

*Denny E. Faust*  
DEPUTY OIL & GAS INSPECTOR

DEC 29 1997

*Approved*

Meter Number: 90085

Location Name: VALENCIA CANYON UNIT #13

Location: TN-28 RG-04

SC-22 UL-O

2 - Federal

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.

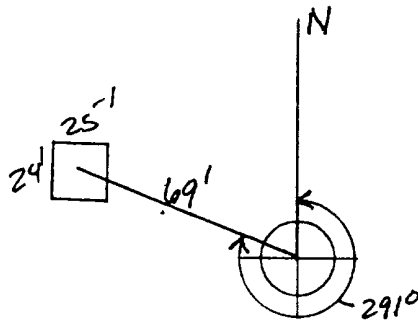
# FIELD PIT SITE ASSESSMENT FORM



GENERAL	<p>Meter: <u>90085</u> Location: <u>VALENCIA CANYON UNIT #13</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>Q</u> Section <u>22</u> Township: <u>28</u> Range: <u>4</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5-15-94</u> Area: <u>10</u> Run: <u>62</u></p>																														
	<table border="0"> <tr> <td data-bbox="104 687 206 1836" rowspan="10">SITE ASSESSMENT</td> <td data-bbox="206 687 854 895"> <p><b>NMOCD Zone:</b></p> <p>(From NMOCD Maps)</p> <p>Inside <input type="checkbox"/> (1)</p> <p>Outside <input checked="" type="checkbox"/> (2)</p> </td> <td data-bbox="854 687 1576 895"> <p><b>Land Type:</b></p> <p>BLM <input type="checkbox"/> (1)</p> <p>State <input type="checkbox"/> (2)</p> <p>Fee <input type="checkbox"/> (3)</p> <p>Indian _____</p> </td> </tr> <tr> <td colspan="2" data-bbox="206 895 1576 950"> <p><b>Depth to Groundwater</b></p> </td> </tr> <tr> <td data-bbox="206 950 854 1004"> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> </td> <td data-bbox="854 950 1576 1004"> <p>FOREST <input checked="" type="checkbox"/></p> </td> </tr> <tr> <td data-bbox="206 1004 854 1059"> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> </td> <td data-bbox="854 1004 1576 1059"></td> </tr> <tr> <td data-bbox="206 1059 854 1113"> <p>Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> </td> <td data-bbox="854 1059 1576 1113"></td> </tr> <tr> <td colspan="2" data-bbox="206 1113 1576 1168"> <p><b>Wellhead Protection Area :</b></p> </td> </tr> <tr> <td colspan="2" data-bbox="206 1168 1576 1321"> <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> </td> </tr> <tr> <td colspan="2" data-bbox="206 1321 1576 1375"> <p><b>Horizontal Distance to Surface Water Body</b></p> </td> </tr> <tr> <td data-bbox="206 1375 854 1430"> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)</p> </td> <td data-bbox="854 1375 1576 1430"></td> </tr> <tr> <td data-bbox="206 1430 854 1485"> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> </td> <td data-bbox="854 1430 1576 1485"></td> </tr> <tr> <td data-bbox="206 1485 854 1539"> <p>Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> </td> <td data-bbox="854 1485 1576 1539"></td> </tr> <tr> <td colspan="2" data-bbox="206 1539 1576 1583"> <p>Name of Surface Water Body _____</p> </td> </tr> <tr> <td colspan="2" data-bbox="206 1583 1576 1659"> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> </td> </tr> <tr> <td colspan="2" data-bbox="206 1659 1576 1769"> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) &lt; 100' (Navajo Pits Only)</p> <p><input type="checkbox"/> (2) &gt; 100'</p> </td> </tr> <tr> <td colspan="2" data-bbox="206 1769 1576 1836"> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>0</u> <b>POINTS</b></p> </td> </tr> </table>	SITE ASSESSMENT	<p><b>NMOCD Zone:</b></p> <p>(From NMOCD Maps)</p> <p>Inside <input type="checkbox"/> (1)</p> <p>Outside <input checked="" type="checkbox"/> (2)</p>	<p><b>Land Type:</b></p> <p>BLM <input type="checkbox"/> (1)</p> <p>State <input type="checkbox"/> (2)</p> <p>Fee <input type="checkbox"/> (3)</p> <p>Indian _____</p>	<p><b>Depth to Groundwater</b></p>		<p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p>	<p>FOREST <input checked="" type="checkbox"/></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><b>Wellhead Protection Area :</b></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><b>Horizontal Distance to Surface Water Body</b></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) &lt; 100' (Navajo Pits Only)</p> <p><input type="checkbox"/> (2) &gt; 100'</p>		<p><b>TOTAL HAZARD RANKING SCORE:</b> <u>0</u> <b>POINTS</b></p>
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REMARKS	<p>Remarks : <u>PIT HAS PARAFIN, PITS ON LOCATION ONE TO BE CLOSED.</u></p>																														

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 291° Footage from Wellhead 69'  
b) Length : 25' Width : 24' Depth : 5'



### REMARKS :

PHOTOGRAPHS AH-6 (10-13)

Completed By:

*[Signature]*

Signature

5-15-94

Date

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>90685</u> Location: <u>VALENCIA CANYON Unit #13</u></p> <p>Coordinates: Letter: <u>0</u> Section <u>22</u> Township: <u>28</u> Range: <u>4</u></p> <p style="padding-left: 40px;">Or Latitude _____ Longitude _____</p> <p>Date Started : <u>7-8-94</u> Area: <u>10</u> Run: <u>62</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <u>MK 103</u></p> <p>Sample Depth: <u>7'</u> Feet</p> <p>Final PID Reading <u>10</u> PID Reading Depth <u>7'</u> Feet</p> <p style="text-align: center;">Yes      No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
<b>CLOSURE</b>	<p>Remediation Method :</p> <p>Excavation <input type="checkbox"/> (1) Approx. Cubic Yards _____</p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input checked="" type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>7-8-94</u> Pit Closed By: <u>BEI</u></p>
<b>REMARKS</b>	<p>Remarks : <u>EPNG lines marked Soil Brown NO Hydrocarbon</u></p> <p><u>odor Hit Rock 7'</u></p>
<p>Signature of Specialist: <u>Morgan Killion</u></p>	



# FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

### PIT CLOSURE PROJECT - Soil

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	mk103	945619
MTR CODE   SITE NAME:	90085	N/A
SAMPLE DATE   TIME (Hrs):	7-8-94	0914
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	7-12-94	7/12/94
DATE OF BTEX EXT.   ANAL.:	N/A	N/A
TYPE   DESCRIPTION:	VG	Brown 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)	210	MG/KG			2.16	28
HEADSPACE PID	10	PPM				
PERCENT SOLIDS	89.6	%				

— 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

df

7/12/94

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

24/07/12 09:24

Sample identification  
 245619

Initial mass of sample, g  
 1.160

Volume of sample after extraction, ml  
 26.000

Petroleum hydrocarbons, ppm  
 10.785

Net absorbance of hydrocarbons (2730 cm<sup>-1</sup>)  
 0.002

**ILLEGIBLE**

