

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

DEC 21 1998

ANDERSON B #1
Meter/Line ID - 87940

RECEIVED
JUL 2 1998

SITE DETAILS

Legals - Twn: 25 Rng: 03
NMOCD Hazard Ranking: 40
Operator: DUGAN PRODUCTION CORP

Sec: 33 Unit: M
Land Type: 4 - Fee
Pit Closure Date: 10/25/94

SOIL CON. DIV

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: 87-940 Location: Anderson "B"-Well No. 1
 Operator #: 1862 Operator Name: Dugan Production P/L District: Ojito
 Coordinates: Letter: M Section 33 Township: 25 Range: 3
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 8/8/94 Area: 08 Run: 91

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 Leeson 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: 40 POINTS

REMARKS

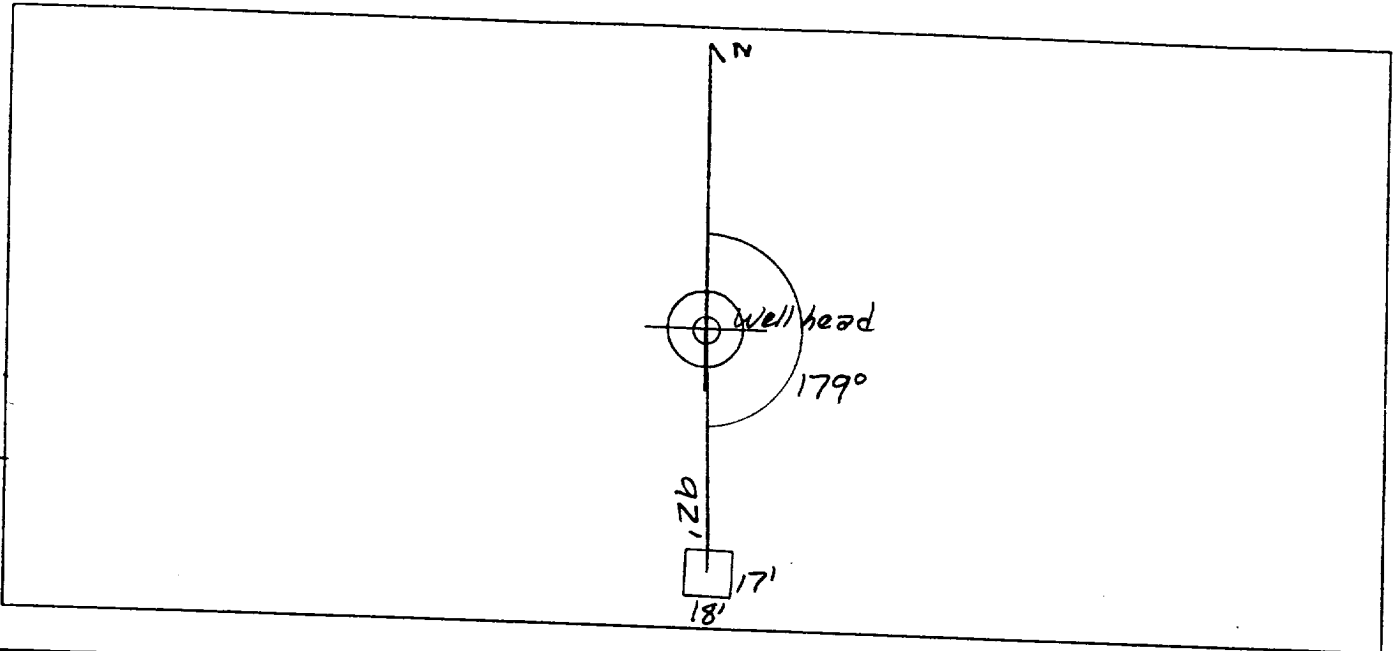
Remarks : Redline Book - Inside Vulnerable Zone Tape - Inside
One pit, pit is dry, will close one pit.

DIG & HAUL

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 179° Footage from Wellhead 92'
 b) Length : 18' Width : 17' Depth : 3'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

Pictures @ 1506 (21-24 Roll 1)

Dump Truck

Pit is approximately 1000' from a residence.

Completed By:

Naush Kelly
 Signature

8/1/94
 Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>87940</u> Location: <u>Anderson 'B' well #1</u> Coordinates: Letter: <u>M</u> Section <u>33</u> Township: <u>25</u> Range: <u>3</u> Or Latitude _____ Longitude _____ Date Started : <u>10/25/94</u> Run: <u>08</u> <u>91</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KD349</u> Sample Depth: <u>6'</u> Feet Final PID Reading <u>394 ppm</u> PID Reading Depth <u>6'</u> Feet Yes No Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation ☒ Approx. Cubic Yards <u>30</u> Onsite Bioremediation ☐ Backfill Pit Without Excavation ☐ Soil Disposition: Envirotech ☒ ☐ Tierra Other Facility ☐ Name: _____ Pit Closure Date: <u>10/25/94</u> Pit Closed By: <u>ISFI</u>
REMARKS	Remarks : <u>Excavated pit to 6', Hit Sandstone, took PID sample, closed pit.</u>
	Signature of Specialist: <u>Phumy Deenan</u>



SPLIT

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			DF	Q	M(g)	V(ml)	
BENZENE	20.10	MG/KG	N/A			SV	0.69
TOLUENE	20.10	MG/KG	N/A			SV	10.0
ETHYL BENZENE	0.838	MG/KG	0.005076		3.94	20	1.9
TOTAL XYLENES	5.06	MG/KG	0.005076		3.94	20	23
TOTAL BTEX	5.90	MG/KG	0.005076		3.94	20	35.6 35.59
TPH (418.1)	974	MG/KG	N/A		2.03	28	340
HEADSPACE PID	394	PPM					Surrogate % 69
PERCENT SOLIDS	91.7	%					Dilution Factor 20

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

The Surrogate Recovery was at 88.7 for this samp All QA/QC was acceptable.

Narrative:

ATI Results attached

DF = Dilution Factor Used

Approved By:

Date:

11-5-94

EL PASO NATURAL GAS EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946450a
Method : C:\LABQUEST\METHODS\SOILS.MET
Sample ID : 946450, 0.26 g
Acquired : Nov 04, 1994 15:14:35
Printed : Nov 04, 1994 15:40:47
User : John

Channel A Results

x.0192

$$\frac{x.0052}{0.26g}$$

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.167	0	0.00000	0.0000
a,a,a TFT	12.467	22978766	7303.77002	3142.0605
TOLUENE	15.067	0	0.00000	0.0000
ETHYLBENZENE	19.367	7140878	116407.63281	55.9770
M & P XYLENE	19.650	41881020	167589.01563	299.6367
O XYLENE	20.183	0	0.00000	0.0000
BFB	20.783	24666684	169985.04688	133.9262

<0.10

<0.10

1.08 mg/kg

5.76 mg/kg

Totals :

26667344

3631.6006

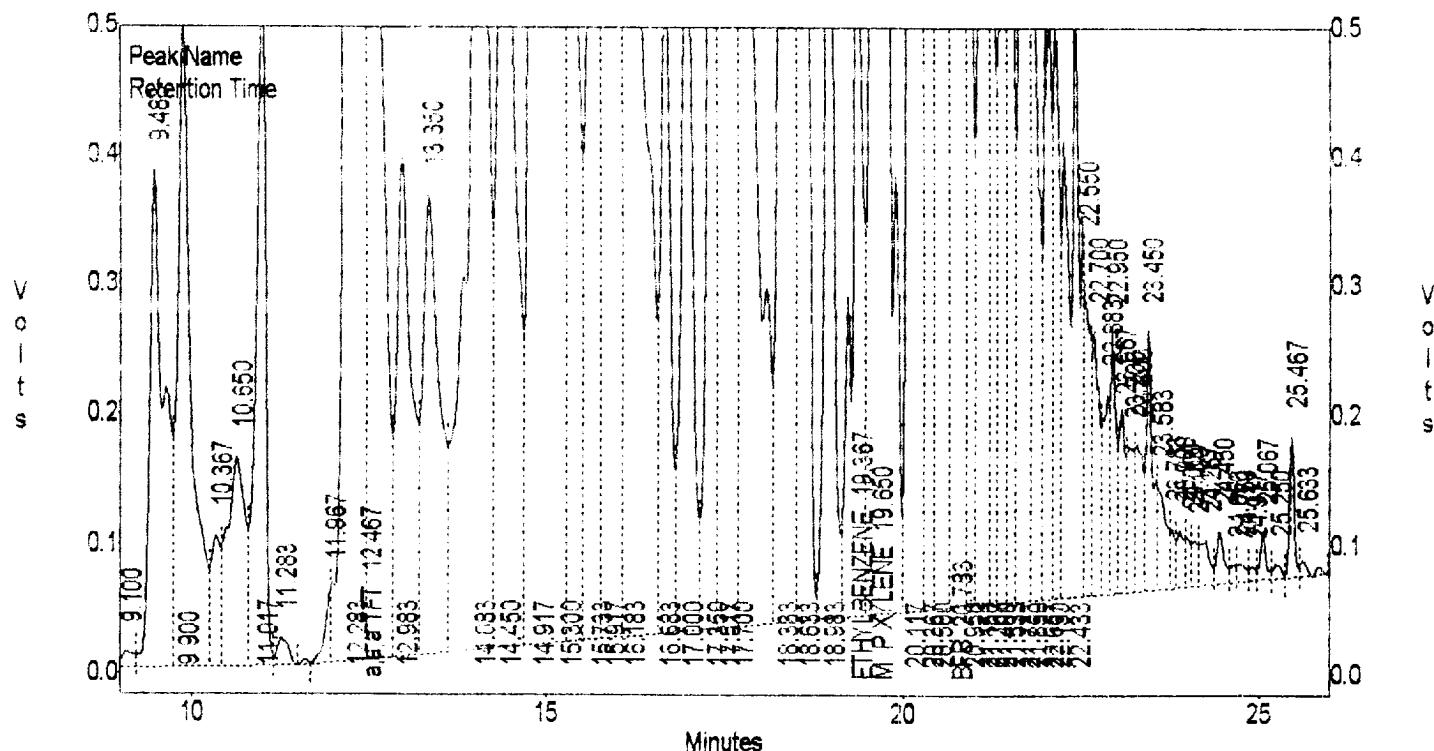
134% Recovery ok

Surrogate

JR

11/4/94

C:\LABQUEST\CHROM\946450a - Channel A



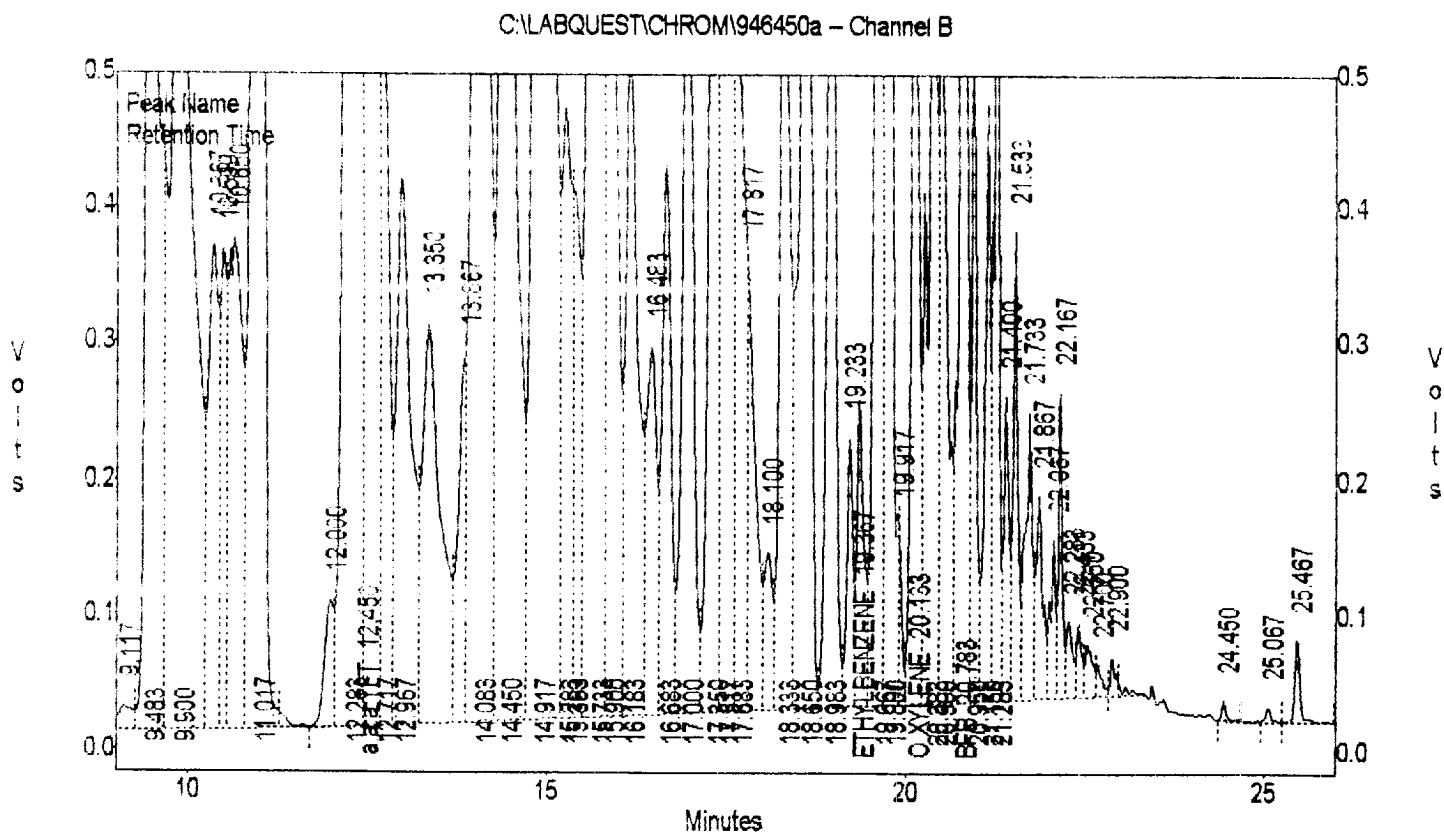
EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

```
File       : C:\LABQUEST\CHROM\946450a
Method     : C:\LABQUEST\METHODS\SOILS.MET
Sample ID  : 946450, 0.26 g
Acquired   : Nov 04, 1994 15:14:35
Printed    : Nov 04, 1994 15:40:52
User       : John
```

