

December 15, 2005

**Work Plan for Characterization  
of  
Second Aquifer**

807 75<sup>th</sup> Avenue  
Oakland, California

AEI Project No. 115483

Prepared For

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DEC 16 2005

AEI CONSULTANTS

**AEI**

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## 1.0 INTRODUCTION

The following workplan has been prepared on behalf of Omega Termite Control, Inc (Omega). AEI Consultants (AEI) has been retained by Omega to provide environmental engineering and consulting services associated with the release of fuel hydrocarbons from the former underground storage tanks on the property. This workplan has been prepared in response to a request by the Alameda County Environmental Health Services (ACEHS) for further site investigation in preparation for development of a formal Remedial Action Plan.

## 2.0 SITE DESCRIPTION AND HISTORY

The site is located in an industrial area of the City of Oakland, on the northern corner of the intersection of 75<sup>th</sup> Avenue and Snell Street, just east of San Leandro Street. The property is approximately 10,000 square feet in size and currently developed with two buildings, occupied by Omega.

On September 15, 1996, AEI removed three gasoline underground storage tanks (USTs) from the subject property. The tanks consisted of one 8,000-gallon UST, one 1,000-gallon UST, and one 500-gallon UST. The former locations of the tanks are shown in Figure 2. A total of five soil samples (Figure 3, Table 2) and one groundwater sample collected during the tank removal activities revealed that a release had occurred from the tank system. Total petroleum hydrocarbons as gasoline (TPH-g), benzene, and MTBE were detected up to 4,300 mg/kg, 13 mg/kg, and 25 mg/kg, respectively in soil samples. The excavation was not backfilled. Soil removed from the excavation was stockpiled on the northern portion of the property. In 1999 soil samples collected from the stockpiled soil contained non-detectable to minor concentrations of TPH as gasoline. Mr. Barney Chan of the ACEHS approved the stockpiled soil for reuse in the excavation.

In October 1997, soil and groundwater samples were collected from six soil borings (BH-1 through BH-6). In June 1999, four groundwater monitoring wells (MW-1 through MW-4) were also installed by AEI (Figure 3, Table 2).

Under the direction of ACEHS, additional soil was removed from the excavation in March 2000. The excavation was extended to 29 by 48 feet in area and 8 feet deep at the east end of the excavation and 11.5 at the west end. During excavation activities, an additional 500 gallon UST was discovered at the eastern end of the excavation. This tank was removed under the direction of Oakland Fire Services Agency (OFSA). A total of six additional soil samples were collected from the sidewalls and bottom of the excavation (Figure 3, Table 2).

The resulting excavation was then backfilled with pea gravel to bridge the water table, with the remainder of the excavation being filled with the previously aerated soil and later with imported fill. At the time the excavation was backfilled a 4-inch PVC casing was installed in the backfill, TW-1. The newly excavated soil was stockpiled on the northern portion of the property. A total of 7,400 gallons of hydrocarbon impacted groundwater was pumped from the excavation, treated on-site, and discharged under EBMUD permit to the sanitary sewer system.

On October 9 and 10, 2003, eight soil borings (SB-7 through SB-14) were advanced on the site and adjacent properties. Borings SB-7 through SB-13 were advanced to depths ranging from 15 to 20 feet bgs to evaluate lateral extent of soil and groundwater contamination at the site. Boring SB-14 was advanced to a depth of 30 feet bgs to determine if the hydrocarbon release had impacted the second aquifer at the site. Soil boring SB-14 encountered a thin clayey sand at a depth of 20 feet bgs with hydrocarbon odor, but which gave up no water into the push probe boring. Permeable gravel was encountered at a depth of approximately 29 feet bgs. The groundwater sample from this interval contained 2,300 micrograms per liter ( $\mu\text{g/L}$ ) TPH-g, and 72,000  $\mu\text{g/L}$  total petroleum hydrocarbons as diesel (TPH-d) with standing water at 20.5 feet bgs. This indicates that the second aquifer has been impacted significantly by hydrocarbons. The hydrostatic head of the first aquifer ranges from 4 to 6 feet bgs while the hydrostatic head in the second aquifer is lower at about 20.5 feet bgs

Sample collection points, borehole locations, and monitoring wells are shown on Figure 4. The construction details of on site wells are present in Table 1. Historical soil sample analytical data is presented in Table 2. Historical water table elevation data is presented in Table 3.

### 3.0 GEOLOGY AND HYDROLOGY

The site is located at approximately 5 feet above mean sea level (msl). The surface of the property is relatively flat. The regional topography slopes very gently to southwest (Figure 1). The U.S.G.S., Open File Report 97-97 was reviewed. The property sits on Natural Levee Deposits (Holocene) which are described as, "Loose, moderately to well-sorted sandy or clayey silt grading to sandy or silty clay." The levee deposits overly and interfinger with alluvial fan and fluvial deposits (Holocene) which are described as brown or tan, medium dense to dense, gravely sand or sandy gravel that generally grades upward, to sandy or silty clay. Near the distal fan edges, the fluvial deposits are typically brown, medium dense sand that fines upward to sandy or silty clay. The site lies on the distal (seaward) edge of the Arroyo Viejo alluvial fan.

Based on the soil borings advanced by AEI, the near surface sediments beneath the site can be divided into several zones. The shallow zone consists of black to yellow brown silty clay with discontinuous layers and lenses of silt and sand to a depth of 15 or more feet bgs. The black clay is interpreted to be a "Bay Mud" layer interbedded with the levee deposits. First groundwater encountered at the site is generally found within the first permeable sand or silt below 5 feet bgs.

In boring SB-14, the base of the shallow aquifer is placed at the base of the sandy interval at 14 feet bgs. In this deep boring, approximately 5 feet of oxidized, yellowish brown silty clay separate this sand from reduced and contaminated clayey sand (18" thick) which appeared wet but yielded no water into the direct push boring. It is not clear whether this sand is part of the overlying or underlying zone, or whether is a separate zone.

Below this sand, another six feet of silty clay is present. This clay is slightly reduced at its upper contact with the impacted sand, however is an oxidized brownish yellow in the middle. The bottom foot, in contact with the underlying gravel, is a strongly reduced dark greenish gray.

The second aquifer was encountered at a depth of approximately 28 feet bgs. The aquifer is clean permeable gravel. The water sample collected from this interval showed evidence of LNAPL and produced a stable water level of 20.5 feet bgs, significantly below the water level in the shallow zone.

The subsurface stratigraphy as it is known is shown on Figures 5 and 6 (Cross sections A-A' and B-B').

Historically, depth to groundwater in the four groundwater monitoring wells have ranged from 2.37 feet (MW-3 2/23/00) below ground surface (bgs) to 6.64 (MW-2 7/30/99). Water levels measurements indicate a highly variable flow direction. As the actual groundwater elevation ranges from less than one foot below mean seal level (msl) to one foot above msl. The hydraulic gradient has ranged from  $1.0 \times 10^{-3}$  ft/ft to  $8.0 \times 10^{-3}$  ft/ft. Historical flow directions and gradients are summarized in Table 3 and 3a.

#### **4.0 INITIAL SITE CONCEPTUAL MODEL**

##### **4.1 Release Occurrence**

Petroleum hydrocarbons were released into soil and groundwater from USTs previously located on the site. The lateral impact to the shallow groundwater appears for the most part to be limited to the site. Neither the flow direction nor lateral extent of the hydrocarbon plume in the second aquifer is known.

##### **4.2 Release Extent**

Historically liquid non-aqueous phase liquids (LNAPL), consisting of diesel and motor oil range hydrocarbons with lesser amounts of gasoline range hydrocarbons, has been seen in the shallow zone groundwater samples from backfill well TW-5. In contrast the contamination in monitoring wells MW-1 through MW-4 has higher gasoline range hydrocarbon concentration than diesel or oil range hydrocarbons. Borings drilled in 2003 and groundwater monitoring wells have effectively defined the limits of the contamination plume in the shallow groundwater to the west south and east. The plume to the north has not been defined. Data from initial investigations and groundwater monitoring events indicated a (pre-2003) hydrocarbon plume extent to the south in the same direction as the groundwater flow direction. However, since early 2003, groundwater flow directions have been erratic, at times to the north, east northeast and west. During this same time period while wells MW-1, MW-3 and MW-4 exhibited decreasing hydrocarbon concentrations, MW-2 located north of the former tank hold has shown steadily increasing concentrations of hydrocarbons. Depth to the shallow groundwater is typically around 5 to 6 feet bgs.

In 2003 soil boring SB-14 drilled was drilled to a depth of 30 feet to evaluate potential impact to the next lower well developed aquifer. At a dept of approximately 29 feet bgs gravel was encountered. The stable groundwater level in the boring was 20.45 feet bgs, significantly lower than the shallow zone, indicating a strong downward gradient underlying the site. The Interval between the first and second aquifers in SB-14 consist primarily of brown to yellow brown silt clay indicating that SB-14 is located outside of the vertical migration pathway between the first and second aquifers. The groundwater sample from SB-14 contained LNAPL which analysis indicated was primarily diesel range hydrocarbons. Groundwater flow direction for the second aquifer is not known but is assumed to west or southwest toward the San Francisco Bay.

#### **4.3 Data Gaps**

Data gaps that require further investigation during subsequent phases of work include the northward extent of the shallow aquifer hydrocarbon contamination, flow direction in the second aquifer, lateral extent of the second aquifer hydrocarbon contamination and confirmation of the vertical gradient between the first and second aquifers. A detailed survey of preferential pathways such nearby wells and or buried utilities has not been done, nor has a sensitive receptor survey been carried out. Storm Drains and Sanitary sewers shown on Figure 2 are based on visual inspection as previous inspection of city records was unable to locate detailed drawings of the sewers in the area. These will be addressed in the proposed investigation.

#### **5.0 PROPOSED INVESTIGATION**

The purpose of the proposed investigation is to delineate the northern extent of the hydrocarbon plume in the shallow groundwater and The proposed scope of work consists of the installing five (5) groundwater monitoring wells at locations shown on Figure 11:

- One shallow zone 2-inch diameter groundwater monitoring well (18 feet bgs) located north of MW-2, to help delineate the northern extent of the groundwater in the shallow zone
- One second aquifer 4-inch diameter groundwater monitoring / extraction well (35 feet bgs) located within the footprint of the former tank hold near back fill well TW-5.
- Three second aquifer 2-inch diameter groundwater monitoring wells (35 feet bgs) at locations near existing wells MW-1 through MW-3 to allow determination of the extent of hydrocarbon continuation and the groundwater gradient in the second aquifer.
- Preparation of a technical report summarizing the activities and results of this investigation and a proposal of a course of remedial action for both the shallow and second groundwater aquifer.

## **6.0 OPERATING PROCEDURES**

### **6.1 Drilling**

A drilling permit will be obtained the from Alameda County Public Works Agency. Underground Service Alert will be notified to identify public utilities in the work area. A private utility locating service will be retained to clear boring locations and confirm location of sewer line and any other previously unidentified underground utilities.

### **6.2 Soil Sampling and Analyses**

The soil borings for the groundwater monitoring wells will be continuously sampled using Marl direct push sampler from surface to total. A continuous sediment core is cut using an approximately 2" outer diameter sampling tube, which hold in 1.75-inch diameter acrylic liners 4-feet in length. Borehole logging, and sample collection will be performed by AEI staff under the direct supervision of an AEI California Professional Geologist.

