



October 25, 1999

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

Subject: Quarterly Groundwater Monitoring Report
Foothill Square Shopping Center
10700 MacArthur Boulevard
Oakland, California
Project No. 3067

Dear Mr. Chan:

Enclosed is a copy of the Quarterly Groundwater Monitoring and Sampling Report for the Third Quarter 1999 for the former Young's Cleaners. A copy of this report has also been sent to Derek Lee of the RWQCB.

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

Sincerely,
AEI CONSULTANTS,

Peter McIntyre
Project Geologist

ENVIRONMENTAL
PROTECTION
99 OCT 27 PM 4: 26

October 25, 1999

**QUARTERLY GROUNDWATER MONITORING
REPORT**
Third Quarter 1999

10700 MacArthur Boulevard
Oakland, California

Project No. 3067

Prepared For

Jay-Phares Corporation
10700 MacArthur Boulevard, Suite 200
Oakland, CA 94506

Prepared By

AEI Consultants
901 Moraga Road, Suite C
Lafayette, CA 94549
(925) 283-6000

AEI



October 25, 1999

Messrs. Ken Phares & John Jay
Jay-Phares Corporation
10700 MacArthur Boulevard, Suite 200
Oakland, CA 94605

**RE: Quarterly Groundwater Monitoring and Sampling Report
Third Quarter 1999**
Foothill Square Shopping Center
10700 MacArthur Boulevard
Oakland, California
Project No. 3067

Dear Messrs. Jay and Phares:

AEI Consultants (AEI) has prepared this report on behalf of The Jay-Phares Corporation, in response to their 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) and the Regional Water Quality Control Board (RWQCB). The purpose of this activity is to monitor groundwater quality associated with a former dry cleaning operation on the property. This report presents the findings of the Third Quarter of 1999 groundwater monitoring and sampling conducted on September 9, 1999. Groundwater level measurements were taken at 12 wells and groundwater samples were collected from 7 of the wells.

Site Description and Background

The site is located in a mixed commercial and residential area of Oakland, California. The property is currently developed with the Foothill Square Shopping Center (FSSC), before which the site was a truck manufacturing plant (refer to Figure 1: Site Location Map). One of the former tenants of the FSSC was Young's Cleaners. The cleaners was located in the northern building, centrally on the property. Young's Cleaners operated from between 1984 and 1995. Prior to 1980, a coin operated dry-cleaner, occupied the same location from 1962 to 1980. The cleaners have been on the Cal-SITES database list since 1980. Please refer to Figure 2 for the location of the former Young's Cleaners.

In 1989, Western Geologic Resources (WGR) installed five groundwater monitoring wells (WGR-MW1 through WGR-MW5) on the property to investigate a release associated with the ARCO gas station located west of the property.

Between 1991 and 1993, RESNA Consultants (RESNA) conducted an investigation on behalf of ARCO to define the extent of hydrocarbon impact relating to the underground fuel release at the ARCO station. As a result of chlorinated solvents detected in several soil samples, the ACHCSA requested further investigation to define the vertical and lateral extent of tetrachloroethylene (PCE) at both the ARCO site and the Foothill Square Shopping Center.

In order to assess the source and extent of PCE impact, Augeas Corporation (Augeas) installed nine groundwater monitoring wells (AMW-1 through AMW-9) on the property between September 1994 and August 1995. Two other wells, MW-6 and MW-7, were also installed on the property by ARCO. Augeas sampled these nine wells and those previously installed on the property from October 1994 through September 1995. This sampling indicated the source of the PCE contamination to be a release of solvents from the former Young's Cleaners location and an associated underground sanitary sewer lateral.

Between October 1995 and January 1996, AEI excavated contaminated soil in and around the former dry cleaning facility. The excavation was extended to between 7 and 18 feet below ground surface. Approximately 2,400 cubic yards of soil was generated during the excavation. With the approval of the Bay Area Air Quality Management District, the stockpiled soil was spread over the southeast corner of the property for aeration. During the excavation, soil aeration, and subsequent paving of the parking lot area, four of the wells, WGR-MW1, WGR-MW5, AMW-2 and AMW-3, were damaged or covered over. Please refer to Figure 2 for locations of the remaining wells.

A Phase II subsurface investigation was performed by PES Environmental, Inc. (PES) in December 1996 and January 1997 to assess whether PCE groundwater contamination had migrated off-site. The results of this off-site groundwater sampling indicated that PCE was not present off-site in the shallow groundwater zone. Concentrations of PCE were detected in the deep groundwater zone to the west of the property along Myers Street and near the ARCO station. PES concluded that the PCE plume had not migrated substantially off-site but recommended the installation of two off-site sentry wells to monitor the stability of the PCE plume in the deep groundwater zone. Two wells, FHS-MW10 and FHS-MW-11 were installed west of the property by PES in March 1997.

Although well screening interval data is not currently available for all of the wells, in general wells identified as deep are screened from between approximately 40 and 56 feet bgs and wells identified as shallow are screened from between 20 and 30 feet bgs.

Groundwater monitoring conducted by PES indicated that concentrations of PCE up to 4,600 µg/L existed in the groundwater just west of the former Young's Cleaners in AMW-6. Also present in and around AMW-6 were breakdown products of PCE

[trichloroethene (TCE), cis 1,2 dichloroethene (cis 1,2 DCE), and trans 1,2 dichloroethene (trans 1,2 DCE)], indicating degradation of PCE is occurring in the subsurface.

In a letter dated October 30, 1998, the ACHCSA requested the further sampling of three shallow wells: AMW-4, AMW-6, and AMW-7 and four deep wells: AMW-9, FHS MW-10, FHS MW-11, and MW-6. The following report describes the groundwater monitoring and sampling activities for the third quarter of 1999 conducted by AEI on September 10, 1999.

Summary of Activities

AEI measured the depth to groundwater in the 12 remaining wells and collected water samples from 7 of the wells on September 10, 1999. Well AMW-7 was not measured or sampled during this episode of sampling. The well box and locking cap were damaged when surrounding concrete was removed associated with a construction project. A water sample was collected and analyzed from AMW-5 as a substitution for AMW-7. The well locations are shown in Figure 2. The depth from the top of the well casings were measured prior to sampling with an electric water level indicator. The elevations of the top of the well casings were obtained from a previous groundwater monitoring report prepared by PES. The wells were purged using a battery powered submersible pump and a groundwater sample was collected from the seven wells using clean disposable Teflon bailers.

Temperature, pH, and turbidity were measured during the purging of the 7 wells. AEI removed at least 3 well volumes. Once the temperature, pH, and turbidity stabilized, a water sample was collected.

Water was poured from the bailers into 40-ml VOA vials and capped so that there was no head space or visible air bubbles 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).

Seven groundwater samples were submitted for chemical analyses for Volatile Halocarbons (VHCs) by EPA method 601/8010.

Field Results

No solvent odor was observed during the purging and sampling activities. In the shallow groundwater zone located between approximately 365.96 to 52.75 feet above mean sea level (msl), with a calculated groundwater flow direction to the northwest. This flow direction is consistent with that obtained in May 1999 with the groundwater level an average of 2.4 feet lower than in May 1999. In the deeper, likely confined groundwater zone, the measured groundwater elevations were calculated to be between 26.64 to 47.45

feet above msl. The calculated groundwater flow direction is to the west / southwest. This flow direction is also consistent with that obtained in May 1999 with the groundwater level an average of 3.78 feet lower than in May 1999.

Groundwater elevation data is summarized in Table 1. The groundwater elevation contours and the groundwater flow directions are shown in Figure 3 and Figure 4. Refer to Appendix A for the Groundwater Monitoring Well Field Sampling Forms.

Groundwater Quality

Significant levels of PCE, TCE, cis 1,2 DCE, and trans 1,2 DCE were detected in the shallow water samples taken from AMW-4, AMW-5, and AMW-6, with the highest concentrations detected in AMW-6, just south of the former Young's Cleaners. Levels of PCE up to 560 µg/L and 99 µg/L were also detected in deep water samples taken from MW-6 and AMW-9, respectively. PCE was detected at 7.5 µg/L in well FHS MW-11, east of the property, across MacArthur Boulevard.

