

December 15, 2005

GROUNDWATER MONITORING REPORT
4th 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

Alameda County
DEC 20 2005

Prepared By

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

AEI



December 15, 2005

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

**Subject: Quarterly Groundwater Monitoring Report
4th 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 4th Quarter 2005 groundwater monitoring and sampling event conducted on December 1, 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

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 ($\mu\text{g/L}$) and 5,000 $\mu\text{g/L}$, 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 $\mu\text{g/L}$, 65 $\mu\text{g/L}$ and 230 $\mu\text{g/L}$, 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 $\mu\text{g/L}$ 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 its installation, however MTBE was reported at a concentration of 37 $\mu\text{g/L}$. 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 using direct push technology. 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 AEI's *Soil Vapor Extraction and Air Sparge Pilot Test Report*, August 6, 2004.

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. The LNAPL thickness was not gauged during this monitoring event to due a faulty interface probe. The LNAPL thickness in MW-3 during the previous monitoring event was 0.64 feet.

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 remove the LNAPL present in MW-3.

Summary of Monitoring Activities

AEI measured the depth to groundwater in three monitoring wells (MW-1, MW-2, and MW-4), one vapor extraction well (VES-2), two air sparging wells (AS-1 and AS-2), and five shallow vapor monitoring points (DP-1, DP-2, DP-3, DP-5, and DP-6) on December 1, 2005. The locations of groundwater monitoring, air sparging, vapor extraction, and vapor monitoring points are shown on Figure 2, Site Plan. Prior to sampling, the depth to water from the top of the casing was measured in all wells with an electric water level indicator. MW-3 was not gauged due to a malfunctioning electronic air/hydrocarbon/water interface meter. Each sampled well 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. Turbidity was visually noted. Once water levels had recovered to at least 90% of their original level, a groundwater sample was collected.

The groundwater samples were collected from each well using new clean disposable Teflon® 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).

Eleven (11) 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

A thick LNAPL sheen was present in well MW-3. The thickness of the LNAPL sheen was not gauged due to a malfunctioning interface probe. Groundwater elevations in the monitoring wells for the current monitoring episode ranged from 39.95 to 37.83 feet above mean sea level (amsl). These groundwater elevations were an average of 2.19 feet higher 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 southwest with a hydraulic gradient of approximately 0.040 ft/ft. The magnitude of the hydraulic gradient is consistent with previous episodes, but the flow direction is not.

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

Benzene and ethylbenzene were detected in MW-1 at 1.3 µg/L and 0.74 µg/L, respectively. TPH-g, TPH-d, MTBE, toluene, and total xylenes were not detected in MW-1 above laboratory method detection limits.

MTBE was detected in MW-2 at 12,000 µg/L. TPH-g, TPH-d, benzene, toluene, ethylbenzene, and total xylenes were not detected in MW-2 above laboratory method detection limits.

Well MW-3 was not sampled due to the presence a thick sheen of LNAPL.

TPH-g, TPH-d, and BTEX were not detected above the laboratory method detection limits in MW-4. MTBE was detected at a concentration of 13 µg/L.

TPH-g, TPH-d, BTEX, and MTBE were detected in VES-2 (located in the backfill of the former tank pit) at 140 µg/L, 540 µg/L, 26 µg/L, 13 µg/L, 4.5 µg/L, 15 µg/L, and 250 µg/L, respectively.

The groundwater samples collected from AS-1 and AS-2 were not analyzed for TPH-d. Toluene and total xylenes were detected in AS-1 at 0.81 µg/L and 1.5 µg/L, respectively. TPH-g, benzene, ethylbenzene, and MTBE were not detected above the laboratory method detection limits in AS-1. TPH-g, BTEX, and MTBE were also not detected in AS-2.

DP-1 through DP-6 were not analyzed for TPH-d. A groundwater sample was not collected from DP-4. The groundwater sample collected from DP-6, which is located near the western boundary of the October 25, 1996 excavation, contained the highest concentrations of TPH-g and BTEX. TPH-g and BTEX were detected in DP-6 at 7,000 µg/L, 1000 µg/L, 7.8 µg/L, 860 µg/L,

and 230 µg/L, respectively. The highest concentration of MTBE (140 µg/L) in the shallow monitoring points was detected in the groundwater sample from DP-3.

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 analytical results and chain of custody documentation 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 one of the highest concentrations 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 March 2006. Continue sampling VES-2, AS-1, AS-2, and DP-1 through DP-6 (if a sufficient volume of water is present) to delineate the extent and further monitor the contaminant plume in the vicinity of wells MW-2 and MW-3

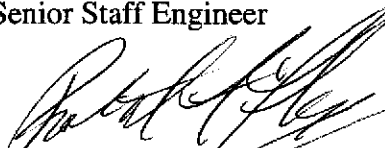
Report Limitations and Signatures

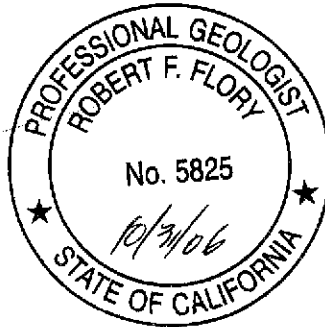
This report presents a summary of work completed by AEI Consultants including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information,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


Richard J. Bradford
Senior Staff Engineer


Robert F. Flory, PG
Senior Project Geologist



Figures

<i>Figure 1</i>	<i>Site Location Map</i>
<i>Figure 2</i>	<i>Site Plan</i>
<i>Figure 3</i>	<i>Sample Analytical Data</i>
<i>Figure 4</i>	<i>Water Table Contours</i>
<i>Figure 5</i>	<i>MW-1</i>
<i>Figure 6</i>	<i>MW-3</i>
<i>Figure 7</i>	<i>Cross Section A-A' Location</i>
<i>Figure 8</i>	<i>East - West Cross Section</i>

