

**EL PASO FIELD SERVICES**  
**PRODUCTION PIT CLOSURE**

DEC 21 1998

**SHEETS #5C**  
**Meter/Line ID - 74374**

**RECEIVED**  
JUL 2 1998

**SITE DETAILS**

**Legals - Twn: 25      Rng: 08**  
**NMOCD Hazard Ranking: 40**  
**Operator: MERIDIAN OIL INC**

**Sec: 01      Unit: H**  
**Land Type: 2 - Federal**  
**Pit Closure Date: 07/14/94**

**OIL CON. DIV.**  
DEC 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

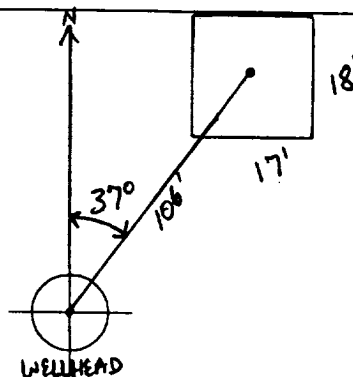
GENERAL	<p>Meter: <u>74374</u> Location: <u>SHEETS # S - C</u></p> <p>Operator #: _____ Operator Name: _____ P/L District: <u>BALLARD</u></p> <p>Coordinates: Letter: <u>H</u> Section <u>1</u> Township: <u>25</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>6.20.94</u> Area: <u>07</u> Run: <u>41</u></p>
SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b> BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input 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 checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>BIG RINCON CANYON</u> (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>
REMARKS	<p>Remarks : <u>ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS IN BIG RINCON CANYON. REDLINE AND TOPO CONFIRMED LOCATION IS INSIDE V.Z.</u></p>

DIG & HARM

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 37° Footage from Wellhead 106'  
b) Length : 18' Width : 17' Depth : 2'



## REMARKS

Remarks :

TOOK PICTURES AT 3:10 P.M.

END DUMP

Completed By:

Robert Champion

Signature

6-20-94

Date

# **PHASE I EXCAVATION**

# FIFTH PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 74374 Location: SHEET # 5-C  
 Coordinates: Letter: H Section 1 Township: 25 Range: 8  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Date Started : 7-14-94 Area: 07 Run: 41

FIELD OBSERVATIONS

Sample Number(s): KP 131  
 Sample Depth: 12' Feet  
 Final PID Reading 470 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: 7-14-94 Pit Closed By: B.E.I

REMARKS

Remarks : some line markers. Started Remediating to  
12'. Soil turned DARK gray. started to Hit SAND STONE.  
11 1/2 + 12', Soil still the same.

Signature of Specialist: Kelly Padilla



# FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

### PIT CLOSURE PROJECT - Soil

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP131	945465
MTR CODE   SITE NAME:	74374	N/A
SAMPLE DATE   TIME (Hrs):	7-14-94	1230
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	7/19/94	7/19/94
DATE OF BTEX EXT.   ANAL.:	7/21/94	7/21/94
TYPE   DESCRIPTION:	VC	Brown Sand/Clay

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.13	MG/KG	5			
TOLUENE	20.13	MG/KG	5			
ETHYL BENZENE	0.17	MG/KG	5			
TOTAL XYLENES	1.5	MG/KG	5			
TOTAL BTEX	1.9	MG/KG				
TPH (418.1)	1320	MG/KG			1.99	28
HEADSPACE PID	470	PPM				
PERCENT SOLIDS	92.2 %					

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

The Surrogate Recovery was at 99 % for this sample All QA/QC was acceptable.

Narrative:

AT I results attached.

DF = Dilution Factor Used

Approved By:

J.S.

Date:

