

*Pinney & Frost*  
**EL PASO FIELD SERVICES**  
**DEPUTY OIL & GAS INSPECTOR**  
**PRODUCTION PIT CLOSURE**

DEC 21 1998

SAN JUAN 28-7 UNIT 252  
Meter/Line ID - 90564

**RECEIVED**  
JUL 2 1998

*Approved*

SITE DETAILS

Legals - Twn: 28      Rng: 07  
NMOCD Hazard Ranking: 60  
Operator: CONOCO - MESA OPERATING L

Sec: 32      Unit: C  
Land Type: 2 - Federal      **OIL CON. DIV.**  
Pit Closure Date: 07/11/94

**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.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

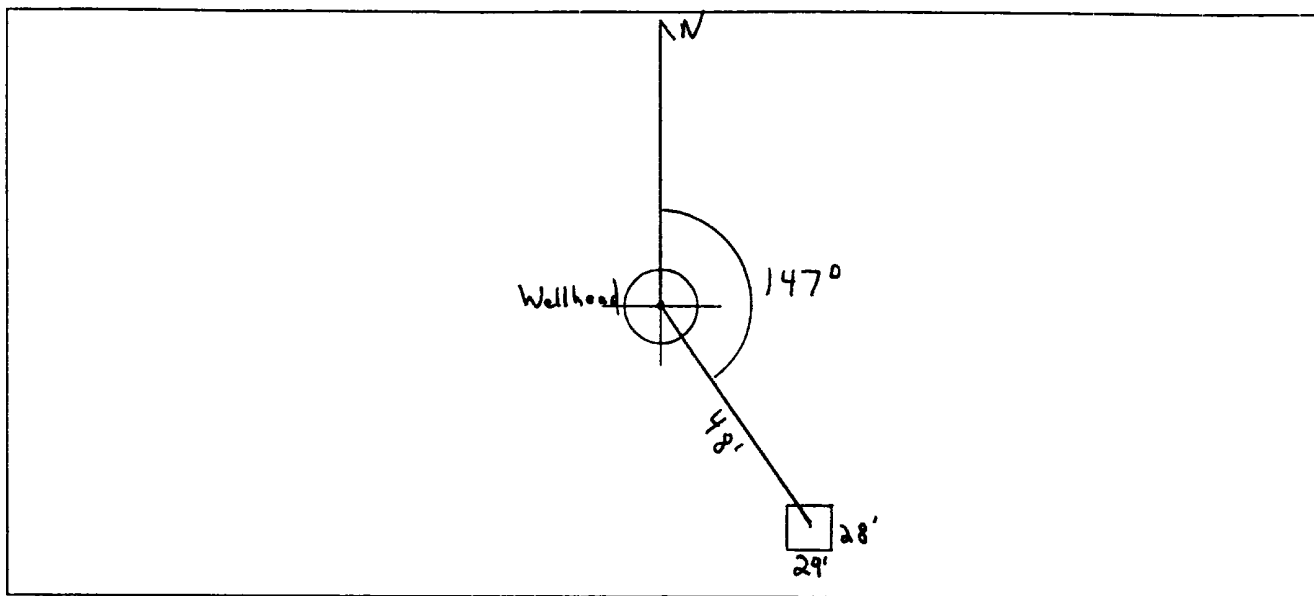
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>90564</u> Location: <u>San Juan 28-7 Unit 252</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Ameco</u> P/L District: <u>Blanco</u></p> <p>Coordinates: Letter: <u>C</u> Section: <u>32</u> Township: <u>28</u> Range: <u>7</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5/27/94</u> Area: <u>13</u> Run: <u>61</u></p>
SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b> BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p><b>Depth to Groundwater</b> Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b> 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 checked="" type="checkbox"/> (1) YES (20 points) <input type="checkbox"/> (2) NO (0 points)</p> <p><b>Horizontal Distance to Surface Water Body</b> Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Martin Canyon</u> (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only) <input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>60</u> POINTS</p>
REMARKS	<p>Remarks : <u>Redline-Inside, Vuln-Inside (online)</u></p> <p><u>4 pits. Will close 1. pit Dry</u></p> <p><u>DIG+HAUL</u></p>

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 147° Footage from Wellhead 48'  
b) Length : 29' Width : 28' Depth : 4'



## REMARKS

Remarks :

Pictures @ 1541 (1679)  
Dump Truck

Completed By:

Cory Chase  
Signature

5/27/94  
Date

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>90564</u> Location: <u>SAN JUAN 28-7 UNIT 252</u></p> <p>Coordinates: Letter: <u>C</u> Section <u>32</u> Township: <u>28</u> Range: <u>7</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>7-11-94</u> Area: <u>13</u> Run: <u>61</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>KP 121</u></p> <p>Sample Depth: <u>10'</u> Feet</p> <p>Final PID Reading <u>592</u> PID Reading Depth <u>10'</u> Feet</p> <p style="text-align: center;">Yes      No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
<b>CLOSURE</b>	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>170</u></p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> (1) <input type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>7-11-94</u> Pit Closed By: <u>B.E.I</u></p>
<b>REMARKS</b>	<p>Remarks : <u>SOME LINE MARKERS. Started Remediating to</u>  <u>12' SOIL TURNED BLACK &amp; GRAY WITH A SMELL.</u>  <u>HIT SANDSTONE AT 10' SOIL TURNED DARK GRAY.</u>  <u>PID 592 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:	KP121	945626
MTR CODE   SITE NAME:	90564	San Juan 28-7 Unit 252
SAMPLE DATE   TIME (Hrs):	11-Jul-94	1533
PROJECT:	Phase I Excavation	
DATE OF TPH EXT.   ANAL.:	7/12/94	7/12/94
DATE OF BTEX EXT.   ANAL.:	7/12/94	7/12/94
TYPE   DESCRIPTION:	VC	Lt. grey sandstone/clay

Field Remarks: Split

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG				
TOLUENE	0.188	MG/KG				
ETHYL BENZENE	0.422	MG/KG				
TOTAL XYLENES	8.10	MG/KG				
TOTAL BTEX	8.74	MG/KG				
TPH (418.1)	488	MG/KG			2.17	28.0
HEADSPACE PID	592	PPM				
PERCENT SOLIDS	87.5	%				

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

The Surrogate Recovery was at 62.2 % for this sample All QA/QC was acceptable.

Narrative:

Surrogate recovery was outside EPNG QC limits due to matrix interference.

DF = Dilution Factor Used

Approved By:

*John Landa*

Date:

original: 8/8/94  
Re-printed: 3/16/98

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

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10/07/12 12:06

1 Sample Identification  
245621

3 Initial mass of sample, g  
3.170

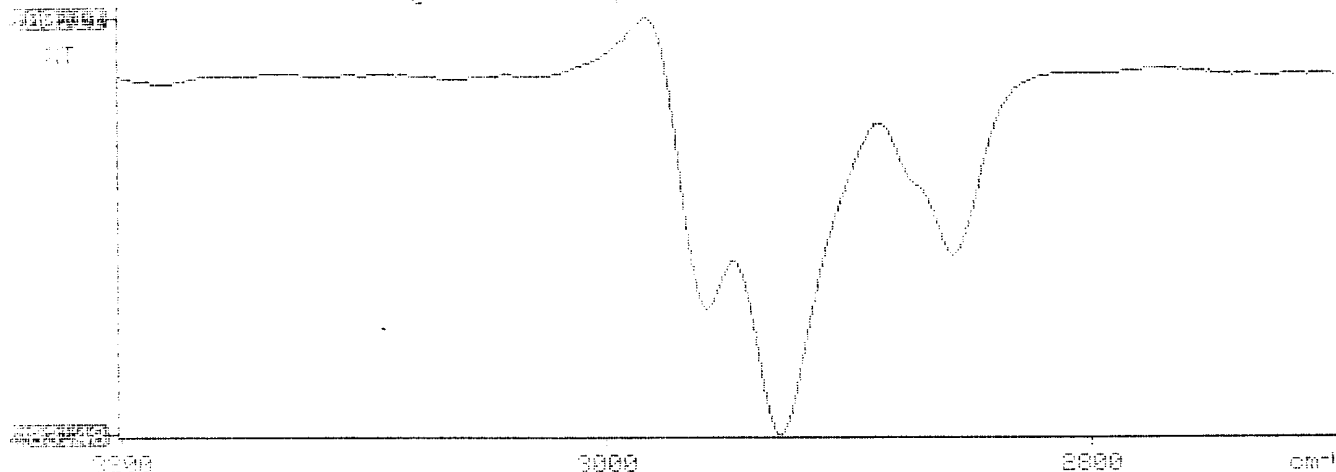
4 Volume of sample after extraction, ml  
35.000

