

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

DEC 21 1998

SAN JUAN 28-6 #115  
Meter/Line ID - 75069

RECEIVED  
JUL 2 1999

**SITE DETAILS**

Legals - Twn: 27      Rng: 06  
NMOCD Hazard Ranking: 40  
Operator: MERIDIAN OIL INC

Sec: 03      Unit: N  
Land Type: 2 - Federal  
Pit Closure Date: 03/30/95

**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.

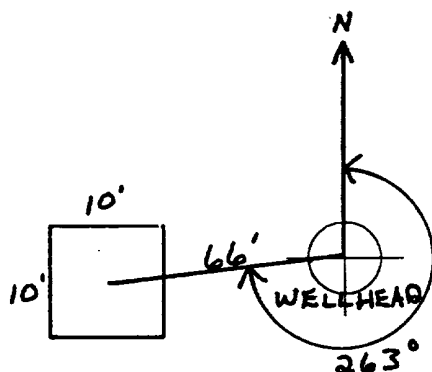
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>75069</u> Location: <u>San Juan 28-6 #115</u></p> <p>Operator #: _____ Operator Name: <u>Meridian</u> P/L District: <u>Bloomfield</u></p> <p>Coordinates: Letter: <u>N</u> Section <u>03</u> Township: <u>27</u> Range: <u>06</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>3/9/95</u> Area: <u>10</u> Run: <u>52</u></p>																
SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p><b>Land Type:</b></p> <table border="0"> <tr> <td>Inside</td><td><input checked="" type="checkbox"/> (1)</td> <td>BLM</td><td><input checked="" type="checkbox"/> (1)</td> </tr> <tr> <td>Outside</td><td><input type="checkbox"/> (2)</td> <td>State</td><td><input type="checkbox"/> (2)</td> </tr> <tr> <td></td><td></td> <td>Fee</td><td><input type="checkbox"/> (3)</td> </tr> <tr> <td></td><td></td> <td>Indian</td><td>_____</td> </tr> </table> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b></p> <p>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><b>Horizontal Distance to Surface Water Body</b></p> <p>Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Munoz Creek</u></p> <p>(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)</p> <p><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>40</u> POINTS</p>	Inside	<input checked="" type="checkbox"/> (1)	BLM	<input checked="" type="checkbox"/> (1)	Outside	<input type="checkbox"/> (2)	State	<input type="checkbox"/> (2)			Fee	<input type="checkbox"/> (3)			Indian	_____
Inside	<input checked="" type="checkbox"/> (1)	BLM	<input checked="" type="checkbox"/> (1)														
Outside	<input type="checkbox"/> (2)	State	<input type="checkbox"/> (2)														
		Fee	<input type="checkbox"/> (3)														
		Indian	_____														
REMARK	<p>Remarks : <u>Redline shows Inside Topo shows Inside VZ</u></p> <p><u>3 pits on loc One looks like old blow pit, One has Achy</u></p> <p><u>in service, Old Achy pit belongs to EPNG Will close old</u></p> <p><u>Achy pit Dig + Haul</u></p>																

ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 263° Footage from Wellhead 66'  
b) Length : 10' Width : 10' Depth : 2'



REMARKS

Remarks :

Photos: 13/11

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Completed By:

James F. Powers  
Signature

3/9/95  
Date

# **PHASE I EXCAVATION**

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# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>75069</u> Location: <u>SAN JUAN 28-6 #115</u></p> <p>Coordinates: Letter: <u>N</u> Section <u>3</u> Township: <u>27</u> Range: <u>6</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>3/30/95</u> Run: <u>10</u> <u>52</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>KD 400</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>893 ppm</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes      No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
<b>CLOSURE</b>	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>40</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 type="checkbox"/> <input checked="" type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>3/30/95</u> Pit Closed By: <u>BEI</u></p>
<b>REMARKS</b>	<p>Remarks : <u>EXCAVATED pit to 12', TOOK PID Sample, Closed pit.</u></p>
	<p>Signature of Specialist: <u><i>King Jean</i></u></p>



