

*Deputy Oil & Gas Inspector*  
DEPUTY OIL & GAS INSPECTOR

DEC 29 1997

*Approved*

Meter Number: 90089  
Location Name: JICARILLA 30 #7  
Location: TN-25 RG-04  
SC-30 UL-O  
6 - Jicarilla  
NMOCD Zone: OUTSIDE  
Hazard Ranking Score: 00

RECEIVED  
APR 14 1997

OIL CON. DIV.  
DIST. 2

**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**

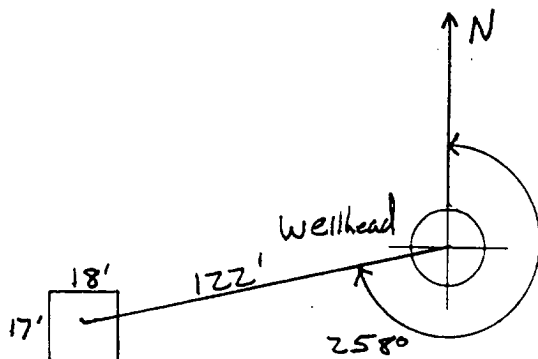
4

GENERAL	<p>Meter: <u>90089</u> Location: <u>Jicarilla 30 well #7</u>          Operator #: <u>0286</u> Operator Name: <u>CONOCO</u> P/L District: <u>Ojito</u>          Coordinates: Letter: <u>Q</u> Section <u>30</u> Township: <u>25N</u> Range: <u>4W</u>          Or Latitude _____ Longitude _____          Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____          Site Assessment Date: <u>7-15-94</u> Area: <u>06</u> Run: <u>51</u></p>
	SITE ASSESSMENT
REMARKS	

## ORIGINAL PIT LOCATION

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Original Pit : a) Degrees from North 258 Footage from Wellhead 122  
b) Length : 18 Width : 17 Depth : 3



## REMARKS

Remarks :

Photos - Roll #1 #13-16

Completed By:

[Signature]

Signature

7-15-94

Date

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	Meter: <u>90089</u> Location: <u>Jicarilla 30 well #7</u> Coordinates: Letter: <u>0</u> Section <u>30</u> Township: <u>25N</u> Range: <u>4W</u> Or Latitude _____ Longitude _____ Date Started : <u>9/20/95</u> Run: _____
<b>FIELD OBSERVATIONS</b>	Sample Number(s): <u>JX84</u> Sample Depth: <u>16'</u> Feet Final PID Reading <u>33</u> PID Reading Depth <u>16</u> Feet <div style="text-align: center;">Yes      No</div> Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
<b>CLOSURE</b>	Remediation Method : <div style="display: flex; justify-content: space-between;"> <div>           Excavation            Onsite Bioremediation            Backfill Pit Without Excavation         </div> <div> <input checked="" type="checkbox"/> Approx. Cubic Yards <u>264</u> LT <sup>9/27/95</sup>  <input type="checkbox"/> <u>Gabriel Jicarilla E.P.O. approved</u>  <input type="checkbox"/> <u>closure 9-21-95</u> </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between;"> <div>           Envirotech <input checked="" type="checkbox"/>            Other Facility <input type="checkbox"/> </div> <div> <input type="checkbox"/> Tierra            Name: _____         </div> </div> Pit Closure Date: <u>9-22-95</u> Pit Closed By: <u>Phil P</u>
<b>REMARKS</b>	Remarks : <u>Pit Pit Readings (N-4.3)(S-25.3)(E-6.8)(W-20.0)</u> <u>Pit size (24x18x16)</u> <u>Fence size 25x22x3 No Net</u> <u>more than 100 Foot From Ephemeral Stream</u>
	Signature of Specialist: <u>[Signature]</u>



# FIELD SERVICES LABORATORY

## ANALYTICAL REPORT

### PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

#### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JK84	947504
MTR CODE   SITE NAME:	9E089	Ticauilla 30 well #7
SAMPLE DATE   TIME (Hrs):	09-20-95	1047
PROJECT:	Jic Pits	
DATE OF TPH EXT.   ANAL:	9-22-95	
DATE OF BTEX EXT.   ANAL:	9/21/95	9/22/95
TYPE   DESCRIPTION:	V6	light grey sand & clay

Field Remarks: (N-4.3)(S-25.3)(E-6.8)(W-20.0)

#### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	17.1	MG/KG			2.02	28
HEADSPACE PID	3.3	PPM				
PERCENT SOLIDS	37.4	%				

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

The Surrogate Recovery was at  
Narrative:

104% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Date:

9-26-95

5-15

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

95/09/22 14:05

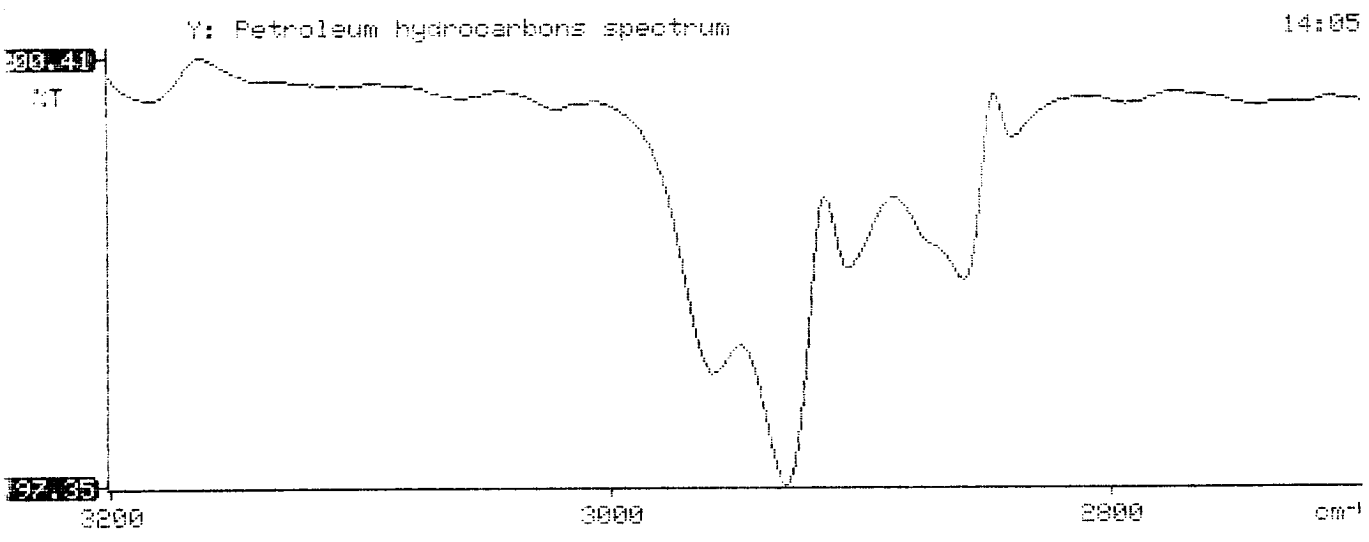
Sample identification  
947504

Initial mass of sample, g  
2.020

Volume of sample after extraction, ml  
28.000

Petroleum hydrocarbons, ppm  
17.130

Net absorbance of hydrocarbons (2930 cm<sup>-1</sup>)  
0.012



## BTEX SOIL SAMPLE WORKSHEET

File	:	947504	Date Printed	:	9/25/95
Soil Mass (g)	:	4.95	Multiplier (L/g)	:	0.00101
Extraction vol. (mL)	:	10	DF (Analytical)	:	200
Shot Volume (uL)	:	50	DF (Report)	:	0.20202

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.505
Toluene (ug/L)	:	0.22	Toluene (mg/Kg):	0.044 0.505
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000 0.505
p & m-xylene (ug/L)	:	0.29	p & m-xylene (mg/Kg):	0.059 1.010
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.505
			Total xylenes (mg/Kg):	0.059 1.515
			Total BTEX (mg/Kg):	0.103

# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\092295-2.005  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 947504,4.95G,50U  
 Acquired : Sep 22, 1995 16:08:13  
 Printed : Sep 22, 1995 16:34:37  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.917	0	0.0000
a,a,a TFT	6.730	4810142	104.1894
TOLUENE	8.777	61616	0.2219
ETHYLBENZENE	12.743	0	0.0000
M & P XYLENE	13.180	95027	0.2868
O XYLENE	14.200	0	0.0000
BFB	15.867	75275904	103.8443

