AEI
CONSULTANTS
BURGARDON & ON BEREISERS SERVICE

Phone: (925) 283-6000

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June 4, 2002

Mr. Don Hwang Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Suite 250 Alameda, CA 94502-6577



Subject:

Quarterly Groundwater Monitoring Report

1075 40th Street Oakland, California AEI Project No. 3119

Dear Mr. Hwang:

Enclosed is a copy of the quarterly groundwater monitoring report for the second quarter 2002 at the above mentioned property.

Please call either Peter McIntyre or myself (925) 283-6000 if you have any questions.

Sincerely,

Nathan Garfield Project Manager

JUN O 7 ZOUZ

June 4, 2002

QUARTERLY GROUNDWATER MONITORING REPORT

1075 40TH Street Oakland, California

Project No. 3119

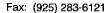
Prepared For

Fidelity Roof Company 1075 40th Street Oakland, CA 94608

Prepared By

All Environmental, Inc. 3210 Old Tunnel Road, Suite B Lafayette, CA 94549 (925) 283-6000







June 4, 2002

Mr. Monte Upshaw Fidelity Roof Company 1075 40th Street Oakland, CA 94608

RE: Quarterly Groundwater Monitoring and Sampling Report

Second Quarter 2002 1075 40th Street Oakland, California Project No. 3119

Dear Mr. Upshaw:

On your behalf, AEI Consultants (AEI) has prepared this report to document the groundwater investigation at the above referenced site (Figure 1: Site Location Map). The purpose of this activity was to monitor groundwater quality in the vicinity of previous underground storage tanks (USTs). The work was performed in compliance with requirements of the Alameda County Health Care Services Agency (ACHCSA). This report presents the findings of the fifteenth episode of groundwater monitoring and sampling.

Site Description and Background

The site currently supports the operation of Fidelity Roof Company and is located in a mixed residential and commercial area of Oakland at 1075 40th Street.

On December 19, 1995, Tank Protect Engineering, Inc. removed one (1) 1,000 gallon diesel underground storage tank (UST) and one (1) 500 gallon gasoline UST from the southeast corner of the property. The removal of the tanks produced a single excavation. Excavated soil was stockpiled north of the excavation. Three discrete soil samples were collected from beneath the USTs. Analysis of the samples indicated that soil beneath the 1,000 gallon UST had been impacted by minor concentrations of Total Petroleum Hydrocarbons as gasoline (TPH-g), TPH as diesel (TPH-d), benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE). A single soil sample collected from beneath the 500 gallon UST indicated that 100 mg/kg of TPH-g and 96 mg/kg of TPH-d were present.

On September 12, 1996, AEI advanced four soil borings in the vicinity of the former UST excavation (Ref. 1). Soil samples were collected from all of the borings and groundwater samples were collected from two of the borings. Analytical results from the subsurface investigation revealed significant levels of gasoline and diesel petroleum hydrocarbons present in soil to the south and to the west of the open excavation. The contamination was thought to

AEI Consultants Project No. 3119 June 4, 2002 Page 2

extend beneath the existing pump island. Groundwater analysis indicated maximum concentrations of 5,500 μ g/L of TPH-g, 340 μ g/L of benzene, and 2,100 μ g/L of TPH-d. Due to the high concentrations of petroleum hydrocarbons within the groundwater, the ACHCSA required further investigation of the extent and magnitude of the groundwater contaminant plume.

During the drilling investigation, AEI collected four soil samples from the stockpile. The samples were combined into one composite sample for analysis in the laboratory. Analysis of the samples indicated concentrations of 3.8 mg/kg of TPH-g, 28 mg/kg of TPH-d, and minor concentrations of BTEX. Approval was granted by Ms. Hugo of the ACHCSA to reuse the stockpiled soil as backfill material.

On October 25, 1996, AEI extended the excavation laterally 7 feet to the south and 12 feet to west (Ref. 2). Soil was removed to a depth of 9 feet below ground surface (bgs). The contaminated soil was stockpiled on-site and profiled for disposal into a Class III Landfill. The dispenser island and associated piping were also removed. Groundwater was not encountered during the excavation activities. Four confirmation soil samples were collected from the excavation sidewalls. Analyses of the soil samples collected from the excavation sidewalls indicated that up to 150 mg/kg of TPH-g, 16 mg/kg of benzene, and 300 mg/kg of TPH-d remained within the western sidewall of the excavation.

The excavated soil was profiled and accepted for disposal at the BFI Vasco Road Sanitary Landfill, in Livermore, California. In November 1996, approximately 235 tons of contaminated soil was loaded and transported to the landfill for disposal, under non-hazardous waste manifest.

