EPFS PIT CLOSURE SUMMARY

Denny G. Foust
DEPUTY OIL & GAS INSPECTOR

JUL 17 1998

Approved

Atlantic B LS 5
Meter/Line ID - 70109

SITE DETAILS

Legals - Twn: 30 **Rng:** 10 **Sec:** 5 **Unit:** B
NMOCD Hazard Ranking: 40 **Land Type:** BLM
Operator: Amoco

PREVIOUS ACTIVITIES

Site Assessment: 8/16/94 **Excavation:** 9/14/94 **Soil Boring:** 7/26/95
Monitor Well: N/A **Re-Excavation:** N/A **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 165 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be above standards at 183 mg/kg and TPH was above standards at 4,770 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 dark gray, silty clay, which continued to approximately 22 feet bgs. At 22 feet bgs a gray, fine to medium grained silty sand was encountered and continued to approximately 27 feet bgs. At 27 feet bgs the soil lithology changed again to a black, nonplastic silty clay, which continued to the termination of the boring at 35 feet bgs. A soil sample was collected for BTEX and TPH analysis at 33-35 feet bgs. Laboratory analysis showed total BTEX and TPH to be below standards at .027 mg/kg and 43.4 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 21 feet beneath the initial excavation.
- The excavation was terminated in a clay material.
- 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: 70-109 Location: Atlantic B LS 5
Operator #: 0203 Operator Name: Amoco Production P/L District: Aztec
Coordinates: Letter: B Section 5 Township: 30 Range: 10
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 6/16/94 Area: 04 Run: 63

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 Jones Arroyo
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

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DIST. 3

Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 40 **POINTS**

REMARKS

Remarks : Redline Book - Inside Vulnerable Zone Topo - Inside
Five pits, location drip pit has liquid in it, Will close one pit.

OTC - 2 HAUL

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 70109 Location: ATLANTIC B LS5

Coordinates: Letter: B Section 5 Township: 30 Range: 10

Or Latitude _____ Longitude _____

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

FIELD OBSERVATIONS

Sample Number(s): KP # 234 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 165 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒	Approx. Cubic Yards 120
Onsite Bioremediation	☐	
Backfill Pit Without Excavation	☐	

Soil Disposition:

Envirotech	☐	☒	Tierra
Other Facility	☐	Name:	_____

Pit Closure Date: 9-14-94 Pit Closed By: B.E.T

REMARKS

Remarks : Some Link markers. Pit has some oil in it ~~St~~arted to Remediating to 12'. At 12' soil still the same Gray Looking with A smell.

Signature of Specialist: Kelly Padilla

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:	KP 234	946123
MTR CODE | SITE NAME:	70109	N/A
SAMPLE DATE | TIME (Hrs):	9-14-94	1400
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	9-15-94	9-15-94
DATE OF BTEX EXT. | ANAL.:	9-19-94	9-19-94
TYPE | DESCRIPTION:	VC	Brown Sand & 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	12	MG/KG	20			
TOTAL XYLENES	170	MG/KG	20			
TOTAL BTEX	~~DJB~~ 183	MG/KG				
TPH (418.1)	~~47~~ 4770	MG/KG			1.80	28
HEADSPACE PID	165	PPM				
PERCENT SOLIDS	EE.1	%				

-- 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:

DJB ATI Results attached. Surrogate Recovery was outside ATI QC limits due to matrix interference

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                        *
*************************************************************
*
 94/09/15  15:43
*
*  Sample identification
 946123
*
*  Initial mass of sample, g
 1.800
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 4766.203
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.533
*
*
*
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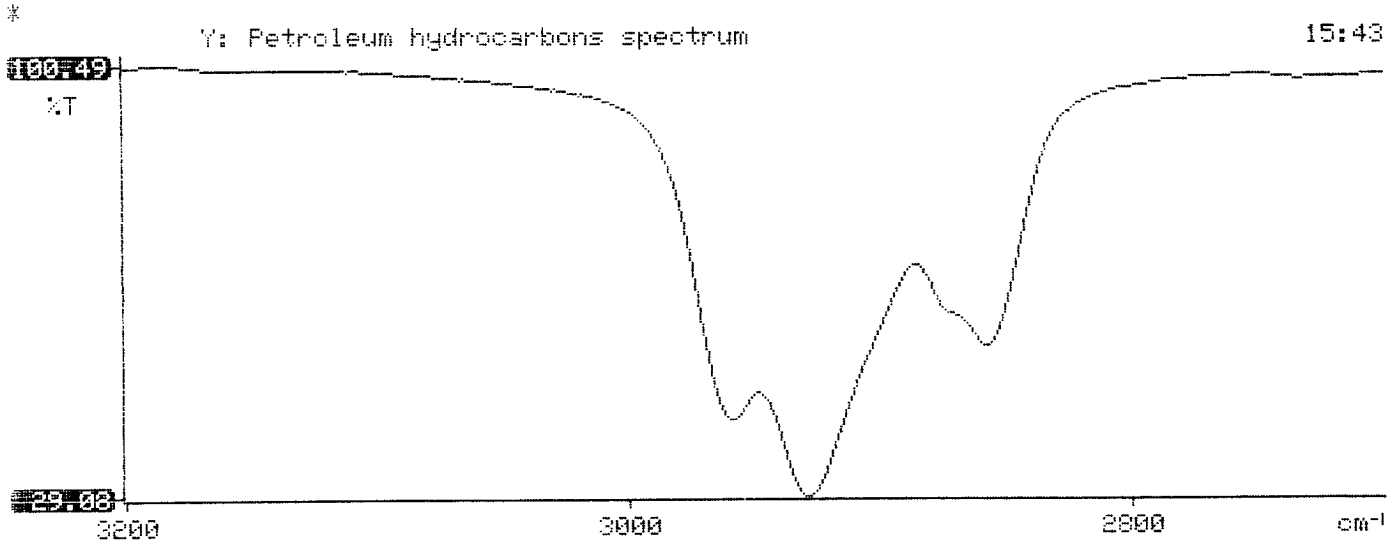


Analytical Technologies, Inc.

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

ATI I.D. **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

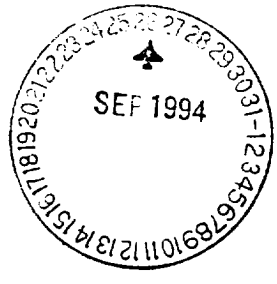
On **09/16/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

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



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
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

PHASE II

RECORD OF SUBSURFACE EX)RATION

Borehole # BH-1
Well #
Page 1 of 1

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 ~~601~~ 6000
Project Location Atlantic B #55, 70109

Elevation
Borehole Location T30, R10, S.5, B
GWL Depth
Logged By S.Kelly
Drilled By
Date/Time Started 7/26/95, 0845
Date/Time Completed 7/26/95, 1630

Well Logged By S.Kelly
Personnel On-Site M. Donohue, D. Charley
Contractors On-Site
Client Personnel On-Site

Drilling Method 4¼" 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 BZ	BH	S (HS)	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15										
20	1	18-20	.6'/2.0'	silty CLAY, dk grey, 10-25% silt, very soft, damp, nonplastic		22			0/8	0905
25	2	23-25	.1'/2.0'	silty SAND, grey, fine to med. sand, loose, damp. trace clay-5-15%		27			0/26	0910 - will continue drilling sample is still very grey, kind of smelly
30	3	28-30	.5'/2.0'	silty CLAY, black, 10-25% silt, soft, damp, nonplastic					0/46	0926 - will continue - same reason as above
35	4	33-35	.8'/2.0'	SAA turning to a more brownish color.					0/12	0935
40				BOH - 35.0'						

Comments: 33'-35' sample (SEK39) sent to lab (BTEX + TPH) Sample was bagged and iced prior to being put in jar. BH grouted to surface.

