



Miller Environmental Company, Inc.

Engineering • Geology • Construction

January 30, 1992

Alameda County Department of Environmental Health  
Hazardous Materials Division  
80 Swan Way, #200  
Oakland, CA 94621

Attn: Susan Hugo

Re: Sample Results for Barbara Fisher, 4218 West St.,  
Oakland, CA

Dear Ms. Hugo:

The following report outlines work performed by Miller Environmental Company (MEC) at 3838 West St. in Oakland. Results of our investigation are presented along with recommendations based on these results. The scope of work included collecting three soil samples and one water sample following the removal of a 550 gallon underground storage tank (UST) from the property mentioned above.

#### INTRODUCTION

On January 8, 1992 personnel from MEC were present at 3838 West St. for the removal of a 550 gallon UST which had previously stored gasoline. The exact location of the product piping was unknown because the lot had been repaved since the installation of the tank. MEC removed as much piping as possible and then capped the remaining pipes at the locations where they led into the excavation pit. The removal of the tank was observed by Susan Hugo from the Alameda County Health Care Services Agency (ACHCSA).

#### TANK REMOVAL

Before removing the UST, which had not been in service for approximately 20 years, it was obvious by visual inspection that the tank was affected by holes, pitting, and corrosion. Holes were also observed on the bottom of the tank when it was removed from the ground. At the time of removal, the tank was filled with water which was pumped out by H&H Environmental Services. Approximately 650 gallons of water

Tank Removal Report for Barbara Fisher  
3838 West Street, Oakland, CA

were pumped out of the tank and excavation pit. The Uniform Hazardous Waste Manifest is attached to this report. When the UST was pulled out of the ground, a smaller tank attached to the bottom was noticed which was, in addition to the bottom of the 550-gallon tank, covered with a black sludge. MEC believes that the small tank may have been a sludge collector. Ground water, which appeared to have a sheen, was encountered in the tank excavation pit. There was also a strong hydrocarbon odor at the site during the time of removal. Soil discoloration seemed apparent in the excavation pit which appeared to be comprised of a combination of sand and clay soils. The soil was black in the upper northwest corner of the hole and dark gray at the bottom of the hole near the surface of the ground water.

#### **SOIL AND WATER SAMPLING**

At the direction of the inspector from ACHCSA, three soil samples and one water sample were collected from the site. A generalized site plan showing soil sampling locations is shown on Figure 1. Two samples (1 & 2) were collected from the native soil and one sample (SP1) was collected as a composite sample from the stockpiled soil. A backhoe bucket was used to retrieve the native soil to be sampled from the soil/ground water interface in the excavation pit. The samples were collected by driving clean 2" x 6" brass tubes into the soil in the backhoe bucket. The laboratory composite sample was comprised of four discrete soil samples which were collected from different locations and depths in the stockpiled soil. In addition, one sample (EXW1) was collected from the groundwater encountered in the tank excavation pit. The water sample was collected using a disposable bailer and 40 ml VOA bottles.

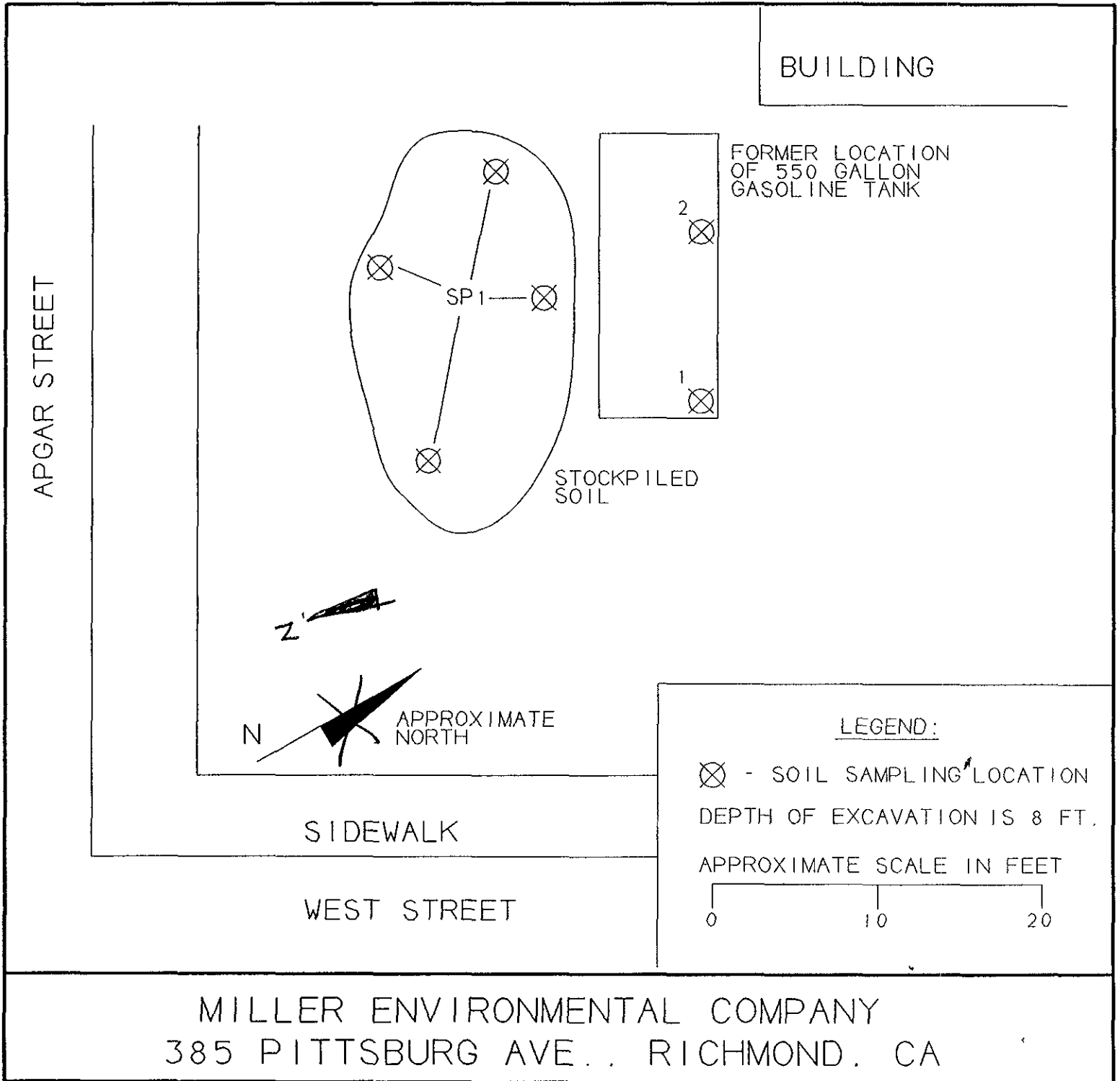
#### Laboratory analyses

Soil samples collected from beneath the former gasoline UST and the spoils pile generated during excavation of the former gasoline tank were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH/gas), benzene, toluene, ethylbenzene and xylene (BTEX), and total lead. The laboratory method used by National Environmental Testing (NET), a state certified laboratory, was EPA method 5030 for TPH/gas, method 8020 for BTEX, and method 7421 for lead. The ground water sample was also analyzed for TPH/gas and BTEX by the same EPA methods mentioned above.

#### Laboratory results

For ease of reference, Table 1 on page 3 provides a summary of laboratory results for TPH/gas, BTEX, and total lead for both the soil and ground water samples.

FIGURE 1. - SOIL SAMPLE LOCATIONS  
B. FISHER, 3838 WEST ST., OAKLAND, CA



Tank Removal Report for Barbara Fisher  
3838 West Street, Oakland, CA

**TABLE 1**  
Laboratory results for soil and water samples  
collected following tank removal

Samp #	Depth in feet	TPH gas	Total Lead	B	T	E	X
1	8'	ND	13	ND	ND	ND	ND
2	8'	ND	21	ND	ND	ND	ND
SP1	XX	4.3	32	ND	16	18	48
EXWL <i>Water</i>	XX	16	NA	ND	ND	ND	420

- a) ND = not detected
- b) NA = not analyzed
- c) XX = no depth available: soil sample was composited in the laboratory from four soil samples collected at various locations and depths in the spoils pile and water sample was collected from the ground water encountered in the excavation pit.
- d) Sample results for TPH/gas and total lead are expressed in milligrams per kilogram (mg/kg) which is equivalent to parts per million (ppm).
- e) Sample results for BTEX are expressed in micrograms per kilogram (ug/kg) which is equivalent to parts per billion (ppb).
- f) Detection limits were:
 

Soil:	Ground Water:
TPH/gas - 1 ppm	TPH/gas - 0.05 ppm
Benzene - 2.5 ppb	Benzene - 0.5 ppb
Toluene - 2.5 ppb	Toluene - 0.5 ppb
Ethylbenzene - 2.5 ppb	Ethylbenzene - 0.5 ppb
Xylene - 2.5 ppb	Xylene - 0.5 ppb
Lead - 0.2 ppm	

**DISCUSSION**

Soil samples (1 & 2) collected from soil-water interface near the bottom of the excavation pit showed no detectable levels of TPH/gas and BTEX and a level of lead below the designated action level. The spoils pile sample (SP1) generated during excavation and removal of the former 550 gal. gasoline tank contained low levels of lead, TPH/gas, ethylbenzene, toluene, and xylenes. The stockpiled soil contained no laboratory detectable level of benzene. The ground water sample also contained levels of TPH/gas and xylenes which were below the recommended drinking water action levels set by the State of California Department of Health Services. Benzene, ethylbenzene, and toluene were not detected in the ground water.

Tank Removal Report for Barbara Fisher  
3838 West Street, Oakland, CA

**CONCLUSIONS**

From examining the laboratory results, it appears that the native soil on the property contains no hydrocarbon contaminants and a level of lead which is below the designated action level. Hydrocarbons were detected in the stockpiled soil at low levels with the level of benzene being non-detect. In addition, low levels of TPH/gas and xylenes were detected in the ground water sample at concentrations below the recommended action levels. Although there were holes in the tank, it was not in use for approximately 20 years, therefore natural bioremediation may have "cleaned" any soil contamination present.

**RECOMMENDATIONS**

MEC recommends that the stockpiled soil be removed from the site and transported to a class III landfill and that the excavation pit be backfilled with clean fill. Because a release of low levels of hydrocarbon contaminants to the ground water has occurred, the Regional Water Quality Control Board (RWQCB) may require a ground water monitoring well within ten feet of the release in the verified downgradient direction. If on-site ground water flow direction can not be verified, three ground water monitoring wells may be necessary to determine ground water flow direction.

An unauthorized release report should be filed with the appropriate agencies. MEC has completed an unauthorized release report and has enclosed it for your review and distribution to the proper agencies.

**WARRANTY**

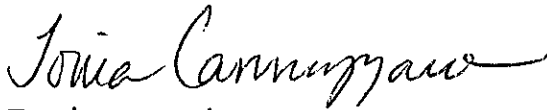
Miller Environmental Company warrants all services to be of high professional quality. No other warranty, either expressed or implied, as to the quality or result to be achieved as a consequence of this work, is made.

This report provides an assessment of potential hazardous waste contamination based on limited sampling, analyses, and on-site observations. This report represents a professional opinion based upon conditions and information made available to Miller Environmental Company to date. Reports do not purport to identify all problems or to indicate that other hazards do not exist. No responsibility is assumed for the correction of conditions or practices existing at the premises of site. Data available from future subsurface exploration may modify the conclusions and recommendations of this report.

Tank Removal Report for Barbara Fisher  
3838 West Street, Oakland, CA

If you have any questions please do not hesitate to call me.

Sincerely,



Tonia Cannizzaro  
Environmental Engineer

Enc: Laboratory Results  
Unauthorized Release Report  
Hazardous Waste Manifest

cc: Ms. Barbara Fisher, Site Owner  
file



®

NATIONAL  
ENVIRONMENTAL  
TESTING, INC.

NET Pacific, Inc.  
435 Tesconi Circle  
Santa Rosa, CA 95401  
Tel: (707) 526-7200  
Fax: (707) 526-9623

RECEIVED

JAN 28 1992

MILLER ENVIRONMENTAL CO.

Reinhard Ruhmke  
Miller Environmental  
385 Pittsburg Ave.  
Richmond, CA 94801

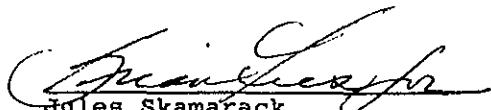
Date: 01/23/1992  
NET Client Acct. No: 78800  
NET Pacific Log No: 92.0054  
Received: 01/10/1992

Client Reference Information

Barbara Fisher

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

  
Jules Skamarack  
Laboratory Manager

Enclosure(s)



Client Acct: 78800  
 Client Name: Miller Environmental  
 NET Log No: 92.0054

Date: 01/23/1992  
 Page: 2

NET Pacific, Inc.

Ref: Barbara Fisher

SAMPLE DESCRIPTION: 1 West End of Tank  
 Date Taken: 01/08/1992  
 Time Taken:  
 LAB Job No: (-110630 )

Parameter	Method	Reporting Limit	Results	Units
Lead	EPA 7421	0.2	13	mg/Kg
TPH (Gas/BTXE, Solid)				
METHOD 5030 (GC, FID)			--	
DATE ANALYZED			01-15-92	
DILUTION FACTOR*			1	
as Gasoline		1	ND	mg/Kg
METHOD 8020 (GC, Solid)			--	
DATE ANALYZED			01-15-92	
DILUTION FACTOR*			1	
Benzene		2.5	ND	ug/Kg
Ethylbenzene		2.5	ND	ug/Kg
Toluene		2.5	ND	ug/Kg
Xylenes (Total)		2.5	ND	ug/Kg





Client Acct: 78800  
 Client Name: Miller Environmental  
 NET Log No: 92.0054

Date: 01/23/1992  
 Page: 3

NET Pacific, Inc.

Ref: Barbara Fisher

SAMPLE DESCRIPTION: 2 East End of Tank  
 Date Taken: 01/08/1992  
 Time Taken:  
 LAB Job No: (-110631 )

Parameter	Method	Reporting Limit	Results	Units
Lead	EPA 7421	0.2	21	mg/Kg
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			01-17-92	
DILUTION FACTOR*			1	
as Gasoline		1	ND	mg/Kg
METHOD 8020 (GC,Solid)			--	
DATE ANALYZED			01-17-92	
DILUTION FACTOR*			1	
Benzene		2.5	ND	ug/Kg
Ethylbenzene		2.5	ND	ug/Kg
Toluene		2.5	ND	ug/Kg
Xylenes (Total)		2.5	ND	ug/Kg



Client Acct: 78800  
 Client Name: Miller Environmental  
 NET Log No: 92.0054

Date: 01/23/1992  
 Page: 4

NET Pacific, Inc.

Ref: Barbara Fisher

SAMPLE DESCRIPTION: SP1 comp  
 Date Taken: 01/08/1992  
 Time Taken:  
 LAB Job No: (-110632 )

Parameter	Method	Reporting Limit	Results	Units
Lead	EPA 7421	0.2	32	mg/Kg
TPH (Gas/BTXE,Solid)				
METHOD 5030 (GC,FID)				
DATE ANALYZED			01-15-92	
DILUTION FACTOR*			1	
as Gasoline			4.3	mg/Kg
METHOD 8020 (GC,Solid)				
DATE ANALYZED			01-15-92	
DILUTION FACTOR*			1	
Benzene		2.5	ND	ug/Kg
Ethylbenzene		2.5	18	ug/Kg
Toluene		2.5	16	ug/Kg
Xylenes (Total)		2.5	48	ug/Kg



Client Acct: 78800  
 Client Name: Miller Environmental  
 NET Log No: 92.0054

Date: 01/23/1992  
 Page: 5

NET Pacific, Inc.

Ref: Barbara Fisher

SAMPLE DESCRIPTION: EXW1  
 Date Taken: 01/08/1992  
 Time Taken:  
 LAB Job No: (-110633 )

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			01-16-92	
DILUTION FACTOR*			10	
as Gasoline		0.05	16	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			01-16-92	
DILUTION FACTOR*			10	
Benzene		0.5	ND	ug/L
Ethylbenzene		0.5	ND	ug/L
Toluene		0.5	ND	ug/L
Xylenes (Total)		0.5	420	ug/L



Client Acct: 78800  
Client Name: Miller Environmental  
NET Log No: 92.0054

Date: 01/23/1992  
Page: 6

NET Pacific, Inc.

Ref: Barbara Fisher

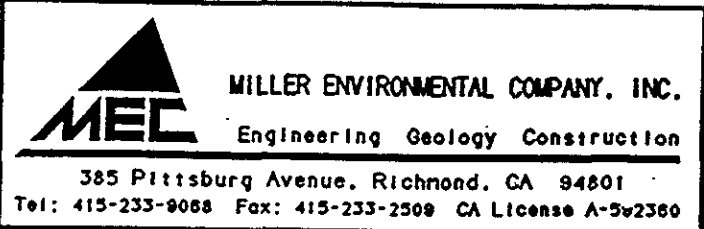
QUALITY CONTROL DATA

<u>Parameter</u>	<u>Reporting Limits</u>	<u>Units</u>	<u>Cal Verif Stand % Recovery</u>	<u>Blank Data</u>	<u>Spike % Recovery</u>	<u>Duplicate Spike % Recovery</u>	<u>RPD</u>
Lead	0.2	mg/Kg	105	ND	117	117	< 1
Gasoline	1.0	mg/Kg	107	ND	91	90	1.3
Benzene	2.5	ug/Kg	94	ND	89	92	2.9
Toluene	2.5	ug/Kg	96	ND	92	91	< 1
Gasoline	1.0	mg/Kg	108	ND	101	95	6.1
Benzene	2.5	ug/Kg	96	ND	112	93	19
Toluene	2.5	ug/Kg	100	ND	98	100	2.0
Gasoline	1.0	mg/Kg	106	ND	101	105	3.9
Benzene	2.5	ug/Kg	115	ND	96	98	2.1
Toluene	2.5	ug/Kg	113	ND	97	100	3.0

COMMENT: Blank Results were ND on other analytes tested.

# Sample Analysis Request / Chain of Custody

3215



JOB NAME: **BARBARA FISHER**

JOB NUMBER: **91-0019** P.O. Number:

Samplers: *Tonia Cannigano*

Sample I.D.	Date	Time	Comp.	Grab	Location	No. of Containers	Matrix	ANALYSES					Turn Around Time	
								TPH as Gasoline	BTXE	TPH as Diesel	TOTAL LEAD			
1	1/8/92			✓	WEST END OF TANK	1	SOIL	✓	✓		✓			10 day
2	1/8/92			✓	EAST END OF TANK	1	SOIL	✓	✓		✓			10 day
SP1*	1/8/92			✓	SPOILS PILE	4	SOIL	✓	✓		✓			10 day
EXW1	1/8/92			✓	WATER IN EXCAVATION	2	WATER	✓	✓					10 day
<p><b>CHAIN OF CUSTODY SEALED 1/9/92</b></p> <p>© 1900 <i>MUT</i></p>														

Relinquished By (Signature)	Date	Time	Accepted By (Signature)
<i>Tonia Cannigano</i>	1/9/92	1155 AM	1 <i>Mike Tucci</i>
2 <i>Mike Tucci</i>	1/9/92	1900	2
3 <i>(signature)</i>	1/10/92	0800	3 <i>(signature)</i>

Laboratory Name & Address: **NET**

REMARKS: *\* Lab Composite of SP1 - SP4 into SP1*

Please print or type. Form designed for use on elite (12-pitch typewriter).

91511539

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <b>C A C 0 0 0 7 0 1 2 4 0</b>		Manifest Document No. <b>0 0 0 0 2</b>		2 Page 1 of 1		Information in the shaded areas is not required by Federal law.																																										
<b>BARBARA FISHER</b> Generator's Mailing Address <b>4218 West Street, Oakland, CA. 94608</b> 4. Generator's Phone (510) 652-4265					A. State Manifest Document Number <b>91511539</b> B. State Generator's ID C. State Transporter's ID <b>200501</b> D. Transporter's Phone <b>(415) 543-4835</b> E. State Transporter's ID F. Transporter's Phone <b>(415) 543-4835</b> G. State Facility's ID <b>C A D 0 0 4 7 7 1 1 6 8</b> H. Facility's Phone <b>(415) 543-4835</b>																																													
5. Transporter 1 Company Name <b>H &amp; H Ship Service Company</b>			6. US EPA ID Number <b>C A D 0 0 4 7 7 1 1 6 8</b>			7. Transporter 2 Company Name			8. US EPA ID Number																																									
9. Designated Facility Name and Site Address <b>H &amp; H Ship Service Company 220 China Basin Street San Francisco, CA 94107</b>						10. US EPA ID Number <b>C A D 0 0 4 7 7 1 1 6 8</b>																																												
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)																																																		
<table border="1"> <thead> <tr> <th rowspan="2">a.</th> <th colspan="2">12. Containers</th> <th rowspan="2">13. Total Quantity</th> <th rowspan="2">14. Unit Wt/Vol</th> <th colspan="2">1. Waste Number</th> </tr> <tr> <th>No.</th> <th>Type</th> <th>State</th> <th>EPA/Other</th> </tr> </thead> <tbody> <tr> <td><b>RESIDUE GASOLINE TANK NON-RCRA HAZARDOUS WASTE SOLID</b></td> <td><b>0 0 1</b></td> <td><b>T P</b></td> <td><b>0 0 5 5 0</b></td> <td><b>P</b></td> <td><b>512</b></td> <td></td> </tr> <tr> <td>b.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>c.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>d.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												a.	12. Containers		13. Total Quantity	14. Unit Wt/Vol	1. Waste Number		No.	Type	State	EPA/Other	<b>RESIDUE GASOLINE TANK NON-RCRA HAZARDOUS WASTE SOLID</b>	<b>0 0 1</b>	<b>T P</b>	<b>0 0 5 5 0</b>	<b>P</b>	<b>512</b>		b.							c.							d.						
a.	12. Containers		13. Total Quantity	14. Unit Wt/Vol	1. Waste Number																																													
	No.	Type			State	EPA/Other																																												
<b>RESIDUE GASOLINE TANK NON-RCRA HAZARDOUS WASTE SOLID</b>	<b>0 0 1</b>	<b>T P</b>	<b>0 0 5 5 0</b>	<b>P</b>	<b>512</b>																																													
b.																																																		
c.																																																		
d.																																																		
J. Additional Descriptions for Materials Listed Above <b>EMPTY 550 gallon tank last containing gasoline. Tank inserted with dry ice for transport. PROFILE #A1494</b>						K. Handling Codes for Wastes Listed Above																																												
15. Special Handling Instructions and Additional Information <b>JOB #9880</b> <b>24 Hr. Emergency Contact: H &amp; H #(415) 543-4835</b> <b>APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR</b>						<b>JOB SITE: BARBARA FISHER 3838 West Street Oakland, California</b>																																												
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.																																																		
Printed/Typed Name <b>Gene Haynes</b>				Signature <i>Gene Haynes</i>				Month Day Year <b>0 1   0 8   9 2</b>																																										
17. Transporter 1 Acknowledgement of Receipt of Materials																																																		
Printed/Typed Name <b>WAYMON H. MC DONALD</b>				Signature <i>Waymon H. McDonald</i>				Month Day Year <b>0 1   0 8   9 2</b>																																										
18. Transporter 2 Acknowledgement of Receipt of Materials																																																		
Printed/Typed Name				Signature				Month Day Year																																										
19. Discrepancy Indication Space																																																		
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.																																																		
Printed/Typed Name				Signature				Month Day Year																																										

DO NOT WRITE BELOW THIS LINE.

Please print or type. Form designed for use on elite (12-pitch typewriter).

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. C1A1C10101017101121410		Manifest Document No 010101011		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address <b>BARBARA FISHER</b> 4218 West Street, Oakland, CA. 94608						A. State Manifest Document Number <b>91511537</b>							
4. Generator's Phone (510) 652-4265						B. State Generator's ID							
5. Transporter 1 Company Name <b>H &amp; H Ship Service Company</b>			6. US EPA ID Number C1A1D1010147171111618			C. State Transporter's ID <b>200545</b>		D. Transporter's Phone <b>(415) 543-4835</b>					
7. Transporter 2 Company Name			8. US EPA ID Number			E. State Transporter's ID		F. Transporter's Phone					
9. Designated Facility Name and Site Address <b>H &amp; H Ship Service Company</b> 220 China Basin Street San Francisco, CA 94107						10. US EPA ID Number C1A1D1010147171111618							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		15. Waste Number	
a. <b>OIL AND WATER</b> <b>NON-RCRA HAZARDOUS WASTE LIQUID</b>						0 0 1 T T		0 0 6 5 0		G		State 134 241 EPA/Other	
b.												State EPA/Other	
c.												State EPA/Other	
d.												State EPA/Other	
J. Additional Descriptions for Materials Listed Above <b>FUEL, OIL AND WATER</b> <b>PROFILE #A1495</b>						K. Handling Codes for Wastes Listed Above a. <b>01</b> b. c. d.							
15. Special Handling Instructions and Additional Information <b>JOB #9893</b> <b>24 Hr. Emergency Contact: H &amp; H #(415) 543-4835</b> <b>APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATOR</b> <b>JOB SITE: BARBARA FISHER</b> <b>3838 West Street</b> <b>Oakland, California</b>													
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.													
Printed/Typed Name <b>GENE HAYNES</b>				Signature 				Month Day Year 0 1 10   8   9   2					
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <b>JAMES R. MORGAN</b>				Signature 				Month Day Year 0 1 10   8   9   2					
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name				Signature				Month Day Year					
19. Discrepancy Indication Space													
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name													
Signature				Month Day Year									

DO NOT WRITE BELOW THIS LINE.