

July 2, 2001

1650

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: Quarterly Groundwater Monitoring Report
807 75th Avenue
Oakland, CA 95621
AEI Project No. 3190

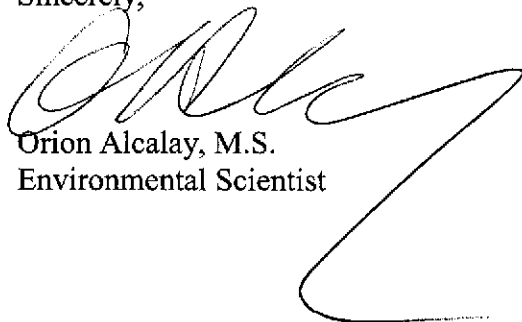
GW [benzene] ↑ in MW1
(3.8 mg/l)

Dear Mr. Chan:

Enclosed is the quarterly groundwater monitoring report for the seventh sampling episode for the above referenced property.

Please call me at (925) 283-6000 if you have any questions.

Sincerely,



Orion Alcalay, M.S.
Environmental Scientist

July 2, 2001

**QUARTERLY GROUNDWATER MONITORING
REPORT**
Seventh Episode 2001

807 75th Avenue
Oakland, CA 95621

Project No. 3190

Prepared For

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

Prepared By

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

AEI



July 2, 2001

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

RE: Quarterly Groundwater Monitoring and Sampling Report
Seventh Episode-May 2001
807 75th Avenue
Oakland, California
Project No. 3190

Dear Mr. Kanady:

AEI Consultants (AEI) has prepared this report to document the results of the seventh 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 seventh episode of groundwater monitoring and sampling conducted on May 25, 2001.

Site Description and Background

The property is located on the northern corner of Snell Street and 75th 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.

Corporate Headquarters

Los Angeles
(310) 798-4255

Phoenix
(602) 240-5990

San Francisco
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Seattle
(425) 401-8500

New York
(212) 279-7770

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 µg/L of TPH-g and 5,000 µg/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.

} Status
of soil P

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.

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 May 25, 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 neither head space nor air bubbles were visible 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-2 through MW-4. Groundwater levels for the current monitoring episode ranged from -0.31 to -0.07 feet below Mean Sea Level (MSL). These groundwater elevations were an average of 0.018 feet 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 .006 foot per foot.

Groundwater elevation data are 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 have increased in monitoring wells MW-1, MW-3 and MW-4 up to 18,000 ug/L and have decreased in wells MW-2 and TW-5. Concentrations of benzene have increased in wells MW-1, MW-2, MW-4 and TW-5 up to 3,800 ug/L. Concentrations of MTBE remained below detectable laboratory limits in all the wells. Concentrations of TPH-d and TOG have decreased in the temporary extraction well TW-5.

Dissolved oxygen content was monitored during this episode of sampling. The concentration of dissolved oxygen in the wells ranged between 0.15 to 0.81 mg/L. 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

Based on the results of this monitoring episode, elevated concentrations of petroleum hydrocarbons remain 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 August 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

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.


Report Limitations and Signatures

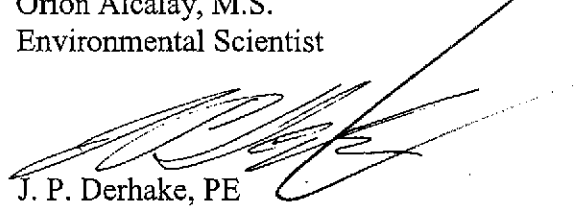
This report presents a summary of work completed by AEI Consultants, including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, 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, M.S.
Environmental Scientist


