

*Denny*  
**EPF SITE CLOSURE SUMMARY**  
**DEPUTY OIL & GAS INSPECTOR**

JUL 17 1998

Huerfanito No. 64  
Meter/Line ID - 70884

*Approved*  
**SITE DETAILS**

Legals - Twp: 26      Rng: 9  
NMOCD Hazard Ranking: 20  
Operator: Meridian

Sec: 12      Unit: D  
Land Type: FEE

**PREVIOUS ACTIVITIES**

Site Assessment: 6/21/94  
Monitor Well: N/A

Excavation: 8/11/94  
Re-Excavation: N/A

Soil Boring: 8/19/95  
Geoprobe: N/A

**CONCLUSIONS**

The 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 256 ppm at 12 feet bgs. Excavation was terminated and a sample was collected and analyzed for BTEX and TPH. Sample analysis indicated total BTEX to be above standards at 111 mg/kg and TPH was above standards at 3,050 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of the impact to soils. The soil lithology consisted of a brown fine grained sand, which continued to the termination of the boring at 20 feet bgs. A sample was collected for BTEX and TPH analysis at 18-20 feet bgs. Laboratory analysis showed total BTEX to be below laboratory detection limits and TPH present at 36.3 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 6 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.

**RECEIVED**  
MAR - 9 1998

**OIL CON. DIV.**  
DIST. 8

# FIELD PIT SITE ASSESSMENT FORM

12

GENERAL	<p>Meter: <u>70884</u> Location: <u>Huerfanito No. 64</u>          Operator #: <u>2999</u> Operator Name: <u>Meridian</u> P/L District: <u>Ballard</u>          Coordinates: Letter: <u>D</u> Section <u>12</u> Township: <u>26</u> Range: <u>9W</u>          Or Latitude _____ Longitude _____          Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____          Site Assessment Date: <u>6-21-94</u> Area: <u>11</u> Run: <u>91</u></p>	
	<p><b>NMOCD Zone:</b> (From NMOCD Maps) Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b> BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input checked="" type="checkbox"/> (3) Indian _____</p> <p><b>Depth to Groundwater</b>          Less Than 50 Feet (20 points) <input type="checkbox"/> (1)          50 Ft to 99 Ft (10 points) <input checked="" 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 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 type="checkbox"/> (1)          200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2)          Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Reed Canyon Wash</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>20</u> POINTS</p>	
REMARKS	<p>Remarks : <u>One pit on location - Dry</u>  <u>Inside V.Z. on Redline &amp; Topo</u></p>	

RECEIVED  
MAR - 9 1998

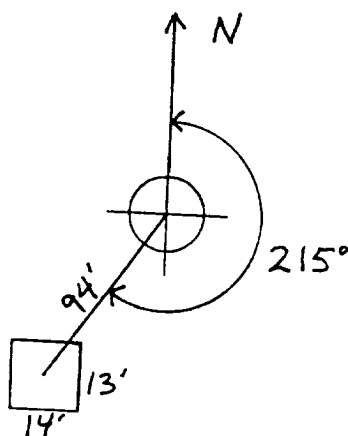
OIL CON. DIV.  
DIST. 3

Print Name

## ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 215 Footage from Wellhead 94  
b) Length : 14 Width : 13 Depth : 3



## REMARKS

Remarks :

Photos - 1540

Bobtail

Completed By:

K. W. H.

Signature

5-21-94

Date

# **PHASE I EXCAVATION**

# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>70884</u> Location: <u>Huerfano No. 64</u></p> <p>Coordinates: Letter: <u>D</u> Section <u>12</u> Township: <u>26</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>8-11-94</u> Run: <u>11</u> <u>91</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KP 181</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>256</u> PID Reading Depth <u>12'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<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 checked="" type="checkbox"/> <input type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>8-11-94</u> Pit Closed By: <u>B.E.F.</u></p>
REMARKS	<p>Remarks : <u>Some LINE MARKERS ON LOCATION. dug A test hole</u>  <u>Pit dirty. Soil turned DARK gray, At 12' Soil still the</u>  <u>Same. 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:	KP181	945907
MTR CODE   SITE NAME:	70884	N/A
SAMPLE DATE   TIME (Hrs):	8-11-94	1600
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	8-16-94	8/16/94
DATE OF BTEX EXT.   ANAL.:	8/17/94	8/19/94
TYPE   DESCRIPTION:	VC	Fine DK Brown Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.25	MG/KG	10			
TOLUENE	39	MG/KG	10			
ETHYL BENZENE	3.0	MG/KG	10			
TOTAL XYLENES	69	MG/KG	10			
TOTAL BTEX	111	MG/KG				
TPH (418.1)	3050	MG/KG			2.17	28
HEADSPACE PID	256	PPM				
PERCENT SOLIDS	90.8	%				

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

The Surrogate Recovery was at 277 % 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:

9/2/94

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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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74/08/16 12:40

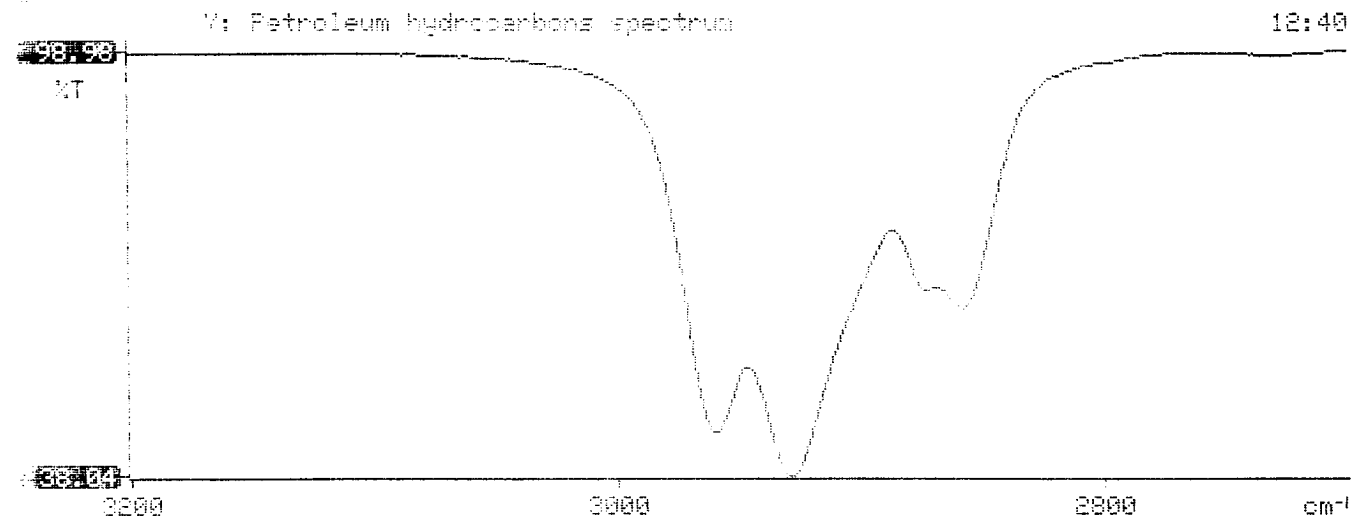
Sample identification  
545907

Initial mass of sample, g  
0.170

Volume of sample after extraction, ml  
28.000

Petroleum hydrocarbons, ppm  
3051.151

Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.415





Analytical **Technologies**, Inc.

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

ATI I.D. 408364

August 24, 1994

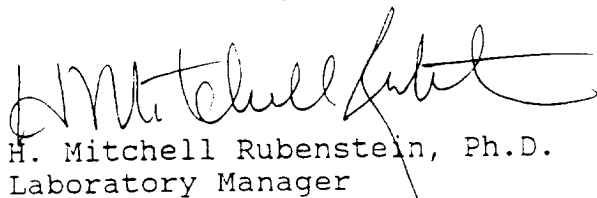
El Paso Natural Gas Company  
P.O. Box 4990  
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

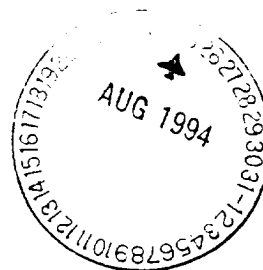
On 08/17/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

  
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.: 408364  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	945907	NON-AQ	08/11/94	08/17/94	08/19/94	10
11	945912	NON-AQ	08/12/94	08/17/94	08/19/94	1
12	945913	NON-AQ	08/12/94	08/17/94	08/19/94	20
PARAMETER			UNITS	10	11	12
BENZENE			MG/KG	<0.25	<0.025	10
TOLUENE			MG/KG	39	<0.025	110
ETHYLBENZENE			MG/KG	3.0	<0.025	20
TOTAL XYLENES			MG/KG	69	<0.025	190

### SURROGATE:

BROMOFLUOROBENZENE (%) 277\* 94 350\*

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

## PHILIP ENVIRONMENTAL

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

JWK 32

Borehole # BH-1  
Well # \_\_\_\_\_  
Page 1 of 1

Project Name EPNG Pits  
Project Number 14509 Phase 6000.77  
Project Location Huerfano No 64 70884

Elevation \_\_\_\_\_  
Borehole Location T26N, R9W, S12, D  
GWL Depth \_\_\_\_\_  
Logged By Jeff W. Kindley  
Drilled By G. Sudduth  
Date/Time Started 08/19/95 0730  
Date/Time Completed 08/19/95 0815

Well Logged By Jeff W. Kindley  
Personnel On-Site P. Roberts, J. Long, G. Sudduth  
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 BZ BH S			Drilling Conditions & Blow Counts
0				Back Fill material to 12'						
5										
10										
15										
20	1	18-20'	1.0 2.0	SW, br sand, Fine grained, dry, medium dense, no odor. Boring terminated at 20'					3/3	0751 15 blows per foot
25										
30										
35										
40										

Comments: Sample collected From 18 to 20 feet and analyzed for BTEX and  
TBA. BH grouted to the surface

Geologist Signature Jeffrey Kindley



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JWK 32	947275
MTR CODE   SITE NAME:	70884	Huerfano No. 64
SAMPLE DATE   TIME (Hrs):	08-19-95	0751
PROJECT:	Phase II Drilling	
DATE OF TPH EXT.   ANAL.:	8/21/95	8-21-95
DATE OF BTEX EXT.   ANAL.:	8/23/95	8/23/95
TYPE   DESCRIPTION:	VG	Brown Sand & clay

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< .5	MG/KG				
TOLUENE	< .5	MG/KG				
ETHYL BENZENE	< .5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	36.3 <sup>8/23/95</sup>	MG/KG			1.98	28
HEADSPACE PID	3	PPM				
PERCENT SOLIDS	93	%				

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

The Surrogate Recovery was at 112% for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Date:

8/24/95

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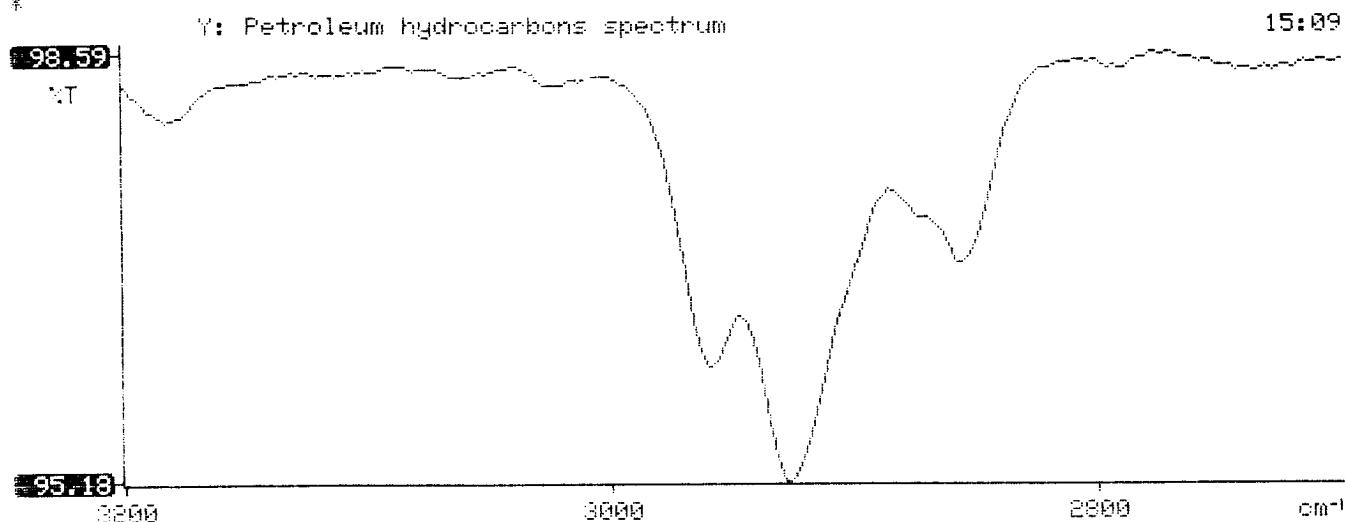
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR *
*      Analysis Report        *
*                               *
*****

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* 95/08/21 15:09
*
* Sample identification
* 947275
*
* Initial mass of sample, g
* 1.980
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 36.308
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.015
*
*
*

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**BTEX SOIL SAMPLE WORKSHEET**

File	:	947275	Date Printed	:	8/25/95
Soil Mass (g)	:	4.97	Multiplier (L/g)	:	0.00101
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.20121

			Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg): 0.000 0.503
Toluene (ug/L)	:	0.00	Toluene (mg/Kg): 0.000 0.503
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg): 0.000 0.503
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg): 0.000 1.006
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg): 0.000 0.503
			Total xylenes (mg/Kg): 0.000 1.509
			Total BTEX (mg/Kg): 0.000

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\082395-1.008  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 947275,4.97G,100U  
 Acquired : Aug 23, 1995 20:40:06  
 Printed : Aug 23, 1995 21:06:19  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.420	0	0.0000
a,a,a TFT	4.937	5183601	99.6661
TOLUENE	6.783	112918	-0.4349
ETHYLBENZENE	10.453	0	0.0000
M & P XYLENE	10.893	73965	-4.9588
O XYLENE	11.933	0	0.0000
BFB	13.433	80986824	112.4291

