Denny G. Foust
DEPUTY OIL & GAS INSPECTOR

DEC 21 1998

Approved

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

RECEIVED
JUL 2 1999
OIL CON. DIV.
DIST. 3

SULLIVAN G.C. B 1A
Meter/Line ID - 89802

SITE DETAILS

Legals - Twn: 32 **Rng:** 10 **Sec:** 21 **Unit:** P
NMOCD Hazard Ranking: 40 **Land Type:** 4 - Fee
Operator: AMOCO PRODUCTION COMPANY **Pit Closure Date: 09/22/94**

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

Meter: 89-802 Location: Sullivan G.C. BIA
Operator #: 0203 Operator Name: Amoco P/L District: Aztec
Coordinates: Letter: P Section 21 Township: 32 Range: 10
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 9/7/94 Area: 04 Run: 43

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 Animas River
(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: 40 **POINTS**

REMARKS

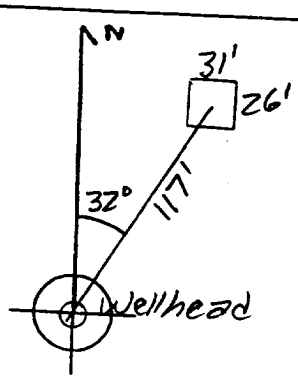
Remarks : Redline Book - Inside Vulnerable Zone Topo - Inside
~~Three~~ Four pits, location drip pit is dry. Will close one pit.
SK 9/7/94
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 32° Footage from Wellhead 117'

b) Length : 31' Width : 26' Depth : 4'



REMARKS

Remarks :

Pictures @ 1027 (21-24, Roll 1)
Dump Truck
There are two residences within 1500' of the site.

Completed By:

Sarah Kelly
Signature

9/7/94
Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 89802 Location: SULLIVAN G.C. BIA

Coordinates: Letter: P Section 21 Township: 32 Range: 10

Or Latitude _____ Longitude _____

Date Started : 9-22-94 Run: 04 43

FIELD OBSERVATIONS

Sample Number(s): KP 247 KOL 9/23/94 _____ _____ _____

Sample Depth: ~~211~~ 12' Feet

Final PID Reading ~~12'~~ 211 9/23/94 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 70

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☐ ☒ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9-22-94 Pit Closed By: B.E.I

REMARKS

Remarks : Some Line markers. Started Remediating to 12' Lots of Rock's. Soil Light gray with a smell. At 12' Soil still the same.

Signature of Specialist: Kelly Padilla

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		
MTR CODE | SITE NAME		N/A
SAMPLE DATE TIME (Hrs)		
SAMPLED BY	N/A	
DATE OF TPH EXT. ANAL.		
DATE OF BTEX EXT. ANAL.		
TYPE DESCRIPTION		

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS F	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)		MG/KG				
HEADSPACE PID		PPM				
PERCENT SOLIDS		%				

TPH is by EPA Method 418.1 and BTEX is by EPA [illegible] 8020

The Surrogate Recovery was at [illegible] % for this sample QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: [illegible] Date: [illegible]

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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                     *
**********************************************************
*
 94/09/27   13:04
*
*   Sample identification
 946193
*
*   Initial mass of sample, g
 2.170
*
*   Volume of sample after extraction, ml
 28.000
*
*   Petroleum hydrocarbons, ppm
 1160.250
*   Net absorbance of hydrocarbons (2930 cm-1)
 0.164
*
*
*
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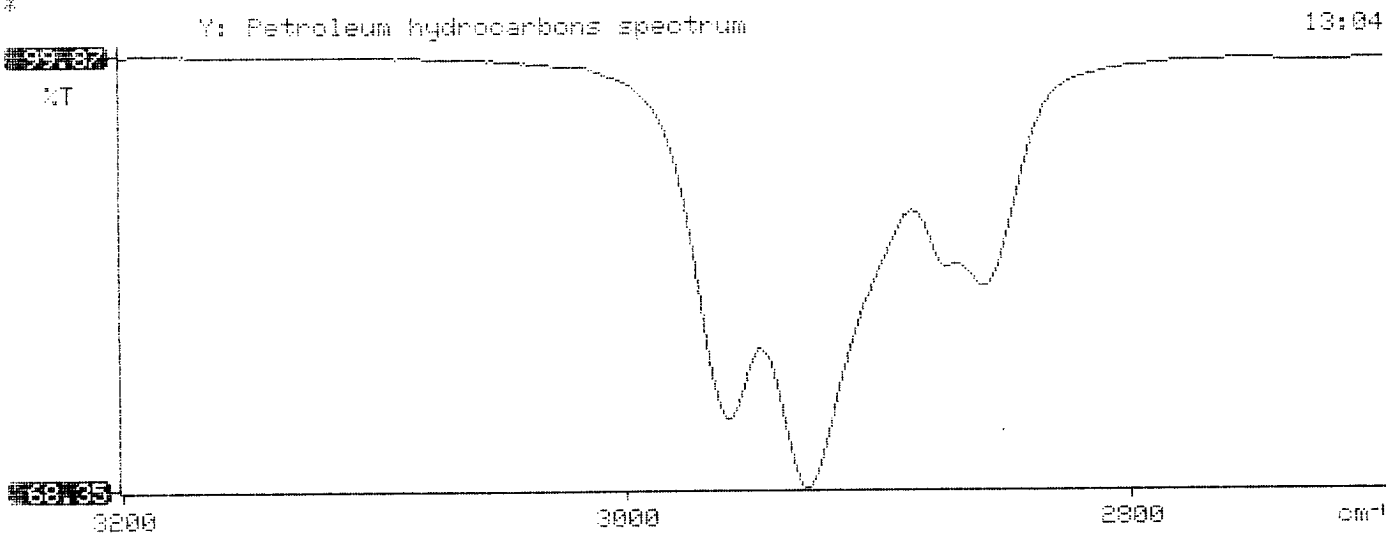

Analytical Technologies, Inc.

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

ATI I.D. **409425**

October 7, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/28/94**, 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:jt

Enclosure

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 409425
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946191	NON-AQ	09/22/94	09/29/94	09/29/94	20
02	946192	NON-AQ	09/22/94	09/29/94	10/03/94	5
03	946193	NON-AQ	09/22/94	09/29/94	09/29/94	1

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	14	<0.13	<0.025
TOLUENE	MG/KG	140	0.41	8.8
ETHYLBENZENE	MG/KG	22	0.14	1.9
TOTAL XYLENES	MG/KG	320	1.3	29
SURROGATE:				
BROMOFLUOROBENZENE (%)		159*	106	149*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1
Well #
Page 1 of 1

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 Sullivan Gas Com B 1A 89802

Elevation
Borehole Location QP-S21-T32-R10
GWL Depth
Logged By CM CHANCE
Drilled By K Padilla
Date/Time Started 7/20/95 - 1020
Date/Time Completed 7/20/95 - 1130

Well Logged By CM Chance
Personnel On-Site K Padilla, F. Rivera, D. Gotto
Contractors On-Site
Client Personnel On-Site

Drilling Method 4 1/4" ID 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 HS	Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										-Cobbles @ ~10'
	1	12-13	6"	Br-reddish b- silty SAND, f-med sand, dense, abt gravel, dry			0	1	67/2	-Refusal @ ~12' -Sample to 13' -1040
15				TDB 13'						
20										
25										
30										
35										
40										

Comments: CM(67(12-13) sent to lab (BTEX, TPH). BH grouted to surface

Geologist Signature Cory Chance

El Paso Natural Gas Company

Phase II Drilling
12-13' Sullivan Gas Com B1

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC 67	947044
MTR CODE | SITE NAME:	89802	N/A
SAMPLE DATE | TIME (Hrs):	07-20-95	10:40
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	7-24-95	7-24-95
DATE OF BTEX EXT. | ANAL.:	7-26-95	7-27-95
TYPE | DESCRIPTION:	VG	Dark brown sand & clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.025	MG/KG	1			
TOLUENE	0.046	MG/KG	1			
ETHYL BENZENE	0.030	MG/KG	1			
TOTAL XYLENES	0.28	MG/KG	1			
TOTAL BTEX	0.356	MG/KG				
TPH (418.1)	69.9	MG/KG			2.02	28
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	94.0	%				

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

The Surrogate Recovery was at 98 % 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                      *
**********************************************************
*
 95/07/24  13:58
*
*  Sample identification
 947044
*
*  Initial mass of sample, g
 2.020
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 69.878
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.019
*
*
*
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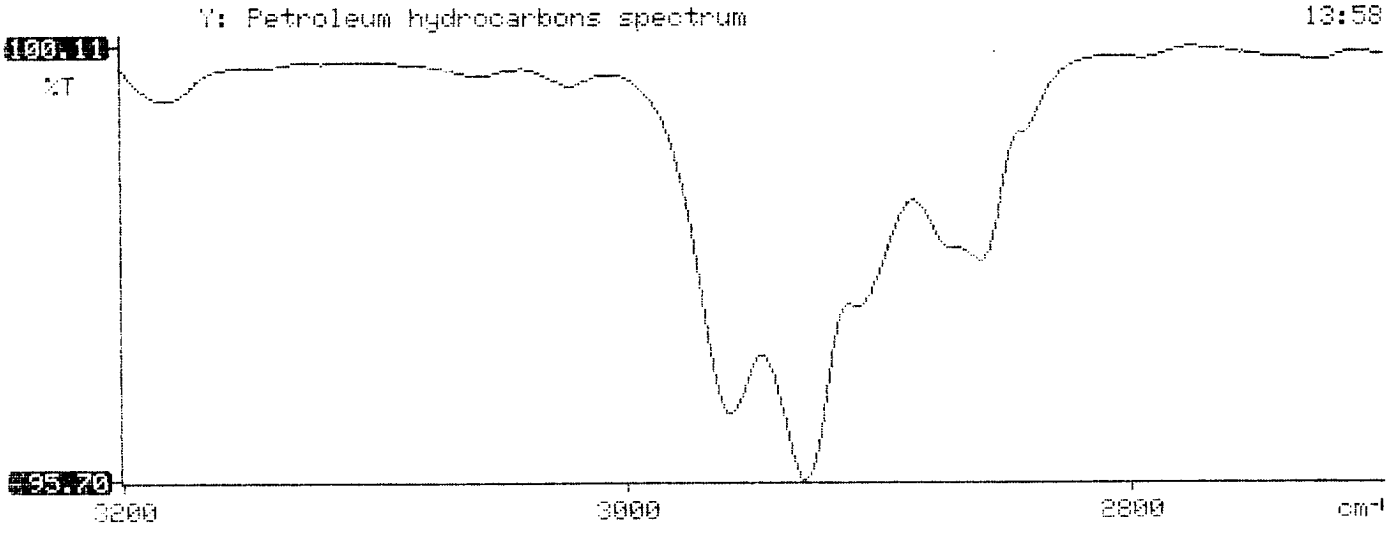


Analytical **Technologies,** Inc.

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

ATI I.D. **507403**

August 3, 1995

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

Project Name/Number: PIT CLOSURE/PHASE II DRILLING 24324

Attention: John Lambdin

On **07/26/95**, 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.

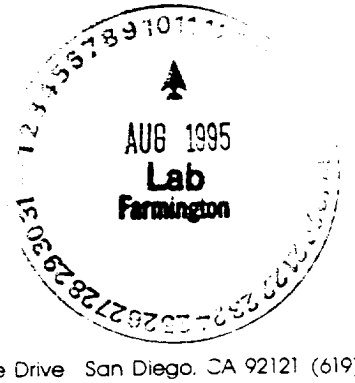
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 507403

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE/PHASE II

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	947044	NON-AQ	07/20/95	07/26/95	07/27/95	1
05	947045	NON-AQ	07/20/95	07/26/95	07/27/95	10
06	947046	NON-AQ	07/20/95	07/26/95	07/27/95	1

PARAMETER	UNITS	04	05	06
BENZENE	MG/KG	<0.025	<0.25	<0.025
TOLUENE	MG/KG	0.046	1.1	<0.025
ETHYLBENZENE	MG/KG	0.030	1.4	<0.025
TOTAL XYLENES	MG/KG	0.28	14	0.056
SURROGATE:				
BROMOFLUOROBENZENE (%)		98	161*	96

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE