DEPUTYOIL & GAS HISE FOR THE

DEC 221997

Meter Number: 75070
Location Name: STATE GAS UNIT BB #1
Location: TN-31 RG-12
SC-16 UL-M
1 - State

NMOCD Zone: OUTSIDE Hazard Ranking Score: 00

DECEIVED N APR 1 4 1997

OIL COM. 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.

1	Meter: 75070 Location: STATE GAS UNIT BB #1					
GENERAL	Operator #: <u>0203</u> Operator Name: Amoco P/L District: <u>Kutz</u>					
	Coordinates: Letter: M Section 16 Township: 31 Range: 12					
	Or Latitude Longitude					
	Pit Type: Dehydrator X Location Drip: Line Drip: Other:					
	Site Visit Date: 3.30.94 Run: 02 73					
	NMOCD Zone: Inside Land Type: BLM ☐ (From NMOCD Vulnerable State ☒ Maps) Zone ☐ Fee ☐ Outside ☒ Incian ☐					
SITE ASSESSMENT	Depth to Groundwater  Less Than 50 Feet (20 points)  50 Ft to 99 Ft (10 points)  Greater Than 100 Ft (0 points)					
	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?  YES (20 points) NO (0 points)					
	Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points)  200 Ft to 1000 Ft (10 points)  Greater Than 1000 Ft (0 points)  Name of Surface Water Body					
	(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)					
	TOTAL HAZARD RANKING SCORE: POINTS					
RKS	Remarks: THREE PITS ON LOCATION. WILL CLOSE ONLY ONE. PT 13 PRY.					
REMARKS						

## FIELD IT REMEDIATION/CLOSUR FORM

GENERAL	Meter: 75070 Location: State Gres Un. + BB ** 1  Coordinates: Letter: M Section 16 Township: 31 Range: 12  Or Latitude Longitude  Date Started: 5/4/94 Area: 02 Run: 73
FIELD OBSERVATIONS	Sample Number(s): 122  Sample Depth: 6' Feet  Final PID Reading 2.13 PID Reading Depth 6' Feet  Yes No  Groundwater Encountered (1) (2) Approximate Depth Feet
CLOSURE	Remediation Method:  Excavation
REMARKS	Remarks: No I've Markers, Hit Rock at b' .  Signature of Specialist: Uale Wilson

(SP3191) 04/07/94



# FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

#### SAMPLE IDENTIFICATION

	SAMILL	IDENTIFICA	11011			
	Field	ID		Lab ID		
SAMPLE NUMBER:	BER: VW42		945 105			
MTR CODE   SITE NAME:	75070		NIA			
SAMPLE DATE   TIME (Hrs):	5/9/94		1345			
SAMPLED BY:		VIA				
DATE OF TPH EXT.   ANAL.:	5/10/94		5/10/94			
DATE OF BTEX EXT.   ANAL.:		NIA	Grey Sand Clay			
TYPE   DESCRIPTION:	V&		Grey			
REMARKS:						
	Ş	RESULTS				
PARAMETER	RESULT	UNITS	QUALIFIERS  DF Q M(g) V(mi			V(mi)
			T Dr	1 0	itity.	V (11.07)
BENZENE		MG/KG	-		<del> </del>	
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
<b>TPH (418.1</b> )	687	MG/KG			2.06	28
HEADSPACE PID	213	PPM				
PERCENT SOLIDS	88.8	%				
	TPH is by EPA Method				es blo	
The Surrogate Recovery was at Narrative:	NIA	_% for this samp	ie All QA/C	ic was accep	otable.	

DF = Dilution Factor Used

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

Perkin-Elmer Model 1600 FT-IR Analysis Report 

74/05/10 14:18

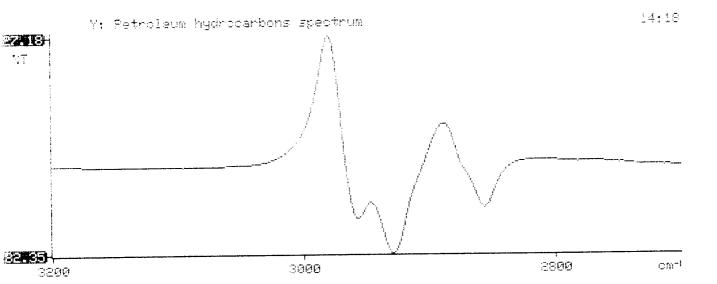
Sample identification 745105

Initial mass of sample, g 1.060

Volume of sample after extraction, ml 000.82

Petroleum hydrocarbons, ppm -87.127

Net absorbance of hydrocarbons (2930 cm-1)



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