

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

January 2, 1996
STID # 3789

Ms. Susan Lowenburg
Mission Taylor Properties
44 Montgomery St. #3520
San Francisco, California 94104

RE: Case Closure - Mission Taylor Properties
1410 65th Street, Emeryville, California 94608

Dear Ms. Lowenburg:

The Alameda County Department of Environmental Health, Environmental Protection Division has recently received concurrence from the Regional Water Quality Control Board regarding this office determination that no further action is required concerning the removal of two underground storage tanks (1,000 gallon gasoline and 10,000 gallon diesel) at the referenced site.

Please be advised that the three groundwater monitoring wells (TMW-1, TMW-2 and TMW-3) at the site must be properly decommissioned before our agency will issue the Remedial Action Completion Certification (closure letter) for the subject site. A report must be submitted documenting the abandonment of the monitoring wells.

Additionally, you will need to notify this office 72 hours in advance of the well abandonment field activities.

If you have any questions concerning this letter, please contact me at (510) 567- 6780.

Sincerely,

Susan L. Hugo
Senior Hazardous Materials Specialist

c: Jun Makishima, Interim Director, Environmental Health
Gordon Coleman, Acting Chief, Environmental Protection / files
Kevin Graves, San Francisco Bay RWQCB

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

March 22, 1996

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510)567-6700

REMEDIAL ACTION COMPLETION CERTIFICATION

Ms. Susan Lowenburg
Mission Taylor Properties
44 Montgomery St. #3520
San Francisco, California 94104

RE: Mission Taylor Properties
1410 6th Street, Emeryville, California 94608
STID # 3789

Dear Ms. Lowenburg:

This letter confirms the completion of site investigation and remedial action for the two underground storage tanks (1 - 1,000 gallon gasoline and 1 - 10,000 gallon diesel) removed on February 23, 1990 at the above described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the two underground storage tanks release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e). If a change in the present land use is proposed, the property owner must promptly notify this agency.

Please contact Susan L. Hugo at (510) 567-6780 if you have any questions regarding this matter.

Sincerely,

Jun Makishima, Interim Director

Enclosure

c: * Gordon Coleman, Acting Chief, Environmental Protection - files
Kevin Graves, RWQCB
Mike Harper, SWRCB (with enclosure)
Michelle King, EKI, 1730 So. Amphlett Blvd., Suite 320
San Mateo, California 94402

Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	* After	** Before	After
TPH (Gas)	270	3900	14,000	430
TPH (Diesel)	2000	230	410,000	ND
Benzene	0.99	75	140	26
Toluene	2.0	85	140	ND
Xylene	6.9	120	1100	ND
Ethylbenzene	0.83	43	140	2.0
Metals	-	-	***	-

* Soil sample collected on April 12, 1990 from the boring TMW-1 at 5.25 ft.

** Water sample from the excavation

*** Metal scan by ICP detected Ba (420 ppb), Cu (98 ppb), Pb (828 ppb), and Zn (131 ppb).

Comments (Depth of Remediation, etc.):

Two underground storage tanks (1000 gallon gasoline and 10,000 gallon diesel) were removed on February 23, 1990 at the subject site. Both tanks were underneath the sidewalk and appeared to be in good condition. No signs of leakage were observed but an oily sheen was present in the water. The tanks were submerged in approximately two feet of water.

Following the tanks' removal, four soil samples were collected from the sidewalls above the water table (between 5 to 6 feet bgs). The soil samples revealed contamination up to 2000 ppm TPH diesel, 270 ppm TPH gasoline, 0.99 ppm benzene, 2.0 ppm toluene, 6.9 ppm xylene and 0.83 ppm ethyl benzene.

Approximately 15,000 gallons of groundwater was pumped out from the excavation and a grab water sample found up to 410 ppm TPH diesel, 14 ppm TPH gasoline, 0.14 ppm benzene, 0.14 ppm toluene, 0.14 ppm ethyl benzene, 1.1 ppm xylene, and metals as described above.

As a result of the contamination detected in the soil and groundwater, a soil and groundwater investigation was conducted. Three soil borings were drilled to a depth of 15 feet bgs on April 12, 1990. Soil samples from the boring TMW-3 (at 3.25 ft and 5.25 ft.) did not detect any TPH gasoline, TPH diesel or BTEX. Soil samples collected from borings TMW-1 and TMW-2 at 5.25 feet bgs found contamination as high as 3900 ppm TPH gasoline, 230 ppm TPH diesel, 75 ppm benzene, 85 ppm toluene, 120 ppm xylene, and 43 ppm ethyl benzene.

Leaking Underground Fuel Storage Tank Program

The three borings were converted to shallow groundwater monitoring wells (TMW-1, TMW-2 and TMW-3). The site is generally underlain by discontinuous silty and sandy clays to a depth of 15 feet. Groundwater was first encountered at a depth of 7.5 feet during the drilling of the boring. Subsequent water level measurements in the three wells indicate groundwater levels at depths of ranging from 2.27 to 3.78 feet indicating that groundwater beneath the site is under confined conditions. Regional groundwater flow in the area is westward towards the San Francisco Bay. However, groundwater flow at the site fluctuates from south to northwest but generally in the westerly direction.

