

EPFS PIT CLOSURE SUMMARY

Penny S. Faust
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Annie L. Elliot B #2
Meter/Line ID - 70473

Approved

SITE DETAILS

Legals - Twn: 29 Rng: 9
NMOCD Hazard Ranking: 30
Operator: Amoco

Sec: 10 Unit: M
Land Type: BLM

PREVIOUS ACTIVITIES

Site Assessment: 5/7/94
Monitor Well: N/A

Excavation: 5/17/94
Re-Excavation: N/A

Soil Boring: 6/19/95
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 595 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be below standards at 16 mg/kg and TPH was above standards at 474 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 below the excavation consisted of a tan, medium to coarse grained sand, which continued to the termination of the boring at 60 feet bgs. A soil sample was collected for BTEX and TPH analysis at 58.5-60.5 feet bgs. Laboratory analysis showed all BTEX compounds to be below laboratory detection limits and TPH present at 59.2 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 46.5 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.

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

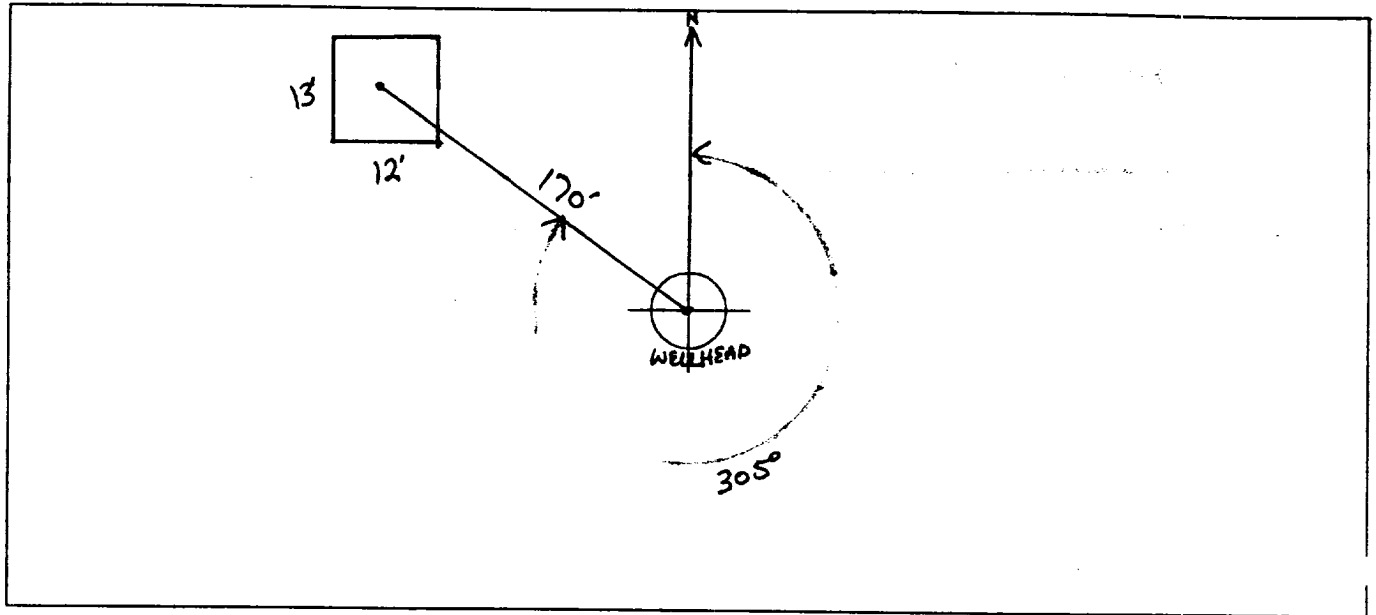
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>70473</u> Location: <u>ANNIE L. ELLIOT B #2</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>M</u> Section <u>10</u> Township: <u>29</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5.7.94</u> Area: <u>10</u> Run: <u>53</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 type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input checked="" type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>MANZANARES 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>30</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>THREE PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. LOCATION IS JUST WEST OF HWY. 64 ON A LITTLE HILL IN MANZANARES CANYON.</u></p> <p><u>PEOLINE AND TOPO CONFIRMED LOCATION TO BE INSIDE THE V.Z.</u></p> <p><u>DIG & HAZEL</u></p>																

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 305° Footage from Wellhead 170'
 b) Length : 13' Width : 12' Depth : 3'

ORIGINAL PIT LOCATION



Remarks :

TOOK PICTURES AT 3:10 P.M.

END DUMP

REMARKS

Completed By:

Robert Thompson

Signature

5.7.94

Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>70473</u> Location: <u>Annie L Elliot B #2</u></p> <p>Coordinates: Letter: <u>M</u> Section <u>10</u> Township: <u>29</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>5-17-94</u> Area: <u>10</u> Run: <u>53</u></p>
OBSERVATIONS	<p>Sample Number(s): <u>KD 68</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>595 ppm</u> PID Reading Depth <u>12'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>30</u></p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>5-17-94</u> Pit Closed By: <u>BEI</u></p>
REMARKS	<p>Remarks : <u>Excavated Pit to 12', took PID Sample, closed Pit.</u></p>
SIGNATURE	<p>Signature of Specialist: <u>Kerry Dancer</u></p>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD68	945199
MTR CODE SITE NAME:	70473	N/A
SAMPLE DATE TIME (Hrs):	5-17-94	1300
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-18-94	5/18/94
DATE OF BTEX EXT. ANAL.:	5/23/94	5/27/94
TYPE DESCRIPTION:	VC	Brown/Grey coarse sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.12	MG/KG	5			
TOLUENE	1.5	MG/KG	5			
ETHYL BENZENE	1.1	MG/KG	5			
TOTAL XYLENES	13	MG/KG	5			
TOTAL BTEX	16	MG/KG				
TPH (418.1)	474	MG/KG			2.07	28
HEADSPACE PID	595	PPM				
PERCENT SOLIDS	93.7	%				

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

The Surrogate Recovery was at 125 % 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:

John Fardhi

Date:

7/14/94



Analytical **Technologies**, Inc.

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

ATI I.D. 405389

June 2, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **05/20/94**, 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.

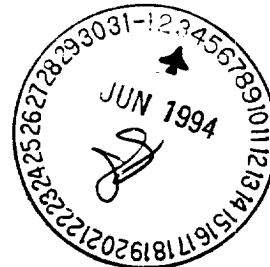
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jd

Enclosure




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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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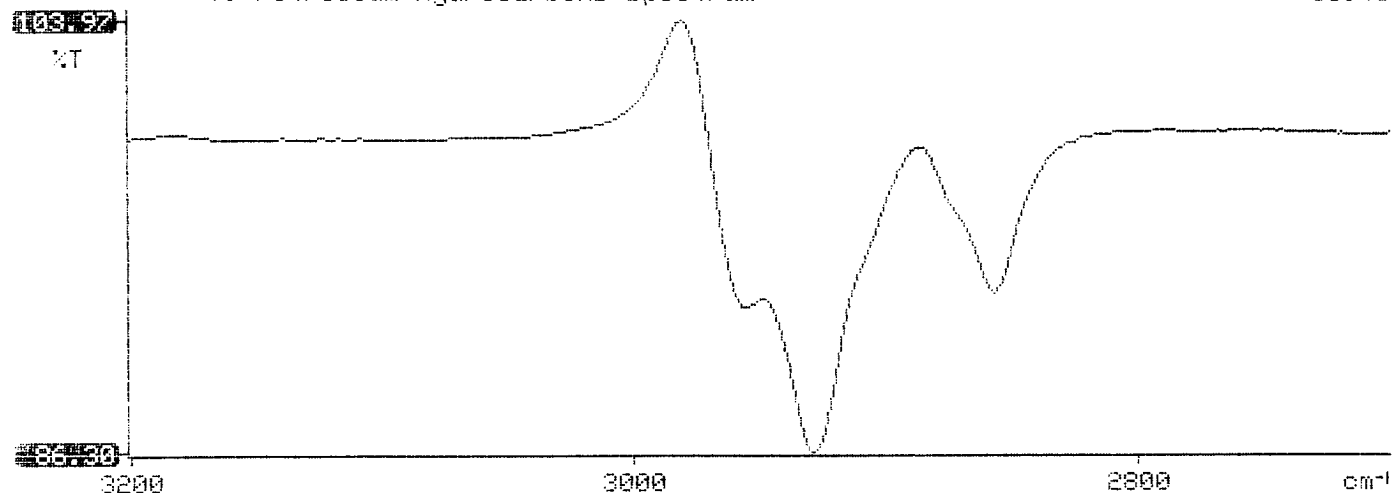
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* 94/05/18 13:45
*
* Sample identification
* 945199
*
* Initial mass of sample, g
* 2.070
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 474.278
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.061
*
*
*

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Y: Petroleum hydrocarbons spectrum

13:45



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 405389
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	945198	NON-AQ	05/17/94	05/23/94	05/26/94	1
08	945199	NON-AQ	05/17/94	05/23/94	05/27/94	5
09	945200	NON-AQ	05/17/94	05/23/94	05/26/94	1

PARAMETER	UNITS	07	08	09
BENZENE	MG/KG	<0.025	<0.12	<0.025
TOLUENE	MG/KG	<0.025	1.5	<0.025
ETHYLBENZENE	MG/KG	<0.025	1.1	<0.025
TOTAL XYLENES	MG/KG	<0.025	13	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%)	84	125*	86
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*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

RECORD OF SUBSURFACE EXPLORATION

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

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

(606) 326-2262 FAX (606) 326-2388

Project Name EPNG Pits
Project Number 14509 Phase 601
Project Location Annie L. Elliot BH #2, 7047-
AK 6/19/95

Well Logged By S. Kelly
Personnel On-Site M. Donohue, J. O'Reife
Contractors On-Site _____
Client Personnel On-Site _____

Elevation _____

Borehole Location _____

GWL Depth _____

Logged By S. Kelly

Drilled By M. Donohue

Date/Time Started 6/19/95, 0705 0905

Date/Time Completed 6/19/95, 0900 1200

Drilling Method 4 1/4" ID 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 <u>5/H5</u> BZ BH S			Drilling Conditions & Blow Counts
0				Backfill to 12'						
1	1	13.5-16.5	1.1'	SAND, tan, med to coarse sand, loose damp.			0	0	<u>28</u> <u>303</u>	0915
2	2	18.5-20.5	1.0'	SAA, but olive grey					<u>162</u> <u>369</u>	0922
3	3	23.5-25.5	1.4'	SAA - w trace fine gravel					<u>268</u> <u>366</u>	0930
4	4	28.5-30.5	1.0'	SAA					<u>209</u> <u>335</u>	0937
5	5	33.5-35.5	1.2'	SAA - w/ 2" interval of fine sand at ~35.0'					<u>210</u> <u>154</u>	0949
6	6	38.5-40.5	1.1'	SAA - w/ mostly fine sand moist					<u>164</u> <u>229</u>	0959

Comments:

See page 2.

Geologist Signature

Sarah Kelly

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 601
Project Location Annie L Elliot B#2, 70473

Elevation _____
Borehole Location _____
GWL Depth _____
Logged By S.Kelly
Drilled By _____
Date/Time Started 6/19/95, 0905
Date/Time Completed 6/19/95, 1200

Well Logged By S.Kelly
Personnel On-Site _____
Contractors On-Site _____
Client Personnel On-Site _____
Drilling Method _____
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 <u>SHS</u>			Drilling Conditions & Blow Counts
							BZ	BH	S	
40										
45	7	43.5-45.5	1.2'	SAA					148 174	1010
50		48.5-50.5	.9'	SAA			0	30	161 233	1023
55		53.5-55.5	.9'	SAND, tan, fine to coarse sand with trace fine gravel, med. dense, damp well graded.		53	17	208	165 221	1135
60		58.5-60.0		SAND, tan, fine sand with trace silt		57			4 14	1155
65				BOH - 60'						
30										
35										
40										

Comments:

58.5-60.5 sample sent to lab (BTEX & TPH) (SEK13). BH grouted to surface.

Geologist Signature Sarah Kelly



Phase II

Annie L. Elliot B II

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

	Field ID	Lab ID
SAMPLE NUMBER:	SEX 14	946912
MTR CODE SITE NAME:	70473	N/A
SAMPLE DATE TIME (Hrs):	6-19-95	1155
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL:	6-21-95	6-21-95
DATE OF BTEX EXT. ANAL:	6-22-95	6-22-95
TYPE DESCRIPTION:	VG	light brown coarse sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	<0.025	MG/KG	1			
ETHYL BENZENE	<0.025	MG/KG	1			
TOTAL XYLENES	<0.025	MG/KG	1			
TOTAL BTEX	20.10	MG/KG				
TPH (418.1)	59.2	MG/KG			1.98	28
HEADSPACE PID	14	PPM				
PERCENT SOLIDS	97.7	%				

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

The Surrogate Recovery was at 96 % for this sample All QA/QC was acceptable.
Narrative:

ATI results attached

DF = Dilution Factor Used

Approved By: Date: 7/11/95

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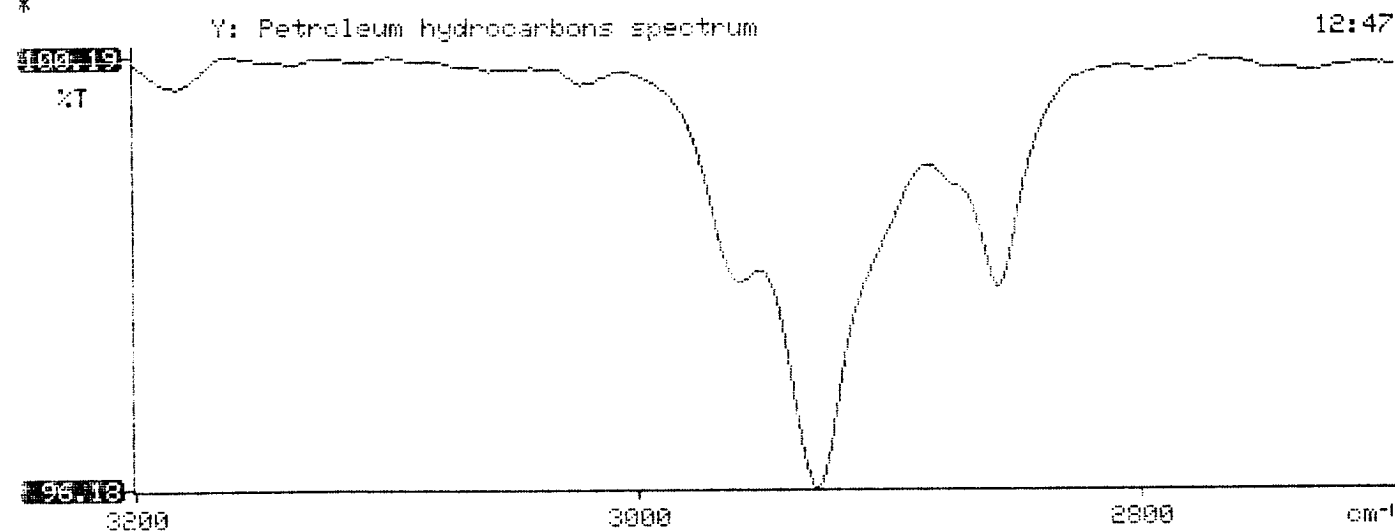
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                  *
*      Analysis Report    *
*                    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

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* 95/06/21 12:47
*
* Sample identification
* 946914
*
* Initial mass of sample, g
* 1.980
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 59.244
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.017
*
*
*

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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. **506401**

June 27, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II 24324

Attention: John Lambdin

On 06/22/95, 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.

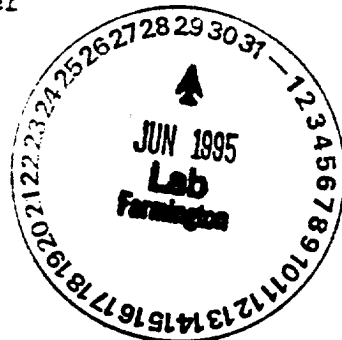
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:gsm

Enclosure





Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506401
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946912	NON-AQ	06/19/95	06/22/95	06/22/95	1
02	946913	NON-AQ	06/19/95	06/22/95	06/22/95	1
03	946914	NON-AQ	06/19/95	06/22/95	06/22/95	1
PARAMETER			UNITS	01	02	03
BENZENE			MG/KG	<0.025	<0.025	<0.025
TOLUENE			MG/KG	<0.025	<0.025	<0.025
ETHYLBENZENE			MG/KG	<0.025	<0.025	<0.025
TOTAL XYLENES			MG/KG	<0.025	<0.025	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%)	98	93	96
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