On March 6, 1997, AEI installed three groundwater monitoring wells (Ref. 3). The wells were subsequently sampled in March 1997, June 1997, October 1997 and January 1998. The analytical data from January 1998 indicated that 29,000 μ g/L of TPH-g, 5,600 μ g/L of benzene and 7,300 μ g/L of TPH-d were present in the groundwater.

At the request of the ACHCSA, six additional soil borings were drilled south and west of the well locations on November 4, 1998 (Ref. 4). The locations of these borings were chosen to assess the lateral extent of impacted groundwater at the site. TPH-d was detected at 2,400 μ g/L in groundwater to the south of the former excavation. No significant concentrations of petroleum hydrocarbons were detected from the other borings.

Based on the results of these six soil borings, the ACHCSA requested the installation of a fourth groundwater monitoring well at the site, located south of the former tank locations along Yerba Buena Avenue. Monitoring well MW-4 was installed on July 15, 1999, and two soil samples at 10 and 14 feet bgs were analyzed from the boring (Ref. 5). No detectable concentrations of petroleum hydrocarbons were found in the soil samples.

The analytical results of prior groundwater sampling episodes are included in Table 2. This report describes the results of the fifteenth groundwater monitoring event that took place on May 14, 2002.

Summary of Activities

AEI measured the depth to groundwater in the four wells on May 14, 2002. Prior to sampling, the depth to water from the top of the well casings was measured with an electric water level indicator. The wells were purged and sampled using disposable bailers. Temperature, pH, and specific conductivity were measured during the purging of the wells. AEI removed at least 3 well volumes from each well while purging. Once the temperature, pH, and specific conductivity stabilized, a water sample was collected. Well locations are shown in Figure 2.

Water was poured from the bailers into 1-liter amber glass bottles and 40 ml glass VOA vials and capped so 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 were submitted for chemical analysis for TPH-g (EPA Method 5030/8015), MTBE (EPA Method 8020/602), benzene, toluene, ethylbenzene, and xylenes (BTEX) (EPA Method 8020/602), and (TPH-d) (EPA Method 3510/8015).

Field Results

A hydrocarbon odor was noted during the sampling of monitoring well MW-2, and a stronger odor was observed during the sampling of monitoring well MW-3. Groundwater levels for the current monitoring episode ranged from 34.50 to 36.29 feet above mean sea level (MSL). These groundwater elevations were an average of 0.94 feet lower than the previous monitoring episode. The most recent calculated groundwater gradient was 0.036 foot per foot (ft/ft), and the direction of flow was towards the north. This represents an approximately 90-degree shift to the north in the direction of flow, and a slight decrease in gradient. These fluctuations were consistent with previous sampling episodes.

Groundwater elevation data are summarized in Table 1. The groundwater elevation contours and the groundwater flow direction are shown on Figure 2. Refer to Appendix B for Groundwater Monitoring Well Field Sampling Forms.

Groundwater Quality

Significant concentrations of petroleum hydrocarbons still remain in the groundwater. Slight fluctuations in concentrations of TPH-g, TPH-d, MTBE and BTEX were observed in the four wells. Well MW-4, which was non- detect for TPH-g during the previous sampling episode, contained elevated concentrations of TPH-g of 26 ug/L, and concentrations of TPH-d elevated from 91 to 140 ug/L. Concentrations of TPH-g, TPH-d and BTEX remained highest in well MW-3 while concentrations of MTBE remained highest in well MW-2.

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

Conclusions

Groundwater analytical results from the current sampling episode indicated that elevated levels of petroleum hydrocarbons remained in the groundwater. Groundwater elevations were lower (-0.94 feet) than the previous sampling episode and groundwater flow direction was to the north. Groundwater flow direction has varied between northwest and westerly flow directions.

A corrective action plan (CAP) discussing available remedial technologies available to this site was submitted to the ACHCSA for their review and has been approved. AEI anticipates beginning the approved scope of work once given authorization. Quarterly groundwater monitoring and sampling of the wells will continue at the site and the next monitoring and sampling episode is scheduled for August 2002.

References

- 1. Phase II Soil and Groundwater Investigation Report, October 7, 1996, prepared by AEI.
- 2. Excavation and Disposal of Contaminated Soil Report, January 7, 1997, prepared by AEI.
- 3. Groundwater Monitoring Well Installation Report, dated May 30, 1997, prepared by AEI.
- 4. Phase II Subsurface Investigation Report, December 9, 1998, prepared by AEI.
- 5. Groundwater Monitoring Well and Sampling report, September 3, 1999, prepared by AEI.
- **6.** Quarterly Groundwater Monitoring and Sampling Report, March 21, 2000, prepared by AEI.
- 7. Quarterly Groundwater Monitoring and Sampling Report, July 28, 2000, prepared by AEI.
- 8. Quarterly Groundwater Monitoring and Sampling Report, November 6, 2000, prepared by AFI
- **9.** Quarterly Groundwater Monitoring and Sampling Report, January 29, 2001, prepared by AEI.
- 10. Quarterly Groundwater Monitoring and Sampling Report, May 8, 2001, prepared by AEI.
- 11. Quarterly Groundwater Monitoring and Sampling Report, August 14, 2001, prepared by AEI.
- 12. Quarterly Groundwater Monitoring and Sampling Report, December 11, 2001, prepared by AEI.
- 13. Quarterly Groundwater Monitoring and Sampling Report, May 31, 2002, prepared by AEI.

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

AEI Consultants Project No. 3119 June 4, 2002 Page 5

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.

Sincerely,

AEI Consultants

Nathan Garfield Staff Geologist

J. P. Derhake, PE

Senior Author, Principal

Figures

Figure 1 Site Location Map Figure 2 Well Location Map

Figure 3 Groundwater Gradient Map

Tables

Table 1 Groundwater Elevation Data

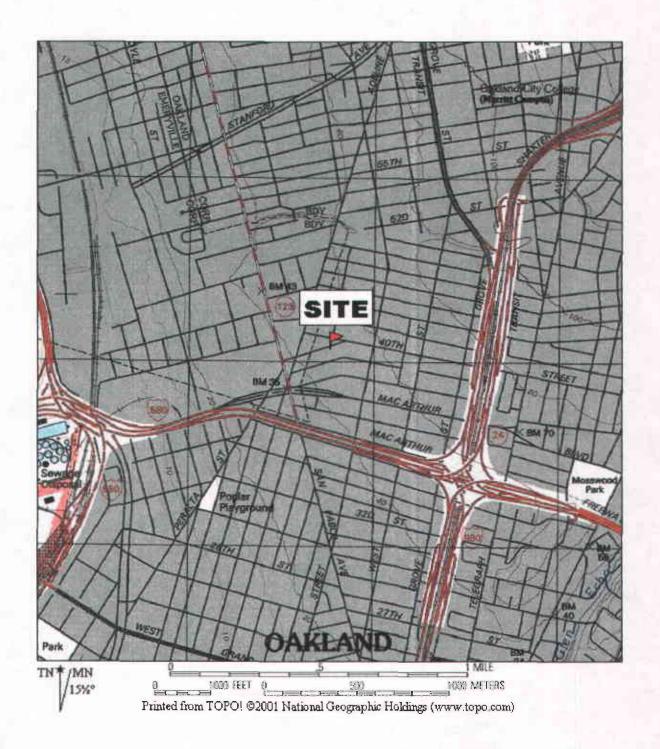
Table 2 Groundwater Sample Analytical Data

Appendices

Appendix A Groundwater Monitoring Well Field Sampling Forms

Appendix B Laboratory Analyses With Chain of Custody Documentation

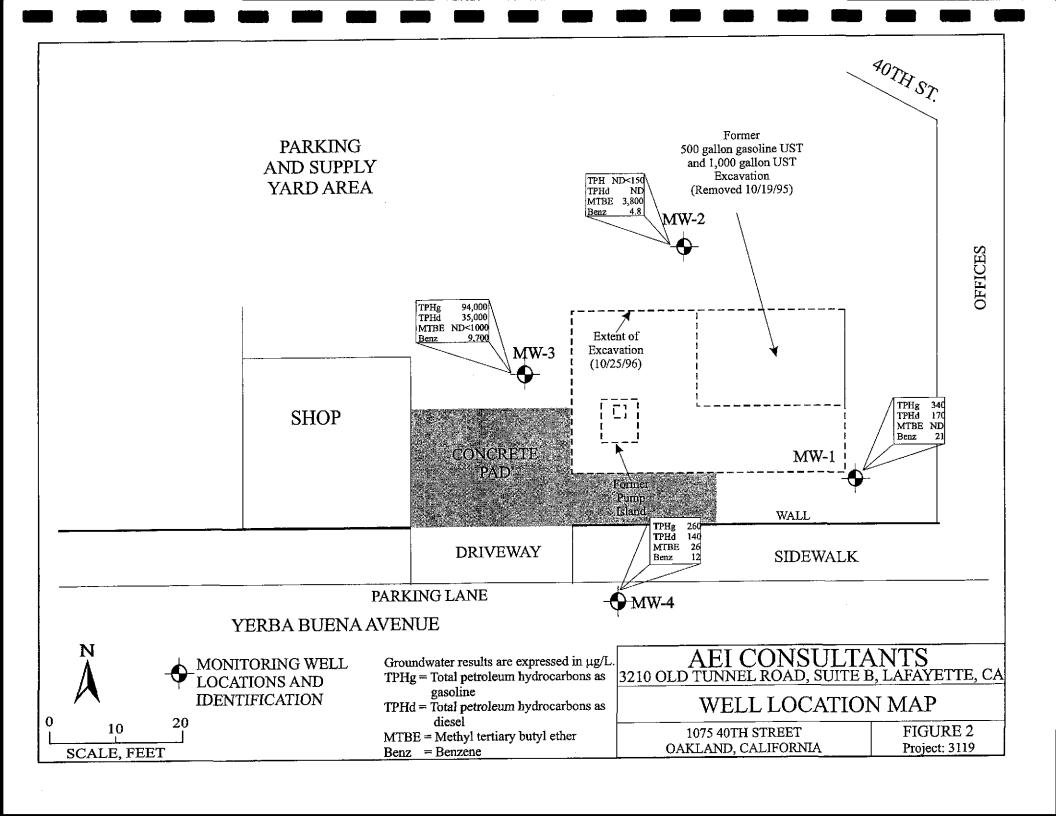
cc: Mr. Don Hwang, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577



