONITORING WELL
  - PROPOSED MONITORING WELL
  - PROPOSED RECOVERY WELL
  - TEMPORARY WELL
  - 10 --- TPH ISOCONCENTRATION CONTOUR LINE (ppm)
  - (FP) FREE PRODUCT
  - (14) TPH CONCENTRATION (ppm)
  - (ND) NONDETECTABLE
  - TPH 45/1  
B

**FIGURE 3**  
**TOTAL PETROLEUM**  
**HYDROCARBON (TPH)**  
**ISOCONCENTRATION MAP**

B P SERVICE STATION NO. 11132  
 3201 35TH AVENUE  
 OAKLAND, CALIFORNIA

PROJECT NO. 30-081

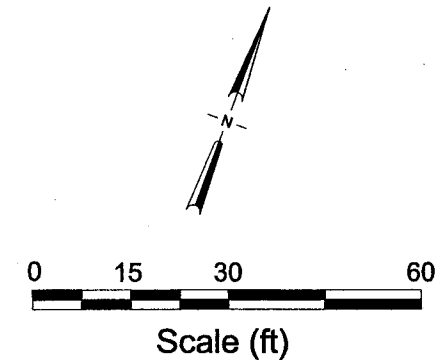
*does this have an impact*  
 QUICK STOP

