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UNDERGROUND STORAGE TANK REMOVAL CLOSURE REPORT FACILITY ID # 0-791673  
MILLINGTON SUPPACT TN  
2/1/1994  
MURPHY ENVIRONMENTAL SERVICES, INC.

**UNDERGROUND STORAGE TANK REMOVAL  
CLOSURE REPORT**

**FOR**

**NAVAL AIR STATION MEMPHIS  
FACILITY IDENTIFICATION NUMBER 0-791673  
MILLINGTON, TENNESSEE**

**PREPARED FOR:**

**MURPHY ENVIRONMENTAL SERVICES, INC.  
P.O. BOX 492  
SOUTHAVEN, MS 38671**

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CLOSURE REPORT**

**FOR**

**NAVAL AIR STATION MEMPHIS  
FACILITY IDENTIFICATION NUMBER 0-791673  
MILLINGTON, TENNESSEE**

**PREPARED FOR:**

**MURPHY ENVIRONMENTAL SERVICES, INC.  
P.O. BOX 492  
SOUTHAVEN, MS 38671**

**Prepared by:**

**ENVIRONMENTAL PROTECTION SYSTEMS, INC.  
4145 WILLOW LAKE BLVD.  
MEMPHIS, TN 38118**

**Project No. 05.M4213.005**

**February 1994**

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## 1.0 INTRODUCTION

Environmental Protection Systems, Inc. (EPS) was retained by Murphy Environmental Services Inc. (MESI) to assist with coordination of the removal of one 8000 gallon underground storage tank (UST) containing gasoline. The tank was located at Building 376 and south of "D" street at the Naval Air Station Memphis, Millington, Tennessee. EPS provided environmental consulting and analytical services for this effort. This report, entitled Underground Storage Tank Removal Closure Report for Naval Air Station Memphis, summarizes the tank removal activities and presents the analytical results certification for closure under the Tennessee Department of Environment and Conservation (TDEC) Underground Storage Tanks Regulations.

## 2.0 TANK LOCATION

The UST was located in a single excavation pit on the northwest side of the service building. (figure 1)

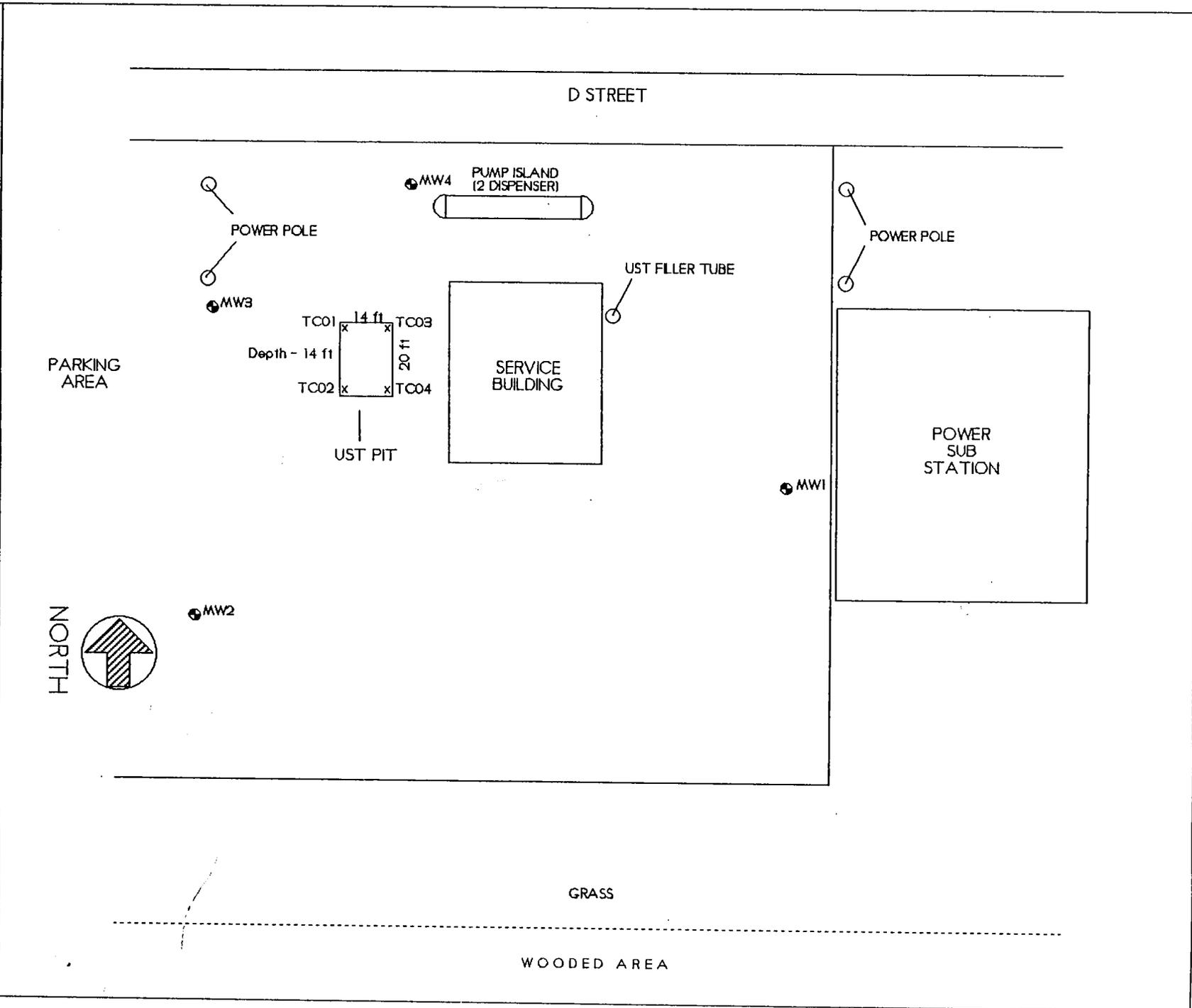
## 3.0 PRELIMINARY PROJECT ACTIVITY

### 3.1 PERMITS

TDEC has issued the facility identification number 0-791673.

The application for closure of the underground storage tank was submitted by MESI on September 23, 1993. TDEC Underground Storage Tank Division approved the application submittal on October 11, 1993.

FIGURE 1



Environmental Protection Systems  
 4145 WILLOW LAKE BLVD.  
 Memphis, Tennessee 38118  
 (901) 966-9235

MEMPHIS NAVAL AIR STATION  
 MILLINGTON, TENNESSEE  
 BUILDING 376

DRAWN BY LOUIS W. SABATER	SCALE NTS	REV.	DATE 02/09/94
------------------------------	--------------	------	------------------

### 3.2 Tank Liquid Removal

Prior to tank removal, all liquid was vacuumed from the tank and associated piping by Jim's Tank Service. The tank contents were placed into a fifty five gallon drum and disposed of at a later date by Jim's Tank Service.

## **4.0 TANK REMOVAL ACTIVITIES**

Excavation activities began on October 29, 1993. The tank area was barricaded and all underground utilities were marked. The UST was purged of explosive vapors by ventilating the UST with nitrogen and discharging the tank vapors through a stack standpipe. The tank atmosphere and ambient air in the work area were tested with a combustible gas indicator to document a less than 20% Lower Explosive Limit.

Asphalt and soil were excavated in order to fully expose the top of the UST. The excavated soils were placed adjacent to the excavation pit on 10 mil polyethylene sheeting and bermed with hay bales, which were also covered with 10 mil polyethylene sheeting.

On October 29, 1993 the 8,000 gallon gasoline tank was removed, labeled, and transported off-site by Murphy and Sons, Inc. The tank was labeled in accordance with TDEC regulations warning against reuse. The tank was cut up and sold for scrap by Murphy and Sons Inc. The excavation pit was backfilled with clean soil brought in from off-site and resurfaced with asphalt on November 1, 1993.

## **5.0 CONFIRMATORY SAMPLING**

Upon removal of the tank system, a total of five confirmatory soil samples were collected from the site. Four soil samples were collected from each corner of the open UST

excavation. An additional composite soil sample was collected from the stockpiled material. Sample locations are presented in Figure 2.

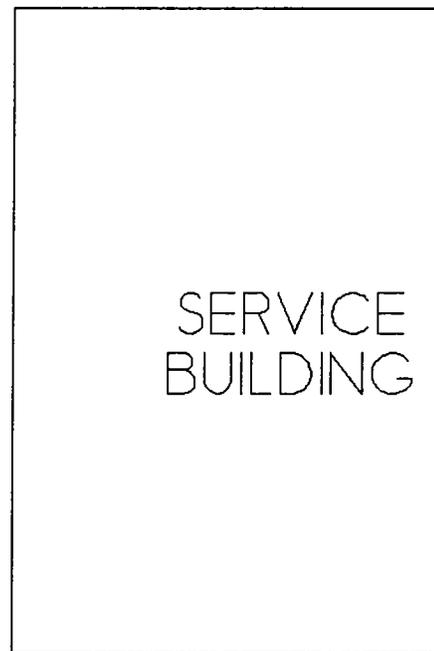
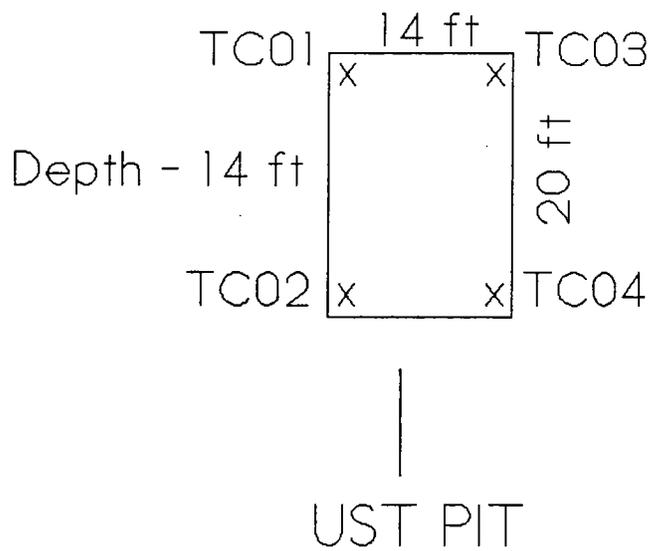
A new pair of disposable latex gloves were worn to collect the soil and transfer to a sterile 250 ml sample jar. A composite sample was also collected from several areas of the stockpiled soil and placed in a sample jar. The stockpiled soils were screened on site for organic vapors using a Foxboro Organic Vapor Analyzer Model 128. Sample locations and concentrations are depicted in Table 1 and Figure 3. Each sample jar was labeled and placed on ice in a cooler. The cooler was shipped under chain of custody procedures by Federal Express to Inchcape Testing Services, Baton Rouge, Louisiana.

## **6.0 ANALYTICAL RESULTS**

The soil samples from the excavation pit were analyzed for Lead Method SW846-7420; Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), Method SW846-8020; and Total Petroleum Hydrocarbons Gasoline (TPHG), Method SW846-8015M as required by TDEC regulations. Strict quality control procedures were followed in the laboratory. TDEC has established maximum acceptable limits for BTEX and TPH as 10 and 100mg/kg (ppm) respectively. BTEX and TPH concentrations were not exceeded in the excavation pit. The analytical results are presented in Table 2.

The soil stockpile composite sample was analyzed in accordance with Environmental Protection Agency protocol for TCLP analyses. The analytical results are summarized in Table 3.

FIGURE 2



NORTH

 <p>Environmental Protection Systems 4145 WILLOW LAKE BLVD. Memphis, Tennessee 38118 (901) 365-9235</p> <p><small>Comprehensive Environmental Services</small></p>	CONFIRMATORY SAMPLE LOCATION		REV.	DATE
	MEMPHIS NAVAL AIR STATION			02/09/94
	MILLINGTON, TENNESSEE			
	BUILDING 376	DRAWN BY LOUIS M. SABATER	SCALE NTS	

TABLE 1

NAVAL AIR STATION MEMPHIS  
MILLINGTON, TN  
FACILITY ID# 0-791673  
Stockpiled Soils

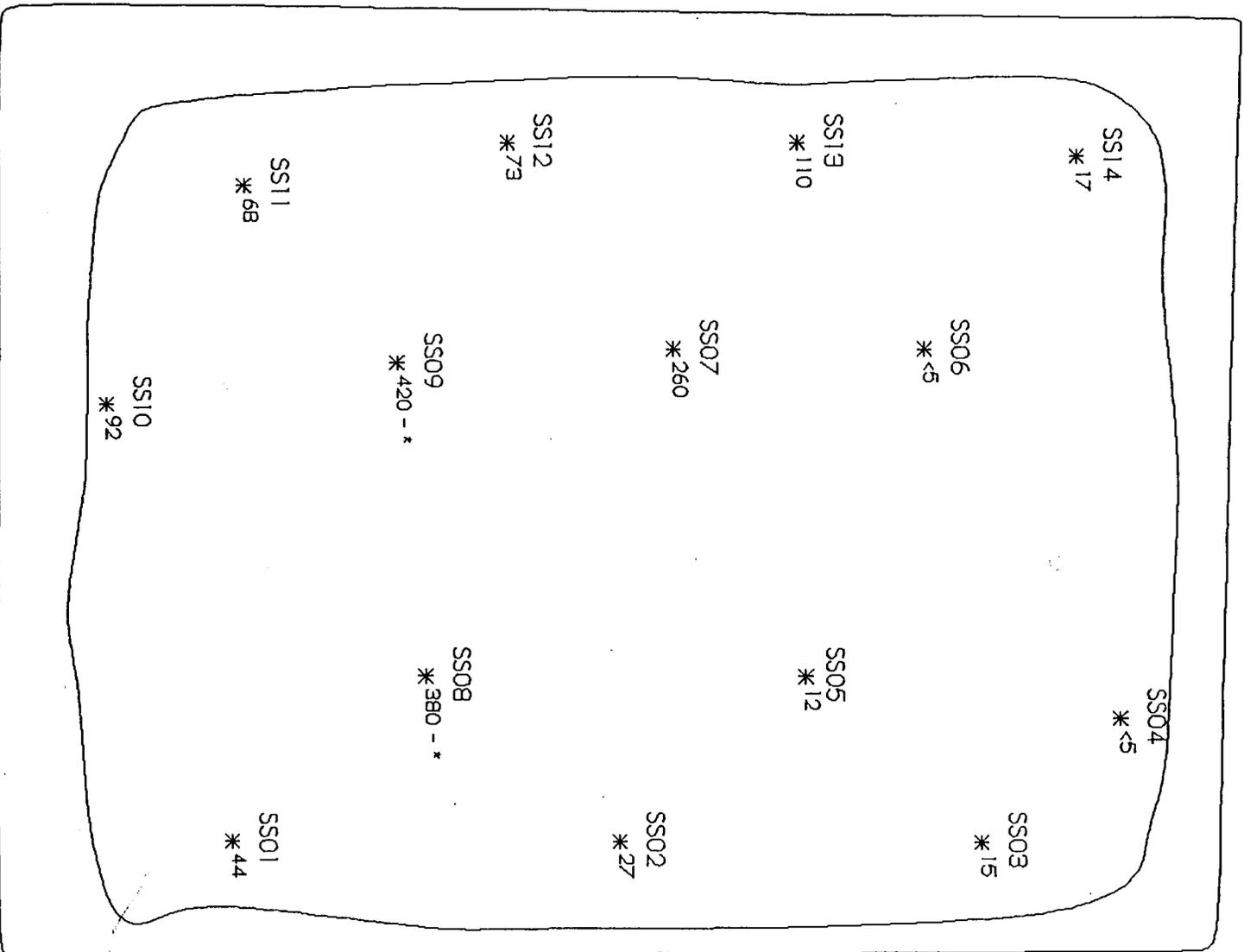
<u>Sample Date</u>	<u>Stockpiled Soil Headspace Sample #</u>	<u>OVA Readings</u>	<u>Notes</u>
10-29-93	SS01	44	
10-29-93	SS02	27	
10-29-93	SS03	15	
10-29-93	SS04	<5	
10-29-93	SS05	12	
10-29-93	SS06	<5	
10-29-93	SS07	260	
10-29-93	SS08	380	sample submitted for analysis
10-29-93	SS09	420	sample submitted for analysis
10-29-93	SS10	92	
10-29-93	SS11	68	
10-29-93	SS12	73	
10-29-93	SS13	110	
10-29-93	SS14	17	

FIGURE 3



NORTH

HAY BALE LINED STOCKPILE AREA



NOTE

- \*380 - \* SAMPLE COLLECTED FOR ANALYSIS
- \*420 - \* SAMPLE COLLECTED FOR ANALYSIS

 <p>Environmental Protection Systems 4145 WILLOW LAKE BLVD Memphis, Tennessee 38118 (901) 866-7265</p>	<p>Comprehensive Environmental Services</p>		<p>MEMPHIS NAVAL AIR STATION</p>	<p>DATE</p> <p>02/09/94</p>	
	<p>OVA FIELD SCREEN RESULTS OF STOCKPILED SOILS</p>		<p>MILLINGTON, TENNESSEE</p>	<p>REV.</p>	
	<p>BUILDING 376</p>		<p>DRAWN BY</p> <p>LOUIS W. SABATER</p>	<p>SCALE</p> <p>N.T.S.</p>	<p>REVISION</p> <p>ANT/C/OVA-RDNG.FOD</p>

TABLE 2

**NAVAL AIR STATION MEMPHIS  
MILLINGTON, TN  
FACILITY ID# 0-791673  
ANALYTICAL RESULTS SUMMARY**

<b>Sample Location</b>	<b>S102993TC01 NW Corner tank pit</b>	<b>S102993TC02 SW corner tank pit</b>	<b>S102993TC03 NE corner tank pit</b>	<b>S102993TC04 SE corner tank pit</b>
<b>Date/Time Collected</b>	10-29-93/13:00	10-29-93/13:02	10-29-93/13:07	10-29-93/13:09
<b>Lead Method 7420 mg/kg</b>	14	14	15	14
<b>Total Hydrocarbons (Gasoline) Method 8015M mg/kg</b>	< 0.100	< 0.100	< 0.100	< 0.100
<b>Benzene Method 8010 mg/kg</b>	< 0.001	< 0.001	< 0.001	< 0.001
<b>Toluene Method 8020 mg/kg</b>	< 0.001	< 0.001	0.005	< 0.001
<b>Ethylbenzene Method 8020 mg/kg</b>	< 0.001	< 0.001	0.002	< 0.001
<b>Xylenes Method 8020 mg/kg</b>	< 0.001	< 0.001	0.011	0.008

TABLE 3

**NAVAL AIR STATION MEMPHIS  
MILLINGTON, TN  
FACILITY ID# 0-791673  
TCLP ANALYTICAL RESULTS SUMMARY (SOIL STOCKPILE COMPOSITE)**

<u>SW846-8080/8150 (mg/l)</u>		<u>SW846-8260 (mg/l)</u>		<u>SW846-8270 (mg/l)</u>		<u>Metals</u>	
Chlordane	< 0.0025	Benzene	< 0.05	O-Cresol	< 0.05	SW846-6101	Arsenic mg/l < 0.2
Endrin	< 0.0005	Carbon tetrachloride	< 0.05	M,P-Cresol	< 0.05	SW846-7080	Barium mg/l 1.5
Heptachlor epoxide	< 0.0005	Chlorobenzene	< 0.05	Cresol	< 0.05	SW846-7130	Cadmium mg/l < 0.1
Heptachlor	< 0.0005	Chloroform	< 0.05	Pentachlorophenol	< 0.05	SW846-7190	Chromium mg/l < 0.05
Lindane	< 0.0005	1,2-Dichloroethane	< 0.05	2,4,5-Trichlorophenol	< 0.05	SW846-7420	Lead mg/l 0.13
Methoxychlor	< 0.0025	1,1-Dichloroethylene	< 0.05	2,4,6-Trichlorophenol	< 0.05	SW846-7470	Mercury mg/l < 0.0002
Toxaphene	< 0.025	Methyl ethyl ketone	< 0.25	1,4-Dichlorobenzene	< 0.05	SW846-7740	Selenium mg/l < 0.01
2,4-D	< 0.025	Tetrachloroethylene	< 0.05	2,4-Dinitrotoluene	< 0.05	SW846-7760	Silver mg/l < 0.2
2,4,5-TP Silvex	< 0.025	Trichloroethylene	< 0.05	Hexachlorobenzene	< 0.05		
		Vinylchloride	< 0.05	Hexachloro-1,3-Butadiene	< 0.05		
				Hexachloroethane	< 0.05		
				Nitrobenzene	< 0.05		
				Pyridine	< 0.05		

## 7.0 CONCLUSIONS

TDEC Underground Storage Tank Division criteria for BTEX and TPH soil concentrations have been accomplished. Based upon the analytical data, it is EPS's opinion that no further action is required at this site.

**APPENDIX A**

**WASTE MANIFEST**

# Jim's Tank Service

No. 1201933A

P.O. Box 22688  
Memphis, TN 38122

## NON-HAZARDOUS WASTE MANIFEST

### GENERATOR

Generator Name N.A.S. Generating Location \_\_\_\_\_

Address \_\_\_\_\_ Address Same

Millington

Phone No. 901-8735461

Phone No. [ ]-[ ]

Description of Waste

Quantity

Contaminated hydro carbons and water

[ ] [ ] [ ] 3.2 gal

specimens, 3, P.G. II Flammable Liquids UN1203

[ ] [ ] [ ] [ ] [ ] [ ]

I hereby certify that the above named material does not contain Hazardous Material other than specified Description of Waste.

James Heide  
Generator Authorized Agent Name

James Heide  
Signature

120193  
Shipment Date

### TRANSPORTER

Truck No. 001

Phone No. 901-357-7237

Transporter Name Jim's Tank Service

Driver Name (Print) Don Sinearly

Address P.O. Box 22688

Vehicle License No. State 9W 2388 TN

Memphis, TN 38122

Vehicle Certification D.O.T. E-10162

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination below.

Don Sinearly  
Driver Signature

120193  
Shipment Date

Don Sinearly  
Driver Signature

120193  
Delivery Date

### DESTINATION

Site Name A.T.M. Oil Co. Inc. Phone No. 501-7321410

Address P.O. Box 1355, West Memphis, AR 72303 EPA # ARD 98 254 9230

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

\_\_\_\_\_  
Name of Authorized Agent

[Signature]  
Signature

120193  
Receipt Date

**APPENDIX B**

**DISPOSAL OF TANK**

The tank was labeled and hauled off site by MESI and subsequently cut up and sold for scrap by Murphy and Sons, Inc., Southaven, Mississippi.

**APPENDIX C**

**LABORATORY RESULTS**

**INCHCAPE TESTING SERVICES**

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

**FILE COPY**

**SAMPLE ANALYSES**

for

EPS/MEMPHIS  
4145 WILLOW LAKE ROAD  
MEMPHIS, TN 38118

ATTENTION: *TOM COLLINS*  
~~RALPH MARCONI~~

November 10, 1993

hal

305623

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.  
7979 GSRI Ave. • Baton Rouge, LA 70820  
504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
November 10, 1993

Sample receipt at WEST-PAINE LABORATORIES INC is documented for your designated sample(s). Chain-of-custody documentation, if provided, is included in this report. Sample analysis was in accordance with Environmental Protection Agency protocol.

A. Fuel Leak Detection and Screening Methods

<u>Parameter</u>	<u>Method</u>
Total hydrocarbons (gasoline)	8015M

B. Test Methods for Evaluating Solid Waste, SW-846, July 1982

<u>Parameter</u>	<u>Method</u>
Lead	7420

C. Test Methods for Evaluating Solid Waste, SW-846, July 1982

<u>Parameter</u>	<u>Method</u>
Purgeable Aromatics	8020

This report shall not be reproduced except in full, without the written permission of Inchcape Testing Services/West-Paine Laboratories. The results herein relate only to the sample(s) tested. Documented results are shown on the following page(s).



Charles P. Byrne  
General Manager

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
4145 WILLOW LAKE ROAD  
MEMPHIS, TN 38118

Date Received: 93/11/01

Parameter: Total hydrocarbons (gasoline)

Sample Source	Sample Date/Time	(mg/kg)	Quality Assurance Actual/Found	Date/Time/Analyst
S102993TC01 FID #9-791673	93/10/29 13:00	< 0.100	N/A	93/11/03 10:03 TSB
S102993TC02 FID #9-791673	93/10/29 13:02	< 0.100	N/A	93/11/03 10:25 TSB
S102993TC03 FID #9-791673	93/10/29 13:07	< 0.100	N/A	93/11/03 10:46 TSB
S102993TC04 FID #9-791673	93/10/29 13:09	< 0.100	N/A	93/11/03 11:08 TSB
S102993TC05 FID #9-791673	93/10/29 14:30	1,020	N/A	93/11/03 09:36 TSB
S102993TC06 FID #9-791673	93/10/29 14:38	303	N/A	93/11/02 16:28 TSB

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
4145 WILLOW LAKE ROAD  
MEMPHIS, TN 38118

Date Received: 93/11/01 Parameter: Lead

Sample Source	Quality Assurance		
Sample Date/Time	(mg/kg Pb)	Actual/Found	Date/Time/Analyst
S102993TC01 FID #9-791673			
93/10/29 13:00	14	3.00/2.96	93/11/05 08:40 HBR
S102993TC02 FID #9-791673			
93/10/29 13:02	14	3.00/2.96	93/11/05 08:40 HBR
S102993TC03 FID #9-791673			
93/10/29 13:07	15	3.00/2.96	93/11/05 08:40 HBR
S102993TC04 FID #9-791673			
93/10/29 13:09	14	3.00/2.96	93/11/05 08:40 HBR
S102993TC05 FID #9-791673			
93/10/29 14:30	9.5	3.00/2.96	93/11/05 08:40 HBR
S102993TC06 FID #9-791673			
93/10/29 14:38	15	3.00/2.96	93/11/05 08:40 HBR

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010006

Method 8020

Purgeable Aromatics

All results in milligrams per kilogram

SAMPLE SOURCE: S102993TC01 FID #9-791673

Sample Date: 93/10/29 Sample Time: 13:00

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	< 0.001	0.001
<u>Toluene</u>	< 0.001	0.001
<u>Ethylbenzene</u>	< 0.001	0.001
<u>Xylene</u>	< 0.001	0.001

Date of Analysis: 93/11/02 Analyst: TSB

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7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010006

QUALITY ASSURANCE/QUALITY CONTROL  
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>S102993TC01 FID #9-791673</u>
Bromofluorobenzene	102

# INCHCAPE TESTING SERVICES

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EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010007

Method 8020

Purgeable Aromatics

All results in milligrams per kilogram

SAMPLE SOURCE: S102993TC02 FID #9-791673

Sample Date: 93/10/29 Sample Time: 13:02

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
Benzene	< 0.001	0.001
Toluene	< 0.001	0.001
Ethylbenzene	< 0.001	0.001
Xylene	< 0.001	0.001

Date of Analysis: 93/11/02

Analyst: TSB

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010007

QUALITY ASSURANCE/QUALITY CONTROL  
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>S102993TC02 FID #9-791673</u>
Bromofluorobenzene	109

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS

MEMPHIS, TN 38118

SAMPLE #: 9311010008

Method 8020

Purgeable Aromatics

All results in milligrams per kilogram

SAMPLE SOURCE: S102993TC03 FID #9-791673

Sample Date: 93/10/29 Sample Time: 13:07

Parameter	Result	Detection Limit
Benzene	< 0.001	0.001
Toluene	0.005	0.001
Ethylbenzene	0.002	0.001
Xylene	0.011	0.001

Date of Analysis: 93/11/02 Analyst: TSB

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010008

QUALITY ASSURANCE/QUALITY CONTROL  
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	S102993TC03 FID #9-791673
Bromofluorobenzene	111

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7979 GSRI Ave. • Baton Rouge, LA 70820

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EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010009

Method 8020

Purgeable Aromatics

All results in milligrams per kilogram

SAMPLE SOURCE: S102993TC04 FID #9-791673

Sample Date: 93/10/29 Sample Time: 13:09

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	<u>&lt; 0.001</u>	<u>0.001</u>
<u>Toluene</u>	<u>&lt; 0.001</u>	<u>0.001</u>
<u>Ethylbenzene</u>	<u>&lt; 0.001</u>	<u>0.001</u>
<u>Xylene</u>	<u>0.008</u>	<u>0.001</u>

Date of Analysis: 93/11/02 Analyst: TSB

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820  
504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010009

QUALITY ASSURANCE/QUALITY CONTROL  
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>S102993TC04</u> <u>FID #9-791673</u>
Bromofluorobenzene	117

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504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010010

Method 8020

Purgeable Aromatics

All results in milligrams per kilogram

SAMPLE SOURCE: S102993TC05 FID #9-791673

Sample Date: 93/10/29 Sample Time: 14:30

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
<u>Benzene</u>	0.214	0.100
<u>Toluene</u>	0.742	0.100
<u>Ethylbenzene</u>	6.33	0.100
<u>Xylene</u>	20.7	0.100

Date of Analysis: 93/11/02 Analyst: TSB

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010010

QUALITY ASSURANCE/QUALITY CONTROL  
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>S102993TC05 FID #9-791673</u>
Bromofluorobenzene	79

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-3717

EPS/MEMPHIS

MEMPHIS, TN 38118

SAMPLE #: 9311010011

Method 8020

Purgeable Aromatics

All results in milligrams per kilogram

SAMPLE SOURCE: S102993TC06 FID #9-791673

Sample Date: 93/10/29 Sample Time: 14:38

<u>Parameter</u>	<u>Result</u>	<u>Detection Limit</u>
Benzene	< 0.100	0.100
Toluene	0.332	0.100
Ethylbenzene	4.42	0.100
Xylene	18.3	0.100

Date of Analysis: 93/11/02

Analyst: TSB

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820  
504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
SAMPLE #: 9311010011

QUALITY ASSURANCE/QUALITY CONTROL  
PERCENT RECOVERY

Purgeable Aromatics

<u>Parameter</u>	<u>S102993TC06</u> <u>FID #9-791673</u>
Bromofluorobenzene	90

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

## GAS CHROMATOGRAPHY WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: DI WATER

Level: (low/med): Low

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	SAMPLE CONCENTRATION ( $\mu\text{g/L}$ )	MS CONCENTRATION ( $\mu\text{g/L}$ )	MS % REC#	QC LIMITS REC.
Benzene	20.0	< 1.0	19.7	98.7	78-121
Toluene	20.0	< 1.0	20.1	100.5	75-124
Ethylbenzene	20.0	< 1.0	20.0	100.2	75-126
M,P-Xylene	40.0	< 1.0	42.9	107.3	81-122
O-Xylene	40.0	< 1.0	42.3	105.8	81-128

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	MSD CONCENTRATION ( $\mu\text{g/L}$ )	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Benzene	20.0	18.5	92.6	6.4	0-14 78-121
Toluene	20.0	18.6	93.2	7.5	0-12 75-124
Ethylbenzene	20.0	18.2	90.9	9.8	0-15 75-126
M,P-Xylene	40.0	40.1	100.3	6.8	0-14 81-122
O-Xylene	40.0	40.5	101.1	4.5	0-11 81-128

# Column to be used to flag recovery and RPD values with an asterisk  
\* Values outside of QC limits

RPD: 0 out of 5 outside limits  
Spike Recovery: 0 out of 10 outside limits

COMMENTS: BBTEX-065

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

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## GAS CHROMATOGRAPHY WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: DIWATER

Level: (low/med): Low

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	SAMPLE CONCENTRATION ( $\mu\text{g/L}$ )	MS CONCENTRATION ( $\mu\text{g/L}$ )	MS % REC#	QC LIMITS REC.
TPHG	1000.0	< 1.0	1094.9	109.5	**

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	MSD CONCENTRATION ( $\mu\text{g/L}$ )	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
TPHG	1000.0	1102.1	110.2	0.7	**	**

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS: BTPHG-025

\*\* QC Limits are currently being established.

CHAIN OF CUSTODY RECORD

Submitted by Client: EPS  
Address: 4145 Willow Lake Blvd  
Memphis, TN 38148  
Contact: Tom Collin  
Phone: 365-9255

Bill to Client: Same  
Address: \_\_\_\_\_  
Contact: Ralph Marconi  
Phone: 901-365-9255

P. O. Number 5-649 Project Name/Number 05.M4213.005

Sampled By: Tom Collin

Matrix <sup>1</sup>	Date	Time (2400)	Comp	Grab	Sample Description	Pre-servatives	No. Containers
S	10/29/93	1300		Y	<del>5102993TC01</del> <u>5102993TC01</u>	N/A	1
S	10/29/93	1302		Y	<u>5102993TC02</u>		1
S	10/29/93	1307		X	<u>5102993TC03</u>		1
S	10/29/93	1309		X	<u>5102993TC04</u>		1
S	10/29/93	1430		X	<u>5102993TC05</u>		1
S	10/29/93	1438		X	<u>5102993TC06</u>		1
S	10/29/93	1440		X	<u>5102993TC07</u>		1

Analytical Requests

BIEX  
VPH-GRO  
Lead  
TECP-BTEX  
Full TECP  
Toluene + Xylene on TECP extract  
TPHG

**ORIGINAL LABM GC METALS**

Remarks: 14

**ORIGINAL COPY**

**GC/MS SEMI-VOL**  
**GC/SEMI-VOL**  
**GC/MS VOL**

Turn Around Time:  24-48 hrs. (min. 100%)  3 days (75%)  1 week (50%)  Standard Other \_\_\_\_\_

Relinquished by: (Signature) Tom Collin Received by: (Signature) EPS Date: 10-29-93 Time: 4:30

Relinquished by: (Signature) \_\_\_\_\_ Received by: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: (Signature) Chris Collins Received by: (Signature) \_\_\_\_\_ Date: 10/29/93 Time: 10:30

Note: F10# 9-791673  
F10 must appear on all Lab sheets.

Lab use only:  
Custody Seal used  yes  no  
in tact  yes  no  
Temperature °C 52

**GO**

Water \_\_\_\_\_  
Solid   
Oil \_\_\_\_\_  
Sludge \_\_\_\_\_

Matrix<sup>1</sup>: W = water, S = soil, SD = solid, L = liquid, SL = sludge, O = oil, CT = charcoal tube, A = air bag

WHITE: CLIENT FINAL REPORT — CANARY: LABORATORY — PINK: CLIENT

**INCECAPE TESTING SERVICES**

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

**FILE COPY**

SAMPLE ANALYSES

for

EPS/MEMPHIS  
4145 WILLOW LAKE ROAD  
MEMPHIS, TN 38118

ATTENTION: TOM COLLINS

November 19, 1993

hal

305768

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.  
7979 GSRI Ave. • Baton Rouge, LA 70820  
504-769-4900 Fax: 504-767-3717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
November 19, 1993

Sample receipt at WEST-PAINE LABORATORIES INC is documented for your designated sample(s). Chain-of-custody documentation, if provided, is included in this report. Sample analysis was in accordance with Environmental Protection Agency protocol.

A. Test Methods for Evaluating Solid Waste, SW-846, November 1986, 3rd Ed.

<u>Parameter</u>	<u>Method</u>
Arsenic	TCLP 1311/6101
Barium	TCLP 1311/7080
Cadmium	TCLP 1311/7130
Chromium	TCLP 1311/7190
Lead	TCLP 1311/7420
Mercury	TCLP 1311/7470
Selenium	TCLP 1311/7740
Silver	TCLP 1311/7760
Acid Extractable Compounds	TCLP 1311/8270
Base-Neutral Compounds	TCLP 1311/8270
Pesticide/Herbicide Compounds	1311/8080/8150
Volatile Compounds	ZHE 1311/8260

B. Test Methods for Evaluating Solid Waste, SW-846, July 1982

<u>Parameter</u>	<u>Method</u>
Benzene	8260
Ethylbenzene	8260
Toluene	8260
Total Xylene	8260

C. Fuel Leak Detection and Screening Methods

<u>Parameter</u>	<u>Method</u>
Total hydrocarbons (gasoline)	8015M

This report shall not be reproduced except in full, without the written permission of Inchcape Testing Services/West-Paine Laboratories. The results found herein relate only to the sample(s) tested. Documented results are shown on the following page(s).

Charles P. Byrne  
General Manager

002/002

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.  
7979 GSRI Ave. • Baton Rouge, LA 70820  
504-769-4900 Fax: 504-767-3717

EPS/MEMPHIS  
MEMPHIS, TN 38118  
November 19, 1993

Sample Source: S102993TC07 FID #9-791673  
Date Collected: 93/10/29 Time Collected: 14:40  
Date Received: 93/11/01 Time Received: 10:10

Parameter (Units)	Results	Percent Recovery	Quality Assurance Actual/Found	Date/Time Analyst
Ethylbenzene (mg/L)	0.082	N/A	N/A	93/11/06 00:00 TSB
Toluene (mg/L)	0.062	N/A	N/A	93/11/06 00:00 TSB
Total Xylene (mg/L)	0.371	N/A	N/A	93/11/06 00:00 TSB
Benzene (mg/L)	< 0.050	N/A	N/A	93/11/06 00:00 TSB
Total hydrocarbons (gasoline) (mg/Kg)	362	N/A	N/A	93/11/11 09:40 CHA

WEST PAINE LAB2

504 767 5576

11:38

02/09/94

ppe

CORRECTED

305768

**INCHCAPE TESTING SERVICES**West-Paine Laboratories, Inc.  
7979 GSRI Ave. • Baton Rouge, LA 70820  
504-769-4900 Fax: 504-767-5717EPS/MEMPHIS  
MEMPHIS TN 38118Sample Source: FID #9-791673Sample No.: 9311010012Analytical Method No.: TCLP 1311/8270Federal Register, Vol. 55, No. 126, Friday, June 29, 1990

Parameter	Regulatory Limit in TCLP Extract (mg/L)	Quantitation Limit (mg/L)	Results (mg/L)	Quality Assurance Spike Recovery (%)
<b>Acid(Phenol) Compounds:</b>				
<u>o-Cresol</u>	<u>200.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>m &amp; p-Cresol</u>	<u>200.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>Cresol</u>	<u>200.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>Pentachlorophenol</u>	<u>100.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>2,4,5-Trichlorophenol</u>	<u>400.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>2,4,6-Trichlorophenol</u>	<u>2.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>

Date/Analyst: 93/11/17 LGBQUALITY CONTROL DATA Surrogate Recovery (%)

2,4,6-Tribromophenol	12
2-Fluorophenol	4
Phenol-d6	11

**INCHCAPE TESTING SERVICES**

West-Painc Laboratories, Inc.  
 7979 GSRI Ave. • Baton Rouge, LA 70820  
 504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
 MEMPHIS TN 38118

Sample Source: FID #9-791673

Sample No.: 9311010012

Analytical Method No.: TCLP 1311/8270

Federal Register, Vol. 55, No. 126, Friday, June 29, 1990

Parameter	Regulatory Limit in TCLP Extract (mg/L)	Quantitation Limit (mg/L)	Results (mg/L)	Quality Assurance Spike Recovery (%)
<b><u>Base-Neutral Compounds:</u></b>				
<u>1,4-Dichlorobenzene</u>	<u>7.5</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>2,4-Dinitrotoluene</u>	<u>0.13</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>Hexachlorobenzene</u>	<u>0.13</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>Hexachloro-1,3-butadiene</u>	<u>0.5</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>Hexachloroethane</u>	<u>3.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>Nitrobenzene</u>	<u>2.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>
<u>Pyridine</u>	<u>5.0</u>	<u>0.05</u>	<u>&lt; 0.05</u>	<u>N/A</u>

Date/Analyst: 93/11/17 LGB

**QUALITY CONTROL DATA Surrogate Recovery (%)**

2-Fluorobiphenyl	90
Nitrobenzene-d5	36
Terphenyl-d14	104

# INCHCAPE TESTING SERVICES

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EPS/MEMPHIS  
MEMPHIS TN 38118

The Toxicity Characteristic Leaching Procedure (TCLP) was employed as specified in the Federal Register, Vol. 55, No. 126, Friday, June 29, 1990. The results below for sample extract in mg/L represent the concentration in the final leachate. For purposes of comparison, the regulatory limit in mg/L of each component is also listed.

Sample Source: FID #9-791673

Sample No.: 9311010012

Parameter	Results	Regulatory Limit	Spike Recovery	Quality Assurance		Date/Analyst
		In Extract		Actual	Found	
Arsenic (mg/L As)	< 0.2	5.0	N/A	10.0	/10.0	93/11/13 RBM
Barium (mg/L Ba)	1.5	100	N/A	10.0	/10.3	93/11/13 RBM
Cadmium (mg/L Cd)	< 0.1	1.0	N/A	10.0	/10.4	93/11/13 RBM
Chromium (mg/L Cr)	< 0.05	5.0	N/A	10.0	/10.2	93/11/13 RBM
Lead (mg/L Pb)	0.13	5.0	N/A	10.0	/10.0	93/11/13 RBM
Mercury (mg/L Hg)	< 0.0002	0.2	N/A	0.005	/0.005	93/11/17 HBR
Silver (mg/L Ag)	< 0.01	5.0	N/A	0.500	/0.517	93/11/13 HBR
Selenium (mg/L Se)	< 0.2	1.0	N/A	10.0	/10.2	93/11/13 RBM

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EPS/MEMPHIS  
 MEMPHIS TN 38118

Sample Source: FID #9-791673

Sample No.: 9311010012

Analytical Method No.: TCLP 1311/8080/8150

Federal Register, Vol. 55, No. 126, Friday, June 29, 1990

Parameter	Regulatory Limit in TCLP Extract (mg/L)	Quantitation Limit (mg/L)	Results (mg/L)	Quality Assurance Spike Recovery (%)
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**Pesticide/Herbicide Compounds:**

Chlordane	0.03	0.0025	< 0.0025	N/A
2,4-D	10.0	0.025	< 0.025	N/A
Endrin	0.02	0.0005	< 0.0005	N/A
Heptachlor epoxide	0.008	0.0005	< 0.0005	N/A
Heptachlor	0.008	0.0005	< 0.0005	N/A
Lindane	0.4	0.0005	< 0.0005	N/A
Methoxychlor	10.0	0.0025	< 0.0025	N/A
Toxaphene	0.5	0.025	< 0.025	N/A
2,4,5-TP Silvex	1.0	0.025	< 0.025	N/A

Date/Analyst: 93/11/17 SLM

**QUALITY CONTROL DATA Surrogate Recovery (%)**

Decachlorobiphenyl	113
Tetrachloro-m-xylene	86

**INCHCAPE TESTING SERVICES**

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EPS/MEMPHIS  
 MEMPHIS TN 38118

Sample Source: FID #9-791673

Sample No.: 9311010012

Analytical Method No.: ZHE 1311/8260

Federal Register, Vol. 55, No. 126, Friday, June 29, 1990

Parameter	Regulatory Limit in TCLP Extract (mg/L)	Quantitation Limit (mg/L)	Results (mg/L)	Quality Assurance Spike Recovery (%)
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**Volatile Compounds:**

Benzene	0.5	0.05	< 0.05	N/A
Carbon tetrachloride	0.5	0.05	< 0.05	N/A
Chlorobenzene	100.0	0.05	< 0.05	N/A
Chloroform	6.0	0.05	< 0.05	N/A
1,2-Dichloroethane	0.5	0.05	< 0.05	N/A
1,1-Dichloroethylene	0.7	0.05	< 0.05	N/A
Methyl ethyl ketone	200.0	0.25	< 0.25	N/A
Tetrachloroethylene	0.7	0.05	< 0.05	N/A
Trichloroethylene	0.5	0.05	< 0.05	N/A
Vinyl chloride	0.2	0.05	< 0.05	N/A

Date/Analyst: 93/11/06 HJP

**QUALITY CONTROL DATA Surrogate Recovery (%)**

1,2-Dichloroethane-d4	87
4-Bromofluorobenzene	85
Toluene-d8	85

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

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## GAS CHROMATOGRAPHY WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: DIWATER

Level: (low/med): Low

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	SAMPLE CONCENTRATION ( $\mu\text{g/L}$ )	MS CONCENTRATION ( $\mu\text{g/L}$ )	MS % REC#	QC LIMITS REC.
TPHG	1000.0	< 1.0	1092.4	109.2	**

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	MSD CONCENTRATION ( $\mu\text{g/L}$ )	MSD % REC #	% RPD #	QC LIMITS RPD	LIMITS REC.
TPHG	1000.0	1041.3	104.1	4.8	**	**

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS: BTPHG-024

\*\* QC Limits are currently being established.

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

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## GAS CHROMATOGRAPHY WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: DI SPIKE

Level:(low/med): Low

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	SAMPLE CONCENTRATION ( $\mu\text{g/L}$ )	MS CONCENTRATION ( $\mu\text{g/L}$ )	MS % REC#	QC LIMITS REC.
Benzene	20.0	<1.0	28.99	96.64	78-121
Toluene	20.0	<1.0	29.01	96.69	75-124
Ethylbenzene	20.0	<1.0	28.93	96.43	75-126
M,P-Xylene	40.0	<1.0	58.23	97.05	81-122
O-Xylene	40.0	<1.0	28.97	96.55	81-128

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	MSD CONCENTRATION ( $\mu\text{g/L}$ )	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Benzene	20.0	28.91	96.35	0.03	0-14 78-121
Toluene	20.0	29.02	96.72	0.03	0-12 75-124
Ethylbenzene	20.0	28.90	96.34	0.09	0-15 75-126
M,P-Xylene	40.0	57.82	96.37	0.70	0-14 81-122
O-Xylene	40.0	29.03	96.75	0.20	0-11 81-128

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: CBTEX-024

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: 9311020078 Level:(low/med): low

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	SAMPLE CONCENTRATION ( $\mu\text{g/L}$ )	MS CONCENTRATION ( $\mu\text{g/L}$ )	MS % REC#	ADVISORY LIMITS REC.
1,1-Dichloroethene	50.0	< 5.0	41.4	83	61-145
Trichloroethene	50.0	< 5.0	49.2	98	71-120
Benzene	50.0	< 5.0	48.9	98	75-130
Toluene	50.0	< 5.0	48.9	98	76-125
Chlorobenzene	50.0	< 5.0	52.2	104	76-127

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	MSD CONCENTRATION ( $\mu\text{g/L}$ )	MSD % REC#	% RPD#	QC LIMITS RPD	REC.
1,1-Dichloroethene	50.0	40.1	80	4	14	61-145
Trichloroethene	50.0	46.2	94	4	14	71-120
Benzene	50.0	47.2	94	4	13	75-130
Toluene	50.0	46.1	92	6	13	76-125
Chlorobenzene	50.0	49.8	98	6	11	76-127

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: VOWLO-204

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

FILE COPY

## SAMPLE ANALYSES

for

EPS/MEMPHIS  
4145 WILLOW LAKE ROAD  
MEMPHIS, TN 38118

ATTENTION: TOM COLLINS

November 19, 1993

hal

305793

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820  
504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS

MEMPHIS, TN 38118

November 19, 1993

Sample receipt at WEST-PAINE LABORATORIES INC is documented for your designated sample(s). Chain-of-custody documentation, if provided, is included in this report. Sample analysis was in accordance with Environmental Protection Agency protocol.

A. Test Methods for Evaluating Solid Waste, SW-846, July 1982

<u>Parameter</u>	<u>Method</u>
Flashpoint	1010
Lead	

B. Test Methods for Evaluating Solid Waste, SW-846, July 1982

<u>Parameter</u>	<u>Method</u>
Volatile Compounds	ZHE 1311/8260

This report shall not be reproduced except in full, without the written permission of Inchcape Testing Services/West-Paine Laboratories. The results found herein relate only to the sample(s) tested. Documented results are shown on the following page(s).



Charles P. Byrne  
General Manager

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS

MEMPHIS, TN 38118

November 19, 1993

Sample Source: P11893TC01 FID #0-791673

Date Collected: 93/11/08 Time Collected: 10:45

Date Received: 93/11/09 Time Received: 10:30

Parameter (Unit)	Result	Percent Recovery	Quality Assurance Actual/Found	Date/Time Analyst
Flashpoint (°F)	97	N/A	80/81	93/11/17 09:00 MBC

**INCHCAPE TESTING SERVICES**West-Paine Laboratories, Inc.  
7979 GSRI Ave. • Baton Rouge, LA 70820  
504-769-4900 Fax: 504-767-5717EPS/MEMPHIS  
MEMPHIS TN 38118

The Toxicity Characteristic Leaching Procedure (TCLP) was employed as specified in the Federal Register, Vol. 55, No. 126, Friday, June 29, 1990. The results below for sample extract in mg/L represent the concentration in the final leachate. For purposes of comparison, the regulatory limit in mg/L of each component is also listed.

Sample Source: FID #0-791673Sample No.: 9311090035

<u>Parameter</u>	<u>Results</u>	<u>Regulatory Limit In Extract</u>	<u>Spike Recovery</u>	<u>Quality Assurance</u>		<u>Date/Analyst</u>
Arsenic (mg/L As)		5.0			/	
Barium (mg/L Ba)		100			/	
Cadmium (mg/L Cd)		1.0			/	
Chromium (mg/L Cr)		5.0			/	
Lead (mg/L Pb)	< 0.1	5.0	N/A	3.00	/3.09	93/11/15 HBR
Mercury (mg/L Hg)		0.2			/	
Silver (mg/L Ag)		5.0			/	
Selenium (mg/L Se)		1.0			/	

**INCHCAPE TESTING SERVICES**

West-Paine Laboratories, Inc.  
 7979 GSRI Ave. • Baton Rouge, LA 70820  
 504-769-4900 Fax: 504-767-5717

EPS/MEMPHIS  
 MEMPHIS TN 38118

Sample Source: FID #0-791673

Sample No.: 9311090035

Analytical Method No.: ZHE 1311/8260

Federal Register, Vol. 55, No. 126, Friday, June 29, 1990

Parameter	Regulatory Limit in TCLP Extract (mg/L)	Quantitation Limit (mg/L)	Results (mg/L)	Quality Assurance Spike Recovery (%)
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**Volatile Compounds:**

Benzene	0.5	0.5	19.4	N/A
Carbon tetrachloride	0.5			
Chlorobenzene	100.0			
Chloroform	6.0			
1,2-Dichloroethane	0.5			
1,1-Dichloroethylene	0.7			
Methyl ethyl ketone	200.0			
Tetrachloroethylene	0.7			
Trichloroethylene	0.5			
Vinyl chloride	0.2			

Date/Analyst: 93/11/18 TSB

**QUALITY CONTROL DATA Surrogate Recovery (%)**

1,2-Dichloroethane-d4	93
4-Bromofluorobenzene	90
Toluene-d8	98

# INCHCAPE TESTING SERVICES

West-Paine Laboratories, Inc.

7979 GSRI Ave. • Baton Rouge, LA 70820

504-769-4900 Fax: 504-767-5717

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample No: 9311090032 Level:(low/med): low

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )	SAMPLE CONCENTRATION ( $\mu\text{g/L}$ )	MS CONCENTRATION ( $\mu\text{g/L}$ )	MS % REC#	ADVISORY LIMITS REC.
1,1-Dichloroethene	500	< 50	407	81	61-145
Trichloroethene	500	< 50	447	89	71-120
Benzene	500	< 50	461	92	75-130
Toluene	500	< 50	452	90	76-125
Chlorobenzene	500	< 50	482	96	76-127

COMPOUND	SPIKE ADDED ( $\mu\text{g/L}$ )		MSD CONCENTRATION ( $\mu\text{g/L}$ )	MSD % REC#	% RPD#	ADVISORY LIMITS REC.
1,1-Dichloroethene	500	381	76	6	14	61-145
Trichloroethene	500	441	88	1	14	71-120
Benzene	500	465	93	1	13	75-130
Toluene	500	456	90	0	13	76-125
Chlorobenzene	500	478	96	0	11	76-127

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: V2WLO-060



**APPENDIX D**

**CLOSURE FORMS**

STATE OF TENNESSEE  
DIVISION OF UNDERGROUND STORAGE TANKS

APPLICATION FOR PERMANENT CLOSURE OF UNDERGROUND STORAGE TANK SYSTEMS

Submit the following application for approval to the appropriate UST Field Office, 30 days in advance of the closure of a UST system. Refer to the attached map for the address of the appropriate field office. An approved copy of this application shall be kept on the site during tank closure activities. All items shall be addressed.

1. Facility I.D. Number: 0 7 9 1 6 7 3

2. Name of Facility: Naval Air Station Memphis

Address: Building 376 on B Street

APPROVED  
DIVISION OF UNDERGROUND STORAGE TANKS  
BY GHATTAS EL-MURR DATE 10-11-93

Phone Number: ( 901 ) 873-5462

County: Shelby

3. Name of Tank Owner/Operator: Gus Mashburn

Address: Building S-9 on B Street

Phone Number: ( 901 ) 873-5462

Contact person: Mike Kempf

4. Number of tanks registered at this site: 2

5. Number of tanks to be closed: 1

6. List the tank number, size, contents, and date last used for all tanks to be closed.

Tank Number	Size	Contents	Date Last Used
<u>1</u>	<u>8,000</u>	<u>gasoline</u>	<u>2-22-93</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

7. A site sketch shall be attached showing the location of the underground storage tanks, associated lines, sampling points and any nearby underground utilities. Has this site sketch been attached with ALL of the required information?  
Yes X No \_\_\_\_\_

A SITE SKETCH IS REQUIRED. Your application will not be processed without one.

8. Type of closure: Removal X Closure in place \_\_\_\_\_

9. If the tank(s) are to be closed in place, describe the method to be used to clean the tank(s) and the type of solid, inert fill material that will be used to fill the tank(s). Refer to "Procedure for Tank Closure in Place" for appropriate fill material.

10. Soil and/or ground water samples must be collected to determine if leakage or spillage has occurred. Laboratory analyses for the following parameters must be performed based on the type of product stored. Mark the types of analyses that will be performed.

**FOR TANKS STORING GASOLINE:**

Benzene, Toluene, Xylene (BTX) AND Total Petroleum Hydrocarbons (TPH)  X

**FOR TANKS THAT ONLY STORED OTHER HYDROCARBONS:** (i.e. diesel, kerosene, waste oil, etc.)

Total Petroleum Hydrocarbons (TPH) \_\_\_\_\_

**FOR CHEMICAL TANKS:**

Contact David Arial with the Environmental Protection Agency in Atlanta at (404) 347-3866.

The State UST Regulations require that the samples be collected where contamination is most likely to be present. This Division requires that the protocol in the "Guidelines for Conducting Site Assessments During Tank Closure" be followed at a minimum. There shall be no deviation from these guidelines unless a person with experience in environmental sampling prepares and submits a site specific sampling plan to this Division for approval.

11. Describe how any contaminated soil that is encountered will be handled, stockpiled, and treated. Note: Any material removed from a tank pit excavation shall be considered to be contaminated until proven otherwise through laboratory analyses. All soils excavated from UST's will be placed on Visqueen, tested according to guidance document #5, then covered with visqueen until samples can be analyzed.

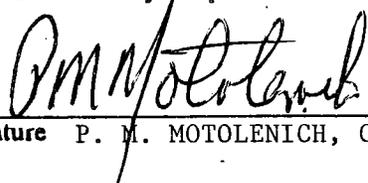
12. List the name of the laboratory where samples will be sent. West Paine Laboratory  
(Baton Rouge) Louisiana

13. Name of Company/Person performing the closure and the date scheduled. Murphy Environmental  
Services, Inc. As soon as possible.

The person signing this application SHALL be the owner of the tank system. Please bear in mind that the person signing this form, as owner of the tank system, is responsible for resolving any environmental problems caused by the petroleum underground storage tank system at this site.

A copy of the approved application shall be kept at the tank closure site for review by the Division's inspectors.

I, (please print) Peter M. Motolenich, agree to report the results of the analytical samples collected in regard to this closure within 30 days of receipt from the laboratory and to resolve any environmental problems caused by the petroleum underground storage tank system at this site.



Signature P. M. MOTOLENICH, CDR, USN

9/23/93  
Date

PUBLIC WORKS OFFICER

Title

TANK TO REMAIN IN SERVICE

NOT REMOVE

MEM-T1249-1  
4,250 GAL  
GASOLINE TANK

VENT

1249

3" FILL

BUMPER  
GUARD

MEM-T1249-2

VALVE  
FOR MANIFOLD  
SYSTEM

BUILDING  
376

CUT VENT  
6" BELOW  
SURFACE & CAP

MEM-T1482-3  
VALVE  
FOR MANIFOLD  
SYSTEM

1482

8,000 GAL  
GASOLINE TANK

2 ft all around  
and under tank

MEM-T1482-2

3" FILL ON  
CONCRETE MOUNT

Stock Pile  
X TGD S #

ASPHALT & CONCRETE

DISPENSERS

Soil samples shall be collected 2 feet below the bottom of the tank, one at each corner of the tank for a total of four soil samples.

The (4) groundwater monitoring wells shall remain

"D" STREET

BUILDING S-9

UST 1482 is a 8,000 gallon steel underground storage tank that supplied gasoline to facility commercial vehicles. It is approximately 30 years old and was abandoned in January 1992. The tank is adjacent to, and west of, Building 376, and it manifolds with tank 1249 (still in service) on the east side of the building.

TANK 1482

NAVAL AIR STATION  
MEMPHIS, TENNESSEE  
NOT TO SCALE

DEPARTMENT OF THE NAVY

SOUTHERN DIVISION - Charleston, SC

NAVAL FACILITIES ENGINEERING COMMAND

Prepared by John Karlyk

Date 7/19/93

Remove Underground Storage Tank (UST 1482)  
NAS Memphis, TN

Scale none

Contract No.

Sketch No. I



# Murphy Environmental Services, Inc.

*Environmental Contractors*

OFFICE ADDRESS: 9148 CORPORATE DR., SOUTHAVEN, MS 38671, 901-346-0633  
MAILING ADDRESS: P. O. BOX 492, SOUTHAVEN, MS 38671, FAX 901-346-0548

November 22, 1993

**FILE COPY**

Mr. Ghattas El-Murr  
Tennessee Department of Environment and Conservation  
Division of Underground Storage Tanks  
Suite E-645, Perimeter Park  
2500 Mount Moriah Road  
Memphis, Tennessee 38115

RE: Naval Air Station  
Millington, TN  
Facility ID # 0-791673

Dear Mr. El-Murr:

This letter is to inform your office that the tank located at the above referenced site has been removed.

The permanent closure and analytical reports are attached.

Should you have any questions, please call me at (901) 346-0633.

Sincerely,



Roger Woolbright  
Environmental Manager

RW/dmc

Enclosures

# STATE OF TENNESSEE DIVISION OF UNDERGROUND STORAGE TANKS

## PERMANENT CLOSURE REPORT FORM

Directions: Please address the following questions in detail. Attach extra sheets if necessary. This form must be completed and submitted with the laboratory analyses sheets.

1. Facility ID#: 0 7 9 1 6 7 3
2. Facility Name: Naval Air Station, Bldg 376, Millington, TN
3. Did you notify this Division one working day prior to taking the soil samples for the closure?  
Yes  No
4. Was the tank atmosphere and the work zone regularly tested with a combustible gas indicator in accordance with Appendix 5 Part (3) of the UST regulations? Yes  No
5. Describe how the tank(s)'s atmosphere was purged: Nitrogen displacement

---

6. Describe how all liquids and sludge were removed from the tank(s): Vacuum Tank

---

7. Describe how all liquids and sludge were stored and disposed of: Liquid is stored in drums  
on site pending laboratory analysis for disposal

---

8. Was the product in the piping drained into the tank to prevent spillage? Yes  No
9. How was the piping disposed? Removed  Capped  Other; (explain) \_\_\_\_\_

---

10. If the tank(s) was removed, was it labeled in accordance with Appendix 5 Part (4)(f) of the UST regulations?  
Yes  No
11. How and where was the tank(s) disposed of? Tank was disposed of by Murphy & Sons  
They were cut up for scrap.

---

12. Was bedrock encountered during tank system abandonment or removal? Yes  No
13. Was water encountered in the tank pit during the tank system abandonment or removal activities?  
Yes  No
14. If "Yes" was checked for question 13, was water sampled? Yes  No  If yes, please attach the results.
15. Was obvious contamination encountered during the tank system abandonment or removal (i.e. discolored soil, soil with a hydrocarbon odor, etc.)? Yes  No
16. Was more than one hundred cubic yards (100 yd<sup>3</sup>) of material removed during the tank system abandonment or removal? Yes  No
17. How much material was removed during the tank closure activities? 100 (cubic yards)
18. If "Yes" was checked for question 13, 15, or 16 did you notify with this Division? Yes  No

Person Notified: \_\_\_\_\_ Date Notified: \_\_\_\_\_

19. What was done with the material after it was removed from the tank excavation? (Any excavated soil will be considered contaminated until proven otherwise through laboratory analyses.) When sampling this material Technical Guidance Document 005 "Sampling Requirements for Aerated and Stockpiled Soils Containing Petroleum Hydrocarbons" shall be followed when applicable. Soil was stockpiled at a separate location as was instructed by NAS. Stockpile was sampled according to TGD#5 and laboratory analysis are included in this report.

20. Are petroleum contaminated soils from this site being treated to reduce the contaminant concentrations to acceptable levels? Yes \_\_\_\_\_ No X

21. If "Yes" was checked for question 20 and this material is being treated on the site of generation or on a site owned by the generator, or a subsidiary of the generator a completed "Application to Treat Petroleum Contaminated Soils" shall be submitted to the appropriate UST field office for approval. If the soil is being treated on a site owned by a third party, the Tennessee Division of Solid Waste Management shall be contacted for a Solid Waste Processing Facility Permit. Have either of these been done? Yes \_\_\_\_\_ No X If "Yes", which Division approved the treatment?

22. Was contaminated material disposed off-site? Yes \_\_\_\_\_ No X Attach documentation (Special Waste Approval Letter, Landfill Tickets, Manifest, etc.) of the proper disposal.

23. Were all samples delivered to the laboratory within 72 hours of collection? Yes X No \_\_\_\_\_

24. Were all samples placed on ice immediately after being collected and kept at 4 degrees Celsius until submitted to the laboratory? Yes X No \_\_\_\_\_

25. Were all samples placed in proper sampling containers at the time they were taken? Yes X No \_\_\_\_\_

26. Were the sampling containers properly prepared prior to the samples being taken? Yes X No \_\_\_\_\_

27. Has an amended notification form been submitted to the UST central office in Nashville? Yes X No \_\_\_\_\_  
Failure to submit the amended Notification form may result in the assessment of additional UST fees.

Results from the analyses of all samples must be submitted with this report. Attach the original or carbon copies of the laboratory report forms, Photocopies will not be accepted. The facility name, UST facility I.D. number, and sample location must be provided to the laboratory and printed on each sheet.

I certify that I have examined and am familiar with the information in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and Official Title of  
Owner or Owner's Authorized  
Representative (Print)

ROGER WOOLBRIGHT

Roger Woolbright  
Signature

11-22-93  
Date



# Murphy Environmental Services, Inc.

*Environmental Contractors*

OFFICE ADDRESS: 9148 CORPORATE DR., SOUTHAVEN, MS 38671, 901-346-0633  
MAILING ADDRESS: P. O. BOX 492, SOUTHAVEN, MS 38671, FAX 901-346-0548

FILE COPY

November 30, 1993

Amanda Yates  
Tennessee Department of Health and Environment  
4th Floor L & C Tower  
401 Church Street  
Nashville, TN 37243-1541

RE: Closure Notification for  
Underground Storage Tanks  
Naval Air Station Memphis  
Building 376 on B Street  
Millington, TN 38054

Dear Ms. Yates:

Please find enclosed the above referenced reports for the site listed.

If you have any questions, please call me at (901) 346-0633.

Sincerely,

Roger Woolbright  
Environmental Manager

RW/dmc

<b>Notification for Underground Storage Tanks</b>	<b>STATE USE ONLY</b>
State Agency Name and Address	ID NUMBER
TYPE OF NOTIFICATION	DATE RECEIVED
<input type="checkbox"/> A. NEW FACILITY <input checked="" type="checkbox"/> B. AMENDED <input checked="" type="checkbox"/> C. CLOSURE _____ No. of tanks at facility      _____ No. of continuation sheets attached	A. Date Entered Into Computer _____ B. Data Entry Clerk Initials _____ C. Owner Was Contacted to Clarify Responses. Comments _____ _____ _____ _____
INSTRUCTIONS	
Please type or print in ink all items except "signature" in section V. This form must be completed for each location containing underground storage tanks. If more than five (5) tanks are owned at this location, photocopy the following sheets, and staple continuation sheets to the form.	

### GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances since January 1, 1984, that are in the ground as of May 8, 1986, or that are brought into use after May 8, 1986. The information requested is required by Section 9002 of the Resource Conservation and Recovery Act, (RCRA), as amended.

The primary purpose of this notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or in the absence of such records, your knowledge, belief, or recollection.

**Who Must Notify?** Section 9002 of RCRA, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify designated State or local agencies of the existence of their tanks. Owner means—

a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and

b) in the case of any underground storage tank in use before November 8, 1984, but no longer is use on that date, any person who owned such tank immediately before the discontinuation of its use.

c) if the State agency so requires, any facility that has undergone any changes to facility information or tank system status (only amended tank information needs to be included).

**What Tanks Are Included?** Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: 1. Gasoline, used oil, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fumigants.

**What Tanks Are Excluded?** Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are:

1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;
2. tanks used for storing heating oil for consumptive use on the premises where stored;

3. septic tanks;
4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws;
5. surface impoundments, pits, ponds, or lagoons;
6. storm water or waste water collection systems;
7. flow-through process tanks;
8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
9. storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

**What Substances Are Covered?** The notification requirements apply to underground storage tanks that contain regulated substances. This includes any substance defined as hazardous in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), with the exception of those substances regulated as hazardous waste under Subtitle C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

**Where To Notify?** Send completed forms to:

Division of Underground Storage Tanks  
4th Floor, L&C Tower  
401 Church Street  
Nashville, TN 37243-1541

**When To Notify?** 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1986. 2. Owners who bring underground storage tanks into use after May 8, 1986, must notify within 30 days of bringing the tanks into use. 3. If the State requires notification of any amendments to facility send information to State agency immediately.

**Penalties:** Any owner who knowingly fails to notify or submits false information shall be subject to a civil penalty not to exceed \$10,000 for each tank for which notification is not given or for which false information is submitted.

#### I. OWNERSHIP OF TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity)  
Naval Air Station Memphis  
 Street Address  
Building 376 on B Street  
Millington TN 38054  
 City State ZIP Code  
Shelby  
 County  
(901) 873-5462  
 Phone Number (include Area Code)

#### II. LOCATION OF TANK(S)

If required by State, give the geographic location of tanks by degrees, minutes, and seconds. Examples Lat. 42, 36, 12 N Long. 85, 24, 17W

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

(If same as Section I, mark box here H)

Facility Name or Company Site Identifier, as applicable  
Naval Air Station Memphis  
 Street Address (P.O. Box not acceptable)  
Building 376 on B Street  
Millington TN 38054  
 City State Zip code  
Shelby  
 County Municipality

III. TYPE OF OWNER

- Federal Government     Commercial  
 State Government     Private  
 Local Government

IV. INDIAN LANDS

- Tanks are located on land within an Indian Reservation or on other trust lands.   
Tanks are owned by native American nation, tribe, or individual.

Tribe or Nation:  
\_\_\_\_\_

V. TYPE OF FACILITY

Select the Appropriate Facility Description

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Gas Station           | <input type="checkbox"/> Railroad                      | <input type="checkbox"/> Trucking/Transport    |
| <input type="checkbox"/> Petroleum Distributor | <input type="checkbox"/> Federal - Non-Military        | <input type="checkbox"/> Utilities             |
| <input type="checkbox"/> Air Taxi (Airline)    | <input checked="" type="checkbox"/> Federal - Military | <input type="checkbox"/> Residential           |
| <input type="checkbox"/> Aircraft Owner        | <input type="checkbox"/> Industrial                    | <input type="checkbox"/> Farm                  |
| <input type="checkbox"/> Auto Dealership       | <input type="checkbox"/> Contractor                    | <input type="checkbox"/> Other (Explain) _____ |

VI. CONTACT PERSON IN CHARGE OF TANKS

Name	Job Title	Address	Phone Number (Include Area Code)
P.M. Motolenich	CDR, USA	Public Works Officer Naval Air Station Bldg. 376 on B Street Millington, TN 38054	(901) 873-5462

VII. FINANCIAL RESPONSIBILITY

I have met the financial responsibility requirements in accordance with 40 CFR Subpart H

Check All that Apply

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Self Insurance       | <input type="checkbox"/> Guarantee        | <input type="checkbox"/> State Funds                        |
| <input type="checkbox"/> Commercial Insurance | <input type="checkbox"/> Surety Bond      | <input type="checkbox"/> Trust Fund                         |
| <input type="checkbox"/> Risk Retention Group | <input type="checkbox"/> Letter of Credit | <input type="checkbox"/> Other Method Allowed Specify _____ |

VIII. CERTIFICATION (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative (Print)

Signature

Date Signed

*Rachel Woolley*

11-26-93

EPA estimates public reporting burden for this form to average 30 minutes per response including time for reviewing instructions, gathering and maintaining the data needed and completing and reviewing the form. Send comments regarding this burden estimate to Chief, Information Policy Branch PM-223, U.S. Environmental Protection Agency, 401 M Street, Washington D.C. 20460, marked "Attention Desk Officer for EPA." This form amends the previous notification form as printed in 40 CFR Part 280, Appendix I. Previous editions of this notification form may be used while supplies last.

**IX. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)**

Tank Identification Number	Tank No. <u>1</u>	Tank No. ____	Tank No. ____	Tank No. ____	Tank No. ____
<b>1. Status of Tank</b> (mark only one)	Currently in Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Temporarily Out of Use <small>(Remember to fill out section IX.)</small>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Permanently Out of Use <small>(Remember to fill out section IX.)</small>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Amendment of Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Date of Installation (mo./year)</b>	Est. 6/68				
<b>3. Estimated Total Capacity (gallons)</b>	8000				
<b>4. Material of Construction</b> (Mark all that apply)	Asphalt Coated or Bare Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cathodically Protected Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Epoxy Coated Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Composite (Steel with Fiberglass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Fiberglass Reinforced Plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lined Interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Double Walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Polyethylene Tank Jacket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Concrete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excavation Liner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Has tank been repaired?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5. Piping (Material)</b> (Mark all that apply)	Bare Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Galvanized Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Fiberglass Reinforced Plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Copper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cathodically Protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Double Walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Secondary Containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>6. Piping (Type)</b> (Mark all that apply)	Suction: no valve at tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Suction: valve at tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Gravity Feed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Has piping been repaired?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tank Identification Number	Tank No. <u>1</u>	Tank No. _____	Tank No. _____	Tank No. _____	Tank No. _____
<b>7. Substance Currently or Last Stored In Greatest Quantity by Volume</b>					
Gasoline	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diesel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gasohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kerosene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heating Oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used Oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hazardous Substance CERCLA name and/or, CAS number</b>	<input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Mixture of Substances Please specify</b>	<input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**X. TANKS OUT OF USE, OR CHANGE IN SERVICE**

<b>1. Closing of Tank</b>					
<b>A. Estimated date last used (mo./day/year)</b>	<u>1/92</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>B. Estimate date tank closed (mo./day/year)</b>	<u>10/29/93</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C. Tank was removed from ground</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>D. Tank was closed in ground</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E. Tank filled with inert material Describe</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F. Change in service</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Site Assessment Completed</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Evidence of a leak detected</b>	<input checked="" type="checkbox"/> YES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**XI. CERTIFICATION OF COMPLIANCE (COMPLETE FOR ALL NEW AND UPGRADED TANKS AT THIS LOCATION)**

Tank Identification Number	Tank No. ____	Tank No. ____	Tank No. ____	Tank No. ____	Tank No. ____						
<b>1. Installation</b>											
	A. Installer certified by tank and piping manufacturers	<input type="checkbox"/>									
	B. Installer certified or licensed by the implementing agency	<input type="checkbox"/>									
	C. Installation inspected by a registered engineer	<input type="checkbox"/>									
	D. Installation inspected and approved by implementing agency	<input type="checkbox"/>									
	E. Manufacturer's installation check-lists have been completed	<input type="checkbox"/>									
	F. Another method allowed by State agency. Please specify.	<input type="checkbox"/>									
<b>2. Release Detection (Mark all that apply)</b>	<b>TANK</b>	<b>PIPING</b>	<b>TANK</b>	<b>PIPING</b>	<b>TANK</b>	<b>PIPING</b>	<b>TANK</b>	<b>PIPING</b>	<b>TANK</b>	<b>PIPING</b>	
	A. Manual tank gauging	<input type="checkbox"/>									
	B. Tank tightness testing	<input type="checkbox"/>									
	C. Inventory controls	<input type="checkbox"/>									
	D. Automatic tank gauging	<input type="checkbox"/>									
	E. Vapor monitoring	<input type="checkbox"/>									
	F. Groundwater monitoring	<input type="checkbox"/>									
	G. Interstitial monitoring double walled tank/piping	<input type="checkbox"/>									
	H. Interstitial monitoring/secondary containment	<input type="checkbox"/>									
	I. Automatic line leak detectors	<input type="checkbox"/>									
	J. Line tightness testing	<input type="checkbox"/>									
	K. Other method allowed by Implementing Agency. Please specify.	<input type="checkbox"/>									
	<b>3. Spill and Overfill Protection</b>										
A. Overfill device installed		<input type="checkbox"/>									
B. Spill device installed		<input type="checkbox"/>									

**OATH: I certify the information concerning installation that is provided in section X is true to the best of my belief and knowledge.**

Installer: \_\_\_\_\_  
 Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Position \_\_\_\_\_ Company \_\_\_\_\_