

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

DEC 21 1998

GRAHAM #51-A  
Meter/Line ID - 89247

**RECEIVED**  
JUL 2 1998

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

**SITE DETAILS**

Legals - Twn: 27 Rng: 08  
NMOCD Hazard Ranking: 10  
Operator: R & G DRILLING COMPANY

Sec: 10 Unit: J  
Land Type: 4 - Fee  
Pit Closure Date: 02/07/95

**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>89247</u> Location: <u>GRAHAM # S1-A</u></p> <p>Operator #: _____ Operator Name: <u>RIG DRILLING</u> P/L District: <u>BLANCO</u></p> <p>Coordinates: Letter: <u>J</u> <sup>REV 3/4/95</sup> Section <u>10</u> Township: <u>27</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>1-26-95</u> Area: <u>03</u> Run: <u>31</u></p>
SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p><b>Land Type:</b> BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input checked="" type="checkbox"/> (3) Indian _____</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2) <sup>RT 1-26-95</sup></p> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input checked="" type="checkbox"/> (2) 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) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) 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) <input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>10</u> POINTS</p>
REMARKS	<p>Remarks : <del>REDLINE SHOWS LOCATION INSIDE V.Z. BUT TOPO SHOWS LOCATION OUTSIDE V.Z.</del> <sup>RT 1-26-95</sup></p> <p>TWO PITS ON LOCATION. DEHY PIT BELONGS TO BP&amp;G. WILL CLOSE PIT.</p> <p>DEHY HAS NOT YET BEEN REMOVED. DEHY STILL OPERATING.</p> <p><u>DIG &amp; HAIL</u> <u>PUSH IN RT</u></p>

# **PHASE I EXCAVATION**

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# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	Meter: <u>89247</u> Location: <u>614 Ham # 51 A</u> Coordinates: Letter: <u>    </u> Section <u>10</u> Township: <u>27</u> Range: <u>8</u> Or Latitude <u>          </u> Longitude <u>          </u> Date Started : <u>2-7-95</u> Run: <u>13</u> <u>31</u>
<b>FIELD OBSERVATIONS</b>	Sample Number(s): <u>MK 362</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>473</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 <u>        </u> 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: <u>                                </u> </div> </div> Pit Closure Date: <u>2-7-95</u> Pit Closed By: <u>BEI</u>
<b>REMARKS</b>	Remarks : <u>Arrived dug sample hole soil turned turned</u> <u>Gray about 6' after we started Excavated soil was Gray</u> <u>Has strong Hydrocarbon odor</u>
<b>SIGNATURE</b>	Signature of Specialist: <u>Morgan Killian</u>



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	mk362	946647
MTR CODE   SITE NAME:	89247	N/A
SAMPLE DATE   TIME (Hrs):	2-7-95	1615
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	2-10-95	2-10-95
DATE OF BTEX EXT.   ANAL.:	2/9/95	2/10/95
TYPE   DESCRIPTION:	VC	Dark Gray sand and clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	13.3	MG/KG	1.11607		2.56	20
TOLUENE	94.3	MG/KG				
ETHYL BENZENE	9.93	MG/KG				
TOTAL XYLENES	137	MG/KG				
TOTAL BTEX	255	MG/KG				
TPH (418.1)	12100	MG/KG			0.47	28
HEADSPACE PID	473	PPM				
PERCENT SOLIDS	90.9	%				

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

The Surrogate Recovery was at 83.7 % for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By: [Signature]

Date: 2-27-95

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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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75/02/10 11:17

