

*James E. Just*  
DEPUTY REGIONAL DIRECTOR

DEC 30 1997

*Approved*

Meter Number:93188  
Location Name:Florance #118  
Location:TN-29 RG-09  
SC-24 UL-A  
2 - Federal  
NMOCD Zone:OUTSIDE  
Hazard Ranking Score:00

RECEIVED  
APR 14 1997

OIL CONSERV. DIV.  
D6718

**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: 93188 Location: Florance #118  
 Operator #: 0203 Operator Name: Amoco P/L District: Bloomfield  
 Coordinates: Letter: A Section 24 Township: 29 Range: 09  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Pit Type: Dehydrator ☒ Location Drip: \_\_\_\_\_ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
 Site Assessment Date: 6-9-95 Area: 10 Run: 92

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 : Topo and Redline show outside VZ.

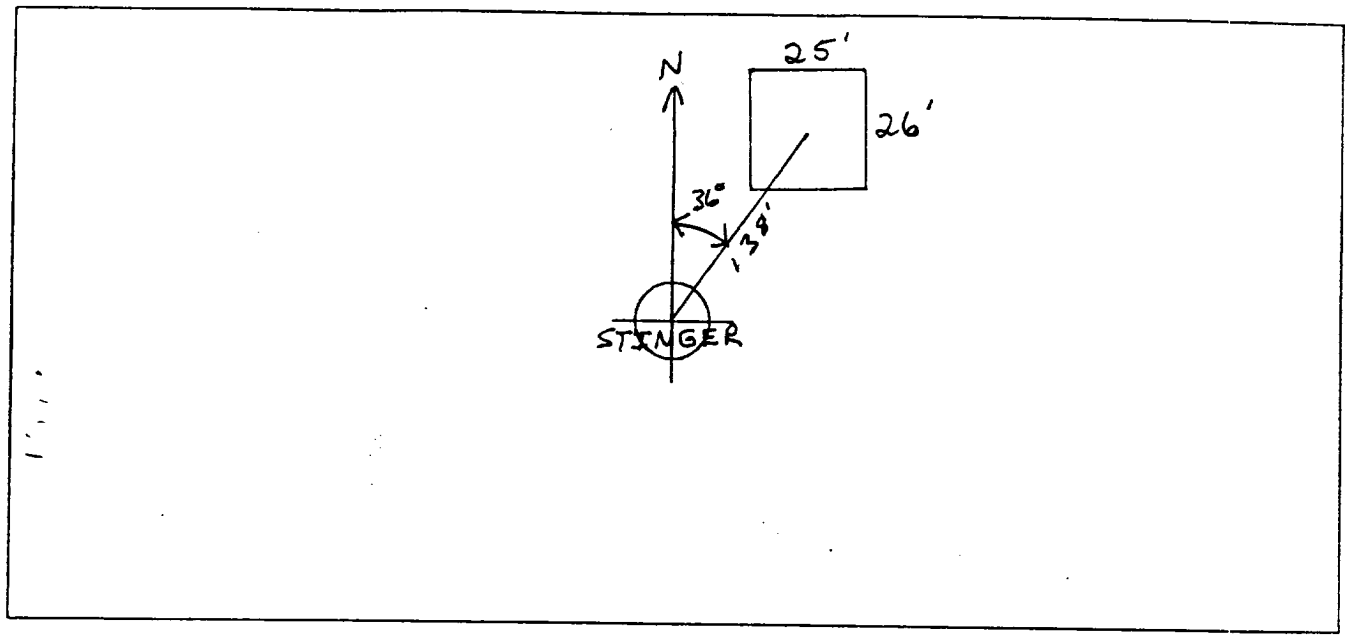
Will close pit : P+A

Push In

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 36° Footage from Wellhead 138'  
b) Length : 25' Width : 26' Depth : 4'



REMARKS

Remarks :  
Photo's 4 pict. 0940  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Completed By:

James L. Penno  
Signature

6-9-95  
Date

# FIELD PIT REMEDIATION/CLOSURE FORM

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GENERAL            | <p>Meter: <u>93188</u> Location: <u>Florence #118</u></p> <p>Coordinates: Letter: <u>A</u> Section <u>24</u> Township: <u>29</u> Range: <u>09</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>7-5-95</u> Run: <u>10</u> <u>92</u></p>                                                                                                                                                                                                           |
| FIELD OBSERVATIONS | <p>Sample Number(s): <u>MK417</u></p> <p>Sample Depth: <u>4'</u> Feet</p> <p>Final PID Reading <u>12 PPM</u> PID Reading Depth <u>4'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>                                                                                                                                                                              |
| CLOSURE            | <p>Remediation Method :</p> <p>Excavation <input type="checkbox"/> Approx. Cubic Yards _____</p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input checked="" type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>7-5-95</u> Pit Closed By: <u>Philips</u></p> |
| REMARKS            | <p>Remarks : <u>Took Fence Down started to dig sample Hole</u></p> <p><u>Floor of pit is sand stone 4'</u></p>                                                                                                                                                                                                                                                                                                                                                        |
|                    | <p>Signature of Specialist: <u>Morgan Killion</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                 |



\*\*\*\*\*  
Test Method for  
Oil and Grease and Petroleum Hydrocarbons  
in Water and Soil  
Perkin-Elmer Model 1600 FT-IR  
Analysis Report  
\*\*\*\*\*

95/07/06 14:06

Sample identification  
946945

Initial mass of sample, g  
0.600

Volume of sample after extraction, ml  
28.000

Petroleum hydrocarbons, ppm  
16610.704

Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.613

