Meter Number:94555
Location Name:Jicarilla Gas Com 35 'D' #1
Location:TN-24 RG-05
SC-12 UL-L
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.

EL PASO FIELD SERVICES

FIELD PIT SITE ASSESSMENT FORM

2

GENERAL

Meter: 94555 Location: Jicarilla Gas Com 35 'D' #1
Operator #: 0203 Operator Name: Amoco P/L District: OJITO
Coordinates: Letter: L Section 12 Township: 24N Range: 5W
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 7-14-94 Area: 06 Run: 51

SITE ASSESSMENT

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

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

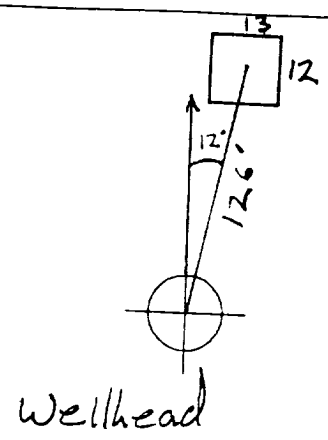
Remarks : Redline Book - outside, Vulnerable Zone Topo - outside
KGW 7-14-94
Two pits on location. water & oil in pit
Four
Pits on N

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 12 Footage from Wellhead 126

b) Length : 13 Width : 13 Depth : 3



REMARKS

Remarks :

Pictures @ Roll 2 #14

oil & water in pit - ~30gals

Completed By:

Signature

7-14-94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 94555 Location: Jicarilla Gas com 35 D #1

Coordinates: Letter: L Section 12 Township: 24N Range: 5W

Or Latitude _____ Longitude _____

Date Started : 8/31/95 Run: 06 51

FIELD OBSERVATIONS

Sample Number(s): JK69 _____ _____ _____

Sample Depth: 19' Feet

Final PID Reading 363.0 PID Reading Depth 19' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 3.2 ~~9/12/95~~

Onsite Bioremediation ☐ Gabriel From Jicarilla E.P.O. approved closure 9-6-95

Backfill Pit Without Excavation ☐ Phase II outside zone

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9-7-95 Pit Closed By: Philip

REMARKS

Remarks : Pit Pid Readings (N-11.3)(S-3.7)(E-45.2)(W-25.0)

Fence

Pit size: 21x20x3

~~Fence~~ Pit size: 20x20x19 No Net

9-5-95

More than 100' From Ephemral stream

Signature of Specialist: James K. Kirby

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:	JK69	947376
MTR CODE | SITE NAME:	94555	Jicarilla Gas Com 35 D #1
SAMPLE DATE | TIME (Hrs):	08-31-95	1600
PROJECT:	Jic Pits	
DATE OF TPH EXT. ANAL.:	9-5-95	
DATE OF BTEX EXT. ANAL.:	9/-95	9/5/95
TYPE | DESCRIPTION:	VG	DARK BROWN SAND + CLAY

Field Remarks: (N-11.3)(S-3.7)(E-45.2)(W-25.0)

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 1	MG/KG	2	D		
TOLUENE	< 1	MG/KG	2	D		
ETHYL BENZENE	< 1	MG/KG	2	D		
TOTAL XYLENES	< 3	MG/KG	2	D		
TOTAL BTEX	< 6	MG/KG	2	D		
TPH (418.1)	444	MG/KG			2.11	25
HEADSPACE PID	363.0	PPM				
PERCENT SOLIDS	93.5	%				

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

The Surrogate Recovery was at 91% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

NP

9-7-95

****
Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report
****

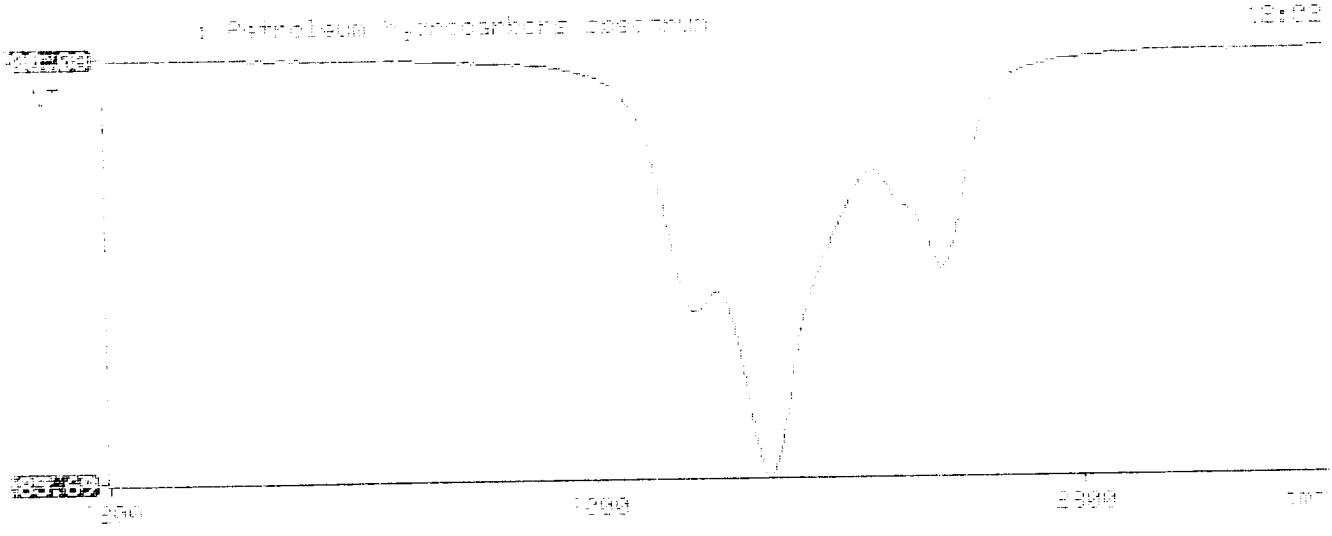
95/09/05 12:02

Sample Identification
?4737%

Initial mass of sample, g
1.110

Volume of sample after extraction, ml
[illegible]

Petroleum hydrocarbons, ppm
[illegible]
Net absorbance of hydrocarbons (2910 cm-1)
.0[illegible]



BTEX SOIL SAMPLE WORKSHEET

File	947376	**Date Printed**	9/6/95	
Soil Mass (g)	4.99	**Multiplier (L/g)**	0.00100	
Extraction vol. (mL)	20	**DF (Analytical)**	400	
Shot Volume (uL)	50	**DF (Report)**	0.40080	
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	1.002
Toluene (ug/L)	0.41	**Toluene (mg/Kg):**	**0.164**	1.002
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	1.002
p & m-xylene (ug/L)	1.07	p & m-xylene (mg/Kg):	0.429	2.004
o-xylene (ug/L)	0.83	o-xylene (mg/Kg):	0.333	1.002
		Total xylenes (mg/Kg):	**0.762**	3.006
		Total BTEX (mg/Kg):	**0.926**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\090595-1.025
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 947376,4.99G,50U
Acquired : Sep 05, 1995 01:46:35
Printed : Sep 05, 1995 02:12:56
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.390	0	0.0000
a,a,a TFT	4.933	1926906	80.9655
TOLUENE	6.770	310944	0.4135
ETHYLBENZENE	10.550	85310	-0.0363
M & P XYLENE	10.903	895167	1.0705
O XYLENE	11.963	120157	0.8337
BFB	13.453	31943224	90.9423