

Denny L. Frost
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

Meter Number: 75240
Location Name: Maddox WN Federal #4
Location: TN-30 RG-13
SC-24 UL-M
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.

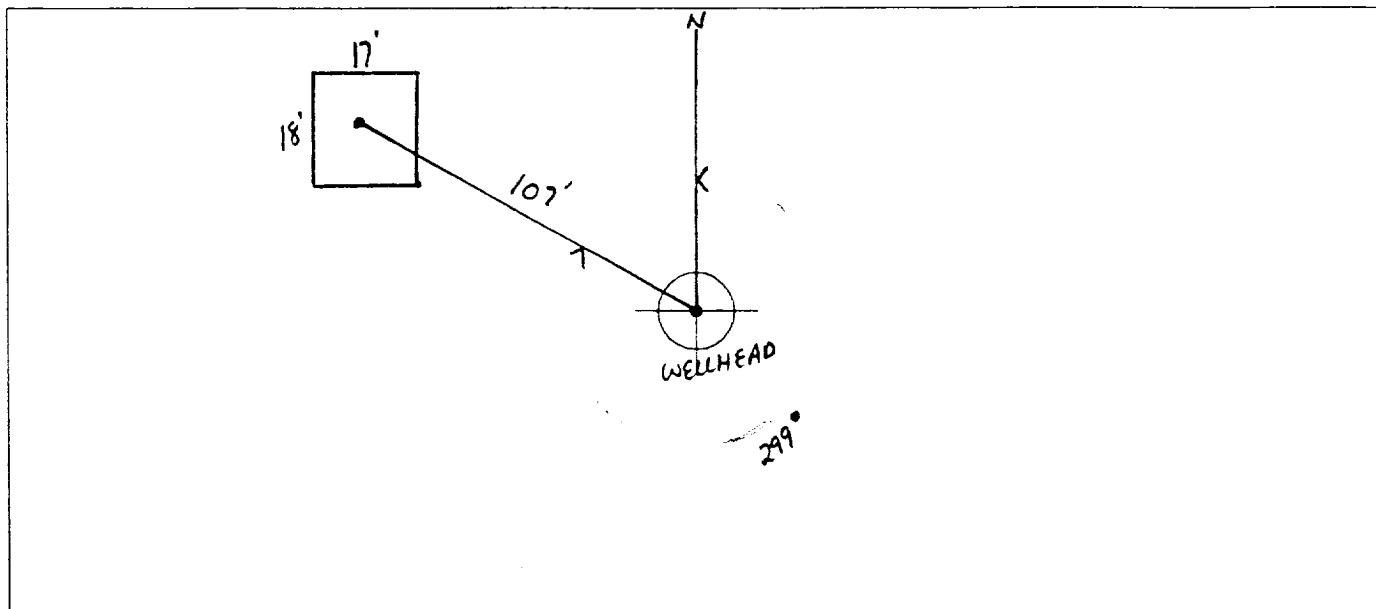
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>75240</u> Location: <u>MADDOX WN FEDERAL #4</u></p> <p>Operator #: <u>0286</u> Operator Name: <u>CONOCO</u> P/L District: <u>KUTZ</u></p> <p>Coordinates: Letter: <u>M</u> Section <u>24</u> Township: <u>30</u> Range: <u>13</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>3.25.94</u> Run: <u>02</u> <u>31</u></p>
	SITE ASSESSMENT
REMARKS	<p>Remarks : <u>TWO PITS ON LOCATION. WILL CLOSE ONLY ONE.</u> <u>PIT IS DRY.</u></p>

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 299° Footage to Wellhead 107'
b) Degrees from North _____ Footage to Dogleg _____
Dogleg Name _____
c) Length : 18' Width : 12' Depth : 1'



REMARKS

Remarks :

STARTED TAKING PICTURES AT 8:21 A.M.END DUMP

Completed By:

Robert J. Thompson
Signature

3.25.94
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>75240</u> Location: <u>MADDOX WW FEDERAL #4</u></p> <p>Coordinates: Letter: <u>M</u> Section <u>24</u> Township: <u>30</u> Range: <u>13</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>4-21-94</u> Area: <u>02</u> Run: <u>31</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>KD16</u></p> <p>Sample Depth: <u>3'</u> Feet</p> <p>Final PID Reading <u>229 ppm</u> PID Reading Depth <u>3'</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>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input type="checkbox"/> (1) Approx. Cubic Yards <u>0</u></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 checked="" type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>4-21-94</u> Pit Closed By: <u>BEI</u></p>
REMARKS	<p>Remarks : <u>Dug test hole to 3', hit Rock Layer. took</u></p> <p><u>PID Sample, closed pit</u></p>
<p>Signature of Specialist: <u>Kenny Dean</u></p>	



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD16	940852
MTR CODE SITE NAME:	75240	NIA
SAMPLE DATE TIME (Hrs):	4/21/94	0850
SAMPLED BY:	NIA	
DATE OF TPH EXT. ANAL.:	4-22-94	4-22-94
DATE OF BTEX EXT. ANAL.:	NIA	NIA
TYPE DESCRIPTION:	VG	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)	2920	MG/KG			2.01	28
HEADSPACE PID	229	PPM				
PERCENT SOLIDS	90.3%	%				

-- 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 Seach

Date: 4/20/94

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

4/04/22 13:11

Sample identification
 20852

Initial mass of sample, g
 0.10

Volume of sample after extraction, ml
 3.000

Petroleum hydrocarbons, ppm
 719.670
 Net absorbance of hydrocarbons (2730 cm⁻¹)
 1.070

