

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

Approved

Meter Number: 72372
Location Name: E.E. ELLIOTT A #2
Location: TN-30 RG-09
SC-15 UL-P
2 - Federal
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.

FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: <u>72372</u> Location: <u>E.E. ELLIOT A #2</u> Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>BLOOMFIELD</u> Coordinates: Letter: <u>P</u> Section <u>15</u> Township: <u>30</u> Range: <u>90</u> ^{4.25.94} _{RT} Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Assessment Date: <u>4.25.94</u> Area: <u>10</u> Run: <u>33</u>
	SITE ASSESSMENT
REMARKS	

GEL. RAL

Meter: 72372 Location: EE Elliott A#2
Coordinates: Letter: P Section 15 Township: 30 Range: 9
Or Latitude _____ Longitude _____
Date Started : 5-18-94 Area: 10 Run: 33

FIELD OBSERVATIONS

Sample Number(s): VW103
Sample Depth: 3' Feet
Final PID Reading 169 PID Reading Depth 3' Feet
Yes No
Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

CLOSURE

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: 5-18-94 Pit Closed By: BEI

REMARKS

Remarks : no line markers hit rock 3'

Signature of Specialist: Vale Wilson



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW 103	945224
MTR CODE SITE NAME:	72372	N/A
SAMPLE DATE TIME (Hrs):	5-18-94	1125
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5-19-94	5/19/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Very coarse sand RJB light colored sand stone

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)	520 521	July 5/12/94 MG/KG			2.13	28
HEADSPACE PID	149	PPM				
PERCENT SOLIDS	95.2	%				

— 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:

Jan Lubch

Date:

9/15/94

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Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil
Perkin-Elmer Model 1600 FT-IR
Analysis Report
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74/05/17 13:42

Sample identification
745224

Initial mass of sample, g
0.130

Volume of sample after extraction, ml
15.000

Petroleum hydrocarbons, ppm
120.596
Net absorbance of hydrocarbons (2930 cm⁻¹)
0.035

