AEE Astbury Environmental Engineering, Inc.
A MEMBER OF THE ASTBURY GROUP

5933 WEST 71ST STREET ▪ INDIANAPOLIS, INDIANA 46278 ▪ 317-290-1471 ▪ FAX: 317-290-1670

September 4, 2002

RECEIVED
SEP 0 9 2002
AIR ENFORCEMENT BRANCH,
U.S. EPA, REGION 5

U.S. EPA Region 5
AE-17J
77 West Jackson Boulevard
Chicago, IL 60604
Attn: Mr. George Czerniak

RE: Compliance Update
40 CFR 63 Subpart MMM
Railworks Wood Products, Inc.
Terre Haute, Indiana
AEE 229.01

Dear Mr. Czerniak:

Last year, it came to the attention of Astbury Environmental Engineering, Inc. (AEE) that the above mentioned facility is required to comply with 40 CFR 63, Subpart MMM, National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production. Railworks Wood Products, Inc. is engaged in, among other processes, blending of oils to produce creosote for wood preservation. The Precompliance plan for the facility has been previously submitted.

Process Description

Creosote production at the facility is accomplished by blending of four heated hydrocarbon oils directly into a tanker truck. Emissions occur only by displacement of air in the truck and by movement of the heated gas to the cooler outside air (no forced air movement or air flow are present). Upon completion of the blending process, the creosote is trucked to other locations on-site.

Preliminary Emissions Testing—Canister

Upon determination of rule applicability to the facility, preliminary emission measurements were obtained by summa canister at the facility on January 29, 2002 during a production run. Results of the summa canister analysis indicated that the concentration of HAPs in the emission stream was likely to be in the parts per billion range by volume. §63.1361 states, in part:

> "*Process vent* means a point of emission from processing equipment to the atmosphere or a control device.[...] A vent is not considered to be a process vent for a given emission episode if the

> undiluted and uncontrolled emission stream that is released through the vent contains less than 20 ppmv HAP, as determined through process knowledge that no HAP are present in the emission stream; using an engineering assessment as discussed in §63.1365(b)(2) [*sic*] (ii); from test data collected using Method 1818 [*sic*] of 40 CFR part 60, appendix A; or from test data collected using any other test method that has been validated according to the procedures in Method 301 of appendix A of this part."

From the preliminary emission data, it appeared that the tanker truck would be likely to fall outside the definition of a process vent by producing less than 20 ppmv of HAPs. Because no other PAI process vents exist at the facility, it would then be exempt from the requirements of 40 CFR 63, Subpart MMM. However, also by the definition, it was necessary to verify the summa canister results through an engineering assessment, testing by Method 18 of 40 CFR 60 Appendix A, or by testing via an alternative approved method.

Emissions Testing—40 CFR 60 Appendix A, Method 25A

It was thought that the low expected HAP concentration in the emission stream would present some difficulties with traditional application of Method 18. Method 18 requires concurrent use of an unspiked sampling train with a sampling train spiked at 40-60% of the expected HAP concentrations. AEE was advised by an accredited testing laboratory that it would not be technically feasible to spike in the parts per billion range, as would be required based on preliminary results. In addition, three replicate samples would be required at a duration of at least one hour each. The batch creosote manufacturing process is typically completed in approximately 45 minutes, meaning that testing during different manufacturing events, possibly under different ambient conditions, would be required to obtain the three samples. A relatively high flow rate would also be required over the 45-minute period to obtain an adequate sample. Based on this information, AEE received approval to employ an alternative test method from U.S. EPA (dated March 28, 2002) allowing testing by 40 CFR 60 Appendix A, Method 25A. This testing was performed on May 3, 2002.

By this method, it was determined that VOCs as TOC were present in the high ppm range, as opposed to the ppb range indicated by initial testing. It was concluded that the initial test equipment malfunctioned or that other unforeseen circumstances led to the initial low readings.

Emissions Testing—40 CFR 60, Appendix A, Method 18

Because it appeared that VOC levels in the emission stream would be higher than the summa canister analysis indicated, it would now be feasible to double-check the Method 25A results using Method 18 as required by the rule. The rationale for this decision was that, in order to size control equipment to comply with the rule, additional data would be helpful. In addition, in the event that HAPs comprised less than 20 ppmv of the VOC stream measured by Method 25A, this analysis could also be used to demonstrate nonapplicability of the rule to Railworks.

Prior to emissions analysis, a sample of the creosote product was analyzed for VOCs and SVOCs by EPA SW-846 Methods 8260 and 8270, respectively. Detected compounds are summarized in Table 1 below.

Compound Detected	Concentration (ppm)
Phenol	5,300
2,4-Dimethylphenol	4,100
Naphthalene	150,000
Acenaphthylene	1,500
Acenaphthene	23,000
Fluorene	23,000
Phenanthrene	80,000
Anthracene	8,300
Fluoranthene	44,000
Pyrene	24,000
Benzo(a)anthracene	6,900
Chrysene	6,200
Benzo(b)fluoranthene	2,800
Benzo(k)fluoranthene	1,600
Benzo(a)pyrene	1,900
Indeno(1,2,3cd)pyrene	420
Benzo(g,h,i)perylene	370
Benzene	3,300
Toluene	4,000
4-Methyl-2-pentanone (MIBK)	140
Ethylbenzene	750
Xylenes	3,800
Styrene	310

Bold=Hazardous Air Pollutant listed in Section 112(b) of the 1990 Clean Air Act Amendments

Based on this information, naphthalene, fluoranthene, phenanthrene, and pyrene were selected for analysis by Method 18 as the most abundant compounds in the creosote mixture. The sample was collected in duplicate with a matrix spike. An average of 1.85 ppmv naphthalene was detected in the emission stream. No fluoranthene, phenanthrene, or pyrene was detected in the emission stream. This result is attributed to the likelihood that much of the volatile TOC previously measured by Method 25A was in the form of non-HAP, straight-chain hydrocarbons. A copy of this analytical report is attached as Appendix A.

It should be noted that three (3) separate sampling events were not conducted. However, this process is not continuous and is conducted on a discrete batch basis, sometimes more rarely than once a week. Therefore, conventional stack testing "runs" would not have the same statistical significance as they would when conducted to measure emissions from an actual stack with a continuous emission stream. The sampling design for the one (1) run conducted was in complete compliance with the requirements of Method 18.

Based on these results, it was determined that 40 CFR 63, Subpart MMM is inapplicable to Railworks due to the emission stream of its only PAI process unit containing less than 20 ppmv HAPs. Unless additional information is obtained contradicting this finding, no further action will be taken by Railworks under Subpart MMM.

Thank you for your assistance in this matter. Should you have any questions or concerns, please feel free to contact this office at your convenience.

Sincerely,
ASTBURY ENVIRONMENTAL ENGINEERING

Jennifer R. Fanson

Jennifer Fanson
Project Manager

Mark Overton

Willis M. Overton, CHMM
Vice President, Industrial Services

JRF/WMO:jrf
Enclosures
Cc: Mr. Sam Sutopo, Railworks Wood Products

APPENDIX A

Analytical Results

Astbury Environmental Engineering, Inc

5933 West 71st Street
Indianapolis, IN 46278

Railworks Wood
Products MACT
(229.01-208)

Analytical Report
(0702-08)

HPLC Analysis

Naphthalene
Phenanthrene
Fluoranthene
Pyrene

Enthalpy Analytical, Inc.
Phone: 919-850-4392 / Fax: 919-850-9012 / www.enthalpy.com
2202 Ellis Road Durham, NC 27703 - 5518

I certify that to the best of my knowledge all analytical data presented in this report:

- Have been checked for completeness
- Are accurate, error-free, and legible
- Have been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized in the appropriate narrative(s)

Michael Steven Schapira

QA Review Performed by: Michael Steven Schapira

Summary of Results

Company	Astbury Environmental Eng
Analyst Initials	AJR
Parameters	PAH HPLC Analysis
# Samples	3 Runs

Client #	229-01-208 / Railworks
Job #	0702-08
PO #	Verbal
Report Date	7/18/2002

Compound	Sample ID / Catch Weight (ug)		
	A	***B***	***C***
Naphthalene	171	28.7	11.2
Phenanthrene	7.60 ND	8.00 ND	6.80 ND
Fluoranthene	7.60 ND	8.00 ND	6.80 ND
Pyrene	7.60 ND	8.00 ND	6.80 ND

Results

Company	Astbury Environmental Eng
Analyst Initials	AJR
Parameters	PAH HPLC Analysis
# Samples	3 Runs

Client #	229-01-208 / Railworks
Job #	0702-08
PO #	Verbal
Report Date	7/18/2002

MDL 0.400 (ug/mL)
LOQ 0.750 (ug/mL)
Compound Naphthalene

Lower Curve Limit 2.14 (ug/mL)
Upper Curve Limit 16.9 (ug/mL)

Sample ID	Lab ID # 1	Lab ID # 2	Analysis Method	Ret Time # 1	Ret Time # 2	% Diff Ret	Conc # 1	Conc # 2	% Diff Conc	Avg Conc (ug/mL)	Vol (mL)	DF	Catch Weight (ug)	Qual
A Imp	003-0301.D	003-0302.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	19.0	1	7.60	ND
A FH	021-0501.D	021-0502.D	0702-08B.	6.30	6.28	0.2	8.77	8.34	2.5	8.55	5.00	4	171	
A BH	005-0601.D	005-0602.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													171	
B Imp	006-0701.D	006-0702.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	20.0	1	8.00	ND
B FH	022-0901.D	022-0902.D	0702-08B.	6.22	6.23	0.2	1.45	1.42	1.0	1.44	5.00	4	28.7	
B BH	008-1001.D	008-1002.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													28.7	
C Imp	009-1101.D	009-1102.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	17.0	1	6.80	ND
C FH	023-1401.D	023-1402.D	0702-08B.	6.22	6.25	0.4	2.29	2.21	1.9	2.25	5.00	1	11.2	
C BH	011-1501.D	011-1502.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													11.2	
Lab Blank	002-0201.D	002-0202.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
MS / A FH*4	012-1601.D	012-1602.D	0702-08B.	6.35	6.37	0.2	17.1	17.1	0.0	17.1	0.345	1	5.91	
												spike amount (µg)	3.30	
												native amount (µg)	2.57	
												spike recovery	101%	

Company	Astbury Environmental Eng
Analyst Initials	AJR
Parameters	PAH HPLC Analysis
# Samples	3 Runs

Client #	229-01-208 / Railworks
Job #	0702-08
PO #	Verbal
Report Date	7/18/2002

MDL 0.400 (ug/mL)
LOQ 0.750 (ug/mL)
Compound Phenanthrene

Lower Curve Limit 2.14 (ug/mL)
Upper Curve Limit 16.9 (ug/mL)

Sample ID	Lab ID # 1	Lab ID # 2	Analysis Method	Ret Time # 1	Ret Time # 2	% Diff Ret	Conc # 1	Conc # 2	% Diff Conc	Avg Conc (ug/mL)	Vol (mL)	DF	Catch Weight (ug)	Qual
A Imp	003-0301.D	003-0302.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	19.0	1	7.60	ND
A FH	004-0401.D	004-0402.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
A BH	005-0601.D	005-0602.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													7.60	ND
B Imp	006-0701.D	006-0702.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	20.0	1	8.00	ND
B FH	007-0801.D	007-0802.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
B BH	008-1001.D	008-1002.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													8.00	ND
C Imp	009-1101.D	009-1102.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	17.0	1	6.80	ND
C FH	010-1301.D	010-1302.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
C BH	011-1501.D	011-1502.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													6.80	ND
Lab Blank	002-0201.D	002-0202.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
MS / A FH*4	012-1601.D	012-1602.D	0702-08B.	10.84	10.86	0.2	10.3	10.3	0.1	10.3	0.345	1	3.54	
												spike amount (µg)	3.37	
												native amount (µg)	0.00	
												spike recovery	105%	

Company	Astbury Environmental Eng
Analyst Initials	AJR
Parameters	PAH HPLC Analysis
# Samples	3 Runs

Client #	229-01-208 / Railworks
Job #	0702-08
PO #	Verbal
Report Date	7/18/2002

MDL 0.400 (ug/mL)
LOQ 0.750 (ug/mL)

Lower Curve Limit 2.14 (ug/mL)
Upper Curve Limit 16.9 (ug/mL)

Compound Fluoranthene

Sample ID	Lab ID # 1	Lab ID # 2	Analysis Method	Ret Time # 1	Ret Time # 2	% Diff Ret	Conc # 1	Conc # 2	% Diff Conc	Avg Conc (ug/mL)	Vol (mL)	DF	Catch Weight (ug)	Qual
A Imp	003-0301.D	003-0302.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	19.0	1	7.60	ND
A FH	004-0401.D	004-0402.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
A BH	005-0601.D	005-0602.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													7.60	ND
B Imp	006-0701.D	006-0702.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	20.0	1	8.00	ND
B FH	007-0801.D	007-0802.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
B BH	008-1001.D	008-1002.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													8.00	ND
C Imp	009-1101.D	009-1102.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	17.0	1	6.80	ND
C FH	010-1301.D	010-1302.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
C BH	011-1501.D	011-1502.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													6.80	ND
Lab Blank	002-0201.D	002-0202.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
MS / A FH*4	012-1601.D	012-1602.D	0702-08B.	14.61	14.66	0.3	10.3	10.3	0.3	10.3	0.345	1	3.56	
												spike amount (µg)	3.42	
												native amount (µg)	0.00	
												spike recovery	104%	

Company	Astbury Environmental Eng
Analyst Initials	AJR
Parameters	PAH HPLC Analysis
# Samples	3 Runs

Client #	229-01-208 / Railworks
Job #	0702-08
PO #	Verbal
Report Date	7/18/2002

MDL 0.400 (ug/mL)
LOQ 0.750 (ug/mL)
Compound Pyrene

Lower Curve Limit 2.14 (ug/mL)
Upper Curve Limit 16.9 (ug/mL)

Sample ID	Lab ID # 1	Lab ID # 2	Analysis Method	Ret Time # 1	Ret Time # 2	% Diff Ret	Conc # 1	Conc # 2	% Diff Conc	Avg Conc (ug/mL)	Vol (mL)	DF	Catch Weight (ug)	Qual
A Imp	003-0301.D	003-0302.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	19.0	1	7.60	ND
A FH	004-0401.D	004-0402.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
A BH	005-0601.D	005-0602.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													7.60	ND
B Imp	006-0701.D	006-0702.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	20.0	1	8.00	ND
B FH	007-0801.D	007-0802.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
B BH	008-1001.D	008-1002.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													8.00	ND
C Imp	009-1101.D	009-1102.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	17.0	1	6.80	ND
C FH	010-1301.D	010-1302.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
C BH	011-1501.D	011-1502.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
													6.80	ND
Lab Blank	002-0201.D	002-0202.D	0702-08B.	NA	NA	NA	0.400	0.400	NA	0.400	5.00	1	2.00	ND
MS / A FH*4	012-1601.D	012-1602.D	0702-08B.	15.97	16.01	0.3	8.86	8.81	0.3	8.83	0.345	1	3.05	
												spike amount (µg)	2.88	
												native amount (µg)	0.00	
												spike recovery	106%	

Narrative Summary

Enthalpy Analytical Narrative Summary

Company:	Astbury Environmental Engineers
Client #:	229-01-208
PO #:	Verbal

Enthalpy #:	0702-08
Analyst:	AJR
Parameters:	EPA Method 8310

Custody

Scott Grosshandler received the samples on July 2 and 16, 2002 after being relinquished by Astbury Environmental Engineers, Inc. Samples were cold upon arrival and kept cold during storage. Prior to and during analysis they were kept under lock with access only by authorized personnel of Enthalpy Analytical, Inc.

Sample Prep

Methylene chloride rinse/extracts with glass beads received from the field were further rinsed with methylene chloride in house to ensure total sample recovery while determining sample final volume. Front and back tube fractions were desorbed separately in 5 mL methylene chloride. Aliquots were evaporated to dryness and resuspended in an equal volume of acetonitrile prior to analysis. Any dilution was performed on the resuspension.

Analysis

All samples were analyzed for a panel of polynuclear aromatic hydrocarbons (PAHs) on a Hewlett-Packard Model 1100 high performance liquid chromatograph (HPLC) with the wavelength set at 254 nm.

Separation

The following table shows approximate retention times for each analyte.

Analyte	Retention Time
Naphthalene	6.3
Phenanthrene	10.9
Fluoranthene	14.6
Pyrene	16.0

Chromatographic conditions

Attached is the method used for these analyses (0702-08A.m), which describes the column and all other applicable analytical parameters.

Matrix Spike

A 0.300-mL aliquot of sample ***A FH*** (diluted four-fold) was spiked with naphthalene, phenanthrene, fluoranthene, and pyrene (45 µL of a solution containing 73.3, 74.9, 76.0, and 64.1 µg/mL of these compounds respectively). The spiked sample aliquot was analyzed in the same manner as the other samples. The following table shows the calculated spike recovery % for each analyte.

Analyte	Spike Recovery
Naphthalene	101%
Phenanthrene	105%
Fluoranthene	104%
Pyrene	106%

Labeling

OK

Calibration

A six-point initial calibration was prepared and analyzed. The correlation coefficient for each of the four compounds was in the range of 0.99993 to 0.99995. Continuing calibration standards were analyzed before and after the samples, and met our internal criterion of +/-10% of tag value.

Reporting Notes

The symbols *MDL* and *LOQ* represent the Minimum Detection Limit and the Limit of Quantification.

The symbols *ND* following a value indicate a non-detect or analytical result below the MDL.

The symbol *J* following a value indicates an analytical result between the MDL and the LOQ.

The symbol *E* following a value indicates an analytical result exceeding 125% of the highest calibration point.

Sample Custody

AEE Astbury Environmental Engineering Inc.

A Member of the Astbury Group

CHAIN OF CUSTODY RECORD

Project No. 229.01-208

Project Name: Railworks wood Products MACT

Samplers (Signature): [signature] / Jennifer R. Jensen

Sta. No.	Date	Time	Comp	Grab	Station Location	No. of Containers	Method 18									Remarks
1	6/28/02	11:15 AM	X		Tanker truck hatch, sample A	1	X									Sample vials are labeled A, B, and C. I am also
1	↓	↓	X		Tanker truck hatch, sample B	1	X									enclosing one unused unspiked vial and one
1	↓	↓	X		Tanker truck hatch, sample C	1	X									unused spiked vial of glass beads that you sent to us, JRJ
																(and the 3 impingers)

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	7/1 9:35	Jennifer R. Jensen			
Jennifer R. Jensen	7/1 10:00 AM				
Relinquished by: (Signature)	Date / Time	Received for laboratory by: (Signature)	Remarks:		
		[signature] 7-2-02	9:30 AM		

AEE Astbury Environmental Engineering Inc.

A Member of the Astbury Group

CHAIN OF CUSTODY RECORD

Project No. 229.01-208

Project Name: Railworks Wood Products

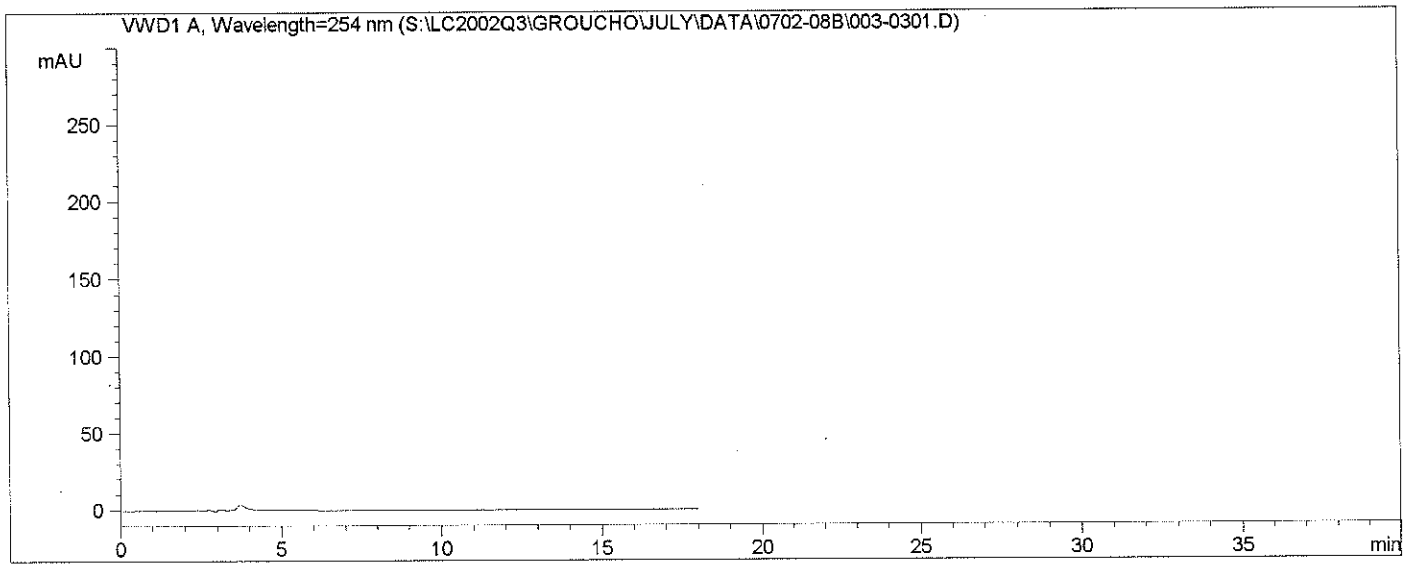
Samplers (Signature): Mack [illegible]

Sta. No.	Date	Time	Comp	Grab	Station Location	No. of Containers	Naphthalene*								Remarks
	6/28			X	A	1 ~~X~~	✓								* Please also proceed
					B	1 ~~X~~	✓								with analysis of other
					C	1 ~~X~~	✓								analytes, as well,
															as we have discussed.

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[illegible] UPS	7/15/02 9:12 AM				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for laboratory by: (Signature)	Remarks:		
		[illegible] 7.16.02 / 9:15 am			

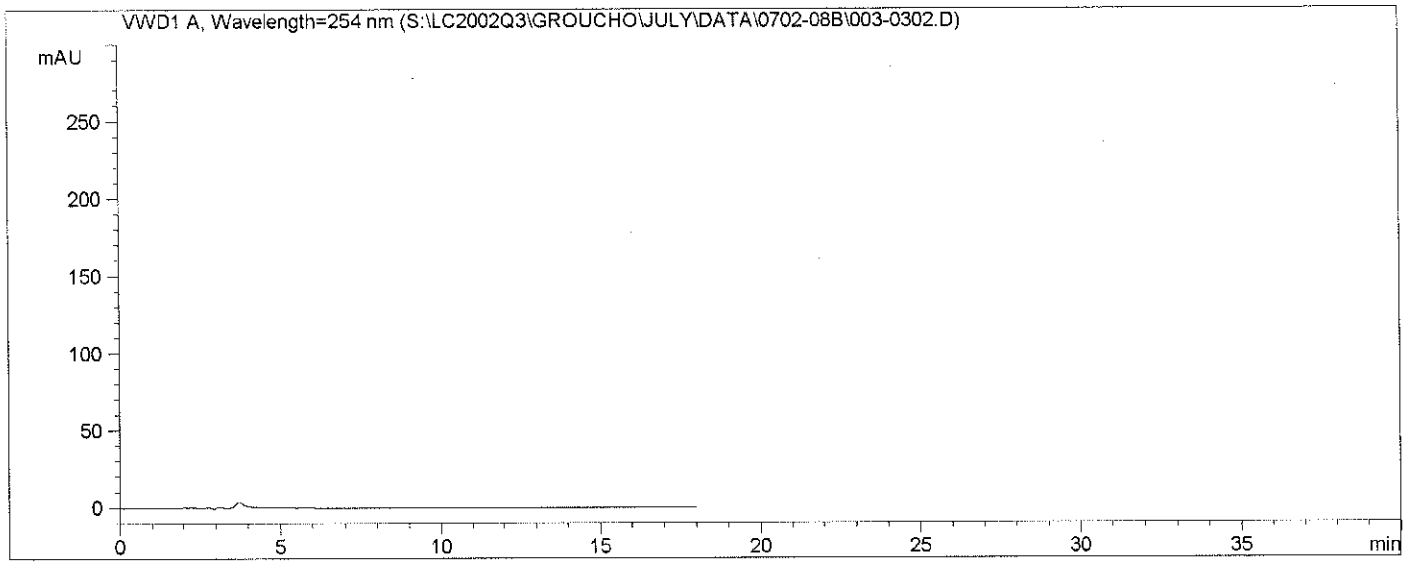
Sample Chromatograms

```
==========================================================================
Injection Date  : 7/16/2002 12:29:07 PM          Seq. Line :   3
Sample Name     : A Imp                               Vial :   3
Acq. Operator   : ajr                                  Inj :   1
                                                 Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171           -          -          -          Naphthalene
 10.361           -          -          -          Phenanthrene
 13.873           -          -          -          Fluoranthene
 15.144           -          -          -          Pyrene

Totals :                                 0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

```
==========================================================================
Injection Date  : 7/16/2002 12:48:46 PM          Seq. Line :   3
Sample Name     : A Imp                               Vial :   3
Acq. Operator   : ajr                                  Inj :   2
                                                 Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```

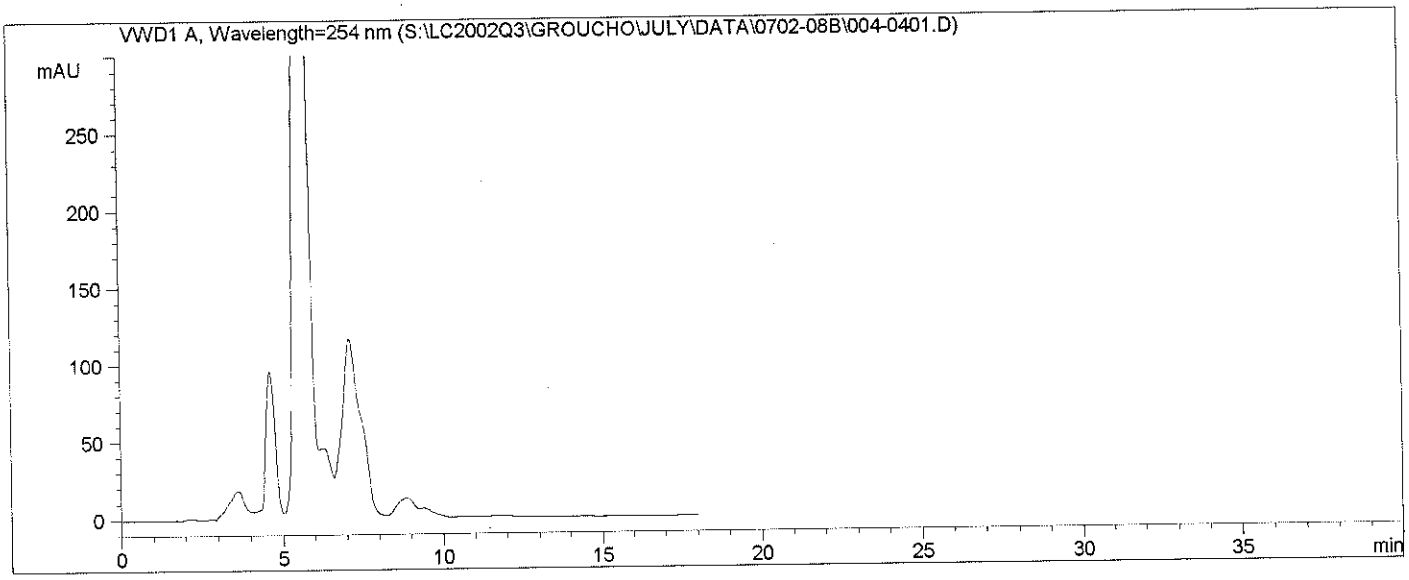



```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]         mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171            -          -          -          Naphthalene
 10.361            -          -          -          Phenanthrene
 13.873            -          -          -          Fluoranthene
 15.144            -          -          -          Pyrene

Totals :                                 0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

Injection Date : 7/16/2002 1:08:25 PM
Sample Name : A Tube FH
Acq. Operator : ajr

Seq. Line : 4
Vial : 4
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



External Standard Report

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 0.00000

Results obtained with enhanced integrator!
2 Warnings or Errors :

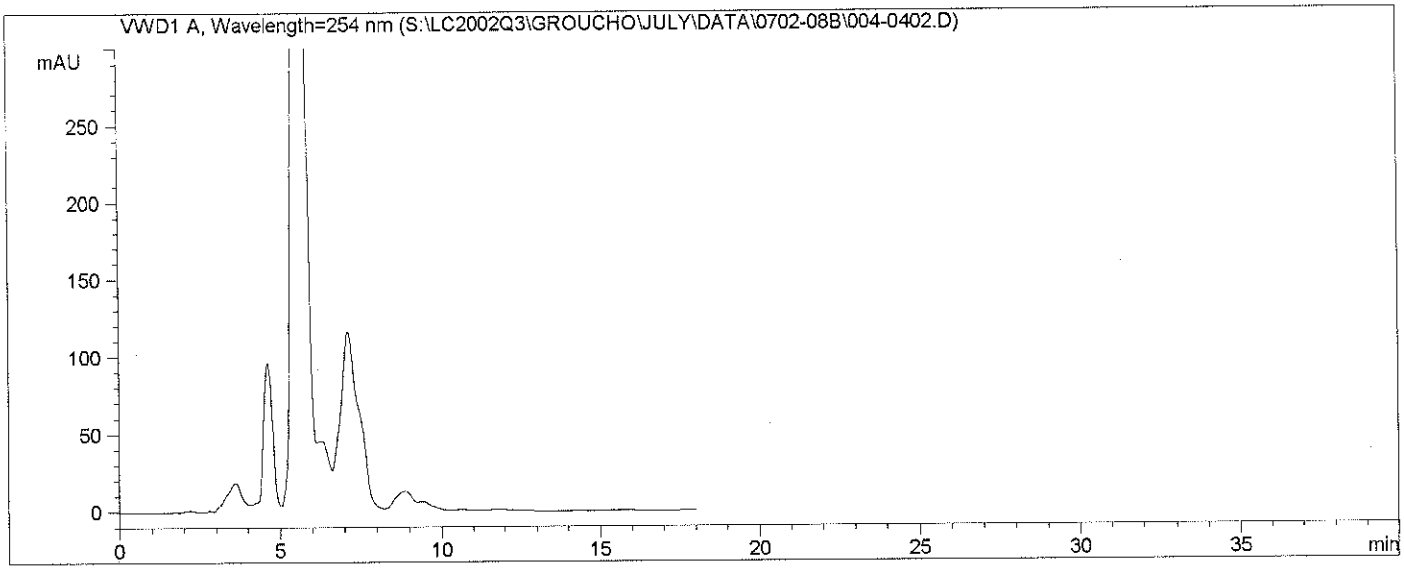
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

Injection Date : 7/16/2002 1:28:04 PM
Sample Name : A Tube FH
Acq. Operator : ajr

Seq. Line : 4
Vial : 4
Inj : 2
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 0.00000

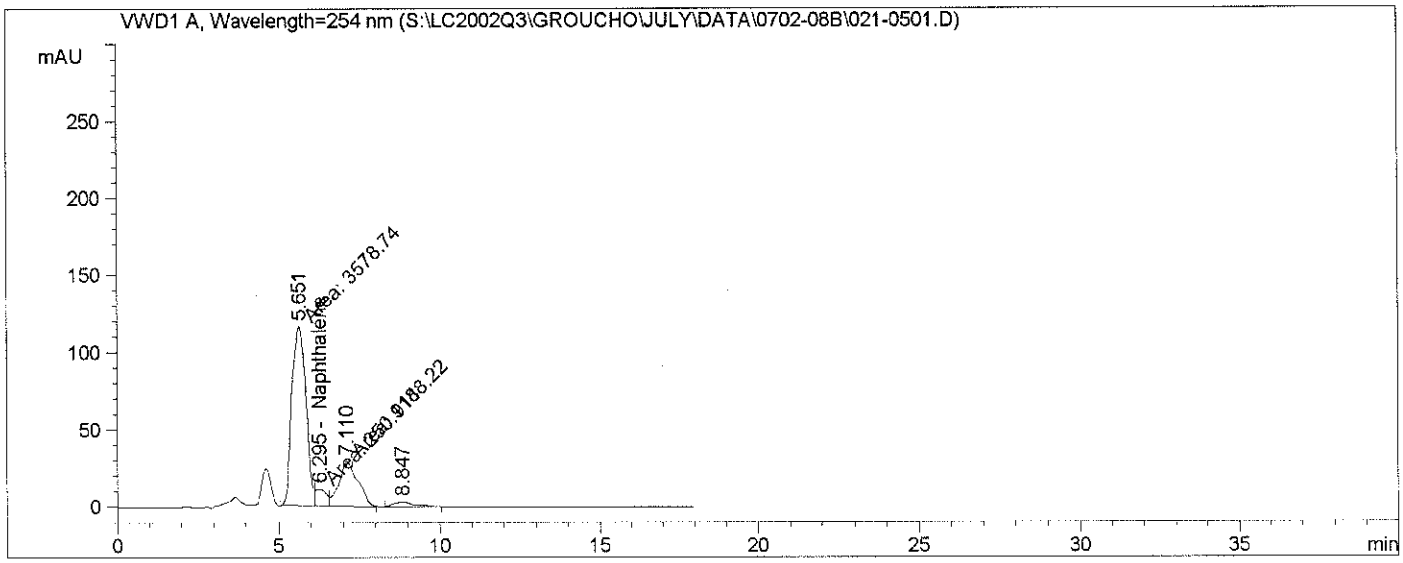
Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

==========

Injection Date : 7/16/2002 1:47:40 PM Seq. Line : 5
Sample Name : A Tube BH*4 Vial : 21
Acq. Operator : ajr Inj : 1
Inj Volume : 20 µl
Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.295	MF	250.91098	3.49334e-2	8.76516		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 8.76516

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

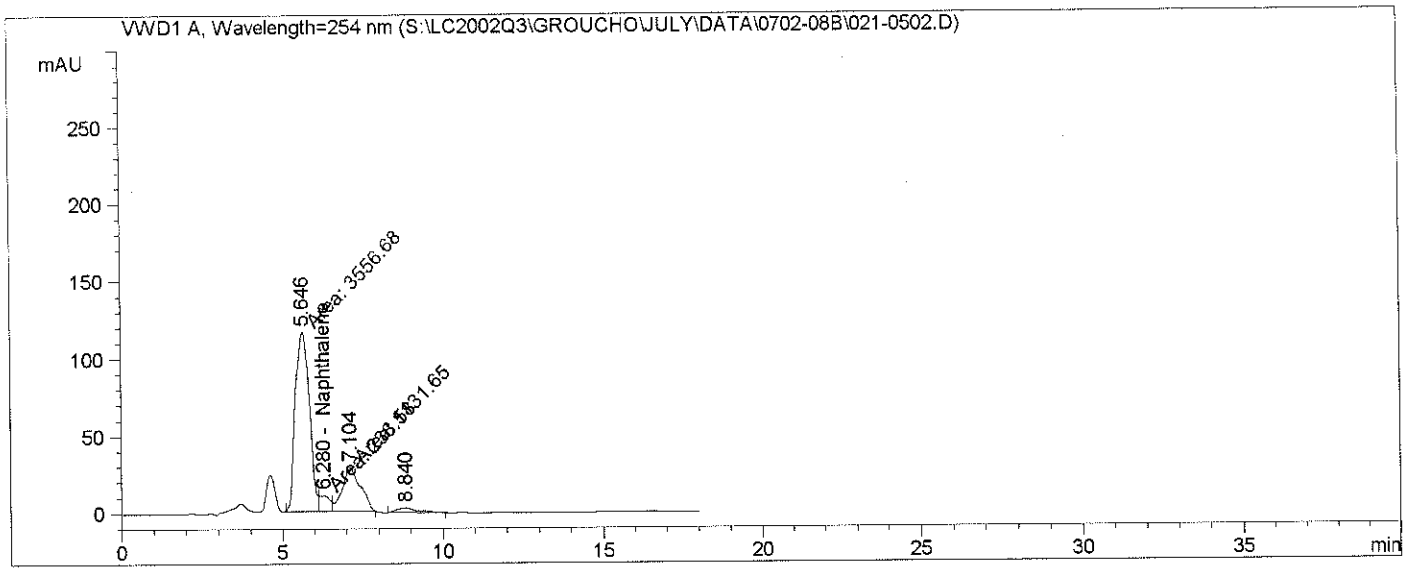
*** End of Report ***

==========

Injection Date : 7/16/2002 2:07:19 PM
Sample Name : A Tube BH*4
Acq. Operator : ajr

Seq. Line : 5
Vial : 21
Inj : 2
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.280	MF	238.58040	3.49391e-2	8.33579		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 8.33579

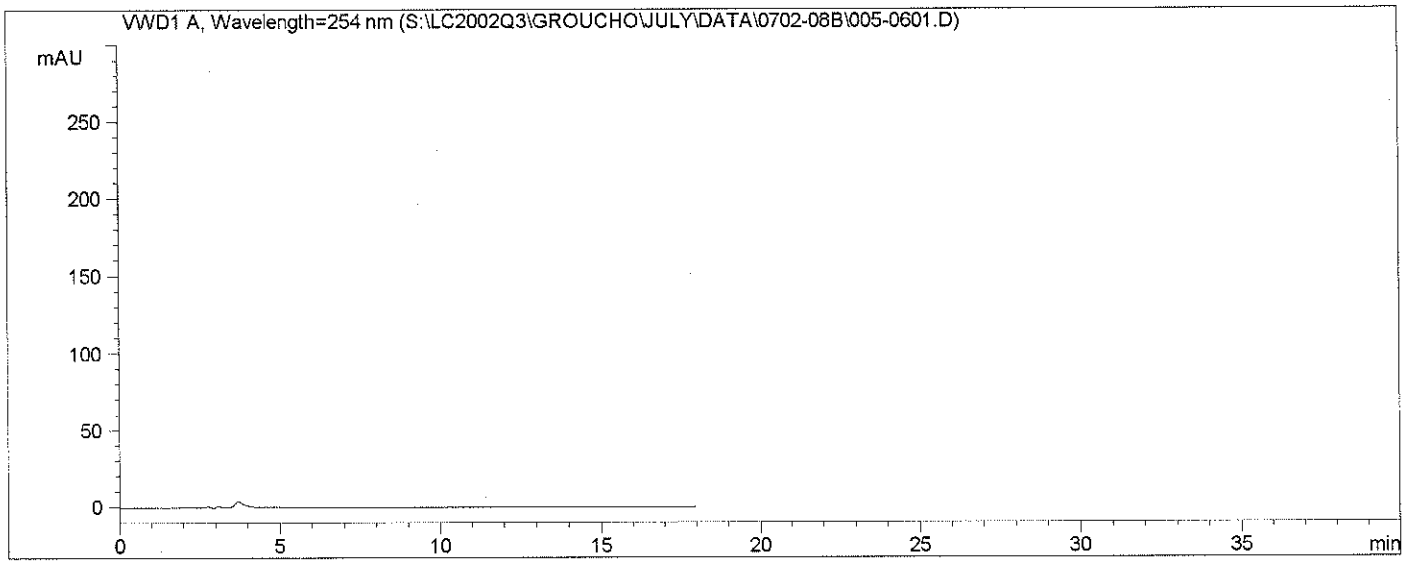
Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

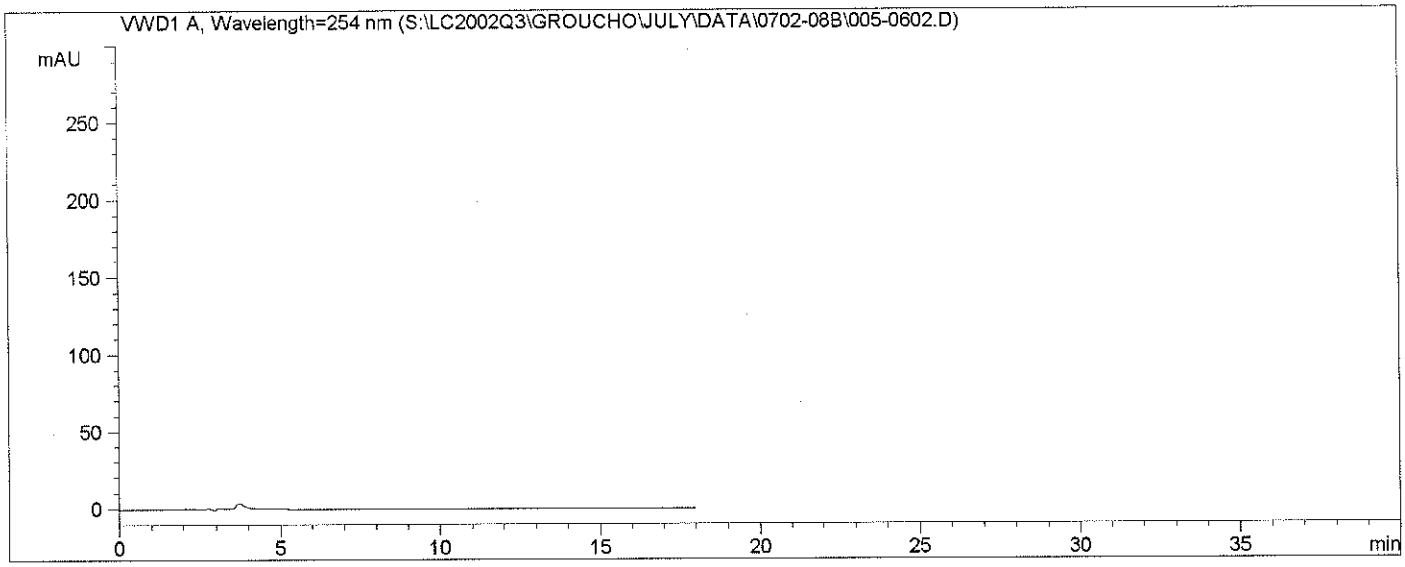
*** End of Report ***

```
==================================================================
Injection Date  : 7/16/2002 2:26:55 PM          Seq. Line :   6
Sample Name     : A Tube BH                          Vial :   5
Acq. Operator   : ajr                                 Inj :   1
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```



