

August 12, 2005

Mr. Jerry Wickham  
Alameda Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

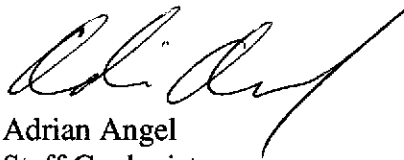
Subject: **3<sup>rd</sup> quarter 2005 Groundwater Monitoring Report**  
807 75<sup>th</sup> Street  
Oakland, CA 94621  
AEI Project No. 3190

Dear Barney:

Enclosed is the most recent quarterly monitoring report for the above referenced site.

Please call me or Robert Flory at (925) 944-2899 ext. 122 if you have any questions.

Sincerely,



Adrian Angel  
Staff Geologist

Alameda County  
AUG 17 2005  
Environmental Health

August 12, 2005

**GROUNDWATER MONITORING REPORT  
Third Quarter, 2005**

807 75th Avenue  
Oakland, California

Project No. 3190

Prepared For

Mr. Allan Kanady  
Omega Termite  
807 75th Avenue  
Oakland, CA 95621

Prepared By

**AEI Consultants**  
2500 Camino Diablo Blvd., Suite 200  
Walnut Creek, CA 94597  
(925) 283-6000

**Alameda County  
AUG 17 2005  
Environmental Health**

**AEI**

August 12, 2005

Mr. Allan Kanady  
Omega Termite  
807 75th Avenue  
Oakland, CA 95621

**Subject: Quarterly Groundwater Monitoring Report  
Third Quarter 2005**  
807 75th Avenue  
Oakland, California  
Project No. 3190

Dear Mr. Kanady:

AEI Consultants (AEI) has prepared this report to document the results of the Third Quarter 2005 groundwater monitoring event at the above referenced site (Figure 1: Site Location Map). This groundwater investigation has been performed in accordance with the requirements of the Alameda County Health Care Services Agency (ACHCSA). The purpose of this activity is to monitor groundwater quality near the location of previously removed underground storage tanks (USTs) at the site.

### **Site Description and Background**

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 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. Five soil samples 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 methyl tertiary butyl ether (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-g. Mr. Barney Chan of the ACHCSA 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. The construction details for the groundwater monitoring wells on site are summarized in Table 1. Monitoring well locations are shown on Figure 2. Historical groundwater elevation and historical groundwater sample analytical data are presented in Tables 2 and 3.

Under the direction of the ACHCSA, additional soil was removed from the excavation in March 2000. The excavation was extended to 29 by 48 feet in size and 8 feet deep at the east end of the excavation and 11.5 at the west end. During the 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). Six additional soil samples were collected from the sidewalls and bottom of the excavation.

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. The newly excavated soil was stockpiled on the northern portion of the property. A total of 7,400 gallons of hydrocarbon-impacted groundwater were pumped from the excavation, treated on-site, and discharged under an East Bay Municipal Utility District permit to the sanitary sewer system.

AEI carried out a site characterization on October 9 and 10, 2003, to address ACHCSA's requests for additional delineation of the vertical and lateral extents of impacted soil and groundwater. Seven temporary Geoprobe® boreholes (SB-7 through SB-13) were advanced to depths ranging from 15 to 20 feet bgs. One borehole, SB-14 was advanced to a depth of 30 feet bgs to determine if the second aquifer at the site had been impacted. Soil samples were collected in the vadose zone above the first aquifer and from the aquitard between the first and second aquifers. The results of chemical analyses of soil samples collected and analyzed during this investigation and earlier investigations appear to have effectively defined the limits of impacted soil in the vadose zone. Highly impacted soil appears to have been removed from the site except in the immediate vicinity of boring SB-14. The limits of soil contamination in the soil below the upper aquifer have not been defined.

The analysis of the water sample from the second aquifer (Boring SB-14, 28 feet bgs) reported TPH-g, TPH-d, MTBE and benzene at concentrations of 2,300 µg/L, 72,000 µg/L, 45 µg/L and 120 µg/L, respectively. Light non-aqueous phase liquid was reported in the on the sampler and in the water sample. The limits of hydrocarbon impact in this aquifer have not been identified.

## Summary of Activities

AEI conducted quarterly groundwater monitoring of four monitoring wells (MW-1 through MW-4) and the one temporary backfill extraction well (TW-5) on July 18, 2005. Prior to measuring depth to water measurements, the caps were removed from the top of all wells and the water level allowed to equilibrate with atmospheric pressure for at least 15 minutes. The depth to groundwater (from the top of the well casings) for each well was measured with an electric water level indicator. The wells were then purged using a submersible pump. Approximately three well volumes were removed from each well. Temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) were measured and the groundwater turbidity was visually noted during the purging of the wells.

Once the groundwater parameters stabilized, and following recovery of water levels to 90% of the original level, water samples were collected from each well. Sample waters were collected using new disposable bailers and placed into 40-milliliter (ml) Volatile Organic Analysis (VOA) vials and 1-liter amber bottles. The VOAs were capped so that no headspace or air bubbles were visible within the vials. Samples were transported in a cooler on ice under appropriate chain-of-custody protocol to McCampbell Analytical, Inc. of Pacheco, California (Department of Health Services Certification #1644).

Groundwater samples from the five wells were analyzed for TPH-g, benzene, toluene, ethyl benzene, xylenes (BTEX), and MTBE by SW8021B/8015Cm. The groundwater samples were also analyzed for TPH-d (as diesel) and TPH-mo (as motor oil) by SW8015C.

## Field Results

A hydrocarbon odor was detected in wells MW-1, MW-2 and TW-5. Groundwater levels for this sampling episode ranged from 0.09 to 0.11 feet above mean sea level (amsl). These elevations are an average of 0.28 feet lower than at the time of the previous quarterly monitoring event. The groundwater gradient calculated using wells MW-1, MW-2 and MW-3 is 0.0004 ft/ft to the south. If wells MW-3 and MW-4 are used for the calculations, gradients to the east or west can be calculated depending on which other wells is used. The gradient can be considered essentially flat.