Monitoring well TMW-3 (downgradient of the former tanks) did not detect any contamination during the entire monitoring period from 4/13/90 to 1/4/93. Monitoring well TMW-1 (upgradient of the former tanks) showed fluctuating levels of contamination (nd to 560 ppb TPH gasoline, 3.2 to 10 ppb benzene, nd to 10 ppb ethyl benzene, nd to 30 ppb xylene. Monitoring well TMW-2 (crossgradient/downgradient of the former tanks) showed contamination ranging from nd to 260 ppb TPH gasoline, 3.8 to 26 ppb benzene, nd to 2.5 ppb ethyl benzene, nd to 7.0 xylene.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **Unknown**
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **Unknown**
Does corrective action protect public health for current land use? **YES**
Site management requirements: **NA**
Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **NO, will decommission upon case closure**
Number Decommissioned: **NA** Number Retained: **NA**
List enforcement actions taken: **NA**
List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Susan L. Hugo** Title: **Sr. Hazardous Materials Specialist**
Signature: *Susan L. Hugo* Date:
Reviewed by
Name: **Eva Chu** Title: **Hazardous Materials Specialist**
Signature: *Eva Chu* Date: *12/5/95*
Name: **Thomas Peacock** Title: **Sup. Hazardous Materials Specialist**
Signature: *Thomas Peacock* Date: *12-5-95*

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response: *Approved*
RWQCB Staff Name: Kevin Graves Title: **Water Resources Control Engineer**
Date: *12/27/95*

[Handwritten signature]

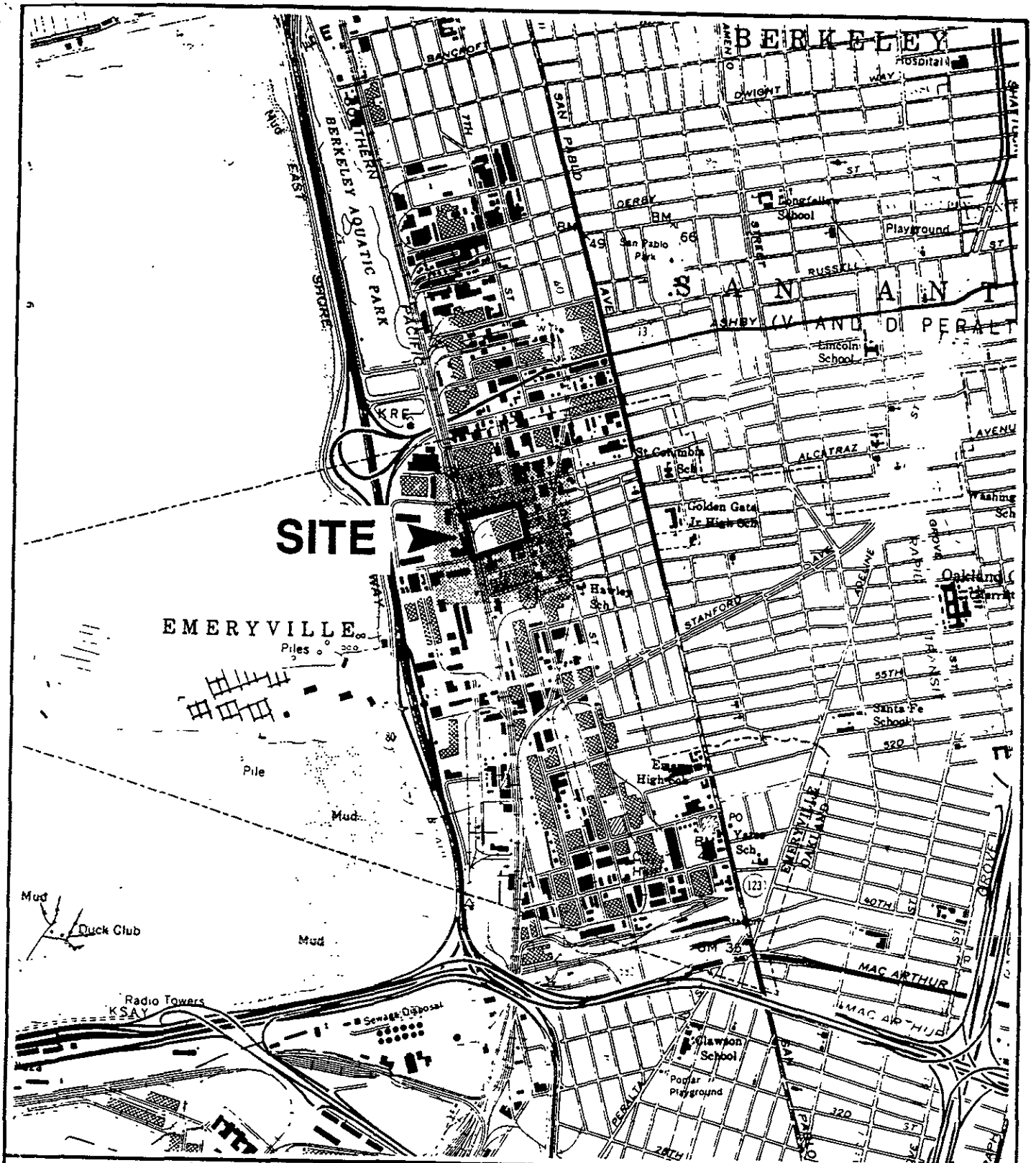
VII. ADDITIONAL COMMENTS, DATA, ETC.

Based on the data submitted for the referenced site, aggressive source removal has occurred at this site. Approximately 90 cubic yards of soil was excavated and disposed and 15,000 gallons of groundwater was pumped out. The last sampling event conducted on January 4, 1993 showed TPH gasoline at 430 ppb, benzene at 26 ppb and ethyl benzene at 2.0 ppb.

