

November 16, 2005

RECEIVED
NOV 20 2005
ENVIRONMENTAL HEALTH SERVICES

**SOIL & GROUNDWATER
INVESTIGATION WORK PLAN**

2221 Union Street
Oakland, CA

AEI Project No.12649
ACHCSA Toxics Case R00002488

Prepared For

Mr. Alejandro C. Aguilar
J & A Truck Repair
2221 Union Street
Oakland, CA 94607

Prepared By

AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597
(925) 283-6000

AEI

November 16, 2005

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

Work Plan – Soil and Groundwater Investigation
J & A Truck Repair Property
2221 Union Street
Oakland, CA 94607
AEI Project No. 12649
ACHCSA Toxics Case R00002488, California Brake and Clutch

Dear Mr. Chan:

The following work plan has been prepared on behalf of Mr. Alejandro Aguilar of J & A Truck Repair. This work plan outlines a scope of work to take place over the next several months at the above referenced property. AEI Consultants (AEI) has been retained by Mr. Wong to provide environmental engineering and consulting services associated with a release of chlorinated volatile organic compounds (CVOCs) at the subject property. AEI proposes to perform the following activities to comply with the Alameda County Health Care Services Agency's (ACHCSA) April 29, 2005 request to further investigate the extent of impacted soil and groundwater in the vicinity of soil boring BH-O. A summary of the proposed soil and groundwater investigation work plan is as follows:

- Prepare this work plan and a site-specific health and safety plan (HASP)
- Obtain a subsurface drilling permit from the Alameda County Public Works Agency (ACPWA) and call Underground Service Alert (USA) to have all public utilities in the area marked prior to drilling
- Install four (4) temporary soil borings at locations shown on Figure 3 using direct push technology (DPT) to depths ranging from 25 to 30 feet below ground surface (bgs) to further investigate and delineate the lateral and vertical extent of CVOCs present near BH-O
- Continuously collect soil samples from each boring, screen soil samples with a photo-ionization detector (PID), and retain select soil samples from each soil boring for chemical analyses for CVOCs per EPA Method 8260B (8010 target list)
- Collect groundwater samples at discrete intervals using a Hydropunch® type of groundwater sampler, and retain select groundwater samples from each interval for chemical analyses for CVOCs per EPA Method 8260B (8010 target list)
- Properly abandon all four temporary soil borings with neat cement grout per local guidelines and regulations

- Based on the soil and groundwater laboratory analytical results, evaluate the soil and groundwater quality and make the appropriate recommendations for the next course of action or possibly case closure
- Prepare a comprehensive report presenting the findings and recommendations of this soil and groundwater investigation

BACKGROUND

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 (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 laboratory analysis (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, volatile organic compounds (VOCs) by EPA Method 8010, and the RCRA five metals by EPA Method 6010. Tetrachloroethylene, also known as perchloroethylene (PCE), at a concentration of 390 mg/kg was the only CVOC 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 VOCs by EPA Method 8010. Elevated levels of CVOCs 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 CVOCs. 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 CVOCs. The soil sample collected from boring MW-3 did not contain CVOCs above laboratory method detection limits, indicating that the soil contamination was confined to a small area. All three groundwater samples contained elevated concentrations of CVOCs. 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 CVOCs. However, the groundwater sample collected from MW-4 contained elevated concentrations of CVOCs.

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 CVOCs. However, the composite sample from the stockpiled soil contained elevated levels of CVOCs. 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.

109
need all
VOCs

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 CVOCs 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 (RBSLs). CVOCs were detected in all the groundwater samples except BH-M. The highest concentrations of CVOCs detected were on 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 CVOCs 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 CVOCs at the west side of the subject property were suspected to be from an off-site source. The plume of CVOCs was not defined to the north or south. However, the CVOC 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 CVOC concentration can be identified and to predict when CVOC 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 ACHCSA (dated April 29, 2005) indicated that additional information and further investigation is necessary to achieve case closure. A copy of this letter is included in Appendix A. In this letter, ACHCSA indicated that no active remediation is required to address the CVOCs in soil and groundwater at the subject property. ACHCSA requested that groundwater monitoring continue at minimum on a semi-annual schedule. In this letter, ACHCSA requested cross-sectional diagrams in two directions in order to understand the hydrogeology near and at the subject property. ACHCSA also requested a proposal to investigate contamination near soil boring BH-O. ACHCSA requested proposed methods to clarify the significance of the data and determine the extent of CVOC contamination in the area of the subject property. The above requested information will be presented in the final report for this investigation.

GEOLOGY AND HYDROLOGY

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. Nearly all fills made prior to 1965 consist mainly of unconsolidated dumped 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. The current groundwater flow direction is to the north at a hydraulic gradient of 0.0271 ft / ft. The current and historic groundwater elevation, flow direction, and hydraulic gradient are included in Table 2.

SOIL AND GROUNDWATER INVESTIGATION

AEI will install up to four (4) temporary soil borings using direct push technology (DPT) at the subject property to depths ranging from 25 to 30 feet bgs to further investigate and delineate the horizontal and vertical extent of CVOCs present near BH-O. The proposed boring locations (labeled SB-1 through SB-4) are shown on Figure 3. A summary of the soil and groundwater investigation work plan is as follows:

Drilling

AEI's drilling subcontractor will advance soil borings with a truck-mounted Geoprobe® DPT drilling rig to depths ranging from 25 to 30 feet bgs. AEI will require the selected drilling

subcontractor to hold a California C-57 driller's license. At least ten days before drilling operations commence, AEI will complete, submit, and obtain a drilling permit from the ACPWD. The ACPWD will be given adequate notification (at least 5 days in advance) of the drilling date in order to schedule an inspection of the permitted drilling work. AEI will confirm the scheduled inspection date at least 24 hours prior to drilling. A copy of the approved permit will be onsite and available for inspection at all times. AEI will decontaminate push rods and other sampling equipment between sample collection and between boreholes as appropriate to minimize the occurrence of cross-contamination. Following groundwater sample collection, AEI will backfill each boring with neat cement grout according to local guidelines and agency regulations.

Soil Sample Collection

AEI will continuously collect soil samples in 1.75-inch diameter acrylic liners contained within the sampling barrel in three to four foot pushes depending on how tight or loose the lithology is. AEI's onsite geologist or engineer will screen each push with a PID for organic vapors and log each push according to the Unified Soil Classification System (USCS). AEI will use a MiniRAE Plus Classic (PGM-76) photo-ionization detector (PID) or similar device to screen soil samples for organic vapors in the field. On the borings logs, AEI's field geologist or engineer will record any positive PID response above background levels for select depths of each push. AEI will collect a four to six inch undistributed soil sample for laboratory analysis from appropriate depths based on visual and olfactory observations and the magnitude of the PID response. AEI will seal each soil sample with Teflon tape and plastic end caps.

Hydropunch® Groundwater Sample Collection

Based on a review of historic soil boring logs prepared by ASE, AEI expects to first encounter groundwater anywhere from three to ten feet bgs. AEI will collect groundwater samples at depths up to 30 feet bgs based on a review of groundwater grab samples at depths that had elevated levels of CVOCs (see Table 4) and at the discretion of AEI's field geologist or engineer. AEI will collect groundwater samples at discrete intervals using a Hydropunch® type of groundwater sampler to further delineate the horizontal and vertical extent of the CVOCs in the groundwater near BH-O. The Hydropunch® groundwater sampler allows samples to be taken at discrete depths without the need of installing a permanent monitoring well. The sampler has a retrievable stainless steel or disposable PVC well screen with a hardened steel penetration tip. The Hydropunch® operates by advancing a 1.75-inch diameter hollow push rod with the penetration tip to the desired sampling interval. The push rods are retracted at the desired depth and water is allowed to hydrostatically infiltrate from the formation into the well screen. This will allow AEI to collect discrete groundwater samples at multiple depth intervals within the same soil boring location. If slow water recharge is encountered, AEI will make necessary provisions to set a temporary PVC well screen during sampling to allow the drill rig to advance to the next soil boring and sampling location. When enough groundwater infiltrates into the well screen, AEI will use a 0.5-inch or 0.75-inch small diameter disposable Teflon® bailer or a low-flow peristaltic pump to collect groundwater samples in 40 ml volatile organic analysis (VOA) vials and preserve the samples with hydrochloric acid. AEI will seal the containers so that no headspace or air bubbles are visible within the sample containers.

Sample Storage

Immediately upon collection, AEI will seal all soil samples and label them with the sample identification, date and time of sample collection, and sampler's name. AEI will place samples in a pre-chilled cooler with water and ice so that the samples stay at the required temperature but do not freeze. AEI will initiate chain of custody documentation prior to leaving the site and transport samples under proper chain of custody protocol to McCampbell Analytical, Inc. of Pacheco, California (Department of Health Services Certification #1644). AEI will deliver all soil and groundwater samples to the laboratory on the day of collection within the required holding time for CVOCs.

Sample Analyses

Select soil and groundwater samples from each of the four temporary soil borings will be analyzed for CVOCs per EPA Method 8260B (8010 target list).

Waste Storage

AEI will store drill cuttings and other investigation-derived waste (IDW) onsite in sealed 55-gallon drums, pending the results of the sample analyses. AEI will also store equipment rinse water and well purge water in sealed 55-gallon drums. Upon receipt of necessary analytical results, AEI will profile the waste for disposal and transportation from the site under the appropriate waste manifest to an approved disposal or recycling facility.

FINAL REPORT

AEI will prepare a detailed report documenting the methods, findings, and conclusions of the soil and groundwater investigation. The report will also include AEI's recommendations for the next course of action. The report will include figures, soil and groundwater sample analytical data tables, soil boring logs, interpretation of contaminant distributions, and the requested geologic cross-sections (in two directions). AEI will upload the final report and analytical data in the appropriate electronic data format (EDF) to the SWRCB's Geotracker database. The entire project will be overseen by and all reports will be reviewed and stamped by a State of California Professional Geologist or Professional Civil Engineer.

SITE SAFETY

AEI will prepare a site-specific health and safety plan (HASP) prior to performing any field work at the site. The HASP will describe the known or suspected chemical and physical hazards that are expected during the course of work at the site, what risk these chemical and physical hazards pose to human health, and the proper safety precautions that need to be employed when working around these hazards. The HASP conforming to Part 1910.120 (i) (2) of 29 Code of Federal Regulations (29 CFR) will be onsite at all times for inspection and for utilization as a reference material. Prior to commencing field activities, AEI will hold a site health and safety meeting at a designated command post near the working area. AEI will outline emergency procedures at this meeting, including a detailed explanation of the hazards of the known or suspected chemicals of

interest and physical hazards. AEI will identify the location and best possible route to the nearest hospital will during the health and safety meeting. AEI will require that all site personnel exposed to these hazards to sign the HASP acknowledging that they understand the potential hazards and appropriate safety precautions. AEI anticipates that Level D personal protection equipment (PPE) will be the maximum amount of protection needed. AEI will require that all site personnel be in Level D PPE unless conditions change that require a higher level of PPE. AEI will establish a working area with barricades and warning tape. The barricades and warning tape will delineate the zone where hard hats and steel-toed shoes must be worn at all times, and where unauthorized personnel will not be allowed. AEI's field geologist or engineer will have the HASP onsite and available for inspection at all times during the project.

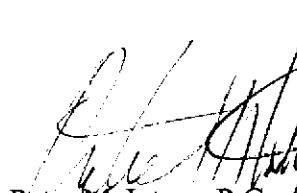
ESTIMATED SCHEDULE

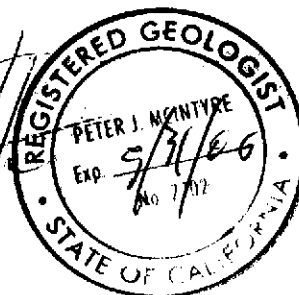
Soil boring permitting will begin once AEI gets approval of this work plan by ACHCSA and an authorization to proceed from our client. AEI anticipates DPT drilling to occur a few weeks thereafter. The ACPWD will be given adequate notification (at least 5 days in advance) of the drilling date in order to schedule an inspection of the permitted drilling work. AEI will confirm the scheduled inspection date at least 24 hours prior to drilling. AEI will obtain laboratory analytical results within approximately one week of the sample collection date. AEI anticipates presenting the results of this investigation to the ACHCSA within four to six weeks of obtaining the soil and groundwater analytical results. AEI will prepare and submit a final report to the client and the ACEHSA within the same approximate timeframe.

Please do not hesitate to contact me or Peter McIntyre at (925) 283-6000 if you have any questions or need additional information regarding this work plan.

Sincerely,
AEI Consultants


Richard Bradford
Senior Staff Engineer


Peter McIntyre, P.G.
Project Manager



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

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.

Figures

Figure 1 - Site Location Map

Figure 2 - Site Plan

Figure 3 - Proposed Soil Boring Locations

Figure 4 - Groundwater Elevations

Figure 5 - Groundwater Sample Analytical Data

Figure 6 - Soil Sample Analytical Data

Figure 7 - Cross Section Direction

Figure 8 - Lithologic Cross Section A – A

Figure 9 - Lithologic Cross Section B – B

Tables

Table 1 - Monitoring Well Construction Details

Table 2 - Groundwater Elevation Data

Table 3 - Groundwater Sample Analytical Data for CVOCs

Table 4 - Groundwater Grab Sample Analytical Data for CVOCs

Table 5 - Soil Sample Analytical Data for CVOCs

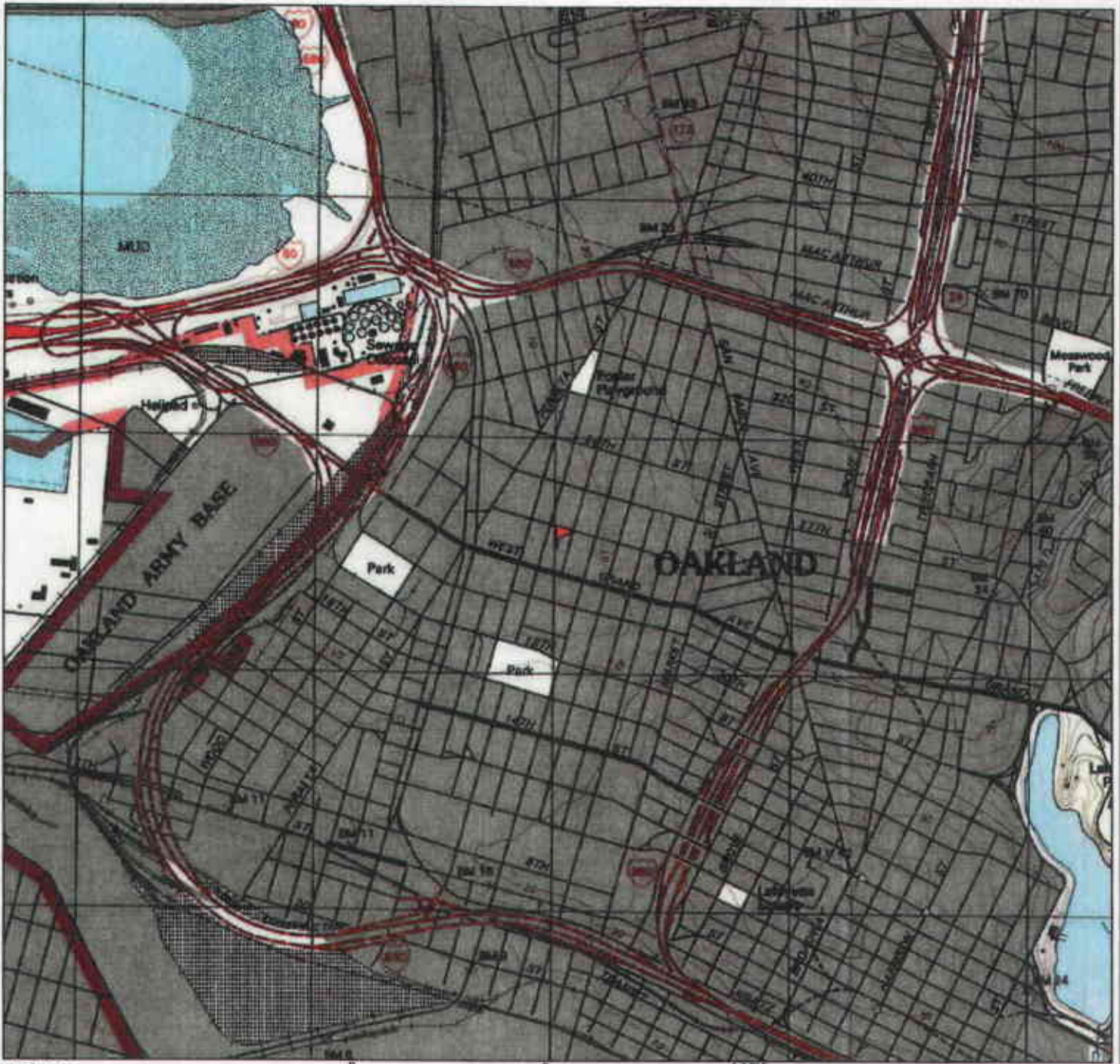
Appendix A - Letter from ACHCSA to Mr. Alejandro Aguilar *Subject: Toxics Case RO0002488, California Brake and Clutch, 2221 Union St., Oakland, CA 94607* (April 29, 2005) prepared by the Alameda County Health Care Services Agency

Appendix B – Table One: Summary of Chemical Analysis of Soil Samples after Soil Remediation Activities VOCs and SVOCs from *Report Detailing Soil Remediation Activities* (November 30, 1999) prepared by Aqua Science Engineers, Inc.

Distribution

Mr. Alejandro C. Aguilar
J & A Truck Repair
2221 Union Street
Oakland, CA 94607

Mr. Vincent Wong
United Commercial Bank
555 Montgomery Street, 4th Floor
San Francisco, CA 91101



TN MN
15°



Map created with TOPOI © 2002 National Geographic (www.nationalgeographic.com/topo)

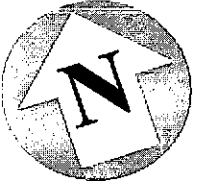
AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

SITE LOCATION MAP

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 1
AEI PROJECT NO. 12649



POPLAR STREET

UNION STREET

NEIGHBORING PROPERTY
(GASOLINE DISPENSING STATION)

BUILDING

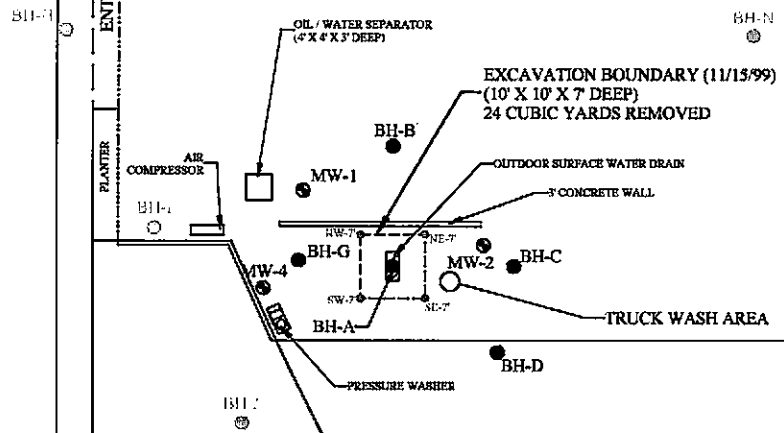
FENCED-IN
DIRT SURFACE
YARD

SHED

PARKING AREA

PARCEL B
(38,524 SQ. FT.)
J & A TRUCK REPAIR

CORRUGATED STEEL BUILDING B
(APPROX. 1,750 SQ. FT.)



BRICK BUILDING A
(APPROX. 10,576 SQ. FT.)

PARCEL A
(17,268 SQ. FT.)
WOOD PALLET
RECYCLING CENTER

AUTOMOTIVE PARTS
CLEANING BINS

NEIGHBORING PROPERTY
(STORAGE AREA)

BUILDING

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)



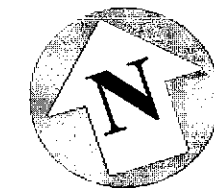
SCALE 1" = 30'

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

SITE PLAN

2221 UNION STREET
OAKLAND, CALIFORNIA

FIGURE 2
AEI PROJECT NO. 12649



NEIGHBORING PROPERTY
(GASOLINE DISPENSING STATION)

BH-O @ 8' (ug/L)	
TCE	230
PCE	150
CDCE	62
BH-O @ 20'	
TCE	42
PCE	29
CDCE	13

BH-O @ 4' (mg/kg)	
TCE	0.013
PCE	0.02
VC	<0.005
DCE	<0.005
TDCE	<0.005
CDCE	<0.005

SHED

BUILDING

FENCED-IN
DIRT SURFACE
YARD

CORRUGATED STEEL BUILDING B
(APPROX. 1,750 SQ. FT.)

BRICK BUILDING A
(APPROX. 10,576 SQ. FT.)

NEIGHBORING PROPERTY
(STORAGE AREA)

PARCEL B
(38,524 SQ. FT.)
J & A TRUCK REPAIR

PARCEL A
(17,268 SQ. FT.)
WOOD PALLET
RECYCLING CENTER

AUTOMOTIVE PARTS
CLEANING BINS

POPLAR STREET

UNION STREET

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)
- PROPOSED SOIL BORING LOCATIONS (SB-1 - SB-4)

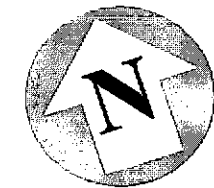
BH-O @ 4'	Concentration (mg/kg) or (ug/L)
TCE = trichloroethylene	0.013
PCE = tetrachloroethylene	0.02
VC = vinyl chloride	<0.005
DCE = 1,1-dichloroethylene	<0.005
TDCE = trans 1,2-dichloroethylene	<0.005
CDCE = cis 1,2-dichloroethylene	<0.005

*Refer to Table 4 for groundwater grab sample analytical data
*Refer to Table 5 for soil analytical data

0 15 30 60

SCALE 1" = 30'

AEI CONSULTANTS	
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA	
PROPOSED SOIL BORING LOCATIONS	
2221 UNION STREET OAKLAND, CALIFORNIA	FIGURE 3 AEI PROJECT NO. 12649



POPLAR STREET

UNION STREET

NEIGHBORING PROPERTY
(GASOLINE DISPENSING STATION)

BUILDING

FENCED-IN
DIRT SURFACE
YARD

SHED

PARKING AREA

PARCEL B
(38,524 SQ. FT.)
J & A TRUCK REPAIR

CORRUGATED STEEL BUILDING B
(APPROX. 1,750 SQ. FT.)

PARCEL A
(17,268 SQ. FT.)
WOOD PALLET
RECYCLING CENTER

BRICK BUILDING A
(APPROX. 10,576 SQ. FT.)

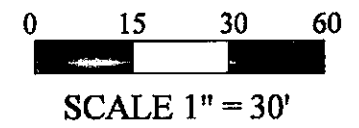
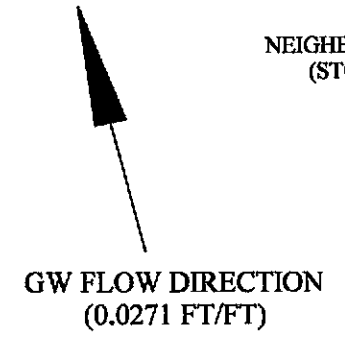
AUTOMOTIVE PARTS
CLEANING BINS

NEIGHBORING PROPERTY
(STORAGE AREA)

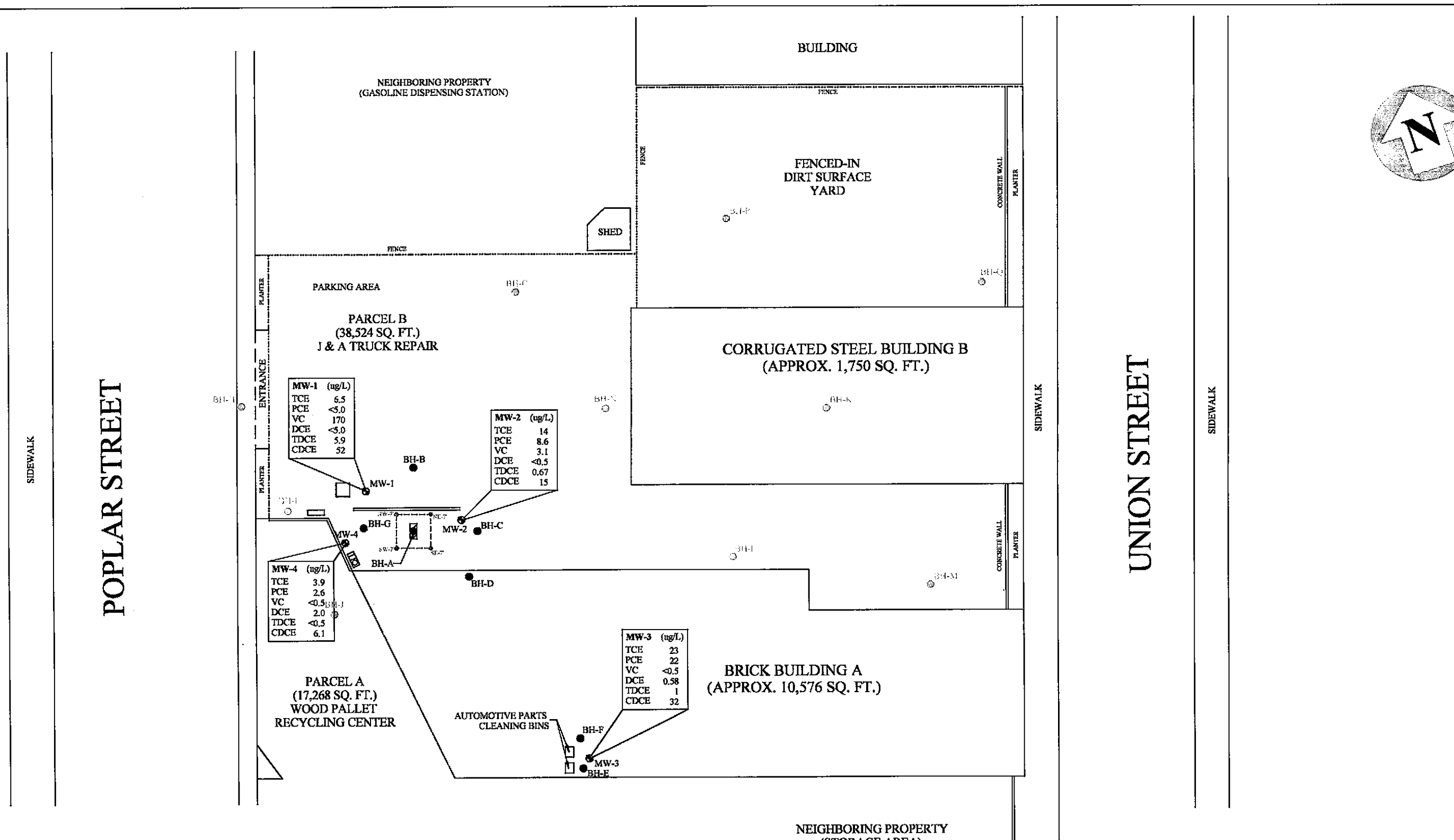
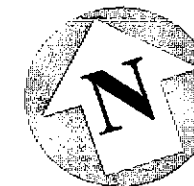
BUILDING

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)
- (19.56) GROUNDWATER ELEVATION FT AMSL (08/11/05)



AEI CONSULTANTS 2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA	
GROUNDWATER ELEVATIONS	
2221 UNION STREET OAKLAND, CALIFORNIA	FIGURE 4 AEI PROJECT NO. 12649



MW-1 (ug/L)

TCE	6.5
PCE	<5.0
VC	170
DCE	<5.0
TDCE	5.9
CDCE	52

MW-2 (ug/L)

TCE	14
PCE	8.6
VC	3.1
DCE	<0.5
TDCE	0.67
CDCE	15

MW-4 (ug/L)

TCE	3.9
PCE	2.6
VC	<0.5
DCE	2.0
TDCE	<0.5
CDCE	6.1

MW-3 (ug/L)

TCE	23
PCE	22
VC	<0.5
DCE	0.58
TDCE	1
CDCE	32

MW-3 Concentration (ug/L)

TCE = trichloroethylene	23
PCE = tetrachloroethylene	22
VC = vinyl chloride	<0.5
DCE = 1,1-dichloroethylene	0.58
TDCE = trans 1,2-dichloroethylene	1
CDCE = cis 1,2-dichloroethylene	32

- 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)

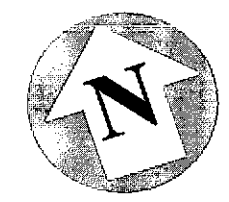


SCALE 1" = 30'

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

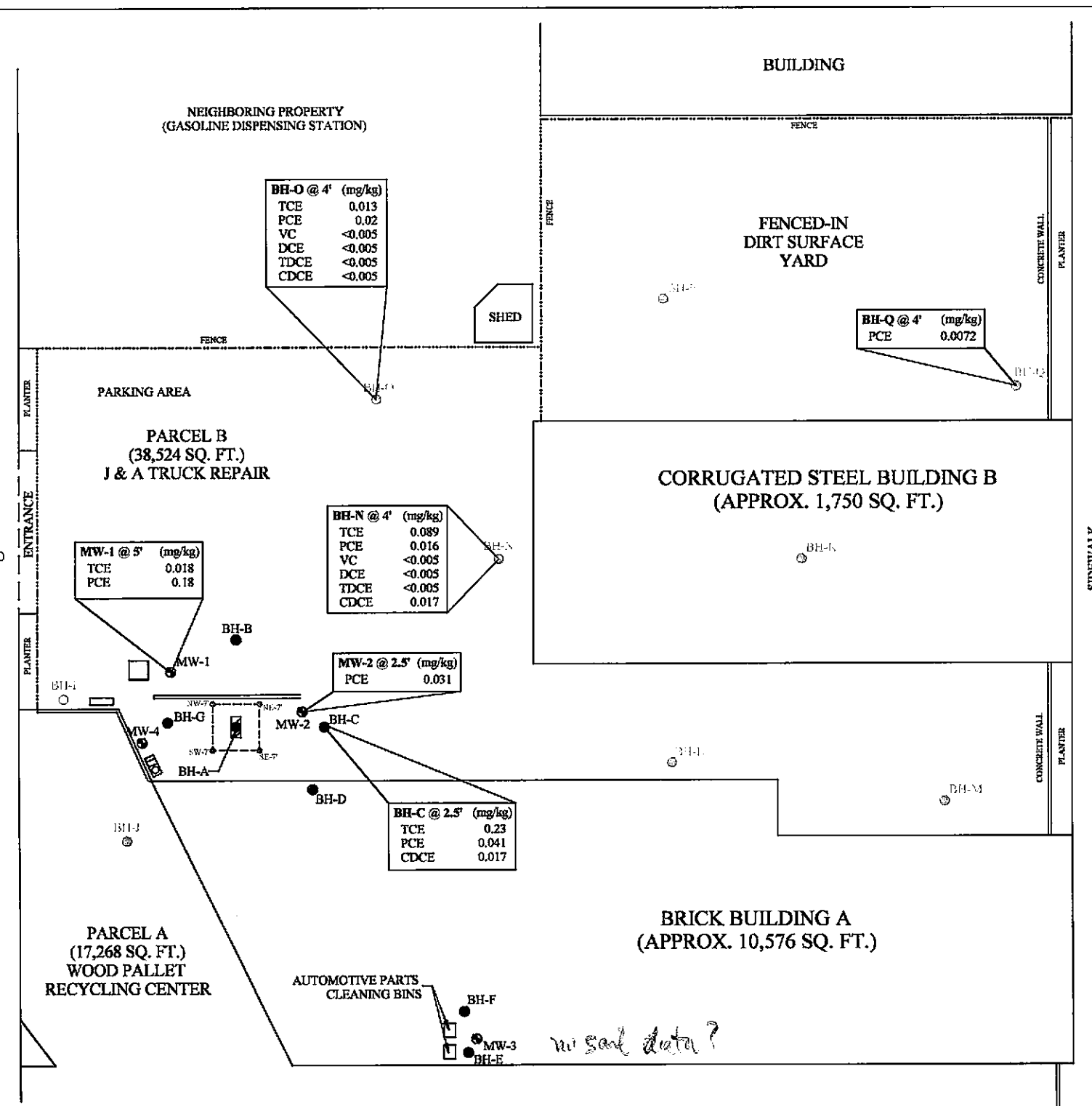
GROUNDWATER ANALYTICAL DATA (08/11/05)

2221 UNION STREET OAKLAND, CALIFORNIA	FIGURE 5 AEI PROJECT NO. 12649
--	-----------------------------------



POPLAR STREET

UNION STREET



BH-O @ 4' (mg/kg)
 TCE 0.013
 PCE 0.02
 VC <0.005
 DCE <0.005
 TDCE <0.005
 CDCE <0.005

BH-Q @ 4' (mg/kg)
 PCE 0.0072

MW-1 @ 5' (mg/kg)
 TCE 0.018
 PCE 0.18

BH-N @ 4' (mg/kg)
 TCE 0.089
 PCE 0.016
 VC <0.005
 DCE <0.005
 TDCE <0.005
 CDCE 0.017

MW-2 @ 2.5' (mg/kg)
 PCE 0.031

BH-C @ 2.5' (mg/kg)
 TCE 0.23
 PCE 0.041
 CDCE 0.017

no soil data?

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)

BH-O @ 4'	Concentration (mg/kg)
TCE = trichloroethylene	0.013
PCE = tetrachloroethylene	0.02
VC = vinyl chloride	<0.005
DCE = 1,1-dichloroethylene	<0.005
TDCE = trans 1,2-dichloroethylene	<0.005
CDCE = cis 1,2-dichloroethylene	<0.005
*Refer to Table 5 for additional soil analytical data	



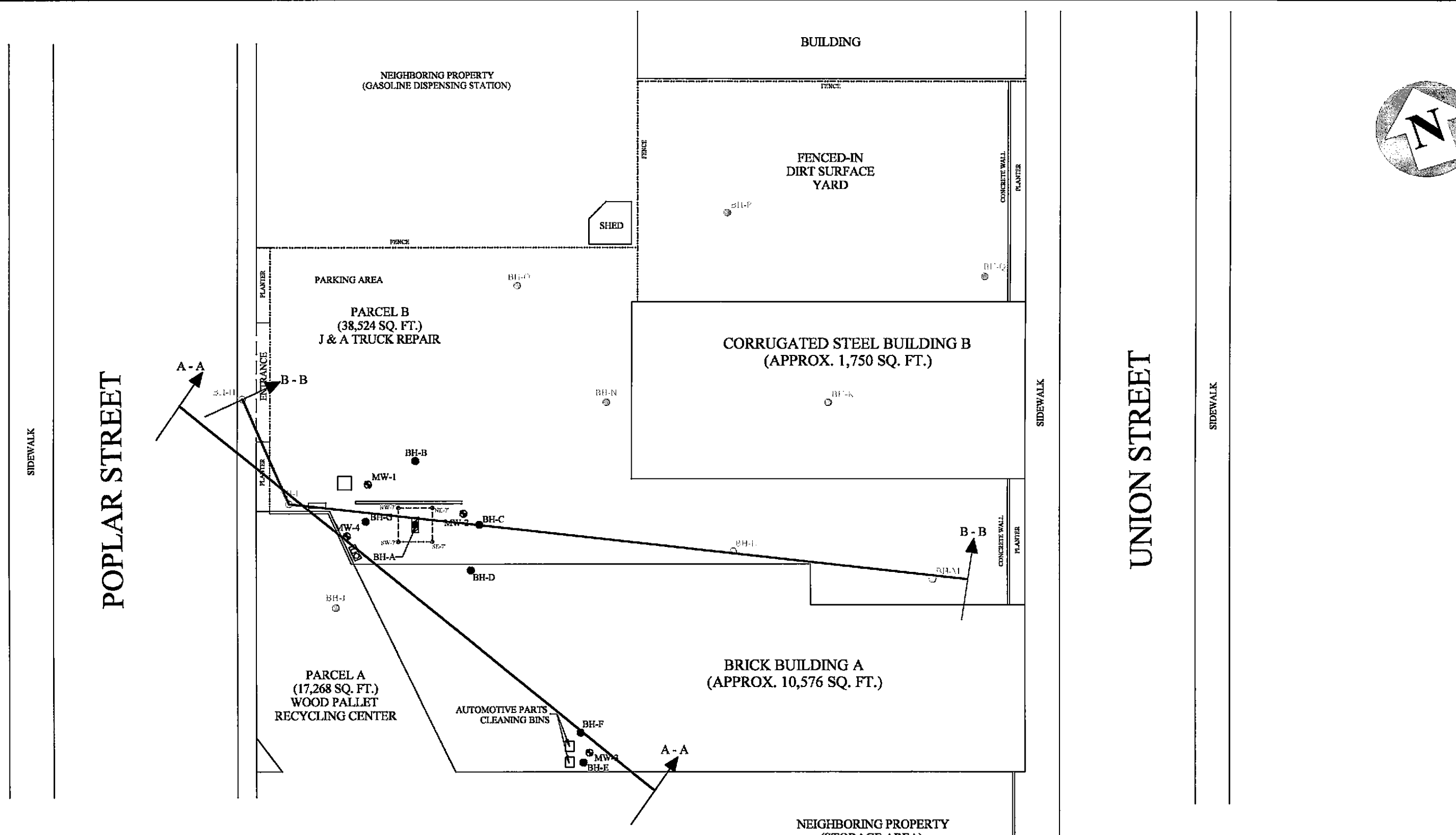
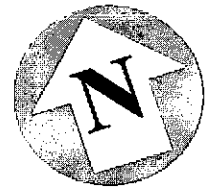
SCALE 1" = 30'

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

SOIL ANALYTICAL DATA

2221 UNION STREET
 OAKLAND, CALIFORNIA

FIGURE 6
 AEI PROJECT NO. 12649



LEGEND

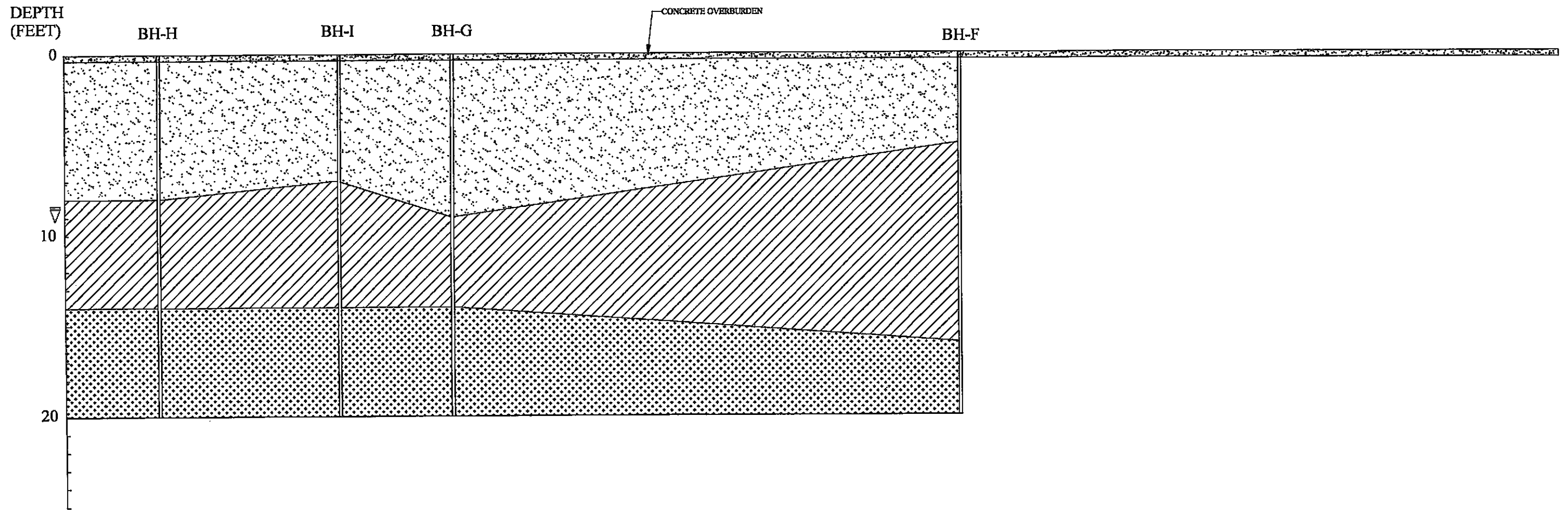
- ⊕ MONITORING WELL LOCATION
- SOIL BORING LOCATION BH-A TO BH-G (07/12/99)
- ⊙ SOIL BORING LOCATION BH-H TO BH-Q (08/07/02)
- CONFIRMATORY SOIL SAMPLE BOEX (11/15/99)

0 15 30 60

SCALE 1" = 30'

AEI CONSULTANTS 2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA	
CROSS SECTION DIRECTION	
2221 UNION STREET OAKLAND, CALIFORNIA	FIGURE 7 AEI PROJECT NO. 12649

LITHOLOGIC CROSS SECTION (A - A)



NON-NATIVE FILL MATERIAL



ML = GRAVELY SILT



ML = SANDY SILT

AEI CONSULTANTS

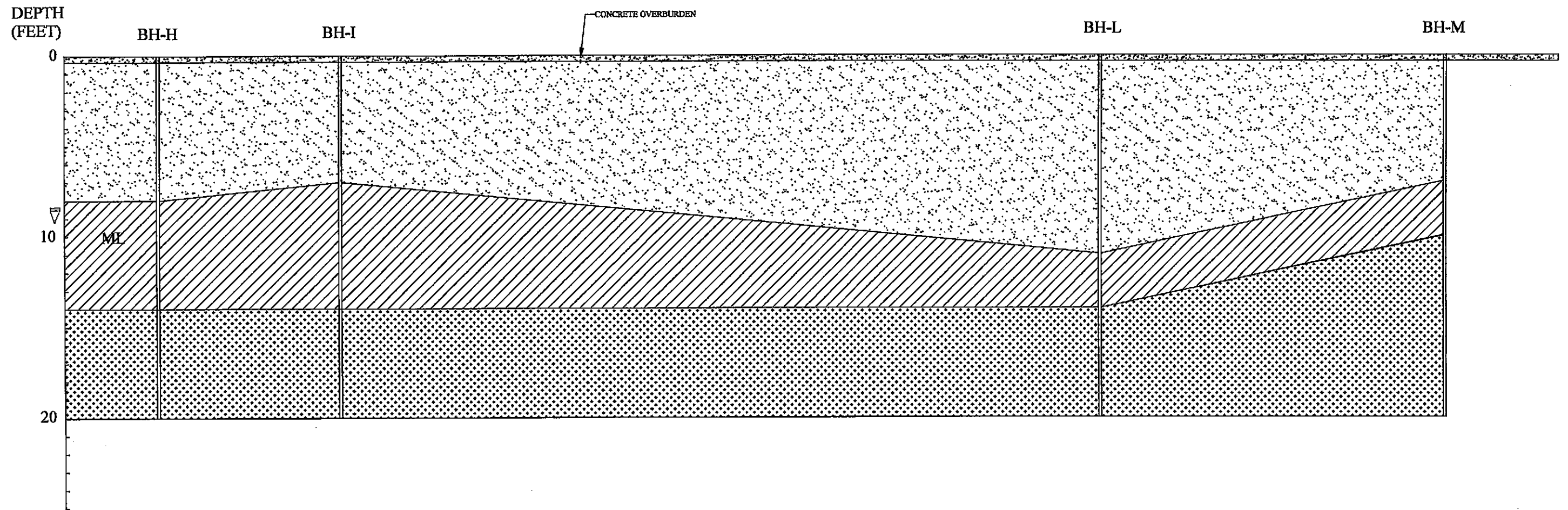
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK, CA

LITHOLOGIC CROSS SECTION A - A


2221 UNION STREET
OAKLAND, CALIFORNIA


FIGURE 8
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 9 AEI PROJECT NO. 12649

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 Diameter (inches)	DWFE (ft bgs)	Static Depth to Water (ft bgs)	Top of Casing 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

All monitoring wells constructed with schedule 40 PVC well casing

*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	Top of Well Casing 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
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
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
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

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

Notes

ft amsl = feet above mean sea level

ft bgs = feet below ground surface

na = data not available

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

TABLE 3: Groundwater Sample Analytical Data for Chlorinated Volatile Organic Compounds (CVOCs)

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

Sample ID	Sample Collection Date	DTW (ft bgs)	VC (µg/L)	1, 1-DCE (µg/L)	trans 1, 2-DCE (µg/L)	cis 1, 2-DCE (µg/L)	1, 1-DCA (µg/L)	1, 2-DCA (µg/L)	TCE (µg/L)	PCE (µg/L)	Chloro Ethane (µg/L)	Other CVOCs (µg/L)
MW-1	9/2/1999	8.81	<1	<1	<1	3.9	58	<1	3.2	9.8	<1	<1 - <10
	11/2/1999	5.94	<1	<1	3.4	17	1.7	<1	15	100	<1	<1 - <10
	2/7/2000	3.55	<5.0	<5.0	<5.0	8	<5.0	<5.0	160	510	<5.0	<5 - <20
	5/16/2000	3.88	<5.0	<5.0	<5.0	10	<5.0	<5.0	73	260	<5.0	<5 - <20
	8/8/2000	5.79	17	<0.5	8.7	21	1.2	<0.5	19	38	<0.5	<0.5 - <5
	11/30/2000	4.14	4.2	<2.5	<2.5	9	<2.5	<2.5	45	110	<2.5	<2.5 - <25
	8/8/2002	5.94	130	<5.0	6.3	18	<5.0	<5.0	49	78	<5.0	<5 - <50
	8/11/2005	5.59	170	<5.0	5.9	52	<5.0	<5.0	6.5	<5.0	<5.0	<5 - <10
MW-2	9/2/1999	6.29	<1	<1	<1	1.7	<1	<1	4.5	48	<1	<1 - <10
	11/2/1999	6.01	<1	<1	<1	1.4	<1	<1	9.5	110	<1	<1 - <10
	2/7/2000	4.12	<2.5	<2.5	<2.5	6.6	<2.5	<2.5	21	200	<2.5	<2.5 - <10
	5/16/2000	4.24	<10	<10	<10	74	<10	<10	220	820	<10	<10 - <40
	8/8/2000	5.68	<5.0	<5	<5	33	<5	<5	82	280	<5	<5 - <20
	11/30/2000	4.78	<10	<10	<10	130	<10	<10	360	660	<10	<10 - <10
	8/8/2002	5.90	2.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
	8/11/2005	5.51	3.1	<0.5	0.67	15	<0.5	<0.5	14	8.6	<0.5	0.53*
MW-3	9/2/1999	6.26	<0.5	<0.5	<0.5	34	22	<0.5	21	38	<0.5	<0.5 - <5
	11/2/1999	5.74	<0.5	<0.5	<0.5	35	22	<0.5	21	59	<0.5	<0.5 - <5
	2/7/2000	3.06	<0.5	<0.5	<0.5	22	8.5	<0.5	13	56	<0.5	<0.5 - <5
	5/16/2000	3.80	<1	<1	<1	<1	5.3	<1	8.7	54	<1	<1 - <10
	8/8/2000	3.54	<1	<1	<1	17	12	<1	11	74	<1	<1 - <4
	11/30/2000	3.55	<1	<1	<1	25	14	<1	14	63	<1	<1 - <10
	8/8/2002	3.53	<2.5	<2.5	<2.5	25	17	<2.5	19	58	<2.5	<2.5 - <25
	8/11/2005	3.38	<0.5	0.58	1	32	11	<0.5	23	22	<0.5	<0.5 - <1

TABLE 3: Groundwater Sample Analytical Data for Chlorinated Volatile Organic Compounds (CVOCs)

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

Sample ID	Sample Collection Date	DTW (ft bgs)	VC (µg/L)	1, 1-DCE (µg/L)	trans 1, 2-DCE (µg/L)	cis 1, 2-DCE (µg/L)	1, 1-DCA (µg/L)	1, 2-DCA (µg/L)	TCE (µg/L)	PCE (µg/L)	Chloro Ethane (µg/L)	Other CVOCs (µg/L)
MW-4	11/2/1999	5.86	6.3	2.7	<0.5	21	14	2.1	0.74	0.68	12	<0.5 - <5
	2/7/2000	3.66	6	0.64	<0.5	18	8.1	<0.5	4.1	14	0.71	<0.5 - <5
	5/16/2000	3.89	0.75	<0.5	<0.5	12	19	<0.5	13	24	<0.5	<0.5 - <5
	8/8/2000	5.77	9.6	1.8	<0.5	17	8.3	1.9	7.4	2.1	3.1	<0.5 - <5
	11/30/2000	4.15	<0.5	<0.5	<0.5	2.8	8.3	<0.5	6.9	30	<0.5	4.6**
	8/8/2002	6.33	0.89	<0.5	<0.5	13	28	<0.5	12	19	<0.5	<0.5 - <5
	8/11/2005	5.79	<0.5	2	<0.5	6.1	11	<0.5	3.9	2.6	<0.5	<0.5 - <1

Notes

All groundwater 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 (<) followed by the laboratory method detection limit (MDL)

µg/L = microgram per liter

CVOCs = chlorinated volatile organic compounds

DWT = depth to water ft bgs

ft bgs = feet below ground surface

PCE = perchloroethylene or tetrachloroethylene

DCE = Dichloroethylene

DCA = Dichloroethane

na = data not available

TCE = trichloroethylene

TCA = trichloroethane

VC = Vinyl Chloride

ESL = Environmental Screening Level¹

* = 1, 2 Dichloropropane

1) Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (4th Edition, February 2005)

** = 1, 1, 1-Trichloroethane

Prepared by the San Francisco Bay Regional Water Quality Control Board (RWQCB)

Volume 1: Summary Tier 1 Lookup Tables (Interim Final - February 2005)

2) Table A: Shallow Soil (≤3M BGS) - Water IS a Current or Potential Source of Drinking Water for Groundwater (µg/L)

3) Table B: Shallow Soil (≤3M BGS) - Water IS NOT a Current or Potential Source of Drinking Water for Groundwater (µg/L)

TABLE 4: Groundwater Grab Sample Analytical Data for Chlorinated Volatile Organic Compounds (CVOCs)

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

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	DWFE (ft bgs)	Boring Terminus (ft bgs)	VC (µg/L)	1, 1-DCE (µg/L)	trans 1, 2-DCE (µg/L)	cis 1, 2-DCE (µg/L)	1, 1-DCA (µg/L)	1, 2-DCA (µg/L)	TCE (µg/L)	PCE (µg/L)	1, 1, 1-TCA (µg/L)	Chloroform (µg/L)	Other CVOCs (µg/L)
BH-A	07/12/99	3	3	3	<25	<25	<25	190	<25	<25	1500	1300	<25	<150	<25 - <250
BH-B	07/12/99	na	4	10	<5	<25	21	130	<5	<25	170	33	<25	<30	<5 - <30
BH-C*	07/12/99	na	4	10	<12	<12	<12	<12	<12	<12	21	35	<12	<12	<12 - <25
BH-D	07/12/99	na	4	10	<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	4	10	<25	<25	<25	46	<25	<25	33	42	<25	<150	<25 - <250
BH-F	07/12/99	na	4	10	<0.5	<0.5	<0.5	8.8	11	<0.5	6.4	9.2	<0.5	<3	<0.5 - <5
BH-G*	07/12/99	na	4	10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5 - <10
BH-H	08/07/02	20	17	20	<0.5	0.77	<0.5	1.2	30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
BH-I	08/07/02	20	17	20	<0.5	3	<0.5	3.2	55	0.92	<0.5	<0.5	<0.5	1.7	<0.5 - <5
BH-J	08/07/02	20	7	20	<0.5	<0.5	<0.5	<0.5	0.79	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
BH-K	08/07/02	20	17	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 20	3	20	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	1.4 <0.5	<0.5 <0.5	<0.5 <0.5	3.9 <0.5	26 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 - <5 <0.5 - <5
BH-M	08/07/02	20	17	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	14	16	<0.5	<0.5	<0.5	16	<0.5	<0.5	32	42	<0.5	<0.5	<0.5 - <5
BH-O	08/07/02	8 20	14	20	<2.5 <0.5	<2.5 <0.5	<2.5 <0.5	62 13	<2.5 0.52	<2.5 <0.5	230 42	150 29	<2.5 <0.5	<2.5 <0.5	<2.5 - <25 <0.5 - <5

TABLE 4: Groundwater Grab Sample Analytical Data for Chlorinated Volatile Organic Compounds (CVOCs)

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

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	DWFE (ft bgs)	Boring Terminus (ft bgs)	VC (µg/L)	1, 1-DCE (µg/L)	trans 1, 2-DCE (µg/L)	cis 1, 2-DCE (µg/L)	1, 1-DCA (µg/L)	1, 2-DCA (µg/L)	TCE (µg/L)	PCE (µg/L)	1, 1, 1-TCA (µg/L)	Chloroform (µg/L)	Other CVOCs (µg/L)
BH-P	08/07/02	15	3	16	<0.5	<0.5	<0.5	<0.5	0.76	<0.5	0.59	<0.5	<0.5	<0.5	<0.5 - <5
BH-Q	08/07/02	20	17	20	<0.5	<0.5	<0.5	<0.5	0.99	<0.5	0.98	2.5	<0.5	<0.5	<0.5 - <5
MW-1	08/27/99	na	4	20	130	<5	6.3	18	<5	<5	49	78	<5	<5	<5 - <50
MW-2	08/27/99	na	4	20	2.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
MW-3	08/27/99	na	3	20	<2.5	<2.5	<2.5	25	17	<2.5	19	58	<2.5	<2.5	<2.5 - <25
MW-4	10/27/99	na	3	20	0.89	<0.5	<0.5	13	28	<0.5	12	19	0.54	<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.

Non-detectable concentrations are noted by a less than sign (<) followed by the laboratory method detection limit (MDL)

mg/kg = milligrams per kilogram of soil

CVOCs = chlorinated volatile organic compounds

DWFE = depth water first encountered ft bgs

ft bgs = feet below ground surface

PCE = perchloroethylene or tetrachloroethylene

DCE = Dichloroethylene

DCA = Dichloroethane

na = data not available

TCE = trichloroethylene

TCA = trichloroethane

VC = Vinyl Chloride

ESL = Environmental Screening Level¹

~ means approximate groundwater sample collection depth

1) Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (4th Edition, February 2005)

Prepared by the San Francisco Bay Regional Water Quality Control Board (RWQCB)

Volume 1: Summary Tier 1 Lookup Tables (Interim Final - February 2005)

2) Table A: Shallow Soil (≤3M BGS) - Water IS a Current or Potential Source of Drinking Water for Groundwater (µg/L)

3) Table B: Shallow Soil (≤3M BGS) - Water IS NOT a Current or Potential Source of Drinking Water for Groundwater (µg/L)

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

TABLE 5: Soil Sample Analytical Data for Chlorinated Volatile Organic Compounds (CVOCs)

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

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	DWFE (ft bgs)	Boring Terminus (ft bgs)	VC (mg/kg)	1, 1-DCE (mg/kg)	trans 1, 2-DCE (mg/kg)	cis 1, 2-DCE (mg/kg)	1, 1-DCA (mg/kg)	1, 2-DCA (mg/kg)	TCE (mg/kg)	PCE (mg/kg)	1, 1, 1-TCA (mg/kg)	Chloroform (mg/kg)	Other CVOCs (mg/kg)
BH-A @ 1'	06/22/99	1	3	3	<11	<11	<11	<11	<11	<11	<11	390	<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	4	10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.053	<0.005	<0.005	<0.005 - <0.010
BH-C	07/12/99	2.5	4	10	<0.005	<0.005	<0.005	0.017	<0.005	<0.005	0.23	0.041	<0.005	<0.005	<0.005 - <0.025
BH-D	07/12/99	2.5	4	10	<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	4	10	<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	4	10	<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	4	10	<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 12	17	20	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 - <0.010 <0.005 - <0.010
BH-I	08/07/02	8 12	17	20	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 - <0.010 <0.005 - <0.010
BH-J	08/07/02	4 12	7	20	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 - <0.010 <0.005 - <0.010
BH-K	08/07/02	4 12	17	20	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 - <0.010 <0.005 - <0.010
BH-L	08/07/02	3	3	20	<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 12	17	20	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	0.017 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 - <0.010 <0.005 - <0.010

TABLE 5: Soil Sample Analytical Data for Chlorinated Volatile Organic Compounds (CVOCs)

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

Soil Boring	Sample Collection Date	Sample Depth (ft bgs)	DWFE (ft bgs)	Boring Terminus (ft bgs)	VC (mg/kg)	1, 1-DCE (mg/kg)	trans 1, 2-DCE (mg/kg)	cis 1, 2-DCE (mg/kg)	1, 1-DCA (mg/kg)	1, 2-DCA (mg/kg)	TCE (mg/kg)	PCE (mg/kg)	1, 1, 1-TCA (mg/kg)	Chloroform (mg/kg)	Other CVOCs (mg/kg)
BH-N	08/07/02	4	14	16	<0.005	<0.005	<0.005	0.017	<0.005	<0.005	0.089	0.016	<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	14	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	0.02	<0.005	<0.005	<0.005 - <0.010
BH-P	08/07/02	4	3	16	<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	17	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0072	<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	4	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.018	0.18	<0.005	<0.005	<0.005 - <0.010
MW-2	08/27/99	2.5	4	20	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.031	<0.005	<0.005	<0.005 - <0.010
MW-3	08/27/99	2.5	3	20	<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	3	20	<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 (<) followed by the laboratory method detection limit (MDL)

mg/kg = milligrams per kilogram of soil

CVOCs = chlorinated volatile organic compounds

DWFE = depth water first encountered

ft bgs = feet below ground surface

PCE = perchloroethylene or tetrachloroethylene

DCE = Dichloroethylene

DCA = Dichloroethane

na = not analyzed or data not available

TCE = trichloroethylene

TCA = trichloroethane

VC = Vinyl Chloride

ESL = Environmental Screening Level¹

1) Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (4th Edition, February 2005)

Prepared by the San Francisco Bay Regional Water Quality Control Board (RWQCB)

Volume 1: Summary Tier 1 Lookup Tables (Interim Final - February 2005)

2) Table A: Shallow Soil (≤3M BGS) - Water IS a Current or Potential Source of Drinking Water for Soil for Commercial / Industrial Land Use Only (mg/kg)

3) Table B: Shallow Soil (≤3M BGS) - Water IS NOT a Current or Potential Source of Drinking Water for Soil for Commercial / Industrial Land Use Only (mg/kg)

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY

DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

April 29, 2005

Mr. Alejandro Aguilar
829 Cayuga Ave.
San Francisco, CA 94112

Dear Mr. Aguilar:

Subject: Toxics Case RO0002488, California Break and Clutch, 2221 Union St.,
Oakland, CA 94607

Alameda County Environmental Health staff has reviewed the case file for the subject site and determined that additional information is necessary to progress toward case closure. We request that you address the following technical comments and submit the technical reports requested below.

TECHNICAL COMMENTS

1. At this time, it appears that no active remediation is required to address the chlorinated solvents in soil and groundwater at the site.
2. Groundwater monitoring must continue at the site, minimally, on a semi-annual schedule. We note that the last reported monitoring at the site was in 8/02. Please perform groundwater monitoring according to the schedule below.
3. Please provide cross-sectional diagrams in two directions as a means to better understand the hydrogeology near and at this site. You should address this as requested below.
4. The concentrations of chlorinated solvents in boring BH-O were elevated and will require further investigation. Please propose method(s) to clarify the significance of this data and determine the extent of HVOC contamination in this area.

TECHNICAL REPORT REQUEST

- June 15, 2005- 1st 2005 Semi-annual monitoring report, cross-section diagrams and proposal to investigate contamination near BH-O.
- December 15, 2005- 2nd 2005 Semi-annual monitoring report

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: files, D. Drogos
Mr. R. Kitay, Aqua Science Engineers, 208 W. El Pintado, Danville, CA 94526
Mr. R. Gebauer, United Commercial Bank, 711 Van Ness Ave., SF, CA 94102
2221 UnionSt 4_29_05

TABLE ONE

Summary of Chemical Analysis of Soil Samples after Soil Remediation Activities
 VOCs and SVOCs
 All results are in parts per billion

SAMPLE NAME	DATE COLLECTED	PGE	TCE	REMAINING VOCs	ALL SVOCs
<u>BOTTOM OF EXCAVATION</u>					
BOEX-NE-7'	11/18/99	< 5.0	< 5.0	< 5 - < 10	NA
BOEX-SW-7'	11/18/99	< 5.0	< 5.0	< 5 - < 10	NA
BOEX-NW-7'	11/18/99	< 5.0	< 5.0	< 5 - < 10	NA
BOEX-SE-7'	11/18/99	< 5.0	< 5.0	< 5 - < 10	NA
<u>STOCKPILED SOIL</u>					
STKP (A-C)	11/18/99	180	14	< 11 - < 110	< 0.02 - < 2.0
OAKLAND RBCA		92,000	330,000	VARIABLES	VARIABLES

NOTES:

Non-detectable concentrations are noted by the less than sign (<) followed by the laboratory detection limit.

Oakland Risk Based Corrective Action (RBCA) cleanup goal for vapor intrusion from subsurface soil to an INDOOR AIR Scenario.