

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



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

StID 6896

November 13, 1998

Mr. Terrence Fox  
Ultramar Inc  
525 W Third Street  
Hanford, CA 93232-0466

**Re: Fuel Leak Site Case Closure for Beacon Station #546, 29705 Mission Blvd, Hayward, CA**

Dear Mr. Fox:

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

**SITE INVESTIGATION AND CLEANUP SUMMARY**

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

- up to 1,540ppm TPH as gasoline, 2,750ppm TPH as diesel, and <1.3ppm benzene exists in soil beneath the site;
- up to 120ppb TPHg exists in groundwater beneath the site; and,
- a site safety plan must be prepared for construction workers in the event of excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.

If you have any questions, please contact me at (510) 567-6762.

eva chu  
Hazardous Materials Specialist

enclosures: 1. Case Closure Letter      2. Case Closure Summary

c: Hugh Murphy, Hayward Fire Department  
files (beaconhay-4)



ENVIRONMENTAL HEALTH SERVICES

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

**REMEDIAL ACTION COMPLETION CERTIFICATION**

**StID 6896 - 29705 Mission Blvd, Hayward, CA  
(1-10K, 2-8K and 1-500 gallon tanks removed on April 6, 1988)**

November 13, 1998

Mr. Terrence Fox  
Ultramar Inc  
525 W Third Street  
Hanford, CA 93232-0466

Dear Mr. Fox:

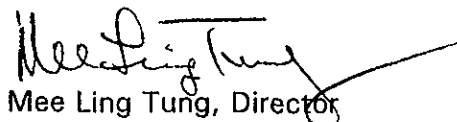
This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the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

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

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

Sincerely,

  
Mee Ling Tung, Director

cc: Richard Pantages, Chief of Division of Environmental Protection  
Chuck Headlee, RWQCB  
Dave Deaner, SWRCB  
Hugh Murphy, Hayward Fire Department  
files-ec (beaconhay-3)

RECEIVED  
QUALITY CONTROL  
JUL 28 1998

### CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

#### I. AGENCY INFORMATION

Date: June 10, 1998

Agency name: Alameda County-HazMat  
City/State/Zip: Alameda, CA 94502  
Responsible staff person: M. Logan

Address: 1131 Harbor Bay Pkwy  
Phone: (510) 567-6700  
Title: Hazardous Materials Spec.

#### II. CASE INFORMATION

Site facility name: Beacon Station No. 546  
Site facility address: 29705 Mission Blvd, Hayward, CA ~~93232~~ 94545  
RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 6896  
URF filing date: 4/6/88 SWEEPS No: N/A

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Terrence Fox Ultramar Inc	525 W Third Street Hanford, CA 93232-0466	209/582-0241

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
T1	10,000	Gasoline	Removed	4/6/88
T2	8,000	"	"	4/8/88
T3	8,000	Diesel	"	"
T4	500	Waste Oil	"	"

#### III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Leaking USTs  
Site characterization complete? YES  
Date approved by oversight agency: 5/13/98  
Monitoring Wells installed? Yes Number: 10  
Proper screened interval? Yes, ~20' to 40' bgs in MW-1  
Highest GW depth below ground surface: 18.17' Lowest depth: 25.06' in MW-1  
Flow direction: W to SW  
Most sensitive current use: Commercial  
Are drinking water wells affected? No Aquifer name: San Leandro Cone  
Is surface water affected? No Nearest affected SW name: NA  
Off-site beneficial use impacts (addresses/locations):  
Report(s) on file? YES Where is report(s) filed? Alameda County  
1131 Harbor Bay Pkwy and Hayward Fire Dept  
Alameda, CA 94502 Hayward, CA 94545

98 AUG 19 AM 1:53  
ENVIRONMENTAL  
PROTECTION

**Treatment and Disposal of Affected Material:**

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank	4 USTs	Disposed by H & H, San Francisco	Aug 1988
	3 USTs	Disposed at Erickson, in Richmond	June 1996
Free Product	55 gal. waste oil	disposed at Chem Waste in Kettleman City	9/19/96
Soil	490 tons	Disposed by TPS Technologies in Richmond	Aug 1996
	2,400 pounds	Disposed at Chem Waste in Kettleman City	9/19/96

**Maximum Documented Contaminant Concentrations - - Before and After Cleanup**

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before<sup>1</sup></u>	<u>After<sup>2</sup></u>	<u>Before<sup>3</sup></u>	<u>After<sup>4</sup></u>
TPH (Gas)	1,100	1,540	1,700,000	120
TPH (Diesel)	2,750 <sup>5</sup>	2,750 <sup>5</sup>	5,400	<50
Benzene	6.1	< 1.3	31,000	< .5
Toluene	77	4.14	48,000	< .5
Ethylbenzene	NA	31.9	NA	< .5
Xylenes	230	181		
MTBE	NA	NA	<5.0	<5.0
Oil & Grease	<30			
Heavy metals				
Other VOCs	ND			

- NOTE 1 soil sample from boring B-5 @ 5' bgs, 4/87  
 2 soil sample collected after overexcavation at dispenser island, sample OE-1P, 7/96  
 3 grab water sample from boring B-5, 4/87  
 4 latest groundwater sampling event, 12/97  
 5 soil sample from beneath diesel tank collected at time of UST removal, 8/88

**IV. CLOSURE**

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? \_\_\_\_\_

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? \_\_\_\_\_

Does corrective action protect public health for current land use? **YES**

Site management requirements: **A site safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.**

Should corrective action be reviewed if land use changes? **YES**

Monitoring wells Decommissioned: **None, pending site closure**

Number Decommissioned: **0** Number Retained: **10**


List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**

## V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu

Title: Haz Mat Specialist

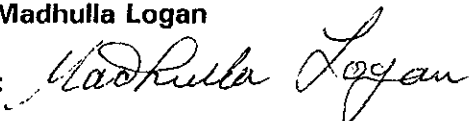
Signature: 

Date: 6/10/98

### Reviewed by

Name: Madhulla Logan

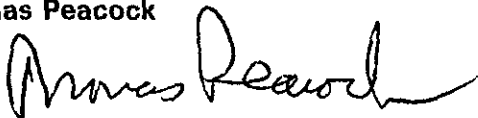
Title: Haz Mat Specialist

Signature: 

Date: 6/18/98

Name: Thomas Peacock

Title: Supervisor

Signature: 

Date: 6-24-98

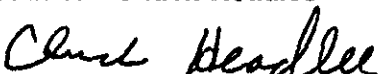
## VI. RWQCB NOTIFICATION

Date Submitted to RB: 7/20/98

RB Response:

RWQCB Staff Name: Chuck Headlee

Title: AEG

Signature: 

Date: 8/4/98

## VII. ADDITIONAL COMMENTS, DATA, ETC.

In April 1987 five exploratory borings (B-1 through B-5) were drilled in the vicinity of the three fuel USTs to groundwater (~26' bgs). Soil and groundwater samples were collected and analyzed for total hydrocarbons, benzene, toluene and xylenes. Hydrocarbon contamination was noted in all soil and water samples. (See Figs 1, 2, and Table 1)

In August 1988 three fuel USTs (1-10K gasoline, 1-8K gasoline, and 1-8K diesel) in a common pit and a 500 gallon waste oil UST in a separate pit were removed from the site. Small through-holes were noted in the 10K gasoline and waste oil tanks. A total of seven soil samples (T1N, T1S, T2N, T2S, T3E, T3W, and WT) were collected from the bottom of the tank excavations. Analytical results are presented on Table 2 and tank and sample locations are presented in Fig 3.

In June 1996 the product lines were uncovered and removed. Soil samples PL-1A through PL-1G were collected beneath the product lines at ~2.5' bgs. At this time, some unknown piping was discovered in the vicinity of the northerly dispenser island. The piping traced to three additional USTs, located near the northeast corner of the site. The tanks (1-250, 1-300, and 1-500 gallons USTs) were removed along with reservoirs (which appeared to be associated with the pumping system) located beneath the east end of each tank. Soil samples (TB-1A and TBN-1B) were collected beneath the ends of the 250 and 300-gallon USTs at ~9' bgs. In addition, two hydraulic floor lifts and an oil sump located in the service bays of the former station building were removed. Soil samples LB-1, LB-2, and OS-1 were collected beneath the hydraulic fluid reservoirs and the oil sump. The locations of the soil samples are illustrated in Figure 4, and the analytical results are summarized in Tables 3 and 4.

In July 1996 several areas of the site which revealed elevated concentrations of petroleum hydrocarbons were overexcavated, including the hydraulic lifts and oil sump, around product line soil samples PL-1B and PL-1E, and around the canopy support footing by the northern most dispenser island. A total of approximately 305 cy of soil was removed. Confirmatory soil samples were collected within the excavations (see Fig 5, Table 5).

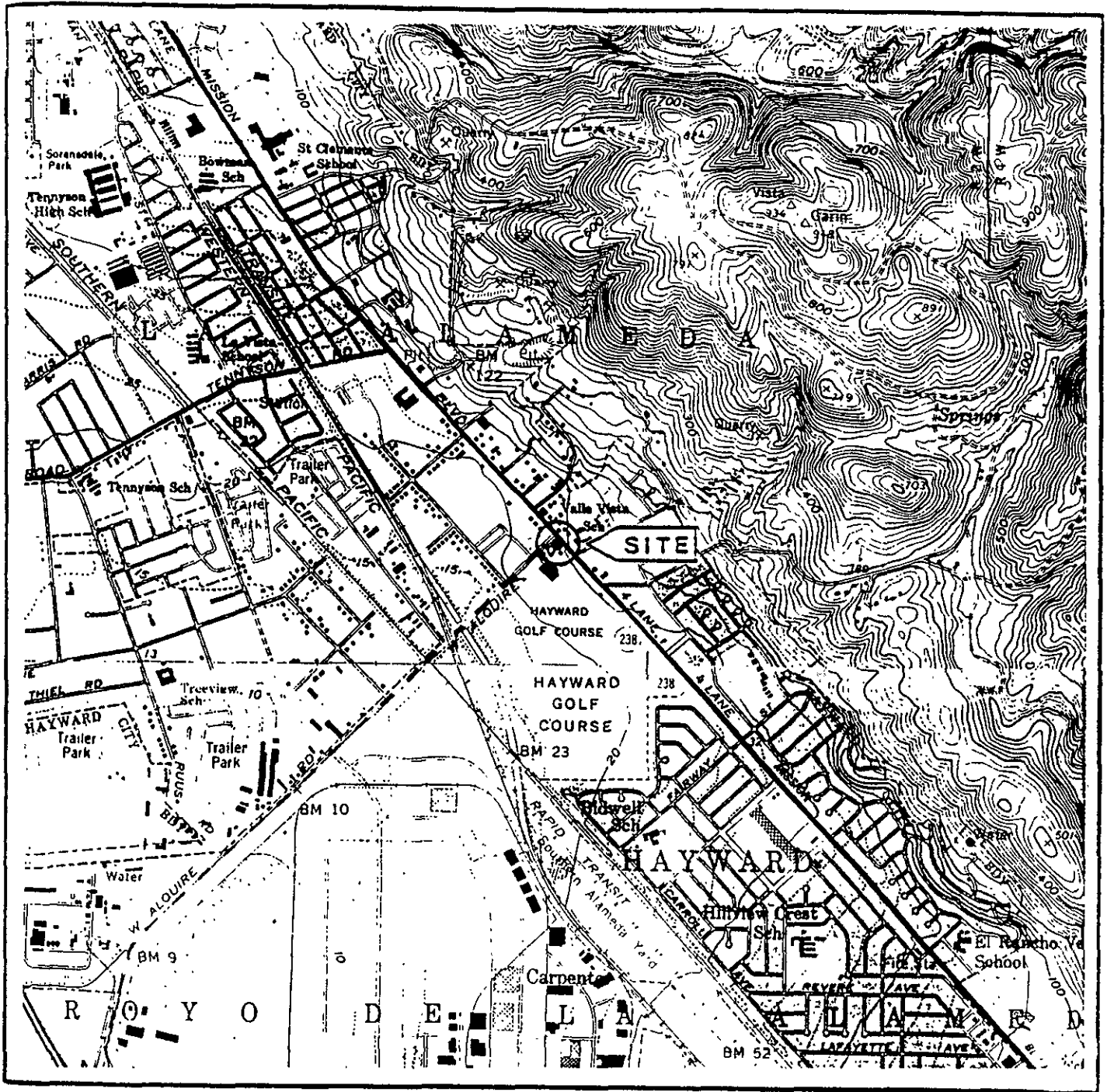
A total of 10 groundwater monitoring wells have been installed in several phases both on- and off-site to delineate the extent of the groundwater plume. Soil samples were collected from each well boring. Wells MW-1 through MW-3 were installed in June 1988. Wells MW-4 through MW-6 were installed in June 1989, wells MW-7 and MW-8 were installed in February 1990, well MW-9 in January 1993, and well MW-10 in June 1994 (see Fig 6 and Table 6). It appeared groundwater flowed to the west/southwest. The contaminant plume extended to well MW-10. An aquifer pump test, extracting water from well MW-1, was performed in October 1989. Because well MW-1 can be pumped continuously at 6.5 gpm, and the sieve analysis indicates a silty clay in the saturated zone, fracture flow may be the dominant mode of groundwater flow at the site. And, a 48-hour aquifer test was conducted in April 1993 by pumping from well MW-8 at an average rate of 4.7 gpm. A value for hydraulic conductivity of 52 ft/day was calculated, which is typical for an aquifer consisting of silty sand, rather than the silty clays noted at this site.

Five soil borings (CSB-1 through CSB-5) were advanced in the vicinity of the former USTs to verify the effectiveness of the source removal performed in 1996. Soil samples collected from each boring at 10', 15' and 20' bgs did not reveal significant concentrations of hydrocarbons. A maximum of 150 ppm TPHg, but no benzene or MTBE, were identified (see Fig 7, Table 7). Groundwater has been sampled quarterly since April 1992. During the last four quarters of sampling (March 1997 to December 1997) low to non-detectable levels of petroleum hydrocarbons have been detected in all the groundwater monitoring wells (see Table 8).

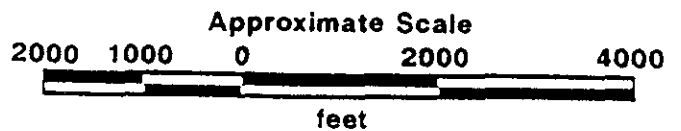
In 1997 a Risk-Based Corrective Action (RBCA) analysis was performed to assess if residual contaminants in soil and groundwater underlying the site warranted further corrective action. Based on the RBCA analysis, residual hydrocarbons do not pose a risk to human health for current land use at the site and surrounding areas, or for current and future use of groundwater in the area (see Tables 9 and 10).