Historically the gradient directions have been highly variable and have been toward all quadrants of the compass. Contaminant concentrations in well MW-2, located to the north of the former UST hold, have shown slow but consistent increases. This suggests that the net groundwater movement in the shallow aquifer is northward toward the creek channel, which runs along the northern border of the site.

Groundwater elevation data are summarized in Table 2. The groundwater elevation contours and the groundwater flow direction are shown in Figure 4. Refer to Appendix A for the Groundwater Monitoring Well Field Sampling Forms.

## **Groundwater Quality**

Although TPH-g and benzene concentrations decreased from last quarter in monitoring well MW-1 to 3,300 µg/L and 1,500 µg/L, respectively, concentrations remain significantly above those seen in 2004. TPH-d and TPH-mo concentrations in MW-1 increased to 700 µg/L and 350 µg/L, respectively.

The TPH-g concentration in well MW-2 remained the same at 3,400 µg/L, just below the historic high of 3,500 µg/L (1/25/05). Both TPH-d and BTEX decreased, with TPH-mo remaining below the detection limit of 250 µg/L.

TPH-g, TPH-d, and BTEX concentrations decreased in well MW-3. These concentrations are slightly above historic lows (10/18/04) for that well.

TPH-g and BTEX concentrations decreased in well MW-4. TPH-d increased slightly in MW-4.

TPH-g, benzene, ethylbenzene and xylenes were not reported above their respective detection limits in backfill well TW-5. TPH-d and TPH-mo decreased to 770 µg/L and 490 µg/L, respectively. The toluene concentration in TW-5 increased to 0.88 µg/L.

TPH-mo was not reported at or above the detection limit of 250 µg/L in well MW-2, MW-3, and MW-4. A summary of groundwater analytical data is presented in Table 3. Laboratory results and chain of custody documents are included in Appendix B.

## **Conclusions and Recommendations**

AEI Recommends continued quarterly monitoring, with the next episode scheduled for October 2005.

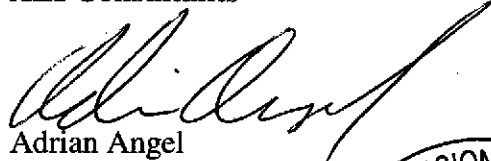
## **Report Limitations and Signatures**

This report presents a summary of work completed by AEI Consultants, including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations are based on these analyses, observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

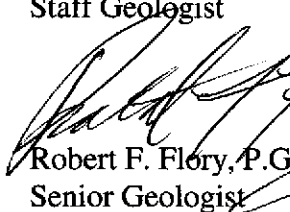
These services were performed in accordance with generally accepted practices in the environmental engineering and construction field that existed at the time and location of the work.

Please contact Robert F. Flory at (925) 944-2899 extension 122, if you have any questions regarding the findings and recommendations included in this report.

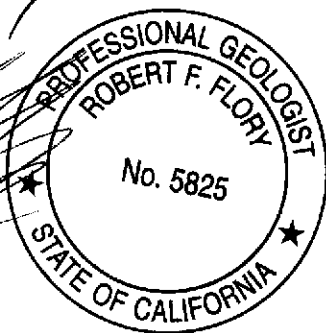
Sincerely,  
**AEI Consultants**



Adrian Angel  
Staff Geologist



Robert F. Flory, P.G.  
Senior Geologist



#### References

1. Underground Storage Tank Removal Final Report, prepared by AEI – October 10, 1996
2. Phase II Soil and Groundwater Investigation Report, prepared by AEI – March 17, 1997
3. Workplan, prepared by AEI – May 21, 1999
4. Soil Boring and Groundwater Monitoring Well Installation Report, prepared by AEI-September 16, 1999
5. Quarterly Groundwater Monitoring and Sampling Report, prepared by AEI-July 28, 2000.
6. Quarterly Groundwater Monitoring and Sampling Report, prepared by AEI-November 3, 2000.
7. Quarterly Groundwater Monitoring and Sampling Report, prepared by AEI-February 7, 2001.
8. Quarterly Groundwater Monitoring and Sampling Report, prepared by AEI-July 2, 2001.
9. Quarterly Groundwater Monitoring and Sampling Report, prepared by AEI-February 20, 2002.
10. Quarterly Groundwater Monitoring and Sampling Report, prepared by AEI-June 21, 2002.
11. Quarterly Groundwater Monitoring and Sampling Report, prepared by AEI-October 14, 2002.
12. Quarterly Groundwater Monitoring and Sampling Report, prepared by AEI-January 31, 2003.
13. Groundwater Monitoring Report, 13<sup>th</sup> Episode 2003, prepared by AEI-March 19, 2003.
14. Groundwater Monitoring Report, 14<sup>th</sup> Episode 2003, prepared by AEI-September 8, 2003.
15. Groundwater Monitoring Report, Fourth Quarter 2003, prepared by AEI-October 24, 2003.
16. Groundwater Monitoring Report, First Quarter 2004, prepared by AEI-January 29, 2004.
17. Groundwater Monitoring Report, Second Quarter 2004, prepared by AEI-May 24, 2004.
18. Groundwater Monitoring Report, Third Quarter 2004, prepared by AEI-August 23, 2004.
19. Groundwater Monitoring Report, Fourth Quarter 2004, prepared by AEI-December 6, 2004.
20. Groundwater Monitoring Report, First Quarter 2005, prepared by AEI-March 9, 2005.
21. Groundwater Monitoring Report, Second Quarter 2005, prepared by AEI-June 22, 2005.

