

Lenny E. Frost

Meter Number: 72332

DEPUTY OIL & GAS INSPECTOR Location Name: SAN JUAN 28-5 #31

Location: TN-28 RG-05

DEC 29 1997

SC-13 UL-G

2 - Federal

NMOCD Zone: OUTSIDE

Hazard Ranking Score: 00

RECEIVED
APR 14 1997

OIL CON. DIV.
DIST. 3

Approved

**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.

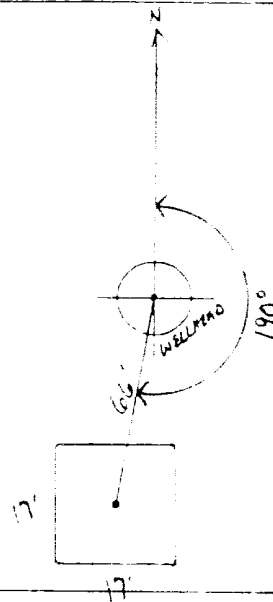
FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>72332</u> Location: <u>SAN JUAN 28-S #31</u></p> <p>Operator #: <u>2999</u> Operator Name: <u>MERIDIAN P/L</u> District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>6</u> Section <u>13</u> Township: <u>28</u> Range: <u>5</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5-27-94</u> Area: <u>10</u> Run: <u>61</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2)</p> <p>Land Type: BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p>Depth to Groundwater</p> <p>Less Than 50 Feet (20 points) <input type="checkbox"/> (1)</p> <p>50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater Than 100 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Wellhead Protection Area :</p> <p>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)</p> <p>Horizontal Distance to Surface Water Body</p> <p>Less Than 200 Ft (20 points) <input type="checkbox"/> (1)</p> <p>200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2)</p> <p>Greater than 1000 Ft (0 points) <input checked="" type="checkbox"/> (3)</p> <p>Name of Surface Water Body _____</p> <p>(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)</p> <p>Distance to Nearest Ephemeral Stream <input type="checkbox"/> (1) < 100' (Navajo Pits Only)</p> <p><input type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>0</u> POINTS</p>
REMARKS	<p>Remarks : <u>TWO PITS ON LOCATION. WILL CLOSE ONLY ONE. PIT IS DRY. LOCATION IS ON TOP OF LAGUNA SECA MESA. REDLINE SHOWS LOCATION INSIDE U.Z. BUT TOPO SHOWS LOCATION IS OUTSIDE U.Z.</u></p> <p style="text-align: right;"><u>PUSH IN</u></p>

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 190° Footage from Well head 66'
b) Length : 17' Width : 17' Depth : 2'

ORIGINAL PIT LOCATION



Remarks :

TOOK PICTURES AT 11:35 A.M.

DUMP TRUCK - BOBTAIL

REMARKS

Completed By:

Robert Thompson

Signature

5.27.94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>72332</u> Location: <u>SAN JUAN 28-5 #31</u></p> <p>Coordinates: Letter: <u>G</u> Section <u>13</u> Township: <u>28</u> Range: <u>5</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>6-29-94</u> Area: <u>10</u> Run: <u>61</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>MX 641</u></p> <p>Sample Depth: <u>6'</u> Feet</p> <p>Final PID Reading <u>123</u> PID Reading Depth <u>6'</u> Feet</p> <p style="text-align: center;">Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input type="checkbox"/> (1) Approx. Cubic Yards _____</p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input checked="" type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>6-29-94</u> Pit Closed By: <u>BEI</u></p>
REMARKS	<p>Remarks : <u>EPN G lines marked soil Brown slight</u></p> <p><u>HYDRO carbon odor pit sandstone G</u></p>
	<p>Signature of Specialist: <u>Morgan Killion</u></p>



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	ML 64	945557
MTR CODE SITE NAME:	72332	N/A
SAMPLE DATE TIME (Hrs):	6-29-94	1420
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6/30/94	6/30/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Red/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)	713	MG/KG			2.11	28
HEADSPACE PID	183	PPM				
PERCENT SOLIDS	95.0	%				

- 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: APLDate: 7/14/94

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

#4/06/30 14:53

Sample identification:
 46557

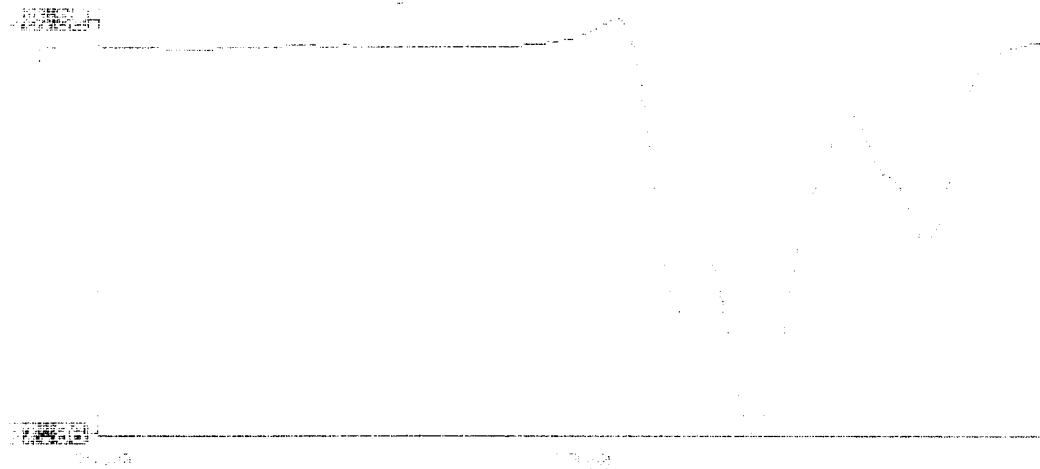
Initial mass of sample, g
 1.110

Volume of sample after extraction, ml
 9.000

Extraction hydrocarbons, mg

Oil Absorbance of hydrocarbons (FTIR) at 1710
 194

Oil Absorbance of hydrocarbons (FTIR) at 1710



1. The first part of the report is a general introduction to the project, which includes a brief history of the project and a statement of the objectives.

2. The second part of the report is a detailed description of the project, which includes a description of the project's scope, a description of the project's methodology, and a description of the project's results.

3. The third part of the report is a discussion of the project, which includes a discussion of the project's significance, a discussion of the project's limitations, and a discussion of the project's conclusions.

4. The fourth part of the report is a conclusion, which includes a summary of the project's findings and a statement of the project's overall impact.

5. The fifth part of the report is a bibliography, which includes a list of the sources used in the project.

6. The sixth part of the report is an appendix, which includes a list of the figures and tables used in the project.

7. The seventh part of the report is a list of references, which includes a list of the sources used in the project.

8. The eighth part of the report is a list of figures and tables, which includes a list of the figures and tables used in the project.

9. The ninth part of the report is a list of references, which includes a list of the sources used in the project.

10. The tenth part of the report is a list of figures and tables, which includes a list of the figures and tables used in the project.

11. The eleventh part of the report is a list of references, which includes a list of the sources used in the project.

12. The twelfth part of the report is a list of figures and tables, which includes a list of the figures and tables used in the project.