8/12/94

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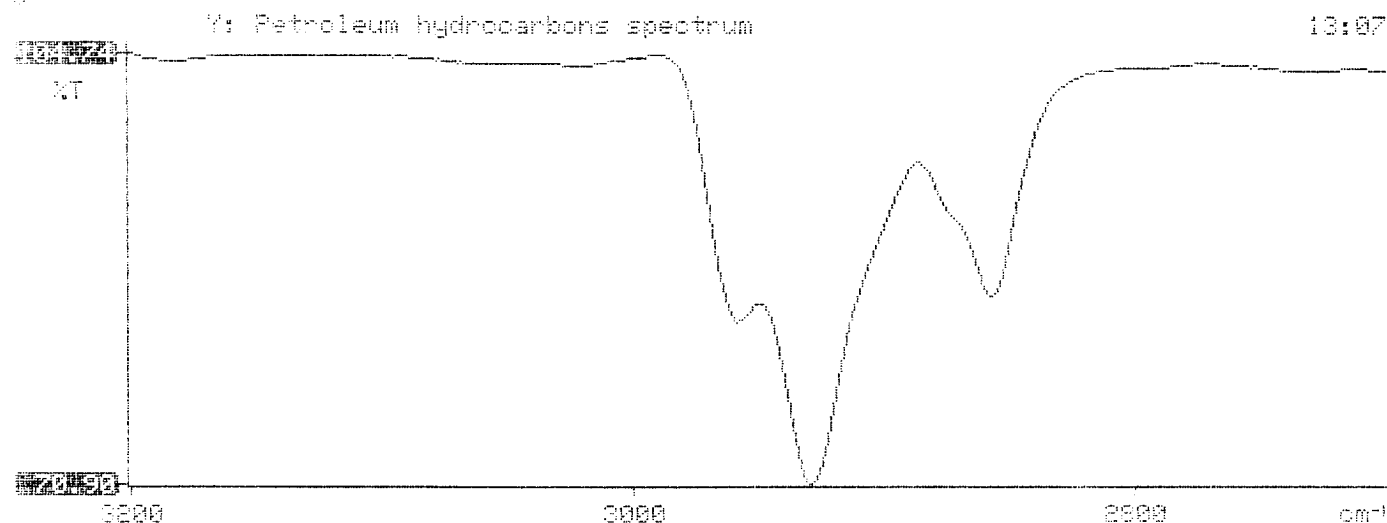
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR   *
*      Analysis Report             *
*****

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94/07/19 13:07
*
* Sample identification
945665
*
* Initial mass of sample, g
1.970
*
* Volume of sample after extraction, ml
28.000
*
* Petroleum hydrocarbons, ppm
1321.256
* Net absorbance of hydrocarbons (2930 cm-1)
0.166
*
*
*

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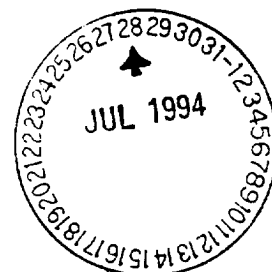
Analytical **Technologies, Inc.**

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

ATI I.D. 407376

July 27, 1994

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



Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 07/20/94, 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.

Letitia Krakowski, Ph.D.  
Project Manager

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR:jt

Enclosure





Analytical Technologies, Inc.

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 407376  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945665	NON-AQ	07/14/94	07/21/94	07/21/94	5
02	945666	NON-AQ	07/14/94	07/21/94	07/21/94	1
03	945667	NON-AQ	07/14/94	07/21/94	07/21/94	1
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.13	<0.025	<0.025
TOLUENE			MG/KG	<0.13	<0.025	<0.025
ETHYLBENZENE			MG/KG	0.17	<0.025	<0.025
TOTAL XYLENES			MG/KG	1.5	<0.025	<0.025

## SURROGATE:

BROMOFLUOROBENZENE (%)	99	94	96
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# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

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

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

Project Name EPNG PITS  
Project Number 14509 Phase 6000.77  
Project Location Sheet 5 #5-a 74374

Elevation \_\_\_\_\_  
Borehole Location Letter H-SI-T25-88  
GWL Depth \_\_\_\_\_  
Logged By J.F. LaBarbera  
Drilled By K. Padilla  
Date/Time Started 8/1/95 - 0832  
Date/Time Completed - 1002 JFL  
10/1

Well Logged By J.F. LaBarbera  
Personnel On-Site K. Padilla, F. Rivera, D. Charlie  
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 <u>15</u> BZ BH S			Drilling Conditions & Blow Counts
0										
5										
10										
15	1	15-16	12	hard, <sup>hard</sup> brown, <sup>fr.</sup> SANDSTONE, X dry, moderately cemented, no odor noted.			0	13	<u>553</u> 3	0846
20	2	20- 20.75	9	Gray, hard, SHALE, dry no odor noted, non-fissile.			0.1	3	<u>633</u> 7.5	0911
25	3	25- 25.5	5	RA  TOB at 25.5' <u>Refusal</u>			0.3	3	<u>633</u> 1.8	Hard drilling Refusal at 25 0937
30										
35										
40										

Comments: Sample JFL 37 From 25-25.5' sent to lab for BTEX/TPH analysis

Geologist Signature John LaBarbera



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

Phase II Drilling  
Sheets #5-C  
(25-25.5')

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JFL 37	947125
MTR CODE   SITE NAME:	74374	N/A
SAMPLE DATE   TIME (Hrs):	08/01/95	09:37
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	8-2-95	8-2-95
DATE OF BTEX EXT.   ANAL.:	8-4-95	8-5-95
TYPE   DESCRIPTION:	V6	light grey 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)	26.3	MG/KG			2.11	28
HEADSPACE PID	2022	PPM				
PERCENT SOLIDS	93.3	%				

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

The Surrogate Recovery was at 105 % for this sample All QA/QC was acceptable.

Narrative:

AT 1 Results attached

DF = Dilution Factor Used

Approved By: J. P.

Date: 8/24/95

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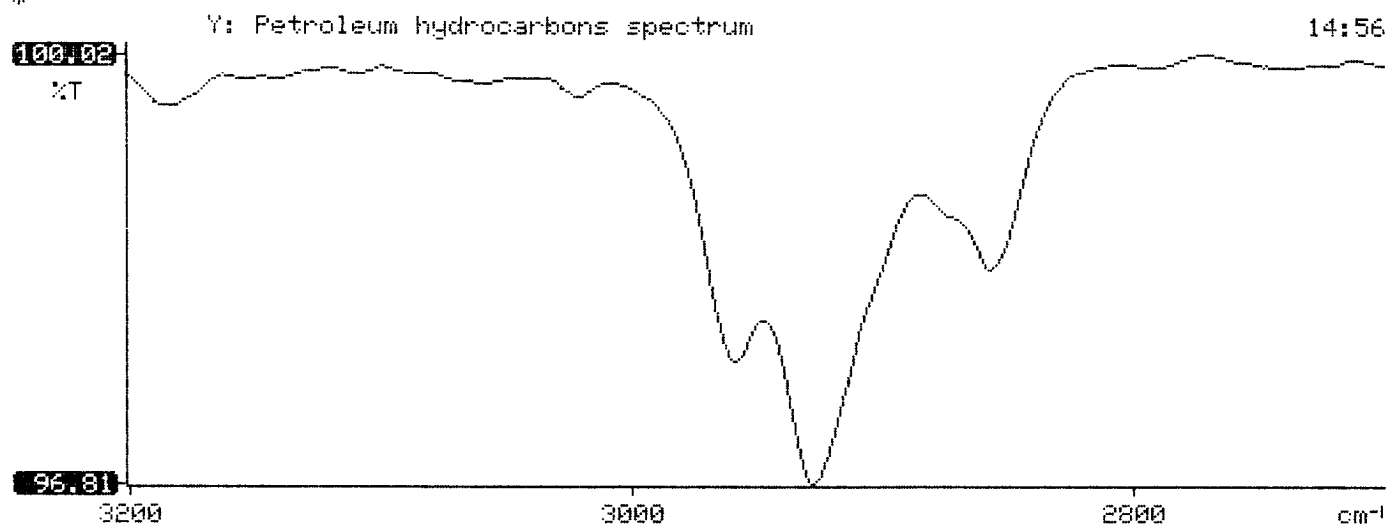
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil       *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                   *
*      Analysis Report                         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

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*
* 95/08/02 14:56
*
* Sample identification
* 947125
*
* Initial mass of sample, g
* 2.110
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 26.304
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.014
*
*
*

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Analytical **Technologies**, Inc.

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

ATI I.D. 508327

August 7, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II DRILLING 24324

Attention: John Lambdin

On 08/04/95, 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.

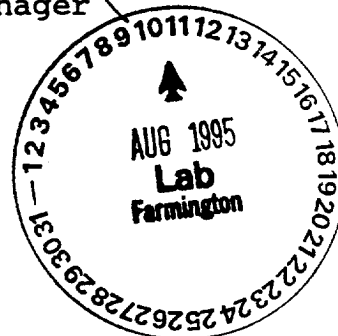
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill  
Project Manager

MR:jt

Enclosure

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager



# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 508327  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE/PHASE II DRILLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	947125	NON-AQ	08/01/95	08/04/95	08/05/95	1
02	947126	NON-AQ	08/01/95	08/04/95	08/05/95	1
03	947127	NON-AQ	08/01/95	08/04/95	08/05/95	50
PARAMETER		UNITS	01	02	03	
BENZENE		MG/KG	<0.025	<0.025	<1.3	
TOLUENE		MG/KG	<0.025	<0.025	60	
ETHYLBENZENE		MG/KG	<0.025	<0.025	13	
TOTAL XYLENES		MG/KG	<0.025	<0.025	110	

## SURROGATE:

BROMOFLUOROBENZENE (%)	105	94	*
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\*SURROGATE RECOVERY NOT OBTAINABLE DUE TO SAMPLE DILUTION