At least one sediment sample will be retained from each 4 feet cored for possible chemical analysis. Additional samples may be retained at lithologic breaks as determined by at the onsite geologist. Selected samples will be sealed with Teflon tape and end caps, labeled with a unique identifier, entered onto chain of custody, and place in a cooler with water-ice. An adjacent sample will be placed in a 1-quart zipper locking plastic bag and used for field screening. The samples will be screened using a Mini-Rae photo ionization detector (PID).

Laboratory work will be performed by a California Department of Health Services certified laboratory following current EPA analytical methodologies.

### **6.3 Well Installation and Development**

The wells will be installed in borings drilled with a standard rotary drilling rig, running 8¼ or 10 1/2 diameter hollow stem augers. The borehole for the shallow aquifer well (MW-6) will be advanced to approximately 18 feet bgs, the second aquifer wells will be drilled to a depth of 35-40 feet. The exact depth will be determined by the location and thickness of the second aquifer gravel. Deep aquifer wells will not be drilled deeper than 9 feet below the top of the aquifer or more than 3 feet deep than the base of the aquifer. The wells will be constructed with 2" diameter schedule 40 PVC well casing, except MW-7 which will be completed with 4-inch diameter casing. The shallow well will be screened to a depth of no more than 2 feet above the first encountered water bearing zone. The second aquifer wells will be constructed with no more than 10 feet of screen, with no more than 2 feet of screen above the top of the second aquifer. Well screens will be constructed of factory slotted 0.010 inch well screen. The screen intervals shown above may be adjusted based on findings of the data collected during drilling by the supervising Professional Geologist .



The well casings will be installed through the augers. The casing will be flush threaded PVC and fitted with a bottom cap. An annular sand pack will be installed through the augers, which will be lifted from the borehole in 1-foot lifts. A bentonite seal will be placed above the sand and the remainder of the boring will be sealed with cement grout. If needed, a bentonite seal will be placed across the pea gravel bridge in the bottom of the former tank excavation, to prevent excessive grout loss while sealing MW-7.

The wells will be developed no sooner than 3 days after setting the well seals by surging, bailing, and purging to stabilize the sand pack and remove accumulated fines from the casing and sand pack.

Each new and existing well will be surveyed relative to each other and mean sea level by a California licensed land surveyor, with accuracy appropriate for GeoTracker uploads. The survey will include property boundaries and onsite structures.

#### **6.4 Groundwater Monitoring**

Monitoring and sampling of the resulting network of wells will occur on a quarterly basis or a period of one year under this work plan, with the first episode to occur within approximately one week of well development.

During each monitoring event, water levels will be measured in each well. Wells will be purged of at least 3 well volumes of water prior to sample collection. During purging the following water quality measurements will be collected: temperature, pH, specific conductivity, dissolved oxygen (DO) and oxidation-reduction potential (ORP). Groundwater samples will be collected with new, unused disposable bailers into appropriate laboratory-supplied containers.

#### **6.5 Laboratory Analysis and Sample Storage**

All samples will be sealed and labeled immediately upon collection. Samples will be placed in a cooler with water ice. Chain of custody documentation will be initiated prior to leaving the site. All samples will be delivered to a state certified laboratory on the day of collection. Soil and groundwater samples will be analyzed for TPH-g, BTEX and MTBE by Methods SW 8021B/8015Cm and TPH-d/mo by method 8015C

#### **6.6 Equipment Decontamination**

Sampling equipment, including sampling barrels, drilling rods, augers, and other equipment used in sampling, will be decontaminated between samples using a steam cleaner and/or a triple rinse system containing Alconox™ or similar detergent. Rinse water will be contained in sealed labeled DOT approved 55-gallon drums in a secure location onsite pending proper disposal.

## **6.7 Waste Storage**

All investigation-derived waste (IDW) will be stored onsite in sealed, labeled 55-gallon drums. IDW will include soil cuttings, plastic sample liners, and other sampling disposables. Equipment rinse water will also be stored in a 55-gallon drum, separate from solid IDW. Upon receipt of analytical results, the waste will be profiled into appropriate disposal or recycling facilities and transported from the site under appropriate manifest. Copies of manifests will be made available once final copies are received from the disposal facility.

## **6.8 Site Safety**

AEI will prepare a site specific Health and Safety Plan conforming to Part 1910.120 (i) (2) of 29 CFR. Prior to commencement of field activities, a site safety meeting will be held at a designated command post near the working area. The Health and Safety Plan will be reviewed and emergency procedures will be outlined at this meeting, including an explanation of the hazards of the known or suspected chemicals of interest. All site personnel will be in Level D personal protection equipment, which is the anticipated maximum amount of protection needed. A working area will be established with barricades and warning tape to delineate the zone where hard hats, steel-toed shoes and safety glasses must be worn, and where unauthorized personnel will not be allowed. The site Health and Safety Plan will be on site at all times during the project.

## **7.0 REPORTING**

Following receipt of the final analytical data, a technical report summarizing the activities and results of this investigation. The technical report will include figures, data tables, logs of borings, interpretation of the contaminant distributions, and a conceptual site model. Contaminant distribution and thoroughness of overall site characterization will be evaluated. If warranted, a formal corrective action plan (CAP) or similar study may be recommended. If interim remediation appears necessary and appropriate, specific methods may be recommended or implemented at the direction of the property owner. Quarterly monitoring of the existing well network will continue unless directed otherwise. The report will also include an evaluation of preferential pathways and ½ mile radius well survey well survey and identification of sensitive receptors near the site.

## **8.0 SCHEDULE**

Field work is anticipated to be scheduled within two weeks of approval of this work plan by the ACEHS. The ACEHS will be given adequate notification of the schedule should inspections be necessary. Drilling and sampling activities are expected to require one or two days. Laboratory analytical results will be available within approximately 1-2 week of sample collection. The final report will be completed within approximately 1 month of receipt of all data.

## 9.0 REFERENCES


1. AEI, *Underground Storage Tank Removal Final Report*, October 10, 1996
2. AEI, *Phase II Soil and Groundwater Investigation Report*, March 17, 1997
3. AEI, *Workplan*, May 21, 1999
4. AEI, *Soil Boring and Groundwater Monitoring Well Installation Report*, September 16, 1995.
5. AEI, *Groundwater Monitoring Report, Fourth Quarter, 2005*, November 11, 2005
6. U.S.G.S., *Open File Report 97-97, Quaternary Geology of Alameda County, and Parts of Contra Costa, Santa Clara, San Mateo, San Francisco, Stanislaus, and San Joaquin Counties, California*, 1997

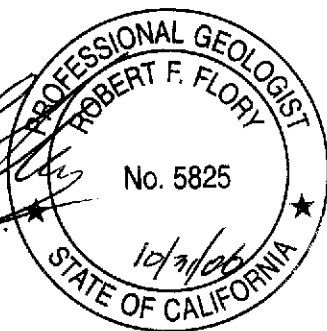
## 10.0 SIGNATURES

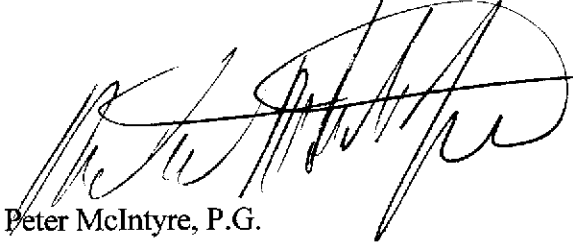
This plan has been prepared by AEI on behalf of Mr. Allan Kanady, Omega Termite Control, Inc. and outlines a scope of work to address the release of hydrocarbons on the property located at 807 75<sup>th</sup> Avenue in the City of Oakland, Alameda County, California. The recommendations rendered in this report were based on previous field investigations and laboratory testing of material samples. This report does not reflect subsurface variations that may exist between sampling points. These variations cannot be anticipated, nor could they be entirely accounted for, in spite of exhaustive additional testing. This plan should not be regarded as a guarantee that no further contamination, beyond that which could have been detected within the scope of past investigations is present beneath the property or that all contamination present at the site will be identified, treated, or removed. Undocumented, unauthorized releases of hazardous material(s), the remains of which are not readily identifiable by visual inspection and/or are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation and may or may not become apparent at a later time. All specified work will be performed in accordance with generally accepted practices in environmental engineering, geology, and hydrogeology and will be performed under the direction of appropriate registered professional(s).

Please contact either of the undersigned with any questions or comments at (925) 944-2899

Sincerely,  
AEI Consultants

  
Robert F. Flory, P.G.  
Project Manager



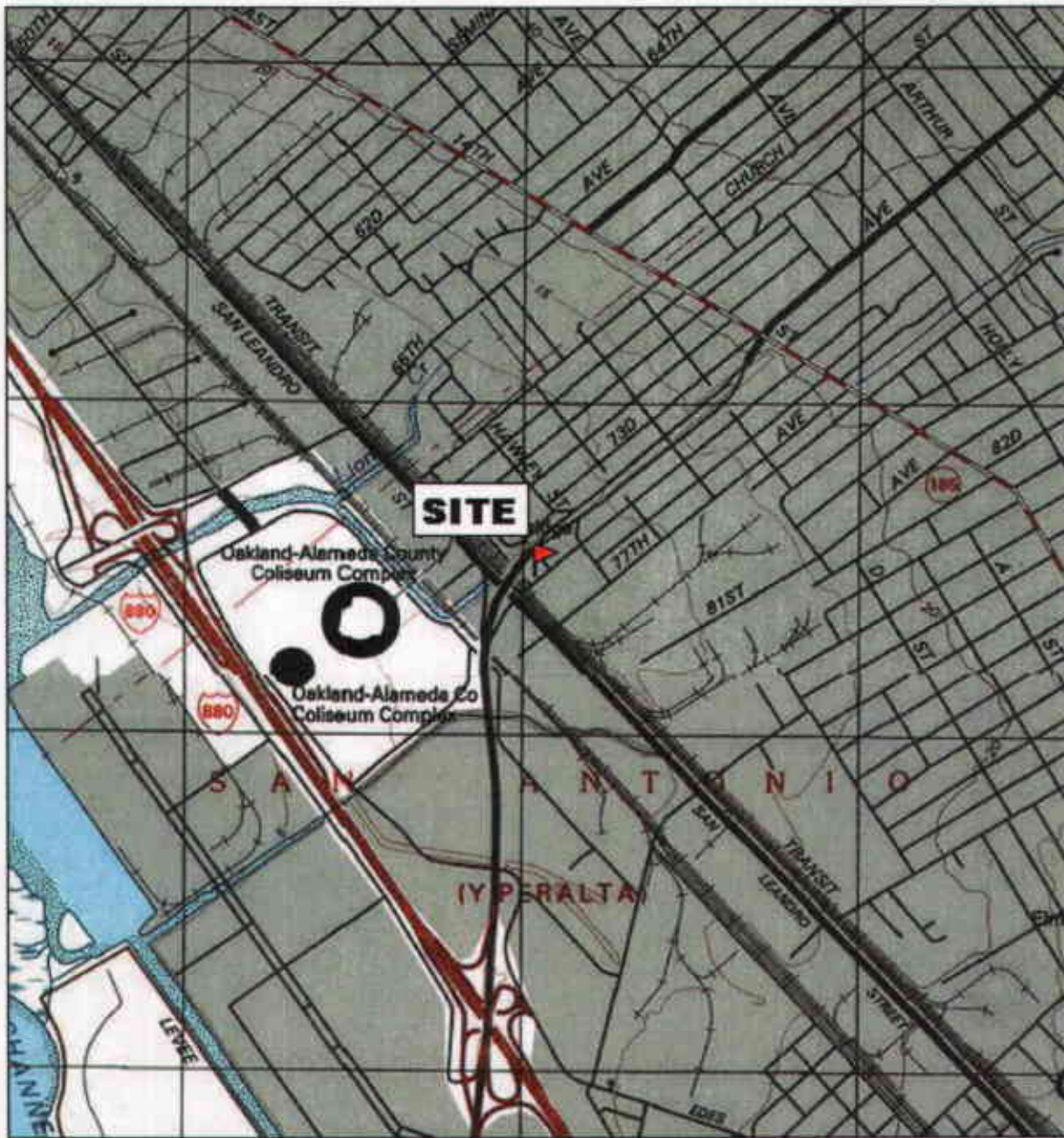
  
Peter McIntyre, P.G.  
Program Manager

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807 75<sup>th</sup> Avenue  
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Alameda County Environmental Health Services (ACEHS)  
Attn: Mr. Jerry Wickham  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

