

# EPFS PIT CLOSURE SUMMARY

*Denny E. Foust*  
**DEPUTY OIL & GAS INSPECTOR**

JUL 17 1998

Brookhaven Com D No. 5  
Meter/Line ID - 70597

*Approved*

## SITE DETAILS

Legals - Twn: 27 Rng: 8  
NMOCD Hazard Ranking: 40  
Operator: Meridian

Sec: 36 Unit: E  
Land Type: STATE

## PREVIOUS ACTIVITIES

Site Assessment: 6/13/94  
Monitor Well: N/A

Excavation: 8/1/94  
Re-Excavation: N/A

Soil Boring: 7/21/95  
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 470 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 199 mg/kg and TPH above standards at 9.270 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of impact to soils. The soil lithology beneath the initial excavation consisted of a brown, fine to coarse grained sand, which continued to approximately 30 feet bgs. At 30 feet bgs a brown, fine to coarse grained sandstone was encountered and continued to the termination of the boring at 35 feet bgs. A sample was collected for BTEX and TPH analysis at 30-31 feet bgs. due to the poor sample recovery. Laboratory analysis showed total BTEX to be below laboratory detection limits and TPH present at 59.5 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 I excavation.
- Test boring sample results indicated soils below standards 18 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. 3

# FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 70597 Location: Brookhaven Com D No. 5  
 Operator #: 2999 Operator Name: MOI P/L District: Ballard  
 Coordinates: Letter: E Section 36 Township: 27 Range: 8  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Pit Type: Dehydrator \_\_\_\_\_ Location Drip: ☒ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
 Site Assessment Date: 6/13/94 Area: 07 Run: 51

SITE ASSESSMENT

## NMOCD Zone:

(From NMOCD  
Maps)

Inside

Outside

## 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 (Cottonwood Canyon) (off of Largo) DIST. 3

(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

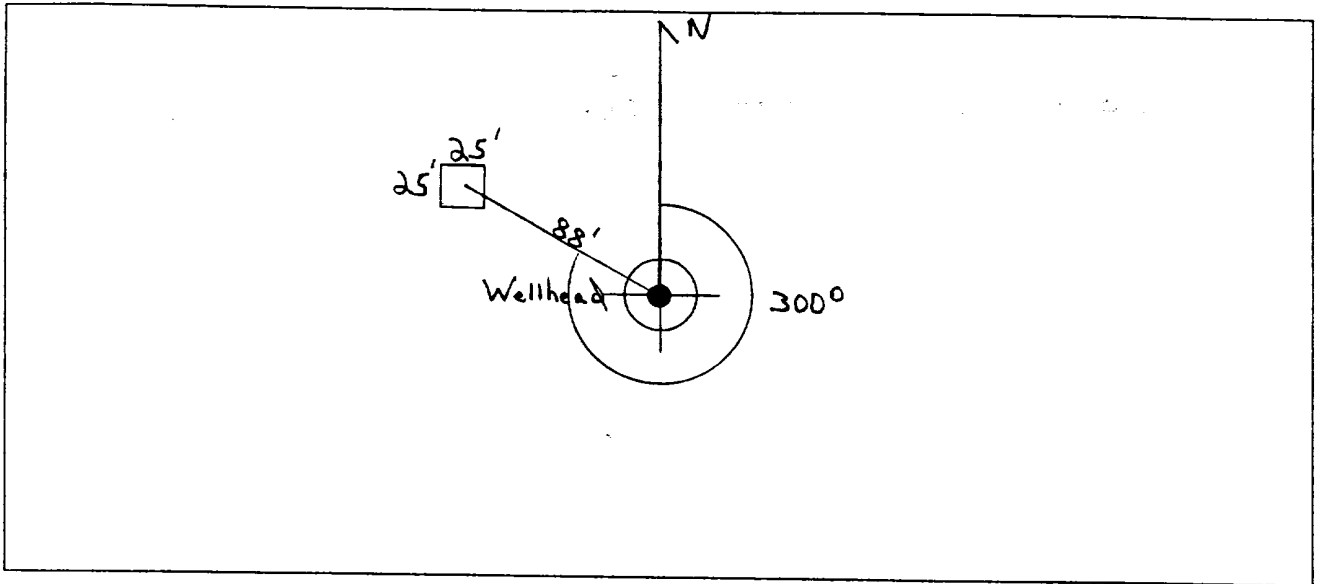
Remarks : Redline Book - Inside Vulnerable Zone Topo - Inside  
1 pit. Will close Pit dry

016+HAUL

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 300° Footage from Wellhead 88'  
 b) Length : 25' Width : 25' Depth : 3'

ORIGINAL PIT LOCATION



### Remarks :

Pictures @ 1229 (13-16)  
Dump Truck

REMARKS

Completed By:

Cory Chase  
 Signature

6/13/94  
 Date

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>70597</u> Location: <u>BROOKHAVEN COM D No. 5</u></p> <p>Coordinates: Letter: <u>E</u> Section <u>36</u> Township: <u>27</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>8-1-94</u> Run: <u>07</u> <u>51</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>KP 160</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>470</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>90</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>8-1-94</u> Pit Closed By: <u>BET</u></p>
<b>REMARKS</b>	<p>Remarks : <u>Some line markers. Started Remediating to 12'</u></p> <p><u>Soil turned light gray with a smell. At 12'</u></p> <p><u>Soil still the same. PID 470 closed pit.</u></p>
	<p>Signature of Specialist: <u>Kelly Padilla</u></p>



# FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

### PIT CLOSURE PROJECT - Soil

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP160	945803
MTR CODE   SITE NAME:	70597	N/A
SAMPLE DATE   TIME (Hrs):	8-1-94	1140
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	8-2-94	8-2-94
DATE OF BTEX EXT.   ANAL.:	8/4/94	8/8/94
TYPE   DESCRIPTION:	VC	Black/Grey Sand/clay

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.5	MG/KG	20			
TOLUENE	20.5	MG/KG	20			
ETHYL BENZENE	8.4	MG/KG	20			
TOTAL XYLENES	190	MG/KG	20			
TOTAL BTEX	199	MG/KG				
TPH (418.1)	9270	MG/KG			1.05	28
HEADSPACE PID	470	PPM				
PERCENT SOLIDS	96.4	%				

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

The Surrogate Recovery was at 620 % 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

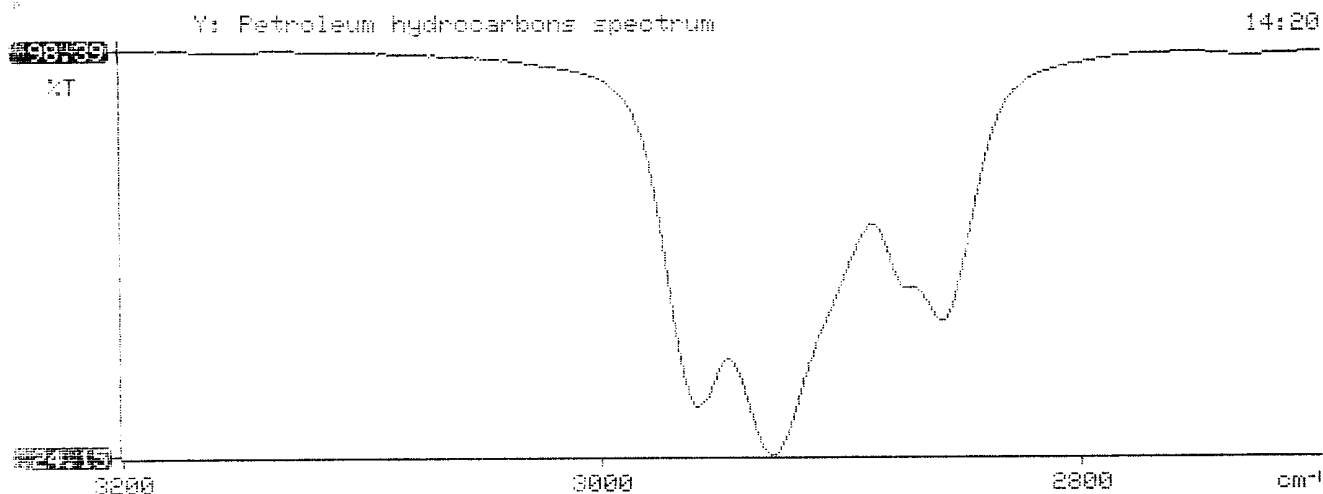
Approved By: J.P.

Date: 9/2/94

ILLEGIBLE

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

\* 94/08/02 14:20  
\*  
\* Sample identification  
\* 945803  
\*  
\* Initial mass of sample, g  
\* 1.050  
\*  
\* Volume of sample after extraction, ml  
\* 25.000  
\*  
\* Petroleum hydrocarbons, ppm  
\* 9271.973  
\* Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
\* 0.609  
\*  
\*  
\*





Analytical**Technologies**, Inc.

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

ATI I.D. 408313

August 12, 1994

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

Project Name/Number: PIT CLOSURE 24324


Attention: John Lambdin

On 08/03/94, 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.

8015 analysis was added on 08/08/94 for sample 945789 per John Lambdin.

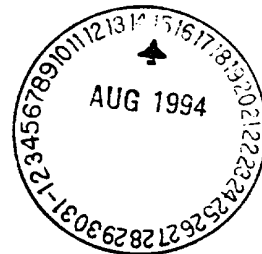
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

  
Letitia Krakowski, Ph.D.  
Project Manager

  
H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR:jt

Enclosure



Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408313  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	945803	NON-AQ	08/01/94	08/04/94	08/08/94	20
PARAMETER			UNITS	16		
BENZENE			MG/KG	<0.5		
TOLUENE			MG/KG	<0.5		
ETHYLBENZENE			MG/KG	8.4		
TOTAL XYLENES			MG/KG	190		

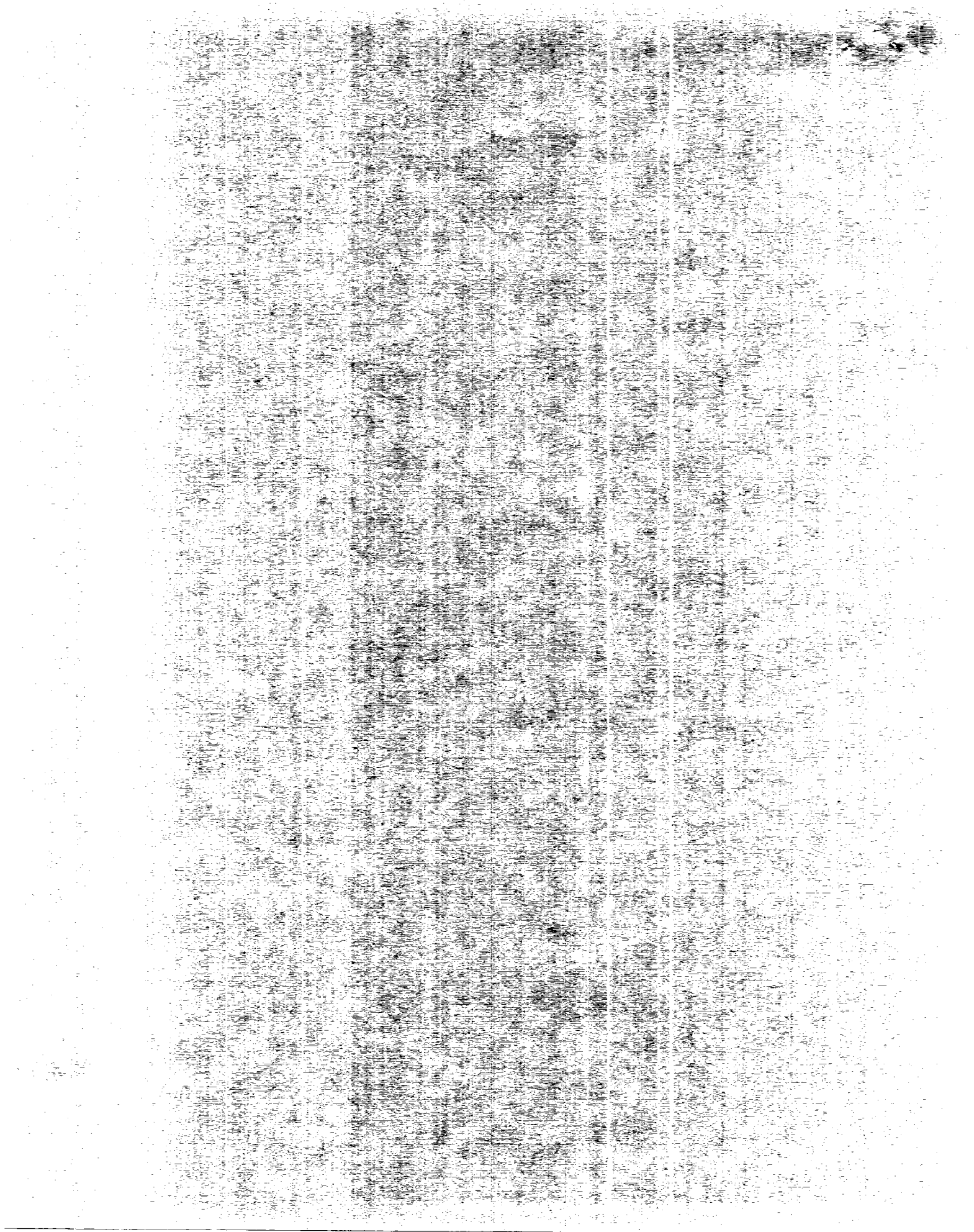
## SURROGATE:

BROMOFLUOROBENZENE (%) 620\*

\*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) 326-2282 FAX (505) 326-2388

Borehole # BH-1  
Well #  
Page 1 of 1

Project Name EPNG PITS  
Project Number 14509 Phase 6000.77  
Project Location Brookhaven Com 2 #5 74597

Well Logged By J.F. LaBarbera  
Personnel On-Site K. Padilla, F. Rivera, D. Olanio D, Gat  
Contractors On-Site  
Client Personnel On-Site

Drilling Method 4 1/4 ID HSA  
Air Monitoring Method PID, CGI

Elevation  
Borehole Location 1st E-536-T27-R8  
GWL Depth  
Logged By J.F. LaBarbera  
Drilled By K. Padilla  
Date/Time Started 7/26/95 - 0842  
Date/Time Completed - 1042

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 <del>HS</del> S			Drilling Conditions & Blow Counts
0										
5				Fill						
10										
15	1	15-15.46	5	Brown, loose, fr to coarse, SAND, tr silt, damp, odor	SW		0	5	3715 630	0850
20	2	20-21.25	15	RA	SW		7	62	4814 8.0	0858
25	3	25-26	12	RR, no odor noted	SW		1	54	558 7.0	0912
30	4	30-31	11	Brown, dense, fr to coarse, SANDSTONE, tr silt, no odor noted	X		0	51	5783 14	cleaned & calibrated PID HS = 1051 0930
35	5	35-	-	no recovery TOB at 35' - Refusal			26		77	Refusal 0950
40										

Comments:

Sample JFL 26 from 30-31 sent to lab for BTEX/TPH analysis.

Geologist Signature

*John LaBarbera*



Phase II Drilling

FIELD SERVICES LABORATORY  
ANALYTICAL REPORTBrookhaven Com.D#5  
(30-31')

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

## SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JFL 26	947088
MTR CODE   SITE NAME:	70597	N/A
SAMPLE DATE   TIME (Hrs):	07-26-95	09:30
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL:	07-27-95	07-27-95
DATE OF BTEX EXT.   ANAL:	8-1-95	8-1-95
TYPE   DESCRIPTION:	VG	

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	20.025	MG/KG	1			
TOTAL BTEX	20.10	MG/KG				
TPH (418.1)	59.5	MG/KG			2.00	28
HEADSPACE PID	5983	PPM				
PERCENT SOLIDS	98.4	%				

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

The Surrogate Recovery was at 103 % for this sample All QA/QC was acceptable.

Narrative:

ATI Results attached.

DF = Dilution Factor Used

Approved By:

Date:

8/22/95

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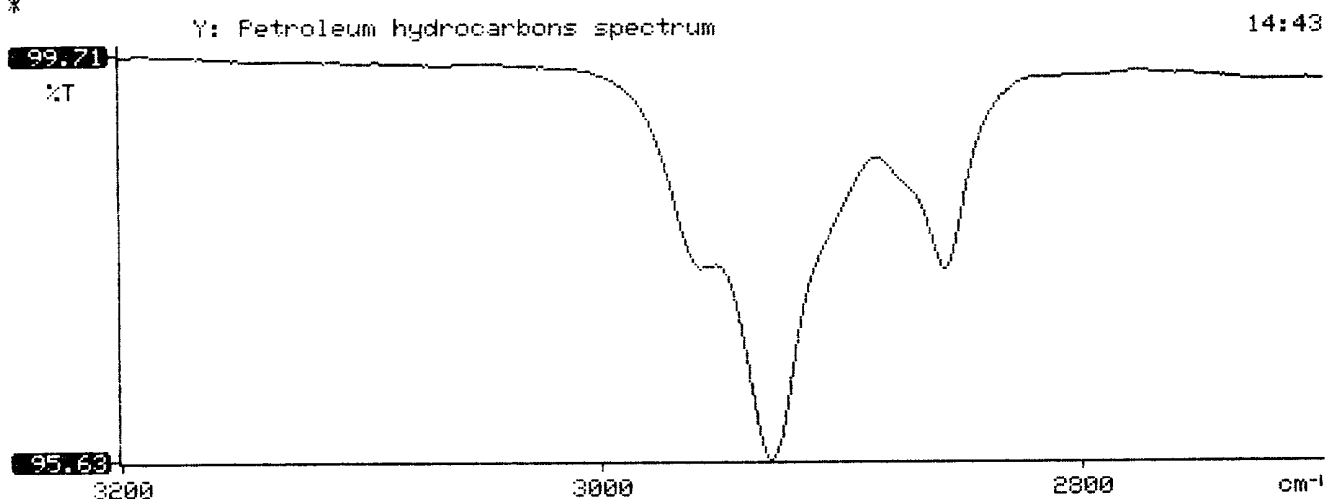
*****
*                               *
*      Test Method for          *
*      Oil and Grease and Petroleum Hydrocarbons .      *
*      in Water and Soil       *
*                               *
*      Perkin-Elmer Model 1600 FT-IR      *
*      Analysis Report                 *
*****

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* 95/07/27 14:43
*
* Sample identification
* 947088
*
* Initial mass of sample, g
* 2.000
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 59.465
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.018
*
*
*

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Analytical **Technologies**, Inc.

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

ATI I.D. 508302

August 11, 1995

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

Project Name/Number: PIT CLOSURE/PHASE I & II 24324

Attention: John Lambdin

On 08/01/95, 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.

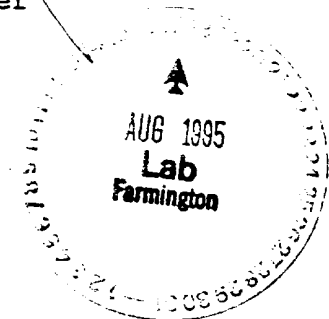
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 508302  
PROJECT # : 24324  
PROJECT NAME : PIT CLOSURE/PHASE I & II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	947086	NON-AQ	07/26/95	08/01/95	08/01/95	1
05	947087	NON-AQ	07/26/95	08/01/95	08/01/95	1
06	947088	NON-AQ	07/26/95	08/01/95	08/01/95	1
PARAMETER			UNITS	04	05	06
BENZENE			MG/KG	<0.025	<0.025	<0.025
TOLUENE			MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE			MG/KG	0.026	<0.025	<0.025
TOTAL XYLENES			MG/KG	0.13	0.030	<0.025

## SURROGATE:

BROMOFLUOROBENZENE (%)	111	109	103
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