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AEI CONSULTANTS
Environmental & Civil Engineering

2500 Camino Diablo, Suite 100, Walnut Creek, CA 94597
Phone: (925) 944-2899 Fax: (925) 944-2895

September 30, 2004

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

Subject: **Quarterly Groundwater Monitoring Report**
Third Quarter 2004
1075 40th Street
Oakland, California
AEI Project No. 3119

Dear Mr. Huang:

Enclosed is a copy of the quarterly groundwater report for the third quarter 2004 groundwater monitoring event. I am working up the data from the pilot test and will have the report done shortly.

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

Sincerely,
AEI Consultants

Robert F. Flory, RG

September 30, 2004

GROUNDWATER MONITORING REPORT

Third Quarter 2004

1075 40th Street
Oakland, California

Project No. 8326

Prepared For

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

Prepared By

AEI Consultants
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September 30, 2004

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

Subject: **Quarterly Groundwater Monitoring Report**
Third Quarter 2004
1075 40th Street
Oakland, California
Project No. 8326

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 third quarter 2004 groundwater monitoring and sampling event conducted on September 30, 2004.

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 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 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 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 groundwater monitoring wells. At the request of the ACHCSA, six 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, south of the former tank locations along Yerba Buena Avenue. Well construction details for the four (4) groundwater monitoring wells are summarized in Table 1.

On May 6, 2004, AEI installed one vapor extraction well (VES-1) and two (2) air sparge wells (AS1 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 AEI carried out a soil vapor extraction and air sparge pilot test. Currently the test data is undergoing analysis and a report summarizing the results of the pilot test is being prepared. Well construction details for the shallow vapor extraction well, the two (2) air sparge wells and the six (6) shallow vapor monitoring wells are summarized in Table 1.

Summary of Activities

AEI measured the depth to groundwater in the four wells (MW-1 to MW-4) on September 10, 2004. Well locations are shown on Figure 2. Prior to sampling, each well was checked for the presence of free product and the depth to water from the top of the well casings was measured with an electric water level indicator. Each well with no free product was then purged of at least 3 well volumes with a submersible pump. Temperature, pH, specific conductivity, dissolved oxygen (DO) 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 no headspace or 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).

Four groundwater samples were submitted for chemical analysis for TPH-g, MTBE, benzene, toluene, ethylbenzene, and xylenes (BTEX) by method SW 8021B/8015Cm, TPH-d by method SW 8015C and fuel oxygenates by SW8260B.

Field Results

Well MW-3 contained 0.66 feet of free product. Groundwater elevations for the current monitoring episode ranged from 34.14 to 34.64 feet above mean sea level (msl). These groundwater elevations were an average of 0.88 lower than the previous monitoring event. 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 0.007 ft/ft. This flow direction and gradient are consistent with previous monitoring events.

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

Groundwater Quality

For the first time, a measurable thickness (0.66) of free product or light non-aqueous phase liquids was present. MTBE was detected in wells MW-2 and MW-4 at 4,100 µg/l and 10 µg/l, respectively by the standard 8015/8021B analysis; however, no other 8015/8021B target analytes were detected in either of these wells above the reported detected limits. However, analysis for fuel oxygenates by EPA Method 8260 reported MTBE in well MW-1 at concentrations of 0.95.

Groundwater sample analytical data is presented in Table 3. Selected analytical data is presented on Figure 2. Laboratory results and chain of custody documents are included in Appendix B.

Summary

Significant hydrocarbons remain in the groundwater beneath the site, particularly west and north of the former excavation. Although seasonal concentration fluctuations have been observed, long-term concentration trends indicate no significant attenuation is occurring. AEI will continue quarterly monitoring, with the next episode scheduled for December 2004.

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.