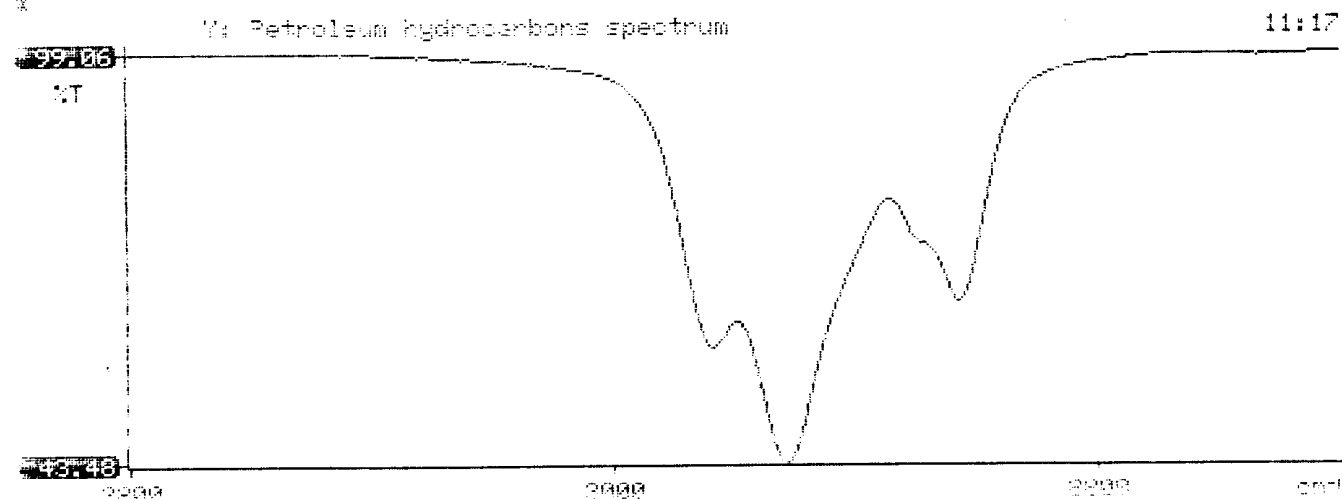
Sample Identification  
946647

Initial mass of sample, g  
0.470

Volume of sample after extraction, ml  
28.000

Petroleum hydrocarbons, ppm  
12119.435

Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.357



# BTEX SOIL SAMPLE WORKSHEET

File	:	946647B	Date Printed	:	2/11/95
Soil Mass (g)	:	2.56	Multiplier (L/g)	:	0.00195
Extraction vol. (mL)	:	20	DF (Analytical)	:	571.429
Shot Volume (uL)	:	35	DF (Report)	:	1.11607

				Det. Limit
Benzene (ug/L)	:	11.89	Benzene (mg/Kg):	13.270 5.580
Toluene (ug/L)	:	84.49	Toluene (mg/Kg):	94.297 5.580
Ethylbenzene (ug/L)	:	8.90	Ethylbenzene (mg/Kg):	9.933 5.580
p & m-xylene (ug/L)	:	96.59	p & m-xylene (mg/Kg):	107.801 11.161
o-xylene (ug/L)	:	26.56	o-xylene (mg/Kg):	29.643 5.580
			Total xylenes (mg/Kg):	137.444 16.741
			Total BTEX (mg/Kg):	254.944

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

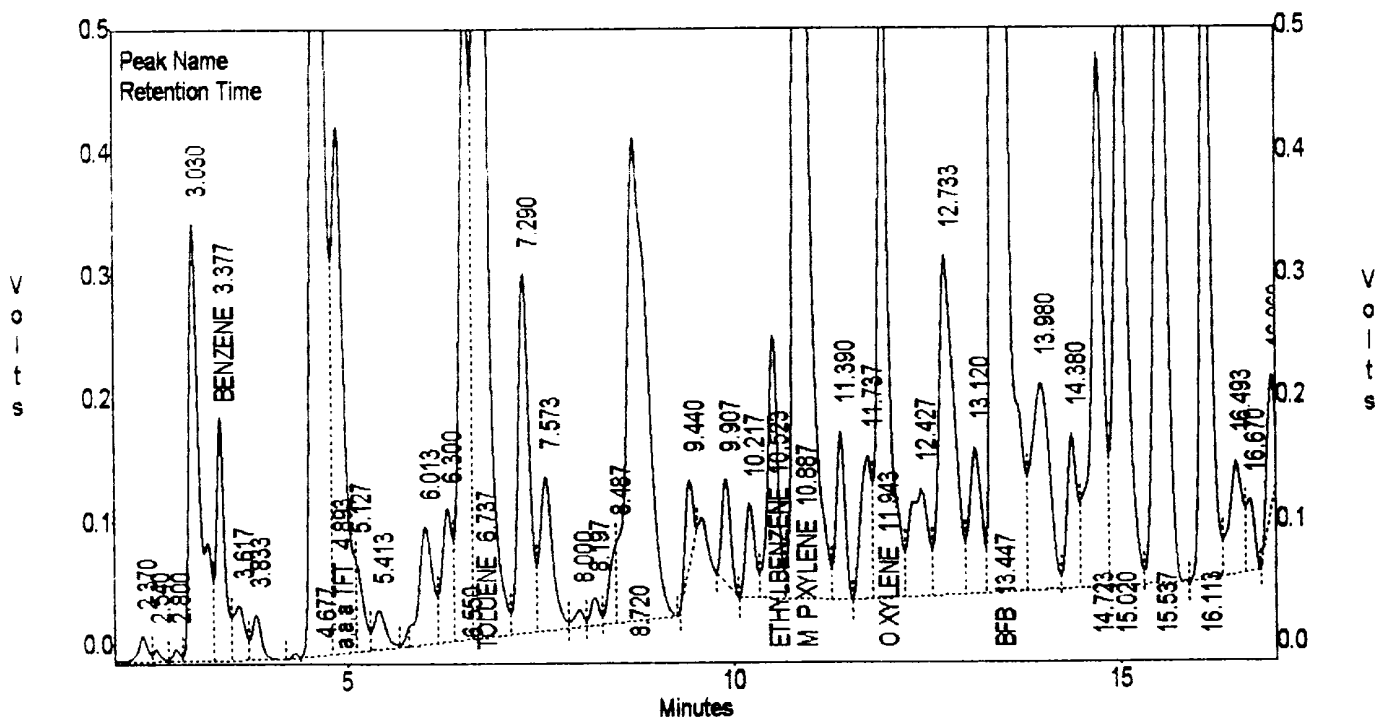
File : C:\LABQUEST\CHROM001\946647B  
 Method : C:\LABQUEST\METHODS\8001.MET  
 Sample ID : 946647,2.56G/35uL  
 Acquired : Feb 10, 1995 23:35:21  
 Printed : Feb 11, 1995 00:01:34  
 User : Tony

### Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.377	1440963	108665.27344	11.8909
a,a,a TFT	4.893	4565239	26415.50781	167.8216
TOLUENE	6.737	19409654	279082.62500	84.4899
ETHYLBENZENE	10.523	1892531	240650.98438	8.8959
M & P XYLENE	10.887	23215590	293876.96875	96.5928
O XYLENE	11.943	5539615	234474.71875	26.5635
BFB	13.447	70988024	832618.18750	83.6912

Totals :  
 127051616 479.9459

C:\LABQUEST\CHROM001\946647B - Channel A



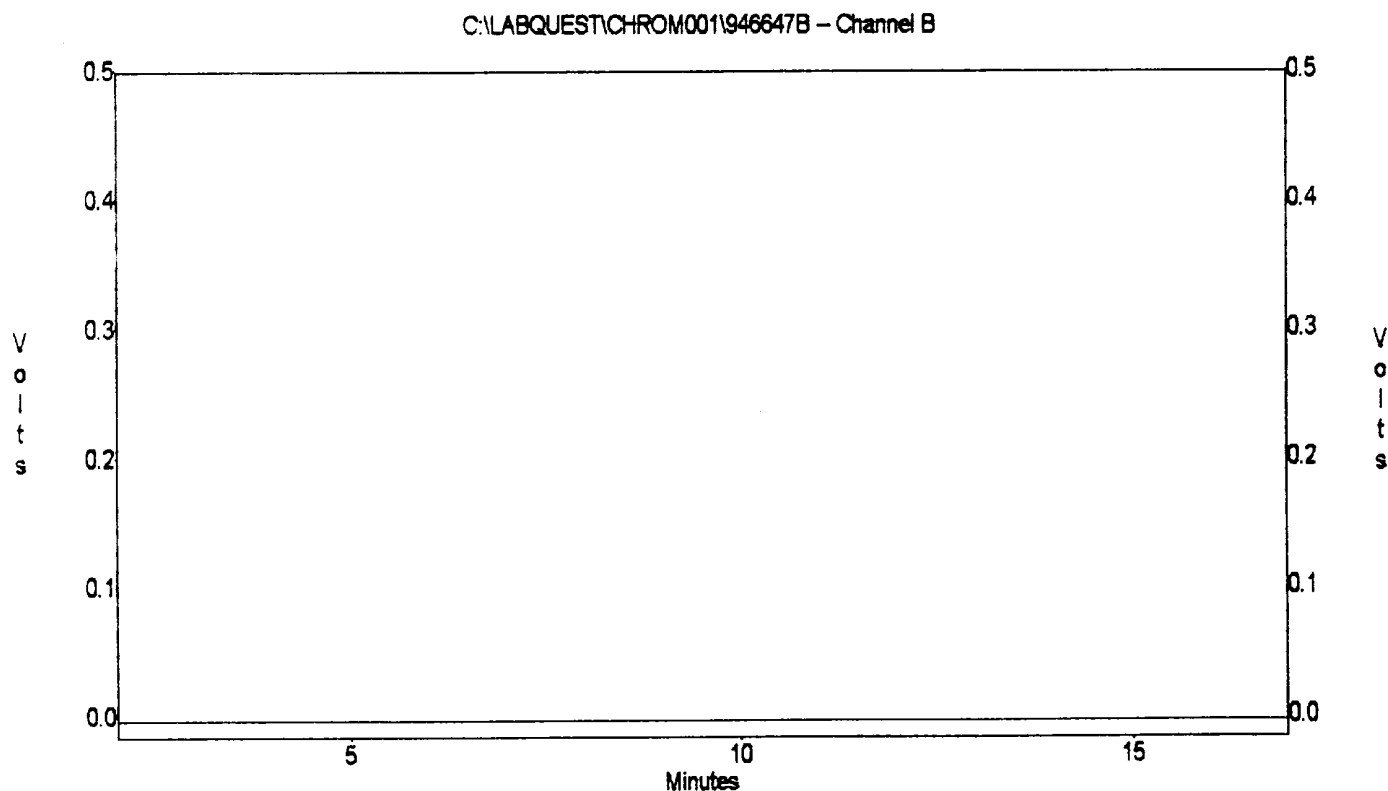


**EL PASO NATURAL GAS  
EPA METHOD 8020 - BTEX SOILS**

File : C:\LABQUEST\CHROM001\946647B  
Method : C:\LABQUEST\METHODS\9001.MET  
Sample ID : 946647,2.56G/35uL  
Acquired : Feb 10, 1995 23:35:21  
Printed : Feb 11, 1995 00:01:40  
User : Tony

## Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.450	0	0.00000	0.0000
a,a,a TFT	4.950	0	0.00000	0.0000
TOLUENE	6.787	0	0.00000	0.0000
ETHYLBENZENE	10.480	0	0.00000	0.0000
M & P XYLENE	10.833	0	0.00000	0.0000
O XYLENE	11.900	0	0.00000	0.0000
BFB	13.400	0	0.00000	0.0000
Totals :		0		0.0000



# 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

Graham #51-A 89247

Elevation

Borehole Location QJ-S10-T27-R8

GWL Depth

Logged By CM CHANCE

Drilled By K Padilla

Date/Time Started 8/23/95 - 1225

Date/Time Completed 8/23/95 1506

Well Logged By

CM Chance

Personnel On-Site

K Padilla, F. Rivera, D. Charlip

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			Drilling Conditions & Blow Counts
							BZ	BH	S HS	
0				Backfill to 12'						
5										
10										
15	1	15-17	18"	Gry Clayey SAND, vf-F sand, tr med sand, v. loose, sl moist, oboe		5	38	306 619		1229 L
20	2	20-22	20"	Br silty CLAY, v. soft, med plastic, sl moist, oboe		6	12	587 649		1344
25	3	25-27	8"	lt gry SAND, vf-F sand, v. dense, dry, oboe		4	18	292 642		1352
30	4	30-31	4"	Br silty SAND, vf-F sand, dense, sl moist		5	28	16 15		1404
35				TDB 31'						
40										

Comments:

CMC 91 (30-31') sent to lab (BTEX, TPH) BH grouted to surface

Geologist Signature

CM Chance



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC91	947319
MTR CODE   SITE NAME:	89247	Graham #51-A
SAMPLE DATE   TIME (Hrs):	08/23/95	14:04
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	8/24/95	
DATE OF BTEX EXT.   ANAL.:	8/25/95	8/29/95
TYPE   DESCRIPTION:	V6	Light grey sand & sand stones

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	4.5	MG/KG				
TOLUENE	4.5	MG/KG				
ETHYL BENZENE	4.5	MG/KG				
TOTAL XYLENES	41.5	MG/KG				
TOTAL BTEX	43	MG/KG				
TPH (418.1)	203	MG/KG			2.02	28
HEADSPACE PID	15	PPM				
PERCENT SOLIDS	91.6	%				

