

Denny E. Frost
DEPUTY OIL & GAS INSPECTOR

DEC 02 1997

Approved

Meter Number: 89632
Location Name: LITTLE FEDERAL #2
Location: TN-30 RG-14
SC-01 UL-C
2 - Federal
NMOCD Zone: OUTSIDE
Hazard Ranking Score: 00

RECEIVED
APR 14 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**

OK 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.

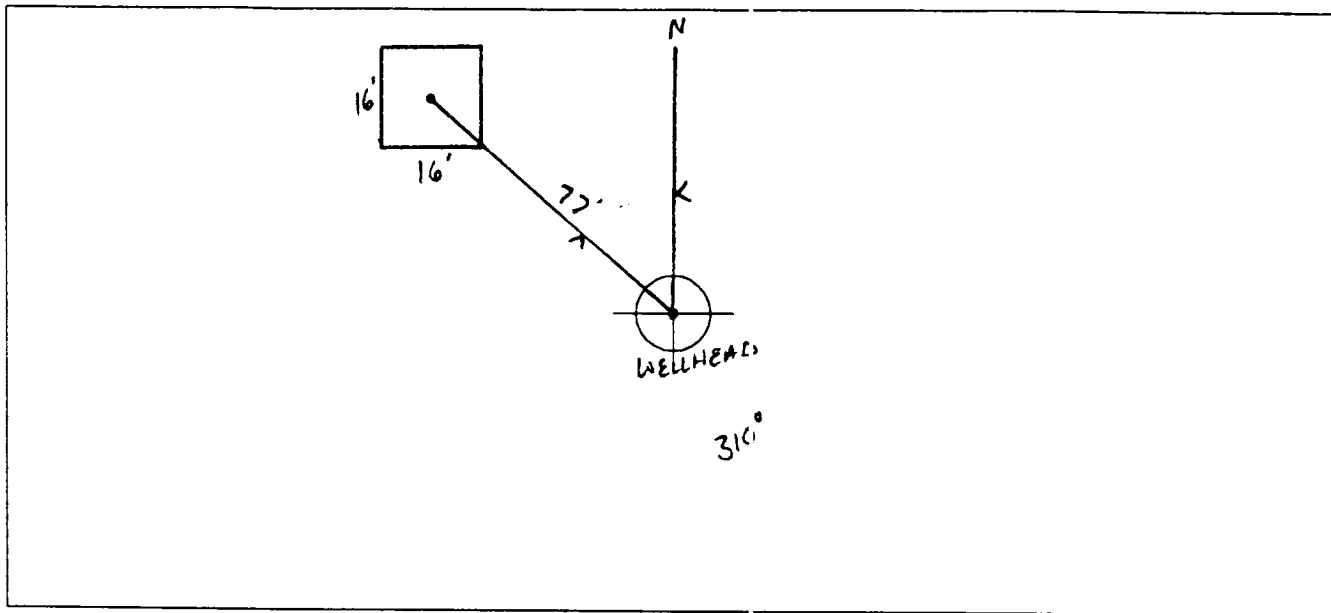
FIELD PIT SITE ASSESSMENT FORM

EPFS
EL PASO FIELD SERVICES

GENERAL	Meter: <u>89632</u> Location: <u>LITTLE FEDERAL #2</u> Operator #: _____ Operator Name: <u>MERIDIAN</u> P/L District: <u>KUTZ</u> Coordinates: Letter: <u>C</u> Section <u>1</u> Township: <u>30</u> Range: <u>14</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____ Site Visit Date: <u>3.28.94</u> Run: <u>02</u> <u>42</u>
SITE ASSESSMENT	NMOCD Zone: Inside _____ Land Type: BLM ☒ (From NMOCD Vulnerable _____ State ☐ Maps) Zone ☐ Fee ☐ Outside ☒ Indian _____ Depth to Groundwater Less Than 50 Feet (20 points) ☐ 50 Ft to 99 Ft (10 points) ☐ Greater Than 100 Ft (0 points) ☒ 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? ☐ YES (20 points) ☒ NO (0 points) Horizontal Distance to Surface Water Body Less Than 200 Ft (20 points) ☐ 200 Ft to 1000 Ft (10 points) ☐ Greater Than 1000 Ft (0 points) ☒ Name of Surface Water Body _____ (Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds) TOTAL HAZARD RANKING SCORE: <u>0</u> POINTS
REMARKS	Remarks : <u>ONLY PIT ON LOCATION. PIT IS DRY.</u> _____ _____

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 310° Footage to Wellhead 77'
 b) Degrees from North _____ Footage to Dogleg _____
 Dogleg Name _____
 c) Length : 16' Width : 16' Depth : 1'



Remarks :

STARTED TAKING PICTURES AT 2:38 P.M.
DUMP TRUCK - BORTAIL

Completed By:

John Champion
 Signature

3.28.94
 Date

FIELD IT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 89632 Location: Little Federal #2
 Coordinates: Letter: C Section: 1 Township: 30 Range: 14
 Or Latitude _____ Longitude _____
 Date Started: ^{5/11/94} ~~5/9/94~~ Area: 02 Run: 42

FIELD OBSERVATIONS

Sample Number(s): VW40
 Sample Depth: 10 Feet
 Final PID Reading 259 PID Reading Depth 10 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: 5/9/94 Pit Closed By: BEI

REMARKS

Remarks : Hit Rock at 10 Ft. & couldn't dig any further

Signature of Specialist: Vale Wilson



FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil

SAMPLE IDENTIFICATION

SAMPLE NUMBER:

Field ID

Lab ID

MTR CODE | SITE NAME:

SAMPLE DATE | TIME (Hrs):

SAMPLED BY:

DATE OF TPH EXT. | ANAL.:

DATE OF BTEX EXT. | ANAL.:

TYPE | DESCRIPTION:

VW40

945103

89632

N/A

5/9/94

1020

N/A

5/10/94

5/10/94

N/A

N/A

VG

Black Coarse 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)	3320	MG/KG			2.04	28
HEADSPACE PID	259	PPM				
PERCENT SOLIDS	85.4	%				

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

The Surrogate Recovery was at
Narrative:

N/A

% for this sample All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

Date:

6/15/94

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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
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04/05/10 14:12

Sample identification
045103

Initial mass of sample, g
1.040

Volume of sample after extraction, ml
13.000

Petroleum hydrocarbons, ppm
1315.197
Net absorbance of hydrocarbons (2930 cm⁻¹)
1.412

