

*El Paso Field Services*  
DEPUTY OIL & GAS INSPECTOR

**EL PASO FIELD SERVICES  
PRODUCTION PIT CLOSURE**

DEC 21 1998

**RECEIVED**  
JUL 2 1998

*Approved*  
**DRYDEN 2E  
Meter/Line ID - 95174**

**OIL CON. DIV.**  
FEBRUARY 23

**SITE DETAILS**

**Legals - Twn: 28**

**Rng: 08**

**Sec: 22**

**Unit: 1**

**NMOCD Hazard Ranking: 40**

**Land Type: 2 - Federal**

**Operator: KOCH EXPLORATION COMPANY**

**Pit Closure Date: 06/10/94**

**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.

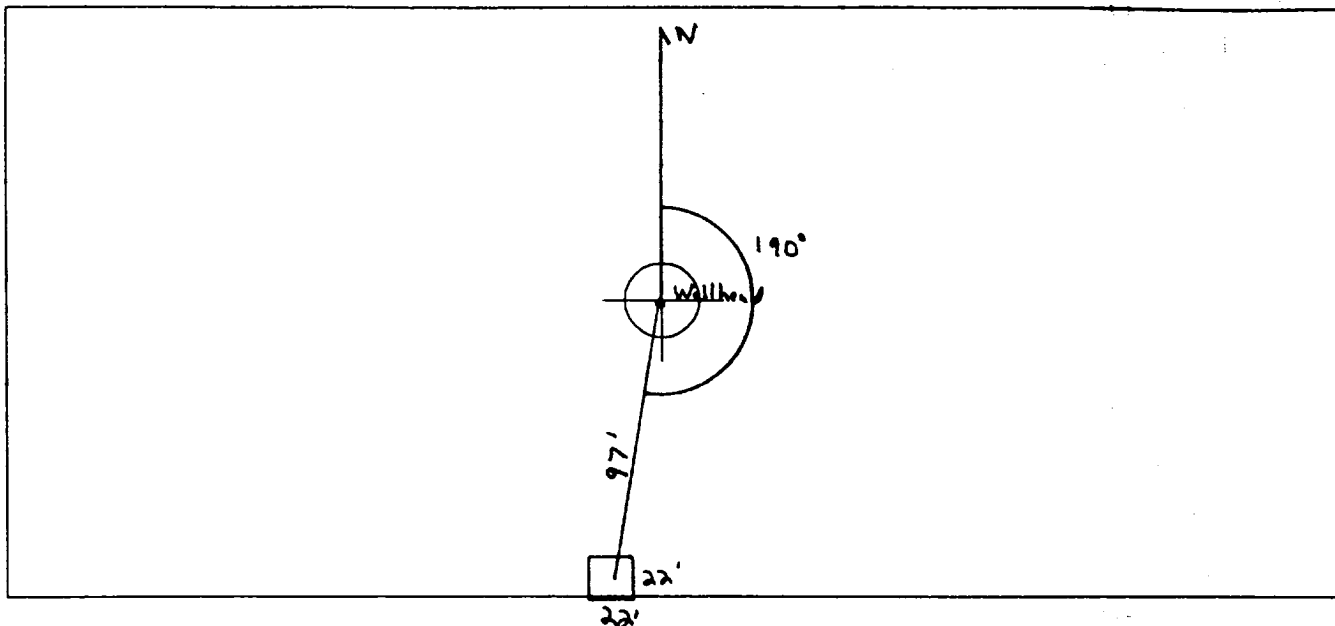
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>95174</u> Location: <u>Dryden 2E</u>          Operator #: <u>554D</u> Operator Name: <u>KOCH</u> P/L District: <u>BLANCO</u>          Coordinates: Letter: <u>I</u> Section <u>22</u> Township: <u>28</u> Range: <u>8</u>          Or Latitude _____ Longitude _____          Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____          Site Assessment Date: <u>5/20/94</u> Area: <u>13</u> Run: <u>62</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 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)          Name of Surface Water Body <u>Carrizo Canyon</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>40</u> POINTS</p>
REMARKS	<p>Remarks : <u>Redline &amp; Vuln - Inside</u>  <u>3 pits. Close to Pit Dry</u>  <u>DIG &amp; HAUL</u></p>

# ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 190° Footage from Wellhead 97'  
 b) Length : 22' Width : 22' Depth : 7' CMC 5/24/94

ORIGINAL PIT LOCATION



REMARKS

Remarks :

Pictures 21116 (17-21)

END DUMP

Completed By:

Cory Chase  
 Signature

5/20/94  
 Date

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>95174</u> Location: <u>Dryden 2E</u></p> <p>Coordinates: Letter: <u>I</u> Section <u>22</u> Township: <u>28</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>6-10-94</u> Area: <u>13</u> Run: <u>62</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>KPH 99</u></p> <p>Sample Depth: <u>12</u> Feet</p> <p>Final PID Reading <u>449</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>50</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>6-10-94</u> Pit Closed By: <u>B.E.I</u></p>
<b>REMARKS</b>	<p>Remarks : <u>Some line marked. Started Remediating To 12'</u></p> <p><u>Soil Turned Black. At 12' Soil still the same PID 449</u></p> <p><u>Closed Pit.</u></p>
	<p>Signature of Specialist: <u>Kelly Padilla</u></p>



## FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil

## SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 99	945425
MTR CODE   SITE NAME:	95174	N/A
SAMPLE DATE   TIME (Hrs):	6-10-94	1347
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	6-13-94	6/13/94
DATE OF BTEX EXT.   ANAL.:	6/15/94	6/18/94
TYPE   DESCRIPTION:	VC	Black/Grey Fine Sand

REMARKS:

## RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.50	MG/KG	20			
TOLUENE	43	MG/KG	20			
ETHYL BENZENE	6.1	MG/KG	20			
TOTAL XYLENES	210	MG/KG	20			
TOTAL BTEX	260	MG/KG				
TPH (418.1)	4190	MG/KG			207	28
HEADSPACE PID	449	PPM				
PERCENT SOLIDS	93.6	%				

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

The Surrogate Recovery was at 63 % 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:

Date:

7/17/94

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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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04/06/13 12:11

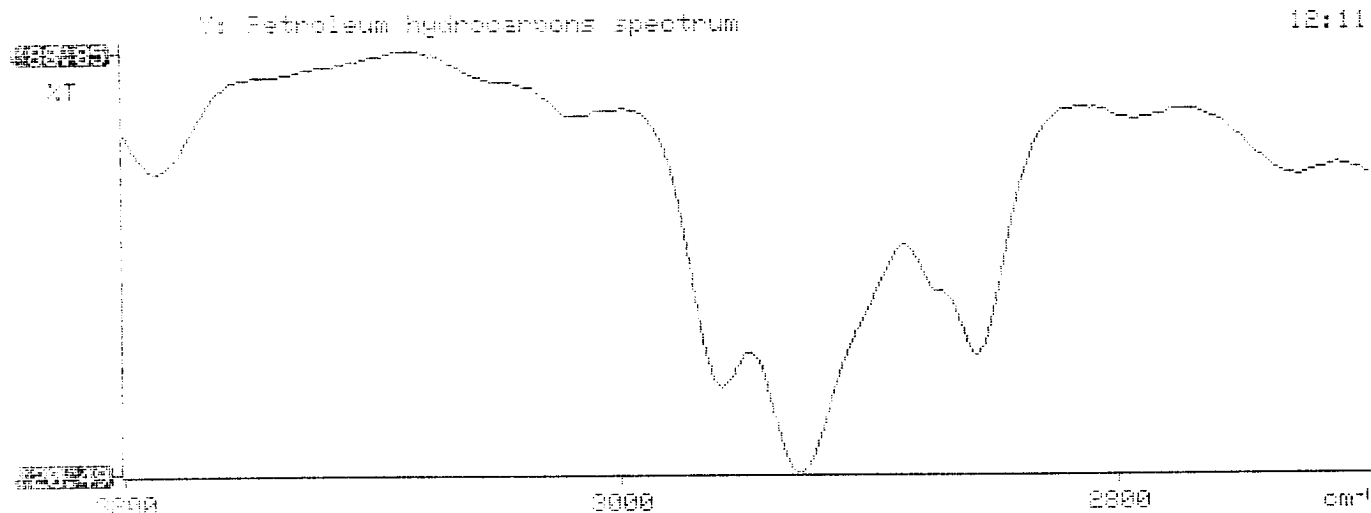
Sample identification  
000477

Initial mass of sample, g  
1.070

Volume of sample after extraction, ml  
25.000

Petroleum hydrocarbons, ppm  
4187.309

Net absorbance of hydrocarbons (2930  $\text{cm}^{-1}$ )  
0.343





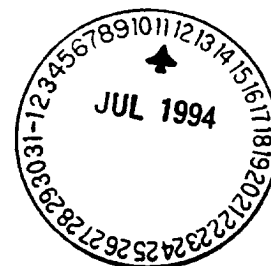
Analytical**Technologies**, Inc.

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

ATI I.D. 406351

July 08, 1994

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



Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 06/14/94, 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.

This report is being reissued to correct surrogate notation for sample 945425.

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

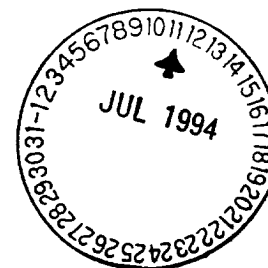
Letitia Krakowski, Ph.D.  
Project Manager

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR:jd

Enclosure





# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 406351  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
25	945424	NON-AQ	06/10/94	06/15/94	06/17/94	1
26	945425	NON-AQ	06/10/94	06/15/94	06/18/94	20
27	945426	NON-AQ	06/10/94	06/15/94	06/18/94	20
PARAMETER			UNITS	25	26	27
BENZENE			MG/KG	<0.025	<0.50	<0.50
TOLUENE			MG/KG	0.030	43	16
ETHYLBENZENE			MG/KG	<0.025	6.1	5.9
TOTAL XYLENES			MG/KG	0.11	210	120

## SURROGATE:

BROMOFLUOROBENZENE (%) 106 63\* 44\*

\*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 #         
Page 1 of 1

Project Name EPNG Pits  
Project Number 14509 Phase 6000-77  
Project Location Dryden 2E 95174

Elevation         
Borehole Location QT-S22-T28-R8  
GWL Depth         
Logged By PL Moss  
Drilled By K Padilla  
Date/Time Started 9/5/95 1245  
Date/Time Completed 9-5-95 1345

Well Logged By         
Personnel On-Site C. Chance, K. Padilla, F. Rivera, P.C.  
Contractors On-Site         
Client Personnel On-Site       

Drilling Method 4 1/4" ID HSA  
Air Monitoring Method PIN, C.GI

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			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Backfill to 12'						
5										
10										
15	1	15-17	SS 10"	SAND, fine-grained, <sup>loose</sup> <del>soft</del> , dark gray, strong hydrocarbon odor, moist	SP		0	71	$\frac{795}{1002}$	
20	2	20-22	SS 14"	SAND, fine-grained, <sup>plm 9/5/95</sup> <del>very soft</del> , sandy CLAY, very soft, black, strong hydrocarbon odor, moist, moderate plasticity	SP <sup>plm 9/5/95</sup> CL	19 9/5/95	25	91	$\frac{1447}{1758}$	1255
25	3	25-27	SS 16"	CLAY, soft, moderate plasticity, strong brown, no odor, moist	CL	25 25.5	6	48	$\frac{22}{8}$	1302
30				25.5' clayey SAND, fine-grained, loose, brown, moist, to gypsum	SC					
35				27' - TD						
40										

Comments:

Collected sample PLM2 (25-27') PLM3 (dup), and PLM4 (Field blank)  
sent to lab (ATEX, TPH). BH grouted to surface. Sample wrapped and  
iced prior to parking in jar.

Geologist Signature

*Philip L Moss*



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	PLM 2	947395
MTR CODE   SITE NAME:	95174	Dryden 2E
SAMPLE DATE   TIME (Hrs):	09-05-95	1302
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	9-6-95	9-6-95
DATE OF BTEX EXT.   ANAL.:	9/6/95	9/11/95
TYPE   DESCRIPTION:	V6	DARK BROWN SAND + CLAY

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	17.6	MG/KG			221	28
HEADSPACE PID	8	PPM				
PERCENT SOLIDS	82.8	%				

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

The Surrogate Recovery was at  
Narrative:

99% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Date: 9-13-95

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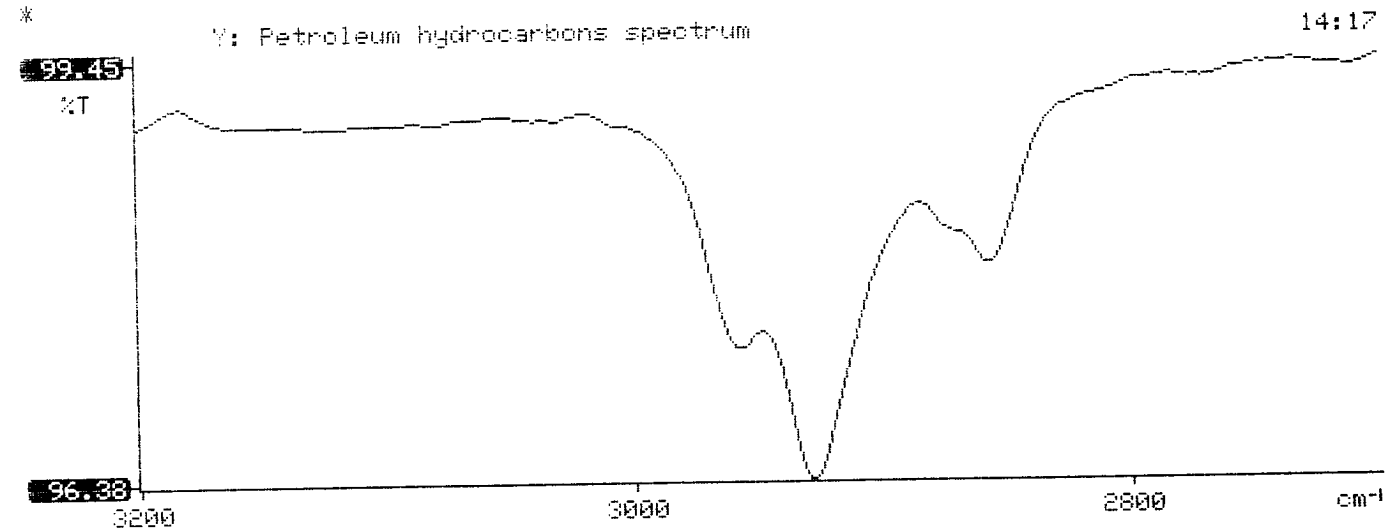
*****
*                                     *
*      Test Method for               *
*      Oil and Grease and Petroleum Hydrocarbons *
*      in Water and Soil             *
*                                     *
*      Perkin-Elmer Model 1600 FT-IR *
*      Analysis Report               *
*      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

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*
* 95/09/06 14:17
*
* Sample identification
* 947395
*
* Initial mass of sample, g
* 2.210
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 17.565
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.013
*
*
*

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## BTEX SOIL SAMPLE WORKSHEET

File	:	947395	Date Printed	:	9/12/95
Soil Mass (g)	:	5.09	Multiplier (L/g)	:	0.00098
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.19646

### Det. Limit

Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000	0.491
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000	0.491
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000	0.491
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000	0.982
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000	0.491
			Total xylenes (mg/Kg):	0.000	1.473
			Total BTEX (mg/Kg):	0.000	

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\091195-0.001  
 Method : C:\LABQUEST\METHODS\9000.met  
 Sample ID : 947395,5.09g,100u  
 Acquired : Sep 11, 1995 11:07:20  
 Printed : Sep 11, 1995 11:37:42  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.983	45655	-1.1327
a,a,a-TFT	11.340	12349473	95.6849
TOLUENE	14.350	526163	-1.1881
ETHYLBENZENE	19.363	186404	-1.0530
M,P-XYLENES	19.777	1073252	-3.2723
O-XYLENE	21.037	166613	-0.7915
BFB	22.787	112385288	98.5940

