Denny G. Foust
DEPUTY OIL & GAS INSPECTOR

DEC 2 9 1997

Approved

Meter Number:74331
Location Name:Jicarilla #67 -1
Location:TN-25 RG-05
SC-20 UL-P
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.

FIELD PIT SITE ASSESSMENT FORM

EPFS
EL PASO FIELD SERVICES

GENERAL

Meter: 74331 Location: JICARILLA #67-1
Operator #: _____ Operator Name: MERIDIAN P/L District: OJITO
Coordinates: Letter: P Section 20 Township: 25 Range: 5
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: X Line Drip: ___ Other: _____
Site Assessment Date: 8.21.95 Area: 06 Run: 63

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 SHOWS INSIDE V.Z. BUT TOPO SHOWS LOCATION OUTSIDE V.Z. ONLY PIT ON THIS LOCATION. IT IS A LOCATION DRIP AND BELONGS TO EPNG. WILL CLOSE PIT.

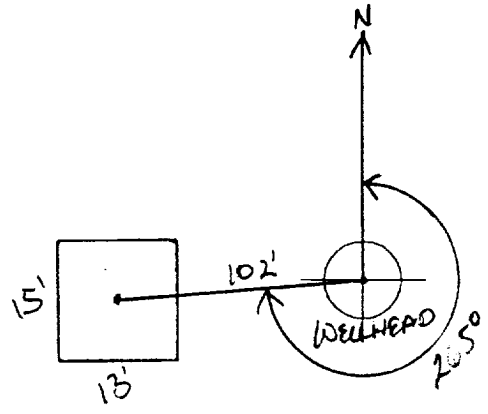
PUSH IN
(revision) 04/08/94

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 265° Footage from Wellhead 102'

b) Length : 15' Width : 13' Depth : 1'



REMARKS

Remarks :

PHOTOS - 1416

Completed By:

Robert Thompson
Signature

8.21.95
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 74331 Location: Jicarilla #67-1

Coordinates: Letter: P Section 20 Township: 25 Range: 5

Or Latitude _____ Longitude _____

Date Started : 9-21-95 Run: 06 63

FIELD OBSERVATIONS

Sample Number(s): NS92 _____ _____ _____

Sample Depth: 4 Feet

Final PID Reading 23.3 PID Reading Depth 4 Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 152 @ 9/28/95

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: 9-26-95 Pit Closed By: Philip

REMARKS

Remarks : PID READINGS: N 64 S-3.6 E-52 W-15
Pit Size 36x27x4 Pit Lsted outside W.Z.
More than 100' from Ephemeral Stream.
Fence Size 21x21x3

Signature of Specialist: Nicholas Sumaltz

El Paso Natural Gas Company

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

SAMPLE IDENTIFICATION

947521 - mh

	Field ID	Lab ID
SAMPLE NUMBER:	NS92	~~947921~~
MTR CODE | SITE NAME:	74331	Jicarilla #67-1
SAMPLE DATE | TIME (Hrs):	09-21-95	0930
PROJECT:	Jic Pits	
DATE OF TPH EXT. | ANAL.:	9/27/95	
DATE OF BTEX EXT. | ANAL.:	9/25/95	9/25/95
TYPE | DESCRIPTION:	V6	Blown Sand

Field Remarks: (N-64)(S-36)(E-52)(W-15)

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)	RLB 9/27/95 ~~23~~ 22.5	MG/KG			1.9E	28
HEADSPACE PID	23.3	PPM				
PERCENT SOLIDS	99.4	%				

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

The Surrogate Recovery was at 105% for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: [signature]

Date: 9-29-95

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

?5/09/27   13:35

  Sample identification
=47521

  Initial mass of samp.e, g
..980

  Volume of sample after extraction, ml
28.000

  Petroleum hydrocarbons, ppm
32.814
  Net absorbance of hydrocarbons (2930 cm-1)
).013
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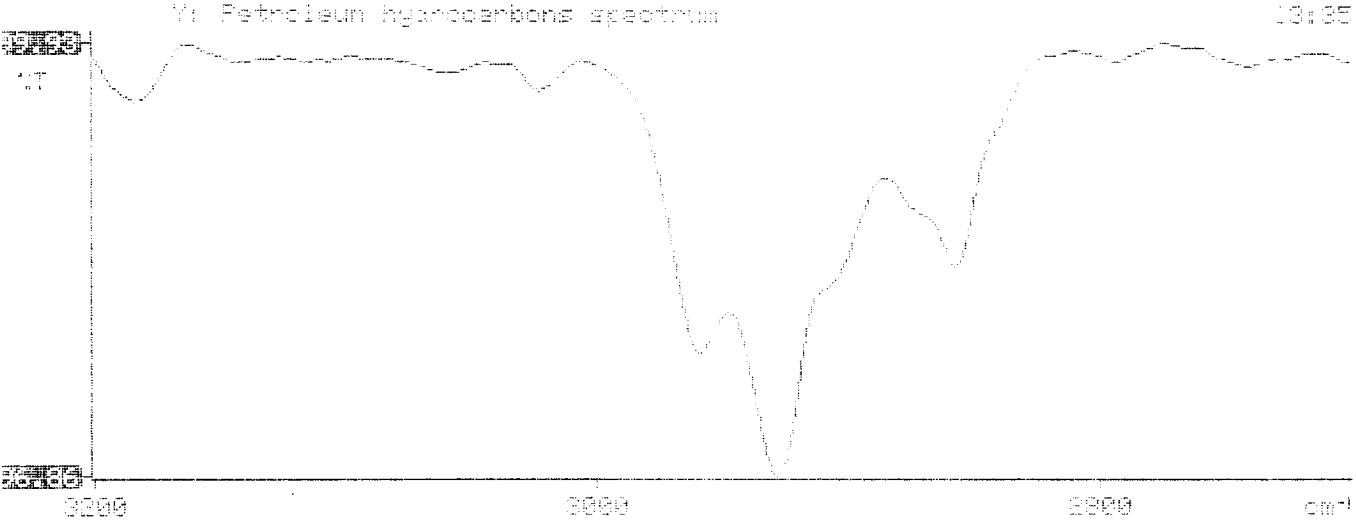

BTEX SOIL SAMPLE WORKSHEET

File	947521	**Date Printed**	9/26/95
Soil Mass (g)	4.99	**Multiplier (L/g)**	0.00100
Extraction vol. (mL)	10	**DF (Analytical)**	200
Shot Volume (uL)	50	**DF (Report)**	0.20040

				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.501
Toluene (ug/L)	1.19	**Toluene (mg/Kg):**	**0.238**	0.501
Ethylbenzene (ug/L)	0.29	**Ethylbenzene (mg/Kg):**	**0.058**	0.501
p & m-xylene (ug/L)	0.89	p & m-xylene (mg/Kg):	0.178	1.002
o-xylene (ug/L)	0.32	o-xylene (mg/Kg):	0.064	0.501
		Total xylenes (mg/Kg):	**0.242**	1.503
		Total BTEX (mg/Kg):	**0.539**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\092595-1.006
Method : C:\LABQUEST\METHODS\9001.MET
Sample ID : 947521,4.99G,50U
Acquired : Sep 25, 1995 17:41:18
Printed : Sep 25, 1995 18:07:43
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.917	0	0.0000
a,a,a TFT	6.723	5076784	109.9649
TOLUENE	8.770	331084	1.1921
ETHYLBENZENE	12.807	74710	0.2923
M & P XYLENE	13.187	295114	0.8907
O XYLENE	14.297	75589	0.3174
BFB	15.843	75787240	104.5497