AEI CONSULTANTS
3210 OLD TUNNEL RD, STE B, LAFAYETTE, CA

SITE LOCATION MAP

SITE ADDRESS CITY, CALIFORNIA FIGURE 1 PROJECT No. ####



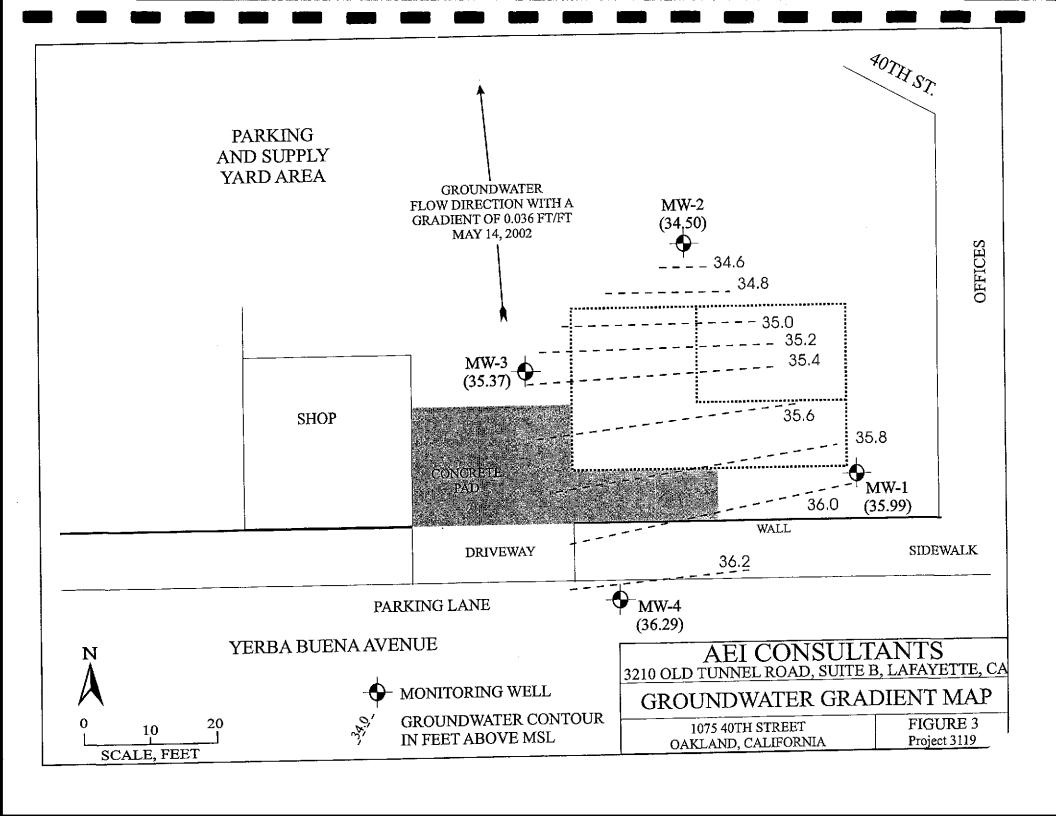


Table 1 **Groundwater Elevation Data**

Well ID	Date	Elevation	Depth to Water	
		/mn	46	Elevation
inter laggiagning		(ft msl)	(ft) = (3)	(ft msl)
MW-1	03/19/97	45.41	8,25	37.16
	06/20/97	45.41	9.1	36.31
	10/08/97	45.41	9.95	35.46
	01/16/98	45.41	7.57	37.84
	08/05/99	45.49	10.16	35.33
	11/18/99	45.49	8.52	36.97
	02/24/00	45.49	7.65	37.84
	05/24/00	45.49	8.47	37.02
	08/29/00	45.49	10.28	35.21
	01/12/01	45.49	8.5	36.99
	04/18/01	45.49	8.77	36.72
	07/27/01	45.49	10.5	34.99
	11/06/01	45.49	10.28	35.21
	02/13/02	45.49	8.47	37.02
	05/14/02	45.49	9.50	35.99
			2.4	24.51
MW-2	03/19/97	44.94	8.4	36.54
	06/20/97	44,94	8.85	36.09
	10/08/97	44.94	9.8	35.14
	01/16/98	44.94	5.28	39.66
	08/05/99	44.98	9.32	35.66
	11/18/99	44.98	10.2	34.78
	02/24/00	44.98	7.03	37.95
	05/24/00	44.98	8.01	36.97
	08/29/00	44.98	11.07	33.91
	01/12/01	44.98	8.6	36.38
	04/18/01	44.98	8.8	36.18
	07/27/01	44.98	11.1	33.88
	11/06/01	44.98	12.21	32,77
	02/13/02	44.98	7.98	37.00
	05/14/02	44.98	10.48	34.50
MW-3	03/19/97	44.32	7.59	36.73
	10/08/97	44.32	9.98	34.34
	06/20/97	44.32	8.36	35.96
	01/16/98	44.32	9.18	35.14
	08/05/99	44.37	10.56	33.81
	11/18/99	44.37	10.92	33.45
	02/24/00	44.37	8.49	35.88
	05/24/00	44.37	8.42	35.95
	08/29/00	44.37	12	32.37
	01/12/01	44.37	10.5	33.87
	04/18/01	44.37	9.5	35.22
	07/27/01	44.37	11.61	32.76
	11/06/01	44.37	11.73	32.64
	02/13/02	44.37	9.36	35.01
	05/14/02	44.37	9.00	35.37
MW-4	08/05/99	43.48	8.79	34.69
	11/18/99	43.48	8.11	35.37
	02/24/00	43.48	5.19	38.29
	05/24/00	43.48	7.23	36.25
	08/29/00	43,48	9.04	34.44
	01/12/01	43.48	6.4	37.08
	04/18/01	43.48	7.3	36.18
	07/27/01	43.48	9.16	34.32
	11/06/01	43.48	9.03	34.45
	02/13/02	43.48	6.60	36.88
	05/14/02	43.48	7.19	36.29

Notes:

All well elevations are measured from the top of the casing and not from the ground ft msl = feet above mean sea level

Table 2 Groundwater Sample Analytical Data

≐Well ID ≅	Date :	Consultant/	TPHg	MTBE	Benzene	Toluene	Ethyl-	Xylenes	TPHd
		Lab				degram	benzene :	njetjužbi	i i kodine je
	edmiser).g	10 (10 (10 (10 (10 (10 (10 (10 (10 (10 ((ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW - 1	03/19/97	AEI/MAI	<50	23	<0.5	<0.5	<0.5	<0.5	<50
	06/23/97	AEI/MAI	1,300	14	150	2.1	12	19	420
	10/08/97	AEI/MAI	56	5.8	2.8	<0.5	<0.5	<0.5	66
•	01/16/98	AEI/MAI	1,500	<33	95	0.72	69	8.4	910
	08/05/99	AEVMAI	160	<15	1.6	<0.5	0.56	1.1	63
	11/18/99	AEI/MAI	79	<5.0	<0.5	<0.5	<0.5	<0.5	<50
	02/24/00	AEI/MAI	300	<5.0	14	0.82	3.5	1.6	160
	05/24/00	AEI/MAI	1,300	ND<10	93	< 0.5	17	1.6	480
İ	08/29/00	AEI/MAI	120	<5.0	0.93	<0.5 -^.5	<0.5 9.3	<0.5 0.69	<0.5
	01/12/01 04/18/01	AEI/MAI AEI/MAI	360 1,100	<5.0 2,800	16 63	<0.5 <0.5	9.3 34	0.03	170 410
	07/27/01	AEI/MAI	1,100	<5.0	1.6	<0.5	<0.5	<0.5	66
ł	11/06/01	AEI/MAI	<50	<5.0	<0.5	<0.5	<0.5	<0.5	<50
	02/13/02	AEI/MAI	430	<5.0	17	0.51	11	0.64	270
	05/14/02	AEI/MAI	340	<5.0	21	<0.5	5.3	0.67	170
ł	*****					10.0			
MW-2	03/19/97	AEUMAI	<50	65	<0.5	<0.5	<0.5	<0.5	<50
	06/23/97	AEI/MAI	<50	70	3.4	<0.5	<0.5	<0.5	<50 €
1	10/08/97	AEI/MAI	<50	90	<0.5	<0.5	<0.5	<0.5	<50
Ī	01/16/98	AEI/MAI	<50	65	<0.5	<0.5	<0.5	<0.5	<50
	08/05/99 11/18/99	AEI/MAI	<50 <50	600	<0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<50
l '	02/24/00	AEI/MAI AEI/MAI	ර0 ර0	370 880	<0.5 <0.5	<0.5 <0.5	<0.5	<0.5	<50 <50
1	05/24/00	AEI/MAI	ND<250	2,200	<0.5	<0.5	<0.5	<0.5	62
	08/29/00	AEI/MAI	ND<200	1,900	<0.5	<0.5	<0.5	<0.5	<50
1	01/12/01	AEI/MAI	470	2,000	8.7	3.1	16	73	70
	04/18/01	AEVMAI	<50	2,800	<0.5	<0.5	<0.5	<0.5	<50
	07/27/01	AEI/MAI	ND<100	3,300	<0.5	<0.5	<0.5	<0.5	<50
	11/06/01	AEUMAI	ND<100	3,000	<0.5	<0.5	<0.5	<0.5	<50
İ	02/13/02	AEI/MAI	54	3,200	<0.5	<0.5	<0.5	<0.5	<50
	05/14/02	AEI/MAI	ND<150	3,800	4.8	ND<1.0	ND<1.0	ND<1.0	<50
MW-3	03/19/97	AEI/MAI	26,000	230	3,000	530	340	2,300	5,000
14214-5	06/23/97	AEI/MAI	25,000	270	4,400	120	540	1,500	7,000
1	10/08/97	AEI/MAI	17,000	ND<280	4,400	47	280	410	5,100
1	01/16/98	AEI/MAI	29,000	ND<360	5,600	740	950	3,500	7,300
ł	08/05/99	AEI/MAI	31,000	ND<200	5,400	150	1100	2,300	5,100
1	11/18/99	AEI/MAI	74,000	ND<1,000	8,100	5,000	2,100	8,100	490,000
1	02/24/00	AEI/MAI	110,000	ND<200	12,000	1,400	2,900	14,000	6,300
1	05/24/00	AEI/MAI	87,000	ND<200	13,000	1,900	2,900	14,000	26,000
1	08/29/00	AEI/MAI	49,000	ND<200	7,400	800	1,800	7,400	9,400
	01/12/01	AEI/MAI	69,000	ND<300	8,600	980	2,600	11,000	21,000
Į.	04/18/01	AEI/MAI	75,000 75,000	ND<500	9,200	1,200	2,500	12,000	13,000
1	07/27/01 11/06/01	AEI/MAI AEI/MAI	89,000	ND<650 ND<200	8,700 7,900	1,100 910	2,600 2,800	12,000 12,000	85,000 86,000
i	02/13/02	AEI/MAI	85,000	ND<2000	8,500	830	2,600	11,000	13,000
	05/14/02	AEI/MAI	94,900	ND<1000	9,700	1,100	3,400	15,000	35,000
						•	•		
MW-4	08/05/99	AEI/MAI	<50	37	<0.5	<0.5	<0.5	<0.5	<50 ≪0
Į.	11/18/99 02/24/00	AEI/MAI AEI/MAI	<50 <50	20 20	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<50 <50
ì	05/24/00	AEI/MAI	120	20 31	1.3	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	140
	08/29/00	AEI/MAI	<50	22	<0.5	<0.5	<0.5	<0.5	<0.5
	01/12/01	AEI/MAI	<50	25	<0.5	<0.5	<0.5	<0.5	81
	04/18/01	AEI/MAI	30	35	2.4	1.1	0.66	4.2	170
	07/27/01	AEI/MAI	87	26	1.8	<0.5	2	10	110
1	11/06/01	AEI/MAI	200	21	4.5	i	5.2	24	59
	02/13/02	AEVMAI	<50	15	<0.5	< 0.5	<0.5	<0.5	91
	05/14/02	AEI/MAI	260	26	12	2.7	11	49	140
L									

Notes:
ug/L= micrograms per liter
ND= Not detected
MTBE= Methyl Tertiary Butyl Ether
TPHg= Total Petroleum Hydrocarbons as gasoline

TPHd= Total Petroleum Hydrocarbons as diesel

AEI = AEI Consultants

 $MAI = McCampbell\ Analytical\ Inc.,\ Pacheco,\ California$

AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM Monitoring Well Number: MW-1 Date of Sampling: 5/14/02 Project Name: Fidelity Roof, Co Job Number: 3119 Name of Sampler: OA Project Address: 1075 40th Street, Oakland MONITORING WELL DATA Well Casing Diameter (2"/4"/6") 2 Cement / Good Seal at Grade -- Type and Condition Well Cap & Lock -- OK/Replace OK Elevation of Top of Casing (feet amsl) 45.49 Depth of Well (feet bgs) 21.00 Depth to Water (feet bgs) 9.50 Water Elevation (feet amsl) 35.99 Three Well Volumes (gallons)* 2" casing: (TD - DTW)(0.16)(3) 5.52 4" casing: (TD - DTW)(0.65)(3) 6" casing: (TD - DTW)(1.44)(3) Actual Volume Purged (gallons) Appearance of Purge Water Clear/ Hydrocarbon odor **GROUNDWATER SAMPLES** (2) 40 ml VOAS, 1-liter amber bottle Number of Samples/Container Size Time Vol Remvd рH Cond Comments Temp 10:30 (deg C) (gal) (µS) 10:31 19.4 6.70 1015 1 10:33 3 18.5 6.81 1019 10:35 5.5 974 18.4 6.84 COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM Monitoring Well Number: MW-2 Date of Sampling: 5/14/02 Project Name: Fidelity Roof, Co Job Number: 3119 Name of Sampler: OA Project Address: 1075 40th Street, 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 (feet amsl) 44.98 Depth of Well (feet bgs) 21.00 Depth to Water (feet bgs) 10.48 Water Elevation (feet amsl) 34.50 Three Well Volumes (gallons)* 2" casing: (TD - DTW)(0.16)(3) 5.04 4" casing: (TD - DTW)(0.65)(3) 6" casing: (TD - DTW)(1.44)(3) Actual Volume Purged (gallons) 5.0 Appearance of Purge Water Clear, No Odor **GROUNDWATER SAMPLES** Number of Samples/Container Size (2) 40 ml VOAS, 1-liter amber bottle Time Vol Remvd Comments Temp pΗ Cond 10:40 (gal) (deg C) (μS) 10:41 19.7 1 6.83 1,481 10:43 3 19.4 1,483 6.85 10:45 5 19.6 6.87 1,502 COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