**Figures**

- Figure 1 Site Location Map
- Figure 2 Site Map
- Figure 3 Groundwater Analytical Data
- Figure 4 Groundwater Gradient
- Figure 5 Graph TPH-g - MW-2
- Figure 6 Graph TPH-g and TPH-d with trend lines, MW-2

**Tables**

- Table 1 Well Construction Details
- Table 2 Historical Groundwater Elevations
- Table 3 Historical Groundwater Analytical Results

**Appendix A** Groundwater Monitoring Well Field Sampling Forms

**Appendix B** Laboratory Reports With Chain of Custody Documentation

Distribution:

Mr. Allan Kanady  
Omega Termite  
807 75th Avenue  
Oakland, CA 95621

2 copies

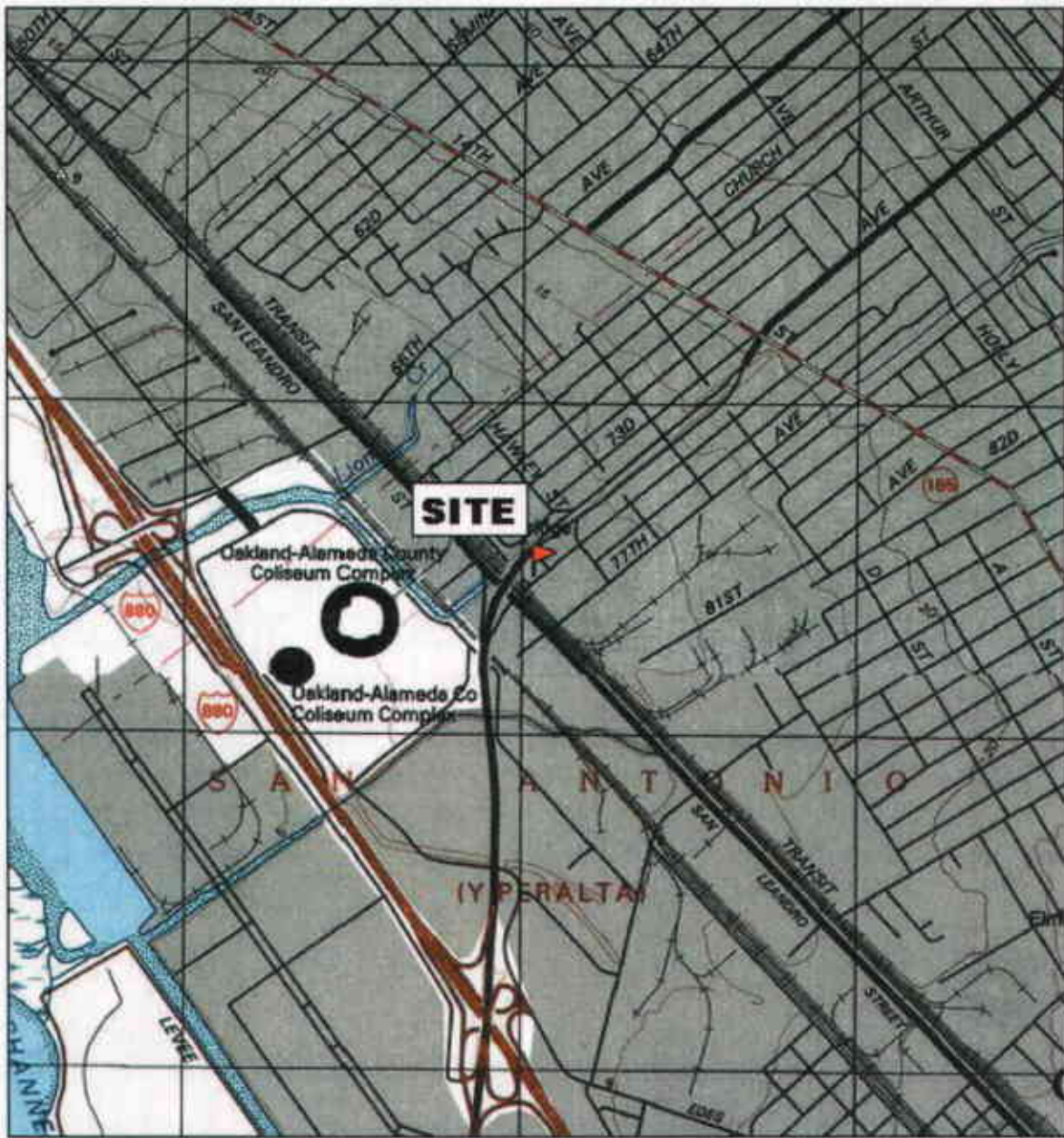
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**FIGURES**



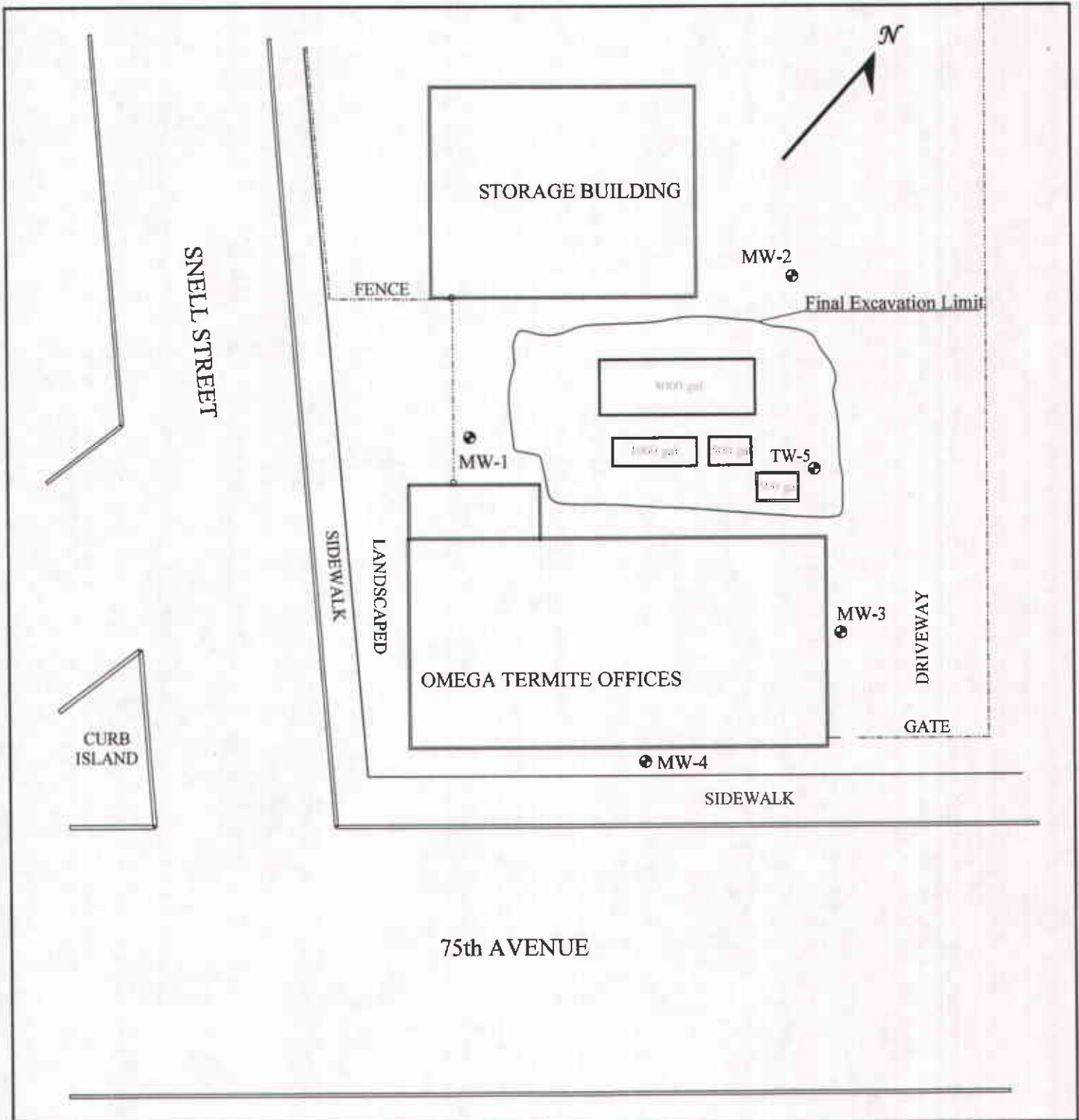


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<p><b>AEI CONSULTANTS</b> 2500 CAMINO DIABLO, STE 200, WALNUT CREEK, CA</p>	
<p><b>SITE LOCATION MAP</b></p>	
<p>807 75<sup>th</sup> AVENUE OAKLAND, CALIFORNIA</p>	<p><b>FIGURE 1</b> PROJECT No. 3190</p>



**LEGEND**

0' 10' 20'

SCALE: 1 in = 20 ft

● MONITORING WELL LOCATIONS

Base Drafted: R. Flory 1/23/04

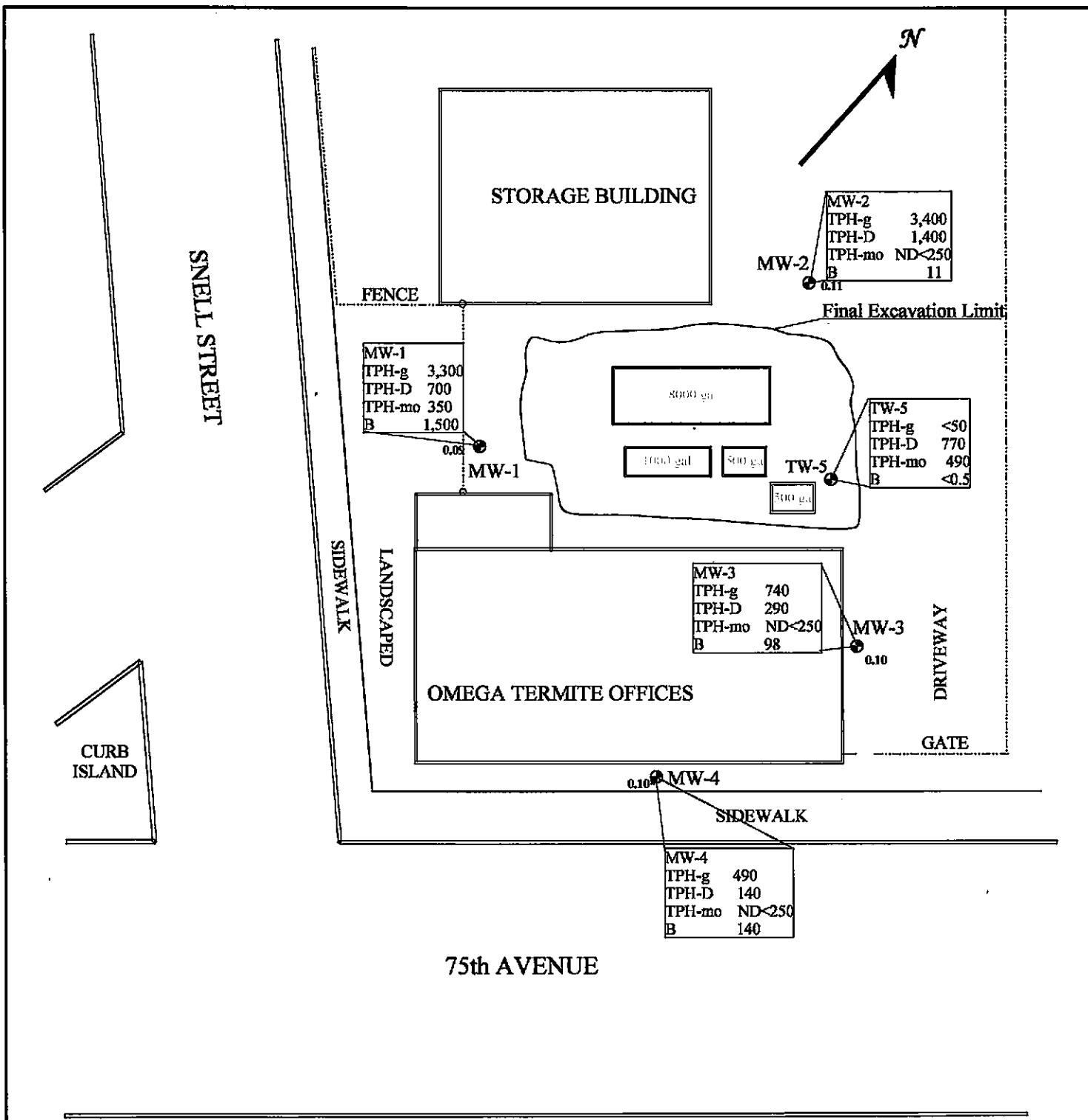
**AEI CONSULTANTS**

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

**SITE MAP**

807 75th AVENUE  
OAKLAND, CALIFORNIA

**FIGURE**  
**2**  
Project No. 3190



**LEGEND**

0' 10' 20'

