

# EPFS PIT CLOSURE SUMMARY

*Dennis E. Faust*  
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Ballard No. 1  
Meter/Line ID - 70768

## SITE DETAILS

*Approved*  
Legals - Twn: 26      Ring: 9  
NMOCD Hazard Ranking: 30  
Operator: Meridian

Sec: 10      Unit: M  
Land Type: BLM

## PREVIOUS ACTIVITIES

Site Assessment: 6/20/94  
Monitor Well: N/A

Excavation: 8/12/94  
Re-Excavation: N/A

Soil Boring: 8/17/95  
Geoprobe: N/A

## CONCLUSIONS

The initial excavation was excavated to the practical extent of the trackhoe, which was 12 feet below ground surface (bgs). PID Field screening indicated soils to be 359 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX was just above standards at 51 mg/kg, and TPH was above standards at 3,070 mg/kg. A test boring was advanced in the center of the initial excavation to determine the extent of the impact to soils. The soil lithology consisted of brown medium grained sand. A sample was collected for BTEX and TPH analysis at 43-45 feet bgs. Laboratory analysis showed all BTEX compounds to be below detection limits and TPH analysis indicated 33.1 mg/kg present in the soil.

## RECOMMENDATIONS

No further action is recommended at the site for the following reasons:

- The bulk of the impacted soil was removed during the phase 1 excavation.
- Test boring sample results indicated soils below standards 31 feet below the initial excavation.
- No groundwater was encountered in the test boring.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soils at the bottom of the initial excavation will naturally degrade with time with minimal risk to the environment.

RECEIVED  
MAR - 9 1998  
OIL CON. DIV.  
DIST. 3

—

# GENERAL

Pit Type: Dehydrator \_\_\_\_\_ Location Drip: X Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
Site Assessment Date: 6-20-94 Area: 11 Run: 91

# SITE ASSESSMENT

REMARKS

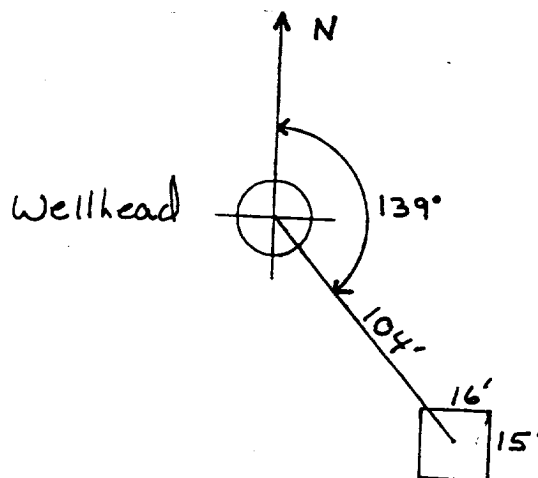
## Inside V.Z. on Redline & Topo

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

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 139 Footage from Wellhead 104'  
b) Length : 16 Width : 15 Depth : 4



## REMARKS

Remarks :

Photos - 1447

Completed By:

Signature

6-20-94

Date





# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>70768</u> Location: <u>Ballard #1</u></p> <p>Coordinates: Letter: <u>M</u> Section <u>10</u> Township: <u>26</u> Range: <u>9W</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>8/12/94</u> Run: <u>11</u> <u>91</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KD 212</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>359 ppm</u> PID Reading Depth <u>12'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>40</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> <input type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>8/12/94</u> Pit Closed By: <u>BEI</u></p>
REMARKS	<p>Remarks : <u>EXCAVATED pit to 12', TOOK PID Sample, Closed pit</u></p>
	<p>Signature of Specialist: <u>[Signature]</u></p>



## FIELD SERVICES LABORATORY

### ANALYTICAL REPORT

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

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 212	945915
MTR CODE   SITE NAME:	70768	N/A
SAMPLE DATE   TIME (Hrs):	8/12/94	1315
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	8/16/94	8/16/94
DATE OF BTEX EXT.   ANAL.:	8/17/94	8/19/94
TYPE   DESCRIPTION:	VC	Fine Brown Sand/clay

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	10.25	MG/KG	10			
TOLUENE	11	MG/KG	10			
ETHYL BENZENE	1.2	MG/KG	10			
TOTAL XYLENES	39	MG/KG	10			
TOTAL BTEX	51	MG/KG				
TPH (418.1)	3070	MG/KG			2.21	28
HEADSPACE PID	359	PPM				
PERCENT SOLIDS	90.8	%				

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

The Surrogate Recovery was at 412 % 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:

J. J.

Date:

9/2/94

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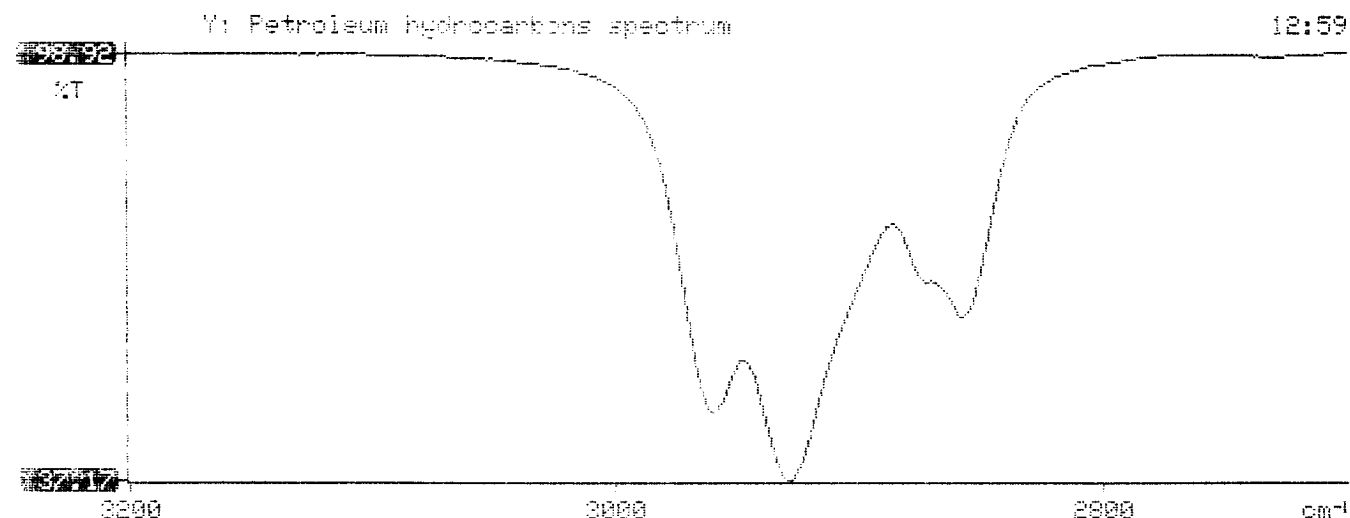
*****
*                                     *
*      Test Method for               *
*      Oil and Grease and Petroleum Hydrocarbons *
*      in Water and Soil             *
*                                     *
*      Perkin-Elmer Model 1600 FT-IR *
*      Analysis Report               *
*****

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1 74/08/16 12:59
2
3 Sample Identification
4 945915
5
6 Initial mass of sample, g
7 2.210
8
9 Volume of sample after extraction, ml
10 26.000
11
12 Petroleum hydrocarbons, ppm
13 3069.740
14
15 Net absorbance of hydrocarbons (2930 cm-1)
16 0.425
17
18
19

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Analytical Technologies, Inc.

# GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408364  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	945914	NON-AQ	08/12/94	08/17/94	08/19/94	1
14	945915	NON-AQ	08/12/94	08/17/94	08/19/94	10
15	945916	NON-AQ	08/12/94	08/17/94	08/19/94	1
PARAMETER			UNITS	13	14	15
BENZENE			MG/KG	<0.025	<0.25	<0.025
TOLUENE			MG/KG	<0.025	11	0.028
ETHYLBENZENE			MG/KG	<0.025	1.2	<0.025
TOTAL XYLENES			MG/KG	<0.025	39	<0.025

## SURROGATE:

BROMOFLUOROBENZENE (%)

96

412\*

99

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE



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

August 24, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 08/17/94, 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.

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR:jt

Enclosure



# **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 2

Project Name EPNG Pits  
Project Number 14509 Phase 6000.77  
Project Location Balland #1 70768

Elevation \_\_\_\_\_  
Borehole Location T26, R9W, S10, M  
GWL Depth \_\_\_\_\_  
Logged By Jeff W. Kindley  
Drilled By G. Sudduth  
Date/Time Started 08/17/95 1414  
Date/Time Completed 08/17/95 1545

Well Logged By Jeff W. Kindley  
Personnel On-Site G. Sudduth, D. Roberts, H. Kiel  
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	SHS	
0				Backfill material to 12'						
5										
10										
15										
20	1	18-20	1.5 2.0	SAND, Brown, medium grained, loose, dry, odor					68/66	1427
25	2	23-25	1.5 2.0	S.A.A.					76/54	1433
30	3	28-30	1.6 2.0	S.A.A.					44/76	1438
35	4	33-35	1.7 2.0	SAND, brown, coarse grained, loose, dry, odor					65/68	1443
40	5	38-40	1.8 2.0	S.A.A.					24/54	1457

Comments: \_\_\_\_\_

Geologist Signature \_\_\_\_\_

# 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 2 of 2

Project Name EPNG Pits  
Project Number 14509 Phase 6000.77  
Project Location Ballard #1 70768

Well Logged By Jeff W. Kindley  
Personnel On-Site G. Sudduth, D. Roberts, H. Kail  
Contractors On-Site \_\_\_\_\_  
Client Personnel On-Site \_\_\_\_\_

Drilling Method 4 1/4 ID HSA  
Air Monitoring Method PID, CGI

Elevation \_\_\_\_\_  
Borehole Location T26, R9W, S10, m  
GWL Depth \_\_\_\_\_  
Logged By Jeff W. Kindley  
Drilled By G. Sudduth  
Date/Time Started 08/17/95 1414  
Date/Time Completed 08/17/95 1545

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	
40										
45	6	43-45		SAA, Boring terminated at 45'					7/8	1506
10										
15										
20										
25										
30										
35										
40										

Comments:

Sample collected at 43 to 45'. BH grouted to surface

Geologist Signature

Jeff W. Kindley

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

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 25	947274
MTR CODE   SITE NAME:	70768	Ballard #1
SAMPLE DATE   TIME (Hrs):	08-17-95	15:06
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	8/21/95	8-21-95
DATE OF BTEX EXT.   ANAL.:	8/21/95	8-21-95
TYPE   DESCRIPTION:	VG	Dark brown clay

Field Remarks:

**RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG		F		
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	33.1 <sup>RB</sup> 8/21/95	MG/KG			2.04	28
HEADSPACE PID	8	PPM				
PERCENT SOLIDS	93.7	%				

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

The Surrogate Recovery was at 96% for this sample All QA/QC was acceptable.  
Narrative:

Benzene taken from FID.

DF = Dilution Factor Used

n D

8/14/95

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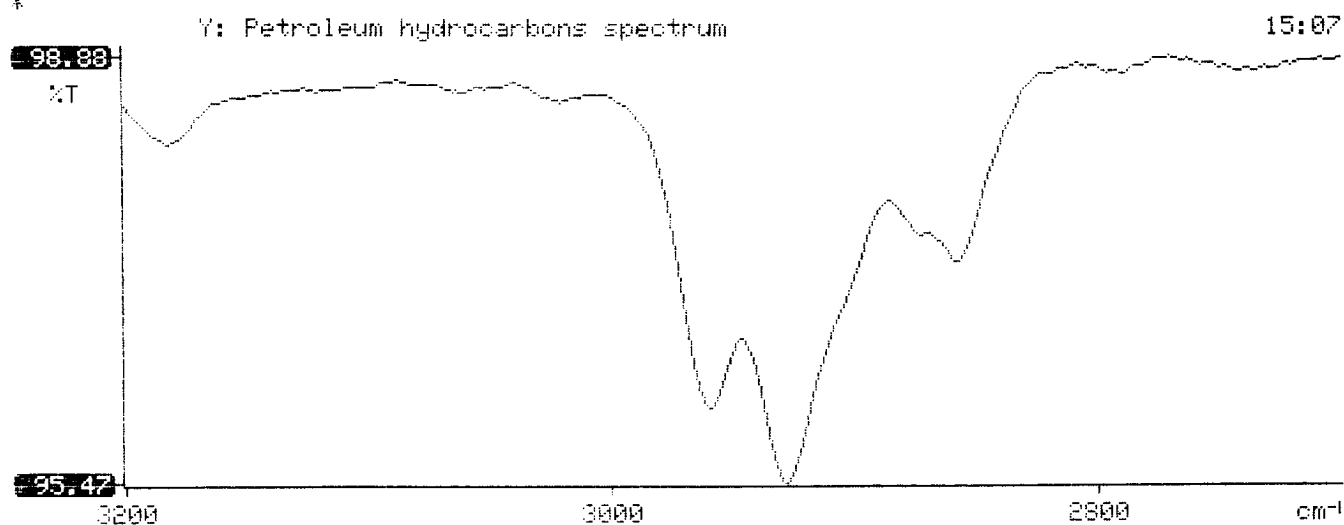
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                  *
*      Analysis Report                           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

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*
* 95/08/21 15:07
*
* Sample identification
* 947274
*
* Initial mass of sample, g
* 2.040
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 33.120
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.014
*
*
*

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# BTEX SOIL SAMPLE WORKSHEET

File	:	947274	Date Printed	:	8/24/95
Soil Mass (g)	:	4.99	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.20040

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.501
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000 0.501
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.501
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000 1.002
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.501
			Total xylenes (mg/Kg):	0.000 1.503
			Total BTEX (mg/Kg):	0.000



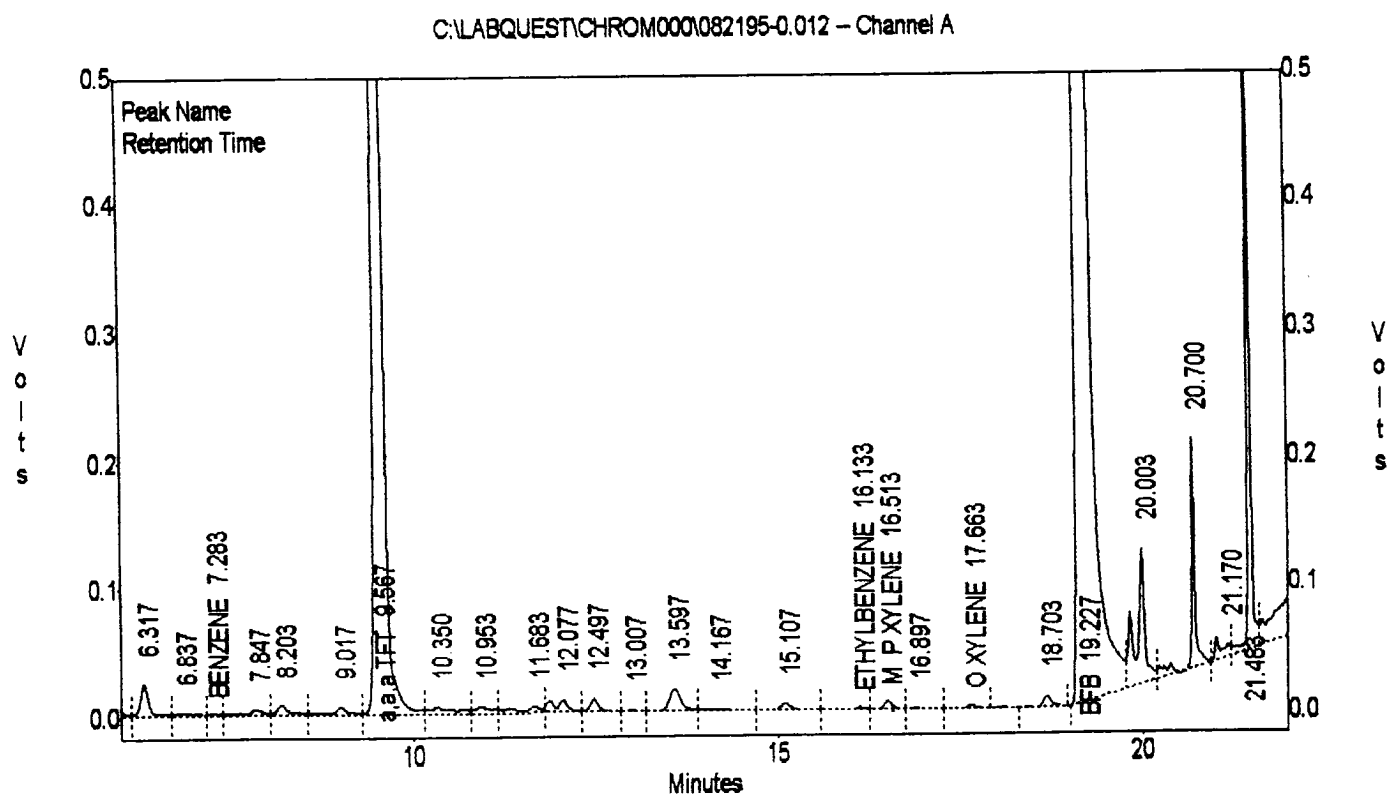
# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\082195-0.012  
 Method : C:\LABQUEST\METHODS\9000.MET  
 Sample ID : 947274.4.99G,100U  
 Acquired : Aug 21, 1995 19:57:21  
 Printed : Aug 21, 1995 20:23:35  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.283	10133	-2.4391
a,a,a TFT	9.567	9218191	93.4881
TOLUENE	11.907	0	0.0000
ETHYLBENZENE	16.133	22634	-0.3024
M & P XYLENE	16.513	54384	-3.0944
O XYLENE	17.663	28234	-0.2036
BFB	19.227	71881472	95.6671



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

File : C:\LABQUEST\CHROM000\082195-0.012  
Method : C:\LABQUEST\METHODS\9000.MET  
Sample ID : 947274,4.99G,100U  
Acquired : Aug 21, 1995 19:57:21  
Printed : Aug 21, 1995 20:23:40  
User : MARLON

## Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.243	0	0.0000
a,a,a TFT	9.573	301783	98.8503
TOLUENE	11.887	0	0.0000
ETHYLBENZENE	16.123	0	0.0000
M & P XYLENE	16.500	0	0.0000
O XYLENE	17.637	0	0.0000
BFB	19.217	1739615	108.6187