Source: B P Oil Company

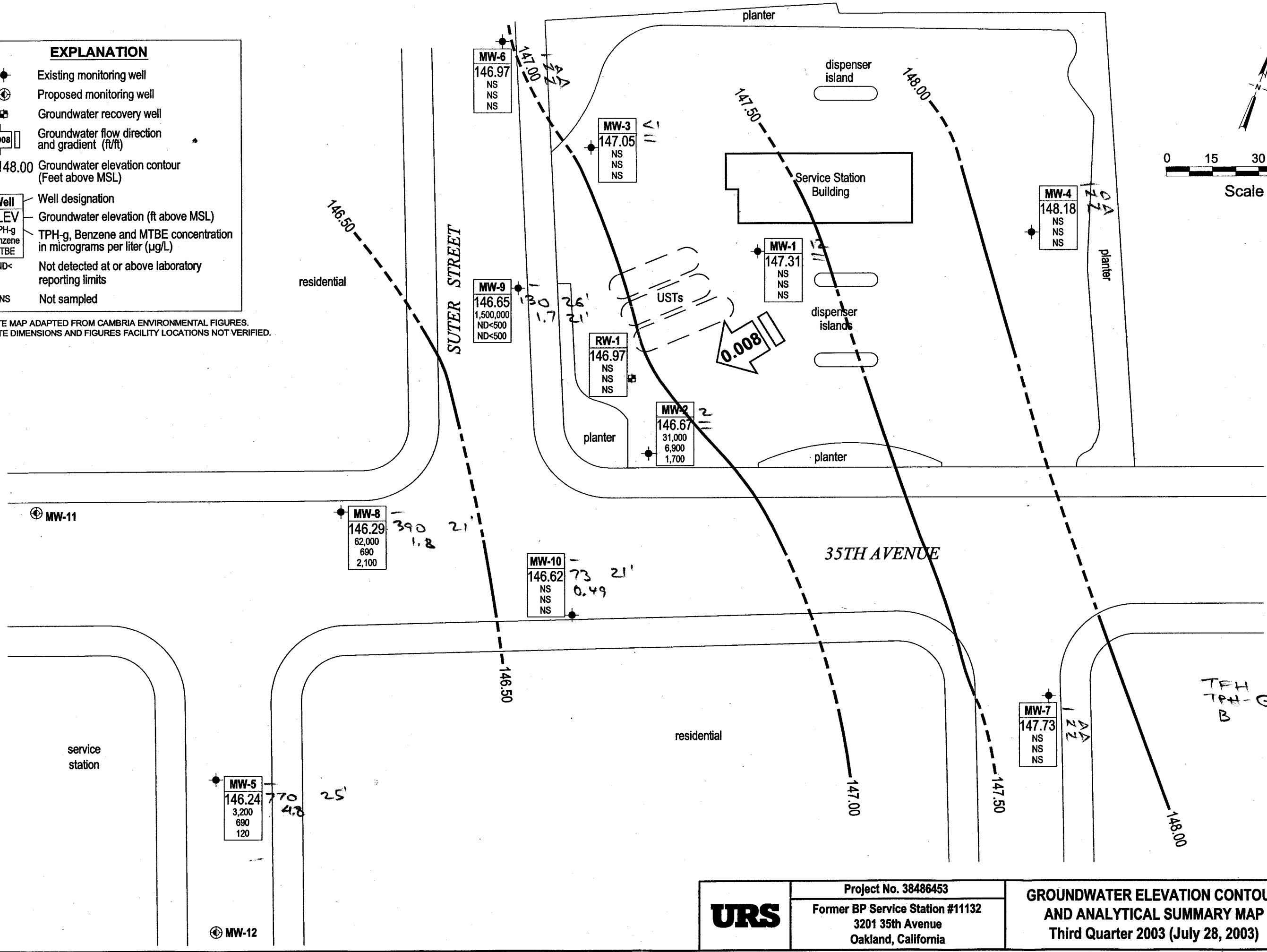
**EXPLANATION**

- Existing monitoring well
  - ⊕ Proposed monitoring well
  - ⊕ Groundwater recovery well
  - ↔ Groundwater flow direction and gradient (ft/ft)
  - 148.00 Groundwater elevation contour (Feet above MSL)
- | Well    | Well designation   |
|---------|--|
| ELEV    | Groundwater elevation (ft above MSL)                                 |
