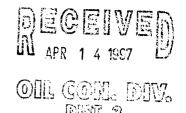
Denny S. Frai DEC & STEEL Approved

Meter Number:75599
Location Name:FLORANCE #66
Location:TN-27 RG-08
SC-18 UL-O
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

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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

_5							
GENERAL	Meter: 75599 Location: Florance #66 Operator #: 0203 Operator Name: Amoco P/L District: Ballard Coordinates: Letter: O Section 18 Township: 27N Range: 8W Or Latitude Longitude Pit Type: Dehydrator X Location Drip: Line Drip: Other: Site Assessment Date: 6-17-94 Area: 11 Run: 62						
SITE ASSESSMENT	NMOCD Zone: Land Type: BLM ☑ (1) (From NMOCD State ☐ (2) Maps) Inside ☐ (1) Fee ☐ (3) Outside ☑ (2) Indian ☐ Depth to Groundwater ☐ (1) ☐ (1) ☐ (2) Less Than 50 Feet (20 points) ☐ (1) ☐ (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 Body Less 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: POINTS						
S							
ARK	Remarks: Three pits on focution - two with tanks Deny pit is dry.						
REMARKS	outside V.Z. on Realine & Topo						
-	Huse a series						

N	ORIGINAL PIT LOCATION Original Pit: a) Degrees from North 375 Footage from Wellhead 158 b) Length: 3 Width: 11 Depth: 3
ORIGINAL PIT LOCATION	325° Wellhead
	Remarks: 1255
REMARKS	Bohtail
	Completed By:
	Signature Date

FIEL PIT REMEDIATION/CLOSC & FORM

GENERAL	Meter: 25.599 Location:#66 Coordinates: Letter: O Section 18 Township: 27 Range: 8 Or Latitude Longitude Date Started: 9-30-94 Run: 11 62							
FIELD OBSERVATIONS	Sample Number(s): VV365 Sample Depth: 12 Feet Final PID Reading 235 PID Reading Depth 12 Feet Yes No Groundwater Encountered Approximate Depth Feet							
CLOSURE	Remediation Method: Excavation							
REMARKS	Remarks:							
	Signature of Specialist: Vale Wilson (SP3181) 03/16/84							



FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

	SAMPLE	DENTIFICA	TION			
	Field I	ID		Lab ID		
SAMPLE NUMBER:	SAMPLE NUMBER: VW 345			946292		
MTR CODE SITE NAME:				N/A		
SAMPLE DATE TIME (Hrs):	9:30 - 6	11				
SAMPLED BY:	N/A					
DATE OF TPH EXT. ANAL.:	10-3-94					
DATE OF BTEX EXT. ANAL.:	NIA			NIQ		
TYPE DESCRIPTION:	V G -		Forown	Sond. d	1 (101)	
REMARKS: _						
	F	RESULTS				
PARAMETER	RESULT	UNITS		QUALIFIERS		
PANAMETER			DF	Q	M(g) V(ml)	
TPH (418.1)	3590	MG/KG			2.08 28	
HEADSPACE PID	235	РРМ				
PERCENT SOLIDS	90.2	%				
		TPH is by EPA Meth	od 418.1			
larrative:						
OF = Dilution Factor Used						
Approved By:			2	(c)(a	lqy	

*************** Test Method for Oil and Grease and Fetroleum Hydrocarbons in Water and Soil

Perkin-Elmer Model 1600 FT-IR Analysis Report *******************

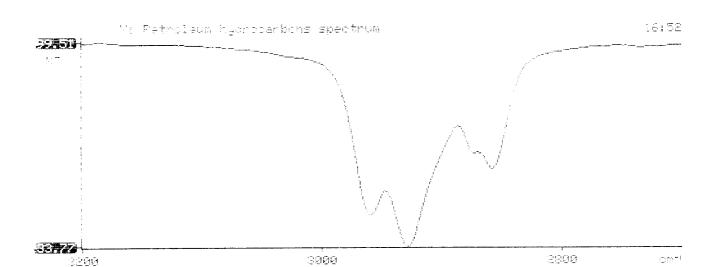
74/10/00 15:52

Sample identification ~46292

Thitial mass of sample, q i.080

Volume of sample after extraction, πl 18.000

Patroleum hydrocarbons, ppm 1888.605 Met absorbance of hydrocarbons (2930 cm-1) 1.465



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