EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEPUTY OIL & GAS INSPECTOR

RECEIVED

MANSFIELD #5
Meter/Line ID - 73396

SITE DETAILS

Legals - Twn: 30 **Rng:** 09 **Sec:** 28 **Unit:**
NMOCD Hazard Ranking: 30 **Land Type:** 2 - Federal
Operator: MERIDIAN OIL INC **Pit Closure Date: 05/06/94**

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

Meter: 73396 Location: MANSFIELD #5

Operator #: 2999 Operator Name: ~~AMOCO~~ MERIDIAN 4.19.94 RT P/L District: BLOOMFIELD

Coordinates: Letter: ___ Section 28 Township: 30 Range: 9

Or Latitude _____ Longitude _____

Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____

Site Assessment Date: 4.19.94 Area: 10 Run: ~~43~~ 33 4.24.94 RT

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)

Inside ☒ (1)

Outside ☐ (2)

Land Type:

BLM ☒ (1)

State ☐ (2)

Fee ☐ (3)

Indian _____

Depth to Groundwater

Less Than 50 Feet (20 points) ☐ (1)

50 Ft to 99 Ft (10 points) ☐ (2)

Greater Than 100 Ft (0 points) ☒ (3)

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? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body

Less Than 200 Ft (20 points) ☐ (1)

200 Ft to 1000 Ft (10 points) ☐ (2)

Greater Than 1000 Ft (0 points) ☒ (3)

Name of Surface Water Body _____

(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)

☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 0 **POINTS**

REMARKS

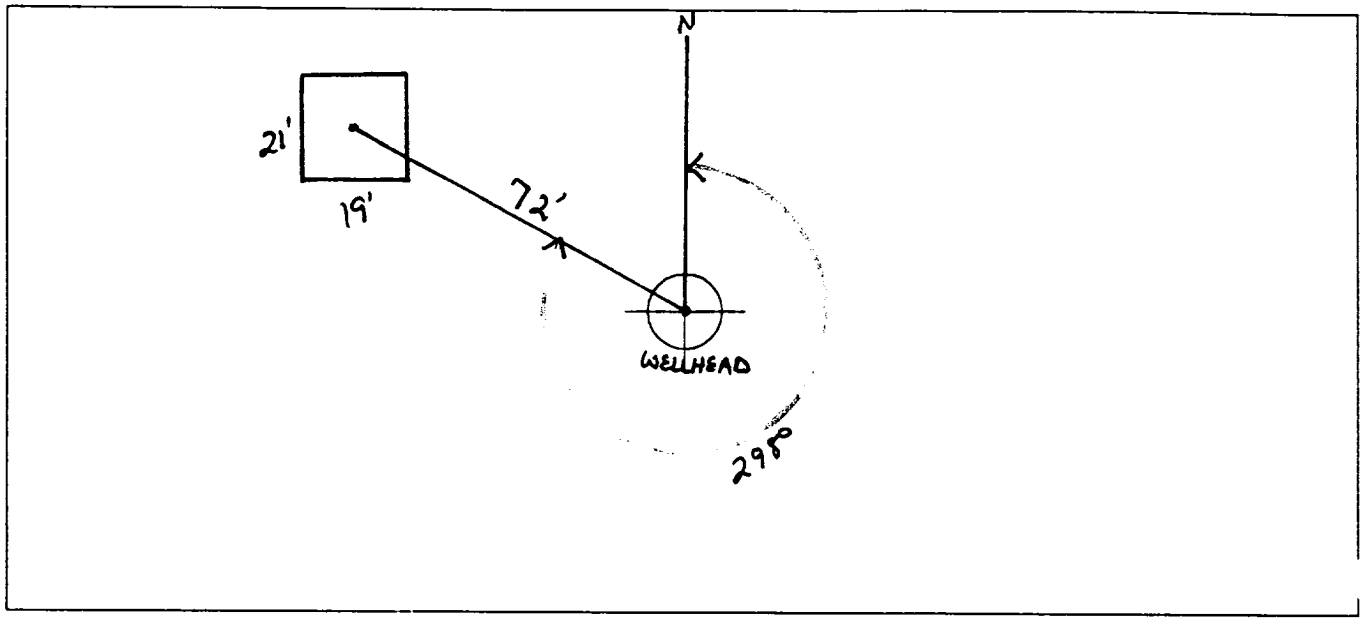
Remarks : ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS ON A MESA. DO NOT KNOW WHY THIS LOCATION IS IN THE WATER VULNERABLE ZONE.

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 298° Footage from Wellhead 72'

b) Length : 21' Width : 19' Depth : 4'



REMARKS

Remarks :

STARTED TAKING PICTURES AT 10:09 A.M.

END DUMP

Completed By:

Robert Thompson

Signature

4.19.94

Date

4-22-94
RT

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 73396 Location: MANSFIELD #5
Operator #: _____ Operator Name: _____ P/L District: BLOOMFIELD
Coordinates: Letter: ___ Section ___ Township: ___ Range: ___
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: _____ Area: 10 Run: 43

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☐ (1)
Outside ☐ (2)

Land Type:
BLM ☐ (1)
State ☐ (2)
Fee ☐ (3)
Indian _____

Depth to Groundwater
Less Than 50 Feet (20 points) ☒ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☐ (3)

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? ☐ (1) YES (20 points) ☐ (2) NO (0 points)

Horizontal Distance to Surface Water Body
Less Than 200 Ft (20 points) ☐ (1)
200 Ft to 1000 Ft (10 points) ☒ (2)
Greater Than 1000 Ft (0 points) ☐ (3)
Name of Surface Water Body PEMADA CANYON
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 30 **POINTS**

REMARKS

Remarks : _____

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 73396 Location: MANSFIELD #5

Coordinates: Letter: E Section 28 Township: 30 Range: 9

Or Latitude _____ Longitude _____

Date Started : 5-6-94 Area: 10 Run: ~~43~~ 33 est 5/9/94

FIELD OBSERVATIONS

Sample Number(s): 945089 KP #29 _____ _____ _____

Sample Depth: 12 Feet

Final PID Reading 203 PID Reading Depth 12 Fe

Yes No

Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Fe

CLOSURE

Remediation Method :

Excavation ☒ (1) Approx. Cubic Yards 55

Onsite Bioremediation ☐ (2)

Backfill Pit Without Excavation ☐ (3)

Soil Disposition:

Envirotech ☐ (1) ☒ (3) Tierra

Other Facility ☐ (2) Name: _____

Pit Closure Date: 5-6-94 Pit Closed By: BET

REMARKS

Remarks : Some LINE MARKERS Pit is dirty started Remediating To 12' soil is BLACK soil still BLACK At 12' PID 203

Signature of Specialist: Kelly Padilla

(SP3191) 04

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP29	945089
MTR CODE SITE NAME:	73396	N/A
SAMPLE DATE TIME (Hrs):	5/6/94	1710
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5/10/94	5/10/94
DATE OF BTEX EXT. ANAL.:	5/13/94	5/15/94
TYPE DESCRIPTION:	VC	Grey Sand/Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.62	MG/KG				
TOLUENE	38	MG/KG				
ETHYL BENZENE	18	MG/KG				
TOTAL XYLENES	240	MG/KG				
TOTAL BTEX	296	MG/KG				
TPH (418.1)	7780	MG/KG		D1	2.04	28
HEADSPACE PID	203	PPM				
PERCENT SOLIDS	88.4	%				

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

The Surrogate Recovery was at 273 % for this sample All QA/QC was acceptable.

Narrative: Surrogate recovery was outside ATI QC limits due to matrix interference. ATI Results attached

DF = Dilution Factor Used

Approved By: John Pardi Date: 6/15/94

****
Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report
****

94/03/10 13:11

Sample identification
945039

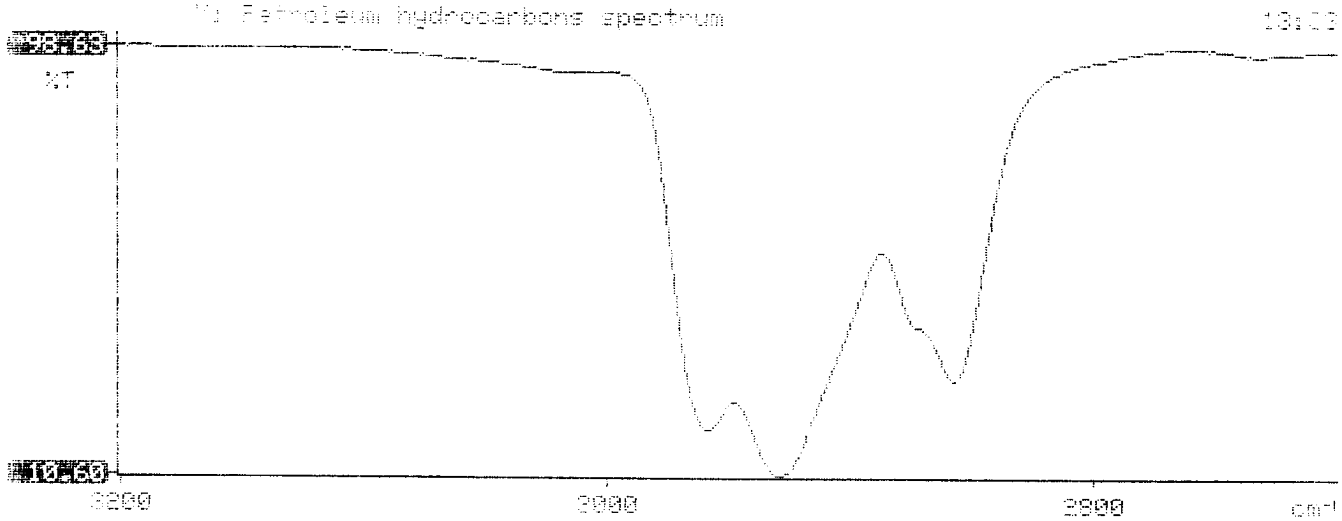
Initial mass of sample, g
2.040

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
7781.824

Net absorbance of hydrocarbons (2930 cm-1)
0.966

Petroleum hydrocarbons spectrum



Analytical Technologies, Inc.

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

ATI I.D. **405343**

May 27, 1994

El Paso Natural Gas Company
770 W. Navajo
Farmington, NM 87401

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **05/11/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **aqueous** and **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.

Client instructed ATI (verbally) to perform a TRPH (418.1) analysis on field ID 945100 (ATI ID 405343-24).

Client instructed ATI (verbally) to continue analysis on field ID 940831 (ATI ID 405343-25) past hold time, as received.

Client was informed that field ID 945085 (ATI ID 405343-01) was received with headspace. Samples were analyzed "as is."

This report is being reissued to correct sample ID's.

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.: 405343

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
11	945087	NON-AQ	05/06/94	05/13/94	05/15/94	25
12	945088	NON-AQ	05/06/94	05/13/94	05/15/94	25
13	945089	NON-AQ	05/06/94	05/13/94	05/15/94	25

PARAMETER	UNITS	11	12	13
BENZENE	MG/KG	<0.62	<0.62	<0.62
TOLUENE	MG/KG	44	15	38
ETHYLBENZENE	MG/KG	20	8.8	18
TOTAL XYLENES	MG/KG	190	89	240
SURROGATE:				
BROMOFLUOROBENZENE (%)		152*	58*	273*

*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
Project Location Mansfield #5 73396

Elevation
Borehole Location
GWL Depth
Logged By CM Chance
Drilled By M. Donahue
Date/Time Started 5/18/95 - 0800
Date/Time Completed 5/18/95 - 1020

Well Logged By CM Chance
Personnel On-Site M Donahue, K Padilla, F Rivera
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: ~~NDD~~ ppm BZ	BH	~~HS~~ S	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15	1	15-17	6"	Br Silty Sand, vF-f sand, med loose, sl moist			1	60	548/853	-0814
20	2	20-22	4"	AA Br silty SH-sp f-med sand, med loose, sl moist			3	60	219/922	-0819
25	3	25-27	4"	AA			3	85	304/464	-0823
30	4	30-32	5"	AA			83	40	131/379	-0831
35	5	35-37	4"	AA			4	46	93/	-0844
40	6	40-42	8"	Br ~~silty~~ Sandy Clay, f-med sand, ~~med loose~~ stiff, ~~sl moist~~ Cal laminations, ~~fracturing~~			3	30	4 ~~88~~ 99/12	-0855

Comments:

Geologist Signature

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 2 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 Mansfield S 73396

Elevation
Borehole Location
GWL Depth
Logged By
Drilled By
Date/Time Started
Date/Time Completed

Well Logged By
Personnel On-Site
Contractors On-Site
Client Personnel On-Site

Drilling Method
Air Monitoring Method

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 BZ	BH	S	Drilling Conditions & Blow Counts
40	7	41-43	12"	Br silty Sand, vf-f sand, med stiff, sl moist (Br dense Clay in shoe, dry)			0	25	3/20	Refusal @ 41' 0923
				TDB 41'						
45										
50										
55										
60										
65										
70										
75										
80										

Comments: Sample 41-43' submitted to Lab for TPH & BTEX. CMCID
10-94# bags Type I, II Cement, 5-50# bag bentonite

Geologist Signature

Phase II

El Paso Natural Gas Company

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC12	946921
MTR CODE | SITE NAME:	73396	N/A
SAMPLE DATE | TIME (Hrs):	5-18-95	0923
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-19-95	5-19-95
DATE OF BTEX EXT. ANAL.:	5-19-95	5-23-95
TYPE | DESCRIPTION:	VG	Light brown sand stones

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	<3.0	MG/KG				
TPH (418.1)	<10 KDW 5/22/95	MG/KG			2.04	28
HEADSPACE PID	20	PPM				
PERCENT SOLIDS	95.4	%				

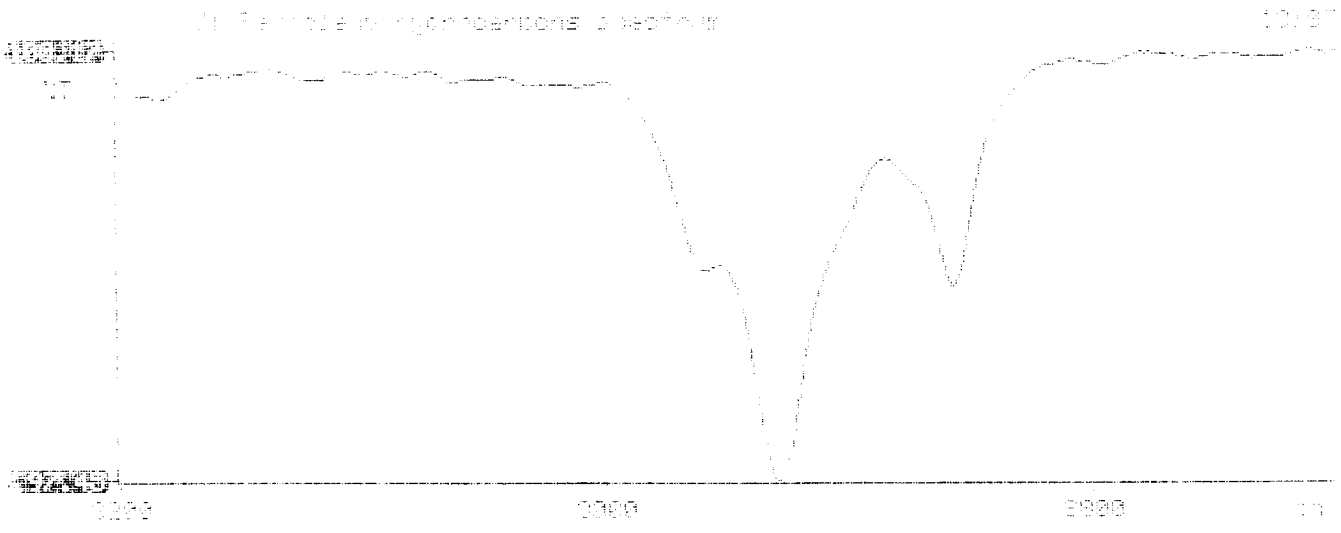
-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 94.5 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

5/26/95


1999
2000
2000

BTEX SOIL SAMPLE WORKSHEET

File	946821A	**Date Printed**	5/24/95
Soil Mass (g)	5	**Multiplier (L/g)**	0.00100
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.20000

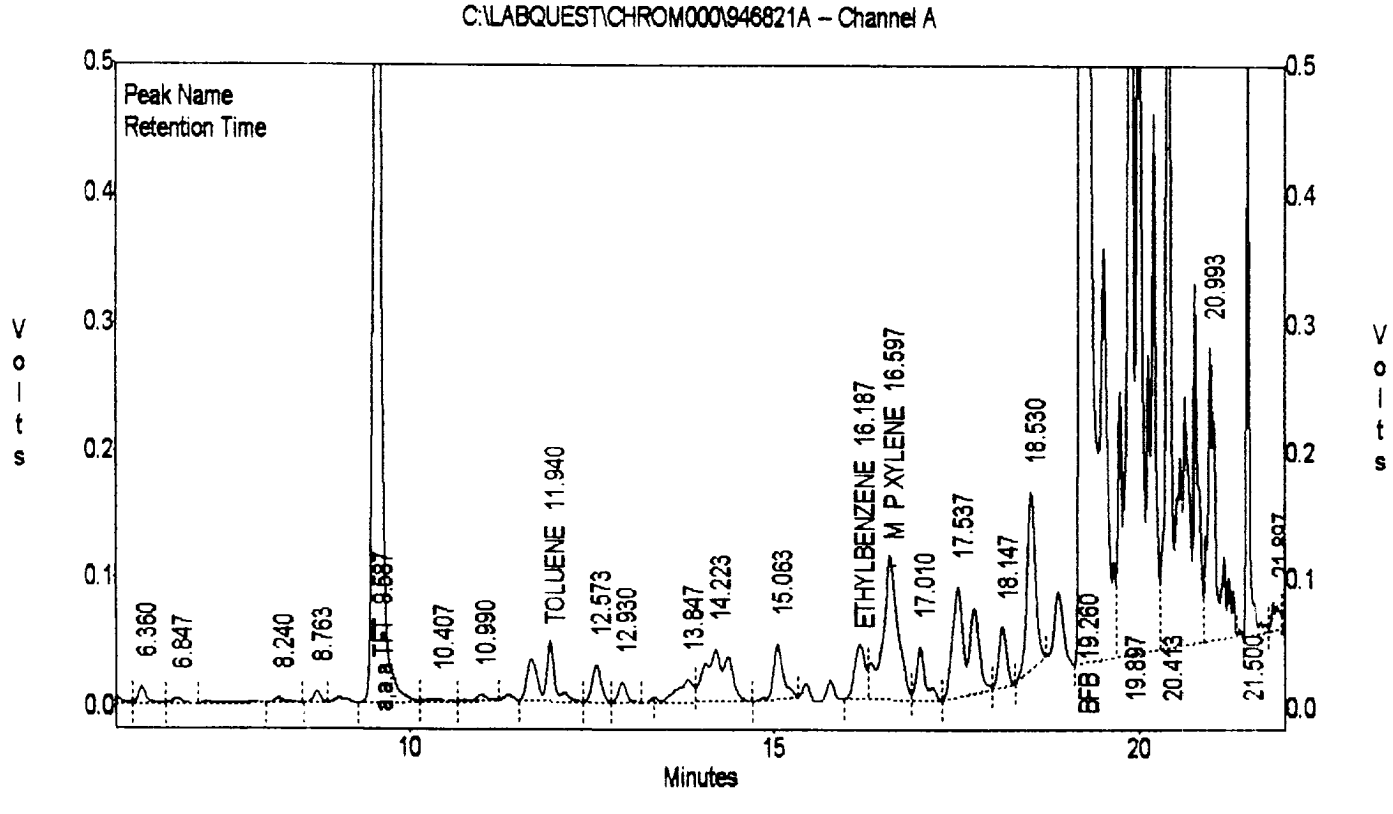
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.00**	0.500
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.00**	0.500
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.00**	0.500
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.00	1.000
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.00	0.500
		Total xylenes (mg/Kg):	**0.00**	1.500
		Total BTEX (mg/Kg):	**0.00**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\946821A
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 946821,5.00/100UL
Acquired : May 23, 1995 20:06:27
Printed : May 23, 1995 20:32:42
User : Tony

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.260	0	0.0000
a,a,a TFT	9.587	5675824	88.8114
TOLUENE	11.940	692919	-3.1389
ETHYLBENZENE	16.187	433497	-2.7008
M & P XYLENE	16.597	1655964	-2.4546
O XYLENE	17.750	0	0.0000
BFB	19.260	57664860	94.5364



EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\946821A
Method : C:\LABQUEST\METHODS\9000.MET
Sample ID : 946821,5.00/100UL
Acquired : May 23, 1995 20:06:27
Printed : May 23, 1995 20:32:48
User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.267	0	0.0000
a,a,a TFT	9.593	322209	107.7382
TOLUENE	11.927	0	0.0000
ETHYLBENZENE	16.197	0	0.0000
M & P XYLENE	16.603	49348	16.1093
O XYLENE	17.720	0	0.0000
BFB	19.263	2214808	101.2576