Geologist Signature Sarah Kelly

El Paso Natural Gas Company

Phase II Drilling
Atlantic BLS 5
(33-35')

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK 39	947084
MTR CODE | SITE NAME:	70109	N/A
SAMPLE DATE | TIME (Hrs):	07-26-95	09:35
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	07-27-95	07-27-95
DATE OF BTEX EXT. | ANAL.:	8-1-95	8-1-95
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	0.027	MG/KG	1			
TOTAL BTEX	0.027	MG/KG				
TPH (418.1)	43.4	MG/KG			2.11	28
HEADSPACE PID	12	PPM				
PERCENT SOLIDS	85.4	%				

-- 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: _____ Date: 8/22/95

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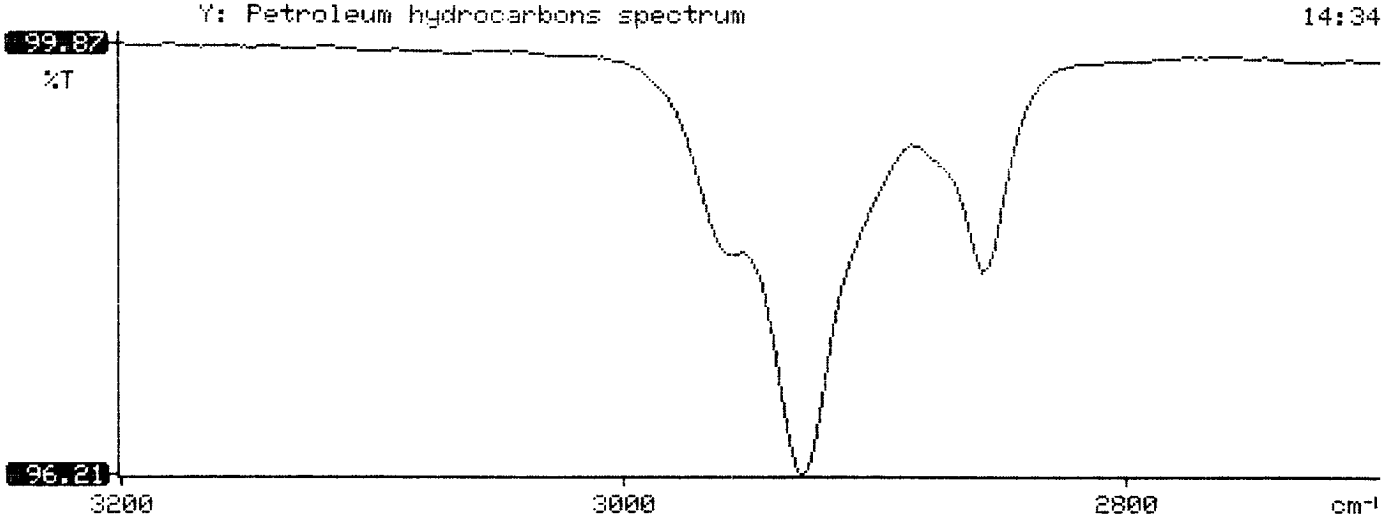
*
* Test Method for
* Oil and Grease and Petroleum Hydrocarbons
* in Water and Soil
*
* Perkin-Elmer Model 1600 FT-IR
* Analysis Report
****
*
95/07/27 14:34
*
* Sample identification
947084
*
* Initial mass of sample, g
2.110
*
* Volume of sample after extraction, ml
28.000
*
* Petroleum hydrocarbons, ppm
43.449
* Net absorbance of hydrocarbons (2930 cm-1)
0.016
*
*
*



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.

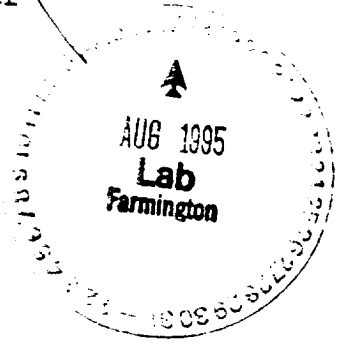
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

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.: 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