

3R - 161

REPORTS

DATE:

July 1, 1998



RECEIVED

JUL 06 1998

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

July 1, 1998

Mr. William C. Olson
NMOCD
2040 S. Pacheco
Santa Fe, NM 87504
Certified Mail: Z 164 299 017
Z 164 299 020

Mr. Bill Liesse
BLM, FDO
1235 La Plata Hwy.
Farmington, NM 87401
Certified Mail: Z 164 299 018

Mr. Jim Walker
EPA - Water Division (WTR-9)
75 Hawthorne Street
San Francisco, CA 94105
Certified Mail: P 358 645 408

Re: Pit Closure Reports/Request for Approval

El Paso Field Services (EPFS) has enclosed, for your approval, pit closure reports for locations that have been remediated and closed.

The closure reports for the locations represented in this enclosure meet the following criteria:

- Pits were located inside the Vulnerable Groundwater Zone.
- The majority of the pits were initially excavated to practical extent.
- At least one of the analytical parameters in the initial verification sample exceeded clean up criteria.
- A soil boring was subsequently performed through the center of the original pit.
- Samples collected from the bottom of the soil boring meet all parameters for clean up criteria.
- The soil boring confirms that groundwater has not been impacted.

EPFS hereby requests your approval for a risk based closure of these pit locations. If you have any questions regarding this information, please contact me at 505/599-2141 or at my E-Mail address: millers@epenergy.com.

Sincerely,

Sandra D. Miller
Environmental Manager

xc: Mr. Denny Foust, NMOCD - Aztec w/enclosures (Z 164 299 016, Z 164 299 021)
Ms. Charmaine Tso - Navajo EPA w/enclosures (Z 164 299 019)

EPFS PIT CLOSURE SUMMARY

RECEIVED

JUL 08 1998

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Charley Pah #2
Meter/Line ID - 70804

SITE DETAILS

Legals - Twn: 27 Rng: 9
NMOCD Hazard Ranking: 60
Operator: Texaco

Sec: 12 Unit: B
Land Type: Navajo

DENIED

*Hit ground water
No ground water sample*

PREVIOUS ACTIVITIES

Site Assessment: 6/14/94
Monitor Well: N/A

Excavation: 8/17/94
Re-Excavation: N/A

Soil Boring: 2/10/97
Geoprobe: N/A

CONCLUSIONS

The initial excavation was excavated to the practical extent of the trackhoe, which was 12 feet below ground surface (bgs). PID field screening indicated subsurface soils to be 283 ppm at 12 feet bgs. Excavation was terminated and a sample was collected. Sample analysis indicated total BTEX to be above standards at 98.9 mg/kg and TPH above standards at 368 mg/kg. A test boring was drilled in the center of the initial excavation to determine the vertical extent of impact to soil. A brown silty clay was encountered at 15 feet bgs and continued to approximately 16 feet bgs. At 16 feet bgs a light gray-brown, fine grained sand was encountered and continued to approximately 17 feet bgs. At 20 feet bgs the soil lithology changed again to an inter-bedded brown silty and sandy clay which continued to the termination of the boring at 20 feet bgs. Groundwater was encountered at approximately 21 feet and rose to 16.4 feet bgs in the boring. A groundwater monitoring well was not installed in the boring. A soil sample was collected for BTEX and TPH analysis at 20-22 feet bgs. Laboratory analysis showed all BTEX and TPH compounds to be below laboratory detection limits.

RECOMMENDATIONS

No further action is recommended at the site for the following reasons:

- The bulk of the impacted soil was removed during the phase 1 excavation.
- The initial excavation was terminated in a clay material.
- Test boring sample results indicated soils below standards 8 feet beneath the initial excavation.
- Residual hydrocarbons remaining in the soils at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

FIELD PIT SITE ASSESSMENT FORM



11

GENERAL	Meter: <u>70804</u> Location: <u>Charley Pah well No 2</u>
	Operator #: <u>0263</u> Operator Name: <u>EXALO P/L</u> District: <u>Ballard</u>
	Coordinates: Letter: <u>B</u> Section <u>12</u> Township: <u>27</u> Range: <u>9</u>
	Or Latitude _____ Longitude _____
	Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____
	Site Assessment Date: <u>6-14-94</u> Area: <u>11</u> Run: <u>71</u>

SITE ASSESSMENT	NMOCD Zone: (From NMOCD Maps)	Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)	Land Type: BLM <input type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian <u>Eastern Navajo Agency</u>	
	Depth to Groundwater	Less Than 50 Feet (20 points) <input checked="" type="checkbox"/> (1) 50 Ft to 99 Ft (10 points) <input type="checkbox"/> (2) Greater Than 100 Ft (0 points) <input type="checkbox"/> (3)		
	Wellhead Protection Area :	Is it less than <u>1000</u> ft from <u>wells</u> , springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? <input checked="" type="checkbox"/> (1) YES (20 points) <input type="checkbox"/> (2) NO (0 points)		
	Horizontal Distance to Surface Water Body	Less Than 200 Ft (20 points) <input checked="" type="checkbox"/> (1) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)		
		Name of Surface Water Body <u>Blanco Canyon</u>		
		(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>60</u> POINTS		

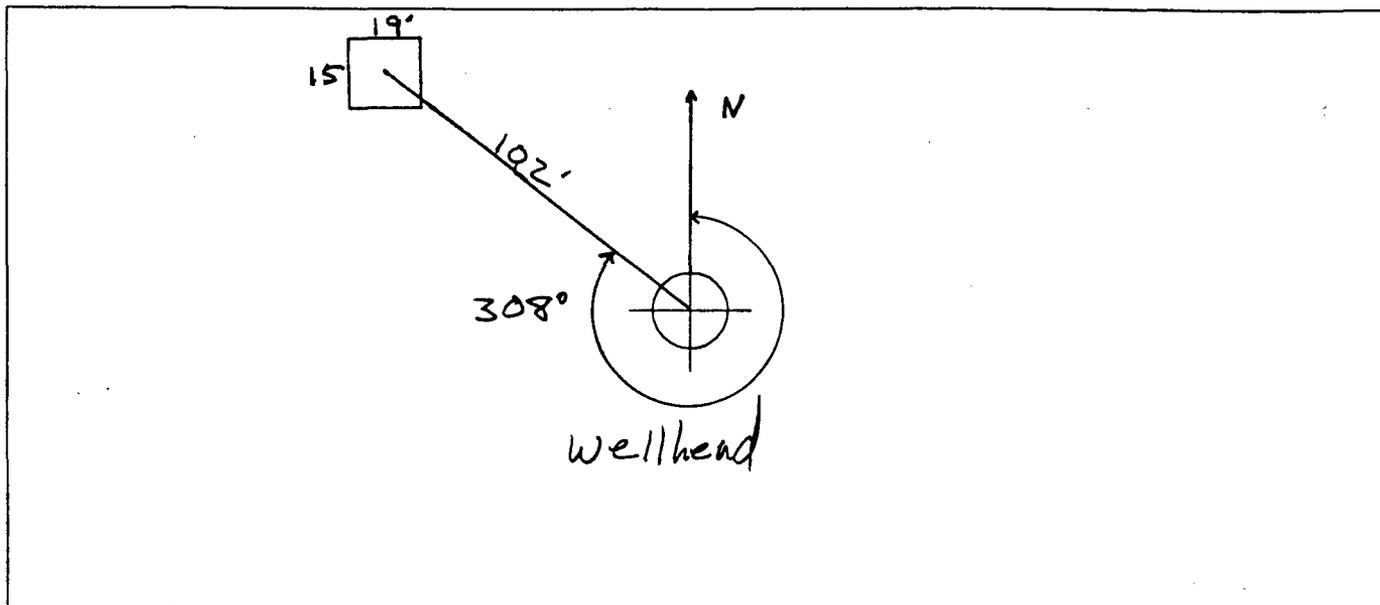
REMARKS	Remarks : <u>one pit on location - - dry</u>
	<u>Inside V.Z. on Redline of Topo</u>

Dry Hand

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 308 Footage from Wellhead 102
b) Length : 19 Width : 15 Depth : 3

ORIGINAL PIT LOCATION



REMARKS

Remarks : Photos - 1513

Completed By:

[Signature]

Signature

6-14-94

Date

**PHASE I
EXCAVATION**

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL	Meter: <u>70804</u> Location: <u>Charley PAH well #2</u> Coordinates: Letter: <u>B</u> Section <u>12</u> Township: <u>27</u> Range: <u>9</u> Or Latitude _____ Longitude _____ Date Started : <u>8/17/94</u> Run: <u>11</u> <u>71</u>
FIELD OBSERVATIONS	Sample Number(s): <u>KD 218</u> Sample Depth: <u>12'</u> Feet Final PID Reading <u>283 ppm</u> PID Reading Depth <u>12'</u> Feet Yes No Groundwater Encountered <input type="checkbox"/> <input checked="" type="checkbox"/> Approximate Depth _____ Feet
CLOSURE	Remediation Method : Excavation <input checked="" type="checkbox"/> Approx. Cubic Yards <u>80</u> Onsite Bioremediation <input type="checkbox"/> Backfill Pit Without Excavation <input type="checkbox"/> Soil Disposition: Envirotech <input checked="" type="checkbox"/> <input type="checkbox"/> Tierra Other Facility <input type="checkbox"/> Name: _____ Pit Closure Date: <u>8/17/94</u> Pit Closed By: <u>BEI</u>
REMARKS	Remarks : <u>Excavated pit to 12', Took pid sample, closed pit.</u>
	Signature of Specialist: <u>Kenny Deane</u>



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

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KP218	945949
MTR CODE SITE NAME:	70804	Charley Pah #2
SAMPLE DATE TIME (Hrs):	8/17/94	1230
PROJECT:	PHASE I	
DATE OF TPH EXT. ANAL.:	8/18/94	8/18/94
DATE OF BTEX EXT. ANAL.:	8/22/94	8/22/94
TYPE DESCRIPTION:	VC	Gray fine sand/clay

Field Remarks: _____

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.5	MG/KG	20	D		
TOLUENE	42.0	MG/KG	20	D		
ETHYL BENZENE	4.90	MG/KG	20	D		
TOTAL XYLENES	52.0	MG/KG	20	D		
TOTAL BTEX	98.9	MG/KG				
TPH (418.1)	368	MG/KG			2.05	28
HEADSPACE PID	283	PPM				
PERCENT SOLIDS	88.3	%				

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

The Surrogate Recovery was at 135 for this sample All QA/QC was acceptable.
The "D" qualifier indicates reported result for this analyte is calculated based on a secondary dilution factor.

Narrative:

ATI results attached. Surrogate recovery was outside ATI QC limits due to matrix interference.

Approved By: John Kuehl INGVZPIT.XLS Date: 9/2/94



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT**

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 218	945949
MTR CODE SITE NAME:	70804	N/A
SAMPLE DATE TIME (Hrs):	8/17/94	1230
SAMPLED BY:	N/A	
DATE OF TPH EXT. ANAL.:	8/18/94	8/18/94
DATE OF BTEX EXT. ANAL.:	8/22/94	8/22/94
TYPE DESCRIPTION:	XG VC ^{with 8/18/94}	Grey fine sand/clay

REMARKS:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	10.5	MG/KG	20			
TOLUENE	42	MG/KG	20			
ETHYL BENZENE	4.9	MG/KG	20			
TOTAL XYLENES	52	MG/KG	20			
TOTAL BTEX	99	MG/KG				
TPH (418.1)	368	MG/KG			205	28
HEADSPACE PID	283	PPM				
PERCENT SOLIDS	87.5 89.5	88.3 %				

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

The Surrogate Recovery was at 135 % for this sample All QA/QC was acceptable.

Narrative:

ATS results attached. Surrogate recovery was outside ATS QC limits due to matrix interference

DF = Dilution Factor Used

Approved By: J.L.

Date: 9/2/94

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

94/08/18 13:40

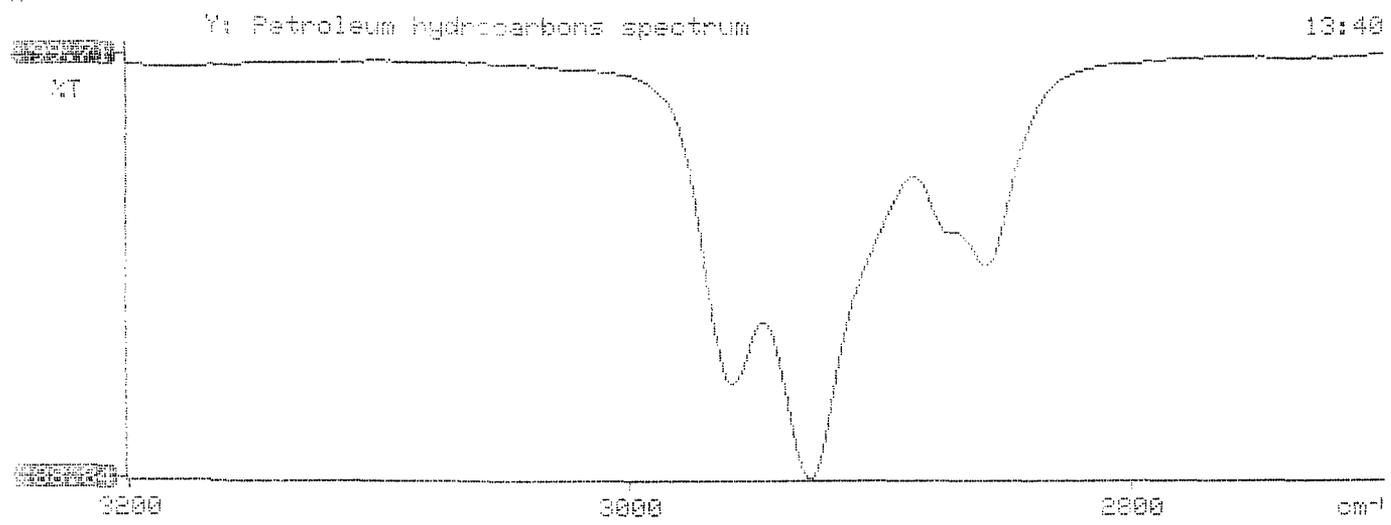
* Sample identification
945947

* Initial mass of sample, g
2.050

* Volume of sample after extraction, ml
20.000

* Petroleum hydrocarbons, ppm
368.496

* Net absorbance of hydrocarbons (2930 cm-1)
0.050





Analytical **Technologies**, Inc.

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

ATI I.D. 408380

August 24, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On 08/19/94, 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.

H. Mitchell Rubenstein, Ph.D.
Laboratory Manager

MR:jt

Enclosure





GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)
CLIENT : EL PASO NATURAL GAS CO. ATI I.D.: 408380
PROJECT # : 24324
PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945945	NON-AQ	08/16/94	08/22/94	08/22/94	10
02	945946	NON-AQ	08/16/94	08/22/94	08/22/94	20
03	945949	NON-AQ	08/17/94	08/22/94	08/22/94	20

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	4.5	<0.5	<0.5
TOLUENE	MG/KG	22	15	42
ETHYLBENZENE	MG/KG	1.6	8.4	4.9
TOTAL XYLENES	MG/KG	52	93	52

SURROGATE:

BROMOFLUOROBENZENE (%) 65* 74 135*

*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE

PHASE II

RECORD OF SUBSURFACE EXPLORATION

Borehole # BH-1

Well # _____ of _____

Page _____ of _____



PHILIP ENVIRONMENTAL SERVICES INC.

4000 Monroe Road

Farmington, New Mexico 87401

(505) 326-2262 FAX (505) 326-2388

Project Name EPFS GW PITS
 Project Number 17520 Phase 6001.77
 Project Location Charley Park N 2 7080Y

Elevation _____
 Borehole Location T27-R9-S12-Ltr B
 GWL Depth _____
 Logged By CM Chance
 Drilled By K. Padilla
 Date/Time Started 2/10/97-0945
 Date/Time Completed 2/10/97-1045

Well Logged By CM Chance
 Personnel On-Site D. Casady, D. Chuley, C. Moore
 Contractors On-Site _____
 Client Personnel On-Site _____
 Drilling Method 4 1/4" ID HSA
 Air Monitoring Method PID, CGI

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: PPM		Drilling Conditions & Blow Counts
							BZ	BH	
0									
5				Backfill to 12'					
15	1	15-17	24	Br silty CLAY, med stiff, med-high plastic, dry Lx gry-br SAND, vf-f sand, loose, v. moist			0	0	0/0 -0953h -GW@ 16.4' BGS
20	2	20-22	24	Br silty CLAY, med stiff, med-high plastic, tr xtn parting dry Br clay SAND, vf-f sand, loose, saturated			5/2		-1000h
25				TOB 22'					
30									
35									
40									

Comments: Hit GW @ 19'. GW rose to 16.4' after 10 min. CMC 299 collected from 20-22' & submitted to lab (BTEX, TPH) Bentonite added to casing & then grouted to surface (BENTONITE)
 Geologist Signature Ray Chaney



**FIELD SERVICES LABORATORY
ANALYTICAL REPORT**

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	CMC299	970079
MTR CODE SITE NAME:	70804	Charley Pah #2
SAMPLE DATE TIME (Hrs):	2/10/97	1000
PROJECT:	Phase II Drilling 20-22'	
DATE OF TPH EXT. ANAL.:	2/13/97	2/13/97
DATE OF BTEX EXT. ANAL.:	2/14/97	2/14/97
TYPE DESCRIPTION:	VG	Gray/brown speckled clay

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)	<10	MG/KG			2.48	28
HEADSPACE PID	2	PPM				
PERCENT SOLIDS	79.0	%				

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

The Surrogate Recovery was at 92.7 % for this sample All QA/QC was acceptable.
Narrative: _____

DF = Dilution Factor Used

Approved By: John Lubben

Date: 2-25-97

EL PASO FIELD SERVICES LABORATORY

EPA METHOD 8020 - BTEX

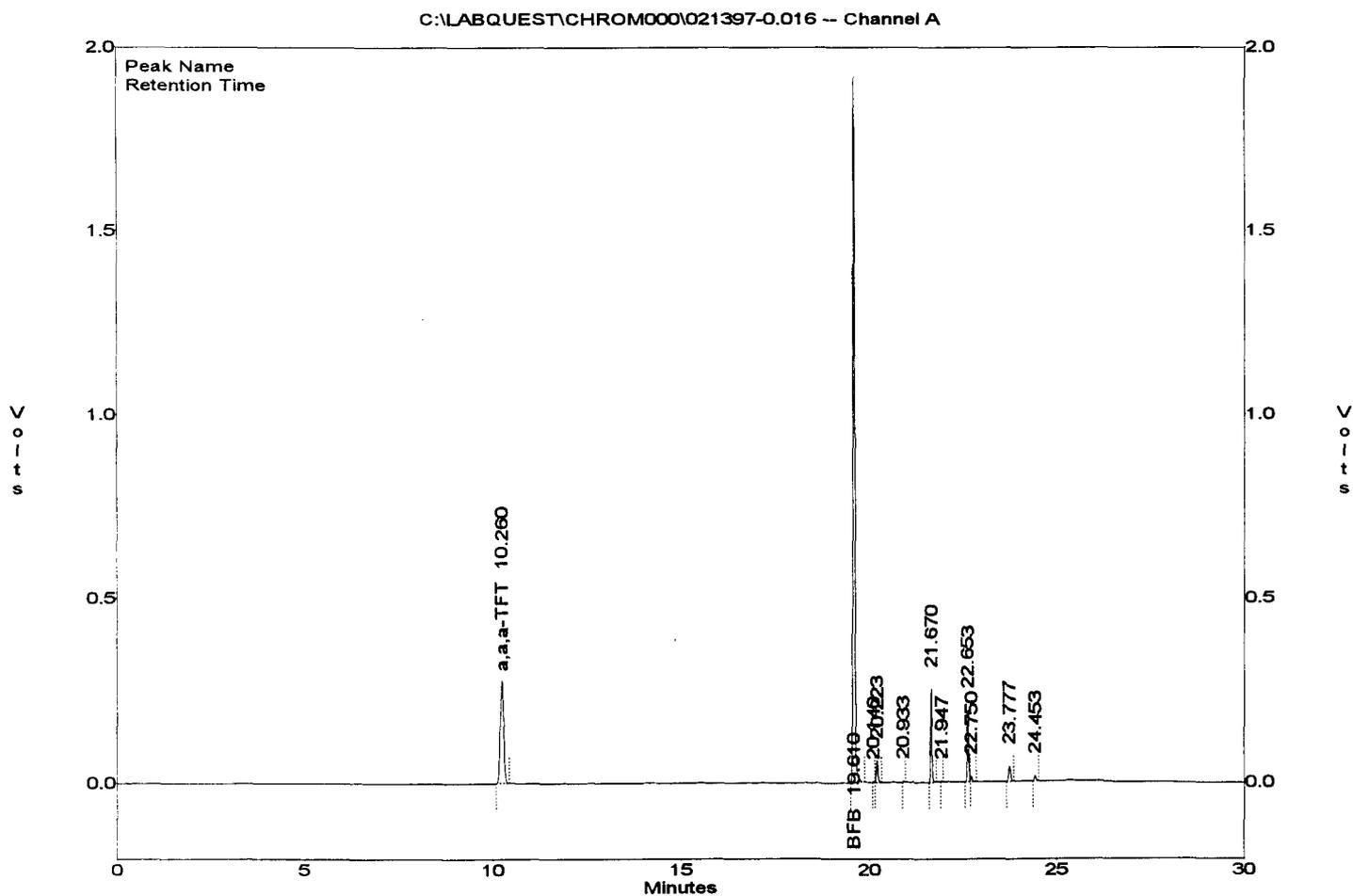
File : C:\LABQUEST\CHROM000\021397-0.016
 Method : C:\LABQUEST\METHODS\10-021297.MET
 Sample ID : 970079,5.54G,50U
 Acquired : Feb 14, 1997 02:26:44
 Printed : Feb 14, 1997 02:57:11
 User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	8.050	0	0.0000
a,a,a-TFT	10.260	1769730	93.7760
TOLUENE	12.567	0	0.0000
ETHYLBENZENE	16.790	0	0.0000
M,P-XYLENES	17.170	0	0.0000
O-XYLENE	18.310	0	0.0000
BFB	19.610	6772550	92.7127

Channel A Group Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
TOTAL XYLENES		0	0.0000



BTEX SOIL SAMPLE WORKSHEET

File	:	970079	Date Printed	:	2/18/97	
Soil Mass (g)	:	5.54	Multiplier (L/g)	:	0.00090	
Extraction vol. (mL)	:	10	CAL FACTOR (Analytical)	:	200	
Shot Volume (uL)	:	50	CAL FACTOR (Report)	:	0.18051	
			DILUTION FACTOR:	1		Det. Limit
Benzene (ug/L)	:	0.00	Benzene (mg/Kg):	0.000		0.451
Toluene (ug/L)	:	0.00	Toluene (mg/Kg):	0.000		0.451
Ethylbenzene (ug/L)	:	0.00	Ethylbenzene (mg/Kg):	0.000		0.451
p & m-xylene (ug/L)	:	0.00	p & m-xylene (mg/Kg):	0.000		0.903
o-xylene (ug/L)	:	0.00	o-xylene (mg/Kg):	0.000		0.451
			Total xylenes (mg/Kg):	0.000		1.354
			Total BTEX (mg/Kg):	0.000		

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

* 97/02/13 14:52

* Sample identification
970079

* Initial mass of sample, g
2.480

* Volume of sample after extraction, ml
28.000

* Petroleum hydrocarbons, ppm
-8.789

* Net absorbance of hydrocarbons (2930 cm⁻¹)
0.155

*
*
*

Y: Petroleum hydrocarbons spectrum

14:52

