AEI CONSULTANTS
ENVIRONMENTAL & CIVIL ENGINEERING SERVICES

3210 Old Tunnel Road, Suite B, Lafayette, CA 94549-4157
Phone: (925) 283-6000 Fax: (925) 283-6121

May 8, 2001

MAY 10 2001

Mr. Scott Seery
ACHCSA
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Quarterly Groundwater Monitoring Report-First Quarter 2001**
1075 40th Street
Oakland, CA 94608
AEI Project No. 3119

Dear Mr. Seery:

Enclosed is the quarterly groundwater monitoring report for the First Quarter 2001.

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

Sincerely,

Orion Alcalay
Environmental Scientist

May 8, 2001

1075 40th Street

QUARTERLY GROUNDWATER MONITORING REPORT

First Quarter 2001

1075 40th Street
Oakland, California

Project No. 3119

Prepared For

Fidelity Roof Company
Oakland, CA 94608

Prepared By

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

AEI

May 8, 2001

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

RE: Quarterly Groundwater Monitoring and Sampling Report
First Quarter 2001
1075 40th Street
Oakland, California
Project No. 3119

Dear Mr. Upshaw:

AEI Consultants (AEI) has prepared this report on your behalf, in response to your request for a groundwater investigation at the above referenced site (Figure 1: Site Location Map). The investigation was initiated by the property owner in accordance with the requirements of the Alameda County Health Care Services Agency (ACHCSA). The purpose of this activity is to monitor groundwater quality in the vicinity of previous underground storage tanks. This report presents the findings of the first episode of groundwater monitoring and sampling for the year 2001. Due to circumstances beyond our control, the work was not conducted until April 18, 2001.

Site Description and Background

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

On December 19, 1995, Tank Protect Engineering 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. The excavated soil was stockpiled north of the excavation. Three discrete soil samples were collected from beneath the USTs. Analysis of the samples indicated that soil beneath the 1,000 gallon UST was impacted with minor concentrations of Total Petroleum Hydrocarbons as gasoline (TPH-g), TPH as diesel (TPH-d), benzene, toluene, ethylbenzene and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE). A single soil sample collected from beneath the 500 gallon UST indicated that 100 mg/kg of TPH-g and 96 mg/kg of TPH-d were present.

On September 12, 1996, AEI advanced four soil borings in the vicinity of the former UST excavation (Ref. 1). Soil samples were collected from all of the borings and groundwater samples were collected from two of the borings. Analytical results from the

subsurface investigation revealed significant levels of gasoline and diesel present in soil to the south and to the west of the open excavation. The contamination was thought to extend beneath the existing pump island. Groundwater analysis indicated maximum concentrations of 5,500 µg/L of TPH-g, 340 µg/L of benzene, and 2,100 µg/L of TPH-d. Due to the high concentrations of petroleum hydrocarbons within the groundwater, the ACHCSA required further investigation of the extent and magnitude of the groundwater contaminant plume.

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

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

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

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

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

Based on the results of these six soil borings, the ACHCSA requested the installation of a fourth groundwater monitoring well at the site, located south of the former tank locations along Yerba Buena Avenue. Monitoring well MW-4 was installed on July 15, 1999 and

two soil samples at 10 and 14 feet bgs were analyzed from the boring (Ref. 5). No detectable concentrations of petroleum hydrocarbons were found in the soil samples.

The analytical results of prior groundwater sampling episodes are included in Table 2. This report describes the results of the subsequent groundwater monitoring event which took place on April 18, 2001.

Summary of Activities

AEI measured the depth to groundwater in the four wells on April 18, 2001. Prior to sampling, the depth from the top of the well casings was measured with an electric water level indicator. The wells were purged and sampled using disposable Teflon bailers. Temperature, pH, and specific conductivity were measured during the purging of the wells. AEI removed at least 3 well volumes. Once the temperature, pH, and specific conductivity stabilized, a water sample was collected. The well locations are shown in Figure 2.

Water was poured from the bailers into 1-liter amber bottles and 40 ml VOA vials and capped so no head space nor air bubbles were visible within the sample containers. Samples were shipped on ice under proper chain of custody protocol to McCampbell Analytical, Inc. of Pacheco, California (State Certification #1644).

Groundwater samples were submitted for chemical analysis for TPH-g (EPA Method 5030/8015), MTBE (EPA Method 8020/602), benzene, toluene, ethylbenzene, and xylenes (BTEX) (EPA Method 8020/602), and (TPH-d) (EPA Method 3510/8015).

Field Results

A strong hydrocarbon odor was detected during the sampling of monitoring wells MW-1, MW-3, and MW-4. No sheen or free product was detected during monitoring activities of the wells. Groundwater levels for the current monitoring episode ranged from 35.22 to 36.72 feet above Mean Sea Level (MSL). These groundwater elevations were an average of 0.01 feet lower than the previous monitoring episode. The direction of the groundwater flow at the time of measurement was towards the west. The latest estimated groundwater gradient is approximately 0.02 foot per foot.

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

Groundwater Quality

Concentrations of TPH-g have increased in wells MW-1, MW-3, and MW-4 since the last sampling episode. Concentrations of TPH-d have increased in wells MW-1 and MW-4, and MTBE concentrations have increased in wells MW-2 and MW-4. Wells MW-3 and MW-4 contained higher concentrations of benzene since the last sampling episode. The change in concentrations may be due to the shift in direction of groundwater flow and/or varying depths of groundwater. Monitoring well MW-3 continues to yield the highest levels of TPH-g, TPH-d and benzene. TPH-g and TPH-d were detected up to 75,000 µg/L and 13,000 µg/L, respectively. Concentrations of BTEX were detected up to 9,200 µg/L, 1,200 µg/L, 2,500 µg/L and 12,000 µg/L, respectively. MTBE was detected up to 2,800 µg/L in well MW-2.

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

Recommendations

Based on the continuing presence of elevated levels of petroleum hydrocarbons in the groundwater, quarterly groundwater monitoring and sampling of the wells will continue at the site. The next monitoring and sampling episode is scheduled for July 2001, as per the requirements of the ACHCSA.

References

1. Phase II Soil and Groundwater Investigation Report, October 7, 19996, prepared by AEI.
2. Excavation and Disposal of Contaminated Soil Report, January 7, 1997, prepared by AEI.
3. Groundwater Monitoring Well Installation Report, dated May 30, 1997, prepared by AEI.
4. Phase II Subsurface Investigation Report, December 9, 1998, prepared by AEI.
5. Groundwater Monitoring Well and Sampling report, September 3, 1999, prepared by AEI.
6. Quarterly Groundwater Monitoring and Sampling Report, March 21, 2000, prepared by AEI.
7. Quarterly Groundwater Monitoring and Sampling Report, July 28, 2000, prepared by AEI.
8. Quarterly Groundwater Monitoring and Sampling Report, November 6, 2000, prepared by AEI.
9. Quarterly Groundwater Monitoring and Sampling Report, January 29, 2001, prepared by AEI.

Report Limitations and Signatures

This report presents a summary of work completed by AEI Consultants including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are entirely representative of all areas not sampled. All conclusions and recommendations are based on these analyses, observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

These services were performed in accordance with generally accepted practices in the environmental engineering and construction field which existed at the time and location of the work.