Sincerely,
AEI Consultants

Registered Geologist
Robert F. Flory
No. 5825
State of California
10/1/04

Robert F. Flory, RG
Senior Project Geologist

Peter McIntyre
Program Manager

Figures

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Table 2 *Groundwater Elevation Data*
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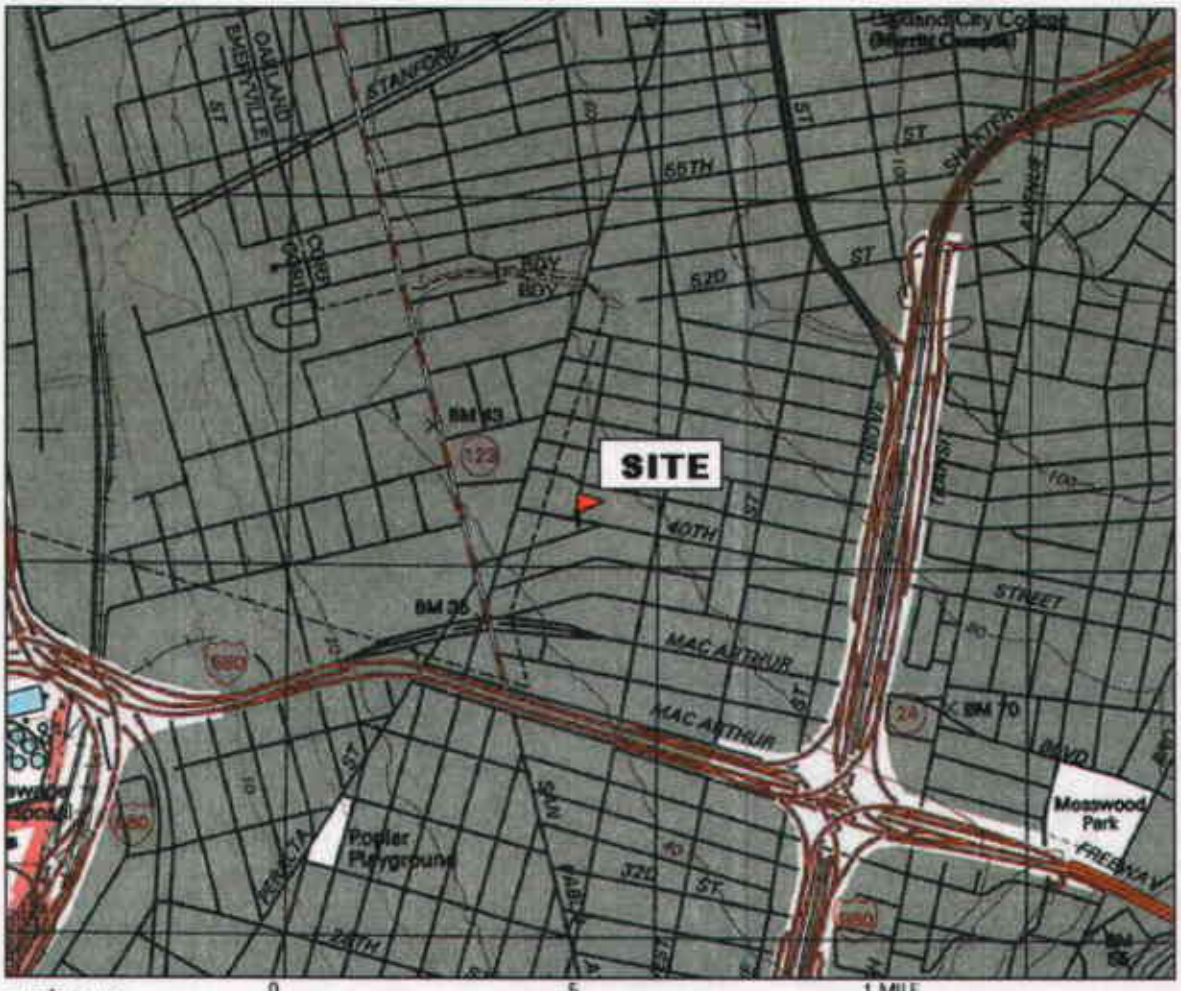
Table 4 *Fuel Oxygenate Analytical Data*

Appendices

Appendix A *Groundwater Monitoring Well Field Sampling Forms*

Appendix B *Laboratory Analyses with Chain of Custody Documentation*

cc: Don Huang
ACHCSA
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577



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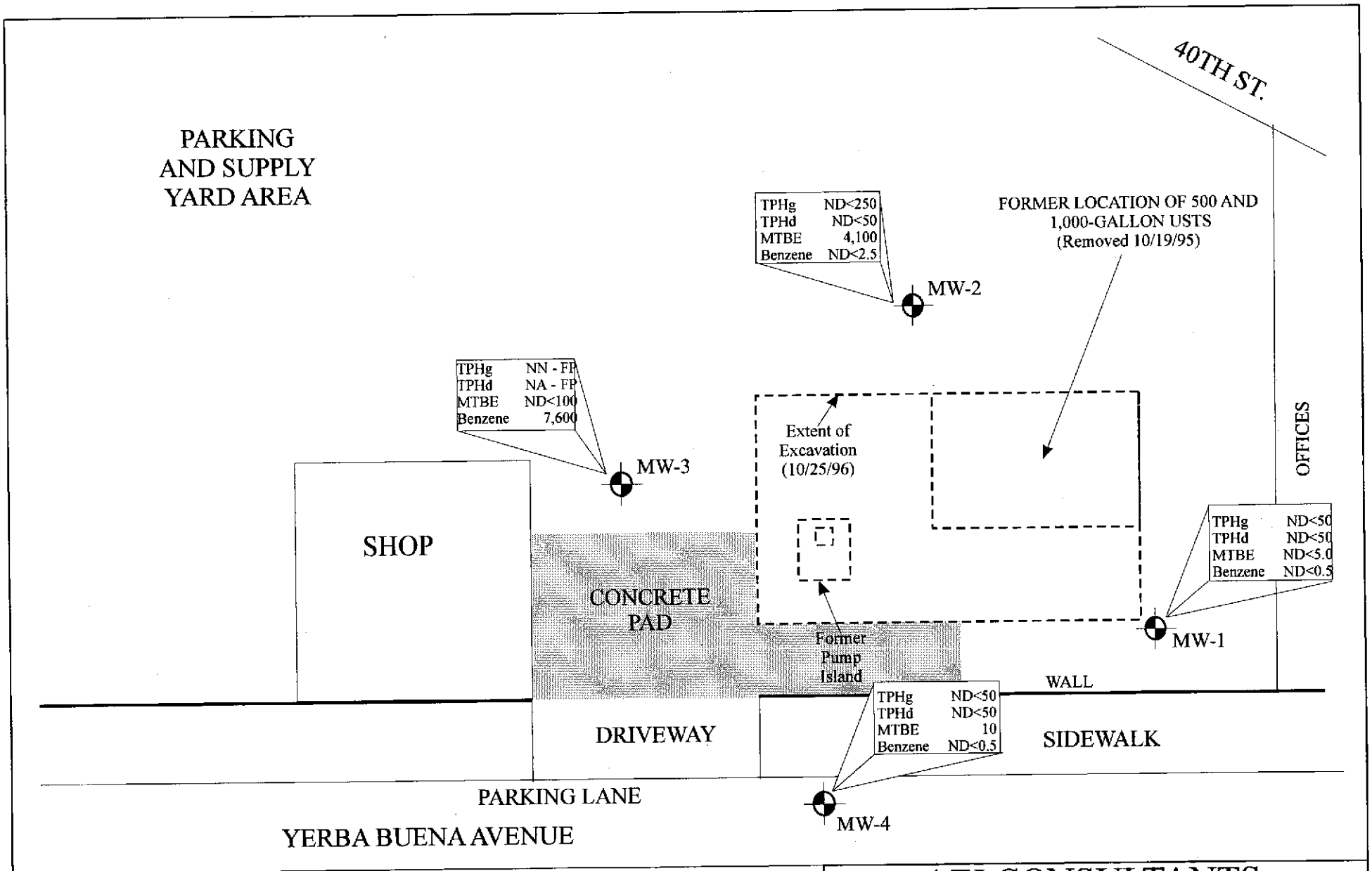
AEI CONSULTANTS	
SITE LOCATION MAP	
1075 40th STREET OAKLAND, CALIFORNIA	**FIGURE 1** PROJECT NO. 8326



Monitoring Well

Groundwater results are expressed in µg/L.
TPHg = Total petroleum hydrocarbons as gasoline
TPHd = Total petroleum hydrocarbons as diesel
MTBE = Methyl tertiary butyl ether by 8260

Scale: 1" = 20'

0 10 20

N

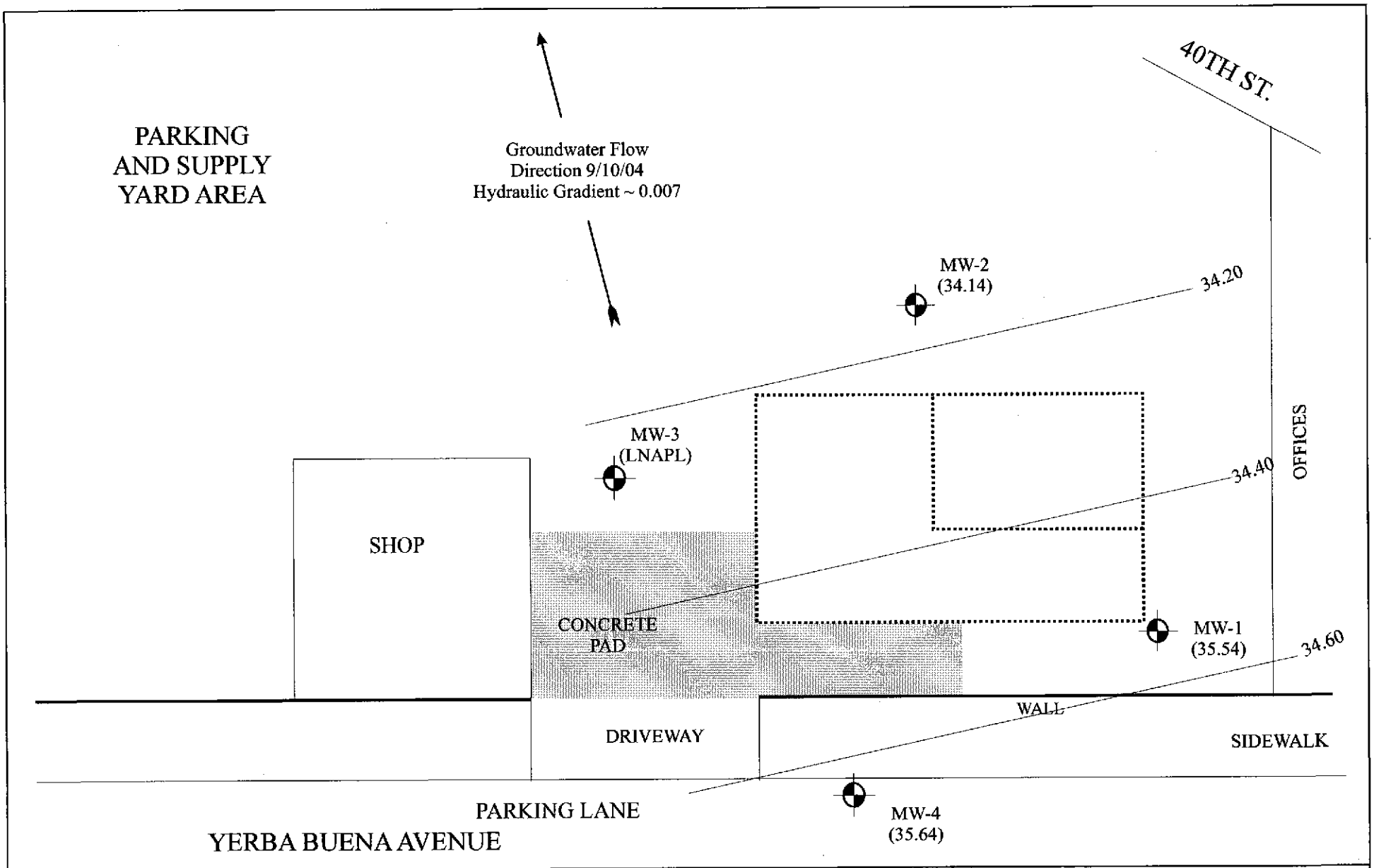
AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 100, WALNUT CREEK, CA

SAMPLE ANALYTICAL DATA - 09/10/04

1075 40TH AVENUE
OAKLAND, CALIFORNIA

Figure 2
AEI Project: 8326



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2500 CAMINO DIABLO, SUITE 100, WALNUT CREEK, CA

