Denny & Bout DEPUTY OIL & GAS INSPECTOR

DEC 2 9 1997

Meter Number:74376
Location Name:SHEETS #8C
Location:TN-26 RG-07
SC-31 UL-N
2 - Federal

NMOCD Zone: OUTSIDE Hazard Ranking Score: 00

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# 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

j					
	Meter: 74-376 Location: Sheets No. 8 - C  Operator #: 2999 Operator Name: Meridian P/L District: Ballard  Coordinates: Letter: N Section 31 Township: 26 Range: 7  Or Latitude Longitude  Pit Type: Dehydrator Location Drip: X Line Drip: Other:  Site Assessment Date: 7/28/94 Area: 07 Run: 92				
	NMOCD Zone:				
	(From NMOCD Land Type: BLM (1)				
	$Mana$ State $\square$ (2)				
•	Fee				
i	$\Delta V = V = V = V = V = V = V = V = V = V $				
	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)				
	Wallbard D. J. J.				
	Wellhead Protection Area:				
ME	Is it less than 1000 ft from wells, springs, or other sources of				
SS	fresh water extraction?, or; Is it less than 200 ft from a private				
ASSESSMENT	domestic water source? (1) YES (20 points) (2) NO (0 points)				
1	Indizontal Distance to Surface Water D. 1				
ITE	Less Than 200 Ft (20 points) (1) 200 Ft to 1000 Ft (10 points) (2)				
S	Greater Than 1000 Ft (0 points) (2)				
	Name of Surface Water Body Big Rincon				
	(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes Ponds)				
	Irrigation Canals, Ditches, Lakes, Ponds)				
	Distance to Nearest Ephemeral Stream (1) < 100'(Navajo Pits Only)				
	TOTAL HAZARD RANKING SCORE				
KS					
ARI	Remarks: Realine Book - Outside Vulacable Zone Tope - Outside One pit, pit is dry, will close one pit				
REMARKS	1 1 WILL CLOSE ONE PIT				
24	D/154 + X/				
	1 FUJIT LIV				

ORIGINAL PIT LOCATION	Original Pit: a) Degrees from North \( \frac{118^\circ}{\sigma} \) Footage from Wellhead \( \frac{92'}{\sigma} \) b) Length: \( \frac{20'}{\sigma} \) Width: \( \frac{18'}{\sigma} \) Depth: \( \frac{4'}{\sigma} \)  \( \text{Wellhead} \)  \( \text{Vellhead} \)  \( \text{118}^\circ \)
REMARKS	Remarks: Pictures @ 1500 (5-9, RollZ)  Dump Truck
	Completed By:

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# FILD PIT REMEDIATION/CLOSURE FORM

1							
GENERAL	Meter: 74:376 Location: Sheets # 8-C  Coordinates: Letter: N Section 3/Township: 26 Range: 7  Or Latitude Longitude  Date Started: 10-10-94 Run: 27 92						
FIELD OBSERVATIONS	Sample Number(s): \( \frac{\sum_392}{\sum_56} \) Feet  Final PID Reading \( \frac{\sum_56}{\sum_56} \) Feet  Yes No  Groundwater Encountered \( \sum_56 \) Approximate Depth \( \sum_56 \) Feet						
CLOSURE	Remediation Method:  Excavation						
REMARKS	Remarks: 6' sandstorl  10 xls f.11						
	Signature of Specialist: Vale Wulsen (SP3191) 03/16/94						



### FIELD SERVICES LABORATORY ANALYTICAL REPORT

# PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

	Field II	D		Lab ID					
SAMPLE NUMBER:	yw 792	946374							
MTR CODE   SITE NAME:									
SAMPLE DATE   TIME (Hrs):	10-10-94		1200						
SAMPLED BY:		Α							
DATE OF TPH EXT.   ANAL.:	10-13-	94							
DATE OF BTEX EXT.   ANAL.:	NA		NIA						
TYPE   DESCRIPTION:	V G_	light gain sand							
RESULTS									
	RESULT	UNITS	QUALIFIERS						
PARAMETER	AESOL I		DF	Q	M(g) V(ml)				
TPH (418.1)	4880	MG/KG			12,02 28				
HEADSPACE PID	154	PPM							
PERCENT SOLIDS	93,3	%							
Narrative:  OF = Dilution Factor Used		TPH is by EPA Metho	od 418.1						

Approved By: Date:	10/23/44
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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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34/10/13 11:54

Sample identification 046374

Initial mass of sample, g 0.020

Volume of sample after extraction, ml 32.000

Tetroleum hydrocarbons. ppm -880.455

Net absorbance of hydrocarbons (2930 cm-1)

