

*Benjamin L. Tait*  
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

*H. J. [illegible]*

Meter Number: 75874  
Location Name: STATE GAS COM BN #1  
Location: TN-30 RG-09  
SC-36 UL-B  
1 - State  
NMOCD Zone: OUTSIDE  
Hazard Ranking Score: 00

RECEIVED  
APR 14 1997  
OIL COLL. DIV.  
DIST. 8

**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: 75874 Location: STATE GAS COM BN #1  
Operator #: 0203 Operator Name: AMOCO P/L District: BLOOMFIELD  
Coordinates: Letter: B Section 36 Township: 30 Range: 9  
Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Pit Type: Dehydrator \_\_\_\_\_ Location Drip: X Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
Site Assessment Date: 4-22-94 Area: 10 Run: 22

SITE ASSESSMENT

**NMOCD Zone:**

(From NMOCD  
Maps)

Inside

Outside

**Land Type:**

BLM

State

Fee

Indian

☐ (1)

☒ (2)

☐ (3)

☐ (1)

☒ (2)

**Depth to Groundwater**

Less Than 50 Feet (20 points)

50 Ft to 99 Ft (10 points)

Greater Than 100 Ft (0 points)

☐ (1)

☐ (2)

☒ (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)

200 Ft to 1000 Ft (10 points)

Greater Than 1000 Ft (0 points)

☐ (1)

☐ (2)

☒ (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

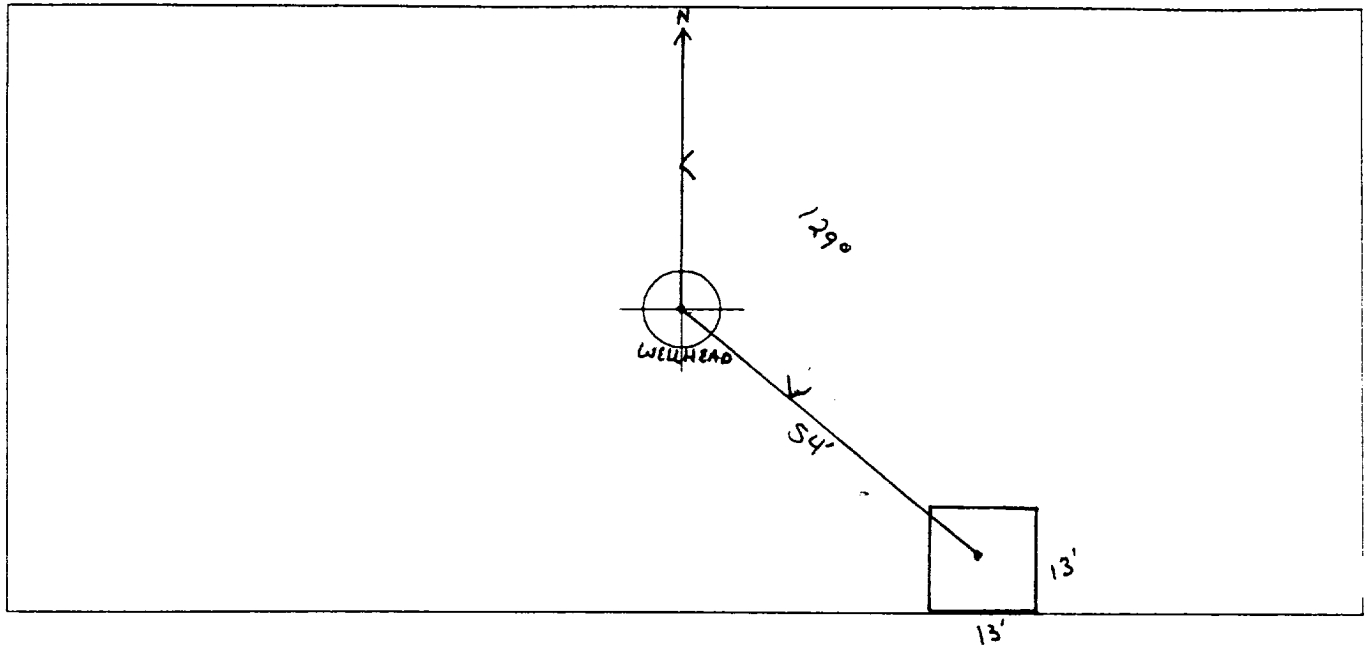
Remarks : ONLY PIT ON LOCATION. PIT IS DRY. LOCATION IS ON TOP OF A MESA. REDLINE SHOWS LOCATION INSIDE V.Z. BUT TOPO SHOWS IT OUTSIDE V.Z.

PUSH IN

# ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 129° Footage from Wellhead 54'  
 b) Length : 13' Width : 13' Depth : 2'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

TOOK PICTURES AT 3:05 P.M.

END DUMP

Completed By:

Paul Thompson  
 Signature

4.27.94  
 Date

GENERAL

Meter: 75874 Location: State Gas Com BN # 1  
Coordinates: Letter: 13 Section 36 Township: 30 Range: 9  
Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Date Started : 5-19-94 Area: 10 Run: 22

FIELD OBSERVATIONS

Sample Number(s): VW 122  
Sample Depth: 12' Feet  
Final PID Reading 260 PID Reading Depth 12' 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: 5-19-94 Pit Closed By: BEZ

REMARKS

Remarks : EPNG line markers

Signature of Specialist: Tale Wilson



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT  
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

VW 122

75874

5-19-94

N/A

5/20/94

N/A

VG

945249

N/A

1550

5-20-94

N/A

Black & gray sand & clay

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)	8130	MG/KG			0.55	28
HEADSPACE PID	260	PPM				
PERCENT SOLIDS	93.3	%				

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

The Surrogate Recovery was at  
Narrative:

N/A

% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

John Lurch

Date:

6/16/94

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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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04/05/20 13:36

Sample identification

045249

Initial mass of sample, g

0.050

Volume of sample after extraction, ml

10.000

Petroleum hydrocarbons, ppm

1127.789

Max absorbance of hydrocarbons (2930 cm-1)

0.007

