

Phone: (925) 283-6000

Fax: (925) 283-6121

February 21, 2001

Ro 508

Mr. Barney Chan ACHSA 1131 Harbor Bay Pkwy, Suite 250 Alameda, CA 94502

Subject:

**Quarterly Groundwater Monitoring Report** 

807 75<sup>th</sup> Avenue Oakland, CA 95621 AEI Project No. 3190

Dear Mr. Chan:

Enclosed is the report for the sixth episode of sampling at the referenced site.

Please call Mr. Peter McIntyre of myself at (925) 283-6000 if you have any questions.

Sincerely,

Orion Alcalay

**Environmental Scientist** 

February 21, 2001

Ro 508

# QUARTERLY GROUNDWATER MONITORING REPORT

Sixth Sampling Episode February-2001

807 75<sup>th</sup> Avenue Oakland, CA 95621

Project No. 3190

Prepared For

Omega Termite Control 807 75<sup>th</sup> Avenue Oakland, CA 95621

Prepared By

AEI Consultants
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549
(800) 801-3224

**AEI** 

February 21, 2001

Mr. Allan Kanady Omega Termite Control 807 75<sup>th</sup> Avenue Oakland, CA 95621

RE: Quarterly Groundwater Monitoring and Sampling Report

Sixth Episode-February 2001 807 75<sup>th</sup> Avenue Oakland, California Project No. 3190

### Dear Mr. Kanady:

AEI Consultants (AEI) has prepared this report to document the results of the fourth episode of groundwater sampling 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 in the vicinity of the previous locations of the underground storage tanks at the site. This report presents the findings of the Sixth Episode of groundwater monitoring and sampling conducted on February 7, 2001.

### Site Description and Background

The property is located on the northern corner of Snell Street and 75<sup>th</sup> Avenue in the City of Oakland. The site currently supports the operation of Omega Termite Control (Figure 1: Site Location Map).

On September 15, 1996, three gasoline underground storage tanks (USTs) were removed from the property by AEI. The tanks consisted of one 500-gallon, one 1,000-gallon and one 8,000-gallon tank. The former locations of the USTs are shown in Figure 2.

Soil samples were collected from beneath the 500-gallon and 1,000-gallon gasoline tanks and from the three sidewalls of the 8,000-gallon tank excavation. Concentrations of total petroleum hydrocarbons as gasoline (TPH-g) were present in the soil beneath the 500-gallon UST at concentrations of 4,300 mg/kg. Minor concentrations (41 mg/kg) of TPH-g were present beneath the 1,000-gallon tank. The three sidewall samples collected from the 8,000-gallon tank excavation indicated concentrations of TPH-g above 100 mg/kg were present in the western and northwestern samples.

Groundwater was encountered during the excavation of the 8,000-gallon tank. A groundwater grab sample collected from the excavation indicated significant concentrations of petroleum hydrocarbon contaminants (Ref. # 1).

AEI issued a workplan, dated January 10, 1997, to the Alameda County Health Care Services Agency (ACHCSA). The workplan defined the extent and magnitude of petroleum hydrocarbon contamination in the vicinity of the former tanks. Six soil borings were advanced on January 31, 1997. This investigation indicated that groundwater was impacted with up to 27,000  $\mu$ g/L of TPH-g and 5,000  $\mu$ g/L of benzene. Significant concentrations of TPH-g were also detected in the soil up to ten feet bgs from the excavation (Ref. # 2).

In response to a request by the ACHCSA for further investigation at the site, AEI submitted a workplan to the ACHCSA on May 21, 1999 for the installation and subsequent sampling of four groundwater monitoring wells at the site (Ref. # 3). This workplan was approved by Barney Chan of the ACHCSA and the four wells were installed in June, 1999 (Ref. # 4).

On March 16, 2000, the former UST excavation was expanded to remove soil contaminated with gasoline. Prior to removal of the soil, the water that was in the excavation was pumped into a Baker tank and stored on-site. The excavation was expanded in all directions. The contaminated soil was stockpiled on the north portion of the property and covered with visqueen. During the over-excavation activities a 500-gallon UST was discovered on the east corner of the excavation. The tank was removed and additional contaminated soil was removed from the area of the former tank.

As requested by the ACHCSA, AEI installed a 10-foot length of 4-inch ID PVC pipe in the area of the former UST to act as a temporary extraction well (TW-5).

The analytical results of the current and prior groundwater sampling episodes are included in Table 2. This report describes the results of the subsequent groundwater monitoring event that took place on February 7, 2001.

### **Summary of Activities**

AEI measured the depth to groundwater and collected water samples from the four wells (MW-1 through MW-4) and the temporary extraction well (TW-5) on February 7, 2001. The well locations are shown in Figure 2. The depth from the top of the well casings was measured prior to sampling with an electric water level indicator. The wells were purged and sampled using clean disposable Teflon bailers.

Temperature, pH, specific conductivity and dissolved oxygen were measured during the purging of the wells. Once these parameters stabilized, a water sample was collected. AEI removed at least 3 well volumes.

Water was poured from the bailers into 40 ml VOA vials and 1-Liter amber bottles and capped so that no head space or visible air bubbles were seen within the sample containers. Samples were shipped on ice under proper chain of custody protocol to McCampbell Analytical, Inc. of Pacheco, California (State Certification #1644).

Groundwater samples from the five wells were submitted for chemical analysis for TPH-g (EPA Method 5030/8015), methyl tertiary butyl ether (MTBE) (EPA Method 8020/602), benzene, toluene, ethylbenzene, and xylenes (BTEX) (EPA Method 8020/602). Additionally, the sample from TW-5 was analyzed for TPH as diesel and TPH as motor oil (EPA Method 8015/3550).

### **Field Results**

No sheen or free product were encountered during monitoring activities. Hydrocarbon odor was detected in monitoring wells MW-1 through MW-3. Groundwater levels for the current monitoring episode ranged from -0.56 to 0.05 feet below Mean Sea Level (MSL). These groundwater elevations were an average of 0.438 foot higher than the previous monitoring episode. The direction of the groundwater flow at the time of measurement was towards the south. The latest calculated groundwater gradient is .008 foot per foot.

Groundwater elevation data is summarized in Table 1. The groundwater elevation contours and the groundwater flow direction are shown in Figure 3. Refer to Appendix B for the Groundwater Monitoring Well Field Sampling Forms.

### Groundwater Quality

Since the previous monitoring episode, concentrations of TPH-g, benzene and MTBE have decreased in monitoring well MW-1 and temporary extraction well TW-5. Concentrations of TPH-g and benzene have increased in wells MW-2 and MW-4 up to 2,600 ug/L and 180 ug/L, respectively. TPH-g in MW-3 remained the same as the previous sampling result; however, benzene increased slightly. Concentrations of MTBE were below detectable laboratory limits in all the wells. TPH as diesel decreased in the temporary extraction well (TW-5); however, TPH as motor oil increased up to 450 ug/L.

Dissolved oxygen content was monitored during this episode of sampling. The concentration of dissolved oxygen in the wells, ranged between 0 to 2.66 mg/L, which is relatively the same as levels recorded during the previous sampling episode. These relatively low concentrations may be indicative of natural bio-degradation of hydrocarbons, in which hydrocarbons are oxidized to produce carbon dioxide and water.

A summary of groundwater quality data is presented in Table 2. Laboratory results and chain of custody documents are included in Appendix B.

### Conclusions

Since the initiation of groundwater monitoring at the site, a general decrease in TPH-g and benzene concentrations has occurred; however, based on the elevated concentrations still present in the groundwater, quarterly groundwater monitoring and sampling of the wells will continue as required by the ACHCSA. The next monitoring and sampling episode is scheduled for April 2001. All wells will be monitored for dissolved oxygen during subsequent episodes and the groundwater in well TW-5 will continue to be analyzed for TPH-g, TPH as diesel, BTEX, MTBE, and TPH as motor oil.

### References

- 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
- 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.

### 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 which existed at the time and location of the work.

Please contact the undersigned or Peter McIntyre for questions regarding the findings outlined in this report.

Sincerely,

**AEI Consultants** 

Orion Alcalay

Environmental Scientist

J. P. Derhak

Principal

Figure 1

Site Location Map

Figure 2

Site Plan

Figure 3

Groundwater Contour Map

Table 1

Groundwater Elevations

Table 2

Groundwater Sample Analytical Results

Appendix A

Groundwater Monitoring Well Field Sampling Forms

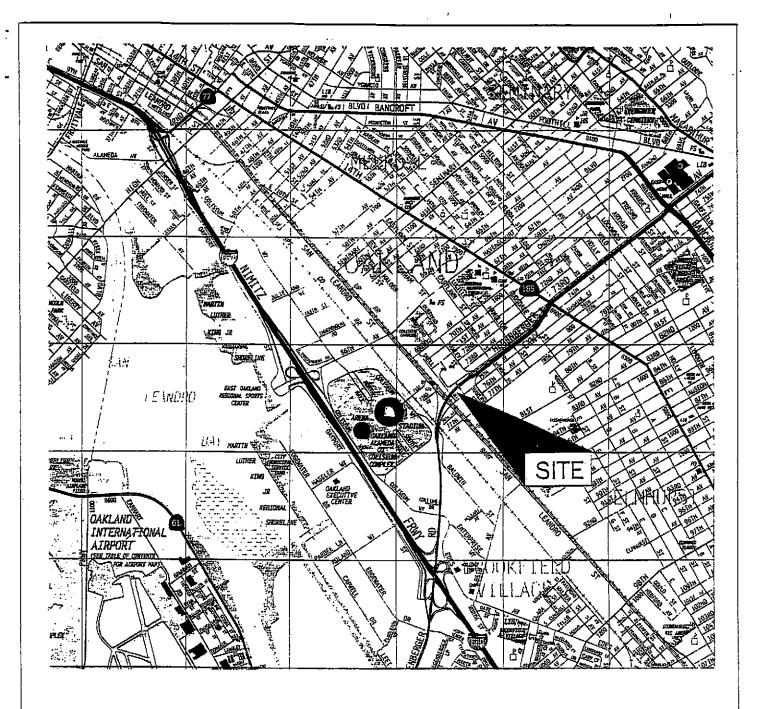
Appendix B

Current Laboratory Analyses With Chain of Custody Documentation

cc:

Mr. Barney Chan, ACHCSA, 1131 Harbor Bay Parkway, Suite 250,

Alameda, CA 94502



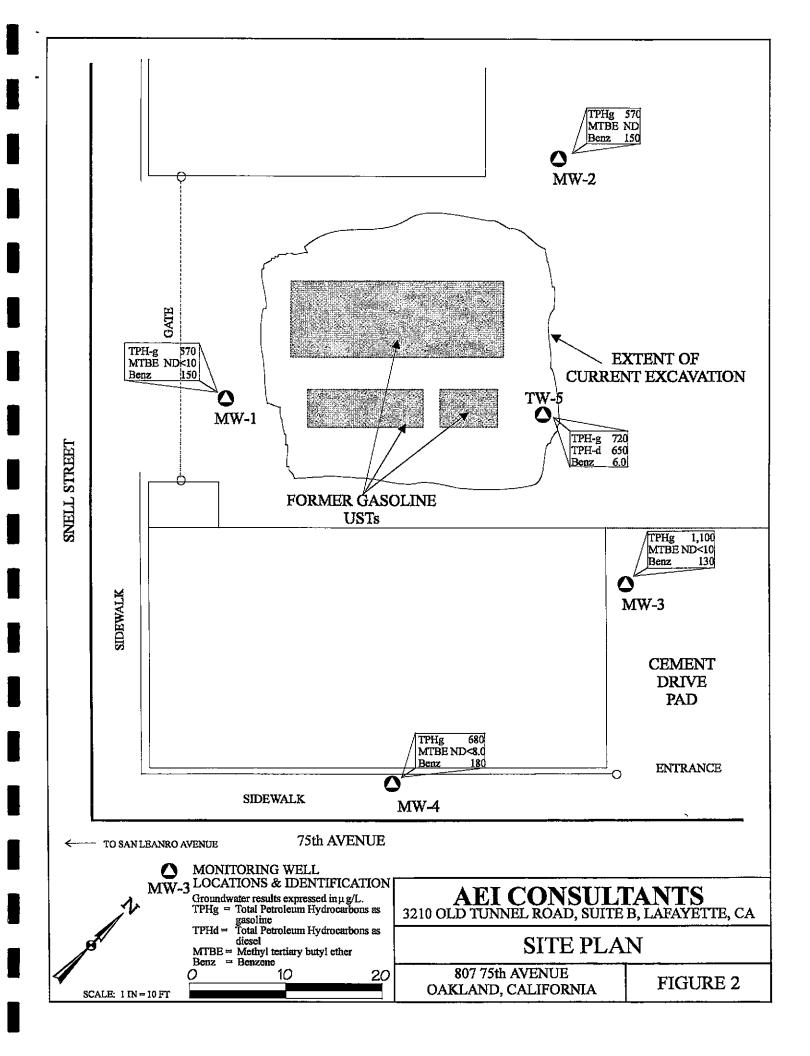


AEI CONSULTANTS
3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE. CA

### SITE LOCATION MAP

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

FIGURE 1 PROJECT NO. 3190



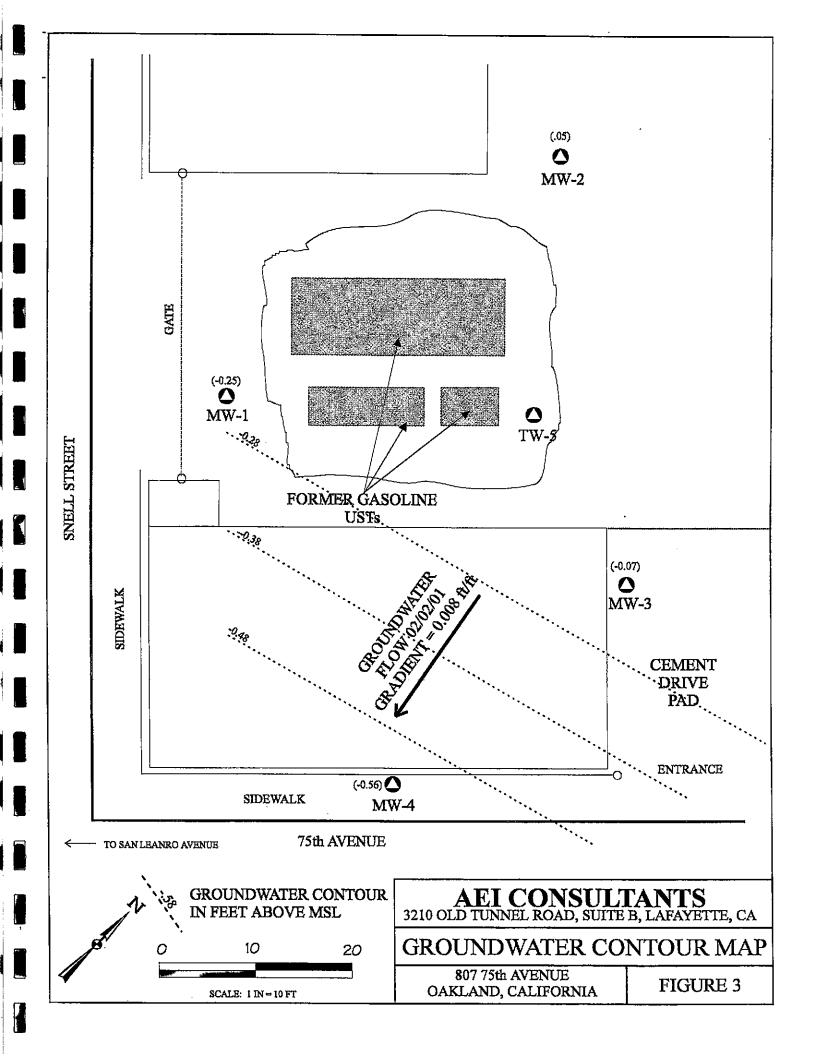


Table 1: Groundwater Elevations

Well ID	ing Date ever of	well a Well	Depth	Groundwater
		Elevation	to Water	Elevation
$(1,1,2,\ldots)$ where $(2,2,\ldots)$	er er rindigerendik Eustraf	(ft msl)	(ft)	(ft-msl)
MW-1	7/30/99	5.00	5.82	-0.82
14144-1	11/9/99	5.00	5.70	-0.70
ł	2/23/00	5.00	2.84	2.16
	5/26/00	5.00	5.50	-0.50
•				
	10/10/00	5.00	5.70	-0.70
	2/7/01	5.00	5.25	-0.25
MW-2	7/30/99	5.95	6.64	-0.69
	11/9/99	5.95	6.42	-0.47
	2/23/00	5.95	3.31	2.64
	5/26/00	5.95	6.34	-0.39
	10/10/00	5.95	6.52	-0.57
	2/7/01	5.95	5.90	0.05
MW-3	7/30/99	4.66	5.35	-0.69
1,1,1,0	11/9/99	4.66	5.11	-0.45
	2/23/00	4.66	2.37	2.29
	5/26/00	4.66	4.98	-0.32
	10/10/00	4.66	5.24	-0.58
	2/7/01	4.66	4.73	-0.38 -0.07
	2///01	4.00	4./3	-0.07
MW-4	7/30/99	4.59	5.45	-0.86
	11/9/99	4.59	5.31	-0.72
1	2/23/00	4.59	2.72	1.87
	5/26/00	4.59	5.07	-0.48
	10/10/00	4.59	5.32	-0.73
	2/7/01	4.59	4.73	-0.14

### Notes:

All well elevations are measured from the top of casing not from the ground surface.

ft msl = feet above mean sea level

Table 2: Groundwater Sample Analytical Results

Sample ID	Sample	TPH as gasoline	MTBE.	Benzene µg/L	Toluëne µg/L	Ethylbenzene ug/L	Xylenes ug/L	TPH as	TPH as motor oil
and the rest of the	Date	μg/L	H6/-L	pga.		PEL		μg/L	ug/L
					A STATE OF THE PARTY OF THE PAR		7.000 Co v. J. Cordio v. Andrino representations for six all shape of		
MW-1	7/30/99	2,700	<10	920	5.5	18	130	-	-
	11/9/99	1,800	<20	430	1.5	26	60	-	-
	2/23/00	3,800	<10	1,500	56	78	35	•	-
	5/26/00	7,100	<10	2,800	70	220	81	-	-
	10/10/00	980	<5.0	260	2.9	10	11	-	-
	2/7/01	570	<5.0	150	1.8	4.9	9.3	-	-
MW-2	7/30/99	1,200	<10	29	2.5	51	100	-	-
	11/9/99	1,300	<30	26	1.1	55	32	-	-
	2/23/00	5,000	<10	200	18	390	440	_	
	5/26/00	2,700	<10	69	13	83	68	-	-
	10/10/00	810	<10	17	4.7	42	46	_	- ,
	2/7/01	2,600	<10	70	15	80	100	-	-
MW-3	7/30/99	2,700	<10	220	15	130	230	-	-
	11/9/99	3,100	15	440	9	150	96	-	-
	2/23/00	1,800	<15	180	11	82	79	-	-
	5/26/00	1,600	6.4	140	10	69	63	-	-
	10/10/00	1,100	ND<10	110	4.4	63	51	-	-
	2/7/01	1,100	ND<10	130	5.1	68	65	-	-
MW-4	7/30/99	340	<10	57	2.2	8.5	6.8	-	-
	11/9/99	1,000	<10	220	ND	17	7.1	-	-
	2/23/00	980	ND	260	7	33	27	-	-
Ì	5/26/00	760	5.7	170	4.8	22	13	_	
	10/10/00	520	ND<10	130	2.3	22	10	-	-
	2/7/01	680	ND<8.0	180	3.7	29	21	-	-
TW-5	10/10/00	5,800	ND<50	650	60	190	230	2,900	<250
	2/7/01	720	ND	6.0	4.5	3.2	4.5	650	450
			, =						-2.
MDL		50	5.0	0.5	0.5	0.5	0.5	50	250

MDL = Method Detection Limit

ND = Not detected above the Method Detection Limit (unless otherwise noted)

 $<sup>\</sup>mu$ g/L = micrograms per liter (ppb)

mg/L = milligrams per liter (ppm)

# APPENDIX A WELL FIELD SAMPLING FORMS

### AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD **SAMPLING FORM** Monitoring Well Number: MW-1 Project Name: Omega Date of Sampling: 02/02/01 Job Number: 3190 Name of Sampler: OA Project Address: 807 75th Ave, Oakland MONITORING WELL DATA Well Casing Diameter (2"/4"/6") Seal at Grade -- Type and Condition Cement / Good Well Cap & Lock -- OK/Replace OK Elevation of Top of Casing 5.00 Depth of Well 20 Depth to Water 5.25 Water Elevation -0.25 Three Well Volumes (gallons)\* 2" casing: (TD - DTW)(0.16)(3) 7.08 4" casing: (TD - DTW)(0.65)(3) 6" casing: (TD - DTW)(1.44)(3) Actual Volume Purged (gallons) 7.0 Appearance of Purge Water Clear-strong hydrocarbon odor GROUNDWATER SAMPLES Number of Samples/Container Size 2 VOAs Time Vol Remvd Temp PH Cond Dissolved Redox Comments (deg C) (gal) (mS)Oxygen (volts) (DO) mg/L 11:45 1 17.06 6.74 1.143 1.10 1.349 11:47 3 16.76 6.70 1.125 0.55 1.331 11:49 5 17.13 6.69 1.129 0.01 1.327 11:51 17.33 6.68 1.135 -0.23 1.328 COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

TD - Total Depth of Well DTW - Depth To Water

### AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM Monitoring Well Number: MW-2 Project Name: Omega Date of Sampling: 02/07/01 Job Number: 3190 Name of Sampler: OA Project Address: 807 75th Ave, Oakland MONITORING WELL DATA Well Casing Diameter (2"/4"/6") Seal at Grade -- Type and Condition Cement / Good Well Cap & Lock - OK/Replace <u>OK</u> Elevation of Top of Casing 5.95 Depth of Well 20 Depth to Water 5,90 Water Elevation .05 Three Well Volumes (gallons)\* 2" casing: (TD - DTW)(0.16)(3) 6.76 4" casing: (TD - DTW)(0.65)(3) 6" casing: (TD - DTW)(1.44)(3) Actual Volume Purged (gallons) 7.0 Appearance of Purge Water Clear-hydrocarbon odor GROUNDWATER SAMPLES Number of Samples/Container Size 2 VOAs Time Vol Remvd Temp PH Cond Dissolved Redox Comments (gal) (deg C) (mS) Oxygen (Volts) (DO) mg/L 11:30 17.84 6.84 .913 2.17 1.067 11:32 3 17.15 6.80 .915 1.96 1.082 11:34 5 17.54 6.71 .9211.72 1.064 11:36 7 17.97 6.70 .990 1.71 1.036 COMMENTS (i.e., sample odor, well recharge time & percent, etc.) Hydrocarbon Odor

TD - Total Depth of Well DTW - Depth To Water

### AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD **SAMPLING FORM** Monitoring Well Number: MW-3 Project Name: Omega Date of Sampling: 02/07/01 Job Number: 3190 Name of Sampler: OA Project Address: 807 75th Ave., Oakland MONITORING WELL DATA Well Casing Diameter (2"/4"/6") 2" Seal at Grade -- Type and Condition Cement / Good Well Cap & Lock -- OK/Replace OK Elevation of Top of Casing 4.66 Depth of Well 20 Depth to Water 4.73 Water Elevation -0.07 Three Well Volumes (gallons)\* 2" casing: (TD - DTW)(0.16)(3) 7.32 4" casing: (TD - DTW)(0.65)(3) 6" casing: (TD - DTW)(1.44)(3) Actual Volume Purged (gallons) 7.5 Appearance of Purge Water Clear **GROUNDWATER SAMPLES** Number of Samples/Container Size 2 VOAs Vol Remvd Time PH Temp Cond Dissolved Redox Comments (gal) (deg C) (mS)Oxygen (Volts) (DO) mg/L 11:17 17.85 6.95 1 1.472 0.36 1.712 11:19 3 16.43 6.74 1.429 0.36 1.743 11:21 5 16.72 6.68 1.442 0.15 1.699 11:23 7.5 17.22 6.67 1.448 0.05 1.694 COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

TD - Total Depth of Well DTW - Depth To Water

### AEI CONSULTANTS – GROUNDWATER MONITORING WELL FIELD SAMPLING FORM Monitoring Well Number: MW-4 Project Name: Omega Date of Sampling: 02/07/01 Job Number: 3190 Name of Sampler: OA Project Address: 807 75th Ave., Oakland MONITORING WELL DATA Well Casing Diameter (2"/4"/6") 2" Seal at Grade -- Type and Condition Cement / Good Well Cap & Lock -- OK/Replace OK Elevation of Top of Casing 4.59 Depth of Well 20 Depth to Water 5.15 Water Elevation -0.56 Three Well Volumes (gallons)\* 2" casing: (TD - DTW)(0.16)(3) 7.12 4" casing: (TD - DTW)(0.65)(3) 6" casing: (TD - DTW)(1.44)(3) Actual Volume Purged (gallons) $\overline{7.0}$ Appearance of Purge Water Clear **GROUNDWATER SAMPLES** Number of Samples/Container Size 2 VOAs Vol Remyd Time Temp PH Cond Dissolved Redox Comments (gal) (deg C) (mS) Oxygen (Volts) (DO) mg/L 12:00 18.24 6.78 1.419 2.66 1.634 12:02 3 17.26 6.73 1.362 2.14 1.594 12:04 5 17.54 6.68 1.370 1.59 1.600 12:06 7 17.92 6.66 1.616 1.397 1.613 COMMENTS (i.e., sample odor, well recharge time & percent, etc.) No hydrocarbon odor or sheen observed

TD - Total Depth of Well DTW - Depth To Water

### AEI CONSULTANTS – GROUNDWATER MONITORING WELL FIELD SAMPLING FORM Monitoring Well Number: TW-5 Project Name: Omega Date of Sampling: 02/07/01 Job Number: 3190 Name of Sampler: OA Project Address: 807 75th Ave., Oakland MONITORING WELL DATA Well Casing Diameter (2"/4"/6") Seal at Grade -- Type and Condition Well Cap & Lock -- OK/Replace Elevation of Top of Casing Depth of Well Depth to Water Water Elevation Three Well Volumes (gallons)\* 2" casing: (TD - DTW)(0.16)(3) 4" casing: (TD - DTW)(0.65)(3) 6" casing: (TD - DTW)(1.44)(3) Actual Volume Purged (gallons) Appearance of Purge Water Greyish to Clear GROUNDWATER SAMPLES Number of Samples/Container Size 2 VOAs, 2 Liter Amber Bottles Time Vol Remvd Temp PH Dissolved Cond Redox Comments (gal) (deg C) (mS)Oxygen (Volts) (DO) mg/L 12:12 2 18.23 6.77 1.397 2.45 1.592 12:14 4 18.04 6.71 1.383 2.36 1.611 12:16 6 17.95 6.69 1.386 2.35 1.627 12:18 8 17.92 6.64 1.384 2.31 1.655 COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

### APPENDIX B

# LABORATORY ANALYTICAL AND CHAIN OF CUSTODY DOCUMENTATION

# McCAMPBELL ANALYTICAL INC.

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

All Environmental, Inc.	Client Project ID: #3190	Date Sampled: 02/07/01						
3210 Old Tunnel Road, Suite B		Date Received: 02/07/01						
Lafayette, CA 94549-4157	Client Contact: Orion Alcalay	Date Extracted: 02/09-02/11/01						
	Client P.O:	Date Analyzed: 02/09-02/11/01						

Lab ID	ods 5030, modifie Client ID	Matrix	TPH(g)	МТВЕ	Benzene	Toluene	Ethyl- benzene	Xylenes	% Recovery Surrogate
59622	MW-1	W	570,a	ND	150	1.8	4.9	9.3	113
59623	MW-2	w	2600,a	ND<10	70	15	80	100	106
59624	MW-3	W	1100,a	ND<10	130	5.1	68	65	4
59625	MW-4	w	680,a	ND<8.0	180	3.7	29	21	115
59626	TW-5	W	720,a	ND	6.0	4.5	3.2	4.5	113
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otherwise		0.5	0.5	0.5	0.5	<del></del>			
	detected above orting limit	S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

<sup>\*</sup> water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/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 gasoline is significant; b) heavier gasoline range compounds are significant (aged gasoline?); c) lighter gasoline range compounds (the most mubile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; c) TPH pattern that does not appear to be derived from gasoline (?); t) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than watesimmiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

Edward Hamilton, Lab Director

<sup>\*</sup> cluttered chromatogram; sample peak coefutes with surrogate peak



# McCAMPBELL ANALYTICAL INC.

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

All Environ	All Environmental, Inc. 3210 Old Tunnel Road, Suite Lafayette, CA 94549-4157  Diesei Range (C10-C23)  PA methods modified 8015, and 35  Lab ID Client ID  59626 TW-5	Client Pr	Date Sample	Date Sampled: 02/07/01										
3210 Old Tu		В		Date Receive	ed: 02/07/01									
Lafayette, C.	A 94549-4157	Client Co	lient Contact: Orion Alcalay Date Extracted: (											
<u> </u>		Client P.	O:	Date Analyza	ed: 02/07/01									
Diesel Ra EPA methods m	ange (C10-C23) and 35	and Oil-Rang 50 or 3510; Calif	e (C18+) Extractable omia RWQCB (SF Bay Re	Hydrocarbons as Diesel	and Motor Oil*									
Lab ID	Client ID	Matrix	LbH(q),	TPH(mo)	% Recovery Surrogate									
59626	TW-5	W	650,d	450	101									
	<del>"</del>	-												
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Reporting Limit unless otherwise stated; ND means not detected above	w	50 ug/L	250 ug/L	
the reporting limit	s	1.0 mg/kg	5.0 mg/kg	
*water samples are reported in ug/L, wi	ipe samples	s in ug/wipe, soil and sludge sa	upples in mg/kg, and all TCLP.	/STIC/SPIP exten

<sup>\*</sup> cluttered chromatogram resulting incocluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

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) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range cumpounds are significant; h) lighter than waterimmiscible sheen is present; i) liquid sample that contains greater than -5 vol. % sediment.

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		FIO 2 <sup>nd</sup> AVENUE SOUTH, #D7 PACHECO, CA 94553										TURN AROUND T										[_		•		0		Ĺ		, <b>%</b>	1		
Telepho	e: (925) 798													RUSH 24 HOUR									JR			7.5 JR 5.11	H, JAV						
Report To: Orion Alcalay Bill To:									十					Ã	naly	sis	Regi	nest						T		her		Comm					
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