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Alameda County  
Environmental Health

April 30, 2009

**GROUNDWATER MONITORING REPORT**  
**1<sup>st</sup> Semester, 2009**

10700 MacArthur Boulevard  
Oakland, California

AEI Project No. 261829  
Toxics Case No. RO0002580

Prepared For

Jay-Phares Corporation  
Attn: John Jay  
10700 MacArthur Boulevard, Suite 200  
Oakland, CA 94605

Prepared By

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2500 Camino Diablo Blvd.  
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ENVIRONMENTAL & ENGINEERING SERVICES

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April 30, 2009

Jay-Phares Corporation  
Attn: John Jay  
10700 MacArthur Blvd.  
Oakland, CA 94605

**Subject:       Semiannual Groundwater Monitoring Report  
                  1<sup>st</sup> Semester, 2009**  
10700 MacArthur Boulevard  
Oakland, California  
AEI Project No. 261829  
Toxics Case No. RO0002580

Dear Mr. 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). This report summarizes the activities and results of the semi-annual monitoring activities conducted on April 2, 2009.

### **Site Description and Background**

The subject property (hereinafter referred to as the site or property) is located at 10700 MacArthur Boulevard (Figure 1). The site is approximately 13.5 acres in size and is currently developed with the Foothill Square Shopping Center. The shopping center consists of five buildings, together totaling approximately 155,600 square feet. The area of concern is the former Youngs Cleaners, located on the north side of the property.

The site is situated in a mixed commercial and residential area of Oakland. The site is bound by MacArthur Boulevard to the west, Foothill Boulevard to the east, and 108th Avenue to the south. An ARCO gasoline station is located adjacent to the northwest and residences to the north. Refer to Figure 2 for a site plan of the western section of the Foothill Square Shopping Center property.

Extensive site assessment activities have been conducted to date including the installation of multiple monitoring wells, soil borings, and soil vapor borings, as well as source removal excavation. The most recent investigation included additional soil vapor borings which completed vapor phase contaminate delineation for the site. An approval for pilot study site mitigation activities has been obtained from the ACHCSA, however the pilot study has yet to commence. For a complete history of previous site investigation activities as well as planned pilot study details, please refer to AEI's *Supplemental Soil Vapor Investigation Report* dated June 25, 2008.

The remainder of this report documents the activities and results of the recent groundwater sampling event.

### **Summary of Activities**

On April 2, 2009, AEI gauged the groundwater levels in each of the thirteen active groundwater monitoring wells at the site and groundwater samples were collected from eight of the wells (AMW-1, AMW-4, AMW-5, AMW-6, AMW-9, MW-6, FHS MW-10, and FHS MW-11) in accordance with the approved sampling schedule. Wells were first opened and water levels allowed to equilibrate with atmospheric pressure. The depth to water from the top of the well casings was measured prior to sampling with an electric water level indicator. The wells were then purged of at least three well volumes using a battery powered submersible pump. Field data sheets are included in Appendix A.

Temperature, pH, specific conductivity, dissolved oxygen, and oxidation-reduction potential (ORP) were measured and the turbidity was visually noted during the purging of the wells. Once the above parameters had stabilized, and the wells were allowed to recharge to a minimum of 90% of their original water volume, a water sample was collected. Groundwater samples were collected from each well using clean, disposable plastic bailers.

Groundwater samples were collected from each well to be sampled into three 40 ml volatile organic analysis (VOA) vials. The samples were capped so that neither head space nor air bubbles were visible within the sample containers. Samples were labeled with unique identifiers, stored over water ice, and placed under chain of custody. The samples were transported to McCampbell Analytical, Inc. of Pittsburg, California (Department of Health Services Certification #1644).

### **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 15 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.

Groundwater levels in the shallow aquifer ranged from 40.04 to 52.58 feet above mean sea level (amsl) on April 2, 2009. Groundwater was determined to flow to the west at a hydraulic gradient of 0.03 feet per foot, both consistent with previous episodes. Groundwater levels in the deeper, apparently confined/semi-confined aquifer, ranged from 27.97 to 46.37 feet above msl on April 2, 2009. Groundwater flow in the deep aquifer was toward the southwest at a hydraulic gradient of 0.03 feet per foot, consistent with previous findings.

Groundwater measurement data are summarized in Table 1. The groundwater 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) detected in groundwater from the shallow wells was from well AMW-6 (250 µg/L, 37 µg/L, and 50 µg/L respectively). The concentrations of VOCs in this well are significantly lower than historical concentrations, however, similar to concentrations detected during the last several groundwater monitoring events. The highest concentrations of PCE, TCE, and cis-1,2 DCE in the deeper zone were found in well MW-6 at 420 µg/L, 28 µg/L, and 17 µg/L, respectively. These concentrations are also lower than historical results but consistent with concentration ranges over the last several monitoring events.

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 Figure 5 for a summary of VOC concentrations in the wells sampled during this event.

### **Summary**

In general, chlorinated VOC concentrations beneath the site appear relatively stable. The ACHCSA, in a letter dated July 10, 2008, concurred that no further characterization is necessary for shallow soil vapor beneath the site and AEI may commence with the pilot testing activities at the site. The pilot testing activities are scheduled to take place in conjunction with site remodeling activities. The ACHCSA will be notified once a schedule has been established. The monitoring well network will continue to be sampled by AEI in accordance with the approved sampling schedule, with the next sampling event scheduled during October 2009.

### **Report Limitations and Signatures**

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. 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 the required information, but it cannot be assumed that they are representative of areas not sampled. All conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.


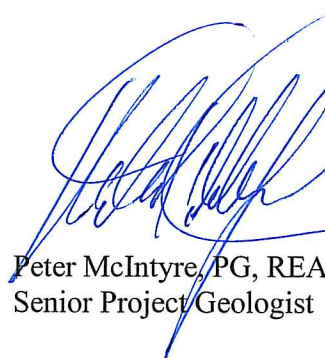
These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work.

If you have any questions regarding our investigation, please do not hesitate to contact either of the undersigned at (925) 746-6000.

Sincerely,  
AEI Consultants



Jeremy Smith  
Senior Project Manager



Peter McIntyre, PG, REA  
Senior Project Geologist

**Figures**

- Figure 1 Site Location Map
- Figure 2 Extended Site Map
- Figure 3 Groundwater Elevation Map – Shallow Wells
- Figure 4 Groundwater Elevation Map – Deep Wells
- Figure 5 Groundwater Analytical Data

