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December 10, 2003

Mr. Scott Seery Alameda County Health Services Agency Environmental Protection Division 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-657 7 Alameda County
DEC 1 2 2003
Environmental Health

RE:

Work Plan for Additional Soil and Groundwater Investigation

3744 Depot Road, Hayward, CA

Dear Mr. Seery:

Based on our previous telephone conversations with you, PIERS has prepared this work plan to verify previous soil and groundwater analytical results at the above-referenced site, hereinafter referred to as the "Property". The purpose of this work is to complete the additional characterization necessary to obtain case closure. It is PIERS' understanding that due to the workload, the Alameda County Department of Environmental Health (ACDEH) is unable to respond in a timely manner to provide oversight for all cases. Therefore, and based on a previous conversation with you, it is our understanding that if the ACDEH does not respond to this work plan within sixty days, there is no objection to the proposed scope of work, and the work plan will therefore be implemented. The results of this work will be provided to the ACDEH.

#### SITE DESCRIPTION AND BACKGROUND

The Property is located on the south side of Depot Road, between the intersections of Depot Road with Cabot Boulevard and Foley Street, in the City of Hayward, County of Alameda, and State of California. A Property Location Map is included with this report (Figure 1). The present tenant is American Auto Dismantler, an automobile salvage operation. The current use of the Property involves the storage and demolition of automobiles.

The following table presents a summary of previous reports, work plans, site investigations and agency correspondences concerning the removal of two underground fuel storage tanks (USTs).

### SUMMARY OF PREVIOUS WORK AND AGENCY CORRESPONDENCE

Reports/Correspondence	Date	Author	Description
Letter requiring submission of reports	January 27, 1995	ACDEH	Requirement of submission of Tank Closure Rpt & PSA
Letter: Notice of Violation to Jack Lotz/ Jesse Allen/ Kenneth & Patricia Hein	May 18, 1995	ACDEH PIERS	Letter of Notice of Violation, failure to submit Tank Closure Rpt & PSA
Site Reconnaissance Workplan for: 3744 Depot Road, Hayward, California	August 28, 1995		Workplan to reconstruct tank history and to install soil borings
Work plan acceptance letter	August 28, 1995	ACDEH	ACDEH reviewed and accepted Work Plan w/comments
Limited Phase II Site Assessment for 3744 Depot Road, Hayward, CA	September 12, 1995	PIERS	Tank removal report & soil borings
Work Plan for Preliminary Site Assessment for 3744 Depot Road, Hayward, CA	June 1996	PIERS	Work plan for PSA
Memorandum on Guidance on MTBE	August 22, 1996	SWRCB	New guidance on GW monitoring of MTBE from active LUFT cases
Well Survey Report	December 30, 1996	JW Rasp, PE	Surveyed monitoring well elevations
Preliminary Site Assessment, Groundwater Well Installation and 1st Quarterly Report	February 10, 1997	PIERS	PSA, well installation and sampling report
Letter reviewed PSA Report	April 9, 1997	ACDEH	Reviewed PIERS' PSA report, and ordered 2 quarters of GW monitoring & sampling
Groundwater Monitoring Well Sampling Report and Request for No Further Action Status	May 27, 1997	PIERS	GW sampling report and request for NFA status
Amendment Letter to the ACDEH	November 3, 1998	PIERS	Letter amending previous groundwater flow direction of 0.002 ft/ft to the south
Letter requesting an additional round of sampling	March 1, 1999	ACDEH	Request for an additional round of well sampling before closure
GW Monitoring Wells Sampling Report	March 30, 1999	PIERS	All results were non-detect
Storm Water Pollution Prevention Plan	April 1999	PIERS	Storm water plan
First Rainfall Event Storm Water Sampling Report	April 1999	PIERS	Storm water sampling report
Final 1999 Groundwater Monitoring Well Sampling Report and Request for No Further Action Status	April 1999	PIERS	Qtrly GW sampling report & request for NFA
Amendment to Final 1999 Report	July 12, 1999	PIERS	Amended lab report, now quantifies MTBE in results.
Phase I Environmental Site Assessment of 3744 Depot Road, Hayward, California	August 2000	PIERS	Phase I ESA
Site Closure Summary and Request for Case Closure for 3744 Depot Road, Hayward, California	August 2000	PIERS	Site closure summary and formal request for No Further Action status
Letter: Comments to Request for Case Closure	March 6, 2001	ACDEH	Comments on case closure request
Letter: Case Closure Summary Additional Data	March 30, 2001	PIERS	Response to ACDEH comments on case closure
Letter response to Case Closure Summary Add. Data	April 4, 2001	ACDEH	Response to letter by PIERS dated March 30, 2001
Letter response to ACDEH on GW gradient	May 9, 2001	PIERS	Response to ACDEH letter dated April 4, 2001
Comments on Case Closure request	May 14, 2001	ACDEH	Response to PIERS letter dated May 9, 2001
Response to Comments and Case Closure Request	February 10, 2003	PIERS	Synopsis of previous work done on-site

