# ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY ALEX BRISCOE, Agency Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6777
FAX (510) 337-9135

#### REMEDIAL ACTION COMPLETION CERTIFICATION

May 13, 2013

Mr. Montague and Carol Upshaw Fidelity Roof Company 1075 40<sup>th</sup> Street Oakland, CA 94608

Subject: Case Closure for Fuel Leak Case No. RO0000186 (Global ID # T0600102117), Fidelity Roof Company, 1075 40<sup>th</sup> Street, Oakland, CA 94608

Mr. Montague and Carol Upshaw:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

Claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required
  for closure that will result in the submission of claims beyond that time period, or that under the
  circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi Director

# ALAMEDA COUNTY HEALTH CARE SERVICES

**AGENCY** 





May 13, 2013

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

Mr. Montague and Carol Upshaw Fidelity Roof Company 1075 40<sup>th</sup> Street Oakland, CA 94608

Subject:

Closure Transmittal; Fuel Leak Case No. RO0000186 (Global ID # T0600102117), Fidelity Roof Company, 1075 40<sup>th</sup> Street, Oakland. CA 94608

Mr. Montague and Carol Upshaw:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

# SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Residual contamination is documented to remain in-place at the site and as documented is
  principally concentrated vertically below the area of UST removal and overexcavation, between the
  approximate depths of 8 and 13 fbgs. Residual contamination also appears to remain outside the
  area of UST excavation / overexcavation. Additionally, soil analytical results for the upper five feet
  of soil were not collected during investigations and thus are not documented.
- Soil vapor samples collected May 5, June 10, and September 28, 2011 contained concentrations of leak check compounds of up to 28,000 μg/m³ 1,1-Diflouroethane (1,1-DFA), 34,000 μg/m³ 1,1-DFA, and 1,800 μg/m³ Isopropyl Alcohol (IP), respectively. Because the shroud concentrations of 1,1-DFA were not collected, an estimate of the leak rate cannot be made. While the IP tracer was (57,000 μg/m³ IP). This represents a concentration of 3.16% of the shroud concentration, and is documented to significantly affect the results. Soil vapor samples collected using the IP tracer ethylbenzene, and 37.7 μg/m³ xylenes.
- ACEH must be notified if any excavation activities take place or the building footprint is modified. If
  a change in land use to any residential or other conservative land use scenario occurs at this site;
  Alameda County Environmental Health (ACEH) must be notified as required by Government Code
  Section 65850.2.2. Due to the potential for direct exposure and vapor intrusion to indoor air for
  future buildings or building modifications, ACEH will re-evaluate the case upon receipt of approved
  development/construction plans.
- Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party (or current property owner/developer) prior to and during excavation and construction activities.
- This site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination on site.

Mr. Montague and Carol Upshaw RO0000186 May 13, 2013, Page 2

1.

If you have any questions, please call Mark Detterman at (510) 567-6876. Thank you.

Sincerely,

Donna L. Drogos, P.E. Division Chief

Enclosures:

Remedial Action Completion Certificate

Case Closure Summary

cc: Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Suite 3341, Oakland, CA 94612-2032 (sent via electronic mail to <a href="mailto:lgriffin@oaklandnet.com">lgriffin@oaklandnet.com</a>)

Ms. Cherie McCaulou (w/enc.), SF- Regional Water Quality Control Board, 1515 Clay Street, Suite 1400, Oakland, CA 94612, (sent via electronic mail to <a href="mailto:CMacaulou@waterboards.ca.gov">CMacaulou@waterboards.ca.gov</a>)

City of Emeryville, Economic Development & Housing Department, c/o Markus Niebanck, 1333 Park Avenue, Emeryville, CA 94608 (sent via electronic mail to <a href="MNiebanck@ci.emeryville.ca.us">MNiebanck@ci.emeryville.ca.us</a>)

Donna Drogos, (sent via electronic mail to <a href="mailto:donna.drogos@acgov.org">donna.drogos@acgov.org</a>)
Mark Detterman (sent via electronic mail to <a href="mailto:mark.detterman@acgov.org">mark.detterman@acgov.org</a>)
Electronic File, GeoTracker

## Alameda County Environmental Health

# CASE CLOSURE SUMMARY LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

#### I. AGENCY INFORMATION

Date: January 24, 2013

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6876
Responsible Staff Person: Mark Detterman	Title: Senior Hazardous Materials Specialist

#### **II. CASE INFORMATION**

Site Facility Name: Fidelity Roof	Company		
Site Facility Address: 1075 40 <sup>th</sup> S	treet, Oakland, CA 94608		
RB Case No.: 01-2301	Local Case No.: 3341	LOP C	Case No.: RO0000186
URF Filing Date: 10/10/1996	Geotracker ID: T0600102117 APN: 12-954-10-2		
Responsible Parties	Addresses		Phone Numbers
Montague M. and Carol J. Upshaw	Fidelity Roof Company 1075 40 <sup>th</sup> Street Oakland, CA 94608-3616		(510) 547-6330

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
<b>20 %</b>	1,000	Diesel	Removed	12/19/1995
<b>=</b> 1435	500	Gasoline	Removed	12/19/1995
	Piping		Not Reported	<b>-</b>

#### III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Holes and corro	osion were reported for t	ooth USTs.	
Site characterization complete? Yes Date Approved By Oversight Agency:			
Monitoring wells installed? Yes	Number: 12	Proper screened interval? Yes	
Highest GW Depth Below Ground Surface: 4.17 fbgs	Lowest Depth: 12.26 fbgs	Flow Direction: West to Northwest	
Most Sensitive Current Use: Potential drinkin	g water source.		

Summary of Production Wells in Vicinity: Two cathodic protection wells are located within a ¼-mile radius; both are upgradient of the site. One industrial well is located at an approximate distance 1,700 feet in an upgradient to crossgradient direction. One abandoned well (unused, but not destroyed) is present at an approximate distance of 480 feet in a cross- to upgradient direction. Based on distances and direction these wells are not anticipated to be receptors.

Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: San Francisco Bay, located approximately one mile west.
Off-Site Beneficial Use Impacts (Addresses/L	_ocations): None identified.
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health

	TREATMENT	AND DISPOSAL OF AFFECTED MATERIAL	
Material Amount (Include Units) Action (Treatment or Disposal w/Destination)			Date
Tank	1- 1,000 gallon diesel 1- 500 gallon gasoline	Not Reported*	12/19/1995
Piping	Not Reported	Not Reported*	12/19/1995
Free Product	None Reported		
	235 tons	Vasco Road Landfill; Livermore, CA	12/6/1996
Soil	282 tons	West Contra Costa County Landfill, Richmond, CA.	3/12/2008
Groundwater	4,900 gallons	HVDPE event; discharged to sanitary sewer.	3/9/2006
	2,500 gallons	Disposed at Instrat facility; Rio Vista, CA	3/11/2008

<sup>\*</sup> A tank closure report was not submitted.

# MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP (Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
Contamiliant	Before	After	Before	After
TPH (Gas)	2,900	2,900	110,000	980
TPH (Diesel)	830	830	160,000	760
TPH (Motor Oil)	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Oil and Grease	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Benzene	16	3.9	13,000	< 0.5
Toluene	83	9.3	5,000	< 0.5
Ethylbenzene	66	66	3,500	13
Xylenes	320	320	15,000	< 1.0
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	16 *	6.9 *	< 0.2 *	<0.2
MTBE and 8260B	6.5 <sup>1</sup>	6.5 <sup>1</sup>	19,000 <sup>2</sup>	1,600 <sup>3</sup>
Other (8240/8270)	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

<sup>\*</sup>Lead was the only heavy metal analyzed.

MTBE = 6.5 mg/kg; TBA = 2.5 mg/kg; TAME < 0.020 mg/kg; ETBE < 0.020 mg/kg; DIPE < 0.020 mg/kg; EtOH <<0.005 mg/kg; EDB < 0.005 mg/kg; and 1,2-DCA < 0.005 mg/kg.

MTBE = 19,000  $\mu$ g/l; TBA = 6,900  $\mu$ g/l; TAME < 100  $\mu$ g/l; ETBE < 100  $\mu$ g/l; DIPE < 100  $\mu$ g/l; 1,2-DCA < 100  $\mu$ g/l; and EDB < 100  $\mu$ g/l

MTBE = 26  $\mu$ g/l; TBA = 1,600  $\mu$ g/l; TAME, ETBE, and DIPE < 2.0  $\mu$ g/l; 1,2-DCA < 1.0  $\mu$ g/l; EtOH and EDB not analyzed

Site History and Description of Corrective Actions:

The site is currently used as a company yard and offices for Fidelity Roof Company. The property is located in a mixed commercial and residential area of Oakland and is bordered to the south by Yerba Buena Avenue, residential properties to the east, commercial and residential properties to the west, and 40<sup>th</sup> Street to the north.

Soil on the site generally consists of clays, with occasional interbedded silts, sands, and gravel. Stabilized groundwater is generally at depths between 5 and 10 feet below ground surface (fbgs). Groundwater appears to have been encountered initially at depths ranging from 12 to 16 fbgs, but this is not specifically reported. Groundwater monitoring has been conducted at the site from March 19, 1997 to December 29, 2011. Contamination on the site is highest in the southeast portion of the site in areas west, northwest, and around the former underground storage tanks (USTs).

On December 19, 1995, one 1,000-gallon diesel UST and one 500- or 800-gallon gasoline UST were removed from the southeastern area of the property. Three discrete soil samples and one soil stockpile sample were collected. Soil samples collected beneath the 1,000-gallon diesel UST contained up to 8.7 milligrams per kilogram (mg/kg) Total Petroleum Hydrocarbons as gasoline (TPHg), 29 mg/kg Total Petroleum Hydrocarbons as diesel (TPHd), and 29 mg/kg Methyl Tertiary Butyl Ether (MTBE), and 0.77 mg/kg benzene. Soil samples collected from beneath the 500-gallon UST gasoline contained 100 mg/kg TPHg, 96 mg/kg TPHd, 2.3 mg/kg benzene, and 1.4 mg/kg MTBE (benzene is not reported). The soil stockpile sample contained 580 mg/kg TPHg, 120 mg/kg TPHd, and 42 mg/kg lead. Groundwater was not encountered in the excavation. Holes and corrosion were noted on all portions of the USTs, but the locations were not specifically defined.

On September 12, 1996, four soil borings (SB-1 through SB-4) were advanced near the former UST excavation. Soil samples were collected every five feet; only the samples collected at ten fbgs were analyzed. The soil sample collected from boring SB-1 at ten fbgs contained the highest concentrations including up to 290 mg/kg TPHg, 45 mg/kg TPHd, 3.9 mg/kg benzene, and 1.5 mg/kg MTBE. Groundwater was encountered at approximately 13-15 fbgs and grab groundwater samples were collected from bores SB-2 and SB-4. Concentrations in the grab groundwater samples contained up to 5,500 micrograms per liter ( $\mu$ g/l) TPHg, 2,100  $\mu$ g/l TPHd, 340  $\mu$ g/l benzene, and 230  $\mu$ g/l MTBE. The tank removal excavation pit remained open and a four-point composite soil sample was collected from the stockpiled soil generated during this event. Two soil samples were additionally collected from the southern wall of the open excavation.

On October 25, 1996, the tank removal excavation was overexcavated laterally seven feet to the south and 12 feet to the west. Three sidewall and three four-point composite stockpile soil samples were collected during the excavation activities. The sidewall sample collected from the west wall of the excavation contained the greatest concentration; with 150 mg/kg TPHg, 300 mg/kg TPHd, and 16 mg/kg benzene (MTBE was not analyzed in these samples). The greatest contaminant concentrations in the four-point stockpile samples were 850 mg/kg TPHg, 720 mg/kg TPHd, and 1.3 mg/kg benzene. In November 1996, 235 tons of contaminated soil was disposed of at the BFI Vasco Road Sanitary Landfill in Livermore, CA.

On March 6, 1997 three borings (BH-1 through BH-3) were advanced and converted to monitoring wells (MW-1 to MW-3). Soil samples collected from 10 fbgs were analyzed for contamination. Groundwater samples were collected from the wells on March 13, 1997. The soil sample collected from BH-3 (MW-3) contained the greatest TPHg and benzene concentrations of 110 mg/kg and 1.1 mg/kg, respectively. The soil samples collected from BH-2 (MW-2) contained the greatest TPHd concentration of 18 mg/kg. No MTBE was detected in the soil samples. The groundwater sample collected from MW-3 was the only sample with detectable concentrations of constituents other than MTBE. Groundwater from MW-3 contained 26,000  $\mu$ g/l TPHg, 5,000  $\mu$ g/l TPHd and 3,000  $\mu$ g/l benzene. MTBE was detected in MW-1, MW-2, and MW-3 groundwater samples at concentrations of 23, 65, and 230  $\mu$ g/l, respectively. The static groundwater depth was measured between 7.59 and 8.25 fbgs.

To assess lateral extent of impacted groundwater, six soil borings (SB-1 through SB-6) were drilled south and west of existing well locations on November 4, 1998. The borings were advanced to depths between 15 and 20 fbgs and groundwater was encountered between 12 and 15 fbgs. Soil samples were collected; however, all samples were placed on hold at the laboratory and were not analyzed. In groundwater, TPHd was only detected in upgradient bore SB-1 at a concentration of 2,400  $\mu$ g/l. Toluene was the only other detected constituent and was found in SB-6 at a concentration of 0.6  $\mu$ g/l.

Based on the November 4, 1998 boring results monitoring well MW-4 was requested to be installed upgradient (south) of the former tank locations on July 15, 1999. Two soil samples were collected at 10 and 14 fbgs from the boring. No detectable concentrations of petroleum hydrocarbons were found in the soil samples. Well MW-4 was sampled during the next groundwater monitoring event on August 5, 1999. MTBE was the only detectable constituent in well MW-4 in that sampling event; at a concentration of 37  $\mu$ g/l. Groundwater sampled from well MW-3 during the same event contained the highest groundwater concentrations; with 5,100  $\mu$ g/l TPHd, 31,000  $\mu$ g/l TPHg and 5,400  $\mu$ g/l benzene detected. The MW-2 groundwater sample contained 600  $\mu$ g/l MTBE.

A Corrective Action Plan (CAP) was submitted on July 31, 2001 which evaluated a number of remedial technologies, recommended vapor extraction / air sparging, and proposed that a pilot test of the technology be conducted. The need for the pilot test was accepted in a December 2001 directive letter; however, the proposed remedial cleanup goals were not.

On May 6, 2004, soil borings AS-1, AS-2, and SVE-1 were completed as two 30 fbgs air sparge wells and one ten fbgs soil vapor extraction well, respectively. Additionally, six shallow vapor points (DP-1 through DP-6) were installed to a depth of 15.5 fbgs on May 12 and 13, 2004. The purpose of the May 6, 2004 well installation was to determine the potential for air sparge/soil vapor extraction (AS/SVE) remediation. Soil samples were collected at approximately five foot intervals from the soil borings. Grab groundwater samples were collected on May 24, 2004 from bores DP-1, DP-2, and DP-3, and groundwater was collected from well MW-3. All contaminant concentrations, with the exception of MTBE, were greatest in shallow vapor point DP-5, located at the edge, but within the area of overexcavation, 15 feet southwest of the former UST area. Soil concentrations, at a depth of 11.5 fbgs, in DP-5 were 2,900 mg/kg TPHg, 830 mg/kg TPHd, 0.012 mg/kg benzene, and <10 mg/kg MTBE. The highest MTBE soil concentration was 0.049 mg/kg, detected in well AS-1 which was located approximately 15 feet west of the former overexcavated UST area. Groundwater samples collected during the event contained up to 90,000 µg/l TPHg, 26,000 µg/l TPHd, 6,700 µg/l benzene, and <1,200 µg/l MTBE in MW-3.

Preliminary tests of the AS/SVE pilot test were conducted during May and June, 2004. Air samples collected during AS/SVE operation contained up to 150,000 micrograms per liter ( $\mu$ g/L) TPHg (150,000,000 micrograms per cubic meter [ $\mu$ g/m³]), 1,800  $\mu$ g/L (1,800,000  $\mu$ g/m³) benzene, and 1,400  $\mu$ g/L (1,400,000  $\mu$ g/m³) MTBE. Based on the results a combined bio-sparge and SVE remediation system was recommended.

After the AS/SVE pilot test light non-aqueous phase liquid (LNAPL) was observed in MW-3 from September 2004 to March 2006. The LNAPL was requested to be removed prior to any corrective action measures. Three mobile LNAPL extraction events were conducted between September and November 2004; 245 gallons of LNAPL and groundwater were extracted and LNAPL thickness was reduced from 0.66 to 0.05 feet.

Due to the low permeability of soils, AS/SVE remediation was deemed to be less effective than high vacuum dual phase extraction (HVDPE). Consequently a 5-day HVDPE extraction event was conducted after receipt of permits from EBMUD and the BAAQMD by Cal-Clean between March 8 and March 13, 2006. Approximately 4,900 gallons of groundwater was extracted and discharged to the sanitary sewer collection system. The estimated hydrocarbon recovery from this event was 58.4 lbs., with calculated 1,763 lbs. remaining in the smear zone soils.

On December 14, 2006 wells MW-5 and MW-6 were installed to delineate the lateral and downgradient extent of the MTBE plume. Soil samples were collected at approximately 10 and 16 fbgs in each soil bore; groundwater stabilized at 16 and 8 fbgs, respectively. All concentrations in soil (TPHg, TPHd, BTEX, and MTBE) were non-detectable at standard reporting limits. Subsequently a LNAPL recovery system was proposed in March 2007 work plan, and consisted of a passive Keck skimmer device.

After a change in consultants a change in the remedial approach was proposed in an April 2007 work plan. The work plan proposed excavation in the vicinity of the former fuel dispenser and LNAPL containing well MW-3 and the implementation of an ozone injection pilot test. A work plan addendum was requested and an addendum included the installation of four soil bores to characterize residual hydrocarbon concentrations associated with the excavation backfill, and beneath the depth of the excavation.

On November 23, 2007, wells DP-3, DP-4, DP-5, DP-6, AS-1, AS-2, and MW-3 were decommissioned by pressure grouting. On November 27, 2007, soil borings B-1 to B-4 were installed to vertically characterize residual concentrations associated with the backfilled UST excavation. Existing reports indicated the excavations were backfilled with uncharacterized cleaner tank excavation spoils below clean fill, while the vertical extent previously had not been determined. The bores were installed to depths ranging from approximately 16 to 30 fbgs in the source zone. Soil and grab groundwater samples were collected from each boring. The highest concentration of TPHd in soil and groundwater was detected in boring B-3 at eight fbgs at 410 mg/kg and 750  $\mu$ g/l, respectively. The highest concentration of TPHg in soil and groundwater was detected in boring B-2 at eight fbgs at a concentration of 170 mg/kg and 320  $\mu$ g/l, respectively. Boring B-2 also contained the highest concentration of MTBE in soil (at 12 fbgs) and groundwater, at concentrations of 6.5 mg/kg and with 180  $\mu$ g/l, respectively.

Remedial excavation activities were conducted between March 10 and 12, 2008 immediately north of the Yerba Buena Avenue entrance to the site. The excavation measured approximately 25 by 55 feet and extended to an approximate depth of 12 fbgs. Of the total volume of soil excavated, a total of 282 tons of soil was segregated and disposed of offsite. After completion of excavation activities on March 12, 2007, groundwater was periodically removed from the excavation cavity after allowing it to recharge. A total of 2,500 gallons of hydrocarbon impacted groundwater was extracted over approximately a one week period. One grab groundwater sample (VH-2) was collected from the holding tank containing the extracted recharge water. Nine sidewall soil samples (SW-1 through SW-9) and six pit bottom soil samples (EB-1 through EB-6) were collected from the excavation pit on March 18, 2008. The highest sidewall soil concentrations were collected from the southern wall of the excavation at with 73 mg/kg TPHg, 63 mg/kg TPHd, and 0.003 mg/kg benzene; no MTBE was detected at standard reporting limits. The

highest excavation bottom sample concentrations were 170 mg/kg TPHg, 7.4 mg/kg TPHd, 0.012 mg/kg benzene; no MTBE was detected at standard limits of reporting. Additionally, sixteen discrete soil samples (SP-1 through SP-16) were collected from soil stockpiles generated during the excavation that were designated as clean backfill for the excavation pit. Only one soil stockpile sample contained detectable amounts of contaminants, with concentrations of 1.5 mg/kg TPHg and 0.043 mg/kg xylenes. The grab groundwater sample collected from the holding tank contained 100 µg/l TPHg, 440 µg/l TPHd, and 8.0 µg/l xylenes. The interim remedial action report recommended case closure exclusively based on the residual concentrations in soil in the vicinity of the excavation. As a result of the interim remedial excavation ACEH requested that post-excavation groundwater monitoring occur prior to implementation of the ozone injection pilot test, requested soil vapor sampling due to documented benzene concentrations in soil and groundwater, and requested that the extent of the MTBE plume be delineated.

Between April 7 and 11, 2011, groundwater monitoring well MW-7 and borings GA-1 through GA-8 were drilled and installed. Soil and grab groundwater samples were collected from each boring. Three soil gas samples (SG/VS-1 through SG/VS-3) were collected from vapor wells adjacent to the building in the eastern portion of the site.

Well MW-7 was installed in a submerged condition with the top of the screen approximately six feet below first encountered groundwater; consequently the well does not monitor the groundwater surface but a position below the groundwater surface. The soil sample collected from boring GA-4, advanced in the location of the former USTs, at 19.5 fbgs was the only sample to contain constituents other than MTBE. Soil sample GA-4 contained 7.9 mg/kg TPHg, 0.13 mg/kg benzene, and 2.5 mg/kg tert-butyl alcohol (TBA). MTBE was detected in soil from borings GA-1 through GA-4, with the highest concentration detected of 0.89 mg/kg, collected from GA-4. Grab groundwater samples collected from borings GA-2 and GA-4, located closest but downgradient of, the former UST location and the March 2008 excavation area, contained the highest contaminant concentrations. The highest detected concentrations in grab groundwater were 250 µg/l TPHg, 100 µg/l benzene, and 1,600 µg/l MTBE. MTBE was detected in all groundwater samples except those from downgradient borings GA-7 and GA-8.

Soil vapor samples collected May 5, June 10, and September 28, 2011 contained concentrations of leak check compounds of up to 28,000  $\mu$ g/m³ 1,1-Diflouroethane (1,1-DFA), 34,000  $\mu$ g/m³ 1,1-DFA, and 1,800  $\mu$ g/m³ Isopropyl Alcohol (IP), respectively. Because the shroud concentrations of 1,1-DFA were not collected, an estimate of the leak rate cannot be made. While the IP tracer was present in the September 2011 sampling results, shroud concentrations were significantly higher (57,000  $\mu$ g/m³ IP). This represents a concentration of 3.16% of the shroud concentration, and is not expected to significantly affect the results. Soil vapor samples collected using the IP tracer documented vapor concentrations of up to <160  $\mu$ g/m³ benzene, 26  $\mu$ g/m³ toluene, 6.3  $\mu$ g/m³ ethylbenzene, and 37.7  $\mu$ g/m³ xylenes; each is less than their respective soil gas vapor intrusion ESL.

#### **IV. CLOSURE**

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes

Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, closure of this site appears to be consistent with the policies established by the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy which became effective on August 17, 2012.

#### Site Management Requirements:

Residual contamination is documented to remain in-place at the site and as documented is principally concentrated vertically below the area of UST removal and overexcavation, between the approximate depths of 8 and 13 fbgs. Residual contamination also appears to remain outside the area of UST excavation / overexcavation between the excavation and the cinder block wall (DP-5). This could not be removed without structural impairment of the wall. Additionally, soil analytical results for the upper five feet of soil were not collected during investigations and thus are not documented.

This fuel leak case has been evaluated for closure consistent with the criteria in the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). Direct soil gas measurements have been obtained at a depth of 5 feet below grade surface (bgs) and contained concentrations of oxygen between 18.5 and 19.9% at that depth; however, as noted analytical samples have not been collected within 5 feet of the surface as outlined in scenario 2aii. However, ACEH judges it appropriate to close the site under scenario 2c with implementation of a land use restriction as an institutional control. Therefore case closure is granted for the current commercial land use and existing building configuration only.

ACEH must be notified if any excavation activities take place or the building footprint is modified. If a change in land use to any residential or other conservative land use scenario occurs at this site; Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. Due to the potential for direct exposure and vapor intrusion to indoor air for future buildings or building modifications, ACEH will re-evaluate the case upon receipt of approved development/construction plans.

Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party (or current property owner/developer) prior to and during excavation and construction activities.

This site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination on site.

Should corrective action be reviewed if land u	se changes? Yes		
Was a deed restriction or deed notification file	d? No	Date Recorded:	
Monitoring Wells Decommissioned: No Number Decommissioned: 7		Number Retained: 10	
List Enforcement Actions Taken: None		/	
List Enforcement Actions Rescinded: None			

### V. ADDITIONAL COMMENTS, DATA, ETC.

#### Considerations and/or Variances:

- Residual contamination is documented to remain in-place at the site and as documented is principally
  concentrated vertically below the area of UST removal and overexcavation, between the approximate
  depths of 8 and 13 fbgs. Residual contamination also appears to remain outside the area of UST
  excavation / overexcavation. Additionally, soil analytical results for the upper five feet of soil were not
  collected during investigations and thus are not documented.
- Soil vapor samples collected May 5, June 10, and September 28, 2011 contained concentrations of leak check compounds of up to 28,000 μg/m³ 1,1-Diflouroethane (1,1-DFA), 34,000 μg/m³ 1,1-DFA, and 1,800 μg/m³ Isopropyl Alcohol (IP), respectively. Because the shroud concentrations of 1,1-DFA were not collected, an estimate of the leak rate cannot be made. While the IP tracer was present in the September 2011 sampling results, shroud concentrations were significantly higher (57,000 μg/m³ IP). This represents a concentration of 3.16% of the shroud concentration, and is not expected to significantly affect the results. Soil vapor samples collected using the IP tracer documented vapor concentrations of up to <160 μg/m³ benzene, 26 μg/m³ toluene, 6.3 μg/m³ ethylbenzene, and 37.7 μg/m³ xylenes.

#### Conclusion:

Alameda County Environmental Health staff believe that the site meets the criteria for case closure under the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy under the current commercial land use developed as a roofing company yard and offices based upon the information available in our files to date. No further investigation or cleanup for the fuel leak case is necessary at this time. However, as specified in the Site Management Requirements, re-evaluation of this case may be required if land uses changes to any residential or other conservative land use scenario, construction or excavation activities take place, or the building structure is otherwise modified.

#### VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Mark Detterman, P.G., C.E.G.	Title: Senior Hazardous Materials Specialist
Signature: Wake A	Date: 1 24 2063
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature: humble (clay)	Date: 01/25/13

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

#### VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Notification Date: January 28, 2	บาร

#### VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: 3/26/2013	Date of Well Decommissioning Report: 4/15/2013
All Monitoring Wells Decommissioned Yes No	Number Decommissioned: 10 Number Retained:
Reason Wells Retained: ハキ	
Additional requirements for submittal of groundwa	ater data from retained wells:
ACEH Concurrence - Signature: Make	Date: 5/13/2013

#### Attachments:

- 1. Site Vicinity Map (2 pp)
- 2. Site Plans (15 pp)
- 3. Soil Analytical Data (13 pp)
- 4. Groundwater Analytical Data (12 pp)
- 5. Soil Vapor Data (3 pp)
- 6. Boring Logs (45 pp)
- 7. Cross Sections (6 pp)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.

#### Detterman, Mark, Env. Health

From:

MCcaulou, Cherie@Waterboards [Cherie.MCcaulou@waterboards.ca.gov]

Sent:

Tuesday, January 29, 2013 1:40 PM

To:

Detterman, Mark, Env. Health

Subject:

RE: RO0000186; Closure Summary for Fidelity Roof Company (T0600102117)

Hello Mark – Thank you for the notification of case closure for the Fidelity Roof Company site at 1075 40<sup>th</sup> Street in Oakland. Please update the site management requirements in GeoTracker for the residual contamination that will be left in place. If you have any questions or comments, please contact me.

Sincerely,

Cherie McCaulou
Engineering Geologist
cmccaulou@waterboards.ca.gov
510-622-2342

From: Detterman, Mark, Env. Health [mailto:Mark.Detterman@acgov.org]

**Sent:** Monday, January 28, 2013 4:30 PM **To:** MCcaulou, Cherie@Waterboards

Subject: FW: R00000186; Closure Summary for Fidelity Roof Company (T0600102117)

Cherie,

I guess my oversight, but I had assumed you (the RWQCB) still got the 30 day comment period, rather than the 60 day specified by the LTCP. Guess you get 60 days too!

Mark Detterman

Senior Hazardous Materials Specialist, PG, CEG

Alameda County Environmental Health

1131 Harbor Bay Parkway

Alameda, CA 94502 Direct: 510.567.6876 Fax: 510.337.9335

Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Detterman, Mark, Env. Health Sent: Monday, January 28, 2013 2:20 PM To: MCcaulou, Cherie@Waterboards Cc: Drogos, Donna, Env. Health

Subject: R00000186; Closure Summary for Fidelity Roof Company (T0600102117)

Cherie,

In order to comply with the RWQCB's 30-day review period, attached is the closure summary for the referenced site, located at 1075 40<sup>th</sup> Street, Oakland, CA 94608. If no comments from the RWQCB are received within the 30-day review period, ACEH's will proceed with case closure.

This is an older site, with some history. Residual contamination will be left in place and the site will be placed in the Oakland permit tracking system. Eight wells are installed; well destruction is pending RWQCB concurrence.

Should you have questions, please let me know. Best,

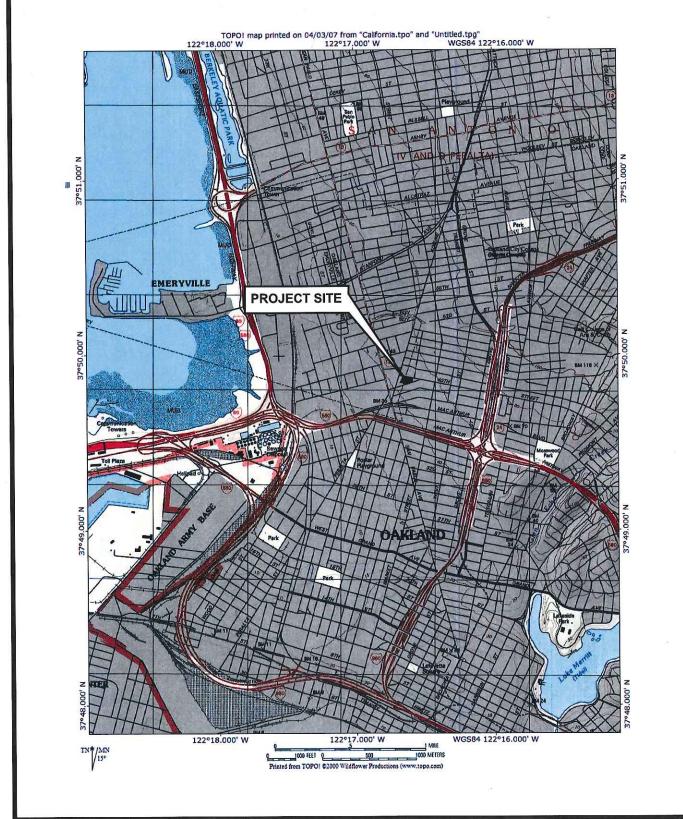
Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335

Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

## **ATTACHMENT 1**



DESIGNED BY: CHECKED BY:

DRAWN BY: MR SCALE:

PROJECT NO:

SITE VICINITY MAP

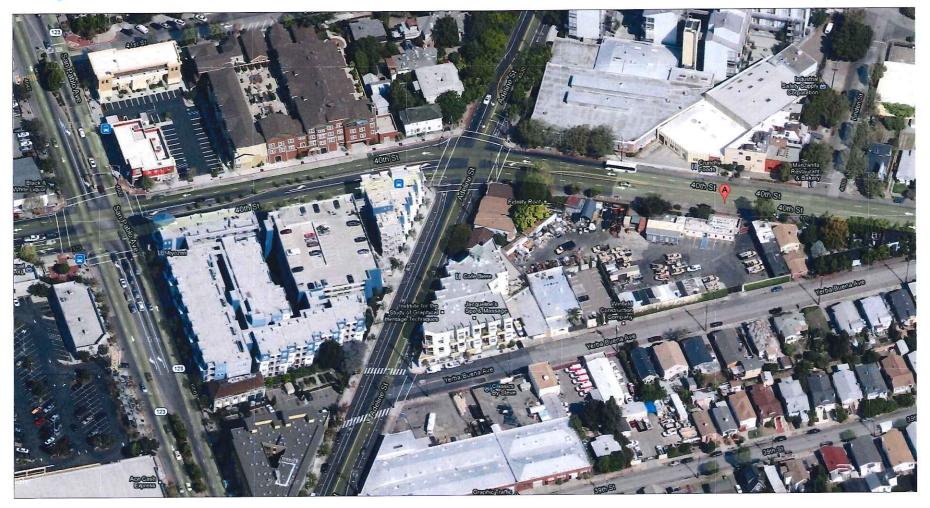
1075 40TH STREET OAKLAND, CALIFORNIA DATE: 11/18/2011

FIGURE: 1

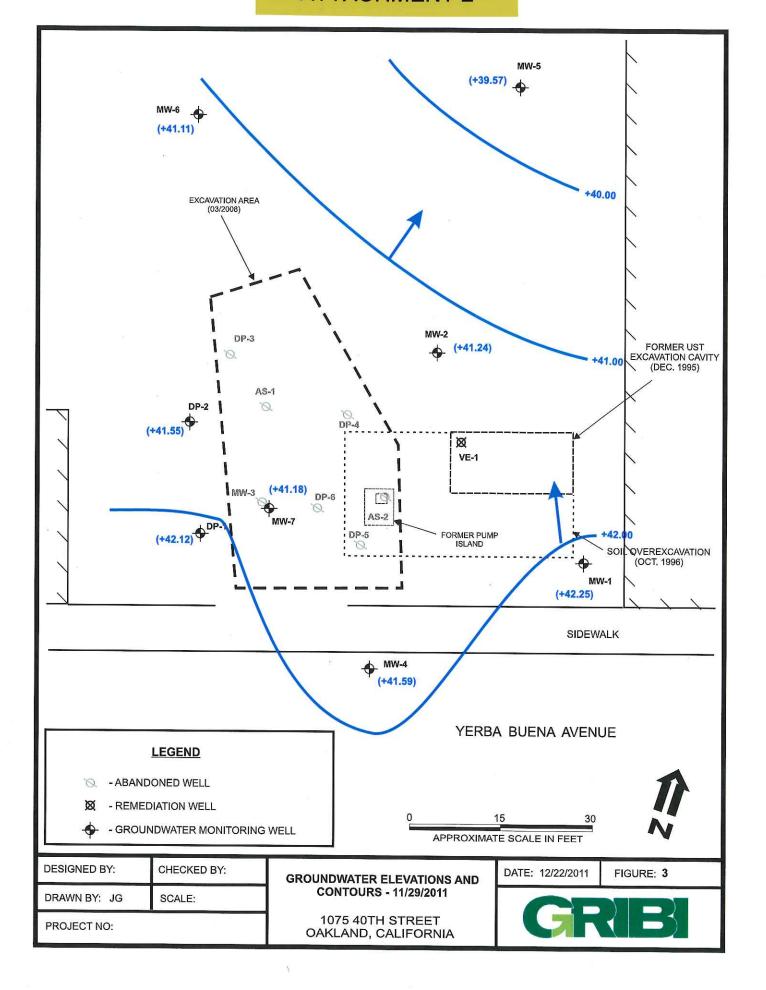


To see all the details that are visible on the screen, use the "Print" link next to the map.



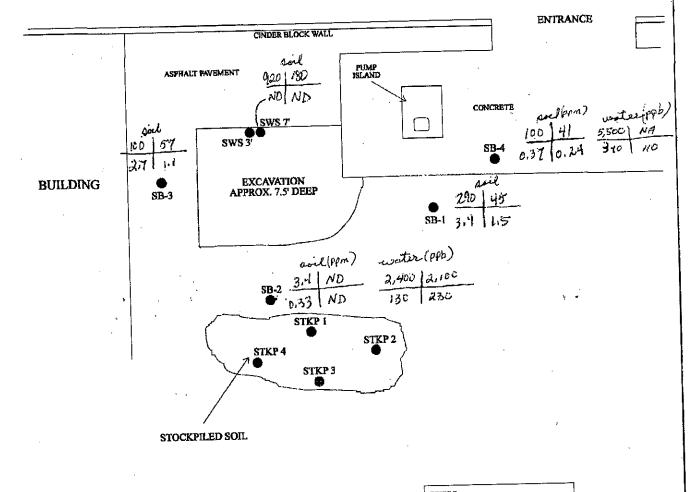


### **ATTACHMENT 2**





← TO 40th STREET



#### KEY

- SOIL BORING LOCATION
- SOIL SAMPLE LOCATION

TPH-g TPH-d (ppm)
Bergere MTBE

ALL ENVIRONMENTAL, INC. 3364 MT. DIABLO BOULEVARD, LAFAYETTE

SCALE: 1 IN = 10 FT DATE: 7 OCTOBER 96 APPROVED BY:

DRAWN BY: J.S. ANDERSON REVISED: J.S. ANDERSON

SOIL BORING AND SAMPLE LOCATION MAP

1075 40th STREET OAKLAND, CALIFORNIA DRAWING NUMBER: FIGURE 2

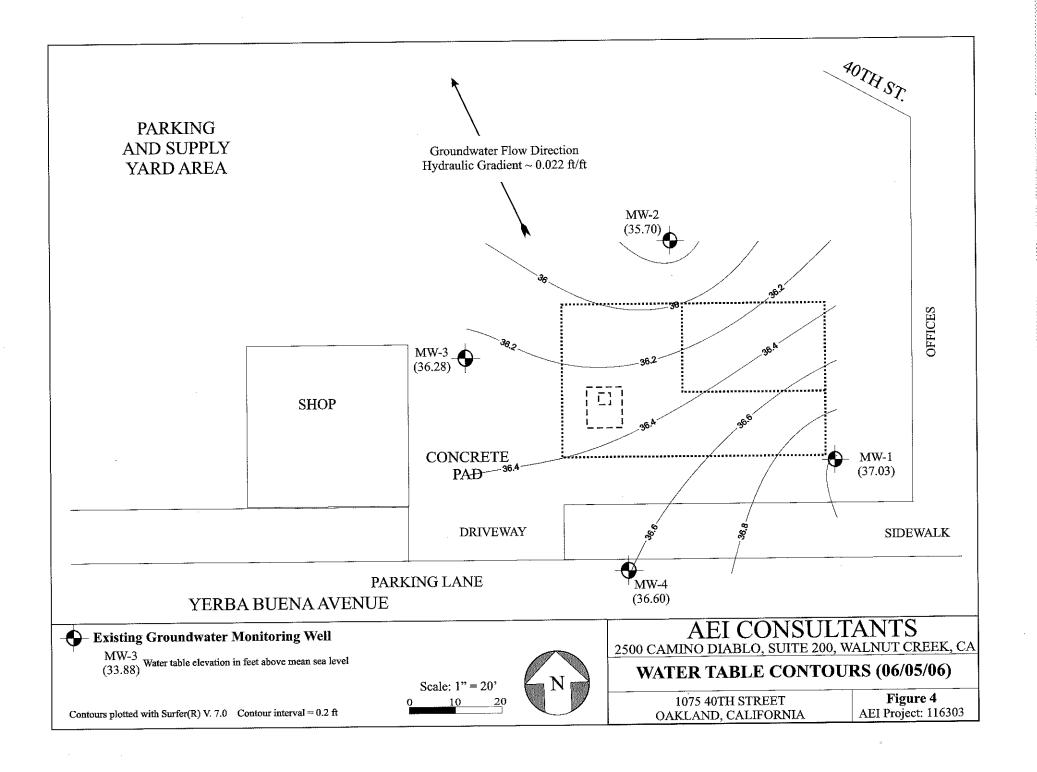
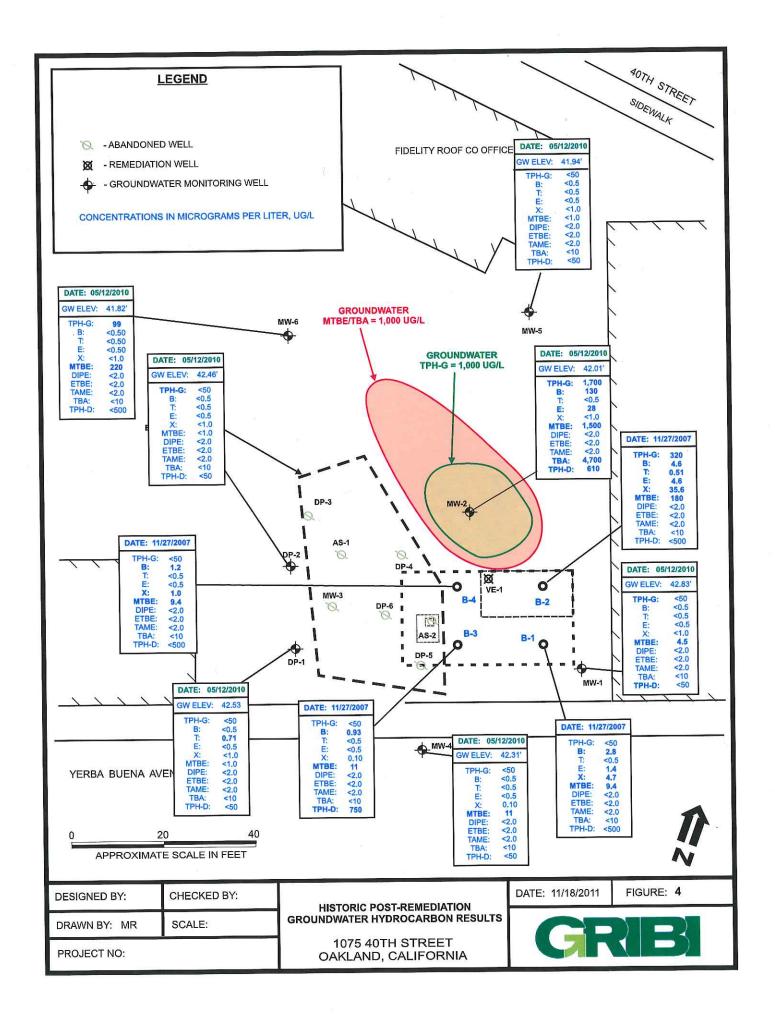
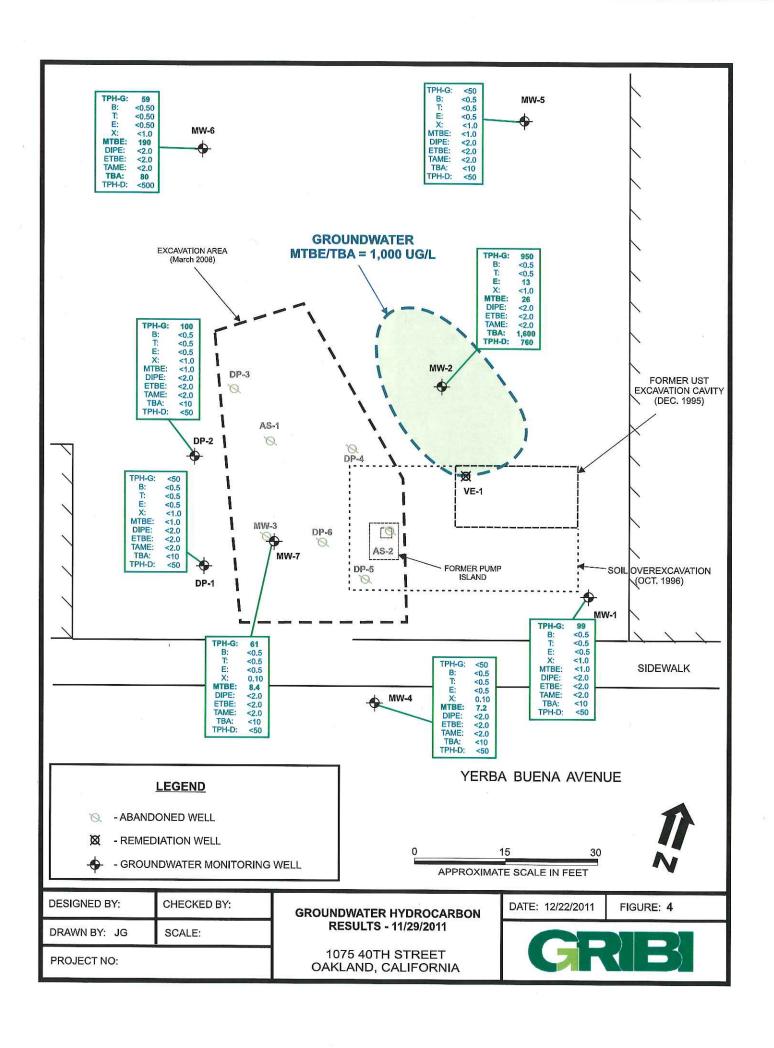


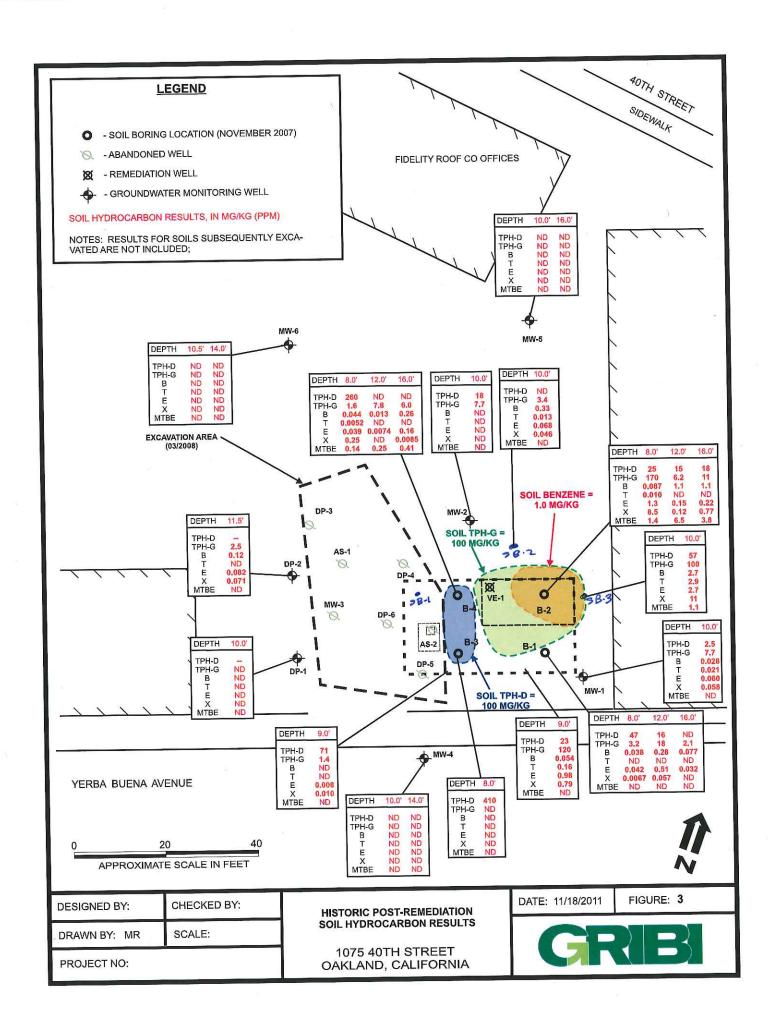
Table 2a: Groundwater Flow Data Fidelity Roofing, 1075 40th Street, Oakland, California

Episode	Date	Average Water Table Elevation (ft amsl)	Water Table Elevation Change (ft)	Hydraulic Gradient Flow Direction (ft/ft)
1	03/19/97	36.81		
2	06/20/97	35.58	-1.23	
3	10/08/97	35.52	-0.06	
4	01/16/98	37.55	2.03	
5	08/05/99	34.87	-2.67	
6	11/18/99	35.14	0.27	
7	02/24/00	37.49	2.35	
8	05/24/00	36.55	-0.94	
9	08/29/00	33.98	-2.57	NW (0.09)
10	01/12/01	36.08	2.10	W (0.06)
11	04/18/01	36.08	0.00	W (0.02)
12	07/27/01	33.99	-2.09	W (0.02)
13	11/06/01	33.77	-0.22	NW (0.05)
14	02/13/02	36.48	2.71	NW (0.05)
15	05/14/02	35.54	-0.94	N (0.04)
16	08/15/02	34.15	-1.39	W (0.05)
17	11/14/02	34,69	0.54	N(0.08)
18	02/12/03	36.09	1.40	NW (0.03)
19	05/16/03	35.08	-1.01	NW (0.06)
20	08/29/03	33.94	-1.14	NW (0.04)
21	12/02/03	35.39	1.45	NW (0.05)
22	03/08/04	36.50	1.12	NW (0.04)
23	06/08/04	35.17	-1.34	NW (0.02)
24	09/10/04	34.29	-0.88	NW (0.007)
25	12/13/04	36.91	2.63	NW (0.05)
26	03/11/05	37.73	0.81	NW (0.016)
27	06/15/05	36.18	-1.55	NW (0.015)
28	09/08/05	34.59	-1.59	NW (0.042)
29	12/01/05	36.78	2.19	NW (0.040)
30	03/07/06	38.45	1.67	NNE (0.03)
31	06/05/06	36.40	-2.05	NNW (0.022)

Notes:
ft amsl = feet above mean sea level









TO 40th STREET **ENTRANCE** CINDER BLOCK WALL soul PUMP ISLAND ASPHALT PAVEMENT CONCRETE soil 100 57 SWS 3 EXCAVATION APPROX. 7,5' DEEP BUILDING SB-3 water (PPb) noil(fpm) 2,400 /2,100 D.33 \ ND 230 STKP 1 STKP 2 STKP 4 STKP 3 STOCKPILED SOIL **KEY** SOIL BORING LOCATION



SOIL SAMPLE LOCATION

TPH-d (ppm)

#### ALL ENVIRONMENTAL, INC. 3364 MT. DIABLO BOULEVARD, LÁFAYETTE

SCALE: 1 IN = 10 FT DATE: 7 OCTOBER 96

APPROVED BY:

DRAWN BY: J.S. ANDERSON

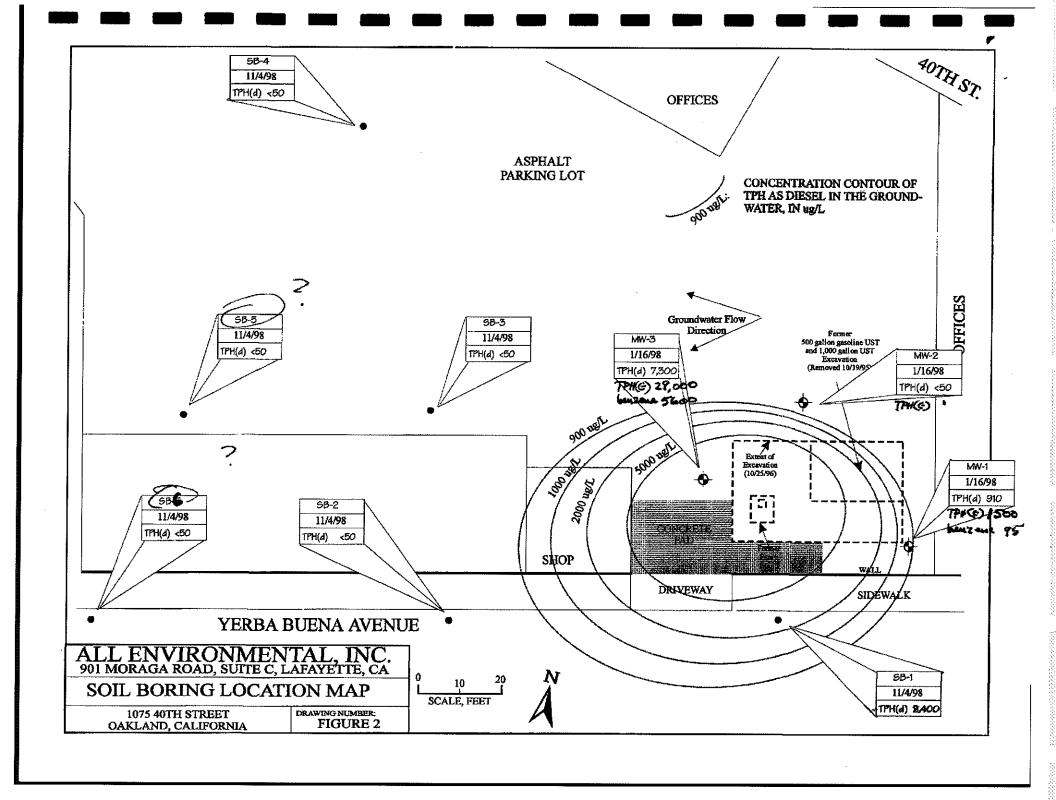
REVISED: J.S. ANDERSON

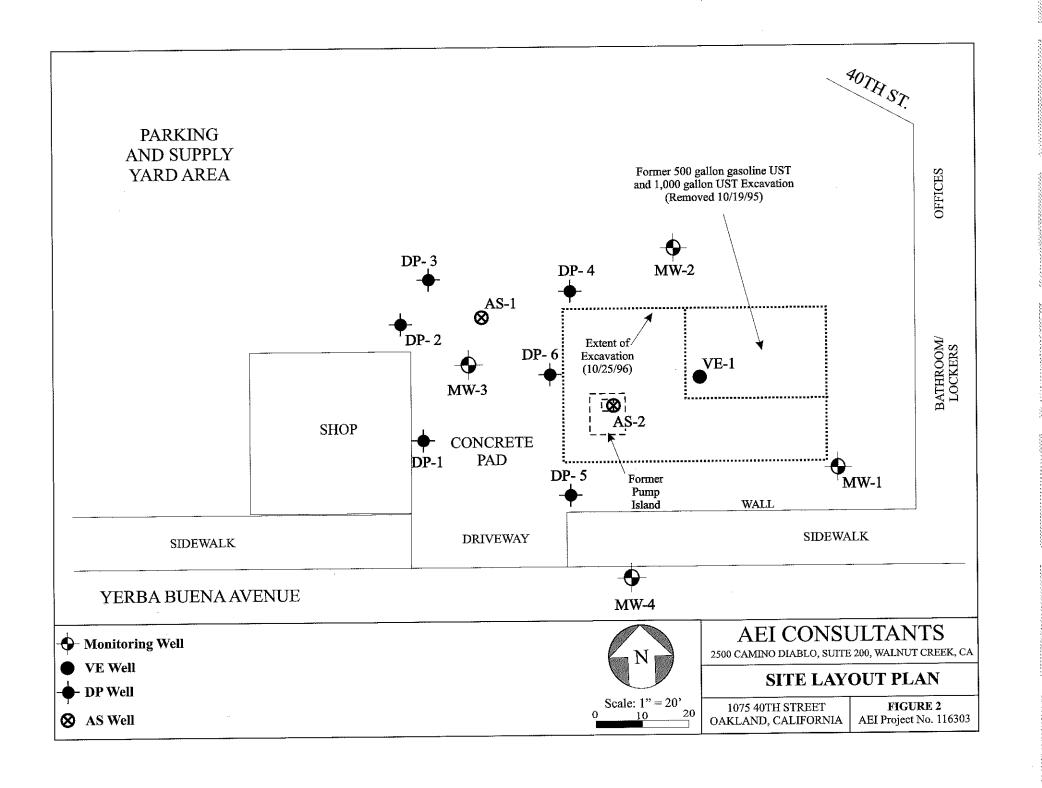
SOIL BORING AND SAMPLE LOCATION MAP

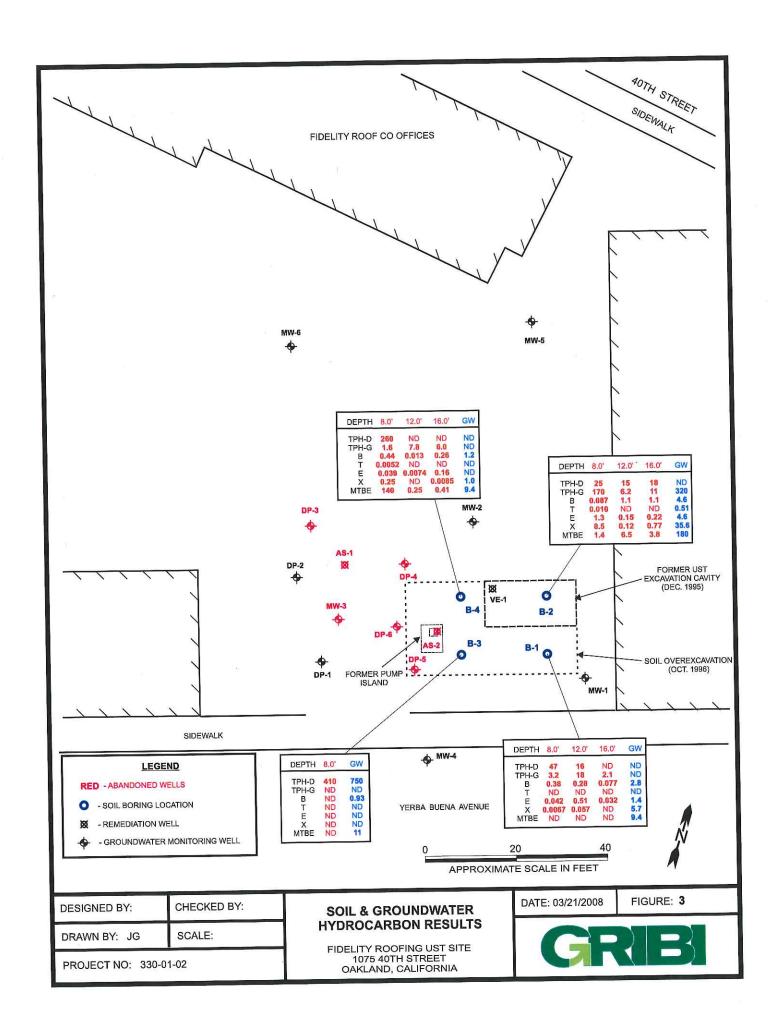
1075 40th STREET OAKLAND, CALIFORNIA

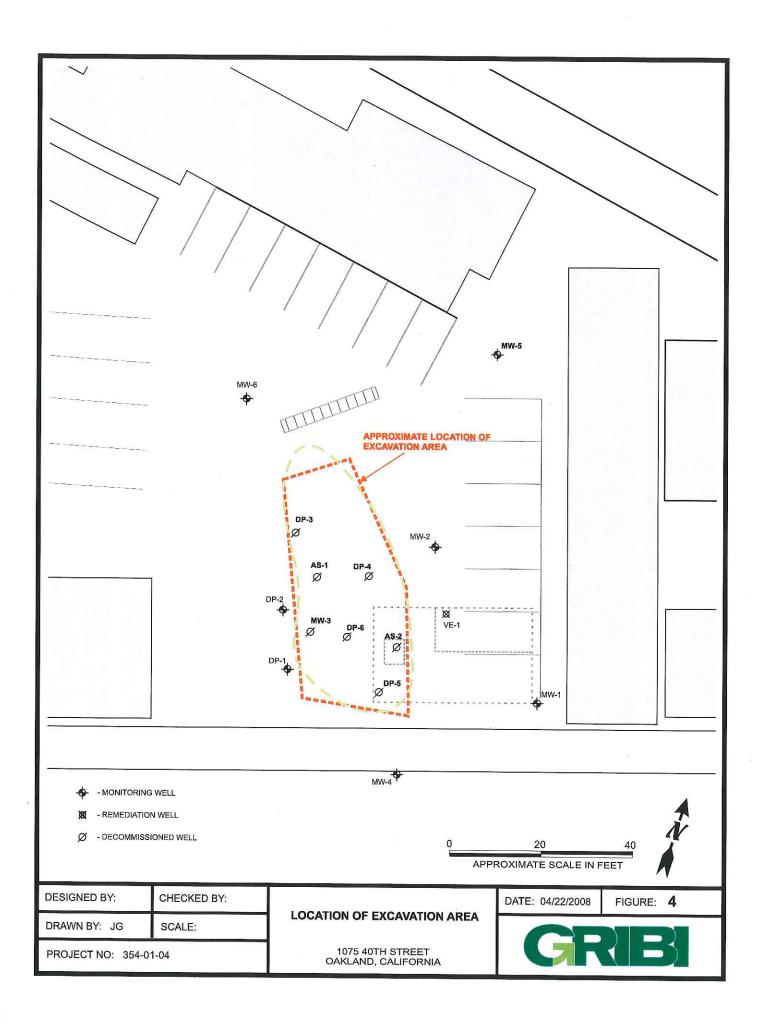
DRAWING NUMBER:

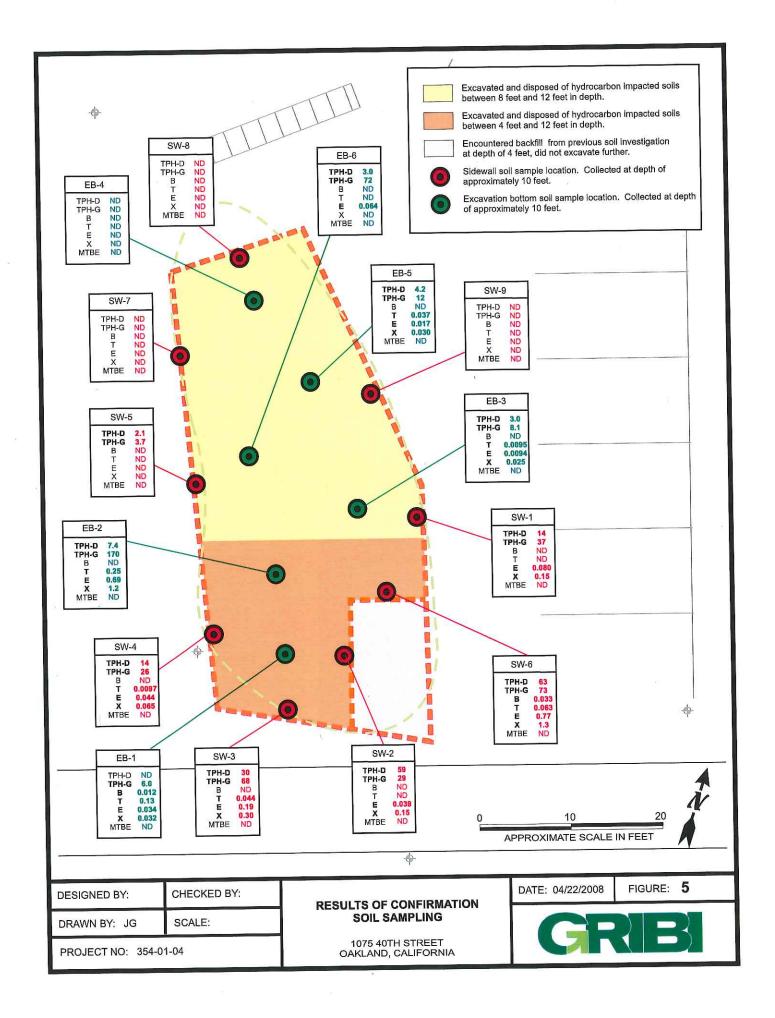
FIGURE 2

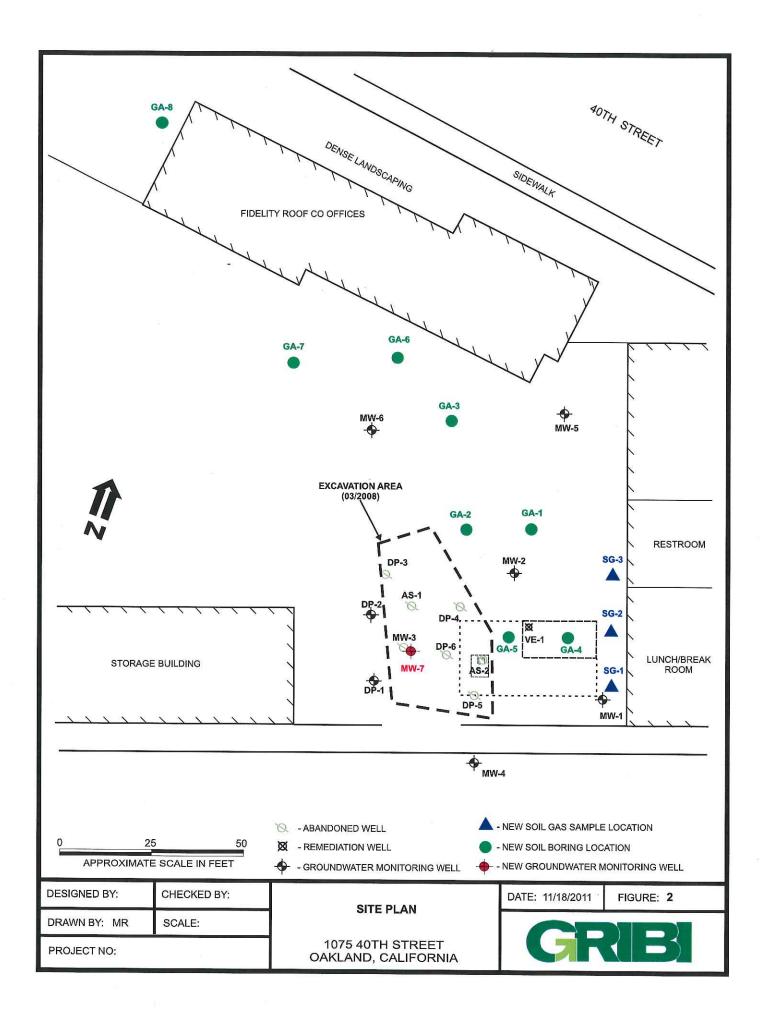


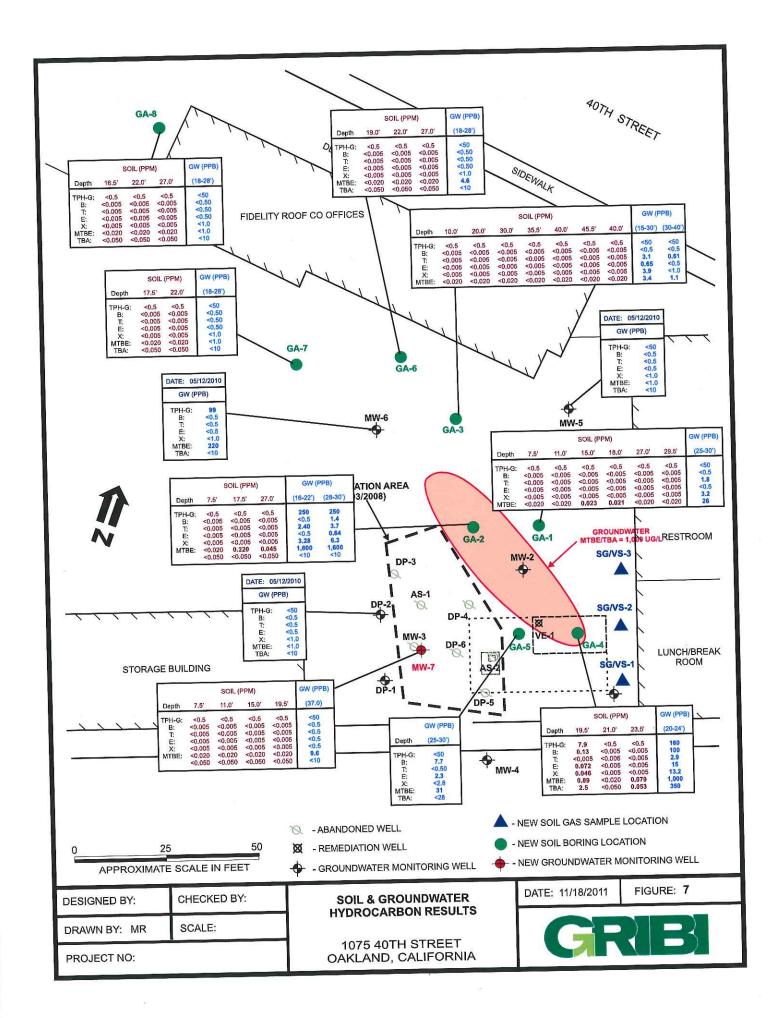












# **ATTACHMENT 3**

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
SW\$ 7'	920	180	<0.2	2.3	<0.2	21	<0.9	NA

Table 2 - Groundwater Sample Analyses

Sample T	PHG TPHG	Benzene	Toluene	Ethyl-	Xylenes	MITTE	Lead
		NAMES OF THE PROPERTY OF THE P			ug/L	ug/L	mg/L
				ng/L			
SB2 W 2	400 2100	130	110	84	250	230	<0.2
SB4 W 5	500 NA	340	350	250	1200	110	NA.
SB4 W	1000 NA	340	330	220	1200		.,,,,

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

analysis to a state certified laboratory.

#### 9.0 ANALYTICAL RESULTS OF SAMPLES

Soil and groundwater samples were analyzed at McCampbell Analytical, Inc. of Pacheco, California (State Certification No. 1644). One soil sample from each boring and groundwater samples from each well were submitted for chemical analyses for TPH as gasoline (EPA Method 5030/8015), TPH as diesel (EPA Method 3510/8015), methyl tertiary butyl ether (MTBE) (EPA Method 8020/602), and benzene, toluene, ethyl benzene, and total xylenes (BTEX) (EPA Method 8020/602).

Refer to the following Table 2 for a summary of the soil sample analyses and to Table 3 for a summary of the groundwater sample analyses.

Table 2 - Soil Sample Analyses

	SHI DEPTHENDED THE	umerzany, sylv	Made in Contract			Ethyl-		
Sample		transfer and annual from Particular		Benzene	Loiuene			
			mg/kg					
BE3HIO0FF	3/6/97		= <b>=</b> 40,05	0.028	0.021	0.060	0.058	2.5
	3/6/97		<0.05	<b>₹0.05</b>	<b>-0.05</b>	<0.05	≼0,05₁	18
	3/6/97	110	<09		036	1.9	7.5	

mw-2

Total Petroleum Hydrocarbons as gasoline = TPHg
Total Petroleum Hydrocarbons as diesel = TPHd
methyl tertiary butyl ether = MTBE
mg/kg = milligrams per kilogram (ppm)



Table 1
Soil Sample Analytical Results

Sample ID	TPH as gasoline mg/kg		MTBE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl- benzene mg/kg	Xylenes mg/kg
MW-4 10' MW-4 14'	<1.0 <1.0	<1.0 <1.0	<0.05 <0.05	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
M.D.L.	1.0	1.0	0.05	0.005	0.005	0.005	0.005

ND = Not detected above the Method Detection Limit

 $\mu$ g/kg = micrograms per kilogram (ppb)

mg/kg = milligrams per kilogram (ppm)

MDL = Method Detection Limit

Table 4: Soil Hydrocarbon Analytical Data, Fidelity Roofing, 1075 40th Street, Oakland, California

Sample	Sample	Date	TPHg	TPHd	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
ID	Depth (mg/L)	(ft)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	
AS1-20	(ug/L) 20.0	05/06/04	ND<1.0	ND<50	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
AS2-15	15.0 10.0	05/06/04 05/06/04	ND<1.0 ND<1.0	1.4 <sup>1</sup> ND<50	ND<0.05 ND<0.05	ND<0.005 ND<0.005	ND<0.005 ND<0.005	ND<0.005 ND<0.005	ND<0.005 ND<0.005
AS2-20	10.0	05/13/04	ND<1.0	NA	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
DP1-10 DP2-11.5	11.5	05/13/04	2.5	NA	ND<0.05	0.12	ND<0.005	0.082	0.071
DP3-11.5	11.5	05/13/04	120 <sup>2</sup>	45 <sup>3,4</sup>	ND<1.5	0.18	0,20	0.31	0.21
DP4-7.5 DP4-10	7.5 10	05/13/04 05/13/04	ND<1.0 350 <sup>2</sup>	NA 94 <sup>3,4</sup>	ND<0.05 ND<4.5	ND<0.005 0.40	ND<0.005 <b>0.53</b>	ND<0.005 <b>0.81</b>	ND<0.005 0.44
DP5-11.5	11.5 13	05/13/04 05/13/04	2900 83	830 <sup>3, 4</sup> 77 <sup>3, 4</sup>	ND<10 ND<0.25	12 0.52	9.3 0.11	66 1.6	320 2.3
DP5-13 DP6-8 DP6-13	8 13	05/13/04 05/13/04	11 <sup>2</sup>	NA 11 <sup>3</sup>	ND<0.5 ND<1.0	0.012 1.3	0.022 ND<0.10	0.0075 2.9	0.014 3.7

Notes:

ug/L= micrograms per liter MTBE= Methyl Tertiary Butyl Ether

TPHg= Total Petroleum Hydrocarbons as gasoline

TPHd= Total Petroleum Hydrocarbons as diesel

1 - oil range compounds are significant

2 - no recogniazable pattern

3 - diesel range compounds are significant; no recognizable pattern

4 - gasoline range compounds are significant

Table 5: Soil Fuel Oxygenate Analytical Data, Fidelity Roofing, 1075 40th Street, Oakland, California

Sample	Date	TAME	TBA	EDB	1,2-DCA	DIPE	Ethanol	ETBE	Methanol	MTBE
Depth	(ue/ke)	(ug/kg)	(ug/kg)	(ue/ke)	(ue/ke)	Method 8260 (μg/kg)	(ug/kg)	(ug/kg)	(ue/ke)	(ue/ke)
					ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	14
									ND<5.0	49
10.0	05/06/04	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
10	05/13/04	NA	NA	NA	NA	NA	NA	NA	NA	NA
11.5	05/13/04	NA	NA	NA	NA	NA	NA	NA	NA	NA
11.5	05/13/04	ND<5.0	ND<25	ND<5.0	NA	ND<5.0	NA	ND<5.0	NA	ND <5.0
75	05/13/04	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	05/13/04	ND<5.0	ND<25	ND<5.0	NA	ND<5.0	NA	ND<5.0	NA	12
115	05/13/04	ND<2000	ND<10.000	NA	NA	ND<2000	NA	ND<2000	NA	ND<2000
13	05/13/04	ND<5.0	ND<25	ND<5.0	NA	ND<5.0	NA	ND<5.0	NA	ND<5.0
8	05/13/04	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	05/15/04	ND<20	ND<100	NA	NA	ND<20	NA	ND<20	NA	ND<20
	20.0 15.0 10.0 10 11.5 11.5 7.5 10 11.5 13	(ug/kg) (ug/kg)  20.0 05/06/04 15.0 05/06/04 10.0 05/06/04  10 05/13/04  11.5 05/13/04  7.5 05/13/04 10 05/13/04  11.5 05/13/04  11.5 05/13/04  8 05/13/04	(ug/ke)         (ug/ke)         (ug/ke)           20.0         05/06/04         ND<5.0	(ug/ke)         (ug/ke)         (ug/ke)         (ug/ke)           20.0         05/06/04         ND<5.0	(μg/kg)         (μg/kg)         (μg/kg)         (μg/kg)         (μg/kg)         (μg/kg)           20.0         05/06/04         ND<5.0	(µg/kg)         (µg/kg) <t< td=""><td>(µg/kg)         (µg/kg)         <t< td=""><td>(µg/kg)         (µg/kg)         <t< td=""><td>(µg/kg)         (µg/kg)         <t< td=""><td>(ug/kg)         (ug/kg)         <t< td=""></t<></td></t<></td></t<></td></t<></td></t<>	(µg/kg)         (µg/kg) <t< td=""><td>(µg/kg)         (µg/kg)         <t< td=""><td>(µg/kg)         (µg/kg)         <t< td=""><td>(ug/kg)         (ug/kg)         <t< td=""></t<></td></t<></td></t<></td></t<>	(µg/kg)         (µg/kg) <t< td=""><td>(µg/kg)         (µg/kg)         <t< td=""><td>(ug/kg)         (ug/kg)         <t< td=""></t<></td></t<></td></t<>	(µg/kg)         (µg/kg) <t< td=""><td>(ug/kg)         (ug/kg)         <t< td=""></t<></td></t<>	(ug/kg)         (ug/kg) <t< td=""></t<>

Notes:

micrograms per kilogram (µg/kg)

TPHg= Total Petroleum Hydrocarbons as gasoline

TPHd= Total Petroleum Hydrocarbons as diesel

TAME - tert-Amyl methyl ether

TBA - t-Butyl alcohol

EDB - 1,2-Dibromethane

1,2-DCA - 1,2-Dichloroethane

DIPE - Diisopropyl ether

ETBE - Ethyl tert-butyl ether

MTBE= Methyl Tertiary Butyl Ether

# McCampbell Analytical, Inc.

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #116303;Fidelity Roof	Date Sampled: 12/14/06
2500 Camino Diablo, Ste. #200	Company	Date Received: 12/14/06
	Client Contact: Robert Flory	Date Extracted: 12/14/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed 12/14/06-12/15/06

# Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE\*

Y**	on method SW5030B	me xemilee (	Analy	rtical methods SV				Work Order	: 0612	2318
Lab ID	Client ID	Matrix	TPH(g)	МТВЕ	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-5-10	S	ND	ND	ND	ND	ND	ND	1	91
002A	MW-5-16	S	ND	ND	ND	ND	ND	ND	1	84
004A	MW-6-10.5	S	ND	ND	ND	ND	ND	ND	1	86
005A	MW-6-16	s	ND	ND	ND	ND	ND	ND	1	82
	-								-	
									<u> </u>	
										-

Reporting Limit for DF =1;	w	NA	NA	NA	NA	NA	NA	1	ug/L
ND means not detected at or	9	1.0	0.05	0.005	0.005	0.005	0.005	1	mg/Kg
above the reporting limit	5	1,0	0,02						

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

<sup>#</sup> cluttered chromatogram; sample peak coelutes with surrogate peak.

<sup>+</sup>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 (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #116303;Fidelity	Date Sampled: 12/14/06
2500 Camino Diablo, Ste. #200	Roof Company	Date Received: 12/14/06
	Client Contact: Robert Flory	Date Extracted: 12/14/06
Walnut Creek, CA 94597	Client P.O.:	Date Analyzed 12/16/06

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

Extraction method SW35	50C		Analytical methods SW8015C  Matrix TPH(d)  S ND					
Lab ID	Client ID				DF	% SS		
0612318-001A	MW-5-10	S	ND		1	99		
0612318-002A	MW-5-16	S	ND		1	99		
0612318-004A	MW-6-10.5	S	ND		1	98		
0612318-005A	MW-6-16	S	ND		1	99		
				·				
		]						

Reporting Limit for DF =1;	W	NA	NA
ND means not detected at or	S	1.0	mg/Kg
above the reporting limit	~		

<sup>\*</sup> water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

<sup>#</sup> 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.

<sup>+</sup>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) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) results are reported on a dry weight basis.

TABLE 4: FUEL OXYGENATES ANALYTICAL DATA Fidelity Roofing, 1075 40th Street, Oakland, California

Well ID	Date	TAME	TBA	EDB	1,2-DCA	DIPE	ETBE	MTBE	Ethanol	Methanol
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	benzene (mg/L)	(mg/L)		
		\ 0_/	<u>`                                  </u>							
MW-1	06/08/04	ND<0.5	ND<5.0	ND<0.5	1.5	ND<0.5	ND<0.5	1.0		
	09/10/04	ND<0.5	ND<5.0	ND<0.5		ND<0.5	ND<0.5	1.0		
MW-2	06/08/04	ND<100	ND<1000	ND<100	ND<100	ND<100	ND<100	4,300		
[V] VV - Z	09/10/04	ND<50	ND<500	ND<50	ND<50	ND<50	ND<50	2,800		
A #331 2	06/08/04	ND<5.0	ND<50	ND<5.0	ND<5.0	ND<5.0	ND<5.0	99		
MW-3	09/10/04	ND<100	ND<1000	ND<100	ND<100	ND<100	ND<100	ND<100		
MW-4	06/08/04	ND<0.5	ND<5.0	ND<0.5	0.79	ND<0.5	ND<0.5	15		
141 44	09/10/04	ND<0.5	ND<5.0	ND<0.5	NA	ND<0.5	ND<0.5	8.2		
MW-5	01/03/07	ND<0.5	ND<5.0			ND<0.5	ND<0.5	ND<0.5	ND<50	ND<500
MW-6	01/03/07	ND<10	ND<100			ND<10	ND<10	320	ND<1,000	ND<10,000
Notes:	Notes:									
(mg/L)	micrograms	crograms per liter				1,2-Dichlore				
TAME	tert-Amyl m	ethyl ether			DIPE	Diisopropyl				
TBA	t-Butyl alcol	nol			ETBE	Ethyl tert-b	•			
EDB	1,2-Dibrome	ethane			MTBE	Methyl Tert	iary Butyl Etl	ner		

### Table 1 SOIL AND GROUNDWATER HYDROCARBON ANALYTICAL RESULTS

Fidelity Roof Co UST Site

0	Sample	Sample	Conce	inanon, oui	. mangi ang	hr. minëram	V. 91. PV: (7.		ns per liter (ug/l)
Sample ID	Matrix	Depth	TPH-D	ТРН-G	В	T	E	X	Oxygenates
B-1-8.0'	soil	8.0 feet	47	3.2	0.038	<0.0050	0.042	0.0067	All ND
B-1-12.0'	soil	12.0 feet	16	18	0.28	<0.0050	0.51	0.057	All ND
B-1-16.0'	soil	16.0 feet	<5.0	2.1	0.077	<0.0050	0.032	<0.0050	All ND
B-1-GW	water	(8.0 feet)	<500	<50	2.8	< 0.50	1.4	5.7	9.4 MTBE
B-2-8.0'	soil	8.0 feet	25	170	0.087	0.010	1.3	8.5	1.4 MTBE 0.34 TBA
B-2-12.0'	soil	12.0 feet	15	6.2	1.1	<0.0050	0.15	0.12	6.5 MTBE 0.56 TBA
B-2-16.0'	soil	16.0 feet	18	11	1.1	<0.0050	0.22	0.77	3.8 MTBE 0.26 TBA
B-2-GW	water	(8.0 feet)	<500	320	4.6	0.51	4.6	35.6	<b>180</b> MTBE
B-3-8.0'	soil	8.0 feet	410	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	All ND
B-3-GW	water	(8.0 feet)	750	<50	0.93	< 0.50	< 0.50	<0.10	<b>11</b> MTBE
B-4-8.0'	soil	8.0 feet	260	1.6	0.044	0.0052	0.039	0.25	0.14 MTB
B-4-12.0'	soil	12.0 feet	<5.0	7.8	0.013	<0.0050	0.0074	<0.0050	0.25 MTB
B-4-16.0'	soil	16.0 feet	<5.0	6.0	0.26	<0.0050	0.16	0.0085	0.41 MTB
B-4-GW	water	(8.0 feet)	<500	<50	1.2	< 0.50	<0.50	1.0	9.4 MTBE
			83	83	0.044	2.9	3,3	2.3	0.023 MTE
SL, soil, drinking w	ater, Res & Cl		83	63	0,044	200	, ,,,		4.4 TBA
			450	150	0.26	29	33	100	8.4 MTBI
SL, soil, non-drinki	ing water, CI		450	130	0.20				310 TBA
CT	ululahan suntan D	40 & CI	100	100	1.0	40	30	20	5.0 MTB
SL, groundwater, d	rinking water, K	es ex CI	100	1					NE TBA
SL, groundwater, n	on-drinking wat	er. Res & CI	2,500	5,000	540	400	300	5,300	1,800 MTI
31., grvanawaier, n	ou- <i>a</i> nning ma	, 1125 a 01	_,,						50,000 TE
SI groundwater v	L, groundwater, vapor intrusion, Res			NE	42	31,000	100,000	10,000	4,700 MTI
L, groundwater, super intrusion, ices			NE					1	NE TBA

TPH-D = Total Petroleum Hydrocarbons as Diesel TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene T = Toluene

T = Tottene
E = Ethylbenzene
X = Xylenes
Oxygenates = Methyl-tert-Butyl Ether (MTBE), Ter-Butyl Alcohol
(TBA), Di-isopropyl Ether (DIPE), Ethyl-t-butyl Ether (ETBE), and
Tert-amyl Methyl Ether (TAME).

<0.0050 = Not detected above the expressed value.

ESL = Environmental Screening Level, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, Interim Final, November 2007.

Res = Residential land use
C1 = Commercial/Industrial land use

#### Table 1 **EXCAVATION PIT SOIL ANALYTICAL RESULTS**

Fidelity Roof Company UST Site

	Sample -		Conce	ntration, mil	ligrams per l	kilogram (mg	/kg, or ppm)	
Sample ID	Depth	TPH-D	TPH-G	В	T	E	X	MTBE
EXCAVATION PIT SI	DEWALL SOII	SAMPLES						
SW-1	10,0 feet	14	37	<0.050	<0.050	0.080	0.15	< 0.50
SW-2	10.0 feet	59	29	<0.010	<0.010	0.039	0.15	<0.010
SW-3	10.0 feet	30	68	<0.005	0.044	0.19	0.30	<0.05
SW-4	10.0 feet	14	26	<0.005	0.0097	0.044	0.065	<1.25
SW-5	10.0 feet	2.1	3.7	<0.005	<0.005	<0.005	<0.005	<0.05
SW-6	10.0 feet	63	73	0.033	0.063	0.77	1.3	<0.05
SW-7	10.0 feet	<1.0	<1.0	<0,005	<0.005	<0.005	<0.005	<0.05
SW-8	10,0 feet	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	< 0.05
SW-9	10.0 feet	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
EXCAVATION PIT B	OTTOM SOIL S	SAMPLES						
EB-1	12.0 feet	<1.0	6.0	0.012	0.013	0.034	0.032	< 0.05
EB-2	12.0 feet	<b>7.4</b> ,	170	<0.010	0.25	0.69	1.2	<0.10
EB-3	12.0 feet	3.0	8.1	<0.005	0.0095	0.0094	0.025	<0.05
EB-4	12,0 feet	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
EB-5	12.0 feet	4.2	12	<0.005	0.037	0.017	0.030	<0.05
EB-6	12.0 feet	3.0	72	<0.062	< 0.062	0.064	<0.062	<0.62
ESL, soil, drinking wa	ter, Res & CI	83	83	0.044	2.9	3.3	2.3	0.023
ESL, soil, non-drinkin	g water, CI	150	450	0.26	29	33	100	8.4

TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-tert-Butyl Ether.

<0.050 = Not detected above the expressed value.

ESL = Environmental Screening Level, as contained in Screening for

Environmental Concerns at Sites with Contaminated Soil and Groundwater, San
Francisco Bay Regional Water Quality Control Board, Interim Final, November 2007.
Res = Residential land use
CI = Commercial/Industrial land use

#### Table 2 EXCAVATED SOIL STOCKPILE ANALYTICAL RESULTS

Fidelity Roof Company UST Site

		Concentration, milligrams per kilogram (mg/kg, or ppm)								
Sample ID	TPH-G	B	T	E	X	MTBE				
SP-1	<1.0	<0.005	<0,005	<0.005	<0.005	<0.005				
SP-2	<1.0	<0.005	<0.005	<0.005	<0.005	< 0.005				
SP-3	<1.0	<0.005	<0.005	<0.005	< 0.005	< 0.005				
SP-4	<1.0	<0.005	<0.005	<0,005	< 0.005	< 0.005				
SP-5	<1.0	< 0.005	<0.005	<0.005	<0.005	< 0.005				
SP-6	<1.0	<0.005	<0.005	<0.005	<0.005	< 0.005				
SP-7	<1.0	<0.005	<0.005	<0.005	< 0.005	< 0.005				
SP-8	<1.0	<0.005	<0.005	<0.005	< 0.005	< 0.005				
SP-9	<1.0	<0.005	<0.005	<0.005	< 0.005	< 0.005				
SP-10	<1,0	<0.005	<0.005	<0.005	<0.005	< 0.005				
SP-11	1.5	< 0.005	< 0.005	<0.005	0.043	< 0.005				
SP-12	<1.0	<0.005	<0.005	<0.005	< 0.005	<0.005				
SP-13	<1.0	< 0.005	< 0.005	<0.005	<0.005	<0.005				
SP-14	<1.0	< 0.005	<0.005	<0,005	< 0.005	< 0.005				
SP-15	<1.0	<0.005	<0,005	<0.005	<0.005	< 0.005				
SP-16	<1.0	<0.005	<0.005	<0.005	<0.005	< 0.005				
ESL, soil, drinking water, Res & CI	83	0.044	2.9	3.3	2.3	0.023				
ESL, soil, non-drinking water, CI	450	0.26	29	33	100	8.4				

 $\begin{array}{l} TPH-D=Total\ Petroleum\ Hydrocarbons\ as\ Diesel\\ TPH-G=Total\ Petroleum\ Hydrocarbons\ as\ Gasoline\\ B=Benzene \end{array}$ 

B – Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl-tert-Butyl Ether.

<1.0 = Not detected above the expressed value.
ESL = Environmental Screening Level, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, Interim Final, November 2007.
Res = Residential land use
CI = Commercial/Industrial land use

Table 1
SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS
Fidelity Roof Co. UST Site

	Sample	Sample	Soil Concentration: milligrams per kilogram (mg/kg), e Groundwater Concentration: micrograms per kilogram (ug/L)								
Sample ID	Matrix	Depth _	TPH-G	В		E	X	MTBE	тва	OXY	
GA-1-7.5	Soil	7.5 feet	<0.50	<0.005	<0.005	<0.005	<0.005	<0.020	<0.050	ND	
GA-1-115	Soil	11.5 feet	<0.50	< 0.005	<0.005	<0.005	<0.005	<0.020	<0.050	ND	
GA-1-15.0	Soil	15.0 feet	<0.50	<0.005	< 0.005	<0,005	<0.005	0.023	<0.050	ND	
GA-1-18.0	Soil	18.0 feet	<0.50	< 0.005	< 0.005	<0.005	<0.005	0.021	<0.050	ND	
GA-1-27.0	Soil	27.0 feet	< 0.50	< 0.005	<0.005	<0.005	< 0.005	< 0.020	<0.050	ND	
GA-1-29.5	Soil	29.5 feet	< 0.50	<0.005	<0.005	<0.005	<0.005	< 0.020	< 0.050	ND	
GA-1-W	Water	(25-30 feet)	<50	<050	1.8	<050	3.2	26	<10	ND	
GA-2-7.5	Soil	7.5 feet	<0.50	<0.005	<0.005	< 0.005	<0.005	< 0.020	< 0.050	ND	
GA-2-17.5	Soil	17.5 feet	<0.50	< 0.005	<0.005	< 0.005	< 0.005	0.220	< 0.050	ND	
GA-2-27.0	Soil	27.0 feet	< 0.50	< 0.005	<0.005	< 0.005	< 0.005	0.045	< 0.050	ND	
GA-2-W16-22	Water	(16-22 feet)	250	<050	2.4	< 0.50	3.28	1,600	<10	ND	
GA-2-W28-30	Water	(28-30 feet)	250	1.4	3.7	0.64	6.3	1,600	<10	ND	
GA-3-7.5	Soil	7.5 feet	< 0.50	< 0.005	<0.005	< 0.005	<0.005	< 0.020	< 0.050	ND	
GA-3-15.0	Soil	15.0 feet	< 0.50	< 0.005	< 0.005	<0.005	<0.005	< 0.020	< 0.050	ND	
GA-3-23.5	Soil	23.5 feet	< 0.50	< 0.005	< 0.005	<0.005	< 0.005	< 0.020	<0.050	ND	
GA-3-26.0	Soil	26.0 feet	< 0.50	< 0.005	< 0.005	<0.005	<0.005	<0.020	<0.050	ND	
GA-3-29.5	Soil	29.5 feet	< 0.50	<0.005	<0.005	< 0.005	< 0.005	< 0.020	<0.050	ND	
GA-3-34.5	Soil	34,5 feet	< 0.50	<0.005	<0.005	<0.005	< 0.005	< 0.020	< 0.050	ND	
GA-3-39.5	Soil	39,5 feet	< 0.50	<0.005	<0.005	< 0.005	< 0.005	< 0.020	< 0.050	ND	
GA-3-W-15-20	Water	(15-20 feet)	<50	<050	3.1	0.65	3.9	3.4	<10	ND	
GA-3-W-30-40	Water	(30-40 feet)	<50	<050	0.61	< 0.50	<1.0	1.1	<10	ND	
GA-4-19.5	Soil	19.5 feet	7.9	0.13	< 0.005	0.072	0.046	0.89	2.5	ND	
GA-4-21.0	Soil	21.0 feet	<0.50	<0.005	<0.005	< 0.005	< 0.005	< 0.020	< 0.050	ND	
GA-4-23,5	Soil	23.5 feet	<0.50	<0.005	< 0.005	< 0.005	< 0.005	0.079	0.053	ND	
GA-4-W-20-24	Water	(20-24 feet)	160	100	2,9	15	13.2	1,000	350	ND	
GA-5-W-25-30	Water	(25-30 feet)	<50	7.7	< 0.50	2.3	<2.8	31	<28	2.5	
GA-6-19.0	Soil	19.5 feet	<0.50	< 0.005	<0.005	< 0.005	< 0.005	<0.020	<0.050	ND	
GA-6-22,0	Soil	22.0 feet	< 0.50	<0.005	< 0.005	<0.005	< 0.005	< 0.020	< 0.050	ND	
GA-6-27.0	Soil	27.0 feet	< 0.50	<0.005	<0.005	<0.005	<0.005	< 0.020	<0.050	ND	
GA-6-W	Water	(18-28 feet)	<50	<050	<050	<050	<1.0	4.6	<10	ND	

## Table 1 SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS

Fidelity Roof Co. UST Site

Sample	Sample Matrix	Sample _ Depth		Soi <i>Grou</i>	l Concentrat idwater Conc	ion: milligr: :entration: m	ams per kilo <i>icrograms pe</i>	gram (mg/kg er kilogram (i	), (g/L)	
D	The Control of the Co	Depth	TPH-G	В	T	E	X	MTBE	TBA	OXY
GA-7-17.5	Soil	17.5 feet	<0.50	<0.005	<0.005	<0.005	<0.005	< 0.020	<0.050	ND
GA-7-22.0	Soil	22.0 feet	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.020	<0.050	ND
GA-7-W	Water	(18-28 feet)	<50	<050	< 0.50	< 0.50	<1.0	<1.0	<10	ND
GA-8-16.5	Soil	16.5 feet	<0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.020	< 0.050	ND
GA-8-22.0	Soil	22.0 feet	<0.50	< 0.005	< 0.005	< 0.005	<0.005	< 0.020	< 0.050	ND
GA-8-27.5	Soil	27.5 feet	< 0.50	<0.005	< 0.005	<0.005	<0.005	< 0.020	< 0.050	ND
GA-8-W	Water	(18-28 feet)	<50	<050	< 0.50	< 0.50	<1.0	<1.0	<10	ND
MW-7-7.5	Soil	7.5 feet	<0.50	<0.005	< 0.005	< 0.005	<0.005	< 0.020	< 0.050	ND
MW-7-11.0	Soil	11.0 feet	<0.50	<0.005	<0.005	< 0.005	<0.005	<0.020	< 0.050	ND
MW-7-15.5	Soil	15.5 feet	<0.50	< 0.005	<0.005	< 0.005	< 0.005	< 0.020	< 0.050	ND
MW-7-19.5	Soil	19.5 feet	< 0.50	< 0.005	<0.005	<0.005	< 0.005	< 0.020	< 0.050	ND
MW-7	Water	(5-20 feet)	<50	< 0.50	< 0.50	< 0.50	<1.0	9.6	<10	ND
Shallow Soil ESI water source, cor	., groundwater nmercial land t	IS a drinking ise	83	0.044	2.9	3,3	2.3	0.075	0.075	0.023
Groundwater ES water source, co.	L, groundwater	r IS a drinking	100	1.0	40	30	20	12	12	5.0

#### Table Notes:

TPH-D = total petroleum hydrocarbons as diesel
TPH-G = total petroleum hydrocarbons as gasoline
MTBE = Methyl tert-butyl ether

< 1.0 = Not detected above the expressed detection level.

All ND = No detectable concentrations of full list of constituents

ESL = Environmental Screening Levels, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, Interim Final, May 2008.

su	MMARY O	OF SOIL VA	POR LAE	able 2 BORATOF of Co. UST	RY ANAL' Site	YTICAL	RESULTS	
Sample	Sample	Sample -	Consti	tuent Conce	ntration, mic	rograms pe	eubic <u>meter (u</u>	g/m^3)
JD	Matrix	Depth	В	7	<u> </u>	X	1,1-DFA	P
Vapo	r Samples, May	5, 2011, Samp	led from tem	iporary vapo	r probes.			
VS-1	Vapor	1.5 feet	7.5	15	8.0	28.0	27,000	
VS-2	Vapor	1.5 feet	6.9	19	7.1	23.9	26,000	
VS-3	Vanor	0.5 feet	9.6	20	7.4	26.5	28.000	

# ATTACHMENT 4

Table 1
Groundwater Laboratory Analytical Results
Fidelity Roof Co. UST Site

Well	Date		GW _	Concentration, micrograms per liter (ug/l)								
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy	
MW-1	3/19/1997	8.25	42.74	<50	<50	<0.5	<0.5	<0.5	<0.5	23	-	
<50.99>	6/23/1997	9.1	41.89	420	1,300	150	2.1	12	19	14	=	
	10/8/1997	9.95	41.04	66	56	2.8	< 0.5	< 0.5	<0.5	5.8		
	1/16/1998	7.57	43.42	910	1,500	95	0.72	69	8.4	<33	-	
	8/5/1999	10.16	40.83	63	160	1.6	< 0.5	0.56	1.1	<15	-	
	11/18/1999	8.52	42.47	<50	79	< 0.5	< 0.5	< 0.5	<0.5	<5.0	-	
	2/24/2000	7.65	43.34	160	300	14	0.82	3.5	1.6	<5.0	3	
	5/24/2000	8.47	42.52	480	1,300	93	< 0.5	17	1.6	<10	-	
	8/29/2000	10.28	40.71	< 0.5	120	0.93	< 0.5	< 0.5	<0.5	<5.0	_	
	1/12/2001	8.5	42.49	170	360	16	< 0.5	9.3	0.69	<5.0	-	
	4/18/2001	8.77	42.22	410	1,100	63	< 0.5	34	0.73	2,800	<del>(100</del> )	
	7/27/2001	10.5	40.49	66	130	1.6	< 0.5	< 0.5	<0.5	<5.0	(70)	
	11/6/2001	10.28	40.71	<50	<50	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	-	
	2/13/2002	8.47	42.52	270	430	17	0.51	11	0.64	<5.0	_	
	5/14/2002	9.5	41.49	170	340	21	< 0.5	5.3	0.67	<5.0	-	
	8/15/2002	10.39	40.60	53	96	0.66	< 0.5	< 0.5	< 0.5	<5.0	-	
	11/14/2002	9.08	41.91	<50	<50	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	-	
	2/12/2003	8.36	42.63	120	710	28	4.3	32	130	<5.0	_	
	5/16/2003	8.49	42.50	340	1,100	54	4.1	40	100	<15	12	
	8/29/2003	9.91	41.08	280	1,200	46	5.1	55	230	<5.0	_	
	12/2/2003	8.88	42.11	<50	<50	<0.5	< 0.5	< 0.5	< 0.5	<5.0	-	
	3/8/2004	7.66	43.33	240	120	2.9	< 0.5	< 0.5	0.71	<5.0	5 <del>-</del>	
	6/8/2004	9.39	41.60	782	<50	< 0.5	< 0.5	< 0.5	<0.5	<5.0	NE	
	9/10/2004	9.95	41.04	<50	<50	< 0.5	< 0.5	< 0.5	<0.5	<5.0	NI	
	12/13/2004	6.94	44.05	150	240	11	< 0.5	5.6	< 0.5	<5.0	_	
	3/11/2005	7.35	43.64	420	1,100	43	0.60	12	0.80	<40	-	
	6/15/2005	7.35	43.64	220	440	26	< 0.5	0.60	< 0.5	<15	-	
	9/8/2005	9.57	41.42	76	120	2.0	< 0.5	< 0.5	< 0.5	<5.0		
	12/1/2005	7.66	43.33	<50	<50	1.3	< 0.5	0.74	< 0.5	<5.0	-	
	3/7/2006	7.32	43.67	150	590	29	0.89	4.4	1.1	<5.0	1	
	6/5/2006	8.46	42.53	120	74	1.2	< 0.5	< 0.5	< 0.5	<5.0	S <del></del>	
	9/18/2006	9.36	41.63	99	<50	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	i( <del>)</del>	
	1/3/2007	7.99	43.00	<50	78	1.4	< 0.5	0.66	< 0.5	<5.0		
	06/12/2007	9.21	41.78	<500	88	9.2	< 0.5	0.64	<1.0	3.8	N	
	09/12/2007	10.02	40.97	<500	410	5.1	<0.5	< 0.5	<1.0	2.7	N	
	12/5/2007	8.68	42.31	1,100	2,300	96	<0.5	20	<1.0	6.2	N	
	03/04/2008	7.87	43.12	920	200	2.8	< 0.5	< 0.5	<1.0	3.2	N	
	05/22/2008	9.62	41.37	590	150	18	< 0.5	< 0.5	<1.0	<1.0	N.	
	09/10/2008	10.57	40.42	<50	110	< 0.5	< 0.5	< 0.5	<1.0	<1.0	N.	
	11/25/2008	9.77	41.22	63	<50	2.6	< 0.5	< 0.5	<1.0	<1.0	N.	
	02/26/2009	7.06	43.93	<50	79	6.9	< 0.5	0.95	<1.0	3.5	N	
	05/26/2009	9.03	41.96	72	220	10	< 0.5	0.85	<1.0	6.4	N	

Table 1
Groundwater Laboratory Analytical Results
Fidelity Roof Co. UST Site

		Bygyra (Brit	Fidelity Roof Co. UST Site  Concentration, micrograms per liter (ug/l)										
Well ID	Date	GW Depth	GW _ Elev.	TPH-D	ТРН-G	В	Т	E	X	МТВЕ	Oxy		
	11/18/2009	9.55	41.44	180	150	<0.5	<0.5	<0.5	<1.0	4.0	ND		
	05/12/2010	8.16	42.83	<50	<50	< 0.5	<0.5	<0.5	<1.0	4.5	ND		
	10/27/2010	9.18	41.81	<50	<50	<0.5	< 0.5	<0.5	<1.0	<1.0	ND		
	05/19/2011	8.30	42,69	<50	68	2.5	< 0.5	<0.5	<1.0	4.8	ND		
	11/29/2011	8,74	42.25	<50	99	< 0.5	<0.5	<0.5	<1.0	<1.0	ND		
MW-2	3/19/1997	8.4	42,09	<50	<50	<0.5	<0.5	<0.5	<0.5	65	_		
<50.49>	6/23/1997	8.85	41.64	<50	<50	3.4	<0.5	<0.5	< 0.5	70	-		
00.15	10/8/1997	9.8	40.69	<50	<50	< 0.5	<0.5	<0.5	<0.5	90			
	1/16/1998	5.28	45.21	<50	<50	< 0.5	< 0.5	< 0.5	<0.5	65	-		
	8/5/1999	9.32	41,17	<50	<50	< 0.5	< 0.5	< 0.5	<0.5	600	_		
	11/18/1999	10.2	40.29	<50	<50	< 0.5	< 0.5	< 0.5	<0.5	370	-		
	2/24/2000	7.03	43.46	<50	<50	< 0.5	< 0.5	< 0.5	<0.5	880	-		
	5/24/2000	8.01	42.48	62	<250	< 0.5	< 0.5	<0.5	< 0.5	2,200	-		
	8/29/2000	11,07	39.42	<50	<200	<0.5	<0.5	<0.5	<0.5	1,900	_		
	1/12/2001	8.6	41.89	70	470	8.7	3.1	16	73	2,000	_		
	4/18/2001	8.8	41.69	<50	<50	<0.5	< 0.5	< 0.5	< 0.5	2,800			
	7/27/2001	11.1	39.39	<50	<100	< 0.5	< 0.5	< 0.5	< 0.5	3,300	-		
	11/6/2001	12.21	38.28	<50	<100	< 0.5	< 0.5	<0.5	<0.5	3,000	_		
	2/13/2002	7.98	42.51	<50	54	< 0.5	< 0.5	<0.5	<0.5	3,200	_		
	5/14/2002	10.48	40.01	<50	<150	4.8	<1.0	<1.0	<1.0	3,800	****		
	8/15/2002	10.64	39.85	<50	<50	<0.5	< 0.5	< 0.5	< 0.5	2,900	-		
	11/14/2002	11.69	38.80	<50	<120	<1.0	<1.0	<1.0	<1.0	3,800	_		
	2/12/2003	9.07	41,42	120	1,100	57	7.0	55	210	3,200	_		
	5/16/2003	11.25	39.24	85	530	35	3.6	22	79	6,000	_		
	8/29/2003	12.19	38.30	1200	2,400	39	5.8	77	320	4,800			
	12/2/2003	10.96	39.53	<b>&lt;</b> 50	<100	<1.0	<1.0	<1.0	<1.0	3,300	_		
	3/8/2004	8.41	42.08	<50	<250	<2.5	<2.5	<2.5	<2.5	4,300	ND		
	6/8/2004	10.19	40.30	<50	<120	<1.2	<1.2	<1.2	<1.2	2,800	ND		
	9/10/2004	10.84	39.65	<250	<250	<2.5	<2.5	<2.5	<2,5	4,100	_		
	12/13/2004	8.41	42.08	<50	77	<0.5	0.83	<0.5	1.9	4,200			
	3/11/2005	7.81	42.68	<50	120	14	< 0.5	0.56	<0.5	4,900	_		
	6/15/2005	7.81	42,68	<50	1,200	85	<5.0	<5.0	<5.0	12,000	_		
	9/8/2005	11.58	38.91	<50	<500	<5.0	<5.0	<5,0	<5.0	8,600	_		
	12/1/2005	9.03	41.46	<50	<500	<5.0	<5.0	<5.0	<5.0	12,000	_		
	3/7/2006	7.78	42.71	<50	<500	44	<5.0	<5.0	<5.0	10,000	_		
	6/5/2006	9.28	41.21	1,000	890	110	<5.0	<5.0	31	19,000	_		
	9/18/2006	10.39	40.10	4,100	2,000,	<5.0	<5.0	<5.0	<5.0	8,900	-		
	01/3/2007	8.79	41.70	600	1,500	150	<5.0	51	59	7,500	_		
	06/12/2007	9.90	40.59	1,700	2,600	230	1.3	110	37.8	8,100	6,900=T		
	09/12/2007	10.75	39.74	740	2,600	9,1	<0.5	73	42.1	1,900	3,900=T		
			39.14	870	2,000	1.1	<0.5	34	15.66	660	2,700=T		
	12/5/2007 03/04/2008	8.01	42.48	700	1,400	150	<0.5	30	11	1,800	3,100=T		

Table 1 Groundwater Laboratory Analytical Results Fidelity Roof Co. UST Site

Well		GW	GW _			Concentra	11011, 11114	rograms pe			
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	Т	E	<u> </u>	MTBE	Оху
***	05/22/2008	10.30	40.19	1,200	960	120	0.60	26	6.3	1,100	4,700=TB
	09/10/2008	10.99	39.50	610	1,300	4.5	<0.5	23	7.0	240	3,100=TB
	11/25/2008	10.49	40.00	750	4,200	<0.5	<0.5	23	5.88	<1.0	ND
	02/26/2009	6.47	44.02	420	1,000	<0.5	4.5	33	24.2	210	4,300=TB
	05/26/2009	9.35	41.14	310	1,800	350	1.2	41	5.28	3,400	4,400=TB
	11/18/2009	10.00	40,49	960	1,600	2.3	< 0.5	15	<1.0	160	2,700=TB
	05/12/2010	8.48	42.01	610	1,700	130	<0.5	28	<1.0	1,500	4,700=TB
	10/27/2010	9.92	40.57	850	1,500	3.1	< 0.5	33	<1.0	28	5,500=TE
	05/19/2011	8.22	42.27	940	840	64	0.51	15	<1.0	230	5,100=TE
	11/29/2011	9.25	41.24	760	980	<0,5	<0.5	13	<1.0	26	1,600=TE
MW-3	3/19/1997	7.59	42.34	5,000	26,000	3,000	530	340	2,300	230	_
<49,93>	6/23/1997	9.98	39,95	7,000	25,000	4,400	120	540	1,500	270	
	10/8/1997	8.36	41.57	5,100	17,000	4,400	47	280	410	<280	_
	1/16/1998	9.18	40.75	7,300	29,000	5,600	740	950	3,500	<360	-
	8/5/1999	10,56	39.37	5,100	31,000	5,400	150	1100	2,300	<200	_
	11/18/1999	10.92	39.01	49,000	74,000	8,100	5,000	2,100	8,100	<1,000	_
	2/24/2000	8.49	41.44	6,300	110,000	12,000	1,400	2,900	14,000	<200	_
	5/24/2000	8.42	41.51	26,000	87,000	13,000	1,900	2,900	14,000	<200	-
	8/29/2000	12	37.93	9,400	49,000	7,400	800	1,800	7,400	<200	
	1/12/2001	10.5	39.43	21,000	69,000	8,600	980	2,600	11,000	<300	-
	4/18/2001	9.5	40.43	13,000	75,000	9,200	1,200	2,500	12,000	<500	-
	7/27/2001	11,61	38.32	85,000	75,000	8,700	1,100	2,600	12,000	<650	
	11/6/2001	11.73	38.20	86,000	89,000	7,900	910	2,800	12,000	<200	_
	2/13/2002	9.36	40.57	13,000	85,000	8,500	830	2,600	11,000	<2,000	-
	5/14/2002	9	40.93	35,000	94,000	9,700	1,100	3,400	15,000	<1,000	=
	8/15/2002	11.72	38.21	9,700	37,000	5,200	430	1,800	5,900	<1,200	-
	11/14/2002	11.28	38.65	23,000	66,000	8,300	860	3,000	11,000	<1,200	-
	2/12/2003	10.17	39.76	8,400	61,000	6,800	500	2,400	9,800	<500	-
	5/16/2003	11.47	38.46	17,000	59,000	6,200	320	2,000	6,500	<500	-
	8/29/2003	11.92	38.01	100,000	78,000	6,800	440	2,900	11,000	<1,200	-
	12/2/2003	11.32	38.61	46,000	68,000	7,600	450	2,900	10,000	<1,000	-
	3/8/2004	10.49	39.44	160,000		7,700	570	300	13,000	<250	-
	6/8/2004	9.89	40.04	26,000	90,000	6,700	580	2,500	13,000	99	ND
	9/10/2004	11.54	38.39	•	Product	7,600*	540*	3,500*	14,000	<100	ND
	12/13/2004	8.91	41.02	Free Proc	luct = 0.05 ft,	Not Sample	d				
	3/11/2005	6.94	42.99		luct = 0.05 ft,						
	6/15/2005	6.99	42.94		luct = 0.12 ft,						
	9/8/2005	10.61	39.32		luct = 0.64 ft,						
	12/1/2005		49.93		luct, Not Sam						
	3/7/2006	5.26	44.67		luct = 0.95 ft,		d				
	6/5/2006	8.09	41.84	690,00		110	10	960	4,400	<100	_
		8.99	40.94	28,000	•	350	24	1,100	4,600	<170	_
1	6/13/2006	0.77	<del>1</del> 0.24	20,000				•	•		

	····				Table						
			Grou	ı <b>ndwater</b> l Fideli	Laboratory ity Roof Co	y Analyti o. UST Si	ical Res te	ults			
Well		GW	GW			Concentra	ition, mic	rograms p	er liter (ug	Д)	
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy
	1/3/2007	8.84	41.09	Free Produc	t = 0.28 ft, No	t Sampled					
	06/12/2007	9.71	40.22	Free Produc	t = 0.55 ft, No	t Sampled					
	09/12/2007	10.82	39.11	Free Produc	t = 0.73 ft, No	t Sampled					
	12/5/2007				Well A	bandoned I	Novembe	r 27 2007			
MW-4	8/5/1999	8.79	40,18	<50	<50	<0.5	<0.5	<0.5	<0.5	<b>37</b>	_
<48.97>	11/18/1999	8.11	40.86	<50	<50	< 0.5	< 0.5	<0.5	< 0.5	20	_
	2/24/2000	5.19	43,78	<50	<50	<0.5	< 0.5	< 0.5	< 0.5	20	_
	5/24/2000	7.23	41.74	140	120	1.3	< 0.5	<0.5	< 0.5	31	-
	8/29/2000	9.04	39.93	<50	<50	<0.5	<0.5	<0.5	< 0.5	22	_
	1/12/2001	6.4	42.57	81	< 50	< 0.5	<0.5	<0.5	<0.5	25	
	4/18/2001	7.3	41.67	170	30	2.4	1.1	0.66	4.2	35	_
	7/27/2001	9.16	39.81	110	87	1,8	<0.5	2.0	10	26	-
	11/6/2001	9.03	39.94	59	200	4.5	1.0	5.2	24	21	_
	2/13/2002	6.6	42.37	91	<50	< 0.5	<0.5	<0.5	<0.5	15	_
	5/14/2002	7.19	41.78	140	260	12	2.7	11	49	26	_
	8/15/2002	8.97	40.00	<50	<50	< 0.5	< 0.5	<0.5	<0.5	12	-
	11/14/2002	7.52	41,45	<50	<50	< 0.5	<0.5	<0.5	<0.5	11	-
	2/12/2003	6.37	42.60	130	170	3.1	0.66	6.4	27	16	_
	5/16/2003	6.81	42.16	60	<50	<0.5	<0.5	<0.5	<0.5	23	_
	8/29/2003	8.56	40.41	120	610	16	2.7	30	130	10	_
	12/2/2003	6.02	42.95	<50	<50	< 0.5	<0.5	<0.5	<0.5	7.7	_
٠.	3/8/2004	5,75	43.22	<50	<50	<0.5	< 0.5	<0.5	<0.5	10	-
	6/8/2004	8.19	40.78	< 50	<50	<0.5	< 0.5	<0.5	<0.5	11	_
	9/10/2004	8.84	40,13	<50	<50	< 0.5	< 0.5	<0.5	< 0.5	10	-
	12/13/2004	5.75	43.22	<50	<50	<0.5	<0.5	<0.5	< 0.5	16	_
	3/11/2005	5.26	43.71	<50	<50	< 0.5	< 0.5	< 0.5	< 0.5	16	-
	6/15/2005	5.26	43.71	<50	<50	<0.5	< 0.5	< 0.5	<0.5	15	ND
	9/8/2005	8.2	40.77	54	<50	< 0.5	< 0.5	<0.5	< 0.5	8.2	ND
	12/1/2005	6.93	42.04	<50	<50	< 0.5	<0.5	< 0.5	< 0.5	13	_
	3/7/2006	4.17	44.80	<50	<50	<0.5	<0.5	<0.5	< 0.5	11	_
	6/5/2006	6.88	42.09	<50	<50	<0.5	<0.5	< 0.5	<0.5	11	-
	9/18/2006	8.33	40.64	110	<50	<0.5	<0.5	<0.5	< 0.5	10	****
	1/3/2007	6.57	42.40	<50	<50	< 0.5	<0.5	< 0.5	< 0.5	7.9	_
	06/12/2007	8.01	40.96	<500	<50	< 0.5	< 0.5	<0.5	<0.5	8.3	ND
	09/12/2007	8.94	40.03	<500	<50	< 0.5	<0.5	<0.5	<0.5	5.7	ND
	12/5/2007	7.61	41.36	<50	<50	<0.5	< 0.5	<0.5	<0.5	7.4	ND
	03/04/2008	6.23	42.74	<50	<50	<0.5	<0.5	<0.5	< 0.5	6.8	ND
	05/22/2008	8.35	40.62	<50	<50	<0.5	<0.5	<0.5	<1.0	4.5	ND
	09/10/2008	9.38	39.59	<50	89	< 0.5	<0.5	<0.5	<1.0	9.3	ND
	11/25/2008	8,61	40,36	<50	<50	< 0.5	<0.5	<0.5	<1.0	<1.0	ND
i				-50	-50	-0.5	-0 C	-n =	~1 A	16	NID

< 0.5

< 0.5

< 0.5

<1.0

<1.0

<1.0

4.6

13

13

< 0.5

< 0.5

< 0.5

<0.5

<0.5

< 0.5

4.65

7.66

8.20

44.32

41.31

40.77

02/26/2009

05/29/2009

11/18/2009

<50

<50

310

<50

<50

<50

ND

ND

ND

Table 1
<b>Groundwater Laboratory Analytical Results</b>
Fidelity Roof Co. UST Site

Well ID	Date	GW Depth	GW Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy
m	0.0000000000000000000000000000000000000			<b>&lt;50</b>	<50	<0.5	<0.5	<0.5	<1.0	11	ND
	05/12/2010	6.66	42.31	< <b>5</b> 0	<50	<0.5	<0.5	<0.5	<1.0	3.0	ND
	10/27/2010	7.78	41.19		<50	<0.5	<0.5	<0.5	<1.0	10	ND
	05/19/2011	6.34	42.63	<50	<50	<0.5	<0.5	<0.5	<1.0	7.2	ND
	11/29/2011	7.38	41.59	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	
MW-5	01/03/2007	16.47	34.57	<50		<0.5	<0.5	<0.5	<1.0	<1.0	ND
51.04>	06/12/2007	10.12	40.92	<500	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	09/12/2007	11.75	39.29	<500	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	12/5/2007	11.35	39.69	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	03/04/2008	9.64	41,40	<50	<50		<0.5	<0.5	<1.0	67	ND
	05/22/2008	10.37	40,67	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	09/10/2008	11.03	40.01	<50	<50	<0.5		<0.5	<1.0	<1.0	ND
	11/25/2008	10.65	40.39	<50	<50	<0.5	<0.5	5.4	24.6	<1.0	ND
	02/26/2009	9.19	41.85	<50	<50	1.0	4.6	<0.5	<1.0	<1.0	ND
	05/26/2009	10.24	40.80	<50	<50	<0.5	<0.5		<1.0	<1.0	ND
	11/18/2009	10.45	40.59	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	05/12/2010	9.10	41.94	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	10/27/2010	10.93	40.11	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	05/19/2011	9.37	41.67	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	11/29/2011	11,47	39.57	<50	<50	<0.5	<0.5	<0.5	<1.0	<5.0	
MW-6	01/03/07	8.93	41.41	63	<50	<0.5	<0.5	<0.5	<1.0	72	ND
<50.34>	06/12/2007	10.05	40.29	<500	<50	<0.5	<0.5	<0.5		180	18=TBA
	09/12/2007	10.83	39.51	<500	<50	<0.5	<0.5	<0.5	<1.0	39	ND
	12/5/2007	9.98	40.36	<50	<50	<0.5	<0.5	<0.5	<1.0	38	ND
	03/04/2008	8.12	42.22	<50	<50	<0.5	<0.5	<0.5	<1.0		ND
	05/22/2008	12.26	38.08	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	180=TB
	09/10/2008	10.14	40.20	<50	<50	<0.5	<0.5	<0.5	<1.0	310	ND ND
	11/25/2008	11.50	38.84	<50	<50	< 0.5	< 0.5	<0.5	<1.0	<1.0	
	02/26/2009	6.39	43.95	<50	<50	<0.5	2.2	2.6	11.9	86	ND
	05/26/2009	9.41	40,93	<50	<50	< 0.5	< 0.5	<0.5	<1.0	88	ND
	11/18/2009	10.11	40.23	<50	<50	<0.5	< 0.5	<0.5	<1.0	62	ND
	05/12/2010	8.52	41.82	<50	99	< 0.5	<0.5	<0.5	<1.0	220	ND
	10/27/2010	10.08	40.26	<50	<50	<0.5	<0.5	<0.5	<1.0	62	ND
	05/19/2011	8.10	42.24	<50	68	<0.5	<0.5	<0.5	<1.0	260	ND
	11/29/2011	9.23	41.11	<50	59	<0.5	<0.5	<0.5	<1.0	190	80=TB
MW-7	05/19/2011	7.94	42.01	<50	<50	< 0.5	<0.5	<0.5	<1.0	9.6	ND
<49.95>	11/29/2011	8.77	41.18	61	<50	<0.5	<0.5	<0.5	<1.0	8.4	ND
VE-1	12/01/2005	5.19	45.56	540	140	26	13	4,5	15	250	_
<50.75>	03/07/2006	2.81	47.94		55	5.2	1.4	2.3	4.5	230	
	06/05/2006	5.37	45.38	490	180	30	4.6	5.8	8.2	410	_
	01/03/2007	4.92	45.83	250	82	8.4	1.5	1.7	2.6	320	
AS-1	12/01/2005	8.11	42.24	_	<50	<0.5	0.81	<0.5	1.5	<5.0	-
<50.35>	01/03/2007	9.2	41,15	130	<50	< 0.5	< 0.5	< 0.5	< 0.5	98	_

<del></del>	<del></del>		<del></del>		Table	1		•			
			Groun	dwater I	Laborator	y Analyti	ical Res	ults			
				Fideli	ty Roof C	Linear Names ages	are a State transfer	an al seavaga se	ung Constanting San	A VA Konnika A Sakiri	nastantan Abai
Well		GW	GW _			Concentra	ation, mic	rograms p	er liter (ug/	nigawan kappengi	
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy
AS-2	12/01/2005	9.64	40.87	<del>-</del>	<50	<0.5	<0.5	<0.5	<0.5	<5.0	-
:50.51>	01/03/2007	10.8	39.71	910	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
				W	ell Abando						
DP-1	12/01/2005	7.22	42.74	-	220	< 0.5	2.8	<0.5	0.94	<5.0	-
49.96>	03/07/2006	4.4	45,56	_	<50	<0.5	0.71	<0.5	1.1	<5.0	_
-	06/13/2006	7.99	41.97	67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	_
	01/03/2007	7.12	42.84	93	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	06/13/2007	8.92	41.04	<500	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	09/12/2007	9.95	40.01	<50	100	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	12/5/2007	9.98	39.98	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	03/04/2008	6.49	43.47	<50	<50	< 0.5	<0.5	<0.5	<1.0	<1.0	ND
	05/22/2008	9.73	40.23	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	09/10/2008	10.51	39,45	<50	75	<0.5	<0.5	<0.5	<1.0	2.1	ND
	11/25/2008	9,83	40.13	<50	<50	<0,5	<0.5	<0.5	<1.0	<1.0	ND
	02/26/2009	5.66	44.30	<50	<50	<0.5	0.99	1.3	4.7	<1.0	ND
	05/29/2009	8.49	41.47	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	11/18/2009	9.27	40,69	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	05/12/2010	7.43	42.53	<50	<50	<0.5	0.77	<0.5	<1.0	<1.0	ND
	10/27/2010	9.37	40.59	<50	<50	< 0.5	<0.5	<0.5	<1.0	<1.0	ND
	05/19/2011	7.37	42.59	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	11/29/2011	7.84	42.12	<50	<50	<0.5	<0.5	<0.5	<1,0	<1.0	ND
DP-2	12/01/2005	6.83	43.34	_	<50	<0.5	<0.5	<0.5	<0.5	59	-
<50.17>	03/07/2006	6.09	44.08	-	230	1.2	2.6	<0.5	1.2	<10	_
	06/13/2006	7.98	42.19	110	280	<0.5	1.2	< 0.5	0.67	<5.0	_
	01/03/2007	7.45	42.72	77	170	<0.5	< 0.5	< 0.5	<0.5	<5.0	_
	06/13/2007	8.39	41.78	<500	75	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	09/12/2007	9.84	40.33	<50	<50	< 0.5	<0.5	< 0.5	<1.0	<1.0	ND
	12/5/2007	9.57	40.60	<50	76	< 0.5	<0.5	<0.5	<1.0	<1.0	ND
	03/04/2008	7.03	43.14	<50	60	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	05/22/2008	10.27	39.90	<50	< 50	< 0.5	<0.5	<0.5	<1.0	<1.0	ND
	09/10/2008	10.52	39.65	<50	96	< 0.5	<0.5	<0.5	<1.0	<1.0	ND
	11/25/2008	9.58	40.59	59	< 50	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	02/26/2009	6.18	43.99	<50	<50	<0.5	1.0	1.3	5.0	<1.0	ND
	05/26/2009	8.46	41.71	<50	<50	<0.5	< 0.5	<0.5	<1.0	<1.0	ND
	11/18/2009	9.46	40.71	<50	85	<0.5	<0.5	<0.5	<1.0	<1.0	ND
	05/12/2010	7.71	42.46	< 50	<50	<0.5	<0.5	<0.5	<1.0	<1,0	ND
	10/27/2010	9.94	40.23	<50	<50	<0.5	<0.5	< 0.5	<1.0	<1.0	ND
	05/19/2011	7.95	42.22	<50	<50	<0.5	<0.5	<0.5	<1.0	<1.0	NE
	11/29/2011	8.62	41.55	<50	100	<0.5	<0.5	<0.5	<1.0	<1.0	ND
DP-3	12/01/2005	7.14	43.31	_	120	2.1	0.96	<0.5	0.78	140	-
<50,45>	03/07/2006	6.62	43.83	_	<50	< 0.5	<0.5	<0.5	<0.5	260	-
	06/13/2006	9.34	41.11	88	220	0.57	0.83	< 0.5	<0.5	67	_

< 0.5

1.1

<0.5

10.53

06/13/2006

39.92

110

78

0.98

	***************************************				Table						
			Grou		Laboratority Roof C			ults			
				Tidel	ily Roof C	الأناء والمحاورة والإوالي	ray from the Alex	rograms i	oer liter (ug	/h	
Well ID	Date	GW Depth	GW _ Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Оху
singer contract	01/03/2007	8.92	41,53	150	<50	0.60	<0.5	<0.5	<0,5	<5.0	
	06/13/2007	10.10	40.35	<500	<50	<0.5	<0.5	<0.5	<1.0	22	ND
	09/12/2007	10.87	39.58	<50	<50	<0.5	<0.5	<0.5	<1.0	36	ND
	03/12/2001	10.67	37.00		Vell Abando	ned Novem	ber 27 200	07			
DP-4	12/01/2005	8.43	42,42	ns	ns	ns	ns	ns	ns	ns	_
<50.85>	03/07/2006	7.19	43.66		2,400	570	3.2	38	0.94	310	-
-50,00-	06/13/2006	8.71	42.14	250	1,100	210	2.0	9.2	1.2	330	_
	06/13/2006	9.56	41.29	210	810	190	1.4	11	0.98	190	-
	01/03/2007	8.33	42.52	260	1,500	210	4.1	11	0.54	200	_
	06/13/2007	9,39	41.46	<500	370	10	< 0.5	2.2	<1.0	85	13=TB/
	09/12/2007	10.21	40.64	<500	660	33	< 0.5	0.58	<1.0	62	14=TBA
	03,12,2001	20		•	Well Abando	ned Noven	nber 27 20	07			
DP-5	12/01/2005	4.69	45,92	na	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
<50.61>	03/07/2006	2.33	48.28	na	<50	<0.5	<0.5	<0.5	<0.5	< 5.0	
	06/13/2006	5.03	45.58	140	<50	<0.5	< 0.5	< 0.5	< 0.5	5.4	
	01/03/2007	4.98	45.63	240	<50	<0.5	< 0.5	<0,5	< 0.5	5.5	_
	06/13/2007	4.33	46.28	<500	<50	< 0.5	< 0.5	<0.5	<1.0	<1.0	ND
	09/12/2007	4.96	45.65	<500	<50	<0.5	< 0.5	<0.5	<1.0	<1.0	ND
				,	Well Aband	oned Nove	mber 27 20	007			
DP-6	12/01/2005	5.91	44.77	_	7,000	1000	7.8	860	230	<120	-
<50.68>	03/07/2006	7.11	43.57	_	6,500	850	5.9	650	350	<160	_
	06/13/2006	8.73	41.95	1,500	3,100	250	1.2	270	120	28	-
	09/18/2006	9.69	40.99	570	840	70	1.3	77	4.5	<10	_
	01/03/2007	7.98	42.70	1,700	2,400	270	3.9	160	30	21	_
	06/13/2007	8,43	42.25	1,100	1,900	310	0.51	200	26.9	15	ND
	09/12/2007	10.14	40,54	1,300	2,800	500	1.3	380	60	20	ND
					Well Aband	loned Nove	mber 27 2	007			

#### Notes:

ug/l= micrograms per liter GW Elev = Groundwater mean sea level elevation. TPH-D = Total Petroleum Hydrocarbons as diesel

TPH-G = Total Petroleum Hydrocarbons as gasoline

B = BenzeneT = Toluene

E = Ethylbenzene

X = XylenesMTBE = Methyl Tertiary Butyl Ether Oxy = Oxygenates (except MTBE), including Ter-Butanol (TBA), Di-isopropyl Ether (DIPE), Ethyl-t-butyl Ether (ETBE), and Tert-amyl Methyl Ether (TAME)

ND = Not detected above the expressed value

<50.99> = Top of casing mean sea level elevation (Morrow Surveying, 01/22/2007).

Table 4: Groundwater Sample Analytical Data - Fuel Oxygenates Fidelity Roof Company, 1075 40th Street, Oakland, California

Well ID	Date	TAME	TBA	EDB	1,2-DCA	DIPE	ETBE	MTBE
		(μg/L)	(μg/L)	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1	06/08/04	ND<0.5	ND<5.0	ND<0.5	1,5	ND<0.5	ND<0.5	1.0
	09/10/04	ND<0.5	ND<5.0	ND<0.5	NA	ND<0.5	ND<0.5	1.0
	12/13/04			Not anlayze	d, MTBE anlay:	zed by 8021B		
	03/11/05			Not anlayze	d, MTBE anlay:	zed by 8021B		
MW-2	06/08/04	ND<100	ND<1000	ND<100	ND<100	ND<100	ND<100	4,300
	09/10/04	ND<50	ND<500	ND<50	ND<50	ND<50	ND<50	2,800
	12/13/04			Not anlayze	d, MTBE anlay	zed by 8021B		
	03/11/05			Not anlayze	d, MTBE anlay	zed by 8021B		
MW-3	06/08/04	ND<5.0	ND<50	ND<5.0	ND<5.0	ND<5.0	ND<5.0	99
	09/10/04	ND<100	ND<1000	ND<100	ND<100	ND<100	ND<100	ND<100
	03/11/05			Not anlayze	ed, MTBE anlay	zed by 8021B		
MW-4	06/08/04	ND<0.5	ND<5.0	ND<0,5	0.79	ND<0.5	ND<0.5	15
*****	09/10/04	ND<0.5	ND<5.0	ND<0.5	NA	ND<0.5	ND<0.5	8.2
	12/13/04			Not anlayzo	ed, MTBE anlay	zed by 8021B		
	03/11/05			Not anlayze	ed, MTBE anlay	zed by 8021B		
Notes:								
μg/L)	micrograms po	er liter		1.2-DCA	1,2-Dichloroe	thane		
rame	tert-Amyl met			DIPE	Diisopropyl e			
ГВА	t-Butyl alcoho	•		ETBE	Ethyl tert-buty			
EDB	1,2-Dibrometi			MTBE		ry Butyl Ether		

Table 1: Groundwater Sample Analytical Results

November 4, 1998

SB-1	AEI/SAI-MAI	<50	2,400	<20	<0.5	<0.5	<0.5	<1.5
SB-2	AEI/SAI	<50	<50	<20	<0.5	<0.5	<0.5	<1.5
SB-4	AEI/SAI	<50	<50	<20	<0.5	<0.5	<0.5	<1.5
SB-5	AEI/SAI	<50	<50	<20	<0.5	<0.5	<0.5	<1.5
SB-6	AEI/SAI	<50	<50	<20	<0.5	0.6	<0.5	<1.5
					ļ	l		
MDL		50	50	20	0.5	0.5	0.5	1.5

MDL = Method Detection Limit

TPH = Total Petroleum Hydrocarbons

ND = Not detected above the Method Detection Limit

 $\mu g/L = micrograms per liter (ppb)$ 

AEl = All Environmental, Inc.

SAI = SunStar Analitical, Inc., Tustin, California

MAI = McCampbell Analytical, Inc., Pacheco, California

## Table 1 SOIL AND GROUNDWATER HYDROCARBON ANALYTICAL RESULTS

Fidelity Roof Co UST Site

	Sample	Sample _	Concer	itration, Soil	: milligrams	per kilogram	(mg/kg); <i>Wa</i>	ter: microgran	ns per liter (ug/l)
Sample ID	Matrix	Depth	TPH-D	TPH-G	В	$m{T}$	E		Oxygenates
B-1-8.0'	soil	8.0 feet	47	3.2	0.038	<0.0050	0.042	0.0067	All ND
B-1-12.0'	soil	12.0 feet	16	18	0.28	<0.0050	0.51	0.057	All ND
B-1-16.0'	soil	16.0 feet	<5.0	2.1	0.077	<0.0050	0.032	<0.0050	All ND
B-1-GW	water	(8.0 feet)	<500	<50	2.8	< 0.50	1.4	5.7	9.4 MTBE
B-2-8.0'	soil	8,0 feet	25	170	0.087	0.010	1.3	8.5	1.4 MTBE 0.34 TBA
B-2-12.0'	soil	12.0 feet	15	6.2	1.1	<0.0050	0.15	0.12	6.5 MTBE 0.56 TBA
B-2-16.0'	soil	16.0 feet	18	11	1,1	<0.0050	0.22	0.77	3.8 MTBE 0.26 TBA
		(8.0 feet)	<500	320	4.6	0.51	4.6	35.6	180 MTBE
B-2-GW B-3-8.0'	water soil	8.0 feet	410	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	Ali ND
B-3-GW	water	(8.0 feet)	750	<50	0.93	< 0.50	< 0.50	<0.10	11 MTBE
B-4-8.0 <sup>t</sup>	soil	8.0 feet	260	1.6	0.044	0.0052	0.039	0.25	0.14 MTBE
B-4-12.0'	soil	12,0 feet	<5.0	7.8	0.013	<0.0050	0.0074	<0.0050	0.25 MTBE
B-4-16.0'	soil	16,0 feet	<5.0	6.0	0.26	<0.0050	0.16	0.0085	0.41 MTBE
B-4-10.0 B-4-GW	water	(8.0 feet)	<500	<50	1.2	<0.50	< 0.50	1.0	9.4 MTBE
			02	83	0.044	2.9	3.3	2.3	0.023 MTBE
SL, soil, drinking w	rater, Res & CI		83	63	0.044	<b></b>	,		4.4 TBA
			450	150	0.26	29	33	100	8.4 MTBE
SL, soil, non-drinki	ing water, CI		450	150	0.20				310 TBA
		2 0 07	100	100	1.0	40	30	20	5.0 MTBE
SL, groundwater, d	rinking water, h	(es & CI	100	100	7.0	1			NE TBA
SL, groundwater, n	on deinbing wa	tor Ros & Cl	2,500	5,000	540	400	300	5,300	1,800 MTBE
SL, grounawater, n	on-arinking wa	ter, nes et Ci	2,500	-,					50,000 TBA
ESL, groundwater, v	anor intrusion	Res	NE	NE	42	31,000	100,000	10,000	4,700 MTBE
באב, grounawater, v	щог ингизит,	ILLI	1					1	NE TBA

TPH-D = Total Petroleum Hydrocarbons as Diesel TPH-G = Total Petroleum Hydrocarbons as Gasoline

TPH-G = Total Petroleum Hydrocarbons as Gasume
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
Oxygenates = Methyl-tert-Butyl Ether (MTBE), Ter-Butyl Alcohol
(TBA), Di-isopropyl Ether (DIPE), Ethyl-t-butyl Ether (ETBE), and
Tert-amyl Methyl Ether (TAME).

<0.0050 = Not detected above the expressed value. ESL = Environmental Screening Level, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, Interim Final, November 2007. Res = Residential land use CI = Commercial/Industrial land use

### Table 3 EXTRACTED GROUNDWATER ANALYTICAL RESULTS

Fidelity Roof Company UST Site

		Concentratio	on, microgra	ıms per liter (	(ug/L, or ppb)	
Sample ID	TPH-D	TPH-G	В	T	<b>.</b>	X
VH-2	440	240	<1.0	<1.0	<1.0	8.0
ESL, groundwater, drinking water, Res & CI	100	100	1.0	40	30	20
ESL, groundwater, non-drinking water, Res & CI	2,500	5,000	540	400	300	5,300
ESL, groundwater, vapor intrusion, Res	NE	NE	42	31,000	100,000	10,000

TPH-D = Total Petroleum Hydrocarbons as Diesel TPH-G = Total Petroleum Hydrocarbons as Gasoline

TPH-GT - Total retrotedin hydrocarbons as Gasonia
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
<0.0050 = Not detected above the expressed value.

ESL = Environmental Screening Level, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, Interim Final, November 2007.

Res = Residential land use
CI = Commercial/Industrial land use
NE = Not Established

Table 1
SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS
Fidelity Roof Co. UST Site

Sample	Sample	Sample	Soil Concentration: milligrams per kilogram (mg/kg), Groundwater Concentration: micrograms per kilogram (ug/L)							
D	Matrix	Depth	TPH-G	В	Т	<u> E</u>	X	MTBE	TBA	oxy
GA-1-7.5	Soil	7.5 feet	<0.50	<0.005	<0.005	<0,005	<0,005	<0.020	<0.050	ND
GA-1-115	Soil	11.5 feet	<0.50	< 0.005	<0.005	< 0.005	<0.005	< 0.020	< 0.050	ND
GA-1-15.0	Soil	15.0 feet	< 0.50	<0.005	<0.005	<0.005	<0.005	0.023	< 0.050	ND
GA-1-18.0	Soil	18.0 feet	< 0.50	< 0.005	<0.005	<0.005	<0.005	0.021	< 0.050	ND
GA-1-27.0	Soil	27.0 feet	< 0.50	<0.005	<0.005	<0.005	< 0.005	< 0.020	<0.050	ND
GA-1-29.5	Soil	29.5 feet	<0.50	< 0.005	<0.005	< 0.005	< 0.005	< 0.020	<0.050	ND
GA-1-W	Water	(25-30 feet)	<50	<050	1.8	<050	3.2	26	<10	ND
GA-2-7.5	Soil	7.5 feet	<0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.020	<0.050	ND
GA-2-17.5	Soil	17.5 feet	< 0.50	< 0.005	< 0.005	< 0.005	<0.005	0.220	<0.050	ND
GA-2-27.0	Soil	27.0 feet	<0.50	<0.005	< 0.005	< 0.005	<0.005	0.045	< 0.050	ND
GA-2-W16-22	Water	(16-22 feet)	250	<050	2.4	< 0.50	3.28	1,600	<10	ND
GA-2-W28-30	Water	(28-30 feet)	250	1.4	3.7	0.64	6.3	1,600	<10	ND
GA-3-7.5	Soil	7.5 feet	<0.50	<0.005	<0.005	< 0.005	< 0.005	< 0.020	<0.050	ND
GA-3-15.0	Soil	15.0 feet	<0.50	<0.005	< 0.005	< 0.005	< 0.005	< 0.020	<0.050	ND
GA-3-23.5	Soil	23.5 feet	<0.50	<0.005	< 0.005	< 0.005	< 0.005	<0.020	<0.050	ND
GA-3-26.0	Soil	26,0 feet	< 0.50	<0.005	< 0.005	< 0.005	<0.005	< 0.020	<0.050	ND
GA-3-29.5	Soil	29,5 feet	<0.50	<0.005	< 0.005	< 0.005	< 0.005	< 0.020	<0.050	ND
GA-3-34.5	Soil	34.5 feet	< 0.50	<0.005	<0.005	< 0.005	< 0.005	< 0.020	<0.050	ND
GA-3-39.5	Soil	39.5 feet	< 0.50	<0.005	< 0.005	< 0.005	< 0.005	< 0.020	< 0.050	ND
GA-3-W-15-20	Water	(15-20 feet)	<50	<050	3.1	0.65	3.9	3.4	<10	ND
GA-3-W-30-40	Water	(30-40 feet)	<50	<050	0.61	< 0.50	<1.0	1.1	<10	ND
GA-4-19.5	Soil	19.5 feet	7.9	0.13	< 0.005	0.072	0.046	0.89	2.5	ND
GA-4-21.0	Soil	21.0 feet	< 0.50	< 0.005	<0.005	<0.005	<0.005	<0.020	< 0.050	ND
GA-4-23.5	Soil	23.5 feet	< 0.50	< 0.005	< 0.005	<0.005	<0.005	0.079	0.053	ND
GA-4-W-20-24	Water	(20-24 feet)	160	100	2.9	15	13.2	1,000	350	ND
GA-5-W-25-30	Water	(25-30 feet)	<50	7.7	< 0.50	2.3	<2.8	31	<28	2.5
GA-6-19.0	Soil	19.5 feet	< 0.50	< 0.005	<0.005	<0.005	<0.005	<0.020	< 0.050	NE
GA-6-22.0	Soil	22.0 feet	< 0.50	< 0.005	<0.005	< 0.005	<0.005	<0.020	< 0.050	NE
GA-6-27.0	Soil	27.0 feet	< 0.50	<0.005	<0.005	<0.005	<0.005	< 0.020	< 0.050	NE
GA-6-W	Water	(18-28 feet)	<50	<050	<050	<050	<1.0	4,6	<10	<u>N</u> E

#### Table 1 SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS

Fidelity Roof Co. UST Site

Sample	Sample	Sample	Soil Concentration: milligrams per kilogram (mg/kg),  Groundwater Concentration: micrograms per kilogram (ug/L)								
D	Matrix	Depth	TPH-G	<b>B</b>		L.	X	MTBE	ТВА	OXY	
GA-7-17.5	Soil	17.5 feet	<0.50	<0.005	<0.005	<0.005	<0.005	<0.020	<0.050	ND	
GA-7-22.0	Soil	22.0 feet	< 0.50	< 0.005	< 0.005	< 0.005	<0.005	<0.020	<0.050	ND	
GA-7-W	Water	(18-28 feet)	<50	<050	< 0.50	< 0.50	<1.0	<1.0	<10	ND	
GA-8-16.5	Soil	16.5 feet	< 0.50	< 0.005	<0.005	<0.005	<0.005	<0.020	< 0.050	ND	
GA-8-22.0	Soil	22.0 feet	< 0.50	< 0.005	<0.005	< 0.005	< 0.005	<0.020	<0.050	ND	
GA-8-27.5	Soil	27.5 feet	< 0.50	<0.005	< 0.005	< 0.005	< 0.005	<0.020	<0.050	ND	
GA-8-W	Water	(18-28 feet)	<50	<050	< 0.50	< 0.50	<1.0	<1.0	<10	ND	
MW-7-7.5	Soil	7.5 feet	< 0.50	<0.005	< 0.005	< 0.005	< 0.005	< 0.020	< 0.050	ND	
MW-7-11.0	Soil	11.0 feet	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.020	< 0.050	ND	
MW-7-15.5	Soil	15.5 feet	< 0.50	< 0.005	< 0.005	<0.005	< 0.005	< 0.020	< 0.050	ND	
MW-7-19.5	Soil	19.5 feet	< 0.50	< 0.005	< 0.005	< 0.005	< 0.005	< 0.020	< 0.050	ND	
MW-7	Water	(5-20 feet)	<50	< 0.50	< 0.50	< 0.50	<1.0	9.6	<10	ND	
Shallow Soil ESL water source, com			83	0.044	2.9	3.3	2.3	0.075	0.075	0.023	
Groundwater ESL water source, con	, 6		100	1.0	40	30	20	12	12	5.0	

#### Table Notes:

TPH-D = total petroleum hydrocarbons as diesel

TPH-G = total petroleum hydrocarbons as gasoline MTBE = Methyl tert-butyl ether

<1.0 = Not detected above the expressed detection level.
All ND = No detectable concentrations of full list of constituents

ESL = Environmental Screening Levels, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, Interim Final, May 2008.

st	J <b>MMARY C</b>		POR LAI	able 2 BORATO of Co. US		YTICAL	RESULTS	
Sample ID	Sample Matrix	Sample Depth	Const B	ituent Conce T	ntration, mic	rograms pei X	<u>r cubic meter (u</u> 1,1-DFA	g/m^3) IP
Vapo	r Samples, May	5, 2011, Samp	led from ten	iporary vapo	or probes.			
VS-1	Vapor	1.5 feet	7.5	15	8.0	28.0	27,000	
VS-2	Vapor	1.5 feet	6.9	19	7.1	23.9	26,000	
VS-3	Vapor	0.5 feet				26.5	28.000	

Table 7: AS/SVE Pilot Test Air Sample Analytical Data Fidelity Roof Company, 1075 40th Street, Oakland, California

Sample ID	Date	Time	ТРНд	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes	Comments
			(µg/L)	(µg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	
VE1	5/20/2004	1020	16,000	ND<90	14	60	ND<5.0	25	VE
VE1-2	5/20/2004	1400	96	ND<2.5	ND<0.25	0.45	ND<0.25	0.23	VE/sparge
MW3	5/20/2004	1015	140,000	1,400	1,800	280	330	1,200	VE
MW-3-2	5/20/2004	1416	150,000	ND<2000	1,500	310	440	1,600	VE/sparge
MW-3-3-1	05/21/04	1035	83,000	ND<1000	1,100	110	ND<50	110	VE
MW-3-3-2	05/21/04	1230	74,000	590	1,000	160	120	380	VE/sparge
DP3-1	05/21/04	1040	150	ND<2.5	ND<0.25	2.0	0.60	1.5	VE
DP3-2	05/21/04	1300	490	ND<2.5	7.4	1.8	4.40	16	VE/sparge

Notes:

ug/L= micrograms per liter of air

MTBE = Methyl Tertiary Butyl Ether

TPHg = Total Petroleum Hydrocarbons as gasoline

### Table 1 SUMMARY OF SOIL AND GROUNDWATER ANALYTICAL RESULTS

Fidelity Roof Co. UST Site

Sample	Sample	Sample						gram (mg/kg e <u>r kilog<i>ram (</i>i</u>		
Ъ	Matrix	Depth	TPH-G	В	<b>T</b>	E	X	MTBE	TBA	OXY
GA-7-17.5	Soil	17.5 feet	<0.50	<0.005	<0.005	<0.005	<0.005	<0.020	<0.050	ND
GA-7-22.0	Soil	22.0 feet	< 0.50	< 0.005	< 0.005	<0.005	< 0.005	< 0.020	<0.050	ND
GA-7-W	Water	(18-28 feet)	<50	<050	< 0.50	< 0.50	<1.0	<1.0	<10	ND
GA-8-16.5	Soil	16.5 feet	<0.50	<0.005	<0.005	<0.005	<0.005	< 0.020	< 0.050	ND
GA-8-22.0	Soil	22,0 feet	<0.50	< 0.005	< 0.005	<0.005	<0.005	< 0.020	< 0.050	ND
GA-8-27.5	Soil	27.5 feet	< 0.50	< 0.005	< 0.005	<0.005	< 0.005	< 0.020	< 0.050	ND
GA-8-W	Water	(18-28 feet)	<50	<050	< 0.50	< 0.50	<1.0	<1.0	<10	ND
MW-7-7.5	Soil	7.5 feet	< 0.50	< 0.005	<0.005	<0.005	< 0.005	< 0.020	< 0.050	ND
MW-7-11.0	Soil	11.0 feet	< 0.50	< 0.005	<0.005	< 0.005	<0.005	<0.020	<0.050	ND
MW-7-15.5	Soil	15.5 feet	< 0.50	< 0.005	<0.005	<0.005	<0,005	<0.020	<0.050	ND
MW-7-19.5	Soil	19,5 feet	<0.50	< 0.005	<0.005	<0.005	<0.005	<0.020	<0.050	ND
MW-7	Water	(5-20 feet)	<50	< 0.50	< 0.50	< 0.50	<1.0	9.6	<10	ND
Shallow Soil ESI water source, con			83	0.044	2.9	3.3	2.3	0.075	0.075	0.023
	Groundwater ESL, groundwater IS a drinking water source, commercial land use.			1.0	40	30	20	12	12	5.0

#### Table Notes:

TPH-D = total petroleum hydrocarbons as diesel
TPH-G = total petroleum hydrocarbons as gasoline
MTBE = Methyl tert-butyl ether

<1.0 = Not detected above the expressed detection level.

All ND = No detectable concentrations of full list of constituents

ESL = Environmental Screening Levels, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, Interim Final, May 2008.

SU	J <b>MMARY C</b>	F SOIL VA	POR LAF	able 2 BORATOI of Co. UST		YTICAL	RESULTS	
Sample	Sample	Sample	Consti	tuent Conce	ntration, mic	rograms pei	cubic meter (u	z/m^3)
ID .	Matrix	Depth	В	T	E	X	1,1-DFA	œ
Vapo	r Samples, May	5, 2011, Samp	led from tem	iporary vapo	r probes.			
VS-1	Vapor	1.5 feet	7.5	15	8.0	28.0	27,000	
VS-2	Vapor	1.5 feet	6.9	19	7.1	23.9	26,000	
VS-3	Vapor	0.5 feet	96	20	7.4	26.5	28,000	

SU	MMARY O		POR LAI	able 2 BORATOI of Co. UST		YTICAL	RESULTS	
Sample ID	Sample Matrix	Sample Depth	Consti B	ituent Conce T	ntration, mic	rograms pei X	cubic meter (1	1g/m^3) IP
Vapor	Samples, June	e 10, 2011, Sam	pled from te	mporary vap	or wells insta	illed in han	l auger boring	S.
VS-1	Vapor	1.5 feet	<3.3	14	32	202	34,000	
VS-2	Vapor	1.5 feet	<3.3	6.7	10	57	19,000	
VS-3	Vapor	0.5 feet	<3.3	9.1	6.9	38.8	23,000	
Vapor	· Samples, Sept	ember 28, 201	l, Sampled fi	rom tempora	ry vapor well	s installed i	n hand auger b	orings.
SG-1	Vapor	4.5 feet	<3.3	26	6.3	37.7		1,800
SG-2	Vapor	4.5 feet	<160	<190	<220	<220	••	1,500
SG-3	Vapor	4.5 feet		Pulled wa	ater during pur	rging no san	ple collected	
SHROUD	Vapor		<160	<190	<220	<220		57,000
L, shallow soi	l gas, residenti:	al	84	6,300	980	21,000		

TPH-D = Total petroleum hydrocarbons as diesel TPH-G = Total petroleum hydrocarbons as gasoline B = Benzene, T = Toluene, E = Ethylbenzene, X = Xylenes 1,1-DFA = 1,1-Difluoroethane (leak check compound) IP = Isopropyl Alcohol (leak check compound) < 3.3 = Not detected above the expressed detection level. -- = Not analyzed for this analyte

ESL = Environmental Screening Level, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, Interim Final, May 2008. Res = Residential Land Use CI = Commercial/Industrial Land Use

# ATTACHMENT 6

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
SOIL SYMBOLS DESCRIPTION	THANKSLAMO COMMENTS
O.0 - 0.6; Asphalt, 3" Aggregate Base.  O.6 - 20.0; Sandy, Gravelly, Clay; dark greenish 5GY 4/1, low plasticity; gravel up to 1/8".  O.6 - 20.0; Sandy, Gravelly, Clay (cont.); mod. yellowish brown 10YR 4/2 w/grayish olive mottling.  O.6 - 20.0; Sandy, Gravelly, Clay (cont.); mod. yellowish brown 10YR 4/2 w/grayish olive mottling.	Hydrocarbon odor. O.0 ppm  Strong Hyd odor. >1000 ppm
ALL ENVIRONMENTAL, II	NC. page 1 of 2

PR	OJEC:	r: FIDELITY - Project No. 1449	LOG C	)F	BOI	REHOLE:	SB-1
					IPLE		
DEPTH (feet)	SOIL SYMBOLS	DESCRIPTION		SAMPLE NO.	INTERVAL	COMM	ents
15 —	CI	0.6 - 20.0; Sandy, Gravelly, Clay (cont.)		L-3		Hyd. odor. Moist. 300 ppm	7
16							
17 —			_				
18 —							
19-							
00-						No sample c	ollected.
20-		Borehole terminated at 20.0 feet. No generation of groundwater.				Borehole bac cement grout	kfilled with
21-	-						
22 –			-				
_							
23 -							
_			_	-			
24-			_	1			
			_				
25 –	]		_				
	]						
26-	]		_				
20							
07			_				
27-	]						
,			. –	1			
28-	1	·	_	1			
-			-	1			
29 -			_				
30-							
31-			_				
		ALL ENVIRONMENTAL,	INC.			page 2	of 2

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
E SOIL SYMBOLS DESCRIPTION	SAMPLES  RON TWANT COMMENTS  COMMENTS
0.0 - 0.6; Asphalt, 3" Aggregate Base.  1	L-1 Hydrocarbon odor. 0.0 ppm  Strong Hyd odor. 800 ppm
ALL ENVIRONMENTAL, IN	C. page 1 of 2

•

PROJE	T: FIDELITY - Project No. 1449	LOG O	F B	OR	EHOLE: SB-2
			SAMI		
(feed the symmetry source of the symmetry source of the symmetry source of the source of the symmetry source of th	DESCRIPTION		SAMPLE NO.	BLOW	COMMENTS
- 15 - CL	8.5 - 19.0; <u>Sandy Clay (cont.)</u> ; moderate yellowis 10YR 4/2; medium plasticity	h brown <sup>I</sup>	-3		No odor. Moist.
16-					
17-					
18-					
19- SM	19.0 - 20.0; <u>Silty Sand;</u> moderate yellowish brown 10YR 4/2; gravel up to 1/8".	n _			No odor. Very moist.
20 - 11	Borehole terminated at 20.0 feet.	- 1	- <del>- 4</del>		Borehole backfilled with cement grout.
21					
22 —					
23 —		_			
24-					
25 —					
26-					
27-		_			
28-					
29		_			
30-		-			
31-	ALL ENVIRONMENTAL, II	VC.			page 2 of 2

**\*** 

PROJEC	T: FIDELITY - Project No. 1449	LOG OF BOREHOLE: SB-3			
BORING	ELEVATION, TOC:				
DRILLING	G CONTRACTOR: GREGG DRILLING	START DATE: 9/12/96 END DATE: 9/12/9			
DRILLING	G METHOD: DIRECT PUSH	TOTAL DEPTH: 20.0'			
DRILLING	G EQUIPMENT: GEOPROBE DRILL RIG	DEPTH TO WATER: NA			
SAMPLIN	G METHOD: 2" DRIVE SAMPLER	LOGGED BY: J.S. ANDERSON			
	R WEIGHT and FALL: N/A	RESPONSIBLE PROFESSIONAL: JPD			
H (See H) H H H H H H H H H H H H H H H H H	DESCRIPTION	SAMPLES  TO SE SUR MOON COMMENTS  TO SE SUR MOON COMMENTS			
- AB () 1 -	0.6 - 20.0; Silty Clay: grayish brown, 5YR 3/2, low plasticity.  0.6 - 20.0; Silty Clay (cont.); dark yellowish ora: 10YR 6/6 w/ olive gray mottling.	L-1 No odor.  Strong Hyd odor. 50 ppm			
	ALL ENVIRONMENTAL, IN	IC. page 1 of 2			
F-80 T OT -					

ŀ

PR	OJEC1	r: FIDELITY - Project No. 1449	LOG C	F	B	OR	ehole: SB-3
						LES	
DEPTH (feet)	SOIL SYMBOLS	DESCRIPTION		SAMPLE NO.	INTERNAL	BLOW	COMMENTS
15 —	CI	0.6 - 20.0; Silty Clay (cont.); moderate yellowish 10YR 5/4.	brown	L-3	$\Lambda$		No odor. Moist.
16 — —							
17			-				,
18 —					$\bigvee$		
19-		0.6 - 20.0; Silty Clay (cont.); moderate vellowish	 ı brown				
		0.6 - 20.0; Silty Clay (cont.); moderate yellowish 10YR 5/4; gravel up to 1.8"		L-4	//		No odor.
20-		Borehole terminated at 20.0 feet.					Borehole backfilled with cement grout.
21-							
22 –							
-			μ				
23 –			• <del>•••••</del>				
24 -			_				
			_				
25 –			_				
_	1						
26-			<del></del>		-		
27-							
28-							
29 -							
_	1		_	]			
30-				1			
31-	······································						
	ALL ENVIRONMENTAL, INC. page 2 of 2						

PROJEC	r: FIDELITY - Project No. 1449	LOG OF BOREHOLE: SB-4		
BORING	ELEVATION, TOC:			
DRILLING	G CONTRACTOR: GREGG DRILLING	START DATE: 9/12/96 END DATE: 9/12/96		
DRILLING	G METHOD: DIRECT PUSH	TOTAL DEPTH: 20.0'		
DRILLING	EQUIPMENT: GEOPROBE DRILL RIG	DEPTH TO WATER: 13.0'		
SAMPLIN	G METHOD: 2" DRIVE SAMPLER	LOGGED BY: J.S. ANDERSON		
,	WEIGHT and FALL: N/A	RESPONSIBLE PROFESSIONAL: JPD		
DEPTH (feet) SYMBORS	DESCRIPTION	SAMPLES  FLORE  SAMPLES  COMMENTS		
_ AB	0.0 - 0.6; Asphalt, 3" Aggregate Base.	_		
1-		-		
		7   1		
2		]		
3-		<u> </u>		
		$\dashv$ M $\mid$		
4 - CL	0.6 - 15.0; <u>Gravelly, Clay;</u> grayish brown, 5YR 3/2, low plasticity; gravel up to 1/8".	-  X		
	5YR 3/2, low plasticity; gravel up to 1/8".	L-1 Slight Hyd. odor.		
5				
6-	·	_		
7 -		-		
		7   1		
8				
9-		_    <b>Y</b>		
	0.6 - 15.0; <u>Gravelly Clay</u> (cont.)	L-2 Slight Hyd. odor.		
10		angua ay u		
12-		-		
		-     -		
13-		-		
14				
	ALL ENVIRONMENTAL, INC.			

Herritalianical English

PR	OJEC:	r: FIDELITY - Project No. 1449	LOG OF	BO	REHOLE: SB-4
	-		S	AMPLE	S
DEPTH (feet)	SOIL SYMBOLS	DESCRIPTION	SAMTE	INTERVAL BLOW	COMMENTS
- 15 -	CI	15.0 - 20.0; <u>Stity Clay;</u> 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.
20-		Borehole terminated at 20.0 feet.	_		Borehole backfilled with cement grout.
21-					
22 —					
23 –		(			
24					
25 –			+		
26-					
			_		} 
27-			_		
28-					
_	]		_		
<b>2</b> 9 –			-		
30-	,,,,,,,		<del>-</del>		
31-					
		ALL ENVIRONMENTAL, I	NC.		page 2 of 2

PROJECT:	Fidelity Roof Co. # 1540		NUMBER: MW-1
BORING L	OC.: REFER TO SITE PLAN	ELEVATION, TOC:	45.41'
DRILLING	CONTRACTOR: GREGG DRILLING	START DATE: 3/6/97	END DATE: 3/6/97
DRILLING	METHOD: HOLLOW STEM AUGER	TOTAL DEPTH: 21'	SCREEN INT: 6'-21'
DRILLING	EQUIPMENT: MOBILE B-53	DEPTH TO WATER: 9'	casing: 2" PVC
SAMPLING	METHOD: 2" DRIVE SAMPLER	LOGGED BY: BC	
	WEIGHT and FALL: 140 lb. 30"	RESPONSIBLE PRO	
HLES SOIL SYMBOLS	DESCRIPTION	SAMPLE SWO.	WELL CONSTRUCTION DETAILS
	0.6 - 21.0: Sandy Gravelly Clay; dark greenish gray with low plasticity; gravel up to 1/8"; slight hydrocarbon odor; 30 ppm.  0.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with high plasticity; grayish olive mottling; strong hydrocarbon odo 700 ppm.	- 6 - 12 - 5' 18 - 18 - 7 - 14 - 10' 14	Universal Well Cover Locking Wing Nut  Neat Cement Grout  Blank SCH 40 PVC (2") Bentonite  No. 3 Monterey Sand  O20" Slotted Well Scree
	ALL ENVIRONMENTA	L, INC.	page 1 of 2

Commence and the second control of the secon

PROJEC'	r: Fidelity Roof Co. #1540	LOG OF BORE	HOLE: MW-1
E SOIL SYMBOLS	DESCRIPTION	SAMPLE STANDS ST	WELL CONSTRUCTION DETAILS
- 15 - CL 16 - 17 - 18 -	0.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity; grayish olive mottling; slight hydrocarbon odor; 30 ppm.		
19 CL :	0.6 - 21.0: Sandy Gravelly Clay (cont.): moderate yellowish brown with high plasticity; grayish olive mottling; slight hydrocarbon odor 0 ppm.	25 20' \ 40 ;	End Cap
	Terminated at 21.0'	-	
22-		-	
23 —		- 1	
24-			
		_	
25		·	
26		-	
27—		_	
28-		-	
		· 🚽 📗	
29			
30-			
31-	ALL ENVIRONMENTA	L, INC.	page 2 of 2

O.0 - 0.6; Asphalt, 3" Aggregate Base.  Universal Well Cover Locking Wing Nut  Locking Wing Nut  O.6 - 21.0: Sandy Gravelly Clay; dark greenish gray with low plasticity; gravel up to 1/8"; slight hydrocarbon odor;  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity; graying olive mottling; slight hydrocarbon odor;  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity; graying holive mottling; slight hydrocarbon odor;  O.7	١			
DRILLING CONTRACTOR: GREGG DRILLING  DRILLING METHOD: HOLLOW STEM AUGER  DRILLING EQUIPMENT: MOBILE B-53  DEPTH TO WATER: 9' CASING: 2' FVC  SAMPLING METHOD: 2' DRIVE SAMPLER  LOGGED BY: BC  HAMMER WEIGHT and FALL: 140 ib. 30'  DESCRIPTION  DESCRIPTION  O.0 - 0.6: Asphalt. 3' Aggregate Base.  O.0 - 0.6: Asphalt. 3' Aggregate Base.  O.0 - 1.6: Asphalt. 3' Aggregate Base.  Universal well construction DETAILS  WELL CONSTRUCTON  DETAILS  Neat General Grout  Neat General Grout  O.6 - 21.0: Sandy Gravelly Clay: dark greenish graw with low plasticity: gravel up to 1/8'; slight hydrocarbon odor; 30 ppm.  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayers and the property of the prop	PROJEC	r: Fidelity Roof Co. # 1540	LOG OF WELL	NUMBER: MW-2
DRILLING CONTRACTOR: GREEK SPEED AUGER  DRILLING METHOD: HOLLOW STEM AUGER  DRILLING EQUIPMENT: MOBILE B-53  SAMPLING METHOD: 2" DRIVE SAMPLER  LOGGED BY: BC  HAMMER WEIGHT and FALL: 140 ib, 30"  DESCRIPTION  DESCRIPTION  DESCRIPTION  O.O - 0.6; Asphalt, 3" Aggregate Base.  O.O - 0.6; Asphalt, 3" Aggregate Base.  O.O - 0.6; Asphalt, 3" Aggregate Base.  O.O - 0.6; Asphalt ib tow plasticity: gravel up to 1/8"; slight hydrocarbon odor; 30 ppm.  O.O - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayers up to 1/8"; slight hydrocarbon odor; 40 ppm.  O.O - 0.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayers up to 1/8"; slight hydrocarbon odor; 40 ppm.  O.O - 0.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity; grayish olive motiting; slight hydrocarbon odor; 40 ppm.	BORING	LOC.: REFER TO SITE PLAN	ELEVATION, TOC:	44.94
DRILLING EQUIPMENT: MOBILE B-53  SAMPLING METHOD: 2' DRIVE SAMPLER  HAMMER WEIGHT and FALL: 140 ib. 30'  DESCRIPTION  DESCRIPTION  SAMPLING WEIGHT and FALL: 140 ib. 30'  RESPONSIBLE PROFESSIONAL: JPD  WELL CONSTRUCTION DETAILS  Universal Well Cover  Locking Wing Nut  Neat Cement Grout  AB  O.6 - 21.0: Sandy Gravelty Clay; dark greenish gray with low plasticity; gravel up to 1/8'; slight hydrocarbon odor;  30 ppm.  DESCRIPTION  Neat Cement Grout  Neat Cement Grout  Neat Cement Grout  Neat Cement Grout  No. 3 Montere Sand  Hamk SCI Hamk SC	DRILLING	G CONTRACTOR: GREGG DRILLING	START DATE: 3/6/97	END DATE: 3/6/97
SAMPLING METHOD: 2" DRIVE SAMPLER  HAMMER WEIGHT and FALL: 140 ib, 30"  DESCRIPTION  DESCRIPTION  O.0 - 0.6; Asphalt, 3" Aggregate Base.  O.0 - 0.6; Asphalt, 3" Aggre	DRILLING	G METHOD: HOLLOW STEM AUGER	TOTAL DEPTH: 21'	SCREEN INT: 6'-21'
SAMPLING METHOD: 2° DRIVE SAMPLER  HAMMER WEIGHT and FALL: 140 lb, 30° RESPONSIBLE PROFESSIONAL: JPD  DESCRIPTION  O.0 - 0.6; Asphalt, 3° Aggregate Base.  O.6 - 21.0: Sandy Gravelly Clay: dark greenish gray with low plasticity: gravel up to 1/8°; slight hydrocarbon odor;  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayfab olive mottling; slight hydrocarbon odor;  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayfab olive mottling; slight hydrocarbon odor;  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayfab olive mottling; slight hydrocarbon odor;  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayfab olive mottling; slight hydrocarbon odor;  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayfab olive mottling; slight hydrocarbon odor;  O.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayfab olive mottling; slight hydrocarbon odor;  O.7020' Slotted Weil Street  O.8 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity: grayfab olive mottling; slight hydrocarbon odor;  O.7020' Slotted Weil Street  O.7020' Slotted Weil Street  O.7020' Slotted  O.7020'	DRILLING	G EQUIPMENT: MOBILE B-53	DEPTH TO WATER: 9'	CASING: 2" PVC
DESCRIPTION  SAMPLES CONSTRUCTION  O.O 0.6; Asphalt, 3" Aggregate Base.  O.			LOGGED BY: BC	
Bentonite  See See See See See See See See See S	HAMME	R WEIGHT and FALL: 140 lb, 30"		
Well Cover Locking Wing Nut  1 -	E SOIL SOIL SOIL SOIL SYMBOLS	DESCRIPTION	SAMPLE OF PACE	CONSTRUCTION
ALL ENVIRONMENTAL, INC.   page 1 of 2	- AB	0.6 - 21.0: Sandy Gravelly Clay; dark greenish gray with low plasticity; gravel up to 1/8"; slight hydrocarbon odor; 30 ppm.  0.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity; grayish olive mottling; slight hydrocarbon odo 40 ppm.	- \ \ 6 \ 8 \ 18 \ \ - \ \ 6 \ 10 \ \ 10 \ \ 14 \ \ - \ \ 6 \ \ 6 \ 10 \ \ 14 \ \ - \ \ 6 \ \ 6 \ 10 \ \ 16 \ \ 6	Well Cover Locking Wing Nut Neat Cement Grout  Blank SCH 40 PVC (2"  Bentonite  No. 3 Monterey Sand  .020" Slotted Well Screet
	1 1	ALL ENVIRONMENTA	L, INC.	page 1 of 2

····	PROJECT: Fidelity Roof Co. #1540 LOG OF BORES				
Licet) Licet (feet) H Communication (feet) H	DESCRIPTION	SAMPLES SAMPLES TRANSMIT BINDSCAMP B	WELL CONSTRUCTION DETAILS		
15 — CL ——————————————————————————————————	0.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity; grayish olive mottling; slight hydrocarbon odor; 40 ppm.	15' \ 15   15   15   15   15   15   15   15			
18	0.6 - 21.0: Sandy Gravelly Clay (cont.): moderate yellowish brown with low plasticity; grayish olive mottling; slight hydrocarbon odor; 20 ppm.	10 18 20' \ 25	End Cap		
	Terminated at 21.0'	-			
22					
23		_			
-		-			
24-					
25					
		-			
26					
27					
_		-			
28		_			
29					
		-			
30	,				
31		_			
	ALL ENVIRONMENTA	L, INC.	page 2 of 2		

The state of the s

Colorate and the colora

BORING LOC.		LOG OF WELL N	
	· REPERIOSITE FLAN	ELEVATION, TOC:	44.32'
		START DATE: 3/6/97	END DATE: 3/6/97
	WINGTOIL GRADE DIED		SCREEN INT: 6'-21'
	THOD: HOLLOW STEM AUGER	TOTAL DEPTH: 21'	
· · · · · · · · · · · · · · · · · · ·	UIPMENT: MOBILE B-53	DEPTH TO WATER: 9'	CASING: 2" PVC
	ETHOD: 2" DRIVE SAMPLER	LOGGED BY: BC RESPONSIBLE PRO	FFSSIONAL: IPD
	[GHT and FALL: 140 lb, 30"	SAMPLES	WELL
E T SOIL SUBMISS (SEE T)	DESCRIPTION	SAMPLE NO. MTSFEVAL RELOW COUMTS	CONSTRUCTION DETAILS
AB   1   2   2   3   3   3   3   4   4   4   4   4   4	- 0.6; Asphalt, 3" Aggregate Base.  3 - 21.0: Gravelly Clay; yish brown with low plasticity; wel up to 1/8"; slight hydrocarbon odor; ppm.  6 - 21.0: Sandy Gravelly Clay (cont.): ayish brown with low plasticity; ayish olive mottling; strong hydrocarbon odo .,000 ppm.	8 16 10' 16 or;	Universal Well Cover  Locking Wing Nut  Neat Cement Grout  Blank SCH 40 PVC (2"  Bentonite  No. 3 Monterey Sand  .020" Slotted Well Screen
	ALL ENVIRONMENTA	L, INC.	page 1 of 2

PROJECT	: Fidelity Roof Co. #1540	LOG OF BORE	HOLE: MW-3
THE SOUR SOUR	DESCRIPTION	SAMPLE NO. 18 NO	WELL CONSTRUCTION DETAILS
15 — CL — — — — — — — — — — — — — — — — —	0.6 - 21.0: Sandy Clay (cont.): moderate yellowish brown with low plasticity; grayish olive mottling; slight hydrocarbon odor; 84 ppm.	- - - - - - 8	
20—CL	0.6 - 21.0: Sandy Gravelly Clay (cont.): moderate yellowish brown with low plasticity; grayish olive mottling; slight hydrocarbon odors 8 ppm.	20' \ 20	End Cap
	Terminated at 21.0'	-	
22		7.	
			·
23 -		_	
24		-	
-			
25 —		· ]	
26		_	
		-	
27-			
28-			
26		_	
29 —		-	
		]	
30-		4 11	
31-			
	ALL ENVIRONMENTA	L, INC.	page 2 of 2

Borehole #: SB-1

Date: 11/3/98

Project: FIDELITY ROOF CO

Total Depth: 16 FEET

**Glient: MONTY UPSHAW** 

Logged By: PJM

Location: 1075 40TH STREET

Responsible Professional JPD

	SUBSURFACE PROFILE	\$	SAMPLE			
Depth Symbol	Description	Number	Туре	Blows/ft	Well Data	Remarks
1	Ground Surface  FILL Asphalt, gravel and sand  SANDY CLAY Greenish grey clay with 5% sand with sands increasing with depth  End of Borehole	SB-17	SS	NA NA	W	No oder, 0.0 ppm  Hydropunch 8 to 12 feet, No GW  PVC inserted to 16 feet  Slow water generation
	by: VIRONEX	All E	nviror	menta	, Inc.	Hole Size: 2"

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549

Drill Type: GEOPROBE

Sheet: 1 of 1

Drill Method: DIRECT PUSH

Borehole #: SB-2

Date: 11/3/98

Project: FIDELITY ROOF CO

Total Depth: 15 FEET

Client: MONTY UPSHAW

Logged By: PJM

Location: 1075 40TH STREET

Responsible Professional JPD

	SUBSURFACE PROFILE	s	AMPLE			
Depth Symbol	Description	Number	Type	Blows/ft	Well Data	Remarks
0 9/8/0 1 - 00S	Ground Surface FILL Asphalt, gravel and sand					
2- 3- 4- 5-	SANDY CLAY Sandy clay, with gravel and 20% sand Medium grey, N5	SB-2 4	SS	NA NA		O.O ppm
6 —	CLAYEY SAND Stiff clayey sand	SB-2 8	SS	- NA	**************************************	hydropunch to 12, no GW
9- 10- 11- 12-						hydropunch to 15, no GW
13-					<b>Y</b>	PVC inserted to 15 Slow water generation
15- 16- 17-	End of Borehole					
18- 19-						
20-						
22-				menta		Hole Size: 2"

Drilled By: VIRONEX

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549

Drill Type: GEOPROBE

Drill Method: DIRECT PUSH

Borehole #: SB-3

Date: 11/3/98

Project: FIDELITY ROOF CO

Total Depth: 20 FEET

Client: MONTY UPSHAW

Logged By: PJM

Location: 1075 40 STREET

Responsible Proffesional: JPD

		SUBSURFACE PROFILE	SAMPLE				
Depth	Symbol	Description	Number	Туре	Blows/ff	Well Data	Remarks
0-	902.2:92	Ground Surface	-		ì	•	
1 - 2 - 3 -		SURFACE AND FILL Asphalt above sand and gravel					
Ι,	-/////					_	;
1 4	4////		SB-3 4	SS	···NA	-	no odor
5-		CLAY					
6.		Stiff clay, greyish red to black with gravel to 15 mm and sand to 5%					0.0 ppm
7.							
8			SB-3 8	SS	NA.		
9	-						
	4						
10	-						
11	4						- CMM reported
12	-						no GW generated
13	-						
14	-						-
15	1						Hydropunch to 20
16	1						PVC inserted to 20
17	<u>.</u>						
16	-			i			No GW generated after 3 hrs
19	4						
	4						
20	4	End of Borehole					
2	1				Ĺ		
2	2 -		1				

VIRONEX VIRONEX

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549

2" 2"

GEOPROBE GEOPROBE

Sheet 1 of 1

DIRECT PUSH DIRECT PUSH

Borehole #: SB-4

Project: FIDELITY ROOF CO

Total Depth: 19 FEET

Client: MONTY UPSHAW

Logged By: PJM

Date: 11/3/98

Location: 1075 40TH STREET

Responsible Professional JPD

	SUBSURFACE PROFILE	8	SAMPLE			
Depth Symbol	Description	Number	Туре	Blows/ft	Well Data	Remarks
0 70 2 70 2 70 3 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Ground Surface  FILL Asphalt, gravel and sand  CLAY Dark grey clay with 5% sand, very stiff  SANDY SILT sandy silt with gravel up to 15 mm  End of Borehole	SB-4 4	SS	NA NA	<b>Y</b>	hydropunch to 12, no GW hydropunch to 19, no GW PVC inserted to 19 Slow water generation
22-	By: VIRONEX	All E	nviror	menta	l, Inc.	Hole Size: 2"

Drilled By: VIRONEX

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549

Drill Type: GEOPROBE

Sheet: 1 of 1

Drill Method: DIRECT PUSH

Borehole #: SB-5

Date: 11/3/98

Project: FIDELITY ROOF CO

Total Depth: 20 FEET

**Client: MONTY UPSHAW** 

Logged By: PJM

Location: 1075 40TH STREET

Responsible Professional JPD

	;	SUBSURFACE PROFILE	5	AMPLE	=		
Depth	Symbol	Description	Number	Type	Blows/ft	Well Data	Remarks
0	327 L 47 86.1	Ground Surface	_				
1.	700 000 900 900	FILL Asphalt, gravel and sand					
3		CLAY					
4		Dark grey clay with 5% sand and gravel up to 10mm	SB-5 4	SS	NA		,
5	-/////						0.0 ppm
6		SANDY CLAY  Dark yellowish brown clay with sand and gravel up to 10mm (15% sand and gravel)				į	No odor
		and gravel)	SB-58	SS	NA	_	
8	-						
9	1			•			
10	<u>-</u>						
11	]						
12	<u>.</u>					<b>▼</b>	Hydropunch to 12, No GW
13	4						
	4						
14							
18	<b>;</b> _						Hydropunch to 20, PVC inserted
16	3-						Dry after 1 hour
17	7-						
11	<b>3</b>					1	
1!	4						
	4						
2	4	End of Borehole		1			
2	1-						
2	2						

Drilled By: VIRONEX

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549

Drill Type: GEOPROBE

Drill Method: DIRECT PUSH

Sheet: 1 of 1

Hole Size: 2"

Borehole #: SB-6

Date: 11/3/98

Project: FIDELITY ROOF CO

Total Depth: 20 FEET

Client: MONTY UPSHAW

Logged By: PJM

Location: 1075 40TH STREET

Responsible Professional JPD

SUBSURFACE PROFILE SAMPLE							
		SUBSURFACE PROFILE	<u> </u>	AMPLE	-		
Depth	Symbol	Description	Number	Туре	Biows/ft	Well Data	Remarks
0-	PRATE/ENGINEER	Ground Surface					
1-2-		FILL Asphalt, gravel and sand					
3-							
4.			SB-6 4	SS	NA		
5-		CLAYEY SAND			!		0.0 ppm
6-		Light grey clayey sand with gravel					No odor
7.		Color change to orange/brown					
8-	1		SB-68	รร	NA		
İ							
9	-						
10	-					:	
11.	-						Hydropunch to 12, No GW
12	_			İ			
13	1						
14	4						
15	4						Hydropunch to 16, No GW
i i	4						
16	7					_	
17	-						
18	i-						Hydropunch to 20
19				Í			Water Samples Collected
20	ı - 						
21	4	End of Borehole					
22	-						

Drilled By: VIRONEX

All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549

Drill Type: GEOPROBE

Sheet: 1 of 1

Hole Size: 2"

Drill Method: DIRECT PUSH

Sheet: 1 of 1

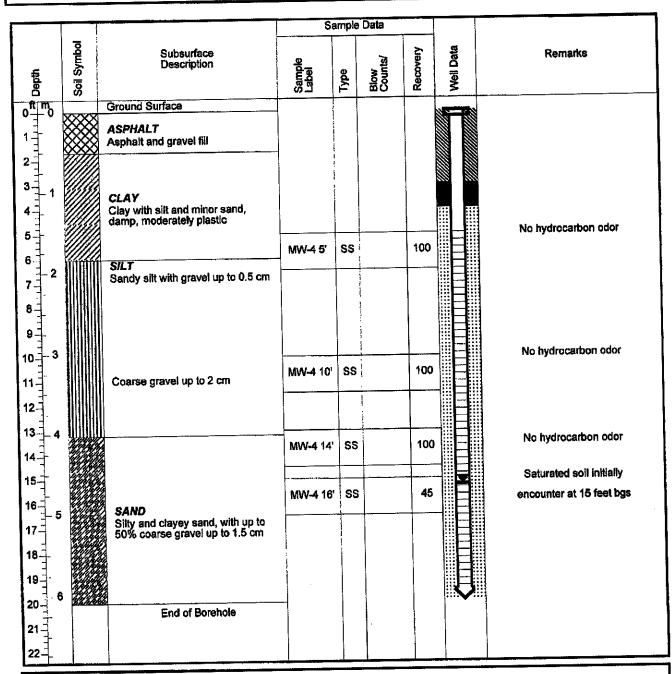
Project No: 3119

Project Name: FIDELITY

Log of Borehole: MW-4

Client: M. UPSHAW

Location: YERBA BUENA AVE.



Drill Date 7/15/99

Drill Method: HOLLOW AUGER

Total Depth: 20 ft. Depth to Water: 15 ft. Reviewed by: JPD

Logged by: PJM

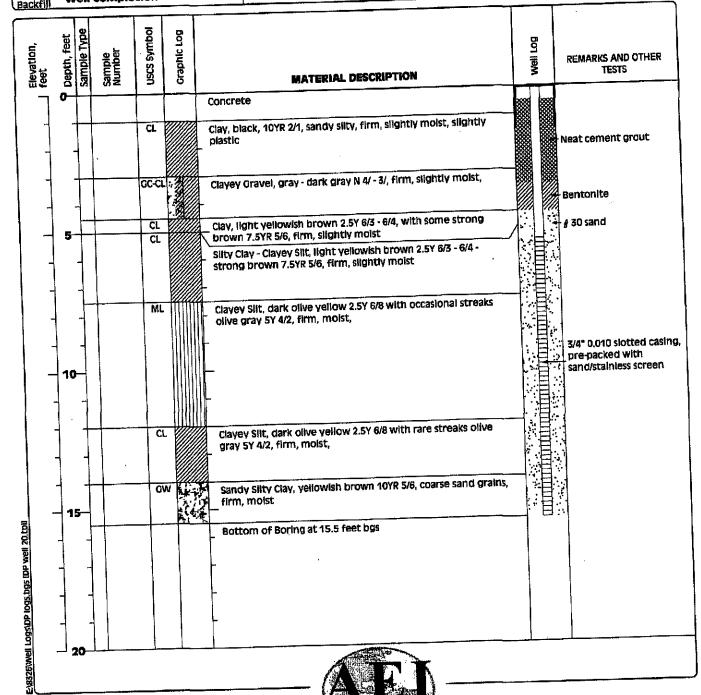
All Environmental, Inc. 901 Moraga Road, Suite C Lafayette, CA 94549 (800) 801-3224

Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

#### Log of Boring DP-1

		· •
Date(s)	Logged By Robert F. Flory	Checked By Jeff Rosenberg
Date(S) May 13, 2004		Total Depth
- tritus	Drill Bit 2.25" sampler, 1.25	Total Depth of Borehole 15.5 feet bgs
i Direct bush	Size/Type continuous core	Approximate
D-II Dia	Drilling Contractor Woodward Drilling	Surface Elevation
Drill Rig AMC 9530 Pro-D	Contractor Woodward Diffinition	
Type Type	Sampling	Well
Groundwater Level Not Encountered	Sampling None Method(s) None	Permit.
and Date Measured ATD	Med Corp.	
	Location	
Borenole Well Completion		

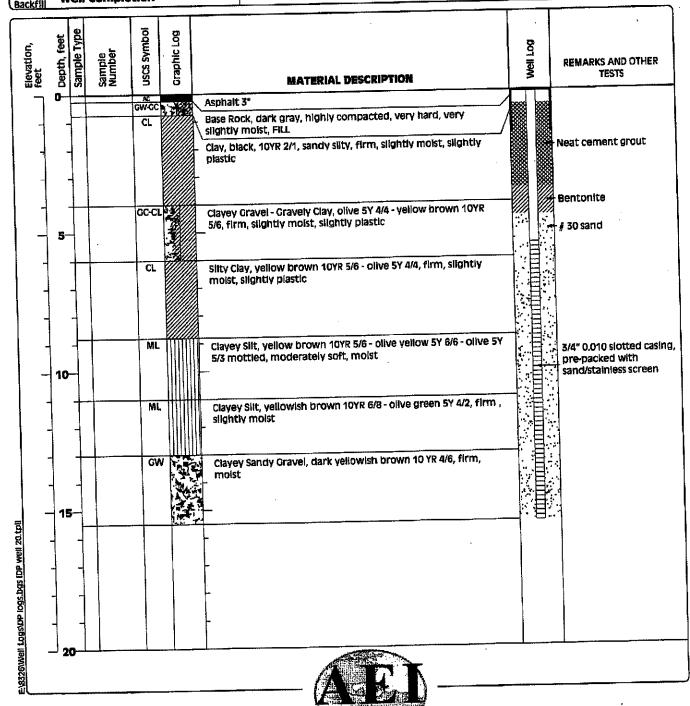


Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

# Log of Boring DP-2

\		
Date(S) May 13, 2004	Logged By Robert F. Flory	Checked By <b>Jeff Rosenberg</b>
nulities a	Drill Bit 2.25" sampler, 1.25	Total Depth of Borehole 15.5 feet bgs
Method Direct push	Size/Type continuous core	Approximate
Drill Rig AMC 9530 Pro-D	Drilling Contractor Woodward Drilling	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) <b>None</b>	Well Permit.
Borehole Well Completion	Location	

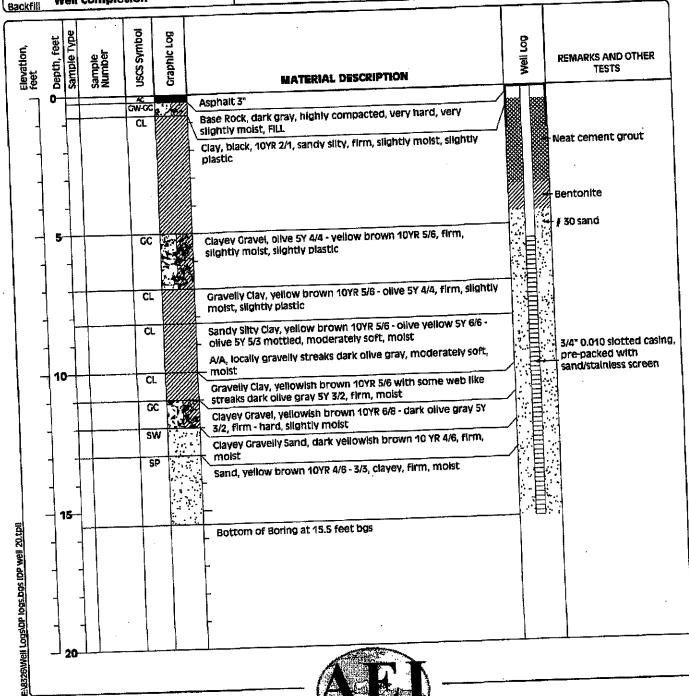


Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

# Log of Boring DP-3

(Data(s)	Logged By Robert F. Flory	Checked By Jeff Rosenberg
Date(s) Drilled Hay 13, 2004 Drilling Piecet Puch	Drill Bit 2.25" sampler, 1.25 Size/Type continuous core	fotal Depth of Borehole 15.5 feet bgs
Drill Rig AMC 9530 Pro-D	Drilling Woodward Drilling Contractor	Approximate Surface Elevation
Groundwater Level Not Encountered and Date Measured ATD	Sampling Methodis) None	permit.
Borehole well completion	Location	



Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

# Log of Boring DP-4

Date(s) May 13, 2004	Logged By Robert F. Flory	Checked By <b>Jeff Rosenberg</b>
- California	Drill Bit 2.25" sampler, 1.25	Total Depth of Borehole 15.5 feet bgs
Method Direct push	Size/Type continuous core	Approximate
Drill Rig Type AMC 9530 Pro-D	Drilling Contractor Woodward Drilling	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) None	Well Permit.
Borenole Well Completion	Location	

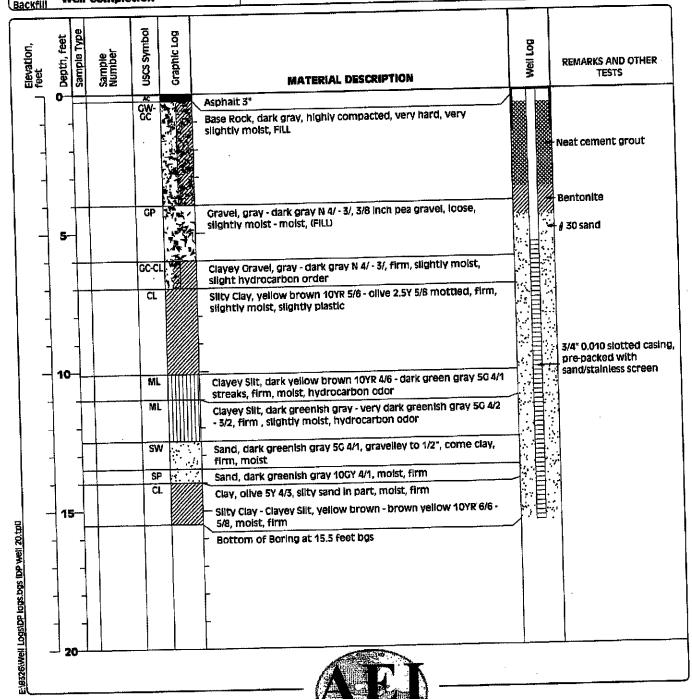
Sample Type Sample Number	uscs symbol	Graphic Log	MATERIAL DESCRIPTION	Well Log		REMARKS AND OTHER TESTS
	OW-GC		Asphalt 3"  Base Rock, dark gray, highly compacted, very hard, very slightly molst, FILL  Clay, black, 10YR 2/1, sandy slity, firm, slightly molst, slightly plastic			Neat cement grout
	CC-CL		Clayey Gravel - Gravely Clay, oilve 5Y 4/4 - yellow brown 10YR 5/6, firm, slightly moist, slightly plastic			Bentonite # 50 sand
	CL		Silty Clay, black - dark olive gray 5Y 3/2 - 5Y 2.5/1, firm, slightly moist, slight hydrocarbon odor			
	ML		siight hydrocarbon odor	<u> </u>		
-	CL		loccally gravelly, firm, moist			3/4" 0.010 slotted casing pre-packed with
	ML		moist, firm, moist			sand/stainless screen
	CL			. 7.	<b>I</b> :	
	GC		mottled, firm, slightly moist			:
	GW		Very Clayey Sandy Gravel, Olive 57 4/3 - light Olive brown 2.57 5/6 mottled, firm, slightly moist			
	GC	14.70		'	Θ.	
			Bottom of Boring at 16.5 feet bgs			
		GC-CL  GC-CL  ML  CL  ML  GC  GC  GC  GC  GC  GC  GC  GC  GC  G	CL CL CL CL CL CL CL CL CL CL CL CL CL C	Asphalt 3"  Base Rock, dark gray, highly compacted, very hard, very slightly moist, FiLL  Clay, black, 10YR 2/1, sandy slity, firm, slightly moist, slightly plastic  CCCL  Clayey Gravel - Gravely Clay, olive 5Y 4/4 - yellow brown 10YR  5/6, firm, slightly moist, slightly plastic  CL  Silty Clay, black - dark olive gray 5Y 3/2 - 5Y 2.5/1, firm, slightly moist, slight hydrocarbon odor  ML  CL  Silty Clay, olive gray - dark olive gray 5Y 3/2 - 5Y 2.5/1, firm, slightly moist, slight hydrocarbon odor  CL  Silty Clay, olive gray - dark olive gray 5Y 4/2 - 3/2, locally sandy loccally gravely, firm, moist  ML  Silty Clay, olive 5Y 5/4 - 5/6 - olive yellow 2.5Y 6/8, firm, slightly moist, firm, moist  CL  Silty Clay, olive 5Y 5/4 - 5/6 - olive yellow 2.5Y 6/8, firm, slightly moist, firm, moist, firm, slightly moist  CL  Clayey Sandy Gravel, olive 5Y 4/3 - light olive brown 2.5Y 5/6 mottled, firm, slightly moist  Very Clayey Sandy Gravel, olive 5Y 4/3 - light olive brown 2.5Y 5/6 mottled, firm, slightly moist	Asphalt 3" Base Rock, dark gray, highly compacted, very hard, very slightly molst, Fill.  Clay, black, 10YR 2/1, sandy slity, firm, slightly molst, slightly plastic  Clayey Gravel - Gravely Clay, olive 5Y 4/4 - yellow brown 10YR 5/6, firm, slightly molst, slightly plastic  CL Slity Clay, black - dark olive gray 5Y 3/2 - 5Y 2.5/1, firm, slightly molst, slight hydrocarbon odor  ML Clayey Slit, dark olive gray 5Y 3/2 - 5Y 2.5/1, firm, slightly molst, slight hydrocarbon odor  CL Slity Clay, olive gray - dark olive gray 5Y 4/2 - 3/2, locally sandy loccally gravelly, firm, molst  ML Slity Clay, olive 5Y 5/4 - 5/6 - olive yellow 2.5Y 6/8, firm, slightly molst, firm, molst, firm, slightly molst  CL Slity Clay, olive yellow 2.5Y 6/8, firm, molst, firm, slightly molst  CL Clayey Sandy Gravel, olive 5Y 4/3 - light olive brown 2.5Y 5/6 mottled, firm, slightly molst  CR Clayey Gravel, yellowish brown 10YR 5/6, firm, moist	Asphait 3" Base Rock, dark gray, highly compacted, very hard, very slightly moist, FiLL Clay, black, 10YR 2/1, sandy slity, firm, slightly moist, slightly plastic  CC-CL Clayey Cravel - Gravely Clay, olive 5Y 4/4 - yellow brown 10YR 5/6, firm, slightly moist, slightly plastic  CL Silty Clay, black - dark olive gray 5Y 3/2 - 5Y 2.5/1, firm, slightly moist, slight hydrocarbon odor  Clayev Slit, dark olive gray 5Y 3/2 - 5Y 2.5/1, firm, slightly moist, slight hydrocarbon odor  CL Silty Clay, olive gray - dark olive gray 5Y 4/2 - 3/2, locally sandy locally gravelly, firm, moist  Silty Clay, olive 5Y 5/4 - 5/6 - olive yellow 2.5Y 6/8, firm, slightly moist, firm, moist  CL Silty Clay, olive 5Y 5/4 - 5/6 - olive yellow 2.5Y 6/8, firm, slightly moist  CL Clayey Sandy Gravel, olive 5Y 4/3 - light olive brown 2.5Y 5/6 mottled, firm, slightly moist  CW Very Clayey Sandy Gravel, olive 5Y 4/3 - light olive brown 2.5Y 5/6 mottled, firm, slightly moist  CC Clayey Cravel, yellowish brown 10YR 5/6, firm, moist

Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

# Log of Boring DP-5

Date(s) May 12, 2004	Logged By Robert F. Flory	Checked By Jeff Rosenberg
Drilling minest much	Drill Bit 2.25" sampler, 1.25 Size/Type continuous core	Total Depth of Borehole 15.5 feet bgs
Drill Rig AMC 9530 Pro-D	Drilling Woodward Drilling	Approximate Surface Elevation
Groundwater Level	Sampling Method(s) None	Well Permit.
and Date Measured Borehole Well Completion	Location	

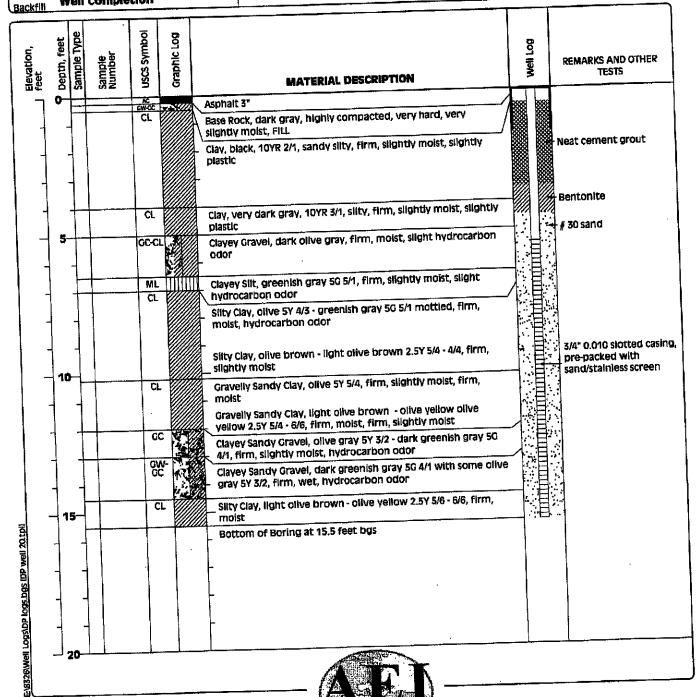


Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

### Log of Boring DP-6

(Date(s) page 2004	Logged By Robert F. Flory	Checked By Jeff Rosenberg
Drilled May 13, 2004	Drill Bit 2.25" sampler, 1.25 Size/Type continuous core	Total Depth of Borehole 15.5 feet bgs
Drill Rig Type AMC 9530 Pro-D	Drilling Woodward Drilling	Approximate Surface Elevation Weli
Groundwater Level and Date Measured	Sampling Method(s) None	Permit.
Borehole Well Completion	Location	

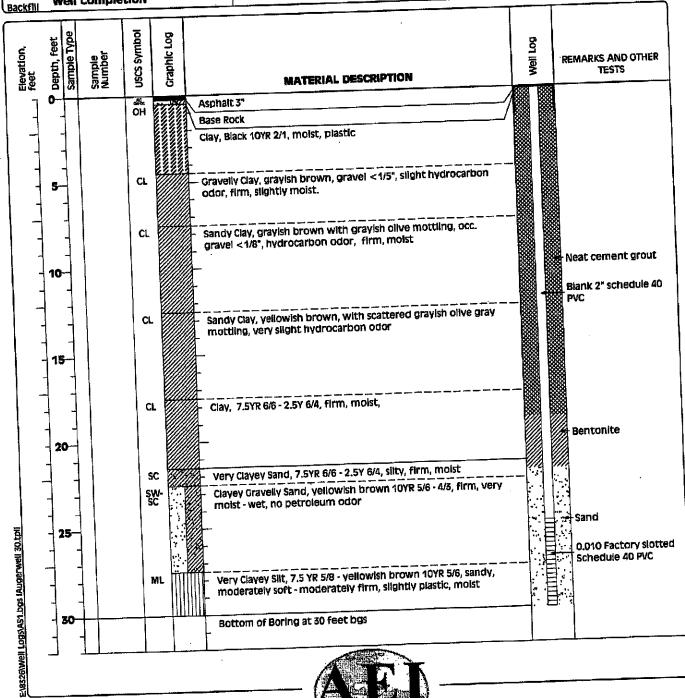


Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

# Log of Boring AS-1

	Logged By Robert F. Flory	Checked By Jeff Rosenberg
Date(s) Drilled May 6, 2004 Drilling	Orill Bit sinch soil bit	Total Depth 30 feet bgs of Borehole
Drilling Method Hollow Stem Auger Drill Rig CME 75	Size/Type Drilling Contractor Woodward Drilling	Approximate Surface Elevation
Groundwater Level	Sampling Method(s) None	Hammer Data
and Date Measured  Borehole Well Completion	Location	

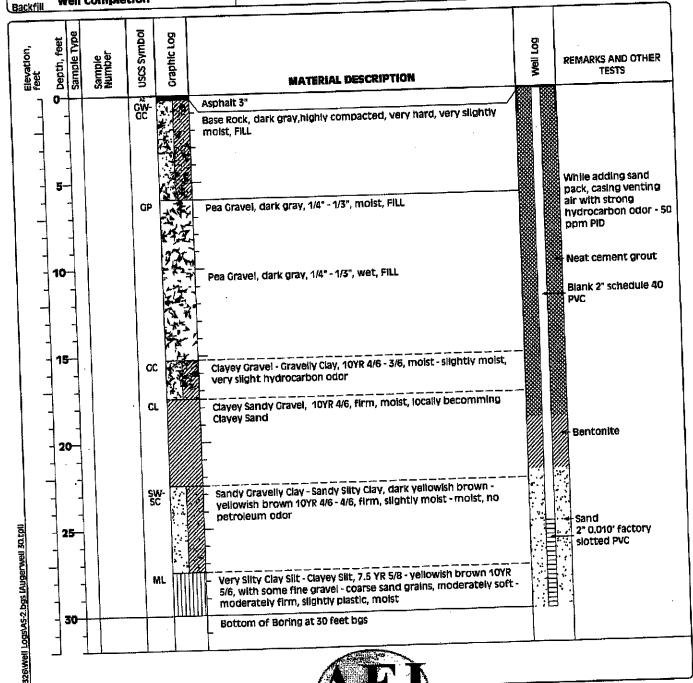


Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

# Log of Boring AS-2

Date(s)	Logged By Robert F. Flory	Checked By Jeff Rosenberg
Drilled May 6, 2004		Total Depth of Borehole 30 feet bgs
Drilling Method Hollow Stem Auger	Size/Type B inch soil bit	of Borehole
	Drilling Woodward Drilling	Approximate Surface Elevation
Type CME /5	CONTRACTOR	Hammer
Groundwater Level	Sampling Method(s) <b>Hone</b>	Data
and Date Measured		
Borehole Well Completion	Location	

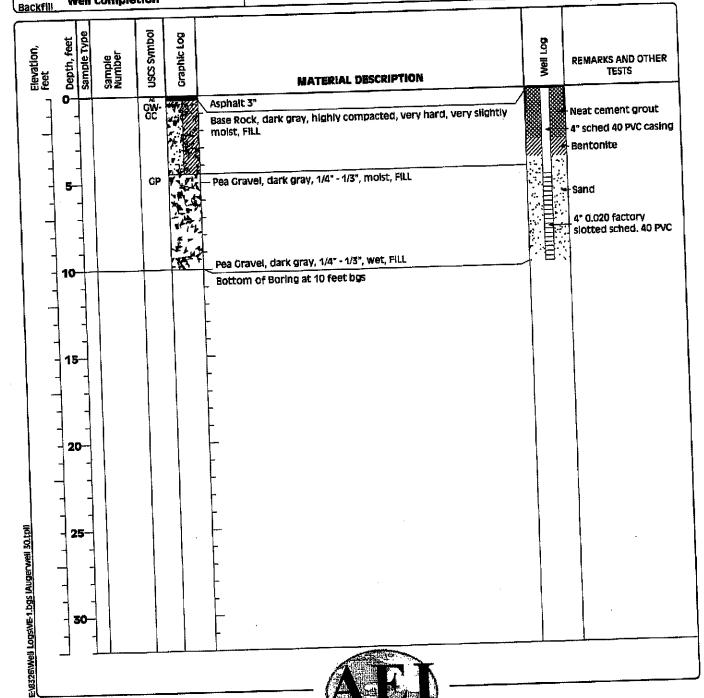


Project Location: 1075 40th Street, Oakland, CA

Project Number: 8326

# Log of Boring VE-1

Date(s)	Logged By Robert F. Flory	Checked By Jeff Rosenberg
Drilled May 6, 2004 Drilled Hollow Stem Auger	Drill Bit Size/Type 8 inch soil bit	Total Depth of Borehole 10 feet bgs
Method Drill Rig CME 75	Drilling Woodward Drilling Contractor	Approximate Surface Elevation
Groundwater Level	Sampling Methodis) None	Hammer Data
and Date Measured  Borehole well completion	Location	

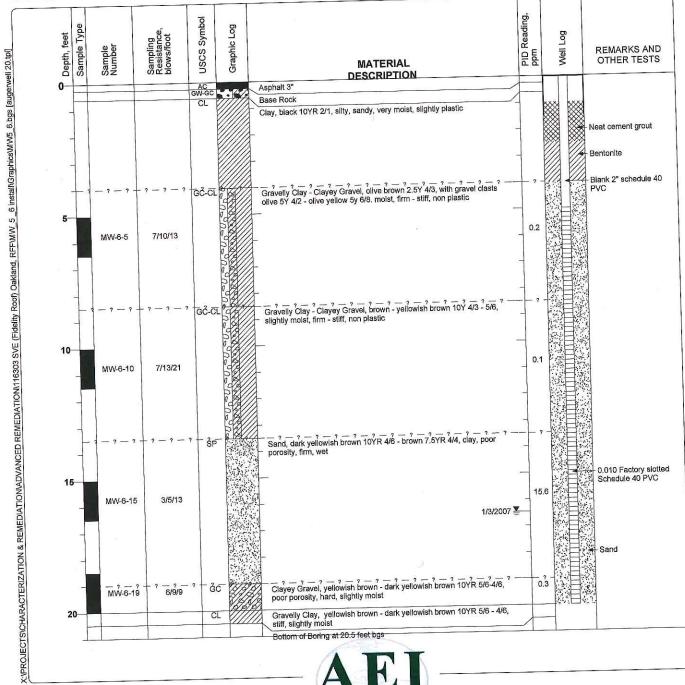


Project Location: 1075 40th Street, Oakland, CA

Project Number: 116303

#### Log of Boring MW-5

Date(s)	Logged By Robert F. Flory	Checked By Adrian Angel
Date(s) Drilled Drilling Method Method	Drill Bit Size/Type	Total Depth of Borehole 20.5 feet bgs
Drill Rig CME 75	Drilling Contractor HEW Drilling	Surface Elevation 51.32 feet MSL
Groundwater Level 16.47 feet measured on and Date Measured 1/3/2007	Sampling Method(s) ModCal	Permit # W2006-1013
Borehole Backfill Well Completion	Location	



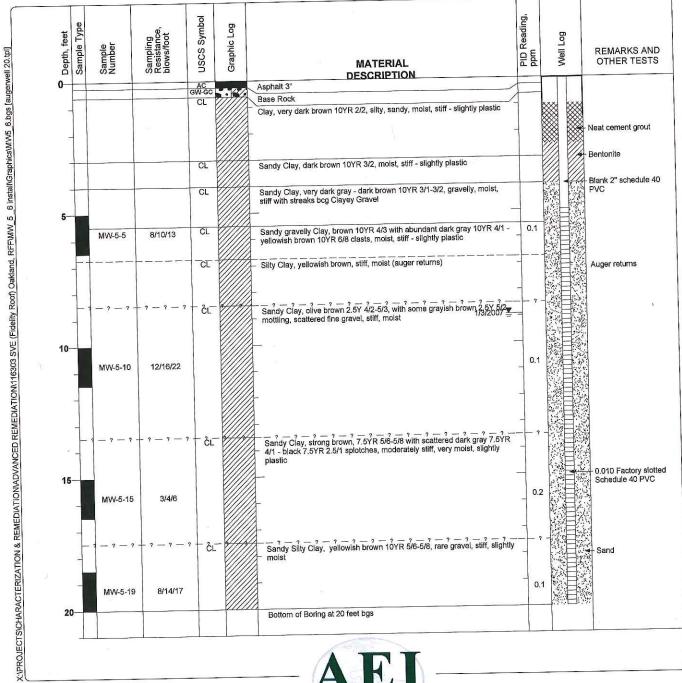


Project Location: 1075 40th Street, Oakland, CA

Project Number: 116303

#### Log of Boring MW-6

Date(s) December 14, 2006	Logged By Robert F. Flory	Checked By Adrian Angel
Drilling Method Method	Drill Bit Size/Type 8 1/4 inch Hollowstem	Total Depth of Borehole 20 feet bgs
Drill Rig Type CME 75	Drilling Contractor HEW Drilling	Surface Elevation 50.74 feet MSL
Groundwater Level 8.93 feet measured on and Date Measured 1/3/2007	Sampling Method(s) <b>ModCal</b>	Permit # W2006-1014
Borehole Well Completion	Location	





# **GRIBI** Associates

BORING LOCATION:

BORING NUMBER: B-1

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOFING UST SITE OAKLAND, CALIFORNIA

PROJECT NUMBER: 330-01-02

START DATE: 11/27/2007

COMPLETION DATE: 11/27/2007

SHEET 1 OF 1

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 24.0 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS  - INITIAL - FINAL	USCS	LOG OF MATERIAL	
10	B-1-12.0					<ul> <li>1.0 - 1.0 ft. Asphalt and base.</li> <li>1.0 - 8.0 ft. Silty Gravel/Fill (GM) Grey brown, backfill mix of silt/sand/gravel, loose, dry, wet at 6.5 feet, moderate hydrocarbon odor at 7.0 feet.</li> <li>8.0 - 10.0 ft. Clay (CL) Olive-grey, stiff becoming soft, moist becoming wet, slightly silty, moderate hydrocarbon odor.</li> <li>10.0 - 16.0 ft. Clay (CL) Brown, stiff with occasional soft zones, moist with occasional wet zones, slight to no hydrocarbon odor.</li> <li>HYDROPUCH: Push to 24 feet and pull rod up to expose 21 to 24 feet and no groundwater comes. Pull rod up to expose 18 feet to 24 feet and groundwater did not enter boring.</li> </ul>	
20							

#### **GRIBI** Associates

BORING LOCATION:

BORING NUMBER: B-2

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOFING UST SITE OAKLAND, CALIFORNIA

PROJECT NUMBER: 330-01-02

START DATE: 11/27/2007

COMPLETION DATE: 11/27/2007

SHEET 1 OF 1

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 30.0 FEET

8.0 - 12.0 ft.  B-2-8.0' 8.0 FT.  B-2-12.0' 12.0 FT.  B-2-12.0' 12	DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS  - INITIAL - FINAL	USCS	LOG OF MATERIAL
15-  16.0 FT.   16.0 FT.   16.0 FT.   16.0 FT.   16.0 - 20.0 ft. Clay (CL)   Brown, stiff to very stiff, moist, slightly silty, no odor or staining   HYDROPUCH: Push to 25 feet and pull rod up to expose 22 to 25 feet and groundwater did not enter boring. Advance rod down to 30 feet to expose 27 feet to 30 feet and groundwater did not enter boring.	10	B-2-12.0	' 12.0 FT.		¥ - FiNAL		<ul> <li>1.0 - 8.0 ft. Silty Gravel/Fill (GM) Grey brown, backfill mix of silt/sand/gravel, loose, dry, wet at 7.0 feet, moderate hydrocarbon odor at 7.0 feet.</li> <li>8.0 - 12.0 ft. Clay (CL) Partial Recovery- brown, wet, soft to medium stiff, moderate hydrocarbon odor.</li> <li>12.0 - 16.0 ft. Clay (CL) Brown, very stiff, moist, moderately silty and moderate hydrocarbon odor/staining from 12 to 13 feet, hydrocarbon odor decreasing with depth.</li> <li>16.0 - 20.0 ft. Clay (CL) Brown, stiff to very stiff, moist, slightly silty, no odor or staining</li> <li>HYDROPUCH: Push to 25 feet and pull rod up to expose 22 to 25 feet and groundwater did not enter boring. Advance rod down to 30 feet to expose 27</li> </ul>

**GRIBI** Associates

BORING NUMBER: B-3 BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOFING UST SITE OAKLAND, CALIFORNIA

PROJECT NUMBER: 330-01-02

START DATE: 11/27/2007

COMPLETION DATE: 11/27/2007

SHEET 1 OF 1

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 12.0 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS	USCS	LOG OF MATERIAL	
5	B-3-8.0'	8.0 FT.				wet at 7.0 feet, moderate hydrocarbon odor at 7.0 feet.	
20	-						

# **GRIBI** Associates

BORING LOCATION:

BORING NUMBER: 8-4

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOFING UST SITE OAKLAND, CALIFORNIA

PROJECT NUMBER: 330-01-02

START DATE: 11/27/2007

COMPLETION DATE: 11/27/2007

SHEET 1 OF 1

DRILLING CONTRACTOR: GREGG DRILLING

DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 16.0 FEET

	CT NOME					COMPLETION DATE.	
DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS	USCS	LOG OF MATERIAL	
						0.0 - 1.0 ft. Asphalt and base.	
5 • -						1.0 - 8.0 ft. Silty Gravel/Fill (GM) Grey brown, backfill mix of silt/sand/gravel, loose, dry, wet at 6.5 feet, moderate hydrocarbon odor at 7.0 feet.	
10	_	8.0 FT.				8.0 - 12.0 ft. Clay (CL)  Brown, moist, stiff to very stiff, slight to moderate hydrocarbon odor from 8-10 feet - decreasing with depth, no hydrocarbon staining.	
15	B-4-12.0	)' 12.0 FT.				12.0 - 16.0 ft. <b>Clay (CL)</b> Brown, moist, stiff to very stiff, no hydrocarbon odors or staining.	
15	B-4-16.	o' 16,0 FT.				HYDROPUCH: Push to 24 feet and pull rod up to expose 21 to 24 feet and no groundwater comes. Pull rod up to expose 18 feet to 24 feet and groundwater did not enter boring.	
20	) -						

BORING NUMBER: GA-1

BORING LOCATION: NORTH OF MW-2

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/07/2011

COMPLETION DATE: 04/07/2011

DRILLING CONTRACTOR: RSI DRILLING

DRILLING METHOD: DIRECT PUSH

**BOREHOLE DIAMETER: 2.5 INCHES** 

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 30.0 FEET

GROUNDWATER DEPTH: 26.0 FT. INITIAL APPROX. 8 FT FINAL

				9		AFFROX	. 8 FT FINAL
DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS  - INITIAL - FINAL	uscs	LOG OF MATERIAL	
:-		100			CL	2.0 - 6.5 ft. Sandy Clay (CL) Reddish brown, firm, dense, some fine gravel clasts, moist, no hydrocarbon odors or staining.	
10-		7.5 FT.		PID = 0		6.5 - 14.0 ft. Clay (CL)  Grey brown, hard, firm, dense, moist, no hydrocarbon odors or staining.	
	GA-1-11.5 GA-1-15.0	11.5 FT. 15.0 FT.		PID = 0		14.0 - 17.5 ft. Silty Clay (CL)  Brown, soft to firm, some gravel clasts, moist to wet, no hydrocarbon odors or staining.	
20	GA-1-18.0	18.0 FT.		PID = 0		17.5 - 20.0 ft. <b>Gravelly Clay (CL)</b> Brown, firm to soft, moist to wet, no hydrocarbon odors or staining.  20.0 - 26.0 ft. <b>Clay (CL)</b>	
	GA-1-27.0	27.0 FT.		\(\frac{}{}\) P(D = 0	SP	Brown, firm, dense, moist, no hydrocarbon odors or staining.  26.0 - 28.0 ft. <b>Gravelly Sand (SP)</b> Brown, firm to loose, silty, subangular clasts to ½ inch diameter, wet, no hydrocarbon odors or staining.	
30	GA-1-27.5	27.5 FT.		PID = 0	SM S	Brown, firm, dense, moist, no hydrocarbon odors or staining.  29.5 - 30.0 ft. Silty Sand (SM)  Brown, firm to soft, very fine to fine grained, wet, no hydrocarbon odors or staining.	
	_					TOTAL DEPTH: 30.0 FEET  COLLECTED GRAB GROUNDWATER SAMPLE GA-1-W AT 30 FT BGS, OPEN HOLE WITH SCREEN FROM 25 TO 30 BGS. FT & BLANK CSG TO SURFACE.	
40	<b>-</b>						
50	- - !-			2		<i>y</i>	

BORING NUMBER: GA-2

BORING LOCATION: NORTHWEST OF MW-2

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/07/2011

COMPLETION DATE: 04/07/2011

DRILLING CONTRACTOR: RSI DRILLING DRILLING METHOD: DIRECT PUSH BOREHOLE DIAMETER: 2.5 INCHES COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 30.0 FEET

LOG OF MATERIAL  SAMPLE
O.0 3.0 ft. Asphalt and base gravel.  3.0 - 5.0 ft. Clay (CL) Dark Grey, silty, moist, no hydrocarbon odors or staining.  Gavely Sand (SP) Gravely Sand (SP) Grey Brown, loosely to firm, moist, no hydrocarbon odors or staining.  6.5 - 15.5 ft. Silty Clay (CL) Light grey brown, firm, dense, moist, no hydrocarbon odors or staining.  15.5 - 16.5 ft. Silty Gravel(GM) Brown, fine to very fine, loose, wet, no hydrocarbon odors or staining.  16.5 - 20.5 ft. Silty Gravel(GM) Brown, silty to sandy, wet, loose to firm, no hydrocarbon odors or staining.  20.5 - 25.0 ft. Silty Clay (CL) Brown, hard, dense, moist, no hydrocarbon odors or staining.  20.5 - 27.0 ft. Gravelly Sand (SP) Brown, sandy grades to gravelly sand, wet, firm to loose, no hydrocarbon odors or staining.  27.0 - 29.0 ft. Clay (CL) Brown, sightly sity, hard, dense, no hydrocarbon odors or staining.  27.0 - 29.0 ft. Clay (CL) Brown, sightly sity, hard, dense, no hydrocarbon odors or staining.  27.0 - 29.0 ft. Clay Sand (SC) Brown, soft, very fine, wet, no hydrocarbon odors or staining.  TOTAL DEPTH: 30.0 FEET COLLECTED GRAB GROUNDWATER SAMPLE GA-2-W-16-22, OPEN AT 22 FT BGS. COLLECTED GRAB GROUNDWATER SAMPLE GA-2-W-28-30; HYDRO-

BORING NUMBER: GA-3

BORING LOCATION: NORTH OF GA-1 & GA-2

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/07/2011

COMPLETION DATE: 04/07/2011

DRILLING CONTRACTOR: RSI DRILLING DRILLING METHOD: DIRECT PUSH BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 40.0 FEET

DEPTH SCALE (FEET)	SAMPLE (	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS  - INITIAL - FINAL	USCS	LOG OF MATERIAL
10- 20- 30-	GA-3-7.5 GA-3-15.0 GA-3-29.5 GA-3-34.5	29.5 FT.		PID = 0  PID = 0  PID = 0  PID = 0  PID = 0		<ul> <li>0.0 - 1.5 ft. Asphalt and base gravel.</li> <li>1.5 - 5.0 ft. Sitty Clay (CL) Dark Grey, firm, dense, no hydrocarbon odors or staining.</li> <li>5.0 - 6.0 ft. Gravelly Sand (SP) Grey Brown, loosely to firm, moist, no hydrocarbon odors or staining.</li> <li>6.0 - 15.0 ft. Clay (CL) Grey brown, dense, hard, moist, no hydrocarbon odors or staining.</li> <li>15.0 - 18.0 ft. Clayey Sand (SC) Brown, soft to firm, fine to very fine, wet, no hydrocarbon odors or staining.</li> <li>18.0 - 20.0 ft. Sitty Clay (CL) Brown, firm, dense, moist, no hydrocarbon odors or staining.</li> <li>20.0 - 25.5 ft. Sitty Clay (CL) Brown, firm, dense, moist, some soft wet clay at 23' - 24', no hydrocarbon odors or staining.</li> <li>25.5 - 27.0 ft. Sitty Gravel (GM) Brown, firm, subrounded clasts to 1", wet, no hydrocarbon odors or staining.</li> <li>27.0 - 33.0 ft. Clay (CL) Brown, hard, dense, moist, no hydrocarbon odors or staining. Soft and wet with very fine sand from 29' - 30'.</li> <li>33.0 - 36.5 ft. Clayey Gravel (GC) Brown, sand, very fine, wet, no hydrocarbon odors or staining.</li> <li>36.5 - 40.0 ft. Silt (ML) Brown, firm, moist, no hydrocarbon odors or staining.</li> <li>TOTAL DEPTH: 40.0 FEET</li> <li>COLLECTED GRAB GROUNDWATER SAMPLE GA-3-W-15-20, OPEN AT 20 FT BGS,</li> <li>WAITED FROM 8:45 - 13:15 NO WATER AT 25 - 30 FT BGS</li> <li>CORED 30 - 40 FT BGS. OPEN FROM 30 - 4 FT BGS'</li> </ul>

BORING NUMBER: GA-4

BORING LOCATION: E SIDE OF FORMER UST PIT

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/08/2011

COMPLETION DATE: 04/8/2011

DRILLING CONTRACTOR: RSI DRILLING DRILLING METHOD: DIRECT PUSH BOREHOLE DIAMETER: 2.5 INCHES COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 24.0 FEET

Depth Sample Sam							1	
10 -  20 -  GA-4-19.5  GA-4-21.0  GA-4-23.5	DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	BLOW COUNTS	uscs	LOG OF MATERIAL	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20	GA-4-19.5 GA-4-21.5 GA-4-23.5	21.0 FT.		▼ PID = 0 PID = 0	SC GC	16.0 - 19.0 ft. Silty Clay (CL) Brown, firm, dense, slight to moderate hydrocarbon odors.  19.0 - 20.5 ft. Clayey Silt (SC) Brown, lightly sandy (very fine), moist to wet, slight to moderate hydrocarbon odors  20.5 - 22.0 ft. Clayey Gravel (GC) Grey, loose to firm, wet, subangular clasts to 1", slight hydrocarbon odors.  22.0 - 24.0 ft. Silty Clay (CL) Brown, firm, dense, slightly moist, no hydrocarbon odors or stain	ng.

BORING NUMBER: GA-5

BORING LOCATION: W SIDE OF FORMER UST PIT

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/08/2011

COMPLETION DATE: 04/08/2011

DRILLING CONTRACTOR: RSI DRILLING DRILLING METHOD: DIRECT PUSH BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 30.0 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS	USCS	LOG OF MATERIAL	
						u u u u u u u u u u u u u u u u u u u	
20		*				HYDROPUNCHED; NO LITHOLOGIC LOGGING	
30						TOTAL DEPTH: 30.0 FEET	
40	- - -					COLLECTED HYDROPUNCH GRAB GROUNDWATER SAMPLE GA-5-W-25-30 FT BGS.	
5	0-			æ			

BORING NUMBER: GA-6

BORING LOCATION: NORTHWEST OF GA-3

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/08/2011

COMPLETION DATE: 04/8/2011

DRILLING CONTRACTOR: RSI DRILLING DRILLING METHOD: DIRECT PUSH **BOREHOLE DIAMETER: 2.5 INCHES** COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 28.0 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS   - INITIAL   - FINAL	uscs	LOG OF MATERIAL	
10-	· ·			*		<ul> <li>0.0 - 2.0 ft. Asphalt and base gravel.</li> <li>2.0 - 6.0 ft. Clay (CL)</li></ul>	
20	GA-6-19.0			PID = 0 PID = 0	GM ML	17.5 - 22.0 ft. Silty Gravel (GM)  Brown, clayey hard, dense, moist, no hydrocarbon odors or staining, no water.  22.0 - 25.0 ft. Silt (ML)  Brown, soft, slightly sandy, clayey, moist to wet, no	
30	GA-6-27.0	27.0 FT.		<b>Ş</b> PID = 0	GM CL	hydrocarbon odors or staining, no water.  25.0 - 27.0 ft. Silty Gravel (GM)  Brown, hard, dense, moist to wet, no hydrocarbon odors or staining.  27.0 - 28.0 ft. Clay (CL)  Brown, hard, dense, moist, no hydrocarbon odors or staining.	
	_					Pulled outer metal casing and left the PVC with 10 ft. screen.  TOTAL DEPTH: 28.0 FEET  PULLED OUTER METAL CASING &LEFT THE PVC WITH 10FT SCREEN.	
40						COLLECTED GRAB GROUNDWATER SAMPLE GA-6-W, OPEN HOLE SCREENED 18-28 FT BGS.	
50							C x

BORING NUMBER: GA-7

BORING LOCATION: NORTHWEST OF GA-3

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/08/2011

COMPLETION DATE: 04/8/2011

DRILLING CONTRACTOR: RSI DRILLING DRILLING METHOD: DIRECT PUSH BOREHOLE DIAMETER: 2.5 INCHES COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 28.0 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS  - INITIAL - FINAL	uscs	LOG OF MATERIAL	
10-	GA-7-17.5			PID = 0		<ul> <li>0.0 - 2.5 ft. Asphalt and base gravel.</li> <li>2.5 - 5.0 ft. Clay (CL) Black to grey, hard, dense, no hydrocarbon odors or staining.</li> <li>5.0 - 8.0 ft. Gravelly Silt (ML) Grey, moist, pea-sized clasts, firm, dense, no hydrocarbon odors or staining.</li> <li>5.0 - 16.0 ft. Clay (CL) Brown, slightly silty, occasionally gravelly, moist, firm, dense, no hydrocarbon odors or staining.</li> <li>16.0 - 20.0 ft. Silty Gravel (GM) Brown, clayey, hard, dense, moist, occasionally wet, no hydrocarbon odors or staining, no water.</li> <li>20.0 - 24.0 ft. Clayey Silt (ML) Brown, soft to firm, locally wet, no hydrocarbon odors or staining.</li> <li>24.0 - 28.0 ft. No Recovery.</li> <li>TOTAL DEPTH: 28.0 FEET COLLECTED GRAB GROUNDWATER SAMPLE GA-7-W, OPEN HOLE SCREENED 18-28 FT BGS.</li> </ul>	
50	-			At			

BORING NUMBER: GA-8

BORING LOCATION: NORTHWEST OF GA-3

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/08/2011

COMPLETION DATE: 04/8/2011

DRILLING CONTRACTOR: RSI DRILLING DRILLING METHOD: DIRECT PUSH

BOREHOLE DIAMETER: 2.5 INCHES

COMPLETION METHOD: BORING

BORING TOTAL DEPTH: 28.0 FEET

DEPTH SCALE (FEET)	AMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS  - INITIAL - FINAL	USCS	LOG OF MATERIAL	3 7.
20 -	GA-7-17.5	17.5 FT.		PID = 0 PID = 0  Ş		O.0 - 4.0 ft. Silt (ML) Brown, loose to firm, moist, soft to firm, no hydrocarbon odors or staining.  4.0 - 6.0 ft. Claye Silt (ML) Dark grey to black, firm, dense, no hydrocarbon odors or staining.  6.0 - 15.0 ft. Clay (CL) Light brown, dense, firm, no hydrocarbon odors or staining.  15.0 - 17.0 ft. Silty Gravel (GM) Brown, firm, subrounded clasts to 2 inches diameter, no hydrocarbon odors or staining, no water.  17.0 - 22.0 ft. Clay (CL) Brown, dense, firm, slightly silty, moist, no hydrocarbon odors or staining.  22.0 - 24.0 ft. Clayey Silt (ML) Brown, soft to firm, moist to wet, no hydrocarbon odors or staining.  24.0 - 26.5 ft. Silty Clay (CL) Grey brown, dense, firm, no hydrocarbon odors or staining.  26.5 - 28.0 ft. Silty Gravel (GM) Red brown, clayey, subangular clasts to 2-inches diameter, dense, moist, no hydrocarbon odors or staining.  TOTAL DEPTH: 28.0 FEET COLLECTED GRAB GROUNDWATER SAMPLE GA-8-W, OPEN HOLE SCREENED 18-28 FT BGS.	

BORING NUMBER: MW-7

BORING LOCATION: IN FORMER EXCAVATION

CAVITY

BORING TYPE: SOIL BORING

PROJECT NAME: FIDELITY ROOF CO UST SITE OAKLAND, CALIFORNIA

FIELD SCIENTIST: JIM GRIBI, PG



START DATE: 04/07/2011

COMPLETION DATE: 04/07/2011

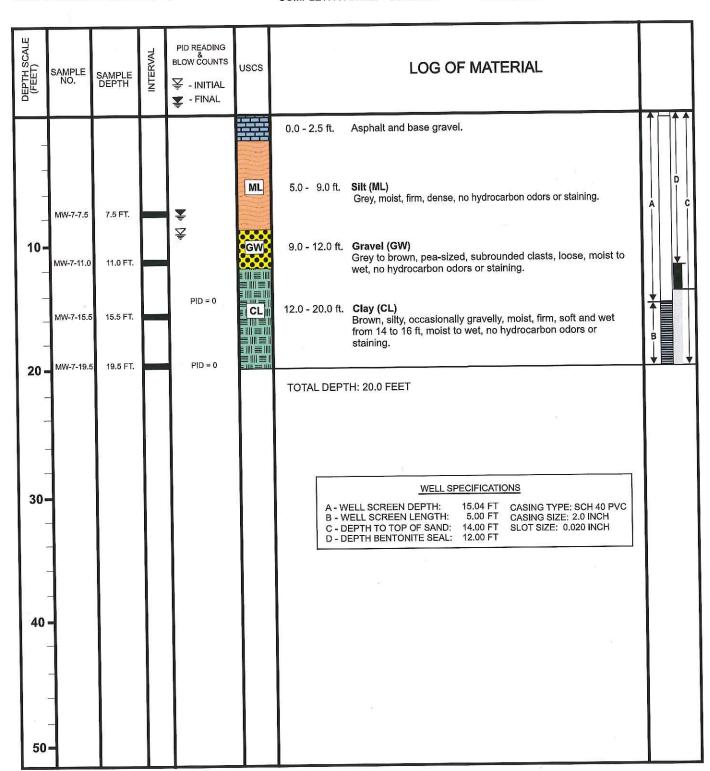
DRILLING CONTRACTOR: RSI DRILLING

DRILLING METHOD: HOLLOW STEM AUGER

BOREHOLE DIAMETER: 8.0 INCHES

COMPLETION METHOD: GWM WELL

BORING TOTAL DEPTH: 20.0 FEET



#### **ATTACHMENT 7**