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

The Surrogate Recovery was at 87% for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

28

9-5-95

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

\* 95/08/24 13:26

\* Sample identification  
 947319

\* Initial mass of sample, g  
 2.020

\* Volume of sample after extraction, ml  
 28.000

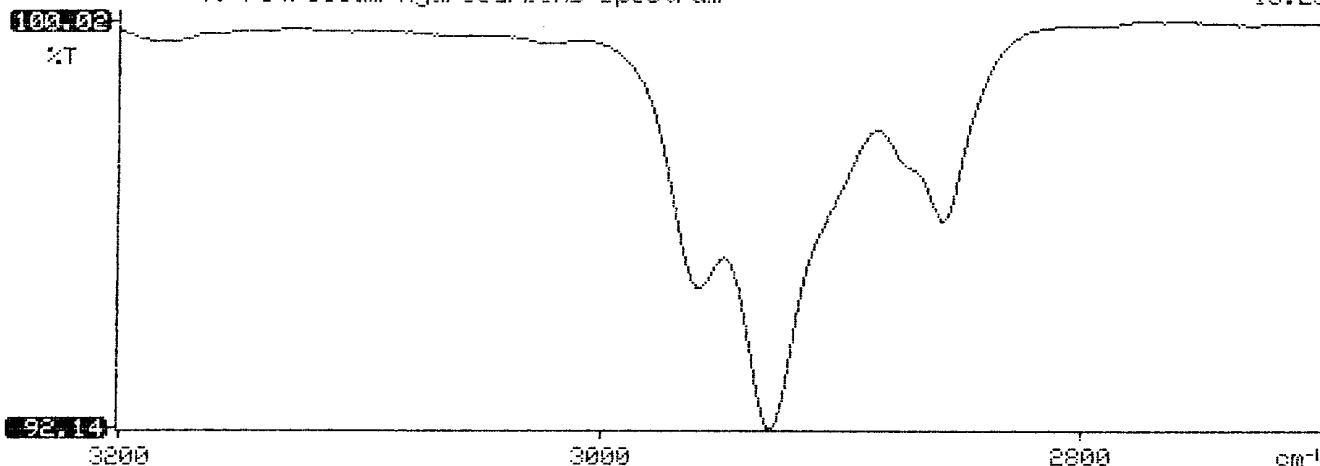
\* Petroleum hydrocarbons, ppm  
 203.440

\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
 0.035

\*  
 \*  
 \*

Y: Petroleum hydrocarbons spectrum

13:26



# BTEX SOIL SAMPLE WORKSHEET

<b>File</b>	<b>:</b>	947319	<b>Date Printed</b>	<b>:</b>	8/31/95
<b>Soil Mass (g)</b>	<b>:</b>	5.00	<b>Multiplier (L/g)</b>	<b>:</b>	0.00100
<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>	0.20000

				<b>Det. Limit</b>
<b>Benzene (ug/L)</b>	<b>:</b>	0.00	<b>Benzene (mg/Kg):</b>	<b>0.000</b> 0.500
<b>Toluene (ug/L)</b>	<b>:</b>	0.00	<b>Toluene (mg/Kg):</b>	<b>0.000</b> 0.500
<b>Ethylbenzene (ug/L)</b>	<b>:</b>	0.00	<b>Ethylbenzene (mg/Kg):</b>	<b>0.000</b> 0.500
<b>p &amp; m-xylene (ug/L)</b>	<b>:</b>	0.00	<b>p &amp; m-xylene (mg/Kg):</b>	<b>0.000</b> 1.000
<b>o-xylene (ug/L)</b>	<b>:</b>	0.00	<b>o-xylene (mg/Kg):</b>	<b>0.000</b> 0.500
			<b>Total xylenes (mg/Kg):</b>	<b>0.000</b> 1.500
			<b>Total BTEX (mg/Kg):</b>	<b>0.000</b>

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\082595-1.028  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 947319,5.00G,100U  
 Acquired : Aug 30, 1995 03:38:53  
 Printed : Aug 30, 1995 04:05:14  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.367	0	0.0000
a,a,a TFT	4.927	2625268	88.2022
TOLUENE	6.737	0	0.0000
ETHYLBENZENE	10.430	0	0.0000
M & P XYLENE	10.880	56547	-4.8769
O XYLENE	11.900	0	0.0000
BFB	13.400	38781744	87.2993

