

Henry E. Toot
EL PASO FIELD SERVICES
DEPUTY OIL & GAS INSPECTOR
PRODUCTION PIT CLOSURE
DEC 21 1995

Approved

JILLSON #4
Meter/Line ID - 93469

RECEIVED
JUL 2 1996

OIL GOLF
DEPT. 4

SITE DETAILS

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

Sec: 08 Unit: E
Land Type: 2 - Federal
Pit Closure Date: 10/12/94

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.

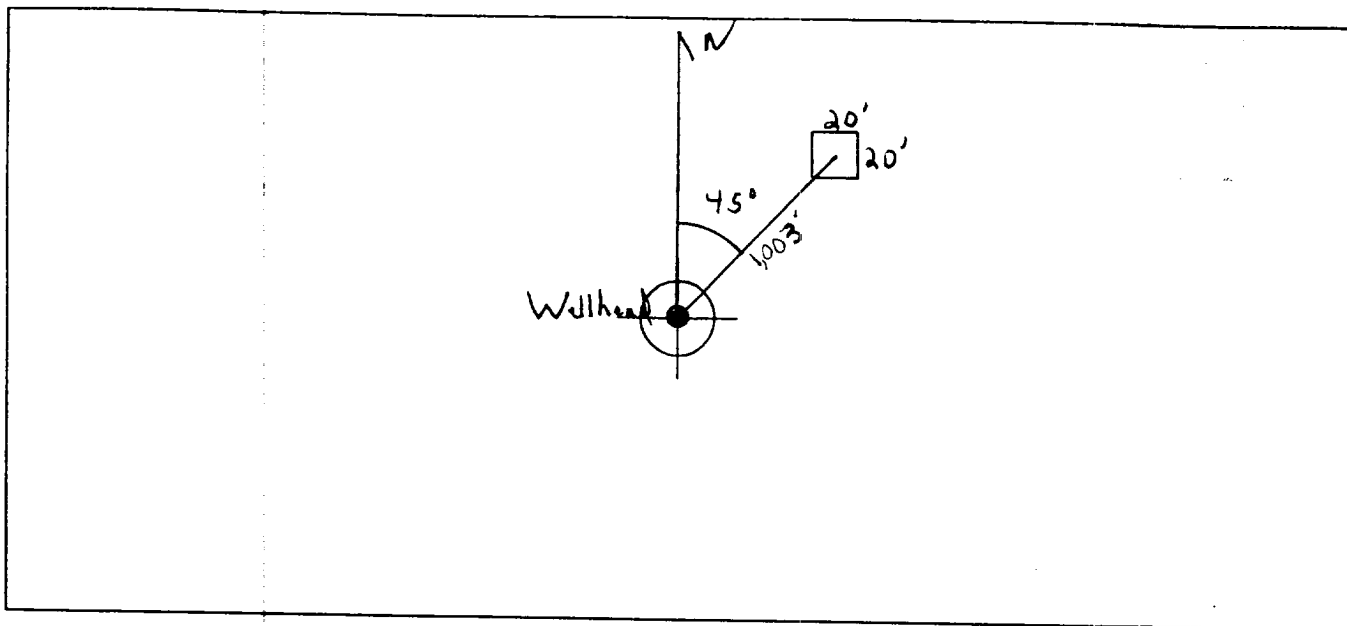
FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>93469</u> Location: <u>JILLSON #4</u> Operator #: <u>2999</u> Operator Name: <u>MOI</u> P/L District: <u>OJITO</u> Coordinates: Letter: <u>E</u> Section <u>8</u> Township: <u>24</u> Range: <u>3</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: ☒ Line Drip: _____ Other: _____ Site Assessment Date: <u>6/15/94</u> Area: <u>08</u> Run: <u>83</u>
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 <u>Billy Rice Canyon</u> (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: <u>40</u> POINTS
REMARKS	Remarks : <u>Redline Bank - Inside</u> <u>Vulnerable Zone Top - Inside</u> <u>1 pit. Will close. Pit ^{check 6/15/94} has liquid in it. Drip line is still hooked up</u> <u>DIG & HAUL</u>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 45° Footage from Wellhead 1003'
b) Length : 20' Width : 20' Depth : 4'



REMARKS

Remarks :

Pictures @ 0955 (22-25)
Dump Truck

Completed By:

Cory Chan
Signature

6/15/99
Date

PHASE I EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>93469</u> Location: <u>JILLSON #4</u> Coordinates: Letter: <u>E</u> Section <u>8</u> Township: <u>24</u> Range: <u>3</u> Or Latitude _____ Longitude _____ Date Started : <u>10-12-94</u> Run: <u>08</u> <u>83</u>
FIELD OBSERVATIONS	Sample Number(s): <u>SP 313</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>089</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation Onsite Bioremediation Backfill Pit Without Excavation ☒ Approx. Cubic Yards <u>90</u> ☐ ☐ Soil Disposition: Envirotech ☒ Other Facility ☐ ☐ Tierra Name: _____ Pit Closure Date: <u>10-12-94</u> Pit Closed By: <u>B.E.F</u>
REMARKS	Remarks : <u>Some line markers Pit HAS A little oil & water.</u> <u>At 12' soil light gray with A small</u> <u>closed pit.</u>
	Signature of Specialist: <u>Kelly Padella</u>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP 313	946407
MTR CODE SITE NAME:	93469	N/A
SAMPLE DATE TIME (Hrs):	10-12-94	0920
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	10-17-94	10-17-94
DATE OF BTEX EXT. ANAL.:	10-19-94	10-20-94
TYPE DESCRIPTION:	VC	Brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.025	MG/KG	1			
TOLUENE	40.025	MG/KG	1			
ETHYL BENZENE	0.077	MG/KG	1			
TOTAL XYLENES	0.36	MG/KG	1			
TOTAL BTEX	0.487	MG/KG				
TPH (418.1)	7010	MG/KG			1.45	28
HEADSPACE PID	89	PPM				
PERCENT SOLIDS	88.4	%				

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

The Surrogate Recovery was at 110 % for this sample All QA/QC was acceptable.
Narrative:

ATI results attached.

DF = Dilution Factor Used

Approved By:

Date:

10/3/94

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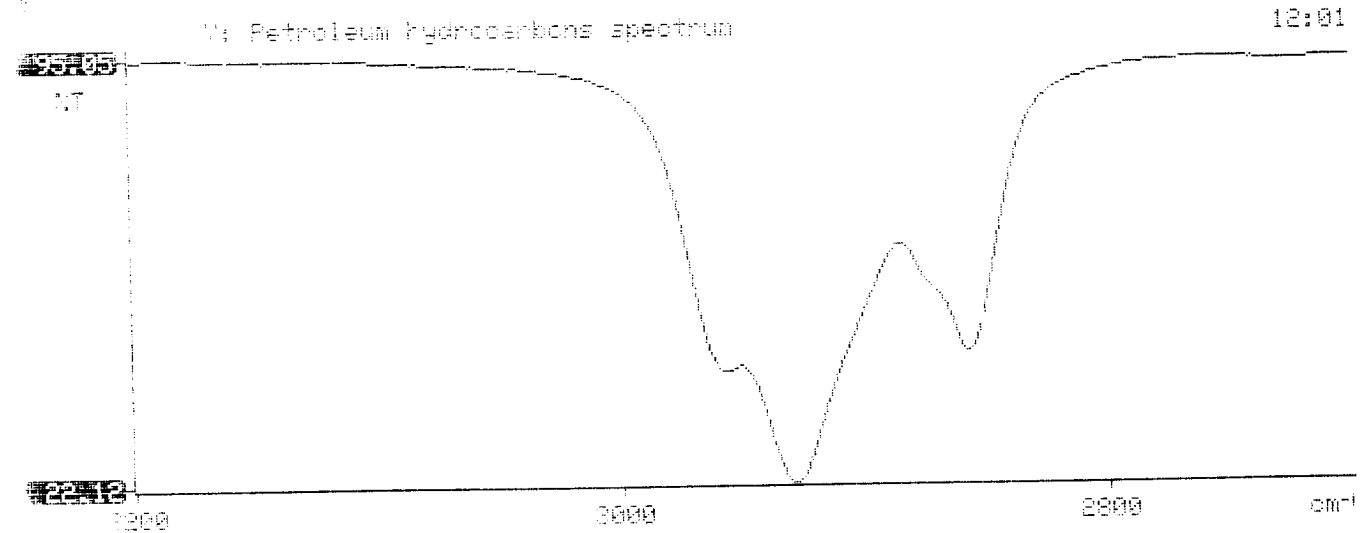
*****
Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil
Parker-Elmer Model 1600 FT-IR
Analysis Report
*****

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74/10/17 12:01
Sample Identification
646407
Initial mass of sample, g
1.450
Volume of sample after extraction, ml
28.000
Petroleum hydrocarbons, ppm
7014.609
Net Absorbance of hydrocarbons (2930 cm-1)
0.631

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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. 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.

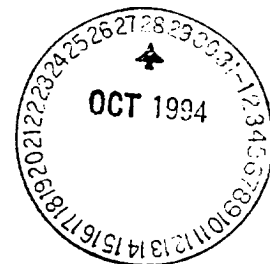
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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 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

Jillson #4 93469

Well Logged By

CM Chance

Personnel On-Site

M. Denehy, K. Padilla, F. River

Contractors On-Site

Client Personnel On-Site

Drilling Method

4 1/4 I.O. HSA

Air Monitoring Method

PID, CBI

Elevation

Borehole Location

GWL Depth

Logged By

CM Chance

Drilled By

M. Denehy, K. Padilla

Date/Time Started

5/25/95 - 1015

Date/Time Completed

5/25/95 - 1115

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: <u>MDU 5</u> BZ BH HS			Drilling Conditions & Blow Counts
0				Backfill to 12'						
5										
10										
15	1	15-17 17-18	12"	Br silty SAND, v-f sand, loose, silty			0	0	1/4	1031 hr
20	2	20-22	20'	AA			0	0	9/2	1039
				TDB 20'						
25										
30										
35										
40										