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

Conclusions and Recommendations

Significant levels of PCE remain in the groundwater in the vicinity of the former Young's Cleaners. The presence of TCE; cis 1,2 DCE; and trans 1,2 DCE in shallow wells AMW-4 and AMW-6 and deep well MW-6 indicate the degradation of PCE is occurring in the subsurface. Results of samples analyzed from the off-site sentry wells indicate that the contaminant plume is not migrating significantly off-site in the deeper groundwater zone.

AEI Consultants recommends the continued quarterly groundwater monitoring and sampling of the wells. AEI will continue to monitor and sample the wells in accordance with the requirements of the RWQCB as outlined in their letter dated October 30, 1999. AEI will collect water samples from three additional wells as requested by the RWQCB. Once the results of this episode of sampling have been received, AEI will request a re-evaluation of the future groundwater monitoring program at the site from the RWQCB. The next episode of sampling is scheduled for mid-December 1999.

References

Augeas Corporation. *Report of Subsurface Investigation, Young's Cleaners, 10700 MacArthur Boulevard, Oakland, California, December 1995*

AEI Consultants *Soil Remediation and Excavation Project Summary, February 7, 1996*

PES Environmental, Inc. *Groundwater Monitoring Well Installation, Foothill Square Shopping Center, 10700 MacArthur Boulevard, Oakland, California, February 3, 1997*

PES Environmental, Inc. *Results of Additional Groundwater Investigation and Risk Evaluation, Former Young's Cleaners, Foothill Square Shopping Center, 10700 MacArthur Boulevard, Oakland, California, March 24, 1997*

PES Environmental, Inc. *Quarterly Monitoring and Well Installation Report, Former Young's Cleaners, Foothill Square Shopping Center, 10700 MacArthur Boulevard, Oakland, California, January 22, 1998*

AEI Consultants *Quarterly Groundwater Monitoring Report, Young's Cleaners, Foothill Shopping Center, 10700 MacArthur Boulevard, Oakland, California, April 20, 1999*

AEI Consultants *Quarterly Groundwater Monitoring Report, Young's Cleaners, Foothill Shopping Center, 10700 MacArthur Boulevard, Oakland, California, May 25, 1999*

Report Limitations and Signatures

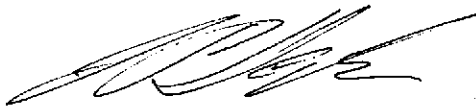
This report presents a summary of work completed by AEI Consultants, including observations and descriptions of site conditions. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information,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

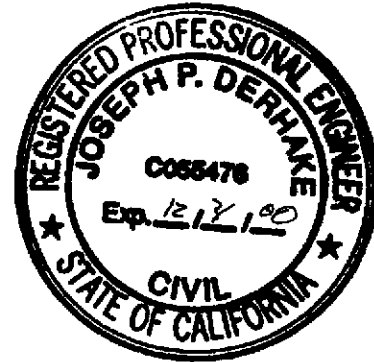
Sincerely,
AEI Consultants



Peter McIntyre
Project Geologist



J. P. Derhake, PE
Principal



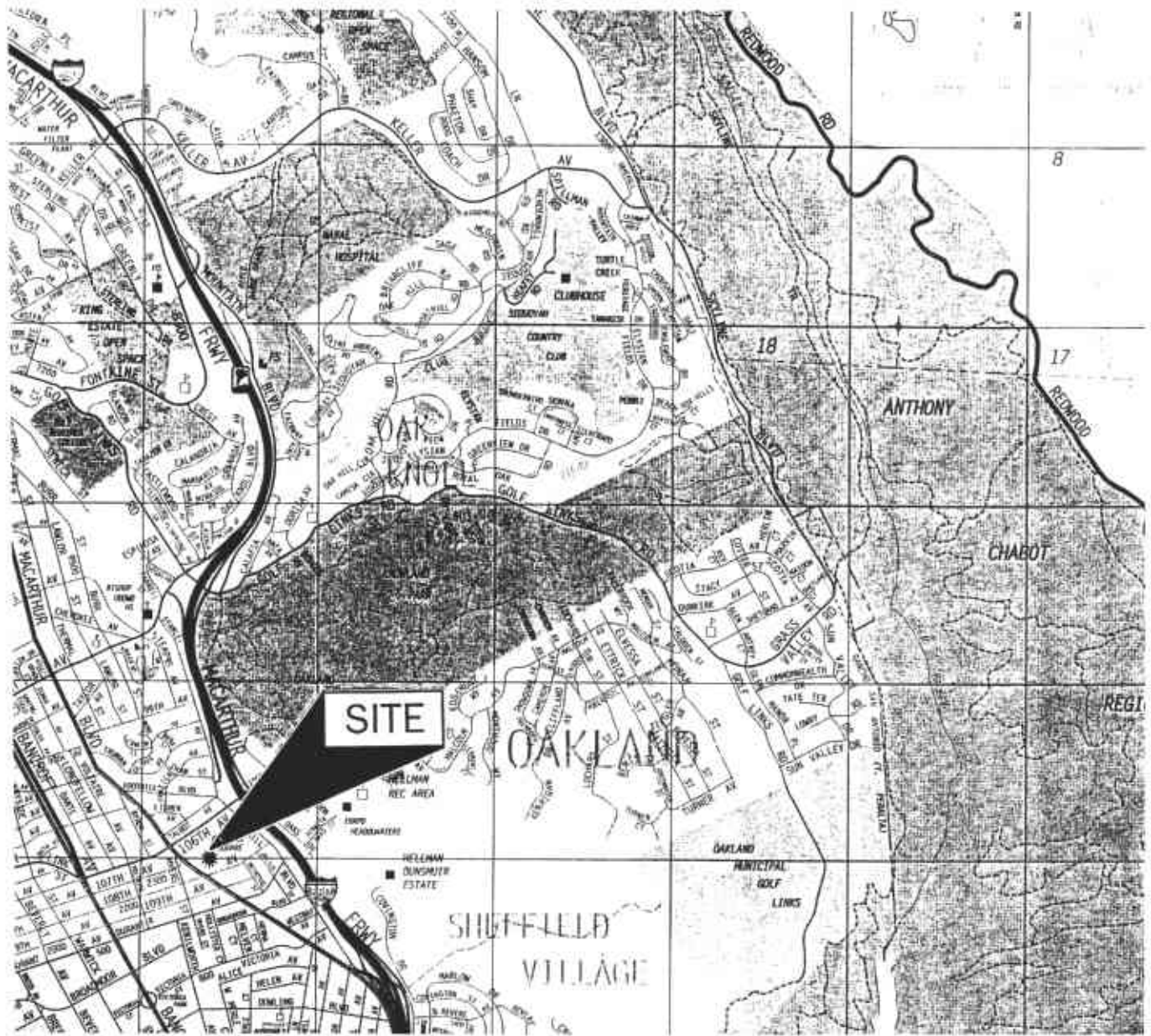
Figures

- | | |
|----------|--------------------------------------|
| Figure 1 | Site Location Map |
| Figure 2 | Site Plan |
| Figure 3 | Groundwater Elevation – Deep Zone |
| Figure 4 | Groundwater Elevation – Shallow Zone |
| Figure 5 | PCE Concentrations – Deep Zone |
| Figure 6 | PCE Concentrations – Shallow Zone |

Appendices

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

cc: Barney Chan, Alameda County Health Care Services Agency
D. Lee, Regional Water Quality Control Board



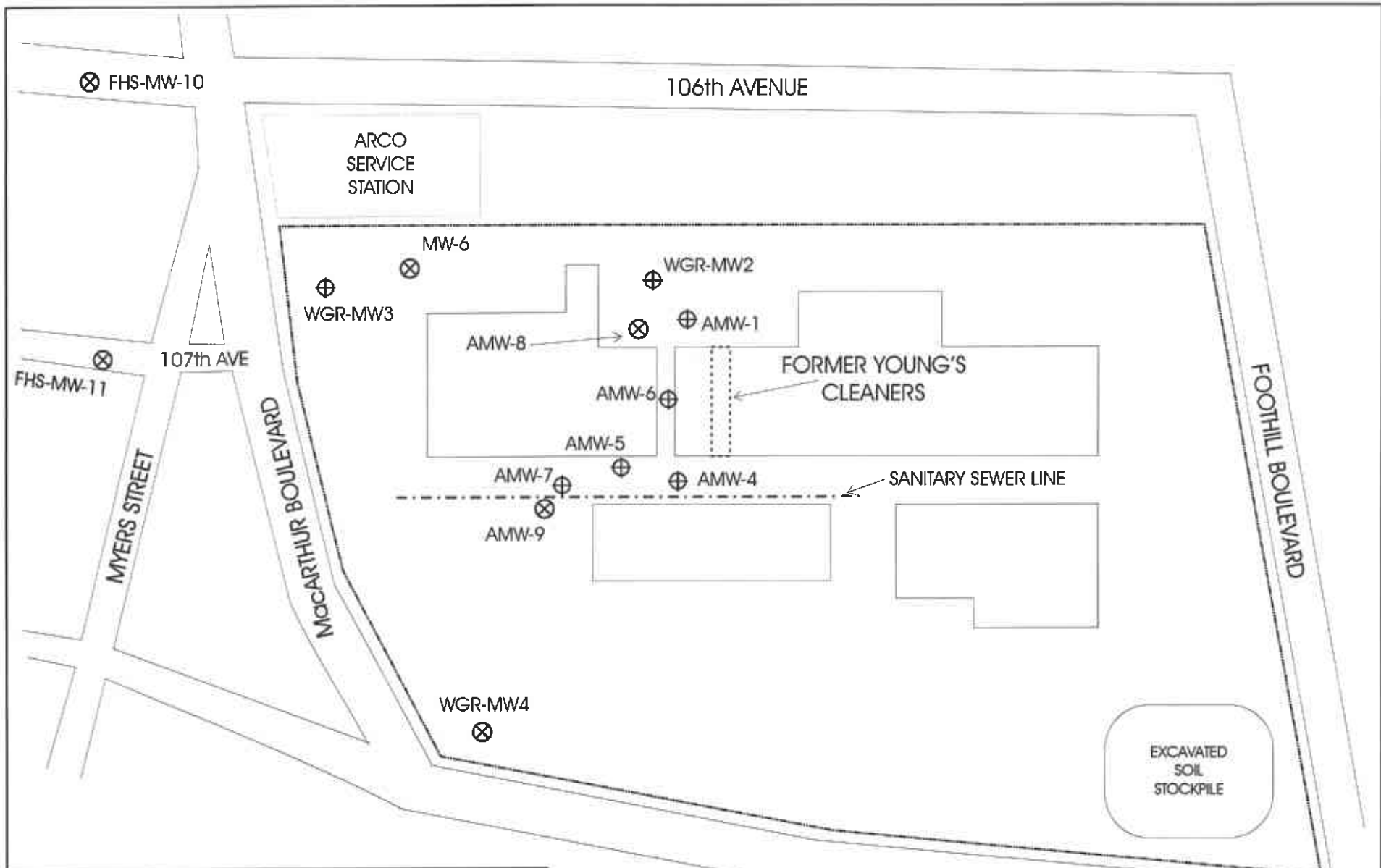
SOURCE:
 THOMAS GUIDE
 1997 EDITION
 SCALE: 1 in. = 2,400 ft.

ALL ENVIRONMENTAL, INC.
 901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

SITE LOCATION MAP

10700 FOOTHILL BOULEVARD
 OAKLAND, CALIFORNIA

FIGURE 1



AEI CONSULTANTS
 901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

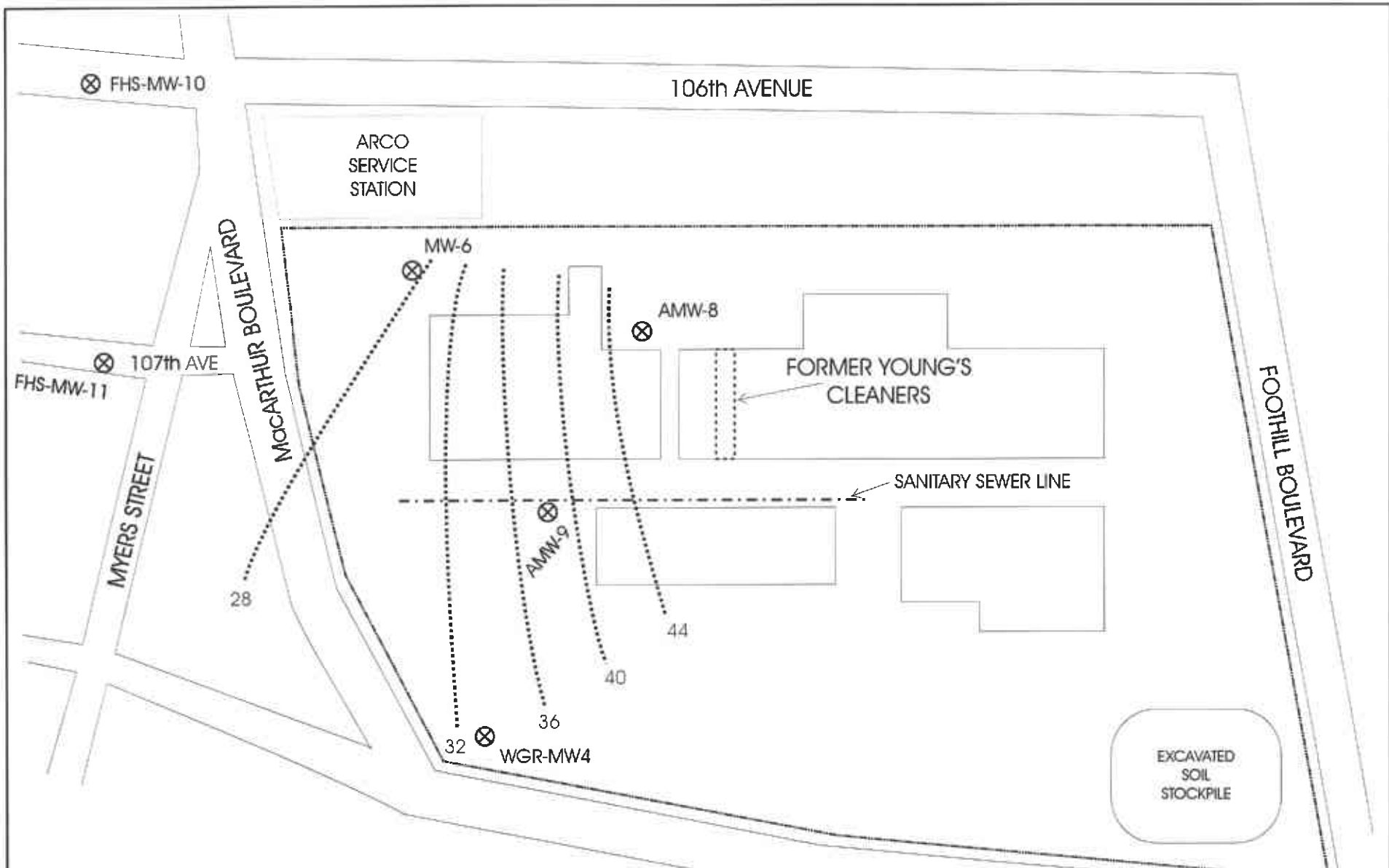
SITE PLAN

10700 MACARTHUR BOULEVARD
 OAKLAND, CALIFORNIA

FIGURE 2



- ⊕ SHALLOW GROUNDWATER ZONE WELL
- ⊗ DEEP GROUNDWATER ZONE WELL



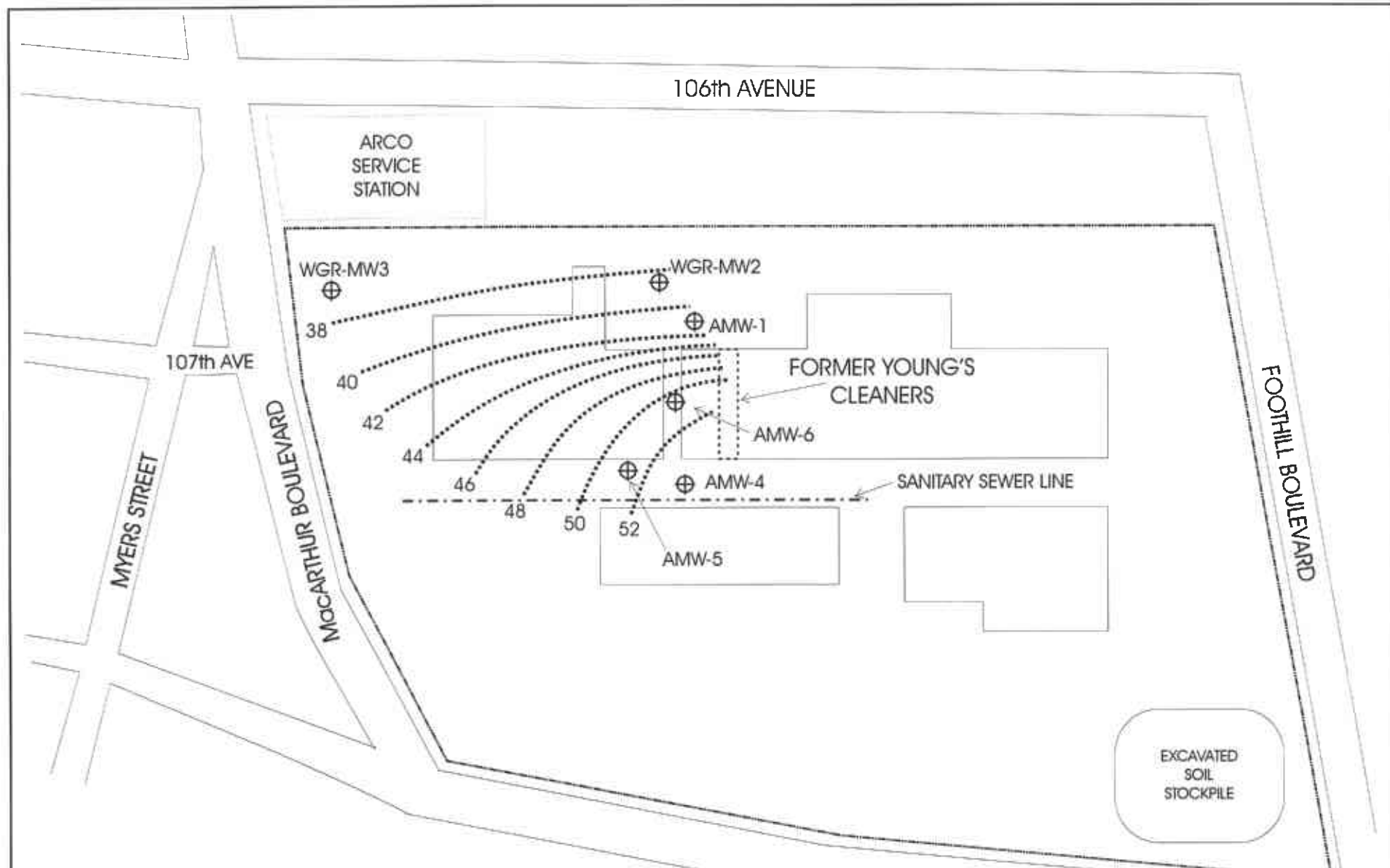
AEI CONSULTANTS
 901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

WATER ELEVATIONS - DEEP ZONE

10700 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA	FIGURE 3
--	-----------------



- ⊗ DEEP GROUNDWATER ZONE WELL
- DEEP ZONE GROUNDWATER CONTOUR (POTENTIAL)
IN FEET ABOVE MEAN SEA LEVEL



AEI CONSULTANTS
 901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

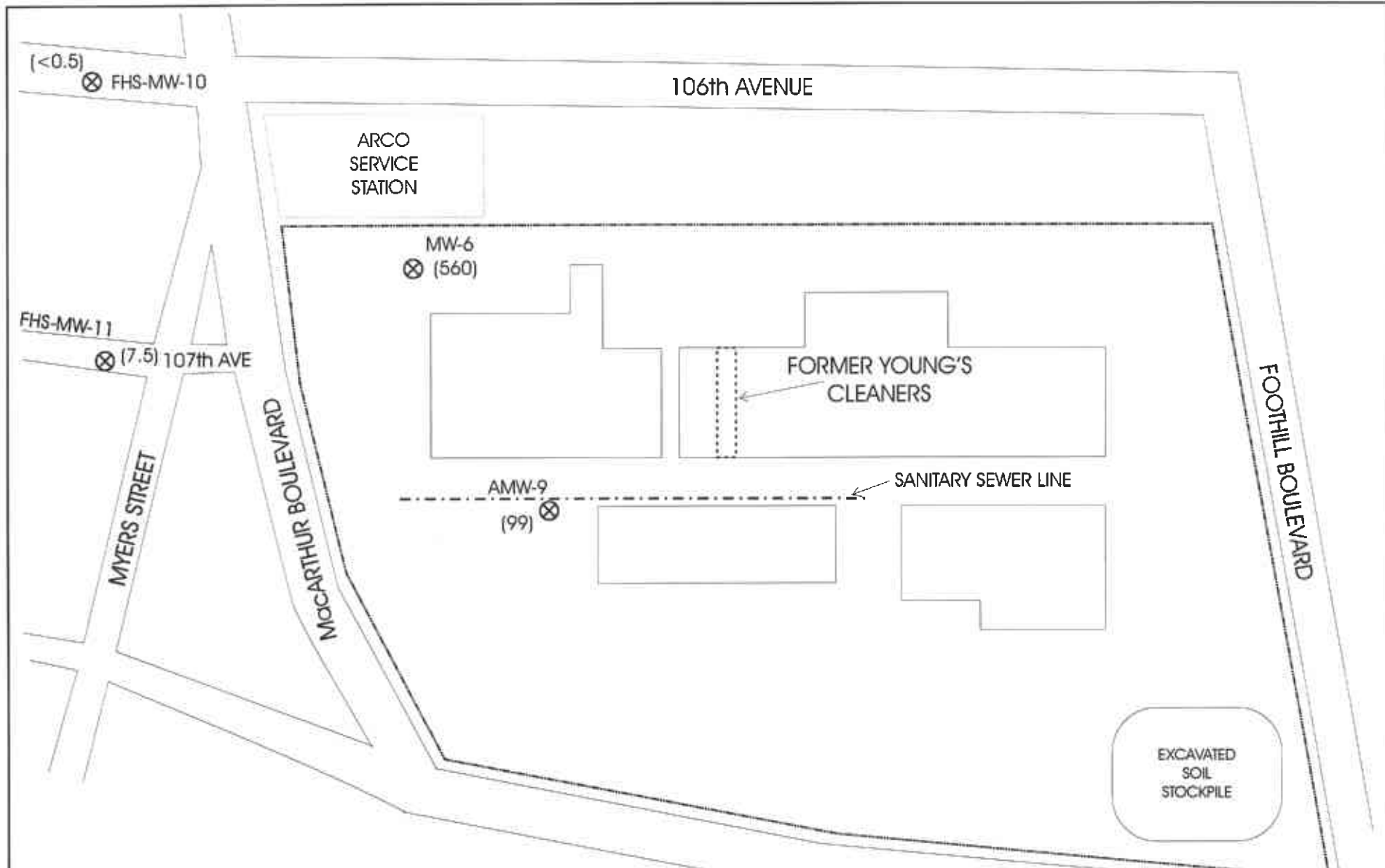
WATER ELEVATIONS - SHALLOW ZONE

10700 MACARTHUR BOULEVARD
 OAKLAND, CALIFORNIA

FIGURE 4



- ⊕ SHALLOW GROUNDWATER ZONE WELL
- ⋯ SHALLOW ZONE GROUNDWATER CONTOUR (POTENTIAL) IN FEET ABOVE MEAN SEA LEVEL



AEI CONSULTANTS.
 901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

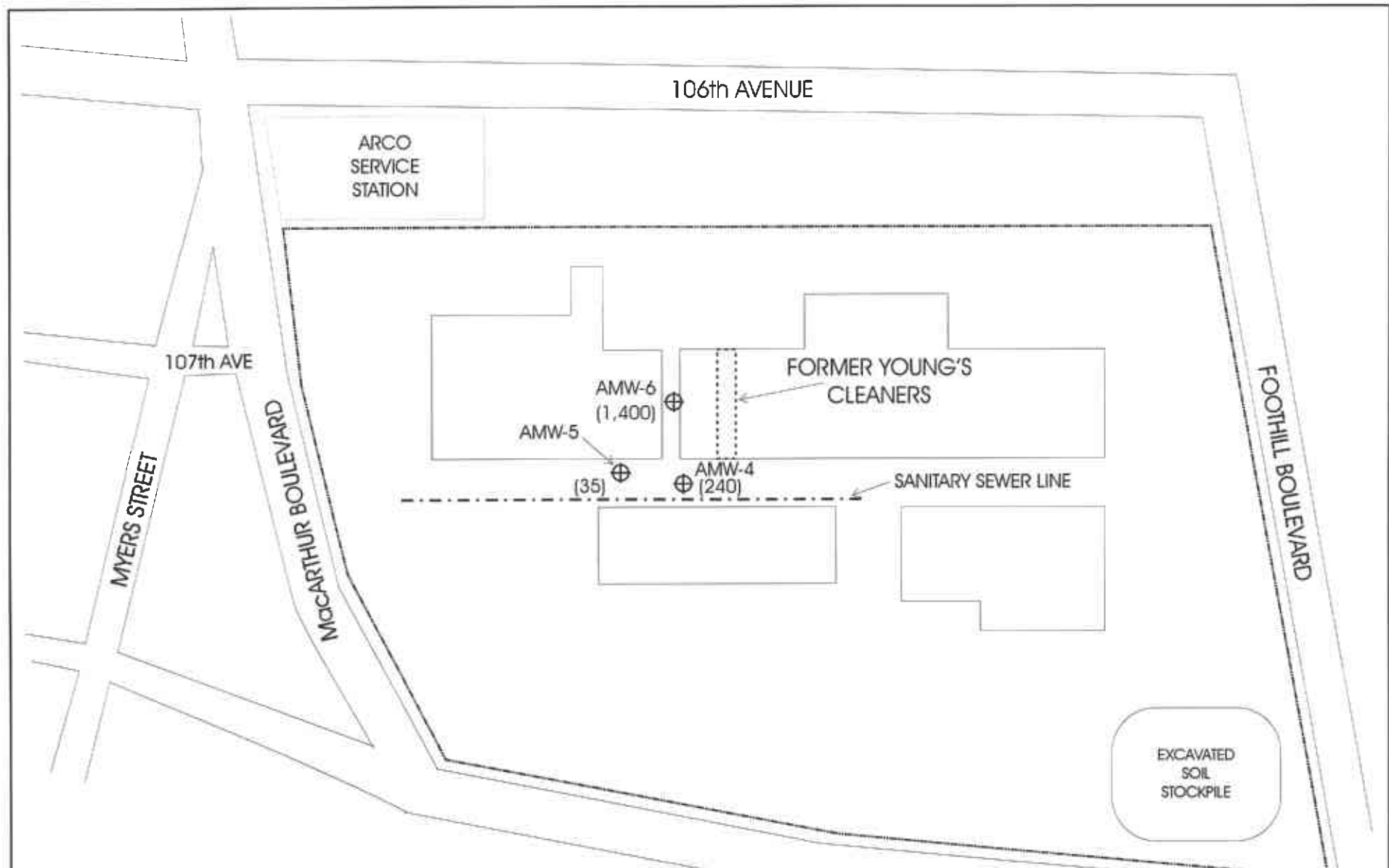
PCE CONCENTRATIONS - DEEP ZONE

10700 MACARTHUR BOULEVARD
 OAKLAND, CALIFORNIA

FIGURE 5



- ⊗ DEEP GROUNDWATER ZONE WELL
- (100) CONCENTRATIONS OF PCE IN $\mu\text{g/L}$ IN DEEP GROUNDWATER ZONE



AEI CONSULTANTS
 901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

PCE CONCENTRATIONS - SHALLOW ZONE

10700 MACARTHUR BOULEVARD
 OAKLAND, CALIFORNIA

FIGURE 6



⊕ SHALLOW GROUNDWATER ZONE WELL
 (100) CONCENTRATIONS OF PCE IN µg/L
 IN SHALLOW GROUNDWATER ZONE

**Table 1
Groundwater Levels**

Well ID (Aquifer zone)	Date	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (Potential) (ft msl)
AMW-1 (Shallow)	1/29/99	64.51	23.01	41.50
	5/5/99	64.51	21.25	43.26
	10/9/99	64.51	24.14	40.37
AMW-4 (Shallow)	1/29/99	64.79	11.51	53.28
	5/5/99	64.79	10.14	54.65
	10/9/99	64.79	12.04	52.75
AMW-5 (Shallow)	1/29/99	64.97	13.87	51.10
	5/5/99	64.97	12.83	52.14
	10/9/99	64.97	14.25	50.72
AMW-6 (Shallow)	1/29/99	65.10	12.74	52.36
	5/5/99	65.10	11.30	53.80
	10/9/99	65.10	13.29	51.81
AMW-7 (Shallow)	1/29/99	64.24	14.91	49.33
	5/5/99	64.24	*	
	10/9/99	64.24	*	
AMW-8 (Deep)	1/29/99	64.55	16.86	47.69
	5/5/99	64.55	14.46	50.09
	10/9/99	64.55	17.10	47.45
AMW-9 (Deep)	1/29/99	63.48	23.22	40.26
	5/5/99	63.48	21.40	42.08
	10/9/99	63.48	23.74	39.74
WGR MW-2 (Shallow)	1/29/99	63.18	23.41	39.77
	5/5/99	63.18	21.41	41.77
	10/9/99	63.18	24.62	38.56
WGR MW-3 (Shallow)	1/29/99	58.34	15.81	42.53
	5/5/99	58.34	18.43	39.91
	10/9/99	58.34	21.38	36.96
WGR MW-4 (Deep)	1/29/99	60.02	26.23	33.79
	5/5/99	60.02	23.80	36.22
	10/9/99	60.02	27.73	32.29
FHS MW-10 (Deep)	1/29/99	52.34	23.91	28.43
	5/5/99	52.34	20.55	31.79
	10/9/99	52.34	25.00	27.34
FHS MW-11 (Deep)	1/29/99	54.06	26.38	27.68
	5/5/99	54.06	22.72	31.34
	10/9/99	54.06	27.42	26.64
MW-6 (Deep)	1/29/99	61.78	32.87	28.91
	5/5/99	61.78	29.41	32.37
	9/10/99	61.78	33.98	27.80

Notes: All well elevations are measured from the top of casing not from the ground surface.
ft msl = feet above mean sea level
* AMW-7 was opened during construction activities, with top soil being introduced to the well, water level and samples were not collected from this well

Table 2
Groundwater Sample Analytical Data

Well (aquifer zone)	Date	Consultant	cis 1,2 DCE	trans 1,2 DCE	PCE	TCE	VHCs*
			µg/L	µg/L	µg/L	µg/L	µg/L
AMW-4 (shallow)	5/15/95	Augeus	NR	<50	2400	<50	NR
	6/21/95	Augeus	NR	<50	2500	<50	NR
	9/13/95	Augeus	NR	<25	1100	<25	NR
	4/16/96	PES	<10	<10	1200	10	NR
	7/17/96	PES	<10	<10	860	<10	NR
	10/23/96	PES	<0.5	<0.5	22	0.5	NR
	9/29/97	PES	<3	<3	340	3	NR
	1/29/99	AEI	<3	<3	100	<3	<3
	5/5/99	AEI	<5	<5	210	<5	<5
	9/10/99	AEI	10	<5	240	18	<5
AMW-5 (shallow)	5/15/95	Augeus	NR	<0.5	1.2	<0.5	NR
	6/21/95	Augeus	NR	<0.5	<0.5	<0.5	NR
	9/13/95	Augeus	NR	<0.5	<0.5	<0.5	NR
	4/16/96	PES	<0.5	<0.5	<0.5	<0.5	NR
	7/17/96	PES	<0.5	<0.5	0.6	<0.5	NR
	10/23/96	PES	<0.5	<0.5	0.8	<0.5	NR
	9/29/97	PES	<0.5	<0.5	13	<0.5	NR
	1/29/99	AEI	NA	NA	NA	NA	NA
	5/5/99	AEI	<1	<1	36	<1	<1
	9/10/99	AEI	<1	<1	35	<1	<1
AMW-6 (shallow)	9/13/95	Augeus	NR	<25	930	<25	NR
	4/16/96	PES	20	<10	1900	110	NR
	7/17/96	PES	<30	<30	3300	280	NR
	10/23/96	PES	<30	<30	2900	140	NR
	9/29/97	PES	220	70	4600	580	NR
	1/29/99	AEI	270	77	2400	390	<63
	5/5/99	AEI	370	110	2700	470	<71
	9/10/99	AEI	190	49	1400	250	<36
AMW-7 (shallow)	9/13/95	Augeus	NR	<25	2350	340	NR
	4/16/96	PES	2200	60	2300	500	NR
	7/17/96	PES	2100	<30	2400	530	NR
	10/23/96	PES	3100	50	3400	610	NR
	9/29/97	PES	33	20	520	100	NR
	1/29/99	AEI	22	<3	95	12	<3
	5/5/99	AEI	NA	NA	NA	NA	NA
	9/10/99	AEI	NA	NA	NA	NA	NA
AMW-9 (deep)	9/13/95	Augeus	NR	<25	170	<25	NR
	4/16/96	PES	7	<3	170	4	NR
	7/17/96	PES	<3	<3	190	4	NR
	10/23/96	PES	<3	<3	190	<3	NR
	9/29/97	PES	<3	<3	110	<3	NR
	1/29/99	AEI	<4	<4	90	<4	<4
	5/5/99	AEI	<2.5	<2.5	94	<2.5	<2.5
	9/10/99	AEI	<2.1	<2.1	99	<2.1	<2.1

Table 2 Continued

Well (aquifer zone)	Date	Consultant	cis 1,2 DCE	trans 1,2 DCE	PCE	TCE	VHCs*
			µg/L	µg/L	µg/L	µg/L	µg/L
FHS MW-10 (deep)	10/9/97	PES	<0.5	<0.5	<0.5	<0.5	NR
	1/29/99	AEI	<0.5	<0.5	<0.5	<0.5	<0.5
	5/5/99	AEI	<0.5	<0.5	<0.5	<0.5	<0.5
	9/10/99	AEI	<0.5	<0.5	<0.5	<0.5	<0.5
FHS MW-11 (deep)	9/29/97	PES	<0.5	<0.5	4	<0.5	NR
	1/29/99	AEI	<0.5	<0.5	7	<0.5	<0.5
	5/5/99	AEI	<0.5	<0.5	7.1	<0.5	<0.5
	9/10/99	AEI	<0.5	<0.5	7.5	<0.5	<0.5
MW-6 (deep)	3/11/95	EMCON	<20	<0.5	1300	<20	NR
	6/5/95	EMCON	<20	<20	2000	<20	NR
	8/29/95	EMCON	<20	<20	1300	<20	NR
	9/11/95	Augeus	NR	<50	2000	<50	NR
	11/16/95	EMCON	<20	<20	1300	<20	NR
	2/28/96	EMCON	<20	<20	960	<20	NR
	4/16/96	PES	10	10	1400	10	NR
	5/28/96	EMCON	<20	<20	970	<20	NR
	7/17/96	PES	<5	<5	590	<5	NR
	8/19/96	EMCON	<20	<20	820	<20	NR
	10/23/96	PES	<5	<5	680	<5	NR
	11/21/96	EMCON	<20	<20	680	<20	NR
	3/26/97	EMCON	<40	<40	830	<40	NR
	5/20/97	EMCON	<5	<5	270	<5	NR
	9/29/97	PES	<10	<10	670	<10	NR
1/29/99	AEI	1.4	<1.3	49	3	<1.3	
5/5/99	AEI	19	<11	530	38	<11	
9/10/99	AEI	27	<12	560	53	<12	
M.C.L.s			6	10	5	5	

M.C.L.s = Maximum Contaminant Levels, listed for detected chemicals only

NA = Not analyzed

NR = Not Reported

cis 1,2-Dichloroethene (cis 1,2 DCE)

trans 1,2-Dichloroethene (trans 1,2 DCE)

Tetrachloroethene (PCE)

Trichloroethene (TCE)

VHCs = All other chemicals by EPA method 601/8010

APPENDIX A
WELL FIELD SAMPLING FORMS

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: AMW-1 (shallow)					
Project Name: Drake Builders			Date of Sampling: 9/10/99		
Job Number: 3067			Name of Sampler: PJM		
Project Address: 10700 MacArthur Boulevard, 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			64.51		
Depth of Well			34		
Depth to Water			24.14		
Water Elevation			40.37		
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)					
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)					
Appearance of Purge Water					
GROUNDWATER SAMPLES					
Number of Samples/Container Size					
Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					

TD - Total Depth of Well
DTW - Depth To Water

**ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL
FIELD SAMPLING FORM**

Monitoring Well Number: AMW-4 (shallow)

Project Name: Drake Builders	Date of Sampling: 9/10/99
Job Number: 3067	Name of Sampler: PJM
Project Address: 10700 MacArthur Boulevard, 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	64.79
Depth of Well	25
Depth to Water	12.04
Water Elevation	52.75
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	6.22
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	8
Appearance of Purge Water	

GROUNDWATER SAMPLES

Number of Samples/Container Size	2 VOAs
----------------------------------	--------

Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
	2	65.3		1867	Turbid
	4	65.5		1768	
	7	65.4		1712	Clears

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

No solvent odor

TD - Total Depth of Well

DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: AMW-5 (shallow)					
Project Name: Drake Builders			Date of Sampling: 9/10/99		
Job Number: 3067			Name of Sampler: PJM		
Project Address: 10700 MacArthur Boulevard, 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			64.97		
Depth of Well			30		
Depth to Water			14.25		
Water Elevation			50.72		
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)			7.56		
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)			8		
Appearance of Purge Water			Slightly turbid		
GROUNDWATER SAMPLES					
Number of Samples/Container Size			2 VOAs		
Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
	2	65.4			
	5	64.0			
	7	67.2			
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					
No solvent odor					

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: AMW-6 (shallow)					
Project Name: Drake Builders			Date of Sampling: 9/10/99		
Job Number: 3067			Name of Sampler: PJM		
Project Address: 10700 MacArthur Boulevard, 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			65.10		
Depth of Well			25		
Depth to Water			13.29		
Water Elevation			51.81		
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)			5.62		
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)			6		
Appearance of Purge Water			Slightly turbid		
GROUNDWATER SAMPLES					
Number of Samples/Container Size			2 VOAs		
Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
	2	66.5	7.60	2120	
	4	63.6	7.55	2080	
	6	62.7	7.32	2040	
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					
No solvent odor					

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. – GROUNDWATER MONITORING WELL FIELD SAMPLING FORM						
Monitoring Well Number: AMW-7 (shallow)						
Project Name: Drake Builders			Date of Sampling: 9/10/99			
Job Number: 3067			Name of Sampler: PJM			
Project Address: 10700 MacArthur Boulevard, 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			64.24			
Depth of Well			24.75			
Depth to Water						
Water Elevation			*			
Three Well Volumes (gallons)*						
2" casing: (TD - DTW)(0.16)(3)						
4" casing: (TD - DTW)(0.65)(3)						
6" casing: (TD - DTW)(1.44)(3)						
Actual Volume Purged (gallons)						
Appearance of Purge Water						
GROUNDWATER SAMPLES						
Number of Samples/Container Size						
Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments	
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)						
* Well not sampled due to damage occurring during construction activities						

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: AMW-8 (deep)					
Project Name: Drake Builders			Date of Sampling: 9/10/99		
Job Number: 3067			Name of Sampler: PJM		
Project Address: 10700 MacArthur Boulevard, 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			64.55		
Depth of Well			45		
Depth to Water			17.10		
Water Elevation			47.45		
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)					
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)					
Appearance of Purge Water					
GROUNDWATER SAMPLES					
Number of Samples/Container Size					
Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					

