

*Stenny & Faust*  
**EL PASO FIELD SERVICES**  
**DEPUTY OIL & GAS INSPECTOR**  
**PRODUCTION PIT CLOSURE**

**DEC 21 1998**

**RECEIVED**  
**JUL 2 1998**

*Approved*  
**DRYDEN 1 E**  
**Meter/Line ID - 94800**

**OIL CON. DIV.**

**SITE DETAILS**

**Legals - Twn: 28**

**Rng: 08**

**Sec: 28**

**Unit: 1**

**NMOCD Hazard Ranking: 40**

**Land Type: 2 - Federal**

**Operator: AMOCO PRODUCTION COMPANY**

**Pit Closure Date: 06/08/94**

**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.

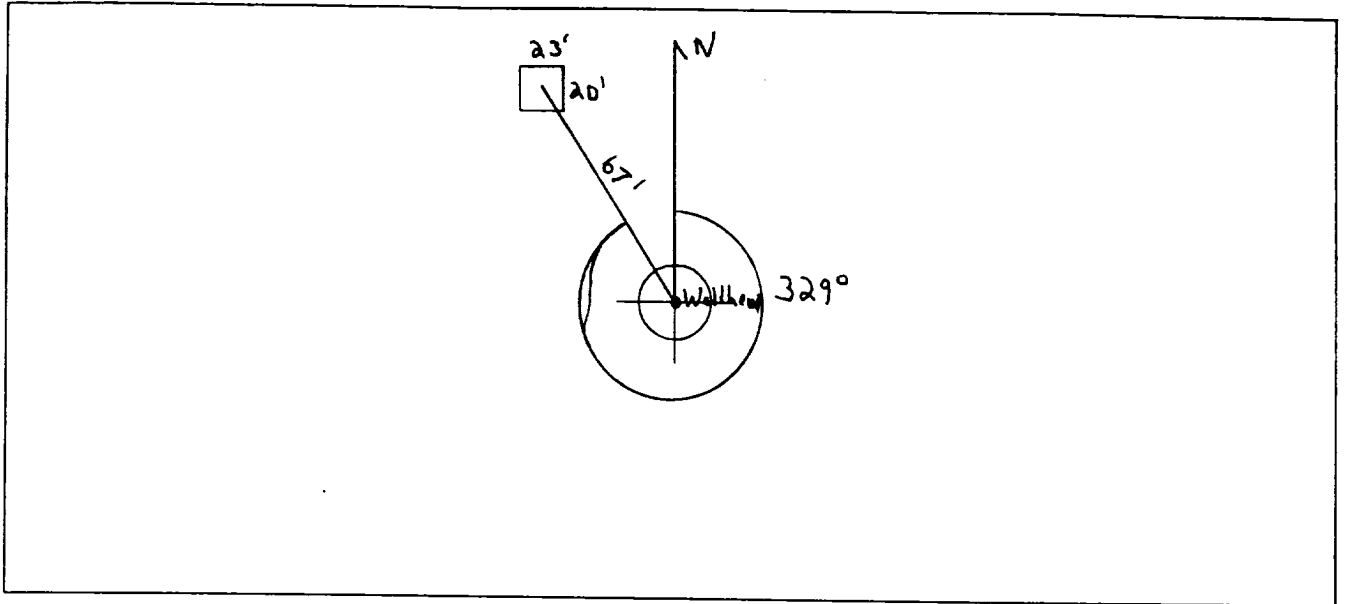
# FIELD PIT SITE ASSESSMENT FORM

GENERAL	<p>Meter: <u>94800</u> Location: <u>Dryden 1-E</u></p> <p>Operator #: <u>0203</u> Operator Name: <u>Amoco</u> P/L District: <u>Blanco</u></p> <p>Coordinates: Letter: <u>I</u> Section <u>28</u> Township: <u>28</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Pit Type: Dehydrator <input checked="" type="checkbox"/> Location Drip: _____ Line Drip: _____ Other: _____</p> <p>Site Assessment Date: <u>5/23/94</u> Area: <u>13</u> Run: <u>31</u></p>
SITE ASSESSMENT	<p><b>NMOCD Zone:</b> (From NMOCD Maps)</p> <p>Inside <input checked="" type="checkbox"/> (1) Outside <input type="checkbox"/> (2)</p> <p><b>Land Type:</b> BLM <input checked="" type="checkbox"/> (1) State <input type="checkbox"/> (2) Fee <input type="checkbox"/> (3) Indian _____</p> <p><b>Depth to Groundwater</b></p> <p>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)</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) 200 Ft to 1000 Ft (10 points) <input type="checkbox"/> (2) Greater Than 1000 Ft (0 points) <input type="checkbox"/> (3)</p> <p>Name of Surface Water Body <u>Large Canyon</u></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) <input type="checkbox"/> (2) &gt; 100'</p> <p><b>TOTAL HAZARD RANKING SCORE:</b> <u>40</u> <b>POINTS</b></p>
REMARKS	<p>Remarks : <u>Redline &amp; Vuln - Inside</u></p> <p><u>3 pits closed. <sup>CML</sup> Andex. Liquid in pit. Called Blanco to have pulled</u></p> <p><u>DIG &amp; HAU</u></p>

### ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 329° Footage from Wellhead 67'  
b) Length : 23' Width : 20' Depth : 5'

ORIGINAL PIT LOCATION



### Remarks :

Pictures @ 1337 (14-23)  
Dump Truck

REMARKS

Completed By:

Cory Chase  
Signature

5/23/94  
Date

# **PHASE I EXCAVATION**



# FIEI PIT REMEDIATION/CLOSURE FORM

<b>GENERAL</b>	<p>Meter: <u>94800</u> Location: <u>Dryden 1-E</u></p> <p>Coordinates: Letter: <u>I</u> Section <u>28</u> Township: <u>28</u> Range: <u>8</u></p> <p>Or Latitude _____ Longitude _____</p> <p>Date Started : <u>6-8-94</u> Area: <u>13</u> Run: <u>31</u></p>
<b>FIELD OBSERVATIONS</b>	<p>Sample Number(s): <sup>KP-6954</sup> <u>KP# 93</u> <del>83</del></p> <p>Sample Depth: <u>12'</u> Feet</p> <p>Final PID Reading <u>236</u> PID Reading Depth <u>12'</u> Feet</p> <p style="text-align: center;">Yes      No</p> <p>Groundwater Encountered <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (2) Approximate Depth _____ Feet</p>
<b>CLOSURE</b>	<p>Remediation Method :</p> <p>Excavation <input checked="" type="checkbox"/> (1) Approx. Cubic Yards <u>100</u></p> <p>Onsite Bioremediation <input type="checkbox"/> (2)</p> <p>Backfill Pit Without Excavation <input type="checkbox"/> (3)</p> <p>Soil Disposition:</p> <p>Envirotech <input type="checkbox"/> (1) <input checked="" type="checkbox"/> (3) Tierra</p> <p>Other Facility <input type="checkbox"/> (2) Name: _____</p> <p>Pit Closure Date: <u>6-8-94</u> Pit Closed By: <u>B.E.I</u></p>
<b>REMARKS</b>	<p>Remarks : <u>Some line marked. Pit HAS some sludge in it</u>  <u>Started Remediating 12' soil turned BLACK. Smells BAD At 12</u>  <u>Soil still same on four walls and bottom of pit.</u></p>
	<p>Signature of Specialist: <u>Kelly Padilla</u></p>



40

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

**SAMPLE IDENTIFICATION**

Field ID

Lab ID

SAMPLE NUMBER:

KP 93

945398

MTR CODE | SITE NAME:

94800

N/A

SAMPLE DATE | TIME (Hrs):

6-8-94

1224

SAMPLED BY:

N/A

DATE OF TPH EXT. | ANAL.:

6/10/94

6/10/94

DATE OF BTEX EXT. | ANAL.:

6/14/94

6/16/94

TYPE | DESCRIPTION:

VC

Red/Grey Clay

REMARKS:

**RESULTS**

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	2.3	MG/KG	20			
TOLUENE	55	MG/KG	20			
ETHYL BENZENE	15	MG/KG	20			
TOTAL XYLENES	250	MG/KG	20			
TOTAL BTEX	322	MG/KG				
TPH (418.1)	5320	MG/KG			2.04	28
HEADSPACE PID	236	PPM				
PERCENT SOLIDS	86.2	%				

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

The Surrogate Recovery was at

Narrative:

192 % for this sample All QA/QC was acceptable.

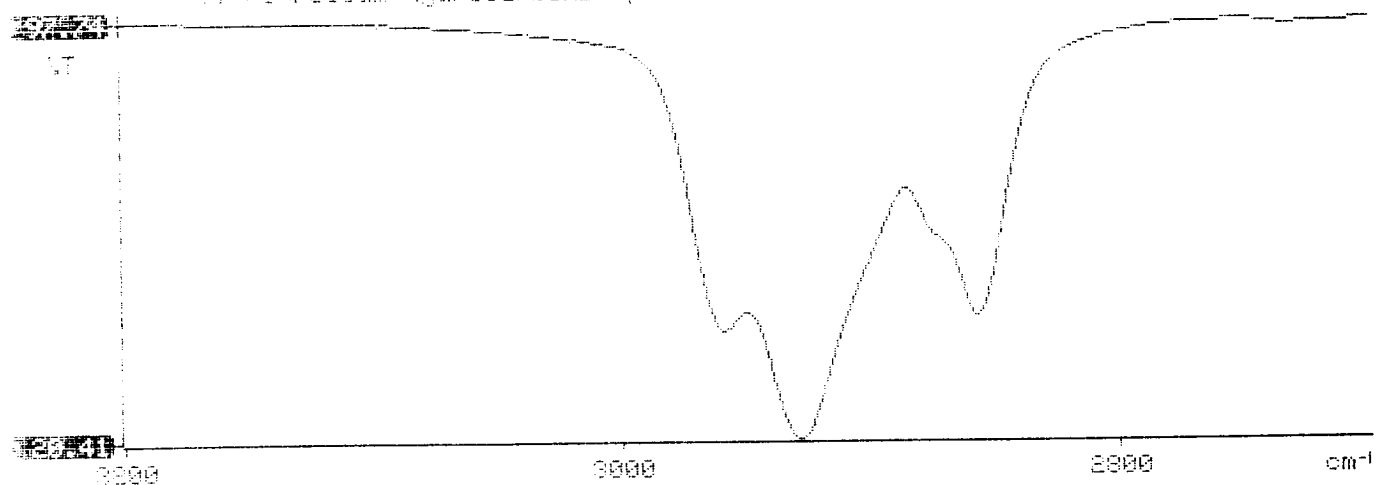
ATI results attached. Surrogate recovery was outside  
ATI QC limits due matrix interference.

DF = Dilution Factor Used

Date:

7/17/94

Perkin-Elmer Model 1600 FT-IR  
Analysis Report







Analytical **Technologies**, Inc.

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

ATI I.D. **406351**

June 21, 1994

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

Project Name/Number: PIT CLOSURE 24324

Attention: John Lambdin

On **06/14/94**, 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.

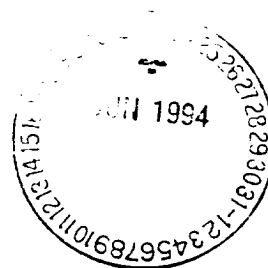
If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

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.: 406351  
 PROJECT # : 24324  
 PROJECT NAME : PIT CLOSURE

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	945397	NON-AQ	06/08/94	06/14/94	06/16/94	1
17	945398	NON-AQ	06/08/94	06/14/94	06/16/94	20
18	945405	NON-AQ	06/09/94	06/14/94	06/16/94	5
PARAMETER			UNITS	16	17	18
BENZENE			MG/KG	<0.025	2.3	<0.12
TOLUENE			MG/KG	0.043	55	0.26
ETHYLBENZENE			MG/KG	<0.025	15	0.13
TOTAL XYLENES			MG/KG	0.032	250	1.6

## SURROGATE:

BROMOFLUOROBENZENE (%) 96 192\* 126\*

\*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 1

Project Name EPNG PITS  
Project Number 14509 Phase 6000 77  
Project Location Dryden I-E 94800

Elevation             
Borehole Location QI-S28-T2R8  
GWL Depth             
Logged By CM CHANCE  
Drilled By K Padilla  
Date/Time Started 8/23/95-0935  
Date/Time Completed 8/23/95-1100

Well Logged By CM Chance  
Personnel On-Site K Padilla, F. Rivera, H. Keil  
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			Drilling Conditions & Blow Counts
							Units: PPM	S	HS	
0				Backfill to 12'						
5										
10										
15	1	15-17	4"	Grn silty CLAY, hard, non plastic, dry			0	28	$\frac{1218}{2657}$	0948 hr
20	2	20-22	8"	Grn silty CLAY, v. stiff, non plastic + Oxidation staining			0	18	$\frac{6}{82}$	0955
25	3	25-26	3"	lt br SAND, f sand, v. dense, dry			0	3	$\frac{3}{0}$	1012
				TOB 26'						
30										
35										
40										

Comments:

CMC 89 (25-26') sent to lab (BTEX, TPH). BH grouted to surface

Geologist Signature

Core Chance



FIELD SERVICES LABORATORY  
ANALYTICAL REPORT

PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID <i>208/24/95</i>
SAMPLE NUMBER:	<i>CMC89</i>	<i>947316 317</i>
MTR CODE   SITE NAME:	<i>94800</i>	<i>Dryden 1-E</i>
SAMPLE DATE   TIME (Hrs):	<i>08/23/95</i>	<i>10:12</i>
PROJECT:	<i>Phase II Drilling</i>	
DATE OF TPH EXT.   ANAL.:	<i>8/24/95</i>	
DATE OF BTEX EXT.   ANAL.:	<i>8/25/95</i>	<i>8/29/95</i>
TYPE   DESCRIPTION:	<i>V6</i>	<i>Light brown sand &amp; sandstones</i>

Field Remarks:

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	<i>&lt; 5</i>	MG/KG				
TOLUENE	<i>&lt; 5</i>	MG/KG				
ETHYL BENZENE	<i>&lt; 5</i>	MG/KG				
TOTAL XYLENES	<i>&lt; 1.5</i>	MG/KG				
TOTAL BTEX	<i>&lt; 3</i>	MG/KG				
TPH (418.1)	<i>77.1</i> <sup><i>2.5</i></sup> <sub><i>8/26/95</i></sub>	MG/KG			<i>2.01</i>	<i>28</i>
HEADSPACE PID	<i>0</i>	PPM				
PERCENT SOLIDS	<i>94.4</i>	%				

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

The Surrogate Recovery was at *87%* for this sample All QA/QC was acceptable.  
Narrative:

DF = Dilution Factor Used

*DP*

*6-5-95*

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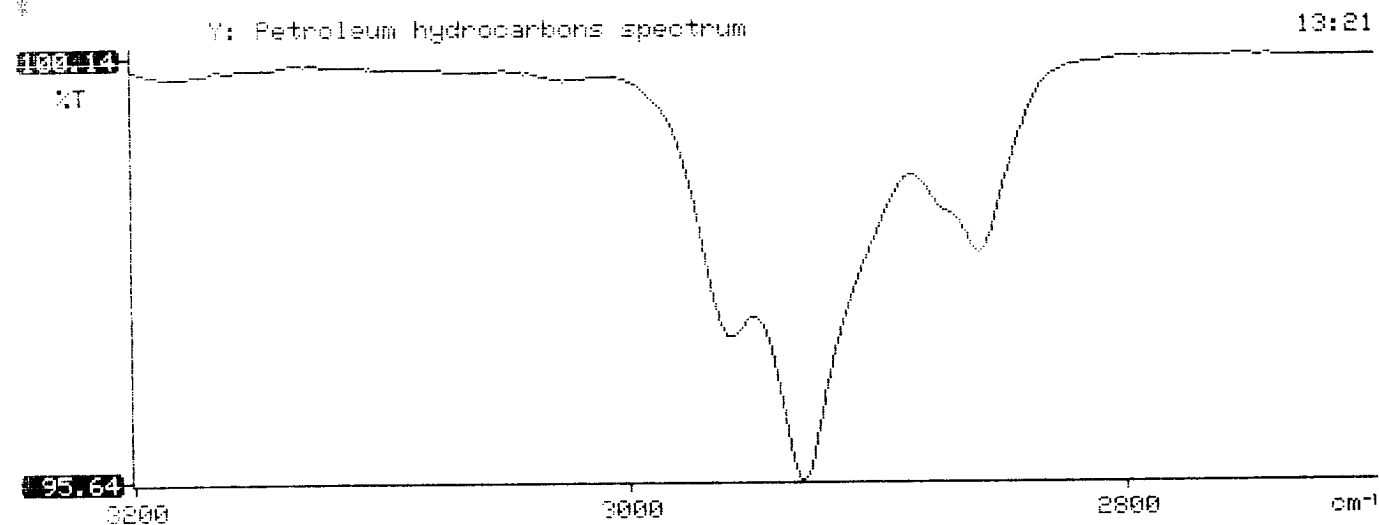
*****
*                               *
*       Test Method for         *
*       Oil and Grease and Petroleum Hydrocarbons *
*       in Water and Soil      *
*                               *
*       Perkin-Elmer Model 1600 FT-IR *
*       Analysis Report         *
*                               *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

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95/08/24 13:21
*
* Sample identification
* 947317
*
* Initial mass of sample, g
* 2.010
*
* Volume of sample after extraction, ml
* 28.000
*
* Petroleum hydrocarbons, ppm
* 77.090
* Net absorbance of hydrocarbons (2930 cm-1)
* 0.020
*
*

```



## BTEX SOIL SAMPLE WORKSHEET

<b>File</b>	<b>:</b>	947317	<b>Date Printed</b>	<b>:</b>	8/31/95
<b>Soil Mass (g)</b>	<b>:</b>	4.98	<b>Multiplier (L/g)</b>	<b>:</b>	0.00100
<b>Extraction vol. (mL)</b>	<b>:</b>	20	<b>DF (Analytical)</b>	<b>:</b>	200
<b>Shot Volume (uL)</b>	<b>:</b>	100	<b>DF (Report)</b>	<b>:</b>	0.20080

				<b>Det. Limit</b>
<b>Benzene (ug/L)</b>	<b>:</b>	0.00	<b>Benzene (mg/Kg):</b>	<b>0.000 0.502</b>
<b>Toluene (ug/L)</b>	<b>:</b>	0.00	<b>Toluene (mg/Kg):</b>	<b>0.000 0.502</b>
<b>Ethylbenzene (ug/L)</b>	<b>:</b>	0.00	<b>Ethylbenzene (mg/Kg):</b>	<b>0.000 0.502</b>
<b>p &amp; m-xylene (ug/L)</b>	<b>:</b>	0.00	<b>p &amp; m-xylene (mg/Kg):</b>	<b>0.000 1.004</b>
<b>o-xylene (ug/L)</b>	<b>:</b>	0.00	<b>o-xylene (mg/Kg):</b>	<b>0.000 0.502</b>
			<b>Total xylenes (mg/Kg):</b>	<b>0.000 1.506</b>
			<b>Total BTEX (mg/Kg):</b>	<b>0.000</b>



# EL PASO NATURAL GAS

## EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\082595-1.026  
 Method : C:\LABQUEST\METHODS\9001.MET  
 Sample ID : 947317,4.98G,100U  
 Acquired : Aug 30, 1995 02:26:48  
 Printed : Aug 30, 1995 02:53:09  
 User : MARLON

### Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	3.367	0	0.0000
a,a,a TFT	4.917	2562967	86.1091
TOLUENE	6.737	0	0.0000
ETHYLBENZENE	10.430	0	0.0000
M & P XYLENE	10.840	0	0.0000
O XYLENE	11.900	0	0.0000
BFB	13.393	38589552	86.8666

