

811  
**EL PASO FIELD SERVICES**  
**PRODUCTION PIT CLOSURE**  
DEPUTY OIL & GAS INSPECTOR

DEC 2 1998

STATE COM H#9 FT  
Meter/Line ID - 87240

**RECEIVED**  
JUL 2 1998

SITE DETAILS

*Approved*  
Legals - Twn: 30 Rng: 09  
NMOCD Hazard Ranking: 40  
Operator: AMOCO PRODUCTION COMPANY

Sec: 16 Unit: B  
Land Type: 1 - State

Pit Closure Date: 05/10/94

**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

<b>GENERAL</b>	<p>Meter: <u>87240</u> Location: <u>STATE COM H #9 FT</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>B</u> Section <u>16</u> Township: <u>30</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>4.22.94</u> Area: <u>10</u> Run: <u>33</u></p>								
<b>SITE ASSESSMENT</b>	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p style="margin-left: 150px;">Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b></p> <table style="width: 100%;"> <tr> <td>BLM</td> <td><input type="checkbox"/> (1)</td> </tr> <tr> <td>State</td> <td><input checked="" type="checkbox"/> (2)</td> </tr> <tr> <td>Fee</td> <td><input type="checkbox"/> (3)</td> </tr> <tr> <td>Indian</td> <td>_____</td> </tr> </table> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>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? <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>Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>CABALLO CANYON</u> (AKA: WILD HORSE WASH)</p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>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>40</u> POINTS</p>	BLM	<input type="checkbox"/> (1)	State	<input checked="" type="checkbox"/> (2)	Fee	<input type="checkbox"/> (3)	Indian	_____
BLM	<input type="checkbox"/> (1)								
State	<input checked="" type="checkbox"/> (2)								
Fee	<input type="checkbox"/> (3)								
Indian	_____								
<b>REMARKS</b>	<p>Remarks : <u>THREE PITS ON LOCATION. WILL CLOSE TWO OF THEM. PITS ARE DRY.</u></p> <p style="text-align: right; margin-top: 20px;"><u>DIG &amp; HAUL</u></p>								

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 87240 Location: State Com # 9 FT  
 Coordinates: Letter: B Section 16 Township: 30 Range: 9  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Date Started : 5-10-94 Area: 10 Run: 33

OBSERVATIONS

Sample Number(s): KD 49  
 Sample Depth: 12' Feet  
 Final PID Reading 177 ppm PID Reading Depth 12' Feet  
 Yes No  
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth \_\_\_\_\_ Feet

CLOSURE

Remediation Method :  
 Excavation ☒ (1) Approx. Cubic Yards 60  
 Onsite Bioremediation ☐ (2)  
 Backfill Pit Without Excavation ☐ (3)  
 Soil Disposition:  
 Envirotech ☐ (1) ☒ (3) Tierra  
 Other Facility ☐ (2) Name: \_\_\_\_\_  
 Pit Closure Date: 5-10-94 Pit Closed By: BEI

REMARKS

Remarks : Excavation Depth went to 12' ; At this Depth  
took PID Reading, Closed Pit

Signature of Specialist: Kenny Brown



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	WD49	945108
MTR CODE   SITE NAME:	87240	N/A
SAMPLE DATE   TIME (Hrs):	5-10-94	0915
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	5/12/94	5/12/94
DATE OF BTEX EXT.   ANAL.:	5/17/94	5/18/94
TYPE   DESCRIPTION:	VC	Brown Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.025	MG/KG	1			
TOLUENE	0.026	MG/KG	1			
ETHYL BENZENE	0.10	MG/KG	1			
TOTAL XYLENES	1.8	MG/KG	1			
TOTAL BTEX	2.0	MG/KG				
TPH (418.1)	2560	MG/KG			2.10	28
HEADSPACE PID	177	PPM				
PERCENT SOLIDS	90.2	%				

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

The Surrogate Recovery was at 43 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached. Surrogate recovery was outside  
ATI QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By:

John Fard

Date:

