

Denny S. Faust
DEPUTY OIL & GAS INSPECTOR

DEC 30 1997

Approved

Meter Number:89596
Location Name:San Juan 29-6 #4A
Location:TN-29 RG-06
SC-17 UL-E
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RECEIVED
APR 14 1997

OIL CON. DIV.
DML 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.

GENERAL

Meter: 89596 Location: SAN JUAN 29-6 # 4A
 Operator #: 7035 Operator Name: PHILLIPS P/L District: BLOOMFIELD
 Coordinates: Letter: E Section 17 Township: 29 Range: 6
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator ☒ Location Drip: _____ Line Drip: _____ Other: _____
 Site Assessment Date: 8.8.95 Area: 10 Run: 61

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 _____

(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

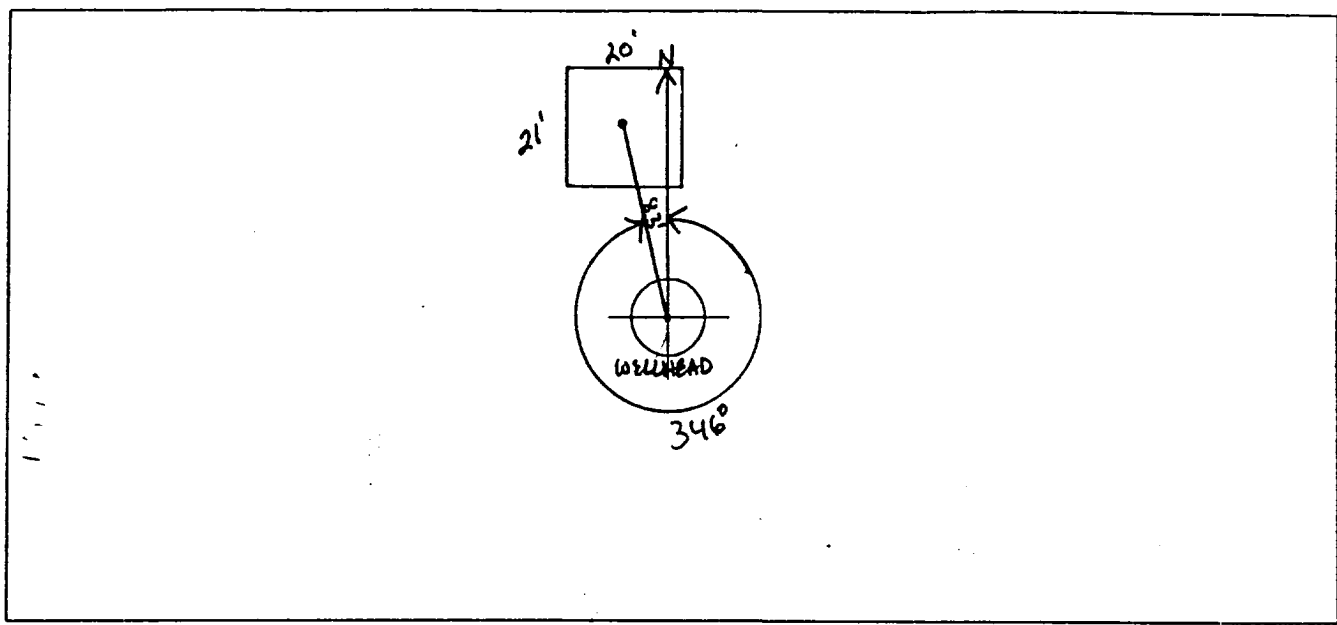
Remarks : REDLINE AND TOPO SHOW LOCATION OUTSIDE V.Z. ONLY
PIT ON THIS LOCATION. IT IS A DEEP PIT AND BELONGS TO
EPNG. WILL CLOSE PIT.

PUSH IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 346° Footage from Wellhead 83'
b) Length : 21' Width : 20' Depth : 3'



REMARKS

Remarks :

Handwritten notes and lines for remarks.

Completed By:

Robert Thompson
Signature

8.8.95
Date

GENERAL

Meter: 89596 Location: SAN JUAN 29-6th 4A

Coordinates: Letter: E Section 17 Township: 29 Range: 6

Or Latitude _____ Longitude _____

Date Started : 9-13-95 Run: 10 61

FIELD OBSERVATIONS

Sample Number(s): MK 459 _____

Sample Depth: 4' Feet

Final PID Reading 5 ppm PID Reading Depth 4' 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: 9-13-95 Pit Closed By: Philip

REMARKS

Remarks : Arrived dug sample hole in rock at 4' soil
had slight Hydrocarbon odor

Signature of Specialist: Morgan Hillion



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 459	947460
MTR CODE SITE NAME:	89596	San Juan 29-6P #4A
SAMPLE DATE TIME (Hrs):	09-13-95	1020
Project SAMPLED BY:	Phase I	N/A
DATE OF TPH EXT. ANAL.:	9-14-95	
DATE OF BTEX EXT. ANAL.:		
TYPE DESCRIPTION:	VG	Dark brown sand & clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	231	MG/KG			2.05	28
HEADSPACE PID	5	PPM				
PERCENT SOLIDS	87.6	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

John Faldut

Date:

9-18-95

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

Perkin-Elmer Model 1600 FT-IR
Analysis Report

95/09/14 17:50

Sample identification
947460

Initial mass of sample, g
2.050

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
231.107

Net absorbance of hydrocarbons (2930 cm⁻¹)
0.039

Y: Petroleum hydrocarbons spectrum

17:50

