



Re 2580
2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597

Phone: (925) 283-6000 Fax: (925) 944-2895

July 8, 2003

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

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

Dear Mr. Chan:

Enclosed is a copy of the report of most recent report for monitoring and sampling of groundwater at the above referenced property

Also enclosed is a copy of the site plan with future building footprints for the shopping center redevelopment project, which has precipitated the request to decommission several of the monitoring wells.

We appreciate your consideration with our request. Please contact me at (925) 283-6000, extension 104, at your convenience, to discuss the well closure.

Sincerely,

AEI CONSULTANTS

Peter McIntyre
Project Manager, Geologist

cc: Ms. Betty Graham
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Ken Phares
Jay-Phares Corporation
10700 MacArthur Boulevard, Suite 200
Oakland, CA 94605

SLIC Young's Dry Cleaners

Alameda County
JUL 15 2003
Environmental Health

Re 2580
AEI CONSULTANTS
Environmental & Civil Engineering Services

PETER MCINTYRE
Project Manager, Geologist

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CHICAGO

FT. LAUDERDALE

LOS ANGELES

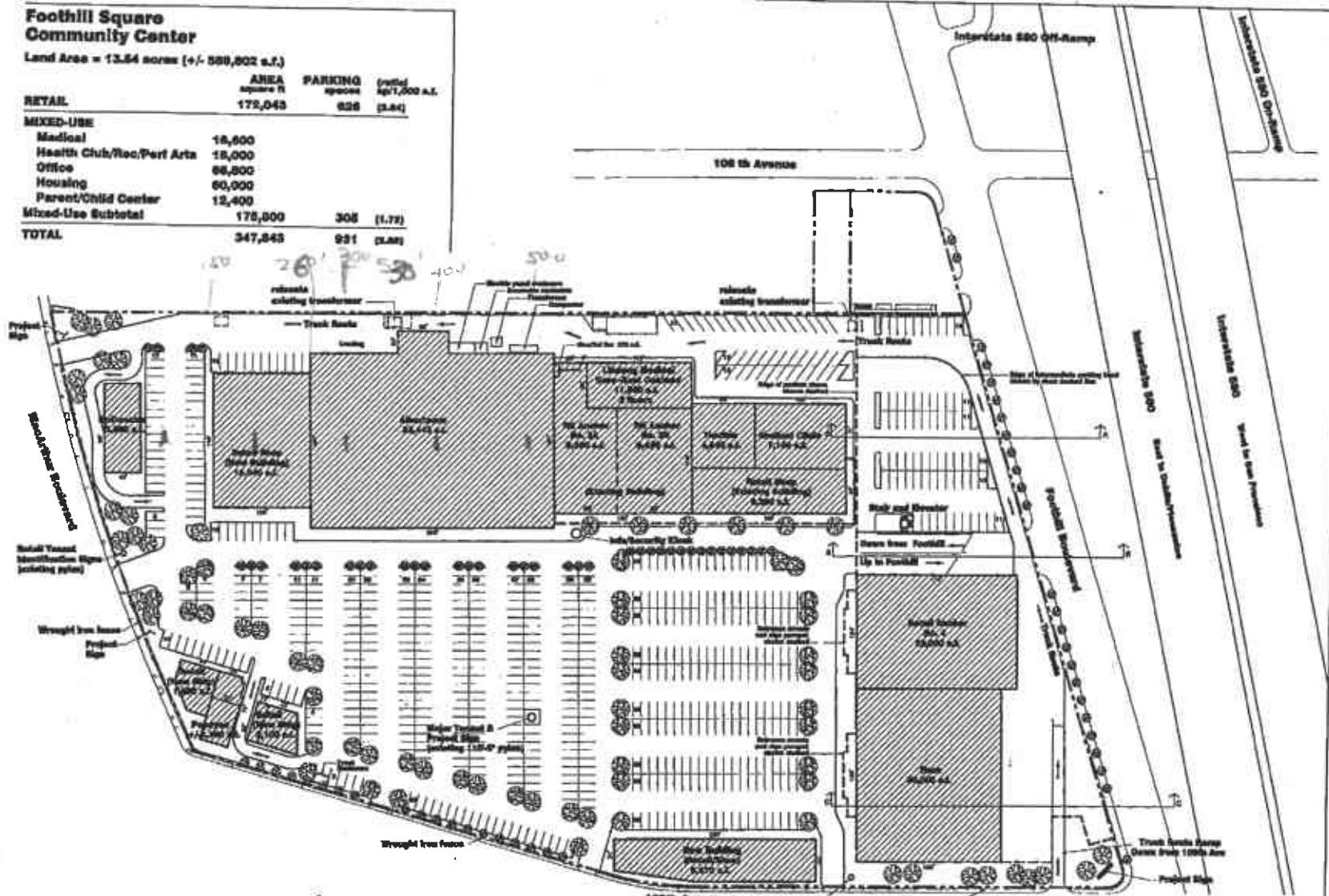
SAN FRANCISCO

www.aeiconsultants.com
800.801.3224

**Foothill Square
Community Center**

Land Area = 13.54 acres (+/- 589,802 s.f.)

	AREA square ft	PARKING spaces (ratio: sq ft/1,000 s.f.)
RETAIL	175,043	828 (3.84)
MIXED-USE		
Medical	15,000	
Health Club/Rec./Perf. Arts	15,000	
Office	60,000	
Housing	60,000	
Parent/Child Center	15,400	
Mixed-Use Subtotal	175,000	305 (1.72)
TOTAL	347,043	921 (3.84)

**Site Plan - Lower Level**

MacArthur Boulevard Associates

June 12, 2003

 Two Harbor East
San Francisco, CA 94105
Tel: 415.531.7100
Fax: 415.531.4759

July 8, 2003

Alameda County
JUL 15 2003
Environmental Health

GROUNDWATER MONITORING REPORT
1st Semester, 2003

10700 MacArthur Boulevard
Oakland, California

Project No. 3067

Prepared For

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

Prepared By

AEI Consultants
2500 Camino Diablo Blvd., Suite 200
Walnut Creek, CA 94597
(925) 283-6000

AEI



2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597

Phone: (925) 283-6000

Fax: (925) 944-2895

July 8, 2003

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

Subject: **Semiannual Groundwater Monitoring Report**
1st Semester, 2003
10700 MacArthur Boulevard
Oakland, California
AEI Project No. 3067

Dear Messrs. Phares and Jay:

AEI Consultants (AEI) has prepared this groundwater monitoring report on behalf of The Jay-Phares Corporation, the manager of the Foothill Square Shopping Center (Figure 1: Site Location Map). The documentation of groundwater quality beneath and around the site was performed to monitor the stability of the chlorinated volatile organic compound (VOC) plume beneath the property.

This report was prepared in accordance with the requirements of the Alameda County Health Care Services Agency (ACHCSA) and the Regional Water Quality Control Board (RWQCB). This report summarizes the activities and results of the semi-annual monitoring activities conducted on March 25, 2003.

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). Refer to Figure 1: Site Location Map. One of the former tenants of the FSSC was Young's Cleaners, which operated from approximately 1984 though 1995.

Between 1989 and 1997, several phases of investigation took place into the extent of a release tetrachloroethylene (PCE) from the former dry-cleaners. A total of 18 monitoring wells were installed. In 1996, AEI removed and treated approximately 2,400 cubic yards of VOC impacted soil from beneath and around the former Young's Cleaners location.

Following soil removal activities and the preparation of a risk assessment, both the RWQCB and ACHCSA agreed that the soil had been sufficiently treated, that remaining VOC contaminants in soil and groundwater did not pose a significant risk to human health, and that traditional groundwater "pump and treat" activities would not likely be necessary. However, additional

groundwater investigation and monitoring was requested at that time to confirm the stability of the dissolved phase VOC plume.

Wells AMW-2 and AMW-3 were decommissioned by AEI prior to soil removal activities. Well WGR-MW1, WGR-MW5, and AMW-7 were covered over during subsequent paving and construction activities. Please refer to Figure 2 for locations of the remaining wells and refer to the referenced reports for details of historical sampling and soil treatment activities.

Summary of Activities

AEI gauged water levels in the thirteen active groundwater monitoring wells at the site. Samples were collected from eleven of the wells, all except WGR MW-2 and WGR MW-3. Each well was opened and water levels were obtained 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 Environmental, Inc. The wells to be sampled were purged using either a battery powered submersible pump or by manual bailing, and groundwater samples was collected from the wells using new disposable bailers.

Temperature, pH, specific conductivity, dissolved oxygen, and oxidation-reduction potential were measured during the purging of the wells. Approximately 3 well volumes of water were removed from each well, if sufficient recharge occurred. Once groundwater had recharged to at least 90% of its original volume, a water sample was collected.

Water was poured from bailers into 40-ml VOA vials, and the vials were capped so that no head space or air bubbles were visible within the sample containers. A total of eleven (11) samples were transported over ice under proper chain of custody protocol to McCampbell Analytical, Inc. of Pacheco, California (Department of Health Services Certification #1644). The samples were analyzed for chlorinated volatile organic compounds by EPA method 8021B (8010 list).

Field Results

Generally, the wells at the site are categorized as being screened either in a shallow water bearing zone or a deeper water bearing zone. Shallow zone wells (AMW-1, AMW-4, AMW-5, AMW-6, WGR MW2, WGR MW3, and MW-7) are screened from approximately 20 to 35 feet below ground surface (bgs), and deeper wells (AMW-8, AMW-9, WGR MW4, MW-6, and FHS MW-10 and FHS MW-11) are generally in the 35 to 60 feet bgs range. Screen intervals, where known, are presented in Table 1.

Water levels in the shallow aquifer ranged from 39.47 to 53.76 feet above mean sea level (amsl) in March 2003. The average water table elevation was 2.06 feet higher than in September 2002. Groundwater was determined to flow to the west, consistent with previous episodes.

Piezometric head measurements of the deeper, apparently confined or semi-confined aquifer, ranged from 8.85 to 47.24 feet above msl in March 2003. The average elevations of the

piezometric head in this aquifer were 2.13 feet higher than in September 2002. Note, however, the head elevation of 8.85 feet amsl in well FHS MW-11 was anomalously low, being approximately 20 feet lower than previous years readings. Groundwater flow in the deep aquifer was toward the southwest, consistent with previous findings.

Head measurement data are summarized in Table 1. The head elevation contours are shown in Figures 3 and 4. Refer to Appendix A for Groundwater Monitoring Well Field Sampling Forms.

Groundwater Quality

The highest concentrations of PCE, trichloroethylene (TCE), and cis-1,2 dichloroethylene (cis-1,2 DCE) were again detected in the water sample taken from shallow well AMW-6 (740 µg/L, 110 µg/L, and 94 µg/L respectively). The concentrations of VOCs in this well are slightly higher than the previous episode, however, based on existing data, the long-term concentration trends in this well are downward. The highest concentrations of PCE and TCE in the deeper zone were found in well MW-6 at 49 µg/L and 3.8 µg/L, respectively, while the lowest cis-1,2 DCE concentration in this zone was in AMW-9 at 4.1 µg/L.

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. Refer to Figures 5 and 6, which show PCE concentrations in the wells sampled during this event.

Summary and Recommendations

In general, chlorinated VOC concentrations detected during the recent episode were consistent with previous episodes. Contaminant concentrations have been decreasing or nearly non-detect in wells near the former source area since the 1996 soil treatment activities. Well AMW-6, historically the most impacted and closest to the former source area, has exhibited an overall decrease in contaminant concentrations since 1997 (see Figure 7).

The RWQCB, in a letter dated April 16, 1997, agreed that the residual concentrations of PCE in soil in several areas beneath the existing buildings did not pose a significant threat to human health. In addition, the RWQCB agreed that impacted groundwater beneath the site did not pose significant human health threat. The decreasing contaminant concentrations in groundwater since 1997 have confirmed that soil removal activities were sufficient to significantly reduce further contaminant migration to groundwater.

Based on these observations, AEI is recommending, at the request of the Jay-Phares Corporation, to decommission the following monitoring wells: AMW-1, AMW-4, AMW-5, AMW-6, AMW-8, and WGR-MW2. Seven wells will remain down-gradient of the former source area and at the perimeter of the property to confirm contaminant plume stability in the both the water table aquifer and deeper water bearing zone. Upon agreement with this well closure request, permits will be obtained from the Alameda County Public Works Agency and wells will be properly

10700 MacArthur Blvd., Oakland

July 8, 2003

AEI Project No. 3067

Page 4

decommissioned. An attempt will also be made to locate and properly decommission wells WGR-MW1, WGR-MW5, and AMW-7.

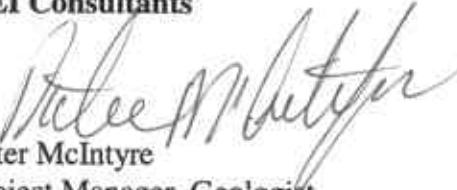
Report Limitations and Signatures

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

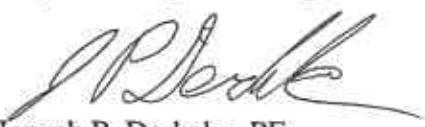
These services were performed in accordance with generally accepted practices in the environmental engineering and construction field that existed at the time and location of the work.

Sincerely,

AEI Consultants



Peter McIntyre
Project Manager, Geologist



Joseph P. Derhake, PE
Principal Engineer



Figures

- Figure 1 Site Location Map
- Figure 2 Site Plan
- Figure 3 Piezometric Contours – Deep Wells
- Figure 4 Water Table Contours – Shallow Aquifer
- Figure 5 PCE Concentrations – Shallow Aquifer
- Figure 6 PCE Concentrations – Deep Wells
- Figure 7 Dissolved Contaminant Concentrations vs. Time: AMW-6

Tables

- Table 1 Groundwater Level Data
- Table 2 Groundwater Sample Analytical Data

Appendices

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

References

1. Augeas Corporation. *Report of Subsurface Investigation, Young's Cleaners*, 10700 MacArthur Boulevard, Oakland, California, December 1995.
2. All Environmental, Inc. *Soil Remediation and Excavation Project Summary, February 7, 1996*.
3. PES Environmental, Inc. *Groundwater Monitoring Well Installation*, Foothill Square Shopping Center, 10700 MacArthur Boulevard, Oakland, California, February 3, 1997.
4. 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.
5. 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.
6. AEI Consultants *Quarterly Groundwater Monitoring Report*, Young's Cleaners, Foothill Shopping Center, 10700 MacArthur Boulevard, Oakland, California, April 20, 1999.
7. AEI Consultants *Quarterly Groundwater Monitoring Report*, Young's Cleaners, Foothill Shopping Center, 10700 MacArthur Boulevard, Oakland, California, May 25, 1999.
8. AEI Consultants *Quarterly Groundwater Monitoring Report*, Young's Cleaners, Foothill Shopping Center, 10700 MacArthur Boulevard, Oakland, California, October 25, 1999.
9. AEI Consultants *Quarterly Groundwater Monitoring Report*, Young's Cleaners, Foothill Shopping Center, 10700 MacArthur Boulevard, Oakland, California, March 21, 2000.
10. AEI Consultants *Groundwater Monitoring Report*, 10700 MacArthur Boulevard, Oakland, California, March 19, 2001.
11. AEI Consultants *Groundwater Monitoring Report*, 10700 MacArthur Boulevard, Oakland, California, October 25, 2001.
12. AEI Consultants *Groundwater Monitoring Report*, 10700 MacArthur Boulevard, Oakland, California, April 2, 2002.
13. AEI Consultants *Groundwater Monitoring Report*, 10700 MacArthur Boulevard, Oakland, California, November 26, 2002

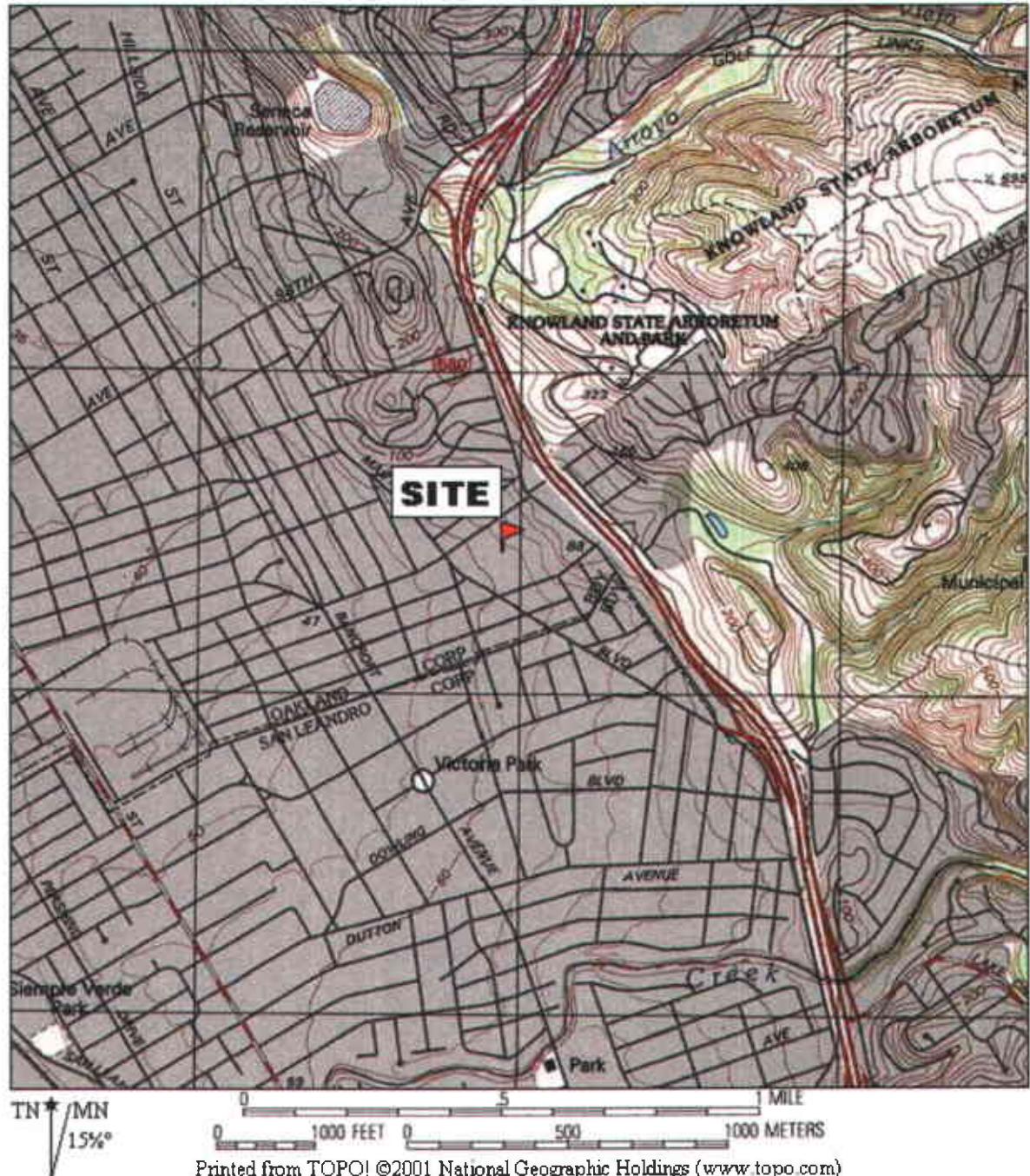
Distribution

Mr. Barney Chan, Alameda County Health Care Services Agency

Ms. Betty Graham, Regional Water Quality Control Board

Jay-Phares Corporation

AEI Files (P. McIntyre, Project # 3067)



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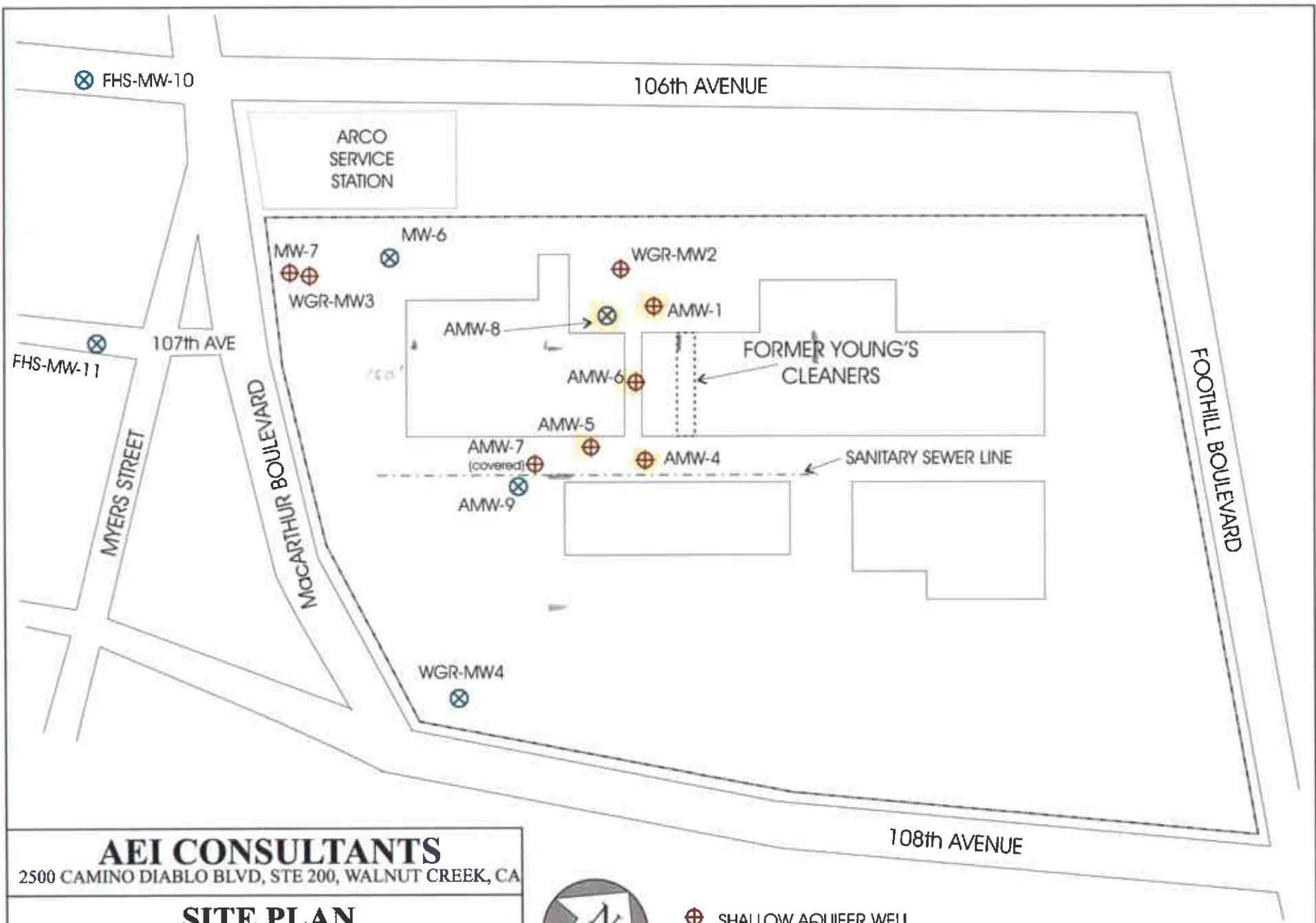
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SITE LOCATION MAP

10700 MACARTHUR BLVD
OAKLAND, CALIFORNIA

FIGURE 1
PROJECT NO. 3067



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2500 CAMINO DIABLO BLVD, STE 200, WALNUT CREEK, CA

SITE PLAN

10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 2



⊕ SHALLOW AQUIFER WELL

⊗ DEEP AQUIFER WELL

SCALE: 1in = ~150 ft

FHS-MW-10
(29.14)
⊗

106th AVENUE

ARCO
SERVICE
STATION

← FLOW DIRECTION
DEEP AQUIFER 3/25/03 →

⊗ 107th AVE
FHS-MW-11
(8.85*)

MYERS STREET

MW-6
(29.70)
⊗

AMW-8
(47.24)
⊗

FORMER YOUNG'S
CLEANERS

⊗ WGR-MW4
(34.27)

← SANITARY SEWER LINE

FOOTHILL BOULEVARD

108th AVENUE

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2500 CAMINO DIABLO BLVD, STE 200, WALNUT CREEK, CA

PIEZOMETRIC CONTOURS - DEEP WELLS
(3/25/03)

10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 3

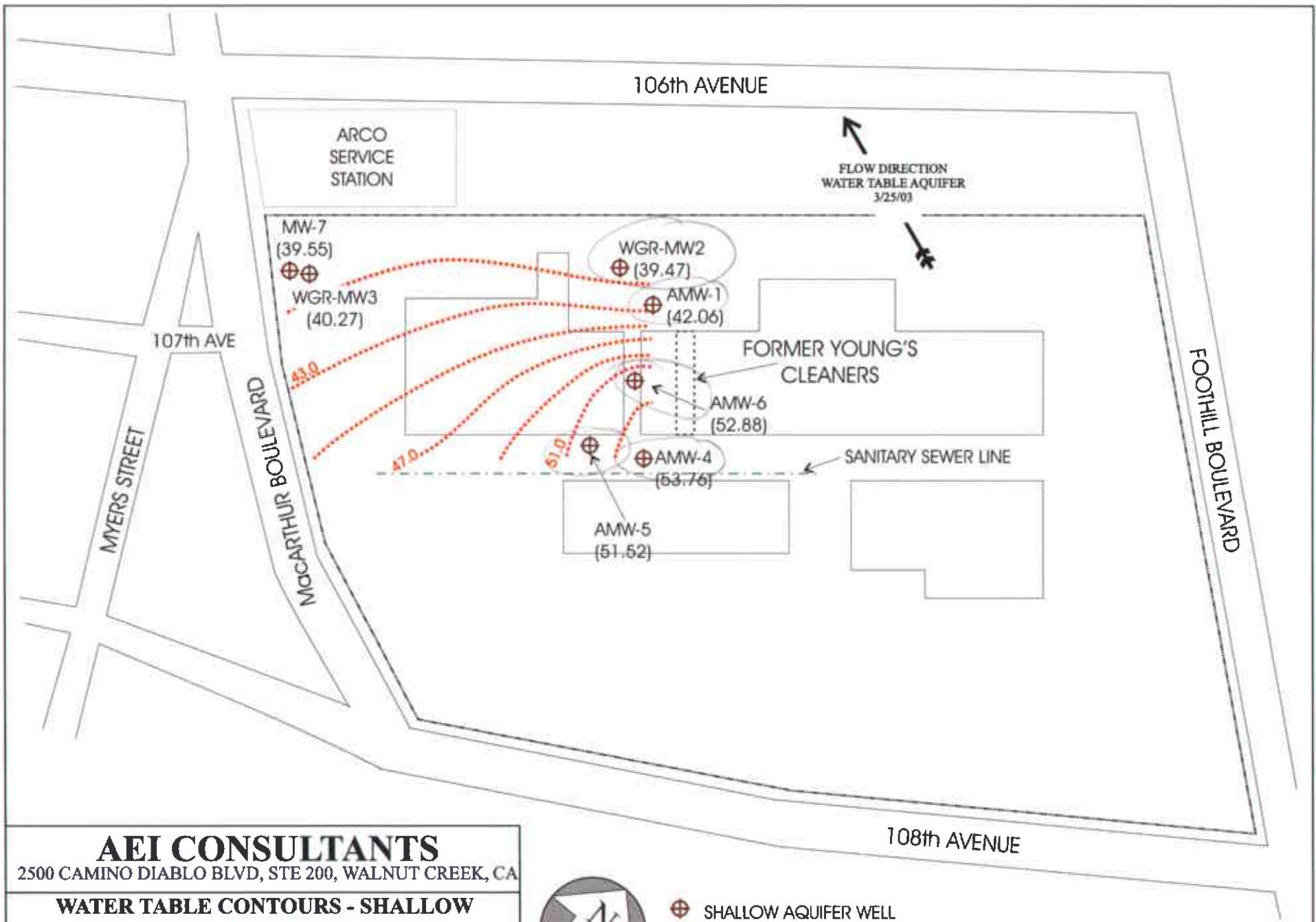


⊗ DEEP AQUIFER WELL

DEEP AQUIFER PIEZOMETRIC CONTOUR
IN FEET ABOVE MEAN SEA LEVEL - 3/25/2003
CONTOUR INTERVAL = 2'

(* abnormally low water level not used in contour plot)

SCALE: 1in = ~150 ft



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**WATER TABLE CONTOURS - SHALLOW
AQUIFER (3/25/03)**

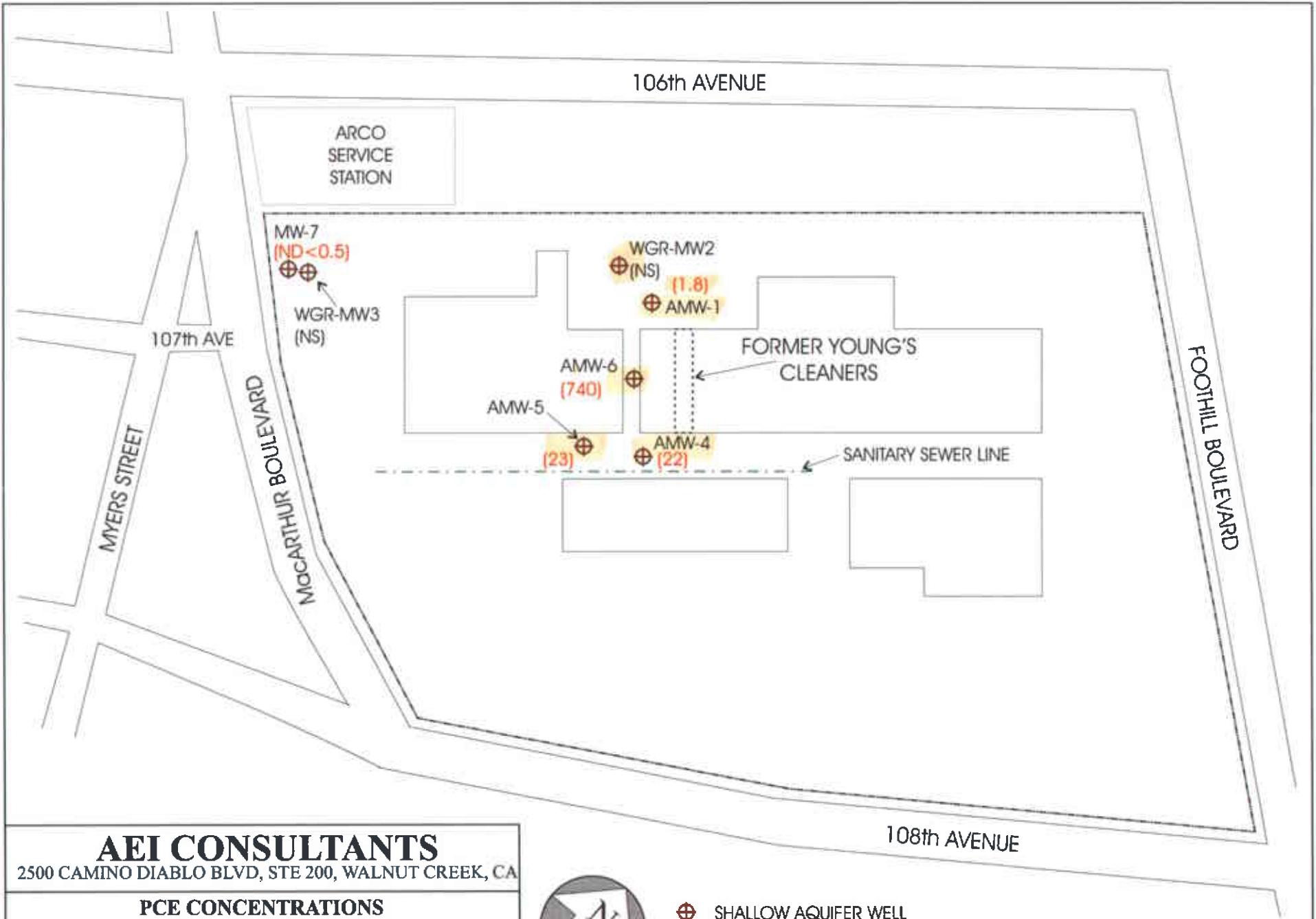
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 4



◆ SHALLOW AQUIFER WELL
SHALLOW WATER TABLE CONTOUR
IN FEET ABOVE MEAN SEA LEVEL
CONTOUR INTERVAL = 2'

SCALE: 1in = ~150 ft



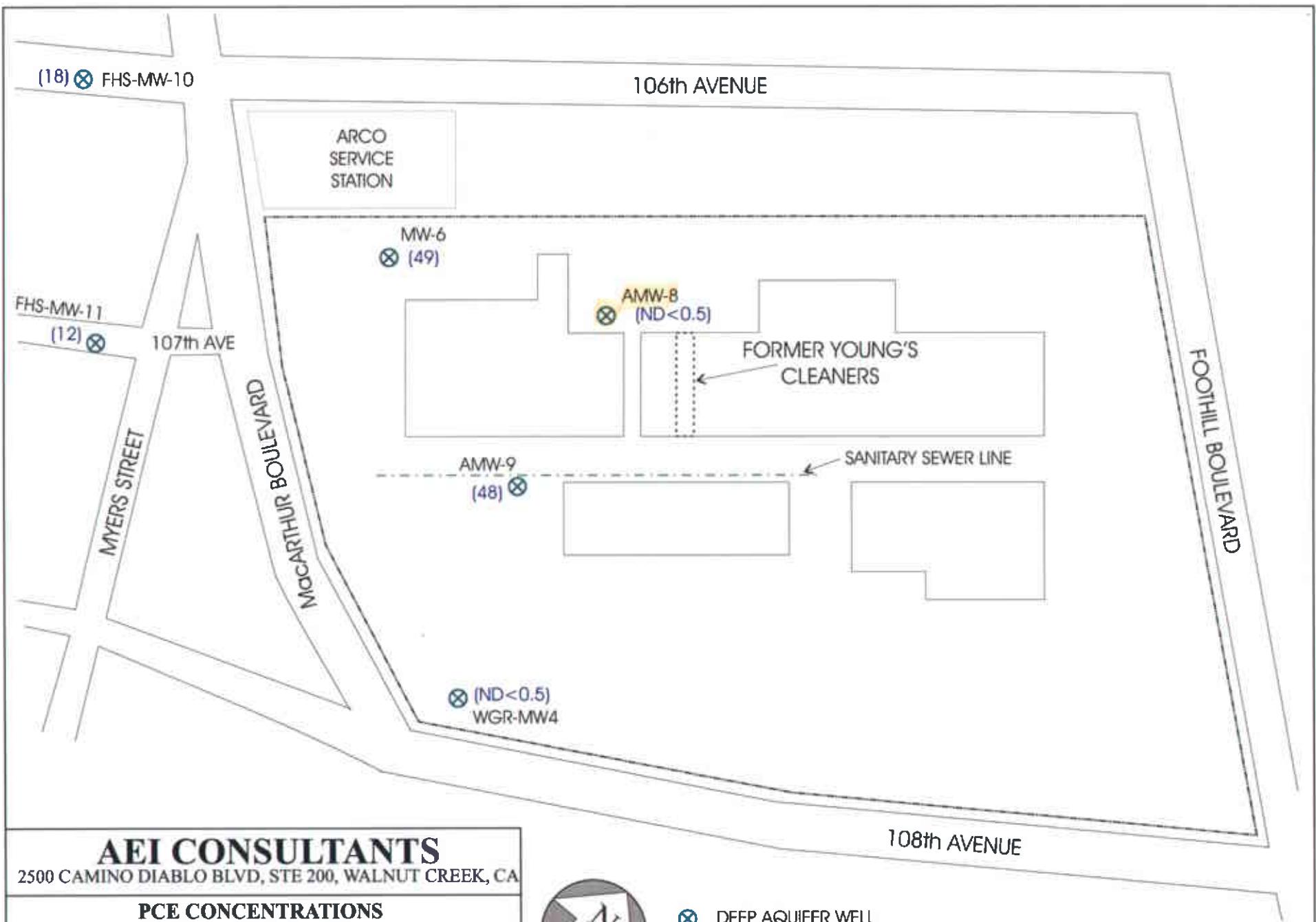
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2500 CAMINO DIABLO BLVD, STE 200, WALNUT CREEK, CA
PCE CONCENTRATIONS
SHALLOW AQUIFER (3/25/03)
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 5



⊕ SHALLOW AQUIFER WELL
(100) CONCENTRATIONS OF PCE IN $\mu\text{g/L}$
IN SHALLOW AQUIFER (SEE TABLE 2 FOR SOURCE DATA)

SCALE: 1in = ~150 ft



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PCE CONCENTRATIONS
DEEP WELLS (3/25/03)

10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 6

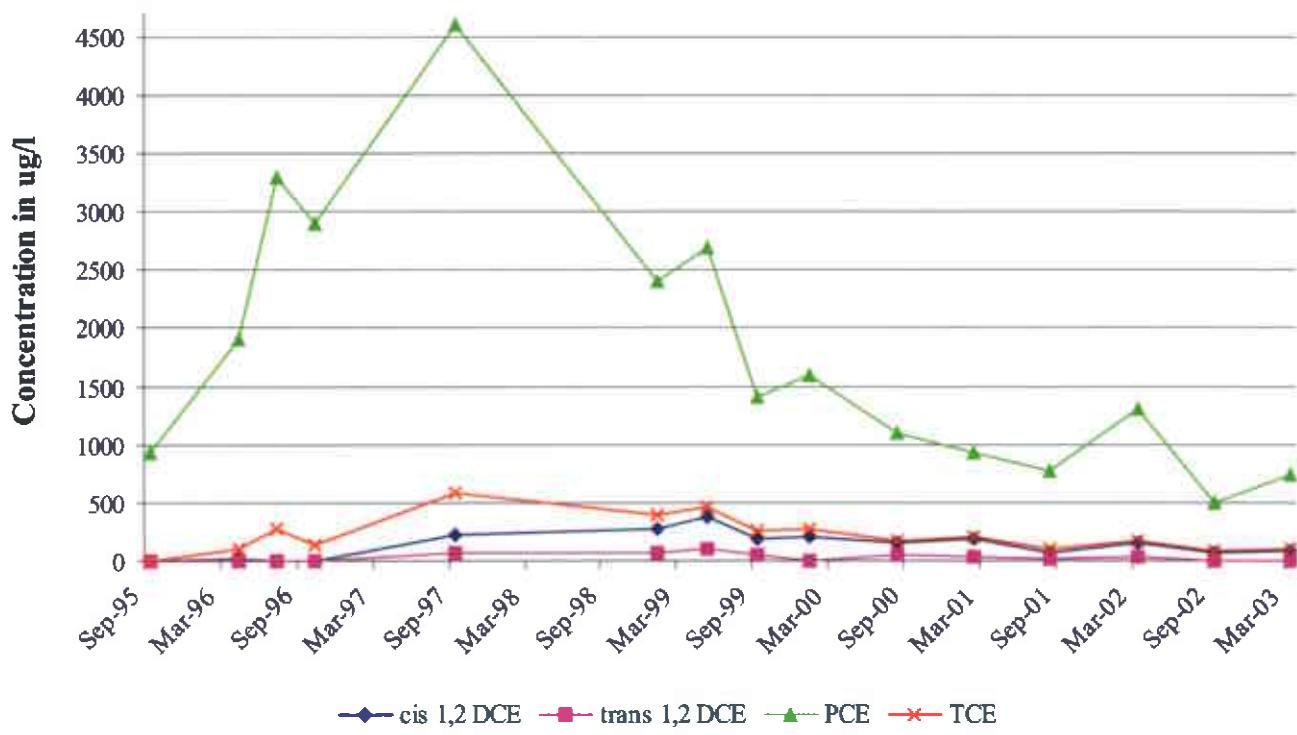


⊗ DEEP AQUIFER WELL

(100) CONCENTRATIONS OF PCE IN µg/L
IN DEEP AQUIFER WELLS (SEE TABLE 2 FOR SOURCE DATA)

SCALE: 1 in = ~150 ft

AMW-6



AEI CONSULTANTS

2500 CAMINO DIABLO BLVD, STE 200, WALNUT CREEK, CA

**DISSOLVED CONTAMINANT CONCENTRATIONS
VS. TIME: AMW-6**

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OAKLAND, CALIFORNIA

FIGURE 7

Refer to Table 2 for source data.
Non-detect results plotted as '0', refer to source data for detection limits.

Table 1
Groundwater Level Data

Well ID (Aquifer zone)	Date	Screen Interval (ft bgs)	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (Potential) (ft msl)
AMW-1 (Shallow)	1/29/1999	24-34	64.51	23.01	41.50
	5/5/1999		64.51	21.25	43.26
	10/9/1999		64.51	24.14	40.37
	1/20/2000		64.51	24.66	39.85
	8/8/2000		64.51	23.30	41.21
	2/15/2001		64.51	23.22	41.29
	8/29/2001		64.51	24.38	40.13
	3/12/2002		64.51	21.29	43.22
	9/27/2002		64.51	23.62	40.89
	3/25/2003		64.51	22.45	42.06
AMW-4 (Shallow)	1/29/1999	15-25	64.79	11.51	53.28
	5/5/1999		64.79	10.14	54.65
	10/9/1999		64.79	12.04	52.75
	1/20/2000		64.79	13.50	51.29
	8/8/2000		64.79	11.74	53.05
	2/15/2001		64.79	12.32	52.47
	8/29/2001		64.79	12.40	52.39
	3/12/2002		64.79	10.13	54.66
	9/27/2002		64.79	12.14	52.65
	3/25/2003		64.79	11.03	53.76
AMW-5 (Shallow)	1/29/1999	20-30	64.97	13.87	51.10
	5/5/1999		64.97	12.83	52.14
	10/9/1999		64.97	14.25	50.72
	1/20/2000		64.97	14.91	50.06
	8/8/2000		64.97	14.14	50.83
	2/15/2001		64.97	14.32	50.65
	8/29/2001		64.97	14.72	50.25
	3/12/2002		64.97	13.12	51.85
	9/27/2002		64.97	14.62	50.35
	3/25/2003		64.97	13.45	51.52
AMW-6 (Shallow)	1/29/1999	Unknown	65.10	12.74	52.36
	5/5/1999		65.10	11.30	53.80
	10/9/1999		65.10	13.29	51.81
	1/20/2000		65.10	14.21	50.89
	8/8/2000		65.10	12.95	52.15
	2/15/2001		65.10	12.64	52.46
	8/29/2001		65.10	13.65	51.45
	3/12/2002		65.10	11.41	53.69
	9/27/2002		65.10	13.25	51.85
	3/25/2003		65.10	12.22	52.88
AMW-7 (Shallow)	1/29/1999	Unknown	64.24	14.91	49.33
	5/5/1999		64.24	*	
AMW-8 (Deep)	1/29/1999	Unknown	64.55	16.86	47.69
	5/5/1999		64.55	14.46	50.09
	10/9/1999		64.55	17.10	47.45
	1/20/2000		64.55	18.51	46.04
	8/8/2000		64.55	16.71	47.84
	2/15/2001		64.55	17.31	47.24
	8/29/2001		64.55	18.30	46.25
	3/12/2002		64.55	16.03	48.52
	9/27/2002		64.55	18.03	46.52
	3/25/2003		64.55	17.31	47.24

Table 1: Continued

Well ID (Aquifer zone)	Date	Screen Interval (ft bgs)	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (Potential) (ft msl)
AMW-9 (Deep)	1/29/1999	Unknown	63.48	23.22	40.26
	5/5/1999		63.48	21.40	42.08
	10/9/1999		63.48	23.74	39.74
	1/20/2000		63.48	24.92	38.56
	8/8/2000		63.48	23.01	40.47
	2/15/2001		63.48	21.20	42.28
	8/29/2001		63.48	22.59	40.89
	3/12/2002		63.48	21.94	41.54
	9/27/2002		63.48	24.16	39.32
	3/25/2003		63.48	23.00	40.48
WGR MW-2 (Shallow)	1/29/1999	23-28	63.18	23.41	39.77
	5/5/1999		63.18	21.41	41.77
	10/9/1999		63.18	24.62	38.56
	1/20/2000		63.18	25.24	37.94
	8/8/2000		63.18	23.41	39.77
	8/29/2001		63.18	25.09	38.09
	3/12/2002		63.18	21.86	41.32
	9/27/2002		63.18	24.69	38.49
	3/25/2003		63.18	23.71	39.47
WGR MW-3 (Shallow)	1/29/1999	22-27	58.34	15.81	42.53
	5/5/1999		58.34	18.43	39.91
	10/9/1999		58.34	21.38	36.96
	1/20/2000		58.34	19.76	38.58
	8/8/2000		58.34	20.88	37.46
	8/29/2001		58.34	21.22	37.12
	3/12/2002		58.34	14.80	43.54
	9/27/2002		58.34	22.32	36.02
	3/25/2003		58.34	18.07	40.27
WGR MW-4 (Deep)	1/29/1999	<u>23-45</u>	60.02	26.23	33.79
	5/5/1999		60.02	23.80	36.22
	10/9/1999		60.02	27.73	32.29
	1/20/2000		60.02	27.97	32.05
	8/8/2000		60.02	26.00	34.02
	2/15/2001		60.02	26.55	33.47
	8/29/2001		60.02	27.14	32.88
	3/12/2002		60.02	24.90	35.12
	9/27/2002		60.02	27.09	32.93
	3/25/2003		60.02	25.75	34.27
FHS MW-10 (Deep)	1/29/1999	<u>42-52</u>	52.34	23.91	28.43
	5/5/1999		52.34	20.55	31.79
	10/9/1999		52.34	25.00	27.34
	1/20/2000		52.34	27.23	25.11
	8/8/2000		52.34	24.06	28.28
	2/15/2001		52.34	24.16	28.18
	8/29/2001		52.34	26.11	26.23
	3/12/2002		52.34	23.94	28.40
	9/27/2002		52.34	25.86	26.48
	3/25/2003		52.34	23.20	29.14

Table 1: Continued

Well ID (Aquifer zone)	Date	Screen Interval (ft bgs)	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (Potential) (ft msl)
FHS MW-11 (Deep)	1/29/1999	59-64	54.06	26.38	27.68
	5/5/1999		54.06	22.72	31.34
	10/9/1999		54.06	27.42	26.64
	1/20/2000		54.06	29.31	24.75
	8/8/2000		54.06	26.11	27.95
	2/15/2001		54.06	26.43	27.63
	8/29/2001		54.06	28.28	25.78
	3/12/2002		54.06	21.61	32.45
	9/27/2002		54.06	27.93	26.13
	3/25/2003		54.06	45.21	8.85
MW-6 (Deep)	1/29/1999	37.5-56	61.78	32.87	28.91
	5/5/1999		61.78	29.41	32.37
	9/10/1999		61.78	33.98	27.80
	1/20/2000		61.78	36.02	25.76
	8/8/2000		61.78	32.73	29.05
	2/15/2001		61.78	33.34	28.44
	8/29/2001		61.78	34.98	26.80
	3/12/2002		61.78	30.72	31.06
	9/27/2002		61.78	34.50	27.28
	3/25/2003		61.78	32.08	29.70
MW-7 (Shallow)	1/20/2000	17.5-37.5	58.64	20.32	38.32
	8/8/2000		58.64	20.50	38.14
	2/15/2001		58.64	16.95	41.69
	8/29/2001		58.64	21.61	37.03
	3/12/2002		58.64	17.03	41.61
	9/27/2002		58.64	22.73	35.91
	3/25/2003		58.64	19.09	39.55

Notes: All well elevations are measured from the top of casing not from the ground surface.

ft msl = feet above mean sea level

* Available data from AMW-7 is presented although this well was covered during 1999 construction activities

Table 2
Groundwater Sample Analytical Data

Well (aquifer zone)	Date	Consultant	cis 1,2 DCE µg/L	trans 1,2 DCE µg/L	PCE µg/L	TCE µg/L	VHCs* µg/L
AMW-1 (shallow)	3/23/95	Augeus	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	6/21/95	Augeus	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/11/95	Augeus	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	7/17/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	10/23/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/29/97	PES	NS	NS	NS	NS	NS
	1/20/00	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/8/00	AEI	NS	NS	NS	NS	NS
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	3/25/03	AEI	ND<0.5	ND<0.5	1.8	ND<0.5	ND<0.5
AMW-4 (shallow)	5/15/95	Augeus	NR	ND<50	2400	ND<50	NR
	6/21/95	Augeus	NR	ND<50	2500	ND<50	NR
	9/13/95	Augeus	NR	ND<25	1100	ND<25	NR
	4/16/96	PES	ND<10	ND<10	1200	10	NR
	7/17/96	PES	ND<10	ND<10	860	ND<10	NR
	10/23/96	PES	ND<0.5	ND<0.5	22	0.5	NR
	9/29/97	PES	ND<3	ND<3	340	3	NR
	1/29/99	AEI	ND<3	ND<3	100	ND<3	ND<3
	5/5/99	AEI	ND<5	ND<5	210	ND<5	ND<5
	9/10/99	AEI	10	ND<5	240	18	ND<5
	1/20/00	AEI	46	ND<2.5	97	6.2	ND<2.5
	8/8/00	AEI	ND<5	ND<5	440	8	ND<5
	2/15/01	AEI	ND<2.5	ND<2.5	81	2.6	ND<2.5
	8/29/01	AEI	ND<2.5	ND<2.5	230	4.6	ND<2.5
	3/12/02	AEI	ND<5.0	ND<5.0	190	ND<5.0	ND<5.0
	9/27/02	AEI	ND<5.0	ND<5.0	220	ND<5.0	10***
	3/25/03	AEI	1.2	ND<1.0	22	1.9	ND<1.0
AMW-5 (shallow)	5/15/95	Augeus	NR	ND<0.5	1.2	ND<0.5	NR
	6/21/95	Augeus	NR	ND<0.5	ND<0.5	ND<0.5	NR
	9/13/95	Augeus	NR	ND<0.5	ND<0.5	ND<0.5	NR
	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR
	7/17/96	PES	ND<0.5	ND<0.5	0.6	ND<0.5	NR
	10/23/96	PES	ND<0.5	ND<0.5	0.8	ND<0.5	NR
	9/29/97	PES	ND<0.5	ND<0.5	13	ND<0.5	NR
	1/29/99	AEI	NA	NA	NA	NA	NA
	5/5/99	AEI	ND<1	ND<1	36	ND<1	ND<1
	9/10/99	AEI	ND<1	ND<1	35	ND<1	ND<1
	1/20/00	AEI	ND<1	ND<1	36	ND<1	ND<1
	8/8/00	AEI	ND<0.5	ND<0.5	50	0.72	ND<0.5
	2/15/01	AEI	ND<0.5	ND<0.5	26	0.76	ND<0.5
	8/29/01	AEI	ND<0.5	ND<0.5	28	0.87	ND<0.5
	3/12/02	AEI	ND<0.5	ND<0.5	25	0.75	ND<0.5
	9/27/02	AEI	ND<0.5	ND<0.5	17	ND<0.5	ND<0.5
	3/25/03	AEI	ND<1.0	ND<1.0	23	ND<1.0	ND<1.0
AMW-6 (shallow)	9/13/95	Augeus	NR	ND<25	930	ND<25	NR
	4/16/96	PES	20	ND<10	1900	110	NR
	7/17/96	PES	ND<30	ND<30	3300	280	NR
	10/23/96	PES	ND<30	ND<30	2900	140	NR
	9/29/97	PES	220	70	4600	580	NR
	1/29/99	AEI	270	77	2400	390	ND<63
	5/5/99	AEI	370	110	2700	470	ND<71
	9/10/99	AEI	190	49	1400	250	ND<36
	1/20/00	AEI	210	ND<35	1600	270	ND<35
	8/8/00	AEI	150	56	1100	180	ND<25
	2/15/01	AEI	190	40	930	200	ND<25
	8/29/01	AEI	77	17	780	110	ND<10
	3/12/02	AEI	150	37	1300	170	ND<25
	9/27/02	AEI	67	ND<17	490	91	ND<17
	3/25/2003	AEI	94	ND<33	740	110	ND<33

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
AMW-7 (shallow)	9/13/95	Augeus	NR	ND<25	2350	340	NR
	4/16/96	PES	2200	60	2300	500	NR
	7/17/96	PES	2100	ND<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	ND<3	95	12	ND<3
	5/5/99	AEI			Well Covered During Construction		
AMW-8 (deep)	9/13/95	Augeus	-	ND<25	95	ND<25	ND<25
	4/16/96	PES	ND<0.5	ND<0.5	0.8	ND<0.5	ND<0.5
	7/17/96	PES	ND<0.5	ND<0.5	1.6	ND<0.5	ND<0.5
	10/23/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/29/97	PES	ND<0.5	ND<0.5	0.7	ND<0.5	ND<0.5
	1/20/00	AEI	ND<0.5	ND<0.5	0.73	ND<0.5	ND<0.5
	8/8/00	AEI	NS	NS	NS	NS	NS
	2/15/01	AEI	ND<0.5	ND<0.5	1.7	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	7.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	3/25/03	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
AMW-9 (deep)	9/13/95	Augeus	NR	ND<25	170	ND<25	NR
	4/16/96	PES	7	ND<3	170	4	NR
	7/17/96	PES	ND<3	ND<3	190	4	NR
	10/23/96	PES	ND<3	ND<3	190	ND<3	NR
	9/29/97	PES	ND<3	ND<3	110	ND<3	NR
	1/29/99	AEI	ND<4	ND<4	90	ND<4	ND<4
	5/5/99	AEI	ND<2.5	ND<2.5	94	ND<2.5	ND<2.5
	9/10/99	AEI	ND<2.1	ND<2.1	99	ND<2.1	ND<2.1
	1/20/00	AEI	ND<0.5	ND<0.5	100	ND<0.5	ND<0.5
	8/8/00	AEI	ND<2.5	ND<2.5	130	ND<2.5	ND<2.5
	2/15/01	AEI	ND<1.0	ND<1.0	69	ND<1.0	ND<1.0
	8/29/01	AEI	ND<2.5	ND<2.5	98	ND<2.5	ND<2.5
	3/12/02	AEI	ND<2.5	ND<2.5	100	ND<2.5	ND<2.5
	9/27/02	AEI	ND<5.0	ND<5.0	80	ND<5.0	ND<5.0
	3/25/03	AEI	4.1	ND<2.5	48	ND<2.5	ND<2.5
FHS MW-10 (deep)	10/9/97	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR
	1/29/99	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	5/5/99	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/10/99	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	1/20/00	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/8/00	AEI	NS	NS	NS	NS	NS
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
FHS MW-11 (deep)	9/29/97	PES	ND<0.5	ND<0.5	4	ND<0.5	NR
	1/29/99	AEI	ND<0.5	ND<0.5	7	ND<0.5	ND<0.5
	5/5/99	AEI	ND<0.5	ND<0.5	7.1	ND<0.5	ND<0.5
	9/10/99	AEI	ND<0.5	ND<0.5	7.5	ND<0.5	ND<0.5
	1/20/00	AEI	ND<0.5	ND<0.5	7.5	ND<0.5	ND<0.5
	8/8/00	AEI	ND<0.5	ND<0.5	38	ND<0.5	ND<0.5
	2/15/01	AEI	ND<0.5	ND<0.5	18	ND<0.5	ND<0.5
	8/29/01	AEI	ND<0.5	ND<0.5	16	ND<0.5	ND<0.5
	3/12/02	AEI	ND<0.5	ND<0.5	13	ND<0.5	0.77**
	9/27/02	AEI	ND<1	ND<1	13	ND<1	6.4** 1.1***
	3/25/03	AEI	0.78	ND<0.5	12	0.88	4.0** 1.0****

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
MW-6 (deep)	3/11/95	EMCON	ND<20	ND<0.5	1300	ND<20	NR
	6/5/95	EMCON	ND<20	ND<20	2000	ND<20	NR
	8/29/95	EMCON	ND<20	ND<20	1300	ND<20	NR
	9/11/95	Augeus	NR	ND<50	2000	ND<50	NR
	11/16/95	EMCON	ND<20	ND<20	1300	ND<20	NR
	2/28/96	EMCON	ND<20	ND<20	960	ND<20	NR
	4/16/96	PES	10	10	1400	10	NR
	5/28/96	EMCON	ND<20	ND<20	970	ND<20	NR
	7/17/96	PES	ND<5	ND<5	590	ND<5	NR
	8/19/96	EMCON	ND<20	ND<20	820	ND<20	NR
	10/23/96	PES	ND<5	ND<5	680	ND<5	NR
	11/21/96	EMCON	ND<20	ND<20	680	ND<20	NR
	3/26/97	EMCON	ND<40	ND<40	830	ND<40	NR
	5/20/97	EMCON	ND<5	ND<5	270	ND<5	NR
	9/29/97	PES	ND<10	ND<10	670	ND<10	NR
	1/29/99	AEI	1.4	ND<1.3	49	3	ND<1.3
	5/5/99	AEI	19	ND<11	530	38	ND<11
	9/10/99	AEI	27	ND<12	560	53	ND<12
	1/20/00	AEI	18	ND<8.5	660	31	ND<8.5
	8/8/00	AEI	98	16	1700	170	ND<5
	2/15/01	AEI	64	ND<10	650	87	ND<10
	8/29/01	AEI	19	ND<5.0	550	38	ND<5.0
	3/12/02	AEI	61	ND<20	1200	99	ND<20
	9/27/02	AEI	ND<12	ND<12	300	27	ND<12
	3/25/03	AEI	2.6	ND<2.5	49	3.8	ND<2.5
MW-7 (shallow)	3/11/95	EMCON	NS	NS	NS	NS	NS
	6/5/95	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	8/29/95	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	9/11/95	Augeus	85	ND<50	-	ND<50	ND<50
	11/16/95	EMCON	ND<20	ND<20	ND<20	ND<20	ND<20
	2/28/96	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	5/28/96	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	7/17/96	PES	0.6	ND<0.5	ND<0.5	0.6	ND<0.5
	8/19/96	EMCON	ND<1	ND<1	ND<1	ND<1	ND<1
	10/23/96	PES	0.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/21/96	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	3/26/97	EMCON	ND<20	ND<20	ND<20	ND<20	ND<20
	5/20/97	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	9/29/97	PES	ND<10	ND<10	ND<10	ND<10	ND<10
	1/20/00	AEI	ND<6.5	ND<6.5	ND<6.5	ND<6.5	ND<6.5
	8/8/00	AEI	NS	NS	NS	NS	NS
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	3/25/03	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
WGR MW-4 (deep)	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	7/17/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	10/23/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/29/97	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	3/25/03	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5

Please refer to the Laboratory Analytical Data for further detailed lab information including Reporting Limits and Dilution Factors

*VHCS = All other chemicals by EPA method 601/8010

** Chloroform (trichloromethane)

NS = Well not sampled

*** Dibromochloromethane

NR = Not Reported

**** Methylene Chloride

µg/L = micrograms per liter (parts per billion)

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

Tetrachloroethene (PCE)

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

Trichloroethene (TCE)

ATTACHMENT A

WELL FIELD SAMPLING FORMS

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: **AMW-1**

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	64.51
Depth of Well	45.00
Depth to Water (from top of casing)	22.45
Water Elevation (feet above msl)	42.06
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	10.8
Actual Volume Purged (gallons)	9.5
Appearance of Purge Water	clear
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size			2 VOAs				
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2.5	19.57	7.06	1563	0.43	153.1	
	5	19.39	7.08	1550	0.40	130.2	
	7.5	19.36	7.02	1507	0.20	135.1	dry at 8 gallons

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

No hydrocarbon odor
Well pumped dry at 8 and again at 9.5 gallons

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: AMW-4

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	64.79
Depth of Well	25.00
Depth to Water (from top of casing)	11.03
Water Elevation (feet above msl)	53.76
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	6.7
Actual Volume Purged (gallons)	7.0
Appearance of Purge Water	clear
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size		2 VOAs					
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	1.5	19.35	7.27	1121	3.07	125.3	
	3	19.62	7.01	1386	0.96	116.9	
	5.5	19.67	6.99	1477	0.46	101.5	
	7	19.7	6.98	1502	0.4	99.2	

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

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: **AMW-5**

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	64.97
Depth of Well	30.00
Depth to Water (from top of casing)	13.45
Water Elevation (feet above msl)	51.52
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	7.9
Actual Volume Purged (gallons)	8.0
Appearance of Purge Water	
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size		2 VOAs					
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2.	19.18	7.01	1902	1.97	136.3	
	4	19.1	6.95	1948	1.95	133.7	
	6	19.38	6.93	1961	0.43	127.7	
	8	19.47	6.83	2028	0.6	122.7	

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

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: **AMW-6**

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	65.10
Depth of Well	25.00
Depth to Water (from top of casing)	12.22
Water Elevation (feet above msl)	52.88
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	6.1
Actual Volume Purged (gallons)	6.5
Appearance of Purge Water	clear at 5 gallons
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size		2 VOAs					
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	18.39	6.96	1171	2.93	113.9	dark brown
	4	18.81	6.9	2027	0.35	107.4	clear at 3 gallons
	6.5	18.91	6.92	2031	0.31	106.2	light brown at 3.5
							clear at 5 gallons

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

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: **AMW-8**

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	64.55
Depth of Well	45.00
Depth to Water (from top of casing)	17.31
Water Elevation (feet above msl)	47.24
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	13.3
Actual Volume Purged (gallons)	14.0
Appearance of Purge Water	clear
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size		2 VOAs					
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	19.08	8.25	356	0.41	55.7	
	5	19.01	7.97	355	0.79	75.4	
	8	19.03	7.95	356	1.10	81.4	
	12	19.04	7.93	357	0.87	84.4	

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

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: AMW-9

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	63.48
Depth of Well	54.30
Depth to Water (from top of casing)	23.00
Water Elevation (feet above msl)	40.48
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	15.0
Actual Volume Purged (gallons)	4.0
Appearance of Purge Water	clear
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size		2 VOAs					
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	3	21.55	7.07	928	2.61	-21.4	dry at 4 gallons

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

Dry at 4 gallons, allowed to recharge before taking sample

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: WGR MW-2

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	63.18
Depth of Well	28.00
Depth to Water (from top of casing)	23.71
Water Elevation (feet above msl)	39.47
Well Volumes Purged	0
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	0.0
Actual Volume Purged (gallons)	0.0
Appearance of Purge Water	N/A
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size							
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

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: WGR MW-3

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	58.34
Depth of Well	27.00
Depth to Water (from top of casing)	18.07
Water Elevation (feet above msl)	40.27
Well Volumes Purged	
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	0.0
Actual Volume Purged (gallons)	0.0
Appearance of Purge Water	N/A
Free Product Present?	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size				Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
Time	Vol Removed (gal)	Temperature (deg C)	pH				

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

Well not purged

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: WGR MW-4

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	4
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	60.02
Depth of Well	44.96
Depth to Water (from top of casing)	25.75
Water Elevation (feet above msl)	34.27
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	37.5
Actual Volume Purged (gallons)	38.0
Appearance of Purge Water	clear
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size		2 VOAs					
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	22.17	6.22	1158	1.81	74.6	
	7	22.56	6.17	1115	0.33	101.5	
	14	22.59	6.18	1119	0.28	99.4	
	21	22.58	6.21	1122	0.13	106.4	
	28	22.51	6.22	1137	0.10	113.7	
	35	22.44	6.19	1166	0.08	120.5	
	38	22.37	6.15	1302	0.07	118.4	

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

slight hydrocarbon odor ???

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: FHS MW-10

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	52.34
Depth of Well	51.94
Depth to Water (from top of casing)	23.20
Water Elevation (feet above msl)	29.14
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	13.8
Actual Volume Purged (gallons)	15.0
Appearance of Purge Water	brown turning clear at 6 gallons
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size			2 VOAs				
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	3	19.19	6.62	576	0.6	125.4	brown
	6	19.19	6.54	587	0.5	185.6	clear
	9	19.2	6.47	583	0.31	125.8	
	12	19.21	6.47	582	0.24	126.7	
	15	19.95	7.2			124.4	

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

Slight hydrocarbon odor ???

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: FHS MW-11

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	54.06
Depth of Well	64.07
Depth to Water (from top of casing)	45.21
Water Elevation (feet above msl)	8.85
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	9.1
Actual Volume Purged (gallons)	9.5
Appearance of Purge Water	clear
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size		2 VOAs					
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	3	19.63	6.6	835	0.92	101.8	
	6	19.5	6.55	840	0.84	112.1	
	9	19.51	6.56	841	0.75	115.6	

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

No hydrocarbon odor

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-6

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	61.78
Depth of Well	48.69
Depth to Water (from top of casing)	32.08
Water Elevation (feet above msl)	29.70
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	8.0
Actual Volume Purged (gallons)	8.0
Appearance of Purge Water	clear
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size		2 VOAs					
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	18.53	6.78	1743	8.3	-14.6	
	4	18.54	6.77	1731	7.7	-20.1	
	6	18.55	6.78	1720	7.1	-34.4	
	8	18.56	6.77	1711	7	-39.3	

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

strong hydrocarbon odor

Monitoring Well Number: MW-7

Project Name:	Foothill Square	Date of Sampling:	3/25/2003
Job Number:	3067	Name of Sampler:	SM & AN
Project Address:	10700 MacArthur Blvd., Oakland		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2
Wellhead Condition	OK
Elevation of Top of Casing (feet above msl)	58.64
Depth of Well	38.00
Depth to Water (from top of casing)	19.09
Water Elevation (feet above msl)	39.55
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	9.1
Actual Volume Purged (gallons)	9.5
Appearance of Purge Water	clear
Free Product Present?	No
	Thickness (ft):

GROUNDWATER SAMPLES

Number of Samples/Container Size				2 VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
	2	20.34	6.28	554	1.02	-10.9	
	4	19.91	6.28	560	4.2	-30	
	6	19.9	6.32	577	3.6	-45.1	clear
	8	19.92	6.33	582	3.7	-40.5	
	9.5	19.93	6.34	584	0.24	-53.8	

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

slight hydrocarbon odor

ATTACHMENT B

**LABORATORY ANALYSES WITH
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. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3067 Client Contact: Peter McIntyre Client P.O.:	Date Sampled: 03/25/03 Date Received: 03/25/03 Date Reported: 04/01/03 Date Completed: 04/01/03
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WorkOrder: 0303436

April 01, 2003

Dear Peter:

Enclosed are:

- 1). the results of 11 analyzed samples from your #3067 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



McCampbell Analytical Inc.

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All Environmental, Inc. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3067	Date Sampled: 03/25/03
		Date Received: 03/25/03
	Client Contact: Peter McIntyre	Date Extracted: 03/28/03
	Client P.O.:	Date Analyzed: 03/28/03

Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8021B

Work Order: 0303436

Lab ID	0303436-001A	0303436-002A	0303436-003A	0303436-004A	Reporting Limit for DF =1	
Client ID	AMW-1	AMW-4	AMW-5	AMW-6		
Matrix	W	W	W	W		
DF	1	2	2	67	S	W
Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Bromoform	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Bromomethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Carbon Tetrachloride	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Chlorobenzene	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Chloroethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
2-Chloroethyl vinyl ether	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Chloroform	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Chloromethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Dibromochloromethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,2-Dichlorobenzene	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,3-Dichlorobenzene	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,4-Dichlorobenzene	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Dichlorodifluoromethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,1-Dichloroethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,2-Dichloroethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,1-Dichloroethylene	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
cis-1,2-Dichloroethylene	ND	1.2	ND<1.0	94	NA	0.5
trans-1,2-Dichloroethylene	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,2-Dichloropropane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
cis-1,3-Dichloropropene	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
trans-1,3-Dichloropropene	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Methylene chloride	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Tetrachloroethylene	1.8	22	23	740	NA	0.5
1,1,1-Trichloroethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
1,1,2-Trichloroethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Trichloroethene	ND	1.9	ND<1.0	110	NA	0.5
Trichlorofluoromethane	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Vinyl Chloride	ND	ND<1.0	ND<1.0	ND<33	NA	0.5
Surrogate Recoveries (%)						
%SS:	99.1	100	114	100		
Comments			i			

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



McCampbell Analytical Inc.

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All Environmental, Inc. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3067	Date Sampled: 03/25/03
		Date Received: 03/25/03
	Client Contact: Peter McIntyre	Date Extracted: 03/28/03
	Client P.O.:	Date Analyzed: 03/28/03

Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8021B

Work Order: 0303436

Lab ID	0303436-005A	0303436-006A	0303436-007A	0303436-008A	Reporting Limit for DF =1	
Client ID	AMW-8	AMW-9	FHS MW-10	FHS MW-11		
Matrix	W	W	W	W	S	W
DF	1	5	2	1		
Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
Bromoform	ND	ND<2.5	ND<1.0	ND	NA	0.5
Bromomethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
Carbon Tetrachloride	ND	ND<2.5	ND<1.0	ND	NA	0.5
Chlorobenzene	ND	ND<2.5	ND<1.0	ND	NA	0.5
Chloroethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
2-Chloroethyl vinyl ether	ND	ND<2.5	ND<1.0	ND	NA	0.5
Chloroform	ND	ND<2.5	5.0	4.0	NA	0.5
Chloromethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
Dibromochloromethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
1,2-Dichlorobenzene	ND	ND<2.5	ND<1.0	ND	NA	0.5
1,3-Dichlorobenzene	ND	ND<2.5	ND<1.0	ND	NA	0.5
1,4-Dichlorobenzene	ND	ND<2.5	ND<1.0	ND	NA	0.5
Dichlorodifluoromethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
1,1-Dichloroethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
1,2-Dichloroethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
1,1-Dichloroethene	ND	ND<2.5	ND<1.0	ND	NA	0.5
cis-1,2-Dichloroethene	ND	4.1	1.7	0.78	NA	0.5
trans-1,2-Dichloroethene	ND	ND<2.5	ND<1.0	ND	NA	0.5
1,2-Dichloropropane	ND	ND<2.5	ND<1.0	ND	NA	0.5
cis-1,3-Dichloropropene	ND	ND<2.5	ND<1.0	ND	NA	0.5
trans-1,3-Dichloropropene	ND	ND<2.5	ND<1.0	ND	NA	0.5
Methylene chloride	ND	ND<2.5	ND<1.0	1.0	NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
Tetrachloroethene	ND	48	18	12	NA	0.5
1,1,1-Trichloroethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
1,1,2-Trichloroethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
Trichloroethene	ND	ND<2.5	2.5	0.88	NA	0.5
Trichlorofluoromethane	ND	ND<2.5	ND<1.0	ND	NA	0.5
Vinyl Chloride	ND	ND<2.5	ND<1.0	ND	NA	0.5

Surrogate Recoveries (%)

%SS:	100	104	81.6	109	
Comments	i				

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



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All Environmental, Inc. 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #3067	Date Sampled: 03/25/03
		Date Received: 03/25/03
	Client Contact: Peter McIntyre	Date Extracted: 03/28/03
	Client P.O.:	Date Analyzed: 03/28/03

Halogenated Volatile Organics by P&T and GC-ELCD (8010 Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8021B

Work Order: 0303436

Lab ID	0303436-009A	0303436-010A	0303436-011A		Reporting Limit for DF =1
Client ID	MW-6	MW-7	WGR MW-4		
Matrix	W	W	W		
DF	5	1	1		S W
Compound	Concentration				µg/kg µg/L
Bromodichloromethane	ND<2.5	ND	ND		NA 0.5
Bromoform	ND<2.5	ND	ND		NA 0.5
Bromomethane	ND<2.5	ND	ND		NA 0.5
Carbon Tetrachloride	ND<2.5	ND	ND		NA 0.5
Chlorobenzene	ND<2.5	ND	ND		NA 0.5
Chloroethane	ND<2.5	ND	ND		NA 0.5
2-Chloroethyl vinyl ether	ND<2.5	ND	ND		NA 0.5
Chloroform	ND<2.5	ND	ND		NA 0.5
Chloromethane	ND<2.5	ND	ND		NA 0.5
Dibromochloromethane	ND<2.5	ND	ND		NA 0.5
1,2-Dichlorobenzene	ND<2.5	ND	ND		NA 0.5
1,3-Dichlorobenzene	ND<2.5	ND	ND		NA 0.5
1,4-Dichlorobenzene	ND<2.5	ND	ND		NA 0.5
Dichlorodifluoromethane	ND<2.5	ND	ND		NA 0.5
1,1-Dichloroethane	ND<2.5	ND	ND		NA 0.5
1,2-Dichloroethane	ND<2.5	ND	ND		NA 0.5
1,1-Dichloroethene	ND<2.5	ND	ND		NA 0.5
cis-1,2-Dichloroethene	2.6	ND	ND		NA 0.5
trans-1,2-Dichloroethene	ND<2.5	ND	ND		NA 0.5
1,2-Dichloropropane	ND<2.5	ND	ND		NA 0.5
cis-1,3-Dichloropropene	ND<2.5	ND	ND		NA 0.5
trans-1,3-Dichloropropene	ND<2.5	ND	ND		NA 0.5
Methylene chloride	ND<2.5	ND	ND		NA 0.5
1,1,2,2-Tetrachloroethane	ND<2.5	ND	ND		NA 0.5
Tetrachloroethene	49	ND	ND		NA 0.5
1,1,1-Trichloroethane	ND<2.5	ND	ND		NA 0.5
1,1,2-Trichloroethane	ND<2.5	ND	ND		NA 0.5
Trichloroethene	3.8	ND	ND		NA 0.5
Trichlorofluoromethane	ND<2.5	ND	ND		NA 0.5
Vinyl Chloride	ND<2.5	ND	ND		NA 0.5

Surrogate Recoveries (%)

%SS:	101	102	101	
Comments				

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



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

QC SUMMARY REPORT FOR SW8021B

Matrix: W

WorkOrder: 0303436

EPA Method: SW8021B		Extraction: SW5030B		BatchID: 6259		Spiked Sample ID: N/A				
Compound	Sample	Spiked	MS*	MSD*	MS-MSD*	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	Low	High
Chlorobenzene	N/A	10	N/A	N/A	N/A	111	110	1.00	70	130
1,1-Dichloroethene	N/A	10	N/A	N/A	N/A	90.7	91.3	0.634	70	130
Trichloroethene	N/A	10	N/A	N/A	N/A	104	104	0.463	70	130
%SS:	N/A	100	N/A	N/A	N/A	89.5	84.1	6.14	70	130

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

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

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.

% Recovery = $100 * (\text{MS-Sample}) / (\text{Amount Spiked})$; RPD = $100 * (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) * 2$.

* MS and / or MSD spike recoveries may not be near 100% or the RPDs near 0% if: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) if that specific sample matrix interferes with spike recovery.

McCAMPBELL ANALYTICAL INC.

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

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 0303436

Client:

All Environmental, Inc.
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #3067
PO:

Date Received: 3/25/03
Date Printed: 3/25/03

Sample ID	ClientSamplID	Matrix	Collection Date	Hold	Requested Tests						
					SW8021B						
0303436-001		AMW-1	Water	3/25/03		A					
0303436-002		AMW-4	Water	3/25/03		A					
0303436-003		AMW-5	Water	3/25/03		A					
0303436-004		AMW-6	Water	3/25/03		A					
0303436-005		AMW-8	Water	3/25/03		A					
0303436-006		AMW-9	Water	3/25/03		A					
0303436-007		FHS MW-10	Water	3/25/03		A					
0303436-008		FHS MW-11	Water	3/25/03		A					
0303436-009		MW-6	Water	3/25/03		A					
0303436-010		MW-7	Water	3/25/03		A					
0303436-011		WGR MW-4	Water	3/25/03		A					

Prepared by: Melissa Valles

Comments:

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

0303434

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Telephone: (925) 798-1620

Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME
 EDF Required? Yes No

RUSH 24 HR 48 HR 72 HR 5 DAY

Report To: Peter McIntyre

Bill To:

Company: AEI Consultants

2500 Camino Diablo, Suite 200

Walnut Creek, CA 94597 E-Mail:

Tele: () 925/283-6000

Fax: () 925/283-6121

Project #: 3067

Project Name:

Project Location: Foothill Shopping Center

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	MATRIX		METHOD PRESERVED	Analysis Request	Other	Comments	
		Date	Time		Water	Soil	Air				
+ AMW-1		3/25/01		2	X			X			
+ AMW-4				2							
+ AMW-5				2							
+ AMW-6				2							
+ AMW-8				2							
+ AMW-9				2							
+ FHS MW-10				2							
+ FHS MW-11				2							
+ MW-6				2							
+ MW-7				2							
+ WGR MW-4		▼		2	X	X					

Relinquished By:

Date: 3/25

Time: 7:24

Received By:

3/25 7:29 pm

Relinquished By:

Date:

Time:

Received By:

Relinquished By:

Date:

Time:

Received By:

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