

Approved
DEC 8 1987

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Meter Number:89345
Location Name:HAMNER #5
Location:TN-29 RG-09
SC-28 UL-F
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RECEIVED
APR 14 1987

OIL CON. DIV.
APR 8

**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: 89345 Location: HAMNER #5
 Operator #: 0203 Operator Name: Amoco P/L District: BLANCO
 Coordinates: Letter: F Section 28 Township: 29 Range: 9
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 5.14.94 Area: 03 Run: 42

SITE ASSESSMENT

NMOCD Zone:(From NMOCD
Maps)

Inside

Outside

Land Type:BLM ☒ (1)State ☐ (2)Fee ☐ (3)

Indian _____

Depth to GroundwaterLess 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 BodyLess 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

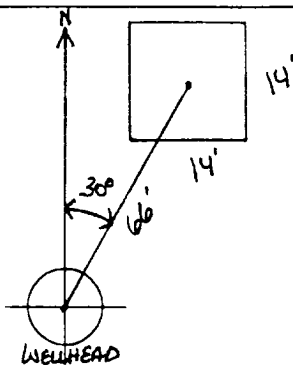
REMARKS

Remarks : ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS ON A HILL
SOUTH OF SULLIVAN RD. REDLINE SHOWS LOCATION IS INSIDE V.I.Z. BUT
TOPO SHOWS LOCATION IS OUTSIDE V.I.Z.

PUSH IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 30° Footage from Wellhead 66'b) Length : 14' Width : 14' Depth : 3'

REMARKS

Remarks :

TOOK PICTURES AT 2:31 A.M.END DUMP

Completed By:

Robert Thompson

Signature

5.14.94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>89345</u> Location: <u>Hamner #5</u> Coordinates: Letter: <u>E</u> Section <u>28</u> Township: <u>29</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Date Started : <u>7-27-94</u> Run: <u>03</u> <u>42</u>
FIELD OBSERVATIONS	Sample Number(s): <u>AK190</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>83</u> PID Reading Depth <u>12'</u> Feet <div style="text-align: center;">Yes No</div> Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
CLOSURE	Remediation Method : <div style="display: flex; justify-content: space-between;"> <div> Excavation Onsite Bioremediation Backfill Pit Without Excavation </div> <div style="text-align: right;"> <input type="checkbox"/> Approx. Cubic Yards _____ <input type="checkbox"/> <input checked="" type="checkbox"/> </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between;"> <div> Envirotech Other Facility </div> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> Tierra <input type="checkbox"/> Name: _____ </div> </div> Pit Closure Date: <u>7-27-94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>EPNG lines marked soil black slight HYDROCARBON odor</u> _____ _____
	Signature of Specialist: <u>Morgan Killion</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 190

945779

89345

N/A

7-27-94

1417

N/A

7/28/94

7/28/94

N/A

N/A

UG

Black/Grey 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)	1360	MG/KG			2.10	.28
HEADSPACE PID	83	PPM				
PERCENT SOLIDS	86.2	%				

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

The Surrogate Recovery was at
Narrative:

N/A

% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

[Signature]

Date:

8/8/94

1. 本報告係根據「證券管理委員會」及「證券交易所」之規定，由本公司董事會及監察人共同編製，並經會計師查核簽證，其內容如有虛偽、不實或隱匿重要事實，致影響投資者之投資判斷，本公司董事會及監察人將依法負法律上之責任。