

Denny L. Tait
DEPUTY OIL & GAS SUPERVISOR
EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

Approved

EPNG COM B LS 3A
Meter/Line ID - 90372

RECEIVED
JUL 2 1998

SITE DETAILS

Legals - Twn: 31 Rng: 10 Sec: 32
NMOCD Hazard Ranking: 40
Operator: AMOCO PRODUCTION COMPANY

Unit: E
Land Type: 1 - State
Pit Closure Date: 09/14/94

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.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

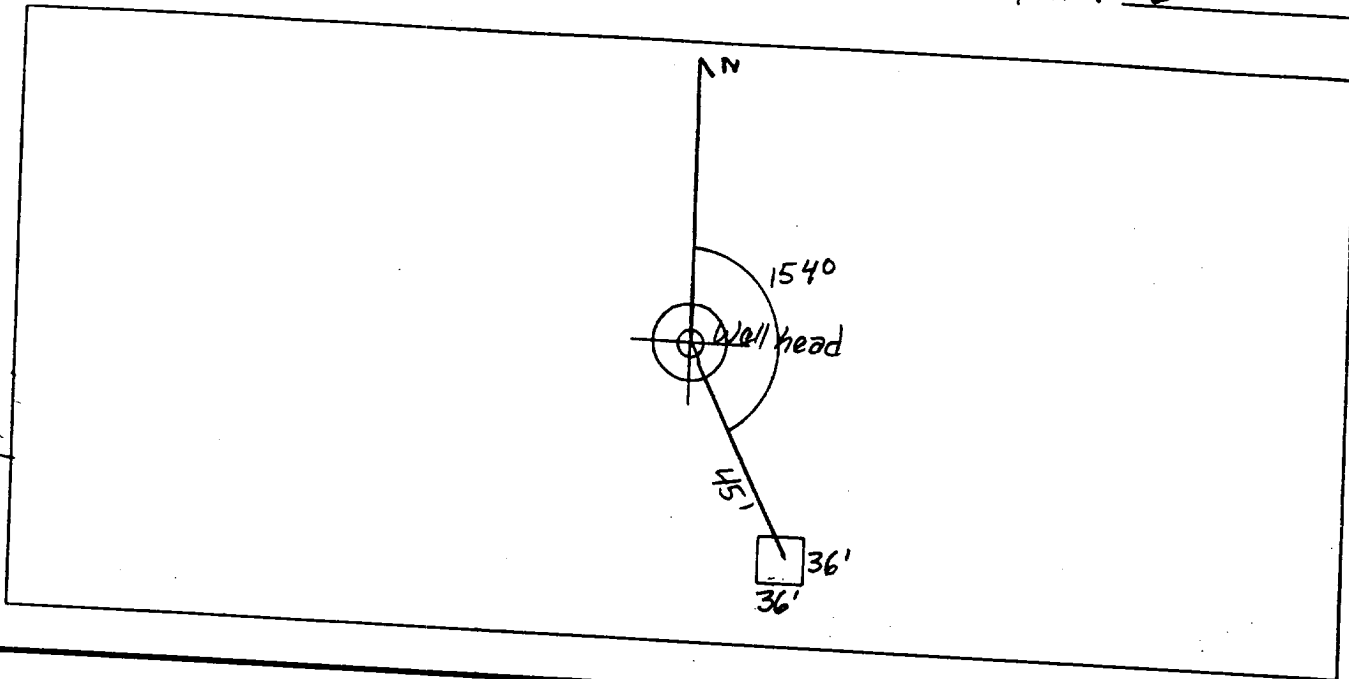
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>90-372</u> Location: <u>EPNG Com B L5 3A</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Amoco Production</u> P/L District: <u>Aztec</u></p> <p>Coordinates: Letter: <u>E</u> Section <u>32</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>8/16/94</u> Area: <u>04</u> Run: <u>63</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p>Land Type: BLM <input type="checkbox"/> (1) State <input checked="" type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)</p> <p>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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Jones Arroyo</u> (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) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>40</u> POINTS</p>
REMARKS	<p>Remarks : <u>Redline Book - Inside Vulnerable Zone Type - Inside</u> <u>Five pits, location drip pit is dry, will close one pit.</u></p> <p style="text-align: right;"><u>DIG & HAUL</u></p>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 154° Footage from Wellhead 45'
 b) Length : 36' Width : 36' Depth : 6'



REMARKS

Remarks :

Pictures @ 1100 (13-16, Roll 12)
Dump Truck

Completed By:

Sam Kelly
 Signature

8/16/94
 Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 90372 Location: EPNG Com B LS 3A

Coordinates: Letter: E Section 32 Township: 31 Range: 10

Or Latitude _____ Longitude _____

Date Started : 9/14/94 Run: 04 63

FIELD OBSERVATIONS

Sample Number(s): KD 258

Sample Depth: 7' Feet

Final PID Reading 450 ppm

PID Reading Depth 7' Feet

Yes No

Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation

☒ Approx. Cubic Yards 30

Onsite Bioremediation

☐

Backfill Pit Without Excavation

☐

Soil Disposition:

Envirotech

☐

☒ Tierra

Other Facility

☐

Name: _____

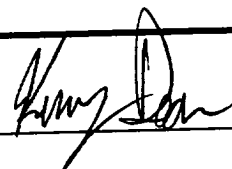
Pit Closure Date: 9/14/94

Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 7', Hit Sandstone took PID sample, closed pit.

Signature of Specialist: _____





SPLIT

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

KD 258

946125

90372

N/A

9-14-94

1220

N/A

9-15-94

9-15-94

9/15/94

9/17/94

vL

Black sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			DF	Q	M(g)	V(ml)	
BENZENE	23.6	MG/KG					15
TOLUENE	255	MG/KG					230
ETHYL BENZENE	38.7	MG/KG					28
TOTAL XYLENES	462	MG/KG					330
TOTAL BTEX	779	MG/KG	0.0385		0.52	20	403
TPH (418.1)	25,600	MG/KG			.28	28	34000 220
HEADSPACE PID	450	PPM					Surrogate % 78
PERCENT SOLIDS	86.8	%					Dilution Factor 20

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

The Surrogate Recovery was at 106% for this samp All QA/QC was acceptable.

Narrative:

ATI Results attached. D(50) = Diluted Soxhlet analyzed 9/21/94

DF = Dilution Factor Used

Approved By:

Date:

10/23/94

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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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04/09/15 14:15