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.183	0	0.00000	0.0000
a,a,a TFT	12.150	17576886	1612.83142	10897.2510
TOLUENE	15.067	0	0.00000	0.0000
ETHYLBENZENE	19.367	1599824	15800.91699	88.5273
M & P XYLENE	19.600	0	0.00000	0.0000
O XYLENE	20.133	5374888	15663.30664	301.1354
BFB	20.783	7047384	18546.16797	390.0650

Totals :	31598982	11676.9795
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EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946450b
 Method : C:\LABQUEST\METHODS\SOILS.MET
 Sample ID : 946450, 3.94g/20ml MeOH, 100u
 Acquired : Nov 05, 1994 15:01:22
 Printed : Nov 05, 1994 15:27:33
 User : John

DF = .005076142

at 1/30

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.217	0	0.00000	0.0000
a,a,a TFT	12.567	2156905	7303.77002	294.9301
TOLUENE	13.100	0	0.00000	0.0000
ETHYLBENZENE	19.383	420569	116407.63281	3.2968
M & P XYLENE	19.617	2671722	167589.01563	19.1148
O XYLENE	20.183	0	0.00000	0.0000
BFB	20.783	16345094	169985.04688	98.7447

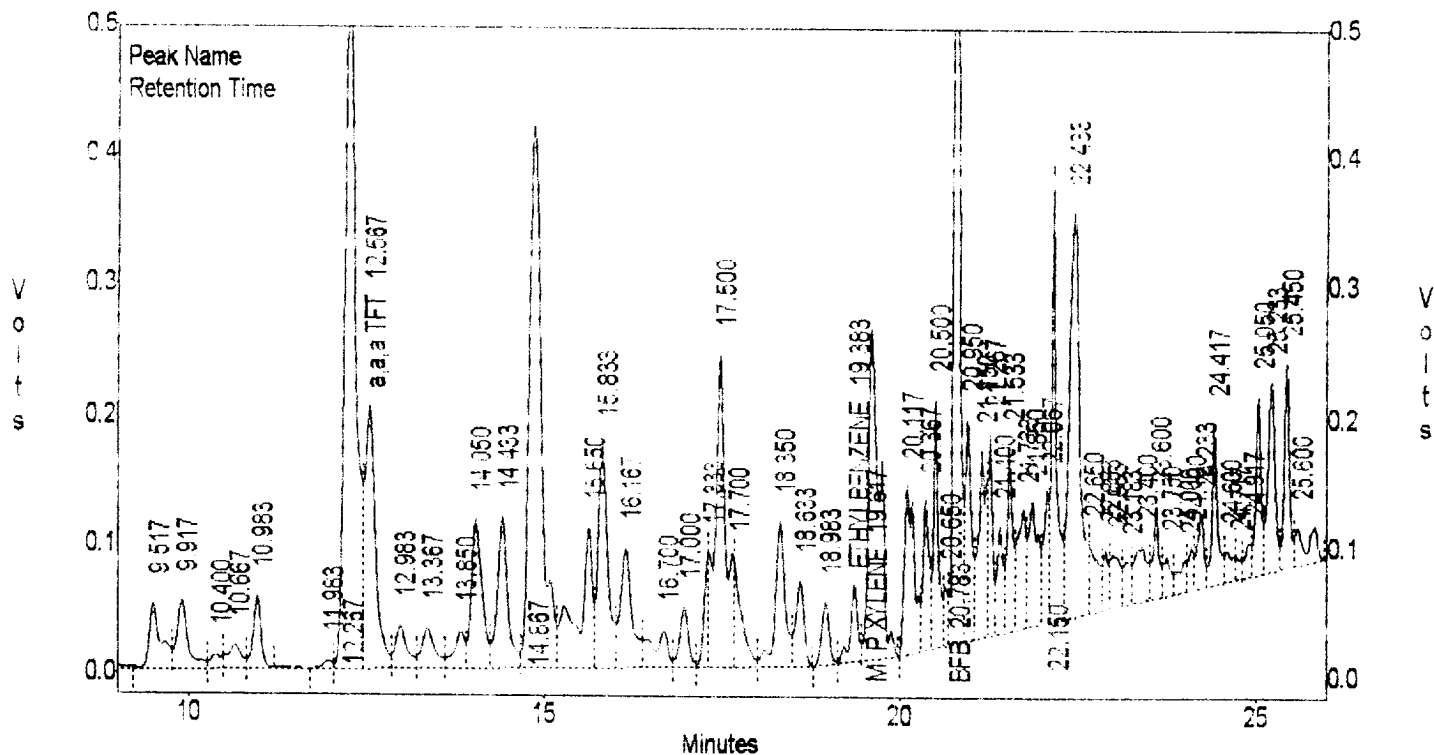
3.2968 x 50 = 165 x DF = 0.838
 19.1148 x 50 = 996 x DF = 5.06 mg

Totals :

21594292

406.0863

C:\LABQUEST\CHROM\946450b - Channel A



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

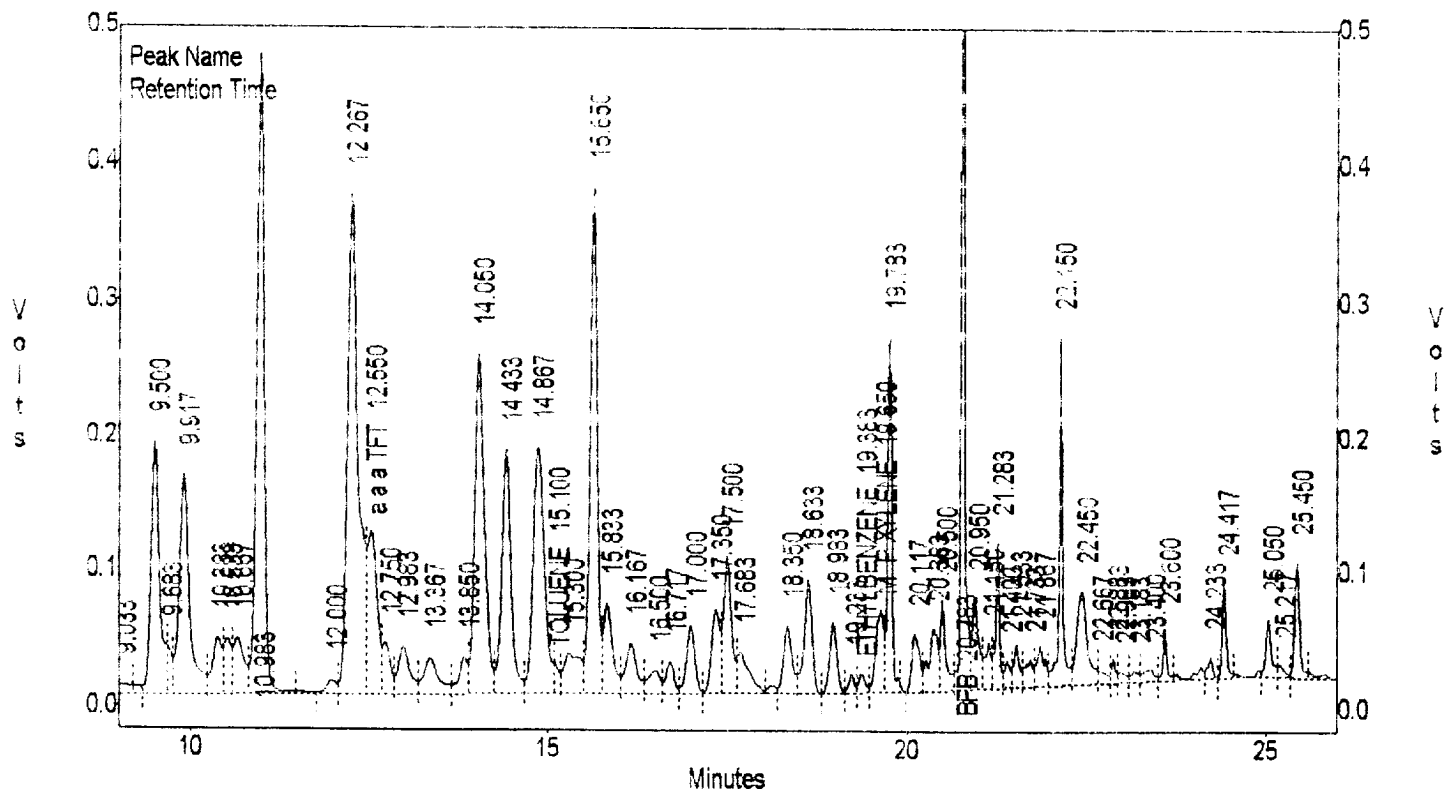
File : C:\LABQUEST\CHROM\946450b
 Method : C:\LABQUEST\METHODS\SOILS.MET
 Sample ID : 946450, 3.94g/20ml MeOH, 100u
 Acquired : Nov 05, 1994 15:01:22
 Printed : Nov 05, 1994 15:27:38
 User : John

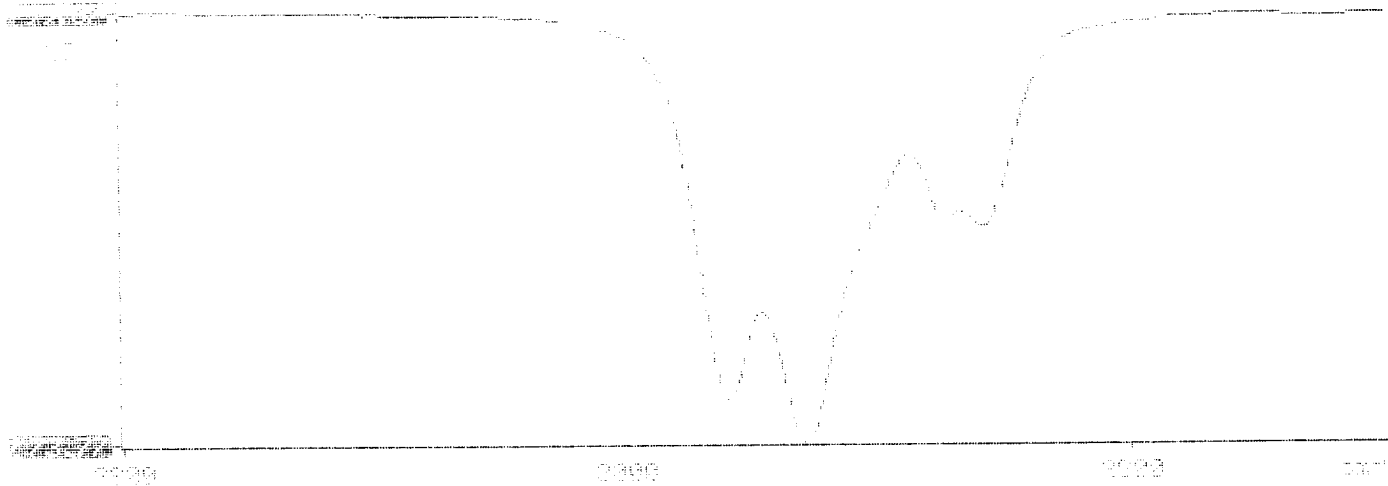
Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.233	0	0.00000	0.0000
a,a,a TFT	12.550	1124912	1612.83142	697.4191
TOLUENE	15.100	89370	16955.15430	4.6859
ETHYLBENZENE	19.383	88362	15800.91699	4.8896
M & P XYLENE	19.650	448119	16103.94629	24.8002
O XYLENE	20.183	0	0.00000	0.0000
BFB	20.783	2481485	18546.16797	137.3475

