

DEPUTY SUPERVISOR  
**EL PASO FIELD SERVICES**  
**PRODUCTION PIT CLOSURE**

02

DEL 2 1 1998

STATE COM H#9 PC  
Meter/Line ID - 75875

**RECEIVED**  
JUL 2 1998

*Approved*

**OIL CON. DIV.**  
**DIST. 3**

SITE DETAILS

Legals - Twn: 30 Rng: 09  
NMOC Hazard Ranking: 40  
Operator: AMOCO PRODUCTION COMPANY

Sec: 16 Unit: B  
Land Type: 1 - State

Pit Closure Date: 05/10/94

**RATIONALE FOR RISK-BASED CLOSURE:**

The above mentioned production pit was assessed and ranked according to the criteria in the New Mexico Conservation Division's Unlined Surface Impoundment Closure Guidelines.

The primary source, discharge to the pit, has been removed. There has been no discharge to the production pit for at least five years and the pit has been closed for at least three years.

The production pit has been remediated to the practical extent of the trackhoe or to the top of bedrock. Initial laboratory analysis has indicated that the soil remaining at the bottom of the excavation is above standards based on the hazard ranking score. Contaminated soil was removed and transported to an approved landfarm for disposal. The initial excavation was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching any residual hydrocarbons remaining in the soil. Therefore, further mobility of residual hydrocarbons is unlikely.

Since the soil samples from the initial excavation were above standards, a test boring was drilled and a sample was collected to evaluate the vertical extent of impact to soils. Test boring sample results indicated soils below standards beneath the original excavation.

El Paso Field Services Company (EPFS) requests closure of the above mentioned production pit location for the following reasons:

- Discharge to the pit has not occurred in over five years and the pit has been closed for over three years.
- The bulk of the impacted soil was removed during the initial excavation.
- The excavation was backfilled with clean soil and graded to divert precipitation away from the excavation area.
- All source material has been removed from the ground surface, eliminating potential direct contact with livestock and the general public.
- Groundwater was not encountered in the initial excavation or test boring; therefore, impact to groundwater is unlikely.
- Soil samples collected beneath the initial excavation were below standards.
- No potential receptors are within 1,000 feet of the site.
- Residual hydrocarbons remaining in the soil at the bottom of the initial excavation will naturally degrade in time with minimal risk to the environment.

# FIELD PIT SITE ASSESSMENT FORM

<b>GENERAL</b>	<p>Meter: <u>75875</u> Location: <u>STATE COM # #9 P.C.</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>AMOCO</u> P/L District: <u>BLOOMFIELD</u></p> <p>Coordinates: Letter: <u>B</u> Section <u>16</u> Township: <u>30</u> Range: <u>9</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator _____ Location Drip: <input checked="" type="checkbox"/> Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>4.22.94</u> Area: <u>10</u> Run: <u>33</u></p>
<b>SITE ASSESSMENT</b>	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p style="margin-left: 100px;">Inside <input checked="" type="checkbox"/> (1)</p> <p style="margin-left: 100px;">Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b></p> <p style="margin-left: 100px;">BLM <input type="checkbox"/> (1)</p> <p style="margin-left: 100px;">State <input checked="" type="checkbox"/> (2)</p> <p style="margin-left: 100px;">Fee <input type="checkbox"/> (3)</p> <p style="margin-left: 100px;">Indian _____</p> <p><b>Depth to Groundwater</b></p> <p>Less Than 50 Feet (20 points) <input checked="" 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 type="checkbox"/> (3)</p> <p><b>Wellhead Protection Area :</b></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><b>Horizontal Distance to Surface Water Body</b></p> <p>Less Than 200 Ft (20 points) <input checked="" 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 type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Caballo Canyon</u> (AKA: Wild Horse Wash)</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) &lt; 100' (Navajo Pits Only)</p> <p style="margin-left: 100px;"><input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE: <u>40</u> POINTS</b></p>
<b>REMARKS</b>	<p>Remarks : <u>3 pits on location. 2 will be closed. Pits dry</u></p> <p style="text-align: right; margin-right: 50px;"><u>Dig &amp; Hav</u></p>

# **PHASE I EXCAVATION**

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 75875 Location: State Com H #9 P.C  
Coordinates: Letter: B Section 16 Township: 30 Range: 9  
Or Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
Date Started : 5-10-94 Area: 10 Run: 33

OBSERVATIONS

Sample Number(s): KD50  
Sample Depth: 12' Feet  
Final PID Reading 373 ppm PID Reading Depth 12' Feet  
Yes No  
Groundwater Encountered  (1)  (2) Approximate Depth \_\_\_\_\_ Feet

CLOSURE

Remediation Method :  
Excavation  (1) Approx. Cubic Yards 60  
Onsite Bioremediation  (2)  
Backfill Pit Without Excavation  (3)  
Soil Disposition:  
Envirotech  (1)  (3) Tierra  
Other Facility  (2) Name: \_\_\_\_\_  
Pit Closure Date: 5-10-94 Pit Closed By: BET

REMARKS

Remarks : Excavated Pit to 12', Took PID Reading - closed Pit

SIGNATURE

Signature of Specialist: [Signature]

## FIELD SERVICES LABORATORY ANALYTICAL REPORT PIT CLOSURE PROJECT - Soil

### SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	KD 50	945109
MTR CODE   SITE NAME:	75875	N/A
SAMPLE DATE   TIME (Hrs):	5-10-94	1215
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	5-12-94	5-12-94
DATE OF BTEX EXT.   ANAL.:	5/17/94	5/19/94
TYPE   DESCRIPTION:	VC	Brown Sand

REMARKS:

### RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	42.5	MG/KG	100			
TOLUENE	11	MG/KG	100			
ETHYL BENZENE	2.9	MG/KG	100			
TOTAL XYLENES	34	MG/KG	100			
TOTAL BTEX	50	MG/KG				
TPH (418.1) / 21,700	<del>21,690</del> <sup>Amis</sup> 4/94	MG/KG			<del>2.63</del> 28	
HEADSPACE PID	373	PPM				
PERCENT SOLIDS	88.4	%				

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

The Surrogate Recovery was at 106 % for this sample All QA/QC was acceptable.

Narrative: ATI Results attached.

DF = Dilution Factor Used

Approved By: John Lamberti

Date: 7/14/94

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

94/05/12 14:01

Sample identification  
945107

Initial mass of sample, g  
0.500

Volume of sample after extraction, ml  
29.000

Petroleum hydrocarbons, ppm  
21697.208

Net absorbance of hydrocarbons (2930 cm-1)  
0.660

\*  
\*  
\*

Y: Petroleum hydrocarbons spectrum

14:01





Analytical **Technologies**, Inc.

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

ATI I.D. **405359**

May 25, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **05/13/94**, 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.

EPA Method 418.1 analysis was added for sample 945125 on 05/17/94.

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

Letitia Krakowski, Ph.D.  
Project Manager

H. Mitchell Rubenstein, Ph.D.  
Laboratory Manager

MR:jd

Enclosure



## GAS CHROMATOGRAPHY RESULTS

TEST : BTEX (EPA 8020)  
 CLIENT : EL PASO NATURAL GAS CO.      ATI I.D.: 405359  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	945108	NON-AQ	05/10/94	05/17/94	05/18/94	1
02	<del>945109</del>	NON-AQ	05/10/94	05/17/94	05/19/94	100
03	945110	NON-AQ	05/10/94	05/17/94	05/18/94	1

PARAMETER	UNITS	01	02	03
BENZENE	MG/KG	<0.025	<2.5	<0.025
TOLUENE	MG/KG	0.026	11	<0.025
ETHYLBENZENE	MG/KG	0.10	2.9	<0.025
TOTAL XYLENES	MG/KG	1.8	34	<0.025

## SURROGATE:

BROMOFLUOROBENZENE (%)      43\*      106      91

\*OUTSIDE ATI QUALITY CONTROL LIMITS DUE TO MATRIX INTERFERENCE



# PHASE II

# RECORD OF SUBSURFACE EXPLORATION

PHILIP ENVIRONMENTAL

4000 Monroe Road  
Farmington, New Mexico 87401  
(505) 326-2262 FAX (505) 326-2388

Borehole # BH-1  
Well # \_\_\_\_\_  
Page 1 of 2

Project Name EPNG Pit  
Project Number 11957 Phase 4DD2 77  
Project Location State Com #9 PC 75875

Elevation \_\_\_\_\_  
Borehole Location \_\_\_\_\_  
GWL Depth \_\_\_\_\_  
Logged By CM Chance  
Drilled By M. Donohue  
Date/Time Started 5/18/95 - 1330  
Date/Time Completed 5/18/95 - 1550

Well Logged By CM Chance  
Personnel On-Site M. Donohue, K. Padilla, F. Rivera  
Contractors On-Site \_\_\_\_\_  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method 4 1/4" ID HSA  
Air Monitoring Method P10 C61

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: <del>WDS</del> <u>WDS</u>			Drilling Conditions & Blow Counts
							BZ	BH	#S	
0				Backfill 12'						
15	1	15-17	10"	Gr silty sand, f-med sand, loose, silty odor			15	84	<del>399</del> 604	1346
20	2	20-22	5"	Gr sandy clay, vf-f sand, soft, low plastic, odor			12	68	<del>258</del> 825	1355
25	3	25-27	10"	Br sandy clay, vf-f sand, soft, low plastic, odor			0	120	<del>630</del> 1090	1413
30	4	30-32	11"	Blk sandy clay, vf sand, med stiff, med plastic, strong odor			4	69	<del>354</del> 668	1426
35	5	35-37	12"	AA			8	178	<del>600</del> 910	1440
40	6	40-42	12"	AA Br silty clay, fastaining hard, non-plastic			6	60	<del>90</del> 308	1457

Comments: \_\_\_\_\_

Geologist Signature \_\_\_\_\_

# RECORD OF SUBSURFACE EXPLORATION

Borehole # \_\_\_\_\_  
 Well # \_\_\_\_\_  
 Page 2 of 2

## PHILIP ENVIRONMENTAL

4000 Monroe Road  
 Farmington, New Mexico 87401  
 (506) 326-2262 FAX (506) 326-2388

Project Name \_\_\_\_\_  
 Project Number \_\_\_\_\_ Phase \_\_\_\_\_  
 Project Location State Com 9 PC 75875

Elevation \_\_\_\_\_  
 Borehole Location \_\_\_\_\_  
 GWL Depth \_\_\_\_\_  
 Logged By \_\_\_\_\_  
 Drilled By \_\_\_\_\_  
 Date/Time Started \_\_\_\_\_  
 Date/Time Completed \_\_\_\_\_

Well Logged By \_\_\_\_\_  
 Personnel On-Site \_\_\_\_\_  
 Contractors On-Site \_\_\_\_\_  
 Client Personnel On-Site \_\_\_\_\_  
 Drilling Method \_\_\_\_\_  
 Air Monitoring Method \_\_\_\_\_

Depth (Feet)	Sample Number	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring			Drilling Conditions & Blow Counts
							Units: NDU	BZ	BH	
40										
45	7	45-47	8"	Green sh, silty, hard, sil fissile TDB 45'						Drilling Harder 2/15 - 1528
50										
55										
60										
65										
70										
75										
80										

Comments: Refusal at 45'. 45-47' sample submitted to lab for BTEX + TPH. SMC12

Geologist Signature \_\_\_\_\_



**FIELD SERVICES LABORATORY  
ANALYTICAL REPORT**

**PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone**

**SAMPLE IDENTIFICATION**

	Field ID	Lab ID
SAMPLE NUMBER:	CML-12	946823
MTR CODE   SITE NAME:	75875	N/A
SAMPLE DATE   TIME (Hrs):	5-18-95	1528
SAMPLED BY:	N/A	
DATE OF TPH EXT.   ANAL.:	5-19-95	5-19-95
DATE OF BTEX EXT.   ANAL.:	5/19/95	5/23/95
TYPE   DESCRIPTION:	UG	Dark Brown Clay in 2 bags

REMARKS:

**RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<0.50	MG/KG				
TOLUENE	<0.50	MG/KG				
ETHYL BENZENE	<0.50	MG/KG				
TOTAL XYLENES	<1.50	MG/KG				
TOTAL BTEX	<3.00	MG/KG				
TPH (418.1)	22.4	MG/KG			2.04	28
HEADSPACE PID	15	PPM				
PERCENT SOLIDS	87.8	%				

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

The Surrogate Recovery was at 92.5 % for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

*John L. Linder*

Date:

5/26/95

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

95/05/19 13:11

\* Sample identification

944923

\* Initial mass of sample, g

1.040

\* Volume of sample after extraction, ml

38.000

\* Petroleum hydrocarbons, ppm

32,408

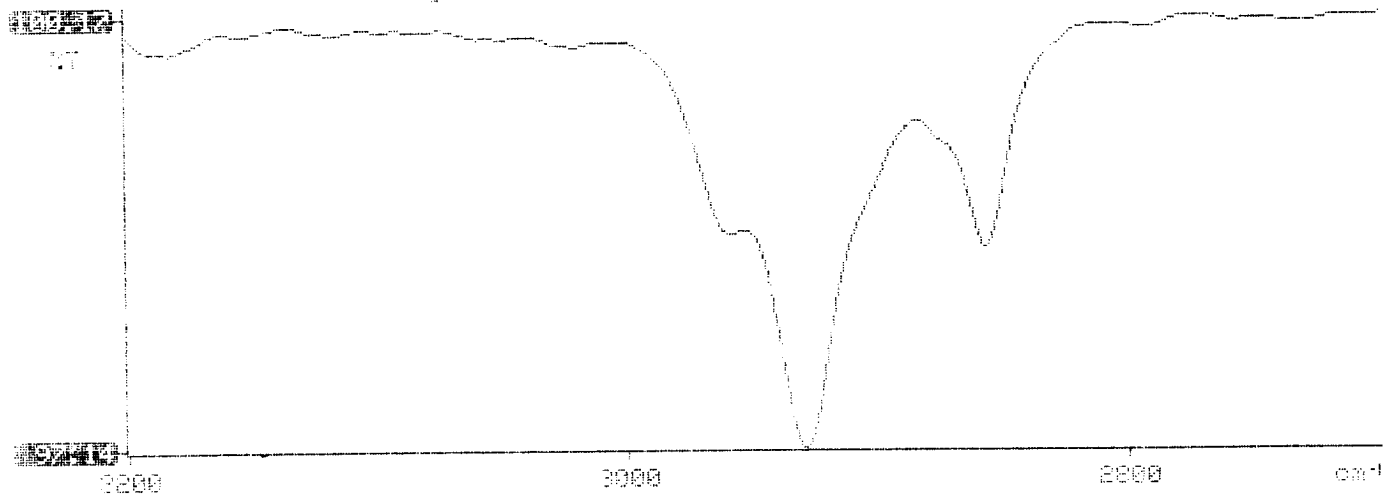
\* Net absorbance of hydrocarbons (2930  $\text{cm}^{-1}$ )

0.013

\*  
\*  
\*

Y: Petroleum hydrocarbons spectrum

13:11



### BTEX SOIL SAMPLE WORKSHEET

**File** : 946823A  
**Soil Mass (g)** : 5.04  
**Extraction vol. (mL)** : 20  
**Shot Volume (uL)** : 100

**Date Printed** : 5/24/95  
**Multiplier (L/g)** : 0.00099  
**DF (Analytical)** : 200  
**DF (Report)** : 0.19841

				<b>Det. Limit</b>
<b>Benzene (ug/L)</b> :	0.00	<b>Benzene (mg/Kg):</b>	<b>0.00</b>	0.496
<b>Toluene (ug/L)</b> :	0.00	<b>Toluene (mg/Kg):</b>	<b>0.00</b>	0.496
<b>Ethylbenzene (ug/L)</b> :	0.00	<b>Ethylbenzene (mg/Kg):</b>	<b>0.00</b>	0.496
<b>p &amp; m-xylene (ug/L)</b> :	0.00	<b>p &amp; m-xylene (mg/Kg):</b>	<b>0.00</b>	0.992
<b>o-xylene (ug/L)</b> :	0.00	<b>o-xylene (mg/Kg):</b>	<b>0.00</b>	0.496
		<b>Total xylenes (mg/Kg):</b>	<b>0.00</b>	1.488
		<b>Total BTEX (mg/Kg):</b>	<b>0.00</b>	

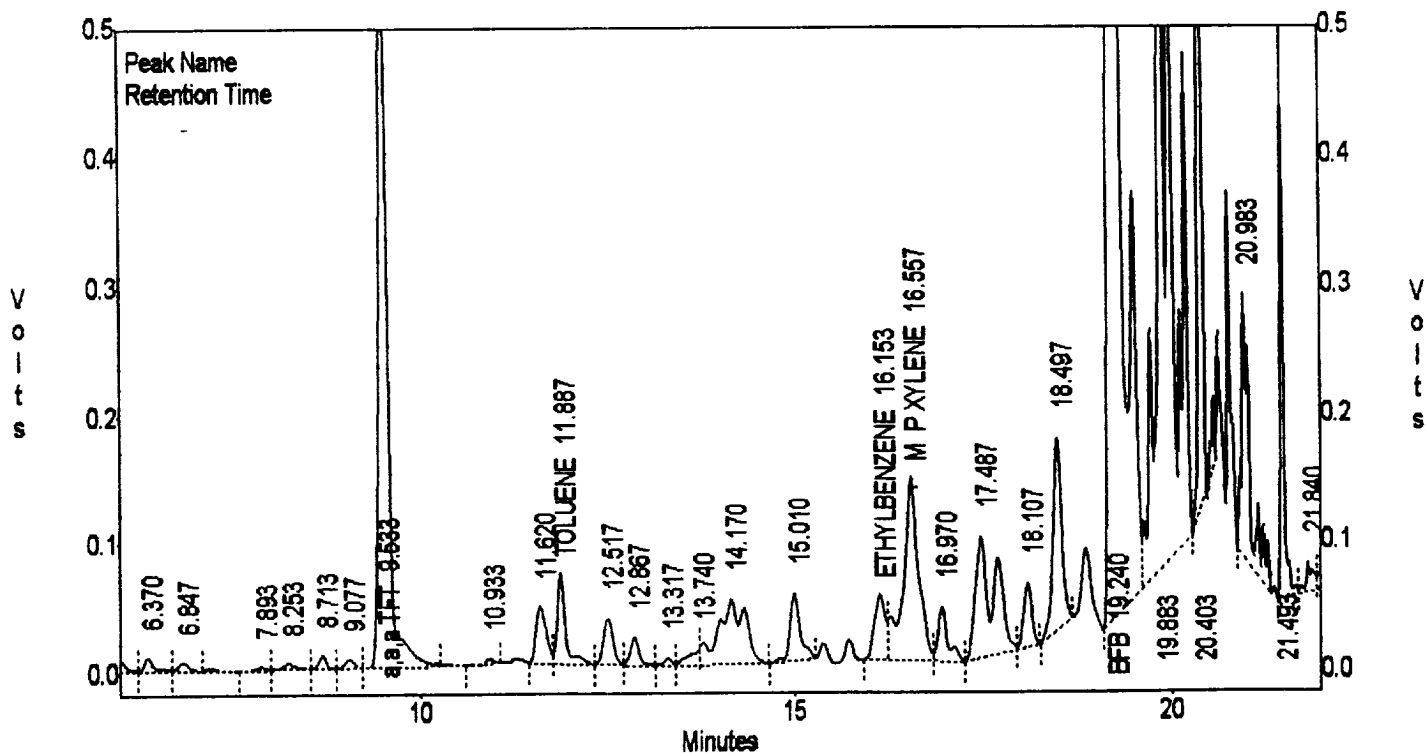
**EL PASO NATURAL GAS  
EPA METHOD 8020 - BTEX SOILS**

File : C:\LABQUEST\CHROM000\946823A  
 Method : C:\LABQUEST\METHODS\9000.MET  
 Sample ID : 946823,5.04/100UL  
 Acquired : May 23, 1995 23:20:43  
 Printed : May 23, 1995 23:46:56  
 User : Tony

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.253	0	0.0000
a,a,a TFT	9.533	4883622	76.4156
TOLUENE	11.887	536240	-3.6555
ETHYLBENZENE	16.153	514928	-2.4023
M & P XYLENE	16.557	2041547	-1.2370
O XYLENE	17.700	0	0.0000
BFB	19.240	56440376	92.5290

C:\LABQUEST\CHROM000\946823A - Channel A



**EL PASO NATURAL GAS**  
**EPA METHOD 8020 - BTEX SOILS**

File : C:\LABQUEST\CHROM000\946823A  
 Method : C:\LABQUEST\METHODS\9000.MET  
 Sample ID : 946823,5.04/100UL  
 Acquired : May 23, 1995 23:20:43  
 Printed : May 23, 1995 23:47:01  
 User : Tony

## Channel B Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	7.370	206025	21.3432
a,a,a TFT	9.540	307814	102.9249
TOLUENE	11.923	0	0.0000
ETHYLBENZENE	16.187	0	0.0000
M & P XYLENE	16.563	54301	16.4973
O XYLENE	17.707	0	0.0000
BFB	19.247	1944802	88.9134

C:\LABQUEST\CHROM000\946823A - Channel B