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 400	946766
MTR CODE   SITE NAME:	75069	N/A
SAMPLE DATE   TIME (Hrs):	3/30/95	1005
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	4/4/95	4/4/95
DATE OF BTEX EXT.   ANAL.:	4/4/95	4/5/95
TYPE   DESCRIPTION:	VC	Grey sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<4.10	MG/KG	1.63934		2.44	20
TOLUENE	117	MG/KG				
ETHYL BENZENE	25.8	MG/KG				
TOTAL XYLENES	377	MG/KG				
TOTAL BTEX	520	MG/KG				
TPH (418.1)	9190	MG/KG			1.03	28
HEADSPACE PID	893	PPM				
PERCENT SOLIDS	90.4	%				

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

The Surrogate Recovery was at  
Narrative:

97.8 % for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

*AD*

Date:

4/19/95

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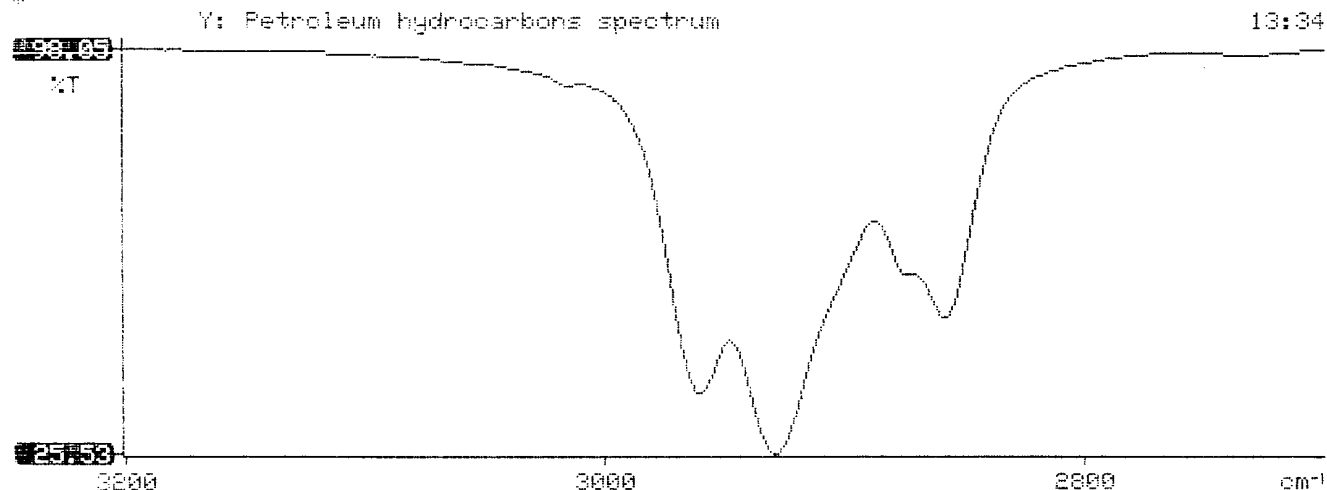
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil       *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                   *
*      Analysis Report     *
*****

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95/04/04  13:34
*
* Sample identification
946766
*
* Initial mass of sample, g
1.030
*
* Volume of sample after extraction, ml
28.000
*
* Petroleum hydrocarbons, ppm
9193.207
* Net absorbance of hydrocarbons (2930 cm-1)
0.583
*
*
*

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## BTEX SOIL SAMPLE WORKSHEET

File	:	946766A	Date Printed	:	4/7/95
Soil Mass (g)	:	2.44	Multiplier (L/g)	:	0.00205
Extraction vol. (mL)	:	20	DF (Analytical)	:	800
Shot Volume (uL)	:	25	DF (Report)	:	1.63934

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 4.098
Toluene (ug/L)	:	71.42	Toluene (mg/Kg):	117.082 4.098
Ethylbenzene (ug/L)	:	15.72	Ethylbenzene (mg/Kg):	25.770 4.098
p & m-xylene (ug/L)	:	192.91	p & m-xylene (mg/Kg):	316.246 8.197
o-xylene (ug/L)	:	37.02	o-xylene (mg/Kg):	60.689 4.098
			Total xylenes (mg/Kg):	376.934 12.295
			Total BTEX (mg/Kg):	519.787

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946766A  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 946766,2.44/25ul  
 Acquired : Apr 05, 1995 15:19:18  
 Printed : Apr 05, 1995 15:45:34  
 User : Tony

### Channel A Results

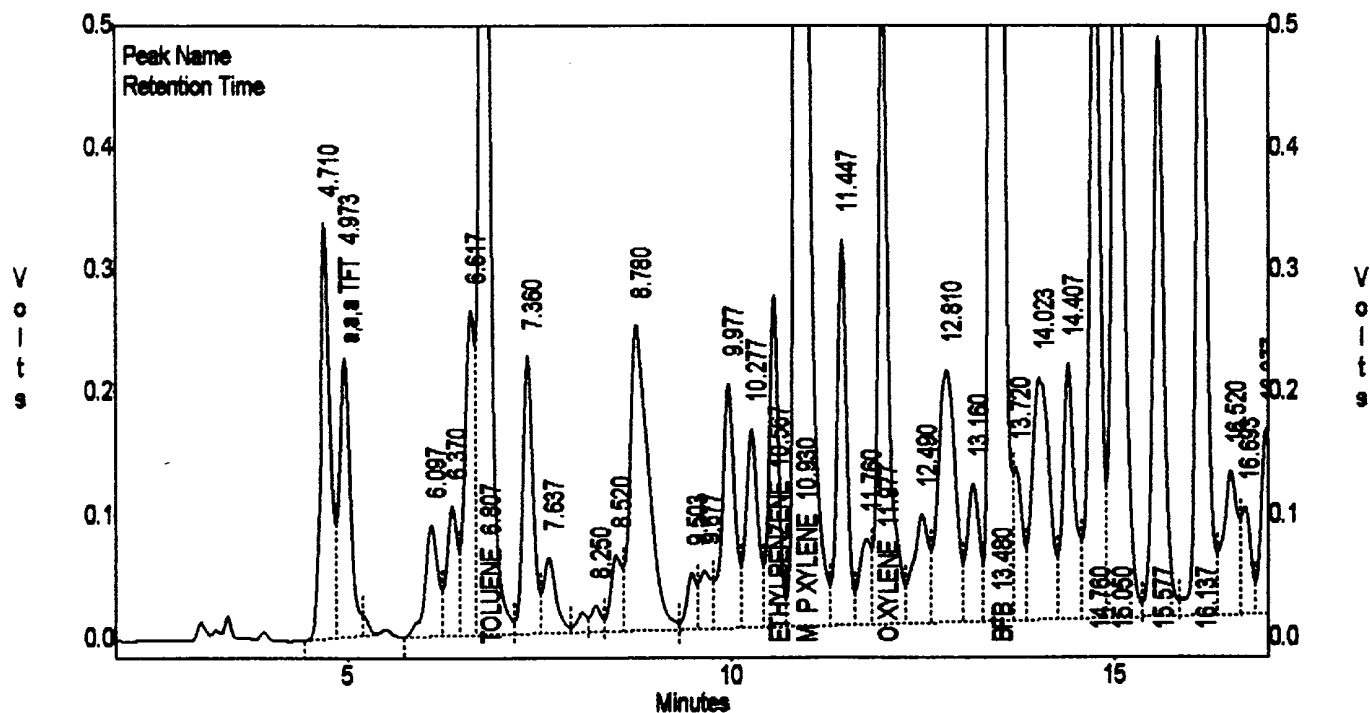
COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.427	0	0.00000	0.0000
a,a,a TFT	4.973	2221416	17915.06641	121.5760
TOLUENE	6.807	11327102	152782.21875	71.4168
ETHYLBENZENE	10.567	2278778	137111.50000	15.7161
M & P XYLENE	10.930	31511188	163191.95313	192.9066
O XYLENE	11.977	5252118	131788.42188	37.0211
BFB	13.480	55455356	563092.56250	97.7532

Totals :

108045952

536.3898

C:\LABQUEST\CHROM001\946766A - Channel A



# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946766A  
 Method : C:\LABQUEST\METHODS\8001.MET  
 Sample ID : 946766,2.44/25uL  
 Acquired : Apr 05, 1995 15:19:18  
 Printed : Apr 05, 1995 15:45:41  
 User : Tony

### Channel B Results

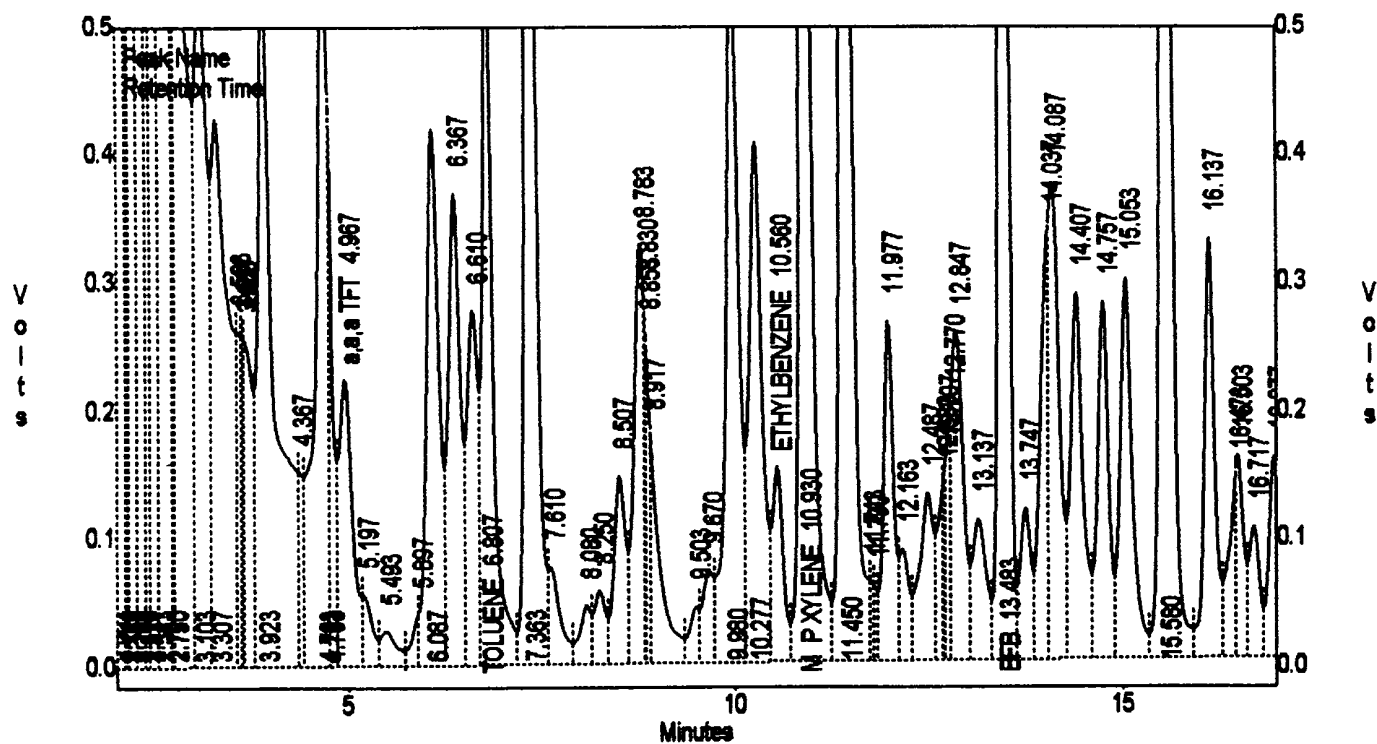
COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.413	0	0.00000	0.0000
a,a,a TFT	4.967	2688771	9297.03906	275.9520
TOLUENE	6.807	5497079	47965.40234	107.3698
ETHYLBENZENE	10.560	1443167	46856.76953	28.7675
M & P XYLENE	10.930	12915143	48130.08203	254.7803
O XYLENE	12.063	0	0.00000	0.0000
BFB	13.483	13843721	96504.81250	141.5275

Totals :

36387880

808.3971

C:\LABQUEST\CHROM001\946766A - Channel B



# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

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

Borehole # BH1  
Well # \_\_\_\_\_  
Page 1 of 1

Project Name EPNG PITS  
Project Number 14509 Phase 6000.77  
Project Location San Juan 28-4 #15 7500'

Elevation \_\_\_\_\_  
Borehole Location Letter #1-S3-D7-R6  
GWL Depth \_\_\_\_\_  
Logged By John LaBarbara  
Drilled By Kelly Postillon  
Date/Time Started 7/13/95 - 11:05  
Date/Time Completed - 12:15

Well Logged By John LaBarbara  
Personnel On-Site K. Padilla, J. Charley, E. Rivas  
Contractors On-Site \_\_\_\_\_  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method 4.25" ID HSA  
Air Monitoring Method PDA & CIGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: <u>ppm</u> BZ BH <u>15</u>			Drilling Conditions & Blow Counts
0										
5										
10										
15	1	14.5 15-17 82%	17	Gray, loose, silty, fine, SAND, med. to coarse	SM				1287 674	
20	2	20-21.5 18	18	AA - little clay	SM	9	2	1277 884		
25	3	25-26 18	18	Gray, med. dense, clayey, SILT, dry, odor	ML	13	127	172		
30	4	27.5-27.75 2	2	Brown, v. dense, silty, v. fine SANDSTONE, dry	X	2.7	150	114 82		Hard drilling - Brown, v. fine, sandstone 1141
35										
40										

Comments: JPL 2 (27.5-27.75) sent to lab for BTEX/TPH analysis.  
Insufficient recovery for QA sample & headspace

Geologist Signature John LaBarbara



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

Phase II Dry ✓  
San Juan 2806 #11

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JFL2	946992
MTR CODE   SITE NAME:	75069	N/A
SAMPLE DATE   TIME (Hrs):	7/13/95	11:41
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	7/14/95	7/14/95
DATE OF BTEX EXT.   ANAL.:	7/19/95	7/19/95
TYPE   DESCRIPTION:	VG	clumpy silty sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.025	MG/KG	1			
TOLUENE	20.025	MG/KG	1			
ETHYL BENZENE	20.025	MG/KG	1			
TOTAL XYLENES	0.42	MG/KG	1			
TOTAL BTEX	0.42	MG/KG				
TPH (418.1)	567	MG/KG			2.20	28
HEADSPACE PID	22	PPM				
PERCENT SOLIDS	96.8	%				

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

The Surrogate Recovery was at 123 % for this sample All QA/QC was acceptable.

Narrative:

AT1 Results for BTEX and modified 8015 attached. Surrogate Recovery outside AT1 QC limits due to matrix interference

DF = Dilution Factor Used

Approved By:

Date: 8/3/95

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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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95/07/14 13:54

\* Sample identification  
946992

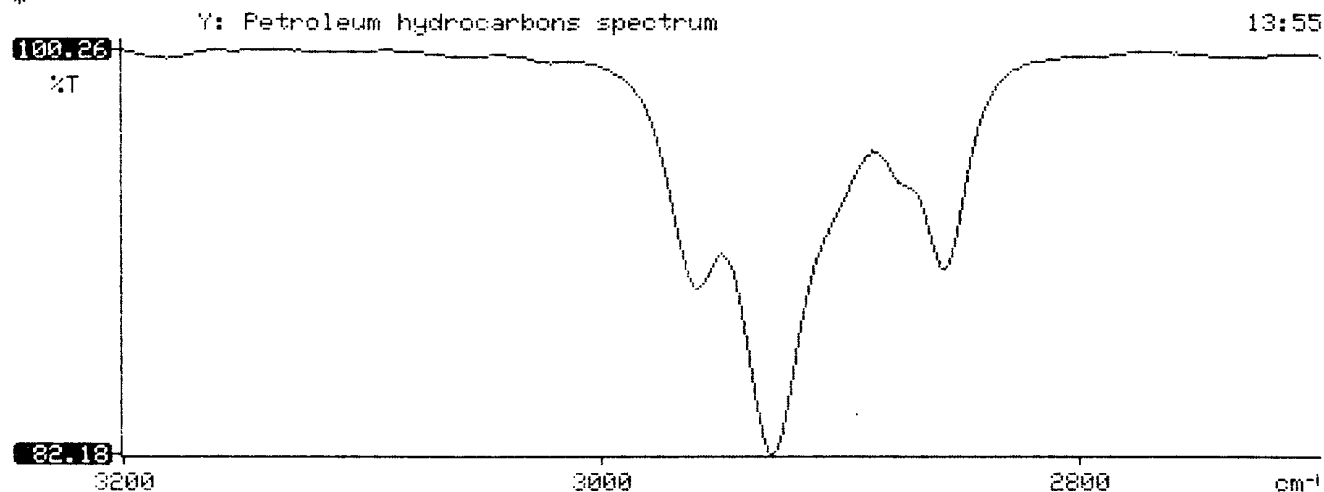
\* Initial mass of sample, g  
2.200

\* Volume of sample after extraction, ml  
28.000

\* Petroleum hydrocarbons, ppm  
567.196

\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.086

\*  
\*  
\*





Analytical **Technologies, Inc.**

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

ATI I.D. 507358

July 25, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II DRIL M/W 24324

Attention: John Lambdin

On 07/19/95, 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.

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

Kimberly D. McNeill  
Project Manager

MR:jt

Enclosure

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager





## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507358  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE/PHASE II DRIL

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946991	NON-AQ	07/13/95	07/19/95	07/20/95	1
02	946992	NON-AQ	07/13/95	07/19/95	07/20/95	1
03	946993	NON-AQ	07/13/95	07/19/95	07/21/95	50
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.025	<0.025	1.9
TOLUENE			MG/KG	<0.025	<0.025	67
ETHYLBENZENE			MG/KG	<0.025	<0.025	13
TOTAL XYLENES			MG/KG	<0.025	0.42	190

## SURROGATE:

BROMOFLUOROBENZENE (%) 105 123\* \*\*NA

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

\*\*SURROGATE RECOVERY NOT OBTAINABLE DUE TO SAMPLE DILUTION

## GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 507358  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE/PHASE II DRIL

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
02	946992	NON-AQ	07/13/95	07/20/95	07/22/95	1
03	946993	NON-AQ	07/13/95	07/20/95	07/24/95	10
04	946994	NON-AQ	07/13/95	07/20/95	07/24/95	1
PARAMETER			UNITS	02	03	04
FUEL HYDROCARBONS			MG/KG	71	5300	4800
HYDROCARBON RANGE				C9-C32	C6-C14	C6-C14
HYDROCARBONS QUANTITATED USING				DIESEL	GASOLINE	GASOLINE
SURROGATE:						
O-TERPHENYL (%)				118	103	96