Totals :
 4222250 869.1422

C:\LABQUEST\CHROM\946450b - Channel B





ILLEGIBLE



Analytical **Technologies**, Inc.

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

ATI I.D. **411303**

November 10, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 11/01/94, 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.

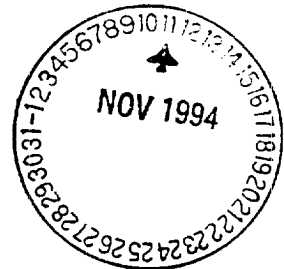
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure





Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 411303
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	946450	NON-AQ	10/25/94	11/01/94	11/02/94	20
08	946451	NON-AQ	10/25/94	11/01/94	11/02/94	20
09	946452	NON-AQ	10/25/94	11/01/94	11/02/94	1

PARAMETER	UNITS	07	08	09
BENZENE	MG/KG	0.69	<0.5	<0.025
TOLUENE	MG/KG	10	2.6	<0.025
ETHYLBENZENE	MG/KG	1.9	<0.5	<0.025
TOTAL XYLENES	MG/KG	23	3.6	0.10

SURROGATE:

BROMOFLUOROBENZENE (%)	69	76	92
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Analytical **Technologies**, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 411303
PROJECT #	: 24324	DATE RECEIVED	: 11/01/94
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 11/02/94

PARAMETER	UNITS	07
PETROLEUM HYDROCARBONS, IR	MG/KG	340

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 Anderson B#1 87940

Elevation _____

Borehole Location _____

GWL Depth _____

Logged By CM CHANCE

Drilled By M. BONGHUE K. Padilla

Date/Time Started 6/6/95 - 1245

Date/Time Completed 6/6/95 - 1500

Well Logged By CM Chance

Personnel On-Site 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: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S HS	
0				Backfill to 6'						
5										
10	1	10-12	6"	Grn silty SAND, vF-f sand, med dense, sl moist			0	0	350 - 1255 hr 506	
15	2	15-16	4"	lt Brn silty SAND, vF-f sand, med dense, sl moist			0	1	221 661 - 1308	
20	3	20-22	8"	lt Brn silty Sand, vF-f sand, tr med sand, med dense, sl moist			0	10	127 - 1320 337	
	4	22-23	5"	Grn CLAY, hard, high plastic, dry			0	0	1 - 1330 292 - very hard	
	5	23-24	4"	Brn silty CLAY, hard, med plastic, dry			0	0	6 - 1400 189	
25	6	25-27	5"	lt Brn silty SAND, vF-f sand, tr med sand very dense, sl moist, sl dbr			0	0	173 - 1417 282	
30	7	30-32	8"	Gray sandy CLAY, vF sand, very stiff, non plastic, dry			0	0	6/12 - 1427	
				TDB 321						
35										
40										

Comments:

30-32' sample (CMC39) sent to lab (BTEX, TPH)

Geologist Signature _____



Sample ID
injection 321

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	cmc 39	946877
MTR CODE SITE NAME:	87940	N/A
SAMPLE DATE TIME (Hrs):	6-6-95	1427
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6-7-95	6-7-95
DATE OF BTEX EXT. ANAL.:	6-8-95	6-12-95
TYPE DESCRIPTION:	VG	gray sand + clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	<0.025	MG/KG	1			
ETHYL BENZENE	<0.025	MG/KG	1			
TOTAL XYLENES	<0.025	MG/KG	1			
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	41.3	MG/KG			1.99	28
HEADSPACE PID	12	PPM				
PERCENT SOLIDS	93.0	%				

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

The Surrogate Recovery was at 91 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached

DF = Dilution Factor Used

Approved By:

Date:

6/28/95

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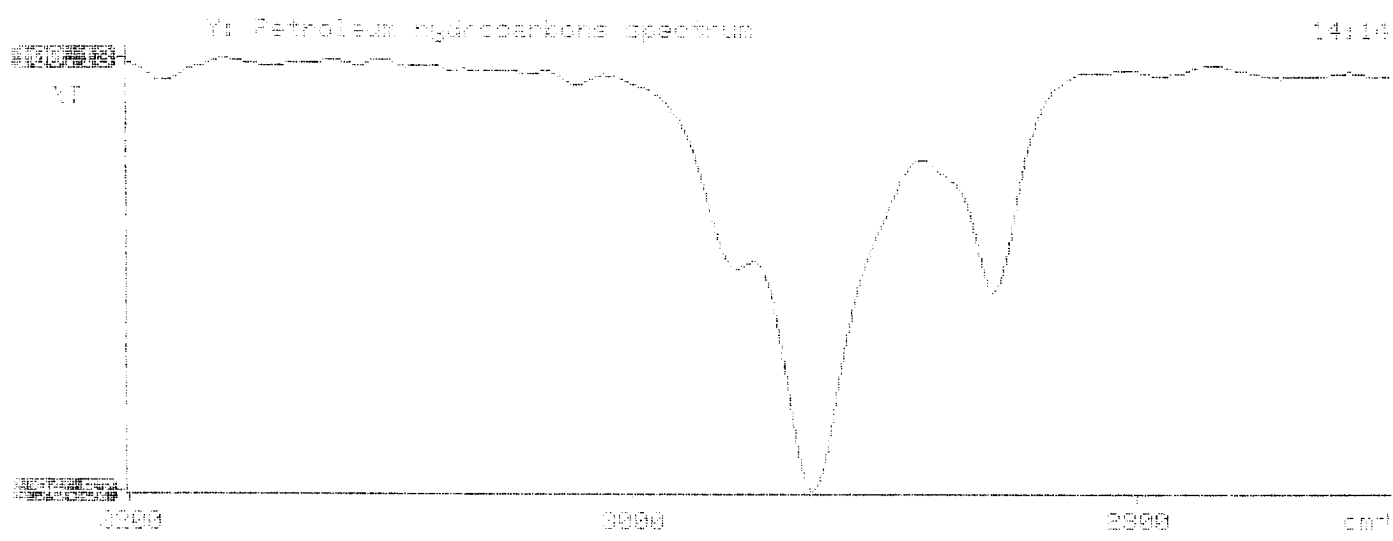
*****
Y      Test Method for
X      Oil and Grease and Petroleum hydrocarbons
X      In Water and Soil
X
X      Perkin-Elmer Model 1600 FT-IR
X      Analysis Report
*****

```

```

# 03/06/07 14:14
#
# Sample identification
# 946877
#
# Initial mass of sample, g
# 1.950
#
# Volume of sample after extraction, ml
# 25.000
#
# Petroleum hydrocarbons, ppm
# 41.273
# Net absorbance of hydrocarbons (2930 cm-1)
# 0.015
#
#
#

```



ILLECIBLE



Analytical **Technologies**, Inc.

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

ATI I.D. 506330

June 13, 1995

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

Project Name/Number: PIT CLOSURE 24324

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Letitia Krakowski

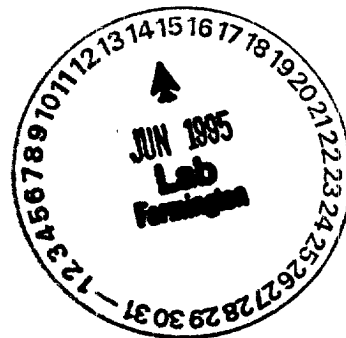
Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure





Analytical **Technologies**, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)
CLIENT : EL PASO NATURAL GAS ATI I.D.: 506330
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	946877	NON-AQ	06/06/95	06/08/95	06/12/95	1
PARAMETER			UNITS	07		
BENZENE			MG/KG	<0.025		
TOLUENE			MG/KG	<0.025		
ETHYLBENZENE			MG/KG	<0.025		
TOTAL XYLENES			MG/KG	<0.025		

SURROGATE:

BROMOFLUOROBENZENE (%) 91