Sincerely,
AEI Consultants

Orion Alcalay
Environmental Scientist

J. P. Derhake, PE, CAC
Senior Author

REGISTERED PROFESSIONAL ENGINEER
JOSEPH P. DERHAKE
C056476
Exp. 12/31/04
CIVIL
STATE OF CALIFORNIA

Figures

Figure 1	Site Location Map
Figure 2	Well Location Map/Groundwater Gradient Map

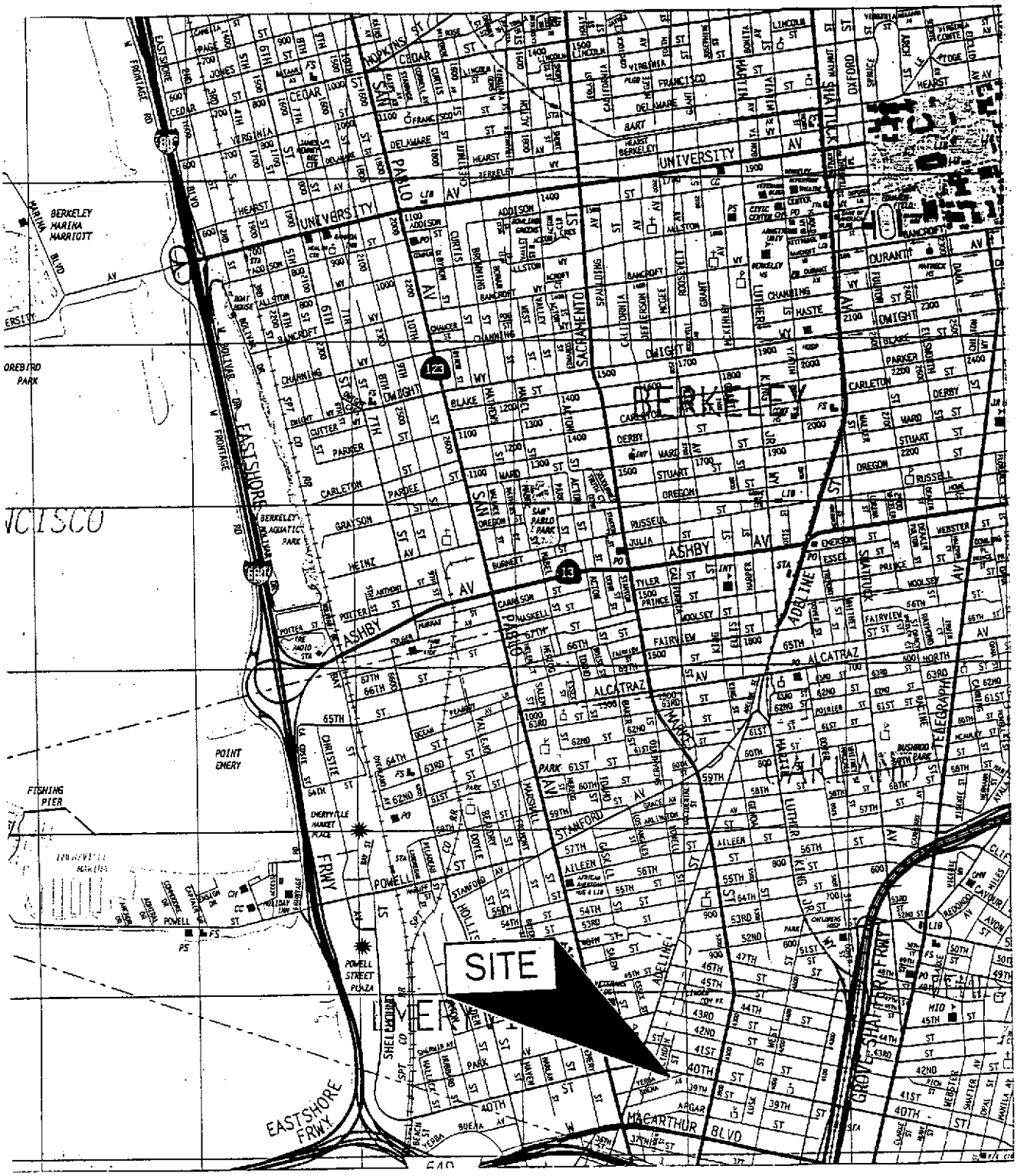
Tables

Table 1	Groundwater Levels
Table 2	Groundwater Sample Analytical Data

Appendices

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

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



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SOURCE:
THOMAS GUIDE
1997
SCALE: 1" = 2,400'