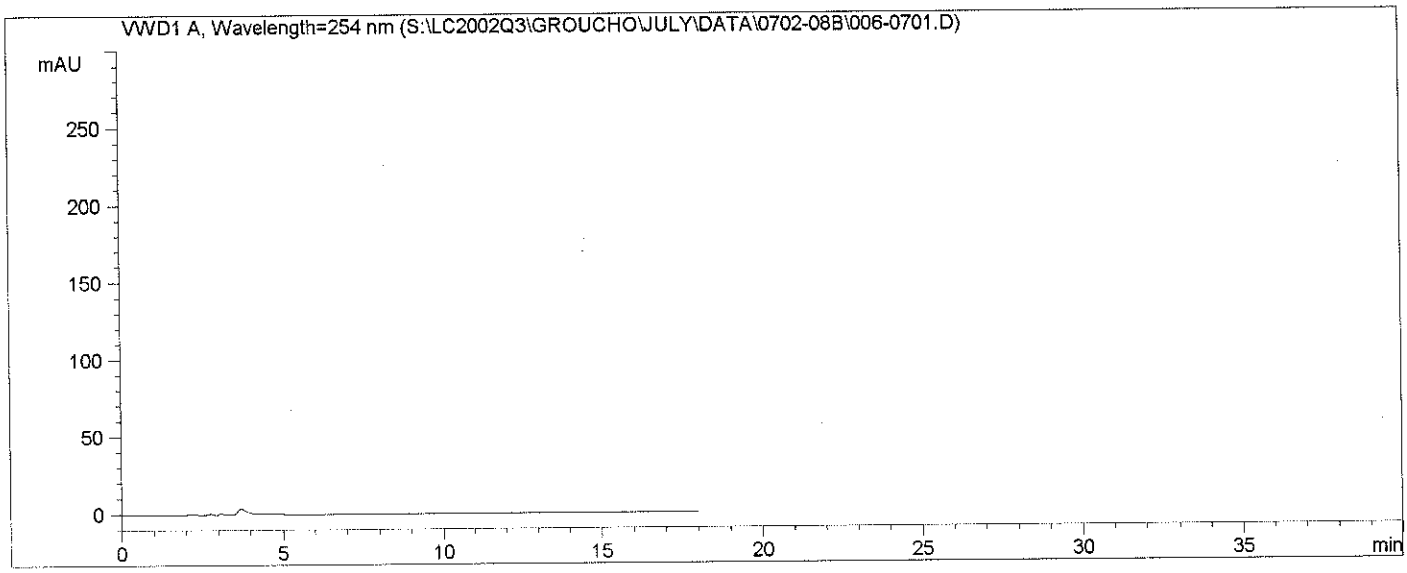

```
==================================================================
                      External Standard Report
==================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|-------------------
  6.171            -          -          -          Naphthalene
 10.361            -          -          -          Phenanthrene
 13.873            -          -          -          Fluoranthene
 15.144            -          -          -          Pyrene

Totals :                                  0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==================================================================
```

```
==========================================================================
Injection Date  : 7/16/2002 2:46:31 PM          Seq. Line :   6
Sample Name     : A Tube BH                          Vial :   5
Acq. Operator   : ajr                                 Inj :   2
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```



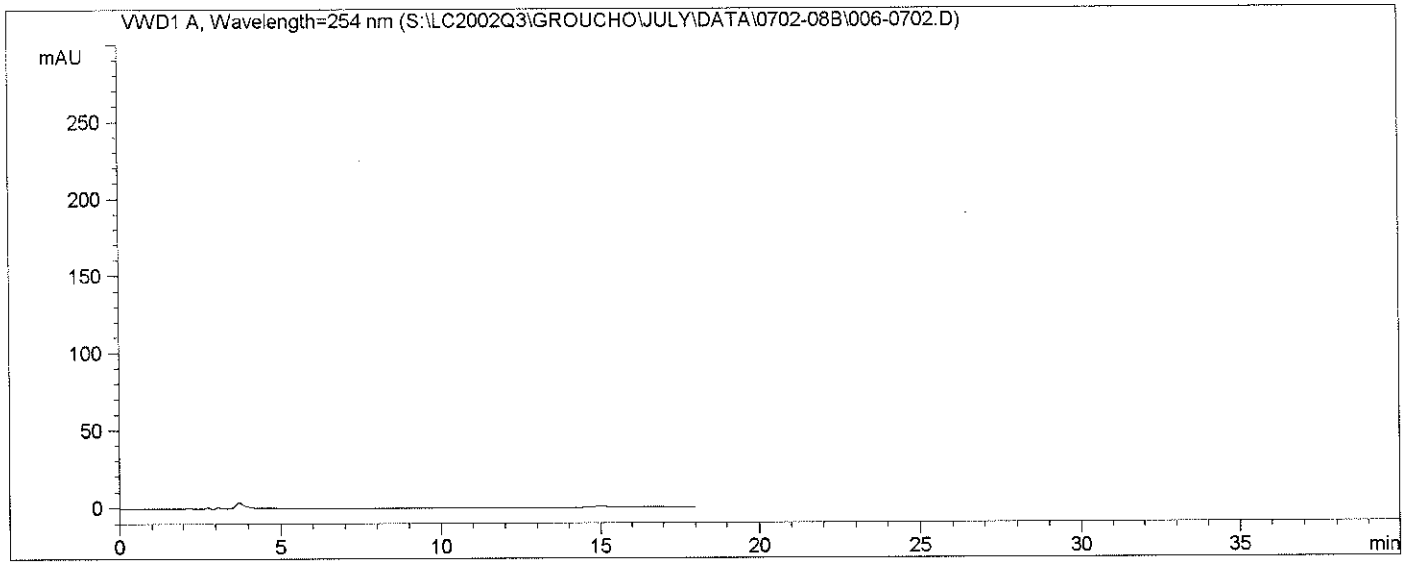

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By             :      Signal
Calib. Data Modified  :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171           -          -          -         Naphthalene
 10.361           -          -          -         Phenanthrene
 13.873           -          -          -         Fluoranthene
 15.144           -          -          -         Pyrene

Totals :                                 0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

```
==================================================================
Injection Date  : 7/16/2002 3:06:06 PM          Seq. Line :   7
Sample Name     : B Imp                              Vial :   6
Acq. Operator   : ajr                                 Inj :   1
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==================================================================
                      External Standard Report
==================================================================

Sorted By             :      Signal
Calib. Data Modified  :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier            :      1.0000
Dilution              :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171          -          -          -          Naphthalene
 10.361          -          -          -          Phenanthrene
 13.873          -          -          -          Fluoranthene
 15.144          -          -          -          Pyrene

Totals :                                 0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==================================================================
```

```
==========================================================================
Injection Date  : 7/16/2002 3:25:43 PM          Seq. Line :   7
Sample Name     : B Imp                              Vial :   6
Acq. Operator   : ajr                                 Inj :   2
                                                Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```



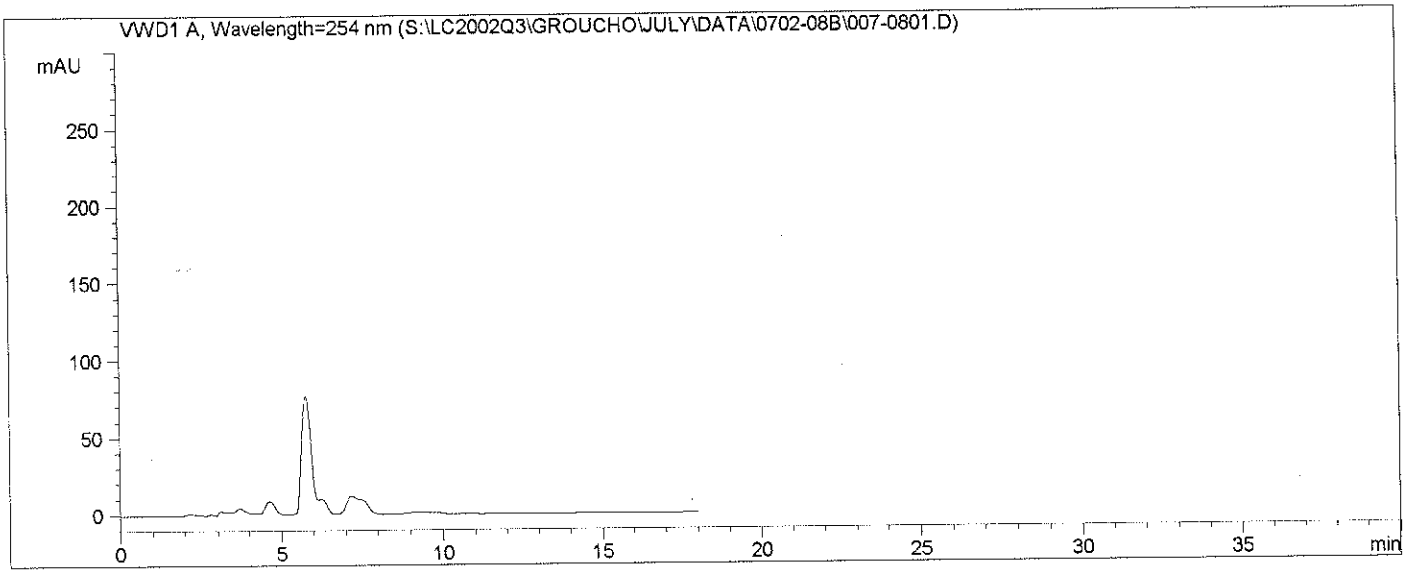

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type      Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171            -          -          -          Naphthalene
 10.361            -          -          -          Phenanthrene
 13.873            -          -          -          Fluoranthene
 15.144            -          -          -          Pyrene

Totals :                                  0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

==========

Injection Date : 7/16/2002 3:45:20 PM
Sample Name : B Tube FH
Acq. Operator : ajr

Seq. Line : 8
Vial : 7
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 0.00000

Results obtained with enhanced integrator!
2 Warnings or Errors :

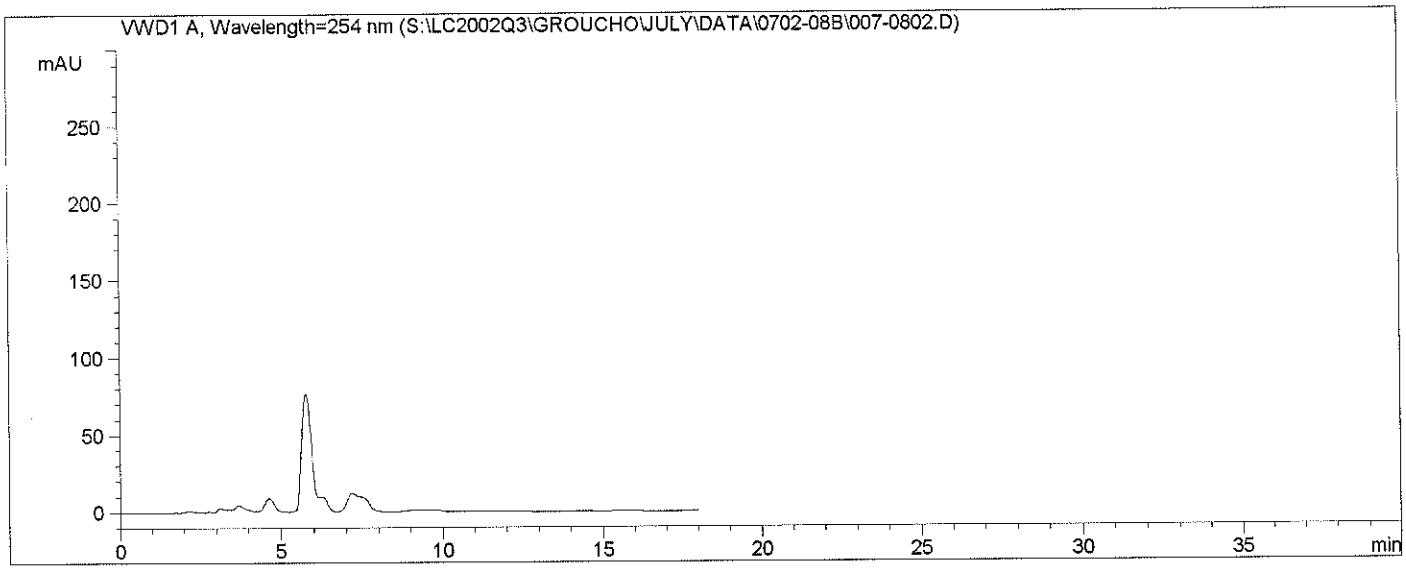
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

==========

Injection Date : 7/16/2002 4:04:58 PM Seq. Line : 8
Sample Name : B Tube FH Vial : 7
Acq. Operator : ajr Inj : 2
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 0.00000

Results obtained with enhanced integrator!
2 Warnings or Errors :

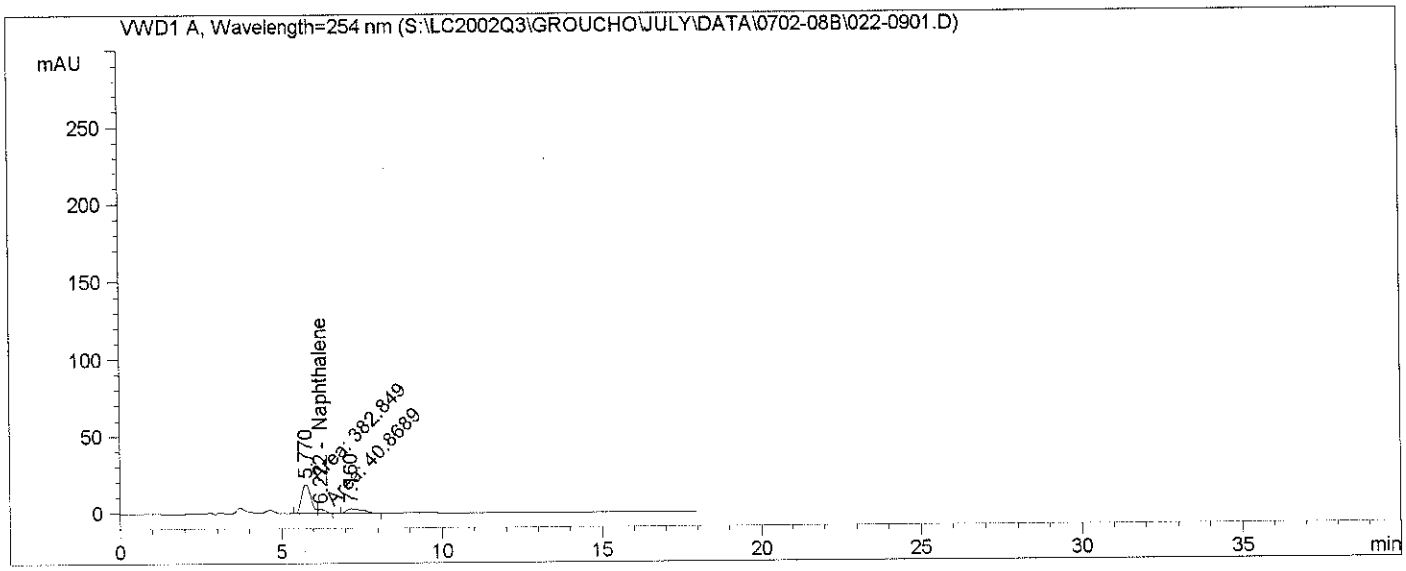
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

==========

Injection Date : 7/16/2002 4:41:40 PM Seq. Line : 9
Sample Name : B Tube FH*4 Vial : 22
Acq. Operator : ajr Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.222	FM	40.86887	3.55064e-2	1.45111		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 1.45111

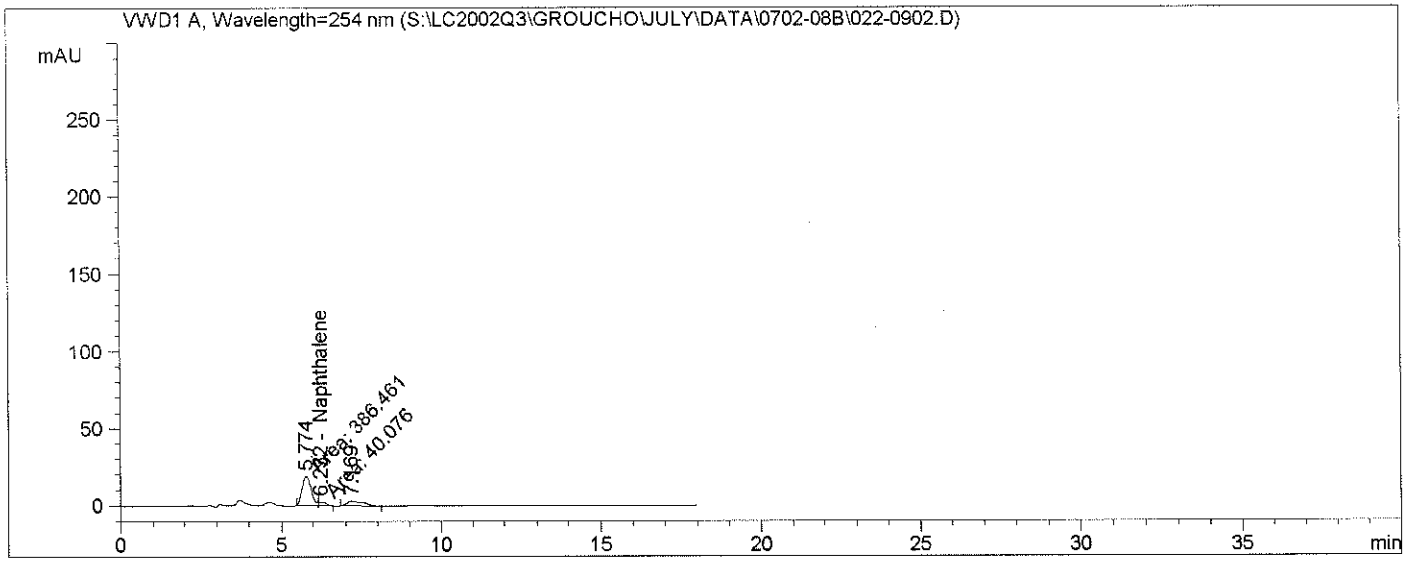
Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

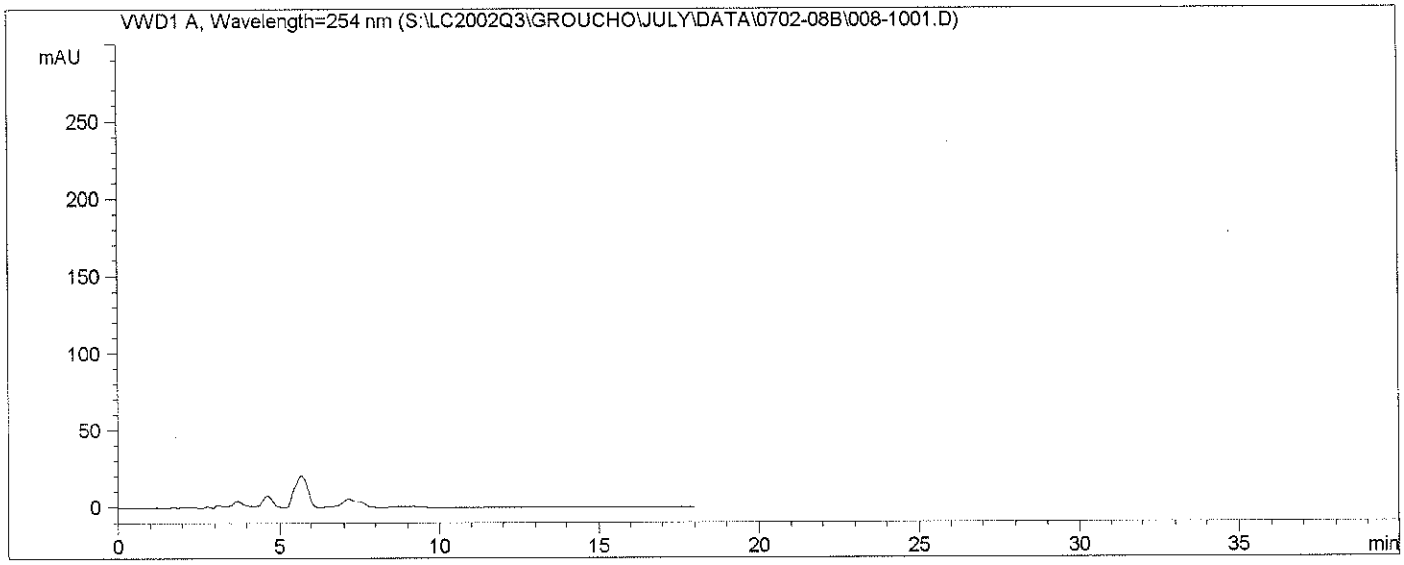
*** End of Report ***

```
==========================================================================
Injection Date  : 7/16/2002 5:01:18 PM          Seq. Line :   9
Sample Name     : B Tube FH*4                        Vial :  22
Acq. Operator   : ajr                                 Inj :   2
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.232 FM       40.07595 3.55199e-2    1.42350     Naphthalene
 10.361            -          -          -          Phenanthrene
 13.873            -          -          -          Fluoranthene
 15.144            -          -          -          Pyrene

Totals :                                 1.42350

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
                          *** End of Report ***
```

```
==========================================================================
Injection Date  : 7/16/2002 5:20:55 PM          Seq. Line :  10
Sample Name     : B Tube BH                          Vial :   8
Acq. Operator   : ajr                                 Inj :   1
                                                Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```



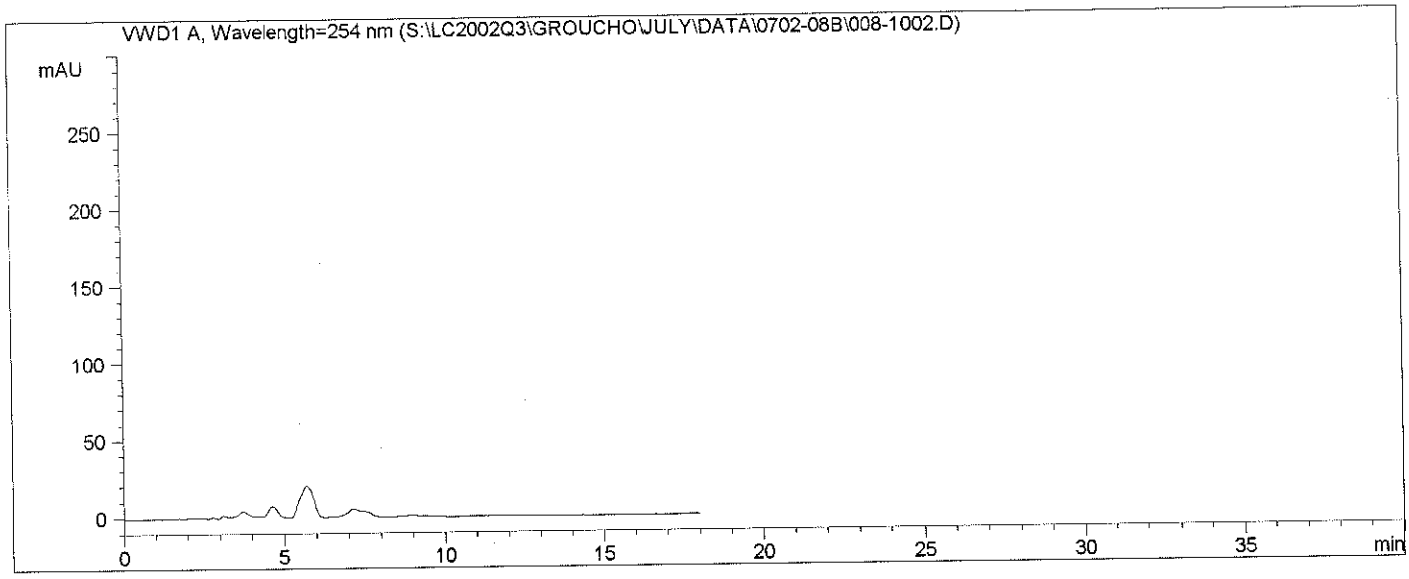

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171            -          -          -          Naphthalene
 10.361            -          -          -          Phenanthrene
 13.873            -          -          -          Fluoranthene
 15.144            -          -          -          Pyrene

Totals :                                  0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

==========

Injection Date : 7/16/2002 7:23:40 PM
Sample Name : B Tube BH
Acq. Operator : ajr

Seq. Line : 10
Vial : 8
Inj : 2
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

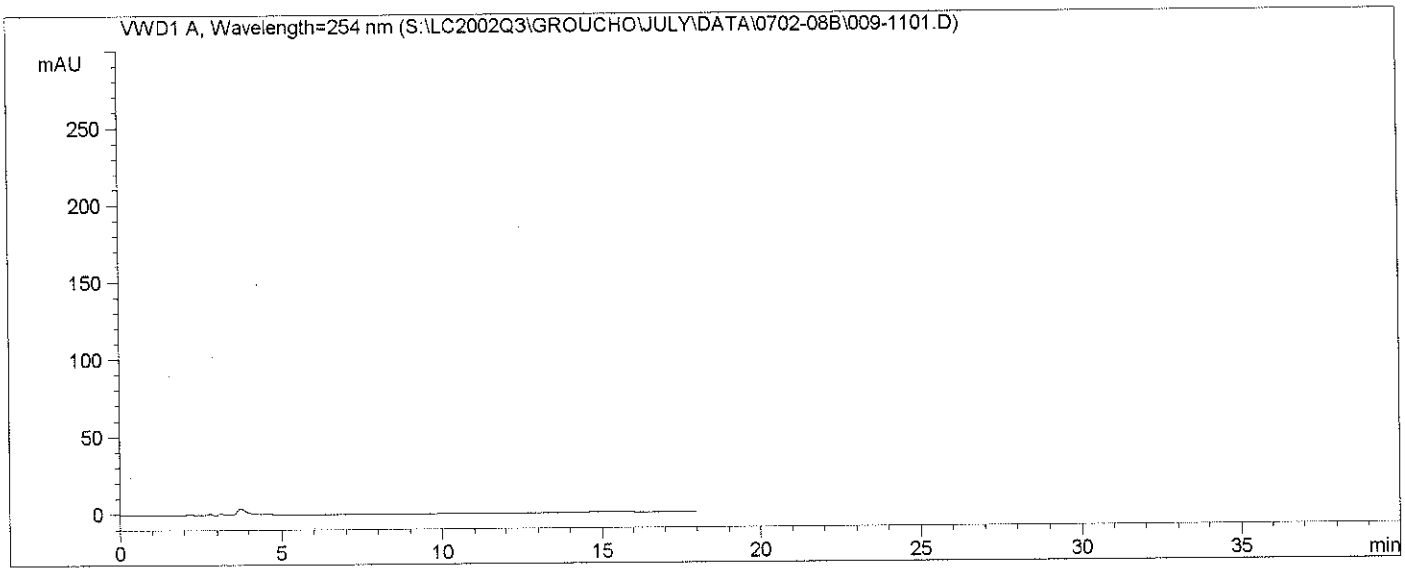
RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

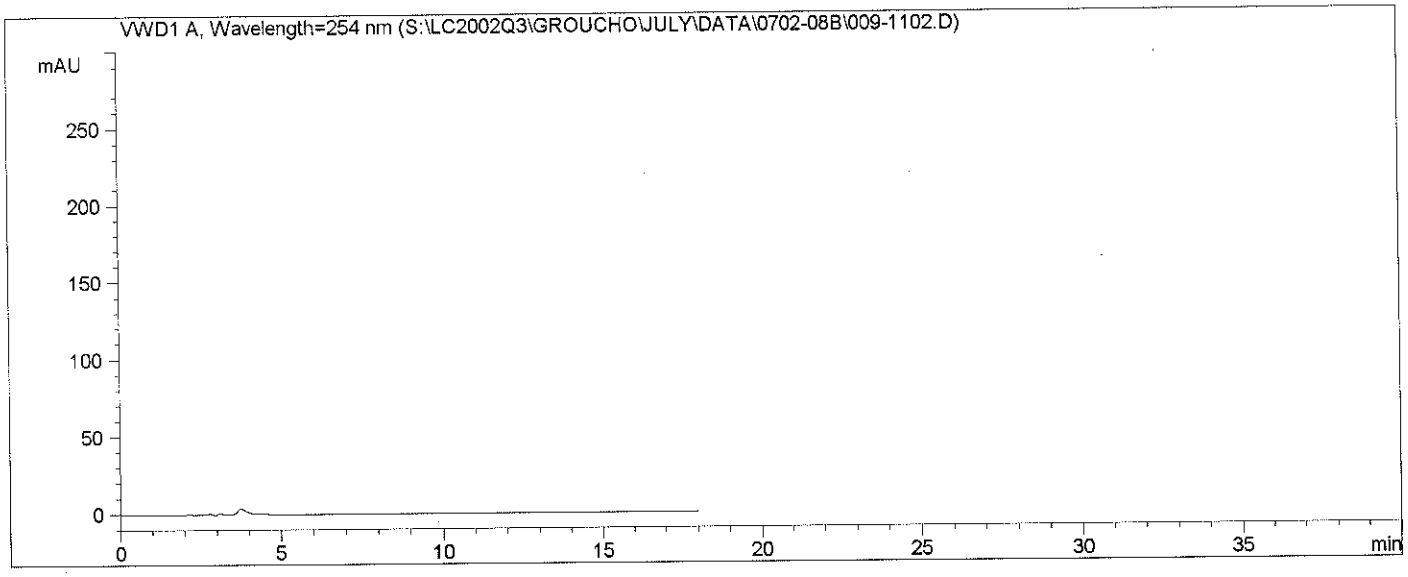
==========

