

Denny E. Frost
DEPUTY OIL & GAS INSPECTOR

DEC 29 1997

Approved

Meter Number:75413

Location Name:JACK FROST GAS COM E #1

Location:TN-27 RG-10

SC-25 UL-D

2 - Federal

NMOCD Zone:OUTSIDE

Hazard Ranking Score:00

**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: 75413 Location: Jack Frost Gas Com E' well #1
 Operator #: 0203 Operator Name: Amoco P/L District: Ballard
 Coordinates: Letter: D Section 25 Township: 27 Range: 10W
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 6-11-94 Area: 11 Run: 31

SITE ASSESSMENT

NMOCD Zone:
 (From NMOCD
 Maps)

Inside
 Outside

Land Type:

BLM ☒ (1)
 State ☐ (2)
 BLM ☐ (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 _____

(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

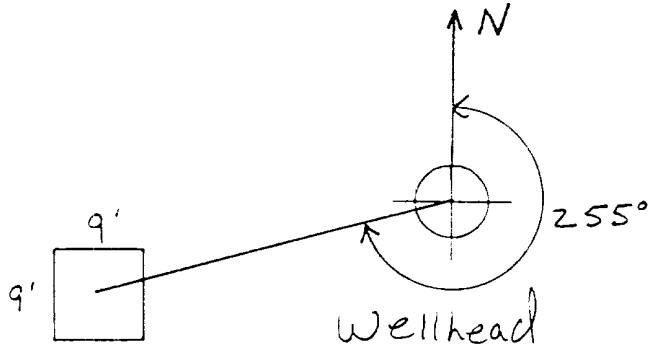
Remarks : 4 pits - Dehy pits dry. Next to meter run
Outside U.Z. Topo & Redline

LGW 6-11-94

[Signature]

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 255 Footage from Wellhead 172
 b) Length : 9 Width : 9 -Depth : 2



Remarks : Photos - 0927

Bob tail

Completed By:

[Signature]

Signature

6-11-94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>75413</u> Location: <u>Jack Frost GC E # 1</u></p> <p>Coordinates: Letter: <u>D</u> Section <u>25</u> Township: <u>22</u> Range: <u>10</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>9-8-94</u> Run: <u>11</u> <u>31</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>VW258</u></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>183</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input type="checkbox"/> Approx. Cubic Yards _____</p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input checked="" type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>9-8-94</u> Pit Closed By: <u>BEI</u></p>
REMARKS	<p>Remarks : _____</p> <p>_____</p> <p>_____</p>
	<p>Signature of Specialist: <u>Vale Wilson</u></p>

Natural Gas Company

FIELD SERVICES LABORATORY ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW 258	946074
MTR CODE SITE NAME:	75413	N/A
SAMPLE DATE TIME (Hrs):	9-8-94	1500
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	9/13/94	9/13/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Lt. Brown Fine Sand

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1) 4340	4336.1 4340	MG/KG			2.08	28
HEADSPACE PID	183	PPM				
PERCENT SOLIDS	93.6	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

J.F.

Date:

9/30/94

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

04/09/13 13:41

Sample identification
 046074

Initial mass of sample, g
 1.030

Volume of sample after extraction, ml
 16.000

Petroleum hydrocarbons, ppm
 1136.137

Net absorbance of hydrocarbons (2930 cm-1)
 1.560

