

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

DEC 29 1997

Approved

Meter Number: 71617

Location Name: Jicarilla C 34 #7

Location: TN-25 RG-05

SC-21 UL-P

6 - Jicarilla

NMOCD Zone: OUTSIDE

Hazard Ranking Score: 00

RECEIVED
APR 14 1997

OIL CON. DIV.
DIV. 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

Meter: 71617 Location: Jicarilla C³⁴ #7
 Operator #: 0703 ^{K6W 7-22-94} Operator Name: Texaco P/L District: Ojito
 Coordinates: Letter: P Section 21 Township: 25N Range: 5W
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 7-18-94 Area: 06 Run: 63

SITE ASSESSMENT

NMOCD Zone:

(From NMOCD
Maps)

Inside

Outside

Land Type:

BLM ☐ (1)

State ☐ (2)

Fee ☐ (3)

Indian Jicarilla
Apache

Depth to Groundwater

Less Than 50 Feet (20 points) ☐ (1)

50 Ft to 99 Ft (10 points) ☐ (2)

Greater Than 100 Ft (0 points) ☒ (3)

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? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body

Less Than 200 Ft (20 points) ☐ (1)

200 Ft to 1000 Ft (10 points) ☐ (2)

Greater Than 1000 Ft (0 points) ☒ (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 ☐ (1) < 100' (Navajo Pits Only)
☒ (2) > 100'

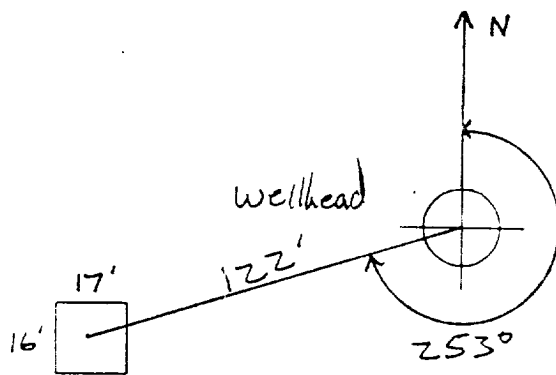
TOTAL HAZARD RANKING SCORE: 0 **POINTS**

REMARKS

Remarks : Redline v.z. - inside Tapo v.z. - outside
pit is dry

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 253 Footage from Wellhead 122
b) Length : 17 Width : 16 Depth : 3



Remarks :

Photos - 5-8

Completed By:

[Signature]

7-18-94

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>71617</u> Location: <u>Jicarilla c³⁴ #7</u></p> <p>Coordinates: Letter: <u>P</u> Section <u>21</u> Township: <u>25N</u> Range: <u>5W</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>8/28/95</u> Run: <u>06</u> <u>63</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>JK62</u></p> <p>Sample Depth: <u>22</u> Feet</p> <p>Final PID Reading <u>3490</u> PID Reading Depth <u>22'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>246</u> <u>8/9/12/95</u></p> <p>Onsite Bioremediation <input type="checkbox"/> Approved to Close by Keith</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> at Jic EPO - 8-29-95</p> <p>Phase II</p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>8-31-95</u> Pit Closed By: <u>Phil P</u></p>
REMARKS	<p>Remarks : <u>Pit Pit Readings (N-25.1)(S-58.5)(E 5.9)(W-0.8)</u></p> <p><u>Pit size 18x15x22</u></p> <p><u>Fence Size: 23x23x3 No Fence</u></p> <p><u>more than 100' from Ephemeral stream</u></p> <p>Signature of Specialist: <u>[Signature]</u></p>



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JK62	947354
MTR CODE SITE NAME:	71617	Jicarilla C 34 #7
SAMPLE DATE TIME (Hrs):	08-29-95	1306
PROJECT:	Jic Pits	
DATE OF TPH EXT. ANAL:	8/10/95	
DATE OF BTEX EXT. ANAL:	8/30/95	9/3/95
TYPE DESCRIPTION:	V6	Dark brown Sand & clay

Field Remarks: (N-25.1)(S-58.5)(E-5.9)(W-0.8)

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 5	MG/KG				
TOLUENE	< 5	MG/KG				
ETHYL BENZENE	< 5	MG/KG				
TOTAL XYLENES	< 15	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	105	MG/KG			2.10	28
HEADSPACE PID	349.0	PPM				
PERCENT SOLIDS	91.0	%				

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

The Surrogate Recovery was at 90% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

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

95/08/30 13:31

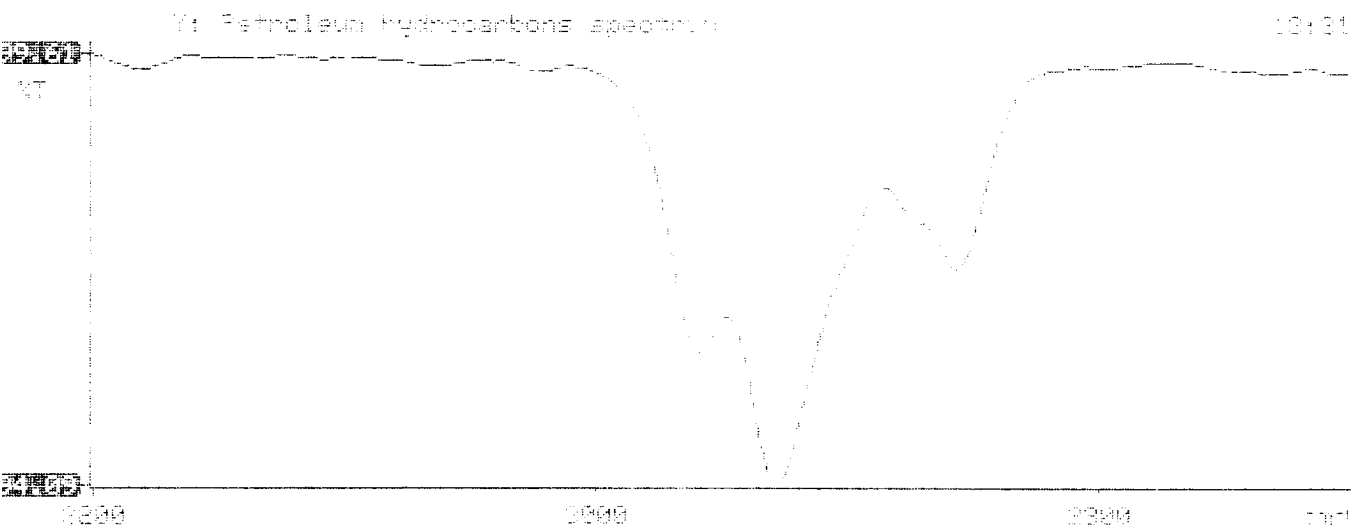
Sample identification
P47354

Initial mass of sample, g
2.100

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
108.452

Net absorbance of hydrocarbons (2930 cm⁻¹)
0.024



ILLEGIBLE

BTEX SOIL SAMPLE WORKSHEET

File	:	947354	Date Printed	:	9/6/95
Soil Mass (g)	:	5.01	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	20	DF (Analytical)	:	200
Shot Volume (uL)	:	100	DF (Report)	:	0.19960

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.499
Toluene (ug/L)	:	0.96	Toluene (mg/Kg):	0.192 0.499
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.499
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000 0.998
o-xylene (ug/L)	:	0.44	o-xylene (mg/Kg):	0.088 0.499
			Total xylenes (mg/Kg):	0.088 1.497
			Total BTEX (mg/Kg):	0.279

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\090395-1.018
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947354,5.01G,100U
 Acquired : Sep 03, 1995 01:15:52
 Printed : Sep 03, 1995 01:42:17
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.390	0	0.0000
a,a,a TFT	4.987	2199640	92.4254
TOLUENE	6.810	400970	0.9645
ETHYLBENZENE	10.553	86961	-0.0250
M & P XYLENE	10.903	579440	-0.8720
O XYLENE	11.957	62357	0.4353
BFB	13.437	31486078	89.6408

C:\LABQUEST\CHROM001\090395-1.018 -- Channel A

