Denny G. Foust
DEPUTY OIL & GAS INSPECTOR
DEC 21 1998

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

Approved

RECEIVED
JUL 2 1998
OIL CON. DIV.
DIST. 3

SANDOVAL GAS COM C 1E
Meter/Line ID - 95407

SITE DETAILS

Legals - Twn: 30 **Rng:** 09 **Sec:** 35 **Unit:** E
NMOCD Hazard Ranking: 10 **Land Type:** 2 - Federal
Operator: AMOCO PRODUCTION COMPANY **Pit Closure Date: 09/12/94**

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: 95407 Location: SANDOVAL GAS COM C1E
Operator #: 0203 Operator Name: Amoco P/L District: BLOOMFIELD
Coordinates: Letter: E Section 35 Township: 30 Range: 9
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 5.26.94 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 _____
(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: 10 **POINTS**

REMARKS

Remarks : TWO PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. LOCATION IS RIGHT OFF THE NORTH SIDE OF CR 4599. REDLINE AND TOPO CONFIRMED LOCATION INSIDE V.Z.

DIG & [illegible]

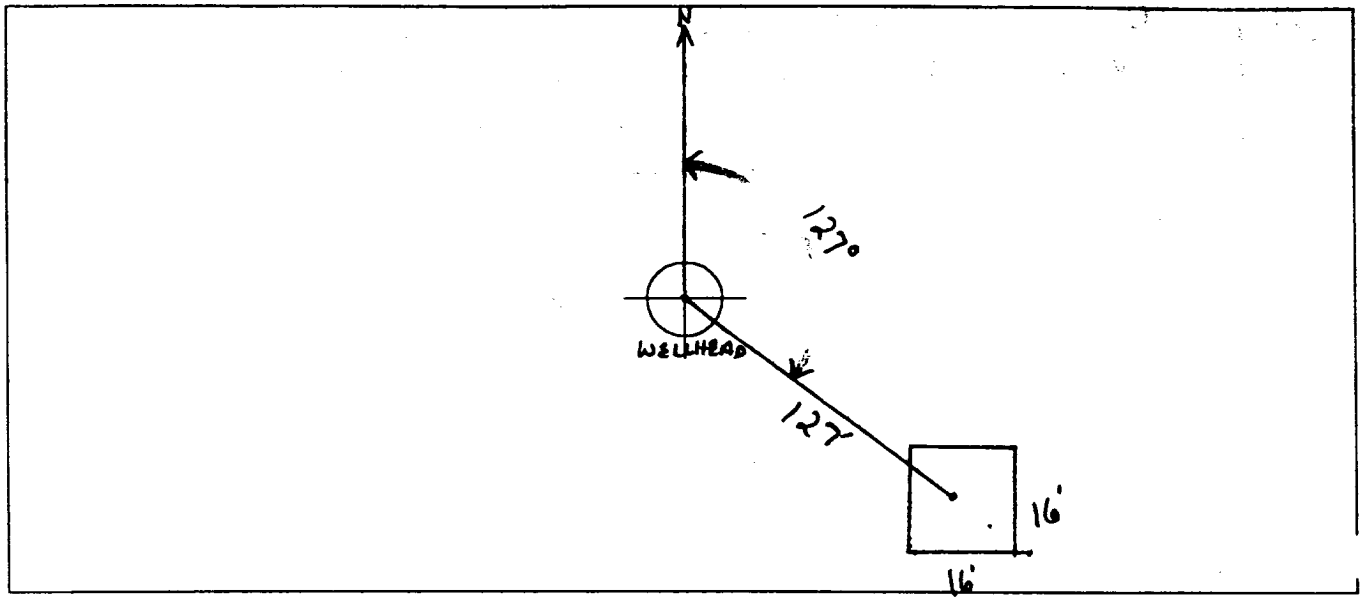
(SP3190) 04/08/94

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 127° Footage from Wellhead 127'

b) Length : 16' Width : 16' Depth : 4'



REMARKS

Remarks :

TOOK PICTURES AT 10:06 A.M.

END DUMP

Completed By:

Robert Thompson
Signature

5-26-94
Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 95407 Location: Sandoval Gas Com CIE

Coordinates: Letter: E Section 35 Township: 30 Range: 9

Or Latitude _____ Longitude _____

Date Started : 9/12/94 Run: 10 43

FIELD OBSERVATIONS

Sample Number(s): KD 251 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 382 ppm PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 80

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9/12/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 12', TOOK PID Sample, Closed pit

Signature of Specialist: Kenny Dearen

(SP3191) 03/16/94

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:	KD 25	946096
MTR CODE | SITE NAME:	95407	N/A
SAMPLE DATE | TIME (Hrs):	9-12-94	1340
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	9-13-94	9-13-94
DATE OF BTEX EXT. | ANAL.:	9-16-94	9-17-94
TYPE | DESCRIPTION:	VC	Red Sand/Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.5	MG/KG	20			
TOLUENE	17	MG/KG	20			
ETHYL BENZENE	5.5	MG/KG	20			
TOTAL XYLENES	270	MG/KG	20			
TOTAL BTEX	293	MG/KG				
TPH (418.1) 2350	~~2353.0~~ 9/16/94	MG/KG			2.14	28
HEADSPACE PID	382	PPM				
PERCENT SOLIDS	89.3	%				

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

The Surrogate Recovery was at 280 % 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: 10/23/94

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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                     *
**********************************************************
*
 94/09/13  15:06
*
*  Sample identification
 946096
*
*  Initial mass of sample, g
 2.140
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 2353.037
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.317
*
*
*
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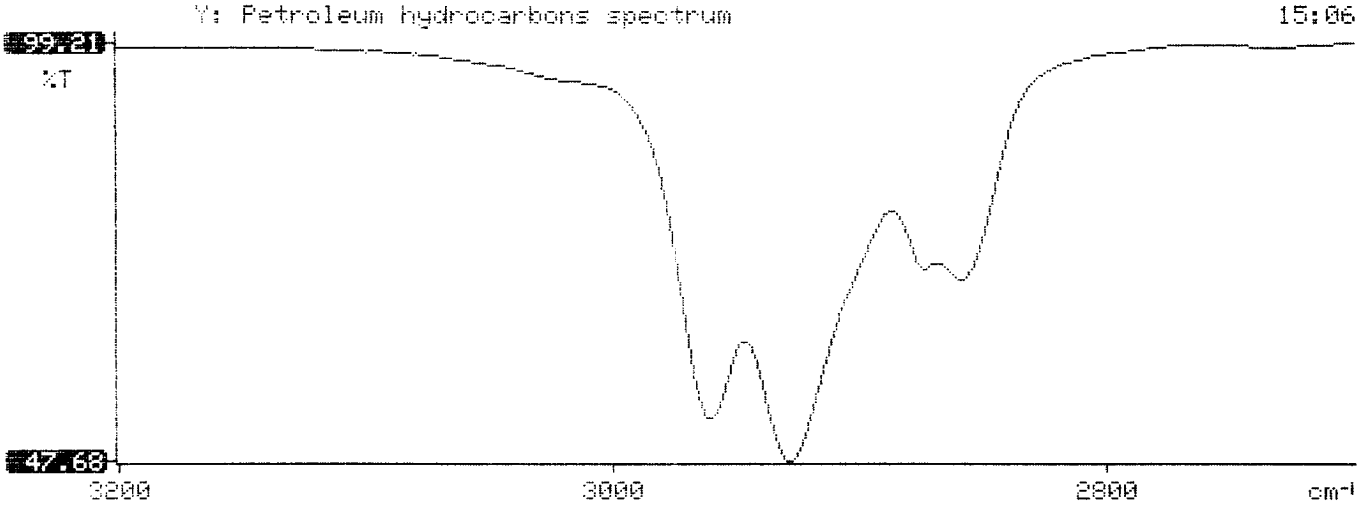

Analytical Technologies, Inc.

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

ATI I.D. **409354**

September 22, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/14/94**, 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.

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

Letitia Krakowski, Ph.D.
Project Manager

MR:jt

Enclosure

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409354

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	946096	NON-AQ	09/12/94	09/14/94	09/17/94	20
17	946097	NON-AQ	09/12/94	09/14/94	09/17/94	20

PARAMETER	UNITS	16	17
BENZENE	MG/KG	<0.5	<0.5
TOLUENE	MG/KG	17	60
ETHYLBENZENE	MG/KG	5.5	<0.5
TOTAL XYLENES	MG/KG	270	18
SURROGATE:			
BROMOFLUOROBENZENE (%)		280*	107

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

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

Project Name EPNG Pits
Project Number 11957 Phase 4002
Project Location Sandoval GC CIE 95407

Elevation
Borehole Location
GWL Depth
Logged By CM Chance
Drilled By M. Donahue
Date/Time Started 5/15/95 - 1530
Date/Time Completed 5/15/95 - 1745

Well Logged By CM Chance
Personnel On-Site M. Nez
Contractors On-Site
Client Personnel On-Site

Drilling Method 4¼ 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: NDU BZ	BH	S	Drilling Conditions & Blow Counts
0				Back fill						
5										
10										
15	1	15-17	4"	lt br silty Sand, vf-fine sand, loose			4	140	HS 1,076	Drilling slightly hard. Some cobbles
20				A/A with cobbles			4	150		
25	2	25-27	4"	A/A lt br silty sand w abnt gravel cobbles, loose, dry			5	156	13	Drilling easier at ~28'
30	3	~~30-31~~ 30-31	6"	lt br weathered Sandstone, f-med sand, sub rounded TDB 31.5'			5	135	HS 9	
35										
40										

Comments: Lab sample taken at 30-31' (9ppm Headspace) CMC6

Geologist Signature

Plus #

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:	cmc 6	94687
MTR CODE | SITE NAME:	95407	N/A
SAMPLE DATE | TIME (Hrs):	5-15-95	1628
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	5-16-95	5-16-95
DATE OF BTEX EXT. | ANAL.:	5/16/95	5/17/95
TYPE | DESCRIPTION:	G	Light grey sand & clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.50	MG/KG	0.20161		4.96	20
TOLUENE	<0.50	MG/KG				
ETHYL BENZENE	<0.50	MG/KG				
TOTAL XYLENES	<1.51	MG/KG				
TOTAL BTEX	<3.01	MG/KG				
TPH (418.1)	~~EC~~ 76.6	KDK 5/18/95 MG/KG			2.01	28
HEADSPACE PID	9	PPM				
PERCENT SOLIDS	93.3	%				

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

The Surrogate Recovery was at 93.3 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: John Keller Date: 5/26/95

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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                     *
**********************************************************
*
 95/05/16  11:36
*
*  Sample identification
 046817
*
*  Initial mass of sample, g
 2.010
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 76.593
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.020
*
*
*
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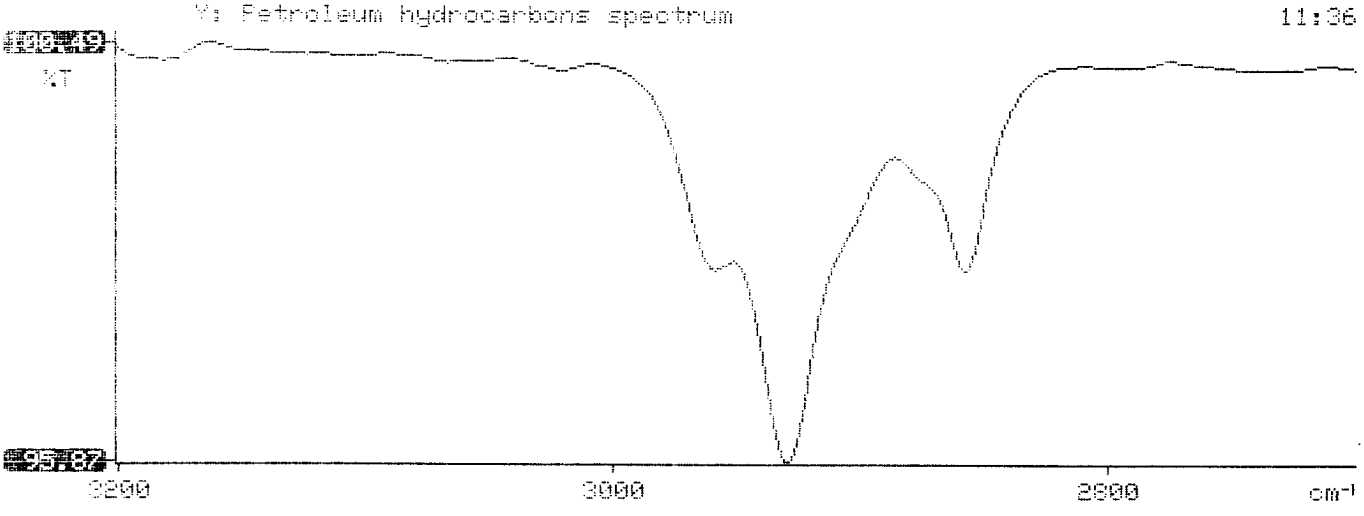


BTEX SOIL SAMPLE WORKSHEET

File	946817A	**Date Printed**	5/18/95
Soil Mass (g)	4.96	**Multiplier (L/g)**	0.00101
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.20161