GROUNDWATER GRADIENT

1075 40TH AVENUE
OAKLAND, CALIFORNIA

Figure 3
AEI Project: 8326

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

Well ID	Date Drilled	Elevation (ft msl)	Water Depth 09/10/04 (ft)	Boring Depth (ft)	Slotted Casing (ft)	Slot Size (in)	Blank Casing (ft)	Sand Interval (ft)	Sand Size	Bentonite Interval (ft)	Grout Interval (ft)
MW-1	03/06/97	45.41	**9.95**	21.0	6-21	0.020	0.5-6	5-21	#3	4-5	0.5-4
MW-2	03/19/97	44.94	10.84	21.0	6-21	0.020	0.5-6	5-21	#3	4-5	0.5-4
MW-3	03/19/97	44.32	**11.54**	21.0	6-21	0.020	0.5-6	5-21	#3	4-5	0.5-4
MW-4	08/05/99	43.48	**8.84**	20.0	5-21	0.020	0.55	4-20	#3	3-4	0.5-3
AS-1	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-2	05/06/04	45.2 est.	----	30.0	25-30	0.010	0.75-25	22-30	2/12	19-22	1.0-19
VE-1	05/06/04	45.0 est.	----	10.0	5-10	0.010	0.75-10	4-10	2/12	3-4	1.0-3
DP-1	05/13/04	44.0 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-2	05/13/04	44.6 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-3	05/13/04	44.7 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-4	05/13/04	44.8 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-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 msl = feet above mean sea level

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

Well ID	Date	Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft msl)
MW-1	03/19/97	45.41	8.25	37.16
	06/20/97	45.41	9.10	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	8.50	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
	06/08/04	45.49	9.39	36.10
	09/10/04	45.49	**9.95**	**35.54**
MW-2	03/19/97	44.94	8.40	36.54
	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
	08/29/00	44.98	11.07	33.91
	01/12/01	44.98	8.60	36.38
	04/18/01	44.98	8.80	36.18
	07/27/01	44.98	11.10	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
	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**

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

Well ID	Date	Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft msl)
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**
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	6.40	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**

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

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

Well ID	Date	Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft msl)

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	----	----
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	----
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	01/12/01	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 (0.04)
23	06/08/04	35.17	-1.34	NW (0.02)
24	09/10/04	34.29	-0.88	**NW (0.007)**

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

Well ID	Date	Depth to Water (ft)	TPHg (ug/L)	TPHd (ug/L)	MTBE by 8021B (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Xylenes (ug/L)
MW - 1	03/19/97	8.25	ND<50	ND<50	23	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/23/97	9.10	1,300	420	14	150	2.1	12	19
	10/08/97	9.95	56	66	5.8	2.8	ND<0.5	ND<0.5	ND<0.5
	01/16/98	7.57	1,500	910	ND<33	95	0.72	69	8.4
	08/05/99	10.16	160	63	ND<15	1.6	ND<0.5	0.56	1.1
	11/18/99	8.52	79	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02/24/00	7.65	300	160	ND<5.0	14	0.82	3.5	1.6
	05/24/00	8.47	1,300	480	ND<10	93	ND<0.5	17	1.6
	08/29/00	10.28	120	<0.5	ND<5.0	0.93	ND<0.5	ND<0.5	ND<0.5
	01/12/01	8.50	360	170	ND<5.0	16	ND<0.5	9.3	0.69
	04/18/01	8.77	1,100	410	2,800	63	ND<0.5	34	0.73
	07/27/01	10.50	130	66	ND<5.0	1.6	ND<0.5	ND<0.5	ND<0.5
	11/06/01	10.28	ND<50	<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02/13/02	8.47	430	270	ND<5.0	17	0.51	11	0.64
	05/14/02	9.50	340	170	ND<5.0	21	ND<0.5	5.3	0.67
	08/15/02	10.39	96	53	ND<5.0	0.66	ND<0.5	ND<0.5	ND<0.5
	11/14/02	9.08	ND<50	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02/12/03	8.36	710	120	ND<5.0	28	4.3	32	130
	05/16/03	8.49	1,100	340	ND<15	54	4.1	40	100
	08/29/03	9.91	1,200	280	ND<5.0	46	5.1	55	230
	12/02/03	8.88	ND<50	ND<50	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	03/08/04	7.66	120	240[1,2]	ND<5.0	2.9	ND<0.5	ND<0.5	0.71
	06/08/04	9.39	ND<50	78[2]	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	09/10/04	**9.95**	**ND<50**	**ND<50**	**ND<5.0**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**
MW - 2	03/19/97	8.40	ND<50	ND<50	65	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/23/97	8.85	ND<50	ND<50	70	3.4	ND<0.5	ND<0.5	ND<0.5
	10/08/97	9.80	ND<50	ND<50	90	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	01/16/98	5.28	ND<50	ND<50	65	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	08/05/99	9.32	ND<50	ND<50	600	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/18/99	10.20	ND<50	ND<50	370	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02/24/00	7.03	ND<50	ND<50	880	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	05/24/00	8.01	ND<250	62	2,200	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	08/29/00	11.07	ND<200	ND<50	1,900	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	01/12/01	8.60	470	70	2,000	8.7	3.1	16	73
	04/18/01	8.80	ND<50	ND<50	2,800	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	07/27/01	11.10	ND<100	ND<50	3,300	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/06/01	12.21	ND<100	ND<50	3,000	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02/13/02	7.98	54	ND<50	3,200	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	05/14/02	10.48	ND<150	ND<50	3,800	4.8	<1.0	<1.0	<1.0
	08/15/02	10.64	ND<50	ND<50	2,900	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/14/02	11.69	ND<120	ND<50	3,800	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	02/12/03	9.07	1,100	120	3,200	57	7	55	210
	05/16/03	11.25	530	85	6,000	35	3.6	22	79
	08/29/03	12.19	2,400	1200	4,800	39	5.8	77	320
	12/02/03	10.96	ND<100	ND<50	3,300	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	03/08/04	8.41	ND<250	ND<50	4,600	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	06/08/04	10.19	ND<120	ND<50	3,400	ND<1.2	ND<1.2	ND<1.2	ND<1.2
	09/10/04	**10.84**	**ND<250**	**ND<250**	**4,100**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**ND<2.5**

