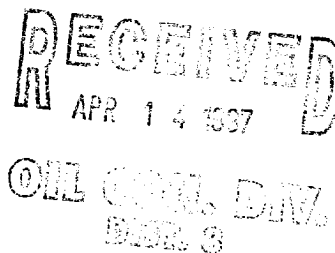


*Denny E. Frost*  
DEPUTY OIL & GAS INSPECTOR

DEC 30 1997

*Approved*

Meter Number: 71468  
Location Name: STATE GAS COM L #1  
Location: TN-29 RG-09  
SC-02 UL-H  
1 - State  
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.

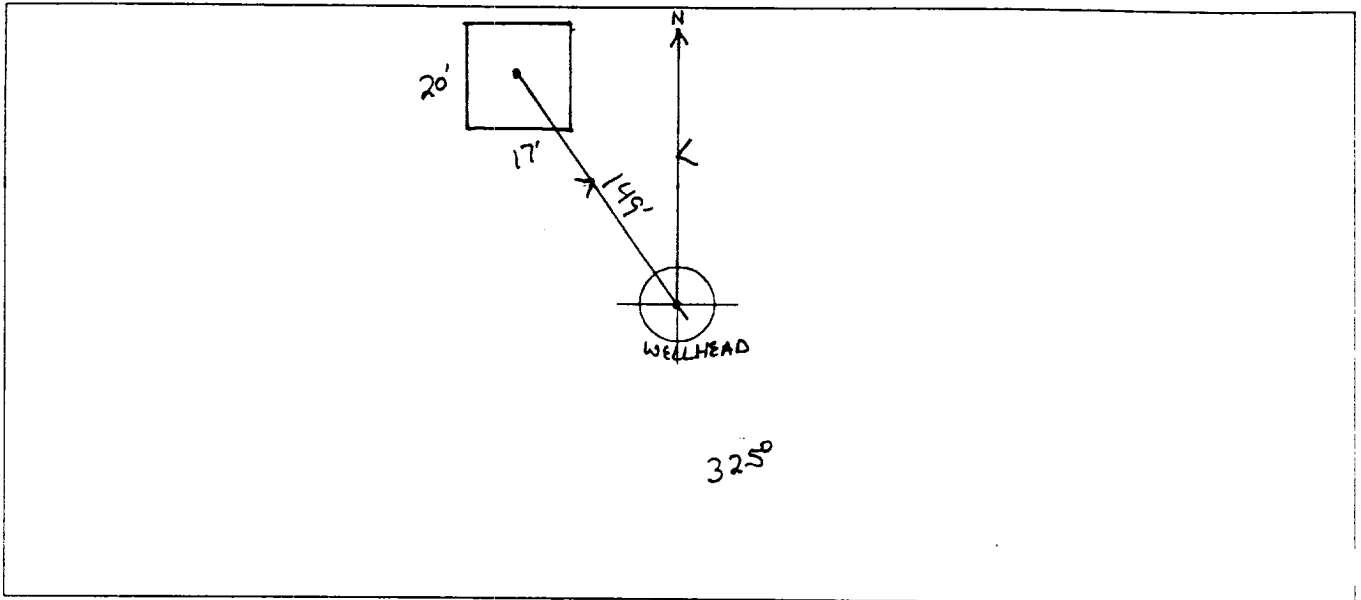
Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

**FIELD PIT SITE ASSESSMENT FORM**

<b>GENERAL</b>	<p>Meter: <u>71468</u> Location: <u>STATE GAS COM L #1</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>H</u> Section <u>2</u> Township: <u>29</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>4-28-94</u> Area: <u>10</u> Run: <u>22</u></p>
<b>SITE ASSESSMENT</b>	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p>Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2)</p> </div> <div style="width: 45%;"> <p><b>Land Type:</b></p> <p>BLM <input type="checkbox"/> (1) State <input checked="" type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> </div> </div> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b> 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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p><b>Horizontal Distance to Surface Water Body</b></p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only) <input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>0</u> POINTS</p>
<b>REMARKS</b>	<p>Remarks : <u>THREE PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. LOCATION IS UP ON TOP OF A HILL NEXT TO BASE OF CLIFF. REGIONAL SHOWS LOCATION INSIDE UZ. AND TOPO SHOWS IT JUST OUTSIDE AGAINST THE BORDER. BECAUSE OF THE LOCATION</u></p> <p style="text-align: right;">DICK 1A1</p>

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 325° Footage from Wellhead 149'  
 b) Length : 20' Width : 17' Depth : 3'



### Remarks :

TOOK PICTURES AT 12:03 P.M.

END DUMP

Completed By:

Robert Thompson

Signature

4.28.94

Date

## GENERAL

Meter: 71468 Location: State Gas Com L#1

Coordinates: Letter: H Section 2 Township: 29 Range: 9

Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

Date Started : 5-20-94 Area: 10 Run: 22

## FIELD OBSERVATIONS

Sample Number(s): VW124

Sample Depth: 12' Feet

Final PID Reading 325 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: 5-20-94 Pit Closed By: BCI

## REMARKS

Remarks : EPA's line markers separator on location

Signature of Specialist: Vale 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:

VW124

945258

71468

N/A

5-20-94

0915

N/A

5/24/94

5/24/94

N/A

N/A

VG

Dark/Grey Coarse 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)	220.24	MG/KG			2.05	28
HEADSPACE PID	325	PPM				
PERCENT SOLIDS	86.0	%				

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

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

= Dilution Factor Used

Approved By:

*John Luvich*

Date:

6/16/94

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

14/05/24 10:28

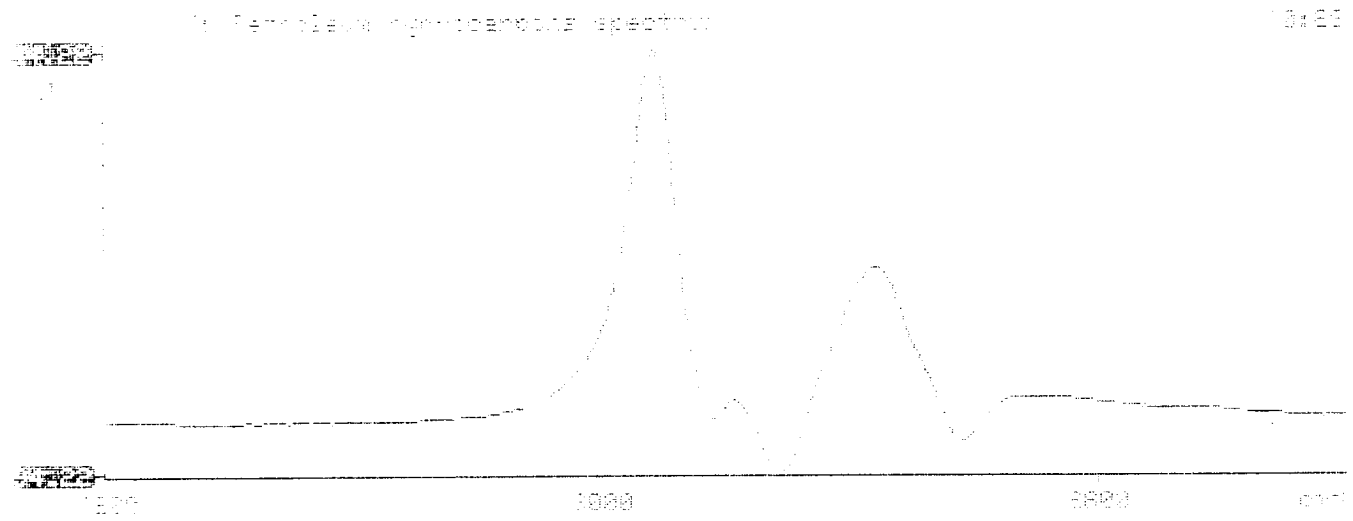
Sample Identification  
145256

Initial mass of sample, g  
0.00

Volume of sample after extraction, ml  
15.000

Petroleum hydrocarbons, ppb  
111/111

Recovery of hydrocarbons (EPA cor-1)  
111



**ILLEGIBLE**