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Phone: (925) 944-2899 Fax: (925) 944-2895

April 25, 2007

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

> Work Plan – Additional Soil Vapor Investigation 10700 MacArthur Blvd. Oakland, CA AEI Project # 261829 Toxics Case No. RO0002580

Dear Mr. Chan:

AEI Consultants (AEI) has prepared this workplan on behalf of MacArthur Boulevard Associates for the property located at 10700 MacArthur Boulevard in the City of Oakland, Alameda County, California. AEI has been retained to provide environmental engineering and consulting services for the property relating to the previously identified release of hazardous materials, specifically tetrachloroethylene (PCE), from the former Young's Cleaners location. This workplan is in response to the Alameda County Health Care Services Agency (ACHCSA) letter dated December 20, 2006. This workplan outlines a scope of work to further investigate the release which is deemed necessary prior to preparation of the requested feasibility study and corrective action plan (CAP).

#### SITE DESCRIPTION AND BACKGROUND

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

The 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 108<sup>th</sup> 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 property and surrounding area.

Prior to the construction of the shopping center, approximately five acres of the northwest portion of the property was formerly occupied by with the Fageol Motor Company, which later became Peterbilt Motors Company, a manufacturer of tractors, trucks, and motorbuses. The southern and eastern portion of the property, approximately two-thirds of the total area, was undeveloped

grassland. Construction of the shopping center began in the early 1960s. Additions to the original center continued through the 1970s, including the construction of a gas station at the southeastern corner in 1970. This gas station was operated by USA Petroleum which ceased operations and was eventually demolished in 1994. A current open leaking underground storage tank (LUST) case exists for this former gas station, the responsibility for which is with USA.

Between 1984 and 1995, Young's Cleaners, a dry-cleaning business, operated in one of the units of the shopping center (Figure 2). A release of PCE was discovered as part of an offsite investigation, which was later traced to Young's Cleaners. Below is a chronology of discovery, investigation, and mitigation of the release.

#### **Preliminary Investigations**

In August 1988, Kaldveer Associates performed a Preliminary Soil and Groundwater Quality Testing Program at the site. Fifteen soil borings were drilled to depths of 11.5 to 36.5 below ground surface (bgs) around the perimeter of the site. The investigation focused on past use of the site as a truck manufacturing facility, the then operating USA Gasoline Station on the southeast corner of the site, and an ARCO service station adjacent to the north west corner of the site. The result of the analytical program indicated the presence of hydrocarbons in the soil and groundwater in the northwest corner of the site, adjacent to the ARCO station.

WGR installed 5 groundwater monitoring wells (WGR-MW-1 to WGR-MW-5) on the shopping center property in January, 1989. Soil and groundwater samples confirmed the presence of petroleum hydrocarbons in the northwest corner of the site. Groundwater samples from well WGR-MW-2 and WGR-MW-3, contained low concentrations of 1,1-trichloroethane. Wells WGR-MW-1 through WGR-MW-3 and WGR-MW-5 were installed in what was described as the "shallow" groundwater, described as between 20 to 35 feet bgs. Well WGR-MW-4 was installed in what was described as the "deeper" groundwater zone, with the well slots from 25 to 45 feet bgs.

RESNA conducted several investigations of the ARCO service station between 1991 and 1993 to define the extent of the petroleum hydrocarbon release that occurred on that property. During their investigations, RESNA detected chlorinated volatile organic compounds (CVOCs) in several of their borings and wells. On March 23, 1993, the ACHCSA requested that the vertical and lateral extent of PCE contamination, discovered on the shopping center by ARCO while investigating its release, be investigated by the shopping center owners.

#### **Exploratory Excavation - 1994**

In May 1994, Augeas performed an exploratory excavation within the Young's Cleaners locations. Approximately 8 cubic yards of soil were removed from site of the coin operated dry cleaning machines. An area approximately 1.5 feet deep and 6 feet by 8 feet was excavated by the south wall of the facility. Augeas collected 4 soil samples (SB-1 through SB-4) from the floor and sidewalls of the shallow excavation which were analyzed by EPA method 8240. PCE was detected in these samples at concentrations ranging from 890 milligrams per kilogram (mg/kg) (SB-1) to

9,100 mg/kg (SB-2). Sample SB-2 was located about three feet directly below a floor drain that was shown by Augeas to be connected to the sanitary sewer.

In July 1994, the existing excavation was extended four feet to the west and deepened to about 4 feet bgs. On August 29, 1994, Augeas collected eight additional soil samples (H-1 through H-8) from floor and sidewalls of the excavation. PCE was reported at concentrations ranging from 1.4 mg/kg (H-2) to 5.0 mg/kg (H-3).

#### Site Characterization – 1994 to 1995

Between September and November 1994, Augeas drilled seven soil borings and three groundwater monitoring wells on the site. Boring B-1 was drilled to a depth of 5 feet bgs and borings B-2 through B-7 to depths of 21 to 25 feet bgs. One well AMW-1 was drilled near the back of Young's Dry Cleaners and two (AMW-2 and AMW-3) near the front of the facility.

Augeas reported PCE soil contamination in 5 of the soil borings (B-3 through B-7) and monitoring wells AMW-2 and AMW-3 at concentrations ranging from 0.012 mg/kg (B-3) to 90 mg/kg (AMW-2).

PCE was detected in groundwater samples from soil borings B-4 through B-6 at concentrations ranging from 870 micrograms per liter ( $\mu$ g/L) to 11,000  $\mu$ g/L. No chlorinated solvents were detected in the groundwater sample from well AMW-1. The groundwater sample from well AMW-2, located in front of the drycleaners, adjacent to the sanitary sewer line was reported to contain PCE, trichloroethylene (TCE), cis & trans-1,2-dichloroethylene (c-1,2-DCE), (t-1,2 –DCE), 1,1-DCE and c-1,3-DCP at concentrations of 35,000  $\mu$ g/L, 320  $\mu$ g/L, 110  $\mu$ g/L, 50  $\mu$ g/L, 8  $\mu$ g/L and 4.2  $\mu$ g/L, respectively. Total petroleum hydrocarbons as Stoddard solvent (TPHs) was also reported in the groundwater sample from AMW-2.

In March 1995, Augeas installed two additional wells, AMW-4 and MW-5. Wells AMW-6 through AMW-9 were installed in July through August 1995. Based on the investigations, Augeas concluded that the PCE contamination centered on the Young's Cleaners, and was caused by a release of solvents from the drycleaner and associated sanitary sewer line in front of the facility. They also concluded that the extent of soil contamination was not wide spread. Augeas recommended that the PCE effected soil be excavated, thereby removing the source. Augeas expected this to result in reduction of PCE and other contaminant concentrations in the groundwater over time.

#### Source Excavation – 1995 to 1996

Between October 1995 and January 1996, AEI excavated PCE contaminated soil from beneath the Young's Cleaners and adjacent tenant spaces and around the sanitary sewer. Upon removal, the excavation was backfilled with clean imported fill. The lateral and vertical extent of the contamination was found to be greater than initially estimated by Augeas. Augeas initially recommended removal of soil with PCE concentrations in excess of 1.0 mg/kg. During excavation,

PCE dechlorination products were identified for the first time in soil and the clean-up goal was revised to a total VOC concentration of 1.0 mg/kg. The resulting excavation extended into adjacent tenant spaces and required the removal of approximately 2,500 cubic yards of affected soil. During excavation activities, wells AMW-2 and AMW-3 were properly abandoned and destroyed.

The removal action was successful in removing a significant volume of highly impacted soil from the source area. However, several areas with residual total VOC concentrations above the 1.0 mg/kg goal remained at the final extent of excavation: 1) The northwest corner of the Young's Cleaners space, where total VOCs were 1.8 mg/kg and 1.9 mg/kg at depths of 4 and 8 feet respectively; 2) beneath the breezeway west of the former cleaners where total VOCs were 2.5 mg/kg at a depth of 5 feet; and 3) beneath the breezeway, in front of and east of the former location of Young's Cleaners (near AMW-3), where total VOC of 1.4 mg/kg were reported in the boring at a depth of 25.5 feet bgs (outside of the extent of the excavation).

The excavated soil was spread over the southeaster corner of the property. In February 1996, ten soil samples were collected by AEI from the stockpile and analyzed for VOCs to evaluate baseline concentrations in the stockpile. PCE was detected in these samples at concentrations ranging from ND<5.0  $\mu$ g/kg to 380  $\mu$ g/kg. TCE was detected in three samples at concentrations ranging from 11  $\mu$ g/kg to 38  $\mu$ g/kg. No other VOCs were detected in the stockpile.

The soil stockpile was tilled between February 1996 and January 1997. In January 1997 and again in May 1999, stockpile sampling occurred. During the May 1999 sampling, PCE was only detected in one of eight samples, at  $28 \mu g/kg$ . Based on the sampling data, limited reuse of the soil was approved.

#### **Additional Groundwater Investigation and Risk Evaluation**

To assess potential offsite migration of PCE in the groundwater, PES Environmental performed a preliminary investigation consisting of a CPT survey and HydroPunch TM sampling of the groundwater. The survey consisted of obtaining CPT measurements at nine locations (HP-1 through HP-9), to depths of up to 60 feet. Following the collection of the CPT data, water samples were collected from HydroPunch TM borings located within several feet of the CPT locations.

In the "shallow" zone, groundwater samples could not be collected from drilling locations HP-1, HP-3, HP-5 HP-6 and HP-9. Although, the CPT logs indicated that the silts of the "shallow" aquifer were saturated and monitoring wells in this interval are productive, the low transmissivity of the silts and clays prevented groundwater sample collection in this shallow zone using this sampling technique. PCE was only detected in groundwater at location HP-7, at 230  $\mu$ g/L. No PCE has been detected in the "shallow" zone in offsite borings.

In the "deep" groundwater zone, PCE was detected in borings HP-0, HP-1, HP-6 and HP-9 at concentrations of 440  $\mu$ g/l, 20  $\mu$ g/L, 40  $\mu$ g/L, and 25  $\mu$ g/L, respectively. This data indicated that although PCE had been detected at the ARCO station at concentrations up to 2,600  $\mu$ g/L, only low

concentrations of PCE were present in the "deep" groundwater zone west of MacArthur Boulevard and west toward 106<sup>th</sup> Avenue.

PES concluded that the PCE plume had not migrated substantially off site and was stable. They attributed the stability of the plume primarily to natural attenuation. PCE dechlorination products were observed, including TCE and cis- and trans- 1,2-DCE.