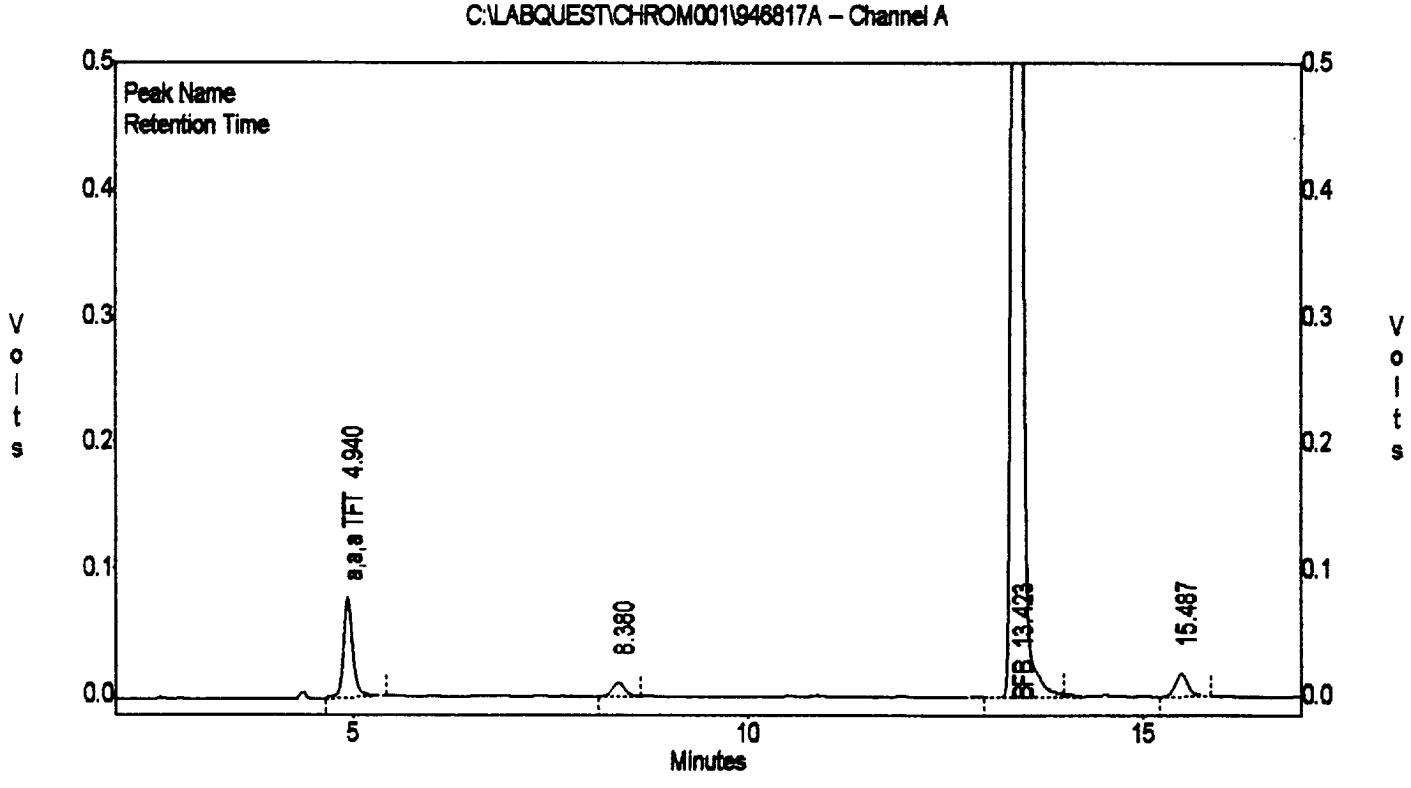
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.00**	0.504
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.00**	0.504
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.00**	0.504
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.00	1.008
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.00	0.504
		Total xylenes (mg/Kg):	**0.00**	1.512
		Total BTEX (mg/Kg):	**0.00**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946817A
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 946817,4.96/100uL
Acquired : May 17, 1995 23:21:25
Printed : May 17, 1995 23:47:39
User : Tony

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.467	0	0.0000
a,a,a TFT	4.940	659070	88.1515
TOLUENE	6.803	0	0.0000
ETHYLBENZENE	10.550	0	0.0000
M & P XYLENE	10.903	0	0.0000
O XYLENE	11.953	0	0.0000
BFB	13.423	13937805	93.2850



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946817A
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 946817,4.96/100uL
Acquired : May 17, 1995 23:21:25
Printed : May 17, 1995 23:47:43
User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.467	0	0.0000
a,a,a TFT	4.940	726609	86.4010
TOLUENE	6.803	0	0.0000
ETHYLBENZENE	10.550	0	0.0000
M & P XYLENE	10.903	0	0.0000
O XYLENE	11.957	0	0.0000
BFB	13.427	4337188	90.8479