

RECEIVED

By Alameda County Environmental Health at 2:16 pm, Apr 01, 2015

MAC ARTHUR BOULEVARD ASSOCIATES
c/o Jay-Phares Corporation
10700 Mac Arthur Boulevard, Suite 200
Oakland, CA 94605
Attention: John Jay (510) 562-9500
(510) 562-9505 (Fax)

March 19, 2015

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 – 2nd 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



March 19, 2015

GROUNDWATER MONITORING REPORT- 2nd 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

San Francisco HQ

Atlanta

Chicago

Costa Mesa

Dallas

Denver

Los Angeles

Miami

New York

Phoenix

Portland

San Jose

National Presence

Regional Focus

Local Solutions



March 19, 2015

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

Subject: **Groundwater Monitoring Report – 2nd 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 October 14, 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, please refer to AEI's *Supplemental Soil Vapor Investigation Report* dated June 25, 2008.

Summary of Monitoring Activities

On October 14, 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, FHS MW-10, and FHS MW-11) and groundwater samples were collected from six of the wells (AMW-1, AMW-6R, AMW-8, AMW-9, FHS MW-10, and FHS MW-11) in accordance with the approved sampling schedule. During sampling, well WGR MW-2 was observed to have been paved over during construction activities and was not accessible. 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 and AMW-6R) are screened between approximately 16 to 25 feet bgs, and deeper wells (AMW-8, AMW-9, and FHS MW-10 and FHS MW-11) are generally screened in the 21 to 33 feet bgs range. Screen intervals, where known, are presented in Table 1.

Overall, groundwater levels at the site since the last monitoring event decreased approximately 1.7 to 3 feet. Groundwater levels in the shallow aquifer were reported at 39.78 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 21.19 to 43.57 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 is 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 490 micrograms per liter ($\mu\text{g/L}$), 110 $\mu\text{g/L}$, and 120 $\mu\text{g/L}$ respectively. These concentrations were relatively consistent with recent data; however, they were well below historic concentration ranges seen in well AMW-6. PCE was detected in AMW-1 at a concentration of 0.69 $\mu\text{g/L}$. 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 25 $\mu\text{g/L}$, 25 $\mu\text{g/L}$, and 17 $\mu\text{g/L}$. 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 second semester groundwater monitoring event at the site, conducted during the 3rd 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 startup and operations report, which will be issued to the ACHCSA under separate cover. The groundwater monitoring well network will continue to be sampled by AEI in accordance with the approved sampling schedule, with the next sampling event scheduled during April 2015.

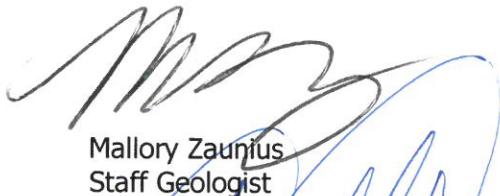
Report Limitations and Signatures

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.

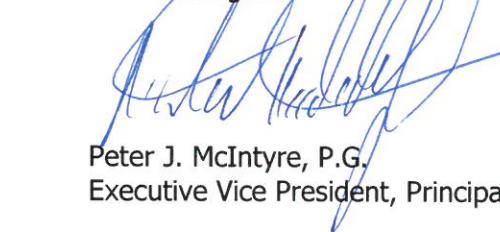
These services were performed in accordance with generally accepted practices, in the environmental engineering and consulting field, which existed at the time and location of the

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



Mallory Zaunius
Staff Geologist



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

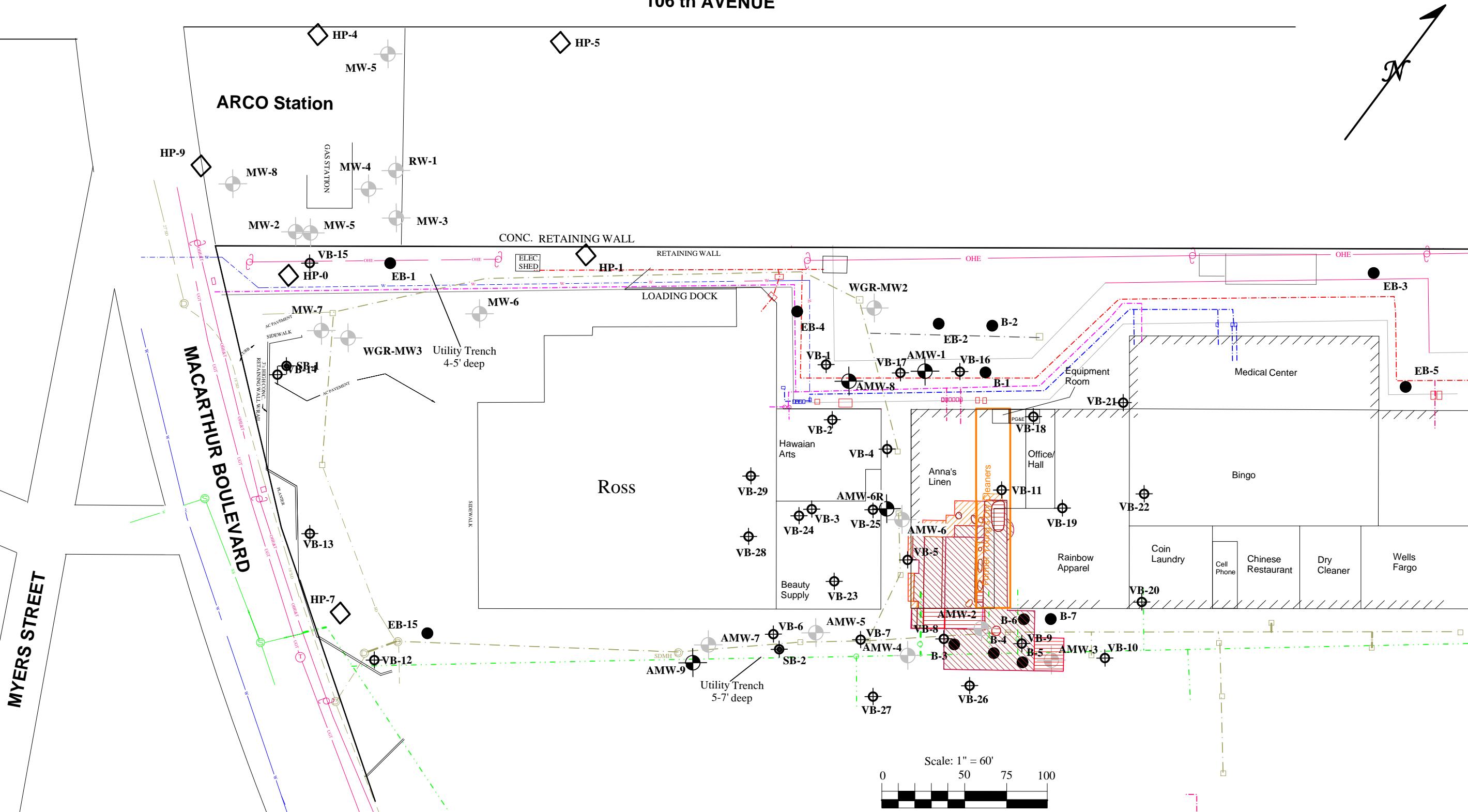
2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597

