

Denny
EL PASO FIELD SERVICES
DEPUTY OIL & GAS INSPECTOR
PRODUCTION PIT CLOSURE

DEC 2 1 1998

Approved
LINDRITH #3
Meter/Line ID - 74407

RECEIVED
JUL 2 1998

SITE DETAILS

Legals - Twn: 24 Rng: 03
NMOCD Hazard Ranking: 40
Operator: MERIDIAN OIL INC

Sec: 16 Unit: C
Land Type: 4 - Fee
Pit Closure Date: 11/13/99

OIL CON. DIV.
OFFICE

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:

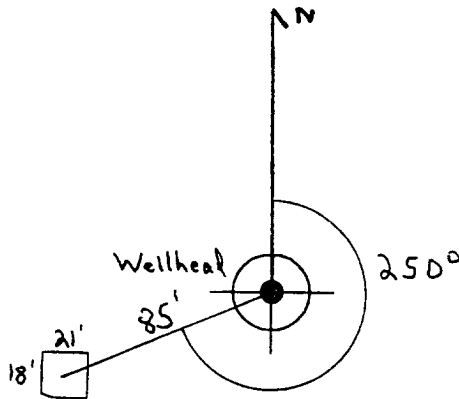
- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All 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>74407</u> Location: <u>Lindrith No.3</u></p> <p>Operator #: <u>2999</u> Operator Name: <u>MDI</u> P/L District: <u>DJITO</u></p> <p>Coordinates: Letter: <u>C</u> Section <u>16</u> Township: <u>24</u> Range: <u>3</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>8/2/94</u> Area: <u>08</u> Run: <u>83</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 type="checkbox"/> (2) Fee <input checked="" type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater</p> <p>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</p> <p>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>Cañada Larga</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</u> <u>Vulnerable Zone Tape - Inside</u></p> <p><u>1 pit. Pit drx</u></p> <p><u>DIG & HAUL</u></p>

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 250° Footage from Wellhead 85'
b) Length : 21' Width : 18' Depth : 4'



REMARKS :

Pictures @ 1308

Completed By:

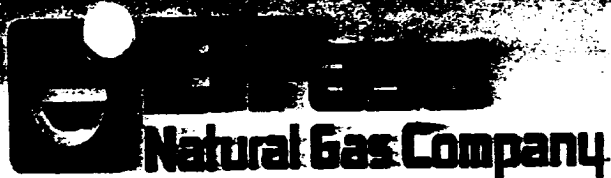
Cory Chane
Signature

8/2/94
Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>74407</u> Location: <u>LINDRITH No. 3</u></p> <p>Coordinates: Letter: <u>C</u> Section <u>16</u> Township: <u>24</u> Range: <u>3</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>10-12-94</u> Run: <u>08</u> <u>83</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KP 314</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>473</u> PID Reading Depth <u>12'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>80</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> <input type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>10-12-94</u> Pit Closed By: <u>B.EI</u></p>
REMARKS	<p>Remarks : <u>Some Line markers. small Pit. Soil gray looking with a smell. At 12' soil still the same.</u></p>
	<p>Signature of Specialist: <u>Kelly Saldaña</u></p>



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT**

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 314	946408
MTR CODE SITE NAME:	744 07	N/A
SAMPLE DATE TIME (Hrs):	10-12-94	1320
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	10-17-94	10-17-94
DATE OF BTEX EXT. ANAL.:	10-19-94	10-23-94
TYPE DESCRIPTION:	VC	Brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.5	MG/KG	20			
TOLUENE	4.3	MG/KG	20			
ETHYL BENZENE	1.2	MG/KG	20			
TOTAL XYLENES	18	MG/KG	20			
TOTAL BTEX	24 23.6 11/1/94	MG/KG				
TPH (418.1)	1120 1130 10/18/94	MG/KG			2.07	28
HEADSPACE PID	473	PPM				
PERCENT SOLIDS	88.7	%				

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

The Surrogate Recovery was at 68 % for this sample All QA/QC was acceptable.
Narrative:

ATI Results attached

DF = Dilution Factor Used

Approved By:

AP

Date:

10/3/94

```

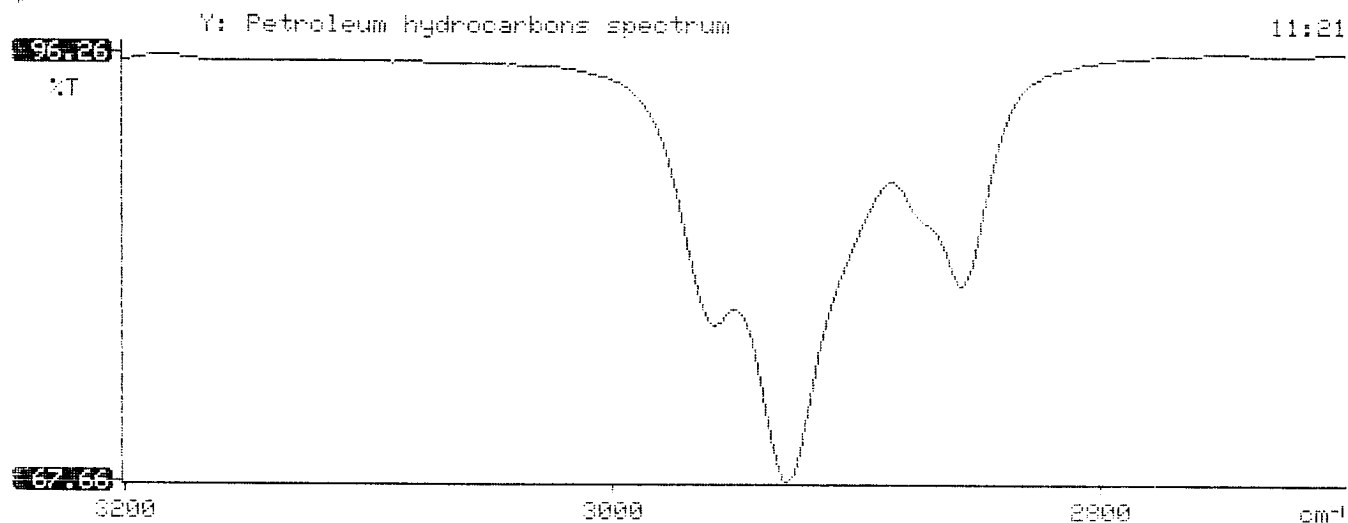
*****
*                               *
*      Test Method for         *
*      Oil and Grease and Petroleum Hydrocarbons      *
*      in Water and Soil      *
*                               *
*      Perkin-Elmer Model 1600 FT-IR                  *
*      Analysis Report                                *
*****

```

```

94/10/17  11:20
*
* Sample identification
946408
*
* Initial mass of sample, g
2.070
*
* Volume of sample after extraction, ml
28.000
*
* Petroleum hydrocarbons, ppm
1125.659
* Net absorbance of hydrocarbons (2930 cm-1)
0.152
*
*
*

```





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

ATI I.D. 410405

October 26, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 10/18/94, 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.

Letter Number:

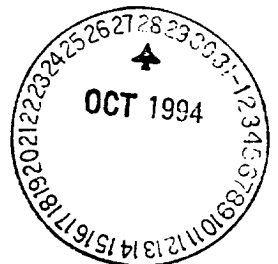
Letitia Krakowski, Ph.D.
Project Manager

1 Mitchell Post

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 410405
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	946407	NON-AQ	10/12/94	10/19/94	10/20/94	1
17	946408	NON-AQ	10/12/94	10/19/94	10/23/94	20
18	946409	NON-AQ	10/12/94	10/19/94	10/20/94	1

PARAMETER	UNITS	16	17	18
BENZENE	MG/KG	<0.025	<0.5	0.064
TOLUENE	MG/KG	<0.025	4.3	2.9
ETHYLBENZENE	MG/KG	0.077	1.2	0.22
TOTAL XYLENES	MG/KG	0.36	18	4.5

SURROGATE:

BROMOFLUOROBENZENE (%) 110 68 77

PHASE II

RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road

Farmington, New Mexico 87401

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

Borehole # BH-1

Well #

Page 1 of 1

Project Name EPNG PITS

Project Number 14509 Phase 6000 / 77

Project Location Linderoth #3 74407

Elevation

Borehole Location

GWL Depth

Logged By CM CHANCE

Drilled By MDONOHUE K. Padilla

Date/Time Started 6/2/95 - 0810

Date/Time Completed 6/2/95 - 1010

Well Logged By CM Chance

Personnel On-Site K. Padilla, F. Rivera

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			Drilling Conditions & Blow Counts
							BZ	BH	HS	
0				Backfill to 12'						
5										
10										
15	1	15-17	6"	Lt gray/reddish Br mottled CLAY, stiff, med plastic, sl moist, odor			1	200	472 480	0823 h-
20	2	20-22	5"	Lt gray CLAY, stiff, med plastic, sl moist, odor			1	172	446 1530	0825
	3	22-24	6"	Reddish Br CLAY, v stiff, med plastic, dry			1	120	169 345	0855
25	4	25-27	5"	Lt gray/reddish br mottled CLAY, hard, low-med plastic, dry			0	80	52 336	0911
				TDB 27'						Refusal @ 27'
30										
35										
40										

Comments:

25-27' sample (CMC 32) sent to lab (BTEX & TPH). Refusal @ 27'

Geologist Signature



Phase II
Lithology 3

FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CNC 32	946863
MTR CODE SITE NAME:	74407	N/A
SAMPLE DATE TIME (Hrs):	6-2-95	0911
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6-5-95	6-5-95
DATE OF BTEX EXT. ANAL.:	6-8-95	6-9-95
TYPE DESCRIPTION:	VG	Light grey sand & clay

