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**EL PASO FIELD SERVICES  
PRODUCTION PIT CLOSURE**

*Denny E. Ford*  
**DEPUTY OIL & GAS INSPECTOR**

**DEC 21 1998**

**TIBBAR FED #4  
Meter/Line ID - 75641**

**RECEIVED**  
JUL 2 1998

**SITE DETAILS**

*Approved*  
**Legals - Twn: 26      Rng: 09  
NMOCD Hazard Ranking: 30  
Operator: MERIDIAN OIL INC**

**Sec: 25      Unit: H  
Land Type: 4 - Fee  
Pit Closure Date: 08/05/94**

**ON CON. DIV.**  
JUL 2 1998

**RATIONALE FOR RISK-BASED CLOSURE:**

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

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

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

# FIELD PIT SITE ASSESSMENT FORM

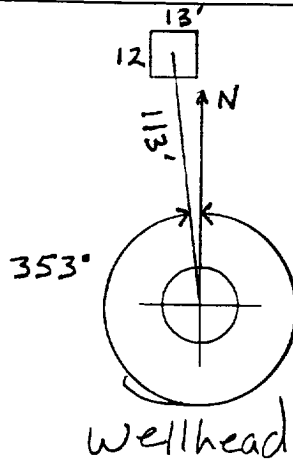
2

GENERAL	<p>Meter: <u>75641</u> Location: <u>Tibbar Fed No. 4</u>          Operator #: <u>2999</u> Operator Name: <u>Meridian P/L</u> District: <u>Ballard</u>          Coordinates: Letter: <u>H</u> Section <u>25</u> Township: <u>26N</u> Range: <u>9W</u>          Or Latitude _____ Longitude _____          Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____          Site Assessment Date: <u>6-24-94</u> Area: <u>11</u> Run: <u>82</u></p>
SITE ASSESSMENT	<p><b>NMOCD Zone:</b>          (From NMOCD Maps) Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b> BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input checked="" type="checkbox"/> (3) Indian _____</p> <p><b>Depth to Groundwater</b>          Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1)          50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)          Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b>          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)</p> <p><b>Horizontal Distance to Surface Water Body</b>          Less Than 200 Ft (20 points) <input type="checkbox"/> (1)          200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2)          Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Blanco Wash</u>          (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)          Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only)  <input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>30</u> POINTS</p>
REMARKS	<p>Remarks : <u>Three pits on location. Drip pit is dry</u>  <u>Inside V. Z. on Redlined Topo</u></p>

~~Print Name~~

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 353 Footage from Wellhead 113  
b) Length : 13 Width : 12 Depth : 3



Remarks :

Photos- 1058 hrs.

End dump

Completed By:

[Signature]

Signature

6-24-94

Date

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	Meter: <u>75641</u> Location: <u>Tibbar Fe<sup>2+</sup> #4</u> Coordinates: Letter: <u>H</u> Section <u>25</u> Township: <u>26N</u> Range: <u>9W</u> Or Latitude _____ Longitude _____ Date Started : <u>8/5/94</u> Run: <u>11</u> <u>82</u>
<b>FIELD OBSERVATIONS</b>	Sample Number(s): <u>KD193</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>257 ppm</u> PID Reading Depth <u>12'</u> Feet <div style="text-align: center;">Yes      No</div> Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
<b>CLOSURE</b>	Remediation Method : <div style="display: flex; justify-content: space-between;"> <div>           Excavation            Onsite Bioremediation            Backfill Pit Without Excavation         </div> <div style="text-align: right;"> <input checked="" type="checkbox"/> Approx. Cubic Yards <u>30</u>  <input type="checkbox"/>  <input type="checkbox"/> </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between;"> <div>           Envirotech <input checked="" type="checkbox"/>            Other Facility <input type="checkbox"/> </div> <div> <input type="checkbox"/> Tierra            Name: _____         </div> </div> Pit Closure Date: <u>8/5/94</u> Pit Closed By: <u>BEI</u>
<b>REMARKS</b>	Remarks : <u>EXCAVATED pit to 12', TOOK p.p Sample, closed pit.</u>
	Signature of Specialist: <u>[Signature]</u>



# FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

### PIT CLOSURE PROJECT - Soil

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KTD 193	945854
MTR CODE   SITE NAME:	75641	N/A
SAMPLE DATE   TIME (Hrs):	8-5-94	1340
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	8/9/94	8/9/94
DATE OF BTEX EXT.   ANAL.:	8/11/94	8/11/94
TYPE   DESCRIPTION:	NL	Brown fine sand

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.025	MG/KG	1			
TOLUENE	20.025	MG/KG	1			
ETHYL BENZENE	1.1	MG/KG	1			
TOTAL XYLENES	13	MG/KG	1			
TOTAL BTEX	14	MG/KG				
TPH (418.1)	1160	MG/KG			2.03	28
HEADSPACE PID	257	PPM				
PERCENT SOLIDS	86.5	%				

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

The Surrogate Recovery was at 113 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached.

DF = Dilution Factor Used

Approved By:

*J.S.*

Date:

9/2/94

\*\*\*\*\*  
 Test Report for  
 Oil and Grease and Petroleum Hydrocarbons  
 in Water and Soil  
 Perkin-Elmer Model 1600 FT-IR  
 Analysis Report  
 \*\*\*\*\*

7/17/97 10:05

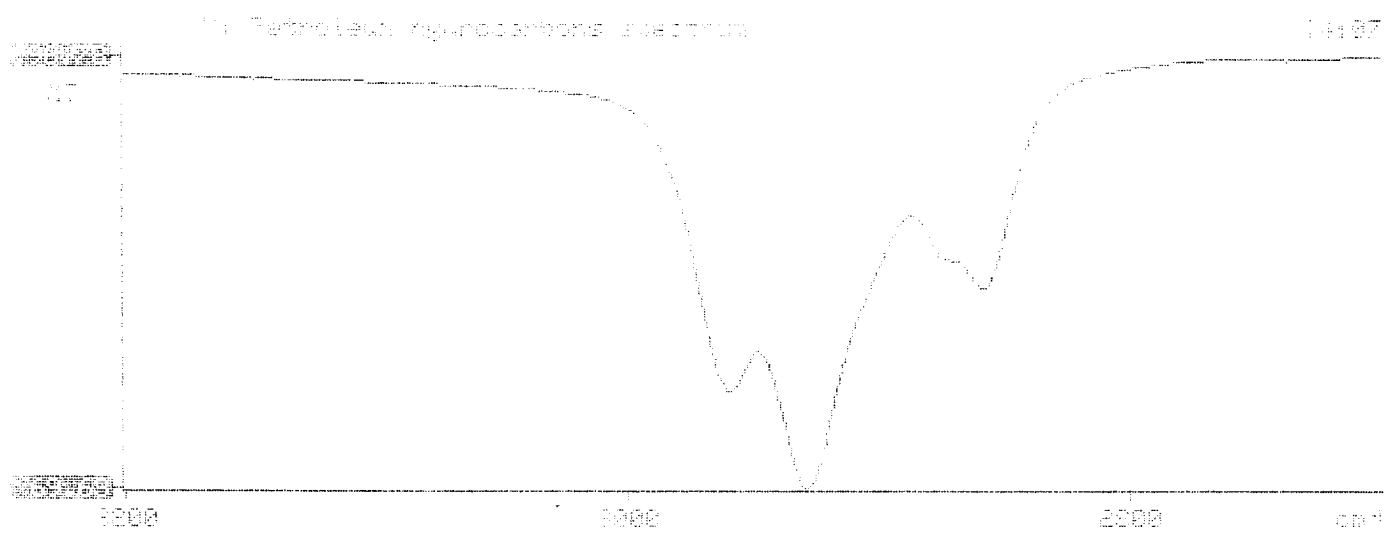
Sample Identification  
 000000

Calculated mass of sample, g  
 0.000

Volume of sample after extraction, ul  
 15.013

Petroleum hydrocarbons, ppm  
 150.995

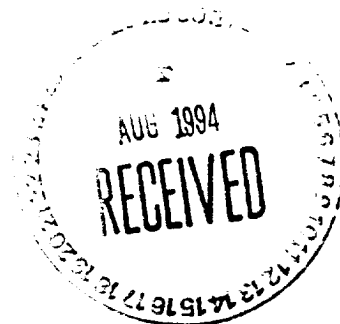
Net absorbance of hydrocarbons (2930 cm-1)  
 0.105





Analytical **Technologies**, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107  
Phone (505) 344-3777 FAX (505) 344-4413



ATI I.D. 408339

August 25, 1994

El Paso Natural Gas Co.  
P.O. Box 4990  
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 08/10/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR:jt

Enclosure





## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408339  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	945853	NON-AQ	08/05/94	08/11/94	08/11/94	1
11	945854	NON-AQ	08/05/94	08/11/94	08/11/94	1
12	945855	NON-AQ	08/05/94	08/11/94	08/11/94	1
PARAMETER			UNITS	10	11	12
BENZENE			MG/KG	<0.025	<0.025	<0.025
TOLUENE			MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE			MG/KG	<0.025	1.1	<0.025
TOTAL XYLENES			MG/KG	<0.025	13	<0.025

## SURROGATE:

BROMOFLUOROBENZENE (%) 88 113 84

# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

## PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

JWK 36

Borehole # BH-1

Well #

Page 1 of 1

Project Name

EPNG Pits

Project Number

14509

Phase

6000.77

Project Location

Tibben Fed No. 4

75641

Elevation

Borehole Location T 26N, R 9W, S 25, H

GWL Depth

Logged By Jeff W. Kindley

Drilled By G. Sudduth

Date/Time Started 08/19/95 1305

Date/Time Completed 08/19/95 1345

Well Logged By

Jeff W. Kindley

Personnel On-Site

D. Roberts, J. Long, G. Sudduth

Contractors On-Site

Client Personnel On-Site

Drilling Method

4 1/4 ID HSA

Air Monitoring Method

PID, CGI

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 BZ BH S/H			Drilling Conditions & Blow Counts
0										
5										
10	1	8-10	1.8 2.0	SW, tan sand, fine grained medium dense, no odor					0/1	1310 17 blows per foot
15	2	13-15	1.5 2.0	SW, tan sand, medium grained medium dense, no odor.					0/1	1319 18 blows per foot
20	3	18-20	1.5 2.0	S.A.A. Boring terminated at 20'					0/1	1324 18 blows per foot
25										
30										
35										
40										

Comments:

Tibben 4 has a fence and been around pit. In addition an above ground storage tank is located above the pits we drilled adjacent (110 feet south) and down gradient of the pit. The sample was collected at 18 to 20 feet since this would place it below the known contamination level of 12' in the pit.

Geologist Signature

Jeffrey Kindley



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

## SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 36	947279
MTR CODE   SITE NAME:	75641	Tibbar Fed. No. 4
SAMPLE DATE   TIME (Hrs):	08/19/95	13:24
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	8/21/95	8-21-95
DATE OF BTEX EXT.   ANAL.:	8/23/95	8/23/95
TYPE   DESCRIPTION:	VG	Brown fine sand

Field Remarks: \_\_\_\_\_

## RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	30.1 <sup>RB</sup> 8/23/95	MG/KG			2.04	2.8
HEADSPACE PID	1	PPM				
PERCENT SOLIDS	98.0	%				

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

The Surrogate Recovery was at 107% for this sample All QA/QC was acceptable.  
Narrative: \_\_\_\_\_

