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October 13, 2005

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

Subject:

Quarterly Groundwater Monitoring Report

3rd Quarter 2005 1075 40th Street Oakland, California AEI Project No. 3119



Dear Mr. Chan:

Enclosed is a copy of the quarterly groundwater report for the 3rd Quarter 2005 groundwater monitoring event.

Please call me or Robert Flory at (925) 944-2899 x122, if you have any questions.

Sincerely,

AEI Consultants

Jeremy Smith Project Manager October 13, 2005

GROUNDWATER MONITORING REPORT 3rd Quarter 2005

1075-40th Street Oakland, California 94608

AEI Project No. 8326 ACHCSA Fuel Leak Case No. RO0000186

Prepared For

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

Prepared By

AEI Consultants 2500 Camino Diablo Blvd., Suite 200 Walnut Creek, CA 94597 (925) 944-2899 Environmental Health

Alameda County
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October 13, 2005

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

Subject:

Quarterly Groundwater Monitoring Report

3rd Quarter 2005 1075 40th Street

Oakland, California 94608 AEI Project No. 8326

ACHCSA Fuel Leak Case No. RO0000186

Dear Mr. Upshaw:

AEI Consultants (AEI) has prepared this report on behalf of Fidelity Roof Company to document the ongoing groundwater investigation at the above referenced site (Figure 1: Site Location Map). The purpose of this activity was to monitor groundwater quality near the previously removed 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 3rd Quarter 2005 groundwater monitoring and sampling event conducted on September 9, 2005.

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. Analysis of the soil 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).

On September 12, 1996, AEI advanced four (4) soil borings near the former UST excavation. Analytical results from the subsurface investigation revealed significant levels of gasoline and diesel petroleum hydrocarbons present in soil and groundwater to the south and to the west of the open excavation. Due to the high concentrations of petroleum hydrocarbons within the

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groundwater, the ACHCSA required further investigation of the extent and magnitude of the groundwater contaminant plume.

On October 25, 1996, AEI extended the excavation laterally 7 feet to the south and 12 feet to the west. Soil was removed to a depth of 9 feet below ground surface (bgs). The dispenser island and associated piping were also removed. Analyses of the soil samples collected from the excavation sidewalls indicated that up to 150 milligrams per kilogram (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.

On March 6, 1997, AEI installed three (3) groundwater monitoring wells, MW-1 through MW-3. TPH-g and TPH-d were detected in well MW-3 at concentrations of 26,000 micrograms per liter (μ g/L) and 5,000 μ g/L, respectively. No TPH-g or TPH-d was detected in wells MW-1 and MW-2, at the time of the initial sampling. MTBE was detected in wells MW-1, MW-2 and MW-3 at concentrations of 23 μ g/L, 65 μ g/L and 230 μ g/L, respectively. Well construction details for the groundwater monitoring wells are summarized in Table 1.

At the request of the ACHCSA, six (6) additional soil borings were drilled south and west of the well locations on November 4, 1998. TPH-d was detected at a concentration of 2,400 µg/L in groundwater to the south of the former excavation. No significant concentrations of petroleum hydrocarbons were detected from the other borings.

Monitoring well MW-4 was installed on July 15, 1999, located south of the former tank locations along Yerba Buena Avenue. No hydrocarbons were detected in MW-4 at the time of it's installation, however MTBE was reported at a concentration of 37 μ g/L. The results of on going groundwater monitoring of these four wells is summarized on Tables 2, 2a, 3.

On May 6, 2004, AEI installed one (1) vapor extraction well (VES-1) and two (2) air sparge wells (AS-1 and AS-1). Six (6) shallow vapor monitoring mini-wells (DP-I through DP-6) were installed on May 13, 2004. On May 19 through 20, 2004, AEI carried out a soil vapor extraction and air sparge pilot test. The results of this pilot test and recommendations for remediation are summarized in the AEI August 6, 2005, Soil Vapor Extraction and air sparge extraction Test Report. Installation of the remediation system is planned upon approval of the report recommendations by the ACHCSA, which is still pending.

LNAPL Removal

Light non-aqueous phase liquid (LNAPL) was reported by the laboratory in samples from monitoring well MW-3 collected on November 18, 1999, but was not present in a measurable thickness until 2004.

On September 9, 2004, 0.66 feet of LNAPL was measured in MW-3. On September 23, 2004, 200 gallons of liquid (water and gasoline) were removed from well MW-3 by Excel

Environmental Services. The liquid was removed by placing a 1-inch PVC stinger into the well and dewatering the well to 17 feet bgs for approximately 90 minutes using a vacuum truck. On September 29, 2004, 0.52 feet of LNAPL was measured in MW-3.

On October 22, 2004, 30 gallons of liquids were removed from MW-3 by extending the 1-inch PVC stinger into the top of the water approximately 6-inches and vacuuming for approximately 1 hour. On October 27, 2004, 0.32 feet of LNAPL was measured in well MW-3.

On November 4 and 23, 2004, 15 gallons of liquid was removed on each visit by vacuuming the surface of the groundwater. LNAPL measurements were on November 6 and 19, 2004 were 0.01 feet and 0.14 feet respectively. At the time of this monitoring event, the LNAPL thickness in MW-3 was 0.64 feet in thickness.

The total amount of LNAPL removed is unknown; LNAPL removal was discontinued when the LNAPL thickness stabilized at a thickness of 0.05 feet. AEI is currently preparing a work plan to deal with the LNAPL.

Summary of Monitoring Activities

AEI measured the depth to groundwater in the four wells (MW-1 to MW-4) on September 9, 2005. The locations of groundwater monitoring wells are shown on Figure 2. Prior to sampling, the depth to water from the top of the casing in wells MW-1, 2 and 4 was measured with an electric water level indicator and in Well MW-3 using an electronic air/hydrocarbon/water interface meter. Each well sampled was then purged of at least three well volumes with a submersible pump. Temperature, pH, specific conductivity and oxidation-reduction potential (ORP) were measured during the purging of the wells and turbidity was visually noted. Once water levels had recovered to at least 90% of their original level, a water sample was collected.

The groundwater samples were collected from each well using clean disposable bailers. The water samples were collected into 1-liter amber glass bottles and 40 ml glass volatile organic analysis (VOA) vials. The VOAs were capped so neither headspace nor air bubbles were present within the sample containers. Samples were delivered on ice under proper chain of custody protocol to McCampell Analytical, Inc. of Pacheco, California (Department of Health Services Certification #1644).

Three groundwater samples were submitted for chemical analysis for TPH-g, MTBE, and BTEX by method SW 8021B/8015Cm, and TPH-d by method SW 8015C.

Field Results

LNAPL with a thickness approximately 0.64 feet was present in well MW-3. Groundwater elevations for the current monitoring episode ranged from 33.40 to 35.92 feet above mean sea level (amsl). These groundwater elevations were an average of 1.59 feet lower than the average

level observed during the previous episode. Based on these water level measurements, the direction of the groundwater flow at the time of measurement was towards the northwest with a hydraulic gradient of approximately 0.042 ft/ft. This flow direction and gradient are consistent with previous episodes.