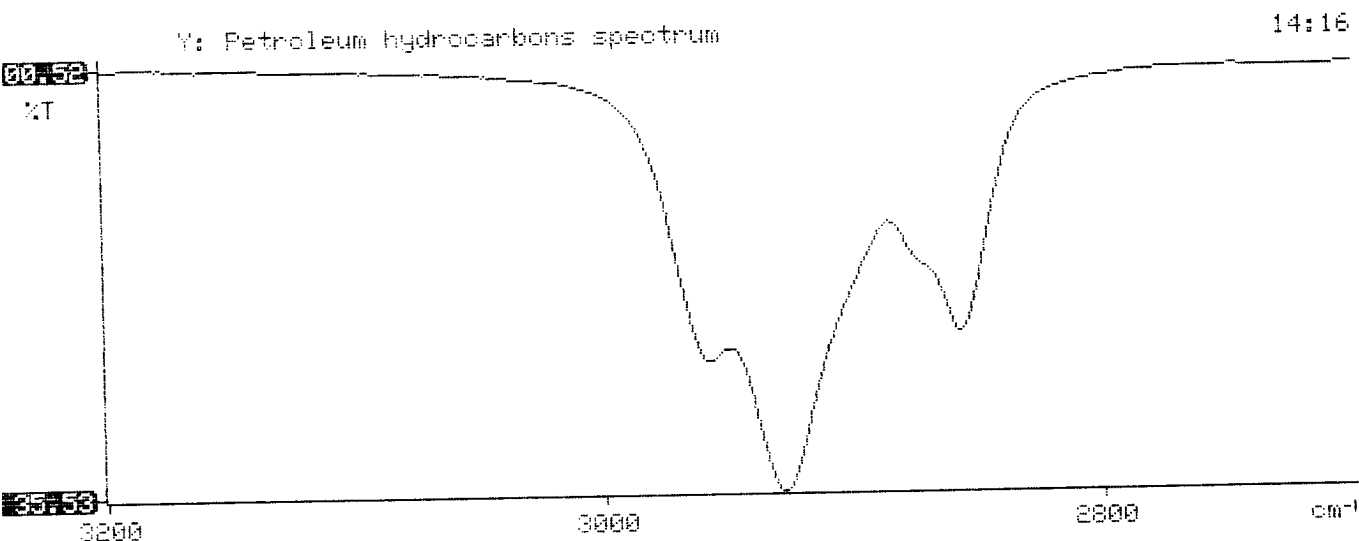
Sample Identification
246125

Initial mass of sample, g
0.280

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
25648.268

Net absorbance of hydrocarbons (2930 cm⁻¹)
0.448



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM\946125B
 Method : C:\LABQUEST\METHODS\SOILS.MET
 Sample ID : 946125 1/100 .52G/20ML
 Acquired : Sep 17, 1994 17:43:37
 Printed : Sep 17, 1994 18:09:48
 User : STACY

SCM

Channel A Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.733	846296	127951.77344	611.9853 6.12
a,a,a TFT	13.067	3244850	7303.77002	44369.2891
TOLUENE	15.600	9191350	128167.09375	6616.1270 66.2
ETHYLBENZENE	19.650	1283170	116407.63281	1005.8712 10.06
M & P XYLENE	19.833	13123937	167589.01563	9389.4883 93.9
O XYLENE	20.350	3276195	115447.89063	2613.5271 26.1
BFB	20.917	19592724	169985.04688	10637.7451 106.4

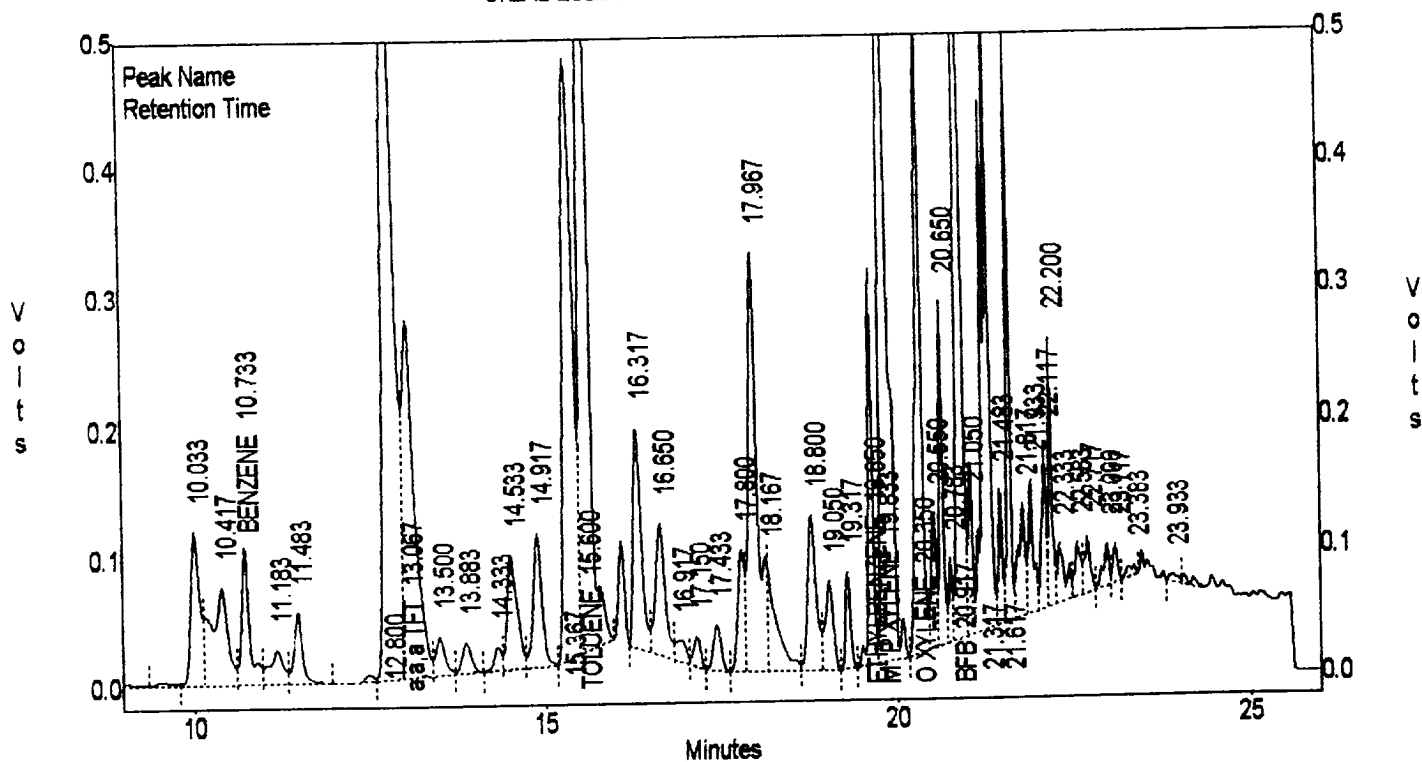
Totals :

50558524

75244.0313

Subtotal
 9/19/94

C:\LABQUEST\CHROM\946125B - Channel A



EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

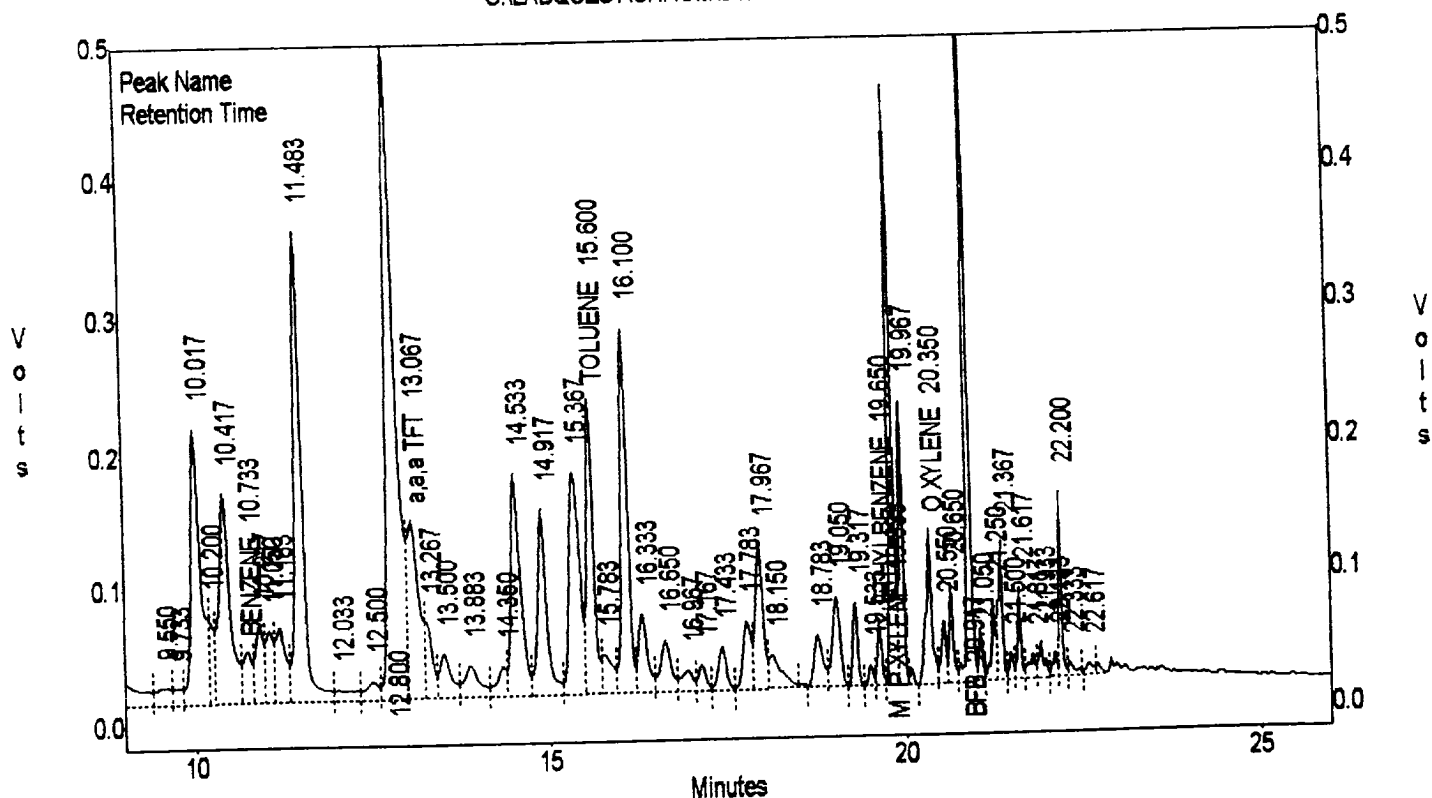
File : C:\LABQUEST\CHROM\946125B
 Method : C:\LABQUEST\METHODS\SOILS.MET
 Sample ID : 946125 1/100 .52G/20ML
 Acquired : Sep 17, 1994 17:43:37
 Printed : Sep 17, 1994 18:09:53
 User : STACY

Channel B Results

COMPONENT	RET TIME	AREA	AVG RF	CONC (ug/L)
BENZENE	10.733	326274	17134.41016	1695.5852
a,a,a TFT	13.067	1494638	1612.83142	92664.0078
TOLUENE	15.600	1500670	16955.15430	7868.3428
ETHYLBENZENE	19.650	199780	15800.91699	1105.4957
M & P XYLENE	19.833	1768246	16103.94629	9785.9600
O XYLENE	20.350	636414	15663.30664	3565.6011
BFB	20.917	2454877	18546.16797	13587.4814

Totals : 8380902 130272.4766

C:\LABQUEST\CHROM\946125B - Channel B





Analytical **Technologies**, Inc.

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

ATI I.D. 409367

September 22, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

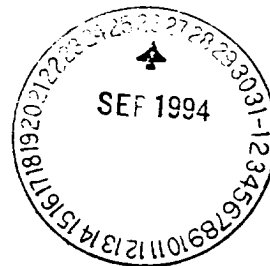
On 09/16/94, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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

Letitia Krakowski, Ph.D.
Project Manager

MR:jt

Enclosure



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
10	946123	NON-AQ	09/14/94	09/19/94	09/19/94	20
11	946124	NON-AQ	09/14/94	09/19/94	09/19/94	1
12	946125	NON-AQ	09/14/94	09/19/94	09/19/94	20
PARAMETER			UNITS	10	11	12
BENZENE			MG/KG	<0.5	<0.025	15
TOLUENE			MG/KG	<0.5	0.028	230 D(50)
ETHYLBENZENE			MG/KG	12	<0.025	28
TOTAL XYLENES			MG/KG	170	0.046	330

SURROGATE:
 BROMOFLUOROBENZENE (%) 118* 102 78

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

D(50)=DILUTED 50X, ANALYZED 09/21/94



GENERAL CHEMISTRY RESULTS

CLIENT : EL PASO NATURAL GAS CO. ATI I.D. : 409367
PROJECT # : 24324 DATE RECEIVED : 09/16/94
PROJECT NAME : PIT CLOSURE DATE ANALYZED : 09/20/94

PARAMETER	UNITS	01	12
PETROLEUM HYDROCARBONS, IR	MG/KG	2100	34000

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole #

BH1

Well #

Page

of

Project Name

EPNG Pits

Project Number

14509

Phase

604 6000

Project Location

EPNG Com B L53A, 90372

Elevation

Borehole Location T3, R10, S.32, E

GWL Depth

Logged By S.Kelly

Drilled By

M. Donohue

Date/Time Started 7/26/95 0715

Date/Time Completed 7/26/95 0840

Well Logged By

S.Kelly

Personnel On-Site

M. Donohue, D. Charley

Contractors On-Site

Client Personnel On-Site

Drilling Method

4 1/4" ID H517

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			Drilling Conditions & Blow Counts
0				Backfill to 7'						
5				Cuttings coming up on auger are black.						
10				Auger cuttings change to brown color						
15				No recovery						Drilling is hard, like rock. cut 1K 7/24/95
20	1	18- 19.5	None							0745-
25	Z	23- 25	1.1 2.0	SAND, lght. brown, fine to med, dense, damp, poorly graded.					0 0	0750
30				Both - 25.0'						
35										
40										

Comments:

23'-25' sample (SEK38) sent to lab (BTEX and TPH)
BH grouted to surface.

Geologist Signature

Sarah Kelly



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

Phase II Drilling

EPNG Com BL53A
(23-25')

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEX 38	947083
MTR CODE SITE NAME:	90372	N/A
SAMPLE DATE TIME (Hrs):	07-26-95	07:50
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	07-27-95	07-27-95
DATE OF BTEX EXT. ANAL.:	8-1-95	08-01-95
TYPE DESCRIPTION:	VG	

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	<0.10	MG/KG				
TPH (418.1)	30.9	MG/KG			1.99	28
HEADSPACE PID	0	PPM				
PERCENT SOLIDS	96.1	%				

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

The Surrogate Recovery was at 101 % 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 14:32

* Sample identification

947083

* Initial mass of sample, g

1.990

* Volume of sample after extraction, ml

28.000

* Petroleum hydrocarbons, ppm

30.945

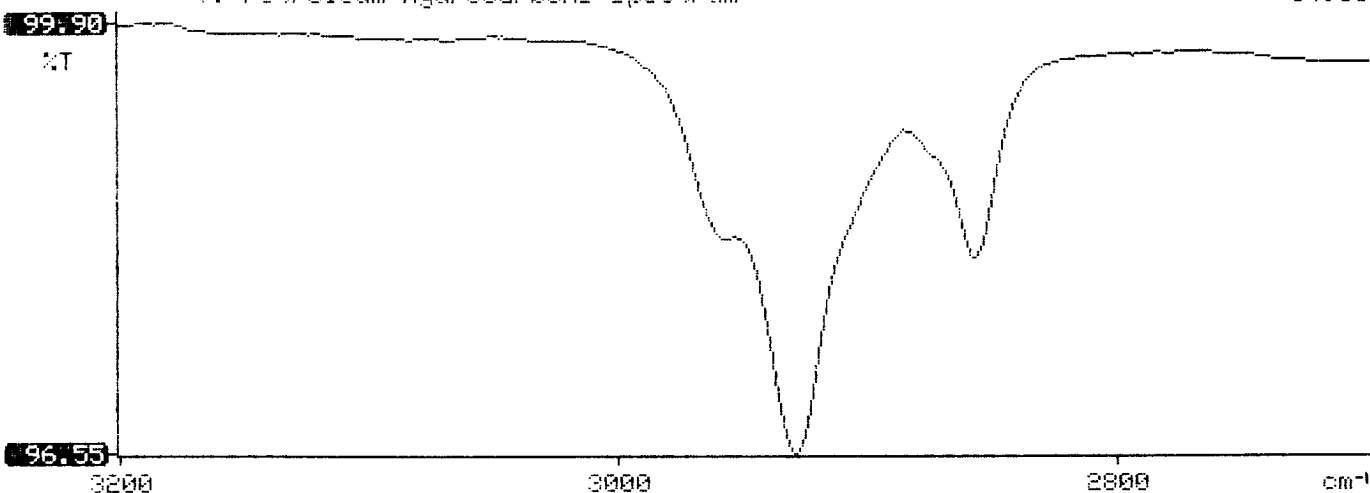
* Net absorbance of hydrocarbons (2930 cm⁻¹)

0.014

*
*
*

Y: Petroleum hydrocarbons spectrum

14:33





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.

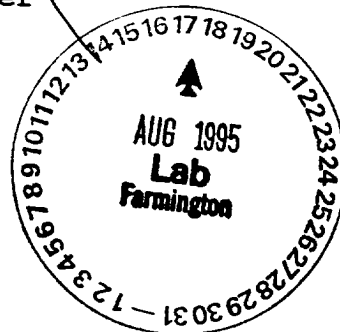
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

MR:jt

Enclosure

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager





Analytical Technologies, Inc.

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
01	947083	NON-AQ	07/26/95	08/01/95	08/01/95	1
02	947084	NON-AQ	07/26/95	08/01/95	08/01/95	1
03	947085	NON-AQ	07/26/95	08/01/95	08/01/95	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	0.027	<0.025	

SURROGATE:

BROMOFLUOROBENZENE (%)	101	99	104
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