

Dennis E. Frost
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

Meter Number: 94516
Location Name: Lindrith B #23
Location: TN-24 RG-03
SC-16 UL-G
2 - Federal
NMOED Zone: OUTSIDE
Hazard Ranking Score: 00

RECEIVED
DEC 14 1997

OFFICE OF THE
DEPUTY OIL & GAS
INSPECTOR

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.

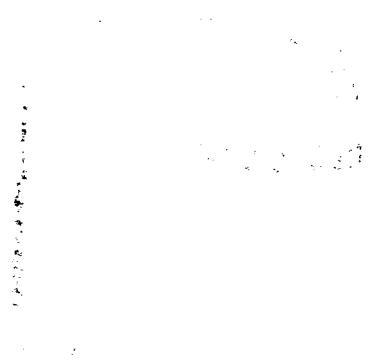
In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity 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

EPFS**EL PASO FIELD SERVICES**

GENERAL

Meter: 94516 Location: LINDRITH B#23
 Operator #: _____ Operator Name: _____ P/L District: Orto
 Coordinates: Letter: G Section 16 Township: 24 Range 3
 Or Latitude _____ Longitude _____
 Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
 Site Assessment Date: 11-21-95 Area: 08 Run: 83

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps) Inside ☐ (1) Outside ☒ (2)

Land Type: BLM ☒ (1) State ☐ (2) Fee ☐ (3) Indian _____

Depth to Groundwater
 Less Than 50 Feet (20 points) ☐ (1)
 50 Ft to 99 Ft (10 points) ☐ (2)
 Greater Than 100 Ft (0 points) ☒ (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) ☐ (1)
 200 Ft to 1000 Ft (10 points) ☐ (2)
 Greater Than 1000 Ft (0 points) ☒ (3)

Name of Surface Water Body Largo wash
 (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

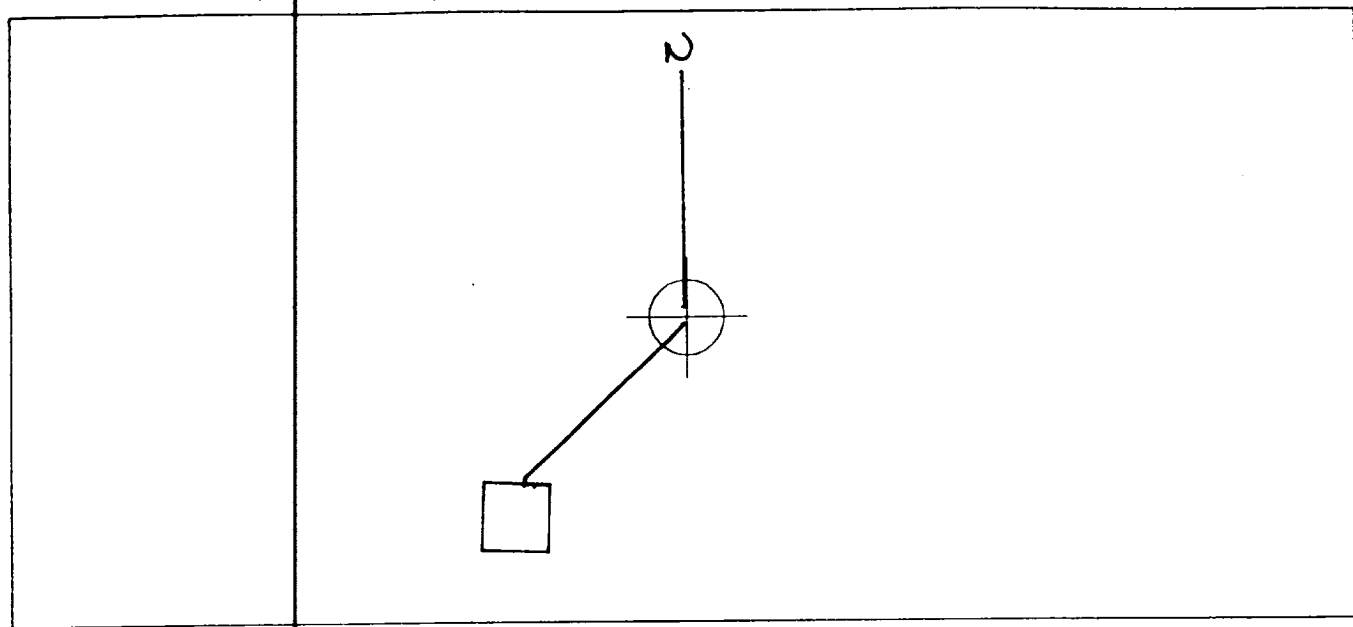
REMARKS

Remarks : Pit listed outside W.V. zone.

ORIGINAL PIT LOCATION

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Original Pit : a) Degrees from North 130 Footage from Wellhead 111'
b) Length : 12 Width : 14 Depth : 3



REMARKS

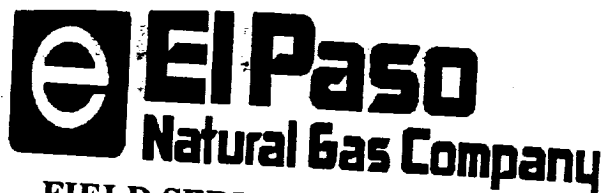
Remarks :

Completed By: Andres Schmalzer
Signature

11-21-95
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>94516</u> Location: <u>Lindrith B #23</u></p> <p>Coordinates: Letter: <u>6</u> Section <u>16</u> Township: <u>24</u> Range: <u>3</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>12/1/95</u> Run: <u>03</u> <u>83</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>JK152</u></p> <p>Sample Depth: <u>10'</u> Feet</p> <p>Final PID Reading : <u>4.4</u> PID Reading Depth <u>10'</u> Feet</p> <p>Yes No</p> <p>Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet</p>
CLOSURE	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>108</u> <u>LT</u> <u>12/1/95</u></p> <p>Onsite Bioremediation <input type="checkbox"/></p> <p>Backfill Pit Without Excavation <input type="checkbox"/></p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> <input type="checkbox"/> Tierra</p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>12/2/95</u> Pit Closed By: <u>Philip</u></p>
REMARKS	<p>Remarks : <u>Pit Pid Readings (N-0.6)(S-5.6)(E-1.2)(W-1.1)</u></p> <p><u>Pit size 17x16x10</u> <u>EPN6 ALTON JAMES ON SITE</u></p> <p><u>Fence size 15x17</u> <u>no net</u></p> <p><u>More Than 100' from Ephemeral stream</u></p> <p>Signature of Specialist: <u>James K. Kulp</u></p>



SPLIT

FIELD SERVICES LABORATORY

ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Outside the GWV Zone

SAMPLE IDENTIFICATION

Field ID		Lab ID	
SAMPLE NUMBER:	TK 152	947825	
MTR CODE SITE NAME:	94516	Lindriith B #23	
SAMPLE DATE TIME (Hrs):	12/1/95		
PROJECT:	Phase I Investigation		
DATE OF TPH EXT. ANAL.:	12/6/95		
DATE OF BTEX EXT. ANAL.:	12/4/95	12/4/95	
TYPE DESCRIPTION:	VG	Dark brown fine sand & clay	

REMARKS: (N-0.6)(S-5.6)(E-1.2)(W-1.1)

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS				ATI Results
			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)	624	MG/KG			1.99	28	
HEADSPACE PID	4.4	PPM					Surrogate %
PERCENT SOLIDS	92.0	%					Dilution Factor

The Surrogate Recovery was at
Narrative:-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --
101% for this samp All QA/QC was acceptable.

DF = Dilution Factor Used

Approved By:

Date:

12-7-95

BTEX SOIL SAMPLE WORKSHEET

File	:	947825	Date Printed	:	12/5/95
Soil Mass (g)	:	5.06	Multiplier (L/g)	:	0.00099
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical)	:	200
Shot Volume (uL)	:	50	CAL FACTOR (Report)	:	0.19763

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	0.14	Benzene (mg/Kg): 0.028	0.494
Toluene (ug/L)	:	0.34	Toluene (mg/Kg): 0.067	0.494
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg): 0.000	0.494
p & m-xylene (ug/L)	:	0.22	p & m-xylene (mg/Kg): 0.043	0.988
o-xylene (ug/L)	:	0.10	o-xylene (mg/Kg): 0.020	0.494
			Total xylenes (mg/Kg): 0.063	1.482
			Total BTEX (mg/Kg): 0.158	

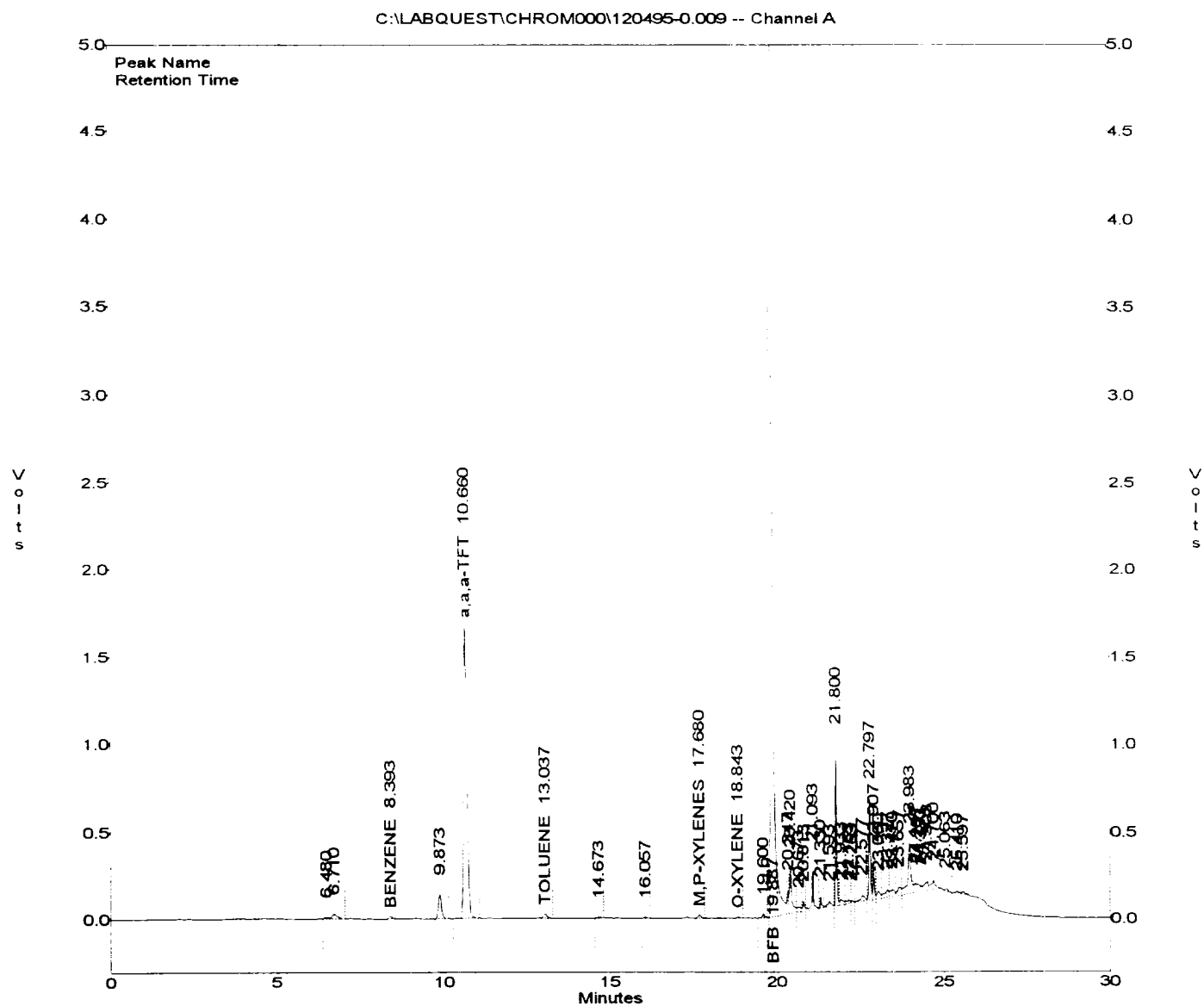
EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM000\120495-0.009
 Method : C:\LABQUEST\METHODS\0-120195.MET
 Sample ID : 947825,5.06G,50U
 Acquired : Dec 04, 1995 20:11:39
 Printed : Dec 04, 1995 20:42:02
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.393	76820	0.1378
a,a,a-TFT	10.660	11805027	0.0000
TOLUENE	13.037	180257	0.3411
ETHYLBENZENE	17.310	0	0.0000
M,P-XYLENES	17.680	114753	0.2160
O-XYLENE	18.843	43912	0.0971
BFB	19.887	57689988	100.7177



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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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95/12/06  11:59
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< Sample identification
947825
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* Initial mass of sample, g
1.990
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* Volume of sample after extraction, ml
28.000
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* Petroleum hydrocarbons, ppm
624.267
* Net absorbance of hydrocarbons (2930 cm-1)
0.085
<
<
<

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