Tables

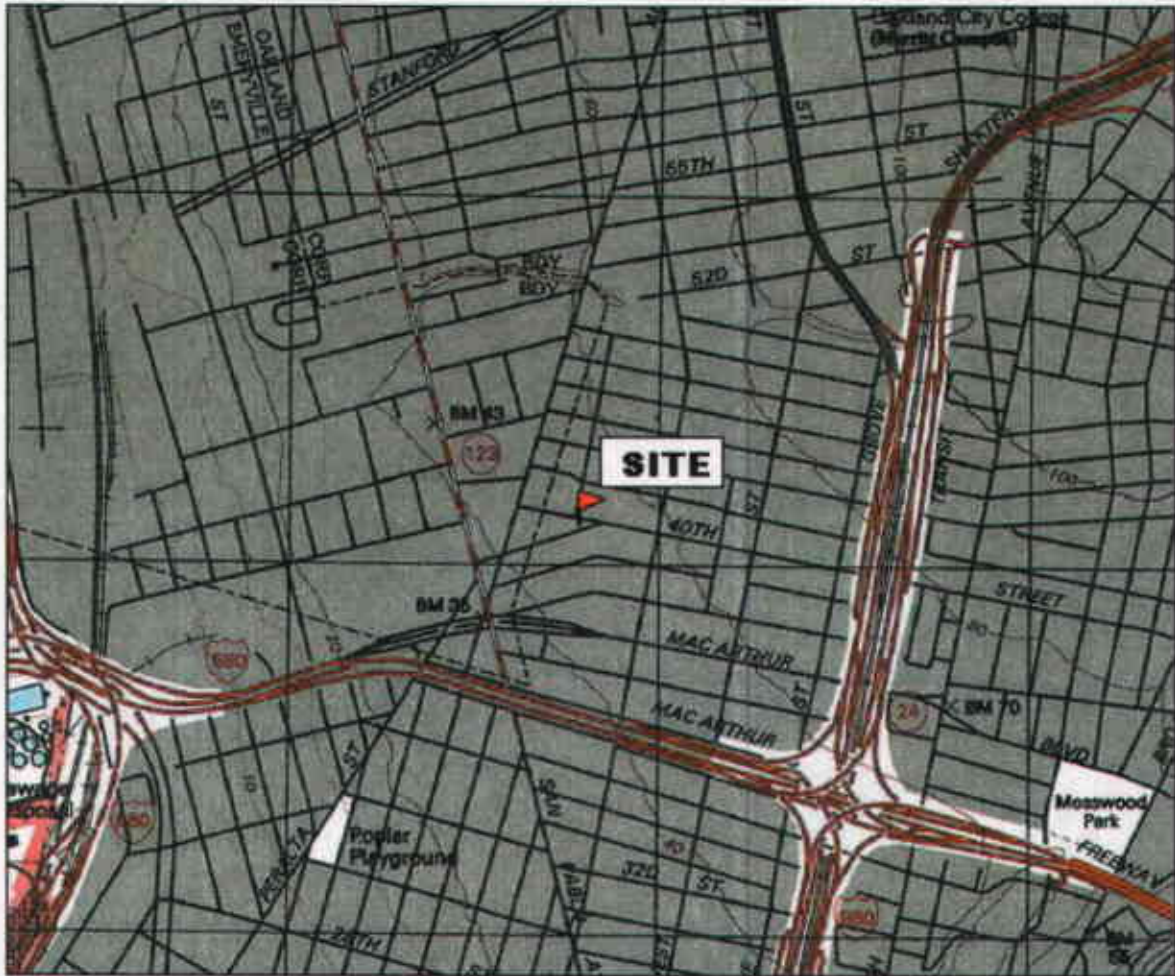
<i>Table 1</i>	<i>Well Construction Details</i>
<i>Table 2</i>	<i>Groundwater Elevation Data</i>
<i>Table 2a</i>	<i>Groundwater Flow Data</i>
<i>Table 3</i>	<i>Groundwater Analytical Data</i>

Appendices

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

cc:

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

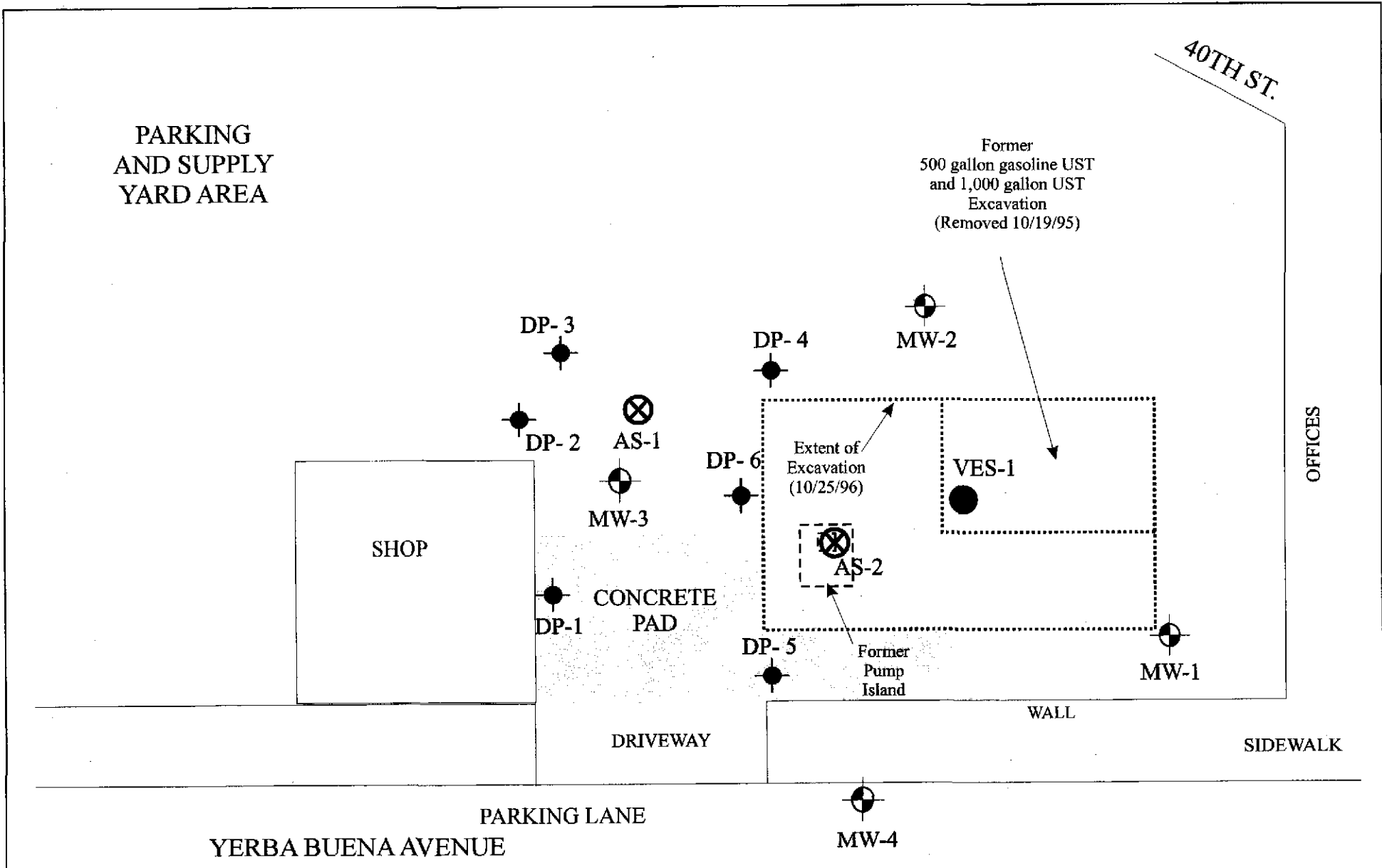


TN * MN
15°

0 1000 FEET 0 500 1000 METERS 1 MILE

Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

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



Existing Groundwater Monitoring Well
 Vapor Monitoring Point
 VES Well
 AS Well

Scale: 1" = 20' 0 10 20

AEI CONSULTANTS
 2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

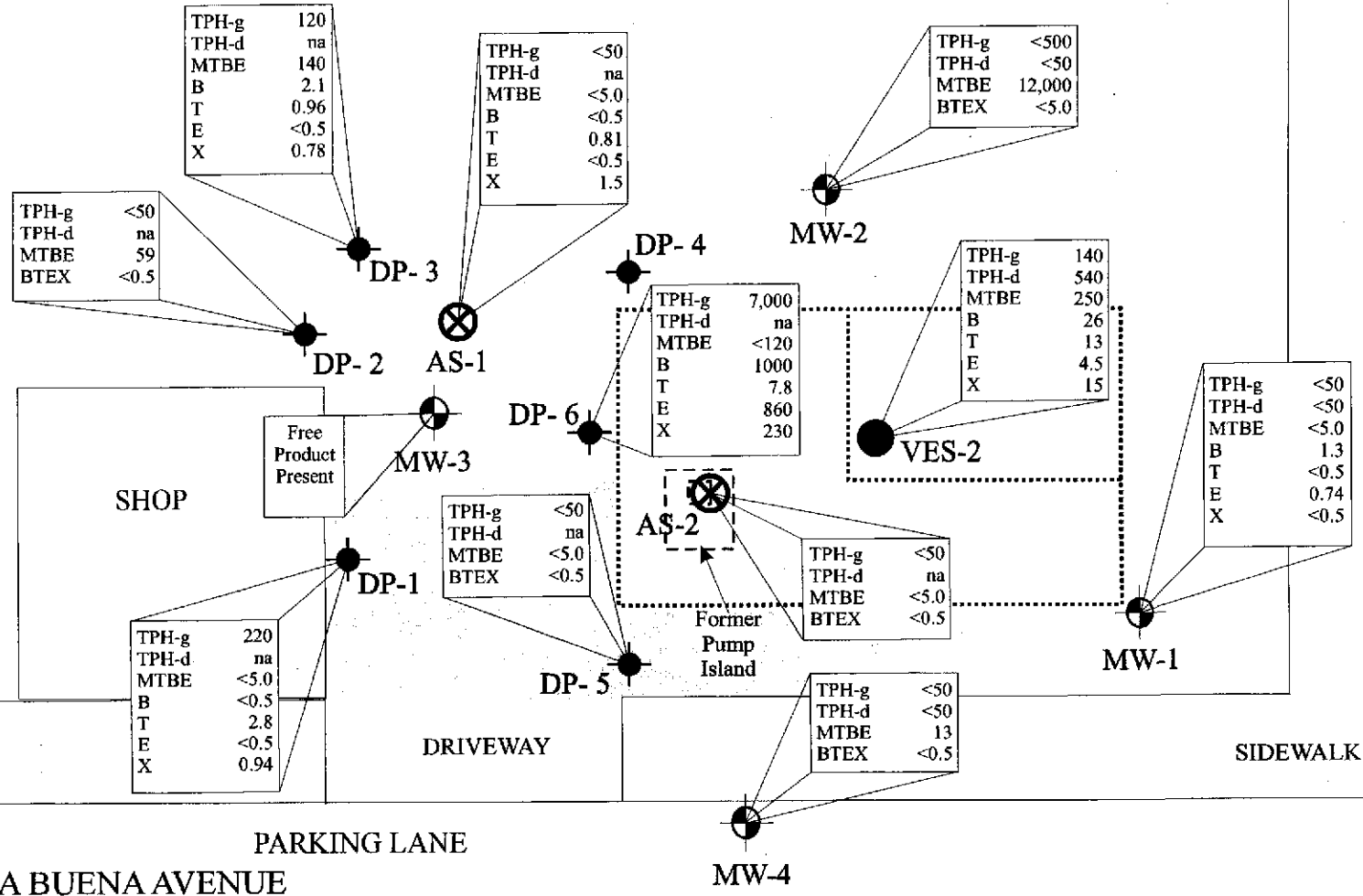
SITE PLAN

1075 40TH AVENUE
 OAKLAND, CALIFORNIA

Figure 2
 AEI Project: 8326

PARKING AND SUPPLY YARD AREA

40TH ST.



Existing Groundwater Monitoring Well
 AS Well
 VES 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: 12/01/05
 na = not analyzed

Vapor Monitoring Point
 Scale: 1" = 20' 0 10 20



AEI CONSULTANTS
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

SAMPLE ANALYTICAL DATA

1075 40TH AVENUE
OAKLAND, CALIFORNIA

Figure 3
AEI Project: 8326

PARKING
AND SUPPLY
YARD AREA

Groundwater Flow Direction
December 1, 2005
Hydraulic Gradient ~ 0.04 ft/ft

40TH ST.

MW-2
(35.95)

MW-3
(ng)*

SHOP

CONCRETE
PAD

MW-1
(37.83)

OFFICES

DRIVEWAY

SIDEWALK

PARKING LANE

YERBA BUENA AVENUE

MW-4
(36.55)

Existing Groundwater Monitoring Well

MW-3
(33.88) Water table elevation in feet above mean sea level

* Free product present, elevation not used to contour groundwater
ng = well not gauged due to the presence of a heavy sheen of NAPL
Contours plotted with Surfer(R) V. 7.0 Contour interval = 0.1 ft