In summary, case closure is recommended because:

- o the leak and ongoing sources have been removed;
- o the site has been adequately characterized;
- o the dissolved plume is not migrating;
- o no water wells, surface water, or other sensitive receptors are likely to be impacted; and,
- o the site presents no significant risk to human health or the environment.



Source: U.S. Geological Survey  
 7.5-Minute Quadrangle  
 Hayward, California  
 Newark, California  
 Photorevised 1980



Applied GeoSystems  
 21211 Mission Blvd., Suite B, Fremont, CA 94539 (415) 651-1100

**SITE VICINITY MAP**  
 Beacon Station No. 546  
 29705 Mission Boulevard  
 Hayward, California

**PLATE**  
**P - 1**

**PROJECT NO. 18008-1**



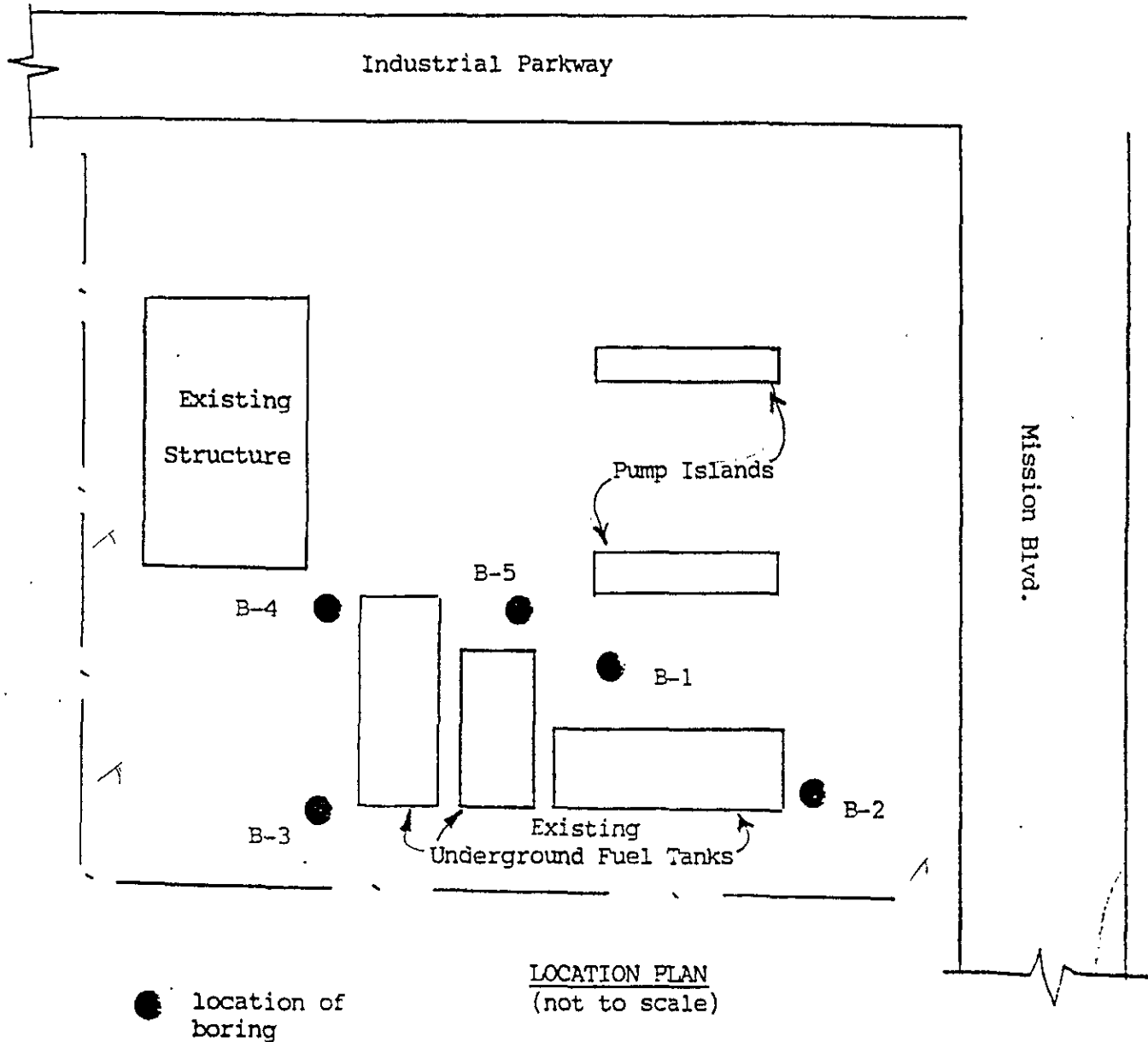
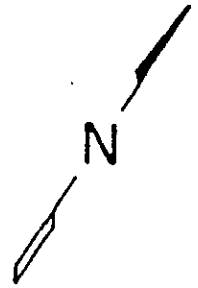
# KAPREALIAN ENGINEERING, INC.

Consulting Engineers

535 Main Street

Martinez, Ca. 94553

(415) 372-5444



Beacon Service Station  
Mission Blvd. & Industrial  
Hayward, California

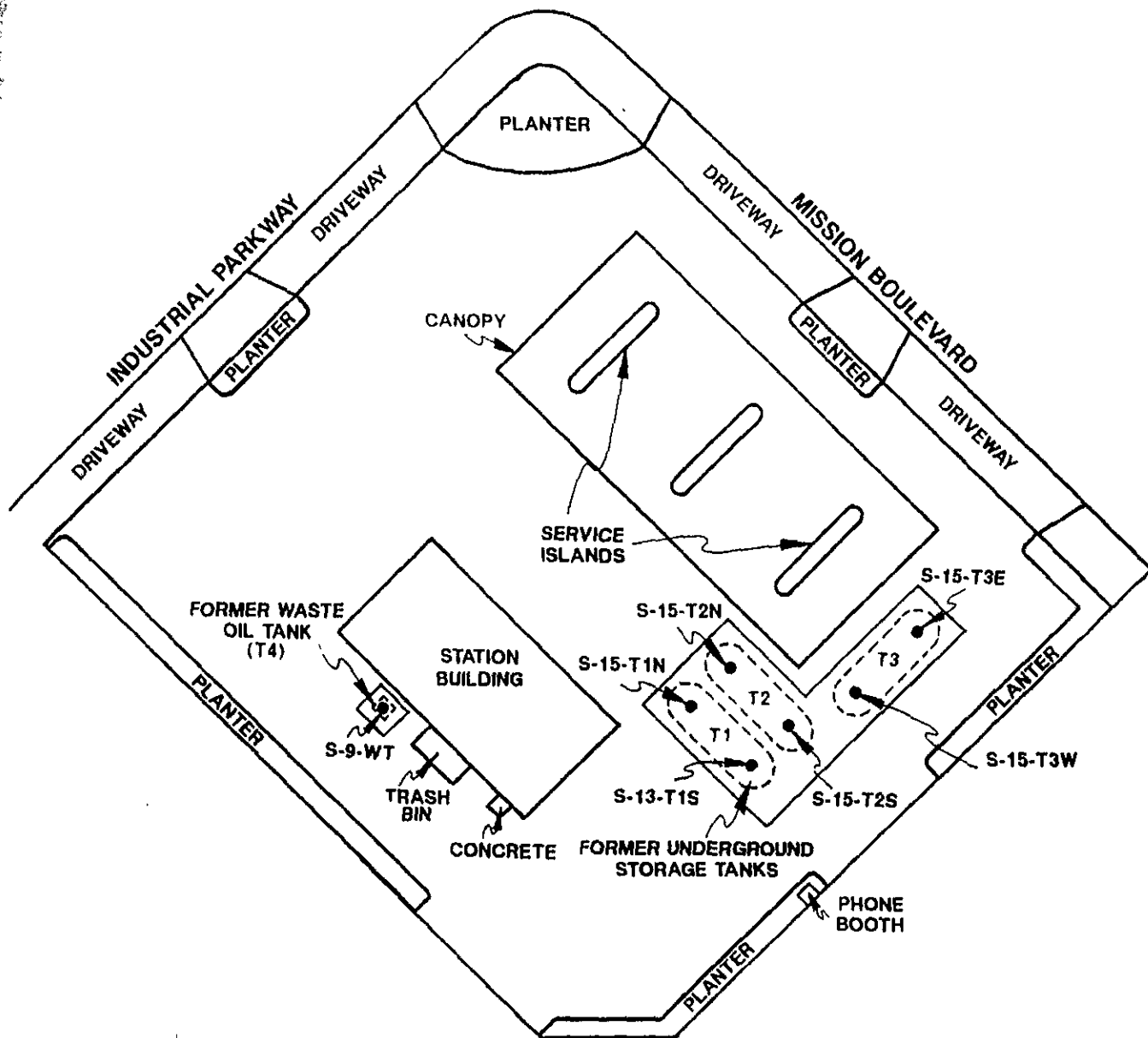


KEI-J87-0310  
 April 1, 1987  
 Page 2

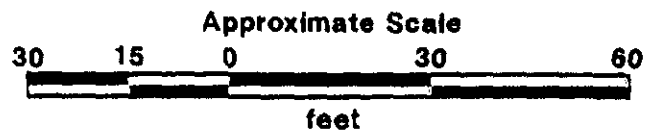
<u>Sample</u>	<u>Type</u>	<u>THC*</u>	<u>B*</u>	<u>T*</u>	<u>X*</u>
B-1 (15')	soil	17	0.17	<0.1	0.59
B-1 (20')	soil	59	2.2	3.9	3.3
B-1 (25')	soil	1600	5.8	36	64
B-2 (15')	soil	7.3	<0.1	<0.1	0.21
B-2 (25')	soil	16	0.81	<0.1	0.21
B-3 (15')	soil	28	0.34	0.43	0.77
B-3 (20')	soil	140	1.6	2.2	11
B-3 (25')	soil	940	2.7	11	32
B-4 (15')	soil	190	0.15	0.78	14
B-4 (20')	soil	260	0.93	2.1	4.5
B-4 (25')	soil	1100	4.7	46	130
B-5 (5')	soil	1100	6.1	77	230
B-5 (15')	soil	550	<0.27	22	94
B-5 (25')	soil	1400	7.5	68	140
B-2 (W)	water	84000	4900	5200	5200
B-3 (W)	water	2000	760	100	230
B-4 (W)	water	130000	3000	3300	16000
B-5 (W)	water	1700000	31000	48000	200000

\* Soil analyses in parts per million (ppm), water analyses in parts per billion (ppb)

THC = Total hydrocarbon  
 B = Benzene  
 T = Toluene  
 X = Xylene



● = Soil sample locations



Source: Measured by tape and compass



31275 Miramar Blvd. Suite B Torrance, CA 90504 (415) 651-7744

**GENERALIZED SITE PLAN**  
**Beacon Station No. 546**  
**29705 Mission Boulevard**  
**Hayward, California**

PLATE  
**P - 2**

PROJECT NO. 18008-1

TABLE 2  
 RESULTS OF LABORATORY ANALYSES  
 Beacon Station No. 546  
 29705 Mission Boulevard  
 Hayward, California

Sample Identifier	TPH	TEH	TOG	VOC
S-15-T1N	184	NA	NA	NA
S-13-T1S	112	NA	NA	NA
S-15-T2N	46	NA	NA	NA
S-15-T2S	5	NA	NA	NA
S-15-T3E	NA	2,750	NA	NA
S-15-T3W	NA	<5	NA	NA
S-9-WT	NA	<5	<30	<*

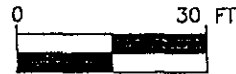
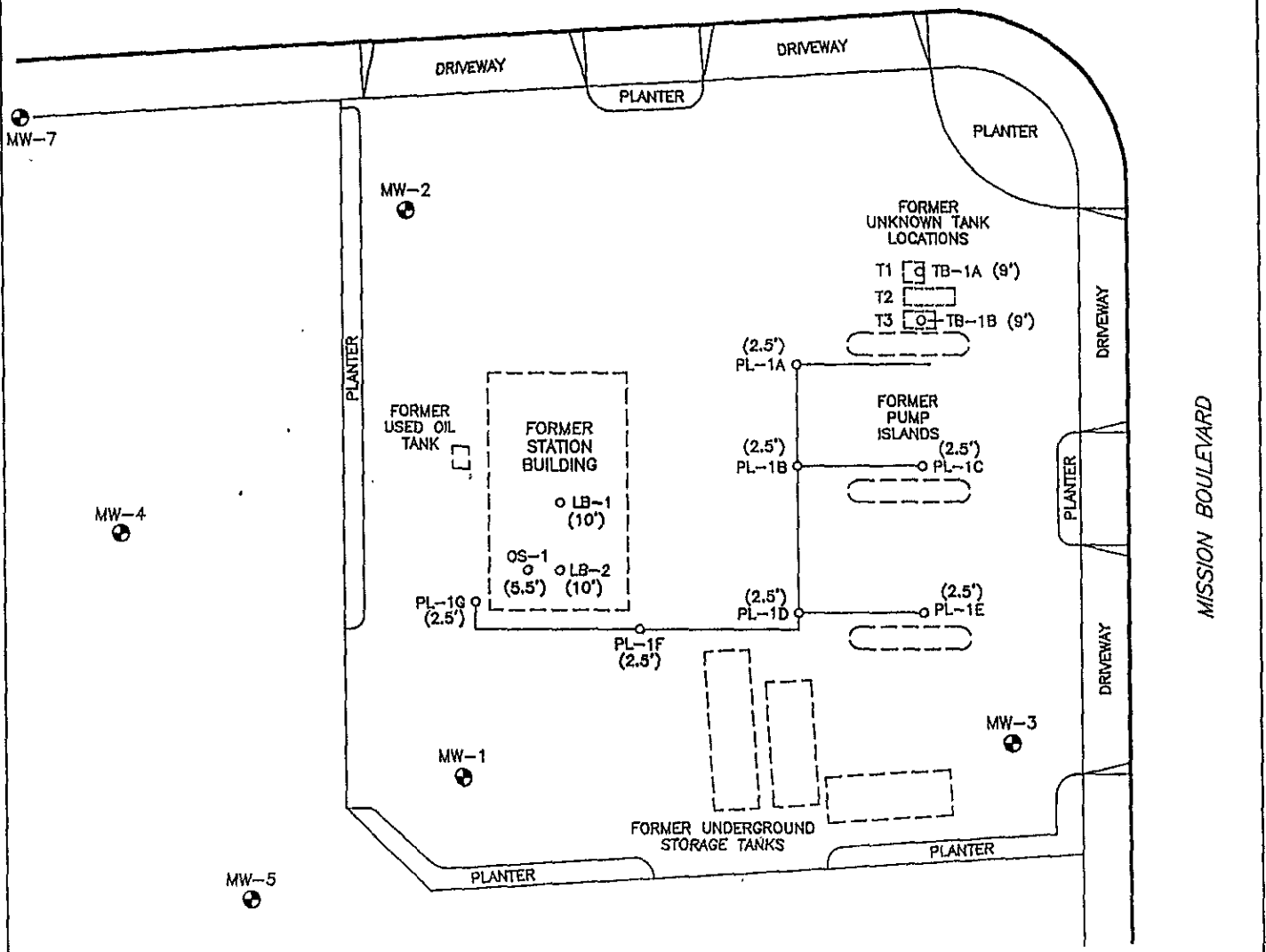
Results reported in parts per million (ppm)  
 TPH = total petroleum hydrocarbons  
 TEH = total extractable hydrocarbons  
 TOG = total oil and grease  
 VOC = volatile organic compounds  
 < = less than detection limit for method of analysis used  
 NA = analysis not required  
 \* = less than the respective detection limits for each VOC

Sample description: S-9-T4S

Side of pit sampled  
 (WT = Waste-oil tank)  
 Tank number  
 Depth below grade (feet)  
 Soil

hydrocarbon contamination prior to spreading. The samples were collected by first removing 6 to 8 inches of covering soil from the sample location and then a sample was collected and handled in the same manner as the samples collected from the tank pits. Approximate sample locations are shown on Plate P-3. A copy of

WEST INDUSTRIAL PARKWAY



SCALE

LEGEND:

- ⊕ MW-1 MONITORING WELL LOCATION
- PL-1C SOIL SAMPLE LOCATION
- T1 250 GALLON SINGLE-WALL STEEL TANK
- T2 500 GALLON SINGLE-WALL STEEL RIVETED TANK
- T3 300 GALLON SINGLE-WALL STEEL TANK

**FIGURE 3**  
**SOIL SAMPLE LOCATION MAP**  
 6/28/96 AND 7/11/96  
 FORMER BEACON STATION NO. 546  
 29705 MISSION BOULEVARD  
 HAYWARD, CA.

PROJECT NO. 0095-967	DRAWN BY M.L. 9/27/96
FILE NO. 95-967-1	PREPARED BY MAB
REVISION NO. 2	REVIEWED BY 

**Delta**  
Environmental  
Consultants, Inc.

BO010035

TABLE 1

**SOIL SAMPLE ANALYTICAL RESULTS FOR HYDROCARBONS**  
Concentrations in milligrams per kilogram (mg/kg)

Former Beacon Station No. 546  
29705 Mission Boulevard  
Hayward, California

<u>Sample ID</u>	<u>Date Sampled</u>	<u>Sample Depth (feet)</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Total Xylenes</u>	<u>TPH<sup>a</sup> as gasoline</u>	<u>TPH as diesel</u>	<u>MTBE<sup>b</sup></u>	<u>Oil and Grease</u>	<u>Volatile Halocarbons</u>
<b>Product Lines</b>											
PL-1A	06/28/96	2.5	<0.005	<0.005	0.028	0.026	1.4	NA <sup>c</sup>	<0.05	NA	NA
PL-1B	06/28/96	2.5	0.71	5.8	14	20	660	NA	<5.0	NA	NA
PL-1C	06/28/96	2.5	<0.005	<0.005	<0.005	<0.005	<1.0	NA	<0.05	NA	NA
PL-1D	06/28/96	2.5	<0.005	<0.005	<0.005	<0.005	<1.0	NA	<0.05	NA	NA
PL-1E	06/28/96	2.5	<0.5	19	38	310	1,800	NA	<5.0	NA	NA
PL-1F	06/28/96	2.5	<0.005	<0.005	<0.005	<0.005	<1.0	NA	<0.05	NA	NA
PL-1G	06/28/96	2.5	<0.005	<0.005	<0.005	<0.005	<1.0	NA	<0.05	NA	NA
<b>Old Tanks</b>											
TB-1A	06/28/96	9	<0.005	<0.005	<0.005	0.007	<1.0	<5.0 <sup>d</sup>	<0.05	<50	NA
TB-1B	06/28/96	9	<0.005	<0.005	<0.005	<0.005	<1.0	4.2	<0.05	<50	NA
<b>Hydraulic Lift</b>											
LB-1	07/11/96	10	<0.005	<0.005	0.086	0.70	5.3 <sup>e</sup>	58 <sup>e</sup>	<0.05	350	<0.005
LB-2	07/11/96	10	<0.005	<0.005	0.023	0.16	9.1 <sup>e</sup>	28 <sup>e</sup>	<0.05	100	<0.005
<b>Oil Sump</b>											
OS-1	07/11/96	5.5	<0.005	<0.005	<0.005	<0.005	<1.0	<10 <sup>h</sup>	<0.05	120	<0.005
<b>Overexcavation</b>											
OE-1A	07/29/96	11.75	1.78	4.42	72.4	445	3,070	NA	NA	NA	NA

BO010027

LRP001.967

TABLE 2

**SOIL SAMPLE ANALYTICAL RESULTS FOR METALS**  
 Concentrations in milligrams per kilogram (mg/kg)

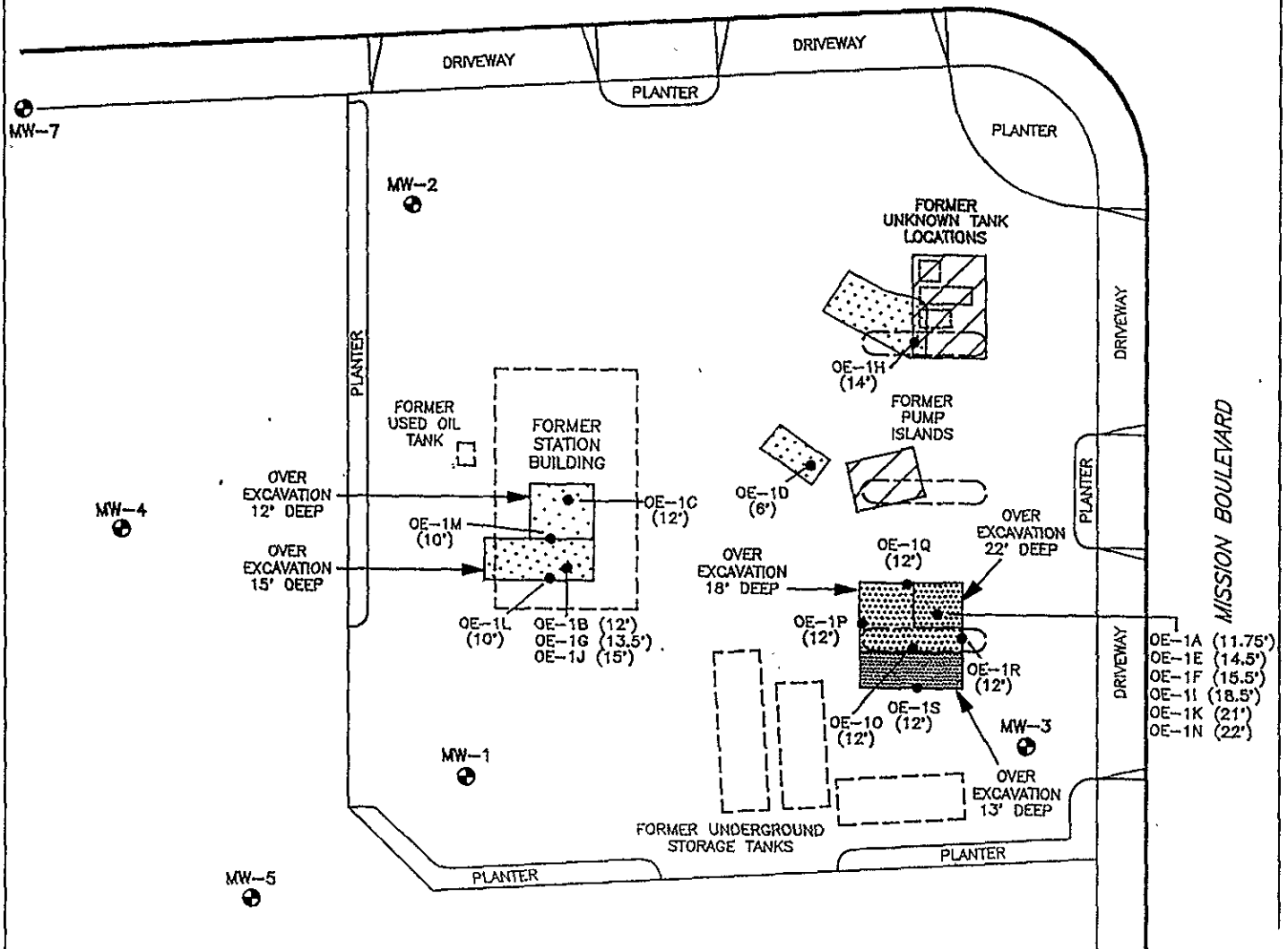
Former Beacon Station No. 546  
 29705 Mission Boulevard  
 Hayward, California

<u>Sample ID</u>	<u>Date Sampled</u>	<u>Sample Depth</u>	<u>Cadmium</u>	<u>Chromium</u>	<u>Lead</u>	<u>Nickel</u>	<u>Zinc</u>
<b>Old Tanks</b>							
TB-1A	06/28/96	9	<0.40	120	14	160	100
TB-1B	06/28/96	9	<0.40	120	16	160	80
<b>Hydraulic Lift</b>							
LB-1	07/11/96	10	<0.80	100	19	140	80
LB-2	07/11/96	10	<0.40	100	17	140	82
<b>Oil Separator</b>							
OS-1	07/11/96	5.5	<0.80	85	14	120	81

\* Sample collected from soil that sluffed into Tank 3 during removal.

BO010030

WEST INDUSTRIAL PARKWAY



LEGEND:

- ⊕ MW-1 MONITORING WELL LOCATION
- OE-1C SOIL SAMPLE LOCATION
- (12') DEPTH OF SOIL SAMPLE IN FEET BELOW GRADE
- [Dotted pattern] LIMITS OF OVER-EXCAVATION
- [Hatched pattern] RE-EXCAVATED PREVIOUS BACKFILL MATERIAL FOR COMPACTION

**FIGURE 4**  
**OVER-EXCAVATION SOIL SAMPLE LOCATION MAP**  
 7/29/96 AND 7/31/96  
 FORMER BEACON STATION NO. 546  
 29705 MISSION BOULEVARD  
 HAYWARD, CA.

PROJECT NO. D095-967	DRAWN BY M.L. 9/3/96
FILE NO. 95-967-1	PREPARED BY MAB
REVISION NO. 1	REVIEWED BY <i>[Signature]</i>

**Delta**  
 Environmental  
 Consultants, Inc.

BO010036

TABLE 1-Continued

SOIL SAMPLE ANALYTICAL RESULTS FOR HYDROCARBONS  
Concentrations in milligrams per kilogram (mg/kg)

Former Beacon Station No. 546  
29705 Mission Boulevard  
Hayward, California

<u>Sample ID</u>	<u>Date Sampled</u>	<u>Sample Depth (feet)</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Total Xylenes</u>	<u>TPH* as gasoline</u>	<u>TPH as diesel</u>	<u>MTBE<sup>b</sup></u>	<u>Oil and Grease</u>	<u>Volatile Halocarbons</u>
OE-1B	07/29/96	12	<0.025	<0.025	0.032	0.273	16.1	67 <sup>i</sup>	NA	128	NA
OE-1C	07/29/96	12	<0.005	<0.005	<0.005	<0.005	<1.0	<10	NA	<50	NA
OE-1D	07/29/96	6	0.041	<0.025	0.166	0.061	7.36	NA	NA	NA	NA
OE-1E	07/29/96	14.5	<2.5	49.3	96.1	537	3,810	NA	NA	NA	NA
OE-1F	07/29/96	15.5	<2.0	16.7	28.2	158	1,110	NA	NA	NA	NA
OE-1G	07/29/96	13.5	<0.025	<0.025	0.031	0.253	18.9	NA	NA	104	NA
OE-1H	07/29/96	14	<0.005	<0.005	<0.005	<0.005	<1.0	NA	NA	NA	NA
OE-1I	07/31/96	18.5	<0.5	0.78	3.15	17.2	188	NA	NA	NA	NA
OE-1J	07/31/96	15	<0.005	<0.005	<0.005	<0.005	<1.0	NA	NA	<50	NA
OE-1K	07/31/96	21	<0.4	6.89	10.3	57.3	630	NA	NA	NA	NA
OE-1L	07/31/96	10	<0.05	<0.05	0.068	0.544	24.8	NA	NA	78	NA
OE-1M'	07/31/96	10	<0.025	<0.025	0.025	0.287	60.9	NA	NA	126	NA
OE-1N'	07/31/96	22	<0.05	5.19	8.74	47.4	540	NA	NA	NA	NA
OE-1O	07/31/96	12	<0.5	0.602	8.69	44.3	586	NA	NA	NA	NA
OE-1P	07/31/96	12	<1.30	4.14	31.9	181	1,540	NA	NA	NA	NA
OE-1Q	07/31/96	12	<0.6	<0.6	2.27	9.06	325	NA	NA	NA	NA

BO010028



TABLE 1-Continued

SOIL SAMPLE ANALYTICAL RESULTS FOR HYDROCARBONS

Concentrations in milligrams per kilogram (mg/kg)

Former Beacon Station No. 546  
29705 Mission Boulevard  
Hayward, California

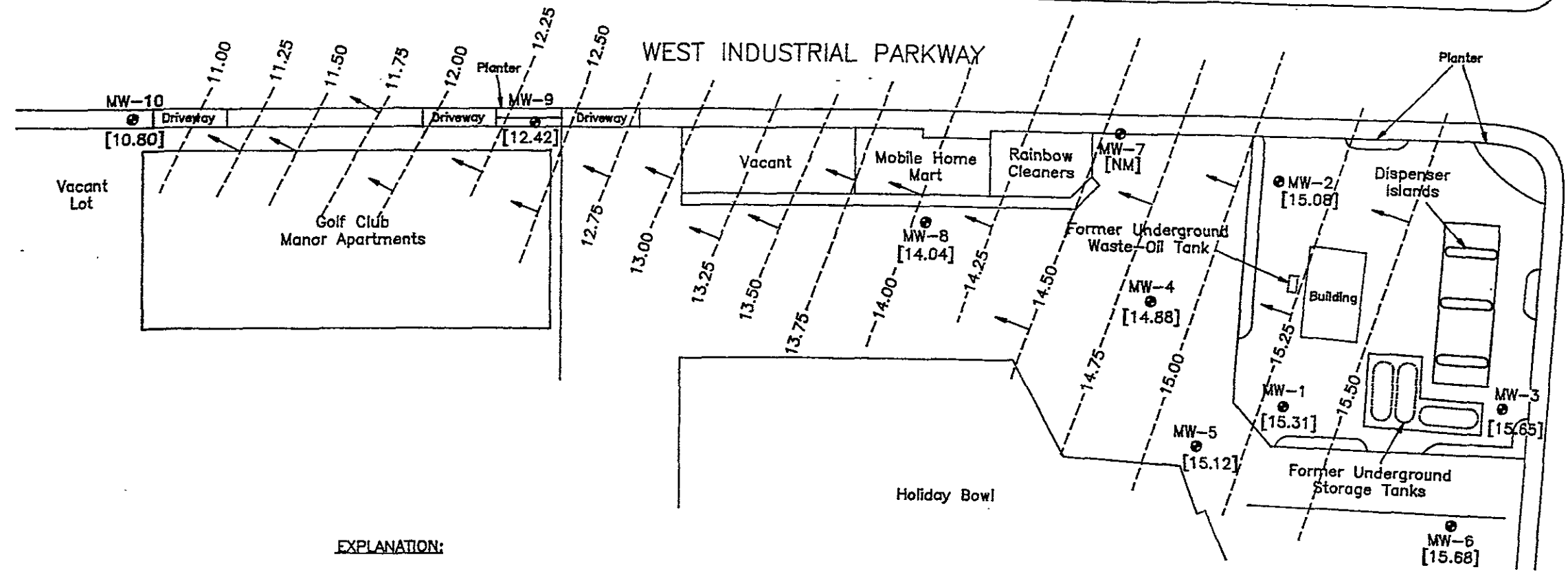
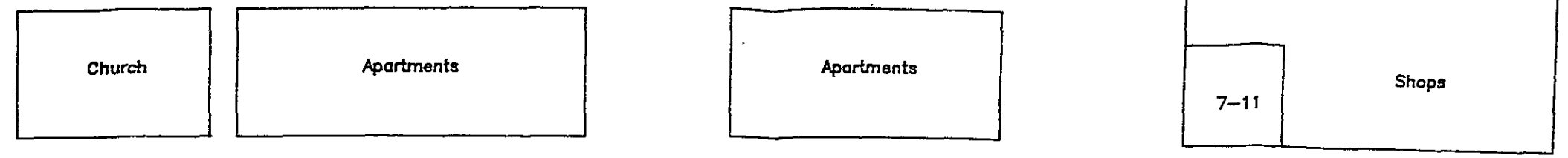
<u>Sample ID</u>	<u>Date Sampled</u>	<u>Sample Depth (feet)</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Total Xylenes</u>	<u>TPH<sup>a</sup> as gasoline</u>	<u>TPH as diesel</u>	<u>MTBE<sup>b</sup></u>	<u>Oil and Grease</u>	<u>Volatile Halocarbons</u>
OE-1R	07/31/96	12	<0.650	0.733	14.5	63.4	1,270	NA	NA	NA	NA
OE-1S	07/31/96	12	<0.005	<0.005	<0.005	0.017	<1.0	NA	NA	NA	NA

- <sup>a</sup> Total petroleum hydrocarbons.
- <sup>b</sup> Methyl tertiary butyl ether.
- <sup>c</sup> Not analyzed.
- <sup>d</sup> Increased reporting limit due to interference from high boiling point compounds.
- <sup>e</sup> Contains gasoline range product similar to Stoddard Solvent.
- <sup>f</sup> Poor surrogate recovery due to matrix interference.
- <sup>g</sup> Product not typical of gasoline.
- <sup>h</sup> Increased reporting limit due to oil range interference.
- <sup>i</sup> Value is approximate, because of interferences.

BO010029

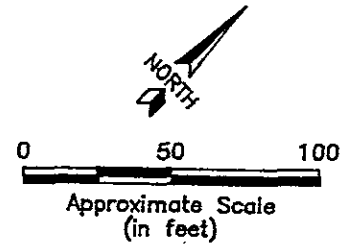
DIXON STREET

MISSION BOULEVARD



**EXPLANATION:**

- MW-9 ● Monitoring Well Location And Designation
- [10.80] Ground Water Elevation in Feet
- Ground Water Table Elevation Contour With Inferred Direction Of Flow



**FIGURE 3**  
**GROUND WATER TABLE CONTOUR MAP (06/13/94)**  
 BEACON STATION #546  
 29705 MISSION BOULEVARD  
 HAYWARD, CALIFORNIA

Project No. 18029.01	Drawn MWB	Acton • Mickelson • van Dam, Inc. Consulting Scientists, Engineers, and Geologists 4511 Golden Foothill Parkway, #1 El Dorado Hills, California 95762 (916) 939-7550
File No. FIG3	Prepared SAL	
Revision	Reviewed	

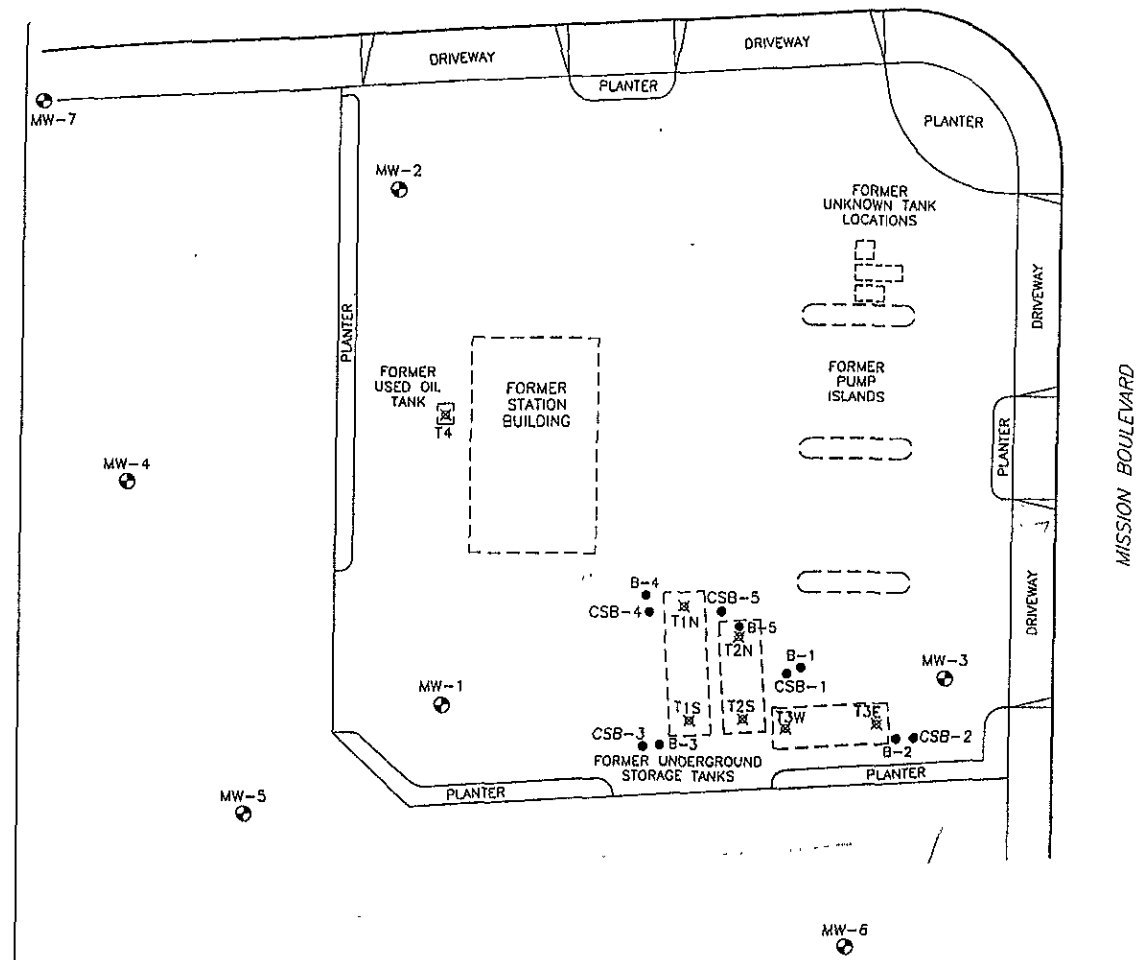
TABLE 5

SOIL SAMPLE ANALYTICAL RESULTS, MONITORING WELLS MW-1 THROUGH MW-10  
 Former Beacon Station No. 546  
 29705 Mission Boulevard, Hayward, California  
 (concentrations in milligrams per kilogram)

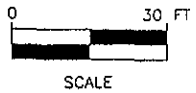
Soil Boring I.D.	Sample Collection Date	Sample Collection Depth (feet below grade)	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHg <sup>a</sup>	TPHd <sup>b</sup>
MW-1	06-30-88	25	13.4	58.1	10.3	63.2	59	255
MW-2	06-30-88	25	0.30	0.99	0.62	2.85	28	NA
MW-3	07-01-88	25	0.28	0.09	0.10	<0.05	<2	NA
MW-4	06-27-89	10	<0.04	<0.04	<0.04	<0.04	<5	NA
	06-27-89	15	<0.04	<0.04	<0.04	<0.04	<5	NA
	06-27-89	20	1.27	0.92	0.59	3.02	NA	<10
MW-5	06-26-89	10	<0.04	<0.04	<0.04	<0.04	<5	NA
	06-26-89	15	<0.04	<0.04	<0.04	<0.04	<5	NA
	06-26-89	20	<0.04	<0.04	<0.04	<0.04	NA	<10
MW-6	06-26-89	25	<0.04	<0.04	<0.04	<0.04	<5	NA
MW-7	02-23-90	17.5	<0.1	<0.1	<0.1	<0.1	1.5	NA
	02-23-90	20	<0.1	<0.1	<0.1	<0.1	9.9	<5
	02-23-90	22.5	<0.1	<0.1	<0.1	<0.1	<1.0	<5
MW-8	02-22-90	15	0.9	<0.1	<0.1	0.1	14	NA
	02-22-90	20	1.7	<0.1	2.7	6.6	150	<5
	02-22-90	25	0.3	<0.1	<0.1	0.3	2.6	<5
MW-9	01-04-93	10.5	0.045	0.009	0.007	0.026	10	NA
	01-14-93	15.5	0.036	<0.005	0.011	0.012	1.7	NA
MW-10	06-13-94	4	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	NA

Note: Data for soil samples collected from monitoring wells MW-1 through MW-9 reported by other consulting firms.  
<sup>a</sup>TPHg = Total petroleum hydrocarbons as gasoline.  
<sup>b</sup>TPHd = Total petroleum hydrocarbons as diesel.

WEST INDUSTRIAL PARKWAY



- LEGEND:
- ⊕ MW-1 MONITORING WELL LOCATION
  - B-4 SOIL BORING LOCATION
  - ⊗ T1N SOIL SAMPLE LOCATION
  - CSB-1 CONFIRMATION SOIL BORING LOCATION 10/28/97



**FIGURE 2**  
**SITE MAP**

FORMER BEACON STATION NO. 546  
29705 MISSION BOULEVARD  
HAYWARD, CA.

PROJECT NO. D095-967	DRAWN BY M.L. 11/25/97
FILE NO. 95-967-1	PREPARED BY RDM
REVISION NO. 4	REVIEWED BY 

**Delta**  
Environmental  
Consultants, Inc.

SOIL SAMPLE ANALYTICAL RESULTS

Former Beacon Station No. 546  
 29705 Mission Boulevard  
 Hayward, California

Sample ID	Date	Depth to Ground Water (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	TPH as gasoline (mg/kg)	MTBE (mg/kg)
CSB-1-10	10/28/97	10	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-1-15	10/28/97	15	<0.05	0.086	2.9	7.3	150	<0.5
CSB-1-20	10/28/97	20	<0.05	0.16	2.7	6.3	86	<0.5
CSB-2-10	10/28/97	10	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-2-15	10/28/97	15	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-2-20	10/28/97	20	<0.05	0.07	2.1	3.4	130	<0.5
CSB-3-10	10/28/97	10	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-3-15	10/28/97	15	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-3-20	10/28/97	20	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-4-10	10/28/97	10	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-4-15	10/28/97	15	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-4-20	10/28/97	20	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-5-10	10/28/97	10	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-5-15	10/28/97	15	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05
CSB-5-20	10/28/97	20	<0.005	<0.005	<0.005	<0.005	<1.0	<0.05

TPH = Total petroleum hydrocarbons.  
 MTBE = Methyl tertiary butyl ether.  
 mg/kg = Milligrams per kilogram.

TABLE 6

GROUND WATER SAMPLE ANALYTICAL RESULTS  
 Former Beacon Station No. 546  
 29705 Mission Boulevard, Hayward, California  
 (concentrations in micrograms per liter)

Monitoring Well	Sample Collection	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHg	TPHd
MW-1	07-07-88	4,070	2,990	330	3,590	17,400	5,400
	02-89	2,450	1,430	190	890	20,800	NA <sup>a</sup>
	08-89	300	280	100	600	1,500	NA
	10-89	<0.5	<0.5	<0.5	<0.5	79	NA
	03-90	800	190	0.6	380	3,100	<50
	04-15-92	710	11	150	440	8,900	NA
	07-07-92	<0.5	<0.5	<0.5	<0.5	<50	NA
	09-23-92	<0.5	<0.5	<0.5	<0.5	<50	NA
	11-12-92 <sup>d</sup>	—	—	—	—	—	—
	02-03-93	72	<0.5	0.6	6.6	950	NA
	05-10-93	210	2.9	42	67	1,000	NA
	08-18-93	220	<0.5	110	150	1,600	NA
	11-18-93	<0.5	<0.5	<0.5	<0.5	51	NA
	03-10-94	37	<0.5	22	26	310	NA
	06-15-94	53	<0.5	40	38	420	NA
	09-15-94	12	<0.5	12	5.8	78	NA
12-21-94	14	<0.5	<0.5	<0.5	26	170	NA
MW-2	07-07-88	1,266	2,117	230	1,563	7,160	NA
	02-89	231	102	30	113	4,130	NA
	08-89	110	65	67	270	950	NA
	10-89	240	220	34	74	930	NA
	03-90	4.3	2.5	<0.5	44	260	<50
	04-15-92	21	4.8	56	26	1,200	NA
	07-07-92	<0.5	<0.5	<0.5	<0.5	<50	NA
	09-23-92	<0.5	<0.5	<0.5	<0.5	<50	NA
	11-12-92 <sup>d</sup>	<0.5	<0.5	1.7	0.9	<50	NA
	02-03-93	2.9	0.8	15	6.0	310	NA
	05-10-93	17	<0.5	23	5.2	190	NA
	08-18-93	53	<1.3	71	16	820	NA
	11-18-93	3.0	<0.5	9.3	0.73	89	NA
	03-10-94	45	<2.5	390	28	2,000	NA
	06-15-94	54	2.0	270	15	1,300	NA
	09-15-94	4.7	<0.5	80	13	370	NA
12-21-94	0.79	<0.50	<0.50	29	190	NA	

TABLE 6 (continued)

## GROUND WATER SAMPLE ANALYTICAL RESULTS

Former Beacon Station No. 546

29705 Mission Boulevard, Hayward, California

(concentrations in micrograms per liter)

