ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 4866 - 67 King Ave, Piedmont, CA 94611
(1-1,500 gallon heating oil tank removed in February 4, 1994)

July 23, 1997

Mr. Bob Leefeldt
1 Morrison Rd
Ross, CA 94957-1590

Mr. Richard Grinold
67 King Ave
Piedmont, kCA 94611

Dear Messrs. Leefeldt and Grinold:

This letter confirms the completion of site investigation and remedial action for the underground storage tank 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 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, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung

Mee Ling Tung, Director

cc: Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Dave Deaner, SWRCB (with attachment-case closure summary)
John Speakman, Piedmont FD, 120 Vista, Piedmont, CA 94611
files-ec (67king.2)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RO#639

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

StID 4866

July 23, 1997

Mr. Bob Leefeldt
1 Morrison Rd
Ross, CA 94957-1590

Mr. Richard Grinold
67 King Ave
Piedmont, kCA 94611

Re: Fuel Leak Site Case Closure for 67 King Ave, Piedmont, CA

Dear Messrs. Leefeldt and Grinold:

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 Protection Division 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 soil contamination (up to 8,200ppm TPH as diesel) remains in the vicinity of the tank closed in place.

If you have any questions, please contact me at (510) 567-6762.

eva chu
Hazardous Materials Specialist

enlosure:
1. Case Closure Letter
2. Case Closure Summary

files (67king.3)

need to import
01-2736

ENVIRONMENTAL
PROTECTION
97 JUL 22 PM 4:11

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date: June 11, 1997**

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Pkwy**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **M. Logan** Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Residential**
Site facility address: **67 King Ave, Piedmont, CA 94611**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **4866**
URF filing date: SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Bob Leefeldt **1 Morrison Rd** **Ross, CA 94957-1590**	**Richard Grinold** **67 King Ave** **Piedmont, CA 94611**	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	1,500	Heating Oil	Closed in Place	2/4/94

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency: **5/16/97**
Monitoring Wells installed? **No**
Proper screened interval? **NA**
Highest GW depth below ground surface: Lowest depth: **Unknown**
Flow direction: **Unknown**
Most sensitive current use: **Residential**
Are drinking water wells affected? **No** Aquifer name: **Unknown**
Is surface water affected? **No** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): **None**

Report(s) on file? **YES** Where is report(s) filed? **Alameda County**
1131 Harbor Bay Pkwy
Alameda, CA 94502

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank	**1 UST**	**Closed-in-Place**	**2/4/94**
Piping			
Free Product	**1400 gal.**	**Waste Oil Recovery Systems**	**11/10/93**
Rinsate	**750 gal.**	**Waste Oil Recovery Systems**	**1/29/94**

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm) Before[1]	Soil (ppm) After	Water (ppb) Before	Water (ppb) After
TPH (Gas)				
TPH (Diesel)	**8,200**			
Benzene	**0.013**			
Toluene	**0.030**			
Ethylbenzene	**0.038**			
Xylenes	**0.180**			
Other				

NOTE: 1 soil from hand-augered boring W6' at 6'bgs, 12/16/93

Comments (Depth of Remediation, etc.):

See Section VII, Additional Comments, etc...

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? _____
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? _____
Does corrective action protect public health for current land use? **YES**
Site management requirements: **Any excavation to depths greater than 5'bgs in the area of the former UST and hydrocarbon-impacted soil will require the submittal of a site safety plan.**

Should corrective action be reviewed if land use changes? **No**
Monitoring wells Decommissioned: **NA**
Number Decommissioned: Number Retained: **NA**
List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Eva Chu** Title: **Haz Mat Specialist**

Signature: [signature] Date: 7/2/97

Reviewed by

Name: **Madhulla Logan** Title: **Haz Mat Specialist**

Signature: [signature] Date: 6/13/97

Name: **Thomas Peacock** Title: **Supervisor**

Signature: [signature] Date: 6-30-97

VI. RWQCB NOTIFICATION

Date Submitted to RB: 7/3/97 RB Response: Approved

RWQCB Staff Name: **Kevin Graves** Title: **AWRCE**

Signature: [signature] Date: 7-18-97

VII. ADDITIONAL COMMENTS, DATA, ETC.

A 1,500 gallon home heating oil underground storage tank (UST) is located in the front yard of the subject residential property, adjacent to a large, old oak tree and walkway to the house (see Fig 1 and 2). The UST could not be removed without possible damage to the oak tree, therefore, the tank was closed-in-place using a sand-concrete slurry.

Prior to the closure, two hand-augered borings (E7'6" and W6') were advanced on either side of the UST to 6 to 7.5' bgs to determine if a fuel release had occurred resulting from the use of the UST. Two soil samples were collected for TPHd and BTEX analyses. Up to 8,200 ppm TPHd and low levels of BTEX were identified in sample W6'. (See Fig 2, Table 1)

The tank was emptied of ~1,400 gallons of diesel fuel and triple-rinsed with 750 gallons of high pressure and high temperature water and detergent. After the rinsate was removed, the UST was filled with a sand-concrete slurry.

The lithology of the area is comprised generally of silts, sandy clays, and clay. Groundwater may be found between 40 to 100'bgs (according to Alameda County Public Works). The low mobility of heating oil in low permeable soil suggests that the fuel release may not have impacted groundwater quality. And because there are no wells within 1,000' of the subject site, any potential impact to groundwater from the fuel release should not spread in excess of 250' (as suggested by the LLNL Study of Hydrocarbon Plumes). It appears that the fuel release should have insignificant impact to the

environment.

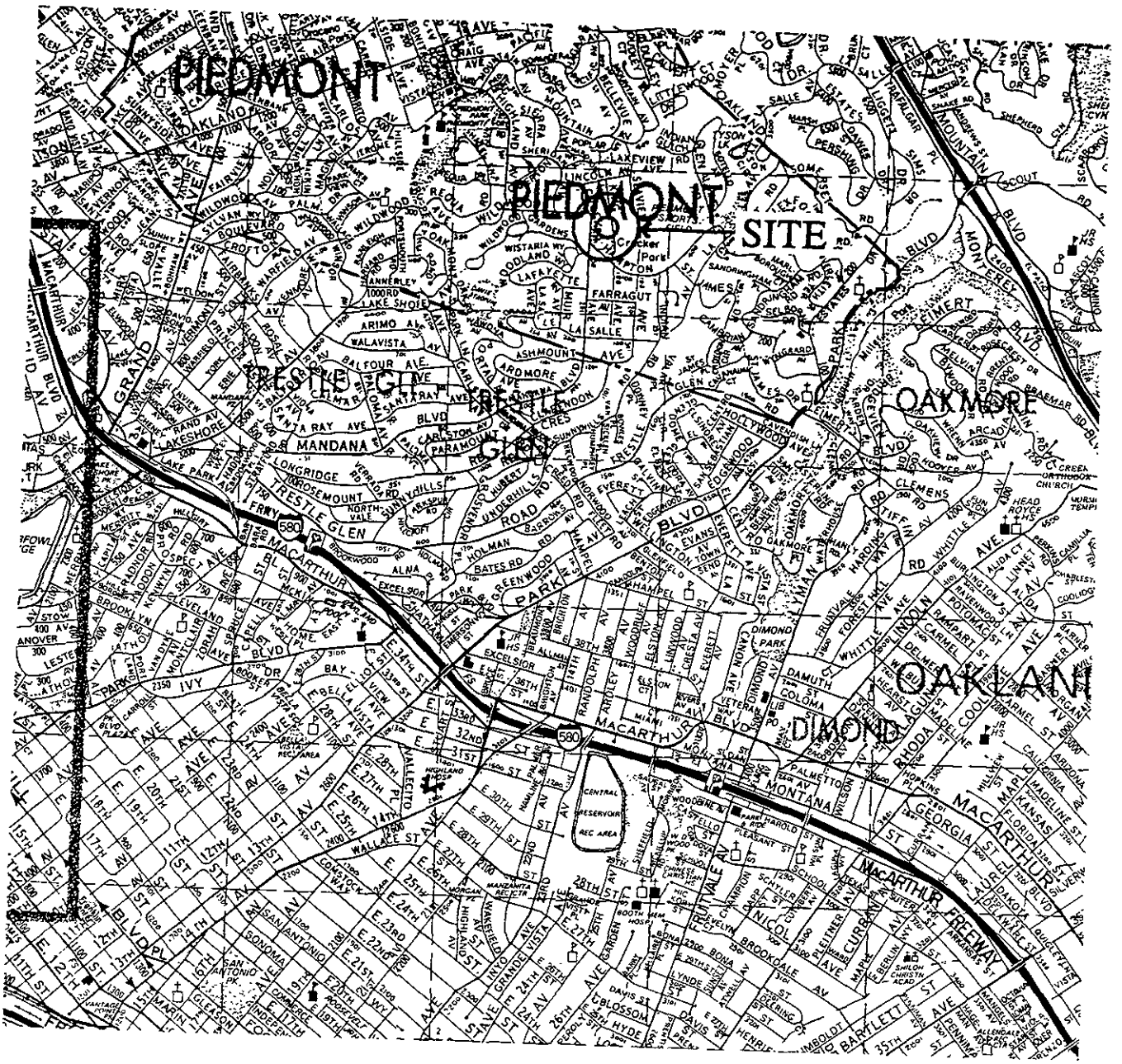
Potential risk to human health through dermal exposure and ingestion is minimized because residual hydrcarbons are at 6 to 7' bgs. And volatilization of BTEX from soil to outdoor air does not exceed a risk of 10_6, based on ASTM RBCA Tier 1 Lookup Table.

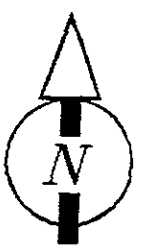
A risk management plan has been submitted which will minimize exposure of hydrocarbons to human health. No further action is required.

In summary, case closure is recommended because:

- the leak and ongoing sources have been removed;
- the site has been adequately characterized;
- no water wells, surface water, or other sensitive receptors are likely to be impacted; and,
- the site presents no significant risk to human health or the environment.

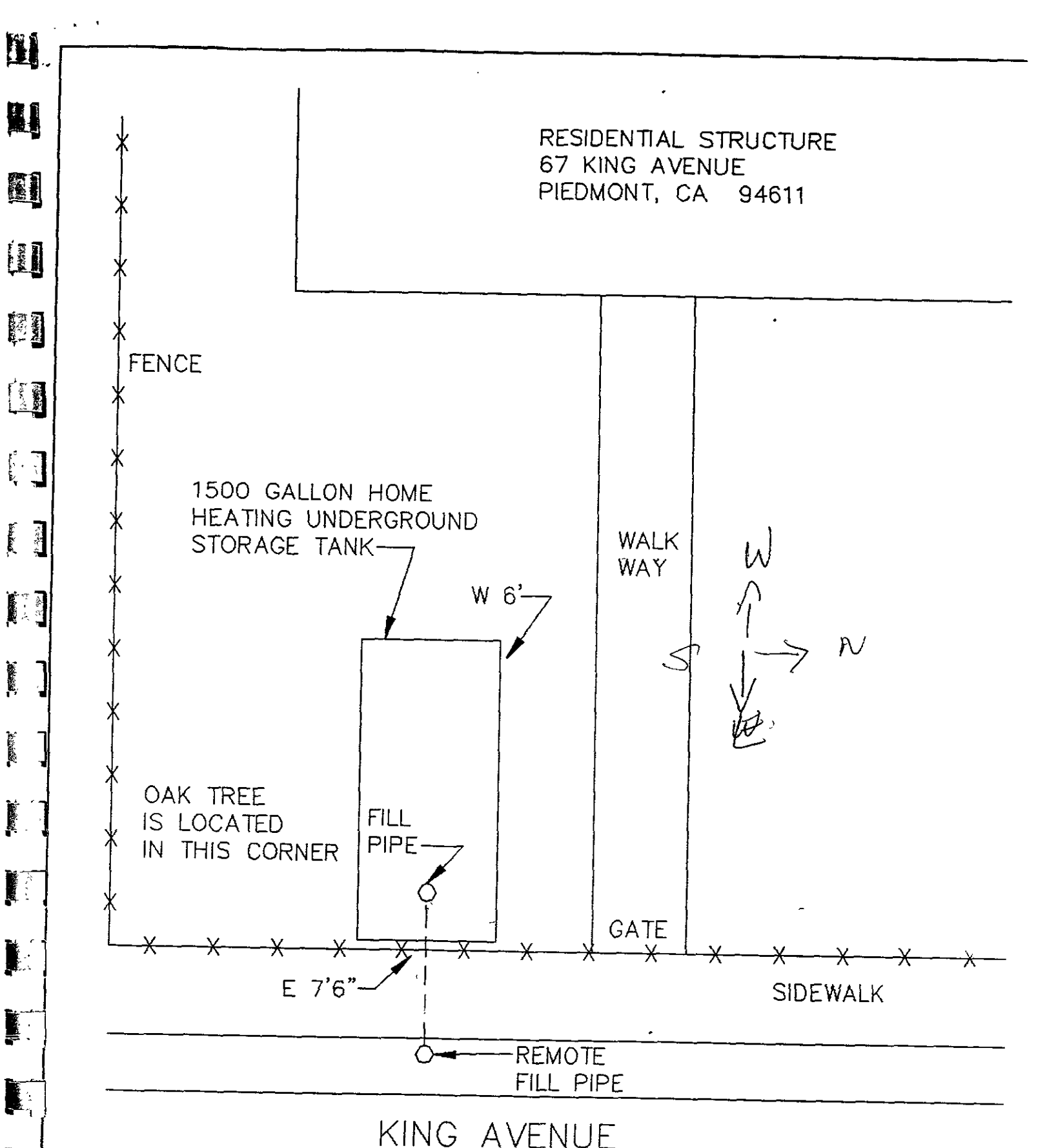
67king.1





From Thomas Bros. Map – 1993

ALL ENVIRONMENTAL, INC. 2641 CROW CANYON RD, SAN RAMON		
SCALE: 1 INCH = 2,200 FT	APPROVED BY:	DRAWN BY: S.P.
DATE: 2/18/94		REVISED: S.P.
SITE LOCATION MAP		
67 KING AVENUE		DRAWING NUMBER: FIGURE 1



N

ALL ENVIRONMENTAL, INC.
2641 CROW CANYON RD, SAN RAMON

SCALE: NTS	APPROVED BY:	DRAWN BY: C.H.
DATE: 2/10/84		REVISED: C.H.

SITE AND SAMPLE LOCATION MAP

67 KING AVENUE

DRAWING NUMBER: FIGURE 2

drive the core tip and the brass tubes into the soil at the bottom of the borings. The location of the soil samples are illustrated on the Site and Sample Location Map.

The soil samples were secured using aluminum foil, teflon caps and sealed with duct tape. The samples were put on ice and transported, under chain of custody procedures to the All Environmental office. The samples were placed in a refrigerator, until the samples were picked up by Priority Environmental Labs personnel.

The samples were taken to Priority Environmental Labs (State Certification # 1708) for chemical analysis. All soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) as diesel (EPA method 3550/8015) with Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) distinction (EPA method 8020). The results of soil sample analyses are tabulated below.

Table 1: Soil Sample Analyses

Sample I.D.	Diesel (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Total Xylenes (ug/kg)
E 7'6"	1300	9.8	18	23	92
W 6'	8200	13	30	38	180

(mg/kg) = ppm or parts per million

(ug/kg) = ppb or parts per billion

Copies of the analytical results and chain of custody are located in Appendix C: Sample Analytical Documentation.