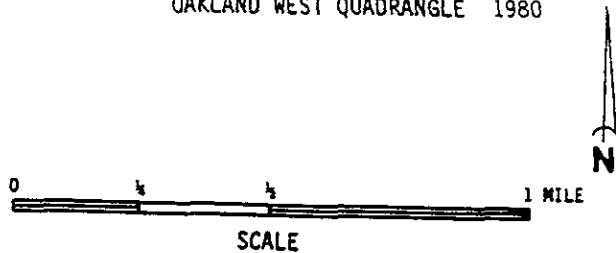
As part of the proposed Sybase expansion in Emeryville, a site assessment was conducted by EKI, Inc. which included the sampling of monitoring well TMW-1 on March 28, 1995. TPH gasoline (100 ppb), TPH diesel (330 ppb), benzene (4.8 ppb), ethyl benzene (1.8 ppb), xylene (3.2 ppb), and low levels of TCE (2.3 ppb) were detected during this sampling event. Monitoring well TMW-1 is upgradient of the former tanks and the levels of contaminants detected are low. Benzene at 26 ppb (highest level detected in TMW-2) is below the RBCA Tier 1 Look-Up Table (cancer risk of one in a million). The following assumptions were used for comparison: exposure pathway - groundwater vapor intrusion from groundwater to buildings; receptor scenario - commercial/industrial land use at the site.

Additional evaluation of the long term impact on groundwater quality of the TPH gasoline and BTEX concentrations measured in soil and groundwater samples was performed by Erler & Kalinowski, Inc. using the non parametric Mann-Kendall test. The results of the test indicate no upward trend exists for the two monitoring wells (TMW-1 and TMW-2).

Therefore, the residual levels of contaminants related to the former tanks at the site do not appear to pose a threat to public health and the environment. The plume appears to be stable and is not migrating based on the data collected from TMW-3 (consistently non detect for all target compounds). The site is currently capped with asphalt paving. Upon development of the site by Sybase, Inc., the area is planned to be capped with concrete or asphalt paving, and a site health and safety plan will be submitted to this agency prior to development activities at the site.



REFERENCE: USGS 7.5 MINUTE SERIES
OAKLAND WEST QUADRANGLE 1980



ENSR

SITE LOCATION MAP
MISSION TAYLOR PROPERTIES
1410 64th STREET
EMERYVILLE, CALIFORNIA

DRAWN BY: <i>MYL</i>	DATE: 01 10 91	PROJECT NO.: 4682-001
CHK'D BY: <i>CS</i>	REVISED:	DWG. NO.: FIGURE 1

analytical results are summarized in Table 1 below. A copy of the laboratory report is included in Appendix D.

Table 1
Summary of Soil Analytical Results

Analysis	Sample Number/Depth				Detection Limit (mg/kg)
	1/6.0 ft.	2/5.0 ft.	3/6.0 ft.	4/5.0 ft.	
Diesel	2000.0	1500.0	740.0	810.0	5.0
Gasoline	220.0	270.0	200.0	77.0	5.7
Benzene	0.39	0.22	0.37	0.99	0.19
Toluene	2.0	1.2	1.4	0.36	0.19
Xylene	5.6	6.9	5.4	2.0	0.19
Ethylbenzene	*	*	0.55	0.83	0.19

* Not detected.
 All results reported in mg/kg.

Table 2

Summary of Soil Analytical Results

Analysis	TMW-1		TMW-2		TMW-3		Detection Limit (mg/kg)
	1.5 ft.	5.25 ft.	1.5 ft.	5.25 ft.	3.25 ft.	5.25 ft.	
Diesel	*	230.0	*	16.0	*	*	5.0
Gasoline	16.0	3900.0	19.0	220.0	*	*	0.05
Benzene	0.59	75.0	0.33	7.3	*	*	0.001
Toluene	0.11	85.0	0.08	8.6	*	*	0.001
Xylene	0.73	120.0	0.56	6.6	*	*	0.001
Ethylbenzene	*	43.0	*	2.7	*	*	0.001

* Not detected
All results reported in mg/kg.

ENSR

Table 3

Summary of Groundwater Analytical Results

Analysis	TMW-1	TMW-2	TMW-3	Detection Limit (mg/l)
Diesel	*	*	*	0.10
Gasoline	0.56	0.14 ✓	*	0.05
Benzene	0.01	0.01	*	0.001
Toluene	<0.002	*	*	0.001
Xylene	0.03	0.007	*	0.001
Ethylbenzene	0.01	0.002	*	0.001

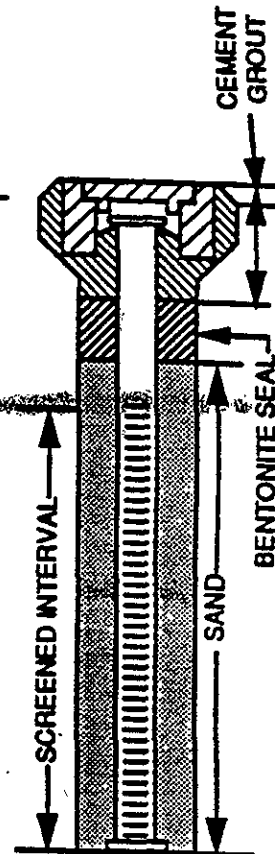
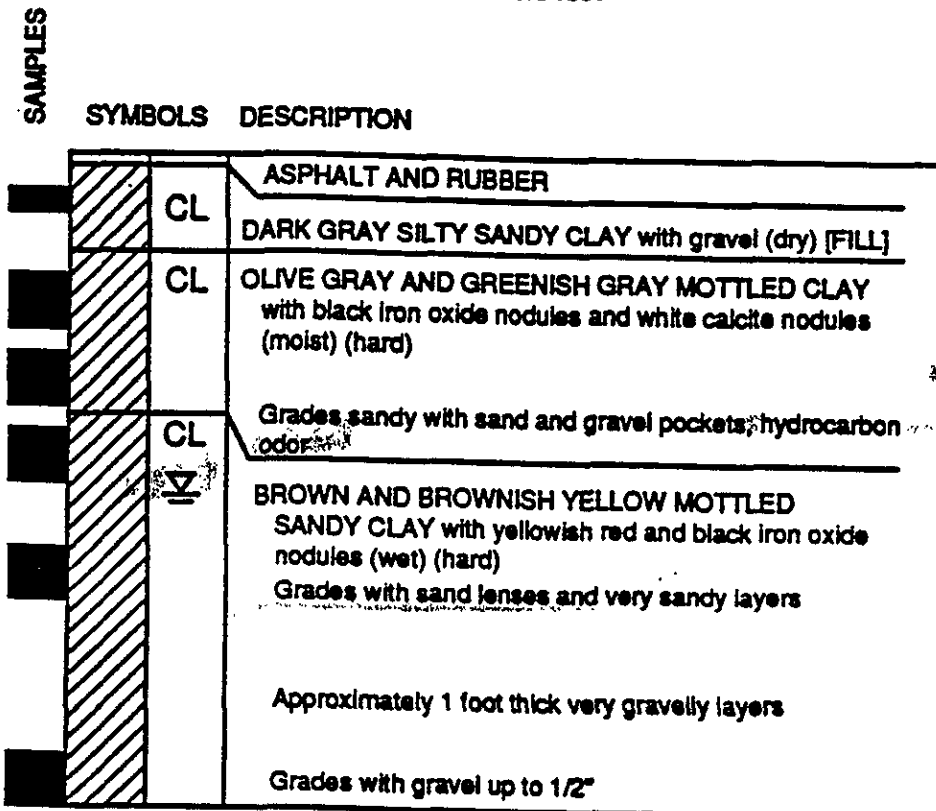
* Not detected.
All results reported in mg/l.

TMW-1

DATE DRILLED: 4/12/90

ELEVATION: 16.5 feet

DEPTH IN FEET	SAMPLING	
	TYPE OF SAMPLER	SAMPLING RESISTANCE
0		
0	CA	40
0	CA	70
5	CA	40
5	CA	30
10	CA	24
15	CA	60
20		
25		
25		
25		



NOTES:

1. Boring completed at a depth of 15.5 feet on 4/12/90
2. 2-inch PVC observation well installed to a depth of 15.0 feet; screened interval from 5.0 to 15.0 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate A-4.

LOG OF BORING

Dames & Moore

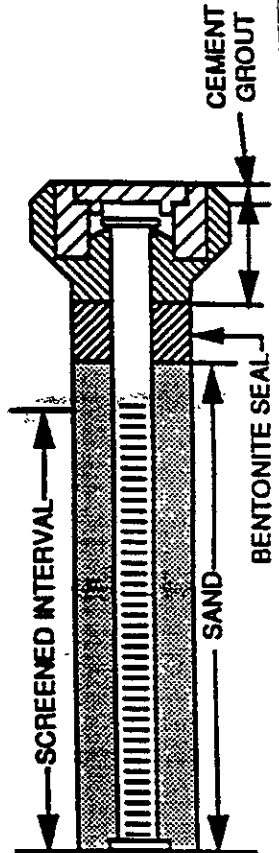
TMW-2

DATE DRILLED: 4/12/90

ELEVATION: 15.6 feet

DEPTH IN FEET	SAMPLING	
	TYPE OF SAMPLER	SAMPLING RESISTANCE
0		
5	CA	push
5	CA	push
5	CA	push
10	CA	push
15	CA	—
20		
25		
25		

SAMPLES	SYMBOLS	DESCRIPTION
		CONCRETE
	CL	DARK GRAY SILTY SANDY CLAY with gravel (slightly moist) [FILL]
		OLIVE GRAY AND DARK GREEN MOTTLED CLAY with white calcite nodules and small reddish brown sand pockets (moist) (very stiff) Grades sandy with sand and gravel pockets, hydrocarbon odor
	CL	BROWN AND BROWNISH YELLOW MOTTLED SANDY CLAY with black iron oxide nodules and minor amount of gravel (very stiff) (moist)
		Grades wet
	SP	BROWN AND BROWNISH YELLOW MOTTLED GRAVELLY SAND with some clay and silt (wet)



NOTES:

1. Boring completed at a depth of 15.5 feet on 4/12/90
2. 2-inch PVC observation well installed to a depth of 15.0 feet; screened interval from 5.0 to 15.0 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 8 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate A-4.

