EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

OIL & GAS INSPECTOR

DEC 21 1998

Approved

CANYON LARGO UNIT #94
Meter/Line ID - 72644

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

SITE DETAILS

Legals - Twn: 25 **Rng:** 06 **Sec:** 24 **Unit:** A
NMOCD Hazard Ranking: 40 **Land Type:** 2 - Federal
Operator: MERIDIAN OIL INC **Pit Closure Date:** 10/27/94

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

10

GENERAL

Meter: 72644 Location: Canyon Largo Unit No. 94
Operator #: 2999 Operator Name: Meridian P/L District: Ojito
Coordinates: Letter: A Section 24 Township: 25 Range: 6W
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: ___
Site Assessment Date: 7-19-94 Area: 06 Run: 62

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☒ (1)
Outside ☐ (2)

Land Type:
BLM ☒ (1)
State ☐ (2)
Fee ☐ (3)
Indian ~~Jicarilla~~ ~~Apache~~ KG

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 Gonzales 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

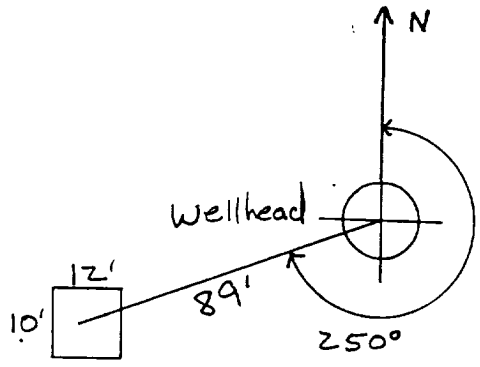
Remarks : Redline V.Z. - inside Topo V.Z. - inside
one pit - dry

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 250 Footage from Wellhead 89

b) Length : 12 Width : 10 Depth : 3



REMARKS

Remarks :

Photos - 9-12 Roll #5

Completed By:

Signature

7-19-94

Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 72644 Location: Canyon Largo unit #94

Coordinates: Letter: A Section 24 Township: 25 Range: 6W

Or Latitude _____ Longitude _____

Date Started : 10/27/94 Run: 06 62

FIELD OBSERVATIONS

Sample Number(s): KD356 _____ _____ _____

Sample Depth: 4' Feet

Final PID Reading 233ppm PID Reading Depth 4' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒ Approx. Cubic Yards 10
Onsite Bioremediation	☐
Backfill Pit Without Excavation	☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 10/27/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 4', took pid sample, closed pit
Hit Sandstone at 4'.

Signature of Specialist: Kenny Davis

(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:	KD 356	94642
MTR CODE | SITE NAME:	72644	N/A
SAMPLE DATE | TIME (Hrs):	10-27-94	1415
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	10-28-94	10-28-94
DATE OF BTEX EXT. | ANAL.:	11-1-94	11-2-94
TYPE | DESCRIPTION:	VC	Brown/gray sand + clay

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG	20			
TOLUENE	19	MG/KG	20			
ETHYL BENZENE	5.3	MG/KG	20			
TOTAL XYLENES	77	MG/KG	20			
TOTAL BTEX	102	MG/KG				
TPH (418.1)	4630	MG/KG			2.05	25
HEADSPACE PID	233	PPM				
PERCENT SOLIDS	87.5	%				

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

The Surrogate Recovery was at 61 % for this sample All QA/QC was acceptable.

Narrative:
ATI Results attached. Surrogate Recovery is outside ATI QC limits due to matrix interference

DF = Dilution Factor Used

Approved By: _____ Date: 11/17/94

Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

[illegible]

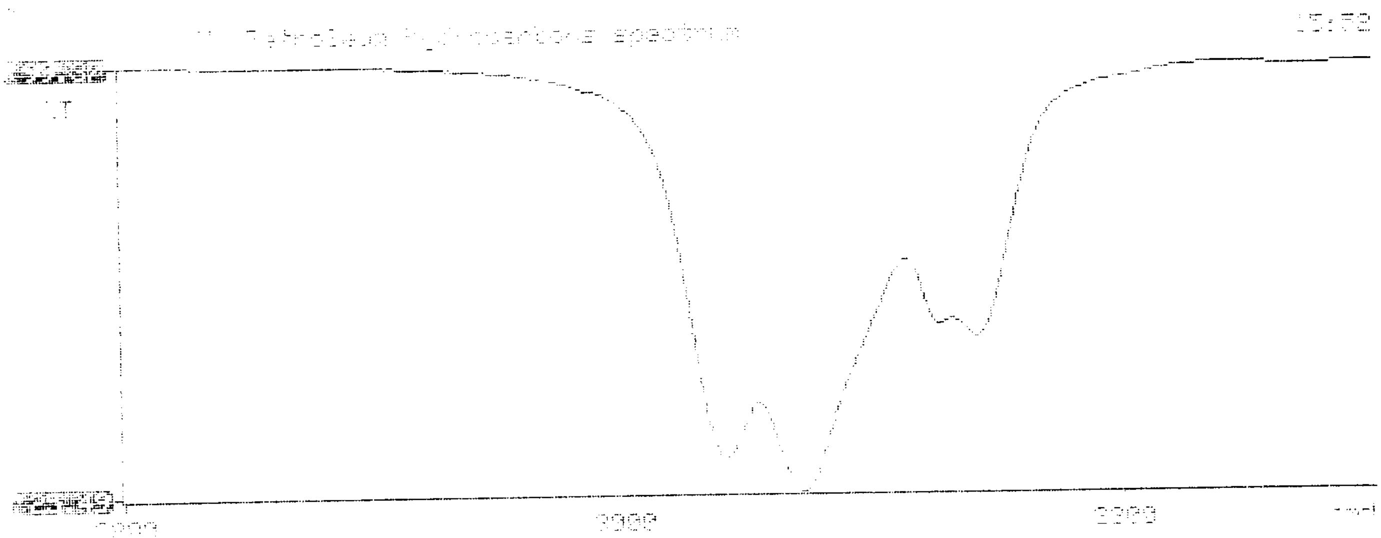
Sample identification
[illegible]

Initial mass of sample, g
[illegible]

Volume of sample after extraction, ml
[illegible]

Petroleum hydrocarbons, ppm
[illegible]
Net absorbance of hydrocarbons (2930 cm-1)
[illegible]

Petroleum hydrocarbons spectrum



ILLEGIBLE

Analytical Technologies, Inc.

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

ATI I.D. **411303**

November 10, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **11/01/94**, 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.

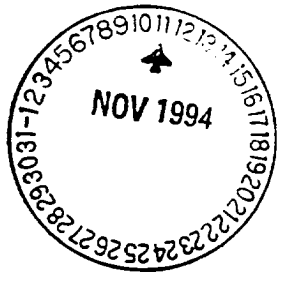
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 411303
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	946460	NON-AQ	10/27/94	11/01/94	11/02/94	20
14	946461	NON-AQ	10/27/94	11/01/94	11/03/94	50
15	946462	NON-AQ	10/27/94	11/01/94	11/02/94	20

PARAMETER	UNITS	13	14	15
BENZENE	MG/KG	<0.5	<1.3	<0.5
TOLUENE	MG/KG	<0.5	<1.3	19
ETHYLBENZENE	MG/KG	4.4	13	5.3
TOTAL XYLENES	MG/KG	71	150	77
SURROGATE: BROMOFLUOROBENZENE (%)		106	160*	61*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

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: Canyon Largo Unit #94 72644

Elevation:
Borehole Location:
GWL Depth:
Logged By: CM CHANCE
Drilled By: ~~M DONOHUE~~ K. Padilla
Date/Time Started: 6/5/95 - 0840
Date/Time Completed: 6/5/95 - 0935

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 BZ	BH	S HS	Drilling Conditions & Blow Counts
0				Backfill to 4'						
10	1	10-12	0"	No sample			0	380	NA	- No sample, V. hard Sandstone
	2	13-13.5	4"	Tan SANDSTONE, vF-f sand, sl crystalline, V. Hard,			0	180	NA/22	- 0905 hr
										- Refusal @ 13.5'
				TOB 13.5'						

Comments: 13-13.5' sample (CMC35) sent to lab. (BTEX & TPH). BH grouted to surface

Geologist Signature ______

Phase II

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:	cmc 35	946869
MTR CODE | SITE NAME:	72644	N/A
SAMPLE DATE | TIME (Hrs):	6-5-95	0905
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	6-7-95	6-7-95
DATE OF BTEX EXT. | ANAL.:	6-8-95	6-12-95
TYPE | DESCRIPTION:	VG	Brown sandstone

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)	46.2	MG/KG			1.99	28
HEADSPACE PID	22	PPM				
PERCENT SOLIDS	92.0	%				

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

The Surrogate Recovery was at 90 % for this sample All QA/QC was acceptable.

Narrative:
ATI Results attached.

DF = Dilution Factor Used

Approved By: _____ Date: 6/28/95

****

Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

****

[illegible]/06/07 1:26

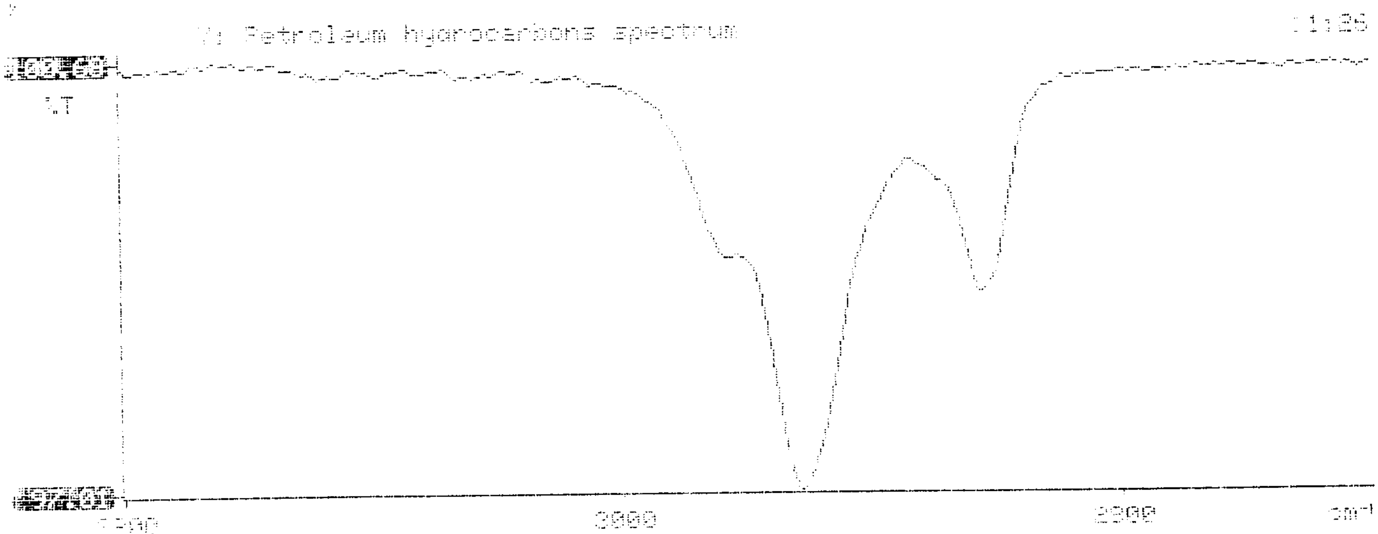
Sample Identification
[illegible]46847

Initial mass of sample, g
1.790

Volume of sample after extraction, ml
[illegible]8.000

Petroleum hydrocarbons, ppm
46.197

Net absorbance of hydrocarbons (2930 cm-1)
0.016



ILLEGIBLE

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

JUN 1995
Lab
Farmington

Analytical Technologies, Inc.

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
04	946869	NON-AQ	06/05/95	06/08/95	06/12/95	1
05	946870	NON-AQ	06/05/95	06/08/95	06/12/95	1
06	946876	NON-AQ	06/06/95	06/08/95	06/12/95	1

PARAMETER	UNITS	04	05	06
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	0.061	<0.025

SURROGATE:			
BROMOFLUOROBENZENE (%)	90	88	94