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

Well ID	Date	Depth to Water (ft)	TPHg (ug/L)	TPHd (ug/L)	MTBE by 8021B (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Xylenes (ug/L)
MW -3	03/19/97	7.59	26,000	5,000	230	3,000	530	340	2,300
	06/23/97	9.98	25,000	7,000	270	4,400	120	540	1,500
	10/08/97	8.36	17,000	5,100	ND<280	4,400	47	280	410
	01/16/98	9.18	29,000	7,300	ND<360	5,600	740	950	3,500
	08/05/99	10.56	31,000	5,100	ND<200	5,400	150	1100	2,300
	11/18/99	10.92	74,000	49,000	ND<1000	8,100	5,000	2,100	8,100
	02/24/00	8.49	110,000	6,300	ND<200	12,000	1,400	2,900	14,000
	05/24/00	8.42	87,000	26,000	ND<200	13,000	1,900	2,900	14,000
	08/29/00	12.00	49,000	9,400	ND<200	7,400	800	1,800	7,400
	01/12/01	10.50	69,000	21,000	ND<300	8,600	980	2,600	11,000
	04/18/01	9.50	75,000	13,000	ND<500	9,200	1,200	2,500	12,000
	07/27/01	11.61	75,000	85,000	ND<650	8,700	1,100	2,600	12,000
	11/06/01	11.73	89,000	86,000	ND<200	7,900	910	2,800	12,000
	02/13/02	9.36	85,000	13,000	ND<2000	8,500	830	2,600	11,000
	05/14/02	9.00	94,000	35,000	ND<1000	9,700	1,100	3,400	15,000
	08/15/02	11.72	37,000	9,700	ND<1200	5,200	430	1,800	5,900
	11/14/02	11.28	66,000	23,000	ND<1,200	8,300	860	3,000	11,000
	02/12/03	10.17	61,000	8,400	ND<500	6,800	500	2,400	9,800
	05/16/03	11.47	59,000	17,000	ND<500	6,200	320	2,000	6,500
	08/29/03	11.92	78,000	100,000	ND<1200	6,800	440	2,900	11,000
	12/02/03	11.32	68,000	46,000	ND<1000	7,600	450	2,900	10,000
	03/08/04	10.49	79,000	160,000	ND<250	7,700	570	300	13,000
	06/08/04	**11.54**	**NA - Free Product**		**ND<100***	**7,600***	**540***	**3,500***	**14,000***
MW-4	08/05/99	8.79	ND<50	ND<50	37	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/18/99	8.11	ND<50	ND<50	20	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02/24/00	5.19	ND<50	ND<50	20	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	05/24/00	7.23	120	140	31	1.3	ND<0.5	ND<0.5	ND<0.5
	08/29/00	9.04	ND<50	ND<50	22	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	01/12/01	6.40	ND<50	81	25	ND<0.5	ND<0.5	ND<0.5	ND<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	ND<0.5	2	10
	11/06/01	9.03	200	59	21	4.5	1	5.2	24
	02/13/02	6.60	ND<50	91	15	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	05/14/02	7.19	260	140	26	12	2.7	11	49
	08/15/02	8.97	ND<50	ND<50	12	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/14/02	7.52	ND<50	ND<50	11	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	02/12/03	6.37	170	130	16	3.1	0.66	6.4	27
	05/16/03	6.81	ND<50	60	23	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	08/29/03	8.56	610	120	10	16	2.7	30	130
	12/02/03	6.02	ND<50	ND<50	7.7	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	03/08/04	5.75	ND<50	ND<50	10	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	06/08/04	8.19	ND<50	ND<50	11	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	09/10/04	**8.84**	**ND<50**	**ND<50**	**10**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**

Notes:

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

Table 4: Fuel Oxygenate Analytical Data, Fidelity Roofing, 1075 40th Street, Oakland, California

Well ID	Date	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	ETBE benzene (µg/L)	MTBE (µg/L)
MW-1	06/08/04	ND<0.5	ND<5.0	ND<0.5	1.5	ND<0.5	ND<0.5	1.0
	09/10/04	ND<0.5	ND<5.0	ND<0.5	NA	ND<0.5	ND<0.5	1.0
MW-2	06/08/04	ND<100	ND<1000	ND<100	ND<100	ND<100	ND<100	4,300
	09/10/04	ND<50	ND<500	ND<50	ND<50	ND<50	ND<50	2,800
MW-3	06/08/04	ND<5.0	ND<50	ND<5.0	ND<5.0	ND<5.0	ND<5.0	99
		ND<100	ND<1000	ND<100	ND<100	ND<100	ND<100	ND<100
MW-4	06/08/04	ND<0.5	ND<5.0	ND<0.5	0.79	ND<0.5	ND<0.5	15
	09/10/04	ND<0.5	ND<5.0	ND<0.5	NA	ND<0.5	ND<0.5	8.2

Notes: Notes:

(µg/L)	micrograms per liter	1,2-DCA	1,2-Dichloroethane
TAME	tert-Amyl methyl ether	DIPE	Diisopropyl ether
TBA	t-Butyl alcohol	ETBE	Ethyl tert-butyl ether
EDB	1,2-Dibromethane	MTBE	Methyl Tertiary Butyl Ether

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	Fidelity Roof Company	Date of Sampling:	9/10/2004
Job Number:	3119	Name of Sampler:	Adrian Nieto
Project Address:	1075 40th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	45.49		
Depth of Well	21.00		
Depth to Water (from top of casing)	9.95		
Water Elevation (feet above msl)	35.54		
Well Volumes Purged	3		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	**5.3**		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	clears quickly		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 40mL VOA, 1 1L

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	20.93	-9.99	901	.74	-190.3	
	4	20.57	-9.99	909	1.21	-171.8	
	6	20.30	-9.99	906	.74	-196.9	

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

Light grey and no hydrocarbon odor noted

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	Fidelity Roof Company	Date of Sampling:	9/10/2004
Job Number:	3119	Name of Sampler:	Adrian Nieto
Project Address:	1075 40th Avenue, Oakland		

MONITORING WELL DATA

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)	10.84		
Water Elevation (feet above msl)	34.14		
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)	**4.9**		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	clears quickly		
Free Product Present?		Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 40mL VOA, 1 1L

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	22.40	-9.99	1407	.83	-38.9	
	4	22.28	-9.99	1383	.73	-42.4	
	6	21.81	-9.99	1387	.64	-22.9	

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

Initially brwon and no hydrocarbon odor

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	Fidelity Roof Company	Date of Sampling:	9/10/2004
Job Number:	3119	Name of Sampler:	Adrian Nieto
Project Address:	1075 40th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	44.37		
Depth of Well	21.00		
Depth to Water (from top of casing)	11.54		
Water Elevation (feet above msl)	32.83		
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)	6.0		
Appearance of Purge Water	clear at 3 gallons		
Free Product Present?	yes	Thickness (ft):	0.66

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 40mL VOA, 1 1L

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	21.72	9.99	1416	.66	-383.2	
	4	21.47	9.99	1018	.48	-420.9	
	6						

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

Initially brown and strong hydrocarbon odor. Quit purging at 5 gallons due to presence of free product

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name:	Fidelity Roof Company	Date of Sampling:	9/10/2004
Job Number:	3119	Name of Sampler:	Adrian Nieto
Project Address:	1075 40th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	43.48		
Depth of Well	20.00		
Depth to Water (from top of casing)	8.84		
Water Elevation (feet above msl)	34.64		
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)	**5.4**		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	slight clear		
Free Product Present?	No	Thickness (ft):	

GROUNDWATER SAMPLES

Number of Samples/Container Size: 2 40mL VOA, 1 1L

Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (µ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	22.56	-9.99	1025	4.20	-114.3	
	4	22.86	-9.99	1115	2.32	-63.5	
	6	22.10	-9.99	1160	.97	-48.1	

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

Slightly clear and no hc odor

McCampbell Analytical, Inc.

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

All Environmental, Inc. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3119; Fidelity Roof	Date Sampled: 09/10/04
		Date Received: 09/10/04
	Client Contact: Robert Flory	Date Reported: 09/17/04
	Client P.O.:	Date Completed: 09/17/04

WorkOrder: 0409143

September 17, 2004

Dear Robert:

Enclosed are:

1). the results of 3 analyzed samples from your **#3119; 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.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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All Environmental, Inc.	Client Project ID: #3119; Fidelity Roof	Date Sampled: 09/10/04
2500 Camino Diablo, Ste. #200		Date Received: 09/10/04
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 09/15/04-09/16/04
	Client P.O.:	Date Analyzed: 09/15/04-09/16/04

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0409143

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001B	MW-1	W	ND	ND	ND	ND	ND	ND	1	98.0
002B	MW-2	W	ND<250,j	4100	ND<2.5	ND<2.5	ND<2.5	ND<2.5	5	96.6
003B	MW-4	W	ND	10	ND	ND	ND	ND	1	98.0
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* 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.

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.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

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Website: www.mccampbell.com E-mail: main@mccampbell.com

All Environmental, Inc.	Client Project ID: #3119; Fidelity Roof	Date Sampled: 09/10/04
2500 Camino Diablo, Ste. #200		Date Received: 09/10/04
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 09/10/04
	Client P.O.:	Date Analyzed: 09/13/04-09/16/04

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0409143

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0409143-001A	MW-1	W	ND	1	109
0409143-002A	MW-2	W	ND	1	108
0409143-003A	MW-4	W	ND	1	89.0

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

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.

DHS Certification No. 1644

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Website: www.mccampbell.com E-mail: main@mccampbell.com

All Environmental, Inc.	Client Project ID: #3119; Fidelity Roof	Date Sampled: 09/10/04
2500 Camino Diablo, Ste. #200		Date Received: 09/10/04
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 09/11/04
	Client P.O.:	Date Analyzed: 09/11/04

Oxygenated Volatile Organics by P&T and GC/MS*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0409143

Lab ID	0409143-001C	0409143-002C	0409143-003C		Reporting Limit for DF =1	
Client ID	MW-1	MW-2	MW-4			
Matrix	W	W	W			
DF	1	100	1		S	W
Compound	**Concentration**				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND<50	ND		NA	0.5
t-Butyl alcohol (TBA)	ND	ND<500	ND		NA	5.0
Diisopropyl ether (DIPE)	ND	ND<50	ND		NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND<50	ND		NA	0.5
Methyl-t-butyl ether (MTBE)	0.95	2800	8.2		NA	0.5
Surrogate Recoveries (%)						
%SS:	97.9	96.9	97.5			
Comments						

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

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content.