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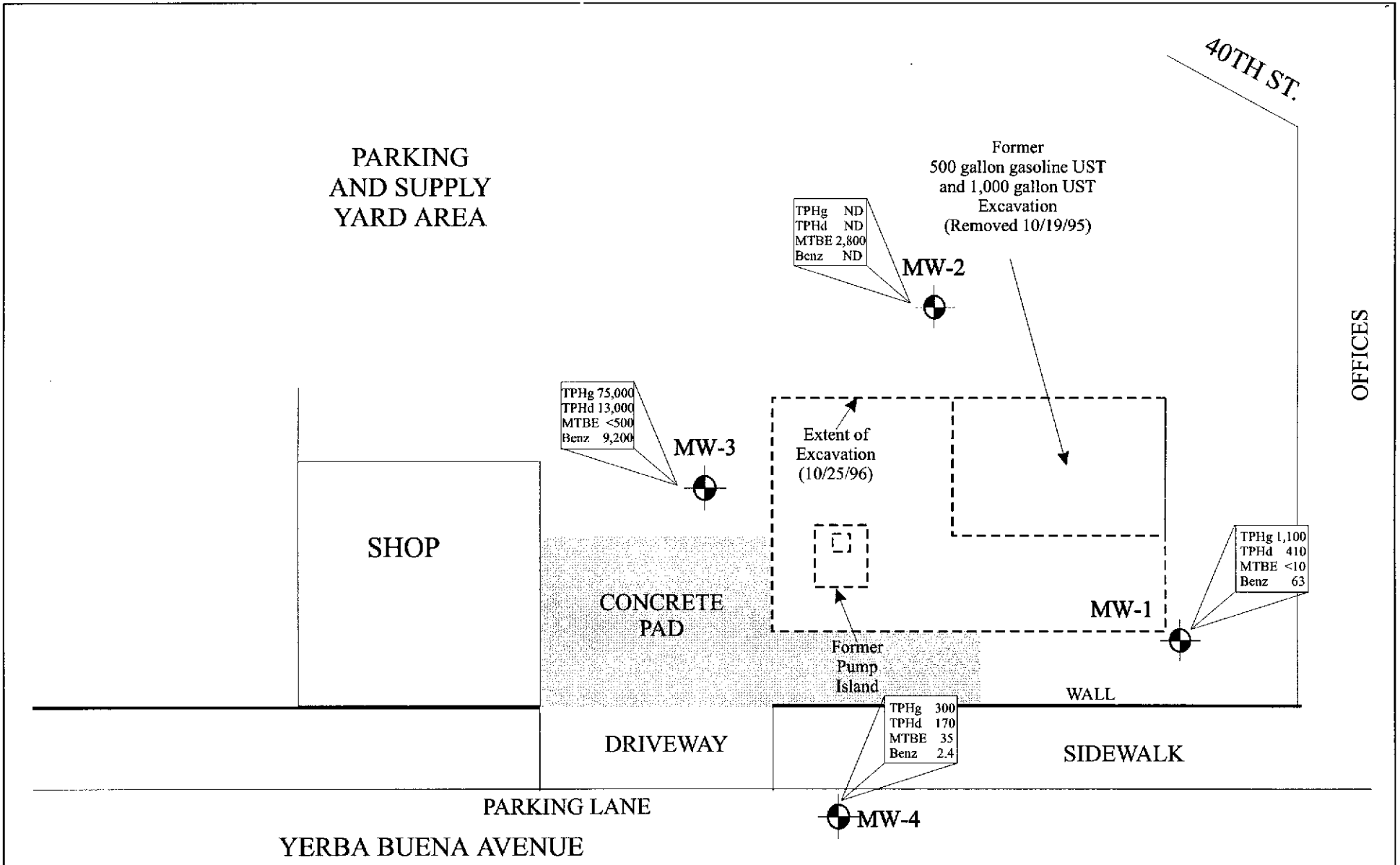
3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

SITE LOCATION MAP

1075 40th STREET OAKLAND, CALIFORNIA	FIGURE 1 PROJECT NO. 3119



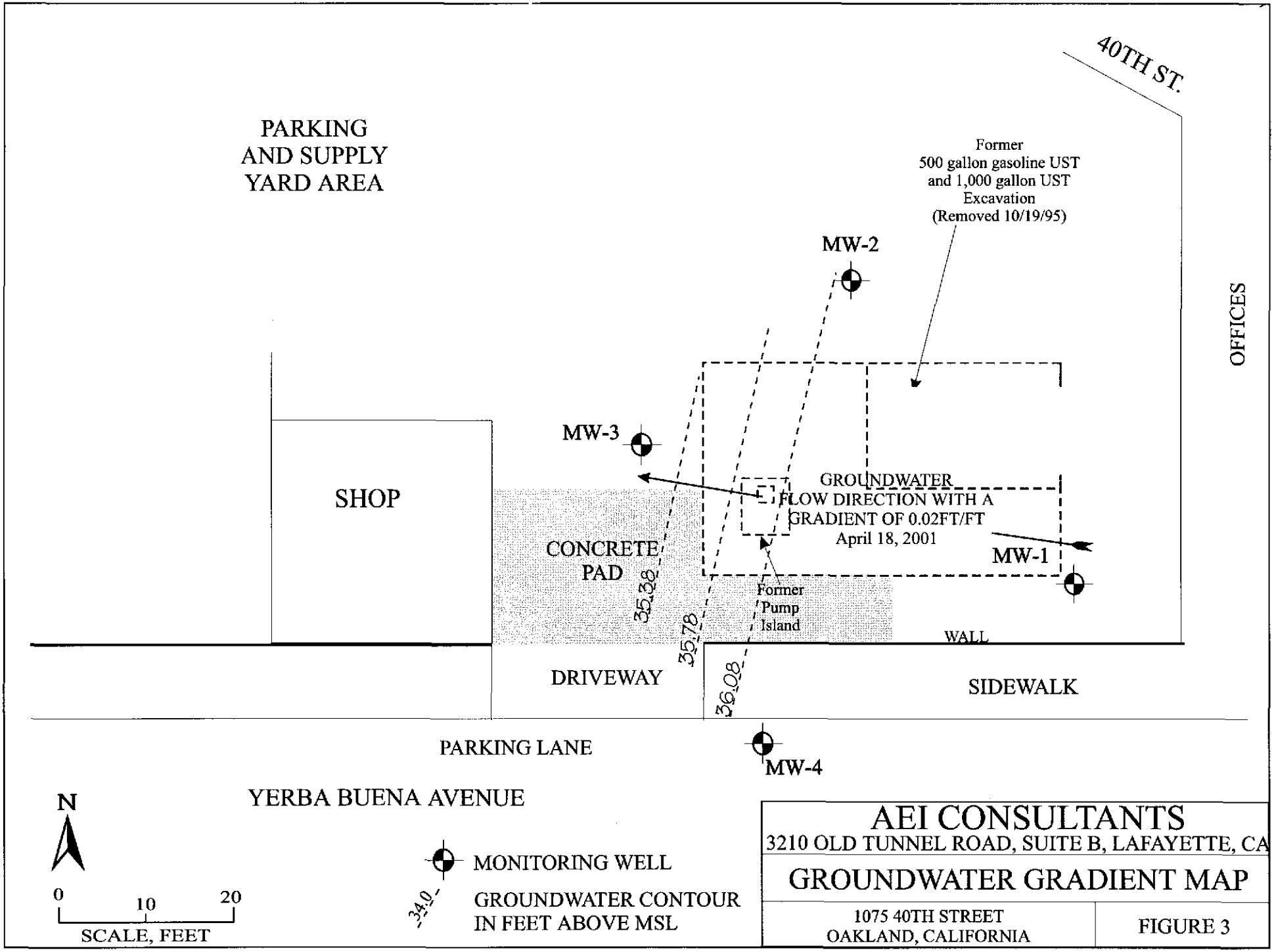
AEI CONSULTANTS

3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

WELL LOCATION MAP

1075 40TH STREET
OAKLAND, CALIFORNIA

FIGURE 2



AEI CONSULTANTS

3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

GROUNDWATER GRADIENT MAP

1075 40TH STREET
OAKLAND, CALIFORNIA

FIGURE 3

Table 1

Groundwater Levels

Well ID	Date	Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft msl)
MW-1	3/19/97	45.41	8.25	37.16
	6/20/97	45.41	9.1	36.31
	10/8/97	45.41	9.95	35.46
	1/16/98	45.41	7.57	37.84
	8/5/99	45.49	10.16	35.33
	11/18/99	45.49	8.52	36.97
	2/24/00	45.49	7.65	37.84
	5/24/00	45.49	8.47	37.02
	8/29/00	45.49	10.28	35.21
	1/12/01	45.49	8.5	36.99
	4/18/01	**45.49**	**8.77**	**36.72**
MW-2	3/19/97	44.94	8.4	36.54
	6/20/97	44.94	8.85	36.09
	10/8/97	44.94	9.8	35.14
	1/16/98	44.94	5.28	39.66
	8/5/99	44.98	9.32	35.66
	11/18/99	44.98	10.2	34.78
	2/24/00	44.98	7.03	37.95
	5/24/00	44.98	8.01	36.97
	8/29/00	44.98	11.07	33.91
	1/12/01	44.98	8.6	36.38
	4/18/01	**44.98**	**8.8**	**36.18**
MW-3	3/19/97	44.32	7.59	36.73
	10/8/97	44.32	9.98	34.34
	6/20/97	44.32	8.36	35.96
	1/16/98	44.32	9.18	35.14
	8/5/99	44.37	10.56	33.81
	11/18/99	44.37	10.92	33.45
	2/24/00	44.37	8.49	35.88
	5/24/00	44.37	8.42	35.95
	8/29/00	44.37	12	32.37
	1/12/01	44.37	10.5	33.87
	4/18/01	**44.37**	**9.5**	**35.22**
MW-4	8/5/99	43.48	8.79	34.69
	11/18/99	43.48	8.11	35.37
	2/24/00	43.48	5.19	38.29
	5/24/00	43.48	7.23	36.25
	8/29/00	43.48	9.04	34.44
	1/12/01	43.48	6.4	37.08
	4/18/01	**43.48**	**7.3**	**36.18**

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 Sample Analytical Data

Well ID	Date	Consultant/Lab	TPHg (ug/L)	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Xylenes (ug/L)	TPHd (ug/L)
MW - 1	3/19/97	AEI/MAI	<50	23	<0.5	<0.5	<0.5	<0.5	<50
	6/23/97	AEI/MAI	1,300	14	150	2.1	12	19	420
	10/8/97	AEI/MAI	56	5.8	2.8	<0.5	<0.5	<0.5	66
	1/16/98	AEI/MAI	1,500	<33	95	0.72	69	8.4	910
	8/5/99	AEI/MAI	160	<15	1.6	<0.5	0.56	1.1	63
	11/18/99	AEI/MAI	79	<5.0	<0.5	<0.5	<0.5	<0.5	<50
	2/24/00	AEI/MAI	300	<5.0	14	0.82	3.5	1.6	160
	5/24/00	AEI/MAI	1,300	ND<10	93	<0.5	17	1.6	480
	8/29/00	AEI/MAI	120	<5.0	0.93	<0.5	<0.5	<0.5	<0.5
	1/12/01	AEI/MAI	360	<5.0	16	<0.5	9.3	0.69	170
	4/18/01	**AEI/MAI**	**1,100**	~~**2,800**~~ NDC 2.0	**63**	**<0.5**	**34**	**0.73**	**410**
MW - 2	3/19/97	AEI/MAI	<50	65	<0.5	<0.5	<0.5	<0.5	<50
	6/23/97	AEI/MAI	<50	70	3.4	<0.5	<0.5	<0.5	<50
	10/8/97	AEI/MAI	<50	90	<0.5	<0.5	<0.5	<0.5	<50
	1/16/98	AEI/MAI	<50	65	<0.5	<0.5	<0.5	<0.5	<50
	8/5/99	AEI/MAI	<50	600	<0.5	<0.5	<0.5	<0.5	<50
	11/18/99	AEI/MAI	<50	370	<0.5	<0.5	<0.5	<0.5	<50
	2/24/00	AEI/MAI	<50	880	<0.5	<0.5	<0.5	<0.5	<50
	5/24/00	AEI/MAI	ND<250	2,200	<0.5	<0.5	<0.5	<0.5	62
	8/29/00	AEI/MAI	ND<200	1,900	<0.5	<0.5	<0.5	<0.5	<50
	1/12/01	AEI/MAI	470	2,000	8.7	3.1	16	73	70
	4/18/01	**AEI/MAI**	**<50**	**2,800**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<50**
MW -3	3/19/97	AEI/MAI	26,000	230	3,000	530	340	2,300	5,000
	6/23/97	AEI/MAI	25,000	270	4,400	120	540	1,500	7,000
	10/8/97	AEI/MAI	17,000	ND<280	4,400	47	280	410	5,100
	1/16/98	AEI/MAI	29,000	ND<360	5,600	740	950	3,500	7,300
	8/5/99	AEI/MAI	31,000	ND<200	5,400	150	1100	2,300	5,100
	11/18/99	AEI/MAI	74,000	ND<1,000	8,100	5,000	2,100	8,100	490,000
	2/24/00	AEI/MAI	110,000	ND<200	12,000	1,400	2,900	14,000	6,300
	5/24/00	AEI/MAI	87,000	ND<200	13,000	1,900	2,900	14,000	26,000
	8/29/00	AEI/MAI	49,000	ND<200	7,400	800	1,800	7,400	9,400
	1/12/01	AEI/MAI	69,000	ND<300	8,600	980	2,600	11,000	21,000
	4/18/01	**AEI/MAI**	**75,000**	**ND<500**	**9,200**	**1,200**	**2,500**	**12,000**	**13,000**
MW-4	8/5/99	AEI/MAI	<50	37	<0.5	<0.5	<0.5	<0.5	<50
	11/18/99	AEI/MAI	<50	20	<0.5	<0.5	<0.5	<0.5	<50
	2/24/00	AEI/MAI	<50	20	<0.5	<0.5	<0.5	<0.5	<50
	5/24/00	AEI/MAI	120	31	1.3	<0.5	<0.5	<0.5	140
	8/29/00	AEI/MAI	<50	22	<0.5	<0.5	<0.5	<0.5	<0.5
	1/12/01	AEI/MAI	<50	25	<0.5	<0.5	<0.5	<0.5	81
	4/18/01	**AEI/MAI**	~~**300**~~ 320	**35**	**2.4**	**1.1**	**0.66**	**4.2**	**170**

Notes:
ug/L= micrograms per liter
ND= Not detected
MTBE= Methyl Tertiary Butyl Ether
TPHg= Total Petroleum Hydrocarbons as gasoline
TPHd= Total Petroleum Hydrocarbons as diesel
AEI All Environmental, Inc.
MAI McCampbell Analytical Inc., Pacheco, California

AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name: Fidelity Roof, Co	Date of Sampling: 4/18/01
Job Number: 3119	Name of Sampler: OA
Project Address: 1075 40th Street, Oakland	

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Seal at Grade -- Type and Condition	Cement / Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	45.49
Depth of Well	21.0
Depth to Water	8.77
Water Elevation	36.72
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	4.21
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	5.0
Appearance of Purge Water	Clear, Hydrocarbon Odor

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2) 40 ml VOAS, 1-liter amber bottle

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
9:45	1	18.1	6.8	1002	
9:47	3	17.9	6.74	996	
9:49	5	18.2	6.72	992	

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

TD - Total Depth of Well
DTW - Depth To Water

AEI CONSULTANTS – GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name: Fidelity Roof, Co	Date of Sampling: 4/18/01
Job Number: 3119	Name of Sampler: OA
Project Address: 1075 40th Street, Oakland	

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Cement / Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	44.98
Depth of Well	21.0
Depth to Water	8.80
Water Elevation	36.18
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	4.22
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	5.0
Appearance of Purge Water	Clear, No Odor

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2) 40 ml VOAS, 1-liter amber bottle

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
10:05	1	21.3	6.67	1,409	
10:07	3	20.1	6.73	1,377	
10:09	5	20.4	6.66	1,422	

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

TD - Total Depth of Well
DTW - Depth To Water

AEI CONSULTANTS - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name: Fidelity Roof, Co	Date of Sampling: 4/18/01
Job Number: 3119	Name of Sampler: OA
Project Address: 1075 40th Street, Oakland	

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Cement / Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	44.37
Depth of Well	21.0
Depth to Water	9.5
Water Elevation	35.22
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	4.56
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	5.0
Appearance of Purge Water	Clear; Hydrocarbon Odor

GROUNDWATER SAMPLES

Number of Samples/Container Size	(2) 40 ml VOAS, 1-liter amber bottle

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
10:15	1	20.9	6.78	1,393	
10:17	3	19.9	6.49	1,427	
10:19	5	20.3	6.50	1,521	

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

TD - Total Depth of Well
DTW - Depth To Water

AEI CONSULTANTS- GROUNDWATER MONITORING WELL FIELD SAMPLING FORM	
Monitoring Well Number: MW-4	
Project Name: Fidelity Roof, Co	Date of Sampling: 4/18/01
Job Number: 3119	Name of Sampler: OA
Project Address: 1075 40th Street, Oakland	
MONITORING WELL DATA	
Well Casing Diameter (2"/4"/6")	2"
Seal at Grade -- Type and Condition	Cement / Good
Well Cap & Lock -- OK/Replace	OK
Elevation of Top of Casing	43.48
Depth of Well	20.0
Depth to Water	7.3
Water Elevation	36.18
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	3.5
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	5.0
Appearance of Purge Water	Clear/Hydrocarbon Odor
GROUNDWATER SAMPLES	
Number of Samples/Container Size	(2) 40 ml VOAS, 1-liter amber bottle

Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
10:34	1	21.1	7.00	1,035	
10:36	3	19.9	6.90	1,045	
10:38	5	20.0	6.71	1,091	

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

TD - Total Depth of Well
DTW - Depth To Water

McCAMPBELL ANALYTICAL INC.

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

All Environmental, Inc.	Client Project ID: #3119; Fidelley	Date Sampled: 04/18/01
3210 Old Tunnel Road, Suite B		Date Received: 04/18/01
Lafayette, CA 94549-4157	Client Contact: Orion Alcalay	Date Extracted: 04/19-04/23/01
	Client P.O:	Date Analyzed: 04/19-04/23/01

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes	% Recovery Surrogate
65730	MW-1	W	1100,a	ND<10	63	ND	34	0.73	119
65731	MW-2	W	ND	2800	ND	ND	ND	ND	103
65732	MW-3	W	75,000,a,h	ND<500	9200	1200	2500	12,000	102
65733	MW-4	W	300,a	35	2.4	1.1	0.66	4.2	---#
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	5.0	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

All Environmental, Inc. 3210 Old Tunnel Road, Suite B Lafayette, CA 94549-4157	Client Project ID: #3119; Fidelley	Date Sampled: 04/18/01
		Date Received: 04/18/01
	Client Contact: Orion Alcalay	Date Extracted: 04/18/01
	Client P.O:	Date Analyzed: 04/20-04/24/01

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

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	% Recovery Surrogate
65730	MW-1	W	410,d	99
65731	MW-2	W	ND	97
65732	MW-3	W	13,000,d,b,h	96
65733	MW-4	W	170,d	98
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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QC REPORT

Date: 04/20/01-04/21/01 Matrix: Water

Extraction: TTLC

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 41801					Instrument:		GC-7
Surrogate1	0.000	99.0	102.0	100.00	99	102	3.0
Xylenes	0.000	30.3	29.1	30.00	101	97	4.0
Ethyl Benzene	0.000	9.4	9.3	10.00	94	93	1.1
Toluene	0.000	9.6	9.4	10.00	96	94	2.1
Benzene	0.000	9.2	9.0	10.00	92	90	2.2
MTBE	0.000	8.3	8.2	10.00	83	82	1.2
GAS	0.000	97.3	94.8	100.00	97	95	2.6
SampleID: 41901					Instrument:		GC-6 A
Surrogate1	0.000	110.0	109.0	100.00	110	109	0.9
TPH (diesel)	0.000	8725.0	8600.0	7500.00	116	115	1.4

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

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

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QC REPORT

Date: 04/19/01 Matrix: Water

Extraction: TTLC

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	
SampleID: 41801					Instrument:	GC-7	
Surrogate1	0.000	97.0	102.0	100.00	97	102	5.0
Xylenes	0.000	28.7	30.4	30.00	96	101	5.8
Ethyl Benzene	0.000	9.1	9.8	10.00	91	98	7.4
Toluene	0.000	9.1	9.8	10.00	91	98	7.4
Benzene	0.000	8.8	9.5	10.00	88	95	7.7
MTBE	0.000	8.8	9.9	10.00	88	99	11.8
GAS	0.000	93.3	93.3	100.00	93	93	0.0
SampleID: 41901					Instrument:	GC-6 A	
Surrogate1	0.000	111.0	112.0	100.00	111	112	0.9
TPH (diesel)	0.000	8725.0	8475.0	7500.00	116	113	2.9

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

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

25478 Zale 852

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HOUR ☐ 48 HOUR ☒ 5 DAY

Report To: ORION ALCALAY Bill To:
Company: All Environmental
3210 Old Tunnel Rd. Suite B
Lafayette, CA 94549
Tele: (925) 283-6000 Fax: (925) 283-6121
Project #: 319 Project Name: Fidelity
Project Location: 1075 40th St. Oakland
Sampler Signature:

	SAMPLE ID	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	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 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other	Comments
(F)	MW-1		4-18-01		3		X					X				X	X															65730
(F)	MW-2																															65731
(F)	MW-3																															65732
(F)	MW-4																															65733

Relinquished By:	Date:	Time:	Received By:
	4-18-01	12:51	Yen Cao @ MAI 4/18/01
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Remarks:

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATION ✓ VOAS | O&G | METALS | OTHER
APPROPRIATE
CONTAINERS ✓