Meter Number:14080
Location Name:Jicarilla L #11
Location:TN-24 RG-05
SC-03 UL-G
6 - Jicarilla
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

Approved

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

GENERAL

Meter: 14080 Location: Jicarilla L #11
Operator #: 0128 Operator Name: Meridian P/L District: Ojito
Coordinates: Letter: G Section 03 Township: 24 Range: 05
Or Latitude _____ Longitude _____
Pit Type: Dehydrator X Location Drip: ___ Line Drip: ___ Other: _____
Site Assessment Date: 9-11-95 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

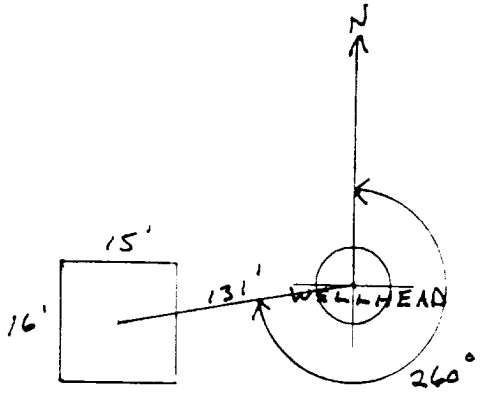
Remarks : Redline + Topo both show outside VZ, 3 pits on location. Dehy-Storage tank pit with Liner, Dehy pit with Liner, Old Dehy pit belongs to EPNG will close old

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 260° Footage from Wellhead 131'

b) Length : 15' Width : 16' Depth : 4'



REMARKS

Remarks :

photo's: 4pict 14:35

Lines from Dehy, go over old Dehy pit, to new pit with Liner.

Completed By:

James L Pierce
Signature

9-11-95
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 14080 Location: Jicarilla C #11

Coordinates: Letter: G Section 03 Township: 24 Range: 05

Or Latitude _____ Longitude _____

Date Started : 9/19/95 Run: 06 51

FIELD OBSERVATIONS

Sample Number(s): JK83 _____ _____ _____

Sample Depth: 6' Feet

Final PID Reading 1510 PID Reading Depth 6' Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 70 ~~8~~ 9/25/95

Onsite Bioremediation ☐ Gabriel Jicarilla E.P.O. Approved

Backfill Pit Without Excavation ☐ Closure 9-21-95

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9-22-95 Pit Closed By: Philip

REMARKS

Remarks : Pit PID Readings (W-36.2)(S-12.5)(E-89.1)(W-132.0)
Pit size 17X14X6 Hit Rock a 6' Foot
Fence Size 18X19X3 No Wet
More than 100' From Ephemral Stream
SPRAYED PIT With Soil Enhancer 9-22-95

Signature of Specialist: Jane K. Kirk

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:	JK23	947492
MTR CODE | SITE NAME:	14080	Jicarilla L #11
SAMPLE DATE | TIME (Hrs):	09-19-95	1230
PROJECT:	Pits	
DATE OF TPH EXT. | ANAL.:	9-20-95	
DATE OF BTEX EXT. | ANAL.:	9/20/95	9/22/95
TYPE | DESCRIPTION:	VG	Dark brown sand and clay

Field Remarks: (N-36.2)(S-12.5)(E-89.1)(W-132.0)

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	63.5	MG/KG	10	D		
TOLUENE	258	MG/KG	10	D		
ETHYL BENZENE	19.9	MG/KG	10	D		
TOTAL XYLENES	221	MG/KG	10	D		
TOTAL BTEX	562	MG/KG	10	D		
TPH (418.1)	3860	MG/KG			2.10	28
HEADSPACE PID	151	PPM				
PERCENT SOLIDS	92.1	%				

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

The Surrogate Recovery was at 101 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 9-26-95

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

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

05/09/20 14:45

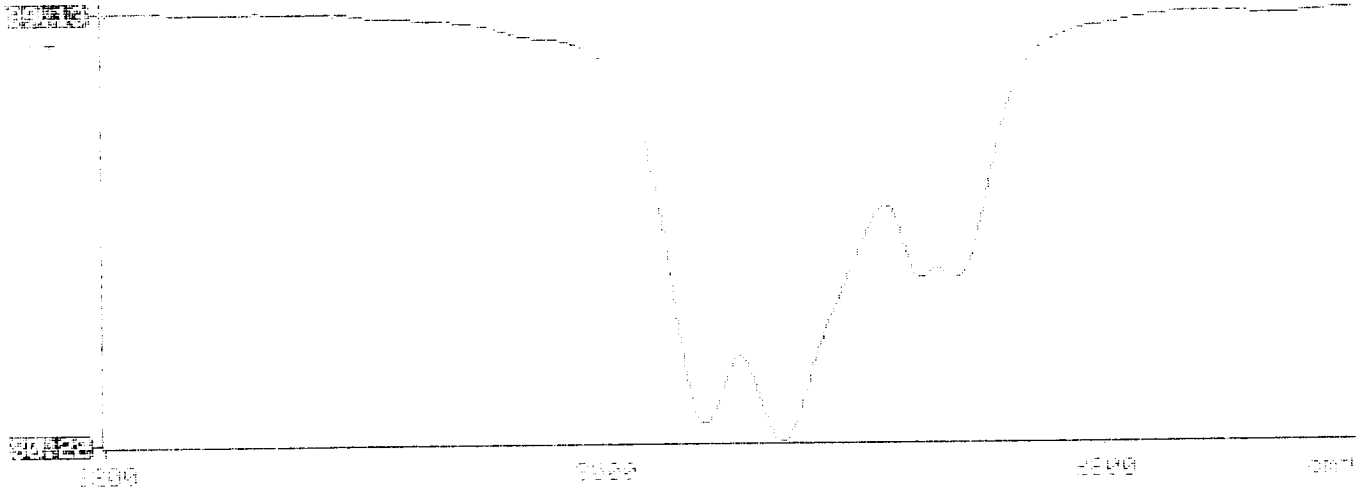
Sample identification
[illegible]

Initial mass of sample, g
[illegible]

Volume of sample after extraction, ml
[illegible]

Petroleum hydrocarbons, ppm
[illegible]
Net absorbance of hydrocarbons (2930 cm-1)
[illegible]

Petroleum hydrocarbons spectrum 14:45



BTEX SOIL SAMPLE WORKSHEET

File	947492	**Date Printed**	9/25/95		
Soil Mass (g)	5.04	**Multiplier (L/g)**	0.00099		
Extraction vol. (mL)	10	**DF (Analytical)**	2000		
Shot Volume (uL)	5	**DF (Report)**	1.98413		

			Det. Limit
Benzene (ug/L)	32.00	**Benzene (mg/Kg):**	**63.492**	4.960
Toluene (ug/L)	130.00	**Toluene (mg/Kg):**	**257.937**	4.960
Ethylbenzene (ug/L)	10.00	**Ethylbenzene (mg/Kg):**	**19.841**	4.960
p & m-xylene (ug/L)	91.00	p & m-xylene (mg/Kg):	180.556	9.921
o-xylene (ug/L)	20.20	o-xylene (mg/Kg):	40.079	4.960
		Total xylenes (mg/Kg):	**220.635**	14.881
		Total BTEX (mg/Kg):	**561.905**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\092295-2.001
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 947492,5.04G,5U
Acquired : Sep 22, 1995 13:46:09
Printed : Sep 22, 1995 14:12:36
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.947	4824740	32.0108
a,a,a TFT	6.720	8230158	178.2681
TOLUENE	8.767	36403708	130.3598
ETHYLBENZENE	12.793	2620817	10.0252
M & P XYLENE	13.163	27864526	91.0047
O XYLENE	14.273	5165232	20.2419
BFB	15.823	73476864	101.3625