Monitoring Well	Sample Collection	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH <sub>g</sub> <sup>a</sup>	TPH <sub>d</sub> <sup>a</sup>
MW-3	07-07-88	94	6	28	29	2,810	NA
	02-89	2.6	<0.5	0.5	0.6	90	NA
	08-89	5.9	5.7	3.7	16.4	25	NA
	10-89	<0.5	<0.5	<0.5	<0.5	<50	NA
	03-90	<0.5	<0.5	<0.5	<0.5	<50	<50
	04-15-92	2.8	<0.5	<0.5	<0.5	69	NA
	07-07-92	<0.5	<0.5	<0.5	<0.5	<50	NA
	09-23-92	<0.5	<0.5	<0.5	<0.5	<50	NA
	11-12-92	<0.5	<0.5	<0.5	<0.5	<50	NA
	02-03-93	1.0	1.3	0.6	2.7	<50	NA
	05-10-93	1.6	<0.5	2.0	<0.5	53	NA
	08-18-93	1.0	<0.5	1.5	<0.5	<50	NA
	11-18-93	<0.5	<0.5	<0.5	<0.5	<50	NA
	03-10-94	<0.5	<0.5	<0.5	<0.5	<50	NA
	06-15-94	<0.5	<0.5	<0.5	<0.5	<50	NA
	09-15-94	<0.5	<0.5	<0.5	<0.5	<50	NA
12-21-94	0.52	<0.5	<0.5	<0.5	<50	NA	
MW-4	07-89	144	191	32	110.6	550	NA
	08-89	280	460	140	980	2,500	NA
	10-89	1,600	780	120	550	8,001	<50
	03-90	280	71	0.6	190	1,300	—
	04-15-92	—	—	—	—	—	NA
	11-18-93	110	6.4	88	240	1,500	NA
	03-10-94	460	5.1	370	450	4,000	NA
	06-15-94	97	1.9	130	150	1,300	NA
	09-15-94	34	1.6	70	110	1,100	NA
	12-21-94	90	2.1	170	160	1,700	NA

TABLE 6 (continued)

GROUND WATER SAMPLE ANALYTICAL RESULTS  
Former Beacon Station No. 546  
29705 Mission Boulevard, Hayward, California  
(concentrations in micrograms per liter)

Monitoring Well	Sample Collection	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHg <sup>a</sup>	TPHd <sup>b</sup>	
MW-5	07-89	970	1,100	520	1,250	5,200	NA	
	08-89	350	430	360	1,220	2,300	NA	
	10-89	2,000	370	230	430	8,800	NA	
	03-90	5,400	980	1,300	3,400	27,000	<50	
	04-15-92	—	—	—	—	—	—	
	11-18-93	23	<0.5	72	6.1	2,800	NA	
	03-10-94	26	<0.5	<0.5	98	2,900	NA	
	06-15-94	14	<0.5	29	18	2,100	NA	
	09-15-94	2.4	<0.5	<0.5	4.9	200	NA	
	12-21-94	4.7	<0.50	3.3	<0.50	290	NA	
	MW-6	07-89	83.5	587	269	79.9	350	NA
		08-89	1.87	1.96	1.68	1.96	5.5	NA
10-89		<0.5	<0.5	<0.5	<0.5	<50	NA	
03-90		1.3	1.4	1.2	1.7	<50	<50	
04-15-92		—	—	—	—	—	—	
11-18-93		<0.5	<0.5	<0.5	1.5	<50	NA	
03-10-94		<0.5	<0.5	<0.5	<0.5	<50	NA	
06-15-94		<0.5	<0.5	<0.5	<0.5	<50	NA	
09-15-94		<0.5	<0.5	<0.5	<0.5	<50	NA	
12-21-94		<0.5	<0.5	<0.5	<0.5	<50	NA	
MW-7		03-90	22	<0.5	<0.5	1.4	270	<50
		04-15-92	21	1.2	2.0	1.2	1,600	NA
	07-07-92	<0.5	<0.5	<0.5	<0.5	320	NA	
	09-23-92	<0.5	<0.5	<0.5	<0.5	90	NA	
	11-12-92	<0.5	<0.5	<0.5	<0.5	<50	NA	
	02-03-93	<0.5	<0.5	<0.5	<0.5	<50	NA	
	05-10-93	190	3.2	45	<1.5	1,800	NA	
	08-18-93	53	<2.5	<2.5	37	1,600	NA	
	11-18-93	<0.5	<0.5	<0.5	7.4	730	NA	
	03-10-94	0.90	<0.5	<0.5	2.8	1,000	NA	
	06-15-94	3.6	<0.5	<0.5	1.8	760	NA	
	09-15-94	0.63	<0.5	<0.5	<0.5	900	NA	
	12-21-94	0.54	<0.50	<0.50	<0.50	640	NA	



TABLE 6 (continued)

GROUND WATER SAMPLE ANALYTICAL RESULTS  
Former Beacon Station No. 546  
29705 Mission Boulevard, Hayward, California  
(concentrations in micrograms per liter)

Monitoring Well	Sample Collection	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHg <sup>a</sup>	TPHd <sup>b</sup>
MW-8	03-90	800	190	0.6	380	1,200	<50
	04-15-92	1,900	34	1,200	1,800	40,000	NA
	07-07-92	560	14	32	630	19,000	NA
	09-23-92	370	<5.0	<5.0	150	4,200	NA
	11-12-92	75	<2.5	<2.5	110	5,100	NA
	02-03-93	800	1.1	660	720	29,000	NA
	04-23-93	480	8.2	550	510	7,400	NA
	05-10-93	540	9.9	770	550	8,900	NA
	08-18-93	790	<25	1,100	720	10,000	NA
	11-18-93	420	<5.0	690	290	8,700	NA
	03-10-94	650	<2.5	930	320	9,500	NA
	06-15-94	360	<2.5	650	190	6,600	NA
	09-15-94	220	<2.5	470	120	7,000	NA
12-21-94	280	<2.5	540	180	6,000	NA	
MW-9	01-04-93	990	67	1,000	2,900	67,000	NA
	02-03-93	64	9.6	70	510	28,000	NA
	05-10-93	180	12	88	110	5,000	NA
	08-18-93	290	<2.5	210	180	4,900	NA
	11-18-93	340	6.0	240	200	8,800	NA
	03-10-94	26	<1.3	23	16	4,100	NA
	06-15-94	17	<1.3	18	8.4	4,100	NA
	09-15-94	39	<2.5	45	16	5,900	NA
	12-21-94	27	4.8	37	15	4,300	NA
MW-10	06-15-94	210	330	1,200	5,400	22,000	NA
	09-15-94	<0.5	<0.5	2.8	7.1	1,500	NA
	12-21-94	2.2	<0.50	4.3	0.88	230	NA

<sup>a</sup>TPHg = Total petroleum hydrocarbons as gasoline.

<sup>b</sup>TPHd = Total petroleum hydrocarbons as diesel.

NA = Not analyzed for this constituent.

<sup>c</sup>Well not sampled on this date.

**TABLE 2**  
**GROUND WATER ANALYTICAL RESULTS**  
**BEACON STATION #546**  
**29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA**  
**(All results in micrograms per Liter)**

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics					
			Gasoline	MTBE <sup>1</sup>	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-1	04/15/92	8,900			710	11	150	440
	07/07/92	<50			<0.5	<0.5	<0.5	<0.5
	09/23/92	<50			<0.5	<0.5	<0.5	<0.5
	11/12/92	---			---	---	<0.5	<0.5
	02/03/93	950			72	<0.5	22	---
	05/10/93	1,000			210	2.9	42	6.6
	08/18/93	1,600			220	<5.0	110	67
	11/18/93	51			<0.5	<0.5	<0.5	150
	03/10/94	310			37	<0.5	<0.5	<0.5
	06/15/94	420			53	<0.5	40	26
	09/15/94	78			12	<0.5	12	38
	12/21/94	170			14	<0.5	<0.5	5.8
	03/17/95	680			49	<0.5	<0.5	26
	06/13/95	970			420	<2.5	61	55
	09/21/95	55			2.0	<0.50	6.6	<2.5
	12/12/95	1,600			54	0.60	6.6	3.6
	03/14/96	92			0.74	<0.50	120	100
	06/21/96	410			6.1	<0.50	4.9	1.5
	08/29/96	970		<5.0	12	<0.50	54	5.4
	12/05/96	490		<5.0	4.8	0.58	61	12
03/17/97	400		<5.0	2.2	<0.50	6.9	4.6	
06/09/97	<50		<5.0	<0.50	<0.50	<0.50	2.9	
09/12/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
MW-2	04/15/92	1,200			21	4.8	56	26
	07/07/92	<50			<0.5	<0.5	<0.5	<0.5
	09/23/92	<50			<0.5	<0.5	<0.5	<0.5
	11/12/92	<50			<0.5	<0.5	<0.5	<0.5
	02/03/93	310			2.9	0.8	1.7	0.9
	05/10/93	190			17	<0.5	15	6.0
	08/18/93	820			53	<1.3	23	5.2
	11/18/93	89			3.0	<0.5	71	16
	03/10/94	2,000			45	<2.5	9.3	0.73
	06/15/94	1,300			54	2.0	390	28
	09/15/94	370			4.7	<0.5	270	15
	12/21/94	190			0.79	<0.5	80	13
	03/17/95	150			4.9	<0.5	<0.5	29
	06/13/95	<50			<0.5	<0.5	0.98	3.4
	09/21/95	320			99	<0.5	<0.5	<0.5
	12/12/95	850			100	<0.50	7.2	0.73
	03/14/96	<50			<0.50	0.52	25	2.6
	06/21/96	65			25	<0.50	<0.50	<0.50
	08/29/96	830		<13	310	<0.50	<0.50	<0.50
	12/05/96	600		<13	76	<1.3	5.8	<1.3
03/17/97	<50		<5.0	2.6	<0.50	1.8	<1.3	
04/22/97	<50		<5.0	1.3	<0.50	<0.50	<0.50	
06/09/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
09/12/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	

NOTES: < = Below indicated detection limit.  
 NS = Not sampled  
 \* = No samples collected since prior to April 1992.

**TABLE 2**  
**GROUND WATER ANALYTICAL RESULTS**  
**BEACON STATION #546**  
**29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA**  
**(All results in micrograms per Liter)**

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics					
			Gasoline	MTBE <sup>1</sup>	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-3	04/15/92	69			2.8	<0.5	<0.5	<0.5
	07/07/92	<50			<0.5	<0.5	<0.5	<0.5
	09/23/92	<50			<0.5	<0.5	<0.5	<0.5
	11/12/92	<50			<0.5	<0.5	<0.5	<0.5
	02/03/93	<50			1.0	1.3	0.6	2.7
	05/10/93	53			1.6	<0.5	2.0	<1.5
	08/18/93	<50			1.0	<0.5	1.5	<0.5
	11/18/93	<50			<0.5	<0.5	<0.5	<0.5
	03/10/94	<50			<0.5	<0.5	<0.5	<0.5
	06/15/94	<50			<0.5	<0.5	<0.5	<0.5
	09/15/94	<50			<0.5	<0.5	<0.5	<0.5
	12/21/94	<50			0.52	<0.5	<0.5	<0.5
	03/17/95	<50			<0.5	<0.5	<0.5	<0.5
	06/13/95	<50			<0.5	<0.5	<0.5	<0.5
	09/21/95	<50			<0.50	<0.50	<0.50	<0.50
	12/12/95	<50			<0.50	<0.50	<0.50	<0.50
	03/14/96	<50			<0.50	<0.50	<0.50	<0.50
	06/21/96	<50			<0.50	<0.50	<0.50	<0.50
	08/29/96	<50		<5.0	<0.50	<0.50	<0.50	<0.50
	12/05/96	<50		<5.0	<0.50	<0.50	<0.50	<0.50
03/17/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
06/09/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
09/12/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
MW-4	04/15/92 **	NS			NS	NS	NS	NS
	11/18/93	1,500			110	6.4	88	240
	03/10/94	4,000			460	5.1	370	450
	06/15/94	1,300			97	1.9	130	150
	09/15/94	1,100			34	1.6	70	110
	12/21/94	1,700			90	2.1	170	160
	03/17/95	3,400			150	<5.0	380	200
	06/13/95	4,100			220	<5.0	310	160
	09/21/95	1,500			110	<1.3	110	38
	12/12/95	1,600			130	1.3	140	72
	03/14/96	1,300			74	<1.3	110	21
	06/21/96	1,100			35	<1.3	78	18
	08/29/96	1,000		<5.0	30	<0.50	72	21
	12/05/96	400		<5.0	9.3	<0.50	29	8.2
	03/17/97	640		<5.0	7.9	<0.50	48	8.6
	06/09/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50
09/12/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/97	<50		<5.0	<0.50	<0.50	<0.50	<0.50	

NOTES: < = Below indicated detection limit  
NS = Not sampled  
\*\* = No samples collected since prior to April 1992

**TABLE 2**  
**GROUND WATER ANALYTICAL RESULTS**  
**BEACON STATION #546**  
**29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA**  
**(All results in micrograms per Liter)**

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics					
			Gasoline	MTBE <sup>1</sup>	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-5	04/15/92 **	NS			NS	NS	NS	NS
	11/18/93	2,800		23	<0.5	72	6.1	
	03/10/94	2,900		26	<0.5	<0.5	98	
	06/15/94	2,100		14	<0.5	29	18	
	09/15/94	200		2.4	<0.5	<0.5	4.9	
	12/21/94	290		4.7	<0.5	3.3	<0.5	
	03/17/95	2,000		8.7	<1.3	3.4	<1.3	
	06/13/95	2,200		2.8	<1.3	<1.3	1.4	
	09/21/95	770		0.92	<0.50	<0.50	<0.50	
	12/12/95	290		1.6	<0.50	0.70	0.66	
	03/14/96	1,100		1.1	<0.50	<0.50	<0.50	
	06/21/96	250		<0.50	<0.50	<0.50	<0.50	
	08/29/96	440		0.64	<0.50	<0.50	<0.50	
	09/19/96	370	<5.0	0.78	1.7	<0.50	<0.50	
	12/05/96	170	<5.0	<0.50	<0.50	<0.50	<0.50	
	03/17/97	760	<5.0	1.2	1.5	0.68	<0.50	
	04/22/97	850	<5.0	0.90	1.7	0.52	<0.50	
06/09/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50		
09/12/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50		
12/13/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50		
MW-6	04/15/92 **	NS			NS	NS	NS	
	11/18/93	<50		<0.5	<0.5	<0.5	1.5	
	03/10/94	<50		<0.5	<0.5	<0.5	<0.5	
	06/15/94	<50		<0.5	<0.5	<0.5	<0.5	
	09/15/94	<50		<0.5	<0.5	<0.5	<0.5	
	12/21/94	<50		<0.5	<0.5	<0.5	<0.5	
	03/17/95	<50		<0.5	<0.5	<0.5	<0.5	
	06/13/95	<50		<0.5	<0.5	<0.5	<0.5	
	09/21/95	<50		<0.50	<0.50	<0.50	<0.50	
	12/12/95	<50		<0.50	<0.50	<0.50	<0.50	
	03/14/96	<50		<0.50	<0.50	<0.50	<0.50	
	06/21/96	<50		<0.50	<0.50	<0.50	<0.50	
	08/29/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
	12/05/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
	03/17/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
	06/09/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
	09/12/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50		

NOTES: < = Below indicated detection limit.  
NS = Not sampled.  
\*\* = No samples collected since prior to April 1992.

**TABLE 2**  
**GROUND WATER ANALYTICAL RESULTS**  
**BEACON STATION #546**  
**29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA**  
**(All results in micrograms per Liter)**

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics				
			Gasoline	MTBE <sup>1</sup>	Benzene	Toluene	Ethylbenzene
MW-7	04/15/92	1,600		21	1.2	2.0	1.2
	07/07/92	320		<0.5	<0.5	<0.5	<0.5
	09/23/92	90		<0.5	<0.5	<0.5	<0.5
	11/12/92	<50		<0.5	<0.5	<0.5	<0.5
	02/03/93	<50		<0.5	<0.5	<0.5	<0.5
	05/10/93	1,800		190	3.2	45	<1.5
	08/18/93	1,600		53	<2.5	<2.5	37
	11/18/93	730		<0.5	<0.5	<0.5	7.4
	03/10/94	1,000		0.90	<0.5	<0.5	2.8
	06/15/94	760		3.6	<0.5	<0.5	1.8
	09/15/94	900		0.63	<0.5	<0.5	<0.5
	12/21/94	640		0.54	<0.5	<0.5	<0.5
	03/17/95	570		4.9	<0.5	<0.5	3.8
	06/13/95	1,000		390	5.2	52	48
	09/21/95	1,100		130	1.3	<1.3	<1.3
	12/12/95	870		<1.3	<1.3	<1.3	<1.3
	03/14/96	570		1.3	<0.50	<0.50	<0.50
	06/21/96	620		16	<0.50	<0.50	<0.50
	08/29/96	540	<5.0	1.0	1.3	<0.50	<0.50
	12/05/96	420	<5.0	<0.50	<0.50	<0.50	<0.50
03/17/97	540	<5.0	<0.50	2.8	<0.50	<0.50	
06/09/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
09/12/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
MW-8	04/15/92	40,000		1,900	34	1,200	1,800
	07/07/92	19,000		560	14	32	630
	09/23/92	4,200		370	<5.0	<5.0	150
	11/12/92	5,100		75	<2.5	<2.5	110
	02/03/93	29,000		800	1.1	660	720
	05/10/93	8,900		540	9.9	770	550
	08/18/93	10,000		790	<2.5	1,100	720
	11/18/93	8,700		420	<5.0	690	290
	03/10/94	9,500		650	<2.5	930	320
	06/15/94	6,600		360	<2.5	650	190
	09/15/94	7,000		220	<2.5	470	120
	12/21/94	6,000		280	<2.5	540	180
	03/17/95	5,600		150	<2.5	410	110
	06/13/95	5,200		51	<2.5	150	50
	09/21/95	4,900		53	<2.5	130	45
	12/12/95	4,500		100	<2.5	150	81
	03/14/96	1,200		11	<0.50	25	10
	06/21/96	1,900		11	3.9	29	8.8
	08/29/96	2,100	<13	17	5.9	44	17
	12/05/96	2,000	<13	18	5.7	46	16
03/17/97	2,300	19	21	1.3	34	14	
06/09/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
09/12/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50	

NOTES < = Below indicated detection limit  
NS = Not sampled  
\*\* = No samples collected since prior to April 1992

**TABLE 2**  
**GROUND WATER ANALYTICAL RESULTS**  
**BEACON STATION #546**  
**29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA**  
**(All results in micrograms per Liter)**

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics				
			Gasoline	MTBE <sup>1</sup>	Benzene	Toluene	Ethylbenzene
MW-9	02/03/92	28,000		64	9.6	70	510
	05/10/93	5,000		180	12	88	110
	08/18/93	4,900		290	<2.5	210	180
	11/18/93	8,800		340	6.0	240	200
	03/10/94	4,100		26	<1.3	23	16
	06/15/94	4,100		17	<1.3	18	8.4
	09/15/94	5,900		39	<2.5	45	16
	12/21/94	4,300		27	4.8	37	15
	03/17/95	3,100		7.3	<2.5	13	3.8
	06/13/95	2,400		<2.5	<2.5	4.0	<2.5
	09/21/95	1,600		4.2	<1.3	17	5.1
	12/12/95	1,100		9.6	<1.3	18	4.7
	03/14/96	1,200		9.9	<1.3	16	1.8
	06/21/96	450		0.71	0.95	5.2	0.77
	08/29/96	530	<5.0	<0.50	0.86	3.2	1.5
	12/05/96	220	<5.0	<0.50	0.94	0.94	<0.50
	03/17/97	410	<5.0	0.98	0.98	1.2	<0.50
04/22/97	450	<5.0	0.87	0.96	1.1	<0.50	
06/09/97	140	<5.0	<0.50	1.3	<0.50	0.64	
09/12/97	64	<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/97	120	<5.0	<0.50	<0.50	<0.50	<0.50	
MW-10	06/13/94	22,000		210	330	1,200	5,400
	09/15/94	1,500		<0.5	<0.5	2.8	7.1
	12/21/94	230		2.2	<0.5	4.3	0.88
	03/17/95	200		6.5	0.67	6.4	8.9
	06/13/95	100		3.9	8.0	1.3	5.8
	09/21/95	<50		0.59	<0.50	1.4	0.70
	12/12/95	<50		<0.50	<0.50	<0.50	<0.50
	03/14/96	130		5.4	<0.50	8.0	12
	06/21/96	<50		<0.50	<0.50	<0.50	<0.50
	08/29/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	12/05/96	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	03/17/97	<50	<5.0	0.62	<0.50	1.2	1.3
	04/22/97	<50	<5.0	<0.50	<0.50	1.2	1.2
	06/09/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	09/12/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	12/13/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50

NOTES. < = Below indicated detection limit.  
NS = Not sampled  
\* = No samples collected since prior to April 1992

TABLE 2

**SOIL RISK-BASED SCREENING LEVEL AND  
SITE SPECIFIC TARGET LEVEL SUMMARY**

Former Beacon Station No. 564  
29705 Mission Boulevard  
Hayward, California

Chemical of Concern	Exposure Pathway	Representative Concentrations (mg/kg)	RBSL (mg/kg)	Exceed?	SSTL (mg/kg)	Exceed?
Benzene	Vapors to Enclosed Spaces	0.0081 <sup>a</sup>	0.0083	N	N/A	N/A
	Vapors to Ambient Air		1.2	N	N/A	N/A
Toluene	Vapors to Enclosed Spaces	0.013 <sup>a</sup>	56	N	N/A	N/A
	Vapors to Ambient Air		>Res	N	N/A	N/A
Ethylbenzene	Vapors to Enclosed Spaces	0.029 <sup>a</sup>	94	N	N/A	N/A
	Vapors to Ambient Air		>Res	N	N/A	N/A
Total Xylenes	Vapors to Enclosed Spaces	0.046 <sup>a</sup>	>Res	N	N/A	N/A
	Vapors to Ambient Air		>Res	N	N/A	N/A

<sup>a</sup> Arithmetic mean source area soil concentration.

RBSL = Risk-Based Screening Level.  
 SSTL = Site Specific Target Level.  
 mg/kg = Milligrams per kilogram.  
 >Res = A concentration greater than saturation would be required to exceed applicable health criteria.  
 N/A = Not applicable. SSTL was calculated because RBSL was not exceeded.

TABLE 4

**GROUND WATER RISK-BASED SCREENING LEVEL AND  
SITE SPECIFIC TARGET LEVEL SUMMARY**

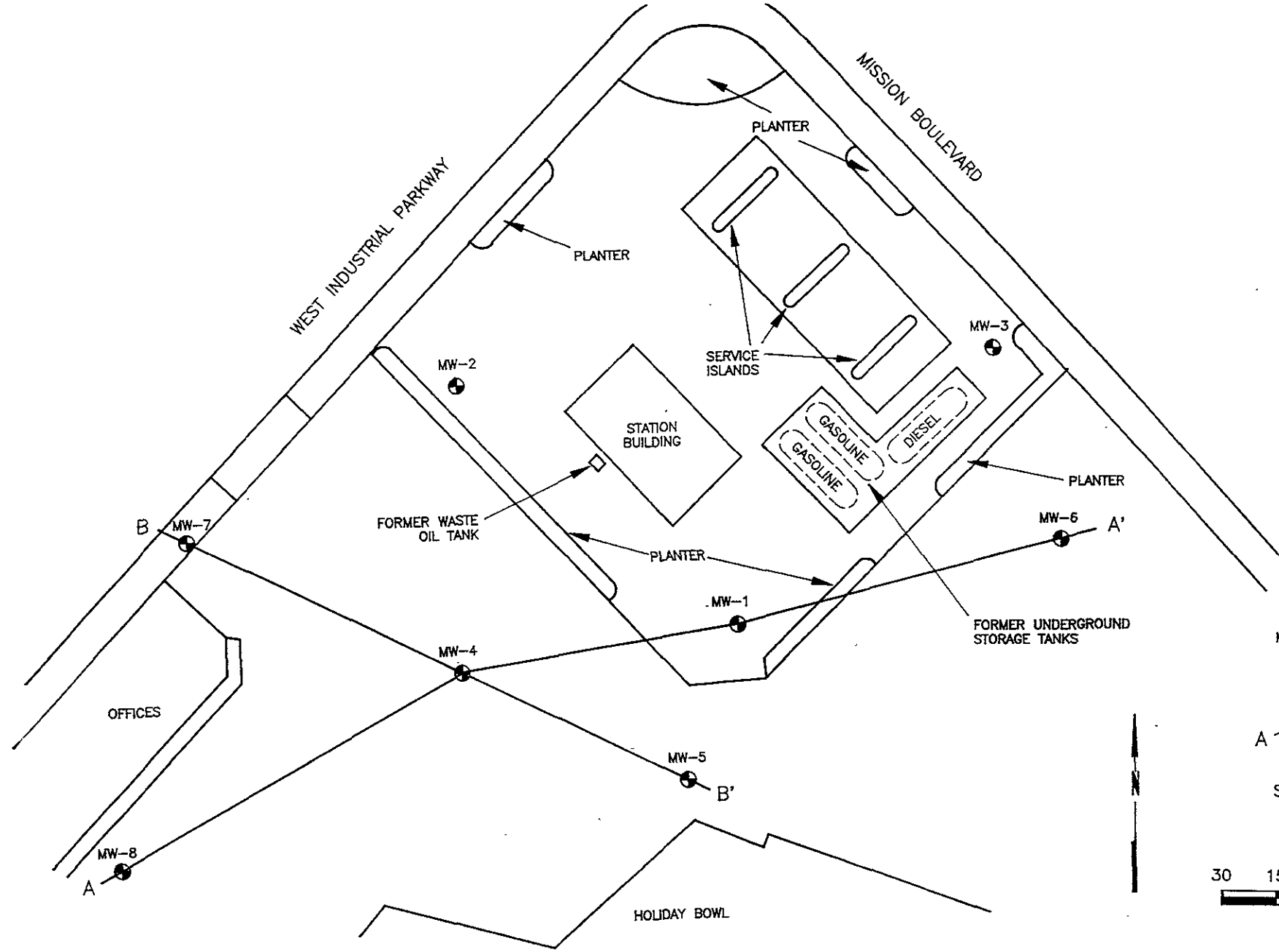
Former Beacon Station No. 546  
29705 Mission Boulevard  
Hayward, California

*-210 ppb*

Chemical of Concern	Exposure Pathway	Representative Concentrations (µg/L)	RBSL (µg/L)	Exceed?	SSTL (µg/L)	Exceed?
Benzene	Vapors to Enclosed Spaces	0.57	21	No	N/A	N/A
	Vapors to Ambient Air		1,700	No	N/A	N/A
Toluene	Vapors to Enclosed Spaces	0.41	85,000	No	N/A	N/A
	Vapors to Ambient Air		>Sol	No	N/A	N/A
Ethylbenzene	Vapors to Enclosed Spaces	0.55	>Sol	No	N/A	N/A
	Vapors to Ambient Air		>Sol	No	N/A	N/A
Total Xylenes	Vapors to Enclosed Spaces	0.46	>Sol	No	N/A	N/A
	Vapors to Ambient Air		>Sol	No	N/A	N/A

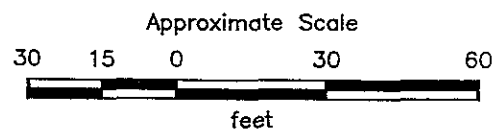
RBSL = Risk-Based Screening Level.  
 SSTL = Site Specific Target Level.  
 >Sol = A concentration greater than the solubility in water.  
 N/A = Not applicable. SSTL was calculated because RBSL was not exceeded.  
 µg/L = Micrograms per liter.





MW-8 = Monitoring well  
 A — A' = Cross section location

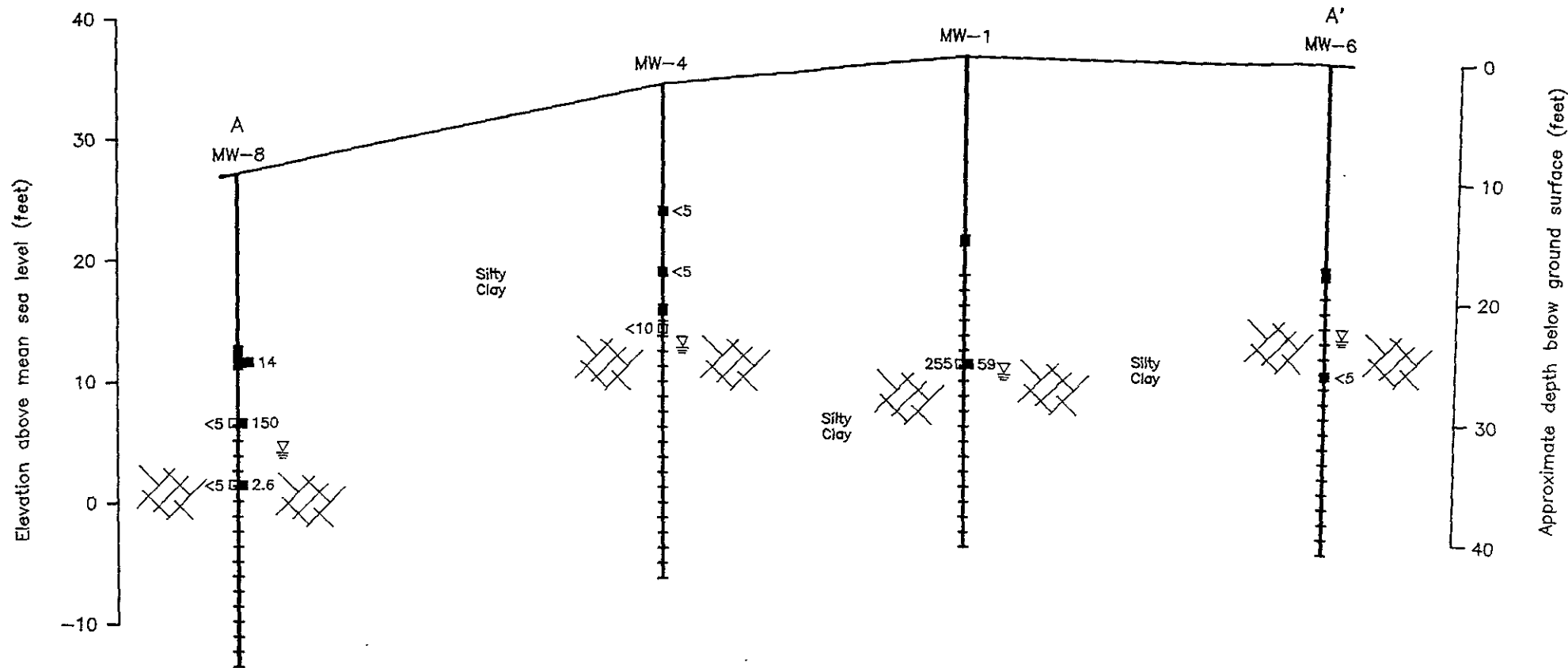
Source: Surveyed by Ron Archer  
 Civil Engineer, Inc.










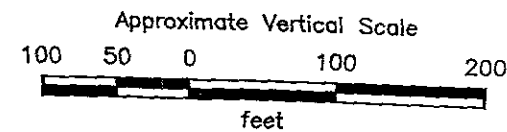
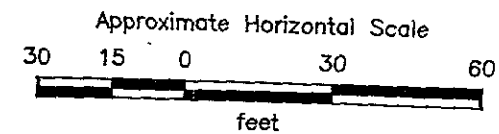
PROJECT NO. 18008-6

**GENERALIZED SITE PLAN**  
**Beacon Station 546**  
**29705 Mission Boulevard**  
**Hayward, California**

**PLATE**  
**2**



-  = Bentonite plug
-  150 = Analytical result in ppm (TPHd)
-  255 = Analytical result in ppm (TPHg)
-  = Well casing
-  = Well screen
-  = First encountered ground water
-  = Fractured zone

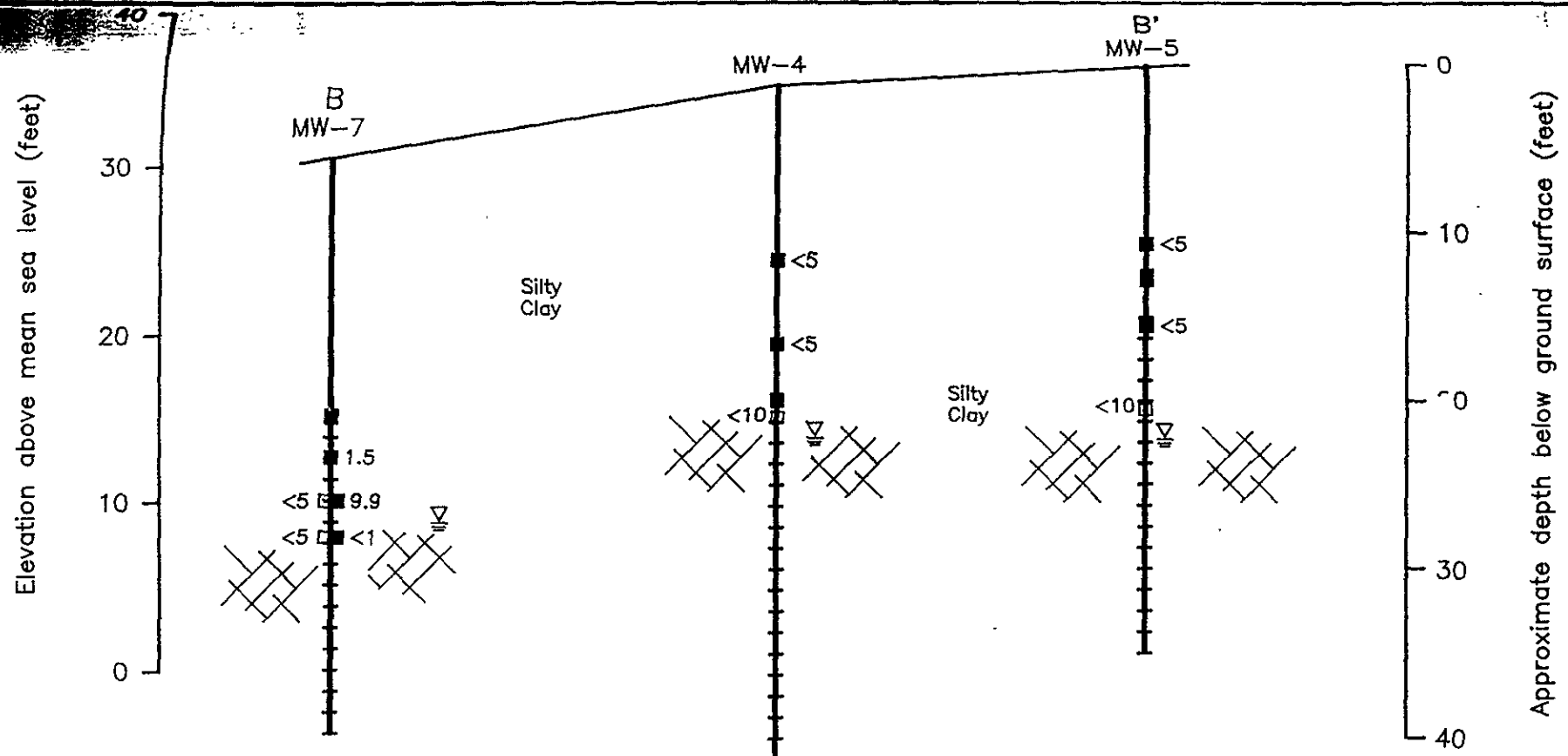










PROJECT NO. 18008-6

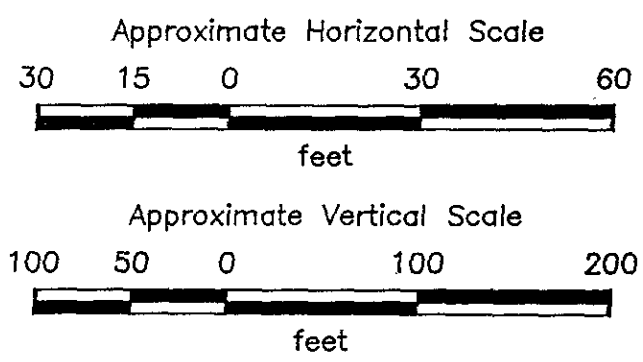
**GEOLOGIC CROSS SECTION A-A'**  
**Beacon Station 548**  
**29705 Mission Boulevard**  
**Hayward, California**

PLATE

6



-  = Bentonite plug
-  <10  = Analytical result in ppm (TPHd)
-  <5 = Analytical result in ppm (TPHg)
-  = Well casing
-  = Well screen
-  = Fractured zone
-  = First encountered ground water



**PLATE**  
**7**

**GEOLOGIC CROSS SECTION B-B'**  
**Beacon Station 546**  
**29705 Mission Boulevard**  
**Hayward, California**



**PROJECT NO. 18008-6**

DEPTH IN FEET	Blows/ Ft.	Sample No.	USCS	DESCRIPTION	WELL CONST.
0				Asphalt (6 inches).	
2			CL	Silty clay, dark brown, slightly damp, low to medium plasticity, very stiff.	
6	19	S-6		OVM = 0ppm.	
10	19	S-11		Some fine- to coarse-grained sand, OVM = 0ppm.	
16	17	S-16		Trace of coarse-grained gravel, OVM = .4ppm.	
20	26	S-21		With some fine- to coarse-grained gravel and sand, brown with green mottling, damp to moist, medium plasticity, OVM = 9ppm.	
26		S-26		Sandy clay, fine- to coarse-grained sand, very moist medium to high plasticity, OVM - 120ppm.	
28			CH	Clay with trace fine- to medium-grained sand, brown, very moist to wet, high plasticity.	
30				(Section continues downward)	



41255 Mission Blvd. Suite B Fremont, CA 94539 (415) 651-1906

PROJECT NO.

18008-3

**LOG OF BORING B-1/MW-1**

**Beacon Station No. 546  
29705 Mission Boulevard  
Hayward, California**

PLATE

**P - 4**

DEPTH IN FEET	Blows/ Fl.	Sample No.	USCS	DESCRIPTION	WELL CONST.
	0				Asphalt (6 inches).
2			CL	Gravelly clay with some sand, fine- to coarse-grained sand, dark brown, slightly moist, low to medium plasticity, stiff.	
4					
6	10	S-6		OVM = 0ppm.	
8					
10			GC	Clayey and sandy gravel, fine- to coarse-grained sand, brown, slightly damp, medium dense.	
12	18	S-11		OVM = 0ppm.	
14			CL	Clay with trace fine- to coarse-grained sand and fine-grained gravel, dark brown, slightly moist, medium to high plasticity, medium stiff.	
16	6	S-15.5		OVM = 0ppm.	
18					
20	22	S-21		OVM = .4ppm.	
22					
24					
26	15	S-26		Green to blue discoloration, very moist to wet, stiff, OVM = 65ppm.	
28					
30					

(Section continues downward)



**LOG OF BORING B-2/MW-2**  
**Beacon Station No. 546**  
**29705 Mission Boulevard**  
**Hayward, California**

PLATE  
**P - 6**

PROJECT NO. **18008-3**

DEPTH IN FEET	Blows/ Ft.	Sample No.	USCS	DESCRIPTION	WELL CONST.
0				Asphalt (6 inches).	
2			CL	Silty clay with a trace of fine- to coarse-grained sand and gravel, brown, slightly moist, low to medium plasticity, hard.	
6	39	S-6			
10	40	S-11			
16	12	S-16	CH	Silty clay with a trace of fine- to coarse-grained sand and gravel, brown, moist, medium to high plasticity, stiff.	
20	20	S-21		Very stiff.	
26	19	S-26		Very moist.	
28					
30					

(Section continues downward)



Applied GeoSystems  
43255 Mission Blvd. Suite B Fremont, CA 94539 (415) 651-1906

## LOG OF BORING B-3/MW-3

Beacon Station No. 546

29705 Mission Boulevard

Hayward, California

PLATE

P - 8

PROJECT NO.

18008-3

Total depth of boring: 40-1/2 feet Diameter of boring: 8 inches Date drilled: 6-26-89  
 Casing diameter: 2 inches Length: 40 feet Slot size: 0.020-inch  
 Screen diameter: 2 inches Length: 20 feet Material type: Sch 40 PVC  
 Drilling Company: Jcon Drilling Driller: Jim and Greg  
 Method Used: Hollow-Stem Auger Field Geologist: Dan Kirkman

Signature of Registered Professional: \_\_\_\_\_  
 Registration No.: \_\_\_\_\_ State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Asphalt (3 inches) over baserock (3 inches).	
2				CL	Silty clay, trace fine to coarse sand, trace fine gravel, dark brown, slightly damp, medium plasticity, hard.	
4	S-5	12				
		17				
		22				
6						
8						
10	S-10	8				
		11				
		22				
12						
14	S-15	8				
		12				
		20				
16						
18						
20	S-20	17			Light brown with green mottling, damp.	
		22				
		25				
					(Section continues downward)	



PROJECT NO. 18008-6

**LOG OF BORING B-4/MW-4**

Beacon Station No. 546  
 29705 Mission Blvd.  
 Hayward, Ca.

PLATE  
**B2**

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
-22				▽ CL	Silty clay, trace fine to coarse sand, trace fine gravel, light brown, with green mottling, damp, medium plasticity, hard.	
-24	S-25	12			Brown with blue-green mottling, wet.	
		17				
-26		27				
-28						
-30	S-30	38			Trace medium sand.	
		32				
-32		27				
-34						
-36	S-35	5			Trace fine gravel, stiff.	
		7				
-38		8				
-40	S-40	7			Total Depth = 40-1/2 feet.	
		7				
-42		8				
-44						
-46						
-48						
-50						



PROJECT NO. 18008-6

**LOG OF BORING B-4/MW-4**

Beacon Station No. 546  
29705 Mission Blvd.  
Hayward, Ca.

PLATE

**B3**



Total depth of boring: 35-1/2 feet Diameter of boring: 8 inches Date drilled: 6-27-89

Casing diameter: 2 inches Length: 35 feet Slot size: 0.020-inch

Screen diameter: 2 inches Length: 20 feet Material type: Sch 40 PVC

Drilling Company: Jcon Drilling Driller: Jim and Greg

Method Used: Hollow-Stem Auger Field Geologist: Dan Kirkman

Signature of Registered Professional: \_\_\_\_\_

Registration No.: \_\_\_\_\_ State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0						
2				CL	Silty clay, trace fine gravel, black, slightly damp, medium plasticity, hard.	
4	S-5	8				
5		18				
6		20				
8						
10	S-10	7			Trace fine to coarse sand, brown, very stiff.	
10		8				
11		20				
12						
14	S-15	7				
15		7				
16		12				
18						
20	S-20	5			Some fine gravel, blue-green.	
20		7				
21		12				

(Section continues downward)



PROJECT NO. 18008-6

**LOG OF BORING B-5/MW-5**  
 Beacon Station No. 546  
 29705 Mission Blvd.  
 Hayward, Ca.

PLATE  
**B4**

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
-22				CL	Silty clay, trace fine gravel, blue-green, slightly damp, medium plasticity, hard.	[Well Const. Column]
-24	S-25	7 17 22		▽ =	Wet	
-26						
-28						
-30	S-30	9 17 22			Some fine to coarse sand, hard.	
-32						
-34	S-35	6 10 12			Trace fine gravel, trace fine to coarse sand, medium plasticity, very stiff.	
-36					Total Depth = 35-1/2 feet.	
-38						
-40						
-42						
-44						
-46						
-48						
-50						



PROJECT NO. 18008-6

**LOG OF BORING B-5/MW-5**

Beacon Station No. 546  
29705 Mission Blvd.  
Hayward, Ca.

