

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

DEC 21 1998

**FEDERAL E #1**  
**Meter/Line ID - 87396**

**RECEIVED**  
JUL 2 1999

**SITE DETAILS**

*Approved*  
**Legals - Twn: 27      Rng: 08**  
**NMOCD Hazard Ranking: 40**  
**Operator: BLEDSOE PETRO CORP**

**Sec: 25      Unit: M**  
**Land Type: 2 - Federal**  
**Pit Closure Date: 07/28/94**

**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.

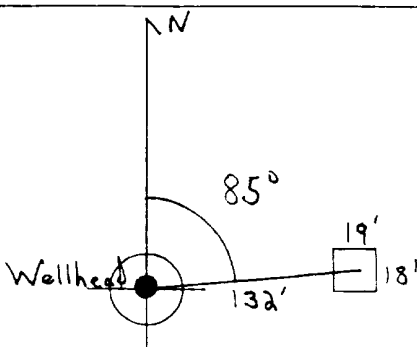
Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

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

GENERAL	<p>Meter: <u>87396</u> Location: <u>Federal E # 1</u></p> <p>Operator #: <u>0748</u> Operator Name: <u>Bledsoe Petro Corp</u> P/L District: <u>Ballard</u></p> <p>Coordinates: Letter: <u>M</u> Section <u>25</u> Township: <u>27</u> Range: <u>8</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>6/13/94</u> Area: <u>07</u> Run: <u>51</u></p>
	<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>Large 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>Redline Book - Inside Vulnerable Zone Topo - Inside</u> <u>2 pits. Closest pit dry</u></p> <p><u>DIG + HAVI</u></p>

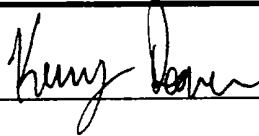
ORIGINAL PIT LOCATION	<div data-bbox="619 299 1069 346">ORIGINAL PIT LOCATION</div> <div data-bbox="199 365 1500 471">Original Pit : a) Degrees from North <u>85°</u> Footage from Wellhead <u>132'</u> b) Length : <u>19'</u> Width : <u>18'</u> Depth : <u>3'</u></div> <div data-bbox="204 512 1500 1094"></div>
REMARKS	<div data-bbox="199 1150 1500 1704">Remarks : <u>Pictures @ 1214 (1-4) roll 5</u> <u>Dump Truck</u></div>
	<div data-bbox="199 1760 1500 1968">Completed By: <div data-bbox="287 1815 805 1954"><u>Cory Chase</u> Signature</div><div data-bbox="1053 1843 1220 1954"><u>6/13/99</u> Date</div></div>

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# **PHASE I EXCAVATION**

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# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	Meter: <u>87396</u> Location: <u>Federal E #1</u> Coordinates: Letter: <u>M</u> Section <u>25</u> Township: <u>27</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Date Started : <u>7/27/94</u> Run: <u>02</u> <u>51</u>
<b>FIELD OBSERVATIONS</b>	Sample Number(s): <u>KD 170</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>389 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>50</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>7/28/94</u> Pit Closed By: <u>BEI</u>
<b>REMARKS</b>	Remarks : <u>Excavated pit to 12', Took PID Sample, Closed pit.</u> _____ _____
	Signature of Specialist: <u></u>



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

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

## SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD170	945781
MTR CODE   SITE NAME:	87396	Federal E #1
SAMPLE DATE   TIME (Hrs):	28-Jul-94	915
PROJECT:	Phase I Excavation	
DATE OF TPH EXT.   ANAL.:	8/2/94	8/2/94
DATE OF BTEX EXT.   ANAL.:	8/3/94	8/3/94
TYPE   DESCRIPTION:	VC	Brown/Grey Clay/Sand

Field Remarks: Split

## RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.89	MG/KG				
TOLUENE	22.4	MG/KG				
ETHYL BENZENE	6.76	MG/KG				
TOTAL XYLENES	124	MG/KG				
TOTAL BTEX	154	MG/KG				
TPH (418.1)	2,810	MG/KG			2.04	28.0
HEADSPACE PID	389	PPM				
PERCENT SOLIDS	92.3	%				

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

The Surrogate Recovery was at 116.0 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John LutchDate: Original: 9/2/94  
Re-printed: 3/16/98

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\945781A  
 Method : C:\LABQUEST\METHODS\WATERS.MET  
 Sample ID : 945781 0.58g/20ml 1/10  
 Acquired : Aug 03, 1994 10:43:18  
 Printed : Aug 04, 1994 13:47:51  
 User : STACY

### Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.417	301358	110084.15625	25.7042
a,a,a TFT	12.817	3028039	12126.05859	4681.4019
TOLUENE	15.333	7795658	113262.99219	649.9420
ETHYLBENZENE	19.517	2134466	104582.78125	195.9361
M & P XYLENE	19.717	29312834	118860.08594	2560.9927
O XYLENE	20.267	10951008	103952.14844	1024.5457
BFB	20.833	20802358	455214.09375	1157.5090

Totals :

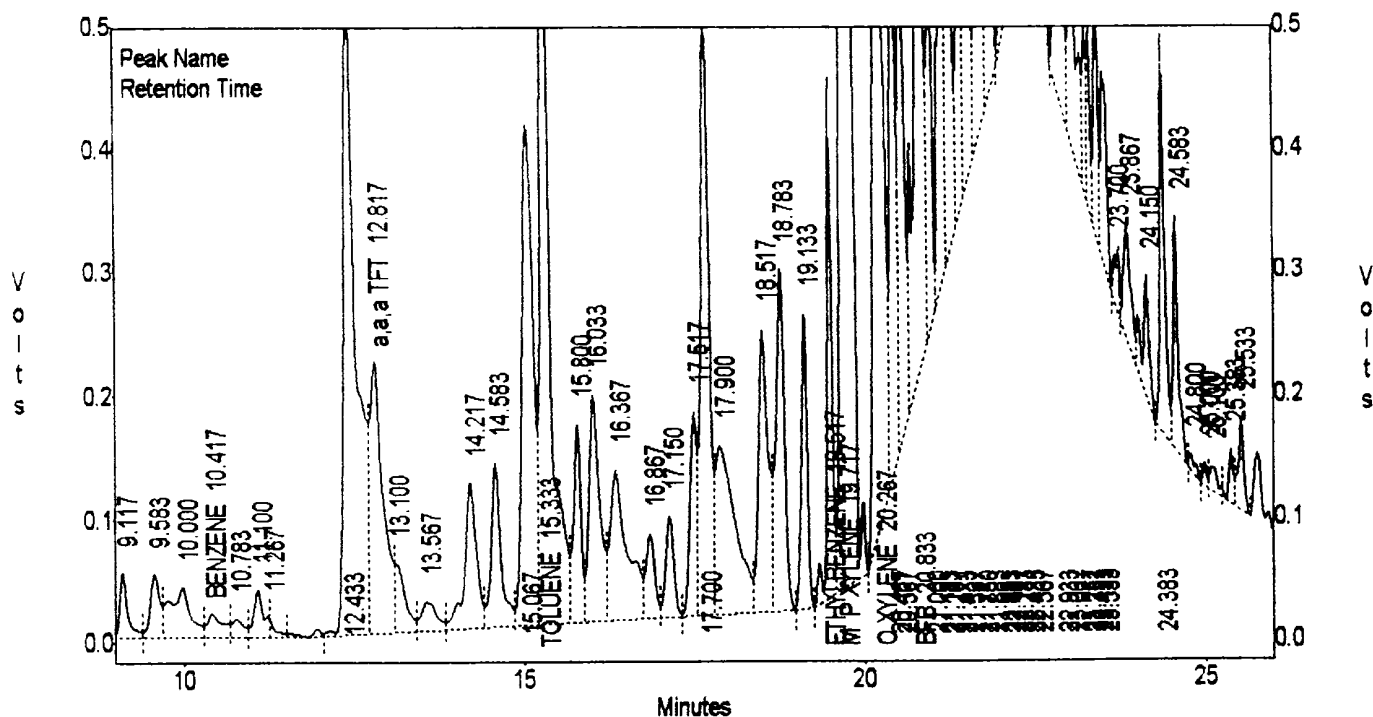
74325720

10296.0313

2.57  
65.0  
19.6  
256  
102.5  
115.8%

*Justfender*  
8/6/94

C:\LABQUEST\CHROM\945781A - Channel A



## EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\945781A  
 Method : C:\LABQUEST\METHODS\WATERS.MET  
 Sample ID : 945781 0.58g/20ml 1/10  
 Acquired : Aug 03, 1994 10:43:18  
 Printed : Aug 04, 1994 13:47:59  
 User : STACY

## Channel B Results

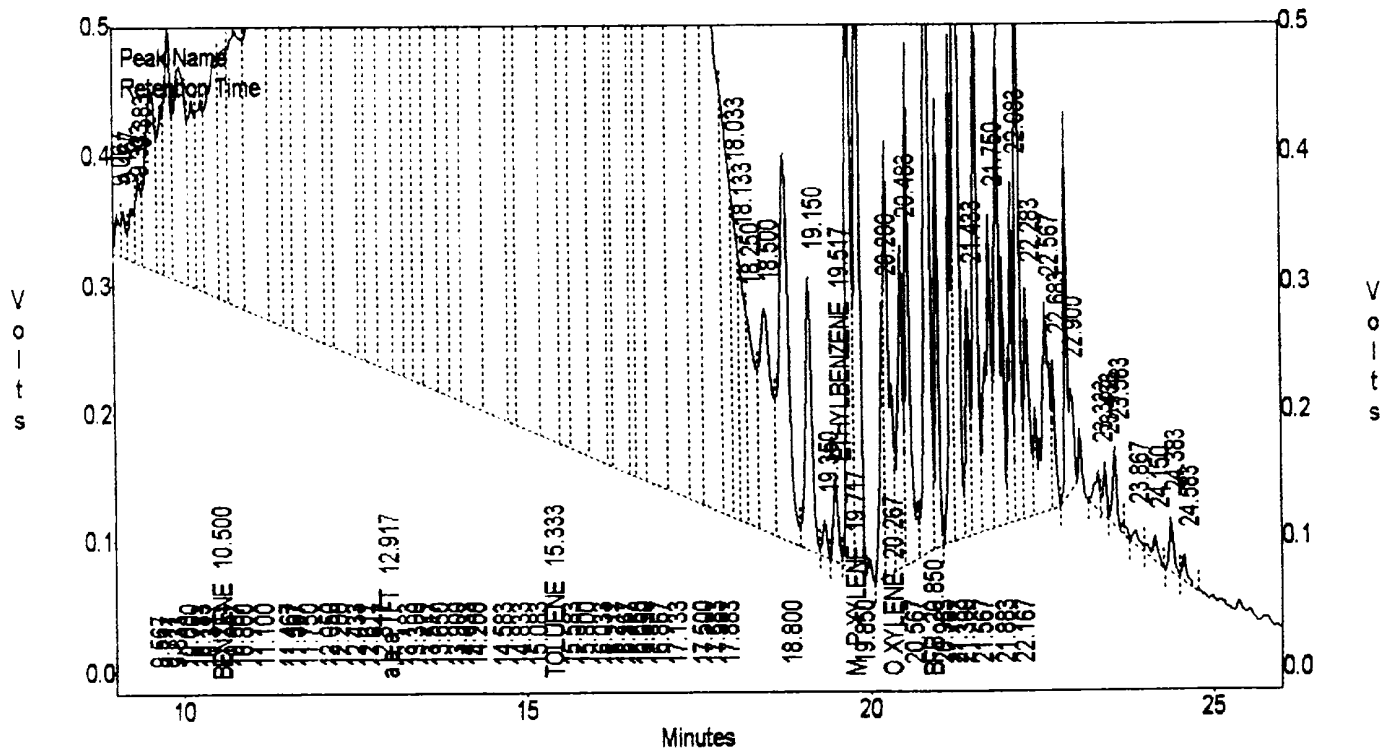
COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.500	2109037	16276.79199	1208.6638
a,a,a TFT	12.917	5997976	1556.41406998988288	0.0000
TOLUENE	15.333	13329325	16277.60938	7745.2402
ETHYLBENZENE	19.517	297311	15369.43262	184.3023
M & P XYLENE	19.717	3936535	15419.21973	2461.6460
O XYLENE	20.267	1777750	15228.25098	1113.0543
BFB	20.850	3709454	29268.63867	2309.2051

Totals :

31157392

2999003392.0000

C:\LABQUEST\CHROM\945781A - Channel B







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

ATI I.D. 408313

August 12, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 08/03/94, 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.

8015 analysis was added on 08/08/94 for sample 945739 per John Lambdin.

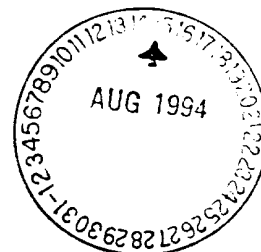
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

  
Letitia Krakowski, Ph.D.  
Project Manager

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR: jt

Enclosure



## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408313  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945781	NON-AQ	07/28/94	08/04/94	08/05/94	10
02	945782	NON-AQ	07/28/94	08/04/94	08/05/94	10
03	945783	NON-AQ	07/28/94	08/04/94	08/05/94	5
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.25	<0.25	<0.13
TOLUENE			MG/KG	10	<0.25	<0.13
ETHYLBENZENE			MG/KG	2.8	2.4	0.42
TOTAL XYLENES			MG/KG	54	37	6.8

## SURROGATE:

BROMOFLUOROBENZENE (%) 71 121\* 108

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

Split Sample



Analytical **Technologies**, Inc.

### GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 408313
PROJECT #	: 24324	DATE RECEIVED	: 08/03/94
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 08/05/94

PARAMETER	UNITS	01	13
PETROLEUM HYDROCARBONS, IR	MG/KG	2100	3900

EPNG Sample #945781  
Split Sample

# PHASE II

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# 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 #

Page 1 of 1

Project Name EPNG PITS

Project Number 14509 Phase 6000.77

Project Location Federal E #1 7058 F.S. 87396

Well Logged By J.F. LaBarbera

Personnel On-Site K. Padilla, F. Rivera, D. Charlie J. O'Keefe

Contractors On-Site

Client Personnel On-Site

Elevation

Borehole Location 14509-M-535-727-RP

GWL Depth

Logged By J.F. LaBarbera

Drilled By K. Padilla

Date/Time Started 7/25/95 - 1209

Date/Time Completed - 1319

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			Drilling Conditions & Blow Counts
							BZ	BH	S	
0										
5										
10										
15	1	15-16	10	Gray, med dense, v. fr. sandy, SILT, damp, odor			1.2	8	492/374	1231
20	2	20-22.5	6	Lt Olive, med coarse, SANDSTONE, poorly cemented, v. sh. odor.	X		1	27	8.5/13.9	1232
25	3	25-25.25	3	Brown, R.R.			0	6.4	14/74	1235
30										
35										
40										

Comments:

Sample JFL 21 from 20-22.5" sent to lab for BTEX/TPH analysis. Unsure if PID headspace at 20" accurate. - Drilling data to 24' when sample checked.

Geologist Signature

*John S. Goodman*



Phase II Drilling  
Federal E #1  
(20-20.5')

# FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

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

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JFL 21	947075
MTR CODE   SITE NAME:	87394	N/A
SAMPLE DATE   TIME (Hrs):	07/25/95	12:30
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	7-26-95	7-26-95
DATE OF BTEX EXT.   ANAL.:	7-27-95	7-28-95
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			<del>28</del>
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)	RLB 7/27/95 2120.8	MG/KG			2.15	28
HEADSPACE PID	8.5	PPM				
PERCENT SOLIDS	92.4	%				

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

The Surrogate Recovery was at 101 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached

DF = Dilution Factor Used

Approved By:

JF

Date:

8/22/95

Test Method for  
Oil and Grease and Petroleum Hydrocarbons  
in Water and Soil

Perkin-Elmer Model 1600 FT-IR  
Analysis Report

95/07/26 13:57

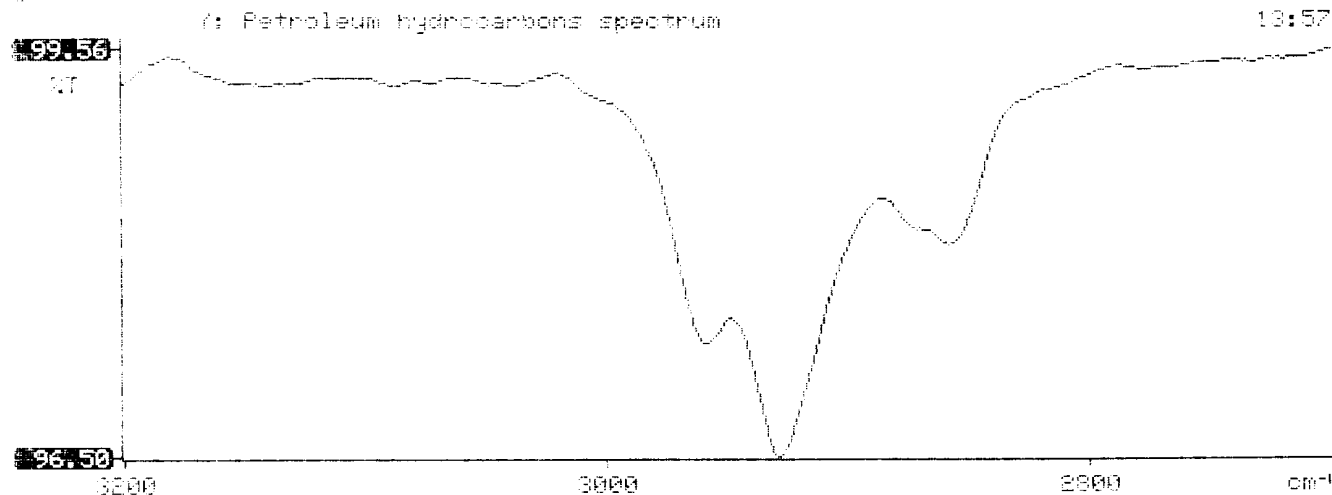
Sample identification  
947073

Initial mass of sample, g  
2.150

Volume of sample after extraction, ml  
28.000

Petroleum hydrocarbons, ppm  
20.828

Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.013





Analytical **Technologies**, Inc.

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

ATI I.D. 507411

August 3, 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 07/27/95, 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.

EPA method 8015 analyses were added on 07/27/95 for samples "947068", "947069" and "947077" per Kim Kirby.

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.: 507411  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE/PHASE II DRILLING

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	947073	NON-AQ	07/25/95	07/27/95	07/28/95	1
05	947074	NON-AQ	07/25/95	07/27/95	07/28/95	1
06	947075	NON-AQ	07/25/95	07/27/95	07/28/95	1

PARAMETER	UNITS	04	05	06
BENZENE	MG/KG	<0.025	<0.025	<0.025
TOLUENE	MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE	MG/KG	0.029	<0.025	<0.025
TOTAL XYLENES	MG/KG	0.45	<0.025	<0.025

## SURROGATE:

BROMOFLUOROBENZENE (%) 102 98 101