

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

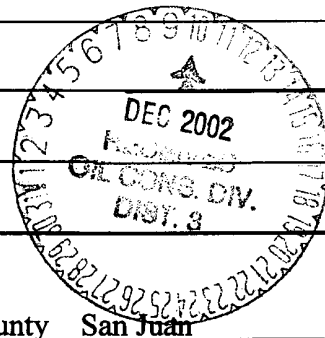
Submit 1 copy to  
appropriate  
District Office  
and 1 copy to  
the Santa Fe Office

(Revised 3/9/94)

*Risk  
bedrock  
defined  
plane*

PIT REMEDIATION AND CLOSURE REPORT

Operator: Amoco Telephone: \_\_\_\_\_  
Address: 30-045-11655  
Facility Or: Florance B#1, Meter 75829  
Well Name \_\_\_\_\_  
Location: Unit or Qtr/Qtr Sec E Sec 22 T 30 R 9 County San Juan  
Pit Type: Separator \_\_\_\_\_ Dehydrator \_\_\_\_\_ Other Drip  
Land Type: BLM X, State \_\_\_\_\_, Fee \_\_\_\_\_ Other \_\_\_\_\_



Pit Location: Pit dimensions: length 29', width 22', depth 2'  
(Attach diagram)

Reference: wellhead X, other \_\_\_\_\_

Footage from reference: 102'

Direction from reference: 274 Degrees X East North \_\_\_\_\_  
of \_\_\_\_\_ West South \_\_\_\_\_

Depth To Ground Water (Vertical distance from contaminants to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) ( 0 points) <u>10</u>
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Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources.)	Yes (20 points) No ( 0 points) <u>0</u>
---	--

Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches.)	Less than 200 feet 200 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) ( 0 points) <u>0</u>
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RANKING SCORE (TOTAL POINTS): 10

Date Remediation Started: 05/17/94 Date completed: 05/17/94

Remediation Method: Excavation \_\_\_\_\_ Approx. cubic yards \_\_\_\_\_

(Check all appropriate sections.)

Landfarmed \_\_\_\_\_ Insitu Bioremediation \_\_\_\_\_

Other Backfill Pit Without Excavation

Remediation Location: Onsite N/A Offsite N/A  
(i.e. landfarmed onsite,  
name and location of  
offsite facility)

General Description of Remedial Action: No line markers, sandstone at 4'

Ground Water Encountered: No X Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit:

Closure Sampling:  
(if multiple samples,  
attach sample results  
and diagram of sample  
locations and depths)

Sample location Four walls and center of pit composite

Sample depth 4'

Sample Date 05/17/94 Sample time 16:50

Sample Results

Benzene(ppm) Not reported

Total BTEX(ppm) Not reported

Field headspace(ppm) 166

TPH 24800

Ground Water Sample: Yes \_\_\_\_\_ No X (If yes, attach sample results)

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Date

1/8/03

Signature

Scott T. Pore

Printed Name

Scott T. Pore

and Title

Senior ENV. Scientist



## PIT CLOSURE REQUEST

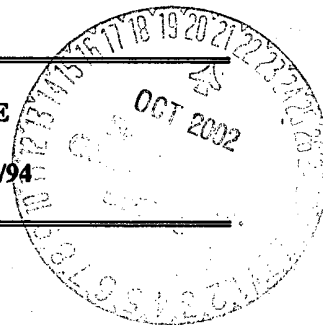
Florance B#1  
Meter/Line ID 75829

### SITE DETAILS

Legals - Twn: 30N  
NMOCD Hazard Ranking: 10  
Operator: Amoco

Rng: 9

Sec: 22 Unit: E  
Land Type: BLM  
Pit Closure Date: 05/17/94



### RATIONALE FOR RISK-BASED CLOSURE

The pit noted above was assessed and ranked according to the criteria in the New Mexico Oil Conservation Division's (NMOCD) Unlined Surface Impoundment Closure Guidelines.

A test pit was excavated to 4 feet (ft) below ground surface (bgs) where bedrock was encountered and a soil sample was collected for field headspace analysis and laboratory analysis for TPH. Groundwater was not encountered in the test pit. Headspace analysis indicated an organic vapor content of 166 ppm; laboratory analysis indicated a TPH concentration of 24,800 mg/kg. The field headspace analysis and TPH measurement exceeded recommended remediation levels for the Hazard Ranking Score of 10.

No soil was disposed of offsite. The pit was backfilled with site soil, topped with clean soil from the surrounding berms, and graded in a manner to direct surface runoff away from the pit area.

A Phase II boring was completed with refusal at 6 ft bgs. No groundwater was encountered in the soil boring. One laboratory sample was collected at 5-6 ft bgs. Headspace analysis indicated an organic vapor content of 56 ppm; laboratory analysis indicated a benzene concentration of <0.5 mg/kg, a total BTEX concentration of <3 mg/kg, and a TPH concentration of 960 mg/kg. The benzene, BTEX, and TPH concentrations were below recommended remediation levels for the Hazard Ranking Score.

No Phase III activities were conducted.

El Paso Field Services requests closure of the above mentioned production pit location for the following reasons:

- The primary source, discharge to the pit, has been removed for over eight years.
- Residual hydrocarbons in the soil will degrade by natural attenuation with minimal risk to the environment.
- The test pit was backfilled and the former pit area graded to direct surface runoff away from the former pit.
- The clean soil from the berms placed on top of the excavation would limit the potential for direct contact with hazardous constituents by livestock or the public; i.e., current direct contact exposure pathways are unlikely to be completed.
- Groundwater was not encountered in the soil boring that reached 6 ft bgs; geologic features in the area indicate the depth to groundwater is at least 50 feet bgs.



## **PIT CLOSURE REQUEST**

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- There are no water supply wells or other sources of fresh water extraction within 1,000 feet of the site.
- Benzene, total BTEX, and TPH concentrations in the soil sample collected at the base of the Phase 2 soil boring were below their respective OCD Hazard Ranking criteria.
- TPH concentrations at 6 ft bgs are less than 10% of what they are at 4 ft bgs, indicating that significant downward migration is not occurring.
- Bedrock encountered at 4 ft bgs makes further excavation impractical.

### **ATTACHMENTS**

Field Pit Assessment Form

Revised Field Pit Assessment Form

Field Pit Remediation/Closure Form

Phase 2 Soil Boring Log

Laboratory Analytical Results

# FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>75829</u> Location: <u>Florence B #1</u> Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>Bloom Field</u> Coordinates: Letter: <u>E</u> Section <u>22</u> Township: <u>30</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____ Site Assessment Date: <u>4/25/94</u> Area: <u>10</u> Run: <u>20</u>		
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2) Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____ Depth to Groundwater Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3) Wellhead Protection Area : Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points) Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3) Name of Surface Water Body _____ (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100' TOTAL HAZARD RANKING SCORE: <u>10</u> POINTS		
REMARKS	Remarks : <u>Redline shows inside V-A. Topo shows outside Vulnerable Area</u> <u>Only pit on location. Dry pit</u>		

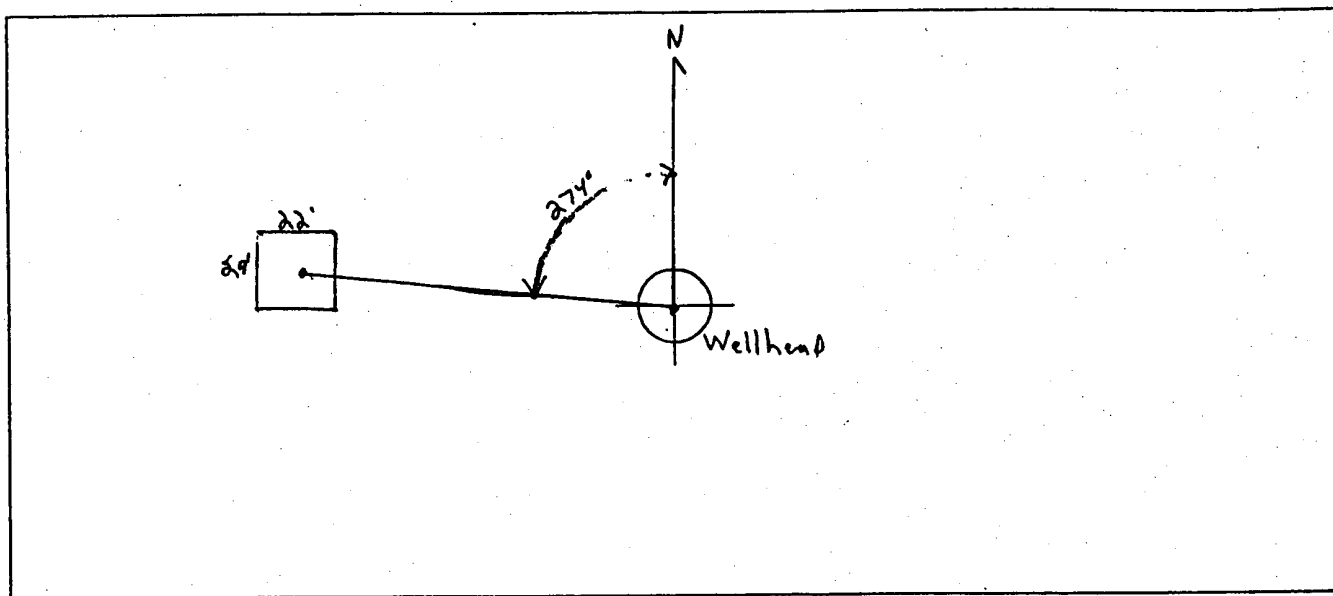
(P.L.T.)

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ORIGINAL PIT LOCATION

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 274° Footage from Wellhead 102  
b) Length : 29' Width : 22' Depth : 2'



REMARKS

Remarks :

Pictures taken at 10:54 a.m.

End Dump

Completed By:

Cory Chase

Signature

4/25/94

Date

# REVISED FIELD PIT SITE ASSESSMENT FORM

<b>GENERAL</b>	<p>Meter: <u>75829</u> Location: <u>Florange B#1</u></p> <p>Operator #: _____ Operator Name: _____ P/L District: _____</p> <p>Coordinates: Letter: <u>E</u> Section <u>22</u> Township: <u>30</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>4/8/98</u> Area: _____ Run: _____</p>
<b>SITE ASSESSMENT</b>	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p style="margin-left: 150px;">Inside <input type="checkbox"/> (1)</p> <p style="margin-left: 150px;">Outside <input checked="" type="checkbox"/> (2)</p> <p><b>Land Type:</b></p> <p style="margin-left: 150px;">BLM <input checked="" type="checkbox"/> (1)</p> <p style="margin-left: 150px;">State <input type="checkbox"/> (2)</p> <p style="margin-left: 150px;">Fee <input type="checkbox"/> (3)</p> <p style="margin-left: 150px;">Indian _____</p> <p><b>Depth to Groundwater</b></p> <p style="margin-left: 50px;">Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> <p style="margin-left: 50px;">50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2)</p> <p style="margin-left: 50px;">Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area</b></p> <p>Is it less than 1000 ft from wells, springs or other sources of fresh water extraction?, or; Is it less than 200 ft from a private domestic water source?</p> <p style="text-align: center;"><input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p><b>Horizontal Distance to Surface Water Body</b></p> <p style="margin-left: 50px;">Less Than 200 Ft (20 points) <input type="checkbox"/> (1)</p> <p style="margin-left: 50px;">200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p style="margin-left: 50px;">Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body: Perennial Rivers, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only)</p> <p style="margin-left: 150px;"><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>10</u> <b>POINTS</b></p>
<b>REMARKS</b>	<p>Remarks: <u>Site has been re-assessed, due to initial assessment including washes as a Surface Water Body. Site is &lt; 100' vertical from center of Caballo Canyon</u></p>



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW99	945216
MTR CODE   SITE NAME:	75829	N/A
SAMPLE DATE   TIME (Hrs):	5-17-94	1615
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	5-18-94	5/18/94
DATE OF BTEX EXT.   ANAL.:	N/A	N/A
TYPE   DESCRIPTION:	V6	Coarse black oily sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	24800	MG/KG			.26	28
HEADSPACE PID	166	PPM				
PERCENT SOLIDS	92.8	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at \_\_\_\_\_ % for this sample All QA/QC was acceptable.  
ative:

DF = Dilution Factor Used

Approved By: [Signature]

Date: 5/21/94



GENERAL

Meter: 75829 Location: Florence B#1  
 Coordinates: Letter: E Section 22 Township: 30 Range: 9  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Date Started : 5-17-94 Area: 10 Run: 33

FIELD OBSERVATIONS

Sample Number(s): VW99  
 Sample Depth: 4' Feet  
 Final PID Reading 166 PID Reading Depth 4' Feet  
 Yes No  
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth \_\_\_\_\_ Feet

CLOSURE

Remediation Method :  
 Excavation ☐ (1) Approx. Cubic Yards \_\_\_\_\_  
 Onsite Bioremediation ☐ (2)  
 Backfill Pit Without Excavation ☒ (3)  
 Soil Disposition:  
 Envirotech ☐ (1) ☐ (3) Tierra  
 Other Facility ☐ (2) Name: \_\_\_\_\_  
 Pit Closure Date: 5-17-94 Pit Closed By: BEI

REMARKS

Remarks : NO Line Markers. Sandstone 4'

Signature of Specialist: Ude Wilson

[illegible]

# RECORD OF SUBSURFACE EXPLORATION

HILIP SERVICES CORP.

3000 Road  
arm New Mexico 87401  
(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1  
Well # \_\_\_\_\_  
Page 1 of \_\_\_\_\_

Project Number 19643 Phase 1001.77  
Project Name EPFS PITS >10  
Project Location FIDRANCE B #1 75829

Elevation \_\_\_\_\_  
Borehole Location LTR: C S: 22 T: 30 R: 9  
GWL Depth \_\_\_\_\_  
Drilled By K. PADILLA  
Well Logged By H. BRADBURY  
Date Started 10/28/98  
Date Completed \_\_\_\_\_

Drilling Method 4 1/4 ID HSA  
Air Monitoring Method PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S/HS	
0				EXCAVATION SAMPLE collected at 4'						BZ=Breathing Zone BH=Borehole S/HS=Sample/Headspace
5	1			LT GR SANDSTONE. MED SAND, MOD CEMENTED, dry			0	0	345 56	1247 hrs hard drilling poor sample RECOVERY WENT down; got another hrs 1251 hrs
10	2			TOB 6'						
15	3									
20										
25										
30										
35										
40										

Comments:

HAB54 5-6 sent to lab for TPH, BTEX. GW NOT  
ENCOUNTERED. BH grouted to surface

Geologist Signature

*Holly Bradbury*



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	HAB54	980761
MTR CODE   SITE NAME:	75829	Florance B #1
SAMPLE DATE   TIME (Hrs):	10/28/98	1257
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	11/9/98	11/9/98
DATE OF BTEX EXT.   ANAL.:	11/3/98	11/6/98
TYPE   DESCRIPTION:	VG	SOIL

Field Remarks: 5-6'

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG				
TOLUENE	<0.5	MG/KG				
ETHYL BENZENE	<0.5	MG/KG				
TOTAL XYLENES	<1.5	MG/KG				
TOTAL BTEX	<3	MG/KG				
TPH (MOD.8015)	960	MG/KG				
HEADSPACE PID	56	PPM				
PERCENT SOLIDS	93.7	%				

-- TPH is by EPA Method 8015 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 100.0 % for this sample All QA/QC was acceptable.  
ative:

DF = Dilution Factor Used

Approved By: John J. J. J.

Date: 12/3/98

2709-D Pan American Freeway NE  
 Albuquerque, New Mexico 87107  
 Phone (505) 344-3777  
 Fax (505) 344-4413

**PINNACLE  
 LABORATORIES**

# GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)  
 CLIENT : EL PASO FIELD SERVICES  
 PROJECT # : (none)  
 PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 811012

SAMPLE		MATRIX	DATE	DATE	DATE	DIL. FACTOR
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	
01	980760	NON-AQ	10/28/98	11/9/98	11/9/98	1
02	980761	NON-AQ	10/28/98	11/9/98	11/9/98	1
03	980762	NON-AQ	10/28/98	11/9/98	11/10/98	1
PARAMETER		DET. LIMIT	UNITS	01	02	03
FUEL HYDROCARBONS, C6-C10		10	MG/KG	< 10	20	< 10
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	5.1	480	5.5
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	< 5.0	460	< 5.0
CALCULATED SUM:				5.1	960	5.5
SURROGATE:				131	156 **	125
O-TERPHENYL (%)						
SURROGATE LIMITS		( 66 - 151 )				

## CHEMIST NOTES:

\*\*= HIGH SURROGATE RECOVERY DUE TO MATRIX INTERFERENCE.



2709-D Pan American Freeway NE  
Albuquerque, New Mexico 87107  
Phone (505) 344-3777  
Fax (505) 344-4413

### GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED (DIRECT INJECT)  
CLIENT : EL PASO FIELD SERVICES  
PROJECT # : (none)  
PROJECT NAME : PHASE II DRILLING

PINNACLE I.D.: 811012

SAMPLE		MATRIX	DATE	DATE	DATE	DIL.
ID. #	CLIENT I.D.		SAMPLED	EXTRACTED	ANALYZED	FACTOR
04	980763	NON-AQ	10/29/98	11/9/98	11/10/98	1
05	980764	NON-AQ	10/29/98	11/9/98	11/10/98	1
06	980765	NON-AQ	10/29/98	11/9/98	11/10/98	1
PARAMETER		DET. LIMIT	UNITS	04	05	06
FUEL HYDROCARBONS, C6-C10		10	MG/KG	88	< 10	< 10
FUEL HYDROCARBONS, C10-C22		5.0	MG/KG	56	< 5.0	< 5.0
FUEL HYDROCARBONS, C22-C36		5.0	MG/KG	40	< 5.0	< 5.0
CALCULATED SUM:				184		

SURROGATE:  
O-TERPHENYL (%)  
SURROGATE LIMITS

( 66 - 151 )

129                      124                      126

CHEMIST NOTES:  
N/A



2709-D Pan American Freeway NE  
Albuquerque, New Mexico 87107  
Phone (505) 344-3777  
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS  
REAGENT BLANK

TEST	: EPA 8015 MODIFIED (DIRECT INJECT)	PINNACLE I.D.	: 811012
BLANK I.D.	: 110998	DATE EXTRACTED	: 11/9/98
CLIENT	: EL PASO FIELD SERVICES	DATE ANALYZED	: 11/9/98
PROJECT #	: (none)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: PHASE II DRILLING		

PARAMETER	UNITS	
FUEL HYDROCARBONS, C6-C10	MG/KG	< 10
FUEL HYDROCARBONS, C10-C22	MG/KG	< 5.0
FUEL HYDROCARBONS, C22-C36	MG/KG	< 5.0

SURROGATE:  
p-TERPHENYL (%) 99  
SURROGATE LIMITS (80 - 151)

CHEMIST NOTES:  
N/A

# BTEX SOIL SAMPLE WORKSHEET

File	:	980761	Date Printed	:	11/15/98
Soil Mass (g)	:	5.13	Multiplier (L/g)	:	0.00097
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		200
Shot Volume (uL)	:	50	CAL FACTOR (Report):		0.19493

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	<0.5	Benzene (mg/Kg): #VALUE!	0.487
Toluene (ug/L)	:	<0.5	Toluene (mg/Kg): #VALUE!	0.487
Ethylbenzene (ug/L)	:	<0.5	Ethylbenzene (mg/Kg): #VALUE!	0.487
p & m-xylene (ug/L)	:	4.69	p & m-xylene (mg/Kg):	0.914 0.975
o-xylene (ug/L)	:	<0.5	o-xylene (mg/Kg): #VALUE!	0.487
			Total xylenes (mg/Kg): #VALUE!	1.462
			Total BTEX (mg/Kg): #VALUE!	



## CHAIN OF CUSTODY RECORD

PROJECT NUMBER # 24324		PROJECT NAME Pit Closure Project		CONTRACT LABORATORY P. O. NUMBER											
SAMPLERS: <i>Holly Backlund</i>		DATE: 10/28/98		REQUESTED ANALYSIS											
LAB ID	DATE	TIME	MATRIX	FIELD ID	SEQUENCE #										
980761	10/28/98	1257	Soil	HAB54	54										
<div style="text-align: center;"> <p><i>HAB 10/28/98</i></p> </div>					TPH	EPA 418.1	BTEX	EPA 8020	LAB PID	TPH	BOD5	FIELD			
					✓										
<div style="display: flex; justify-content: space-between;"> <div> RECEIVED BY: (Signature)  <i>Holly Backlund</i> 10/28/98 1621 </div> <div> DATE/TIME  10/30/98 1345 </div> <div> RECEIVED BY: (Signature)  <i>[Signature]</i> </div> </div>					<div style="display: flex; justify-content: space-between;"> <div> RECEIVED BY: (Signature)  <i>[Signature]</i> </div> <div> DATE/TIME  10-30-98 1345 </div> <div> RECEIVED OF LABORATORY BY: (Signature)  <i>[Signature]</i> </div> </div>										

REQUESTED TURNAROUND TIME:

☐ ROUTINE ☐ RUSH

CARRIER CO.

RESULTS & INVOICES TO:

FIELD SERVICES LABORATORY  
EL PASO NATURAL GAS COMPANY  
P. O. BOX 4990  
FARMINGTON, NEW MEXICO 87499

505-599-2144

FAX: 505-599-2261