PLATE

**B5**

Total depth of boring: 40-1/2 feet Diameter of boring: 8 inches Date drilled: 6-26-89  
 Casing diameter: 2 inches Length: 40 feet Slot size: 0.020-inch  
 Screen diameter: 2 inches Length: 20 feet Material type: Sch 40 PVC  
 Drilling Company: Jcon Drilling Driller: Jim and Greg  
 Method Used: Hollow-Stem Auger Field Geologist: Dan Kirkman

Signature of Registered Professional: \_\_\_\_\_

Registration No.: \_\_\_\_\_ State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Asphalt (2 inches) over baserock (4 inches).	
2				CL	Silty clay, trace fine gravel, dark brown, dry, medium plasticity, hard.	
4	S-5	10				
		17				
		19				
6						
8						
10	S-10	6			Trace fine to medium gravel, brown, slightly damp, very stiff.	
		11				
		12				
12						
14	S-15	19			Less gravel, hard.	
		25				
		30				
16						
18						
20	S-20	6			Trace fine gravel, trace fine to coarse sand, light brown, with green mottling.	
		11				
		30				
					(Section continues downward)	



**LOG OF BORING B-6/MW-6**  
 Beacon Station No. 546  
 29705 Mission Blvd.  
 Hayward, Ca.

PLATE  
**B6**

PROJECT NO. 18008-6

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
22				CL	Silty clay, trace fine gravel, trace fine to coarse sand, light brown, with green mottling, slightly damp, medium plasticity, hard.	
24	S-25	11 14 20		▽ =	Wet.	
26						
28						
30	S-30	14 21 31				
32						
34					Some fine sand, trace fine to medium gravel.	
36	S-36	12 20 32				
38						
40	S-40	7 8 10			Very stiff.	
42					Total Depth = 40-1/2 feet.	
44						
46						
48						
50						



PROJECT NO. 18008-6

**LOG OF BORING B-6/MW-6**

Beacon Station No. 546  
29705 Mission Blvd.  
Hayward, Ca.

PLATE

**B7**

Total depth of boring: 34-1/2 feet Diameter of boring: 10 inches Date drilled: 2-22-90  
 Casing diameter: 4 inches Length: 33 feet Slot size: 0.020-inch  
 Screen diameter: 4 inches Length: 15 feet Material type: Sch 40 PVC  
 Drilling Company: Kvilhaug Well Drilling, Inc. Driller: Rod and Paul  
 Method Used: Hollow-Stem Auger Field Geologist: Keith McVicker  
 Signature of Registered Professional: \_\_\_\_\_  
 Registration No.: \_\_\_\_\_ State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0				CL	Silty clay, brown, damp, medium plasticity.	
4	S-5		0.3			
8	S-7.5		0.3	ML	Clayey silt, some sand and gravel, brown, damp, slight plasticity.	
12	S-12.5		0.3	CL	Silty clay, trace sand and gravel, brown, damp, slight plasticity.	
18	S-17.5		0.3		Dark brown.	
20	S-20		110			

(Section continues downward)



PROJECT NO. 18008-6

**LOG OF BORING B-7/MW-7**  
 Former Beacon Station 546  
 29705 Mission Boulevard  
 Hayward, California

PLATE  
**B8**

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
				CL	Silty clay, trace gravel, dark brown, moist, medium plasticity.	
22	S-22.5		▽ 0.2		Fractured, brown with green staining in fracture, slight to medium plasticity.	
24	S-24.5		0.3	CH	Silty clay, minor sand, green-black, wet, high plasticity, fractured.	
26	S-27		0.2	CL	Silty clay, minor sand, green-black, wet, medium plasticity.	
30	S-29.5		0		Moist.	
34	S-34		0		Some sand and gravel.	
Total Depth = 34-1/2 feet.						
36						
38						
40						
42						
44						
46						
48						
50						



PROJECT NO. 18008-6

**LOG OF BORING B-7/MW-7**

Former Beacon Station 546  
29705 Mission Boulevard  
Hayward, California

PLATE

**B9**

Depth of boring: 40-1/2 feet Diameter of boring: 10 inches Date drilled: 2-22-90  
 Boring diameter: 4 inches Length: 40 feet Slot size: 0.020-inch  
 Screen diameter: 4 inches Length: 20 feet Material type: Sch 40 PVC  
 Drilling Company: Kvilhaug Well Drilling, Inc. Driller: Rod and Paul  
 Method Used: Hollow-Stem Auger Field Geologist: Keith McVicker

Signature of Registered Professional: \_\_\_\_\_  
 Registration No.: \_\_\_\_\_ State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0				CL	Silty clay, trace sand and gravel, dark brown, damp, medium plasticity,	
4	S-4		0			
10	S-9.5		0		Increase in silt, trace sand, brown.	
14		18				
15		18				
16	S-15	20	47.5		Trace sand and gravel, hard.	
18		8				
20	S-20	20				
		25	33.7		Green-brown.	

(Section continues downward)



**LOG OF BORING B-8/MW-8**  
 Former Beacon Station 546  
 29705 Mission Boulevard  
 Hayward, California

PLATE  
**B10**

PROJECT NO. 18008-6

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
				CL	Silty clay, trace sand and gravel, green-brown, damp, medium plasticity, hard.	
-22						
-24	S-24.5	10 15	27		Wet, very stiff, fractured, visible water in fractures.	
-26						
-28				CH	Silty clay, with trace gravel, tan, wet, high plasticity, very stiff.	
-30	S-30	4 5 20	2.7	CL	Silty clay, with trace gravel, tan, wet, medium plasticity, very stiff.	
-32						
-34				CH	Silty clay, some gravel, brown, wet, high plasticity, very stiff.	
-36	S-35	7 15 25	7.9			
-38				CL	Silty clay, some gravel, tan, moist, medium plasticity, very stiff.	
-40	S-40	7 12 18	6.8			
-42					Total Depth = 40-1/2 feet.	
-44						
-46						
-48						
-50						



## LOG OF BORING B-8/MW-8

Former Beacon Station 546  
29705 Mission Boulevard  
Hayward, California

PLATE

B11

PROJECT NO. 18008-6



FIELD BORING MONITORING WELL LOG



AEGIS ENVIRONMENTAL, INC.

Boring # \_\_\_\_\_ MW# 9 Sheet 1 Of 2

Project Name: Beacon Station ID # 546

Address: 29705 Mission Blvd, Hayward Job # 92-067

Logged By: J. Giorgi Pro. Mgr: J. Giorgi Edited By:

Drilling Contractor: Woodward Drilling Company

Drill Rig Type/Method: Mobile B-57 / HSA

Drillers Name: Erik Forsstrom

Borehole Dia./Drill Bit Type Total Depth: 25

8 1/4 inches / Clay Bit

Hammer Wt: 140 lbs Drop: 30 inches

Start Time: 9:15 Date: 1-4-93

Completion Time: 13:00 Date: 1-4-93

Backfilled Time: \_\_\_\_\_ Date: \_\_\_\_\_

Sketch Map Of Site Area With Boring Locations:

Sampler Type Length	Sample Condition	Casing Type & Size	Driven (in.)	Recovered (in.)	Annulus Filler	Blow Count (6 in.)	PID/OVA (ppmv)	Depth		Boring Depth in Feet	Casing Depth in Feet	Water Depth in Feet	1st Water							
								Sample Recovery	Feet (Below Surface)				USCS	Time	Date					
									0											
									1	Concrete (sidewalk) and fill material										
GS									1	0-1.0										
									2	Clay with silt, brownish black, moist, no product odor										
									3											
									4											
									5											
CMSS	E		6	6		7			5	Same as above (SAA) and hard										
	E		6	6		17			6											
	E		6	6		29	0		6											
									7											
									8											
									9											
									10											
CMSS	E		6	6		5	50		10	SAA except, light olive gray to some										
	E		6	6		6			11	bluish gray and moderate yellowish										
	E		6	6		15			11	brown, slight product odor										
									12											

Sample sent to Laboratory for chemical analysis

E = Excellent  
P = Poor



Project Name:

Beacon Station #546

Address:

29705 Mission Blvd, Hayward, CA

Job #

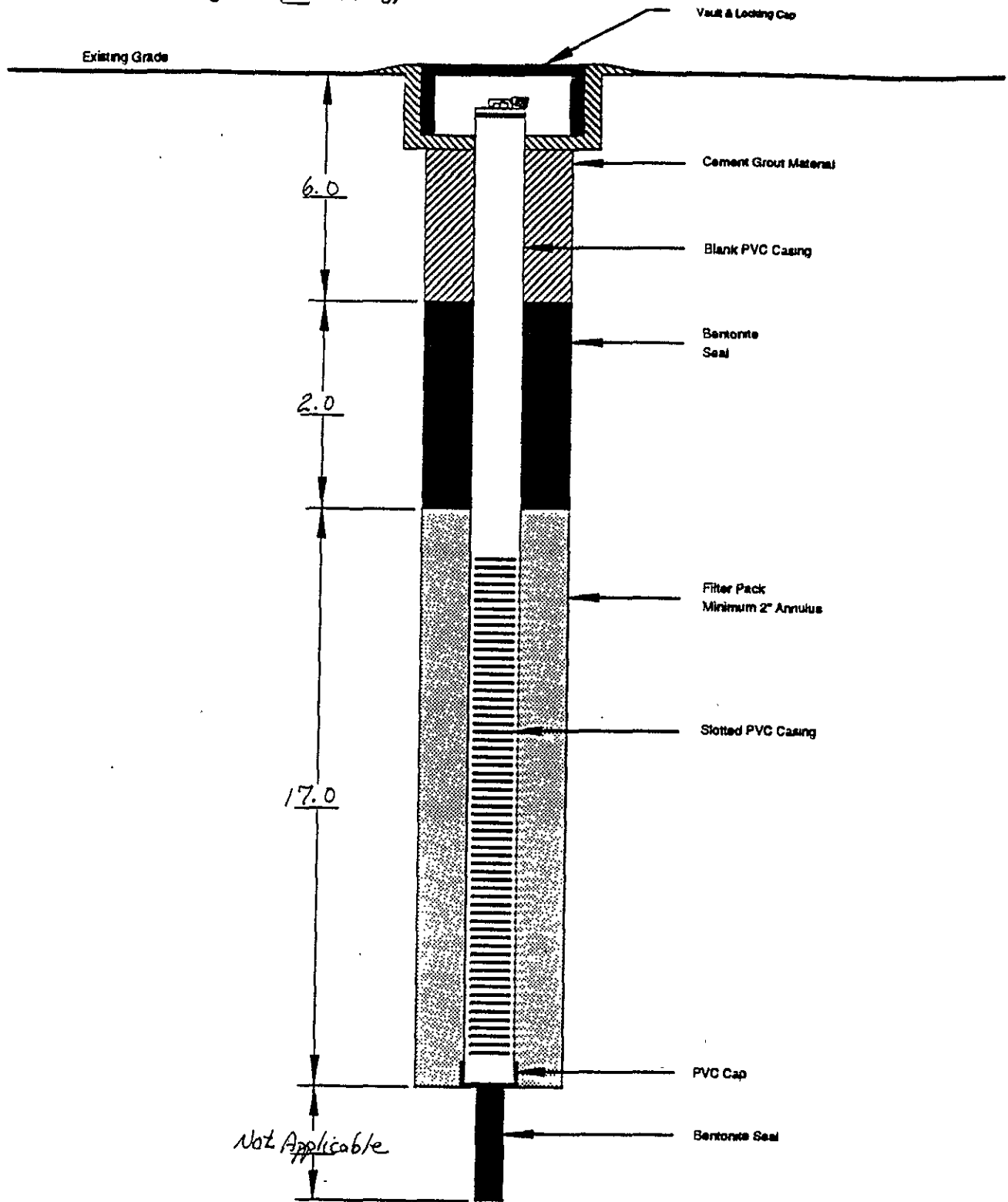
92-067

Sampler Type Length	Sample Condition	Casing Type & Size	Driven (in.)	Recovered (in.)	Annulus Filler	Blow Count (6 in.)	PID/OVA (ppmv)	Depth		Sample Recovery	Feet (Below Surface)	USCS
											13	
											14	
											15	
CMSS	E		66			6	50				16	
	E		66			14					17	
	E		66			16					18	
											19	
											20	
CMSS	E		66			5	5				21	
	E		66			8					22	
	P		62			13					23	
											24	
											25	
CMSS	E		66			9	0				26	
	E		66			12					27	
	P		61			13					28	
											29	
											30	

First water at 14.5 feet below grade

SAA except more silt, less olive gray,  
more moderate yellowish brown, and  
no bluish greenSAA except dark yellowish orange to  
moderate brown, no product odorTotal Depth = 25 feet below grade  
SAA

Groundwater Monitoring Well (2" casing)



(NOT TO SCALE)



AEGIS ENVIRONMENTAL, INC.

Typical Groundwater Monitoring Well  
Construction Details (2" Casing)

Client Name *Ultramar Inc*  
Street *29705 Mission Blvd., Hayward, CA*  
City, State *Hayward, CA*

JOB NUMBER

*92-067*

FIGURE

*MW-9*

# Acton • Mickelson • van Dam, Inc.

Consulting Scientists, Engineers, and Geologists

Log of Soil Boring: MW-10	OVM/OVA: hNU PID with 10.2 eV probe									
Project Number: 19029.02	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Drilling</td> <td style="width: 33%;">Time</td> <td style="width: 33%;">Date</td> </tr> <tr> <td>Start</td> <td>0750</td> <td>6/13/94</td> </tr> <tr> <td>Finish</td> <td>0850</td> <td>6/13/94</td> </tr> </table>	Drilling	Time	Date	Start	0750	6/13/94	Finish	0850	6/13/94
Drilling	Time	Date								
Start	0750	6/13/94								
Finish	0850	6/13/94								
Location: BEACON STATION #546 29705 MISSION BOULEVARD HAYWARD, CALIFORNIA	Water Depth (Date): 6.61 Feet (6/13/94)									
Drilling Company: WEST HAZMAT DRILLING Drilled By: GEORGE DeJESUS Drilling Method: 8-INCH O.D. HSA; CME-75 LOW ACCESS Sampling Method: CALIFORNIA-MODIFIED SPLIT-SPOON SAMPLER FITTED WITH 2" X 8" S.S. SAMPLE SLEEVES	Casing Elevation: 17.41 Feet Completion Depth: 20 Feet Logged By: S. LIATY Checked By: <i>DJR</i>									

DEPTH (feet)	SAMPLE INTERVAL	DESCRIPTION	GRAPHIC LOG	USCS CLASS	WELL CONSTRUCTION	BLOMS/6 IN.	INCHES DRIVEN	INCHES RECOVERD	COMMENTS	SAMPLE NO.
5	5-11	CLAY, Dark olive gray, damp	[Hatched pattern]	CL	[Well construction diagram]	5 11 15	18	18		MW10-1
10	11-14	SANDY CLAY, Moderate gray brown, moist, trace silt, fine-grained sand	[Dotted pattern]	SC		5 9 14	18	18	Slight hydrocarbon odor at 8 feet	MW10-2
15	14-16	Becomes moderate yellowish brown, saturated at 12 feet	[Dotted pattern]			6 12 16	18	18		MW10-3
20	Total Depth = 20 feet									