5 Petroleum hydrocarbons, ppm  
452,468

6 Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.007

7 Petroleum hydrocarbons spectrum

12:06



2.02g  
20ml

945626 ~~HDP~~ *Jul 7/15/94*

John Lambdin  
Type : Sample

File : BETX\_\_05.D01

Run : 01

Path : C:\CHROM

Collection : 13:47:31 Jul 15 1994 Meth(A): BETX [ 12:00:54 Jul 14 1994 ]

Integration: 13:47:31 Jul 15 1994 Meth(A): BETX [ 12:00:54 Jul 14 1994 ]

Report : 14:13:42 Jul 15 1994 Meth(A): BETX [ 12:00:54 Jul 14 1994 ]

Sample Amt : 1.000000e+0 Dilution: 5.000000e+0

EXTERNAL STANDARD ( AREA )

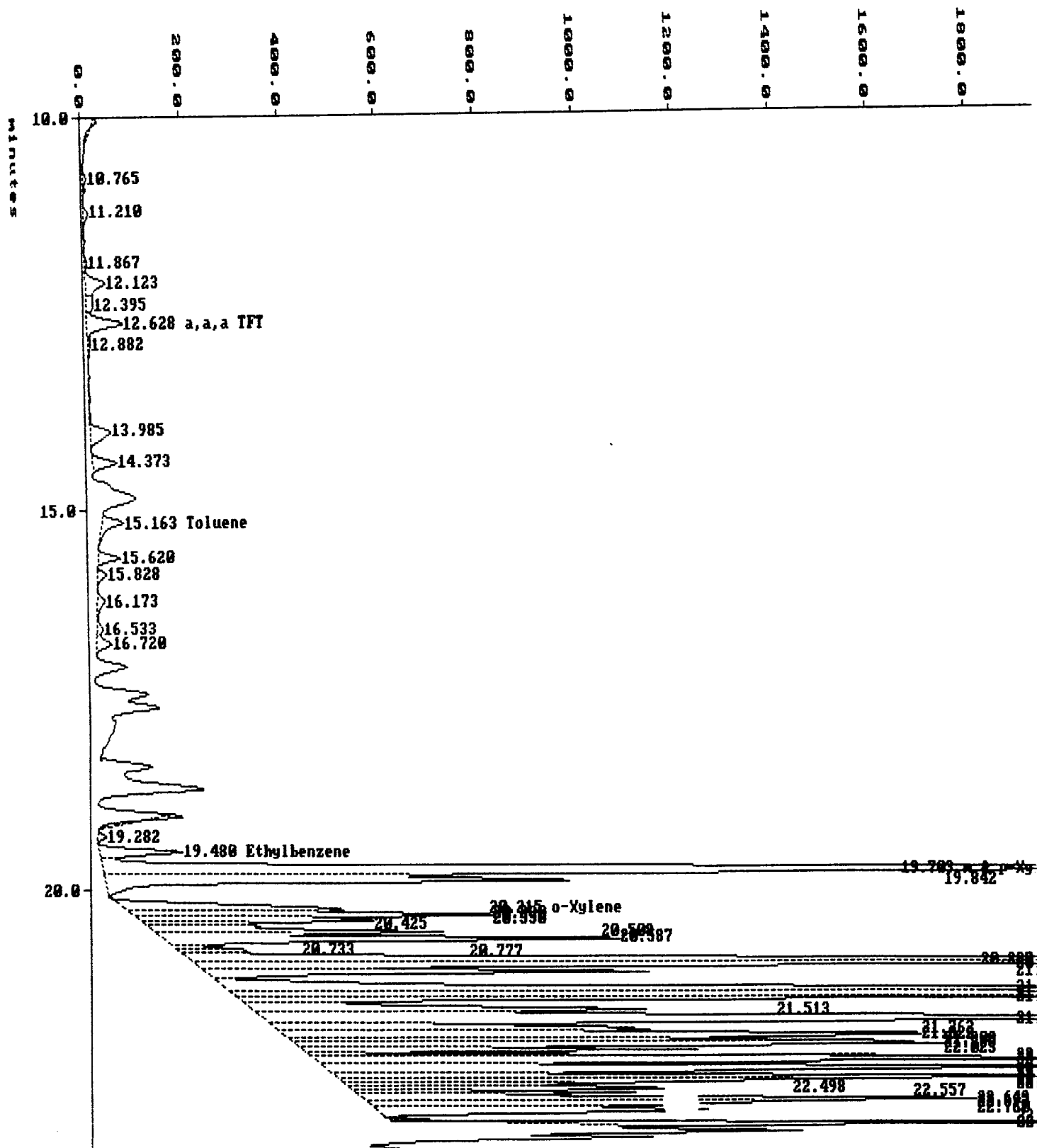
RT	Area	BC	ExpRT	RF	ug/L	Name
			10.266	8.44764e-6	2.5	Benzene
10.765	43758	T		0.00000e+0	0.0000	Unknown
11.210	81905	V		0.00000e+0	0.0000	Unknown
11.867	35722	T		0.00000e+0	0.0000	Unknown
12.123	382929	T		0.00000e+0	0.0000	Unknown
12.395	166121	T		0.00000e+0	0.0000	Unknown
12.628	578102	T	12.628	1.53869e-4	28.9 444.7606	R a,a,a TFT
12.882	57763			0.00000e+0	0.0000	Unknown
13.985	403185	V		0.00000e+0	0.0000	Unknown
14.373	347092			0.00000e+0	0.0000	Unknown
15.163	347721	V	15.150	1.09295e-5	3.8 19.0021	Toluene
15.620	277217	T		0.00000e+0	0.0000	Unknown
15.828	136472	T		0.00000e+0	0.0000	Unknown
16.173	163951	T		0.00000e+0	0.0000	Unknown
16.533	106160	T		0.00000e+0	0.0000	Unknown
16.720	226355	V		0.00000e+0	0.0000	Unknown
19.282	70761	V		0.00000e+0	0.0000	Unknown
19.480	918459	T	19.416	9.27740e-6	8.4 42.6046	Ethylbenzene
19.703	16761177	T	19.648	8.48187e-6	142 710.8308	m & p-Xylene
19.842	4645989	V		0.00000e+0	0.0000	Unknown
