RO 2580 ✓

AEI CONSULTANTS
ENVIRONMENTAL & CIVIL ENGINEERING

2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597
Phone: (925) 283-6000 Fax: (925) 944-2895

July 12, 2004

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

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

Dear Mr. Chan:

Enclosed is a copy of the well closure plan and report of the most recent monitoring and sampling performed at the above referenced property.

Thank you for your time on Friday discussing the site and we look forward to your comment and approval of our client's plan to closure selected wells in preparation for redevelopment of the property.

Please contact me at (925) 283-6000, extension 104, to discuss any questions or if you need any additional information.

Sincerely,
AEI CONSULTANTS

Peter McIntyre
Project Manager

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

July 12, 2004

WELL CLOSURE PLAN

10700 MacArthur Boulevard
Oakland, California

AEI Project No. 3067

Prepared For

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
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AEI

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July 12, 2004

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

Subject: **Well Closure Plan &**
Semiannual Groundwater Monitoring - 2st Semester, 2003
10700 MacArthur Boulevard
Oakland, California
AEI Project No. 3067

Dear Messrs. Jay and Phares:

AEI Consultants (AEI) has prepared this document 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 has been performed to monitor the stability of the chlorinated volatile organic compound (VOC) plume beneath the property. Well closure activities are outlined in anticipation of major redevelopment activities planned for the property.

This groundwater monitoring was performed in accordance with the requirements of the Alameda County Health Care Services Agency (ACHCSA) and the Regional Water Quality Control Board (RWQCB). The monitoring activities described herein occurred on November 2, 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 of 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 evaluation was by PES, 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 monitoring was required 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 Monitoring Activities

AEI gauged water levels in twelve active and accessible groundwater monitoring wells on November 2 and 6, 2003. Samples were collected from six of the wells, AMW-4, AMW-6, AMW-9, MW-6 and FHS-MW-10. 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 collected into 40-ml volatile organic analysis (VOA) vials, and the vials were capped so that no visible head space or air bubbles were present within the sample containers. A total of six 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 wells ranged from 36.12 to 52.46 feet above mean sea level (amsl), which is an average of 2.27 feet lower than the previous episode in March 2003. This change is consistent with seasonal variations observed over several years of monitoring. Based

on these water level elevations groundwater was determined to flow to the west-northwest, consistent with previous episodes.

Piezometric head measurements of the deeper, apparently confined or semi-confined aquifer, ranged from 25.95 to 43.01 feet above msl in November 2003. The average elevations of the peizometric head in these wells were 2.54 feet lower than in March 2003. Again, this change is consistent with seasonal fluctuations recorded at the site. Based on these measurements, 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 (440 µg/L, 60 µg/L, and 66 µg/L respectively). The concentrations of VOCs in this well all detected at their lowest levels since soil removal activities occurred in 1996. As can be seen in Figure 7, concentrations of all VOCs are steadily decreasing in this source area well.

The highest concentrations of PCE and TCE in the deeper zone were found in well MW-6 at 340 µg/L and 13 µg/L, respectively. These concentrations are consistent with previous monitoring results. Overall, well MW-6, down-gradient of the former source area, has exhibited a long-term trend of decreasing VOC concentrations.

Sample analyses of other wells is generally consistent with previous events. Refer to Table 2 for a summary of sample analytical data. PCE concentrations are also presented on Figures 5 and 6. Laboratory results and chain of custody documents for the November 2003 event are included in Appendix B.

Summary

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. 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 a significant human health threat, and that active groundwater treatment would not likely be required. The decreasing contaminant concentrations in groundwater since 1997 have confirmed that soil removal activities have been successful at reducing further contaminant migration to groundwater.

Well Closure Plan

Planning has been underway for several years on major redevelopment of the Foothill Square Shopping Center. Recently plans have been formalized and construction is tentatively scheduled to begin in the late 2004. Approximate locations of the finalized new building locations are shown on Figure 8.

In anticipation of the building demolition and construction activities, selected onsite monitoring wells will be closed. These wells are in locations of planned building foundations or in areas where construction activities have a high likelihood of damaging protective well boxes and casings. The following wells will be closed: AMW-1, AMW-4, AMW-5, AMW-6, AMW-8, WGR-MW2, WGR-MW3, WGR-MW4, and MW-7. Onsite wells MW-6 and AMW-9 and offsite "sentry" wells FHS-MW-10 and FHS-MW-11 will remain.

The well closure activities will be performed under permit of the Alameda County Public Works Agency by a California C57 licensed drilling contractor. It is anticipated that closure via pressure grout will be acceptable. At the time of closure, the depth to water and total depth of each well will be measured and recorded. Neat cement grout will be pumped into each well under pressure to ensure that the casing, annular sand pack, and screen have been filled. The tops of the casings will be over-drilled to a minimum depth of 5 feet below grade or to below the maximum depth anticipated of planned grading, whichever is deeper. The well boxes will be removed and the resulting shallow borehole will be filled with near cement grout to just below (< 12 inches) of ground surface. The grout will be allowed settle in each well location for a minimum of 1 hour, and if any settlement occurs, the holes will be toped off. If necessary to match existing grade, a concrete or asphalt surface patch may then be installed. Upon completion, well closure activities will be documented via Department of Water Resources (DWR) form 188.

Well closure activities will be scheduled to occur at the site demolition activities, tentatively in late 2004. The onsite wells to remain (MW-6 and AMW-9) will be adequately marked and protected to reduce the possibility of damage during site construction activities.

Continuation of semi-annual monitoring and sampling of the four wells to remain is planned to ensure that decreasing contaminant concentrations trends continue.

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 sample analyses were performed to provide the requested information, but it cannot be assumed that they are entirely representative of all areas not sampled. Any 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.

We look forward to your comment and approval to proceed with the well closure. Please contact Mr. McIntyre at 925/283-6000, extension 104, with any questions.

Sincerely,
AEI Consultants

Jeff Rosenberg
Project Engineer

Peter McIntyre, RG
Project Manager

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
Figure 8	New Building Locations

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

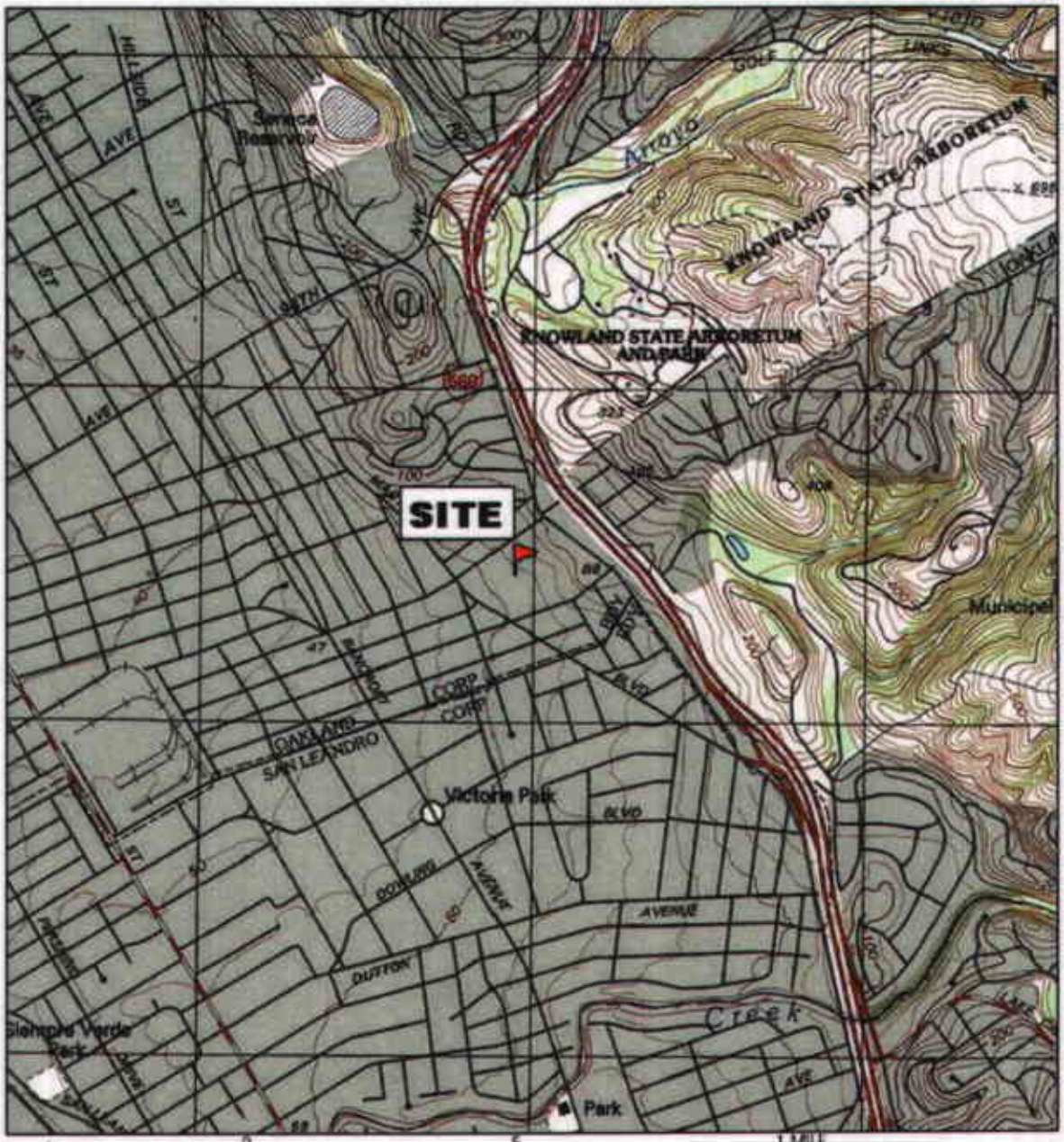
References

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
14. AEI Consultants *Groundwater Monitoring Report,* 10700 MacArthur Boulevard, Oakland, California, July 8, 2003

Distribution

Mr. Barney Chan, Alameda County Health Care Services Agency
Ms. Betty Graham, Regional Water Quality Control Board
Jay-Phares Corporation



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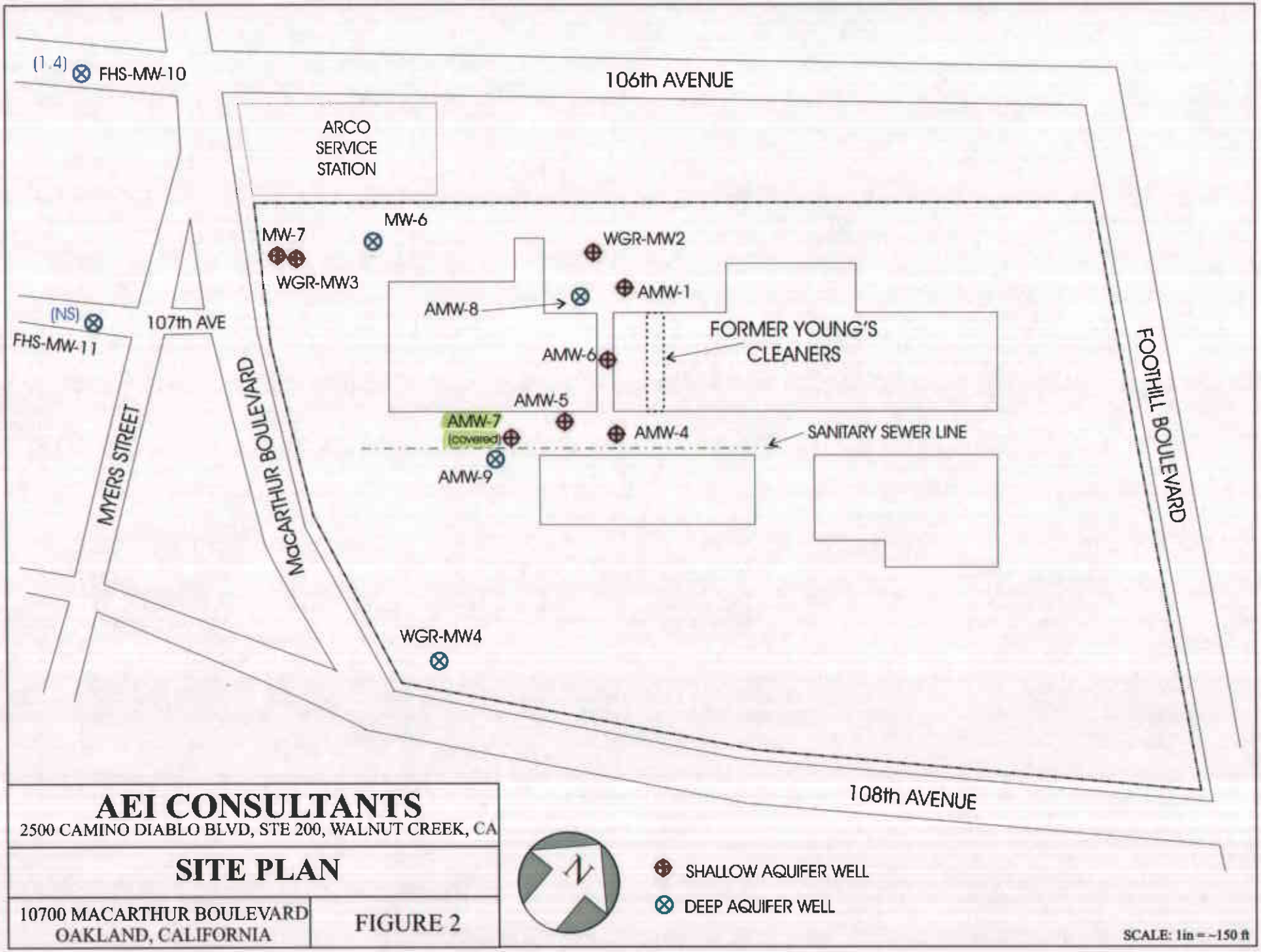
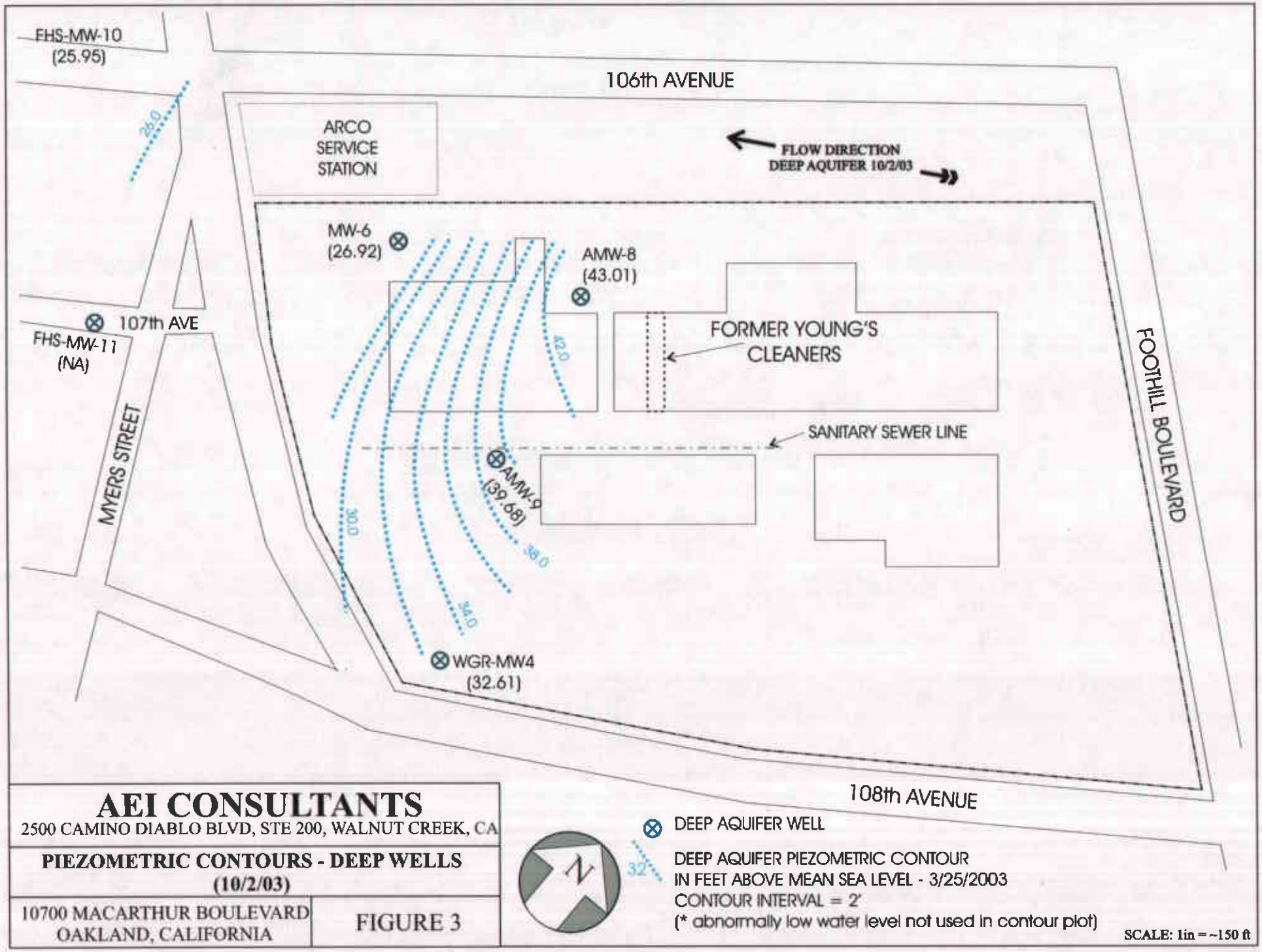
SITE LOCATION MAP

10700 MACARTHUR BLVD
OAKLAND, CALIFORNIA

FIGURE 1
PROJECT NO. 3067


(1,4) FHS-MW-10
106th AVENUE
ARCO SERVICE STATION
MW-6
MW-7
WGR-MW2
WGR-MW3
AMW-1
AMW-8
(NS) FHS-MW-11
107th AVE
FORMER YOUNG'S CLEANERS
AMW-6
FOOTHILL BOULEVARD
AMW-5
AMW-7 (covered)
AMW-4
SANITARY SEWER LINE
AMW-9
MYERS STREET
MacARTHUR BOULEVARD
WGR-MW4
108th AVENUE
AEI CONSULTANTS
2500 CAMINO DIABLO BLVD, STE 200, WALNUT CREEK, CA
SITE PLAN
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA
FIGURE 2
N
SHALLOW AQUIFER WELL
DEEP AQUIFER WELL
SCALE: 1in = ~150 ft



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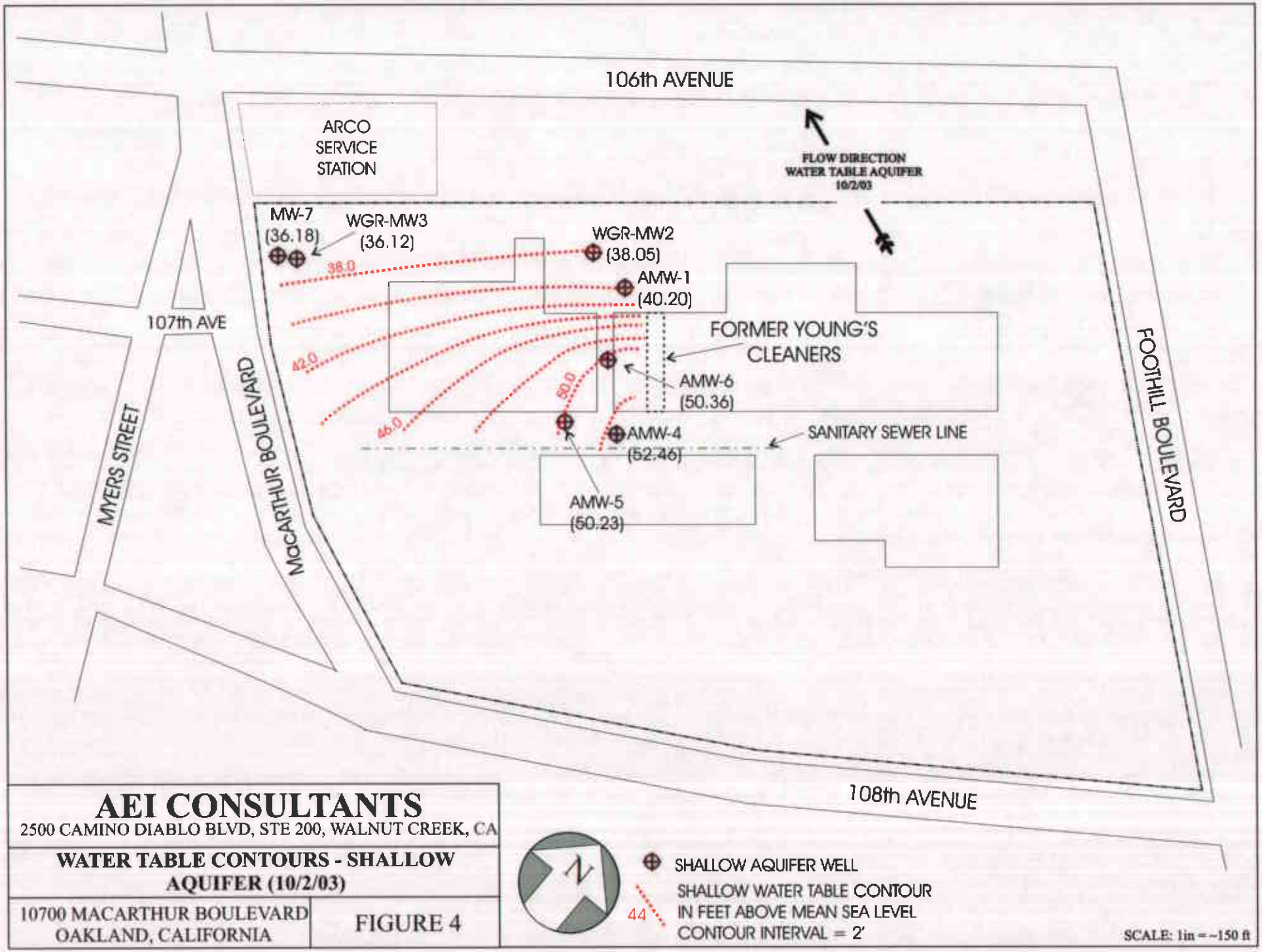
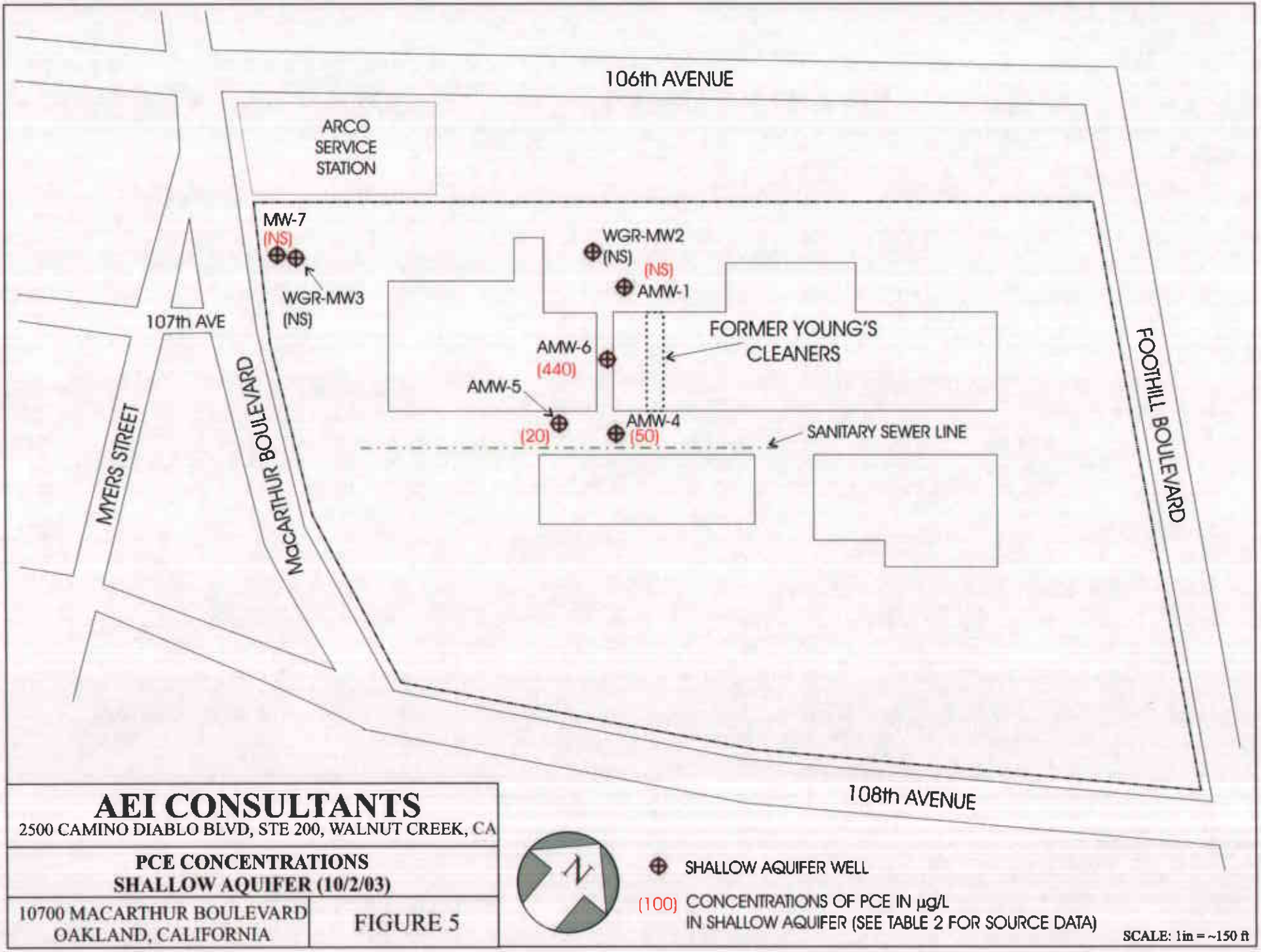
PIEZOMETRIC CONTOURS - DEEP WELLS (10/2/03)

10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 3


106th AVENUE
ARCO SERVICE STATION
FLOW DIRECTION WATER TABLE AQUIFER 10/2/03
MW-7 (36.18)
WGR-MW3 (36.12)
WGR-MW2 (38.05)
AMW-1 (40.20)
38.0
42.0
46.0
50.0
107th AVE
MYERS STREET
MacARTHUR BOULEVARD
FORMER YOUNG'S CLEANERS
AMW-6 (50.36)
AMW-4 (52.46)
SANITARY SEWER LINE
AMW-5 (50.23)
FOOTHILL BOULEVARD
108th AVENUE
AEI CONSULTANTS
2500 CAMINO DIABLO BLVD, STE 200, WALNUT CREEK, CA
WATER TABLE CONTOURS - SHALLOW AQUIFER (10/2/03)
10700 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA
FIGURE 4
N
SHALLOW AQUIFER WELL
44
SHALLOW WATER TABLE CONTOUR IN FEET ABOVE MEAN SEA LEVEL
CONTOUR INTERVAL = 2'
SCALE: 1in = ~150 ft



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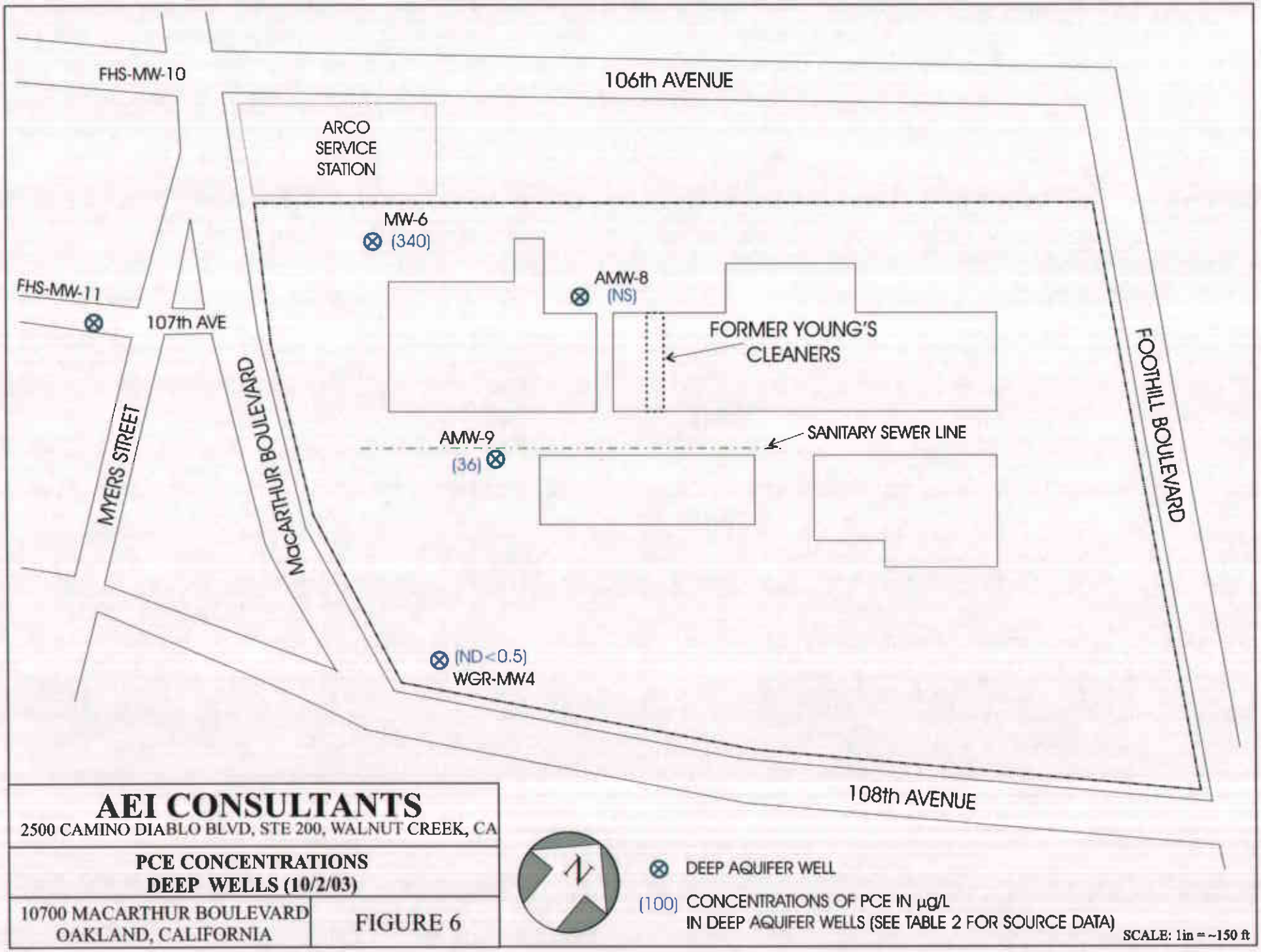
PCE CONCENTRATIONS
SHALLOW AQUIFER (10/2/03)