J. P. Derhake, PE
Principal

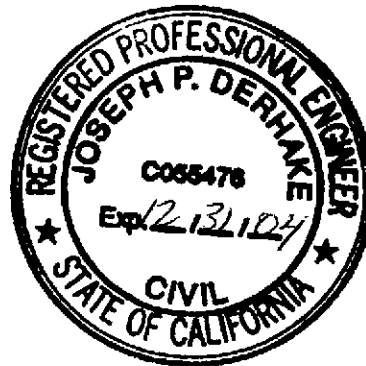
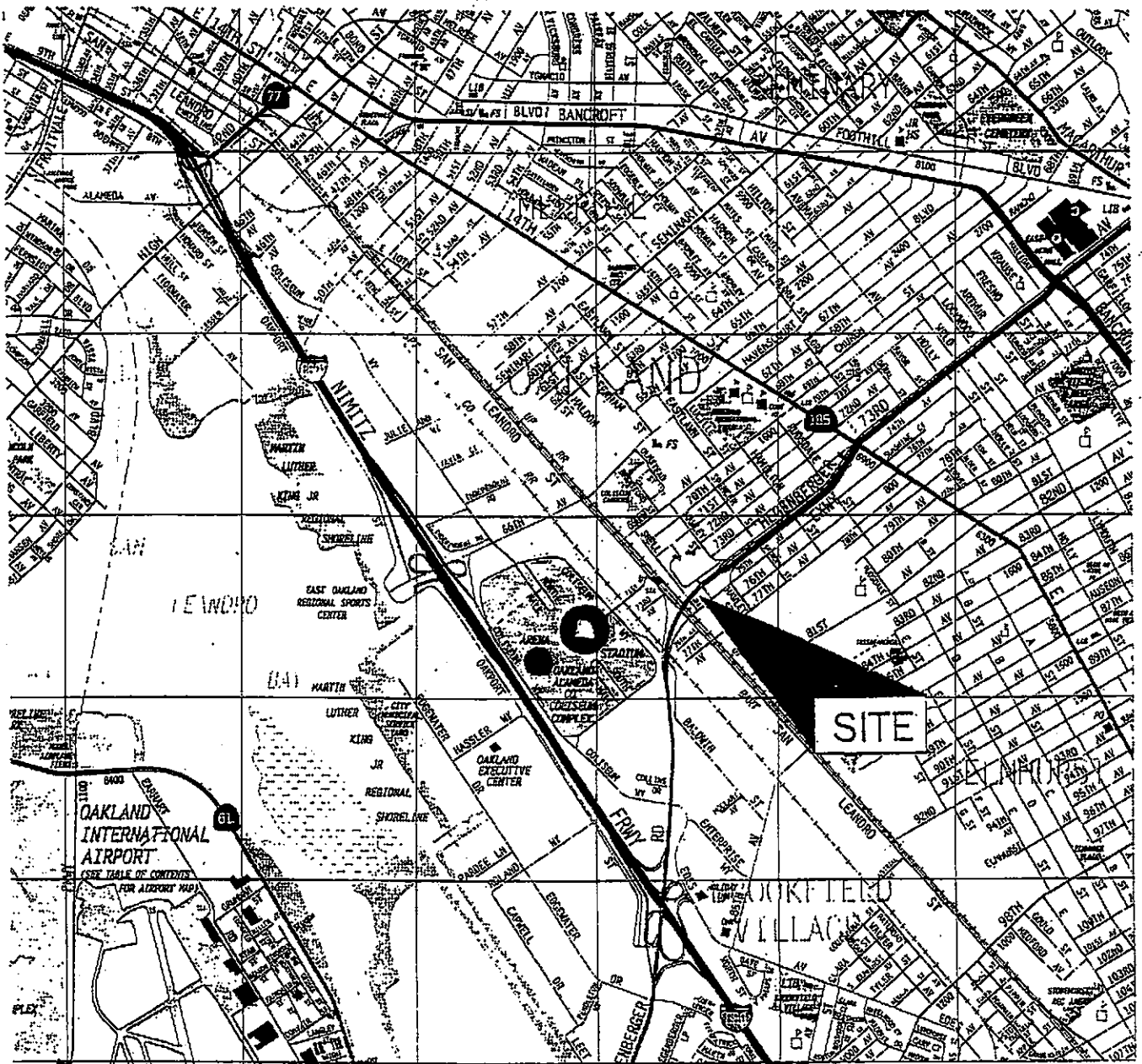


