Jennifer Pratt
DEPUTY OIL & GAS INSPECTOR
DEC 21 1998
Approved

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

RECEIVED
JUL 2 1998
OIL CON. DIV.
DIST. 3

HEATH GAS COM C 1A
Meter/Line ID - 89932

SITE DETAILS

Legals - Twn: 30 **Rng:** 09 **Sec:** 31 **Unit:** N
NMOCD Hazard Ranking: 60 **Land Type:** 2 - Federal
Operator: AMOCO PRODUCTION COMPANY **Pit Closure Date: 01/31/95**

RATIONALE FOR RISK-BASED CLOSURE:

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

J:\18954\rbc

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 89932 Location: Heath Gas Com C 1A
Operator #: 0203 Operator Name: Amoco P/L District: Bloomfield
Coordinates: Letter: N Section 31 Township: 30 Range: 9
Or Latitude ✓ Longitude ____
Pit Type: Dehydrator ✓ Location Drip: ___ Line Drip: ___ Other: ____
Site Assessment Date: 1/16/95 Area: 10 Run: 83

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 Vaca 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'

TOTAL HAZARD RANKING SCORE: 60 **POINTS**

REMARKS

Remarks : Redline Book: Inside Vulnerable Zone Topo: Inside
3 pits. Closed

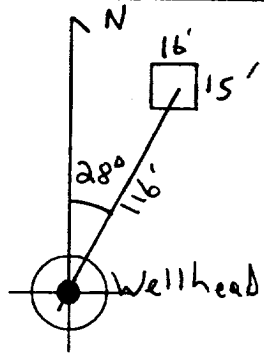
DIGHAU

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 28° Footage from Wellhead 116'

b) Length : 16' Width : 15' Depth : 4'



REMARKS

Remarks :

Pictures @ 1156 hr 9-13 roll 2

Completed By:

Cory Chance
Signature

1/16/95
Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 89932 Location: Heath Gas Com C #1A

Coordinates: Letter: N Section 31 Township: 30 Range: 9

Or Latitude _____ Longitude _____

Date Started : 1-31-95 Run: 10 83

FIELD OBSERVATIONS

Sample Number(s): MK 342 _____ _____ _____

Sample Depth: 6' Feet

Final PID Reading 318 PID Reading Depth 6' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒	Approx. Cubic Yards 20
Onsite Bioremediation	☐	
Backfill Pit Without Excavation	☐	

Soil Disposition:

Envirotech	☐	☒	Tierra
Other Facility	☐	Name:	_____

Pit Closure Date: 1-31-95 Pit Closed By: BEI

REMARKS

Remarks : Arrived took Fence down removed to truck loads of soil Hit Rock at 6' Soil Gray Strong Hydrocarbon odor

Signature of Specialist: Morgan Killion

(SP3191) 03/16/94

El Paso 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:	MK 342	946614
MTR CODE | SITE NAME:	89932	N/A
SAMPLE DATE | TIME (Hrs):	1-31-95	0925
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	2/2/95	2/2/95
DATE OF BTEX EXT. | ANAL.:	2/1/95	2/2/95
TYPE | DESCRIPTION:	VC	light gray sand and clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	48.9	MG/KG	0.79681		2.51	20
TOLUENE	296	MG/KG				
ETHYL BENZENE	30.0	MG/KG				
TOTAL XYLENES	265	MG/KG				
TOTAL BTEX	641	MG/KG				
TPH (418.1)	4990	MG/KG			0.51	28
HEADSPACE PID	318	PPM				
PERCENT SOLIDS	87.5	%				

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

The Surrogate Recovery was at 81.5 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 2-22-95

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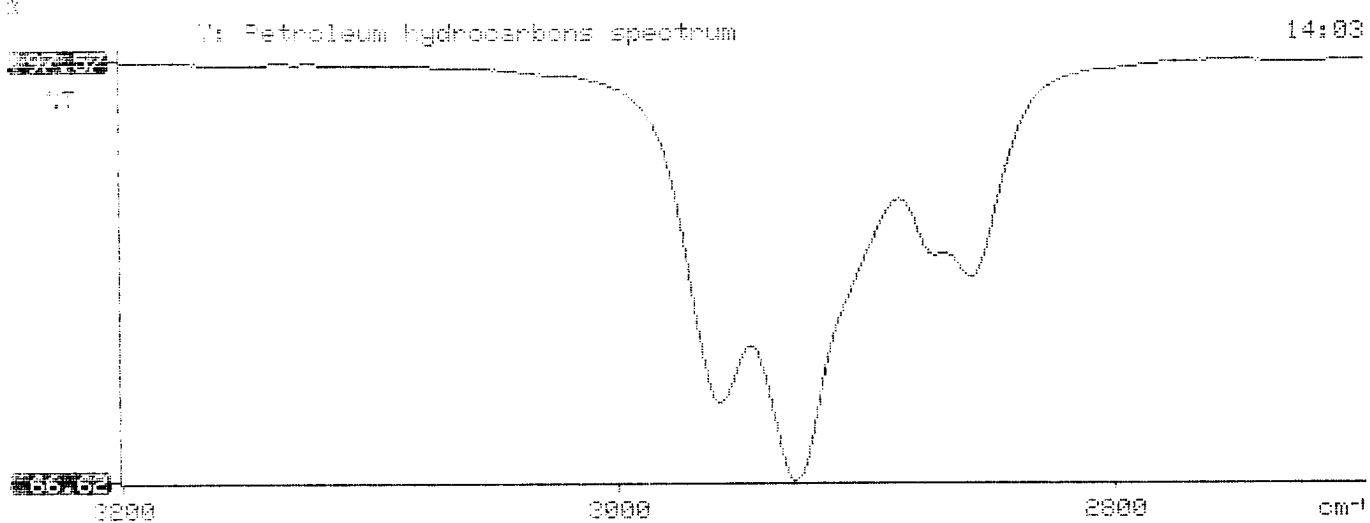
************************   ************************
*                     Test Me_hod for                    *
*      Oil and Grease and Petroleum Hydrocarbons         *
*                    in Water and Soil                   *
*                                                        *
*              Perkin-Elmer Model 1600 FT-IR             *
*                     Analysis Report                    *
**********************************************************
*
 95/12/02  14:02
*
*  Sample identification
 744614
*
*  Initial mass of sample, g
 0.510
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 4991.422
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.165
*
*
*
```



BTEX SOIL SAMPLE WORKSHEET

File	: 946614A	**Date Printed**	: 2/2/95		
Soil Mass (g)	: 2.51	**Multiplier (L/g)**	: 0.00199		
Extraction vol. (mL)	: 20	**DF (Analytical)**	: 400		
Shot Volume (uL)	: 50	**DF (Report)**	: 0.79681		

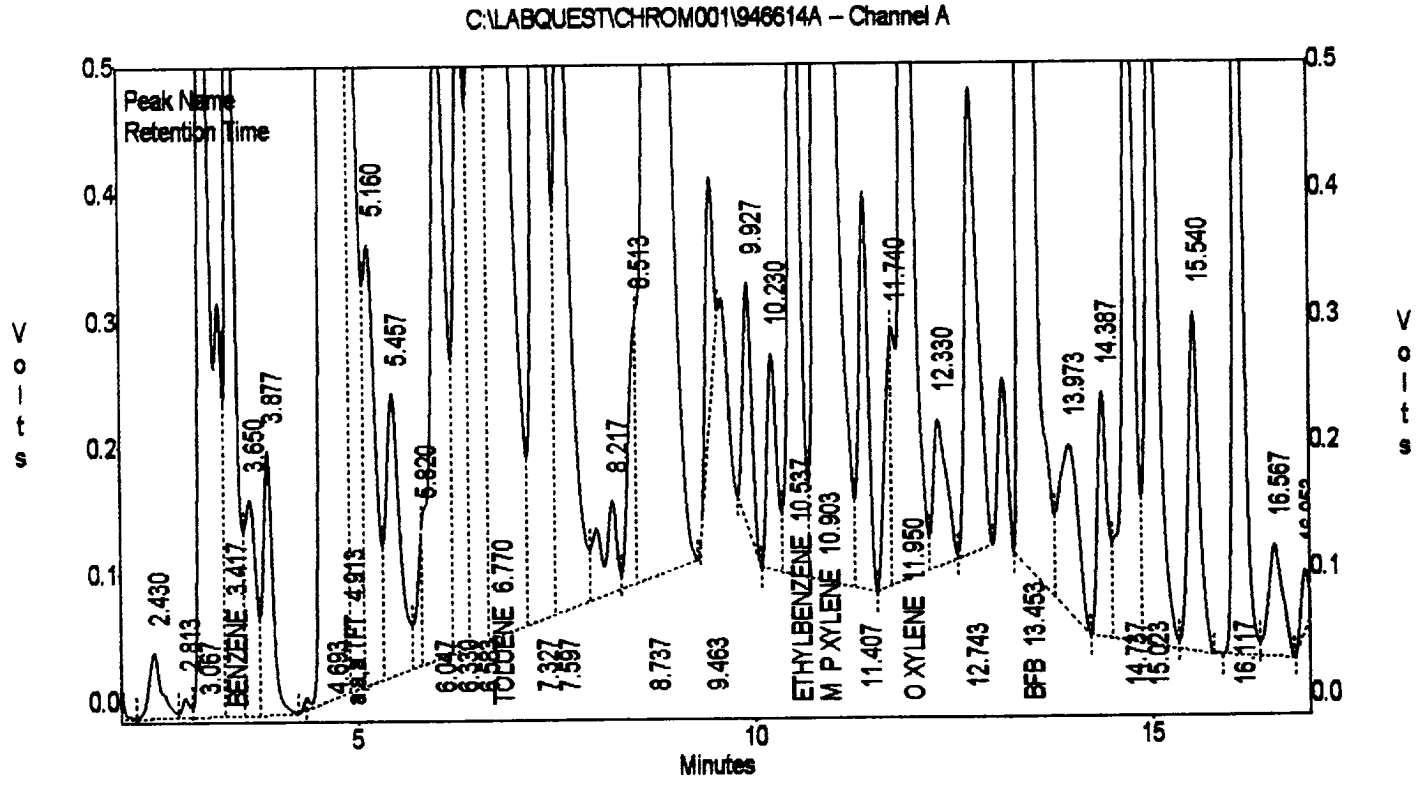
			Det. Limit
Benzene (ug/L)	: 61.39	**Benzene (mg/Kg):**	**48.916**	3.984
Toluene (ug/L)	: 371.87	**Toluene (mg/Kg):**	**296.311**	3.984
Ethylbenzene (ug/L)	: 37.67	**Ethylbenzene (mg/Kg):**	**30.016**	3.984
p & m-xylene (ug/L)	: 268.15	p & m-xylene (mg/Kg):	213.665	7.968
o-xylene (ug/L)	: 64.92	o-xylene (mg/Kg):	51.729	3.984
		Total xylenes (mg/Kg):	**265.394**	11.952
		Total BTEX (mg/Kg):	**640.637**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946614A
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 946614,2.51G/50uL
Acquired : Feb 02, 1995 15:53:46
Printed : Feb 02, 1995 16:20:00
User : Tony

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.417	7908277	121531.74219	61.3924
a,a,a TFT	4.913	6976632	32055.68359	214.1160
TOLUENE	6.770	91898864	314479.71875	371.8703
ETHYLBENZENE	10.537	8494582	228573.29688	37.6748
M & P XYLENE	10.903	67505664	316768.40625	268.1457
O XYLENE	11.950	14306792	221087.17188	64.9212
BFB	13.453	77741728	944778.31250	81.5250
Totals :		274832544		1099.6454

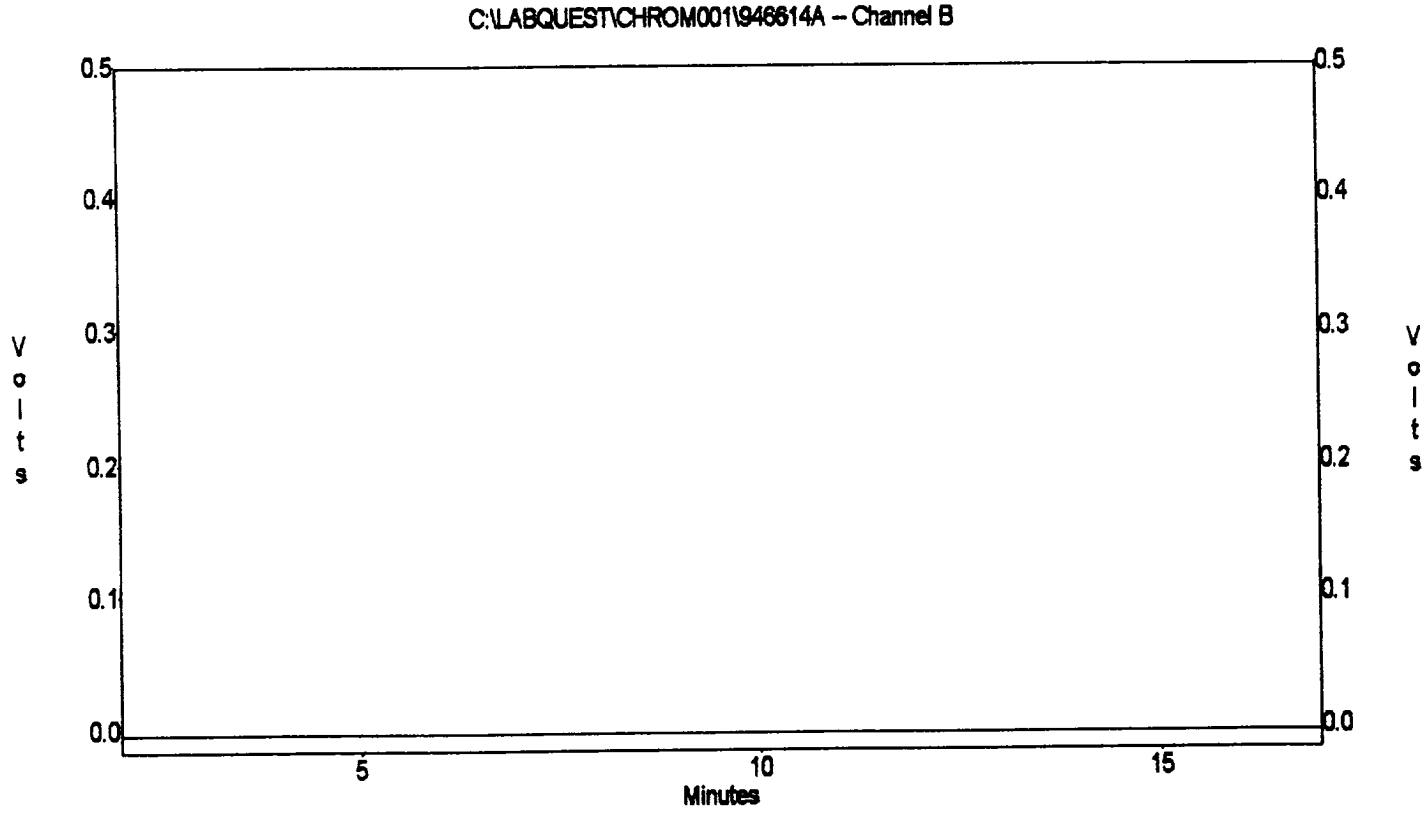


EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\946614A
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 946614,2.51G/50uL
Acquired : Feb 02, 1995 15:53:46
Printed : Feb 02, 1995 16:20:06
User : Tony

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	3.450	0	0.00000	0.0000
a,a,a TFT	4.950	0	0.00000	0.0000
TOLUENE	6.787	0	0.00000	0.0000
ETHYLBENZENE	10.480	0	0.00000	0.0000
M & P XYLENE	10.833	0	0.00000	0.0000
O XYLENE	11.900	0	0.00000	0.0000
BFB	13.400	0	0.00000	0.0000
Totals :		0		0.0000



PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 2

PHILIP ENVIRONMENTAL
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 Heath Gas Com C1A 89932

Elevation
Borehole Location
GWL Depth
Logged By CM Chance
Drilled By M. Donahue
Date/Time Started 5/24/95 - 0820
Date/Time Completed 5/24/95 - 1020

Well Logged By CM Chance
Personnel On-Site M. Donahue, K. Padilla, F. Rios
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4 I.D. 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				Backfill to 6'						
5										
10	1	10-12	16"	Br sandy CLAY, vf sand, med stiff, low plastic, dry			0	31	146/217	0639
15	2	15-17	10"	lt Grn, silty SAND, vf sand, med dense, sl moist,			0	30	75/127	0649
20	3	20-22	8"	Gry silty SAND, abnt vf sand, med dense, sl moist			0	25	54/184	0700
25	4	25-27	10"	Gry silty SAND, abnt vf-f sand, med dense, sl moist			0	20	4/181	0711
30	5	30-32	10"	Br silty SAND, abnt vf-f sand, med dense, sl moist			0	30	28/58	0735
35	6	35-37	4"	Gry SAND, tr silt, f-med sand, loose, sl moist			0	25	32/64	0747
40	7	40-42	8"	Gry silty Clay, stiff, low plastic, dry			0	30	48/61	0800

Comments:

Geologist Signature

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 2 of 2

PHILIP ENVIRONMENTAL
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 Heath Gas Com C1A 89932

Elevation ±
Borehole Location
GWL Depth
Logged By CM Chance
Drilled By M. Donahue
Date/Time Started
Date/Time Completed

Well Logged By CM Chance
Personnel On-Site M. Donahue, K. Padilla
Contractors On-Site
Client Personnel On-Site

Drilling Method 4¼ I.D. 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	HS	Drilling Conditions & Blow Counts
40										
45	8	45-47	5"	Gry silty CLAY, very stiff, nonplastic, dry			0	80	32/73	0821
50	9	50-51	6"	AA			0	30	15/56	0845
55	10	55-57	8"	AA			0	28	6/14	0909
				TDB 56.5'						
60										
65										
70										
75										
80										

Comments: 55-57' sample submitted to lab (BTEX, TPH) CMC 23

Geologist Signature

Phase II

El Paso 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:	cmc 23	94834
MTR CODE | SITE NAME:	89932	N/A
SAMPLE DATE | TIME (Hrs):	5-24-95	0909
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	5/25/95	5/25/95
DATE OF BTEX EXT. | ANAL.:	5/30/95	6/1/95
TYPE | DESCRIPTION:	VG	Light grey fine sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.025	MG/KG	1			
TOLUENE	0.11	MG/KG	1			
ETHYL BENZENE	< 0.025	MG/KG	1			
TOTAL XYLENES	0.046	MG/KG	1			
TOTAL BTEX	0.206	MG/KG				
TPH (418.1)	66.3	MG/KG			1.96	28
HEADSPACE PID	14	PPM				
PERCENT SOLIDS	91.2	%				

-- 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: John Loredo Date: 6/8/95

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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                      *
**********************************************************
*
 95/05/25  11:00
*
*  Sample identification
 946834
*
*  Initial mass of sample, g
 1.760
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 66.259
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.018
*
*
*
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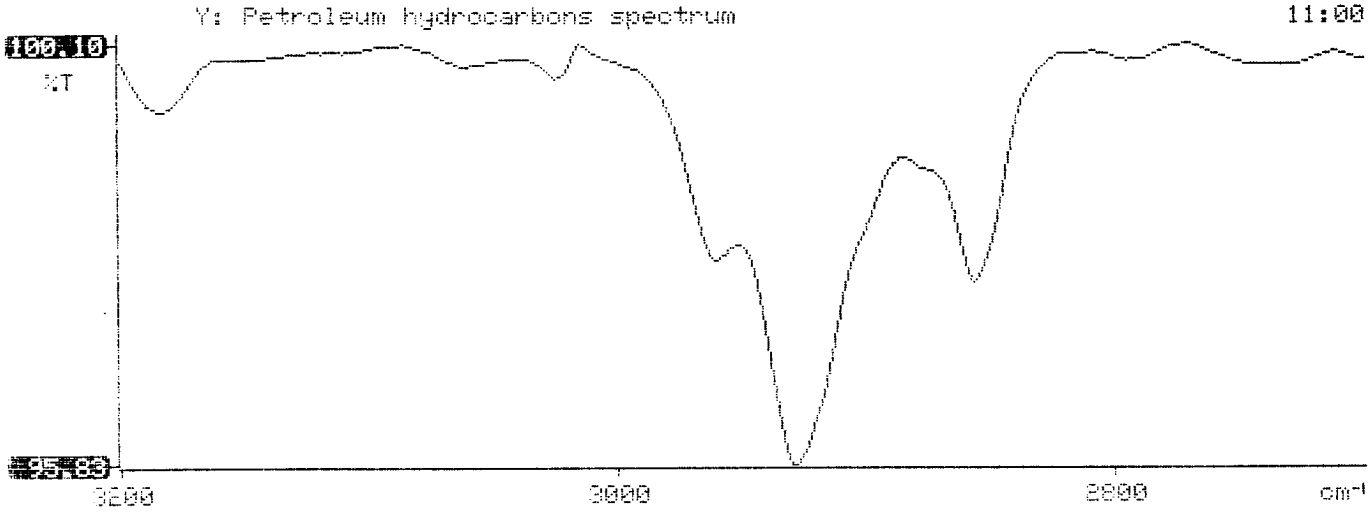


Analytical **Technologies,** Inc.

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

ATI I.D. **505394**

June 5, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **05/26/95**, 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.

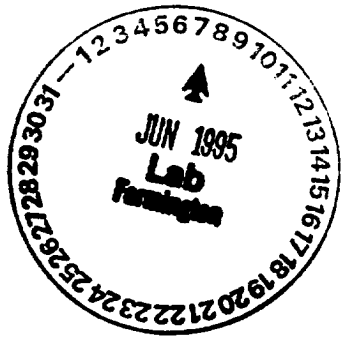
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 505394
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	946833	NON-AQ	05/23/95	05/30/95	06/01/95	1
05	946834	NON-AQ	05/24/95	05/30/95	06/01/95	1

PARAMETER	UNITS	04	05
BENZENE	MG/KG	<0.025	<0.025
TOLUENE	MG/KG	<0.025	0.11
ETHYLBENZENE	MG/KG	<0.025	<0.025
TOTAL XYLENES	MG/KG	0.037	0.046
SURROGATE:			
BROMOFLUOROBENZENE (%)		95	99