

Denny & ...
DEPUTY OIL & GAS INSPECTOR

DEC 02 1997

Approved

Meter Number:72361
Location Name:SAN JUAN 32-8 #11
Location:TN-31 RG-08
SC-21 UL-G
4 - Fee
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RECEIVED
APR 14 1997
OIL COLL. 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: <u>72361</u> Location: <u>SAN JUAN 32-8 #11</u>
	Operator #: <u>7035</u> Operator Name: <u>PHILLIPS</u> P/L District: <u>BLOOMFIELD</u>
	Coordinates: Letter: <u>6</u> Section <u>21</u> Township: <u>31</u> Range: <u>8</u>
	Or Latitude _____ Longitude _____
Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____	
Site Assessment Date: <u>5-24-94</u> Area: <u>10</u> Run: <u>32</u>	

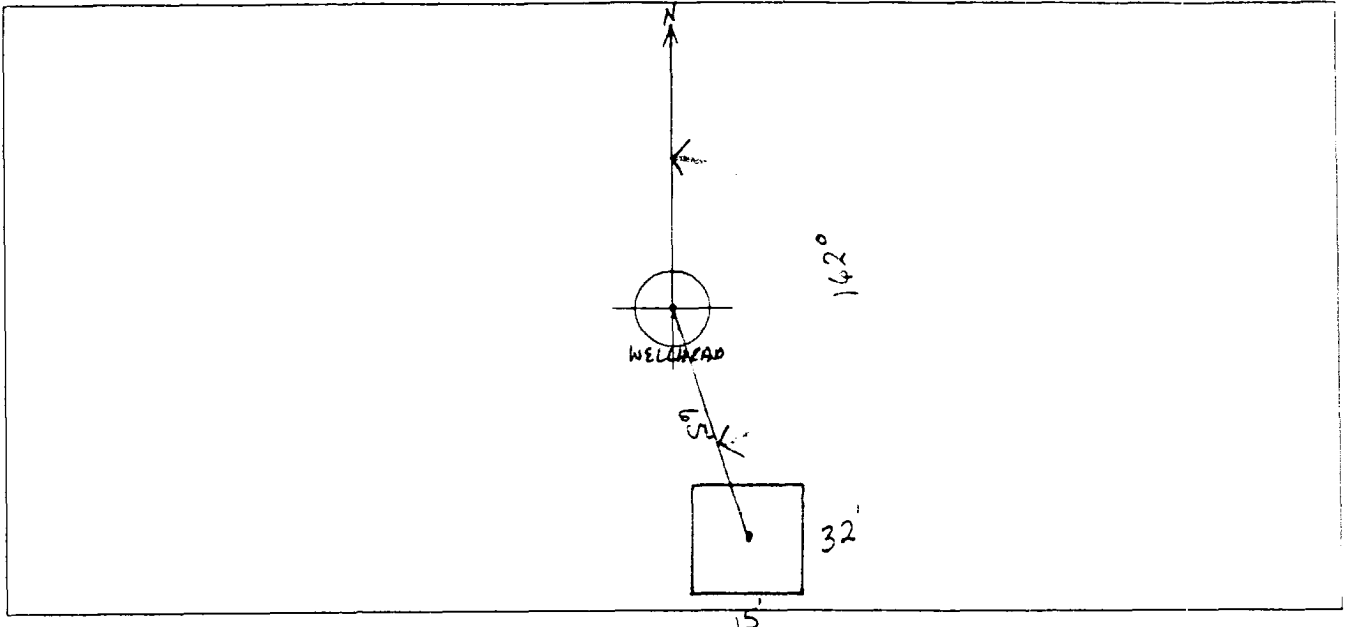
SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps)	Land Type:	BLM <input type="checkbox"/> (1)
	Inside <input type="checkbox"/> (1)	State <input type="checkbox"/> (2)	Fee <input checked="" type="checkbox"/> (3)
	Outside <input checked="" type="checkbox"/> (2)	Indian _____	
	Depth to Groundwater		
	Less Than 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>TWO PITS ON LOCATION. WILL CLOSE ONLY ONE, PIT IS DRY. LOCATION IS ON TOP OF PUMP MESA. REDLINE AND TOPO (CONFIRMED LOCATION IS OUTSIDE V.Z.</u>
	<u>PUSH 7/21</u>

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 162° Footage from Wellhead 65'
b) Length : 32' Width : 15' Depth : 2'

ORIGINAL PIT LOCATION



REMARKS

Remarks :

TOOK PICTURES AT 1:16 P.M.
END DUMP

Completed By:

Robert Champion

Signature

5.24.94

Date

FIELD () REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>72361</u> Location: <u>San Juan 32-8 # 11</u>
	Coordinates: Letter: <u>6</u> Section <u>21</u> Township: <u>31</u> Range: <u>8</u> Or Latitude _____ Longitude _____
	Date Started : <u>6-14-94</u> Area: <u>10</u> Run: <u>32</u>

FIELD OBSERVATIONS	Sample Number(s): <u>VW 206</u>
	Sample Depth: <u>6'</u> Feet
	Final PID Reading <u>290</u> PID Reading Depth <u>6'</u> Feet Yes No
	Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet

CLOSURE	Remediation Method :
	Excavation <input type="checkbox"/> (1) Approx. Cubic Yards _____
	Onsite Bioremediation <input type="checkbox"/> (2)
	Backfill Pit Without Excavation <input checked="" type="checkbox"/> (3)
	Soil Disposition:
Envirotech <input type="checkbox"/> (1) <input type="checkbox"/> (3) Tierra	
Other Facility <input type="checkbox"/> (2) Name: _____	
Pit Closure Date: <u>6-14-94</u> Pit Closed By: <u>BEI</u>	

REMARKS	Remarks : <u>EPING line markers 6' hit Bedrock layer & could not dig any further.</u>

Signature of Specialist: <u>Vale Wilson</u>



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	VW 206	945452
MTR CODE SITE NAME:	72361	N/A
SAMPLE DATE TIME (Hrs):	6-14-94	1310
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	6/16/94	6/16/94
DATE OF BTEX EXT. ANAL.:	N/A	N/A
TYPE DESCRIPTION:	VG	Brown Grey Sandstone 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)	3330	MG/KG			2.29	28
HEADSPACE PID	290	PPM				
PERCENT SOLIDS	88.0	%				

- 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

Handwritten signatures and dates: 7/14/94

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

4/06/16 14:45

Sample identification
745452

Initial mass of sample, g
1.290

Volume of sample after extraction, ml
13.000

Petroleum hydrocarbons, ppm
1329.509
Net absorbance of hydrocarbons (2930 cm⁻¹)
0.477

