

JUL 17 1998

*Approved*

SITE DETAILS

Legals - Twn: 28      Rng: 8      Sec: 11      Unit: D *11*  
NMOCD Hazard Ranking: 40      Land Type: BLM  
Operator: Amoco

PREVIOUS ACTIVITIES

Site Assessment: 5/20/94      Excavation: 6/13/94      Soil Boring: 9/6/95  
Monitor Well: N/A      Re-Excavation: N/A -      Geoprobe: N/A

CONCLUSIONS

The initial excavation was excavated to the practical extent of the trackhoe, which was 12 feet below ground surface (bgs). PID field screening indicated subsurface soils to be 733 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be above standards at 329 mg/kg, and TPH was above standards at 10.300 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of impact to soil. A grayish-brown silty sand was encountered at 15 feet bgs and continued to the termination of the boring at 17 bgs. A soil sample was collected for BTEX and TPH analysis at 15-17 feet bgs. Laboratory analysis showed all BTEX compounds to be below laboratory detection limits and TPH present at 36.7 mg/kg.

RECOMMENDATIONS

No further action is recommended at the site for the following reasons:

- The bulk of the impacted soil was removed during the phase 1 excavation.
- Test boring sample results indicated soils below standards 3 feet beneath the initial excavation.
- No groundwater was encountered in the test boring.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soils at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

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OIL CON. DIV.  
DIST. 3

# FIELD PIT SITE ASSESSMENT FORM

<b>GENERAL</b>	Meter: <u>70998</u> Location: <u>JONES A 2</u> Operator #: <u>0203</u> Operator Name: <u>AMOCD</u> P/L District: <u>BLANCO</u> Coordinates: Letter: <u>D</u> Section <u>11</u> Township: <u>28</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____ Site Assessment Date: <u>5/20/94</u> Area: <u>13</u> Run: <u>62</u>
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<b>SITE ASSESSMENT</b>	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p style="margin-left: 100px;">                 Inside <input checked="" type="checkbox"/> (1)                  Outside <input type="checkbox"/> (2)             </p> <p><b>Land Type:</b></p> <table style="margin-left: 100px;"> <tr> <td>BLM</td> <td><input checked="" type="checkbox"/> (1)</td> </tr> <tr> <td>State</td> <td><input type="checkbox"/> (2)</td> </tr> <tr> <td>Fee</td> <td><input type="checkbox"/> (3)</td> </tr> <tr> <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>                  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>Jasis 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>40</u> POINTS</p>	BLM	<input checked="" type="checkbox"/> (1)	State	<input type="checkbox"/> (2)	Fee	<input type="checkbox"/> (3)	Indian	_____
BLM	<input checked="" type="checkbox"/> (1)								
State	<input type="checkbox"/> (2)								
Fee	<input type="checkbox"/> (3)								
Indian	_____								

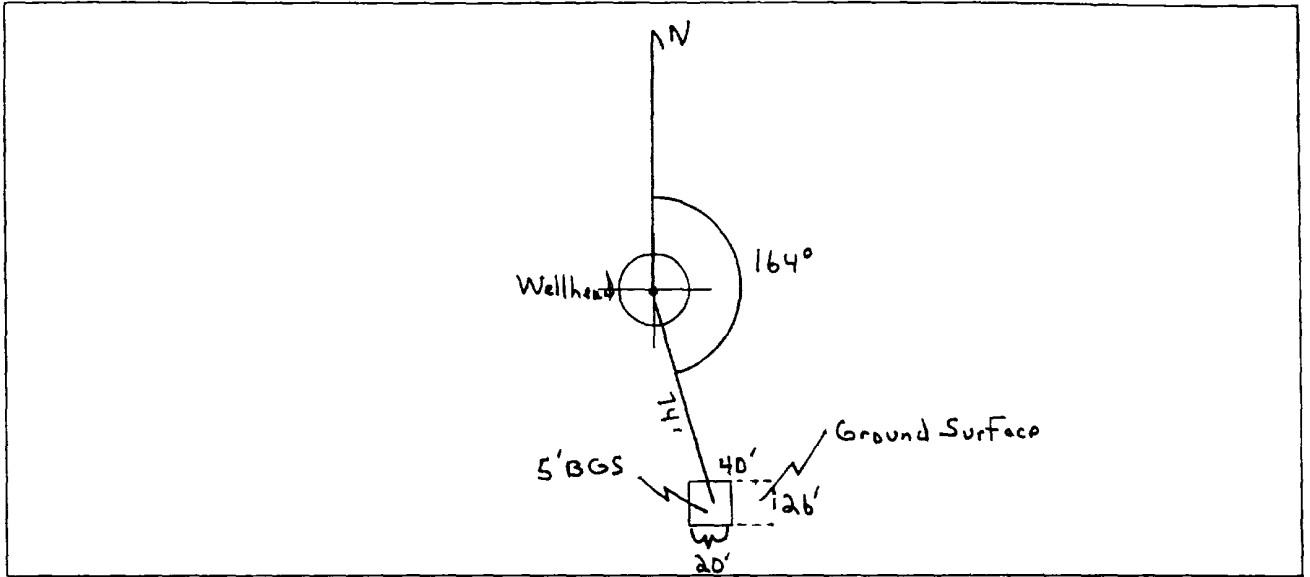
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 MAR - 9 1994  
**OIL CON. DIV.**  
 DIST. 3

<b>REMARKS</b>	Remarks : <u>Redlined Vln. - Inside</u> <u>2 pits. Close. Pit Dry</u> <div style="text-align: right; margin-top: 20px;"><u>DIG &amp; HALL</u></div>
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ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 164° Footage from Wellhead 74'  
b) Length : 40' Width : 26' Depth : 5'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

Pictures @ 1501 (6-9)

Dump Truck

Actual pit is 26'x20'x5'. A 40'x26' berm + fence surround pit

Completed By:

Cory Chase  
Signature

5/20/94  
Date

# **PHASE I EXCAVATION**

**FIEI PIT REMEDIATION/CLOSURE FORM**

<b>GENERAL</b>	Meter: <u>70998</u> Location: <u>JONES A<sup>2</sup></u> Coordinates: Letter: <u>D</u> Section <u>11</u> Township: <u>28</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Date Started : <u>6-13-94</u> Area: <u>13</u> Run: <u>62</u>
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<b>FIELD OBSERVATIONS</b>	Sample Number(s): <u>KP # 100</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>733</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet
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<b>CLOSURE</b>	Remediation Method : Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>70</u> Onsite Bioremediation <input type="checkbox"/> (2) Backfill Pit Without Excavation <input type="checkbox"/> (3) Soil Disposition: Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra Other Facility <input type="checkbox"/> (2) Name: _____ Pit Closure Date: <u>6-13-94</u> Pit Closed By: <u>B.E.I</u>
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<b>REMARKS</b>	Remarks : <u>Some Line markers. Started Remediating 12' soil</u> <u>Looks Black. At 12 soil still same.</u>
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<b>SIGNATURE</b>	Signature of Specialist: <u>Kelly Padilla</u>
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**FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil**

**SAMPLE IDENTIFICATION**

	Field ID	Lab ID
SAMPLE NUMBER:	KP100	945435
MTR CODE   SITE NAME:	70998	N/A
SAMPLE DATE   TIME (Hrs):	6-13-94	1047
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	6/16/94	6/16/94
DATE OF BTEX EXT.   ANAL.:	6/17/94	6/20/94
TYPE   DESCRIPTION:	VC	Brown fine Sand/Clay

REMARKS:

**RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	60.50	MG/KG	20			
TOLUENE	33	MG/KG	20			
ETHYL BENZENE	15	MG/KG	20			
TOTAL XYLENES	280	MG/KG	20			
TOTAL BTEX	329	MG/KG				
TPH (418.1)	10,300	MG/KG			1.02	28
HEADSPACE PID	733	PPM				
PERCENT SOLIDS	67.5	%				

-- 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:  
ATI results attached, Surrogate recovery exceeded  
ATI QC limits due to Omatrix interference.

DF = Dilution Factor Used

Approved By: J.P.

Date: 7/17/94

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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  
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54/06/16 15:36

\* Sample identification  
945435

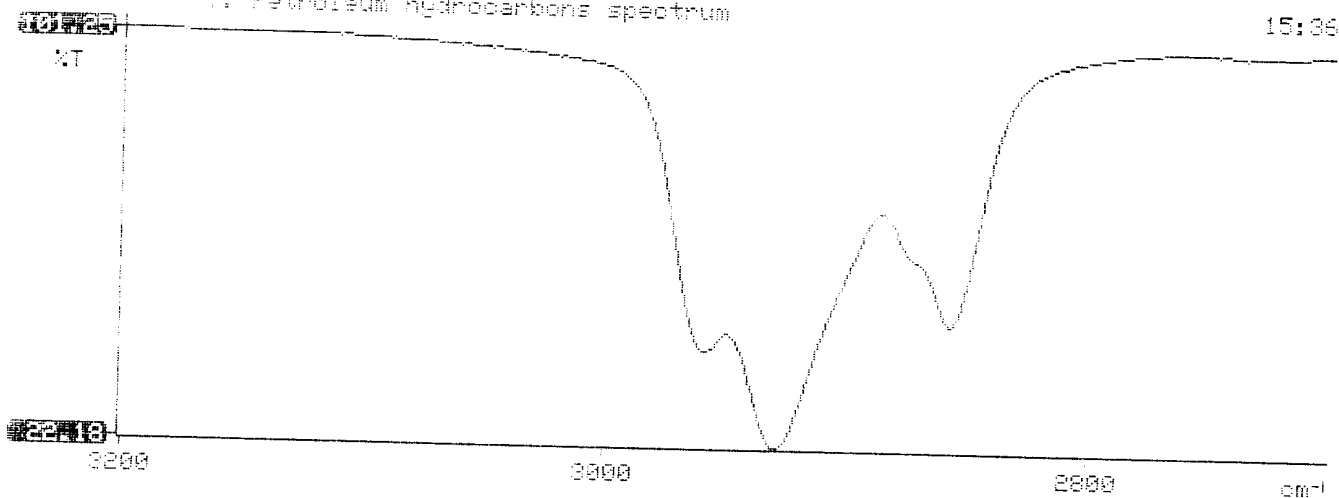
\* Initial mass of sample, g  
1.020

\* Volume of sample after extraction, ml  
29.000

\* Petroleum hydrocarbons, ppm  
10278.570

\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.455

Y: Petroleum hydrocarbons spectrum

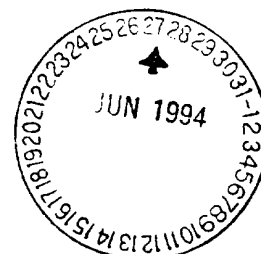




Analytical **Technologies**, Inc.

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

ATI I.D. 406367



June 24, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/17/94**, 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:jd

Enclosure





GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 406367  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945433	NON-AQ	06/13/94	06/17/94	06/20/94	1
02	945434	NON-AQ	06/13/94	06/17/94	06/20/94	100
03	945435	NON-AQ	06/13/94	06/17/94	06/20/94	20

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	<2.5	<0.50
TOLUENE	MG/KG	0.034	<2.5	33
ETHYLBENZENE	MG/KG	<0.025	30	15
TOTAL XYLENES	MG/KG	<0.025	570	280

SURROGATE:

BROMOFLUOROBENZENE (%) 96 73 123\*

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

**Burlington Environmental Inc.**  
 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 JONES A2 70998

Elevation \_\_\_\_\_  
 Borehole Location QD-S11-T28-R8  
 GWL Depth \_\_\_\_\_  
 Logged By Phillip Moss  
 Drilled By K. Padilla  
 Date/Time Started 9/6/95 / 10:53  
 Date/Time Completed 9/6/95 / 11:33

Well Logged By Phillip Moss  
 Personnel On-Site K. Padilla, P. Moss, E. Rivera  
 Contractors On-Site \_\_\_\_\_  
 Client Personnel On-Site M. Gonzalez  
 Drilling Method 4 1/4 I.D. HSA  
 Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (in %)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM			Drilling Conditions & Blow Counts
							BZ	BH	S	
0				Backfill to 12'						
15	1	15-17	SS 14% a	silty SAND, fine-grained, loose, grayish brown, no clay, moist.  TO - 17'	SM		.2	1	38 5	11:01
20										
25										
30										
35										
40										

Comments: PLM 6 (15-17') sent to lab (CBTEX, TPH). BH grouted to the surface.

Geologist Signature Phillip Z. Moss



**FIELD SERVICES LABORATORY  
ANALYTICAL REPORT**

**PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone**

**SAMPLE IDENTIFICATION**

	Field ID	Lab ID
SAMPLE NUMBER:	PLM6	947407
MTR CODE   SITE NAME:	70998	Jones A2
SAMPLE DATE   TIME (Hrs):	09-06-95	1101
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	9-8-95	
DATE OF BTEX EXT.   ANAL.:	9/8/95	9/11/95
TYPE   DESCRIPTION:	V6	DARK 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)	36.7	MG/KG			2.01	28
HEADSPACE PID	5	PPM				
PERCENT SOLIDS	92.8	%				

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

The Surrogate Recovery was at 92.9% for this sample All QA/QC was acceptable.  
Narrative: \_\_\_\_\_

DF = Dilution Factor Used

Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

9-13-95

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

\* 95/09/08 14:01

\* Sample identification  
947407

\* Initial mass of sample, g  
2.010

\* Volume of sample after extraction, ml  
28.000

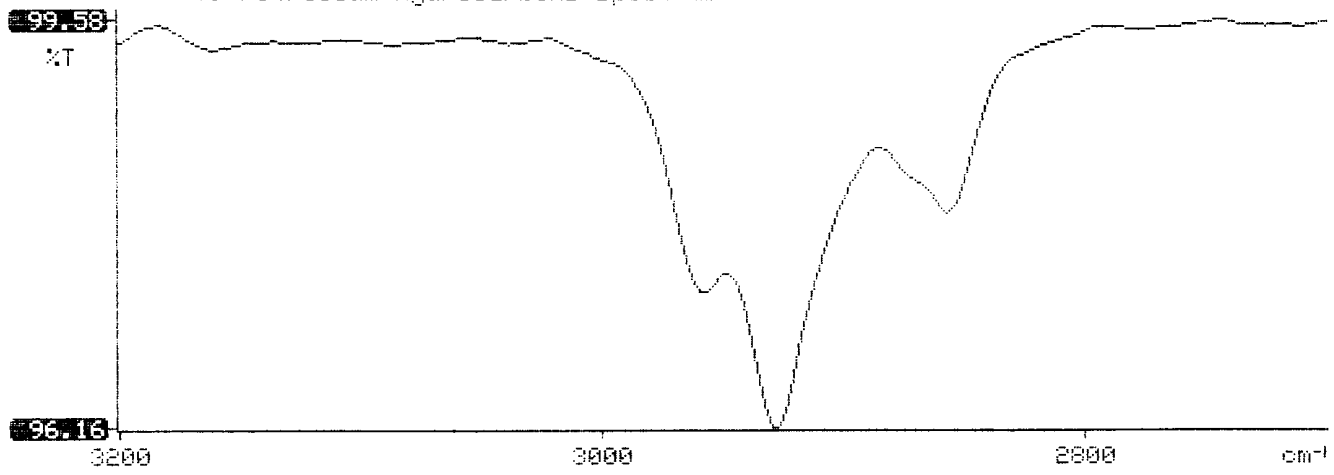
\* Petroleum hydrocarbons, ppm  
36.730

\* Net absorbance of hydrocarbons (2930 cm-1)  
0.015

\*  
\*  
\*

Y: Petroleum hydrocarbons spectrum

14:01



## BTEX SOIL SAMPLE WORKSHEET

File	:	947407	Date Printed	:	9/12/95
Soil Mass (g)	:	4.95	Multiplier (L/g)	:	0.00101
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.20202

			Det. Limit	
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.505
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000 0.505
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.505
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000 1.010
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.505
			Total xylenes (mg/Kg):	0.000 1.515
			Total BTEX (mg/Kg):	0.000

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\091195-1.008  
 Method : C:\LABQUEST\METHODS\9001\MET  
 Sample ID : 947407,4.95G,100U  
 Acquired : Sep 11, 1995 22:20:47  
 Printed : Sep 11, 1995 22:47:09  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.410	0	0.0000
a,a,a TFT	4.963	3097739	89.7040
TOLUENE	6.800	51517	-0.6812
ETHYLBENZENE	10.513	0	0.0000
M & P XYLENE	10.927	149647	-3.8172
O XYLENE	11.927	0	0.0000
BFB	13.467	55260992	92.2166

