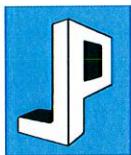


**RECEIVED**

By Alameda County Environmental Health at 3:03 pm, May 19, 2014



JAY-PHARES CORPORATION

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[www.jayphares.com](http://www.jayphares.com)

May 16, 2014

Mr. Jerry Wickham  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

**Subject:** Perjury Statement and Report Transmittal  
Groundwater Monitoring Report – 1<sup>st</sup> Semester 2014  
10700 MacArthur Blvd.  
Oakland, California  
AEI Project # 261829  
Toxics Case No. RO0002580

Dear Mr. Wickham:

I declare under penalty of perjury, that the information and/or recommendations contained in the attached report for the above-referenced site are true and correct to the best of my knowledge.

If you have any questions or need additional information, please do not hesitate to call me at (510) 562-9500, or Mr. Peter McIntyre at AEI Consultants, (925) 746-6004.

Sincerely,

MACARTHUR BOULEVARD ASSOCIATES  
(a California limited partnership)

BY: JAY-PHARES CORPORATION  
(Its Management Agent)

By:  
John Jay, Executive Vice President

cc: Mr. Peter McIntyre, AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597



May 15, 2014

## GROUNDWATER MONITORING REPORT- 1st SEMESTER 2014

**Property Identification:**

10700 MacArthur Boulevard  
Oakland, California 94605

AEI Project No. 261829

Toxics Case No. RO0002580

**Prepared for:**

Jay-Phares Corporation  
Attn: Mr. John Jay  
10700 MacArthur Blvd., Suite 200  
Oakland, CA 94605

**Prepared by:**

AEI Consultants  
2500 Camino Diablo  
Walnut Creek, CA 94597  
(925) 746-6000

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National Presence

Regional Focus

Local Solutions



May 15, 2014

Jay-Phares Corporation  
Attn: Mr. John Jay  
10700 MacArthur Blvd., Suite 200  
Oakland, CA 94605

**Subject:** **Groundwater Monitoring Report – 1<sup>st</sup> Semester, 2014**  
10700 MacArthur Boulevard  
Oakland, California 94605  
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 16, 2014.

## 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 Young's 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 contaminant delineation for the site. An approval for pilot study site

mitigation activities has been obtained from the ACHCSA, and the pilot study activities are currently ongoing. 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.

### **Summary of Monitoring Activities**

On April 16, 2014, AEI gauged the groundwater levels in each of the accessible active groundwater monitoring wells at the site (AMW-1, AMW-6R, AMW-8, AMW-9, WGR MW-2, FHS MW-10, and FHS MW-11) and groundwater samples were collected from five of the wells (AMW-1, AMW-6R, AMW-9, FHS MW-10, and FHS MW-11) in accordance with the approved sampling schedule. All accessible 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 to be sampled were then purged of at least three well volumes either using a battery powered submersible pump or bailed by hand. 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). Groundwater samples were analyzed for halogenated volatile organic compounds (HVOCs) using EPA Method 8260.

### **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-6R, and WGR MW2) are screened between approximately 13 to 34 feet bgs, and deeper wells (AMW-8, AMW-9, and FHS MW-10 and FHS MW-11) are generally screened in the 35 to 64 feet bgs range. Screen intervals, where known, are presented in Table 1.

Overall, groundwater levels at the site since the last monitoring event increased approximately 0.7 to 1 feet. Groundwater levels in the shallow aquifer were reported at 38.76 feet above mean sea level (amsl) in WGR MW-2 and 41.50 feet amsl in AMW-1. With the limited number of shallow wells, sufficient data is not available to calculate a groundwater flow direction for the shallow wells. Historically, groundwater in the shallow wells flows towards the west. Groundwater levels in the deeper, apparently confined/semi-confined aquifer, ranged from 24.22 to 46.53 feet amsl. Groundwater flow in the deep aquifer was calculated toward the southwest at a hydraulic gradient of approximately 0.04 feet per foot, relatively consistent with previous findings.

Groundwater measurement data are summarized in Table 1. The groundwater elevation contours for deep wells are shown in Figure 3. Refer to Appendix A for Groundwater Monitoring Well Field Sampling Forms.

### **Groundwater Quality**

Tetrachloroethene (PCE), trichloroethylene (TCE), and cis-1,2 dichloroethylene (cis-1,2 DCE) were detected in groundwater from the shallow well AMW-6R at 540 micrograms per liter ( $\mu\text{g/L}$ ), 110  $\mu\text{g/L}$ , and 110  $\mu\text{g/L}$  respectively. These concentrations were relatively consistent with recent data; however, they were well below historic concentration ranges seen in well MW-6. PCE was detected in AMW-1 at a concentration of 0.68  $\mu\text{g/L}$ . No other HVOCS were detected in AMW-1 at or above the laboratory detection limits. PCE was detected in three of the deeper zone wells (AMW-9, FHS MW-10, and FHS MW-11) at concentrations of 13  $\mu\text{g/L}$ , 27  $\mu\text{g/L}$ , and 22  $\mu\text{g/L}$ , respectively, which represents a slight decrease in AMW-9 and FHS MW-11 from the last sampling event. PCE had not been detected in well FHS MW-10 since 2008. TCE was found in FHS MW-10 slightly above the laboratory detection limit at 0.55  $\mu\text{g/L}$ . 1,2-DCE was not detected at or above the laboratory detection limit in any of the deep groundwater samples.

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

### **Summary**

The report presents the findings of the first semester groundwater monitoring event at the site, conducted during the 2<sup>nd</sup> Quarter 2014. The ACHCSA, in a letter dated July 10, 2008, concurred that no further characterization is necessary to investigate shallow soil vapor beneath the site and AEI may commence with the pilot testing activities at the site. Construction work for the implementation of the pilot study activities commenced in July 2012. This included the installation of the horizontal extraction piping, conveyance piping, and soil vapor extraction well. Subsequently, the sub-slab depressurization system and soil vapor extraction system commenced operation in January 2014 and is currently operational.

AEI is currently preparing a system installation and startup report which will be issued to the ACHCSA under separate cover. 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 2014.

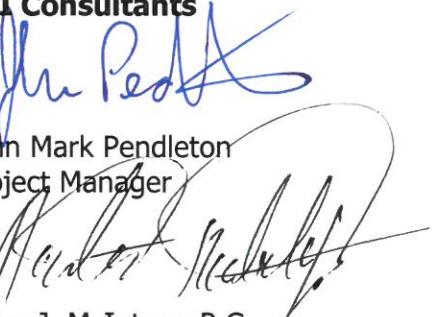
### **Report Limitations and signatures**

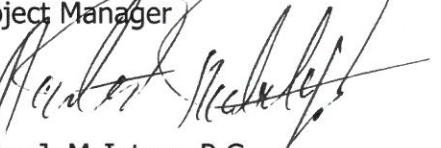
This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested 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 consulting 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 one of us at (925) 746-6000.

