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April 20, 2006

Mr. Barney M. Chan
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Soil & Groundwater Investigation Report**
2221 Union Street
Oakland, CA 94607
AEI Project No. 116355
ACEH Toxics Case RO0002488

Dear Mr. Chan:

Enclosed is one electronic copy of the recently completed *Soil and Groundwater Investigation Report* which also includes the results of the 1st semi-annual groundwater monitoring event performed by AEI on March 2, 2006.

If you have any questions or comments, you may reach me or Peter McIntyre at (925) 283-6000.

Sincerely,
AEI Consultants

Richard Bradford
Senior Staff Engineer
rbradford@aeiconsultants.com

(Enclosure)

April 20, 2006

SOIL & GROUNDWATER INVESTIGATION REPORT

2221 Union Street
Oakland, California

Project No. 116355
ACHCSA Toxics Case RO0002488

Prepared For

Mr. Alex Aguilar
J&A Truck Repair
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Oakland, CA 94607

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1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this report on behalf of Mr. Alex Aguilar of J & A Truck Repair. This investigation was initiated by the property owner in accordance with the requirements of the Alameda County Environmental Health (ACEH) local oversight program. The following report describes the activities and results of the subsurface investigation performed by AEI on March 16, 2006 at the above referenced property (Figure 1: Site Location Map). This report also presents the results of the 1st semi-annual monitoring episode performed by AEI on March 2, 2006.

The investigation included installation of four temporary soil borings to 30 feet below ground surface (bgs) to collect soil and groundwater samples for chemical analyses. Soil samples were collected using standard direct push sampling methods and groundwater samples were collected at three discrete intervals using an isolated direct push groundwater sampler.

This investigation was designed to further investigate and delineate the lateral and vertical extent of contamination present near previous boring BH-O installed August 2002.

2.0 BACKGROUND SUMMARY

The subject property (hereinafter referred to as the "site" or "property") is located at 2221 Union Street in Oakland, California. The property is bordered by Union Street to the east and Poplar Street to the west, between West Grand Avenue and 25th Street. The site is approximately 0.84 acres in size improved with two single-story buildings, buildings A and B (Figure 1). Building A (approximately 10,576 square feet) is located at the southern end of the property and Building B (approximately 1,750 square feet) is located at the northeastern corner of the property. Building A was constructed in 1963 on an original foundation. Historical records indicate the structure referred to as Building B was constructed in 1948. In addition to the buildings, the property is improved with concrete-paved parking areas and associated unpaved areas.

The immediately surrounding properties consist of Commercial Fueling Network (2336 Poplar Street) and a single-story commercial building (2327 Union Street) to the north; Union Street and various commercial and industrial buildings (2210-2320 Union Street) to the east; All Metals Welding (2211 Union Street), a single-story commercial building (2232 Union Street) and Ace Pallet (no address) to the south; and Poplar Street and Cypress Mandela Training Center (2229 Poplar Street) to the west.

According to AEI's *Phase I Environmental Site Assessment* (June 21, 2005), the property was vacant land during the 1910s and by the early 1930s was developed with a building at the northeastern corner of the site. California Laundry Equipment (CLE) occupied the site from 1939 to 1990. During their occupancy in the 1930s and the 1940s, two additional buildings (in the location of Building A and Building B) were constructed. In the early 1960s, Fred E. Glatt and David Glatt purchased the property, which continued to be occupied by CLE. During that time, the single-story corrugated building at the northeastern corner of the property was demolished.

Building A, an office/plant building was constructed on an old foundation at the southern end of the property in 1963 after a fire destroyed the previous structure.

During the late 1960s, 1970s, and 1980s, the northeastern and northwestern corners of the property appeared to be used for automobile storage (perhaps as part of the adjacent property to the northwest). California Brake and Clutch used the property in the 1990s. In 1999, Alejandro Aguilar purchased the property, which is now occupied by J & A Truck Repair.

According to files reviewed at the ACHCSA, a Phase I Environmental Site Assessment[1] (ESA) identified a surface water drain in the outdoor yard as a recognized environmental concern and recommended soil sampling in the vicinity of the drain.

On June 22, 1999, Aqua Science Engineers, Inc. (ASE) installed one soil boring (BH-A) using a hand auger through the bottom of the drain. ASE retained two soil samples for chemical analyses (BH-A @ 1' and BH-A @ 3'). One sample (BH-A @ 1') was collected at a depth of one foot and the other sample (BH-A @ 3') at a depth of three feet near the bottom of the surface water drain. The soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-g) and diesel (TPH-d) by EPA Method 8015, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8020, oil and grease by Standard Method 5520E, halogenated volatile organic compounds (HVOCs) by EPA Method 8010, and the RCRA five metals by EPA Method 6010. Tetrachloroethylene, also know as perchloroethylene (PCE), at a concentration of 390 mg/kg was the only HVOC detected above action levels. Soil sample BH-A @ 3' was placed on hold at the laboratory but was not subsequently analyzed because it was "saturated" and had the same "appearance and odor" as soil sample BH-A @ 1'.

On July 12, 1999, ASE advanced six soil borings (labeled BH-B through BH-G) to assess the soil and groundwater quality around the former drain in the outdoor yard and near a fissure in the concrete inside Building A, an area where methyl ethyl ketone (MEK) was used as a cleaning solvent. Six soil samples were collected at two and half feet below ground surface (bgs) and analyzed for HVOCs by EPA Method 8010. Elevated levels of HVOCs were detected in two (BH-B and BH-C) of the six soil borings. The soil sample analytical data from soil borings BH-A through BH-G are included in Table 5. Groundwater grab samples were also collected from each soil boring. All but one of the groundwater samples collected from the six soil borings and one from the bottom of the former drain contained elevated concentrations of HVOCs. The groundwater grab sample analytical data from soil borings BH-A through BH-G are included in Table 4.

On August 2, 1999, three monitoring wells (MW-1 through MW-3) were installed by ASE. Monitoring well construction details are included in Table 1. The soil samples collected from soil boring MW-1 and MW-2 contained low concentrations of HVOCs. The soil sample collected from boring MW-3 did not contain HVOCs above laboratory method detection limits, indicating that the

[1] No information on the author or source of this Phase I ESA could be found on record at ACEH. The reference to this Phase I ESA and information on the recognized environmental concern were taken directly from ASE's *Workplan for a Soil and Groundwater Assessment* (July 9, 1999).

soil contamination was confined to a small area. All three groundwater samples contained elevated concentrations of HVOCs. Quarterly groundwater monitoring at the subject property commenced in September 1999.

On October 27, 1999, a fourth monitoring well (MW-4) was installed. The soil sample collected from MW-4 contained no detectable concentrations of HVOCs. However, the groundwater sample collected from MW-4 contained elevated concentrations of HVOCs.

In November 1999, approximately 24 cubic yards of impacted soil was excavated from around the outdoor drain. Four confirmatory soil samples were collected from the bottom of the drain and one composite sample was collected from the stockpiled soil. None of the four soil samples collected from the bottom of the excavation pit contained detectable concentrations of HVOCs. However, the composite sample from the stockpiled soil contained elevated levels of HVOCs. The excavation pit was backfilled in November 1999. A new outdoor drain, piping system, and an oil/water separator were installed in December 1999. After characterization, approximately 36.90 tons of stockpiled soil from the excavation was hauled for disposal in December 1999.

A Report of Sensitive Receptors Survey and Area Well Survey (December 6, 2000) prepared by ASE indicated that twenty-five wells were located within a 1,000-foot radius of the property. Fourteen of these wells were used for groundwater monitoring purposes. Three other wells were reportedly destroyed. No domestic or municipal drinking water wells or protected surface water bodies were identified within a 1,000-foot radius of the property. The report also evaluated the potential for utility lines and trenches within the vicinity of the site to act as preferential pathways for contaminant migration to and from the site. The report identified potential conduits, such as storm water drains, sanitary sewers, gas pipelines, electrical conduits, ect. The depth of the storm water and sanitary sewer lines ranges between five and ten feet bgs. The depth to electric and gas lines ranges between three and five feet bgs. The depth of water supply lines ranges between three and seven feet bgs. According to ASE, exact locations of onsite utilities were difficult to gauge since reinforced concrete covers most of the site. ASE concluded that based on the average depth to the water table and gradient direction that some "down-gradient conduits lie below the water table".

In August 2002, ASE directed the drilling of ten additional soil borings (labeled BH-H through BH-Q) to delineate the vertical and lateral extent of contamination. Soil and groundwater samples were collected from the ten soil borings, and a groundwater sample was collected from the four monitoring wells. The only concentrations of HVOCs detected in the soil samples from four of the ten borings were relatively low cis-1, 2-dichloroethylene (DCE), trichloroethylene (TCE), and PCE. All of the concentrations detected were below San Francisco Bay Regional Water Quality Control Board's (RWQCB) Risk-Based Screening Levels[2] (RBSLs). HVOCs were detected in all the groundwater samples except BH-M. The highest concentrations of HVOCs detected were on

[2] The San Francisco Bay RWQCB's current Environmental Screening Levels (ESLs) replace the Risk-Based Screening Levels (RBSLs) presented in the document, entitled *Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater*, San Francisco Bay RWQCB (December 2001) which was effective at the time of ASE's August 2002 soil and groundwater investigation.

the west side of the subject property. The soil sample analytical data from soil borings BH-H through BH-Q are included in Table 5. The groundwater data also suggested that some of the groundwater contamination might possibly be from an off-site source. The groundwater sample collected from BH-O contained the only PCE concentration exceeding the RBSL for sites where groundwater is not a current or potential source of drinking water.

All concentrations of HVOCs in groundwater samples collected from borings to the east and northeast were below all RBSLs. The groundwater analytical data is presented in Table 4. The HVOCs at the west side of the subject property were suspected to be from an off-site source. The plume of HVOCs was not defined to the north or south. However, the HVOC concentrations near the property lines to the north and south did not appear to be a threat to human health or the environment. ASE concluded that groundwater monitoring is required to determine if a decreasing trend in the HVOC concentration can be identified and to predict when HVOC concentrations will decrease to below the drinking water RBSL.

On August 11, 2005, ASE performed a groundwater monitoring episode at the property. The groundwater sample collected from monitoring well MW-1 contained 6.5 µg/L TCE, 52 µg/L cis-1, 2-DCE, 5.9 µg/L trans-1, 2-DCE, and 170 µg/L vinyl chloride. The groundwater samples collected from MW-2 contained 8.6 µg/L PCE, 14 µg/L TCE, 15 µg/L, cis-1, 2-DCE, and 0.67 µg/L trans-1, 2-DCE. The historic and current groundwater sample analytical data is presented in Table 3.

A letter from ACEH (dated April 29, 2005) indicated that additional information and further investigation is necessary to achieve case closure. In this letter, ACEH indicated that no active remediation is required to address the HVOCs in soil and groundwater at the subject property. ACEH requested that groundwater monitoring continue at minimum on a semi-annual schedule. In this letter, ACEH requested cross-sectional diagrams in two directions in order to understand the hydrogeology at the subject property. ACEH also requested a proposal to investigate contamination near soil boring BH-O. ACEH requested proposed methods to clarify the significance of the data and determine the extent of HVOC contamination in the area of the subject property.

In November 2005, AEI prepared a work plan for a soil and groundwater investigation. The work plan was approved with minimal technical comments in a letter from ACEH dated December 30, 2006. The following report describes the methods and results of AEI's March 16, 2006 subsruface investigation.

3.0 GEOLOGY AND HYDROGEOLOGY

The United States Geology Survey (USGS) *Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California (2000-Verion 1.0)* was reviewed. The property sits on artificial fill (af) or a man-made deposit of various materials and ages. Some of the fills are consolidated and quite firm. According to the map database, nearly all fills made prior to 1965 consist mainly of unconsolidated fill material.

Based on a thorough review of soil boring logs prepared by ASE, this artificial fill material may be as thick as ten feet at the subject site. The site is bordered to the north and northeast by basin deposit (Qhb) of the Holocene age that are described as very fine silty-clay to clay deposits occupying flat-floored basins at the distal edge of alluvial fans adjacent to the bay mud (Qhbm).

The topographic map shows the property located at approximately 15 feet above mean sea level. Groundwater sampling and excavation work at the site have indicated that a shallow groundwater table is typically encountered between 3 feet and 9 feet bgs. The direction of groundwater flow is historically west, northeast, and east, predominantly to the north or northeast; although nearby sites have highly variable flow directions.

4.0 INVESTIGATION ACTIVITIES

AEI performed a subsurface investigation at the subject property on March 16, 2006. A soil boring permit (Permit # W2006-0154) and an inspection time were obtained from the Alameda County Public Works Agency (ACPWA) prior to commencing field activities. Boring locations were marked and Underground Service Alert North was notified to identify any public utilities conflicts in the work area three business days prior to drilling.

AEI subcontracted Vironex Drilling (C57 license #705927) to perform the direct push drilling work. A total of four (4) soil borings (labeled SB-1 through SB-4) were advanced using a hydraulically-powered Geoprobe® 6600 direct push rig. The Geoprobe® 6600 uses both static force and percussion to advance sampling tools into the subsurface.

Boring locations were chosen to further investigate and delineate the lateral and vertical extent of contamination present near previous boring BH-O as approved by ACEH. Groundwater samples were collected at three intervals (i.e., approximately 6.5 to 10-foot, 16.5 to 20-foot, and 26.5 to 30-foot) using a Geoprobe® Screen Point 16 (SP16) isolated groundwater sampler. The boring locations are shown on Figure 2.

Saturated soils were apparent in each of the borings in the range of 6 to 7 feet bgs. Historical groundwater elevation data suggests that the groundwater flow direction is highly variable. The most recent groundwater elevation data (03/02/06) indicates that groundwater flows in a northern direction with a calculated hydraulic gradient of approximately 0.025 feet per foot.

4.1 Soil Sample Collection

Soil borings were advanced with a truck-mounted Geoprobe® 6600 rig to an ultimate depth of 30 feet bgs. All borings, expect the first boring SB-1, were continuously cored to 10 feet bgs in order to collect vadose zone soil core samples. SB-1 was continuously cored to 20 feet bgs for the purpose of describing the lithology of the saturated zone.

Soil core samples were continuously collected using a Macro-Core® direct push sampler into standard 60-inch long by 1.75-inch diameter PETG liners, from which a 4 to 6-inch sample was chosen at selected depths. Select soil samples were retained in each boring at the 5 and 10-foot interfaces for chemical analyses. The soil samples were sealed with Teflon® tape and plastic end caps, marked with unique identifiers, and placed in a cooler with wet ice to await transportation to the laboratory.

Borings were logged by AEI's field engineer and described according to the Unified Soil Classification System (USCS). Soil core samples were screened in the field using olfactory and other sensory perceptions and an organic vapor meter. No significant chemical odor was observed during boring advancement and sample collection. The soil core samples were screened in the field at customary intervals using a Mini-RAE Classic Plus (model PGM-76) photo ionization detector (PID).

AEI utilized a 10.6 eV lamp in the PID to ensure HVOCs that require higher ionization energies and have slower response times as compared to hydrocarbons would be accurately detected. The PID was calibrated at the office prior to use in the field with 100 ppm isobutylene standard calibration gas at room temperature. The soil screening data is presented on the borings logs found in Appendix A.

4.2 Groundwater Sample Collection

Groundwater samples were collected using both open hole piezometers and the Geoprobe® SP16 isolated groundwater sampler. The soil borings, except SB-1, were advanced to a depth a 10 feet bgs in order to continuously collect vadose zone soil core samples. A temporary open-hole piezometer constructed of ¾-inch diameter slotted PVC casing was then installed to facilitate groundwater sample collection from the 6.5 to 10-foot interval. Then, the SP16 sampler was driven to collect groundwater samples from the 16.5 to 20-foot and 26.5 to 30-foot approximate intervals.

The assembled SP16 groundwater sampler, designed for use with 1.5-inch probe rods, is approximately 51.5 inches long with an outer diameter of 1.625 inches. Upon deployment, up to 41 inches of stainless steel screen can be exposed to the formation. Due to the 'tight' nature of the encountered soils, the entire 41-inch length of screen was exposed to facilitate groundwater sample collection.

The SP-16 was first driven to the desired depth using standard probe rods. The probe rods and sheath were then retracted exposing the screen to the formation. The screen sheath forms a mechanical annular seal above the screen interval. Low density polyethylene tubing (¼-inch diameter) with a check ball valve attached to the end was used to collect groundwater samples. Due to a very slow recharge rate (>3 hours for <1 VOA), a groundwater sample could not collected from the 16.5 to 20-foot interval in SB-4. Water samples from all other locations were collected into three (3) 40-mL VOA vials. The groundwater samples were capped so that there was no head space or visible air bubbles

within the vials, marked with unique identifiers, and then placed in a cooler with wet ice to await transportation to the laboratory.

4.3 Laboratory Analyses

On day of sample collection, the soil and groundwater samples were transported to McCampbell Analytical Inc. of Pacheco, California (Department of Health Services Certification #1644) under chain of custody protocol for chemical analysis. Analytical results and chain of custody documents are included as Appendix C.

Soil samples retained from the 5 and 10-foot interfaces were analyzed from each boring, expect for SB-1, where the soil core sample recovery was less than 5% and a sample was instead retained at the next (15-foot) interface. Groundwater samples collected approximately from the 6.5 to 10-foot, 16.5 to 20-foot, and 26.5 to 30-foot intervals were analyzed from each boring. Soil and groundwater samples were analyzed for HVOCs by EPA Method SW8260 (i.e., the 8010 basic target list).

Any remaining soil and groundwater samples were placed on hold at the laboratory pending the results of the initial analyses.

4.4 Soil Boring Decommissioning

Following final groundwater sample collection, the SP-16 was retracted and each boring was backfilled with neat cement grout using the SP16 or a piece of ¾-inch diameter casing per applicable Alameda County and State of California guidelines.

4.5 Equipment Decontamination

The Macro-Core® sampler and drive rods were decontaminated with a triple rinse system before reassembly with a new liner. The triple rinse system consisted of cleansing the sample tools with Liquinox® or similar detergent, followed by rinsing with tap water, and a final rinsing with distilled water.

The SP-16 sampler and drive rods were decontaminated with a triple rinse system before advancing to the next sampling location. The triple rinse system consisted of cleansing the sample tools with Liquinox® or similar detergent, followed by rinsing with tap water, and a final rinsing with distilled water.

5.0 1ST SEMI-ANNUAL GROUNDWATER MONITORING EVENT, 2006

5.1 Summary of Activities

AEI measured depth to groundwater in a total of four (4) wells (MW-1 through MW-4) on March 2, 2006. The depth from the top of the well casings was measured with an electric

water level indicator prior to sampling. The wells were purged and sampled using disposable Teflon bailers. Temperature, turbidity, pH, specific conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) were measured during the purging of the wells. AEI removed at least 3 well volumes prior to sampling each well. Once temperature, pH, specific conductivity stabilized after three consecutive readings and following the recovery of water levels to at least 90%, a water sample was collected. The well locations are shown in Figure 2.

Water was poured from the bailers into 40 ml VOA vials and capped so that neither head space nor air bubbles were visible within the sample containers. Samples were shipped on ice under proper chain of custody protocol to McCampbell Analytical, Inc. of Pacheco, California (Department of Health Services Certification #1644).

A total of four (4) Groundwater samples were submitted for chemical analysis for VOCs by EPA Method SW8260B (full suite) as requested by the ACHCSA's December 30, 2005 technical comment letter.

5.2 Field Results

Groundwater levels for the current monitoring episode ranged from 11.02 to 12.80 feet above mean sea level (msl). These groundwater elevations were an average of 1.47 feet higher than the previous monitoring episode. The direction of the groundwater flow at the time of measurement was towards the north. The latest estimated groundwater gradient is approximately 0.025 feet per foot.

Groundwater elevation data is summarized in Table 1. The groundwater elevation contours and the groundwater flow direction are shown in Figure 2. Refer to Appendix A for the Groundwater Monitoring Well Field Sampling Forms.

5.3 Groundwater Quality

The highest concentrations of PCE and TCE detected during this monitoring episode were in samples collected from MW-1. Analysis of groundwater samples collected from well MW-1 detected elevated levels of PCE and TCE at concentrations of 90 µg/L and 32 µg/L, respectively. Lower levels of 1,1-dichloroethane, cis 1,2-dichloroethene, trans 1,2-dichloroethne, and vinyl chloride (VC) were detected at concentrations of 3.2 µg/L, 15 µg/L, 1.9 µg/L, and 7.4 µg/L, respectively.

Analysis of groundwater samples collected from MW-2, MW-3, and MW-4 detected elevated levels of PCE at concentrations of 44 µg/L, 12 µg/L, and 5.2 µg/L, respectively.

Analysis of groundwater samples collected from MW-2, MW-3, and MW-4 detected elevated levels of TCE at concentrations of 19 µg/L, 12 µg/L, and 1.5 µg/L, respectively.

A summary of groundwater monitoring analytical data is presented in Table 2. Laboratory results and chain of custody documents are included in Appendix B.

6.0 FINDINGS

6.1 Geology and Hydrology

The near surface soils encountered during boring advancement consisted of very loose, brown well-graded fine-grained sands with silt. The top five feet of soil appears to be artificial fill material. A thin (approximately 1 to 1.5-foot thick) layer of very soft, dark gray to black organic soil with sand was encountered at approximately 4 to 5 feet bgs. Soft, dark gray silts with fine-grained sand and sub-rounded gravel were encountered from approximately 5 to 10 feet bgs. Both of these layers exhibit traits of the basin (Qhb) and/or bay mud (Qhbm) deposits. A soft to medium stiff greenish gray lean clay was encountered from approximately 10 to 20 feet bgs. Medium dense, yellowish-brown poorly graded sands with silt were encountered from approximately 20 feet to the boring terminus. Refer to Appendix A for detailed logs of the borings.

First groundwater was encountered in each boring at approximately 6 to 7 feet bgs. Monitoring wells MW-1 through MW-4 sampled at the site are screened from approximately 10 to 20 feet bgs. The static depth to water in these well ranges from approximately 2.37 feet bgs (MW-3) to 4.18 feet bgs (MW-2). Historical groundwater elevation data suggests that the groundwater flow direction is highly variable. The most recent groundwater elevation data (03/02/06) indicates that groundwater flows in a northern direction with a calculated hydraulic gradient of approximately 0.025 feet per foot

6.2 Groundwater Quality

The highest concentrations of PCE and TCE were detected in groundwater samples collected at various intervals from borings SB-3 and SB-4.

Analysis of groundwater samples collected from SB-3 revealed elevated level of PCE at concentrations of 460 µg/L, 250 µg/L, and 5.8 µg/L in the 6.5 to 10-foot, 16.5 to 20-foot, and 26.5 to 30 foot intervals, respectively.

Analysis of groundwater samples collected from SB-3 revealed elevated levels of TCE at concentrations of 110 µg/L, 76 µg/L, and 2.5 µg/L in the 6.5 to 10-foot, 16.5 to 20-foot, and 26.5 to 30 foot intervals, respectively.

Analysis of groundwater samples collected from SB-4 revealed elevated levels PCE at concentrations of 410 µg/L and 3.4 µg/L in the 6.5 to 10-foot and 26.5 to 30-foot intervals, respectively.

Analysis of groundwater samples collected from SB-4 revealed elevated levels TCE at concentrations of 190 µg/L and 2.5 µg/L in the 6.5 to 10-foot and 26.5 to 30 foot intervals, respectively.

The lowest concentrations of PCE and TCE were detected in the groundwater samples at various intervals from borings SB-1 and SB-2.

6.3 Soil Quality

The highest concentrations of PCE were detected in the soil samples from borings SB-3 and SB-4. The highest concentrations of TCE were detected in the soil samples from borings SB-1 and SB-2.

Elevated levels of PCE were detected in soil samples collected from borings SB-3 and SB-4 at 5 feet at concentrations of 0.64 mg/kg and 0.14 mg/kg, respectively. No PCE was detected above the laboratory method detection limit of 0.005 mg/kg in the soil samples collected from borings SB-3 at and SB-4 at 10 feet.

Relatively low to non-detectable concentrations of TCE were detected in the soil samples from borings SB-3 and SB-4 at various depths.

Relatively low to elevated levels of TCE were detected in soil samples collected from borings SB-1 and SB-2 at 5 feet at concentrations of 0.25 mg/kg and 0.038 mg/kg, respectively. Relatively low to elevated levels of TCE were detected in soil samples collected from borings SB-1 and SB-2 at 10 feet at concentrations of <0.005 mg/kg and 0.012 mg/kg, respectively.

Relatively low to non-detectable concentrations of PCE were detected in the soil samples from borings SB-1 and SB-2 at various depths.

Soil sample analytical data is summarized in Table 1, and groundwater sample analytical data is summarized in Table 2.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Elevated to relatively low concentrations of HVOCs were detected in the soil and groundwater samples collected from SB-1 through SB-4. The highest concentrations of PCE and TCE were detected in the groundwater samples from borings SB-3 and SB-4. The highest concentrations of PCE were detected in the soil samples from borings SB-3 and SB-4 and the highest concentrations of TCE were detected in the soil samples from borings SB-1 and SB-2. Elevated levels of PCE and TCE detected in soil borings SB-3 and SB-4 may indicative of a “slug” of PCE that has migrated from the old source

Concentrations of PCE and TCE biodegradation (daughter) products, including cis 1,2-DCE, were detected in the soil and groundwater samples collected from borings SB-1 through SB-4 as well as in the groundwater samples collected from wells MW-1 through MW-4. This suggests that aerobic degradation, reductive dehalogenation (i.e., dechlorination), or a combination thereof is occurring. Furthermore, indigenous microorganisms may be utilizing the thin layer of heavy organic material identified during this investigation as a feedstock (i.e., carbon source) for biodegradation processes.

Concentrations of PCE and TCE detected in monitoring wells MW-1 through MW-4 during this semi-annual monitoring event fall below the San Francisco Bay RWQCB's published ESLs[3] of 120 µg/L and 360 µg/L for PCE and TCE, respectively. The concentrations of vinyl chloride detected all of the monitoring wells except MW-1 (7.4 µg/L) are below the ESL of 3.8 µg/L.

AEI makes the following recommendation(s) based on current site conditions, site history provided to AEI, current and future use of the site as a truck repair facility, and the findings of this subsurface investigation:

- Perform groundwater sampling and monitoring for at least on more semi-annual event scheduled for later this year. At that time, re-evaluate the HVOC concentration trends. If concentrations of HVOCs continue to show a decreasing trend, consider case closure.

- Based on the results of this investigation, AEI recommends no further investigations of a potential source in the vicinity of previous boring BH-O, since evidence of a significant release in this are was not identified.

- It is suspected that contamination detected in this area have migrated from the known source in what is now the truck wash area.

- the contamination detected during this investigation does not appear to pose a significant risk to the public health or environment based on the results of ASE's *A Report of Sensitive Receptors Survey and Area Well Survey* (December 6, 2000) and the current and future use of the property as a truck repair facility.

- A monitoring well may be required down-gradient of soil boring SB-4 to evaluate and monitor impacts to groundwater quality in this area.

8.0 REFERENCES

Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California (2000 - Version 1.0) prepared by R.W. Graymer of the United States Geological Survey

[3] San Francisco Bay RWQCB's *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, Volume 1: Summary Tier 1 Lookup Tables, Table B: Shallow Soil (≤3M BGS) – Water IS NOT a Current or Potential Source of Drinking Water.

Phase I Environmental Site Assessment (June 21, 2005) prepared by AEI Consultants

Quarterly Groundwater Monitoring Report, February 2000 Groundwater Sampling (February 28, 2000) prepared by Aqua Science Engineers, Inc.

Quarterly Groundwater Monitoring Report, May 2000 Groundwater Sampling (May 31, 2000) prepared by Aqua Science Engineers, Inc.

Quarterly Groundwater Monitoring Report, August 2000 Groundwater Sampling (October 1, 2000) prepared by Aqua Science Engineers, Inc.

Quarterly Groundwater Monitoring Report, November 2000 Groundwater Sampling (December 13, 2000) prepared by Aqua Science Engineers, Inc.

Quarterly Groundwater Monitoring Report, August 2005 Groundwater Sampling Event (September 16, 2005) prepared by Aqua Science Engineers, Inc.

Report Detailing Soil Remediation Activities (November 30, 1999) prepared by Aqua Science Engineers, Inc.

Report of Sensitive Receptors Survey and Area Well Survey for 2221 Union Street, Oakland, CA (December 6, 2000) prepared by Aqua Science Engineers, Inc.

Report of Soil and Groundwater Assessment (July 28, 1999) prepared by Aqua Science Engineers, Inc.

Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (4th edition, February 2005) Volume 1: Summary Tier 1 Lookup Tables (Interim Final - February 2005) prepared by the San Francisco Bay Regional Water Quality Control Board (RWQCB)

Workplan for a Soil and Groundwater Assessment (July 9, 1999) prepared by Aqua Science Engineers, Inc.

Workplan for a Soil and Groundwater Assessment (June 26, 2002) prepared by Aqua Science Engineers, Inc.

Soil and Groundwater Investigation Work Plan (November 16, 2005) prepared by AEI Consultants

9.0 SIGNATURES

This soil and groundwater investigation report has been prepared by AEI on behalf of Mr. Alex Aguilar of J & A Truck Repair and outlines a scope of work performed to investigate the lateral and vertical extent of contamination near previous boring BH-O on the property located at 2221 Union Street in the City of Oakland, Alameda County, California. The recommendations rendered in this report were based on field investigations and laboratory testing of material samples. This report does not reflect subsurface variations that may exist between sampling points. These variations cannot be anticipated, nor could they be entirely accounted for, in spite of exhaustive additional testing. This plan should not be regarded as a guarantee that no further contamination,

testing. This plan should not be regarded as a guarantee that no further contamination, beyond that which could have been detected within the scope of past investigations is present beneath the property or that all contamination present at the site will be identified, treated, or removed. Undocumented, unauthorized releases of hazardous material(s), the remains of which are not readily identifiable by visual inspection and/or are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation and may or may not become apparent at a later time.

All specified work will be performed in accordance with generally accepted practices in environmental engineering, geology, and hydrogeology and were performed under the direction of appropriate registered professional(s).

Please contact either of the undersigned with any questions or comments at (925) 283-6000.

Sincerely,
AEI Consultants

Richard Bradford
Senior Staff Engineer

Peter McIntyre, PG, REA
Project Manager

REGISTERED GEOLOGIST
PETER J. MCINTYRE
Exp. 5/31/06
No. 7702
STATE OF CALIFORNIA

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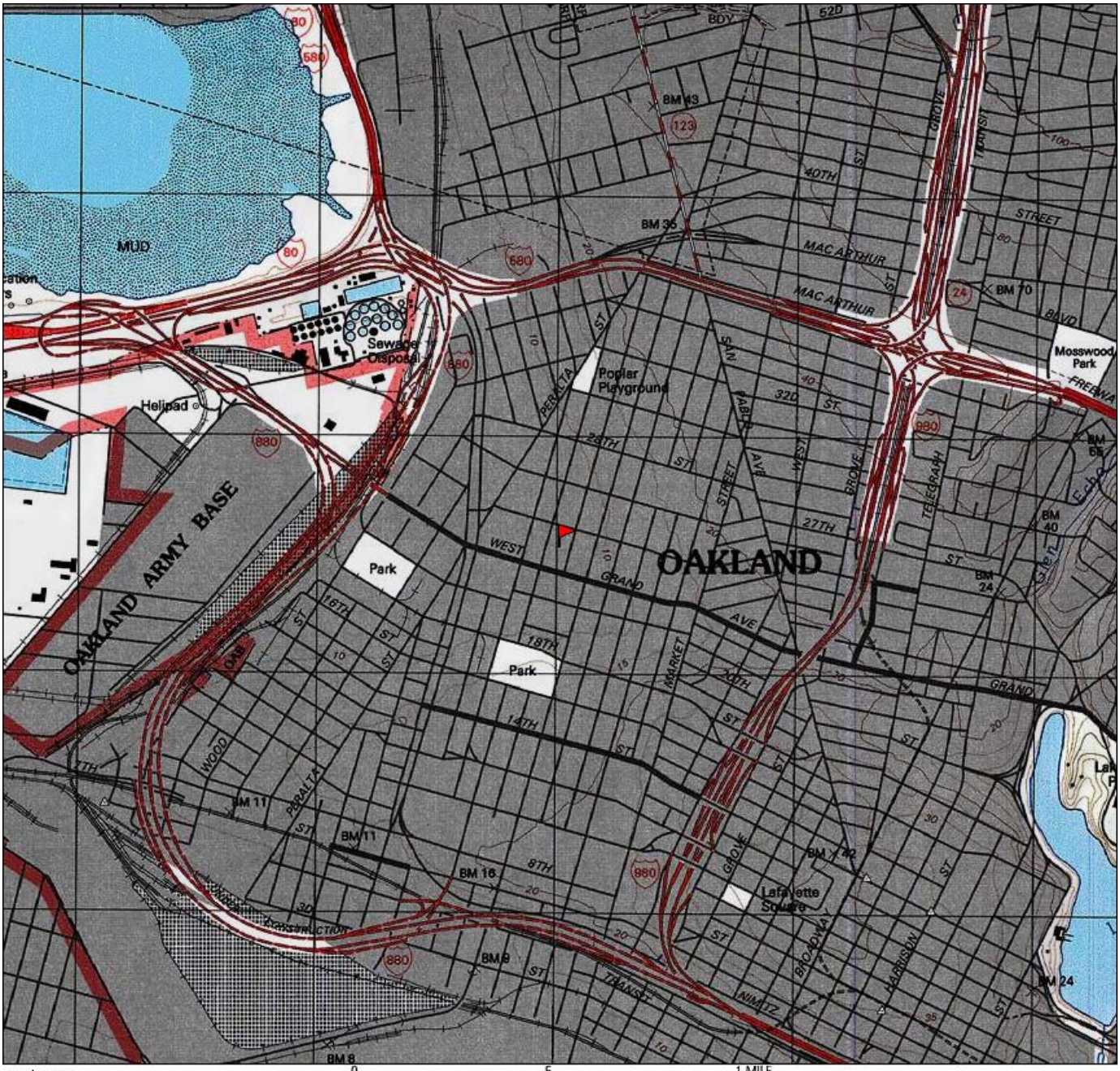
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

GeoTracker (electronic copy)

FIGURES



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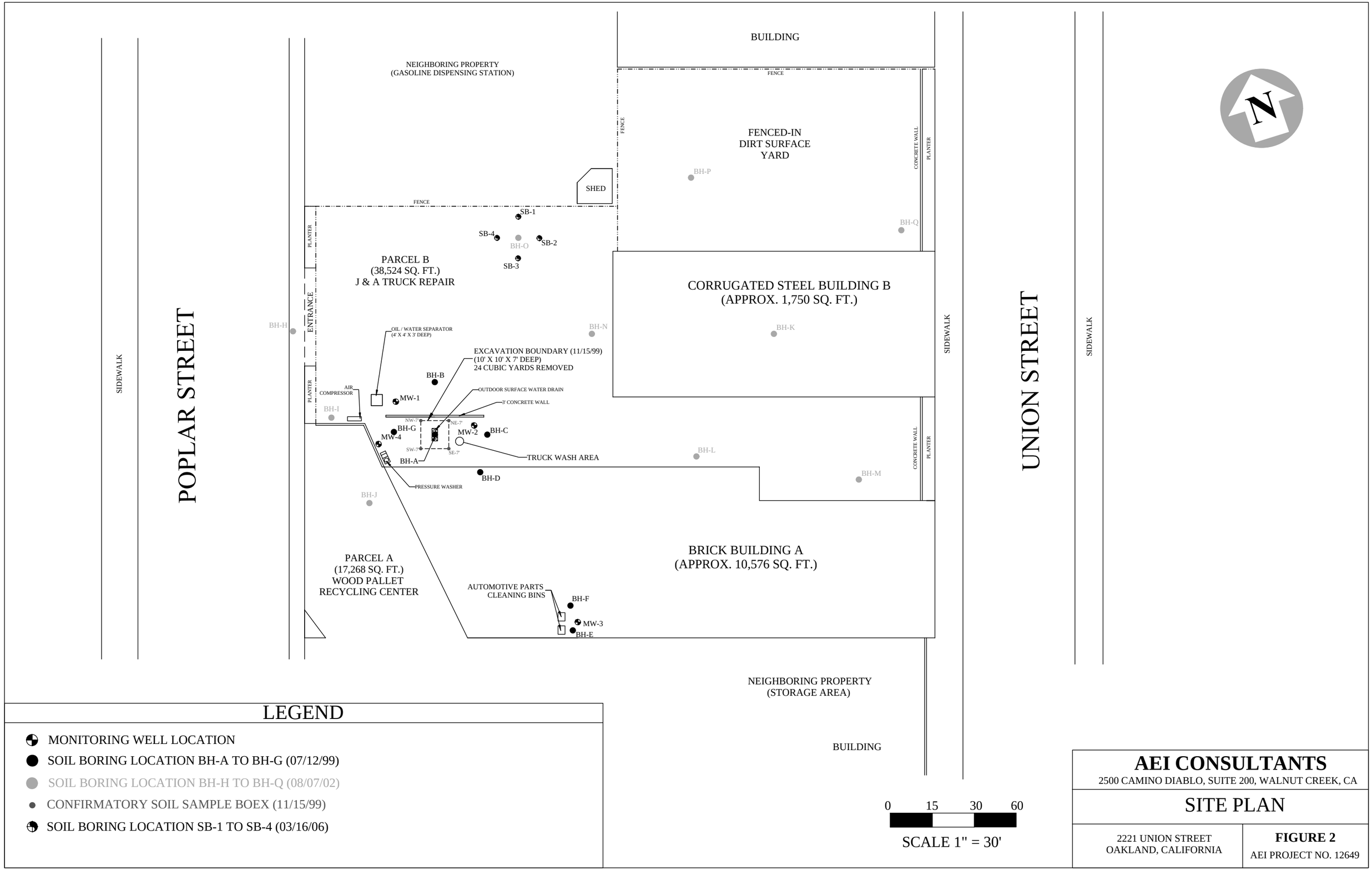
SITE LOCATION MAP

2221 UNION STREET OAKLAND, CALIFORNIA	**FIGURE 1** PROJECT NO. 116355



LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION BH-A TO BH-G (07/12/99)
- SOIL BORING LOCATION BH-H TO BH-Q (08/07/02)
- CONFIRMATORY SOIL SAMPLE BOEX (11/15/99)
- SOIL BORING LOCATION SB-1 TO SB-4 (03/16/06)

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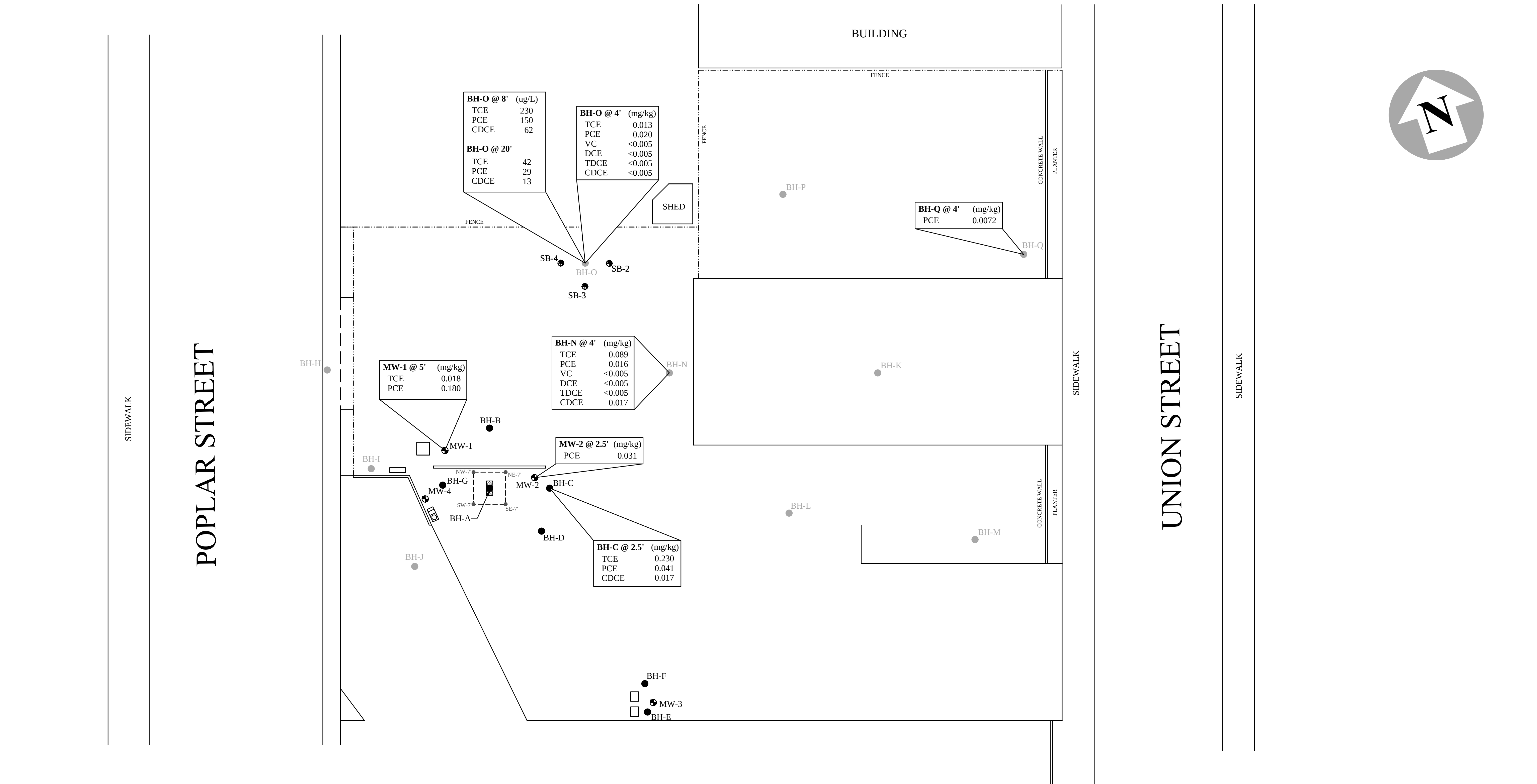
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

SITE PLAN

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 2
AEI PROJECT NO. 12649



LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION BH-A TO BH-G (07/12/99)
- SOIL BORING LOCATION BH-H TO BH-Q (08/07/02)
- CONFIRMATORY SOIL SAMPLE BOEX (11/15/99)
- SOIL BORING LOCATION SB-1 TO SB-4 (03/16/06)

BH-O @ 4'	Concentration (mg/kg, ug/L)
TCE = trichloroethene	0.013
PCE = tetrachloroethene	0.02
VC = vinyl chloride	<0.005
DCE = 1,1-dichloroethene	<0.005
TDCE = trans 1,2-dichloroethene	<0.005
CDCE = cis 1,2-dichloroethene	<0.005

ug/L = micrograms per liter of water (ppb)
mg/kg = milligrams per kilogram of soil (ppm)
Refer to Tables 6 and 7 for details on historical soil and groundwater analyticlas

0 15 30 60

SCALE 1" = 30'

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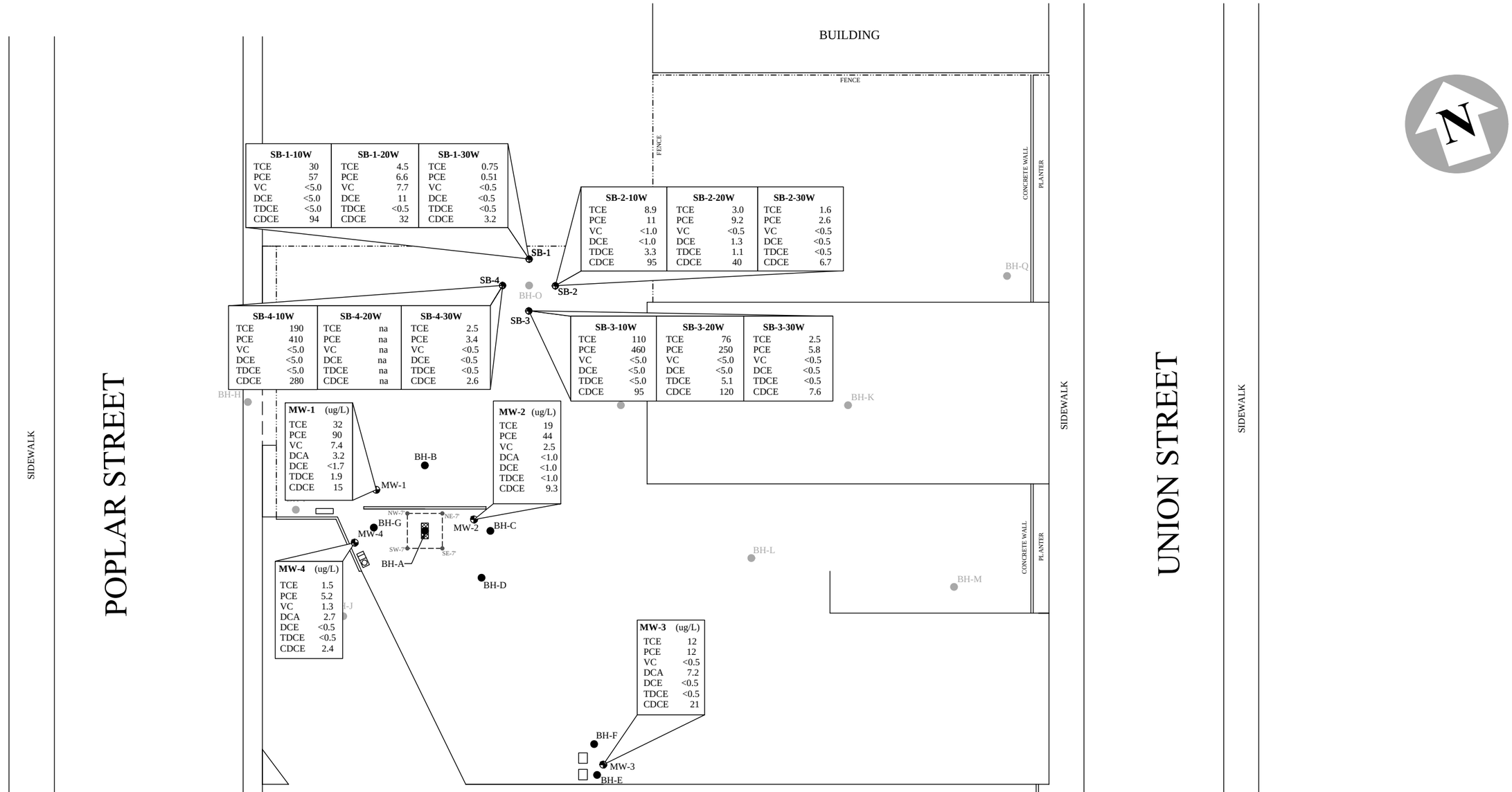
HISTORICAL SOIL BORING ANALYTICALS

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 3
AEI PROJECT NO. 12649



LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION BH-A TO BH-G (07/12/99)
- SOIL BORING LOCATION BH-H TO BH-Q (08/07/02)
- CONFIRMATORY SOIL SAMPLE BOEX (11/15/99)
- SOIL BORING LOCATION SB-1 TO SB-4 (03/16/06)

SB-1-10W	Concentration (ug/L)
TCE = trichloroethene	30
PCE = tetrachloroethene	57
VC = vinyl chloride	<5.0
DCA = 1,1-dichloroethane	<5.0
DCE = 1,1-dichloroethene	<0.5
TDCE = trans 1,2-dichloroethene	<5.0
CDCE = cis 1,2-dichloroethene	94

ug/L = micrograms per liter of water (ppb)
Refer to Appendix A for detailed labortory analytical report, including dilution factors

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2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

SOIL BORING GROUNDWATER DATA

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 4

AEI PROJECT NO. 12649

BUILDING

FENCE

FENCE

CONCRETE WALL

PLANTER

SIDEWALK

POPLAR STREET

UNION STREET

SIDEWALK

SB-1-5'		SB-1-15'	
TCE	0.25	TCE	<0.005
PCE	<0.020	PCE	<0.005
VC	<0.020	VC	<0.005
DCE	<0.020	DCE	<0.005
TDCE	<0.020	TDCE	<0.005
CDCE	0.50	CDCE	<0.005

SB-2-5'		SB-2-10'	
TCE	0.038	TCE	0.25
PCE	<0.010	PCE	0.012
VC	<0.010	VC	<0.010
DCE	<0.010	DCE	<0.010
TDCE	0.016	TDCE	0.025
CDCE	0.30	CDCE	0.40

SB-4-5'		SB-4-10'	
TCE	0.022	TCE	<0.005
PCE	0.14	PCE	<0.005
VC	<0.005	VC	<0.005
DCE	<0.005	DCE	<0.005
TDCE	<0.005	TDCE	0.008
CDCE	0.033	CDCE	0.16

SB-3-5'		SB-3-10'	
TCE	<0.050	TCE	<0.005
PCE	0.64	PCE	<0.005
VC	<0.050	VC	<0.005
DCE	<0.050	DCE	<0.005
TDCE	<0.050	TDCE	<0.005
CDCE	<0.050	CDCE	<0.005

SB-1
SB-2
SB-3
SB-4
BH-A
BH-B
BH-C
BH-D
BH-E
BH-F
BH-G
BH-H
BH-I
BH-J
BH-K
BH-L
BH-M
BH-O
BH-P
BH-Q
MW-1
MW-2
MW-3
MW-4
NW-7'
NE-7'
SW-7'
SE-7'

LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION BH-A TO BH-G (07/12/99)
- SOIL BORING LOCATION BH-H TO BH-Q (08/07/02)
- CONFIRMATORY SOIL SAMPLE BOEX (11/15/99)
- SOIL BORING LOCATION SB-1 TO SB-4 (03/16/06)

SB-1-5' Concentration (mg/kg)

TCE = trichloroethene	0.013
PCE = tetrachloroethene	0.02
VC = vinyl chloride	<0.005
DCE = 1,1-dichloroethene	<0.005
TDCE = trans 1,2-dichloroethene	<0.005
CDCE = cis 1,2-dichloroethene	<0.005

mg/kg = milligrams per kilogram of soil (ppm)
Refer to Appendix A for detailed labortory analytical report, including dilution factors

0 15 30 60

SCALE 1" = 30'

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2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

SOIL BORING SOIL DATA

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 5
AEI PROJECT NO. 12649

POPLAR STREET

SIDEWALK

BUILDING

FENCE

FENCE

CONCRETE WALL

PLANTER

SHED

FENCE

SIDEWALK

UNION STREET

SIDEWALK

MW-1 (ug/L)

TCE	32
PCE	90
VC	7.4
DCA	3.2
DCE	<1.7
TDCE	1.9
CDCE	15

MW-1

MW-2 (ug/L)

TCE	19
PCE	44
VC	2.5
DCA	<1.0
DCE	<1.0
TDCE	<1.0
CDCE	9.3

MW-2

MW-4

MW-4 (ug/L)

TCE	1.5
PCE	5.2
VC	1.3
DCA	2.7
DCE	<0.5
TDCE	<0.5
CDCE	2.4

MW-3 (ug/L)

TCE	12
PCE	12
VC	<0.5
DCA	7.2
DCE	<0.5
TDCE	<0.5
CDCE	21

MW-3

LEGEND

MONITORING WELL LOCATION

MW-1 Concentration (ug/L)

TCE = trichloroethene	32
PCE = tetrachloroethene	90
VC = vinyl chloride	7.4
DCA = 1,1-dichloroethane	3.2
DCE = 1,1-dichloroethene	<1.7
TDCE = trans 1,2-dichloroethene	1.9
CDCE = cis 1,2-dichloroethene	15

ug/L = micrograms per liter of water (ppb)
Refer to Appendix A for detailed laboratory analytical report, including dilution factors

0 15 30 60

SCALE 1" = 30'

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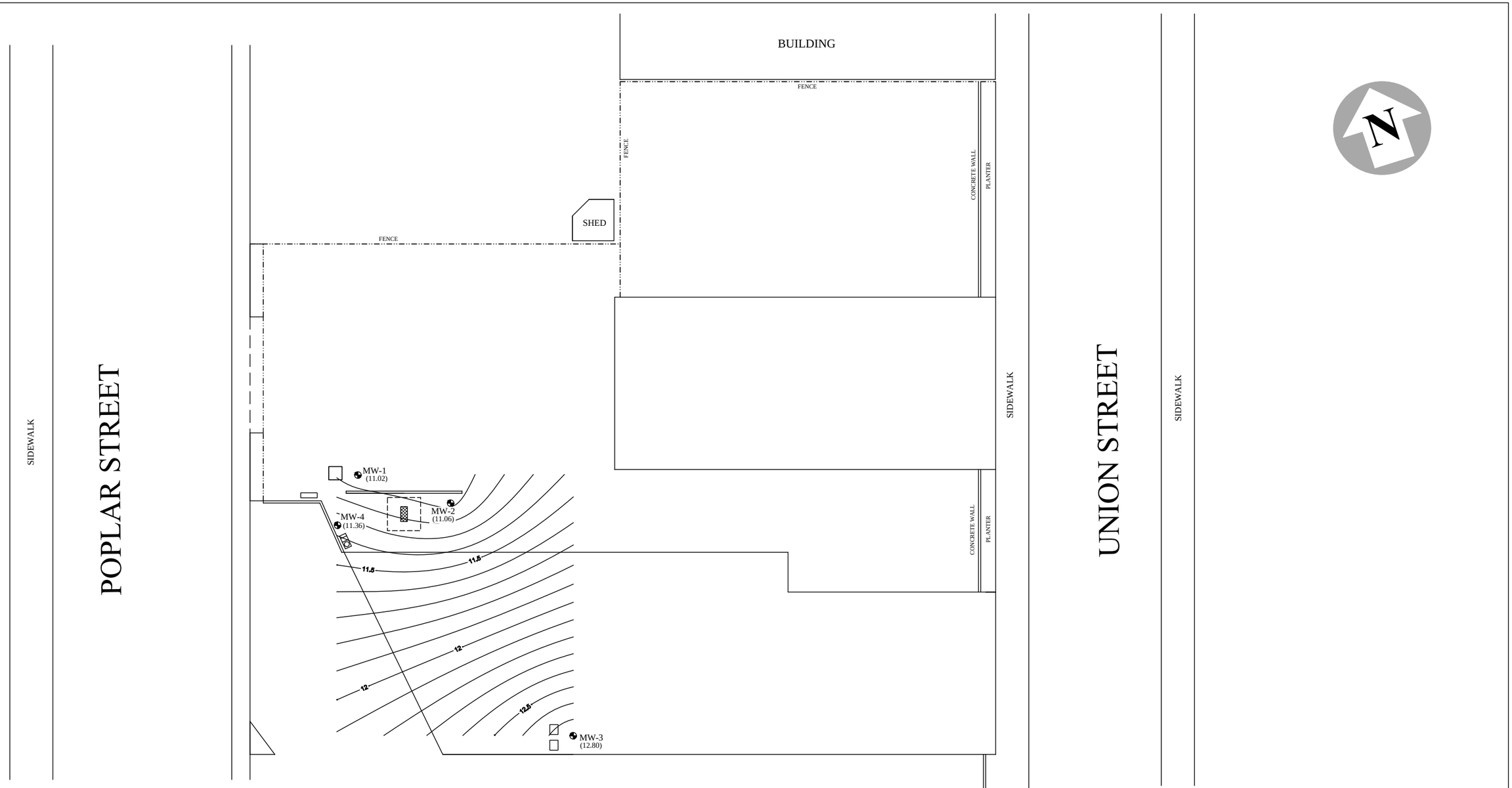
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

GROUNDWATER ANALYTICAL DATA (03/02/06)

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 6
AEI PROJECT NO. 12649



LEGEND

- MONITORING WELL LOCATION
- (19.56) Groundwater Elevation in feet amsl
- 12 Groundwater elevation contours created using Surfer V.7.0

Groundwater Flow Direction
(0.0253 ft/ft)

0 15 30 60

SCALE 1" = 30'

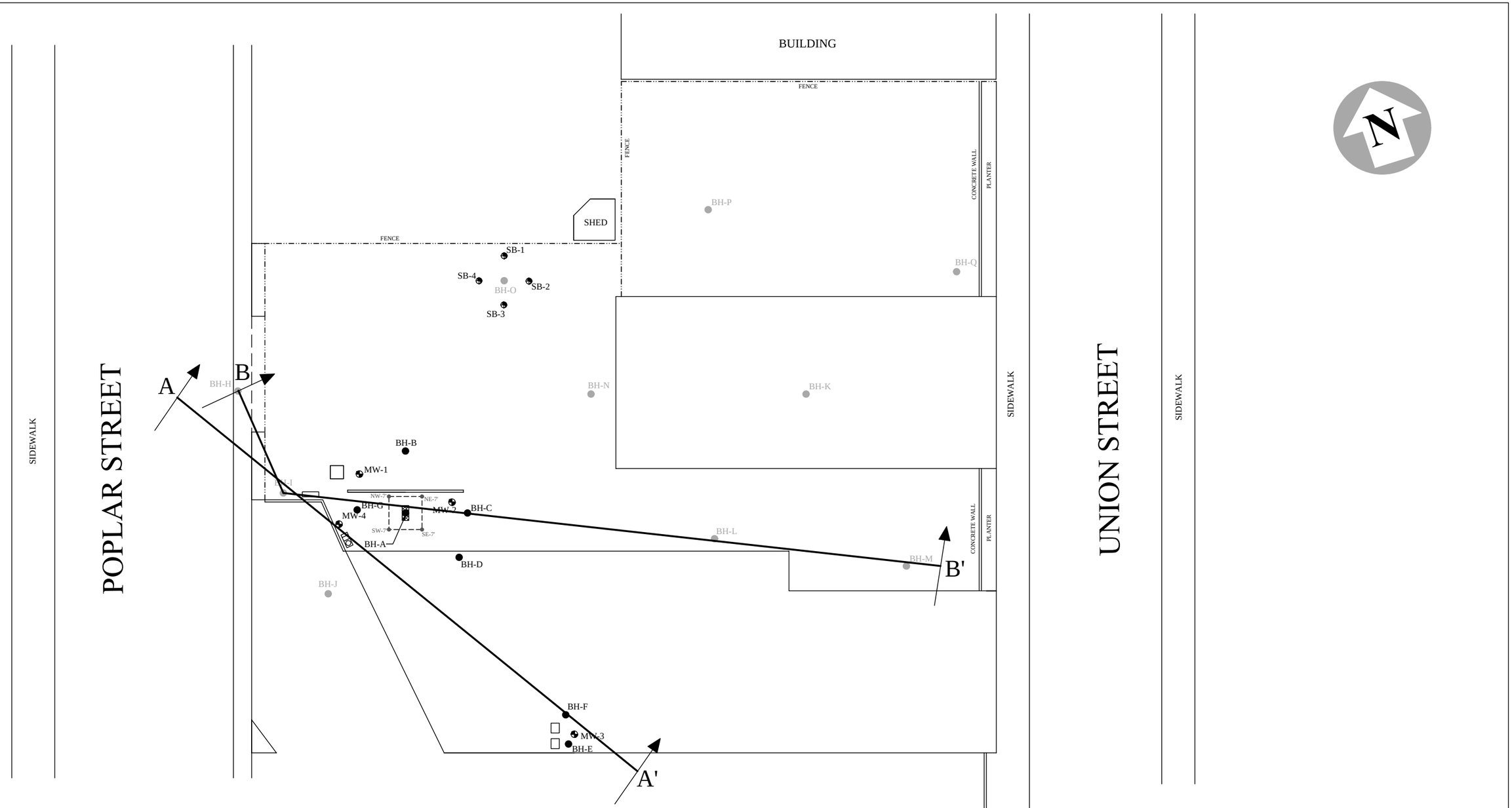
AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

GROUNDWATER ELEVATION CONTOURS (03/02/06)

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 7
AEI PROJECT NO. 12649



LEGEND

- MONITORING WELL LOCATION
- SOIL BORING LOCATION BH-A TO BH-G (07/12/99)
- SOIL BORING LOCATION BH-H TO BH-Q (08/07/02)
- CONFIRMATORY SOIL SAMPLE BOEX (11/15/99)
- SOIL BORING LOCATION SB-1 TO SB-4 (03/16/06)

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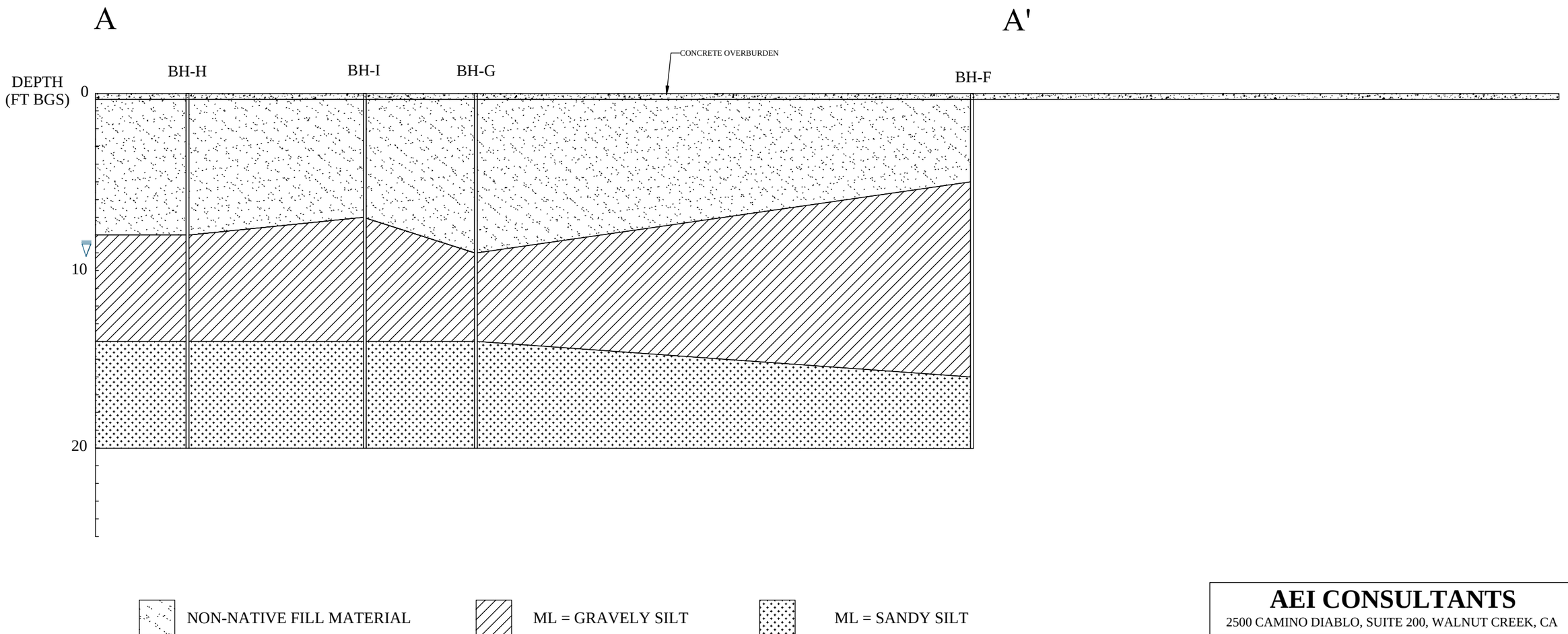
CROSS SECTION DIRECTION

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 8
AEI PROJECT NO. 12649

LITHOLOGIC CROSS SECTION (A - A')



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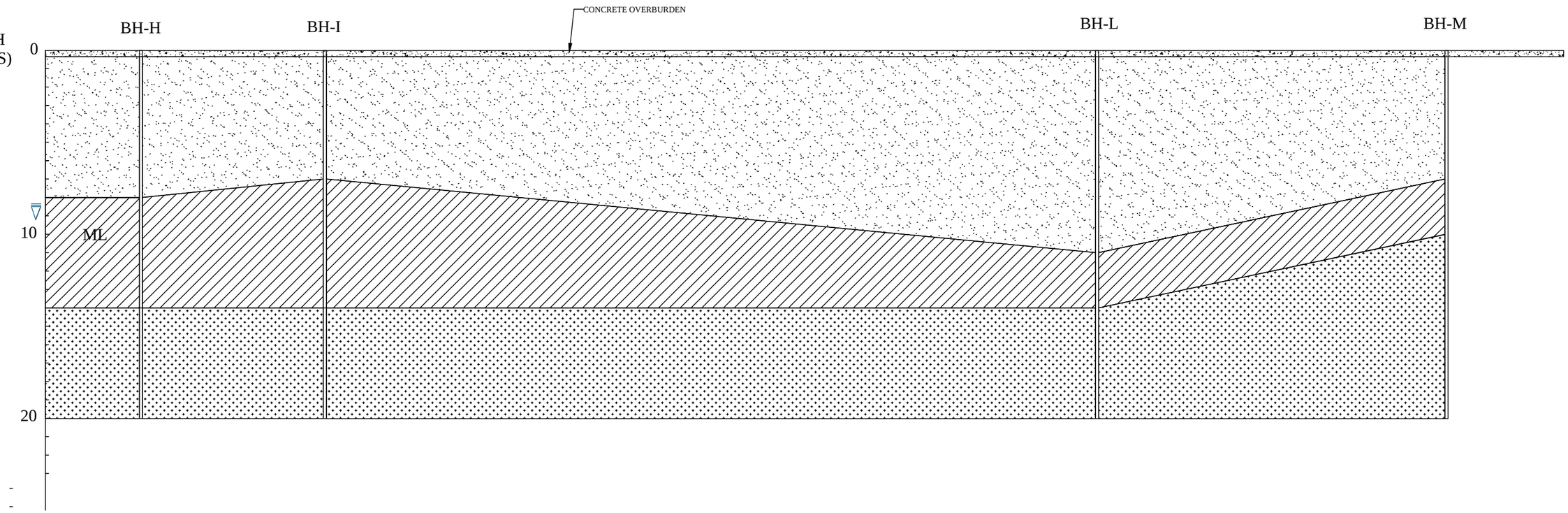
LITHOLOGIC CROSS SECTION A - A'

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 9
AEI PROJECT NO. 12649

LITHOLOGIC CROSS SECTION (B - B')



NON-NATIVE FILL MATERIAL

ML = GRAVELY SILT

ML = SANDY SILT

AEI CONSULTANTS
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

LITHOLOGIC CROSS SECTION B - B'

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 10
AEI PROJECT NO. 12649

TABLES

TABLE 1: Monitoring Well Construction Details

J & A Truck Repair
2221 Union Street, Oakland, CA

Installation Date	Driller / Installer	Drilling Method	Well ID	*Screen Interval (ft bgs)	Screen Slot Size (inches)	Well Depth (ft bgs)	Well Diamter (inches)	DWFE (ft bgs)	Static DTW (ft bgs)	TOC Well Elevation (ft amsl)	Groundwater Elevation (ft amsl)
08/27/99	Gregg Drilling	HSA	MW-1	10 to 20	0.02	20	2	4	9.42	15.00	5.58
08/27/99	Gregg Drilling	HSA	MW-2	10 to 20	0.02	20	2	4	6.08	15.24	9.16
08/27/99	Gregg Drilling	HSA	MW-3	10 to 20	0.02	20	2	3	6.08	15.10	9.02
10/27/99	HEW Drilling	HSA	MW-4	9.5 to 19.5	0.02	19.5	2	3	5.86	15.21	9.35

Notes

ft amsl = feet above mean sea level
ft bgs = feet below ground surface
na = data not available
HSA = hollow-stem auger
DWFE = depth water first encountered
DTW = depth to water
TOC = top of casing

All monitoring wells constructed with schedule 40 PVC well casing and slotted well screen

*Approximate screen interval according to Aqua Science Engineers, Inc.

TABLE 2: Groundwater Elevation Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Well ID	Screen Interval (ft bgs)	Date	TOC Elevation (ft amsl)	Depth to Water (ft bgs)	Groundwater Elevation (ft amsl)
MW-1	10 to 20	09/02/99	15.00	8.81	6.19
		11/02/99	15.00	5.94	9.06
		11/04/99	15.00	7.15	7.85
		11/09/99	15.00	4.72	10.28
		02/07/00	15.00	3.55	11.45
		05/16/00	15.00	3.88	11.12
		08/08/00	15.00	5.79	9.21
		11/30/00	15.00	4.14	10.86
		08/08/02	15.00	5.94	9.06
		08/11/05	15.00	5.59	9.41
		03/02/06	**15.00**	**3.98**	**11.02**
MW-2	10 to 20	09/02/99	15.29	6.29	9.00
		11/02/99	15.24	6.01	9.23
		11/04/99	15.24	5.94	9.30
		11/09/99	15.24	5.28	9.96
		02/07/00	15.24	4.12	11.12
		05/16/00	15.24	4.24	11.00
		08/08/00	15.24	5.68	9.56
		11/30/00	15.24	4.78	10.46
		08/08/02	15.24	5.9	9.34
		08/11/05	15.24	5.51	9.73
		03/02/06	**15.24**	**4.18**	**11.06**
MW-3	10 to 20	09/02/99	15.15	6.26	8.89
		11/02/99	15.17	5.74	9.43
		11/04/99	15.17	6.09	9.08
		11/09/99	15.17	5.64	9.53
		02/07/00	15.17	3.06	12.11
		05/16/00	15.17	3.80	11.37
		08/08/00	15.17	3.54	11.63
		11/30/00	15.17	3.56	11.61
		08/08/02	15.17	3.53	11.64
		08/11/05	15.17	3.38	11.79
		03/02/06	**15.17**	**2.37**	**12.80**
MW-4	9.5 to 19.5	11/02/99	15.21	5.86	9.35
		11/04/99	15.21	5.85	9.36
		11/09/99	15.21	4.56	10.65
		02/07/00	15.21	3.66	11.55
		05/16/00	15.21	3.89	11.32
		08/08/00	15.21	5.77	9.44
		11/30/00	15.21	4.15	11.06
		08/08/02	15.21	6.33	8.88
		08/11/05	15.21	5.79	9.42
		03/02/06	**15.21**	**3.85**	**11.36**

TABLE 2a: Groundwater Flow Summary

J & A Truck Repair
2221 Union Street, Oakland, CA

Episode #	Date	Average Water Table Elevation (ft amsl)	Change from Previous Episode (ft)	Flow Direction	Hydraulic Gradient (ft/ft)
1	09/02/99	6.02	0.00	west	0.1184
2	11/02/99	9.27	3.25	northeast	0.0047
3	11/04/99	8.90	-0.37	north - northwest	0.0070
4	11/09/99	7.44	-1.46	east	0.0207
5*	02/07/00	11.56	4.12	northeast	0.0166
6*	05/16/00	11.20	-0.36	northeast	0.0100
7*	08/08/00	9.96	-1.24	northeast	0.0100
8*	11/30/00	11.00	1.04	northeast	0.0070
9	08/08/02	9.73	-1.27	north	0.0305
10	08/11/05	10.09	0.36	north	0.0271
11	**3/2/2006**	**11.56**	**1.47**	**north**	**0.025**

Notes

ft amsl = feet above mean sea level
ft bgs = feet below ground surface
na = data not available
TOC = top of casing

*data obtained directly from groundwater monitoring reports prepared by Aqua Science Engineers, Inc., all other hydraulic gradient calculations were performed by AEI Consultants

TABLE 3: Groundwater Sample Analytical Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Sample ID	Sample Collection Date	DTW (ft bgs)	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	cis 1,2-DCE (µg/L)	trans 1, 2-DCE (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	VC (µg/L)	Chloro ethane (µg/L)	Other HVOCs (µg/L)
MW-1	9/2/1999	8.81	9.8	3.2	<1	3.9	<1	58	<1	<1	<1	<1 - <10
	11/2/1999	5.94	100	15	<1	17	3.4	1.7	<1	<1	<1	<1 - <10
	2/7/2000	3.55	510	160	<5.0	8	<5.0	<5.0	<5.0	<5.0	<5.0	<5 - <20
	5/16/2000	3.88	260	73	<5.0	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5 - <20
	8/8/2000	5.79	38	19	<0.5	21	8.7	1.2	<0.5	17	<0.5	<0.5 - <5
	11/30/2000	4.14	110	45	<2.5	9	<2.5	<2.5	<2.5	4.2	<2.5	<2.5 - <25
	8/8/2002	5.94	78	49	<5.0	18	6.3	<5.0	<5.0	130	<5.0	<5 - <50
	8/11/2005	5.59	<5.0	6.5	<5.0	52	5.9	<5.0	<5.0	170	<5.0	<5 - <10
	3/2/2006	**3.98**	**90**	**32**	**<1.7**	**15**	**1.9**	**3.2**	**<1.7**	**7.4**	**<1.7**	**<1.7**
MW-2	9/2/1999	6.29	48	4.5	<1	1.7	<1	<1	<1	<1	<1	<1 - <10
	11/2/1999	6.01	110	9.5	<1	1.4	<1	<1	<1	<1	<1	<1 - <10
	2/7/2000	4.12	200	21	<2.5	6.6	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5 - <10
	5/16/2000	4.24	820	220	<10	74	<10	<10	<10	<10	<10	<10 - <40
	8/8/2000	5.68	280	82	<5	33	<5	<5	<5	<5.0	<5	<5 - <20
	11/30/2000	4.78	660	360	<10	130	<10	<10	<10	<10	<10	<10 - <10
	8/8/2002	5.90	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	2.5	<0.5	<0.5 - <5
	8/11/2005	5.51	8.6	14	<0.5	15	0.67	<0.5	<0.5	3.1	<0.5	0.53*
	3/2/2006	**4.18**	**44**	**19**	**<1**	**9.3**	**<1**	**<1**	**<1**	**2.5**	**<1**	**<1**

TABLE 3: Groundwater Sample Analytical Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Sample ID	Sample Collection Date	DTW (ft bgs)	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	cis 1,2-DCE (µg/L)	trans 1, 2-DCE (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	VC (µg/L)	Chloro ethane (µg/L)	Other HVOCs (µg/L)
MW-3	9/2/1999	6.26	38	21	<0.5	34	<0.5	22	<0.5	<0.5	<0.5	<0.5 - <5
	11/2/1999	5.74	59	21	<0.5	35	<0.5	22	<0.5	<0.5	<0.5	<0.5 - <5
	2/7/2000	3.06	56	13	<0.5	22	<0.5	8.5	<0.5	<0.5	<0.5	<0.5 - <5
	5/16/2000	3.80	54	8.7	<1	<1	<1	5.3	<1	<1	<1	<1 - <10
	8/8/2000	3.54	74	11	<1	17	<1	12	<1	<1	<1	<1 - <4
	11/30/2000	3.55	63	14	<1	25	<1	14	<1	<1	<1	<1 - <10
	8/8/2002	3.53	58	19	<2.5	25	<2.5	17	<2.5	<2.5	<2.5	<2.5 - <25
	8/11/2005	3.38	22	23	0.58	32	1	11	<0.5	<0.5	<0.5	<0.5 - <1
	3/2/2006	**2.37**	**12**	**12**	**<0.5**	**21**	**<0.5**	**7.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-4	11/2/1999	5.86	0.68	0.74	2.7	21	<0.5	14	2.1	6.3	12	<0.5 - <5
	2/7/2000	3.66	14	4.1	0.64	18	<0.5	8.1	<0.5	6	0.71	<0.5 - <5
	5/16/2000	3.89	24	13	<0.5	12	<0.5	19	<0.5	0.75	<0.5	<0.5 - <5
	8/8/2000	5.77	2.1	7.4	1.8	17	<0.5	8.3	1.9	9.6	3.1	<0.5 - <5
	11/30/2000	4.15	30	6.9	<0.5	2.8	<0.5	8.3	<0.5	<0.5	<0.5	4.6**
	8/8/2002	6.33	19	12	<0.5	13	<0.5	28	<0.5	0.89	<0.5	<0.5 - <5
	8/11/2005	5.79	2.6	3.9	2	6.1	<0.5	11	<0.5	<0.5	<0.5	<0.5 - <1
	3/2/2006	**3.85**	**5.2**	**1.5**	**<0.5**	**2.4**	**<0.5**	**2.7**	**<0.5**	**1.3**	**<0.5**	**<0.5**

Notes

All groundwater sample analytical data prior to the March 2, 2006 sampling event was obtained from soil and groundwater investigation reports prepared by Aqua Science Engineers, Inc.

Non-detectable concentrations are noted by a less than sign (<) follwed by the laboratory method detection or reporting limit

ft bgs = feet below ground surface
na = data not available

µg/L = microgram per liter

HVOCs = halogenated volatile organic compounds

DWT = depth to water

PCE = tetrachloroethene
TCE = trichloroethene

DCE = Dichloroethene
TCA = trichloroethane

DCA = Dichloroethane
VC = Vinyl Chloride

* = 1, 2 Dichloropropane
** = 1, 1, 1-Trichloroethane

TABLE 4: Soil Sample Analytical Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	PCE (mg/kg)	TCE (mg/kg)	1, 1-DCE (mg/kg)	cis 1,2-DCE (mg/kg)	trans 1,2-DCE (mg/kg)	1,1-DCA (mg/kg)	1,2-DCA (mg/kg)	1,1,1-TCA (mg/kg)	VC (mg/kg)	Chloro form (mg/kg)	Other HVOCs (mg/kg)
SB-1-5'	03/16/06	5	<0.020	0.25	<0.020	0.50	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
SB-1-15'	03/16/06	15	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-2-5'	03/16/06	5	<0.010	0.038	<0.010	0.30	0.016	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
SB-2-10'	03/16/06	10	0.012	0.25	<0.010	0.40	0.025	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
SB-3-5'	03/16/06	5	0.64	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
SB-3-10'	03/16/06	10	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-4-5'	03/16/06	5	0.14	0.022	<0.005	0.033	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SB-4-10'	03/16/06	10	<0.005	<0.005	<0.005	0.16	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Notes

Non-detectable concentrations are noted by a less than sign (<) follwed by the laboratory method detection or reporting limit

mg/kg = miligrams per kilogram of soil

HVOCs = halogenated volatile organic compounds

ft bgs = feet below ground surface

na = not analyzed or data not available

ns = not sampled

PCE = tetrachloroethene

TCE = trichloroethene

DCE = Dichloroethene

TCA = trichloroethane

DCA = Dichloroethane

VC = Vinyl Chloride

TABLE 5: Groundwater Sample Analytical Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Sample ID	Sample Collection Date	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	cis 1,2-DCE (µg/L)	trans 1,2-DCE (µg/L)	1,1-DCA (µg/L)	1, 2-DCA (µg/L)	VC (µg/L)	Chloro ethane (µg/L)	Other HVOCs (µg/L)
SB-1-10W	3/16/2006	57	30	<5	94	<5	<5	<5	<5	<5	<5.0
SB-1-20W	3/16/2006	6.6	4.5	11	32	<0.5	6.2	<0.5	7.7	<0.5	<0.5
SB-1-30W	3/16/2006	0.51	0.75	<0.5	3.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-2-10W	3/16/2006	11	8.9	<1	95	3.3	<1	<1	<1	<1	<1
SB-2-20W	3/16/2006	9.2	3	1.3	40	1.1	8	<0.5	<0.5	<0.5	<0.5
SB-2-30W	3/16/2006	2.6	1.6	<0.5	6.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-3-10W	3/16/2006	460	110	<5	95	<5	<5	<5	<5	<5	<5
SB-3-20W	3/16/2006	250	76	<5	120	5.1	<5	<5	<5	<5	<5
SB-3-30W	3/16/2006	5.8	2.5	<0.5	7.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SB-4-10W	3/16/2006	410	190	<5	280	<5	<5	<5	<5	<5	<5
SB-4-20W	3/16/2006	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
SB-4-30W	3/16/2006	3.4	2.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes

Non-detectable concentrations are noted by a less than sign (<) follwed by the laboratory method detection or reporting limit

µg/L = microgram per liter

HVOCs = halogenated volatile organic compounds

ft bgs = feet below ground surface

na = data not available

ns = not sampled

PCE = tetrachloroethene

TCE = trichloroethene

DCE = Dichloroethene

TCA = trichloroethane

DCA = Dichloroethane

VC = Vinyl Chloride

TABLE 6: Historical Soil Sample Analytical Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	PCE (mg/kg)	TCE (mg/kg)	1,1-DCE (mg/kg)	cis 1,2-DCE (mg/kg)	trans 1,2-DCE (mg/kg)	1, 1-DCA (mg/kg)	1, 2-DCA (mg/kg)	1,1,1-TCA (mg/kg)	VC (mg/kg)	Chloro form (mg/kg)	Other HVOCs (mg/kg)
BH-A @ 1'	06/22/99	1	390	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11 - <22
BH-A @ 3'	06/22/99	3	na	na	na	na	na	na	na	na	na	na	na
BH-B	07/12/99	2.5	0.053	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-C	07/12/99	2.5	0.041	0.23	<0.005	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.025
BH-D	07/12/99	2.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-E	07/12/99	2.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-F	07/12/99	2.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-G	07/12/99	2.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-H	08/07/02	4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
		12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-I	08/07/02	8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
		12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-J	08/07/02	4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
		12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-K	08/07/02	4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
		12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-L	08/07/02	3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-M	08/07/02	4	<0.005	<0.005	<0.005	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
		12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010

TABLE 6: Historical Soil Sample Analytical Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	PCE (mg/kg)	TCE (mg/kg)	1,1-DCE (mg/kg)	cis 1,2-DCE (mg/kg)	trans 1,2-DCE (mg/kg)	1, 1-DCA (mg/kg)	1, 2-DCA (mg/kg)	1,1,1-TCA (mg/kg)	VC (mg/kg)	Chloro form (mg/kg)	Other HVOCs (mg/kg)
BH-N	08/07/02	4	0.016	0.089	<0.005	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
		12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-O	08/07/02	4	0.02	0.013	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-P	08/07/02	4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
		12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
BH-Q	08/07/02	4	0.0072	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
		12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
MW-1	08/27/99	5	0.18	0.018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
MW-2	08/27/99	2.5	0.031	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
MW-3	08/27/99	2.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010
MW-4	10/27/99	4.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 - <0.010

Notes

All soil sample analytical data was obtained from soil and groundwater investigation reports prepared by Aqua Science Engineers, Inc.

Non-detectable concentrations are noted by a less than sign (<) follwed by the laboratory method detection or reporting limit

ft bgs = feet below ground surface

na = not analyzed or data not available

mg/kg = miligrams per kilogram of soil

HVOCs = halogenated volatile organic compounds

DWFE = depth water first encountered

PCE = tetrachloroethene

DCE = Dichloroethene

DCA = Dichloroethane

TCE = trichloroethene

TCA = trichloroethane

VC = Vinyl Chloride

TABLE 7: Historical Groundwater Grab Sample Analytical Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	cis 1,2-DCE (µg/L)	trans 1,2-DCE (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1,1-TCA (µg/L)	VC (µg/L)	Chloroform (µg/L)	Other HVOCs (µg/L)
BH-A	07/12/99	3	1300	1500	<25	190	<25	<25	<25	<25	<25	<150	<25 - <250
BH-B	07/12/99	na	33	170	<25	130	21	<5	<25	<25	<5	<30	<5 - <30
BH-C*	07/12/99	na	35	21	<12	<12	<12	<12	<12	<12	<12	<12	<12 - <25
BH-D	07/12/99	na	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	<0.5	<0.5	<3	<0.5 - <5
BH-E	07/12/99	na	42	33	<25	46	<25	<25	<25	<25	<25	<150	<25 - <250
BH-F	07/12/99	na	9.2	6.4	<0.5	8.8	<0.5	11	<0.5	<0.5	<0.5	<3	<0.5 - <5
BH-G*	07/12/99	na	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5 - <10
BH-H	08/07/02	20	<0.5	<0.5	0.77	1.2	<0.5	30	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
BH-I	08/07/02	20	<0.5	<0.5	3	3.2	<0.5	55	0.92	<0.5	<0.5	1.7	<0.5 - <5
BH-J	08/07/02	20	<0.5	<0.5	<0.5	<0.5	<0.5	0.79	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
BH-K	08/07/02	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.54	<0.5 - <5
BH-L	08/07/02	4	26	3.9	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
		20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
BH-M	08/07/02	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
BH-N	08/07/02	15	42	32	<0.5	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
BH-O	08/07/02	8	150	230	<2.5	62	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5 - <25
		20	29	42	<0.5	13	<0.5	0.52	<0.5	<0.5	<0.5	<0.5	<0.5 - <5

TABLE 7: Historical Groundwater Grab Sample Analytical Data

J & A Truck Repair
2221 Union Street, Oakland, CA

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	PCE (µg/L)	TCE (µg/L)	1,1-DCE (µg/L)	cis 1,2-DCE (µg/L)	trans 1,2-DCE (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1,1-TCA (µg/L)	VC (µg/L)	Chloro form (µg/L)	Other HVOCs (µg/L)
BH-P	08/07/02	15	<0.5	0.59	<0.5	<0.5	<0.5	0.76	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
BH-Q	08/07/02	20	2.5	0.98	<0.5	<0.5	<0.5	0.99	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
MW-1	08/27/99	na	78	49	<5	18	6.3	<5	<5	<5	130	<5	<5 - <50
MW-2	08/27/99	na	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	<0.5	2.5	<0.5	<0.5 - <5
MW-3	08/27/99	na	58	19	<2.5	25	<2.5	17	<2.5	<2.5	<2.5	<2.5	<2.5 - <25
MW-4	10/27/99	na	19	12	<0.5	13	<0.5	28	<0.5	0.54	0.89	<0.5	<0.5 - <5

Notes

All groundwater sample analytical data was obtained from soil and groundwater investigation reports prepared by Aqua Science Engineers, Inc.

* Samples had an extremely high silt content and were analyzed using a method similar to a soil sample

Non-detectable concentrations are noted by a less than sign (<) follwed by the laboratory method detection or reporting limit

ft bgs = feet below ground surface

na = data not available

µg/L = microgram per liter

HVOCs = halogenated volatile organic compounds

DWFE = depth water first encountered

PCE = tetrachloroethene

TCE = trichloroethene

DCE = Dichloroethene

TCA = trichloroethane

DCA = Dichloroethane

VC = Vinyl Chloride

APPENDIX A

SOIL BORING LOGS

Project: J&A Truck Repair
Project Location: 2221 Union Street, Oakand
Project Number: 116355

Log of Boring SB-1

Sheet 1 of 2

Date(s) Drilled **March 16, 2006**	Logged By **Ricky Bradford**	Checked By **Peter McIntyre**
Drilling Method **Direct Push Technology**	Drill Bit Size/Type	Total Depth of Borehole **30 feet bgs**
Drill Rig Type **Geoprobe 6600**	Drilling Contractor **Vironex**	Approximate Surface Elevation **15 feet**
Groundwater Level and Date Measured **6 feet ATD**	Sampling Method(s) **Tube, Other**	Well Permit. **W2006-0154**
Borehole Backfill **Cement Slurry**	Location **Northern portion of propety**	

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
15	0			Asphalt		Asphalt concrete overburden		
				SW-SM		WELL GRADED SAND W/ SILT, very loose, brown, fine grained, moist, non-plastic, non-cohesive, well-graded, ~10% fines		top 0 - 5 feet appears to be fill material < 10% recovery
10	5		SB-1-5'	OL-OH ML		ORGANIC SOIL W/ SAND, very soft, dark gray to black, moist, high plasticity, cohesive SILT W/ SAND & GRAVEL, soft, dark gray, wet, medium plasticity, cohesive, ~10% fine sand, ~10% subrounded gravel (ATD) ▽	0	no odor DTW ~ 6 ft 10% recovery
5	10		SB-1-10W	CL		LEAN CLAY, soft to medium stiff, greenish gray, wet, medium plasticity, cohesive	-	Groundwater sample collected using temporary casing 50% recovery
0	15		SB-1-15'				0	no odor 60% recovery
-5	20		SB-1-20W	SP-SM		POORLY GRADED SAND W/ SILT, medium dense, yellowish-brown, moist, non-plastic, non-cohesive, <5% subangular gravel	0	no odor Groundwater sample collected using SP16 sampler
-10	25							

Figure

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\CHARACTERIZATION\116355 SGWI-SAGWM (J&A Truck) Oakland - RB\SB-1.bgs [AEI geoprobe 30.tpl]

Project: J&A Truck Repair
Project Location: 2221 Union Street, Oakand
Project Number: 116355

Log of Boring SB-1

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
	25			SP-SM		POORLY GRADED SAND W/ SILT, medium dense, yellowish-brown, moist, non-plastic, non-cohesive, <5% subangular gravel (cont.)	-	
-13								
	30		SB-1-30W			Bottom of Boring at 30 feet bgs	-	Groundwater sample collected using SP16 sampler
-18								
	35							
-23								
	40							
-28								
	45							
-33								
	50							
-38								
	55							
-43								

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\CHARACTERIZATION\116355 SGWI-SAGWM (J&A Truck) Oakland - RB\SB-1.bgs [AEI geoprobe 30.tpl]

Figure

Project: J&A Truck Repair
Project Location: 2221 Union Street, Oakand
Project Number: 116355

Log of Boring SB-2

Sheet 1 of 2

Date(s) Drilled **March 16, 2006**	Logged By **Ricky Bradford**	Checked By **Peter McIntyre**
Drilling Method **Direct Push Technology**	Drill Bit Size/Type **2 inch**	Total Depth of Borehole **30 feet bgs**
Drill Rig Type **Geoprobe 6600**	Drilling Contractor **Vironex**	Approximate Surface Elevation **15 feet**
Groundwater Level and Date Measured **6 feet ATD**	Sampling Method(s) **Tube, Other**	Well Permit. **W2006-0154**
Borehole Backfill **Cement Slurry**	Location **Northern portion of propety**	

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
15	0			Asphalt		Asphalt concrete overburden		
				SW-SM		WELL GRADED SAND W/ SILT, very loose, brown, fine grained, moist, non-plastic, non-cohesive, well-graded, ~10% fines		top 0 - 5 feet appears to be fill material 20% recovery
10	5		SB-2-5'	OL-OH		ORGANIC SOIL W/ SAND, very soft, dark gray to black, moist, high plasticity, cohesive (ATD)	0	no odor DTW ~ 6 ft
				ML		SILT W/ SAND & GRAVEL, soft, dark gray, wet, medium plasticity, cohesive, ~10% fine sand, ~10% subrounded gravel		60% recovery
5	10		SB-2-10'				0	
			SB-2-10W	CL		LEAN CLAY, soft to medium stiff, greenish gray, wet, medium plasticity, cohesive	-	Groundwater sample collected using temporary casing
0	15							
-5	20		SB-2-20W	SP-SM		POORLY GRADED SAND W/ SILT, medium dense, yellowish-brown, moist, non-plastic, non-cohesive, <5% subangular gravel		Groundwater sample collected using SP16 sampler
-10	25							

Figure

X:\PROJECTS\CHARACTERIZATION & REMEDIATION\CHARACTERIZATION\116355 SGWI-SAGWM (J&A Truck) Oakland - RB\SB-1.bgs [AEI geoprobe 30.tpl]

Project: J&A Truck Repair
Project Location: 2221 Union Street, Oakand
Project Number: 116355

Log of Boring SB-2

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
	25			SP-SM		POORLY GRADED SAND W/ SILT, medium dense, yellowish-brown, moist, non-plastic, non-cohesive, <5% subangular gravel (cont.)	-	
-13								
	30		SB-2-30W			Bottom of Boring at 30 feet bgs	-	Groundwater sample collected using SP16 sampler
-18								
	35							
-23								
	40							
-28								
	45							
-33								
	50							
-38								
	55							
-43								

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Figure

Project: J&A Truck Repair
Project Location: 2221 Union Street, Oakand
Project Number: 116355

Log of Boring SB-3

Sheet 1 of 2

Date(s) Drilled **March 16, 2006**	Logged By **Ricky Bradford**	Checked By **Peter McIntyre**
Drilling Method **Direct Push Technology**	Drill Bit Size/Type **2 inch**	Total Depth of Borehole **30 feet bgs**
Drill Rig Type **Geoprobe 6600**	Drilling Contractor **Vironex**	Approximate Surface Elevation **15 feet**
Groundwater Level and Date Measured **6 feet ATD**	Sampling Method(s) **Tube, Other**	Well Permit. **W2006-0154**
Borehole Backfill **Cement Slurry**	Location **Northern portion of propety**	

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
15	0			Asphalt		Asphalt concrete overburden		
				SW-SM		WELL GRADED SAND W/ SILT, very loose, brown, fine grained, moist, non-plastic, non-cohesive, well-graded, ~10% fines		top 0 - 5 feet appears to be fill material 40% recovery
10	5		SB-3-5'	OL-OH		ORGANIC SOIL W/ SAND, very soft, dark gray to black, moist, high plasticity, cohesive	0	no odor
						(ATD) ▽		DTW ~ 6 ft
				ML		SILT W/ SAND & GRAVEL, soft, dark gray, wet, medium plasticity, cohesive, ~10% fine sand, ~10% subrounded gravel		80% recovery
5	10		SB-3-10'				0	
			SB-3-10W	CL		LEAN CLAY, soft to medium stiff, greenish gray, wet, medium plasticity, cohesive	-	Groundwater sample collected using temporary casing
0	15							
-5	20		SB-3-20W	SP-SM		POORLY GRADED SAND W/ SILT, medium dense, yellowish-brown, moist, non-plastic, non-cohesive, <5% subangular gravel		Groundwater sample collected using SP16 sampler
-10	25							

Figure

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Project: J&A Truck Repair
Project Location: 2221 Union Street, Oakand
Project Number: 116355

Log of Boring SB-3

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
	25			SP-SM		POORLY GRADED SAND W/ SILT, medium dense, yellowish-brown, moist, non-plastic, non-cohesive, <5% subangular gravel (cont.)	-	
-13								
	30		SB-3-30W			Bottom of Boring at 30 feet bgs	-	Groundwater sample collected using SP16 sampler
-18								
	35							
-23								
	40							
-28								
	45							
-33								
	50							
-38								
	55							
-43								

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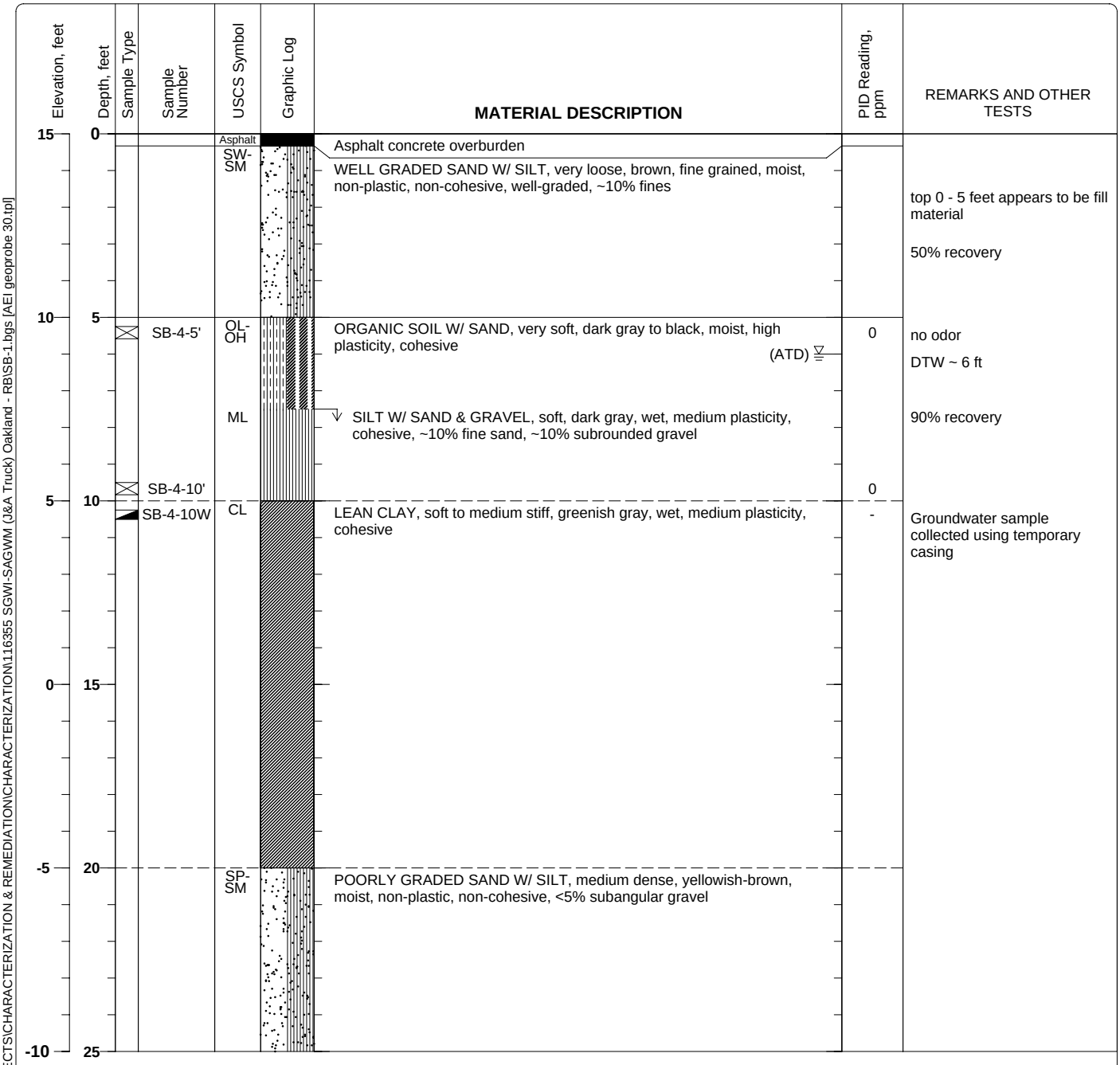
Figure

Project: J&A Truck Repair
Project Location: 2221 Union Street, Oakand
Project Number: 116355

Log of Boring SB-4

Sheet 1 of 2

Date(s) Drilled **March 16, 2006**	Logged By **Ricky Bradford**	Checked By **Peter McIntyre**
Drilling Method **Direct Push Technology**	Drill Bit Size/Type **2 inch**	Total Depth of Borehole **30 feet bgs**
Drill Rig Type **Geoprobe 6600**	Drilling Contractor **Vironex**	Approximate Surface Elevation **15 feet**
Groundwater Level and Date Measured **6 feet ATD**	Sampling Method(s) **Tube, Other**	Well Permit. **W2006-0154**
Borehole Backfill **Cement Slurry**	Location **Northern portion of propety**	



Figure

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Project: J&A Truck Repair
Project Location: 2221 Union Street, Oakand
Project Number: 116355

Log of Boring SB-4

Sheet 2 of 2

Elevation, feet	Depth, feet	Sample Type	Sample Number	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	REMARKS AND OTHER TESTS
	25			SP-SM		POORLY GRADED SAND W/ SILT, medium dense, yellowish-brown, moist, non-plastic, non-cohesive, <5% subangular gravel (cont.)	-	
-13								
	30		SB-4-30W			Bottom of Boring at 30 feet bgs	-	Groundwater sample collected using SP16 sampler
-18								
	35							
-23								
	40							
-28								
	45							
-33								
	50							
-38								
	55							
-43								

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Figure

APPENDIX B

GROUNDWATER MONITORING WELL FIELD SAMPLING FORMS

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-1

Project Name:	J&A Truck Repair	Date of Sampling:	3/2/2006
Job Number:	116355	Name of Sampler:	A. Nieto
Project Address:	2221 Union Street, Oakland, CA 94607		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	15.00		
Depth of Well	20.00		
Depth to Water (from top of casing)	3.98		
Water Elevation (feet above msl)	11.02		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	**7.6**		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Dark with no hc odors, cleared by 3.5 gallons		
Free Product Present?	Yes / No	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
	2	16.74	7.09	748	1.36	305.7	
	4	16.69	7.05	695	1.01	307.4	
	6	16.80	7.10	741	0.76	241.8	
	8	17.39	7.10	797	0.63	259.3	

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

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-2

Project Name:	J&A Truck Repair	Date of Sampling:	3/2/2006
Job Number:	116355	Name of Sampler:	A. Nieto
Project Address:	2221 Union Street, Oakland, CA 94607		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	15.24		
Depth of Well	20.00		
Depth to Water (from top of casing)	4.18		
Water Elevation (feet above msl)	11.06		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	**7.5**		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Clear by 2.5 gallons		
Free Product Present?	Yes / No	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
	2	15.54	7.24	639	1.29	2.6	
	4	17.70	7.34	899	0.97	-89.5	
	6	15.99	7.48	1048	0.85	-145.7	
	8	16.95	7.37	945	0.67	-111.2	

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

Watre started brown, no hc odors/smell noted

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-3

Project Name:	J&A Truck Repair	Date of Sampling:	3/2/2006
Job Number:	116355	Name of Sampler:	A. Nieto
Project Address:	2221 Union Street, Oakland, CA 94607		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	15.10		
Depth of Well	20.00		
Depth to Water (from top of casing)	2.37		
Water Elevation (feet above msl)	11.72		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	**8.4**		
Actual Volume Purged (gallons)	10.0		
Appearance of Purge Water	cleared at 2 gallons		
Free Product Present?	Yes / No	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
	2	17.02	6.33	763	2.86	27.9	
	4	16.19	6.21	709	2.11	46.3	
	6	16.26	6.26	729	1.78	31.2	
	8	16.7	6.38	781	1.36	27.3	
	10	17.3	6.42	807	1.03	21.8	

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

Initially light brown, no hc odors

AEI CONSULTANTS

GROUNDWATER MONITORING WELL FIELD SAMPLING FORM

Monitoring Well Number: MW-4

Project Name:	J&A Truck Repair	Date of Sampling:	3/2/2006
Job Number:	116355	Name of Sampler:	A. Nieto
Project Address:	2221 Union Street, Oakland, CA 94607		

MONITORING WELL DATA

Well Casing Diameter (2"/4"/6")	2"		
Wellhead Condition	OK		
Elevation of Top of Casing (feet above msl)	15.21		
Depth of Well	19.50		
Depth to Water (from top of casing)	3.85		
Water Elevation (feet above msl)	11.36		
Well Volumes Purged	3		
Gallons Purged: formula valid only for casing sizes of 2" (.16 gal/ft), 4" (.65 gal/ft), and 6" (1.44 gal/ft)	**7.5**		
Actual Volume Purged (gallons)	8.0		
Appearance of Purge Water	Turned light brown at 3 gallons		
Free Product Present?	Yes / No	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
	2	15.92	6.61	579	0.96	2.5	
	4	15.23	6.51	611	0.75	-16.4	
	6	16.34	6.55	660	0.63	-51.6	
	8	16.86	6.60	703	0.58	-27.4	

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

Water milky brown started with no hc odors

APPENDIX C

LABORATORY ANALYSES
W/ CHAIN OF CUSTODY DOCUMENTATION

McCampbell Analytical, Inc.

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

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #116355; J&A Truck Repair	Date Sampled: 03/02/06
		Date Received: 03/02/06
	Client Contact: Ricky Bradford	Date Reported: 03/07/06
	Client P.O.:	Date Completed: 03/08/06

WorkOrder: 0603041

March 08, 2006

Dear Ricky:

Enclosed are:

1). the results of **4** analyzed samples from your **#116355; J&A Truck Repair project,**

2). a QC report for the above samples

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

4). a bill for analytical services.

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

Best regards,

Angela Rydelius, Lab Manager

McCAMPBELL ANALYTICAL INC.

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

CHAIN OF CUSTODY RECORD

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

EDF Required? YES **PDF Required?** YES

Report To: Ricky Bradford	**Bill To:**
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	**E-Mail:** rbradford@aeiconsultants.com
Tele: (925) 283-6000 ext. 148	**Fax:** (925) 944-2895
Project #: 116355	**Project Name:** J&A Truck Repair
Project Location: 2221 Union Street, Oakland, CA	
Sampler Signature: Adrian Kirk	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 (8260) Full Suite	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other	Comments
MW-1		3/2/06		4	VOAs	X					X	X											X								
MW-2		"		X	X	X					X	X											X								
MW-3		"		X	X	X					X	X											X								
MW-4		"		X	X	X					X	X											X								

Relinquished By:	**Date:** 3/2/06	**Time:**	**Received By:**
Relinquished By:	**Date:**	**Time:**	**Received By:**
Relinquished By:	**Date:**	**Time:**	**Received By:**

ICE/t° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB _____ PERSERVED IN LAB _____

PRESERVATION	VOAS	O&G	METALS	OTHER
	✓			

APPROPRIATE CONTAINERS ✓

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0603041 **ClientID: AEL** **EDF: YES**

Report to:
Ricky Bradford
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #116355; J&A Truck Repair
PO:

Bill to:
Joanne Bryant
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days

Date Received: 03/02/2006
Date Printed: 03/02/2006

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0603041-001	MW-1	Water	3/2/06	☐	A	A										
0603041-002	MW-2	Water	3/2/06	☐	A											
0603041-003	MW-3	Water	3/2/06	☐	A											
0603041-004	MW-4	Water	3/2/06	☐	A											

Test Legend:

1	8260B_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Kathleen Owen

Comments:

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

McCampbell Analytical, Inc.

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

AEI Consultants	Client Project ID: #116355; J&A Truck Repair	Date Sampled: 03/02/06
		Date Received: 03/02/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/06/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/06/06

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603041

Lab ID	0603041-001A
Client ID	MW-1
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<17	3.3	5.0	Acrolein (Propenal)	ND<17	3.3	5.0
Acrylonitrile	ND<6.7	3.3	2.0	tert-Amyl methyl ether (TAME)	ND<1.7	3.3	0.5
Benzene	ND<1.7	3.3	0.5	Bromobenzene	ND<1.7	3.3	0.5
Bromochloromethane	ND<1.7	3.3	0.5	Bromodichloromethane	ND<1.7	3.3	0.5
Bromoform	ND<1.7	3.3	0.5	Bromomethane	ND<1.7	3.3	0.5
2-Butanone (MEK)	ND<6.7	3.3	2.0	t-Butyl alcohol (TBA)	ND<17	3.3	5.0
n-Butyl benzene	ND<1.7	3.3	0.5	sec-Butyl benzene	ND<1.7	3.3	0.5
tert-Butyl benzene	ND<1.7	3.3	0.5	Carbon Disulfide	ND<1.7	3.3	0.5
Carbon Tetrachloride	ND<1.7	3.3	0.5	Chlorobenzene	ND<1.7	3.3	0.5
Chloroethane	ND<1.7	3.3	0.5	2-Chloroethyl Vinyl Ether	ND<3.3	3.3	1.0
Chloroform	ND<1.7	3.3	0.5	Chloromethane	ND<1.7	3.3	0.5
2-Chlorotoluene	ND<1.7	3.3	0.5	4-Chlorotoluene	ND<1.7	3.3	0.5
Dibromochloromethane	ND<1.7	3.3	0.5	1,2-Dibromo-3-chloropropane	ND<1.7	3.3	0.5
1,2-Dibromoethane (EDB)	ND<1.7	3.3	0.5	Dibromomethane	ND<1.7	3.3	0.5
1,2-Dichlorobenzene	ND<1.7	3.3	0.5	1,3-Dichlorobenzene	ND<1.7	3.3	0.5
1,4-Dichlorobenzene	ND<1.7	3.3	0.5	Dichlorodifluoromethane	ND<1.7	3.3	0.5
1,1-Dichloroethane	3.2	3.3	0.5	1,2-Dichloroethane (1,2-DCA)	ND<1.7	3.3	0.5
1,1-Dichloroethene	ND<1.7	3.3	0.5	cis-1,2-Dichloroethene	15	3.3	0.5
trans-1,2-Dichloroethene	1.9	3.3	0.5	1,2-Dichloropropane	ND<1.7	3.3	0.5
1,3-Dichloropropane	ND<1.7	3.3	0.5	2,2-Dichloropropane	ND<1.7	3.3	0.5
1,1-Dichloropropene	ND<1.7	3.3	0.5	cis-1,3-Dichloropropene	ND<1.7	3.3	0.5
trans-1,3-Dichloropropene	ND<1.7	3.3	0.5	Diisopropyl ether (DIPE)	ND<1.7	3.3	0.5
Ethylbenzene	ND<1.7	3.3	0.5	Ethyl tert-butyl ether (ETBE)	ND<1.7	3.3	0.5
Freon 113	ND<33	3.3	10	Hexachlorobutadiene	ND<1.7	3.3	0.5
Hexachloroethane	ND<1.7	3.3	0.5	2-Hexanone	ND<1.7	3.3	0.5
Isopropylbenzene	ND<1.7	3.3	0.5	4-Isopropyl toluene	ND<1.7	3.3	0.5
Methyl-t-butyl ether (MTBE)	ND<1.7	3.3	0.5	Methylene chloride	ND<1.7	3.3	0.5
4-Methyl-2-pentanone (MIBK)	ND<1.7	3.3	0.5	Naphthalene	ND<1.7	3.3	0.5
Nitrobenzene	ND<33	3.3	10	n-Propyl benzene	ND<1.7	3.3	0.5
Styrene	ND<1.7	3.3	0.5	1,1,1,2-Tetrachloroethane	ND<1.7	3.3	0.5
1,1,2,2-Tetrachloroethane	ND<1.7	3.3	0.5	Tetrachloroethene	90	3.3	0.5
Toluene	ND<1.7	3.3	0.5	1,2,3-Trichlorobenzene	ND<1.7	3.3	0.5
1,2,4-Trichlorobenzene	ND<1.7	3.3	0.5	1,1,1-Trichloroethane	ND<1.7	3.3	0.5
1,1,2-Trichloroethane	ND<1.7	3.3	0.5	Trichloroethene	32	3.3	0.5
Trichlorofluoromethane	ND<1.7	3.3	0.5	1,2,3-Trichloropropane	ND<1.7	3.3	0.5
1,2,4-Trimethylbenzene	ND<1.7	3.3	0.5	1,3,5-Trimethylbenzene	ND<1.7	3.3	0.5
Vinyl Chloride	7.4	3.3	0.5	Xylenes	ND<1.7	3.3	0.5

Surrogate Recoveries (%)

%SS1:	110	%SS2:	106
%SS3:	96		

Comments:

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

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

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

McCampbell Analytical, Inc.

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

AEI Consultants	Client Project ID: #116355; J&A Truck Repair	Date Sampled: 03/02/06
		Date Received: 03/02/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/06/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/06/06

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603041

Lab ID	0603041-002A
Client ID	MW-2
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<10	2.0	5.0	Acrolein (Propenal)	ND<10	2.0	5.0
Acrylonitrile	ND<4.0	2.0	2.0	tert-Amyl methyl ether (TAME)	ND<1.0	2.0	0.5
Benzene	ND<1.0	2.0	0.5	Bromobenzene	ND<1.0	2.0	0.5
Bromochloromethane	ND<1.0	2.0	0.5	Bromodichloromethane	ND<1.0	2.0	0.5
Bromoform	ND<1.0	2.0	0.5	Bromomethane	ND<1.0	2.0	0.5
2-Butanone (MEK)	ND<4.0	2.0	2.0	t-Butyl alcohol (TBA)	ND<10	2.0	5.0
n-Butyl benzene	ND<1.0	2.0	0.5	sec-Butyl benzene	ND<1.0	2.0	0.5
tert-Butyl benzene	ND<1.0	2.0	0.5	Carbon Disulfide	ND<1.0	2.0	0.5
Carbon Tetrachloride	ND<1.0	2.0	0.5	Chlorobenzene	ND<1.0	2.0	0.5
Chloroethane	ND<1.0	2.0	0.5	2-Chloroethyl Vinyl Ether	ND<2.0	2.0	1.0
Chloroform	ND<1.0	2.0	0.5	Chloromethane	ND<1.0	2.0	0.5
2-Chlorotoluene	ND<1.0	2.0	0.5	4-Chlorotoluene	ND<1.0	2.0	0.5
Dibromochloromethane	ND<1.0	2.0	0.5	1,2-Dibromo-3-chloropropane	ND<1.0	2.0	0.5
1,2-Dibromoethane (EDB)	ND<1.0	2.0	0.5	Dibromomethane	ND<1.0	2.0	0.5
1,2-Dichlorobenzene	ND<1.0	2.0	0.5	1,3-Dichlorobenzene	ND<1.0	2.0	0.5
1,4-Dichlorobenzene	ND<1.0	2.0	0.5	Dichlorodifluoromethane	ND<1.0	2.0	0.5
1,1-Dichloroethane	ND<1.0	2.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND<1.0	2.0	0.5
1,1-Dichloroethene	ND<1.0	2.0	0.5	cis-1,2-Dichloroethene	9.3	2.0	0.5
trans-1,2-Dichloroethene	ND<1.0	2.0	0.5	1,2-Dichloropropane	ND<1.0	2.0	0.5
1,3-Dichloropropane	ND<1.0	2.0	0.5	2,2-Dichloropropane	ND<1.0	2.0	0.5
1,1-Dichloropropene	ND<1.0	2.0	0.5	cis-1,3-Dichloropropene	ND<1.0	2.0	0.5
trans-1,3-Dichloropropene	ND<1.0	2.0	0.5	Diisopropyl ether (DIPE)	ND<1.0	2.0	0.5
Ethylbenzene	ND<1.0	2.0	0.5	Ethyl tert-butyl ether (ETBE)	ND<1.0	2.0	0.5
Freon 113	ND<20	2.0	10	Hexachlorobutadiene	ND<1.0	2.0	0.5
Hexachloroethane	ND<1.0	2.0	0.5	2-Hexanone	ND<1.0	2.0	0.5
Isopropylbenzene	ND<1.0	2.0	0.5	4-Isopropyl toluene	ND<1.0	2.0	0.5
Methyl-t-butyl ether (MTBE)	ND<1.0	2.0	0.5	Methylene chloride	ND<1.0	2.0	0.5
4-Methyl-2-pentanone (MIBK)	ND<1.0	2.0	0.5	Naphthalene	ND<1.0	2.0	0.5
Nitrobenzene	ND<20	2.0	10	n-Propyl benzene	ND<1.0	2.0	0.5
Styrene	ND<1.0	2.0	0.5	1,1,1,2-Tetrachloroethane	ND<1.0	2.0	0.5
1,1,2,2-Tetrachloroethane	ND<1.0	2.0	0.5	Tetrachloroethene	44	2.0	0.5
Toluene	ND<1.0	2.0	0.5	1,2,3-Trichlorobenzene	ND<1.0	2.0	0.5
1,2,4-Trichlorobenzene	ND<1.0	2.0	0.5	1,1,1-Trichloroethane	ND<1.0	2.0	0.5
1,1,2-Trichloroethane	ND<1.0	2.0	0.5	Trichloroethene	19	2.0	0.5
Trichlorofluoromethane	ND<1.0	2.0	0.5	1,2,3-Trichloropropane	ND<1.0	2.0	0.5
1,2,4-Trimethylbenzene	ND<1.0	2.0	0.5	1,3,5-Trimethylbenzene	ND<1.0	2.0	0.5
Vinyl Chloride	2.5	2.0	0.5	Xylenes	ND<1.0	2.0	0.5

Surrogate Recoveries (%)

%SS1:	103	%SS2:	104
%SS3:	97		

Comments:

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

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

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

DHS Certification No. 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.

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AEI Consultants	Client Project ID: #116355; J&A Truck Repair	Date Sampled: 03/02/06
		Date Received: 03/02/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/06/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/06/06

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603041

Lab ID	0603041-003A
Client ID	MW-3
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	6.6	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	7.2	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	21	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	36	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	12	1.0	0.5
Toluene	0.81	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	12	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	0.82	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	ND	1.0	0.5	Xylenes	2.1	1.0	0.5

Surrogate Recoveries (%)

%SS1:	103	%SS2:	105
%SS3:	95		

Comments:

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

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

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

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AEI Consultants	Client Project ID: #116355; J&A Truck Repair	Date Sampled: 03/02/06
		Date Received: 03/02/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/06/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/06/06

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603041

Lab ID	0603041-004A
Client ID	MW-4
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND	1.0	5.0	Acrolein (Propenal)	ND	1.0	5.0
Acrylonitrile	ND	1.0	2.0	tert-Amyl methyl ether (TAME)	ND	1.0	0.5
Benzene	ND	1.0	0.5	Bromobenzene	ND	1.0	0.5
Bromochloromethane	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
2-Butanone (MEK)	ND	1.0	2.0	t-Butyl alcohol (TBA)	ND	1.0	5.0
n-Butyl benzene	ND	1.0	0.5	sec-Butyl benzene	ND	1.0	0.5
tert-Butyl benzene	ND	1.0	0.5	Carbon Disulfide	ND	1.0	0.5
Carbon Tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl Vinyl Ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
2-Chlorotoluene	ND	1.0	0.5	4-Chlorotoluene	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	1,2-Dibromo-3-chloropropane	ND	1.0	0.5
1,2-Dibromoethane (EDB)	ND	1.0	0.5	Dibromomethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,1-Dichloroethane	2.7	1.0	0.5	1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5
1,1-Dichloroethene	ND	1.0	0.5	cis-1,2-Dichloroethene	2.4	1.0	0.5
trans-1,2-Dichloroethene	ND	1.0	0.5	1,2-Dichloropropane	ND	1.0	0.5
1,3-Dichloropropane	ND	1.0	0.5	2,2-Dichloropropane	ND	1.0	0.5
1,1-Dichloropropene	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Diisopropyl ether (DIPE)	ND	1.0	0.5
Ethylbenzene	ND	1.0	0.5	Ethyl tert-butyl ether (ETBE)	ND	1.0	0.5
Freon 113	ND	1.0	10	Hexachlorobutadiene	ND	1.0	0.5
Hexachloroethane	ND	1.0	0.5	2-Hexanone	ND	1.0	0.5
Isopropylbenzene	ND	1.0	0.5	4-Isopropyl toluene	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
4-Methyl-2-pentanone (MIBK)	ND	1.0	0.5	Naphthalene	ND	1.0	0.5
Nitrobenzene	ND	1.0	10	n-Propyl benzene	ND	1.0	0.5
Styrene	ND	1.0	0.5	1,1,1,2-Tetrachloroethane	ND	1.0	0.5
1,1,2,2-Tetrachloroethane	ND	1.0	0.5	Tetrachloroethene	5.2	1.0	0.5
Toluene	1.0	1.0	0.5	1,2,3-Trichlorobenzene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	1.5	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	1,2,3-Trichloropropane	ND	1.0	0.5
1,2,4-Trimethylbenzene	0.73	1.0	0.5	1,3,5-Trimethylbenzene	ND	1.0	0.5
Vinyl Chloride	1.3	1.0	0.5	Xylenes	2.7	1.0	0.5

Surrogate Recoveries (%)

%SS1:	104	%SS2:	104
%SS3:	96		

Comments:

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

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

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0603041

EPA Method SW8260B	Extraction SW5030B				BatchID: 20593			Spiked Sample ID 0603037-009C		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
tert-Amyl methyl ether (TAME	ND	10	106	104	1.53	113	110	2.77	70 - 130	70 - 130
Benzene	ND	10	117	119	1.14	117	117	0	70 - 130	70 - 130
t-Butyl alcohol (TBA)	ND	50	85.7	88	2.71	91.8	96.9	5.41	70 - 130	70 - 130
Chlorobenzene	ND	10	109	107	1.92	119	115	3.31	70 - 130	70 - 130
1,2-Dibromoethane (EDB)	ND	10	101	99.7	1.60	117	111	5.82	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	114	109	4.37	119	115	2.86	70 - 130	70 - 130
1,1-Dichloroethene	ND	10	94.9	88.2	7.26	103	97.5	5.28	70 - 130	70 - 130
Diisopropyl ether (DIPE)	ND	10	117	113	3.93	118	116	1.63	70 - 130	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	111	108	3.10	114	108	5.08	70 - 130	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	109	107	1.44	116	112	3.42	70 - 130	70 - 130
Toluene	ND	10	102	99.1	2.51	113	106	6.61	70 - 130	70 - 130
Trichloroethene	ND	10	106	99.5	6.76	117	109	7.37	70 - 130	70 - 130
%SS1:	104	10	102	105	3.58	102	102	0	70 - 130	70 - 130
%SS2:	100	10	96	97	1.01	94	97	2.67	70 - 130	70 - 130
%SS3:	117	10	95	111	15.8	95	111	15.4	70 - 130	70 - 130

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

NONE

BATCH 20593 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0603041-001A	3/02/06	3/06/06	3/06/06 1:55 PM	0603041-002A	3/02/06	3/06/06	3/06/06 5:31 PM
0603041-003A	3/02/06	3/06/06	3/06/06 3:21 PM	0603041-004A	3/02/06	3/06/06	3/06/06 4:04 PM

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

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

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

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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

DHS Certification No. 1644

QA/QC Officer

McCampbell Analytical, Inc.

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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #116355; J & A Truck Repair	Date Sampled: 03/16/06
		Date Received: 03/16/06
	Client Contact: Ricky Bradford	Date Reported: 03/23/06
	Client P.O.:	Date Completed: 03/23/06

WorkOrder: 0603304

March 23, 2006

Dear Ricky:

Enclosed are:

1). the results of **19** analyzed samples from your **#116355; J & A Truck Repair project,**

2). a QC report for the above samples

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

4). a bill for analytical services.

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

Best regards,

Angela Rydelius, Lab Manager

AEI 060506

McCAMPBELL ANALYTICAL INC.

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

CHAIN OF CUSTODY RECORD

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

EDF Required? ☒ Yes ☐ No PDF Required? ☒ Yes ☐ No

Report To: Ricky Bradford Bill To: same

Company: AEI Consultants

2500 Camino Diablo, Suite 200

Walnut Creek, CA 94597 E-Mail: rbradford@aeiconsultants.com

Tele: (925) 283-6000 ext. 148 Fax: (925) 944-2895

Project #: 116355 Project Name: J&A Truck Repair

Project Location: 2221 Union Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other: EPA 8260 (8010 list) HVOCs only (not full suite)	Comments
SB-1-5'		3/16/06		1	AL		X				X																			X	
SB-1-15'				1	AL		X				X																			X	
SB-1-20'				1	AL		X				X																				hold
SB-1-10W				3	VOA	X					X	X																		X	
SB-1-20W				3	VOA	X					X	X																		X	
SB-1-30W				3	VOA	X					X	X																		X	
SB-2-5'				1	AL		X				X																			X	
SB-2-10'				1	AL		X				X																			X	
SB-2-10W				3	VOA	X					X	X																		X	
SB-2-20W				3	VOA	X					X	X																		X	
SB-2-30W				3	VOA	X					X	X																		X	
SB-3-5'				1	AL		X				X																			X	
SB-3-10'				1	AL		X				X																			X	

Relinquished By:	Date:	Time:	Received By:
	3/16/06	524	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° ✓ VOAS | O&G | METALS | OTHER

GOOD CONDITION ✓ PRESERVATION ✓

HEAD SPACE ABSENT ✓ APPROPRIATE

DECHLORINATED IN LAB _____ CONTAINERS ✓

PERSERVED IN LAB _____

McCAMPBELL ANALYTICAL INC.

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

CHAIN OF CUSTODY RECORD

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

EDF Required? ☒ Yes ☐ No PDF Required? ☒ Yes ☐ No

Report To: Ricky Bradford Bill To: same

Company: AEI Consultants

2500 Camino Diablo, Suite 200

Walnut Creek, CA 94597 E-Mail: rbradford@aeiconsultants.com

Tele: (925) 283-6000 ext. 148 Fax: (925) 944-2895

Project #: 116355 Project Name: J&A Truck Repair

Project Location: 2221 Union Street, Oakland

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Other: EPA 8260 (8010 list) HVOCs only (not full suite)	Comments
1150 SB-3-10W		3/16/06		3	VOA	X					X	X																	X	
1199 SB-3-20W				3	VOA	X					X	X																	X	
1215 SB-3-30W				3	VOA	X					X	X																	X	
SB-4-5'				1	AL		X				X																		X	
SB-4-10'				1	AL		X				X																		X	
1150 SB-4-10W				3	VOA	X					X	X																	X	
~~SB-4-20W~~				3	VOA	X					X	X																	X	
1220 SB-4-30W				3	VOA	X					X	X																	X	

Relinquished By:	Date:	Time:	Received By:
	3/16/06	524	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

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

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0603304 **ClientID: AEL** **EDF: YES**

Report to:
Ricky Bradford
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
TEL: (925) 283-6000
FAX: (925) 283-6121
ProjectNo: #116355; J & A Truck Repair
PO:

Bill to:
Joanne Bryant
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days

Date Received: 03/16/2006
Date Printed: 03/16/2006

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0603304-001	SB-1-5'	Soil	3/16/06	☐	A											
0603304-002	SB-1-15'	Soil	3/16/06	☐	A		A									
0603304-004	SB-1-10W	Water	3/16/06	☐		A										
0603304-005	SB-1-20W	Water	3/16/06	☐		A										
0603304-006	SB-1-30W	Water	3/16/06	☐		A										
0603304-007	SB-2-5'	Soil	3/16/06	☐	A											
0603304-008	SB-2-10'	Soil	3/16/06	☐	A											
0603304-009	SB-2-10W	Water	3/16/06	☐		A										
0603304-010	SB-2-20W	Water	3/16/06	☐		A										
0603304-011	SB-2-30W	Water	3/16/06	☐		A										
0603304-012	SB-3-5'	Soil	3/16/06	☐	A											
0603304-013	SB-3-10'	Soil	3/16/06	☐	A											
0603304-014	SB-3-10W	Water	3/16/06	☐		A										
0603304-015	SB-3-20W	Water	3/16/06	☐		A										
0603304-016	SB-3-30W	Water	3/16/06	☐		A										

Test Legend:

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

Prepared by: Melissa Valles

Comments:

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

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0603304 **ClientID: AEL** **EDF: YES**

Report to:
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2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days

Date Received: 03/16/2006
Date Printed: 03/16/2006

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0603304-017	SB-4-5'	Soil	3/16/06	☐	A											
0603304-018	SB-4-10'	Soil	3/16/06	☐	A											
0603304-019	SB-4-10W	Water	3/16/06	☐		A										
0603304-020	SB-4-30W	Water	3/16/06	☐		A										

Test Legend:

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

Prepared by: Melissa Valles

Comments:

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

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

AEI Consultants	Client Project ID: #116355; J & A Truck Repair	Date Sampled: 03/16/06
		Date Received: 03/16/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/16/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/17/06-03/22/06

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603304

Lab ID	0603304-001A	0603304-002A	0603304-007A	0603304-008A	Reporting Limit for DF =1	
Client ID	SB-1-5'	SB-1-15'	SB-2-5'	SB-2-10'		
Matrix	S	S	S	S	S	W
DF	4	1	2	2		
Compound	**Concentration**				mg/kg	µg/L
Bromodichloromethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Bromoform	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Bromomethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Carbon Tetrachloride	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Chlorobenzene	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Chloroethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
2-Chloroethyl Vinyl Ether	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Chloroform	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Chloromethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Dibromochloromethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
1,2-Dichlorobenzene	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
1,3-Dichlorobenzene	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
1,4-Dichlorobenzene	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Dichlorodifluoromethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
1,1-Dichloroethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
1,1-Dichloroethene	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
cis-1,2-Dichloroethene	0.50	ND	0.30	0.40	0.005	NA
trans-1,2-Dichloroethene	ND<0.020	ND	0.016	0.025	0.005	NA
1,2-Dichloropropane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
cis-1,3-Dichloropropene	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
trans-1,3-Dichloropropene	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Methylene chloride	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
1,1,2,2-Tetrachloroethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Tetrachloroethene	ND<0.020	ND	ND<0.010	0.012	0.005	NA
1,1,1-Trichloroethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
1,1,2-Trichloroethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Trichloroethene	0.25	ND	0.038	0.25	0.005	NA
Trichlorofluoromethane	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Vinyl Chloride	ND<0.020	ND	ND<0.010	ND<0.010	0.005	NA
Surrogate Recoveries (%)						
%SS1:	115	109	116	115		
%SS2:	98	98	96	98		
%SS3:	113	115	115	118		
Comments						

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

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

McCampbell Analytical, Inc.

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Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants	Client Project ID: #116355; J & A Truck Repair	Date Sampled: 03/16/06
		Date Received: 03/16/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/16/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/17/06-03/22/06

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603304

Lab ID	0603304-012A	0603304-013A	0603304-017A	0603304-018A	Reporting Limit for DF =1	
Client ID	SB-3-5'	SB-3-10'	SB-4-5'	SB-4-10'		
Matrix	S	S	S	S	S	W
DF	10	1	1	1		
Compound	**Concentration**				mg/kg	µg/L
Bromodichloromethane	ND<0.050	ND	ND	ND	0.005	NA
Bromoform	ND<0.050	ND	ND	ND	0.005	NA
Bromomethane	ND<0.050	ND	ND	ND	0.005	NA
Carbon Tetrachloride	ND<0.050	ND	ND	ND	0.005	NA
Chlorobenzene	ND<0.050	ND	ND	ND	0.005	NA
Chloroethane	ND<0.050	ND	ND	ND	0.005	NA
2-Chloroethyl Vinyl Ether	ND<0.050	ND	ND	ND	0.005	NA
Chloroform	ND<0.050	ND	ND	ND	0.005	NA
Chloromethane	ND<0.050	ND	ND	ND	0.005	NA
Dibromochloromethane	ND<0.050	ND	ND	ND	0.005	NA
1,2-Dichlorobenzene	ND<0.050	ND	ND	ND	0.005	NA
1,3-Dichlorobenzene	ND<0.050	ND	ND	ND	0.005	NA
1,4-Dichlorobenzene	ND<0.050	ND	ND	ND	0.005	NA
Dichlorodifluoromethane	ND<0.050	ND	ND	ND	0.005	NA
1,1-Dichloroethane	ND<0.050	ND	ND	ND	0.005	NA
1,2-Dichloroethane (1,2-DCA)	ND<0.050	ND	ND	ND	0.005	NA
1,1-Dichloroethene	ND<0.050	ND	ND	ND	0.005	NA
cis-1,2-Dichloroethene	ND<0.050	ND	0.033	0.16	0.005	NA
trans-1,2-Dichloroethene	ND<0.050	ND	ND	0.0080	0.005	NA
1,2-Dichloropropane	ND<0.050	ND	ND	ND	0.005	NA
cis-1,3-Dichloropropene	ND<0.050	ND	ND	ND	0.005	NA
trans-1,3-Dichloropropene	ND<0.050	ND	ND	ND	0.005	NA
Methylene chloride	ND<0.050	ND	ND	ND	0.005	NA
1,1,2,2-Tetrachloroethane	ND<0.050	ND	ND	ND	0.005	NA
Tetrachloroethene	0.64	ND	0.14	ND	0.005	NA
1,1,1-Trichloroethane	ND<0.050	ND	ND	ND	0.005	NA
1,1,2-Trichloroethane	ND<0.050	ND	ND	ND	0.005	NA
Trichloroethene	ND<0.050	ND	0.022	ND	0.005	NA
Trichlorofluoromethane	ND<0.050	ND	ND	ND	0.005	NA
Vinyl Chloride	ND<0.050	ND	ND	ND	0.005	NA
Surrogate Recoveries (%)						
%SS1:	115	105	102	103		
%SS2:	97	98	98	97		
%SS3:	113	117	118	115		
Comments						

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

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

McCampbell Analytical, Inc.

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Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants	Client Project ID: #116355; J & A Truck Repair	Date Sampled: 03/16/06
		Date Received: 03/16/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/18/06-03/22/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/18/06-03/22/06

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603304

Lab ID	0603304-004A	0603304-005A	0603304-006A	0603304-009A	Reporting Limit for DF =1	
Client ID	SB-1-10W	SB-1-20W	SB-1-30W	SB-2-10W		
Matrix	W	W	W	W	S	W
DF	10	1	1	2		
Compound	**Concentration**				µg/kg	µg/L
Bromodichloromethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
Bromoform	ND<5.0	ND	ND	ND<1.0	NA	0.5
Bromomethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
Carbon Tetrachloride	ND<5.0	ND	ND	ND<1.0	NA	0.5
Chlorobenzene	ND<5.0	ND	ND	ND<1.0	NA	0.5
Chloroethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
2-Chloroethyl Vinyl Ether	ND<10	ND	ND	ND<2.0	NA	1.0
Chloroform	ND<5.0	ND	ND	ND<1.0	NA	0.5
Chloromethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
Dibromochloromethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
1,2-Dichlorobenzene	ND<5.0	ND	ND	ND<1.0	NA	0.5
1,3-Dichlorobenzene	ND<5.0	ND	ND	ND<1.0	NA	0.5
1,4-Dichlorobenzene	ND<5.0	ND	ND	ND<1.0	NA	0.5
Dichlorodifluoromethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
1,1-Dichloroethane	ND<5.0	6.2	ND	ND<1.0	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<5.0	ND	ND	ND<1.0	NA	0.5
1,1-Dichloroethene	ND<5.0	11	ND	ND<1.0	NA	0.5
cis-1,2-Dichloroethene	94	32	3.2	95	NA	0.5
trans-1,2-Dichloroethene	ND<5.0	ND	ND	3.3	NA	0.5
1,2-Dichloropropane	ND<5.0	ND	ND	ND<1.0	NA	0.5
cis-1,3-Dichloropropene	ND<5.0	ND	ND	ND<1.0	NA	0.5
trans-1,3-Dichloropropene	ND<5.0	ND	ND	ND<1.0	NA	0.5
Methylene chloride	ND<5.0	ND	ND	ND<1.0	NA	0.5
1,1,2,2-Tetrachloroethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
Tetrachloroethene	57	6.6	0.51	11	NA	0.5
1,1,1-Trichloroethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
1,1,2-Trichloroethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
Trichloroethene	30	4.5	0.75	8.9	NA	0.5
Trichlorofluoromethane	ND<5.0	ND	ND	ND<1.0	NA	0.5
Vinyl Chloride	ND<5.0	7.7	ND	ND<1.0	NA	0.5
Surrogate Recoveries (%)						
%SS1:	103	120	111	120		
%SS2:	99	98	96	98		
%SS3:	105	118	119	118		
Comments	i	i	i	i		

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

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

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AEI Consultants	Client Project ID: #116355; J & A Truck Repair	Date Sampled: 03/16/06
		Date Received: 03/16/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/18/06-03/22/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/18/06-03/22/06

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603304

Lab ID	0603304-010A	0603304-011A	0603304-014A	0603304-015A	Reporting Limit for DF =1	
Client ID	SB-2-20W	SB-2-30W	SB-3-10W	SB-3-20W		
Matrix	W	W	W	W	S	W
DF	1	1	10	10		
Compound	**Concentration**				µg/kg	µg/L
Bromodichloromethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
Bromoform	ND	ND	ND<5.0	ND<5.0	NA	0.5
Bromomethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
Carbon Tetrachloride	ND	ND	ND<5.0	ND<5.0	NA	0.5
Chlorobenzene	ND	ND	ND<5.0	ND<5.0	NA	0.5
Chloroethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
2-Chloroethyl Vinyl Ether	ND	ND	ND<10	ND<10	NA	1.0
Chloroform	ND	ND	ND<5.0	ND<5.0	NA	0.5
Chloromethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
Dibromochloromethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
1,2-Dichlorobenzene	ND	ND	ND<5.0	ND<5.0	NA	0.5
1,3-Dichlorobenzene	ND	ND	ND<5.0	ND<5.0	NA	0.5
1,4-Dichlorobenzene	ND	ND	ND<5.0	ND<5.0	NA	0.5
Dichlorodifluoromethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
1,1-Dichloroethane	8.0	ND	ND<5.0	ND<5.0	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND<5.0	ND<5.0	NA	0.5
1,1-Dichloroethene	1.3	ND	ND<5.0	ND<5.0	NA	0.5
cis-1,2-Dichloroethene	40	6.7	95	120	NA	0.5
trans-1,2-Dichloroethene	1.1	ND	ND<5.0	5.1	NA	0.5
1,2-Dichloropropane	ND	ND	ND<5.0	ND<5.0	NA	0.5
cis-1,3-Dichloropropene	ND	ND	ND<5.0	ND<5.0	NA	0.5
trans-1,3-Dichloropropene	ND	ND	ND<5.0	ND<5.0	NA	0.5
Methylene chloride	ND	ND	ND<5.0	ND<5.0	NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
Tetrachloroethene	9.2	2.6	460	250	NA	0.5
1,1,1-Trichloroethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
1,1,2-Trichloroethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
Trichloroethene	3.0	1.6	110	76	NA	0.5
Trichlorofluoromethane	ND	ND	ND<5.0	ND<5.0	NA	0.5
Vinyl Chloride	ND	ND	ND<5.0	ND<5.0	NA	0.5
Surrogate Recoveries (%)						
%SS1:	121	111	109	111		
%SS2:	97	97	99	102		
%SS3:	117	116	106	106		
Comments	i	i	i	i		

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

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

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AEI Consultants	Client Project ID: #116355; J & A Truck Repair	Date Sampled: 03/16/06
		Date Received: 03/16/06
2500 Camino Diablo, Ste. #200	Client Contact: Ricky Bradford	Date Extracted: 03/18/06-03/22/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed: 03/18/06-03/22/06

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

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0603304

Lab ID	0603304-016A	0603304-019A	0603304-020A		Reporting Limit for DF =1	
Client ID	SB-3-30W	SB-4-10W	SB-4-30W			
Matrix	W	W	W		S	W
DF	1	10	1			
Compound	**Concentration**				µg/kg	µg/L
Bromodichloromethane	ND	ND<5.0	ND		NA	0.5
Bromoform	ND	ND<5.0	ND		NA	0.5
Bromomethane	ND	ND<5.0	ND		NA	0.5
Carbon Tetrachloride	ND	ND<5.0	ND		NA	0.5
Chlorobenzene	ND	ND<5.0	ND		NA	0.5
Chloroethane	ND	ND<5.0	ND		NA	0.5
2-Chloroethyl Vinyl Ether	ND	ND<10	ND		NA	1.0
Chloroform	ND	ND<5.0	1.1		NA	0.5
Chloromethane	ND	ND<5.0	ND		NA	0.5
Dibromochloromethane	ND	ND<5.0	ND		NA	0.5
1,2-Dichlorobenzene	ND	ND<5.0	ND		NA	0.5
1,3-Dichlorobenzene	ND	ND<5.0	ND		NA	0.5
1,4-Dichlorobenzene	ND	ND<5.0	ND		NA	0.5
Dichlorodifluoromethane	ND	ND<5.0	ND		NA	0.5
1,1-Dichloroethane	ND	ND<5.0	ND		NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND<5.0	ND		NA	0.5
1,1-Dichloroethene	ND	ND<5.0	ND		NA	0.5
cis-1,2-Dichloroethene	7.6	280	2.6		NA	0.5
trans-1,2-Dichloroethene	ND	ND<5.0	ND		NA	0.5
1,2-Dichloropropane	ND	ND<5.0	ND		NA	0.5
cis-1,3-Dichloropropene	ND	ND<5.0	ND		NA	0.5
trans-1,3-Dichloropropene	ND	ND<5.0	ND		NA	0.5
Methylene chloride	ND	ND<5.0	ND		NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND<5.0	ND		NA	0.5
Tetrachloroethene	5.8	410	3.4		NA	0.5
1,1,1-Trichloroethane	ND	ND<5.0	ND		NA	0.5
1,1,2-Trichloroethane	ND	ND<5.0	ND		NA	0.5
Trichloroethene	2.5	190	2.5		NA	0.5
Trichlorofluoromethane	ND	ND<5.0	ND		NA	0.5
Vinyl Chloride	ND	ND<5.0	ND		NA	0.5
Surrogate Recoveries (%)						
%SS1:	112	113	112			
%SS2:	97	99	97			
%SS3:	118	107	116			
Comments	i	i	i			

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

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

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

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0603304

EPA Method SW8260B	Extraction SW5030B				BatchID: 20778			Spiked Sample ID 0603288-006A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
Chlorobenzene	ND	0.050	95.9	97	1.16	95.8	94.1	1.79	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	0.050	107	109	2.10	109	84.9	24.4	70 - 130	70 - 130
1,1-Dichloroethene	ND	0.050	80.3	82.8	3.01	115	88.1	26.3	70 - 130	70 - 130
Trichloroethene	ND	0.050	93.6	94	0.423	93.8	95.9	2.20	70 - 130	70 - 130
%SS1:	106	0.050	98	100	1.76	105	103	2.35	70 - 130	70 - 130
%SS2:	98	0.050	100	99	0.695	98	100	2.05	70 - 130	70 - 130
%SS3:	115	0.050	108	110	1.96	103	106	3.32	70 - 130	70 - 130

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

NONE

BATCH 20778 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0603304-001A	3/16/06	3/16/06	3/21/06 3:44 PM	0603304-002A	3/16/06	3/16/06	3/17/06 10:35 PM
0603304-007A	3/16/06	3/16/06	3/22/06 3:16 PM	0603304-008A	3/16/06	3/16/06	3/21/06 5:11 PM
0603304-012A	3/16/06	3/16/06	3/21/06 6:01 PM	0603304-013A	3/16/06	3/16/06	3/18/06 1:32 AM
0603304-017A	3/16/06	3/16/06	3/18/06 2:16 AM	0603304-018A	3/16/06	3/16/06	3/18/06 3:02 AM

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

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

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

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.

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QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0603304

EPA Method SW8260B	Extraction SW5030B				BatchID: 20787			Spiked Sample ID 0603308-005B		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
Chlorobenzene	ND	10	92.8	91	1.96	89.6	89.6	0	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	107	107	0	106	107	0.798	70 - 130	70 - 130
1,1-Dichloroethene	ND	10	84	82.8	1.40	82.6	81.1	1.73	70 - 130	70 - 130
Trichloroethene	ND	10	93.6	91.5	2.35	90.3	88.5	1.96	70 - 130	70 - 130
%SS1:	108	10	102	100	1.46	101	100	1.50	70 - 130	70 - 130
%SS2:	98	10	101	101	0	100	101	1.00	70 - 130	70 - 130
%SS3:	112	10	108	107	0.562	109	109	0	70 - 130	70 - 130

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

NONE

BATCH 20787 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0603304-004A	3/16/06	3/18/06	3/18/06 3:51 AM	0603304-005A	3/16/06	3/22/06	3/22/06 12:32 AM
0603304-006A	3/16/06	3/22/06	3/22/06 1:15 AM	0603304-009A	3/16/06	3/22/06	3/22/06 2:03 AM
0603304-010A	3/16/06	3/22/06	3/22/06 2:47 AM	0603304-011A	3/16/06	3/22/06	3/22/06 3:35 AM
0603304-014A	3/16/06	3/18/06	3/18/06 8:50 AM	0603304-015A	3/16/06	3/18/06	3/18/06 11:21 AM
0603304-016A	3/16/06	3/22/06	3/22/06 4:23 AM	0603304-019A	3/16/06	3/18/06	3/18/06 12:52 PM
0603304-020A	3/16/06	3/22/06	3/22/06 5:07 AM				

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

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

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

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

QA/QC Officer