

James E. Frost
DEC 8 8 1997

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Approved

Meter Number:70507
Location Name:W.D. HEATH A #2
Location:TN-29 RG-09
SC-17 UL-A
2 - Federal
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RECEIVED
APR 14 1997

OIL SOIL DIV.
DEC 8

**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.

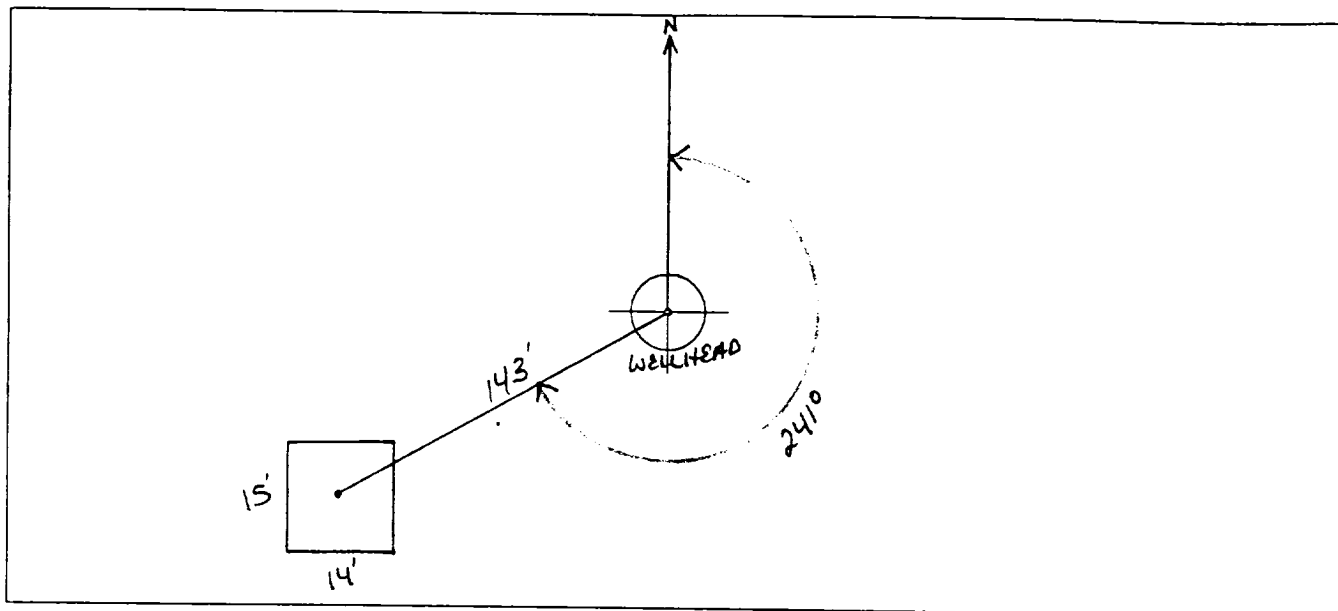
Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

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.

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 241° Footage from Wellhead 143'
 b) Length : 15' Width : 14' Depth : 1'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

TOOK PICTURES AT 11:33 A.M.

END DUMP

Completed By:

Robert Thompson
 Signature

5.7.94
 Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 70507 Location: W.D. Heath A#2
 Coordinates: Letter: A Section 17 Township: 29 Range: 9
 Or Latitude _____ Longitude _____
 Date Started : 6-8-94 Area: 10 Run: 53

FIELD OBSERVATIONS

Sample Number(s): KD 102
 Sample Depth: 12 Feet
 Final PID Reading 87 ppm PID Reading Depth 12 Feet
 Yes No
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☐ (1) Approx. Cubic Yards 0
 Onsite Bioremediation ☐ (2)
 Backfill Pit Without Excavation ☒ (3)
 Soil Disposition:
 Envirotech ☐ (1) ☒ (3) Tierra
 Other Facility ☐ (2) Name: _____
 Pit Closure Date: 6-8-94 Pit Closed By: BEI

REMARKS

Remarks : Pit Had Line Running thru the middle of pit. El Paso called
Said they had a switcher on the way. He located line for us. Dug Test
Hole, took PID Sample, closed pit.

Signature of Specialist: Kenny Leon



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	150102	945400
MTR CODE SITE NAME:	70507	N/A
SAMPLE DATE TIME (Hrs):	6-8-94	1015
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6/10/94	6/10/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Brown Sand Clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE		MG/KG				
TOLUENE		MG/KG				
ETHYL BENZENE		MG/KG				
TOTAL XYLENES		MG/KG				
TOTAL BTEX		MG/KG				
TPH (418.1)	76.3	MG/KG			1.96	28
HEADSPACE PID	87	PPM				
PERCENT SOLIDS	95.1	%				

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

The Surrogate Recovery was at N/A % for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Approved By:

Dr. L. L. L.

Date:

6/11/1994

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

04/06/10 13:05

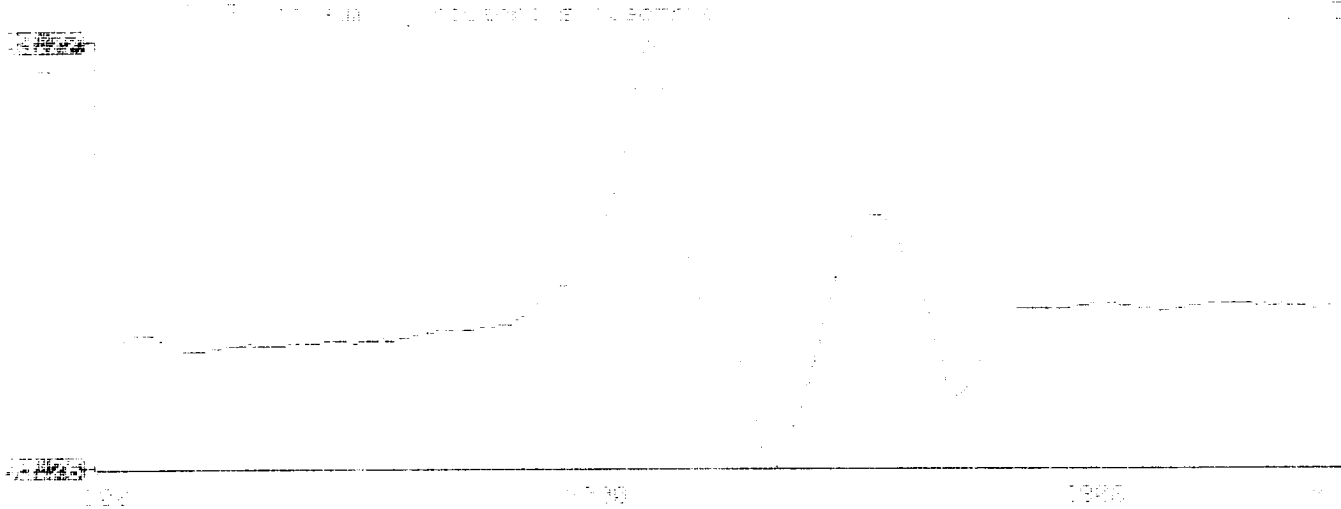
Sample Identification
05100

Initial mass of sample, g
300

Volume of sample after extraction, ml
1000

Sample concentration, ppm

Extraction solvent: hexane (HPLC grade)
100



ILLEGIBLE