Figure 1 Site Location Map
Figure 2 Site Plan
Figure 3 Groundwater Contour Map

Table 1 Groundwater Elevations
Table 2 Groundwater Sample Analytical Results

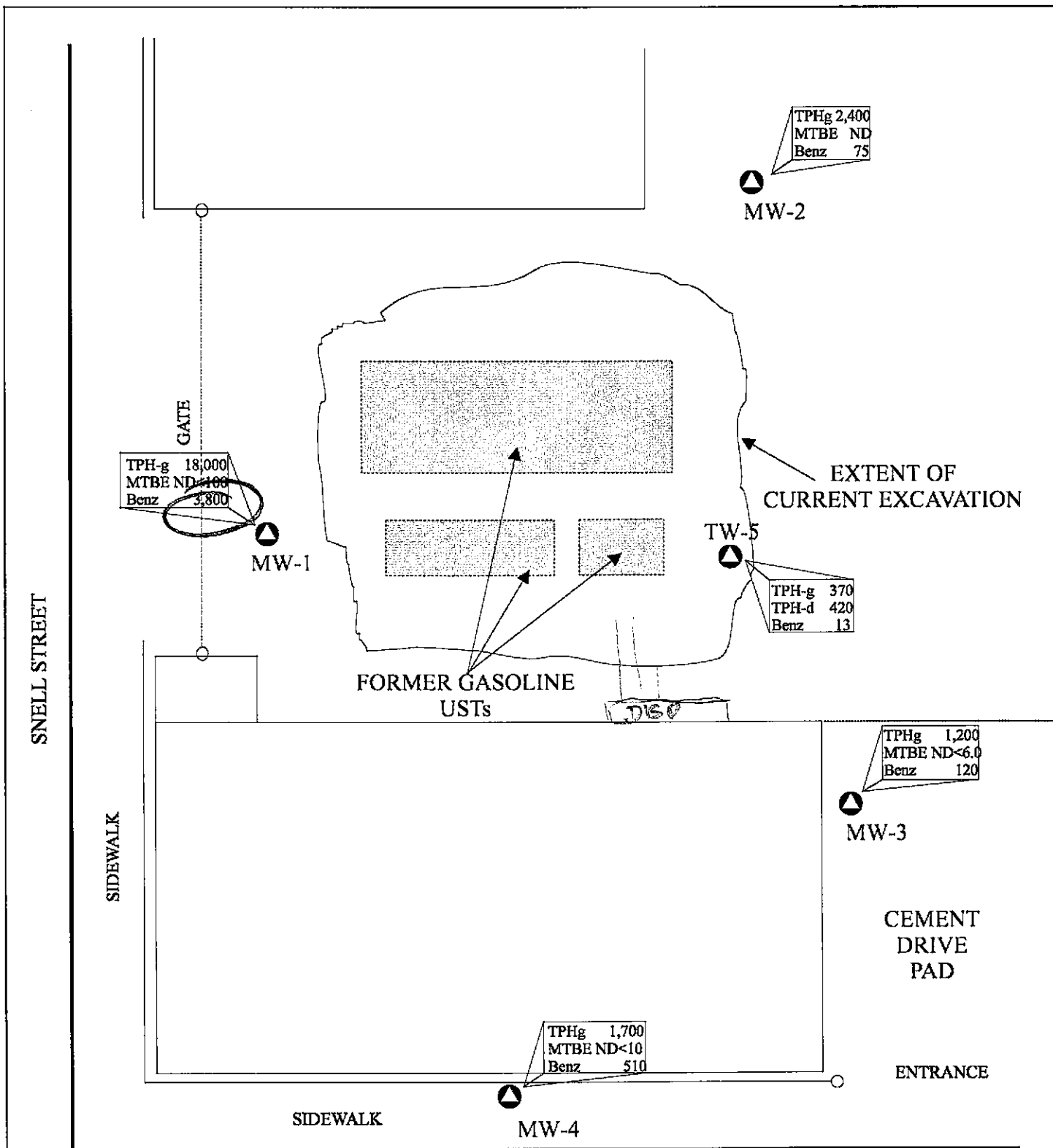
Appendix A Groundwater Monitoring Well Field Sampling Forms
Appendix B Current Laboratory Analyses With Chain of Custody Documentation

cc: Mr. Barney Chan, ACHCSA, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502



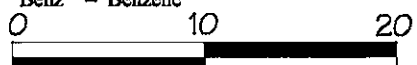
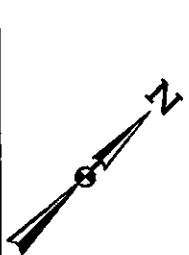
SOURCE:
 THOMAS GUIDE 1997
 SCALE: 1 in = 2,400 ft.

AEI CONSULTANTS 3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE. CA	
SITE LOCATION MAP	
807 75th STREET OAKLAND, CALIFORNIA	FIGURE 1 PROJECT NO. 3190



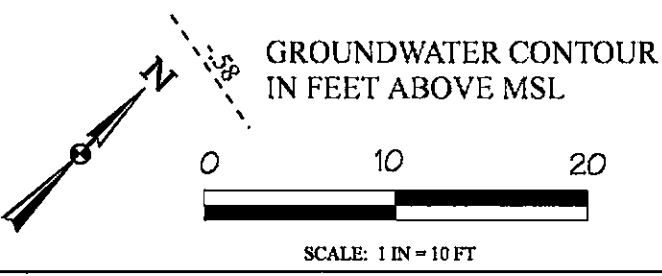
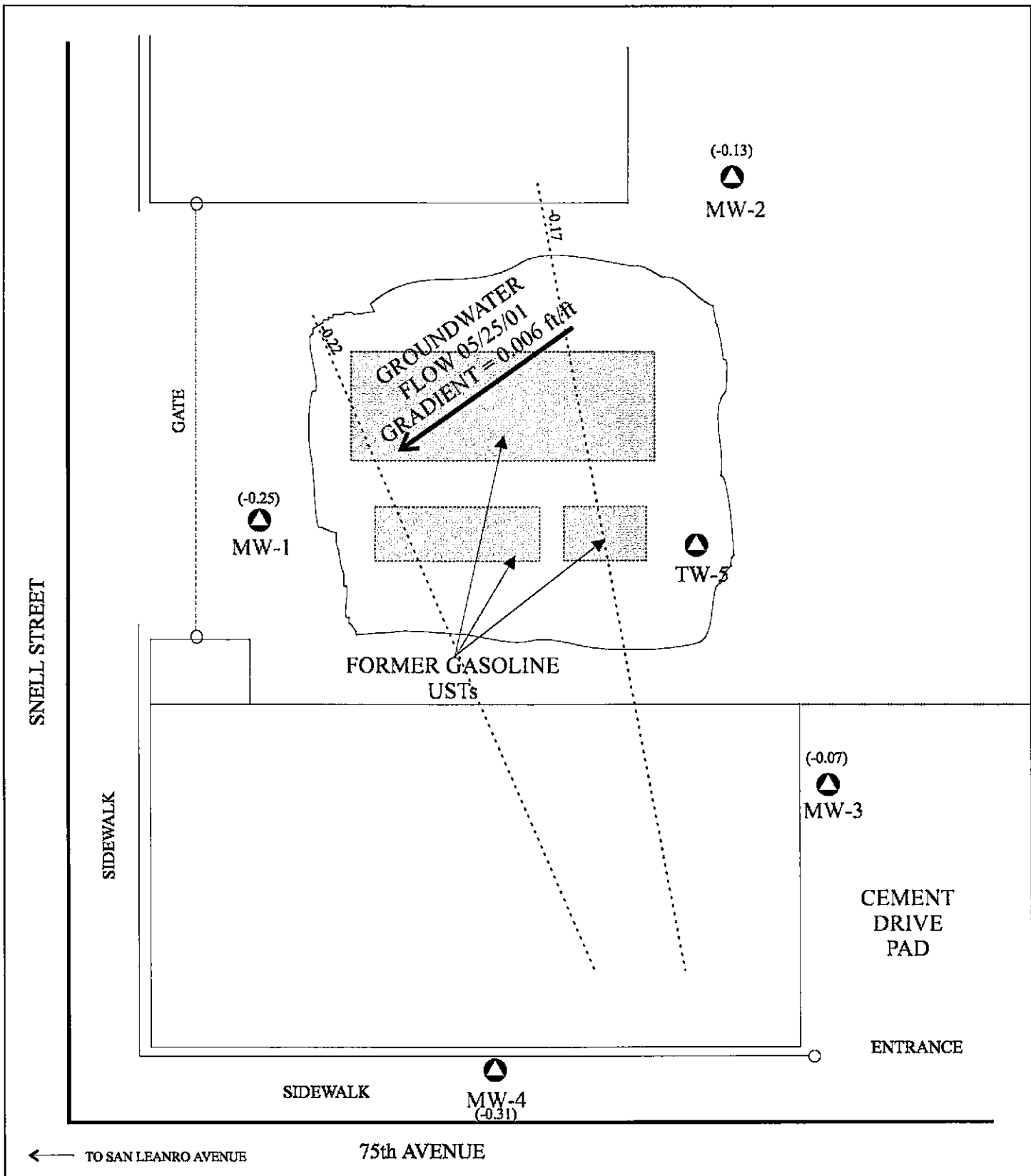
← TO SAN LEANRO AVENUE

75th AVENUE



SCALE: 1 IN = 10 FT

AEI CONSULTANTS 3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA	
SITE PLAN	
807 75th AVENUE OAKLAND, CALIFORNIA	FIGURE 2



AEI CONSULTANTS 3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA	
GROUNDWATER CONTOUR MAP	
807 75th AVENUE OAKLAND, CALIFORNIA	FIGURE 3

**Table 1:
Groundwater Elevations**

Well ID	Date	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft msl)
MW-1	7/30/99	5.00	5.82	-0.82
	11/9/99	5.00	5.70	-0.70
	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
	5/25/01	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
	5/25/01	5.95	6.08	-0.13
MW-3	7/30/99	4.66	5.35	-0.69
	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	-0.07
	5/25/01	4.66	4.73	-0.07
MW-4	7/30/99	4.59	5.45	-0.86
	11/9/99	4.59	5.31	-0.72
	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
	5/25/01	4.59	4.90	-0.31

Notes:

Well elevations measured from top of casing not from ground surface.

ft msl = feet above mean sea level

**Table 2:
Groundwater Sample Analytical Results**

Sample ID	Sample Collection Date	TPH as gasoline $\mu\text{g/L}$	MTBE $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$	TPH as diesel $\mu\text{g/L}$	TPH as motor oil $\mu\text{g/L}$
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	-	-
	5/25/01	18,000	ND<100	3,800	350	550	620	-	-
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	-	-
	5/25/01	2,400	ND	75	16	85	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	-	-
	5/25/01	1,200	ND<6.0	120	5.4	69	64	-	-
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	-	-
	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	-	-
	5/25/01	1,700	ND<10	510	9.6	44	46	-	-
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
	5/25/01	370	ND	13.0	4.1	1.6	1.3	420	ND
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)

$\mu\text{g/L}$ = 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: 05/25/01
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Job Number: 3190	Name of Sampler: OA
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Project Address: 807 75th Ave, Oakland

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"
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Seal at Grade -- Type and Condition	Cement / Good
-------------------------------------	---------------

Well Cap & Lock -- OK/Replace	OK
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Elevation of Top of Casing	5.00
----------------------------	------

Depth of Well	20
---------------	----

Depth to Water	5.25
----------------	------

Water Elevation	-0.25
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Three Well Volumes (gallons)*

2" casing: (TD - DTW)(0.16)(3)	7.08
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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
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GROUNDWATER SAMPLES

Number of Samples/Container Size	2 VOAs
----------------------------------	--------

Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Dissolved Oxygen (DO) mg/L	Redox (volts)	Comments
10:36	1	17.01	6.55	1202	0.32	1.067	
10:38	3	17.11	6.54	1194	0.21	1.071	
10:40	5	17.04	6.54	1196	0.17	1.074	
10:42	7	17.04	6.54	1215	0.15	1.074	

1067 mV

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: 05/25/01
Job Number: 3190	Name of Sampler: OA
Project Address: 807 75 th 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	5.95
Depth of Well	20
Depth to Water	6.08
Water Elevation	-0.13
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

5.95
~~5.95~~ - 0.13
 6.08

GROUNDWATER SAMPLES

Number of Samples/Container Size	2 VOAs
----------------------------------	--------

Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Dissolved Oxygen (DO) mg/L	Redox (Volts)	Comments
11:20	1	17.57	6.60	1016	0.36	1.064	
11:22	3	18.23	6.54	1009	0.22	1.077	
11:24	5	17.72	6.52	1041	0.19	1.077	
11:26	7	17.54	6.54	1016	0.17	1.079	

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: 05/25/01			
Job Number: 3190				Name of Sampler: OA			
Project Address: 807 75 th 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; hydrocarbon odor			
GROUNDWATER SAMPLES							
Number of Samples/Container Size				2 VOAs			
Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Dissolved Oxygen (DO) mg/L	Redox (Volts)	Comments
12:10	1	17.49	6.52	1754	0.25	1.053	
12:12	3	17.76	6.51	1774	0.25	1.057	
12:14	5	17.26	6.55	1779	0.19	1.056	
12:16	7	17.15	6.54	1755	0.17	1.061	
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: 05/25/01			
Job Number: 3190				Name of Sampler: OA			
Project Address: 807 75 th 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				4.90			
Water Elevation				-0.31			
Three Well Volumes (gallons)*							
2" casing: (TD - DTW)(0.16)(3)				7.24			
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 (gal)	Temp (deg C)	PH	Cond (mS)	Dissolved Oxygen (DO) mg/L	Redox (Volts)	Comments
11:50	1	18.23	6.52	1723	0.28	1.065	
11:52	3	18.61	6.55	1623	0.81	1.069	
11:54	5	18.14	6.38	1661	0.27	1.077	
11:56	7	17.89	6.45	1681	0.19	1.079	
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: 05/25/01
Job Number: 3190	Name of Sampler: OA
Project Address: 807 75 th Ave., Oakland	

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4"
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 (gal)	Temp (deg C)	PH	Cond (mS)	Dissolved Oxygen (DO) mg/L	Redox (Volts)	Comments
12:25	2	17.63	6.75	1721	0.31	1.058	
12:27	4	17.68	6.74	1633	0.43	1.060	
12:29	6	17.64	6.69	1635	0.47	1.064	
12:31	8	17.57	6.66	1642	0.52	1.065	
12:33	10	17.54	6.63	1644	0.53	1.072	

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

APPENDIX B

**LABORATORY ANALYTICAL AND
CHAIN OF CUSTODY DOCUMENTATION**



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 Environmental, Inc. 3210 Old Tunnel Road, Suite B Lafayette, CA 94549-4157	Client Project ID: #3190; Omega	Date Sampled: 05/25/01
		Date Received: 05/25/01
	Client Contact: Orion Alcalay	Date Extracted: 05/31-06/01/01
	Client P.O:	Date Analyzed: 05/31-06/01/01

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*
 EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g) ⁺	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	% Recovery Surrogate
68422	MW-1	W	18,000,a	ND<100	3800	350	550	620	109
68423	MW-2	W	2400,a	ND	75	16	85	100	107
68424	MW-3	W	1200,a	ND<6.0	120	5.4	69	64	109
68425	MW-4	W	1700,a	ND<10	510	9.6	44	46	108
68426	TW-5	W	370,a	ND	13	4.1	1.6	1.3	109
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W		50 ug/L	5.0	0.5	0.5	0.5	0.5	
	S		1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* 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

* 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 (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.



McCAMPBELL ANALYTICAL INC.

110 2nd Ave. South, #D7, Pacheco, CA 94553-5560
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QC REPORT

Date: 05/31/01 Matrix: Water

Extraction: TTLC

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	

SampleID: 52201

Instrument: GC-7

Surrogate1	0.000	95.0	90.0	100.00	95	90	5.4
Xylenes	0.000	29.5	28.4	30.00	98	95	3.8
Ethyl Benzene	0.000	9.2	8.7	10.00	92	87	5.6
Toluene	0.000	9.5	8.7	10.00	95	87	8.8
Benzene	0.000	9.0	8.2	10.00	90	82	9.3
MTBE	0.000	9.6	9.0	10.00	96	90	6.5
GAS	0.000	97.3	92.5	100.00	97	92	5.0

SampleID: 52101

Instrument: GC-11 A

Surrogate1	0.000	108.0	109.0	100.00	108	109	0.9
TPH (diesel)	0.000	7500.0	7450.0	7500.00	100	99	0.7

$$\% \text{ Recovery} = \frac{(MS - \text{Sample})}{\text{Amount Spiked}} \cdot 100$$

$$\text{RPD} = \frac{(MS - \text{MSD})}{(MS + \text{MSD})} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation



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QC REPORT

Date: 05/25/01-05/26/01 Matrix: Water

Extraction: TTLC

Compound	Concentration: ug/L			%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	

SampleID: 52201

Instrument: GC-3

Surrogate1	0.000	101.0	101.0	100.00	101	101	0.0
Xylenes	0.000	25.5	25.6	30.00	85	85	0.4
Ethyl Benzene	0.000	8.4	8.4	10.00	84	84	0.0
Toluene	0.000	8.7	8.7	10.00	87	87	0.0
Benzene	0.000	8.8	8.7	10.00	88	87	1.1
MTBE	0.000	10.4	10.1	10.00	104	101	2.9
GAS	0.000	79.0	79.2	100.00	79	79	0.2

SampleID: 52101

Instrument: GC-11 A

Surrogate1	0.000	95.0	93.0	100.00	95	93	2.1
TPH (diesel)	0.000	6450.0	6350.0	7500.00	86	85	1.6

$$\% \text{ Recovery} = \frac{(MS - \text{Sample})}{\text{Amount Spiked}} \cdot 100$$

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2100$$

RPD means Relative Percent Difference

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McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553

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Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HOUR 48 HOUR 5 DAY

Report To: ORION ALCALAY Bill To:
Company: All Environmental
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549-4157
Tele: (925) 283-6000 Fax: (925) 283-6121
Project #: 3190 Project Name: Omega
Project Location: 803 75th Ave Oakland
Sampler Signature: [Signature]

Analysis Request

Other

Comments

SAMPLE ID	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				BTEX & TPH as Gas (602/8020 + 8015) / MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/D&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 / 8240 / 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	Other	Comments					
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO ₃	Other																						
HW-1		5/25/01		2		X					X			X																						
HW-2				2		X					X			X																						
HW-3				2		X					X			X																						
HW-4				2		X					X			X																						
TW-5				4		X					X			X		X																				

68422 (+)
68423 (+)
68424 (+)
68425 (+)
68426 +

Relinquished By: [Signature] Date: 5/25/01 Time: 3:00 Received By: [Signature]
Relinquished By: [Signature] Date: 5/25/01 Time: 4:10 Received By: [Signature]
Relinquished By: _____ Date: _____ Time: _____ Received By: _____

Remarks: ICE/4° GOOD CONDITION LEAD CONTAINMENT PRESERVATION APPROPRIATE CONTAINERS
VOAS O&G METALS OTHER