

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

DEC 30 1997

Approved

Meter Number: 75398

Location Name: GALLEGOS CANYON UNIT 234

Location: TN-28 RG-13

SC-14 UL-A

4 - Fee

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.

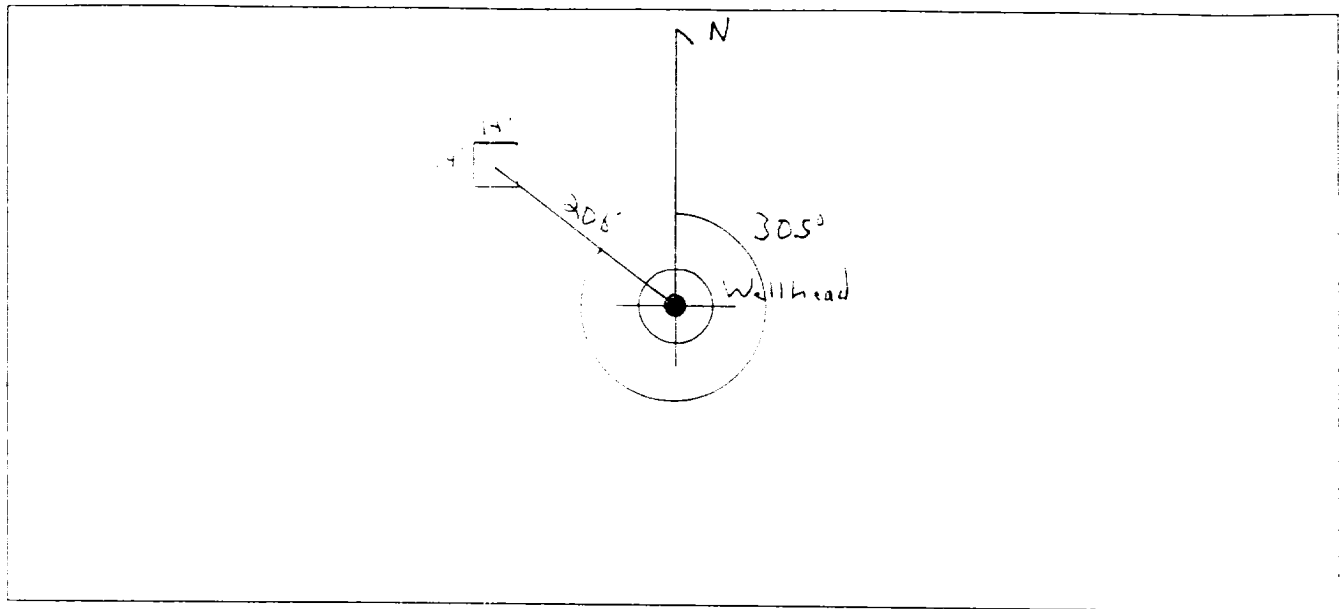
Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>75398</u> Location: <u>Gallegos Canyon Unit 234</u> Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>Angel Peak</u> Coordinates: Letter: <u>A</u> Section <u>14</u> Township: <u>28</u> Range: <u>13</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: _____ Line Drip: <u>/</u> Other: _____ Site Assessment Date: <u>1/23/94</u> Area: <u>01</u> Run: <u>51</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps) Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2)</p> <p>Land Type: BLM <input checked="" type="checkbox"/> (1) ^{Cons 1/25/94} State <input type="checkbox"/> (2) Fee <input checked="" type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater 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>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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)</p> <p>Horizontal Distance to Surface Water Body 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) Name of Surface Water Body _____ (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>0</u> POINTS</p>
REMARKS	<p>Remarks : <u>Redline Book: Outside Vulnerable Zone Type: Outside</u> <u>3 pits. Closest Line Drip is next to above meter location</u> <u>PUSH-IN</u></p>

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 305° Footage from Wellhead 206'
 b) Length : 14' Width : 14' Depth : 4'



REMARKS :

Pictures @ 1437 hr 9-12 roll-1

Pit is listed as "line drip" on pit sheet

Completed By:

Cory Chance
 Signature

1/23/95
 Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>75398</u> Location: <u>Gallegos Canyon unit #234</u> Coordinates: Letter: <u>A</u> Section <u>14</u> Township: <u>28</u> Range: <u>13</u> Or Latitude _____ Longitude _____ Date Started : <u>7-14-95</u> Run: <u>01</u> <u>61</u>
FIELD OBSERVATIONS	Sample Number(s): <u>MK434</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>1261 ppm</u> PID Reading Depth <u>12'</u> Feet <div style="text-align: center;">Yes No</div> Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
CLOSURE	Remediation Method : <div style="display: flex; justify-content: space-between;"> <div> Excavation Onsite Bioremediation Backfill Pit Without Excavation </div> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div> Approx. Cubic Yards _____ Tierra </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between;"> <div> Envirotech Other Facility </div> <div style="text-align: right;"> <input type="checkbox"/> <input type="checkbox"/> </div> <div> Name: _____ Pit Closure Date: <u>7-14-95</u> </div> <div style="text-align: right;"> Pit Closed By: <u>Philip</u> </div> </div>
REMARKS	Remarks : <u>Arrived took fence down Dug Sample Hole</u> <u>Soil Grayish-black strong Hydrocarbon odor</u>
	Signature of Specialist: <u>Morgan Hillier</u>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK 34	947001
MTR CODE SITE NAME:	75398	N/A
SAMPLE DATE TIME (Hrs):	7/14/95	13:00
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	7-18-95	7-18-95
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	gray clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	95.7	MG/KG			2.02	28
HEADSPACE PID	1260	PPM				
PERCENT SOLIDS	79.2	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

Date:

7/20/95

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

25/07/13 08:42

Sample identification
447001
Initial mass of sample, g
0.020
Volume of sample after extraction, ml
13.000
Petroleum hydrocarbons, ppm
15.710
Net absorbance of hydrocarbons (2930 cm-1)
0.022