An evaluation of risk to human health via migration of contaminant vapors into the occupied building spaces was documented in the February 15, 1996 report prepared by PES. The numerical evaluation modeled the indoor concentrations of the site contaminants (PCE, TCE, 1,1-DCE, cisand trans-1,2-DCE) using residual contaminant concentrations in soil. The modeled indoor air contaminant concentrations were below their respective Preliminary Remediation Goals (PRGs) (US EPA Region IX, 1995) and, therefore, it was concluded at that time that the concentrations of remaining contaminants in the soil did not pose a significant threat to human health. This finding was concurred with by the ACHCS and Regional Water Quality Control Board (RWQCB) in letters dated March 26, 1996 and March 21, 1996, respectively.

Based on the findings of the groundwater investigation, PES recommended that two additional down gradient "sentry" wells be installed to monitor the down gradient edge of the groundwater plume. In July 1997, these two wells (FHS-MW-10 and FHS-MW-11) were drilled and installed at depths of 54.5 and 62.5 feet bgs, respectively. Sampling of these wells began in September 1997. During subsequent groundwater monitoring, PCE was detected in well FHS-MW10 and FHS-MW-11 at maximum concentrations of  $18 \mu g/L$  and  $12 \mu g/L$ , respectively.

#### **Soil Vapor Investigation**

In July 2004, AEI requested that the monitoring wells at the subject site be closed, subsequently, the ACHCS requested that additional investigative activities be performed prior to site closure in a letter dated October 8, 2004. The requested investigation was originally proposed in AEI's Vapor Survey Workplan dated July 7, 2005, and approved in a letter from the ACHCS dated August 22, 2005. The investigative activities were completed on October 11 through 13, 2006. A total of 34 soil vapor samples were collected from seventeen (17) borings (VB-1 through VB-17), each with a sample collected from approximately 5 feet and 10 feet bgs.

Results of soil vapor sample analyses indicated the presence of subsurface vapor phase contaminants, including PCE, TCE, cis-1,2 DCE, and vinyl chloride, with the highest concentrations detected in the vicinity of the former excavation. Vapor phase contaminant concentrations decrease significantly away from the former release area. The data revealed that vapor phase migration along the onsite utility corridor has not occurred. The concurrent groundwater monitoring performed October 17, 2006, indicated continued natural attenuation of PCE and related contaminants. PCE had decreased significantly in a number of wells, including source area wells, AMW-4 and MW-6. The results of the soil vapor investigation and most recent groundwater monitoring activities are detailed in the *Additional Site Investigation Report*, dated November 30, 2006.

In a letter dated December 20, 2006, the ACHCS requested further site characterization at the site, a feasibility study, and continuation of semi-annual groundwater monitoring at the site.

Boring and well locations, the source removal excavation, and site features are presented in Figures 2 through 5. Historical soil and groundwater analytical data, water levels, and previous soil vapor sample data are included in Tables 1 through 5.

#### PROPOSED WORK

Based on the findings of the October 2006 investigation, the extent of the release has not fully been defined, particularly in an easterly direction from the former Young's Cleaners. The ACHCS has requested additional subsurface assessment of soil vapor and groundwater conditions and preparation of a feasibility study. ACHCS considers the presence of elevated concentrations of PCE and related CVOCs in soil vapor a potential threat to human health via the vapor intrusion into indoor air migration pathway. It is proposed that the additional investigation of the extent of vapor phase CVOCs be performed prior to evaluation of possible mitigation measures and development of the requested CAP. The CAP is planned to follow completion of the investigation.

In order to further assess the extent of PCE in the vapor phase beneath the building, additional soil vapor borings are proposed. The goal of the additional sampling is to define the extent of vapor phase contaminants in a timely and cost effective manner utilizing temporary soil gas probes and a mobile laboratory, consistent with the October 2006 investigation. Five additional boring (VB-18 to VB-22) are proposed, as shown on Figure 6. Soil vapor samples will be collected at depths of 5 and 10 feet bgs in each of these five locations. As a contingency, three other tentative boring locations [VB-23(t) to VB-25(t) are presented, which may be performed if analytical data obtained from the mobile laboratory indicates the need to investigate further to the east.

As requested by ACHCS, groundwater monitoring will be scheduled to occur on a semi-annual basis, with the next events planned for April 2007 and October 2007, after which a reevaluation of the need for groundwater monitoring may be prudent. For the time being, AEI proposes the following eight (8) wells be sampled semi-annually: AMW-1, AMW-4 to AMW-6, AMW-9, FHS MW-10, FHS MW-11, and MW-6 with wells AMW-8, MW-7, and WGR MW-4 sampled annually (October event).

Groundwater monitoring data following source excavation in 1995 and 1996 indicates decreasing concentrations in many of the wells around and down-gradient of the source area, including those wells with historically the highest concentrations, including AMW-4, AMW-6, and MW-6. This strongly suggests that although PCE and other CVOCs may remain in the shallow vadose zone soil in the vapor phase that these residual contaminants are not acting as a continued source of impact to groundwater. Based on these observations and the consistent west to southwest groundwater flow directions, the extent of CVOC impacted groundwater has been relatively well

defined, with no further groundwater investigation proposed with the exception of the monitoring outlined above.

#### FIELD PROCEDURES

#### Permits and Clearances

Upon approval of a scope of work for these investigation activities, a soil boring permit application will be submitted to the Alameda County Public Works Agency (ACPWA). Prior to beginning drilling activities, Underground Service Alert (USA) will be notified and a private utility locating service contracted to identify other underground utilities in the work area. All drilling work will be performed by a California C57 licensed drilling contractor working under the direction of AEI professional staff. The selected contractor will have experience performing soil vapor sampling investigations. Once drilling dates have been established, the ACPWA and other parties will be given adequate notification to schedule any necessary inspections and site visits.

#### **Drilling and Sample Collection**

The project will be performed in accordance with generally accepted standards and practices in the field of environmental engineering. To obtain the soil gas samples, the temporary soil gas sampling probes will be installed in the proposed locations. The vapor probe consists of hollow ¾ inch stainless steel rods with an internally threaded bottom sub and sacrificial tip. At the desired depth, the rods are pulled back, dropping the sacrificial tip. The top of the borehole will be sealed with a temporary seal of hydrated Bentonite and an appropriate leak detection compound utilized. A ¼-inch disposable poly sampling line is then inserted inside the rods and screwed into the end sub. Air is then flushed from the rods prior to sample collection. Samples will be collected into one or more new, disposable sampling syringes. Immediately upon collection, the samples will be analyzed by the onsite mobile laboratory. It should be noted that a purge volume test was completed for this site during the October 2006 soil vapor survey. During the vapor survey, it was determined that 3 purge volumes should be removed from each boring prior to collecting a vapor sample, therefore a purge volume test will not be completed for this sampling event, and the 3 purge volume number will be used.

Should no flow conditions be encountered during vapor sampling or vacuum necessary to induce flow is too high [>10 inches of mercury (in Hg)], a vapor sample will be attempted at a shallower depth. If extensive no flow conditions are encountered, soil matrix sampling in lieu of soil gas sampling may be performed. In this event, the regulatory agency and client will be contacted immediately.

Upon completion of sampling activities, all probes and sampling materials will be removed from the boreholes and each grouted to ground surface in accordance with state and local guidelines. Surfacing will then be patched.

#### Sample Analyses

All samples will be analyzed onsite with California DHS certified mobile laboratory equipment operated by a chemist qualified and experienced in performing soil gas analyses. Samples will be analyzed for CVOCs by EPA method 8260 along with the leak detection compounds, with appropriate detection limits (0.10  $\mu$ g/l). Laboratory procedures will include appropriate quality assurance / quality control analyses, including method blanks and use of surrogates during sample analyses.

#### Groundwater Monitoring Activities

During each monitoring event, water levels will be measured in each well. Wells will be purged of at least 3 well volumes of water prior to sample collection. During purging the following water quality measurements will be collected: temperature, pH, specific conductivity, dissolved oxygen (DO) and oxidation-reduction potential (ORP). Following recovery of water levels, groundwater samples will be collected with new, unused disposable bailers into appropriate laboratory-supplied containers. Groundwater samples will be submitted to a California DHS certified laboratory for analyses for CVOCs by EPA method 8260.

#### Equipment Decontamination

Sampling equipment will be decontaminated between samples using a triple rinse system containing Alconox <sup>TM</sup> or similar detergent. Rinse water will be contained in sealed labeled DOT approved 55-gallon drums in a secure location onsite pending proper disposal.

#### REPORTING

Following receipt and review of the findings of the investigation with our client, AEI will prepare and issue a report updating the site characterization. The report will include data tables, figures of drilling and sampling locations, and copies of laboratory analytical reports. A written discussion of the methods and findings, and recommendations will be included. Data will be compared to the RWQCB ESLs as a preliminary evaluation and to determine whether additional evaluation or risk modeling is necessary. The project will be overseen and the report(s) signed by an AEI California registered professional geologist or engineer. Upon approval for access to the GeoTracker database, site reports will be uploaded to the database in electronic format.

Semi-annual groundwater monitoring reports will be prepared and submitted within approximately 4 weeks of receipt of groundwater sampling analytical data. The reports will include cumulative data, interpretation of water level data, and a discussion of the findings.

#### **SITE SAFETY**

Prior to commencement of field activities, a site safety meeting will be held at a designated command post near the working area. Emergency procedures will be outlined at this meeting, including an explanation of the hazards of the known or suspected chemicals of interest. All site

personnel will be in Level D personal protection equipment, which is the anticipated maximum amount of protection needed. A working area will be established with barricades and warning tape to delineate the zone where hard hats and steel-toed shoes must be worn, and where unauthorized personnel will not be allowed. A site safety plan conforming to Part 1910.120 (i) (2) of 29 CFR will be on site at all times during the project.

#### ESTIMATED SCHEDULE

Once a scope of work has been agreed upon by all involved parties, drilling permit applications for the subsurface investigation and pilot test will be submitted. Upon approval of the permits, field work will be scheduled and the ACHCS and ACPWA will be notified of the schedule. It is expected that the subsurface investigation will occur within approximately 2 weeks of permit approval. Field work may be scheduled to occurring during nights or weekends, as needed based on the occupancy of the property buildings. Completion of the report is expected within approximately 60 days of approval to proceed, barring any unexpected delays.

AEI requests your approval to proceed with this project. Please contact the undersigned at (925) 944-2899 if you have any questions or need any additional information.

Peter McIntyre, RG, REA

Senior Project Manager

Sincerely,

**AEI Consultants** 

Jeremy Smith
Project Manager

Figure 1 – Site Location Map

Figure 2 – Site Plan

Figure 3 – Source Excavation

Figure 4 – Recent Groundwater Sample Data

Figure 5 – Previous Soil Vapor Analytical Data

**Figure 6** – Proposed Soil Vapor Sampling Locations

**Table 1** – Historical Analytical Results for Soil

Table 2 – Well Construction Details

Table 3 – Groundwater Level Data

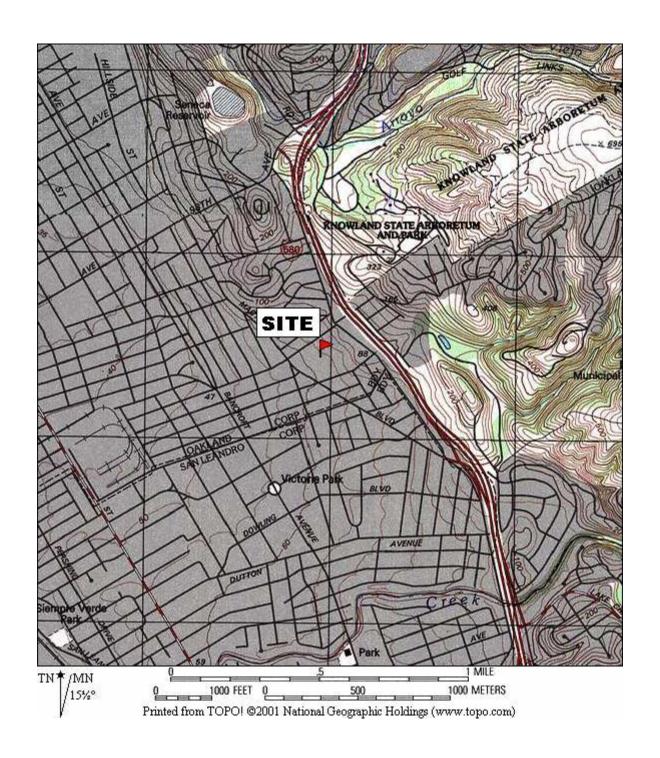
**Table 4** – Groundwater Sample Analytical Data

**Table 3** – Soil Vapor Analytical Results

#### **Distribution:**

MacArthur Boulevard Associates c/o Jay-Phares Corporation Attention: Mr. John Jay 10700 MacArthur Blvd. Oakland, CA 94605 Mr. Barney Chan Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502 (electronic upload to ACHCS FTP site)

## **FIGURES**

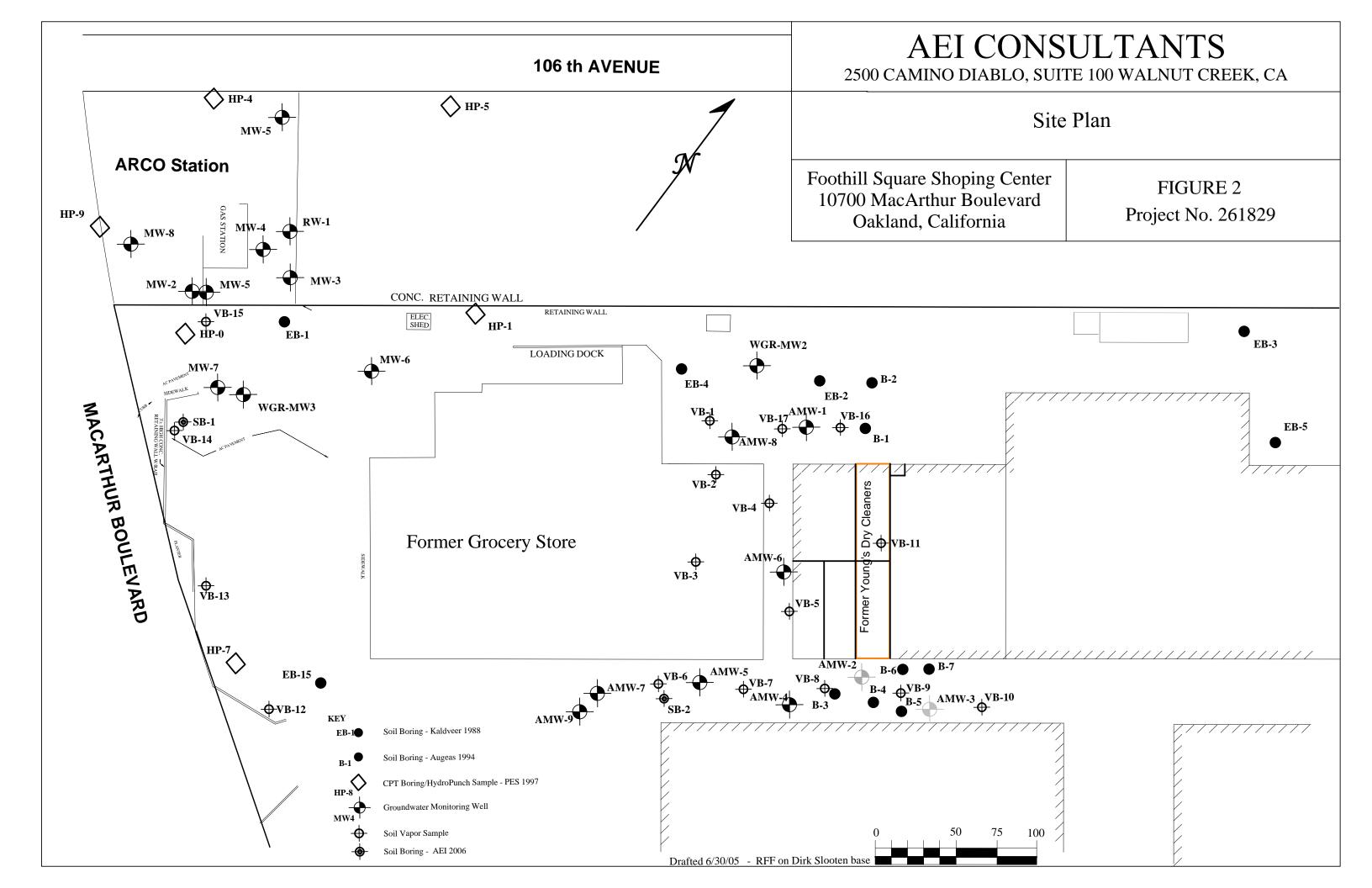


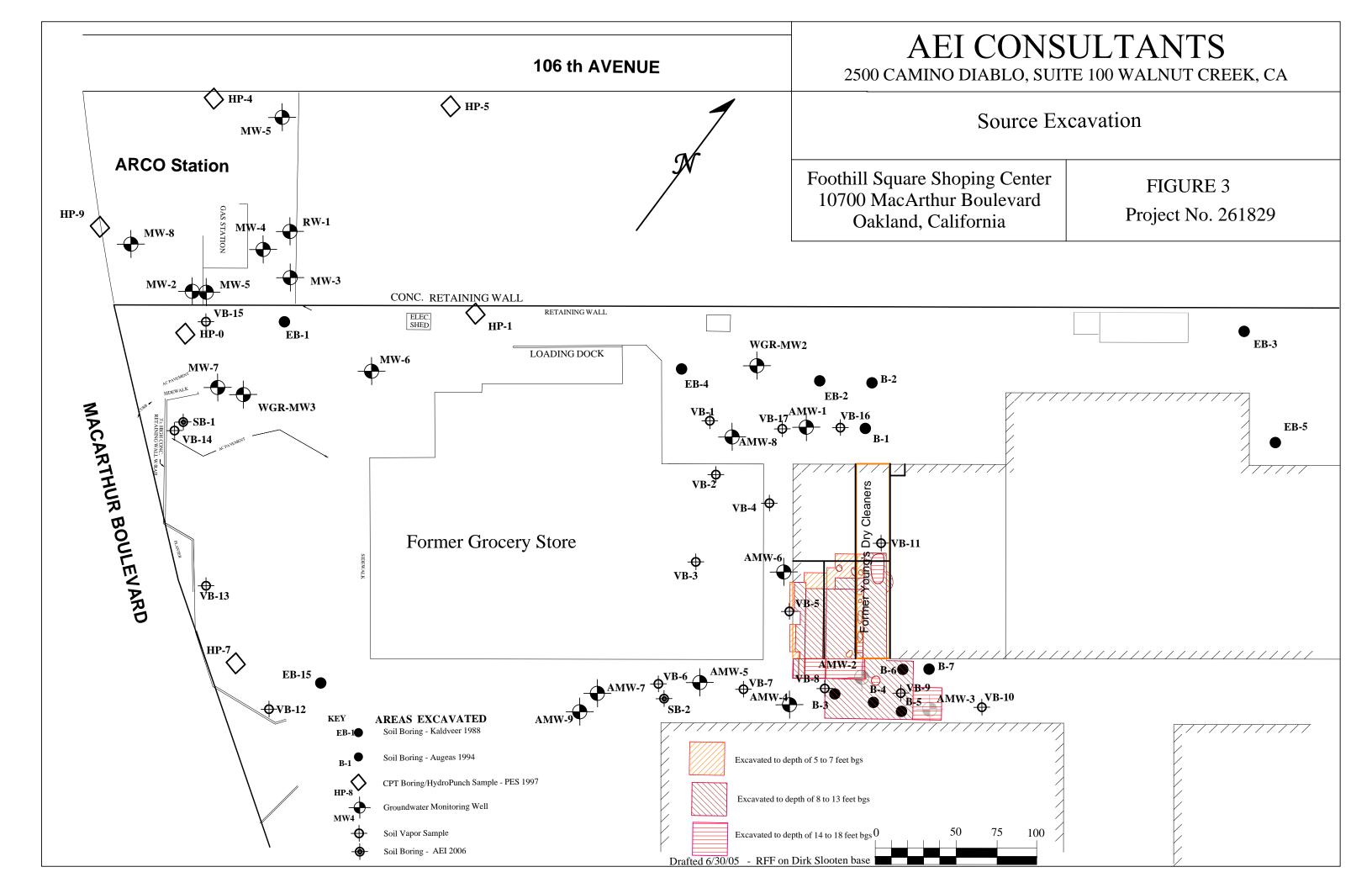
## **AEI CONSULTANTS**

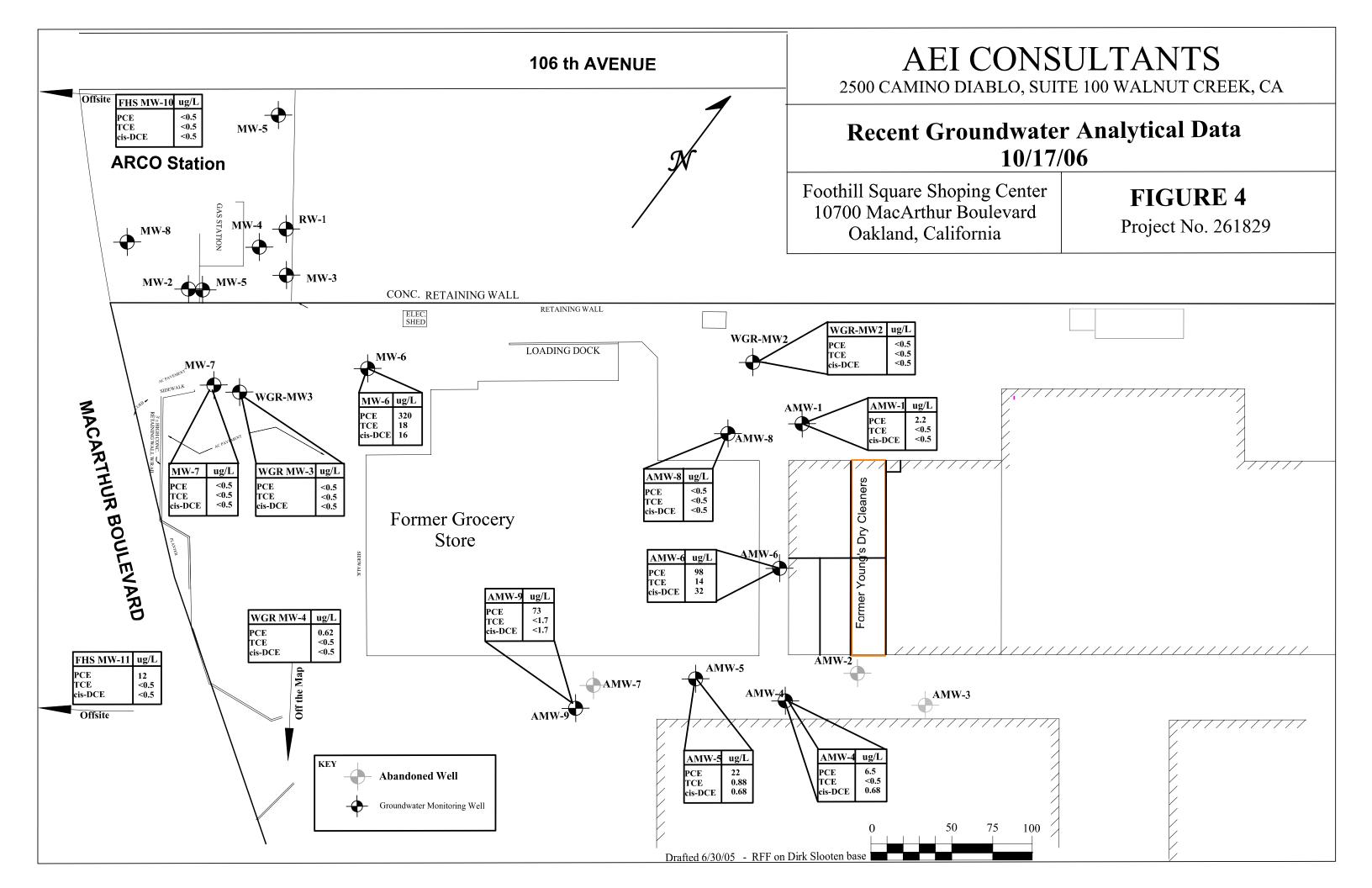
2500 Camino Diablo, Suite 200, Walnut Creek, CA 94597

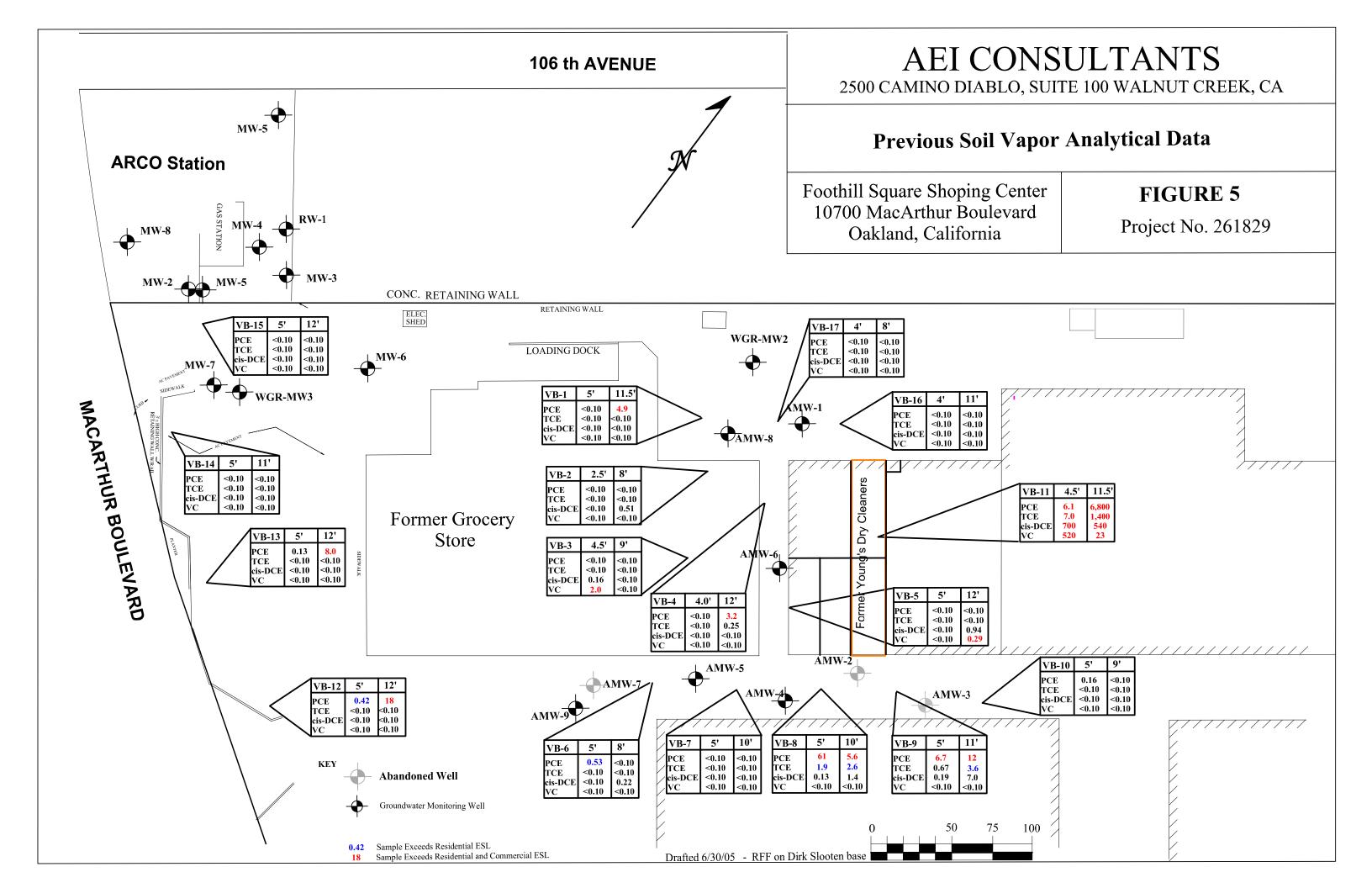
### SITE LOCATION MAP

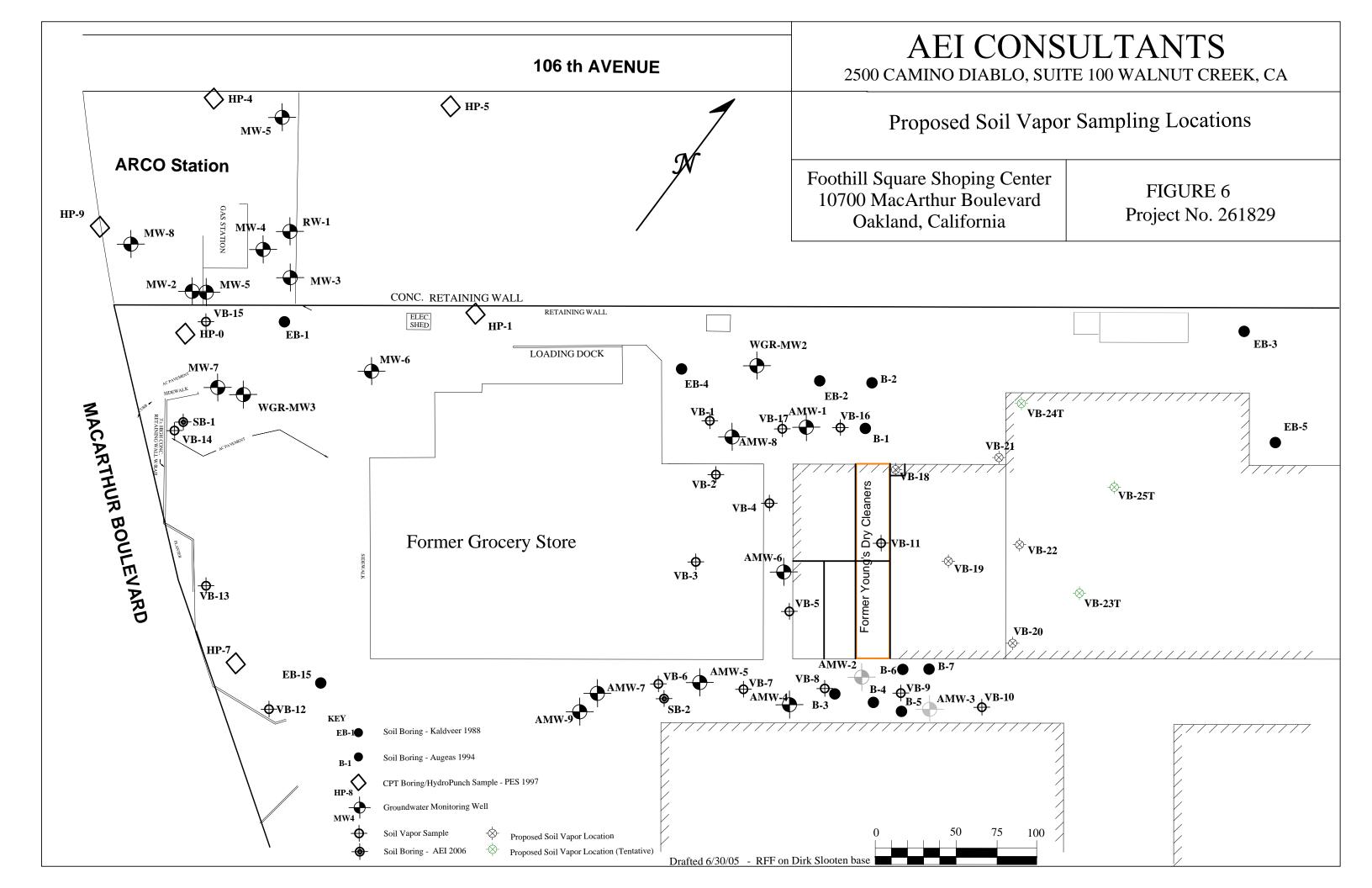
10700 MACARTHUR BLVD OAKLAND, CALIFORNIA FIGURE 1 PROJECT No. 261829











# **TABLES**

Table 1
Summary of Historical Analytical Results for Soil
Foothill Square Shopping Center, 10700 MacArthur Blvd., Oakland, California

Date Concentrations reported in micrograms per kilogram (µg/kg)	g)	Comments
Sampled PCE TCE c-1,2-DCE t-1,2-DCE 1,1-DCE 1,1,1-TC	CCA VC	
12/5/1988 <5 <5 <5 <5 <5	<5	
12/5/1988 <1 <1 <1 <1 <1 <1	<1	
12/5/1988 <1 <1 <1 <1 <1 <1	<1	
12/5/1988 <1 <1 <1 <1 <1 <1	<1	
12/6/1988 <1 <1 <1 <1 <1 <1	<1	
12/6/1988 <2 <2 <2 <2 <2 <2	<2	
12/7/1988 <1 <1 <1 <1 <1 <1	<1	
12/7/1988 <1 <1 <1 <1 <1 <1	<1	
12/8/1988 <5 <5 <5 <5 <5	<5	
9/12/1994 <5 <5 <5 <5 <5	<5	
9/12/1994 <5 <5 <5 <5 <5	<5	
9/12/1994 <5 <5 <5 <5 <5	<5	
9/12/1994 <5 <5 <5 <5 <5	<5	
9/12/1994 <5 <5 <5 <5 <5	<5	
10/7/1994	<20	Soil Excavated
10/7/1994 <10 <8 <5 <6 <12 <12	< 20	
10/7/1994	< 20	
10/7/1994 <b>27</b> <8 <5 <6 <12 <12	< 20	
10/7/1994 <b>1,600 150 120</b> <6 <12 <12		Soil Excavated
10/7/1994 <b>70</b> <8 <b>22</b> <6 <12 <12		Soil Excavated
10/7/1994 <b>100</b> <8 <b>9</b> <6 <12 <12	< 20	
10/7/1994 <b>30</b> <8 <5 <6 <12 <12		
11/3/1994 <b>1,600</b> <5 <5 <5 <5 <5	<10	Soil Excavated
11/3/1994 <b>450</b> <5 <5 <5 <5	<10	Soil Excavated
11/3/1994 <b>440</b> <5 <5 <5 <5 <5	<10	
11/3/1994 <5 <5 <5 <5 <5	<10	
11/3/1994 <5 <5 <5 <5 <5	<10	
11/3/1994 <b>5,000</b> <5 <5 <5 <5 <5	<10	Soil Excavated
11/3/1994 <b>590</b> <5 <5 <5 <5	<10	
11/3/1994 <5 <5 <5 <5 <5	<10	
11/3/1994 <5 <5 <5 <5 <5	<10	
11/23/1994 <b>38</b> <5 <5 <5 <5 <5	<10	
11/23/1994 <b>60</b> <5 <5 <5 <5	<10	
11/23/1994 <5 <5 <5 <5 <5	<10	
11/23/1994 <5 <5 <5 <5 <5	<10	

**Table 1**Summary of Historical Analytical Results for Soil
Foothill Square Shopping Center, 10700 MacArthur Blvd., Oakland, California

Sample	Sampled	Depth	Date		Concentr	ations reported	in microgram	s per kilogr	am (µg/kg)		Comments
Location	By	(ft bgs)	Sampled	PCE	TCE	c-1,2-DCE	t-1,2-DCE	1,1-DCE	1 ,1,1- TCA	VC	
B-8	Augeus	6	3/23/1995	< 0.5	< 0.5	_	< 0.5	_	< 0.5	<1.0	
AMW-1	Augeus	4	9/12/1994	<5	<5	<5	<5	<5	<5	<5	
	υ	6	9/12/1994	<5	<5	<5	<5	<5	<5	<5	
		11	9/12/1994	<5	<5	<5	<5	<5	<5	<5	
		16	9/12/1994	<5	<5	<5	<5	<5	<5	<5	
		21	9/12/1994	<5	<5	<5	<5	<5	<5	<5	
		26	9/12/1994	<5	<5	<5	<5	<5	<5	<5	
		31	9/12/1994	<5	<5	<5	<5	<5	<5	<5	
		34	9/12/1994	<5	<5	<5	<5	<5	<5	<5	
AMW-2	Augeus	10	9/30/1994	22,000	50	250	<6	<12	<12	<20	Soil Excavated
		15	9/30/1994	90,000	600	210	<6	<12	<12	< 20	Soil Excavated
		20	9/30/1994	400	20	30	<6	<12	<12	< 20	
		25	9/30/1994	30	<8	<5	<6	<12	<12	< 20	
AMW-3	Augeus	5.5	11/18/1994	6	<5	<5	<5	<5	<5	<10	Soil Excavated
		10	11/18/1994	390	<5	<5	<5	<5	<5	<10	Soil Excavated
		15.5	11/18/1994	59	<5	<5	<5	<5	<5	<10	Soil Excavated
		20.5	11/18/1994	820	<5	<5	<5	<5	<5	<10	
		25.5	11/18/1994	1,400	<5	<5	<5	<5	<5	<10	
		30	11/18/1994	210	<5	<5	<5	<5	<5	<10	
AMW-4	Augeus	6	3/22/1995	870	<5	-	<5	-	<5	<10	
		11	3/22/1995	13	< 0.5	-	< 0.5	-	< 0.5	<1.0	
		16	3/22/1995	7.5	< 0.5	-	< 0.5	-	< 0.5	<1.0	
		21	3/22/1995	5.3	< 0.5	-	< 0.5	-	< 0.5	<1.0	
		26	3/22/1995	< 0.5	21	_	< 0.5	-	< 0.5	<1.0	
AMW-5	Augeus	6	3/22/1995	1.1	< 0.5	-	< 0.5	-	< 0.5	<10	
		11	3/22/1995	< 0.5	< 0.5	-	< 0.5	-	< 0.5	<1.0	
		16	3/22/1995	< 0.5	< 0.5	-	< 0.5	-	< 0.5	<1.0	
		21	3/22/1995	< 0.5	< 0.5	-	< 0.5	-	< 0.5	<1.0	
		26	3/22/1995	< 0.5	< 0.5	-	< 0.5	-	< 0.5	<1.0	
		31	3/22/1995	< 0.5	< 0.5	-	< 0.5	-	< 0.5	<1.0	
AMW-6	Augeus	6	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<10	
		11	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		16.5	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		21	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		26	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	

Table 1
Summary of Historical Analytical Results for Soil
Foothill Square Shopping Center, 10700 MacArthur Blvd., Oakland, California

Sample	Sampled	Depth	Date		Concentra	ations reported	in microgram	ıs per kilogı	am (µg/kg)		Comments
Location	By	(ft bgs)	Sampled	PCE	TCE	c-1,2-DCE		1,1-DCE	1 ,1,1- TCA	VC	1
AMW-7	Augeus	6	8/2/1998	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<10	
		11.5	8/2/1998	33	14	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		16	8/2/1998	60	10	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		21	8/2/1998	85	11	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		26	8/2/1998	210	39	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
AMW-8	Augeus	6	2/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<10	
		11	2/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		16.5	2/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		21	2/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		26	2/28/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		31.5	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		36.5	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		41	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		46	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		51.5	8/1/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
AMW-9	Augeus	5	7/31/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		9.5	7/31/1995	29	17	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		14.5	7/31/1995	120	31	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		19.5	7/31/1995	27	7.7	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		24.5	7/31/1995	110	2.1	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		31	8/2/1995	30	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		36	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		41	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		45	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		51	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	
		54.5	8/2/1995	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<1.0	

Table 2
Well Construction Details
Foothill Shoping Center, 10700 MacArthur Blvd., Oakland, California

Well ID	Date Drilled	Elevation	Boring Depth	Zone	Casing depth	Casing Size	Slotted Casing	Slot Size	Blank Casing	Sand Interval	Sand Size	Bentonite Interval	Grout Interval
		(ft msl)	(ft)			(inches)	(ft)	(in)	(ft)	(ft)		(ft)	(ft)
Young's Cleaner													
WGR-MW-1	12/05/88	65.97	33.5	Shallow	28.5	2.0	23.5-28.5						
WGR-MW-2	12/06/88	63.18	40.50	Shallow	28.00	2.0	23-28						
WGR-MW-3	12/07/88	58.34	42.00	Shallow	27.00	2.0	22-27						
WGR-MW-4	12/07/88	60.02	50.50	Deep	45.00	2.0	25-45						
WGR-MW-5	12/8/1988	68.94	31.50	Shallow	31.5	2.0	23.5-31.5						
AMW-1	09/12/94	64.57	34.0	Shallow	34.0	2.0	24-34	0.020	0.5-24	23-34	2/12	21-23	0.75-21
AMW-2	09/30/94	65.33	29.0	Shallow	29.0	2.0	19-29	0.020	0.5-19	17-29	2/12	16-17	0.75-16
AMW-3	11/18/94	65.09	29.0	Shallow	29.0	2.0	19-29	0.020	0.5-19	18-29	2/12	16-18	0.75-16
AMW-4		64.79	25.0	Shallow	25.0	2.0	15-25						
AMW-5		64.97	30.0	Shallow	30.0	2.0	20-30						
AMW-6		65.1	25.0	Shallow	25.0	2.0							
AMW-7		64.24	25.0	Shallow	25.0	2.0							
AMW-8		64.6	45.0	Deep	45.0	2.0							
AMW-9		63.5	54.3	Deep	54.3	2.0							
FHS MW-10	07/15/97	52.37	52.0	Deep	52	2.0	42-52	0.010	0.5-42	41-52	2/12	39-41	0.75-39
FHS MW-11	07/14/97	54.06	64.5	Deep	64	2.0	59-64	0.010	0.5-59	58-64	2/12	56-58	0.75-56

Well Construction Details
Foothill Shoping Center, 10700 MacArthur Blvd., Oakland, California

Well ID	Date Drilled	Elevation	Boring Depth	Zone	Casing depth	Casing Size	Slotted Casing	Slot Size	Blank Casing	Sand Interval	Sand Size	Bentonite Interval	Grout Interval
		(ft msl)	(ft)			(inches)	(ft)	(in)	(ft)	(ft)		(ft)	(ft)
Young's Cleane	ers												
ARCO Station													
MW-2	03/22/89	55.10	28.5	Shallow	25.5	4.0	15.5-25.5						
MW-7	06/16/92	58.64	37.5	Shallow	37.5	2.0	17.5-37.5						
MW-3	03/21/89	56.55	40.5	Deep	38.4	2.0	20-40						
MW-1	03/21/89	55.92	40.5	Deep	39.0	2.0	19-39						
RW-1	NA	56.32	48.9			6.0							
MW-5	04/06/89	55.43	49.0	Deep	47.5	4.0	32.47.5						
MW-8	NA	53.65	49.0	Deep	49.0	4.0	29-49						
MW-4	03/29/89	55.98	53.5	Deep	50.0	2.0	30-50						
MW-6	06/16/92	61.78	61.0	Deep	56.0	2.0	37.5-56						
USA Gas Stat		<b>7</b> 0.50	42.0	5	40.0	0.0	20.40	2.222	0.20	15.10		45.45	0.45
S-1	NA	78.68	43.0	Bedrock	40.0	3.0	20-40	0.020	0-20	17-40		15-17	0-15
S-2	NA	80.93	40.0	Bedrock	40.0	3.0	21-40	0.020	0-20	17-40		15-17	0-15
MW-3	2/28/1995	80.32	44.0	Bedrock	44.0	4.0	24-44	0.020	0-24	22-44	#3	20-22	0-20
MW-4	11/20/1995	76.42	40.5	Shallow	40.0	4.0	10-40	0.020	0-10	9-40.5	#3	8-9	0-8
MW-5	11/20/1995	80.52	41.5	Shallow	40.0	4.0	10-40	0.020	0-10	9-40.5	#3	8-9	0-8
MW-6	11/20/1995	81.64	40.5	Shallow	40.0	4.0	10-40	0.020	0-10	9-40.5	#3	8-9	0-8
MW-7	11/21/1995	78.86	41.0	Shallow	40.0	4.0	10-40	0.020	0-10	9-40.5	#3	8-9	0-8
MW-8	11/21/1995	79.55	35.5	Bedrock	35.00	4.0	10-35	0.020	0-10	9-40.5	#3	8-9	0-8

Notes:

All well elevations are measured from the top of the casing ft msl = feet above mean sea level

Shaded Wells have been decommissioned

Table 3
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)
	1.00.11.000				
AMW-1	1/29/1999	24-34	64.51	23.01	41.50
(Shallow)	5/5/1999		64.51	21.25	43.26
	10/9/1999		64.51	24.14	40.37
	1/20/2000		64.51	24.66	39.85
	8/8/2000		64.51	23.30	41.21
	2/15/2001		64.51	23.22	41.29
	8/29/2001		64.51	24.38	40.13
	3/12/2002		64.51	21.29	43.22
	9/27/2002		64.51	23.62	40.89
	3/25/2003		64.51	22.45	42.06
	10/2/2003		64.51	24.31	40.20
	10/17/2006		64.51	22.91	41.60
AMW-4	1/29/1999	15-25	64.79	11.51	53.28
(Shallow)	5/5/1999		64.79	10.14	54.65
(Billion)	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
			64.79	12.32	52.47
	2/15/2001				
	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
AMW-5	1/29/1999	20-30	64.97	13.87	51.10
(Shallow)	5/5/1999		64.97	12.83	52.14
	10/9/1999		64.97	14.25	50.72
	1/20/2000		64.97	14.91	50.06
	8/8/2000		64.97	14.14	50.83
	2/15/2001		64.97	14.32	50.65
	8/29/2001		64.97	14.72	50.25
	3/12/2002		64.97	13.12	51.85
	9/27/2002		64.97	14.62	50.35
	3/25/2003		64.97	13.45	51.52
	10/2/2003 <b>10/17/2006</b>		64.97 <b>64.97</b>	14.74 <b>14.15</b>	50.23 <b>50.82</b>
AMW-6	1/29/1999	Unknown	65.10	12.74	52.36
(Shallow)	5/5/1999		65.10	11.30	53.80
	10/9/1999		65.10	13.29	51.81
	1/20/2000		65.10	14.21	50.89
	8/8/2000		65.10	12.95	52.15
	2/15/2001		65.10	12.64	52.46
	8/29/2001		65.10	13.65	51.45
	3/12/2002		65.10	11.41	53.69
	9/27/2002		65.10	13.25	51.85
	3/25/2003		65.10	12.22	52.88
	10/2/2003		65.10	14.74	50.36
	10/17/2006		65.10	11.46	53.64
AMW-7		Unknown	64.24	14.91	49.33
(Shallow)	1/29/1999 5/5/1999	Ulikilowii		overed during const	
· · ·		** -		· ·	
AMW-8	1/29/1999	Unknown	64.55	16.86	47.69
(Deep)	5/5/1999		64.55	14.46	50.09
	10/9/1999		64.55	17.10	47.45
	1/20/2000		64.55	18.51	46.04
	8/8/2000		64.55	16.71	47.84
	2/15/2001		64.55	17.31	47.24
	8/29/2001		64.55	18.30	46.25
	3/12/2002		64.55	16.03	48.52
	9/27/2002		64.55	18.03	46.52
	3/25/2003		64.55	17.31	47.24
	10/2/2003		64.55	21.54	43.01
			64.55	16.05	48.5

**Table 3: Continued** 

(Aquifer zone)		(ft bgs)	Elevation (ft msl)	to Water (ft)	Elevation (Potential (ft msl)
AMW-9	1/29/1999	Unknown	63.48	23.22	40.26
(Deep)	5/5/1999		63.48	21.40	42.08
	10/9/1999		63.48	23.74	39.74
	1/20/2000		63.48	24.92	38.56
	8/8/2000		63.48	23.01	40.47
	2/15/2001		63.48	21.20	42.28
	8/29/2001		63.48	22.59	40.89
	3/12/2002		63.48	21.94	41.54
	9/27/2002		63.48	24.16	39.32
	3/25/2003		63.48	23.00	40.48
	10/2/2003		63.48	23.80	39.68
	10/17/2006		63.48	23.07	40.41
WGR MW-2	1/29/1999	23-28	63.18	23.41	39.77
(Shallow)	5/5/1999		63.18	21.41	41.77
	10/9/1999		63.18	24.62	38.56
	1/20/2000		63.18	25.24	37.94
	8/8/2000		63.18	23.41	39.77
	8/29/2001		63.18	25.09	38.09
	3/12/2002		63.18	21.86	41.32
	9/27/2002		63.18	24.69	38.49
	3/25/2003		63.18	23.71	39.47
	10/2/2003		63.18	25.13	38.05
	10/17/2006		63.18	23.91	39.27
WGR MW-3	1/29/1999	22-27	58.34	15.81	42.53
(Shallow)	5/5/1999		58.34	18.43	39.91
	10/9/1999		58.34	21.38	36.96
	1/20/2000		58.34	19.76	38.58
	8/8/2000		58.34	20.88	37.46
	8/29/2001		58.34	21.22	37.12
	3/12/2002		58.34	14.80	43.54
	9/27/2002		58.34	22.32	36.02
	3/25/2003		58.34	18.07	40.27
	10/2/2003		58.34	22.22	36.12
	10/17/2006		58.34	21.85	36.49
WGR MW-4	1/29/1999	23-45	60.02	26.23	33.79
(Deep)	5/5/1999		60.02	23.80	36.22
	10/9/1999		60.02	27.73	32.29
	1/20/2000		60.02	27.97	32.05
	8/8/2000		60.02	26.00	34.02
	2/15/2001		60.02	26.55	33.47
	8/29/2001		60.02	27.14	32.88
	3/12/2002		60.02	24.90	35.12
	9/27/2002		60.02	27.09	32.93
	3/25/2003		60.02	25.75	34.27
	10/2/2003		60.02	27.41	32.61
	10/17/2006		60.02	26.31	33.71
FHS MW-10	1/29/1999	42-52	52.34	23.91	28.43
(Deep)	5/5/1999		52.34	20.55	31.79
	10/9/1999		52.34	25.00	27.34
	1/20/2000		52.34	27.23	25.11
	8/8/2000		52.34	24.06	28.28
	2/15/2001		52.34	24.16	28.18
	8/29/2001		52.34	26.11	26.23
	3/12/2002		52.34	23.94	28.40
	9/27/2003		52.34	25.86	26.48
	3/25/2003		52.34	23.20	29.14
	10/6/2003		52.34	26.39	25.95
	10/17/2006		52.34	24.35	27.99

**Table 3: Continued** 

		Well	Depth	Groundwater
	Screen Interval			levation (Potentia
Date				(ft msl)
	\ 0/	, ,		
1/20/1000	50.64	54.06	26.20	27.60
	59-64			27.68
				31.34
				26.64
				24.75
				27.95
				27.63
				25.78
				32.45
				26.13
		54.06		8.85
10/2/2003			Well Inaccessible	2
10/17/2006		54.06	26.54	27.52
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
				29.70
10/2/2003		61.78	34.86	26.92
10/17/2006		61.78	32.58	29.20
1/20/2000	17 5-37 5	58 64	20.32	38.32
	17.0 07.0			38.14
				41.69
				37.03
				41.61
				35.91
				39.55
				36.18
			22.40 22.19	36.45
	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 1/29/1999 5/5/1999 9/10/1999 1/20/2000 8/8/2000 2/15/2001 8/29/2001 3/12/2002 9/27/2002 3/25/2003 10/2/2003	1/29/1999 59-64 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 1/29/1999 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 1/20/2000 8/8/2000 2/15/2001 8/29/2001 3/12/2002 9/27/2002 3/25/2003 10/17/2006 1/20/2000 17.5-37.5	Date   (ft bgs)   (ft msl)	Date         Screen Interval (ft bgs)         Elevation (ft msl)         to Water (ft)           1/29/1999         59-64         54.06         26.38           5/5/1999         54.06         22.72           10/9/1999         54.06         27.42           1/20/2000         54.06         29.31           8/8/2000         54.06         26.11           2/15/2001         54.06         26.43           8/29/2001         54.06         28.28           3/12/2002         54.06         21.61           9/27/2002         54.06         27.93           3/25/2003         54.06         27.93           3/25/2003         54.06         26.54           10/17/2006         54.06         26.54           1/29/1999         37.5-56         61.78         32.87           5/5/1999         61.78         32.94           9/10/1999         61.78         33.98           1/20/2000         61.78         33.98           1/20/2001         61.78         33.34           8/29/2001         61.78         34.98           3/12/2002         61.78         34.50           3/25/2003         61.78         34.50

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

ft msl = feet above mean sea level

Table 4
Groundwater Sample Analytical Data
10700 MacArthur Blvd., Oakland, California

Well			cis 1,2 DCE	trans 1,2 DCE	PCE	TCE	VHCs*
(aguifer zone)	Date	Consultant	μg/L	μg/L	μg/L	μg/L	μg/L
AMW-1	3/23/95	Augeus	_	ND<0.5	ND<0.5	ND<0.5	ND<0.5
(shallow - 29)	6/21/95	Augeus	_	ND<0.5	ND<0.5	ND<0.5	ND<0.5
(	9/11/95	Augeus	_	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	7/17/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	10/23/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/29/97	PES	NS	NS	NS	NS	NS
	1/20/00	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/8/00	AEI	NS	NS	NS	NS	NS
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	3/25/03	AEI	ND<0.5	ND<0.5	1.8	ND<0.5	ND<0.5
	10/2/03	AEI	NS NS	NS	NS	NS NS	NS NS
	10/2/03	AEI	ND<0.5	ND<0.5	2.2	ND<0.5	ND <rl< td=""></rl<>
	10/1//00	ALI	ND<0.5	ND<0.3	2.2	NDC0.5	NDCKL
AMW-4	5/15/95	Augeus	NR	ND<50	2400	ND<50	NR
(shallow - 25)	6/21/95	Augeus	NR	ND<50	2500	ND<50	NR
	9/13/95	Augeus	NR	ND<25	1100	ND<25	NR
	4/16/96	PES	ND<10	ND<10	1200	10	NR
	7/17/96	PES	ND<10	ND<10	860	ND<10	NR
	10/23/96	PES	ND<0.5	ND<0.5	22	0.5	NR
	9/29/97	PES	ND<3	ND<3	340	3	NR
	1/29/99	AEI	ND<3	ND<3	100	ND<3	ND<3
	5/5/99	AEI	ND<5	ND<5	210	ND<5	ND<5
	9/10/99	AEI	10	ND<5	240	18	ND<5
	1/20/00	AEI	46	ND<2.5	97	6.2	ND<2.5
	8/8/00	AEI	ND<5	ND<5	440	8	ND<5
	2/15/01	AEI	ND<2.5	ND<2.5	81	2.6	ND<2.5
	8/29/01	AEI	ND<2.5	ND<2.5	230	4.6	ND<2.5
	3/12/02	AEI	ND<5.0	ND<5.0	190	ND<5.0	ND<5.0
	9/27/02	AEI	ND<5.0	ND<5.0	220	ND<5.0	10***
	3/25/03	AEI	1.2	ND<1.0	22	1.9	ND<1.0
	10/2/03	AEI	2.8	ND<0.5	50	2.8	ND<0.5
	1017/06	AEI	9.9	ND<0.5	6.5	ND<0.5	ND <rl< td=""></rl<>
AMW-5	5/15/05	Augona	NR	NID <0.5	1.2	ND <0.5	NR
(shallow - 30)	5/15/95 6/21/95	Augeus	NR NR	ND<0.5 ND<0.5	ND<0.5	ND<0.5 ND<0.5	NR NR
(Shanow - 50)		Augeus	NR NR				NR NR
	9/13/95	Augeus		ND<0.5	ND<0.5	ND<0.5	
	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NR
	10/22/06	PES	ND<0.5	ND<0.5	0.6	ND<0.5	NR ND
	10/23/96	PES	ND<0.5	ND<0.5	0.8	ND<0.5	NR
	9/29/97	PES	ND<0.5	ND<0.5	13	ND<0.5	NR
	1/29/99	AEI	NA ND 1	NA ND 11	NA	NA	NA
	5/5/99	AEI	ND<1	ND<1	36	ND<1	ND<1
	9/10/99	AEI	ND<1	ND<1	35	ND<1	ND<1
	1/20/00	AEI	ND<1	ND<1	36	ND<1	ND<1
	8/8/00	AEI	ND<0.5	ND<0.5	50	0.72	ND<0.5
	2/15/01	AEI	ND<0.5	ND<0.5	26	0.76	ND<0.5
	8/29/01	AEI	ND<0.5	ND<0.5	28	0.87	ND<0.5
	3/12/02	AEI	ND<0.5	ND<0.5	25	0.75	ND<0.5
	9/27/02	AEI	ND<0.5	ND<0.5	17	ND<0.5	ND<0.5
	3/25/03	AEI	ND<1.0	ND<1.0	23	ND<1.0	ND<1.0
	10/2/03	AEI	ND<0.5	ND<0.5	20	0.58	ND<0.5
	10/17/06	AEI	0.68	ND<0.5	22	0.88	ND <rl< td=""></rl<>

Well			cis 1,2 DCE	trans 1,2 DCE	PCE	TCE	VHCs*
(aguifer zone)	Date	Consultant	μg/L	μg/L	μg/L	μg/L	μg/L
AMW-6	9/13/95	Augeus	NR	ND<25	930	ND<25	NR
(shallow - 25)	4/16/96	PES	20	ND<10	1900	110	NR
	7/17/96	PES	ND<30	ND<30	3300	280	NR
	10/23/96	PES	ND<30	ND<30	2900	140	NR
	9/29/97	PES	220	70	4600	580	NR
	1/29/99	AEI	270	77	2400	390	ND<63
	5/5/99	AEI	370	110	2700	470	ND<71
	9/10/99	AEI	190	49	1400	250	ND<36
	1/20/00	AEI	210	ND<35	1600	270	ND<35
	8/8/00	AEI	150	56	1100	180	ND<25
	2/15/01	AEI	190	40	930	200	ND<25
	8/29/01	AEI	77	17	780	110	ND<10
	3/12/02	AEI	150	37	1300	170	ND<25
	9/27/02	AEI	67	ND<17	490	91	ND<17
	3/25/2003	AEI	94	ND<33	740	110	ND<33
	10/2/2003	AEI	66	13	440	60	ND<10
	10/17/2006	AEI	32	4.9	98	14	ND <rl< th=""></rl<>
AMW-7	9/13/95	Augeus	NR	ND<25	2350	340	NR
(shallow)	4/16/96	PES	2200	60	2300	500	NR
(	7/17/96	PES	2100	ND<30	2400	530	NR
	10/23/96	PES	3100	50	3400	610	NR
	9/29/97	PES	33	20	520	100	NR
	1/29/99	AEI	22	ND<3	95	12	ND<3
	5/5/99	AEI		Well Cove	ered During Co	nstruction	
AMW-8	9/13/95	Augeus	-	ND<25	95	ND<25	ND<25
(deep - 45)	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 ND 0.5	NS ND 0.5	NS	NS
	10/17/06	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND <rl< th=""></rl<>
AMW-9	9/13/95	Augeus	NR	ND<25	170	ND<25	NR
(deep - 54)	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< th=""></rl<>

FHS MW-10	g/L  NR  O<0.5  O<0.5  O<0.5  NS  O<0.5
(deep - 52)         1/29/99         AEI         ND<0.5	0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 NS 0<0.5 NS 0<0.5 NS 0<0.5 NS 00** 00** 0<0.5 NR 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5
5/5/99   AEI   ND<0.5   ND<	0<0.5 0<0.5 0<0.5 0<0.5 NS 0<0.5 NS 0<0.5 NS 0<0.5 NS 0<0.5 NS 0.0** 0.0** 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5
9/10/99	0<0.5 0<0.5 NS 0<0.5 NS 0<0.5 NS .0** .0** .0** 0<0.5 NR 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0
1/20/00	0<0.5 NS 0<0.5 NS 0<0.5 NS 000** 0.00** 0.00** 0<0.5 NR 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5 0<0.5
8/8/00 AEI NS NS NS NS NS NS NS NS 2/15/01 AEI ND<0.5 ND<	NS D<0.5 NS D<0.5 NS O** .0** .0** D <rl d<0.5="" d<0.5<="" nr="" th=""></rl>
2/15/01   AEI   ND<0.5   ND	0<0.5 NS 0<0.5 NS 00** 00* 00** 00** 00** 00** 00** 00** 00** 00** 00** 00** 00*
R/29/01   AEI NS NS NS NS NS NS   NS   NS   NS   NS	NS 0<0.5 NS 00** 00** 00** 00** 00** 00** 00** 0
3/12/02   AEI   ND<0.5   ND	0<0.5 NS .0** .0** <b>D<rl< b=""> NR 0&lt;0.5 0&lt;0.5 0&lt;0.5</rl<></b>
9/27/02	NS .0** .0** <b>D<rl< b=""> NR D&lt;0.5 D&lt;0.5 D&lt;0.5</rl<></b>
3/25/03   AEI   1.7   ND<1.0   18   2.5   3.5   10/6/03   AEI   ND<0.5   ND<0.5   ND<0.5   1.4   ND<0.5   ND<	.0** .0** O <rl nr="" o<0.5="" o<0.5<="" th=""></rl>
10/6/03	.0** O <rl nr="" o<0.5="" o<0.5<="" th=""></rl>
10/17/06	NR D<0.5 D<0.5 D<0.5 D<0.5 D<0.5
FHS MW-11 9/29/97 PES ND<0.5 ND<0.5 4 ND<0.5 ND (deep 64.5) 1/29/99 AEI ND<0.5 ND<0.5 7 ND<0.5 N 5/5/99 AEI ND<0.5 ND<0.5 7.1 ND<0.5 N 9/10/99 AEI ND<0.5 ND<0.5 7.5 ND<0.5 N 1/20/00 AEI ND<0.5 ND<0.5 7.5 ND<0.5 N 8/8/00 AEI ND<0.5 ND<0.5 7.5 ND<0.5 N 2/15/01 AEI ND<0.5 ND<0.5 ND<0.5 18 ND<0.5 N 8/29/01 AEI ND<0.5 ND<0.5 ND<0.5 18 ND<0.5 N 8/29/01 AEI ND<0.5 ND<0.5 16 ND<0.5 N 3/12/02 AEI ND<0.5 ND<0.5 16 ND<0.5 N 3/12/02 AEI ND<0.5 ND<0.5 13 ND<0.5 0 9/27/02 AEI ND<1 ND<1 13 ND<1 6.4* 3/25/03 AEI 0.78 ND<0.5 12 0.88 4.0* 10/2/03 Well Inaccessible 10/17/06 AEI ND<0.5 ND<0.5 1300 ND<0.5 N MW-6 3/11/95 EMCON ND<0.5 ND<0.5 1300 ND<0.5 N MW-6 (deep 48.69) 6/5/95 EMCON ND<0.20 ND<0.20 1300 ND<0.20 ND<0.5 PO<0.5 ND<0.5 ND	NR D<0.5 D<0.5 D<0.5 D<0.5
(deep 64.5)         1/29/99         AEI         ND<0.5	O<0.5 O<0.5 O<0.5 O<0.5
(deep 64.5)         1/29/99         AEI         ND<0.5	D<0.5 D<0.5 D<0.5
9/10/99 AEI ND<0.5 ND<0.5 7.5 ND<0.5 N 1/20/00 AEI ND<0.5 ND<0.5 7.5 ND<0.5 N 8/8/00 AEI ND<0.5 ND<0.5 38 ND<0.5 N 2/15/01 AEI ND<0.5 ND<0.5 18 ND<0.5 N 8/29/01 AEI ND<0.5 ND<0.5 16 ND<0.5 N 3/12/02 AEI ND<0.5 ND<0.5 13 ND<0.5 N 9/27/02 AEI ND<1 ND<1 13 ND<1 6.4* 3/25/03 AEI 0.78 ND<0.5 12 0.88 4.0* 10/2/03 Well Inaccessible 10/17/06 AEI ND<0.5 ND<0.5 1300 ND<0.5 N MW-6 (deep 48.69) 6/5/95 EMCON ND<20 ND<0.5 1300 ND<20 ND<20 8/29/95 EMCON ND<20 ND<20 1300 ND<20 9/11/95 Augeus NR ND<50 2000 ND<50	O<0.5 O<0.5
1/20/00	0<0.5
8/8/00	
2/15/01   AEI   ND<0.5   ND<0.5   18   ND<0.5   N 8/29/01   AEI   ND<0.5   ND<0.5   16   ND<0.5   N 3/12/02   AEI   ND<0.5   ND<0.5   13   ND<0.5   0 9/27/02   AEI   ND<1   ND<1   13   ND<1   6.4* 3/25/03   AEI   0.78   ND<0.5   12   0.88   4.0* 10/2/03   Well Inaccessible 10/17/06   AEI   ND<0.5   ND<0.5   ND<0.5   N   MW-6   3/11/95   EMCON   ND<20   ND<0.5   1300   ND<20   ND<0.5   ND<0.5	>0.5
8/29/01   AEI   ND<0.5   ND<0.5   16   ND<0.5   ND 3/12/02   AEI   ND<0.5   ND<0.5   13   ND<0.5   0 9/27/02   AEI   ND<1   ND<1   13   ND<1   6.4* 3/25/03   AEI   0.78   ND<0.5   12   0.88   4.0* 10/2/03   Well Inaccessible 10/17/06   AEI   ND<0.5   ND	
3/12/02 AEI ND<0.5 ND<0.5 13 ND<0.5 0 9/27/02 AEI ND<1 ND<1 13 ND<1 6.4* 3/25/03 AEI 0.78 ND<0.5 12 0.88 4.0* 10/2/03 Well Inaccessible 10/17/06 AEI ND<0.5 ND<0.5 20 ND<0.5 N  MW-6 3/11/95 EMCON ND<20 ND<0.5 1300 ND<20 (deep 48.69) 6/5/95 EMCON ND<20 ND<20 2000 ND<20 8/29/95 EMCON ND<20 ND<20 1300 ND<20 9/11/95 Augeus NR ND<50 2000 ND<50	0<0.5
9/27/02   AEI   ND<1   ND<1   13   ND<1   6.4*     3/25/03   AEI   0.78   ND<0.5   12   0.88   4.0*     10/2/03   Well Inaccessible     10/17/06   AEI   ND<0.5   ND<0.5   20   ND<0.5   ND<0.5     MW-6   3/11/95   EMCON   ND<20   ND<0.5   1300   ND<20     (deep 48.69)   6/5/95   EMCON   ND<20   ND<20   2000   ND<20     8/29/95   EMCON   ND<20   ND<20   1300   ND<20     9/11/95   Augeus   NR   ND<50   2000   ND<50	0<0.5
3/25/03   AEI   0.78   ND<0.5   12   0.88   4.0**	77**
3/25/03   AEI   0.78   ND<0.5   12   0.88   4.0**	1.1***
MW-6 (deep 48.69)         3/11/95 (b/5/95)         EMCON (b/5/95)         ND<20 (b/5/95)	1.0****
MW-6         3/11/95         EMCON         ND<20	
(deep 48.69)         6/5/95         EMCON         ND<20	O <rl< th=""></rl<>
(deep 48.69)         6/5/95         EMCON         ND<20	NR
8/29/95 EMCON ND<20 ND<20 1300 ND<20 9/11/95 Augeus NR ND<50 2000 ND<50	NR
· · · · · · · · · · · · · · · · · · ·	NR
11/16/95 EMCON ND<20 ND<20 1300 ND<20	NR
	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
	0<1.3
	D<11
	D<12
	D<8.5 D<5
	D<5 D<10
	D<5.0
	0<20
	O<20 O<12
10/2/05 AEI 15 ND<5.0 340 21 N 10/17/06 AEI 16 ND<5.0 320 18 N	0<20

Well			cis 1,2 DCE	trans 1,2 DCE	PCE	TCE	VHCs*
(aguifer zone)	Date	Consultant	μg/L	μg/L	μg/L	μg/L	μg/L
MW-7	3/11/95	EMCON	NS	NS	NS	NS	NS
(shallow - 38)	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*****< th=""></rl*****<>
WGR MW-2 (Shallow)	10/17/06	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND <rl< th=""></rl<>
WGR MW-3 (Shallow)	10/17/06	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND <rl< th=""></rl<>
WGR MW-4	4/16/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
(deep)	7/17/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	10/23/96	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/29/97	PES	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	2/15/01	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	8/29/01	AEI	NS	NS	NS	NS	NS
	3/12/02	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	9/27/02	AEI	NS	NS	NS	NS	NS
	3/25/03	AEI	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	10/2/03	AEI	NS	NS	NS	NS	NS
	10/17/06	AEI	ND<0.5	ND<0.5	0.62	ND<0.5	ND <rl< td=""></rl<>

#### Table 2 Notes:

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

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

Trichloroethene (TCE)

<sup>\*</sup>VHCs = All other chemicals by EPA method 601/8010 or 8260

<sup>\*\*</sup> Chloroform (trichloromethane)

<sup>\*\*\*</sup> Dibromochloromethane

<sup>\*\*\*\*</sup> Methylene Chloride

<sup>\*\*\*\*\*</sup> bromodichloromethane

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

 $NS = Well \ not \ sampled$ 

NR = Not Reported

 $<sup>\</sup>mu$ g/L = micrograms per liter (parts per billion)

Tetrachloroethene (PCE)

<sup>\*</sup> Available data from AMW-7 is presented although this well was covered during 1999 construction activities RL = Reporting Limit

**Table 5: Soil Vapor Analytical Results** *10700 MacArthur Blvd., Oakland, California* 

Sample	Date	Depth	PCE	TCE	cis-1,2-DCE	trans-1,2 DCE	Vinyl Chloride
ID		(feet bgs)	µg/L	µg/L	μg/L	μg/L	µg/L
VB-1-5	10/12/2006	5	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-1-11.5	10/12/2006	11.5	<b>4.9</b>	<b>0.44</b>	ND<0.10	ND<0.10	ND<0.10
VB-2-2.5	10/12/2006	2.5	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-2-8	10/12/2006	8	ND<0.10	ND<0.10	<b>0.51</b>	ND<0.10	ND<0.10
VB-3-4.5	10/12/2006	4.5	ND<0.10	ND<0.10	<b>0.16</b>	ND<0.10	<b>2.0</b>
VB-3-9	10/12/2006	9	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-4-4	10/13/2006	4	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-4-12	10/13/2006	12	<b>3.2</b>	<b>0.25</b>	ND<0.10	ND<0.10	ND<0.10
VB-5-5	10/13/2006	5	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-5-12 <sup>1</sup>	10/13/2006	12	ND<0.10	ND<0.10	<b>0.94</b>	<b>0.13</b>	<b>0.29</b>
VB-6-5 <sup>2</sup>	10/11/2006	5	<b>0.53</b> ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-6-8 <sup>1</sup>	10/11/2006	8		ND<0.10	<b>0.22</b>	ND<0.10	ND<0.10
VB-7-5	10/12/2006	5	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-7-10	10/12/2006	10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-8-5	10/12/2006	5	61	1.9	0.13	ND<0.10	ND<0.10
VB-8-10	10/12/2006	10	5.6	2.6	1.4	ND<0.10	ND<0.10
VB-9-5 <sup>1</sup>	10/12/2006	5	6.7	0.67	0.19	ND<0.10	ND<0.10
VB-9-11	10/12/2006	11	12	3.6	7.0	ND<0.10	ND<0.10
VB-10-5	10/13/2006	5	<b>0.16</b>	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-10-9	10/13/2006	9	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-11-4.5	10/13/2006	4.5	6.1	7.0	700	170	520
VB-11-11.5	10/13/2006	11.5	6,800	1,400	540	64	23
VB-12-5	10/11/2006	5	0.42	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-12-12	10/11/2006	12	18	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-13-5	10/11/2006	5	0.13	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-13-12	10/11/2006	12	8.0	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-14-5	10/11/2006	5	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-14-11	10/11/2006	11	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-15-5	10/11/2006	5	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-15-12	10/11/2006	12	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10

Sample	Date	Depth	PCE	TCE	cis-1,2-DCE	trans-1,2 DCE	Vinyl Chloride
ID		(feet bgs)	µg/L	µg/L	µg/L	µg/L	µg/L
VB-16-4	10/13/2006	4	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-16-11	10/13/2006	11	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-17-4	10/13/2006	4	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
VB-17-8	10/13/2006	8	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.10
Residential Land Use ESL  Commercial Land Use ESL			0.4	1.2 4.1	7.3 20	15 41	0.032 0.11

Notes:

PCE = Tetrachloroethene

TCE = Trichloroethene

c-1,2-DCE = cis-1,2-Dichloroethene

trans-1,2-DCE = trans-1,2-Dichloroethene

 $\mu g/L = micrograms per liter (ppb)$ 

bgs = below ground surface

ESL's = Environmental Screening Level for shallow soil gas screening levels.

<sup>&</sup>lt;sup>1</sup> = Duplicate analysis performed on this sample. Highest results reported on table.

 $<sup>^2</sup>$  = Purge volume test performed on this sample. Sample reported after 3 purge volumes for all samples.