EPFS PIT CLOSURE SUMMARY

Dennyce S. Zust
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Approved

Riddle No. 1
Meter/Line ID - 70657

Legals - Twn: 25 **Rng:** 7
NMOCD Hazard Ranking: 40
Operator: Jack Foster

SITE DETAILS
Sec: 4 **Unit:** B
Land Type: FEE

PREVIOUS ACTIVITIES

Site Assessment: 6/29/94 **Excavation:** 7/14/94 **Soil Boring:** 8/3/95
Monitor Well: N/A **Re-Excavation:** N/A **Geoprobe:** N/A

CONCLUSIONS

The initial excavation was excavated to the top of bed rock, which was 10 feet below ground surface (bgs). PID field screening indicated subsurface soils to be 567 ppm at 10 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be below standards at 20 mg/kg, and TPH was above standards at 534 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of impact to soil. A brown shale was encountered at 15 feet bgs and continued to 18 feet bgs where the boring was terminated due to auger refusal. A soil sample was collected for BTEX and TPH analysis at 15-16 feet bgs. Laboratory analysis showed all BTEX compounds to be below standards at .074 mg/kg and TPH present at 74.6 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.
- The excavation was dug to the top of a very hard shale, which would prevent further downward migration of residual hydrocarbons.
- Test boring sample results indicated soils below standards 5 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.

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 70-657 Location: Riddle No. 1
Operator #: 4250 Operator Name: Jack Foster P/L District: Ballard
Coordinates: Letter: B Section 4 Township: 25 Range: 7
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 06/29/94 Area: 07 Run: 41

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

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 Palluche Canyon
(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'

RECEIVED
MAR - 9 1998
OIL CON. DIV.
DIST. 3

TOTAL HAZARD RANKING SCORE: 40 **POINTS**

REMARKS

Remarks : Redline Book - Inside SK Vulnerable Zone Topo - Inside
One pit, pit is dry, will close one pit

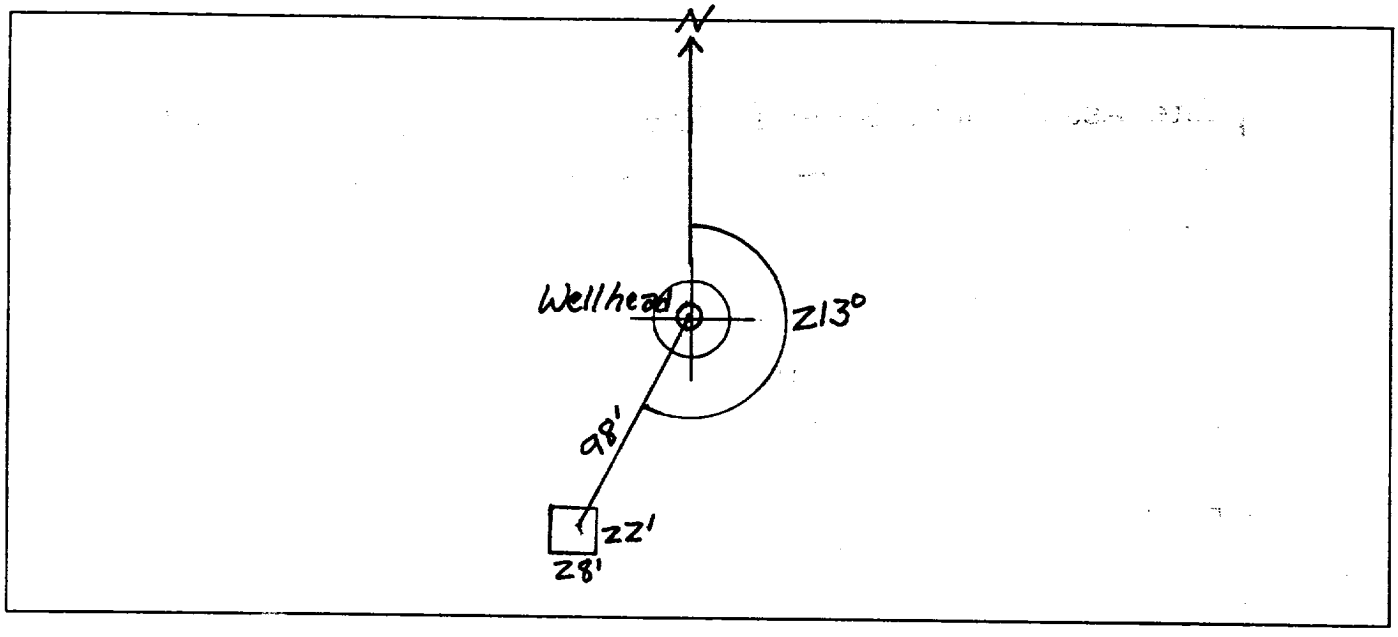
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 213° Footage from Wellhead 98'

b) Length : 28' Width : 22' Depth : 4'



REMARKS

Remarks :

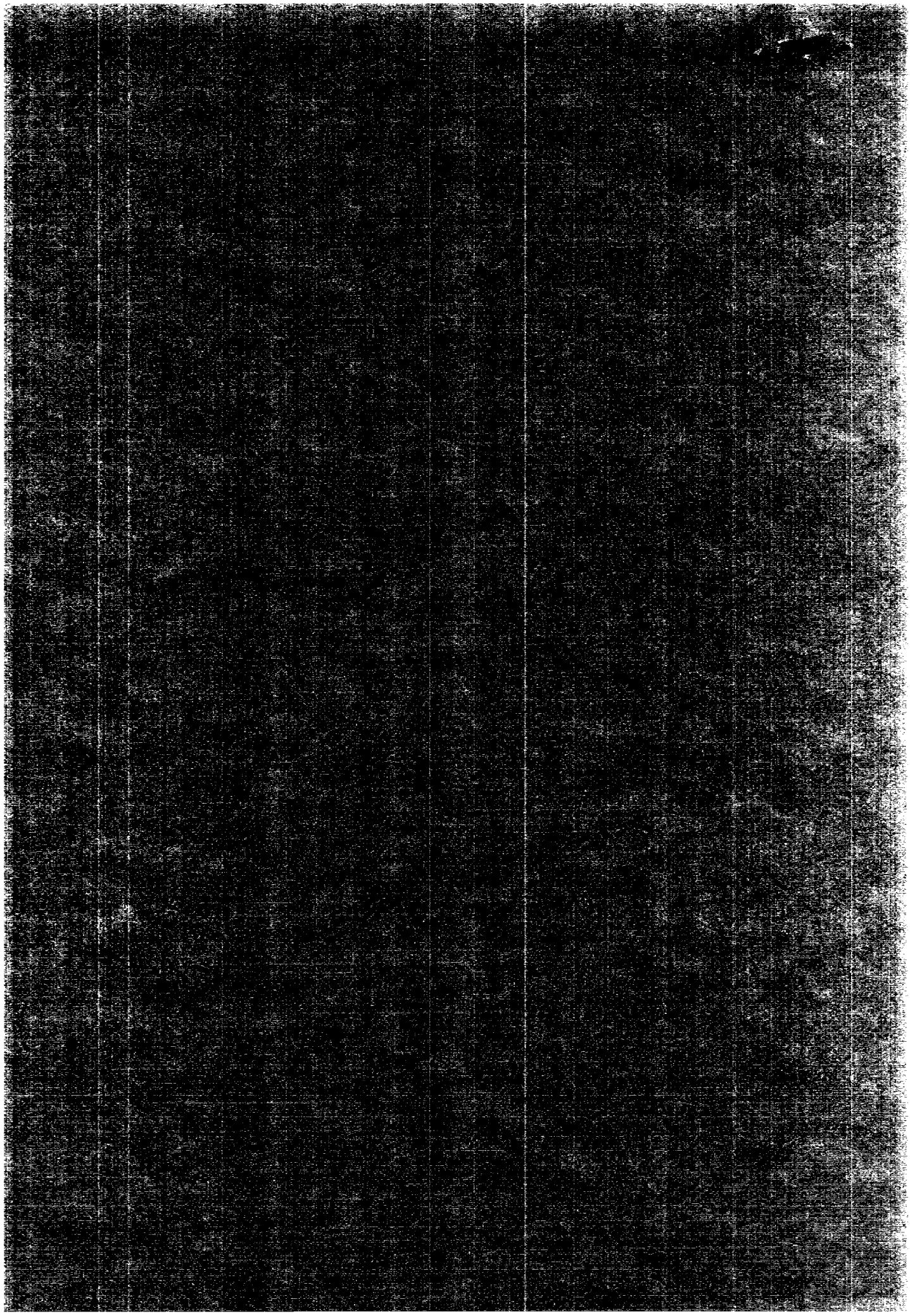
Pictures 1406 (21-25)
Dump Truck

Completed By:

Sarah Kelly
Signature

6/29/94
Date

PHASE I EXCAVATION



FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 70657 Location: Riddle #1

Coordinates: Letter: B Section 4 Township: 25 Range: 7

Or Latitude _____ Longitude _____

Date Started : 7/14/94 Run: 07 41

FIELD OBSERVATIONS

Sample Number(s): KD 149 _____ _____ _____

Sample Depth: 10' Feet

Final PID Reading 567 ppm PID Reading Depth 10 Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 70

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 7/15/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 10', Hit a hard layer of shale took PID sample, Closed pit.

Signature of Specialist: Kenny Denver

(SP3191) 03/16/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 149	9456-84
MTR CODE | SITE NAME:	70657	N/A
SAMPLE DATE | TIME (Hrs):	7-15-94	0935
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	7/19/94	7/19/94
DATE OF BTEX EXT. | ANAL.:	7/24/94	7/24/94
TYPE | DESCRIPTION:	VC	DK Brown Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG	20			
TOLUENE	<0.5	MG/KG	20			
ETHYL BENZENE	<0.5	MG/KG	20			
TOTAL XYLENES	18	MG/KG	20			
TOTAL BTEX	20	MG/KG				
TPH (418.1)	534	MG/KG			2.10	28
HEADSPACE PID	567	PPM				
PERCENT SOLIDS	~~87.36~~ 87.4 %					

8/9/94 TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 –

The Surrogate Recovery was at 118 % 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

ND

Date: 8/12/94

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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                *
**********************************************
*
 94/07/19  14:15
*
*  Sample identification
 945684
*
*  Initial mass of sample, g
 2.100
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 533.524
*  Net absorbance of hydrocarbons (2930 cm-1)
 .072
*
*
*
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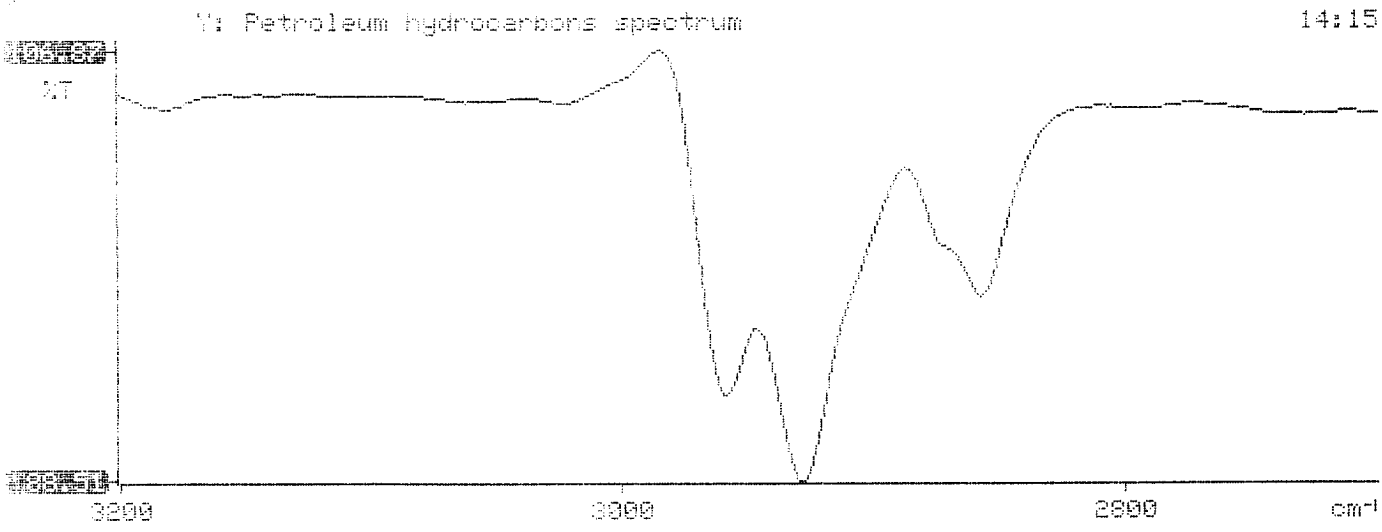
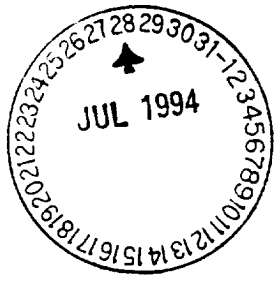


Analytical Technologies, Inc.

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

ATI I.D. **407376**



July 27, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **07/20/94**, 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:jt

Enclosure

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 407376

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	945683	NON-AQ	07/15/94	07/21/94	07/21/94	1
11	945684	NON-AQ	07/15/94	07/24/94	07/24/94	20
12	945685	NON-AQ	07/15/94	07/21/94	07/22/94	1

PARAMETER	UNITS	10	11	12
BENZENE	MG/KG	<0.025	<0.5	<0.025
TOLUENE	MG/KG	<0.025	<0.5	<0.025
ETHYLBENZENE	MG/KG	<0.025	<0.5	<0.025
TOTAL XYLENES	MG/KG	<0.025	18	<0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		99	118*	91

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

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

Project Name EPNG PITS
Project Number 14509 Phase 6000.77
Project Location Riddle #1 70457

Elevation
Borehole Location letter B - SH-T25-R7
GWL Depth
Logged By J.F. LaBarbera
Drilled By K. Padilla
Date/Time Started 8/3/95 - 1417
Date/Time Completed - 1500

Well Logged By J.F. LaBarbera
Personnel On-Site K. Padilla, F. Rivera, D. Charlie
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	H/S	Drilling Conditions & Blow Counts
0				Fill						
5										
10										
15	1	15-16	13	Brown, mod. hard, SHALE, dry, sl. odor	X		9	65	249/162	v. hard drilling 1427
20	2	18-	0	No Recovery			1.2	112	/	Refusal 1435
				TOB at 18' - Refusal						
25										
30										
35										
40										

Comments: Sample JFL #4 & #5 (Dupe) from 15-16' sent to lab for BTEX/TPH analysis. QA/QC Sample JFL #6 also taken.

Geologist Signature John J. LaBarbera

El Paso Natural Gas Company

Phase II Drilling
Riddle #1

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JFL 44	947143
MTR CODE | SITE NAME:	70657	N/A
SAMPLE DATE | TIME (Hrs):	08/03/95	14:27
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	8-4-95	8-4-95
DATE OF BTEX EXT. | ANAL.:	8-9-95	8-9-95
TYPE | DESCRIPTION:	VG	Light brown clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.032	MG/KG	1			
TOLUENE	0.042	MG/KG	1			
ETHYL BENZENE	<0.025	MG/KG	1			
TOTAL XYLENES	<0.025	MG/KG	1			
TOTAL BTEX	<0.074	MG/KG				
TPH (418.1)	746	MG/KG			2.14	28
HEADSPACE PID	249	PPM				
PERCENT SOLIDS	89.9	%				

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

The Surrogate Recovery was at 98 % 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                        *
**********************************************************
*
 95/08/04  13:25
*
*  Sample identification
 947143
*
*  Initial mass of sample, g
 2.140
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 74.588
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.020
*
*
*
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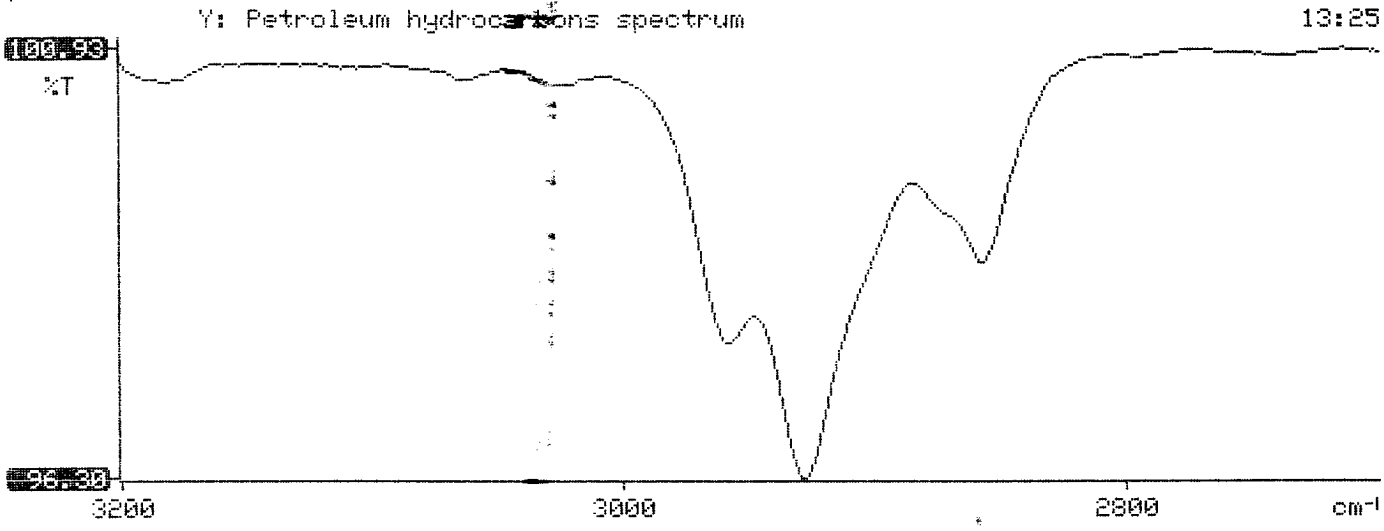

Analytical **Technologies,** Inc.

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

ATI I.D. **508342**

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 **08/08/95**, 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

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.: 508342

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE/PHASE I & II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	947141	NON-AQ	08/03/95	08/09/95	08/10/95	1
05	947142	NON-AQ	08/03/95	08/09/95	08/09/95	1
06	947143	NON-AQ	08/03/95	08/09/95	08/09/95	1

PARAMETER	UNITS	04	05	06
BENZENE	MG/KG	<0.025	<0.025	0.032
TOLUENE	MG/KG	<0.025	<0.025	0.042
ETHYLBENZENE	MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES	MG/KG	<0.025	<0.025	<0.025
SURROGATE:				
BROMOFLUOROBENZENE (%)		98	104	98