Groundwater elevation data and groundwater sample analytical data are summarized in Tables 2, 2a, and 3. The groundwater elevation contours and the groundwater flow direction are shown on Figure 4. Refer to Appendix A for Groundwater Monitoring Well Field Sampling Forms, which include field measurements and observations made during the monitoring activities.

Groundwater Quality

TPH-g, TPH-d, and benzene were detected in MW-1 at 120 μ g/L, 76 μ g/L, and 2.0 μ g/L, respectively. MTBE, toluene, ethylbenzene, and xylenes were not detected in MW-1 above laboratory detection limits.

MTBE was detected in MW-2 at $8,600~\mu g/L$, respectively. TPH-g, TPH-d, benzene, toluene, ethylbenzene, and xylenes were not detected in MW-2 above laboratory detection limits.

Well MW-3 was not sampled due to the presence of 0.64 feet of LNAPL.

TPH-g and BTEX continued to be at non-detectable concentration is MW-4. TPH-d and MTBE were detected at a concentrations of 54 μ g/L and 16 μ g/L, respectively in MW-4.

Groundwater sample analytical data is presented in Table 3. Historical hydrocarbon concentrations in wells MW-1 and MW-3 are shown in Figures 5 and 6, respectively. Laboratory results and chain of custody documents are included in Appendix B.

Summary

LNAPL continues to be present in the immediate vicinity of MW-3. Significant concentrations of MTBE continue to be present in well MW-2. The MTBE concentration reported in MW-2 during this event represents the highest concentration of MTBE ever reported in MW-2.

Recommendations

Based on the current and historical data, AEI recommends the following:

 Continued quarterly monitoring, with the next monitoring event tentatively scheduled for December 2005. To aid in further delineation of the extent of the contamination plume in the vicinity of wells MW-2 and MW-3, AEI recommends that wells DP-1, DP-2, and DP-3 also be sampled, if a sufficient volume of water is present to sample.

 Prepare a work plan for a three to five day dual phase extraction pilot test to remove the LNAPL in MW-3

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 the undersigned at (925) 944-2899 if you have any questions or need any additional information.

Sincerely,

AEI Consultants

Jeremy Smith

Project Manager

Robert F. Flory PG

Senior Project Geologist

No. 5825

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Figures

Figure 1 Site Location Map

Figure 2 Site Plan

Figure 3 Sample Analytical Data

Figure 4 Water Table Contours

Figure 5 MW-1 Figure 6 MW-3

Tables

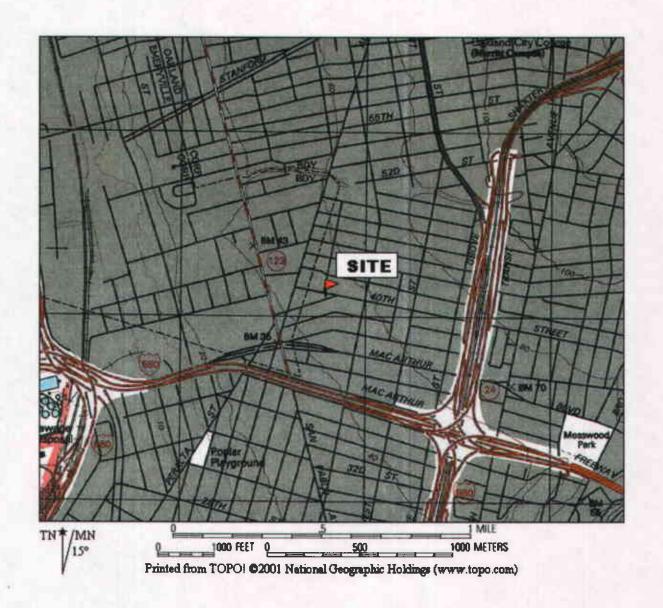
Table 1 Well Construction Details
Table 2 Groundwater Elevation Data
Table 2a Groundwater Flow Data
Table 3 Groundwater Analytical Data

Appendices

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

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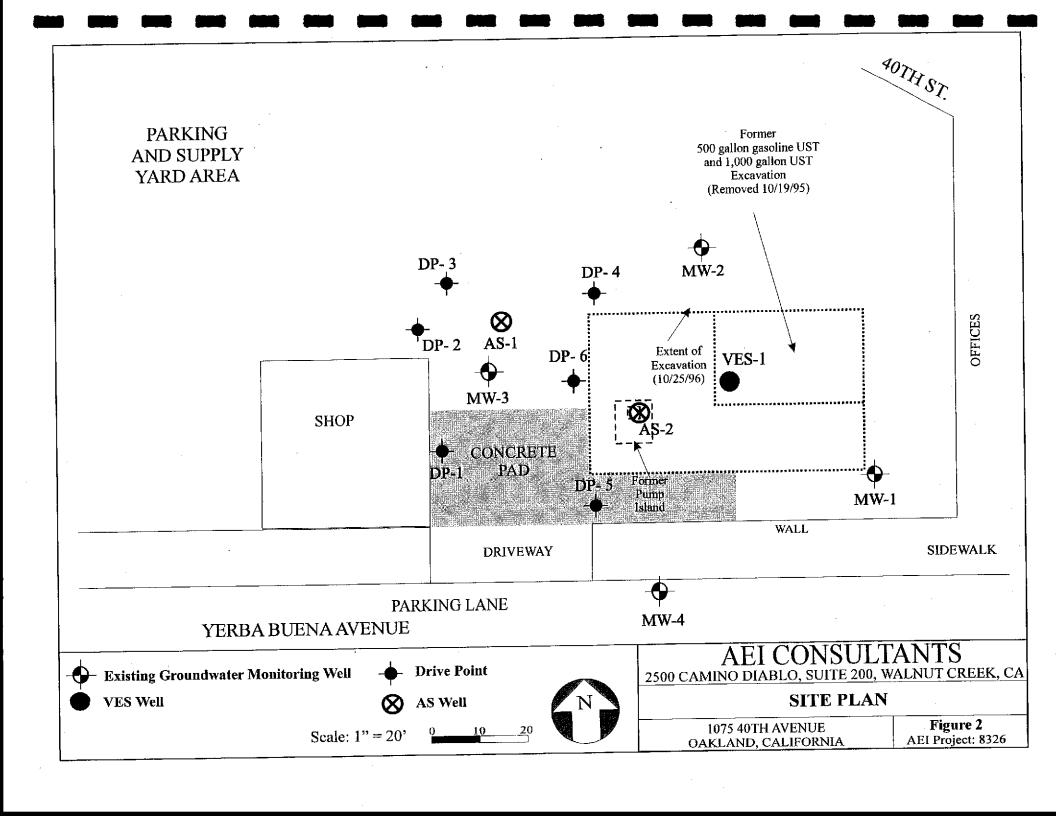
Barney Chan ACHCSA 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

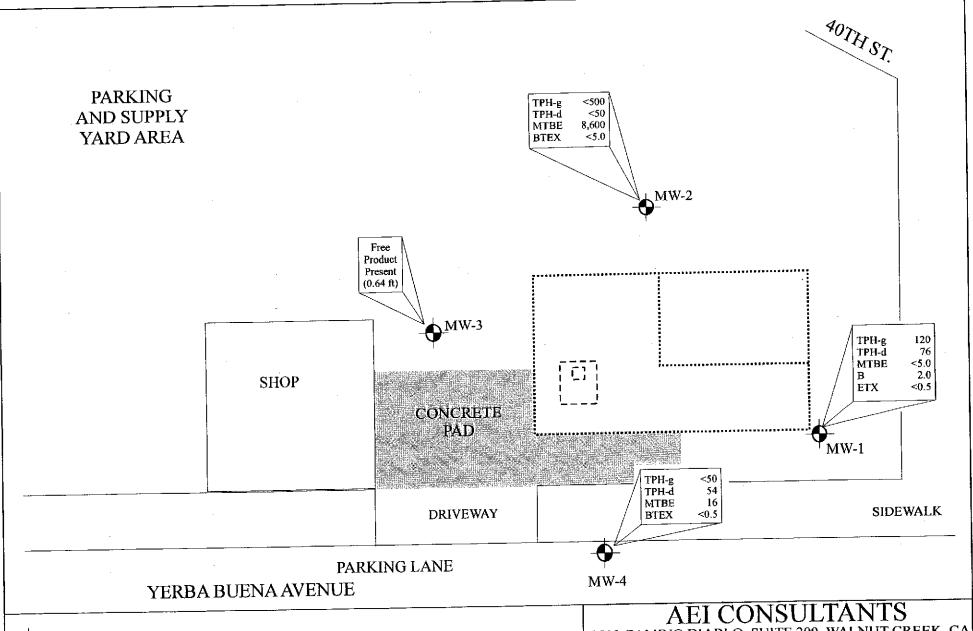


AEI CONSULTANTS SITE LOCATION MAP

1075 40th STREET OAKLAND, CALIFORNIA

FIGURE 1 PROJECT NO. 8326







Monitoring Well Groundwater results are reported in µg/L TPH-g = Total Petroleum Hydrocarbons as gasoline TPH-d = Total Petroleum Hydrocarbons as diesel

MTBE = Methyl tertiary-Butyl Ether BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes Sampling Event: 9/8/05 Scale: 1" = 20

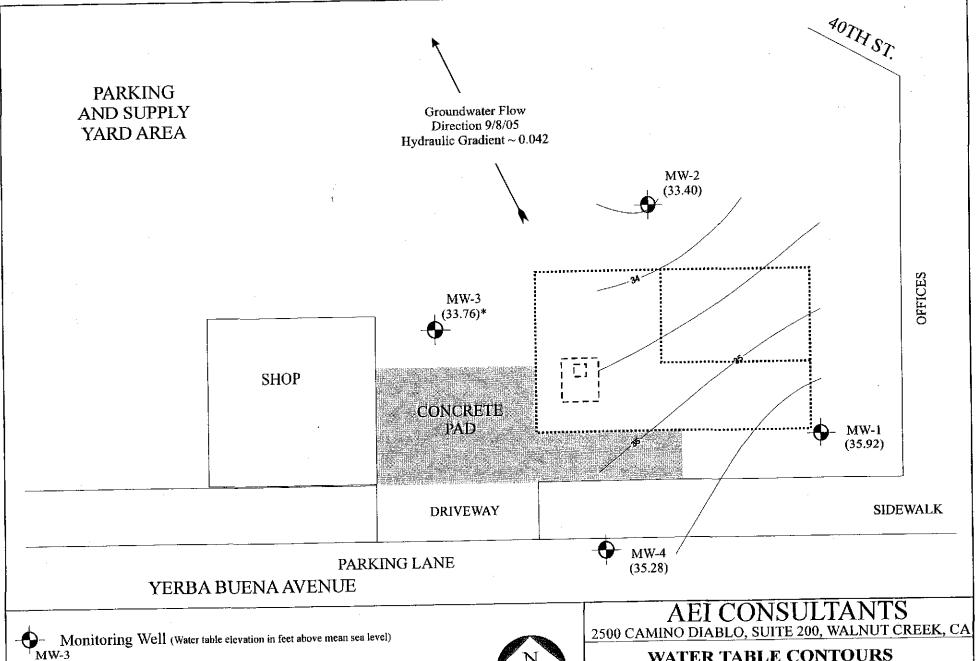
0 10 20



2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

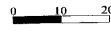
SAMPLE ANALYTICAL DATA

1075 40TH AVENUE OAKLAND, CALIFORNIA Figure 3
AEI Project: 8326



(33.88)* Free product present, elevation not used to contour groundwater Water table contours drawn by Surfer mapping software

Scale: 1" = 20





WATER TABLE CONTOURS

1075 40TH AVENUE OAKLAND, CALIFORNIA

Figure 4 AEI Project: 8326

FIGURE 5 - Fidelity Roof - MW-1

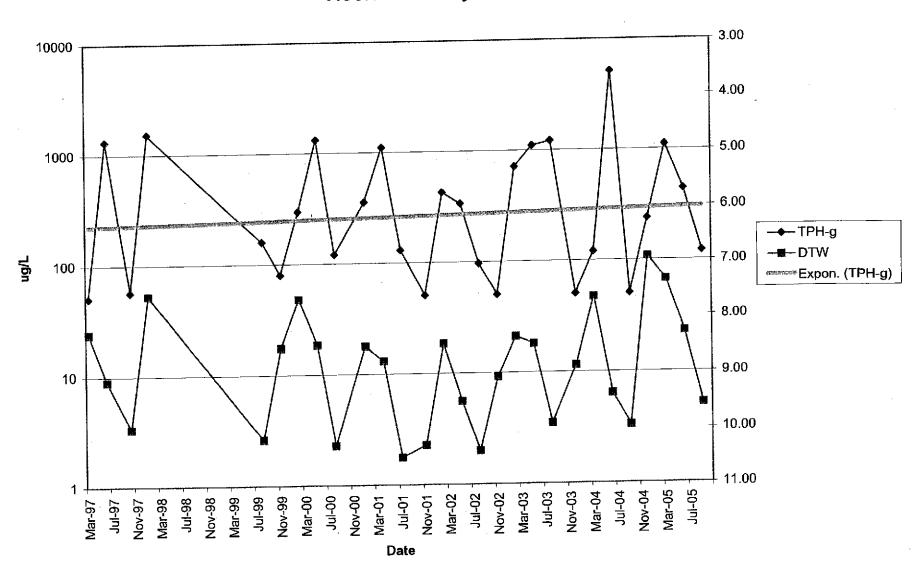


FIGURE 6 - Fidelity Roof - MW-3

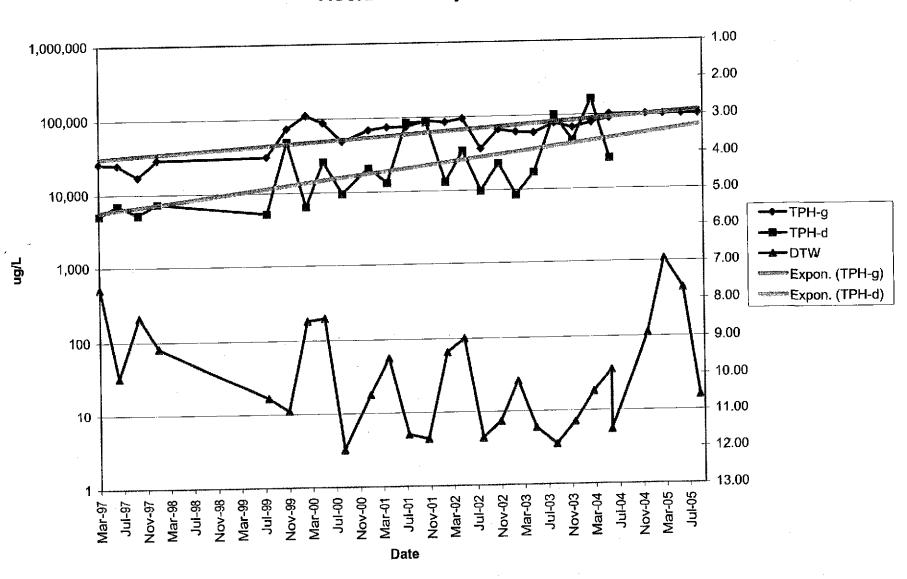


Table 1: Well Construction Details
Fidelity Roof Company, 1075 40th Street, Oakland, California

Well ID	Date Drilled	Elevation	Water Depth	Boring Depth	Slotted Casing	Slot Size	Blank Casing	Sand Interval	Sand Size	Bentonite Interval	Grout Interval
		(ft amsl)	12/13/04 (ft)	(ft)	(ft)	(in)	(ft)	(ft)		(ft)	(ft)
MW-1	03/06/97	45.41	6.94	21.0	6-21	0.020	0.5-6	5-21	#3	4-5	0.5-4
MW-2	03/19/97	44.94	9.26	21.0	6-21	0.020	0.5-6	5-21	#3	4-5	0.5-4
MW-3	03/19/97	44.32	8.91	21.0	6-21	0.020	0.5-6	5-21	#3	4-5	0.5-4
MW-4	08/05/99	43.48	5.51	20.0	5-21	0.020	0.55	4-20	#3	3-4	0.5-3
•	05/06/04	45.2 est		30.0	25-30	0.010	0.75-25	22-30	2/12	19-22	1.0-19
AS-1				30.0	25-30	0.010	0.75-25	22-30	2/12	19-22	1.0-19
AS-2	05/06/04	45.2 est.		10.0	5-10	0.010	0.75-10	4-10	2/12	3-4	1.0-3
VE-1	05/06/04	45.0 est.			5.5-15.5	# 40 mesh	5.5-0.5	4.5-15.5	#30	3.5-4.5	0.75-3.5
DP-1	05/13/04	44.0 est.		16.0		# 40 mesh	5.5-0.5	4.5-15.5	#30	3.5-4.5	0.75-3.5
DP-2	05/13/04	44.6 est.		16.0	5.5-15.5		5.5-0.5	4,5-15.5	#30	3,5-4.5	0.75-3.5
DP-3	05/13/04	44.7 est.		16.0	5.5-15.5	# 40 mesh				3.5-4.5	0.75-3.5
DP-4	05/13/04	44.8 est.		16.0	5.5-15.5	# 40 mesh	5.5-0.5	4.5-15.5	#30	•	
DP-5	05/13/04	45.0 est.		16.0	5.5-15.5	# 40 mesh	5.5-0.5	4,5-15.5	#30	3.5-4.5	0.75-3.5
DP-6	05/13/04	44.3 est.		16.0	5.5-15.5	# 40 mesh	5.5-0.5	4.5-15.5	#30	3.5-4.5	0.75-3.5

Notes:

All well elevations are measured from the top of the casing and ft amsl = feet above mean sea level

Table 2: Groundwater Elevation Data Fidelity Roofing, 1075 40th Street, Oakland, California

Well ID	Date	Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevatio (ft amsl)
	00/10/07		8.25	37.16
MW-1	03/19/97	45.41	9.10	36.31
	06/20/97	45.41		35.46
	10/08/97	45.41	9.95	37.84
	01/16/98	45.41	7.57	35,33
	08/05/99	45.49	10.16	
•	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	8.50	36.99
	04/18/01	45.49	8.77	36.72
	07/27/01	45.49	10.50	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
	08/15/02	45,49	10.39	35.10
	11/14/02	45.49	9.08	36.41
	02/12/03	45.49	8.36	37.13
	05/16/03	45.49	8.49	37.00
	08/29/03	45.49	9.91	35.58
	12/02/03	45,49	8.88	36.61
	03/08/04	45.49	7.66	37.83
		45.49	9.39	36.10
	06/08/04		9.95	35.54
	09/10/04	45.49	6.94	38.55
	12/13/04	45.49	7.35	38.14
	03/11/05	45.49		37.20
	06/15/05	45 49	8.29	35.92
	09/08/05	45.49	9.57	33.94
MW-2	03/19/97	44,94	8.40	36.54
1.2	06/20/97	44.94	8.85	36.09
	10/08/97	44.94	9.80	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	10.20	34.78
	02/24/00	44.98	7.03	37.95
	05/24/00	44.98	8.01	36.97
		44.98	11.07	33.91
	08/29/00	44.98	8.60	36.38
	01/12/01	44.98	8.80	36.18
	04/18/01		11.10	33.88
	07/27/01	44.98		32.77
	11/06/01	44.98	12.21	37.00
	02/13/02	44.98	7.98	34.50
	05/14/02	44.98	10.48	
	08/15/02	44.98	10.64	34.34
	11/14/02	44.98	11.69	33.29
	02/12/03	44.98	9.07	35.91
·	05/16/03	44.98	11.25	33.73
	08/29/03	44.98	12.19	32.79
	12/02/03	44.98	10.92	34.06
	03/08/04	44.98	8.41	36.57
	06/08/04	44.98	10.19	34.79
	09/10/04	44.98	10.84	34.14
	12/13/04	44.98	9.26	35.72
	03/11/05	44.98	7.81	37.17
				34.18
	06/15/05	44.98	10.80	J 4 .10

Table 2: Groundwater Elevation Data Fidelity Roofing, 1075 40th Street, Oakland, California

Well ID	Date	Elevation	Depth to Water	Groundwater Elevation (ft amsl)
		(ft amsl)	(ft)	
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	12.00	32.37
	01/12/01	44.37	10.50	33.87
	04/18/01	44.37	9.50	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
	08/15/02	44.37	11.72	32.65
	11/14/02	44.37	11.28	33.09
	02/12/03	44.37	10.17	34.20
	05/16/03	44.37	11.47	32.90
	08/29/03	44.37	11,92	32.45
	12/02/04	44.37	10.96	33.41
	03/08/04	44.37	10.49	33.88
	06/08/04	44.37	9.89	34.48
	09/10/04	44.37	11.54	32.83
	12/13/04	44.37	8.96	35.41
	03/11/05	44.37	6,99	37.38
	06/15/05	44.37	7.72	36.65
	9/8/2005 *	44.37	10.61	33.76
MW-4	08/05/99	43.48	8.79	34.69
IAT AA	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	6.40	37.08
	04/18/01	43.48	7.30	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
	08/15/02	43.48	8.97	34.51
	11/14/02	43.48	7.52	35.96
	02/12/03	43.48	6.37	37.11
	05/16/03	43.48	6.81	36.67
	08/29/03	43.48	8.56	34.92
	12/02/03	43.48	6.02	37.46
	03/08/04	43.48	5.75	37.73
	06/08/04	43.48	8.19	35.29
	09/10/04	43.48	8.84	34.64
	12/13/04	43.48	5.51	37.97
	03/11/05	43.48	5.26	38.22
	06/15/05	43.48	6.79	36.69
	09/08/05	43.48	8.20	35.28

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

^{* =} Apparent groundwater elevation, free product present

Table 2a: Groundwater Flow Data Fidelity Roofing, 1075 40th Street, Oakland, California

Episode	Date	Average Water Table Elevation (ft amsl)	Water Table Elevation Change (ft)	Hydraulic Gradient Flow Direction (ft/ft)
1	03/19/97	36.81		# F
2	06/20/97	35.58	-1.23	
3	10/08/97	35.52	-0.06	
4	01/16/98	37.55	2.03	
5	08/05/99	34.87	-2.67	-n
6	11/18/99	35.14	0.27	
7	02/24/00	37.49	2,35	
8	05/24/00	36.55	-0.94	
9	08/29/00	33.98	-2.57	NW (0.09)
10	0.1/12/01	36.08	2.10	W (0.06)
11	04/18/01	36.08	0.00	W (0.02)
12	07/27/01	. 33.99	-2.09	W (0.02)
13	11/06/01	33.77	-0.22	NW (0.05)
14	02/13/02	36.48	2.71	NW (0.05)
15	05/14/02	35.54	-0.94	N (0.04)
16	08/15/02	34.15	-1.39	W (0.05)
17	11/14/02	34.69	0.54	N (0.08)
18	02/12/03	36.09	1.40	NW (0.03)
19	05/16/03	35.08	-1.01	NW (0.06)
20	08/29/03	33.94	-1.14	NW (0.04)
21	12/02/03	35.39	1.45	NW (0.05)
22	03/08/04	36.50	1.12	NW (0. 0 4)
23	06/08/04	35.17	-1.34	NW (0.02)
24	09/10/04	34.29	-0.88	NW (0.007)
25	12/13/04	36.91	2.63	NW (0.05)
26	03/11/05	37.73	0.81	NW (0.016)
27	06/15/05	36.18	-1.55	NW (0.015)
28	09/08/05	34.59	-1.59	NW (0.042)

 $\underline{\text{Notes:}}$ ft amsl = feet above mean sea level

Table 3: Groundwater Analytical Data Fidelity Roofing, 1075 40th Street, Oakland, California

Well ID	Date	Depth to Water	TPHg	TPHd	мтве	Benzene	Toluene	Ethyl- benzene	Xylenes
			EPA Method S			EPA	Method SW80	J21B	
		(ft)	(ug/	<u>L)</u>	<u> </u>		(ug/L)		
	00/10/05	0.25	<50	<50	23	<0.5	<0.5	<0.5	<0.5
MW - 1	03/19/97	8.25	1,300	420	14	150	2.1	12	19
	06/23/97	9.10 9.95	56	66	5.8	2.8	< 0.5	< 0.5	<0.5
	10/08/97		1,500	, 910	<33	95	0.72	69	8.4
	01/16/98	7.57	160	63	<15	1.6	< 0.5	0.56	1.1
	08/05/99	10.16 8.52	79	<50	<5.0	< 0.5	< 0.5	<0.5	< 0.5
	11/18/99		300	160	<5.0	14	0.82	3.5	1.6
	02/24/00	7.65	1,300	480	<10	93	< 0.5	17	1.6
	05/24/00	8.47	120	<0.5	<5.0	0.93	< 0.5	< 0.5	<0.5
	08/29/00	10.28 8.50	360	170	<5.0	16	< 0.5	9.3	0.69
	01/12/01		1,100	410	2,800	63	< 0.5	34	0.73
	04/18/01	8.77	130	66	<5.0	1.6	< 0.5	< 0.5	< 0.5
	07/27/01	10.50	<50	<50	<5.0	< 0.5	< 0.5	<0.5	< 0.5
	11/06/01	10.28	430	270	<5.0	17	0.51	11	0.64
	02/13/02	8.47	340	170	<5.0	21	<0.5	5.3	0.67
	05/14/02	9.50	96	53	<5.0	0.66	<0.5	< 0.5	< 0.5
	08/15/02	10.39	<50	<50	<5.0	<0.5	<0.5	< 0.5	<0.5
	11/14/02	9.08	710	120	<5.0	28	4.3	32	130
	02/12/03	8.36	1,100	340	<15	54	4.1	40	100
	05/16/03	8.49		280	<5.0	46	5.1	55	230
	08/29/03	9.91	1,200 <50	< 50	<5.0	<0.5	<0.5	< 0.5	< 0.5
	12/02/03	8.88	120	240 ^{1,2}	<5.0	2.9	<0.5	< 0.5	0.71
	03/08/04	7.66	<50	$\frac{240}{78^2}$	<5.0	<0.5	<0.5	<0.5	< 0.5
	06/08/04	9.39	<50	<50	<5.0	<0.5	< 0.5	< 0.5	< 0.5
	09/10/04	9.95	240	150	<5.0	11	<0.5	5.6	< 0.5
	12/13/04	6.94	1,100	420	<40	43	0.60	12	0.80
	03/11/05	7.35	440	220	<15	26	<0.5	0.60	<0.5
	06/15/05 09/08/05	7.35 . 9.57	120 ³	76 ¹	<5.0	2.0	<0.5	<0.5	<0.5
N. 6357 0	03/19/97	8.40	<50	<50	65	<0.5	<0.5	<0.5	<0.5
MW - 2	06/23/97	8.85	<50	<50	70	3.4	< 0.5	<0.5	<0.:
	10/08/97	9.80	<50	<50	90	< 0.5	<0.5	<0.5	<0.:
		5.28	<50	<50	65	< 0.5	<0.5	<0.5	<0.5
	01/16/98 08/05/99	9.32	<50	<50	600	<0.5	<0.5	<0.5	<0.:
		10.20	<50	<50	370	< 0.5	<0.5	<0.5	<0.:
	11/18/99 02/24/00	7.03	<50	<50	880	< 0.5	<0.5	<0.5	<0.:
	05/24/00	8.01	<250	62	2,200	< 0.5	< 0.5	< 0.5	<0.
		11.07	<200	<50	1,900	< 0.5	<0.5	<0.5	<0.
	08/29/00	8.60	470	70	2,000	8.7	3.1	16	73
	01/12/01	8.80	<50	<50	2,800	< 0.5	< 0.5	<0.5	<0.
	04/18/01		<100	<50	3,300	< 0.5	< 0.5	<0.5	<0.
	07/27/01	11.10	<100	<50	3,000	< 0.5	< 0.5	< 0.5	<0.
	11/06/01	12.21 7.98	54	<50	3,200	< 0.5	<0.5	<0.5	<0.
	02/13/02		<150	<50	3,800	4.8	<1.0	<1.0	<1.
	05/14/02	10.48 10.64	<50	<50	2,900	<0.5	<0.5	<0.5	<0.
	08/15/02	11.69	<120	<50	3,800	<1.0	<1.0	<1.0	<1
	11/14/02	9.07	1,100	120	3,200	57	7	55	21
	02/12/03		530	85	6,000	35	3.6	22	79
	05/16/03	11.25	2,400	1200	4,800	39	5.8	77	32
	08/29/03	12.19 10.06	<100	<50	3,300	<1.0	<1.0	<1.0	<1
	12/02/03	10,96	<250	<50	4,600	<2.5	<2.5	<2.5	<2
	03/08/04	8.41	<120	<50	3,400	<1.2	<1.2	<1.2	<1
	06/08/04	10.19		<250	4,100	<2.5	<2.5	<2,5	<2
	09/10/04	10.84	<250	<50	4,200	<0.5	0.83	< 0.5	1.
	12/13/04	8.41	120	<50	4,200	14	<0.5	0.56	<0
	03/11/05	7.81	120	<50 <50	12,000		<5.0	<5.0	<5
	06/15/05	7.81	1,200		8,600			<5.0	<5
	09/08/05	11.58	<500	<50	: 0.000	~5.0	-510	2,0	

Table 3: Groundwater Analytical Data Fidelity Roofing, 1075 40th Street, Oakland, California

Well ID	Date	Depth to Water	ТРНд	TPHd	МТВЕ	Benzene	Toluene	Ethyl- benzene	Xylenes
			EPA Method S	1		EPA	Method SW8	021B	
		(ft)	(ue	/L)			(ug/L)		
34117 3	03/19/97	7.59	26,000	5,000	230	3,000	530	340	2,300
MW -3	03/19/97	9.98	25,000	7,000	270	4,400	120	540	1,500
	10/08/97	8.36	17,000	5,100	<280	4,400	47	280	410
	01/16/98	9.18	29,000	7,300	<360	5,600	740	950	3,500
	08/05/99	10.56	31,000	5,100	<200	5,400	150	1100	2,300
	11/18/99	10.92	74,000	49,000	<1,000	8,100	5,000	2,100	8,100
	02/24/00	8.49	110,000	6,300	<200	12,000	1,400	2,900	14,000
	05/24/00	8.42	87,000	26,000	<200	13,000	1,900	2,900	14,000
	08/29/00	12.00	49,000	9,400	<200	7,400	800	1,800	7,400
	01/12/01	10.50	69,000	21,000	<300	8,600	980	2,600	11,000
	04/18/01	9.50	75,000	13,000	< 500	9,200	1,200	2,500	12,000
	07/27/01	11.61	75,000	85,000	<650	8,700	1,100	2,600	12,000
	11/06/01	11.73	89,000	86,000	<200	7,900	910	2,800	12,000
	02/13/02	9.36	85,000	13,000	<2,000	8,500	830	2,600	11,000
	05/14/02	9.00	94,000	35,000	<1.000	9,700	1,100	3,400	15,000
	08/15/02	11.72	37,000	9,700	<1.200	5,200	430	1,800	5,900
	11/14/02	11.28	66,000	23,000	<1,200	8,300	860	3,000	11,000
	02/12/03	10.17	61,000	8,400	<500	6,800	500	2,400	9,800
	05/16/03	11.47	59,000	17,000	<500	6,200	320	2,000	6,500
•	08/29/03	11.92	78,000	100,000	<1,200	6,800	440	2,900	11,000
	12/02/03	11.32	68,000	46,000	<1,000	7,600	450	2,900	10,000
	03/08/04	10.49	79,000	160,000	<250	7,700	570	300	13,000
	06/08/04	9.89	90,000	26,000	<1,200	6,700	580	2,500	13,000
	06/08/04	11.54		ee Product	<100*	7,600*	540*	3,500*	14,000*
	12/13/04	8.91		roduct = 0.05 ft	-	- '	-	-	-
	03/11/05	6.94		roduct = 0.05 ft	-	-	-	-	-
	06/15/05	6.99	NA - Free P	roduct = 0.12 ft	-	-	-	-	-
	09/08/05	10.61	NA - Free P	roduct = 0.64 ft	-	-	•	-	-
MW-4	08/05/99	8.79	<50	<50	37	< 0.5	< 0.5	< 0.5	< 0.5
141 44 4	11/18/99	8.11	<50	<50	20	<0.5	< 0.5	<0.5	<0.5
	02/24/00	5.19	<50	<50	20	< 0.5	< 0.5	<0.5	<0.5
	05/24/00	7.23	120	140	31	1.3	< 0.5	<0.5	< 0.5
	08/29/00	9.04	<50	<50	22	< 0.5	<0.5	<0.5	<0.5
	01/12/01	6.40	<50	81	25	< 0.5	<0.5	< 0.5	<0.5
	04/18/01	7.30	30	170	35	2.4	1.1	0.66	. 4.2
	07/27/01	9.16	87	110	26	1.8	<0.5	2	10
	11/06/01	9.03	200	59	21	4.5	1	5.2	24
	02/13/02	6.60	<50	91	15	<0.5	< 0.5	< 0.5	<0.5
	05/14/02	7.19	260	140	26	12	2.7	11	49
	08/15/02	8.97	<50	<50	12	< 0.5	<0.5	<0.5	<0.5
	11/14/02	7.52	<50	<50	11	<0.5	< 0.5	<0.5	<0.5
	02/12/03	6.37	170	130	16	3.1	0.66	6.4	27
	05/16/03	6.81	<50	60	23	<0.5	< 0.5	<0.5	<0.5
	08/29/03	8.56	610	120	10	. 16	2.7	30	130
	12/02/03	6.02	<50	<50	7.7	<0.5	< 0.5	< 0.5	<0.5
	03/08/04	5.75	<50	<50	10	< 0.5	< 0.5	<0.5	<0.5
	06/08/04	8.19	<50	<50	11	< 0.5	< 0.5	< 0.5	<0.5
	09/10/04	8.84	<50	<50	10	< 0.5	<0.5	<0.5	< 0.5
	12/13/04	5.75	<50	<50	16	<0.5	<0.5	< 0.5	<0.5
	03/11/05	5.26	<50	<50	16	<0.5	<0.5	<0.5	< 0.5
	06/15/05	5.26	<50	< 50	15	<0.5	<0.5	<0.5	.<0.5
•	09/08/05	8.20	<50	54 ²	16	<0.5	<0.5	<0.5	<0.5

ug/L= micrograms per liter

MTBE= Methyl Tertiary Butyl Ether

TPHg= Total Petroleum Hydrocarbons as gasoline TPHd= Total Petroleum Hydrocarbons as diesel

* + Analysis by 8260

- 1 gasoline range compounds are significant
- 2 diesel range compounds are significant; no recognizable pattern
- 3 unmodified or weakly modified diesel is significant
- 4 lighter than water immiscible sheen/product is present
- 5- oil range compounds are significant

APPENDIX A

GROUNDWATER MONITORING WELL FIELD SAMPLING FORMS

Monitoring Well Number:

MW-1

•		, · · · · · · · · · · · · · · · · · ·
Project Name:	Fidelity Roof Company	Date of Sampling: 9/8/05
Job Number:	3119	Name of Sampler: Adrian Nieto
Project Address:	1075 40th Avenue, Oakland	

MONTORN MONTORN	en eilen	7.
Well Casing Diameter (2"/4"/6")		2
Wellhead Condition	ОК	▼
Elevation of Top of Casing (feet above msl)		45.49
Depth of Well		21.00
Depth to Water (from top of casing)		9.57
Water Elevation (feet above msl)		35.92
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)		5.5
Actual Volume Purged (gallons)		6.0
Appearance of Purge Water		clear
Free Product Present	? No	Thickness (ft):

ples/Container S	NZ-6		2 40mL VOA,	1 1L		
Vol Removed (gal)	Temperature (deg C)	рН	Conductivity (µS/cm)	DO (mg/L)	ORP (meV)	Comment
2	20.87	6.81	451	.08	-30.1	
4	20.71	6.72	477	.05	-69.7	<u> </u>
6	20.35	6.74	486	.03	-37.5	
						
		 				
	(gai) 2 4	(gal) (deg C) 2 20.87 4 20.71	(gal) (deg C) pri 2 20.87 6.81 4 20.71 6.72	(gal) (deg C) pH (μ·S/cm) 2 20.87 6.81 451 4 20.71 6.72 477	(gal) (deg C) pH (μ.S/cm) (mg/L) 2 20.87 6.81 451 .08 4 20.71 6.72 477 .05	Vol Kelnoved (gal) remperature (deg C) pH (μ.S/cm) (mg/L) (meV) 2 20.87 6.81 451 .08 -30.1 4 20.71 6.72 477 .05 -69.7

no hc odors

Monitoring Well Number: MW-2

Project Name:	Fidelity Roof Company	Date of Sampling: 9/8/05
Job Number:	3119	Name of Sampler: Adrian Nieto
Project Address:	1075 40th Avenue, Oakland	

PROMINENT OF THE PROMIN	CW36 的人人。
Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	44.98
Depth of Well	21.00
Depth to Water (from top of casing)	11.58
Water Elevation (feet above msl)	35.72
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)	4.5
Actual Volume Purged (gallons)	8.0
Appearance of Purge Water	Clears at .5 gallons
Free Product Present	t? no Thickness (ft): -

ber of Sample	es/Container S	Size	<u> </u>	2 40mL VOA, 1	1 1L		
Time	Vol Removed (gal)	Temperature (deg C)	рН	Conductivity (µ S/cm)	DO (mg/L)	ORP (meV)	Comments
	1	21.50	6.67	828	.12	-35.5	
	3	21.98	6.68	757	.35	-30.6	
	5	21.96	6.73	725	.32	-20.4	
							·

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

Light brown no hc odors present

				Monito	oring Well	Number:	MW-3		
Project Name:		Fidelity Roof	Company		Date of Sampling: 9/8/05				
Job Number:		311			Name	of Sampler: Ad	Irian Nieto		
	10	75 40th Aver		nd	<u></u>	<u> </u>	· · · · · · · · · · · · · · · · · · ·		
Project Address:	. 10	70 40th Aver	ide, Cariai	1	· · · · · · · · · · · · · · · · · · ·				
	i Bull Carrier	M	energie.	enverbeau		新 州 東北州	34号期)推得证		
Well Casing Diame	eter (2"/4"/6")					2			
Vellhead Condition	ОК								
Elevation of Top of	Casing (feet a	above msl)				44.37			
Depth of Well						21.00			
Depth to Water (fro	om top of casir	na)				10.61			
Depth to FP		-				9.97			
Water Elevation (f	eet above msl))				33.76			
Well Volumes Pur				N/A					
Calculated Gallesizes of 2" (.16 Actual Volume Pu	gal/ft), 4" (.65 g	ormula valid only al/ft), and 6" (1	y for casing .44 gal/ft)			N/A			
Appearance of Pu				N/A					
, tppou/ci/ioo_ci/		Free Proc	duct Present	? yes	7	hickness (ft):	0.64		
			Carran E (Trans V Tr	AFERSONE		a de la Carta de l			
Number of Sampl	es/Container S		TKEE PERAN	2 40mL VOA,					
Time	Vol Removed (gal)		pН	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments		
			-				·		
	· · · · · · · · · · · · · · · · · · ·		T	1 1		1			

Well not purged or sampled, Free Product detected

Monitoring Well Number:

MW-4

Project Name:	Fidelity Roof Company	Date of Sampling: 9/8/05
Job Number:	3119	Name of Sampler: Adrian Nieto
Project Address:	1075 40th Avenue, Oakland	

THE PROPERTY OF THE PROPERTY O	ienvijelulumav	A C C A C A C A C A C A C A C A C A C A	Me.		
Well Casing Diameter (2"/4"/6")		2			
Wellhead Condition	ОК				
Elevation of Top of Casing (feet above msl)		43.48			
Depth of Well		20.00			
Depth to Water (from top of casing)		8.20			
Water Elevation (feet above msl)	35.28				
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)		5.7			
Actual Volume Purged (gallons)	-	6.0			
Appearance of Purge Water	clears quickly				
Free Product Present	? No	Thickness (ft):			

	ntainer Si			2 40mL VOA, 1	· · · · · · · · · · · · · · · · · · ·		
lima	Removed (gal)	Temperature (deg C)	Нq	Conductivity (μ S/cm)	DO (mg/L)	ORP (meV)	Comments
	2	23.23	6.65	463	.25	33.7	
	4	23.09	6.66	513	.23	40.9	
	6	22.23	6.70	581	.15	34.8	

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

Water light brown with no hc odors

APPENDIX B

LABORATORY ANALYTICAL REPORT 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: maim@mccampbell.com

AEI Consultants	Client Project ID: #8326; Fidelity Roof	Date Sampled: 09/08/05
2500 Camino Diablo, Ste. #200		Date Received: 09/08/05
	Client Contact: Robert Flory	Date Reported: 09/14/05
Walnut Creek, CA 94597	Client P.O.:	Date Completed: 09/15/05

WorkOrder: 0509178

September 15, 2005

Dear Robert:

Enclosed are:

- 1). the results of 3 analyzed samples from your #8326; Fidelity Roof 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

AEI Consultants	Client Project ID: #8326; Fidelity Roof	Date Sampled: 09/08/05
2500 Camino Diablo, Ste. #200		Date Received: 09/08/05
	Client Contact: Robert Flory	Date Extracted: 09/10/05-09/12/05
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 09/10/05-09/12/05

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm								Work (Order: 0:	09178
Lab ID	Client ID	Matrix	TPH(g)	МТВЕ	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	w	120,a	ND	2.0	ND	ND	ND	1	102
002A	MW-2	w	ND<500,j	8600	ND<5.0	ND<5.0	ND<5.0	ND<5.0	10	97
003A	MW-4	w	ND	16	ND	ND	ND	ND	1	94
			<u> </u>					· · · · · · · · · · · · · · · · · · ·		
					•					
										-
		-	<u> </u>							-
									-	-
				}						
	ng Limit for DF =1;		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/.