7/14/94

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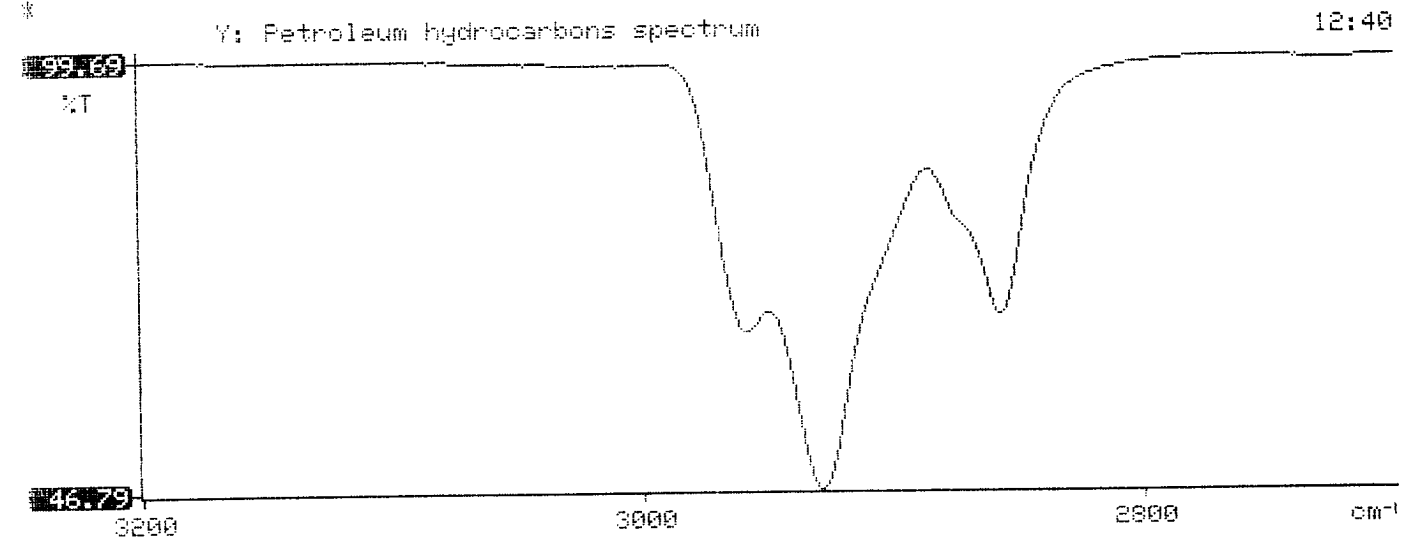
*****
*                                     *
*      Test Method for               *
*      Oil and Grease and Petroleum Hydrocarbons *
*      in Water and Soil             *
*                                     *
*      Perkin-Elmer Model 1600 FT-IR  *
*      Analysis Report               *
*     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

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* 94/05/12 12:40
*
* Sample identification
* 945108
*
* Initial mass of sample, g
* 2.100
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 2558.468
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.328
*
*
*

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

May 25, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 05/13/94, 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.

EPA Method 418.1 analysis was added for sample 945125 on 05/17/94.

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

Letitia Krakowski, Ph.D.  
Project Manager

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR:j d

Enclosure





Analytical Technologies, Inc.

## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405359  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	<del>945108</del>	NON-AQ	05/10/94	05/17/94	05/18/94	1
02	945109	NON-AQ	05/10/94	05/17/94	05/19/94	100
03	945110	NON-AQ	05/10/94	05/17/94	05/18/94	1
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.025	<2.5	<0.025
TOLUENE			MG/KG	0.026	11	<0.025
ETHYLBENZENE			MG/KG	0.10	2.9	<0.025
TOTAL XYLENES			MG/KG	1.8	34	<0.025

### SURROGATE:

BROMOFLUOROBENZENE (%)	43*	106	91
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\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE



# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

## PHILIP ENVIRONMENTAL

4000 Monroe Road  
Farmington, New Mexico 87401  
(505) 326-2262 FAX (505) 326-2388

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

Project Name EPUG Pits  
Project Number 14509 Phase 6000-77  
Project Location State CM H9 FT, 87240

Well Logged By S. Kelly  
Personnel On-Site K. Padilla, E. Rivera, D. Tsalas  
Contractors On-Site   
Client Personnel On-Site

Elevation   
Borehole Location   
GWL Depth   
Logged By S. Kelly  
Drilled By K. Padilla  
Date/Time Started 6/14/95, 1215  
Date/Time Completed 6/14/95, 1235

Drilling Method 4 1/4" ID HSA  
Air Monitoring Method CGA, PED

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU 5/45 BZ BH S			Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10				SAND, light brown, med. to coarse, moist, very loose (to 17')			6	4	0	-1225
15	1	15-17	10"	BOH-15 AK 6/14/95						
20										
25										
30										
35										
40										

Comments: 15'-17' sample (CMC55) sent to lab (RTX & TPH) BH grout to surface.

Geologist Signature



Phasett

# FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

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

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	Cmc 55	946901
MTR CODE   SITE NAME:	87240	N/A
SAMPLE DATE   TIME (Hrs):	6-14-95	1225
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL:	6/15/95	6-15-95
DATE OF BTEX EXT.   ANAL:	6/16/95	6/16/95
TYPE   DESCRIPTION:	VG	Dark brown sand & clay

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	<0.025	MG/KG	1			
ETHYL BENZENE	<0.025	MG/KG	1			
TOTAL XYLENES	<0.025	MG/KG	1			
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	75.9	MG/KG			2.05	28
HEADSPACE PID	1	PPM				
PERCENT SOLIDS	87.6	%				

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

The Surrogate Recovery was at 97 % for this sample All QA/QC was acceptable.  
Narrative:

ATI Results attached.

DF = Dilution Factor Used

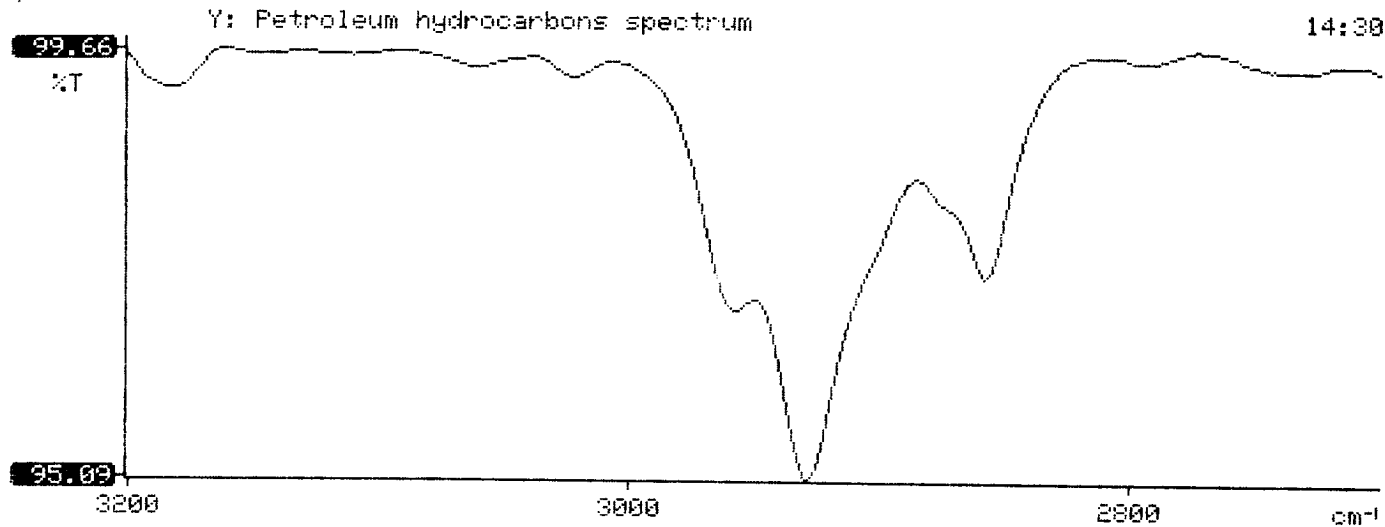
Approved By:

Date:

6/28/95

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

\* 95/06/15 14:29  
\* Sample identification  
\* 946901  
\* Initial mass of sample, g  
\* 2.050  
\* Volume of sample after extraction, ml  
\* 28.000  
\* Petroleum hydrocarbons, ppm  
\* 75.888  
\* Net absorbance of hydrocarbons (2930 cm-1)  
\* 0.020  
\*  
\*  
\*



\*\*\*\*\*  
\* Test Method for \*  
\*\*\*\*\*



Analytical **Technologies**, Inc.

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

ATI I.D. **506376**

June 21, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II 24324

Attention: John Lambdin

On 06/16/95, 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.

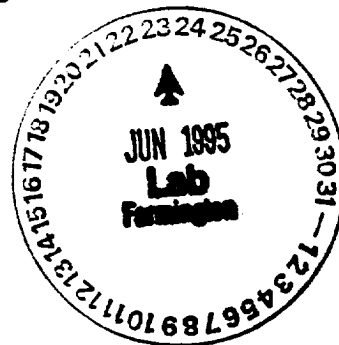
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill  
Project Manager

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.: 506376  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE/PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	946900	NON-AQ	06/14/95	06/16/95	06/16/95	1
11	946901	NON-AQ	06/14/95	06/16/95	06/16/95	1
12	946902	NON-AQ	06/14/95	06/16/95	06/16/95	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	<0.025	<0.025
TOTAL XYLENES			MG/KG	<0.025	<0.025	0.26

## SURROGATE:

BROMOFLUOROBENZENE (%) 103 97 137\*

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE