Meter Number:95286
Location Name:FLORANCE 7A FT
Location:TN-30 RG-09
SC-23 UL-F
2 - Federal
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.

FIELD PIT SITE ASSESSMENT FORM

EPFS EL PASO FIELD SERVICES

GENERAL

Meter: 9528b Location: Florance 7A FT

Operator #: 0203 Operator Name: Amoco P/L District: Bloomfield

Coordinates: Letter: F Section 22 Township: 30 Range: 9

Or Latitude _____ Longitude _____

Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____

Site Assessment Date: 1/16/95 Area: 10 Run: 33

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)

Inside ☐ (1)

Outside ☒ (2)

Land Type:

BLM ☒ (1)

State ☐ (2)

Fee ☐ (3)

Indian _____

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

Spits. Closed

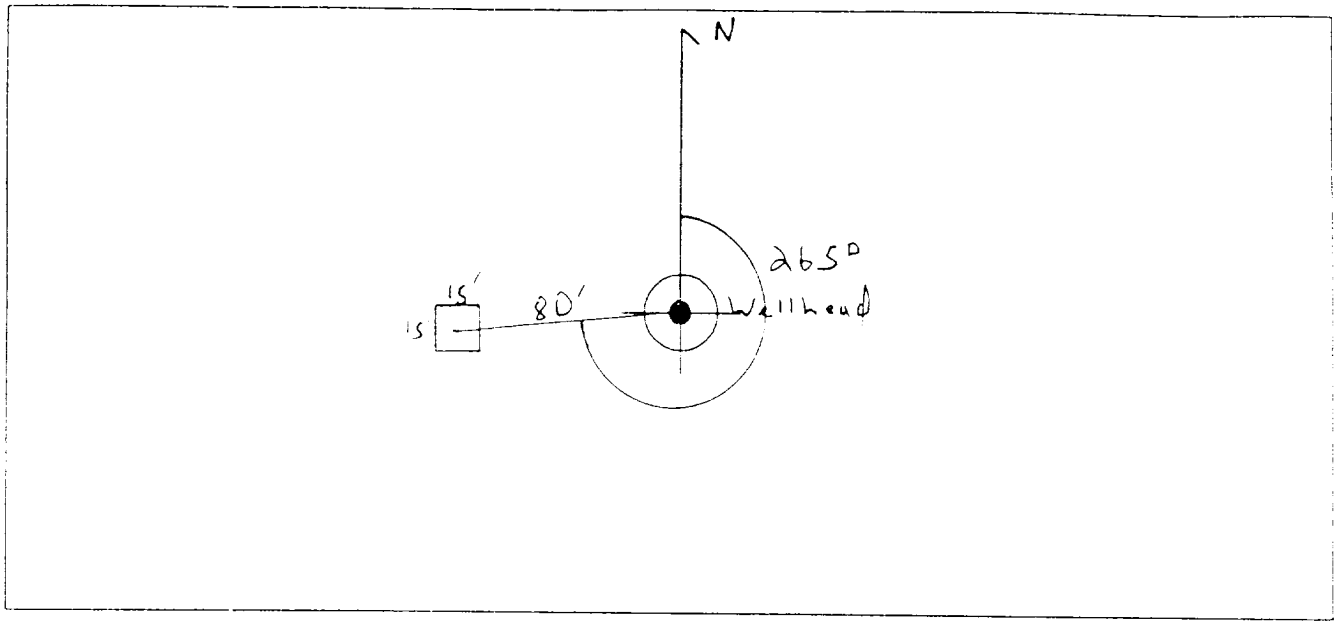
PUSH-IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 265° Footage from Wellhead 80'

b) Length : 15' Width : 15' Depth : 3'



REMARKS

Remarks :

Pictures @ 1454 hr 6-10 roll 3

Completed By:

Cory Chase
Signature

1/16/95
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 95286 Location: Florance #7A

Coordinates: Letter: F Section 23 Township: 30 Range: 9

Or Latitude _____ Longitude _____

Date Started : 2-13-95 Run: 10 33

FIELD OBSERVATIONS

Sample Number(s): MK 382 _____ _____ _____

Sample Depth: 5 Feet

Final PID Reading 466 PPM PID Reading Depth 5 Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☐ Approx. Cubic Yards _____

Onsite Bioremediation ☐

Backfill Pit Without Excavation ☒

Soil Disposition:

Envirotech ☐ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 2-13-95 Pit Closed By: BEI

REMARKS

Remarks : Arrive Dug Sample Hole Hit Rock 5'
Soil was Black and Had strong Hydro carbon odor

Signature of Specialist: Morgan Killion

Natural Gas Company

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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	MK382	9416675
MTR CODE | SITE NAME:	95286	N/A
SAMPLE DATE | TIME (Hrs):	2-13-95	1215
SAMPLED BY:	N/A	
DATE OF TPH EXT. | ANAL.:	2/17/95	2/17/95
DATE OF BTEX EXT. | ANAL.:	N/A	N/A
TYPE | DESCRIPTION:	VG	Black sand and clay

REMARKS: TPH done at ATI

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	5100	MG/KG				
HEADSPACE PID	466	PPM				
PERCENT SOLIDS	91.2	%				

-- TPH is by EPA Method 418.1 --

Narrative:
ATI Results attached

DF = Dilution Factor Used

Approved By: _____ Date: 3-20-95

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

CLIENT	: EL PASO NATURAL GAS CO.	ATI I.D.	: 502381
PROJECT #	: 24324	DATE RECEIVED	: 02/17/95
PROJECT NAME	: PIT CLOSURE	DATE ANALYZED	: 02/17/95

PARAMETER	UNITS	17	18	19	20
PETROLEUM HYDROCARBONS, IR	MG/KG	550	5100	<20	1200

94675

Analytical Technologies, Inc.

2709-D Pan American Freeway NE Albuquerque NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. **502381**

February 23, 1995

El Paso Natural Gas Co.
P. O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **02/17/95**, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA Method 8020 analyses were added on February 21, 1995 for samples 946659, 946660, 946661, 946662, 946663, 946664, 94666, 946667, 946668, 946669, 946680, 946682 per John Lambdin.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Letitia Krakowski, Ph.D.
Project Manager

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure