

Deputy Oil & Gas Inspector
DEPUTY OIL & GAS INSPECTOR

DEC 2 1987

Approved

Meter Number: 74884

Location Name: Jicarilla Contract #10

Location: TN-25 RG-05

SC-33 UL-M

6 - Jicarilla

NMOCD Zone: OUTSIDE

Hazard Ranking Score: 00

RECEIVED
APR 14 1987

OIL CON. DIV.
DNL 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.

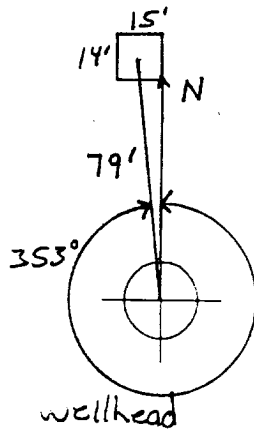
Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>74884</u> Location: <u>Jicarilla Contract #10</u> Operator #: <u>0425</u> Operator Name: <u>BWP Inc</u> P/L District: <u>OJITO</u> Coordinates: Letter: <u>M</u> Section <u>33</u> Township: <u>25N</u> Range: <u>5W</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

Original Pit : a) Degrees from North 353 Footage from Wellhead 79
 b) Length : 15 Width : 14 Depth : 2



REMARKS :

Pictures ~~to~~ Roll #1 photo 1-4

oil in pit \approx 30 gals

Completed By:

[Signature]

Signature

7-15-94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>74884</u> Location: <u>Jicarilla contract #10</u> Coordinates: Letter: <u>M</u> Section <u>33</u> Township: <u>25N</u> Range: <u>5W</u> Or Latitude _____ Longitude _____ Date Started : <u>9/11/95</u> Run: <u>06</u> <u>51</u>
FIELD OBSERVATIONS	Sample Number(s): <u>JK 26</u> Sample Depth: <u>9'</u> Feet Final PID Reading <u>3090</u> PID Reading Depth <u>9</u> Feet Yes No 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> <input checked="" type="checkbox"/> Approx. Cubic Yards <u>404</u> LT <u>9/27/95</u> <input type="checkbox"/> <u>DAVE FROM Jicarilla E.P.O. approved</u> <input type="checkbox"/> <u>closure 9-18-95</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>9-19-95</u> Pit Closed By: <u>Phil P</u>
REMARKS	Remarks : <u>Pit PID Readings (W-270)(S-722)(E-93)(N-65.0)</u> <u>Pit size: 24x35x9</u> <u>4 ft Rock at 9'</u> <u>Fence size 18x17x3</u> <u>no wet</u> <u>more than 100' From Ephemeral Stream</u> <u>SPRAYED PIT WITH SOIL ENHANCER 9-18-95</u> Signature of Specialist: <u>James K. Kuby</u>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

JK 76

Lab ID

94 7436

MTR CODE | SITE NAME:

74884

Jic Contract 148 #10

SAMPLE DATE | TIME (Hrs):

09-11-95

1625

PROJECT:

Jic Pits

DATE OF TPH EXT. | ANAL.:

9-12-95

DATE OF BTEX EXT. | ANAL.:

9/12/95

9/14/95

TYPE | DESCRIPTION:

V6

Light brown fine sand & silt

Field Remarks: (N-27.0)(S-77.2)(E-9.3)(W-65.0)

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	7.2	MG/KG	4	D		
TOLUENE	26.6	MG/KG	4	D		
ETHYL BENZENE	4.7	MG/KG	4	D		
TOTAL XYLENES	30.6	MG/KG	4	D		
TOTAL BTEX	69.1	MG/KG	4	D		
TPH (418.1)	3910	MG/KG			22?	22?
HEADSPACE PID	309	PPM				
PERCENT SOLIDS	92.9	%				

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

The Surrogate Recovery was at 98% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By: 

Date:

9-15-95

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

95/09/12 11:57

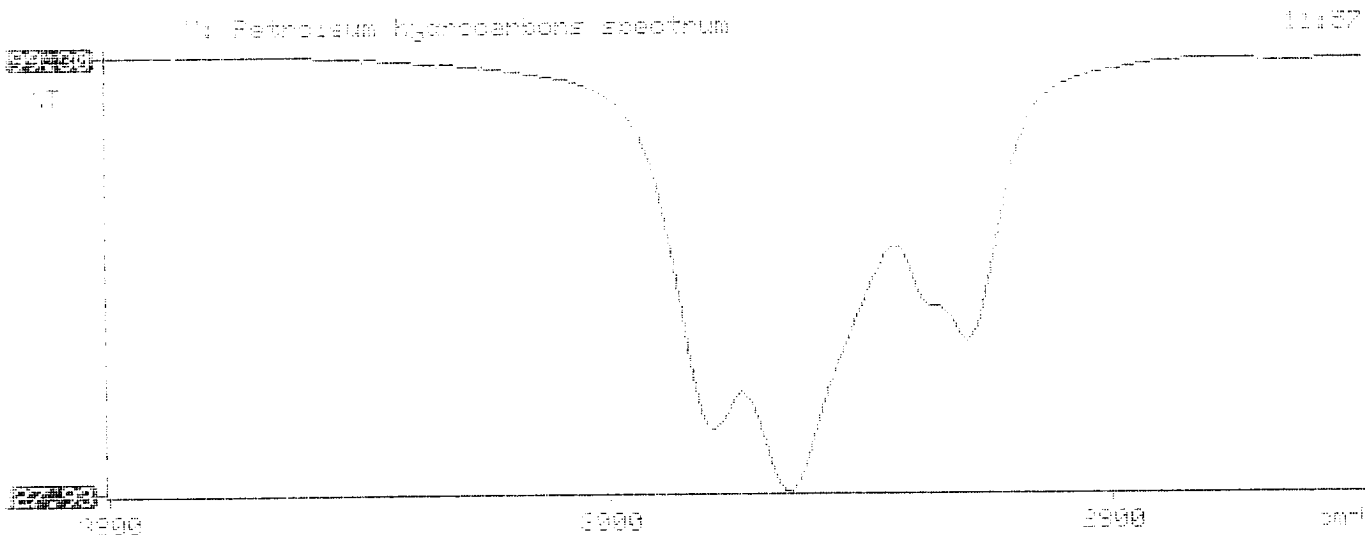
Sample Identification
 947436

Initial mass of sample, g
 1.280

Volume of sample after extraction, ml
 18.000

Petroleum hydrocarbons, ppm
 1907.775

Net absorbance of hydrocarbons (2930 cm⁻¹)
 0.149



BTEX SOIL SAMPLE WORKSHEET

File	:	947436	Date Printed	:	9/15/95
Soil Mass (g)	:	4.95	Multiplier (L/g)	:	0.00101
Extraction vol. (mL)	:	20	DF (Analytical)	:	800
Shot Volume (uL)	:	25	DF (Report)	:	0.80808

			Det. Limit
Benzene (ug/L)	:	8.89	
Toluene (ug/L)	:	32.90	
Ethylbenzene (ug/L)	:	5.81	
p & m-xylene (ug/L)	:	34.90	
o-xylene (ug/L)	:	3.01	
Benzene (mg/Kg):		7.184	2.020
Toluene (mg/Kg):		26.586	2.020
Ethylbenzene (mg/Kg):		4.695	2.020
p & m-xylene (mg/Kg):		28.202	4.040
o-xylene (mg/Kg):		2.432	2.020
Total xylenes (mg/Kg):		30.634	6.061
Total BTEX (mg/Kg):		69.099	

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\091495-0.010
 Method : C:\LABQUEST\METHODS\9000.MET
 Sample ID : 947436,4.95G,25U
 Acquired : Sep 14, 1995 17:35:12
 Printed : Sep 15, 1995 07:48:30
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.957	5524187	8.8879
a,a,a-TFT	11.357	18360362	142.2578
TOLUENE	14.387	17725268	32.8977
ETHYLBENZENE	19.403	3273963	5.8109
M,P-XYLENES	19.830	19414496	34.9029
O-XYLENE	20.870	1878566	3.0088
BFB	22.840	111343608	97.6801