20.215	2350043	T	20.221	9.14233e-6	21.9 107.4244	o-Xylene
20.280	2660537	T		0.00000e+0	0.0000	Unknown
20.350	1701734	T		0.00000e+0	0.0000	Unknown
20.425	617349	T		0.00000e+0	0.0000	Unknown
20.508	2301235	T		0.00000e+0	0.0000	Unknown
20.587	3744562	T		0.00000e+0	0.0000	Unknown
20.733	464791	T		0.00000e+0	0.0000	Unknown
20.776	379721	T		0.00000e+0	0.0000	Unknown
20.887	13224411	T	20.837	4.70556e-6	62.2 311.1414	BFB
20.928	7971994	T		0.00000e+0	0.0000	Unknown
21.035	3151856	T		0.00000e+0	0.0000	Unknown
21.240	7991247	T		0.00000e+0	0.0000	Unknown
21.318	13600675	T		0.00000e+0	0.0000	Unknown
21.350	6881721	T		0.00000e+0	0.0000	Unknown
21.513	3573999	T		0.00000e+0	0.0000	Unknown
21.628	16921980	T		0.00000e+0	0.0000	Unknown
21.762	3363612	T		0.00000e+0	0.0000	Unknown
21.822	6040786	T		0.00000e+0	0.0000	Unknown
21.908	2560112	T		0.00000e+0	0.0000	Unknown
21.953	4471379	T		0.00000e+0	0.0000	Unknown
22.023	2174985	T		0.00000e+0	0.0000	Unknown
22.110	2293805	T		0.00000e+0	0.0000	Unknown
22.151	6654274	T		0.00000e+0	0.0000	Unknown
22.242	13344274	T		0.00000e+0	0.0000	Unknown
22.365	5233445	T		0.00000e+0	0.0000	Unknown

*Jul 7/15/94*

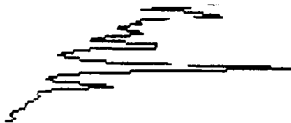


22.455	857317	T	0.00000e+0	0.0000	Unknown
22.498	1601235	T	0.00000e+0	0.0000	Unknown
22.557	1347374	T	0.00000e+0	0.0000	Unknown
22.643	4766793	T	0.00000e+0	0.0000	Unknown
22.697	2031803	T	0.00000e+0	0.0000	Unknown
22.760	3143854	V	0.00000e+0	0.0000	Unknown
22.878	110349	V	0.00000e+0	0.0000	Unknown
22.943	2689766	V	0.00000e+0	0.0000	Unknown