GeoTracker



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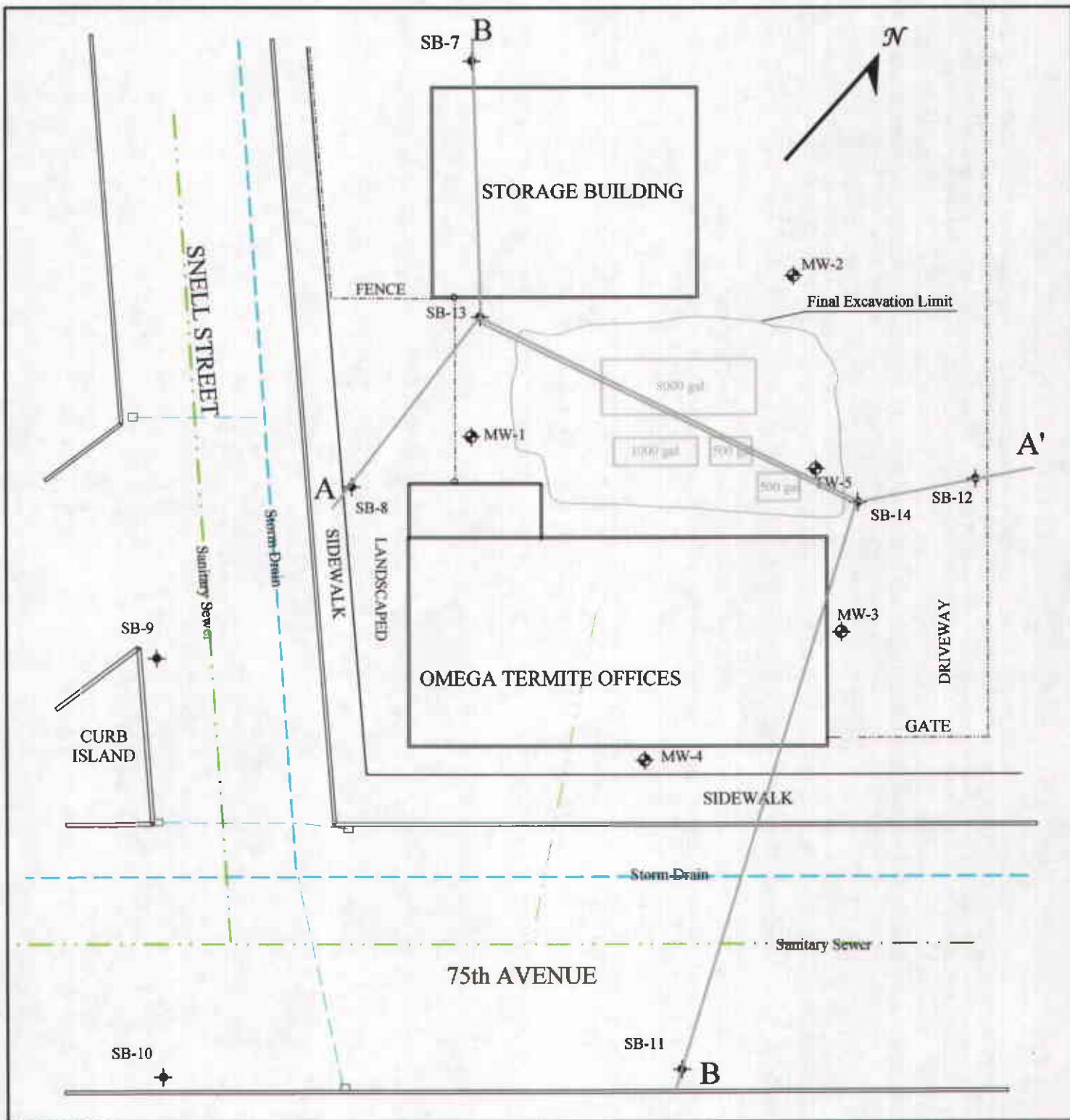
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**SITE LOCATION MAP**

807 75<sup>th</sup> AVENUE  
OAKLAND, CALIFORNIA

**FIGURE 1**  
PROJECT NO. 3190



**LEGEND**

0' 10' 20'

SCALE: 1 in = 20 ft

Sanitary Sewer

Storm Drain

Line of Section

◆ Boring Locations  
◆ Existing Shallow Zone Well

Base Drafted: R. Flory 1/23/04

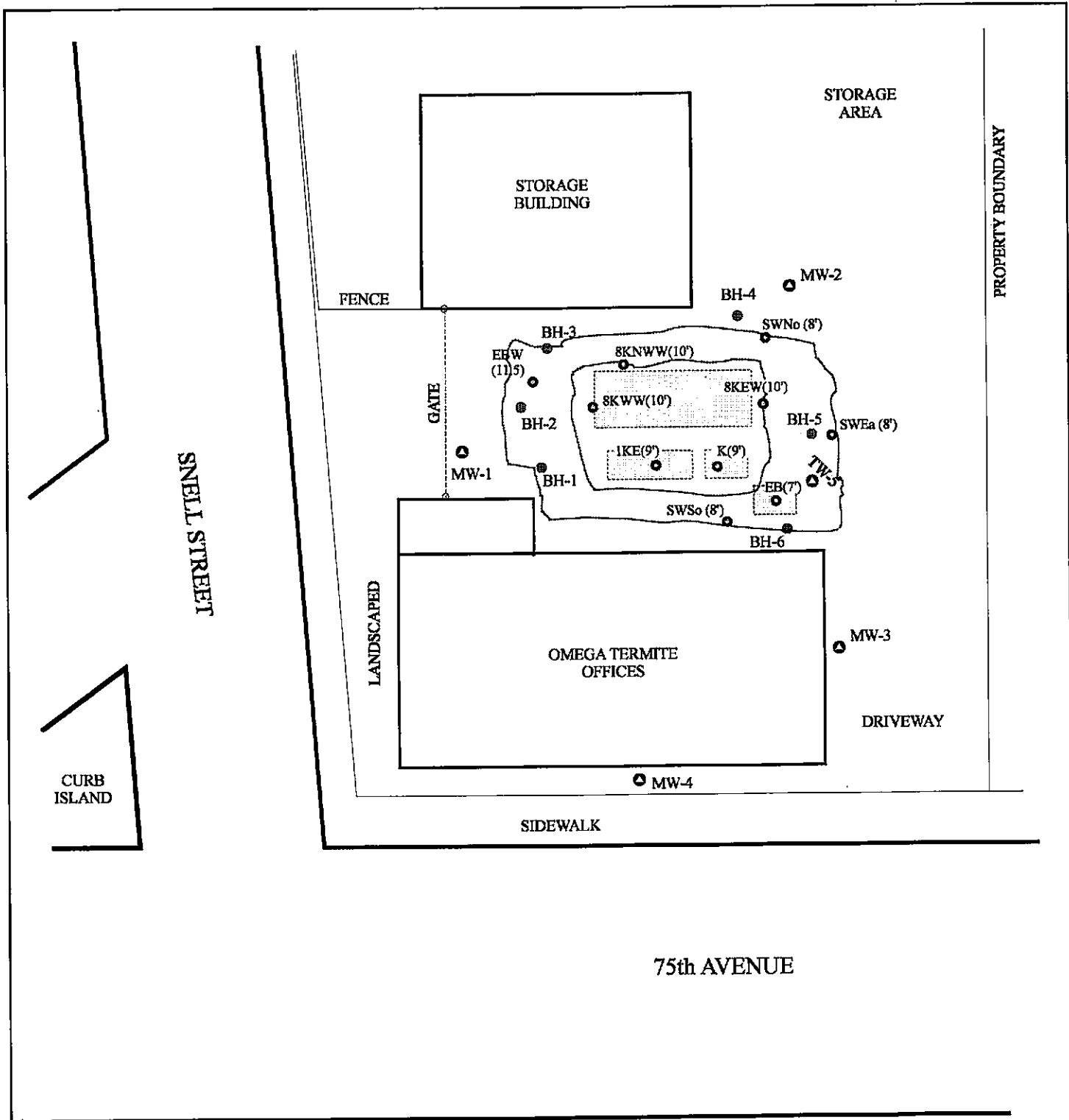
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2500 CAMINO DIABLO, STE. 100, WALNUT CREEK, CA

**SITE MAP**

807 75th AVENUE  
OAKLAND, CALIFORNIA

**FIGURE**  
**2**  
Project No. 115483



**LEGEND**

- PREVIOUS TEMPORARY BOREHOLES (1/31/97)
- EXCAVATION SOIL SAMPLE COLLECTION POINTS (9/15/96 & 3/20/00)
- ⊙ EXISTING WELLS

SCALE: 1 in = 20 ft

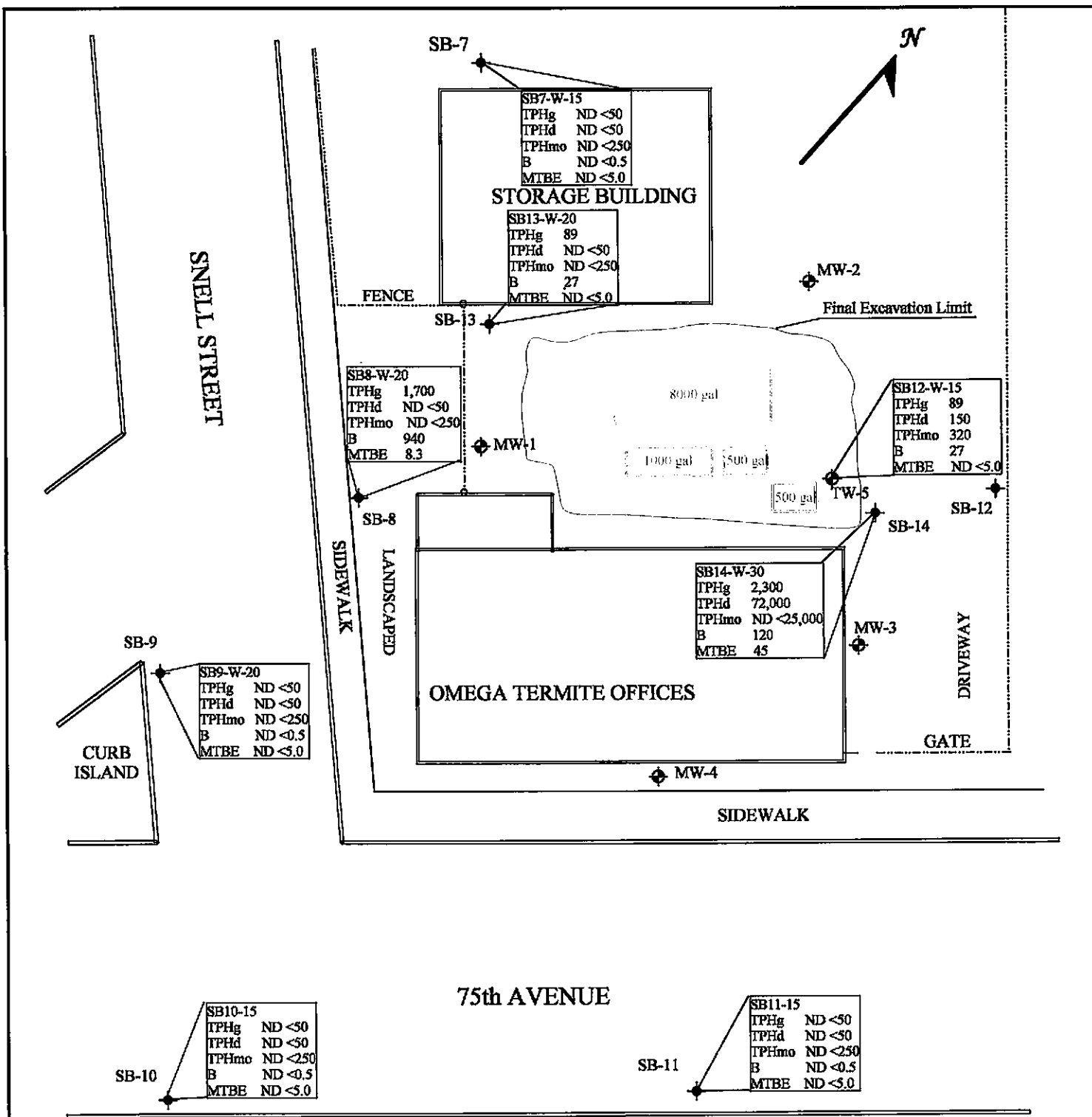
0' 10' 20'

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 2500 CAMINO DIABLO, STE. 200, WALNUT CREEK, CA

**TANK EXCAVATION  
 BORINGS AND SAMPLE LOCATIONS**

807 75th AVENUE  
 OAKLAND, CALIFORNIA

**FIGURE 3**  
 AEI PROJECT No. 115483



**LEGEND**

0' 10' 20'  
SCALE: 1in = 20 ft

- Base Drafted: R Flory 1/23/04
- ◆ MONITORING WELL LOCATIONS
  - ◆ Boring Locations
  - ◆ Existing Shallow Zone Well

SB11-W-15  
TPHg Total petroleum hydrocarbons as gasoline ug/L  
TPHd Total petroleum hydrocarbons as diesel ug/L  
TPHmo Total petroleum hydrocarbons as motor ug/L  
B Benzene ug/L  
MTBE Methyl - tert-butyl ether ug/L

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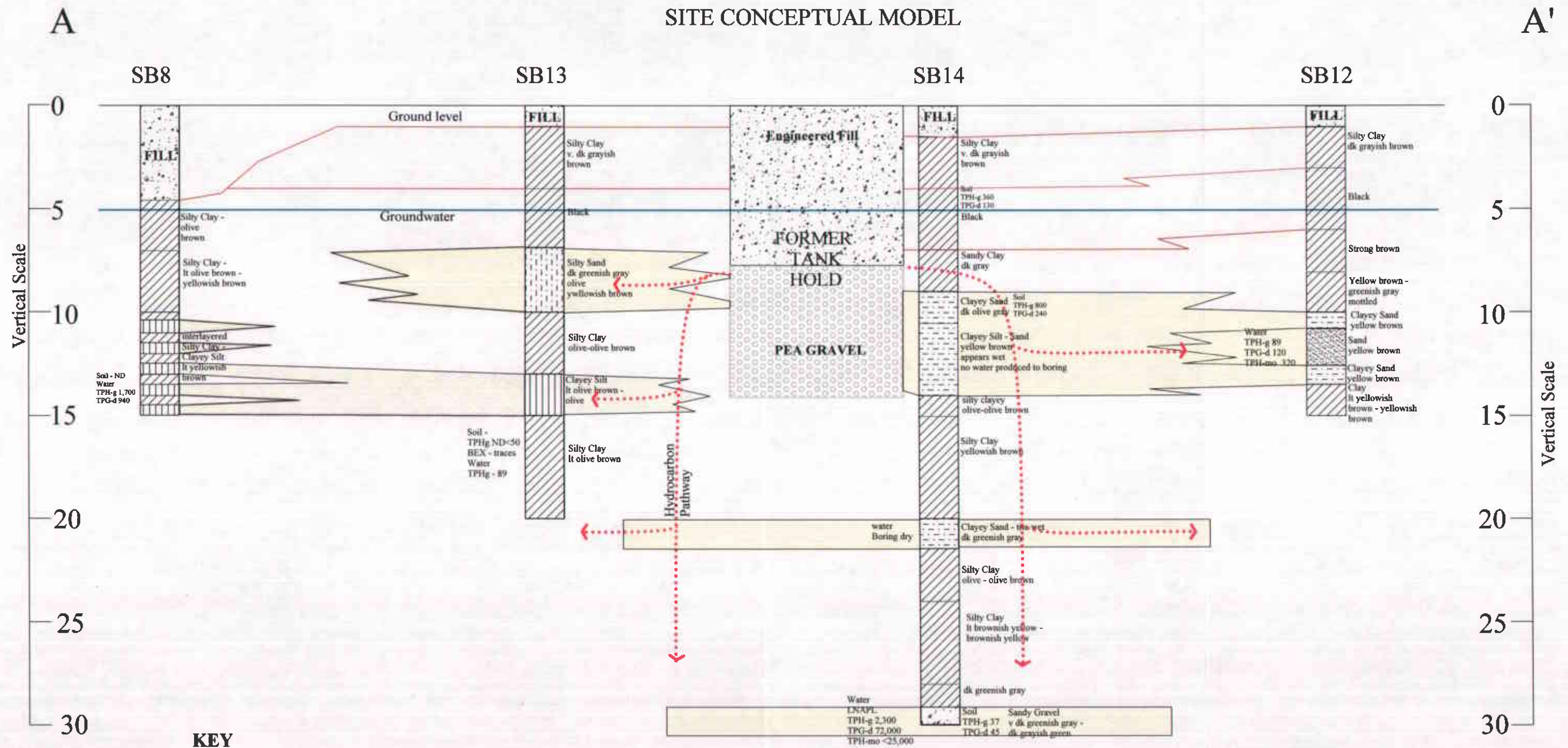
**Groundwater Analyticals  
Soil Borings (2003)**

807 75th AVENUE  
OAKLAND, CALIFORNIA

**FIGURE  
4  
Project No. 115483**



# SITE CONCEPTUAL MODEL



### KEY

- Clay
- Sandy Clay
- Silt
- Silty Sand
- Clayey Sand
- Sand
- Gravel

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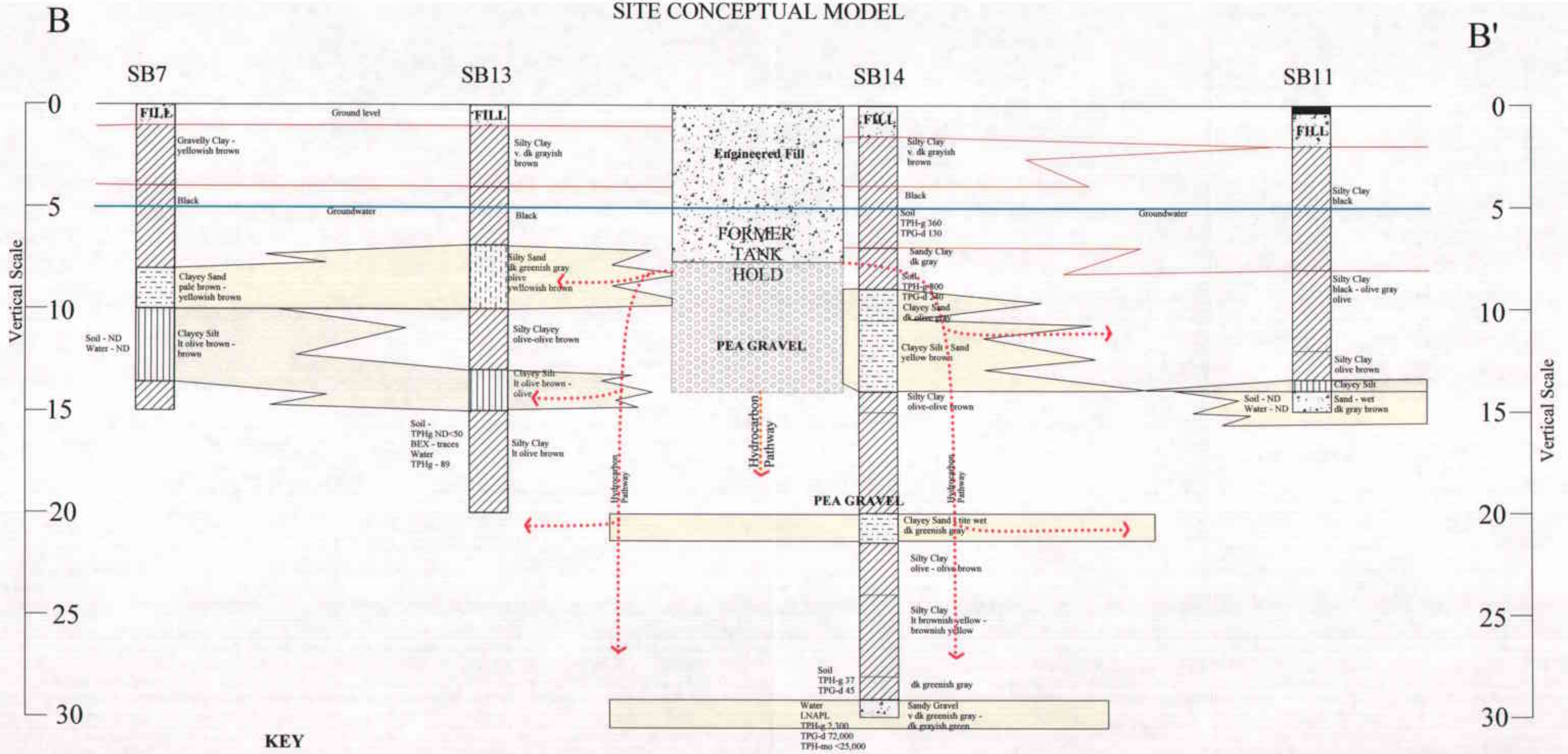
**Cross Section A - A'**

