

**Denny L. Faust**  
**DEPUTY OIL & GAS INSPECTOR**

DEC 22 1997

*Approved*

Meter Number: 97131  
Location Name: STATE COM AH #30E  
Location: TN-30 RG-12  
SC-36 UL-N  
1 - State  
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

**EL PASO FIELD SERVICES**

GENERAL

Meter: 97131 Location: STATE COM AH #30 E  
 Operator #: 0286 Operator Name: CONOCO P/L District: KUTZ  
 Coordinates: Letter: N Section 36 Township: 30 Range: 12  
 Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 Pit Type: Dehydrator ☒ Location Drip: \_\_\_\_\_ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
 Site Visit Date: 3.21.94 Run: 02 40

SITE ASSESSMENT

**NMOCD Zone:** Inside ☐ **Land Type:** BLM ☐  
 (From NMOCD Vulnerable ☐ State ☒  
 Maps) Zone ☐ Fee ☐  
 Outside ☒ Indian \_\_\_\_\_

## Depth to Groundwater

Less Than 50 Feet (20 points) ☐  
 50 Ft to 99 Ft (10 points) ☐  
 Greater Than 100 Ft (0 points) ☒

## 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? ☐ YES (20 points) ☒ 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) ☒

Name of Surface Water Body \_\_\_\_\_

(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)

**TOTAL HAZARD RANKING SCORE:** 0 POINTS

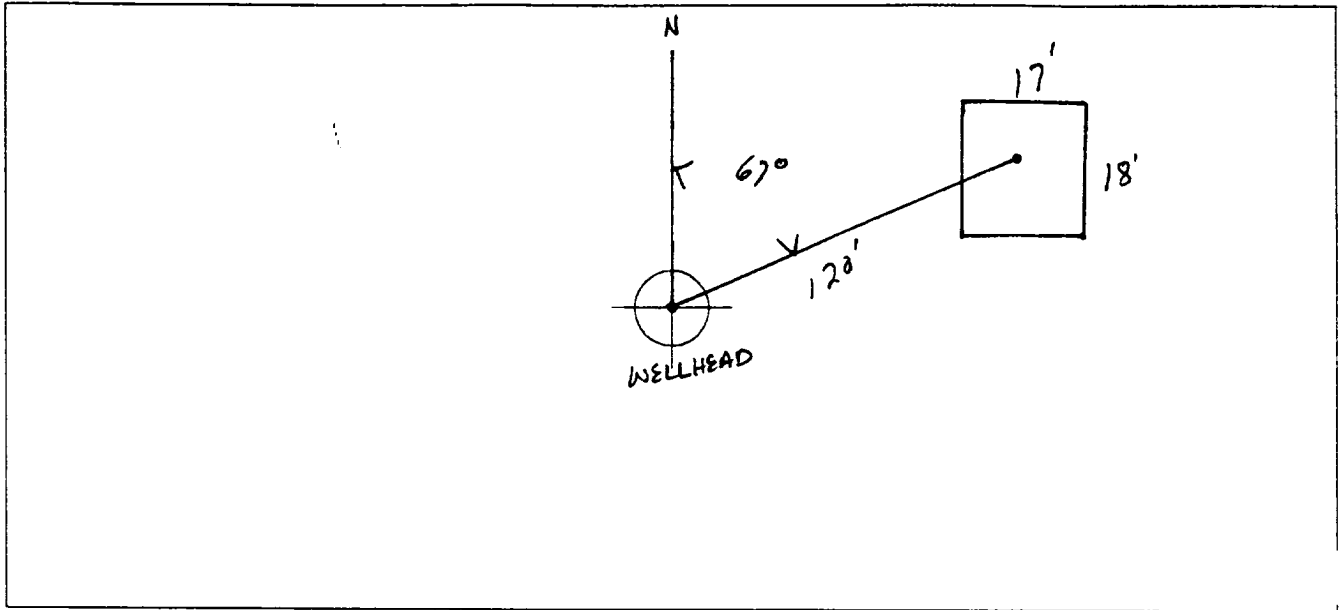
REMARKS

Remarks : ONLY PIT ON LOCATION. DUMP IS JUST N.E. FROM  
LOCATION. PIT IS DRY.

ORIGINAL PIT LOCATION

## ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 67° Footage to Wellhead 120'  
b) Degrees from North \_\_\_\_\_ Footage to Dogleg \_\_\_\_\_  
Dogleg Name \_\_\_\_\_  
c) Length : 18' Width : 17' Depth : 3'



REMARKS

Remarks :

STARTED TAKING PICTURES AT 12:54 P.M.END DUMP

Completed By:

Robert Thompson  
Signature

3-21-94  
Date

# FIELD PIT REMEDIATION/CLOSURE FORM

|                           |  |
|---------------------------|--|
| <b>GENERAL</b>            | Meter: <u>97131</u> Location: <u>State Com AH #30E</u><br>Coordinates: Letter: <u>N</u> Section <u>36</u> Township: <u>30</u> Range: <u>12</u><br>Or Latitude _____ Longitude _____<br>Date Started : <u>4-19-94</u> Area: <u>02</u> Run: <u>41</u>  |
| <b>FIELD OBSERVATIONS</b> | Sample Number(s): <sup>940824</sup> <u>VW9</u><br>Sample Depth: <u>10'</u> Feet<br>Final PID Reading <u>411</u> PID Reading Depth <u>10</u> Feet<br>Yes No<br>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth <u>10</u> Feet  |
| <b>CLOSURE</b>            | Remediation Method :<br>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>45</u><br>Onsite Bioremediation <input type="checkbox"/> (2)<br>Backfill Pit Without Excavation <input type="checkbox"/> (3)<br>Soil Disposition:<br>Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra<br>Other Facility <input type="checkbox"/> (2) Name: _____<br>Pit Closure Date: <u>4-19-94</u> Pit Closed By: <u>BEI</u> |
| <b>REMARKS</b>            | Remarks : <u>Hit hard shale at 10' &amp; couldn't dig any further. Contamination started cleaning up pretty good before then. Pit was wet to start lots of oil &amp; paraffin.</u>   |
|                           | Signature of Specialist: <u>Vale Wilson</u>  |



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

|                            | Field ID | Lab ID           |
|----------------------------|----------|------------------|
| SAMPLE NUMBER:             | VW9      | 940824           |
| MTR CODE   SITE NAME:      | 97131    | NIA              |
| SAMPLE DATE   TIME (Hrs):  | 4/19/94  | 0900             |
| SAMPLED BY:                | NIA      |                  |
| DATE OF TPH EXT.   ANAL.:  | 4/22/94  | 4/22/94          |
| DATE OF BTEX EXT.   ANAL.: | 4/25/94  | 4/25/94          |
| TYPE   DESCRIPTION:        | VC       | Grey Sand / Clay |

REMARKS:

RESULTS

| PARAMETER      | RESULT                                     | UNITS | QUALIFIERS |   |      |       |
|----------------|--|-------|------------|---|------|-------|
|                |  |       | DF         | Q | M(g) | V(ml) |
| BENZENE        | 1.61                                       | MG/KG | 20         |   |      |       |
| TOLUENE        | 20.7                                       | MG/KG | 20         | B |      |       |
| ETHYL BENZENE  | 3.21                                       | MG/KG | 20         |   |      |       |
| TOTAL XYLENES  | <del>37.5</del><br>30.9 <sup>4/23/94</sup> | MG/KG | 20         |   |      |       |
| TOTAL BTEX     | 63.0                                       | MG/KG | 0.0417     |   | 0.48 | 20    |
| TPH (418.1)    | 3570                                       | MG/KG |            |   | 2.02 | 28    |
| HEADSPACE PID  | 411  | PPM   |            |   |      |       |
| PERCENT SOLIDS | 88.4                                       | %     |            |   |      |       |

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

The Surrogate Recovery was at 100.1 % for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By:

*John Sabido*

Date:

5/17/94

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

Perkin-Elmer Model 1600 FT-IR  
Analysis Report

04/04/22 10:10

Sample identification  
040824

Initial mass of sample, g  
0.020

Volume of sample after extraction, ml  
10.000

Petroleum hydrocarbons, ppm  
572.119

Net absorbance of hydrocarbons (2930  $\text{cm}^{-1}$ )  
0.452

Y: Petroleum hydrocarbons spectrum

10:10

