

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

DEC 29 1997

Approved

Meter Number: 72472
Location Name: RUSSELL LS 5
Location: TN-28 RG-08
SC-25 UL-G
2 - Federal
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.

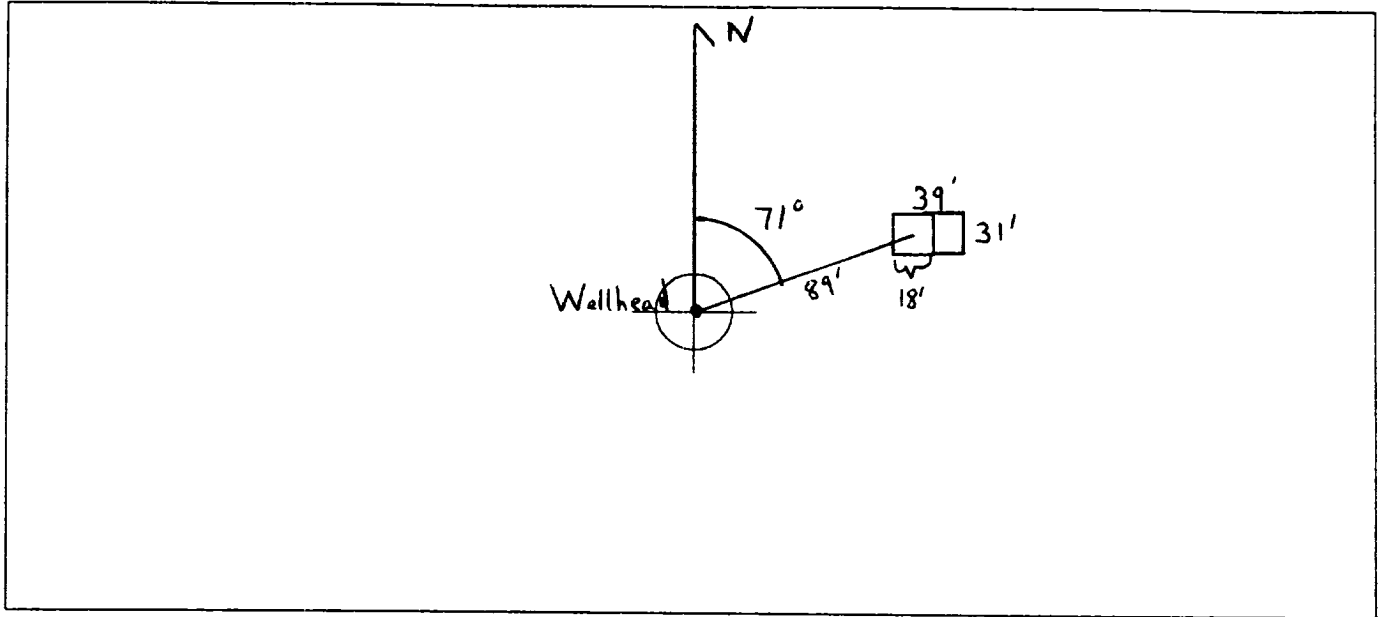
Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>73472</u> Location: <u>Russell LS 5</u> Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>Blanco</u> Coordinates: Letter: <u>G</u> Section <u>25</u> Township: <u>28</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>6/9/94</u> Area: <u>13</u> Run: <u>42</u>
	SITE ASSESSMENT
REMARKS	

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 71° Footage from Wellhead 89'
 b) Length : 39' Width : 31' Depth : 4'



Remarks :

Pictures @ 1305 (5-9)
End Dump

Fenced & Bermed area of pit is 39' x 31'. Actual pit area is 31' x 18' x 4'

Completed By:

Cory Chance
 Signature

6/9/94
 Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>72472</u> Location: <u>Russell LS #5</u> Coordinates: Letter: <u>G</u> Section <u>25</u> Township: <u>28</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Date Started : <u>8-4-94</u> Run: <u>13</u> <u>42</u>
FIELD OBSERVATIONS	Sample Number(s): <u>MK 228</u> Sample Depth: <u>9'</u> Feet Final PID Reading <u>284</u> PID Reading Depth <u>9'</u> 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: <u>8-4-94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>EPNGLINES NOT marked soil Gray strong HYDROCARBON</u> <u>odor hit sandstone 9'</u>
	Signature of Specialist: <u>Morgan Hillion</u>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

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:

mk 228

945849

72472

N/A

8-4-94

1603

N/A

8/9/94

8/9/94

N/A

N/A

VG

gray sand + clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	3400	MG/KG			2.23	28
HEADSPACE PID	284	PPM				
PERCENT SOLIDS	90.0	%				

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

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

DF = Dilution Factor Used

Approved By: J. S.

Date: 8/12/94

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

Perkin-Elmer Model 1600 FT-IR
Analysis Report

04/08/09 13:55

Sample identification
045849

Initial mass of sample, g
0.030

Volume of sample after extraction, ml
13.000

Petroleum hydrocarbons, ppm
1797.133
Net absorbance of hydrocarbons (2930 cm⁻¹)
0.74

ILLEGIBLE

Net Petroleum hydrocarbons spectrum

13.000

