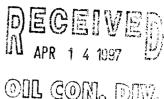
Meter Number:72188 Location Name:BOLACK C LS 11 Location:TN-27 RG-08 SC-28 UL-K 2 - Federal NMOCD Zone: OUTSIDE Hazard Ranking Score:00



OIL CON. DI

### 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:

10<sup>-9</sup> to 10<sup>-13</sup> cm/sec Sandstone 10<sup>-12</sup> to 10<sup>-16</sup> cm/sec 10<sup>-12</sup> to 10<sup>-15</sup> cm/sec Shale Clay

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

i					
GENERAL	Meter: 72188 Location: Bolack C LS 11 Operator #: 0203 Operator Name: Amoco P/L District: Ballard Coordinates: Letter: K Section 28 Township: 27 Range: 8				
9	Or Latitude Longitude Pit Type: Dehydrator Location Drip: Line Drip: Other: Site Assessment Date: 6/11/94 Area: O7 Run: 3.3				
	NMOCD Zone:				
	(From NMOCD Land Type: BLM (1) State (2)				
	Maps) Inside (1) Fee (3)  Outside (2) Indian				
SITE ASSESSMENT	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)				
	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)				
	$\square (2) > 100 \text{ (Navajo Pits Unity)}$				
	TOTAL HAZARD RANKING SCORE: POINTS				
REMARKS	Remarks: Redline Book & Vulnerable Zone Topo-Outside 3pits. Will close 1. Pitary				
RE	PUSH-IN_				

# FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: 1218 Location: BoLACK C. LS 11  Coordinates: Letter: L Section 28 Township: 27 Range: 8  Or Latitude Longitude Longitude  Date Started: 9-26-94 Run: 07 32
FIELD OBSERVATIONS	Sample Number(s): \( \sum \ \ \sum \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
CLOSURE	Remediation Method:  Excavation
REMARKS	Remarks: 10' Bestande Couldat dig say Rostha 10 pls F.1/  Signature of Specialist: Valle Wan
	(SP3191) 03/16/94



## FIELD SERVICES LABORATORY ANALYTICAL REPORT

## PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

	Field I	D		Lab ID		
SAMPLE NUMBER:	vw 335	946220				
MTR CODE   SITE NAME:	72188	N/A				
SAMPLE DATE   TIME (Hrs):	9/26/96	13				
SAMPLED BY:	,	N/	I/A			
DATE OF TPH EXT.   ANAL.:	9/27/91		9/27			
DATE OF BTEX EXT.   ANAL.:	NA		Aja t	(3)		
TYPE   DESCRIPTION:	V.G.		lind ou	4/ Silver	( CQ/	
REMARKS:						
	F	RESULTS				
PARAMETER	RESULT UNITS	DF	QUALIF Q	IERS M(g) V(mi)		
TPH (418.1)	497	MG/KG			222 28	
HEADSPACE PID	211	PPM				
	A 11					
	85,4	%		1		
PERCENT SOLIDS		% TPH is by EPA Metho	od 418.1	1		
PERCENT SOLIDS			od 418.1			
			nd 418.1			

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Test Method for Oil and Grease and Petroleum Hydrocarbons in Water and Soil

Perkin-Elmer Model 1600 FT-IR

74/09/27 14:34

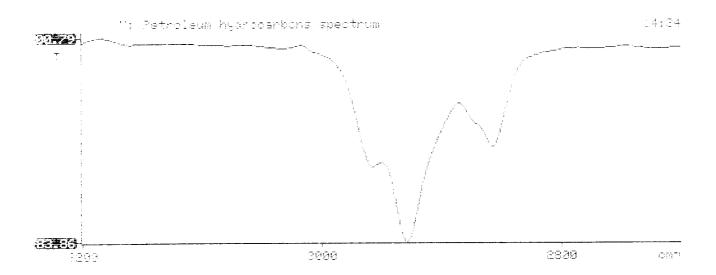
Sample identification F46220

Initial mass of sample, g 1.220

Volume of sample after extraction, ml 38.000

Petroleum hydrocarbons, ppm 97.039

Net absorbance of hydrocarbons (2930 cm-1)



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