

EPFS PIT CLOSURE SUMMARY

Denny S. Faust
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Atlantic A LS 1
Meter/Line ID - 70096

Approved

Legals - Twn: 31 Rng: 10
NMOCD Hazard Ranking: 40
Operator: Amoco

SITE DETAILS

Sec: 27 Unit: H
Land Type: BLM

PREVIOUS ACTIVITIES

Site Assessment: 8/31/94
Monitor Well: N/A

Excavation: 9/14/94
Re-Excavation: N/A

Soil Boring: 8/2/95
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 411 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be below standards at 43.8 mg/kg and TPH was above standards at 2,450 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of impact to soil. The soil lithology beneath the excavation consisted of a gray, coarse grained sand, which continued to approximately 53 feet bgs. At 53 feet bgs the soil lithology changed again to a dark gray, clayey sand, which continued to the termination of the boring at 55 feet bgs. A soil sample was collected for BTEX and TPH analysis at 53-55 feet bgs. Laboratory analysis showed total BTEX and TPH to be below standards at 1.22 mg/kg and 55.2 mg/kg respectively.

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 41 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

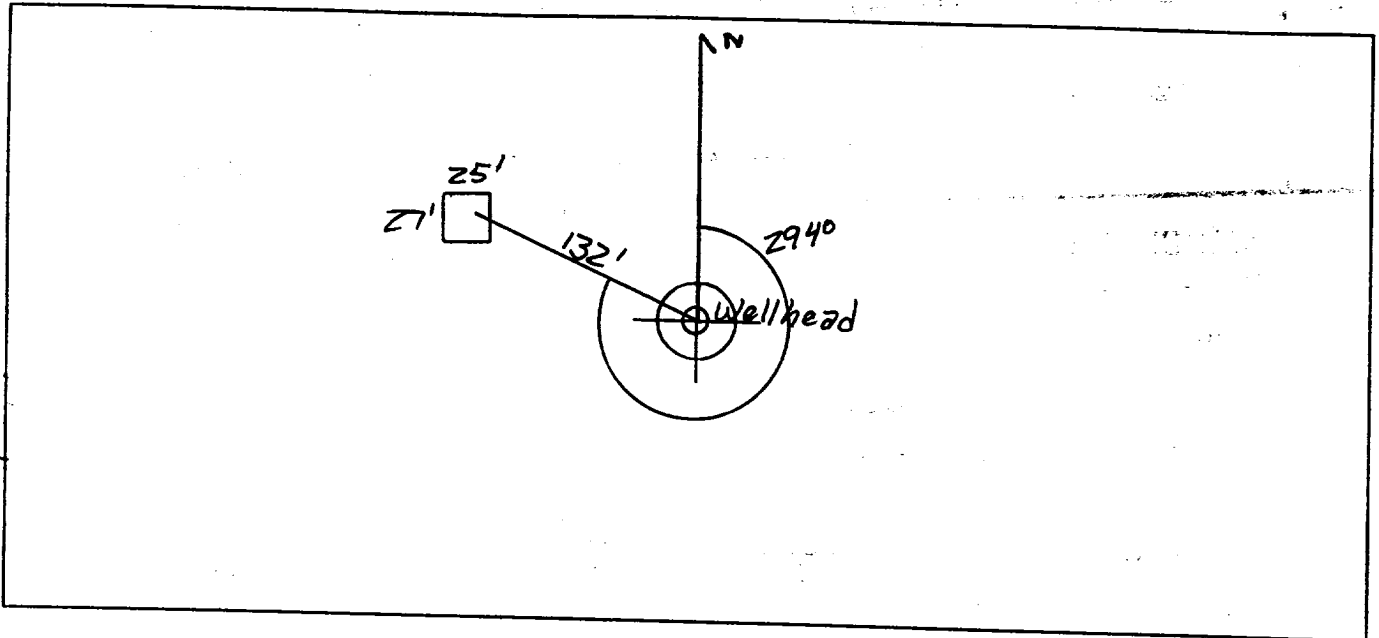
OIL CON. DIV.
DIST. 3

FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>70-096</u> Location: <u>Atlantic A LSI</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Amoco Production P/L</u> District: <u>Aztec</u></p> <p>Coordinates: Letter: <u>H</u> Section <u>27</u> Township: <u>31</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>8/31/94</u> Area: <u>04</u> Run: <u>61</u></p>																
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Land Type:</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>Depth to Groundwater</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>Wellhead Protection Area :</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>Horizontal Distance to Surface Water Body</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>Hart Canyon</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) < 100' (Navajo Pits Only)</p> <p><input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <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	_____														
REMARKS	<p>Remarks : <u>Redline Book - Inside Vulnerable Zone - Inside</u></p> <p><u>Four pits, location drip pit is dry. Will close one pit.</u></p> <p><u>DIG & HAIL</u></p>																

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 294° Footage from Wellhead 132'
 b) Length : 27' Width : 25' Depth : 3'



REMARKS :

Pictures @ 0846 (1-4, B114)
Dump Truck

Completed By:

Mark Kelly
 Signature

8/31/94
 Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>70096</u> Location: <u>Atlantic A 451</u></p> <p>Coordinates: Letter: <u>H</u> Section <u>22</u> Township: <u>31</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>9/14/94</u> Run: <u>04</u> <u>61</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KD 259</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>411 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>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>70</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>9/14/94</u> Pit Closed By: <u>BET</u></p>
REMARKS	<p>Remarks : <u>Excavated pit to 12', TOOK PID Sample,</u> <u>Closed pit.</u></p>
	<p>Signature of Specialist: <u>[Signature]</u></p>



Natural Gas Company

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 259	946126
MTR CODE SITE NAME:	70096	N/A
SAMPLE DATE TIME (Hrs):	9-14-94	1605
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	9-15-94	9-15-94
DATE OF BTEX EXT. ANAL.:		
TYPE DESCRIPTION:	vc	Black/grey sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.81	MG/KG				
TOLUENE	2.5	MG/KG				
ETHYL BENZENE	3.5	MG/KG				
TOTAL XYLENES	37	MG/KG				
TOTAL BTEX	43.8	MG/KG				
TPH (418.1)	2450	MG/KG			2.04	28
HEADSPACE PID	411	PPM				
PERCENT SOLIDS	91.4	%				

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

The Surrogate Recovery was at 152 % for this sample All QA/QC was acceptable.
Narrative:

ATI Results attached

DF = Dilution Factor Used

Approved By:

Date:

11/3/94

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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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94/09/15  14:11

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* Sample identification
946126

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* Initial mass of sample, g
2.040

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* Volume of sample after extraction, ml
28.000

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* Petroleum hydrocarbons, ppm
2448.818

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* Net absorbance of hydrocarbons (2930 cm-1)
0.315

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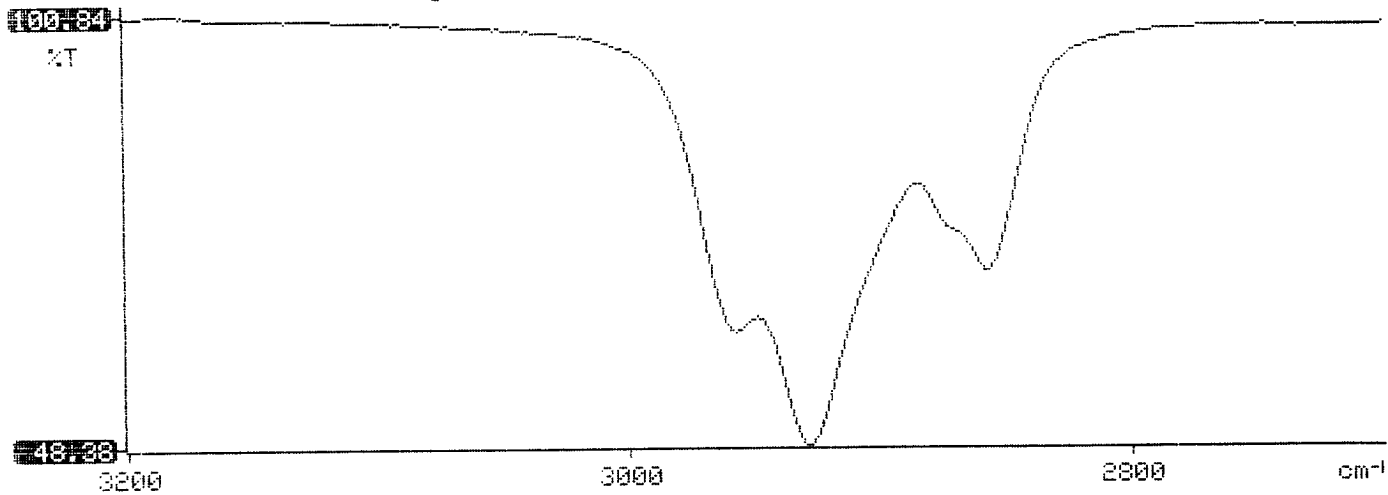
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Y: Petroleum hydrocarbons spectrum

