

Denny E. Frost
DEPUTY OIL & GAS INSPECTOR

DEC 29 1997

Approved

Meter Number:89137

Location Name:CANYON LARGO UNIT #261

Location:TN-24 RG-06

SC-21 UL-L

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: 89-137 Location: Canyon Largo Unit No. 261
Operator #: 1987 Operator Name: Meridian P/L District: Ballard
Coordinates: Letter: L Section 21 Township: 24 Range: 6
Or Latitude _____ Longitude _____
Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
Site Assessment Date: 1/20/95 Area: 07 Run: 42

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) 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 La Parita Canyon
(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

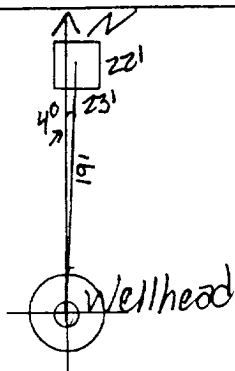
Remarks : Vulnerable Zone Topo: Outside Redline Book: Outside
One pit, pit is dry. Will close one pit.

PUSH IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 4° Footage from Wellhead 19'
b) Length : 23' Width : 22' Depth : 3'



REMARKS

Remarks :

Pictures at 1250.
Dump Truck.

Completed By:

Sarah Kelly
Signature

1/20/95
Date

FIG. 1 PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 89137 Location: CANYON Largo unit NO. 261
 Coordinates: Letter: L Section 21 Township: 24 Range: 6
 Or Latitude _____ Longitude _____
 Date Started : 7-17-95 Run: 07 42

FIELD OBSERVATIONS

Sample Number(s): mk437 _____
 Sample Depth: 9' Feet
 Final PID Reading 1 ppm PID Reading Depth 9' Feet
 Yes No
 Groundwater Encountered ☐ ☒ Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☐ Approx. Cubic Yards _____
 Onsite Bioremediation ☐
 Backfill Pit Without Excavation ☒
 Soil Disposition:
 Envirotech ☐ Tierra ☐
 Other Facility ☐ Name: _____
 Pit Closure Date: 7-17-95 Pit Closed By: Philip

REMARKS

Remarks : Arrived Took Fence down Dug Sample Hole
pit appeared to be clean all the way down
Hit Sand stone 9'

Signature of Specialist: Morgan Killian



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 437	94 7016
MTR CODE SITE NAME:	89137	N/A
SAMPLE DATE TIME (Hrs):	7/17/95	
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	7-18-95	7-18-95
DATE OF BTEX EXT. ANAL.:		
TYPE DESCRIPTION:	VG	Red/Brown sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	34.5	MG/KG			1.98	28
HEADSPACE PID	1	PPM				
PERCENT SOLIDS	94.8	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

Date: 7/20/95

```

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

```

95/07/18 10:48

Sample identification
947016

Initial mass of sample, g
1.980

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
34.455

Net absorbance of hydrocarbons (2930 cm⁻¹)
0.014