| TPH-g   | TPH-g, Benzene and MTBE concentration in micrograms per liter (µg/L) |
| Benzene |  |
| MTBE    |  |
| ND<     | Not detected at or above laboratory reporting limits                 |
| NS      | Not sampled  |

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.

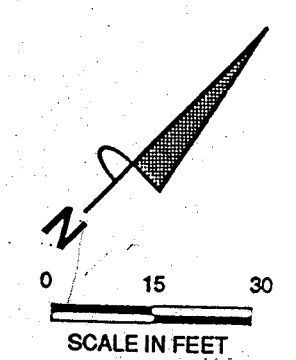
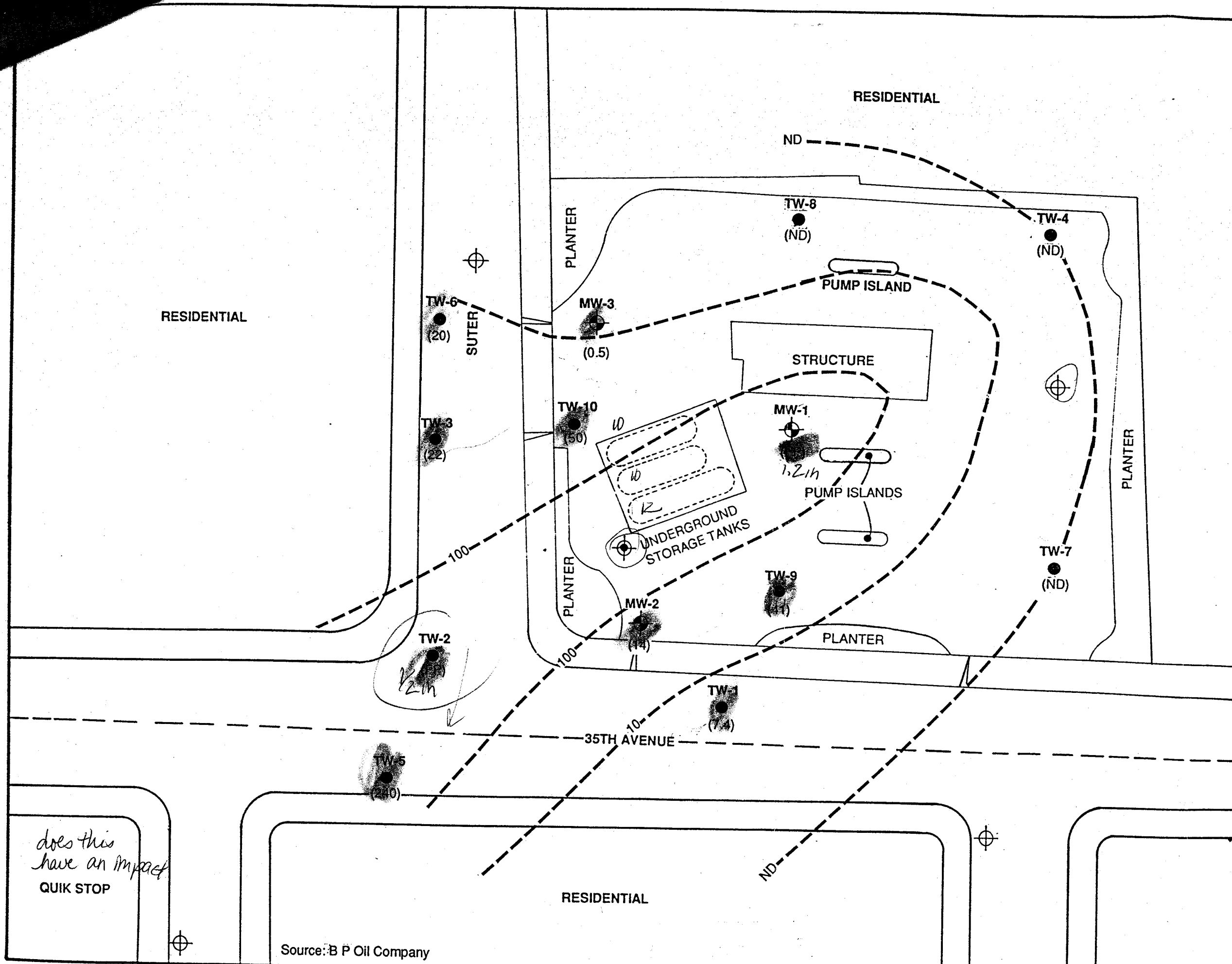