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	0.14	MG/KG	1			
TOTAL BTEX	0.235	MG/KG				
TPH (418.1)	127, 26.7 ^{used 6/6/95}	MG/KG			1.99	28
HEADSPACE PID	334	PPM				
PERCENT SOLIDS	91.0	%				

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

The Surrogate Recovery was at 810 % for this sample All QA/QC was acceptable.
Narrative:

All results attached, for ~~USE~~ and modified BDIS

DF = Dilution Factor Used

Date:

6/28/95

```

*****
X      Test Method for
*      Oil and Grease and Petroleum Hydrocarbons
*      in Water and Soil.
*
*      Perkin-Elmer Model 1600 FT-IR
*      Analysis Report
*****

```

95/06/05 14:04

* Sample identification
946863

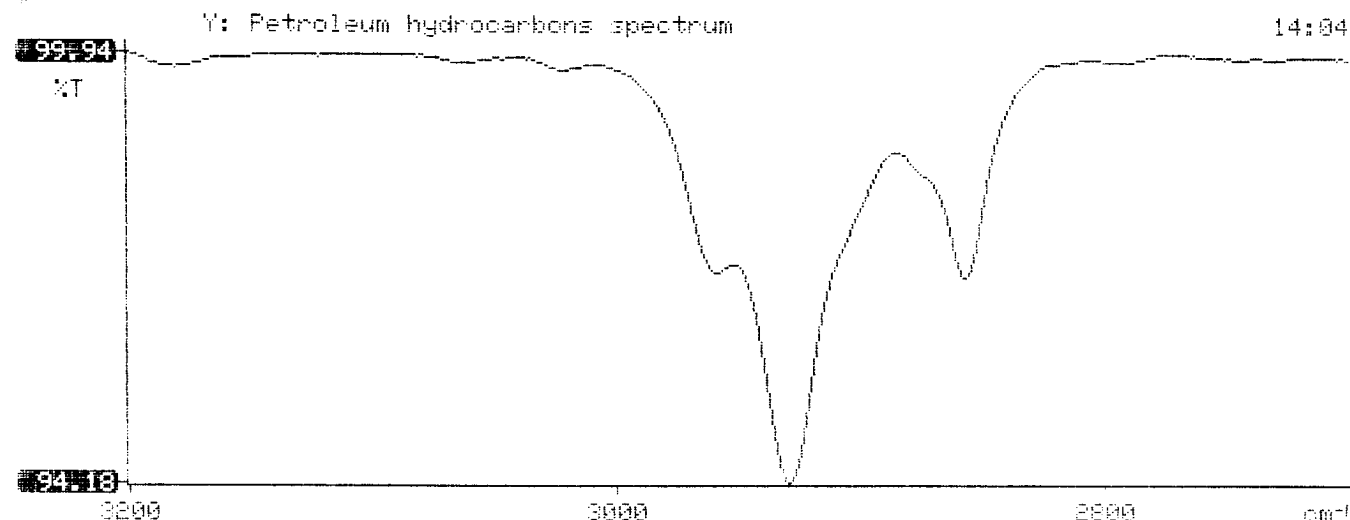
* Initial mass of sample, g
1.790

* Volume of sample after extraction, ml
28.000

* Petroleum hydrocarbons, ppm
126.661

* Net absorbance of hydrocarbons (2930 cm^{-1})
0.026

*
*
*





Analytical **Technologies**, Inc.

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

ATI I.D. **506330**

June 13, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/08/95**, 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.

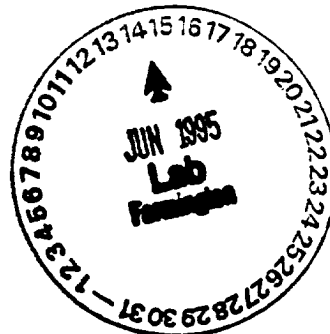
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, (EPA 8020)
 CLIENT : EL PASO NATURAL GAS ATI I.D.: 506330
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946863	NON-AQ	06/02/95	06/08/95	06/09/95	1
02	946864	NON-AQ	06/02/95	06/08/95	06/09/95	1
03	946865	NON-AQ	06/02/95	06/08/95	06/12/95	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	0.16	<0.025	<0.025

SURROGATE:

BROMOFLUOROBENZENE (%)	86	90	89
------------------------	----	----	----



Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED
CLIENT : EL PASO NATURAL GAS ATI I.D.: 506330
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946863	NON-AQ	06/02/95	06/08/95	06/09/95	1
PARAMETER			UNITS	01		
FUEL HYDROCARBONS			MG/KG	<5		
HYDROCARBON RANGE				-		
HYDROCARBONS QUANTITATED USING				-		

SURROGATE:

O-TERPHENYL (%) 92