Sincerely,  
**AEI Consultants**

  
John Mark Pendleton  
Project Manager

  
Peter J. McIntyre, P.G.  
Executive Vice President, Principal Geologist



  
Jeremy Smith  
Senior Project Manager

### **Figures**

- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3: Groundwater Elevation Map – Deep Wells
- Figure 4: Groundwater Analytical Data

### **Tables**

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

### **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 MacAurther Blvd., Oakland, California 94605  
Geotracker electronic upload

## **FIGURES**



**AEI CONSULTANTS**

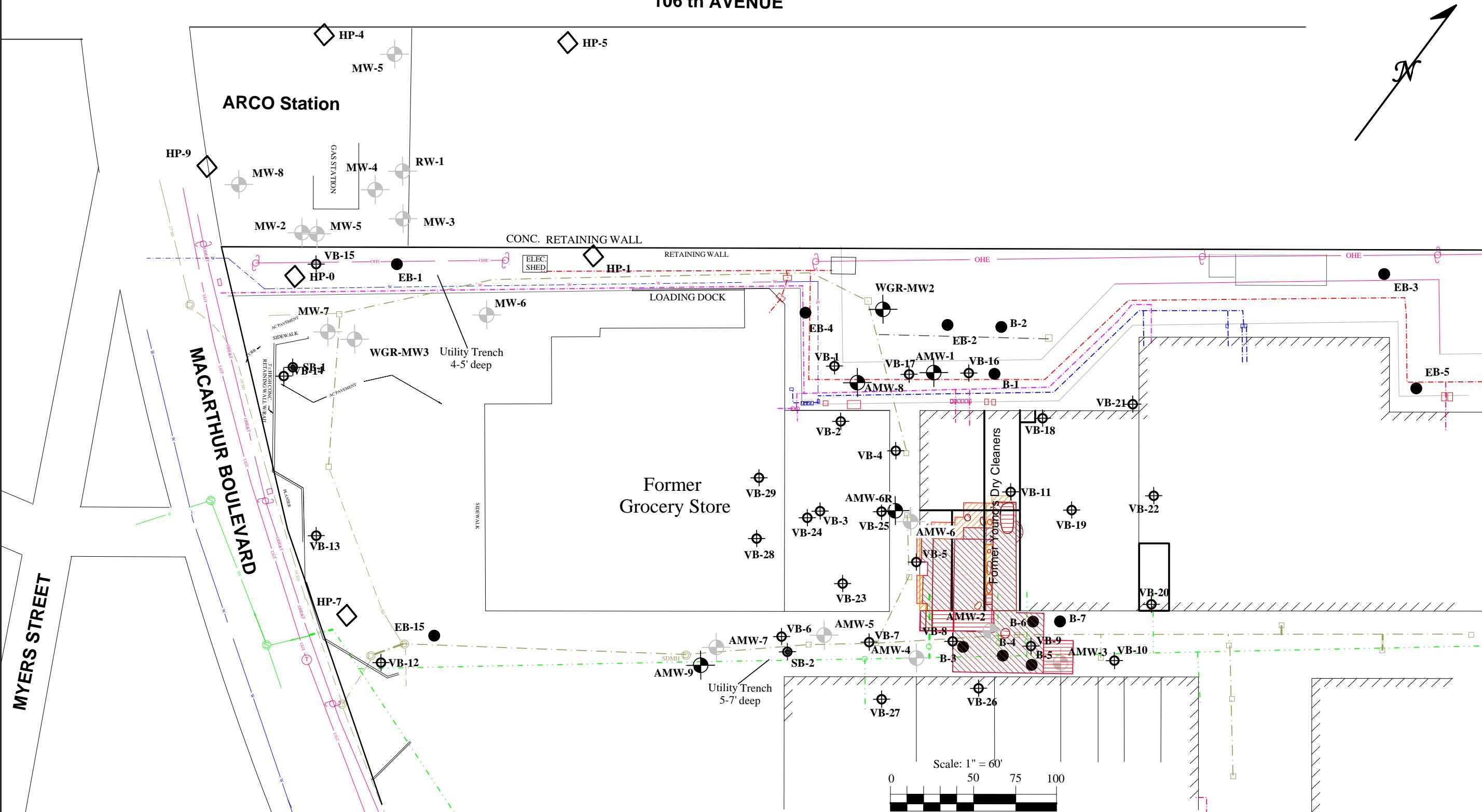
2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597

**SITE LOCATION MAP**

10700 MACARTHUR BLVD  
OAKLAND, CALIFORNIA

**FIGURE 1**  
PROJECT No. 261829

106 th AVENUE



**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 bg

Excavated to depth of 8 to 13 feet b

Excavated to depth of 14 to 18 feet b

## Abandoned Monitoring Web

On Site Storm Drai

Off Site Storm Drain

#### On Site Sanitary Services

On Site Underground

#### **— · — · —** On Site Gas Line

Drafted 6/30/05 - RFF on Dirk Slooten basis  
Revised 05/08 by J.SMIT

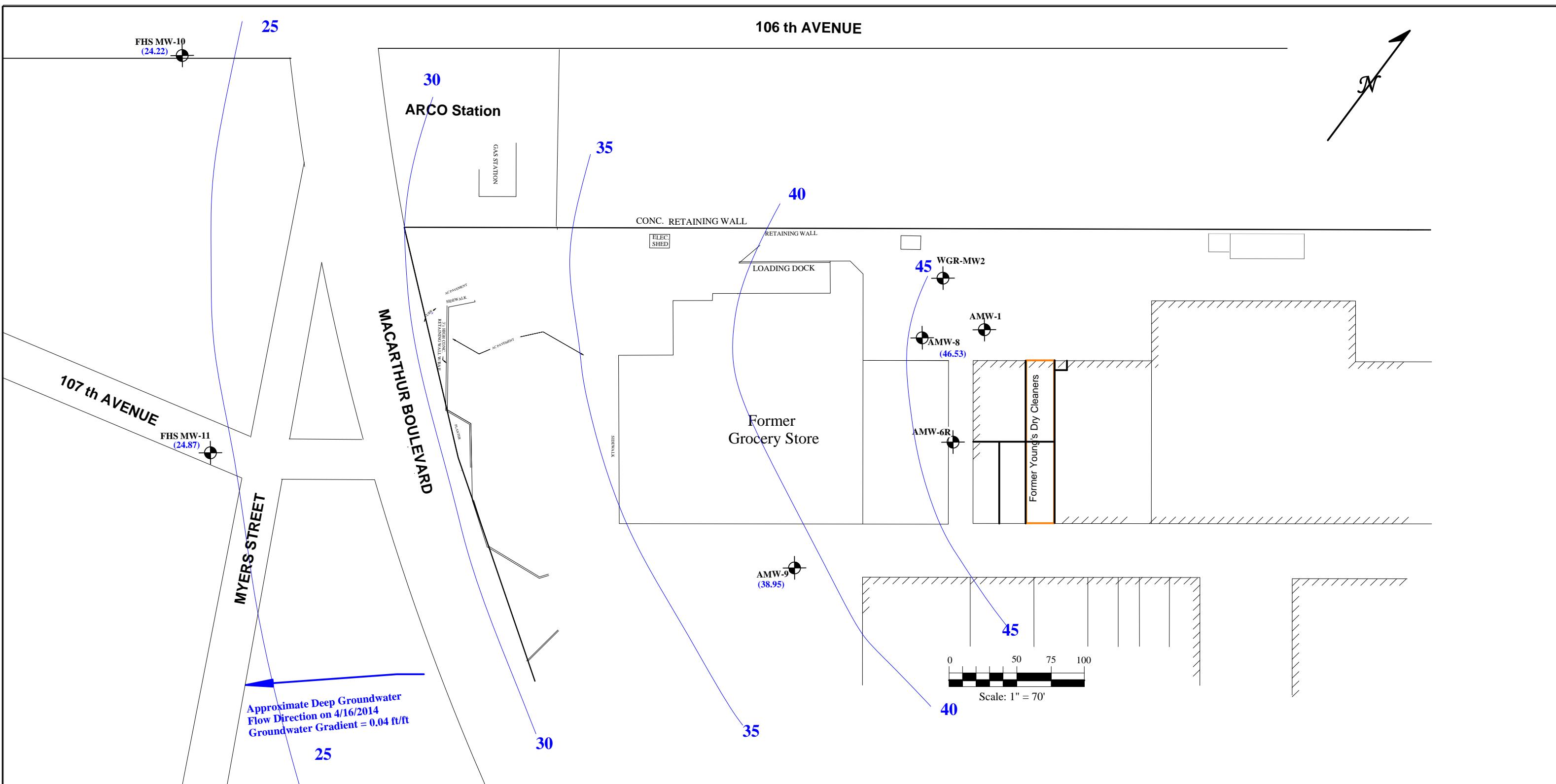
AEI CONSULTANTS

2500 CAMINO DIABLO, WALNUT CREEK, CA

## SITE PLAN

10700 MACARTHUR BLVD.  
OAKLAND, CALIFORNIA

**FIGURE 2**  
PROJECT NO. 261829



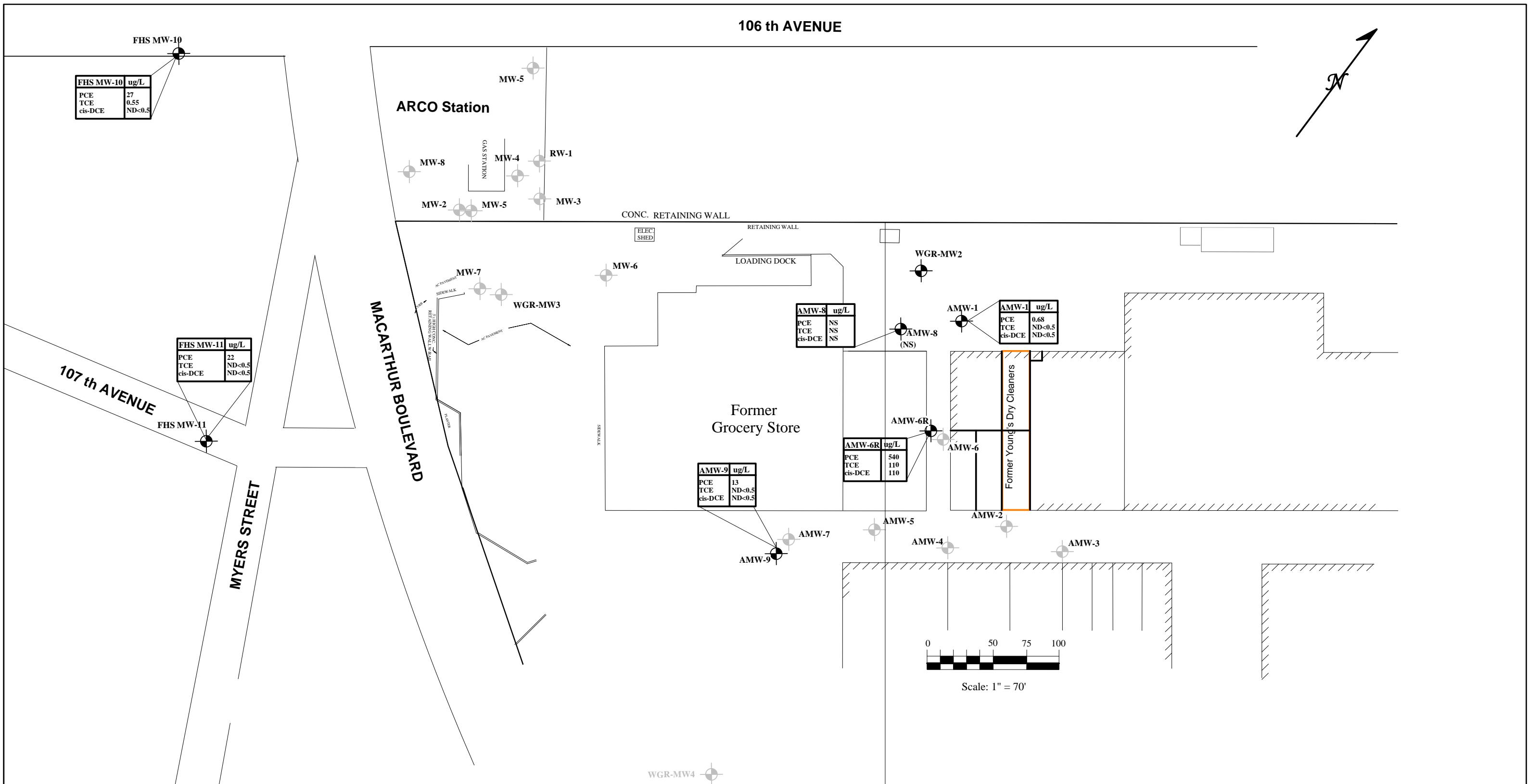
**AEI CONSULTANTS**

2500 CAMINO DIABLO, WALNUT CREEK, CA

Groundwater Elevation Map -  
Deep Wells

10700 MACARTHUR BLVD.  
OAKLAND, CALIFORNIA

**FIGURE 3**  
PROJECT NO. 261829

**KEY**

Abandoned Monitoring Well

Groundwater Monitoring Well

PCE = tetrachloroethene

TCE = trichloroethene

cis-DCE = cis 1,2-Dichloroethene

ug/L = micrograms per liter (ppb)

NS = not sampled

**AEI CONSULTANTS**

2500 CAMINO DIABLO, WALNUT CREEK, CA

Groundwater Analytical Data  
(4/16/14)

10700 MACARTHUR BLVD.  
OAKLAND, CALIFORNIA

**FIGURE 4**  
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
	4/2/2009		64.51	22.49	42.02
	10/2/2009		64.51	24.38	40.13
	4/9/2010		64.51	21.68	42.83
	11/10/2010		64.51	24.11	40.40
	5/27/2011		64.51	20.98	43.53
	10/19/2011		64.51	23.41	41.10
	4/30/2012		64.51	22.19	42.32
	10/29/2012		64.51	24.31	40.20
	4/26/2013		64.51	22.39	42.12
	10/11/2013		64.51	24.37	40.14
	<b>4/16/2014</b>		<b>64.51</b>	<b>23.01</b>	<b>41.50</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
	4/2/2009		64.79	12.21	52.58
	10/2/2009		64.79	13.91	50.88
	4/9/2010		64.79	11.23	53.56
	11/10/2010		64.79	12.85	51.94
	5/27/2011		64.79	10.25	54.54
	10/19/2011		64.79	12.42	52.37
	4/30/2012		64.79	11.49	53.30
	10/29/2012		Well Destroyed during Construction		

**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-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
	4/2/2009		64.97	14.62	50.35
	10/2/2009		64.97	16.18	48.79
	4/9/2010		64.97	13.98	50.99
	11/10/2010		64.97	15.78	49.19
	5/27/2011		64.97	13.65	51.32
	10/19/2011		64.97	14.68	50.29
	4/30/2012		64.97	14.87	50.10
	10/29/2012		Well Destroyed during Construction		
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
	4/2/2009		65.10	13.38	51.72
	10/2/2009		65.10	16.03	49.07
	4/9/2010		65.10	12.75	52.35
	11/10/2010		65.10	14.56	50.54
	5/27/2011		Well Destroyed and Replaced with AMW-6R		
AMW-6R (Shallow)	5/27/2011	13-23	NA	14.70	NA
	10/19/2011		NA	14.50	NA
	4/30/2012		NA	15.94	NA
	10/29/2012		NA	14.54	NA
	4/26/2013		NA	14.18	NA
	10/11/2013		NA	14.58	NA
	<b>4/16/2014</b>		<b>NA</b>	<b>13.84</b>	<b>NA</b>

**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-7 (Shallow)	1/29/1999 5/5/1999	Unknown	64.24	14.91	49.33
				Well Covered during construction	
AMW-8 (Deep)	1/29/1999 5/5/1999 10/9/1999 1/20/2000 8/8/2000 2/15/2001 8/29/2001 3/12/2002 9/27/2002 3/25/2003 10/2/2003 10/17/2006 5/3/2007 10/17/2007 4/1/2008 10/2/2008 4/2/2009 10/2/2009 4/9/2010 11/10/2010 5/27/2011 10/19/2011 4/30/2012 10/29/2012 4/26/2013 10/11/2013 <b>4/16/2014</b>	64.55 <b>64.55</b>	16.86 14.46 17.10 18.51 16.71 17.31 18.30 16.03 18.03 17.31 21.54 16.05 23.01 18.34 17.49 19.10 18.18 19.75 17.76 19.41 15.92 17.15 17.16 18.72 17.61 19.11 <b>18.02</b>	47.69 50.09 47.45 46.04 47.84 47.24 46.25 48.52 46.52 47.24 43.01 48.5 41.54 46.21 47.06 45.45 46.37 44.80 46.79 45.14 48.63 47.40 47.39 45.83 46.94 45.44 <b>46.53</b>	
AMW-9 (Deep)	1/29/1999 5/5/1999 10/9/1999 1/20/2000 8/8/2000 2/15/2001 8/29/2001 3/12/2002 9/27/2002 3/25/2003 10/2/2003 10/17/2006 5/3/2007 10/17/2007 4/1/2008 10/2/2008 4/2/2009 10/2/2009 4/9/2010 11/10/2010 5/27/2011 10/19/2011 4/30/2012 10/29/2012 4/26/2013 10/11/2013 <b>4/16/2014</b>	? - 55	63.48	23.22	40.26
			63.48	21.40	42.08
			63.48	23.74	39.74
			63.48	24.92	38.56
			63.48	23.01	40.47
			63.48	21.20	42.28
			63.48	22.59	40.89
			63.48	21.94	41.54
			63.48	24.16	39.32
			63.48	23.00	40.48
			63.48	23.80	39.68
			63.48	23.07	40.41
			63.48	23.17	40.31
			63.48	24.97	38.51
			63.48	22.97	40.51
			63.48	25.65	37.83
			63.48	23.80	39.68
			63.48	25.98	37.50
			63.48	22.80	40.68
			63.48	25.36	38.12
			63.48	21.73	41.75
			63.48	24.07	39.41
			63.48	22.90	40.58
			63.48	25.49	37.99
			63.48	23.49	39.99
			63.48	25.33	38.15
			<b>63.48</b>	<b>24.53</b>	<b>38.95</b>

**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)
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
	4/2/2009		63.18	23.23	39.95
	10/2/2009		63.18	25.70	37.48
	4/9/2010		63.18	22.36	40.82
	11/10/2010		63.18	24.79	38.39
	5/27/2011		63.18	21.56	41.62
	10/19/2011		63.18	24.06	39.12
	4/30/2012		63.18	NA	NA
	10/29/2012		63.18	29.05	34.13
	4/26/2013		63.18	23.54	39.64
	10/11/2013		63.18	25.72	37.46
	<b>4/16/2014</b>		<b>63.18</b>	<b>24.42</b>	<b>38.76</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
	4/2/2009		58.34	17.89	40.45
	10/2/2009		58.34	22.16	36.18
	4/9/2010		58.34	15.71	42.63
	11/10/2010		58.34	21.75	36.59
	5/27/2011				

Well Destroyed by ARCO; Case Closure at 10600 MacArthur Blvd.

**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)
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
	4/2/2009		60.02	25.77	34.25
	10/2/2009		60.02	28.81	31.21
	4/9/2010		60.02	25.01	35.01
	11/10/2010		60.02	28.14	31.88
	5/27/2011		60.02	24.51	35.51
	10/19/2011		60.02	26.97	33.05
	4/30/2012		60.02	24.48	35.54
	10/29/2012		60.02	28.23	31.79
	<b>4/26/2013</b>		<b>Well Destroyed during Construction</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
	4/2/2009		52.34	23.80	28.54
	10/2/2009		52.34	28.51	23.83
	4/9/2010		52.34	22.04	30.30
	11/10/2010		52.34	NA	NA
	5/27/2011		52.34	21.28	31.06
	10/19/2011		52.34	24.18	28.16
	4/30/2012		52.34	22.41	29.93
	10/29/2012		52.34	25.25	27.09
	4/26/2013		52.34	25.49	26.85
	10/11/2013		52.34	28.83	23.51
	<b>4/16/2014</b>		<b>52.34</b>	<b>28.12</b>	<b>24.22</b>

**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)
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
	4/2/2009		54.06	26.09	27.97
	10/5/2009*		54.06	30.80	23.26
	4/9/2010		54.06	21.51	32.55
	11/10/2010		54.06	NA	NA
	5/27/2011		54.06	23.38	30.68
	10/19/2011		54.06	27.23	26.83
	4/30/2012		54.06	24.60	29.46
	10/29/2012		54.06	28.29	25.77
	4/26/2013		54.06	29.02	25.04
	10/11/2013		54.06	30.94	23.12
	<b>4/16/2014</b>		<b>54.06</b>	<b>29.19</b>	<b>24.87</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
	4/2/2009		61.78	32.67	29.11
	10/2/2009		61.78	36.98	24.80
	4/9/2010		61.78	30.09	31.69
	11/10/2010		61.78	35.87	25.91
	5/27/2011		Well Destroyed by ARCO; Case Closure at 10600 MacArthur Blvd.		

**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)
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
	4/2/2009		58.64	18.60	40.04
	10/2/2009		58.64	22.60	36.04
	4/9/2010		58.64	17.57	41.07
	11/10/2010		58.64	22.16	36.48
	5/27/2011			Well Destroyed by ARCO; Case Closure at 10600 MacArthur Blvd.	

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

All well elevations are measured in ft msl = feet above mean sea level

\* = Car parked over well, reading taken 3 days later than other wells.

NA = not available

**Table 2**  
**Groundwater Sample Analytical Data**  
**10700 MacArthur Blvd., Oakland, California**

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**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
<b>AMW-6R</b> <b>(shallow)</b>	5/27/2011	AEI	54	7.5	210	45	ND<RL
	10/19/2011	AEI	86	ND<12	570	86	ND<RL
	4/30/2012	AEI	74	8.6	220	65	ND<RL
	10/29/12	AEI	93	14	520	92	ND<RL
	04/26/13	AEI	92	<25	410	98	ND<RL
	10/11/13	AEI	100	15	540	110	ND<RL
	<b>04/16/14</b>	<b>AEI</b>	<b>110</b>	<b>ND&lt;12</b>	<b>540</b>	<b>110</b>	<b>ND&lt;RL</b>
<b>AMW-7</b> <b>(shallow)</b>	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		
<b>AMW-8</b> <b>(deep)</b>	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
	4/2/09	AEI	NS	NS	NS	NS	NS
	10/2/09	AEI	ND<0.5	ND<0.5	1.4	ND<0.5	ND<RL
	4/9/10	AEI	NS	NS	NS	NS	NS
	10/25/10	AEI	ND<0.5	ND<0.5	2.2	ND<0.5	ND<RL
	5/27/11	AEI	NS	NS	NS	NS	NS
	10/19/11	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	4/30/12	AEI	NS	NS	NS	NS	NS
	10/29/12	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	04/26/13	AEI	NS	NS	NS	NS	NS
	10/11/13	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	<b>04/16/14</b>	<b>AEI</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>	<b>NS</b>

**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
<b>AMW-9</b> <b>(deep)</b>	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
	4/2/09	AEI	ND<2.5	ND<2.5	180	ND<2.5	ND<RL
	10/2/09	AEI	ND<2.5	ND<2.5	140	ND<2.5	ND<RL
	4/9/10	AEI	ND<5.0	ND<5.0	160	ND<5.0	ND<RL
	10/22/10	AEI	ND<1.7	ND<1.7	93	ND<1.7	ND<RL
	5/27/11	AEI	ND<1.2	ND<1.2	53	ND<1.2	ND<RL
	10/19/11	AEI	ND<0.5	ND<0.5	30	ND<0.5	ND<RL
	4/30/12	AEI	ND<0.5	ND<0.5	3.4	ND<0.5	ND<RL
	10/29/12	AEI	ND<0.5	ND<0.5	14	ND<0.5	ND<RL
	04/26/13	AEI	ND<0.5	ND<0.5	6.9	ND<0.5	ND<RL
	10/11/13	AEI	ND<0.5	ND<0.5	18	ND<0.5	ND<RL
	04/16/14	AEI	ND<0.5	ND<0.5	<b>13</b>	ND<0.5	ND<RL
<b>FHS MW-10</b> <b>(deep)</b>	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**
	4/2/09	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	10/2/09	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	4/9/10	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	10/22/10	AEI	NS	NS	NS	NS	NS
	5/27/11	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	10/19/11	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL <sup>8</sup>
	4/30/12	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	10/29/12	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	04/26/13	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	10/11/13	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	04/16/14	AEI	ND<0.5	ND<0.5	<b>27</b>	<b>0.55</b>	ND<RL