14:11





Analytical **Technologies**, Inc.

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

ATI I.D. **409367**

October 27, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/16/94**, 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.

This report is being reissued to correct surrogate recovery notations on samples 946108 and 946126.

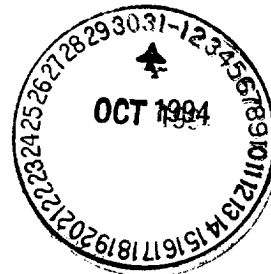
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 409367
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	946126	NON-AQ	09/14/94	09/19/94	09/19/94	20
PARAMETER			UNITS			
BENZENE			MG/KG	13		
TOLUENE			MG/KG	0.81		
ETHYLBENZENE			MG/KG	2.5		
TOTAL XYLENES			MG/KG	3.5		
				37		

SURROGATE:

BROMOFLUOROBENZENE (%) 152*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH#1
 Well # _____
 Page 1 of 2

Philip Environmental Services Corp.
 4000 Monroe Road
 Farmington, New Mexico 87401
 (505) 326-2262 FAX (505) 326-2388

Project Name EPNG Pits
 Project Number 14509 Phase 602-6009
 Project Location Attacks A LSI 70-096

Elevation _____
 Borehole Location T31, R10, S27 H
 GWL Depth _____
 Logged By S. Kelly J. Kindley
 Drilled By S. Kelly J. Kindley
 Date/Time Started 08/02/95 1830
 Date/Time Completed 08/02/95 1040

Well Logged By S. Kelly J. Kindley
 Personnel On-Site J. O'Keefe, M. Donahue, J. G.
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method 4 1/4" HSA
 Air Monitoring Method CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ BH S/H S			Drilling Conditions & Blow Counts
0				Backfill Soil to 12'						
15										encountered hard unit at 15'
20	1	18'-20'	6/2	SAND, Gray, dense, coarse grain quartz constituents not well rounded. dry			192/268			8:52
25	2	23'-25'	1.5/1.5	Sand, Light gray, coarse grain, loose dry			399/318			9:00
30	3	28'-30'	1.3/2	S.A.A.			308/328			9:07
35	4	33'-35'	1.6/1.5	S.A.A			139/301			9:16
40	5	38'-40'	1.5/2	S.A.A			142/100			9:24

Comments:

Geologist Signature

[Handwritten Signature: J. Kindley]

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Borehole # BH#1

Well # _____

Page 2 of 2

Project Name EPNG Pits

Project Number 14509 Phase -604 6000

Project Location Atlanta's A LSI 70-096

Elevation _____

Borehole Location T31, R10, S27, H

GWL Depth _____

Logged By S. Kelly J. Kindley

Drilled By M. Donahue

Date/Time Started 08/02/95 0830

Date/Time Completed 08/02/95 1040

Well Logged By S. Kelly J. Kindley

Personnel On-Site J. O'Keefe, M. Donahue, A. Gatto

Contractors On-Site _____

Client Personnel On-Site _____

Drilling Method 4 1/4" HSA

Air Monitoring Method CGI, PID

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU BZ BH S/H			Drilling Conditions & Blow Counts
0 45										
50	6	48'-50'		Not able to recover sample.						9:44 (JNK)
55	7	53-55		clayey sand (20% clay), dark gray, STIFF, Dry Boring terminated at 55'					74/23	9:44
15										
20										
25										
30										
35										
40										

Comments:

Sample collected at 53' to 55'. Analysis to be run (BTEX, TPH). Sample collected First placed in baggy with 0 head space and stored in cooler at 4°C. Afterward soil was placed in jar. Elapsed time 5 minutes. BH grouted to surface.

Geologist Signature

Jeffrey Kindley

FIELD SERVICES LABORATORY

Atlantic ALSI

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK 50	947134
MTR CODE SITE NAME:	70096	N/A
SAMPLE DATE TIME (Hrs):	8/2/95	09:44
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	8-4-95	8-4-95
DATE OF BTEX EXT. ANAL.:	8-9-95	8-10-95
TYPE DESCRIPTION:	VG	grey sand & clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.57	MG/KG	1			
TOLUENE	0.47	MG/KG	1			
ETHYL BENZENE	20.025	MG/KG	1			
TOTAL XYLENES	0.18	MG/KG	1			
TOTAL BTEX	1.22	MG/KG				
TPH (418.1)	55.2	MG/KG			2.03	28
HEADSPACE PID	23	PPM				
PERCENT SOLIDS	90.2	%				

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

The Surrogate Recovery was at 99 % for this sample All QA/QC was acceptable.

Narrative: ATI Results attached.

DF = Dilution Factor Used

Approved By: J.P.

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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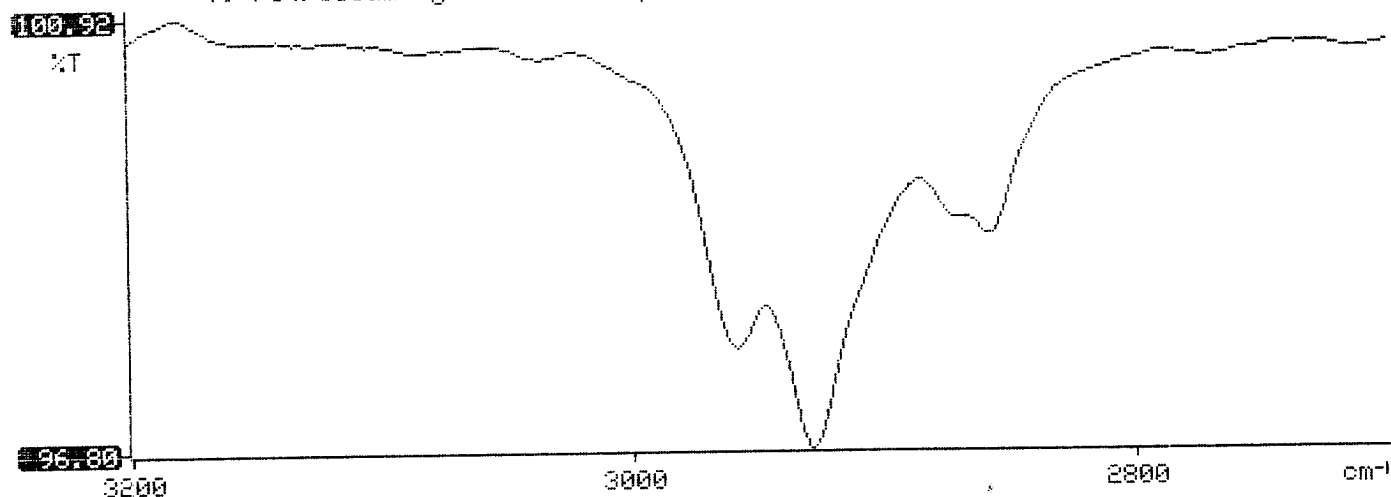
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*
95/08/04  10:29
*
*  Sample identification
947134
*
*  Initial mass of sample, g
2.030
*
*  Volume of sample after extraction, ml
28.000
*
*  Petroleum hydrocarbons, ppm
55.183
*  Net absorbance of hydrocarbons (2930 cm-1)
0.017
*
*
*

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Y: Petroleum hydrocarbons spectrum

10:29





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

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.: 508342
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE I & II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	947134	NON-AQ	08/02/95	08/09/95	08/10/95	1
02	947135	NON-AQ	08/02/95	08/09/95	08/09/95	1
03	947137	NON-AQ	08/02/95	08/09/95	08/09/95	1
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	0.57	<0.025	<0.025
TOLUENE			MG/KG	0.47	<0.025	0.052
ETHYLBENZENE			MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES			MG/KG	0.18	<0.025	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%) 99 104 108