

*Deming & Felt*  
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

*Approved*

**Meter Number:75143**

**Location Name:STATE GAS COM A#1**

**Location:TN-31 RG-12**

**SC-36 UL-N**

**1 - State**

**NMOCD Zone:OUTSIDE**

**Hazard Ranking Score:00**

**RECEIVED**  
APR 14 1997

**OIL CON. DIV.**  
DEC 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	<p>Meter: <u>75143</u> Location: <u>STATE GAS COM A #1</u></p> <p>Operator #: <u>0286</u> Operator Name: <u>CONOCO</u> P/L District: <u>KUTZ</u></p> <p>Coordinates: Letter: <u>N</u> Section <u>36</u> Township: <u>31</u> Range: <u>12</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Visit Date: <u>3.22.94</u> Run: <u>02</u> <u>71</u></p>
	SITE ASSESSMENT
REMARKS	<p>Remarks : <u>TWO PITS ON LOCATION. WILL CLOSE ONLY ONE.</u></p>

# ORIGINAL PIT LOCATION

A hand-drawn diagram on a rectangular sheet of paper. At the top center, there is a circle with a dot in the middle. A vertical line extends upwards from the dot, with the letter 'N' at the top. To the left of the circle, the word 'WELLHEAD' is written. A line extends from the dot towards the bottom right, ending at a dot inside a rectangle. This line is labeled '99'' and has an arrow pointing towards the rectangle. The angle between the vertical line and this line is labeled '163°'. The rectangle has a width of '13'' and a height of '12''.

## REMARKS

STARTED TAKING PICTURES AT 12:01 P.M.  
END DUMP

Signature

(SP31808) 03/16/94

# FIELD IT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	Meter: <u>7543</u> Location: <u>State Gas Com A#1</u> Coordinates: Letter: <u>N</u> Section <u>36</u> Township: <u>31</u> Range: <u>12</u> Or Latitude _____ Longitude _____ Date Started : <u>5/9/94</u> Area: <u>02</u> Run: <u>71</u>
<b>FIELD OBSERVATIONS</b>	Sample Number(s): <u>VW44</u> Sample Depth: <u>12</u> Feet Final PID Reading <u>193</u> PID Reading Depth <u>12</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet
<b>CLOSURE</b>	Remediation Method : Excavation <input type="checkbox"/> (1) Approx. Cubic Yards <u>0</u> Onsite Bioremediation <input type="checkbox"/> (2) Backfill Pit Without Excavation <input checked="" type="checkbox"/> (3) Soil Disposition: Envirotech <input type="checkbox"/> (1) <input type="checkbox"/> (3) Tierra Other Facility <input type="checkbox"/> (2) Name: _____ Pit Closure Date: <u>5/9/94</u> Pit Closed By: <u>BEI</u>
<b>REMARKS</b>	Remarks : <u>No line markers. Soil Dark with HC, 12' sandstone</u> _____ _____
Signature of Specialist: <u>Vale Wilson</u>	



# 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:

VW44	945 107
75143	NIA
5/9/94	1640
NIA	
5/10/94 5/16/94	5/10/94 5/16/94
NIA	NIA
VG	Black 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)	7760	MG/KG			.52	28
HEADSPACE PID	193	PPM				
PERCENT SOLIDS	87.9	%				

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

The Surrogate Recovery was at \_\_\_\_\_ % for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

Approved By:

*John L. Latta*

Date:

5/21/94

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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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04/05/10 14:22

Sample Identification  
 945107

Initial mass of sample, g  
 1.980

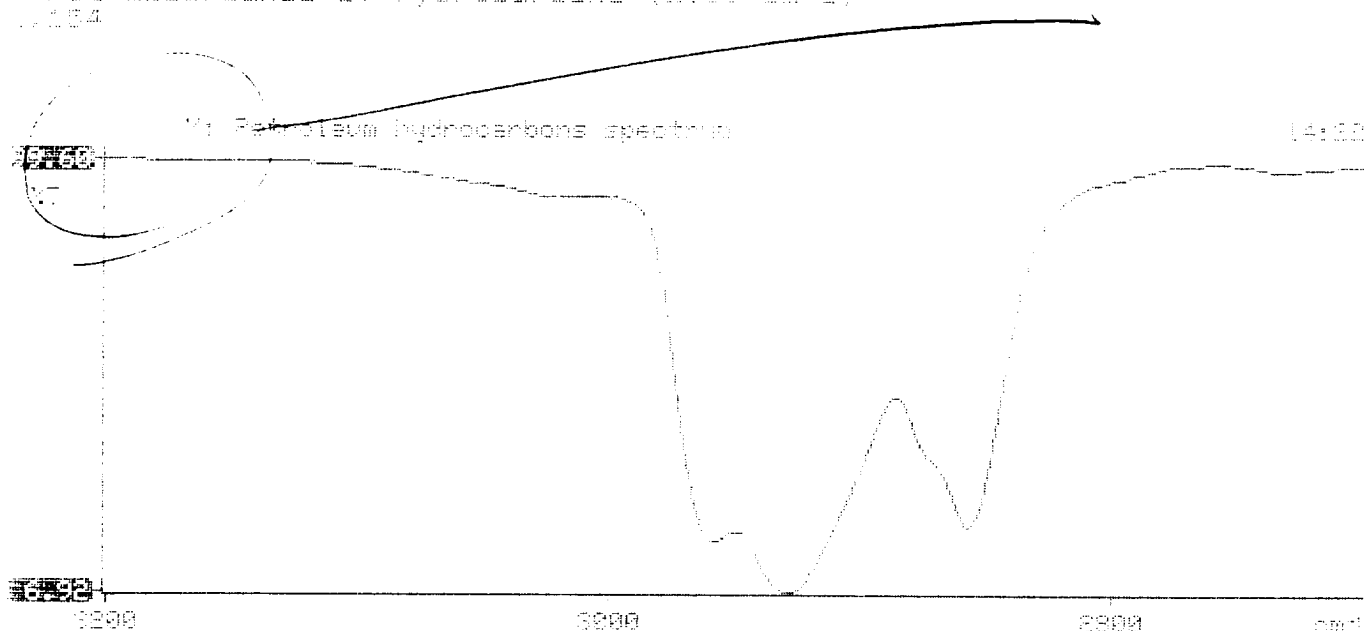
Volume of sample after extraction, ml  
 13.000

Petroleum hydrocarbons, ppm  
 576.681

Net absorbance of hydrocarbone (1930 cm-1)  
 0.154

*Pedo Thars* *mon 5/16*

945107



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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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04/05/16 10:56

Sample identification  
145107

Initial mass of sample, g  
0.520

Volume of sample after extraction, ml  
11.000

Petroleum hydrocarbons, ppm  
762.071

Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.244

