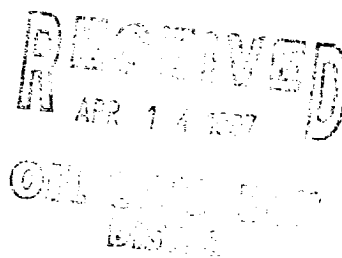


Denny E. Foust
DEPUTY OIL & GAS INSPECTOR

DEC 30 1997

Approved

Meter Number: 87225
Location Name: A.L. ELLIOTT D #6
Location: TN-29 RG-09
SC-13 UL-E
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

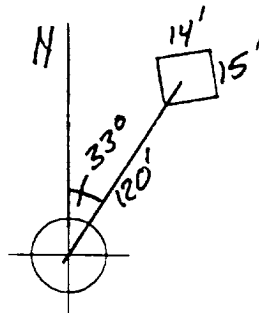


GENERAL	Meter: <u>87225</u> Location: <u>A.L. ELLIOTT "D" #6</u> Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: _____ Coordinates: Letter: <u>E</u> Section <u>13</u> Township: <u>29</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Assessment Date: <u>5-11-94</u> Area: <u>10</u> Run: <u>92</u>		
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps) Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2)		
	Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____		
Depth to Groundwater Less Than 50 Feet (20 points) <input type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/> (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? <input type="checkbox"/> (1) YES (20 points) <input checked="" type="checkbox"/> (2) NO (0 points)			
Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) <input type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input checked="" type="checkbox"/> (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 <input type="checkbox"/> (1) < 100' (Navajo Pits Only) <input type="checkbox"/> (2) > 100'			
TOTAL HAZARD RANKING SCORE: <u>0</u> POINTS			
REMARKS	Remarks : <u>FO TWO PITS ON LOCATION. CLOSE ONLY THE DE DRIP PIT NEAR METER HOUSE. RED LINE AND TOPD CONFIRM BOUNDARY OUTSIDE V.Z.</u> <div style="text-align: right;"><u>PUSH IN</u></div>		

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 33° Footage from Wellhead 120'
b) Length : 15' Width : 14' Depth : 3'



REMARKS

Remarks :

TOOK PICTURES AH-2 (1-4)

END DUMP

Completed By:

Alfred S. Harris

Signature

5-11-94

Date

FIELD T REMEDIATION/CLOSURE FORM

GENERAL

Meter: 87225 Location: A. Elliott D#6
 Coordinates: Letter: E Section 13 Township: 29 Range: 9
 Or Latitude _____ Longitude _____
 Date Started : 5-24-94 Area: 10 Run: 92

FIELD OBSERVATIONS

Sample Number(s): VW144
 Sample Depth: 12' Feet
 Final PID Reading 218 PID Reading Depth 12' Feet
 Yes No
 Groundwater Encountered ☐ (1) ☒ (2) Approximate Depth _____ Feet

CLOSURE

Remediation Method :
 Excavation ☐ (1) Approx. Cubic Yards _____
 Onsite Bioremediation ☐ (2)
 Backfill Pit Without Excavation ☒ (3)
 Soil Disposition:
 Envirotech ☐ (1) ☐ (3) Tierra
 Other Facility ☐ (2) Name: _____
 Pit Closure Date: 5-24-94 Pit Closed By: BEJ

REMARKS

Remarks : Line markers all over

Signature of Specialist: Vale Wilson



FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW 144	945292
MTR CODE SITE NAME:	87225	N/A
SAMPLE DATE TIME (Hrs):	5-24-94	1310
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	5/26/94	5/26/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Brown fine sand

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)	3550	MG/KG			1.96	28
HEADSPACE PID	218	PPM				
PERCENT SOLIDS	88.6	%				

— 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: John Linder

Date: 6/16/94

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

10/05/26 12:48

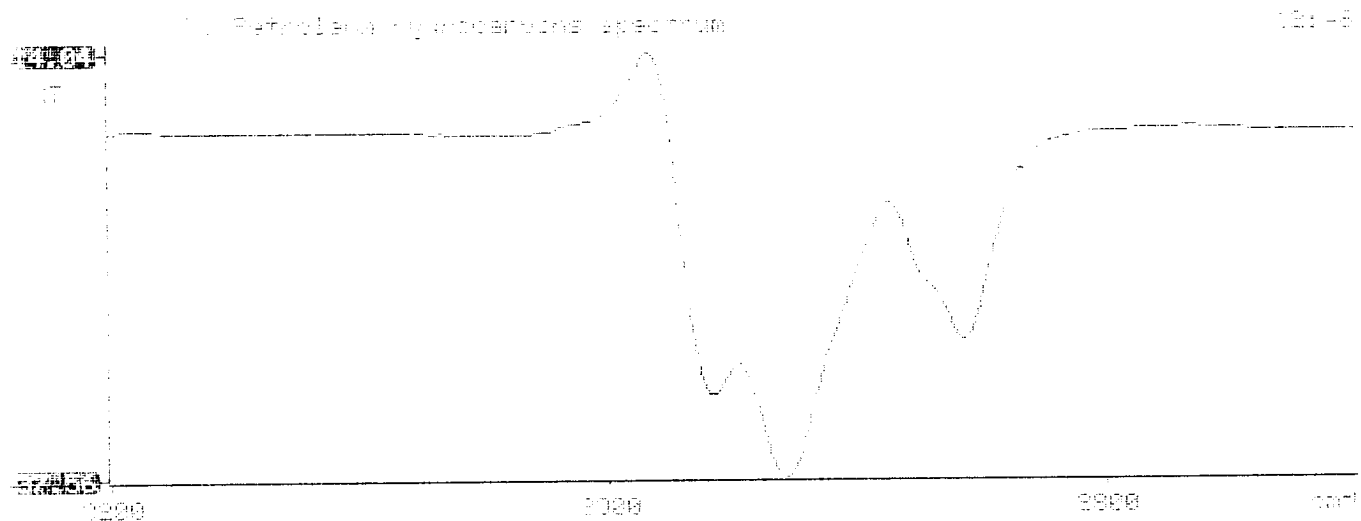
Sample Identification
 091192

Initial mass of sample, g
 1.00

Volume of sample after extraction, ml
 10.000

Petroleum hydrocarbons, ppm
 1754.424

per Absorbance of hydrocarbons (19710 cm-1)
 424



ILLEGIBLE