LOG OF BORING

Dames & Moore

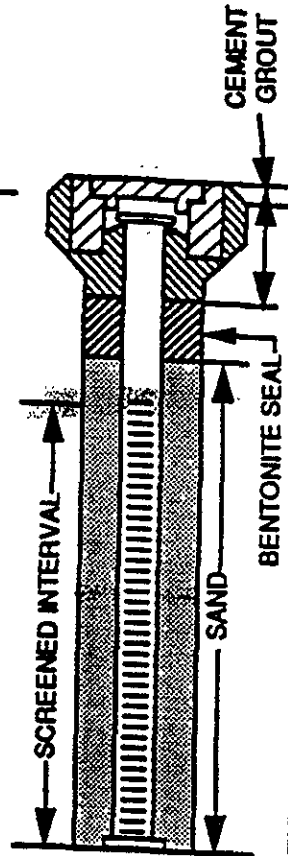
TMW-3

DATE DRILLED: 4/12/90

ELEVATION: 15.4 feet

DEPTH IN FEET	SAMPLING	
	TYPE OF SAMPLER	SAMPLING RESISTANCE
0	CA	44
	CA	58
5	CA	52
	CA	17
10	CA	28
15	CA	40
20		
25		
25		

SAMPLES	SYMBOLS	DESCRIPTION
	CL	ASPHALT AND BRICK
	CL	DARK GRAY SILTY SANDY CLAY with gravel (moist) (hard) [FILL]
	CL	OLIVE GRAY AND GREENISH GRAY MOTTLED SANDY CLAY with black iron oxide nodules (moist) (hard)
	CL	BROWN AND BROWNISH YELLOW MOTTLED SANDY CLAY, sand is coarse (wet) (stiff to very stiff)
	SP	BROWN SAND, with some clay and gravel, contains gravelly layers (wet) (medium dense)
	CL	BROWN AND BROWNISH YELLOW MOTTLED SILTY CLAY with some sand (wet) (very stiff)



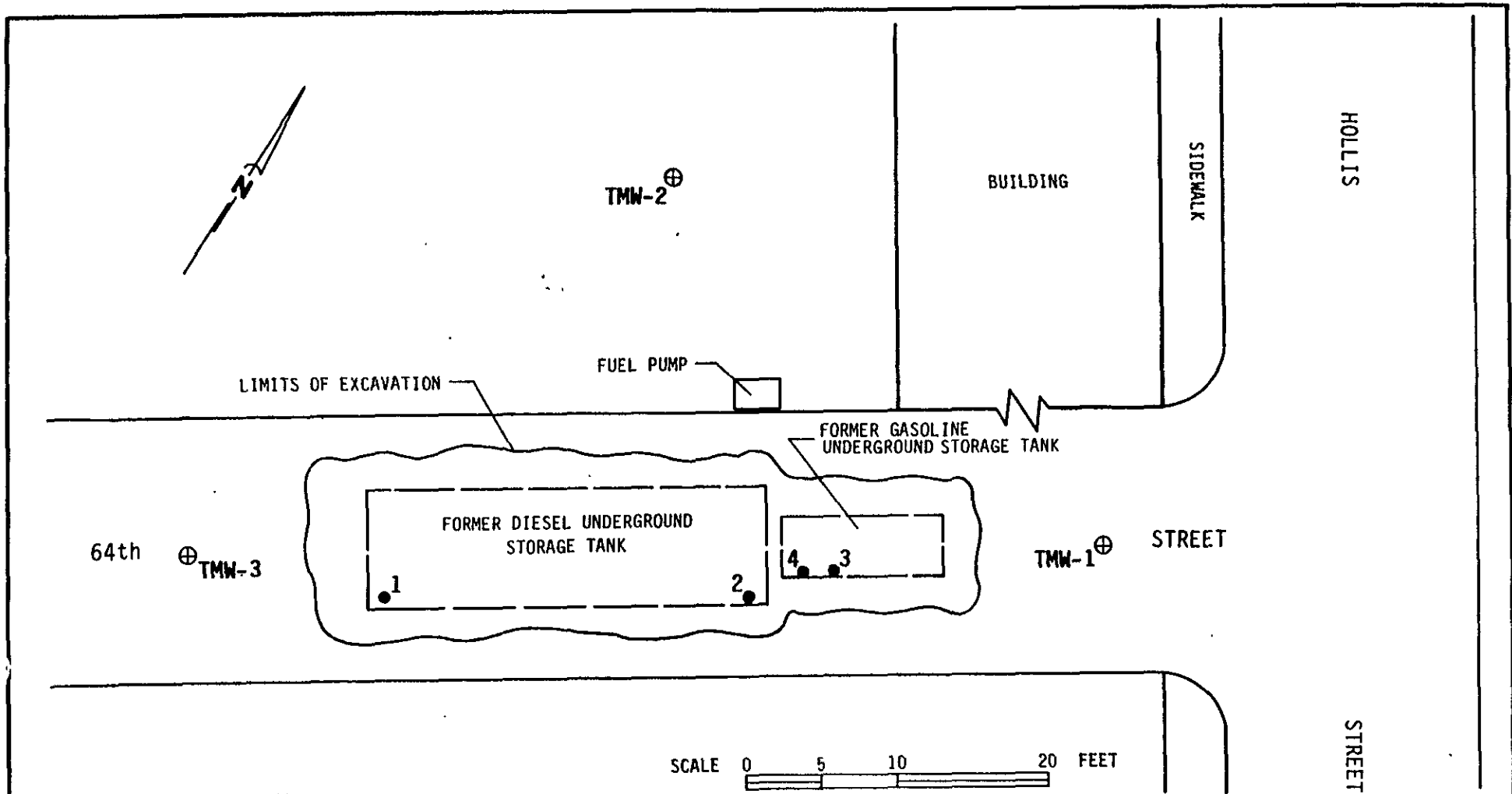
NOTES:

1. Boring completed at a depth of 15.5 feet on 4/12/90
2. 2-inch PVC observation well installed to a depth of 15.0 feet; screened interval from 5.0 to 15.0 feet.
3. Sampling resistance is measured in blows per foot required to drive the sampler 12 inches with a 140 lb. hammer falling 30 inches after sampler has been seated 6 inches.
4. Boring log indicates interpreted subsurface conditions only at the location and the time the boring was drilled.
5. For an explanation of terms used see the Soils Classification Chart and Key to Test Data, Plate A-4.

LOG OF BORING

Dames & Moore

PLATE A-3

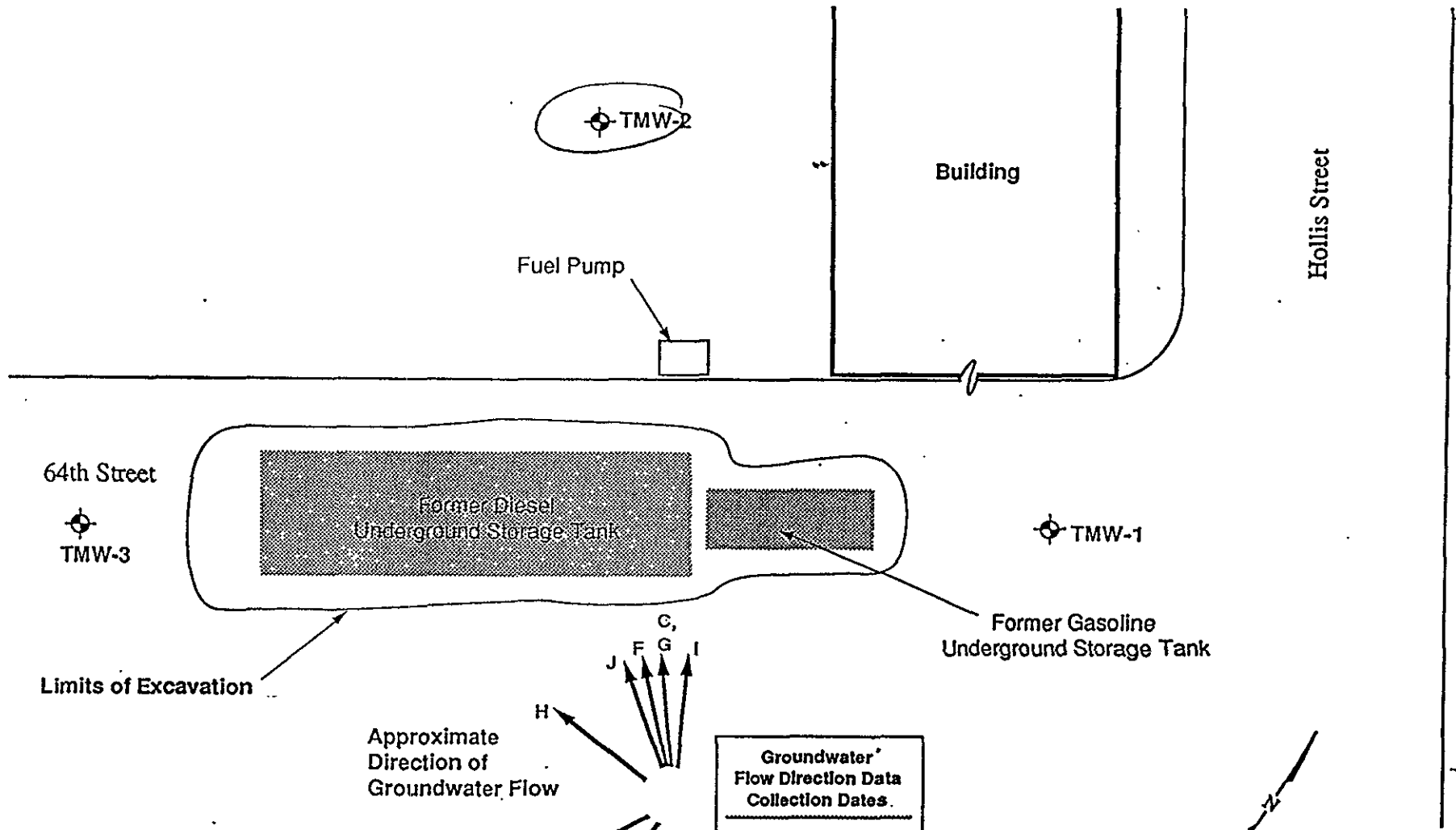


EXPLANATION

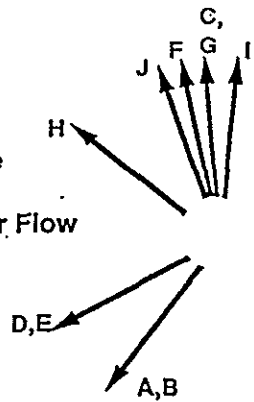
- 4 SOIL SAMPLE LOCATION
- ⊕ TMW-3 SOIL BORINGS/MONITORING WELLS