Omega Termite  
807 75th Avenue  
Oakland, California

FIGURE 5  
Project No. 115483

Drafted 12/8/05 by RFF

# SITE CONCEPTUAL MODEL



Horizontal Scale  
Approximate

### KEY

- |  |            |  |             |  |        |
|--|------------|--|-------------|--|--------|
|  | Clay       |  | Silty Sand  |  | Sand   |
|  | Sandy Clay |  | Clayey Sand |  | Gravel |
|  | Silt       |  |             |  |        |

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<b>Cross Section B - B'</b>	
Omega Termite 807 75th Avenue Oakland, California	FIGURE 6 Project No. 115483

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Figure 7 - MW-1 Hydrocarbon Trends

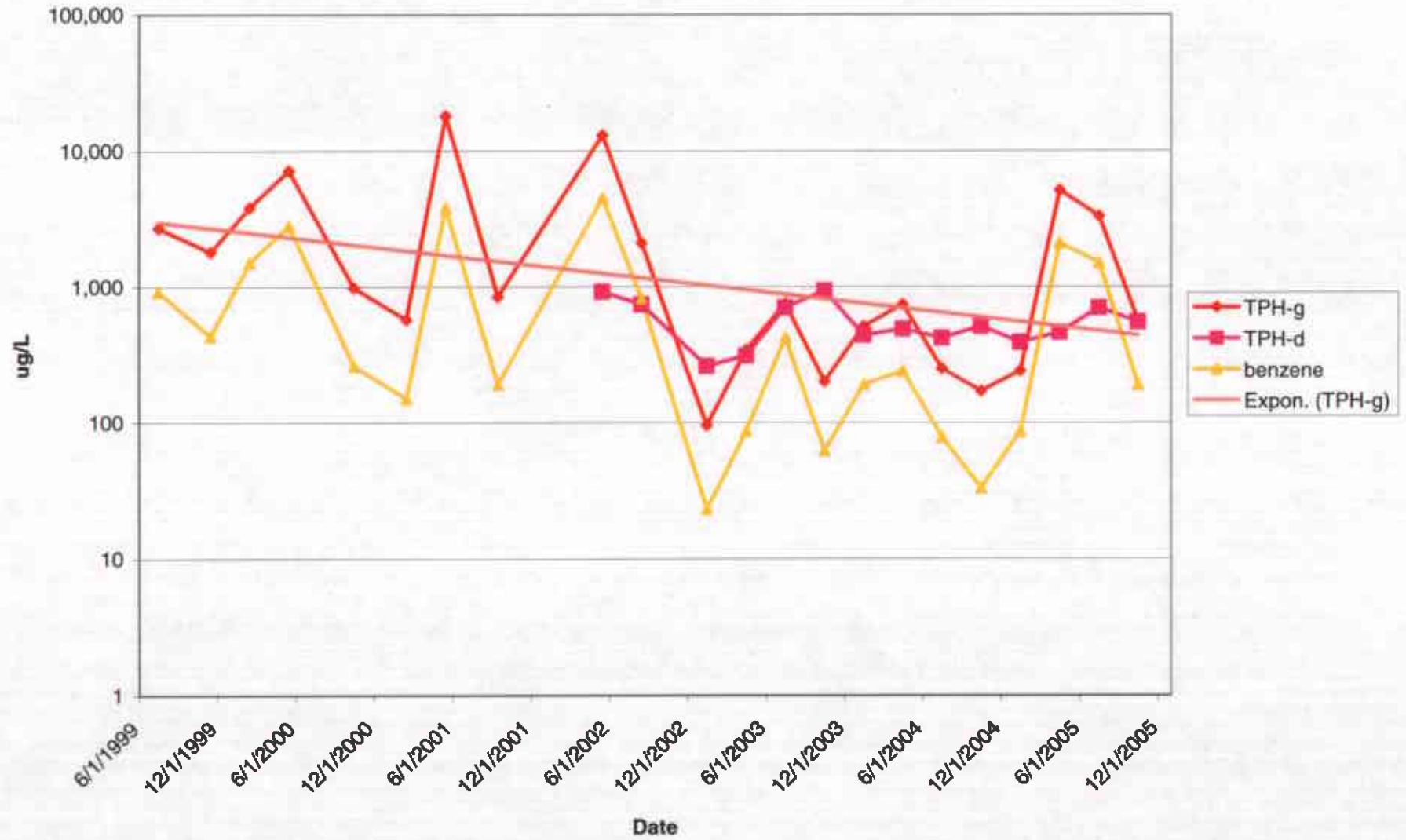


Figure 8 - MW-3 Hydrocarbon Trends

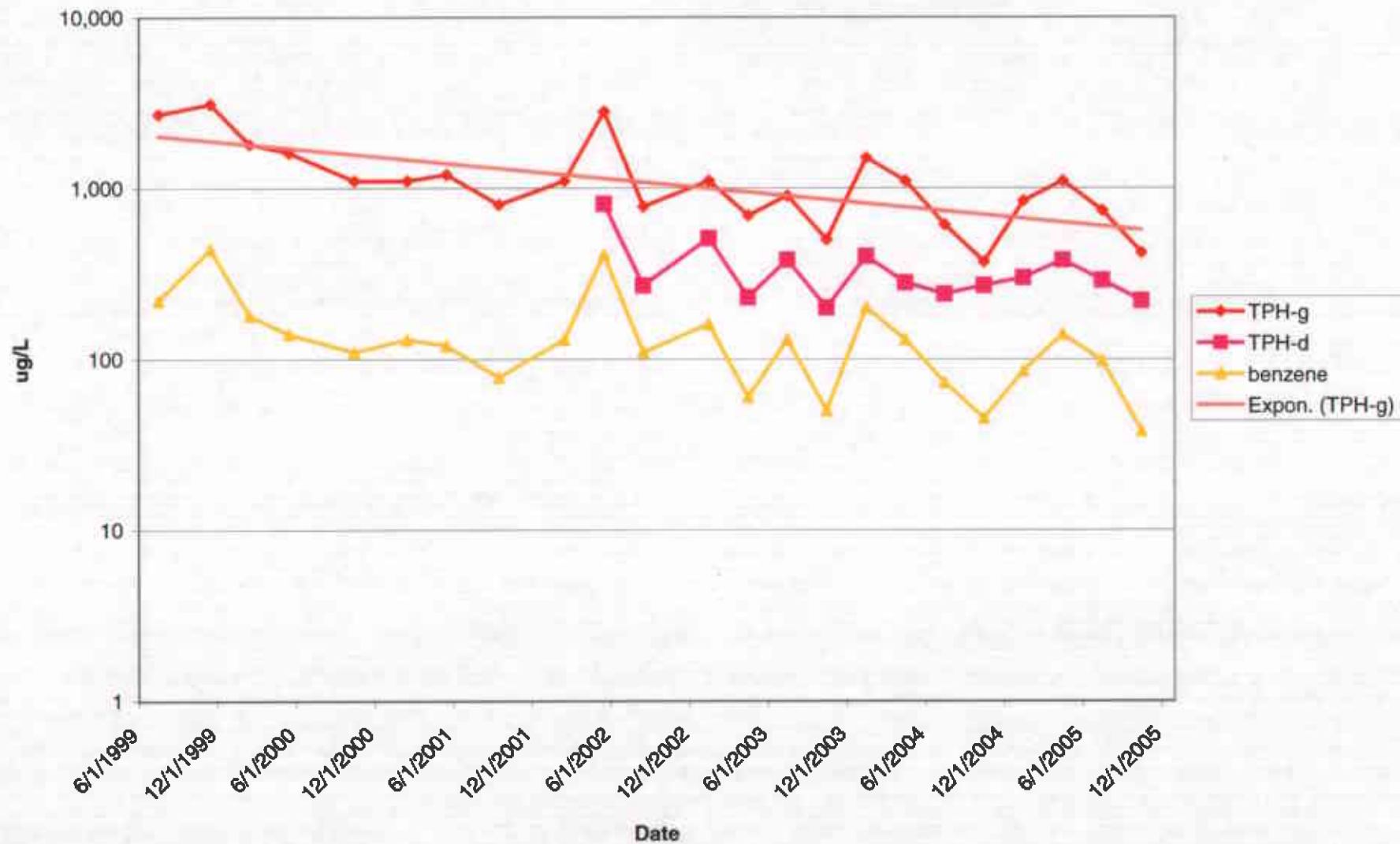


Figure 9 - MW-4 Hydrocarbon Trends

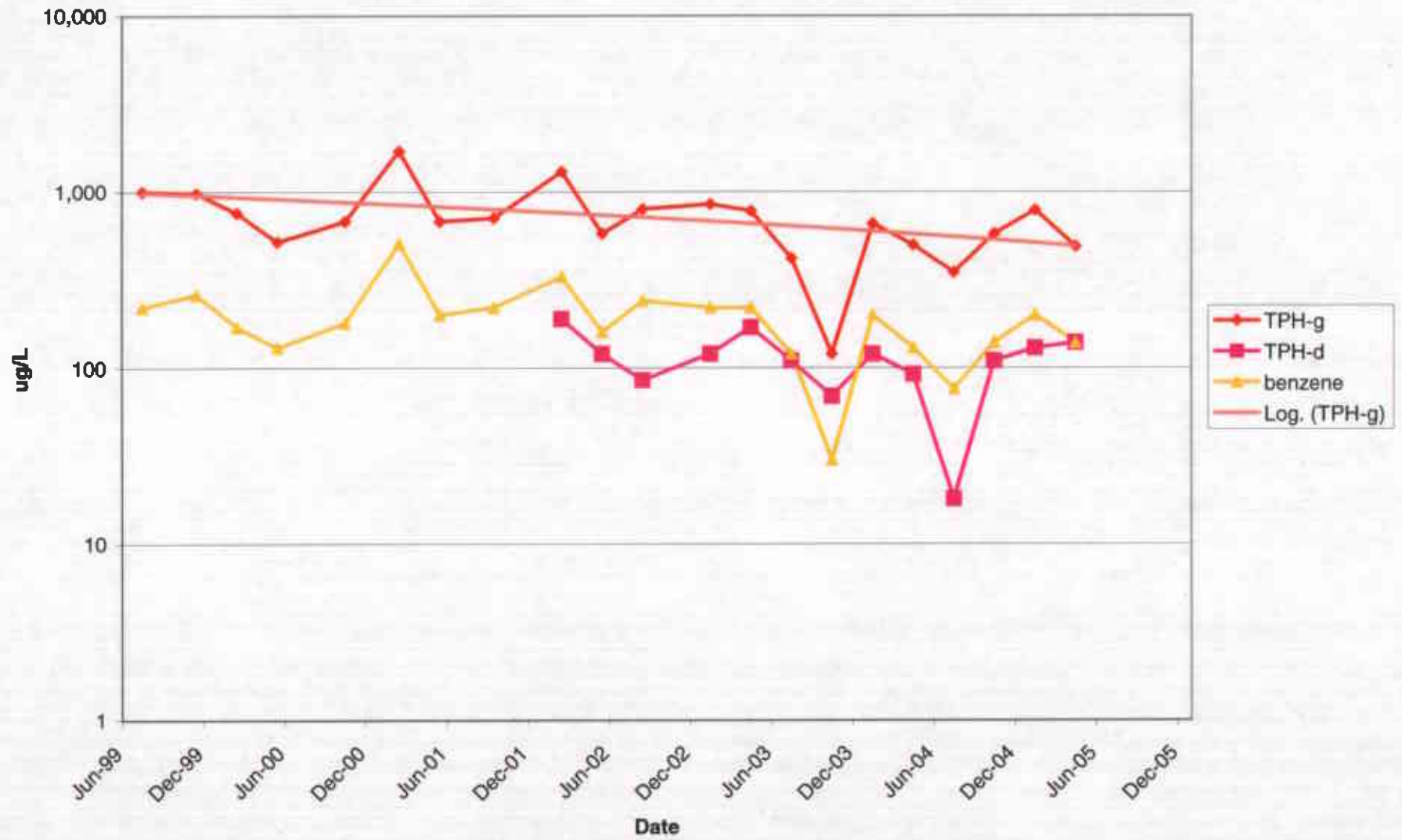
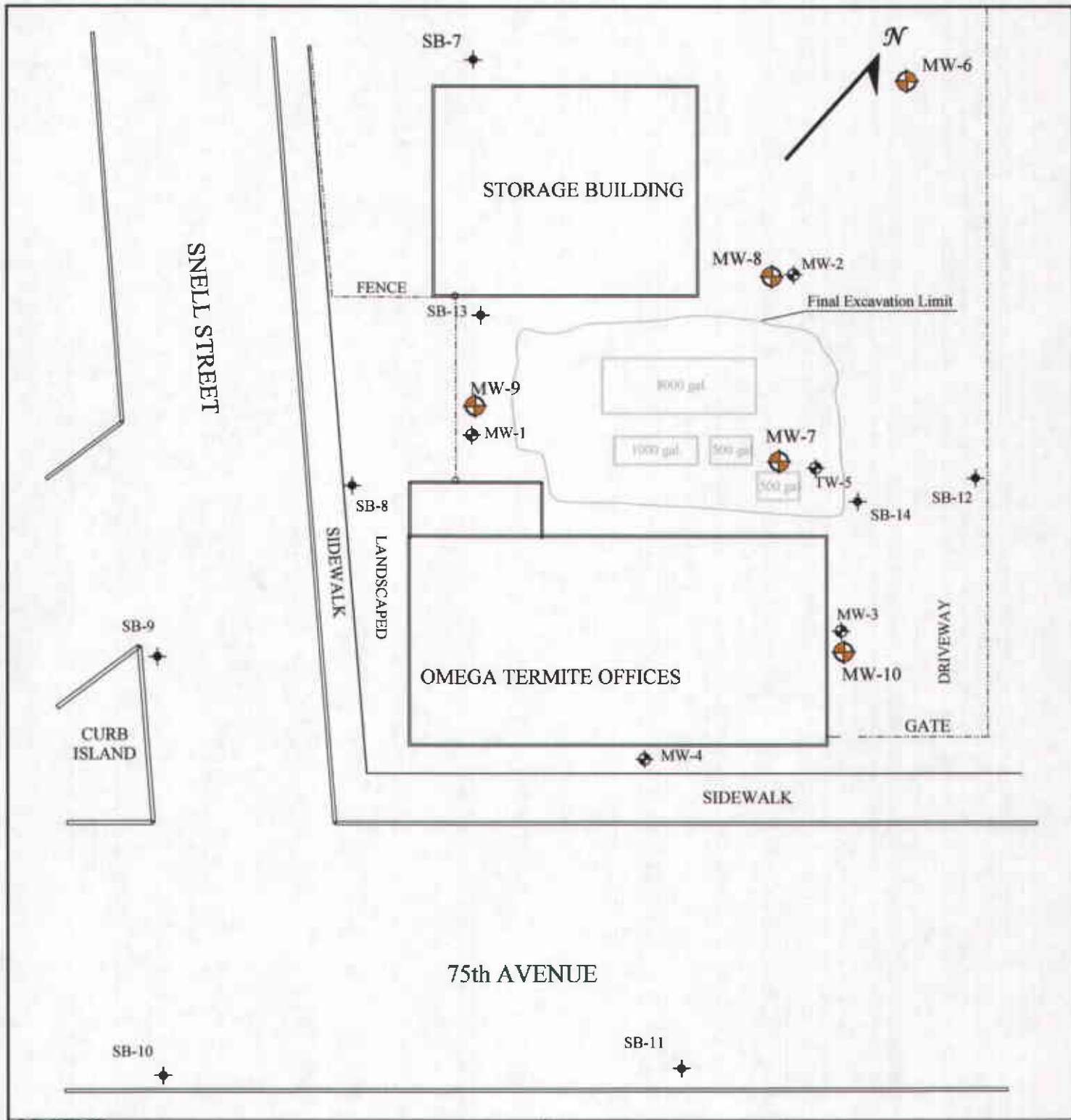


Figure 10 Hydrocarbons MW-2





**LEGEND**

0' 10' 20'  
 SCALE: 1in = 20 ft

- ◆ Boring Locations
- ◆ Existing Shallow Zone Well
- ◆ Proposed Well - 2nd Aquifer
- ◆ Proposed well - Shallow Zone

Base Drafted: R. Flory 1/23/04

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**PROPOSED WELL LOCATIONS**

807 75th AVENUE  
 OAKLAND, CALIFORNIA

**FIGURE**  
 11  
 Project No. 115483

**Table 1 Well Construction Details, Omega Termite, 807 75th Ave., Oakland, CA**

<b>Well ID</b>	<b>Date Installed</b>	<b>Top of Casing (feet)</b>	<b>Water Depth 01/25/05</b>	<b>Casing Material</b>	<b>Total Depth (feet)</b>	<b>Well Depth (feet)</b>	<b>Borehole Diameter (inches)</b>	<b>Casing Diameter (inches)</b>	<b>Screened Interval (feet)</b>	<b>Slot Size (inches)</b>	<b>Filter Pack Interval (feet)</b>	<b>Filter Pack Material (feet)</b>	<b>Bentonite Seal (feet)</b>	<b>Grout Seal (feet)</b>
MW-1	06/25/99	5.00	5.24	PVC	20	20	8 1/4	2	20.0-5.0	0.02	0.5-4.5	#3 sand	4.5-3.5	3.5-0.5
MW-2	06/25/99	5.95	6.17	PVC	20	20	8 1/4	2	20.0-5.0	0.02	0.5-4.5	#3 sand	4.5-3.5	3.5-0.5
MW-3	06/25/99	4.66	4.82	PVC	20	20	8 1/4	2	20.0-5.0	0.02	0.5-4.5	#3 sand	4.5-3.5	3.5-0.5
MW-4	06/25/99	4.59	4.83	PVC	20	20	8 1/4	2	20.0-5.0	0.02	0.5-4.5	#3 sand	4.5-3.5	3.5-0.5
TW-5	Mar. 2000	NS	6.04	PVC	10	10	NA	4	10.0-5.0	1/4" drilled	NA	NA	NA	2.0



**Table 2 Historical Soil Data, Omega Termit, 807 - 75th Street, Oakland, CA**

Sample ID	Date	TPHg mg/kg	TPHd mg/kg	TPHmo mg/kg	MTBE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl- benzene mg/kg	Xylenes mg/kg	Lead EPA 6010 mg/kg
SB7-10	10/09/03	ND<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	---
SB8-15	10/09/03	ND<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	---
SB9-15	10/09/03	ND<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	---
SB10-15	10/09/03	ND<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	---
SB11-15	10/09/03	ND<1.0	ND<1.0	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	---
SB12-15	10/10/03	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	---
SB13-14	10/10/03	ND<1.0	---	---	ND<0.05	<b>0.049</b>	ND<0.005	<b>0.014</b>	<b>0.019</b>	---
SB14-4.5	10/10/03	<b>360</b>	<b>130<sup>1,2</sup></b>	ND<5.0	ND<2.5	<b>1.4</b>	<b>1.5</b>	<b>8.0</b>	<b>37</b>	---
SB14-9.5	10/10/03	<b>800</b>	<b>240<sup>1,2</sup></b>	<b>8.2</b>	ND<2.0	<b>2.9</b>	<b>3.5</b>	<b>16</b>	<b>71</b>	---
SB14-28.0	10/10/03	<b>37<sup>3,4</sup></b>	<b>45<sup>5</sup></b>	ND<5.0	ND<0.05	ND<0.005	ND<0.005	<b>0.015</b>	<b>0.11</b>	---
SW South 8'	3/20/00	290	---	---	ND<0.5	0.84	2.0	6.3	1.3	9.1
SW North 8'	3/20/00	1.8	---	---	ND<0.05	ND<0.005	ND<0.005	0.007	0.008	7.3
SW East 8'	3/20/00	1800	---	---	ND<5.0	12	65	32	160	7.4
EB 7'	3/20/00	560	220	100	ND<1.0	0.59	4.9	7.3	40	7.5
EB West 11.5'	3/20/00	280	---	---	ND<0.21	2.7	6.6	5.2	23	5.9
MW-1 10'	6/25/99	<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	6.4
MW-1 15'	6/25/99	3.4	---	---	ND<0.05	0.092	0.022	0.054	0.14	4.8
MW-2 10'	6/25/99	420	---	---	<2	ND<0.1	2.7	4.8	8.2	6.6
MW-2 15'	6/25/99	<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	6.9
MW-3 10'	6/25/99	14	---	---	ND<0.05	0.3	0.091	0.29	0.28	6.6
MW-3 15'	6/25/99	<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	8.5
MW-4 10'	6/25/99	3.6	---	---	ND<0.05	0.71	ND<0.005	0.19	ND<0.005	6.6
MW-4 15'	6/25/99	<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005	8.5
BH-1 10'	1/31/97	4.1	---	---	ND<5.0	0.078	0.009	0.11	0.17	5.6
BH-2 10'	1/31/97	23	---	---	0.13	0.46	0.05	0.089	0.061	7.7
BH-3 10'	1/31/97	280	---	---	1.8	3.2	3.0	3.8	12	6.6
BH-4 10'	1/31/97	4.6	---	---	ND<5.0	0.03	0.025	0.36	0.46	7.8
BH-5 10'	1/31/97	800	---	---	5.0	4.3	23	15	65	6.7
BH-6 10'	1/31/97	110	---	---	0.53	3.0	0.25	0.95	0.53	5.6
8KEW (10')	9/15/96	64	---	---	0.16	1.8	1.2	1.4	2.9	11
8KWW (10')	9/15/96	2600	---	---	25	2.8	15	37	120	24
8KNWW (10')	9/15/96	360	---	---	2.5	2.5	0.83	8.5	2.4	110
1KE (9')	9/15/96	41	---	---	ND<0.1	0.077	0.99	0.86	4.7	8.5
K (9')	9/15/96	4300	---	---	ND<10	13	83	71	310	9.8

TPHg	Total petroleum hydrocarbons as gasoline	1	diesel range compounds are significant, no recognizable pattern
TPHd	Total petroleum hydrocarbons as diesel		
TPHmo	Total petroleum hydrocarbons as motor oil	2	gasoline range compounds are significant
MTBE	methyl tert-butyl ether	3	strongly aged gasoline or diesel range are significant
---	Sample not analyzed by this method	4	no recognizable pattern
		5	kerosene/kerosene range

Table 3

**Historical Groundwater Data  
Omega Termite, 807 75th Ave., Oakland, CA**

Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)	Elevation Change (ft)
MW-1	07/30/99	5.00	5.82	-0.82	---
	11/09/99	5.00	5.70	-0.70	0.12
	02/23/00	5.00	2.84	2.16	2.86
	05/26/00	5.00	5.50	-0.50	-2.66
	10/10/00	5.00	5.70	-0.70	-0.20
	02/07/01	5.00	5.25	-0.25	0.45
	05/25/01	5.00	5.25	-0.25	0.00
	09/19/01	5.00	5.51	-0.51	-0.26
	02/06/02	NM	NM	NM	NM
	05/17/02	5.00	5.30	-0.30	---
	08/20/02	5.00	5.39	-0.39	-0.09
	01/10/03	5.00	4.11	0.89	1.28
	04/14/03	5.00	4.85	0.15	-0.74
	07/14/03	5.00	5.08	-0.08	-0.23
	10/14/03	5.00	5.63	-0.63	-0.55
	01/13/04	5.00	4.53	0.47	1.10
	04/15/04	5.00	5.14	-0.14	-0.61
	07/15/04	5.00	5.42	-0.42	-0.28
	10/18/04	5.00	5.24	-0.24	0.18
	01/25/05	5.00	4.47	0.53	0.77
	04/19/05	5.00	4.66	0.34	-0.19
07/18/05	5.00	4.91	0.09	-0.25	
10/18/05	5.00	5.24	-0.24	-0.33	
11/03/05	5.00	5.31	-0.31	-0.07	
MW-2	07/30/99	5.95	6.64	-0.69	---
	11/09/99	5.95	6.42	-0.47	0.22
	02/23/00	5.95	3.31	2.64	3.11
	05/26/00	5.95	6.34	-0.39	-3.03
	10/10/00	5.95	6.52	-0.57	-0.18
	02/07/01	5.95	5.90	0.05	0.62
	05/25/01	5.95	6.08	-0.13	-0.18
	09/19/01	5.95	6.53	-0.58	-0.45
	02/06/02	5.95	5.72	0.23	0.81
	05/17/02	5.95	6.17	-0.22	-0.45
	08/20/02	5.95	NM	NM	NM
	01/10/03	5.95	5.12	0.83	---
	04/14/03	5.95	4.98	0.97	0.14
	07/14/03	5.95	5.99	-0.04	-1.01
	10/14/03	5.95	6.43	-0.48	-0.44
	01/13/04	5.95	5.42	0.53	1.01
	04/15/04	5.95	6.02	-0.07	-0.60
	07/15/04	5.95	5.27	0.68	0.75
	10/18/04	5.95	6.12	-0.17	-0.85
	04/19/05	5.95	5.61	0.34	0.51
	07/18/05	5.95	5.84	0.11	-0.23
10/19/05	5.95	6.17	-0.22	-0.33	
11/03/05	5.95	6.21	-0.26	-0.04	

**Table 3**                      **Historical Groundwater Data**  
**Omega Termite, 807 75th Ave., Oakland, CA**

<b>Well ID</b>	<b>Date</b>	<b>Well Elevation (ft amsl)</b>	<b>Depth to Water (ft)</b>	<b>Groundwater Elevation (ft amsl)</b>	<b>Elevation Change (ft)</b>
<b>MW-3</b>	07/30/99	4.66	5.35	-0.69	----
	11/09/99	4.66	5.11	-0.45	0.24
	02/23/00	4.66	2.37	2.29	2.74
	05/26/00	4.66	4.98	-0.32	-2.61
	10/10/00	4.66	5.24	-0.58	-0.26
	02/07/01	4.66	4.73	-0.07	0.51
	05/25/01	4.66	4.73	-0.07	0.00
	09/19/01	4.66	5.07	-0.41	-0.34
	02/06/02	4.66	4.69	-0.03	0.38
	05/17/02	4.66	4.80	-0.14	-0.11
	08/20/02	4.66	4.97	-0.31	-0.17
	01/10/03	4.66	3.59	1.07	1.38
	04/14/03	4.66	5.40	-0.74	-1.81
	07/14/03	4.66	4.69	-0.03	0.71
	10/14/03	4.66	5.16	-0.50	-0.47
	01/13/04	4.66	4.15	0.51	1.01
	04/15/04	4.66	4.73	-0.07	-0.58
	07/15/04	4.66	5.03	-0.37	-0.30
	10/18/04	4.66	4.85	-0.19	0.18
	01/25/05	4.66	4.13	0.53	0.72
	04/19/05	4.66	4.23	0.43	-0.10
07/18/05	4.66	4.56	0.10	-0.33	
10/18/05	4.66	4.82	-0.16	-0.26	
11/03/05	4.66	4.87	-0.21	-0.05	
<b>MW-4</b>	07/30/99	4.59	5.45	-0.86	----
	11/09/99	4.59	5.31	-0.72	0.14
	02/23/00	4.59	2.72	1.87	2.59
	05/26/00	4.59	5.07	-0.48	-2.35
	10/10/00	4.59	5.32	-0.73	-0.25
	02/07/01	4.59	4.73	-0.14	0.59
	05/25/01	4.59	4.90	-0.31	-0.17
	09/19/01	4.59	5.16	-0.57	-0.26
	02/06/02	4.59	4.65	-0.06	0.51
	05/17/02	4.59	4.90	-0.31	-0.25
	08/20/02	4.59	5.02	-0.43	-0.12
	01/10/03	4.59	3.78	0.81	1.24
	04/14/03	4.59	4.11	0.48	-0.33
	07/14/03	4.59	4.75	-0.16	-0.64
	10/14/03	4.59	5.28	-0.69	-0.53
	01/13/04	4.59	4.07	0.52	1.21
	04/15/04	4.59	4.70	-0.11	-0.63
	07/15/04	4.59	5.09	-0.50	-0.39
	10/18/04	4.59	4.86	-0.27	0.23
	01/25/05	4.59	4.02	0.57	0.84
	04/19/05	4.59	4.17	0.42	-0.15
07/18/05	4.59	4.49	0.10	-0.32	
10/18/05	4.59	4.83	-0.24	-0.34	
11/03/05	4.59	4.88	-0.29	-0.05	

Table 3

**Historical Groundwater Data  
Omega Termite, 807 75th Ave., Oakland, CA**

Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)	Elevation Change (ft)
TW-5	09/19/01	NS	6.59	----	---
	05/17/02	NS	6.56	----	0.03
	08/20/02	NS	6.62	----	-0.06
	01/10/03	NS	4.66	---	1.96
	04/14/03	NS	5.30	----	-0.64
	07/14/03	NS	5.84	---	-0.54
	07/14/03	NS	5.84	----	0.00
	10/14/03	NS	6.08	----	-0.24
	01/13/04	NS	4.83	----	1.25
	04/15/04	NS	5.64	----	-0.81
	07/15/04	NS	5.89	----	-0.25
	10/18/04	NS	5.95	----	-0.06
	01/25/05	NS	5.13	----	0.82
	04/19/05	NS	5.27	----	-0.14
	07/18/05	NS	5.76	----	-0.49
	10/18/05	NS	6.04	----	-0.28
	11/03/05	NS	6.09	----	-0.05

Depth to water measured from the top of well casing  
ft amsl = feet above mean sea level

NS - TW-5 Not surveyed

**Table 3a: Groundwater Flow Summary  
Omega Termite, 807 75th Ave., Oakland, CA**

Episode #	Date	Average Elevation (ft)	Elevation Change (ft)	Flow Direction Gradient
1	07/30/99	-0.77	-	
2	11/09/99	-0.59	0.18	0.0056 / SW
3	02/23/00	2.24	2.83	0.008 / S
4	05/26/00	-0.42	-2.66	0.003 / SW
5	10/10/00	-0.65	-0.22	0.0036 / S
6	02/07/01	-0.10	0.54	0.008 / S
7	05/25/01	-0.19	-0.09	0.006 / S
8	09/19/01	-0.52	-0.33	0.004 / S
9	02/06/02	0.05	0.56	0.005 / SE
10	05/17/02	-0.24	-0.29	0.003 / SW
11	08/20/02	-0.38	-0.13	0.002 / S
12	01/10/03	0.90	1.28	0.006 / E-NE
13	04/14/03	0.22	-0.69	0.016 / E-NE
14	07/14/03	-0.08	-0.29	.0017 / S-SE
15	10/14/03	-0.58	-0.50	0.003 / SE
16	01/13/04	0.51	1.08	0.001 / W
17	04/15/04	-0.10	-0.61	0.001 / W
18	07/15/04	-0.15	-0.05	0.001 / W
19	10/18/04	-0.22	-0.07	0.002 / N
20	01/25/05	0.49	0.71	0.002 / N
21	04/19/05	0.33	-0.17	0.001 / N
22	07/18/05	0.01	-0.32	0.0004 / S
23	10/18/05	-0.33	-0.34	0.0017 / SW

Average Elevation calculated in Excel

Only wells MW-1 through MW-4 used in Average Elevation calculations until Episode 8, episodes use MW-1 through MW-6

Table 4

**Historical Groundwater Analyses, Omega Termite, 807 75th Ave., Oakland, CA**  
**Omega Termite, 807 75th Ave., Oakland, CA**

Sample ID	Sample Collection Date	Water depth	TPH-g	TPH-d	TPHmo	MTBE	Benzene	Toluene	Ethyl benzene	Xylenes
			µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-1	07/30/99	5.82	2,700	---	---	ND<10	920	5.5	18	130
	11/09/99	5.70	1,800	---	---	ND<20	430	1.5	26	60
	02/23/00	2.84	3,800	---	---	ND<10	1,500	56	78	35
	05/26/00	5.50	7,100	---	---	ND<10	2,800	70	220	81
	10/10/00	5.70	980	---	---	ND<5.0	260	2.9	10	11
	02/07/01	5.25	570	---	---	ND<5.0	150	1.8	4.9	9.3
	05/25/01	5.25	18,000	---	---	ND<100	3,800	350	550	620
	09/19/01	5.51	840	---	---	ND<5.0	190	4.0	4.6	5.3
	05/17/02	5.30	13,000	920	---	ND<5.0	4,500	29	50	58
	08/20/02	5.39	2,100	740	ND<5000 <sup>2</sup>	ND<15	820	4.5	6.4	9.6
	01/10/03	4.11	95	260	ND<5000 <sup>2</sup>	ND<5.0	23	0.66	3.9	6.5
	04/14/03	4.85	340	310	---	ND<5.0	87	1.3	4.3	5.6
	07/14/03	5.08	750	700	---	ND<10	420	0.84	3.7	6.0
	10/14/03	5.63	200	930	460.0	ND<5.0	62	0.83	2.2	2.7
	01/13/04	4.53	510	440	ND<250	ND<5.0	190	1.7	11	18.0
	04/15/04	5.14	740	490	ND<250	ND<10	240	ND<0.5	5.0	9.6
	07/15/04	5.42	250	420	260	ND<5.0	78	ND<0.5	5.0	4.4
	10/18/04	5.42	170	510	290	ND<5.0	33	0.75	1.7	3.5
	01/25/05	4.47	240	390	ND<250	ND<5.0	86	0.82	1.3	3.0
	04/19/05	4.66	5,100	460	ND<250	ND<50	2,100	5.2	13	84
07/18/05	4.91	3,300	700	350	ND<45	1,500	2.8	13	24	
10/18/05	5.24	560	550	330	ND<5.0	190	ND<0.5	3.0	8.6	
MW-2	07/30/99	6.64	1,200	---	---	ND<10	29	2.5	51	100
	11/09/99	6.42	1,300	---	---	ND<30	26	1.1	55	32
	02/23/00	3.31	5,000	---	---	ND<10	200	18	390	440
	05/26/00	6.34	2,700	---	---	ND<10	69	13	83	68
	10/10/00	6.52	810	---	---	ND<10	17	4.7	42	46
	02/07/01	5.90	2,600	---	---	ND<10	70	15	80	100
	05/25/01	6.08	2,400	---	---	ND<5.0	75	16	85	100
	09/19/01	6.53	1,200	---	---	ND<5.0	10	8.5	46	55
	02/06/02	5.72	1,800	---	---	ND<50	14	11	58	59
	05/17/02	6.17	2,000	860	---	8.1	19	1.1	0.75	88
	01/10/03	5.12	2,000	910	ND<5000	ND<50	11	11	96	100
	04/14/03	4.98	2,400	800	-	ND<10	16	10	100	73
	07/14/03	5.99	1,900	970	-	ND<15	18	4.8	79	78
	10/14/03	6.43	1,600	1,300	ND<250	ND<10	14	5.9	87	78
	01/13/04	5.72	2,900	960	ND<250	ND<50	26	13	190	150
	04/15/04	6.02	2,700	1,100	ND<250	ND<15	28	11	120	100
	07/15/04	5.27	2,300	1,000	ND<250	ND<10	8.8	3.8	96	84
	10/18/04	5.27	2,400	910	ND<250	ND<10	8.6	8.9	68	72
	01/25/05	5.41	3,500	1,200	ND<250	ND<50	21	11	170	120
	04/19/05	5.61	3,400	1,700	ND<250	ND<15	15	7.4	150	94
07/18/05	5.84	3,400	1,400	ND<250	ND<5.0	11	9.7	100	89	
10/18/05	6.17	3,000	2,000	270	ND<5.0	8.4	6.7	88	86	

Table 4

**Historical Groundwater Analyses, Omega Termite, 807 75th Ave., Oakland, CA**  
**Omega Termite, 807 75th Ave., Oakland, CA**

Sample ID	Sample Collection Date	Water depth	TPH-g µg/L	TPH-d µg/L	TPHmo mg/L	MTBE mg/L	Benzene mg/L	Toluene mg/L	Ethyl benzene mg/L	Xylenes mg/L
MW-3	07/30/99	5.35	2,700	---	---	ND<10	220	15	130	230
	11/09/99	5.11	3,100	---	---	15	440	8.8	150	96
	02/23/00	2.37	1,800	---	---	ND<15	180	11	82	79
	05/26/00	4.98	1,600	---	---	6.4	140	10	69	63
	10/10/00	5.24	1,100	---	---	ND<10	110	4.4	63	51
	02/07/01	4.73	1,100	---	---	ND<10	130	5.1	68	65
	05/25/01	4.73	1,200	---	---	ND<6.0	120	5.4	69	64
	09/19/01	5.07	800	---	---	<5.0	78	3.5	52	37
	02/06/02	4.69	1,100	---	---	ND<10	130	4.7	77	71
	05/17/02	4.80	2,800	810	---	ND<50/2.0 <sup>1</sup>	410	23	160	210
	08/20/02	4.97	780	270	ND<5000 <sup>2</sup>	ND<10	110	2.8	63	41
	01/10/03	3.59	1,100	510	ND<5000 <sup>2</sup>	ND<20	160	3.4	98	84
	04/14/03	5.40	690	230	-	ND<5.0	60	2.3	44	34
	07/14/03	4.69	900	380	-	ND<5.0	130	2.0	70	43
	10/14/03	5.16	500	200	ND<250	ND<10	50	2.3	37	18
	01/13/04	4.15	1,500	400	ND<250	ND<30	200	6.2	120	88
	04/15/04	4.73	1,100	280	ND<250	ND<15	130	3.7	75	53
	07/15/04	5.03	610	240	ND<250	ND<5.0	73	2.1	51	29
	10/18/04	5.03	370	270	ND<250	ND<5.0	45	1.2	47	28
	01/25/05	4.13	840	300	ND<250	ND<5.0	85	2.4	68	45
04/19/05	4.23	1,100	380	ND<250	ND<5.0	140	4.0	95	59	
07/18/05	4.66	740	290	ND<250	ND<5.0	98	2.0	70	35	
10/18/05	4.82	420	220	ND<250	ND<5.0	38	1.1	35	16	
MW-4	07/30/99	5.45	340	---	---	ND<10	57	2.2	8.5	6.8
	11/09/99	5.31	1,000	---	---	ND<10	220	<0.5	17	7.1
	02/23/00	2.72	980	---	---	ND<5.0	260	7	33	27
	05/26/00	5.07	760	---	---	5.7	170	4.8	22	13
	10/10/00	5.32	520	---	---	ND<10	130	2.3	22	10
	02/07/01	4.73	680	---	---	ND<8.0	180	3.7	29	21
	05/25/01	4.90	1,700	---	---	ND<10	510	9.6	44	46
	09/19/01	5.16	680	---	---	ND<10	200	2.6	33	12
	02/06/02	4.65	710	---	---	ND<15	220	2.8	40	21
	05/17/02	4.90	1,300	190	---	3.3 <sup>1</sup>	330	5.6	61	51
	08/20/02	5.02	580	120	ND<5000 <sup>2</sup>	ND<5.0	160	1.7	34	13
	01/10/03	3.78	800	85	ND<5000 <sup>2</sup>	ND<20	240	2.5	46	28
	04/14/03	4.11	850	120	---	ND<10	220	2.7	47	26
	07/14/03	4.75	780	170	---	ND<20	220	1.4	44	23
	10/14/03	5.25	420	110	ND<250	ND<5.0	120	0.95	31	8.2
	01/13/04	4.07	120	69	ND<250	ND<10	30	0.52	8.1	4.7
	04/15/04	4.70	660	120	ND<250	ND<25	200	2.2	39	24
	07/15/04	5.09	500	92	ND<250	ND<5.0	130	1.3	35	15
	10/18/04	5.09	350	18	ND<250	ND<5.0	76	0.68	22	4.9
	01/25/05	4.02	580	110	ND<250	ND<5.0	140	1.2	37	20
04/19/05	4.17	790	130	ND<250	ND<5.0	200	1.7	51	28	
07/18/05	4.49	490	140	ND<250	ND<5.0	140	0.99	36	11	
10/18/05	4.83	320	84	ND<250	ND<5.0	72	0.59	20	4.4	

Table 4

**Historical Groundwater Analyses, Omega Termite, 807 75th Ave., Oakland, CA**  
**Omega Termite, 807 75th Ave., Oakland, CA**

Sample ID	Sample Collection Date	Water depth	TPH-g µg/L	TPH-d µg/L	TPHmo mg/L	MTBE mg/L	Benzene mg/L	Toluene mg/L	Ethyl benzene mg/L	Xylenes mg/L
TW-5	10/10/00	---	5,800	2,900	ND<250	ND<50	650	60	190	230
	02/07/01	---	720	650	450	ND<5.0	6.0	4.5	3.2	4.5
	05/25/01	---	370	420	ND<250	ND<5.0	13.0	4.1	1.6	1.3
	09/19/01	6.59	15,000	2,700,000	1,100,000	530	29	2.7	14	240
	02/06/02	---	280	55,000	18,000	ND<5.0	2.3	0.74	ND<0.5	0.70
	05/17/02	6.56	480	41,000	---	ND<5.0/ <sup>1</sup> <5.0 <sup>1</sup>	1.6	1.1	0.8	ND<0.5
	08/20/02	6.62	240	21,000	ND<5000 <sup>2</sup>	ND<5.0	8.0	1.2	1.1	0.54
	01/10/03	4.66	ND<50	1,300	ND<5000 <sup>2</sup>	ND<5.0	5.4	0.58	ND<0.5	1.10
	4/14/2003	5.30	160	2,300	---	ND<5.0	18	5.7	5.9	16
	7/14/2003	5.84	100	16,000	---	ND<5.0	1.2	0.77	0.63	1.2
	10/14/03	6.08	120	10,000	4,600	ND<5.0	1.6	1.6	ND<0.5	1.2
	01/13/04	4.83	110	2,100	1,400	ND<5.0	8.4	1.2	ND<0.5	3.9
	04/15/04	5.64	170	2,200	1,100	ND<5.0	2.5	1.2	ND<0.5	5.1
	07/15/04	5.89	81	3,000	1,600	ND<5.0	5	1.3	0.85	4.1
	10/18/04	5.89	230	3,700	1,600	ND<5.0	0.54	3.4	ND<0.5	0.93
	01/25/05	5.13	63	750	640	ND<5.0	ND<0.5	0.78	ND<0.5	1.3
	04/19/05	5.27	ND<50	1,100	660	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
07/18/05	5.76	ND<50	770	490	ND<5.0	ND<0.5	0.88	ND<0.5	ND<0.5	
10/18/05	6.04	78	1,600	1,100	ND<5.0	ND<0.5	1.6	ND<0.5	ND<0.5	
SB7-W-15	10/09/03	---	ND <50	--	--	ND <5.0	ND <0.5	ND <0.5	ND <0.5	ND <0.5
SB8-W-15	10/09/03	---	1,700	--	--	8.3	940	2.7	0.58	2.2
SB9-W-20	10/09/03	---	ND <50	--	--	ND <5.0	ND <0.5	ND <0.5	ND <0.5	ND <0.5
SB10-W-15	10/09/03	---	ND <50	--	--	ND <5.0	ND <0.5	ND <0.5	ND <0.5	ND <0.5
SB11-W-15	10/09/03	---	ND <50	--	--	ND <5.0	ND <0.5	ND <0.5	ND <0.5	ND <0.5
SB12-W-15	10/09/03	---	ND <50	150	320	ND <5.0	ND <0.5	ND <0.5	ND <0.5	ND <0.5
SB13-W-20	10/10/03	---	89	--	--	ND <5.0	27	0.53	2.4	6.2
SB14-W-30	10/10/03	---	2,300	72,000	ND <5000	45	120	7.8	35	100
BH-1	1/31/97	---	13,000	--	--	<60	770	67	530	1,800
BH-4	1/31/97	---	25,000	--	--	<50	1,300	110	1,200	2,400
BH-6	1/31/97	---	27,000	--	--	230	5,000	410	1,100	2,400
GW	9/15/96	---	4,800	--	--	<130	4,100	3,500	21,000	6,400

## Notes

mg/L micrograms per liter (parts per billion)

--- not sampled

ND not detected

TPH-g total petroleum hydrocarbons as gasoline

TPH-d total petroleum hydrocarbons as diesel

TPH-mo total petroleum hydrocarbons as motor oil

1 MTBE concentrations by methods 8021B/8260B

2 analysis for total oil and grease by method 5520