SITE LOCATION MAP

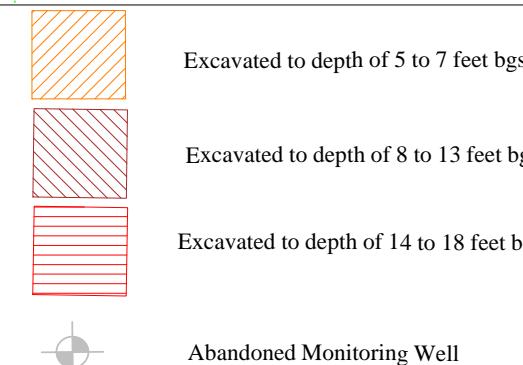
10700 MACARTHUR BLVD
OAKLAND, CALIFORNIA

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



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

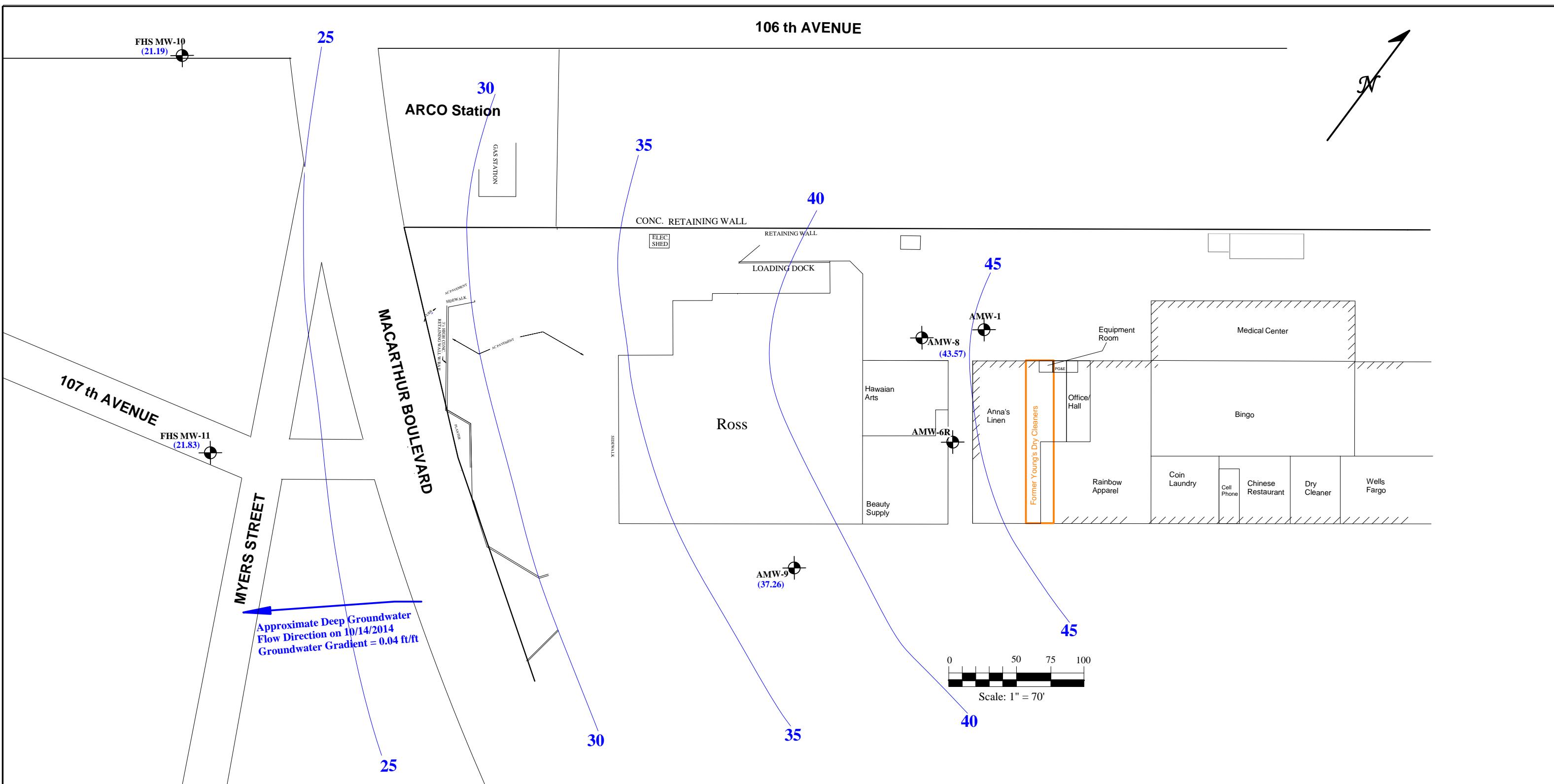
Drafted 6/30/05 - RFF on Dirk Slooten base
Revised 03/15 by J.SMITH

