

*Denny E. Foust*  
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

*Approved*

Meter Number: 71651  
Location Name: SAN JUAN 30-6 #67  
Location: TN-30 RG-07  
SC-12 UL-H  
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

GENERAL

Meter: 71651 Location: SAN JUAN 30-6-#67  
Operator #: 2999 Operator Name: Mohdian P/L District: Bloomfield  
Coordinates: Letter: H Section 12 Township: 30 Range: 7  
Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Pit Type: Dehydrator ☒ Location Drip: \_\_\_\_\_ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
Site Assessment Date: 4-27-94 Area: 10 Run: 82

SITE ASSESSMENT

## NMOCD Zone:

(From NMOCD  
Maps)

Inside

Outside

## Land Type:

BLM

State

Fee

Indian

☒ (1)

☐ (2)

☐ (3)

☐ (1)

☒ (2)

## Depth to Groundwater

Less Than 50 Feet (20 points)

50 Ft to 99 Ft (10 points)

Greater Than 100 Ft (0 points)

☐ (1)

☐ (2)

☒ (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)

200 Ft to 1000 Ft (10 points)

Greater Than 1000 Ft (0 points)

☐ (1)

☐ (2)

☒ (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

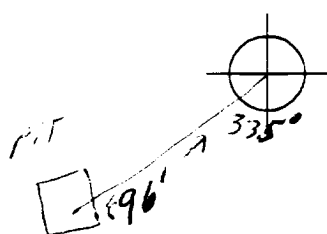
REMARKS

Remarks : PIT WAS DRY

271912  
2137 7132 01271 0324 11

# ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 335° Footage from Wellhead 96'  
b) Length : 30' Width : 30' Depth : 3'



ORIGINAL PIT LOCATION

Remarks :

REMARKS

Handwritten remarks section with multiple horizontal lines for text entry.

Completed By:

Ermine Truby

Signature

4-27-94

Date

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	Meter: <u>71651</u> Location: <u>SAN JUAN 30-6 #67</u> Coordinates: Letter: <u>H</u> Section <u>12</u> Township: <u>30</u> Range: <u>7</u> Or Latitude _____ Longitude _____ Date Started : <u>4-27-94</u> Area: <u>10</u> Run: <u>31</u>
<b>FIELD OBSERVATIONS</b>	<div style="text-align: right; margin-bottom: 5px;">945030 <i>and</i> 4/29/94</div> Sample Number(s): <u>E.T. #6</u> Sample Depth: <u>5'</u> Feet Final PID Reading _____ PID Reading Depth _____ Feet <div style="text-align: center;">Yes      No</div> Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet
<b>CLOSURE</b>	Remediation Method : <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 40%;">           Excavation            Onsite Bioremediation            Backfill Pit Without Excavation         </div> <div style="width: 55%;"> <input type="checkbox"/> (1) Approx. Cubic Yards _____  <input type="checkbox"/> (2)  <input checked="" type="checkbox"/> (3)         </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 40%;">           Envirotech            Other Facility         </div> <div style="width: 55%;"> <input type="checkbox"/> (1)      <input type="checkbox"/> (3) Tierra  <input type="checkbox"/> (2) Name: _____         </div> </div> Pit Closure Date: <u>4-27-94</u> Pit Closed By: <u>E. F. N. C.</u>
<b>REMARKS</b>	Remarks : <u>(PIT WAS DRY) HIT ROCK AT 5'</u> _____ _____
	Signature of Specialist: <u>Ernie Truby</u>



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	ET 6	94S030
MTR CODE   SITE NAME:	71651	N/A
SAMPLE DATE   TIME (Hrs):	4/27/94	1345
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	5-2-94	5/2/94
DATE OF BTEX EXT.   ANAL.:	N/A	N/A
TYPE   DESCRIPTION:	VG	Grey Fine Sand/Clay

REMARKS: \_\_\_\_\_

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1) 286	286.115	MG/KG			2.0	28
HEADSPACE PID	765	PPM				
PERCENT SOLIDS	94.93.7	%				

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

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

DF = Dilution Factor Used

Approved By: John Swoboda

Date: 5/7/94

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

Perkin-Elmer Model 1600 FT-IR  
 Analysis Report  
 \*\*\*\*\*

4/05/02 12:03

Sample identification  
 145030

Initial mass of sample, g  
 1.000

Volume of sample after extraction, ml  
 2.000

Petroleum hydrocarbons, ppm  
 36,413

Net absorbance of hydrocarbons (2930 cm-1)  
 0.149

1: Petroleum hydrocarbons spectrum

11:03

