

Denny B. Davis
DEPUTY OIL & GAS INSPECTOR

DEC 30 1997

Approved

Meter Number:89349
Location Name:HILL #1A
Location:TN-29 RG-08
SC-04 UL-F
4 - Fee
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RECEIVED
APR 14 1997

OIL CON. 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.

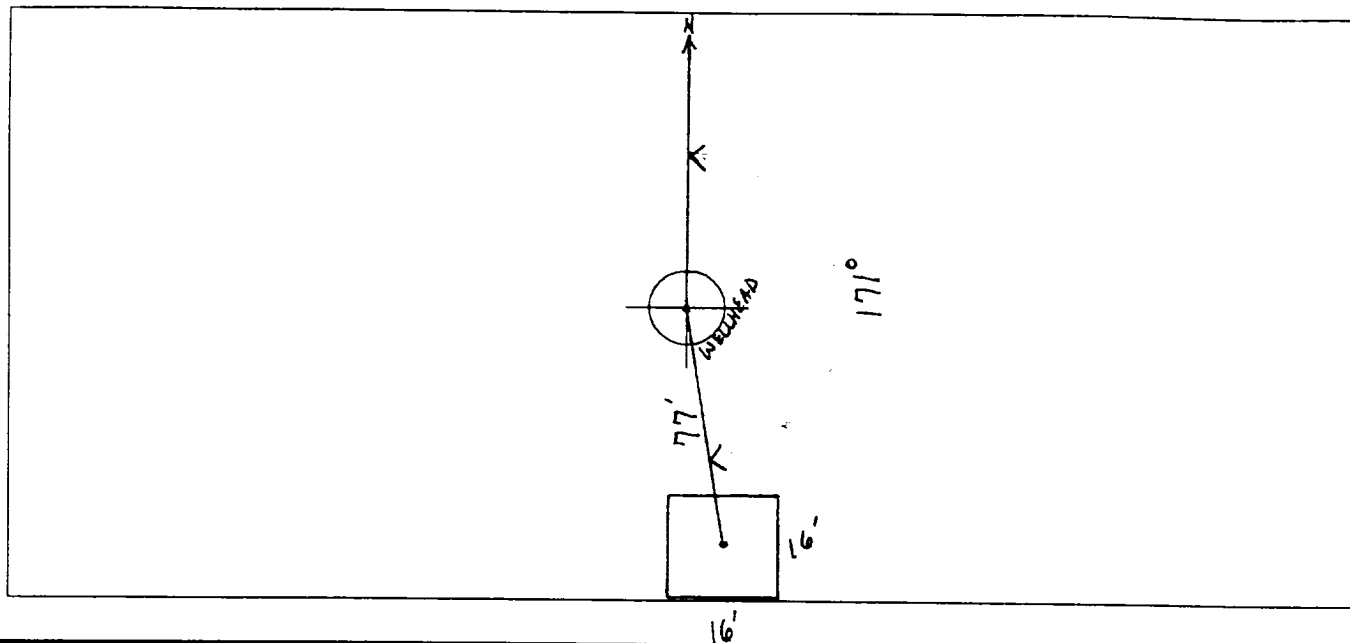
Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

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ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 171° Footage from Wellhead 77'
b) Length : 16' Width : 16' Depth : 3'



REMARKS

Remarks :

TOOK PICTURES AT 3:59 P.M.

END DUMP

Completed By:

Robert Thompson
Signature

5.9.94
Date

GENERAL	FIELD OBSERVATIONS	CLOSURE	REMARKS
Meter: <u>89344</u> Location: <u>Hill #1A</u> Coordinates: Letter: <u>F</u> Section <u>4</u> Township: <u>29</u> Range: <u>8</u> Or Latitude _____ Longitude _____ Date Started : <u>5-23-94</u> Area: <u>10</u> Run: <u>41</u>	Sample Number(s): <u>VW137</u> <u>VW138</u> <u>VW139</u> _____ Sample Depth: <u>12'</u> Feet Final PID Reading <u>287</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet	Remediation Method : Excavation ☐ (1) Approx. Cubic Yards _____ Onsite Bioremediation ☐ (2) Backfill Pit Without Excavation ☒ (3) Soil Disposition: Envirotech ☐ (1) ☐ (3) Tierra Other Facility ☐ (2) Name: _____ Pit Closure Date: <u>5-23-94</u> Pit Closed By: <u>BEI</u>	Remarks : <u>EPN/6 line markers</u> _____ _____
Signature of Specialist: <u>Vale Wilson</u>			



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW 137	945278
MTR CODE SITE NAME:	89349	N/A
SAMPLE DATE TIME (Hrs):	5-23-94	1400
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-24-94	5/24/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Brown Clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	570.567	MG/KG JUN 4/12/94			2.05	28
HEADSPACE PID	284	PPM				
PERCENT SOLIDS	89.3	%				

— TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 —

The Surrogate Recovery was at N/A % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By:

[Signature]

Date:

6/16/94

 Test Method for
 Oil and Grease and Petroleum Hydrocarbons
 in Water and Soil
 Perkin-Elmer Model 1600 FT-IR
 Analysis Report

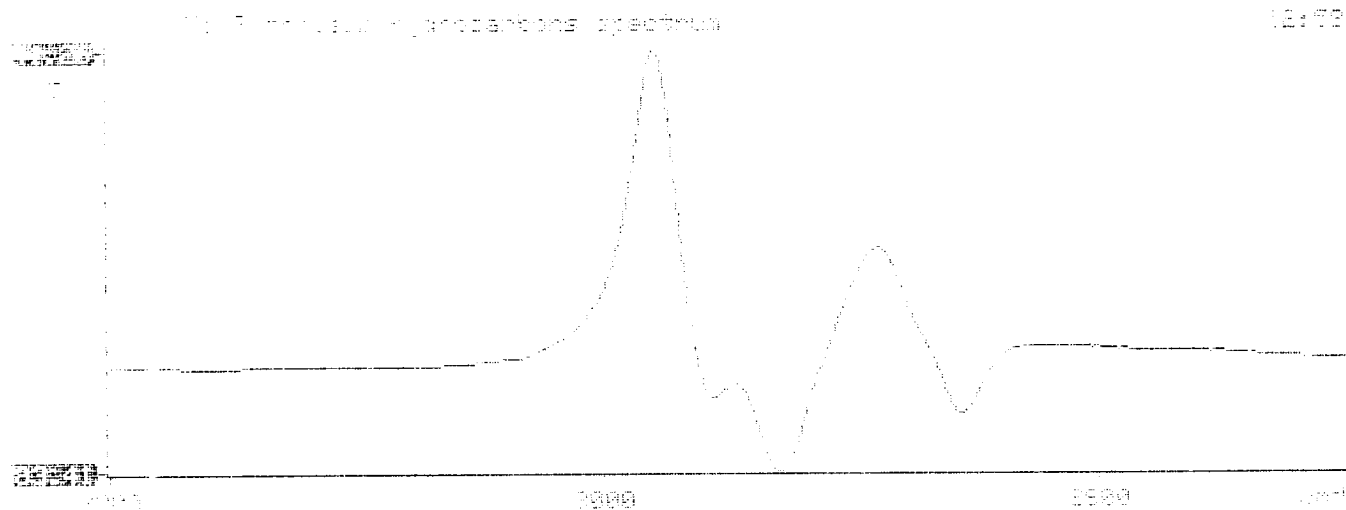
11/05/84 12:52

Sample Identification
 115012

Initial mass of sample, g
 11.150

Volume of sample after extraction, ml
 11.000

Petroleum hydrocarbons, ppm
 17.200
 11.150
 11.000



ILLEGIBLE