

### FIDELITY ROOF COMPANY

**RECEIVED** 

9:07 am, Feb 10, 2010

Alameda County Environmental Health

February 3, 2010

Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor Alameda, CA 94502

Attention: Steven Plunkett

Subject: Closure Request Report

1075 40<sup>th</sup> Street, Oakland, CA 94608

ACDEH Site No. RO000186

### Ladies and Gentlemen:

Attached please find a copy of the *Closure Request Report*, 1075 40<sup>th</sup> Street, Oakland, CA 94608, prepared by Gribi Associates. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Very truly yours,

Monte M. Upshaw

Chairman

Fidelity Roof Company



February 3, 2010

Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor Alameda, CA 94502

Attention: Stephan Plunkett

Subject: Closure Request Report

Fidelity Roof UST Site

1075 40th Street, Oakland, California

ACDEH Fuel Leak Case: RO0000186; Global ID: T0600102117

### Ladies and Gentlemen:

Gribi Associates is pleased to submit this Closure Request Report on behalf of Fidelity Roof Company for the underground storage tank (UST) site located at 1075 40<sup>th</sup> Street in Oakland, California (see Figure 1, Figure 2, and Figure 3). This report provides a rationale for regulatory closure of the site, based on the following generally-accepted closure criteria: (1) A large portion of the contaminant source, or sources, has been removed; (2) The site has been adequately characterized; (3) The contaminant plume is not migrating, and chemical concentrations in groundwater are expected to meet water quality objectives in the future; (4) No other waters of the State, water supply wells, or other sensitive receptors are likely to be impacted; and (5) The site does not pose a significant risk to human health or safety. This site should be closed as a "low risk" site with unrestricted land use. A deed restriction should be attached to the property which includes requirements for a soil management plan and vapor barriers beneath constructed buildings, and precludes groundwater use.

### SITE DESCRIPTION AND BACKGROUND

### **General Site Description**

The site is located in a mixed commercial and residential area of Oakland, immediately adjacent to the east Emeryville city border. The site is bordered to the south by Yerba Buena Avenue followed by residential properties, to the east by residential properties, to the west by commercial and residential properties, and to the north by 40<sup>th</sup> Street followed by commercial

and residential properties. The site is currently used as a company yard and offices for Fidelity Roof Company.

Subsurface soils at the site and in the site area generally consist of clays, with occasional thin, discontinuous silts, sands, and gravels (see Figure 4). Groundwater at the site is generally encountered at depths ranging from 5 to 10 feet below surface grade.

### **UST Removal Activities**

On December 19, 1995, Tank Protect Engineering, Inc. removed one 1,000-gallon diesel UST and one 500-gallon gasoline UST from a single excavation cavity on the southeast corner of the property. Soil sample analytical results indicated minimal soil hydrocarbon impacts beneath the 1,000-gallon UST. On September 12, 1996, All Environmental, Inc. (AEI) drilled and sampled four soil borings, SB-1 through SB-4, near the former UST excavation. Analytical results from the subsurface investigation revealed significant soil hydrocarbon impacts east and west of the UST excavation cavity.

On October 25, 1996, AEI extended the excavation cavity laterally seven feet to the south and 12 feet to the west. Soil was removed to a depth of nine feet below ground surface. The dispenser island and associated piping were also removed. Analyses of the soil samples collected from the excavation sidewalls indicated up to 150 milligrams per kilogram (mg/kg) of TPH-G, 16 mg/kg of benzene, and 300 mg/kg of TPH-D remained within the western excavation sidewall.

### **Site Investigation Activities**

On March 6, 1997, AEI installed three groundwater monitoring wells, MW-1, MW-2, and MW-3. Significant groundwater hydrocarbon impacts were reported for well MW-3, located approximately ten feet west-northwest from the former fuel dispenser island. Low to nondetectable hydrocarbon impacts were reported in groundwater samples from wells MW-1 and MW-2, located south and north, respectively, from the former UST excavation cavity.

On November 4, 1998, AEI drilled and sampled six additional soil borings, SB-1 through SB-6, south and west from the former excavation cavity. An elevated concentration of diesel-range hydrocarbons was noted in a grab groundwater sample from a southerly boring. Groundwater analytical results from west borings showed no significant hydrocarbon impacts.

On May 6, 2004, AEI installed one vapor extraction well, VE-1, and two air sparge wells, AS-1 and AS-1, at the site. In addition, six shallow drive point small diameter monitoring wells, DP-1 through DP-6, were installed on May 13, 2004 using direct push technology. On May 19 and 20, 2004, AEI conducted a soil vapor extraction/air sparge pilot test using newly-installed wells. The results of this pilot test and recommendations for remediation are summarized in AEI's *Soil Vapor Extraction and Air Sparge Pilot Test Report*, dated August 6, 2004.



Between March 8 and March 13, 2006. AEI conducted a five-day high vacuum dual-phase (SVE and groundwater extraction) extraction (HVDPE) event at the site. On March 8, 2006, extraction began on well MW-3. Total influent hydrocarbon concentrations ranged from approximately 156 part per million by volume (ppmv) to 355 ppmv. The total system flow rate ranged from 32 to 50 standard cubic feet per minute (scfm). Extraction well VE-1 and monitoring well MW-2 were connected to the system on March 10, 2006. Total influent hydrocarbon concentrations ranged from approximately 427 to 612 ppmv. The total system flow rate ranged from 108 to 124 scfm. Hydrocarbon concentrations stabilized in the 450 to 500 ppmv range until the end of the day on March 12, 2006 when the concentrations fell to about 340 ppmv. By the last day of the event, concentrations stabilized in the 150 to 200 ppmv range. Mass removal estimates using field data indicated a total of approximately 58.4 pounds of hydrocarbons were recovered. With a 97% system uptime, this equals approximately 12.65 pounds per day (lb/day) of vapor phase hydrocarbons recovered. AEI estimated the approximate total mass of hydrocarbons in the smear zone (from approximately 5.5 to 12 feet bgs) to be 1,821 pounds, or 299 gallons.

On December 14, 2006, AEI installed two additional groundwater monitoring wells, MW-5 and MW-6, approximately 50 feet northwest, in an expected downgradient groundwater flow direction, from the former UST cavity. Soil and groundwater analytical results from these wells showed low to nondetectable hydrocarbon impacts.

### **Recent Site Remediation Activities**

Review of available site documents showed two distinct hydrocarbon plume areas associated with this site (see Figure 5): (1) An easterly primarily groundwater MTBE/TBA plume that extends downgradient (northwest) from the former UST tank area; and (2) A westerly soil and groundwater hydrocarbon plume extending downgradient from the former fuel dispenser area (see Figure 5). Due to the low permeability soils beneath the site, both plumes appeared to be fairly small and concentrated. The soil and groundwater impacts associated with the westerly fuel dispenser plume included gasoline-range hydrocarbons above regulatory screening levels, and free phase hydrocarbons (free product) in a single well, MW-3. Remediation of the free product would be required prior to obtaining regulatory site closure.

To address free-product and associated soil and groundwater impacts in the vicinity of MW-3, Gribi Associates submitted the *Workplan to Conduct Site Remediation Activities* and the *Addendum to Workplan to Conduct Site Remediation Activities* to the Alameda County Department of Environmental Health (ACDEH) on April 3, 2007 and June 7, 2007, respectively. This workplan and workplan addendum proposed: (1) The drilling of approximately four soil borings in the former UST source area; (2) The decommissioning of seven site wells within the planned excavation area; (3) The excavation and offsite disposal of hydrocarbon-impacted soil and groundwater immediately west from the former UST excavation cavity; and (4) Conducting verification soil and groundwater sampling to assess remediation effectiveness. The workplan and workplan addendum were approved by the ACDEH on May 23, 2007 and August 8, 2007, respectively.



Seven site wells, MW-3, AS-1, AS-2, DP-3, DP-4, DP-5 and DP-6, were decommissioned on November 23, 2007. These decommissioned wells, which were pressure grouted, consisted of one 2-inch diameter monitoring well (MW-3), four 3/4-inch diameter monitoring wells (DP-3 through DP-6), and two 2-inch remediation wells (AS-1 and AS-2).

On November 27, 2007, four investigative soil borings, B-1 through B-4, were drilled to depths ranging from approximately 16 feet to 30 feet in depth using direct-push hydraulically-driven soil coring equipment. Soils encountered in boring B-1 through B-4 were generally similar, consisting primarily of silty gravel fill material to a depth of approximately 8 feet below surface, followed by silty clays to total boring depths. Groundwater was encountered in all borings at a depth of approximately 8 feet below surface grade. Attempts to collect deeper water samples by hydropunching variously from 21 feet to 30 feet in depth were unsuccessful and yielded no water in all four borings. Moderate hydrocarbon staining and odors were noted in soils in all four borings at the fill/native interface, from about 8 feet to 10 feet below surface grade. Soils below 10 feet in depth in the four borings did not exhibit significant staining or odors. Soil and groundwater laboratory analytical results for these four borings are summarized on Figure 5 and Figure 8, respectively. Results of the soil boring investigation showed relatively low soil and groundwater hydrocarbon impacts in native soils at the base of the former UST overexcavation cavity. The highest soil and groundwater hydrocarbon impacts were encountered in boring B-2, located beneath the former UST itself in the northeast corner of the former overexcavation cavity. The soil sample collected at 8 feet in depth in B-2 showed 170 mg/kg of TPH-G, 0.087 mg/kg of benzene, and 1.4 mg/kg of MTBE. Soil samples collected at 12 feet and 16 feet in depth showed low concentrations of TPH-G, but did show respective benzene concentrations of 1.1 mg/kg and 1.1 mg/kg, and respective MTBE concentrations of 6.5 mg/kg and 3.8 mg/kg. The grab groundwater sample from boring B-2 showed 320 ug/l of TPH-G, 4.6 ug/l of benzene, and 180 ug/l of MTBE. These concentrations are all above the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) drinking water Environmental Screening Levels (ESLs) for TPH-G, benzene, and MTBE; however, they are generally below nondrinking water ESLs. Groundwater below the site is not currently a drinking water source, and there is little expectation that groundwater below the site would be used for drinking water source in the future.

Soil excavation and disposal activities and confirmation soil sampling activities were conducted between March 10, 2008 and March 12, 2008. Groundwater removal and excavation backfill and resurfacing activities were conducted between March 18, 2008 and March 25, 2008. A total of 282 tons of hydrocarbon impacted soil was excavated and disposed of at the West Contra Costa County Landfill in Richmond, California, and approximately 2,500 gallons of hydrocarbon impacted groundwater was removed and disposed of at the Instrat facility in Rio Vista California. Confirmation soil sample laboratory analytical results are summarized on Figure 6. Excavation pit sidewall soil samples, collected in the groundwater hydrocarbon "smear zone" at about 10 feet in depth, showed low to nondetectable concentrations of hydrocarbon constituents, with the highest TPH-G and benzene concentrations being 73 mg/kg and 0.033 mg/kg,



respectively. Excavation pit bottom soil samples, collected at 12 feet in depth, showed low to nondetectable concentrations of hydrocarbon constituents, with the highest TPH-G and benzene concentrations being 170 mg/kg and 0.012 mg/kg, respectively. While the highest TPH-G soil concentration (170 mg/kg) is above drinking water soil ESL of 100 mg/kg, this appears to be a laterally isolated occurrence at 12 feet in depth. In addition, the highest benzene soil concentration (0.033 mg/kg) is below the drinking water soil ESL of 0.044 mg/kg. Thus, residual soil hydrocarbon impacts in the excavation area appear to be minimal and do not pose a significant environmental or human health risk.

The grab groundwater sample from the water holding tank showed 240 ug/L of TPH-G, 440 ug/L of TPH-D, and no detectable benzene. While the TPH-G and TPH-D concentrations are above the drinking water ESL for TPH-G and TPH-D of 83 ug/L, the lack of detectable benzene in this sample would tend to reduce the risk posed by this groundwater. Also, groundwater below the site is not currently a drinking water source, and there is little expectation that groundwater below the site would be used for drinking water source in the future.

Results of source removal activities were reported in *Report of Source Removal Activities*, (Gribi Associates, April 22, 2008). Based on source removal activities, this report recommended no additional investigation or remediation in this area of the site.

Quarterly groundwater monitoring has been conducted for site wells since 2001. Results of this and previous monitoring events seem to indicate: (1) A general west-northwesterly trending groundwater flow gradient beneath the site; and (2) A relatively small groundwater MTBE/TBA plume extending 30 to 40 feet northwest from the former UST area.

### REQUEST FOR REGULATORY SITE CLOSURE

The preponderance of evidence clearly shows that this site meets generally-accepted closure requirements and should be granted regulatory site closure as a "low risk" site with unrestricted land use. Specifically, site closure should be granted because: (1) The contaminant sources have been largely removed; (2) The site has been adequately characterized; (3) The contaminant plume is not migrating, and chemical concentrations in groundwater are expected to meet water quality objectives in the future; (4) No other waters of the State, water supply wells, or other sensitive receptors are likely to be impacted; and (5) The site does not pose a significant risk to human or environmental receptors. This site should be closed as a "low risk" site with unrestricted land use. A deed restriction should be attached to the property which includes requirements for a soil management plan, vapor barriers beneath constructed buildings, and precludes groundwater use.

### **Contaminant Source Removal**

Contaminants of concern (COCs) identified for this site include: (1) Total Petroleum Hydrocarbons as Diesel (TPH-D); (2) Total Petroleum Hydrocarbons as Gasoline (TPH-G); (3) Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX); and (4) Oxygenates (primarily



MTBE/TBA). All COCs are associated with the USTs formerly located on the southeast corner of the property. There appear to have been two distinct hydrocarbon source areas. Fuel releases at the former pump island, located southwest from the former site USTs, appear to have resulted in a westerly soil and groundwater primarily gasoline hydrocarbon plume (and resulting in free product in former well MW-3). Fuel releases associated with the former gasoline UST resulted in an easterly primarily gasoline (perhaps newer gasoline, given the MTBE/TBA impacts only in this plume) hydrocarbon plume.

Source removal activities at the site have included the following specific tasks and activities:

- The two site USTs, one 1,000-gallon diesel UST and one 500-gallon gasoline UST, were removed from the site in December 1995. There has been nor further use of USTs at the project site.
- In October 1996, the UST excavation cavity was overexcavated and approximately 235 tons of hydrocarbon impacted soils were removed. This overexcavation area included the former fuel island area west of the former USTs.
- In March 2006, a 5-day high-vacuum dual-phase extraction event was conducted at the site. During the event approximately 58 pounds of hydrocarbons were removed from the subsurface through the extraction of hydrocarbon impacted soil and groundwater.
- In March 2008, soil excavation activities were conducted to remove residual hydrocarbon impacts associated with the westerly hydrocarbon plume, which had previously resulted in the presence of free product in well MW-3. During these activities, approximately 282 tons of hydrocarbon-impacted soil and 2,500 gallons of hydrocarbon-impacted groundwater were removed for offsite disposal.

The two soil excavations were successful at removing nearly all remaining residual soil hydrocarbon impacts from the site (see Figure 6). Results of the November 2007 soil boring investigation, within the former October 1996 UST overexcavation cavity, showed relatively low soil and groundwater hydrocarbon impacts in native soils at the base of the former UST overexcavation cavity (see Figure 7). The highest soil and groundwater hydrocarbon impacts were encountered in boring B-2, located beneath the former UST itself, in the northeast corner of the former overexcavation cavity. While soil samples from this boring showed hydrocarbon levels above ESLs, these impacts are isolated in a small area. Also, the fact that groundwater hydrocarbon concentrations in immediate downgradient well MW-2 and further downgradient well MW-6 are not increasing, but rather seem to be decreasing, indicates that the residual source area hydrocarbons are not acting as an ongoing source.

Confirmation sidewall and excavation pit bottom soil samples collected during the 2008 excavation showed hydrocarbon soil concentrations to be below soil ESLs with respect to groundwater as a drinking water source for all compounds in fourteen of fifteen soil samples. Following both excavations, very low and limited residual soil impacts remain at the site.



### **Adequate Site Characterization**

Approximately 15 investigative borings and 15 groundwater monitoring wells have been installed on this site. Boring logs from these borings and wells have show that soils beneath the site generally consist of clays, with occasional thin discontinuous sands, and gravels, down to approximately 20 feet in depth (see Figure 4). Two well borings, AS-1 and AS-2, were drilled to 30 feet in depth, and encountered clayey sands and silts from approximately 21 feet to 30 feet in depth. Groundwater is generally encountered in borings and wells at depths between 5 to 10 feet below surface grade.

As shown on Figure 5 and Figure 8, soil and groundwater hydrocarbon impacts have been defined laterally in all directions, and all significant soil hydrocarbon impacted soils were excavated and removed except for a small area beneath the former USTs. This area measures approximately 15 feet by 20 feet, and the maximum concentrations of TPH-G and Benzene encountered in recent borings in this small area were only 170 mg/kg and 1.1 mg/kg, respectively. Groundwater hydrocarbon impacts are limited to a relatively small TPH-G and MTBE/TBA plume that extends approximately 50 feet west-northwest from the former UST excavation. The limited extent of these impacts appears to have been the result of primarily low permeability, clay-dominated soils beneath the site. Although some sands and gravels were encountered in site borings, these zones were thin and discontinuous and were surrounded by low permeability clays and silts (see Figure 4).

Vertical soil hydrocarbon impacts were fully defined in the westerly hydrocarbon plume, and were removed by excavation. Soil hydrocarbon results from the 2008 excavation pit bottom samples showed no significant hydrocarbon impacts (see Figure 6), and soil samples from previous deeper air sparge wells AS-1 and AS-2 showed no hydrocarbon detections below at or below 15 feet in depth (see Figure 5). Vertical soil hydrocarbon impacts are not fully defined in the small easterly plume, directly beneath the former USTs. However, given the small lateral extent of this plume, the relatively small accompanying groundwater hydrocarbon plume, the clay-dominated soils in this area, and the decrease in TPH-G concentrations with depth (as would be expected), we would not expect vertical hydrocarbon impacts associated with this plume to be extensive.

### **Plume Migration and Natural Attenuation**

Contaminant soil and groundwater plume migration has been minimal (see Figure 5 and Figure 8), with soil hydrocarbon migration not exceeding approximately 30 feet and groundwater hydrocarbon migration not exceeding approximately 50 feet. The limited extent of these impacts appears to have been the result of primarily low permeability, clay-dominated soils beneath the site. Although some sands and gravels were encountered in site borings, these zones were thin and discontinuous and were surrounded by low permeability clays (see Figure 4).



The limited extent of the hydrocarbon groundwater plume indicates that natural attenuation processes are mitigating the downgradient movement of groundwater hydrocarbon impacts. Also, the presence of TBA (an MTBE breakdown product), along with the slow decrease in MTBE over time, indicates that natural attenuation of MTBE is occurring. Given these conditions, as well as the small size of the remnant soil and groundwater hydrocarbon plumes and their position on the upgradient side of the site at significant distance from the downgradient property line, it is reasonable to conclude that groundwater ESLs for all hydrocarbon compounds will be met before migrating offsite.

A summary of cumulative hydrocarbon groundwater results for site wells is provided as Attachment A.

### **Sensitive Receptors Impacts**

Soil and groundwater hydrocarbon impacts from this site do not extend beyond the property boundaries, and there are no surface water bodies in close proximity to the site. In addition, the State Water Board's Geotracker database identifies no public water wells within the site vicinity, and a review of reports for the several nearby downgradient sites (Dunne Quality Paints/Green City Lofts, California Linen, Oakland National Engravers, City of Emeryville/Magnolia site, SNK Andante site, Ennis/AC Transit, and San Francisco French Bread Co., Celis Service Station) on the Geotracker and Alameda County online databases clearly indicates that there are no water supply wells in the site vicinity. Thus, there are no sensitive receptors relative to surface water, groundwater, or offsite ambient and enclosed space air receptors associated with the project site hydrocarbon impacts.

While onsite potential ambient and/or indoor air sensitive receptors are present, the risk associated with these receptors is minimal, given that: (1) The site is essentially fully paved; (2) Remnant hydrocarbon, and particularly VOC, plumes are of small aerial extent; and (3) All soil hydrocarbon impacts above 10 feet in depth were removed by overexcavation.

### **Risk Evaluation**

Results of our preliminary risk evaluation of all potential exposure pathways for this UST site are summarized in Table 1.



## Table 1 PRELIMINARY EXPOSURE PATHWAY SCREENING Fidelity Roof UST Site

	Fidelity F	Roof UST Site	
Exposure Pathway	Complete?	Risk Level	Discussion
Air Exposure Pathway  Surface soil volatilization to ambient air	Possible	Low	Possible risk due to low-concentration soil TPH-G/BTEX in shallow soils; risk expected to be low due to clay-dominated soils beneath site, low COC concentrations and lack of VOCs.
Subsurface soil volatilization to ambient air	Possible	Low	Possible risk due to low-concentration soil TPH-G/BTEX; risk expected to be low due to clay-dominated soils beneath site, depth of soil impacts and low VOC concentrations.
Subsurface soil volatilization to enclosed space	Possible	Low	Possible risk due to low-concentration soil TPH-G/BTEX; risk expected to be low due to clay-dominated soils beneath site, depth of soil impacts and low VOC concentrations.
Groundwater volatilization to ambient air	Possible	Low	Possible risk due to low-concentration groundwater TPH-G/BTEX; risk expected to be low due to clay-dominated soils beneath site, depth of groundwater impacts and low VOC concentrations.
Groundwater volatilization to enclosed space	Possible	Low	Possible risk due to low-concentration groundwater TPH-G/BTEX; risk expected to be low due to clay-dominated soils beneath site, depth of groundwater impacts and low VOC concentrations.
Soil Exposure Pathway			
Dermal contact/ingestion of surface soils	No	None	No significant soil hydrocarbon impacts identified above 10 feet in depth.
Dermal contact/ingestion of subsurface soils	Possible	Low	Construction worker only, below 10 feet in depth
Groundwater Exposure Pathway			
Soil leaching to groundwater, ingestion	No	None	No nearby downgradient (W-NW) water supply wells.
Dissolved/free phase groundwater ingestion	No	None	No nearby downgradient (W-NW) water supply wells.
Surface Water Exposure Pathway			
Soil leaching to surface water	No	None	No nearby surface water bodies.
Groundwater plume discharge to surface water	No	None	No nearby surface water bodies.

As the table above illustrates, complete exposure pathways exist relative to potential air exposure and soil exposure pathways. However, the potential risk associated with these exposure pathways is low, given: (1) The small size of remnant soil and groundwater hydrocarbon plumes; (2) The relatively low concentrations of VOCs in soil and groundwater associated with these plumes; and (3) The low permeability clay-dominated soils underlying the site.



### **Summary**

Regulatory closure should be granted for this site based on the following generally-accepted closure criteria: (1) A large portion of the contaminant source, or sources, have been removed; (2) The site has been adequately characterized; (3) The contaminant plume is not migrating, and chemical concentrations in groundwater are expected to meet water quality objectives in the future; (4) No other waters of the State, water supply wells, or other sensitive receptors are likely to be impacted; and (5) The site does not pose a significant risk to human health or safety. This site should be closed as a "low risk" site with unrestricted land use. A deed restriction should be attached to the property which includes requirements for a soil management plan and vapor barriers beneath constructed buildings, and precludes groundwater use.

We appreciate this opportunity to provide this report for your review. Please contact us if there are questions or if additional information is required.

Very truly yours,

Matthew A. Rosman

Project Engineer

James E. Gribi Registered Geologist California No. 5843

t

c Monte Upshaw, Fidelity Roof Company Mary Rose Cassa, SFBRWQCB

Enclosures: Figure 1: Site Vicinity Map

Figure 2: Site Area Plan

Figure 3: Site Plan with Cross-Section Transect

Figure 4: Lithologic Cross Section

Figure 5: Pre-Remediation Soil Hydrocarbon Impacts

Figure 6: Results of 2008 Excavation Confirmation Soil Sampling

Figure 7: Post-Remediation Soil Hydrocarbon Impacts

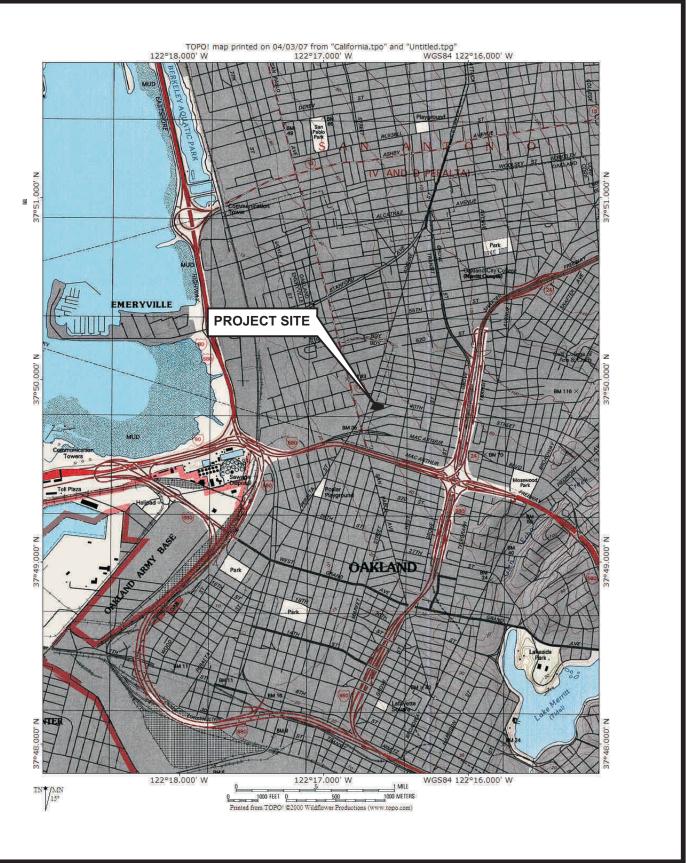
Figure 8: Post-Remediation Groundwater Hydrocarbon Impacts

Attachment A: Summary of Historic Groundwater Results



### **FIGURES**





DESIGNED BY:	CHECKED BY:				
DRAWN BY: MR	SCALE:				

PROJECT NO:

SITE VICINITY MAP

1075 40TH STREET OAKLAND, CALIFORNIA DATE: 02/03/2010 FIGURE: 1



0 100 200

APPROXIMATE SCALE IN FEET



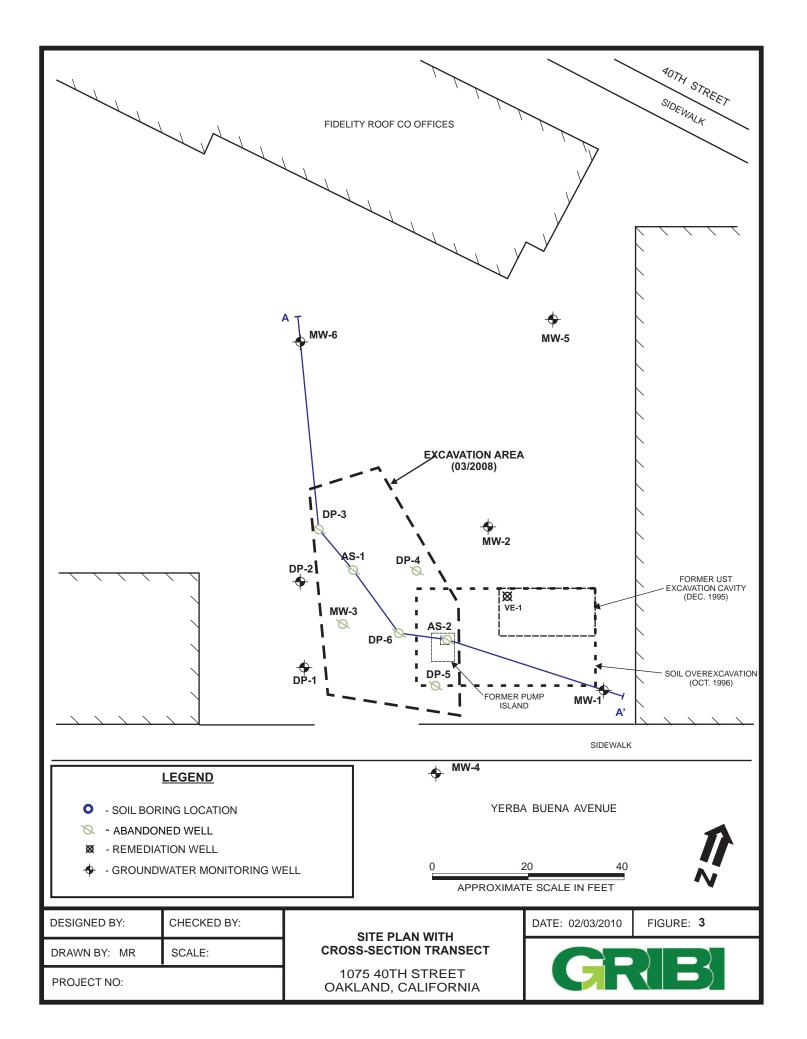
DESIGNED BY:	CHECKED BY: JG
DRAWN BY: MR	SCALE:

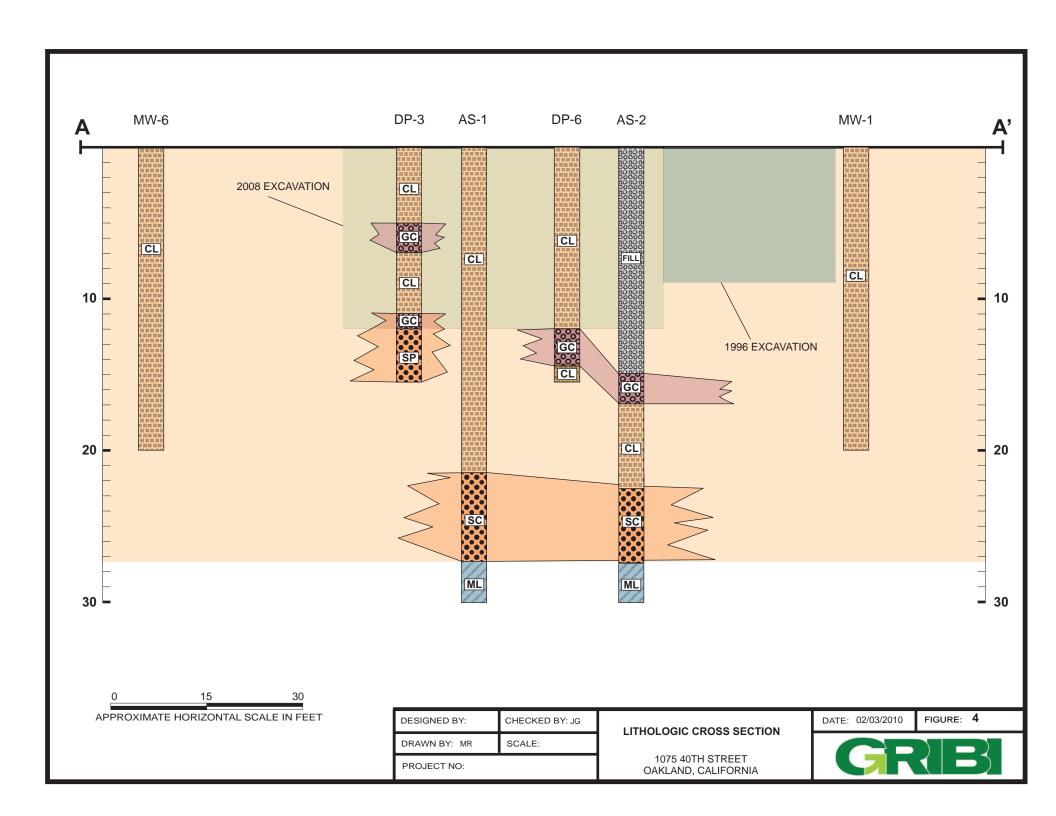
PROJECT NO:

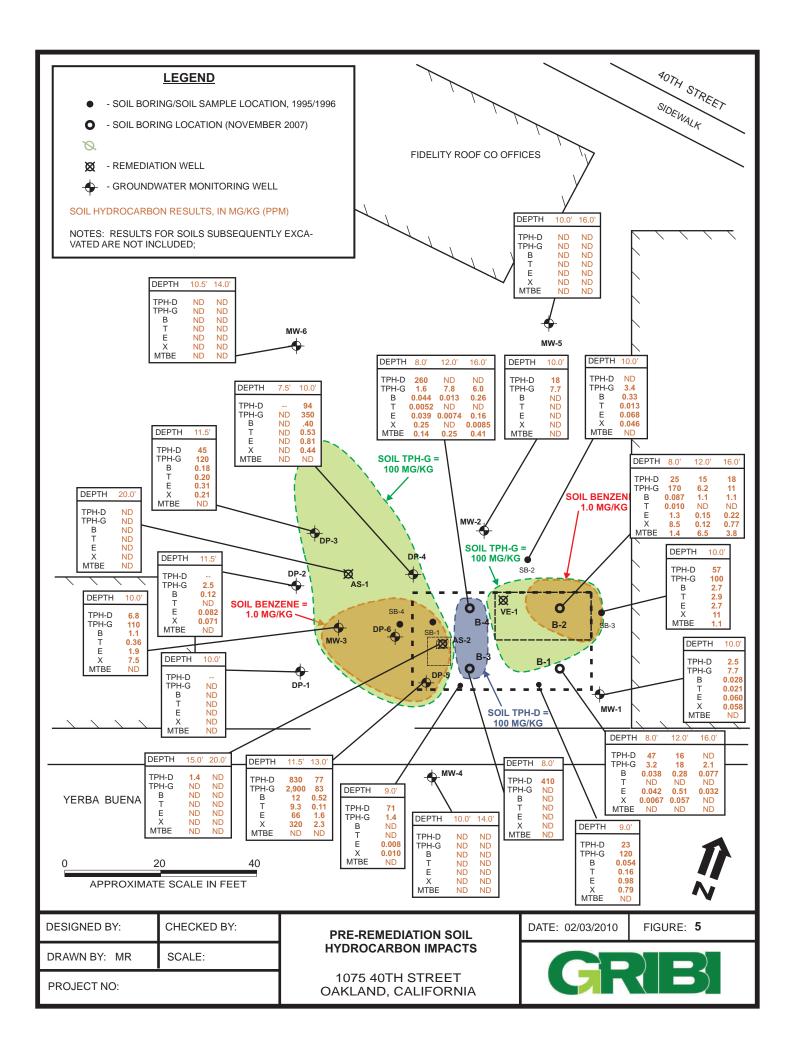
SITE AREA PLAN

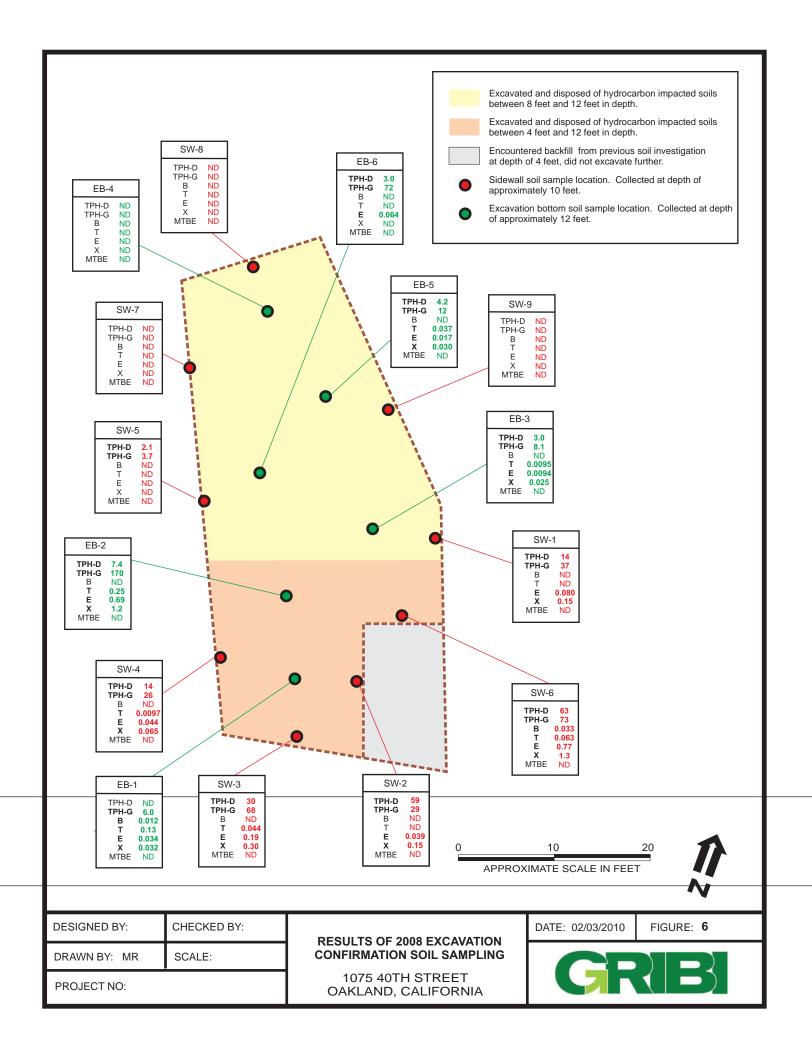
1075 40TH STREET OAKLAND, CALIFORNIA

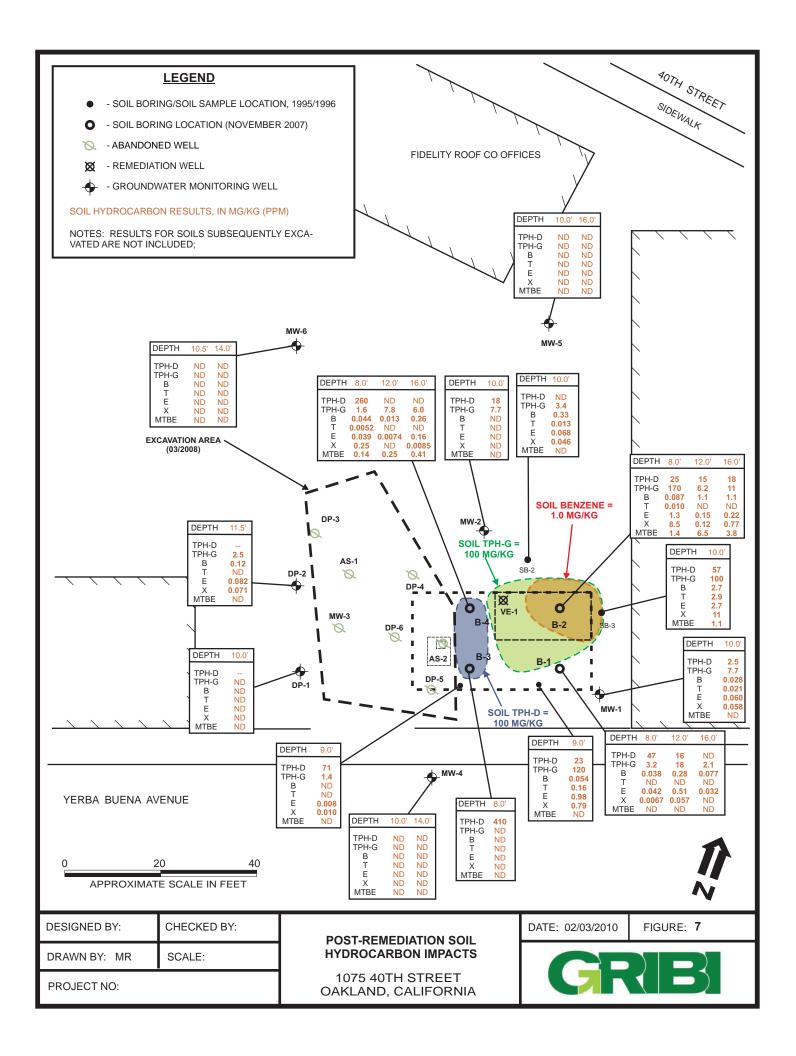
DATE: 02/03/2010	FIGURE: 2
GR	<b>  =</b>

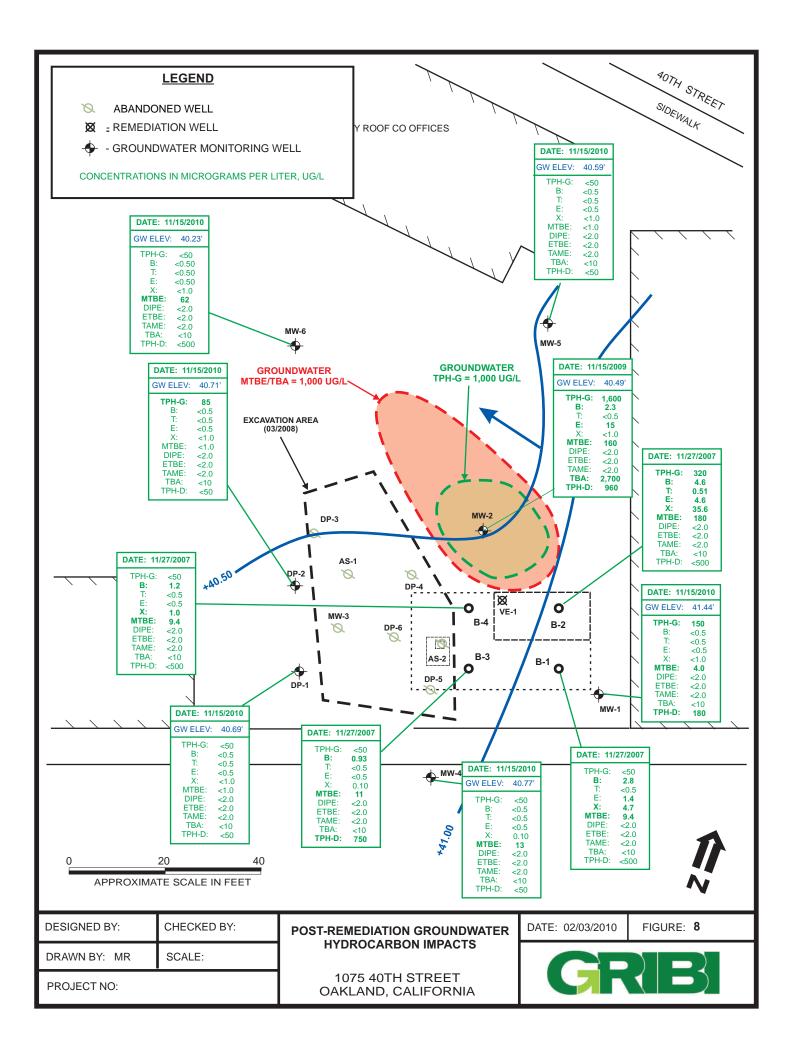












# ATTACHMENT A CUMULATIVE GROUNDWATER RESULTS



Well	Dut	GW	GW 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			
	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			
	7/27/2001	10.5	40.49	66	130	1.6	< 0.5	< 0.5	< 0.5	< 5.0			
	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			
	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			
	6/8/2004	9.39	41.60	782	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	ND		
	9/10/2004	9.95	41.04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	ND		
	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			
	6/5/2006	8.46	42.53	120	74	1.2	< 0.5	< 0.5	< 0.5	< 5.0			
	9/18/2006	9.36	41.63	99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0			
	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	ND		
	09/12/2007	10.02	40.97	< 500	410	5.1	< 0.5	< 0.5	<1.0	2.7	ND		
	12/5/2007	8.68	42.31	1,100	2,300	96	< 0.5	20	<1.0	6.2	ND		
	03/04/2008	7.87	43.12	920	200	2.8	< 0.5	< 0.5	<1.0	3.2	ND		
	05/22/2008	9.62	41.37	590	150	18	< 0.5	< 0.5	<1.0	<1.0	ND		

Well	De t-	GW	GW GW	Concentration, micrograms per liter (ug/l)								
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy	
	09/10/2008	10.57	40.42	<50	110	< 0.5	< 0.5	< 0.5	<1.0	<1.0	ND	
	11/25/2008	9.77	41.22	63	< 50	2.6	< 0.5	< 0.5	<1.0	<1.0	ND	
	02/26/2009	7.06	43.93	< 50	79	6.9	< 0.5	0.95	<1.0	3.5	ND	
	05/26/2009	9.03	41.96	72	220	10	< 0.5	0.85	<1.0	6.4	ND	
	11/18/2009	9.55	41.44	180	150	< 0.5	< 0.5	< 0.5	<1.0	4.0	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		
	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	< 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		
	1/3/2007	8.79	41.70	600	1,500	150	<5.0	51	59	7,500		

Well	Date	GW	GW										
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy		
	06/12/2007	9.90	40.59	1,700	2,600	230	1.3	110	37.8	8,100	6,900=TBA		
	09/12/2007	10.75	39.74	740	2,600	9.1	< 0.5	73	42.1	1,900	3,900=TBA		
	12/5/2007			870	2,000	1.1	< 0.5	34	15.66	660	2,700=TBA		
	03/04/2008	8.01	42.48	700	1,400	150	< 0.5	30	11	1,800	3,100=TBA		
	05/22/2008	10.30	40.19	1,200	960	120	0.60	26	6.3	1,100	4,700=TBA		
	09/10/2008	10.99	39.50	610	1,300	4.5	< 0.5	23	7.0	240	3,100=TBA		
	11/25/2008	10.49	40.00	750	4,200	< 0.50	< 0.5	23	5.88	<1.0	ND		
	02/26/2009	6.47	44.02	420	1,000	< 0.50	4.5	33	24.2	210	4,300=TBA		
	05/26/2009	9.35	41.14	310	1,800	350	1.2	41	5.28	3,400	4,400=TBA		
	11/18/2009	10.00	40.49	960	1,600	2.3	< 0.5	15	<1.0	160	2,700=TBA		
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	79,000	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	Free Pr	roduct	7,600*	540*	3,500*	14,000	<100	ND		
	12/13/2004	8.91	41.02	Free Produc	t = 0.05  ft,  1	Not Sampled							
	3/11/2005	6.94	42.99	Free Produc	t = 0.05  ft,  1	Not Sampled							
	6/15/2005	6.99	42.94	Free Produc	t = 0.12  ft,  1	Not Sampled							

Well ID	Date	GW Depth	GW Elev.	Concentration, micrograms per liter (ug/l)									
II)	0/0/2007	-		TPH-D	TPH-G	B	T	E	X	MTBE	Oxy		
	9/8/2005	10.61	39.32	Free Produc		_	l						
	12/1/2005	 5 26	49.93		t, Not Sampl								
	3/7/2006 6/5/2006	5.26 8.09	44.67 41.84	690,000	t = 0.95  ft, N 37,000	•	10	960	4,400	<100			
	6/3/2006	8.99	40.94	28,000	41,000	110 350	24	1,100	4,600	<100			
	9/18/2006	10.56	39.37	,	t = 0.04  ft, N			1,100	4,000	<170			
	1/3/2007	8.84	41.09	Free Produc									
	06/12/2007	9.71	40.22	Free Produc		_							
	09/12/2007	10.82	39.11	Free Produc									
	12/5/2007	10.02	37.11	Tree Troude		Abandoned		er 27 2007					
MW-4	8/5/1999	8.79	40.18	<50	<50	<0.5	<0.5	< 0.5	<0.5	37			
<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			
	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		

Well	Date	GW GW Concentration, micrograms per liter (ug/l)									
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy
	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
	02/26/2009	4.65	44.32	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	4.6	ND
	05/29/2009	7.66	41.31	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	13	ND
	11/18/2009	8.20	40.77	310	< 50	< 0.5	< 0.5	< 0.5	<1.0	13	ND
MW-5	01/03/2007	16.47	34.57	<50	< 50	< 0.5	< 0.5	< 0.5	<1.0	<1.0	
<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	< 0.5	<1.0	<1.0	ND
	05/22/2008	10.37	40.67	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	67	ND
	09/10/2008	11.03	40.01	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	<1.0	ND
	11/25/2008	10.65	40.39	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	<1.0	ND
	02/26/2009	9.19	41.85	< 50	< 50	1.0	4.6	5.4	24.6	<1.0	ND
	05/26/2009	10.24	40.80	< 50	< 50	< 0.5	< 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
MW-6	01/03/07	8.93	41.41	63	< 50	< 0.5	< 0.5	< 0.5	<1.0	< 5.0	
<50.34>	06/12/2007	10.05	40.29	< 500	< 50	< 0.5	< 0.5	< 0.5	<1.0	72	ND
	09/12/2007	10.83	39.51	< 500	< 50	< 0.5	< 0.5	< 0.5	<1.0	180	18=TBA
	12/5/2007	9.98	40.36	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	39	ND
	03/04/2008	8.12	42.22	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	38	ND
	05/22/2008	12.26	38.08	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	<1.0	ND
	09/10/2008	10.14	40.20	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	310	180=TBA
	11/25/2008	11.50	38.84	< 50	< 50	< 0.5	< 0.5	< 0.5	<1.0	<1.0	ND
	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
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	
	06/12/2007										
	09/12/2007										-
	12/5/2007	_	_	_	_	_	-	-	_	_	

Well	_	GW	GW	ride	Concentration, micrograms per liter (ug/l)									
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy			
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				
	06/12/2007													
	09/12/2007										_			
	12/05/2007	-	_	_	-	_	-	-	_	-				
				V	Well Abando	ned Noven	nber 27 20	07						
AS-2	12/01/2005	9.64	40.87		<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				
	06/12/2007													
	09/12/2007													
	12/05/2007													
				V	Well Abando	ned Noven	ıber 27 20	07						
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			
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			

### Table 1 Groundwater Laboratory Analytical Results

Fidelity Roof Co. UST Site

Well		GW	GW		nty Roof C			crograms	per liter (u	g/l)	
ID	Date	Depth	Elev.	TPH-D	TPH-G	В	T	E	X	MTBE	Oxy
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	
	06/13/2006	10.53	39.92	110	78	< 0.5	1.1	< 0.5	0.98	45	
	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
				v	Vell Abando	ned Noven	nber 27 20	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	
	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=TBA
	09/12/2007	10.21	40.64	< 500	660	33	< 0.5	0.58	<1.0	62	14=TBA
				v	Vell 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
				V	Well Abando	ned Noven	nber 27 20	07			
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
				v	Vell Abando	ned Noven	nber 27 20	07			

#### 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 = Benzene

T = Toluene

E=Ethylbenzene

X = XylenesMTBE = Methyl Tertiary Butyl Ether

 $Oxy = Oxygenates \ (except \ MTBE), including \ Ter-Butanol \ (TBA), \ Disopropyl \ Ether \ (DIPE), \ Ethyl-t-butyl \ Ether \ (ETBE), \ and \ Tert-amyl \ Methyl \ Ether \ (TAME)$ 

ND = Not detected above the expressed value

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