**Tables**

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

**Appendices**

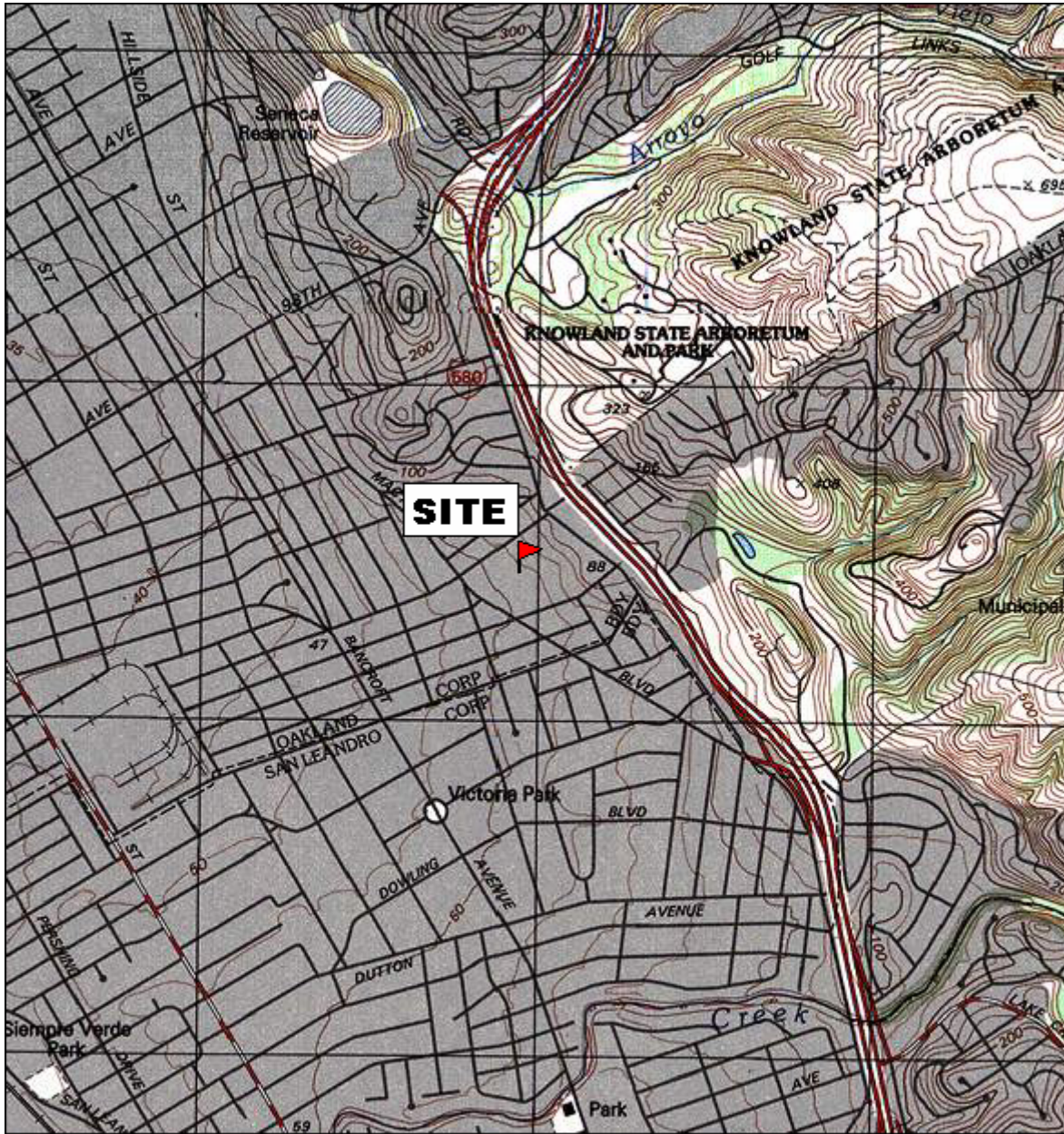
- Appendix A Groundwater Monitoring Well Field Sampling Forms
- Appendix B Laboratory Analyses With Chain of Custody Documentation

**Distribution**

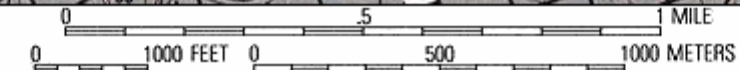
Mr. Jerry Wickham, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502 (electronic copy)  
Jay-Phares Corporation, Attn: John Jay, 10700 MacArthur Blvd., Oakland, California 94605  
Geotracker electronic upload

## **FIGURES**



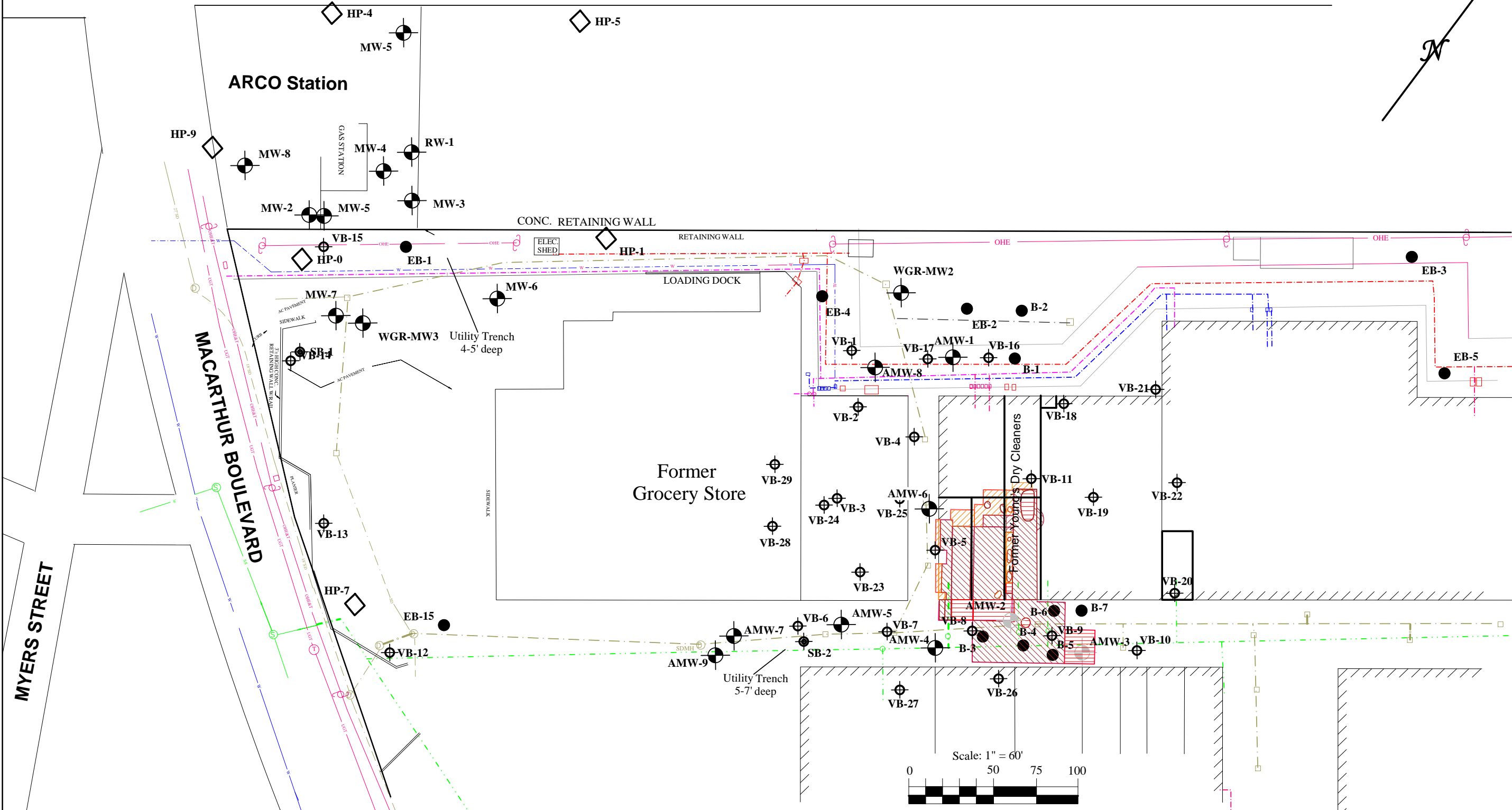
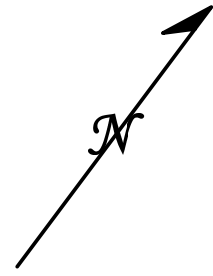


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<b>AEI CONSULTANTS</b> 2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597	
<b>SITE LOCATION MAP</b>	
10700 MACARTHUR BLVD OAKLAND, CALIFORNIA	<b>FIGURE 1</b> PROJECT No. 261829



- KEY**
- EB-1 ● Soil Boring - Kaldveer 1988
  - B-1 ● Soil Boring - Augeas 1994
  - HP-8 ◊ CPT Boring/HydroPunch Sample - PES 1997
  - MW4 ⊕ Groundwater Monitoring Well
  - ⊕ Soil Vapor Sample
  - ⊙ Soil Boring - AEI 2006

- Excavated to depth of 5 to 7 feet bgs
- Excavated to depth of 8 to 13 feet bgs
- Excavated to depth of 14 to 18 feet bgs
- Abandoned Monitoring Well

- On Site Storm Drain
- Off Site Storm Drain
- On Site Sanitary Sewer
- Off Site Sanitary Sewer
- On Site Underground Power
- On Site Gas Line

Drafted 6/30/05 - RFF on Dirk Slooten base  
 Revised 05/08 by J.SMITH

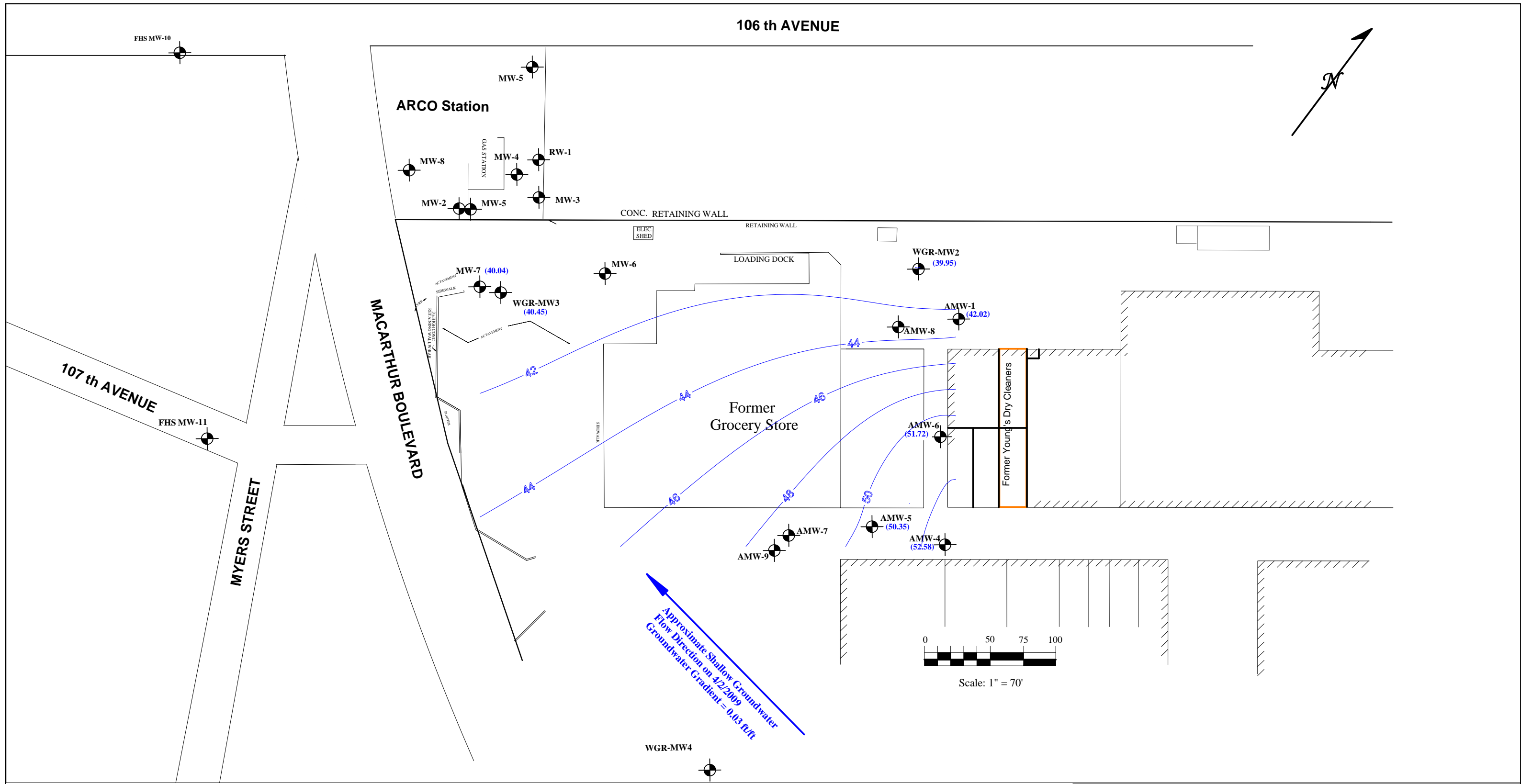
**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, WALNUT CREEK, CA

**SITE PLAN**

10700 MACARTHUR BLVD.  
 OAKLAND, CALIFORNIA

**FIGURE 2**  
 PROJECT NO. 261829





**KEY**

Groundwater Monitoring Well

**MW4** (49.91) = Groundwater Elevation (feet)

Groundwater Contour in 2 foot intervals

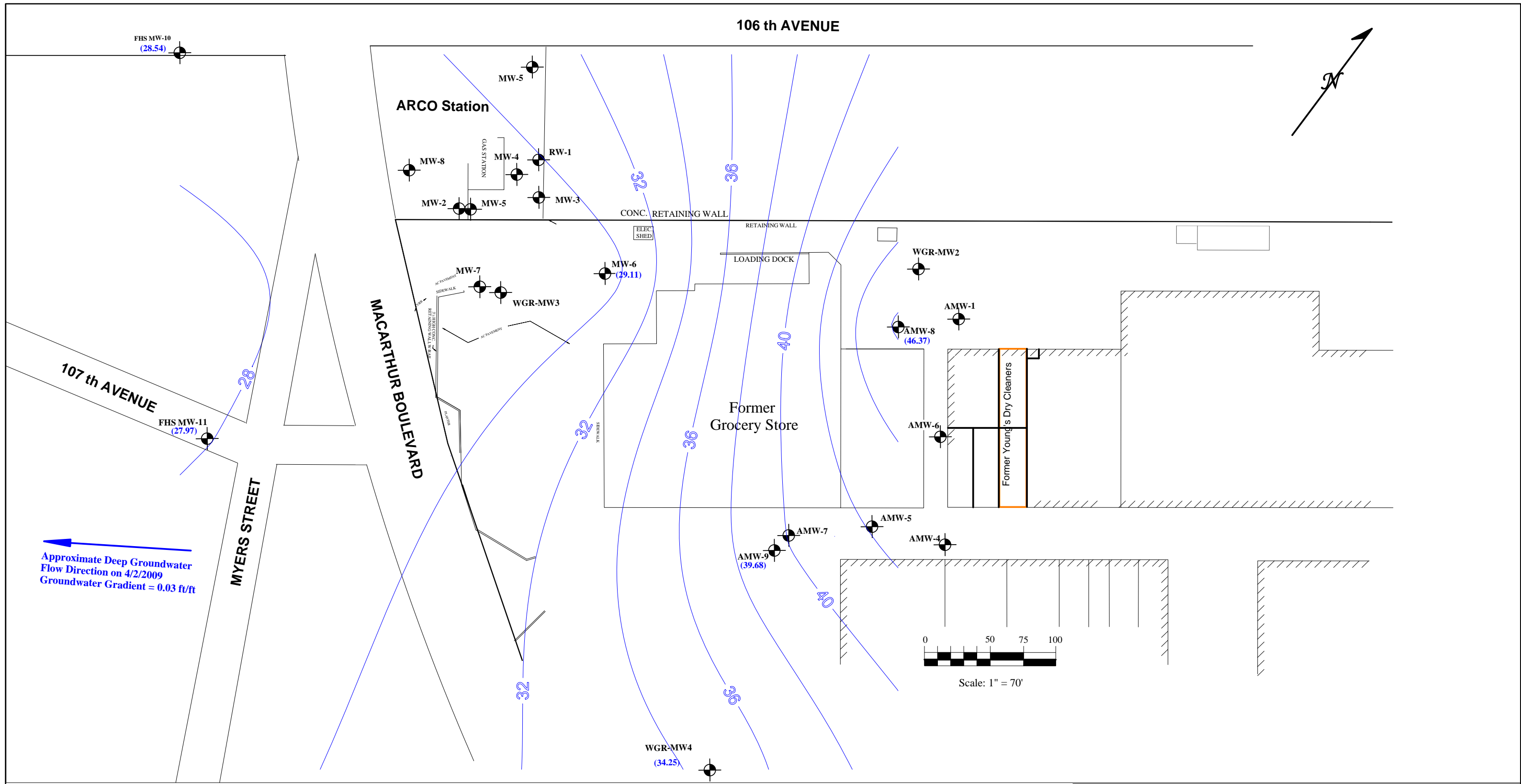
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2500 CAMINO DIABLO, WALNUT CREEK, CA

## Groundwater Elevation Map - Shallow Wells

10700 MACARTHUR BLVD.  
OAKLAND, CALIFORNIA

**FIGURE 3**  
PROJECT NO. 261829



**KEY**

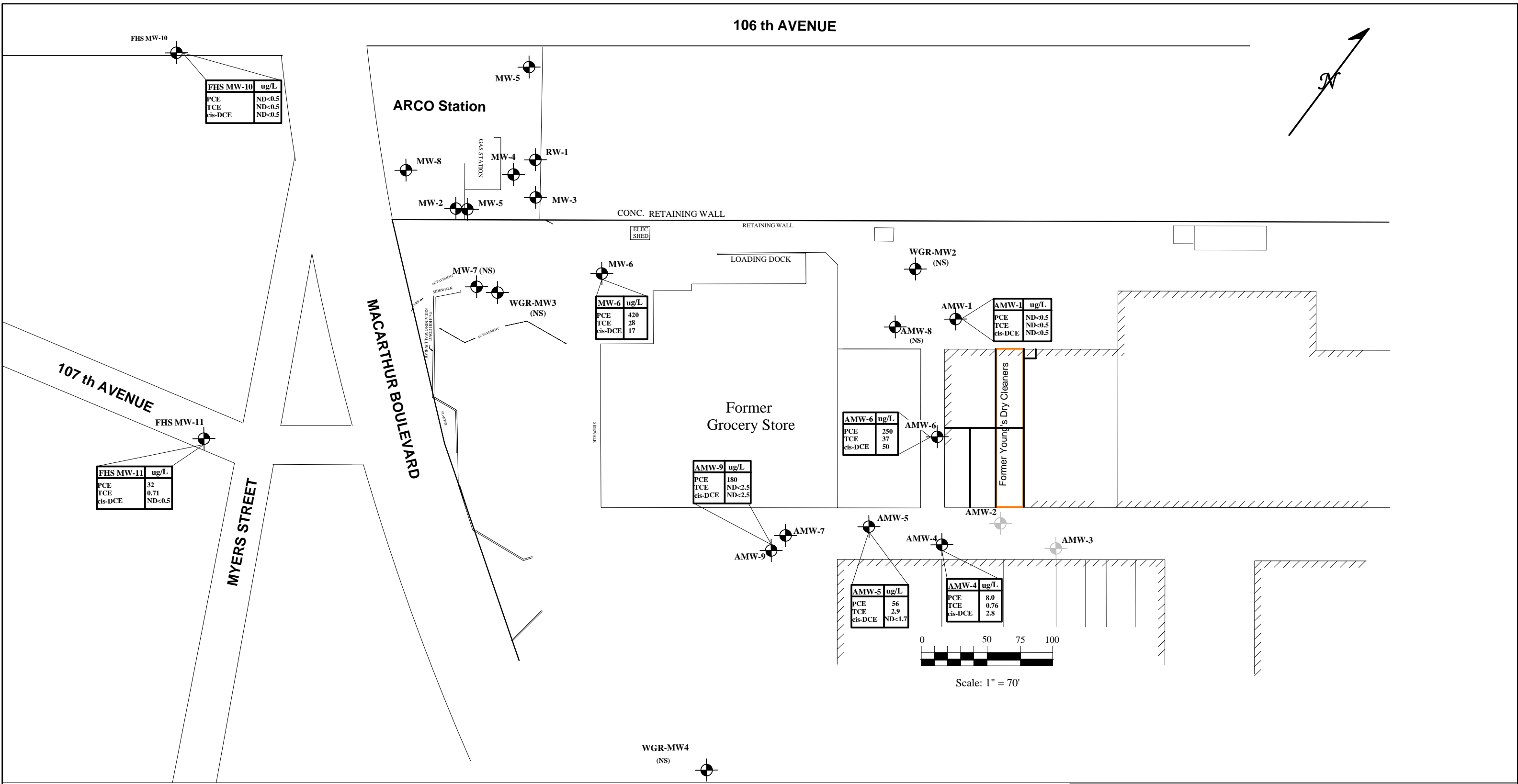
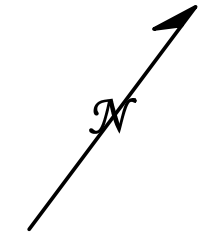
Groundwater Monitoring Well

MW4  
(49.91) = Groundwater Elevation (feet)

Groundwater Contour in 2 foot intervals

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2500 CAMINO DIABLO, WALNUT CREEK, CA	
<b>Groundwater Elevation Map - Deep Wells</b>	
10700 MACARTHUR BLVD. OAKLAND, CALIFORNIA	<b>FIGURE 4</b> PROJECT NO. 261829

106 th AVENUE



KEY



Groundwater Monitoring Well

PCE = tetrachloroethene  
 TCE = trichloroethene  
 cis-DCE = cis 1,2-Dichloroethene  
 ug/L = micrograms per liter (ppb)  
 NS = not sampled

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## Groundwater Analytical Data (4/2/09)

10700 MACARTHUR BLVD.  
OAKLAND, CALIFORNIA

**FIGURE 5**  
PROJECT NO. 261829

## **TABLES**

**Table 1**  
**Groundwater Level Data**  
**10700 MacArthur Blvd., Oakland, California**

Well ID (Aquifer zone)	Date	Screen Interval (ft bgs)	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (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
	10/2/2003		64.51	24.31	40.20
	10/17/2006		64.51	22.91	41.60
	5/3/2007		64.51	18.61	45.90
	10/17/2007		64.51	23.97	40.54
	4/1/2008		64.51	22.02	42.49
	10/2/2008		64.51	24.21	40.30
	<b>4/2/2009</b>		<b>64.51</b>	<b>22.49</b>	<b>42.02</b>
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
	10/2/2003		64.79	12.33	52.46
	10/17/2006		64.79	12.76	52.03
	5/3/2007		64.79	11.11	53.68
	10/17/2007		64.79	12.64	52.15
	4/1/2008		64.79	11.49	53.30
	10/2/2008		64.79	13.34	51.45
	<b>4/2/2009</b>		<b>64.79</b>	<b>12.21</b>	<b>52.58</b>
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
	10/2/2003		64.97	14.74	50.23
	10/17/2006		64.97	14.15	50.82
	5/3/2007		64.97	13.92	51.05
	10/17/2007		64.97	15.06	49.91
	4/1/2008		64.97	14.14	50.83
	10/2/2008		64.97	15.72	49.25
	<b>4/2/2009</b>		<b>64.97</b>	<b>14.62</b>	<b>50.35</b>
AMW-6 (Shallow)	1/29/1999	? - 25	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
	10/2/2003		65.10	14.74	50.36
	10/17/2006		65.10	11.46	53.64
	5/3/2007		65.10	13.04	52.06
	10/17/2007		65.10	13.87	51.23
	4/1/2008		65.10	12.64	52.46
	10/2/2008		65.10	14.54	50.56
	<b>4/2/2009</b>		<b>65.10</b>	<b>13.38</b>	<b>51.72</b>
AMW-7 (Shallow)	1/29/1999	Unknown	64.24	14.91	49.33
	5/5/1999		Well Covered during construction		
AMW-8 (Deep)	1/29/1999	? - 45	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
	10/2/2003		64.55	21.54	43.01
	10/17/2006		64.55	16.05	48.5
	5/3/2007		64.55	23.01	41.54
	10/17/2007		64.55	18.34	46.21
	4/1/2008		64.55	17.49	47.06
	10/2/2008		64.55	19.10	45.45
	<b>4/2/2009</b>		<b>64.55</b>	<b>18.18</b>	<b>46.37</b>



Table 1: Continued

Well ID (Aquifer zone)	Date	Screen Interval (ft bgs)	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (ft msl)
AMW-9 (Deep)	1/29/1999	7 - 55	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
	10/2/2003		63.48	23.80	39.68
	10/17/2006		63.48	23.07	40.41
	5/3/2007		63.48	23.17	40.31
	10/17/2007		63.48	24.97	38.51
	4/1/2008		63.48	22.97	40.51
	10/2/2008		63.48	25.65	37.83
	<b>4/2/2009</b>		<b>63.48</b>	<b>23.80</b>	<b>39.68</b>
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
	10/2/2003		63.18	25.13	38.05
	10/17/2006		63.18	23.91	39.27
	5/3/2007		63.18	24.11	39.07
	10/17/2007		63.18	NA	NA
	4/1/2008		63.18	22.83	40.35
	10/2/2008		63.18	25.53	37.65
			<b>4/2/2009</b>		<b>63.18</b>
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
	10/2/2003		58.34	22.22	36.12
	10/17/2006		58.34	21.85	36.49
	5/3/2007		58.34	18.37	39.97
	10/17/2007		58.34	NA	NA
	4/1/2008		58.34	18.74	39.60
	10/2/2008		58.34	23.62	34.72
			<b>4/2/2009</b>		<b>58.34</b>
WGR MW-4 (Deep)	1/29/1999	23-45	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
	10/2/2003		60.02	27.41	32.61
	10/17/2006		60.02	26.31	33.71
	5/3/2007		60.02	26.13	33.89
	10/17/2007		60.02	28.33	31.69
	4/1/2008		60.02	25.91	34.11
	10/2/2008		60.02	28.85	31.17
	<b>4/2/2009</b>		<b>60.02</b>	<b>25.77</b>	<b>34.25</b>
FHS MW-10 (Deep)	1/29/1999	42-52	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
	9/27/2003		52.34	25.86	26.48
	3/25/2003		52.34	23.20	29.14
	10/6/2003		52.34	26.39	25.95
	10/17/2006		52.34	24.35	27.99
	5/3/2007		52.34	23.97	28.37
	10/17/2007		52.34	27.71	24.63
	4/1/2008		52.34	23.79	28.55
	10/2/2008		52.34	28.40	23.94
	<b>4/2/2009</b>		<b>52.34</b>	<b>23.80</b>	<b>28.54</b>