10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 5



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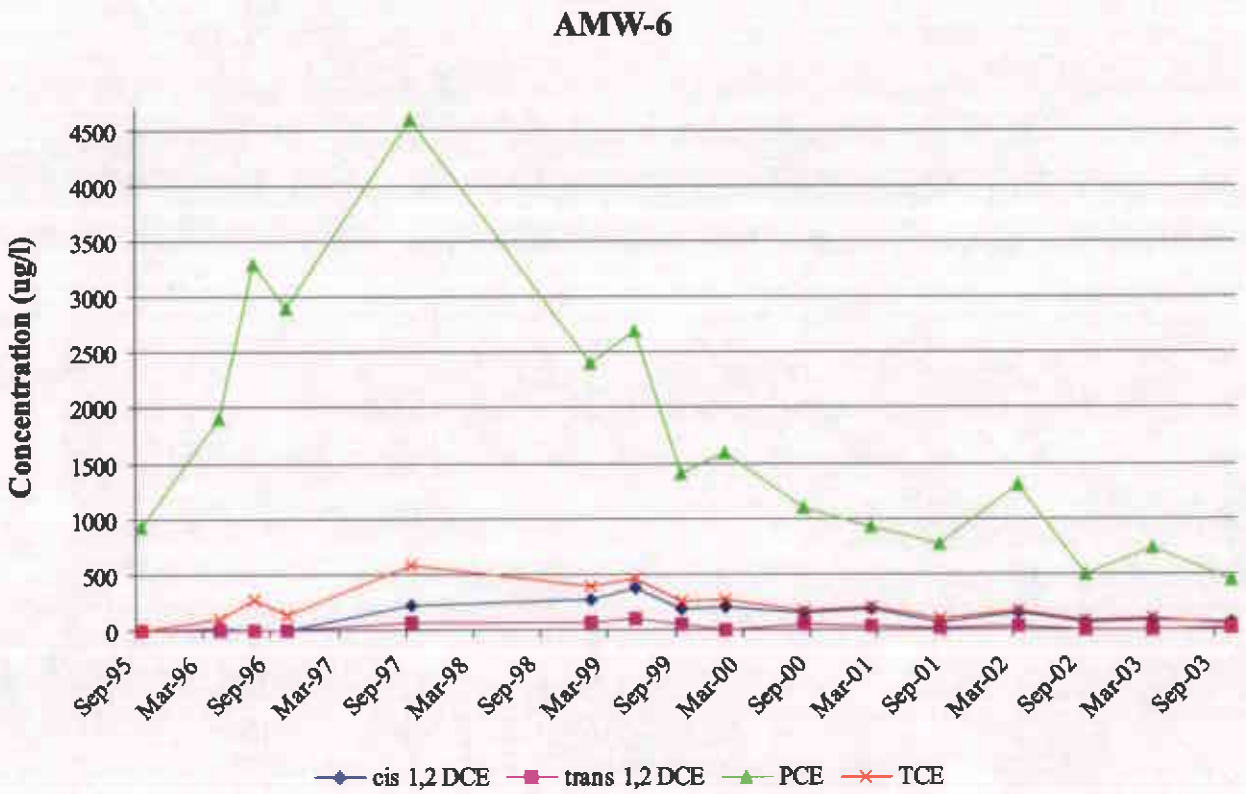
PCE CONCENTRATIONS
DEEP WELLS (10/2/03)

10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 6



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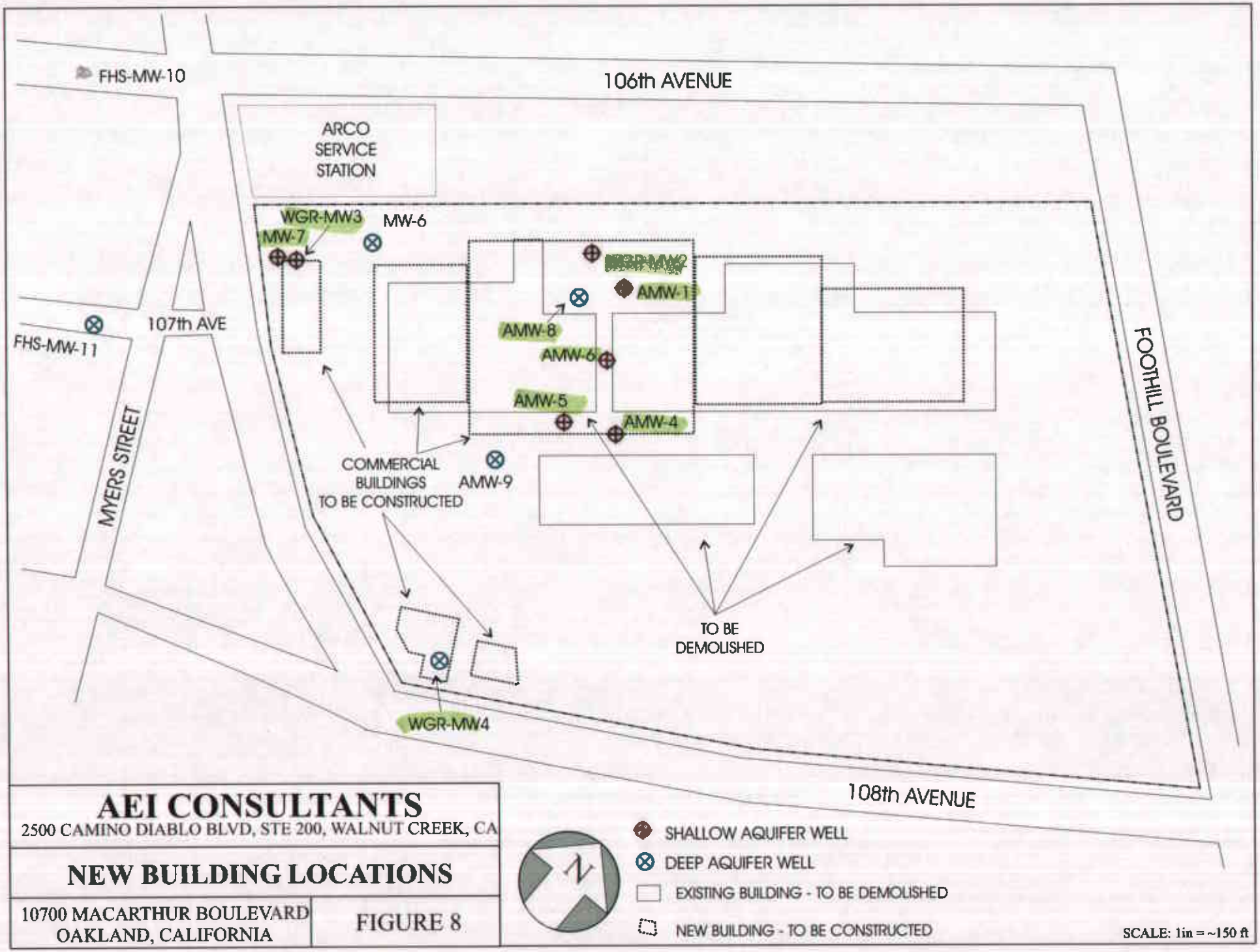
DISSOLVED CONTAMINANT CONCENTRATIONS VS. TIME: AMW-6

10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 7

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



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NEW BUILDING LOCATIONS

10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

FIGURE 8

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	1/29/1999	24-34	64.51	23.01	41.50
(Shallow)	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
	10/2/2003		**64.51**	**24.31**	**40.20**
AMW-4	1/29/1999	15-25	64.79	11.51	53.28
(Shallow)	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
	10/2/2003		**64.79**	**12.33**	**52.46**
AMW-5	1/29/1999	20-30	64.97	13.87	51.10
(Shallow)	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
	10/2/2003		**64.97**	**14.74**	**50.23**
AMW-6	1/29/1999	Unknown	65.10	12.74	52.36
(Shallow)	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
	10/2/2003		**65.10**	**14.74**	**50.36**
AMW-7	1/29/1999	Unknown	64.24	14.91	49.33
(Shallow)	5/5/1999			Well Covered during consturction	
AMW-8	1/29/1999	Unknown	64.55	16.86	47.69
(Deep)	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
	10/2/2003		**64.55**	**21.54**	**43.01**

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	1/29/1999	Unknown	63.48	23.22	40.26
(Deep)	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
	10/2/2003		**63.48**	**23.80**	**39.68**
WGR MW-2	1/29/1999	23-28	63.18	23.41	39.77
(Shallow)	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
	10/2/2003		**63.18**	**25.13**	**38.05**
WGR MW-3	1/29/1999	22-27	58.34	15.81	42.53
(Shallow)	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
	10/2/2003		**58.34**	**22.22**	**36.12**
WGR MW-4	1/29/1999	23-45	60.02	26.23	33.79
(Deep)	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
	10/2/2003		**60.02**	**27.41**	**32.61**
FHS MW-10	1/29/1999	42-52	52.34	23.91	28.43
(Deep)	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
	9/27/2003		52.34	25.86	26.48
	3/25/2003		52.34	23.20	29.14
	10/6/2003		**52.34**	**26.39**	**25.95**

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
	10/2/2003			**Well Inaccessible**	
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
	10/2/2003		**61.78**	**34.86**	**26.92**
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
	10/2/2003		**58.64**	**22.46**	**36.18**

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

Table 2
Groundwater Sample Analytical Data

Well (aguifer 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	3/23/95	Augeus	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5
(shallow)	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
	10/2/03	**AEI**	**NS**	**NS**	**NS**	**NS**	NS
AMW-4	5/15/95	Augeus	NR	ND<50	2400	ND<50	NR
(shallow)	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
	10/2/03	**AEI**	**2.8**	**ND<0.5**	**50**	**2.8**	**ND<0.5**
AMW-5	5/15/95	Augeus	NR	ND<0.5	1.2	ND<0.5	NR
(shallow)	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
	10/2/03	**AEI**	**ND<0.5**	**ND<0.5**	**20**	**0.58**	**ND<0.5**
AMW-6	9/13/95	Augeus	NR	ND<25	930	ND<25	NR
(shallow)	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
	10/2/2003	**AEI**	**66**	**13**	**440**	**60**	**ND<10**

Table 2 Continued

Well (aguifer 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-7	9/13/95	Augeus	NR	ND<25	2350	340	NR
(shallow)	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	9/13/95	Augeus	-	ND<25	95	ND<25	ND<25
(deep)	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
	10/2/03	**AEI**	**NS**	**NS**	**NS**	**NS**	**NS**
AMW-9	9/13/95	Augeus	NR	ND<25	170	ND<25	NR
(deep)	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
	10/2/03	**AEI**	**4.8**	**<0.5**	**36**	**1.1**	**ND<0.5**
FHS MW-10	10/9/97	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR
(deep)	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
	3/25/03	AEI	1.7	ND<1.0	18	2.5	5.0**
	10/6/03	**AEI**	**ND<0.5**	**ND<0.5**	**1.4**	**ND<0.5**	**1.0****
FHS MW-11	9/29/97	PES	ND<0.5	ND<0.5	4	ND<0.5	NR
(deep)	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****
	10/2/03		**Well Inaccessible**				

Table 2 Continued

Well (aguifer zone)	Date	Consultant	cis 1,2 DCE µg/L	trans 1,2 DCE µg/L	PCE µg/L	TCE µg/L	VHCs* µg/L
MW-6	3/11/95	EMCON	ND<20	ND<0.5	1300	ND<20	NR
(deep)	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
	10/2/03	**AEI**	**13**	**ND<5.0**	**340**	**21**	**ND<5.0**
MW-7	3/11/95	EMCON	NS	NS	NS	NS	NS
(shallow)	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
	10/2/03	**AEI**	**NS**	**NS**	**NS**	**NS**	**NS**
WGR MW-4	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
(deep)	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
	10/2/03	**AEI**	**NS**	**NS**	**NS**	**NS**	**NS**

Table 2 Notes:

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)

*** Dibromochloromethane

**** Methylene Chloride

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

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

NS = Well not sampled

NR = Not Reported

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

Tetrachloroethene (PCE)

Trichloroethene (TCE)

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

APPENDIX 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:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	24.31		
Water Elevation (feet above msl)	40.20		
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)			
Appearance of Purge Water			
Free Product Present?	na	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 sampled this episode

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: AMW-4

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	12.33		
Water Elevation (feet above msl)	52.46		
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 4 gallons		
Free Product Present?	na	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	19.95	7.44	1436	1.48	-88.9	
	4	19.93	7.24	1426	0.48	-117.8	
	6	19.92	7.20	1425	0.34	-123.7	

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

Initially grey

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: AMW-5

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	14.74		
Water Elevation (feet above msl)	50.23		
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)	**7.3**		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	clear up at 1.5 gallons		
Free Product Present?	na	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	19.48	7.32	1616	0.99	-93.2	
	4	19.70	7.24	1624	0.65	-99.6	
	6	19.59	7.08	1636	0.24	-133.8	
	8	19.57	7.05	1671	0.21	-136.7	

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

started brown color and no hc odors

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: AMW-6

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	14.74		
Water Elevation (feet above msl)	50.36		
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)	**4.9**		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	clear up at 2.5 gallons		
Free Product Present?	na	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	18.91	7.40	1648	1.23	-90.2	
	4	18.97	7.21	1683	0.80	-96.9	
	6	18.96	7.13	1691	0.69	-101.7	

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

Initilly brown no hc odors

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: AMW-8

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	21.54		
Water Elevation (feet above msl)	43.01		
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)			
Appearance of Purge Water			
Free Product Present?	na	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 sampled

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: AMW-9

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	23.80		
Water Elevation (feet above msl)	39.68		
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)	**14.6**		
Actual Volume Purged (gallons)	12.5		
Appearance of Purge Water	clear		
Free Product Present?	na	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	20.58	6.96	1806	1.70	-135.5	
	6	20.66	6.98	1811	1.01	-136.8	
	9	20.74	7.00	1814	0.49	-140.6	
	12	20.84	7.01	1809	0.45	-148.9	dry at 12.5

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

Clear, no odors. Dry at 12.5 gallons. Slow recharge

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: WGR MW-2

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	25.13		
Water Elevation (feet above msl)	38.05		
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)			
Appearance of Purge Water			
Free Product Present?	na	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:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	22.22		
Water Elevation (feet above msl)	36.12		
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)			
Appearance of Purge Water			
Free Product Present?	na	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-4

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	27.41		
Water Elevation (feet above msl)	32.61		
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)	**34.2**		
Actual Volume Purged (gallons)			
Appearance of Purge Water			
Free Product Present?	na	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: FHS MW-10

Project Name:	Foothill Square	Date of Sampling:	10/6/2003
Job Number:	3067	Name of Sampler:	A. Nieto
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)	26.39		
Water Elevation (feet above msl)	25.95		
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)	**12.3**		
Actual Volume Purged (gallons)	14.0		
Appearance of Purge Water	clear at 10.5 gallons		
Free Product Present?	na	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	19.21	6.77	469	1.17	212.3	
	6	19.20	6.63	480	0.65	206.4	
	9	19.21	6.55	484	0.45	167.3	
	12	19.22	6.54	484	0.36	163.2	
	14	19.23	6.52	484	0.26	158.3	

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

Initially brown, light grey by 3.5 gallons, clears by 10 1/2 gallons

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: FHS MW-11

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)			
Water Elevation (feet above msl)			
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)			
Appearance of Purge Water			
Free Product Present?	na	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 INACCESSIBLE - Car Parked over wellhead

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-6

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	34.86		
Water Elevation (feet above msl)	26.92		
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)	**6.6**		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	clear at 1.5 gallons		
Free Product Present?	na	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	18.61	7.18	1445	0.85	-90.9	
	4	18.60	7.06	1436	0.62	-98.6	
	6	18.60	6.97	1424	0.50	-104.2	
	8	18.60	6.93	1415	0.43	-108.5	

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

Initially light brown, clears quickly

Monitoring Well Number: MW-7

Project Name:	Foothill Square	Date of Sampling:	10/2/2003
Job Number:	3067	Name of Sampler:	A. Nieto & S Moore
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)	22.46		
Water Elevation (feet above msl)	36.18		
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)	**7.5**		
Actual Volume Purged (gallons)			
Appearance of Purge Water			
Free Product Present?	na	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

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

slight hydrocarbon odor

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.	Client Project ID: #3067; FHS	Date Sampled: 10/02/03
2500 Camino Diablo, Ste. #200		Date Received: 10/03/03
Walnut Creek, CA 94597	Client Contact: Peter McIntyre	Date Reported: 10/10/03
	Client P.O.:	Date Completed: 10/10/03

WorkOrder: 0310049

October 10, 2003

Dear Peter:

Enclosed are:

1). the results of **5** analyzed samples from your **#3067; FHS 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.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

All Environmental, Inc.	Client Project ID: #3067; FHS	Date Sampled: 10/02/03
2500 Camino Diablo, Ste. #200		Date Received: 10/03/03
Walnut Creek, CA 94597	Client Contact: Peter McIntyre	Date Extracted: 10/09/03
	Client P.O.:	Date Analyzed: 10/09/03

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

Extraction Method: SW5030B | Analytical Method: SW8021B by 8260 | Work Order: 0310049

Lab ID	0310049-001A	0310049-002A	0310049-003A	0310049-004A	Reporting Limit for DF =1	
Client ID	AMW-4	AMW-5	AMW-6	AMW-9		
Matrix	W	W	W	W		
DF	1	1	20	1	S	W
Compound	**Concentration**				µg/kg	µg/L
Bromodichloromethane	ND	ND	ND<10	ND	NA	0.5
Bromoform	ND	ND	ND<10	ND	NA	0.5
Bromomethane	ND	ND	ND<10	ND	NA	0.5
Carbon Tetrachloride	ND	ND	ND<10	ND	NA	0.5
Chlorobenzene	ND	ND	ND<10	ND	NA	0.5
Chloroethane	ND	ND	ND<10	ND	NA	0.5
2-Chloroethyl vinyl ether	ND	ND	ND<10	ND	NA	0.5
Chloroform	ND	ND	ND<10	ND	NA	0.5
Chloromethane	ND	ND	ND<10	ND	NA	0.5
Dibromochloromethane	ND	ND	ND<10	ND	NA	0.5
1,2-Dichlorobenzene	ND	ND	ND<10	ND	NA	0.5
1,3-Dichlorobenzene	ND	ND	ND<10	ND	NA	0.5
1,4-Dichlorobenzene	ND	ND	ND<10	ND	NA	0.5
Dichlorodifluoromethane	ND	ND	ND<10	ND	NA	0.5
1,1-Dichloroethane	ND	ND	ND<10	ND	NA	0.5
1,2-Dichloroethane	ND	ND	ND<10	ND	NA	0.5
1,1-Dichloroethene	ND	ND	ND<10	ND	NA	0.5
cis-1,2-Dichloroethene	2.8	ND	66	4.8	NA	0.5
trans-1,2-Dichloroethene	ND	ND	13	ND	NA	0.5
1,2-Dichloropropane	ND	ND	ND<10	ND	NA	0.5
cis-1,3-Dichloropropene	ND	ND	ND<10	ND	NA	0.5
trans-1,3-Dichloropropene	ND	ND	ND<10	ND	NA	0.5
Methylene chloride	ND	ND	ND<10	ND	NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND	ND<10	ND	NA	0.5
Tetrachloroethene	50	20	440	36	NA	0.5
1,1,1-Trichloroethane	ND	ND	ND<10	ND	NA	0.5
1,1,2-Trichloroethane	ND	ND	ND<10	ND	NA	0.5
Trichloroethene	2.8	0.58	60	1.1	NA	0.5
Trichlorofluoromethane	ND	ND	ND<10	ND	NA	0.5
Vinyl Chloride	ND	ND	ND<10	ND	NA	0.5
Surrogate Recoveries (%)						
%SS:	100	105	88.5	100		
Comments						

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

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

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

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

DHS Certification No. 1644

Angela Rydelius, Lab Manager

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

All Environmental, Inc.	Client Project ID: #3067; FHS	Date Sampled: 10/02/03
2500 Camino Diablo, Ste. #200		Date Received: 10/03/03
Walnut Creek, CA 94597	Client Contact: Peter McIntyre	Date Extracted: 10/09/03
	Client P.O.:	Date Analyzed: 10/09/03

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

Extraction Method: SW5030B | Analytical Method: SW8021B by 8260 | Work Order: 0310049

		Reporting Limit for DF =1	
Lab ID	0310049-005A		
Client ID	MW-6		
Matrix	W		
DF	10	S	W
Compound	**Concentration**	µg/kg	µg/L
Bromodichloromethane	ND<5.0	NA	0.5
Bromoform	ND<5.0	NA	0.5
Bromomethane	ND<5.0	NA	0.5
Carbon Tetrachloride	ND<5.0	NA	0.5
Chlorobenzene	ND<5.0	NA	0.5
Chloroethane	ND<5.0	NA	0.5
2-Chloroethyl vinyl ether	ND<5.0	NA	0.5
Chloroform	ND<5.0	NA	0.5
Chloromethane	ND<5.0	NA	0.5
Dibromochloromethane	ND<5.0	NA	0.5
1,2-Dichlorobenzene	ND<5.0	NA	0.5
1,3-Dichlorobenzene	ND<5.0	NA	0.5
1,4-Dichlorobenzene	ND<5.0	NA	0.5
Dichlorodifluoromethane	ND<5.0	NA	0.5
1,1-Dichloroethane	ND<5.0	NA	0.5
1,2-Dichloroethane	ND<5.0	NA	0.5
1,1-Dichloroethene	ND<5.0	NA	0.5
cis-1,2-Dichloroethene	13	NA	0.5
trans-1,2-Dichloroethene	ND<5.0	NA	0.5
1,2-Dichloropropane	ND<5.0	NA	0.5
cis-1,3-Dichloropropene	ND<5.0	NA	0.5
trans-1,3-Dichloropropene	ND<5.0	NA	0.5
Methylene chloride	ND<5.0	NA	0.5
1,1,2,2-Tetrachloroethane	ND<5.0	NA	0.5
Tetrachloroethene	340	NA	0.5
1,1,1-Trichloroethane	ND<5.0	NA	0.5
1,1,2-Trichloroethane	ND<5.0	NA	0.5
Trichloroethene	21	NA	0.5
Trichlorofluoromethane	ND<5.0	NA	0.5
Vinyl Chloride	ND<5.0	NA	0.5
Surrogate Recoveries (%)			
%SS:	91.3		
Comments			

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

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

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

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

DHS Certification No. 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B

Matrix: W WorkOrder: 0310049

EPA Method: SW8021B Extraction: SW5030B BatchID: 8743 Spiked Sample ID: 0309536-003A

	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	ND	10	113	115	1.75	106	105	1.23	70	130
1,1-Dichloroethene	ND	10	91.4	95.3	4.18	88.8	86	3.22	70	130
Trichloroethene	ND	10	98.3	101	2.71	112	110	1.08	70	130
%SS:	112	100	112	113	0.889	109	110	0.898	70	130

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

NONE

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

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

* MS 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.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0310049

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

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

Date Received: **10/3/03**
Date Printed: **10/3/03**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests						
					SW8021B						
0310049-001	AMW-4	Water	10/2/03	☐	A						
0310049-002	AMW-5	Water	10/2/03	☐	A						
0310049-003	AMW-6	Water	10/2/03	☐	A						
0310049-004	AMW-9	Water	10/2/03	☐	A						
0310049-005	MW-6	Water	10/2/03	☐	A						

Prepared by: Maria Venegas

Comments:

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

0310099

McCAMPBELL ANALYTICAL INC.

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

CHAIN OF CUSTODY RECORD

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

EDF Required? ☐ Yes ☑ No

Report To: 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: FHS
Project Location: Foothill Square 106th @ MacArthur
Sampler Signature: A Nieto

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601/8010 by 8021	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other	Comments
AMW-4		10/2/03	pm	2	Vom	X					X	X							X												
AMW-5				2		X					X	X							X												
AMW-6				2		X					X	X							X												
AMW-9				2		X					X	X							X												
MW-6				2		X					X	X							X												

Relinquished By:	Date:	Time:	Received By:
	10/3/03	1:00	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

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; FHS "B"	Date Sampled: 10/06/03
		Date Received: 10/06/03
	Client Contact: Peter McIntyre	Date Reported: 10/10/03
	Client P.O.:	Date Completed: 10/10/03

WorkOrder: 0310077

October 10, 2003

Dear Peter:

Enclosed are:

1). the results of 1 analyzed sample from your **#3067; FHS "B" project,**

2). a QC report for the above sample

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager

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All Environmental, Inc.	Client Project ID: #3067; FHS "B"	Date Sampled: 10/06/03
2500 Camino Diablo, Ste. #200		Date Received: 10/06/03
Walnut Creek, CA 94597	Client Contact: Peter McIntyre	Date Extracted: 10/09/03
	Client P.O.:	Date Analyzed: 10/09/03

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

Extraction Method: SW5030B | Analytical Method: SW8021B by 8260 | Work Order: 0310077

					Reporting Limit for DF =1	
Lab ID	0310077-001A					
Client ID	FHS-MW-10					
Matrix	W				S	W
DF	1				µg/kg	µg/L
Compound	**Concentration**					
Bromodichloromethane	ND				NA	0.5
Bromoform	ND				NA	0.5
Bromomethane	ND				NA	0.5
Carbon Tetrachloride	ND				NA	0.5
Chlorobenzene	ND				NA	0.5
Chloroethane	ND				NA	0.5
2-Chloroethyl vinyl ether	ND				NA	0.5
Chloroform	1.0				NA	0.5
Chloromethane	ND				NA	0.5
Dibromochloromethane	ND				NA	0.5
1,2-Dichlorobenzene	ND				NA	0.5
1,3-Dichlorobenzene	ND				NA	0.5
1,4-Dichlorobenzene	ND				NA	0.5
Dichlorodifluoromethane	ND				NA	0.5
1,1-Dichloroethane	ND				NA	0.5
1,2-Dichloroethane	ND				NA	0.5
1,1-Dichloroethene	ND				NA	0.5
cis-1,2-Dichloroethene	ND				NA	0.5
trans-1,2-Dichloroethene	ND				NA	0.5
1,2-Dichloropropane	ND				NA	0.5
cis-1,3-Dichloropropene	ND				NA	0.5
trans-1,3-Dichloropropene	ND				NA	0.5
Methylene chloride	ND				NA	0.5
1,1,2,2-Tetrachloroethane	ND				NA	0.5
Tetrachloroethene	1.4				NA	0.5
1,1,1-Trichloroethane	ND				NA	0.5
1,1,2-Trichloroethane	ND				NA	0.5
Trichloroethene	ND				NA	0.5
Trichlorofluoromethane	ND				NA	0.5
Vinyl Chloride	ND				NA	0.5
Surrogate Recoveries (%)						
%SS:	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.

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

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

DHS Certification No. 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B

Matrix: W WorkOrder: 0310077

EPA Method: SW8021B Extraction: SW5030B BatchID: 8820 Spiked Sample ID: 0310101-005A

	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	ND<500	10	108	107	1.09	104	107	2.68	70	130
1,1-Dichloroethene	ND<500	10	80.7	80	0.799	84.1	87	3.42	70	130
Trichloroethene	7699.00	10	90.5	91.4	0.524	98.3	102	4.13	70	130
%SS:	118	100	114	117	2.46	114	114	0	70	130

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

NONE

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

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

* MS 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.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.
NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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

A2

031007T

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CHAIN OF CUSTODY RECORD

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

EDF Required? ☐ Yes ☒ No

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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: FHS B
Project Location: 106th and MacArthur
Sampler Signature: Adrian Nieto

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other	Comments
+ FHS-MW-1D		10/6/03	1045	2	VOAs	X					X	X							X												

Relinquished By:	Date:	Time:	Received By:
Adrian Nieto	10/6	2:50 pm	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° NC
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB
PRESERVATION APPROPRIATE ✓
CONTAINERS
PERSERVED IN LAB

VOAS	O&G	METALS	OTHER
✓			

la. Meli

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 0310077

Client:
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TEL: (925) 283-6000
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ProjectNo: #3067; FHS "B"
PO:

Date Received: **10/06/2003**
Date Printed: **10/06/2003**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests SW8021B
0310077-001	FHS-MW-10	Water	10/06/2003 10:45:00	☐	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.