SCALE: 1in = 20 ft

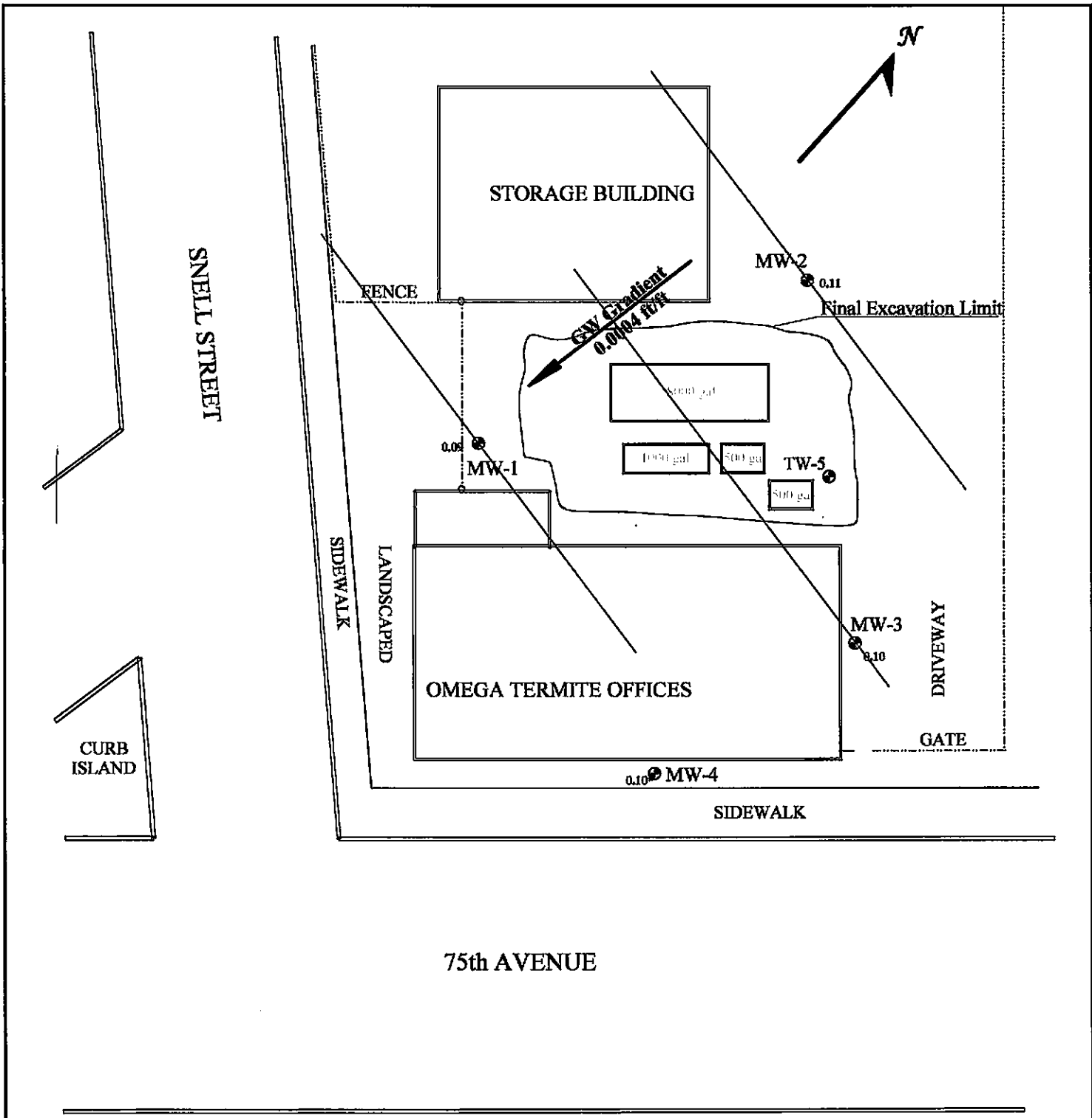
● MONITORING WELL LOCATIONS with concentrations in ug/L on 7/18/05

TPH-g - Total Petroleum Hydrocarbons as gasoline  
 TPH-d - Total Petroleum Hydrocarbons as diesel  
 TPH-mo - Total Petroleum Hydrocarbons as motor oil  
 B - benzene

**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, STE. 100, WALNUT CREEK, CA

**Groundwater Analytical Data**

807 75th AVENUE OAKLAND, CALIFORNIA	<b>FIGURE 3</b> Project No. 3190
--	-------------------------------------



<b>LEGEND</b>  SCALE: 1 in = 20 ft	Base Drafted: R Flory 1/23/04	<b>AEI CONSULTANTS</b> 2500 CAMINO DIABLO, STE. 100, WALNUT CREEK, CA	
	<b>Groundwater Gradient - 7/18/05</b>		807 75th AVENUE OAKLAND, CALIFORNIA

**TABLES**



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

Well ID	Date Installed	Top of Casing (feet)	Water Depth 01/25/05	Casing Material	Total Depth (feet)	Well Depth (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material (feet)	Bentonite Seal (feet)	Grout Seal (feet)
MW-1	06/25/99	5.00	4.91	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	5.84	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	4.56	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	4.49	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	5.73	PVC	10	10	NA	4	10.0-5.0	1/4" drilled	NA	NA	NA	2.0

**Table 2 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>MW-1</b>	07/30/99	5.00	5.82	-0.82
	11/09/99	5.00	5.70	-0.70
	02/23/00	5.00	2.84	2.16
	05/26/00	5.00	5.50	-0.50
	10/10/00	5.00	5.70	-0.70
	02/07/01	5.00	5.25	-0.25
	05/25/01	5.00	5.25	-0.25
	09/19/01	5.00	5.51	-0.51
	02/06/02	NS	NS	NS
	05/17/02	5.00	5.30	-0.30
	08/20/02	5.00	5.39	-0.39
	01/10/03	5.00	4.11	0.89
	04/14/03	5.00	4.85	0.15
	07/14/03	5.00	5.08	-0.08
	10/14/03	5.00	5.63	-0.63
	01/13/04	5.00	4.53	0.47
	04/15/04	5.00	5.14	-0.14
	07/15/04	5.00	5.42	-0.42
	10/18/04	5.00	5.24	-0.24
	01/25/05	5.00	4.47	0.53
04/19/05	5.00	4.66	0.34	
	<b>07/18/05</b>	<b>5.00</b>	<b>4.91</b>	<b>0.09</b>
<b>MW-2</b>	07/30/99	5.95	6.64	-0.69
	11/09/99	5.95	6.42	-0.47
	02/23/00	5.95	3.31	2.64
	05/26/00	5.95	6.34	-0.39
	10/10/00	5.95	6.52	-0.57
	02/07/01	5.95	5.90	0.05
	05/25/01	5.95	6.08	-0.13
	09/19/01	5.95	6.53	-0.58
	02/06/02	5.95	5.72	0.23
	05/17/02	5.95	6.17	-0.22
	08/20/02	5.95	NS	NS
	01/10/03	5.95	5.12	0.83
	04/14/03	5.95	4.98	0.97
	07/14/03	5.95	5.99	-0.04
	10/14/03	5.95	6.43	-0.48
	01/13/04	5.95	5.42	0.53
	04/15/04	5.95	6.02	-0.07
	07/15/04	5.95	5.27	0.68
	10/18/04	5.95	6.12	-0.17
	04/19/05	5.95	5.61	0.34
	<b>04/19/05</b>	<b>5.95</b>	<b>5.84</b>	<b>0.11</b>



**Table 2                      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>MW-3</b>	07/30/99	4.66	5.35	-0.69
	11/09/99	4.66	5.11	-0.45
	02/23/00	4.66	2.37	2.29
	05/26/00	4.66	4.98	-0.32
	10/10/00	4.66	5.24	-0.58
	02/07/01	4.66	4.73	-0.07
	05/25/01	4.66	4.73	-0.07
	09/19/01	4.66	5.07	-0.41
	02/06/02	4.66	4.69	-0.03
	05/17/02	4.66	4.80	-0.14
	08/20/02	4.66	4.97	-0.31
	01/10/03	4.66	3.59	1.07
	04/14/03	4.66	5.40	-0.74
	07/14/03	4.66	4.69	-0.03
	10/14/03	4.66	5.16	-0.50
	01/13/04	4.66	4.15	0.51
	04/15/04	4.66	4.73	-0.07
	07/15/04	4.66	5.03	-0.37
	10/18/04	4.66	4.85	-0.19
	01/25/05	4.66	4.13	0.53
04/19/05	4.66	4.23	0.43	
	<b>07/18/05</b>	<b>4.66</b>	<b>4.56</b>	<b>0.10</b>
<b>MW-4</b>	07/30/99	4.59	5.45	-0.86
	11/09/99	4.59	5.31	-0.72
	02/23/00	4.59	2.72	1.87
	05/26/00	4.59	5.07	-0.48
	10/10/00	4.59	5.32	-0.73
	02/07/01	4.59	4.73	-0.14
	05/25/01	4.59	4.90	-0.31
	09/19/01	4.59	5.16	-0.57
	02/06/02	4.59	4.65	-0.06
	05/17/02	4.59	4.90	-0.31
	08/20/02	4.59	5.02	-0.43
	01/10/03	4.59	3.78	0.81
	04/14/03	4.59	4.11	0.48
	07/14/03	4.59	4.75	-0.16
	10/14/03	4.59	5.28	-0.69
	01/13/04	4.59	4.07	0.52
	04/15/04	4.59	4.70	-0.11
	07/15/04	4.59	5.09	-0.50
	10/18/04	4.59	4.86	-0.27
	01/25/05	4.59	4.02	0.57
04/19/05	4.59	4.17	0.42	
	<b>07/18/05</b>	<b>4.59</b>	<b>4.49</b>	<b>0.10</b>

**Table 2                      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)
TW-5	09/19/01	ns	6.59	na
	05/17/02	ns	6.56	na
	08/20/02	ns	6.62	na
	01/10/03	ns	4.66	na
	04/14/03	ns	5.30	na
	07/14/03	ns	5.84	na
	07/14/03	ns	5.84	na
	10/14/03	ns	6.08	na
	01/13/04	ns	4.83	na
	04/15/04	ns	5.64	na
	07/15/04	ns	5.89	na
	10/18/04	ns	5.95	na
	01/25/05	ns	5.13	na
	04/19/05	ns	5.27	na
	07/18/05	ns	5.76	na

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

ns - TW-5 Not surveyed  
na - not available

**Table 1 - Groundwater Elevations, 807 75th Ave., Oakland, CA**

Episode	Date	Average Water Table Elevation (ft amsl)	Water Table Elevation Change (ft)	Hydraulic Gradient/ Flow Direction (ft/ft)
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	-0.08	-0.59	0.001 / W
18	07/15/04	-0.15	-0.08	0.001 / W
19	10/18/04	-0.22	-0.07	0.002 / N
20	01/25/05	0.37	0.58	0.002 / N
21	04/19/05	0.38	0.01	0.001 / N
22	07/18/05	0.10	-0.28	0.0004 / S

Table 3

**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 µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethyl benzene µg/L	Xylenes µg/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	
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	

Table 3

**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 µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethyl benzene µg/L	Xylenes µg/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
	<b>07/18/05</b>	<b>4.66</b>	<b>740</b>	<b>290</b>	<b>ND&lt;250</b>	<b>ND&lt;5.0</b>	<b>98.0</b>	<b>2.0</b>	<b>70</b>	<b>35</b>
	MW-4	07/30/99	5.45	340	---	---	ND<10	57	2.2	8.5
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
<b>07/18/05</b>		<b>4.49</b>	<b>490</b>	<b>140</b>	<b>ND&lt;250</b>	<b>ND&lt;5.0</b>	<b>140</b>	<b>0.99</b>	<b>36</b>	<b>11</b>

**Table 3**                      **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 µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethyl benzene µg/L	Xylenes µg/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/<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	1100	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

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

**APPENDIX A**

**MONITORING WELL FIELD SAMPLING FORMS**



**AEI CONSULTANTS**  
**GROUNDWATER MONITORING WELL FIELD SAMPLING FORM**

**Monitoring Well Number: MW-1**

Project Name:	Omega Termite	Date of Sampling:	7/18/2005
Job Number:	3190	Name of Sampler:	AN
Project Address:	807 75th Avenue Oakland		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	5.00		
Depth of Well	20.00		
Depth to Water (from top of casing)	4.91		
Water Elevation (feet above msl)	0.09		
Well Volumes Purged	3		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	7.2		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Initially dark, clears at 1.5 gallons		
Free Product Present?	No	Thickness (ft):	NA

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				2 - 40ml VOAs, 1 L Amber			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	18.13	6.85	495	0.23	-75.5	
	4	18.68	6.84	489	0.20	-64.3	
	6	18.28	6.80	523	0.09	-62.7	
	8	18.12	6.76	546	0.09	-63.3	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Initially dark, clearing at 1.5 gallons. Strong hydrocarbon odor.

**AEI CONSULTANTS**  
**GROUNDWATER MONITORING WELL FIELD SAMPLING FORM**

**Monitoring Well Number: MW-2**

Project Name:	Omega Termite	Date of Sampling:	7/18/2005
Job Number:	3190	Name of Sampler:	AN
Project Address:	807 75th Avenue Oakland		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	5.95		
Depth of Well	20.00		
Depth to Water (from top of casing)	5.84		
Water Elevation (feet above msl)	0.11		
Well Volumes Purged	3		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	7.2		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	NA

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				2 - 40ml VOAs, 1 L Amber			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	20.09	7.11	587	0.18	-74.3	
	4	19.81	7.17	590	0.13	-70.9	
	6	19.53	7.14	587	0.1	-78.2	
	8	19.22	7.07	758	0.08	-81.2	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Clear with strong hydrocarbon odor.



**AEI CONSULTANTS**  
**GROUNDWATER MONITORING WELL FIELD SAMPLING FORM**

**Monitoring Well Number: MW-3**

Project Name:	Omega Termite	Date of Sampling:	7/18/2005
Job Number:	3190	Name of Sampler:	AN
Project Address:	807 75th Avenue Oakland		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	4.66		
Depth of Well	20.00		
Depth to Water (from top of casing)	4.56		
Water Elevation (feet above msl)	0.10		
Well Volumes Purged	3		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	7.4		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	NA

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				2 - 40ml VOAs, 1 L Amber			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	19.20	4.20	785	0.30	192.9	
	4	19.79	4.18	792	0.43	431.6	
	6	18.74	4.18	796	0.22	306.3	
	8	18.66	4.09	794	0.13	152.7	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Clear with no hydrocarbon odor.

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: MW-4**

Project Name:	Omega Termitte	Date of Sampling:	7/18/2005
Job Number:	3190	Name of Sampler:	AN
Project Address:	807 75th Avenue Oakland		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	4.59		
Depth of Well	20.00		
Depth to Water (from top of casing)	4.49		
Water Elevation (feet above msl)	0.10		
Well Volumes Purged	3		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	7.4		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Clear		
Free Product Present?	No	Thickness (ft):	NA

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				2 - 40ml VOAs, 1 L Amber			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	19.47	9.55	701	1.07	102.4	
	4	20.25	9.93	676	0.86	92.0	
	6	19.70	7.09	726	0.75	113.9	
	8	19.34	6.36	753	0.53	278.8	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Clear with no hydrocarbon odors.

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: TW-5**

Project Name:	Omega Termite	Date of Sampling:	7/18/2005
Job Number:	3190	Name of Sampler:	AN
Project Address:	807 75th Avenue Oakland		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)			
Depth of Well	10.00		
Depth to Water (from top of casing)	5.76		
Water Elevation (feet above msl)			
Well Volumes Purged	3		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	9.2		
Actual Volume Purged (gallons)	10.0		
Appearance of Purge Water	Light gray, clears quickly		
Free Product Present?	No	Thickness (ft):	NA

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				2 - 40ml VOAs, 1 L Amber			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	21.80	7.28	497	0.15	-53.7	
	4	21.91	7.39	493	0.10	-52.0	
	6	21.98	7.51	491	0.07	-50.1	
	8	22.00	7.52	490	0.05	-50.9	
	10	22.01	7.52	490	0.04	-52.3	

**COMMENTS (i.e., sample odor, well recharge time & percent, etc.)**

Initially light gray, clears quickly. Strong hydrocarbon odor.

**APPENDIX B**

**LABORATORY ANALYTICAL AND  
CHAIN OF CUSTODY DOCUMENTATION**





**McC Campbell Analytical, Inc.**

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
Telephone : 925-798-1620 Fax : 925-798-1622  
Website: www.mcccampbell.com E-mail: main@mcccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3190; Omega Termite	Date Sampled: 07/18/05
		Date Received: 07/18/05
	Client Contact: Peter McIntyre	Date Reported: 07/25/05
	Client P.O.:	Date Completed: 07/25/05

**WorkOrder: 0507260**

July 25, 2005

Dear Peter:

Enclosed are:

- 1). the results of 5 analyzed samples from your #3190; Omega Termite project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



# McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560  
 Telephone : 925-798-1620 Fax : 925-798-1622  
 Website: www.mcccampbell.com E-mail: main@mcccampbell.com

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #3190; Omega Termite	Date Sampled: 07/18/05
		Date Received: 07/18/05
	Client Contact: Peter McIntyre	Date Extracted: 07/21/05-07/22/05
	Client P.O.:	Date Analyzed: 07/21/05-07/22/05

### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0507260

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	3300,a,i	ND<45	1500	2.8	13	24	1	110
002A	MW-2	W	3400,a,i	ND	11	9.7	100	89	1	98
003A	MW-3	W	740,a	ND	98	2.0	70	35	1	86
004A	MW-4	W	490,a	ND	140	0.99	36	11	1	119
005A	TW-5	W	ND	ND	ND	0.88	ND	ND	1	113

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

\* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request.



QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0507260

EPA Method: SW8021B/8015Cm		Extraction: SW5030B			BatchID: 17187		Spiked Sample ID: 0507259-006A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) £	ND	60	102	102	0	103	108	4.15	70 - 130	70 - 130
MTBE	ND	10	109	93.4	15.1	90	92.9	3.16	70 - 130	70 - 130
Benzene	ND	10	104	107	2.31	98.8	104	4.86	70 - 130	70 - 130
Toluene	ND	10	107	111	3.90	105	112	5.93	70 - 130	70 - 130
Ethylbenzene	ND	10	116	119	2.53	115	115	0	70 - 130	70 - 130
Xylenes	ND	30	103	107	3.17	107	107	0	70 - 130	70 - 130
%SS:	101	10	108	111	2.40	105	106	1.57	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 17187 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507260-001A	7/18/05	7/21/05	7/21/05 9:40 AM	0507260-001A	7/18/05	7/22/05	7/22/05 4:44 AM
0507260-002A	7/18/05	7/21/05	7/21/05 10:40 AM	0507260-003A	7/18/05	7/21/05	7/21/05 11:10 AM
0507260-004A	7/18/05	7/22/05	7/22/05 2:45 AM	0507260-005A	7/18/05	7/22/05	7/22/05 3:15 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0507260

EPA Method: SW8015C		Extraction: SW3510C			BatchID: 17172			Spiked Sample ID: N/A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(d)	N/A	1000	N/A	N/A	N/A	96.6	93	3.82	N/A	70 - 130
%SS:	N/A	2500	N/A	N/A	N/A	93	86	8.03	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 17172 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0507260-001B	7/18/05	7/18/05	7/19/05 4:43 AM	0507260-002B	7/18/05	7/18/05	7/19/05 7:41 PM
0507260-003B	7/18/05	7/18/05	7/19/05 6:24 PM	0507260-004B	7/18/05	7/18/05	7/19/05 8:09 AM
0507260-005B	7/18/05	7/18/05	7/19/05 9:21 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 % Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).  
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



AEI 0507200

**McCAMPBELL ANALYTICAL INC.**

110 2<sup>nd</sup> AVENUE SOUTH, #D7  
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

**CHAIN OF CUSTODY RECORD**

**TURN AROUND TIME**

needs ✓ EDF Required?  Yes  No  24 HR  48 HR  72 HR  5 DAY

Report To: Peter McIntyre Bill To: same  
Company: AEI Consultants  
2500 Camino Diablo, Suite 200  
Walnut Creek, CA 94597 E-Mail: pmcintyre@aeiconsultants.com  
Tele: (925) 944-2899 Fax: (925) 944-2895  
Project #: 3190 Project Name: Omega + emite  
Project Location: 007 75th Ave Oakland  
Sampler Signature: [Signature]

Analysis Request  Other  Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED								
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other					
+2 MW-1		7/18/05		4	Vials Lipton	X					X	X	X	X	X	X			
+1 MW-2						X					X	X	X	X	X	X			
+ MW-3						X					X	X	X	X	X	X			
+ MW-4						X					X	X	X	X	X	X			
+ MW-5						X					X	X	X	X	X	X			

BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015) + MD	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI					
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Relinquished By: [Signature] Date: 7/18/05 Time: 4:32p Received By: [Signature]  
Relinquished By: Date: Time: Received By:  
Relinquished By: Date: Time: Received By:

ICE/✓ GOOD CONDITION ✓ HEAD SPACE ABSENT ✓ DECHLORINATED IN LAB ✓ PRESERVATION APPROPRIATE CONTAINERS ✓ PRESERVED IN LAB ✓  
VOAS O&G METALS OTHER

**McC Campbell Analytical, Inc.**



110 Second Avenue South, #D7  
 Pacheco, CA 94553-5560  
 (925) 798-1620

**CHAIN-OF-CUSTODY RECORD**

WorkOrder: 0507260

ClientID: AEL

EDF: NO

Report to:

Peter McIntyre  
 AEI Consultants  
 2500 Camino Diablo, Ste. #200  
 Walnut Creek, CA 94597

TEL: (925) 283-6000  
 FAX: (925) 283-6121  
 ProjectNo: #3190; Omega Termite  
 PO:

Bill to:

Diane  
 All Environmental, Inc.  
 2500 Camino Diablo, Ste. #200  
 Walnut Creek, CA 94597

Requested TAT:

5 days

Date Received: 07/18/2005

Date Printed: 07/18/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
0507260-001	MW-1	Water	7/18/05	<input type="checkbox"/>	A	A	B													
0507260-002	MW-2	Water	7/18/05	<input type="checkbox"/>	A		B													
0507260-003	MW-3	Water	7/18/05	<input type="checkbox"/>	A		B													
0507260-004	MW-4	Water	7/18/05	<input type="checkbox"/>	A		B													
0507260-005	TW-5	Water	7/18/05	<input type="checkbox"/>	A		B													

Test Legend:

1	G-MBTX_W	2	PREDF REPORT	3	TPH(DMO)_W	4		5
6		7		8		9		10
11		12		13		14		15

Prepared by: Rosa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.