Denny G Foust
DEPUTY OIL & GAS INSPECTOR
DEC 30 1997
Approved

Meter Number:87802
Location Name:DELO #8
Location:TN-29 RG-11
SC-33 UL-I
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RATIONALE FOR RISK-BASED CLOSURE OF PRODUCTION PITS LOCATED OUTSIDE OF THE VULNERABLE ZONE IN THE SAN JUAN BASIN

This production pit location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there are no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source, discharge to the pit has been removed. There has been no discharge to the pits for at least 4 years and the pits have been closed for at least one year.

Each pit was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact of hydrocarbons with livestock and the populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

Sandstone	10^{-9} to 10^{-13} cm/sec
Shale	10^{-12} to 10^{-16} cm/sec
Clay	10^{-12} to 10^{-15} cm/sec

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

EPFS
EL PASO FIELD SERVICES

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 87802 Location: Delo No. 8
Operator #: 1987 Operator Name: Meridian P/L District: Angel Peak
Coordinates: Letter: I Section ~~23~~ 33 (CMC 9/15/94) Township: 29 Range: 11
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 9/13/94 Area: 01 Run: 63

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 _____
(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: 0 **POINTS**

REMARKS

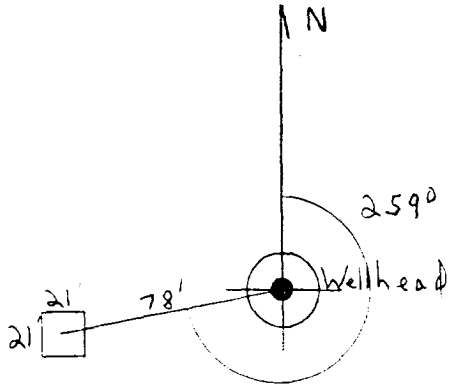
Remarks : Redline Book - Outside , Vulnerable Zone Topo - Outside
2 pits. Will close 1. Pit has small amount of water in it
Redline book shows site in Sec. 33. Location sign shows 23.
PUSH-IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 259° Footage from Wellhead 78'

b) Length : 21' Width : 21' Depth : 5'



REMARKS

Remarks :

Pictures @ 1424 hr

Completed By:

Cory Chance
Signature

9/13/94
Date

GENERAL

Meter: 87802 Location: Delo #8

Coordinates: Letter: I Section 33 Township: 29 Range: 11

Or Latitude _____ Longitude _____

Date Started : 10/6/94 Run: 01 63

FIELD OBSERVATIONS

Sample Number(s): KD 320 _____ _____ _____

Sample Depth: 12' Feet

Final PID Reading 198 ppm PID Reading Depth 12' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☐ Approx. Cubic Yards _____

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☒

Soil Disposition:

Envirotech ☐ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 10/6/94 Pit Closed By: BEI

REMARKS

Remarks : Dug test hole to 12', Took PID Sample, Closed pit.

Signature of Specialist: Kelly Deaver

(SP3191) 03/16/94

El Paso Natural Gas Company

SPLIT

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 320	946350
MTR CODE | SITE NAME:	87802	N/A
SAMPLE DATE | TIME (Hrs):	10-6-94	0835
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	10-16-94	10/19/94
DATE OF BTEX EXT. | ANAL.:	N/A	N/A
TYPE | DESCRIPTION:	VG	Brown Sand

REMARKS: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			DF	Q	M(g)	V(ml)	
TPH (418.1)	468	MG/KG			2.0	28	310
HEADSPACE PID	320	PPM					
PERCENT SOLIDS	92.6	%					

-- TPH is by EPA Method 418.1

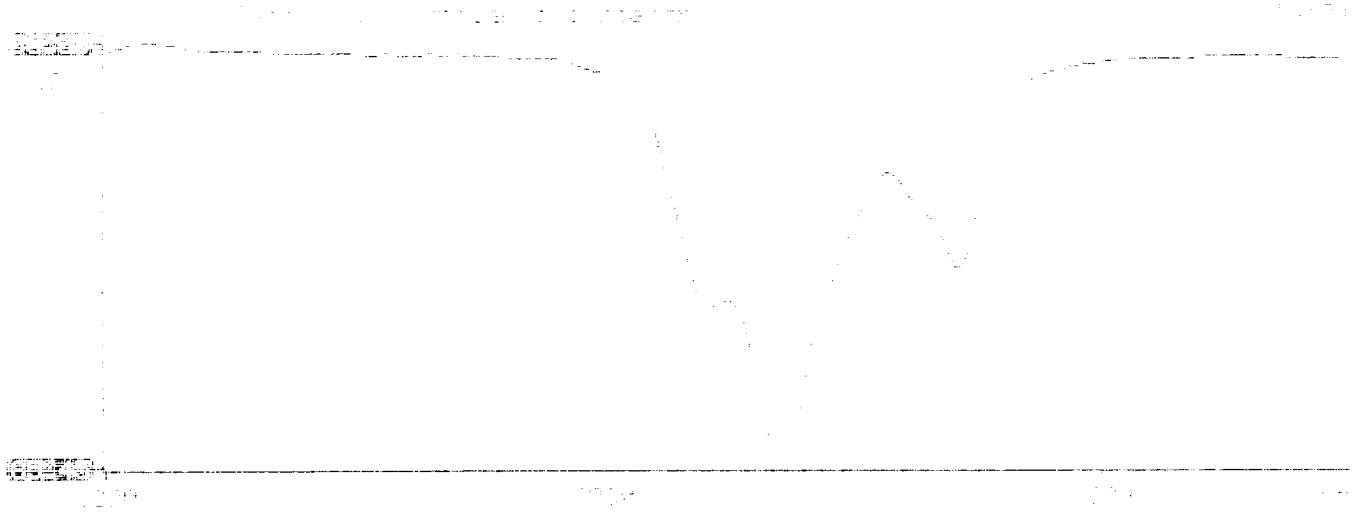
Narrative: ATI Results attached.

DF = Dilution Factor Used

Approved By: _____ Date: 11/3/94

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

Perkin-Elmer Model 1600 FT-IR
Analytical Report



Analytical **Technologies,** Inc.

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

ATI I.D. **410392**

October 19, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **10/14/94**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** sample(s). The sample(s) 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

OCT 1994

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS	ATI I.D.	: 410392
PROJECT #	: 24324	DATE RECEIVED	: 10/14/94
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 10/17/94

PARAMETER	UNITS	01	946350
PETROLEUM HYDROCARBONS, IR	MG/KG	310	