Meter Number:95936
Location Name:Jic Contract 148 #38
Location:TN-25 RG-05
SC-13 UL-N
6 - Jicarilla
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

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.

EPFS
EL PASO FIELD SERVICES

FIELD PIT SITE ASSESSMENT FORM

Meter: 95936 Location: JIC CONTRACT 148 #38
Operator #: 0203 Operator Name: AMOCO P/L District: OJITO
Coordinates: Letter: N Section 13 Township: 25 Range: 5
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 6-17-95 Area: 06 Run: 63

NMOCD Zone: (From NMOCD Maps)
Inside ☐ (1)
Outside ☒ (2)

Land Type:
BLM ☐ (1)
State ☐ (2)
Fee ☐ (3)
Indian JICARILLA

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'

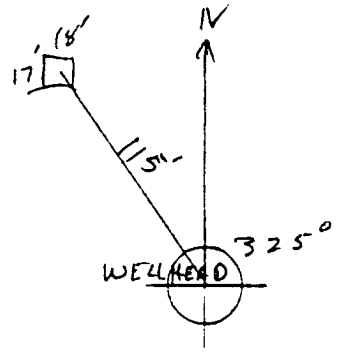
TOTAL HAZARD RANKING SCORE: 0 **POINTS**

Remarks : 3 PITS + TANK AREA ON LOCATION, PIT CONTAINS OIL

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 325° Footage from Wellhead 115'

b) Length : 18' Width : 17' Depth : 28'



Remarks :

Completed By:

Signature

8-17-95

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 95936 Location: JIC CONTRACT 148 #38

Coordinates: Letter: D Section 13 Township: 25 Range: 5

Or Latitude _____ Longitude _____

Date Started : 8-29-95 Run: 06 63

FIELD OBSERVATIONS

Sample Number(s): 0579 _____ _____ _____

Sample Depth: 14 Feet

Final PID Reading 1.4 PID Reading Depth 14 Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 162 @ 9/25/95

Onsite Bioremediation ☐ Approved to Close by Keith

Backfill Pit Without Excavation ☐ of JIC EPO 8-29-95

Soil Disposition:

Envirotech ☒ Tierra ☐

Other Facility ☐ Name: _____

Pit Closure Date: 9-5-95 Pit Closed By: Philip

REMARKS

Remarks : PID WALL (N-9.8)(S-1.0)(E-3.0)(W-1.0)
Pit SIZE 19X15X14 LESS THAN 100' FROM EPHEMERAL STREAM
Pit OnSIZE W.V. ZONE (EPNG NORMAN ONSITE)
FENCE SIZE 28X28X3 NO NET

Signature of Specialist: [signature]

(SP319)

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	NS-7	947351
MTR CODE | SITE NAME:	95936	Jic. Contract 148 #38
SAMPLE DATE | TIME (Hrs):	08-29-95	1400
PROJECT:	Jic Pits	
DATE OF TPH EXT. | ANAL.:	8/30/95	
DATE OF BTEX EXT. | ANAL.:	8/30/95	9/3/95
TYPE | DESCRIPTION:	VG	Dark brown sand & clay

Field Remarks: (N-9.8)(S-1.0)(E-3.0)(W-1.0)

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	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	689	MG/KG			2.23	28
HEADSPACE PID	1.4	PPM				
PERCENT SOLIDS	91.2	%				

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

The Surrogate Recovery was at 92% 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 14:29

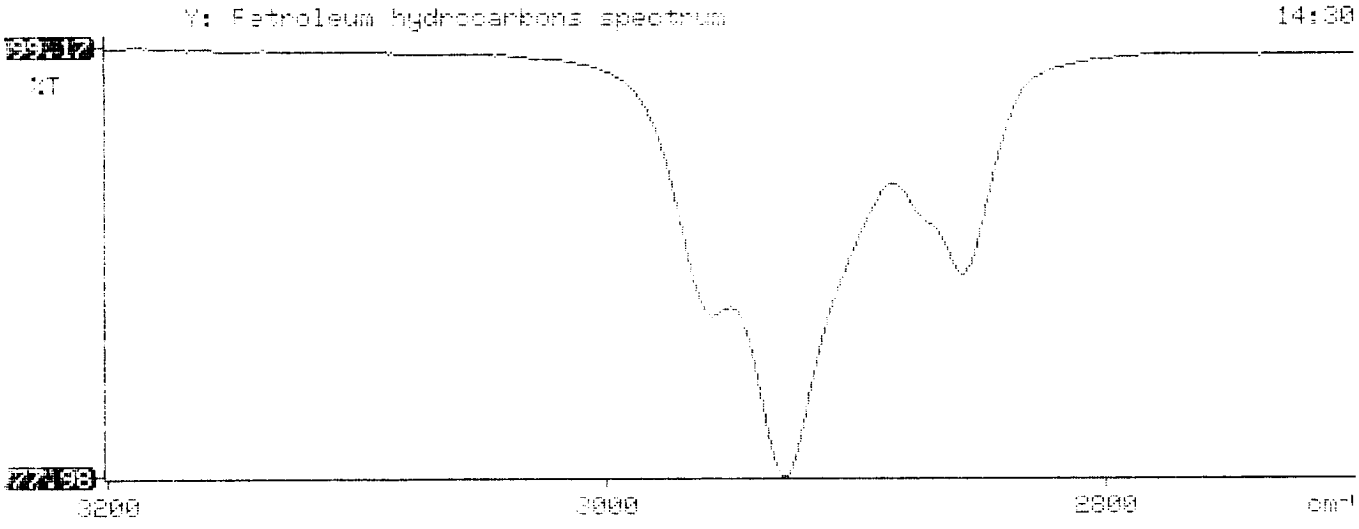
Sample identification
47351

Initial mass of sample, g
1.230

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
38.568

Net absorbance of hydrocarbons (2930 cm-1)
0.103



BTEX SOIL SAMPLE WORKSHEET

File	947351	**Date Printed**	9/6/95	
Soil Mass (g)	5.06	**Multiplier (L/g)**	0.00099	
Extraction vol. (mL)	20	**DF (Analytical)**	200	
Shot Volume (uL)	100	**DF (Report)**	0.19763	
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.494
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.494
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.494
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	0.988
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.494
		Total xylenes (mg/Kg):	**0.000**	1.482
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\090395-1.015
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 947351,5.06G,100U
Acquired : Sep 02, 1995 23:28:05
Printed : Sep 04, 1995 11:12:44
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.390	0	0.0000
a,a,a TFT	4.967	1998780	83.9855
TOLUENE	6.800	219031	-0.1491
ETHYLBENZENE	10.540	0	0.0000
M & P XYLENE	10.923	412650	-1.8982
O XYLENE	11.877	0	0.0000
BFB	13.473	32288940	91.9266