

*Denny L. Faust*  
**DEPUTY OIL & GAS INSPECTOR**

**DEC 22 1997**

*Approved*

**Meter Number:70985**

**Location Name:SAN JUAN 32-9 UNIT #26**

**Location:TN-31 RG-10**

**SC-01 UL-L**

**2 - Federal**

**NMOCD Zone:OUTSIDE**

**Hazard Ranking Score:00**

**RECEIVED**  
APR 14 1997

**OIL CON. DIV.**  
DIST. 3

**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.

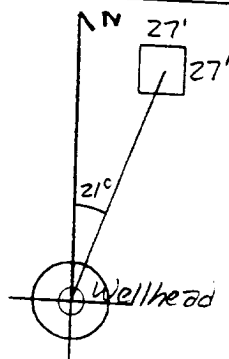
Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

## FIELD PIT SITE ASSESSMENT FORM

<b>GENERAL</b>	<p>Meter: <u>70-985</u> Location: <u>San Juan 32-9 Unit #26</u></p> <p>Operator #: <u>2999</u> Operator Name: <u>Meridian</u> P/L District: <u>Azte C</u></p> <p>Coordinates: Letter: <u>L</u> Section <u>1</u> Township: <u>31</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: <u>X</u> Other: _____</p> <p>Site Assessment Date: <u>9/6/94</u> Area: <u>04</u> Run: <u>53</u></p>
<b>SITE ASSESSMENT</b>	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Inside <input type="checkbox"/> (1)</p> <p>Outside <input checked="" type="checkbox"/> (2)</p> </div> <div style="width: 45%;"> <p><b>Land Type:</b></p> <p>BLM <input checked="" type="checkbox"/> (1)</p> <p>State <input type="checkbox"/> (2)</p> <p>Fee <input type="checkbox"/> (3)</p> <p>Indian _____</p> </div> </div> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b></p> <p>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><b>Horizontal Distance to Surface Water Body</b></p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Miller Canyon</u></p> <p>(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) &lt; 100' (Navajo Pits Only)</p> <p style="margin-left: 400px;"><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>0</u> POINTS</p>
<b>REMARKS</b>	<p>Remarks : <u>Redline Book - Outside</u> <u>Vulnerable Zone - Outside</u></p> <p><u>Four pits, line and drip is dry. Will close one pit.</u></p> <p style="text-align: right;"><u>PUS H. TAN</u></p>

# ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 21° Footage from Wellhead 162'  
 b) Length : 27' Width : 27' Depth : 5'



ORIGINAL PIT LOCATION

## Remarks :

Pictures @ 1515 (48, Roll 1)

Dump Truck

Pit is an end-of-the line drip pit with a swirl pot in it. Call Aztec dist. to get swirl pot removed before closing.

REMARKS

Completed By:

Sarah Kelly

Signature

9/7/94

Date

# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 70985 Location: SAN JUAN 32-9 UNIT #26  
 Coordinates: Letter: L Section 1 Township: 31 Range: 10  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Date Started : 10-3-94 Run: 04 53

FIELD OBSERVATIONS

Sample Number(s): KP 276  
 Sample Depth: 4' Feet  
 Final PID Reading 148 PID Reading Depth 4' 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: 10-3-94 Pit Closed By: B.E.F.

REMARKS

Remarks : NO LINE MARKERS HIT SAND STONE AT 4'

Signature of Specialist: Kelly Padilla



**FIELD SERVICES LABORATORY  
ANALYTICAL REPORT**

**PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone**

**SAMPLE IDENTIFICATION**

SAMPLE NUMBER:

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

Field ID

Lab ID

67 276	946 298
70985	N/A
10-3-94	0905
N/A	
10-6-94	
N/A	N/A
VG	Brown sand & clay

REMARKS:

**RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	106	MG/KG			2.07	28
HEADSPACE PID	148	PPM				
PERCENT SOLIDS	85.7	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

*John F. [Signature]*

Date:

10/13/94

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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
*****

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04/10/06 11:21

Sample identification  
746298

Initial mass of sample, g  
1.070

Volume of sample after extraction, ml  
25.000

Petroleum hydrocarbons, ppm  
25.351

Net Absorbance of hydrocarbons (2970 cm-1)  
1.097