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

Angela Rydelius, Lab Manager

[#] 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.



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

AEI Consultants	Client Project ID: #8326; Fidelity Roof	Date Sampled: 09/08/05
2500 Camino Diablo, Ste. #200		Date Received: 09/08/05
W. 1 . 4 G . 1 G . 04507	Client Contact: Robert Flory	Date Extracted: 09/08/05
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 09/10/05-09/12/05

ixtraction method: SW			Range (C10-C23) Extractable Hydrocarbons as Diesel* Analytical methods: SW8015C				
Lab ID	Client ID	Matrix	TPH(d)	DF	% SS		
0509178-001B	MW-1	w	76,d	1	99		
0509178-002B	MW-2	w	ND	1	119		
0509178-003B	MW-4	w	54,b	. 1	97		
				÷			
			<u> </u>				
	Limit for DF =1;	w	50		ıg/L		

Reporting Limit for DF =1;	w	50	μg/L
ND means not detected at or above the reporting limit	S	NA	NA

^{*} 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 / STLC / SPLP / TCLP extracts are reported in µg/L.

1

_Angela Rydelius, Lab Manager

[#] 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) 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/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.



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: 0509178

EPA Method: SW8021B/	/8015Cm	Extraction: SW5030B			BatchID: 17917			Spiked Sample ID: 0509178-003A			
Analyte	Sample	Spiked	мѕ	MSD % Rec.	MS-MSD % RPD	LCS	LCSD % Rec.	LCS-LCSD	Acceptance Criteria (%)		
Analyte	μg/L	μg/L	% Rec.			% Rec.			MS / MSD	LCS / LCSD	
TPH(btex) [£]	ND	60	112	112	0	106	106	0	70 - 130	70 - 130	
МТВЕ	16	10	87.7	85.3	0.943	98.7	102	3.08	70 - 130	70 - 130	
Benzene	ND	10	97.6	97.6	0	112	113	0.288	70 - 130	70 - 130	
Toluene	ND	10	98.9	99.1	0.169	107	107	0	70 - 130	70 - 130	
Ethylbenzene	ND	10	99	99.3	0.314	110	109	0.382	70 - 130	70 - 130	
Xylenes	ND	30	100	100	0	95.3	95.7	0.349	70 - 130	70 - 130	
%SS:	94	10	96	96	0	109	108	0.992	70 - 130	70 - 130	

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

NONE

BATCH 17917 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0509178-001A	9/08/05	9/10/05	9/10/05 9:02 PM	0509178-002A	9/08/05	9/10/05	9/10/05 4:19 PM
0509178-002A	9/08/05	9/12/05	9/12/05 4:51 PM	0509178-003A	9/08/05	9/10/05	9/10/05 9:35 PM

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.

QA/QC Officer



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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0509178

EPA Method: SW8015C	Extraction: SW3510C			Batc	hID: 17911		Spiked Sample ID: N/A			
A a b .d. a	Sample	Spiked	мѕ	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
Analyte	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(d)	N/A	1000	N/A	N/A	N/A	102	102	0	N/A	70 - 130
%SS:	N/A	2500	N/A	N/A	N/A	103	103	0	N/A	70 - 130

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

BATCH 17911 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed	
0509178-001B	9/08/05	9/08/05	9/12/05 1:51 PM	0509178-002B	9/08/05	9/08/05	9/10/05 12:11 AM	
0509178-003B	9/08/05	9/08/05	9/12/05 2:59 PM	ļ				

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.

DHS Certification No. 1644

QA/QC Officer

CHAIN-OF-CUSTODY RECORD



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

2500 Camino Diablo, Ste. #200

WorkOrder: 0509178

ClientID: AEL

EDF: NO

Requested TAT:

Date Received:

Report to:

Robert Flory **AEI Consultants**

(925) 283-6000

FAX:

(925) 283-6121

ProjectNo: #8326; Fidelity Roof

PO:

TEL:

Bill to:

Diane

All Environmental, Inc.

2500 Camino Diablo, Ste. #200

Date Printed: Walnut Creek, CA 94597

09/08/2005

5 days

09/08/2005

Walnut Cree	k, CA 94597	PO:						waii	iut Cret	3K, CA	94001			Dute 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		700,20	
				Requested Tests (See legend below)														
	ClitComplD	Matrix	Collection Date	Hold	1 2	3	4	5	6	7		8 9	10		12	13	14	15
Sample ID	ClientSamplD	MIGHTA	0011001101112111		<u> </u>													
		. 										····]	T		
0509178-001	MW-1	Water	9/8/05	_	AAA			+-			_				 	···	T	
0509178-002	MW-2	Water	9/8/05		Α	B	-								+	 	-	+
0509178-003	MW-4	Water	9/8/05		Α	В										.l	<u> </u>	لــــــــــــــــــــــــــــــــــــــ

Test Legend:

1	G-MBTEX_W						
6							
11							

2	PREDF REPORT
7	
12	

3	TPH(D)_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.

al

0504178

CHAIN OF CUSTODY RECORD McCAMPBELL ANALYTICAL INC. TURN AROUND TIME 110 2nd AVENUE SOUTH, #D7 (5 DAY 72 HR RUSH 24 HR 48 HR PACHECO, CA 94553-5560 Write On (DW) No Fax: (925) 798-1622 EDF Required? Coelt (Normal) No Telephone: (925) 798-1620 Comments Other Analysis Request Bill To: Report To: Robert Flory **AEI** Consultants Total Petroleum Oil & Grease (5520 E&F/B&F) Company: AEI Consultants 2500 Camino Diablo, Suite 200 8015)/MTBE Lead (7240/7421/239.2/6010) Toatal lead 625 / 8270 / 8310 E-Mail: rflory@aelconsultants.com Total Petroleum Hydrocarbons (418.1) Fax: (925) 944-2895 EPA 601 / 8010 basic list by 8012B Tele: (925) 944-2899 ext. 122 Project Name: Fidelity Roof BTEX ONLY (EPA 602 / 8020) EPA 608 / 8080 PCB's ONLY Project #: 8326 multi-range EPA 8015 Project Location: 1075 40th Street, Oakland, CA PAH's / PNA's by EPA Sampler Signature: Advun EPA 624 / 8240 / 8260 TPH as Diesel (8015) METHOD MATRIX SAMPLING Type Containers PRESERVED CAM-17 Metals LUFT 5 Metals EPA 625 / 8270 EPA 608 / 8080 BTEX & TPH as # Containers SAMPLE 1D LOCATION Sludge Water HNO, Other Other TPH (Field Point Name) Time 2 Date HC Soil Air Ice \mathbf{x} X 18/05 MW-1 $\mathbf{x} \mathbf{x}$ X X | t /MW-2 Wot sample MARS $\mathbf{X} \mid \mathbf{X}$ $|\mathbf{x}| \times$ 16 X MW-4 voas org METALS OTHER Received By Time: Rellyiquished By: Dates PRESERVATION_ APPROPRIATE GOOD CONDITION Received By: Time: Relinquished By: CONTAINERS_ HEAD SPACE ABSENT PERSERVED IN LAB DECHLORINATED IN LAB Received By: Time: Date: Relinquished By: