Jennifer Found
DEPUTY OIL & GAS INSPECTOR
DEC 21 1998
Approved

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

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

RIDDLE CLS 2A
Meter/Line ID - 89934

SITE DETAILS

Legals - Twn: 31 **Rng:** 09 **Sec:** 30 **Unit:** J
NMOCD Hazard Ranking: 40 **Land Type:** 2 - Federal
Operator: AMOCO PRODUCTION COMPANY **Pit Closure Date: 09/15/94**

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: 89-934 Location: Riddle C LS 2A
Operator #: 0203 Operator Name: Amoco Production P/L District: Aztec
Coordinates: Letter: J Section 30 Township: 31 Range: 9
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 8/30/94 Area: 04 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 Little Pump 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: 40 **POINTS**

REMARKS

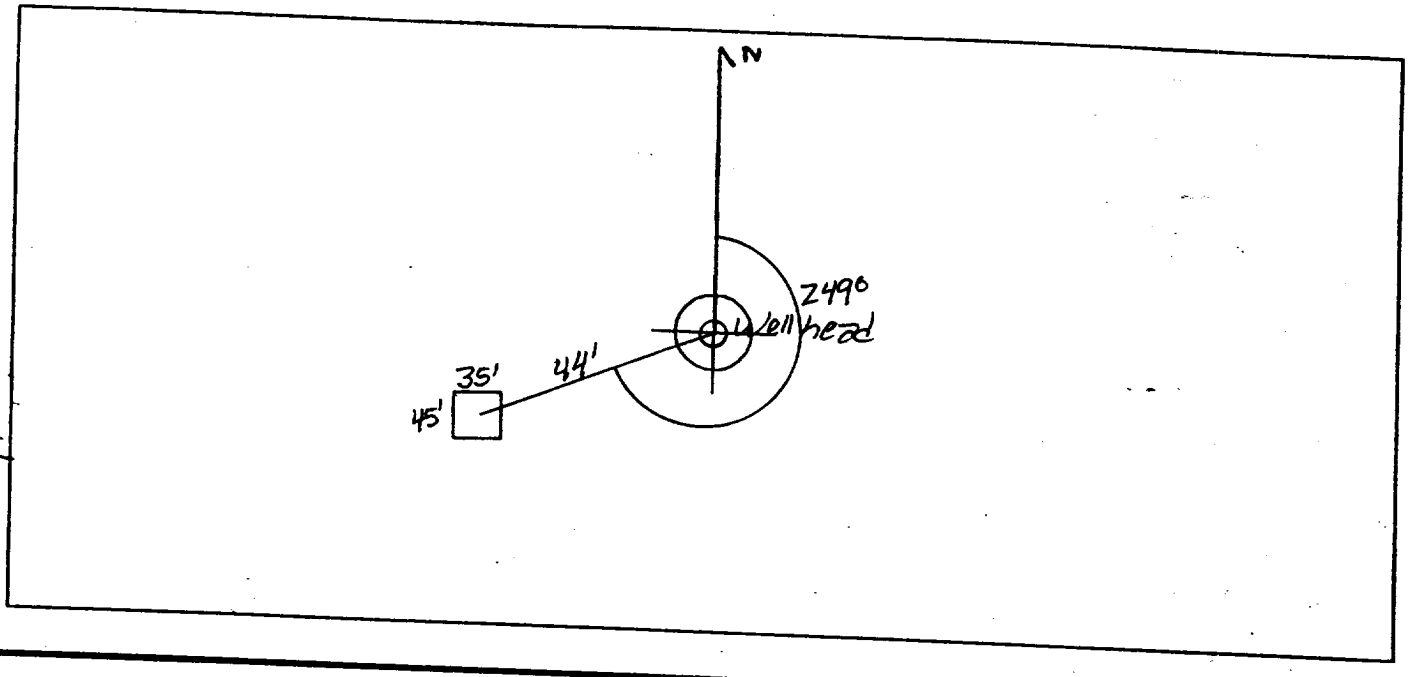
Remarks : Redline Book - Inside Vulnerable Zone Topo - Inside
Four pits, location drip pit has a small amount of liquid in it. Will close one pit.
DIG & HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 249° Footage from Wellhead 44'

b) Length : 45' Width : 35' Depth : 4'



REMARKS

Remarks :

Pictures #0954 (5-8, Roll 2)
Dump Truck

Completed By:

Sarah Kelly
Signature

8/30/94
Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 89934 Location: Riddle CLS 2A

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

Or Latitude _____ Longitude _____

Date Started : 9-15-94 Run: 04 83

FIELD OBSERVATIONS

Sample Number(s): KP 236 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 095 PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒	Approx. Cubic Yards 160
Onsite Bioremediation	☐	
Backfill Pit Without Excavation	☐	

Soil Disposition:

Envirotech	☐	☒	Tierra
Other Facility	☐	Name:	_____

Pit Closure Date: 9-15-94 Pit Closed By: B.E.I

REMARKS

Remarks : Some line markers. Pit has some oil & water Push in sides of Pit to solidify. Before we could haul off. At 12' soil looked like it cleaned up Pid 095 Closed Pit.

Signature of Specialist: Kelly Padilla

(SP3181) 03/16/94

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	946128
MTR CODE | SITE NAME:	89934	N/A
SAMPLE DATE | TIME (Hrs):	9-15-94	1520
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	9/20/94	9/20/94
DATE OF BTEX EXT. | ANAL.:	9/22/94	9/23/94
TYPE | DESCRIPTION:	VC	DK Brown fine Sand/Clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	0.039	MG/KG	1			
TOLUENE	0.78	MG/KG	1			
ETHYL BENZENE	0.26	MG/KG	1			
TOTAL XYLENES	8.8	MG/KG	1			
TOTAL BTEX	9.18	MG/KG				
TPH (418.1)	13,800	MG/KG			0.50	28
HEADSPACE PID	95	PPM				
PERCENT SOLIDS	91.1	%				

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

The Surrogate Recovery was at 70 % for this sample All QA/QC was acceptable.

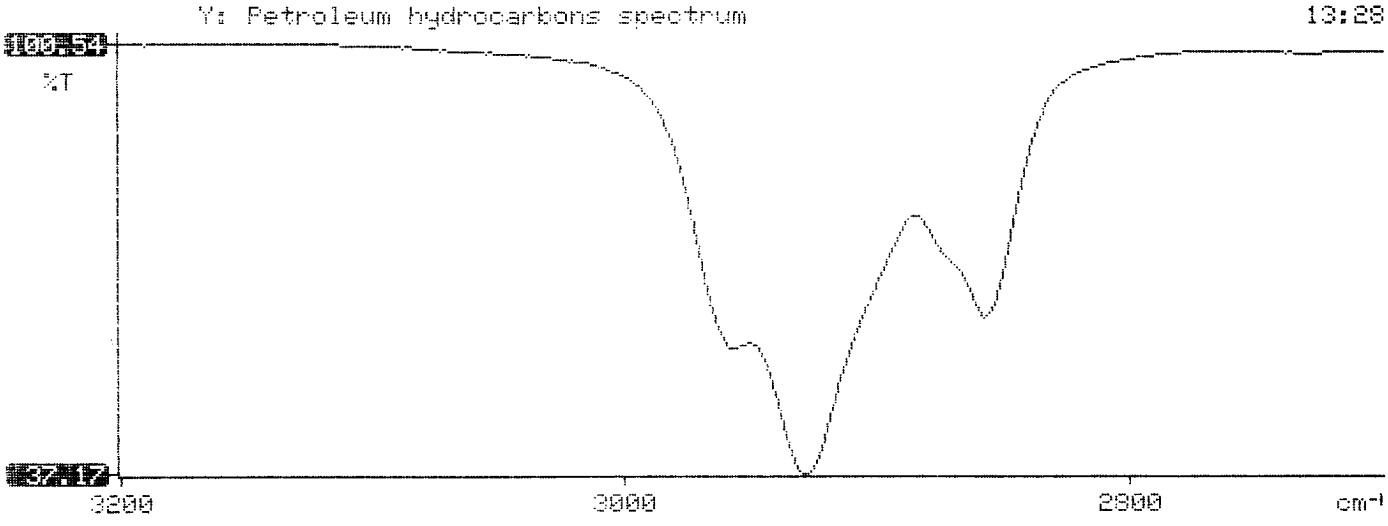
Narrative:

ATI Results attached.

DF = Dilution Factor Used

Approved By: _____ Date: 10/27/94

```
*****************************************************
*                    Test Method for                *
*     Oil and Grease and Petroleum Hydrocarbons     *
*                  in Water and Soil                *
*                                                   *
*            Perkin-Elmer Model 1600 FT-IR          *
*                  Analysis Report                  *
*****************************************************
*
 94/09/20  13:28
*
*  Sample identification
 946128
*
*  Initial mass of sample, g
 0.500
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 13757.951
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.430
*
*
*
```



Analytical Technologies, Inc.

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

ATI I.D. **409389**

September 29, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **09/21/94**, 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 ATI I.D.: 409389

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946127	NON-AQ	09/15/94	09/22/94	09/23/94	1
02	946128	NON-AQ	09/15/94	09/22/94	09/23/94	1
03	946129	NON-AQ	09/15/94	09/22/94	09/23/94	1

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	0.039	<0.025
TOLUENE	MG/KG	0.040	0.78	0.091
ETHYLBENZENE	MG/KG	<0.025	0.26	<0.025
TOTAL XYLENES	MG/KG	0.066	8.8	0.15
SURROGATE:				
BROMOFLUOROBENZENE (%)		93	70	91

PHASE II

RECORD OF SUBSURFACE E))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 Riddle CLSZA, 89-934

Elevation
Borehole Location T31, R9, S.30, J
GWL Depth
Logged By S.Kelly
Drilled By M. Donohue
Date/Time Started 7/26/95, 1055
Date/Time Completed 7/26/95, 1200

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		Silty SAND, light gray 10-25% silt, fine sand loose, damp.					15/30'	1110
25	2	23-25	1.0'/2.0'						0/2	1120
				BOH - 25.00'						
30										
35										
40										

Comments: 23'-25' sample (SEK40) sent to lab (BTEX & TPH) Sample was bagged and iced prior to being put in jar. BH grouted to surface

Geologist Signature Sarah Kelley

El Paso Natural Gas Company

Phase II Drilling
Riddle CLS2A
(23-25')

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	SEK 40	947085
MTR CODE | SITE NAME:	89934	N/A
SAMPLE DATE | TIME (Hrs):	07-26-95	11:20
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	<0.025	MG/KG	1			
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	78.5	MG/KG			2.04	28
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	93.2	%				

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

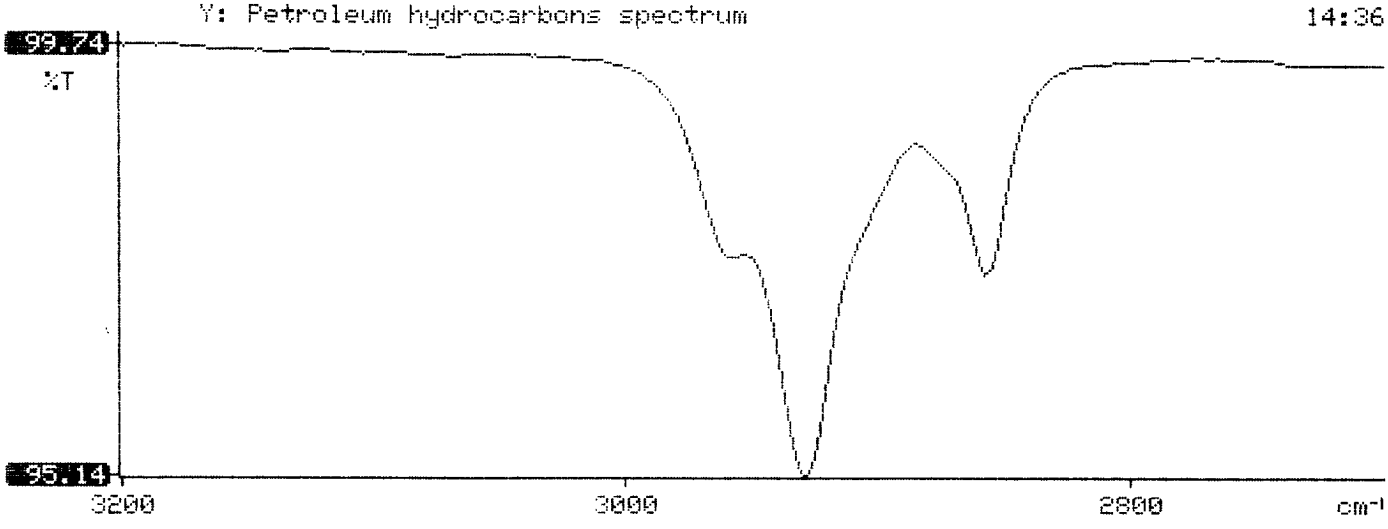
The Surrogate Recovery was at 104 % for this sample All QA/QC was acceptable.

Narrative: ATI Results attached

DF = Dilution Factor Used

Approved By: _____ Date: 8/2/95

```
**********************************************************
*                    Test Method for                     *
*      Oil and Grease and Petroleum Hydrocarbons         *
*                  in Water and Soil                     *
*                                                        *
*             Perkin-Elmer Model 1600 FT-IR              *
*                    Analysis Report                     *
**********************************************************
*
 95/07/27   14:36
*
*  Sample identification
 947085
*
*  Initial mass of sample, g
 2.040
*
*  Volume of sample after extraction, ml
 28.000
*
*  Petroleum hydrocarbons, ppm
 78.541
*  Net absorbance of hydrocarbons (2930 cm-1)
 0.020
*
*
*
```



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.

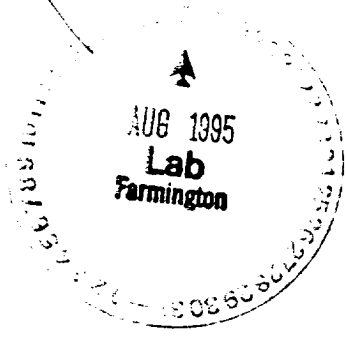
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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