aqua science engineers inc.

December 4, 2003

Mr. Amir K. Gholami
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

SUBJECT: ENCLOSED WORKPLAN
Oakland Truck Stop
8255 San Leandro Street
Oakland, California

Dear Mr. Gholami:

Enclosed please find the workplan for the Oakland Truck Stop project located at 8255 San Leandro Street in Oakland, California. This workplan covers all of the items we previously discussed. However, no geologic cross-section is included. The reason for this is that the previous elevation surveys did not cover the soil borings. Since it would not have been worth the cost to do an elevation survey for just the soil borings alone, and since using the borings would be needed to prepare a meaningful geologic cross-section, ASE decided that it would not be worth the effort to prepare a cross-section that would be of no significant benefit. ASE will prepare the cross-section as part of the upcoming assessment, which will be more meaningful since deeper lithologic information will become available. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Robert E. Kitay, ~~R.G.~~, R.E.A.
Senior Geologist

cc: Mr. Nissan Saidian, 5733 Medallion Court, Castro Valley, CA 94522 aqua science engineers inc.

December 4, 2003

WORKPLAN
for
ADDITIONAL SOIL AND GROUNDWATER ASSESSMENT
at
Oakland Truck Stop
8255 San Leandro Street
Oakland, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
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1.0 INTRODUCTION

This submittal presents Aqua Science Engineers, Inc. (ASE)'s workplan for additional soil and groundwater assessment at the Oakland Truck Stop located at 8255 San Leandro Street in Oakland, California (Figure 1). The proposed site assessment activities were initiated by Mr. Nissan Saidian, owner of the property, as requested by the Alameda County Health Care Services Agency (ACHCSA) based on the requirements stated during a meeting on October 21, 2003.

2.0 BACKGROUND INFORMATION

The subject site is currently a truck stop that has been in operation since the early 1960s.

2.1 March 1998 Underground Storage Tank (UST) Removal

In March 1998, W.A. Craig, Inc. removed one 500-gallon waste oil underground storage tank (UST) and two 4,000-gallon gasoline USTs from the site. Up to 460 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-G), 930 ppm total petroleum hydrocarbons as diesel (TPH-D), 5.8 ppm benzene, 1.7 ppm toluene, 8.2 ppm ethyl benzene, 3.3 ppm total xylenes and 0.64 ppm methyl tertiary butyl ether (MTBE) were detected in soil samples collected from the gasoline UST excavations at the time of the removal. Up to 3,600 ppm TPH-G, 21,000 ppm TPH-D, 2.1 ppm benzene, 8 ppm toluene, 18 ppm ethyl benzene, 15 ppm total xylenes and 8.1 ppm MTBE were detected in soil samples collected from the waste oil UST excavation. Water samples collected from the UST excavations contained up to 5,500 parts per billion (ppb) TPH-G, 880,000 ppb TPH-D, 580 ppb benzene, 12 ppb toluene, 180 ppb ethyl benzene, 39 ppb total xylenes and 1,900 ppb MTBE. W.A. Craig reported that all contaminated soil from both the gasoline and waste oil UST excavations were removed based on visual, olfactory and photoionization detector readings. This contaminated soil was transported from the site for disposal in a Class II landfill. The excavations were backfilled with clean imported material.

2.2 February 1999 Soil and Groundwater Assessment

In February 1999, Penn Environmental drilled 13 soil borings at the site and constructed monitoring wells in four of the borings (Figure 2, from Penn Environmental report). Relatively low hydrocarbon concentrations were detected in soil samples collected near the former waste oil USTs, and relatively low to moderate hydrocarbon concentrations were detected in groundwater samples collected from these borings. Soil samples collected from borings B-4, B-6, B-8 and MW-3 contained TPH-G concentrations over 100 ppm and benzene concentrations over 1 ppm. All of these borings are in the vicinity of the existing gasoline USTs. Soil samples collected from the remaining borings contained much lower TPH-G and benzene, toluene, ethyl benzene, and total xylenes (collectively known as BTEX) concentrations in soil. Soil samples collected from all of the borings contained TPH-D concentrations over 100 ppm except for samples collected from borings B-7 and B-9, at the southern and western corners of the site. Up to 68,000 ppb TPH-G, 62,000 ppb TPH-D, 24,000 ppb benzene, 390 ppb toluene, 2,000 ppb ethyl benzene, 2,300 ppb total xylenes and 28,000 ppb MTBE were detected in groundwater samples collected from these monitoring wells/borings. Once again, the highest TPH-G and BTEX concentrations were in the wells/borings drilled near the existing USTs, although the highest TPH-D concentrations (between 25,000 ppb and 62,000 ppb) were detected in groundwater samples collected from monitoring well MW-1 and borings B-1 and B-2, all in the vicinity of the dispensers. Elevated MTBE concentrations (up to 7,800 ppb) were also detected in groundwater samples collected from borings in the dispenser area.

2.3 August 1999 Quarterly Groundwater Monitoring

In August 1999, ASE performed quarterly groundwater monitoring for the site. Monitoring well MW-1 contained free-floating diesel. Groundwater samples collected from monitoring well MW-3 contained 56,000 ppb TPH-G, 10,000 ppb TPH-D, 17,000 ppb benzene, 2,600 ppb toluene, 2,600 ppb ethyl benzene, 1,200 ppb total xylenes and 6,100 ppb MTBE. Much lower hydrocarbon concentrations were detected in groundwater samples collected from monitoring wells MW-2 and MW-4, located near the former waste oil USTs. In addition, the groundwater samples collected from monitoring wells MW-2 and MW-4, near the former waste oil USTs, were also analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated bi-phenols (PCBs), cadmium, chromium, lead, nickel and zinc. No SVOCs, PCBs or VOCs were detected in these samples other than 11 ppb isopropyl benzene. The only metal concentration that exceeded California Department of Health Services (DHS) maximum contaminant levels (MCLs) for drinking water was lead in the groundwater sample collected from monitoring well MW-4 at 260 ppb. The groundwater flow direction was to the west. See Tables One and Two for tabulated results from this and subsequent groundwater samplings.

2.4 December 1999 Monitoring Well Installation

In December 1999, ASE constructed monitoring wells MW-5 and MW-6 at the site (Figure 3). Free-floating hydrocarbons were still present on the groundwater surface of monitoring well MW-1. High hydrocarbon concentrations, including benzene, ethyl benzene and MTBE concentrations exceeding DHS MCLs for drinking water, were detected in groundwater samples collected from monitoring well MW-2. Benzene concentrations in groundwater samples collected from monitoring wells MW-2 and MW-6 exceeded DHS MCLs for drinking water. The MTBE concentration in groundwater samples collected from monitoring wells MW-3, MW-4 and MW-5 also exceeded DHS MCLs for drinking water. MTBE was confirmed in monitoring well MW-3 by EPA Method 8260. Most of these concentrations were similar to previous results. No dissolved lead was detected in groundwater samples collected from monitoring well MW-4 this quarter. The groundwater flow direction was to the southwest.

2.5 March 2000 Quarterly Groundwater Monitoring

In March 2000, ASE conducted a groundwater monitoring event at the site. The analytical results from this sampling showed very similar hydrocarbon concentrations to the previous sampling results except that high MTBE concentrations (12,000 ppb) were detected in the groundwater sample collected from monitoring well MW-6. Free-floating hydrocarbons were still present in monitoring well MW-1.

2.6 May and June 2000 Soil and Groundwater Assessment

In May and June 2000, ASE drilled eight soil borings at the site (Figure 3). Soil samples collected from borings BH-A and BH-B contained TPH-G and TPH-D concentrations over 100 ppm. Boring BH-B also contained BTEX concentrations over 1 ppm, including 2.3 ppm benzene. Soil samples collected from borings BH-G and BH-H contained TPH-G over 100 ppm and over 1,000 ppm TPH-D; however, all of the BTEX concentrations were below 1 ppm. Soil samples collected from borings BH-C, BH-D, BH-E, and BH-F did not contain any significant concentrations of TPH-G, TPH-D or

BTEX. MTBE concentrations detected in soil samples collected from borings BH-C and BH-D exceeded 1 ppm. Lower concentrations of MTBE were detected in soil samples collected from borings BH-B, BH-G and BH-H. The analytical results are tabulated in Tables Three and Four.

Relatively high TPH-G, TPH-D and BTEX concentrations were detected in groundwater samples collected from borings BH-A and BH-B, west and southwest of the former USTs. Groundwater samples collected from these borings contained TPH-G as high as 51,000 ppb, TPH-D as high as 120,000 ppb and benzene as high as 4,000 ppb. The MTBE concentration in boring BH-A, which contained the highest BTEX concentrations, was only 46 ppb. Groundwater samples collected from borings BH-C, BH-D and BH-E, along the southern property line and south of the existing USTs, contained total petroleum hydrocarbons as motor oil (TPH-MO) as high as 11,000 ppb, MTBE as high as 42,000 ppb and tert-butyl alcohol (TBA) as high as 6,800 ppb. No TPH-G or BTEX was detected in the groundwater samples collected from these borings. A very high TPH-D concentration of 2,200,000 ppb was detected in groundwater samples collected from boring BH-G, near the pump island. TPH-G and MTBE were also detected in groundwater samples collected from boring BH-G at 120,000 ppb and 170 ppb, respectively. This boring is east of monitoring well MW-1, which contains free-floating hydrocarbons. The remaining two borings, BH-F and BH-H, both drilled in the eastern portion of the property, contained TPH-D and/or TPH-MO at concentrations as high as 1,400 ppb, but did not contain detectable concentrations of BTEX or oxygenates. These analytical results are tabulated in Tables Five and Six.

2.7 July 2002 Soil and Groundwater Assessment

In July 2002, ASE installed wells MW-7, MW-8 and MW-9 at the site (Figure 4). ASE also attempted to drill a soil boring on the eastern parking lane of San Leandro Street to define the extent of soil and groundwater contamination to the east. Several attempts were made but drilling was met with refusal at relatively shallow depths in each instance.

No compounds were detected in the soil sample collected from 10.5-feet below ground surface (bgs) in MW-7. The only hydrocarbon concentration detected in the soil sample collected from 11.0-feet bgs in MW-8 was 3.9 ppm TPH-D. The soil sample collected from 13.0-feet bgs in MW-9 contained 15 ppm TPH-MO, 0.0058 ppm MTBE and 0.0051 ppm TBA. No other hydrocarbons were detected in the soil samples analyzed. See Tables One and Two for tabulated results from this and subsequent groundwater samplings.

2.8 August 2002 Step Drawdown and Constant Rate Pumping Tests

In August 2002, step drawdown and 605-minute constant rate pumping tests were conducted by H_2O Geol of Livermore, California. Based on the results of the step-drawdown test, a pumping rate of 1 gallon per minute (gpm) was selected for the constant rate pumping test. Water was pumped from extraction well MW-9 and water levels were monitored in the remaining site wells during the duration of the test. The actual average pumping rate during the test was 1.08 gpm.

The pumping well (MW-9), as well as monitoring wells MW-3, MW-6 and MW-8 experienced drawdown in response to the test. The distance drawdown relationship among the monitoring wells in response to the pumping was inconsistent with a drawdown of 0.15-feet in monitoring well MW-3 located 49.14-feet from the pumping well and a drawdown of 0.59-feet in monitoring well MW-8 located 65.8-feet from the pumping well. This apparent anisotropy is attributed to the presence of the tank excavation and a pipeline trench along the southeast property boundary. The hydraulic conductivity of the wells that experienced drawdown ranged from 2.45 feet/day to 7.6 feet/day. These hydraulic conductivity calculations, however, represent a combination of the hydraulics of the tank excavation and pipeline trench as well as the semi-confined silt sand aquifer.

Because of the influence from the tank backfill and pipeline trench, actual sustainable hydraulic properties for the site can not be calculated without conducting a very long pump test (over 12,000 minutes) and completely dewatering the excavation and pipeline trench, which may not be possible at all.

2.9 October 2002 Sensitive Receptor Survey, Tier I Risk-Assessment, and Corrective Action Plan

In October 2002, ASE conducted a sensitive receptor survey, a Tier I Risk-Assessment, and prepared a corrective action plan. ASE also presented the results of the July 2002 soil and groundwater assessment and August 2002 pump tests in this same report.

For the sensitive receptor survey, ASE researched whether any surface water bodies or water supply wells are located within 2,000-feet of the site. Directly behind the site lies a small, unnamed creek. This creek appears to provide drainage and is very heavily vegetated. Given the flat topography in the area and location of the San Francisco Bay, it is likely that this creek is tidally influenced. This is the likely explanation as to why the groundwater gradient beneath the site is highly variable. Three wells were identified within 2,000-feet of the site. One of the wells is used for industrial purposes and two are used for irrigation. No domestic or municipal water supply wells were located within 2,000-feet of the site.

The Tier I risk-assessment was conducted by comparing the concentrations detected in soil and groundwater at the site with Risk-Based Screening Levels (RBSLs) published in the "Application of Risk-Based Screening Levels and Decision Making to Sites With Impacted Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) dated December 2001. Since there are no domestic or municipal water supply wells in the site vicinity, and since it is unlikely that groundwater in the site vicinity will ever be used for drinking water, ASE compared the hydrocarbon concentrations detected at the site to RBSLs for sites where groundwater is not a current or potential source of drinking water.

Benzene, MTBE, TPH-G and TPH-D concentrations detected in groundwater samples collected from the site wells exceeded RBSLs for sites where groundwater is not a current or potential source of drinking water. ASE then compared the concentrations for these four compounds to the "indoor air impacts" concentrations in Table F-2 in Volume 2 of the RBSL document to determine whether the hydrocarbon concentrations detected at the site may be a threat to human health based on volatilization of hydrocarbons into indoor air. The benzene concentration detected in groundwater from monitoring well MW-3 exceeded the RBSL regardless of soil type. Based on the Tier I risk-assessment, the benzene concentration detected in groundwater samples collected from monitoring well MW-3 presents a threat to human health if a building were built on this location. TPH-G, TPH-D, benzene and MTBE concentrations detected in several wells at the site exceeded RBSLs for other non-human health criteria including ceiling values and aquatic life protection.

The corrective action plan (CAP) discussed potential remediation strategies for the site. Soil overexcavation, air sparging and soil vapor extraction, groundwater "pump and treat," in-situ bioremediation, and in-situ chemical oxidation were discussed as possible remediation alternatives. Of these alternatives, chemical oxidation, and specifically ozone sparging, was selected as the preferred remediation alternative.

2.10 March 2003 Workplan for an Ozone Sparging Test

In March 2003, ASE prepared a workplan to conduct an ozone sparging test. This workplan has been verbally approved by the ACHCSA but a written approval has not yet been received.

3.0 OCTOBER 21, 2003 MEETING

During a meeting attended by Mr. Robert Kitay of ASE and Mr. Amir Gholami of the ACHCSA on October 21, 2003, Mr. Gholami stated the following:

- The ASE workplan for an ozone sparging test dated March 18, 2003 has been approved. ASE needs a letter or other written documentation regarding this approval for the Underground Storage Tank Cleanup Fund.

- Further definition of both the horizontal and vertical extent of groundwater contamination is required. The proposed scope of work for this assessment is presented in this workplan below.

- A magnetometer or ground penetrating radar survey is required to confirm that no additional USTs exist in the subsurface at the site that could act as additional sources of contamination. The proposed scope of work for this task is presented in this workplan below.

- A subsurface conduit study is required. The proposed scope of work for this task is presented in this workplan below.

- Continued quarterly groundwater monitoring is required at the site until further notice. ASE will continue the quarterly groundwater sampling. ASE will propose a modification in the sampling plan in a separate document.

- Weekly bailing of free-floating product must continue in monitoring well MW-1 until such time that no measurable free-product is present. This task is currently being fulfilled by the station personnel and will continue as indicated.

- Cracked concrete in the vicinity of the diesel dispensers could be a possible source of the diesel contamination found in monitoring well MW-1. This concrete will be repaired by the property owner.

4.0 CONCEPTUAL SITE MODEL

The site has had releases of gasoline and diesel fuel from multiple locations. The two locations of primary concern were the release of gasoline (including benzene and MTBE) from the USTs near the southern property line as well as a significant release of diesel fuel in the vicinity of the dispensers. It is unknown whether the release of diesel fuel is related to a leak in the product piping or from surface spillage, but significant surface spillage has occurred in this area on a regular basis.

The groundwater flow direction at the site has been inconsistent, and is probably related to tidal influence from the deep utility line on the southern edge of the property with appears to connect to the creek behind the truck stop. It is not known at this time whether this line is a conduit for the movement of groundwater contamination but this line does appear to influence the movement of groundwater at the site.

The shallow soil at the site appears to have relatively low permeability, but groundwater appears in a deeper more permeable silty sand layer that is under hydraulic head (artesian non-flowing) conditions. This deeper zone lies approximately 15-feet bgs.

5.0 OUTLINE OF PROPOSED SCOPE OF WORK (SOW)

The purpose of this assessment is to further define the extent of soil and groundwater contamination at the site and to assess the risk associated with the presence of soil and groundwater contamination beneath the site. The scope of work for this project is to:

1) Review the files for the property directly south of the Oakland Truck Stop to determine whether there may already be data regarding groundwater contamination on this property. Present the results of this file review in a workplan addendum that will include proposed boring locations for this property if needed.

2) Research the location and depth of subsurface utilities in the site vicinity and determine whether any of these utility lines may be a potential conduit for the migration of groundwater contamination. ASE will pay particular attention the line on the southern property line that appears to be influencing groundwater conditions at the site. If needed based on this study, additional borings will be proposed to investigate potential impacts from these conduits.

3) Obtain a drilling permit from the Alameda County Public Works Agency.

4) Obtain access agreements from the property owners to the east of the site either under the BART tracks or between the BART tracks and Southern Pacific Railroad tracks. ASE will also obtain an access agreement to drill on the property south of the site if necessary based on our file review for that property.

5) Contract with a subsurface utility locating service to confirm that no additional USTs exist in the subsurface at the site that could act as additional sources of contamination and to clear drilling locations of underground utility lines.

6) Drill shallow soil borings in on and off-site locations using a Geoprobe. Soil samples will be collected continuously and groundwater samples will be collected from the first water-bearing zone encountered.

7) Drill deeper soil borings near the USTs using a Geoprobe with dual-wall samplers to a depth of 50-feet bgs. Soil samples will be collected continuously and groundwater samples will be collected from adjacent borings using a Hydropunch sampler in each water-bearing zone.

8) Following collection of the soil and groundwater samples, backfill the borings described in Tasks 6 and 7 with neat cement placed by tremie pipe.

9) Analyze soil and groundwater samples collected from each boring described in task 6 at a CAL-DHS certified analytical laboratory for TPH-D and TPH-MO by EPA Method 8015 and TPH-G, BTEX, fuel oxygenates, ethanol and methanol by EPA Method 8260B.

10) Prepare a report presenting results from this assessment. This report will present tabulated analytical results, geologic cross-sections, potentiometric surface maps, an updated site conceptual model, conclusions, and recommendations.

6.0 DETAILS OF PROPOSED SOW

Details of the assessment are presented below.

TASK 1 - *REVIEW FILES FOR THE ADJACENT PROPERTY SOUTH OF THE SITE TO DETERMINE THE EXTENT OF GROUNDWATER CONTAMINATION TO THE SOUTH*

Previous environmental sampling is known to have taken place on the property immediately south of the site. ASE will review the files for that property to determine whether there may already be data regarding groundwater contamination on this property. ASE will present the results of this file review in a workplan addendum that will include proposed boring locations for this property if needed.

TASK 2 - *CONDUCT A SUBSURFACE CONDUIT SURVEY FOR THE SITE VICINITY*

ASE will research the location and depth of subsurface utilities in the site vicinity and determine whether any of these utility lines may be a potential conduit for the migration of groundwater contamination. ASE will pay particular attention to the line on the southern property line that appears to be influencing groundwater conditions at the site. If needed based on this study, additional borings will be proposed to investigate potential impacts from these conduits.

TASK 3 - *OBTAIN A DRILLING PERMIT FROM THE ALAMEDA COUNTY PUBLIC WORKS AGANCY*

Prior to drilling, ASE will obtain a drilling permit from the Alameda County Public Works Agency. ASE will also notify Underground Service Alert (USA) to have underground utility lines marked in the site vicinity at least 48-hours prior to drilling.

TASK 4 - *OBTAIN ACCESS AGREEMENTS FROM NEIGHBORING PROPERTY OWNERS TO ALLOW FOR DRILLING ON THEIR PROPERTY*

ASE will obtain access agreements from the property owners to the east of the site either under the BART tracks or between the BART tracks and Southern Pacific Railroad tracks to allow for drilling on their property. ASE will also obtain an access agreement to drill on the property south of the site if necessary based on our file review for that property.

TASK 5 - CONTRACT WITH AN UNDERGROUND UTILITY LINE LOCATING SERVICE TO LOCATE ANY UNKNOWN USTS AT THE SITE AND TO CLEAR THE DRILLING LOCATIONS OF UNDERGROUND UTILITY LINES

ASE will contract with a subsurface utility locating service to conduct a magnetometer or ground penetrating radar (GPR) survey to confirm that no additional USTs exist in the subsurface at the site that could act as additional sources of contamination. This service will also clear drilling locations of underground utility lines. In addition, ASE will contact Underground Service Alert (USA) at least 48 hours prior to drilling. If any additional USTs are located, ASE will prepare a workplan addendum to address any newly discovered USTs.

TASK 6 - *DRILL SHALLOW SOIL BORINGS ON AND OFF-SITE AND COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORINGS FOR ANALYSIS*

ASE will drill three borings on the north and northwestern portions of the property and will collect soil and groundwater samples to define the extent of groundwater contamination both horizontally and vertically at the site (Figure 5). These borings will be drilled using a Geoprobe or similar type direct-push drilling rig. In addition, a boring will be required to define the extent of contamination to the east, where previous attempts at drilling in San Leandro Street met with refusal. This boring will be placed under the BART tracks or in other accessible areas in this direction depending on what property an access agreement can be secured. A boring may also be drilled on the property to the south of the site depending on the results of the file review described in Task 1.

Undisturbed soil samples will be collected continuously for subsurface hydrogeologic description and possible chemical analysis. The geologist will describe the soil according to the Unified Soil Classification System (USCS). The samples will be collected in acetate tubes using a drive sampler advanced as the boring progresses. Samples to be retained for analysis will be immediately removed from the sampler, trimmed, sealed with Teflon tape and plastic caps, secured with duct tape, labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples will be placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-DHS certified analytical laboratory.

Soil from the remaining tubes not sealed for analysis will be removed for hydrogeologic description and will be screened for volatile compounds with a photoionization detector (PID). The soil will be screened by emptying soil from one of the tubes into a plastic bag. The bag will be sealed and placed in the sun for approximately 10 minutes. After the hydrocarbons have been allowed to volatilize, the PID will measure the vapor through a small hole, punched in the bag. These PID readings will be used as a screening tool only since these procedures are not as rigorous as those used in an analytical laboratory.

A groundwater sample will be collected from the boring. Drilling will be halted at the water table and a Hydropunch or similar type device will be utilized to collect groundwater samples from the boring. The groundwater samples will be contained in 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid and sealed without headspace. The samples will then be labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples. The samples will then be sealed in plastic bags and cooled in an ice chest with wet ice for transport to a state-certified analytical laboratory under chain-of-custody.

All sampling equipment will be cleaned in buckets with brushes and a TSP or Alconox solution, then rinsed twice with tap water. Rinsates will be contained on-site in 55-gallon steel drums and stored on-site until off-site disposal can be arranged.

TASK 7 - *DRILL DEEPER SOIL BORINGS NEAR THE USTS AND COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORINGS FOR ANALYSIS*

In addition to the borings described in Task 6 above, the definition of the vertical extent of contamination will require deeper borings in the vicinity of the USTs and near the southern property line (Figure 5). ASE will drill deeper borings adjacent to monitoring wells MW-3 and MW-9 using a direct push drill rig with dual-rod samplers. Groundwater samples will be collected in each significant water-bearing zone. If any water-bearing zone is over 5-feet thick, samples will be collected every 5-feet within a zone using a Hydropunch or other discrete depth sampler. ASE anticipates that these borings will extend to 50 or 60-feet depending on the lithology encountered. If significant contamination is found at these depths, then further definition will be required using other methods such as Cone Penetrometer Testing (CPT).

Soil borings will be drilled using dual-wall samplers to a depth of 50-feet bgs collecting soil samples continuously. The dual-walled sampler allows the boring to advance with an external conductor casing to minimize potential cross-contamination into deeper water-bearing zones. Undisturbed soil samples will be collected continuously for subsurface hydrogeologic description and possible chemical analysis. The internal drive sampler is lined with acetate tubes and the internal sampler will be removed and then replaced after each sampling run.

The geologist will describe the soil according to the USCS. Samples to be retained for analysis will be immediately removed from the sampler, trimmed, sealed with Teflon tape and plastic caps, secured with duct tape, labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples will be placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-DHS certified analytical laboratory. Samples will be retained for analysis at least every 5-feet, in areas of obvious soil contamination and at each lithologic contact.

Soil from the remaining tubes not sealed for analysis will be removed for hydrogeologic description and will be screened for volatile compounds with a PID. The soil will be screened by emptying soil from one of the tubes into a plastic bag. The bag will be sealed and placed in the sun for approximately 10 minutes. After the hydrocarbons have been allowed to volatilize, the PID will measure the vapor through a small hole, punched in the bag. These PID readings will be used as a screening tool only since these procedures are not as rigorous as those used in an analytical laboratory.

Once the lithology is known, ASE will collect groundwater samples from a second boring drilled immediately adjacent to the first boring. Groundwater samples will be collected from targeted zones using a Hydropunch sampler. Target sampling locations will include at least one location from each identified water-bearing zone. If water-bearing zones are greater than 5-feet in thickness, then multiple samples will be collected from the zones at vertical intervals of 5-feet.

In each boring, the Hydropunch will be driven into the target sampling zone. The Hydropunch sampler will be checked to verify that there has been no leakage of groundwater into the rods prior to opening. Once the rods are shown to be dry, the Hydropunch screen will be opened and groundwater will be allowed to enter the rods. Groundwater samples will then be collected from within the rods using a bailer. Groundwater samples will then be decanted from the bailer into 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid and sealed without headspace. The samples will then be labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples. The samples will then be sealed in plastic bags and cooled in an ice chest with wet ice for transport to a state-certified analytical laboratory under chain-of-custody.

All sampling equipment will be cleaned in buckets with brushes and a TSP or Alconox solution, then rinsed twice with tap water. Rinsates will be contained on-site in 55-gallon steel drums and stored on-site until off-site disposal can be arranged.

If the extent of groundwater contamination is not defined (either laterally or vertically) based on these samples, then additional borings will be drilled to complete these definitions. If deeper drilling is required to complete the vertical definition, then ASE will likely utilize CPT for the deeper boring.

TASK 8 - BACKFILL THE BORINGS WITH NEAT CEMENT

Following collection of the soil and groundwater samples, the boreholes described in Tasks 6 and 7 will be backfilled with neat cement placed by tremie pipe.

TASK 9 - ANALYZE SOIL AND GROUNDWATER SAMPLES COLLECTED FROM THE BORINGS

Each soil and groundwater sample will be analyzed at a CAL-DHS certified environmental laboratory for TPH-D and TPH-MO by modified EPA Method 3510/8015M, and TPH-G, BTEX, oxygenates, ethanol and methanol by EPA Method 8260B.

TASK 10 - PREPARE A SUBSURFACE ASSESSMENT REPORT

ASE will prepare a subsurface assessment report outlining the methods and findings of this assessment. This report will include a summary of the results, the site background and history, description of the work completed, tabulated soil and groundwater analytical results, geologic cross-sections, potentiometric surface maps, an updated site conceptual model, conclusions and recommendations. Formal boring logs, analytical reports, and chain of custody documents will be included as appendices.

This report will be submitted under the seal of a California registered civil engineer or geologist.

5.0 SCHEDULE

ASE will proceed with this project immediately upon approval of this workplan by the ACHCSA and approval of the costs from the UST Cleanup Fund.

Should you have any questions or comments, please call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

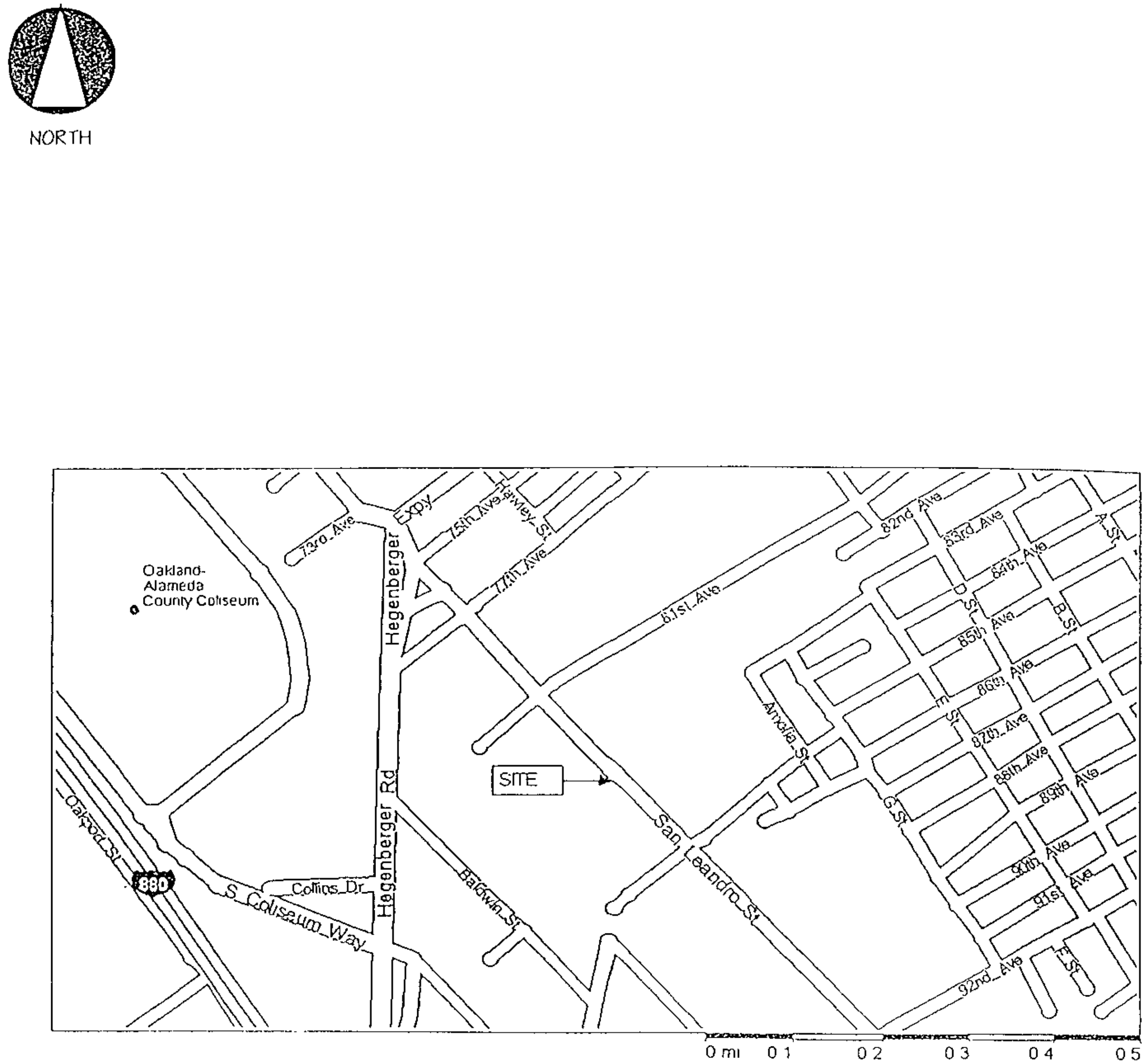
Robert E. Kitay, R.G., R.E.A.
Senior Geologist

cc: Mr. Nissan Saidian, 5733 Medallion Court, Castro Valley, CA 94522

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

Ms. Betty Graham, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA 94612

FIGURES



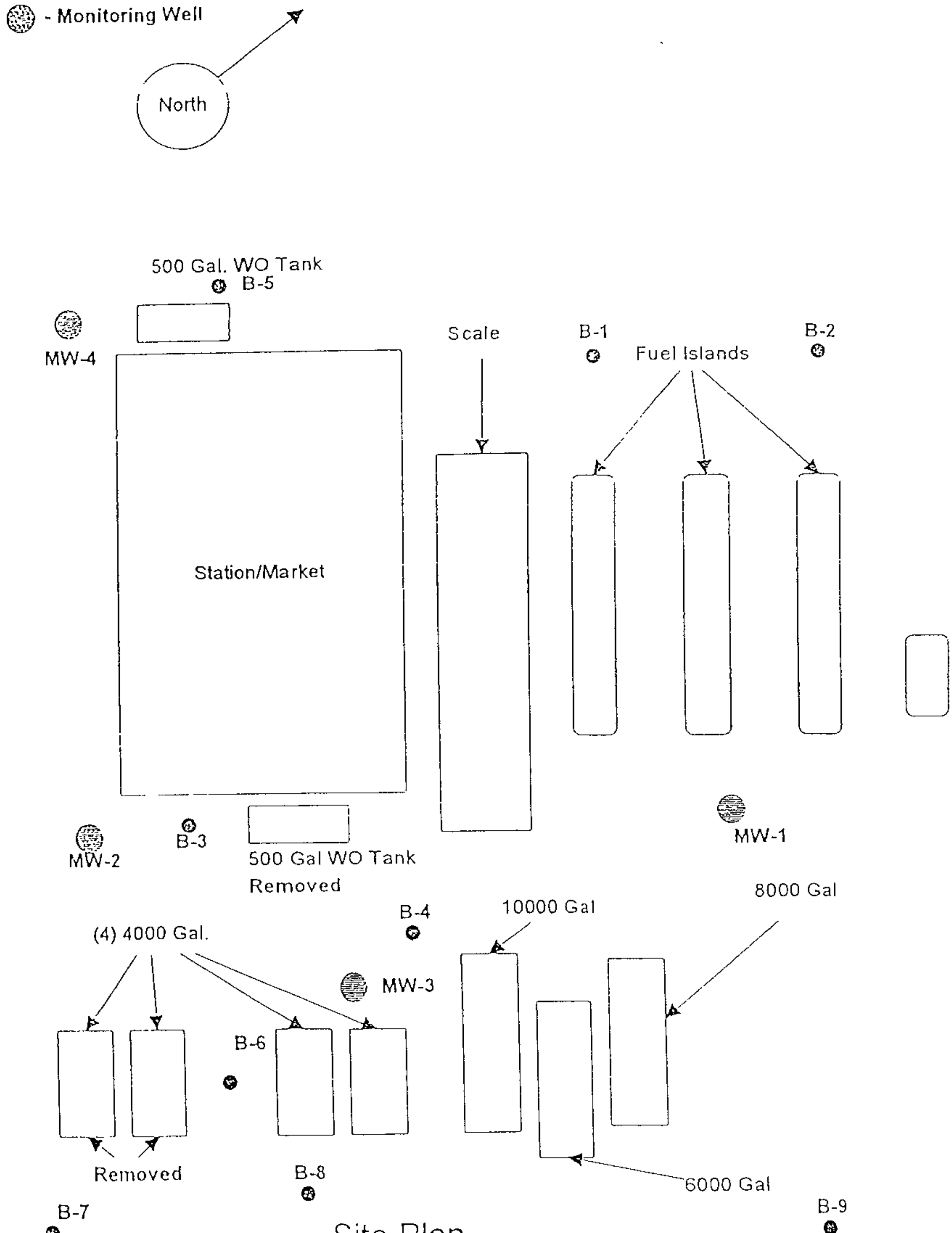
LOCATION MAP

OAKLAND TRUCK STOP
8255 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC

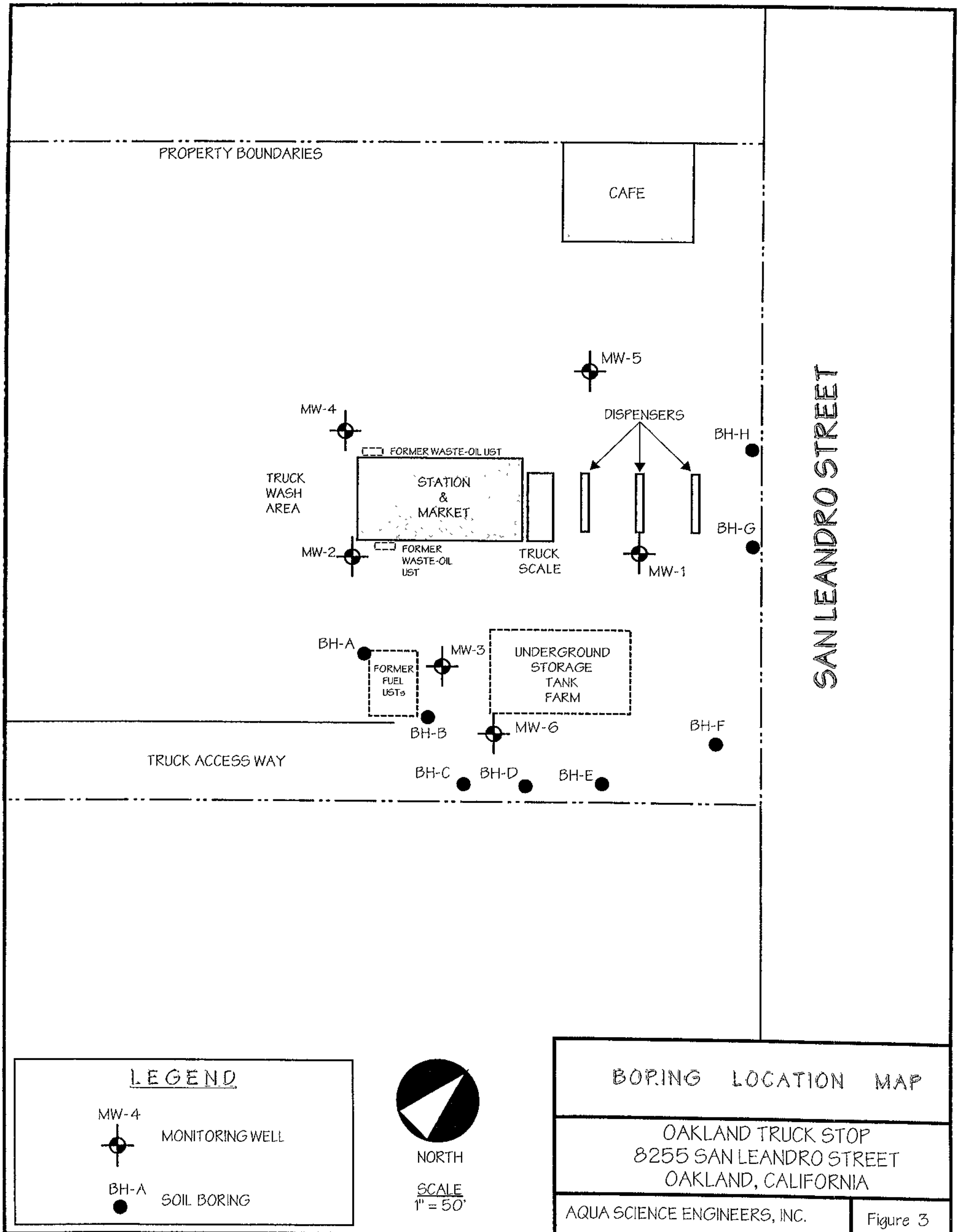
Figure 1

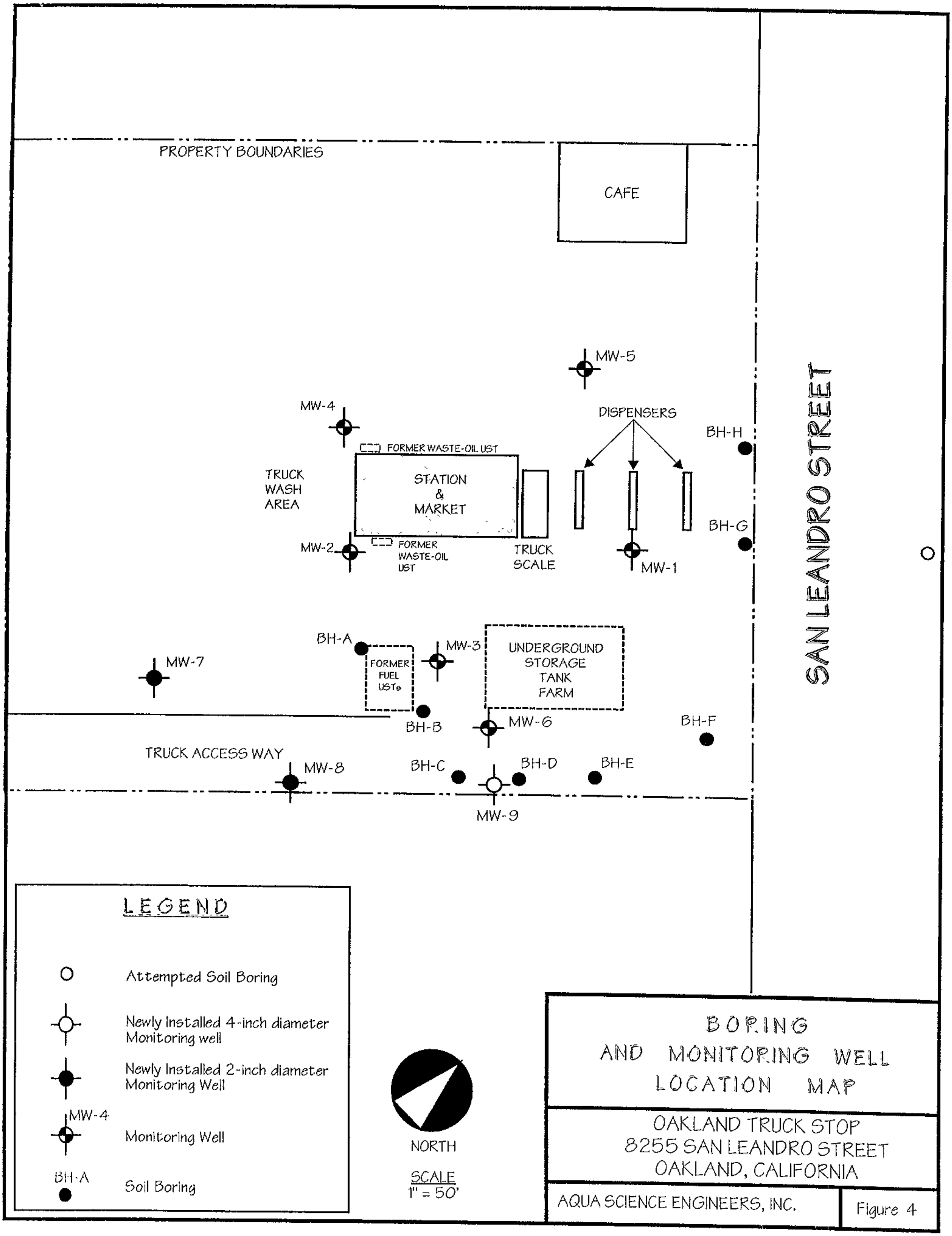
FIGURE 2

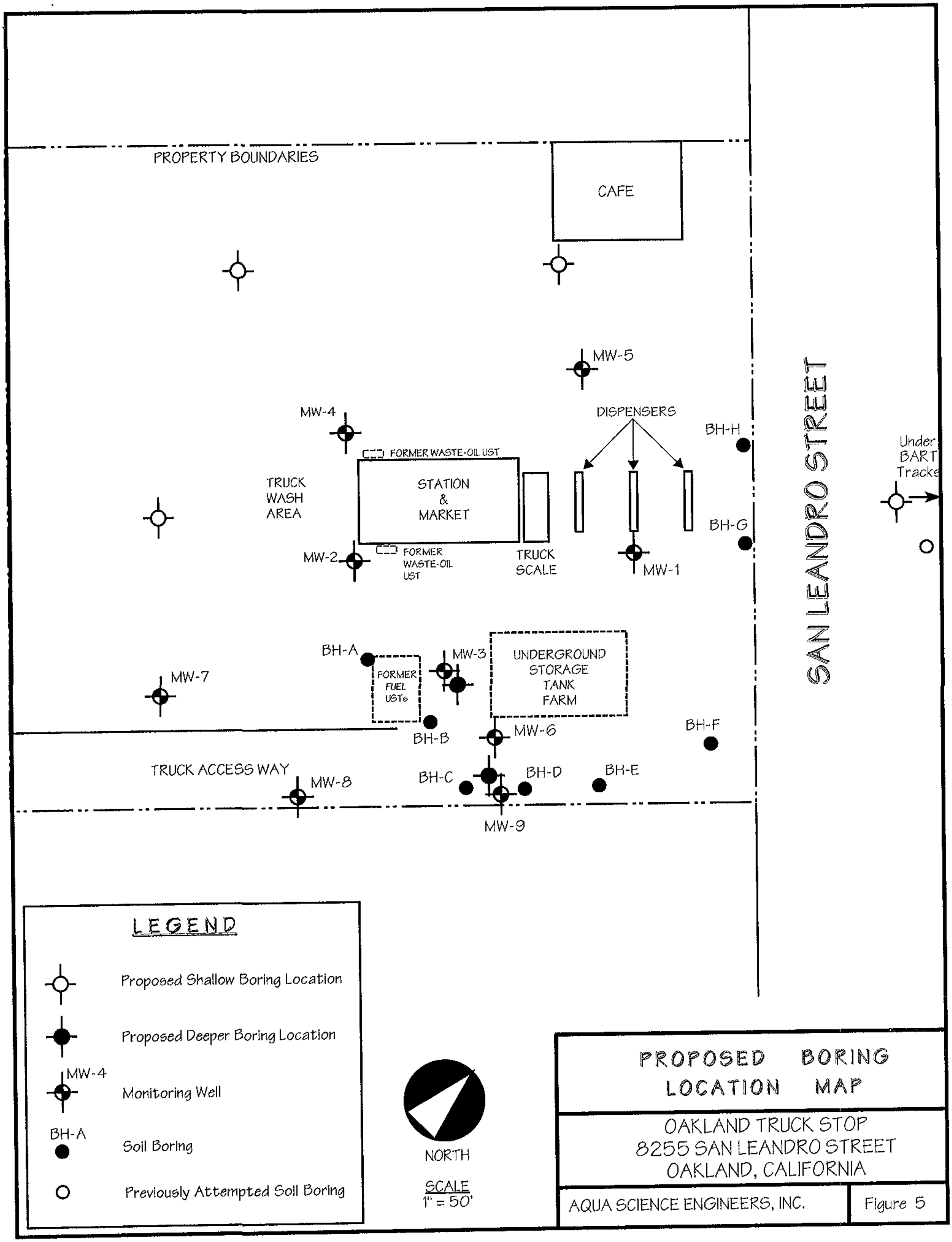


Site Plan

8255 San Leandro St., Oakland CA


PROPERTY BOUNDARIES
CAFE
MW-5
MW-4
DISPENSERS
BH-H
FORMER WASTE-OIL UST
TRUCK WASH AREA
STATION & MARKET
BH-G
MW-2
FORMER WASTE-OIL UST
TRUCK SCALE
MW-1
SAN LEANDRO STREET
BH-A
MW-3
FORMER FUEL USTs
UNDERGROUND STORAGE TANK FARM
BH-B
MW-6
BH-F
TRUCK ACCESS WAY
BH-C
BH-D
BH-E
LEGEND
MW-4
MONITORING WELL
BH-A
SOIL BORING
NORTH
SCALE
1" = 50'
BORING LOCATION MAP
OAKLAND TRUCK STOP
8255 SAN LEANDRO STREET
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS, INC.
Figure 3


PROPERTY BOUNDARIES
CAFE
MW-5
MW-4
DISPENSERS
BH-H
FORMER WASTE-OIL UST
TRUCK
WASH
AREA
STATION
&
MARKET
BH-G
MW-2
FORMER
WASTE-OIL
UST
TRUCK
SCALE
MW-1
SAN LEANDRO STREET
BH-A
MW-3
UNDERGROUND
STORAGE
TANK
FARM
MW-7
FORMER
FUEL
USTs
BH-B
MW-6
BH-F
TRUCK ACCESS WAY
MW-8
BH-C
BH-D
BH-E
MW-9
LEGEND
Attempted Soil Boring
Newly Installed 4-inch diameter Monitoring well
Newly Installed 2-inch diameter Monitoring Well
MW-4
Monitoring Well
BH-A
Soil Boring
NORTH
SCALE
1" = 50'
BORING
AND MONITORING WELL
LOCATION MAP
OAKLAND TRUCK STOP
8255 SAN LEANDRO STREET
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS, INC.
Figure 4



PROPOSED BORING LOCATION MAP

OAKLAND TRUCK STOP
8255 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.	Figure 5

TABLES

TABLE ONE
Groundwater Elevation Data
Oakland Truck Stop
8255 San Leandro Street, Oakland, CA

Well I.D & Date Sampled	Top of Casing Elevation (msl)	Depth to Water (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
MW-1				
8/16/99	97.12	Unknown	> 1.0	Unknown
8/27/99		6.90	0.36	90.51*
9/10/99		6.85	0.18	90.41*
9/24/99		6.65	0.08	90.53*
10/8/99		6.87	0.28	90.47*
10/22/99		6.81	0.23	90.49*
11/2/99		6.94	0.31	90.43*
11/19/99		6.91	0.12	90.31*
12/6/99		6.93	0.12	90.29*
3/8/00		5.93	0.21	91.36*
6/14/00		6.57	0.72	90.41*
12/11/00		6.70	0.60	90.90*
3/6/01		5.75	0.40	91.69*
6/6/01		7.60	1.48	90.70*
9/4/01		6.80	0.20	90.48*
3/11/02		approx. 7.47	approx. 3	approx. 92.05*
6/6/02		6.49	0.67	91.17*
9/4/02	11.02	6.89	0.54	4.56*
12/17/02		4.65		6.47*
3/7/03		6.55	1.19	3.52*
6/5/03		9.77	4.63	4.95*
9/19/03		**6.56**	**0.32**	**4.72***
MW-2				
8/16/99	96.82	6.30	--	90.52
12/6/99		8.46	--	88.36
3/8/00		9.12	--	87.70
6/14/00		8.34	--	88.48
12/11/00		5.94	--	90.88
3/6/01		4.70	--	92.12
6/6/01		6.03	--	90.79
9/4/01		6.34	--	90.48
3/11/02		4.89	--	91.93
6/6/02		5.69	--	91.13
9/4/02	10.70	6.17	--	4.53
12/17/02		4.39	--	6.31
3/7/03		5.44	--	5.26
6/5/03		5.59	--	5.11
9/19/03		**6.09**	**--**	**4.61**

TABLE ONE
Groundwater Elevation Data
Oakland Truck Stop
8255 San Leandro Street, Oakland, CA

Well I.D & Date Sampled	Top of Casing Elevation (msl)	Depth to Water (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
MW-3				
8/16/99	96.43	5.85	--	90.58
12/6/99		5.70	--	90.73
3/8/00		5.32	--	91.11
6/14/00		6.95	--	89.48
12/11/00		6.22	--	90.21
3/6/01		4.83	--	91.60
6/6/01		5.62	--	90.81
9/4/01		5.91	--	90.52
3/11/02		4.42	--	92.01
6/6/02		5.19	--	91.24
9/4/02	10.32	5.72	--	4.60
12/17/02		3.96	--	6.36
3/7/03		4.88	--	5.44
6/5/03		5.05	--	5.27
9/19/03		5.62	--	4.70
MW-4				
8/16/99	96.60	6.12	--	90.48
12/6/99		5.98	--	90.62
3/8/00		4.32	--	92.28
6/14/00		5.58	--	91.02
12/11/00		5.70	--	90.90
3/6/01		4.46	--	92.14
6/6/01		5.89	--	90.71
9/4/01		6.16	--	90.44
3/11/02		4.67	--	91.93
6/6/02		5.50	--	91.10
9/4/02	10.50	5.97	--	4.53
12/17/02		4.22	--	6.28
3/7/03		5.23	--	5.27
6/5/03		5.38	--	5.12
9/19/03		5.91	--	4.59
MW-5				
12/6/99	96.30	5.94	--	90.36
3/8/00		4.06	--	92.24
6/14/00		5.25	--	91.05
12/11/00		5.45	--	90.85
3/6/01		4.12	--	92.18
6/6/01		5.56	--	90.74
9/4/01		5.84	--	90.46
3/11/02		4.38	--	91.92
6/6/02		5.16	--	91.14
9/4/02	10.20	5.62	--	4.58
12/17/02		4.12	--	6.08
3/7/03		4.89	--	5.31
6/5/03		5.04	--	5.16
9/19/03		5.56	--	4.64

TABLE ONE
Groundwater Elevation Data
Oakland Truck Stop
8255 San Leandro Street, Oakland, CA

Well I.D & Date Sampled	Top of Casing Elevation (msl)	Depth to Water (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
MW-6				
12/6/99	96.79	5.80	--	90.99
3/8/00		4.10	--	92.69
6/14/00		5.64	--	91.15
12/11/00		5.72	--	91.07
3/6/01		4.32	--	92.47
6/6/01		5.81	--	90.98
9/4/01		6.12	--	90.67
3/11/02		4.49	--	92.30
6/6/02		5.33	--	91.46
9/4/02	10.71	5.92	--	4.79
12/17/02		3.85	--	6.86
3/7/03		4.96	--	5.75
6/5/03		5.18	--	5.53
9/19/03		**5.81**	--	**4.90**
MW-7				
9/4/02	9.17	4.67	--	4.50
12/17/02		3.11	--	6.06
3/7/03		3.89	--	5.28
6/5/03		3.57	--	5.60
9/19/03		**4.57**	--	**4.60**
MW-8				
9/4/02	9.68	4.94	--	4.74
12/17/02		3.26	--	6.42
3/7/03		4.01	--	5.67
6/5/03		4.28	--	5.40
9/19/03		**4.87**	--	**4.81**
MW-9				
9/4/02	11.07	6.26	--	4.81
12/17/02		4.23	--	6.84
3/7/03		5.26	--	5.81
6/5/03		5.56	--	5.51
9/19/03		**6.25**	--	**4.82**

Notes:
* = Groundwater elevation adjusted for the presence of free-floating hydrocarbons by the equation: Adjusted groundwater elevation = Top of of casing elevation - depth to groundwater + (0.8 x free-floating hydrocarbon thickness)

Mid Coast Engineers (MCE) surveyed all site monitoring wells on July 11, 2002 to mean sea level (MSL). The updated elevation data is reflected in the table above.

TABLE TWO

Summary of Chemical Analysis of GROUNDWATER Samples

Petroleum Hydrocarbons

All results are in parts per billion

Well ID DATE	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA
MW-1												
8/16/99					Not Sampled Due to Free-Floating Hydrocarbons							
12/6/99					Not Sampled Due to Free-Floating Hydrocarbons							
3/8/00					Not Sampled Due to Free-Floating Hydrocarbons							
6/14/00					Not Sampled Due to Free-Floating Hydrocarbons							
12/11/00					Not Sampled Due to Free-Floating Hydrocarbons							
3/6/01					Not Sampled Due to Free-Floating Hydrocarbons							
6/6/01					Not Sampled Due to Free-Floating Hydrocarbons							
9/4/01					Not Sampled Due to Free-Floating Hydrocarbons							
3/11/02					Not Sampled Due to Free-Floating Hydrocarbons							
6/6/02					Not Sampled Due to Free-Floating Hydrocarbons							
9/4/02					Not Sampled Due to Free-Floating Hydrocarbons							
12/17/02					Not Sampled Due to Free-Floating Hydrocarbons							
3/7/03					Not Sampled Due to Free-Floating Hydrocarbons							
6/5/03					Not Sampled Due to Free-Floating Hydrocarbons							
9/19/03					**Not Sampled Due to Free-Floating Hydrocarbons**							
MW-2												
8/16/99	2,200	970*	< 500	3.8	< 2.0	3	< 4 0	< 20	NA	NA	NA	NA
12/6/99	1,900	400*	< 500	16	< 0 5	1.5	< 0.5	5.2	NA	NA	NA	NA
3/8/00	1,600*	530*	< 500	9.7	< 0.5	2.7	< 0.5	27	NA	NA	NA	NA
6/14/00	2,000	75	< 100	2.8	< 0.5	3.4	< 0.5	16	3.4	< 0.5	< 0.5	64
12/11/00	1,000	120	< 100	2.6	< 0.5	< 0.5	< 0.5	15	2.9	< 0.5	< 0.5	62
3/6/01	1,500	1,400	NA	2.2	< 0.5	1.7	< 0.5	22	3.4	<0 5	<0.5	83
6/6/01	1,700	190	NA	2.6	< 0.5	2 3	< 0 5	26	3.2	<0 5	<0.5	83
9/4/01	2,000	450	NA	2.7	< 0 5	2.1	< 0.5	33	3.4	< 0.5	< 0.5	93
3/11/02	1,100	410	NA	1.0	< 0.5	0.5	< 0.5	26	2.5	< 0.5	< 0.5	69
6/6/02	900	430	NA	1.2	< 0.5	< 0.5	< 0.5	23	2.8	< 0.5	< 0.5	73
9/4/02	910	510	NA	1.6	< 0 5	< 0.5	< 0.5	45	2.5	< 0.5	< 0.5	67
12/17/02	190	220	NA	0.65	< 0.5	< 0.5	< 0 5	34	1.5	< 0.5	< 0.5	46
3/7/03	380	300	NA	0.81	< 0.5	< 0.5	< 0.5	50	1.9	< 0.5	< 0.5	73
6/5//2003	2,200	2,200	NA	1.7	< 0.5	1.5	< 0.5	180	4.9	< 0.5	1 3	110
9/19/03	**2,300**	**520**	**NA**	**2.0**	**< 0.5**	**2.1**	**< 0.5**	**180**	**3.7**	**< 0.5**	**1.1**	**120**
MW-3												
8/16/99	56,000	10,000**	< 500	17,000	2,600	2,600	1,200	6,100	NA	NA	NA	NA
12/6/99	40,000	9,100*	< 500	16,000	140	1,800	100	2,200/4,000‡	NA	NA	NA	NA
3/8/00	22,000	4,500*	< 500	11,000	72	1,100	130	3,400	NA	NA	NA	NA
6/14/00	34,000	16,000	< 100	13,000	94	1,300	160	4,800	31	< 10	21	2,700
12/11/00	24,000	14,000	< 100	13,000	88	780	120	4,300	< 50	< 50	< 50	2,300
3/6/01	34,000	12,000	NA	15,000	100	1,100	130	4,000	< 50	< 50	< 50	2,100
6/6/01	34,000	20,000	NA	14,000	94	550	110	4,400	< 50	< 50	< 50	2,300
9/4/01	29,000	19,000	NA	13,000	83	480	83	4,100	< 50	< 50	< 50	3,400
3/11/02	12,000	14,000	NA	2,900	< 20	110	< 20	530	< 20	< 20	< 20	330
6/6/02	20,000	14,000	NA	10,000	< 50	200	51	2,400	< 50	< 50	< 50	1,200
9/4/02	24,000	17,000	NA	11,000	< 50	140	< 50	3,200	< 50	< 50	< 50	1,400
12/17/02	4,900	17,000	NA	2,000	< 10	52	12	360	< 10	< 10	< 10	220
3/7/03	8,700	16,000	NA	2,300	< 10	43	11	770	< 10	< 10	< 10	360
6/5/03	27,000	14,000	NA	10,000	53	220	53	5,000	< 50	< 50	< 50	1,600
9/19/03	**120,000**	**13,000**	**NA**	**20,000**	**170**	**710**	**250**	**6,100**	**< 25**	**< 25**	**< 25**	**2,600**

TABLE TWO

Summary of Chemical Analysis of GROUNDWATER Samples

Petroleum Hydrocarbons

All results are in parts per billion

Well ID DATE	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA
MW-4												
8/16/99	61***	1,100*	< 500	< 0.5	< 0.5	< 0.5	< 1.0	86	NA	NA	NA	NA
12/6/99	130***	220*	< 500	< 1.0	< 1.0	< 1.0	< 1.0	130	NA	NA	NA	NA
3/8/00	< 50	220*	< 500	< 0.5	< 0.5	< 0.5	< 0.5	130	NA	NA	NA	NA
6/14/00	< 50	< 50	< 100	< 0.5	< 0.5	< 0.5	< 0.5	100	< 0.5	< 0.5	< 0.5	20
12/11/00	< 50	< 50	< 100	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	16
3/6/01	< 50	670	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	9.9
6/6/01	< 50	790	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	20
9/4/01	< 50	950	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	26
3/11/02	< 50	250	NA	< 0.5	< 0.5	< 0.5	< 0.5	84	< 0.5	< 0.5	< 0.5	21
6/6/02	< 50	710	NA	< 0.5	< 0.5	< 0.5	< 0.5	92	< 0.5	< 0.5	< 0.5	21
9/4/02	< 50	1,100	NA	< 0.5	< 0.5	< 0.5	< 0.5	150	< 0.5	< 0.5	< 0.5	18
12/17/02	< 50	470	NA	< 0.5	< 0.5	< 0.5	< 0.5	120	< 0.5	< 0.5	< 0.5	< 5.0
3/7/03	< 50	470	NA	< 0.5	< 0.5	< 0.5	< 0.5	120	< 0.5	< 0.5	0.52	18
6/5/03	< 50	2,000	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	0.50	23
9/19/03	< 50	830	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.80	23
MW-5												
12/6/99	450***	2,000*	< 500	< 1.0	< 1.0	< 1.0	< 1.0	21	NA	NA	NA	NA
3/8/00	51***	530*	< 500	< 0.5	< 0.5	< 0.5	< 0.5	84	NA	NA	NA	NA
6/14/00	380	1,400	< 100	< 0.5	< 0.5	< 0.5	< 0.5	160	12	< 0.5	< 0.5	22
12/11/00	540	590	< 100	< 0.5	< 0.5	< 0.5	< 0.5	240	9.5	< 0.5	< 0.5	32
3/6/01	510	2,900	NA	< 0.5	< 0.5	< 0.5	< 0.5	140	13	< 0.5	< 0.5	19
6/6/01	280	2,700	NA	< 0.5	< 0.5	< 0.5	< 0.5	180	13	< 0.5	< 0.5	26
9/4/01	630	2,600	NA	< 0.5	< 0.5	< 0.5	< 0.5	180	9.4	< 0.5	< 0.5	29
3/11/02	97	3,500	NA	< 0.5	< 0.5	< 0.5	< 0.5	29	0.79	< 0.5	< 0.5	7.4
6/6/02	61	3,500	NA	< 0.5	< 0.5	< 0.5	< 0.5	150	2.9	< 0.5	< 0.5	34
9/4/02	92	6,100	NA	< 0.5	< 0.5	< 0.5	< 0.5	370	3.6	< 0.5	< 0.5	72
12/17/02	110	2,100	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	4.2	< 0.5	< 0.5	14
3/7/03	71	1,600	NA	< 0.5	< 0.5	< 0.5	< 0.5	150	2.2	< 0.5	< 0.5	35
6/5/03	95	3,300	NA	< 0.5	< 0.5	< 0.5	< 0.5	170	4.6	< 0.5	< 0.5	43
9/19/03	100	1,400	NA	< 0.5	< 0.5	< 0.5	< 0.5	310	5.2	< 0.50	0.68	86
MW-6												
12/6/99	13,000	< 50	< 500	180	21	11	24	< 100	NA	NA	NA	NA
3/8/00	< 10,000	4,600*	< 500	230	26	18	39	12,000	NA	NA	NA	NA
6/14/00	8,400	12,000	< 100	190	12	9.5	22	15,000	< 5.0	< 5.0	70	3,300
12/11/00	< 5,000	10,000	< 100	190	< 50	< 50	< 50	14,000	< 50	< 50	74	2,900
3/6/01	5,300	6,700	NA	220	< 50	< 50	< 50	13,000	< 50	< 50	84	2,100
6/6/01	5,000	23,000	NA	210	< 25	< 25	< 25	12,000	< 25	< 25	84	4,200
9/4/01	5,400	22,000	NA	190	12	< 10	23	15,000	< 10	< 10	79	4,000
3/11/02	4,600	11,000	NA	160	< 25	< 25	< 25	15,000	< 25	< 25	39	5,100
6/6/02	< 5,000	14,000	NA	200	< 50	< 50	< 50	17,000	< 50	< 50	77	8,700
9/4/02	< 5,000	50,000	NA	140	< 50	< 50	< 50	21,000	< 50	< 50	52	7,500
12/17/02	< 5,000	9,100	NA	130	< 50	< 50	< 50	16,000	< 50	< 50	64	6,300
3/7/03	< 5,000	12,000	NA	160	< 50	< 50	< 50	20,000	< 50	< 50	53	7,500
6/5/2003	< 5,000	23,000	NA	230	< 50	< 50	< 50	19,000	< 50	< 50	86	7,100
9/19/03	8,900	24,000	NA	220	< 25	< 25	< 25	15,000	< 25	< 25	74	8,100

TABLE TWO

Summary of Chemical Analysis of GROUNDWATER Samples

Petroleum Hydrocarbons

All results are in parts per billion

Well ID DATE	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA
MW-7												
9/4/02	<50	130****	NA	<0.5	<0.5	<0.5	<0.5	3.4	<0.5	<0.5	<0.5	<5.0
12/17/02	<50	220	NA	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5	<5.0
3/7/03	<50	140	NA	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5	<0.5	<5.0
6/5/03	<50	200	NA	<0.5	<0.5	<0.5	<0.5	2.5	<0.5	<0.5	<0.5	<5.0
9/19/03	**<50**	**320**	**NA**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**5.0**	**<0.5**	**<0.5**	**<0.5**	**<5.0**
MW-8												
9/4/02	<50	170	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
12/17/02	<50	100	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
3/7/03	<50	62	NA	<0.5	<0.5	<0.5	<0.5	33	<0.5	<0.5	<0.5	<5.0
6/5/03	<50	270	NA	<0.5	<0.5	<0.5	<0.5	13	<0.5	<0.5	<0.5	<5.0
9/19/03	**<50**	**250**	**NA**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**11**	**<0.5**	**<0.5**	**<0.5**	**<5.0**
MW-9												
9/4/02	<2,500	1,000	NA	<25	<25	<25	<25	12,000	<25	<25	70	1,700
12/17/02	<2,000	880	NA	<20	<20	<20	<20	4,500	<20	<20	23	2,300
3/7/03	<500	450	NA	<5.0	<5.0	<5.0	<5.0	1,700	<5.0	<5.0	8.4	6,600
6/5/03	<500	4,500	NA	<5.0	<5.0	<5.0	<5.0	120	<5.0	<5.0	<5.0	17,000
9/19/03	**<1000**	**4,500**	**NA**	**<10**	**<10**	**<10**	**<10**	**38**	**<10**	**<10**	**<10**	**15,000**
DHS MCL	NE	NE	NE	1	150	700	1,750	13	NE	NE	NE	NE
ESL	400	500	500	46	130	290	1	1,800	NE	NE	NE	NE

Notes:

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

Most recent concentrations are in bold.

DHS MCL is the California Department of Health Services maximum contaminant level for drinking water.

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

NE = MCL/ESL not established.

NA = Sample not analyzed for this compound.

* = Non-typical diesel pattern, hydrocarbons in early diesel range.

** = Estimated concentration due to overlapping fuel patterns in the sample.

*** = Non-typical gasoline pattern.

**** = Non-typical diesel pattern.

= MTBE concentration by EPA Method 8260

TABLE THREE

Summary of Analysis of **SOIL** Samples

TPH-G, TPH-D, BTEX

All results are in **parts per million**

Boring	Depth (Feet)	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes
BH-A	7.5'	**370**	**670**	< 200	**2.3**	**0.16**	**4.7**	**1.1**
	11.5'	**210**	**130**	< 10	**1.3**	**0.52**	**3.7**	**15**
BH-B	7.5'	**4.4**	**2.5**	**24**	**0.040**	< 0.0050	< 0.0050	< 0.0050
	11.5'	**190**	**120**	< 10	**0.048**	**0.030**	**0.37**	**0.020**
BH-C	11.5'	< 1.0	< 1.0	< 10	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-D	11.5'	< 1.0	< 1.0	< 10	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-E	11.5'	< 1.0	< 1.0	**14**	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-F	11.5'	< 1.0	< 1.0	< 10	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-G	12'	**270**	**1,500**	< 10	< 0.020	**0.028**	< 0.020	< 0.020
BH-H	8'	**150**	**1,100**	< 10	**0.029**	**0.024**	< 0.020	< 0.020
	12'	**3.0**	**320**	< 10	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-7	10.5'	< 1.0	< 1.0	< 10	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-8	11.0'	< 1.0	**3.9**	< 10	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-9	13.0'	< 1.0	< 1.0	**15**	< 0.0050	< 0.0050	< 0.0050	< 0.0050
RBSL		400	500	500	0.39	8.4	24	1.0

Notes:

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

Detectable concentrations are in **bold**.

RBSL is the California Regional Water Quality Control Board, San Francisco Bay Region Risk-Based Screening Level for subsurface soil at commercial/industrial property where groundwater is not a current or potential source of drinking water.

TABLE FOUR

Summary of Analysis of **SOIL** Samples
Oxygenates
All results are in **parts per million**

Boring	Depth (Feet)	MTBE	DIPE	ETBE	TAME	TBA
BH-A	7.5'	< 0.050	< 0.050	< 0.050	< 0.050	< 0.50
	11.5'	< 0.020	< 0.020	< 0.020	< 0.020	< 0.20
BH-B	7.5'	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.012**
	11.5'	**0.41**	< 0.020	< 0.020	< 0.020	< 0.20
BH-C	11.5'	**1.0**	< 0.0050	< 0.0050	**0.025**	**0.49**
BH-D	11.5'	**1.7**	< 0.0050	< 0.0050	**0.024**	**0.57**
BH-E	11.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-F	11.5'	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-G	12'	**0.050**	< 0.020	< 0.020	< 0.020	< 0.20
BH-H	8'	**0.060**	< 0.020	< 0.020	< 0.020	< 0.20
	12'	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.020
MW-7	10.5'	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-8	11.0'	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
MW-9	13.0'	**0.0058**	< 0.0050	< 0.0050	< 0.0050	**0.0051**
RBSL		1.0	NE	NE	NE	NE

Notes:
Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit.

Detectable concentrations are in **bold**.

RBSL is the California Regional Water Quality Control Board, San Francisco Bay Region Risk-Based Screening Level for subsurface soil at commercial/industrial property where groundwater is not a current or potential source of drinking water.

NE = RBSL is not established.

TABLE FIVE

Summary of Analysis of **WATER** Samples

TPH-G, TPH-D, BTEX

All results are in **parts per billion**

Boring	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes
BH-A	**43,000**	**8,700**	< 100	**4,000**	**400**	**2,200**	**3,100**
BH-B	**51,000**	**120,000**	< 2,000	**430**	< 10	**700**	**19**
BH-C	< 200	**200**	**890**	< 2.0	< 2.0	< 2.0	< 2.0
BH-D	< 500	< 50	**2,400**	< 5.0	< 5.0	< 5.0	< 5.0
BH-E	< 50	< 50	**11,000**	< 0.50	< 0.50	< 0.50	< 0.50
BH-F	< 50	< 50	**780**	< 0.50	< 0.50	< 0.50	< 0.50
BH-G	**120,000**	**2,200,000**	< 1,000	< 50	< 50	< 50	< 50
BH-H	< 50	**1,400**	**1,400**	< 0.50	< 0.50	< 0.50	< 0.50
MCL		NE	NE	1.0	150	700	1,750

Notes:

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

Detectable concentrations are in **bold**.

MCL is the California Department of Health Services maximum contaminant level for drinking water.

NE = No MCL is established.

TABLE SIX

Summary of Analysis of **WATER** Samples
Oxygenates
All results are in **parts per billion**

Boring	MTBE	DIPE	ETBE	TAME	TBA
BH-A	**46**	< 20	< 20	< 20	< 200
BH-B	**6,200**	< 10	< 10	**37**	**1,000**
BH-C	**13,000**	< 2.0	< 2.0	**100**	**2,600**
BH-D	**42,000**	< 5.0	< 5.0	**250**	**6,800**
BH-E	**6.0**	< 0.50	< 0.50	< 0.50	< 5.0
BH-F	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0
BH-G	**170**	< 50	< 50	< 50	< 500
BH-H	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0
PRG	13	NE	NE	NE	NE

Notes:

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

Detectable concentrations are in **bold**.

MCL is the California Department of Health Services maximum contaminant level for drinking water.

NE = No MCL is established.