(BETX\_05.D01) mV



25.0





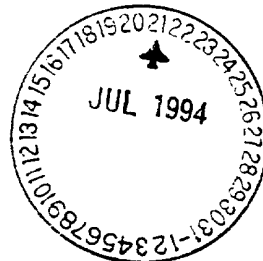
Analytical **Technologies, Inc.**

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

ATI I.D. **407346**

July 20, 1994

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



Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 07/13/94, 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.

Samples were run by either internal or external surrogate method. The following samples were run by internal surrogate method: 02, 03, 05, 08, 09, 10, and 12.

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



## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 407346  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	945624	NON-AQ	07/11/94	07/14/94	07/16/94	1
11	945625	NON-AQ	07/11/94	07/14/94	07/16/94	1
12	945626	NON-AQ	07/11/94	07/14/94	07/16/94	5

PARAMETER	UNITS	10	11	12
BENZENE	MG/KG	<0.025	0.49	0.30
TOLUENE	MG/KG	<0.025	4.0	3.0
ETHYLBENZENE	MG/KG	<0.025	2.5	1.2
TOTAL XYLENES	MG/KG	0.17	36	19

## SURROGATE:

PROMOFLUOROBENZENE (%) 88 118\* 101

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

Split Sample



Analytical **Technologies**, Inc.

### GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 407346
PROJECT #	: 24324	DATE RECEIVED	: 07/13/94
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 07/15/94

PARAMETER	UNITS	01	12
PETROLEUM HYDROCARBONS, IR	MG/KG	13000	670

Split Sample  
EPNG Sample # 945626

# 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 San Juan 28-7 Unit 52 90564

Well Logged By cmc 8/3/95 PL Moss

Personnel On-Site K Padilla, F. Rivera, D. Charlin

Contractors On-Site

Client Personnel On-Site

Elevation

Borehole Location QC-S32-T28-R7

GWL Depth

Logged By GM-CHANCE PL Moss

Drilled By 7/5/95 K Padilla

Date/Time Started 8/31/95 9/5/95 10:25

Date/Time Completed 8/31/95 7/5/95 11:50

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 S BZ BH HS			Drilling Conditions & Blow Counts
0				Backfill to 10'						
5										
10										
15	1	15-17	SS 7.5"	sandstone, fine-grained, lt. brown, friable, thin bedded, strong hydrocarbon odor			0	54	651 774	1040 SS refusal at 16'
20	2	20-22	SS 0"	NA No recovery.			18	44	NA	1048
25	3	25-27	SS 5"	sandstone, fine-grained, lt. brown, poorly cemented, thin bedded			3	21.5 44.5	41 5	1058
30	4	30-32	SS 3 1/2"	AA			1	10	41 2	1106
35				TD @ 32'						
40										

Comments:

PLM1 (30-32') sent to lab (BTEX, TPH). Drilled to 30', anticipated  
a higher head space reading at 25-27'. BH grouted to surface.  
Not enough volume for QA samples. Sample bagged and used before putting  
into jar.

Geologist Signature

Philip L. Moss



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	PLM1	947394
MTR CODE   SITE NAME:	90564	San Juan 28-7 Unit 252
SAMPLE DATE   TIME (Hrs):	09-05-95	1106
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	9-6-95	9-6-95
DATE OF BTEX EXT.   ANAL.:	9/6/95	9/10/95
TYPE   DESCRIPTION:	V6	LIGHT BROWN SAND + CLAY

Field 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	MG/KG				
TPH (418.1)	OB 2053.4	MG/KG			209	28
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	93.2	%				

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

The Surrogate Recovery was at 87% for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By: [Signature]

Date: 9-11-95



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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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95/09/06 14:14

\* Sample identification  
947394

\* Initial mass of sample, g  
2.090

\* Volume of sample after extraction, ml  
28.000

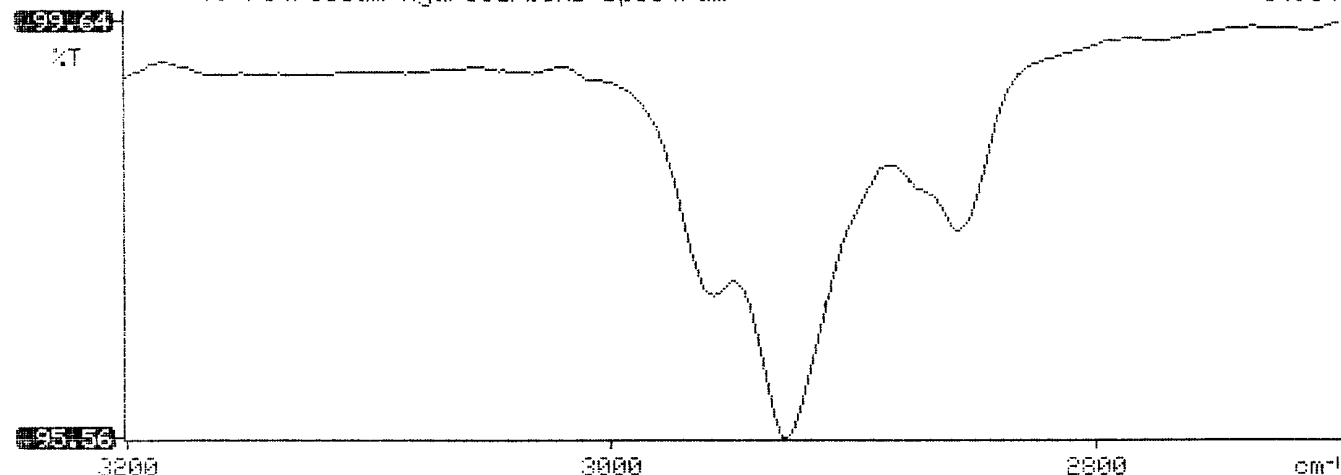
\* Petroleum hydrocarbons, ppm  
53.441

\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.017

\*  
\*  
\*

Y: Petroleum hydrocarbons spectrum

14:14



## BTEX SOIL SAMPLE WORKSHEET

<b>File</b>	<b>:</b>	<b>947394</b>	<b>Date Printed</b>	<b>:</b>	<b>9/11/95</b>
<b>Soil Mass (g)</b>	<b>:</b>	<b>5.00</b>	<b>Multiplier (L/g)</b>	<b>:</b>	<b>0.00100</b>
<b>Extraction vol. (mL)</b>	<b>:</b>	<b>20</b>	<b>DF (Analytical)</b>	<b>:</b>	<b>200</b>
<b>Shot Volume (uL)</b>	<b>:</b>	<b>100</b>	<b>DF (Report)</b>	<b>:</b>	<b>0.20000</b>

				<b>Det. Limit</b>
<b>Benzene (ug/L)</b>	<b>:</b>	<b>0.00</b>	<b>Benzene (mg/Kg):</b>	<b>0.000 0.500</b>
<b>Toluene (ug/L)</b>	<b>:</b>	<b>0.00</b>	<b>Toluene (mg/Kg):</b>	<b>0.000 0.500</b>
<b>Ethylbenzene (ug/L)</b>	<b>:</b>	<b>0.00</b>	<b>Ethylbenzene (mg/Kg):</b>	<b>0.000 0.500</b>
<b>p &amp; m-xylene (ug/L)</b>	<b>:</b>	<b>0.00</b>	<b>p &amp; m-xylene (mg/Kg):</b>	<b>0.000 1.000</b>
<b>o-xylene (ug/L)</b>	<b>:</b>	<b>0.00</b>	<b>o-xylene (mg/Kg):</b>	<b>0.000 0.500</b>
			<b>Total xylenes (mg/Kg):</b>	<b>0.000 1.500</b>
			<b>Total BTEX (mg/Kg):</b>	<b>0.000</b>

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\090795-1.013  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 947394,5.00G,100U  
 Acquired : Sep 10, 1995 19:30:28  
 Printed : Sep 10, 1995 19:56:50  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.410	0	0.0000
a,a,a TFT	4.947	3125485	90.5075
TOLUENE	6.747	0	0.0000
ETHYLBENZENE	10.513	0	0.0000
M & P XYLENE	10.870	76415	-4.1134
O XYLENE	11.927	0	0.0000
BFB	13.413	52077028	86.9034

C:\LABQUEST\CHROM001\090795-1.013 -- Channel A

