

*Denny E. Faust*  
DEPUTY OIL & GAS INSPECTOR

DEC 29 1997

*Approved*

Meter Number: 74940  
Location Name: BISHOP #2  
Location: TN-25 RG-03  
SC-26 UL-L  
4 - Fee  
NMOCD Zone: OUTSIDE  
Hazard Ranking Score: 00

RECEIVED  
APR 16 1997

OIL CON. DIV.  
DRL 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.



EL PASO FIELD SERVICES

## FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 74-940 Location: Bishop No. 2  
 Operator #: 1862 Operator Name: Dugan Production P/L District: Ojito  
 Coordinates: Letter: L Section 26 Township: 25 Range: 3  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Pit Type: Dehydrator \_\_\_\_\_ Location Drip: X Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
 Site Assessment Date: 8/11/94 Area: 08 Run: 91

SITE ASSESSMENT

## NMOCD Zone:

(From NMOCD Maps)

Inside

Outside

## 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 Gavilan Canyon

(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

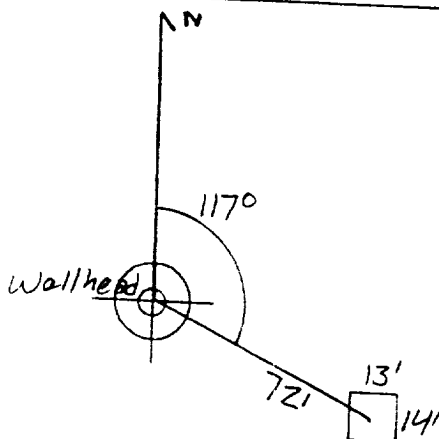
Remarks : Redline Book - Outside Vulnerable Zone Tap - Outside  
One pit, pit is dry, will close one pit.

PUSH IN

ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 117° Footage from Wellhead 72'  
b) Length : 13' Width : 14' Depth : 2'



REMARKS

## Remarks :

Pictures @ 1301 (16-19, Roll 1)

Dump Truck

Location sign says unit D, redline books shows meter in unit L.

Completed By:

Sarah Kelly  
Signature

8/11/94  
Date

# FIELD PIT REMEDIATION/CLOSURE FORM

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GENERAL            | <p>Meter: <u>74940</u> Location: <u>Bishop #2</u></p> <p>Coordinates: Letter: <u>L</u> Section <u>26</u> Township: <u>25</u> Range: <u>3</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>10-5-94</u> Run: <u>08</u> <u>91</u></p>                                                                                                                                                                                                            |
| FIELD OBSERVATIONS | <p>Sample Number(s): <u>VW378</u></p> <p>Sample Depth: <u>9'</u> Feet</p> <p>Final PID Reading <u>225</u> PID Reading Depth <u>9'</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>10-5-94</u> Pit Closed By: <u>BEZ</u></p> |
| REMARKS            | <p>Remarks : <u>Hit Bentonite 4' - 9' couldn't dig anymore</u></p>                                                                                                                                                                                                                                                                                                                                                                                                 |
|                    | <p>Signature of Specialist: <u>Vale Wilson</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                 |



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

VW378

Lab ID

946348.

MTR CODE | SITE NAME:

74940

N/A

SAMPLE DATE | TIME (Hrs):

10-5-94

1340

SAMPLED BY:

N/A

DATE OF TPH EXT. | ANAL.:

10-6-94

DATE OF BTEX EXT. | ANAL.:

N/A

N/A

TYPE | DESCRIPTION:

VG

Brown/Grey sand & clay

REMARKS:

RESULTS

| PARAMETER      | RESULT | UNITS | QUALIFIERS |   |      |       |
|----------------|--------|-------|------------|---|------|-------|
|                |        |       | DF         | Q | M(g) | V(ml) |
| TPH (418.1)    | 32.6   | MG/KG |            |   | 2.02 | 28    |
| HEADSPACE PID  | 225    | PPM   |            |   |      |       |
| PERCENT SOLIDS | 90.3   | %     |            |   |      |       |

-- TPH is by EPA Method 418.1 --

narrative:

F = Dilution Factor Used

Approved By:

Date:

10-13-94

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

04/10/06 15:36

Sample Identification  
 046348

Initial mass of sample, g  
 0.00

Mass of residue after extraction, g  
 0.00

Mass of solvent, g  
 0.00

Mass of sample + solvent, g  
 0.00

