

Denny S. Faust
DEPUTY OIL & GAS INSPECTOR

DEC 30 1997

Approved

Meter Number: 87238

Location Name: STATE COM #1Y

Location: TN-29 RG-08

SC-02 UL-H

1 - State

NMOCD Zone: OUTSIDE

Hazard Ranking Score: 00

RECEIVED
APR 14 1997

OIL CON. DIV.
DIST. 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.

EPFS

FIELD PIT SITE ASSESSMENT FORM

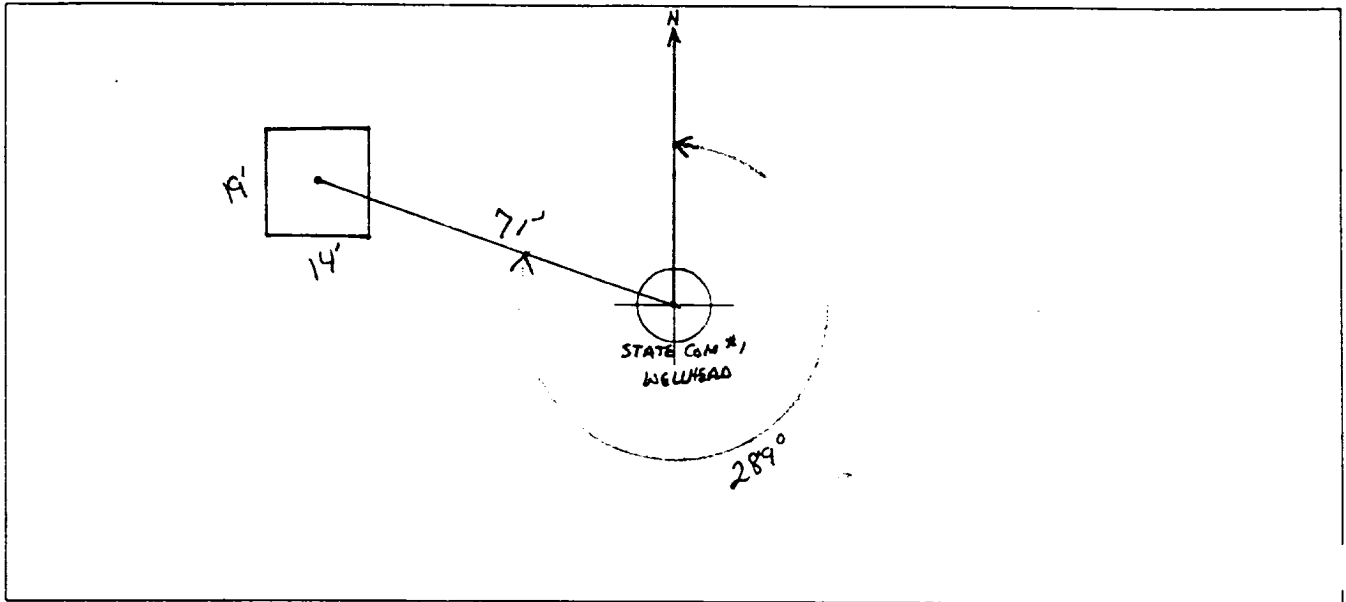
EL PASO FIELD SERVICES

GENERAL	<p>Meter: <u>87238</u> Location: <u>STATE COM # 19</u></p> <p>Operator #: <u>8367</u> Operator Name: <u>SOUTHLAND ROYALTY</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>H</u> Section <u>2</u> Township: <u>29</u> Range: <u>8</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>5.10.94</u> Area: <u>10</u> Run: <u>72</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p style="margin-left: 150px;">Inside <input type="checkbox"/> (1)</p> <p style="margin-left: 150px;">Outside <input checked="" type="checkbox"/> (2)</p> <p style="margin-left: 150px;">Land Type: BLM <input type="checkbox"/> (1)</p> <p style="margin-left: 150px;">State <input checked="" type="checkbox"/> (2)</p> <p style="margin-left: 150px;">Fee <input type="checkbox"/> (3)</p> <p style="margin-left: 150px;">Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Wellhead Protection Area :</p> <p>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>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>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) < 100' (Navajo Pits Only)</p> <p style="margin-left: 150px;"><input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>0</u> POINTS</p>
REMARKS	<p>Remarks : <u>THREE PITS ON LOCATION. WILL CLOSE ONLY ONE PIT IS DRY. LOCATION IS ON TOP OF MANZANARES MESA. REDLINE AND TOP CONFINED LOCATION TO BE OUTSIDE THE V.Z.</u></p> <p style="text-align: right;"><u>PUSH IN</u></p>

ORIGINAL PIT LOCATION

STATE COM #1

Original Pit : a) Degrees from North 289° Footage from Wellhead 71'
 b) Length : 19' Width : 14' Depth : 4'



Remarks :

TOOK PICTURES AT

END DUMP

DEHY PIT FOR THIS STATE COM 14 LOCATION IS ACTUALLY ON ANOTHER LOCATION THAT HAS BEEN P.A.D. MEASUREMENTS AND BEARING WERE TAKEN FROM THE ABANDONED WELLHEAD OF THE STATE COM #1 BECAUSE IT WAS MUCH CLOSER THAN THE STATE COM 14 WELLHEAD. THE STATE COM #1 IS APPROXIMATELY 250' N. OF THE STATE COM #14.

Completed By:

Robert Thompson

Signature

5-10-94

Date

Meter: 87238 Location: State Com # 1Y

Coordinates: Letter: H Section 2 Township: 29 Range: 8

Or Latitude _____ Longitude _____

Date Started : 6-11-94 Area: 10 Run: 22

Sample Number(s): VW164

Sample Depth: 2' Feet

Final PID Reading 257 PID Reading Depth 12' Feet

Yes No

Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

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: 6-11-94 Pit Closed By: BEI

Remarks : Line markers - 12' sandstone. As we were back filling we tore 2 cathodic protection lines. Lines were not flagged + our line detector did not pick them up.

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:

vw164	945321
87238	N/A
6-1-94	1325
N/A	N/A
6/10/94	6/10/94
N/A	N/A
VG	Brown sand + clay

REMARKS: * BEBUN TPH

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)	632	MG/KG			2.13	28
HEADSPACE PID	257	PPM				
PERCENT SOLIDS	88.4	%				

— 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

Dr. S. L. D.

Date: 6/11/94



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW164	945321
MTR CODE SITE NAME:	87238	N/A
SAMPLE DATE TIME (Hrs):	6-1-94	1325
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6-3-94	6/3/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	BROWN SANDY 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)	1,190	MG/KG			2.11	28
HEADSPACE PID	257	PPM				
PERCENT SOLIDS	88.4	%				

- 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:

TPH QC outside limits - need rerun

DF = Dilution Factor Used

Approved By: _____

Date: _____