Denny G. Foust
DEPUTY OIL & GAS INSPECTOR
DEC 29 1997

Approved

Meter Number:74351
Location Name:Jicarilla Apache A #1
Location:TN-25 RG-05
SC-25 UL-D
6 - Jicarilla
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RECEIVED
APR 1 4 1997
OIL CON. DIV.
DIST. 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.

EPFS
EL PASO FIELD SERVICES

FIELD PIT SITE ASSESSMENT FORM

Meter: 74351 Location: JICARILLA APACHE A #1
Operator #: 0124 Operator Name: AMERADA HESS CORP P/L District: OJITO
Coordinates: Letter: D Section 25 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'

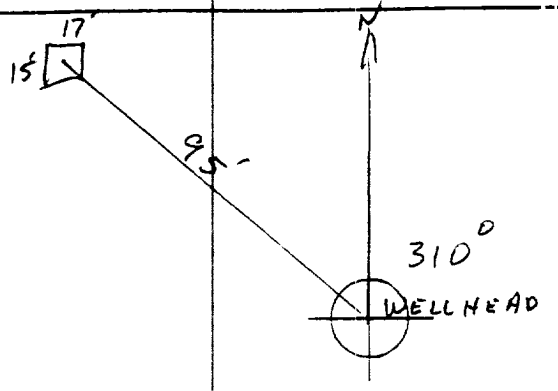
TOTAL HAZARD RANKING SCORE: 2 **POINTS**

Remarks : _____

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 310° Footage from Wellhead 95'

b) Length : 15' Width : 17' Depth : 12"



Remarks :

Completed By:

Signature

8-17-95

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 74351 Location: JICARILLA APACHE A #1

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

Or Latitude _____ Longitude _____

Date Started : 9-5-95 Run: 04 63

FIELD OBSERVATIONS

Sample Number(s): 4587 _____ _____ _____

Sample Depth: 11 Feet

Final PID Reading 96.4 PID Reading Depth 11 Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 190 yds 9/10/95

Onsite Bioremediation ☐ Gabrial From Jic E.P.O. Approved closure 9-6-95

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 9-8-95 Pit Closed By: Philip

REMARKS

Remarks : FINAL PID READINGS (N-11.4)(S-91)(E-62)(W-63)
PIT SIZE: 16X19X11 PIT LISTED OUTSIDE ZONE MORE THAN 100' FROM EPHEMERAL STREAM. SPRAYED PIT WITH soil enhancer 9-6-95
FENCE SIZE 21X21X3 NO NET

Signature of Specialist: Charles Schmaltz

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:	NS87	947404
MTR CODE | SITE NAME:	74351	Jic. Apache A #1
SAMPLE DATE | TIME (Hrs):	09-05-95	1545
PROJECT:	Jic Pits	
DATE OF TPH EXT. | ANAL.:	9-5-95	
DATE OF BTEX EXT. | ANAL.:	9/8/95	9/11/95
TYPE | DESCRIPTION:	V6	DARK BROWN SAND & CLAY

Field Remarks: (N-11.4)(S-91)(E-62)(W-63)

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)	47.5	MG/KG			2.09	25
HEADSPACE PID	96.4	PPM				
PERCENT SOLIDS	88.8	%				

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

The Surrogate Recovery was at 94% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: Date: 9-13-95

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

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

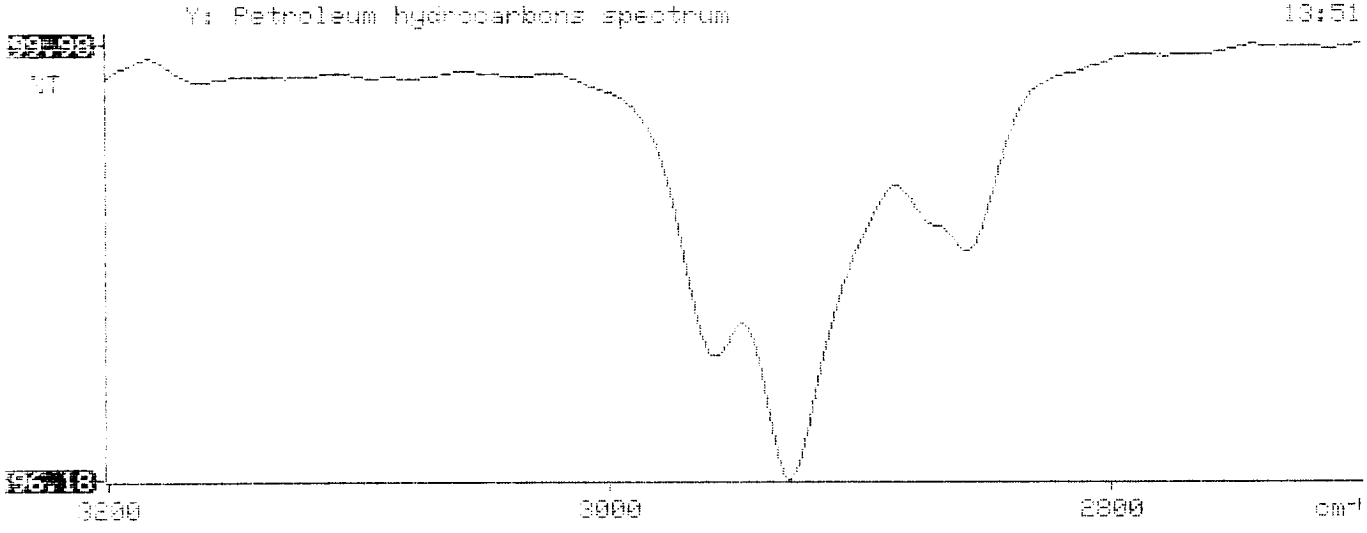
95/09/08 13:51

Sample identification
947404

Initial mass of sample, g
1.090

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
47.523
Net absorbance of hydrocarbons (2930 cm-1)
0.016



BTEX SOIL SAMPLE WORKSHEET

File	947404	**Date Printed**	9/12/95
Soil Mass (g)	5.07	**Multiplier (L/g)**	0.00099
Extraction vol. (mL)	20	**DF (Analytical)**	200
Shot Volume (uL)	100	**DF (Report)**	0.19724

				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.493
Toluene (ug/L)	0.00	**Toluene (mg/Kg):**	**0.000**	0.493
Ethylbenzene (ug/L)	0.00	**Ethylbenzene (mg/Kg):**	**0.000**	0.493
p & m-xylene (ug/L)	0.00	p & m-xylene (mg/Kg):	0.000	0.986
o-xylene (ug/L)	0.00	o-xylene (mg/Kg):	0.000	0.493
		Total xylenes (mg/Kg):	**0.000**	1.479
		Total BTEX (mg/Kg):	**0.000**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\091195-1.002
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 947404,5.07G,100U
Acquired : Sep 11, 1995 18:44:35
Printed : Sep 11, 1995 19:10:56
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.410	0	0.0000
a,a,a TFT	4.963	3206594	92.8562
TOLUENE	6.771	0	0.0000
ETHYLBENZENE	10.513	0	0.0000
M & P XYLENE	10.920	165297	-3.7539
O XYLENE	11.927	0	0.0000
BFB	13.463	56256068	93.8771