According to previous investigations by PIERS, a 500-gallon waste oil UST and a 1000-gallon gasoline UST were apparently excavated sometime in 1990 and 1991, left on site for years, and finally disposed of in 1994 by a previous tenant, without a permit. The tank excavations were also left open for approximately two years before being backfilled. The ACDEH was informed of the tank removals in 1991 and required the owner to provide soil sample analytical results. Samples were later collected by an environmental consultant, TAT Environmental, in May 1992, but no report was ever issued, and the consultant is now out of business. The Property went into foreclosure, and was sold in 1996 to River Bend Properties. Figure 1 shows the site map.

PIERS completed a "Limited Phase II Environmental Assessment" at the Property in August 1995 (report dated September 12, 1995). Five exploratory soil borings were installed at the site. Soil samples and grab groundwater samples were collected from borings located down-gradient of the two tank pits. Tables 1, 1A, 1B, and 1C show the analytical laboratory results. Up to 3,300 parts per million (ppm) of oil and grease and 2,795 parts per billion (ppb) of semi-volatile organic compounds were present in soil collected from the vicinity of the former waste oil tank. Oil and grease at concentrations of 390 ppm and up to 600 ppb of volatile organic compounds were detected in a grab groundwater sample from the boring located down-gradient of the former waste oil tank. The grab groundwater sample collected from the boring located down-gradient from the former gasoline tank contained 43,000 ppb of Total Petroleum Hydrocarbons as gasoline and 300 ppb of benzene. Figure 2 presents the soil analytical data, and Figure 3 presents the grab groundwater analytical data.

To meet the requirements of the ACDEH and the Regional Water Quality Control Board (RWQCB), PIERS performed a Preliminary Site Assessment to delineate and assess the extent of soil and groundwater impact. This work was outlined in a workplan submitted to the ACDEH on July 2, 1996. Two exploratory soil borings and two monitoring wells were subsequently installed at the site, on November 25, 1996. Soil samples were obtained from the borings and wells, and groundwater grab samples were obtained from the borings. The two newly installed monitoring wells and the one on-site existing well were developed and sampled. Tables 2 and 2B show the analytical laboratory results. A report summarizing this work was prepared, entitled "Preliminary Site Assessment, Groundwater Well Installation and 1st Quarterly Report for 3744 Depot Road", dated February 10, 1997.

On April 29, 1997, PIERS performed another sampling event of the three groundwater wells at the request of Amy Leech, ACDEH case worker. No detectable chemical constituents were present in water from any of the three wells during this sampling event, as shown on Table 3. On May 27, 1997 PIERS submitted the "Groundwater Monitoring Well Sampling Report and Request for No Further Action Status". On November 3, 1998, PIERS submitted a letter to the ACDEH amending the measured groundwater flow direction from the north to the south for the May 1997 Groundwater Sampling Report.

On an unrelated matter, in March and April 1999, PIERS also developed a Storm Water Pollution Prevention Plan and performed storm water sampling on a storm drain located in front of the Property. Table 4 shows the laboratory analytical results.

On March 1, 1999, the ACDEH requested an additional round of sampling before closure. In the report "Final 1999 Groundwater Monitoring Well Sampling Report and Request for No Further Action Status", dated April 20, 1999, PIERS recommended that the site be granted a "no further action" status, and that case closure be granted. On July 12, 1999, PIERS submitted a letter which amended the laboratory results of the above-mentioned report to include MTBE (Methyl-Tertiary-Butyl-Ether) concentrations in the results. Refer to Tables 5 and 5A for laboratory results.

In August 2000, PIERS prepared and submitted a Phase I Environmental Site Assessment for the Property, and a separate "Site Closure Summary and Request for Case Closure for 3744 Depot Road, Hayward, California".

In March, April and May of 2001, a series of letters were generated between the ACDEH and PIERS, as a response to comments to various aspects of the Site Closure Summary and Request for Case Closure. Apparently, the final letter from the ACDEH dated May 14, 2001, was not received by PIERS, and work didn't proceed until a phone call in January 2003. PIERS then responded to the last set of comments by ACDEH, and again requested Case Closure on February 10, 2003. The letters discussed the hydraulic gradient on-site, and whether the flow direction was clearly defined.

#### DISCUSSION

Over time, the hydraulic gradient at the site has been measured as 0.0017 feet per foot (ft/ft), 0.002 ft/ft, and 0.0009 ft/ft, all essentially flat gradients. The direction of flow has been measured over time as southerly and northerly. The groundwater elevation is approximately 5 feet below grade; however, there are fluctuations of up to 5 feet in elevation over time. It is reasonable to assume that, based on the flat gradient, shallow water depth and nearby San Francisco Bay, that the groundwater at the site may be tidally influenced; in which case, the gradient fluctuates. The relative flatness of the gradient also allows us to assume that any contaminants may have migrated back and forth around the point source.

Also, the tank excavations in 1990 were left open for approximately two years, allowing volatilization of constituents to occur, as well as attenuation and biodegradation.

#### PROPOSED WORK

Based on the relatively flat gradients and natural attenuation at the site, the following work is proposed: to sample soil and groundwater in all four directions around the two former tank locations to verify that the petroleum hydrocarbon constituents concentrations are under regulatory action levels, so that case closure can be requested and finalized.

The proposed additional work includes the following: completion of one soil boring in each direction (up-gradient, down-gradient, and cross-gradient) around the former waste oil tank pit, and one boring in each direction around the former gasoline tank pit. The three existing on-site wells will be purged and sampled as one of the water sample points around each former tank excavation. Soil samples were previously collected at the perimeters of the former tank pits, near the well locations. The locations of the proposed borings and the existing wells are shown on Figures 2 and 3.

At the borings, a soil sample will be collected approximately one to two feet into native materials beneath each of the tank pit bottoms. Also, grab groundwater samples will be collected from these borings. At the wells, only groundwater samples will be collected.

The following is a breakdown of the proposed tasks:

#### Task 1. Pre-field Activities

Following approval of this workplan by the ACDEH, a site-specific health and safety plan will be prepared and permits will be obtained from Zone 7 of the Alameda County Water District.

#### Task 2. Installation of Exploratory Borings and Sampling of the Monitoring Wells

The exploratory borings will be installed at the locations shown on Figure 2. The borings will be completed using a Geoprobe drill rig. Drilling will be performed by a California-licensed well driller. A California-registered geologist will monitor the drilling activities and prepare logs of the borings.

Soil samples will be collected continuously in the borings using the Geoprobe, until they are extended to at least three feet beneath the former tank pit bottom, and until the first water-bearing zone is reached.

Samples will be collected in a drilling rod lined with a plastic liner. The portion of the liner containing the sample selected for analyses will be cut. The liner will then be sealed with Teflon-lined plastic caps, labeled, and placed in individually sealed plastic bags. They will then be stored in a cooler, on crushed ice or "blue ice," for delivery to a state-certified laboratory. Properly executed Chain of Custody documentation will accompany all soil samples.

Following sample collection, the borings will be backfilled with neat cement to the surface. Bentonite will be used to seal the saturated zone. Cuttings generated during drilling will be placed in DOT-approved 5-gallon pails, or placed on visqueen, pending analysis and proper disposal.

Well Sampling: Prior to purging, the wells will be checked for total depth and depth to the water table using an electronic sounder. The wells will then be purged using a pump or bailer of a minimum of three casing volumes, or until the total well depth is achieved or nearly achieved, if sediment has collected. During purging operations, the field parameters pH, temperature, and electrical conductivity will be recorded after each 1/2 casing volume of groundwater is removed. The well purging is terminated when successive parameter measurements vary by less than 10% and after at least three casing volumes of groundwater have been removed.

Following completion of purging, water samples will be collected by the use of a clean disposable Teflon bailer, and promptly decanted into one-liter amber bottles, as appropriate. The bottles will be sealed with Teflon-lined screw caps, labeled, and stored, on ice, for delivery to a state-certified laboratory.

During field sampling, any equipment placed in the well and re-used will be decontaminated before purging or sampling the next well, by cleaning with Alconox or equivalent detergent, following by double rinsing with distilled or deionized water.

The order of sampling of the wells will be to sample the least contaminated well first, then more contaminated wells, based on historical results.

#### Task 3. Laboratory Analyses

Properly executed Chain of Custody documentation will accompany all soil and water samples.

All of the soil and groundwater samples will be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Methods 8015C and 8020, and for Oil and Grease by Method 9071. The three grab groundwater samples from the waste oil tank pit will be analyzed for TPH as diesel by EPA Method 8015C, the LUFT five metals, and volatile organic compounds and the fuel oxygenates by EPA Method 8260B. The three grab groundwater samples from the former fuel tank pit, and the three groundwater samples from the existing wells, will also be analyzed for the fuel oxygenates by EPA Method 8260B.

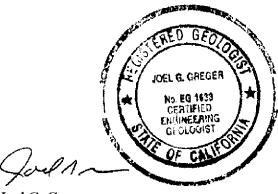
#### Task 4. Report Preparation

Following analysis of this data, a report will be prepared which summarizes the procedures and findings associated with the completed work, and makes additional recommendations, as appropriate.

If you have any questions regarding this work plan/proposal, please do not hesitate to contact our office.

#### Sincerely,

### PIERS Environmental Services, Inc.

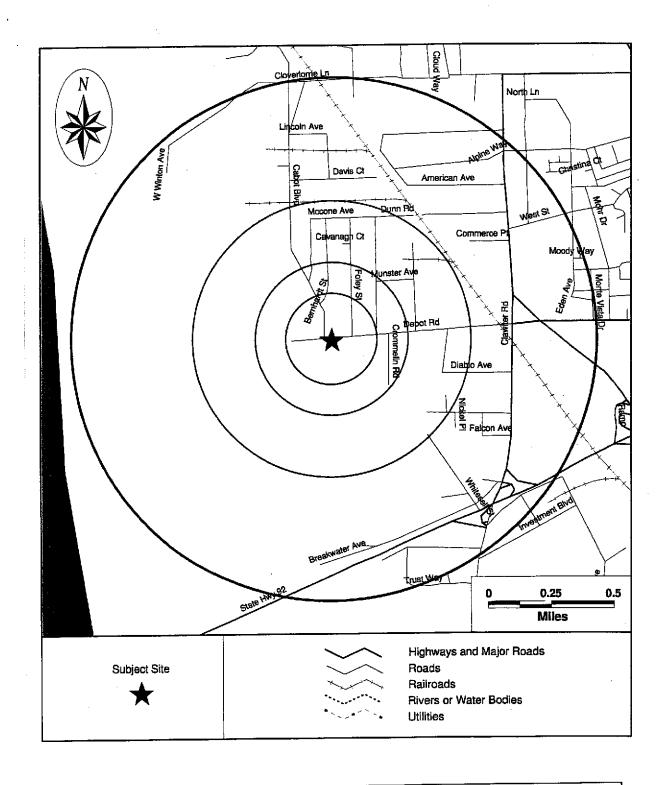


Joel G. Greger Senior Project Manager CEG # EG1633, REA # 07079



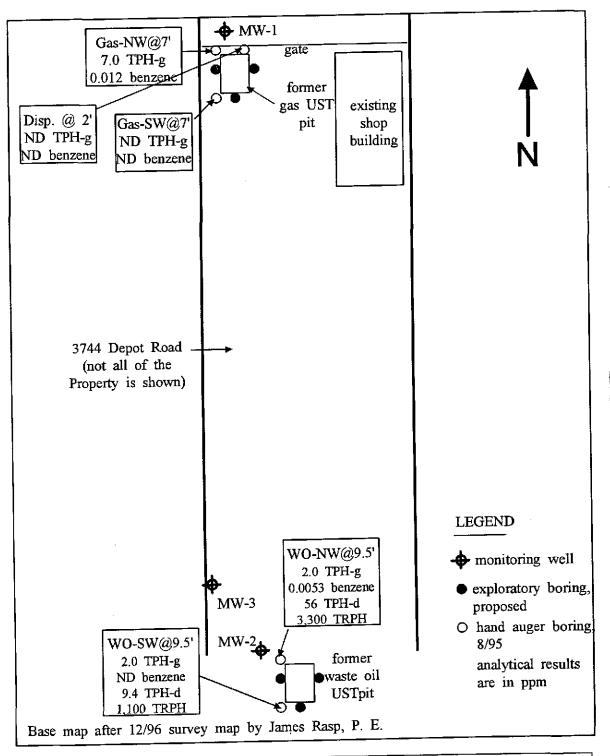
Kay Pannell Chief Operations Officer REP #5800, REA-II #20236

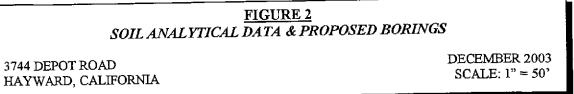
Attachments
Figures 1, 2, and 3
Tables 1, 1A, 1B, 1C
Tables 2 and 2B
Table 3
Table 4
Tables 5 and 5A

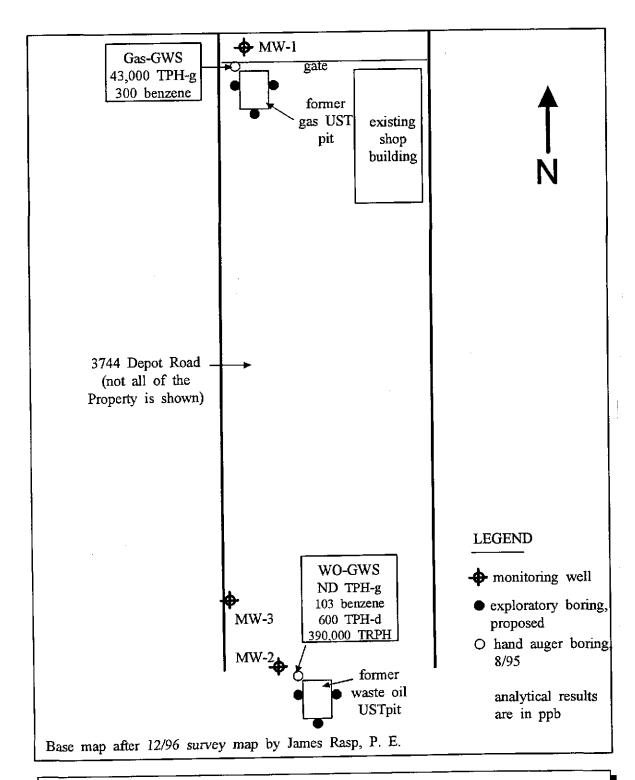


## FIGURE 1 SITE VICINITY MAP

3744 DEPOT ROAD HAYWARD, CALIFORNIA NOVEMBER 2003 NOT TO SCALE







# FIGURE 3 GRAB WATER ANALYTICAL DATA & PROPOSED BORINGS

3744 DEPOT ROAD HAYWARD, CALIFORNIA DECEMBER 2003 SCALE: 1" = 50'

TABLE 1
Laboratory Analytical Results
3744 Depot Road, Hayward, CA
Sample Date: 08/29/95

Sample No.	Depth	Matrix/units	TPHG	TPHD	TRPH	Benzene	Toluene	e Ethylbenzene	Xylenes (Total)	Volatile Organics* EPA Method 8240	Semivolatile Organics ** EPA Method 8270
B9593, GAS-SQ@7	7 ft	SOIL/mg/kg	ND	ND	ND	ND	ND	0.014	ND	ND	ND
B9594, GAS-NW@7	7 ft	SOIL/mg/kg	7.0	ND	ND	0.012	0.014	0.089	1.0	ND	ND
B9595, GAS-GWS		WATER/ug/I	43,000	ND	ND	300	360	1,400	10,000	ND	ND
B9596, DISP@2	2 ft	SOIL/mg/kg	ND	ND	ND	ND	ND	ND	0.073	ND	ND
B9597,WO-SW@7	7ft	SOIL/mg/kg	2	9.4	1,100	0.0091	ND	ND	ND	9.1*	ND
B9598, WO-NW@9.5	9.5 ft	SOIL/mg/kg	2	56	3,300	0.063	0.0093	0.171	0.055	396.3*	2,795**
B9599, WO-GWS		WATER/ug/l	ND	600	390	103	ND	17	21	141*	57**
B9600, MW1-GWS	_	WATER/ug/I	ND	ND	2.9	ND	ND	ND	ND	ND	ND

mg/kg = milligrams per kilograms

ug/l = micrograms per liter

TPHG = Total Petroleum Hydrocarbons as gasoline

TPHD = Total Petroleum Hydrocarbons as diesel

TRPH = Total Recoverable Petroleum Hydrocarbons, by EPA 418.1

TPHG analyzed by EPA Method 8015M BTEX analyzed by EPA Method 8020

<sup>\*</sup> Breakdown of individual constituents is presented in Table 1A

<sup>\*\*</sup> Breakdown of individual constituents is presented in Table 1B

**TABLE 1A** 

# Laboratory Analytical Results - EPA METHOD 8240 3744 Depot Road, Hayward, CA

Sample Date: 08/30/95

Sample No.	Depth	Matrix/units	Acetone	Benzene	Toluene	Ethylbenzene	Xylenes (Total)
B9593, GAS-SQ@7	7 ft	SOIL/ug/kg	ND	ND	ND	ND	ND
B9594, GAS-NW@7	7 ft	SOIL/ug/kg	ND	ND	ND	ND	ND
B9595, GAS-GWS		WATER/ug/I	ND	ND	ND	ND	ND
B9596, DISP@2	2 ft	SOIL/ug/kg	ND	ND	ND	ND	ND
B9597,WO-SW@7	7ft	SOIL/ug/kg	ND	ND	ND	ND	ND
B9598, WO-NW@9.5	9.5 ft	SOIL/ug/kg	98	5.3	6	110	40
B9599, WO-GWS		WATER/ug/I	ND	103	ND	17	21
B9600, MW1-GWS		WATER/ug/I	ND	ND	ND	ND	ND

ND = not detected ug/kg = micrograms per kilogram ug/L = micrograms per liter

# TABLE 1B Laboratory Analytical Results - EPA METHOD 8270 3744 Depot Road, Hayward, CA Sample Date: 08/30/95

Sample No.	Depth	Matrix / units	Naphthalene	2-Methyl naphthalene	bis(2- Ethylhexyl) phthalate
B9593, GAS-SQ@7	7 ft	SOILug/kg	ND	ND	ND
B9594, GAS-NW@7	7 ft	SOILug/kg	ND	ND	ND
B9595, GAS-GWS		WATER/ ug/L	ND	ND	ND
B9596, DISP@2	2 ft	SOILug/kg	ND	ND	ND
B9597,WO-SW@7	7ft	SOlLug/kg	ND	ND	ND
B9598, WO-NW@9.5	9.5 ft	SOILug/kg	825	1970	ND
B9599, WO-GWS		WATER/ ug/L	23	18	16
B9600, MW1-GWS		WATER/ ug/L	ND	ND	ND

ND= not detected ug/kg = microgram per kilogram ug/L = microgram per liter

## TABLE 1C Laboratory Analytical Results - METALS 3744 Depot Road, Hayward, CA Sample Date: 08/30/95

Sample No.	Depth	Matrix/units	Cadmium	Chromium	Lead	Nickel	Zinc
B9593, GAS-SQ@7	7 ft	SOIL/mg/kg	NR	NR	NR	NR	NR
B9594, GAS-NW@7	7 ft	SOIL/mg/kg	NR	NR	NR	NR	NR
B9595, GAS-GWS		WATER/mg/L	NR	NR	NR	NR	NR
B9596, DISP@2	2 ft	SOIL/mg/kg	NR	NR	NR	NR	NR
B9597,WO-SW@7	7ft	SOIL/mg/kg	ND	24	11	36	37
B9598, WO-NW@9.5	9.5 ft	SOIL/mg/kg	ND	27	12	43	34
B9599, WO-GWS		WATER/mg/L	ND	ND	ND	0.085	ND
B9600, MW1-GWS		WATER/mg/L	ND	ND	ND	ND	ND

ND = not detected

NR = not run

mg/L = milligrams per Liter

mg/kg = milligrams per kilogram

TABLE 2 Laboratory Analytical Results 3744 Depot Road, Hayward, CA Sample Date: 10/28/96 - 11/26/96

Sample No.	Depth in feet	Matrix / units	TPHG	TPHD	TRPH	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Volatile Organics* EPA Method 8240	Semivolatile Organics ** EPA Method 8270
C15405, MW1@5.5	5.5	SOIL/mg/kg	ND	ND	ND	ND	NĎ	ND	ND	ND	ND
C15406, MW2@5.5	5.5	SOIL/mg/kg	ND	ND	52	ND	ND	ND	ND	ND	ND
C16580, MW #1		WATER/ug/I	ND	ND	ND	ND	ND	ND	ND	ND	ND
C16581, MW #2		WATER/ug/I	ND	ND	ND	ND	ND	ND	ND	ND	32
C16582, NW #3		WATER/ug/l	ND	ND	ND	ND	ND	ND	ND	NA	NA

mg/kg = milligrams per kilograms

ug/l = micrograms per liter

TPHG = Total Petroleum Hydrocarbons as gasoline

TPHD = Total Petroleum Hydrocarbons as diesel

TRPH = Total Recoverable Petroleum Hydrocarbons, by EPA 418.1

NA = not detected

TPHG analyzed by EPA Method 8015M

BTEX analyzed by EPA Method 8020

<sup>\*</sup> Breakdown of individual constituents is presented in Table 2A

<sup>\*\*</sup> Breakdown of individual constituents is presented in Table 2B

TABLE 2B
Laboratory Analytical Results - EPA METHOD 8270
3744 Depot Road, Hayward, CA
Sample Date: 11/26/96

Sample No.	Depth	Matrix / units	Naphthalene	2-Methyl naphthalene	bis(2- Ethylhexyl) phthalate	Di-n- butylphthalate
C15405, MW1@5.5	5.5	SOIL/mg/kg	ND	ND	ND	ND
C15406, MW2@5.5	5.5	SOIL/mg/kg	ND	ND	ND	ND
C16580, MW #1		WATER/ug/I	ND	ND	ND	ND
C16581, MW #2		WATER/ug/I	ND	ND	ND	32
C16582, NW #3		WATER/ug/I	ND	ND	ND	ND

ND= not detected ug/kg = microgram per kilogram ug/L = microgram per liter

TABLE 3
Laboratory Analytical Results
3744 Depot Road, Hayward, CA
Sample Date: 04/29/97

Sample No.	Depth in Matrix / units feet	TPHG	TPHD	TRPH	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Organics* EPA	Semivolatile Organics ** EPA Method 8270
D7444, MW1	WATER/ug/l	ND	NA	ND	ND	ND	ND	ND	NA	NA
D744 <u>5, MW</u> 2	WATER/ug/l	ND	NA	ND	ND	ND	ND	ND	ND	ND

mg/kg = milligrams per kilograms

ug/l = micrograms per liter

TPHG = Total Petroleum Hydrocarbons as gasoline

TPHD = Total Petroleum Hydrocarbons as diesel

TRPH = Total Recoverable Petroleum Hydrocarbons, by EPA 418.1

NA = not analyzed

TPHG analyzed by EPA Method 8015M BTEX analyzed by EPA Method 8020

<sup>\*</sup> Breakdown of individual constituents is presented in Table 3A

<sup>\*\*</sup> Breakdown of individual constituents is presented in Table 3B

TABLE 4
Laboratory Analytical Results
3744 Depot Road, Hayward, CA
Sample Date: 11/09/98

Sample No.	Depth in fee	t Matrix / units	O&G	TSS	TOC	рΗ	Conductivity	Aluminum	iron	Lead
E20098	Front Drain	WATER/mg/l	9.1	53	44	7.4	270	0.39	0.33	ND

ND = not detected mg/l = milligrams per liter

Conductivity units are umhos/cm

O&G = total oil & grease

TSS = total suspended solids

TOC = total organic carbon

pH = acidity

TABLE 5
Laboratory Analytical Results
3744 Depot Road, Hayward, CA
Sample Date: 03/30/99

Sample No.	Depth Matrix / in feet units	TPHG	TPHD	TRPH	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Volatile Organics* EPA Method 8240	Semivolatile Organics ** EPA Method 8270
G8558, MW1	WATER/ug/I	ND	NA	NA	ND	ND	ND	ND	ND	NA	NA
G8559, MW2	WATER/ug/I	ND	ND	ND	ND	ND	ND	ND	9.3	(see Table 5A)	ND

mg/kg = milligrams per kilograms

ug/l = micrograms per liter

TPHG = Total Petroleum Hydrocarbons as gasoline

TPHD = Total Petroleum Hydrocarbons as diesel

TRPH = Total Recoverable Petroleum Hydrocarbons, by EPA 418.1

NA = not detected

TPHG analyzed by EPA Method 8015M

BTEX analyzed by EPA Method 8020

MTBE = Methyl-tertiary-Butyl-Ether

\* Breakdown of individual constituents is presented in Table 5A

<sup>\*\*</sup> Breakdown of individual constituents is presented in Table 5B

# TABLE 5A Laboratory Analytical Results - EPA METHOD 8240 3744 Depot Road, Hayward, CA Sample Date: 03/30/99

Sample No.	Depth Ma	atrix/units	Acetone	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	Bromo dichloro methane	Dibromo chloro methane
MW1	wa	iter/ug/l	ND	ND	ND	ND	ND	NA	NA
MW2	wa	iter/ug/i	ND	NĐ	ND	ND	ND	5.5	8.4

NA = not analyzed

ND = not detected

ug/kg = micrograms per kilogram

ug/l = micrograms per liter