

Benjamin E. Tost
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

Approved

Meter Number: 93113

Location Name: JICARILLA GAS COM 35C #1E

Location: TN-24 RG-05

SC-02 UL-J

6 - Jicarilla

NMOCD Zone: OUTSIDE

Hazard Ranking Score: 00

RECEIVED
APR 14 1998
OIL & GAS
DIVISION

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

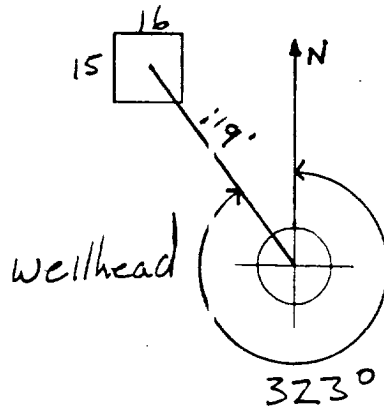


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GENERAL	<p>Meter: <u>93113</u> Location: <u>Ticarilla Gas Com 35C #1E</u> Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>OJITO</u> Coordinates: Letter: <u>J</u> Section <u>2</u> Township: <u>24N</u> Range: <u>5W</u> Or Latitude _____ Longitude _____ Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____ Site Assessment Date: <u>7-14-94</u> Area: <u>06</u> Run: <u>51</u></p>
SITE ASSESSMENT	<p>NMOCD Zone: (From NMOCD Maps) Inside <input type="checkbox"/> (1) Outside <input checked="" type="checkbox"/> (2)</p> <p>Land Type: BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian <u>Ticarilla Apache</u></p> <p>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)</p> <p>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)</p> <p>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)</p> <p>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 checked="" type="checkbox"/> (2) > 100'</p> <p>TOTAL HAZARD RANKING SCORE: <u>0</u> POINTS</p>
REMARKS	<p>Remarks : <u>Redline Book - outside , Vulnerable Zone Tape - outside</u> <u>Three pits. Dehy pit has water & oil in it</u> <u>Push in</u></p>

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 323 Footage from Wellhead 119
b) Length : 16 Width : 15 Depth : 3



REMARKS :

Pictures @ Roll #2 photo 18

Large volume of water & oil in pit

Completed By:

[Signature]

Signature

7-14-94

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	<p>Meter: <u>93113</u> Location: <u>Jicarilla Gas Com 35K #1E</u></p> <p>Coordinates: Letter: <u>J</u> Section <u>2</u> Township: <u>24N</u> Range: <u>5W</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>9/5/95</u> Run: <u>06</u> <u>51</u></p>
FIELD OBSERVATIONS	<p>Sample Number(s): <u>JK71</u> <u>JK72</u> <u>JK73</u></p> <p>Sample Depth: <u>17'</u> Feet</p> <p>Final PID Reading <u>310.0</u> PID Reading Depth <u>17'</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>922</u> <u>8/25/95</u></p> <p>Onsite Bioremediation <input type="checkbox"/> <u>GABRIEL From Jicarilla E.P.D. approved</u></p> <p>Backfill Pit Without Excavation <input type="checkbox"/> <u>closure 9-6-95</u></p> <p><u>PHASE II outside zone</u></p> <p>Soil Disposition:</p> <p>Envirotech <input checked="" type="checkbox"/> Tierra <input type="checkbox"/></p> <p>Other Facility <input type="checkbox"/> Name: _____</p> <p>Pit Closure Date: <u>9-12-95</u> Pit Closed By: <u>Philip</u></p>
REMARKS	<p>Remarks : <u>Pit Pit Readings (W-11.3)(S-480)(E-480)(W-48.2)</u></p> <p><u>Pit Size 30x34x17 SPRAYED PIT WITH SOIL ENHANCER 9-6-95</u></p> <p><u>Fence Size 19x18x3 No Net</u></p> <p><u>More Than 100' From EPHERAL Stream</u></p>
	<p>Signature of Specialist: <u>James K. Kelly</u></p>



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	JK71	947401
MTR CODE SITE NAME:	93113	Jicarilla Gas Com 35C #1E
SAMPLE DATE TIME (Hrs):	09-05-95	1328
PROJECT:	Jic Pits	
DATE OF TPH EXT. ANAL.:	9-6-95	9-6-95
DATE OF BTEX EXT. ANAL.:	9/6/95	9/11/95
TYPE DESCRIPTION:	V6	LIGHT BROWN SAND & CLAY

Field Remarks: (N-11.8)(S-48.0)(E-148.0)(W-48.2)

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 5	MG/KG	10	D		
TOLUENE	11.0	MG/KG	10	D		
ETHYL BENZENE	< 5	MG/KG	10	D		
TOTAL XYLENES	67.8	MG/KG	10	D		
TOTAL BTEX	78.8	MG/KG	10	D		
TPH (418.1)	12500	MG/KG			.78	28
HEADSPACE PID	300	PPM				
PERCENT SOLIDS	91.2	%				

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

The Surrogate Recovery was at 96% for this sample All QA/QC was acceptable.
Narrative:

DF = Dilution Factor Used

Date: 9-13-95

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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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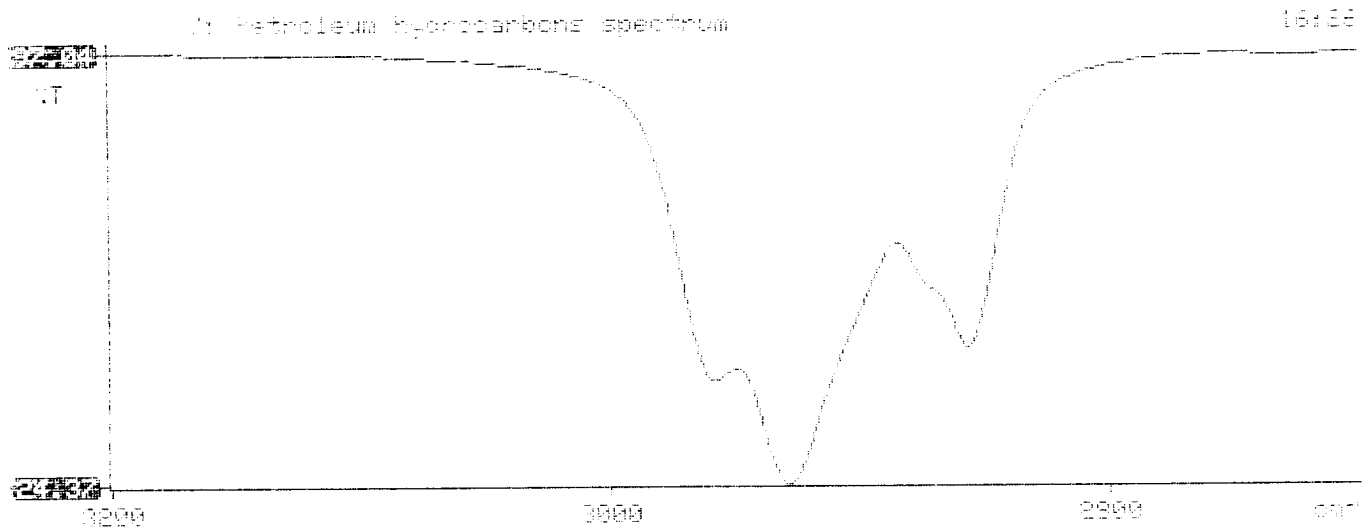
75/09/06 16:26

Sample identification
#47401

Initial mass of sample, g
1.780

Volume of sample after extraction, ml
10.000

Petroleum hydrocarbons, ppm
1479.062
Net absorbance of hydrocarbons (2930 cm⁻¹)
.099



BTEX SOIL SAMPLE WORKSHEET

File	:	947401	Date Printed	:	9/12/95
Soil Mass (g)	:	5.06	Multiplier (L/g)	:	0.00099
Extraction vol. (mL)	:	20	DF (Analytical)	:	2000
Shot Volume (uL)	:	10	DF (Report)	:	1.97628

				Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 4.941
Toluene (ug/L)	:	5.58	Toluene (mg/Kg):	11.028 4.941
Ethylbenzene (ug/L)	:	1.67	Ethylbenzene (mg/Kg):	3.300 4.941
p & m-xylene (ug/L)	:	24.80	p & m-xylene (mg/Kg):	49.012 9.881
o-xylene (ug/L)	:	9.52	o-xylene (mg/Kg):	18.814 4.941
			Total xylenes (mg/Kg):	67.826 14.822
			Total BTEX (mg/Kg):	82.154

EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\947401
 Method : C:\LABQUEST\METHODS\9001.MET
 Sample ID : 947401,5.06G,10U
 Acquired : Sep 11, 1995 15:12:31
 Printed : Sep 11, 1995 15:39:10
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.410	0	0.0000
a,a,a TFT	4.973	4085617	118.3109
TOLUENE	6.793	1538902	5.5753
ETHYLBENZENE	10.537	301151	1.6684
M & P XYLENE	10.903	7235737	24.8455
O XYLENE	11.950	1892660	9.5205
BFB	13.437	57803512	96.4594

C:\LABQUEST\CHROM001\947401 -- Channel A