TD - Total Depth of Well
DTW - Depth To Water

**ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL
FIELD SAMPLING FORM**

Monitoring Well Number: AMW-9 (deep)

Project Name: Drake Builders	Date of Sampling: 9/10/99
Job Number: 3067	Name of Sampler: PJM
Project Address: 10700 MacArthur Boulevard, 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	63.48
Depth of Well	54.3
Depth to Water	23.74
Water Elevation	39.74
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	14.67
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	17
Appearance of Purge Water	Slightly turbid

GROUNDWATER SAMPLES

Number of Samples/Container Size	2 VOAs
----------------------------------	--------

Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
	5	66.4	7.74	2080	
	10	66.4	7.53	1952	

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

No solvent odor

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM						
Monitoring Well Number: WGR MW-2 (shallow)						
Project Name: Drake Builders			Date of Sampling: 9/10/99			
Job Number: 3067			Name of Sampler: PJM			
Project Address: 10700 MacArthur Boulevard, Oakland						
MONITORING WELL DATA						
Well Casing Diameter (2"/4"/6")			4"			
Seal at Grade -- Type and Condition			Cement / Good			
Well Cap & Lock -- OK/Replace			Replace			
Elevation of Top of Casing			63.18			
Depth of Well			28			
Depth to Water			24.62			
Water Elevation			38.56			
Three Well Volumes (gallons)*						
2" casing: (TD - DTW)(0.16)(3)						
4" casing: (TD - DTW)(0.65)(3)						
6" casing: (TD - DTW)(1.44)(3)						
Actual Volume Purged (gallons)						
Appearance of Purge Water						
GROUNDWATER SAMPLES						
Number of Samples/Container Size						
Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments	
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)						

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: WGR MW-3 (shallow)					
Project Name: Drake Builders			Date of Sampling: 9/10/99		
Job Number: 3067			Name of Sampler: PJM		
Project Address: 10700 MacArthur Boulevard, Oakland					
MONITORING WELL DATA					
Well Casing Diameter (2"/4"/6")			4"		
Seal at Grade -- Type and Condition			Cement / Good		
Well Cap & Lock -- OK/Replace			OK		
Elevation of Top of Casing			58.34		
Depth of Well			26.94		
Depth to Water			21.38		
Water Elevation			36.96		
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)					
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)					
Appearance of Purge Water					
GROUNDWATER SAMPLES					
Number of Samples/Container Size					
Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: WGR MW-4 (deep)					
Project Name: Drake Builders			Date of Sampling: 9/10/99		
Job Number: 3067			Name of Sampler: PJM		
Project Address: 10700 MacArthur Boulevard, Oakland					
MONITORING WELL DATA					
Well Casing Diameter (2"/4"/6")			4"		
Seal at Grade -- Type and Condition			Cement / Good		
Well Cap & Lock -- OK/Replace			OK		
Elevation of Top of Casing			60.02		
Depth of Well			44.96		
Depth to Water			27.73		
Water Elevation			32.29		
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)					
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)					
Appearance of Purge Water					
GROUNDWATER SAMPLES					
Number of Samples/Container Size					
Time	Vol Remvd (gal)	Temp (deg C)	pH	Cond (mS)	Comments
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					

TD - Total Depth of Well
DTW - Depth To Water

**ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL
FIELD SAMPLING FORM**

Monitoring Well Number: FHS MW-10 (deep)

Project Name: Drake Builders	Date of Sampling: 9/10/99
Job Number: 3067	Name of Sampler: PJM
Project Address: 10700 MacArthur Boulevard, 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	52.34
Depth of Well	51.94
Depth to Water	25.00
Water Elevation	27.34
Three Well Volumes (gallons)*	
2" casing: (TD - DTW)(0.16)(3)	12.93
4" casing: (TD - DTW)(0.65)(3)	
6" casing: (TD - DTW)(1.44)(3)	
Actual Volume Purged (gallons)	15
Appearance of Purge Water	Clear

GROUNDWATER SAMPLES

Number of Samples/Container Size	2 VOAs
----------------------------------	--------

Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
	4	68.8	7.44	541	
	8	67.4	7.44	524	
	12	65.9	7.47	521	

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

No solvent odor

TD - Total Depth of Well

DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: FHS MW-11 (deep)					
Project Name: Drake Builders			Date of Sampling: 9/10/99		
Job Number: 3067			Name of Sampler: PJM		
Project Address: 10700 MacArthur Boulevard, 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			54.06		
Depth of Well			64.07		
Depth to Water			27.42		
Water Elevation			26.64		
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)			17.59		
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)			19		
Appearance of Purge Water			Clear		
GROUNDWATER SAMPLES					
Number of Samples/Container Size			2 VOAs		
Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
	5	70.9	7.34	736	
	10	70.6	7.17	710	
	15	73.1	7.27	714	
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					
No solvent odor					

TD - Total Depth of Well
DTW - Depth To Water

ALL ENVIRONMENTAL INC. - GROUNDWATER MONITORING WELL FIELD SAMPLING FORM					
Monitoring Well Number: MW-6 (deep)					
Project Name: Drake Builders			Date of Sampling: 9/10/99		
Job Number: 3067			Name of Sampler: PJM		
Project Address: 10700 MacArthur Boulevard, 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			61.78		
Depth of Well			48.69		
Depth to Water			33.98		
Water Elevation			27.80		
Three Well Volumes (gallons)*					
2" casing: (TD - DTW)(0.16)(3)			7.06		
4" casing: (TD - DTW)(0.65)(3)					
6" casing: (TD - DTW)(1.44)(3)					
Actual Volume Purged (gallons)			7.5		
Appearance of Purge Water			Turbid		
GROUNDWATER SAMPLES					
Number of Samples/Container Size			2 VOAs		
Time	Vol Remvd (gal)	Temp (deg C)	PH	Cond (mS)	Comments
	3	70.3	7.11	165	
	6	63.5	7.52	157	
COMMENTS (i.e., sample odor, well recharge time & percent, etc.)					
No solvent odor					

TD - Total Depth of Well

DTW - Depth To Water

APPENDIX B

**LABORATORY ANALYTICAL AND
CHAIN OF CUSTODY DOCUMENTATION**



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. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: #3067; Foothill	Date Sampled: 09/10/99
		Date Received: 09/10/99
	Client Contact: Peter McIntyre	Date Extracted: 09/10/99
	Client P.O:	Date Analyzed: 09/10/99

09/17/99

Dear Peter:

Enclosed are:

- 1). the results of 7 samples from your #3067; Foothill 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,

John M. H.
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. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: #3067; Foothill	Date Sampled: 09/10/99
		Date Received: 09/10/99
	Client Contact: Peter McIntyre	Date Extracted: 09/10-09/17/99
	Client P.O:	Date Analyzed: 09/10-09/17/99

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	19029	19030	19031	19032
Client ID	AMW-4	AMW-5	AMW-6	AMW-9
Matrix	W	W	W	W
Compound	Concentration			
Bromodichloromethane	ND<5	ND<1	ND<36	ND<2.1
Bromoform ^(b)	ND<5	ND<1	ND<36	ND<2.1
Bromomethane	ND<5	ND<1	ND<36	ND<2.1
Carbon Tetrachloride ^(c)	ND<5	ND<1	ND<36	ND<2.1
Chlorobenzene	ND<5	ND<1	ND<36	ND<2.1
Chloroethane	ND<5	ND<1	ND<36	ND<2.1
2-Chloroethyl Vinyl Ether ^(d)	ND<5	ND<1	ND<36	ND<2.1
Chloroform ^(e)	ND<5	ND<1	ND<36	ND<2.1
Chloromethane	ND<5	ND<1	ND<36	ND<2.1
Dibromochloromethane	ND<5	ND<1	ND<36	ND<2.1
1,2-Dichlorobenzene	ND<5	ND<1	ND<36	ND<2.1
1,3-Dichlorobenzene	ND<5	ND<1	ND<36	ND<2.1
1,4-Dichlorobenzene	ND<5	ND<1	ND<36	ND<2.1
Dichlorodifluoromethane	ND<5	ND<1	ND<36	ND<2.1
1,1-Dichloroethane	ND<5	ND<1	ND<36	ND<2.1
1,2-Dichloroethane	ND<5	ND<1	ND<36	ND<2.1
1,1-Dichloroethene	ND<5	ND<1	ND<2.1	ND<2.1
cis 1,2-Dichloroethene	10	ND<1	190	ND<2.1
trans 1,2-Dichloroethene	ND<5	ND<1	49	ND<2.1
1,2-Dichloropropane	ND<5	ND<1	ND<36	ND<2.1
cis 1,3-Dichloropropene	ND<5	ND<1	ND<36	ND<2.1
trans 1,3-Dichloropropene	ND<5	ND<1	ND<36	ND<2.1
Methylene Chloride ^(f)	ND<5	ND<1	ND<36	ND<2.1
1,1,2,2-Tetrachloroethane	ND<5	ND<1	ND<36	ND<2.1
Tetrachloroethene	240	35	1400	99
1,1,1-Trichloroethane	ND<5	ND<1	ND<36	ND<2.1
1,1,2-Trichloroethane	ND<5	ND<1	ND<36	ND<2.1
Trichloroethene	18	ND<1	250	ND<2.1
Trichlorofluoromethane	ND<5	ND<1	ND<36	ND<2.1
Vinyl Chloride ^(g)	ND<5	ND<1	ND<36	ND<2.1
% Recovery Surrogate	97	98	98	98
Comments				

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe
 Reporting limit unless otherwise stated: water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) tribromomethane; (c) tetrachloromethane; (d) (2-chloroethoxy)ethene; (e) trichloromethane; (f) dichloromethane; (g) chloroethene; (h) a lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content.

DHS Certification No. 1644

Edward Hamilton 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. 901 Moraga Road, Suite C Lafayette, CA 94549	Client Project ID: #3067; Foothill	Date Sampled: 09/10/99
		Date Received: 09/10/99
	Client Contact: Peter McIntyre	Date Extracted: 09/10-09/17/99
	Client P.O:	Date Analyzed: 09/10-09/17/99

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	19033	19034	19035
Client ID	FHS MW-10	FHS W-11	MW 6
Matrix	W	W	W
Compound	Concentration		
Bromodichloromethane	ND	ND	ND<12
Bromoform ^(b)	ND	ND	ND<12
Bromomethane	ND	ND	ND<12
Carbon Tetrachloride ^(c)	ND	ND	ND<12
Chlorobenzene	ND	ND	ND<12
Chloroethane	ND	ND	ND<12
2-Chloroethyl Vinyl Ether ^(d)	ND	ND	ND<12
Chloroform ^(e)	ND	ND	ND<12
Chloromethane	ND	ND	ND<12
Dibromochloromethane	ND	ND	ND<12
1,2-Dichlorobenzene	ND	ND	ND<12
1,3-Dichlorobenzene	ND	ND	ND<12
1,4-Dichlorobenzene	ND	ND	ND<12
Dichlorodifluoromethane	ND	ND	ND<12
1,1-Dichloroethane	ND	ND	ND<12
1,2-Dichloroethane	ND	ND	ND<12
1,1-Dichloroethene	ND	ND	ND<12
cis 1,2-Dichloroethene	ND	ND	27
trans 1,2-Dichloroethene	ND	ND	ND<12
1,2-Dichloropropane	ND	ND	ND<12
cis 1,3-Dichloropropene	ND	ND	ND<12
trans 1,3-Dichloropropene	ND	ND	ND<12
Methylene Chloride ^(f)	ND	ND	ND<12
1,1,2,2-Tetrachloroethane	ND	ND	ND<12
Tetrachloroethene	ND	7.5	560
1,1,1-Trichloroethane	ND	ND	ND<12
1,1,2-Trichloroethane	ND	ND	ND<12
Trichloroethene	ND	ND	53
Trichlorofluoromethane	ND	ND	ND<12
Vinyl Chloride ^(g)	ND	ND	ND<12
% Recovery Surrogate	98	97	98
Comments			

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe
 Reporting limit unless otherwise stated: water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) tribromomethane; (c) tetrachloromethane; (d) (2-chloroethoxy)ethene; (e) trichloromethane; (f) dichloromethane; (g) chloroethene; (h) a lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content.

DHS Certification No. 1644

Edward Hamilton, Lab Director

QC REPORT FOR EPA 8010/8020/EDB

Date: 09/10/99-09/11/99

Matrix: WATER

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	MS	MSD			MS	MSD	
1,1-DCE	0.0	10.8	10.7	10.0	108	107	0.9
Trichloroethene	0.0	9.9	8.9	10.0	99	89	10.6
EDB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	0.0	9.4	9.3	10.0	94	93	1.1
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobz (PID)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* Rec. = (MS - Sample) / amount spiked x 100

RPD = ((MS - MSD) / (MS + MSD)) x 2 x 100



ALL ENVIRONMENTAL, INC.

Environmental Engineering & Construction

901 Moraga Road, Suite C
Lafayette, CA 94549
(925) 283-6000 Fax: (925) 283-6121

CHAIN OF CUSTODY

PAGE 1 OF 1

16699 Zale 84

TAT: RUSH / 24 hr / 48 hr / 5 day / other

AEI PROJECT MANAGER Peter McIntyme
 PROJECT NAME Foofhi 11
 PROJECT NUMBER 3067
 TOTAL # OF CONTAINERS 14
 RCVD. GOOD CONDITION/COLD Y N

TPH(g), BTEX, MTBE
SOIL: EPA 8080/801EM, 8080
 WATER: EPA 8080/801EM, 8080

TPH(g)
SOIL: EPA 8080/801EM
 WATER: EPA 8080/801EM

BTEX, MTBE
SOIL: EPA 8080
 WATER: EPA 8080

TOTAL OIL & GREASE
SOIL: EPA 1631 of STD. 8580 D/EAF
 WATER: STD. 8580 B&F

VOLATILE HALOCARBONS
SOIL: EPA 8070
 WATER: EPA 601

VOC's
SOIL: EPA 8240
 WATER: EPA 604

SEMI-VOLATILE ORGANICS
SOIL: EPA 8270/3850
 WATER: EPA 625/3510

TOTAL LEAD (TTLG)
SOIL: 0010 (ICP)
 WATER: 290.2 (AA)

LUFT 5 METALS
SOIL: EPA 7180, 7190, 7190, 7280, 7280
 WATER:

SAMPLE ID	DATE	TIME	MATRIX	TPH(g), BTEX, MTBE	TPH(g)	BTEX, MTBE	TOTAL OIL & GREASE	VOLATILE HALOCARBONS	VOC's	SEMI-VOLATILE ORGANICS	TOTAL LEAD (TTLG)	LUFT 5 METALS	HOLD	# OF CONTAINERS
AMW - 4	9/10/99	2:00	H ₂ O				X						19029	2
AMW - 5	↓	↓	↓				X						19030	2
AMW - 6	↓	↓	↓				X						19031	2
AMW - 9	↓	↓	↓				X						19032	2
FHS MW-10	↓	↓	↓				X						19033	2
FHS MW-11	↓	↓	↓				X						19034	2
MW 6	↓	↓	↓				X						19035	2

ICE/® _____ PRESERVATION _____
 GOOD CONDITION _____ APPROPRIATE _____
 HEAD SPACE ABSENT _____ CONTAINERS _____

VOAS | O&G | METALS | OTHER

COMMENTS / INSTRUCTIONS
McCampbell

ANALYTICAL LABORATORY _____
 ADDRESS _____
 PHONE () _____ FAX () _____

RELINQUISHED BY
Peter McIntyme
 SIGNATURE
 PRINTED NAME
 AEI
 COMPANY
 DATE 9/10/99 TIME 5:30

RECEIVED BY
Gina A Butler
 SIGNATURE
 PRINTED NAME
 M AEI
 COMPANY
 DATE 9/10/99 TIME 5:30

RELINQUISHED BY
 SIGNATURE
 PRINTED NAME
 COMPANY
 DATE TIME

RECEIVED BY
 SIGNATURE
 PRINTED NAME
 COMPANY
 DATE TIME