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QC SUMMARY REPORT FOR SW8021B/8015Cm

Matrix: W WorkOrder: 0409143

EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 13062 Spiked Sample ID: 0409135-013A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(btex)£	ND	60	97.5	104	6.04	100	101	1.12	70	130
MTBE	ND	10	95.1	99.8	4.81	96.5	98.2	1.75	70	130
Benzene	ND	10	103	110	7.39	102	106	3.85	70	130
Toluene	ND	10	98	107	8.98	101	101	0	70	130
Ethylbenzene	ND	10	100	107	6.86	102	104	2.04	70	130
Xylenes	ND	30	85.7	94.7	9.98	90	90.3	0.370	70	130
%SS:	98.5	10	106	110	3.57	106	107	1.19	70	130

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

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not applicable or not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8015C

Matrix: W WorkOrder: 0409143

EPA Method: SW8015C Extraction: SW3510C BatchID: 13063 Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
TPH(d)	N/A	7500	N/A	N/A	N/A	110	109	1.39	70	130
%SS:	N/A	2500	N/A	N/A	N/A	118	116	1.34	70	130

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

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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

McCampbell Analytical, Inc.

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Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

Matrix: W WorkOrder: 0409143

EPA Method: SW8260B Extraction: SW5030B BatchID: 13064 Spiked Sample ID: 0409143-001C

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	90.8	91.7	1.01	85.9	87.7	2.09	70	130
t-Butyl alcohol (TBA)	ND	50	82.9	82.6	0.350	83.1	83	0.182	70	130
Diisopropyl ether (DIPE)	ND	10	120	120	0	116	117	1.06	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	109	107	1.55	105	106	0.816	70	130
Methyl-t-butyl ether (MTBE)	0.949	10	90.7	89.4	1.27	98.8	101	1.93	70	130
%SS2:	97.9	10	102	102	0	103	103	0	70	130

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

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

QA/QC Officer

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0409143 **ClientID: AEL**

Report to:
Robert Flory
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #3119; Fidelity Roof
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 9/10/04
Date Printed: 9/10/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0409143-001	MW-1	Water	9/10/04	☐	C	B	A												
0409143-002	MW-2	Water	9/10/04	☐	C	B	A												
0409143-003	MW-4	Water	9/10/04	☐	C	B	A												

Test Legend:

1	5-OXYS_W	2	G-MBTEX_W	3	TPH(D)_W	4		5	
6		7		8		9		10	
11		12		13		14		15	

Prepared by: Rosa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

AEI 0409143

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? ☐ Yes ☐ No

Report To: Bob Flores Bill To: Same
Company: AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597 E-Mail:
Tele: (925) 944-2899 Fax: (925) 944-2895
Project #: 3119 Project Name: Fidelity Rod
Project Location:
Sampler Signature: Adrian Nieto

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other
MW-1	ND	9/09		5	VOA	X					X	X		
MW-2		"		"	"	X					X	X		
MW-4		"		"	"	X					X	X		

Analysis Request

BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&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~~ / 8260 Fuel oxygenates	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
X	X							X								
X	X							X								
X	X							X								

Relinquished By:	Date:	Time:	Received By:
Adrian Nieto	10/9		Lisa Kim
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

	VOAS	O&G	METALS	OTHER
ICE/t° ✓	PRESERVATION			
GOOD CONDITION ✓	APPROPRIATE			
HEAD SPACE ABSENT ✓	CONTAINERS ✓			
DECHLORINATED IN LAB	PERSERVED IN LAB			

McCampbell Analytical, Inc.

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Website: www.mccampbell.com E-mail: main@mccampbell.com

All Environmental, Inc. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3119; Fidelity Roof	Date Sampled: 09/10/04
		Date Received: 09/10/04
	Client Contact: Robert Flory	Date Reported: 09/16/04
	Client P.O.:	Date Completed: 09/16/04

WorkOrder: 0409145

September 16, 2004

Dear Robert:

Enclosed are:

1). the results of **1** analyzed sample from your **#3119; Fidelity Roof project,**

2). a QC report for the above sample

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.

Yours truly,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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

All Environmental, Inc.	Client Project ID: #3119; Fidelity Roof	Date Sampled: 09/10/04
2500 Camino Diablo, Ste. #200		Date Received: 09/10/04
	Client Contact: Robert Flory	Date Extracted: 09/13/04
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 09/13/04

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B | Analytical Method: SW8260B | Work Order: 0409145

Lab ID	0409145-001A
Client ID	MW-3
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<1000	200	5.0	Acrolein (Propenal)	ND<1000	200	5.0
Acrylonitrile	ND<400	200	2.0	tert-Amyl methyl ether (TAME)	ND<100	200	0.5
Benzene	7600	200	0.5	Bromobenzene	ND<100	200	0.5
Bromochloromethane	ND<100	200	0.5	Bromodichloromethane	ND<100	200	0.5
Bromoform	ND<100	200	0.5	Bromomethane	ND<100	200	0.5
2-Butanone (MEK)	ND<400	200	2.0	t-Butyl alcohol (TBA)	ND<1000	200	5.0
n-Butyl benzene	900	200	0.5	sec-Butyl benzene	ND<100	200	0.5
tert-Butyl benzene	ND<100	200	0.5	Carbon Disulfide	ND<100	200	0.5
Carbon Tetrachloride	ND<100	200	0.5	Chlorobenzene	ND<100	200	0.5
Chloroethane	ND<100	200	0.5	2-Chloroethyl Vinyl Ether	ND<200	200	1.0
Chloroform	ND<100	200	0.5	Chloromethane	ND<100	200	0.5
2-Chlorotoluene	ND<100	200	0.5	4-Chlorotoluene	ND<100	200	0.5
Dibromochloromethane	ND<100	200	0.5	1,2-Dibromo-3-chloropropane	ND<100	200	0.5
1,2-Dibromoethane (EDB)	ND<100	200	0.5	Dibromomethane	ND<100	200	0.5
1,2-Dichlorobenzene	ND<100	200	0.5	1,3-Dichlorobenzene	ND<100	200	0.5
1,4-Dichlorobenzene	ND<100	200	0.5	Dichlorodifluoromethane	ND<100	200	0.5
1,1-Dichloroethane	ND<100	200	0.5	1,2-Dichloroethane (1,2-DCA)	ND<100	200	0.5
1,1-Dichloroethene	ND<100	200	0.5	cis-1,2-Dichloroethene	ND<100	200	0.5
trans-1,2-Dichloroethene	ND<100	200	0.5	1,2-Dichloropropane	ND<100	200	0.5
1,3-Dichloropropane	ND<100	200	0.5	2,2-Dichloropropane	ND<100	200	0.5
1,1-Dichloropropene	ND<100	200	0.5	cis-1,3-Dichloropropene	ND<100	200	0.5
trans-1,3-Dichloropropene	ND<100	200	0.5	Diisopropyl ether (DIPE)	ND<100	200	0.5
Ethylbenzene	3500	200	0.5	Ethyl tert-butyl ether (ETBE)	ND<100	200	0.5
Freon 113	ND<2000	200	10	Hexachlorobutadiene	ND<100	200	0.5
Hexachloroethane	ND<100	200	0.5	2-Hexanone	ND<100	200	0.5
Isopropylbenzene	150	200	0.5	4-Isopropyl toluene	ND<100	200	0.5
Methyl-t-butyl ether (MTBE)	ND<100	200	0.5	Methylene chloride	ND<100	200	0.5
4-Methyl-2-pentanone (MIBK)	ND<100	200	0.5	Naphthalene	3000	200	0.5
Nitrobenzene	ND<2000	200	10	n-Propyl benzene	630	200	0.5
Styrene	ND<100	200	0.5	1,1,1,2-Tetrachloroethane	ND<100	200	0.5
1,1,2,2-Tetrachloroethane	ND<100	200	0.5	Tetrachloroethene	ND<100	200	0.5
Toluene	540	200	0.5	1,2,3-Trichlorobenzene	ND<100	200	0.5
1,2,4-Trichlorobenzene	ND<100	200	0.5	1,1,1-Trichloroethane	ND<100	200	0.5
1,1,2-Trichloroethane	ND<100	200	0.5	Trichloroethene	ND<100	200	0.5
Trichlorofluoromethane	ND<100	200	0.5	1,2,3-Trichloropropane	ND<100	200	0.5
1,2,4-Trimethylbenzene	6900	200	0.5	1,3,5-Trimethylbenzene	1700	200	0.5
Vinyl Chloride	ND<100	200	0.5	Xylenes	14,000	200	0.5

Surrogate Recoveries (%)

%SS1:	103	%SS2:	98.1
%SS3:	96.9		

Comments:

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

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8260B

Matrix: W WorkOrder: 0409145

EPA Method: SW8260B Extraction: SW5030B BatchID: 13064 Spiked Sample ID: 0409143-001C

Analyte	Sample	Spiked	MS*	MSD*	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
tert-Amyl methyl ether (TAME)	ND	10	90.8	91.7	1.01	85.9	87.7	2.09	70	130
Benzene	ND	10	117	116	1.37	114	116	1.33	70	130
t-Butyl alcohol (TBA)	ND	50	82.9	82.6	0.350	83.1	83	0.182	70	130
Chlorobenzene	ND	10	98.7	99.4	0.641	97.6	97.7	0.128	70	130
1,2-Dibromoethane (EDB)	ND	10	103	101	1.92	101	101	0	70	130
1,2-Dichloroethane (1,2-DCA)	1.24	10	98.8	94.2	4.25	107	110	2.27	70	130
1,1-Dichloroethene	ND	10	105	98.7	6.16	109	109	0	70	130
Diisopropyl ether (DIPE)	ND	10	120	120	0	116	117	1.06	70	130
Ethyl tert-butyl ether (ETBE)	ND	10	109	107	1.55	105	106	0.816	70	130
Methyl-t-butyl ether (MTBE)	0.949	10	90.7	89.4	1.27	98.8	101	1.93	70	130
Toluene	ND	10	109	109	0	108	105	3.02	70	130
Trichloroethene	ND	10	87.2	82.9	5.07	88.6	87	1.83	70	130
%SS1:	---#	10	100	97	2.61	101	102	1.64	70	130
%SS2:	97.9	10	102	102	0	103	103	0	70	130
%SS3:	117	10	109	113	3.18	108	111	2.65	70	130

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

NONE

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

QA/QC Officer

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0409145 **ClientID: AEL**

Report to:
Robert Flory
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #3119; Fidelity Roof
PO:

Bill to:
Diane
All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days
Date Received: 9/10/04
Date Printed: 9/10/04

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0409145-001	MW-3	Water	9/10/04	☐	A														

Test Legend:

1 8260B_W	2	3	4	5
6	7	8	9	10
11	12	13	14	15

Prepared by: Rosa Venegas

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.

0409145

McCAMPBELL ANALYTICAL, INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: MET Bill To:

Company:

E-Mail:

Tele: (925) 283-6000 Fax: ( )

Project #: 3119 Project Name: Fidelity Roof

Project Location:

Sampler Signature: Adrian Martinez

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other
MW-3		10/9/04		3	VOA	X					X	X		

Analysis Request

BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010 / 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8081	EPA 608 / 8082 PCB's ONLY	EPA 8140 / 8141	EPA 8150 / 8151	EPA 524.2 / 624 / 8260	EPA 525 / 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals (6010 / 6020)	LUFT 5 Metals (6010 / 6020)	Lead (200.8 / 200.9 / 6010)
										X					

Other | Comments

Filter Samples for Metals analysis: Yes / No

Relinquished By:	Date:	Time:	Received By:
Adrian Martinez	10/9/04		Alexa Cousins
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

COMMENTS:

PRESERVATION	VOAS	O&G	METALS	OTHER
			pH<2	