

Denny E. Faust
DEPUTY OIL & GAS INSPECTOR

DEC 02 1997

Meter Number: 94924

Location Name: Mesa Twin Mounds #1 - 30 GL

Location: TN-30 RG-14

SC-30 UL-D

2 - Federal

NMOCD Zone: OUTSIDE

Hazard Ranking Score: 00

RECEIVED
APR 14 1997

OIL CON. DIV.
DIST. 2

**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.

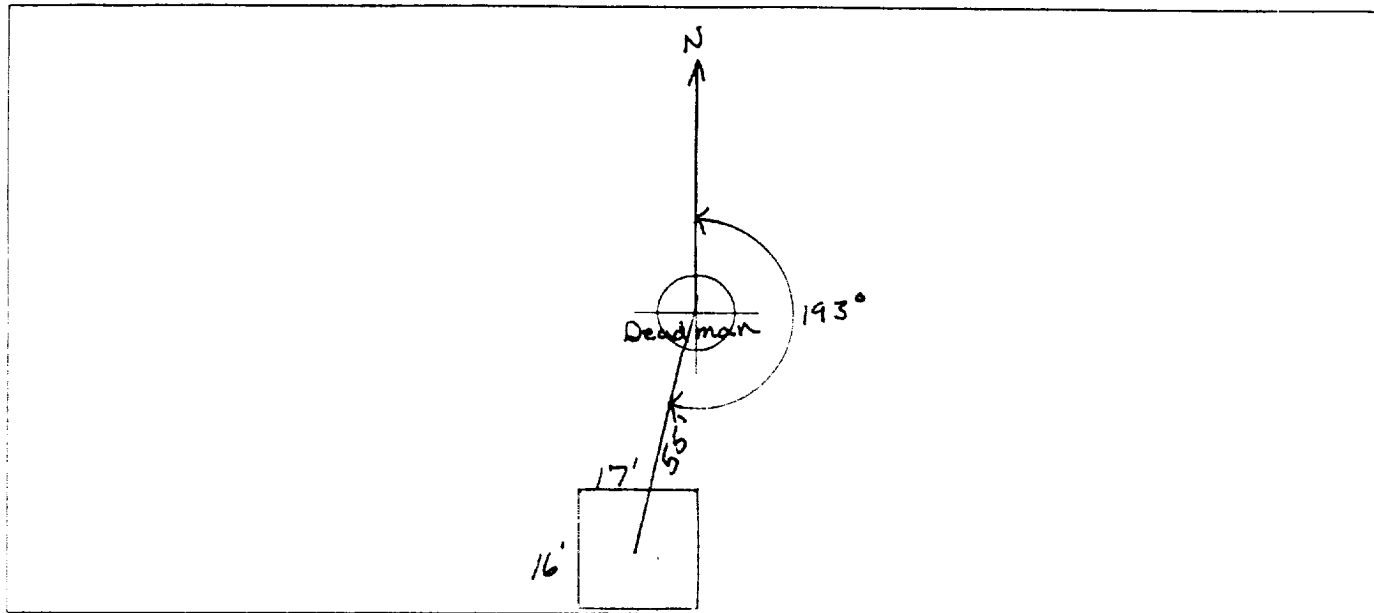
Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>94924</u> Location: <u>Mesa Twin Mounds #1-30 GL</u></p> <p>Operator #: <u>9391</u> Operator Name: <u>Walsh Engineering</u> District: <u>Kntz</u></p> <p>Coordinates: Letter: <u>Q</u> Section <u>30</u> Township: <u>30</u> Range: <u>14</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <u>X</u> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>10-17-95</u> Area: <u>02</u> Run: <u>23</u></p>																
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps)</p> <p>Land Type:</p> <table border="0"> <tr> <td>Inside</td> <td><input type="checkbox"/> (1)</td> <td>BLM</td> <td><input checked="" type="checkbox"/> (1)</td> </tr> <tr> <td>Outside</td> <td><input checked="" type="checkbox"/> (2)</td> <td>State</td> <td><input type="checkbox"/> (2)</td> </tr> <tr> <td></td> <td></td> <td>Fee</td> <td><input type="checkbox"/> (3)</td> </tr> <tr> <td></td> <td></td> <td>Indian</td> <td>_____</td> </tr> </table> <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>	Inside	<input type="checkbox"/> (1)	BLM	<input checked="" type="checkbox"/> (1)	Outside	<input checked="" type="checkbox"/> (2)	State	<input type="checkbox"/> (2)			Fee	<input type="checkbox"/> (3)			Indian	_____
Inside	<input type="checkbox"/> (1)	BLM	<input checked="" type="checkbox"/> (1)														
Outside	<input checked="" type="checkbox"/> (2)	State	<input type="checkbox"/> (2)														
		Fee	<input type="checkbox"/> (3)														
		Indian	_____														
REMARK.	<p>Remarks : <u>At A Loc. Topo shows outside UZ. Not in my Redline</u></p> <p><u>4 pits on Loc. 1.) Rig Blow pit 2.) Separator pit 3. Loc Drip</u></p> <p><u>4.) Loc Drip's both belong to EPNG will close both</u></p> <p><u>Loc. Drip's.</u></p>																

ORIGINAL PIT LOCATION

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Original Pit : a) Degrees from North 193° Footage from Wellhead 55'b) Length : 17' Width : 16' Depth : 5'

REMARKS

Remarks :

photo's 10:05 4 pict.P + A Loc.

Completed By:

James J. Perrow
Signature10-17-95

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>94924</u> Location: <u>Mesa Twin Mounds #1-30 GL</u> Coordinates: Letter: <u>Q</u> Section <u>30</u> Township: <u>30</u> Range: <u>14</u> Or Latitude _____ Longitude _____ Date Started : <u>10-23-95</u> Run: <u>02</u> <u>23</u>
FIELD OBSERVATIONS	Sample Number(s): <u>JP66</u> Sample Depth: <u>7</u> Feet Final PID Reading <u>4 ppm</u> PID Reading Depth <u>7</u> Feet <div style="text-align: center;">Yes No</div> Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
CLOSURE	Remediation Method : <div style="display: flex; justify-content: space-between;"> <div> Excavation <input type="checkbox"/> Onsite Bioremediation <input type="checkbox"/> Backfill Pit Without Excavation <input checked="" type="checkbox"/> </div> <div> Approx. Cubic Yards <u>0</u> <input checked="" type="checkbox"/> Tierra </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between;"> <div> Envirotech <input type="checkbox"/> Other Facility <input type="checkbox"/> </div> <div> <input checked="" type="checkbox"/> Name: _____ </div> </div> Pit Closure Date: <u>10-23-95</u> Pit Closed By: <u>Philip Env</u>
REMARKS	Remarks : <u>Dug 2 ft below bottom of pit + hit sandstone, took PIA it was 84 ppm. Used 10 cu yd backfill.</u> <u>Fencing: 25 x 25 Netting: No</u>
	Signature of Specialist: <u>James J. Leann</u>



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JPL66	947690
MTR CODE SITE NAME:	94924	MesaTwinMounds #1-30 6L
SAMPLE DATE TIME (Hrs):	10-23-95	1700
PROJECT:	Phase I	
DATE OF TPH EXT. ANAL.:	10/25/95	
DATE OF BTEX EXT. ANAL.:	10/24/95	10/24/95
TYPE DESCRIPTION:	V6	light brown sand : 3rd floor

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	< 0.5	MG/KG				
ETHYL BENZENE	< 0.5	MG/KG				
TOTAL XYLENES	< 1.5	MG/KG				
TOTAL BTEX	< 3	MG/KG				
TPH (418.1)	149	MG/KG			2.01	28
HEADSPACE PID	4	PPM				
PERCENT SOLIDS	91.8	%				

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

The Surrogate Recovery was at 98% for this sample All QA/QC was acceptable.
Narrative: _____

DF = Dilution Factor Used

Approved By: 

Date: 10-26-95

BTEX SOIL SAMPLE WORKSHEET

File	:	947690	Date Printed	:	10/25/95
Soil Mass (g)	:	5.01	Multiplier (L/g)	:	0.00100
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):	:	200
Shot Volume (uL)	:	50	CAL FACTOR (Report):	:	0.19960

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.499
Toluene (ug/L)	:	0.97	Toluene (mg/Kg):	0.194 0.499
Ethylbenzene (ug/L)	:	0.17	Ethylbenzene (mg/Kg):	0.034 0.499
p & m-xylene (ug/L)	:	0.36	p & m-xylene (mg/Kg):	0.072 0.998
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000 0.499
			Total xylenes (mg/Kg):	0.072 1.497
			Total BTEX (mg/Kg):	0.299

EL PASO NATURAL GAS

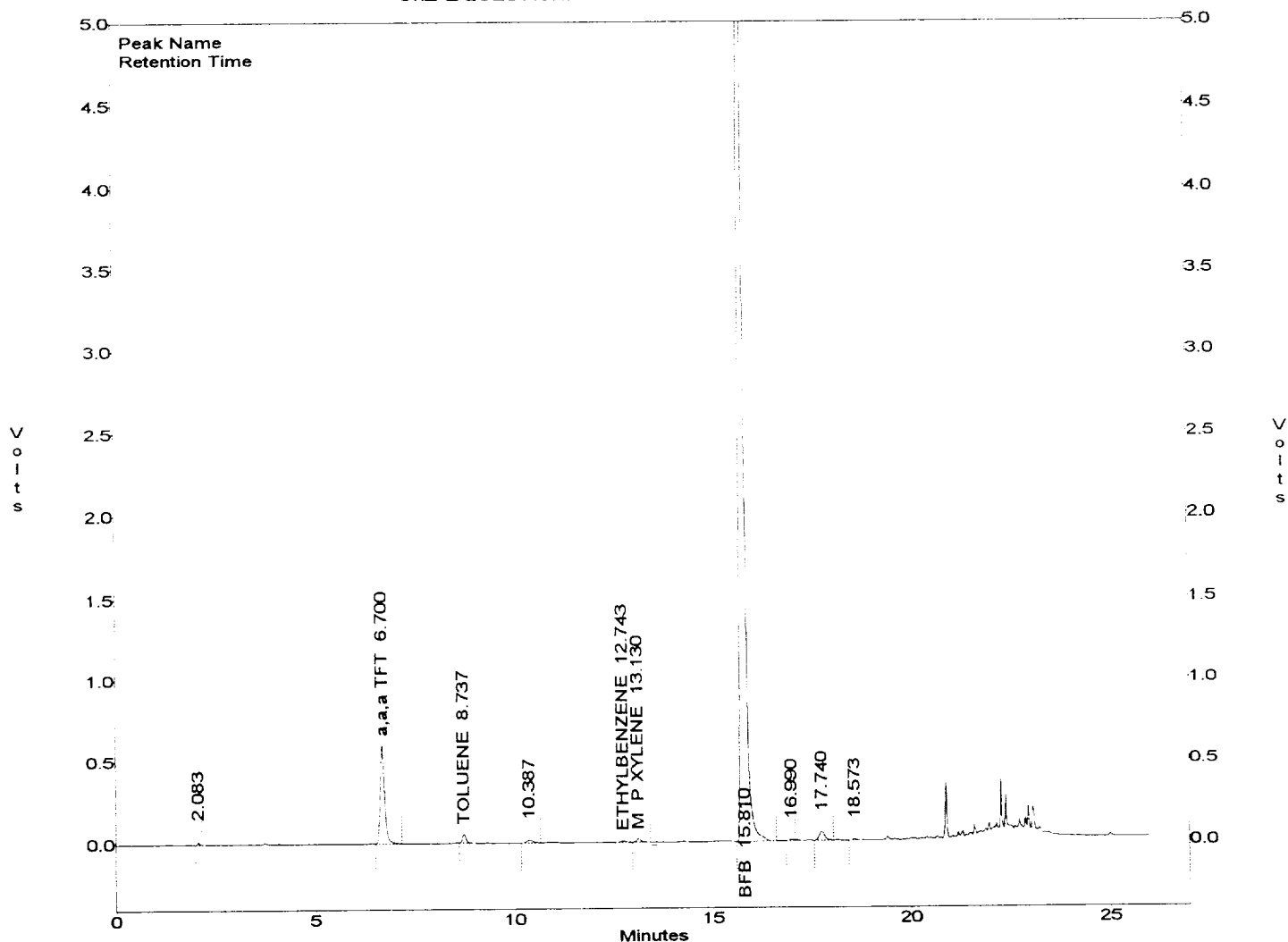
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\102495-1.003
Method : C:\LABQUEST\METHODS\1-101395.MET
Sample ID : 947690,5.01G,50U
Acquired : Oct 24, 1995 14:40:50
Printed : Oct 24, 1995 15:07:11
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.873	0	0.0000
a,a,a TFT	6.700	4503441	100.5374
TOLUENE	8.737	350301	0.9737
ETHYLBENZENE	12.743	57441	0.1735
M & P XYLENE	13.130	147530	0.3644
O XYLENE	14.223	0	0.0000
BFB	15.810	67832840	98.4202

C:\LABQUEST\CHROM001\102495-1.003 -- Channel A



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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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95/10/25 14:59

Sample identification
947690

Initial mass of sample, g
2.010

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
148.549

Net absorbance of hydrocarbons (2930 cm^{-1})
0.028

