DEPUTY OIL & GAS INSPECTOR

DEC 21 1998

EL PASO FIELD SERVICES
PRODUCTION PIT CLOSURE

W.O. HUGHES #1
Meter/Line ID - 87915

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

SITE DETAILS

Legals - Twn: 24 **Rng:** 03 **Sec:** 08 **Unit:** I
NMOCD Hazard Ranking: 40 **Land Type:** 4 - Fee
Operator: MERIDIAN OIL INC **Pit Closure Date:** 10/11/94

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: 87915 Location: W.O. HUGHES No. 1
Operator #: 2999 Operator Name: MDI P/L District: OJITO
Coordinates: Letter: I Section 8 Township: 24 Range: 3
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 8/2/94 Area: 08 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 Cañada Larga
(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 1 pit. Will close. Pit dry

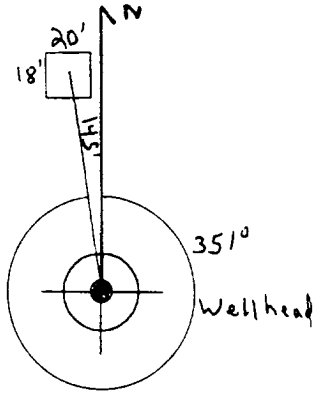
DIG + HAUL

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 351° Footage from Wellhead 145'

b) Length : 20' Width : 18' Depth : 3'



REMARKS

Remarks :

Pictures @ 1050

Completed By:

Cory Champ
Signature

9/-/94
Date

PHASE I
EXCAVATION

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 87915 Location: W.O. Hughes #1

Coordinates: Letter: I Section 8 Township: 24 Range: 3

Or Latitude _____ Longitude _____

Date Started : 10/11/94 Run: 08 83

FIELD OBSERVATIONS

Sample Number(s): KD 327 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 228 ppm PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation	☒	Approx. Cubic Yards 50
Onsite Bioremediation	☐	
Backfill Pit Without Excavation	☐	

Soil Disposition:

Envirotech	☒	☐	Tierra
Other Facility	☐	Name:	_____

Pit Closure Date: 10/11/94 Pit Closed By: BEI

REMARKS

Remarks : Excavated pit to 12', Took PID Sample, Closed pit.

Signature of Specialist: Kenny Dearn

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 327	946401
MTR CODE | SITE NAME:	87915	N/A
SAMPLE DATE | TIME (Hrs):	10-11-94	0850
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	Fruitland Sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	40.5	MG/KG	20			
TOLUENE	7.4	MG/KG	20			
ETHYL BENZENE	1.1	MG/KG	20			
TOTAL XYLENES	4.1	MG/KG	20			
TOTAL BTEX	13.1	MG/KG				
TPH (418.1)	3,250	MG/KG			2.23	28
HEADSPACE PID	228	PPM				
PERCENT SOLIDS	92.6	%				

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

The Surrogate Recovery was at 66 % for this sample All QA/QC was acceptable.

Narrative:

ATL Results attached.

DF = Dilution Factor Used

Approved By: _____ Date: 11/3/94

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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
****

[illegible]

[illegible]

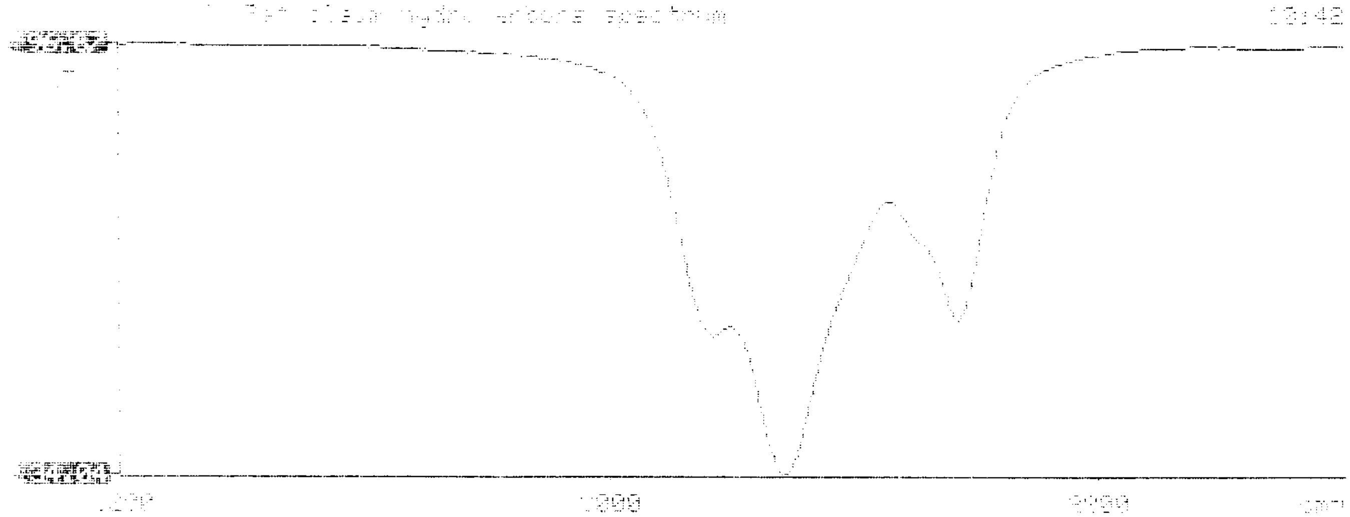
Initial mass of sample, g
[illegible]

Final volume of sample after extraction, ml
[illegible]

Petroleum hydrocarbons, ppm
[illegible]

[illegible] of hydrocarbons (2930 cm-1)
[illegible]

Petroleum hydrocarbons spectrum 10:42



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.

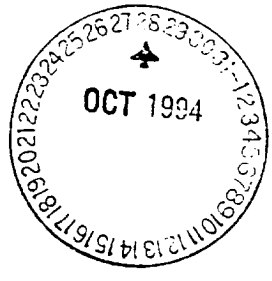
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure



Analytical Technologies, Inc.

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
10	946401	NON-AQ	10/11/94	10/19/94	10/23/94	20
11	946402	NON-AQ	10/11/94	10/19/94	10/23/94	20
12	946403	NON-AQ	10/11/94	10/19/94	10/20/94	1

PARAMETER	UNITS	10	11	12
BENZENE	MG/KG	<0.5	<0.5	<0.025
TOLUENE	MG/KG	7.4	32	0.051
ETHYLBENZENE	MG/KG	1.1	<0.5	0.043
TOTAL XYLENES	MG/KG	4.1	6.3	0.41
SURROGATE:				
BROMOFLUOROBENZENE (%)		66	82	99

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 W.D. Hughes #1 87915

Elevation
Borehole Location
GWL Depth
Logged By CM CHANCE
Drilled By ~~M DONOHUE~~ K. Padilla
Date/Time Started 6/1/95 - 1200
Date/Time Completed 6/1/95 - 1310

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 12'						
15	1	15-17	5"	lt Br silty SAND, vf-F sand, tr med sand, abnt Qtz, loose, sl moist			0	0	1/6	1221 hr
				TOB 17'						
40										

Comments: 15-19' (CMC 30) sample submitted to lab (BTEX, TPH)

Geologist Signature

Phase II
? Hume #1

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 30	946861
MTR CODE | SITE NAME:	87915	N/A
SAMPLE DATE | TIME (Hrs):	6-1-95	1221
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	6-2-95	6-2-95
DATE OF BTEX EXT. | ANAL.:	6-5-95	6-7-95
TYPE | DESCRIPTION:	VG	course brown 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	<0.025	MG/KG	1			
TOTAL BTEX	<0.10	MG/KG				
TPH (418.1)	49.7	MG/KG			2.10	28
HEADSPACE PID	6	PPM				
PERCENT SOLIDS	95.6	%				

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

The Surrogate Recovery was at 97 % 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
[illegible] and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

[illegible]

[illegible] identification

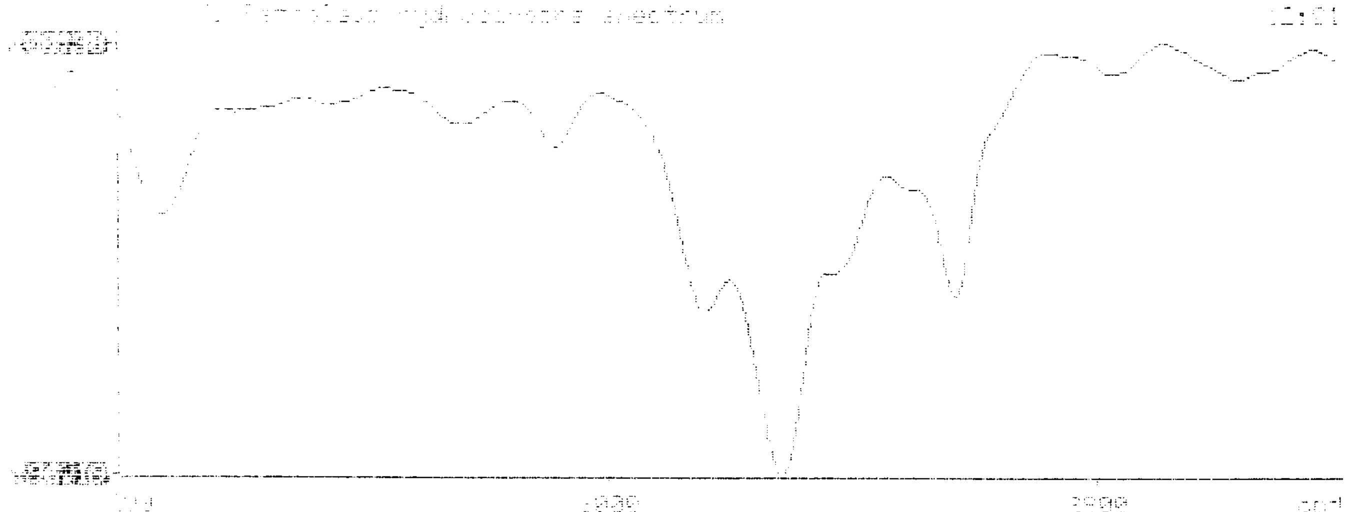
[illegible] mass of sample, g

[illegible] of [illegible] after extraction, ml

[illegible] petroleum hydrocarbons, ppm

[illegible] of hydrocarbons (2930 cm-1)

[illegible] petroleum hydrocarbons spectrum



Analytical **Technologies,** Inc.

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

ATI I.D. **506317**

June 9, 1995

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/03/95**, 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.

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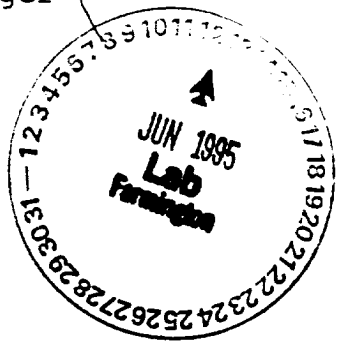

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)

CLIENT : EL PASO NATURAL GAS ATI I.D.: 506317

PROJECT # : 24324

PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	946860	NON-AQ	06/01/95	06/05/95	06/07/95	1
11	946861	NON-AQ	06/01/95	06/05/95	06/07/95	1
12	946862	NON-AQ	06/01/95	06/05/95	06/07/95	1

PARAMETER	UNITS	10	11	12
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
SURROGATE:				
BROMOFLUOROBENZENE (%)		89	97	92