AEI CONSULTANTS
2500 CAMINO DIABLO, WALNUT CREEK, CA

SITE PLAN

10700 MACARTHUR BLVD.
OAKLAND, CALIFORNIA

FIGURE 2
PROJECT NO. 261829



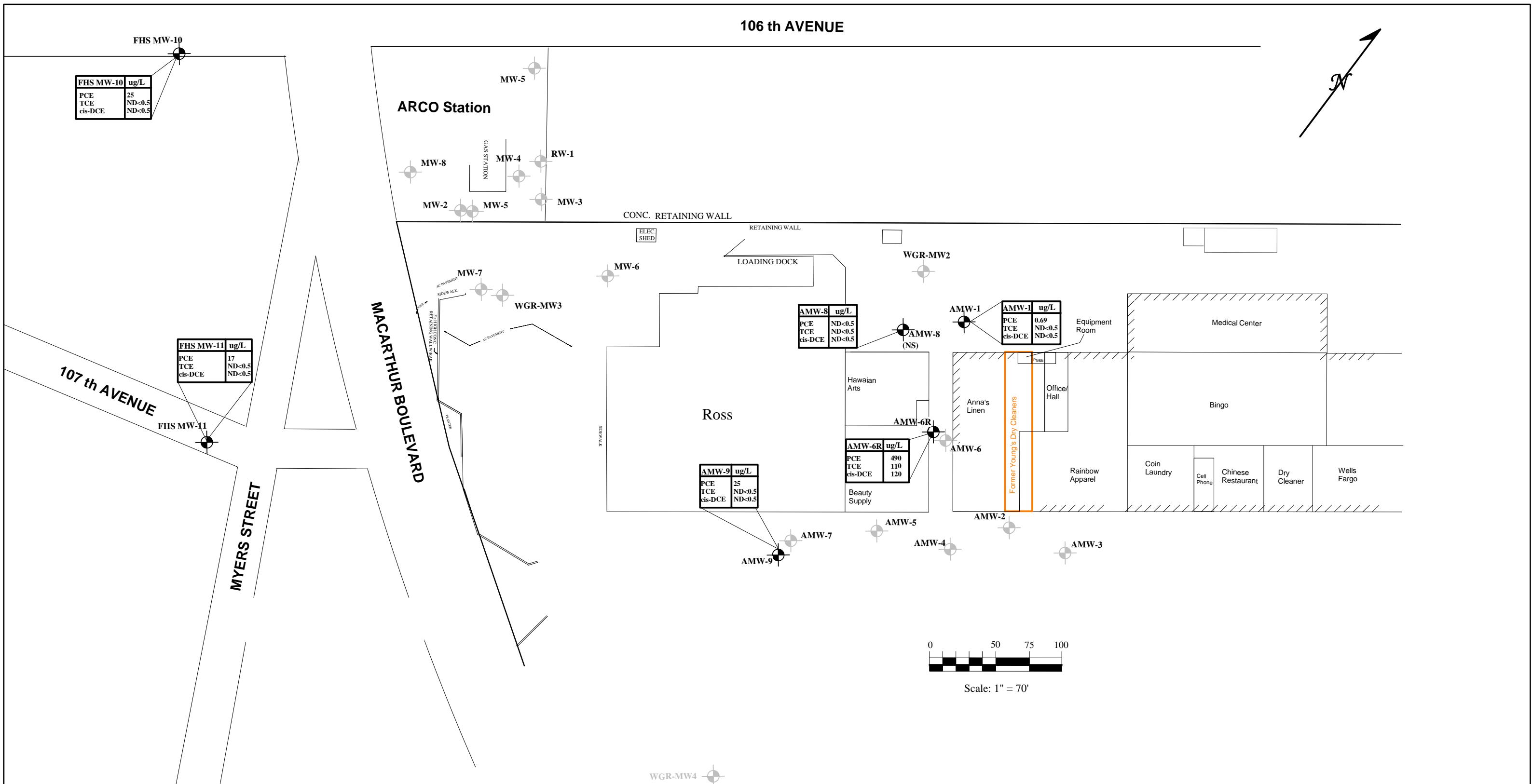
AEI CONSULTANTS

2500 CAMINO DIABLO, WALNUT CREEK, CA

Groundwater Elevation Map -
Deep Wells

10700 MACARTHUR BLVD.
OAKLAND, CALIFORNIA

FIGURE 3
PROJECT NO. 261829



AEI CONSULTANTS

2500 CAMINO DIABLO, WALNUT CREEK, CA

Groundwater Analytical Data
(10/14/14)

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
AMW-4 (Shallow)	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
	4/16/2014		64.51	23.01	41.50
	10/14/2014		64.51	24.73	39.78
	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
	4/16/2014		NA	13.84	NA
10/14/2014			NA	16.31	NA

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	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
	4/2/2009		64.55	18.18	46.37
	10/2/2009		64.55	19.75	44.80
	4/9/2010		64.55	17.76	46.79
	11/10/2010		64.55	19.41	45.14
	5/27/2011		64.55	15.92	48.63
	10/19/2011		64.55	17.15	47.40
	4/30/2012		64.55	17.16	47.39
	10/29/2012		64.55	18.72	45.83
	4/26/2013		64.55	17.61	46.94
	10/11/2013		64.55	19.11	45.44
	4/16/2014		64.55	18.02	46.53
	10/14/2014		64.55	20.98	43.57
AMW-9 (Deep)	1/29/1999	? - 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
	4/2/2009		63.48	23.80	39.68
	10/2/2009		63.48	25.98	37.50
	4/9/2010		63.48	22.80	40.68
	11/10/2010		63.48	25.36	38.12
	5/27/2011		63.48	21.73	41.75
	10/19/2011		63.48	24.07	39.41
	4/30/2012		63.48	22.90	40.58
	10/29/2012		63.48	25.49	37.99
	4/26/2013		63.48	23.49	39.99
	10/11/2013		63.48	25.33	38.15
	4/16/2014		63.48	24.53	38.95
	10/14/2014		63.48	26.22	37.26

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
	4/16/2014		63.18	24.42	38.76
	10/14/2014		Destroyed/ Covered with Black Top		
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
	4/26/2013		Well Destroyed during Construction		
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
	4/16/2014		52.34	28.12	24.22
	10/14/2014		52.34	31.15	21.19

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
	4/16/2014		54.06	29.19	24.87
	10/14/2014		54.06	32.23	21.83
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.