Scale: 1" = 20'
0 10 20



AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

WATER TABLE CONTOURS

1075 40TH AVENUE
OAKLAND, CALIFORNIA

Figure 4
AEI Project: 8326

FIGURE 5 - Fidelity Roof - MW-1

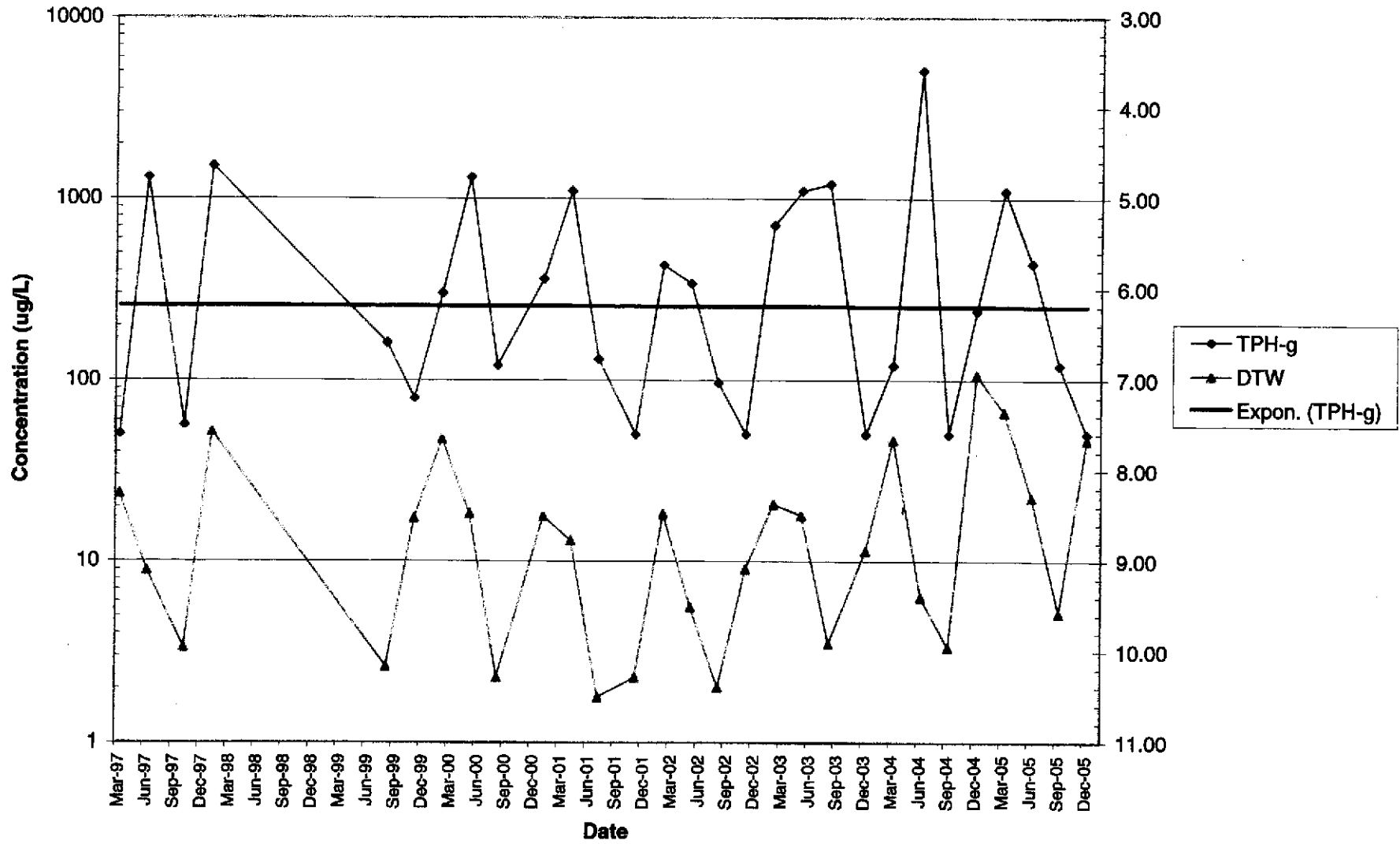
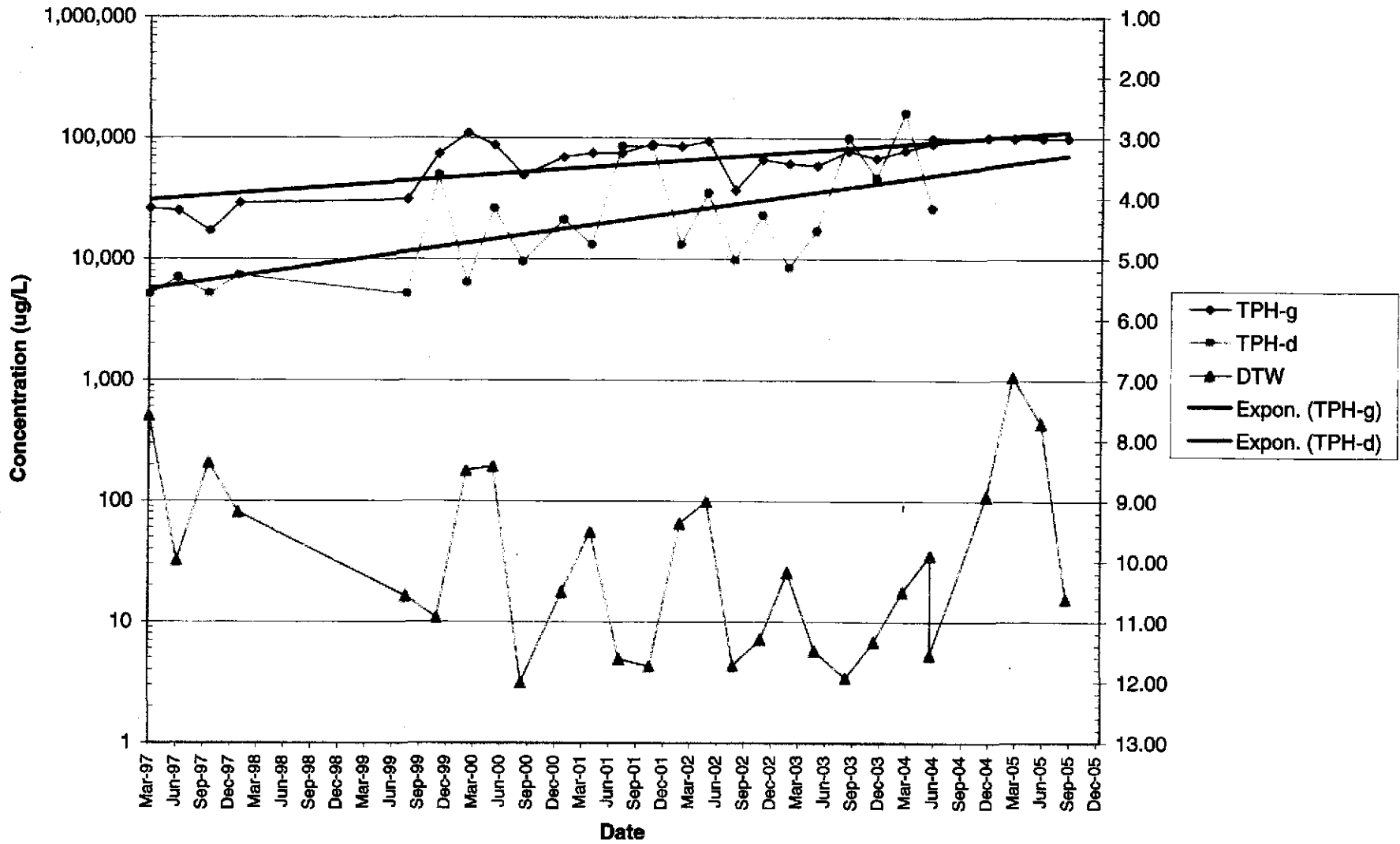
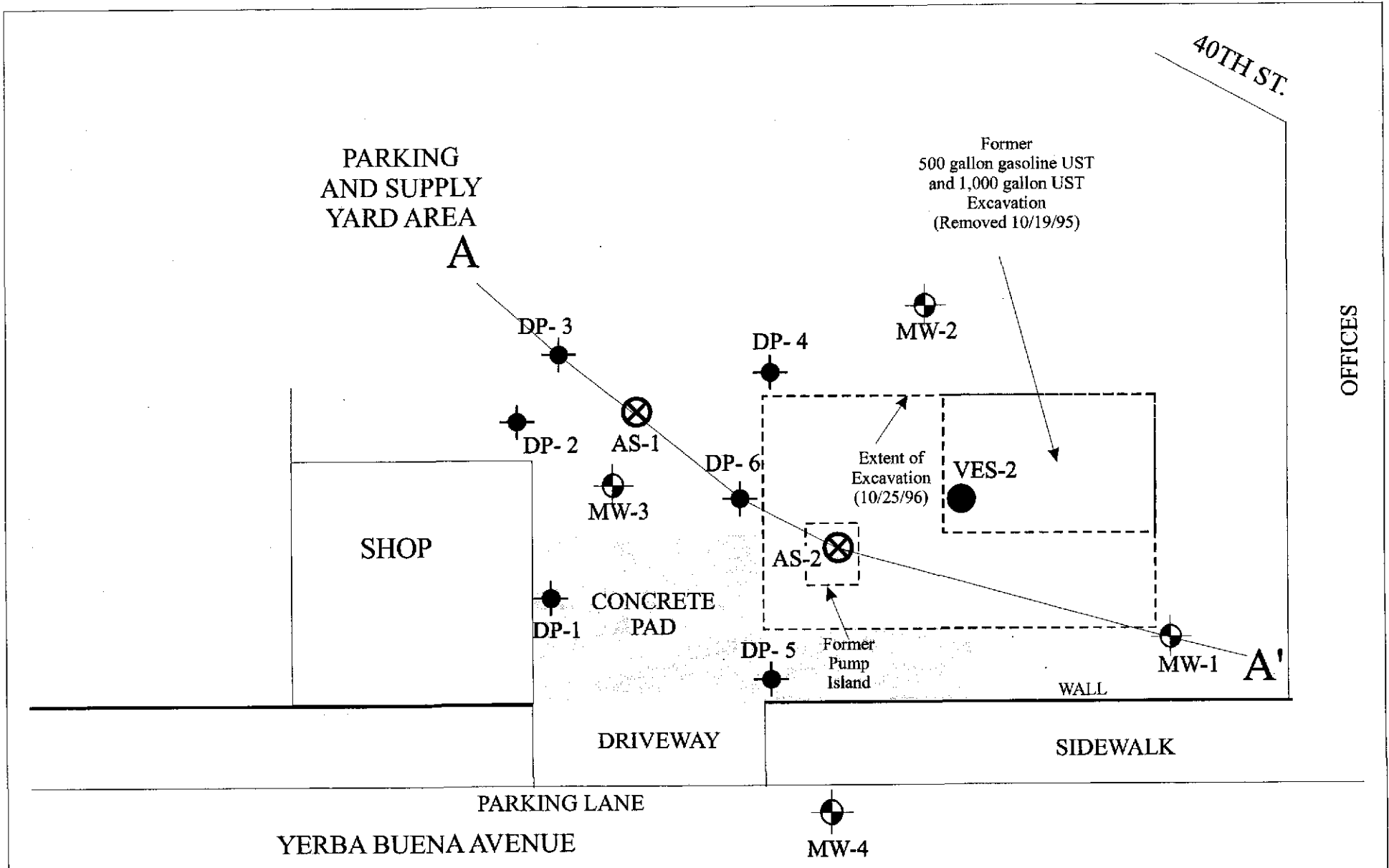


FIGURE 6 - Fidelity Roof - MW-3





Existing Groundwater Monitoring Well
 AS Well
 VES Well
 Vapor Monitoring Point
 Scale: 1" = 20'

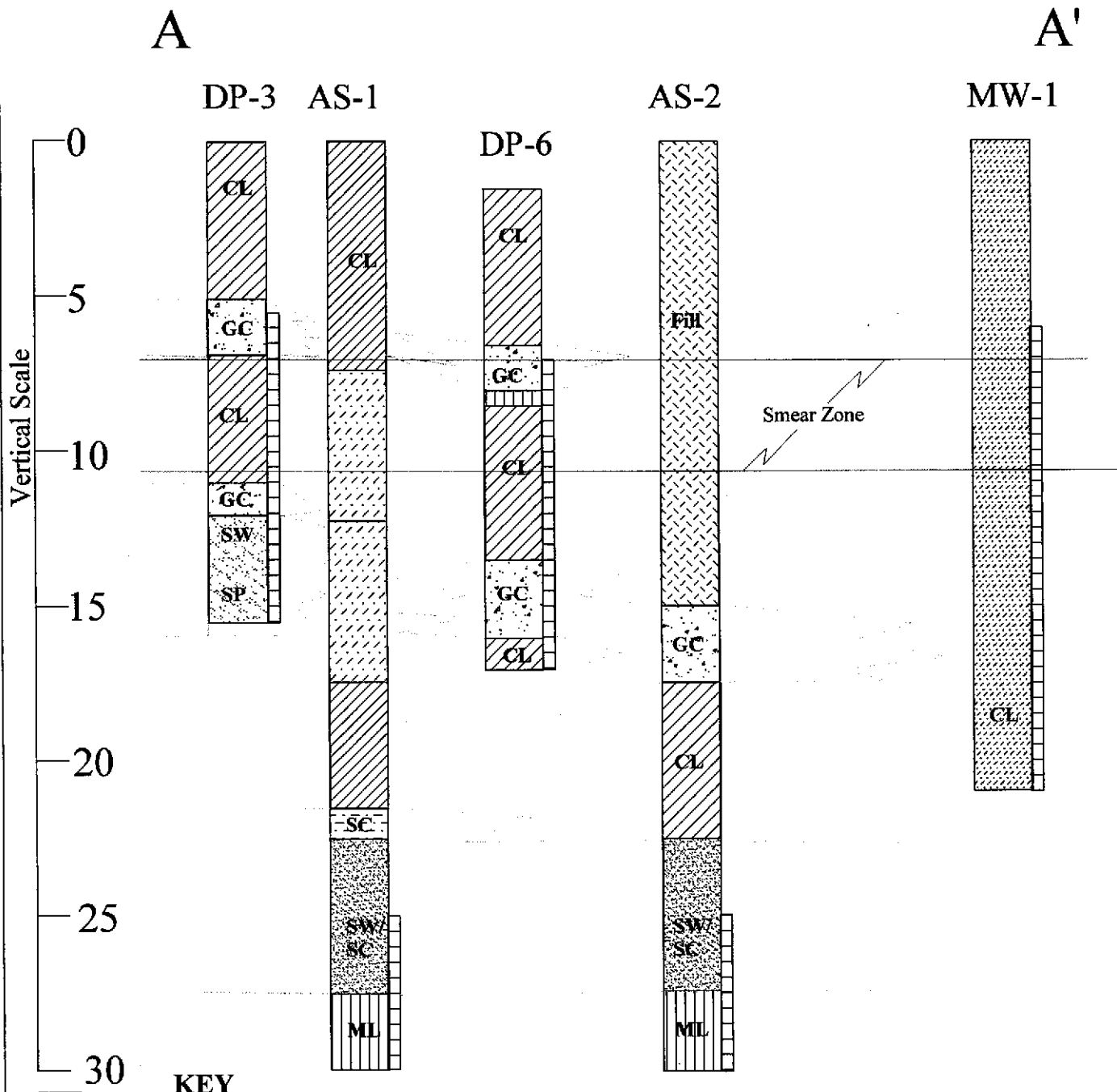
AEI CONSULTANTS
 2500 CAMINO DIABLO, SUITE 100, WALNUT CREEK, CA






CROSS SECTION A-A' LOCATION

1075 40TH STREET
 OAKLAND, CALIFORNIA

Figure 7
 AEI Project: 8326





- KEY**
-  Sand
 -  Gravel
 -  Clay
 -  Sandy Clay
 -  Clayey Sand

Drafted 9/18/05 by RFF

<p>AEI CONSULTANTS 2500 CAMINO DIABLO, SUITE 100 WALNUT CREEK, CA</p>	
<p>East - West Cross Section</p>	
<p>Fidelity Roof Company 1075 40th Street Oakland, California</p>	<p>FIGURE 8 Project No. 8326</p>

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

Well ID	Date Drilled	Elevation (ft amsl)	Water Depth 12/13/04 (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	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
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 not from the 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 Elevation (ft amsl)
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
	12/13/04	45.49	6.94	38.55
	03/11/05	45.49	7.35	38.14
06/15/05	45.49	8.29	37.20	
09/08/05	45.49	9.57	35.92	
12/01/05	45.49	7.66	37.83	
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
	12/13/04	44.98	9.26	35.72
	03/11/05	44.98	7.81	37.17
06/15/05	44.98	10.80	34.18	
09/08/05	44.98	11.58	33.40	
12/01/05	44.98	9.03	35.95	

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

Well ID	Date	Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)
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	
12/01/05*	44.37	ng	-	
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
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	
12/01/05	43.48	6.93	36.55	

Notes:

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

ft amsl = feet above mean sea level

ng = not gauged

* = 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	----	---
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)
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)
29	12/01/05	36.78	2.19	NW (0.040)

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 (ft)	TPHg	TPHd	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
			EPA Method SW8015Cm/C (ug/L)						
MW - 1	03/19/97	8.25	<50	<50	23	<0.5	<0.5	<0.5	<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	<0.5	<0.5	<0.5
	01/16/98	7.57	1,500	910	<33	95	0.72	69	8.4
	08/05/99	10.16	160	63	<15	1.6	<0.5	0.56	1.1
	11/18/99	8.52	79	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	02/24/00	7.65	300	160	<5.0	14	0.82	3.5	1.6
	05/24/00	8.47	1,300	480	<10	93	<0.5	17	1.6
	08/29/00	10.28	120	<0.5	<5.0	0.93	<0.5	<0.5	<0.5
	01/12/01	8.50	360	170	<5.0	16	<0.5	9.3	0.69
	04/18/01	8.77	1,100	410	2,800	63	<0.5	34	0.73
	07/27/01	10.50	130	66	<5.0	1.6	<0.5	<0.5	<0.5
	11/06/01	10.28	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	02/13/02	8.47	430	270	<5.0	17	0.51	11	0.64
	05/14/02	9.50	340	170	<5.0	21	<0.5	5.3	0.67
	08/15/02	10.39	96	53	<5.0	0.66	<0.5	<0.5	<0.5
	11/14/02	9.08	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	02/12/03	8.36	710	120	<5.0	28	4.3	32	130
	05/16/03	8.49	1,100	340	<15	54	4.1	40	100
	08/29/03	9.91	1,200	280	<5.0	46	5.1	55	230
	12/02/03	8.88	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
	03/08/04	7.66	120	240 ^{1,2}	<5.0	2.9	<0.5	<0.5	0.71
	06/08/04	9.39	<50	78 ²	<5.0	<0.5	<0.5	<0.5	<0.5
	09/10/04	9.95	<50	<50	<5.0	<0.5	<0.5	<0.5	<0.5
12/13/04	6.94	240	150	<5.0	11	<0.5	5.6	<0.5	
03/11/05	7.35	1,100	420	<40	43	0.60	12	0.80	
06/15/05	7.35	440	220	<15	26	<0.5	0.60	<0.5	
09/08/05	9.57	120 ³	76 ¹	<5.0	2.0	<0.5	<0.5	<0.5	
12/01/05	7.66	<50	<50	<5.0	1.3	<0.5	0.74	<0.5	
MW - 2	03/19/97	8.40	<50	<50	65	<0.5	<0.5	<0.5	<0.5
	06/23/97	8.85	<50	<50	70	3.4	<0.5	<0.5	<0.5
	10/08/97	9.80	<50	<50	90	<0.5	<0.5	<0.5	<0.5
	01/16/98	5.28	<50	<50	65	<0.5	<0.5	<0.5	<0.5
	08/05/99	9.32	<50	<50	600	<0.5	<0.5	<0.5	<0.5
	11/18/99	10.20	<50	<50	370	<0.5	<0.5	<0.5	<0.5
	02/24/00	7.03	<50	<50	880	<0.5	<0.5	<0.5	<0.5
	05/24/00	8.01	<250	62	2,200	<0.5	<0.5	<0.5	<0.5
	08/29/00	11.07	<200	<50	1,900	<0.5	<0.5	<0.5	<0.5
	01/12/01	8.60	470	70	2,000	8.7	3.1	16	73
	04/18/01	8.80	<50	<50	2,800	<0.5	<0.5	<0.5	<0.5
	07/27/01	11.10	<100	<50	3,300	<0.5	<0.5	<0.5	<0.5
	11/06/01	12.21	<100	<50	3,000	<0.5	<0.5	<0.5	<0.5
	02/13/02	7.98	54	<50	3,200	<0.5	<0.5	<0.5	<0.5
	05/14/02	10.48	<150	<50	3,800	4.8	<1.0	<1.0	<1.0
	08/15/02	10.64	<50	<50	2,900	<0.5	<0.5	<0.5	<0.5
	11/14/02	11.69	<120	<50	3,800	<1.0	<1.0	<1.0	<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	<100	<50	3,300	<1.0	<1.0	<1.0	<1.0
	03/08/04	8.41	<250	<50	4,600	<2.5	<2.5	<2.5	<2.5
	06/08/04	10.19	<120	<50	3,400	<1.2	<1.2	<1.2	<1.2
	09/10/04	10.84	<250	<250	4,100	<2.5	<2.5	<2.5	<2.5
12/13/04	8.41	77	<50	4,200	<0.5	0.83	<0.5	1.9	
03/11/05	7.81	120	<50	4,900	14	<0.5	0.56	<0.5	
06/15/05	7.81	1,200	<50	12,000	85	<5.0	<5.0	<5.0	
09/08/05	11.58	<500	<50	8,600	<5.0	<5.0	<5.0	<5.0	
12/01/05	9.03	<500	<50	12,000	<5.0	<5.0	<5.0	<5.0	

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

Well ID	Date	Depth to Water (ft)	TPHg	TPHd	MTBE	Benzene	Toluene	Ethyl-	Xylenes
			EPA Method SW8015Cm/C (ug/L)					benzene	
			EPA Method SW8021B (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	<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		NA - Free Product	<100*	7,600*	540*	3,500*	14,000*	
12/13/04	8.91		NA - Free Product = 0.05 ft	-	-	-	-	-	
03/11/05	6.94		NA - Free Product = 0.05 ft	-	-	-	-	-	
06/15/05	6.99		NA - Free Product = 0.12 ft	-	-	-	-	-	
09/08/05	10.61		NA - Free Product = 0.64 ft	-	-	-	-	-	
12/01/05	ng		NA - Free Product	-	-	-	-	-	
MW-4	08/05/99	8.79	<50	<50	37	<0.5	<0.5	<0.5	<0.5
	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	
12/01/05	6.93	<50	<50	13	<0.5	<0.5	<0.5	<0.5	

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

Well ID	Date	Depth to Water (ft)	TPHg	TPHd	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
			EPA Method SW8015Cm/C (ug/L)						
VES-2	12/01/05	5.19	140 ³	540 ^{2,5}	250	26	13	4.5	15
AS-1	12/01/05	8.11	<50	na	<5.0	<0.5	0.81	<0.5	1.5
AS-2	12/01/05	9.64	<50	na	<5.0	<0.5	<0.5	<0.5	<0.5
DP-1	12/01/05	7.22	220 ²	na	<5.0	<0.5	2.8	<0.5	0.94
DP-2	12/01/05	6.83	<50	na	59	<0.5	<0.5	<0.5	<0.5
DP-3	12/01/05	7.14	120	na	140	2.1	0.96	<0.5	0.78
DP-4	12/01/05	8.43	ns	ns	ns	ns	ns	ns	ns
DP-5	12/01/05	4.69	<50	na	<5.0	<0.5	<0.5	<0.5	<0.5
DP-6	12/01/05	5.91	7,000	na	<120	1000	7.8	860	230

Notes:

ug/L= micrograms per liter

MTBE= Methyl Tertiary Butyl Ether

TPHg= Total Petroleum Hydrocarbons as gasoline

TPHd= Total Petroleum Hydrocarbons as diesel

na = not analyzed

ns = not sampled

ng = not gauged

* + 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

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	Fidelity Roof Company	Date of Sampling:	12/1/2005
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)	7.66		
Water Elevation (feet above msl)	37.83		
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)	6.4		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	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 S/cm)	DO (mg/L)	ORP (meV)	Comments
	2	20.40	7.12	373	0.36	52.2	
	4	20.58	7	376	0.18	56.2	
	6	20.66	6.95	385	0.11	44.2	
	8	20.72	6.92	388	0.08	41.5	

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

no hc odors, shows up clear

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	Fidelity Roof Company	Date of Sampling:	12/1/2005
Job Number:	3119	Name of Sampler:	Adrian Nieto
Project Address:	1075 40th Avenue, Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"14"16")	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)	9.03		
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)	5.7		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Clears at .5 gallons		
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 S/cm)	DO (mg/L)	ORP (meV)	Comments
	1	21.72	6.93	693	0.29	31.4	
	3	22.19	6.9	622	0.38	42.9	
	4	22.25	7.02	590	0.32	62.3	
	7	22.04	7.02	626	0.11	65.7	

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

Light brown no hc odors present

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	Fidelity Roof Company	Date of Sampling:	12/1/2005
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)	10.61		
Depth to FP	9.97		
Water Elevation (feet above msl)	33.76		
Well Volumes Purged	N/A		
Calculated Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	N/A		
Actual Volume Purged (gallons)	N/A		
Appearance of Purge Water	N/A		
Free Product Present?	yes	Thickness (ft):	0.64

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

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

Well not purged or sampled, Free Product detected

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name:	Fidelity Roof Company	Date of Sampling:	12/1/2005
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)	6.23		
Water Elevation (feet above msl)	37.25		
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)	6.6		
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 S/cm)	DO (mg/L)	ORP (meV)	Comments
	2	21.95	6.79	432	0.31	121.3	
	4	22.14	6.88	380	0.44	120.8	
	6	22.41	6.83	419	0.24	129.2	
	8	22.35	6.86	447	0.32	143.9	

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

Water light brown with no hc odors



McC Campbell Analytical, Inc.

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #8326; Fidelity Roof Company	Date Sampled: 12/01/05
		Date Received: 12/01/05
	Client Contact: Robert Flory	Date Reported: 12/06/05
	Client P.O.:	Date Completed: 12/06/05

WorkOrder: 0512027

December 06, 2005

Dear Robert:

Enclosed are:

- 1). the results of 11 analyzed samples from your #8326; Fidelity Roof Company 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. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

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

ABE Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #8326; Fidelity Roof Company	Date Sampled: 12/01/05
	Client Contact: Robert Flory	Date Received: 12/01/05
	Client P.O.:	Date Extracted: 12/01/05-12/06/05
		Date Analyzed: 12/01/05-12/06/05

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

Extraction method: SW5030B

Analytical methods: SW8021B/8015Cm

Work Order: 0512027

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	ND,j	ND	1.3	ND	0.74	ND	1	110
002A	MW-2	W	ND<500,j,j	12,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	10	96
003A	MW-4	W	ND,j	13	ND	ND	ND	ND	1	114
004A	VES-2	W	140,a,i	250	26	13	4.5	15	1	112
005A	AS-1	W	ND,i	ND	ND	0.81	ND	1.5	1	105
006A	AS-2	W	ND,i	ND	ND	ND	ND	ND	1	107
007A	DP-1	W	220,m,i	ND	ND	2.8	ND	0.94	1	104
008A	DP-2	W	ND,i	59	ND	ND	ND	ND	1	108
009A	DP-3	W	120,a,i	140	2.1	0.96	ND	0.78	1	108
010A	D-5	W	ND,i	ND	ND	ND	ND	ND	1	101
011A	D-6	W	7000,a,i	ND<120	1000	7.8	860	230	10	95

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 McC Campbell 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.



McC Campbell Analytical, Inc.

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #8326; Fidelity Roof Company	Date Sampled: 12/01/05
	Client Contact: Robert Flory	Date Received: 12/01/05
	Client P.O.:	Date Analyzed: 12/02/05

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

Extraction method: SW3510C

Analytical methods: SW8015C

Work Order: 0512027

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0512027-001B	MW-1	W	ND,i	1	105
0512027-002B	MW-2	W	ND,i	1	104
0512027-003B	MW-4	W	ND,i	1	103
0512027-004B	VES-2	W	540,g,b,i	1	104

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 McC Campbell 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.



McC Campbell 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 SW8021B/8015Cm

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0512027

EPA Method: SW8021B/8015Cm		Extraction: SW5030B			BatchID: 19234			Spiked Sample ID 0512049-001A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
TPH(btex) ^f	ND	60	101	103	1.94	102	100	1.15	70 - 130	70 - 130
MTBE	ND	10	95	103	8.23	81.1	108	28.0	70 - 130	70 - 130
Benzene	ND	10	99.6	91.8	8.22	98.2	95.2	3.16	70 - 130	70 - 130
Toluene	ND	10	107	98.3	8.16	104	102	2.27	70 - 130	70 - 130
Ethylbenzene	ND	10	112	106	6.34	110	108	1.35	70 - 130	70 - 130
Xylenes	ND	30	117	110	5.88	107	110	3.08	70 - 130	70 - 130
%SS:	109	10	106	97	8.67	105	99	5.96	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 19234 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0512027-001A	12/01/05 2:00 PM	12/02/05	12/02/05 8:31 AM	0512027-002A	12/01/05 1:50 PM	12/01/05	2/01/05 10:15 PM
0512027-002A	12/01/05 1:50 PM	12/03/05	12/03/05 2:50 AM	0512027-003A	12/01/05 2:15 PM	12/02/05	12/02/05 9:00 AM
0512027-004A	12/01/05 1:20 PM	12/02/05	2/02/05 10:00 AM	0512027-005A	12/01/05 1:40 PM	12/02/05	2/02/05 10:29 AM
0512027-006A	12/01/05 3:35 PM	12/02/05	2/02/05 11:13 PM	0512027-007A	12/01/05 4:10 PM	12/02/05	12/02/05 9:51 AM
0512027-008A	12/01/05 2:05 PM	12/02/05	2/02/05 10:23 AM	0512027-009A	12/01/05 3:45 PM	12/06/05	12/06/05 4:13 AM
0512027-010A	12/01/05 2:45 PM	12/02/05	2/02/05 11:29 AM	0512027-011A	12/01/05 2:55 PM	12/02/05	12/02/05 7:58 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.

E 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.



McC Campbell Analytical, Inc.

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

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0512027

EPA Method: SW8015C	Extraction: SW3510C			BatchID: 19245			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	MS / MSD	LCS / LCSD
TPH(d)	N/A	1000	N/A	N/A	N/A	108	110	1.61	N/A	70 - 130
%SS:	N/A	2500	N/A	N/A	N/A	96	98	1.39	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 19245 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0512027-001B	12/01/05 2:00 PM	12/01/05	12/02/05 9:40 PM	0512027-002B	12/01/05 1:50 PM	12/01/05	12/02/05 4:32 AM
0512027-003B	12/01/05 2:15 PM	12/01/05	12/02/05 6:49 AM	0512027-004B	12/01/05 1:20 PM	12/01/05	12/02/05 5:41 AM

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

0512027 ael

McCAMPBELL ANALYTICAL INC.
 110 2ND AVENUE SOUTH #B7
 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
 GeoTracker EDF PDF Excel Write On (DW)

Report To: Robert F. Flory Bill To: Same
 Company: AEI Consultants
 2500 Camino Diablo, Suite 200
 Walnut Creek, CA 94597 E-Mail: rflory@aeiconsultants.com
 Tel: (925) 944-2899, extension 122 Fax: (925) 944-2895
 Project #: 8326 Project Name: Fidelity Roof Company
 Project Location: 1075 40th Street, Oakland, CA
 Sampler Signature: *Adrian Nieto*

Analysis Request										Other	Comments					
HTEX & TPH as Gas (802/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (41X, 1)	HYOCs EPA 8260 (8010 list)	BTEX ONLY (EPA 602 / 8020)	Pesticides EPA 608 / 8080	PCBs EPA 608 / 8080	VOCs EPA 624 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239 2/6010)	RCI	Halogenated VOCs (8260B - 8010 Target List)	Filter Samples for Metals Analysis: Yes / No
MW-1																
MW-2																
MW-3																not sample
MW-4																
VES-2																
AS-1																
AS-2																
DP-1																
DP-2																
DP-3																
D-5																
D-6																

Relinquished By: <i>Adrian Nieto</i>	Date: <i>12/1/05</i>	Time: <i>5:45</i>	Received By: <i>Mel Vall</i>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/C
 GOOD CONDITION
 HEAD SPACE ABSENT
 DECHLORINATED IN LAB
 PRESERVATION APPROPRIATE
 CONTAINERS
 PRESERVED IN LAB
 VDAS O&G METALS OTHER

McCampbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0512027

ClientID: AEL

EDF: YES

Report to:

Robert Flory
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597

TEL: (925) 283-6000
 FAX: (925) 283-6121
 ProjectNo: #8326; Fidelity Roof Company
 PO:

Bill to:

Joanne Bryant
 AEI Consultants
 2500 Camino Diablo, Ste. #200
 Walnut Creek, CA 94597

Requested TAT:

5 days

Date Received: 12/01/2005

Date Printed: 12/01/2005

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0512027-001	MW-1	Water	12/01/2005	<input type="checkbox"/>	A	A	B										
0512027-002	MW-2	Water	12/01/2005	<input type="checkbox"/>	A		B										
0512027-003	MW-4	Water	12/01/2005	<input type="checkbox"/>	A		B										
0512027-004	VES-2	Water	12/01/2005	<input type="checkbox"/>	A		B										
0512027-005	AS-1	Water	12/01/2005	<input type="checkbox"/>	A												
0512027-006	AS-2	Water	12/01/2005	<input type="checkbox"/>	A												
0512027-007	DP-1	Water	12/01/2005	<input type="checkbox"/>	A												
0512027-008	DP-2	Water	12/01/2005	<input type="checkbox"/>	A												
0512027-009	DP-3	Water	12/01/2005	<input type="checkbox"/>	A												
0512027-010	D-5	Water	12/01/2005	<input type="checkbox"/>	A												
0512027-011	D-6	Water	12/01/2005	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTX_W	2	PREF REPORT	3	TPH(D)_W	4		5	
6		7		8		9		10	
11		12							

Prepared by: Juanita 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.