Comments:

Drilled to 20' to ensure not in backfill. 20-22' sample submitted to lab (BTEX, TPH)
CMC25

Geologist Signature



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CM C 25	946836
MTR CODE SITE NAME:	93469	N/A
SAMPLE DATE TIME (Hrs):	5-25-95	1034
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-30-95	5-30-95
DATE OF BTEX EXT. ANAL.:	6-1-95	6-2-95
TYPE DESCRIPTION:	VG	Light brown sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	20.025	MG/KG	1			
TOLUENE	20.025	MG/KG	1			
ETHYL BENZENE	20.025	MG/KG	1			
TOTAL XYLENES	20.025	MG/KG	1			
TOTAL BTEX	20.10	MG/KG				
TPH (418.1)	72.0 ^{418.1}	MG/KG			2.08	28
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	92.9	%				

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

The Surrogate Recovery was at 92 % for this sample All QA/QC was acceptable.

Narrative:

ATI results attached

DF = Dilution Factor Used

XZ

6/8/95

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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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05/03/99 14:27

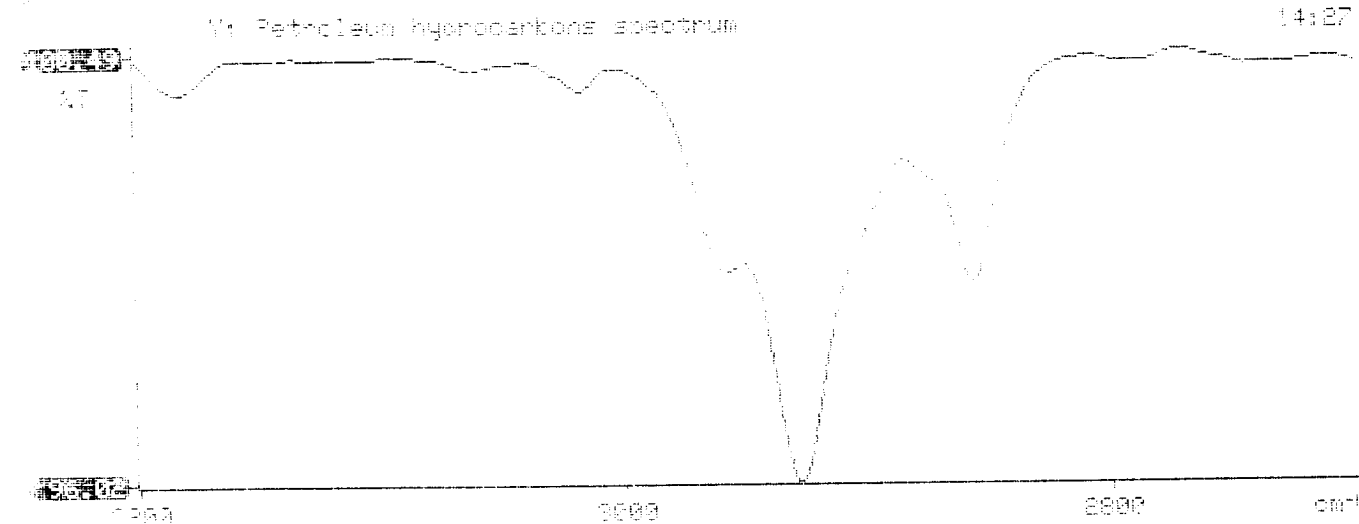
1 Sample identification
946876

2 Initial mass of sample, g
3.000

3 Volume of sample after extraction, ml
39.000

4 Petroleum hydrocarbons, ppm
71.972

5 Net absorbance of hydrocarbons (2930 cm^{-1})
1.019





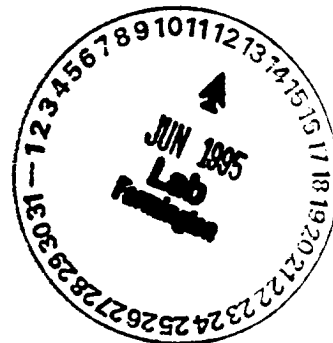
Analytical **Technologies**, Inc.

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

ATI I.D. 506301

June 8, 1995

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



Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 06/01/95, 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.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)
 CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 506301
 PROJECT # : 24324
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	946835	NON-AQ	05/25/95	06/01/95	06/02/95	1
02	946836	NON-AQ	05/25/95	06/01/95	06/02/95	1
03	946837	NON-AQ	05/25/95	06/01/95	06/02/95	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	<0.025	<0.025
METHYL-t-BUTYL ETHER	MG/KG	<0.12	<0.12	<0.12

SURROGATE:

BROMOFLUOROBENZENE (%)	100	92	95
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