

*George E. Smith*  
REGIONAL & SAN JUAN INSPECTOR

DEC 26 1997

*Approved*

**Meter Number: 71719**  
**Location Name: SAN JUAN 28-5 #17**  
**Location: TN-28 RG-05**  
**SC-20 UL-K**  
**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**

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: 71719 Location: San Juan 28-5 #17  
Operator #: \_\_\_\_\_ Operator Name: Meridian P/L District: Gloomfield  
Coordinates: Letter: K Section: 20 Township: 28 Range: 05  
Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Pit Type: Dehydrator ☒ Location Drip: \_\_\_\_\_ Line Drip: \_\_\_\_\_ Other: \_\_\_\_\_  
Site Assessment Date: 3/9/95 Area: 10 Run: 52

**NMOCD Zone:**

(From NMOCD  
Maps)

Inside

Outside

**Land Type:**

BLM

State

Fee

Indian

☒ (1)

☐ (2)

☐ (3)

☐ (1)

☒ (2)

**Depth to Groundwater**

Less Than 50 Feet (20 points)

50 Ft to 99 Ft (10 points)

Greater Than 100 Ft (0 points)

☐ (1)

☐ (2)

☒ (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)

200 Ft to 1000 Ft (10 points)

Greater Than 1000 Ft (0 points)

☐ (1)

☐ (2)

☒ (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 : Redline shows outside Tepe shows outside VZ

2 pits on Loc One has Dehy in service Old Dehy

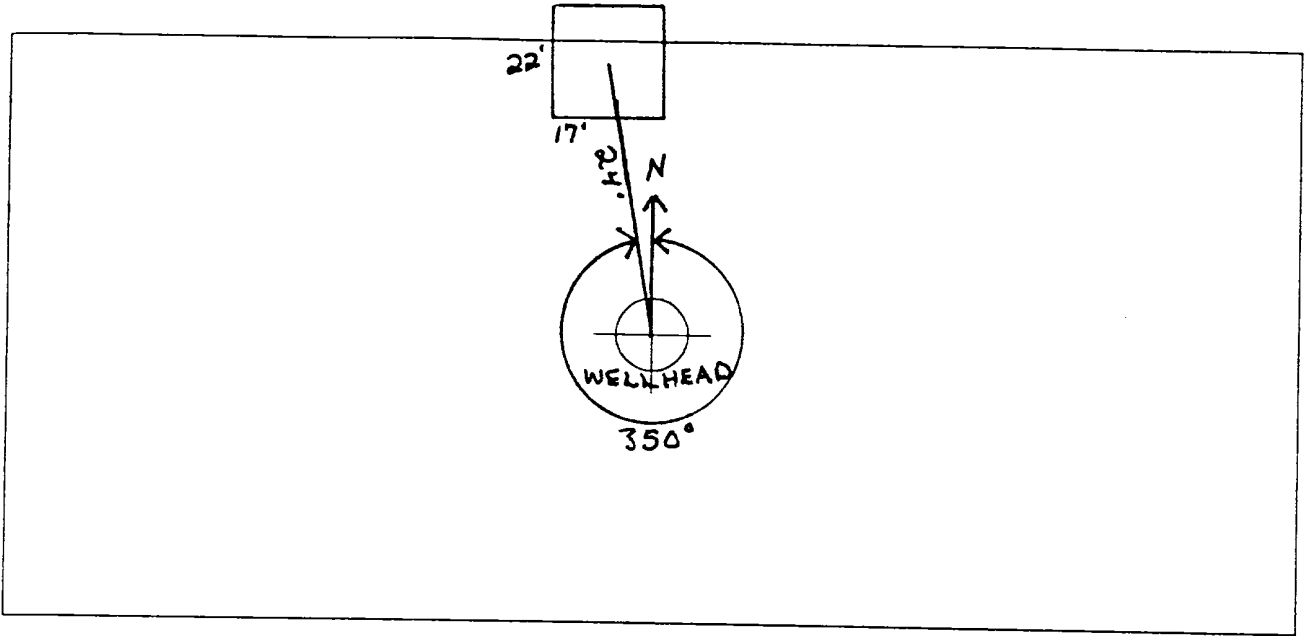
not belongs to EPNG Will close old Dehy pit

SITE ASSESSMENT

MARK

## ORIGINAL PIT LOCATION

REMARKS



Photos: 1140

  
Signature

3/9/95  
Date

# FIELD PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	Meter: <u>71719</u> Location: <u>SAN JUAN 28-5 #17</u> Coordinates: Letter: <u>K</u> Section <u>20</u> Township: <u>28</u> Range: <u>05</u> Or Latitude _____ Longitude _____ Date Started : <u>3/17/95</u> Run: <u>10</u> <u>52</u>
<b>FIELD OBSERVATIONS</b>	Sample Number(s): <u>KP 451</u> Sample Depth: <u><del>12</del> 3</u> Feet Final PID Reading <u>295</u> PID Reading Depth <u><del>12</del> 3</u> Feet <div style="text-align: center;">Yes      No</div> Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
<b>CLOSURE</b>	Remediation Method : <div style="display: flex; justify-content: space-between;"> <div>           Excavation            Onsite Bioremediation            Backfill Pit Without Excavation         </div> <div style="text-align: center;"> <input type="checkbox"/>  <input type="checkbox"/>  <input checked="" type="checkbox"/> </div> <div>           Approx. Cubic Yards _____              Tierra         </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between;"> <div>           Envirotech            Other Facility         </div> <div style="text-align: center;"> <input type="checkbox"/>  <input type="checkbox"/> </div> <div>           Name: _____            Pit Closure Date: <u>3-17-95</u> </div> <div>           Pit Closed By: <u>B.E.I.</u> </div> </div>
<b>REMARKS</b>	Remarks : <u>No Line markers. dug A Test hole to</u> <u>the sampled closed pit Hit SAND stone at 3'</u>
	Signature of Specialist: <u>Kelly Padilla</u>



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP451	941645
MTR CODE   SITE NAME:	71719	N/A
SAMPLE DATE   TIME (Hrs):	3-17-95	1433
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL:	3/23/95	3/23/95
DATE OF BTEX EXT.   ANAL:	N/A	N/A
TYPE   DESCRIPTION:	V6	Dark Gray fine sand and clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
TPH (418.1)	2570	MG/KG			1.97	28
HEADSPACE PID	295	PPM				
PERCENT SOLIDS	86.1	%				

-- TPH is by EPA Method 418.1 --

Narrative:

DF = Dilution Factor Used

Approved By:

Date:

3-24-95

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

75/03/23 09:50

Sample identification  
 046745

Initial mass of sample, g  
 1.970

Volume of sample after extraction, ml  
 15.000

Petroleum hydrocarbons, ppm  
 1566.391  
 Net absorbance of hydrocarbons (2930  $\text{cm}^{-1}$ )  
 .316