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<b>URS</b>	Project No. 38486453	<b>GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP</b>	FIGURE <b>1</b>
	Former BP Service Station #11132 3201 35th Avenue Oakland, California		

TPH 109/kg  
TPH-G  
B



- LEGEND:**
- ⊕ MONITORING WELL
  - ⊕ PROPOSED MONITORING WELL
  - ⊕ PROPOSED RECOVERY WELL
  - TEMPORARY WELL
  - 10 --- TPH ISOCONCENTRATION CONTOUR LINE (ppm)
  - (FP) FREE PRODUCT
  - (14) TPH CONCENTRATION (ppm)
  - (ND) NONDETECTABLE

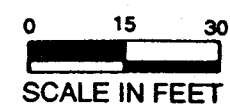
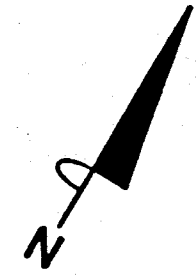
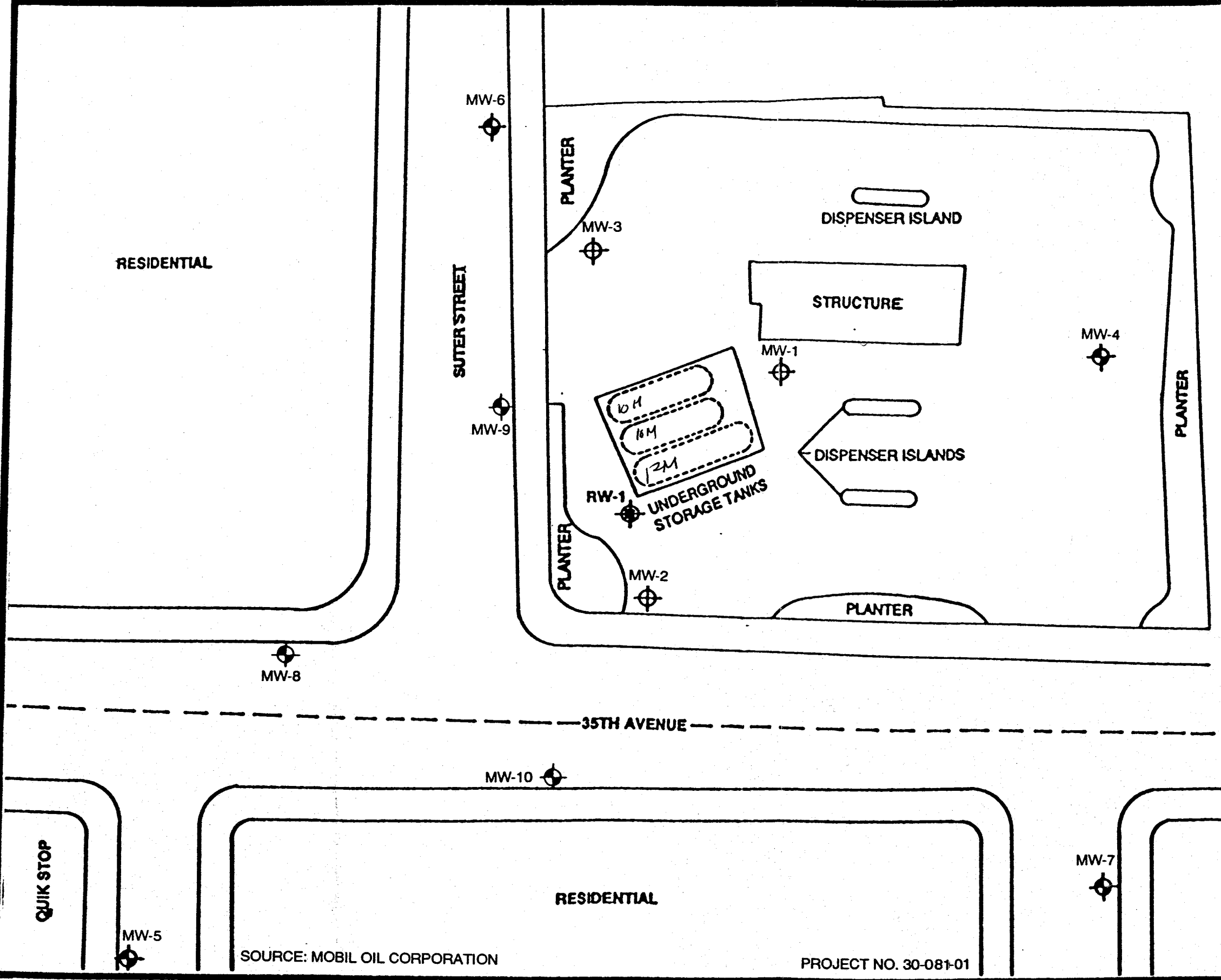
**FIGURE 3**  
**TOTAL PETROLEUM**  
**HYDROCARBON (TPH)**  
**ISOCONCENTRATION MAP**

B P SERVICE STATION NO. 11132  
 3201 35TH AVENUE  
 OAKLAND, CALIFORNIA




PROJECT NO. 30-081

*does this have an impact*  
 QUICK STOP

Source: B P Oil Company




**LEGEND:**

-  MONITORING WELLS INSTALLED BY ALTON GEOSCIENCE
-  MONITORING WELLS INSTALLED BY KAPREALIAN ENGINEERING, INC.
-  RECOVERY WELL INSTALLED BY ALTON GEOSCIENCE

**FIGURE 2: SITE PLAN**

BP OIL COMPANY  
SERVICE STATION NO. 11132  
3201 35th AVENUE  
OAKLAND, CALIFORNIA

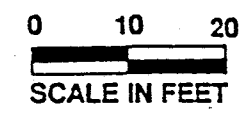
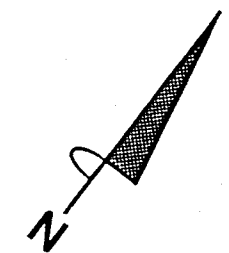
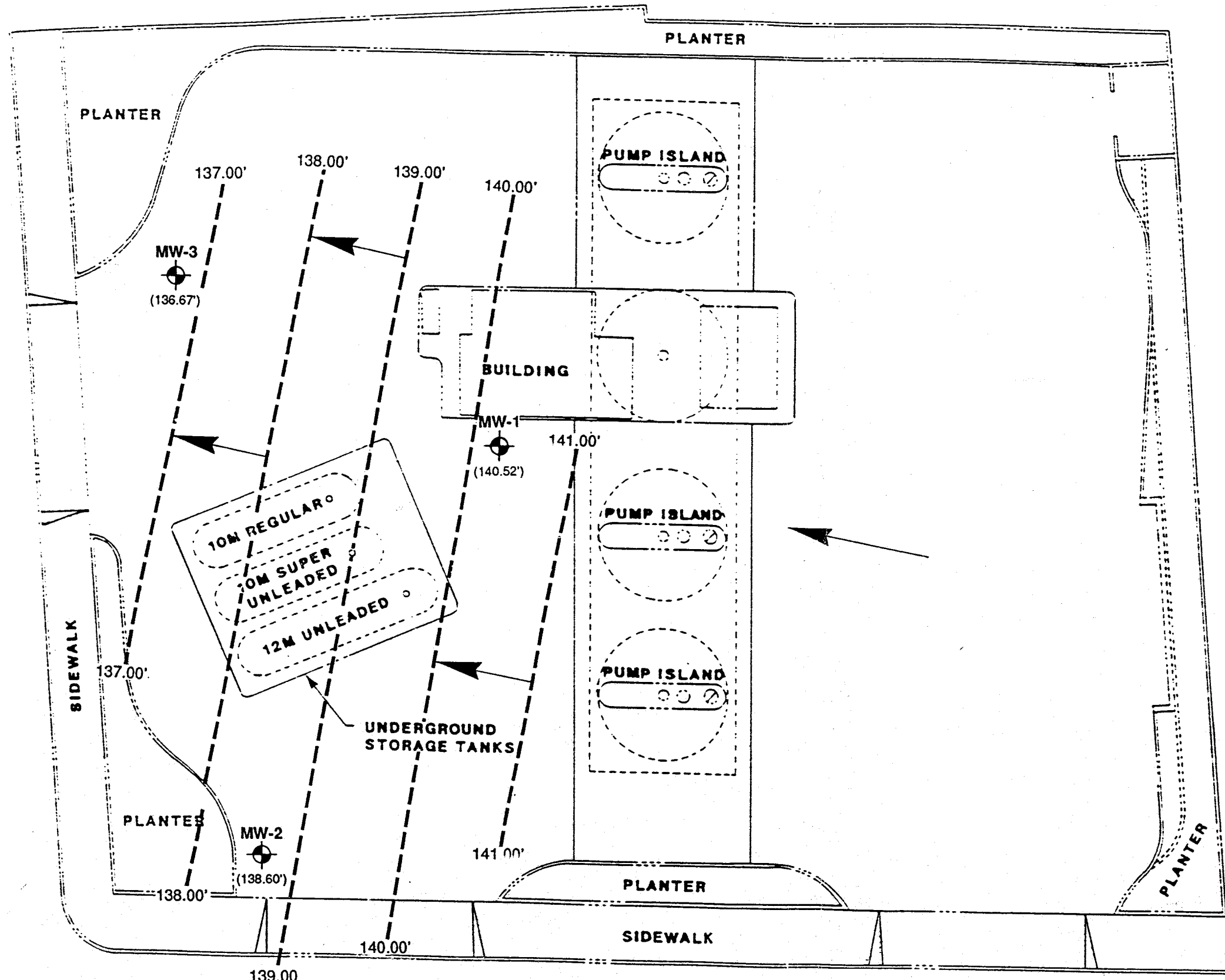


**ALTON GEOSCIENCE**  
1000 Burnett Ave., Ste. 140  
Concord, CA 94520





SOURCE: MOBIL OIL CORPORATION

PROJECT NO. 30-081-01

SUTER STREET



**LEGEND:**

-  MONITORING WELLS
-  (140.52') GROUND WATER ELEVATION
-  138.00' GROUND WATER ELEVATION CONTOUR
-  ← DIRECTION OF GROUND WATER FLOW

**FIGURE 2 GROUND WATER ELEVATION CONTOUR MAP**

B P SERVICE STATION NO. 11132  
3201 35TH AVENUE  
OAKLAND, CALIFORNIA



35TH AVENUE