

*Denny E. Felt*  
DEPUTY OIL & GAS INSPECTOR

DEC 29 1987

*Approved*

**Meter Number: 74337**  
**Location Name: QUITZAU #9**  
**Location: TN-25 RG-08**  
**SC-11 UL-M**  
**2 - Federal**  
**NMOCD Zone: OUTSIDE**  
**Hazard Ranking Score: 00**

RECEIVED  
APR 14 1987  
OIL & GAS DIV.  
L-1018

**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: 74-337 Location: Quitzon No. 9  
Operator #: 2999 Operator Name: Meridian P/L District: Ballard  
Coordinates: Letter: M Section 11 Township: 25 Range: 8  
Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Pit Type: Dehydrator \_\_\_\_\_ Location Drip: X Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
Site Assessment Date: 7/28/94 Area: 07 Run: 92

**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 Selph 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**

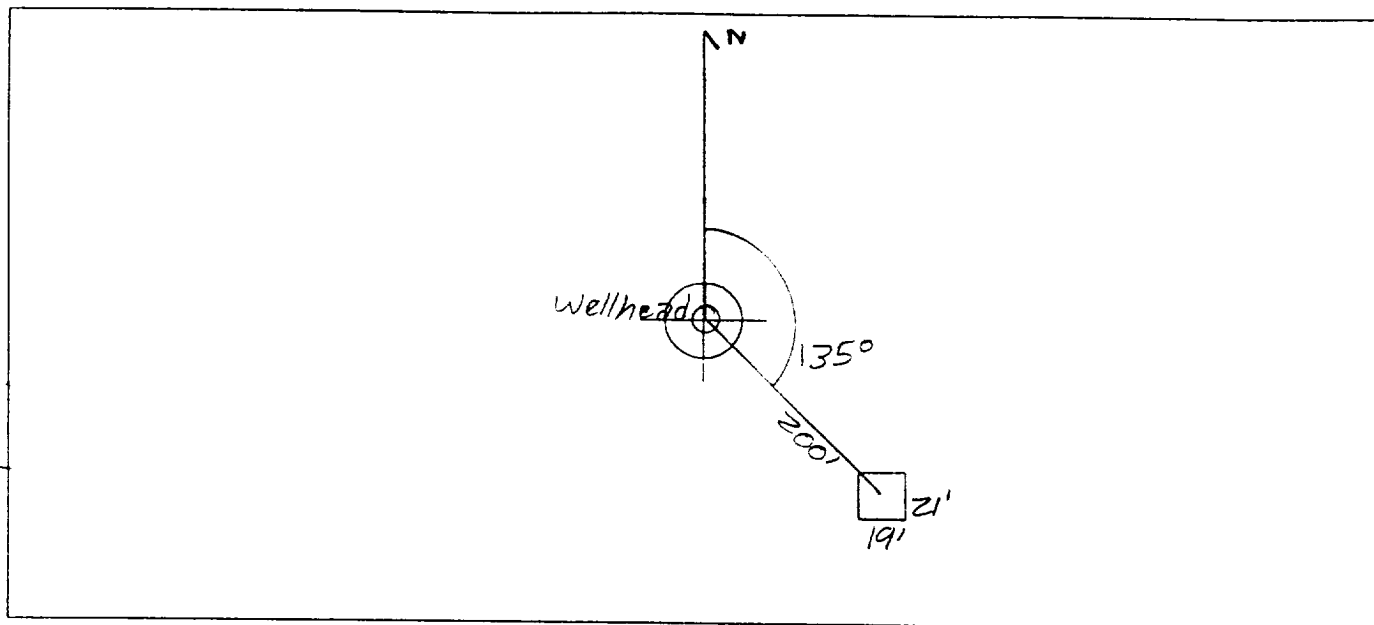
Remarks : Redline Book - Outside Vulnerable Zone Type - Outside  
Two pits, on site, location drip pit is dry, will close one pit.

PUSH IAI

ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 135° Footage from Wellhead 200'  
b) Length : 19' Width : 21' Depth : 3'



REMARKS

## Remarks :

Pictures @ 1540 (9-12, Roll 12)

Dump Truck

Meter is temporarily abandoned.

Completed By:

Amber Kelly

Signature

7/28/94

Date

# FIELD PIT REMEDIATION/CLOSURE FORM

## GENERAL

Meter: 74337 Location: Quitman #9  
 Coordinates: Letter: M Section 11 Township: 25 Range: 8  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Date Started : 10-10-94 Run: 07 92

## FIELD OBSERVATIONS

Sample Number(s): VW390  
 Sample Depth: 9' Feet  
 Final PID Reading 163 PID Reading Depth 9' 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: 10-10-94 Pit Closed By: BEZ

## REMARKS

Remarks : 8' Bentonite  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature of Specialist: Vale Wilson



## FIELD SERVICES LABORATORY

### ANALYTICAL REPORT

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

#### SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

VW 390

946372

74337

N/A

10-10-94

0930

N/A

10-13-94

N/A

N/A

VG

Brown fine sand & clay

REMARKS:

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	370	MG/KG			1.99	28
HEADSPACE PID	163	PPM				
PERCENT SOLIDS	93.1	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

Date:

10/23/94

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

4/10/13 11:50

Sample identification  
46372

Initial mass of sample, g  
1.990

Volume of sample after extraction, ml  
8.000

Petroleum hydrocarbons, ppm  
69.714

Net absorbance of hydrocarbons (2930  $\text{cm}^{-1}$ )  
0.055

ILLEGIBLE

