October 7, 1996

# PHASE II
# SOIL AND GROUNDWATER
# INVESTIGATION

***1075 40th Street***
**Oakland, California**

Fidelity Roofing

**Project No. 1449**

**Prepared For**

**Mr. Monte Upshaw**
**Fidelity Roof Company**
**1075 40th Street**
**Oakland, CA 94608**

**Prepared By**

**All Environmental, Inc.**
**3364 Mount Diablo Boulevard**
**Lafayette, CA 94549**
**(800) 801-3224**

AEI

ALL ENVIRONMENTAL, INC.
*Environmental Engineering & Construction*

October 7, 1996
Project No. 1449

Mr. Monte Upshaw
Fidelity Roof Company
1075 40th Street
Oakland, CA 94608

Subject: **1075 40th Street, Oakland, California**

Dear Mr. Upshaw:

The following letter report describes the activities and results of the subsurface investigation conducted by All Environmental, Inc. (AEI) at the above referenced property. The investigation was conducted in response to your request to assess and define the magnitude and extent of petroleum hydrocarbon contamination present at the site.

**I Property Description**

The subject property currently supports the operation of Fidelity Roof Company (Figure 1: Site Location Map).

On December 19, 1995, Tank Protect Engineering removed one (1) 1,000 gallon underground storage tank (UST) and one (1) 500 gallon gasoline UST from the southeast corner of the property. The removal of the tanks produced a single excavation. The excavated soil was stockpiled north of the excavation. Three discrete soil samples were collected from beneath the USTs. Analysis of the samples indicated that soil beneath the 1000 gallon UST was impacted with minor concentrations of total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, benzene, toluene, ethylbenzene and xylene (BTEX) and methyl tertiary butyl ether (MTBE). A single soil sample collected from beneath the 800 gallon UST indicated 100 ppm TPH as gasoline and 96 ppm TPH as diesel present. BTEX was present at concentrations of 2.0 ppm, 0.26 ppm, 1.9 ppm and 8.0 ppm, respectively. MTBE was not present above the detection limit of 0.30 ppm.

Four discrete soil samples were collected from the excavated soil. The samples were analyzed as one composite sample. TPH as gasoline and TPH as diesel were present within the representative sample at concentrations of 580 ppm and 120 ppm, respectively. BTEX concentrations were 2.3 ppm, 11 ppm, 6.8 ppm and 47 ppm, respectively. MTBE was not detected within the composite stockpile soil sample.

AEI issued a workplan on August 28, 1996 to the Alameda County Health Care Services Agency (ACHCSA). The workplan was designed to define the extent and magnitude of petroleum hydrocarbon contamination in the vicinity of the former USTs. On September 11, 1996, Ms. Susan Hugo of the ACHCSA approved the workplan. The following report describes the scope and results of the subsurface investigation.

**II Investigative Efforts**

All Environmental, Inc. (AEI) performed a subsurface investigation at the property on September 12, 1996. The investigation included the advancement of four soil borings (SB-1, SB-2, SB-3 and SB-4) in the vicinity of the former USTs. The borings were advanced in the locations shown on Figure 2 using a Geoprobe drilling rig. Prior to drilling, permit number 96695 was obtained from the Zone 7 Water Agency (Refer to Attachment A).

The four soil borings were advanced to 20 feet below ground surface (bgs). Soil samples were collected at 5, 10, 15 and 20 feet bgs and labeled L-1, L-2, L-3 and L-4, respectively. The soil samples were screened in the field with a portable organic vapor meter (OVM). The soil samples were collected in 7/8 inch acrylic liners which were sealed with teflon tape and caps and placed on ice in an ice chest for transportation to the laboratory under chain of custody protocol. The near surface sediments encountered during the boring advancement included silty, sandy, gravely clay. Logs of the boreholes are present as Attachment B.

Groundwater was encountered at approximately 13-15 feet bgs. Grab groundwater samples were obtained from SB-2 and SB-4 and labeled SB2 W and SB4 W, respectively. Groundwater samples were collected using a clean stainless steel bailer. Water was poured from the bailer amber liter bottles, 40 ml voa vials and 16 ounce HPDE plastic bottles and capped so that no head space or visible air bubbles were present within the sample containers. The groundwater samples were labeled and placed in an ice chest for transportation to McCampbell Analytical, Inc. under chain of custody protocol. Due to slow recharge, only two voas of groundwater were collected from SB-4.

The borings were backfilled with cement slurry as per ACHCSA requirements upon collection of the soil and groundwater samples.

The soil and groundwater samples were submitted to McCampbell Analytical, Inc. of Pacheco, California (DOHS Certification Number 1644) for analysis. Soil samples collected at 10 feet bgs from each boring was analyzed for total petroleum hydrocarbons (TPH) as gasoline (EPA method 5030/8015), TPH as diesel (EPA method 8015/3550), benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary butyl ether (MTBE) (EPA method 8020/602) and total lead (AA). Grab groundwater sample SB-2 W was analyzed for the same constituents, however due to the lack of sample volume, SB-4 W was analyzed only for TPH as gasoline, BTEX and MTBE.

In an effort to characterize the existing stockpile of soil remaining from the UST removal, AEI collected four discrete soil samples (STKP 1-4) from approximately 2 feet within the stockpile. The soil samples were collected in six inch brass liners that were driven into the soil until completely full. The sample tubes were sealed with teflon tape and plastic caps and placed into a cooler with ice to await transport. The four discrete samples were combined by the laboratory into one composite sample for analysis. The composite sample was analyzed for TPH as gasoline, TPH as diesel, BTEX and MTBE.

In addition, two soil samples were collected from the southern sidewall of the open excavation. The sidewall samples were collected from approximately 3 feet and 7 feet bgs and labeled SWS, 3' and SWS, 7', respectively. The samples were collected in six inch brass liners that were driven into the soil until completely full. The sample tubes were sealed with teflon tape and plastic caps and were placed into a cooler with ice to await transport. Soil sample SWS,7' was analyzed for TPH as gasoline, TPH as diesel, BTEX and MTBE. Soil sample SWS,3' was placed on hold at the laboratory for potential future analysis.

**III Findings**

Significant concentrations of petroleum hydrocarbons are present within the soil, south and east of the current open excavation. Soil samples collected from the southern sidewall and from SB-1 indicated between 920 parts per million (ppm) and 290 ppm TPH as gasoline present. Minor concentrations of TPH as diesel, BTEX, MTBE and lead are present within the soil. Refer to Table 1 for a summary of the soil sample analytical results.

Samples collected from the stockpiled soil indicated only minor concentrations of petroleum hydrocarbons present.

Groundwater samples collected from borings SB-2 and SB-4 contained significant concentrations of petroleum hydrocarbons, indicating that the groundwater beneath the site is impacted. Concentrations of TPH as gasoline, TPH as diesel, benzene and MTBE were present at maximum concentrations of 5500 parts per billion (ppb), 2100 ppb, 340 ppb, and 230 ppb. Refer to Table 2 for a summary of the groundwater analytical data.

The laboratory analytical results and chain of custody documents are included as Attachment C.

**IV Recommendations/Additional Investigations**

Analytical results from the subsurface investigation revealed significant levels of gasoline and diesel present within soil to the south and west of the open excavation. The soil contamination is believed to extend beneath the existing pump island. AEI recommends additional excavation of soil from south of the current excavation. In addition, the excavation of contaminated soil from beneath and in the vicinity of the pump island is recommended. Any remaining associated piping should be removed and disposed during the excavation activities. Moderate concentrations of petroleum hydrocarbons are present in the soil to the east of the excavation, however additional soil removal could potentially undermine the existing building. Concentrations present in the soil north of the excavation do not warrant the removal of additional soil.

Due to the significant levels of contamination present in the groundwater beneath the site, further investigation into the impact on groundwater will probably be required by the ACHCSA. The investigation should include the installation of three groundwater monitoring wells to determine groundwater gradient beneath the site and to evaluate the petroleum hydrocarbon plume.

AEI recommends the use of the current stockpiled soil as backfill material. AEI believes the low concentrations of petroleum hydrocarbons present within the soil are not significant enough to warrant the expense of off-site disposal and the import of clean fill material.

If you have any questions regarding our investigation, please do not hesitate to contact Jennifer Anderson at (510) 283-6000.

Sincerely,

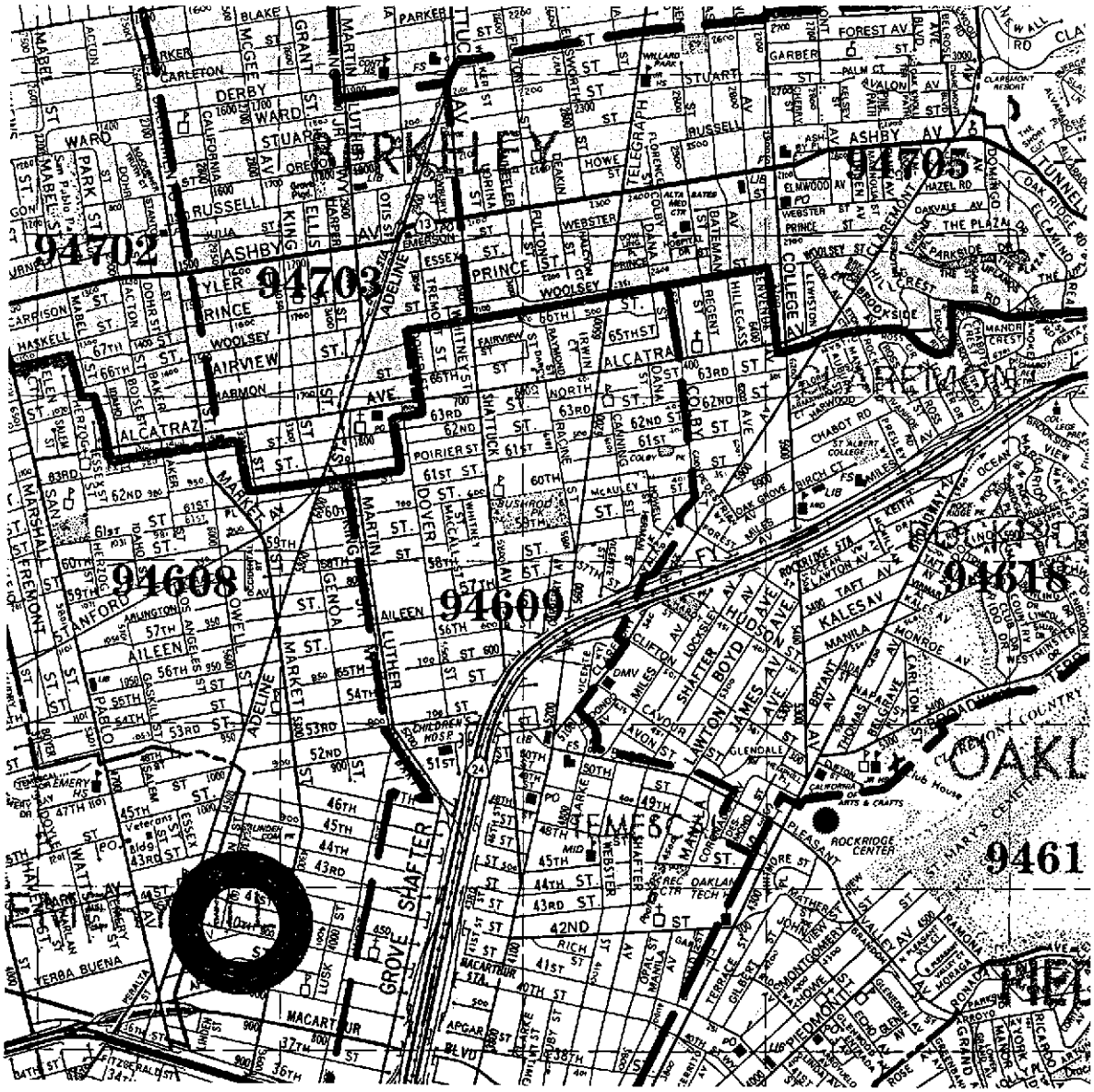
Jennifer Anderson
Project Manager

for

Joseph P. Derhake, PE, CAC
Principal

cc: Ms. Susan Hugo, Alameda County Health Care Services Agency, Department of Environmental Health, 1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502

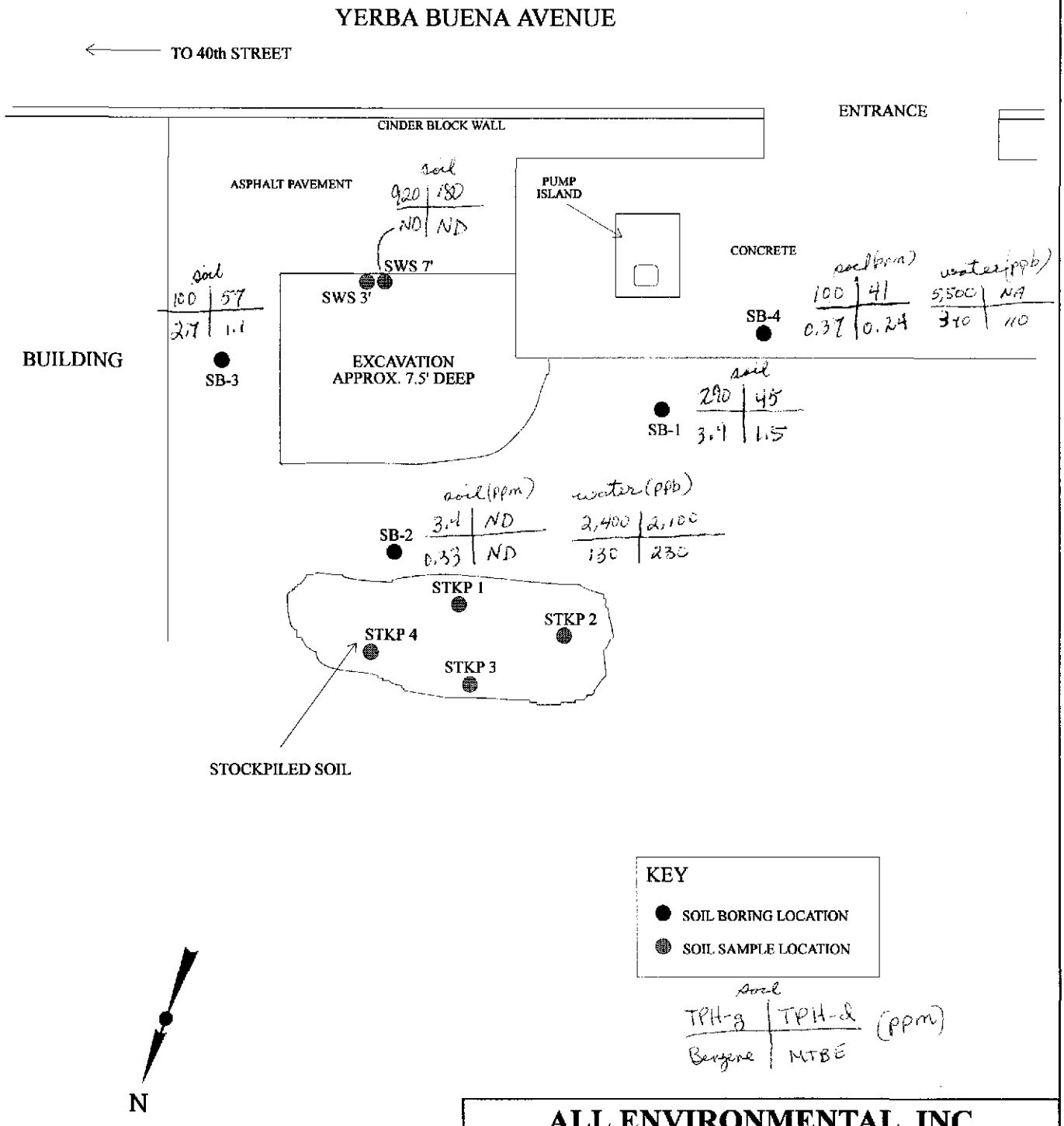
Attachment A
Attachment B
Attachment C




N

FROM:
THOMAS BROS. MAPS
1995

| ALL ENVIRONMENTAL, INC.<br>3364 MT. DIABLO BOULEVARD, LAFAYETTE | | |
|---|---|---|
| SCALE: 1 IN = 2200 FT | APPROVED BY: | DRAWN BY: J.S. ANDERSON |
| DATE: 7 OCTOBER 96 | | REVISED: J.S. ANDERSON |
| SITE LOCATION MAP | | |
| 1075 40th STREET<br>OAKLAND, CALIFORNIA | | DRAWING NUMBER:<br>FIGURE 1 |




| | | |
|---|---|---|
| **ALL ENVIRONMENTAL, INC.**<br>3364 MT. DIABLO BOULEVARD, LAFAYETTE | | |
| SCALE: 1 IN = 10 FT | APPROVED BY: | DRAWN BY: J.S. ANDERSON |
| DATE: 7 OCTOBER 96 | | REVISED: J.S. ANDERSON |
| SOIL BORING AND SAMPLE LOCATION MAP | | |
| 1075 40th STREET<br>OAKLAND, CALIFORNIA | | DRAWING NUMBER:<br>FIGURE 2 |

*Table 1 - Soil Sample Analyses*

| Sample Identification | TPHg mg/kg | TPHd mg/kg | Benzene mg/kg | Toluene mg/kg | Ethyl-benzene mg/kg | Xylenes mg/kg | MTBE mg/kg | Lead mg/kg |
|---|---|---|---|---|---|---|---|---|
| SB-1, L-2, 10' | 290 | 45 | 3.9 | 2.7 | 4.6 | 18 | 1.5 | 9.4 |
| SB-2, L-2, 10' | 3.4 | <50 | 0.33 | 0.013 | 0.068 | 0.046 | <0.05 | 5.4 |
| SB-3, L-2, 10' | 100 | 57 | 2.7 | 2.9 | 2.7 | 11 | 1.1 | 7.7 |
| SB-4, L-2, 10' | 100 | 41 | 0.37 | 0.28 | 1.5 | 6.9 | 0.24 | 11 |
| STKP (1-4) | 3.8 | 28 | 0.009 | 0.021 | 0.012 | 0.079 | <1.0 | NA |
| SWS 7' | 920 | 180 | <0.2 | 2.3 | <0.2 | 21 | <0.9 | NA |

*Table 2 - Groundwater Sample Analyses*

| Sample Identification | TPHg ug/L | TPHd ug/L | Benzene ug/L | Toluene ug/L | Ethyl-benzene ug/L | Xylenes ug/L | MTBE ug/L | Lead mg/L |
|---|---|---|---|---|---|---|---|---|
| SB2 W | 2400 | 2100 | 130 | 110 | 84 | 250 | 230 | <0.2 |
| SB4 W | 5500 | NA | 340 | 350 | 250 | 1200 | 110 | NA |

Total Petroleum Hydrocarbons as gasoline = TPHg
Total Petroleum Hydrocarbons as diesel = TPHd
mg/kg = milligrams per kilogram (ppm)
ug/L = micrograms per liter (ppb)
mg/L = milligrams per liter (ppm)
NA = Not Analyzed

ZONE 7 WATER AGENCY
5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588
VOICE (510) 484-2600
FAX (510) 462-3914

# DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT FIDELITY ROOF COMPANY
1075 40TH STREET
OAKLAND, CA 94608

CLIENT
Name FIDELITY ROOF COMPANY /MONTE UPSHAW
Address 1075 40TH STREET Voice (510) 547 6330
City OAKLAND Zip 94608

APPLICANT
Name ALL ENVIRONMENTAL, INC.
JENNIFER ANDERSON Fax (510) 283 6121
Address 3364 MT DIABLO BLVD Voice (510) 283 6000
City LAFAYETTE Zip 94549

TYPE OF PROJECT
Well Construction
Cathodic Protection ___
Water Supply ___
Monitoring ___
Geotechnical Investigation
General ___
Contamination X
Well Destruction ___

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger ___
Cable ___ Other GEOPROBE

DRILLER'S LICENSE NO. 485165

WELL PROJECTS
Drill Hole Diameter ___ in. Maximum
Casing Diameter ___ in. Depth ___ ft.
Surface Seal Depth ___ ft. Number ___

GEOTECHNICAL PROJECTS
Number of Borings 4
Hole Diameter 1 in. Maximum
Depth 25 ft.

ESTIMATED STARTING DATE 9/12/96
ESTIMATED COMPLETION DATE 9/12/96

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ Date 9/11/96

FOR OFFICE USE

PERMIT NUMBER 96695
LOCATION NUMBER

PERMIT CONDITIONS

*Circled Permit Requirements Apply*

A. GENERAL
(1.) A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
(3.) Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

(C.) GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 26 Sep 96
Wyman Hong

91992

TOTAL P.01

| | |
|---|---|
| **PROJECT:** FIDELITY - Project No. 1449 | **LOG OF BOREHOLE:** SB-1 |
| BORING LOC.: WEST OF EXCAVATION | ELEVATION, TOC: -- |
| DRILLING CONTRACTOR: GREGG DRILLING | START DATE: 9/12/96 / END DATE: 9/12/96 |
| DRILLING METHOD: DIRECT PUSH | TOTAL DEPTH: 20.0' |
| DRILLING EQUIPMENT: GEOPROBE DRILL RIG | DEPTH TO WATER: 15.0' |
| SAMPLING METHOD: 2" DRIVE SAMPLER | LOGGED BY: J.S. ANDERSON |
| HAMMER WEIGHT and FALL: N/A | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | COMMENTS |
|---|---|---|---|---|---|---|
| 0 | AB | 0.0 - 0.6; Asphalt, 3" Aggregate Base. | | | | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | CL | 0.6 - 20.0; Sandy, Gravelly, Clay; dark greenish gray, 5GY 4/1, low plasticity; gravel up to 1/8". | | | | |
| 5 | | | L-1 | | | Hydrocarbon odor. 0.0 ppm |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | 0.6 - 20.0; Sandy, Gravelly, Clay (cont.); mod. yellowish brown 10YR 4/2 w/ grayish olive mottling. | L-2 | | | Strong Hyd odor. >1000 ppm |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |

**PROJECT:** FIDELITY - Project No. 1449

**LOG OF BOREHOLE:** SB-1

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | COMMENTS |
|---|---|---|---|---|---|---|
| 15 | CL | 0.6 - 20.0; Sandy, Gravelly, Clay (cont.) | L-3 | | | Hyd. odor.<br>Moist.<br>300 ppm ▼ |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | No sample collected. |
| | | Borehole terminated at 20.0 feet.<br>No generation of groundwater. | | | | Borehole backfilled with cement grout. |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |

| | | | |
|---|---|---|---|
| **PROJECT:** FIDELITY - Project No. 1449 | | **LOG OF BOREHOLE:** SB-2 | |
| BORING LOC.: NORTH OF EXCAVATION | | ELEVATION, TOC: -- | |
| DRILLING CONTRACTOR: GREGG DRILLING | | START DATE: 9/12/96 | END DATE: 9/12/96 |
| DRILLING METHOD: DIRECT PUSH | | TOTAL DEPTH: 20.0' | |
| DRILLING EQUIPMENT: GEOPROBE DRILL RIG | | DEPTH TO WATER: 13.4' | |
| SAMPLING METHOD: 2" DRIVE SAMPLER | | LOGGED BY: J.S. ANDERSON | |
| HAMMER WEIGHT and FALL: N/A | | RESPONSIBLE PROFESSIONAL: JPD | |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | COMMENTS |
|---|---|---|---|---|---|---|
| 0 | AB | 0.0 - 0.6; Asphalt, 3" Aggregate Base. | | | | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | CL | 0.6 - 8.5; Gravelly, Clay; grayish brown, 5YR 3/2, low plasticity; gravel up to 1/8". | | | | |
| 5 | | | L-1 | | | Hydrocarbon odor. 0.0 ppm |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | 8.5 - 19.0; Sandy Clay; dark yellowish orange 10YR 6/6, gray mottling. | L-2 | | | Strong Hyd odor. 800 ppm |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | ▼ 1215 |
| 14 | | | | | | |

**PROJECT:** FIDELITY - Project No. 1449 | **LOG OF BOREHOLE:** SB-2

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | COMMENTS |
|---|---|---|---|---|---|---|
| 15 | CL | 8.5 - 19.0; Sandy Clay (cont.); moderate yellowish brown 10YR 4/2; medium plasticity | L-3 | | | No odor. Moist. |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | SM | 19.0 - 20.0; Silty Sand; moderate yellowish brown 10YR 4/2; gravel up to 1/8". | L-4 | | | No odor. Very moist. |
| 20 | | Borehole terminated at 20.0 feet. | | | | Borehole backfilled with cement grout. |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |

| | |
|---|---|
| **PROJECT:** FIDELITY - Project No. 1449 | **LOG OF BOREHOLE:** SB-3 |
| BORING LOC.: EAST OF EXCAVATION | ELEVATION, TOC: -- |
| DRILLING CONTRACTOR: GREGG DRILLING | START DATE: 9/12/96 / END DATE: 9/12/96 |
| DRILLING METHOD: DIRECT PUSH | TOTAL DEPTH: 20.0' |
| DRILLING EQUIPMENT: GEOPROBE DRILL RIG | DEPTH TO WATER: NA |
| SAMPLING METHOD: 2" DRIVE SAMPLER | LOGGED BY: J.S. ANDERSON |
| HAMMER WEIGHT and FALL: N/A | RESPONSIBLE PROFESSIONAL: JPD |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | COMMENTS |
|---|---|---|---|---|---|---|
| 0 | AB | 0.0 - 0.6; Asphalt, 3" Aggregate Base. | | | | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | CL | 0.6 - 20.0; Silty Clay; grayish brown, 5YR 3/2, low plasticity. | | | | |
| 5 | | | L-1 | | | No odor. |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | 0.6 - 20.0; Silty Clay (cont.); dark yellowish orange 10YR 6/6 w/ olive gray mottling. | L-2 | | | Strong Hyd odor. 50 ppm |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |

**PROJECT:** FIDELITY - Project No. 1449 | **LOG OF BOREHOLE:** SB-3

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | COMMENTS |
|---|---|---|---|---|---|---|
| 15 | CL | 0.6 - 20.0; Silty Clay (cont.); moderate yellowish brown 10YR 5/4. | L-3 | | | No odor. Moist. |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | 0.6 - 20.0; Silty Clay (cont.); moderate yellowish brown 10YR 5/4; gravel up to 1.8".. | L-4 | | | No odor. |
| | | Borehole terminated at 20.0 feet. | | | | Borehole backfilled with cement grout. |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |

| | | | |
|---|---|---|---|
| **PROJECT:** FIDELITY - Project No. 1449 | | **LOG OF BOREHOLE:** SB-4 | |
| BORING LOC.: NORTH OF EXCAVATION | | ELEVATION, TOC: -- | |
| DRILLING CONTRACTOR: GREGG DRILLING | | START DATE: 9/12/96 | END DATE: 9/12/96 |
| DRILLING METHOD: DIRECT PUSH | | TOTAL DEPTH: 20.0' | |
| DRILLING EQUIPMENT: GEOPROBE DRILL RIG | | DEPTH TO WATER: 13.0' | |
| SAMPLING METHOD: 2" DRIVE SAMPLER | | LOGGED BY: J.S. ANDERSON | |
| HAMMER WEIGHT and FALL: N/A | | RESPONSIBLE PROFESSIONAL: JPD | |

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | COMMENTS |
|---|---|---|---|---|---|---|
| 0 | AB | 0.0 - 0.6; Asphalt, 3" Aggregate Base. | | | | |
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | CL | 0.6 - 15.0; Gravelly, Clay; grayish brown, 5YR 3/2, low plasticity; gravel up to 1/8". | | | | |
| 5 | | | L-1 | | | Slight Hyd. odor. |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 0.6 - 15.0; Gravelly Clay (cont.) | | | | |
| 10 | | | L-2 | | | Slight Hyd. odor. |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | ▼ |
| 14 | | | | | | |

**PROJECT:** FIDELITY - Project No. 1449 | **LOG OF BOREHOLE:** SB-4

| DEPTH (feet) | SOIL SYMBOLS | DESCRIPTION | SAMPLES: SAMPLE NO. | SAMPLES: INTERVAL | SAMPLES: BLOW COUNTS | COMMENTS |
|---|---|---|---|---|---|---|
| 15 | CL | 15.0 - 20.0; Silty Clay; moderate yellowish brown 10YR 5/4; medium plasticity. | L-3 | | | Slight odor. |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | 15.0 - 20.0; Silty Clay (cont.) | | | | |
| 20 | | | L-4 | | | Slight odor. |
| | | Borehole terminated at 20.0 feet. | | | | Borehole backfilled with cement grout. |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

| | | |
|---|---|---|
| All Environmental, Inc.<br>3364 Mt. Diablo Blvd.<br>Lafayette, CA 94549 | Client Project ID: Fidelity; # 1449 | Date Sampled: 09/12/96 |
| | | Date Received: 09/12/96 |
| | Client Contact: Jennifer Anderson | Date Extracted: 09/12-09/15/96 |
| | Client P.O: | Date Analyzed: 09/13-09/15/96 |

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX***
EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

| Lab ID | Client ID | Matrix | TPH(g)+ | MTBE | Benzene | Toluene | Ethylben-zene | Xylenes | % Rec. Surrogate |
|---|---|---|---|---|---|---|---|---|---|
| 68961 | SB-3,L-2,10' | S | 100,a | 1.1 | 2.7 | 2.9 | 2.7 | 11 | 106 |
| 68965 | SB-1,L-2,10' | S | 290,a | 1.5 | 3.9 | 2.7 | 4.6 | 18 | 122# |
| 68968 | SB-2,L-2,10' | S | 3.4,a | ND | 0.33 | 0.013 | 0.068 | 0.046 | 87 |
| 68972 | SB-4,L-2,10' | S | 100,b,d | 0.24 | 0.37 | 0.28 | 1.5 | 6.9 | 110# |
| 68975 | STKP(1-4) | S | 3.8,b,d | ND | 0.009 | 0.021 | 0.012 | 0.079 | 107 |
| 68978 | SB2 W | W | 2400,a | 230 | 130 | 110 | 84 | 250 | 115# |
| 68979 | SB4 W | W | 5500,a | 110 | 340 | 350 | 250 | 1200 | 106 |
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| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | |
| | | S | 1.0 mg/kg | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | |

* water and vapor samples are reported in ug/L, soil and sludge samples in mg/kg, and all TCLP extracts in mg/L

# cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

| McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553<br>Tele: 510-798-1620 Fax: 510-798-1622 |
|---|---|

| All Environmental, Inc.<br>3364 Mt. Diablo Blvd.<br>Lafayette, CA 94549 | Client Project ID: Fidelity; # 1449 | Date Sampled: 09/12/96 |
|---|---|---|
| | | Date Received: 09/12/96 |
| | Client Contact: Jennifer Anderson | Date Extracted: 09/12-09/13/96 |
| | Client P.O: | Date Analyzed: 09/12-09/13/96 |

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel ***

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

| Lab ID | Client ID | Matrix | TPH(d)+ | % Recovery Surrogate |
|---|---|---|---|---|
| 68961 | SB-3,L-2,10' | S | 57,d | 100 |
| 68965 | SB-1,L-2,10' | S | 45,d,a | 101 |
| 68968 | SB-2,L-2,10' | S | ND | 101 |
| 68972 | SB-4,L-2,10' | S | 41,d,a | 101 |
| 68975 | STKP(1-4) | S | 28,d,g | 102 |
| 68978 | SB2 W | W | 2100,g,d | 122# |
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| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | |
| | | S | 1.0 mg/kg | |

* water samples are reported in ug/L, soil and sludge samples in mg/kg, and all TCLP and STLC extracts in mg/L

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Tele: 510-798-1620 Fax: 510-798-1622

| | | |
|---|---|---|
| All Environmental, Inc. | Client Project ID: Fidelity; # 1449 | Date Sampled: 09/12/96 |
| 3364 Mt. Diablo Blvd. | | Date Received: 09/12/96 |
| Lafayette, CA 94549 | Client Contact: Jennifer Anderson | Date Extracted: 09/13/96 |
| | Client P.O: | Date Analyzed: 09/13-09/14/96 |

**Lead***

EPA analytical methods 6010/200.7, 239.2+

| Lab ID | Client ID | Matrix | Extraction° | Lead* | % Recovery Surrogate |
|---|---|---|---|---|---|
| 68961 | SB-3,L-2,10' | S | TTLC | 7.7 | 96 |
| 68965 | SB-1,L-2,10' | S | TTLC | 9.4 | 97 |
| 68968 | SB-2,L-2,10' | S | TTLC | 5.4 | 96 |
| 68972 | SB-4,L-2,10' | S | TTLC | 11 | 95 |
| 68978 | SB2 W | W | TTLC | ND,i | NA |
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| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | S | TTLC | 3.0 mg/kg | |
| | | W | TTLC | 0.005 mg/L | |
| | | --- | STLC,TCLP | 0.2 mg/L | |

* soil and sludge samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

+ Lead is analysed using EPA method 6010 (ICP)for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

° EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

# surrogate diluted out of range; N/A means surrogate not applicable to this analysis

& reporting limit raised due matrix interference

i) liquid sample that contains greater than ~ 2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Tele: 510-798-1620 Fax: 510-798-1622

| | | |
|---|---|---|
| All Environmental, Inc.<br>3364 Mt. Diablo Blvd.<br>Lafayette, CA 94549 | Client Project ID: Fidelity; # 1449 | Date Sampled: 09/12/96 |
| | | Date Received: 09/12/96 |
| | Client Contact: Jennifer Anderson | Date Extracted: 09/18/96 |
| | Client P.O: | Date Analyzed: 09/18/96 |

**Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX***

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

| Lab ID | Client ID | Matrix | TPH(g)+ | MTBE | Benzene | Toluene | Ethylben-zene | Xylenes | % Rec. Surrogate |
|---|---|---|---|---|---|---|---|---|---|
| 68977 | SWS, 7' | S | 920,b, j | ND< 0.9 | ND< 0.2 | 2.3 | ND< 0.2 | 21 | 105 |
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| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | |
| | | S | 1.0 mg/kg | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | |

* water and vapor samples are reported in ug/L, soil and sludge samples in mg/kg, and all TCLP extracts in mg/L

# cluttered chromatogram; *sample peak coelutes with surrogate peak*

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

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Tele: 510-798-1620 Fax: 510-798-1622

| | | |
|---|---|---|
| All Environmental, Inc.<br>3364 Mt. Diablo Blvd.<br>Lafayette, CA 94549 | Client Project ID: Fidelity; # 1449 | Date Sampled: 09/12/96 |
| | | Date Received: 09/12/96 |
| | Client Contact: Jennifer Anderson | Date Extracted: 09/18/96 |
| | Client P.O: | Date Analyzed: 09/18/96 |

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel ***

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

| Lab ID | Client ID | Matrix | TPH(d)+ | % Recovery Surrogate |
|---|---|---|---|---|
| 68977 | SWS, 7' | S | 180,d | 101 |
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| Reporting Limit unless otherwise stated; ND means not detected above the reporting limit | | W | 50 ug/L | |
| | | S | 1.0 mg/kg | |

* water samples are reported in ug/L, soil and sludge samples in mg/kg, and all TCLP and STLC extracts in mg/L

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC.
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Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/13/96 Matrix: Soil

| Analyte | Concentration (mg/kg) Sample (#67156) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 1.745 | 1.807 | 2.03 | 86 | 89 | 3.5 |
| Benzene | 0.000 | 0.194 | 0.176 | 0.2 | 97 | 88 | 9.7 |
| Toluene | 0.000 | 0.204 | 0.184 | 0.2 | 102 | 92 | 10.3 |
| Ethylbenzene | 0.000 | 0.208 | 0.186 | 0.2 | 104 | 93 | 11.2 |
| Xylenes | 0.000 | 0.608 | 0.542 | 0.6 | 101 | 90 | 11.5 |
| TPH (diesel) | 0 | 294 | 307 | 300 | 98 | 102 | 4.2 |
| TRPH (oil and grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/14/96 Matrix: Soil

| Analyte | Concentration (mg/kg) Sample (#67156) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 2.213 | 2.141 | 2.03 | 109 | 105 | 3.3 |
| Benzene | 0.000 | 0.222 | 0.218 | 0.2 | 111 | 109 | 1.8 |
| Toluene | 0.000 | 0.224 | 0.218 | 0.2 | 112 | 109 | 2.7 |
| Ethylbenzene | 0.000 | 0.220 | 0.214 | 0.2 | 110 | 107 | 2.8 |
| Xylenes | 0.000 | 0.658 | 0.636 | 0.6 | 110 | 106 | 3.4 |
| TPH (diesel) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| TRPH (oil and grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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# QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/12/96 Matrix: Water

| Analyte | Concentration (ug/L) Sample (#68704) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.0 | 109.0 | 102.0 | 100.0 | 109.0 | 102.0 | 6.6 |
| Benzene | 0.0 | 10.3 | 10.7 | 10.0 | 103.0 | 107.0 | 3.8 |
| Toluene | 0.0 | 10.4 | 10.8 | 10.0 | 104.0 | 108.0 | 3.8 |
| Ethyl Benzene | 0.0 | 10.9 | 11.2 | 10.0 | 109.0 | 112.0 | 2.7 |
| Xylenes | 0.0 | 32.0 | 32.8 | 30.0 | 106.7 | 109.3 | 2.5 |
| TPH (diesel) | 0 | 171 | 160 | 150 | 114 | 106 | 6.9 |
| TRPH (oil & grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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# QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/15/96 Matrix: Water

| Analyte | Concentration (ug/L) Sample (#68856) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.0 | 108.4 | 108.5 | 100.0 | 108.4 | 108.5 | 0.1 |
| Benzene | 0.0 | 10.3 | 10.5 | 10.0 | 103.0 | 105.0 | 1.9 |
| Toluene | 0.0 | 10.2 | 10.5 | 10.0 | 102.0 | 105.0 | 2.9 |
| Ethyl Benzene | 0.0 | 10.2 | 10.3 | 10.0 | 102.0 | 103.0 | 1.0 |
| Xylenes | 0.0 | 29.6 | 30.8 | 30.0 | 98.7 | 102.7 | 4.0 |
| TPH (diesel) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| TRPH (oil & grease) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

McCAMPBELL ANALYTICAL INC.
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Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/18/96 Matrix: Soil

| Analyte | Concentration (mg/kg) Sample (#67156) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | 0.000 | 1.955 | 1.821 | 2.03 | 96 | 90 | 7.1 |
| Benzene | 0.000 | 0.204 | 0.214 | 0.2 | 102 | 107 | 4.8 |
| Toluene | 0.000 | 0.212 | 0.218 | 0.2 | 106 | 109 | 2.8 |
| Ethylbenzene | 0.000 | 0.212 | 0.220 | 0.2 | 106 | 110 | 3.7 |
| Xylenes | 0.000 | 0.644 | 0.670 | 0.6 | 107 | 112 | 4.0 |
| TPH (diesel) | 0 | 305 | 303 | 300 | 102 | 101 | 0.9 |
| TRPH (oil and grease) | 0.0 | 19.6 | 20.3 | 20.8 | 94 | 98 | 3.5 |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR HYDROCARBON ANALYSES

Date: 09/18/96 Matrix: Water

| Analyte | Concentration (ug/L) Sample (#68913) | MS | MSD | Amount Spiked | % Recovery MS | MSD | RPD |
|---|---|---|---|---|---|---|---|
| TPH (gas) | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Benzene | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Toluene | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Ethyl Benzene | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Xylenes | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| TPH (diesel) | 0 | 151 | 160 | 150 | 101 | 107 | 5.9 |
| TRPH (oil & grease) | 0 | 22600 | 22400 | 23700 | 95 | 95 | 0.9 |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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# QC REPORT FOR AA METALS

Date: 09/14/96 Matrix: Soil

| Analyte | Concentration (mg/kg, mg/L) | | | Amount | % Recovery | | |
|---|---|---|---|---|---|---|---|
| | Sample | MS | MSD | Spiked | MS | MSD | RPD |
| Total Lead | 0.0 | 5.09 | 4.78 | 5.0 | 102 | 96 | 6.3 |
| Total Cadmium | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total Chromium | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total Nickel | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total Zinc | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| STLC Lead | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Organic Lead | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

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Tele: 510-798-1620 Fax: 510-798-1622

# QC REPORT FOR ICP and/or AA METALS

Date: 09/13/96 Matrix: Water

| Analyte | Concentration (mg/L) | | | Amount | % Recovery | | RPD |
|---|---|---|---|---|---|---|---|
| | Sample | MS | MSD | | MS | MSD | |
| Total Lead | 0.00 | 4.80 | 6.00 | 5.00 | 96 | 120 | 22.2 |
| Total Cadmium | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total Chromium | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total Nickel | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total Zinc | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Dissolved Iron | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Organic Lead | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

**ALL ENVIRONMENTAL, INC.**
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

# Chain of Custody

5 DAY

7173 AALE79

DATE: 9/12/96 PAGE: 1 OF: 2

AEI PROJECT MANAGER: Jennifer Anderson
PROJECT NAME: Fidelity
PROJECT NUMBER: 1449
SIGNATURE:
TOTAL # OF CONTAINERS: 27
RECD. GOOD COND./COLD: YES

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030.8015) | TPH-Gasoline (EPA 5030.8015) w/ BTEX and MTBE (EPA 602.8020) | TPH-Diesel (EPA 3510/3550.8015) | PURGEABLE AROMATICS BTEX and MTBE (EPA 602.8020) | TOTAL OIL & GREASE (EPA 5520 E&F) | TOTAL LEAD (AA) (EPA 7420) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | LUFT Metals (EPA 7130,7190,7420,7520,7950) | STLC CAM 17 (EPA 1310/6010) | | NUMBER OF CONTAINERS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | X | X | | | | X | | | | |
| SB-3, L-1, 5' | 91296 | 830 | SOIL | | HOLD | | | | | | | | 68960 | 1 |
| SB-3, L-2, 10' | 91296 | 903 | | | X | X | | | X | | | | 68961 | 1 |
| SB-3, L-3, 15' | | 915 | | | | | | | | | | | 68962 | 1 |
| SB-3, L-4, 20' | | 930 | | | HOLD | | | | | | | | 68963 | 1 |
| SB-1, L-1, 5' | | 945 | | | | | | | | | | | 68964 | 1 |
| SB-1, L-2, 10' | | 1000 | | | X | X | | | X | | | | 68965 | 1 |
| SB-1, L-3, 15' | | 1005 | | | HOLD | | | | | | | | 68966 | 1 |
| SB-2, L-1, 5' | | 1100 | | | | | | | | | | | 68967 | 1 |
| SB-2, L-2, 10' | | 1107 | | | X | X | | | X | | | | 68968 | 1 |
| SB-2, L-3, 15' | | 1115 | | | | | | | | | | | 68969 | 1 |
| SB-2, L-4, 20' | | 1130 | | | HOLD | | | | | | | | 68970 | 1 |
| SB-4, L-1, 5' | | 1150 | | | | | | | | | | | 68971 | 1 |
| SB-4, L-2, 10' | | 1200 | | | X | X | | | X | | | | 68972 | 1 |
| SB-4, L-3, 15' | | 1210 | | | HOLD | | | | | | | | 68973 | 1 |
| SB-4, L-4, 20' | | 1220 | | | | | | | | | | | 68974 | 1 |

NUMBER OF CONTAINERS

ANALYTICAL LAB: McCampbell
ADDRESS:
PHONE: ( ) - FAX: ( ) -

INSTRUCTIONS/COMMENTS:

| RELINQUISHED BY: 1 | RECEIVED BY: 1 | RELINQUISHED BY: 2 | RECEIVED |
|---|---|---|---|
| Signature | Signature | Signature | Signature |
| Jennifer Anderson | Angela Rydelius | Printed Name | Printed Name |
| Printed Name | MAI | Company | Company |
| AEI | Company | Time Date | Time Date |
| Company | Time 6pm Date 9/12/96 | | |
| Time 6:00pm Date 9/12/96 | | | |

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT
PRESERVATIVE APPROPRIATE
CONTAINERS ✓

**ALL ENVIRONMENTAL, INC.**
3364 Mt. Diablo Boulevard
Lafayette, CA 94549
(510) 283-6000 FAX: (510) 283-6121

# Chain of Custody

5-DAY

DATE: 9/12/96 PAGE: 2 OF: 2

7173 AALE79

AEI PROJECT MANAGER: Jennifer Anderson
PROJECT NAME: Fidelity
PROJECT NUMBER: 1449
SIGNATURE: J Anderson
TOTAL # OF CONTAINERS: 27
RECD. GOOD COND./COLD: YES

## ANALYSIS REQUEST

| SAMPLE I.D. | DATE | TIME | MATRIX | TPH-Gasoline (EPA 5030/8015) | TPH-Gasoline (EPA 5030/8015) w/ BTEX and MTBE (EPA 602/8020) | TPH-Diesel (EPA 3510/3550/8015) | PURGEABLE AROMATICS BTEX and MTBE (EPA 602/8020) | TOTAL OIL & GREASE (EPA 5520 E&F) | TOTAL LEAD (AA) (EPA 7420) | VOLATILE ORGANIC COMPOUNDS (EPA 8240) | LUFT Metals (EPA 7190/7190/7490/7590/7950) | STLC CAM 17 (EPA 1310/6010) | RCI REACTIVITY/CORROSIVITY/IGNITABILITY (Title 22 R66261.21-4) | NUMBER OF CONTAINERS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | 68975 | |
| STKP(1-4) | 9/12/96 | | SOIL | | X | X | | | | | | | # 68976 | 4 |
| SWS, 3' | ↓ | | SOIL | | HOLD | | | | | | | | | 1 |
| SWS, 7' | | | SOIL | | X | X OFF Hold 9/18 Stay | | | | | | | # 68977 | 1 |
| SB2W | | 1255 | WATER | | X | X | | | X | | | | 68978 | 4 3 2 VOAs 1 Liter 1 Lead |
| SB4W | ↓ | 1520 | WATER | | X | | | | | | | | | 2 3 VOAs |
| | | | | | | | | | | | | | 68979 | |

ICE/T ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE ✓
APPROPRIATE CONTAINERS ✓
VOA ✓

(water sample SB4W 1½ VOAs only !!

filtered & preserved in lab (SB2W)

ANALYTICAL LAB: McCampbell
ADDRESS:
PHONE: ( ) - FAX: ( ) -
INSTRUCTIONS/COMMENTS:

| RELINQUISHED BY: 1 | RECEIVED BY: 1 | RELINQUISHED BY: 2 | RECEIVED BY: 2 |
|---|---|---|---|
| Signature: J Anderson | Signature: Angela Rydelius | Signature: | Signature: |
| Printed Name: Jennifer Anderson | Printed Name: Angela Rydelius | Printed Name: | Printed Name: |
| Company: AEI | Company: MAI | Company: | Company: |
| Time: 6:00pm Date: 9/12/96 | Time: 6pm Date: 9/12/96 | Time: Date: | Time: Date: |