Denny S. Fourt
DEMUTY ON & GAS INSPECTOR

DEC 221997

Meter Number:93708
Location Name:STANOLIND GAS COM C #1

Location:TN-32 RG-12 SC-17 UL-J 2 - Federal

NMOCD Zone: OUTSIDE Hazard Ranking Score: 00

DEGEIVED N APR 1 4 1997

OIL COM. DIV.

## 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 FORMEL PASO FIRED STRUCK

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GENERAL	Meter: 93708 Location: STANOLIND GAS COM C #1					
	Operator #: 0203 Operator Name: Amoco P/L District: Kutz					
	Coordinates: Letter: J Section 17 Township: 32 Range: 12					
	Or Latitude Longitude					
	Pit Type: Dehydrator X Location Drip: Line Drip: Other:					
	Site Visit Date: 3.31-94 Run: 02 92					
SITE ASSESSMENT	NMOCD Zone: Inside Land Type: BLM (From NMOCD Vulnerable State Maps)  Zone Fee Outside Indian					
	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:O POINTS					
REMARKS	Remarks: Two PITS ON LOCATION WILL CLOSE ONLY ONE.					
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#### FIELD IT REMEDIATION/CLOSUR FORM

GENERAL	Meter: <u>93708</u> Location: <u>Stanolind Gas Com C#1</u> Coordinates: Letter: <u>J</u> Section <u>17</u> Township: <u>32</u> Range: <u>12</u> Or Latitude Longitude  Date Started: <u>5/9/94</u> Area: <u>02</u> Run: <u>92</u>					
FIELD OBSERVATIONS	Sample Number(s): VW Y I  Sample Depth: 12' Feet  Final PID Reading Depth 12' Feet  Yes No  Groundwater Encountered (1) (2) Approximate Depth Feet					
CLOSURE	Remediation Method:  Excavation					
	Soil Disposition:  Envirotech (1) (3) Tierra  Other Facility (2) Name:  Pit Closure Date: 5/9/44 Pit Closed By: BEE					
REMARKS	Remarks: 501 was clema. No the Murkels.					
	Signature of Specialist: Vale Whom (SP3191) 04/07/94					

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# FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

#### **SAMPLE IDENTIFICATION**

	Field ID		Lab ID				
SAMPLE NUMBER:	VWYI		945 104				
MTR CODE   SITE NAME:	93768		NIA				
SAMPLE DATE   TIME (Hrs):	5/9/9			<u>00</u>			
SAMPLED BY:		VIA					
DATE OF TPH EXT.   ANAL.:	ATE OF TPH EXT.   ANAL.:   5 10 94			51/0194			
DATE OF BTEX EXT.   ANAL.:			MA				
TYPE   DESCRIPTION:	V&		Fine Brown Sand				
REMARKS:				·····			
		RESULTS		<del>*************************************</del>			
PARAMETER	RESULT UNITS		QUALIFIERS				
			DF	Q	M(g)	V(mi)	4
BENZENE		MG/KG				·	
TOLUENE		MG/KG				<del></del>	
ETHYL BENZENE		MG/KG					
TOTAL XYLENES		MG/KG					
TOTAL BTEX		MG/KG					
TPH (418.1)	<10	MG/KG			2.05	28	
HEADSPACE PID	0	PPM					
PERCENT SOLIDS	89.2	%					
e Surrogate Recovery was at rrative:	TPH is by EPA Method	418.1 and BTEX is by EF % for this sample		was accep	table.		
= 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 14:15

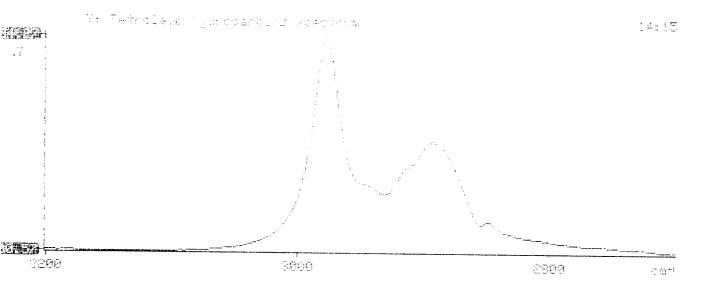
Sample identification 45104

Initial mass of sample, g

Volume of sample after extraction, ml 13.556

Retroleum hydrocarbons, ppm 305.487

Net absorbance of hydrocarbons (1771) cm-i: 1.007



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