**Table 1: Continued**

Well ID (Aquifer zone)	Date	Screen Interval (ft bgs)	Well Elevation (ft msl)	Depth to Water (ft)	Groundwater Elevation (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		
	10/17/2006		54.06	26.54	27.52		
	5/3/2007		54.06	26.25	27.81		
	10/17/2007		54.06	29.88	24.18		
	4/1/2008		54.06	26.02	28.04		
	10/2/2008		54.06	30.61	23.45		
	<b>4/2/2009</b>		<b>54.06</b>	<b>26.09</b>	<b>27.97</b>		
	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		
10/17/2006		61.78	32.58		29.20		
5/3/2007		61.78	32.54		29.24		
10/17/2007		61.78	36.20		25.58		
4/1/2008		61.78	32.39		29.39		
10/2/2008		61.78	36.86		24.92		
<b>4/2/2009</b>		<b>61.78</b>	<b>32.67</b>		<b>29.11</b>		
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		
	10/17/2006		58.64	22.19	36.45		
	5/3/2007		58.64	19.52	39.12		
	10/17/2007		58.64	21.49	37.15		
	4/1/2008		58.64	19.73	38.91		
	10/2/2008		58.64	24.64	34.00		
<b>4/2/2009</b>	<b>58.64</b>	<b>18.60</b>	<b>40.04</b>				

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**  
**10700 MacArthur Blvd., Oakland, California**

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
	10/2/03	AEI	NS	NS	NS	NS	NS
	10/17/06	AEI	ND<0.5	ND<0.5	2.2	ND<0.5	ND<RL
	5/2/07	AEI	ND<0.5	ND<0.5	ND<0.5	0.69	ND<RL
	10/17/07	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	4/1/08	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	10/2/08	AEI	ND<0.5	ND<0.5	0.60	ND<0.5	ND<RL
<b>4/2/09</b>	<b>AEI</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;RL</b>	
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
	10/2/03	AEI	2.8	ND<0.5	50	2.8	ND<0.5
	10/17/06	AEI	9.9	ND<0.5	6.5	ND<0.5	ND<RL
	5/3/07	AEI	2.7	ND<0.5	5.1	1.2	ND<RL**
10/17/07	AEI	4.0	ND<0.5	6.2	ND<0.5	ND<RL	
4/1/08	AEI	3.3	ND<0.5	5.8	2.6	0.85**	
10/2/08	AEI	11.0	ND<1.0	34	2.9	ND<RL <sup>3</sup>	
<b>4/2/09</b>	<b>AEI</b>	<b>2.8</b>	<b>ND&lt;0.5</b>	<b>8.0</b>	<b>0.76</b>	<b>ND&lt;RL<sup>4</sup></b>	
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
	10/2/03	AEI	ND<0.5	ND<0.5	20	0.58	ND<0.5
	10/17/06	AEI	0.68	ND<0.5	22	0.88	ND<RL
	5/3/07	AEI	0.91	ND<0.5	42	2.0	ND<RL
10/17/07	AEI	1.2	ND<0.5	42	2.0	ND<RL	
4/1/08	AEI	1.7	ND<0.5	50	2.8	ND<RL	
10/2/08	AEI	1.5	ND<1.0	46	2.3	ND<RL	
<b>4/2/09</b>	<b>AEI</b>	<b>ND&lt;1.7</b>	<b>ND&lt;1.7</b>	<b>56</b>	<b>2.9</b>	<b>ND&lt;RL</b>	

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-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
	10/2/2003	AEI	66	13	440	60	ND<10
	10/17/2006	AEI	32	4.9	98	14	ND<RL
	5/3/2007	AEI	32	ND<5.0	120	22	ND<RL
	10/17/2007	AEI	48	8.4	140	27	ND<RL <sup>2</sup>
	4/1/2008	AEI	39	6.2	140	24	ND<RL
10/2/2008	AEI	43	7.1	130	26	ND<RL	
<b>4/2/2009</b>	<b>AEI</b>	<b>50</b>	<b>8.1</b>	<b>250</b>	<b>37</b>	<b>ND&lt;RL</b>	
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
	10/2/03	AEI	NS	NS	NS	NS	NS
	10/17/06	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	5/3/07	AEI	NS	NS	NS	NS	NS
	10/17/07	AEI	ND<0.5	ND<0.5	1.6	ND<0.5	ND<RL
	4/1/08	AEI	NS	NS	NS	NS	NS
10/2/08	AEI	ND<0.5	ND<0.5	1.3	ND<0.5	ND<RL	
<b>4/2/09</b>	<b>AEI</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	
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
	10/2/03	AEI	4.8	<0.5	36	1.1	ND<0.5
	10/17/06	AEI	ND<1.7	ND<1.7	73	ND<1.7	ND<RL
	5/3/07	AEI	ND<2.5	ND<2.5	86	ND<2.5	ND<RL
	10/17/07	AEI	ND<2.5	ND<2.5	130	ND<2.5	ND<RL
	4/1/08	AEI	ND<2.5	ND<2.5	130	ND<2.5	ND<RL
10/2/08	AEI	ND<2.5	ND<2.5	110	ND<2.5	ND<RL	
<b>4/2/09</b>	<b>AEI</b>	<b>ND&lt;2.5</b>	<b>ND&lt;2.5</b>	<b>180</b>	<b>ND&lt;2.5</b>	<b>ND&lt;RL</b>	

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	
<b>FHS MW-10</b> (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	
	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**	
	10/17/06	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL	
	5/3/2007 <sup>1</sup>	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL	
	10/17/07	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL	
	4/1/08	AEI	ND<0.5	ND<0.5	0.88	ND<0.5	ND<RL	
	10/2/08	AEI	ND<0.5	ND<0.5	3.4	ND<0.5	1.4**	
	<b>4/2/09</b>	<b>AEI</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;RL</b>	
	<b>FHS MW-11</b> (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****	
10/2/03				Well Inaccessible				
10/17/06		AEI	ND<0.5	ND<0.5	20	ND<0.5	ND<RL	
5/3/2007 <sup>1</sup>		AEI	ND<0.5	ND<0.5	25	1.1	ND<RL	
10/17/07		AEI	ND<0.5	ND<0.5	31	0.71	ND<RL	
4/1/08		AEI	ND<0.5	ND<0.5	26	0.61	ND<RL	
10/2/08		AEI	ND<0.5	ND<0.5	31	0.74	ND<RL	
<b>4/2/09</b>	<b>AEI</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>32</b>	<b>0.71</b>	<b>ND&lt;RL</b>		
<b>MW-6</b> (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		
10/2/03	AEI	13	ND<5.0	340	21	ND<5.0		
10/17/06	AEI	16	ND<5.0	320	18	ND<RL		
5/3/07	AEI	0.92	ND<0.5	39	2.1	ND<RL		
10/17/07	AEI	10	ND<5.0	310	18	ND<RL		
4/1/08	AEI	6.8	ND<1.7	76	9.2	ND<RL		
10/2/08	AEI	21	ND<12	380	33	ND<RL		
<b>4/2/09</b>	<b>AEI</b>	<b>17</b>	<b>ND&lt;10</b>	<b>420</b>	<b>28</b>	<b>ND&lt;RL</b>		



