DEC 2 8 1997

Approved

**Meter Number:94162**
**Location Name:FEDERAL COM A #5**
**Location:TN-25 RG-06**
**SC-35 UL-E**
**2 - Federal**
**NMOCD Zone:OUTSIDE**
**Hazard Ranking Score:00**

RECEIVED
APR 1 4 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

EL PASO FIELD SERVICES

## GENERAL

Meter: 94162 Location: FEDERAL COM A #5

Operator #: _____ Operator Name: KIMBELL OIL P/L District: OJITO

Coordinates: Letter: E Section 35 Township: 25 Range: 6

Or Latitude _____ Longitude _____

Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____

Site Assessment Date: 2-7-95 Area: 06 Run: 52

## 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 : REDLINE SHOWS INSIDE BUT TOPO SHOWS LOCATION OUTSIDE V.Z ONLY PIT ON LOCATION. BELONGS TO EPNG. WILL CLOSE PIT.

PUSH IN

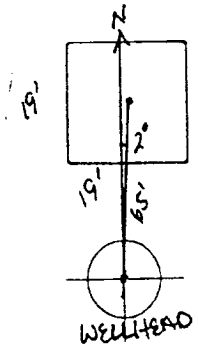
(SP3190) 04/08/94

ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 20 Footage from Wellhead 65'

b) Length : 19' Width : 19' Depth : 2'




REMARKS

Remarks :

PHOTOS- 1030

Completed By:

Robert Thompson
Signature

2-7-95
Date

# FIELD PIT REMEDIATION/CLOSURE FORM

**GENERAL**

Meter: 94162 Location: Federal Com A #5

Coordinates: Letter: E Section 35 Township: 25 Range: 6

Or Latitude _____ Longitude _____

Date Started : 3-14-95 Run: 06 52

**FIELD OBSERVATIONS**

Sample Number(s): KP 439 _____ _____ _____

Sample Depth: 9' Feet

Final PID Reading 243 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: 3-14-95 Pit Closed By: B.E.J

**REMARKS**

**Remarks :** Some Line markers. dug A Test hole. Hit Sandstone At 9' Sampled Closed Pit

Signature of Specialist: Kelly Padilla

(SP3191) 03/16/94

El Paso Natural Gas Company

# FIELD SERVICES LABORATORY
# ANALYTICAL REPORT
# PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

## SAMPLE IDENTIFICATION

| | Field ID | Lab ID |
|---|---|---|
| SAMPLE NUMBER: | KP 439 | 946726 |
| MTR CODE \| SITE NAME: | 94162 | N/A |
| SAMPLE DATE \| TIME (Hrs): | 3-14-95 | 1315 |
| SAMPLED BY: | N/A | |
| DATE OF TPH EXT. \| ANAL.: | 3/23/95 | 3/23/95 |
| DATE OF BTEX EXT. \| ANAL.: | N/A | N/A |
| TYPE \| DESCRIPTION: | V6 | green sand and clay |

REMARKS: _____

## RESULTS

| PARAMETER | RESULT | UNITS | QUALIFIERS | | | |
|---|---|---|---|---|---|---|
| | | | DF | Q | M(g) | V(ml) |
| TPH (418.1) | 822 | MG/KG | | | 1.98 | 28 |
| HEADSPACE PID | 243 | PPM | | | | |
| PERCENT SOLIDS | 90.4 | % | | | | |

-- TPH is by EPA Method 418.1 --

Narrative: _____

DF = Dilution Factor Used

Approved By: _____ Date: 3-24-95

**********  **********

Test Me .od for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report

**********

95/03/23 09:06

Sample Identification
944726

Initial mass of sample, g
1.1950

Volume of sample after extraction, ml
30.000

Petroleum hydrocarbons, ppm
331.920
Net absorbance of hydrocarbons (2930 cm-1)
0.103