**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	VHGs* µg/L
<b>FHS MW-11</b> <b>(deep)</b>	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
	4/2/09	AEI	ND<0.5	ND<0.5	32	0.71	ND<RL
	10/5/09	AEI	ND<0.5	ND<0.5	32	0.70	ND<RL
	4/9/10	AEI	ND<1.0	ND<1.0	32	ND<1.0	ND<RL
	10/22/10	AEI	NS	NS	NS	NS	NS
	5/27/11	AEI	ND<1.7	ND<1.7	63	1.9	NS
	10/19/11	AEI	ND<1.0	ND<1.0	49	ND<1.0	ND<RL
	4/30/12	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	10/29/12	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	04/26/13	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	10/11/13	AEI	ND<0.5	ND<0.5	26	ND<0.5	ND<RL
	<b>4/16/2014</b>	<b>AEI</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>22</b>	<b>ND&lt;0.5</b>	<b>ND&lt;RL<sup>9</sup></b>
<b>MW-6</b> <b>(deep)</b>	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	Auges	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
	4/2/09	AEI	17	ND<10	420	28	ND<RL
	10/2/09	AEI	22	ND<10	410	29	ND<RL
	4/9/10	AEI	5.5	ND<5.0	160	10	ND<RL
	10/25/10	AEI	26	ND<10	400	30	ND<RL
	5/27/11			Well Destroyed by ARCO; Case Closure at 10600 MacArthur Blvd.			

**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
<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
	10/2/09	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	4/9/10	AEI	NS	NS	NS	NS	NS
	10/22/10	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	5/27/11	Well Destroyed by ARCO; Case Closure at 10600 MacArthur Blvd.					
<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
	10/2/09	AEI	NS	NS	NS	NS	NS
	4/9/10	AEI	NS	NS	NS	NS	NS
	10/22/10	AEI	NS	NS	NS	NS	NS
	5/27/11	AEI	NS	NS	NS	NS	NS
	10/19/11	AEI	NS	NS	NS	NS	NS
	4/30/12	AEI	NS	NS	NS	NS	NS
	4/26/13	AEI	NS	NS	NS	NS	NS
	10/11/13	AEI	NS	NS	NS	NS	NS
	04/16/14	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
	10/2/09	AEI	NS	NS	NS	NS	NS
	4/9/10	AEI	NS	NS	NS	NS	NS
	10/22/10	AEI	NS	NS	NS	NS	NS
	5/27/11	Well Destroyed by ARCO; Case Closure at 10600 MacArthur Blvd.					

**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
WGR MW-4 (deep)	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	7/17/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	10/23/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/29/97	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	3/25/03	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	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
	10/2/09	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	4/9/10	AEI	NS	NS	NS	NS	NS
	10/22/10	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	5/27/11	AEI	NS	NS	NS	NS	NS
	10/19/11	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	4/30/12	AEI	NS	NS	NS	NS	NS
	10/29/12	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<RL
	04/26/13	AEI	Well Destroyed During Onsite Construction Activities				

**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

NS = Well not sampled

NR = Not Reported

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

Tetrachloroethene (PCE)

Trichloroethene (TCE)

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

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 µg/L

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

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

<sup>5</sup> = Vinyl Chloride detected at a concentration of 4.0 µg/L

<sup>6</sup> = Vinyl Chloride detected at a concentration of 11 µg/L

<sup>7</sup> = Chloroform detected at a concentration of 0.69 µg/L

<sup>8</sup> = Chloroform detected at a concentration of 0.64 µg/L

<sup>9</sup> = Chloroform detected at a concentration of 1.2 µg/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:	4/16/2014
Job Number:	261829	Name of Sampler:	J. Sigg
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)	23.01
Water Elevation (feet above msl)	41.50
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>10.6</b>
Actual Volume Purged (gallons)	11.0
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
6:50	3	18.43	7.38	1,185	2.83	-131.7	clear
	6	18.46	7.43	1,180	1.92	-129.4	clear
	9	18.51	7.48	1,174	1.74	-126.3	clear
	11	18.53	7.54	1,169	1.43	-121.2	clear
7:00							

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


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

**Monitoring Well Number:** **AMW-6R**

Project Name:	Foothill Square	Date of Sampling:	4/16/2014
Job Number:	261829	Name of Sampler:	J. Sigg
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)	
Depth of Well	23.00
Depth to Water (from top of casing)	13.84
Water Elevation (feet above msl)	9.16
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)	4.4
Actual Volume Purged (gallons)	4.0
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 ( $\mu$ sec/cm)	DO (mg/L)	ORP (meV)	Comments
8:48	1	17.46	6.59	1,291	2.20	-125.7	cloudy
	2	17.26	6.72	896	1.56	-148.9	clear
	3	17.39	7.08	1,080	1.17	-156.1	clear
8:52	4	17.54	7.29	1,480	1.01	-144.6	clear

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

Depth to water measurement is an estimation

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

**Monitoring Well Number:** **AMW-8**

Project Name:	Foothill Square	Date of Sampling:	4/16/2014
Job Number:	261829	Name of Sampler:	J. Sigg
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)	18.02		
Water Elevation (feet above msl)	46.53		
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)	NA		
Appearance of Purge Water	NA		
Free Product Present?	na	Thickness (ft):	-

**GROUNDWATER SAMPLES**

Number of Samples/Container Size				NA			
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; Gauged Only.

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

**Monitoring Well Number:** **AMW-9**

Project Name:	Foothill Square	Date of Sampling:	4/16/2014
Job Number:	261829	Name of Sampler:	J. Sigg
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)	24.53
Water Elevation (feet above msl)	38.95
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)	14.3
Actual Volume Purged (gallons)	14.0
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
7:17	3	18.68	7.68	1,285	3.65	324.5	
	6	18.72	7.66	1,275	2.93	320.1	
	9	18.72	7.66	1,263	2.37	318.7	
	12	18.73	7.63	1,255	1.83	305.2	
	14	18.73	7.60	1,247	1.62	295.7	
7:30							

**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:	4/16/2014
Job Number:	261829	Name of Sampler:	J. Sigg
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)	24.42
Water Elevation (feet above msl)	38.76
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				Comments			
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:** FHS MW-10

Project Name:	Foothill Square	Date of Sampling:	4/16/2014
Job Number:	261829	Name of Sampler:	J. Sigg
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)	28.12
Water Elevation (feet above msl)	24.22
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)	11.4
Actual Volume Purged (gallons)	11.0
Appearance of Purge Water	clear
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
6:10	3	18.65	7.58	1132	6.57	-212.4	
	6	18.68	7.58	1127	5.85	-199.5	
	9	18.69	7.56	112	4.72	-183.7	
	11	18.71	7.55	1109	3.13	-179.4	
6:20							

**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:	4/16/2014
Job Number:	261829	Name of Sampler:	J. Sigg
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)	29.19
Water Elevation (feet above msl)	24.87
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)	16.7
Actual Volume Purged (gallons)	17.0
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
5:00	3	18.60	7.59	1127	4.83	-132.4	
	6	18.62	7.59	1110	3.92	-130.1	
	9	18.65	7.61	1095	2.90	-127.5	
	12	18.68	7.58	1083	2.73	-125.4	
	15	18.71	7.56	1072	2.65	-120.3	
	17	18.73	7.55	1066	2.52	-111.8	
5:45							

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


## **APPENDIX B**

### **LABORATORY ANALYSES WITH CHAIN OF CUSTODY DOCUMENTATION**



# McCampbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1404660

**Report Created for:** AEI Consultants  
2500 Camino Diablo, Ste.#200  
Walnut Creek, CA 94597

**Project Contact:** Jeremy Smith

**Project P.O.:** 55466

**Project Name:** #261829; 10700 MacArthur Blvd. Oakland, CA

**Project Received:** 04/16/2014

Analytical Report reviewed & approved for release on 04/22/2014 by:

Question about  
your data?

[Click here to email](#)  
[McCAMPBELL](#)

Angela Rydelius,  
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory.  
The analytical results relate only to the items tested. Results reported conform to the most  
current NELAP standards, where applicable, unless otherwise stated in the case narrative.***





## Glossary of Terms & Qualifier Definitions

**Client:** AEI Consultants  
**Project:** #261829; 10700 MacArthur Blvd. Oakland, CA  
**WorkOrder:** 1404660

### Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or 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.
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
TEQ	Toxicity Equivalence

### Analytical Qualifier

b1 aqueous sample that contains greater than ~1 vol. % sediment



## Analytical Report

**Client:** AEI Consultants  
**Project:** #261829; 10700 MacArthur Blvd. Oakland, CA  
**Date Received:** 4/16/14 13:21  
**Date Prepared:** 4/17/14-4/18/14

**WorkOrder:** 1404660  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
AMW-1	1404660-001A	Water	04/16/2014 07:00	GC18	89492
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Bromodichloromethane	ND		0.50	1	04/17/2014 22:10
Bromoform	ND		0.50	1	04/17/2014 22:10
Bromomethane	ND		0.50	1	04/17/2014 22:10
Carbon Tetrachloride	ND		0.50	1	04/17/2014 22:10
Chlorobenzene	ND		0.50	1	04/17/2014 22:10
Chloroethane	ND		0.50	1	04/17/2014 22:10
Chloroform	ND		0.50	1	04/17/2014 22:10
Chloromethane	ND		0.50	1	04/17/2014 22:10
Dibromochloromethane	ND		0.50	1	04/17/2014 22:10
1,2-Dibromoethane (EDB)	ND		0.50	1	04/17/2014 22:10
1,2-Dichlorobenzene	ND		0.50	1	04/17/2014 22:10
1,3-Dichlorobenzene	ND		0.50	1	04/17/2014 22:10
1,4-Dichlorobenzene	ND		0.50	1	04/17/2014 22:10
Dichlorodifluoromethane	ND		0.50	1	04/17/2014 22:10
1,1-Dichloroethane	ND		0.50	1	04/17/2014 22:10
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	04/17/2014 22:10
1,1-Dichloroethene	ND		0.50	1	04/17/2014 22:10
cis-1,2-Dichloroethene	ND		0.50	1	04/17/2014 22:10
trans-1,2-Dichloroethene	ND		0.50	1	04/17/2014 22:10
1,2-Dichloropropane	ND		0.50	1	04/17/2014 22:10
cis-1,3-Dichloropropene	ND		0.50	1	04/17/2014 22:10
trans-1,3-Dichloropropene	ND		0.50	1	04/17/2014 22:10
Freon 113	ND		0.50	1	04/17/2014 22:10
Methylene chloride	ND		0.50	1	04/17/2014 22:10
1,1,1,2-Tetrachloroethane	ND		0.50	1	04/17/2014 22:10
1,1,2,2-Tetrachloroethane	ND		0.50	1	04/17/2014 22:10
Tetrachloroethene	<b>0.68</b>		0.50	1	04/17/2014 22:10
1,1,1-Trichloroethane	ND		0.50	1	04/17/2014 22:10
1,1,2-Trichloroethane	ND		0.50	1	04/17/2014 22:10
Trichloroethene	ND		0.50	1	04/17/2014 22:10
Trichlorofluoromethane	ND		0.50	1	04/17/2014 22:10
Vinyl Chloride	ND		0.50	1	04/17/2014 22:10
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	109		70-130		04/17/2014 22:10
Toluene-d8	100		70-130		04/17/2014 22:10
4-BFB	103		70-130		04/17/2014 22:10

(Cont.)



## Analytical Report

**Client:** AEI Consultants  
**Project:** #261829; 10700 MacArthur Blvd. Oakland, CA  
**Date Received:** 4/16/14 13:21  
**Date Prepared:** 4/17/14-4/18/14

**WorkOrder:** 1404660  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
AMW-6R	1404660-002A	Water	04/16/2014 09:00	GC28	89492
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Bromodichloromethane	ND		12	25	04/18/2014 16:01
Bromoform	ND		12	25	04/18/2014 16:01
Bromomethane	ND		12	25	04/18/2014 16:01
Carbon Tetrachloride	ND		12	25	04/18/2014 16:01
Chlorobenzene	ND		12	25	04/18/2014 16:01
Chloroethane	ND		12	25	04/18/2014 16:01
Chloroform	ND		12	25	04/18/2014 16:01
Chloromethane	ND		12	25	04/18/2014 16:01
Dibromochloromethane	ND		12	25	04/18/2014 16:01
1,2-Dibromoethane (EDB)	ND		12	25	04/18/2014 16:01
1,2-Dichlorobenzene	ND		12	25	04/18/2014 16:01
1,3-Dichlorobenzene	ND		12	25	04/18/2014 16:01
1,4-Dichlorobenzene	ND		12	25	04/18/2014 16:01
Dichlorodifluoromethane	ND		12	25	04/18/2014 16:01
1,1-Dichloroethane	ND		12	25	04/18/2014 16:01
1,2-Dichloroethane (1,2-DCA)	ND		12	25	04/18/2014 16:01
1,1-Dichloroethene	ND		12	25	04/18/2014 16:01
cis-1,2-Dichloroethene	110		12	25	04/18/2014 16:01
trans-1,2-Dichloroethene	ND		12	25	04/18/2014 16:01
1,2-Dichloropropane	ND		12	25	04/18/2014 16:01
cis-1,3-Dichloropropene	ND		12	25	04/18/2014 16:01
trans-1,3-Dichloropropene	ND		12	25	04/18/2014 16:01
Freon 113	ND		12	25	04/18/2014 16:01
Methylene chloride	ND		12	25	04/18/2014 16:01
1,1,1,2-Tetrachloroethane	ND		12	25	04/18/2014 16:01
1,1,2,2-Tetrachloroethane	ND		12	25	04/18/2014 16:01
Tetrachloroethene	540		12	25	04/18/2014 16:01
1,1,1-Trichloroethane	ND		12	25	04/18/2014 16:01
1,1,2-Trichloroethane	ND		12	25	04/18/2014 16:01
Trichloroethene	110		12	25	04/18/2014 16:01
Trichlorofluoromethane	ND		12	25	04/18/2014 16:01
Vinyl Chloride	ND		12	25	04/18/2014 16:01
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	Analytical Comments: b1	
Dibromofluoromethane	102		70-130		04/18/2014 16:01
Toluene-d8	104		70-130		04/18/2014 16:01
4-BFB	83		70-130		04/18/2014 16:01

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## Analytical Report

**Client:** AEI Consultants  
**Project:** #261829; 10700 MacArthur Blvd. Oakland, CA  
**Date Received:** 4/16/14 13:21  
**Date Prepared:** 4/17/14-4/18/14

**WorkOrder:** 1404660  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
AMW-9	1404660-003A	Water	04/16/2014 07:30	GC18	89492
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Bromodichloromethane	ND		0.50	1	04/17/2014 23:27
Bromoform	ND		0.50	1	04/17/2014 23:27
Bromomethane	ND		0.50	1	04/17/2014 23:27
Carbon Tetrachloride	ND		0.50	1	04/17/2014 23:27
Chlorobenzene	ND		0.50	1	04/17/2014 23:27
Chloroethane	ND		0.50	1	04/17/2014 23:27
Chloroform	ND		0.50	1	04/17/2014 23:27
Chloromethane	ND		0.50	1	04/17/2014 23:27
Dibromochloromethane	ND		0.50	1	04/17/2014 23:27
1,2-Dibromoethane (EDB)	ND		0.50	1	04/17/2014 23:27
1,2-Dichlorobenzene	ND		0.50	1	04/17/2014 23:27
1,3-Dichlorobenzene	ND		0.50	1	04/17/2014 23:27
1,4-Dichlorobenzene	ND		0.50	1	04/17/2014 23:27
Dichlorodifluoromethane	ND		0.50	1	04/17/2014 23:27
1,1-Dichloroethane	ND		0.50	1	04/17/2014 23:27
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	04/17/2014 23:27
1,1-Dichloroethene	ND		0.50	1	04/17/2014 23:27
cis-1,2-Dichloroethene	ND		0.50	1	04/17/2014 23:27
trans-1,2-Dichloroethene	ND		0.50	1	04/17/2014 23:27
1,2-Dichloropropane	ND		0.50	1	04/17/2014 23:27
cis-1,3-Dichloropropene	ND		0.50	1	04/17/2014 23:27
trans-1,3-Dichloropropene	ND		0.50	1	04/17/2014 23:27
Freon 113	ND		0.50	1	04/17/2014 23:27
Methylene chloride	ND		0.50	1	04/17/2014 23:27
1,1,1,2-Tetrachloroethane	ND		0.50	1	04/17/2014 23:27
1,1,2,2-Tetrachloroethane	ND		0.50	1	04/17/2014 23:27
Tetrachloroethene	13		0.50	1	04/17/2014 23:27
1,1,1-Trichloroethane	ND		0.50	1	04/17/2014 23:27
1,1,2-Trichloroethane	ND		0.50	1	04/17/2014 23:27
Trichloroethene	ND		0.50	1	04/17/2014 23:27
Trichlorofluoromethane	ND		0.50	1	04/17/2014 23:27
Vinyl Chloride	ND		0.50	1	04/17/2014 23:27
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	113		70-130		04/17/2014 23:27
Toluene-d8	101		70-130		04/17/2014 23:27
4-BFB	102		70-130		04/17/2014 23:27

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## Analytical Report

**Client:** AEI Consultants  
**Project:** #261829; 10700 MacArthur Blvd. Oakland, CA  
**Date Received:** 4/16/14 13:21  
**Date Prepared:** 4/17/14-4/18/14

**WorkOrder:** 1404660  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
FHS MW-10	1404660-004A	Water	04/16/2014 06:20	GC18	89492
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Bromodichloromethane	ND		0.50	1	04/18/2014 00:05
Bromoform	ND		0.50	1	04/18/2014 00:05
Bromomethane	ND		0.50	1	04/18/2014 00:05
Carbon Tetrachloride	ND		0.50	1	04/18/2014 00:05
Chlorobenzene	ND		0.50	1	04/18/2014 00:05
Chloroethane	ND		0.50	1	04/18/2014 00:05
Chloroform	ND		0.50	1	04/18/2014 00:05
Chloromethane	ND		0.50	1	04/18/2014 00:05
Dibromochloromethane	ND		0.50	1	04/18/2014 00:05
1,2-Dibromoethane (EDB)	ND		0.50	1	04/18/2014 00:05
1,2-Dichlorobenzene	ND		0.50	1	04/18/2014 00:05
1,3-Dichlorobenzene	ND		0.50	1	04/18/2014 00:05
1,4-Dichlorobenzene	ND		0.50	1	04/18/2014 00:05
Dichlorodifluoromethane	ND		0.50	1	04/18/2014 00:05
1,1-Dichloroethane	ND		0.50	1	04/18/2014 00:05
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	04/18/2014 00:05
1,1-Dichloroethene	ND		0.50	1	04/18/2014 00:05
cis-1,2-Dichloroethene	ND		0.50	1	04/18/2014 00:05
trans-1,2-Dichloroethene	ND		0.50	1	04/18/2014 00:05
1,2-Dichloropropane	ND		0.50	1	04/18/2014 00:05
cis-1,3-Dichloropropene	ND		0.50	1	04/18/2014 00:05
trans-1,3-Dichloropropene	ND		0.50	1	04/18/2014 00:05
Freon 113	ND		0.50	1	04/18/2014 00:05
Methylene chloride	ND		0.50	1	04/18/2014 00:05
1,1,1,2-Tetrachloroethane	ND		0.50	1	04/18/2014 00:05
1,1,2,2-Tetrachloroethane	ND		0.50	1	04/18/2014 00:05
Tetrachloroethene	<b>27</b>		0.50	1	04/18/2014 00:05
1,1,1-Trichloroethane	ND		0.50	1	04/18/2014 00:05
1,1,2-Trichloroethane	ND		0.50	1	04/18/2014 00:05
Trichloroethene	<b>0.55</b>		0.50	1	04/18/2014 00:05
Trichlorofluoromethane	ND		0.50	1	04/18/2014 00:05
Vinyl Chloride	ND		0.50	1	04/18/2014 00:05
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	106		70-130		04/18/2014 00:05
Toluene-d8	101		70-130		04/18/2014 00:05
4-BFB	102		70-130		04/18/2014 00:05

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## Analytical Report

**Client:** AEI Consultants  
**Project:** #261829; 10700 MacArthur Blvd. Oakland, CA  
**Date Received:** 4/16/14 13:21  
**Date Prepared:** 4/17/14-4/18/14

**WorkOrder:** 1404660  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
FHS MW-11	1404660-005A	Water	04/16/2014 05:45	GC18	89492
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Bromodichloromethane	ND		0.50	1	04/18/2014 00:44
Bromoform	ND		0.50	1	04/18/2014 00:44
Bromomethane	ND		0.50	1	04/18/2014 00:44
Carbon Tetrachloride	ND		0.50	1	04/18/2014 00:44
Chlorobenzene	ND		0.50	1	04/18/2014 00:44
Chloroethane	ND		0.50	1	04/18/2014 00:44
Chloroform	<b>1.2</b>		0.50	1	04/18/2014 00:44
Chloromethane	ND		0.50	1	04/18/2014 00:44
Dibromochloromethane	ND		0.50	1	04/18/2014 00:44
1,2-Dibromoethane (EDB)	ND		0.50	1	04/18/2014 00:44
1,2-Dichlorobenzene	ND		0.50	1	04/18/2014 00:44
1,3-Dichlorobenzene	ND		0.50	1	04/18/2014 00:44
1,4-Dichlorobenzene	ND		0.50	1	04/18/2014 00:44
Dichlorodifluoromethane	ND		0.50	1	04/18/2014 00:44
1,1-Dichloroethane	ND		0.50	1	04/18/2014 00:44
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	04/18/2014 00:44
1,1-Dichloroethene	ND		0.50	1	04/18/2014 00:44
cis-1,2-Dichloroethene	ND		0.50	1	04/18/2014 00:44
trans-1,2-Dichloroethene	ND		0.50	1	04/18/2014 00:44
1,2-Dichloropropane	ND		0.50	1	04/18/2014 00:44
cis-1,3-Dichloropropene	ND		0.50	1	04/18/2014 00:44
trans-1,3-Dichloropropene	ND		0.50	1	04/18/2014 00:44
Freon 113	ND		0.50	1	04/18/2014 00:44
Methylene chloride	ND		0.50	1	04/18/2014 00:44
1,1,1,2-Tetrachloroethane	ND		0.50	1	04/18/2014 00:44
1,1,2,2-Tetrachloroethane	ND		0.50	1	04/18/2014 00:44
Tetrachloroethene	<b>22</b>		0.50	1	04/18/2014 00:44
1,1,1-Trichloroethane	ND		0.50	1	04/18/2014 00:44
1,1,2-Trichloroethane	ND		0.50	1	04/18/2014 00:44
Trichloroethene	ND		0.50	1	04/18/2014 00:44
Trichlorofluoromethane	ND		0.50	1	04/18/2014 00:44
Vinyl Chloride	ND		0.50	1	04/18/2014 00:44
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	107		70-130		04/18/2014 00:44
Toluene-d8	101		70-130		04/18/2014 00:44
4-BFB	105		70-130		04/18/2014 00:44



## Quality Control Report

<b>Client:</b> AEI Consultants <b>Date Prepared:</b> 4/18/14 <b>Date Analyzed:</b> 4/17/14 <b>Instrument:</b> GC18 <b>Matrix:</b> Water <b>Project:</b> #261829; 10700 MacArthur Blvd. Oakland, CA	<b>WorkOrder:</b> 1404660 <b>BatchID:</b> 89492 <b>Extraction Method:</b> SW5030B <b>Analytical Method:</b> SW8260B <b>Unit:</b> µg/L <b>Sample ID:</b> MB/LCS-89492 1404709-001KMS/MSD
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### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	-	0.50	-	-	-	-
Benzene	ND	-	0.50	-	-	-	-
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	-	2.0	-	-	-	-
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	19.1	0.50	20	-	95.5	70-130
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	20.6	0.50	20	-	103	70-130
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	21.4	0.50	20	-	107	70-130
1,1-Dichloroethene	ND	23.5	0.50	20	-	117	70-130
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

(Cont.)



## Quality Control Report

<b>Client:</b>	AEI Consultants	<b>WorkOrder:</b>	1404660
<b>Date Prepared:</b>	4/18/14	<b>BatchID:</b>	89492
<b>Date Analyzed:</b>	4/17/14	<b>Extraction Method:</b>	SW5030B
<b>Instrument:</b>	GC18	<b>Analytical Method:</b>	SW8260B
<b>Matrix:</b>	Water	<b>Unit:</b>	µg/L
<b>Project:</b>	#261829; 10700 MacArthur Blvd. Oakland, CA	<b>Sample ID:</b>	MB/LCS-89492 1404709-001KMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	-	0.50	-	-	-	-
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	-	0.50	-	-	-	-
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	-	0.50	-	-	-	-
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	-	0.50	-	-	-	-
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	20.3	0.50	20	-	102	70-130
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-

#### Surrogate Recovery

Dibromofluoromethane	26.6	49.1	45	107	109	70-130
Toluene-d8	25.7	46.3	45	103	103	70-130
4-BFB	2.74	4.76	4.5	110	106	70-130

(Cont.)



# Quality Control Report

**Client:** AEI Consultants  
**Date Prepared:** 4/18/14  
**Date Analyzed:** 4/17/14  
**Instrument:** GC18  
**Matrix:** Water  
**Project:** #261829; 10700 MacArthur Blvd. Oakland, CA

**WorkOrder:** 1404660  
**BatchID:** 89492  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-89492  
1404709-001KMS/MSD

## QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chlorobenzene	19.6	19.6	20	ND	98.1	97.9	70-130	0.249	20
1,2-Dibromoethane (EDB)	20.3	20.1	20	ND	101	101	70-130	0	20
1,2-Dichloroethane (1,2-DCA)	20.1	20.2	20	ND	101	101	70-130	0	20
1,1-Dichloroethene	20.5	20.9	20	ND	103	105	70-130	2.10	20
Trichloroethene	20.1	20.4	20	ND	100	102	70-130	1.41	20
<b>Surrogate Recovery</b>									
Dibromofluoromethane	44.7	45.1	45		99	100	70-130	0.854	20
Toluene-d8	44.3	44.0	45		98	98	70-130	0	20
4-BFB	4.52	4.40	4.5		100	98	70-130	2.51	20



# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1404660

ClientCode: AEL

WaterTrax  WriteOn  EDF  Excel  EQuIS  Email  HardCopy  ThirdParty  J-flag

## Report to:

Jeremy Smith  
AEI Consultants  
2500 Camino Diablo, Ste.#200  
Walnut Creek, CA 94597  
(925) 283-6000 FAX: (925) 944-2895

Email: jasmith@aeiconsultants.com  
cc/3rd Party:  
PO: 55466  
ProjectNo: #261829; 10700 MacArthur Blvd. Oakland,  
CA

## Bill to:

Sara Guerin  
AEI Consultants  
2500 Camino Diablo, Ste. #200  
Walnut Creek, CA 94597  
AccountsPayable@AEIConsultants.co

Requested TAT: 5 days

Date Received: 04/16/2014

Date Printed: 04/22/2014

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
1404660-001	AMW-1	Water	4/16/2014 7:00	<input type="checkbox"/>	A	A										
1404660-002	AMW-6R	Water	4/16/2014 9:00	<input type="checkbox"/>	A											
1404660-003	AMW-9	Water	4/16/2014 7:30	<input type="checkbox"/>	A											
1404660-004	FHS MW-10	Water	4/16/2014 6:20	<input type="checkbox"/>	A											
1404660-005	FHS MW-11	Water	4/16/2014 5:45	<input type="checkbox"/>	A											

Test Legend:

1	8010BMS_W
6	
11	

2	PREDF REPORT
7	
12	

3	
8	

4	
9	

5	
10	

Prepared by: Shana Carter

## 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.



## WORK ORDER SUMMARY

**Client Name:** AEI CONSULTANTS

**QC Level:** LEVEL 2

**Work Order:** 1404660

**Project:** #261829; 10700 MacArthur Blvd. Oakland, CA

**Client Contact:** Jeremy Smith

**Date Received:** 4/16/2014

**Comments:**

**Contact's Email:** [jasmith@aeiconsultants.com](mailto:jasmith@aeiconsultants.com)

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1404660-001A	AMW-1	Water	SW8260B (HVOCs List)	3	VOA	<input type="checkbox"/>	4/16/2014 7:00	5 days	Present	<input type="checkbox"/>	
1404660-002A	AMW-6R	Water	SW8260B (HVOCs List)	3	VOA	<input type="checkbox"/>	4/16/2014 9:00	5 days	2%+	<input type="checkbox"/>	
1404660-003A	AMW-9	Water	SW8260B (HVOCs List)	3	VOA	<input type="checkbox"/>	4/16/2014 7:30	5 days	Present	<input type="checkbox"/>	
1404660-004A	FHS MW-10	Water	SW8260B (HVOCs List)	3	VOA	<input type="checkbox"/>	4/16/2014 6:20	5 days	Trace	<input type="checkbox"/>	
1404660-005A	FHS MW-11	Water	SW8260B (HVOCs List)	3	VOA	<input type="checkbox"/>	4/16/2014 5:45	5 days	Trace	<input type="checkbox"/>	

\* NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).

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**Bottle Legend:**

VOA = 43mL VOA, Unpreserved

1404666

McCAMPBELL ANALYTICAL INC.

**1534 Willow Pass Road  
Pittsburg, CA 94565**

**Telephone: (925) 252-9262**

Fax: (925) 252-9269

Report To: Jeremy Smith	Bill To: same	P.O. 55466
Company: AEI Consultants		
2500 Camino Diablo		
Walnut Creek, CA 94597	E-Mail: <a href="mailto:jasmith@aeiconsultants.com">jasmith@aeiconsultants.com</a>	
Tele: (925) 746-6000	Fax: (925) 746-6099	
Project #: 261829	Project Name: Foothill Square	
Project Location: 10700 MacArthur Blvd. Oakland, CA		
Sampler Signature: 		

## **CHAIN OF CUSTODY RECORD**

TURN AROUND TIME

**RUSH    24 HR    48 HR    72 HR    5 DAY**

**EDF Required?**  Yes

No

## **Analysis Request**

## Other

## Comments

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	MATRIX	METHOD PRESERVED
		Date	Time			

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_

ICE/<sup>t<sub>0</sub></sup>3.2 GOOD CONDITION \_\_\_\_\_ HEAD SPACE ABSENT \_\_\_\_\_ DECHLORINATED IN LAB \_\_\_\_\_ PRESERVATION \_\_\_\_\_ APPROPRIATE CONTAINERS \_\_\_\_\_ PERSERVED IN LAB \_\_\_\_\_ VOAS | O&G | METALS | OTHER

**Relinquished By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Received By:** \_\_\_\_\_

**GOOD CONDITION** \_\_\_\_\_ **APPROPRIATE** \_\_\_\_\_  
**HEAD SPACE ABSENT** \_\_\_\_\_ **CONTAINERS** \_\_\_\_\_  
**DECHLORINATED IN LAB** \_\_\_\_\_ **PRESERVED IN LAB** \_\_\_\_\_

**Relinquished By:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Received By:** \_\_\_\_\_



## Sample Receipt Checklist

Client Name: **AEI Consultants** Date and Time Received: **4/16/2014 1:21:45 PM**  
Project Name: **#261829; 10700 MacArthur Blvd. Oakland, CA** LogIn Reviewed by: **Shana Carter**  
WorkOrder N°: **1404660** 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/coolier? Yes  No  NA   
Shipping container/coolier 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: 3.2°C NA   
Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
Sample labels checked for correct preservation? Yes  No   
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.

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Comments: