

Denny L. Best
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

Approved

Meter Number:70025
Location Name:HOWELL A#1
Location:TN-30 RG-08
SC-08 UL-G
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RECEIVED
APR 14 1997

OIL CON. DIV.
DIST. 2

**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.



EL PASO FIELD SERVICES

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 70025 Location: HOWELL A#1
 Operator #: 2999 Operator Name: MERIDIAN P/L District: BLOOMFIELD
ACTEC
 Coordinates: Letter: G Section 8 Township: 30 Range: 8 RC 4/18/94
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 4-18-94 Area: 10 Run: 32

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps) Inside (1) Outside (2)

Land Type: BLM (1) State (2) Fee (3) Indian _____

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) NC (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: 0 POINTS

REMARKS

Remarks : _____

FIELD VT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>70025</u> Location: <u>HOWELL A#1</u> Coordinates: Letter: <u>G</u> Section <u>8</u> Township: <u>30</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Date Started : <u>4-18-94</u> Area: <u>10</u> Run: <u>32</u>
FIELD OBSERVATIONS	Sample Number(s): <u>940758</u> <u>940759</u> <u>940760</u> <u>E.T. 1</u> <u>E.T. 2</u> <u>E.T. 3</u> Sample Depth: <u>80"</u> Feet Final PID Reading _____ PID Reading Depth _____ Feet Yes No Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation <input type="checkbox"/> (1) Approx. Cubic Yards _____ Onsite Bioremediation <input type="checkbox"/> (2) Backfill Pit Without Excavation <input checked="" type="checkbox"/> (3) Soil Disposition: Envirotech <input type="checkbox"/> (1) <input type="checkbox"/> (3) Tierra Other Facility <input type="checkbox"/> (2) Name: _____ Pit Closure Date: <u>4-18-94</u> Pit Closed By: <u>E.P.V.G.</u>
REMARKS	Remarks : <u>PIT IS DRY, WE HIT ROCK AT 30"</u> _____ _____
	Signature of Specialist: <u>Eugene Truby</u>



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	ET 1	940753
MTR CODE SITE NAME:	70025	NIA
SAMPLE DATE TIME (Hrs):	4-18-94	1040
SAMPLED BY:	NIA	
DATE OF TPH EXT. ANAL.:	4-21-94	4-21-94
DATE OF BTEX EXT. ANAL.:	NIA	NIA
TYPE DESCRIPTION:	VG	31K Fine SAND

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)	1730	MG/KG			2.01	28
HEADSPACE PID	1290	PPM				
PERCENT SOLIDS	90	%				

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

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

DF = Dilution Factor Used

Approved By: _____

John F. Galli

Date: _____

4/30/94

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

Perkin-Elmer Model 1600 FT-IR
Analysis Report

1/04/01 10:11

Sample Client/Location
10782

Original mass of sample, g
0.12

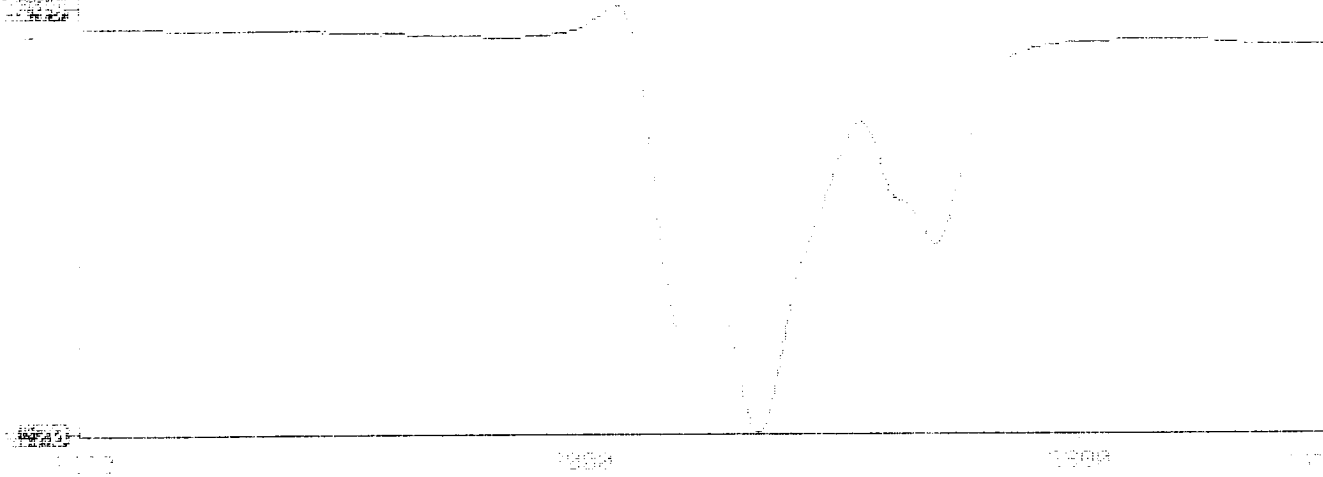
Mass of sample after extraction, g
0.010

Total Hydrocarbons, ppm
1000

Concentration of Hydrocarbons (EPA method)
100

1. Petroleum Hydrocarbons spectrum

10:11



ILLEGIBLE