



R079



April 26, 2005

Alameda County

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Environmental Health

WORKPLAN
for
ADDITIONAL SOIL AND GROUNDWATER ASSESSMENT
ASE JOB NO. 3976
at
Kozel Property
1001 42nd Street
Oakland, California

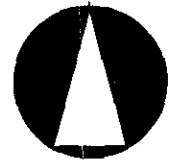
Submitted by:
AQUA SCIENCE ENGINEERS, INC.
208 West El Pintado
Danville, CA 94526
(925) 820-9391

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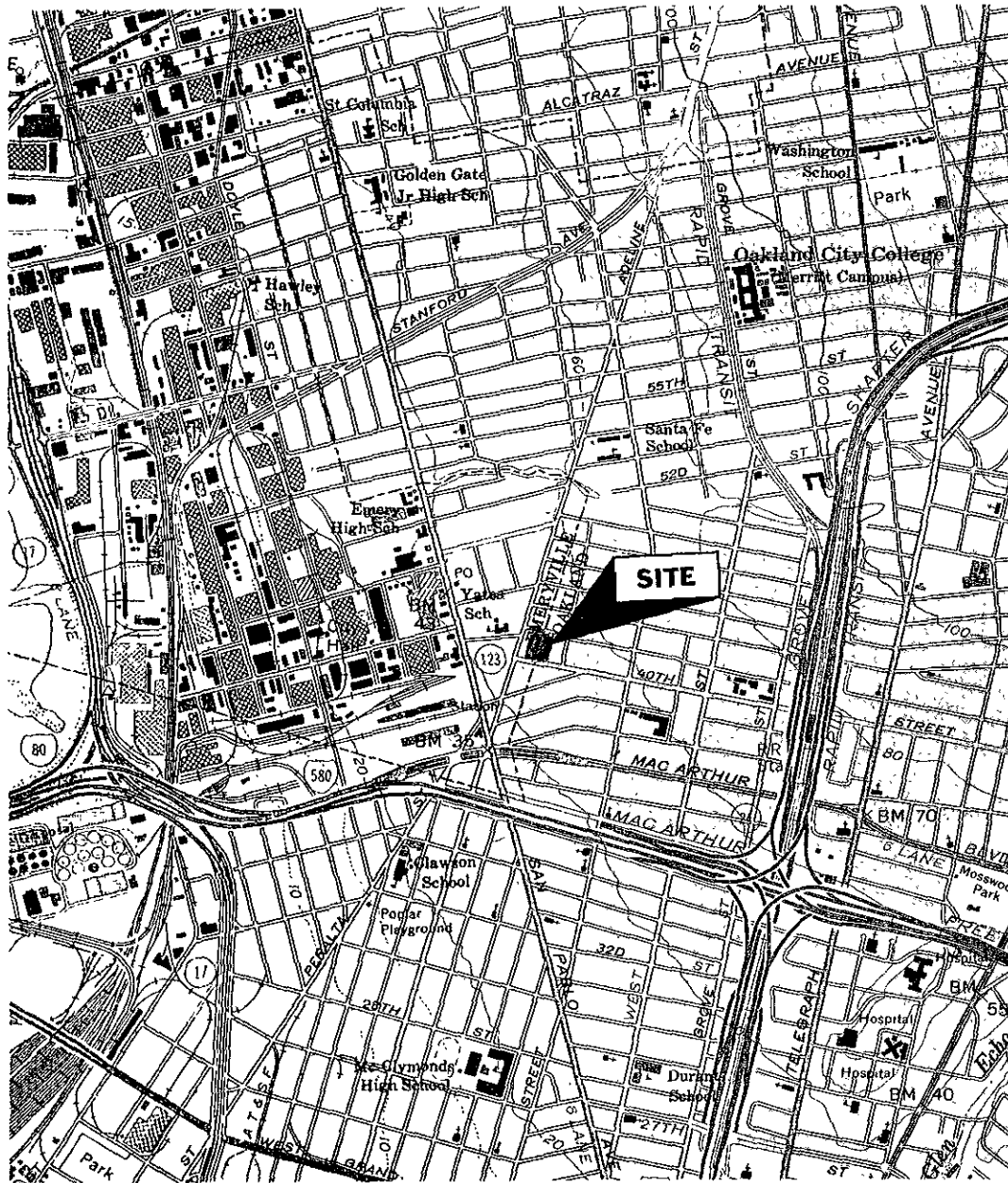
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NORTH



SITE LOCATION MAP

Kozel Property
1001 42nd Street
Oakland, California

AQUA SCIENCE ENGINEERS, INC.

FIGURE 1

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1.0 INTRODUCTION

This workplan presents Aqua Science Engineers, Inc. (ASE)'s workplan for additional soil and groundwater assessment at the Kozel Property located at 1001 42nd Street in Oakland, California (Figures 1 and 2). Part of the subject property is also located in Emeryville, California as the city limit runs through the subject property. The site assessment activities were initiated by Mr. Edward Kozel of the Edward R. and Elizabeth A. Kozel Charitable Remainder Trust, owner of the property, as specified by the Alameda County Health Care Services Agency (ACHCSA) in its letter dated March 10, 2005 (Appendix A).

2.0 BACKGROUND INFORMATION

The site was formerly owned by Boysen Paint Company, which ceased operation in the early 1980s, and was subsequently merged into the Ameritone Paint Corporation, a wholly owned subsidiary of the Grow Group. The site was purchased by Mr. and Mrs. Edward Kozel in 1981, and until recently was operated by Oakland National Engravers (ONE). A furniture restoration shop known as Rockridge Furniture Refinishing also previously occupied a portion of the property. The subject site is currently vacant.

2.1 Underground Storage Tank Removal from Beneath Loading Dock

In 1987, one 10,000-gallon underground storage tank (UST) used for the storage of mineral spirits was removed from beneath the truck loading dock on the 41st Street side of the property. Soil samples collected from beneath the UST at the time of the removal contained up to 43.5 parts per million (ppm) total petroleum hydrocarbons, 0.07 ppm benzene, 0.6 ppm toluene, and 17.6 ppm xylenes. Monitoring well MW-LD4 was also installed at this time. It is unknown how this well was constructed, although there has been speculation that this well may have been installed in the excavation pit.

2.2 Soil and Groundwater Assessment Of 41st Street UST

In 1987, O.H. Materials (OHM) began an investigation of an 8,000-gallon UST in the 41st Street sidewalk. This UST was previously used by Boysen Paint Company to store mineral spirits. A ground penetrating radar (GPR) was used to identify buried structures in the vicinity of the UST. Three underground utility lines were identified that would have been impacted by the removal of the UST.

In February 1988, OHM installed a temporary groundwater monitoring well adjacent to the UST and collected groundwater samples for analysis. Total petroleum hydrocarbons (TPH) were detected in the water samples at 610,000 parts per billion (ppb) and methylene chloride was detected at 720 ppb.

In May 1990, monitoring well MW-B1 was installed in the sidewalk on the west side of the UST. Groundwater samples collected from the monitoring well contained 57,000 ppb TPH and 11.4 ppb methylene chloride.

2.3 September 1991 Groundwater Sampling

In September 1991, Aqua Terra Technologies (ATT) collected groundwater samples from monitoring well MW-B1 (identified as MW-41st in its report) and MW-LD4. Groundwater samples collected from MW-B1 contained 18,000 ppb total purgeable petroleum hydrocarbons (TPPH), 29,000 ppb total petroleum hydrocarbons as kerosene (TPH-K), 5.6 ppb toluene, 250 ppb ethylbenzene, and 980 ppb total xylenes. The total dissolved solids (TDS) concentration was 526,000 ppb. No halogenated volatile organic compounds (HVOCs), including methylene chloride, were detected. The groundwater samples collected from MW-LD4 contained 2.0 ppb benzene, 3.1 ppb toluene, 9.0 ppb ethylbenzene, and 24 ppb total xylenes. The TDS in MW-LD4 was 695,000 ppb.

2.4 May 1993 UST Closure In-Place

In May 1993, Environmental Strategies Corporation (ESC) closed the 41st Street UST in-place. The sidewalk and fill were removed and the UST and piping were inspected prior to the closure. The tank piping contained holes and did not pass a pressure test. The UST, however, did pass a pressure test when it was isolated from the piping. During the excavation work, a product/water mixture that did not appear to be related to the UST was also found to be emanating from beneath the Rockridge Furniture Refinishing building at a depth of 2.5-feet below ground surface (bgs). A sample of this liquid was collected and labeled trench water. Approximately 25 tons of soil were excavated from above the tank and were disposed of off-site. Soil samples collected around the excavation pit and piping contained total extractable petroleum hydrocarbons (TEPH) up to 1.7 ppm and TPPH up to 0.74 ppm. The laboratory then identified the hydrocarbons as matching mineral spirits, although the samples were not quantified using the mineral spirit standard. The only VOC detected

was xylenes at concentrations up to 0.8 ppm. A total of 39 cubic yards of cement slurry was used to fill the void of the UST. The trench water sample contained 24,000 ppb TPPH, 12,000 ppb TEPH, and 380 ppb total xylenes. A soil sample was also collected from the sump area. This sample contained 10 ppm TEPH, 130 ppm TPPH, 1 ppm toluene, 1.3 ppm ethylbenzene, and 7.9 ppm total xylenes.

2.5 May 1993 Monitoring Well Installation

In May 1993, ESC installed monitoring wells MW-B2, MW-B3 and MW-B4 in 41st Street. The site wells were sampled in June and September 1993. Groundwater samples collected in September 1993 contained total petroleum hydrocarbons as mineral spirits (TPH-MS) at 290,000 ppb in MW-B2 and 43,000 ppb in MW-B1. The remaining wells contained TPH-MS at concentrations between 700 and 2,400 ppb. No VOCs were detected during either sampling.

2.6 Concrete Sump Closure and Monitoring Well Installation

The site previously contained two steel-lined concrete sumps. These sumps were apparently used by Rockridge Furniture Refinishing in conjunction with its furniture-stripping operation. Solvents used for the stripping of furniture contained methylene chloride. In May 1993, ESC collected a sample of the sludge in the bottom of the sump. This sample contained 130 ppm total petroleum hydrocarbons, 1.1 ppm toluene, 1.4 ppm ethylbenzene, 14 ppm total xylenes, 0.46 ppm trichloroethene (TCE) and 17 ppm methylene chloride. Liquid in the sump on August 1993 contained 79,000 ppb methylene chloride, 12,000 ppb TCE and trace concentrations of 1,2-dichloroethylene (DCE). This liquid, approximately 110 gallons, was removed from the site.

In 1994, Block Environment Services (BES) drilled a boring adjacent to the sump and installed monitoring well BES-1 in the boring. Soil samples were collected from the boring at depths of 3 and 8-feet bgs. TCE was detected in the soil sample collected from 3-feet bgs at 0.0095 ppm and in the sample collected from 8-feet bgs at 0.013 ppm. No methylene chloride was detected in either soil or groundwater samples from this boring/well, and no TCE was detected in groundwater samples collected from this well.

2.7 Neutralization Room UST Closure In-Place

A 300-gallon UST was discovered in the neutralization room along the eastern wall of the facility in November 1994. The tank location was

pinpointed using GPR. No piping was discovered associated with the UST. Due to the UST's location adjacent to the north building wall, the UST could not be safely removed and it was therefore closed in-place. The liquid contents of the UST were sampled and analyzed for pH, metals, VOCs, semi-volatile organic compounds (SVOCs), flash-point and total petroleum hydrocarbons as diesel (TPH-D) and kerosene (TPH-K). TPH-D was detected at 24 ppm and TPH-K was detected at 20 ppm. The only organic compound detected was di-n-butylphthalate at 1.2 ppm. The presence of this compound was attributed to it being an artifact of a plasticizer that is often detected in environmental samples. The contents of the UST were removed and a soil boring was drilled adjacent to the UST to a depth of 4.5-feet bgs, which represented a depth of 1-foot beneath the bottom of the UST. The soil sample was analyzed for total petroleum hydrocarbons as gasoline (TPH-G), TPH-D, VOCs, SVOCs, and oil and grease. The only compound detected was benzene at 0.007 ppm. Based on these results, the UST was backfilled with concrete and the ACHCSA issued a no further action letter regarding this UST on April 5, 1996.

2.8 Off-Site Groundwater Sampling

Although no reports or description of the sampling could be located, tables and figures in various reports indicate that four "temporary wells" were installed in off-site locations near the site. These "temporary wells" are assumed to be Hydropunch sampling points based on their labels of HP-1 through HP-4. Since there are two sampling dates for HP-1 listed, it is also assumed that sampling in this location was repeated. Groundwater samples collected from HP-1 contained 21,000 ppb TPH-MS in December 1999, but contained less than 50 ppb in January 2000. Groundwater samples collected from HP-1 and HP-3 contained less than 100 ppb TPH-MS, and samples from HP-4 contained 570 ppb TPH-MS. It should be noted that HP-1 is located west of the Dunne Paint property and HP-4 is located south of the Dunne Paint property.

2.9 Groundwater Sampling

Groundwater samples have been collected on a periodic basis from the site groundwater monitoring wells. Depth to groundwater data and analytical results from the groundwater sampling are tabulated in Tables One and Two. During the most recent sampling on December 16, 2004, 0.02-feet of free-floating hydrocarbons were measured in monitoring well MW-B1, adjacent to the former UST, and 0.02-feet of free-floating hydrocarbons were measured in BES-1, adjacent to the former sump. Monitoring well MW-B2 contained TPH-MS at 480 ppb, and MW-B4

contained 450 ppb TPH-MS. No TPH-MS was detected in groundwater samples collected from MW-B3. No TPH-MS was detected in any of the Dunne Paint wells during their most recent sampling in September 2004. Monitoring well MW-LD4 was found full of cement. No information is available on the destruction of this well.

2.10 March 1998 and January 2004 Phase I Reports

In March 1998, National Assessment Corporation (NAC) prepared a Phase I Environmental Site Assessment for the site. A second Phase I report was prepared by ASE in January 2004. Besides the UST and sump area issues discussed above, potential on-site environmental concerns discussed in the Phase I reports included (a) potential contamination in the former etching room, and (b) potential contamination in the former drum storage area. Although not noted in either Phase I report as a potential concern, ASE also considered the former ASTs near the former sump area as a potential source area to investigate.

2.11 July 2004 Conduit Study, Area Well Survey and Workplan

In July 2004, ASE conducted a survey to determine whether subsurface utility lines in the site vicinity could act as a conduit for the preferential movement of groundwater in the site vicinity. This study was conducted by reviewing Underground Service Alert (USA) markings in the site vicinity, reviewing documents such as as-built drawings supplied by the city and individual utility companies, and contacting individuals who would have knowledge of the individual utility lines. Figure 2 presents the location of all known utility lines in the site vicinity. None of the natural gas, water, electrical, telephone or cable TV lines in the site vicinity were determined to be potential conduits for the preferential movement of groundwater.

The sanitary sewer lines in 41st Street, Adeline Street, and Linden Street are deeper than the groundwater elevations during some of the groundwater monitoring events. For this reason, these lines are potential conduits for the preferential movement of groundwater. The City of Emeryville has an 18-inch diameter storm sewer line down Adeline Street. The bottom of this line is approximately 5 to 6-feet bgs and pitches to the south. There was no information available as to what material may have been used to backfill the trenches over the line. Since groundwater has been measured at the site as shallow as 5.08-feet bgs, it is possible that this line could be a conduit for the movement of groundwater during rare periods of high water table. However, since the water table at the site is

typically 6 to 8-feet bgs, this line would not be considered a potential conduit for the movement of groundwater except during very rare periods of very high water table conditions.

EBMUD has a line known as the Adeline Storm Water Interceptor beneath Adeline Street. This is a 48-inch diameter line with a total depth of 18-feet bgs. The bottom of this line is always below the typical depth of groundwater in the site vicinity. For this reason, this line should be considered a potential conduit for the preferential movement of groundwater. Trench plugs were placed in the annular space surrounding the line to prevent the preferential movement of groundwater along this conduit. These trench plugs should prevent this trench line from being a preferential pathway for the movement of contaminated groundwater. The as-built drawings for this line show that extra trench plugs were placed along this line between 40th Street and 41st Street in an area where soil contamination was encountered. This location is southwest of the site and directly west of the former Dunne Paint facility.

ASE also conducted an area well survey to locate wells within 1/4-mile of the site. Thirteen wells were identified during this survey. Of these wells, eight are monitoring wells, two are cathodic protection wells, one is a destroyed well, and two are of unknown use. No domestic, irrigation or municipal water supply wells were located. Based on the well locations and the groundwater flow direction, the only well that appears to be a potential conduit for the movement of contamination would be the destroyed well near the site which consisted of pea gravel fill between 20 and 65-feet bgs. However, it appears that this well is generally upgradient of the site. Since mineral spirits are not readily soluble in water, and given that there is no apparent pumping stress on the deeper aquifer, it is highly unlikely that this destroyed well could be a conduit for the downward movement of contamination.

Other conduits were also investigated and no basements were located in any of the residential units adjacent to the site. The conduit study and area well survey were included in the workplan dated July 23, 2004.

2.12 October to December 2004 Soil and Groundwater Assessment

Between October and December 2004, ASE drilled soil borings BH-A through BH-DD in on and off-site locations to further define the extent of elevated mineral spirits and VOCs at the site. In general, only relatively low concentrations of TPH-MS and VOCs were detected in the soil samples. The only soil sample that contained TPH-MS at concentrations

exceeding the Environmental Screening Level (ESL) for residential soil in areas where groundwater is not a current or potential source of drinking water was the sample collected from 11.5-foot bgs in boring BH-AA. TPH-MS was detected in groundwater at concentrations exceeding ESLs for areas where groundwater is not a current or potential source of drinking water in samples collected from borings BH-B, BH-E, BH-H through BH-K, BH-P through BH-R, BH-T, BH-U, BH-W, and BH-Y through BH-DD. None of the VOCs detected exceeded ESLs, with the exception of naphthalene in the groundwater sample collected from BH-Z. Borings BH-D, BH-V and BH-CC were dry, so no groundwater samples could be collected from these borings. Due to the low permeability in the water-bearing zone in borings BH-F and BH-G, there was insufficient water in these borings to fill 1-liter amber glass bottles for TPH-MS analysis, so only VOCs could be analyzed in these borings. Analytical results for the soil and groundwater sampling are tabulated in Tables Four and Five. TPH-MS concentrations are plotted on Figure 2.

3.0 CONCEPTUAL SITE MODEL

There appear to be multiple significant potential source areas of the mineral spirits in groundwater at the site, including:

- A significant source area located under the site building on the eastern portion of the site. The exact source in this area is not known; however, this is the only area on the property with TPH-MS concentrations in soil over ESLs. Some of the highest TPH-MS concentrations on the site are located in this area.
- The area surrounding the former UST under the truck loading dock appears to be a source of TPH-MS in groundwater. Although the TPH-MS concentrations were not the highest in boring BH-U, this boring appeared to contain free-floating mineral spirits in the pea gravel fill material.
- The former UST and/or UST piping under the 41st Street sidewalk appear to be a source of TPH-MS in groundwater.

In addition, there are several other areas that may be less significant potential source areas including:

- The former ASTs on the southern portion of the property may have also been a source of TPH-MS in groundwater, although this is not certain because of the close proximity between this area and the

former UST in the truck loading lock. The only boring in this area that contained extremely high TPH-MS concentrations was BH-B, which is the boring closest to the former UST in the truck loading dock. In addition, no TPH-MS was detected in soil samples from any of the borings in this area at concentrations above ESLs.

- The former sump near BES-1 may also have been a source area; however, this appears to be a minor source, if a source at all, since none of the highest TPH-MS concentrations at the site were located in this area.
- There may be a source of mineral spirits in the former Rockridge Furniture Building; however, this appears to be a minor source, if a source at all, since none of the highest TPH-MS concentrations at the site were located in this area.

The extent of TPH-MS in soil and groundwater appears to be well defined on-site, with the exception of the far northeastern location in the building to the east. The extent off-site is not completely defined. However, groundwater samples collected from monitoring wells MW-B3, MW-D1, MW-D2 and boring HP-2 suggest that the mineral spirits related to the Kozel property have not migrated south onto the former Dunne Paint property directly across 41st Street to the south. Although borings were only drilled in sidewalk areas, the mineral spirits related to the former UST in the 41st Street sidewalk appear to have migrated to the west, including potential migration under the residential property at 1020 41st Street and 4102 Adeline Street. It is not known at this time whether any mineral spirits related to the Kozel property may have migrated as far as the Adeline Storm Water Interceptor. However, notes from the installation of the Adeline Storm Water Interceptor do not indicate mineral spirit odors at 41st Street, but only south of 41st Street west of the former Dunne Paint property.

In general, low permeability sediments such as clayey silt or silty clay were encountered from beneath the concrete or asphalt surface to approximately 13-feet bgs. Medium and/or highly permeability sediments (such as gravelly sand or silty sand) were encountered below 13-feet to the total depth explored in many of the borings. Borings to the north generally showed lower permeability than borings to the south. Depth to groundwater was highly variable throughout the site. The groundwater depth was below the depth of the sewer line located within 41st Street in all of the borings adjacent to that line.

Regardless of the number of specific sources, elevated mineral spirit concentrations appear to have generally merged into approximately a single plume, and there appears to be very little impact to vadose zone soil with groundwater being the primary medium of concern. The plume appears to have moved to the west under 41st Street. Although there may be potential preferred pathways for the movement of groundwater, the plume generally appears to be moving consistently to the west. There is little indication of movement to the north (which appears to have soils of lower permeability and is cross/upgradient), to the east (which is generally upgradient), or to the south past the centerline of 41st Street (since there are several monitoring wells on the south side of 41st Street that do not contain significant concentrations of mineral spirits).

The purpose of this assessment is to a) complete the definition of the extent of elevated mineral spirits in groundwater including a determination as to whether sewer lines in 41st Street and Adeline Street may be potential conduits for the movement of elevated mineral spirits in groundwater, b) define the vertical extent of mineral spirits on-site, and c) develop a plan for the removal of free-floating mineral spirits.

4.0 EXTENT OF FREE-PHASE MINERAL SPIRITS

Mineral spirits are generally considered insoluble. However, according to <http://www.nature.nps.gov/hazardssafety/tox/minspiri.pdf>, the aqueous solubility of mineral spirits is 45,880 ppb. This concentration appears to coincide with ASE's observations at the site as to where there may be free-floating mineral spirits. The only exception is in ASE's boring BH-U, which appeared to contain free-floating mineral spirits, but only contained 1,600 ppb TPH-MS. The estimated extent of free-phase mineral spirits is shown on Figure 2. It appears that concentrations of TPH-MS fall off very quickly outside of the areas that contain free-phase mineral spirits, which reflects the generally insolubility of mineral spirits. Initial remediation at the site will concentrate on the removal of free-phase mineral spirits in the area shown on Figure 2.

5.0 ELIMINATION OF SAMPLING FOR HVOCS OFF-SITE

The ACHCSA has requested further information on the TCE, naphthalene and acetone previously detected at the site prior to concurring with ASE's recommendation to eliminate sampling for HVOCS in off-site samples.

There has only been one groundwater sample collected at the site where TCE was detected. TCE was detected in groundwater samples collected

from boring BH-G at 0.57 ppb, a concentration that is below the ESL. In 1994, BES drilled a boring adjacent to the sump and installed monitoring well BES-1 in the boring. A soil sample collected from 3-foot bgs contained 0.0095 ppm TCE and a soil sample collected from 8-foot bgs contained 0.013 ppm TCE. However, no TCE was detected in the groundwater samples collected from the well. In addition, TCE has not been detected in borings drilled downgradient of BES-1. Based on these results, it does not appear that TCE is a chemical of concern for the site.

There were several low concentrations of acetone detected in soil samples during the last investigation at the site. However, none of the acetone concentrations exceeded ESLs, and no acetone was detected in any groundwater sample collected at the site to date. Based on these results, ASE does not consider acetone to be a chemical of concern for the site.

There were two groundwater samples analyzed during the most recent assessment that contained naphthalene at concentrations exceeding ESLs. However, both of these samples were collected in on-site locations, and borings drilled downgradient of these locations did not contain naphthalene. Based on these data, ASE considers naphthalene to be a chemical of concern on-site, but not off-site. ASE recommends that soil and groundwater samples collected on-site continue to be analyzed for VOCs, but it does not appear necessary to analyze samples from locations away from the site for naphthalene. ASE recommends that off-site samples no longer be analyzed for VOCs.

6.0 SCOPE OF WORK

The purpose of this assessment was to a) complete the definition of the extent of elevated mineral spirits in groundwater including a determination as to whether sewer lines in 41st Street and Adeline Street may be potential conduits for the movement of elevated mineral spirits in groundwater, b) define the vertical extent of mineral spirits on-site, and c) develop a plan for the removal of free-floating mineral spirits. The specific scope of work for this project is to:

- 1) Obtain a drilling permit from the Alameda County Public Works Agency (ACPWA).
- 2) Obtain encroachment permits from the Cities of Oakland and Emeryville to drill in city streets.

- 3) Contract with a subsurface utility locating service to clear drilling locations of underground utility lines.
- 4) Drill at least 6 soil borings in both on and off-site locations and collect soil and groundwater samples for analysis. One additional soil boring will be drilled to deeper depths with a dual-wall casing in an attempt to define the vertical extent of elevated mineral spirits in groundwater.
- 5) Following collection of the soil and groundwater samples, backfill the borings described in task 4 with neat cement placed by tremie pipe.
- 6) Analyze soil and groundwater samples collected from each boring at a CAL-DHS certified analytical laboratory for TPH-MS by modified EPA Method 8015. In addition, samples collected from all on-site borings will be analyzed for VOCs by EPA Method 8260B. One water sample collected in an area of elevated mineral spirit concentrations will also be analyzed for SVOCs for use in a possible future risk-assessment.
- 7) Prepare a report presenting results from this assessment, including a plan for the remediation of free-phase mineral spirits.

7.0 DETAILS OF PROPOSED SCOPE OF WORK

Details of the assessment are presented below.

TASK 1 - *OBTAIN A DRILLING PERMIT FROM THE ALAMEDA COUNTY PUBLIC WORKS AGENCY*

Prior to drilling, ASE will obtain a drilling permit from the Alameda County Public Works Agency.

TASK 2 - *OBTAIN ENCROACHMENT PERMITS TO DRILL IN THE CITY STREETS*

Prior to drilling, ASE will obtain encroachment permits from the Cities of Oakland and Emeryville to drill borings in their rights of way.

TASK 3 - *CONTRACT WITH AN UNDERGROUND UTILITY LINE LOCATING SERVICE TO ACCURATELY LOCATE UNDERGROUND UTILITY LINES IN STREET AREAS*

ASE will contact Underground Service Alert (USA) at least 48 hours prior to drilling. ASE will also contract with a private underground utility locating service to pinpoint the location of utility lines in the drilling locations.

TASK 4 - *DRILL SOIL BORINGS ON AND OFF-SITE AND COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORINGS FOR ANALYSIS*

ASE will drill six soil borings into the first water-bearing zone in both on and off-site locations (Figure 3). The borings will be drilled using a Geoprobe or similar type drill rig. A Badger drill rig will be used inside building locations where a truck-mounted drill rig can not be utilized. One boring will be located north of boring BH-BB to define the extent of TPH-MS to the northeast. One boring will be drilled north of boring BH-T to better define the extent of elevated TPH-MO between BH-T and BH-O. One boring will be drilled in the sidewalk area of the Linden Street and 41st Street intersection to define the extent of TPH-MS to the southeast. One boring will be drilled south of boring BH-Q to define the extent of elevated TPH-MS to the south in the gap between MW-D1 and MW-D2. Two borings will be drilled to the west near the intersection of Adeline Street and 41st Street. These borings will be drilled adjacent to the sewer line in 41st Street and across sewer lines in Adeline Street. The purpose of these borings is to define the extent of TPH-MS to the west and to better determine whether the utility lines in 41st Street and Adeline Street could be a preferred pathway for the movement of TPH-MS. In addition, one deeper boring will be drilled near boring BH-B to determine the vertical extent of TPH-MS. This deeper boring will be drilled with a dual-walled casing which will allow for the shallower water-bearing zones to be sealed off preventing the vertical migration of contaminants to deeper water-bearing zones. The deeper boring will be drilled to 50-feet bgs, or deeper if there is an indication of elevated mineral spirits or VOCs at a depth of 50-feet bgs. An ASE geologist will direct the drilling.

Undisturbed soil samples will be collected continuously for subsurface hydrogeologic description and possible chemical analysis. The samples will be described by the ASE geologist 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. Each sample will be immediately removed from the sampler, trimmed, sealed

with Teflon tape and plastic caps, secured with duct tape, and 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 then be placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-EPA 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.

After groundwater is encountered, ASE will collect groundwater samples from the borings using a bailer. The groundwater samples to be analyzed for volatile compounds will be slowly decanted from the bailer into 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid and sealed without headspace. The samples to be analyzed for non-volatile compounds will be contained in 1-liter amber glass bottles. The samples will then be labeled and placed in an ice chest with wet ice for transportation to the analytical laboratory under chain of custody documentation. Water samples from the deeper boring will be collected using a Hydropunch.

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

TASK 5 - BACKFILL THE BORINGS WITH NEAT CEMENT

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

TASK 6 - ANALYZE SOIL AND GROUNDWATER SAMPLES COLLECTED FROM THE BORINGS

One soil and one groundwater sample will be analyzed at a CAL-DHS certified environmental laboratory for TPH-MS by EPA Method 8015. In

addition, groundwater samples collected from on-site borings will be analyzed for VOCs by EPA Method 8260B. In the deeper boring drilled near BH-B, additional groundwater samples will be analyzed from deeper water-bearing zones (one sample for each water-bearing zone encountered or one sample per every 10-feet in depth if water-bearing zones extend vertically more than 10-feet). The shallow water sample collected in this area of elevated mineral spirit concentrations will also be analyzed for SVOCs for use in a possible future risk-assessment.

TASK 7 - PREPARE A SOIL AND GROUNDWATER ASSESSMENT REPORT

ASE will prepare a subsurface assessment report presenting the methods and findings of this assessment. This report will include a summary of the results, the site background and history, tabulated soil and groundwater analytical results, an updated conceptual site model, conclusions and recommendations for appropriate additional assessment and feasibility tests for remediation, as necessary. At this time, ASE expects that remediation of the free-floating mineral spirits can best be achieved by pumping from either excavations and/or extraction wells. However, since the full extent of free-floating mineral spirits is not currently known, and since there is a possible property transaction pending at this time, a plan for the removal of the mineral spirits will be presented following the completion of this assessment. 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.

8.0 SCHEDULE

ASE will proceed with this project immediately upon approval of this workplan by the ACHCSA.

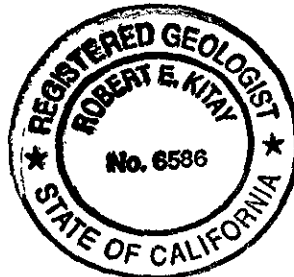
Aqua Science Engineers appreciates the opportunity provide environmental consulting services for this project. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



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



Attachments: Figures 1 through 3
Tables One through Five
Appendix A

FIGURES













42nd STREET

ADELINE STREET

LINDEN STREET

41st STREET

LEGEND

-  FORMER UST
-  FORMER SUMP
-  MONITORING WELL FOR KOZEL PROPERTY
-  MONITORING WELL FOR DUNNE PAINTS
-  TEMPORARY WELL LOCATION
-  GAS LINE
-  ELECTRIC LINE
-  TELEPHONE LINE
-  STORM SEWER LINE
-  SANITARY SEWER LINE
-  WATER LINE
-  GEOPROBE BORING LOCATION

ESTIMATED EXTENT OF FREE-PHASE MINERAL SPIRITS

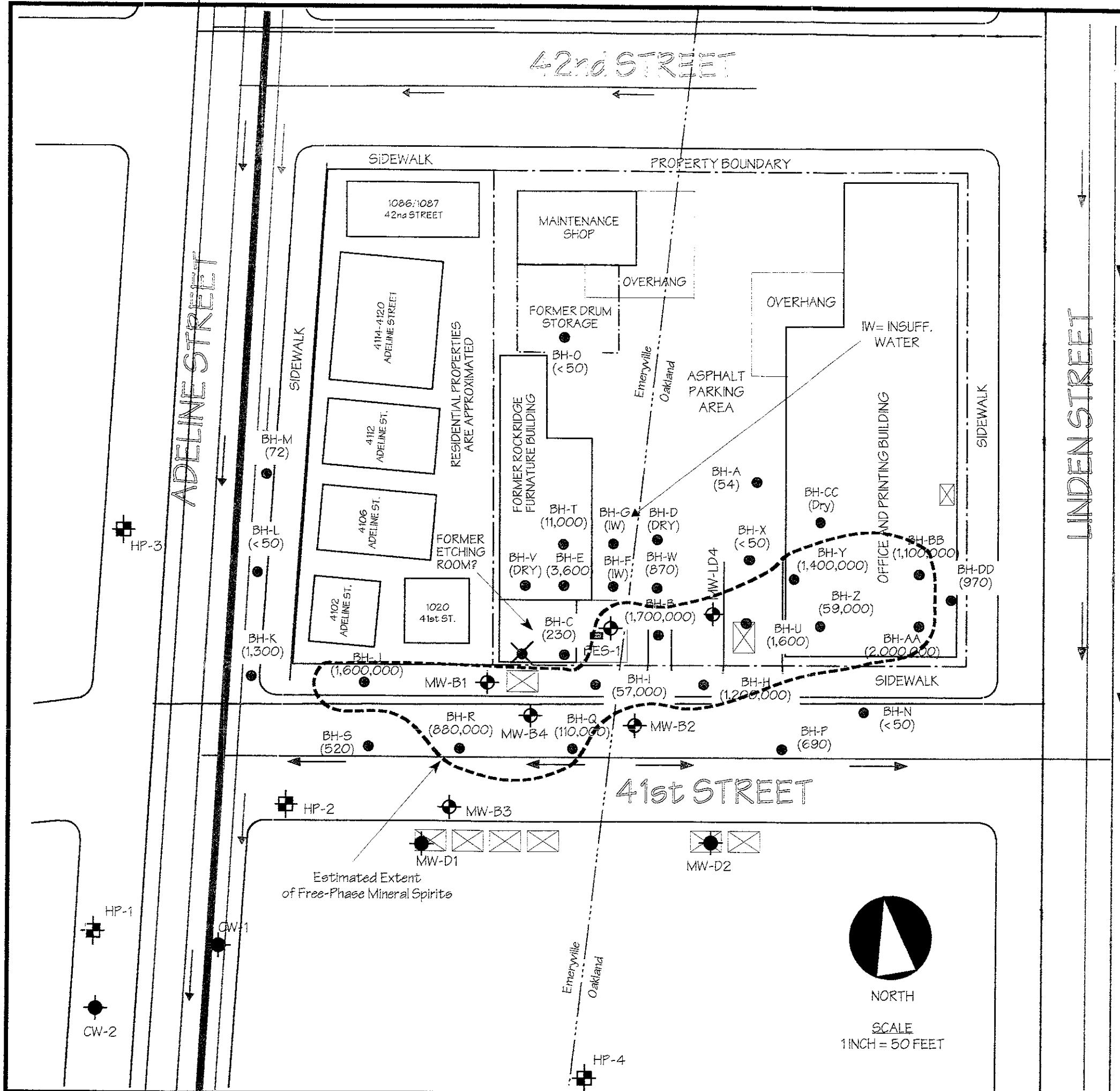
Date: April 14, 2005

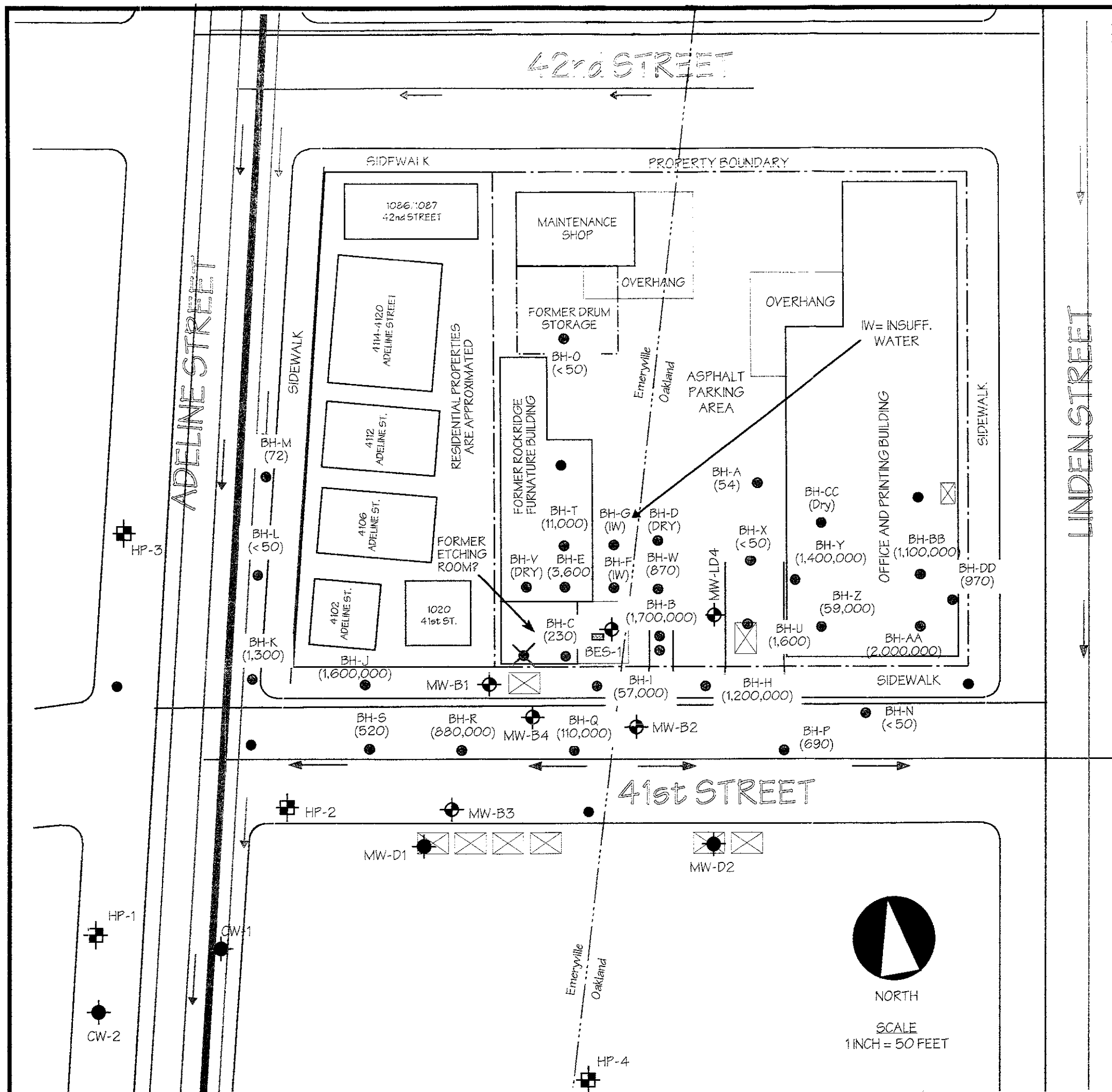
Scale: 1" = 50'

Kozel Property
1001 42nd Street
Oakland, California

Aqua Science Engineers, Inc.

Figure 2





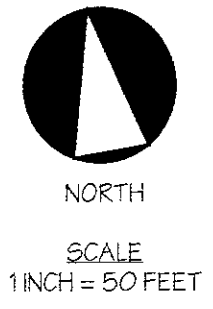
LEGEND

- FORMER UST
- FORMER SUMP
- MONITORING WELL FOR KOZEL PROPERTY
- MONITORING WELL FOR DUNNE PAINTS
- TEMPORARY WELL LOCATION
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- STORM SEWER LINE
- SANITARY SEWER LINE
- WATER LINE
- GEOPROBE BORING LOCATION
- PROPOSED BORING LOCATION
- PROPOSED DEEPER SOIL BORING

PROPOSED BORING LOCATIONS WITH PREVIOUS TPH-MS CONCENTRATIONS IN GROUNDWATER IN PPB

Date: April 14, 2005 Scale: 1" = 50'

Kozel Property
1001 42nd Street
Oakland, California



TABLES

TABLE ONE
 Groundwater Elevation Data
 Kozel Property
 1001 42nd Street, Oakland, CA 94608

Well ID	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Depth to Product (feet)	Groundwater Elevation (msl)
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Former ONE Facility

MW-B1	6/10/93	49.92	6.14		43.78
	7/8/93		6.64		43.28
	8/24/93		6.69		43.23
	9/29/93		8.46		41.46
	10/20/93		6.69		43.23
	11/23/93		6.65		43.27
	12/10/98		---		---
	12/14/99		---		---
	6/15/04		6.00	5.85	44.04*
	9/14/04		6.18	6.14	43.77*
	12/16/04		5.14	5.12	44.80*
MW-B2	6/10/93	50.77	6.75		44.02
	7/8/93		6.91		43.86
	8/24/93		7.22		43.55
	9/29/93		8.80		41.97
	10/20/93		7.25		43.52
	11/23/93		7.26		43.51
	12/10/98		6.43		44.34
	12/14/99		6.50		44.27
	6/15/04		6.40		44.37
	9/14/04		6.56		44.21
	12/16/04		5.88		44.89
MW-B3	6/10/93	49.02	6.85		42.17
	7/8/93		6.05		42.97
	8/24/93		6.21		42.81
	9/29/93		7.74		41.28
	10/20/93		6.24		42.78
	11/23/93		6.18		42.84
	12/10/98		4.94		44.08
	12/14/99		5.08		43.94
	6/15/04		5.43		43.59
	9/14/04		5.63		43.39
	12/16/04		4.67		44.35

TABLE ONE
 Groundwater Elevation Data
 Kozel Property
 1001 42nd Street, Oakland, CA 94608

Well ID	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Depth to Product (feet)	Groundwater Elevation (msl)
MW-B4	6/10/93	49.74	6.00		43.74
	7/8/93		6.14		43.60
	8/24/93		6.34		43.40
	9/29/93		7.97		41.77
	10/20/93		6.11		43.63
	11/23/93		6.38		43.36
	12/10/98		6.20		43.54
	12/14/99		6.05		43.69
	6/15/04		5.58	sheen	44.16
	9/14/04		5.95		43.79
	12/16/04		5.24		44.50
MW-LD4	6/10/93	51.51	6.98		44.53
	7/8/93		7.18		44.33
	8/24/93		7.31		44.20
	9/29/93		7.43		44.08
	10/20/93		7.37		44.14
	11/23/93		7.32		44.19
	12/10/98		6.14		45.37
	12/14/99		6.52		44.99
	6/15/04		Well Abandoned		
BES-1	12/10/98	Not surveyed	10.18		---
	12/14/99		10.98		---
	6/15/04		9.95	9.94	---
	9/14/04		10.28	10.21	---
	12/16/04		54.27	7.94	7.92

TABLE ONE
 Groundwater Elevation Data
 Kozel Property
 1001 42nd Street, Oakland, CA 94608

Well ID	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Depth to Product (feet)	Groundwater Elevation (msl)	
<u>Former Dunne Palms</u>						
MW-D1	6/10/93	50.56	5.29		45.27	
	7/8/93		5.67		44.89	
	8/24/93		6.01		44.55	
	9/29/93		7.69		42.87	
	10/20/93		6.20		44.36	
	11/23/93		6.08		44.48	
	12/14/99		4.60		45.96	
	11/12/03		49.32	5.98		43.34
	3/12/03			5.97		43.35
	6/15/04			6.07		43.25
9/14/04	5.86			43.46		
MW-D2	6/10/93	50.56	6.25		44.31	
	7/8/93		6.37		44.19	
	8/24/93		6.47		44.09	
	9/29/93		7.96		42.60	
	10/20/93		6.48		44.08	
	11/23/93		6.44		44.12	
	12/10/98		5.68		44.88	
	12/14/99		5.80		44.76	
	11/12/03		50.52	9.52		41.00
	3/12/03			8.94		41.58
6/15/04	5.89			44.63		
9/14/04	6.01			44.51		
CW-1	11/12/03	47.55	8.93		38.62	
	3/12/03		6.85		40.70	
	6/15/04		7.85		39.70	
	9/14/04		8.38		39.17	
CW-2	11/12/03	47.59	9.25		38.34	
	3/12/03		7.22		40.37	
	6/15/04		8.40		39.19	
	9/14/04		8.98		38.61	

TABLE ONE
 Groundwater Elevation Data
 Kozel Property
 1001 42nd Street, Oakland, CA 94608

Well ID	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Depth to Product (feet)	Groundwater Elevation (msl)
CW-3	11/12/03	46.39	8.30		38.09
	3/12/03		6.04		40.35
	6/15/04		7.74		38.65
	9/14/04		8.65		37.74

NOTES:

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

Current data is in **bold**.

TABLE TWO
 Summary of Analytical Results for GROUNDWATER Samples
 Kozel Property (Former O.N.E. Color Communications)
 And Former Dunne Quality Paints
 1001 42nd Street, Oakland, CA 94608
 All results are in parts per billion (ppb)

Well ID & Dates Sampled	Mineral Spirits	Other TPH (As Noted)	Toluene	Ethyl benzene	Total Xylenes	tert-Butyl benzene	sec-Butyl benzene	n-Butyl benzene	Vinyl chloride	1,1-Dichloro ethane	trans-1,2-Dichloro ethene	cis-1,2-Dichloro ethene	Other VOCs
Former O.N.E. Color Communications													
MW-B1													
9/30/1991	-	<50*; 18,000*; 29,000*	6	250	980	ND	ND	ND	ND	ND	ND	ND	5 (benzene)
6/10/1993	-	27,000*; 57,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/29/1993	43,000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/28/2003	26,000	1,100,000*; 37,000*	<2.5	<2.5	<2.5	23	<2.5	<2.5	<2.5	<2.5	-	<2.5	<2.5 - <25
6/15/2004						Not Sampled Due to Free Product							
9/14/2004						Not Sampled Due to Free Product							
12/16/2004						Not Sampled Due to Free Product							
MW-B2													
6/10/1993	-	3,800*; 1,400*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/29/1993	290,000	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/10/1998	150,000	<1,000*; ND*; 2,400*; <1,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/14/1999	630	-	-	-	-	-	-	-	-	-	-	-	-
5/28/2003	1,100	22,000*; 1,600*	<0.5	<0.5	<0.5	3.2	3.2	<0.5	<0.5	<0.5	-	<0.5	<0.5 - <5
6/15/2004	3,000	-	<5.0	<5.0	<10	<10	<10	33	<5.0	<5.0	<5.0	<5.0	<5.0 - <500
9/14/2004	410	-	<5.0	<5.0	<10	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0 - <500
12/16/2004	480	-	<0.5	<0.5	<1.0	1.8	1.4	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5 - <50
MW-B3													
6/10/1993	-	1,700*; 510*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/29/1993	2,400	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/10/1998	120	ND*; ND*; 830*; ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/14/1999	<50	-	-	-	-	-	-	-	-	-	-	-	-
5/28/2003	ND	ND*; ND*	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5 - <5
6/15/2004	<50	-	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5 - <50
9/14/2004	<50	-	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5 - <50
12/16/2004	<50	-	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5 - <50
MW-B4													
6/10/1993	-	36,000*; 36,000*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/29/1993	1,400	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/10/1998	7,500	1,000*; ND*; 2,700*; ND*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/14/1999	5,100	-	-	-	-	-	-	-	-	-	-	-	-
5/28/2003	990	7,000*; 14,000*	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	1.8	<0.5	-	<0.5	<0.5 - <5
6/15/2004	1,300	-	<5.0	<5.0	<10	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0 - <500
9/14/2004	400	-	<5.0	<5.0	<10	<10	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0 - <500
12/16/2004	450	-	<1.0	<1.0	<2.0	4.6	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0 - <100

TABLE TWO
 Summary of Analytical Results for GROUNDWATER Samples
 Kozel Property (Former O.N.E. Color Communications)
 And Former Dunne Quality Paints
 1001 42nd Street, Oakland, CA 94608
 All results are in parts per billion (ppb)

Well ID & Dates Sampled	Mineral Spirits	Other TPH (As Noted)	Toluene	Ethyl benzene	Total Xylenes	tert-Butyl benzene	sec-Butyl benzene	n-Butyl benzene	Vinyl chloride	1,1-Dichloro ethane	trans-1,2-Dichloro ethene	cis-1,2-Dichloro ethene	Other VOCs
MW-D2													
8/26/1988	1,600	-	-	-	-	-	-	-	-	-	-	-	-
1/18/1989	< 1,000	-	6.3	ND	12	-	-	-	-	-	-	-	-
4/24/1989	< 1,000	-	ND	ND	7.7	-	-	-	-	-	-	-	-
2/21/1990	300	-	ND	0.3	1.5	-	-	-	-	-	-	-	-
6/10/1992	76	ND ^a ; ND ^c	ND	ND	ND	-	-	-	-	-	-	-	-
6/10/1993	-	9,100 ^b ; 6,200 ^d	ND	ND	ND	-	-	-	-	-	-	-	-
9/24/1993	< 50	ND ^a ; ND ^c	ND	ND	ND	-	-	-	-	-	-	-	-
9/29/1993	220	-	ND	ND	ND	-	-	-	-	-	-	-	-
12/10/1998	180	ND ^a ; ND ^c ; 95 ^e ; ND ^f	ND	ND	ND	-	-	-	-	-	-	-	-
12/14/1999	100	-	-	-	-	-	-	-	-	-	-	-	-
11/12/2003	1,400	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
3/12/2004	330	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
6/15/2004	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
9/14/2004	< 50	-	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 - < 50
CW-1													
11/12/2003	85	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
3/12/2004	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
6/15/2004	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
9/14/2004	< 50	-	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 - < 50
CW-2													
11/12/2003	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
3/12/2004	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
6/15/2004	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
9/14/2004	< 50	-	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 - < 50
CW-3													
11/12/2003	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	5.1 (TCE)
3/12/2004	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
6/17/2004	< 50	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 0.5 - < 50
9/14/2004	< 50	-	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0 - < 50
ESL	NE	VARIES	130	290	15	NE	NE	NE	40	47	590	590	VARIES

Notes:

Most recent concentrations are in Bold.

Non-detectable concentrations noted by the less than sign (<) followed by the laboratory reporting limit or "ND".

NA indicates the data is not available

"-" indicates not tested.

^a = TPH-d, ^b = TEPH (non-diesel); ^c = TPH-g, ^d = TPPH (non-gasoline), ^e = Kerosene

^f indicates a grab sample

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 Indicates an ESL has not been established

TABLE THREE
Kozel Property
Boring Elevation Survey
(Feet Above MSL)

Boring	Elevation (MSL)
BH-A	56.19
BH-B	53.76
BH-C	54.65
BH-D	54.93
BH-E	54.79
BH-F	54.75
BH-G	54.80
BH-H	51.42
BH-I	50.81
BH-J	49.58
BH-K	48.82
BH-L	48.87
BH-M	49.18
BH-N	52.77
BH-O	54.99
BH-P	52.05
BH-Q	50.82
BH-R	50.28
BH-S	49.64
BH-T	54.81
BH-U	52.16
BH-V	54.79
BH-W	54.90
BH-X	52.56
BH-Y	56.42
BH-Z	56.44
BH-AA	56.44
BH-BB	56.45
BH-CC	56.43
BH-DD	56.45
BES-1	54.27
MW-B1	49.92

TABLE FOUR
Summary of Analytical Results for SOIL Samples from Soil Borings
Kozel Property (Former O.N.E. Color Communications)
1001 42nd Street, Oakland, CA 94608
All results are in parts per million (ppm)

Boring ID	Sample Depth	TPH Mineral Spirits	Toluene	Ethyl benzene	Total Xylenes	tert-Butyl benzene	sec-Butyl benzene	n-Butyl benzene	Vinyl chloride	1,1-Dichloro ethane	trans-1,2-Dichloro ethene	cis-1,2-Dichloro ethene	Other VOCs
BH-W	7.5	24	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	ND
BH-X	11.5	58	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	ND
BH-Y	8.5	44	< 0.005	< 0.005	< 0.005	0.017	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.067 (Acetone) 0.036 (p-Isopropyltoluene)
BH-Z	11.5	51	< 0.005	< 0.005	< 0.005	0.012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.100 (Acetone) 0.026 (p-Isopropyltoluene) 0.028 (naphthalene)
BH-AA	11.5	1,100	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	< 0.019	0.058 (p-Isopropyltoluene)
BH-BB	11.5	320	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	< 0.017	0.017 (p-Isopropyltoluene)
BH-CC	11.5 19.5	31 < 1.0	< 0.020 < 0.005	< 0.020 < 0.005	< 0.020 < 0.005	< 0.020 < 0.005	< 0.020 < 0.005	< 0.020 < 0.005	< 0.020 < 0.005	< 0.020 < 0.005	< 0.020 < 0.005	< 0.020 < 0.005	0.032 (p-Isopropyltoluene) ND
BH-DD	11.5	< 1.0	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	ND
ESL		500	9.3	4.7	1.5	390 (PRG)	220 (PRG)	240 (PRG)	0.0067	0.33	3.1	1.6	0.5 (Acetone)

Notes

Detectable concentrations are in Bold.

Non-detectable concentrations noted by the less than sign (<) followed by the laboratory reporting limit or "ND".

ESL is the Environmental Screening Level for residential soil in areas where groundwater is not a current or potential source of drinking water established by the California Regional Water Quality Control Board, San Francisco Bay Region as presented in the "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" document dated July 2003

PRG = The United State Environmental Protection Agency Region IX Preliminary Remediation Goal for residential soil is presented for compounds where an ESL has not been established

TABLE FIVE
 Summary of Analytical Results for GROUNDWATER Samples from Soil Borings
 Kozel Property (Former O.N.E. Color Communications)
 1001 42nd Street, Oakland, CA 94608
 All results are in parts per billion (ppb)

Boring ID	TPH Mineral Spirits	Toluene	Ethyl benzene	Total Xylenes	tert-Butyl benzene	sec-Butyl benzene	n-Butyl benzene	Vinyl chloride	1,1-Dichloro ethane	trans-1,2- Dichloro ethene	cis-1,2- Dichloro ethene	Other VOCs
BH-A	54	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-B	1,700,000	<2.0	<2.0	<4.0	7.9	<4.0	9.0	<2.0	<2.0	<2.0	<2.0	ND
BH-C	230	<0.5	<0.5	<1.0	3.1	2.2	<1.0	0.51	<0.5	<0.5	4.7	ND
BH-D	IW	IW	IW	IW	IW	IW	IW	IW	IW	IW	IW	IW
BH-E	3,600	<0.5	<0.5	<1.0	1.3	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-F	IW	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-G	IW	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	0.57 (TCE)
BH-H	1,200,000	<2.0	<2.0	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0	ND
BH-I	57,000	<2.0	<2.0	<4.0	13	35	<4.0	<2.0	<2.0	<2.0	<2.0	20 (n-propylbenzene)
BH-J	1,600,000	<2.0	<2.0	<4.0	20	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0	ND
BH-K	1,300	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-L	<50	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-M	72	0.64	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-N	<50	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-O	<50	26	2.4	13	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	1.6 (benzene)
BH-P	690	0.57	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-Q	110,000	<2.0	<2.0	<4.0	61	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0	ND
BH-R	880,000	<0.5	<0.5	<1.0	4.9	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-S	520	0.64	<0.5	<1.0	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-T	11,000	12	1.2	6.8	2.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	0.70 (benzene) 0.93 (1,2,4-trimethylbenzene)
BH-U	1,600	<0.5	<0.5	<1.0	1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	ND
BH-V	IW	IW	IW	IW	IW	IW	IW	IW	IW	IW	IW	IW
BH-W	870,000	<1.0	<1.0	<2.0	26	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	2.6 (naphthalene) 4.0 (1,2,4-trimethylbenzene)

TABLE FIVE
 Summary of Analytical Results for GROUNDWATER Samples from Soil Borings
 Kozel Property (Former O.N.E. Color Communications)
 1001 42nd Street, Oakland, CA 94608
 All results are in parts per billion (ppb)

Boring ID	TPH Mineral Spirits	Toluene	Ethyl benzene	Total Xylenes	tert-Butyl benzene	sec-Butyl benzene	n-Butyl benzene	Vinyl chloride	1,1-Dichloro ethane	trans-1,2- Dichloro ethene	cis-1,2- Dichloro ethene	Other VOCs
BH-X	< 50	< 0.5	< 0.5	< 10	< 10	< 10	< 10	< 0.5	< 0.5	< 0.5	< 0.5	ND
BH-Y	1,400,000	12	< 5.0	12	46	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	41 (naphthalene)
BH-Z	59,000	11	< 0.5	7.3	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	ND
BH-AA	2,000,000	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	ND
BH-BB	1,100,000	< 5.0	< 5.0	< 10	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	ND
BH-DD	970	2.9	0.58	3.8	< 1.0	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	0.78 (1,2,4-trimethylbenzene)
ESL	640	130	290	13	240 (PRG)	240 (PRG)	240 (PRG)	4.0	47	590	590	

Notes:

Detectable concentrations are in **Bold**.

Non-detectable concentrations noted by the less than sign (<) followed by the laboratory reporting limit or "ND"

IW indicates that the boring contained insufficient water to sample, so no analysis was performed

ESL is the Environmental Screening Level for areas where groundwater is not a current or potential source of drinking water as established by the California Regional Water Quality Control Board, San Francisco Bay Region in their Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater" dated July 2005

PRG is the Preliminary Remediation Goal for residential soil as established by the US EPA Region IX; no ESL has been established

APPENDIX A

ACHCSA Directive Letter

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director

March 18, 2005



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

Mr. Edward Kozel
20 Oak Knoll Drive
Healdsburg, CA 95448

Dear Mr. Kozel:

Subject: Fuel Leak Case RO0000079, 1001 42nd St., Oakland, CA 94608, Oakland National Engravers (ONE)

Alameda County Environmental Health staff has reviewed the case file for the subject site including the January 19, 2005 *Report of Soil and Groundwater Assessment* by ASE, your consultant. We request that you address the following technical comments and submit the technical report requested below.

TECHNICAL COMMENTS

DEFINITION OF DISSOLVE AND FREE PRODUCT PLUMES

1. Our office concurs with the report's conclusion that the extent of the petroleum (mineral spirits) plume has not yet been defined, both laterally and vertically. We request that you further define the extent of the contamination and suggest the collection of depth discrete soil and groundwater samples. The vertical extent of contamination is of particular concern in locations where permeable soil type is noted in the deepest extent of the boring. We note that the potential impact to neighboring residential properties was not evaluated since the borings proposed near the site boundary were not able to collect water samples. In addition, the extent of free product must be determined and removed to the extent possible. Elevated TPH as mineral spirits was reported in groundwater samples. Please determine what concentrations in groundwater may represent free product and delineate those areas where remediation should be targeted. How will free product be remediated? Please address these items in the requested work plan.

CHEMICALS OF CONCERN

2. Your consultant recommends the elimination of volatile organics analysis, however, before we can concur with this you must show that the detected naphthalene, TCE and acetone are from laboratory contamination or some other artifact. In addition, you must demonstrate that the former sumps at the site, where volatile contaminants were identified, have been adequately assessed. Provide your rationale and justification for elimination of VOC analysis in the requested work plan.

COMPLETENESS OF FIGURES

3. Please show the locations of all former USTs, sumps and other potential contaminant sources on your future submitted figures. These are missing on some of the figures in the referenced report.

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Mr. Edward Kozel
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PREFERENTIAL PATHWAY/SITE CONCEPTUAL MODEL

4. The down-gradient migration of the plume is not well understood at this time. Conflicting or lack of data has made the understanding of the site difficult. The following observations require clarification/investigation. No data exists to evaluate the threat to the adjacent residences. The report states that the sewers lines may be acting as preferential pathways, however groundwater samples collected along the sewer line in 41st St. detected both elevated and low levels of TPHms, while the wells on the south side of the sewer detected only low levels. To determine the extent and impact of the petroleum release(s), your site conceptual model (SCM) must be confirmed. Additional sampling is necessary to determine the plume migration pathway. To do this, we request that you present a SCM with your hypotheses for plume migration and propose additional investigation to confirm/refute each one. Please provide this in the requested work plan. We urge you to obtain all off-site access agreements now, to facilitate the investigation. Based upon the results of your investigation, it is anticipated that additional monitoring wells will be required.

APPROPRIATE CLEAN-UP LEVELS

5. Though the work proposes performing a human health risk assessment for residential exposure, you are reminded that all the appropriate cleanup levels must be considered including nuisance threshold, eco-toxicity and groundwater protection as well as human health.

TECHNICAL REPORT REQUEST

- April 20, 2005- Work plan for the lateral and vertical delineation of the plume, determination of free product concentration and location(s) of areas of free product, justification for the elimination of HVOC analysis, work plan for the verification of SCM hypotheses and evaluation of appropriate clean-up levels.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

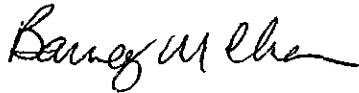
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Mr. Edward Kozel
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PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

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. Robert Kitay, ASE, Inc., 208 West El Pintado, Danville, CA 94526

Ms. Kim Kraft, ONE Color Communications, 1001 42nd St., Oakland, CA 94608

Mr. Martin Samuels, Green City Development Group, 3675 Del Monte Ave.,
Oakland, 94608

Mr. Jon Rosso, Clayton Group Services, 6920 Koff Center Parkway, Suite 216,
Pleasanton, CA 94566

Mr. Donald Miller, California Linen, 989 41st St., Oakland, CA 94608

ONE 3-18-05