

DEPUTY EL PASO INSPECTOR  
**EL PASO FIELD SERVICES**  
**PRODUCTION PIT CLOSURE**  
DEC 21 1998

*Approved*

**ELLIOTT G CM N 1**  
**Meter/Line ID - 75126**

**RECEIVED**  
JUL 2 1998

**SITE DETAILS**

**Legals - Twn: 30 Rng: 09 Sec: 33**  
**NMOCD Hazard Ranking: 10**  
**Operator: AMOCO PRODUCTION COMPANY**

**Unit: 1**  
**Land Type: 4 - Fee**

**OIL CON. DIV.**  
**DIST. 3**

**Pit Closure Date: 05/11/94**

**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.

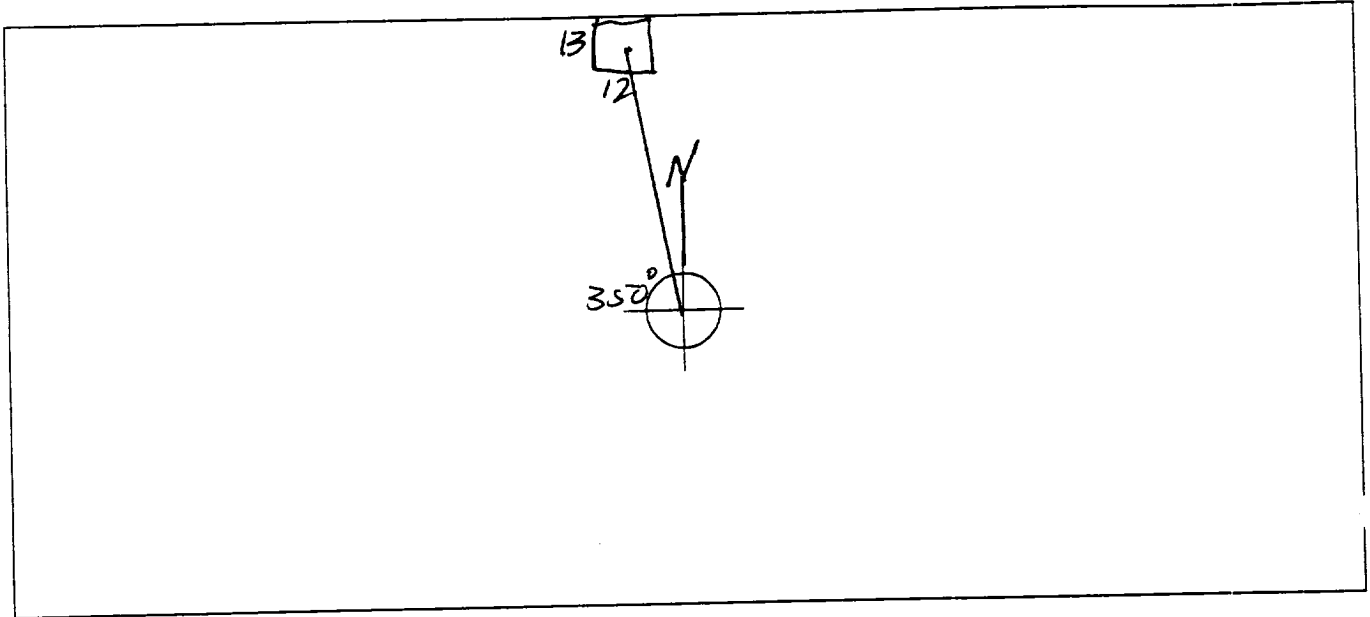
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>75126</u> Location: <u>ELLIOT GCM N1</u>          Operator #: <u>0203</u> Operator Name: <u>AMDCO</u> P/L District: <u>BLOOMFIELD</u>          Coordinates: Letter: <u>I</u> Section <u>33</u> Township: <u>30</u> Range: <u>9</u>          Or Latitude _____ Longitude _____          Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____          Site Assessment Date: <u>5-11-94</u> Area: <u>10</u> Run: <u>43</u></p>																
	SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)      <b>Land Type:</b></p> <table border="0"> <tr> <td>Inside</td> <td><input checked="" type="checkbox"/> (1)</td> <td>BLM</td> <td><input type="checkbox"/> (1)</td> </tr> <tr> <td>Outside</td> <td><input type="checkbox"/> (2)</td> <td>State</td> <td><input type="checkbox"/> (2)</td> </tr> <tr> <td></td> <td></td> <td>Fee</td> <td><input checked="" type="checkbox"/> (3)</td> </tr> <tr> <td></td> <td></td> <td>Indian</td> <td>_____</td> </tr> </table> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input checked="" 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 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 checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____</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)</p> <p><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>10</u> POINTS</p>	Inside	<input checked="" type="checkbox"/> (1)	BLM	<input type="checkbox"/> (1)	Outside	<input type="checkbox"/> (2)	State	<input type="checkbox"/> (2)			Fee	<input checked="" type="checkbox"/> (3)			Indian
Inside		<input checked="" type="checkbox"/> (1)	BLM	<input type="checkbox"/> (1)													
Outside	<input type="checkbox"/> (2)	State	<input type="checkbox"/> (2)														
		Fee	<input checked="" type="checkbox"/> (3)														
		Indian	_____														
REMARKS	<p>Remarks : <u>3 PITS ON LOCATION, DRY PIT</u></p>																

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 350 Footage from Wellhead 174  
b) Length : 13 Width : 12 Depth : 18"



## REMARKS

Remarks :

RUN TECH LEFT NOTE IDENTIFYING THAT THIS  
LOCATION WAS FPNG

Completed By:

Andy Carley  
Signature

5-11-94  
Date

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>75126</u> Location: <u>ELLIOT GAS Com N<sup>th</sup></u></p> <p>Coordinates: Letter: <u>I</u> Section <u>33</u> Township: <u>30</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>5-11-94</u> Area: <u>10</u> Run: <u>43</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>K.P<sup>#</sup>39</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>380</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
<b>CLOSURE</b>	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>45</u></p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>5-11-94</u> Pit Closed By: <u>B.E.I</u></p>
<b>REMARKS</b>	<p>Remarks : <u>Some LINE markers on location. Started</u></p> <p><u>Remediating TO 12' SOIL Light Brown Lots of SAND</u></p> <p><u>Smell's Real BAD SAMPLE AT 12' P.I.D 380</u></p>
	<p>Signature of Specialist: <u>Kelly Padilla</u></p>



10

FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 39	945128
MTR CODE   SITE NAME:	75126	N/A
SAMPLE DATE   TIME (Hrs):	5-11-94	1340
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	Fine Brown Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.50	MG/KG	20			
TOLUENE	84	MG/KG	20			
ETHYL BENZENE	34	MG/KG	20			
TOTAL XYLENES	370	MG/KG	50 <sup>3/4</sup>			
TOTAL BTEX	489	MG/KG				
TPH (418.1)	1880	MG/KG			2.2	28
HEADSPACE PID	380	PPM				
PERCENT SOLIDS	90.9	%				

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

The Surrogate Recovery was at 44 % 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 L. Lorch*

Date:

7/17/94

Y: Petroleum hydrocarbons spectrum

13:36

100%

0%

4000 3000 2000 cm<sup>-1</sup>

The infrared spectrum displays transmittance on the y-axis (0% to 100%) and wavenumber on the x-axis (4000 to 2000 cm<sup>-1</sup>). The spectrum is relatively flat at 100% transmittance until approximately 3000 cm<sup>-1</sup>, where it begins to drop. A sharp, deep absorption peak is observed at approximately 2950 cm<sup>-1</sup>, reaching nearly 0% transmittance. A smaller, broader peak is visible at approximately 2850 cm<sup>-1</sup>. The transmittance then rises sharply, returning to 100% by approximately 2000 cm<sup>-1</sup>.



Analytical **Technologies**, Inc.

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

ATI I.D. **405359**

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:jd

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
10	945127	NON-AQ	05/11/94	05/17/94	05/18/94	20
11	945128	NON-AQ	05/11/94	05/17/94	05/18/94	20
12	945129	NON-AQ	05/11/94	05/17/94	05/18/94	50

PARAMETER	UNITS	10	11	12
BENZENE	MG/KG	<0.50	<0.50	<1.2
TOLUENE	MG/KG	29	84	<1.2
ETHYLBENZENE	MG/KG	25	34	28
TOTAL XYLENES	MG/KG	360	370 D50	480

### SURROGATE:

BROMOFLUOROBENZENE (%) 522\* 44\* NA\*\*

D50=DILUTED 50X, ANALYZED 05/19/94

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

\*\*SURROGATE RECOVERY NOT OBTAINABLE DUE TO SAMPLE DILUTION

# PHASE II

# RECORD OF SUBSURFACE EX. ORATION

Philip Environmental Services Corp.

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 601  
Project Location Elliott Gas COM N#1, 75124

Elevation \_\_\_\_\_  
Borehole Location \_\_\_\_\_  
GWL Depth \_\_\_\_\_  
Logged By S.Kelly  
Drilled By K. Padilla  
Date/Time Started 6/22/95, 0740 AK 6/23/95  
Date/Time Completed 6/23/95, 0820

Well Logged By S.Kelly  
Personnel On-Site K. Padilla, F. Rivera, D. Tola  
Contractors On-Site \_\_\_\_\_  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method 4 1/4" STD HST  
Air Monitoring Method CGI, 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: NDU <u>5/45</u> BZ BH S			Drilling Conditions & Blow Counts
0				Backfill to						
5				12!						
10										
15	1	15-17	.71	silty SAND, grey, fine, angular sand, loose, damp						<u>11</u> <u>0755</u> <u>245</u>
20	2	20-22	1.11	SAA - color turning to light brown near 22!						<u>5</u> <u>0805</u> <u>48</u>
25	3	25-27	.9'	SAA - with streaks of rust coloring, sandy GRAVEL in shoe of split spoon - w/ med angular gravel, med. dense, dry.						<u>0</u> <u>0814</u> <u>33</u>
30										
35				B6H-27'						
40										

Comments: 25'-27' sample sent to lab (SEK'20) for BTEX & TPH. Sample bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature

Isiah Kelly

**SPLIT****FIELD SERVICES LABORATORY  
ANALYTICAL REPORT**Phase II  
Drilling**PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone****SAMPLE IDENTIFICATION**

	Field ID	Lab ID
SAMPLE NUMBER:	SEK20	946925
MTR CODE   SITE NAME:	75126	N/A
SAMPLE DATE   TIME (Hrs):	6-23-95	0827
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	6/27/95	6/27/95
DATE OF BTEX EXT.   ANAL.:		
TYPE   DESCRIPTION:	VG	Brown sand + clay

REMARKS: \_\_\_\_\_

**RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			DF	Q	M(g)	V(ml)	
BENZENE	<0.5	MG/KG					<0.025
TOLUENE	<0.5	MG/KG					<0.025
ETHYL BENZENE	<0.5	MG/KG					<0.025
TOTAL XYLENES	<1.5	MG/KG					<0.025
TOTAL BTEX	<3.0	MG/KG					<0.10
TPH (418.1)	57.6	MG/KG			2.06	28	<20
HEADSPACE PID	33	PPM					Surrogate % 94
PERCENT SOLIDS	89.8	%					Dilution Factor 1

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

The Surrogate Recovery was at 92.1 for this samp All QA/QC was acceptable.

Narrative:

all results attached

DF = Dilution Factor Used

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

Date: \_\_\_\_\_

7/14/95

```

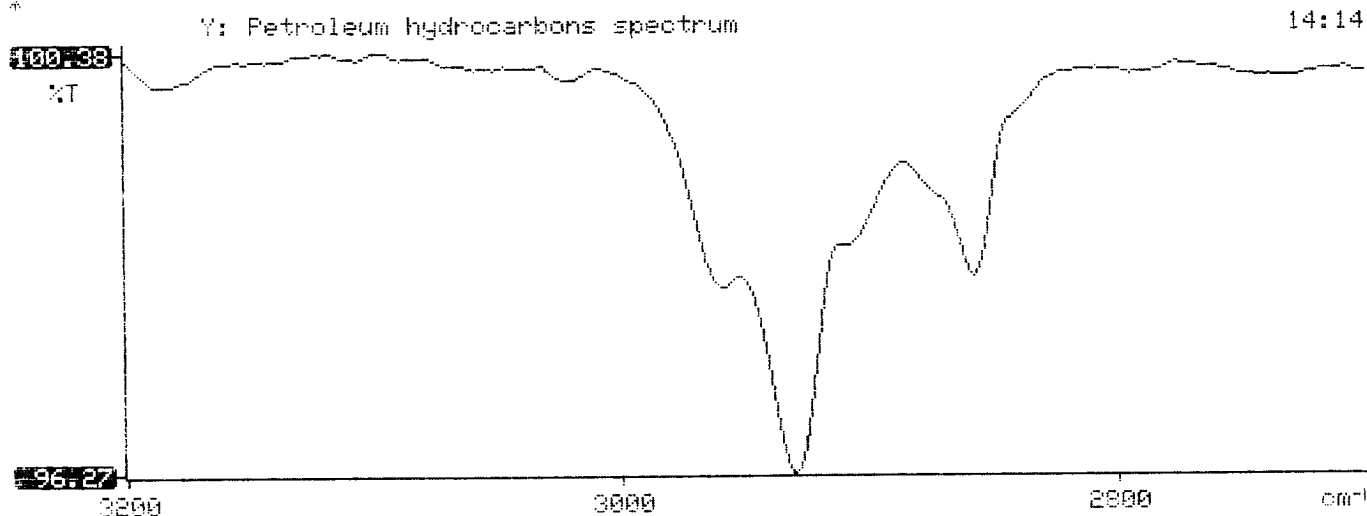
*****
*                               *
*   Test Method for             *
*   Oil and Grease and Petroleum Hydrocarbons   *
*   in Water and Soil          *
*                               *
*   Perkin-Elmer Model 1600 FT-IR               *
*   Analysis Report                     *
*                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

```

```

95/06/27  14:14
*
*   Sample identification
946925
*
*   Initial mass of sample, g
2.060
*
*   Volume of sample after extraction, ml
28.000
*
*   Petroleum hydrocarbons, ppm
57.590
*   Net absorbance of hydrocarbons (2930 cm-1)
0.017
*
*
*

```





Analytical **Technologies, Inc.**

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

ATI I.D. **506426**

July 10, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/29/95**, 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





Analytical Technologies, Inc.

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506426  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	946925	NON-AQ	06/23/95	06/29/95	06/30/95	1
PARAMETER			UNITS	07		
BENZENE			MG/KG	<0.025		
TOLUENE			MG/KG	<0.025		
ETHYLBENZENE			MG/KG	<0.025		
TOTAL XYLENES			MG/KG	<0.025		

SURROGATE:

BROMOFLUOROBENZENE (%)

94



Analytical **Technologies**, Inc.

### GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 506426
PROJECT #	: 24324	DATE RECEIVED	: 06/29/95
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 06/30/95

PARAMETER	UNITS	07
PETROLEUM HYDROCARBONS, IR	MG/KG	<20

946925



SPLIT

# **BTEX SOIL SAMPLE WORKSHEET**

<b>File</b>	<b>:</b>	946925A	<b>Date Printed</b>	<b>:</b>	6/28/95
<b>Soil Mass (g)</b>	<b>:</b>	4.92	<b>Multiplier (L/g)</b>	<b>:</b>	0.00102
<b>Extraction vol. (mL)</b>	<b>:</b>	20	<b>DF (Analytical)</b>	<b>:</b>	200
<b>Shot Volume (uL)</b>	<b>:</b>	100	<b>DF (Report)</b>	<b>:</b>	0.20325

					<b>Det. Limit</b>
<b>Benzene (ug/L)</b>	<b>:</b>	0.00	<b>Benzene (mg/Kg):</b>	<b>0.00</b>	0.508
<b>Toluene (ug/L)</b>	<b>:</b>	0.00	<b>Toluene (mg/Kg):</b>	<b>0.00</b>	0.508
<b>Ethylbenzene (ug/L)</b>	<b>:</b>	0.00	<b>Ethylbenzene (mg/Kg):</b>	<b>0.00</b>	0.508
<b>p &amp; m-xylene (ug/L)</b>	<b>:</b>	0.00	<b>p &amp; m-xylene (mg/Kg):</b>	<b>0.00</b>	1.016
<b>o-xylene (ug/L)</b>	<b>:</b>	0.00	<b>o-xylene (mg/Kg):</b>	<b>0.00</b>	0.508
			<b>Total xylenes (mg/Kg):</b>	<b>0.00</b>	1.524
			<b>Total BTEX (mg/Kg):</b>	<b>0.00</b>	
<b>BFB Recovery:</b>		92.1 %			

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

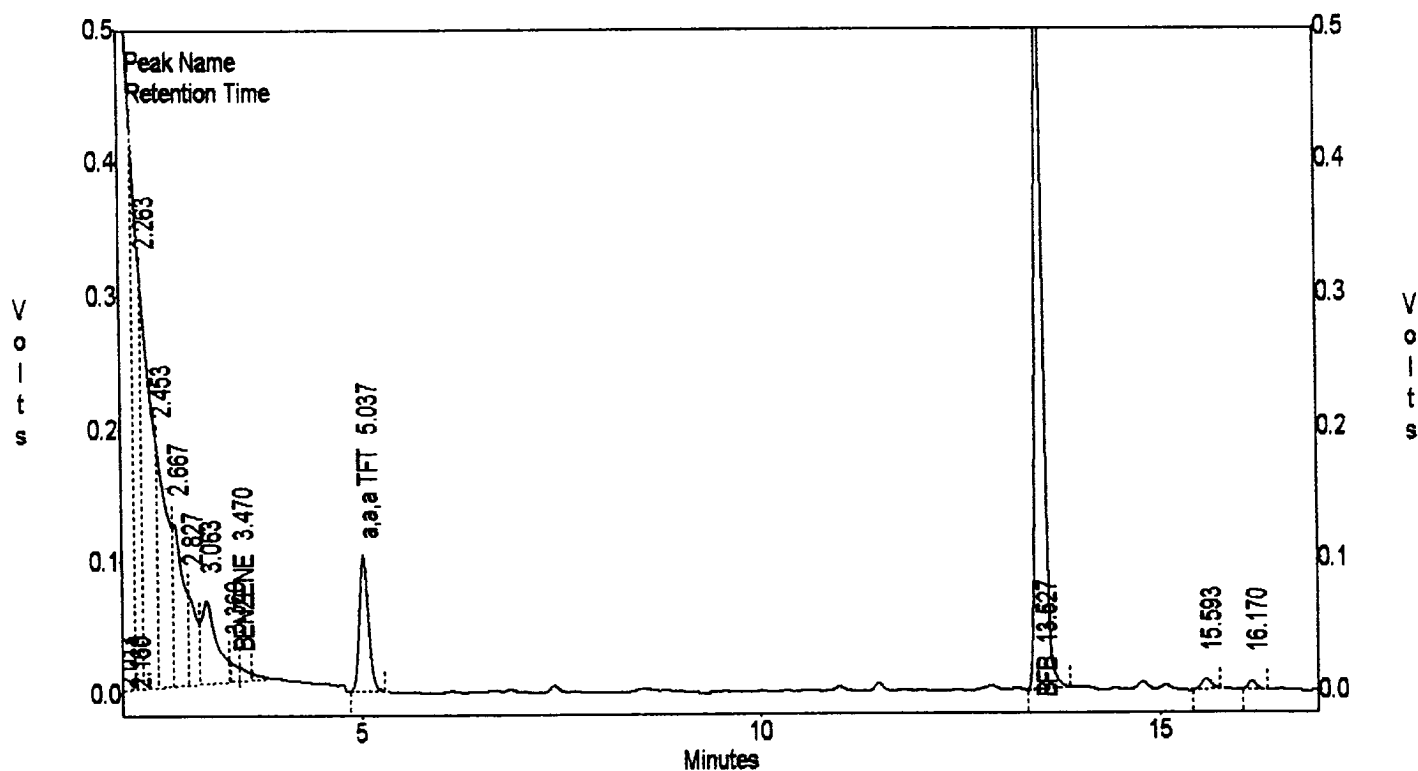
File : C:\LABQUEST\CHROM001\946925a  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 946925.4.92G/100uL  
 Acquired : Jun 27, 1995 19:29:34  
 Printed : Jun 27, 1995 19:55:52  
 User : John

### Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.470	70742	<del>4.5973</del>
a,a,a TFT	5.037	814754	108.9024
TOLUENE	6.680	0	0.0000
ETHYLBENZENE	10.610	0	0.0000
M & P XYLENE	11.000	0	0.0000
O XYLENE	12.053	0	0.0000
BFB	13.527	3952260	92.1020

NA  
 JP  
 6/28/95

C:\LABQUEST\CHROM001\946925a - Channel B



# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946925a  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 946925,4.92G/100uL  
 Acquired : Jun 27, 1995 19:29:34  
 Printed : Jun 27, 1995 19:55:47  
 User : John

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.453	0	0.0000
a,a,a TFT	5.033	3170394	85.4098
TOLUENE	6.867	153248	-0.3799
ETHYLBENZENE	10.650	135287	-0.0438
M & P XYLENE	10.997	254911	-3.7033
O XYLENE	12.040	106339	0.1610
BFB	13.523	48945356	74.3466