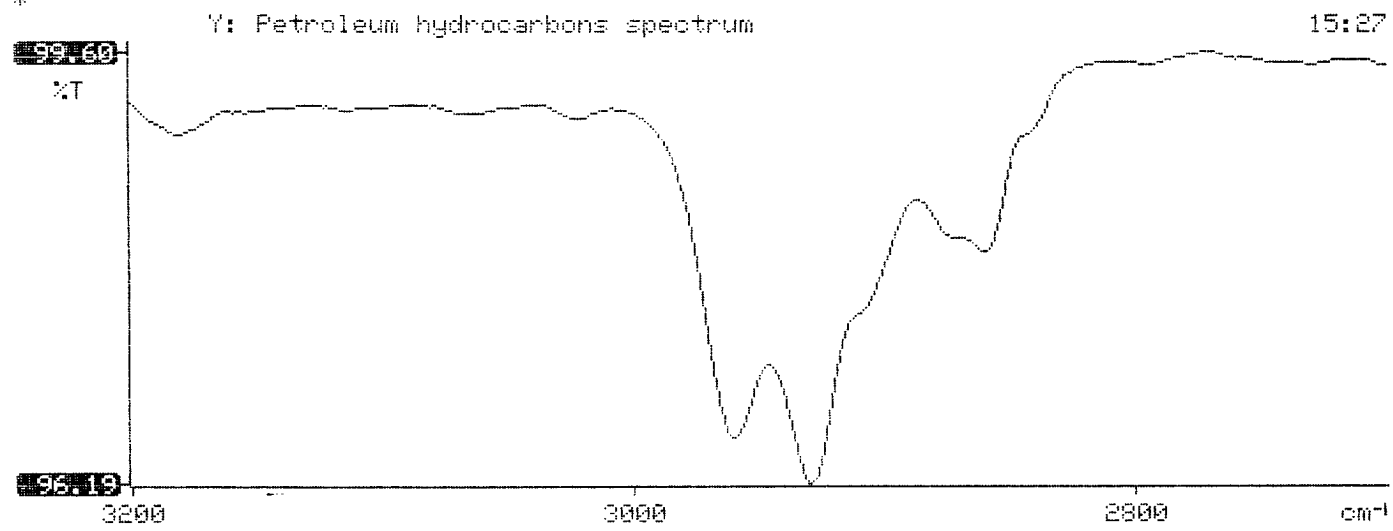
DF = Dilution Factor Used

Approved By: \_\_\_\_\_

Date: 8/28/95

\*\*\*\*\*  
\* Test Method for \*  
\* Oil and Grease and Petroleum Hydrocarbons \*  
\* in Water and Soil \*  
\* Perkin-Elmer Model 1600 FT-IR \*  
\* Analysis Report \*  
\*\*\*\*\*

\* 95/08/21 15:27 \*  
\* Sample identification \*  
\* 947279 \*  
\* Initial mass of sample, g \*  
\* 2.040 \*  
\* Volume of sample after extraction, ml \*  
\* 28.000 \*  
\* Petroleum hydrocarbons, ppm \*  
\* 30.054 \*  
\* Net absorbance of hydrocarbons (2930 cm-1) \*  
\* 0.014 \*  
\* \*  
\* \*



# BTEX SOIL SAMPLE WORKSHEET

File	:	947279	Date Printed	:	8/25/95
Soil Mass (g)	:	4.99	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.20040

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.501
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000 0.501
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.501
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000 1.002
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.501
			Total xylenes (mg/Kg):	0.000 1.503
			Total BTEX (mg/Kg):	0.000

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\082395-1.016  
 Method : C:\LABQUEST\METHODS\0001.MET  
 Sample ID : 947279,4.99G,100U  
 Acquired : Aug 24, 1995 01:28:12  
 Printed : Aug 24, 1995 01:54:26  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.440	0	0.0000
a,a,a TFT	4.910	4654633	89.4955
TOLUENE	6.750	80025	-0.5260
ETHYLBENZENE	10.530	51135	-0.3790
M & P XYLENE	10.860	0	0.0000
O XYLENE	11.943	0	0.0000
BFB	13.423	77130496	107.0756