AEI C	CONSULTAN				ER MON FORM	ITORING WELL FIELD						
		Monitor	ing W	ell Nı	ımber: M	[W-3						
Project Nan	ne: Fidelity Roof	, Co		Date	of Samplin	ng: 5/14/02						
Job Number				Nam	e of Sampl	er: OA						
Project Add	ress: 1075 40 th	Street, Oakl	and									
		MONI	TORI	NG V	VELL DA	TA						
Well Casing	g Diameter (2"/4			2"	TODES DIE							
	de Type and C			Cem	ent / Good							
	Lock OK/Re	•		OK								
	f Top of Casing	 		44.3′	7							
Depth of W	ell (feet bgs)			21.0								
	ater (feet bgs)			9.0								
Water Elev	ation (feet amsl)			35.3	7							
Three Well	Volumes (gallor	1s)*										
	ng: (TD - DTW)			5.76								
	ng: (TD - DTW)											
	ng: (TD - DTW)					MARK W. C.						
	ume Purged (gal	•		6.0								
Appearance	e of Purge Water	•		Clear; Strong Hydrocarbon Odor								
		~~~				7						
X 1 C	G 1 (G)		JNDW		R SAMPI							
Number of	Samples/Contai	ner Size		(2) 4	U MI VUA	S, 1-liter amber bottle						
Time	Vol Remvd	Temp	pl	<u>L</u> Н	Cond	Comments						
10:49	(gal)	(deg Ĉ)	-		(µS)							
10:52	2	20.6	6.6	55	1,155							
10:54	4	19.7	6.6	56	1,515	Well went dry, restarted after 30s.						
10:56	6	19.7	6.6	55	1,558							
			<u> </u>									
			<u> </u>									
			<u> </u>									
	COMMENT	S (i.e., sam	ple od	or, we	ell recharge	e time & percent, etc.)						
		·										

AEI CONSULTANTS- GROUNDWATER MONITORING WELL FIELD SAMPLING FORM Monitoring Well Number: MW-4 Project Name: Fidelity Roof, Co Date of Sampling: 5/14/02 Job Number: 3119 Name of Sampler: OA Project Address: 1075 40th Street, 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 (feet amsl) 43.48 Depth of Well (feet bgs) 20.00 Depth to Water (feet bgs) 7.19 Water Elevation (feet amsl) 36.29 Three Well Volumes (gallons)* 2" casing: (TD - DTW)(0.16)(3) 6.14 4" casing: (TD - DTW)(0.65)(3) 6" casing: (TD - DTW)(1.44)(3) Actual Volume Purged (gallons) Appearance of Purge Water Clear/ no hydrocarbon odor **GROUNDWATER SAMPLES** (2) 40 ml VOAS, 1-liter amber bottle Number of Samples/Container Size Time Vol Remvd Temp Comments pΗ Cond 11:00 (gal) (deg C) (µS) 11:02 21.0 7.02 891 20.1 11:04 4 6.94 1,080 11:06 6 20.0 6.91 1,112 COMMENTS (i.e., sample odor, well recharge time & percent, etc.)

Sent By: McCampbell Analytical, Inc.;

925

798 4612;

May-22-02

3:03PM;

Page 3/6

McCampbell Analytical Inc.

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

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0205189

Client

All Environmental, Inc. 3210 Old Tunnel Rd., Ste. B Lafayette, CA 94549-4157 TEL: FAX:

(925) 283-6000

ProjectNo: #3119

(925) 283-6121 #3119; Fidelity

PO:

14-May-02

								Request	eri Teete					
Sample ID	ClientSampID	Matrix	Collection Date	Bottle	SW8015C	8021B/8015	N			*	representa		·	
0205189-001 0205189-002	MW-1 MW-2	Water Water	5/14/02 5/14/02		B	A						····	· ·	<u>-</u>
0205189-003 0205189-004	MW-3 MW-4	Water Water	5/14/02 5/14/02		8 B	A							1 14 14 14 14 14 14 14 14 14 14 14 14 14	

Comments:

		Date/Time	. ·		 .	 Date	Time	
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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.

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Talant	McCAMPBELL ANALYTICAL INC. 110 2 th AVENUE SOUTH, #D7 PACHBCO, CA 94553 Telephone: (925) 798-1620 Fax: (925) 798-1622												AR(1	OF			′>₹ 5 D.	í AY-						
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Tele: (925) 283-6		1,207	-	Fax:	(925)	283	-612	1		_ <u>-</u> -				ĮĒ	1) S	13	·		1				188	1		1						1	٠.	
Project #: 3/19		··· -·· -			et Na				1	16	دمر			80.55		Grease (5520 E&F/B&F)	₹ 8							18	.		ļ		-	İ					
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SAMPLE ID	LOCATION	Date	Time	# Containers	Type Containe	Water	Soil	Air	Other	Ice	HCI	HNO,	Other	BTSX & TPH as Gas (602/8020 +	TPH as Diesel (8015)	Total Petroleum Oil &	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'8 / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI							
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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.	Client Project ID: #3119; Fidelity	Date Sampled: 05/14/02
3210 Old Tunnel Road, Suite B		Date Received: 05/14/02
Lafayette, CA 94549-4157	Client Contact: Orion Alcalay	Date Extracted: 05/16-05/17/02
	Client P.O:	Date Analyzed: 05/16-05/17/02

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 GCFtD(5030) Lab ID Client ID Matrix TPH(g)* Ethyl-MTBE % Recovery Benzene Toluene **Xylenes** benzene 0205189 Surrogate MW-I W 340,a ND -001 21 ND 5.3 0.67 0205189 MW-2 W ND<150 3800 -002 ND<1.0 4.8 ND<1.0 ND<1.0 117 0205189 MW-3 W 94,000,a ND<1000 -003 9700 1100 3400 15,000 111 0205189 MW-4 W 260,a 26 -004 12 2,7 11 49 114 Reporting Limit unless W 50 ug/L 5.0 otherwise stated; ND 0.5 0.5 0.5 0.5 means not detected above 1.0 mg/kg the reporting limit 0.05 0.005 0.005 0.005 0.005

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.

DHS Certification No. 1644



Edward Hamilton, Lab Director

^{*} 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

cluttered chromatogram; sample peak coclutes 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

		<u> </u>
All Environmental, Inc.	Client Project ID: #3119; Fidelity	Date Sampled: 05/14/02
3210 Old Tunnel Road, Suite B		Date Received: 05/14/02
Lafayette, CA 94549-4157	Client Contact: Orion Alcalay	Date Extracted: 05/14-05/21/02
	Client P.O:	Date Analyzed: 05/14-05/21/02
Diesel Ro	inge (C10, C23) Extracted to	

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel * EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510) Lab ID Client ID Matrix *(b)H4T % Recovery Surrogate 0205189-MW-1 W 001 170,d/e 95 0205189-MW-2 W 002 ND 91 0205189-MW-3 W 003 35,000.d 92 0205189-MW-4 W 004 140,d,b 105

and reporting titill	S	1.0 mg/kg	
*			
water and vapor samples are reported in	ug/L, wipe	samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STE	C/SPLP
extracts in ug/L		,	, 31 12

50 ug/l.

* 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.

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 (kerosene?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Reporting Limit unless otherwise

stated, ND means not detected above the reporting limit

Edward Hamilton, Lab Director