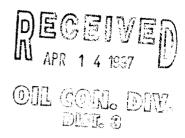
DEU & (1807 Approved

Meter Number: 90808
Location Name: HUGHES #2
Location: TN-29 RG-08
SC-21 UL-G
2 - Federal
NMOCD Zone: OUTSIDE
Hazard Ranking Score: 00



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

6	
GENERAL	Meter: 90808 Location: Hughes No. 2 Operator #: 0203 Operator Name: Amoco P/L District: Blanco Coordinates: Letter: G Section 21 Township: 29 Range: 8 Or Latitude Longitude Pit Type: Dehydrator X Location Drip: Line Drip: Other: Site Assessment Date: 6-8-94 Area: 13 Run: 21
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside Outside Outside (1) Fee (3) Outside O
REMARKS	Remarks 600 Three Duts on location. Dehy pit adjacent to
REM	Meter-house - location outside V.Z. On Pedline and The

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: 90 808 Location: Hughes # 2 Coordinates: Letter: G Section 21 Township: 29 Range: 8 Or Latitude Longitude Date Started: 8-2-94 Run: 23 21							
FIELD OBSERVATIONS	Sample Number(s): MK2/2 Sample Depth: 12 Feet Final PID Reading 307 PID Reading Depth 12 Feet Yes No Groundwater Encountered							
CLOSURE	Remediation Method: Excavation							
	Envirotech							
REMARKS	Remarks: Epu & lines Marked Soil Grayish Brown Strong HYDroggradon odor							
	Signature of Specialist: Morgan Killion (SP3191) 03/16/94							



FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field	I ID		Lab ID		
SAMPLE NUMBER:	MJ4 21	m/4 212		945823		
MTR CODE SITE NAME:	90808			N/A		
SAMPLE DATE TIME (Hrs):			1356			
SAMPLED BY:						
DATE OF TPH EXT. ANAL.:			8/4/94			
ATE OF BTEX EXT. ANAL.:						
TYPE DESCRIPTION:	٧		Brome	smo 1	elvy	
REMARKS:						
neiwanks.						
		RESULTS				
				···· · · · · · · · · · · · · · · · · ·		
PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(mi)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	2940	MG/KG			2.20	28
HEADSPACE PID	307	PPM				
PERCENT SOLIDS 9	W-F.88 1.	1/5/94 %				
Surrogate Recovery was at rative:	- TPH is by EPA Method 4	418.1 and BTEX is by EPA _% for this samp		C was accep	otable.	
= Dilution Factor Used						
) P			Date:	8/May	/	

