

Denny & Frost
DEPUTY OIL & GAS INSPECTOR

DEC 22 1997

Approved

Meter Number: 87612
Location Name: Chacon Jicarilla #3
Location: TN-23 RG-03
SC-16 UL-I
6 - Jicarilla
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.

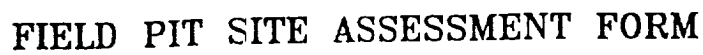
In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity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



Meter: 87612 Location: CHACON JICARILLA #3
Operator #: 8903 Operator Name: DAVE THOMAS P/L District: OJITO
Coordinates: Letter: I Section 16 Township: 23 Range: 3
Or Latitude _____ Longitude _____
Pit Type: Dehydrator _____ Location Drip: X Line Drip: _____ Other: _____
Site Assessment Date: 7.7.95 Area: 08 Run: 93

NMOCD Zone: (From NMOCD Maps)		Land Type:	BLM	<input type="checkbox"/> (1)
			State	<input type="checkbox"/> (2)
	Inside	<input type="checkbox"/> (1)	Fee	<input type="checkbox"/> (3)
	Outside	<input checked="" type="checkbox"/> (2)	Indian	<u>JICARILLA APACHE</u>

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

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)

Less Than 200 Ft (20 points) ☐ (1)
200 Ft to 1000 Ft (10 points) ☐ (2)
Greater Than 1000 Ft (0 points) ☒ (3)

(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

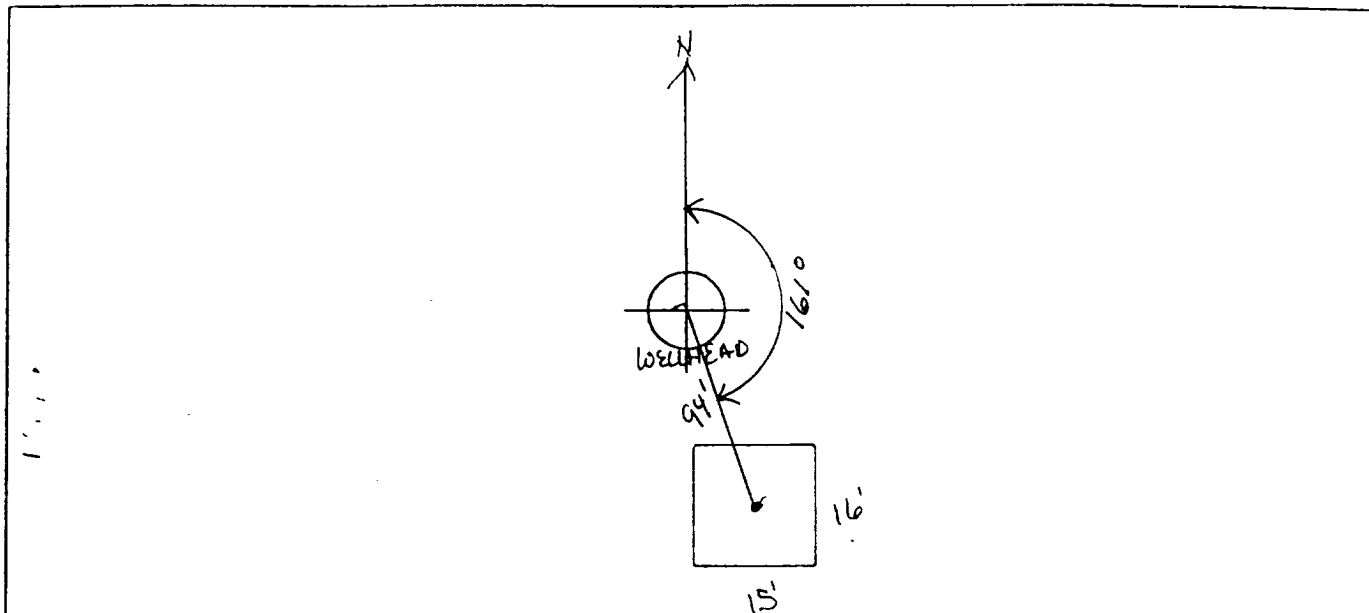
Remarks : REDLINE AND TOPS SHOWS LOCATION OUTSIDE V-2. ONLY PIT
ON THIS LOCATION, IT IS A LOCATION DRIP AND BELONGS TO
EPNG. WILL CLOSE PIT.

PUSH IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 161° Footage from Wellhead 94'
b) Length : 16' Width : 15' Depth : 2'



REMARKS

Remarks :

PHOTOS-

Completed By:

Robert Thompson

Signature

7.7.95

Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>87612</u> Location: <u>CHACON JILARILLA #3</u> Coordinates: Letter: <u>T</u> Section <u>14</u> Township: <u>23</u> Range: <u>3</u> Or Latitude _____ Longitude _____ Date Started : <u>10-12-95</u> Run: <u>08</u> <u>93</u>
FIELD OBSERVATIONS	Sample Number(s): <u>NS115</u> <u>NS116</u> <u>NS117</u> Sample Depth: <u>16</u> Feet Final PID Reading <u>205</u> PID Reading Depth <u>16</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 Onsite Bioremediation Backfill Pit Without Excavation </div> <div> <input checked="" type="checkbox"/> Approx. Cubic Yards <u>394</u> <u>lt</u> <u>10/19/95</u> <input type="checkbox"/> <u>Keith Jil. E.P.D. approved closure</u> <input type="checkbox"/> <u>10-16-95</u> </div> </div> Soil Disposition: <div style="display: flex; justify-content: space-between;"> <div> Envirotech <input type="checkbox"/> Other Facility <input checked="" type="checkbox"/> </div> <div> <input type="checkbox"/> Tierra Name: <u>Jil. LAND FARM L.L.P.</u> </div> </div> Pit Closure Date: <u>10-17-95</u> Pit Closed By: <u>Philip</u>
REMARKS	Remarks : <u>PID READINGS: (N-65)(S-82.5)(E-87)(W-36)</u> <u>Pit size 18x21x16 - Rock Bottom Pit is LISTED OUTSIDE THE W.V. ZONE</u> <u>MORE THAN 100' FROM EPHEMERAL STREAM.</u> <u>Fencing 28' X 28' X 3 Netting Y-N</u>
	Signature of Specialist: <u>Julius Schmitt</u>



FIELD SERVICES LABORATORY
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	NS115	947638
MTR CODE SITE NAME:	87612	Chacon # Jic. #3
SAMPLE DATE TIME (Hrs):	10-12-95	1130
PROJECT:	Jic Pits	
DATE OF TPH EXT. ANAL:	10-16-95	
DATE OF BTEX EXT. ANAL:	10/16/95	10/17/95
TYPE DESCRIPTION:	V6	LIGHT GRAY SAND + JAWA STONE

Field Remarks: (N-65)(S-82.5)(E-87)(W-36)

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	1.6	MG/KG				
TOTAL BTEX	1.6	MG/KG				
TPH (418.1)	104	MG/KG			195	28
HEADSPACE PID	205	PPM				
PERCENT SOLIDS	87.3	%				

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

The Surrogate Recovery was at 92% for this sample All QA/QC was acceptable.

Narrative:

ATI Results for MOD 8015 attached (<5).

DF = Dilution Factor Used

Approved By: [Signature]

Date: 10-18-95

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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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95/10/16 16:13

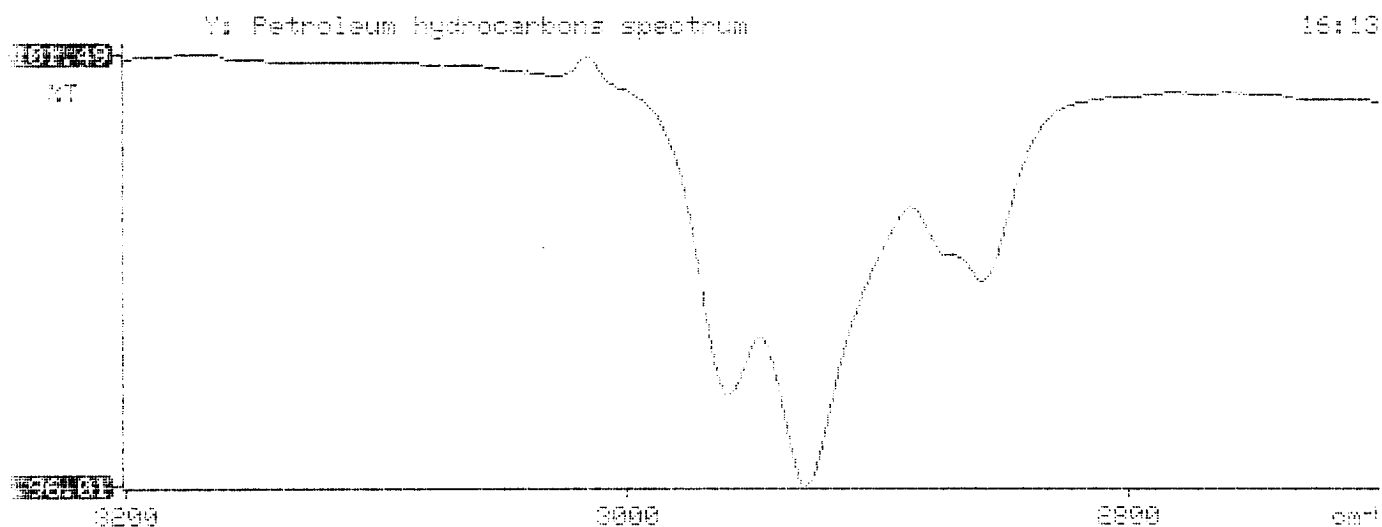
Sample identification
947638

Initial mass of sample, g
1.950

Volume of sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
104.169

Net absorbance of hydrocarbons (2930 cm⁻¹)
0.023



BTEX SOIL SAMPLE WORKSHEET

File	:	947638	Date Printed	:	10/18/95
Soil Mass (g)	:	4.97	Multiplier (L/g)	:	0.00101
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical):		200
Shot Volume (uL)	:	50	CAL FACTOR (Report):		0.20121

		DILUTION FACTOR:	1	Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000 0.503
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000 0.503
Ethylbenzene (ug/L)	:	1.49	Ethylbenzene (mg/Kg):	0.300 0.503
p & m-xylene (ug/L)	:	5.98	p & m-xylene (mg/Kg):	1.203 1.006
o-xylene (ug/L)	:	1.95	o-xylene (mg/Kg):	0.392 0.503
			Total xylenes (mg/Kg):	1.596 1.509
			Total BTEX (mg/Kg):	1.895

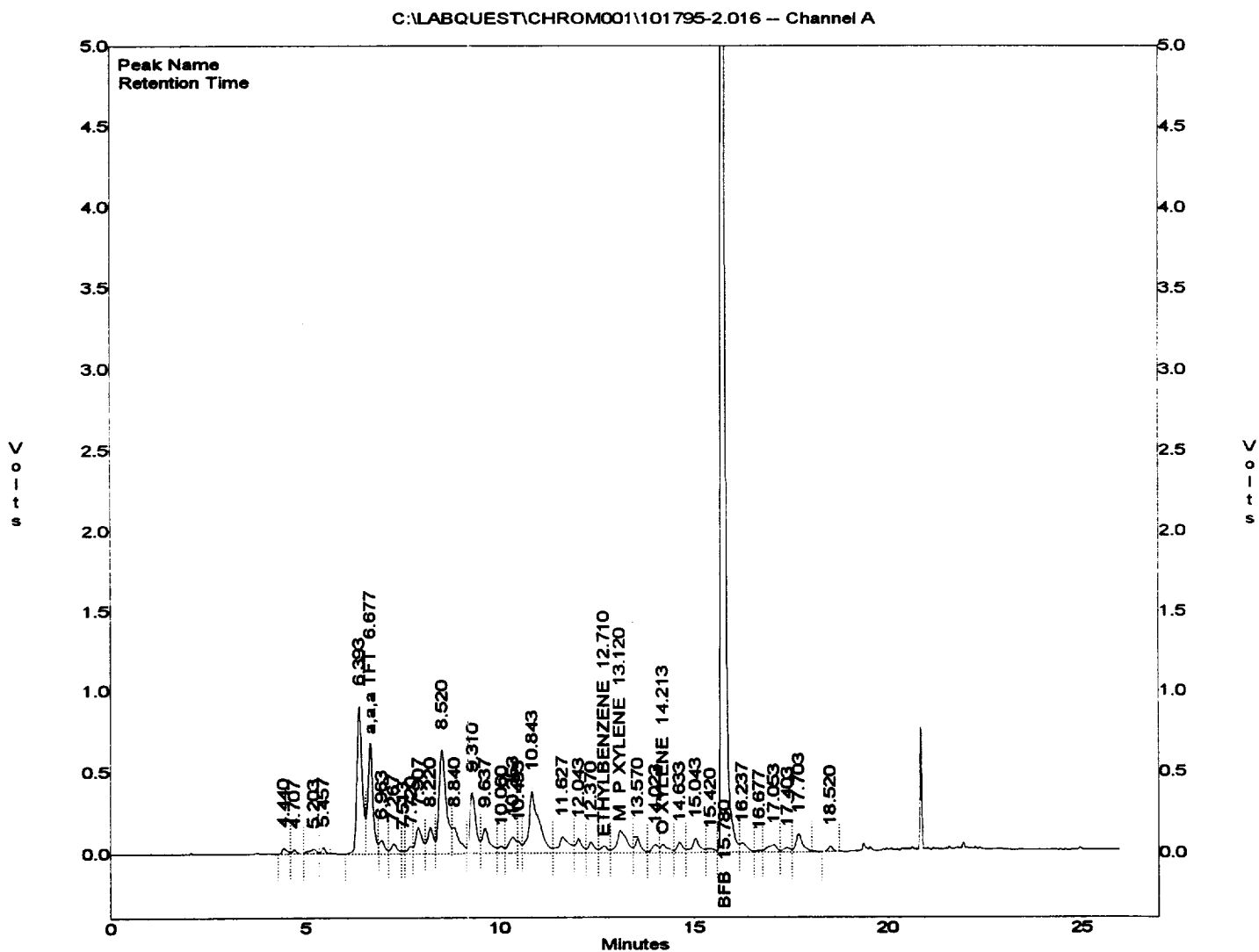
EL PASO NATURAL GAS

EPA METHOD 8020 - BTEX SOILS

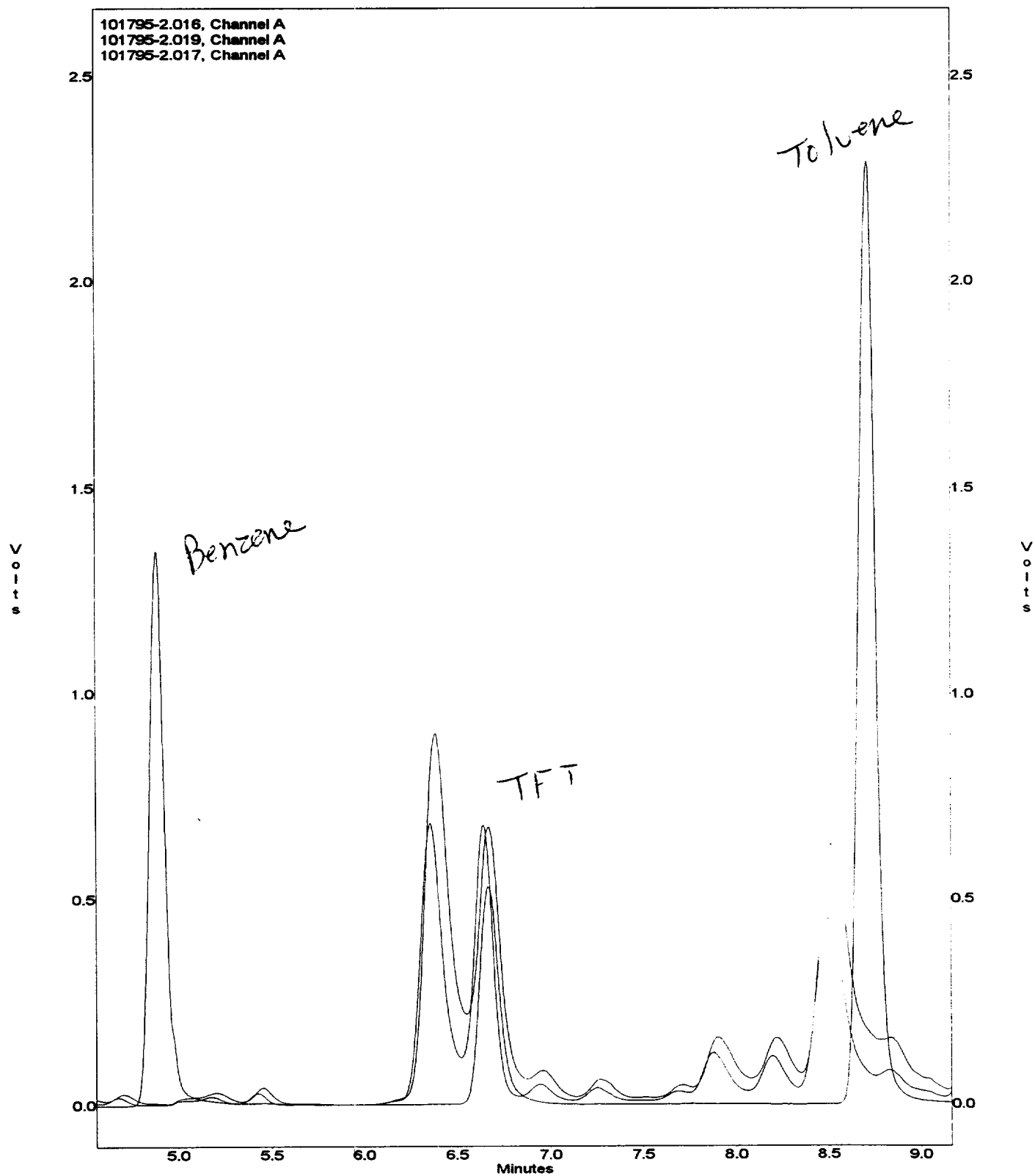
File : C:\LABQUEST\CHROM001\101795-2.016
 Method : C:\LABQUEST\METHODS\1-101395.MET
 Sample ID : 947638,4.97G,50U
 Acquired : Oct 16, 1995 02:55:52
 Printed : Oct 16, 1995 03:22:16
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.873	0	0.0000
a,a,a TFT	6.677	6240939	139.3263
TOLUENE	8.717	0	0.0000
ETHYLBENZENE	12.710	493301	1.4902
M & P XYLENE	13.120	2323759	5.9811
O XYLENE	14.213	601387	1.9450
BFB	15.780	63175732	91.6631



Overlaid Traces





Analytical**Technologies**,Inc.

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015 MODIFIED
CLIENT : EL PASO NATURAL GAS ATI I.D.: 510430
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE/JIC PITS

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	947638	NON-AQ	10/12/95	10/31/95	11/01/95	1
02	947660	NON-AQ	10/16/95	10/31/95	11/01/95	1
03	947670	NON-AQ	10/17/95	10/31/95	11/01/95	1
PARAMETER			UNITS	01	02	03
FUEL HYDROCARBONS			MG/KG	<5	33	<5
HYDROCARBON RANGE				-	C7-C28	-
HYDROCARBONS QUANTITATED USING				-	DIESEL	-
SURROGATE:						
O-TERPHENYL (%)				89	100	87



Analytical**Technologies**, Inc.

2709-D Pan American Freeway, NE Albuquerque, NM 87107
Phone (505) 344-3777 FAX (505) 344-4413

ATI I.D. 510430

November 7, 1995

El Paso Natural Gas
P.O. Box 4990
Farmington, NM 87499

Project Name/Number: PIT CLOSURE/JIC PITS 24324

Attention: John Lambdin

On 10/31/95, Analytical Technologies, Inc., (ADHS License No. AZ0015), received a request to analyze **non-aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

MR:jt

Enclosure

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