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

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

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-6R (shallow)	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
	04/16/14	AEI	110	ND<12	540	110	ND<RL
	10/14/14	AEI	120	ND<25	490	110	ND<RL
					Well Covered During Construction		
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
	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
	04/16/14	AEI	NS	NS	NS	NS	NS
	10/14/14	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	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	VHCs* µg/L
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
	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	13	ND<0.5	ND<RL
	10/14/14	AEI	ND<0.5	ND<0.5	25	ND<0.5	ND<RL
FHS MW-10 (deep)	10/9/97	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR
	1/29/99	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	5/5/99	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/10/99	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	1/20/00	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/8/00	AEI	NS	NS	NS	NS	NS
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	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 ¹	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 ⁸
	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	27	0.55	ND<RL
	10/14/14	AEI	ND<0.5	ND<0.5	25	ND<0.5	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
FHS MW-11 (deep)	9/29/97	PES	ND<0.5	ND<0.5	4	ND<0.5	NR
	1/29/99	AEI	ND<0.5	ND<0.5	7	ND<0.5	ND<0.5
	5/5/99	AEI	ND<0.5	ND<0.5	7.1	ND<0.5	ND<0.5
	9/10/99	AEI	ND<0.5	ND<0.5	7.5	ND<0.5	ND<0.5
	1/20/00	AEI	ND<0.5	ND<0.5	7.5	ND<0.5	ND<0.5
	8/8/00	AEI	ND<0.5	ND<0.5	38	ND<0.5	ND<0.5
	2/15/01	AEI	ND<0.5	ND<0.5	18	ND<0.5	ND<0.5
	8/29/01	AEI	ND<0.5	ND<0.5	16	ND<0.5	ND<0.5
	3/12/02	AEI	ND<0.5	ND<0.5	13	ND<0.5	0.77**
	9/27/02	AEI	ND<1	ND<1	13	ND<1	6.4** 1.1***
	3/25/03	AEI	0.78	ND<0.5	12	0.88	4.0** 1.0***
	10/2/03				Well Inaccessible		
	10/17/06	AEI	ND<0.5	ND<0.5	20	ND<0.5	ND<RL
	5/3/2007 ¹	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
	4/16/2014	AEI	ND<0.5	ND<0.5	22	ND<0.5	ND<RL ⁹
	10/14/2014	AEI	ND<0.5	ND<0.5	17	ND<0.5	ND<RL¹⁰
MW-6 (deep)	3/11/95	EMCON	ND<20	ND<0.5	1300	ND<20	NR
	6/5/95	EMCON	ND<20	ND<20	2000	ND<20	NR
	8/29/95	EMCON	ND<20	ND<20	1300	ND<20	NR
	9/11/95	Augus	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
MW-7 (shallow)	3/11/95	EMCON	NS	NS	NS	NS	NS
	6/5/95	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	8/29/95	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	9/11/95	Augeus	85	ND<50	-	ND<50	ND<50
	11/16/95	EMCON	ND<20	ND<20	ND<20	ND<20	ND<20
	2/28/96	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	5/28/96	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	7/17/96	PES	0.6	ND<0.5	ND<0.5	0.6	ND<0.5
	8/19/96	EMCON	ND<1	ND<1	ND<1	ND<1	ND<1
	10/23/96	PES	0.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	11/21/96	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	3/26/97	EMCON	ND<20	ND<20	ND<20	ND<20	ND<20
	5/20/97	EMCON	ND<10	ND<10	ND<10	ND<10	ND<10
	9/29/97	PES	ND<10	ND<10	ND<10	ND<10	ND<10
	1/20/00	AEI	ND<6.5	ND<6.5	ND<6.5	ND<6.5	ND<6.5
	8/8/00	AEI	NS	NS	NS	NS	NS
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	3/25/03	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	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.					
WGR MW-2 (Shallow)	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
	10/14/14	Well Destroyed during construction activities					
WGR MW-3 (Shallow)	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)

¹ = Reported by laboratory without letters FHS as prefix

² = Vinyl Chloride detected at a concentration of 1.9 µg/L

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

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

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

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

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

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

⁹ = Chloroform detected at a concentration of 1.2 µg/L

¹⁰ = Chloform detected at a concentration of 8.3 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:	10/14/2014
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)	24.73
Water Elevation (feet above msl)	39.78
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	9.7
Actual Volume Purged (gallons)	8.0
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
6:15	2	20.32	7.47	1,328	3.38	-99.5	
	4	20.30	7.47	1,324	2.75	-91.3	
	6	20.33	7.45	1,320	1.58	-86.4	
6:20	8	20.34	7.43	1,318	1.01	-83.7	

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:	10/14/2014
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)	16.31
Water Elevation (feet above msl)	6.69
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)	3.2
Actual Volume Purged (gallons)	3.0
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
8:48	1	20.38	7.82	1,403	4.32	-153.2	
	2	20.35	7.80	1,397	3.89	-150.1	
8:50	3	20.33	7.79	1,390	2.17	-148.7	

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:	10/14/2014
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)	20.98
Water Elevation (feet above msl)	43.57
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)	11.5
Actual Volume Purged (gallons)	10.0
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
7:12	2	20.42	7.81	1,427	2.89	-151.2	
	4	20.47	7.79	1,425	2.63	-144.7	
	6	20.43	7.80	1,418	2.17	-140.3	
	8	20.45	7.80	1,411	1.95	-138.2	
7:20	10	20.42	7.80	1,408	1.27	-133.4	

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

AEI CONSULTANTS
GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: **AMW-9**

Project Name:	Foothill Square	Date of Sampling:	10/14/2014
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)	
Water Elevation (feet above msl)	63.48
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	26.1
Actual Volume Purged (gallons)	
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
8:04	2	20.33	7.65	1,123	3.56	176.2	
	4	20.33	7.62	1,118	3.05	170.3	
	6	20.31	7.64	1,097	2.57	166.4	
	8	20.31	7.63	1,084	2.10	160.3	
8:10	10	20.30	7.60	1,077	1.88	158.8	

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:	10/14/2014
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)	
Water Elevation (feet above msl)	63.18
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: FHS MW-10

Project Name:	Foothill Square	Date of Sampling:	10/14/2014
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)		31.15	
Water Elevation (feet above msl)		21.19	
Well Volumes Purged		3	
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)		10.0	
Actual Volume Purged (gallons)		9.0	
Appearance of Purge Water		Clear	
Free Product Present?	n/a	Thickness (ft):	-

GROUNDWATER SAMPLES

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:	10/14/2014
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)	32.23
Water Elevation (feet above msl)	21.83
Well Volumes Purged	3
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	15.3
Actual Volume Purged (gallons)	15.0
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
5:30	3	20.36	7.57	882	4.97	-138.4	
	6	20.35	7.56	880	3.84	-135.3	
	9	20.35	7.53	877	2.66	-133.2	
	12	20.33	7.46	875	1.73	-130.7	
5:40	15	20.32	7.44	873	1.24	-128.4	

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: 1410493

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

Project Contact: Jeremy Smith

Project P.O.: 69010

Project Name: #261829; Foothill Square

Project Received: 10/14/2014

Analytical Report reviewed & approved for release on 10/21/2014 by:

Question about
your data?

[Click here to email](#)
McCcampbell

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; Foothill Square
WorkOrder: 1410493

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
ML	Minimum Level of Quantitation
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.
PF	Prep Factor
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 Report

Client: AEI Consultants
Project: #261829; Foothill Square
Date Received: 10/14/14 14:00
Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493
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	1410493-001A	Water	10/14/2014 06:30	GC18	96680
<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Date Analyzed</u>
Bromodichloromethane	ND	0.50	1		10/18/2014 21:11
Bromoform	ND	0.50	1		10/18/2014 21:11
Bromomethane	ND	0.50	1		10/18/2014 21:11
Carbon Tetrachloride	ND	0.50	1		10/18/2014 21:11
Chlorobenzene	ND	0.50	1		10/18/2014 21:11
Chloroethane	ND	0.50	1		10/18/2014 21:11
Chloroform	ND	0.50	1		10/18/2014 21:11
Chloromethane	ND	0.50	1		10/18/2014 21:11
Dibromochloromethane	ND	0.50	1		10/18/2014 21:11
1,2-Dibromoethane (EDB)	ND	0.50	1		10/18/2014 21:11
1,2-Dichlorobenzene	ND	0.50	1		10/18/2014 21:11
1,3-Dichlorobenzene	ND	0.50	1		10/18/2014 21:11
1,4-Dichlorobenzene	ND	0.50	1		10/18/2014 21:11
Dichlorodifluoromethane	ND	0.50	1		10/18/2014 21:11
1,1-Dichloroethane	ND	0.50	1		10/18/2014 21:11
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1		10/18/2014 21:11
1,1-Dichloroethene	ND	0.50	1		10/18/2014 21:11
cis-1,2-Dichloroethene	ND	0.50	1		10/18/2014 21:11
trans-1,2-Dichloroethene	ND	0.50	1		10/18/2014 21:11
1,2-Dichloropropane	ND	0.50	1		10/18/2014 21:11
cis-1,3-Dichloropropene	ND	0.50	1		10/18/2014 21:11
trans-1,3-Dichloropropene	ND	0.50	1		10/18/2014 21:11
Freon 113	ND	0.50	1		10/18/2014 21:11
Methylene chloride	ND	0.50	1		10/18/2014 21:11
1,1,1,2-Tetrachloroethane	ND	0.50	1		10/18/2014 21:11
1,1,2,2-Tetrachloroethane	ND	0.50	1		10/18/2014 21:11
Tetrachloroethene	0.69	0.50	1		10/18/2014 21:11
1,1,1-Trichloroethane	ND	0.50	1		10/18/2014 21:11
1,1,2-Trichloroethane	ND	0.50	1		10/18/2014 21:11
Trichloroethene	ND	0.50	1		10/18/2014 21:11
Trichlorofluoromethane	ND	0.50	1		10/18/2014 21:11
Vinyl Chloride	ND	0.50	1		10/18/2014 21:11

(Cont.)



Analytical Report

Client: AEI Consultants
Project: #261829; Foothill Square
Date Received: 10/14/14 14:00
Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493
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	1410493-001A	Water	10/14/2014 06:30	GC18	96680
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	92		73-131		10/18/2014 21:11
Toluene-d8	106		72-117		10/18/2014 21:11
4-BFB	105		74-116		10/18/2014 21:11
<u>Analyst(s):</u>	KF				

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: AEI Consultants

Project: #261829; Foothill Square

Date Received: 10/14/14 14:00

Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493

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	1410493-002A	Water	10/14/2014 09:00	GC18	96680
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Bromodichloromethane	ND		25	50	10/21/2014 01:29
Bromoform	ND		25	50	10/21/2014 01:29
Bromomethane	ND		25	50	10/21/2014 01:29
Carbon Tetrachloride	ND		25	50	10/21/2014 01:29
Chlorobenzene	ND		25	50	10/21/2014 01:29
Chloroethane	ND		25	50	10/21/2014 01:29
Chloroform	ND		25	50	10/21/2014 01:29
Chloromethane	ND		25	50	10/21/2014 01:29
Dibromochloromethane	ND		25	50	10/21/2014 01:29
1,2-Dibromoethane (EDB)	ND		25	50	10/21/2014 01:29
1,2-Dichlorobenzene	ND		25	50	10/21/2014 01:29
1,3-Dichlorobenzene	ND		25	50	10/21/2014 01:29
1,4-Dichlorobenzene	ND		25	50	10/21/2014 01:29
Dichlorodifluoromethane	ND		25	50	10/21/2014 01:29
1,1-Dichloroethane	ND		25	50	10/21/2014 01:29
1,2-Dichloroethane (1,2-DCA)	ND		25	50	10/21/2014 01:29
1,1-Dichloroethene	ND		25	50	10/21/2014 01:29
cis-1,2-Dichloroethene	120		25	50	10/21/2014 01:29
trans-1,2-Dichloroethene	ND		25	50	10/21/2014 01:29
1,2-Dichloropropane	ND		25	50	10/21/2014 01:29
cis-1,3-Dichloropropene	ND		25	50	10/21/2014 01:29
trans-1,3-Dichloropropene	ND		25	50	10/21/2014 01:29
Freon 113	ND		25	50	10/21/2014 01:29
Methylene chloride	ND		25	50	10/21/2014 01:29
1,1,1,2-Tetrachloroethane	ND		25	50	10/21/2014 01:29
1,1,2,2-Tetrachloroethane	ND		25	50	10/21/2014 01:29
Tetrachloroethene	490		25	50	10/21/2014 01:29
1,1,1-Trichloroethane	ND		25	50	10/21/2014 01:29
1,1,2-Trichloroethane	ND		25	50	10/21/2014 01:29
Trichloroethene	110		25	50	10/21/2014 01:29
Trichlorofluoromethane	ND		25	50	10/21/2014 01:29
Vinyl Chloride	ND		25	50	10/21/2014 01:29

(Cont.)



Analytical Report

Client: AEI Consultants
Project: #261829; Foothill Square
Date Received: 10/14/14 14:00
Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493
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	1410493-002A	Water	10/14/2014 09:00	GC18	96680
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	92		73-131		10/21/2014 01:29
Toluene-d8	110		72-117		10/21/2014 01:29
4-BFB	109		74-116		10/21/2014 01:29
<u>Analyst(s):</u>	KBO				

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: AEI Consultants
Project: #261829; Foothill Square
Date Received: 10/14/14 14:00
Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493
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-8	1410493-003A	Water	10/14/2014 07:30	GC18	96680
<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Date Analyzed</u>
Bromodichloromethane	ND	0.50	1		10/21/2014 02:08
Bromoform	ND	0.50	1		10/21/2014 02:08
Bromomethane	ND	0.50	1		10/21/2014 02:08
Carbon Tetrachloride	ND	0.50	1		10/21/2014 02:08
Chlorobenzene	ND	0.50	1		10/21/2014 02:08
Chloroethane	ND	0.50	1		10/21/2014 02:08
Chloroform	ND	0.50	1		10/21/2014 02:08
Chloromethane	ND	0.50	1		10/21/2014 02:08
Dibromochloromethane	ND	0.50	1		10/21/2014 02:08
1,2-Dibromoethane (EDB)	ND	0.50	1		10/21/2014 02:08
1,2-Dichlorobenzene	ND	0.50	1		10/21/2014 02:08
1,3-Dichlorobenzene	ND	0.50	1		10/21/2014 02:08
1,4-Dichlorobenzene	ND	0.50	1		10/21/2014 02:08
Dichlorodifluoromethane	ND	0.50	1		10/21/2014 02:08
1,1-Dichloroethane	ND	0.50	1		10/21/2014 02:08
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1		10/21/2014 02:08
1,1-Dichloroethene	ND	0.50	1		10/21/2014 02:08
cis-1,2-Dichloroethene	ND	0.50	1		10/21/2014 02:08
trans-1,2-Dichloroethene	ND	0.50	1		10/21/2014 02:08
1,2-Dichloropropane	ND	0.50	1		10/21/2014 02:08
cis-1,3-Dichloropropene	ND	0.50	1		10/21/2014 02:08
trans-1,3-Dichloropropene	ND	0.50	1		10/21/2014 02:08
Freon 113	ND	0.50	1		10/21/2014 02:08
Methylene chloride	ND	0.50	1		10/21/2014 02:08
1,1,1,2-Tetrachloroethane	ND	0.50	1		10/21/2014 02:08
1,1,2,2-Tetrachloroethane	ND	0.50	1		10/21/2014 02:08
Tetrachloroethene	ND	0.50	1		10/21/2014 02:08
1,1,1-Trichloroethane	ND	0.50	1		10/21/2014 02:08
1,1,2-Trichloroethane	ND	0.50	1		10/21/2014 02:08
Trichloroethene	ND	0.50	1		10/21/2014 02:08
Trichlorofluoromethane	ND	0.50	1		10/21/2014 02:08
Vinyl Chloride	ND	0.50	1		10/21/2014 02:08

(Cont.)



Analytical Report

Client: AEI Consultants
Project: #261829; Foothill Square
Date Received: 10/14/14 14:00
Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493
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-8	1410493-003A	Water	10/14/2014 07:30	GC18	96680
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	92		73-131		10/21/2014 02:08
Toluene-d8	110		72-117		10/21/2014 02:08
4-BFB	105		74-116		10/21/2014 02:08
<u>Analyst(s):</u>	KBO				

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: AEI Consultants
Project: #261829; Foothill Square
Date Received: 10/14/14 14:00
Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493
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	1410493-004A	Water	10/14/2014 08:15	GC18	96680
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Bromodichloromethane	ND		0.50	1	10/18/2014 23:07
Bromoform	ND		0.50	1	10/18/2014 23:07
Bromomethane	ND		0.50	1	10/18/2014 23:07
Carbon Tetrachloride	ND		0.50	1	10/18/2014 23:07
Chlorobenzene	ND		0.50	1	10/18/2014 23:07
Chloroethane	ND		0.50	1	10/18/2014 23:07
Chloroform	ND		0.50	1	10/18/2014 23:07
Chloromethane	ND		0.50	1	10/18/2014 23:07
Dibromochloromethane	ND		0.50	1	10/18/2014 23:07
1,2-Dibromoethane (EDB)	ND		0.50	1	10/18/2014 23:07
1,2-Dichlorobenzene	ND		0.50	1	10/18/2014 23:07
1,3-Dichlorobenzene	ND		0.50	1	10/18/2014 23:07
1,4-Dichlorobenzene	ND		0.50	1	10/18/2014 23:07
Dichlorodifluoromethane	ND		0.50	1	10/18/2014 23:07
1,1-Dichloroethane	ND		0.50	1	10/18/2014 23:07
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	10/18/2014 23:07
1,1-Dichloroethene	ND		0.50	1	10/18/2014 23:07
cis-1,2-Dichloroethene	ND		0.50	1	10/18/2014 23:07
trans-1,2-Dichloroethene	ND		0.50	1	10/18/2014 23:07
1,2-Dichloropropane	ND		0.50	1	10/18/2014 23:07
cis-1,3-Dichloropropene	ND		0.50	1	10/18/2014 23:07
trans-1,3-Dichloropropene	ND		0.50	1	10/18/2014 23:07
Freon 113	ND		0.50	1	10/18/2014 23:07
Methylene chloride	ND		0.50	1	10/18/2014 23:07
1,1,1,2-Tetrachloroethane	ND		0.50	1	10/18/2014 23:07
1,1,2,2-Tetrachloroethane	ND		0.50	1	10/18/2014 23:07
Tetrachloroethene	25		0.50	1	10/18/2014 23:07
1,1,1-Trichloroethane	ND		0.50	1	10/18/2014 23:07
1,1,2-Trichloroethane	ND		0.50	1	10/18/2014 23:07
Trichloroethene	ND		0.50	1	10/18/2014 23:07
Trichlorofluoromethane	ND		0.50	1	10/18/2014 23:07
Vinyl Chloride	ND		0.50	1	10/18/2014 23:07

(Cont.)



Analytical Report

Client: AEI Consultants

Project: #261829; Foothill Square

Date Received: 10/14/14 14:00

Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493

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	1410493-004A	Water	10/14/2014 08:15	GC18	96680
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	93		73-131		10/18/2014 23:07
Toluene-d8	106		72-117		10/18/2014 23:07
4-BFB	103		74-116		10/18/2014 23:07
<u>Analyst(s):</u>	KF				

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: AEI Consultants
Project: #261829; Foothill Square
Date Received: 10/14/14 14:00
Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493
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	1410493-005A	Water	10/14/2014 05:00	GC18	96680
<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Date Analyzed</u>
Bromodichloromethane	ND	0.50	1		10/18/2014 23:46
Bromoform	ND	0.50	1		10/18/2014 23:46
Bromomethane	ND	0.50	1		10/18/2014 23:46
Carbon Tetrachloride	ND	0.50	1		10/18/2014 23:46
Chlorobenzene	ND	0.50	1		10/18/2014 23:46
Chloroethane	ND	0.50	1		10/18/2014 23:46
Chloroform	ND	0.50	1		10/18/2014 23:46
Chloromethane	ND	0.50	1		10/18/2014 23:46
Dibromochloromethane	ND	0.50	1		10/18/2014 23:46
1,2-Dibromoethane (EDB)	ND	0.50	1		10/18/2014 23:46
1,2-Dichlorobenzene	ND	0.50	1		10/18/2014 23:46
1,3-Dichlorobenzene	ND	0.50	1		10/18/2014 23:46
1,4-Dichlorobenzene	ND	0.50	1		10/18/2014 23:46
Dichlorodifluoromethane	ND	0.50	1		10/18/2014 23:46
1,1-Dichloroethane	ND	0.50	1		10/18/2014 23:46
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1		10/18/2014 23:46
1,1-Dichloroethene	ND	0.50	1		10/18/2014 23:46
cis-1,2-Dichloroethene	ND	0.50	1		10/18/2014 23:46
trans-1,2-Dichloroethene	ND	0.50	1		10/18/2014 23:46
1,2-Dichloropropane	ND	0.50	1		10/18/2014 23:46
cis-1,3-Dichloropropene	ND	0.50	1		10/18/2014 23:46
trans-1,3-Dichloropropene	ND	0.50	1		10/18/2014 23:46
Freon 113	ND	0.50	1		10/18/2014 23:46
Methylene chloride	ND	0.50	1		10/18/2014 23:46
1,1,1,2-Tetrachloroethane	ND	0.50	1		10/18/2014 23:46
1,1,2,2-Tetrachloroethane	ND	0.50	1		10/18/2014 23:46
Tetrachloroethene	25	0.50	1		10/18/2014 23:46
1,1,1-Trichloroethane	ND	0.50	1		10/18/2014 23:46
1,1,2-Trichloroethane	ND	0.50	1		10/18/2014 23:46
Trichloroethene	ND	0.50	1		10/18/2014 23:46
Trichlorofluoromethane	ND	0.50	1		10/18/2014 23:46
Vinyl Chloride	ND	0.50	1		10/18/2014 23:46

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: AEI Consultants

Project: #261829; Foothill Square

Date Received: 10/14/14 14:00

Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493

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	1410493-005A	Water	10/14/2014 05:00	GC18	96680
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	94		73-131		10/18/2014 23:46
Toluene-d8	106		72-117		10/18/2014 23:46
4-BFB	105		74-116		10/18/2014 23:46
<u>Analyst(s):</u>	KF				

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: AEI Consultants
Project: #261829; Foothill Square
Date Received: 10/14/14 14:00
Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493
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	1410493-006A	Water	10/14/2014 05:45	GC18	96680
<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Date Analyzed</u>
Bromodichloromethane	ND	0.50	1		10/19/2014 00:24
Bromoform	ND	0.50	1		10/19/2014 00:24
Bromomethane	ND	0.50	1		10/19/2014 00:24
Carbon Tetrachloride	ND	0.50	1		10/19/2014 00:24
Chlorobenzene	ND	0.50	1		10/19/2014 00:24
Chloroethane	ND	0.50	1		10/19/2014 00:24
Chloroform	8.3	0.50	1		10/19/2014 00:24
Chloromethane	ND	0.50	1		10/19/2014 00:24
Dibromochloromethane	ND	0.50	1		10/19/2014 00:24
1,2-Dibromoethane (EDB)	ND	0.50	1		10/19/2014 00:24
1,2-Dichlorobenzene	ND	0.50	1		10/19/2014 00:24
1,3-Dichlorobenzene	ND	0.50	1		10/19/2014 00:24
1,4-Dichlorobenzene	ND	0.50	1		10/19/2014 00:24
Dichlorodifluoromethane	ND	0.50	1		10/19/2014 00:24
1,1-Dichloroethane	ND	0.50	1		10/19/2014 00:24
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1		10/19/2014 00:24
1,1-Dichloroethene	ND	0.50	1		10/19/2014 00:24
cis-1,2-Dichloroethene	ND	0.50	1		10/19/2014 00:24
trans-1,2-Dichloroethene	ND	0.50	1		10/19/2014 00:24
1,2-Dichloropropane	ND	0.50	1		10/19/2014 00:24
cis-1,3-Dichloropropene	ND	0.50	1		10/19/2014 00:24
trans-1,3-Dichloropropene	ND	0.50	1		10/19/2014 00:24
Freon 113	ND	0.50	1		10/19/2014 00:24
Methylene chloride	ND	0.50	1		10/19/2014 00:24
1,1,1,2-Tetrachloroethane	ND	0.50	1		10/19/2014 00:24
1,1,2,2-Tetrachloroethane	ND	0.50	1		10/19/2014 00:24
Tetrachloroethene	17	0.50	1		10/19/2014 00:24
1,1,1-Trichloroethane	ND	0.50	1		10/19/2014 00:24
1,1,2-Trichloroethane	ND	0.50	1		10/19/2014 00:24
Trichloroethene	ND	0.50	1		10/19/2014 00:24
Trichlorofluoromethane	ND	0.50	1		10/19/2014 00:24
Vinyl Chloride	ND	0.50	1		10/19/2014 00:24

(Cont.)



Analytical Report

Client: AEI Consultants

Project: #261829; Foothill Square

Date Received: 10/14/14 14:00

Date Prepared: 10/18/14-10/21/14

WorkOrder: 1410493

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	1410493-006A	Water	10/14/2014 05:45	GC18	96680
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	95		73-131		10/19/2014 00:24
Toluene-d8	105		72-117		10/19/2014 00:24
4-BFB	102		74-116		10/19/2014 00:24
<u>Analyst(s):</u>	KF				



Quality Control Report

Client: AEI Consultants
Date Prepared: 10/20/14
Date Analyzed: 10/18/14
Instrument: GC18
Matrix: Water
Project: #261829; Foothill Square

WorkOrder: 1410493
BatchID: 96680
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-96680
1410638-002CMS/MSD

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	9.45	0.50	10	-	94	61-123
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	40.0	2.0	40	-	100	42-115
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	8.96	0.50	10	-	90	50-153
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	9.69	0.50	10	-	97	68-119
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	10.0	0.50	10	-	100	63-117
1,1-Dichloroethene	ND	8.90	0.50	10	-	89	78-110
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropene	ND	-	0.50	-	-	-	-
1,3-Dichloropropene	ND	-	0.50	-	-	-	-
2,2-Dichloropropene	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

Client: AEI Consultants
Date Prepared: 10/20/14
Date Analyzed: 10/18/14
Instrument: GC18
Matrix: Water
Project: #261829; Foothill Square

WorkOrder: 1410493
BatchID: 96680
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-96680
1410638-002CMS/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	9.66	0.50	10	-	97	67-121
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.48	0.50	10	-	95	62-121
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	9.56	0.50	10	-	96	61-118
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	9.04	0.50	10	-	90	81-112
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	23.3	23.9		25	93	96	76-125
Toluene-d8	26.5	25.6		25	106	102	71-125
4-BFB	2.57	2.59		2.5	103	104	74-104

(Cont.)



Quality Control Report

Client: AEI Consultants
Date Prepared: 10/20/14
Date Analyzed: 10/18/14
Instrument: GC18
Matrix: Water
Project: #261829; Foothill Square

WorkOrder: 1410493
BatchID: 96680
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-96680
1410638-002CMS/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
tert-Amyl methyl ether (TAME)	9.67	9.56	10	ND	97	96	70-130	0	20
t-Butyl alcohol (TBA)	41.1	41.7	40	7.9	83	104	70-130	0	20
Chlorobenzene	9.41	9.00	10	ND	94	90	70-130	0	20
1,2-Dibromoethane (EDB)	10.1	9.70	10	ND	101	97	70-130	0	20
1,2-Dichloroethane (1,2-DCA)	10.2	9.97	10	ND	102	100	70-130	0	20
1,1-Dichloroethene	9.23	8.86	10	ND	92	89	70-130	0	20
Diisopropyl ether (DIPE)	10.1	9.77	10	ND	101	98	70-130	0	20
Ethyl tert-butyl ether (ETBE)	9.65	9.48	10	ND	97	95	70-130	0	20
Methyl-t-butyl ether (MTBE)	9.66	9.53	10	ND	95	95	70-130	0	20
Trichloroethene	9.61	9.12	10	ND	96	91	70-130	0	20

Surrogate Recovery

Dibromofluoromethane	24.0	23.9	25		96	96	73-131	0	20
Toluene-d8	25.3	25.4	25		101	102	72-117	0	20
4-BFB	2.56	2.66	2.5		103	106	74-116	0	20



CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1410493

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: 69010
ProjectNo: #261829; Foothill Square

Bill to:

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

Requested TAT: 5 days

Date Received: 10/14/2014

Date Printed: 10/21/2014

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	
1410493-001	AMW-1	Water	10/14/2014 6:30	<input type="checkbox"/>	A	A											
1410493-002	AMW-6R	Water	10/14/2014 9:00	<input type="checkbox"/>	A												
1410493-003	AMW-8	Water	10/14/2014 7:30	<input type="checkbox"/>	A												
1410493-004	AMW-9	Water	10/14/2014 8:15	<input type="checkbox"/>	A												
1410493-005	FHS MW-10	Water	10/14/2014 5:00	<input type="checkbox"/>	A												
1410493-006	FHS MW-11	Water	10/14/2014 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: Caleigh Callaway

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: 1410493

Project: #261829; Foothill Square

Client Contact: Jeremy Smith

Date Received: 10/14/2014

Comments:

Contact's Email: 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
1410493-001A	AMW-1	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	<input type="checkbox"/>	10/14/2014 6:30	5 days	None	<input type="checkbox"/>	
1410493-002A	AMW-6R	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	<input type="checkbox"/>	10/14/2014 9:00	5 days	Trace	<input type="checkbox"/>	
1410493-003A	AMW-8	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	<input type="checkbox"/>	10/14/2014 7:30	5 days	Trace	<input type="checkbox"/>	
1410493-004A	AMW-9	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	<input type="checkbox"/>	10/14/2014 8:15	5 days	None	<input type="checkbox"/>	
1410493-005A	FHS MW-10	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	<input type="checkbox"/>	10/14/2014 5:00	5 days	None	<input type="checkbox"/>	
1410493-006A	FHS MW-11	Water	SW8260B (HVOCs List)	3	VOA w/ HCl	<input type="checkbox"/>	10/14/2014 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).

Bottle Legend:

VOA w/ HCl = 43mL VOA w/ HCl

1410493

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. #** 69010
Company: AEI Consultants
2500 Camino Diablo, Suite 200
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: *John Snapp*

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX		METHOD PRESERVED	Analysis Request	Other	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	
AMW-1		10-14-14	0630	3	VDA	X			X X		BTEX & TPH as Gas (602/8020 + 8015)/MTBE
AMW-6R			0900	3	VDA	X			X X		TPH as Diesel (8015) w/silica Gel Cleanup
AMW-8			0730	3	VDA	X			X X		Total Petroleum Oil & Grease (5520 E&F/B&F)
AMW-9			0815	3	VDA	X			X X		Total Petroleum Hydrocarbons (418.1)
FHS MW-10			0500	3	VDA	X			X X		HVOCs EPA 8260
FHS MW-11			0545	3	VDA	X			X X		BTEX ONLY (EPA 602 / 8020)

Relinquished By: <i>John Snapp</i>	Date: 10-14-14	Time: 1140	Received By: <i>Marcia 270</i>
Relinquished By:	Date: 10/14/14	Time: 1:00	Received By: <i>JAR</i>
Relinquished By:	Date:	Time:	Received By:

ICE/t° 60
GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
PRESERVATION _____
APPROPRIATE CONTAINERS _____
METALS _____
OTHER _____
VOAS _____
O&G _____



Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **10/14/2014 2:00:55 PM**

Project Name: **#261829; Foothill Square**

LogIn Reviewed by:

Caleigh Callaway

WorkOrder No: **1410493**

Matrix: Water

Carrier: Courier

Chain of Custody (COC) Information

- | | | |
|---|---|-----------------------------|
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sample IDs noted by Client on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Date and Time of collection noted by Client on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sampler's name noted on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |

Sample Receipt Information

- | | | | |
|--|---|-----------------------------|--|
| Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Samples in proper containers/bottles? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |

Sample Preservation and Hold Time (HT) Information

- | | | | |
|--|---|-----------------------------|--|
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Container/Temp Blank temperature | Cooler Temp: 6°C | | NA <input type="checkbox"/> |
| Water - VOA vials have zero headspace / no bubbles? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| Sample labels checked for correct preservation? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| pH acceptable upon receipt (Metal: pH<2; 522: pH<4)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Samples Received on Ice? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| (Ice Type: WET ICE) | | | |
| Total Chlorine tested and acceptable upon receipt for EPA 522? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |

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

Comments: