March 9, 2005

GROUNDWATER MONITORING REPORT First 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

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March 9, 2005

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

Subject:

Quarterly Groundwater Monitoring Report

First Ouarter 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 first 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 75th 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 μ g/L, 72,000 μ g/L, 45 μ g/L and 120 μ g/L, respectively. The limits of impact in this aquifer have not been identified.

Summary of Activities

AEI conducted quarterly groundwater monitoring of four monitoring wells (MW-1, MW-2, MW-3 and MW-4) and the one temporary backfill extraction well (TW-5) on January 25, 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 battery powered 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 turbidity was visually noted during the purging of the wells.

Once the groundwater parameters stabilized, and following recovery of water levels, 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 0.53 to 0.82 feet above mean sea level (amsl). These elevations are an average of 0.54 feet higher than at the time of the previous quarterly monitoring event. Groundwater flow direction based on monitoring wells MW-1, MW-3 and MW-4 was to the north with a hydraulic gradient of 0.001 ft/ft. The hydraulic gradient is a decrease from the previous quarter's gradient of 0.002 ft/ft. Well MW-2 was not used in the gradient calculations due to its anomalous high groundwater elevation. The groundwater level in MW-2 commonly exhibits a similar anomalous high groundwater elevation, which is thought to be due to local recharge from creek/estuary along the northwest boundary of the property. The temporary extraction well, TW-5, is not included in calculating the groundwater flow direction or the hydraulic gradient due to variation in well construction and its location in the backfilled tank excavation.

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

TPH-g concentrations increased in all wells, except TW-5. TPH-d concentrations increased in wells MW-2 MW-3 and MW-4, but decreased in wells MW-1 and TW-5. TPH-mo was reported at a concentration of 640 μg/L in temporary backfill well TW-5 and reported at below the reporting limit of 250 μg/L in wells MW-1 through MW-4.

Benzene was reported in wells MW-1 through MW-4 a concentrations of 86 μ g/L, 21 μ g/L, 85 μ g/L and 140 μ g/L, respectively. MTBE has not been detected above laboratory reporting limits in any of the wells sampled since the September 19, 2001 monitoring event.

The TPH-g and benzene reported in wells MW-1, MW-3 and MW-4 were within recent historical ranges. However, the TPH-g, TPH-d and benzene concentrations (3,500 μ g/L, 1,200 μ g and 21 μ g/L, respectively) in well MW-2 are the highest concentrations of these analytes reported since February 23, 2000. The anomalous February 23, 2000 TPH-g spike of 5,000 μ g/L was related to an extremely low groundwater level.

A summary of groundwater analytical data is presented in Table 3. Laboratory results and chain of custody documents are included in Appendix B.

Conclusions

Hydrocarbon concentrations in wells MW-1, MW-3, MW-4 and temporary backfill well TW-5 continue to show overall declining trends. However, hydrocarbons concentrations in well MW-2 continue to show an upward trend. This increase taken together with the data from the November 13, 2004 soil and groundwater investigation suggest that the site has not been completely characterized.

Recommendations

AEI believes that additional investigation is warranted to further delineate the hydrocarbons in the second aquifer previously identified in boring SB-14. However, at this time no guidance or feedback from the Alameda County Health Care Services Agency (ACHCSA) has been received. In light of the discontinuance of pre-approval for projects by the State UST Fund and the UST Fund's history of refusing reimbursement for activities not approved by an oversight agency, the expenditure of additional funds except for continuing the current groundwater monitoring program cannot be recommended at this time.

Groundwater monitoring and sampling of the five existing wells will continue, with the next episode scheduled for April 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

Distribution

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- 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
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- 13. Groundwater Monitoring Report, 13th Episode 2003, prepared by AEI-March 19, 2003.
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- 15. Groundwater Monitoring Report, Fourth Quarter 2003, prepared by AEI-October 24, 2003.
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- 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.

Figures

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

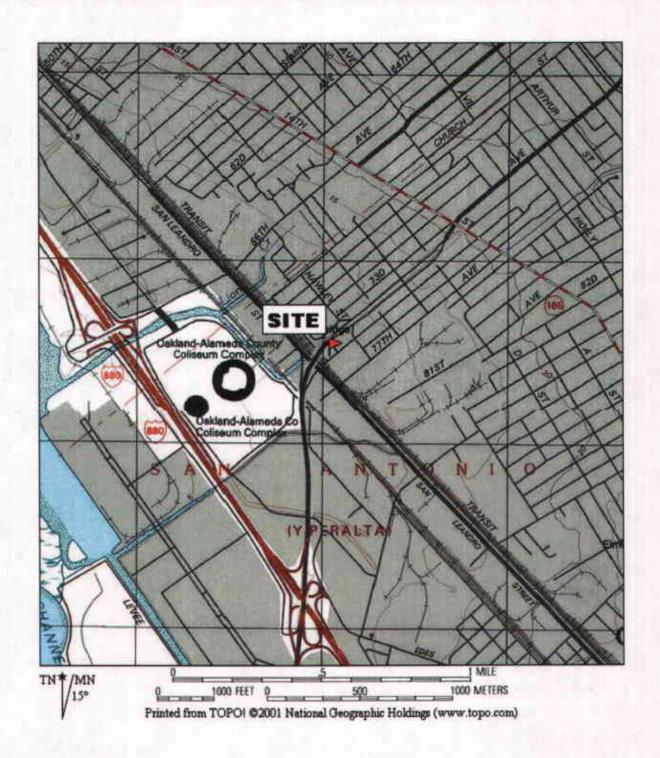
Table 1 Well Construction Details

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

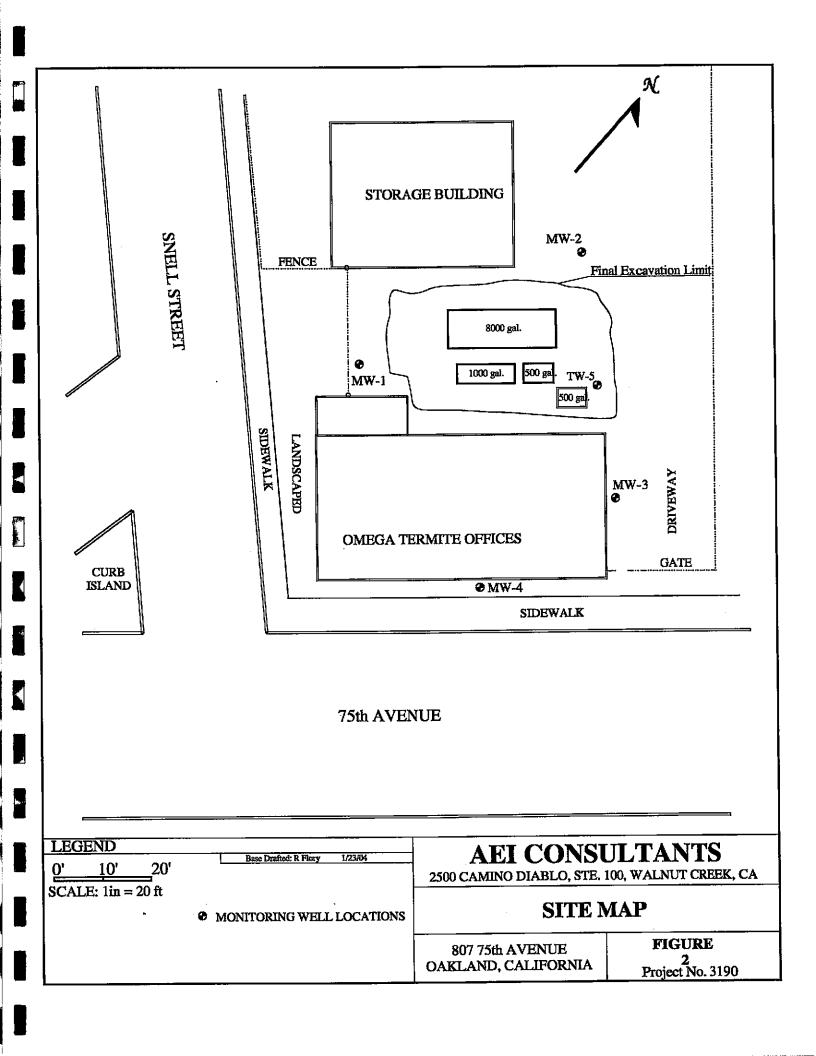


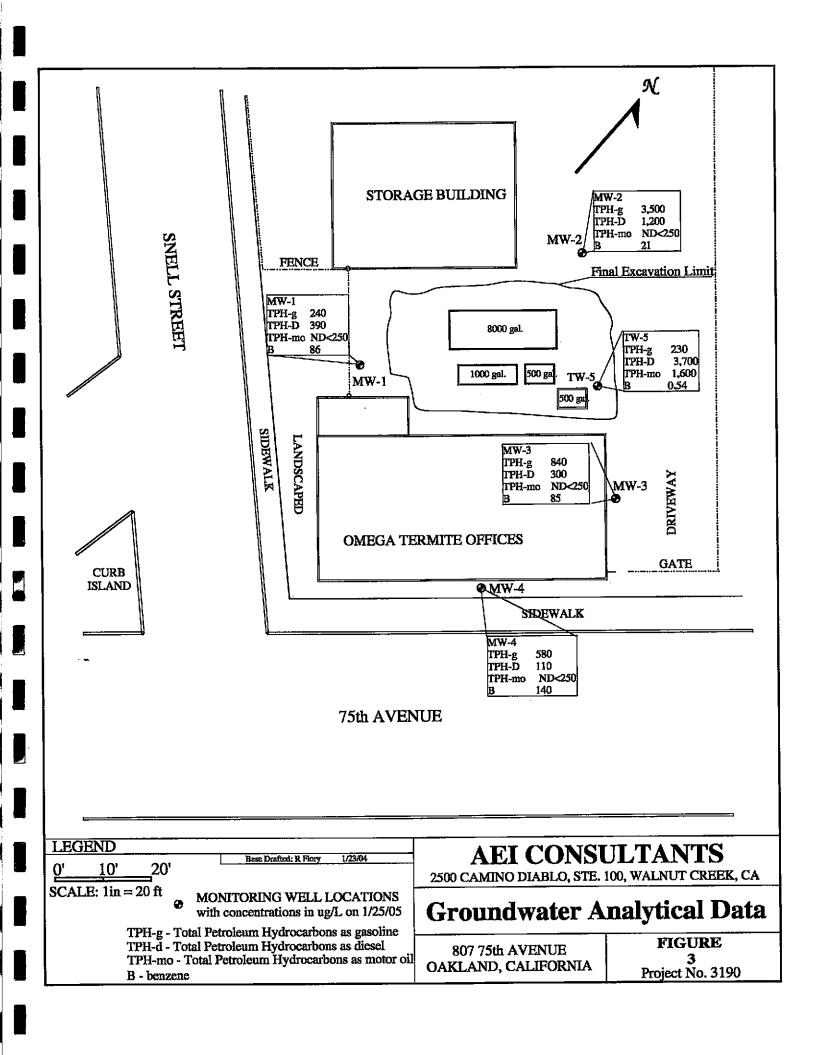
AEI CONSULTANTS 2500 CAMINO DIABLO, STE 200, WALNUT CREEK, CA

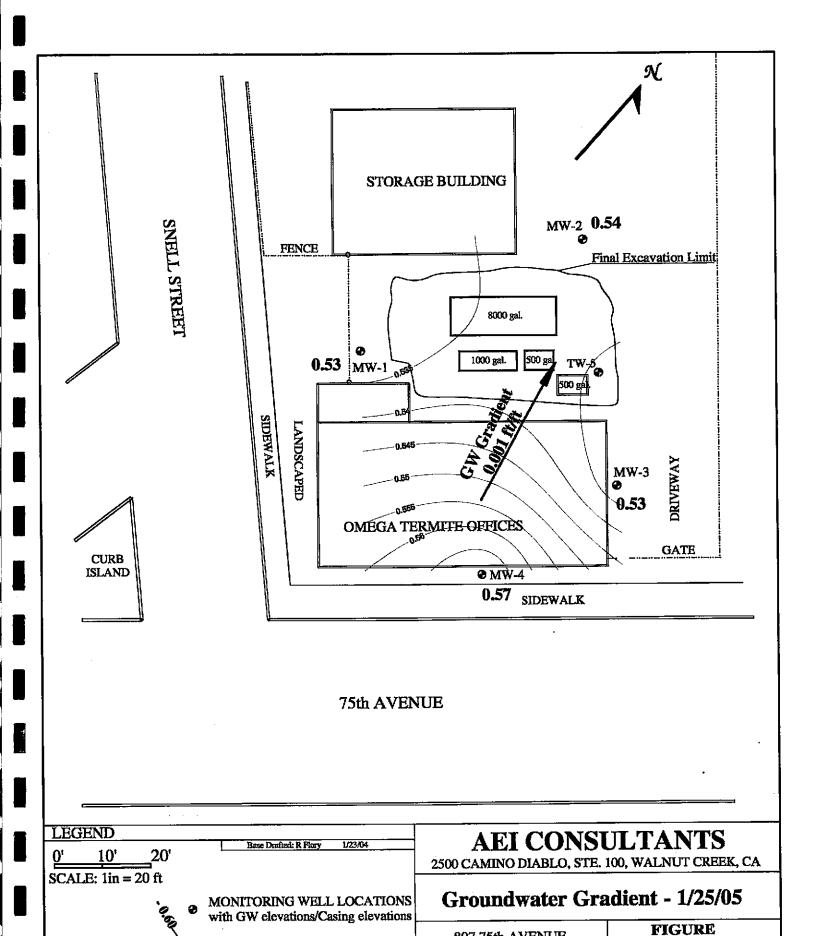
SITE LOCATION MAP

807 75th AVENUE OAKLAND, CALIFORNIA

FIGURE 1 PROJECT No. 3190







GW Contours

feet MSL

807 75th AVENUE

OAKLAND, CALIFORNIA

4 Project No. 3190

Figure 5 TPH-g MW-2



Figure 6 Recent TPH -g and TPH-d with Trend Lines, MW-2

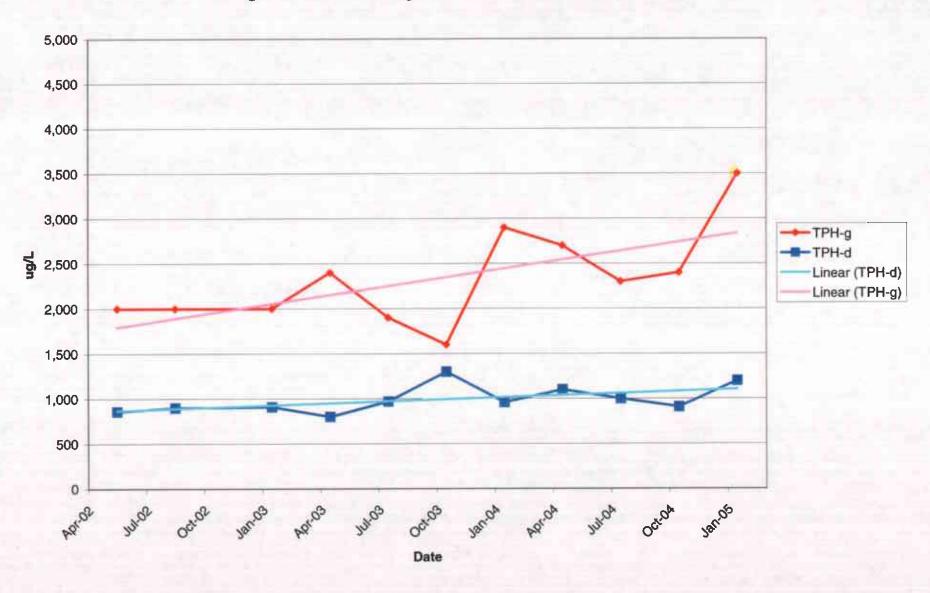


Table 1 Well Construction Details, Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Date Installed	Top of Casing (feet)		Casing Material		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	4.47	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	5.41	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	4.13	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	4.02	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	5.13	PVC	10	10	NA	4	10.0-5.0	1/4" drilled	NA	NA	NA	2.0

Table 2 - Groundwater Elevations, Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MW-1	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
MW-2	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
	01/25/05	5.95	5.41	0.54

Table 2 - Groundwater Elevations, Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
MW-3	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
MW-4	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
10 To	01/25/05	4.59	4.02	0.57

Table 2 - Groundwater Elevations, 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	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

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	$0.001 / \mathrm{W}^{-}$
18	07/15/04	-0.15	-0.08	$0.001 / \mathbf{W}$
19	10/18/04	-0.22	-0.07	0.002 / N
20	01/25/05	0.54	0.76	0.002 / N

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

Sample ID	Sample Collection	Water depth	TPH-g	TPH-d	TPHmo	MTBE	Benzene	Toluene	Ethyl benzene	Xylenes
113	Date	Сери	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
MW-1	07/30/99	5.82	2,700			ND<10	920	5.5	18	130
141 44 -1	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 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
	02/06/02	NS						_		
	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 ²	ND<15	820	4.5	6.4	9.6
		4.11	2,100 95	260	$ND < 5000^2$	ND<5.0	23	0.66	3.9	6.5
	01/10/03	4.11	93 340	310		ND<5.0	87	1.3	4.3	5.6
	04/14/03 07/14/03		750	700		ND<3.0 ND<10	420	0.84	3.7	6.0
		5.08	200	930	460.0	ND<10 ND<5.0	62	0.83	2.2	2.7
	10/14/03	5.63	510	930 440	460.0 ND<250	ND<5.0	190	1.7	11	18.0
	01/13/04 04/15/04	4.53 5.14	740	490	ND<250 ND<250	ND<3.0	240	ND<0.5	5.0	9.6
		5.42	250	490 420	260	ND<10 ND<5.0	78	ND<0.5	5.0	4.4
	07/15/04 10/18/04	5.42 5.42	1 70	510	290	ND<5.0	33	0.75	1.7	3.5
	01/25/05	3.42 4.47	240	390	ND<250	ND<5.0	86	0.82	1.3	3.0
	•			•				2.5	£1	100
MW-2	07/30/99	6.64	1,200			ND<10	29	2.5	51 55	32
	11/09/99	6.42	1,300			ND<30	26	1.1	390	32 440
	02/23/00	3.31	5,000			ND<10	200	18 13	83	68
	05/26/00	6.34	2,700			ND<10	69	4.7	63 42	46
•	10/10/00	6.52	810			ND<10	17	4.7 15	80	100
	02/07/01	5.90	2,600			ND<10	70 75	16	85	100
	05/25/01	6.08	2,400			ND<5.0 ND<5.0	10	8.5	46	55
	09/19/01	6.53	1,200			ND<50	14	11	58	59
	02/06/02	5.72	1,800	960		8.1 ¹	19	1.1	0.75	88
	05/17/02	6.17	2,000	860	NS	NS	NS	NS	NS	NS ·
	08/20/02	NS 5.12	NS	NS 910	$ND < 5000^2$	ND<50	11	11	96	100
	01/10/03	5.12	2,000		ND<2000	ND<10	16	10	100	73
	04/14/03	4.98	2,400	800 970	-	ND<10 ND<15	18	4.8	79	78
	07/14/03	5.99	1,900		ND<250	ND<13 ND<10	14	5.9	87	78
	10/14/03	6.43	1,600	1,300 960	ND<250 ND<250	ND<10 ND<50	26	13	190	150
•	01/13/04 04/15/04	5.72	2,900	1,100	ND<250 ND<250	ND<30 ND<15	28	11	120	100
		6,02 5,27	2,700	1,100	ND<250 ND<250	ND<13	8.8	3.8	96	84
	07/15/04	5.27 5.27	2,300 2,400	910	ND<250 ND<250	ND<10 ND<10	8.6	8.9	68	7 2
	10/18/04 01/25/05		2,400 3,500	1,200	ND<250 ND<250	ND<10 ND<50	21	11	170	120
	01/45/05	5.41	3,300	1,200	MD~720	7477-20	41	11	110	

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

Sample ID	Sample Collection	Water depth	TPH-g	TPH-d	TPHmo	MTBE	Benzene	Toluene	Ethyl benzen e	Xylenes
ш	Date	аеры	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
	<u></u>			F6 -	<u> </u>					
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 70
	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 ¹	410	23	160	210
	08/20/02	4.97	780	270	ND<5000 ²	ND<10	110	2.8	63	41
	01/10/03	3.59	1,100	510	$ND < 5000^2$	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	1500	400	ND<250	ND<30	200	6.2	120	88
	04/15/04	4.73	1100	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	670	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
MW-4	07/30/99	5.45	340			ND<10	57	2.2	8.5	6.8
2.2	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 ¹	330	5.6	61	51
	08/20/02	5.02	580	120	ND<5000 ²	ND<5.0	160	1.7	34	13
	01/10/03	3.78	800	85	ND<5000 ²	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

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

Sample	Sample	Water	TPH-g	TPH-d	TPHmo	MTBE	Benzene	Toluene	Ethyl	Xylenes
Щ	Collection	depth							benzene	
	Date		μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	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 ¹	1.6	1.1	0.8	ND<0.5
	08/20/02	6.62	240	21,000	ND<5000 ²	ND<5.0	8.0	1.2	1.1	0.54
	01/10/03	4.66	ND<50	1,300	ND<5000 ²	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

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

analysis for total oil and grease by method 5520

APPENDIX A

Groundwater Monitoring Well Field Sampling Forms

Monitoring Well Number:

MW-1

Project Name:	Omega Termite	Date of Sampling: 1/25/2005
Job Number:	3190	Name of Sampler: AN
Project Address:	807 75th Avenue Oakland	

MONITORIN	IG 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)	4.47					
Water Elevation (feet above msl)		0.53				
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)	7.5					
Actual Volume Purged (gallons)		8.0				
Appearance of Purge Water		clears at 2.5 gallons				
Free Product Present?	No	Thickness (ft):	NA			

ber of Sar	nples/Container S	Size		2 - 40ml VOAs	, 1 L Amber		
Time	Vol Removed (gal)	Temperature (deg C)	рН	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	17.70	7.54	777	0.03	-65	
	4	17.16	7.68	816	0.04	-69.7	
	6	17.11	7.74	869	0.05	-72.2	
	8	17.50	7.77	915	0.02	-73.2	
							11

Initially dark with strong hydrocarbon odors. Clears at 2.5 gallons.	

	Monitoring	g wei	i Number.	IVIV	V-Z
_		70-4-	of Compliant	4/25/200	_

Project Name:	Omega Termite	Date of Sampling: 1/25/2005
Job Number:	3190	Name of Sampler: AN
Project Address:	807 75th Avenue Oakland	

MONITORIN	G 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)	5.41			
Water Elevation (feet above msl)	0.54			
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	clears quickly			
Free Product Present? No Thickness (ft):			NA	

		GR	OUNDV	VATER SAMPLE	ES		
mber of San	nples/Container S	Size		2 - 40ml VOAs	As, 1 L Amber		
Time	Vol Removed (gal)	Temperature (deg C)	рН	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	18.42		1332	0.04	354	
	4	17.55	-	1341	0.02	361.6	
	6	18.02	-	1317	0.02	369.3	
	8	18.35	-	1304	0.01	369.5	

nitially light grey and strong hydrocarbon odor	
V = 0 .	

Monitoring Well Number:

MW-3

Project Name:	Omega Termite	Date of Sampling: 1/25/2005
Job Number:	3190	Name of Sampler: AN
Project Address:	807 75th Avenue Oakland	

MONITORIN	G WELL DATA		THE RES	
Well Casing Diameter (2"/4"/6")		2		
Wellhead Condition	ОК		-	
Elevation of Top of Casing (feet above msl)		4.66		
Depth of Well		20.00		
Depth to Water (from top of casing)	4.13			
Water Elevation (feet above msl)	0.53			
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)	7.6			
Actual Volume Purged (gallons)	8.0			
Appearance of Purge Water	Clears quickly			
Free Product Present?	No	Thickness (ft):	NA	

	No. in Part I	GR	OUNDV	VATER SAMPLE	ES		
mber of San	nples/Container S	Size		2 - 40ml VOAs	, 1 L Amber		
Time	Vol Removed (gal)	Temperature (deg C)	pН	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	16.86	-	1635	0.1	397.7	
	4	16.55	1.5	1666	0.12	474.5	
	6	17.79	9.73	1656	0.02	415.5	
	8	17.93	-	1651	0.02	402.4	

Initially brown with no hydrocarbon odors. Clears quickly.					

Monitoring Well Number:

MW-4

Project Name:	Omega Termite	Date of Sampling: 1/25/2005
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	ОК		-		
Elevation of Top of Casing (feet above msl)	4.59				
Depth of Well	20.00				
Depth to Water (from top of casing)	4.02				
Water Elevation (feet above msl)	0.57				
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)					
Actual Volume Purged (gallons)	8.0				
Appearance of Purge Water	Clears at 1.5 gal.				
Free Product Present?	No	Thickness (ft):	NA		

GROUNDWATER SAMPLES							
mber of San	nples/Container S	Size		2 - 40ml VOAs	, 1 L Amber		
Time	Vol Removed (gal)	Temperature (deg C)	рН	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	18.12	7.01	1435	0.22	-22.3	
	4	17.57	7.04	1391	0.27	-19.3	
	6	17.87	7.01	1443	0.22	-16.4	
	8	18.26	6.98	1532	0.13	-14.2	

Initially brown with no hydrocarbon odors. Clears at 1.5 gallons.	

Monitoring Well Number:

TW-5

Project Name:	Omega Termite	Date of Sampling: 1/25/2005
Job Number:	3190	Name of Sampler: AN
Project Address:	807 75th Avenue Oakland	

MONITORIN	G 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)		5.13	
Water Elevation (feet above msl)			
Well Volumes Purged		3	
Caculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)		9.4	
Actual Volume Purged (gallons)		10.0	
Appearance of Purge Water		Clears quickly	
Free Product Present?	No	Thickness (ft):	NA

ber of San	nples/Container 9	Size		2 - 40ml VOAs	, 1 L Amber		
Time	Vol Removed (gal)	Temperature (deg C)	рΗ	Conductivity (μS/cm)	DO (mg/L)	ORP (meV)	Comments
	2	14.94	7.88	891	0.18	-49.3	
	4	14.90	7.79	875	0.10	-42.3	
	6	14.87	7.63	860	0.04	-35.5	
	8	14.86	7.55	855	0.03	-32.8	
	10	14.85	7.48	852	0.02	-29.7	

Initially light brown with strong hydrocarbon odors. Clears quickly.					

APPENDIX B

Laboratory Reports with Chain of Custody Documentation



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

All Environmental, Inc.	Client Project ID: #3190; Omega	Date Sampled:	01/25/05
2500 Camino Diablo, Ste. #200		Date Received:	01/25/05
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Reported:	02/01/05
Wallut Cites, CA 94391	Client P.O.:	Date Completed:	02/01/05

WorkOrder: 0501320

February 01, 2005

Dear Robert:

Enclosed are:

- 1). the results of 5 analyzed samples from your #3190; Omega 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. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Angela Rydelius, Lab Manager



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

All Environmental, Inc.	Client Project ID: #3190; Omega	Date Sampled: 01/25/05
2500 Camino Diablo, Ste. #200		Date Received: 01/25/05
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 01/28/05
wamu Creek, CA 94397	Client P.O.:	Date Analyzed: 01/28/05

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

T	Gasoli method: SW5030B	_	ge (C6-C12)	•	rocarbons as nethods: SW80211		ith BTEX and		Order: 0:	501320
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	w	240,a,i	ND	86	0.82	1.3	3.0	1	109
002A	MW-2	w	3500,a	ND<50	21	11	170	120	10	115
003A	MW-3	w	840,a	ND	85	2.4	68	45	1	106
004A	MW-4	w	580,a	ND	140	1.2	37	20	1	112
005A	TW-5	w	63 , a	ND	.ND	0.78	ND	1.3	1	112
			1		- 					
7										
							-			
									1	
							+			
								-		
	ng Limit for DF =1;	w	50	5.0	0.5	0.5	0.5	0.5	1	μg/
	ns not detected at or the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/I

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in	ı 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 McCampbell 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.





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All Environmental, Inc.	Client Project ID: #3190; Omega	Date Sampled: 01/25/05
2500 Camino Diablo, Ste. #200		Date Received: 01/25/05
	Client Contact: Robert Flory	Date Extracted: 01/25/05
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 01/26/05

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C			Analytical methods: SW801		Work Order: 0501320		
Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	·DF	% SS	
0501320-001B	MW-1	w	390,a,i	ND	1	104	
0501320-002B	MW-2	w	1200,d,b	ND	1	104	
0501320-003B	MW-3	w	300,d,b	ND	1	107	
0501320-004B	MW-4	w	110, d	ND	1	109	
0501320-005B	TW-5	w	750,b,g	640	1	86	
					,		
							
	MF_SF AUG.				 		
					1		
	•						
					 	-	
	imit for DF =1;	w	50	250		μg/L	
	ot detected at or reporting limit	S	NA	NA	n	ng/Kg	

^{*} water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / SPLP / TCLP extracts are reported in µg/L.

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.



[#] cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

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

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501320

EPA Method: SW8021B/80	I5Cm E	Extraction:	SW5030E	3	Batch	ID: 14781	S	piked Sampi	le ID: 0501:	309-007A			
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (9				
, many to	µg/L	µg/L	μg/L % Rec.		% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD			
TPH(btex) £	ND	60	96	93.7	2.49	92.2	94.2	2.18	70 - 130	70 - 130			
МТВЕ	ND	10	112	113	1.19	99	100	1.30	70 - 130	70 - 130			
Benzene	ND	10	99.3	106	6.64	98.6	104	5.31	70 - 130	70 - 130			
Toluene	ND	10	101	108	6.80	99.5	104	4.60	70 - 130	70 - 130			
Ethylbenzene	ND	10	102	110	7.31	101	106	5.09	70 - 130	70 - 130			
Xylenes	ND	30	103	110	6.25	100	107	6.45	70 - 130	70 - 130			
%SS:	106	10	98	99	1.48	102	101	0.488	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

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.



NONE

McCampbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501320

EPA Method: SW8015C	E	Extraction:	SW35100		Batch	ID: 14780	S	Spiked Sample ID: N/A							
Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	e Criteria (%)					
Allalyte	µg/L µg/l		% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD					
TPH(d)	N/A	7500	N/A	N/A	N/A	95.3	94.6	0.703	N/A	70 - 130					
%SS:	N/A	2500	N/A	N/A	N/A	97	96	0.715	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:

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.

QA/QC Officer



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

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0501320

EPA Method: SW80218	3/8015Cm E	xtraction:	SW5030E	3	Batch	ID: 14787	s	piked Sampi	e ID: 0501	334-003A
Analista	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance	e Criteria (%)
Analyte	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) [£]	ND	60	92.4	93.4	1.13	108	99.3	7.92	70 - 130	70 - 130
MTBE	ND	10	109	110	0.679	108	93	15.3	70 - 130	70 - 130
Benzene	ND	10	102	106	3.45	118	103	13.9	70 - 130	70 - 130
Toluene	ND	10	104	107	2.17	113	105	7.34	70 - 130	70 - 130
Ethylbenzene	ND	10	107	110	2.72	117	106	9.51	70 - 130	70 - 130
Xylenes	ND	30	110	110	0	107	107	0	70 - 130	70 - 130
%\$S:	108	10	98	100	1.82	113	103	9.60	70 - 130	70 - 13Ó

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

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.



CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0501320

ClientID: AEL

Report to:

Robert Flory

All Environmental, Inc.

(925) 798-1620

2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597

TEL: FAX: (925) 283-6000 (925) 283-6121

ProjectNo: #3190; Omega

PO:

Bill to:

Requested TAT:

Date Received:

5 days

Diane

All Environmental, Inc.

Walnut Creek, CA 94597

2500 Camino Diablo, Ste. #200

Date Printed:

01/25/2005

01/25/2005

							-		I	Request	ed Test	s (See le	egend b	elow)					
Sample ID	ClientSamplD	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
								1	-1			-I			1	Т			
0501320-001	MW-1	Water	1/25/05	44	А	A	D					ļ	ļ			-	 	ļ	+-
0501320-002	MW-2	Water	1/25/05		Α		B				ļ		<u>_</u>			<u> </u>			
0501320-003	MW-3	Water	1/25/05		Α		В					<u></u>				ļ			
0501320-004	MW-4	Water	1/25/05		Α		В	ļ			<u> </u>					-	ļ. .		┷
0501320-005	TW-5	Water	1/25/05		Α		В]						<u> </u>	\perp

Test Legend:

1	G-MBTEX_W
6	
11	

2	PREDF REPORT
7	
12	

3	TPH(DMO)_W
8	
13	

4	
9	
14	

5	
10	
15	

Prepared by: Melissa Valles

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.

AEI Consultants									CHAIN OF CUSTODY RECORD TURN AROUND TIME																										
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Tele: (925) 944-2 Project #: 3190	2899 ext. 1.	<u> </u>			t Nar										E	TPH Multi-range diesel/motor oil	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)		BTEX ONLY (By EPA 602 / 8020)	<u>_</u>				PAH's / PNA's by EPA 625 / 8270 / 8310		İ	Toatal lead							
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