

Denny S. Fort
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

Approved

Meter Number: 70532
Location Name: PRITCHARD B3
Location: TN-31 RG-09
SC-34 UL-K
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.

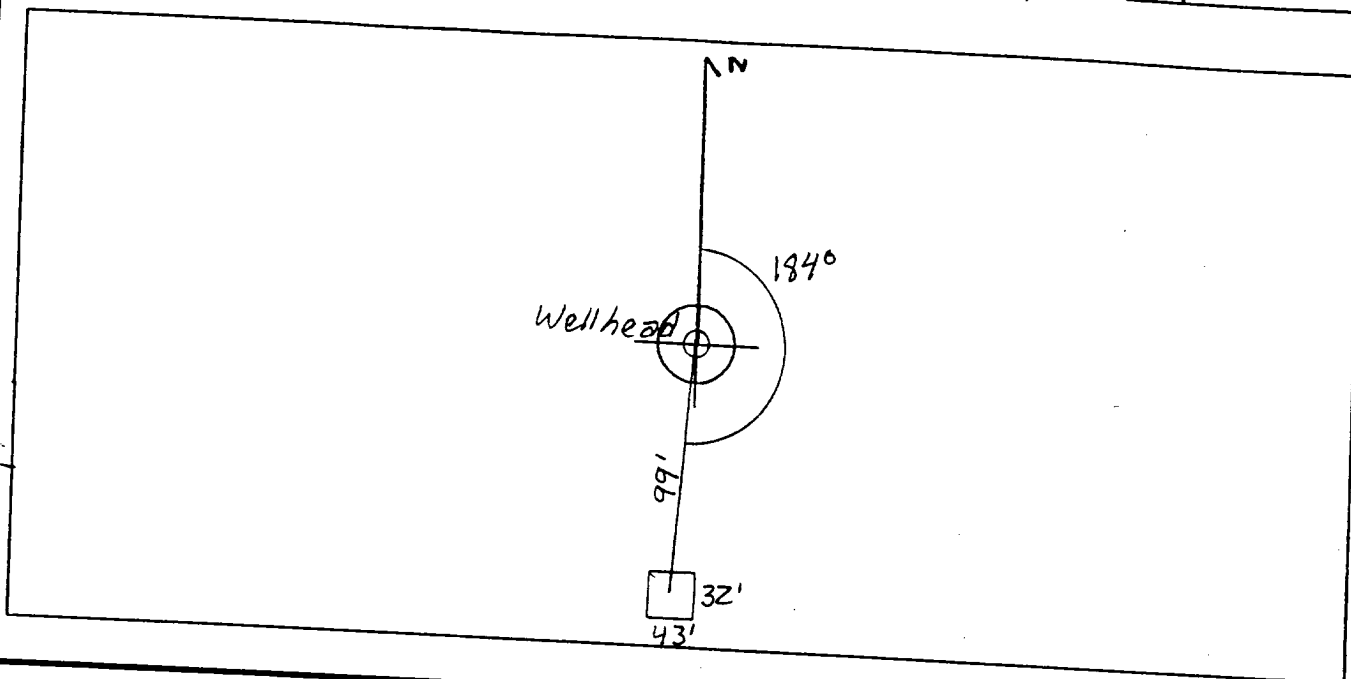
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>70-532</u> Location: <u>Pritchard B3</u> Operator #: <u>0203</u> Operator Name: <u>Amoco Production</u> P/L District: <u>Aztec</u> Coordinates: Letter: <u>K</u> Section <u>34</u> Township: <u>31</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Assessment Date: <u>8/31/94</u> Area: <u>04</u> Run: <u>41</u></p>
	SITE ASSESSMENT
REMARKS	

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 184° Footage from Wellhead 99'
b) Length : 43' Width : 32' Depth : 4'

ORIGINAL PIT LOCATION



REMARKS :

Pictures @ 1107 (17-20, R6114)
Dump Truck

REMARKS

Completed By:

Amah Holley
Signature

8/31/94
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>70532</u> Location: <u>Pritchard B3</u> Coordinates: Letter: <u>K</u> Section <u>34</u> Township: <u>31</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Date Started : <u>10/3/94</u> Run: <u>04</u> <u>41</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KD 303</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>54 ppm</u> PID Reading Depth <u>12'</u> Feet Groundwater Encountered <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation <input type="checkbox"/> Approx. Cubic Yards _____ Onsite Bioremediation <input type="checkbox"/> Backfill Pit Without Excavation <input checked="" type="checkbox"/> Soil Disposition: Envirotech <input type="checkbox"/> Tierra <input type="checkbox"/> Other Facility <input type="checkbox"/> Name: _____ Pit Closure Date: <u>10/3/94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>Excavated test hole to 12', took pid sample, closed pit.</u>
	Signature of Specialist: <u>[Signature]</u>



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT**

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

Field ID

Lab ID

Field ID	Lab ID
VD 303	946308
70532	N/A
10-3-94	1435
N/A	N/A
10-6-94	N/A
N/A	N/A
VG	Grey sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	5090	MG/KG			2.14	28
HEADSPACE PID	54	PPM				
PERCENT SOLIDS	88.8	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

Date:

10/13/94

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

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84/10/06 11:44

Sample identification
 446306

Initial mass of sample, g
 1.140

Volume of sample after extraction, ml
 12.000

Petroleum hydrocarbons, ppm
 1086.716
 Net Absorbance of hydrocarbons (2930 cm-1)
 .674