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
<b>MW-7</b> <b>(shallow)</b>	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
	10/2/03	AEI	NS	NS	NS	NS	NS
	10/17/06	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL*****
	5/3/07	AEI	NS	NS	NS	NS	NS
	10/17/07	AEI	ND<10	ND<10	ND<10	ND<10	ND<RL
	4/1/08	AEI	NS	NS	NS	NS	NS
10/2/08	AEI	ND<1.0	ND<1.0	2.2	ND<1.0	ND<RL	
4/2/09	AEI	NS	NS	NS	NS	NS	
<b>WGR MW-2</b> <b>(Shallow)</b>	10/17/06	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	5/3/07	AEI	NS	NS	NS	NS	NS
	10/17/07	AEI	NS	NS	NS	NS	NS
	4/1/08	AEI	NS	NS	NS	NS	NS
	10/2/08	AEI	NS	NS	NS	NS	NS
4/2/09	AEI	NS	NS	NS	NS	NS	
<b>WGR MW-3</b> <b>(Shallow)</b>	10/17/06	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	5/3/07	AEI	NS	NS	NS	NS	NS
	10/17/07	AEI	NS	NS	NS	NS	NS
	4/1/08	AEI	NS	NS	NS	NS	NS
	10/2/08	AEI	NS	NS	NS	NS	NS
4/2/09	AEI	NS	NS	NS	NS	NS	
<b>WGR MW-4</b> <b>(deep)</b>	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
	10/2/03	AEI	NS	NS	NS	NS	NS
	10/17/06	AEI	ND<0.5	ND<0.5	0.62	ND<0.5	ND<RL
	5/3/07	AEI	NS	NS	NS	NS	NS
	10/17/07	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	4/1/08	AEI	NS	NS	NS	NS	NS
	10/2/08	AEI	ND<0.5	ND<0.5	0.55	ND<0.5	ND<RL
4/2/09	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 or 8260

\*\* Chloroform (trichloromethane)

NS = Well not sampled

\*\*\* Dibromochloromethane

NR = Not Reported

\*\*\*\* Methylene Chloride

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

\*\*\*\*\* bromodichloromethane

Tetrachloroethene (PCE)

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

Trichloroethene (TCE)

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

<sup>1</sup> = Reported by laboratory without letters FHS as prefix

<sup>2</sup> = Vinyl Chloride detected at a concentration of 1.9 ug/L

<sup>3</sup> = Vinyl Chloride detected at a concentration of 2.0 ug/L

<sup>4</sup> = Vinyl Chloride detected at a concentration of 0.66 ug/L

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

RL = Reporting Limit

**APPENDIX A**

**GROUNDWATER MONITORING WELL  
FIELD SAMPLING FORMS**

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: AMW-1**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	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)	64.51		
Depth of Well	45.00		
Depth to Water (from top of casing)	22.49		
Water Elevation (feet above msl)	42.02		
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)	<b>10.8</b>		
Actual Volume Purged (gallons)	11.0		
Appearance of Purge Water	Initially light brown, clearing quickly		
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3-VOAs				
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments	
9:10	1	18.19	7.35	1365	1.53	-39.6	Clear	
	2	18.78	7.32	1367	1.08	-61.2	Clear	
	3	18.88	7.33	1425	0.93	-69.2	Clear	
	4	18.99	7.33	1475	0.63	-84.9	Clear	
	5	19.01	7.36	1420	0.49	-103.9	Clear	
	7	19.01	7.41	1363	0.38	-121.2	Clear	
	9	18.96	7.47	1476	2.93	-46.7	Clear	
	9:44	11	19.05	7.40	1480	4.17	-37.7	Clear

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

Well dry at 7 gallons. Recharged at 9:39.

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: AMW-4**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	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)	64.79		
Depth of Well	25.00		
Depth to Water (from top of casing)	12.21		
Water Elevation (feet above msl)	52.58		
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)	7.0		
Appearance of Purge Water	Initially dark, clearing quickly		
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments
11:46	1	19.23	7.59	1256	0.33	-125.5	Clear
	2	19.28	7.54	1207	0.29	-137.9	Clear
	3	19.30	7.49	1229	0.24	-145.9	Clear
	4	19.34	7.46	1262	0.18	-155.3	Clear
	5	19.35	7.45	1269	0.16	-159.4	Clear
	6	19.36	7.44	1273	0.19	-165.0	Clear
11:52	7	19.37	7.43	1276	0.24	-169.3	Clear

**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:	4/2/2009
Job Number:	261829	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)	64.97		
Depth of Well	30.00		
Depth to Water (from top of casing)	14.62		
Water Elevation (feet above msl)	50.35		
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)	7.4		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Initially brown, clearing quickly		
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
11:28	1	19.32	7.57	1405	0.66	-75.9	Clear
	2	19.17	7.48	1401	0.45	-92.7	Clear
	3	18.86	7.41	1389	0.58	-99.5	Clear
	4	19.06	7.37	1398	0.50	-100.1	Clear
	5	19.10	7.36	1401	0.28	-98.1	Clear
	6	19.23	7.34	1408	0.30	-106.0	Clear
	7	19.28	7.33	1415	0.23	-113.5	Clear
11:35	8	19.35	7.32	1433	0.19	-124.6	Clear

**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:	4/2/2009
Job Number:	261829	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)	65.10		
Depth of Well	25.00		
Depth to Water (from top of casing)	13.38		
Water Elevation (feet above msl)	51.72		
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)	5.6		
Actual Volume Purged (gallons)	6.0		
Appearance of Purge Water	Clear		
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments
12:05	1	18.40	7.46	1418	0.73	-88.5	Clear
	2	18.28	7.41	1412	0.45	-108.9	Clear
	3	18.26	7.39	1417	0.38	-119.9	Clear
	4	18.40	7.38	1430	0.47	-122.9	Clear
	5	18.46	7.38	1434	0.58	-120.0	Clear
12:10	6	18.57	7.37	1429	0.23	-131.3	Clear

**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:	4/2/2009
Job Number:	261829	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)	64.55		
Depth of Well	45.00		
Depth to Water (from top of casing)	18.18		
Water Elevation (feet above msl)	46.37		
Well Volumes Purged	NA		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	Not sampled		
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 ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments

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

Well not sampled in accordance with sampling schedule

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: AMW-9**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	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)	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)	<b>14.6</b>		
Actual Volume Purged (gallons)	15.0		
Appearance of Purge Water	Initially brown, clearing quickly		
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments
10:56	1	20.23	7.39	1825	1.85	-24.8	Clear
	2	20.42	7.32	1833	2.38	-32.0	Clear
	3	20.55	7.30	1832	2.40	-27.0	Clear
	4	20.69	7.30	1786	2.75	-28.2	Clear
	5	20.78	7.42	1100	3.41	-32.4	Clear
	10	20.72	7.38	811	4.56	-32.5	Clear
11:14	15	20.62	7.21	1826	3.57	-54.4	Clear

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


**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: WGR MW-2**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	Name of Sampler:	A. Nieto
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)	23.23		
Water Elevation (feet above msl)	39.95		
Well Volumes Purged	NA		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	Not sampled		
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 in accordance with sampling schedule

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: WGR MW-3**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	Name of Sampler:	A. Nieto
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)	17.89		
Water Elevation (feet above msl)	40.45		
Well Volumes Purged	NA		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	Not sampled		
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 ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments

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

Well not sampled in accordance with sampling schedule

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: WGR MW-4**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	Name of Sampler:	A. Nieto
Project Address:	10700 MacArthur Blvd., Oakland		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	4		
Wellhead Condition	OK <span style="float: right;">▼</span>		
Elevation of Top of Casing (feet above msl)	60.02		
Depth of Well	44.96		
Depth to Water (from top of casing)	25.77		
Water Elevation (feet above msl)	34.25		
Well Volumes Purged	NA		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	<b>NA</b>		
Actual Volume Purged (gallons)	Not Sampled		
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 in accordance with sampling schedule

**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: FHS MW-10**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	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)	23.80		
Water Elevation (feet above msl)	28.54		
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)	<b>13.5</b>		
Actual Volume Purged (gallons)	14.0		
Appearance of Purge Water	Initially light brown, clearing at 2.5 gallons		
Free Product Present?	n/a	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments
7:36	1	18.25	6.90	521	1.83	-57.5	Light brown
	2	18.77	6.85	531	1.08	-66.3	Light brown
	3	18.86	6.87	546	1.03	-101.5	Clear
	4	18.84	6.88	549	0.79	-105.1	Clear
	5	18.89	6.89	550	0.75	-105.6	Clear
	6	18.91	6.89	550	0.71	-106.0	Clear
	9	18.93	6.89	550	0.72	-105.6	Clear
	12	18.93	6.89	550	0.73	-105.9	Clear
7:45	14	18.93	6.89	550	0.72	-106.4	Clear

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


**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: FHS MW-11**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	Name of Sampler:	A. Nieto
Project Address:	10700 MacArthur Blvd., Oakland		

**MONITORING WELL DATA**

Well Casing Diameter (2"/4"/6")	2		
Wellhead Condition	OK <span style="float: right;">▼</span>		
Elevation of Top of Casing (feet above msl)	54.06		
Depth of Well	64.07		
Depth to Water (from top of casing)	26.09		
Water Elevation (feet above msl)	27.97		
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)	<b>18.2</b>		
Actual Volume Purged (gallons)	19.0		
Appearance of Purge Water	Clear		
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity (μ sec/cm)	DO (mg/L)	ORP (meV)	Comments
8:15	1	18.91	8.65	698	2.73	-46.8	Clear
	2	19.13	8.01	714	1.43	-44.2	Clear
	3	19.20	7.39	720	0.81	-54.4	Clear
	4	19.22	7.27	723	0.72	-57.7	Clear
	5	19.23	7.23	724	0.71	-58.3	Clear
	8	19.26	7.09	725	0.79	-59.7	Clear
	11	19.28	7.05	725	0.74	-60.6	Clear
8:30	14	19.28	7.02	723	0.69	-60.9	Clear
	17	19.28	7.01	722	0.69	-62.4	Clear
	19	19.28	7.00	722	0.66	-64.6	Clear

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

--



**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: MW-6**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	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)	61.78		
Depth of Well	48.69		
Depth to Water (from top of casing)	32.67		
Water Elevation (feet above msl)	29.11		
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)	7.7		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Initially brown, clear after 2.5 gallons		
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 VOAs			
Time	Vol Removed (gal)	Temperature (deg C)	pH	Conductivity ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments
9:59	1	18.09	7.35	1346	0.41	-76.8	Light brown
	2	18.25	7.29	1343	0.21	-98.5	Light brown
	3	18.28	7.27	1341	0.18	-106.0	Clear
	4	18.30	7.26	1340	0.16	-113.2	Clear
	5	18.31	7.26	1340	0.16	-120.1	Clear
	6	18.32	7.25	1339	0.16	-124.9	Clear
	7	18.33	7.25	1338	0.19	-127.5	Clear
10:08	8	18.34	7.24	1337	0.24	-129.1	Clear

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


**AEI CONSULTANTS**  
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

**Monitoring Well Number: MW-7**

Project Name:	Foothill Square	Date of Sampling:	4/2/2009
Job Number:	261829	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)	58.64		
Depth of Well	38.00		
Depth to Water (from top of casing)	18.60		
Water Elevation (feet above msl)	40.04		
Well Volumes Purged	NA		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	NA		
Actual Volume Purged (gallons)	Not sampled		
Appearance of Purge Water			
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				3 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.)**

Well not sampled in accordance with sampling schedule

**APPENDIX B**

**LABORATORY ANALYTICAL REPORT WITH CHAIN OF  
CUSTODY DOCUMENTATION**



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261829; Foothill Square	Date Sampled: 04/02/09
		Date Received: 04/02/09
	Client Contact: Jeremy Smith	Date Reported: 04/09/09
	Client P.O.:	Date Completed: 04/09/09

**WorkOrder: 0904081**

April 09, 2009

Dear Jeremy:

Enclosed within are:

- 1) The results of the **8** analyzed samples from your project: **#261829; Foothill Square,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice 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 or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.

0904081

**McCAMPBELL ANALYTICAL INC.**

1534 Willow Pass Road  
Pittsburg, CA 94565

Telephone: (925) 252-9262

Fax: (925) 252-9269

**CHAIN OF CUSTODY RECORD**

TURN AROUND TIME

RUSH 24 HR  48 HR  72 HR  5 DAY

EDF Required?  Yes  No

Report To: Jeremy Smith Bill To: same P.O. #WC081488

Company: AEI Consultants

2500 Camino Diablo

Walnut Creek, CA 94597

E-Mail: jasmith@aeiconsultants.com

Tele: (925) 746-6000

Fax: (925) 746-6099

Project #: 261829

Project Name: Foothill Square

Project Location: 10700 MacArthur Blvd. Oakland, CA

Sampler Signature: *[Signature]*

Analysis Request

Other

Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED							
		Date	Time			Water	Soil	Air	Sludge	Other	Ice	HCl	HNO <sub>3</sub>	Other				
AMW-1		4/2/09	6:15	3	VOAL	X					X	X						
AMW-4			13:15			X					X	X						
AMW-5			13:05			X					X	X						
AMW-6			13:25			X					X	X						
AMW-9			13:00			X					X	X						
MW-6			10:20			X					X	X						
FHS MW-10			7:55			X					X	X						
FHS MW-11			08:45			X					X	X						

BTEX & TPH as Gas (602/8020 + 8015)/MTBE  
 TPH as Diesel (8015) w/silica Gel Cleanup  
 Total Petroleum Oil & Grease (5520 E&F/B&F)  
 Total Petroleum Hydrocarbons (418.1)  
 HVOCs EPA 8260  
 BTEX ONLY (EPA 602 / 8020)  
 EPA 608 / 8080  
 EPA 608 / 8080 PCB's ONLY  
 EPA 624 / 8260  
 EPA 625 / 8270  
 PAH's / PNA's by EPA 625 / 8270 / 8310  
 CAM-17 Metals  
 LUFT 5 Metals  
 Lead (7240/7421/239.2/6010)  
 RCI

④  
③  
②  
①  
+

Relinquished By: <i>[Signature]</i>	Date: 4/6/09	Time: 7:00	Received By: <i>[Signature]</i>
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/TEMP YES 12°C  
 GOOD CONDITION  
 HEAD SPACE ABSENT  
 DECHLORINATED IN LAB *[initials]*

PRESERVATION APPROPRIATE CONTAINERS  
 PRESERVED IN LAB *[initials]*

VOAS O&G METALS OTHER

**McC Campbell Analytical, Inc.**

1534 Willow Pass Rd  
 Pittsburg, CA 94565-1701  
 (925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

**WorkOrder: 0904081**

**ClientCode: AEL**

WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Report to: Jeremy Smith    Email: jasmith@aeiconsultants.com    Bill to: Denise Mockel    Requested TAT: **5 days**  
 AEI Consultants    cc: AEI Consultants    AEI Consultants  
 2500 Camino Diablo, Ste. #200    PO: 2500 Camino Diablo, Ste. #200    **Date Received: 04/02/2009**  
 Walnut Creek, CA 94597    ProjectNo: #261829; Foothill Square    Walnut Creek, CA 94597    **Date Printed: 04/02/2009**  
 (925) 283-6000    FAX (925) 944-2895    dmockel@aeiconsultants.com

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0904081-001	AMW-1	Water	4/2/2009 10:15	<input type="checkbox"/>	A	A											
0904081-002	AMW-4	Water	4/2/2009 13:15	<input type="checkbox"/>	A												
0904081-003	AMW-5	Water	4/2/2009 13:05	<input type="checkbox"/>	A												
0904081-004	AMW-6	Water	4/2/2009 13:25	<input type="checkbox"/>	A												
0904081-005	AMW-9	Water	4/2/2009 13:00	<input type="checkbox"/>	A												
0904081-006	MW-6	Water	4/2/2009 10:20	<input type="checkbox"/>	A												
0904081-007	FHS MW-10	Water	4/2/2009 7:55	<input type="checkbox"/>	A												
0904081-008	FHS MW-11	Water	4/2/2009 8:45	<input type="checkbox"/>	A												

**Test Legend:**

1	8010BMS_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

**Prepared by: Samantha Arbuckle**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
 Hazardous samples will be returned to client or disposed of at client expense.



### Sample Receipt Checklist

Client Name: **AEI Consultants** Date and Time Received: **04/02/09 8:17:42 PM**  
 Project Name: **#261829; Foothill Square** Checklist completed and reviewed by: **Samantha Arbuckle**  
 WorkOrder N°: **0904081** Matrix Water Carrier: Client Drop-In

#### Chain of Custody (COC) Information

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

#### Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 1.2°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

-----

Client contacted: Date contacted: Contacted by:

Comments:



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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261829; Foothill Square	Date Sampled: 04/02/09
	Client Contact: Jeremy Smith	Date Received: 04/02/09
	Client P.O.:	Date Extracted: 04/08/09
		Date Analyzed: 04/08/09

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0904081

Lab ID	0904081-001A	0904081-002A	0904081-003A	0904081-004A	Reporting Limit for DF = 1	
Client ID	AMW-1	AMW-4	AMW-5	AMW-6	S	W
Matrix	W	W	W	W		
DF	1	1	3.3	10		

Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Bromoform	ND	ND	ND<1.7	ND<5.0	NA	0.5
Bromomethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Carbon Tetrachloride	ND	ND	ND<1.7	ND<5.0	NA	0.5
Chlorobenzene	ND	ND	ND<1.7	ND<5.0	NA	0.5
Chloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Chloroform	ND	ND	ND<1.7	ND<5.0	NA	0.5
Chloromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Dibromochloromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,2-Dibromoethane (EDB)	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,2-Dichlorobenzene	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,3-Dichlorobenzene	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,4-Dichlorobenzene	ND	ND	ND<1.7	ND<5.0	NA	0.5
Dichlorodifluoromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,1-Dichloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,1-Dichloroethene	ND	ND	ND<1.7	ND<5.0	NA	0.5
cis-1,2-Dichloroethene	ND	2.8	ND<1.7	50	NA	0.5
trans-1,2-Dichloroethene	ND	ND	ND<1.7	8.1	NA	0.5
1,2-Dichloropropane	ND	ND	ND<1.7	ND<5.0	NA	0.5
cis-1,3-Dichloropropene	ND	ND	ND<1.7	ND<5.0	NA	0.5
trans-1,3-Dichloropropene	ND	ND	ND<1.7	ND<5.0	NA	0.5
Freon 113	ND	ND	ND<33	ND<100	NA	10
Methylene chloride	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,1,1,2-Tetrachloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,1,1,2,2-Tetrachloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Tetrachloroethene	ND	8.0	56	250	NA	0.5
1,1,1-Trichloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
1,1,2-Trichloroethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Trichloroethene	ND	0.76	2.9	37	NA	0.5
Trichlorofluoromethane	ND	ND	ND<1.7	ND<5.0	NA	0.5
Vinyl Chloride	ND	0.66	ND<1.7	ND<5.0	NA	0.5

#### Surrogate Recoveries (%)

%SS1:	75	75	79	80	
%SS2:	109	109	109	108	
%SS3:	98	97	100	98	

#### Comments

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

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.





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AEI Consultants  2500 Camino Diablo, Ste. #200  Walnut Creek, CA 94597	Client Project ID: #261829; Foothill Square	Date Sampled: 04/02/09
	Client Contact: Jeremy Smith	Date Received: 04/02/09
	Client P.O.:	Date Extracted: 04/08/09
		Date Analyzed: 04/08/09

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0904081

Lab ID	0904081-005A	0904081-006A	0904081-007A	0904081-008A	Reporting Limit for DF = 1	
Client ID	AMW-9	MW-6	FHS MW-10	FHS MW-11	S	W
Matrix	W	W	W	W		
DF	5	20	1	1		

Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND<2.5	ND<10	ND	ND	NA	0.5
Bromoform	ND<2.5	ND<10	ND	ND	NA	0.5
Bromomethane	ND<2.5	ND<10	ND	ND	NA	0.5
Carbon Tetrachloride	ND<2.5	ND<10	ND	ND	NA	0.5
Chlorobenzene	ND<2.5	ND<10	ND	ND	NA	0.5
Chloroethane	ND<2.5	ND<10	ND	ND	NA	0.5
Chloroform	ND<2.5	ND<10	ND	ND	NA	0.5
Chloromethane	ND<2.5	ND<10	ND	ND	NA	0.5
Dibromochloromethane	ND<2.5	ND<10	ND	ND	NA	0.5
1,2-Dibromoethane (EDB)	ND<2.5	ND<10	ND	ND	NA	0.5
1,2-Dichlorobenzene	ND<2.5	ND<10	ND	ND	NA	0.5
1,3-Dichlorobenzene	ND<2.5	ND<10	ND	ND	NA	0.5
1,4-Dichlorobenzene	ND<2.5	ND<10	ND	ND	NA	0.5
Dichlorodifluoromethane	ND<2.5	ND<10	ND	ND	NA	0.5
1,1-Dichloroethane	ND<2.5	ND<10	ND	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<2.5	ND<10	ND	ND	NA	0.5
1,1-Dichloroethene	ND<2.5	ND<10	ND	ND	NA	0.5
cis-1,2-Dichloroethene	ND<2.5	17	ND	ND	NA	0.5
trans-1,2-Dichloroethene	ND<2.5	ND<10	ND	ND	NA	0.5
1,2-Dichloropropane	ND<2.5	ND<10	ND	ND	NA	0.5
cis-1,3-Dichloropropene	ND<2.5	ND<10	ND	ND	NA	0.5
trans-1,3-Dichloropropene	ND<2.5	ND<10	ND	ND	NA	0.5
Freon 113	ND<50	ND<200	ND	ND	NA	10
Methylene chloride	ND<2.5	ND<10	ND	ND	NA	0.5
1,1,1,2-Tetrachloroethane	ND<2.5	ND<10	ND	ND	NA	0.5
1,1,2,2-Tetrachloroethane	ND<2.5	ND<10	ND	ND	NA	0.5
Tetrachloroethene	180	420	ND	32	NA	0.5
1,1,1-Trichloroethane	ND<2.5	ND<10	ND	ND	NA	0.5
1,1,2-Trichloroethane	ND<2.5	ND<10	ND	ND	NA	0.5
Trichloroethene	ND<2.5	28	ND	0.71	NA	0.5
Trichlorofluoromethane	ND<2.5	ND<10	ND	ND	NA	0.5
Vinyl Chloride	ND<2.5	ND<10	ND	ND	NA	0.5

### Surrogate Recoveries (%)

%SS1:	74	79	73	75	
%SS2:	91	108	91	110	
%SS3:	72	98	73	96	

### Comments

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

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.



**QC SUMMARY REPORT FOR SW8260B**

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 42451

WorkOrder 0904081

Analyte	EPA Method SW8260B		Extraction SW5030B						Spiked Sample ID: 0904081-001A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Chlorobenzene	ND	10	112	110	1.86	104	106	2.30	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	116	117	1.35	106	107	1.44	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	102	104	1.98	100	103	2.54	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	94.5	92.5	2.10	88.8	90.4	1.75	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	129	127	1.66	122	123	1.40	70 - 130	30	70 - 130	30
%SS1:	75	25	75	78	4.81	78	78	0	70 - 130	30	70 - 130	30
%SS2:	109	25	108	108	0	106	106	0	70 - 130	30	70 - 130	30
%SS3:	98	2.5	96	97	1.54	96	96	0	70 - 130	30	70 - 130	30

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

BATCH 42451 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0904081-001A	04/02/09 10:15 AM	04/08/09	04/08/09 4:50 PM	0904081-002A	04/02/09 1:15 PM	04/08/09	04/08/09 5:28 PM
0904081-003A	04/02/09 1:05 PM	04/08/09	04/08/09 10:35 PM	0904081-004A	04/02/09 1:25 PM	04/08/09	04/08/09 11:12 PM
0904081-005A	04/02/09 1:00 PM	04/08/09	04/08/09 5:30 PM	0904081-006A	04/02/09 10:20 AM	04/08/09	04/08/09 11:50 PM
0904081-007A	04/02/09 7:55 AM	04/08/09	04/08/09 6:55 PM	0904081-008A	04/02/09 8:45 AM	04/08/09	04/08/09 6:06 PM

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

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

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

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 freon 113 may occasionally appear in the method blank at low levels.