ENSRTM

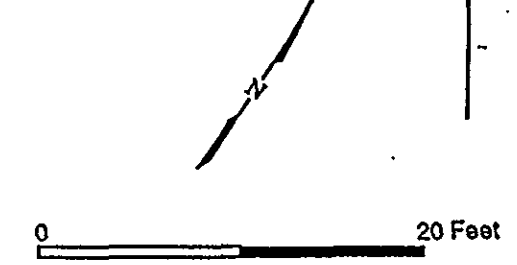
SITE PLAN
MISSION TAYLOR PROPERTIES
1410 64th STREET
EMERYVILLE, CALIFORNIA



Approximate
Direction of
Groundwater Flow



Groundwater* Flow Direction Data Collection Dates.	
A	4/13/90
B	11/30/90
C	4/12/91
D	8/16/91
E	10/6/92
F	11/23/92
G	12/03/92
H	01/04/93
I	02/02/93
J	03/04/93



SITE PLAN
Mission Taylor Properties
1410 64th Street
Emeryville, California
FIGURE 1

TABLE 1
MISSION TAYLOR PROPERTIES
ANALYTICAL RESULTS
 1410 64th Street
 Emeryville, California

Monitoring Well #	Date	Chemical Concentrations - Micrograms/Liter ($\mu\text{g}/\text{L}$)					
		TPHg	TPHd	Benzene	Toluene	Ethyl-benzene	Total xylene
TMW-1	04/13/90	560	ND	10	ND	10	30
	11/30/90	ND	ND	3.2	ND	3.2	ND
	✓ 04/12/91	150	NA	3.2	ND	2.0	ND
	✓ 08/16/91	150	NA	4.8	ND	3.7	2.6
	10/06/92	230	NA	6.1	ND	3.1	ND
	01/04/93	430	NA	9.9 <small>1.8</small>	ND	ND	ND

Monitoring Well #	Date	Chemical Concentrations - Micrograms/Liter ($\mu\text{g}/\text{L}$)					
		TPHg	TPHd	Benzene	Toluene	Ethyl-benzene	Total xylene
TMW-2	04/13/90	140	ND	10	ND	2.0	7.0
	11/30/90	ND	ND	3.8	ND	ND	ND
	✓ 04/12/91	160	NA	16	ND	1.7	ND
	✓ 08/16/91	130	NA	7.7	ND	1.3	1.1
	10/06/92	170	NA	18	ND	2.5	ND
	01/04/93	260	NA	26	ND	2.0	ND

reported date 5/29/91 →

TABLE 1
MISSION TAYLOR PROPERTIES
ANALYTICAL RESULTS
 1410 64th Street
 Emeryville, California

Monitoring Well #	Date	Chemical Concentrations - Micrograms/Liter ($\mu\text{g}/\ell$)					
		TPHg	TPHd	Benzene	Toluene	Ethyl-benzene	Total xylene
TMW-3	04/13/90	ND	ND	ND	ND	ND	ND
	11/30/90	ND	ND	ND	ND	ND	ND
	04/12/91	ND	NA	ND	ND	ND	ND
	08/16/91	ND	NA	ND	ND	ND	ND
	10/06/92	ND	NA	ND	ND	ND	ND
	01/04/93	ND	NA	ND	ND	ND	ND

ND = Not detected at or above the reporting limit
 NA = Not analyzed
 TPHg = Total petroleum hydrocarbons as gasoline
 TPHd = Total petroleum hydrocarbons as diesel

Monitoring Well	Total Well Depth (Top of PVC)	Elevation (Top of PVC)	Date	Depth-to-Water	Groundwater Elevation
TMW-1	14.69	16.34	04/25/90	3.48	12.86
			11/30/90	3.57	12.77
			04/29/91	3.41	12.93
			08/16/91	3.61	12.73
			10/06/92	3.78	12.56
			11/23/92	3.58	12.76
			12/03/92	3.58	12.76
			01/04/93	3.16	13.18
			02/02/93	3.70	12.64
			03/04/93	3.24	13.10

TABLE 2
MISSION TAYLOR PROPERTIES
SUMMARY OF GROUNDWATER ELEVATIONS
 1410 - 64th Street
 Emeryville, California

Monitoring Well	Total Well Depth (Top of PVC)	Elevation (Top of PVC)	Date	Depth-to-Water	Groundwater Elevation
TMW-2	16.35	15.36	04/25/90	2.59	12.77
			11/30/90	2.57	12.79
			04/29/91	2.78	12.58
			08/16/91	2.71	12.65
			10/06/92	3.35	12.48
			11/23/92	3.03	12.01
			12/03/92	2.44	12.33
			01/04/93	3.16	12.92
			02/02/93	2.63	12.20
			03/04/93		12.73
TMW-3	15.53	15.14	04/25/90	2.54	12.60
			11/30/90	2.27	12.87
			04/29/91	2.36	12.78
			08/16/91	2.61	12.53
			10/06/92	2.78	12.36
			11/23/92	2.73	12.41
			12/03/92	2.62	12.52
			01/04/93	2.28	12.86
			02/02/93	2.46	12.68
			03/04/93	2.28	12.86

Table 4
 Results of Groundwater Samples Analyses
 for Halogenated VOCs, PAHs, and Industrial Solvents
 Sybase, Inc
 64th and 65th Street Properties
 Emeryville, California
 EKI 940018.00

Sample ID	Date Sampled	VOCs EPA Method 8010 (a)									PAHs Method 8100 (ug/L)	Industrial Solvents (ug/L)
		chloro-ethane (ug/L)	1,1-DCA (ug/L)	1,2-DCA (ug/L)	1,1-DCE (ug/L)	cis-1,2-DCE (ug/L)	trans-1,2-DCE (ug/L)	TCE (ug/L)	vinyl chloride (ug/L)	Freon 113 (ug/L)		
MW-1	3/23/95	<5 (b)	<2.5	<2.5	<2.5	39 (c)	9.9	170	<5	9	ND (d)	ND
MW-2	3/23/95	<2.5	<1.2	<1.2	<1.2	60	46	2.5	<2.5	<2.5	ND	ND
MW-3	3/23/95	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	ND	ND
MW-4	3/23/95	<2.5	<1.2	<1.2	<1.2	28	16	54	<2.5	<2.5	ND	ND
MW-5	3/27/95	18	5.8	<0.5	<0.5	8.5	9.6	<0.5	10	<1	ND	(e)
MW-6	3/27/95	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	ND	ND
M-6Dup	3/27/95	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	ND	ND
RMW-1	3/24/95	<2.5	<1.2	1.4	<1.2	16	10	53	<2.5	<2.5	ND	ND
R-1Dup	3/24/95	<2.5	<1.2	1.3	<1.2	15	9.7	51	<2.5	<2.5	NA (f)	NA
RMW-2	3/24/95	<1	<0.5	0.96	<0.5	12	8.4	26	<1	<1	ND	ND
RMW-3	3/27/95	<1	11	<0.5	1.4	25	22	36	3.7	<1	ND	ND
TMW-1	3/28/95	<1	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	<1	<1	ND	ND

NOTES:

- (a) Only compounds detected in groundwater samples are included in table.
- (b) Less than symbol (" $<$ ") denotes that compound was not present above the laboratory detection limit indicated.
- (c) Compounds indicated in bold were present at concentrations that exceeded its respective laboratory detection limits.
- (d) "ND" indicates that none of the compounds analyzed by the method listed were present above laboratory detection limits.
- (e) Compounds reported in this sample include: carbon tetrachloride ("CT") =260 ug/L, 1,2-DCA=380 ug/L, ethyl acetate=830 ug/L, ethylbenzene=100 ug/L, tetrachloroethene ("PCE") =200 ug/L, toluene=22 ug/L, and o-xylene=220 ug/L. However, the laboratory indicated that the detection of CT, 1,2-DCA, ethylbenzene, PCE, toluene, and o-xylene is likely attributed to false positive recovery of these compounds in the Industrial Solvent analysis. These compounds were not detected on the EPA 8010 and BTEX

Table 3
 Results of Groundwater Sample Analyses
 for Metals and Petroleum Hydrocarbons
 Sybase, Inc
 64th and 65th Street Properties
 Emeryville, California
 EKI 940018.00

Sample ID	Date Sampled	Metals EPA 6000/7000 Series			Fuel Fingerprint EPA Method 8015		TPPH (a) EPA Method 8015/8020					
		Arsenic (ug/L)	Lead (ug/L)	Chromium (ug/L)	TEPH (ug/L)	Hydrocarbon Pattern (b)	TPPH (ug/L)	Hydrocarbon Pattern (b)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)
MW-1	3/23/95	<5 (c)	<5	<10	5500 (d)	diesel	170	C7-C12	<0.5	<0.5	<0.5	<0.5
MW-2	3/23/95	<5	<5	<10	260	C9-C24 (e)	71	<C8	<0.5	<0.5	<0.5	<0.5
MW-3	3/23/95	13	<5	<10	150	C9-C24 (e)	<50	-	<0.5	<0.5	<0.5	<0.5
MW-4	3/23/95	<5	<5	<10	190	C9-C24 (e)	<50	-	<0.5	<0.5	<0.5	<0.5
MW-5	3/27/95	68	<5	<10	29000	C9-C24 (e)	600	>C8	<0.5	<0.5	<0.5	<0.5
MW-6	3/27/95	16	<5	<10	13000	C9-C24 (e)	74	>C8	<0.5	<0.5	<0.5	<0.5
M-6Dup	3/27/95	NA (f)	NA	NA	5600	C9-C24(e)	250	>C8	<0.5	<0.5	<0.5	<0.5
RMW-1	3/24/95	<5	<5	<10	210	C13-C24 (e)	<50	-	<0.5	<0.5	<0.5	<0.5
R-1Dup	3/24/95	NA	NA	NA	97	C10-C24 (e)	<50	-	<0.5	<0.5	<0.5	<0.5
RMW-2	3/24/95	7.6	<5	<10	150	C10-C24 (e)	<50	ND	<0.5	<0.5	<0.5	<0.5
RMW-3	3/27/95	<5	<5	<10	97000	C9-C24 (e)	11000	>C8	<10	<10	<10	<10
TMW-1	3/28/95	<5	<5	<10	330	C9-24 (e)	100	gas	4.8	<0.5	1.8	3.2

NOTES:

- (a) TPPH = total purgeable petroleum hydrocarbons quantified against gasoline standard.
- (b) Hydrocarbon pattern indicates the identified hydrocarbon in the sample (i.e., diesel) or the range of carbon chain lengths quantified in the sample if the sample chromatogram did not resemble common hydrocarbon standards.
- (c) Less than symbol ("<") denotes that compound was not present above the detection limit indicated.
- (d) Compounds indicated in bold were present at concentrations that exceeded respective laboratory detection limits.
- (e) Sample was quantified in the diesel range (i.e., up to a carbon chain length of 24), but the hydrocarbon chain length range extended to C36.
- (f) Not analyzed.