```
==========================================================================
Injection Date  : 7/16/2002 7:43:19 PM          Seq. Line :  11
Sample Name     : C Imp                              Vial :   9
Acq. Operator   : ajr                                 Inj :   1
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```



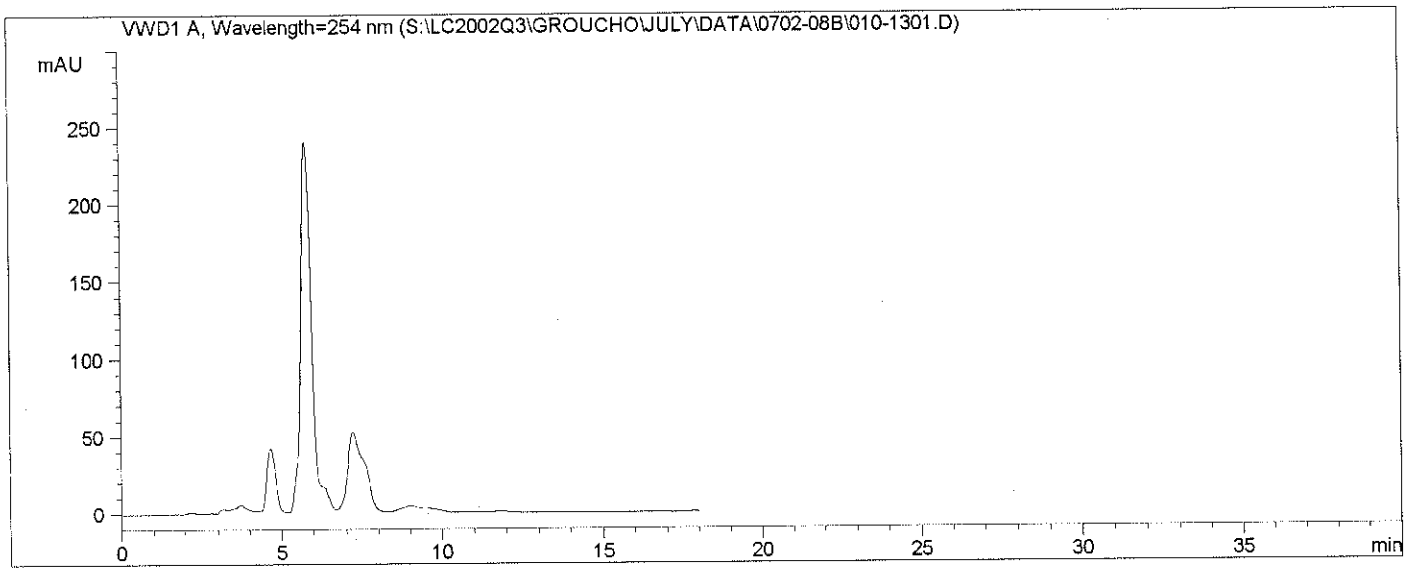

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171          -         -          -          Naphthalene
 10.361          -         -          -          Phenanthrene
 13.873          -         -          -          Fluoranthene
 15.144          -         -          -          Pyrene

Totals :                                 0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

```
==========================================================================
Injection Date  : 7/16/2002 8:02:58 PM          Seq. Line :  11
Sample Name     : C Imp                               Vial :   9
Acq. Operator   : ajr                                  Inj :   2
                                                Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171          -          -          -         Naphthalene
 10.361          -          -          -         Phenanthrene
 13.873          -          -          -         Fluoranthene
 15.144          -          -          -         Pyrene

Totals :                                 0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

```
==========================================================================
Injection Date  : 7/16/2002 9:02:33 PM          Seq. Line :  13
Sample Name     : C Tube FH                          Vial :  10
Acq. Operator   : ajr                                 Inj :   1
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm
```

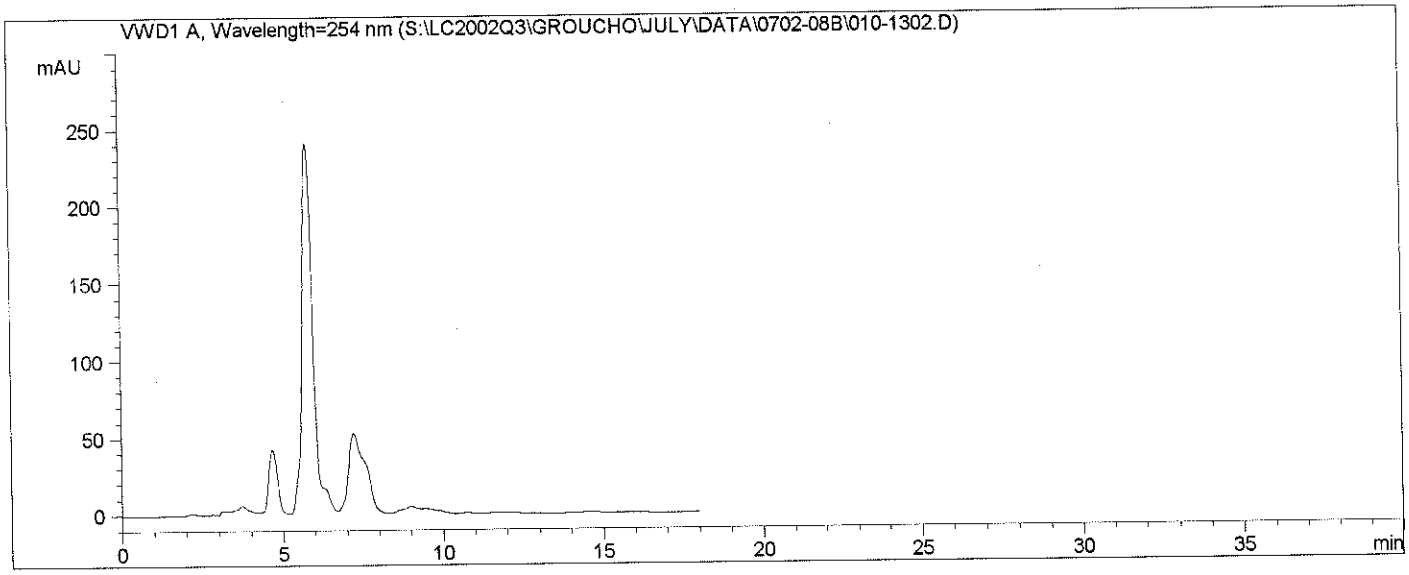
RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene
Totals :				0.00000		

```
 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

Injection Date : 7/16/2002 9:22:33 PM
Sample Name : C Tube FH
Acq. Operator : ajr

Seq. Line : 13
Vial : 10
Inj : 2
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



External Standard Report

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

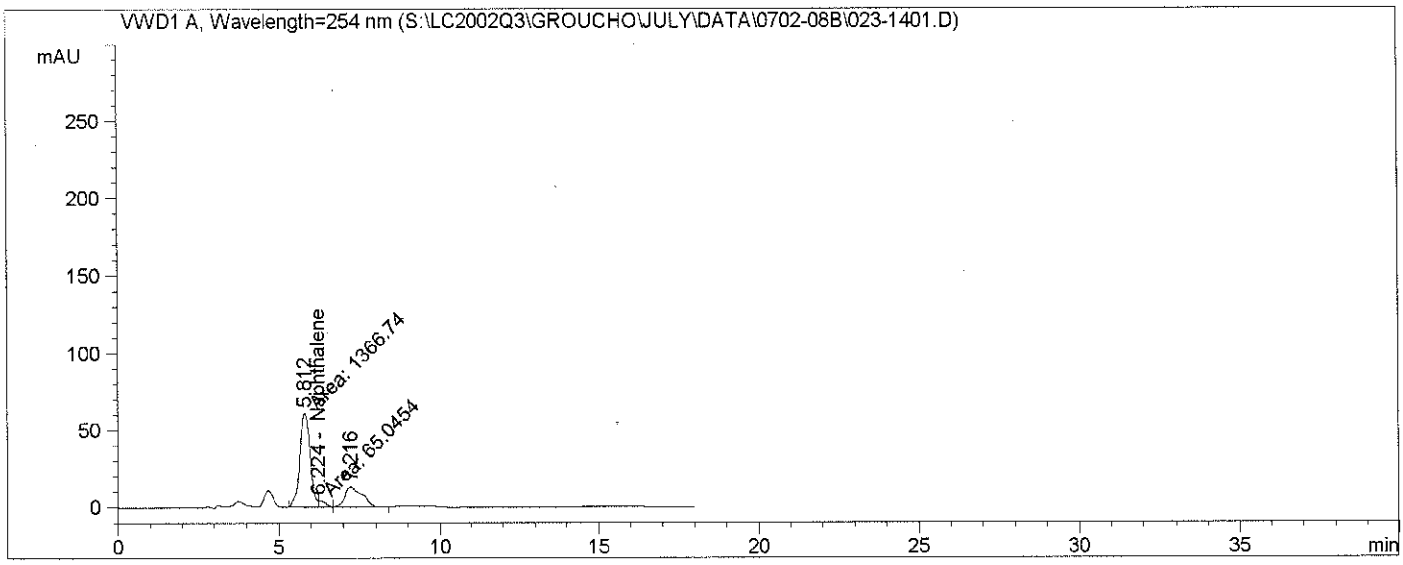
Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

```
==========================================================================
Injection Date  : 7/16/2002 9:42:28 PM          Seq. Line :  14
Sample Name     : C Tube FH*4                        Vial :  23
Acq. Operator   : ajr                                 Inj :   1
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:29:58 AM by ajr
                  (modified after loading)
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      7/17/2002 9:29:29 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm
```

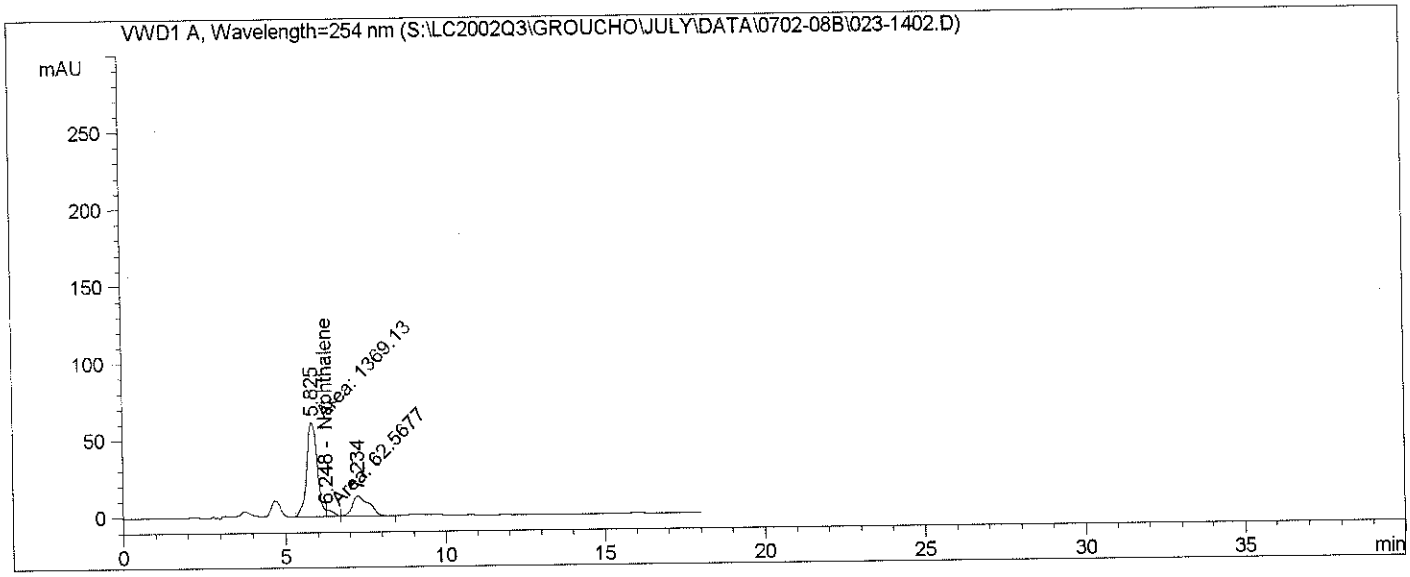
RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.224	FM	65.04543	3.52520e-2	2.29298		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene
Totals :				2.29298		

```
 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
                          *** End of Report ***
```

Injection Date : 7/16/2002 10:02:24 PM
Sample Name : C Tube FH*4
Acq. Operator : ajr

Seq. Line : 14
Vial : 23
Inj : 2
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:31:21 AM by ajr
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 7/17/2002 9:31:18 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

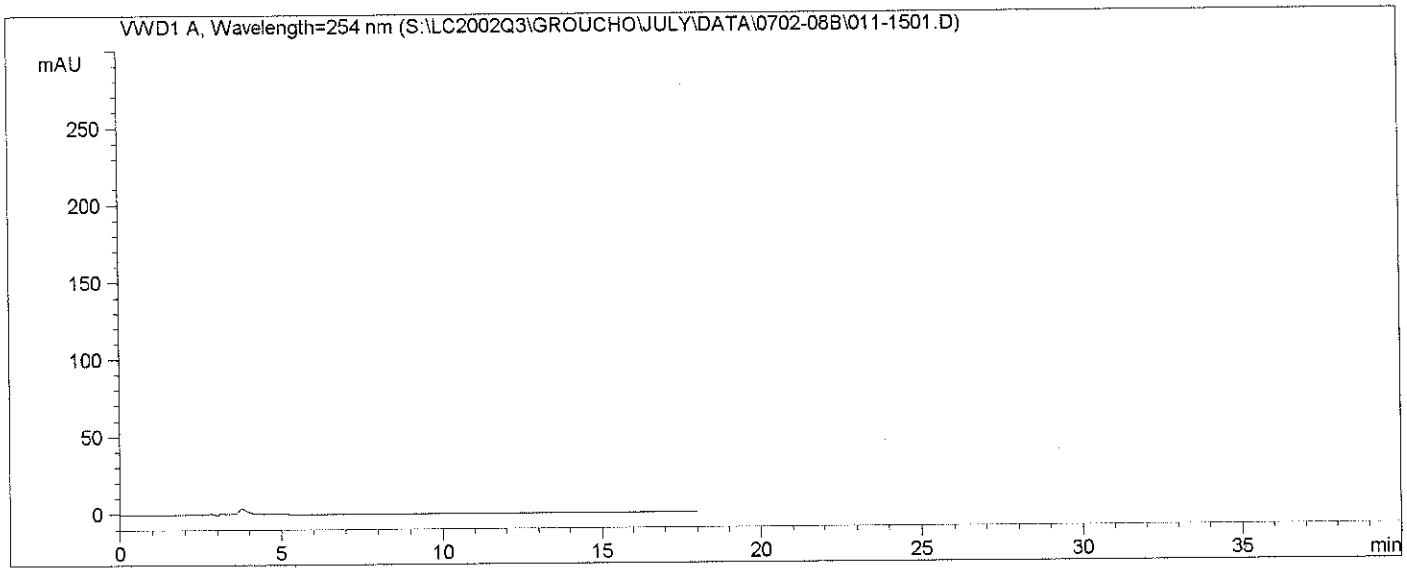
RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.248	FM	62.56768	3.52690e-2	2.20670		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene
Totals :				2.20670		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

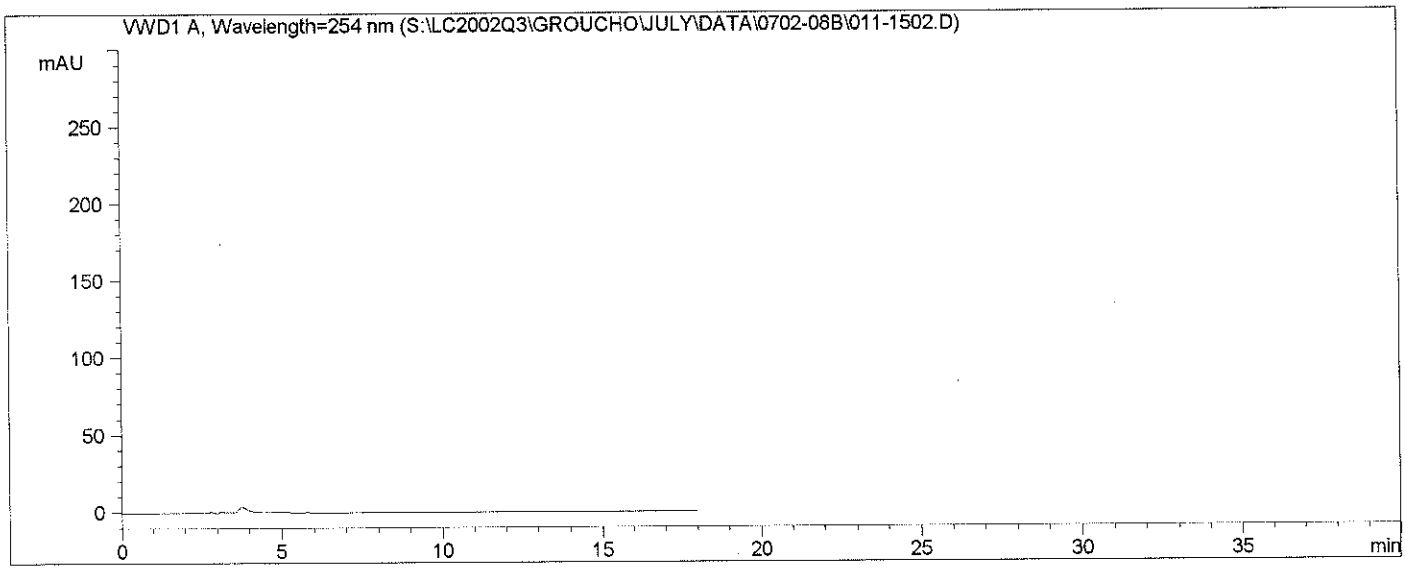
*** End of Report ***

```
==========================================================================
Injection Date  : 7/16/2002 10:22:22 PM          Seq. Line :  15
Sample Name     : C Tube BH                           Vial :  11
Acq. Operator   : ajr                                  Inj :   1
                                                Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171           -          -          -          Naphthalene
 10.361           -          -          -          Phenanthrene
 13.873           -          -          -          Fluoranthene
 15.144           -          -          -          Pyrene

Totals :                                 0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

```
==========================================================================
Injection Date  : 7/16/2002 10:42:20 PM          Seq. Line :  15
Sample Name     : C Tube BH                           Vial :  11
Acq. Operator   : ajr                                  Inj :   2
                                                 Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```



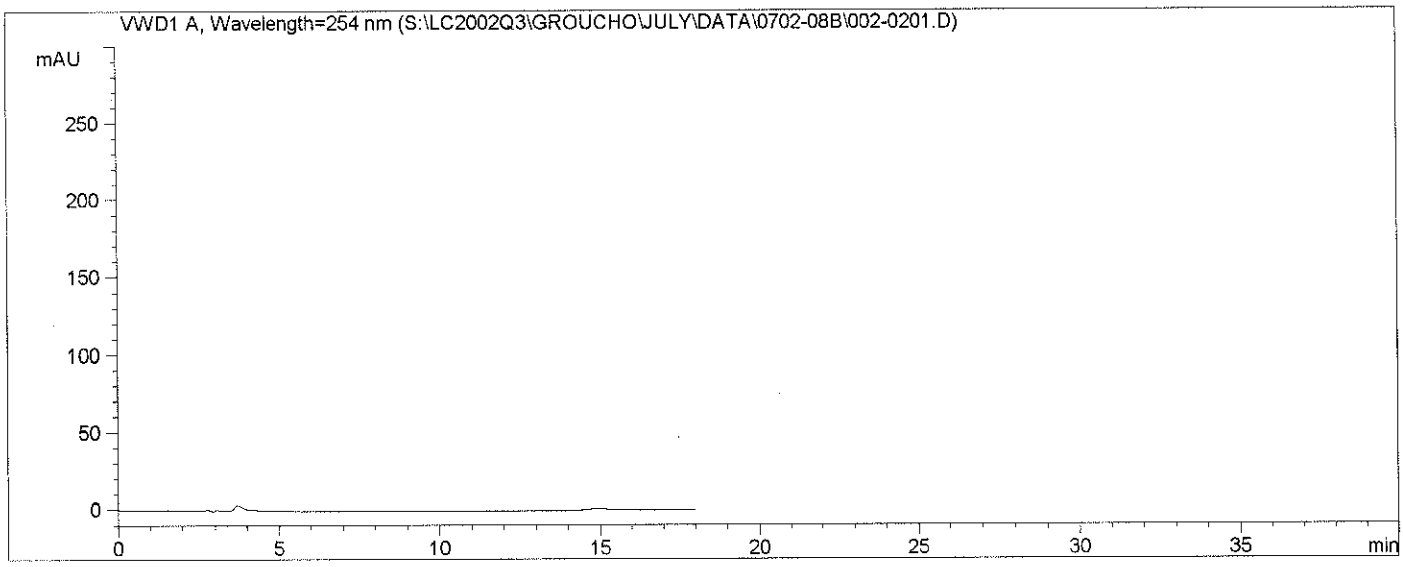

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171          -         -          -          Naphthalene
 10.361          -         -          -          Phenanthrene
 13.873          -         -          -          Fluoranthene
 15.144          -         -          -          Pyrene

Totals :                                 0.00000

 Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========================================================================
```

1 mL CH2Cl2 resuspended in ACN

==========

Injection Date : 7/16/2002 11:49:50 AM Seq. Line : 2
Sample Name : LB Vial : 2
Acq. Operator : ajr Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 0.00000

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

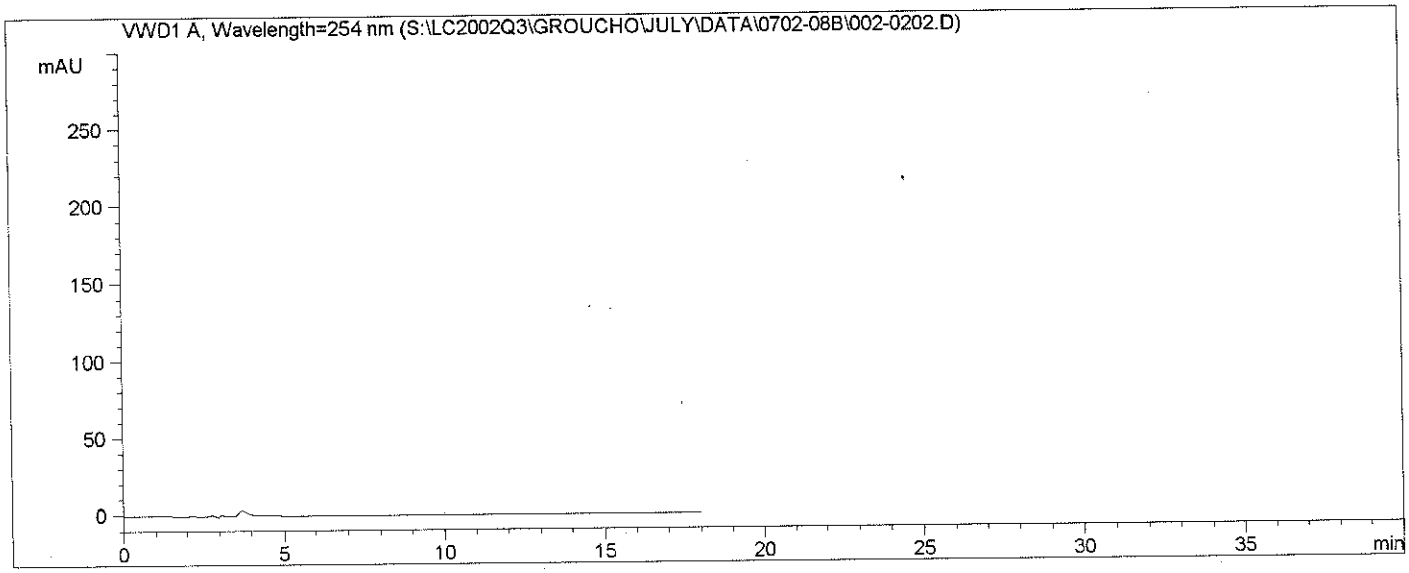
==========

1 mL CH2Cl2 resuspended in ACN

==========

Injection Date : 7/16/2002 12:09:29 PM Seq. Line : 2
Sample Name : LB Vial : 2
Acq. Operator : ajr Inj : 2
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 0.00000

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

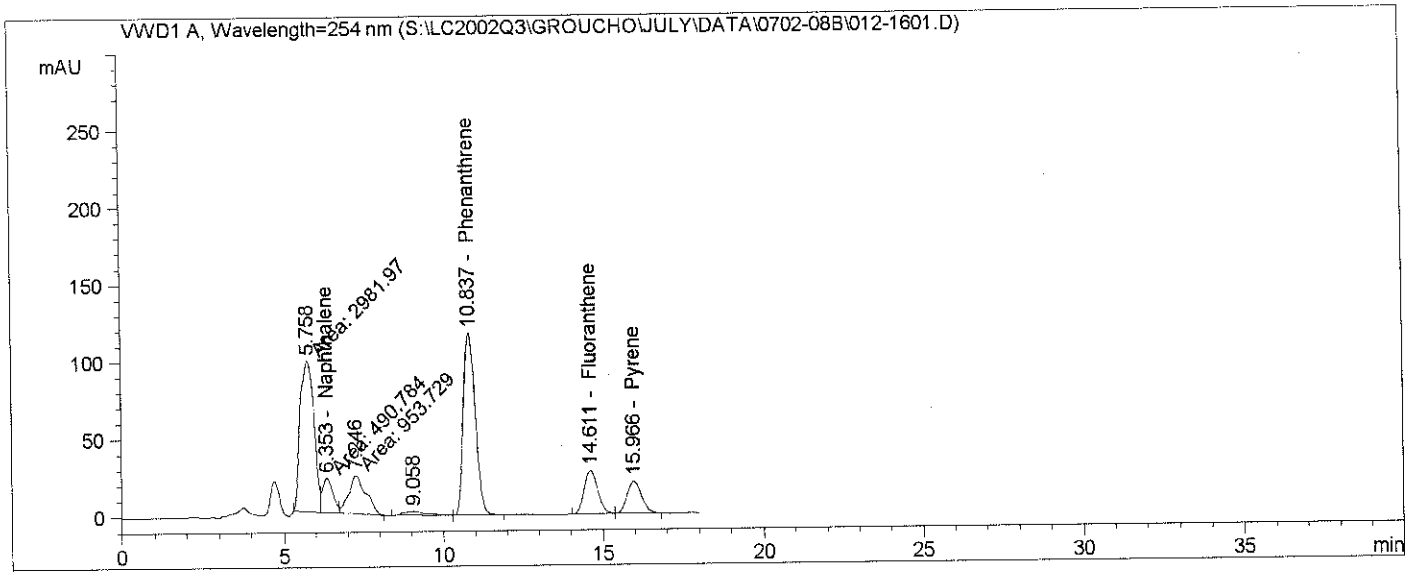
0.3 mL A Tube FH*4 + 45 uL PAHs working solution

==========

Injection Date : 7/16/2002 11:02:16 PM
Sample Name : MS
Acq. Operator : ajr

Seq. Line : 16
Vial : 12
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:36:16 AM by ajr
(modified after loading)



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 7/17/2002 9:36:14 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.353	MF	490.78403	3.48789e-2	17.11799		Naphthalene
10.837	VB	3003.91333	3.41552e-3	10.25994		Phenanthrene
14.611	BV	827.82587	1.24996e-2	10.34747		Fluoranthene
15.966	VB	656.11652	1.35019e-2	8.85881		Pyrene

Totals : 46.58420

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

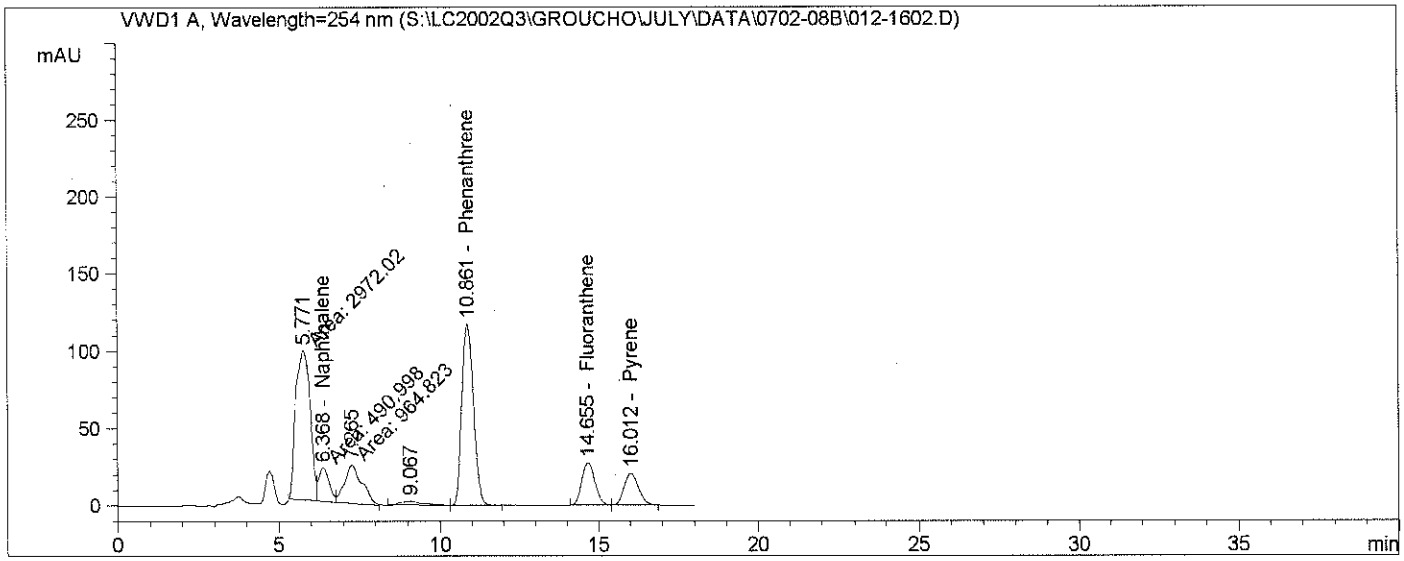
==========

*** End of Report ***

0.3 mL A Tube FH*4 + 45 uL PAHs working solution

==========

Injection Date : 7/16/2002 11:22:23 PM Seq. Line : 16
Sample Name : MS Vial : 12
Acq. Operator : ajr Inj : 2
Inj Volume : 20 µl
Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:36:16 AM by ajr
(modified after loading)



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 7/17/2002 9:36:14 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.368	MF	490.99823	3.48788e-2	17.12545		Naphthalene
10.861	VB	3010.40527	3.41553e-3	10.28213		Phenanthrene
14.655	BV	823.66583	1.24998e-2	10.29565		Fluoranthene
16.012	VB	652.17218	1.35022e-2	8.80579		Pyrene

Totals : 46.50902

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========

*** End of Report ***

Curve(s)/QA Point(s) Chromatograms

Agilent 1100 Quaternary Pump 1

Control

Flow	:	1.000 ml/min
Stoptime	:	18.00 min
Posttime	:	Off

Solvents

Solvent A	:	100.0 % (75% MeOH)
Solvent B	:	Off
Solvent C	:	Off
Solvent D	:	Off

PressureLimits

Minimum Pressure	:	0 bar
Maximum Pressure	:	400 bar

Auxiliary

Maximal Flow Ramp	:	100.00 ml/min^2
Primary Channel	:	Auto
Compressibility	:	83*10^-6/bar
Minimal Stroke	:	Auto

Store Parameters

Store Ratio A	:	Yes
Store Ratio B	:	Yes
Store Ratio C	:	Yes
Store Ratio D	:	Yes
Store Flow	:	Yes
Store Pressure	:	Yes

Agilent 1100 Contacts Option

Contact 1	:	Open
Contact 2	:	Open
Contact 3	:	Open
Contact 4	:	Open

Agilent 1100 Variable Wavelength Detector 1

Signal

Wavelength	:	254 nm
Peakwidth	:	> 0.1 min

Time

Stoptime	:	As pump
Posttime	:	Off

Analog Output

Zero offset analog out.	:	5 %
Attenuation analog out.	:	1000 mAU

Store Additionally

Signal w/o Reference	:	No
Reference	:	No

Autobalance

Prerun balancing : Yes
Postrun balancing : No

Special Parameters
Margin for negative Absorbance: 100 mAU
Signal Polarity : Positive
Enable analysis when lamp is off: No
Scan from : 190 nm
Scan to : 400 nm
Scan step : 2 nm

Agilent 1100 Contacts Option
==========

Contact 1 : Open
Contact 2 : Open
Contact 3 : Open
Contact 4 : Open

==========
Agilent 1100 Autosampler 1
==========

Injection
Injection Mode : Needle Wash
Injector volume : 20.0 µl
Wash Vial : 100

Auxiliary
Drawspeed : 200 µl/min
Ejectspeed : 200 µl/min
Draw position : 0.0 mm

Time
Stoptime : As Pump
Posttime : Off

==========
Agilent 1100 Column Thermostat 1
==========

Temperature settings
Left temperature : 40.0°C
Right temperature : Same as left
Enable analysis : When Temp. is within setpoint +/- 0.8°C
Store left temperature : Yes
Store right temperature: Yes

Time
Stoptime : As pump
Posttime : Off

Column Switching Valve : Column 1

Calibration Table

Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 10.000 %
Abs. Reference Window : 0.000 min
Rel. Non-ref. Window : 10.000 %
Abs. Non-ref. Window : 0.000 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Included
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: No Update

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Lvl Sig		Amount [ug/mL]	Area	Amt/Area	Ref	Grp	Name
6.171	1	1	2.14000	60.07526	3.56220e-2			Naphthalene
		2	4.80000	138.26188	3.47167e-2			
		3	9.57000	273.14961	3.50357e-2			
		4	12.20000	345.85312	3.52751e-2			
		5	14.70000	423.14380	3.47400e-2			
		6	16.90000	485.85056	3.47844e-2			
10.361	1	1	2.18000	635.31345	3.43138e-3			Phenanthrene
		2	4.90000	1456.59760	3.36400e-3			
		3	9.77000	2861.01562	3.41487e-3			
		4	12.50000	3621.73035	3.45139e-3			
		5	15.00000	4416.09204	3.39667e-3			
		6	17.30000	5062.27271	3.41744e-3			
13.873	1	1	2.21000	174.03862	1.26983e-2			Fluoranthene
		2	4.97000	398.28421	1.24785e-2			
		3	9.92000	790.26819	1.25527e-2			
		4	12.70000	1005.56400	1.26297e-2			
		5	15.20000	1221.50940	1.24436e-2			
		6	17.50000	1407.78143	1.24309e-2			
15.144	1	1	1.87000	133.55465	1.40018e-2			Pyrene
		2	4.19000	311.36795	1.34567e-2			
		3	8.36000	617.06107	1.35481e-2			
		4	10.70000	784.22519	1.36440e-2			
		5	12.80000	955.57742	1.33950e-2			
		6	14.80000	1099.79462	1.34571e-2			

1 Warnings or Errors :

Method S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M

Warning : Overlapping peak time windows at 13.873 min, signal 1

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Peak Sum Table

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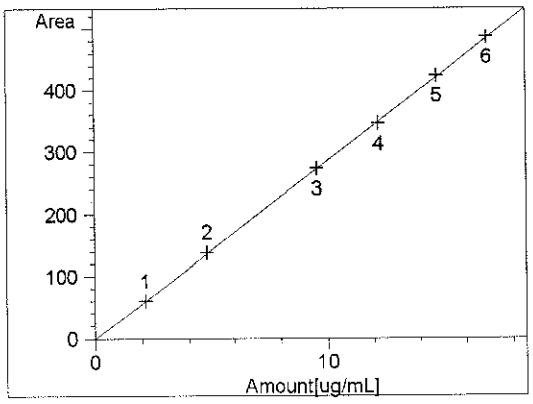
No Entries in table

==========

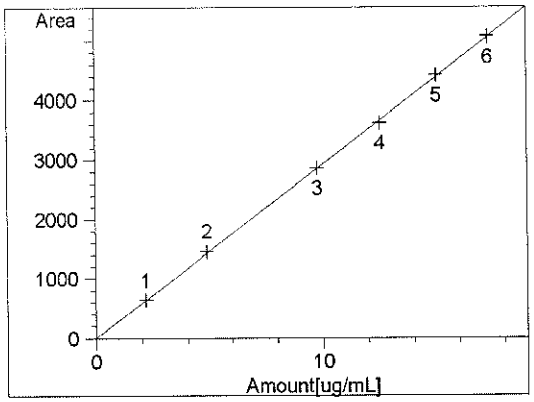
==========

Calibration Curves

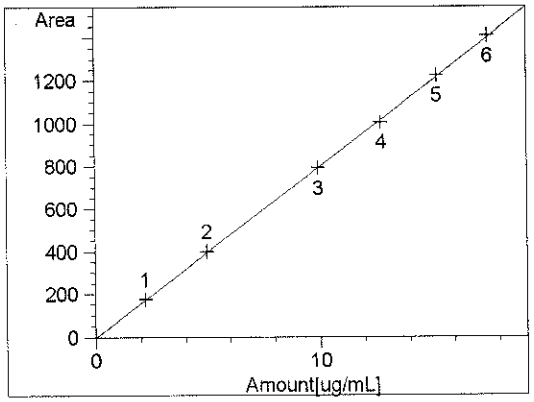
==========



Naphthalene at exp. RT: 6.171
VWD1 A, Wavelength=254 nm
Correlation: 0.99995
Residual Std. Dev.: 2.09305
Formula: y = mx + b
m: 28.71759
b: -8.03401e-1
x: Amount[ug/mL]
y: Area

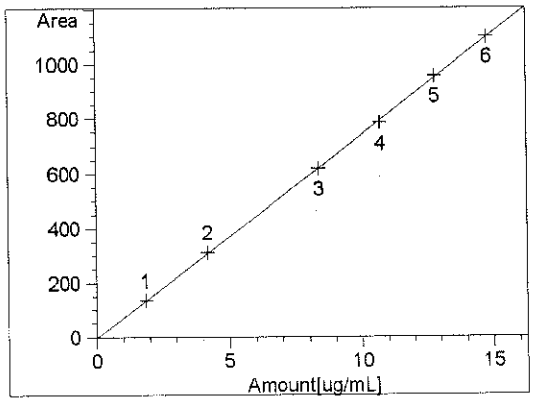


Phenanthrene at exp. RT: 10.361
VWD1 A, Wavelength=254 nm
Correlation: 0.99994
Residual Std. Dev.: 22.42784
Formula: y = mx + b
m: 292.47784
b: 3.10896
x: Amount[ug/mL]
y: Area



Fluoranthene at exp. RT: 13.873
VWD1 A, Wavelength=254 nm
Correlation: 0.99994
Residual Std. Dev.: 6.28404
Formula: y = mx + b
m: 80.27718
b: -2.83967
x: Amount[ug/mL]
y: Area

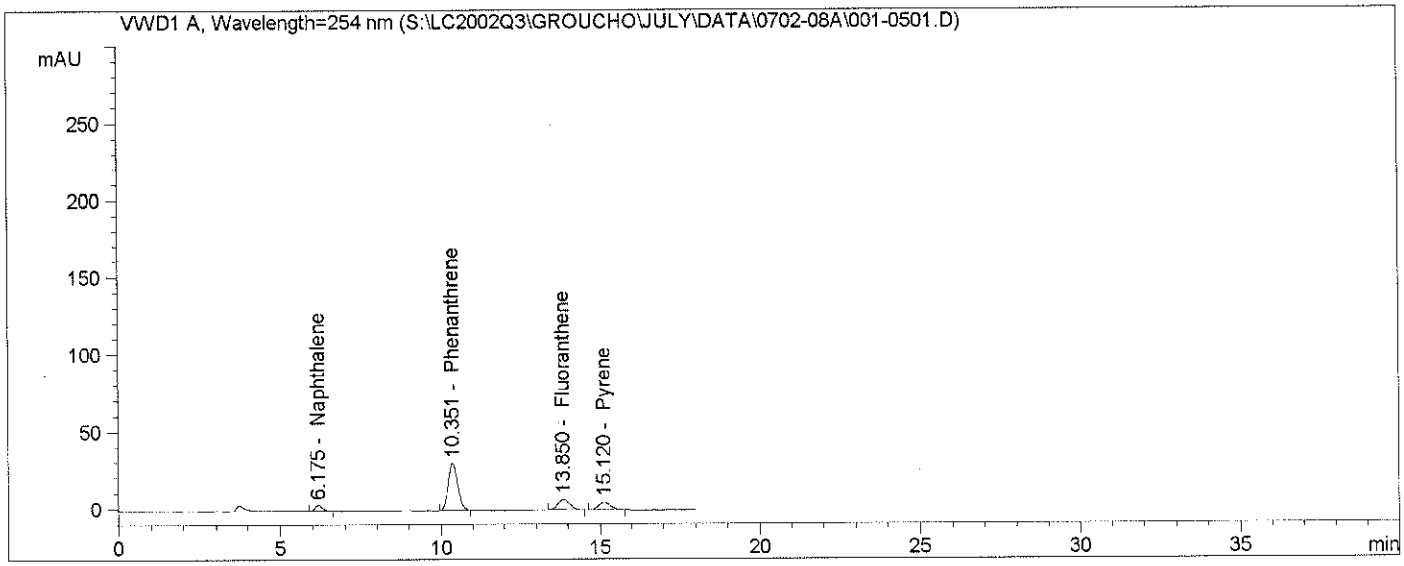
Method S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M



Pyrene at exp. RT: 15.144
VWD1 A, Wavelength=254 nm
Correlation: 0.99993
Residual Std. Dev.: 5.41477
Formula: y = mx + b
m: 74.39304
b: -2.91719
x: Amount[ug/mL]
y: Area

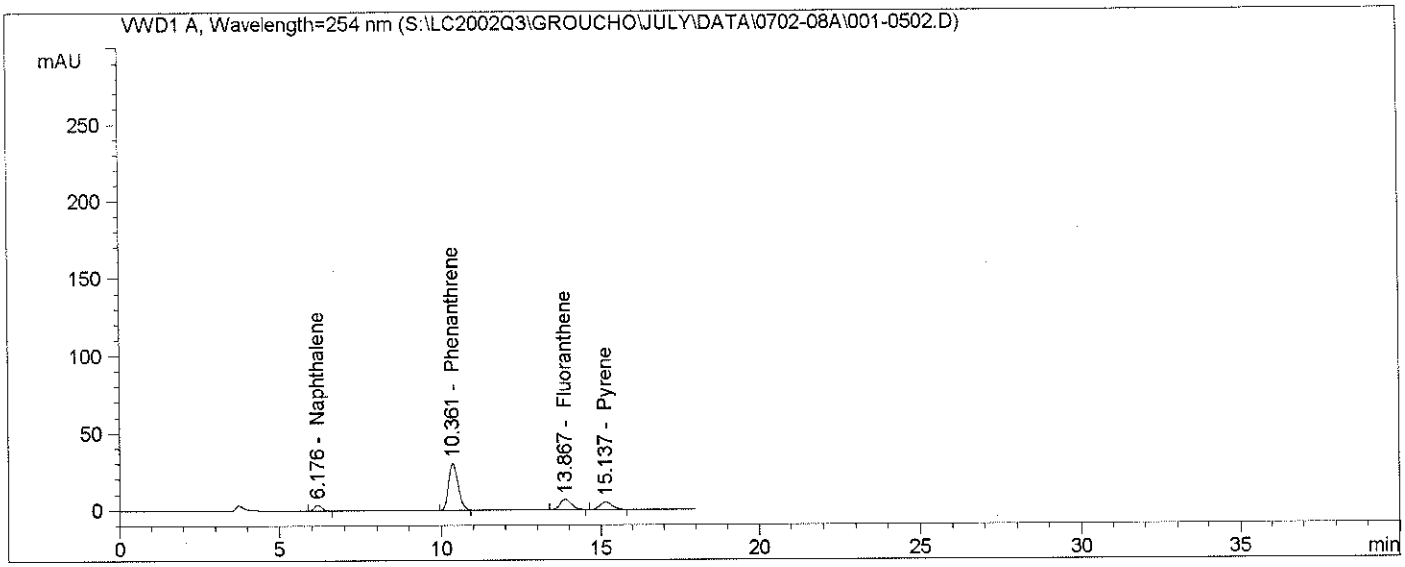
==========

```
==========================================================================
Injection Date  : 7/15/2002 4:21:00 PM          Seq. Line :   5
Sample Name     : Standard 1                         Vial :   1
Acq. Operator   : ajr                                 Inj :   1
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.175 BB       60.11891 3.52872e-2    2.12143     Naphthalene
 10.351 BB      635.51208 3.40234e-3    2.16223     Phenanthrene
 13.850 BP      175.31810 1.26586e-2    2.21928     Fluoranthene
 15.120 PB      132.26712 1.37386e-2    1.81716     Pyrene

Totals :                                8.32010

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                          *** End of Report ***
```

```
==========================================================================
Injection Date  : 7/15/2002 4:40:38 PM          Seq. Line :   5
Sample Name     : Standard 1                         Vial :   1
Acq. Operator   : ajr                                 Inj :   2
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm
```

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.176	BB	60.03161	3.52879e-2	2.11839		Naphthalene
10.361	BB	635.11481	3.40233e-3	2.16087		Phenanthrene
13.867	BB	172.75914	1.26616e-2	2.18741		Fluoranthene
15.137	BB	134.84218	1.37329e-2	1.85178		Pyrene

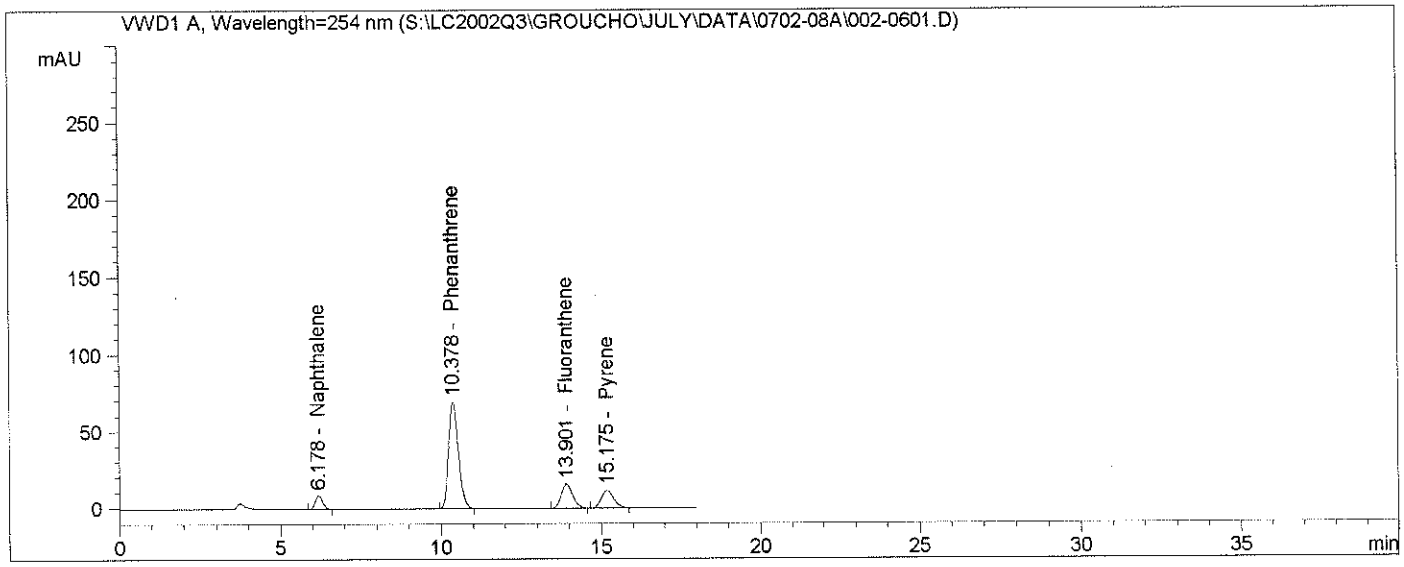
Totals : 8.31844

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

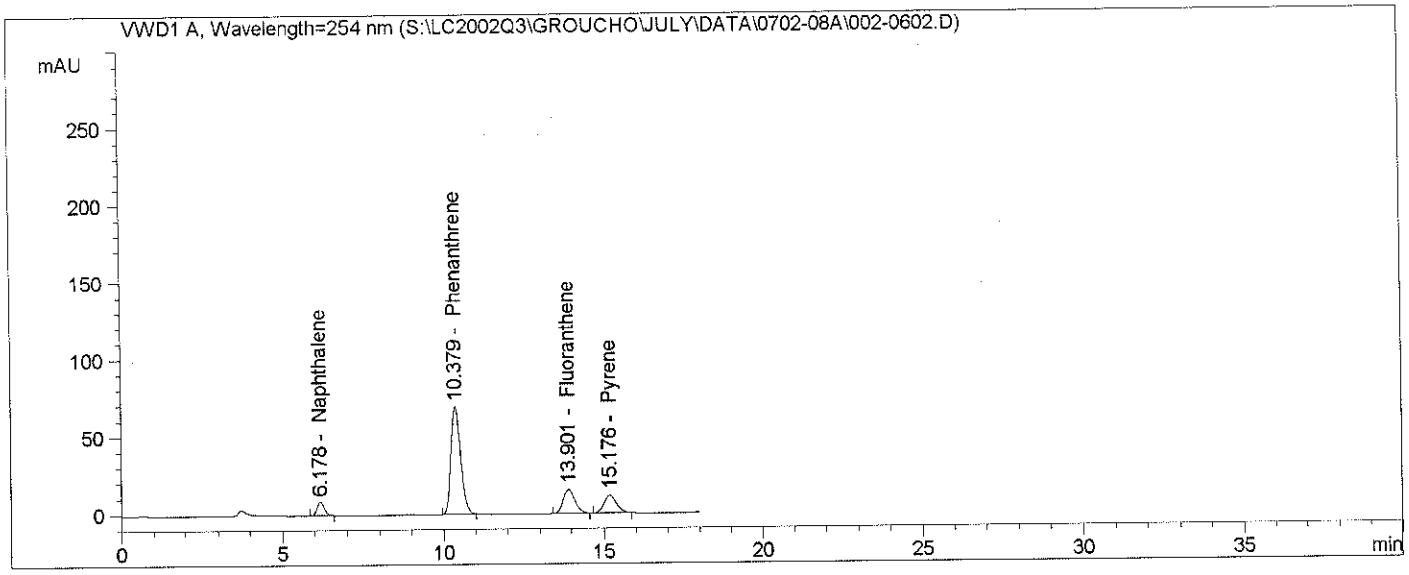
==========
*** End of Report ***

```
==========================================================================
Injection Date  : 7/15/2002 5:00:18 PM          Seq. Line :   6
Sample Name     : Standard 2                         Vial :   2
Acq. Operator   : ajr                                 Inj :   1
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.178 PB      138.39919 3.50240e-2    4.84729     Naphthalene
 10.378 BB     1457.46069 3.41177e-3    4.97252     Phenanthrene
 13.901 BB      398.81088 1.25455e-2    5.00330     Fluoranthene
 15.175 BB      311.18491 1.35681e-2    4.22220     Pyrene

Totals :                                19.04531

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                          *** End of Report ***
```

```
==========================================================================
Injection Date  : 7/15/2002 5:19:58 PM          Seq. Line :   6
Sample Name     : Standard 2                         Vial :   2
Acq. Operator   : ajr                                 Inj :   2
                                              Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```



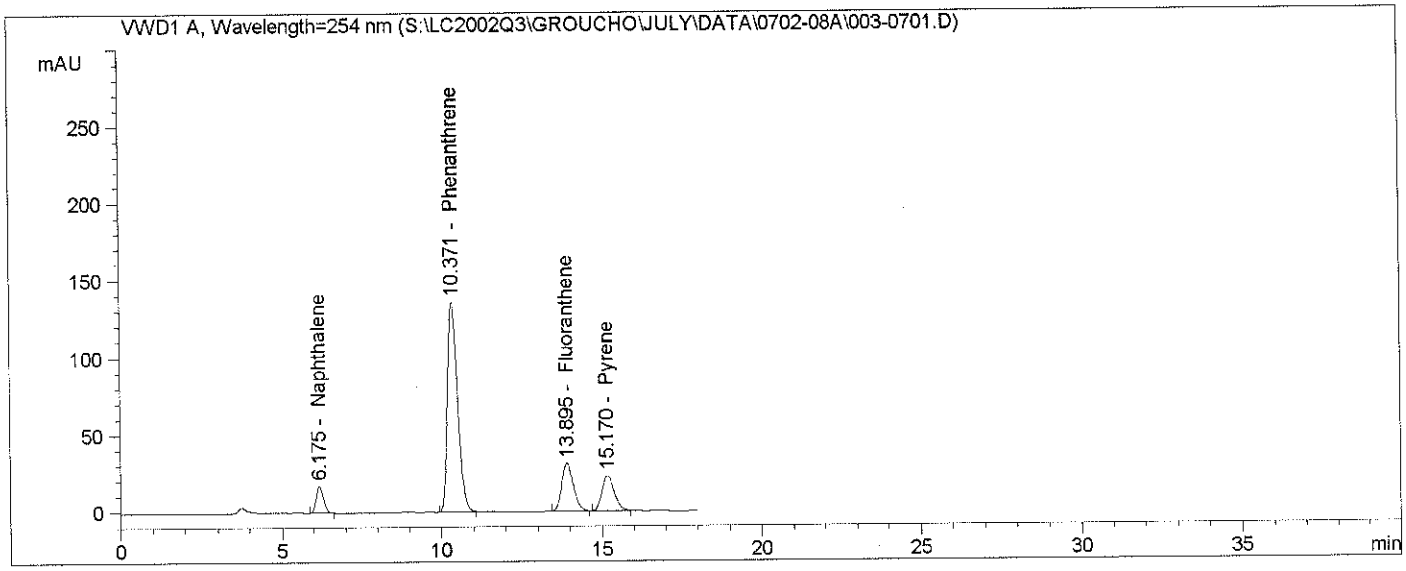

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount    Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.178 BB      138.12457 3.50244e-2    4.83773     Naphthalene
 10.379 BB     1455.73450 3.41176e-3    4.96662     Phenanthrene
 13.901 BB      397.75754 1.25458e-2    4.99018     Fluoranthene
 15.176 BB      311.55099 1.35680e-2    4.22712     Pyrene

Totals :                                19.02164

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                        *** End of Report ***
```

==========

Injection Date : 7/15/2002 5:39:37 PM
Sample Name : Standard 3
Acq. Operator : ajr

Seq. Line : 7
Vial : 3
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.175	BB	273.35391	3.49242e-2	9.54667		Naphthalene
10.371	BB	2862.26733	3.41535e-3	9.77564		Phenanthrene
13.895	BB	786.10309	1.25018e-2	9.82773		Fluoranthene
15.170	BB	614.51019	1.35059e-2	8.29953		Pyrene

Totals : 37.44957

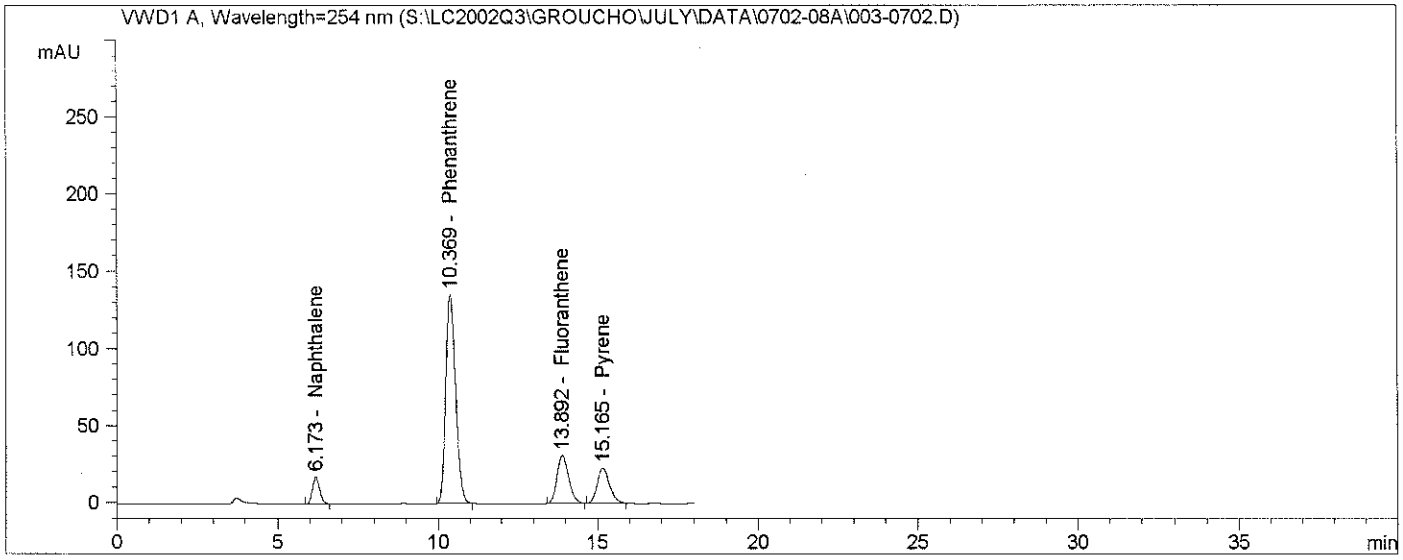
Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========

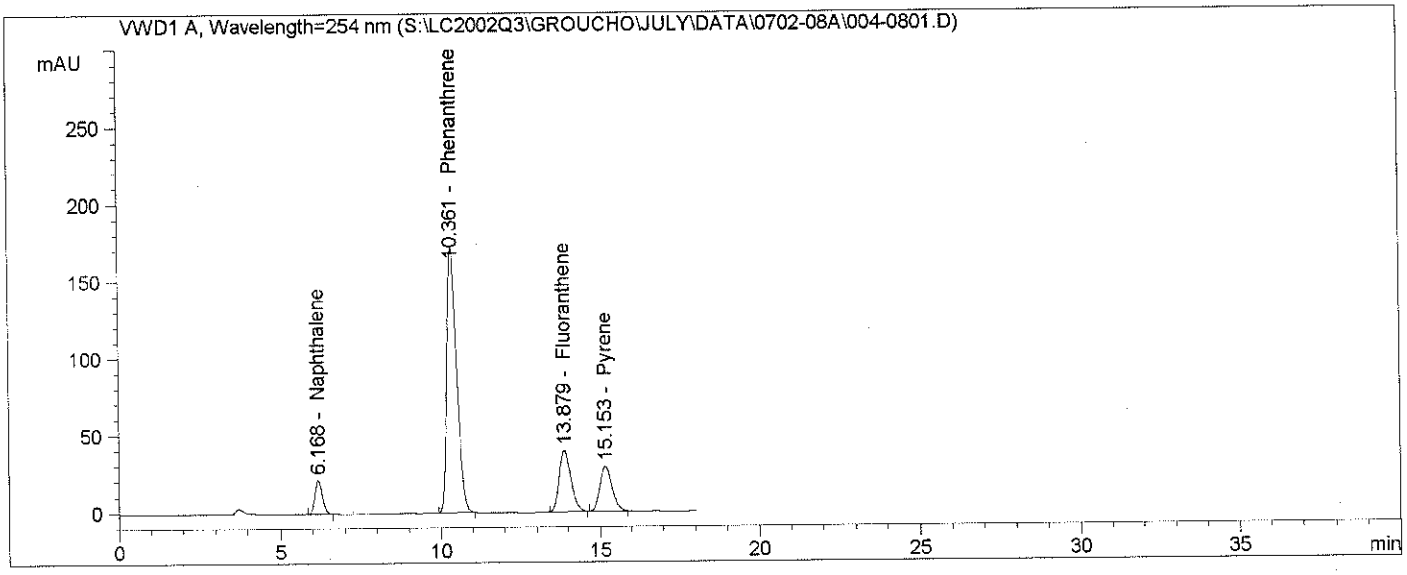
*** End of Report ***

```
==========================================================================
Injection Date  : 7/15/2002 5:59:18 PM          Seq. Line :   7
Sample Name     : Standard 3                         Vial :   3
Acq. Operator   : ajr                                 Inj :   2
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]         mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.173 PB      272.94531 3.49244e-2    9.53244    Naphthalene
 10.369 BB     2859.76392 3.41535e-3    9.76708    Phenanthrene
 13.892 BB      794.43329 1.25014e-2    9.93150    Fluoranthene
 15.165 BB      619.61194 1.35054e-2    8.36811    Pyrene

Totals :                                37.59913

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                          *** End of Report ***
```

```
==========================================================================
Injection Date  : 7/15/2002 6:18:56 PM          Seq. Line :   8
Sample Name     : Standard 4                         Vial :   4
Acq. Operator   : ajr                                 Inj :   1
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm
```

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.168	PB	346.03439	3.49027e-2	12.07754		Naphthalene
10.361	BB	3622.07910	3.41613e-3	12.37348		Phenanthrene
13.879	BB	1011.75165	1.24918e-2	12.63860		Fluoranthene
15.153	BB	787.46808	1.34919e-2	10.62445		Pyrene

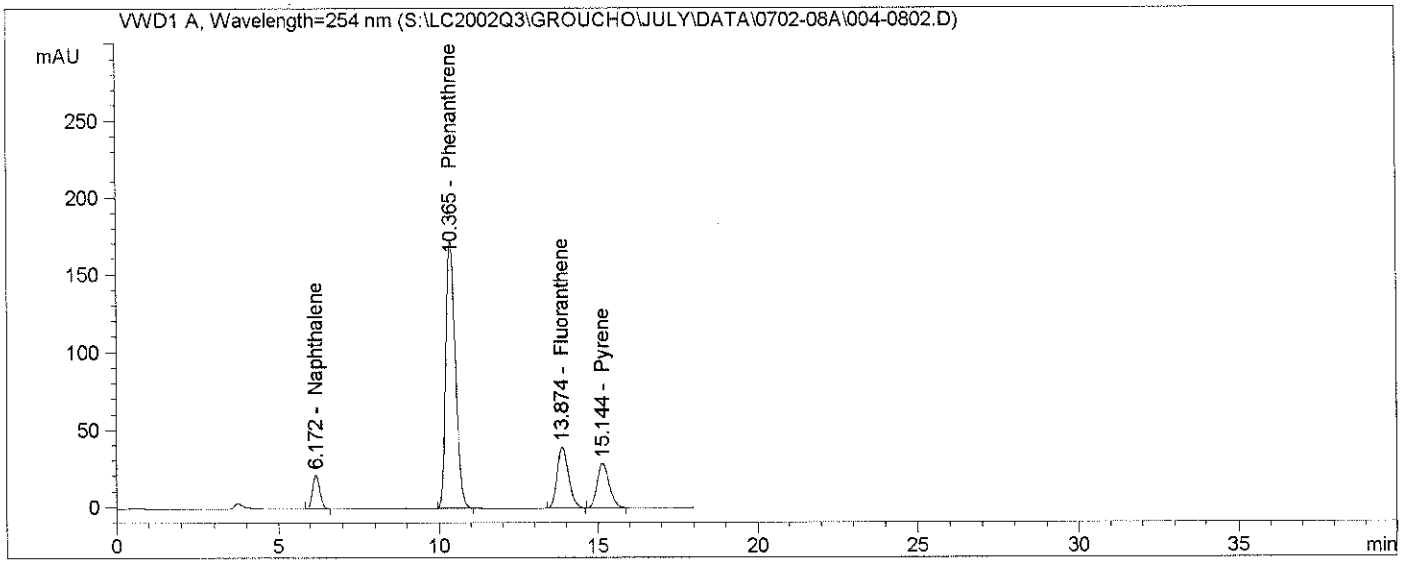
Totals : 47.71408

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==
*** End of Report ***

```
==========================================================================
Injection Date  : 7/15/2002 6:38:35 PM          Seq. Line :   8
Sample Name     : Standard 4                         Vial :   4
Acq. Operator   : ajr                                 Inj :   2
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```

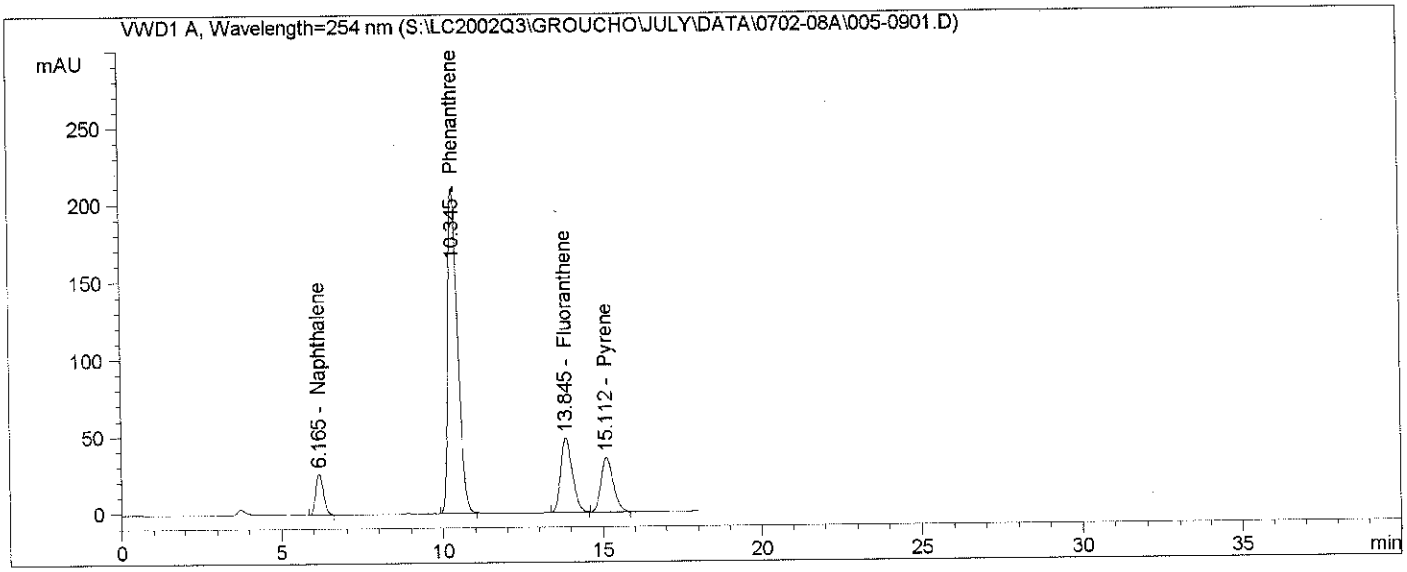



```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]         mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.172 BB      345.67184 3.49028e-2   12.06491     Naphthalene
 10.365 BB     3621.38159 3.41613e-3   12.37110     Phenanthrene
 13.874 BB      999.37634 1.24922e-2   12.48445     Fluoranthene
 15.144 BB      780.98230 1.34923e-2   10.53727     Pyrene

Totals :                               47.45773

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                          *** End of Report ***
```

Injection Date : 7/15/2002 6:58:31 PM
Sample Name : Standard 5
Acq. Operator : ajr

Seq. Line : 9
Vial : 5
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



External Standard Report

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

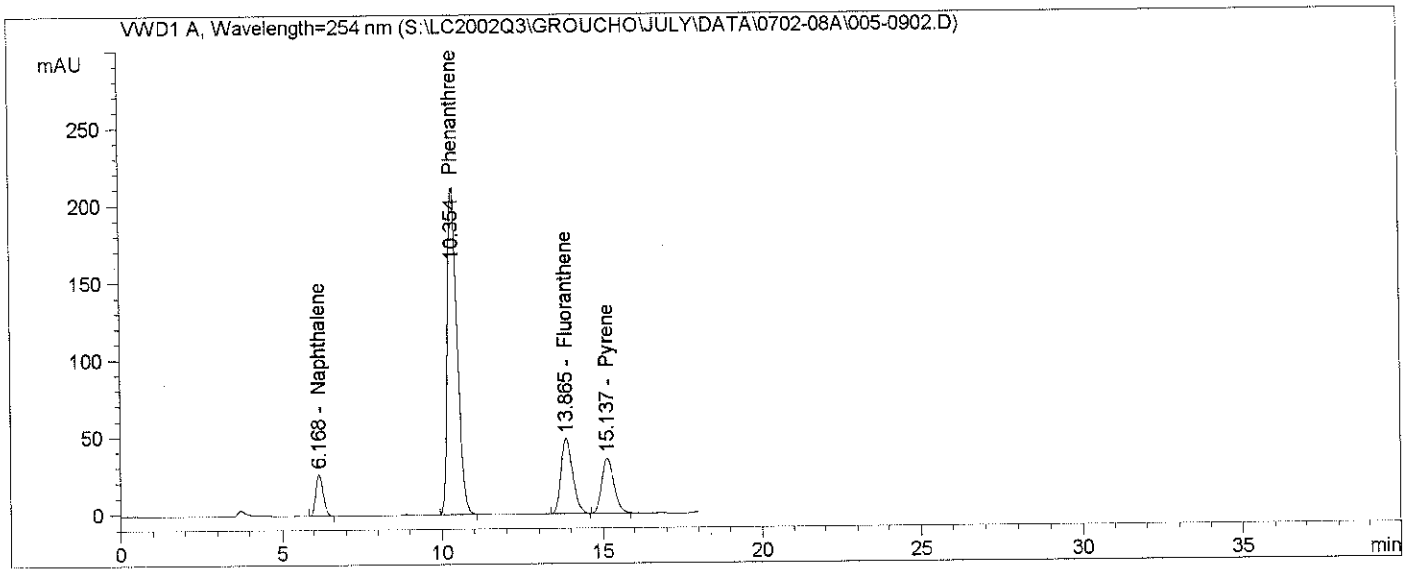
RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.165	PB	423.05716	3.48880e-2	14.75961		Naphthalene
10.345	BB	4415.29248	3.41665e-3	15.08553		Phenanthrene
13.845	BB	1221.00659	1.24858e-2	15.24526		Fluoranthene
15.112	BB	954.94586	1.34832e-2	12.87571		Pyrene
Totals :				57.96611		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

*** End of Report ***

```
==========================================================================
Injection Date  : 7/15/2002 7:18:28 PM          Seq. Line :   9
Sample Name     : Standard 5                         Vial :   5
Acq. Operator   : ajr                                 Inj :   2
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```

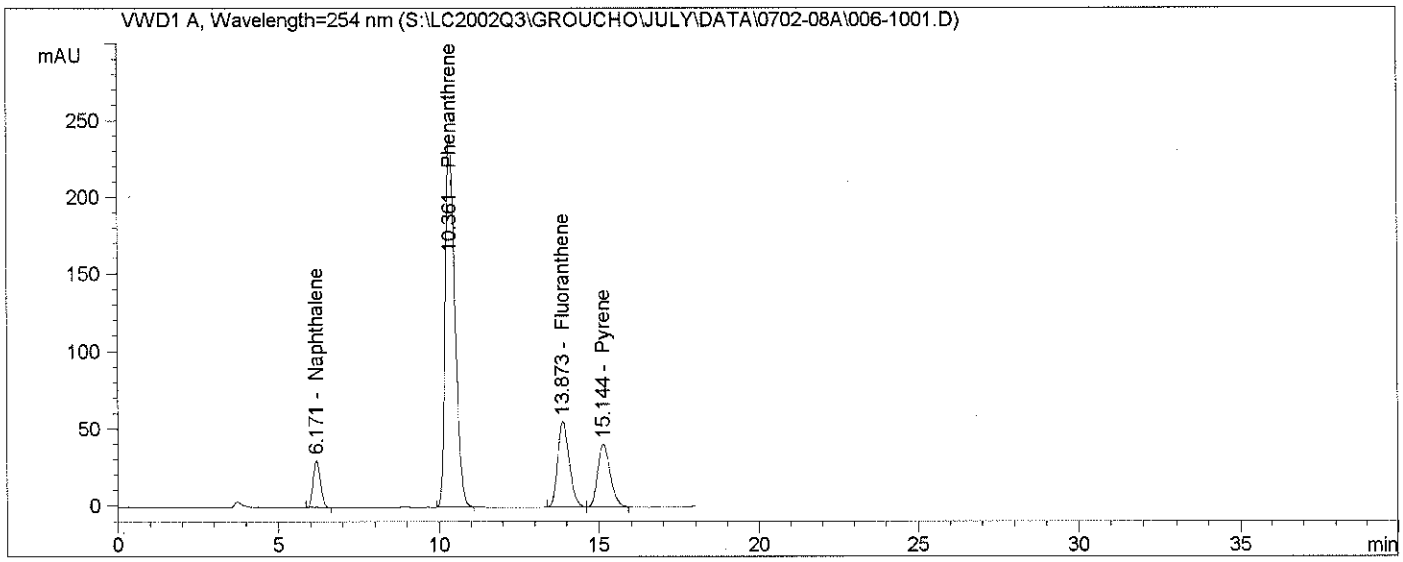



```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm
```

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.168	BB	423.23044	3.48880e-2	14.76565		Naphthalene
10.354	BB	4416.89160	3.41666e-3	15.09100		Phenanthrene
13.865	BB	1222.01221	1.24858e-2	15.25778		Fluoranthene
15.137	BB	956.20898	1.34831e-2	12.89269		Pyrene
Totals :				58.00712		

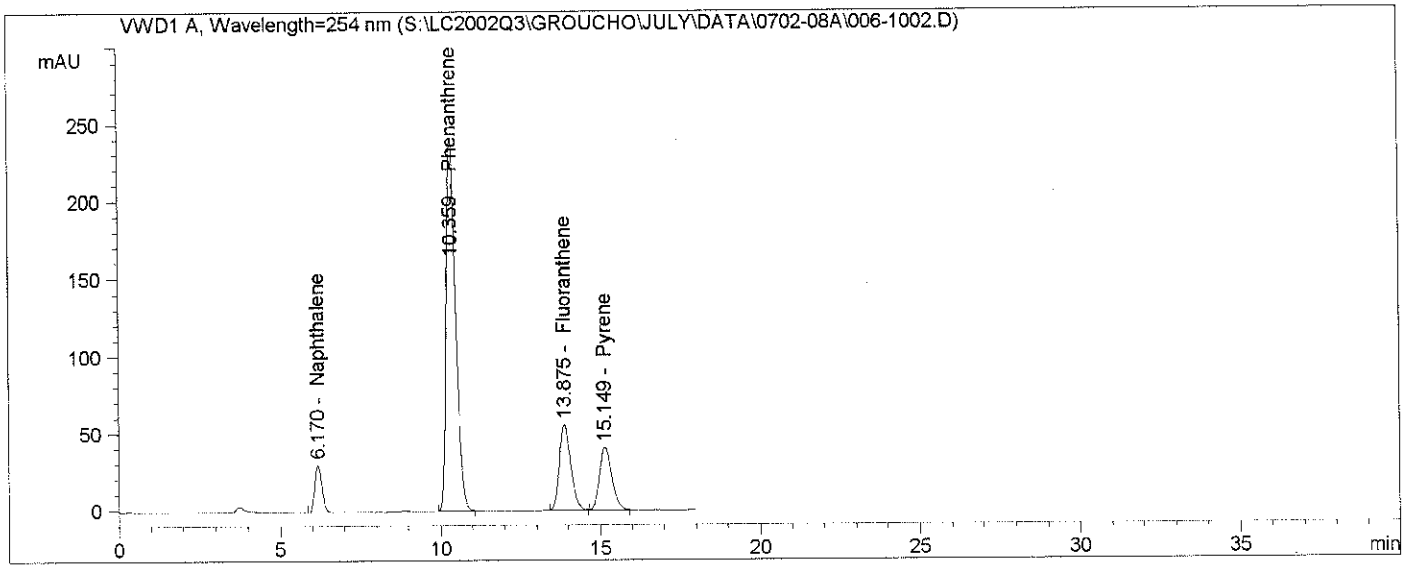
```
 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                        *** End of Report ***
```

```
==========================================================================
Injection Date  : 7/15/2002 7:38:23 PM          Seq. Line :  10
Sample Name     : Standard 6                         Vial :   6
Acq. Operator   : ajr                                 Inj :   1
                                                Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]         mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.171 BB      485.89462 3.48794e-2   16.94773     Naphthalene
 10.361 BB     5064.03076 3.41696e-3   17.30361     Phenanthrene
 13.873 BB     1404.88953 1.24820e-2   17.53586     Fluoranthene
 15.144 BB     1098.81458 1.34778e-2   14.80961     Pyrene

Totals :                                66.59680

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                          *** End of Report ***
```

```
==========================================================================
Injection Date  : 7/15/2002 7:58:19 PM          Seq. Line :  10
Sample Name     : Standard 6                         Vial :   6
Acq. Operator   : ajr                                 Inj :   2
                                               Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:18:58 AM by ajr
```



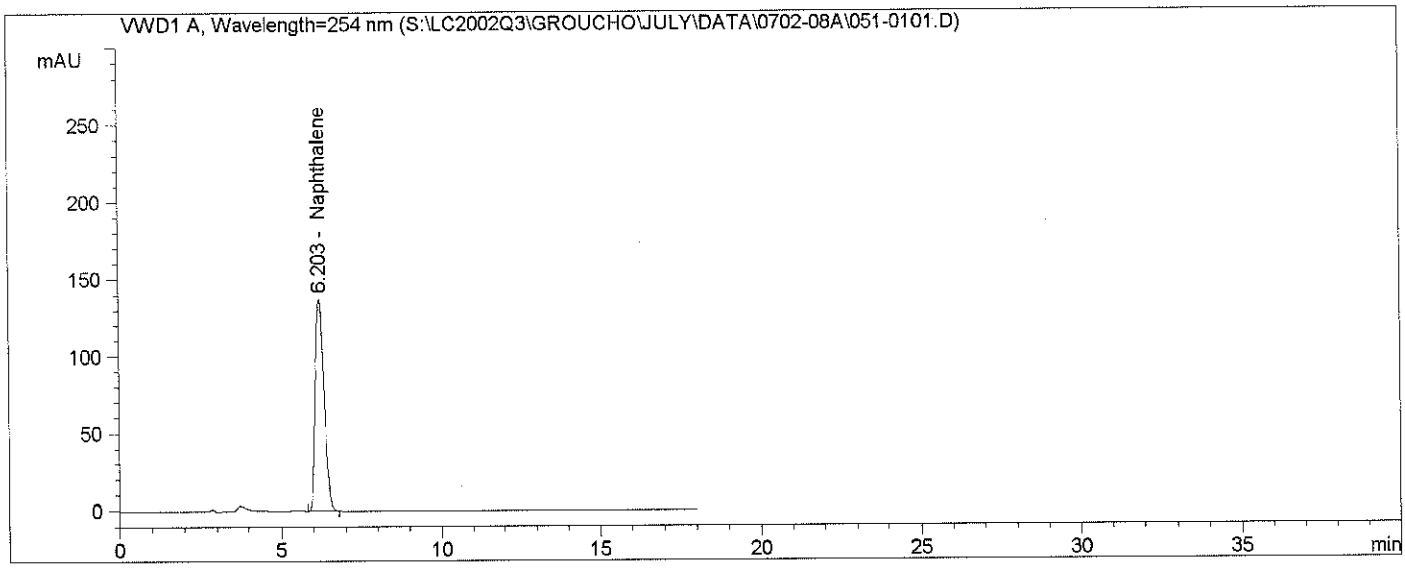

```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      Tuesday, July 16, 2002 9:44:37 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]          mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|-----------------
  6.170 PB      485.80649 3.48794e-2   16.94466     Naphthalene
 10.359 BB     5060.51465 3.41696e-3   17.29159     Phenanthrene
 13.875 BB     1410.67334 1.24819e-2   17.60791     Fluoranthene
 15.149 BB     1100.77466 1.34777e-2   14.83596     Pyrene

Totals :                               66.68011

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                          *** End of Report ***
```

Retention Time Marker

==========

Injection Date : 7/15/2002 3:02:30 PM Seq. Line : 1
Sample Name : Naphthalene Vial : 51
Acq. Operator : ajr Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.203	PB	2593.55396	3.48326e-2	90.34035		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 90.34035

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

*** End of Report ***

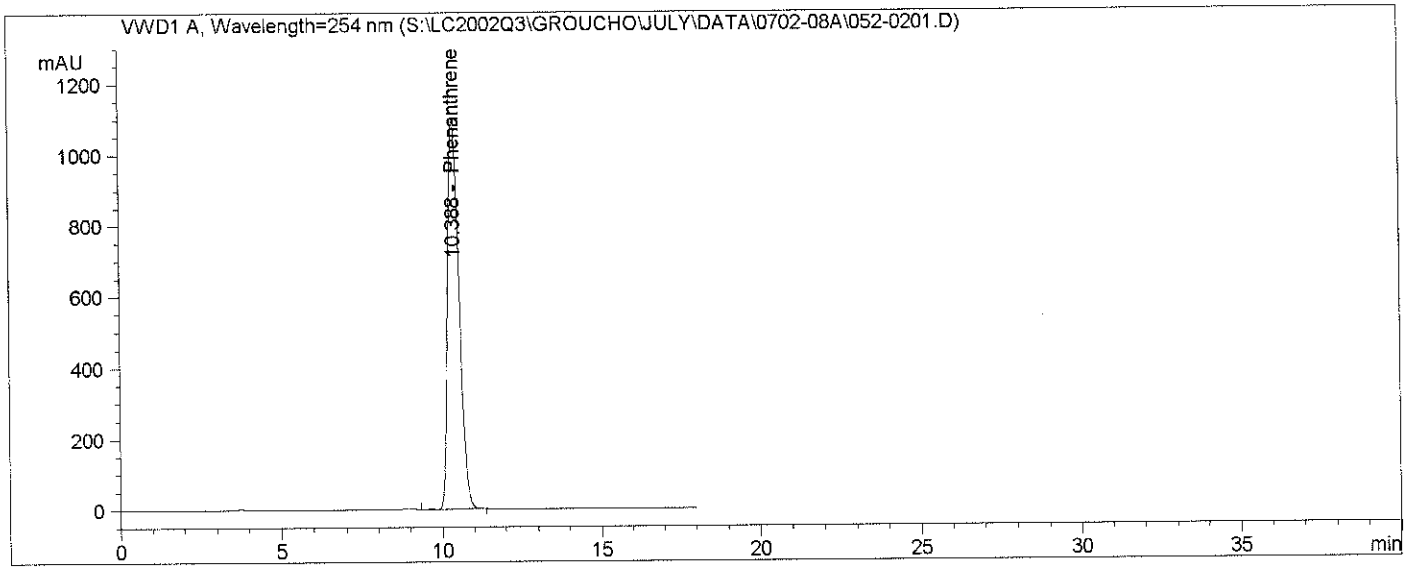
Retention Time Marker

==========

Injection Date : 7/15/2002 3:22:08 PM
Sample Name : Phenanthrene
Acq. Operator : ajr

Seq. Line : 2
Vial : 52
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:40:07 AM by ajr
(modified after loading)



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.388	VB	2.70979e4	3.41867e-3	92.63862		Phenanthrene
13.873		-	-	-		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 92.63862

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

*** End of Report ***

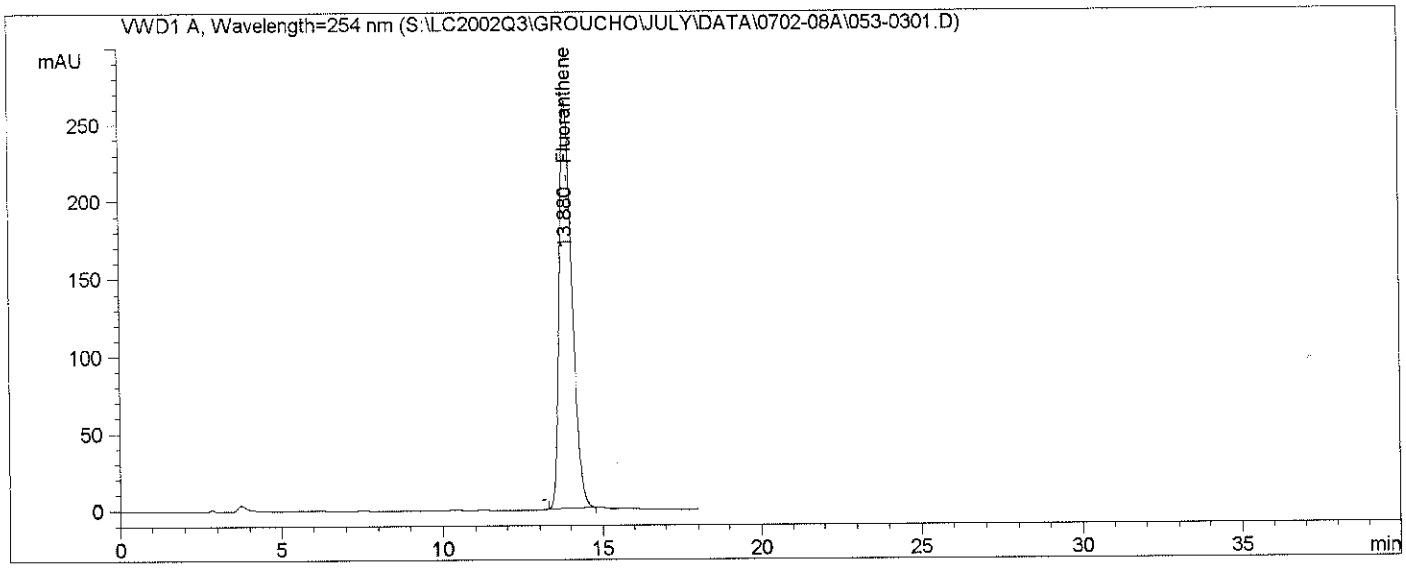
Retention Time Marker

==========

Injection Date : 7/15/2002 3:41:45 PM
Sample Name : Fluoranthene
Acq. Operator : ajr

Seq. Line : 3
Vial : 53
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.880	BB	7385.37549	1.24616e-2	92.03382		Fluoranthene
15.144		-	-	-		Pyrene

Totals : 92.03382

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

==========

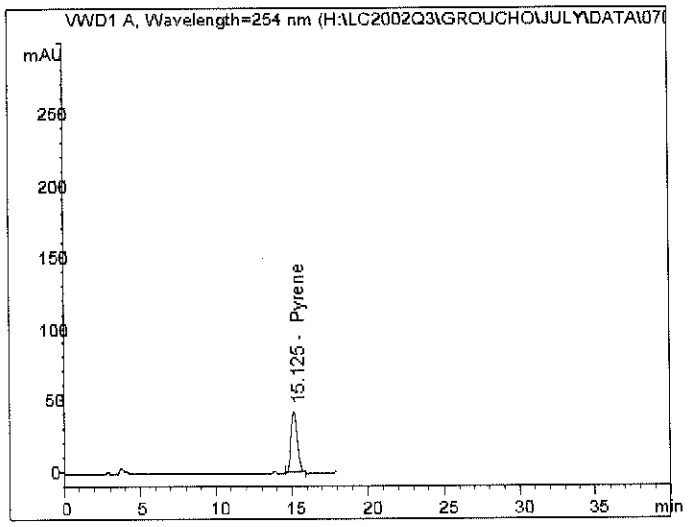
*** End of Report ***

Data File H:\LC2002Q3\GROUCHO\JULY\DATA\0702-08A\054-0401.D Sample Name: Pyrene

Retention Time Marker

==========

Injection Date : 7/15/2002 4:01:22 PM Seq. Line : 4
Sample Name : Pyrene Location : Vial 54
Acq. Operator : ajr Inj : 1
Acq. Instrument : Groucho
Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : H:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.171		-	-	-		Naphthalene
10.361		-	-	-		Phenanthrene
13.873		-	-	-		Fluoranthene
15.125	BB	1265.90063	1.34731e-2	17.05560		Pyrene

Totals : 17.05560

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

Instrument 3 7/19/2002 10:32:45 AM

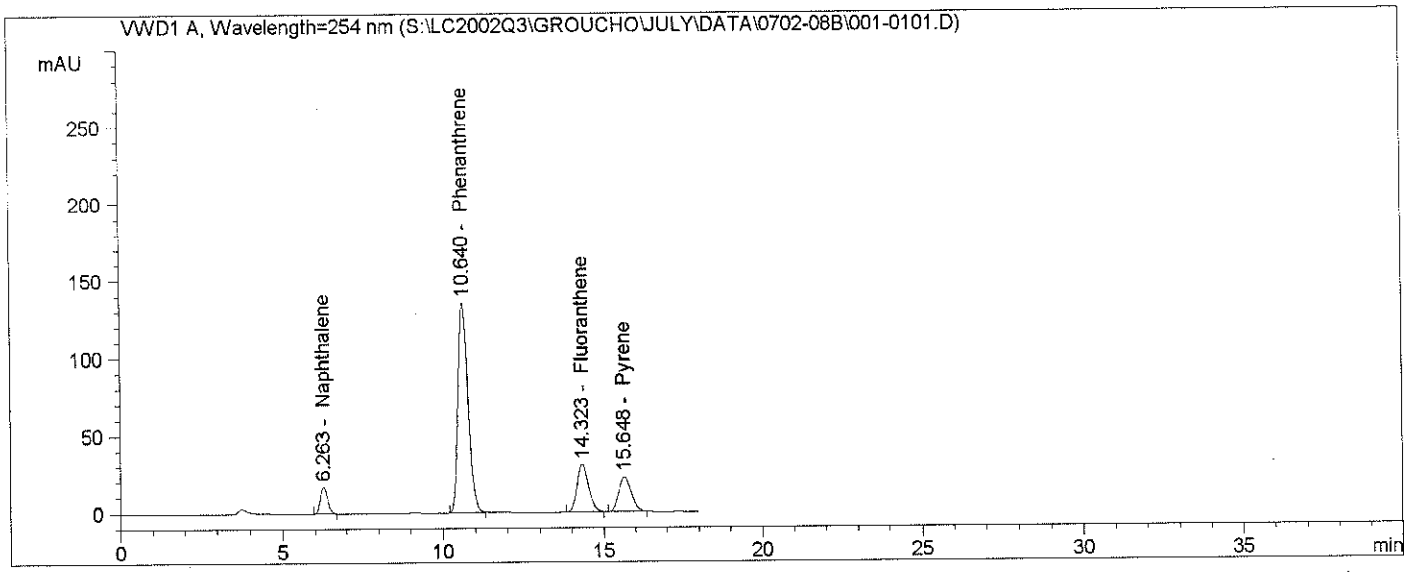
HPLC-14, p. 55

==========

Injection Date : 7/16/2002 11:10:34 AM
Sample Name : Standard 3
Acq. Operator : ajr

Seq. Line : 1
Vial : 1
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



==========

External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.263	BB	271.32245	3.49250e-2	9.47593		Naphthalene
10.640	BB	2856.66187	3.41534e-3	9.75648		Phenanthrene
14.323	BB	781.42334	1.25021e-2	9.76944		Fluoranthene
15.648	BB	611.02643	1.35063e-2	8.25270		Pyrene

Totals : 37.25455

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

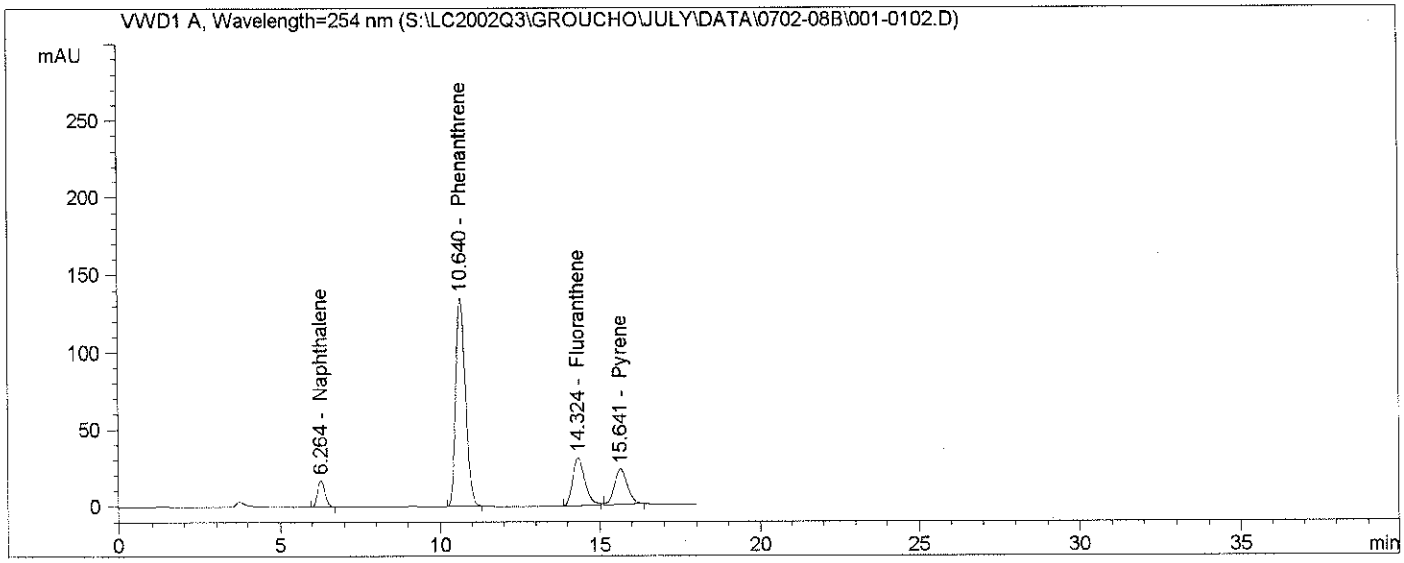
==========

*** End of Report ***

HPLC-14, p. 55

==========

Injection Date : 7/16/2002 11:30:12 AM Seq. Line : 1
Sample Name : Standard 3 Vial : 1
Acq. Operator : ajr Inj : 2
Inj Volume : 20 µl
Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.264	BB	271.30099	3.49250e-2	9.47518		Naphthalene
10.640	BB	2848.26733	3.41533e-3	9.72777		Phenanthrene
14.324	BB	807.89600	1.25006e-2	10.09921		Fluoranthene
15.641	BB	655.29327	1.35020e-2	8.84774		Pyrene

Totals : 38.14990

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========

*** End of Report ***

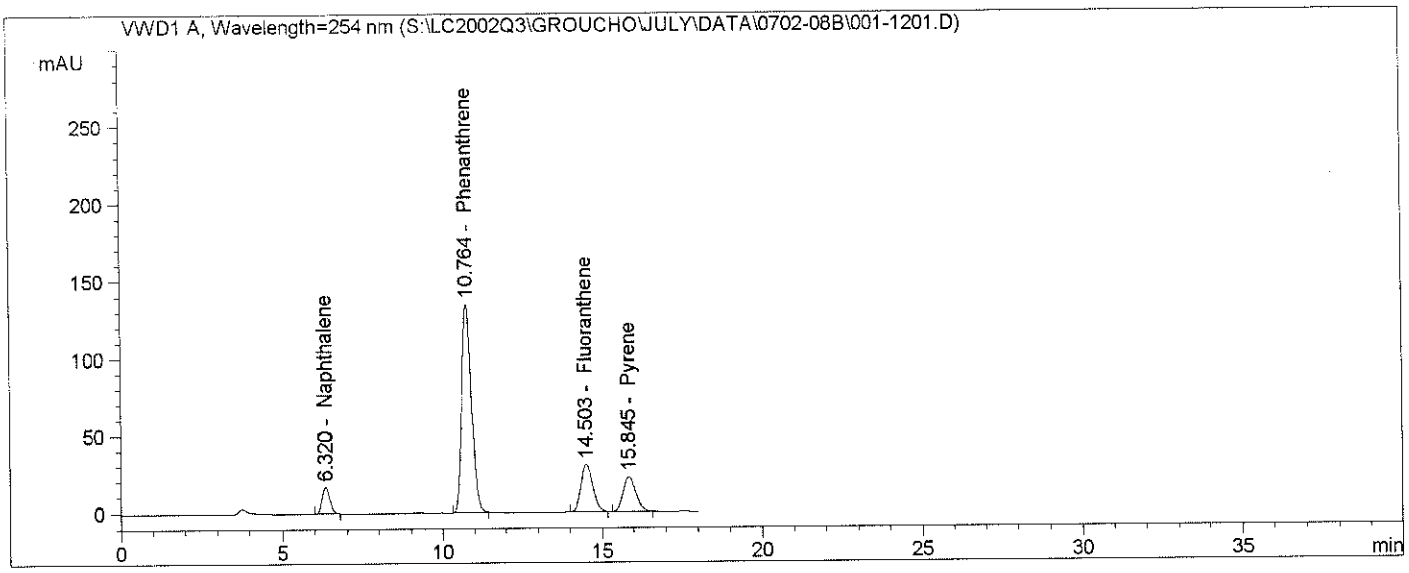
HPLC-14, p. 55

==========

Injection Date : 7/16/2002 8:22:36 PM
Sample Name : Standard 3
Acq. Operator : ajr

Seq. Line : 12
Vial : 1
Inj : 1
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.320	BB	273.15350	3.49243e-2	9.53969		Naphthalene
10.764	BB	2873.53149	3.41536e-3	9.81415		Phenanthrene
14.503	BB	789.95660	1.25016e-2	9.87574		Fluoranthene
15.845	BB	617.99371	1.35056e-2	8.34636		Pyrene

Totals : 37.57594

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========

*** End of Report ***

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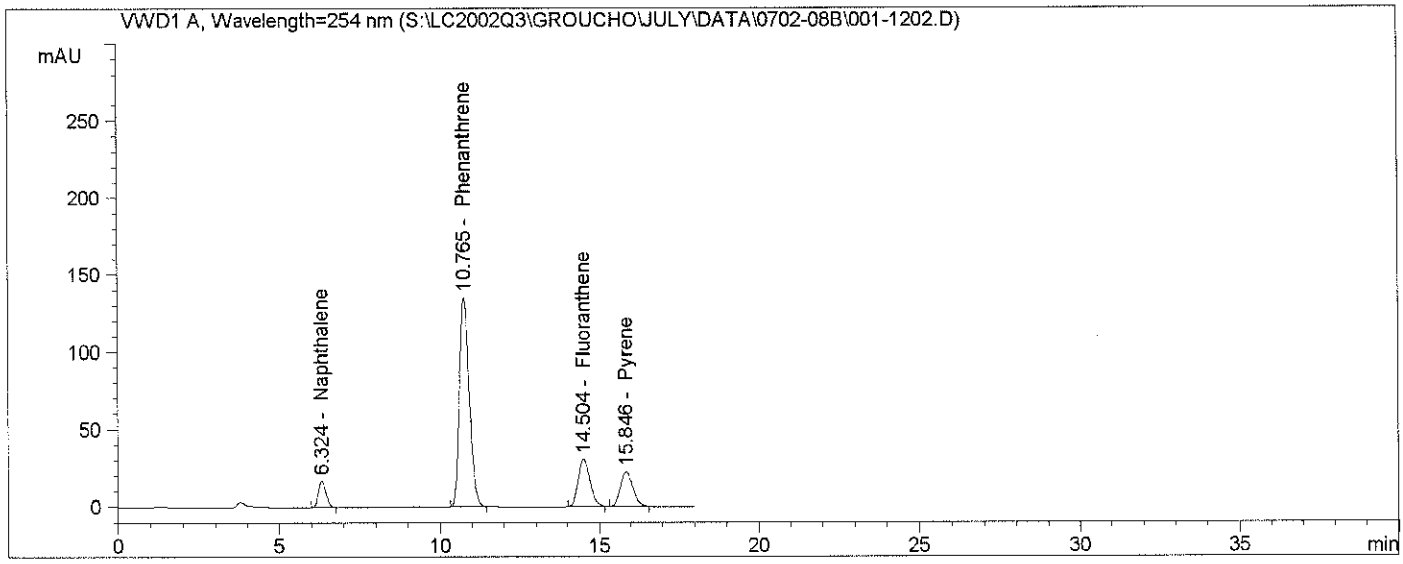
==========

Injection Date : 7/16/2002 8:42:33 PM Seq. Line : 12
Sample Name : Standard 3 Vial : 1
Acq. Operator : ajr Inj : 2
Inj Volume : 20 µl

Acq. Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed : 7/17/2002 9:18:58 AM by ajr



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : Tuesday, July 16, 2002 9:44:37 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime [min]	Type	Area mAU *s	Amt/Area	Amount [ug/mL]	Grp	Name
6.324	PB	273.32285	3.49242e-2	9.54559		Naphthalene
10.765	BB	2873.70239	3.41536e-3	9.81474		Phenanthrene
14.504	BB	794.06598	1.25014e-2	9.92693		Fluoranthene
15.846	BB	618.05627	1.35056e-2	8.34720		Pyrene

Totals : 37.63445

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========

*** End of Report ***

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	Standard 3	0702-08A	2	Sample		
2	2	LB	0702-08A	2	Sample		
3	3	A Imp	0702-08A	2	Sample		
4	4	A Tube FH	0702-08A	2	Sample		
5	21	A Tube BH*4	0702-08A	2	Sample		
6	5	A Tube BH	0702-08A	2	Sample		
7	6	B Imp	0702-08A	2	Sample		
8	7	B Tube FH	0702-08A	2	Sample		
9	22	B Tube FH*4	0702-08A	2	Sample		
10	8	B Tube BH	0702-08A	2	Sample		
11	9	C Imp	0702-08A	2	Sample		
12	1	Standard 3	0702-08A	2	Sample		
13	10	C Tube FH	0702-08A	2	Sample		
14	23	C Tube FH*4	0702-08A	2	Sample		
15	11	C Tube BH	0702-08A	2	Sample		
16	12	MS	0702-08A	2	Sample		
17	1	Standard 3	0702-08A	2	Sample		
18	99	meoh	JUNK	1	Sample		

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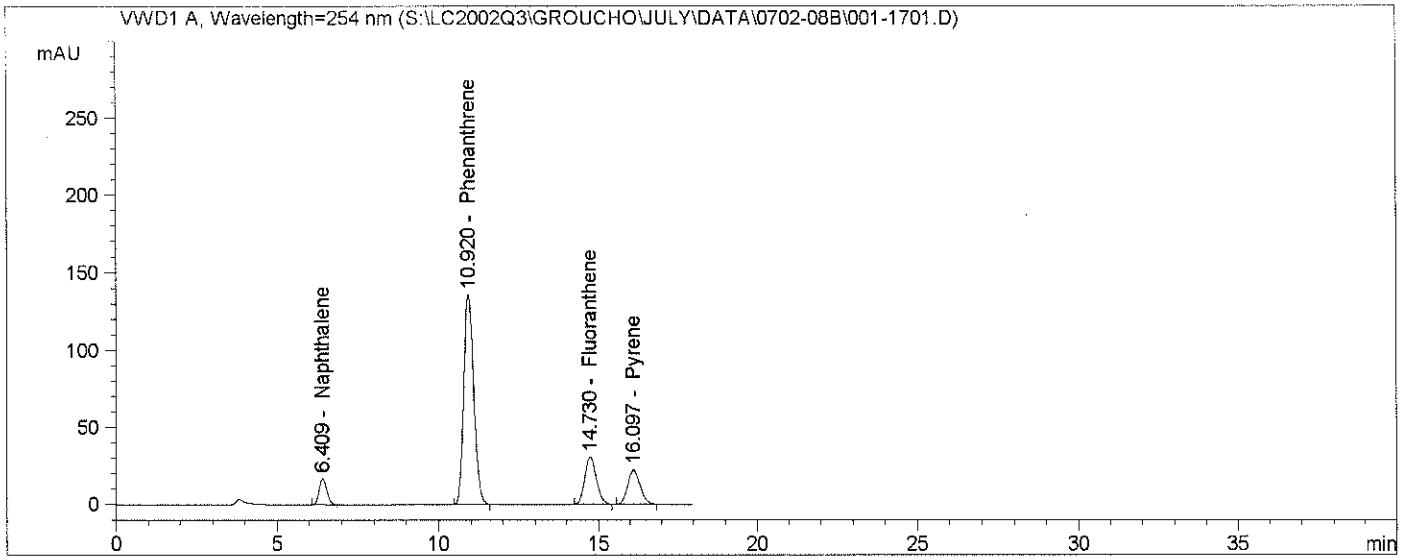
```
==========================================================================
Injection Date  : 7/16/2002 11:42:24 PM          Seq. Line :  17
Sample Name     : Standard 3                          Vial :   1
Acq. Operator   : ajr                                  Inj :   1
                                                Inj Volume : 20 µl
Acq. Method     : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08A.M
Last changed    : 7/15/2002 2:59:49 PM by ajr
Analysis Method : S:\LC2002Q3\GROUCHO\JULY\METHODS\0702-08B.M
Last changed    : 7/17/2002 9:41:16 AM by ajr
                  (modified after loading)
```




```
==========================================================================
                        External Standard Report
==========================================================================

Sorted By              :      Signal
Calib. Data Modified   :      7/17/2002 9:41:02 AM
Multiplier             :      1.0000
Dilution               :      1.0000

Signal 1: VWD1 A, Wavelength=254 nm

RetTime  Type     Area      Amt/Area    Amount   Grp   Name
 [min]         mAU   *s                [ug/mL]
-------|------|----------|----------|----------|--|------------------
  6.409 PB      276.61124 3.49230e-2    9.66009     Naphthalene
 10.920 BB     2906.87988 3.41541e-3    9.92817     Phenanthrene
 14.730 BB      799.08917 1.25011e-2    9.98950     Fluoranthene
 16.097 BB      625.65204 1.35048e-2    8.44930     Pyrene

Totals :                                38.02707

 Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========================================================================
                          *** End of Report ***
```

Sequence: S:\LC2002Q3\GROUCHO\JULY\SEQUENCE\0702-08A.S

Sequence Table:

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	51	Naphthalene	0702-08A	1	Sample		
2	52	Phenanthrene	0702-08A	1	Sample		
3	53	Fluoranthene	0702-08A	1	Sample		
4	54	Pyrene	0702-08A	1	Sample		
5	1	Standard 1	0702-08A	2	Sample		
6	2	Standard 2	0702-08A	2	Sample		
7	3	Standard 3	0702-08A	2	Sample		
8	4	Standard 4	0702-08A	2	Sample		
9	5	Standard 5	0702-08A	2	Sample		
10	6	Standard 6	0702-08A	2	Sample		
11	99	meoh	JUNK	1	Sample		