

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

DEC 21 1998

MCCONNEL #6
Meter/Line ID - 74410

RECEIVED
JUL 2 1998

SITE DETAILS

Approval
Legals - Twn: 26 Rng: 09
NMOCD Hazard Ranking: 20
Operator: MERIDIAN OIL INC

Sec: 25 Unit: A
Land Type: 4 - Fee
Pit Closure Date: 08/08/94

OIL CON. DIV.
DIST. 3

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.

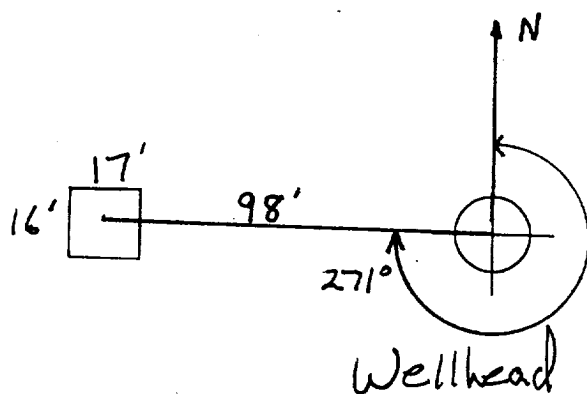
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>74410</u> Location: <u>McConnel No. 6</u> Operator #: <u>2999</u> Operator Name: <u>Merriman</u> P/L District: <u>Beallard</u> Coordinates: Letter: <u>A</u> Section <u>25</u> Township: <u>26N</u> Range: <u>9W</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Assessment Date: <u>6-24-94</u> Area: <u>11</u> Run: <u>82</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps) Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input checked="" type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater 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>Wellhead Protection Area : 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>Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Blanco Wash</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>20</u> POINTS</p>
REMARKS	<p>Remarks: <u>Two pits on location. One drip pit next to well (operator). Other drip pit is dry.</u> <u>Inside V.Z. on Redline & Topo</u></p>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 271 Footage from Wellhead 98
b) Length : 17 Width : 16 Depth : 3



REMARKS

Remarks :

Photos - 1016 hrs

End dump

Completed By:

A handwritten signature in black ink, appearing to be 'J. H. [unclear]', is written over a horizontal line.

Signature

6-24-94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>74410</u> Location: <u>Mc CONNEL NO. 6</u></p> <p>Coordinates: Letter: <u>A</u> Section <u>25</u> Township: <u>26</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>8-8-94</u> Run: <u>11</u> <u>82</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KP 171</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>143</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>80</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"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>8-8-94</u> Pit Closed By: <u>B.E.I</u></p>
REMARKS	<p>Remarks : <u>SOME LINE MARKERS STARTED REMEDIATING TO 12'</u></p> <p><u>SOIL TURNED DARK GRAY REAL SANDY AT 12' SOIL STILL THE</u></p> <p><u>SAME WITH A LIGHT SMELL PID 143 SOIL STILL DARK GRAY LOOKING SANDY</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 Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 171	945862
MTR CODE SITE NAME:	74410	N/A
SAMPLE DATE TIME (Hrs):	8-8-94	0930
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	8-9-94	8-9-94
DATE OF BTEX EXT. ANAL.:	8/11/94	8/11/94
TYPE DESCRIPTION:	✓C	Dark brown sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	0.089	MG/KG	1			
ETHYL BENZENE	0.11	MG/KG	1			
TOTAL XYLENES	0.56	MG/KG	1			
TOTAL BTEX	0.78	MG/KG				
TPH (418.1)	121	MG/KG			2.02	28
HEADSPACE PID	143	PPM				
PERCENT SOLIDS	94.4	%				

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

The Surrogate Recovery was at 99 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached.

DF = Dilution Factor Used

Approved By: JEF.

Date: 9/2/94

```

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

```

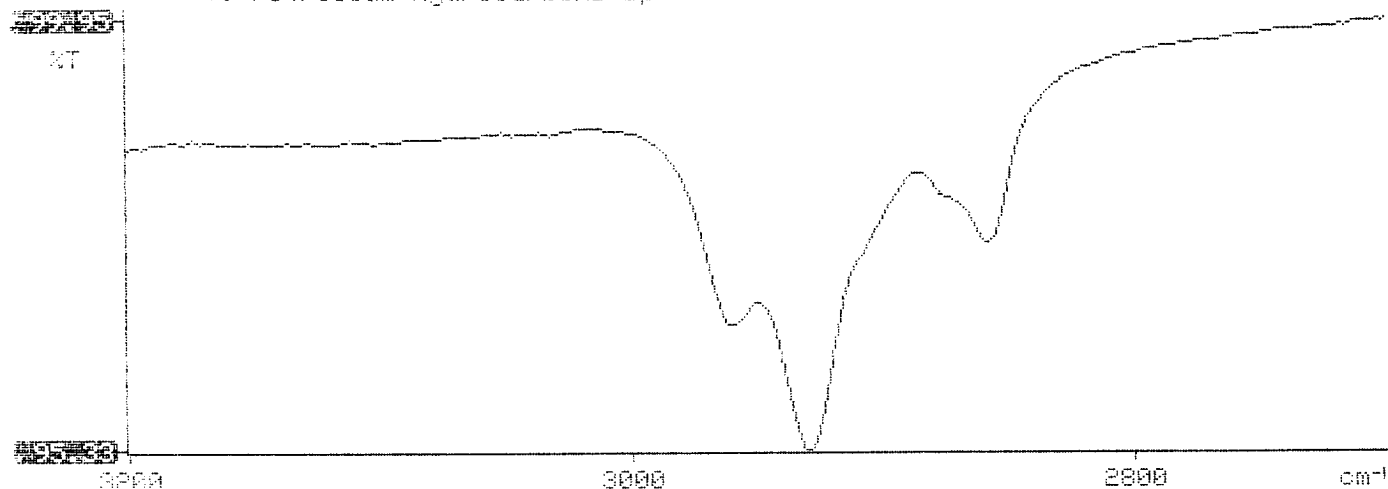
```

74/05/09 14:25
*
* Sample Identification
* 945062
*
* Initial mass of sample, g
* 2.020
*
* Volume of sample after extraction, ml
* 23.000
*
* Petroleum hydrocarbons, ppm
* 120.703
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.018
*

```

Y: Petroleum hydrocarbons spectrum

14:26





Analytical**Technologies**, Inc.

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



ATI I.D. 408339

August 25, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 08/10/94, 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

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408339
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	945856	NON-AQ	08/05/94	08/11/94	08/11/94	1
14	945862	NON-AQ	08/08/94	08/11/94	08/11/94	1
15	945863	NON-AQ	08/08/94	08/11/94	08/11/94	10
PARAMETER			UNITS	13	14	15
BENZENE			MG/KG	<0.025	<0.025	2.8
TOLUENE			MG/KG	<0.025	0.089	61
ETHYLBENZENE			MG/KG	0.39	0.11	12
TOTAL XYLENES			MG/KG	5.0	0.56	130

SURROGATE:

BROMOFLUOROBENZENE (%)	75	99	145*
------------------------	----	----	------

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
 Well # ✓
 Page 1 of 2

PHILIP ENVIRONMENTAL

4000 Monroe Road
 Farmington, New Mexico 87401
 (505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
 Project Number 14509 Phase 6000.77
 Project Location McConnel No. 6 74410

Elevation _____
 Borehole Location T26N, R9W, S25, A
 GWL Depth _____
 Logged By Jeff W. Kindley
 Drilled By G. Sudduth
 Date/Time Started 08/15/95 1320
 Date/Time Completed 08/15/95

Well Logged By Jeff W. Kindley
 Personnel On-Site G. Sudduth, D. Roberts, H. Keife
 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 BZ BH S/H S			Drilling Conditions & Blow Counts
0				Backfill material to 12'						
5										
10										
15										
20	1	18-20	1.7 2.0	SAND, gray, medium grained, loose, dry			101 131			1336
25	2	23-25	2 2.0	SAA			98 96			1344
30	3	28-30	1.7 2.0	SAND, Black, medium to coarse grained, loose, dry			101 105			1352
35	4	33-35	1.4 2.0	CLAY, gray, tight, dry			70 98			1402
40	5	38-40	1.5 2.0	SAA			72 77			1420

Comments:

Geologist Signature

Jeff W. Kindley

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

McCannel No. 6 74410

Elevation

Borehole Location T24N, R9W, S25, A

GWL Depth

Logged By Jeff W. Kindley

Drilled By

Date/Time Started 08/15/95 1320

Date/Time Completed 08/15/95

Well Logged By

Jeff W. Kindley

Personnel On-Site

G. Sudduth, D. Roberts, H. Keefe

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 BZ BH S			Drilling Conditions & Blow Counts
40										
45	6	43-45	0.5 2.0	S.A.A					68/ 104	1439
50	7	48-50	0.6 2.0	S.A.A					12/ 69	14 54
55	8	53-55	0.5 2.0	S.A.A Boring terminated at 55'					8/ 6	1531
20										
25										
30										
35										
40										

Comments:

Sample collected at 53 to 55'. BH grouted to the 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 15	94 7240
MTR CODE SITE NAME:	74410	McConnel No. 6
SAMPLE DATE TIME (Hrs):	08/15/95	15:31
PROJECT:	Phase II Drilling	
DATE OF TPH EXT. ANAL.:	8/17/95	8/17/95
DATE OF BTEX EXT. ANAL.:	8/18/95	8/19/95
TYPE DESCRIPTION:	V6	light grey sand, clay & sandstones

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)	34.8	MG/KG			2.0	28
HEADSPACE PID	6	PPM				
PERCENT SOLIDS	92.5	%				

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

The Surrogate Recovery was at 93% for this sample All QA/QC was acceptable.

Narrative:

Benzene taken from FID.

DF = Dilution Factor Used

Approved By:

Date:

8/24/95

```

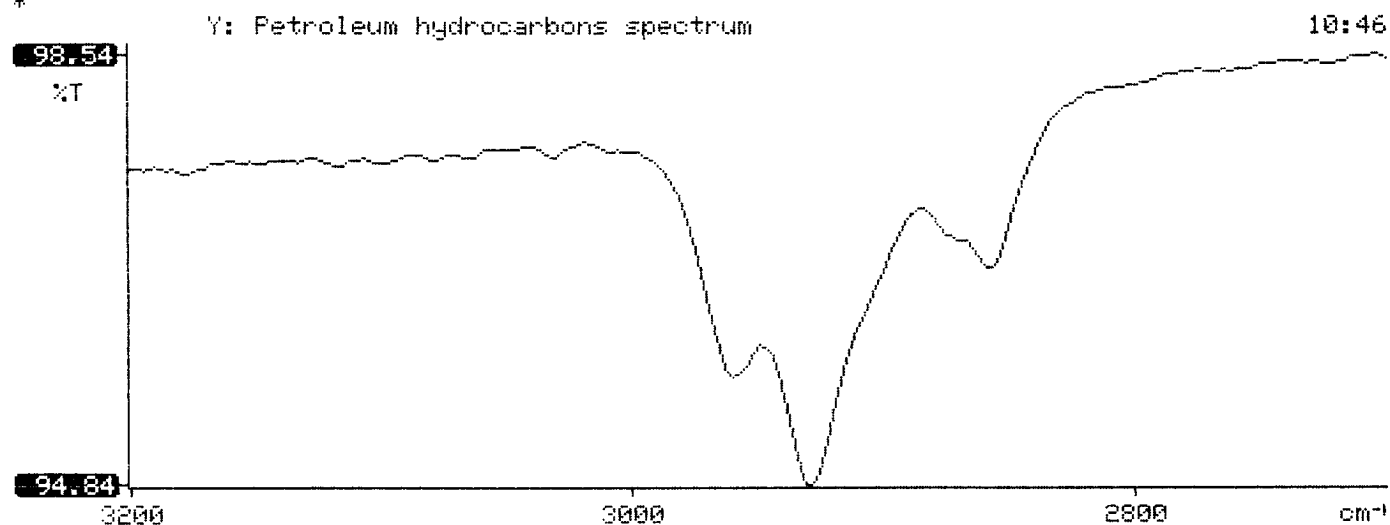
*****
*                               *
*       Test Method for         *
*       Oil and Grease and Petroleum Hydrocarbons         *
*       in Water and Soil      *
*                               *
*       Perkin-Elmer Model 1600 FT-IR                     *
*       Analysis Report      *
*****

```

```

* 95/08/17 10:46
*
* Sample identification
* 947240
*
* Initial mass of sample, g
* 2.000
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 34.776
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.015
*
*
*

```



BTEX SOIL SAMPLE WORKSHEET

File	:	947240	Date Printed	:	8/23/95
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

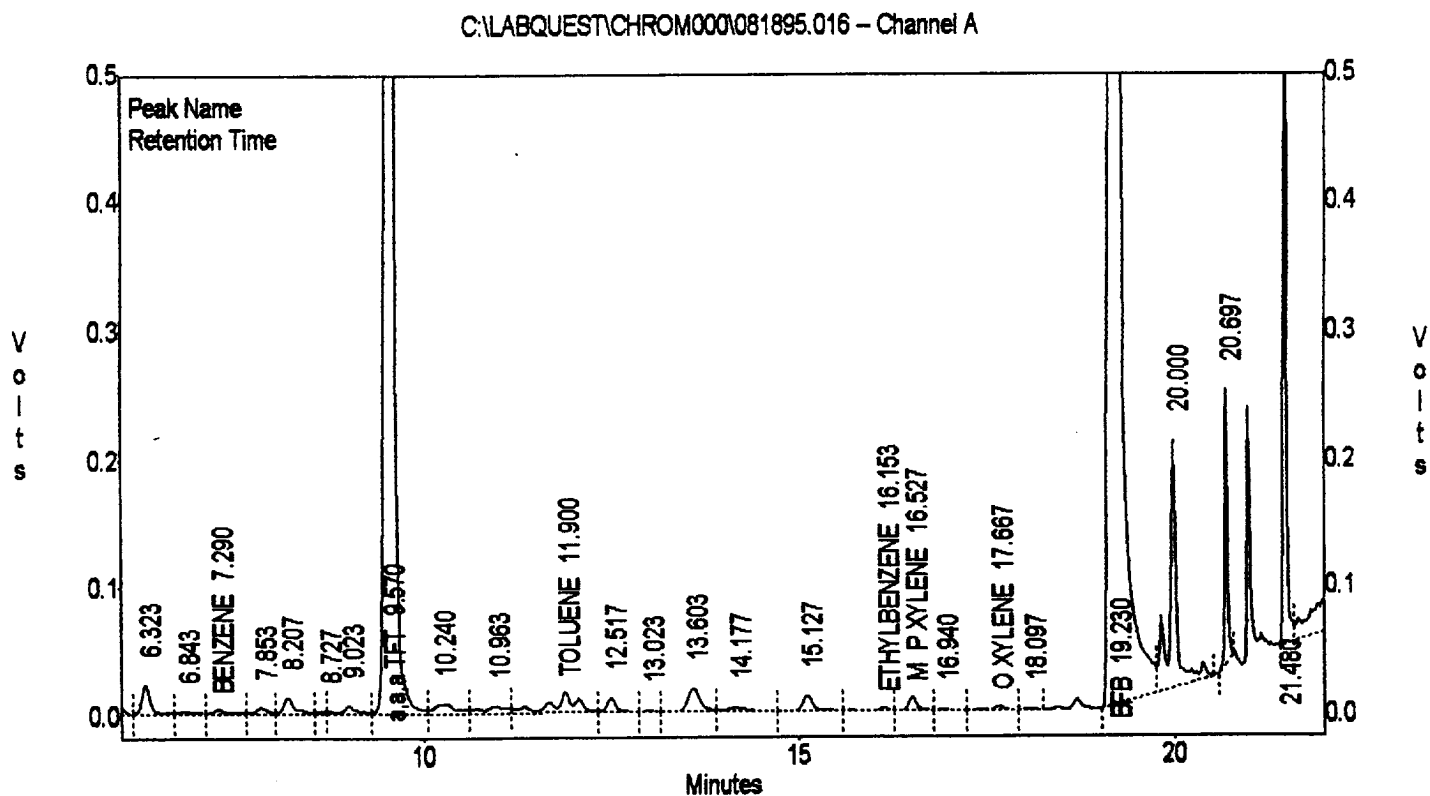
EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\081895.016
 Method : C:\LABQUEST\METHODS\9000.MET
 Sample ID : 947240,4.99G,100U
 Acquired : Aug 19, 1995 02:41:16
 Printed : Aug 21, 1995 14:06:24
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.290	42424	-2.3503
a,a,a TFT	9.570	9477141	96.1143
TOLUENE	11.900	349759	-0.0229
ETHYLBENZENE	16.153	34226	-0.2725
M & P XYLENE	16.527	90733	-3.0062
O XYLENE	17.667	41096	-0.1696
BFB	19.230	69303760	92.5372



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\081895.016
 Method : C:\LABQUEST\METHODS\9000.MET
 Sample ID : 947240,4.99G,100U
 Acquired : Aug 19, 1995 02:41:16
 Printed : Aug 21, 1995 14:06:32
 User : MARLON

Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.500	0	0.0000
a,a,a TFT	9.577	298736	97.8524
TOLUENE	11.893	0	0.0000
ETHYLBENZENE	16.120	0	0.0000
M & P XYLENE	16.497	0	0.0000
O XYLENE	17.637	0	0.0000
BFB	19.217	1568629	97.9426

