Appendix A.6

Focussed Remedial Investigation Report

Volume 5 of 6

299 Main Street Site
Westbury, New York
(Site Code 1-30-043S)

December 1999

❖ Impact Environmental Consulting, Inc. • 1 Village Plaza Park • New York • 11754
516.269.8800 • fax 516.269.1599

CHEMTECH
ANALAB/ICM DIVISION

205 Campus Plaza 1 • Raritan Center • Edison, NJ • 08837
Tel: 732.225.4111 Fax: 732.225.4110

DATA PACKAGE FOR SMIVOLATILE ORGANICS

PART II

PROJECT NAME: # 1-30-0435
PROJECT # 98-335, WESTBURY

IMPACT ENVIRONMENTAL
1 VILLAGE PLAZA
KING PARK NY 11754
916-269-8800

CHEMTECH PROJECT	13826ASP
ATTENTION	KEVIN KLEAKA

PART I	VOLATILE ORGANICS
PART II	SEMIVOLATILE ORGANICS
PART III	TPH BY GC
PART IV	TOTAL METALS

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Tel: 732.225.4111 Fax: 732.225.4110

CASE NARRATIVE-SEMIVOLATILES

Impact Environmental
Project Name: # 1-30-0435
Project # 98-335, Westbury
Chemtech Project # 13826ASP

A. Number of Samples and Date of Receipt
16 Soil samples were delivered to the laboratory intact on 10/18/99.

B. Parameters
Test requested was Volatile Organics, Semivolatile Organics, TPH BY GC & Total Metals. This data package contains results for Semivolatile Organics.

C. Analytical Techniques:
The analysis of Semivolatile Organics is based Method 8270B. The samples were analyzed on instrument BNA2 using GC Column RTX-5 which is 30 meters, 0.25mm ID, 0.25mm df (crossbond 5% diphenyl-95% dimethyl polysiloxane).

D. QA/ QC Samples:
Surrogate Recoveries were within QC limits except for the followings: GP-009-SS10, GP-010-SS15 and GP-009-SS10RE. Blank Spike recoveries met QC criteria. MS/MSD recoveries and RPDs met requirements. Holding Times were met. Tuning Checks met requirements. Internal Standard Areas did not meet requirements. Retention Times were acceptable. Calibrations met requirements. Blank analyses did not indicate the presence of contamination.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature _____ Name: Divyajit Mehta

Date: 11/11/99 Title: Lab Manager

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COVER PAGE

Lab Name: Chemtech Consulting Group Client: IMPACT ENVIRONMENTAL
Lab Code: CHEM Project No.: 13826ASP

Client Sample No.	Lab Sample ID
GP-008-SS30	87991
GP-008-SS45	87992
GP-009-SS10	87993
GP-010-SS15	87994
GP-011-SS15	87995
GP-012-SS15	87996
GP-009-SS30	87997
GP-009-SS45	87998
GP-010-SS30	87999
GP-010-SS45	88000
GP-011-SS30	88001
GP-011-SS45	88002
GP-012-SS30	88003
GP-012-SS45	88004
GP-013-SS8	88005
GP-013-SS12	88006

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designed, as verified by the following signature.

Signature: _____ Name: DIVYAJIT MEHTA

Date : 11/11/97 Title: LAB DIRECTOR

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DATA REPORTING QUALIFIERS - ORGANIC

For reporting results, the following "Results Qualifiers" are used:

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates the compound was analyzed for, but was not detected. Report the minimum detection limit for the sample with the U, ie "10 U". This is not necessarily the instrument detection limit. The figure represents the minimum detection limit attainable for this particular sample based on any concentration or dilution that may have been required.

J - Indicates an estimated value. This flag is used:

(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed).

(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit but greater than zero. If the detection limit was 10 ug/L and a concentration of 3 ug/L was calculated, report as "3 J".

B - Indicates the analyte was found in the blank as well as the sample; report as "12 B".

E - Indicates the analyte's's concentration exceeds the calibrated range of the GC/MS instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

P - This flag is used for a Pesticide/Aroclor target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".

N - This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.

CHEMTECH CONSULTING GROUP

SEMIVOLATILE ORGANICS DATA

CHEMTECH CONSULTING GROUP

SEMIVOLATILE

QC DATA

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS30

Level: (low/med) LOW

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 0 #	#	#	#	#	#	TOT OUT
01	BLKSPK1	58	53	53						
02	SBLK01	72	65	59						
03	GP-012-SS30	59	55	51						
04	GP-012-SS45	57	57	45						
05	GP-010-SS30	62	56	49						
06	GP-011-SS45	52	48	44						
07	GP-011-SS15	56	52	42						
08	GP-010-SS30	51	46	38						
09	GP-009-SS45	57	53	43						
10	GP-009-SS30	72	75	67						
11	GP-013-SS12	69	73	95						
12	GP-013-SS8	70	71	101						
13	GP-012-SS15	65	64	77						
14	GP-009-SS10	306 *	52	75						1
15	GP-010-SS45	57	56	66						
16	GP-010-SS30MS	56	54	64						
17	GP-010-SS30MSD	56	56	63						
18	GP-010-SS15	8 *	35	69						1
19	GP-009-SS30RE	60	67	73						
20	GP-013-SS12RE	62	68	116						
21	GP-013-SS8RE	61	64	128						
22	GP-012-SS15RE	58	62	107						
23	GP-009-SS10RE	571 *	1 *	128						2
24	GP-010-SS15RE	30	46	103						
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(23-120)
S2 (FBP) = 2-Fluorobiphenyl	(30-115)
S3 0 = Terphenyl-d14	(18-137)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS30

Matrix Spike - Sample No.: GP-010-SS30 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	3500	0	1900	54	(28-104)
n-Nitroso-di-n-propylamine	3500	0	2400	69	(41-126)
1,2,4-Trichlorobenzene	3500	0	2500	71	(38-107)
Acenaphthene	3500	0	2100	60	(31-137)
2,4-Dinitrotoluene	3500	0	2100	60	(28-89)
Pyrene	3500	0	2600	74	(35-142)

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	3500	2200	63	15	27	(28-104)
n-Nitroso-di-n-propylamine	3500	2400	69	0	38	(41-126)
1,2,4-Trichlorobenzene	3500	2600	74	4	23	(38-107)
Acenaphthene	3500	2300	66	9	19	(31-137)
2,4-Dinitrotoluene	3500	2300	66	9	47	(28-89)
Pyrene	3500	2500	71	4	36	(35-142)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits

Spike Recovery: 0 out of 12 outside limits

Comments:

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: EAST SOLIDER CREEK Group: GP-008-SS30

Matrix Spike - Sample No.: BLKSPK1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	#	QC. LIMITS REC.
1,4-Dichlorobenzene	3300	0	2900	88		(28-104)
n-Nitroso-di-n-propylamine	3300	0	3300	100		(41-126)
1,2,4-Trichlorobenzene	3300	0	3100	94		(38-107)
Acenaphthene	3300	0	2600	79		(31-137)
2,4-Dinitrotoluene	3300	0	2900	88		(28-89)
Pyrene	3300	0	2400	73		(35-142)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits

Spike Recovery: 0 out of 12 outside limits

Comments: _____

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK01

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-S

Lab File ID: B6735.D Lab Sample ID: SBLK01

Instrument ID: BNA1 Date Extracted: 10/18/99

Matrix: (soil/water) SOIL Date Analyzed: 11/3/99

Level: (low/med) LOW Time Analyzed: 1932

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	BLKSPK1	BLKSPK1	B6693.D	11/01/99
02	GP-012-SS30	O88003	B6738.D	11/03/99
03	GP-012-SS45	O88004	B6739.D	11/03/99
04	GP-010-SS30	O88001	B6740.D	11/03/99
05	GP-011-SS45	O88002	B6741.D	11/04/99
06	GP-011-SS15	O87995	B6742.D	11/04/99
07	GP-010-SS30	O87999	B6743.D	11/04/99
08	GP-009-SS45	O87998	B6744.D	11/04/99
09	GP-009-SS30	O87997	B6757.D	11/04/99
10	GP-013-SS12	O88006	B6758.D	11/04/99
11	GP-013-SS8	O88005	B6759.D	11/04/99
12	GP-012-SS15	O87996	B6760.D	11/04/99
13	GP-009-SS10	O87993	B6761.D	11/04/99
14	GP-010-SS45	O88000	B6834.D	11/09/99
15	GP-010-SS30MS	O88001MS	B6835.D	11/09/99
16	GP-010-SS30MSD	O88001SD	B6836.D	11/09/99
17	GP-010-SS15	O87994	B6837.D	11/09/99
18	GP-009-SS30RE	O87997RE	B6838.D	11/09/99
19	GP-013-SS12RE	O88006RE	B6839.D	11/09/99
20	GP-013-SS8RE	O88005RE	B6840.D	11/09/99
21	GP-012-SS15RE	O87996RE	B6841.D	11/09/99
22	GP-009-SS10RE	O87993RE	B6842.D	11/09/99
23	GP-010-SS15RE	O87994RE	B6843.D	11/09/99
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CRE Group: GP-008-SS3

Lab File ID: B6762.D DFTPP Injection Date: 11/5/99

Instrument ID: BNA1 DFTPP Injection Time: 1000

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	65.5
70	Less than 2.0% of mass 69	0.3 (0.4)1
127	40.0 - 60.0% of mass 198	44.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.2
275	10.0 - 30.0% of mass 198	22.0
365	Greater than 1.00% of mass 198	2.4
441	Present, but less than mass 443	13.2
442	Greater than 40.0% of mass 198	89.0
443	17.0 - 23.0% of mass 442	16.7 (18.8)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	SSTD020	B6763.D	11/5/99	1027
02	SSTD050	SSTD050	B6764.D	11/5/99	1144
03	SSTD080	SSTD080	B6765.D	11/5/99	1235
04	SSTD120	SSTD120	B6766.D	11/5/99	1326
05	SSTD160	SSTD160	B6767.D	11/5/99	1423
06					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CRE Group: GP-008-SS3

Lab File ID: B6268.D DFTPP Injection Date: 10/6/99

Instrument ID: BNA1 DFTPP Injection Time: 0955

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	68.3
70	Less than 2.0% of mass 69	0.4 (0.5)1
127	40.0 - 60.0% of mass 198	47.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.5
275	10.0 - 30.0% of mass 198	21.4
365	Greater than 1.00% of mass 198	2.4
441	Present, but less than mass 443	12.3
442	Greater than 40.0% of mass 198	81.0
443	17.0 - 23.0% of mass 442	15.5 (19.1)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	SSTD020	B6269.D	10/6/99	1021
02	SSTD050	SSTD050	B6270.D	10/6/99	1111
03	SSTD080	SSTD080	B6271.D	10/6/99	1201
04	SSTD120	SSTD120	B6272.D	10/6/99	1252
05	SSTD160	SSTD160	B6273.D	10/6/99	1342
06					
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: EAST SOLIDER CRE Group: GP-008-SS3

Lab File ID: B6690.D DFTPP Injection Date: 11/1/99

Instrument ID: BNA1 DFTPP Injection Time: 1005

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	69.7
70	Less than 2.0% of mass 69	0.4 (0.6)1
127	40.0 - 60.0% of mass 198	41.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	23.0
365	Greater than 1.00% of mass 198	2.5
441	Present, but less than mass 443	13.3
442	Greater than 40.0% of mass 198	92.8
443	17.0 - 23.0% of mass 442	18.2 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD0805	B6691.D	11/1/99	1031
02	BLKSPK1	BLKSPK1	B6693.D	11/1/99	1213
03					
04					
05					
06					
07					
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22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: EAST SOLIDER CRE Group: GP-008-SS3

Lab File ID: B6733.D DFTPP Injection Date: 11/3/99

Instrument ID: BNA1 DFTPP Injection Time: 1814

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	64.8
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	40.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	22.4
365	Greater than 1.00% of mass 198	2.4
441	Present, but less than mass 443	14.3
442	Greater than 40.0% of mass 198	93.3
443	17.0 - 23.0% of mass 442	18.5 (19.9)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD0802	B6734.D	11/3/99	1842
02	SBLK01	SBLK01	B6735.D	11/3/99	1932
03	GP-012-SS30	O88003	B6738.D	11/3/99	2204
04	GP-012-SS45	O88004	B6739.D	11/3/99	2254
05	GP-010-SS30	O88001	B6740.D	11/3/99	2344
06	GP-011-SS45	O88002	B6741.D	11/4/99	0034
07	GP-011-SS15	O87995	B6742.D	11/4/99	0124
08	GP-010-SS30	O87999	B6743.D	11/4/99	0214
09	GP-009-SS45	O87998	B6744.D	11/4/99	0304
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11					
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19					
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21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: EAST SOLIDER CRE Group: GP-008-SS3

Lab File ID: B6748.D DFTPP Injection Date: 11/4/99

Instrument ID: BNA1 DFTPP Injection Time: 0950

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	65.5
70	Less than 2.0% of mass 69	0.4 (0.7)1
127	40.0 - 60.0% of mass 198	41.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	8.0
275	10.0 - 30.0% of mass 198	23.7
365	Greater than 1.00% of mass 198	2.4
441	Present, but less than mass 443	13.3
442	Greater than 40.0% of mass 198	91.2
443	17.0 - 23.0% of mass 442	18.7 (20.5)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD0803	B6749.D	11/4/99	1017
02	GP-009-SS30	O87997	B6757.D	11/4/99	1701
03	GP-013-SS12	O88006	B6758.D	11/4/99	1752
04	GP-013-SS8	O88005	B6759.D	11/4/99	1842
05	GP-012-SS15	O87996	B6760.D	11/4/99	1932
06	GP-009-SS10	O87993	B6761.D	11/4/99	2023
07					
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11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CRE Group: GP-008-SS3

Lab File ID: B6832.D DFTPP Injection Date: 11/9/99

Instrument ID: BNA1 DFTPP Injection Time: 0931

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	57.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	67.3
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	40.0 - 60.0% of mass 198	43.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	22.4
365	Greater than 1.00% of mass 198	2.5
441	Present, but less than mass 443	13.0
442	Greater than 40.0% of mass 198	91.4
443	17.0 - 23.0% of mass 442	17.4 (19.0)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD0804	B6833.D	11/9/99	0958
02	GP-010-SS45	O88000	B6834.D	11/9/99	1048
03	GP-010-SS30MS	O88001MS	B6835.D	11/9/99	1138
04	GP-010-SS30MSD	O88001SD	B6836.D	11/9/99	1229
05	GP-010-SS15	O87994	B6837.D	11/9/99	1320
06	GP-009-SS30RE	O87997RE	B6838.D	11/9/99	1410
07	GP-013-SS12RE	O88006RE	B6839.D	11/9/99	1501
08	GP-013-SS8RE	O88005RE	B6840.D	11/9/99	1552
09	GP-012-SS15RE	O87996RE	B6841.D	11/9/99	1643
10	GP-009-SS10RE	O87993RE	B6842.D	11/9/99	1733
11	GP-010-SS15RE	O87994RE	B6843.D	11/9/99	1824
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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS3

Lab File ID (Standard): B6691.D Date Analyzed: 11/1/99

Instrument ID: BNA1 Time Analyzed: 1031

		IS1 (DCB) AREA	#	RT	#	IS2 (NAP) AREA	#	RT	#	IS3 (ACE) AREA	#	RT	#
	12 HOUR STD	380294		9.79		1390978		12.96		761383		17.54	
	UPPER LIMIT	760588		10.29		2781956		13.46		1522766		18.04	
	LOWER LIMIT	190147		9.29		695489		12.46		380692		17.04	
	SAMPLE NO.												
01	BLKSPK1	296056		9.80		1092756		12.96		612878		17.55	
02													
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS3

Lab File ID (Standard): B6691.D Date Analyzed: 11/1/99

Instrument ID: BNA1 Time Analyzed: 1031

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1500124	21.39	1390763	28.41	1441155	31.90
	UPPER LIMIT	3000248	21.89	2781526	28.91	2882310	32.40
	LOWER LIMIT	750062	20.89	695382	27.91	720578	31.40
	SAMPLE NO.						
01	BLKSPK1	1076918	21.40	936629	28.38	964696	31.89
02							
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS3

Lab File ID (Standard): B6734.D Date Analyzed: 11/3/99

Instrument ID: BNA1 Time Analyzed: 1842

		IS1 (DCB) AREA	#	RT	#	IS2 (NAP) AREA	#	RT	#	IS3 (ACE) AREA	#	RT	#
	12 HOUR STD	379529		9.79		1324553		12.94		685759		17.54	
	UPPER LIMIT	759058		10.29		2649106		13.44		1371518		18.04	
	LOWER LIMIT	189765		9.29		662277		12.44		342880		17.04	
	SAMPLE NO.												
01	SBLK01	308235		9.79		1063933		12.93		569025		17.53	
02	GP-012-SS30	375229		9.78		1298336		12.92		689107		17.52	
03	GP-012-SS45	346689		9.78		1223557		12.92		600676		17.52	
04	GP-010-SS30	406809		9.78		1368560		12.92		716673		17.52	
05	GP-011-SS45	408813		9.78		1369044		12.92		731588		17.52	
06	GP-011-SS15	390035		9.78		1364545		12.92		722681		17.52	
07	GP-010-SS30	405612		9.77		1351980		12.92		739962		17.52	
08	GP-009-SS45	391173		9.77		1328058		12.92		699037		17.52	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS3

Lab File ID (Standard): B6734.D Date Analyzed: 11/3/99

Instrument ID: BNA1 Time Analyzed: 1842

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	1338420	21.38	1284899	28.40	1306036	31.90
	UPPER LIMIT	2676840	21.88	2569798	28.90	2612072	32.40
	LOWER LIMIT	669210	20.88	642450	27.90	653018	31.40
	SAMPLE NO.						
01	SBLK01	1061706	21.37	964019	28.36	967450	31.87
02	GP-012-SS30	1334067	21.36	1236974	28.36	1329619	31.87
03	GP-012-SS45	1193518	21.36	1114274	28.37	1160495	31.86
04	GP-010-SS30	1383593	21.36	1288969	28.36	1379317	31.87
05	GP-011-SS45	1389437	21.36	1277536	28.36	1360647	31.87
06	GP-011-SS15	1372980	21.36	1294292	28.36	1339723	31.87
07	GP-010-SS30	1381475	21.36	1274015	28.35	1350887	31.87
08	GP-009-SS45	1303211	21.36	1242711	28.36	1311659	31.87
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS3

Lab File ID (Standard): B6749.D Date Analyzed: 11/4/99

Instrument ID: BNA1 Time Analyzed: 1017

		IS1 (DCB) AREA	#	RT	#	IS2 (NAP) AREA	#	RT	#	IS3 (ACE) AREA	#	RT	#
	12 HOUR STD	389512		9.75		1370782		12.92		767102		17.51	
	UPPER LIMIT	779024		10.25		2741564		13.42		1534204		18.01	
	LOWER LIMIT	194756		9.25		685391		12.42		383551		17.01	
	SAMPLE NO.												
01	GP-009-SS30	363473		9.76		1139529		12.92		466429		17.53	
02	GP-013-SS12	331001		9.76		1074290		12.93		462117		17.55	
03	GP-013-SS8	345381		9.74		1097883		12.90		519847		17.52	
04	GP-012-SS15	353225		9.75		1204634		12.89		649070		17.49	
05	GP-009-SS10	29458	*	9.82		17314	*	13.00		21569	*	18.06	*
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: EAST SOLIDER CREEK Group: GP-008-SS3

Lab File ID (Standard): B6749.D Date Analyzed: 11/4/99

Instrument ID: BNA1 Time Analyzed: 1017

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	1472717		21.35		1304148		28.37		1327542		31.87	
	UPPER LIMIT	2945434		21.85		2608296		28.87		2655084		32.37	
	LOWER LIMIT	736359		20.85		652074		27.87		663771		31.37	
	SAMPLE NO.												
01	GP-009-SS30	1040789		21.38		775113		28.34		376270	*	31.84	
02	GP-013-SS12	871510		21.39		388521	*	28.40		140273	*	31.92	
03	GP-013-SS8	906095		21.37		364405	*	28.40		143949	*	31.90	
04	GP-012-SS15	1113602		21.33		641922	*	28.34		292898	*	31.83	
05	GP-009-SS10	103732	*	21.77		203080	*	28.42		80006	*	31.88	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS3

Lab File ID (Standard): B6833.D Date Analyzed: 11/9/99

Instrument ID: BNA1 Time Analyzed: 0958

		IS1 (DCB) AREA	#	RT	#	IS2 (NAP) AREA	#	RT	#	IS3 (ACE) AREA	#	RT	#
	12 HOUR STD	416493		9.65		1537267		12.81		876072		17.40	
	UPPER LIMIT	832986		10.15		3074534		13.31		1752144		17.90	
	LOWER LIMIT	208247		9.15		768634		12.31		438036		16.90	
	SAMPLE NO.												
01	GP-010-SS45	424963		9.66		1601986		12.80		930112		17.40	
02	GP-010-SS30MS	457225		9.68		1658695		12.82		969952		17.41	
03	GP-010-SS30MSD	434654		9.68		1626026		12.82		915228		17.41	
04	GP-010-SS15	128766	*	9.72		280007	*	13.12		640269		17.56	
05	GP-009-SS30RE	475618		9.69		1672832		12.86		714416		17.49	
06	GP-013-SS12RE	466972		9.71		1450624		12.89		602300		17.51	
07	GP-013-SS8RE	437444		9.68		1471817		12.85		644352		17.48	
08	GP-012-SS15RE	522236		9.68		1796106		12.83		969792		17.42	
09	GP-009-SS10RE	15090	*	9.76		15517	*	12.93		165331	*	17.54	
10	GP-010-SS15RE	121126	*	9.73		576264	*	13.17		473438		17.55	
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NAP) = Naphthalene-d8
IS3 (ACE) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CREEK Group: GP-008-SS3

Lab File ID (Standard): B6833.D Date Analyzed: 11/9/99

Instrument ID: BNA1 Time Analyzed: 0958

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	1706104		21.25		1295522		28.27		1110918		31.76	
	UPPER LIMIT	3412208		21.75		2591044		28.77		2221836		32.26	
	LOWER LIMIT	853052		20.75		647761		27.77		555459		31.26	
	SAMPLE NO.												
01	GP-010-SS45	1710093		21.25		1338109		28.25		1089686		31.74	
02	GP-010-SS30MS	1819162		21.28		1364597		28.24		1122377		31.75	
03	GP-010-SS30MSD	1646067		21.28		1337812		28.25		1101326		31.75	
04	GP-010-SS15	1142129		21.36		818231		28.29		380617	*	31.78	
05	GP-009-SS30RE	1397502		21.34		1085001		28.29		585625		31.78	
06	GP-013-SS12RE	1071807		21.36		318023	*	28.33		110034	*	31.82	
07	GP-013-SS8RE	946756		21.33		293070	*	28.33		97793	*	31.83	
08	GP-012-SS15RE	1691861		21.26		707014		28.27		272292	*	31.76	
09	GP-009-SS10RE	126319	*	21.89	*	118559	*	28.33		27846	*	31.78	
10	GP-010-SS15RE	771060	*	21.37		366846	*	28.29		109721	*	31.76	
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

CHEMTECH CONSULTING GROUP

SEMIVOLATILE

SAMPLE DATA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS10

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87993

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6761.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 14 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	38	U
108-60-1	bis(2-chloroisopropyl)ether	38	U
95-50-1	1,2-Dichlorobenzene	38	U
541-73-1	1,3-Dichlorobenzene	38	U
106-46-7	1,4-Dichlorobenzene	38	U
621-64-7	n-Nitroso-di-n-propylamine	38	U
67-72-1	Hexachloroethane	38	U
98-95-3	Nitrobenzene	38	U
78-59-1	Isophorone	38	U
111-91-1	bis(2-Chloroethoxy)methane	38	U
120-82-1	1,2,4-Trichlorobenzene	38	U
91-20-3	Naphthalene	38	U
106-47-8	4-Chloroaniline	77	U
87-68-3	Hexachlorobutadiene	38	U
91-57-6	2-Methylnaphthalene	66	U
77-47-4	Hexachlorocyclopentadiene	38	U
91-58-7	2-Chloronaphthalene	38	U
88-74-4	2-Nitroaniline	140	U
131-11-3	Dimethylphthalate	38	U
208-96-8	Acenaphthylene	38	U
606-20-2	2,6-Dinitrotoluene	38	U
99-09-2	3-Nitroaniline	150	U
83-32-9	Acenaphthene	38	U
132-64-9	Dibenzofuran	61	U
121-14-2	2,4-Dinitrotoluene	38	U
84-66-2	Diethylphthalate	38	U
7005-72-3	4-Chlorophenyl-phenylether	38	U
86-73-7	Fluorene	38	U
100-01-6	4-Nitroaniline	200	U
86-30-6	N-Nitrosodiphenylamine	38	U
122-66-7	1,2-Diphenylhydrazine	38	U
101-55-3	4-Bromophenyl-phenylether	38	U
118-74-1	Hexachlorobenzene	38	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS10

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87993

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6761.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 14 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	38	U
120-12-7	Anthracene	38	U
86-74-8	Carbazole	57	U
84-74-2	Di-n-butylphthalate	38	U
206-44-0	Fluoranthene	2100	
129-00-0	Pyrene	1000	
85-68-7	Butylbenzylphthalate	38	U
91-94-1	3,3'-Dichlorobenzidine	150	U
56-55-3	Benzo[a]anthracene	220	
218-01-9	Chrysene	280	
117-81-7	bis(2-Ethylhexyl)phthalate	1900	
117-84-0	Di-n-octylphthalate	38	U
205-99-2	Benzo[b]fluoranthene	120	U
207-08-9	Benzo[k]fluoranthene	110	U
50-32-8	Benzo[a]pyrene	38	U
193-39-5	Indeno(1,2,3-cd)pyrene	38	U
53-70-3	Dibenz[a,h]anthracene	57	U
191-24-2	Benzo[g,h,i]perylene	38	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-009-SS10

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87993

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6761.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 14 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 108-88-3	Toluene	4.68	12600	J
2. 111-65-9	Octane	5.27	5900	J
3. 100-41-4	Ethylbenzene	6.68	5000	J
4. 108-38-3	Benzene, 1,3-dimethyl-	6.88	10700	J
5. 95-47-6	Benzene, 1,2-dimethyl-	7.36	4000	J
6. 111-84-2	Nonane	7.48	4400	J
7. 103-65-1	Benzene, propyl-	8.64	3600	J
8. 98-82-8	Benzene, (1-methylethyl)-	8.83	6500	J
9. 526-73-8	Benzene, 1,2,3-trimethyl-	8.97	2300	J
10. 124-18-5	Decane	9.55	1800	J
11. 638-68-6	Triacontane	10.21	2900	J
12. 135-98-8	Benzene, (1-methylpropyl)-	10.62	2000	J
13. 3891-98-3	Dodecane, 2,6,10-trimethyl-	16.47	1900	J
14. 629-50-5	Tridecane	19.35	2300	J
15. 544-76-3	Hexadecane	25.66	2000	J
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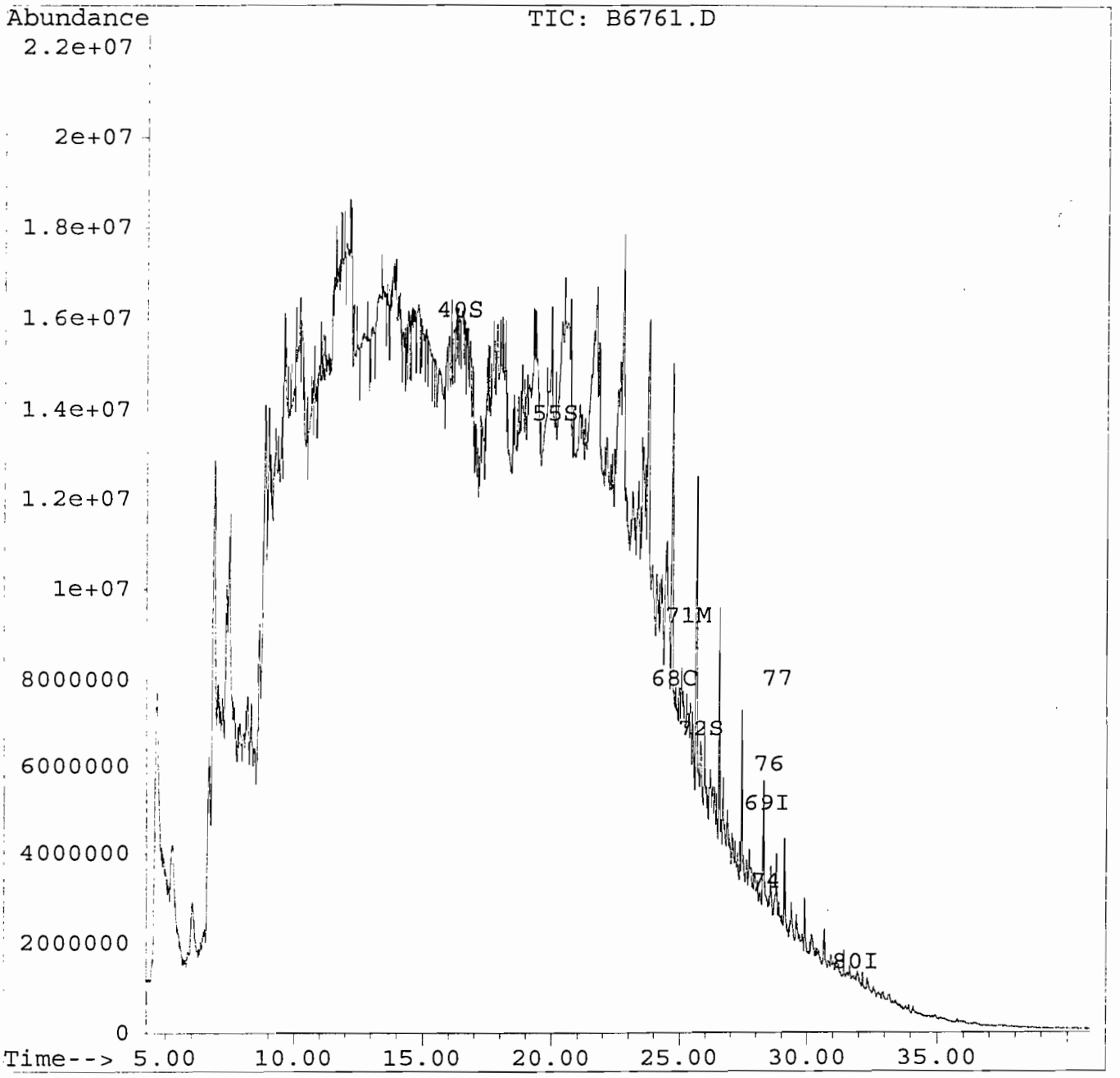
30.				

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :
Quant Time: Nov 10 12:13 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000028

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :
Quant Time: Nov 10 12:13 1999

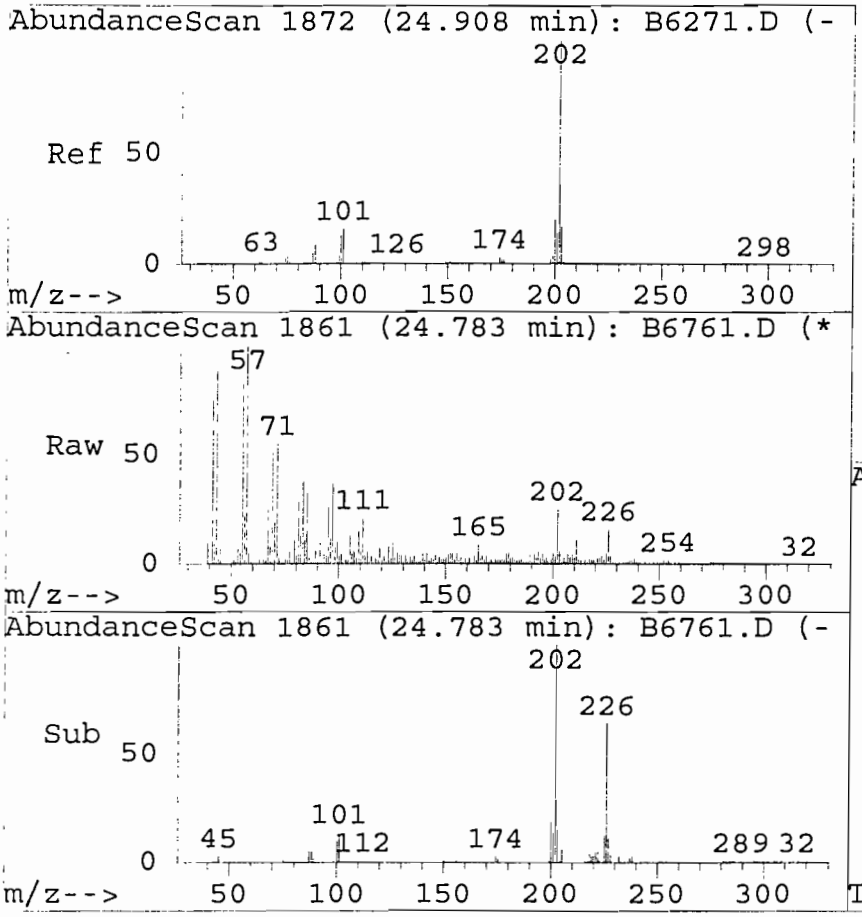
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.82	152	29458	40.00	ng		0.04
21) Naphthalene-d8	13.00	136	17314	40.00	ng		0.06
36) Acenaphthene-d10	18.06	164	21569	40.00	ng		0.53
57) Phenanthrene-d10	21.77	188	103732	40.00	ng		0.38
69) Chrysene-d12	28.42	240	203080	40.00	ng		0.02
80) Perylene-d12	31.88	264	80006	40.00	ng		-0.02
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	7.02	112	1013249	987.91	ng		#
6) 2-Chlorophenol-d4	9.35	132	296608	311.71	ng		#
7) Phenol-d5	9.20	99	642197	547.11	ng		#
13) 1,2-Dichlorobenzene-d4	10.26	152	61370	92.66	ng		#
22) Nitrobenzene-d5	11.30	82	126890	612.27	ng		#
40) 2-Fluorobiphenyl	16.37	172	76690	103.36	ng		
55) 2,4,6-Tribromophenol	20.09	330	295396	2078.98	ng		
72) Terphenyl-d14	25.82	244	900741	150.60	ng		
Target Compounds							Qvalue
68) Fluoranthene	24.78	202	277970	109.04	ng		91
71) Pyrene	25.32	202	370405	53.19	ng		93
74) Benzo[a]anthracene	28.39	228	61595	11.22	ng	m	83
76) Chrysene	28.49	228	71889	14.32	ng	m	87
77) bis(2-Ethylhexyl)phthalate	28.80	149	540748	96.76	ng		97

000029

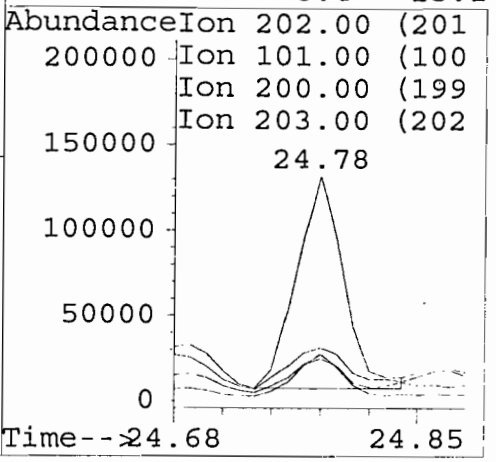
(#) = qualifier out of range (m) = manual integration

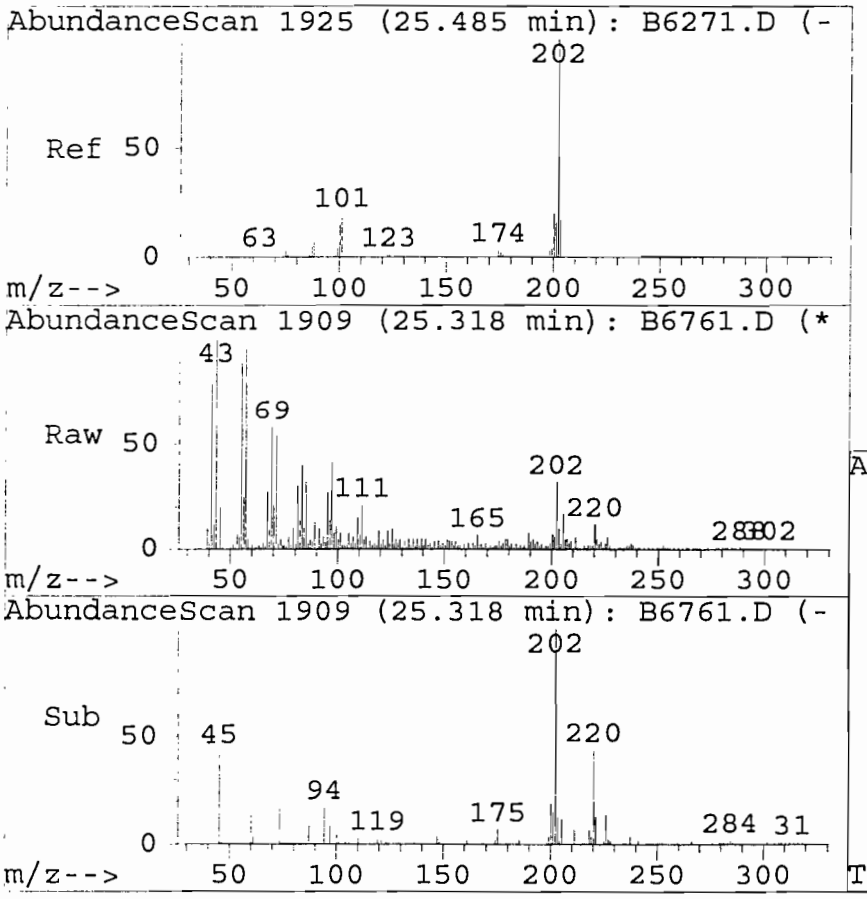


#68
Fluoranthene
Concen: 109.04 ng
RT: 24.78 min Scan# 1861
Delta R.T. 0.19 min
Lab File: B6761.D
Acq: 4 Nov 99 8:23 pm

Tgt Ion:202 Resp: 277970

Ion	Ratio	Lower	Upper
202	100		
101	18.9	7.8	23.4
200	20.8	9.9	29.6
203	23.7	8.4	25.1

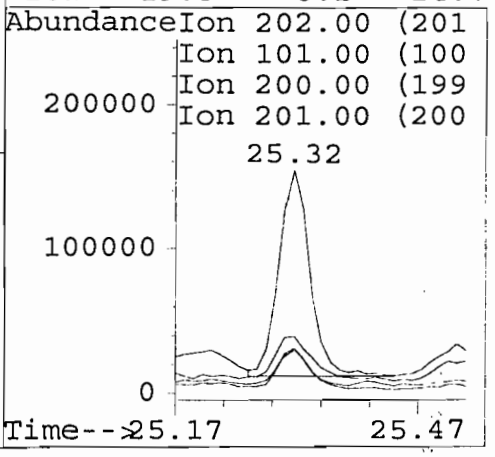




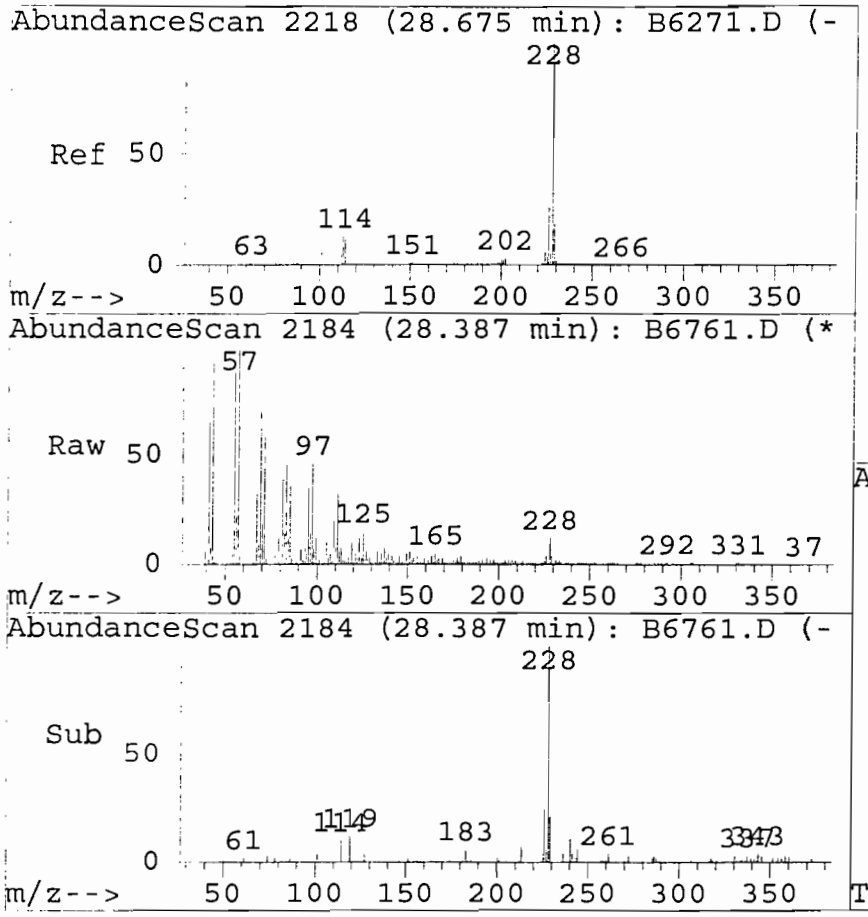
#71
Pyrene
Concen: 53.19 ng
RT: 25.32 min Scan# 1909
Delta R.T. 0.16 min
Lab File: B6761.D
Acq: 4 Nov 99 8:23 pm

Tgt Ion:202 Resp: 370405

Ion	Ratio	Lower	Upper
202	100		
101	25.6	9.5	28.5
200	20.2	10.2	30.6
201	19.5	8.2	24.6

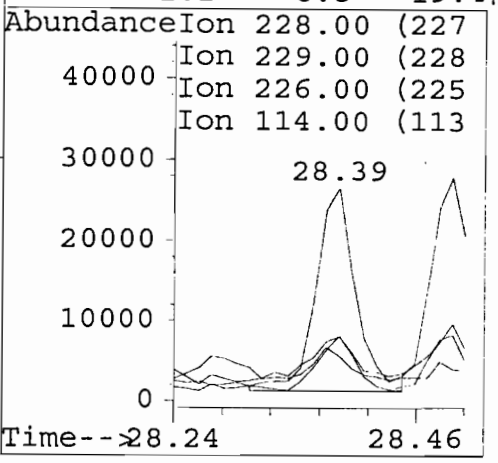


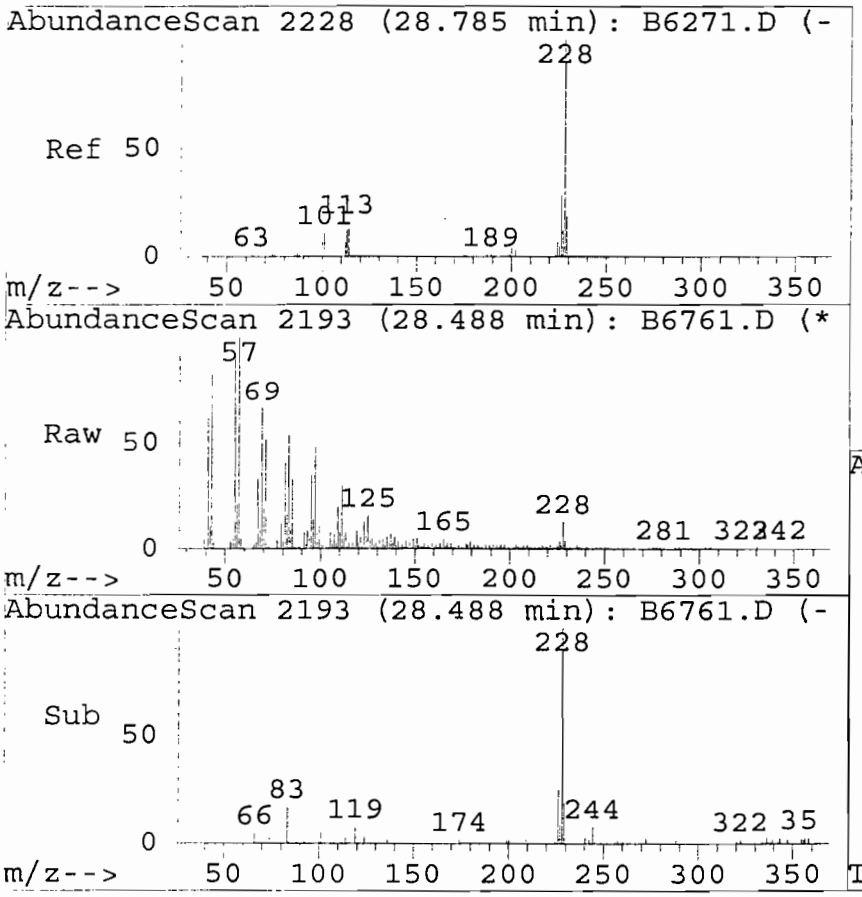
000030



#74
Benzo[a]anthracene
Concen: 11.22 ng m
RT: 28.39 min Scan# 2184
Delta R.T. 0.03 min
Lab File: B6761.D
Acq: 4 Nov 99 8:23 pm

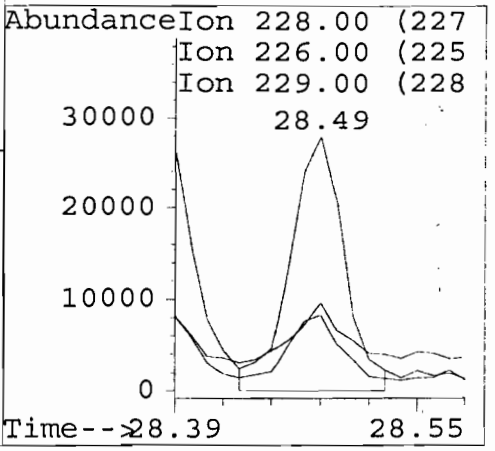
Tgt Ion:228	Resp:	61595	
Ion	Ratio	Lower	Upper
228	100		
229	30.5	9.6	28.7#
226	30.7	13.1	39.3
114	21.1	6.5	19.4#





#76
Chrysene
Concen: 14.32 ng m
RT: 28.49 min Scan# 2193
Delta R.T. 0.01 min
Lab File: B6761.D
Acq: 4 Nov 99 8:23 pm

Tgt Ion:228	Resp:	71889	
Ion	Ratio	Lower	Upper
228	100		
226	29.6	14.6	43.9
229	34.4	9.7	29.1#
0	0.0	0.0	0.0



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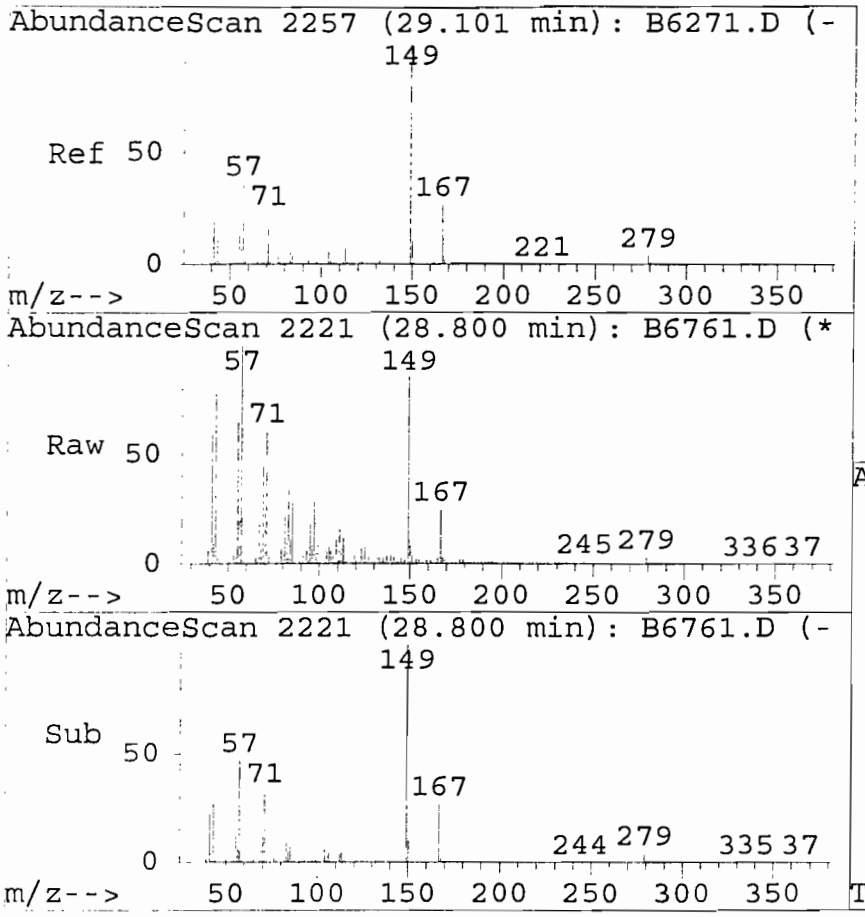
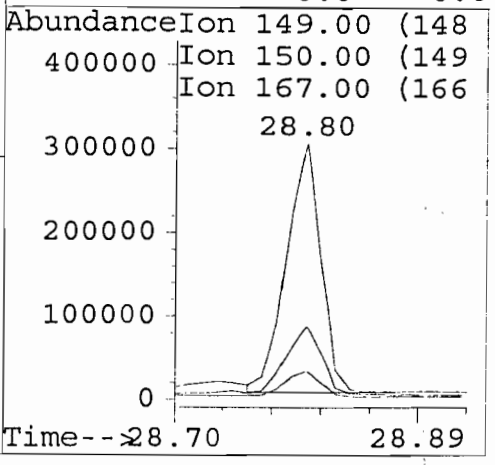


#77
bis(2-Ethylhexyl)phthalate
Concen: 96.76 ng
RT: 28.80 min Scan# 2221
Delta R.T. 0.01 min
Lab File: B6761.D
Acq: 4 Nov 99 8:23 pm

Tgt Ion:149 Resp: 540748

Ion	Ratio	Lower	Upper
149	100		
150	11.1	5.2	15.7
167	28.7	13.5	40.5
0	0.0	0.0	0.0



000032

Library Search Compound Report

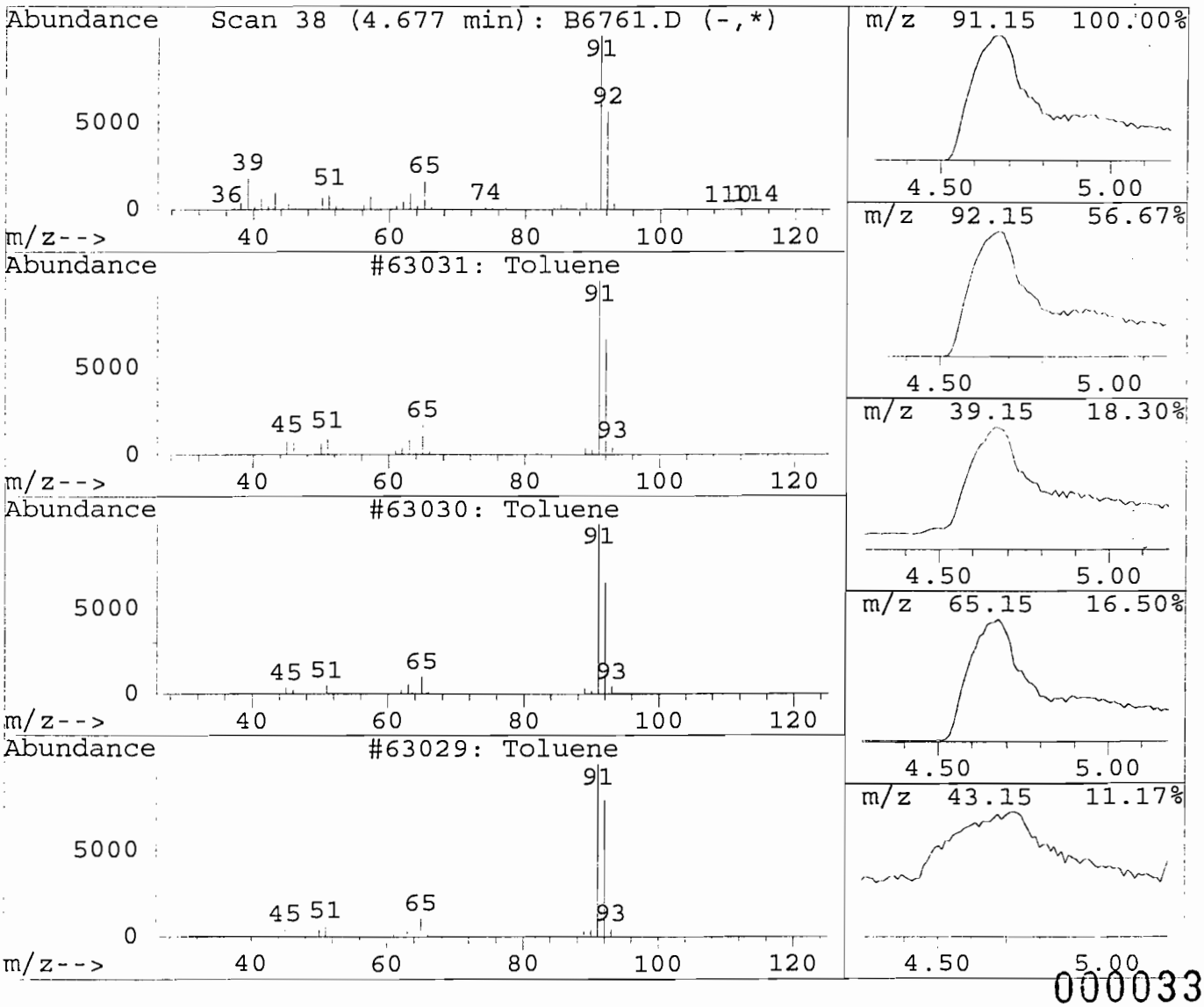
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
4.68	652.37 ng	81093947	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Toluene	63031	000108-88-3	91
2	Toluene	63030	000108-88-3	91
3	Toluene	63029	000108-88-3	91
4	Toluene	965	000108-88-3	90
5	1,3,5-Cycloheptatriene	63036	000544-25-2	90



000033

Library Search Compound Report

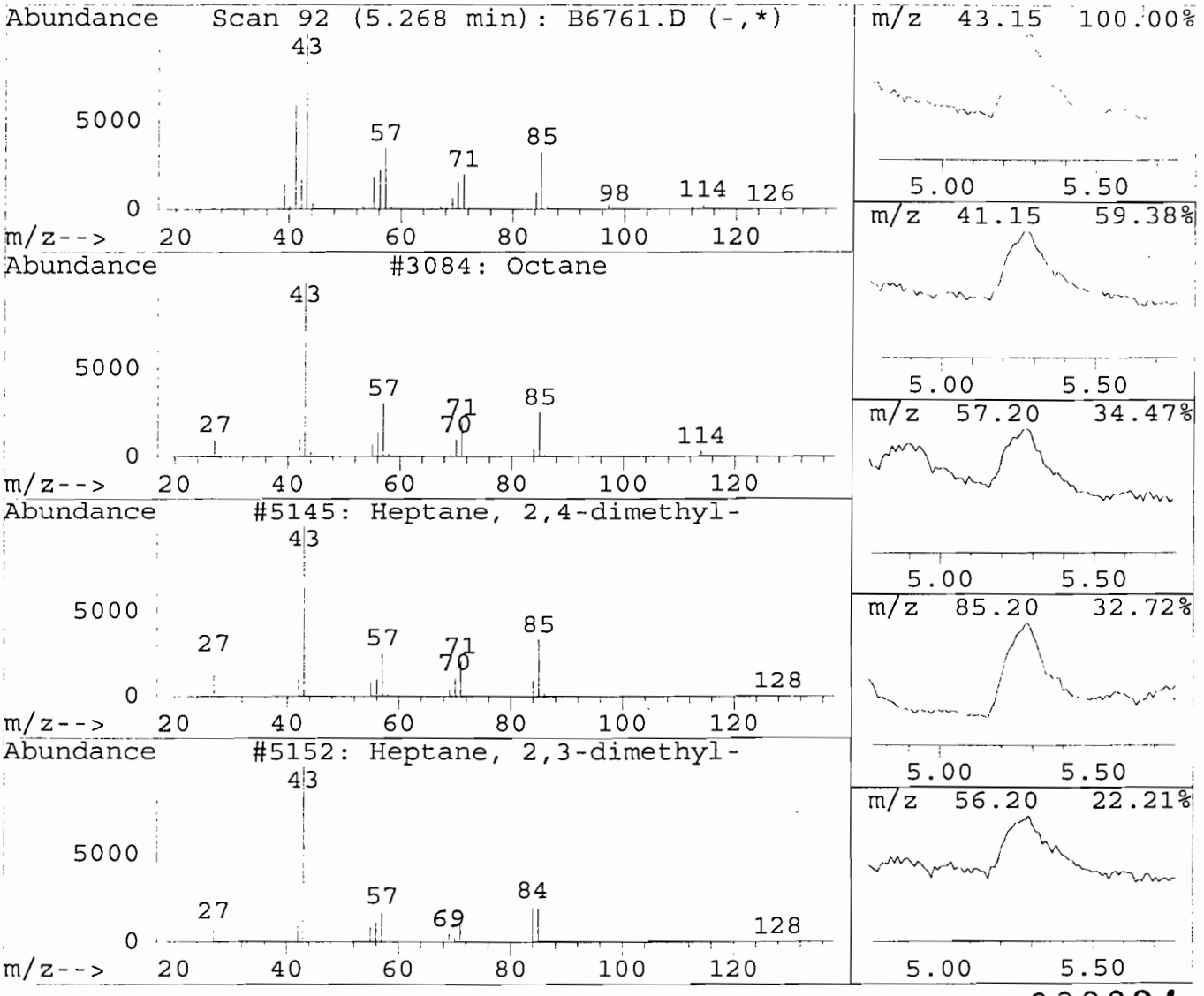
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.27	305.07 ng	37921917	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane	3084	000111-65-9	72
2	Heptane, 2,4-dimethyl-	5145	002213-23-2	64
3	Heptane, 2,3-dimethyl-	5152	003074-71-3	64
4	Nonane	65142	000111-84-2	59
5	Octane	64207	000111-65-9	59



000034

Library Search Compound Report

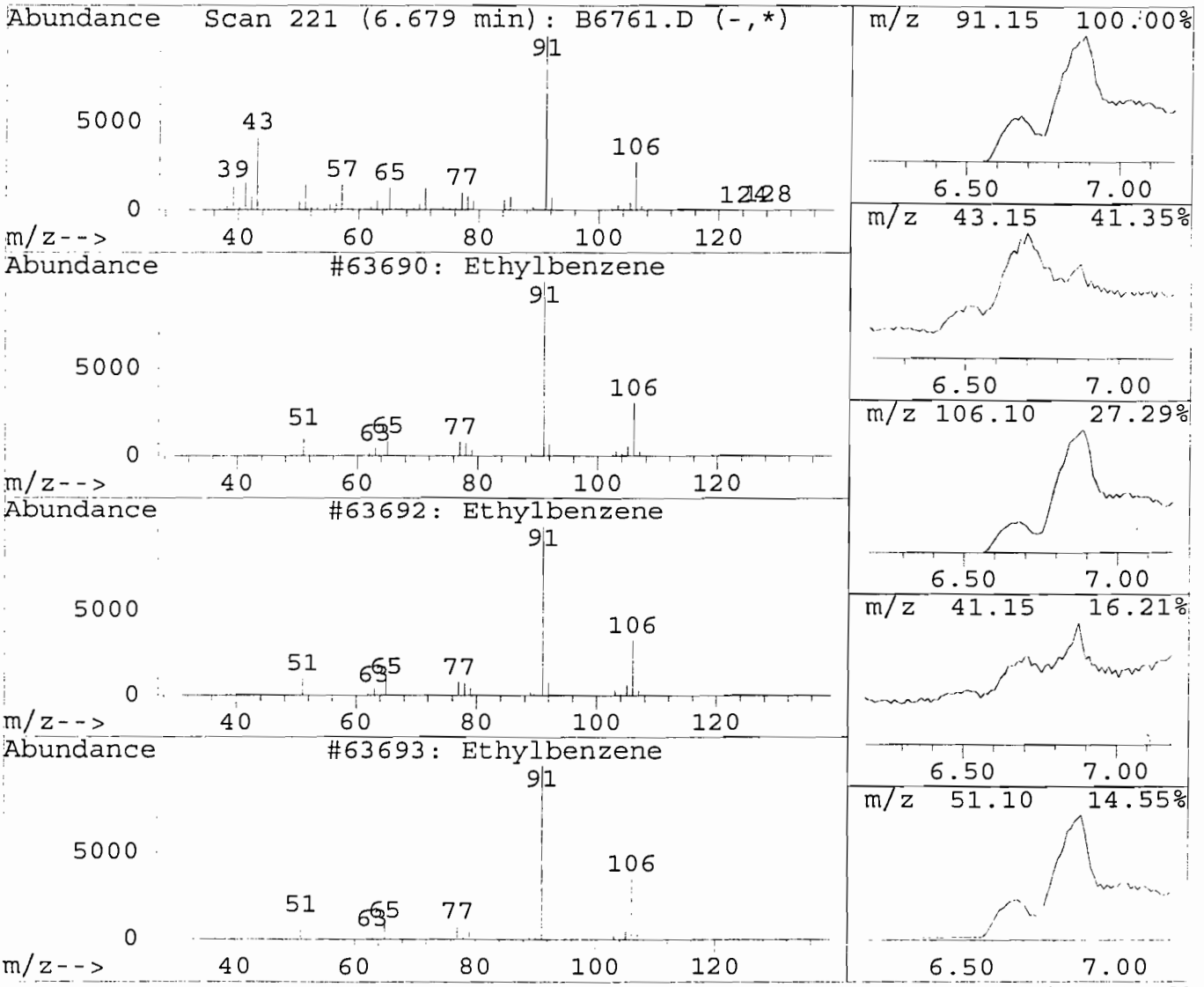
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.68	259.49 ng	32256303	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethylbenzene	63690	000100-41-4	92
2	Ethylbenzene	63692	000100-41-4	92
3	Ethylbenzene	63693	000100-41-4	70
4	Ethylbenzene	63691	000100-41-4	70
5	Ethylbenzene	2026	000100-41-4	70



000035

Library Search Compound Report

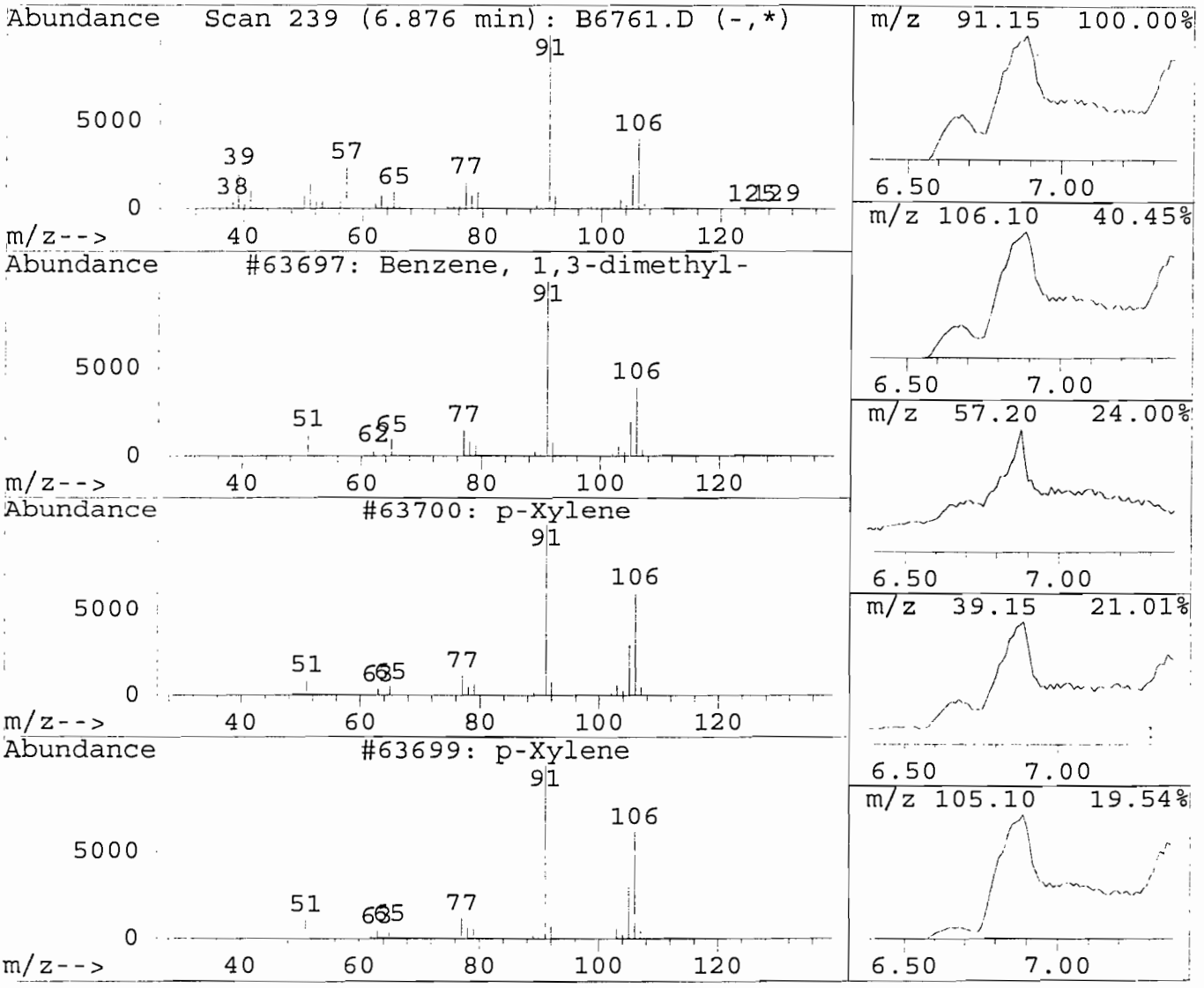
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.88	553.18 ng	68764077	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,3-dimethyl-	63697	000108-38-3	95
2	p-Xylene	63700	000106-42-3	95
3	p-Xylene	63699	000106-42-3	95
4	Benzene, 1,3-dimethyl-	63695	000108-38-3	95
5	Benzene, 1,2-dimethyl-	63705	000095-47-6	94



Library Search Compound Report

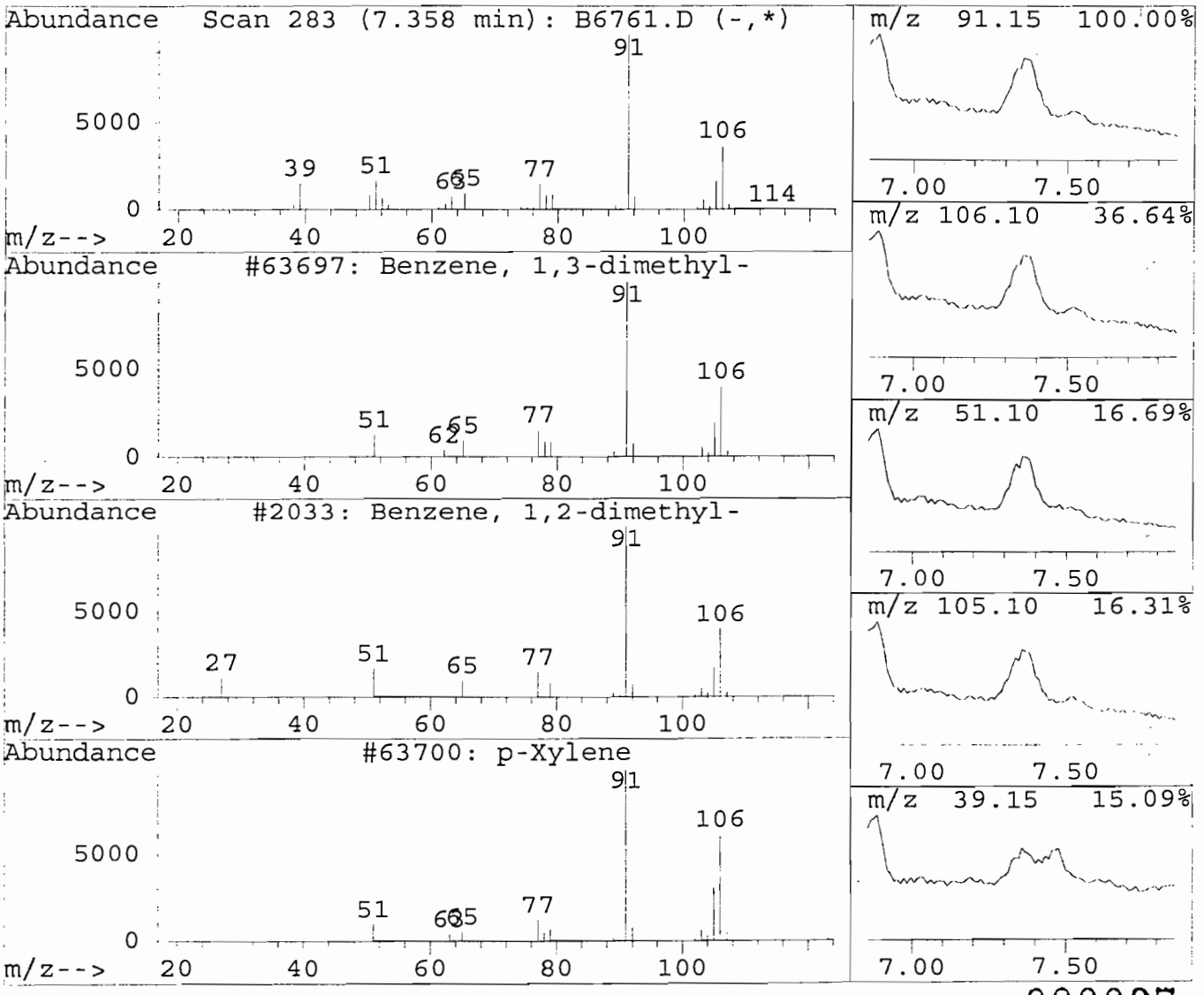
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
7.36	206.84 ng	25711987	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,3-dimethyl-	63697	000108-38-3	97
2	Benzene, 1,2-dimethyl-	2033	000095-47-6	94
3	p-Xylene	63700	000106-42-3	94
4	Benzene, 1,3-dimethyl-	63696	000108-38-3	94
5	p-Xylene	63699	000106-42-3	94



000037

Library Search Compound Report

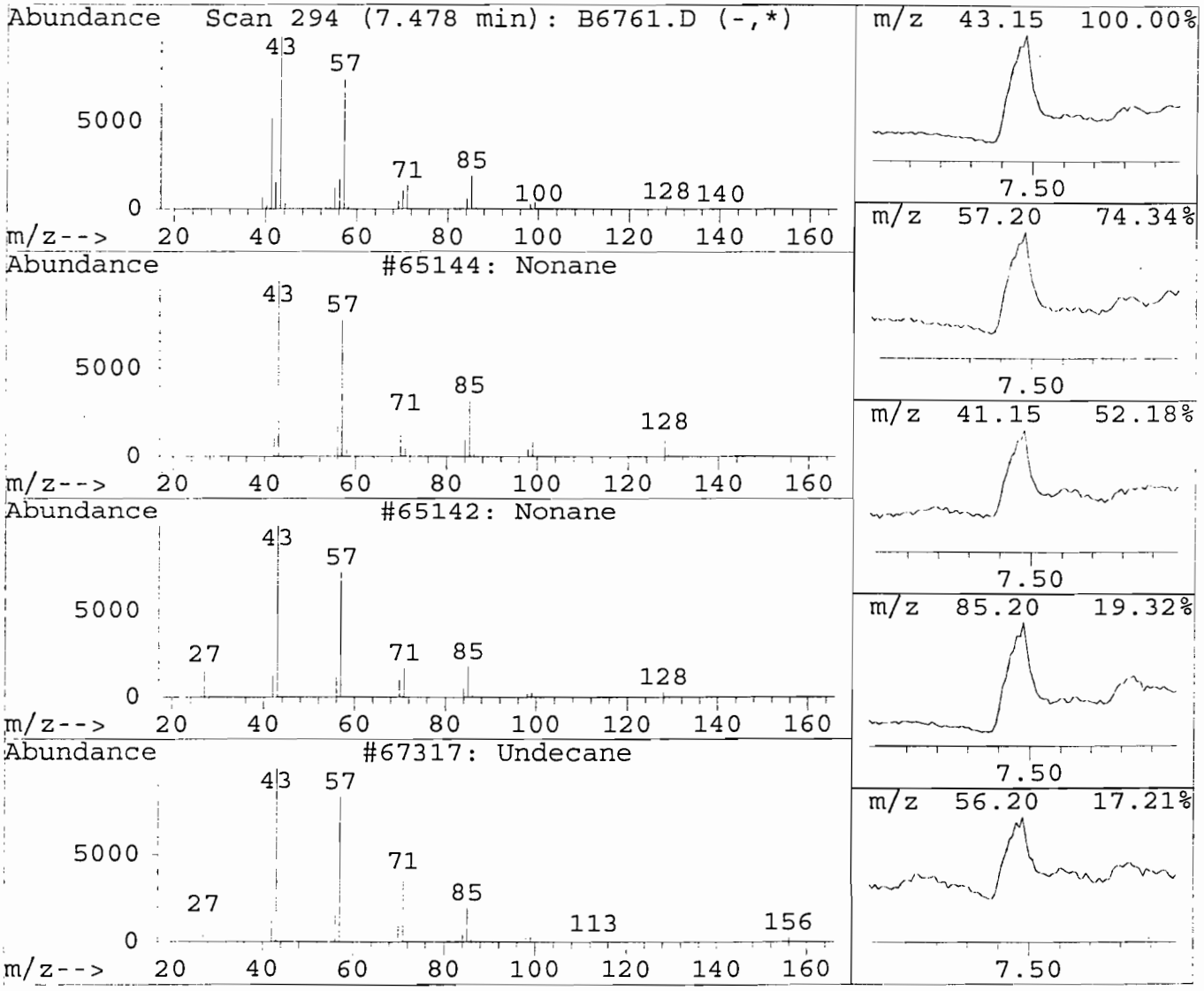
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
7.48	229.25 ng	28497790	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	65144	000111-84-2	91
2	Nonane	65142	000111-84-2	72
3	Undecane	67317	001120-21-4	72
4	Nonane	65143	000111-84-2	59
5	Hexane, 2,4-dimethyl-	64213	000589-43-5	56



Library Search Compound Report

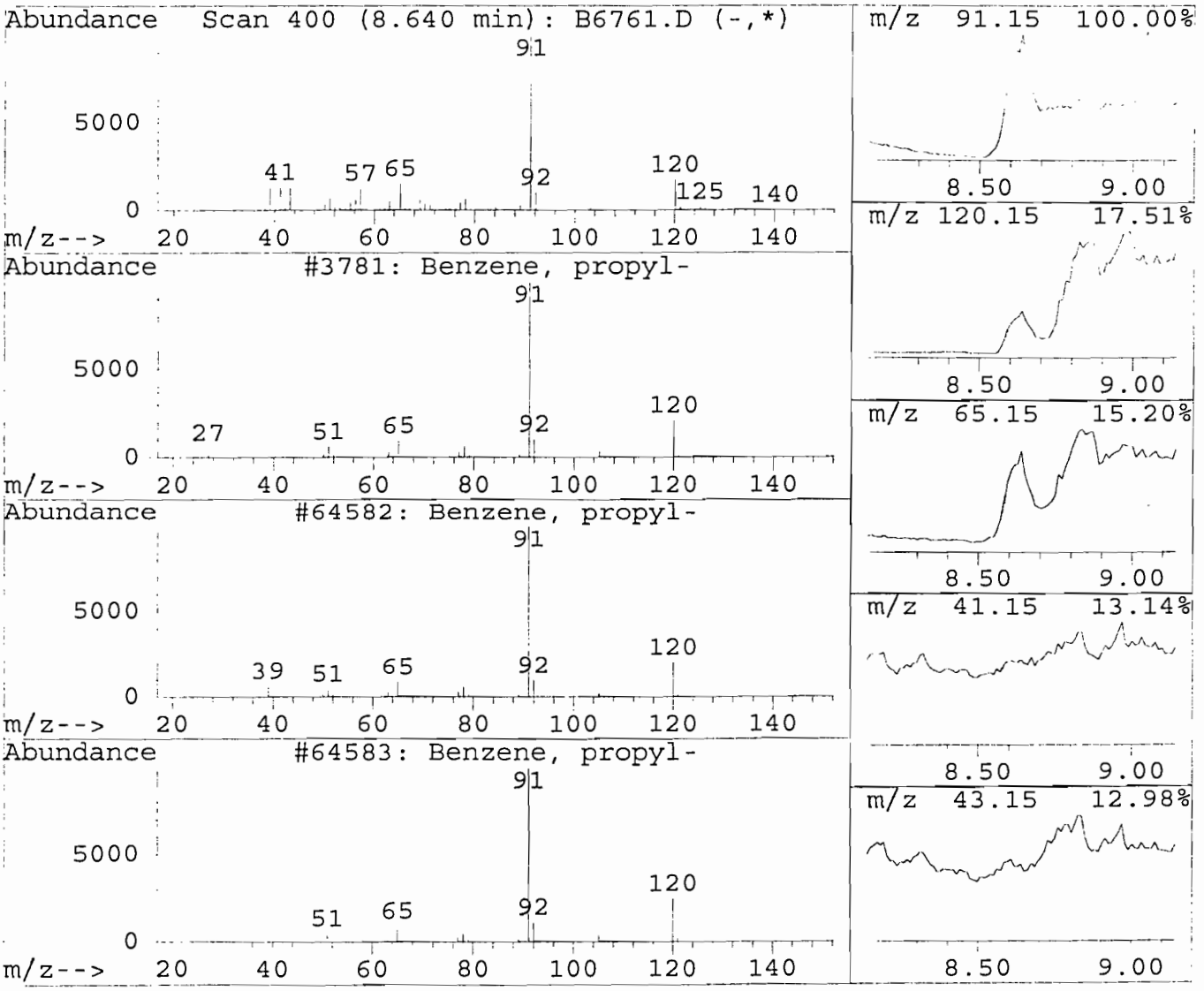
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.64	187.82 ng	23347026	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, propyl-	3781	000103-65-1	76
2	Benzene, propyl-	64582	000103-65-1	76
3	Benzene, propyl-	64583	000103-65-1	72
4	1,2-Ethanediamine, N,N'-bis(phenylm	32052	000140-28-3	59
5	Benzene, propyl-	64584	000103-65-1	50



Library Search Compound Report

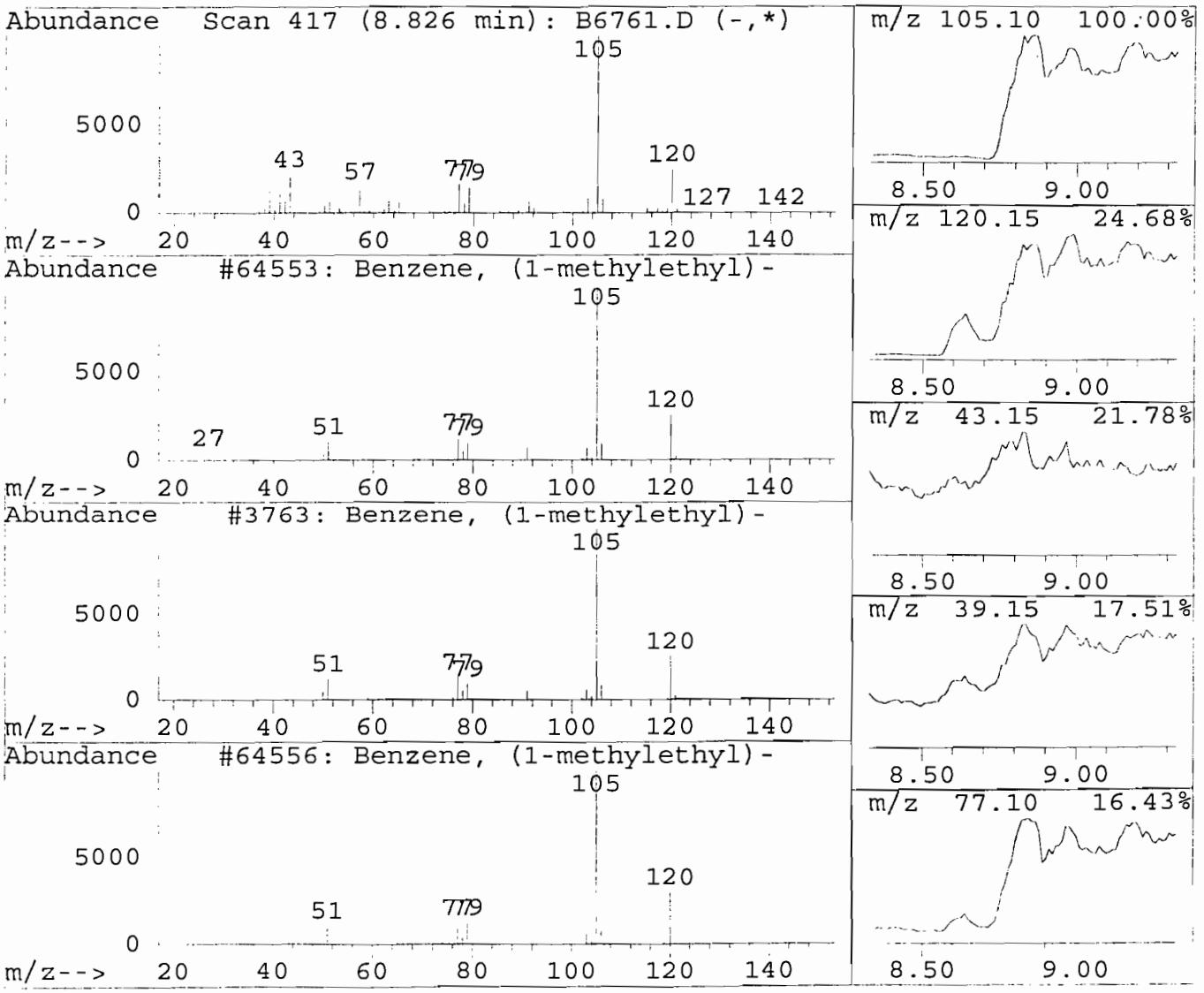
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.83	337.64 ng	41970614	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, (1-methylethyl)-	64553	000098-82-8	87
2	Benzene, (1-methylethyl)-	3763	000098-82-8	87
3	Benzene, (1-methylethyl)-	64556	000098-82-8	87
4	Benzene, (1-methylethyl)-	64554	000098-82-8	87
5	Benzene, (1-methylethyl)-	64552	000098-82-8	83



000040

Library Search Compound Report

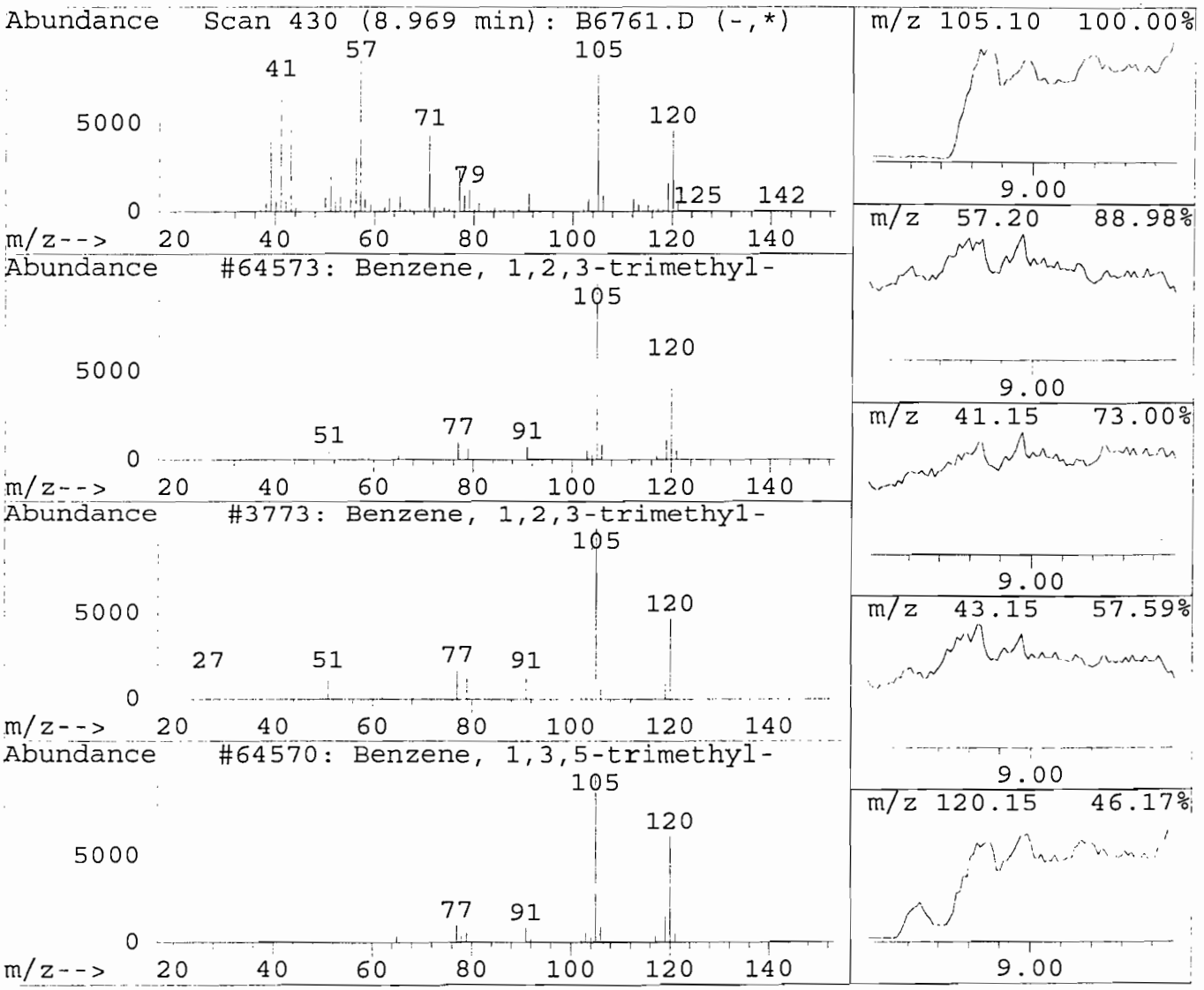
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.97	117.36 ng	14588689	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	64573	000526-73-8	46
2	Benzene, 1,2,3-trimethyl-	3773	000526-73-8	42
3	Benzene, 1,3,5-trimethyl-	64570	000108-67-8	42
4	Benzene, 1,3,5-trimethyl-	3772	000108-67-8	42
5	Benzene, 1,2,3-trimethyl-	64574	000526-73-8	42



Library Search Compound Report

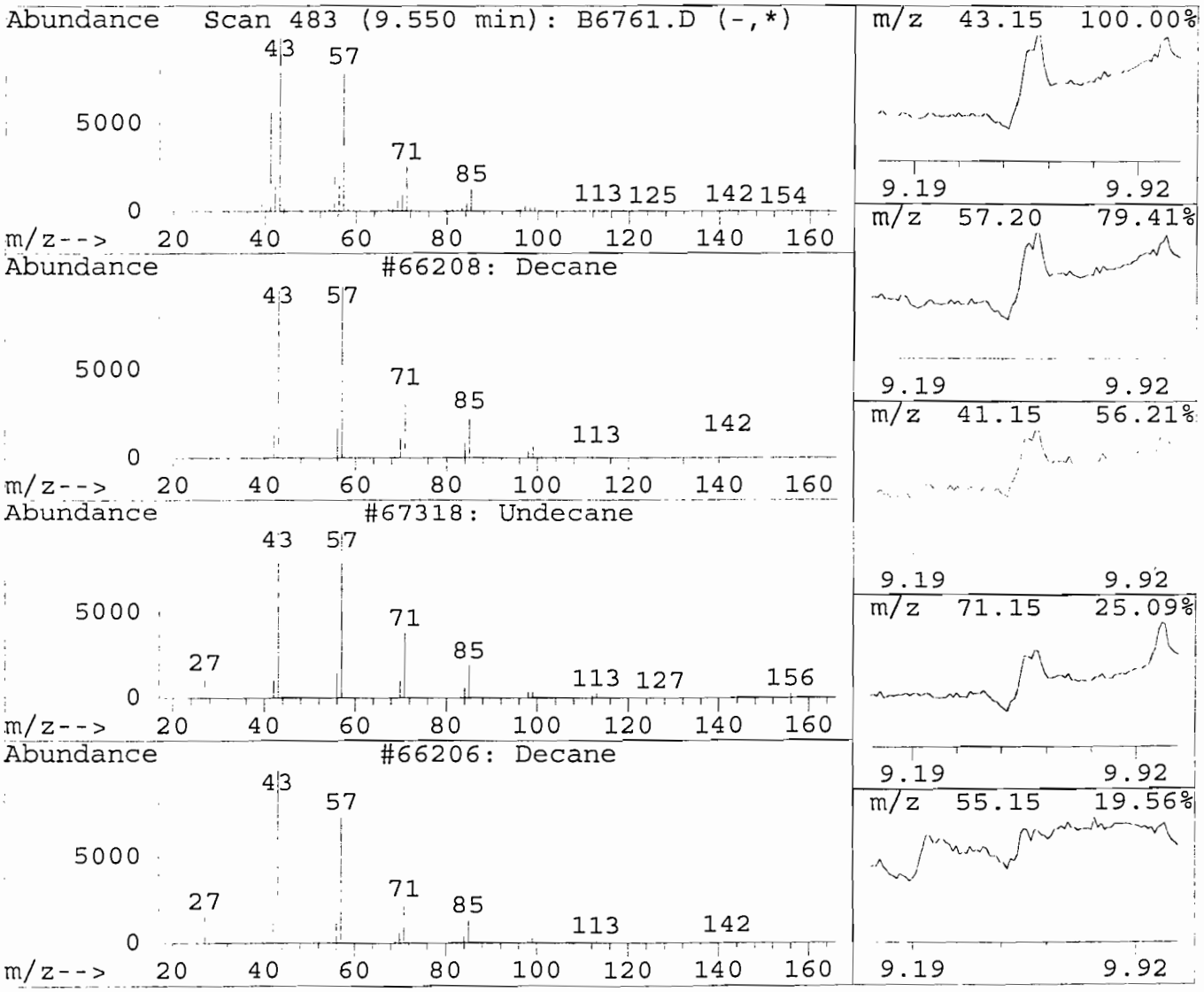
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.55	91.21 ng	11338614	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	66208	000124-18-5	91
2	Undecane	67318	001120-21-4	78
3	Decane	66206	000124-18-5	78
4	Eicosane	72323	000112-95-8	72
5	Nonane	65142	000111-84-2	72



Library Search Compound Report

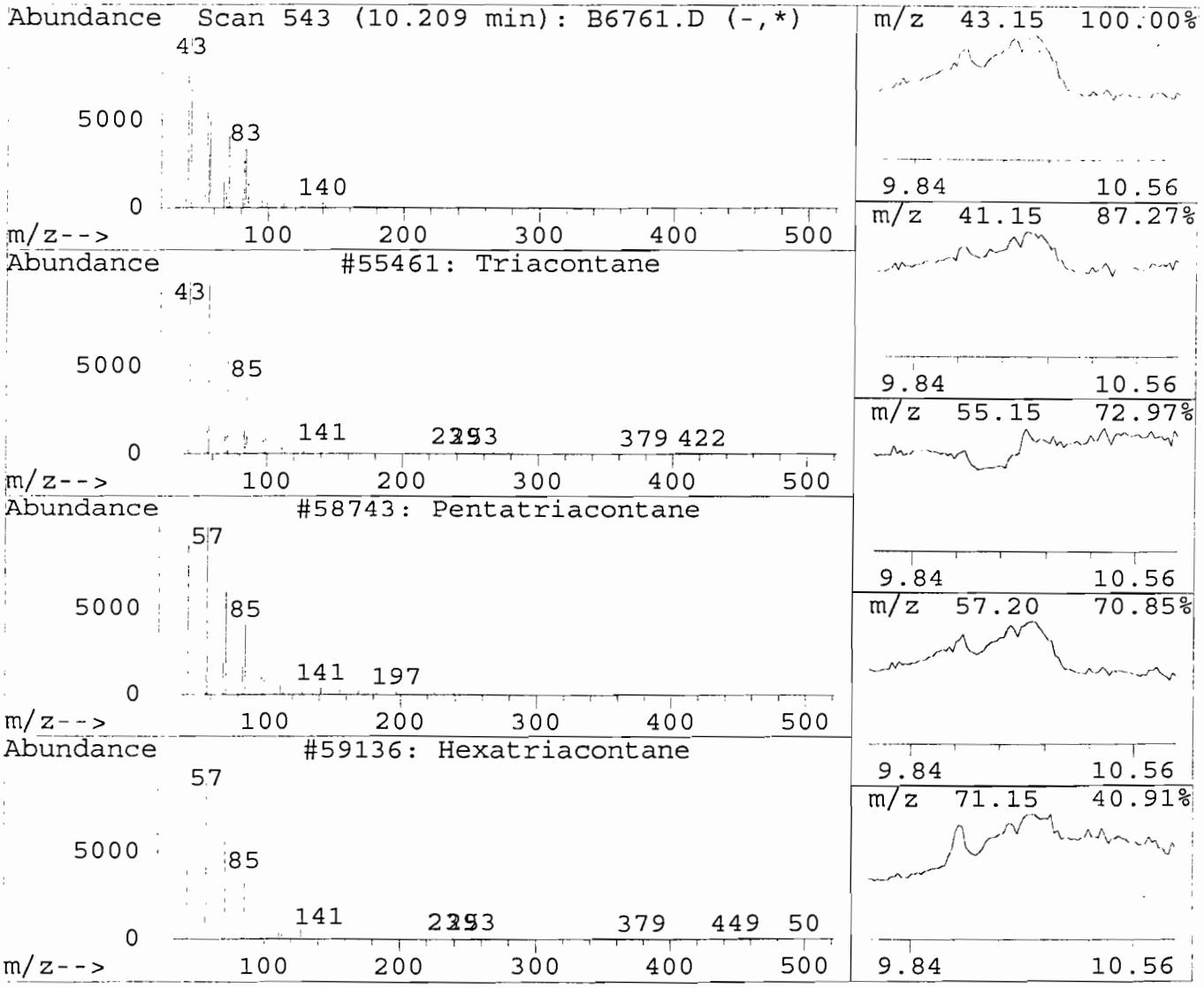
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.21	147.20 ng	18297587	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Triacontane	55461	000638-68-6	47
2	Pentatriacontane	58743	000630-07-9	47
3	Hexatriacontane	59136	000630-06-8	43
4	Hexatriacontane	74636	000630-06-8	38
5	Butane, 2-iodo-2-methyl-	22156	000594-38-7	38



000043

Library Search Compound Report

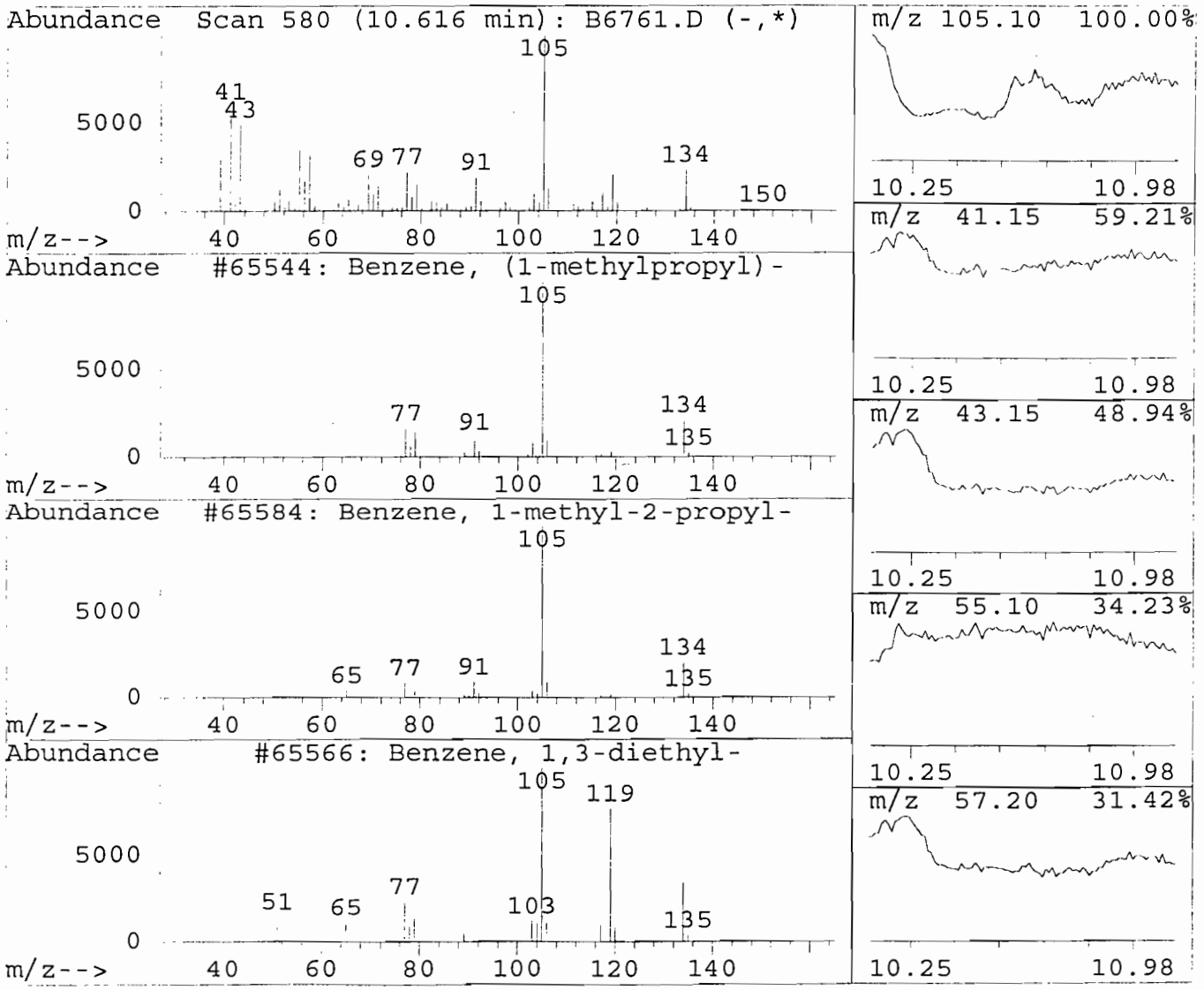
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.62	104.27 ng	12961802	1,4-Dichlorobenzene-d4	9.82

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, (1-methylpropyl)-	65544	000135-98-8	64
2	Benzene, 1-methyl-2-propyl-	65584	001074-17-5	64
3	Benzene, 1,3-diethyl-	65566	000141-93-5	62
4	Benzene, 1,2-diethyl-	65562	000135-01-3	58
5	Benzene, (1-methylethyl)-	3763	000098-82-8	55



Library Search Compound Report

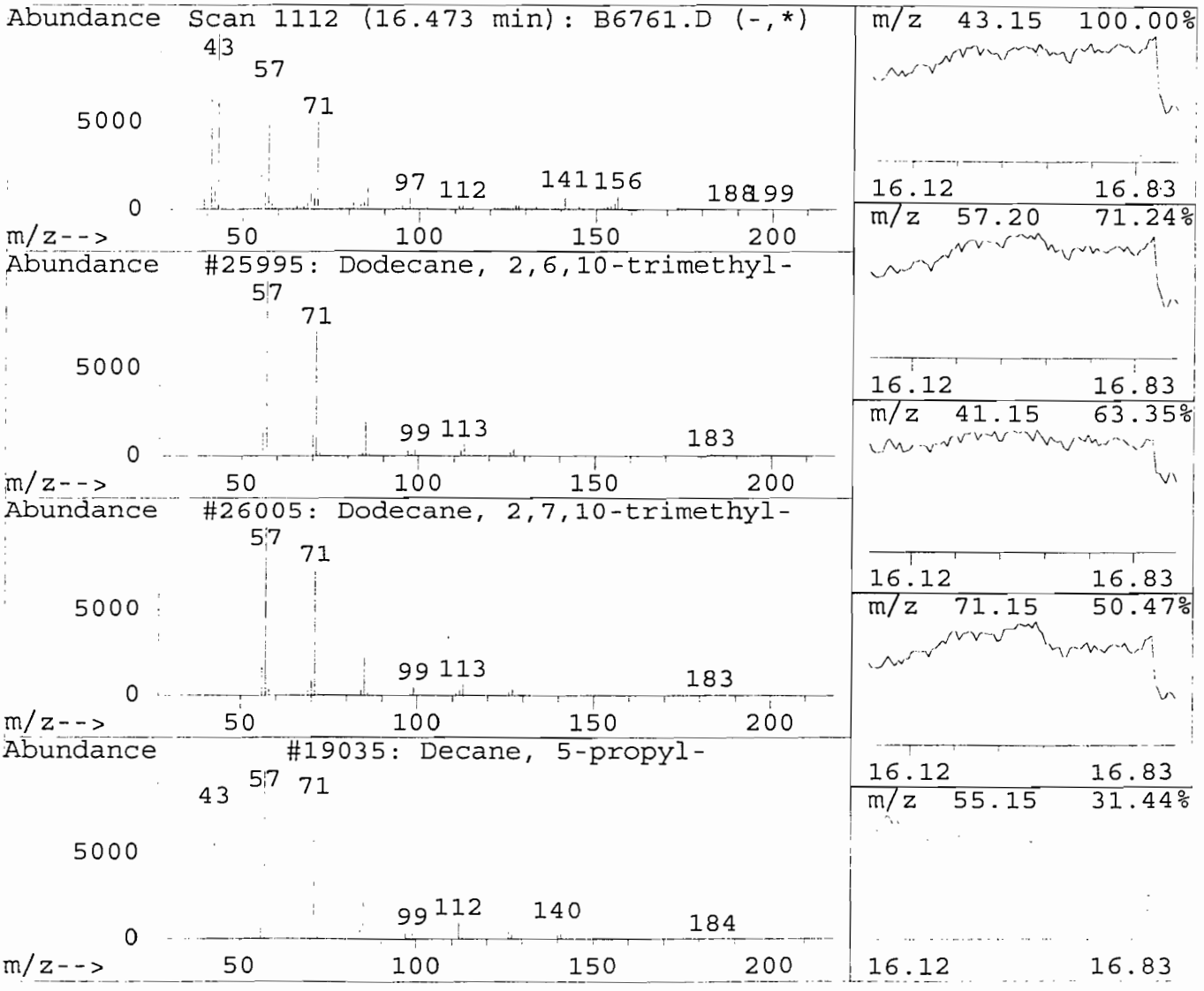
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.47	96.59 ng	13704456	Acenaphthene-d10	18.06

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 2,6,10-trimethyl-	25995	003891-98-3	53
2	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	53
3	Decane, 5-propyl-	19035	017312-62-8	53
4	Undecane	67318	001120-21-4	49
5	Eicosane	72323	000112-95-8	47



000045

Library Search Compound Report

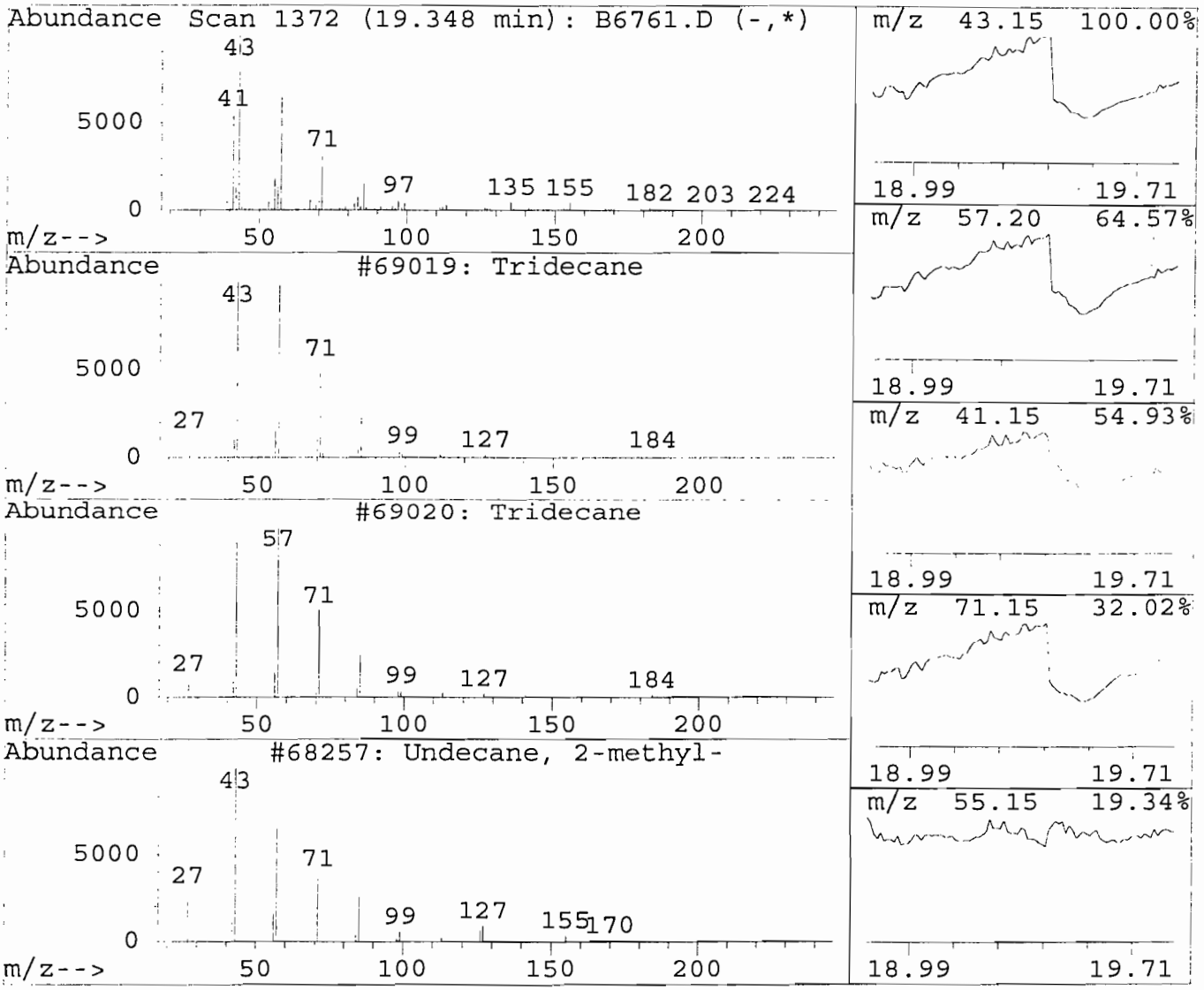
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.35	117.40 ng	16657334	Acenaphthene-d10	18.06

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	69019	000629-50-5	93
2	Tridecane	69020	000629-50-5	76
3	Undecane, 2-methyl-	68257	007045-71-8	72
4	Dodecane	68250	000112-40-3	70
5	Decane, 2-methyl-	11614	006975-98-0	64



000046

Library Search Compound Report

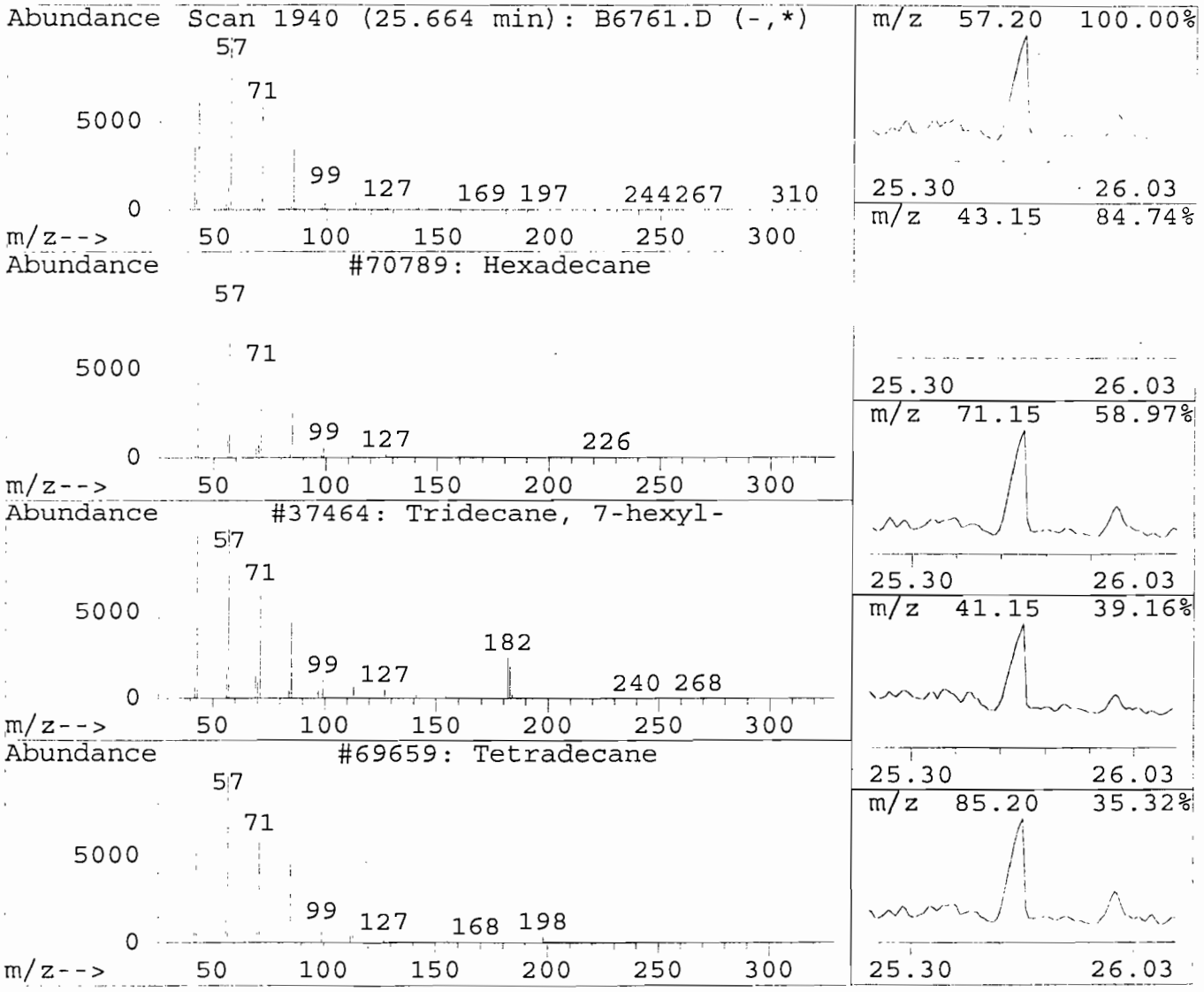
Data File : D:\HPCHEM\1\DATA\B11104\B6761.D
Acq Time : 4 Nov 99 8:23 pm
Sample : 13826ASP-87993-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.66	100.75 ng	24175221	Chrysene-d12	28.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecane	70789	000544-76-3	86
2	Tridecane, 7-hexyl-	37464	007225-66-3	83
3	Tetradecane	69659	000629-59-4	83
4	Heptadecane	71191	000629-78-7	83
5	Hexatriacontane	59136	000630-06-8	83



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS10RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87993RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6842.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 14 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	38	U
108-60-1	bis(2-chloroisopropyl)ether	38	U
95-50-1	1,2-Dichlorobenzene	38	U
541-73-1	1,3-Dichlorobenzene	38	U
106-46-7	1,4-Dichlorobenzene	38	U
621-64-7	n-Nitroso-di-n-propylamine	38	U
67-72-1	Hexachloroethane	38	U
98-95-3	Nitrobenzene	38	U
78-59-1	Isophorone	38	U
111-91-1	bis(2-Chloroethoxy)methane	38	U
120-82-1	1,2,4-Trichlorobenzene	38	U
91-20-3	Naphthalene	38	U
106-47-8	4-Chloroaniline	77	U
87-68-3	Hexachlorobutadiene	38	U
91-57-6	2-Methylnaphthalene	66	U
77-47-4	Hexachlorocyclopentadiene	38	U
91-58-7	2-Chloronaphthalene	38	U
88-74-4	2-Nitroaniline	140	U
131-11-3	Dimethylphthalate	38	U
208-96-8	Acenaphthylene	38	U
606-20-2	2,6-Dinitrotoluene	38	U
99-09-2	3-Nitroaniline	150	U
83-32-9	Acenaphthene	38	U
132-64-9	Dibenzofuran	61	U
121-14-2	2,4-Dinitrotoluene	38	U
84-66-2	Diethylphthalate	38	U
7005-72-3	4-Chlorophenyl-phenylether	38	U
86-73-7	Fluorene	38	U
100-01-6	4-Nitroaniline	200	U
86-30-6	N-Nitrosodiphenylamine	38	U
122-66-7	1,2-Diphenylhydrazine	38	U
101-55-3	4-Bromophenyl-phenylether	38	U
118-74-1	Hexachlorobenzene	38	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS10RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87993RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6842.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 14 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	38	U
120-12-7	Anthracene	38	U
86-74-8	Carbazole	57	U
84-74-2	Di-n-butylphthalate	38	U
206-44-0	Fluoranthene	1500	
129-00-0	Pyrene	1800	
85-68-7	Butylbenzylphthalate	38	U
91-94-1	3,3'-Dichlorobenzidine	150	U
56-55-3	Benzo[a]anthracene	190	
218-01-9	Chrysene	270	
117-81-7	bis(2-Ethylhexyl)phthalate	1900	
117-84-0	Di-n-octylphthalate	38	U
205-99-2	Benzo[b]fluoranthene	120	U
207-08-9	Benzo[k]fluoranthene	110	U
50-32-8	Benzo[a]pyrene	38	U
193-39-5	Indeno(1,2,3-cd)pyrene	38	U
53-70-3	Dibenz[a,h]anthracene	57	U
191-24-2	Benzo[g,h,i]perylene	38	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-009-SS10RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87993RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6842.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 14 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/Kg

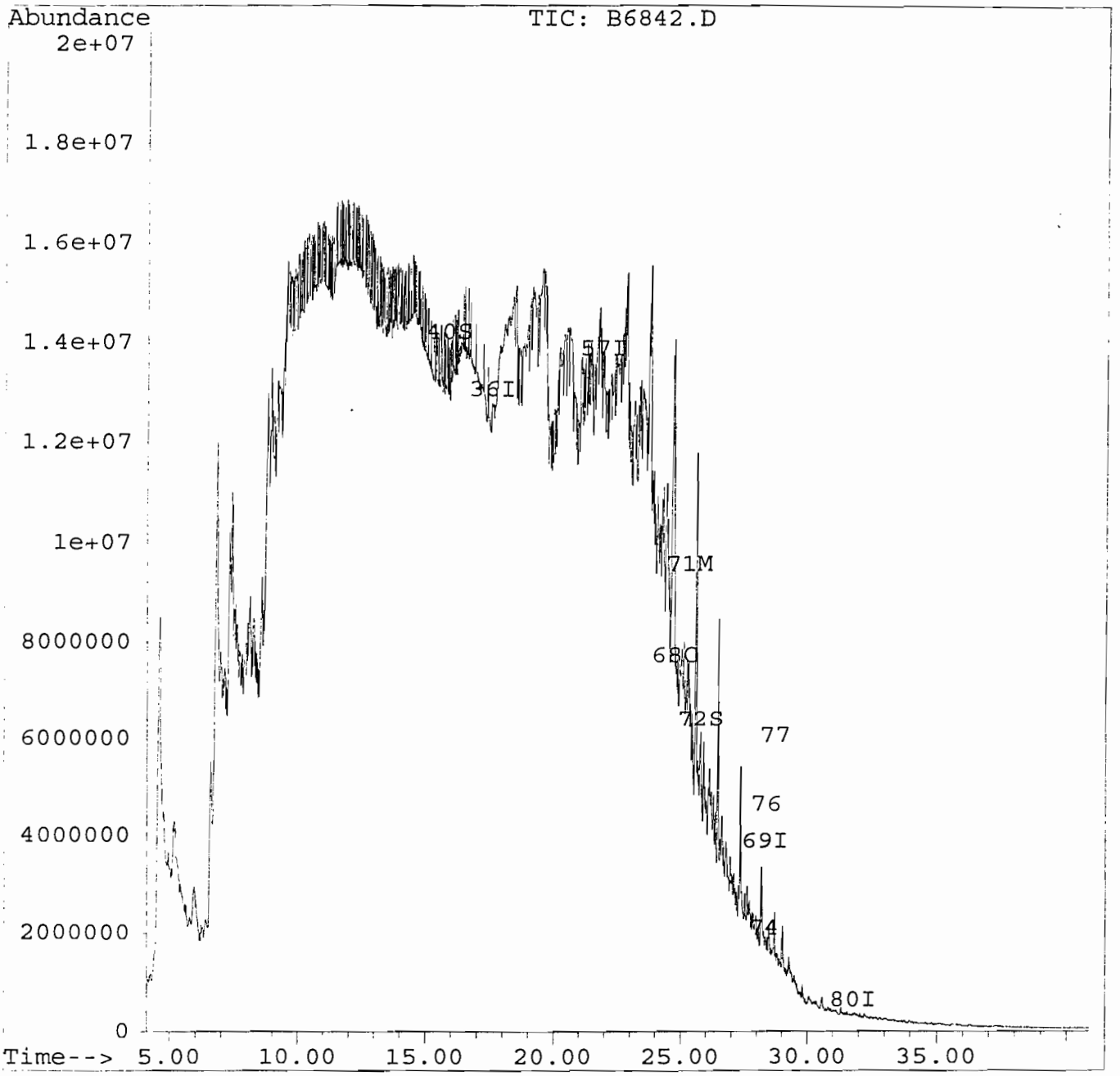
CAS Number	Compound Name	RT	Est. Conc.	Q
1. 108-88-3	Toluene	4.61	17100	J
2. 111-65-9	Octane	5.18	3100	J
3.	Unknown	5.94	2400	J
4. 100-41-4	Ethylbenzene	6.60	4400	J
5. 108-38-3	Benzene, 1,3-dimethyl-	6.82	12300	J
6. 106-42-3	p-Xylene	7.31	3600	J
7. 111-84-2	Nonane	7.40	2500	J
8. 5911-04-6	Nonane, 3-methyl-	8.10	1600	J
9. 103-65-1	Benzene, propyl-	8.56	2700	J
10. 108-67-8	Benzene, 1,3,5-trimethyl-	8.91	2600	J
11. 611-14-3	Benzene, 1-ethyl-2-methyl-	9.21	2200	J
12. 124-18-5	Decane	9.50	1800	J
13.	Unknown	24.43	2100	J
14. 544-76-3	Hexadecane	24.71	4600	J
15. 54833-23-7	Eicosane, 10-methyl-	25.60	3100	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :
Quant Time: Nov 10 12:23 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000051

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :
Quant Time: Nov 10 12:23 1999

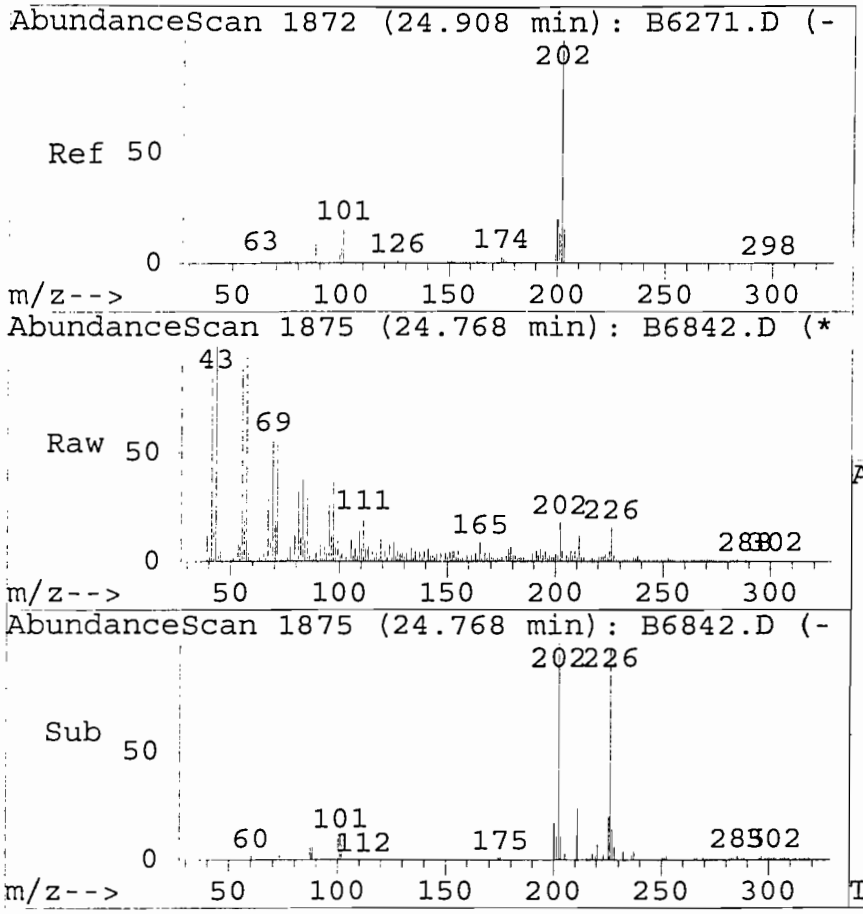
Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.76	152	15090	40.00	ng	0.03
21) Naphthalene-d8	12.93	136	15517	40.00	ng	0.05
36) Acenaphthene-d10	17.54	164	165331	40.00	ng	0.06
57) Phenanthrene-d10	21.89	188	126319	40.00	ng	0.56
69) Chrysene-d12	28.33	240	118559	40.00	ng	0.00
80) Perylene-d12	31.78	264	27846	40.00	ng	-0.06
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.96	112	987618	1649.97	ng	#
6) 2-Chlorophenol-d4	9.30	132	177474	315.89	ng	#
7) Phenol-d5	9.15	99	1302790	1841.20	ng	#
13) 1,2-Dichlorobenzene-d4	10.22	152	44438	121.25	ng	#
22) Nitrobenzene-d5	11.30	82	242743	1141.97	ng	#
40) 2-Fluorobiphenyl	15.83	172	13153	2.16	ng	m
55) 2,4,6-Tribromophenol	20.32	330	68428	50.54	ng	m
72) Terphenyl-d14	25.77	244	878242	256.34	ng	
Target Compounds						Qvalue
68) Fluoranthene	24.77	202	274808	77.64	ng	m 1
71) Pyrene	25.29	202	344930	92.55	ng	91
74) Benzo[a]anthracene	28.30	228	32349	9.75	ng	90
76) Chrysene	28.39	228	41938	13.92	ng	m 91
77) bis(2-Ethylhexyl)phthalate	28.71	149	346652	97.59	ng	97

000052

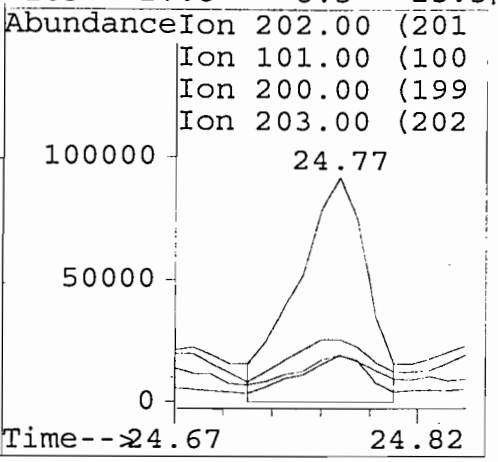
(#) = qualifier out of range (m) = manual integration

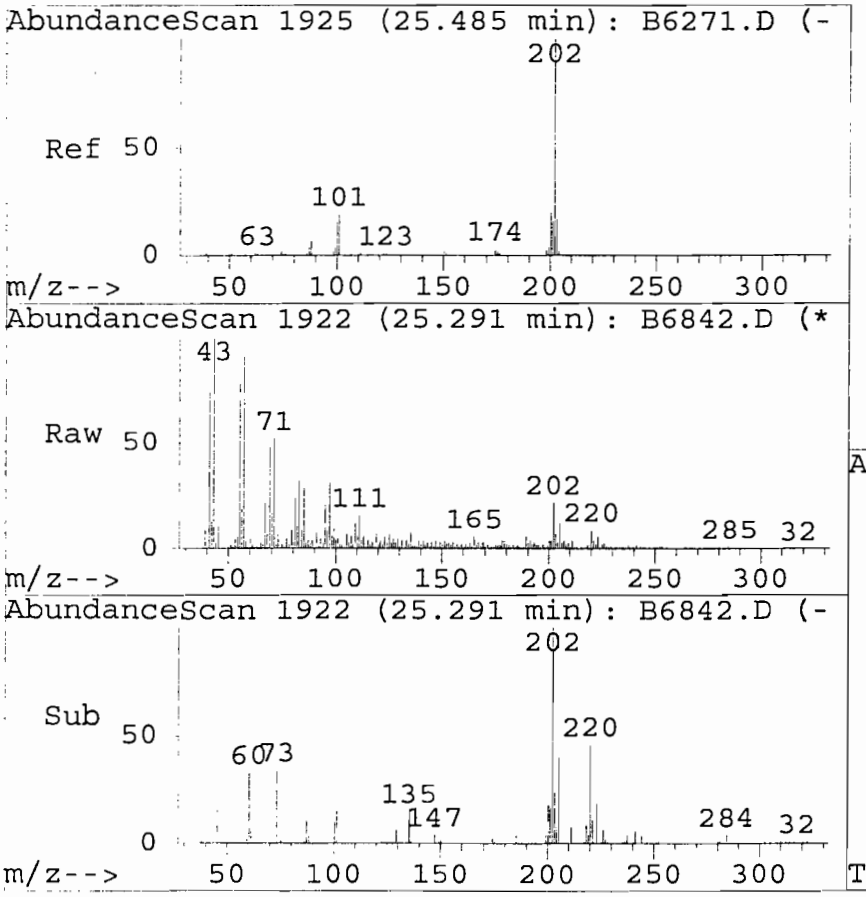


#68
Fluoranthene
Concen: 77.64 ng m
RT: 24.77 min Scan# 1875
Delta R.T. 0.23 min
Lab File: B6842.D
Acq: 9 Nov 99 5:33 pm

Tgt Ion:202 Resp: 274808

Ion	Ratio	Lower	Upper
202	100		
101	20.8	7.4	22.2
200	20.6	9.9	29.7
203	27.8	8.5	25.5#

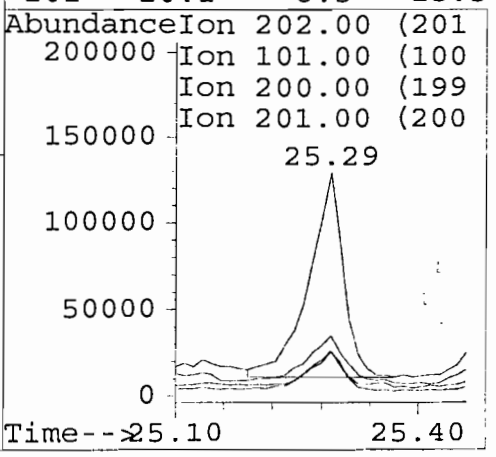


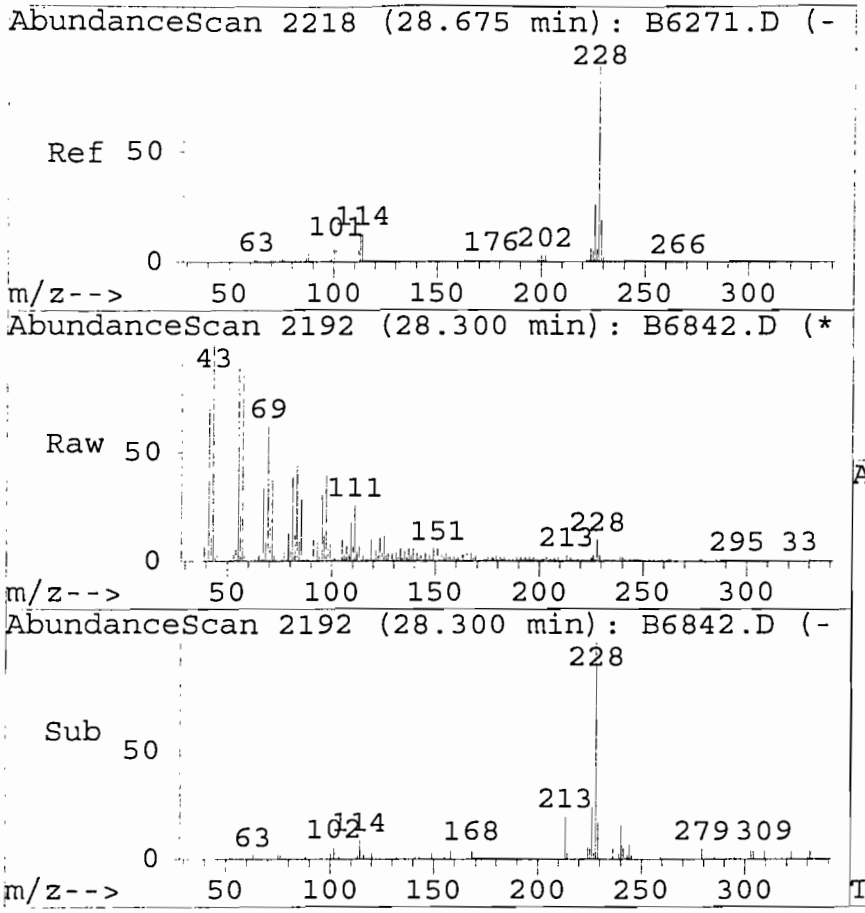


#71
Pyrene
Concen: 92.55 ng
RT: 25.29 min Scan# 1922
Delta R.T. 0.19 min
Lab File: B6842.D
Acq: 9 Nov 99 5:33 pm

Tgt Ion:202 Resp: 344930

Ion	Ratio	Lower	Upper
202	100		
101	27.0	9.2	27.7
200	20.1	10.5	31.6
201	20.1	8.5	25.5

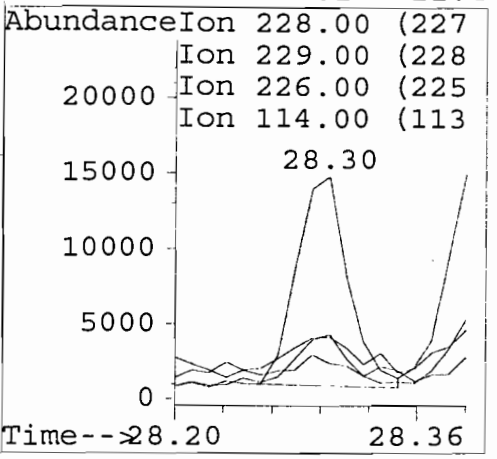


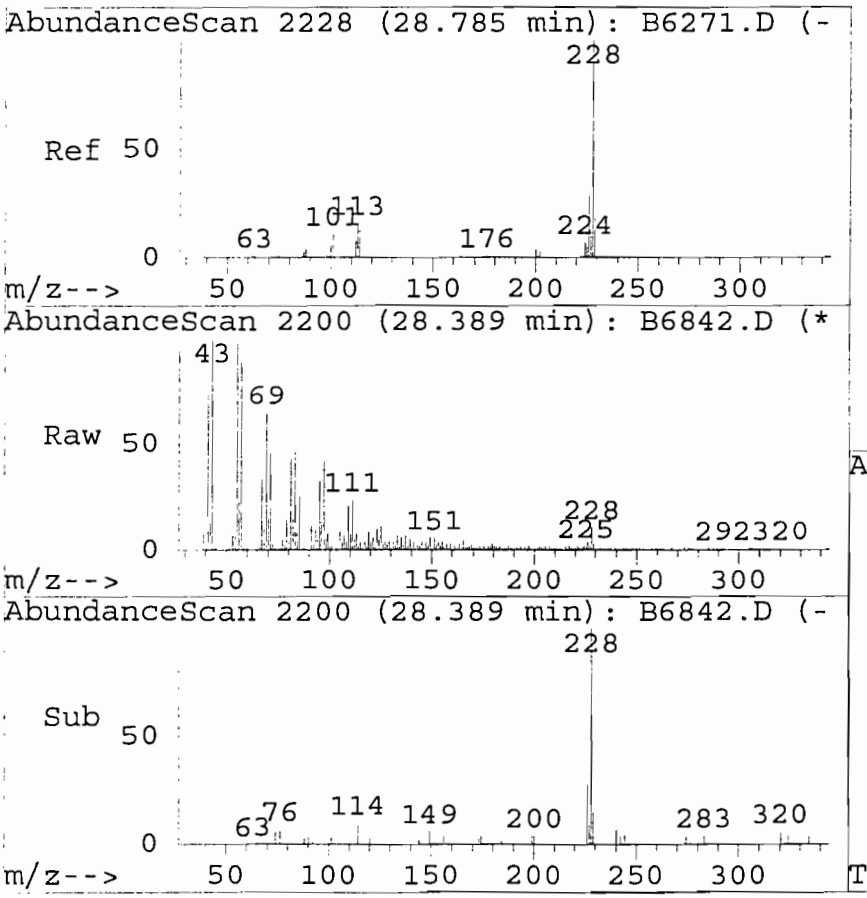


#74
Benzo[a]anthracene
Concen: 9.75 ng
RT: 28.30 min Scan# 2192
Delta R.T. 0.01 min
Lab File: B6842.D
Acq: 9 Nov 99 5:33 pm

Tgt Ion:228 Resp: 32349

Ion	Ratio	Lower	Upper
228	100		
229	28.0	9.4	28.2
226	29.2	13.3	39.8
114	16.1	7.1	21.4

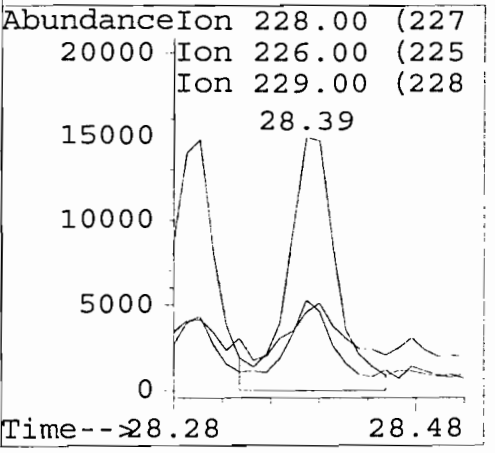




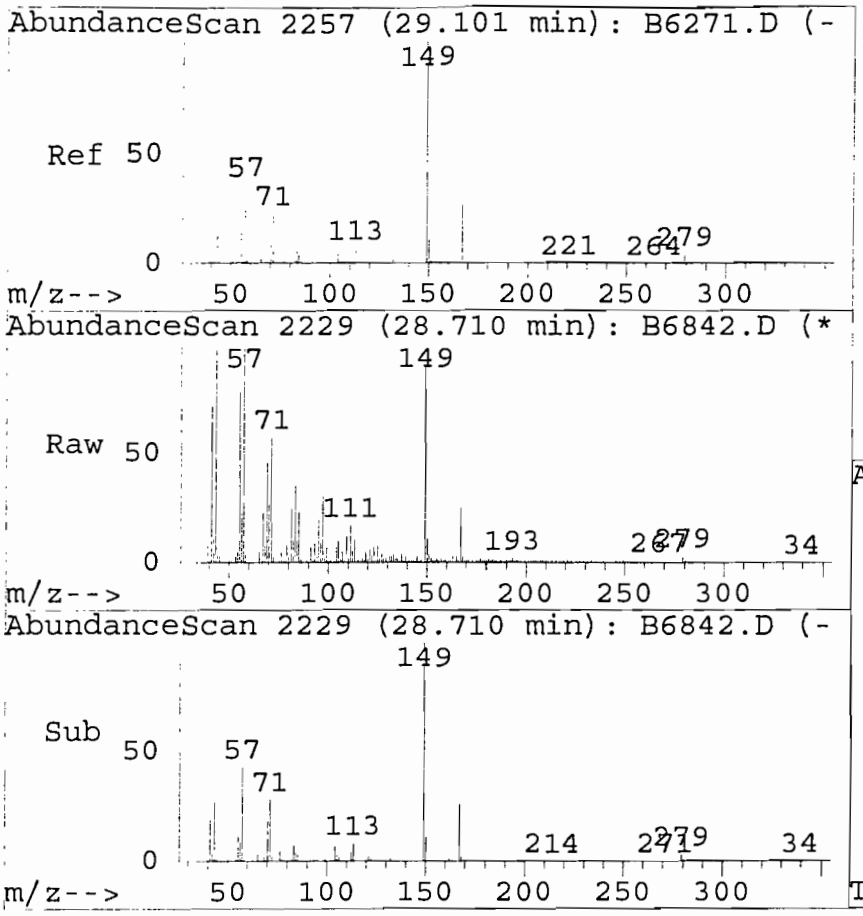
#76
Chrysene
Concen: 13.92 ng m
RT: 28.39 min Scan# 2200
Delta R.T. -0.02 min
Lab File: B6842.D
Acq: 9 Nov 99 5:33 pm

Tgt Ion:228 Resp: 41938

Ion	Ratio	Lower	Upper
228	100		
226	35.3	14.0	41.9
229	30.7	9.7	29.0#
0	0.0	0.0	0.0



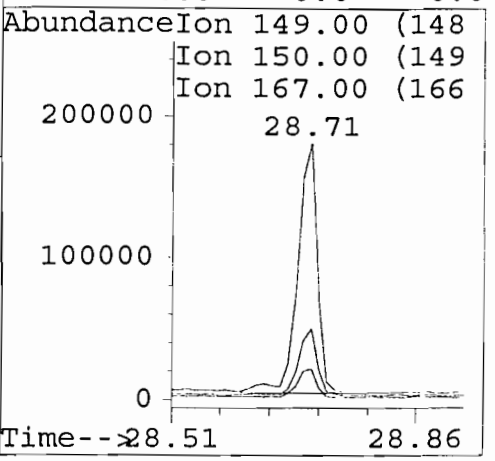
000054



#77
bis(2-Ethylhexyl)phthalate
Concen: 97.59 ng
RT: 28.71 min Scan# 2229
Delta R.T. -0.02 min
Lab File: B6842.D
Acq: 9 Nov 99 5:33 pm

Tgt Ion:149 Resp: 346652

Ion	Ratio	Lower	Upper
149	100		
150	12.2	5.6	16.8
167	27.7	14.7	44.1
0	0.0	0.0	0.0



Library Search Compound Report

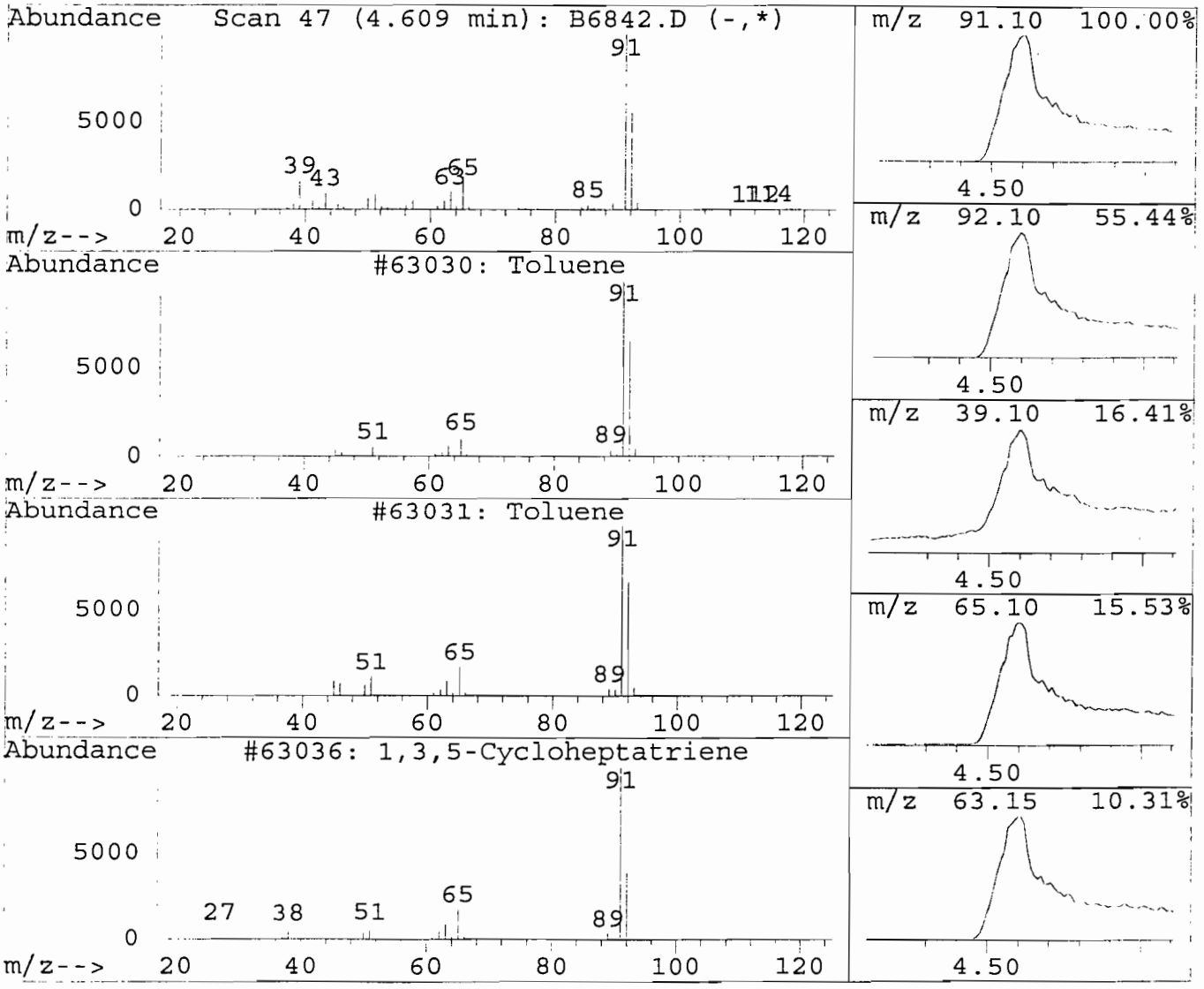
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
4.61	883.13 ng	78547244	1,4-Dichlorobenzene-d4	9.76

Hit# of 19	Tentative ID	Ref#	CAS#	Qual
1	Toluene	63030	000108-88-3	91
2	Toluene	63031	000108-88-3	90
3	1,3,5-Cycloheptatriene	63036	000544-25-2	90
4	1,3,5-Cycloheptatriene	970	000544-25-2	90
5	Toluene	63028	000108-88-3	87



000056

Library Search Compound Report

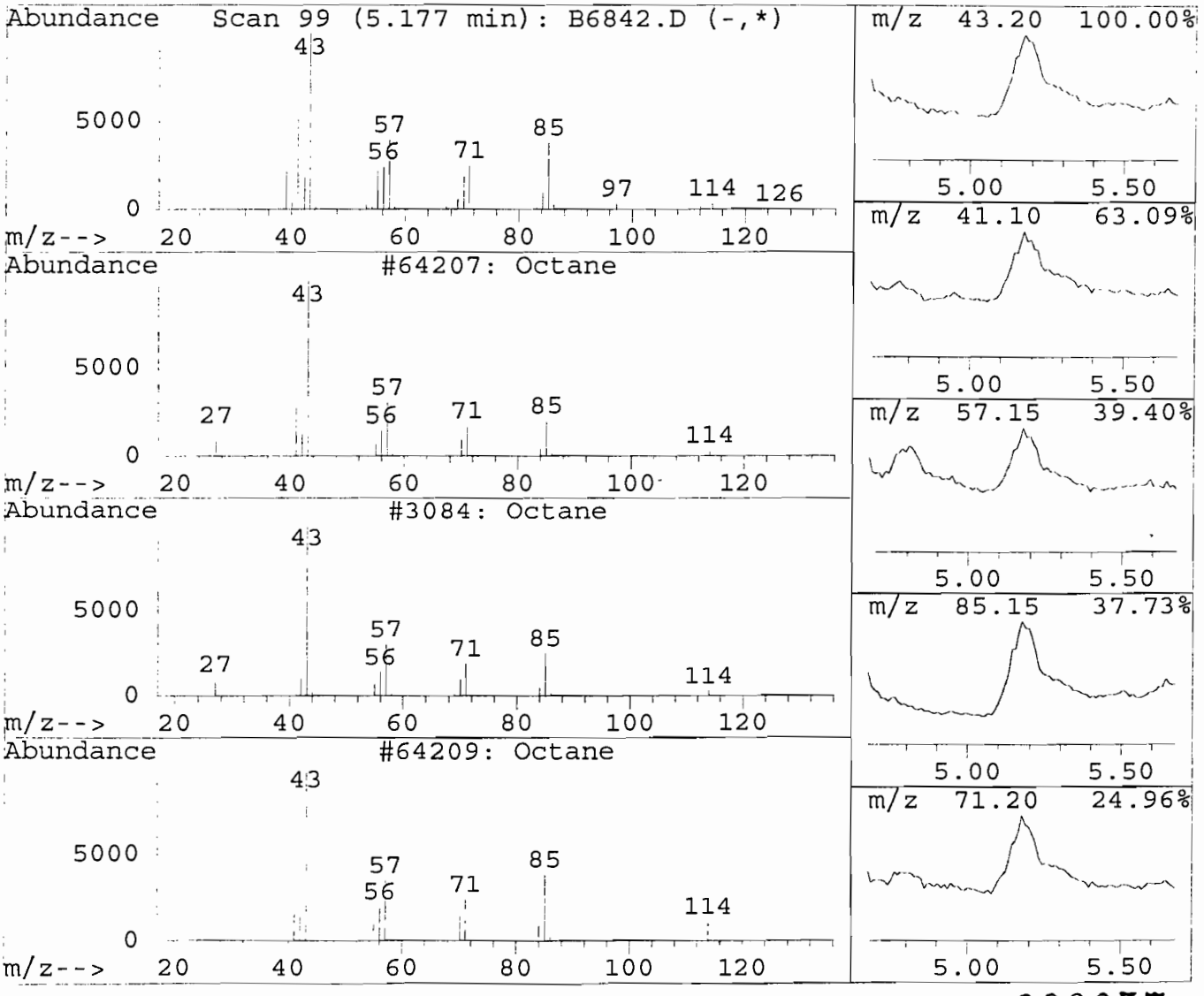
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.18	159.11 ng	14151315	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane	64207	000111-65-9	86
2	Octane	3084	000111-65-9	86
3	Octane	64209	000111-65-9	83
4	Hexane, 2,4-dimethyl-	3089	000589-43-5	72
5	Octane, 2-methyl-	5142	003221-61-2	59



000057

Library Search Compound Report

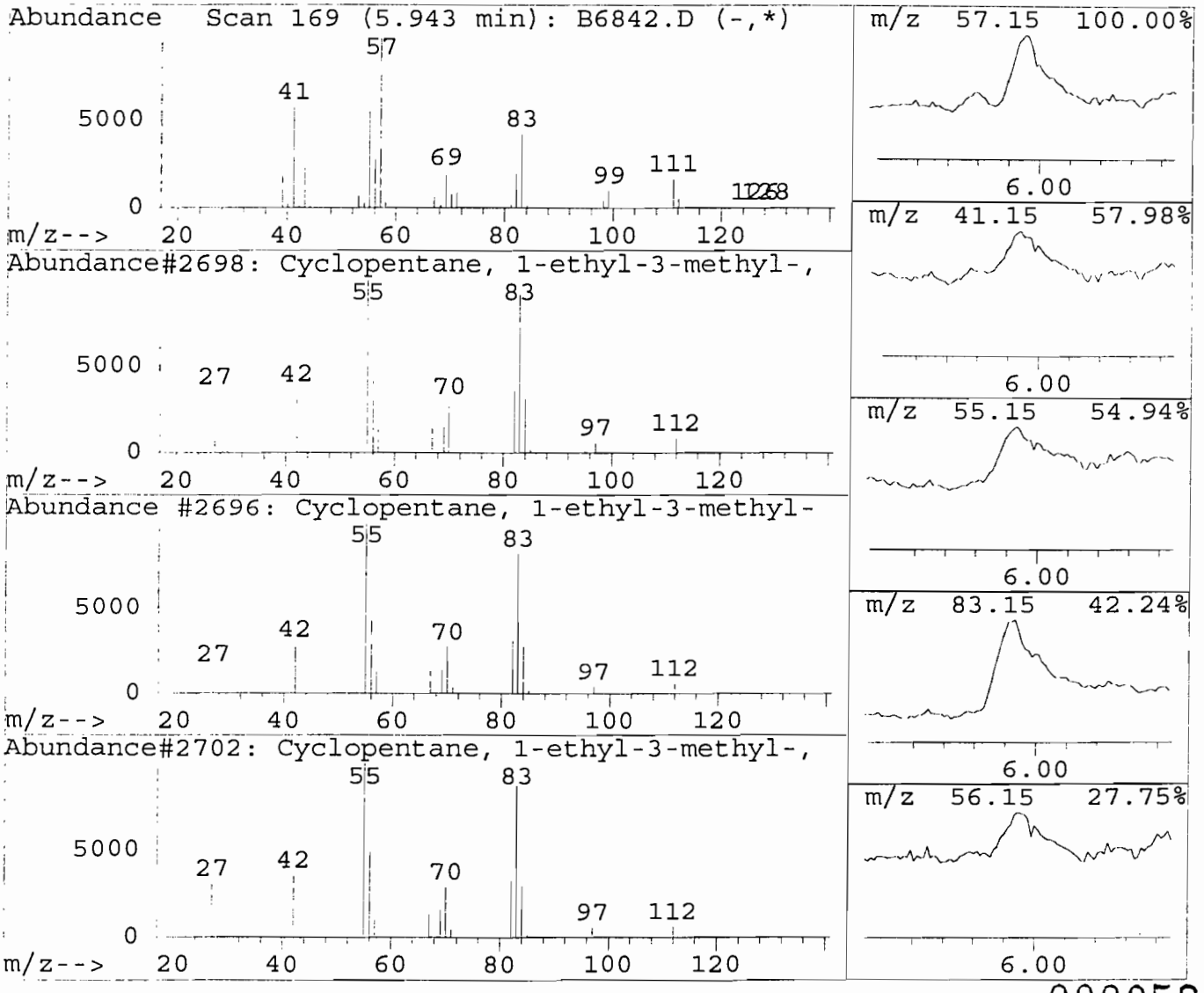
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
5.94	125.44 ng	11156732	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, 1-ethyl-3-methyl-, tr	2698	002613-65-2	42
2	Cyclopentane, 1-ethyl-3-methyl-	2696	003726-47-4	42
3	Cyclopentane, 1-ethyl-3-methyl-, ci	2702	002613-66-3	42
4	2-Heptenal, (Z)-	2610	057266-86-1	38
5	Oxirane, [(dodecyloxy)methyl]-	32383	002461-18-9	37



000058

Library Search Compound Report

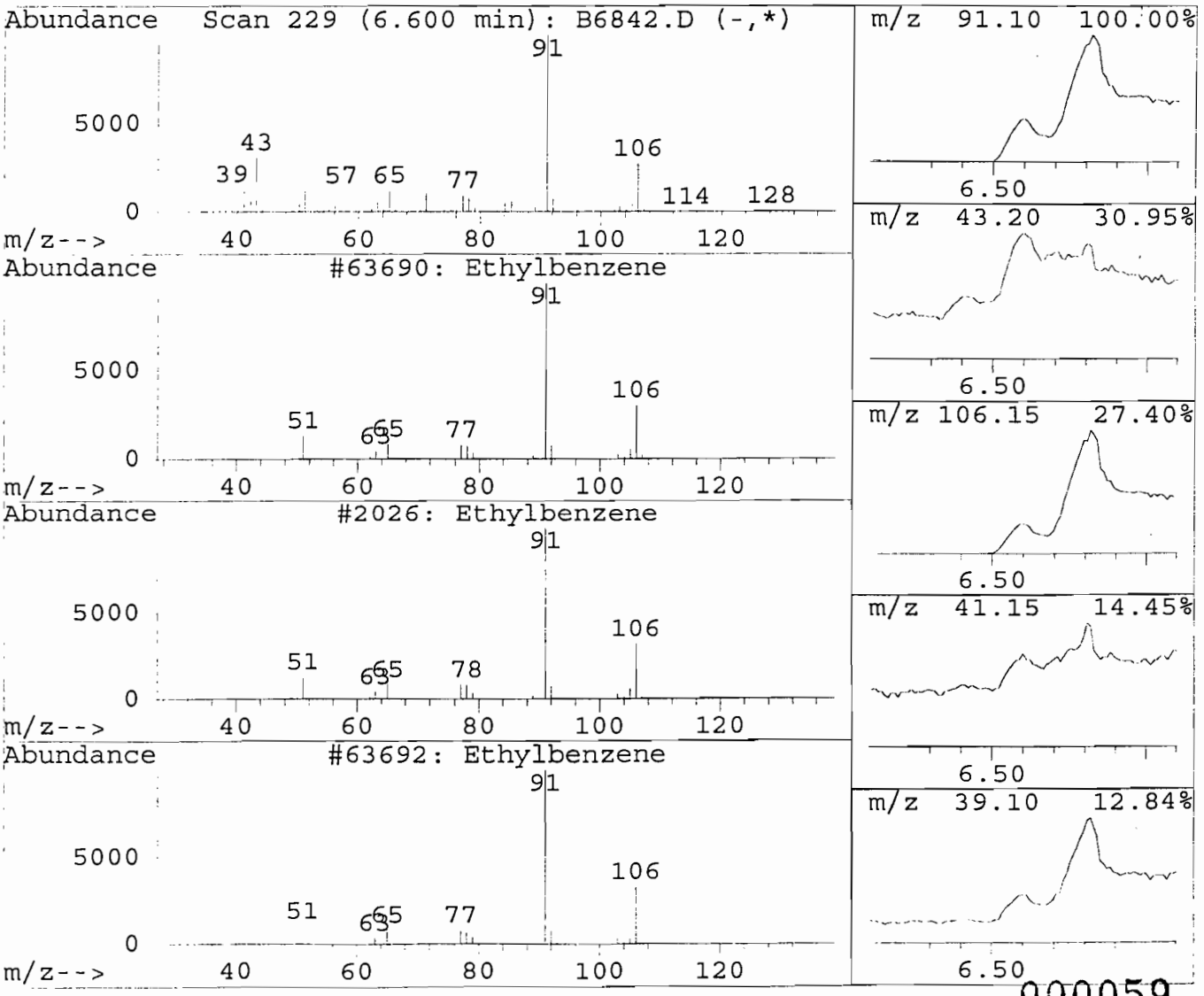
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.60	226.99 ng	20189052	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethylbenzene	63690	000100-41-4	92
2	Ethylbenzene	2026	000100-41-4	92
3	Ethylbenzene	63692	000100-41-4	92
4	Ethylbenzene	63694	000100-41-4	86
5	Ethylbenzene	63693	000100-41-4	70



000059

Library Search Compound Report

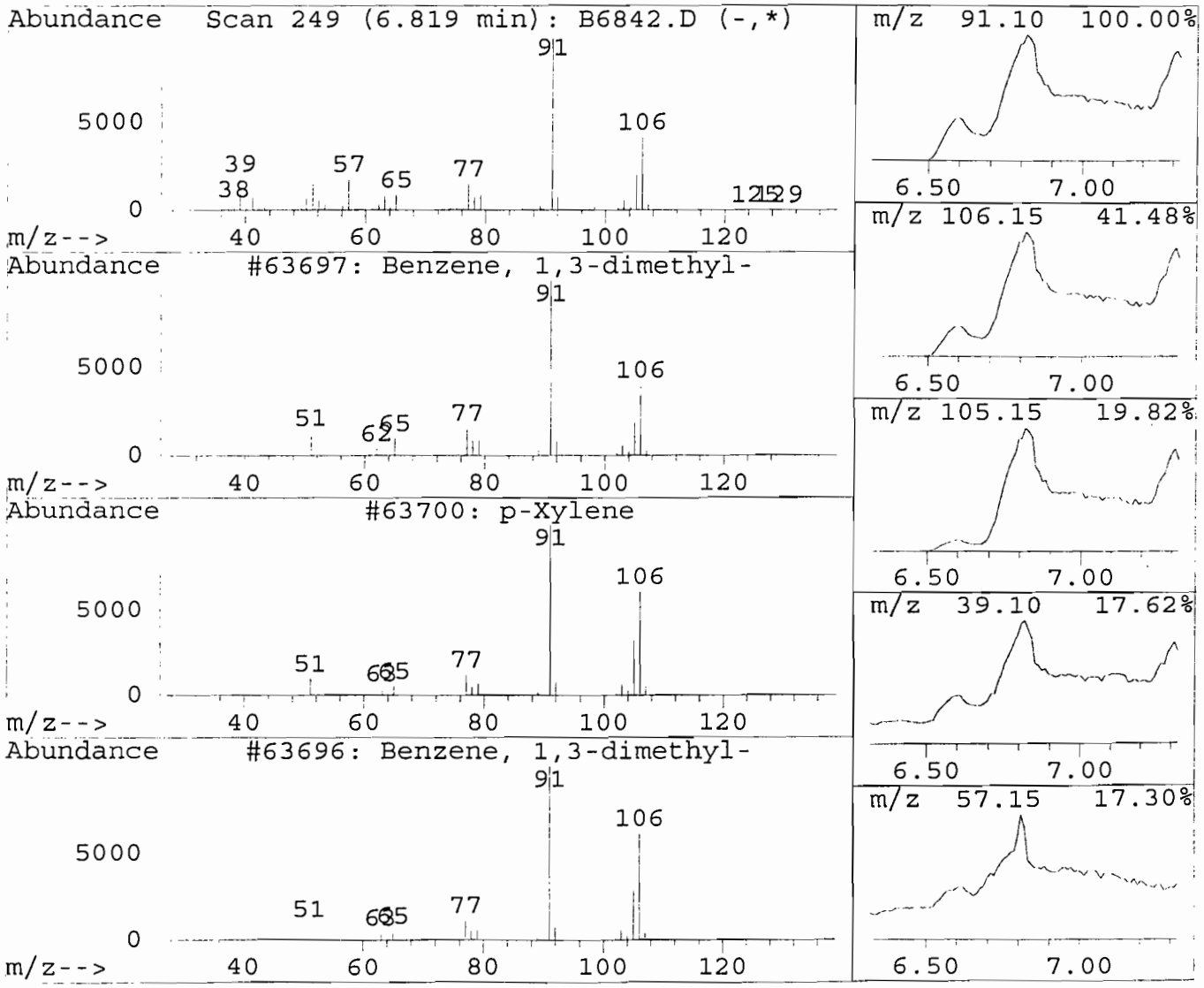
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
6.82	634.37 ng	56422630	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,3-dimethyl-	63697	000108-38-3	94
2	p-Xylene	63700	000106-42-3	94
3	Benzene, 1,3-dimethyl-	63696	000108-38-3	94
4	p-Xylene	63701	000106-42-3	93
5	p-Xylene	63699	000106-42-3	93



Library Search Compound Report

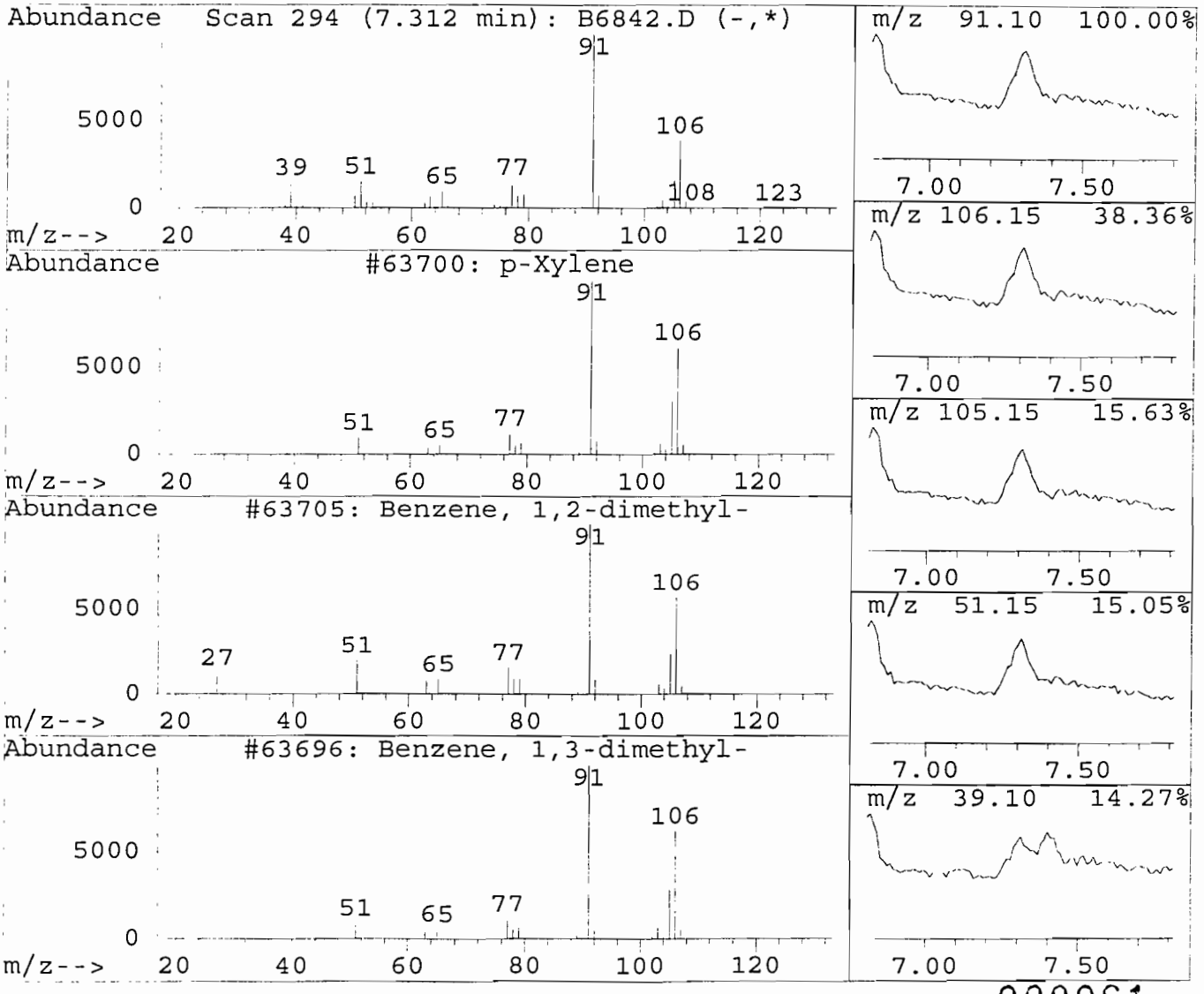
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
7.31	187.20 ng	16649821	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	p-Xylene	63700	000106-42-3	94
2	Benzene, 1,2-dimethyl-	63705	000095-47-6	94
3	Benzene, 1,3-dimethyl-	63696	000108-38-3	94
4	Benzene, 1,3-dimethyl-	63695	000108-38-3	94
5	Benzene, 1,2-dimethyl-	63707	000095-47-6	94



000061

Library Search Compound Report

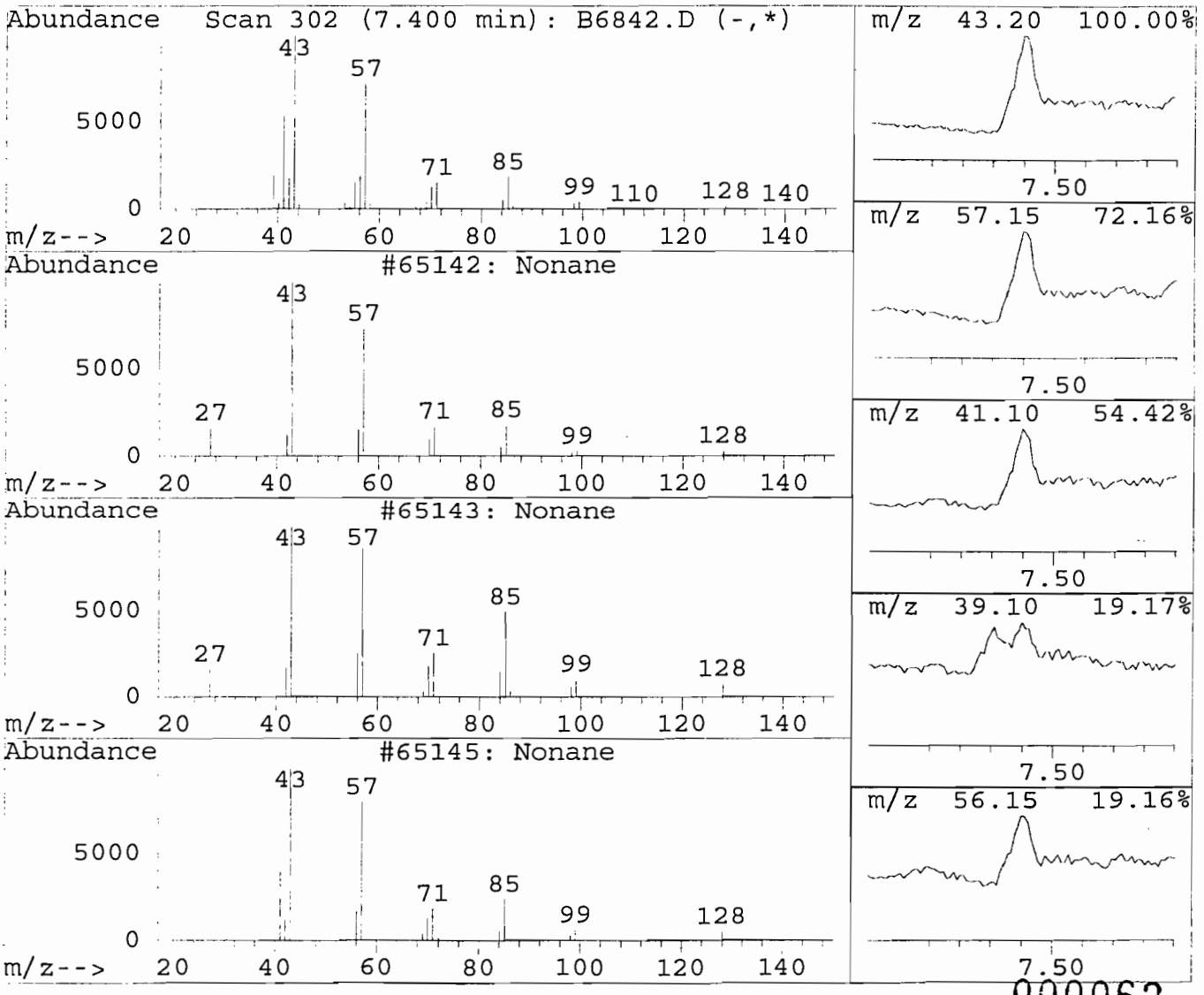
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
7.40	130.34 ng	11592506	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane	65142	000111-84-2	83
2	Nonane	65143	000111-84-2	83
3	Nonane	65145	000111-84-2	74
4	Nonane	65144	000111-84-2	72
5	Undecane	67317	001120-21-4	72



000062

Library Search Compound Report

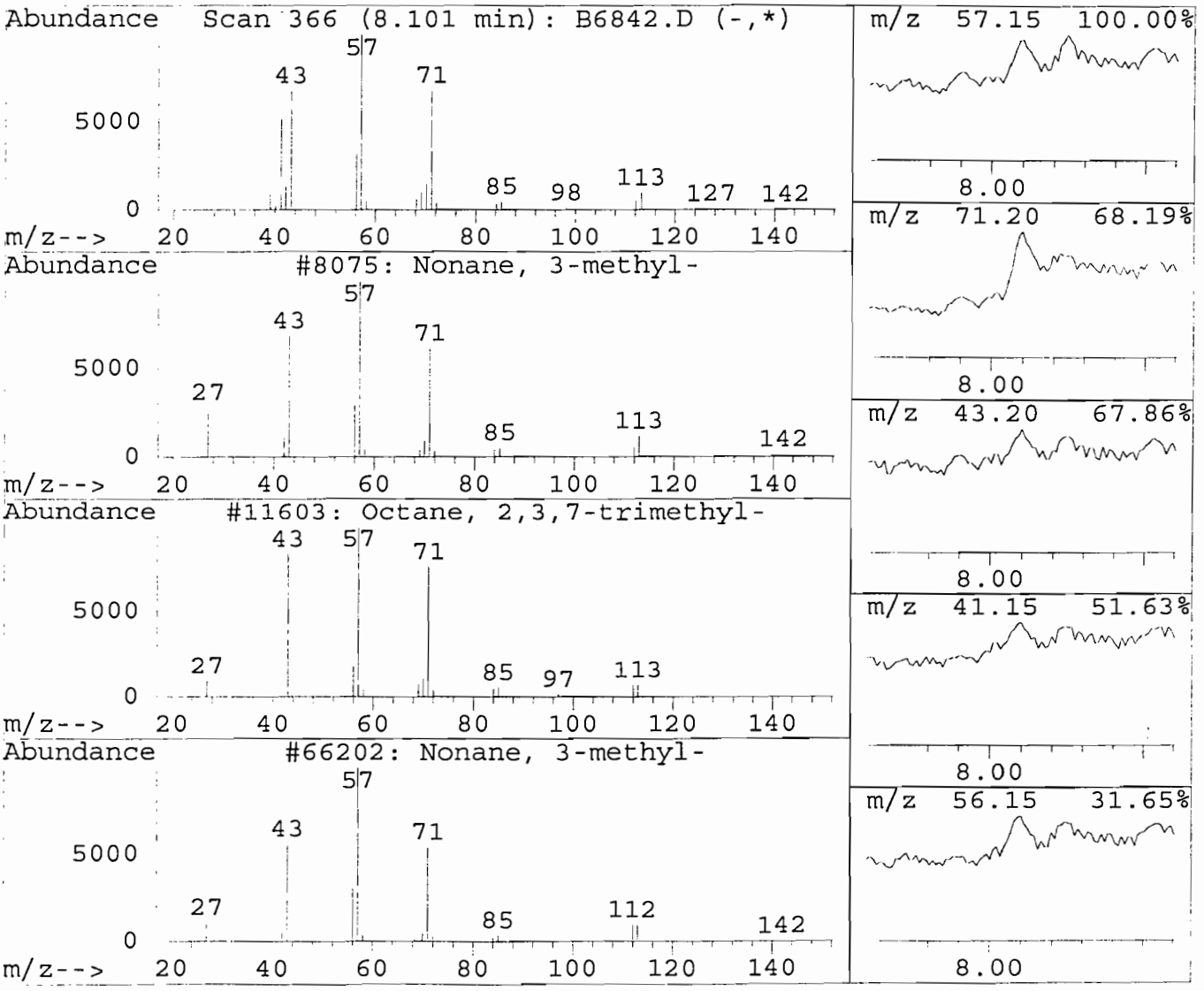
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.10	84.36 ng	7503421	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 3-methyl-	8075	005911-04-6	90
2	Octane, 2,3,7-trimethyl-	11603	062016-34-6	86
3	Nonane, 3-methyl-	66202	005911-04-6	83
4	Heptane, 3-ethyl-5-methyl-	8092	052896-90-9	81
5	Pentadecane	26001	000629-62-9	72



Library Search Compound Report

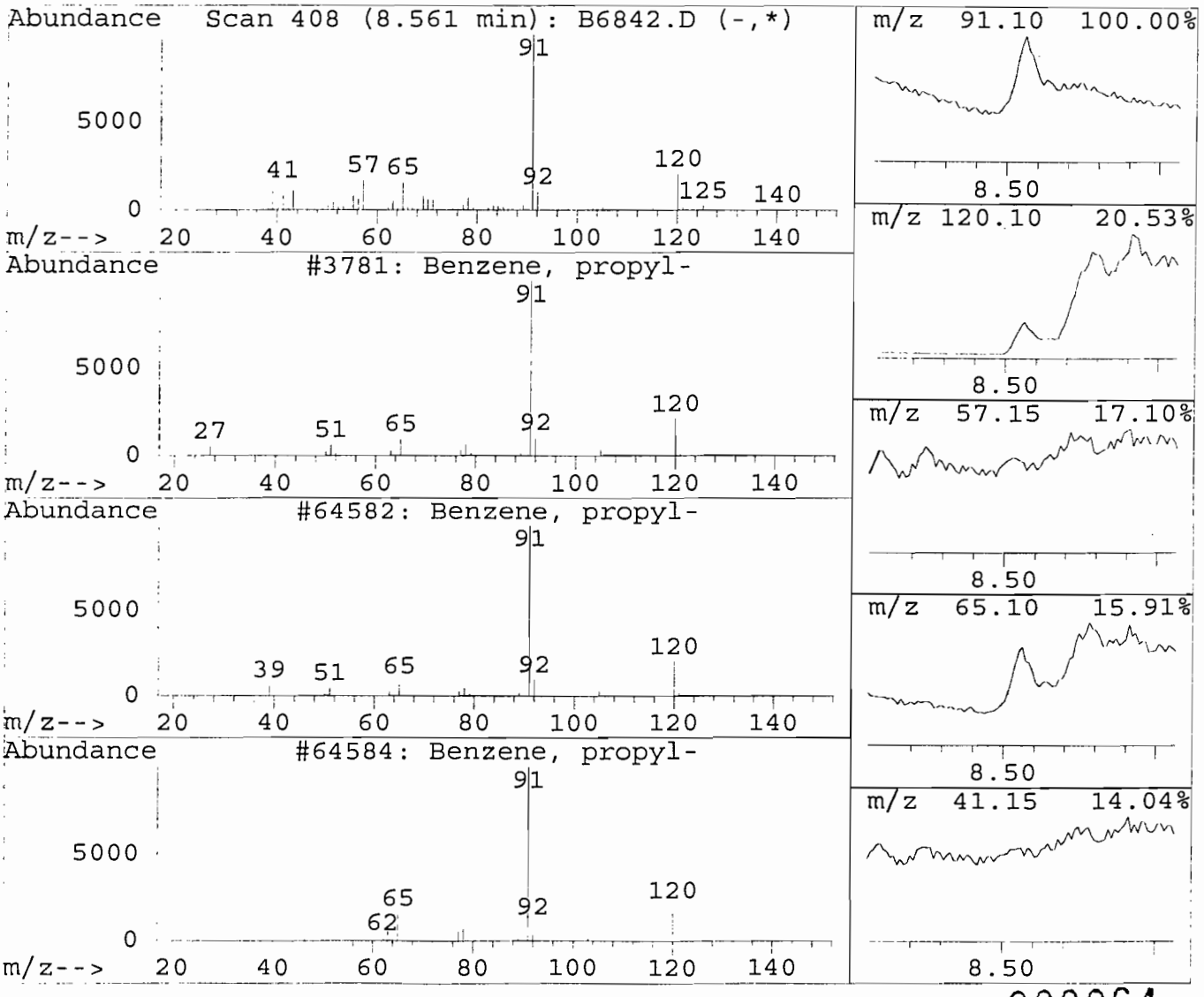
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.56	138.88 ng	12352255	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, propyl-	3781	000103-65-1	76
2	Benzene, propyl-	64582	000103-65-1	76
3	Benzene, propyl-	64584	000103-65-1	74
4	Benzene, propyl-	64583	000103-65-1	68
5	Propanenitrile, 3-[(phenylmethyl)am	12493	000706-03-6	64



000064

Library Search Compound Report

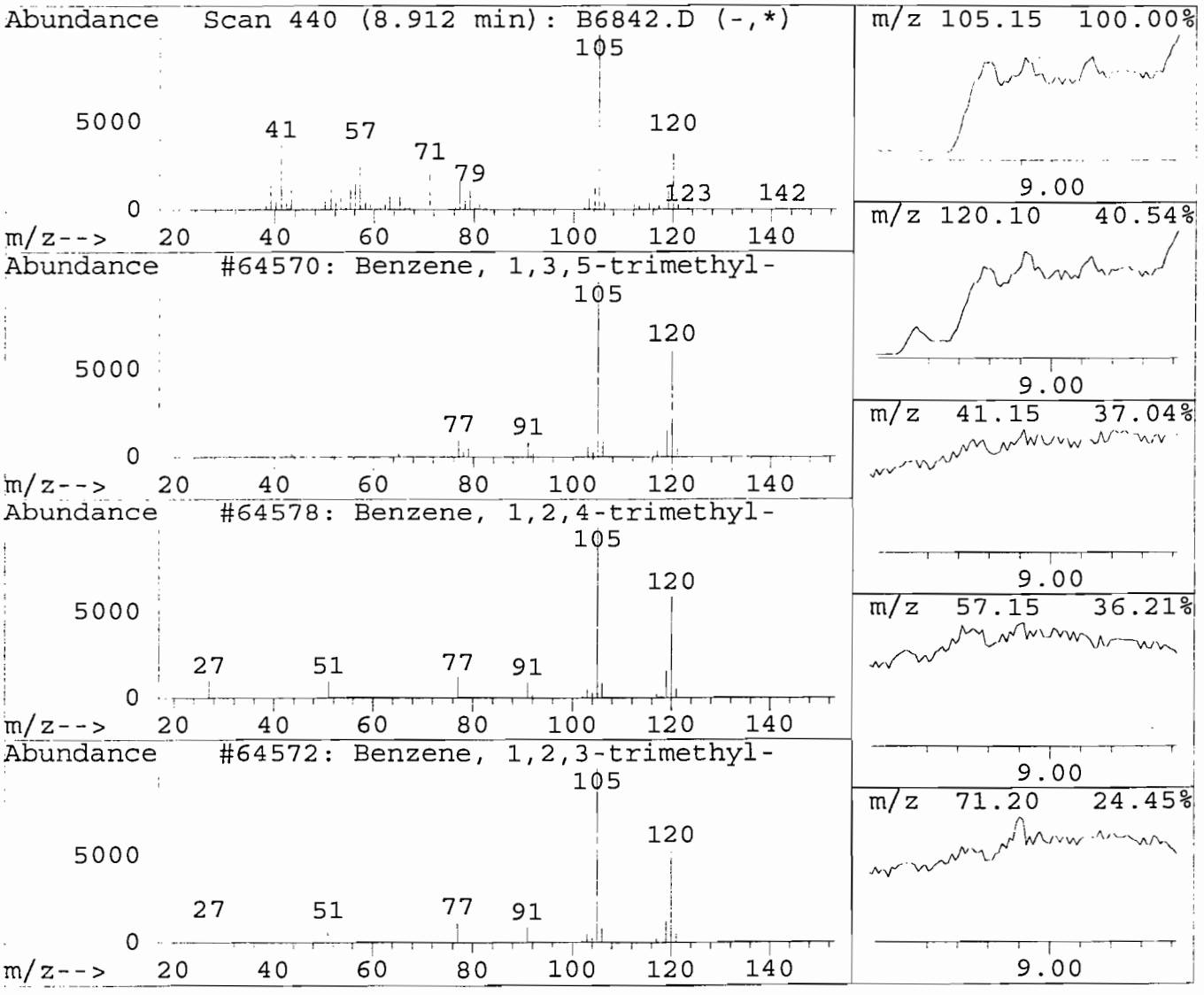
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.91	134.17 ng	11933778	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,3,5-trimethyl-	64570	000108-67-8	76
2	Benzene, 1,2,4-trimethyl-	64578	000095-63-6	70
3	Benzene, 1,2,3-trimethyl-	64572	000526-73-8	70
4	Benzene, 1,3,5-trimethyl-	64569	000108-67-8	64
5	Benzene, 1,2,3-trimethyl-	64573	000526-73-8	64



000065

Library Search Compound Report

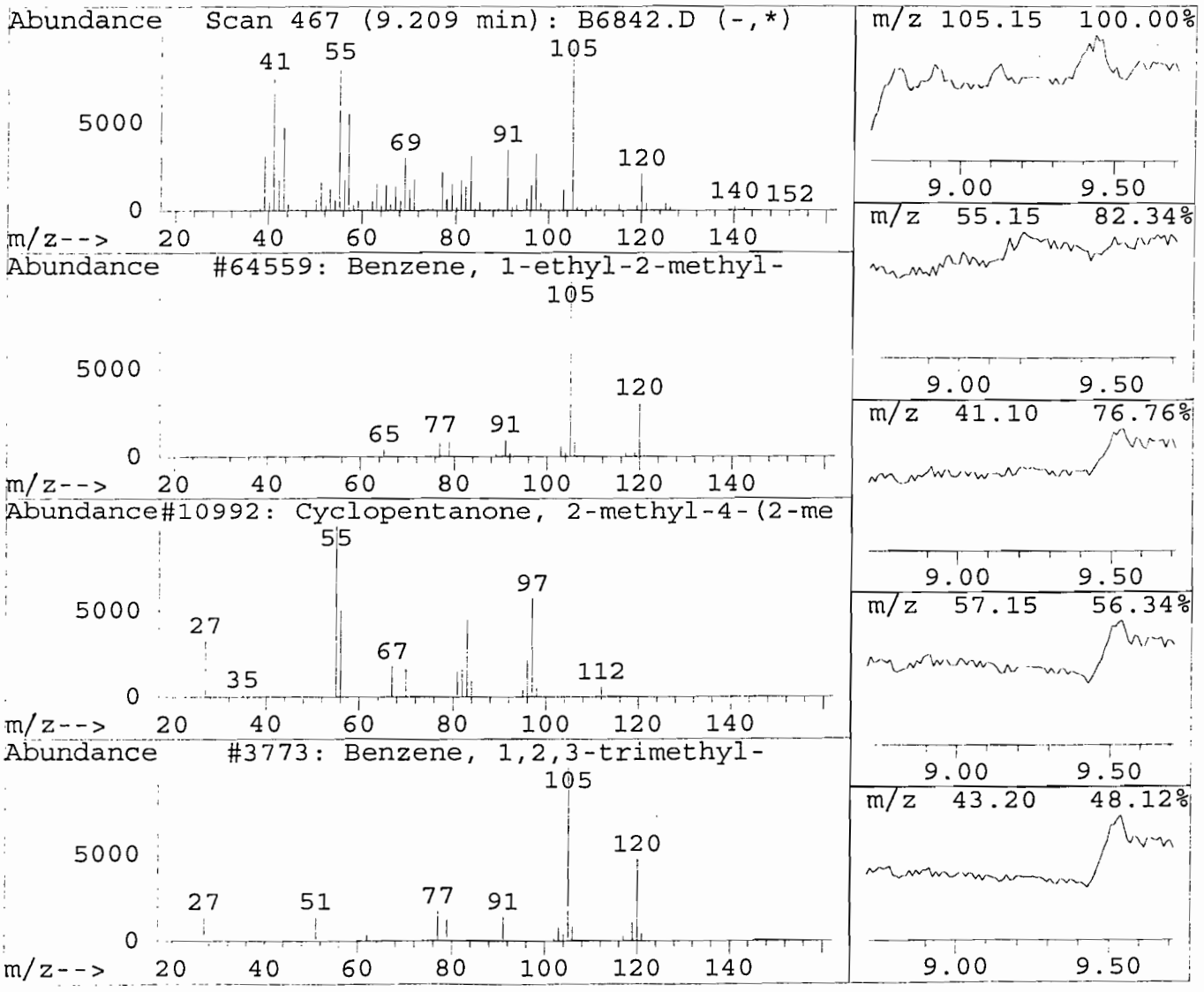
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.21	112.55 ng	10010216	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	64559	000611-14-3	35
2	Cyclopentanone, 2-methyl-4-(2-methy	10992	069770-96-3	35
3	Benzene, 1,2,3-trimethyl-	3773	000526-73-8	35
4	Benzene, (1-methylethyl)-	3763	000098-82-8	35
5	Benzene, 1-ethyl-4-methyl-	64567	000622-96-8	30



Library Search Compound Report

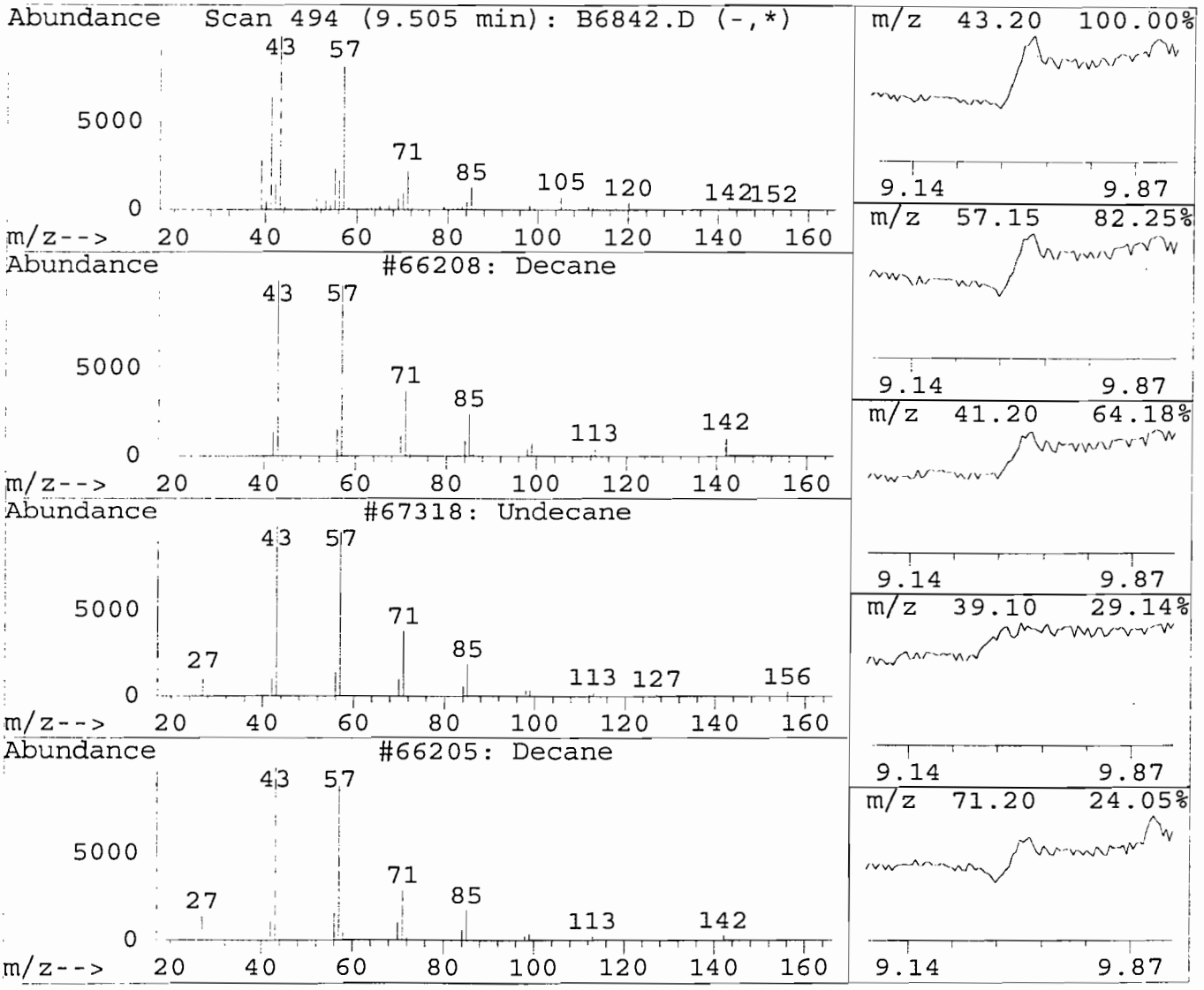
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.50	91.08 ng	8101125	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	66208	000124-18-5	91
2	Undecane	67318	001120-21-4	78
3	Decane	66205	000124-18-5	78
4	Decane	66204	000124-18-5	72
5	Eicosane	72323	000112-95-8	64



000067

Library Search Compound Report

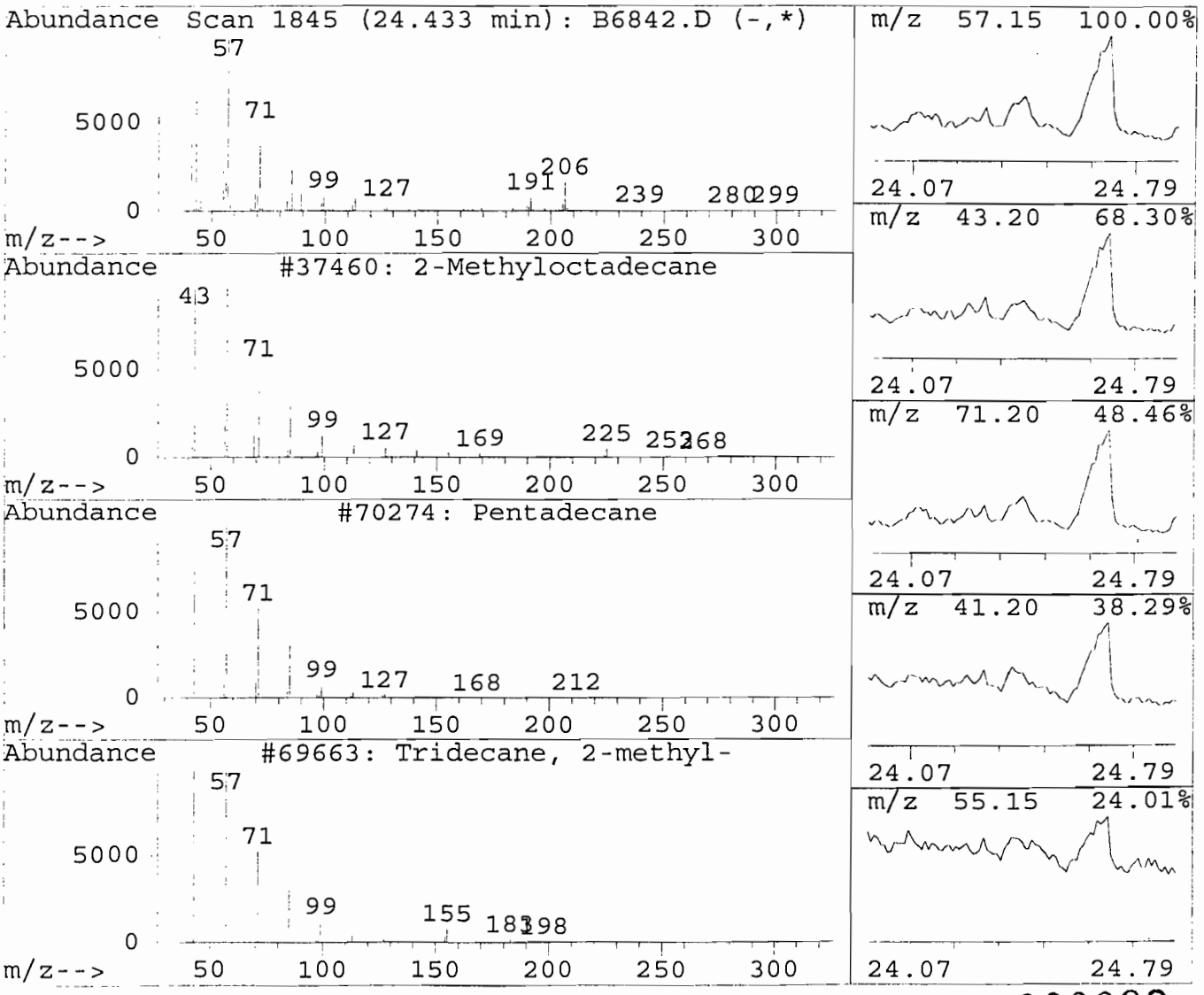
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.43	109.28 ng	25717424	Phenanthrene-d10	21.03

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2-Methyloctadecane	37460	000000-00-0	86
2	Pentadecane	70274	000629-62-9	70
3	Tridecane, 2-methyl-	69663	001560-96-9	70
4	Tetradecane	69657	000629-59-4	62
5	Hexadecane	70787	000544-76-3	60



000068

Library Search Compound Report

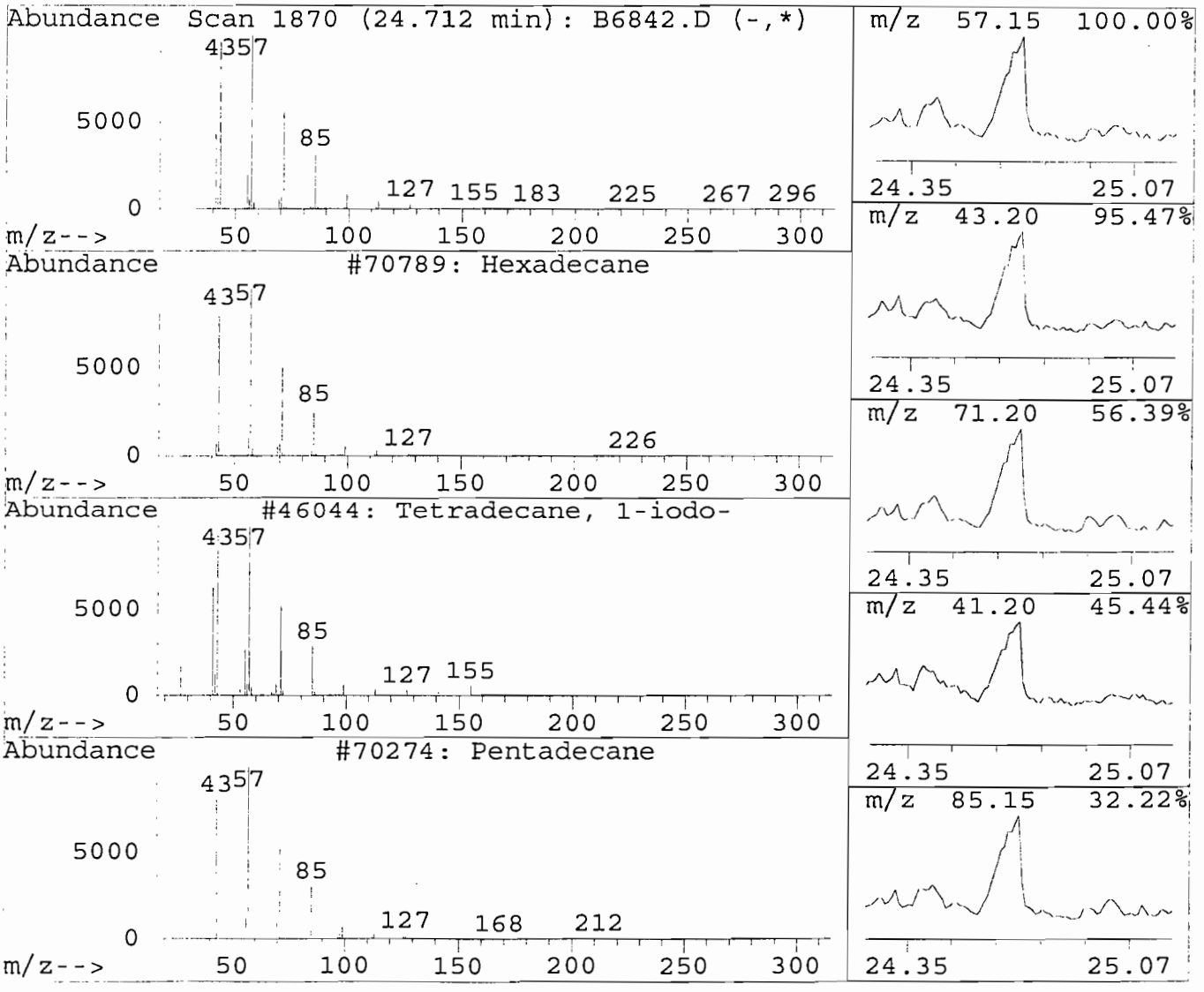
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.71	236.39 ng	34713781	Chrysene-d12	28.33

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecane	70789	000544-76-3	91
2	Tetradecane, 1-iodo-	46044	019218-94-1	72
3	Pentadecane	70274	000629-62-9	72
4	Undecane, 4,5-dimethyl-	18996	017312-79-7	64
5	Octane, 5-ethyl-2-methyl-	11608	062016-18-6	64



000069

Library Search Compound Report

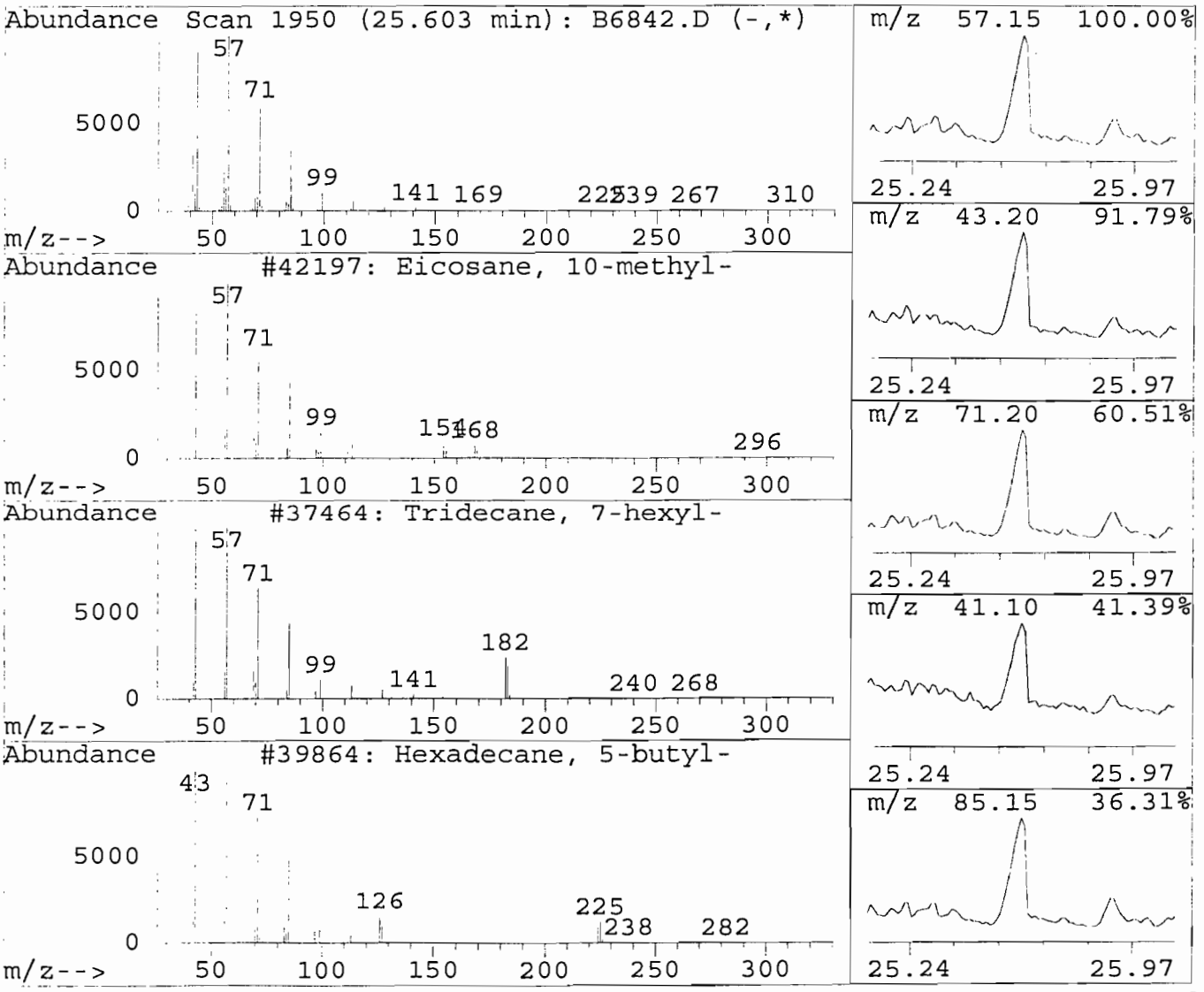
Data File : D:\HPCHEM\1\DATA\B11109\B6842.D
Acq Time : 9 Nov 99 5:33 pm
Sample : 13826ASP-87993-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.60	158.22 ng	23233461	Chrysene-d12	28.33

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Eicosane, 10-methyl-	42197	054833-23-7	94
2	Tridecane, 7-hexyl-	37464	007225-66-3	91
3	Hexadecane, 5-butyl-	39864	006912-07-8	91
4	Hexadecane	70789	000544-76-3	91
5	Heneicosane	72684	000629-94-7	90



000070

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87994

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6837.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 8 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	36	U
108-60-1	bis(2-chloroisopropyl)ether	36	U
95-50-1	1,2-Dichlorobenzene	36	U
541-73-1	1,3-Dichlorobenzene	36	U
106-46-7	1,4-Dichlorobenzene	36	U
621-64-7	n-Nitroso-di-n-propylamine	36	U
67-72-1	Hexachloroethane	36	U
98-95-3	Nitrobenzene	36	U
78-59-1	Isophorone	36	U
111-91-1	bis(2-Chloroethoxy)methane	36	U
120-82-1	1,2,4-Trichlorobenzene	36	U
91-20-3	Naphthalene	36	U
106-47-8	4-Chloroaniline	72	U
87-68-3	Hexachlorobutadiene	36	U
91-57-6	2-Methylnaphthalene	61	U
77-47-4	Hexachlorocyclopentadiene	36	U
91-58-7	2-Chloronaphthalene	36	U
88-74-4	2-Nitroaniline	130	U
131-11-3	Dimethylphthalate	36	U
208-96-8	Acenaphthylene	36	U
606-20-2	2,6-Dinitrotoluene	36	U
99-09-2	3-Nitroaniline	140	U
83-32-9	Acenaphthene	36	U
132-64-9	Dibenzofuran	57	U
121-14-2	2,4-Dinitrotoluene	36	U
84-66-2	Diethylphthalate	36	U
7005-72-3	4-Chlorophenyl-phenylether	36	U
86-73-7	Fluorene	36	U
100-01-6	4-Nitroaniline	190	U
86-30-6	N-Nitrosodiphenylamine	36	U
122-66-7	1,2-Diphenylhydrazine	36	U
101-55-3	4-Bromophenyl-phenylether	36	U
118-74-1	Hexachlorobenzene	36	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87994

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6837.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 8 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	110	
120-12-7	Anthracene	36	U
86-74-8	Carbazole	53	U
84-74-2	Di-n-butylphthalate	36	U
206-44-0	Fluoranthene	61	
129-00-0	Pyrene	87	
85-68-7	Butylbenzylphthalate	36	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	36	U
218-01-9	Chrysene	36	U
117-81-7	bis(2-Ethylhexyl)phthalate	1200	
117-84-0	Di-n-octylphthalate	42	
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	36	U
193-39-5	Indeno(1,2,3-cd)pyrene	36	U
53-70-3	Dibenz[a,h]anthracene	53	U
191-24-2	Benzo[g,h,i]perylene	36	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-010-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87994

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6837.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/Kg

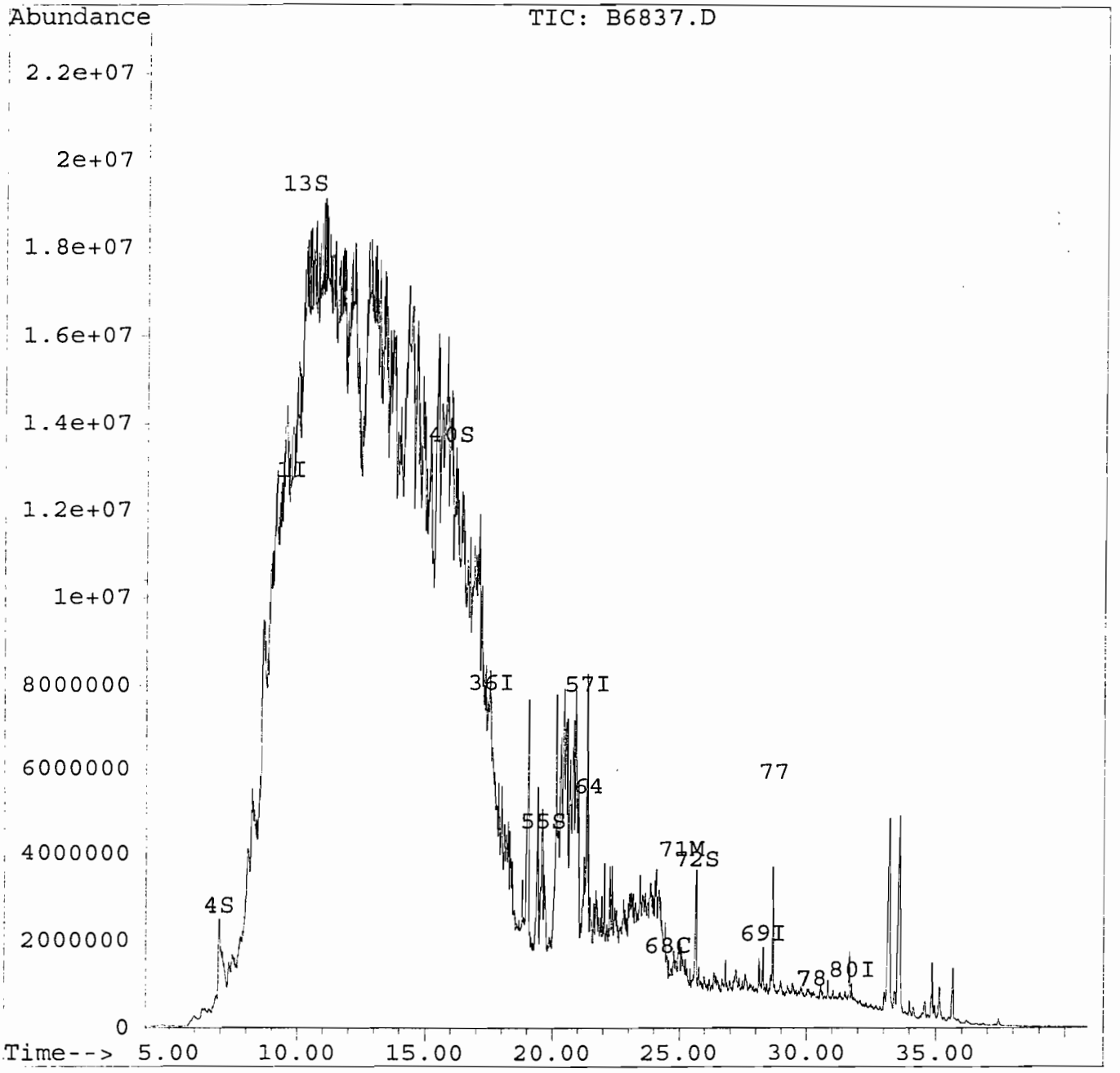
CAS Number	Compound Name	RT	Est. Conc.	Q
1. 62108-32-1	Heptane, 2,2,3,4,6,6-hexamet	8.65	1200	J
2. 14686-14-7	3-Heptene, (E)-	8.67	1200	J
3. 62338-09-4	Decane, 2,2,3-trimethyl-	8.95	1800	J
4. 124-18-5	Decane	9.45	1500	J
5. 32357-83-8	Ether, hexyl pentyl	9.50	1300	J
6. 62238-01-1	Decane, 2,2,8-trimethyl-	9.93	1400	J
7. 55162-61-3	Tetracontane, 3,5,24-trimeth	10.44	1600	J
8. 4390-04-9	Nonane, 2,2,4,4,6,8,8-heptam	14.43	2300	J
9. 31295-56-4	Dodecane, 2,6,11-trimethyl-	14.60	1500	J
10. 4032-86-4	Heptane, 3,3-dimethyl-	15.44	3500	J
11. 629-78-7	Heptadecane	15.58	2200	J
12. 13475-82-6	Heptane, 2,2,4,6,6-pentameth	15.78	3800	J
13. 74421-19-5	Hexane, 1-(hexyloxy)-5-methy	16.14	1600	J
14. 629-62-9	Pentadecane	16.87	1400	J
15. 26429-11-8	Heptadecane, 4-methyl-	17.08	1300	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :
Quant Time: Nov 10 12:31 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000074

Quantitation Report

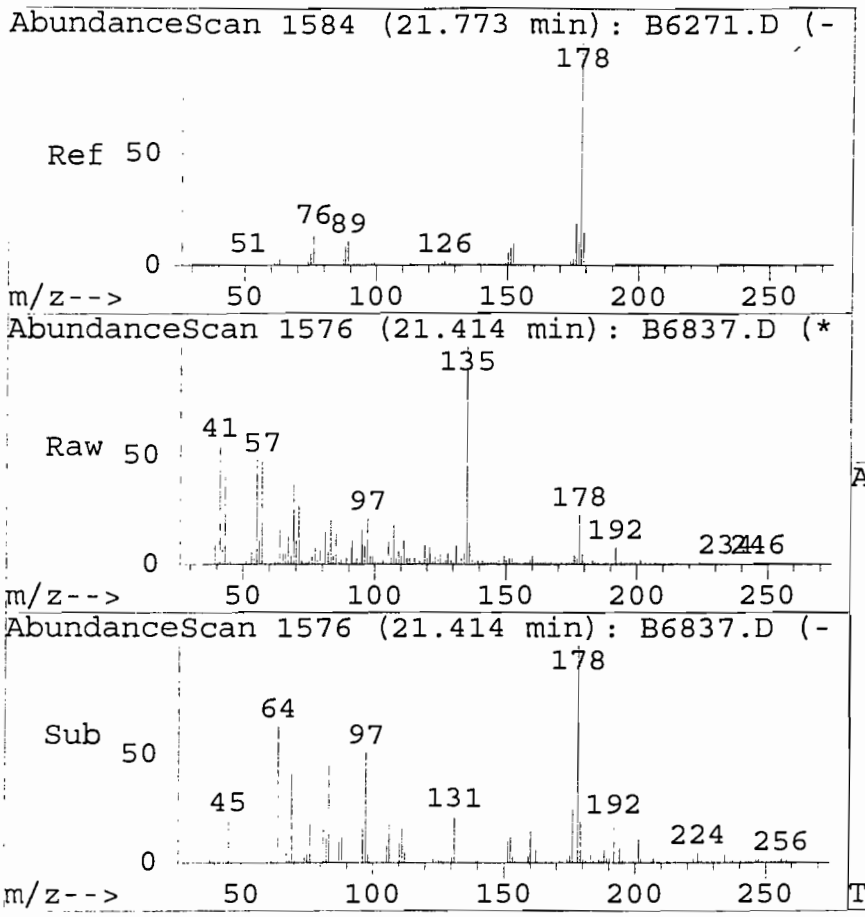
Data File : F:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :
Quant Time: Nov 10 12:31 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.72	152	128766	40.00	ng	-0.01
21) Naphthalene-d8	13.12	136	280007	40.00	ng	0.24
36) Acenaphthene-d10	17.56	164	640269	40.00	ng	0.09
57) Phenanthrene-d10	21.36	188	1142129	40.00	ng	0.03
69) Chrysene-d12	28.29	240	818231	40.00	ng	-0.05
80) Perylene-d12	31.78	264	380617	40.00	ng	-0.05
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.95	112	3527959	690.72	ng	
6) 2-Chlorophenol-d4	9.28	132	751803	156.82	ng	#
7) Phenol-d5	9.16	99	3118683	516.52	ng	#
13) 1,2-Dichlorobenzene-d4	10.17	152	120723	38.60	ng	
22) Nitrobenzene-d5	11.44	82	58295	15.20	ng	#
40) 2-Fluorobiphenyl	15.92	172	1623476	69.00	ng	
55) 2,4,6-Tribromophenol	19.62	330	1443207	275.25	ng	
72) Terphenyl-d14	25.67	244	3250784	137.48	ng	
Target Compounds						Qvalue
64) Phenanthrene	21.41	178	178157	6.24	ng	93
68) Fluoranthene	24.55	202	107710	3.37	ng	96
71) Pyrene	25.08	202	122948	4.78	ng	97
77) bis(2-Ethylhexyl)phthalate	28.69	149	1572584	64.15	ng	97
78) Di-n-octylphthalate	30.20	149	101126	2.33	ng	96

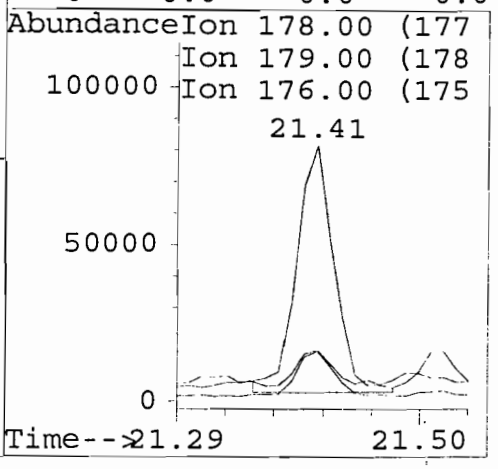
(#) = qualifier out of range (m) = manual integration

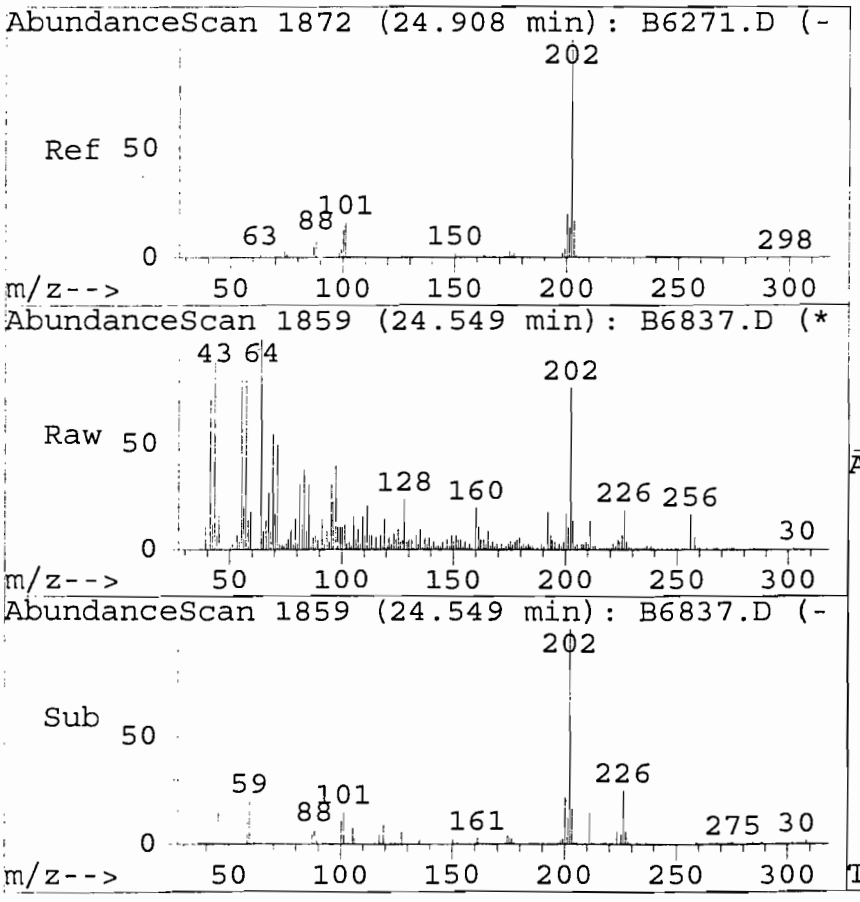


#64
Phenanthrene
Concen: 6.24 ng
RT: 21.41 min Scan# 1576
Delta R.T. 0.02 min
Lab File: B6837.D
Acq: 9 Nov 99 1:20 pm

Tgt Ion:178 Resp: 178157

Ion	Ratio	Lower	Upper
178	100		
179	20.2	7.4	22.3
176	19.7	9.4	28.2
0	0.0	0.0	0.0

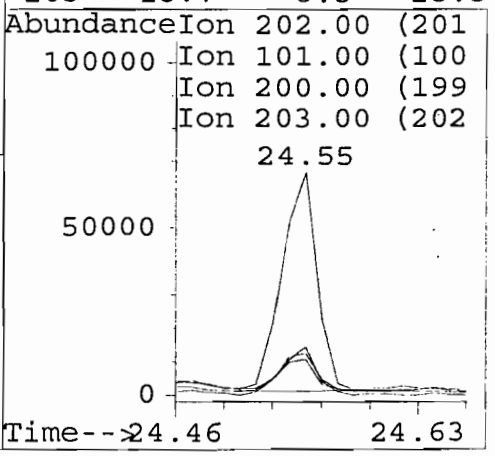




#68
Fluoranthene
Concen: 3.37 ng
RT: 24.55 min Scan# 1859
Delta R.T. 0.01 min
Lab File: B6837.D
Acq: 9 Nov 99 1:20 pm

Tgt Ion:202 Resp: 107710

Ion	Ratio	Lower	Upper
202	100		
101	16.0	7.4	22.2
200	21.7	9.9	29.7
203	18.7	8.5	25.5



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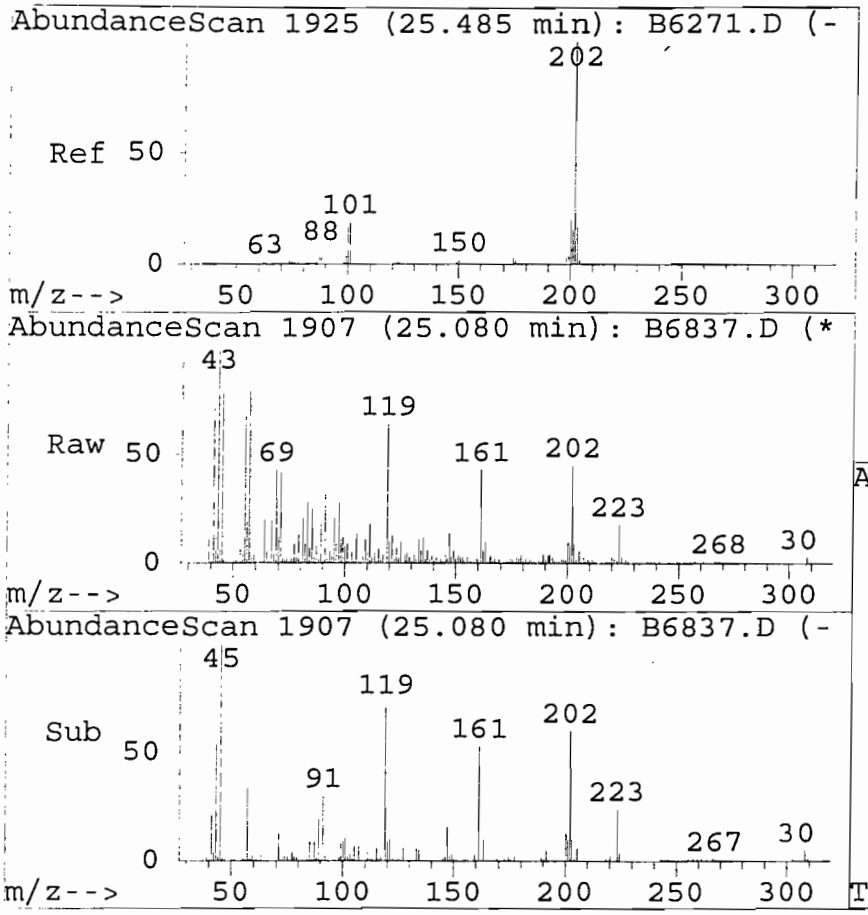
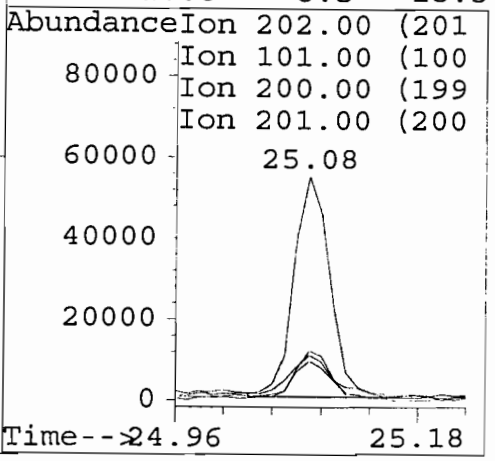
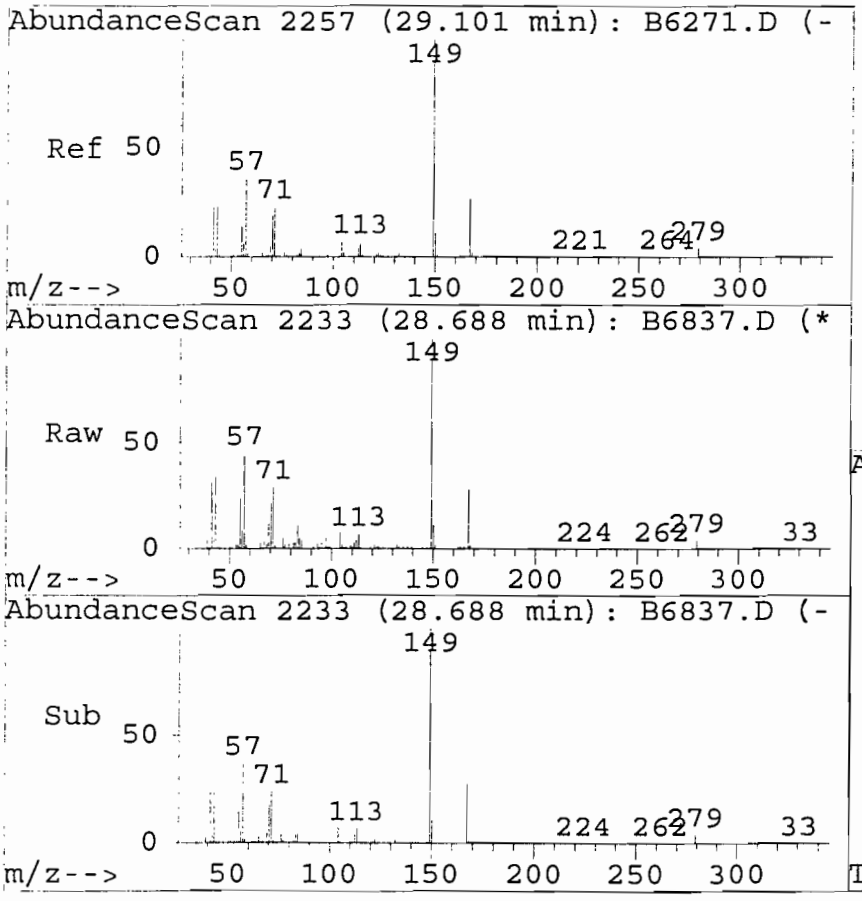


#71
Pyrene
Concen: 4.78 ng
RT: 25.08 min Scan# 1907
Delta R.T. -0.02 min
Lab File: B6837.D
Acq: 9 Nov 99 1:20 pm

Tgt Ion:202 Resp: 122948

Ion	Ratio	Lower	Upper
202	100		
101	20.2	9.2	27.7
200	22.2	10.5	31.6
201	17.6	8.5	25.5

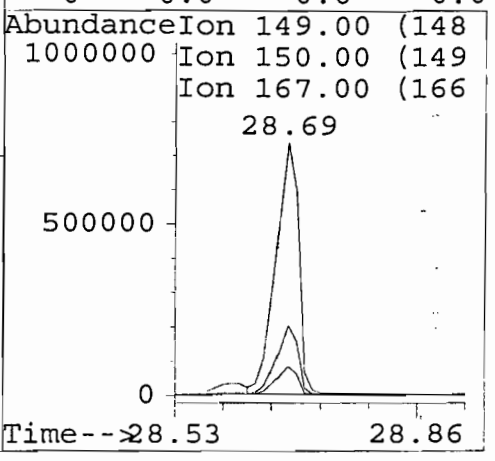




#77
bis(2-Ethylhexyl)phthalate
Concen: 64.15 ng
RT: 28.69 min Scan# 2233
Delta R.T. -0.04 min
Lab File: B6837.D
Acq: 9 Nov 99 1:20 pm

Tgt Ion:149 Resp: 1572584

Ion	Ratio	Lower	Upper
149	100		
150	11.4	5.6	16.8
167	27.6	14.7	44.1
0	0.0	0.0	0.0



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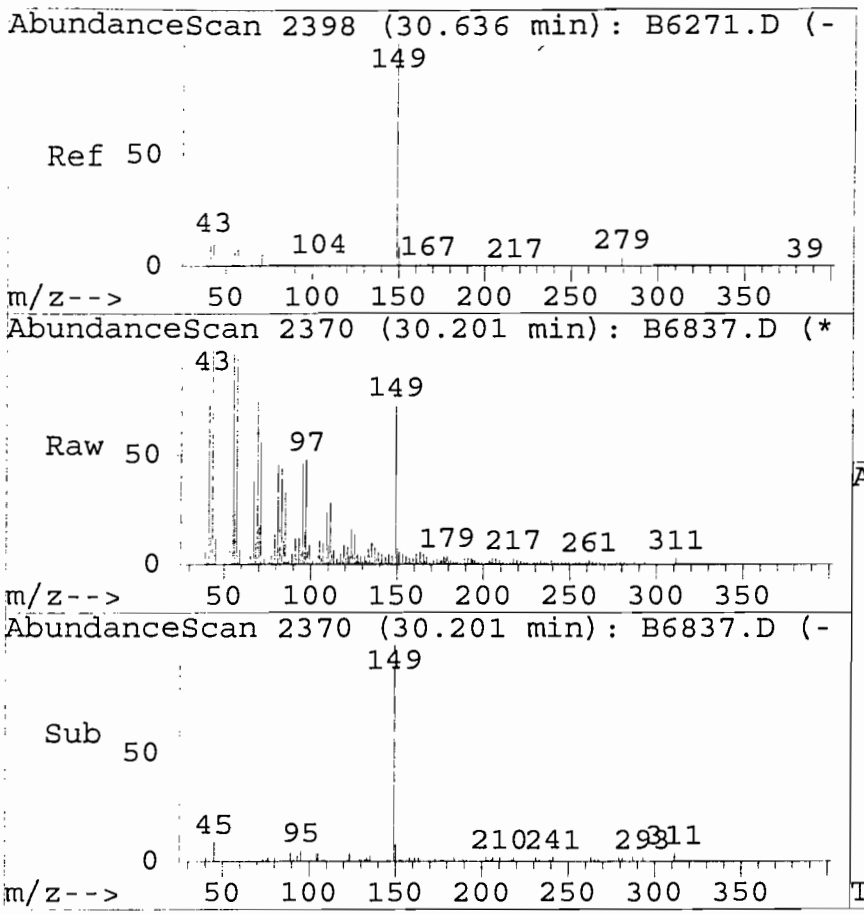
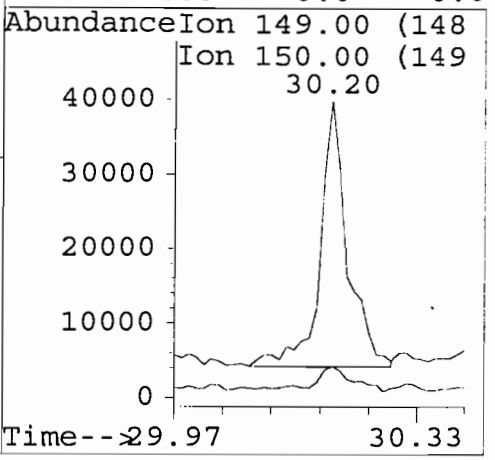


#78
Di-n-octylphthalate
Concen: 2.33 ng
RT: 30.20 min Scan# 2370
Delta R.T. -0.07 min
Lab File: B6837.D
Acq: 9 Nov 99 1:20 pm

Tgt Ion:149 Resp: 101126

Ion	Ratio	Lower	Upper
149	100		
150	10.8	4.7	14.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



000078

Library Search Compound Report

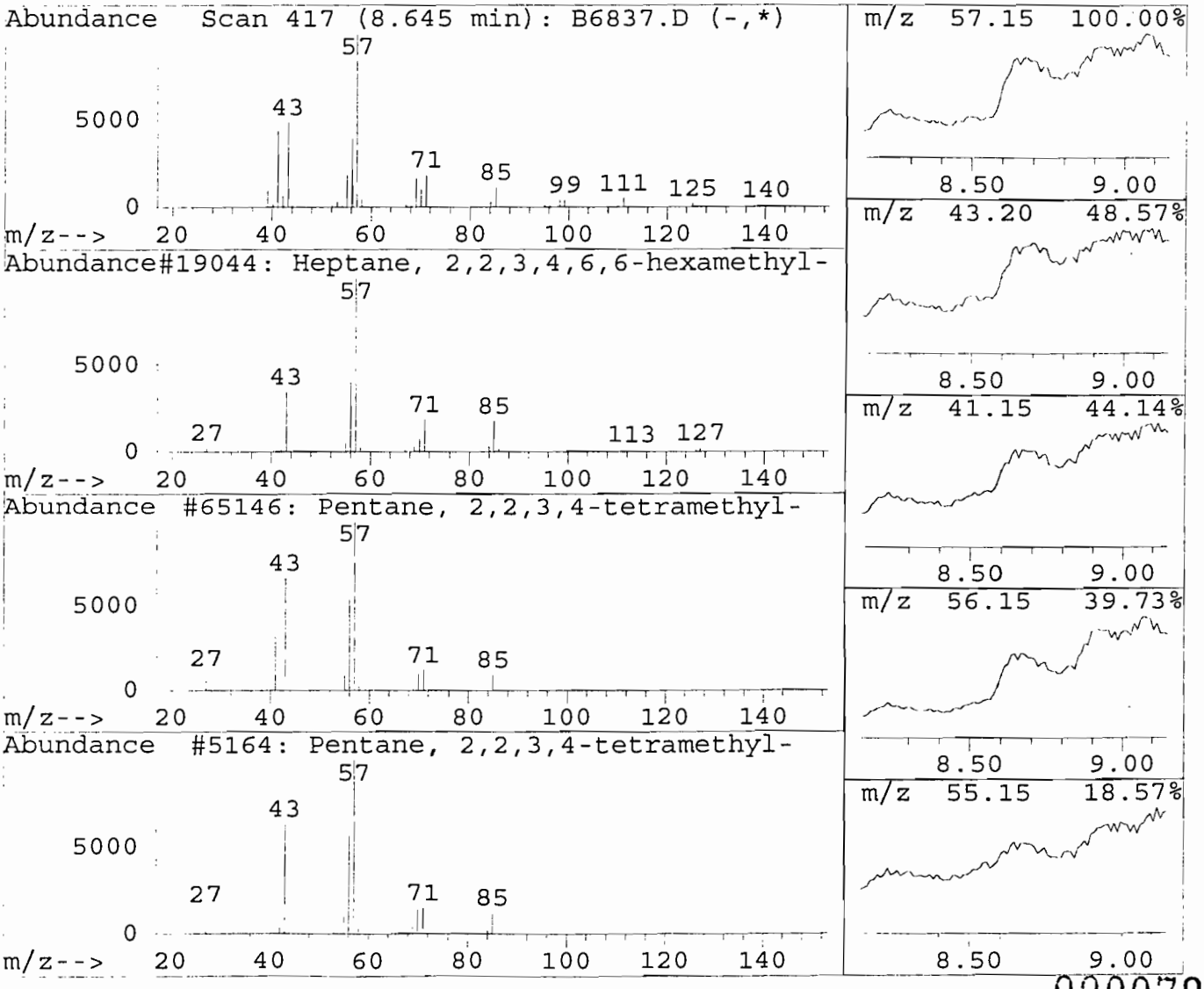
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.65	67.55 ng	29242399	1,4-Dichlorobenzene-d4	9.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,2,3,4,6,6-hexamethyl-	19044	062108-32-1	59
2	Pentane, 2,2,3,4-tetramethyl-	65146	001186-53-4	59
3	Pentane, 2,2,3,4-tetramethyl-	5164	001186-53-4	59
4	Octane, 2,2,6-trimethyl-	11599	062016-28-8	56
5	2,2,7,7-Tetramethyloctane	15365	001071-31-4	53



000079

Library Search Compound Report

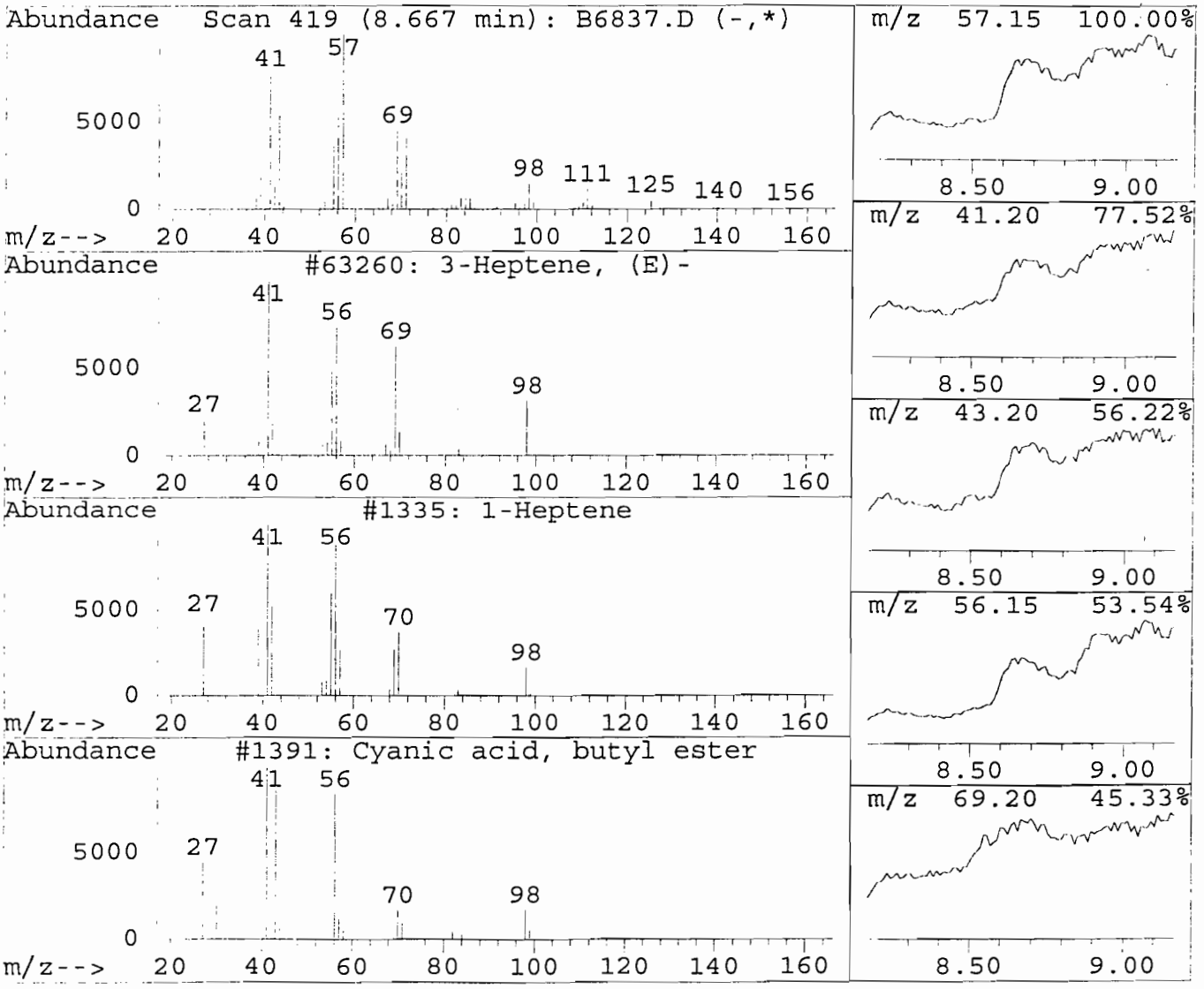
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.67	68.68 ng	29731671	1,4-Dichlorobenzene-d4	9.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3-Heptene, (E)-	63260	014686-14-7	38
2	1-Heptene	1335	000592-76-7	38
3	Cyanic acid, butyl ester	1391	001768-24-7	38
4	Cyclohexane, 1-methyl-2-propyl-	66074	004291-79-6	35
5	5-Methyl-2-hexene,c&t	1327	003404-62-4	35



Library Search Compound Report

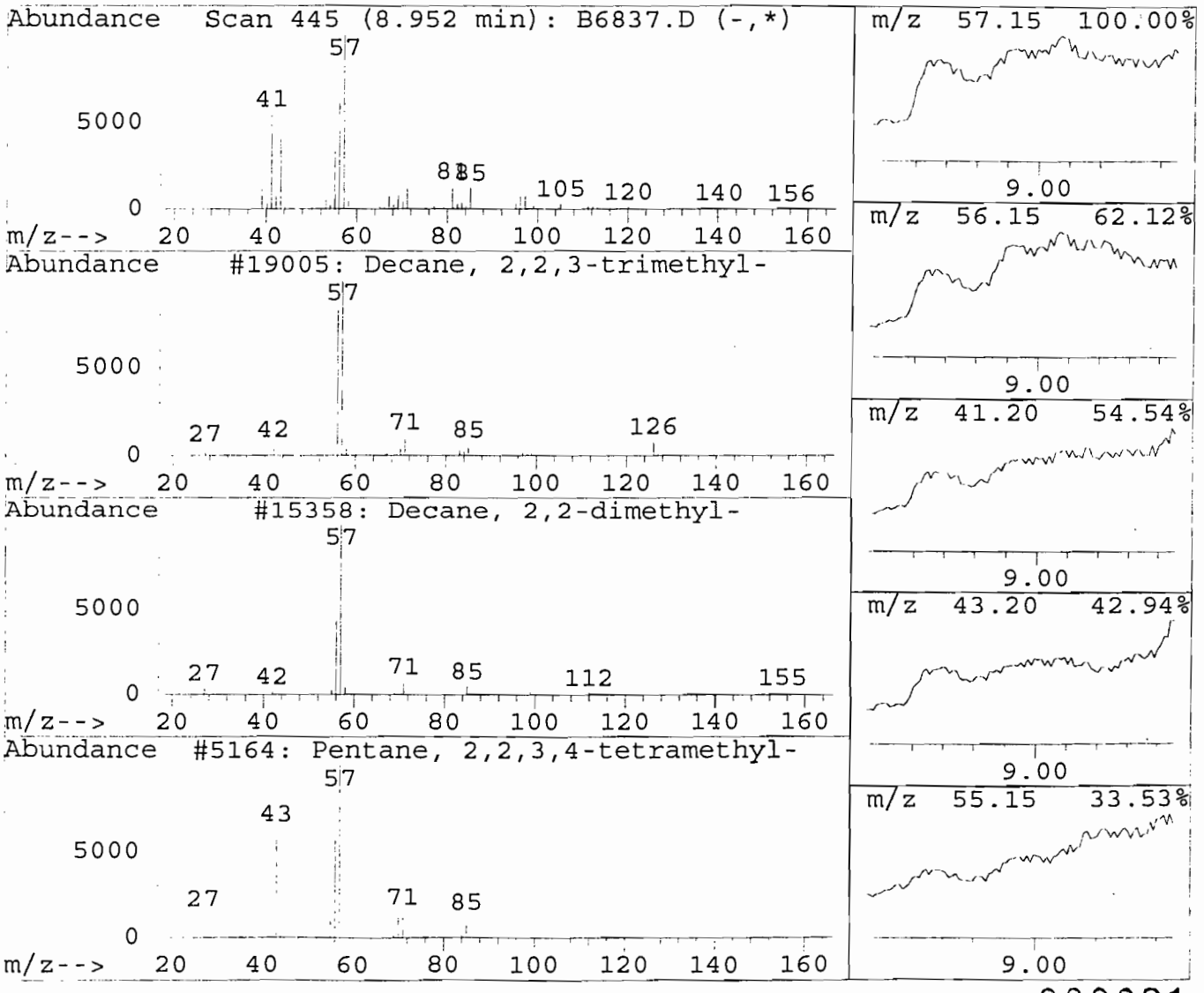
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
8.95	98.95 ng	42837661	1,4-Dichlorobenzene-d4	9.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,2,3-trimethyl-	19005	062338-09-4	64
2	Decane, 2,2-dimethyl-	15358	017302-37-3	53
3	Pentane, 2,2,3,4-tetramethyl-	5164	001186-53-4	53
4	Decane, 2,2,3-trimethyl-	69024	062338-09-4	53
5	Octane, 2,5,6-trimethyl-	11607	062016-14-2	47



000081

Library Search Compound Report

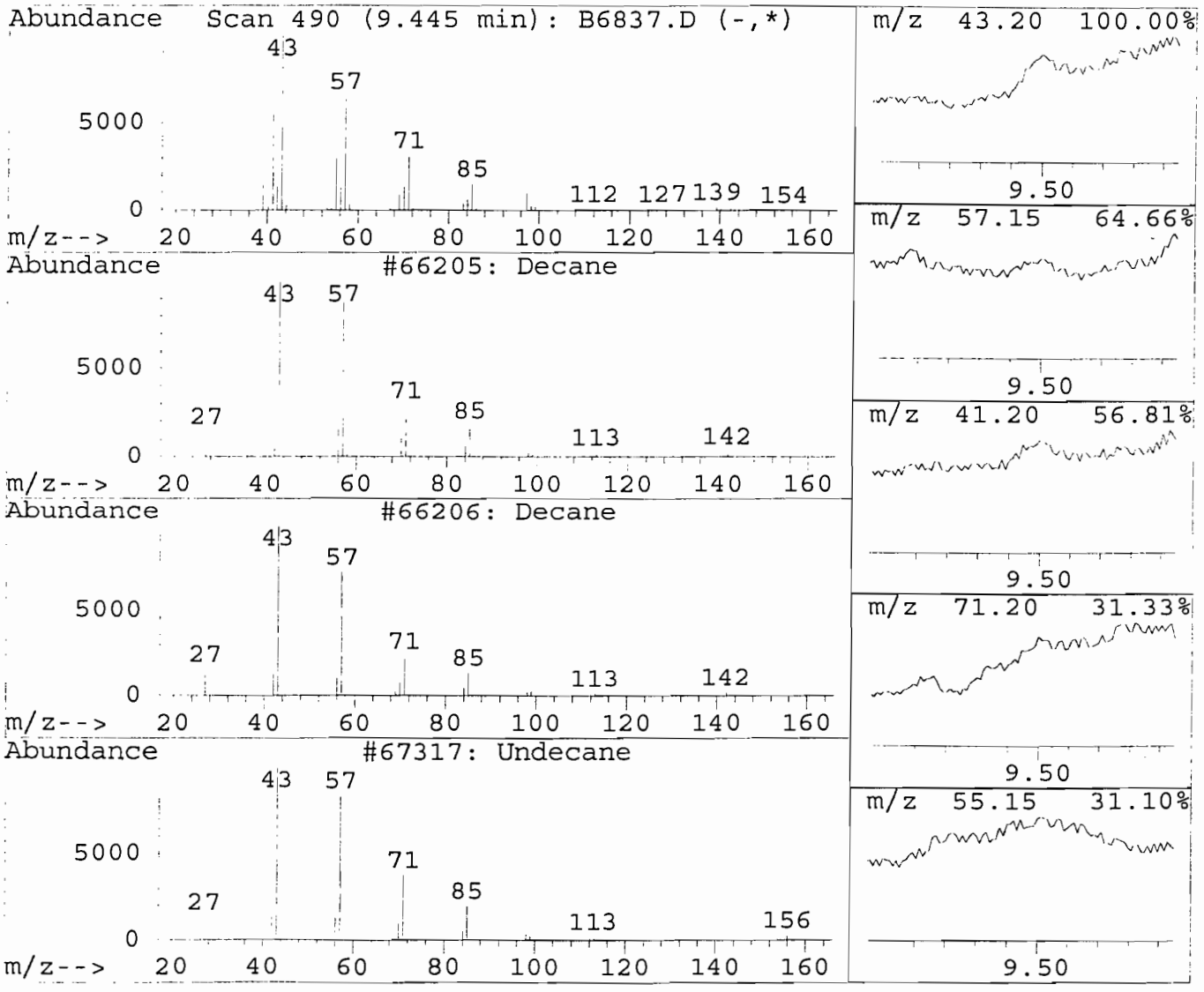
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.45	82.34 ng	35648280	1,4-Dichlorobenzene-d4	9.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	66205	000124-18-5	72
2	Decane	66206	000124-18-5	72
3	Undecane	67317	001120-21-4	72
4	Tetradecane	69658	000629-59-4	64
5	Docosane	72997	000629-97-0	64



000082

Library Search Compound Report

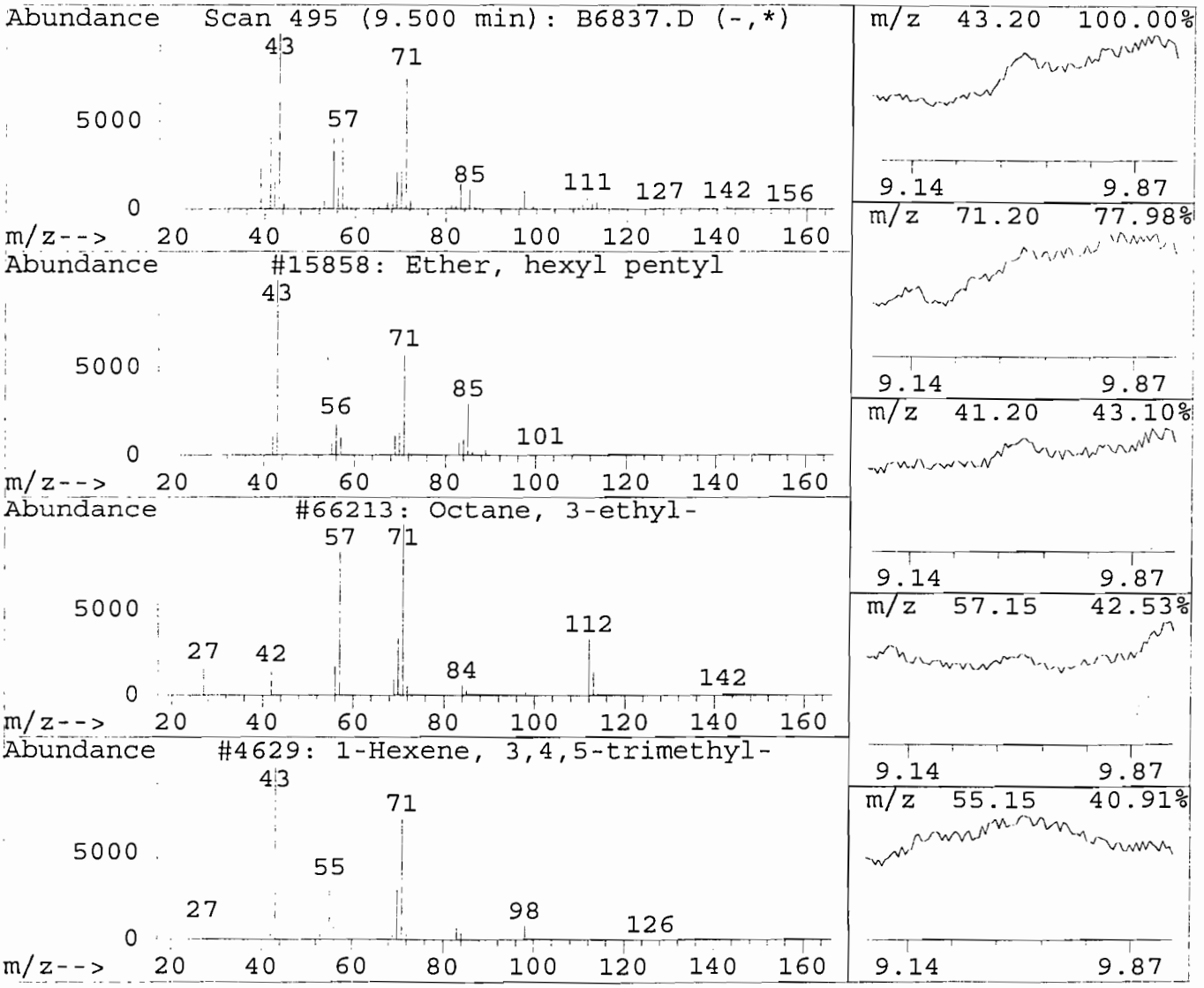
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.50	71.71 ng	31044226	1,4-Dichlorobenzene-d4	9.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ether, hexyl pentyl	15858	032357-83-8	72
2	Octane, 3-ethyl-	66213	005881-17-4	64
3	1-Hexene, 3,4,5-trimethyl-	4629	056728-10-0	53
4	Decane, 4-methyl-	67323	002847-72-5	50
5	3-Hexanone, 4,4-dimethyl-	5103	019550-14-2	50



Library Search Compound Report

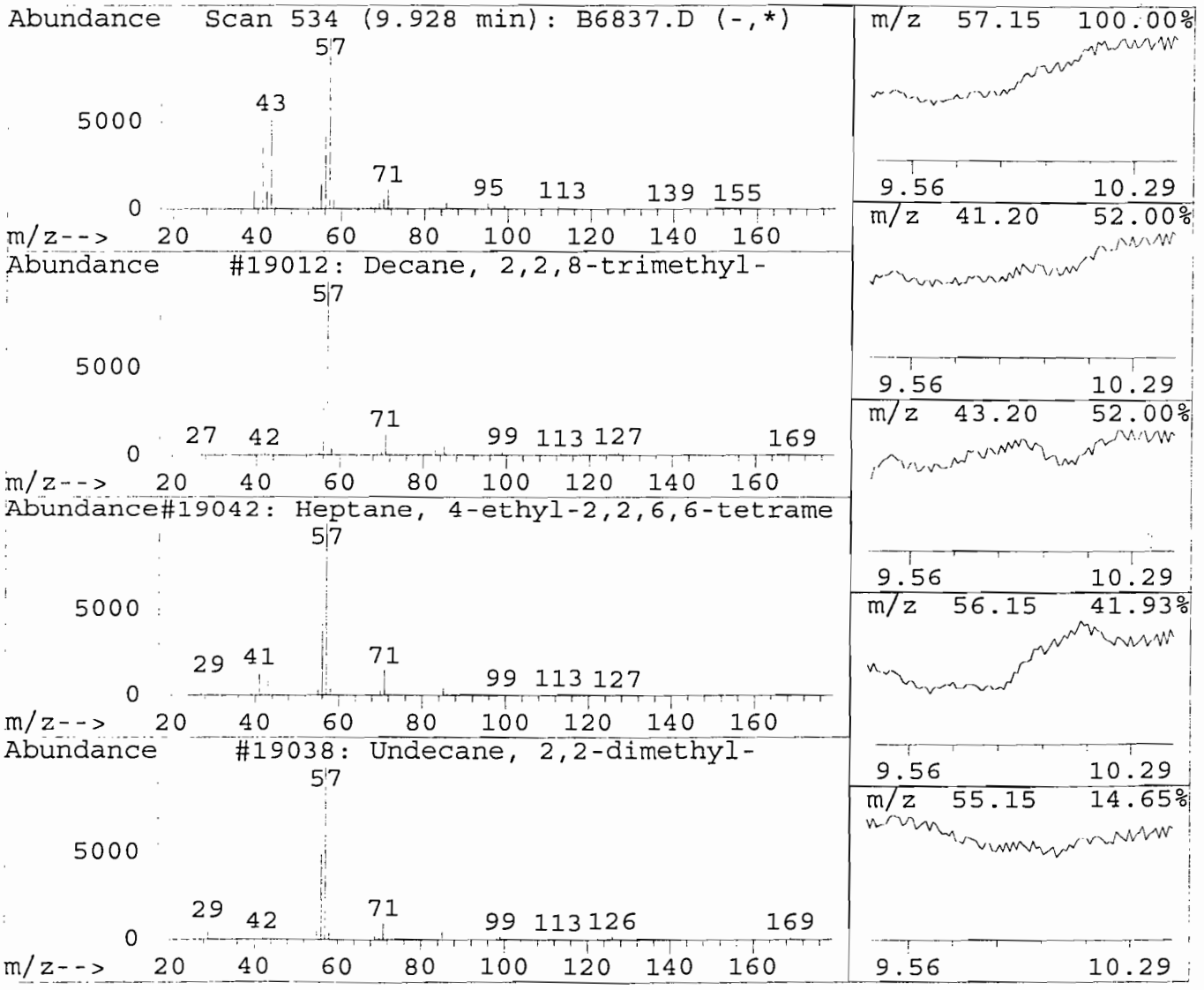
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.93	75.36 ng	32624130	1,4-Dichlorobenzene-d4	9.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,2,8-trimethyl-	19012	062238-01-1	50
2	Heptane, 4-ethyl-2,2,6,6-tetramethy	19042	062108-31-0	50
3	Undecane, 2,2-dimethyl-	19038	017312-64-0	50
4	Heptane, 2,5-dimethyl-	5143	002216-30-0	47
5	Heptane, 2,2,4,6,6-pentamethyl-	68260	013475-82-6	45



Library Search Compound Report

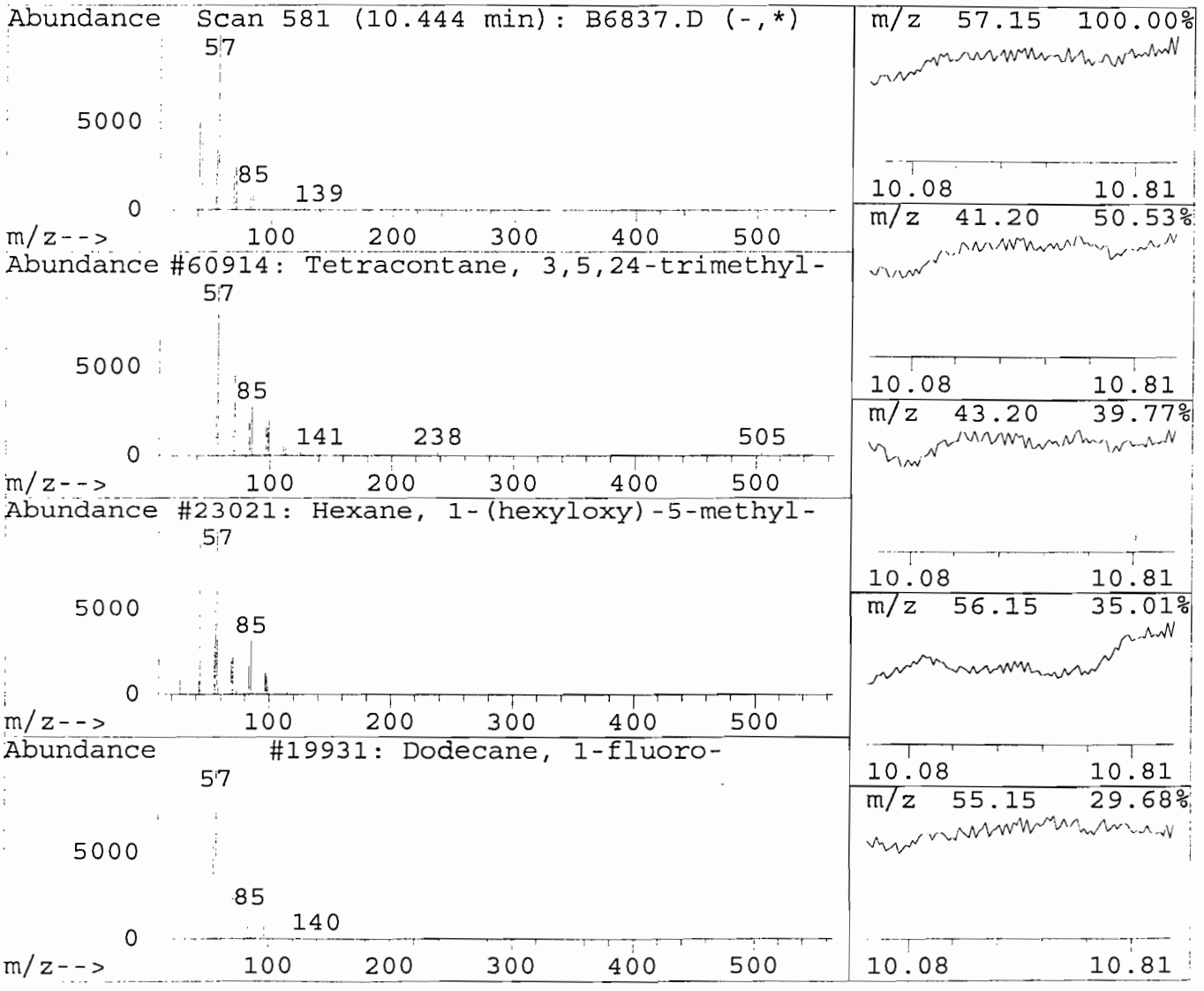
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.44	89.73 ng	38848072	1,4-Dichlorobenzene-d4	9.72

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetracontane, 3,5,24-trimethyl-	60914	055162-61-3	64
2	Hexane, 1-(hexyloxy)-5-methyl-	23021	074421-19-5	43
3	Dodecane, 1-fluoro-	19931	000334-68-9	40
4	Pentane, 2,2,3,4-tetramethyl-	5164	001186-53-4	40
5	Hexane, 2,2,5,5-tetramethyl-	66226	001071-81-4	40



000085

Library Search Compound Report

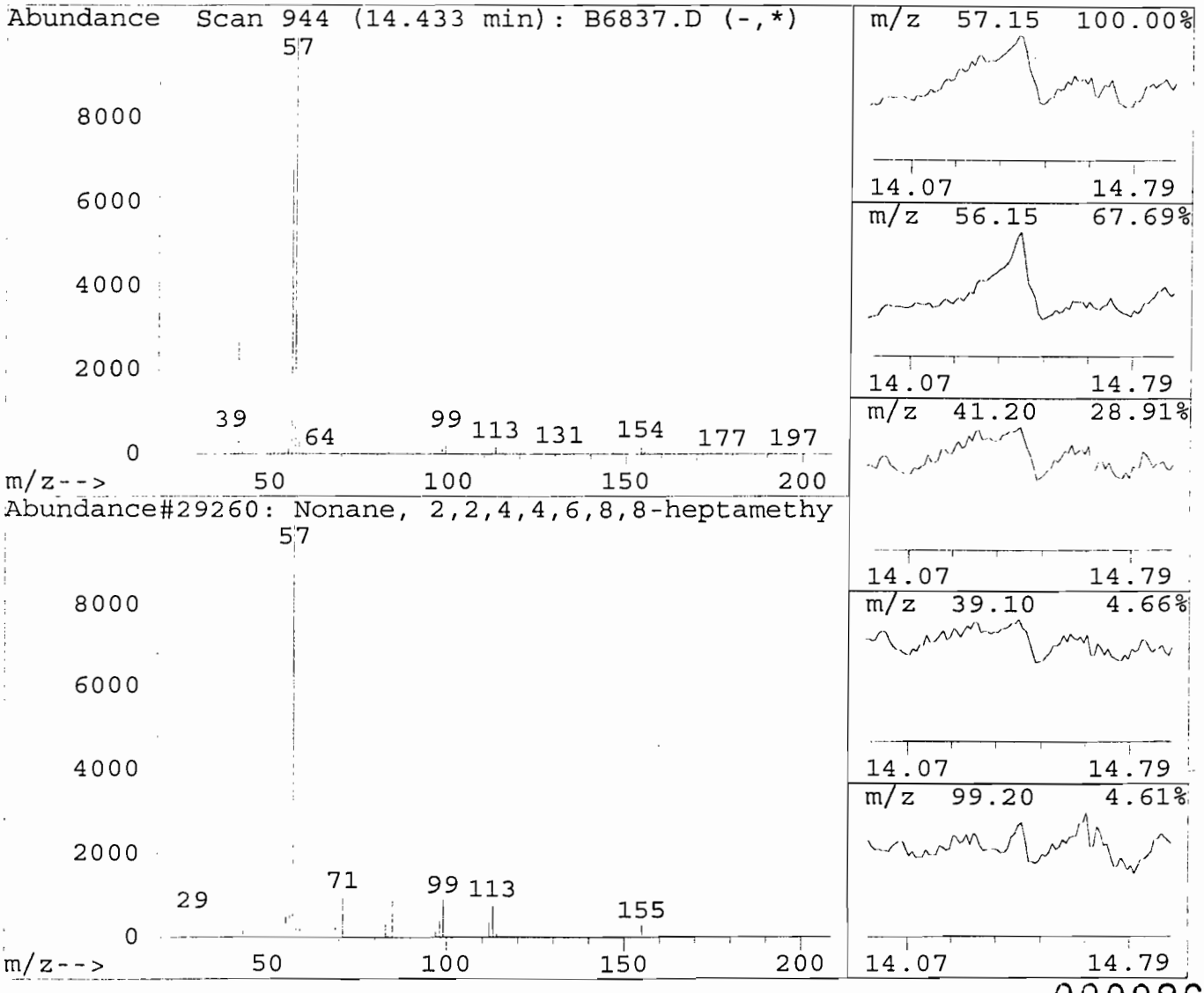
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.43	128.02 ng	27221703	Naphthalene-d8	13.12

Hit# of 1	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 2,2,4,4,6,8,8-heptamethyl-	29260	004390-04-9	7



000086

Library Search Compound Report

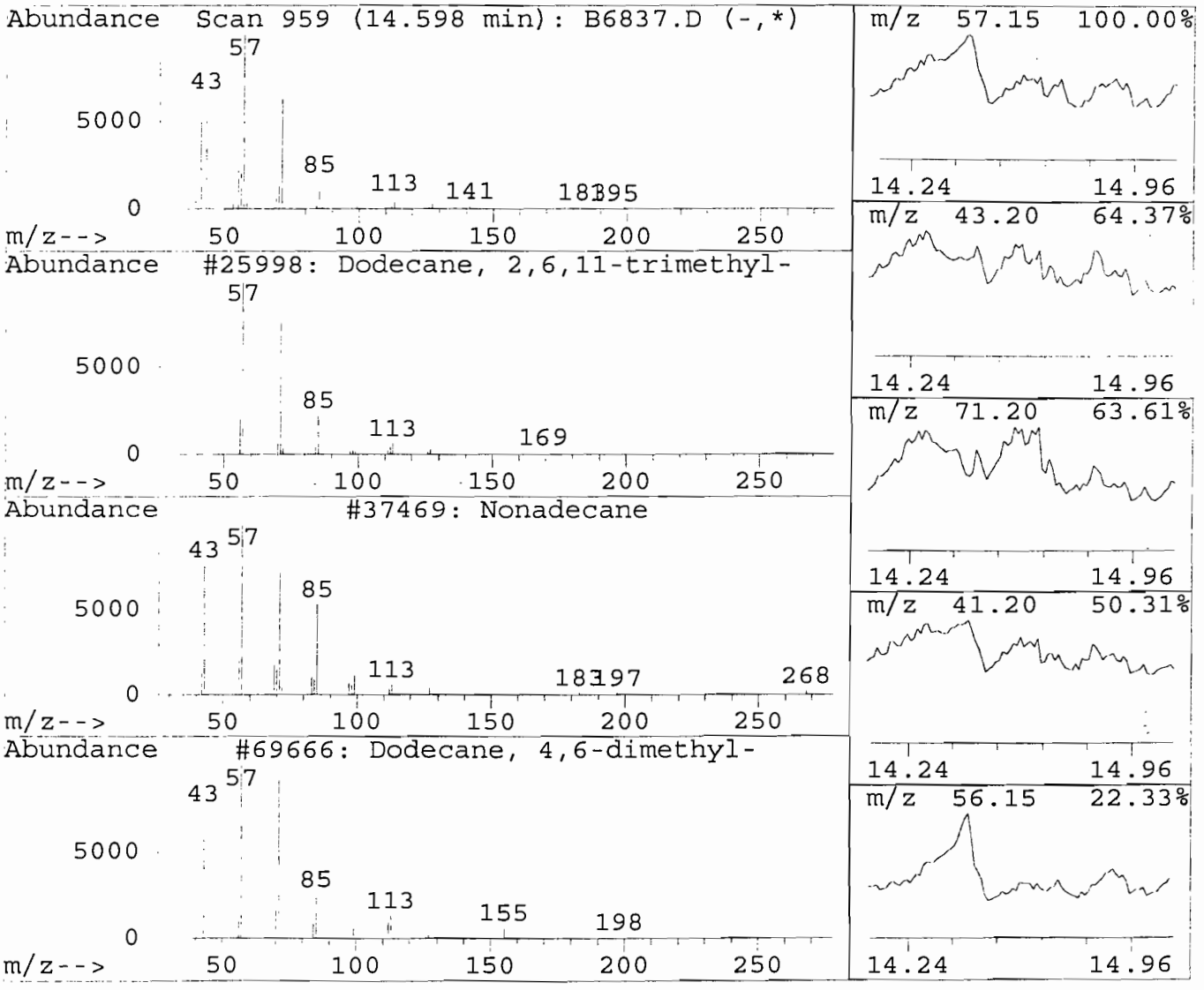
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.60	85.40 ng	18158919	Naphthalene-d8	13.12

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 2,6,11-trimethyl-	25998	031295-56-4	78
2	Nonadecane	37469	000629-92-5	72
3	Dodecane, 4,6-dimethyl-	69666	061141-72-8	64
4	Undecane, 3,6-dimethyl-	19000	017301-28-9	64
5	Dodecane, 2,6,10-trimethyl-	25995	003891-98-3	56



Library Search Compound Report

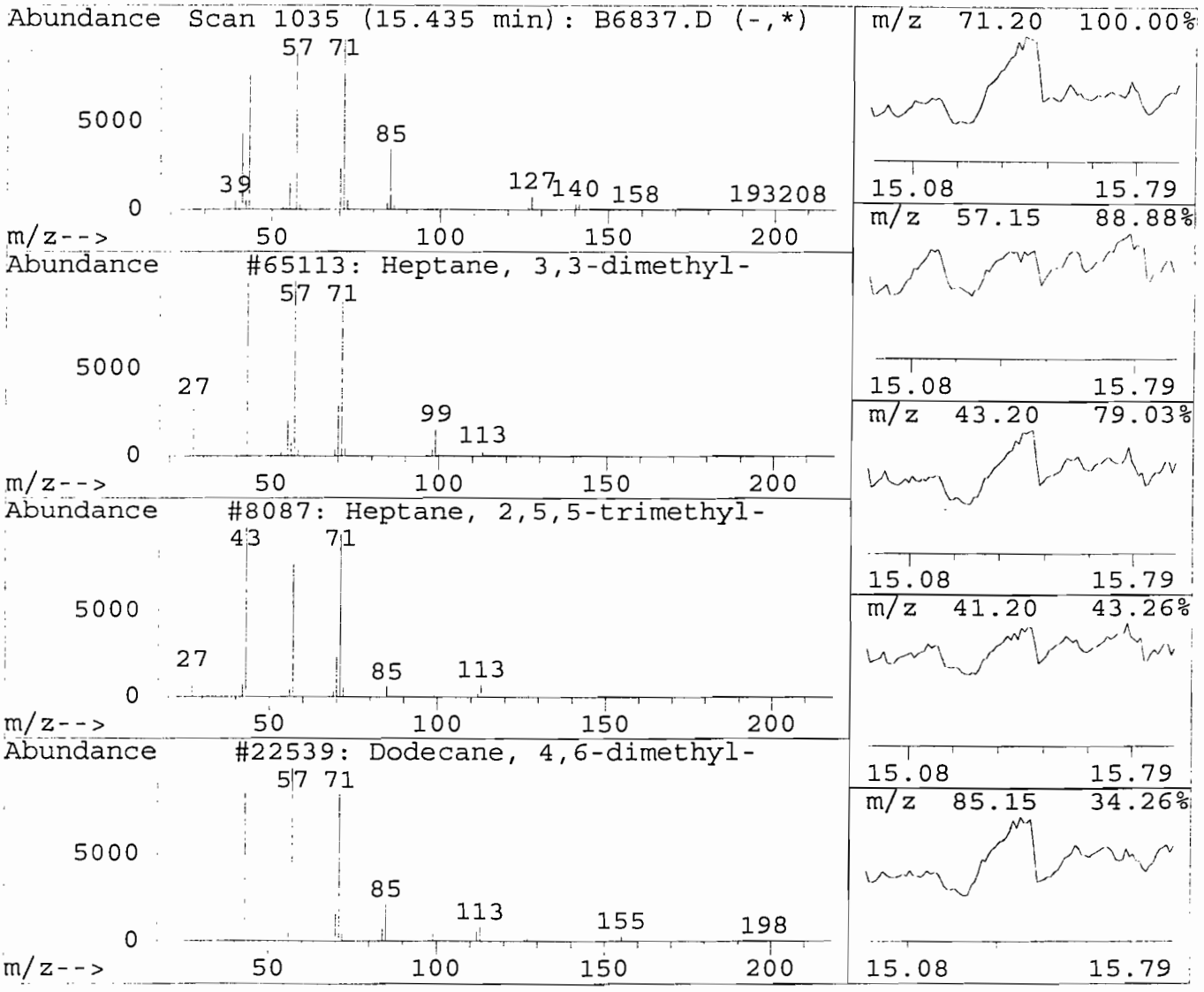
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration .
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.44	192.78 ng	58904561	Acenaphthene-d10	17.56

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3,3-dimethyl-	65113	004032-86-4	64
2	Heptane, 2,5,5-trimethyl-	8087	001189-99-7	64
3	Dodecane, 4,6-dimethyl-	22539	061141-72-8	64
4	Decane, 2,3,4-trimethyl-	19050	062238-15-7	64
5	Octane, 2,6,6-trimethyl-	11600	054166-32-4	64



000088

Library Search Compound Report

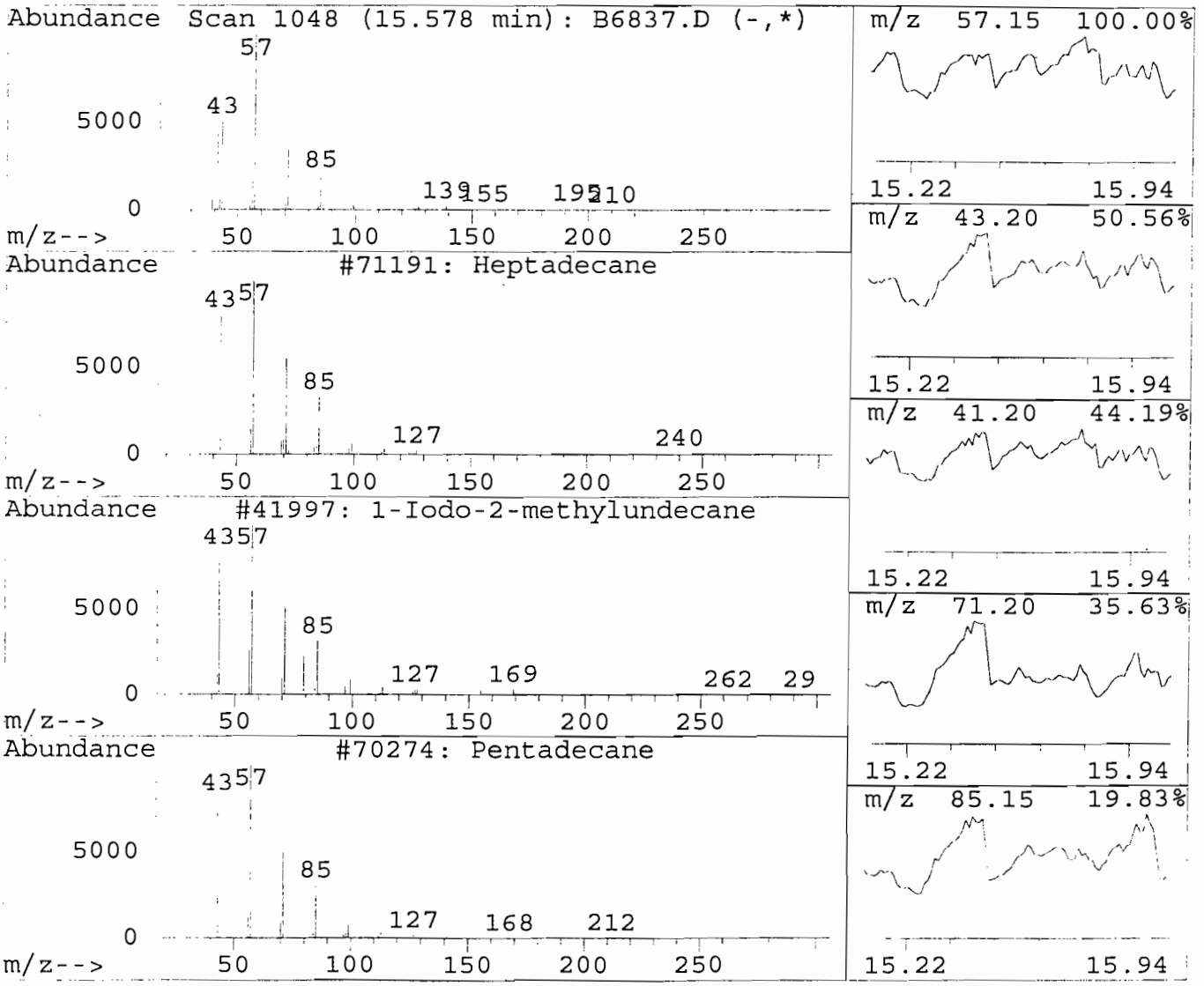
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.58	118.95 ng	36344977	Acenaphthene-d10	17.56

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptadecane	71191	000629-78-7	59
2	1-Iodo-2-methylundecane	41997	073105-67-6	59
3	Pentadecane	70274	000629-62-9	59
4	Dotriacontane	74491	000544-85-4	59
5	Triacontane	55461	000638-68-6	59



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Library Search Compound Report

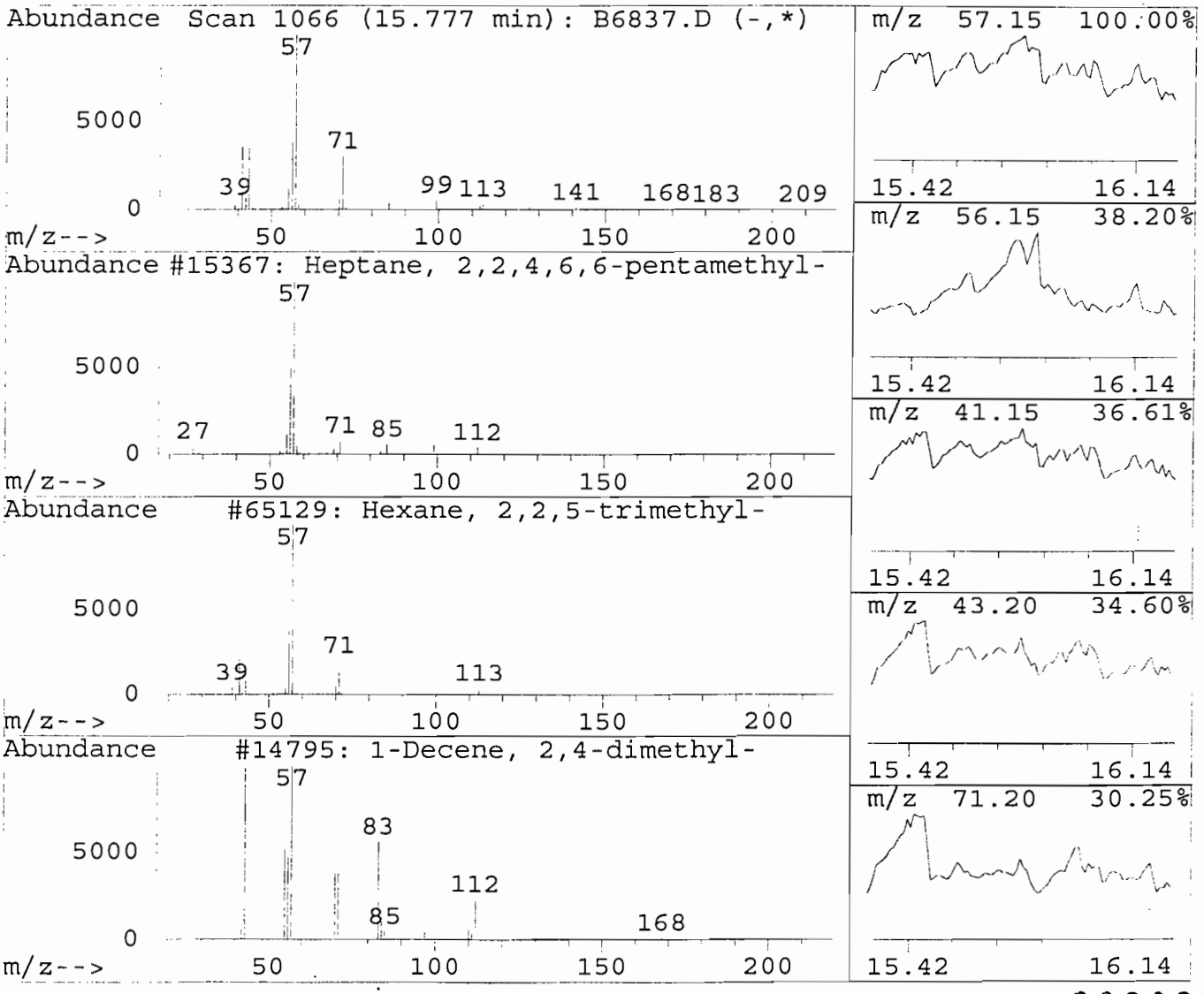
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.78	207.17 ng	63301738	Acenaphthene-d10	17.56

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2,2,4,6,6-pentamethyl-	15367	013475-82-6	53
2	Hexane, 2,2,5-trimethyl-	65129	003522-94-9	50
3	1-Decene, 2,4-dimethyl-	14795	055170-80-4	50
4	Decane, 2,5,9-trimethyl-	19017	062108-22-9	47
5	Undecane, 2,5-dimethyl-	19056	017301-22-3	43



Library Search Compound Report

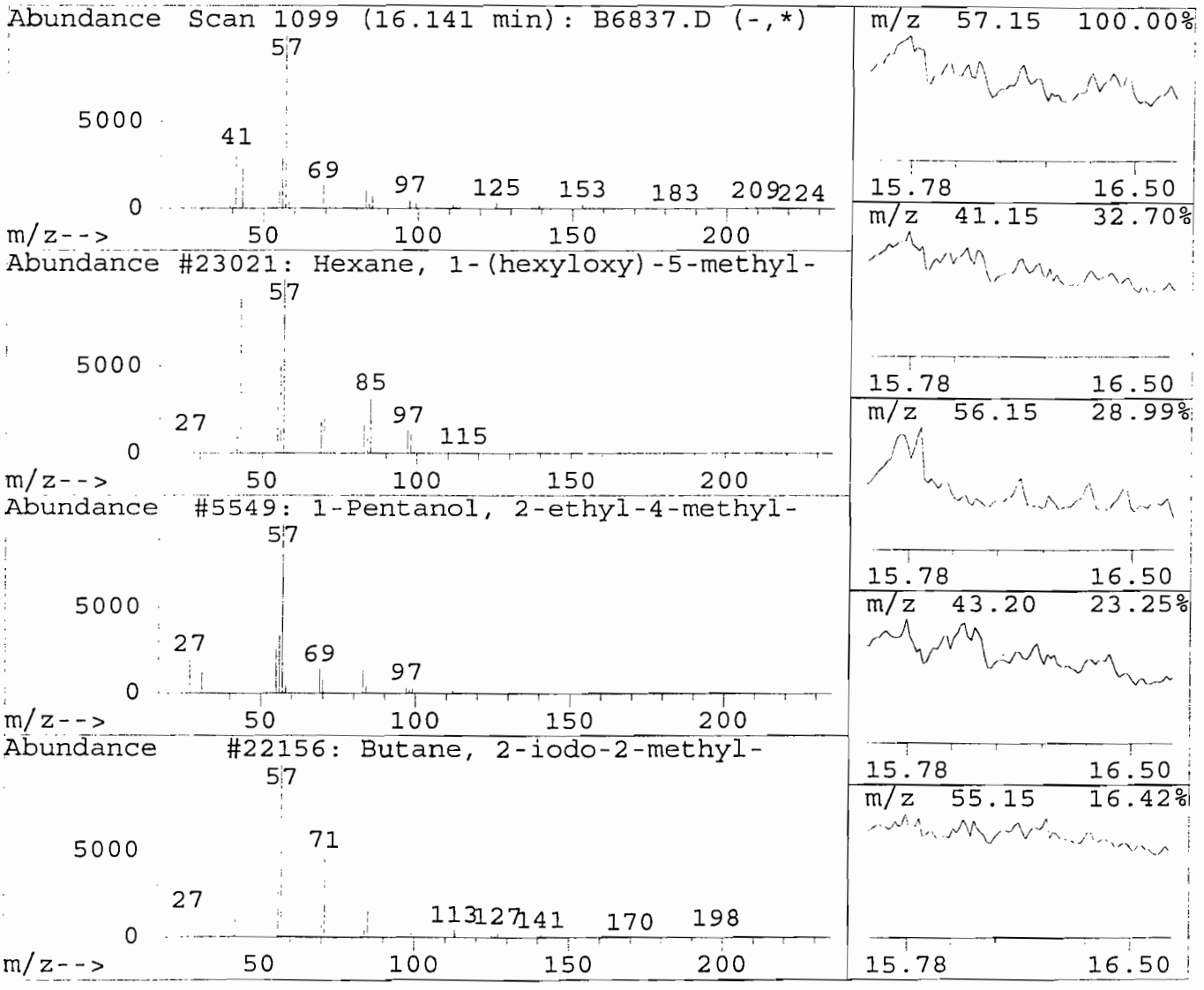
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.14	90.67 ng	27705560	Acenaphthene-d10	17.56

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexane, 1-(hexyloxy)-5-methyl-	23021	074421-19-5	53
2	1-Pentanol, 2-ethyl-4-methyl-	5549	000106-67-2	40
3	Butane, 2-iodo-2-methyl-	22156	000594-38-7	36
4	Decanedioic acid, didecyl ester	58384	002432-89-5	32
5	Hexadecane, 1-chloro-	35935	004860-03-1	32



Library Search Compound Report

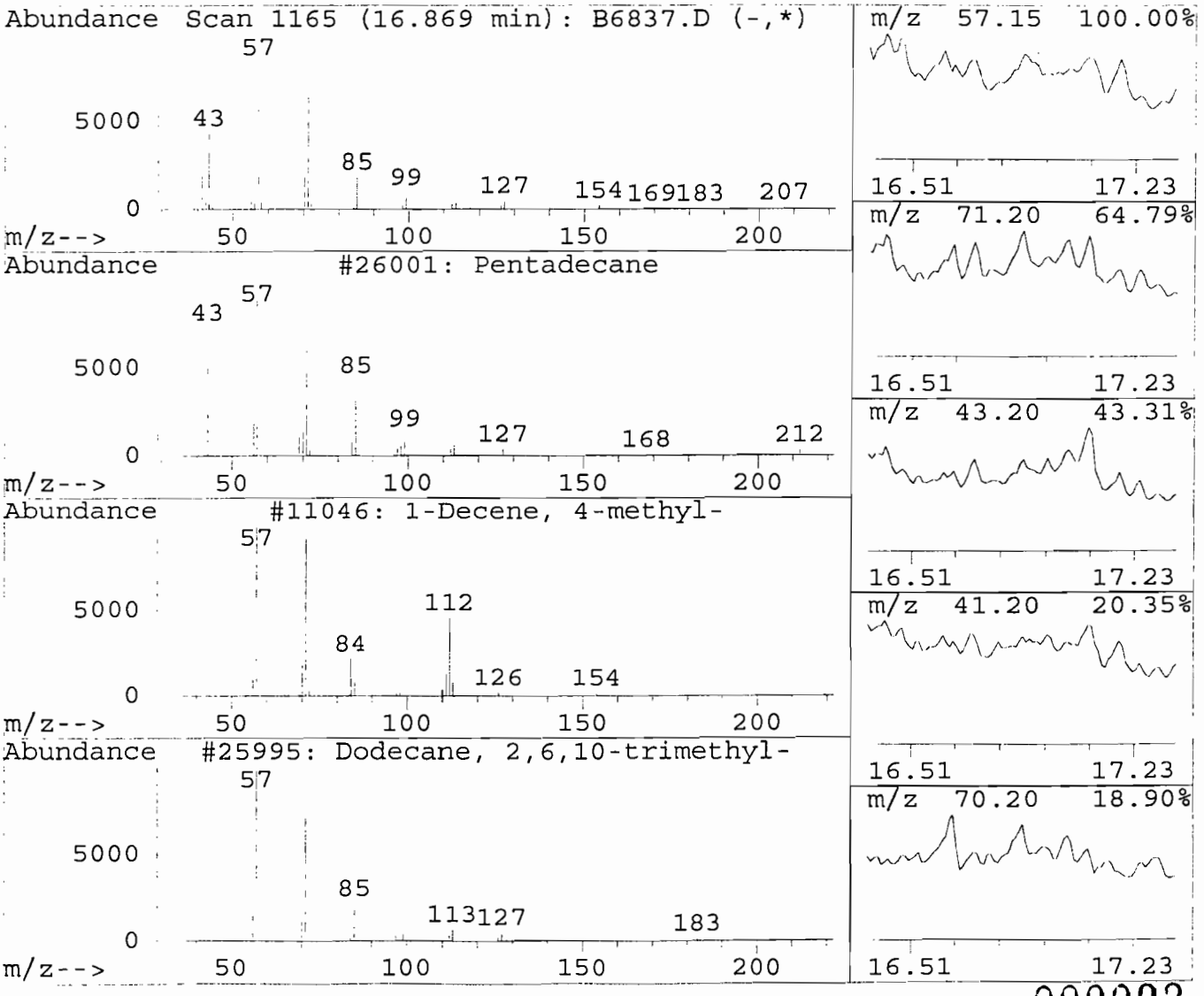
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.87	75.57 ng	23089669	Acenaphthene-d10	17.56

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentadecane	26001	000629-62-9	64
2	1-Decene, 4-methyl-	11046	013151-29-6	59
3	Dodecane, 2,6,10-trimethyl-	25995	003891-98-3	56
4	Pentane, 2,2,3,3-tetramethyl-	65115	007154-79-2	53
5	Tetradecane	69661	000629-59-4	50



000092

Library Search Compound Report

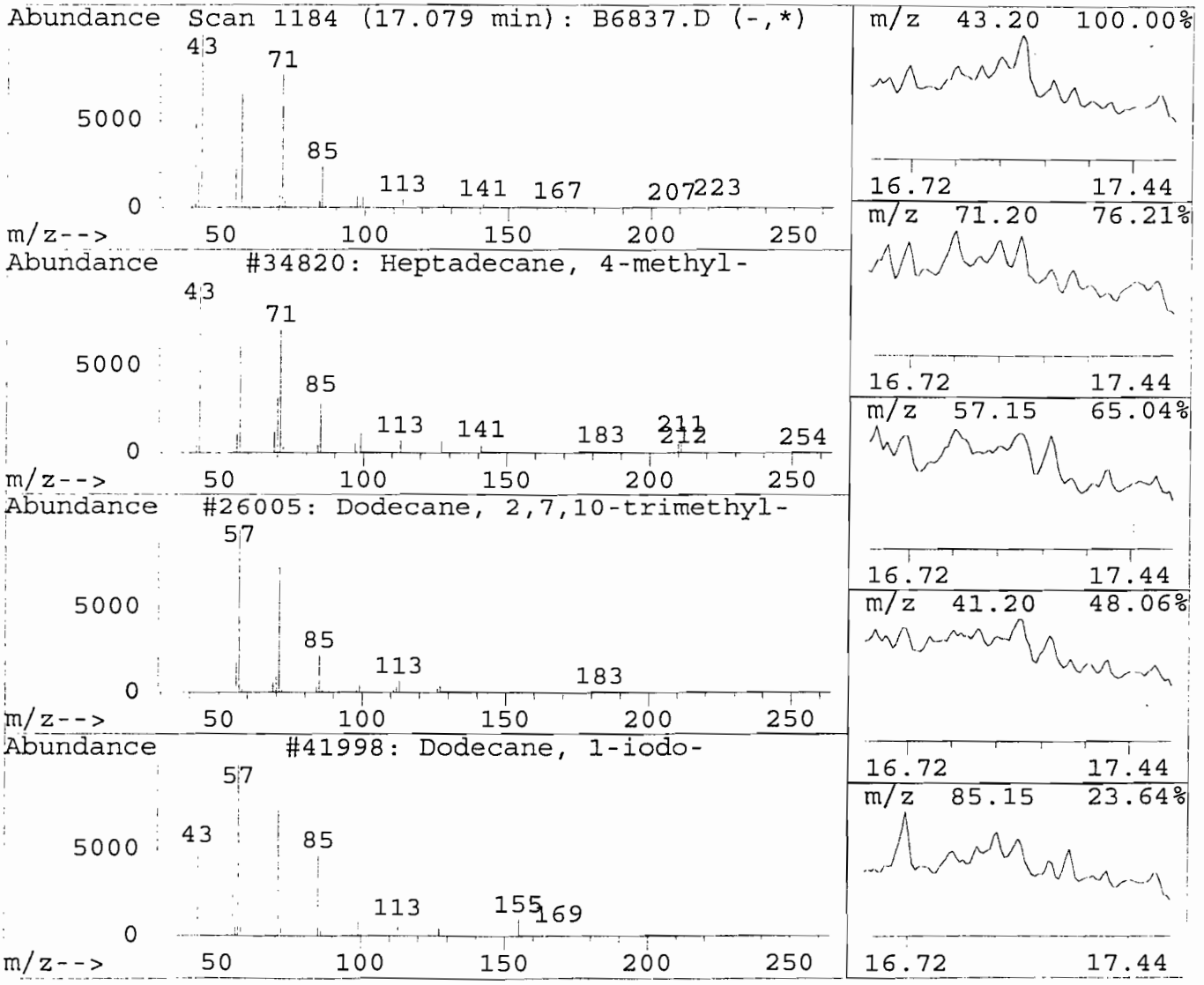
Data File : D:\HPCHEM\1\DATA\B11109\B6837.D
Acq Time : 9 Nov 99 1:20 pm
Sample : 13826ASP-87994-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
17.08	71.40 ng	21817541	Acenaphthene-d10	17.56

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptadecane, 4-methyl-	34820	026429-11-8	78
2	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	72
3	Dodecane, 1-iodo-	41998	004292-19-7	64
4	1-Hydroxy-3-methyl-2-butanone	1728	036960-22-2	59
5	Pentadecane	70274	000629-62-9	59



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS15RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87994RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6843.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 8 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	36	U
108-60-1	bis(2-chloroisopropyl)ether	36	U
95-50-1	1,2-Dichlorobenzene	36	U
541-73-1	1,3-Dichlorobenzene	36	U
106-46-7	1,4-Dichlorobenzene	36	U
621-64-7	n-Nitroso-di-n-propylamine	36	U
67-72-1	Hexachloroethane	36	U
98-95-3	Nitrobenzene	36	U
78-59-1	Isophorone	36	U
111-91-1	bis(2-Chloroethoxy)methane	36	U
120-82-1	1,2,4-Trichlorobenzene	36	U
91-20-3	Naphthalene	36	U
106-47-8	4-Chloroaniline	72	U
87-68-3	Hexachlorobutadiene	36	U
91-57-6	2-Methylnaphthalene	61	U
77-47-4	Hexachlorocyclopentadiene	36	U
91-58-7	2-Chloronaphthalene	36	U
88-74-4	2-Nitroaniline	130	U
131-11-3	Dimethylphthalate	36	U
208-96-8	Acenaphthylene	36	U
606-20-2	2,6-Dinitrotoluene	36	U
99-09-2	3-Nitroaniline	140	U
83-32-9	Acenaphthene	36	U
132-64-9	Dibenzofuran	57	U
121-14-2	2,4-Dinitrotoluene	36	U
84-66-2	Diethylphthalate	36	U
7005-72-3	4-Chlorophenyl-phenylether	36	U
86-73-7	Fluorene	36	U
100-01-6	4-Nitroaniline	190	U
86-30-6	N-Nitrosodiphenylamine	36	U
122-66-7	1,2-Diphenylhydrazine	36	U
101-55-3	4-Bromophenyl-phenylether	36	U
118-74-1	Hexachlorobenzene	36	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS15RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87994RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6843.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 8 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	110	
120-12-7	Anthracene	36	U
86-74-8	Carbazole	53	U
84-74-2	Di-n-butylphthalate	36	U
206-44-0	Fluoranthene	63	
129-00-0	Pyrene	120	
85-68-7	Butylbenzylphthalate	36	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	36	U
218-01-9	Chrysene	36	U
117-81-7	bis(2-Ethylhexyl)phthalate	1700	
117-84-0	Di-n-octylphthalate	84	
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	36	U
193-39-5	Indeno(1,2,3-cd)pyrene	36	U
53-70-3	Dibenz[a,h]anthracene	53	U
191-24-2	Benzo[g,h,i]perylene	36	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-010-SS15RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87994RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6843.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 629-78-7	Heptadecane	10.23	1900	J
2. 15869-86-0	Octane, 4-ethyl-	11.03	1500	J
3. 52896-90-9	Heptane, 3-ethyl-5-methyl-	15.39	4000	J
4. 7098-22-8	Tetratetracontane	15.47	3400	J
5. 62016-37-9	Octane, 2,4,6-trimethyl-	15.61	4800	J
6. 3522-94-9	Hexane, 2,2,5-trimethyl-	15.71	2800	J
7. 62108-26-3	Decane, 2,6,8-trimethyl-	15.76	3900	J
8. 62016-37-9	Octane, 2,4,6-trimethyl-	16.01	2000	J
9. 17301-31-4	Undecane, 3,9-dimethyl-	16.23	1700	J
10. 62338-09-4	Decane, 2,2,3-trimethyl-	16.36	2200	J
11. 62238-01-1	Decane, 2,2,8-trimethyl-	16.47	2000	J
12. 17312-82-2	Undecane, 4,6-dimethyl-	16.61	2200	J
13. 31081-18-2	Nonane, 3-methyl-5-propyl-	16.86	2100	J
14. 6624-79-9	1-Dotriacontanol	17.02	1600	J
15. 17302-37-3	Decane, 2,2-dimethyl-	17.18	1900	J
16.				
17.				
18.				
19.				
20.				
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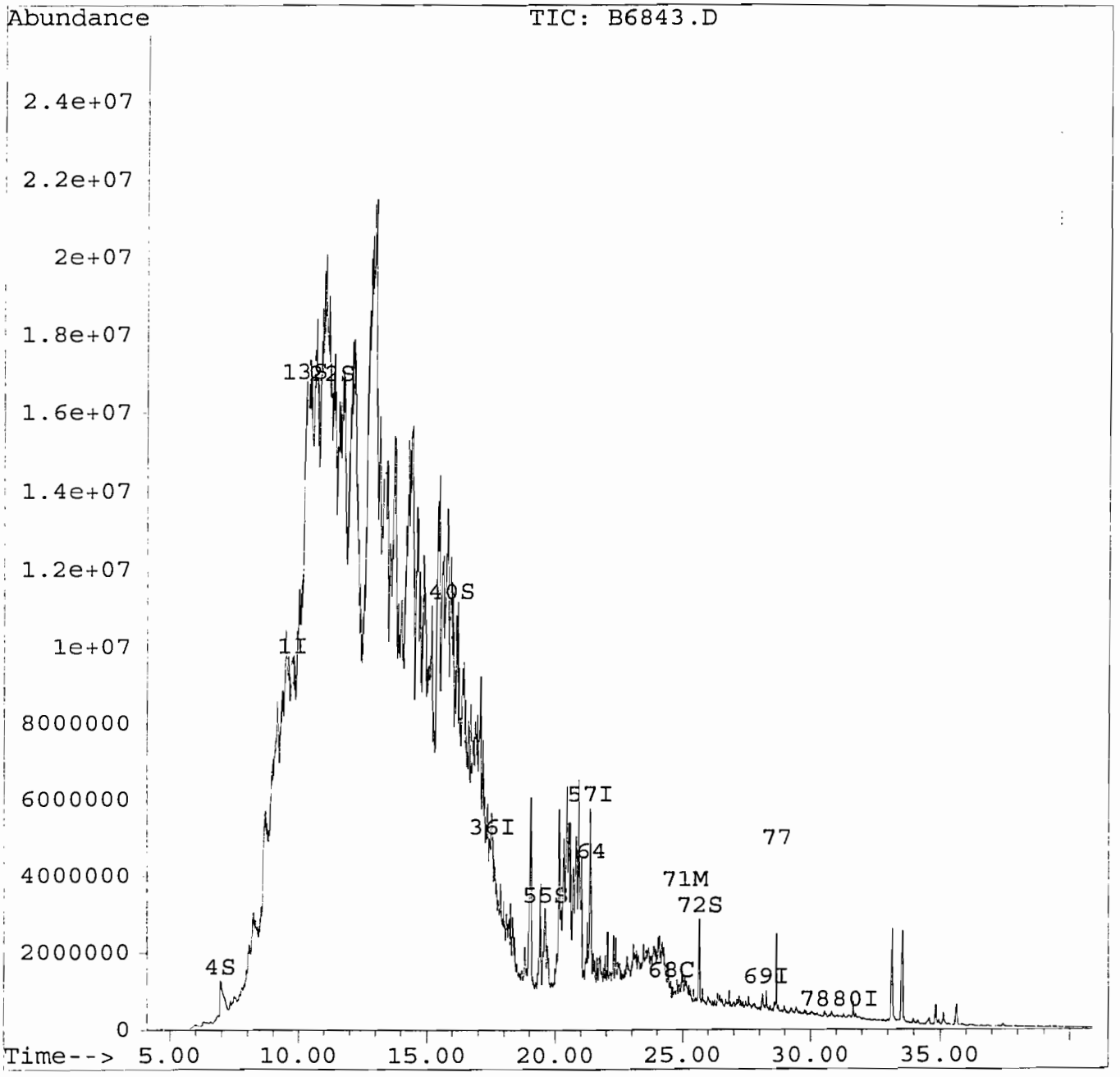
28.				
29.				
30.				

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :
Quant Time: Nov 10 12:34 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :
Quant Time: Nov 10 12:34 1999

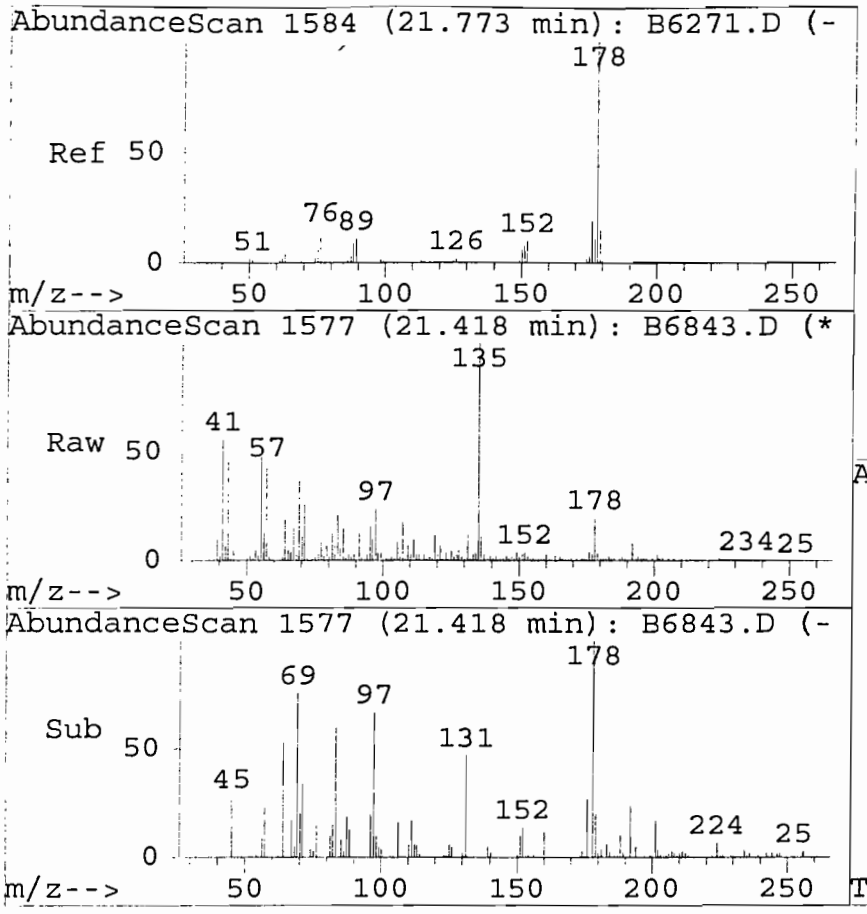
Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.73	152	121126	40.00	ng		0.00
21) Naphthalene-d8	13.17	136	576264	40.00	ng		0.28
36) Acenaphthene-d10	17.55	164	473438	40.00	ng		0.07
57) Phenanthrene-d10	21.37	188	771060	40.00	ng		0.05
69) Chrysene-d12	28.29	240	366846	40.00	ng		-0.05
80) Perylene-d12	31.76	264	109721	40.00	ng		-0.07
System Monitoring Compounds							**%Recovery**
4) 2-Fluorophenol	6.95	112	2005401	417.39	ng		
6) 2-Chlorophenol-d4	9.33	132	1866836	413.96	ng		#
7) Phenol-d5	9.17	99	2500524	440.26	ng		#
13) 1,2-Dichlorobenzene-d4	10.18	152	81888	27.84	ng		
22) Nitrobenzene-d5	11.23	82	473819	60.02	ng		
40) 2-Fluorobiphenyl	15.92	172	1615601	92.86	ng		
55) 2,4,6-Tribromophenol	19.63	330	774617	199.79	ng		
72) Terphenyl-d14	25.66	244	2187436	206.34	ng		
Target Compounds							**Qvalue**
64) Phenanthrene	21.42	178	114948	5.96	ng		90
68) Fluoranthene	24.55	202	75608	3.50	ng		97
71) Pyrene	25.09	202	78927	6.84	ng		98
77) bis(2-Ethylhexyl)phthalate	28.68	149	1022277	93.01	ng		96
78) Di-n-octylphthalate	30.20	149	89997	4.63	ng	m	74

000098

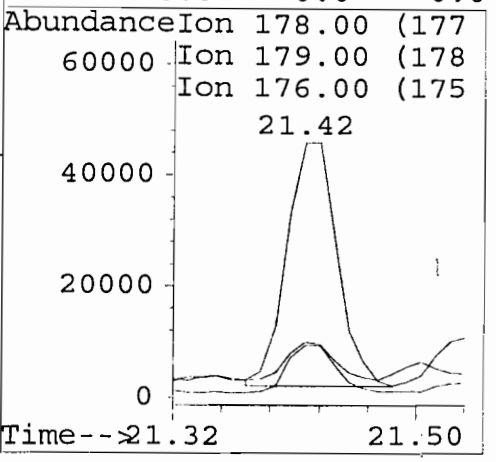
(#) = qualifier out of range (m) = manual integration

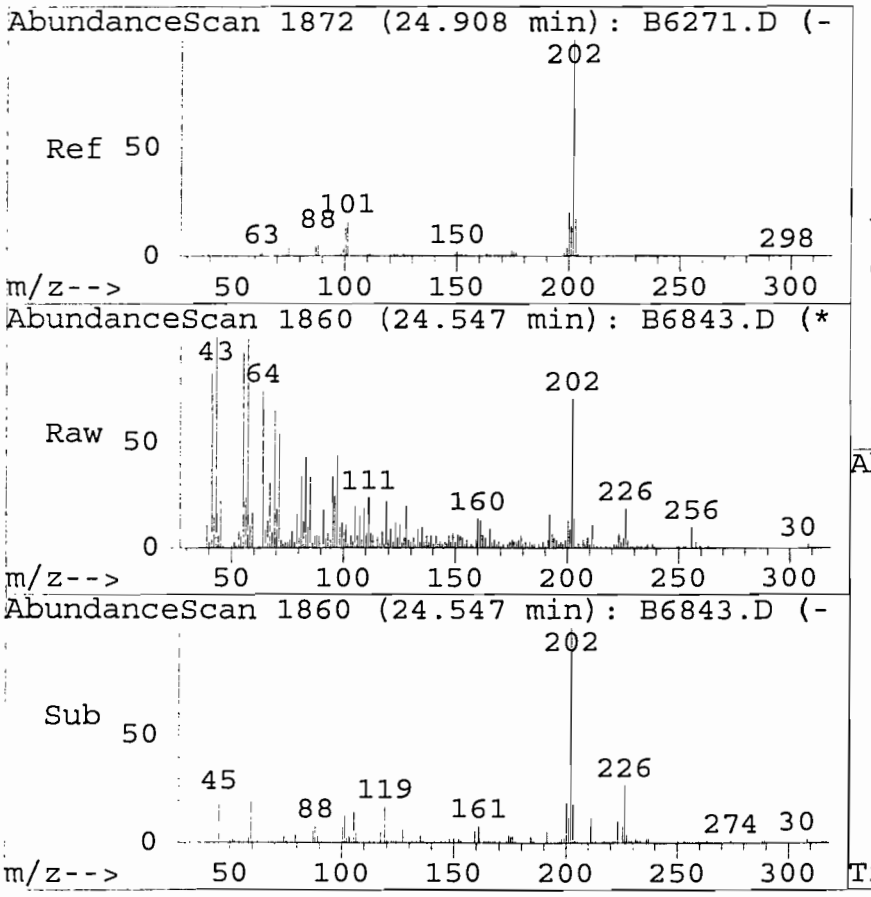


#64
Phenanthrene
Concen: 5.96 ng
RT: 21.42 min Scan# 1577
Delta R.T. 0.03 min
Lab File: B6843.D
Acq: 9 Nov 99 6:24 pm

Tgt Ion:178 Resp: 114948

Ion	Ratio	Lower	Upper
178	100		
179	21.9	7.4	22.3
176	20.5	9.4	28.2
0	0.0	0.0	0.0

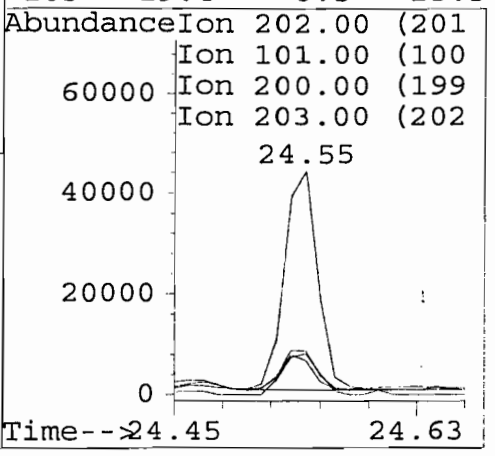


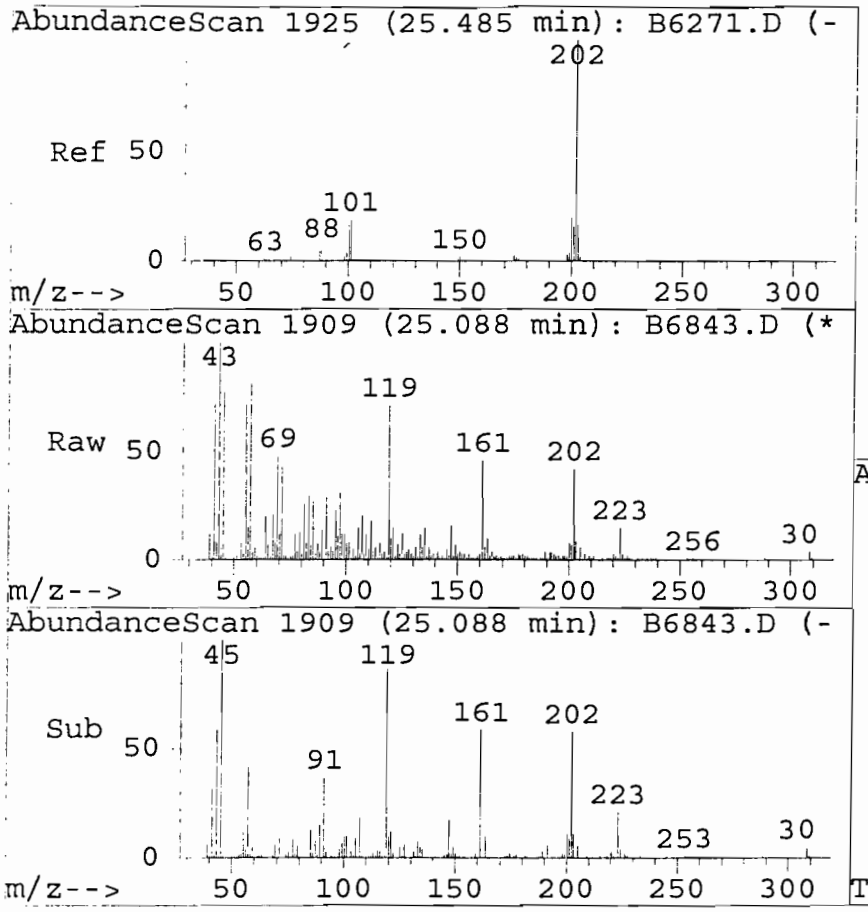


#68
Fluoranthene
Concen: 3.50 ng
RT: 24.55 min Scan# 1860
Delta R.T. 0.01 min
Lab File: B6843.D
Acq: 9 Nov 99 6:24 pm

Tgt Ion:202 Resp: 75608

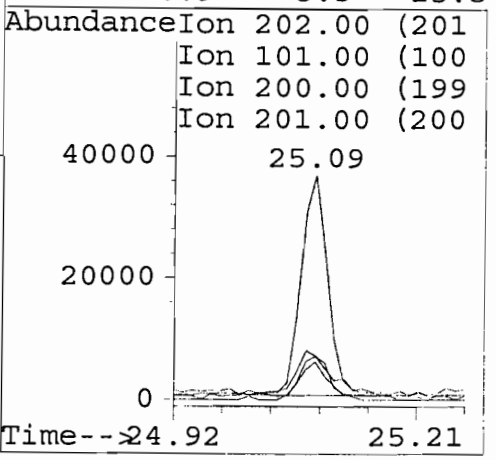
Ion	Ratio	Lower	Upper
202	100		
101	15.2	7.4	22.2
200	18.3	9.9	29.7
203	19.4	8.5	25.5

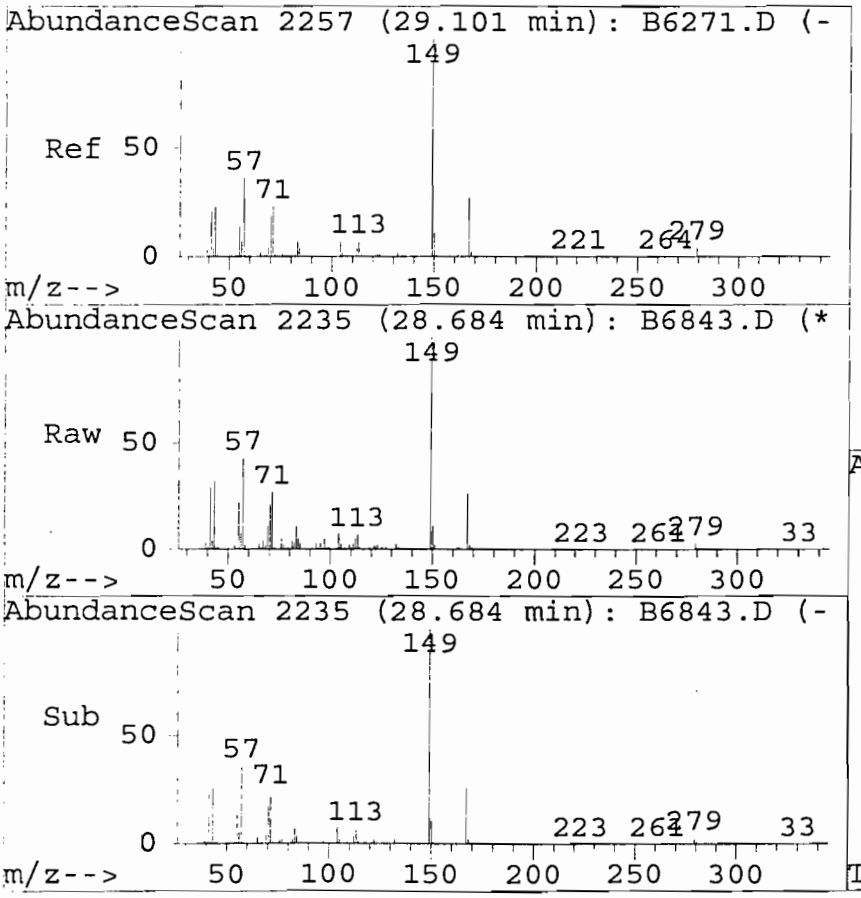




#71
Pyrene
Concen: 6.84 ng
RT: 25.09 min Scan# 1909
Delta R.T. -0.01 min
Lab File: B6843.D
Acq: 9 Nov 99 6:24 pm

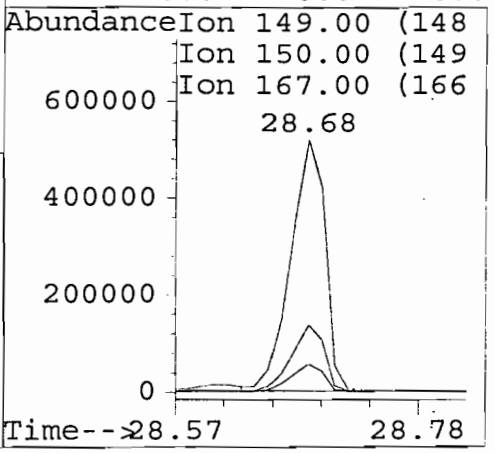
Tgt Ion:202	Resp:	78927
Ion	Ratio	Lower	Upper
202	100		
101	19.5	9.2	27.7
200	19.3	10.5	31.6
201	16.9	8.5	25.5



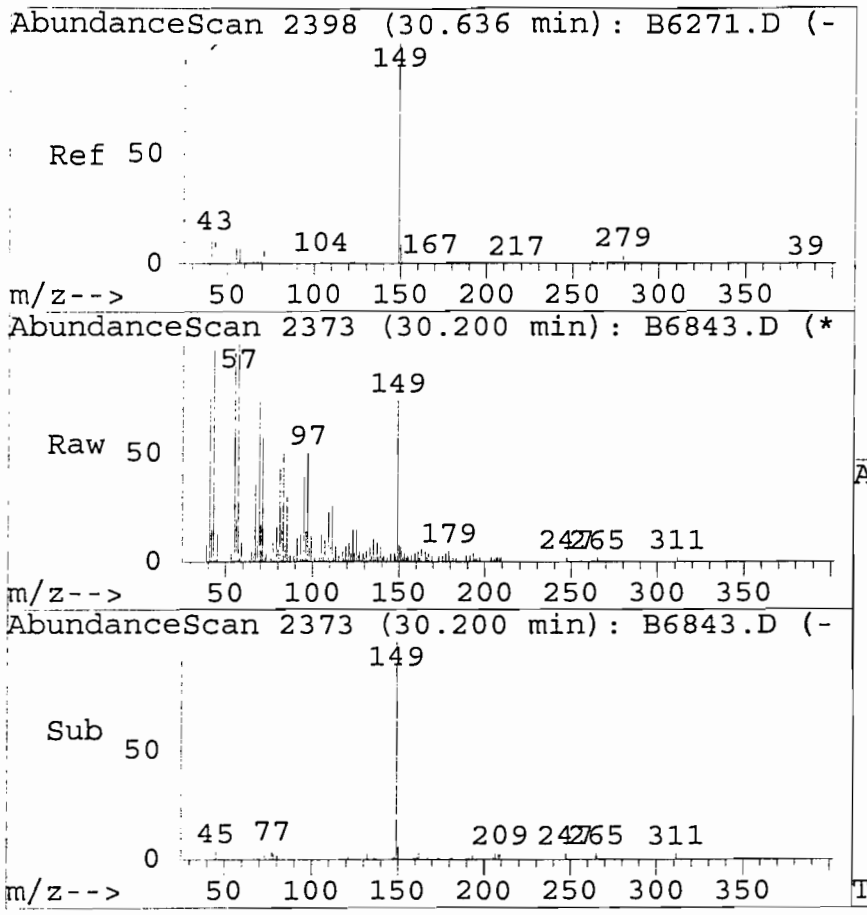


#77
bis(2-Ethylhexyl)phthalate
Concen: 93.01 ng
RT: 28.68 min Scan# 2235
Delta R.T. -0.05 min
Lab File: B6843.D
Acq: 9 Nov 99 6:24 pm

Tgt Ion:149	Resp:	1022277
Ion	Ratio	Lower	Upper
149	100		
150	11.2	5.6	16.8
167	26.4	14.7	44.1
0	0.0	0.0	0.0



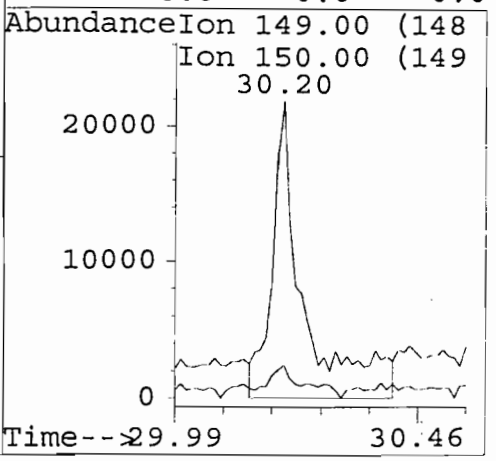
000100



#78
Di-n-octylphthalate
Concen: 4.63 ng m
RT: 30.20 min Scan# 2373
Delta R.T. -0.07 min
Lab File: B6843.D
Acq: 9 Nov 99 6:24 pm

Tgt Ion:149 Resp: 89997

Ion	Ratio	Lower	Upper
149	100		
150	11.1	4.7	14.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



000101

Library Search Compound Report

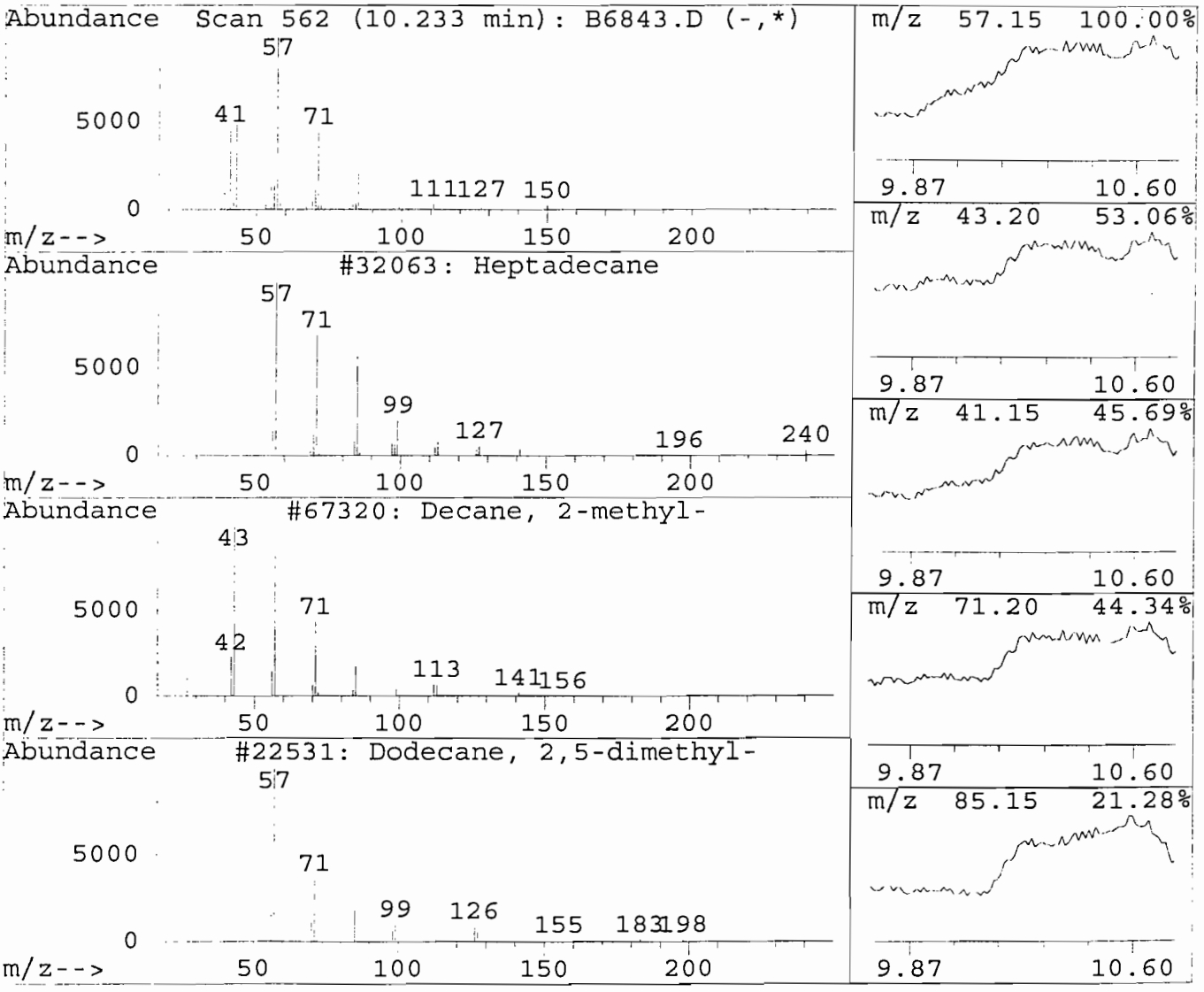
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.23	104.90 ng	28516939	1,4-Dichlorobenzene-d4	9.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptadecane	32063	000629-78-7	78
2	Decane, 2-methyl-	67320	006975-98-0	78
3	Dodecane, 2,5-dimethyl-	22531	056292-65-0	78
4	Hexadecane	70789	000544-76-3	72
5	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	64



000102

Library Search Compound Report

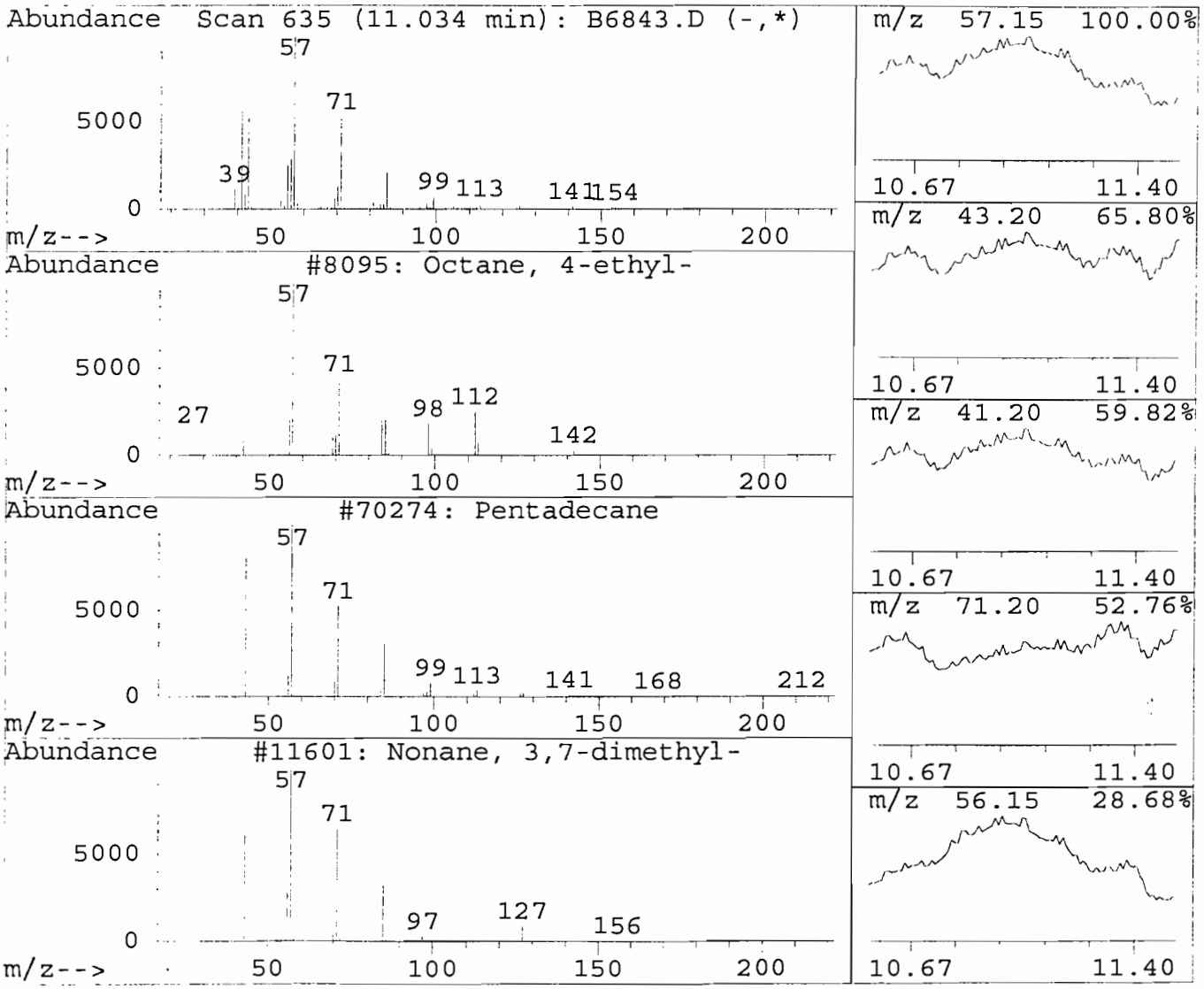
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
11.03	82.16 ng	22335893	1,4-Dichlorobenzene-d4	9.73

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 4-ethyl-	8095	015869-86-0	78
2	Pentadecane	70274	000629-62-9	64
3	Nonane, 3,7-dimethyl-	11601	017302-32-8	64
4	Decane, 3-methyl-	67315	013151-34-3	59
5	Pentadecane	26001	000629-62-9	59



000103

Library Search Compound Report

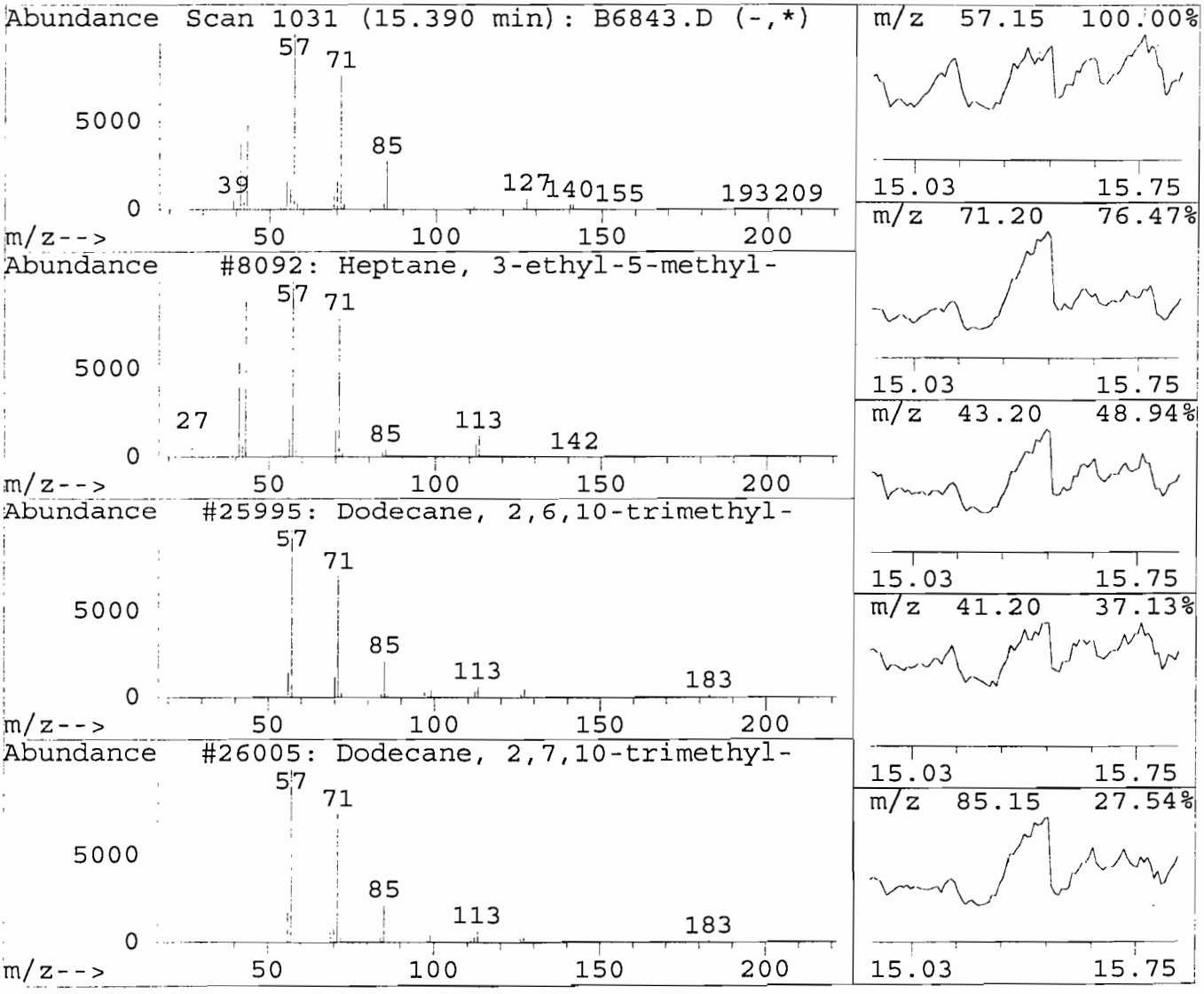
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.39	220.48 ng	40993585	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 3-ethyl-5-methyl-	8092	052896-90-9	80
2	Dodecane, 2,6,10-trimethyl-	25995	003891-98-3	78
3	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	78
4	Nonane, 5-butyl-	19037	017312-63-9	72
5	Butane, 2-iodo-2-methyl-	22156	000594-38-7	72



Library Search Compound Report

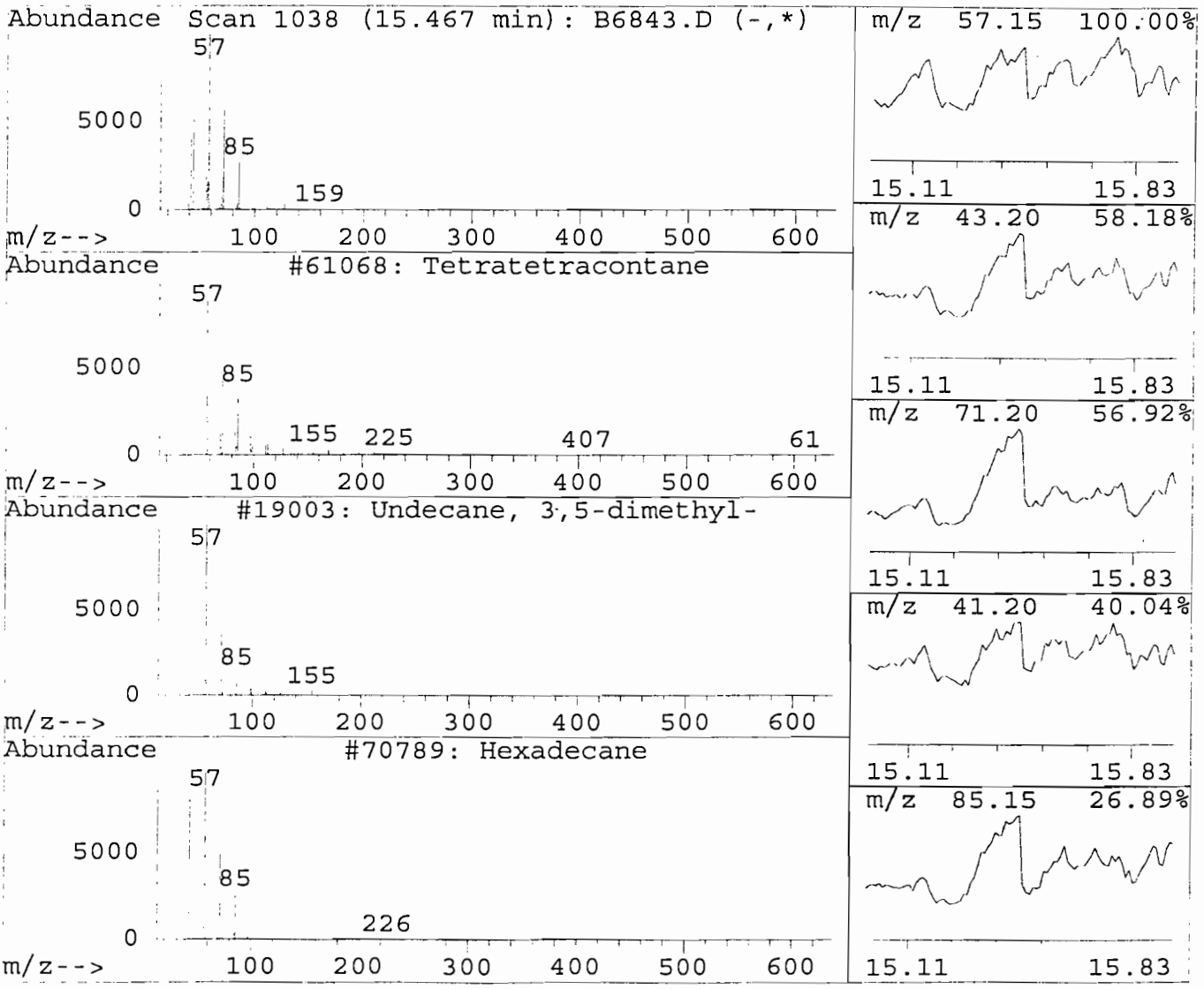
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.47	187.34 ng	34831637	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetratetracontane	61068	007098-22-8	78
2	Undecane, 3,5-dimethyl-	19003	017312-81-1	78
3	Hexadecane	70789	000544-76-3	72
4	Dodecane, 3-methyl-	19011	017312-57-1	64
5	Undecane	67318	001120-21-4	64



Library Search Compound Report

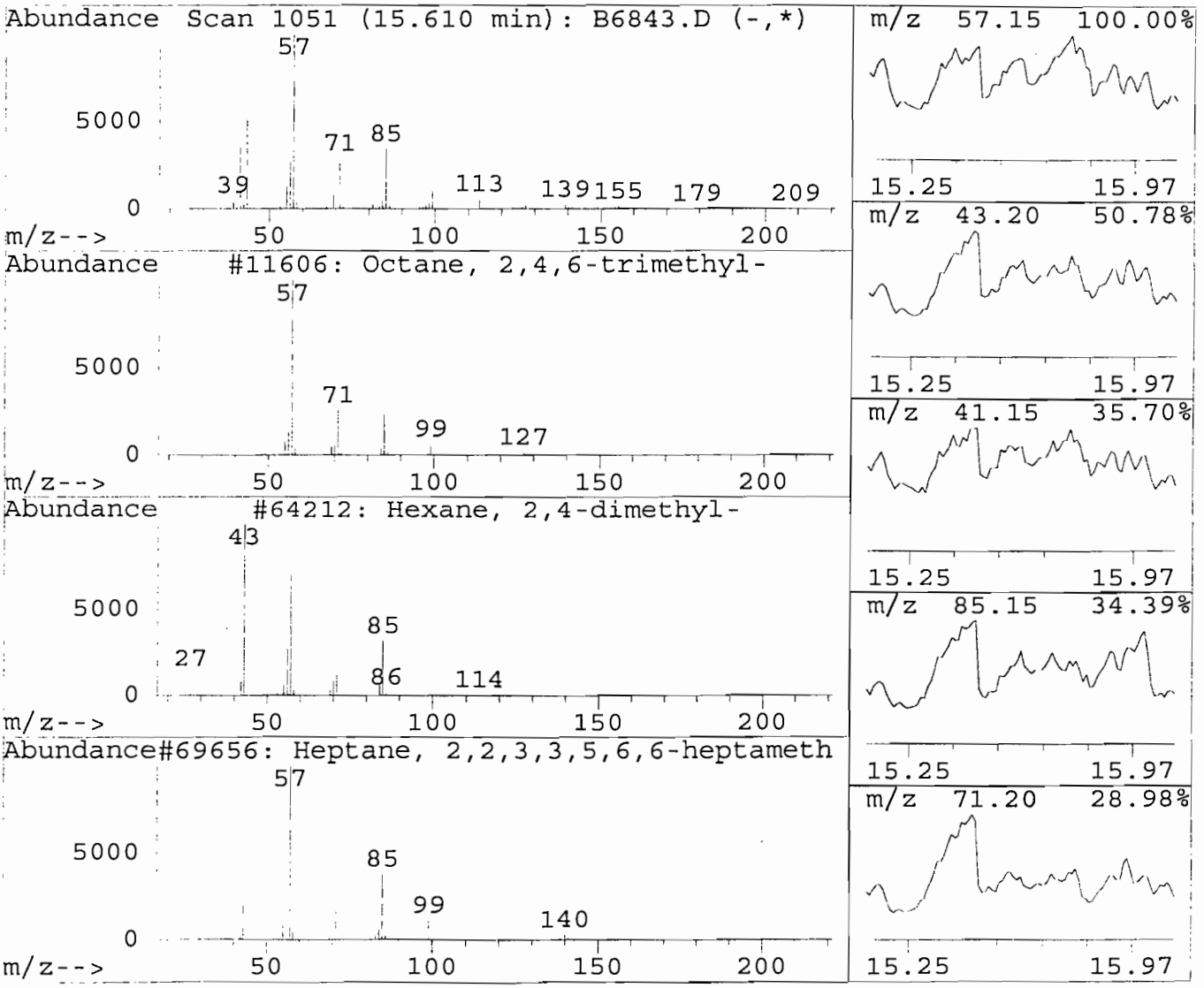
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.61	267.12 ng	49665831	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2,4,6-trimethyl-	11606	062016-37-9	64
2	Hexane, 2,4-dimethyl-	64212	000589-43-5	53
3	Heptane, 2,2,3,3,5,6,6-heptamethyl-	69656	007225-67-4	53
4	Octane, 2,7-dimethyl-	66209	001072-16-8	50
5	Heptadecane	71191	000629-78-7	50



000106

Library Search Compound Report

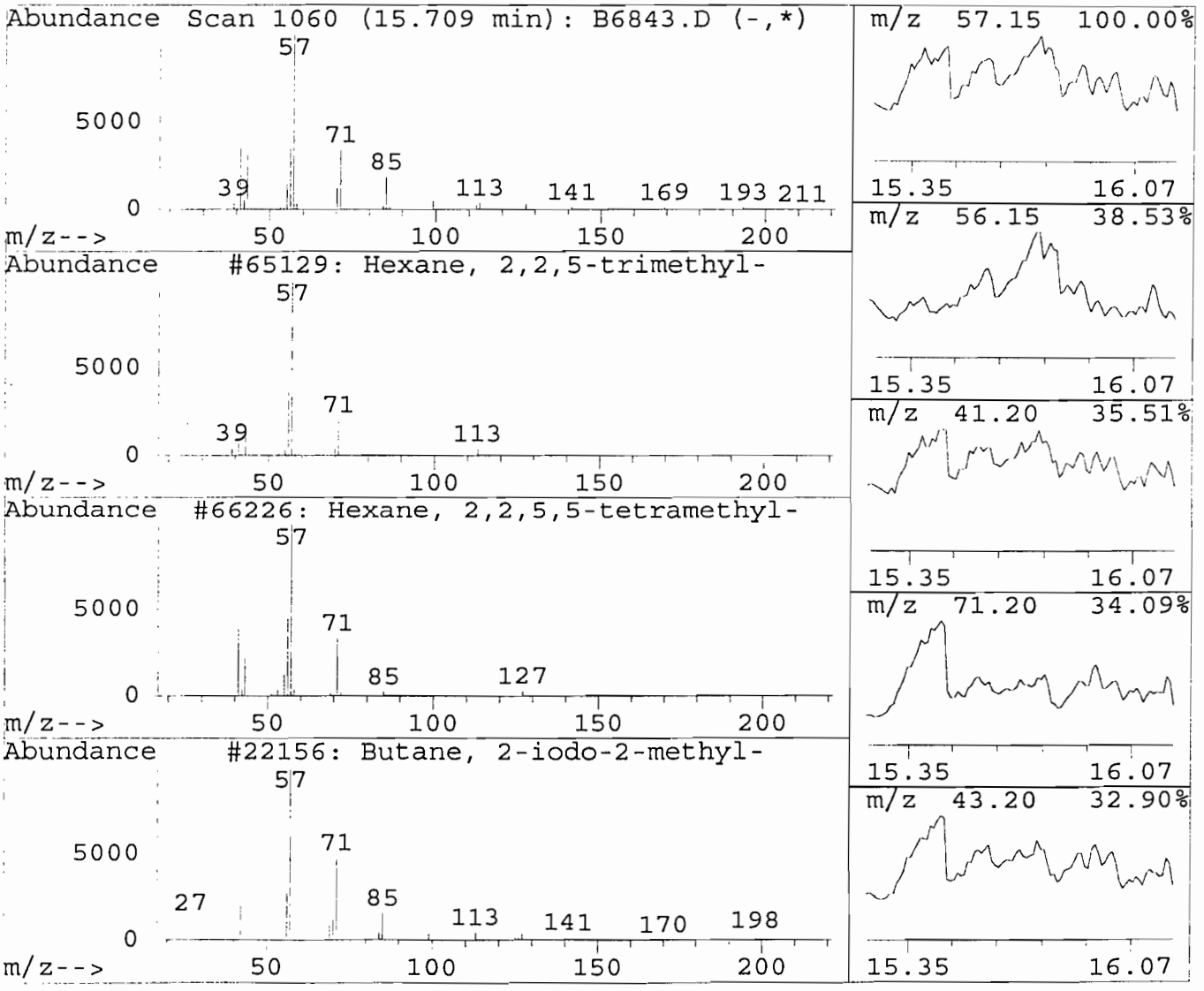
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.71	152.61 ng	28374122	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexane, 2,2,5-trimethyl-	65129	003522-94-9	53
2	Hexane, 2,2,5,5-tetramethyl-	66226	001071-81-4	53
3	Butane, 2-iodo-2-methyl-	22156	000594-38-7	50
4	Hexane, 2,2,5,5-tetramethyl-	8102	001071-81-4	50
5	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	47



Library Search Compound Report

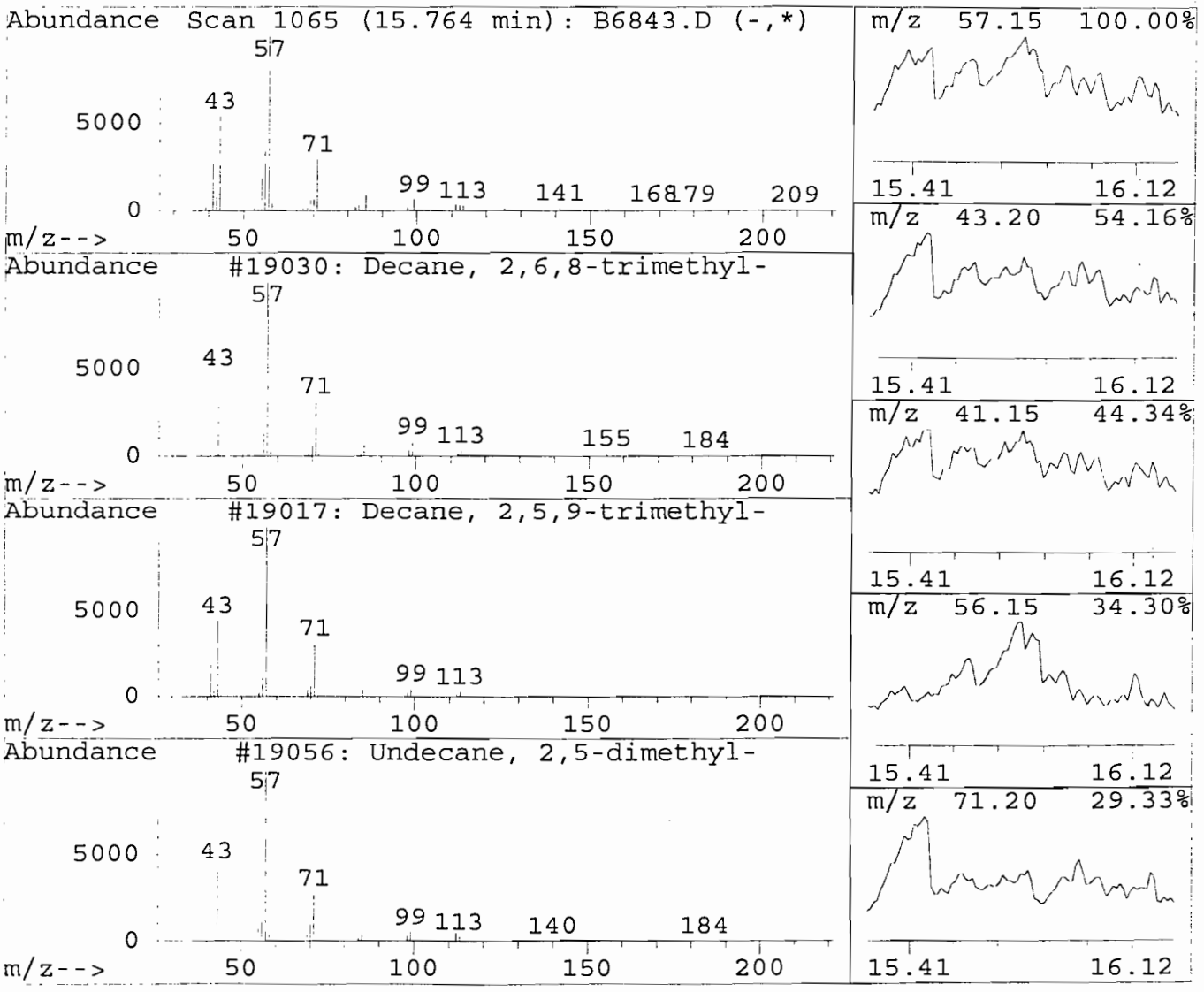
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.76	214.44 ng	39871246	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,6,8-trimethyl-	19030	062108-26-3	59
2	Decane, 2,5,9-trimethyl-	19017	062108-22-9	53
3	Undecane, 2,5-dimethyl-	19056	017301-22-3	53
4	Decane, 2,6,6-trimethyl-	19023	062108-24-1	53
5	Octane, 4-ethyl-	66222	015869-86-0	53



Library Search Compound Report

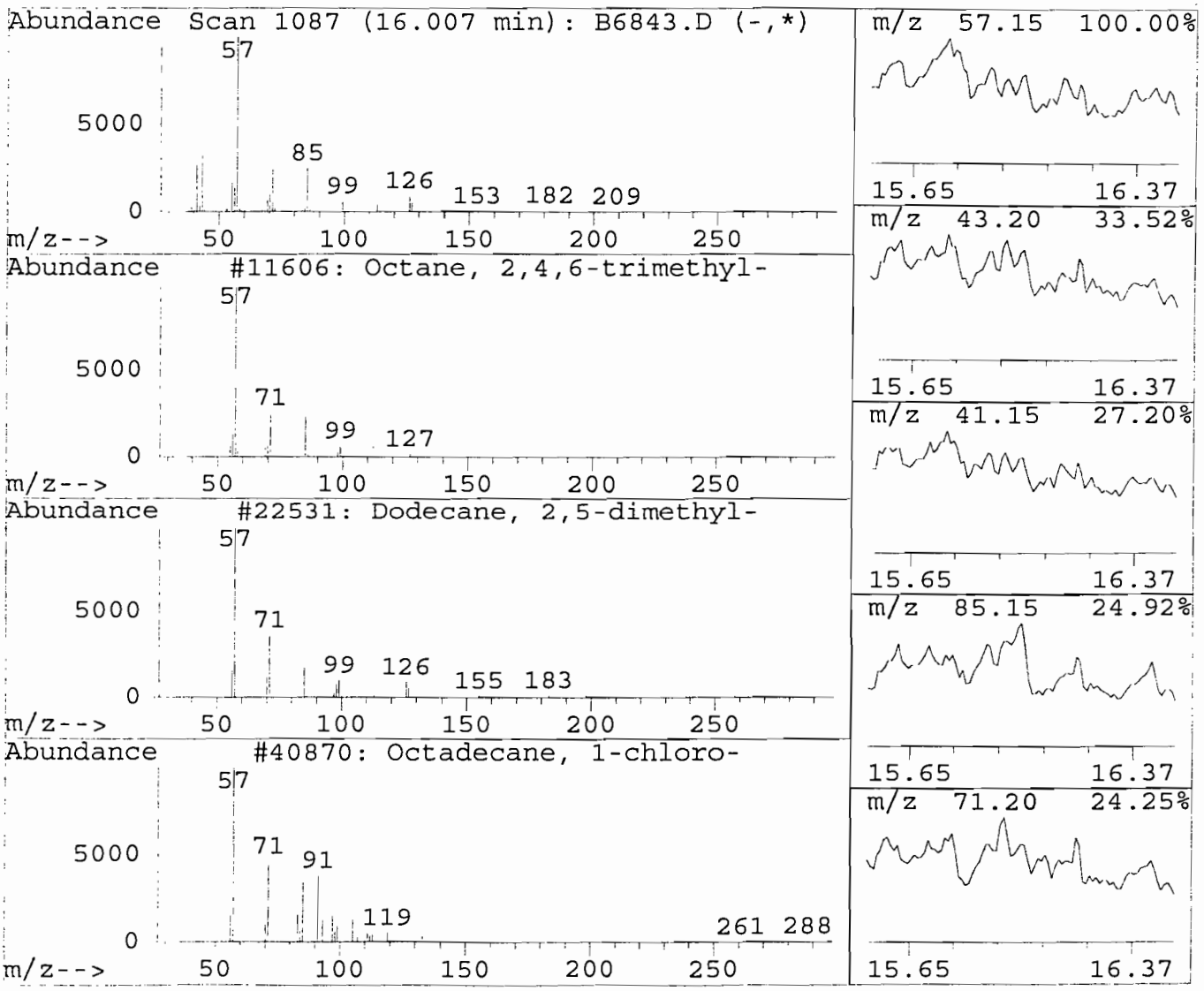
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.01	110.76 ng	20593880	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octane, 2,4,6-trimethyl-	11606	062016-37-9	72
2	Dodecane, 2,5-dimethyl-	22531	056292-65-0	59
3	Octadecane, 1-chloro-	40870	003386-33-2	59
4	Heptadecane, 8-methyl-	34816	013287-23-5	53
5	10-Methylnonadecane	39858	000000-00-0	53



000109

Library Search Compound Report

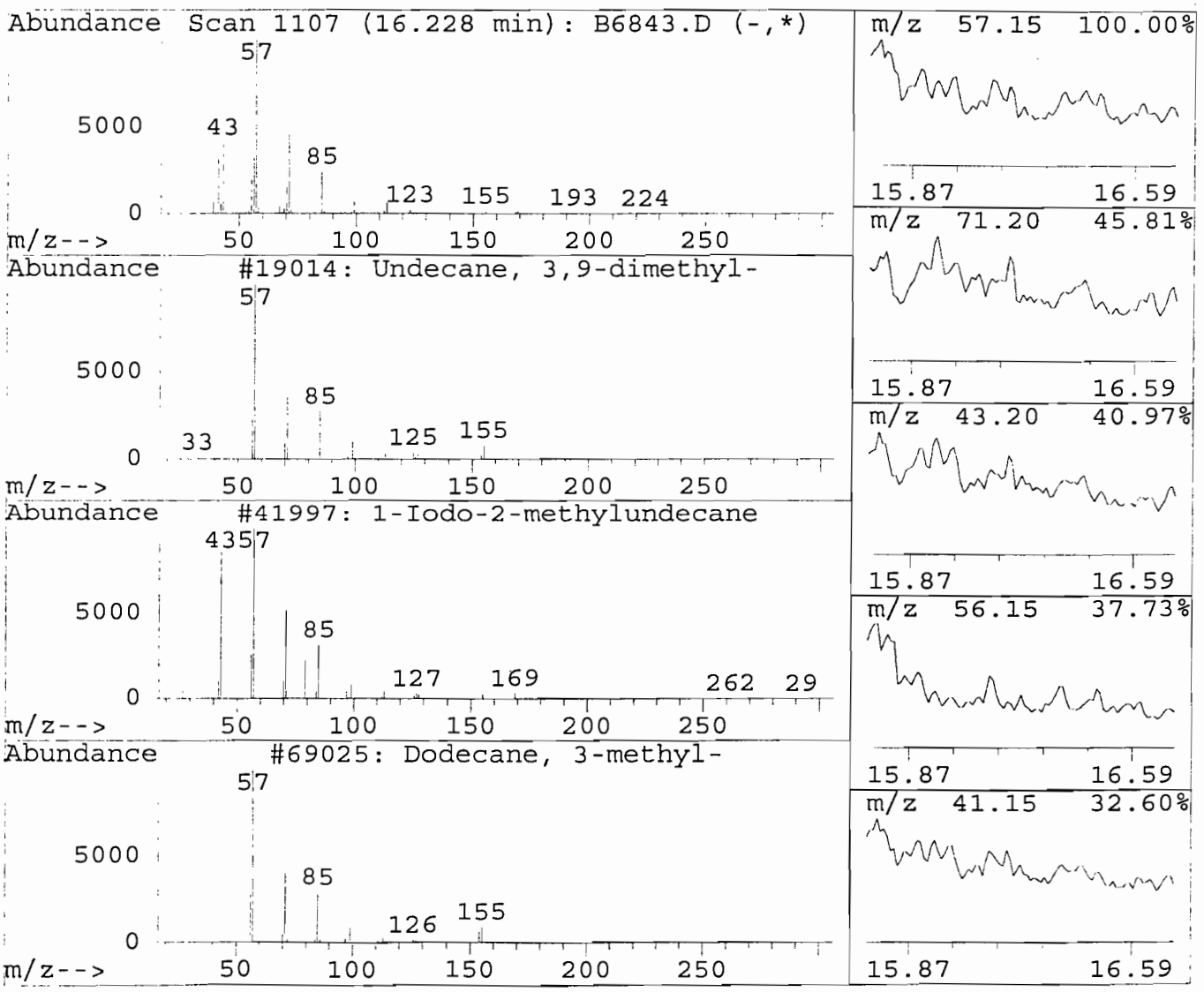
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.23	91.14 ng	16945105	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 3,9-dimethyl-	19014	017301-31-4	78
2	1-Iodo-2-methylundecane	41997	073105-67-6	72
3	Dodecane, 3-methyl-	69025	017312-57-1	72
4	Dodecane, 3-methyl-	19011	017312-57-1	72
5	Nonane, 3,7-dimethyl-	11601	017302-32-8	64



000110

Library Search Compound Report

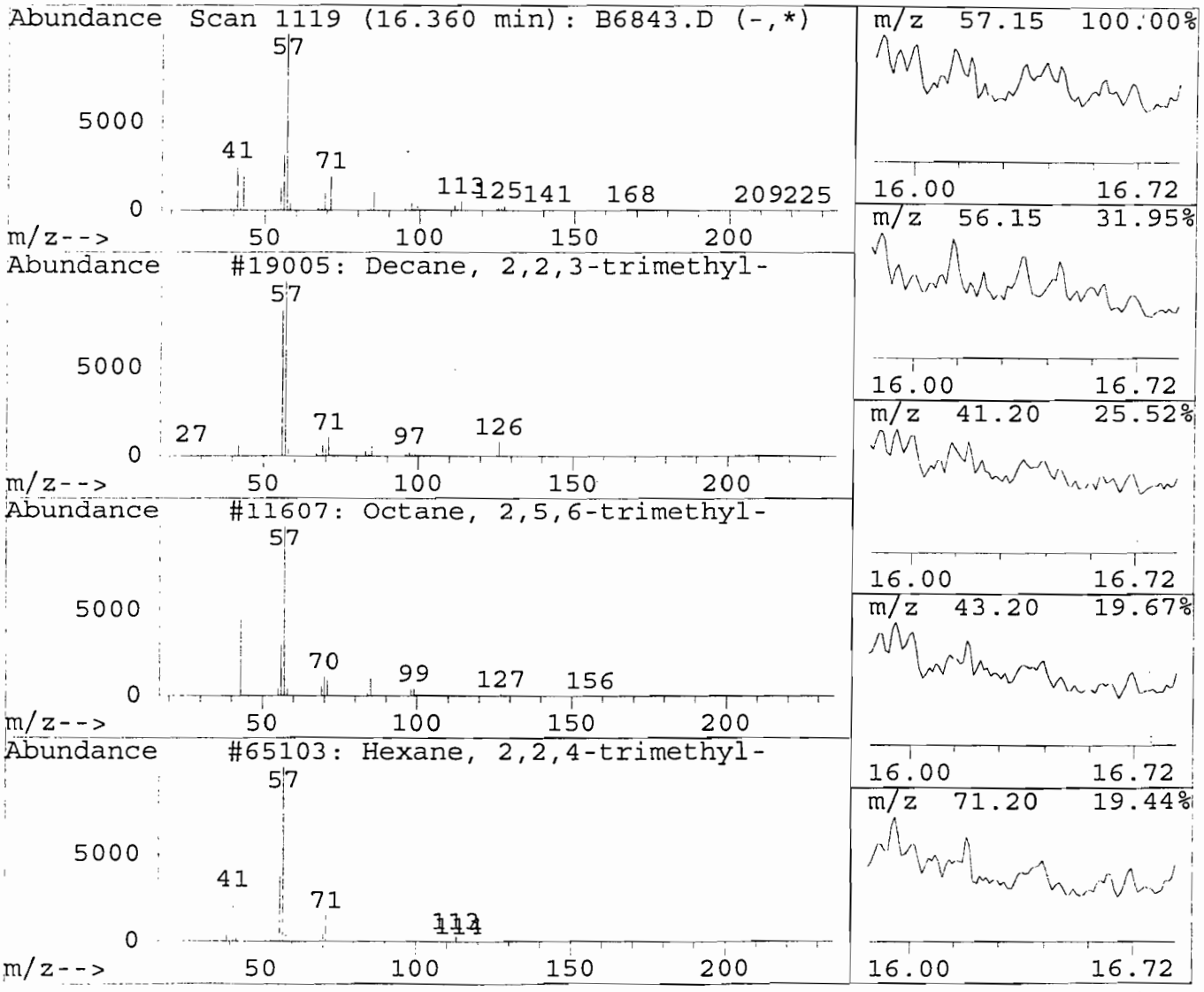
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.36	120.35 ng	22375790	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,2,3-trimethyl-	19005	062338-09-4	64
2	Octane, 2,5,6-trimethyl-	11607	062016-14-2	53
3	Hexane, 2,2,4-trimethyl-	65103	016747-26-5	53
4	Hexane, 2,2,5-trimethyl-	5149	003522-94-9	50
5	Hexane, 2,2,5-trimethyl-	65128	003522-94-9	50



000111

Library Search Compound Report

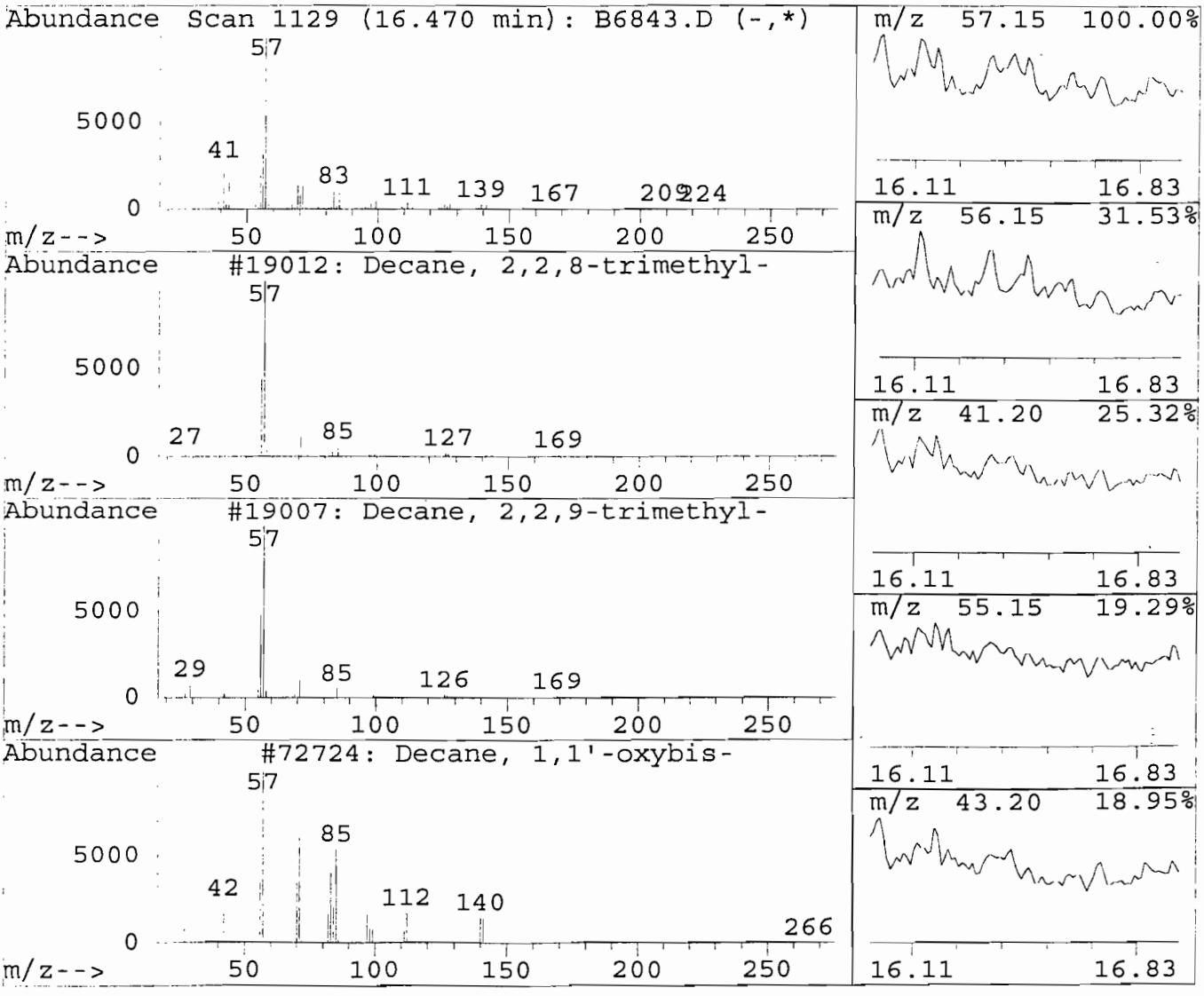
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.47	111.60 ng	20749241	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,2,8-trimethyl-	19012	062238-01-1	53
2	Decane, 2,2,9-trimethyl-	19007	062238-00-0	53
3	Decane, 1,1'-oxybis-	72724	002456-28-2	43
4	Pentadecane, 1-bromo-	41188	000629-72-1	43
5	Dodecane, 2,5-dimethyl-	22531	056292-65-0	38



000112

Library Search Compound Report

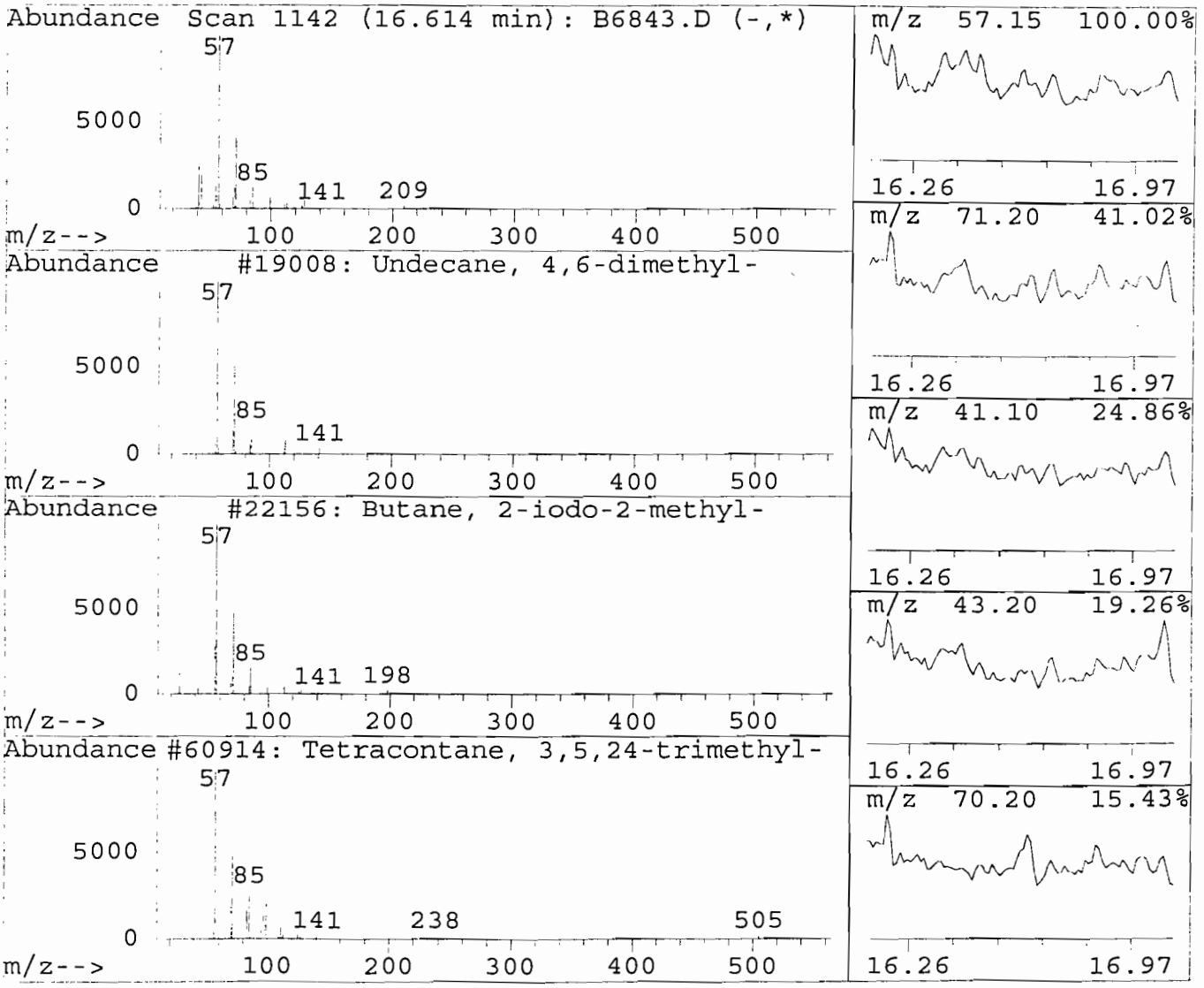
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.61	122.90 ng	22850371	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 4,6-dimethyl-	19008	017312-82-2	72
2	Butane, 2-iodo-2-methyl-	22156	000594-38-7	72
3	Tetracontane, 3,5,24-trimethyl-	60914	055162-61-3	64
4	Octane, 4-ethyl-	66222	015869-86-0	64
5	Octane, 2,5-dimethyl-	66225	015869-89-3	59



Library Search Compound Report

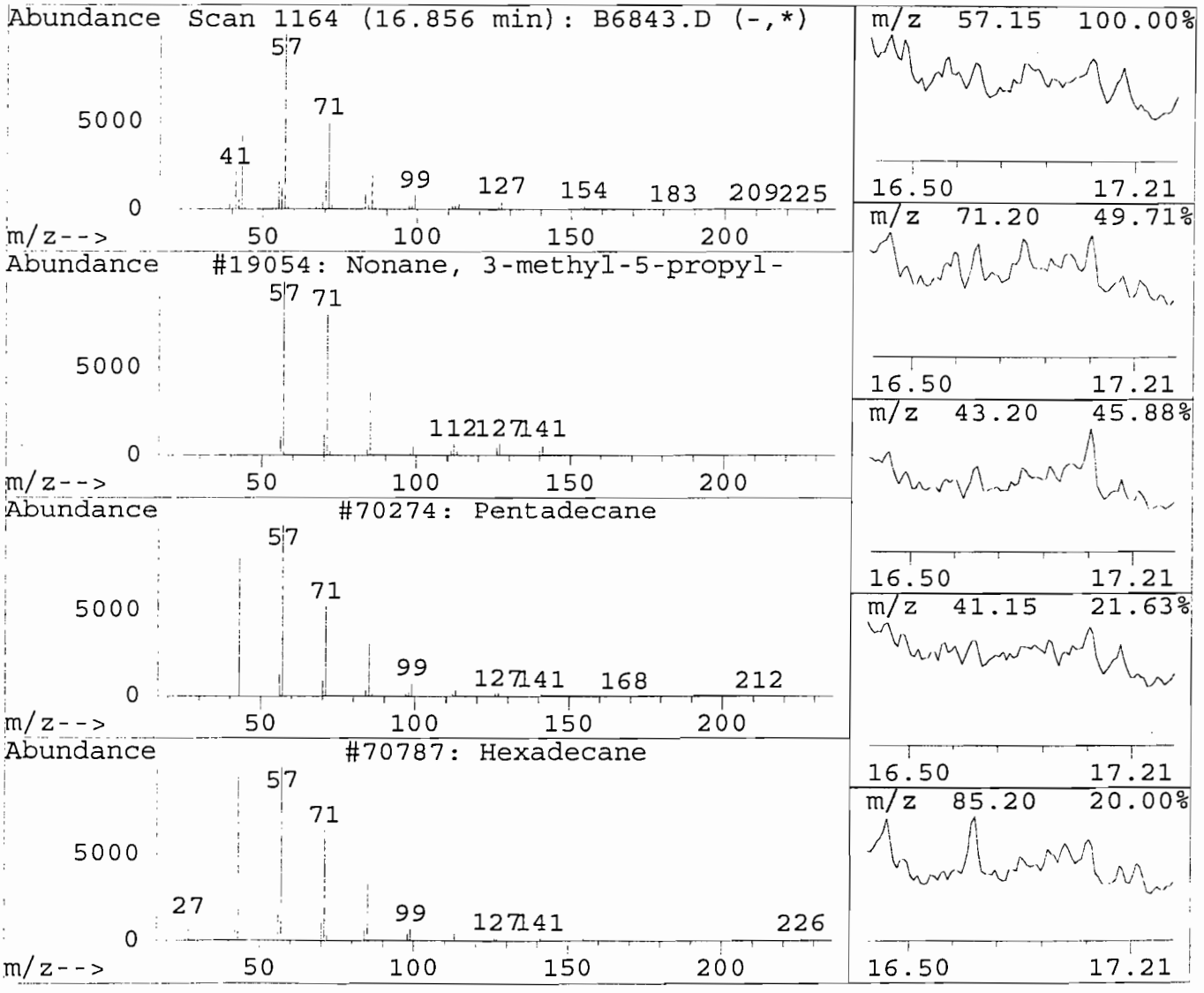
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.86	115.80 ng	21530952	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 3-methyl-5-propyl-	19054	031081-18-2	78
2	Pentadecane	70274	000629-62-9	59
3	Hexadecane	70787	000544-76-3	59
4	Hexadecane, 2,6,10,14-tetramethyl-	39868	000638-36-8	53
5	Eicosane	72323	000112-95-8	49



000114

Library Search Compound Report

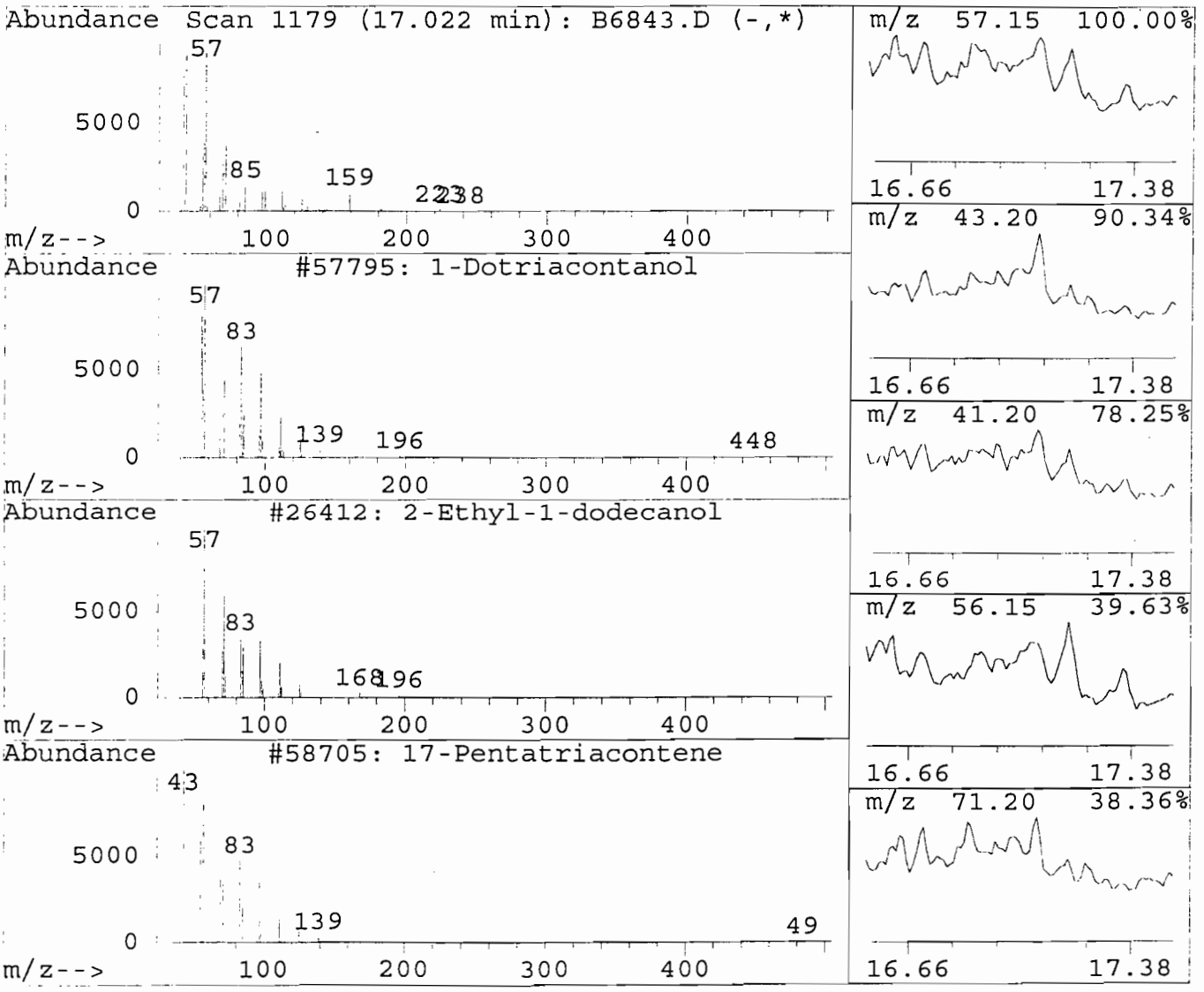
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
17.02	89.56 ng	16652365	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Dotriacontanol	57795	006624-79-9	64
2	2-Ethyl-1-dodecanol	26412	000000-00-0	59
3	17-Pentatriacontene	58705	006971-40-0	50
4	Hexane, 3-ethyl-4-methyl-	5162	003074-77-9	49
5	Heptane, 3,4-dimethyl-	65136	000922-28-1	49



Library Search Compound Report

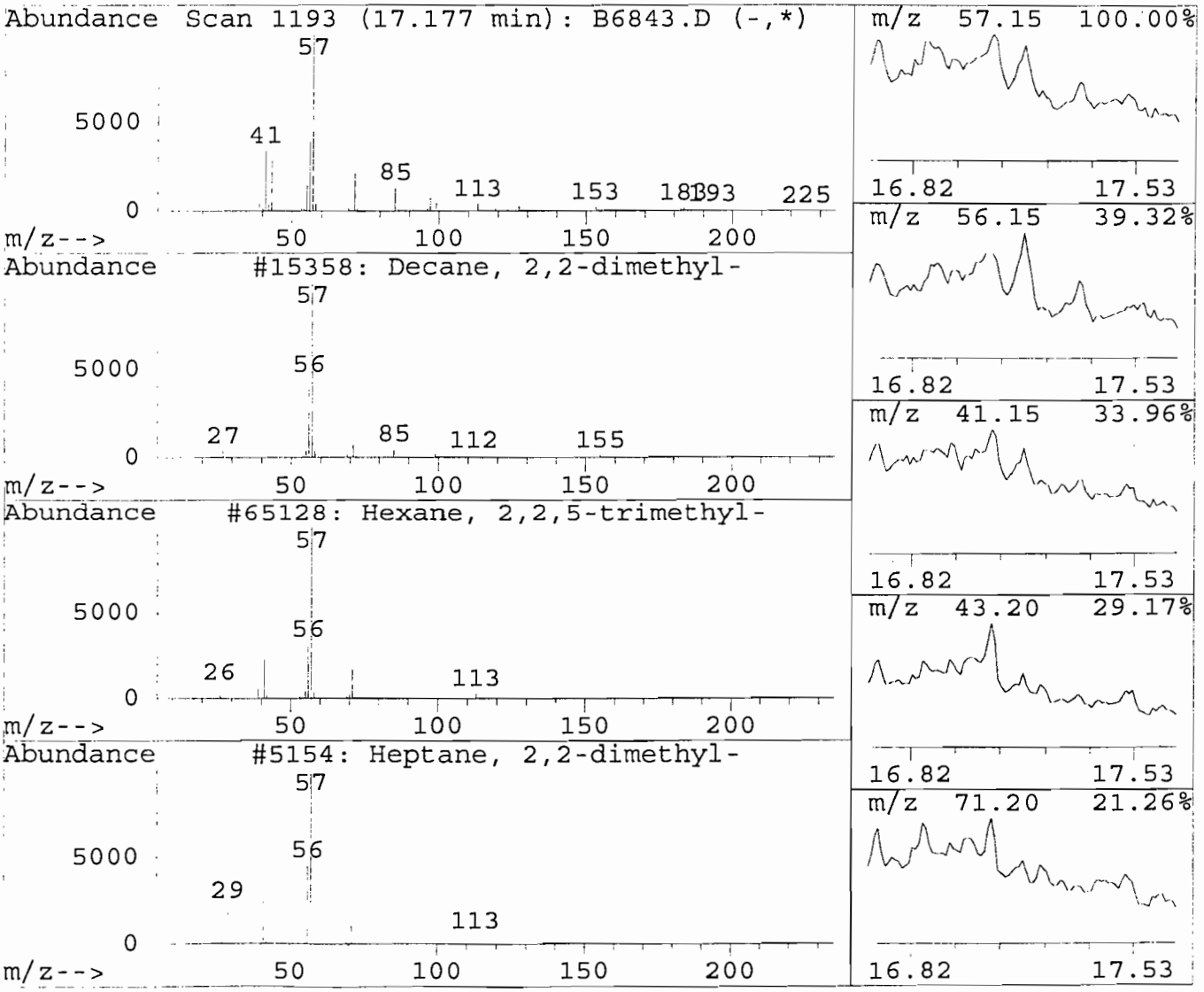
Data File : D:\HPCHEM\1\DATA\B11109\B6843.D
Acq Time : 9 Nov 99 6:24 pm
Sample : 13826ASP-87994-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
17.18	102.98 ng	19146383	Acenaphthene-d10	17.55

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,2-dimethyl-	15358	017302-37-3	64
2	Hexane, 2,2,5-trimethyl-	65128	003522-94-9	59
3	Heptane, 2,2-dimethyl-	5154	001071-26-7	59
4	Octane, 2,5,6-trimethyl-	11607	062016-14-2	59
5	Octane, 2,2,6-trimethyl-	11599	062016-28-8	59



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-011-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87995

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6742.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	35	U
108-60-1	bis(2-chloroisopropyl)ether	35	U
95-50-1	1,2-Dichlorobenzene	35	U
541-73-1	1,3-Dichlorobenzene	35	U
106-46-7	1,4-Dichlorobenzene	35	U
621-64-7	n-Nitroso-di-n-propylamine	35	U
67-72-1	Hexachloroethane	35	U
98-95-3	Nitrobenzene	35	U
78-59-1	Isophorone	35	U
111-91-1	bis(2-Chloroethoxy)methane	35	U
120-82-1	1,2,4-Trichlorobenzene	35	U
91-20-3	Naphthalene	35	U
106-47-8	4-Chloroaniline	70	U
87-68-3	Hexachlorobutadiene	35	U
91-57-6	2-Methylnaphthalene	59	U
77-47-4	Hexachlorocyclopentadiene	35	U
91-58-7	2-Chloronaphthalene	35	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	35	U
208-96-8	Acenaphthylene	35	U
606-20-2	2,6-Dinitrotoluene	35	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	35	U
132-64-9	Dibenzofuran	55	U
121-14-2	2,4-Dinitrotoluene	35	U
84-66-2	Diethylphthalate	35	U
7005-72-3	4-Chlorophenyl-phenylether	35	U
86-73-7	Fluorene	35	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	35	U
122-66-7	1,2-Diphenylhydrazine	35	U
101-55-3	4-Bromophenyl-phenylether	35	U
118-74-1	Hexachlorobenzene	35	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-011-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87995

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6742.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	35	U
120-12-7	Anthracene	35	U
86-74-8	Carbazole	51	U
84-74-2	Di-n-butylphthalate	35	U
206-44-0	Fluoranthene	35	U
129-00-0	Pyrene	35	U
85-68-7	Butylbenzylphthalate	35	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	35	U
218-01-9	Chrysene	35	U
117-81-7	bis(2-Ethylhexyl)phthalate	65	U
117-84-0	Di-n-octylphthalate	35	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	35	U
193-39-5	Indeno(1,2,3-cd)pyrene	35	U
53-70-3	Dibenz[a,h]anthracene	52	U
191-24-2	Benzo[g,h,i]perylene	35	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-011-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87995

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6742.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 5 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 149-57-5	Hexanoic acid, 2-ethyl-	11.76	100	J
2. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.56	190	J
3. 103-23-1	Hexanedioic acid, bis(2-ethy	27.41	1300	J
4. 629-96-9	1-Eicosanol	28.19	270	J
5. 301-02-0	9-Octadecenamide, (Z)-	30.63	420	J
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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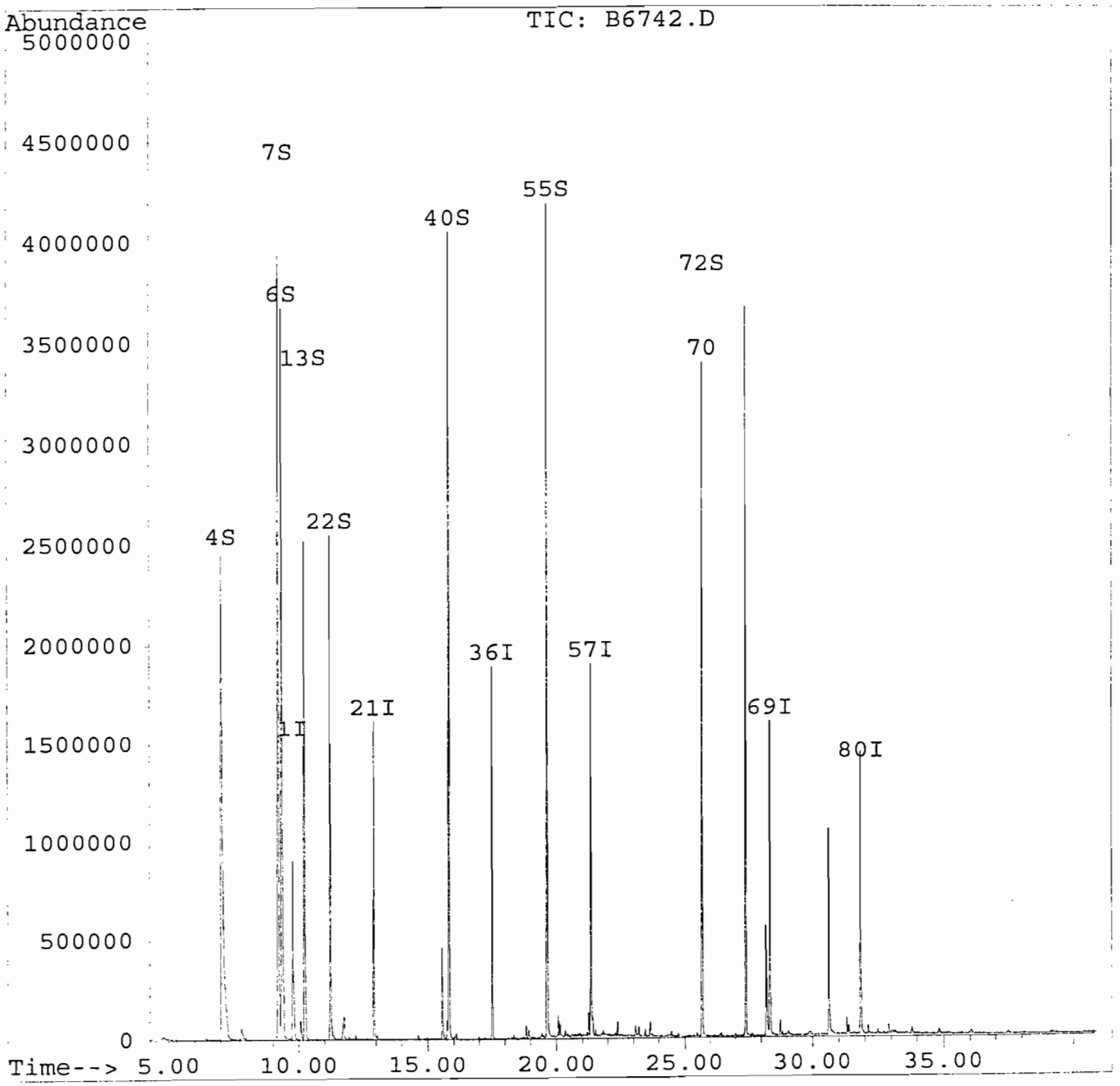
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6742.D
Acq Time : 4 Nov 99 1:24 am
Sample : 13826ASP-87995-QB505
Misc :
Quant Time: Nov 4 8:37 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000120

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6742.D
Acq Time : 4 Nov 99 1:24 am
Sample : 13826ASP-87995-QB505
Misc :
Quant Time: Nov 4 8:37 1999

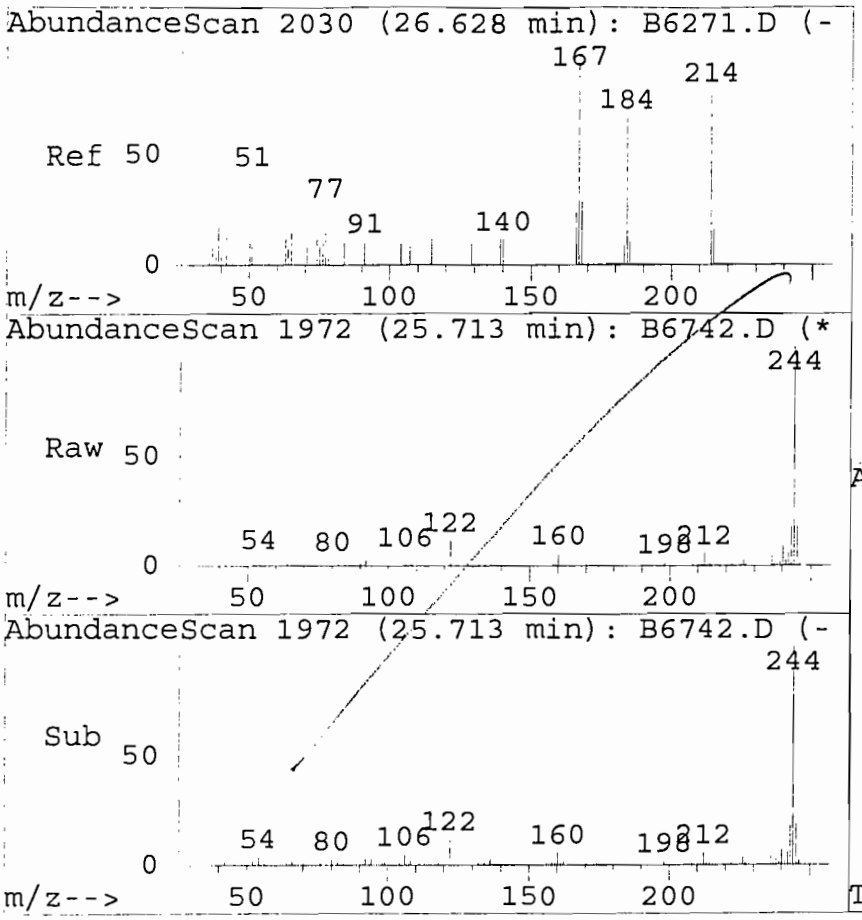
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.78	152	390035	40.00	ng	-0.03
21) Naphthalene-d8	12.92	136	1364545	40.00	ng	-0.33
36) Acenaphthene-d10	17.52	164	722681	40.00	ng	-0.33
57) Phenanthrene-d10	21.36	188	1372980	40.00	ng	-0.34
69) Chrysene-d12	28.36	240	1294292	40.00	ng	-0.35
80) Perylene-d12	31.87	264	1339723	40.00	ng	-0.34
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.03	112	2778278	204.59	ng	
6) 2-Chlorophenol-d4	9.35	132	2782862	220.88	ng	
7) Phenol-d5	9.22	99	3603620	231.87	ng	
13) 1,2-Dichlorobenzene-d4	10.22	152	958152	109.26	ng	
22) Nitrobenzene-d5	11.22	82	1822308	111.57	ng	
40) 2-Fluorobiphenyl	15.83	172	2562633	103.09	ng	
55) 2,4,6-Tribromophenol	19.65	330	1449522	304.48	ng	
72) Terphenyl-d14	25.71	244	3226350	84.64	ng	
Target Compounds						Qvalue
70) Benzidine	25.71	184	32727	329.80	ng	98

000121

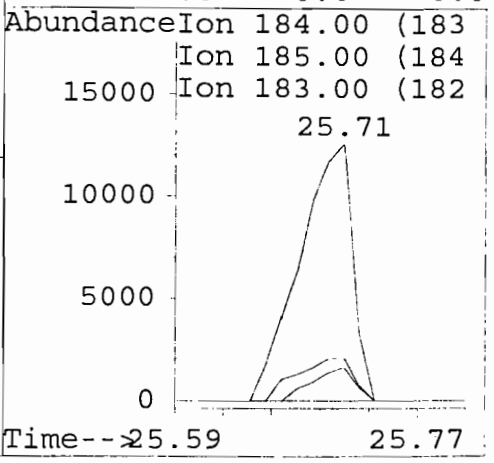
(#) = qualifier out of range (m) = manual integration



#70
Benzidine
Concen: 329.80 ng
RT: 25.71 min Scan# 1972
Delta R.T. -0.92 min
Lab File: B6742.D
Acq: 4 Nov 99 1:24 am

Tgt Ion:184 Resp: 32727

Ion	Ratio	Lower	Upper
184	100		
185	16.5	8.2	24.6
183	12.9	7.1	21.3
0	0.0	0.0	0.0



000122

Library Search Compound Report

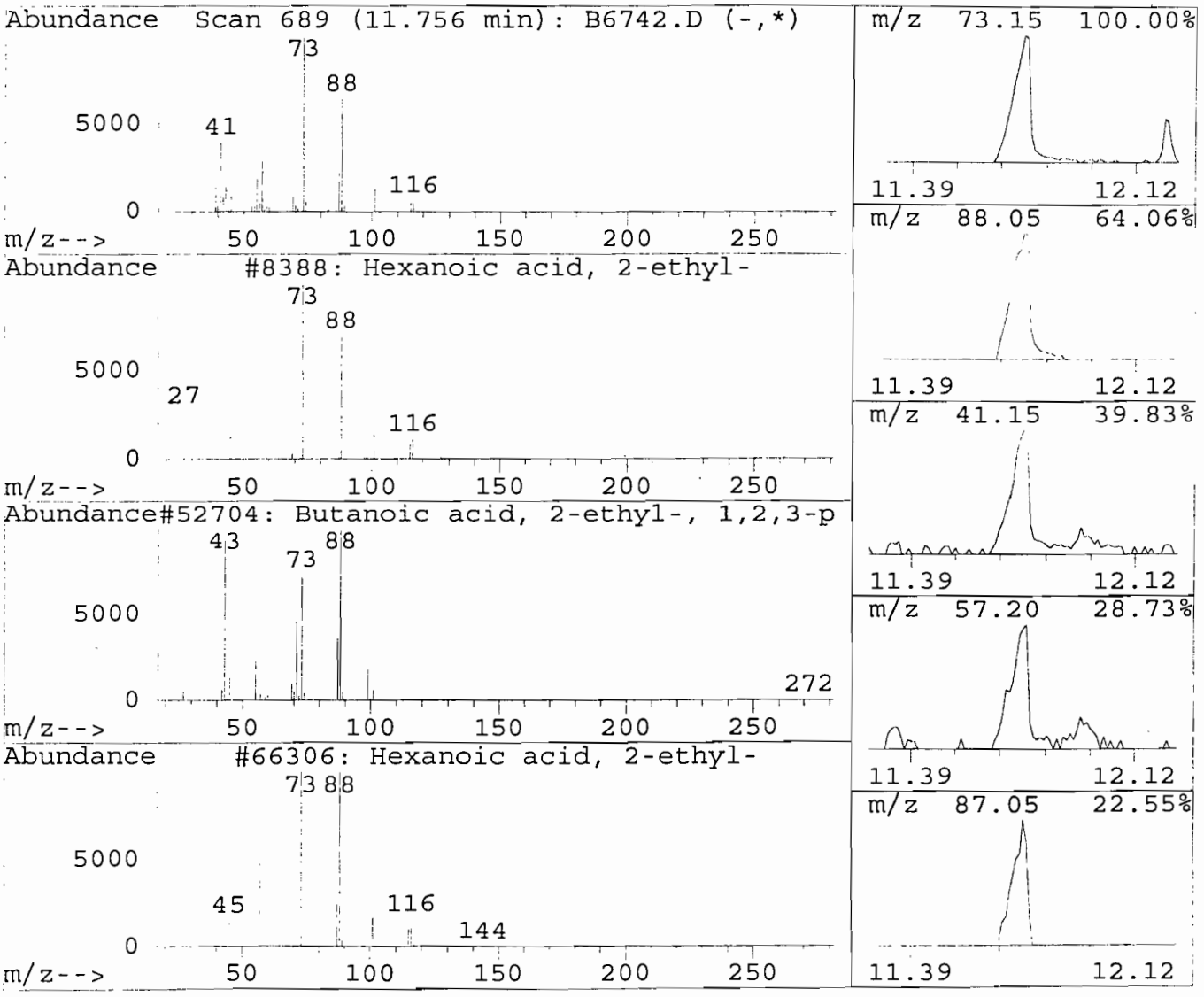
Data File : D:\HPCHEM\1\DATA\B11103\B6742.D
Acq Time : 4 Nov 99 1:24 am
Sample : 13826ASP-87995-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
11.76	5.67 ng	446235	Naphthalene-d8	12.92

Hit# of 15	Tentative ID	Ref#	CAS#	Qual
1	Hexanoic acid, 2-ethyl-	8388	000149-57-5	64
2	Butanoic acid, 2-ethyl-, 1,2,3-prop	52704	056554-54-2	45
3	Hexanoic acid, 2-ethyl-	66306	000149-57-5	42
4	Hexanamide, 6-(heptyloxy)-	29783	055191-08-7	38
5	Pentanoic acid, ethyl ester	65244	000539-82-2	28



000123

Library Search Compound Report

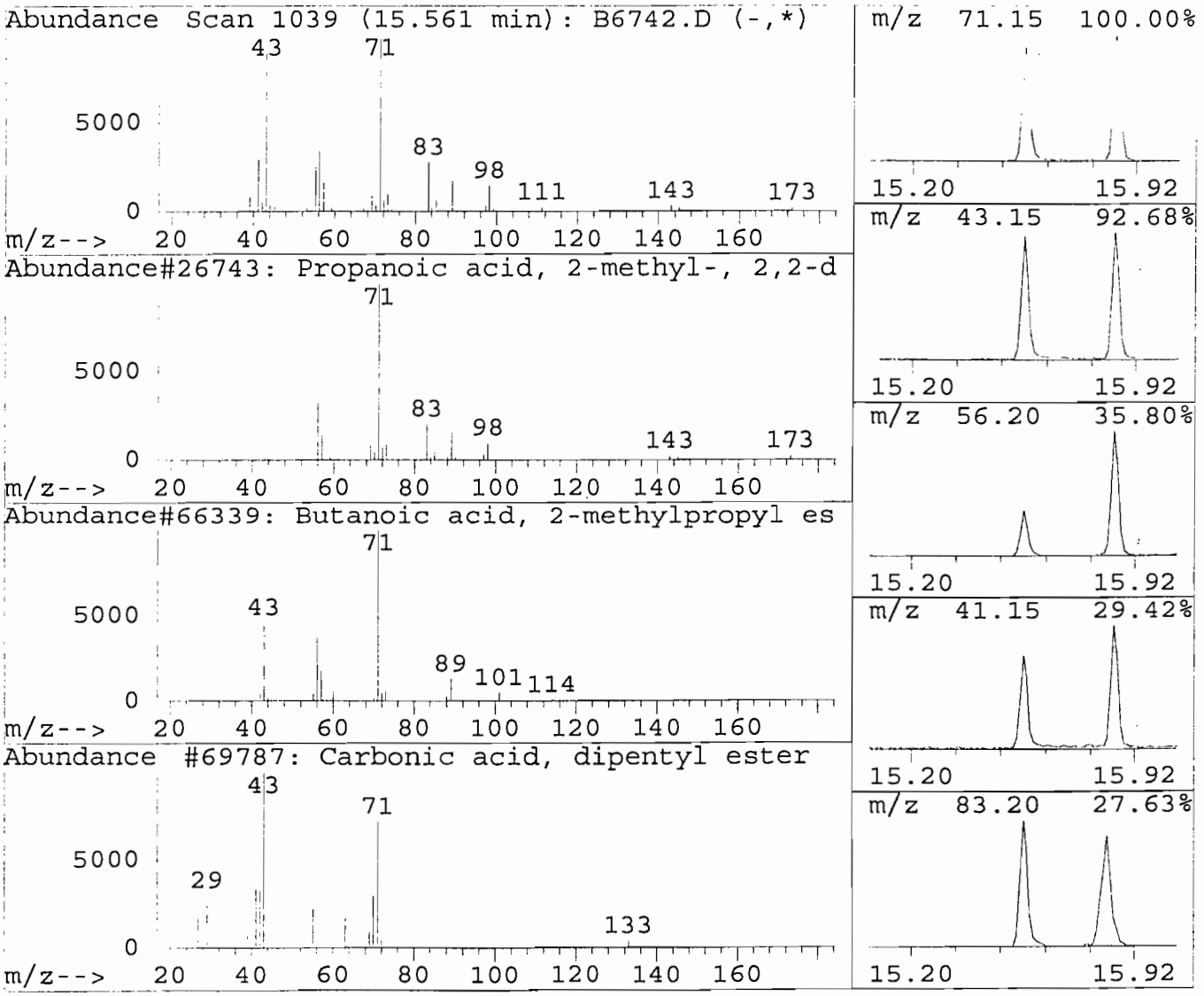
Data File : D:\HPCHEM\1\DATA\B11103\B6742.D
Acq Time : 4 Nov 99 1:24 am
Sample : 13826ASP-87995-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.56	10.70 ng	941452	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	50
2	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	47
3	Carbonic acid, dipentyl ester	69787	002050-94-4	43
4	Butanoic acid, 1-methylethyl ester	65238	000638-11-9	38
5	Propanoic acid, 2-methyl-, 2-ethyl-	26741	074367-31-0	38



000124

Library Search Compound Report

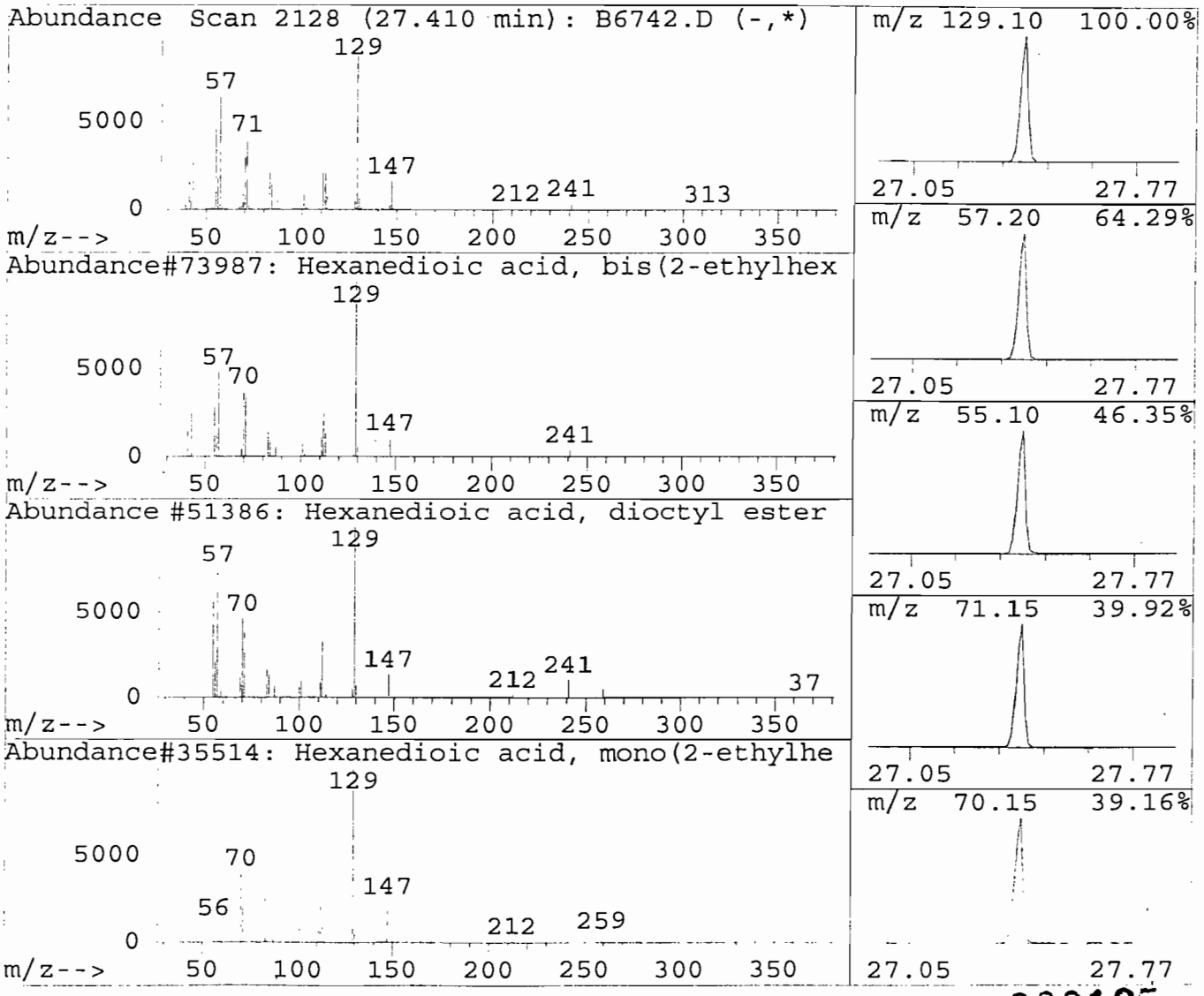
Data File : D:\HPCHEM\1\DATA\B11103\B6742.D
Acq Time : 4 Nov 99 1:24 am
Sample : 13826ASP-87995-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.41	71.73 ng	6439878	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	87
2	Hexanedioic acid, dioctyl ester	51386	000123-79-5	74
3	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	58
4	Octane, 4-ethyl-	8095	015869-86-0	35
5	2-Ethyl-1-dodecanol	26412	000000-00-0	25



000125

Library Search Compound Report

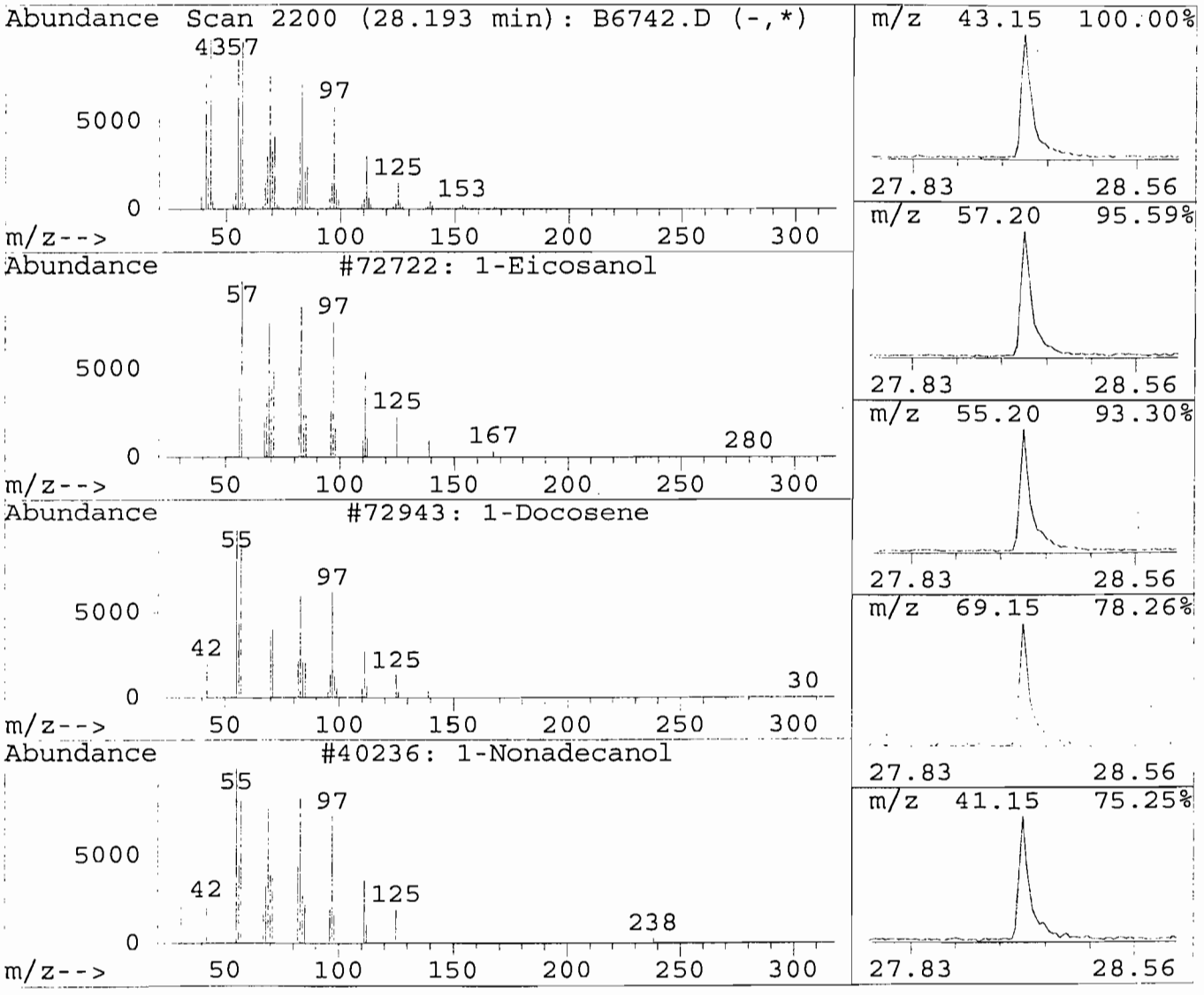
Data File : D:\HPCHEM\1\DATA\B11103\B6742.D
Acq Time : 4 Nov 99 1:24 am
Sample : 13826ASP-87995-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.19	15.11 ng	1356731	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Eicosanol	72722	000629-96-9	94
2	1-Docosene	72943	001599-67-3	91
3	1-Nonadecanol	40236	001454-84-8	91
4	Phosphonic acid, dioctadecyl ester	60683	019047-85-9	91
5	3-Eicosene, (E)-	39521	074685-33-9	90



Library Search Compound Report

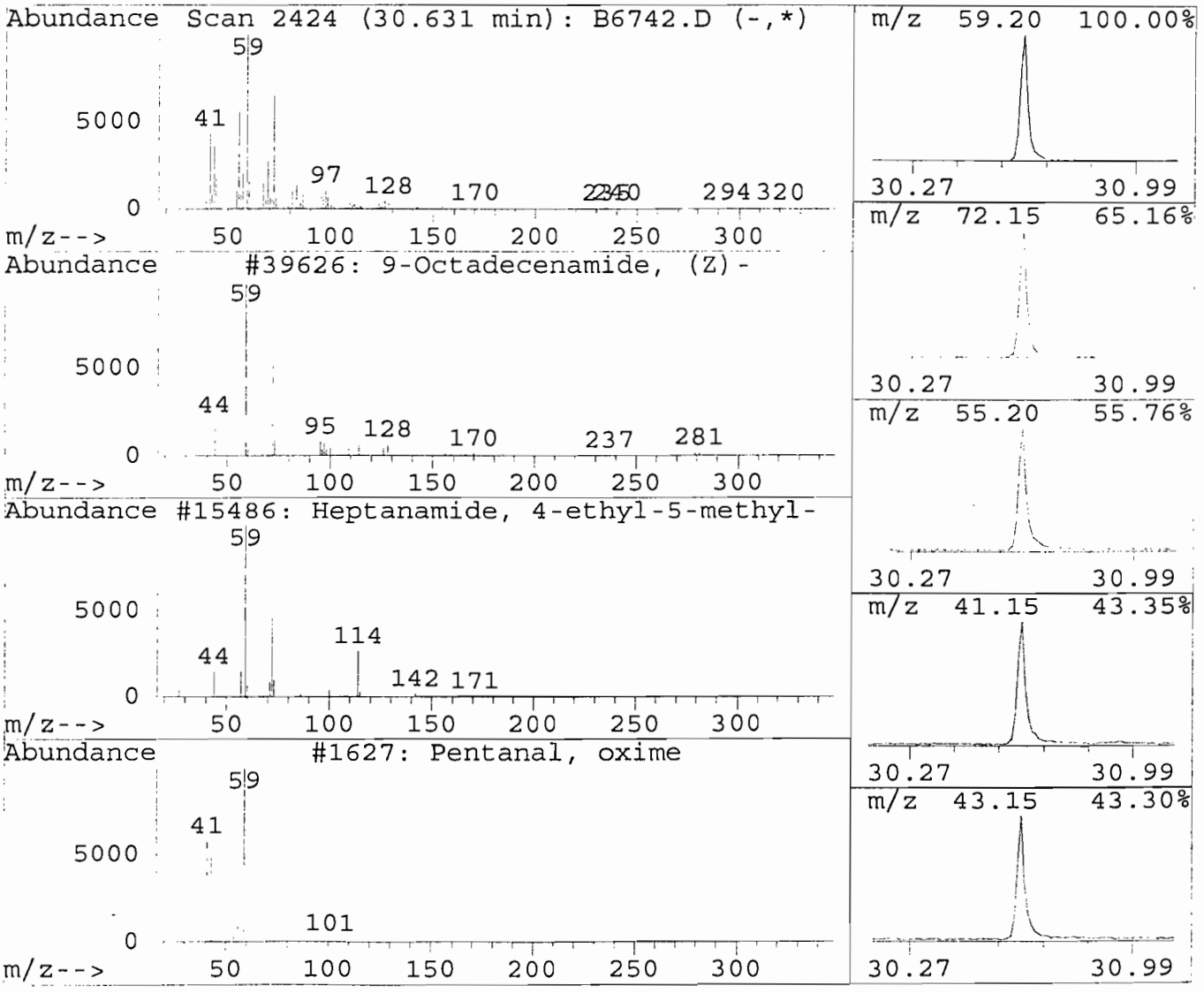
Data File : D:\HPCHEM\1\DATA\B11103\B6742.D
Acq Time : 4 Nov 99 1:24 am
Sample : 13826ASP-87995-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.63	23.70 ng	2098945	Perylene-d12	31.87

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	72
2	Heptanamide, 4-ethyl-5-methyl-	15486	054789-40-1	45
3	Pentanal, oxime	1627	000628-79-5	43
4	Hexadecanamide	34960	000629-54-9	40
5	Methyl 17-methoxy-10-methoxycarbony	52728	000000-00-0	38



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-012-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87996

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6760.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	35	U
108-60-1	bis(2-chloroisopropyl)ether	35	U
95-50-1	1,2-Dichlorobenzene	35	U
541-73-1	1,3-Dichlorobenzene	35	U
106-46-7	1,4-Dichlorobenzene	35	U
621-64-7	n-Nitroso-di-n-propylamine	35	U
67-72-1	Hexachloroethane	35	U
98-95-3	Nitrobenzene	35	U
78-59-1	Isophorone	35	U
111-91-1	bis(2-Chloroethoxy)methane	35	U
120-82-1	1,2,4-Trichlorobenzene	35	U
91-20-3	Naphthalene	35	U
106-47-8	4-Chloroaniline	70	U
87-68-3	Hexachlorobutadiene	35	U
91-57-6	2-Methylnaphthalene	59	U
77-47-4	Hexachlorocyclopentadiene	35	U
91-58-7	2-Chloronaphthalene	35	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	35	U
208-96-8	Acenaphthylene	35	U
606-20-2	2,6-Dinitrotoluene	35	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	35	U
132-64-9	Dibenzofuran	55	U
121-14-2	2,4-Dinitrotoluene	35	U
84-66-2	Diethylphthalate	35	U
7005-72-3	4-Chlorophenyl-phenylether	35	U
86-73-7	Fluorene	35	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	35	U
122-66-7	1,2-Diphenylhydrazine	35	U
101-55-3	4-Bromophenyl-phenylether	35	U
118-74-1	Hexachlorobenzene	35	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-012-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87996

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6760.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	35	U
120-12-7	Anthracene	35	U
86-74-8	Carbazole	51	U
84-74-2	Di-n-butylphthalate	35	U
206-44-0	Fluoranthene	59	
129-00-0	Pyrene	75	
85-68-7	Butylbenzylphthalate	35	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	35	U
218-01-9	Chrysene	35	U
117-81-7	bis(2-Ethylhexyl)phthalate	61	J
117-84-0	Di-n-octylphthalate	35	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	35	U
193-39-5	Indeno(1,2,3-cd)pyrene	35	U
53-70-3	Dibenz[a,h]anthracene	52	U
191-24-2	Benzo[g,h,i]perylene	35	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-012-SS15

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87996

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6760.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 12 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.54	250	J
2. 74645-98-0	Dodecane, 2,7,10-trimethyl-	20.12	80	J
3. 112-95-8	Eicosane	23.45	84	J
4. 7098-22-8	Tetratetracontane	24.24	130	J
5.	Unknown	24.89	150	J
6.	Unknown	25.82	190	J
7. 630-06-8	Hexatriacontane	26.75	190	J
8. 103-23-1	Hexanedioic acid, bis(2-ethy	27.39	1400	J
9. 2136-70-1	Ethanol, 2-(tetradecyloxy)-	28.18	390	J
10. 55162-61-3	Tetracontane, 3,5,24-trimeth	29.04	180	J
11.	Unknown	29.52	180	J
12. 301-02-0	9-Octadecenamide, (Z)-	30.60	450	J
13.				
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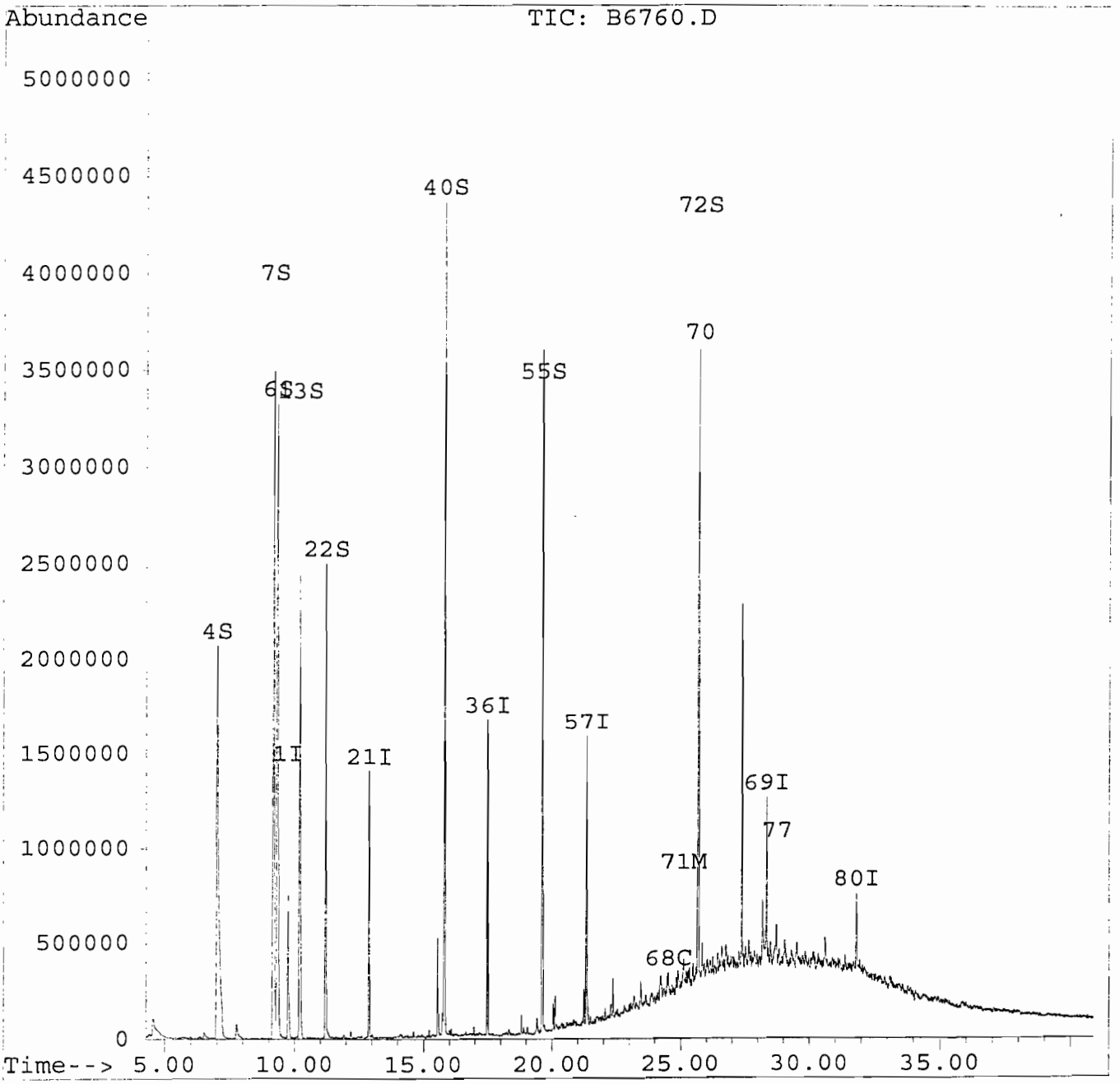
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :
Quant Time: Nov 5 8:47 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000131

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :
Quant Time: Nov 5 8:47 1999

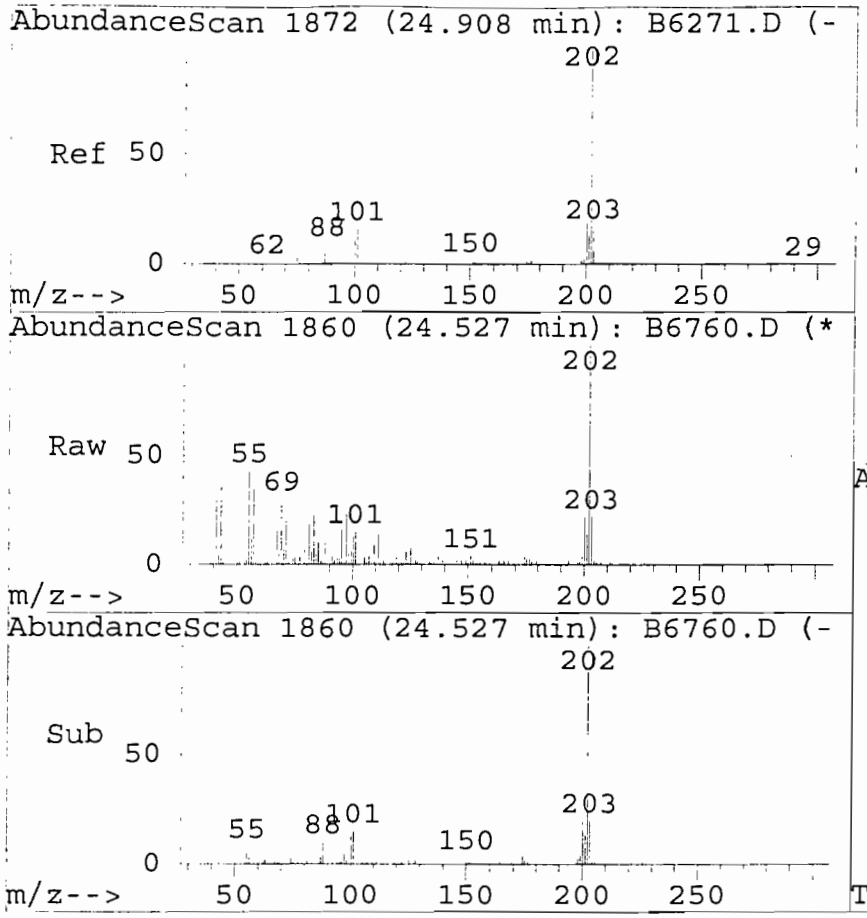
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	353225	40.00	ng	-0.04
21) Naphthalene-d8	12.89	136	1204634	40.00	ng	-0.05
36) Acenaphthene-d10	17.49	164	649070	40.00	ng	-0.05
57) Phenanthrene-d10	21.33	188	1113602	40.00	ng	-0.05
69) Chrysene-d12	28.34	240	641922	40.00	ng	-0.06
80) Perylene-d12	31.83	264	292898	40.00	ng	-0.07
System Monitoring Compounds						**%Recovery**
4) 2-Fluorophenol	7.00	112	2962623	240.90	ng	
6) 2-Chlorophenol-d4	9.32	132	2999529	262.89	ng	
7) Phenol-d5	9.19	99	3672790	260.95	ng	
13) 1,2-Dichlorobenzene-d4	10.19	152	1052195	132.49	ng	
22) Nitrobenzene-d5	11.21	82	1873297	129.92	ng	
40) 2-Fluorobiphenyl	15.81	172	2870422	128.56	ng	
55) 2,4,6-Tribromophenol	19.63	330	1228622	287.34	ng	
72) Terphenyl-d14	25.69	244	2908780	153.86	ng	
Target Compounds						**Qvalue**
68) Fluoranthene	24.53	202	92316	3.37	ng	94
~~70) Benzidine~~	25.69	184	29891	607.35	ng	93
71) Pyrene	25.10	202	93951	4.27	ng	98
77) bis(2-Ethylhexyl)phthalate	28.74	149	61522	3.48	ng	95

000132

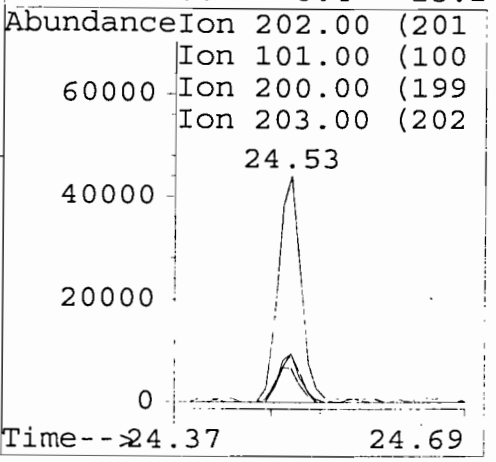
(#) = qualifier out of range (m) = manual integration

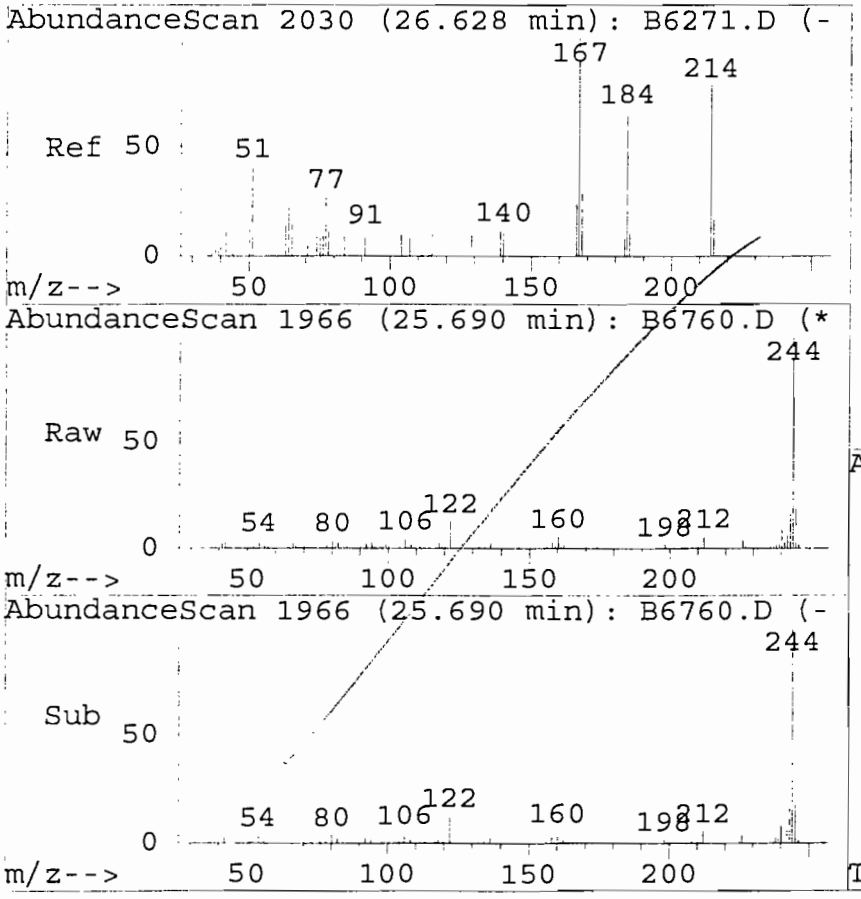


#68
Fluoranthene
Concen: 3.37 ng
RT: 24.53 min Scan# 1860
Delta R.T. -0.07 min
Lab File: B6760.D
Acq: 4 Nov 99 7:32 pm

Tgt Ion:202 Resp: 92316

Ion	Ratio	Lower	Upper
202	100		
101	14.9	7.8	23.4
200	21.6	9.9	29.6
203	21.6	8.4	25.1

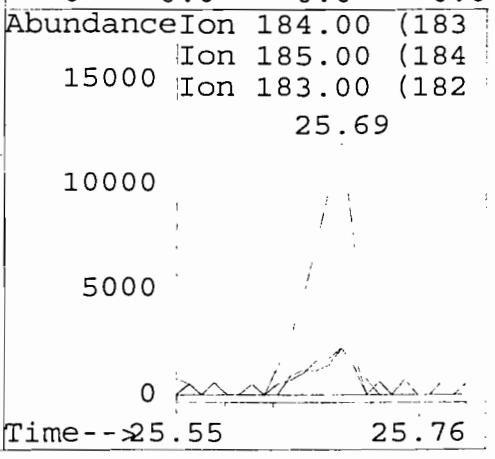




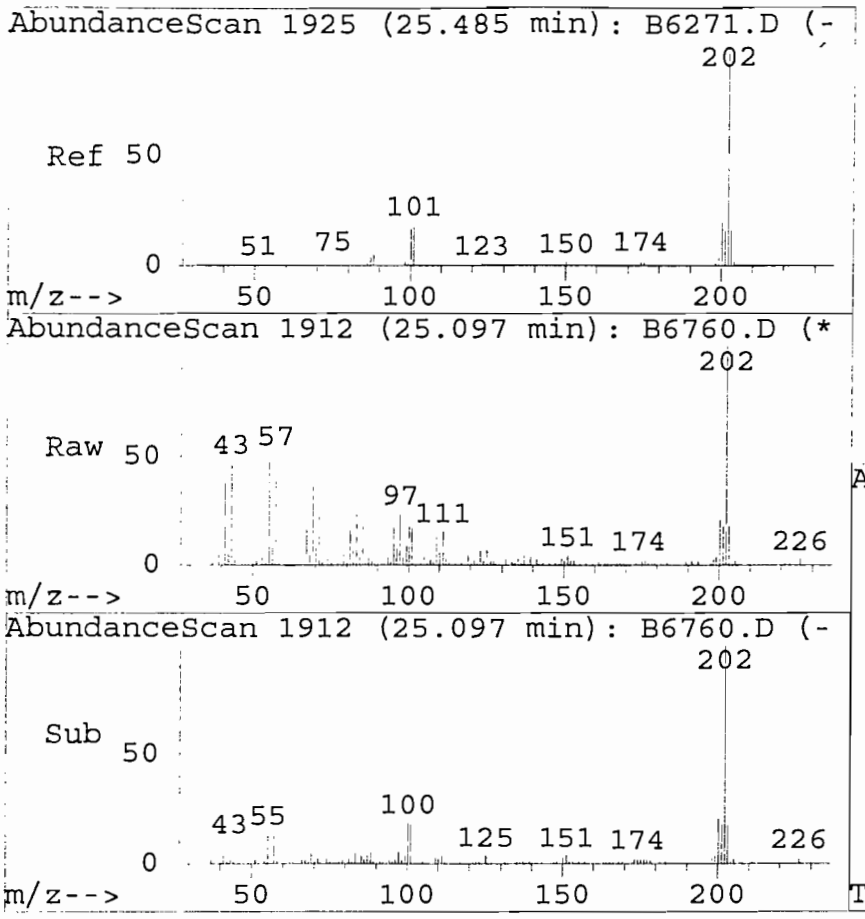
#70
Benzidine
Concen: 607.35 ng
RT: 25.69 min Scan# 1966
Delta R.T. -0.64 min
Lab File: B6760.D
Acq: 4 Nov 99 7:32 pm

Tgt Ion:184 Resp: 29891

Ion	Ratio	Lower	Upper
184	100		
185	18.6	8.2	24.6
183	18.2	7.1	21.3
0	0.0	0.0	0.0



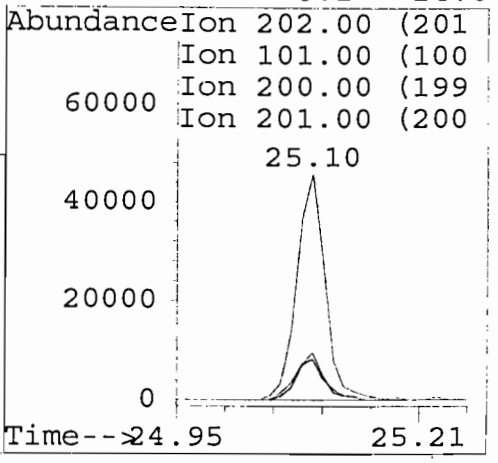
000133

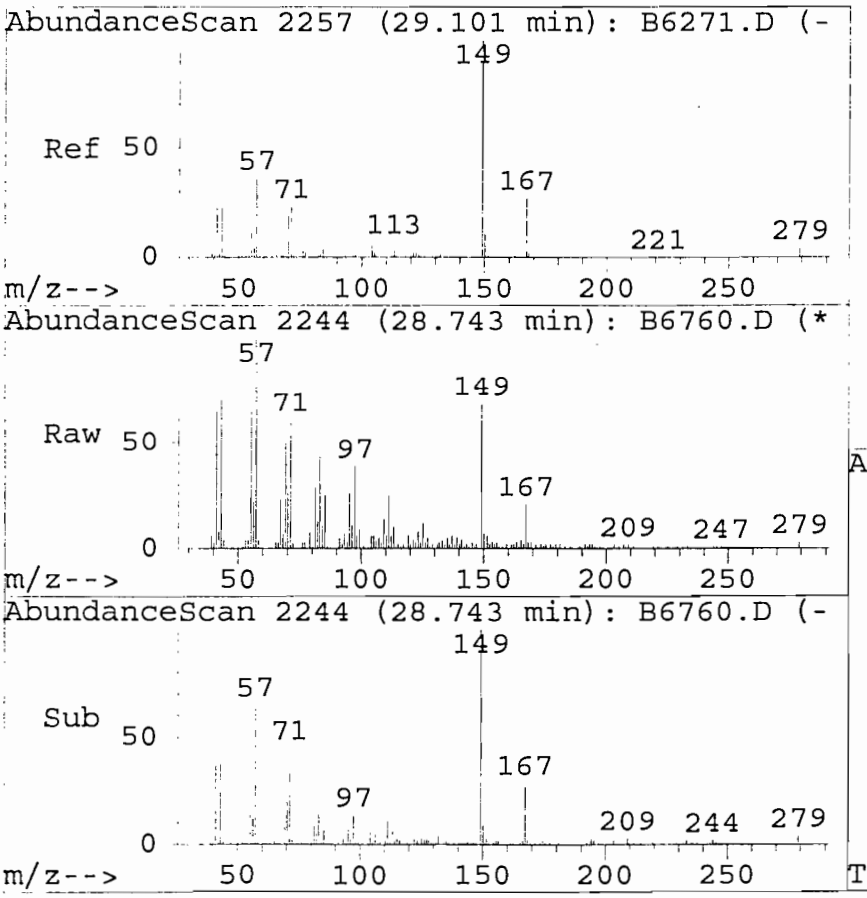


#71
Pyrene
Concen: 4.27 ng
RT: 25.10 min Scan# 1912
Delta R.T. -0.07 min
Lab File: B6760.D
Acq: 4 Nov 99 7:32 pm

Tgt Ion:202 Resp: 93951

Ion	Ratio	Lower	Upper
202	100		
101	18.1	9.5	28.5
200	20.9	10.2	30.6
201	18.0	8.2	24.6

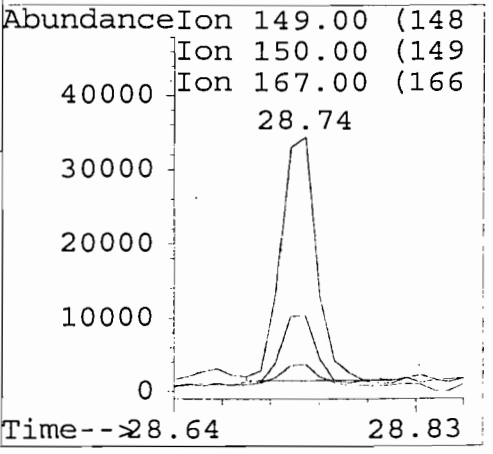




#77
bis(2-Ethylhexyl)phthalate
Concen: 3.48 ng
RT: 28.74 min Scan# 2244
Delta R.T. -0.05 min
Lab File: B6760.D
Acq: 4 Nov 99 7:32 pm

Tgt Ion:149 Resp: 61522

Ion	Ratio	Lower	Upper
149	100		
150	10.8	5.2	15.7
167	30.1	13.5	40.5
0	0.0	0.0	0.0



Library Search Compound Report

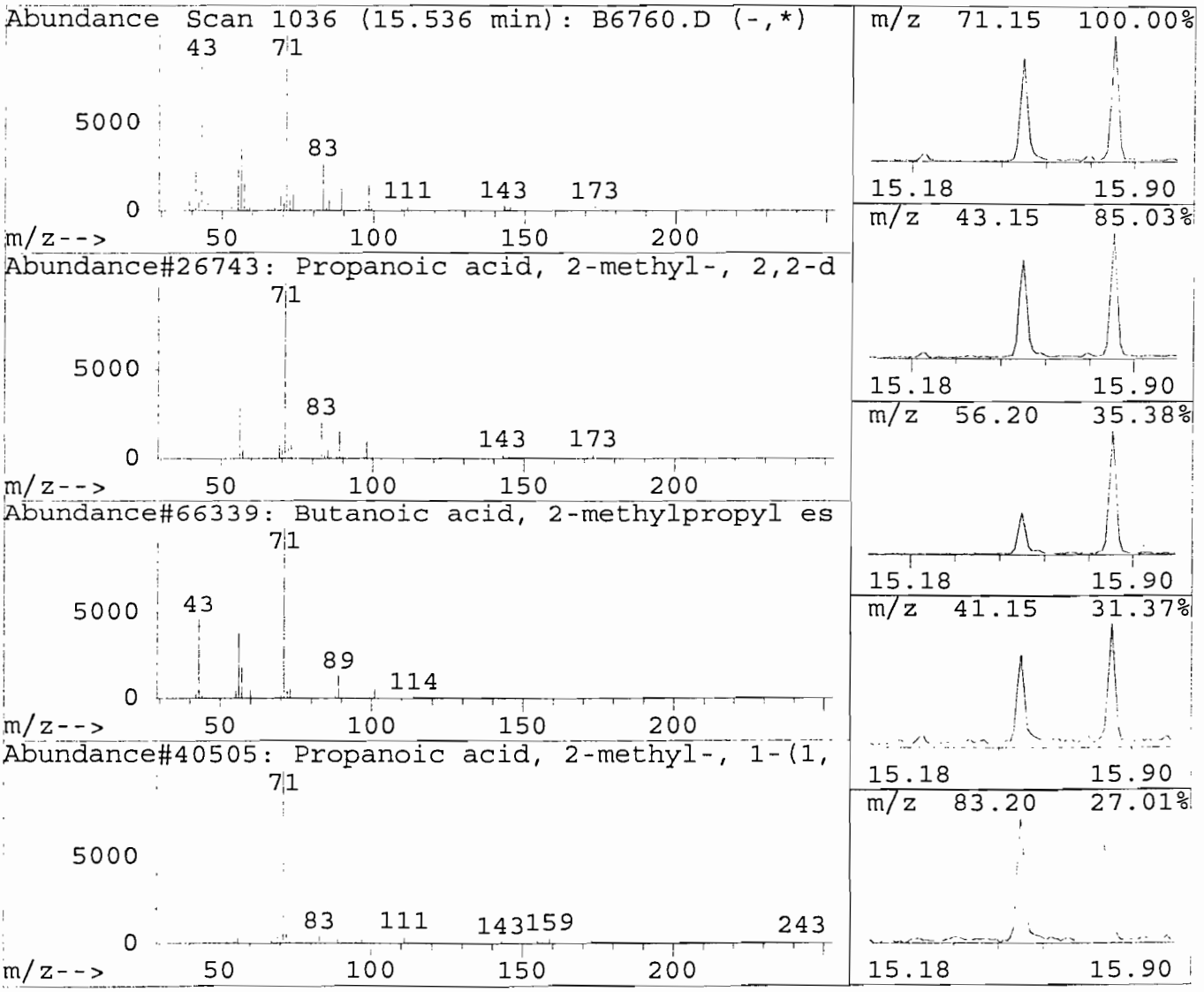
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.54	14.38 ng	1129967	Acenaphthene-d10	17.49

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	83
2	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	45
3	Propanoic acid, 2-methyl-, 1-(1,1-d	40505	074381-40-1	43
4	4,4-Dimethyl-1-hexene	2723	001647-08-1	38
5	Cyclopentanol, 1-methyl-	63340	001462-03-9	38



000135

Library Search Compound Report

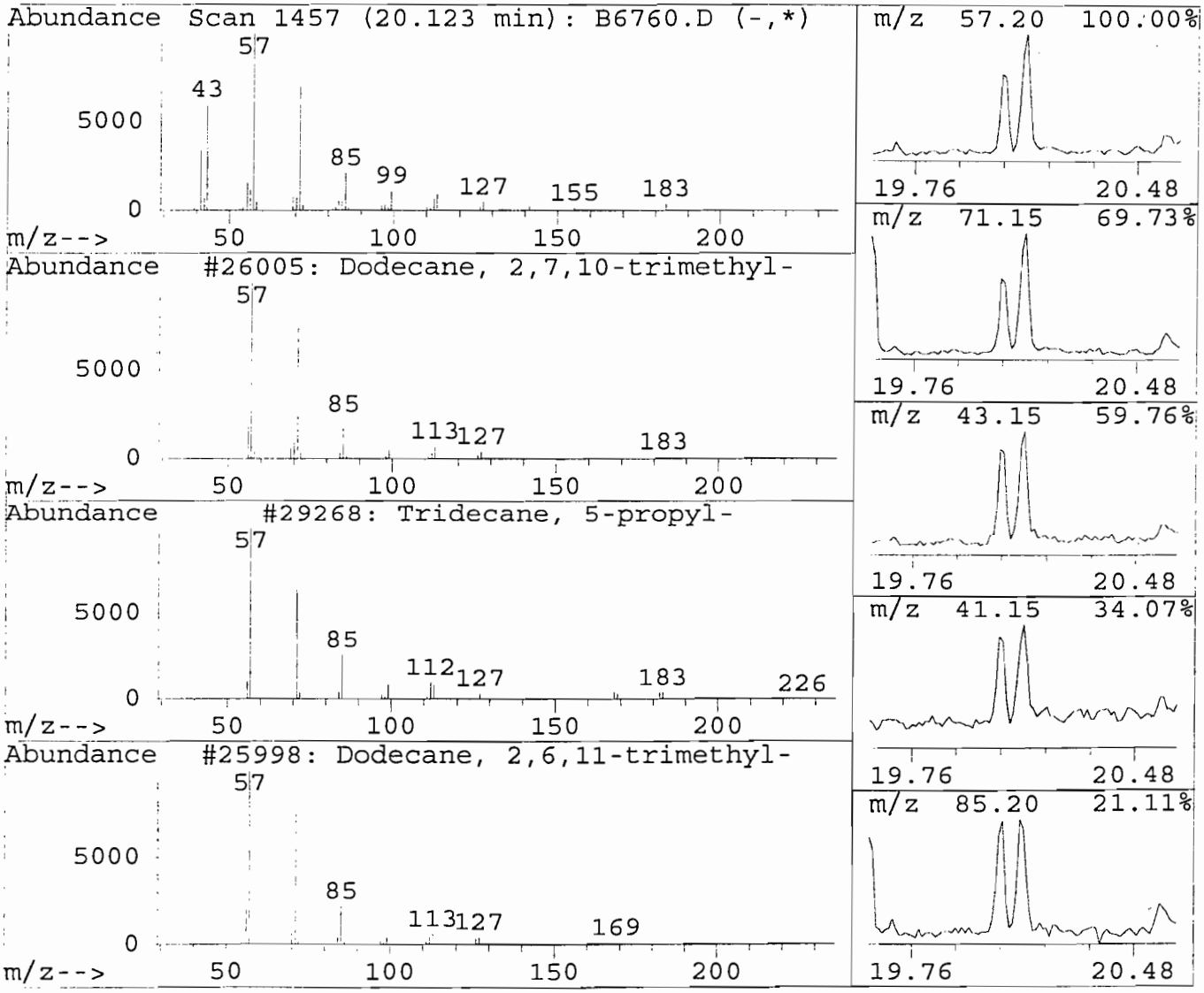
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.12	4.55 ng	395904	Phenanthrene-d10	21.33

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	86
2	Tridecane, 5-propyl-	29268	055045-11-9	83
3	Dodecane, 2,6,11-trimethyl-	25998	031295-56-4	80
4	Pentadecane, 2,6,10,14-tetramethyl-	71951	001921-70-6	80
5	Heptadecane, 7-methyl-	34817	020959-33-5	80



Library Search Compound Report

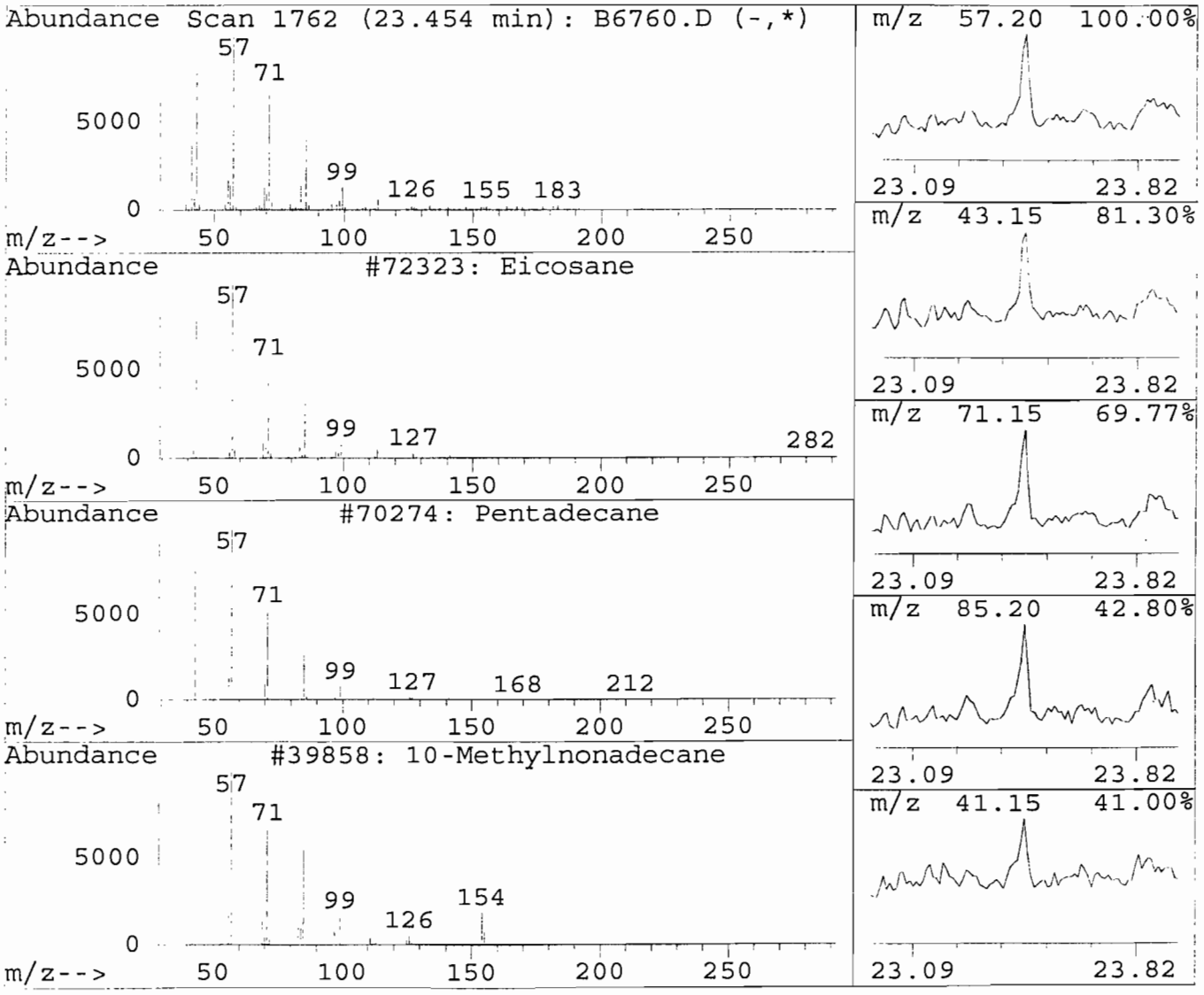
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.45	4.80 ng	417949	Phenanthrene-d10	21.33

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Eicosane	72323	000112-95-8	91
2	Pentadecane	70274	000629-62-9	86
3	10-Methylnonadecane	39858	000000-00-0	86
4	Heptadecane	71191	000629-78-7	86
5	Octadecane	71559	000593-45-3	80



000137

Library Search Compound Report

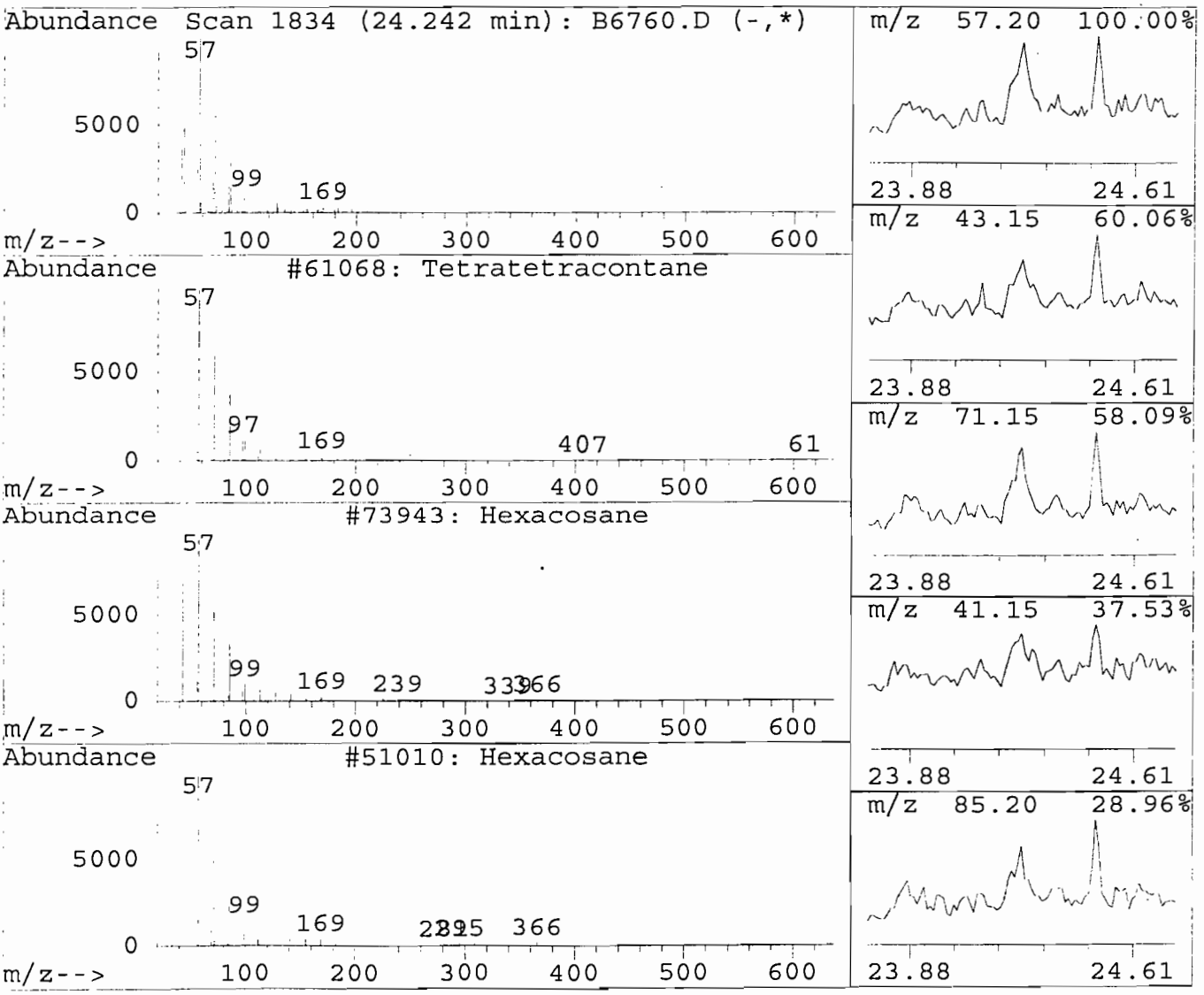
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.24	7.16 ng	623064	Phenanthrene-d10	21.33

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetratetracontane	61068	007098-22-8	90
2	Hexacosane	73943	000630-01-3	86
3	Hexacosane	51010	000630-01-3	86
4	Hexatriacontane	59136	000630-06-8	78
5	Dotriacontane	74492	000544-85-4	78



Library Search Compound Report

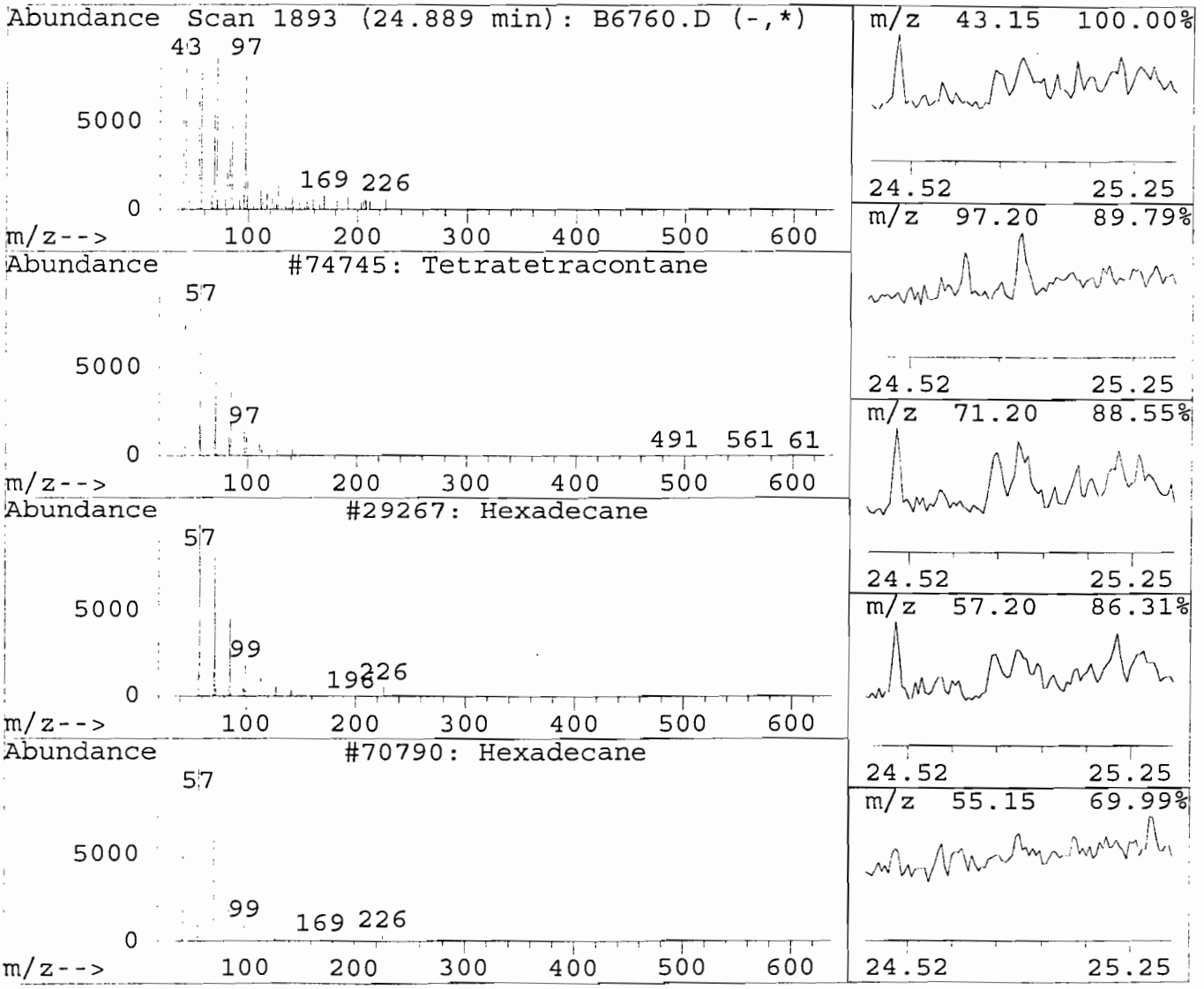
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.89	8.75 ng	435544	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetratetracontane	74745	007098-22-8	50
2	Hexadecane	29267	000544-76-3	49
3	Hexadecane	70790	000544-76-3	46
4	Tetradecane	69662	000629-59-4	46
5	Hexadecane	70788	000544-76-3	46



Library Search Compound Report

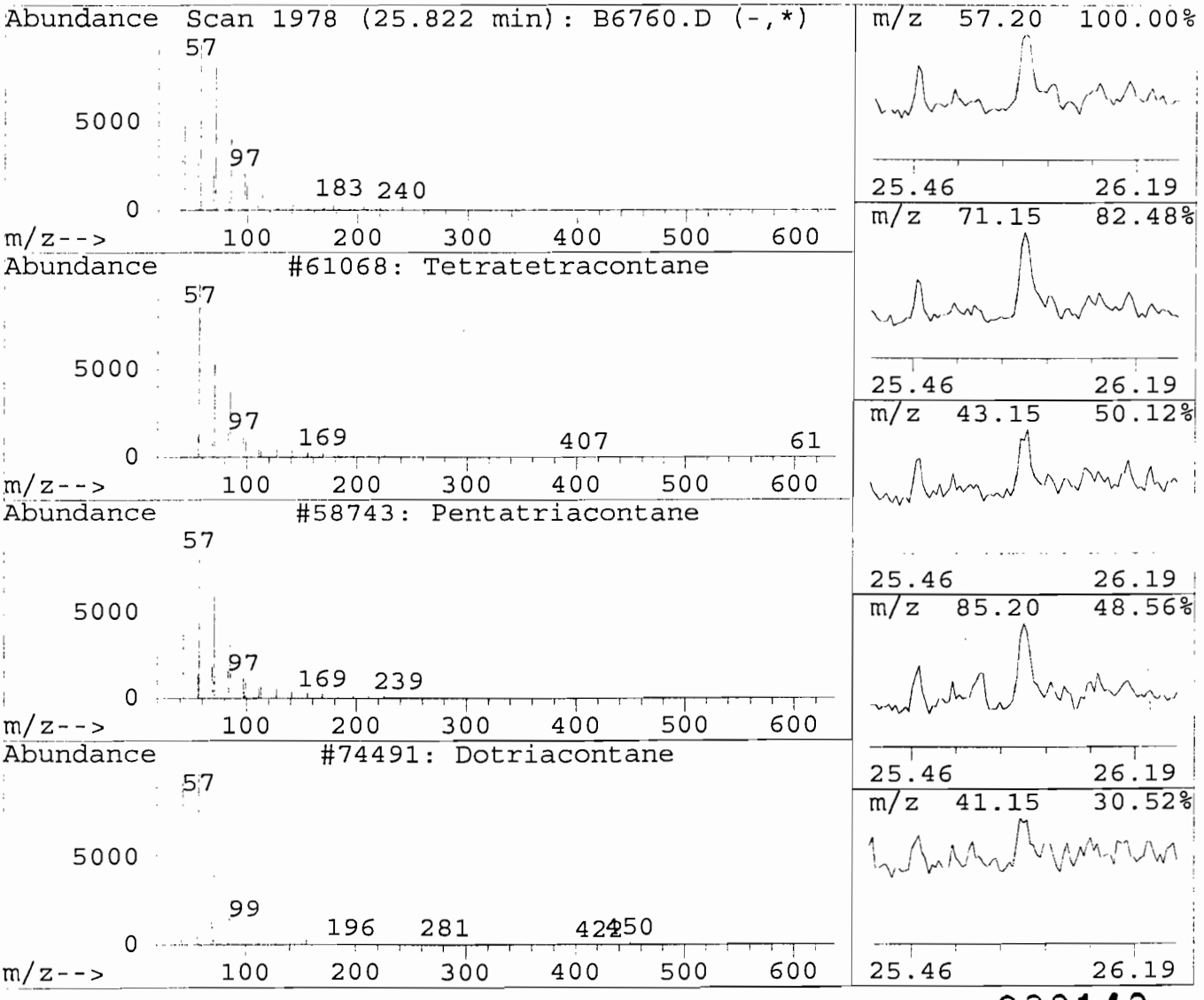
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.82	10.62 ng	528586	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetratetracontane	61068	007098-22-8	90
2	Pentatriacontane	58743	000630-07-9	87
3	Dotriacontane	74491	000544-85-4	86
4	Hexatriacontane	74635	000630-06-8	86
5	Heneicosane, 11-(1-ethylpropyl)-	51002	055282-11-6	86



000140

Library Search Compound Report

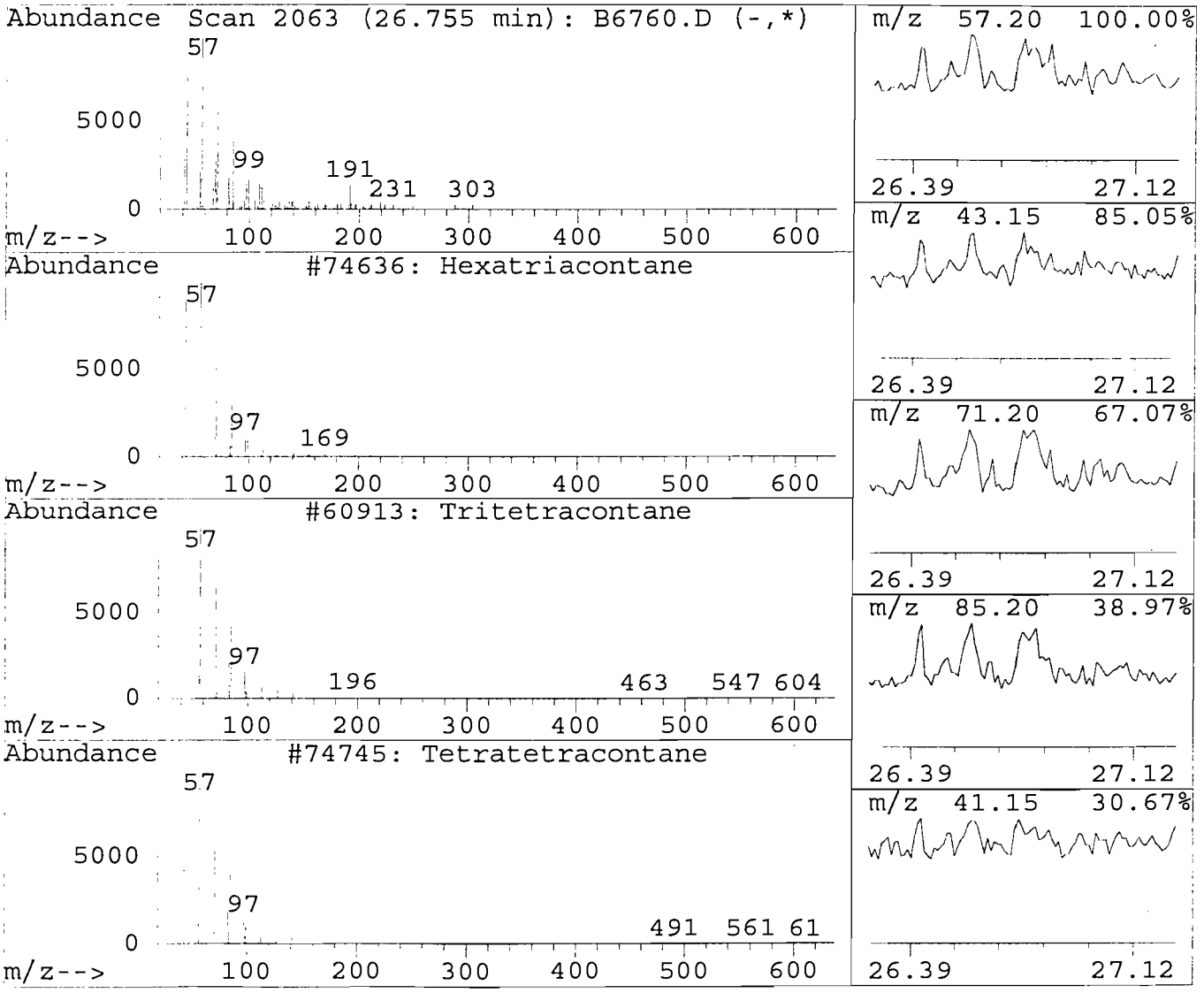
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
26.75	10.69 ng	532438	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexatriacontane	74636	000630-06-8	72
2	Tritetracontane	60913	007098-21-7	64
3	Tetratetracontane	74745	007098-22-8	64
4	Eicosane, 10-methyl-	42197	054833-23-7	59
5	Eicosane	72326	000112-95-8	58



Library Search Compound Report

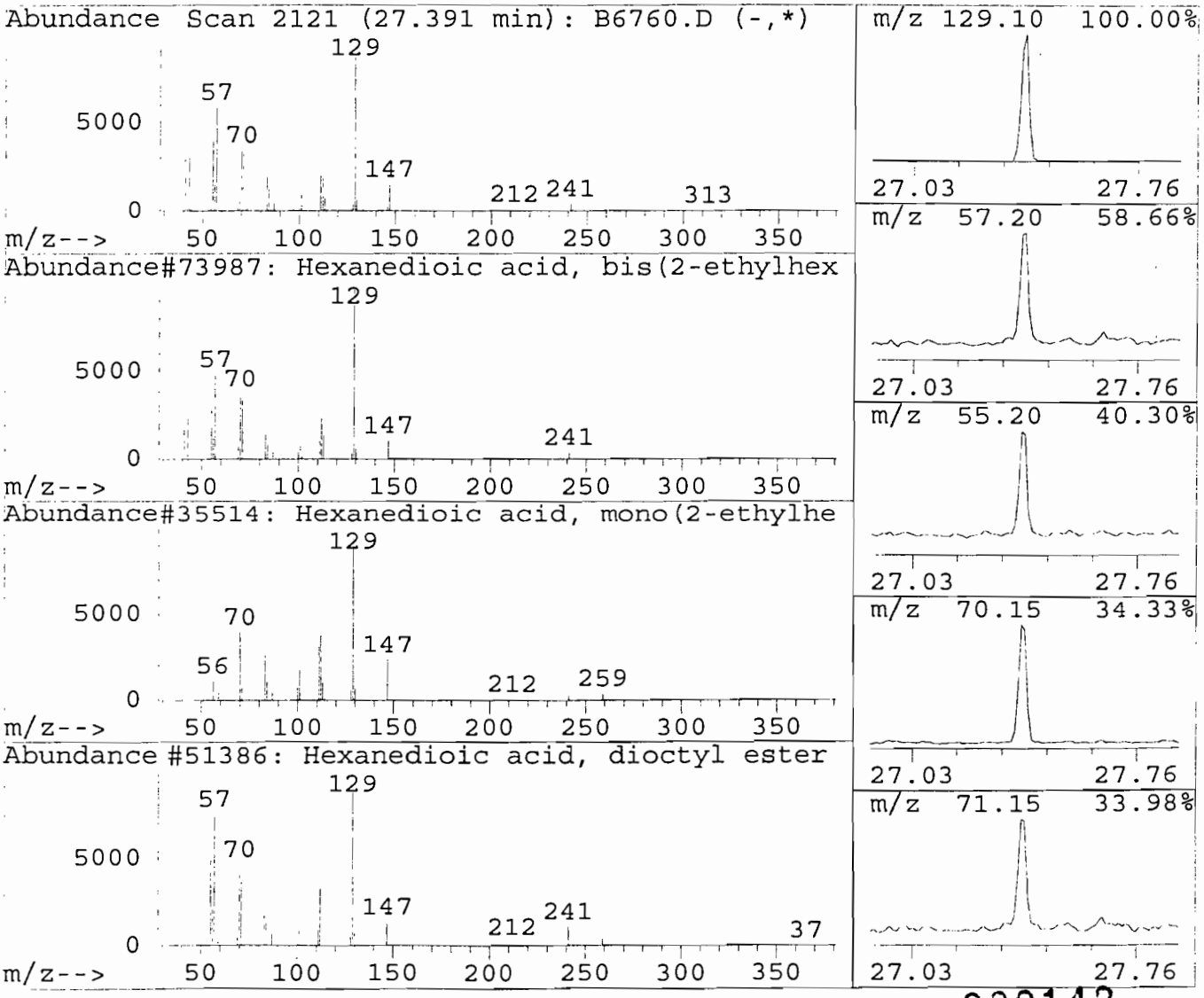
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.39	77.31 ng	3849529	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	87
2	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	59
3	Hexanedioic acid, dioctyl ester	51386	000123-79-5	52
4	Thiophene, 2-nitro-	5172	000609-40-5	47
5	Hexanedioic acid, bis(1,3-dimethylb	44807	055125-22-9	43



000142

Library Search Compound Report

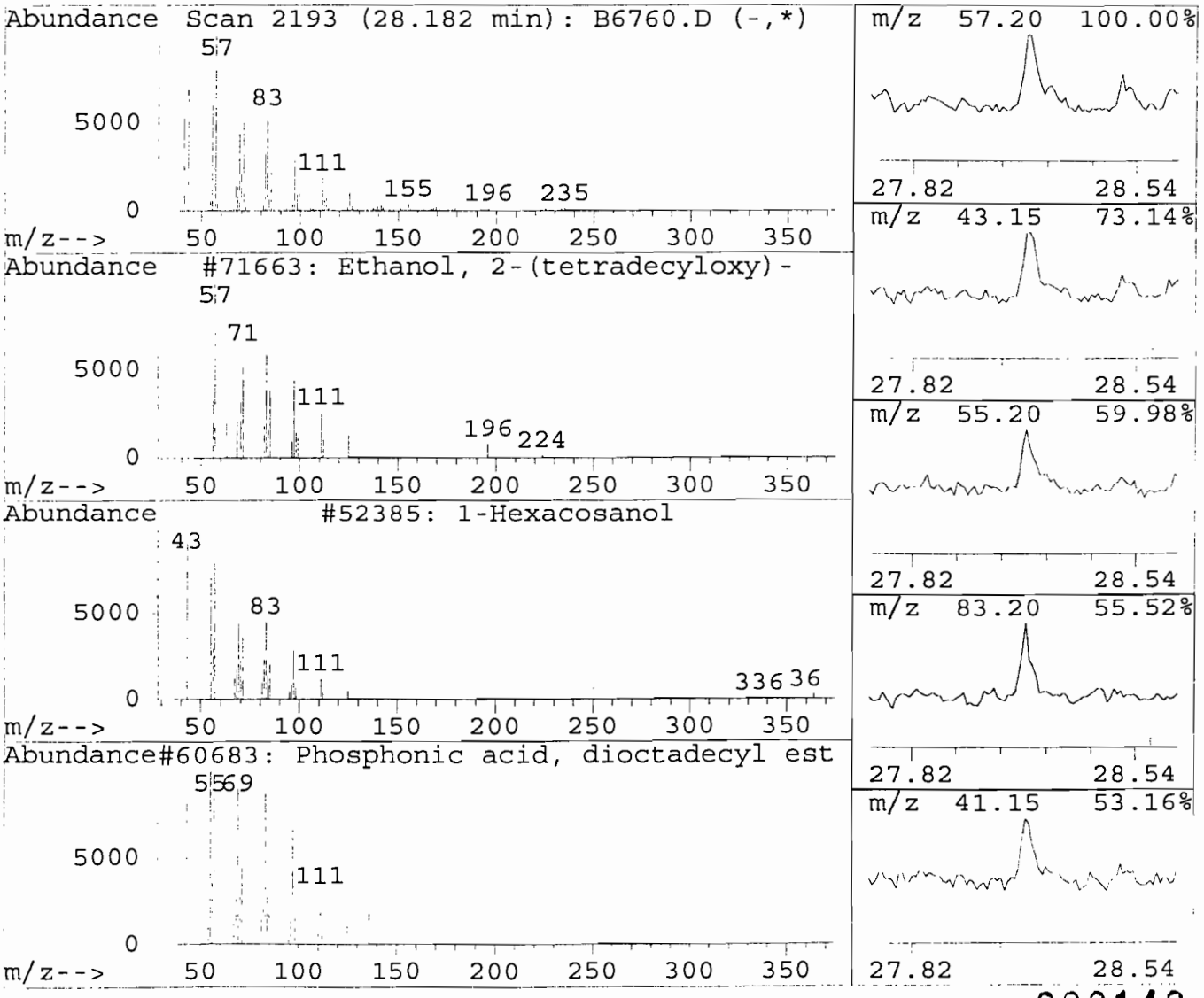
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.18	22.16 ng	1103628	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethanol, 2-(tetradecyloxy)-	71663	002136-70-1	83
2	1-Hexacosanol	52385	000506-52-5	80
3	Phosphonic acid, dioctadecyl ester	60683	019047-85-9	64
4	Cyclohexadecane	28780	000295-65-8	58
5	Cyclopentane, (4-octyldodecyl)-	73683	005638-09-5	58



000143

Library Search Compound Report

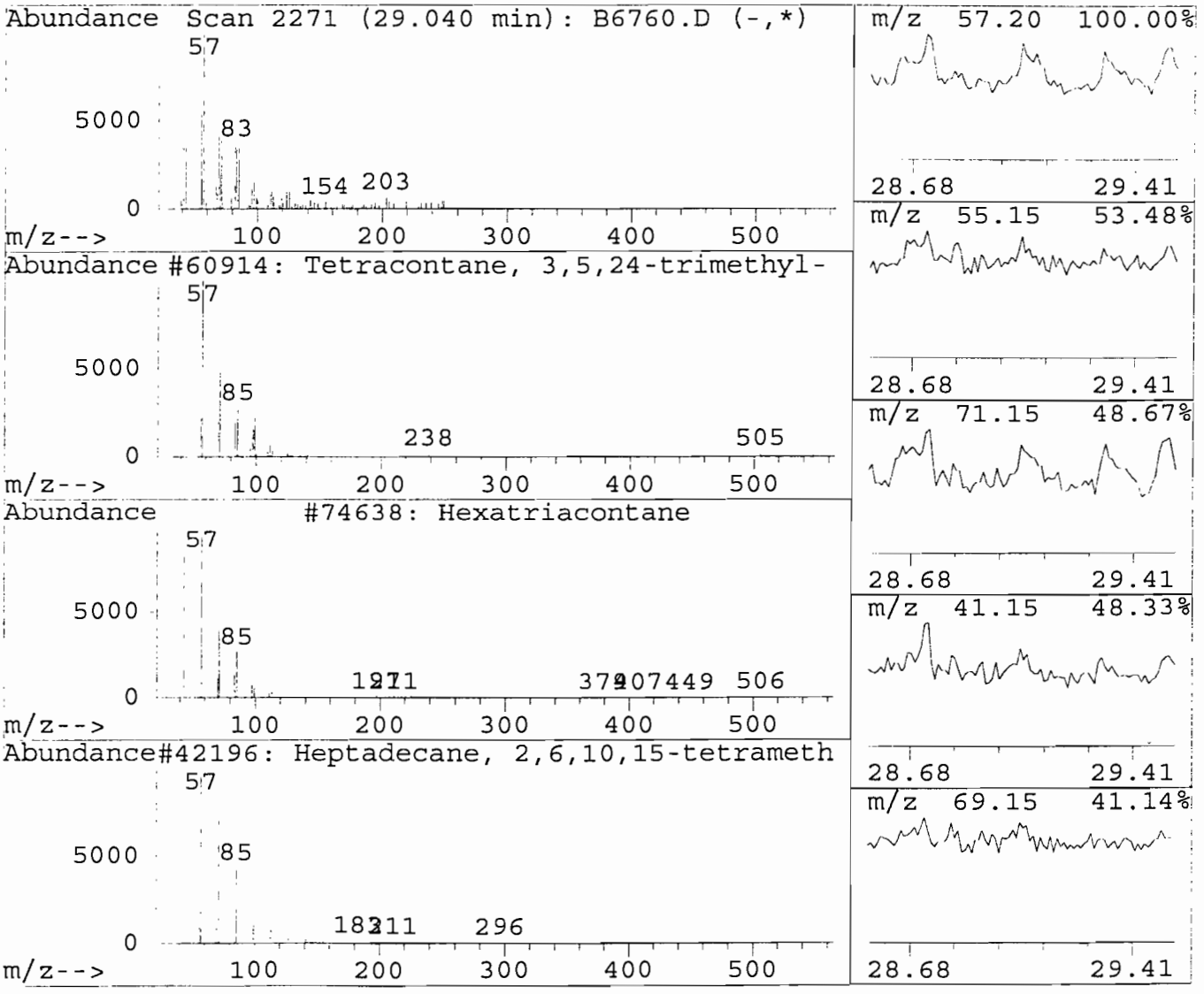
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
29.04	10.13 ng	504352	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetracontane, 3,5,24-trimethyl-	60914	055162-61-3	47
2	Hexatriacontane	74638	000630-06-8	43
3	Heptadecane, 2,6,10,15-tetramethyl-	42196	054833-48-6	43
4	Undecane, 3,8-dimethyl-	19009	017301-30-3	43
5	Dodecane	68250	000112-40-3	38



000144

Library Search Compound Report

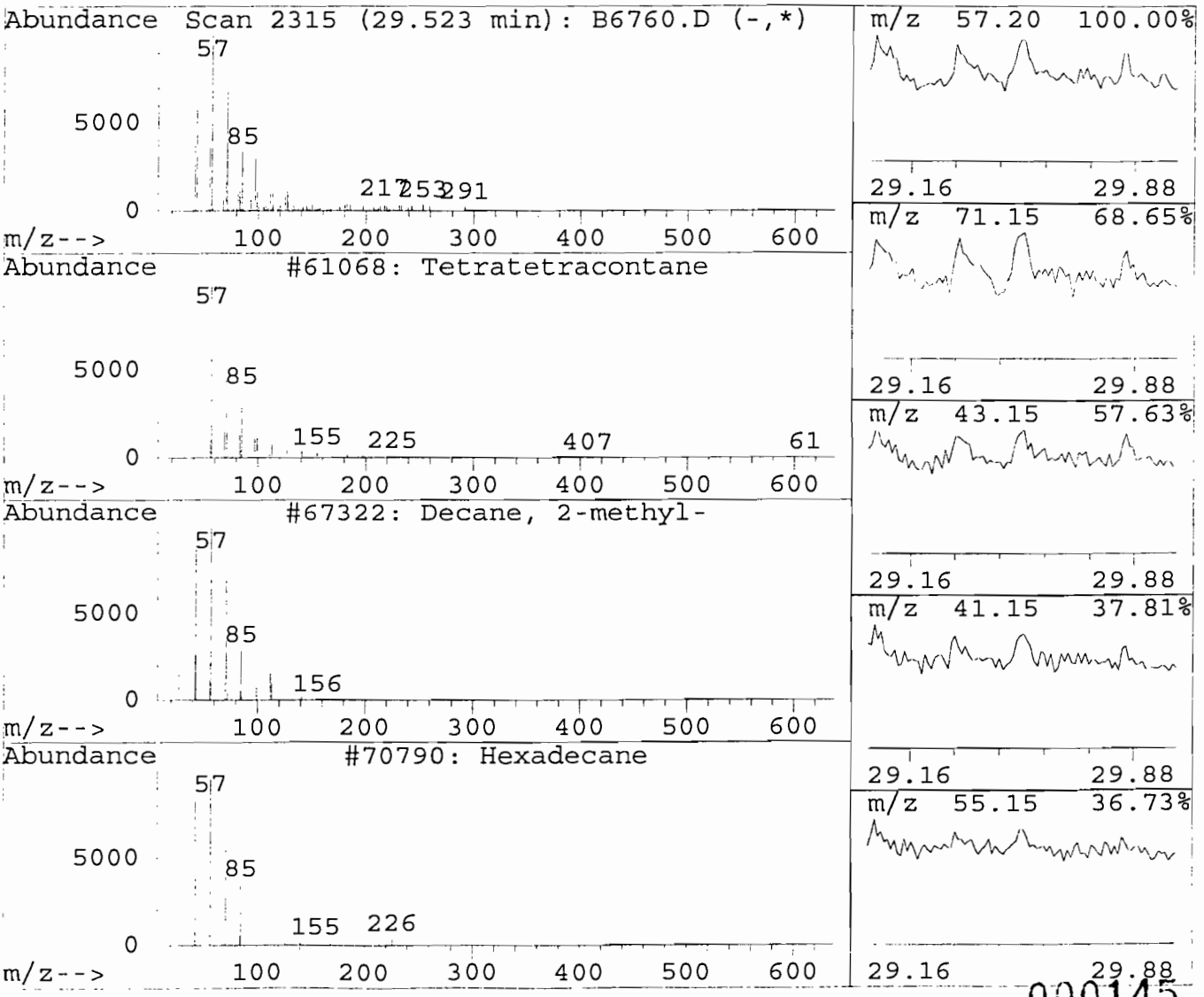
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
29.52	10.44 ng	519815	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetratetracontane	61068	007098-22-8	64
2	Decane, 2-methyl-	67322	006975-98-0	64
3	Hexadecane	70790	000544-76-3	53
4	Heptadecane	71193	000629-78-7	53
5	Hexatriacontane	59136	000630-06-8	53



000145

Library Search Compound Report

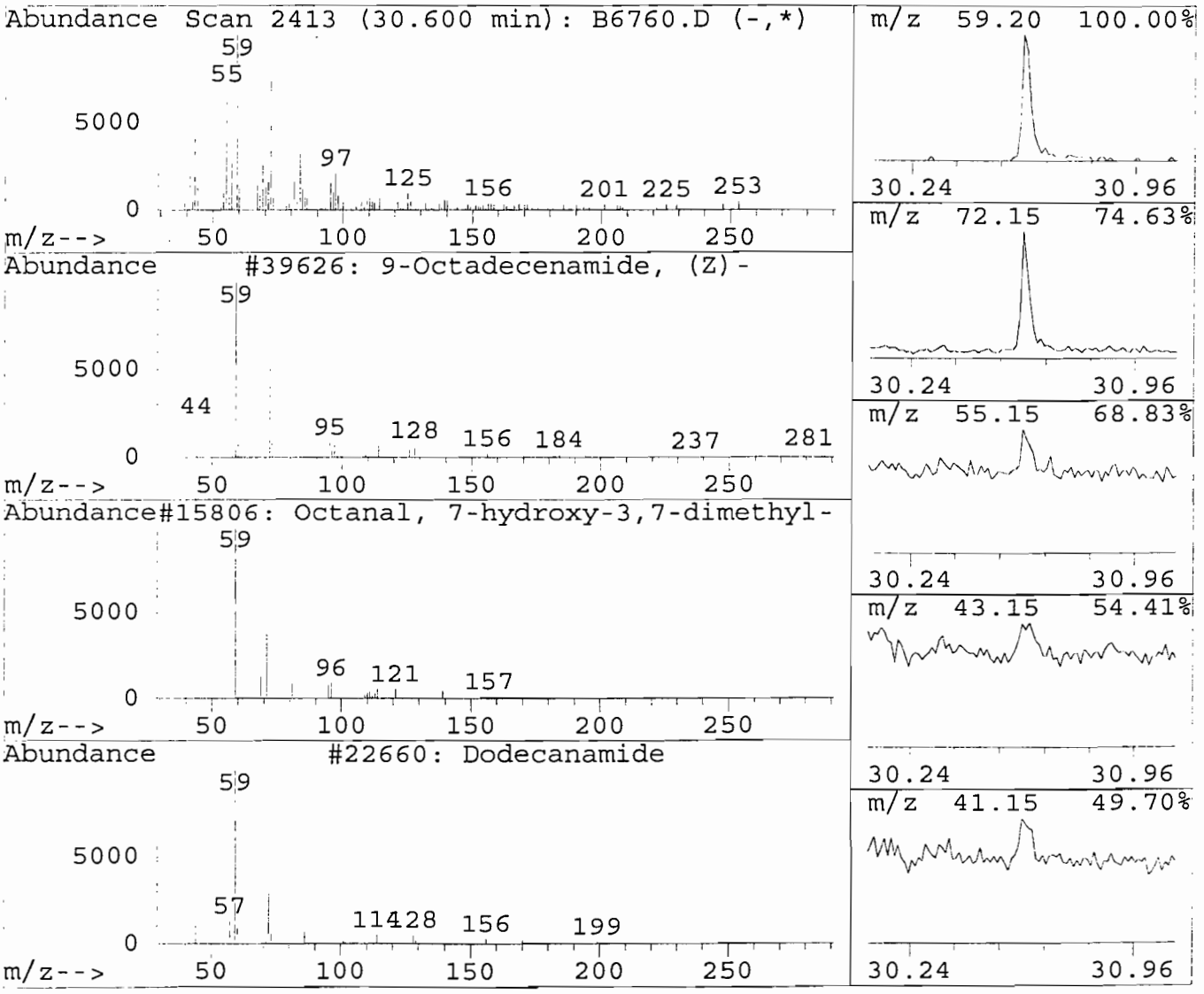
Data File : D:\HPCHEM\1\DATA\B11104\B6760.D
Acq Time : 4 Nov 99 7:32 pm
Sample : 13826ASP-87996-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.60	25.79 ng	512354	Perylene-d12	31.83

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	59
2	Octanal, 7-hydroxy-3,7-dimethyl-	15806	000107-75-5	27
3	Dodecanamide	22660	001120-16-7	27
4	Metoxuron	29490	019937-59-8	22
5	1,2-Ethanediamine, N,N-bis(1-methyl	8459	000121-05-1	22



000146

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-012-SS15RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87996RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6841.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	35	U
108-60-1	bis(2-chloroisopropyl)ether	35	U
95-50-1	1,2-Dichlorobenzene	35	U
541-73-1	1,3-Dichlorobenzene	35	U
106-46-7	1,4-Dichlorobenzene	35	U
621-64-7	n-Nitroso-di-n-propylamine	35	U
67-72-1	Hexachloroethane	35	U
98-95-3	Nitrobenzene	35	U
78-59-1	Isophorone	35	U
111-91-1	bis(2-Chloroethoxy)methane	35	U
120-82-1	1,2,4-Trichlorobenzene	35	U
91-20-3	Naphthalene	35	U
106-47-8	4-Chloroaniline	70	U
87-68-3	Hexachlorobutadiene	35	U
91-57-6	2-Methylnaphthalene	59	U
77-47-4	Hexachlorocyclopentadiene	35	U
91-58-7	2-Chloronaphthalene	35	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	35	U
208-96-8	Acenaphthylene	35	U
606-20-2	2,6-Dinitrotoluene	35	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	35	U
132-64-9	Dibenzofuran	55	U
121-14-2	2,4-Dinitrotoluene	35	U
84-66-2	Diethylphthalate	35	U
7005-72-3	4-Chlorophenyl-phenylether	35	U
86-73-7	Fluorene	35	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	35	U
122-66-7	1,2-Diphenylhydrazine	35	U
101-55-3	4-Bromophenyl-phenylether	35	U
118-74-1	Hexachlorobenzene	35	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-012-SS15RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87996RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6841.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	35	U
120-12-7	Anthracene	35	U
86-74-8	Carbazole	51	U
84-74-2	Di-n-butylphthalate	35	U
206-44-0	Fluoranthene	48	
129-00-0	Pyrene	99	
85-68-7	Butylbenzylphthalate	35	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	35	U
218-01-9	Chrysene	35	U
117-81-7	bis(2-Ethylhexyl)phthalate	73	
117-84-0	Di-n-octylphthalate	35	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	35	U
193-39-5	Indeno(1,2,3-cd)pyrene	35	U
53-70-3	Dibenz[a,h]anthracene	52	U
191-24-2	Benzo[g,h,i]perylene	35	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-012-SS15RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87996RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6841.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 5 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 10 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 79-34-5	Ethane, 1,1,2,2-tetrachloro-	7.70	120	J
2. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.46	240	J
3. 1921-70-6	Pentadecane, 2,6,10,14-tetra	20.04	86	J
4. 646-31-1	Tetracosane	23.38	74	J
5. 544-76-3	Hexadecane	24.17	100	J
6. 7098-22-8	Tetratetracontane	25.75	180	J
7. 103-23-1	Hexanedioic acid, bis(2-ethy	27.32	1600	J
8.	Unknown	28.12	390	J
9. 630-06-8	Hexatriacontane	28.96	150	J
10.	Unknown	30.54	570	J
11.				
12.				
13.				
14.				
15.				
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21.				
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25.				
26.				
27.				
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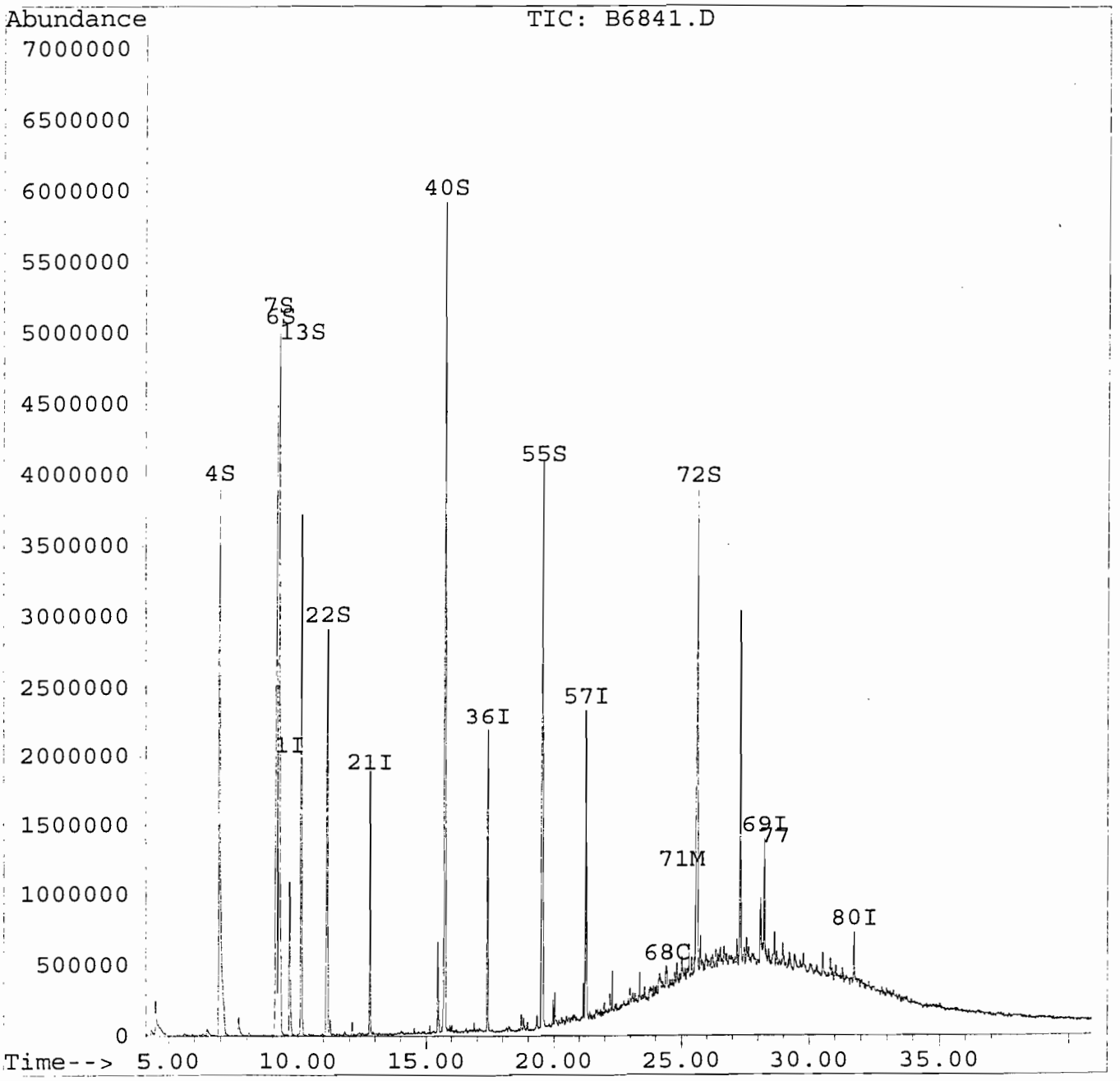
29.				
30.				

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :
Quant Time: Nov 10 7:56 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration



000150

Quantitation Report

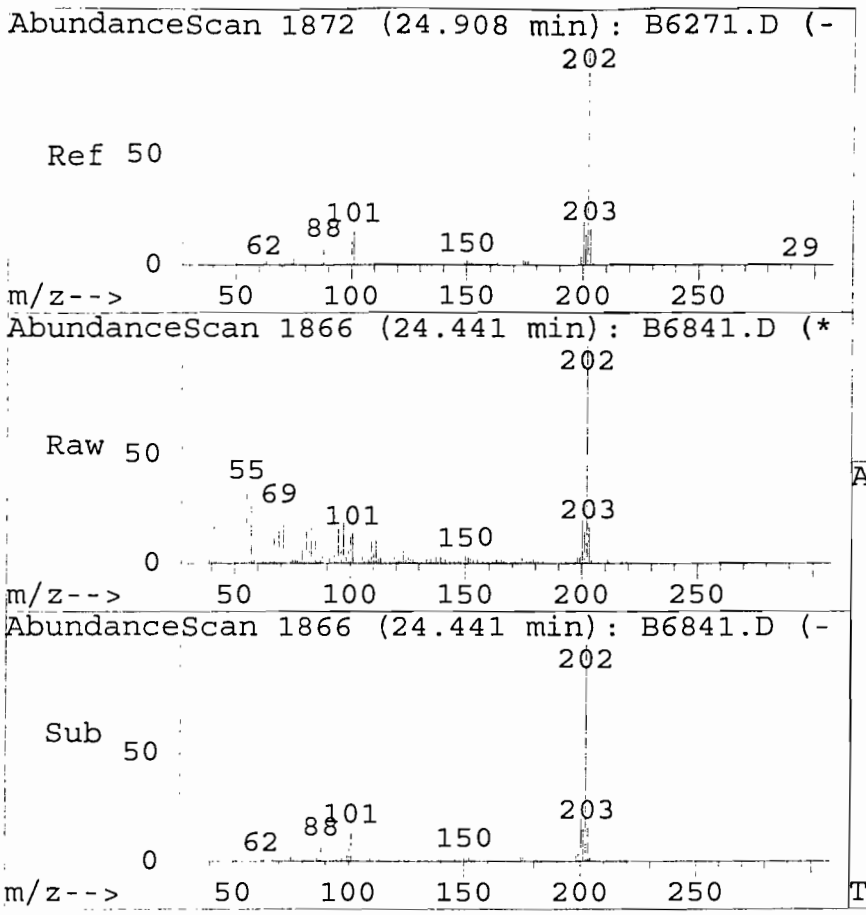
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :
Quant Time: Nov 10 7:56 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.68	152	522236	40.00	ng	-0.05
21) Naphthalene-d8	12.83	136	1796106	40.00	ng	-0.06
36) Acenaphthene-d10	17.42	164	969792	40.00	ng	-0.06
57) Phenanthrene-d10	21.26	188	1691861	40.00	ng	-0.06
69) Chrysene-d12	28.27	240	707014	40.00	ng	-0.07
80) Perylene-d12	31.76	264	272292	40.00	ng	-0.07
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.97	112	4128612	199.30	ng	
6) 2-Chlorophenol-d4	9.28	132	4518305	232.38	ng	
7) Phenol-d5	9.19	99	5398069	220.44	ng	
13) 1,2-Dichlorobenzene-d4	10.14	152	1489565	117.44	ng	
22) Nitrobenzene-d5	11.16	82	2841033	115.47	ng	
40) 2-Fluorobiphenyl	15.75	172	4402801	123.53	ng	
55) 2,4,6-Tribromophenol	19.58	330	1749629	220.31	ng	
72) Terphenyl-d14	25.64	244	4392536	214.99	ng	
Target Compounds						Qvalue
68) Fluoranthene	24.44	202	129403	2.73	ng	99
71) Pyrene	25.01	202	125473	5.65	ng	96
77) bis(2-Ethylhexyl)phthalate	28.65	149	87667	4.14	ng	94

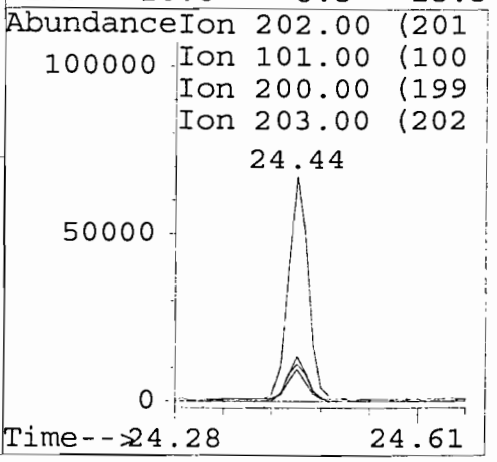
(#) = qualifier out of range (m) = manual integration

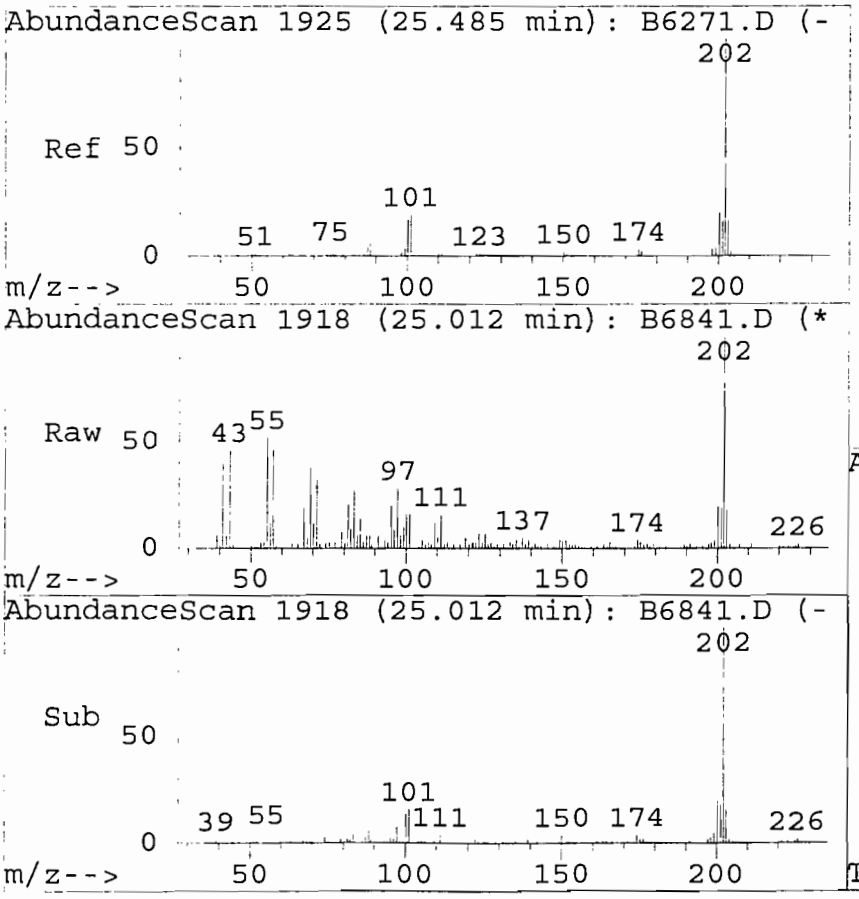


#68
Fluóranthene
Concen: 2.73 ng
RT: 24.44 min Scan# 1866
Delta R.T. -0.09 min
Lab File: B6841.D
Acq: 9 Nov 99 4:43 pm

Tgt Ion:202 Resp: 129403

Ion	Ratio	Lower	Upper
202	100		
101	14.4	7.4	22.2
200	20.0	9.9	29.7
203	16.6	8.5	25.5

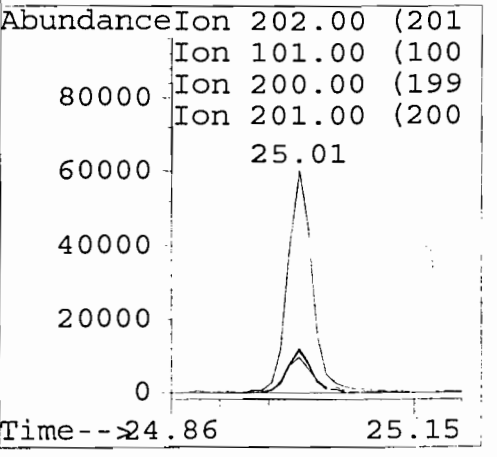




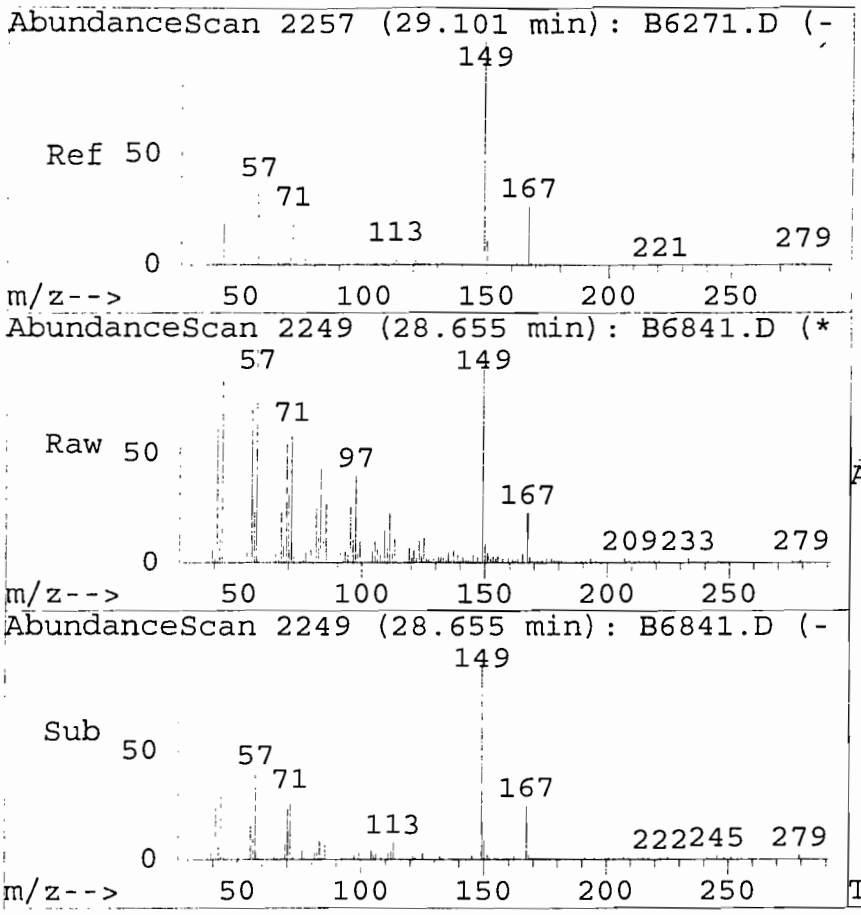
#71
Pyrene
Concen: 5.65 ng
RT: 25.01 min Scan# 1918
Delta R.T. -0.09 min
Lab File: B6841.D
Acq: 9 Nov 99 4:43 pm

Tgt Ion:202 Resp: 125473

Ion	Ratio	Lower	Upper
202	100		
101	16.0	9.2	27.7
200	20.1	10.5	31.6
201	18.9	8.5	25.5



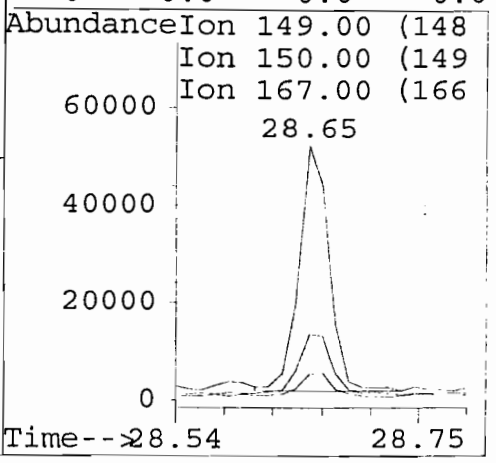
000152



#77
bis(2-Ethylhexyl)phthalate
Concen: 4.14 ng
RT: 28.65 min Scan# 2249
Delta R.T. -0.07 min
Lab File: B6841.D
Acq: 9 Nov 99 4:43 pm

Tgt Ion:149 Resp: 87667

Ion	Ratio	Lower	Upper
149	100		
150	10.1	5.6	16.8
167	25.7	14.7	44.1
0	0.0	0.0	0.0



000153

Library Search Compound Report

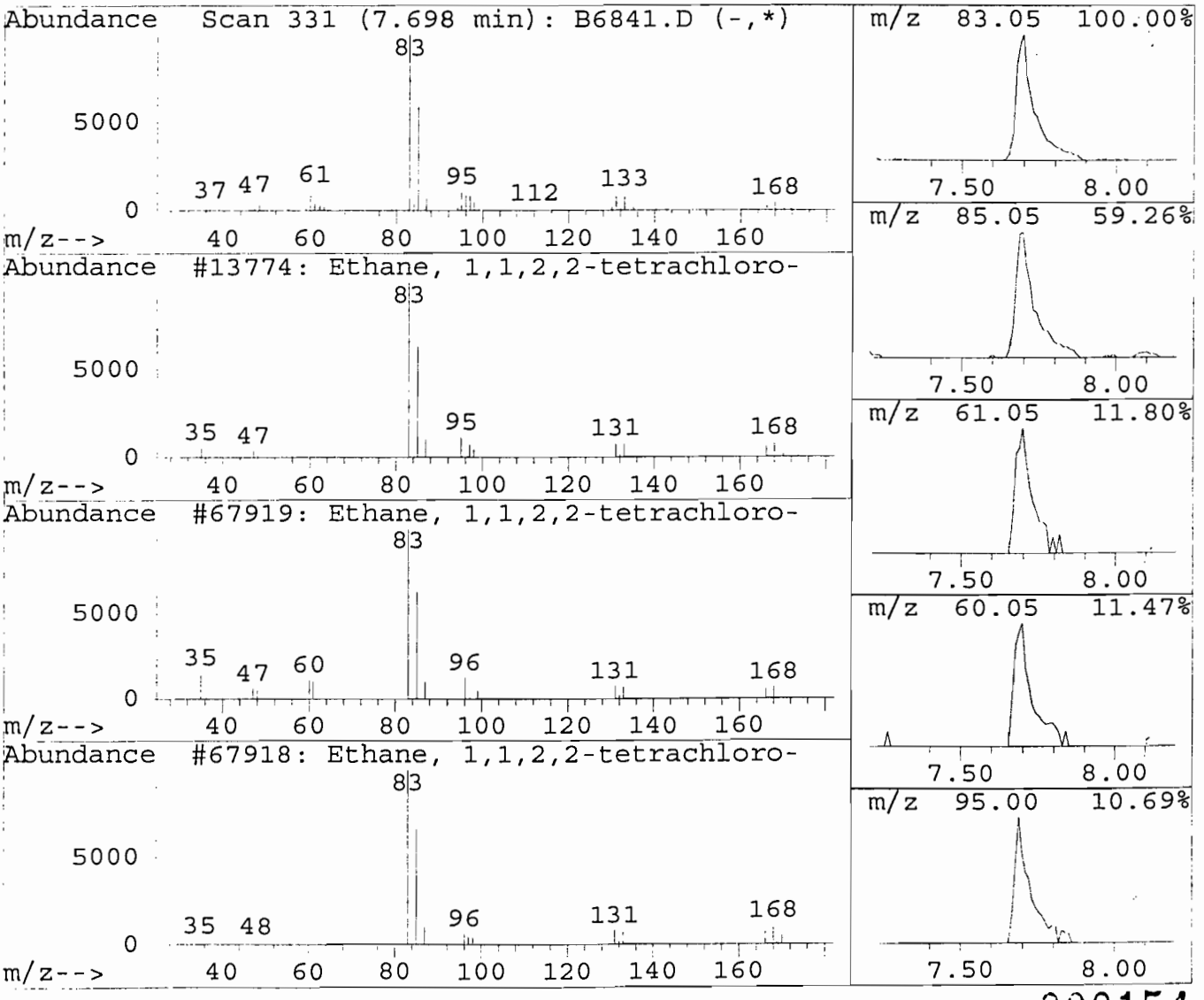
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
7.70	6.90 ng	586763	1,4-Dichlorobenzene-d4	9.68

Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1	Ethane, 1,1,2,2-tetrachloro-	13774	000079-34-5	83
2	Ethane, 1,1,2,2-tetrachloro-	67919	000079-34-5	70
3	Ethane, 1,1,2,2-tetrachloro-	67918	000079-34-5	68
4	Ethane, 1,1,2-trichloro-2-fluoro-	9542	000359-28-4	59
5	Ethane, 1,2,2-trichloro-1,1-difluor	14325	000354-21-2	59



000154

Library Search Compound Report

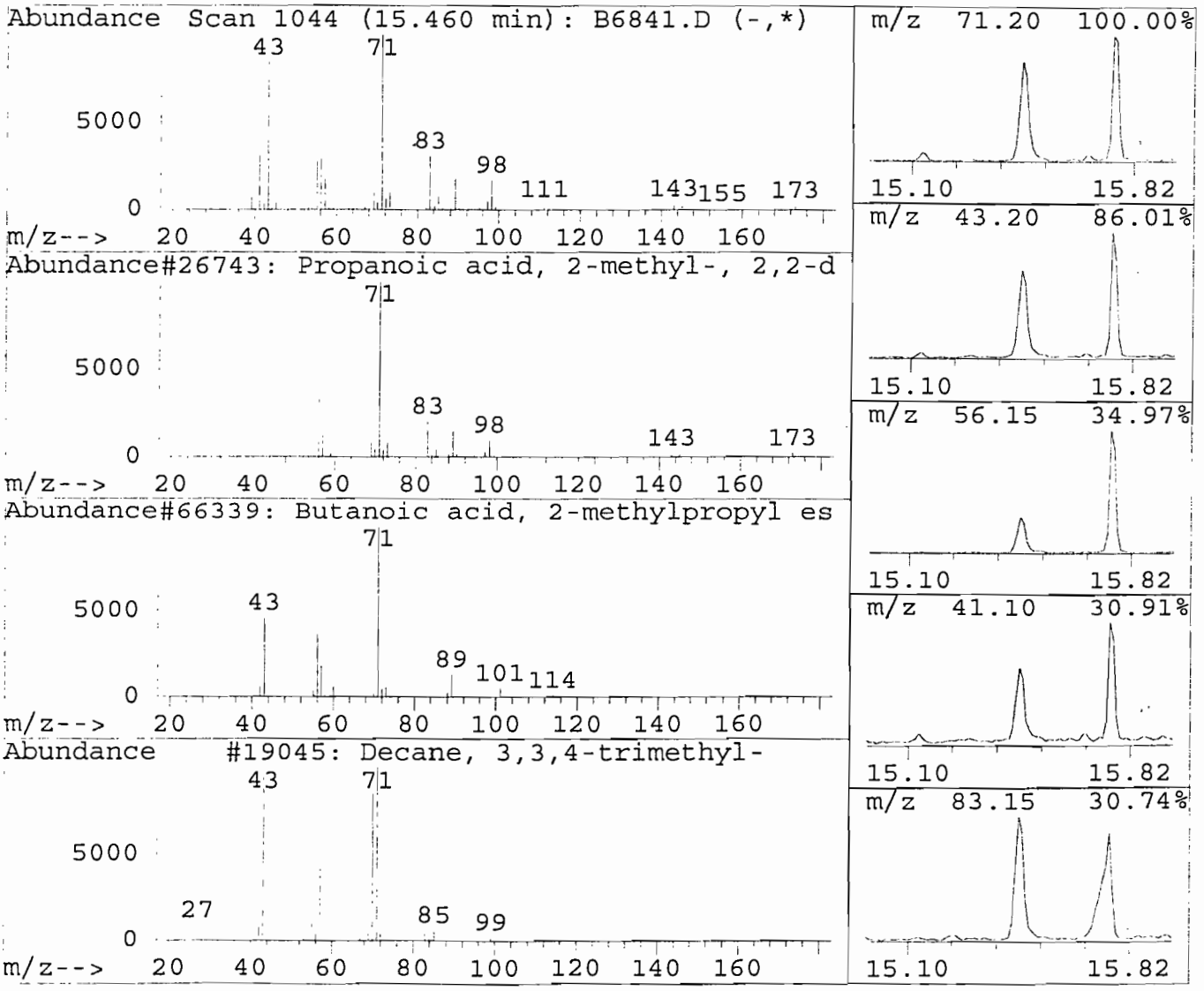
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.46	13.67 ng	1612521	Acenaphthene-d10	17.42

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	90
2	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	47
3	Decane, 3,3,4-trimethyl-	19045	049622-18-6	43
4	Propanoic acid, 2-methyl-, 2-methyl	66305	000097-85-8	42
5	Propanoic acid, 2-methyl-, 2-methyl	66303	000097-85-8	42



Library Search Compound Report

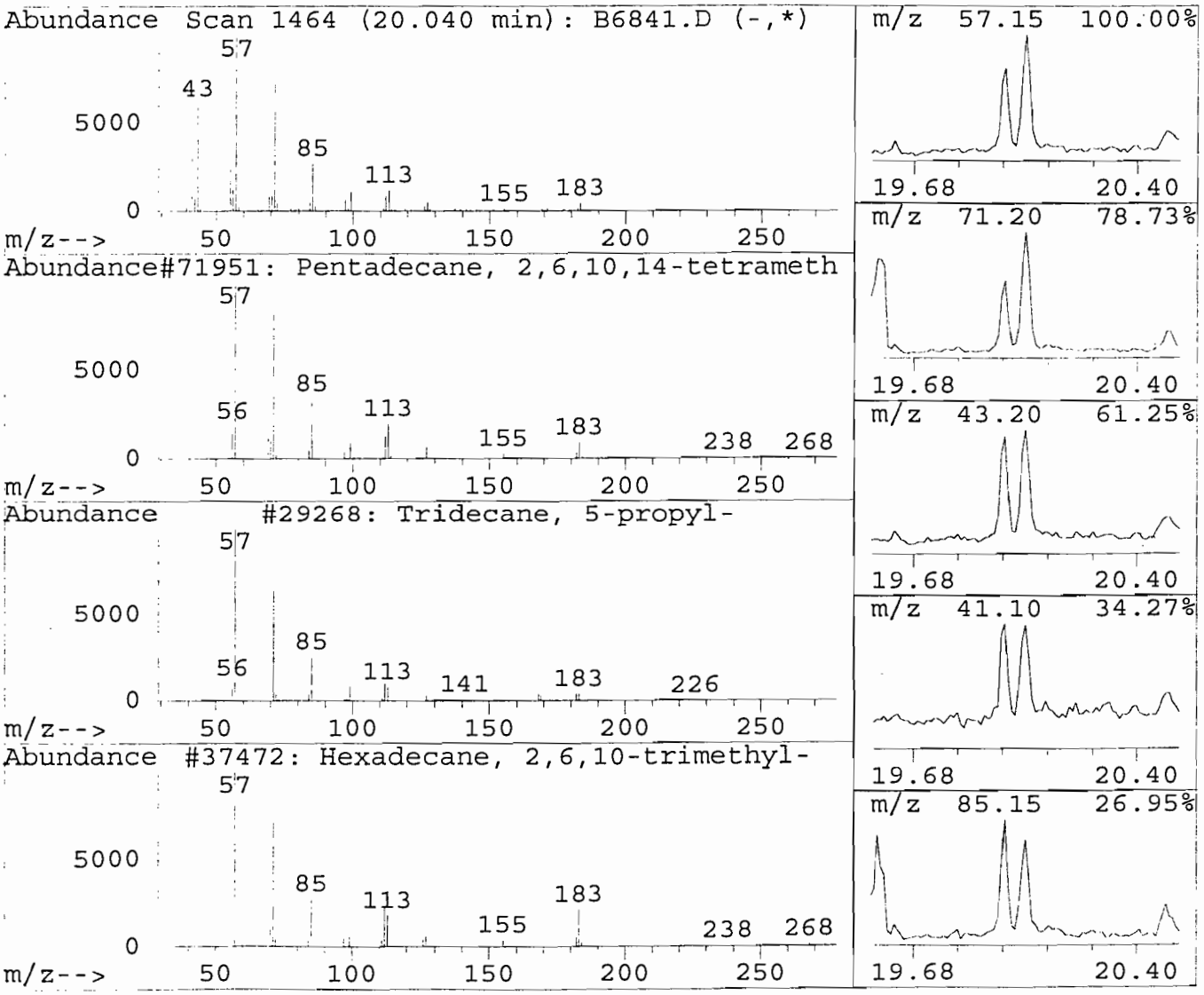
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.04	4.89 ng	651522	Phenanthrene-d10	21.26

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	71951	001921-70-6	91
2	Tridecane, 5-propyl-	29268	055045-11-9	90
3	Hexadecane, 2,6,10-trimethyl-	37472	055000-52-7	90
4	Dodecane, 4,6-dimethyl-	69666	061141-72-8	86
5	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	86



Library Search Compound Report

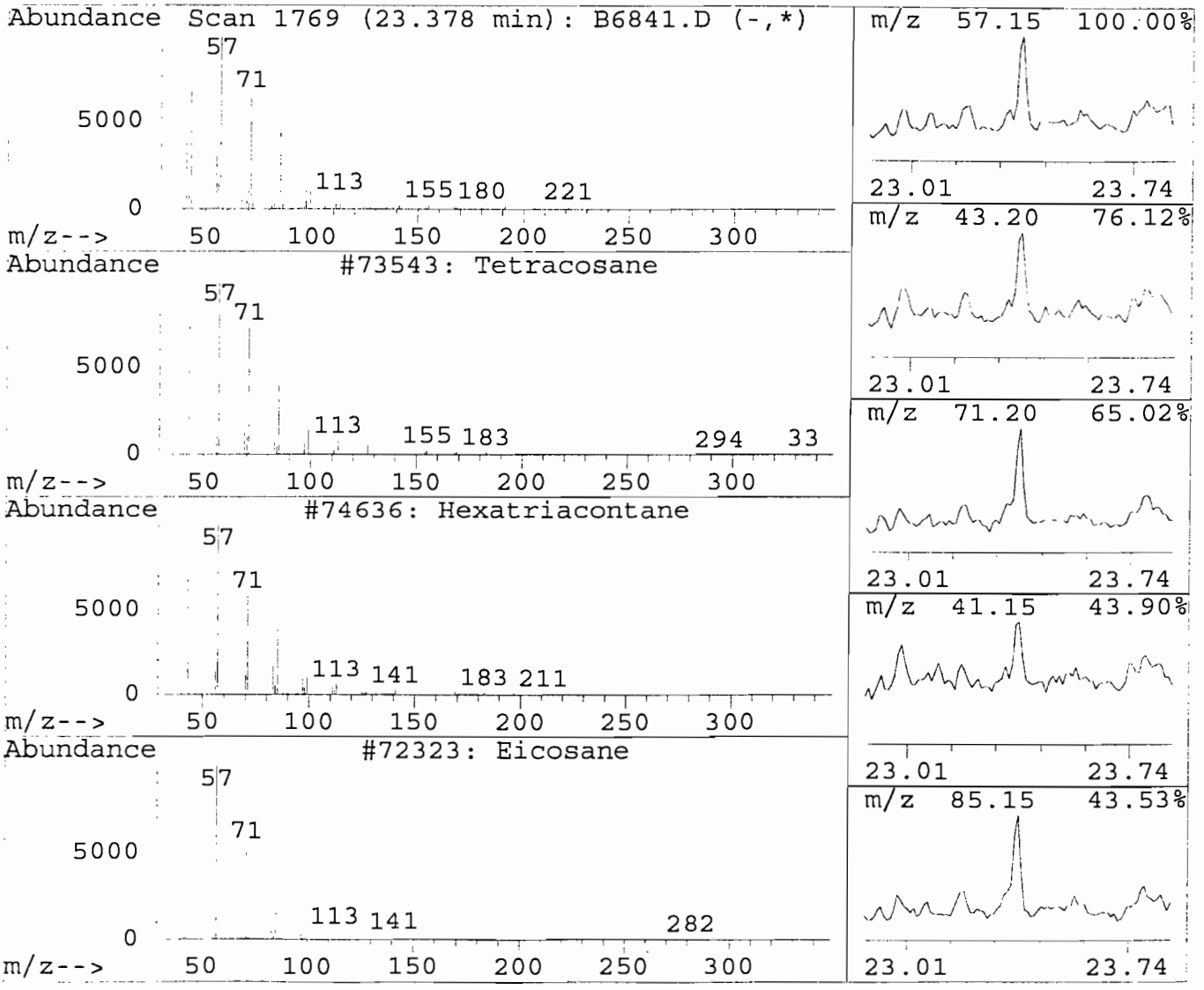
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.38	4.25 ng	566083	Phenanthrene-d10	21.26

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetracosane	73543	000646-31-1	91
2	Hexatriacontane	74636	000630-06-8	90
3	Eicosane	72323	000112-95-8	87
4	Eicosane, 10-methyl-	42197	054833-23-7	86
5	Pentadecane	70278	000629-62-9	86



000157

Library Search Compound Report

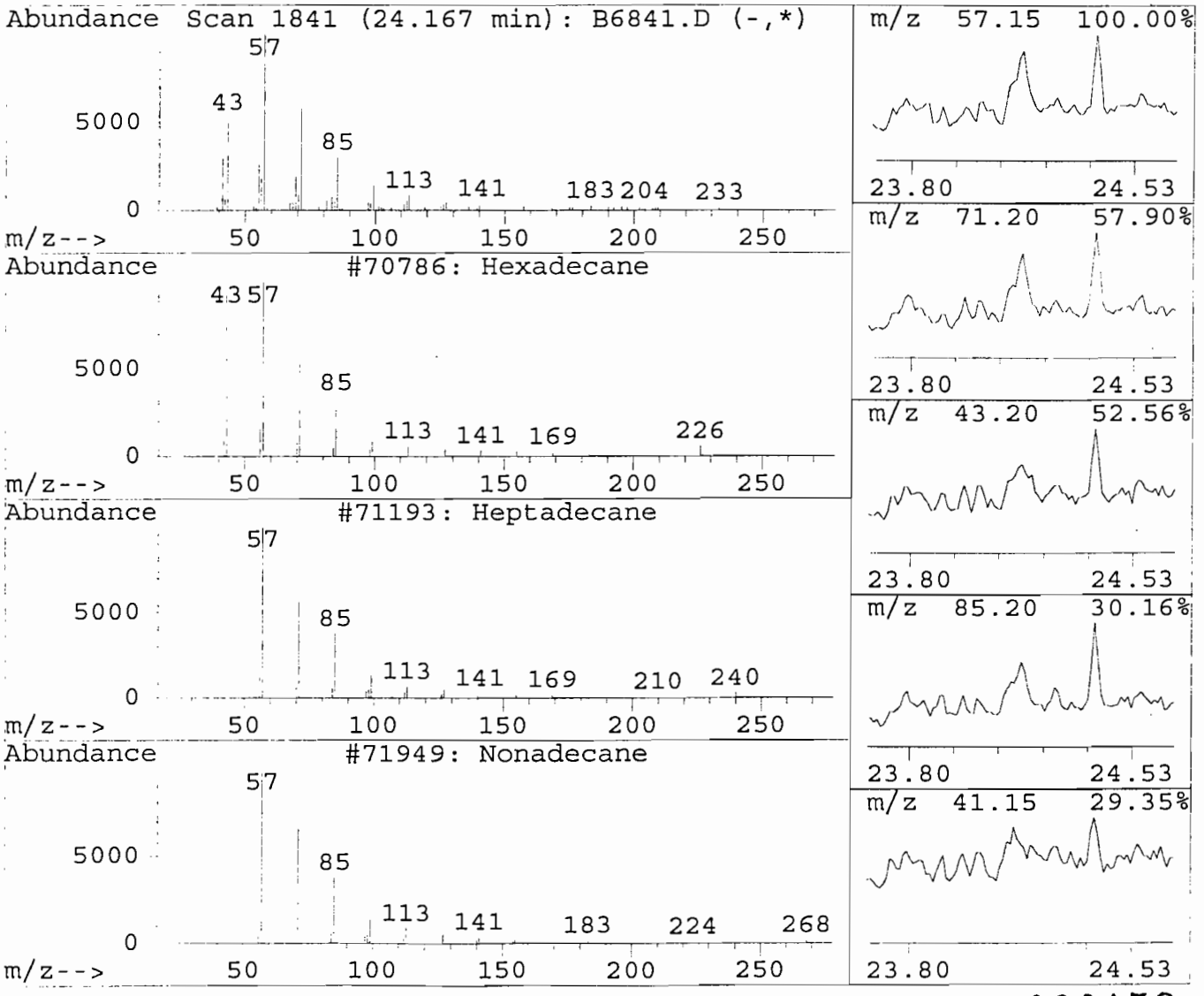
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.17	5.77 ng	769425	Phenanthrene-d10	21.26

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecane	70786	000544-76-3	90
2	Heptadecane	71193	000629-78-7	80
3	Nonadecane	71949	000629-92-5	74
4	Hexadecane	70788	000544-76-3	72
5	Hexadecane	29267	000544-76-3	64



000158

Library Search Compound Report

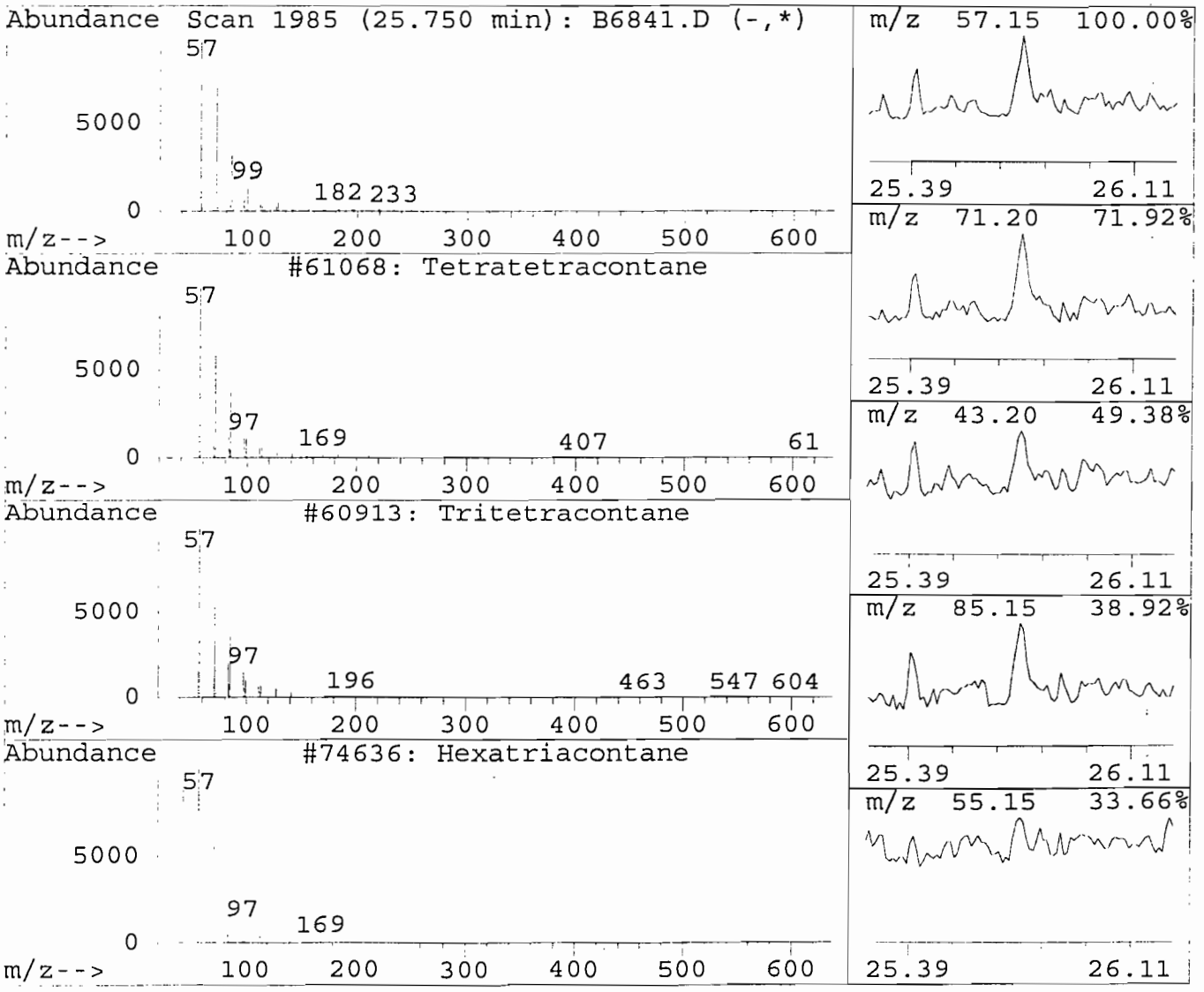
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.75	10.00 ng	633728	Chrysene-d12	28.27

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetratetracontane	61068	007098-22-8	87
2	Tritetracontane	60913	007098-21-7	86
3	Hexatriacontane	74636	000630-06-8	86
4	Heneicosane	42201	000629-94-7	86
5	Heptadecane, 2,6,10,15-tetramethyl-	42196	054833-48-6	83



Library Search Compound Report

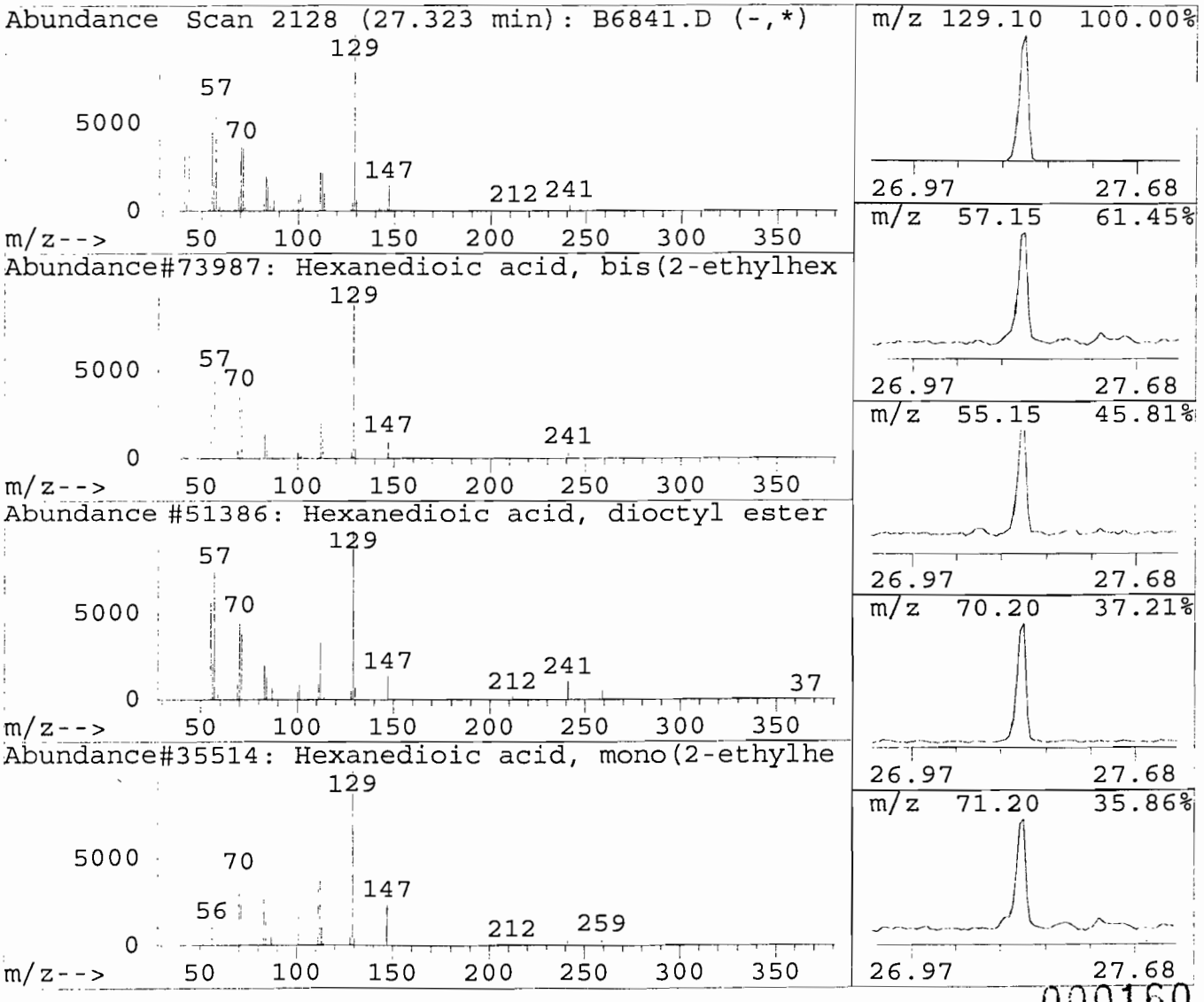
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.32	88.64 ng	5616503	Chrysene-d12	28.27

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	83
2	Hexanedioic acid, dioctyl ester	51386	000123-79-5	58
3	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	58
4	2,2'-Bi-1,3-dioxolane, 4,4,4',4',5,	35498	035528-76-8	43
5	Hexanedioic acid, dihexyl ester	44802	000110-33-8	32



000160

Library Search Compound Report

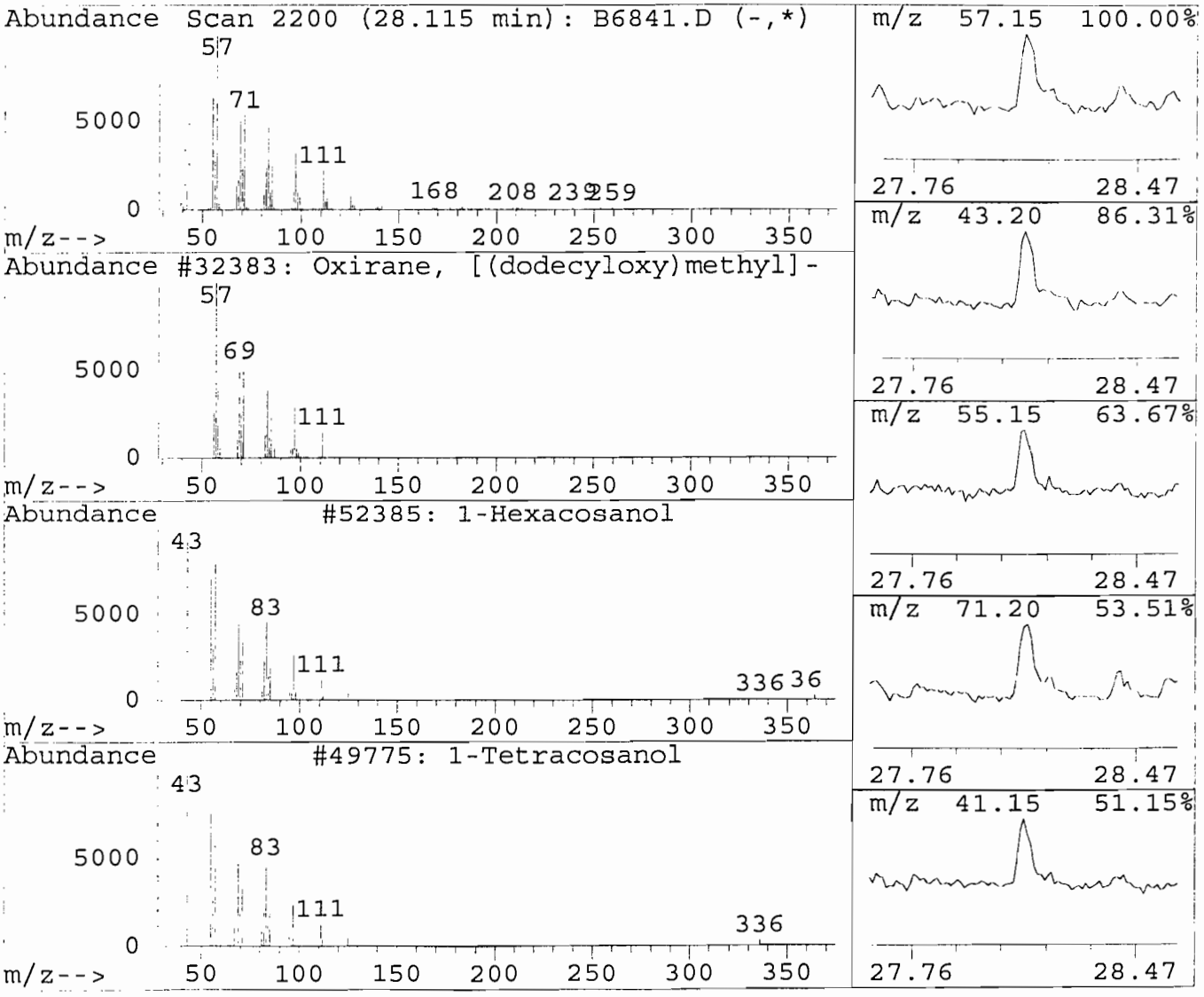
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.12	22.31 ng	1413880	Chrysene-d12	28.27

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Oxirane, [(dodecyloxy)methyl]-	32383	002461-18-9	86
2	1-Hexacosanol	52385	000506-52-5	81
3	1-Tetracosanol	49775	000506-51-4	81
4	1-Nonadecanol	40236	001454-84-8	74
5	4-Tetradecanol	26420	001653-33-4	74



000161

Library Search Compound Report

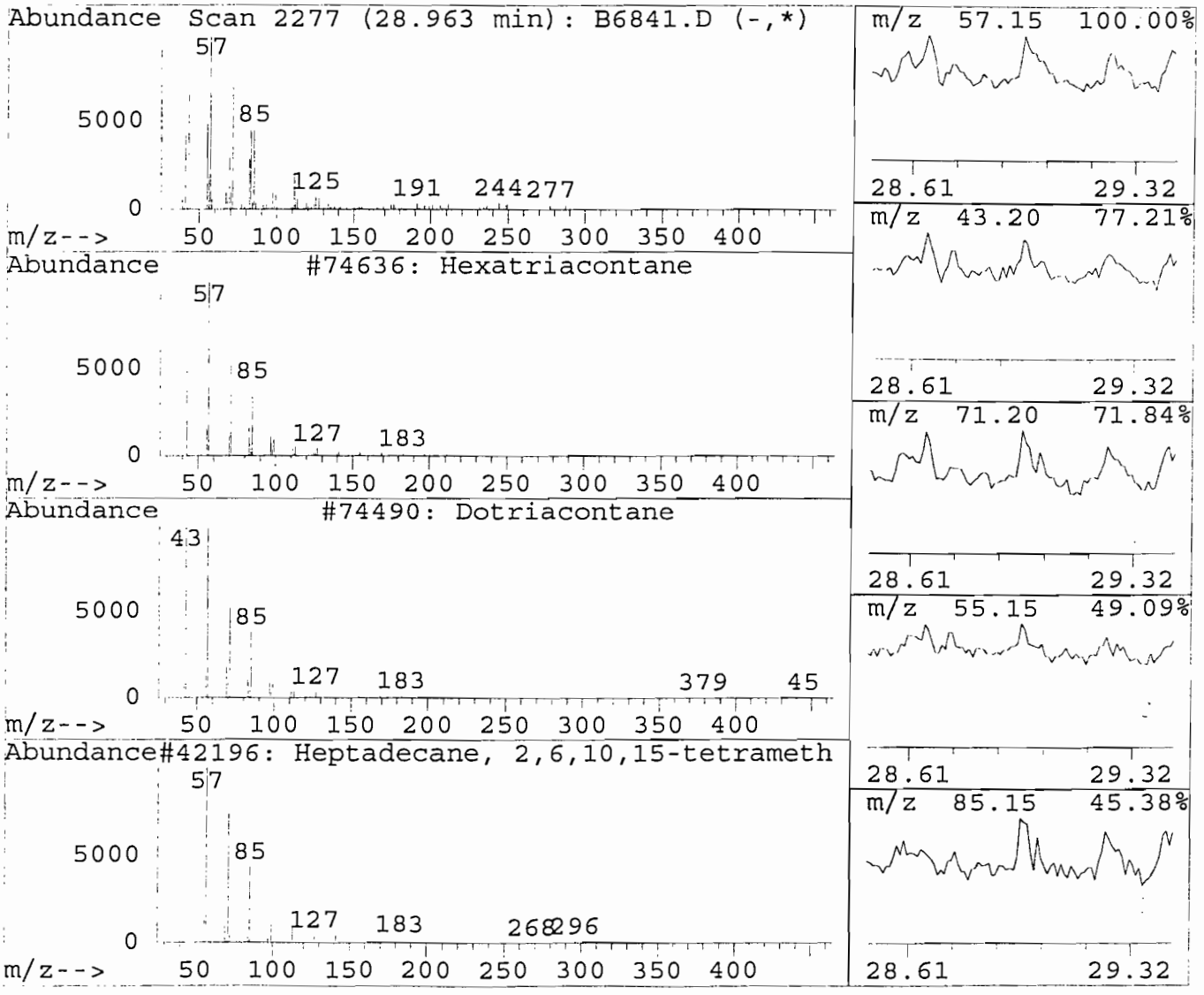
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.96	8.66 ng	548706	Chrysene-d12	28.27

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexatriacontane	74636	000630-06-8	49
2	Dotriacontane	74490	000544-85-4	47
3	Heptadecane, 2,6,10,15-tetramethyl-	42196	054833-48-6	43
4	Docosane	72997	000629-97-0	43
5	Heptadecane	71191	000629-78-7	43



Library Search Compound Report

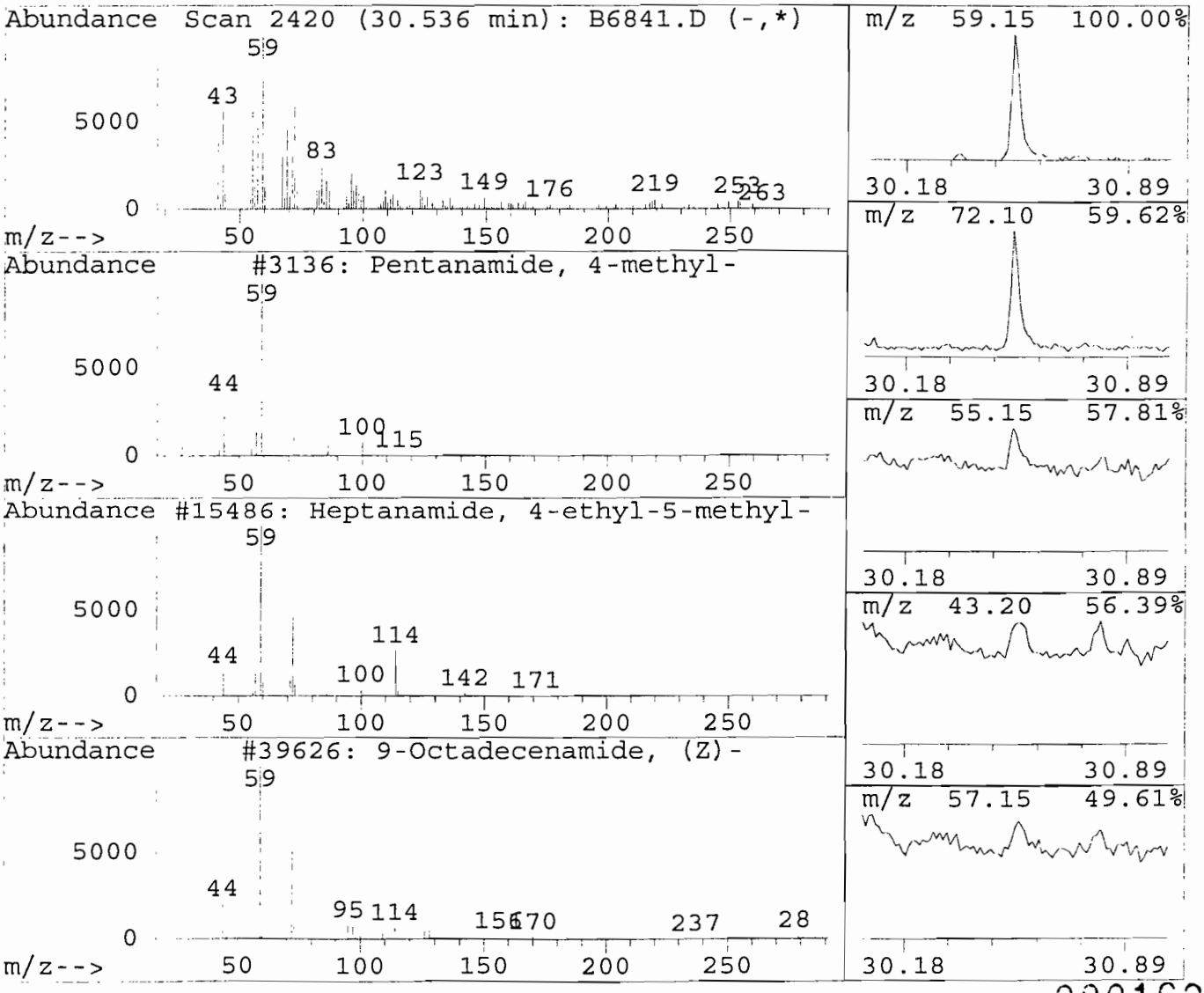
Data File : D:\HPCHEM\1\DATA\B11109\B6841.D
Acq Time : 9 Nov 99 4:43 pm
Sample : 13826ASP-87996-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.54	32.64 ng	626590	Perylene-d12	31.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentanamide, 4-methyl-	3136	001119-29-5	50
2	Heptanamide, 4-ethyl-5-methyl-	15486	054789-40-1	47
3	9-Octadecenamide, (Z)-	39626	000301-02-0	45
4	Pentanamide	1620	000626-97-1	43
5	3-Cyclohexene-1-methanol, .alpha.,.	67179	000098-55-5	38



000163

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87997

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6757.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	34	U
621-64-7	n-Nitroso-di-n-propylamine	34	U
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	34	U
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	68	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	1600	
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	34	U
132-64-9	Dibenzofuran	54	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	34	U
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	310	
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87997

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6757.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	370	
120-12-7	Anthracene	34	U
86-74-8	Carbazole	50	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	97	
129-00-0	Pyrene	120	
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	40	
218-01-9	Chrysene	49	
117-81-7	bis(2-Ethylhexyl)phthalate	110	
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	57	J
207-08-9	Benzo[k]fluoranthene	52	J
50-32-8	Benzo[a]pyrene	52	
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-009-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87997

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6757.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/Kg

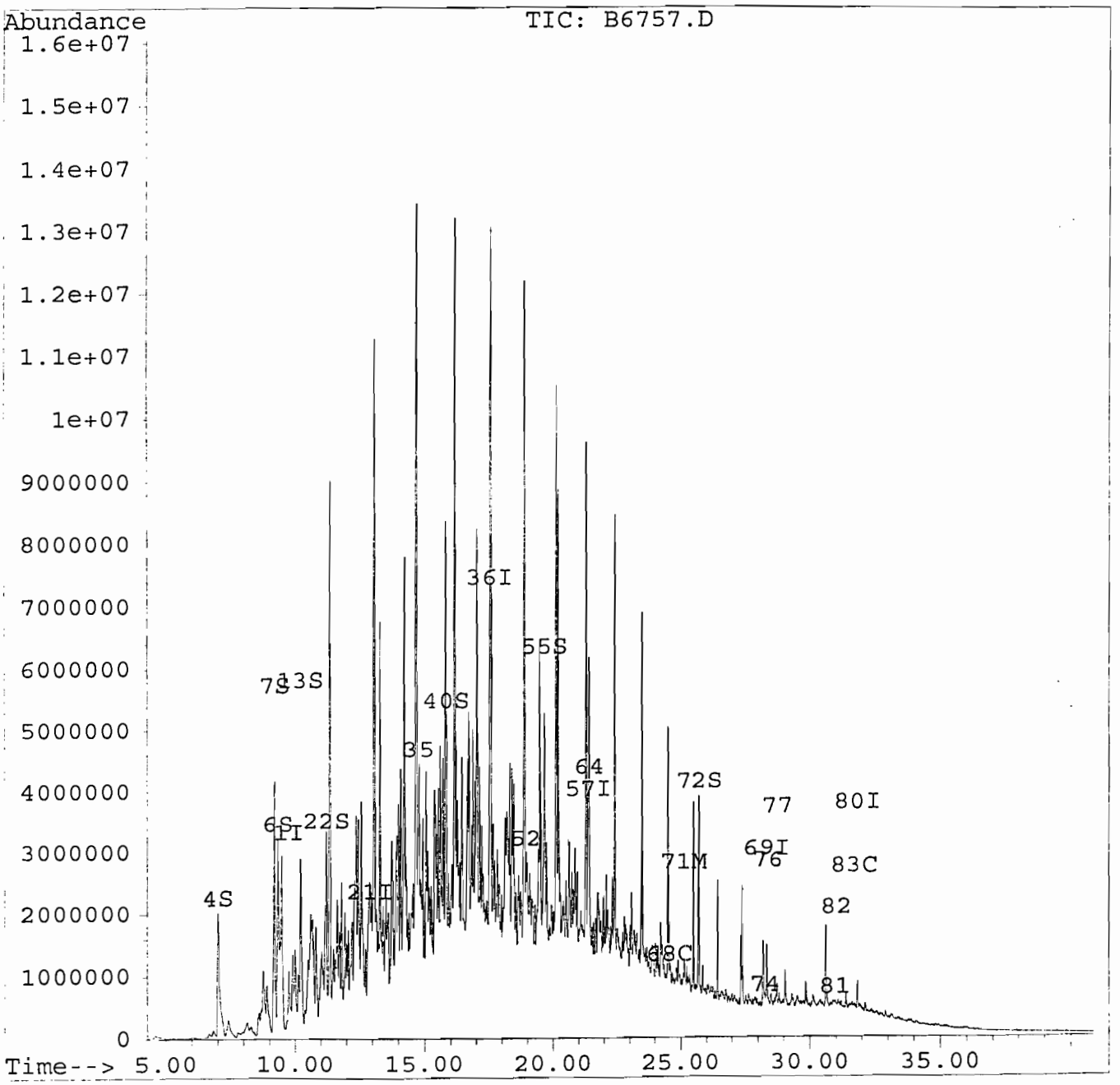
CAS Number	Compound Name	RT	Est. Conc.	Q
1. 124-18-5	Decane	9.47	2000	J
2.	Unknown	10.61	890	J
3. 17302-32-8	Nonane, 3,7-dimethyl-	10.81	700	J
4. 1120-21-4	Undecane	11.37	1600	J
5. 629-62-9	Pentadecane	14.24	1100	J
6. 112-40-3	Dodecane	14.69	2300	J
7. 62108-26-3	Decane, 2,6,8-trimethyl-	19.48	900	J
8. 629-78-7	Heptadecane	20.14	1200	J
9. 31295-56-4	Dodecane, 2,6,11-trimethyl-	20.21	740	J
10. 593-45-3	Octadecane	21.32	940	J
11. 629-92-5	Nonadecane	22.43	780	J
12. 629-97-0	Docosane	25.50	1400	J
13.	Unknown	26.43	870	J
14. 103-23-1	Hexanedioic acid, bis(2-ethy	27.39	870	J
15. 7098-22-8	Tetratetracontane	28.21	840	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :
Quant Time: Nov 7 19:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000167

Quantitation Report

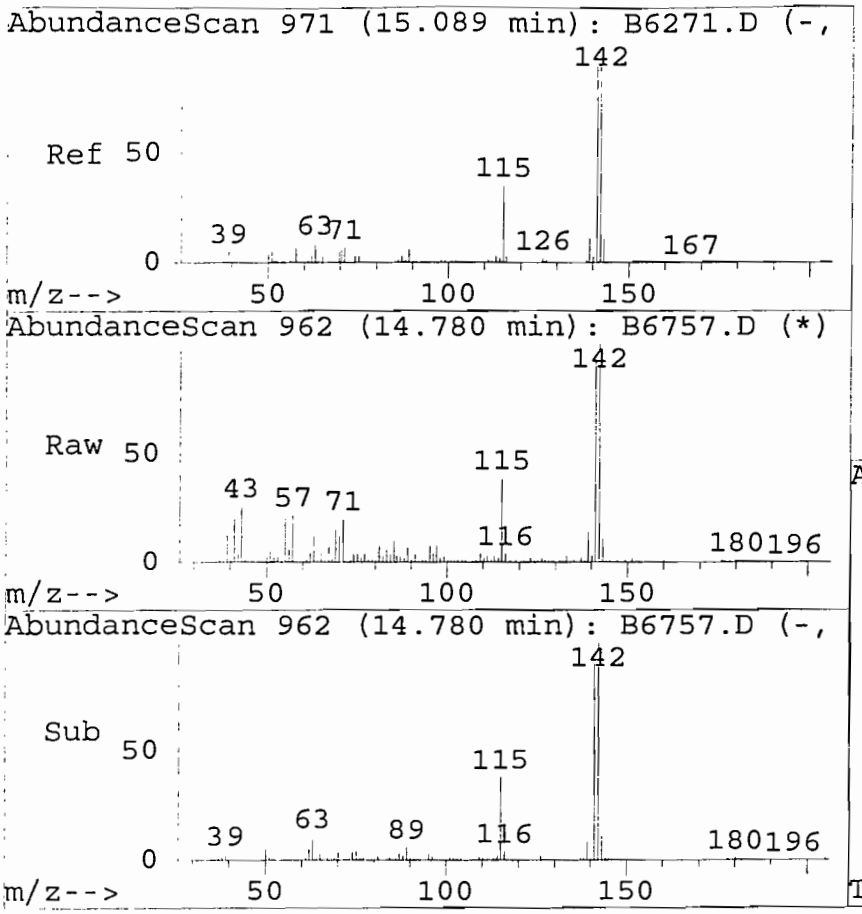
Data File : F:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :
Quant Time: Nov 7 19:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.76	152	363473	40.00	ng		-0.03
21) Naphthalene-d8	12.92	136	1139529	40.00	ng		-0.02
36) Acenaphthene-d10	17.53	164	466429	40.00	ng		0.00
57) Phenanthrene-d10	21.38	188	1040789	40.00	ng		0.00
69) Chrysene-d12	28.34	240	775113	40.00	ng		-0.05
80) Perylene-d12	31.84	264	376270	40.00	ng		-0.06
System Monitoring Compounds							**%Recovery**
4) 2-Fluorophenol	7.02	112	2973415	234.96	ng		
6) 2-Chlorophenol-d4	9.34	132	3130290	266.61	ng		
7) Phenol-d5	9.21	99	3894504	268.90	ng		
13) 1,2-Dichlorobenzene-d4	10.20	152	1083259	132.55	ng		
22) Nitrobenzene-d5	11.22	82	1964829	144.05	ng		
40) 2-Fluorobiphenyl	15.85	172	2411900	150.33	ng		
55) 2,4,6-Tribromophenol	19.68	330	1233714	401.52	ng		
72) Terphenyl-d14	25.71	244	3072711	134.60	ng		
Target Compounds							**Qvalue**
35) 2-Methylnaphthalene	14.78	142	1658739	94.73	ng		94
52) Fluorene	18.94	166	222925	18.06	ng		84
64) Phenanthrene	21.44	178	524172	21.53	ng		97
68) Fluoranthene	24.56	202	144546	5.65	ng		97
71) Pyrene	25.13	202	192305	7.23	ng		98
74) Benzo[a]anthracene	28.30	228	48391	2.31	ng		93
76) Chrysene	28.40	228	55186	2.88	ng		95
77) bis(2-Ethylhexyl)phthalate	28.75	149	130849	6.13	ng		94
81) Benzo[b]fluoranthene	30.98	252	35398	3.31	ng		85
82) Benzo[k]fluoranthene	31.02	252	29420	3.04	ng	m	84
83) Benzo[a]pyrene	31.71	252	26542	3.05	ng	m	90

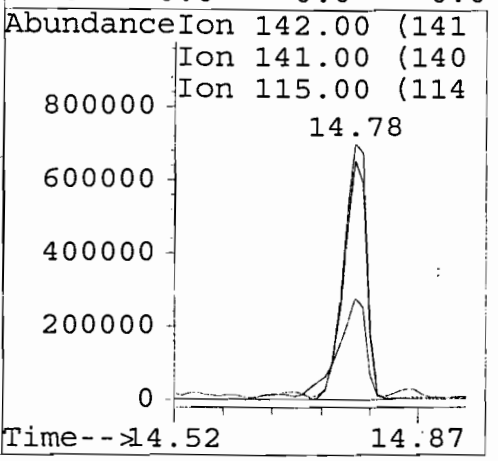
(#) = qualifier out of range (m) = manual integration
B6757.D B11006C.M Wed Nov 10 14:06:03 1999 BNA3 Page 1

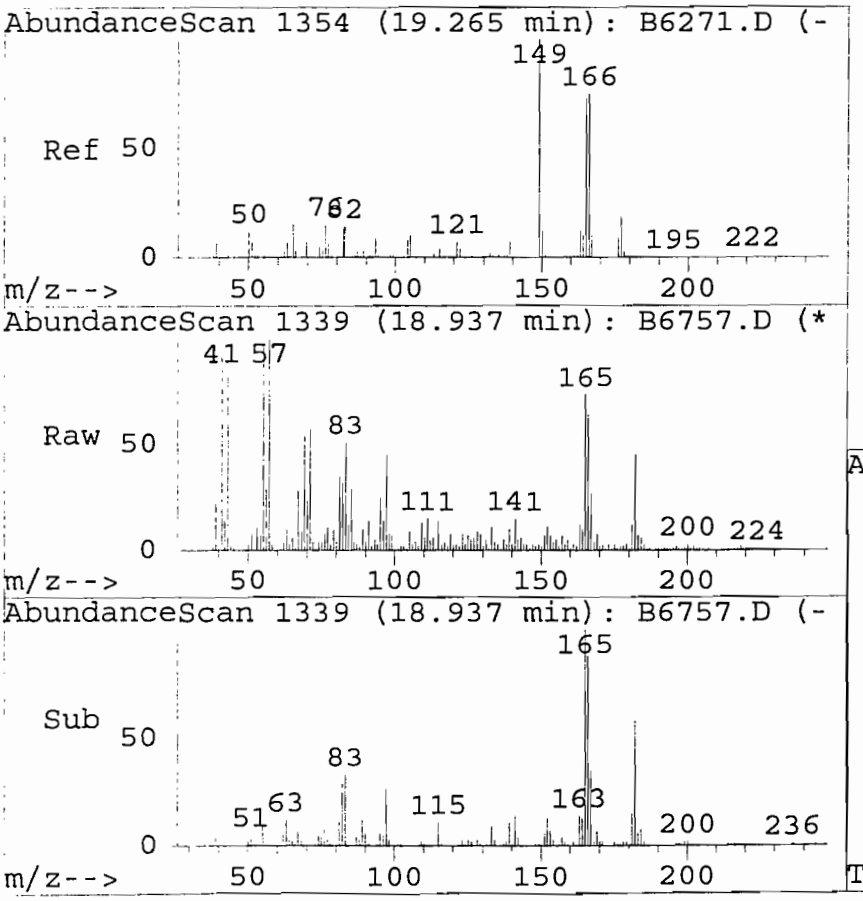


#35
2-Methylnaphthaléne
Concen: 94.73 ng
RT: 14.78 min Scan# 962
Delta R.T. -0.00 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:142 Resp: 1658739

Ion	Ratio	Lower	Upper
142	100		
141	93.2	44.4	133.2
115	39.5	17.5	52.5
0	0.0	0.0	0.0

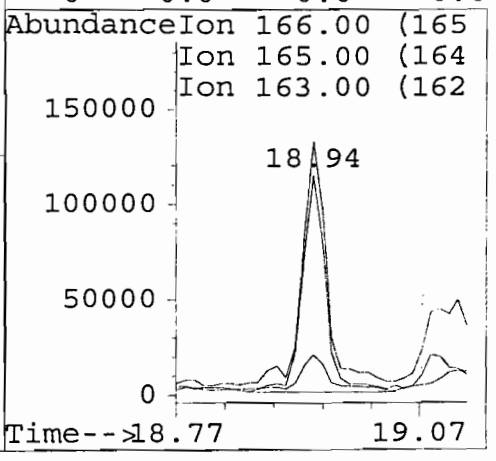




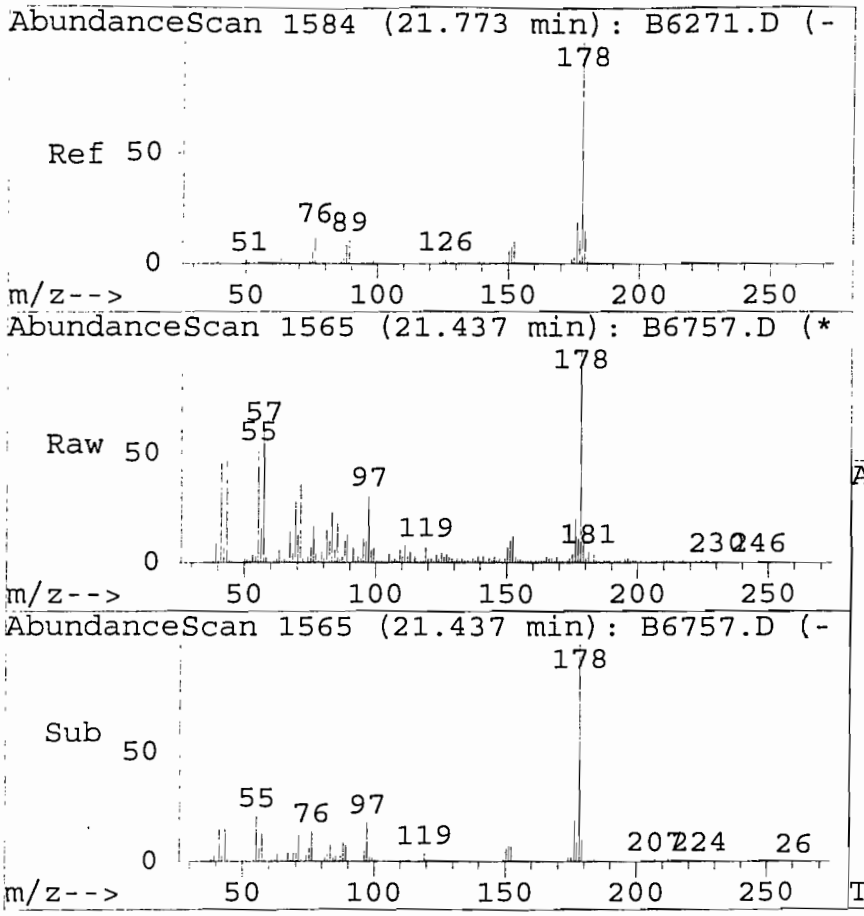
#52
Fluorene
Concen: 18.06 ng
RT: 18.94 min Scan# 1339
Delta R.T. -0.02 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:166 Resp: 222925

Ion	Ratio	Lower	Upper
166	100		
165	115.4	48.8	146.4
163	18.4	8.1	24.3
0	0.0	0.0	0.0



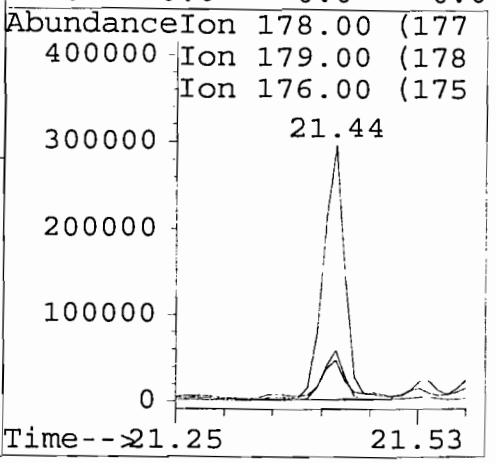
000169

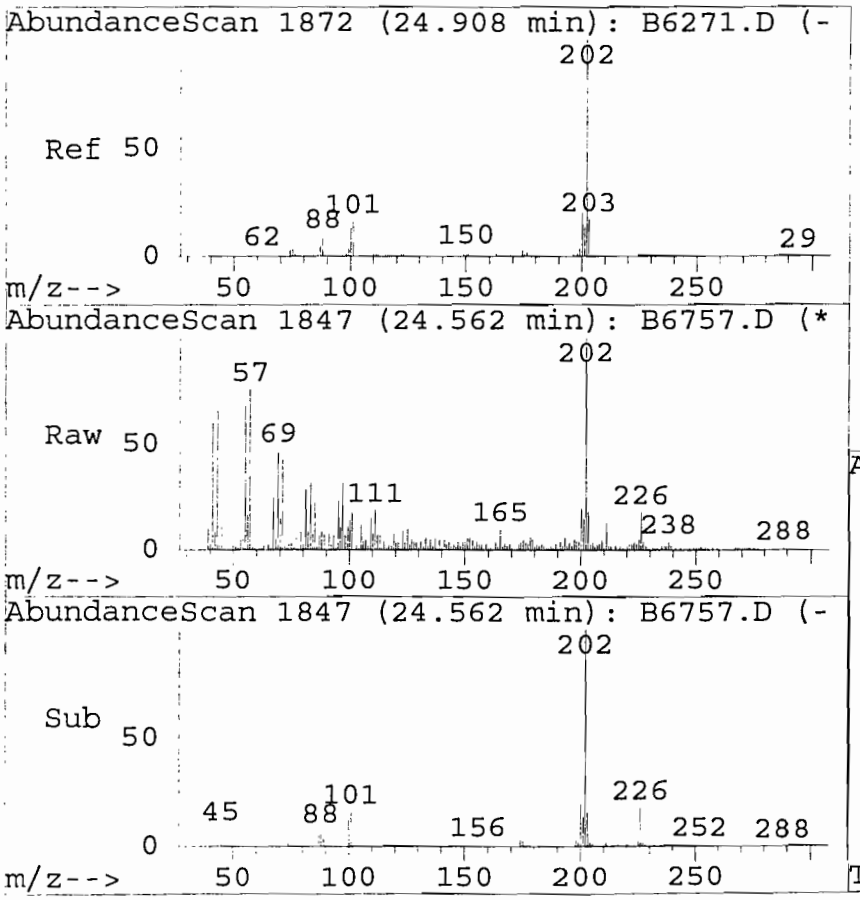


#64
Phenanthrene
Concen: 21.53 ng
RT: 21.44 min Scan# 1565
Delta R.T. -0.01 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:178 Resp: 524172

Ion	Ratio	Lower	Upper
178	100		
179	16.1	7.2	21.7
176	19.9	9.6	28.8
0	0.0	0.0	0.0

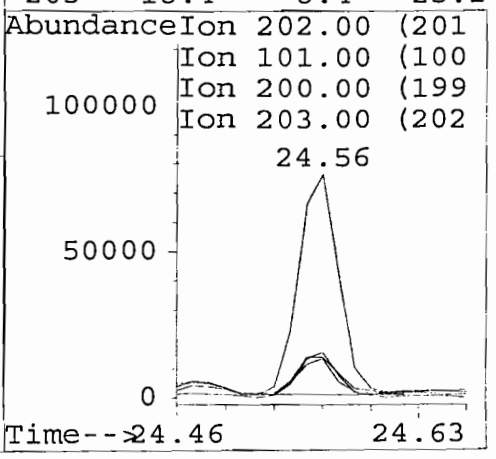




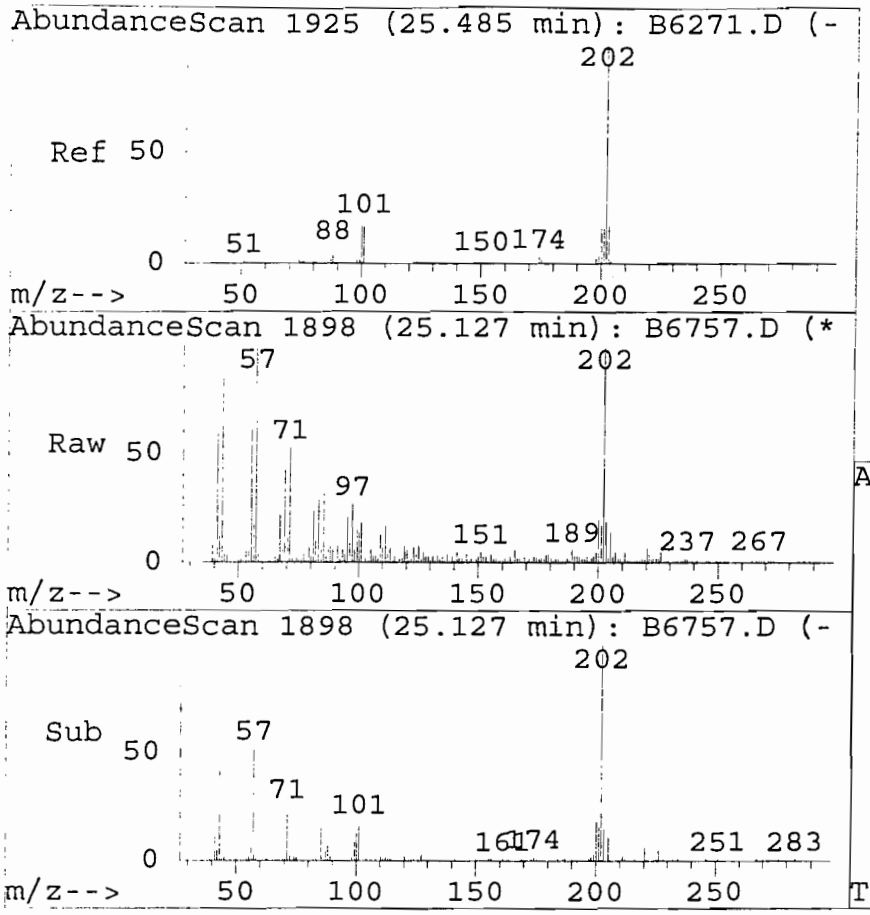
#68
Fluoranthene
Concen: 5.65 ng
RT: 24.56 min Scan# 1847
Delta R.T. -0.03 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:202 Resp: 144546

Ion	Ratio	Lower	Upper
202	100		
101	17.7	7.8	23.4
200	20.5	9.9	29.6
203	18.4	8.4	25.1



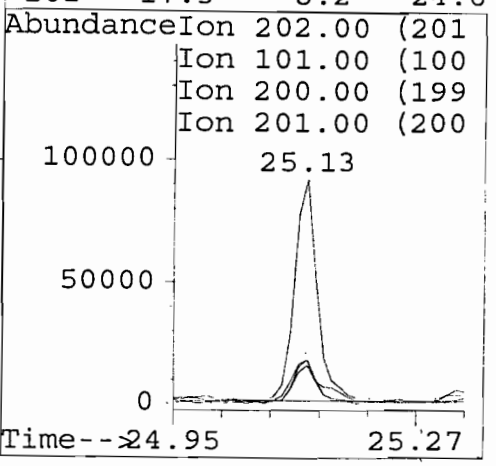
000170

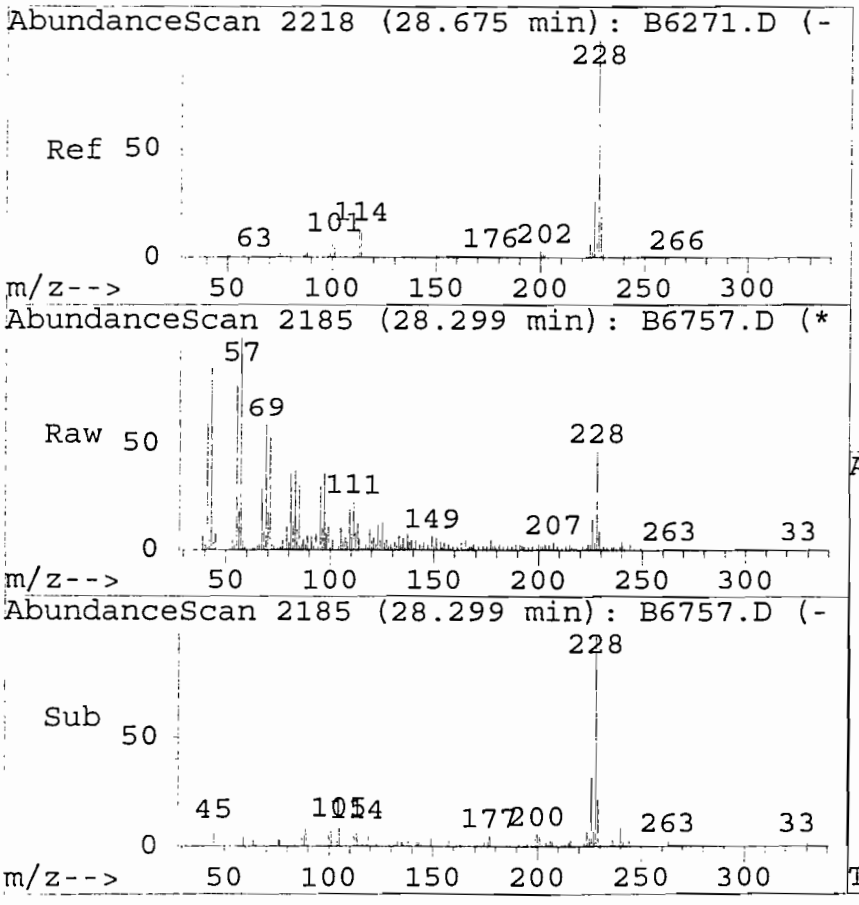


#71
Pyréne
Concen: 7.23 ng
RT: 25.13 min Scan# 1898
Delta R.T. -0.04 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:202 Resp: 192305

Ion	Ratio	Lower	Upper
202	100		
101	19.8	9.5	28.5
200	19.9	10.2	30.6
201	17.3	8.2	24.6

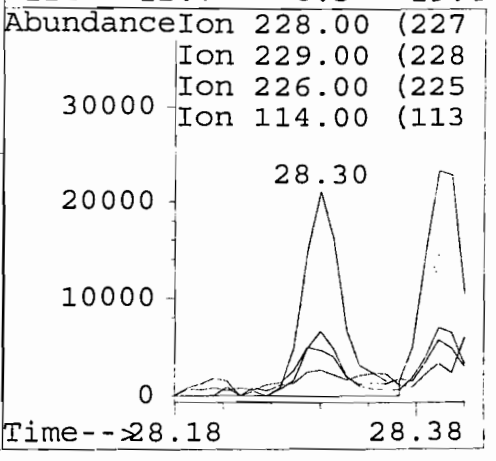




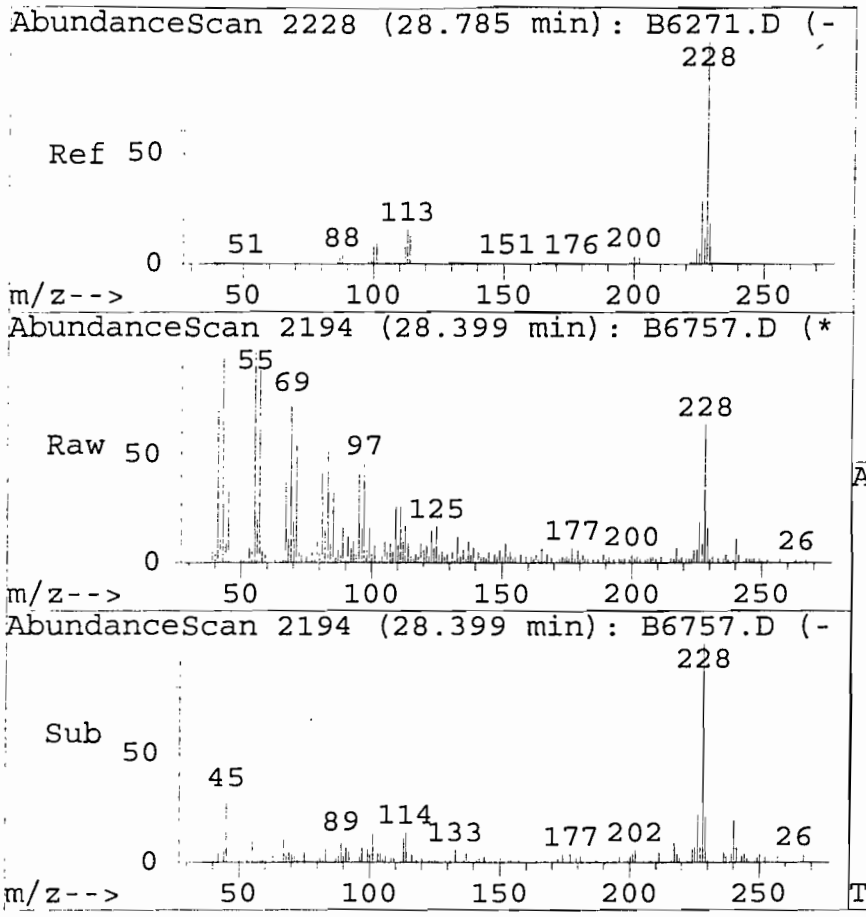
#74
Benzo[a]anthracene
Concen: 2.31 ng
RT: 28.30 min Scan# 2185
Delta R.T. -0.05 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:228 Resp: 48391

Ion	Ratio	Lower	Upper
228	100		
229	22.4	9.6	28.7
226	31.6	13.1	39.3
114	12.7	6.5	19.4



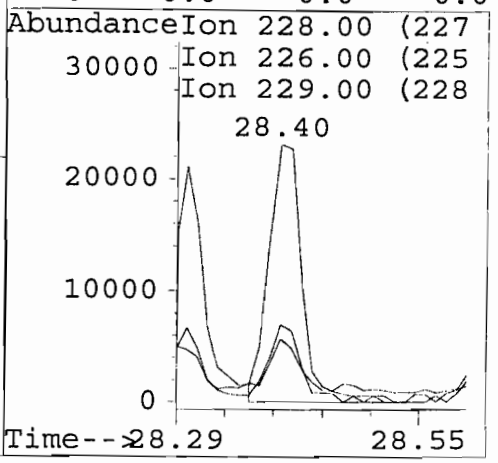
000171

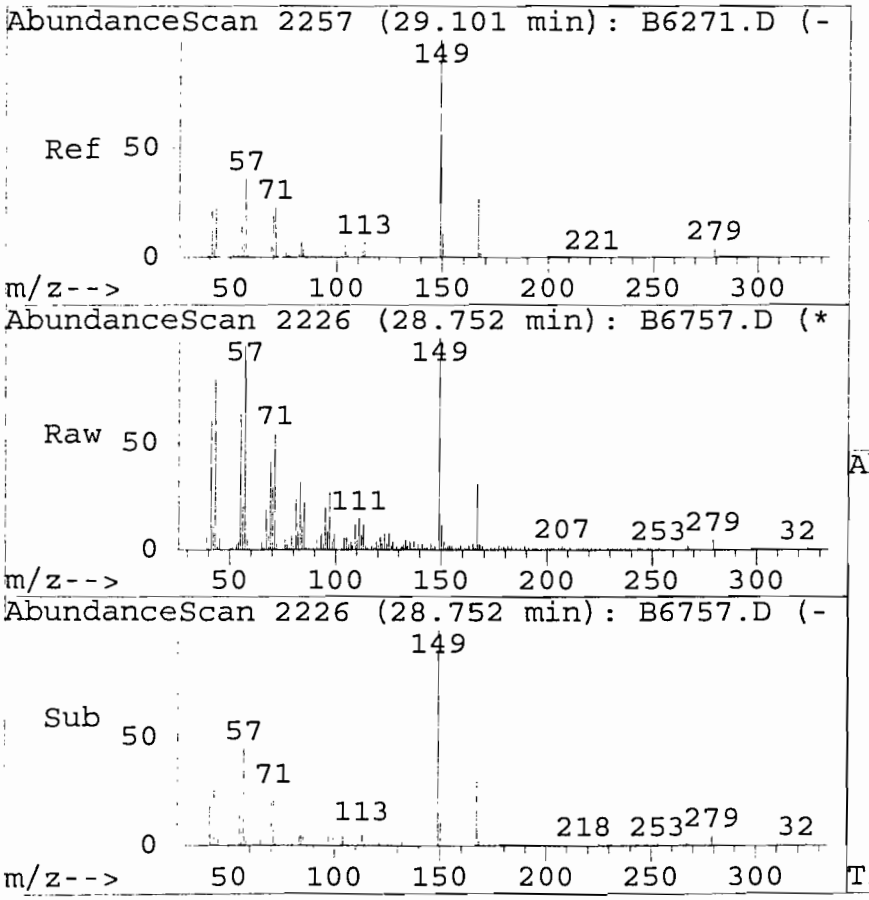


#76
Chrysene
Concen: 2.88 ng
RT: 28.40 min Scan# 2194
Delta R.T. -0.08 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:228 Resp: 55186

Ion	Ratio	Lower	Upper
228	100		
226	30.0	14.6	43.9
229	24.6	9.7	29.1
0	0.0	0.0	0.0

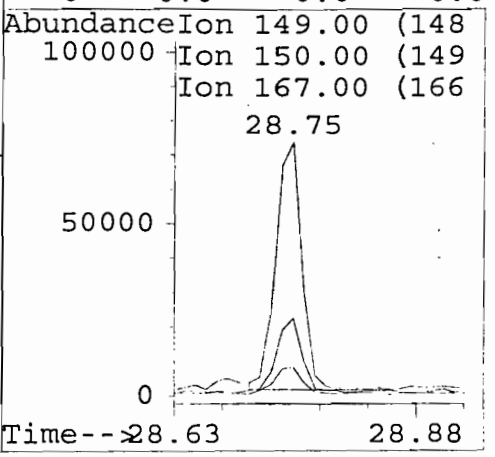




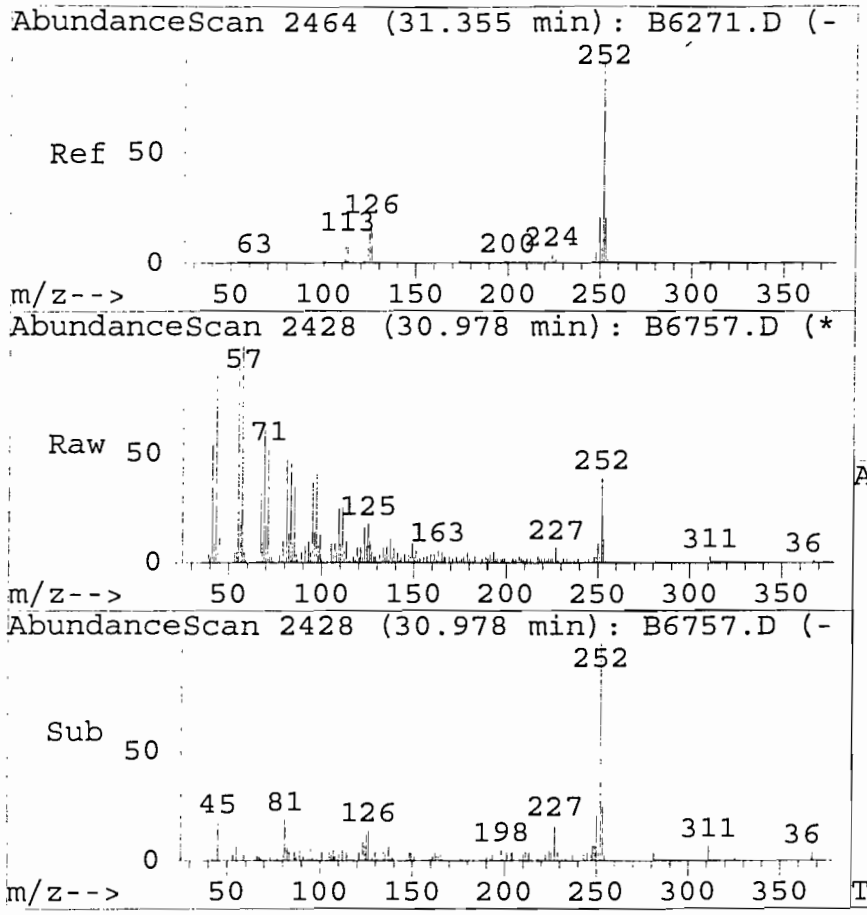
#77
bis(2-Ethylhexyl)phthalate
Concen: 6.13 ng
RT: 28.75 min Scan# 2226
Delta R.T. -0.04 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:149 Resp: 130849

Ion	Ratio	Lower	Upper
149	100		
150	11.6	5.2	15.7
167	30.5	13.5	40.5
0	0.0	0.0	0.0



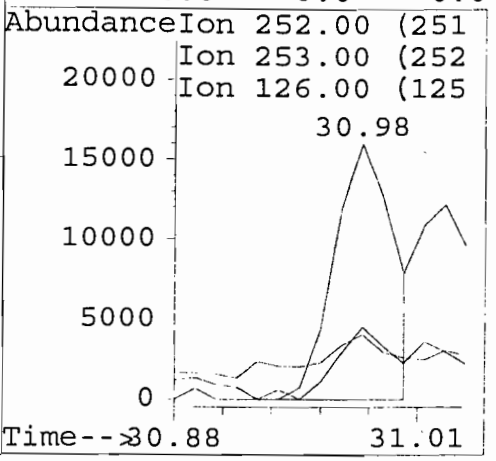
000172

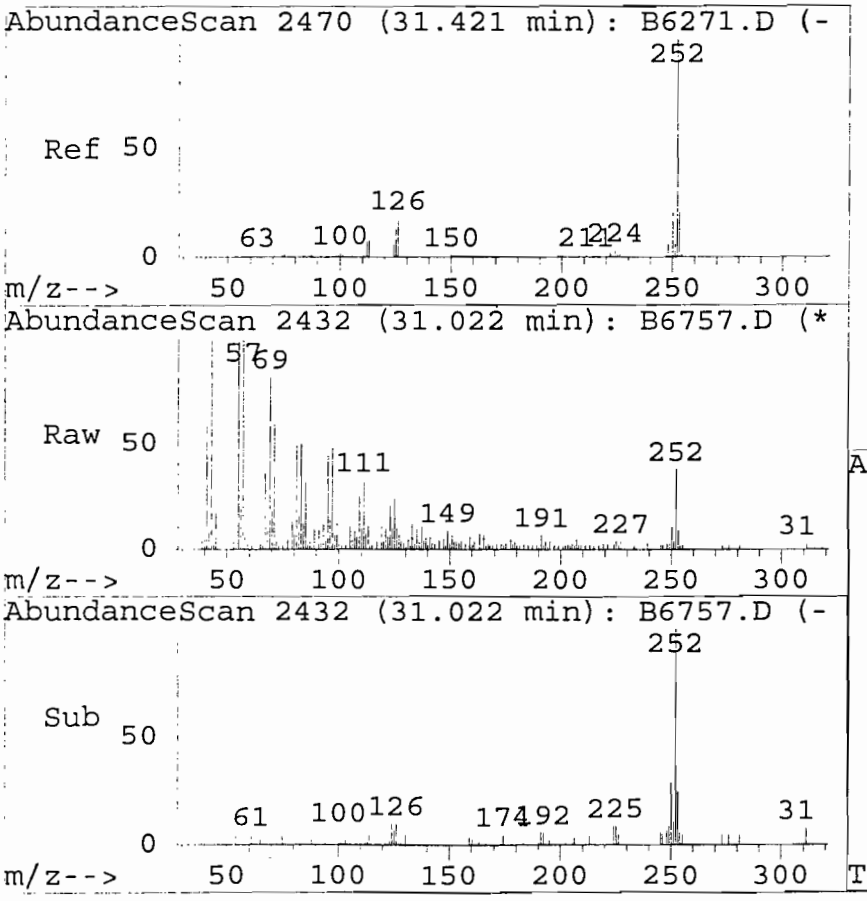


#81
Benzo[b]fluoranthene
Concen: 3.31 ng
RT: 30.98 min Scan# 2428
Delta R.T. -0.07 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:252 Resp: 35398

Ion	Ratio	Lower	Upper
252	100		
253	28.2	10.6	31.9
126	25.3	9.3	27.9
0	0.0	0.0	0.0

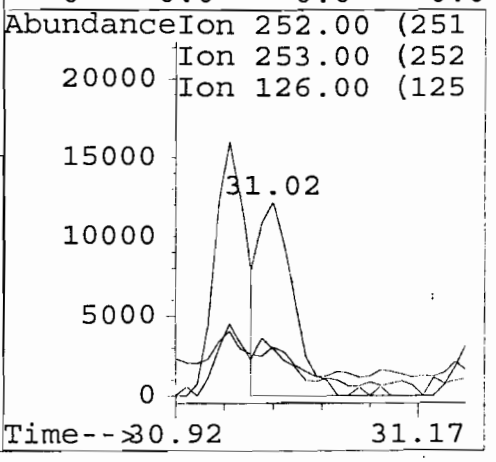




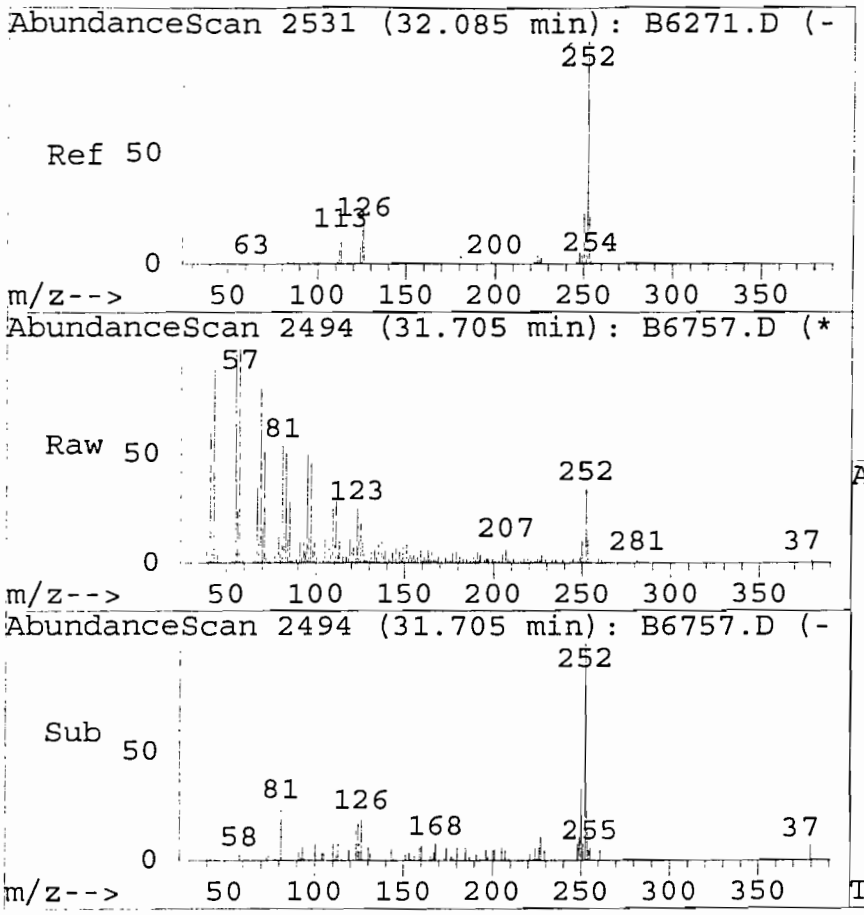
#82
Benzo[k]fluoranthene
Concen: 3.04 ng m
RT: 31.02 min Scan# 2432
Delta R.T. -0.09 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:252 Resp: 29420

Ion	Ratio	Lower	Upper
252	100		
253	24.5	10.6	31.9
126	25.1	8.8	26.5
0	0.0	0.0	0.0



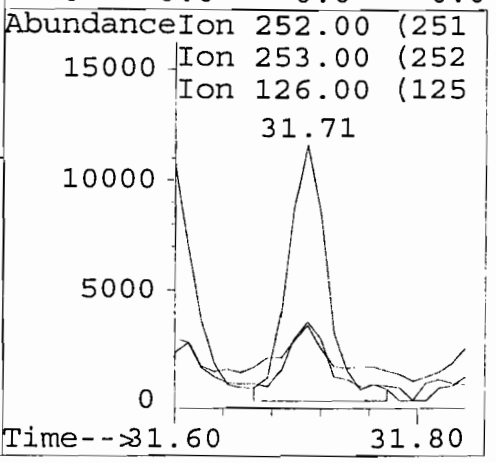
000173



#83
Benzo[a]pyrene
Concen: 3.05 ng m
RT: 31.71 min Scan# 2494
Delta R.T. -0.07 min
Lab File: B6757.D
Acq: 4 Nov 99 5:01 pm

Tgt Ion:252 Resp: 26542

Ion	Ratio	Lower	Upper
252	100		
253	30.9	10.7	32.2
126	29.5	9.1	27.4#
0	0.0	0.0	0.0



000174

Library Search Compound Report

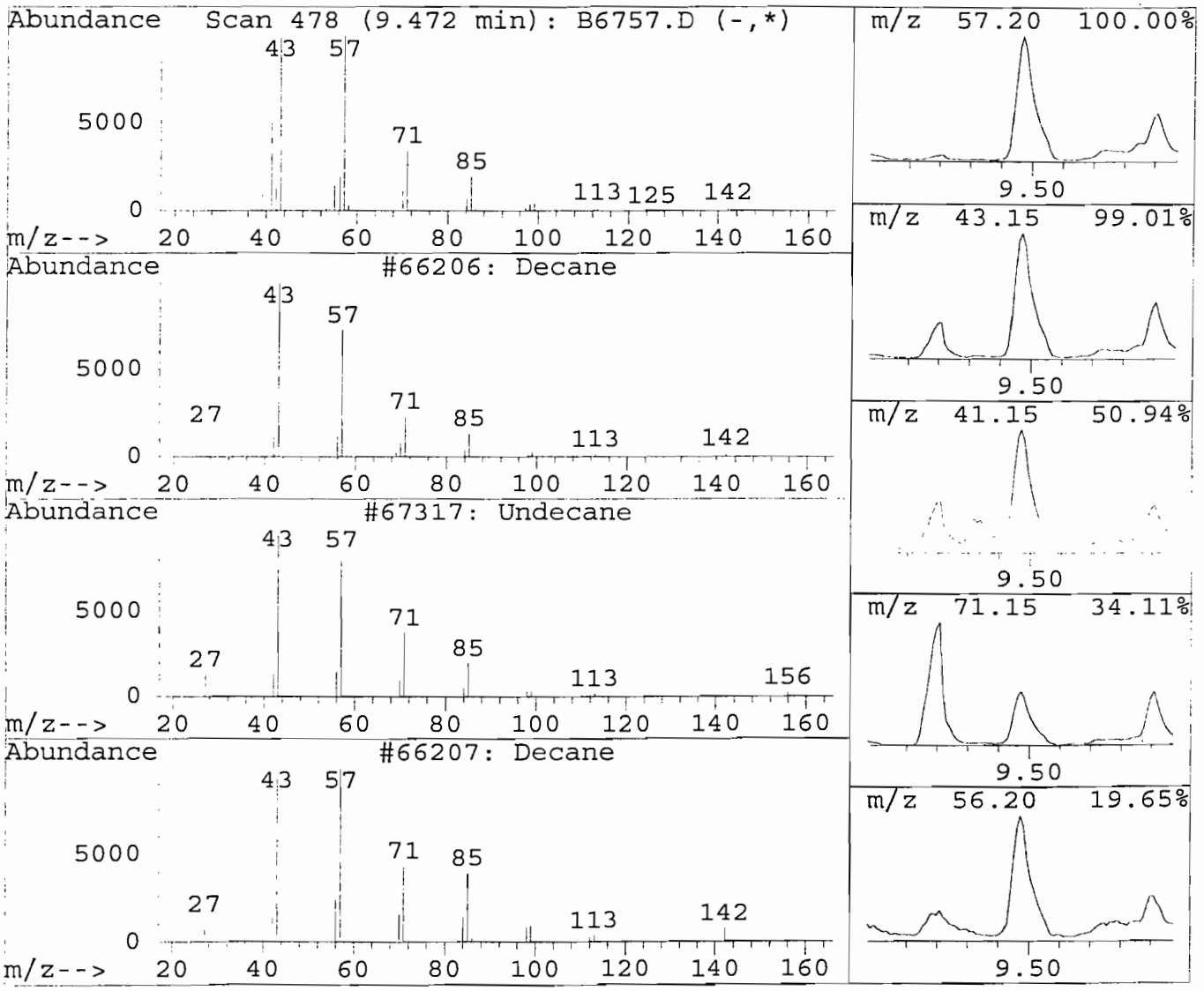
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.47	116.75 ng	14510657	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	66206	000124-18-5	90
2	Undecane	67317	001120-21-4	90
3	Decane	66207	000124-18-5	83
4	Undecane	67318	001120-21-4	78
5	Decane	66204	000124-18-5	78



000175

Library Search Compound Report

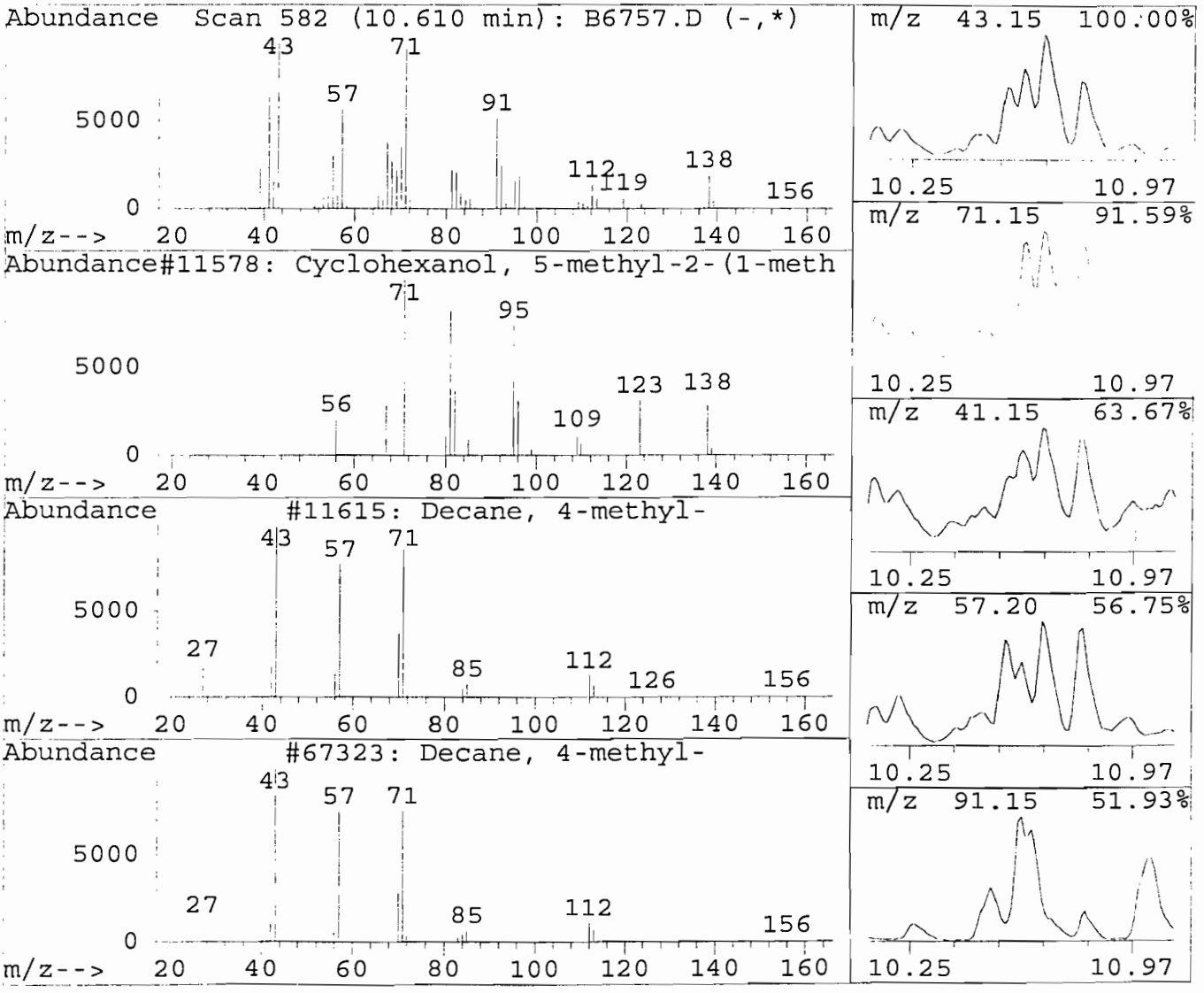
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.61	51.75 ng	6431303	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexanol, 5-methyl-2-(1-methyle	11578	000089-78-1	47
2	Decane, 4-methyl-	11615	002847-72-5	42
3	Decane, 4-methyl-	67323	002847-72-5	42
4	Cyclohexanol, 5-methyl-2-(1-methyle	11592	000490-99-3	40
5	Hexadecane, 1,1-dimethoxy-	40553	002791-29-9	38



000176

Library Search Compound Report

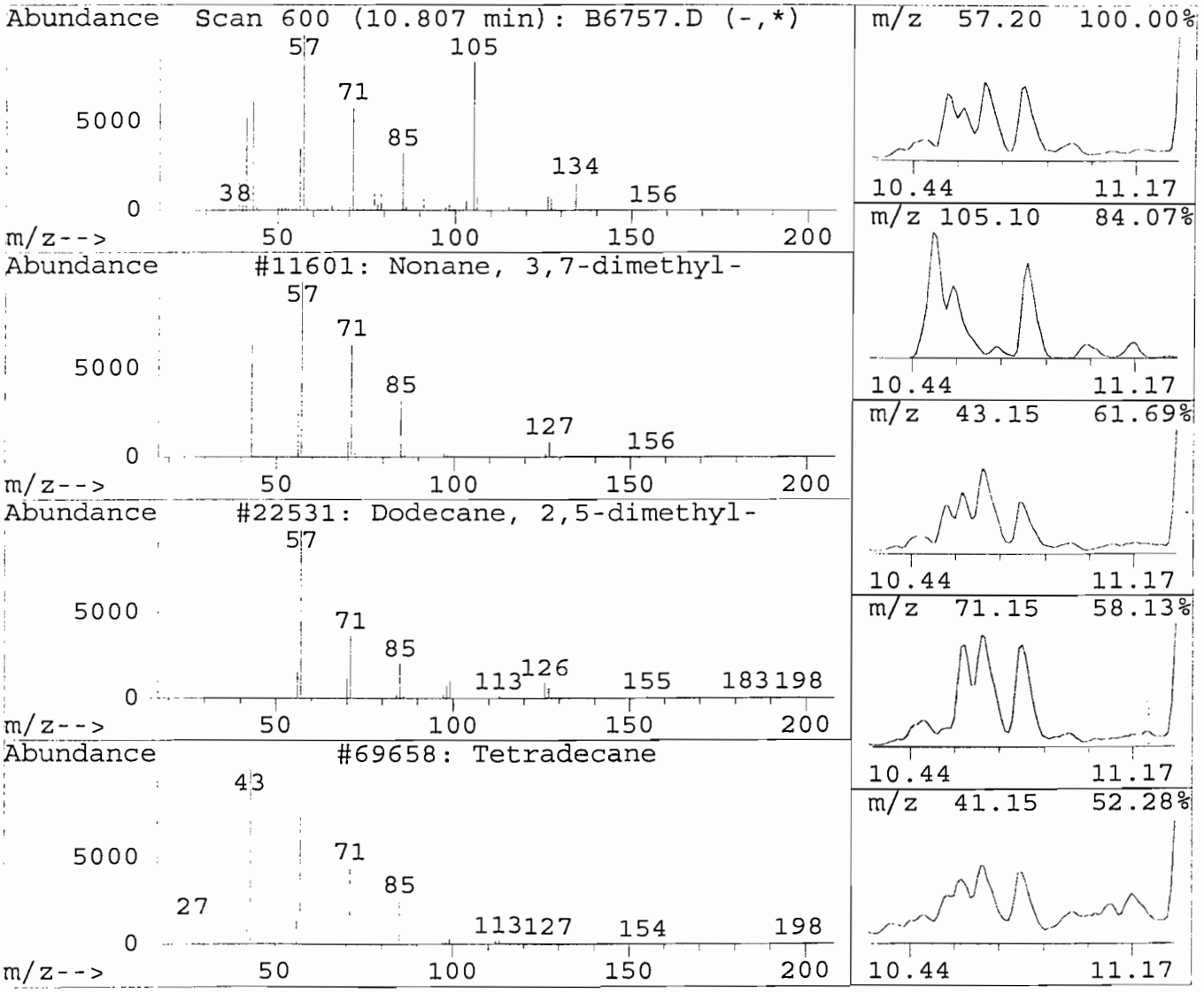
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.81	40.63 ng	5049227	1,4-Dichlorobenzene-d4	9.76

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonane, 3,7-dimethyl-	11601	017302-32-8	58
2	Dodecane, 2,5-dimethyl-	22531	056292-65-0	50
3	Tetradecane	69658	000629-59-4	47
4	Heptadecane	71191	000629-78-7	47
5	Octadecane	71559	000593-45-3	43



000177

Library Search Compound Report

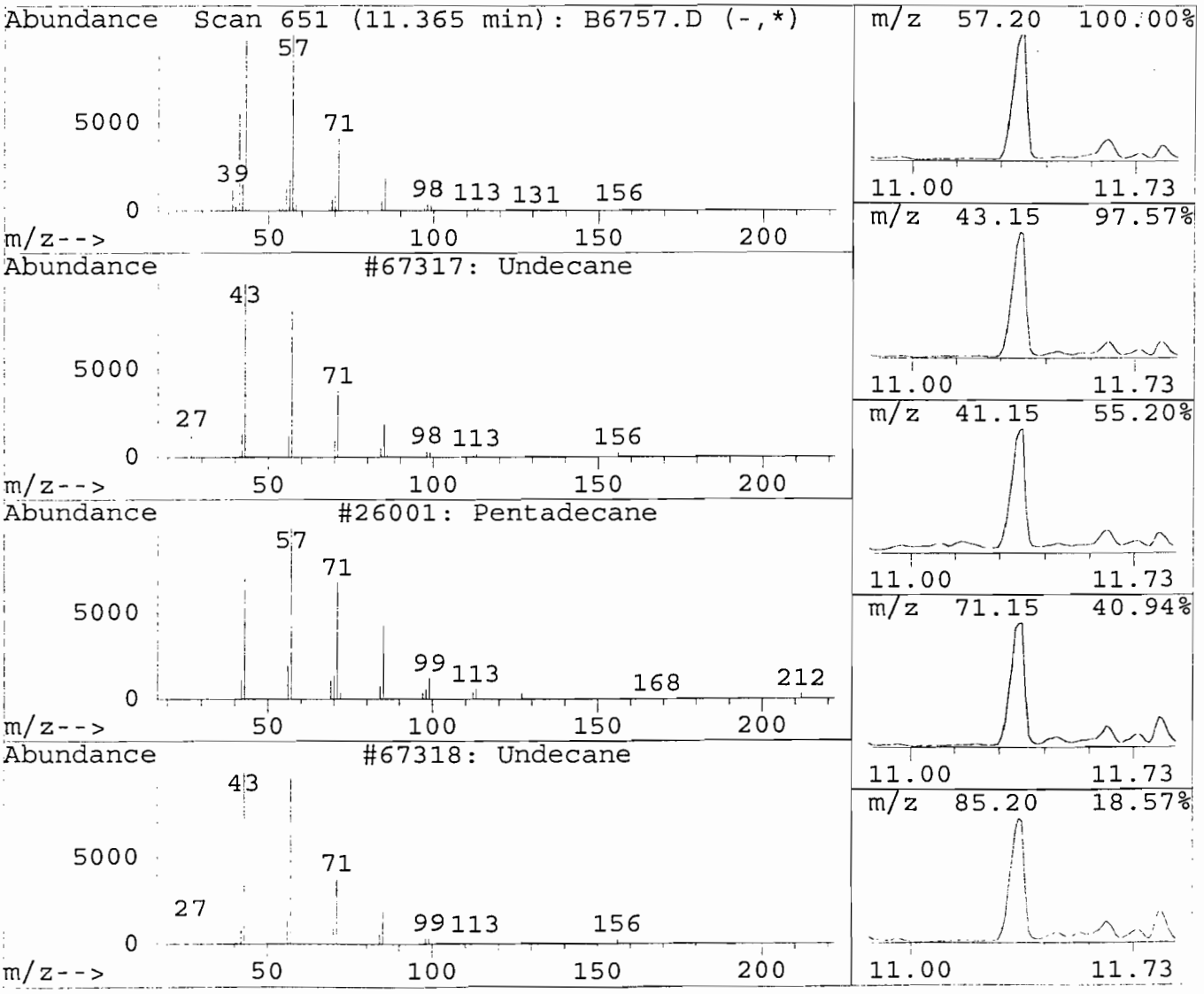
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
11.37	91.65 ng	26050224	Naphthalene-d8	12.92

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane	67317	001120-21-4	90
2	Pentadecane	26001	000629-62-9	83
3	Undecane	67318	001120-21-4	83
4	Hexadecane	70789	000544-76-3	83
5	Decane, 2-methyl-	67320	006975-98-0	78



000178

Library Search Compound Report

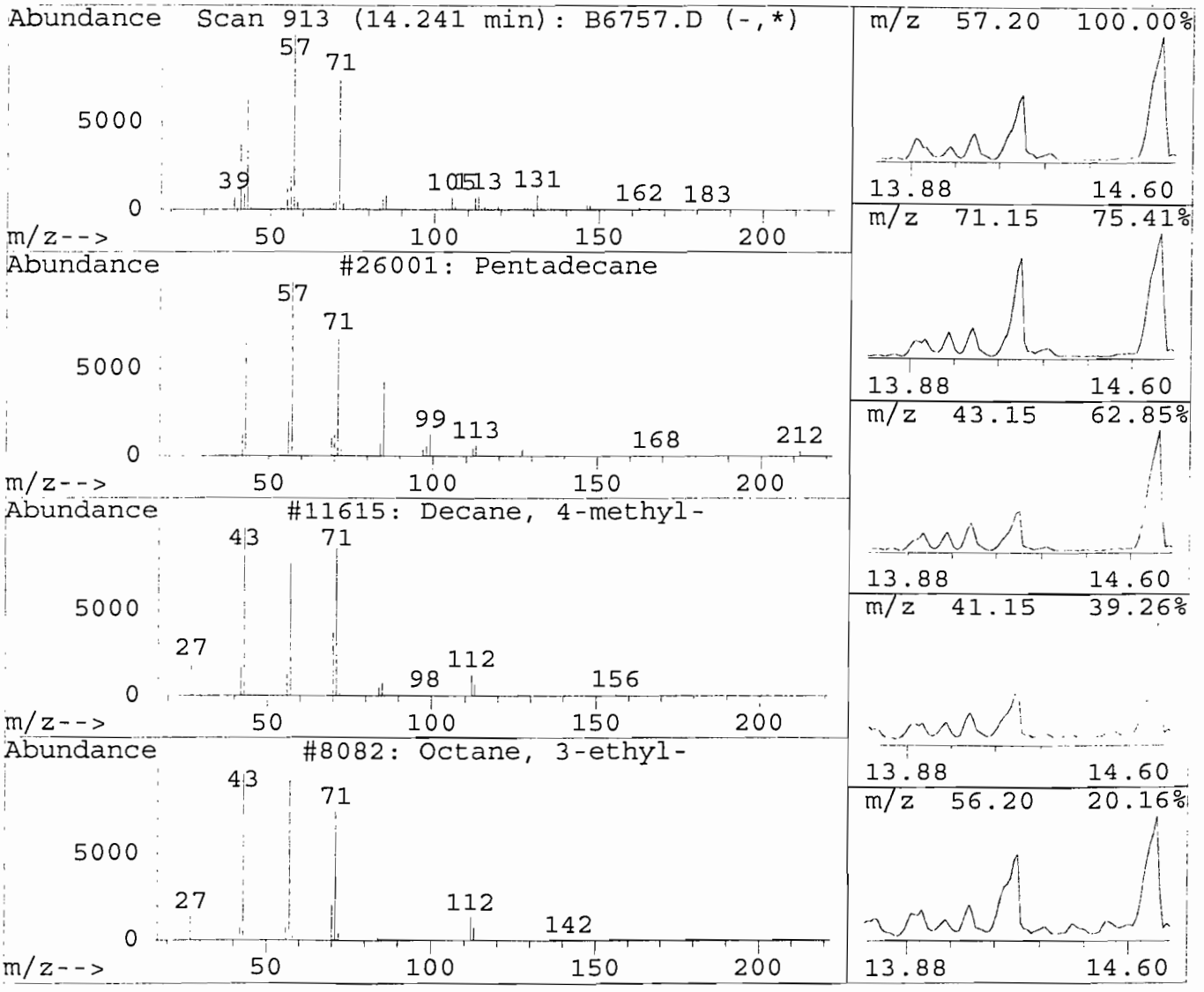
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.24	62.10 ng	17651895	Naphthalene-d8	12.92

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentadecane	26001	000629-62-9	78
2	Decane, 4-methyl-	11615	002847-72-5	64
3	Octane, 3-ethyl-	8082	005881-17-4	64
4	Octane, 2-bromo-	69279	000557-35-7	59
5	3-Hexanone, 2,2-dimethyl-	65066	005405-79-8	59



Library Search Compound Report

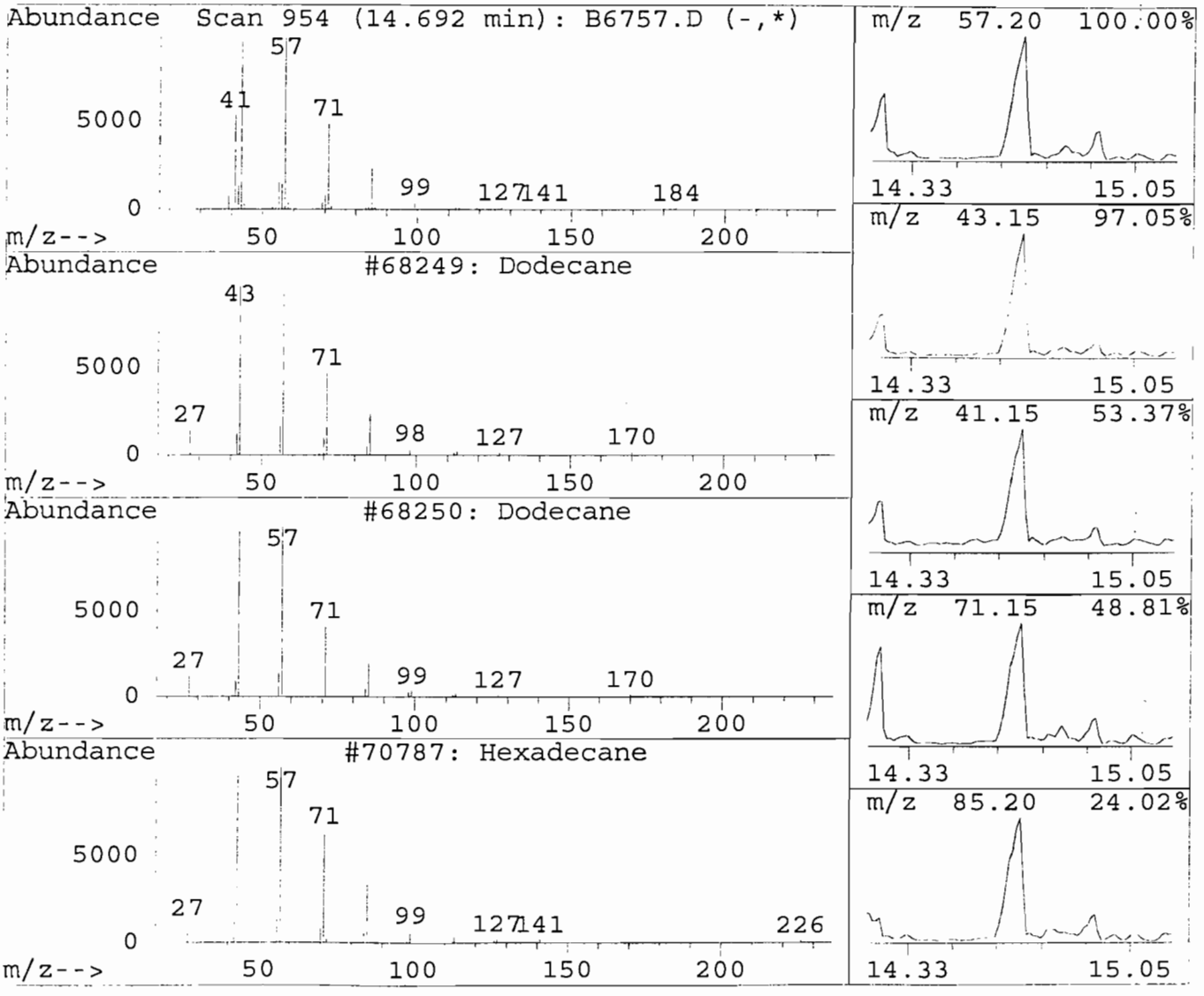
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.69	131.26 ng	37308837	Naphthalene-d8	12.92

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	68249	000112-40-3	90
2	Dodecane	68250	000112-40-3	86
3	Hexadecane	70787	000544-76-3	83
4	Heptadecane	71194	000629-78-7	83
5	Eicosane	72324	000112-95-8	78



000180

Library Search Compound Report

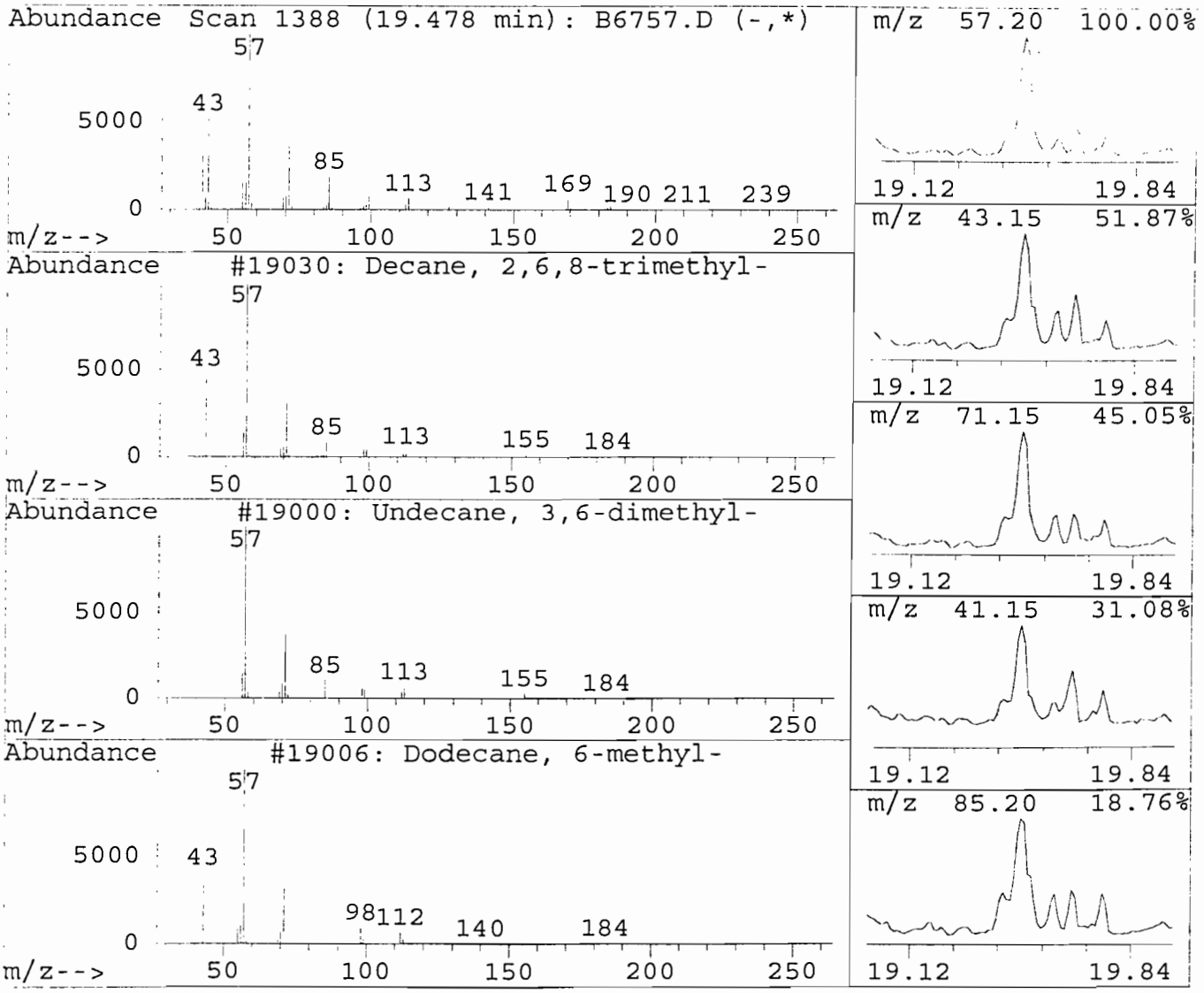
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.48	52.21 ng	18624412	Phenanthrene-d10	21.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2,6,8-trimethyl-	19030	062108-26-3	87
2	Undecane, 3,6-dimethyl-	19000	017301-28-9	86
3	Dodecane, 6-methyl-	19006	006044-71-9	74
4	Undecane, 2,6-dimethyl-	69033	017301-23-4	68
5	Heptadecane	71191	000629-78-7	64



Library Search Compound Report

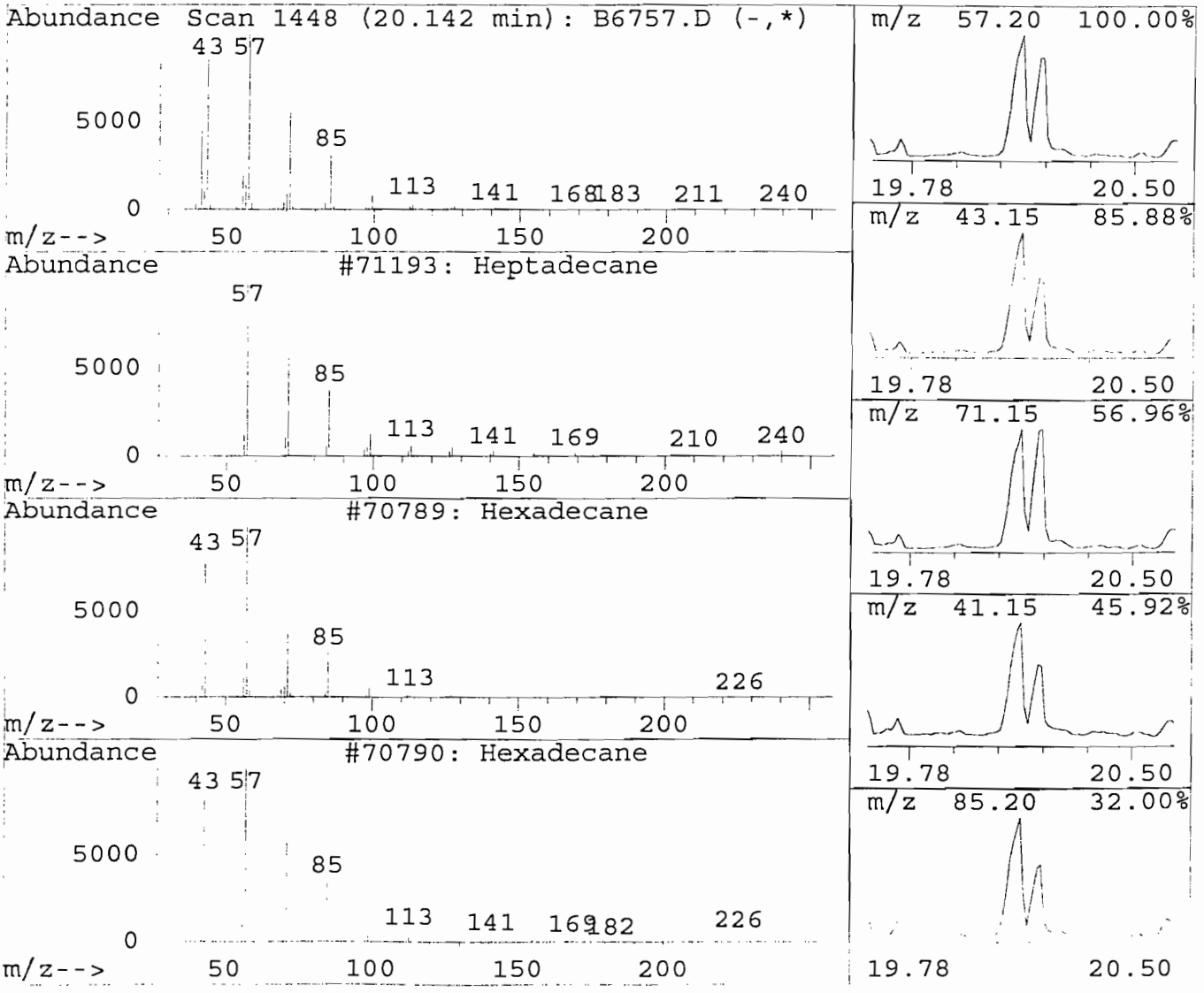
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.14	69.96 ng	24957151	Phenanthrene-d10	21.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptadecane	71193	000629-78-7	94
2	Hexadecane	70789	000544-76-3	91
3	Hexadecane	70790	000544-76-3	90
4	Pentadecane	70274	000629-62-9	87
5	Hexadecane	70787	000544-76-3	86



Library Search Compound Report

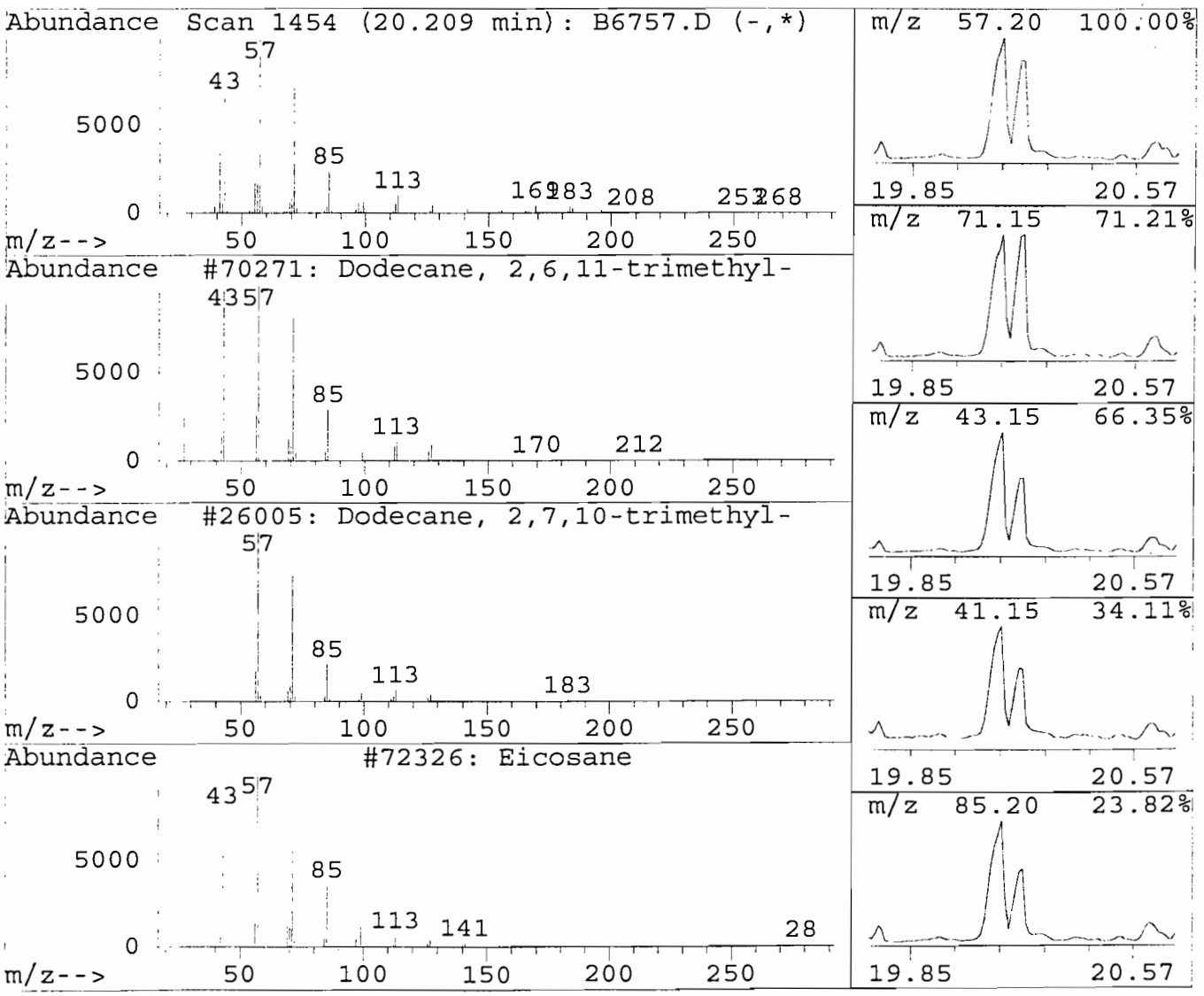
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.21	43.26 ng	15432310	Phenanthrene-d10	21.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 2,6,11-trimethyl-	70271	031295-56-4	91
2	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	87
3	Eicosane	72326	000112-95-8	64
4	Tetradecane, 3-methyl-	26004	018435-22-8	58
5	Nonane, 3-methyl-	66202	005911-04-6	53



000183

Library Search Compound Report

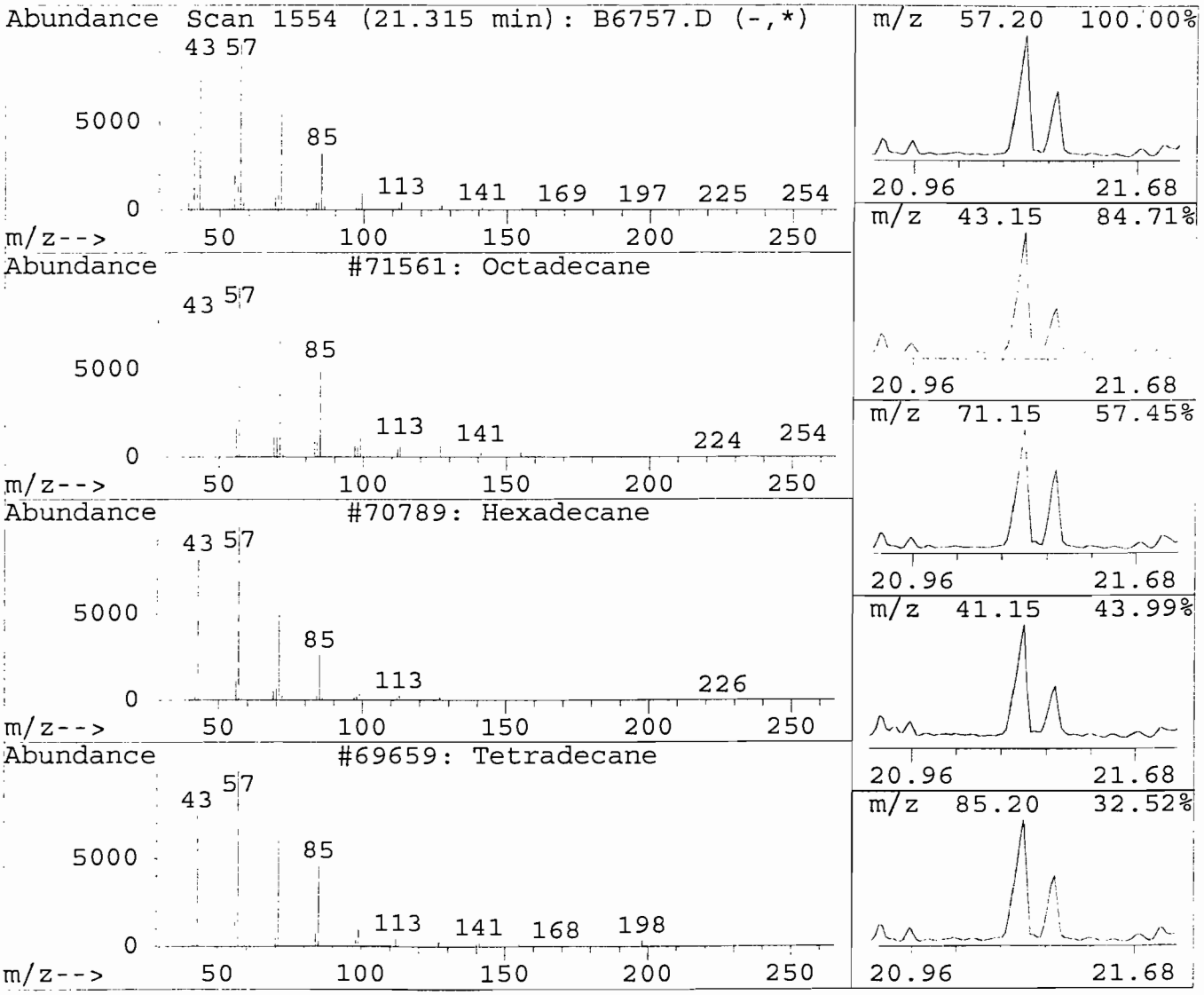
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.32	54.67 ng	19501124	Phenanthrene-d10	21.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octadecane	71561	000593-45-3	94
2	Hexadecane	70789	000544-76-3	91
3	Tetradecane	69659	000629-59-4	91
4	Hexadecane	70790	000544-76-3	90
5	Heptadecane	71191	000629-78-7	87



Library Search Compound Report

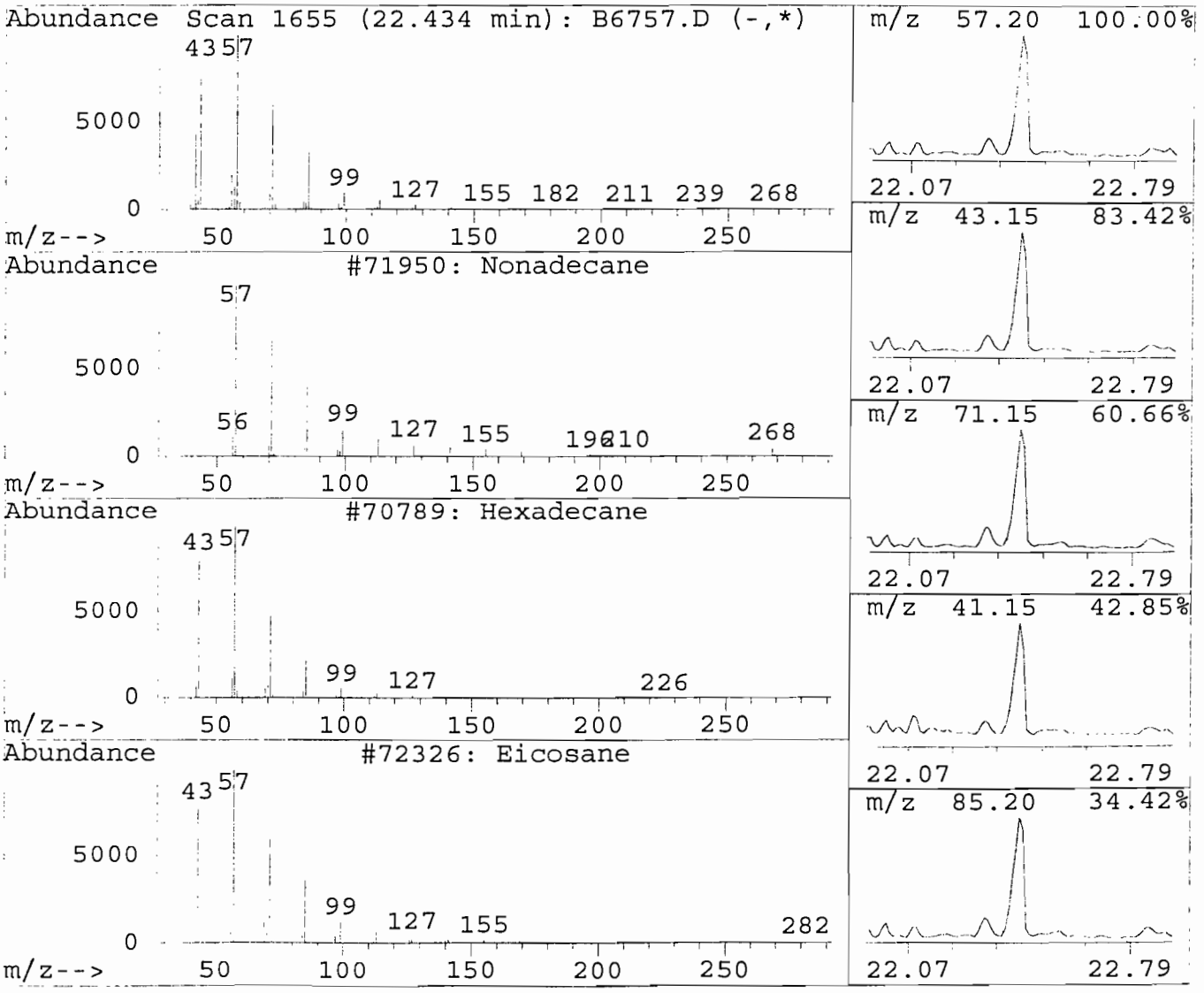
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.43	45.19 ng	16119938	Phenanthrene-d10	21.38

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonadecane	71950	000629-92-5	93
2	Hexadecane	70789	000544-76-3	91
3	Eicosane	72326	000112-95-8	87
4	Heptadecane	71191	000629-78-7	87
5	Dodecane, 2-methyl-6-propyl-	29264	055045-08-4	86



Library Search Compound Report

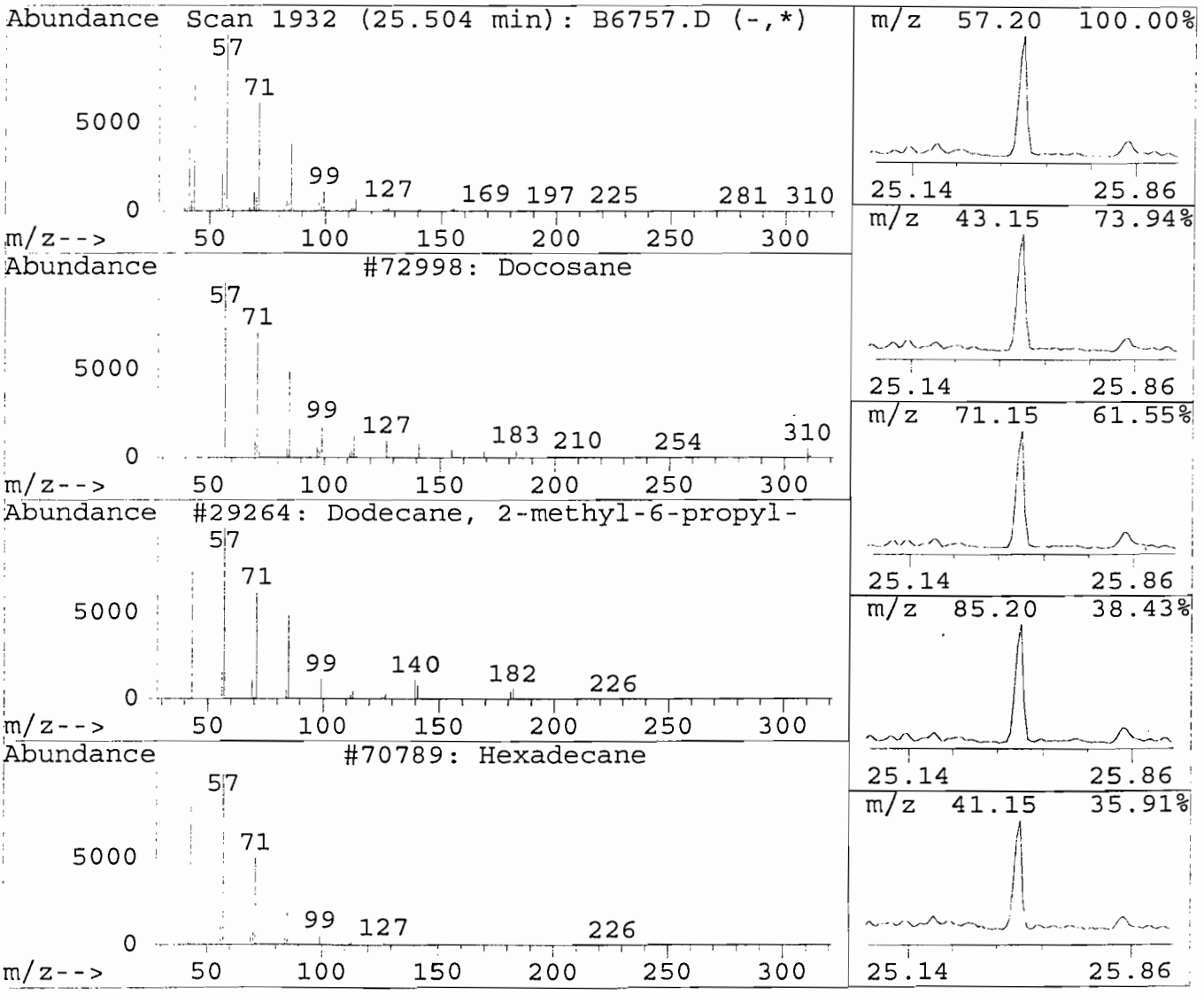
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.50	82.02 ng	5698162	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Docosane	72998	000629-97-0	96
2	Dodecane, 2-methyl-6-propyl-	29264	055045-08-4	94
3	Hexadecane	70789	000544-76-3	93
4	Tridecane, 1-iodo-	44187	035599-77-0	93
5	Tridecane, 7-hexyl-	37464	007225-66-3	91



000186

Library Search Compound Report

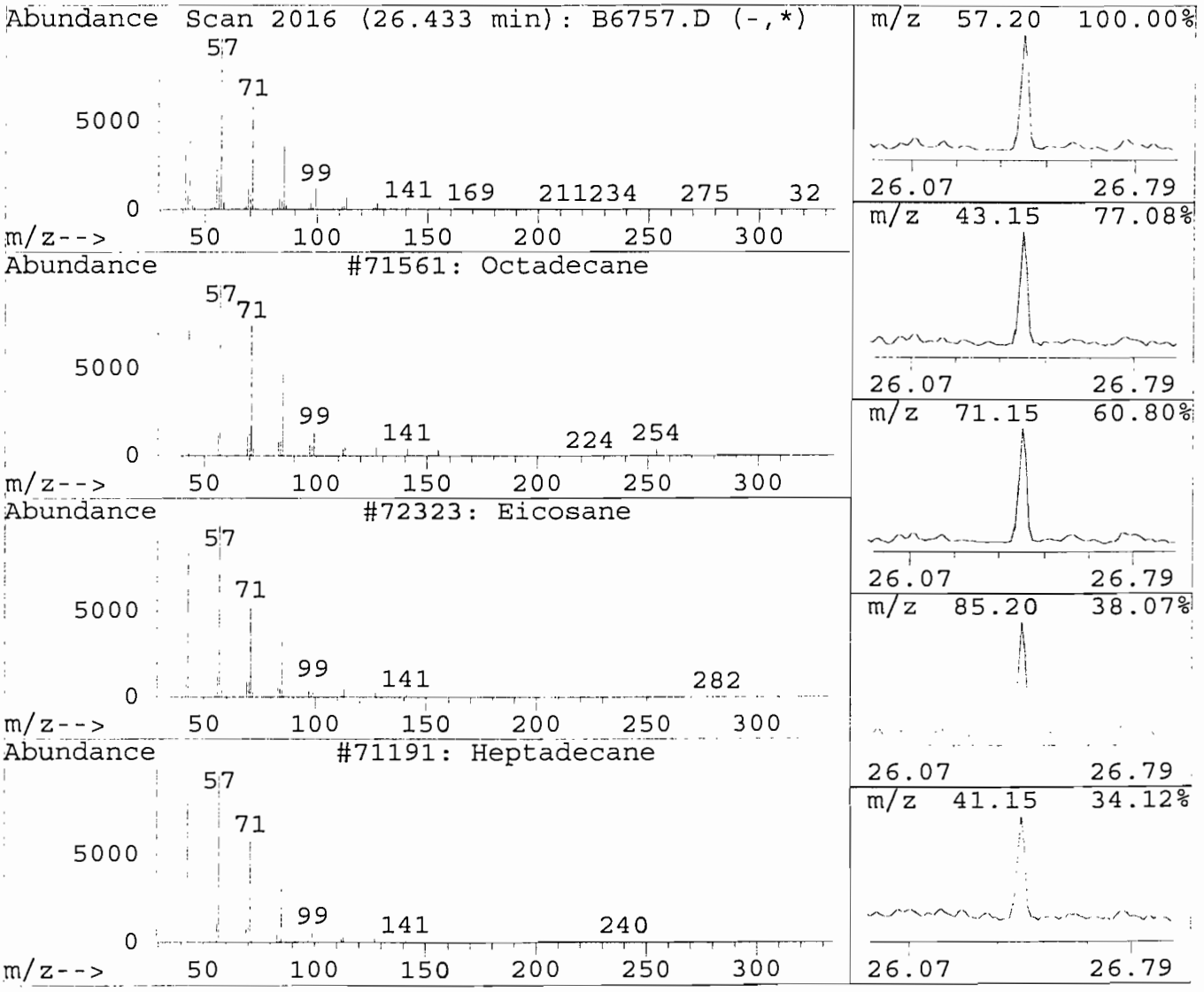
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
26.43	50.73 ng	3524288	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octadecane	71561	000593-45-3	96
2	Eicosane	72323	000112-95-8	91
3	Heptadecane	71191	000629-78-7	91
4	Tricosane	73318	000638-67-5	91
5	Eicosane, 10-methyl-	42197	054833-23-7	90



Library Search Compound Report

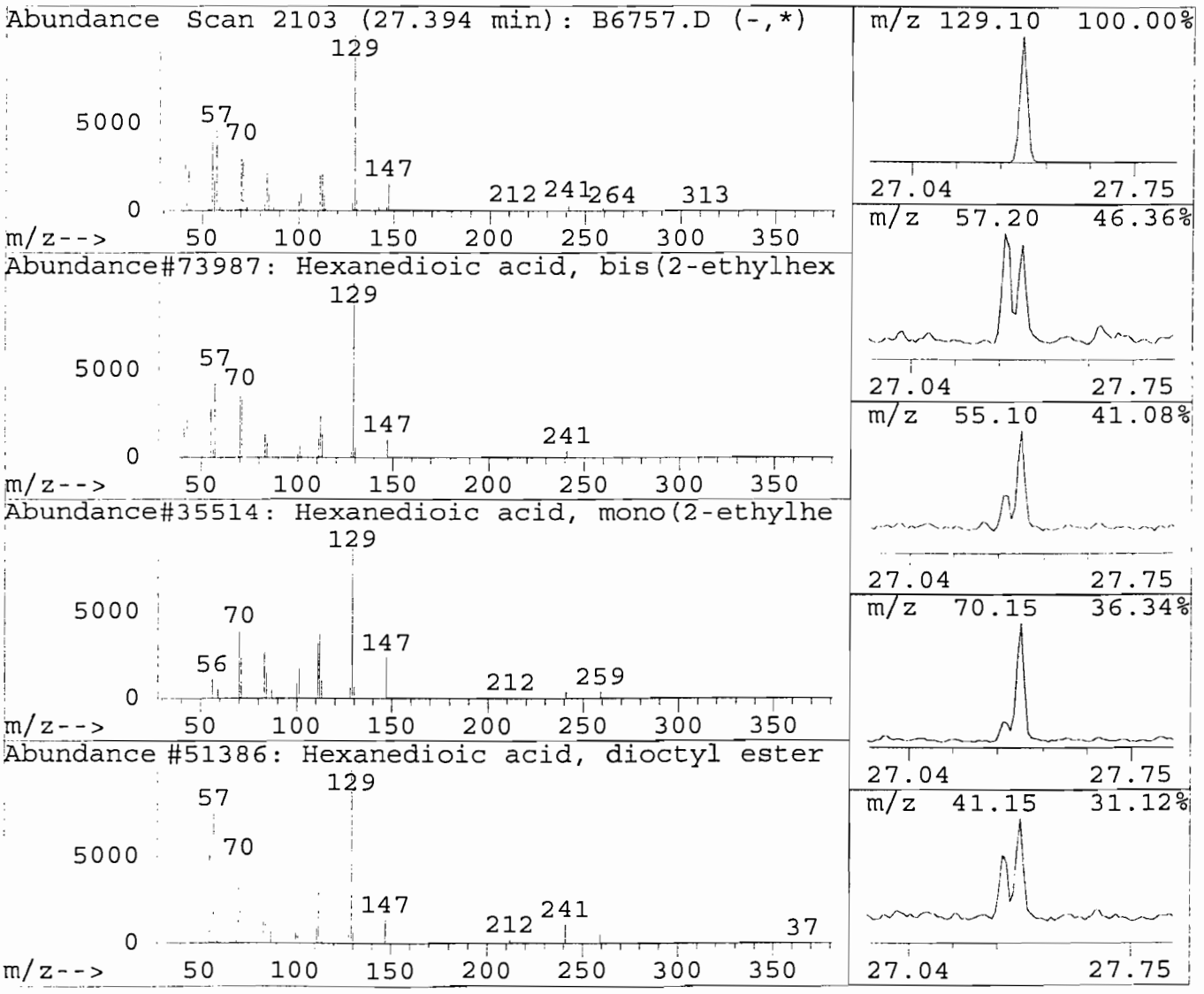
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.39	50.79 ng	3528398	Chrysene-d12	28.34

Hit# of 13	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	83
2	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	50
3	Hexanedioic acid, dioctyl ester	51386	000123-79-5	47
4	Hexanedioic acid, bis(1-methylpropy	71655	038447-22-2	38
5	Thiophene, 2-nitro-	5172	000609-40-5	38



000188

Library Search Compound Report

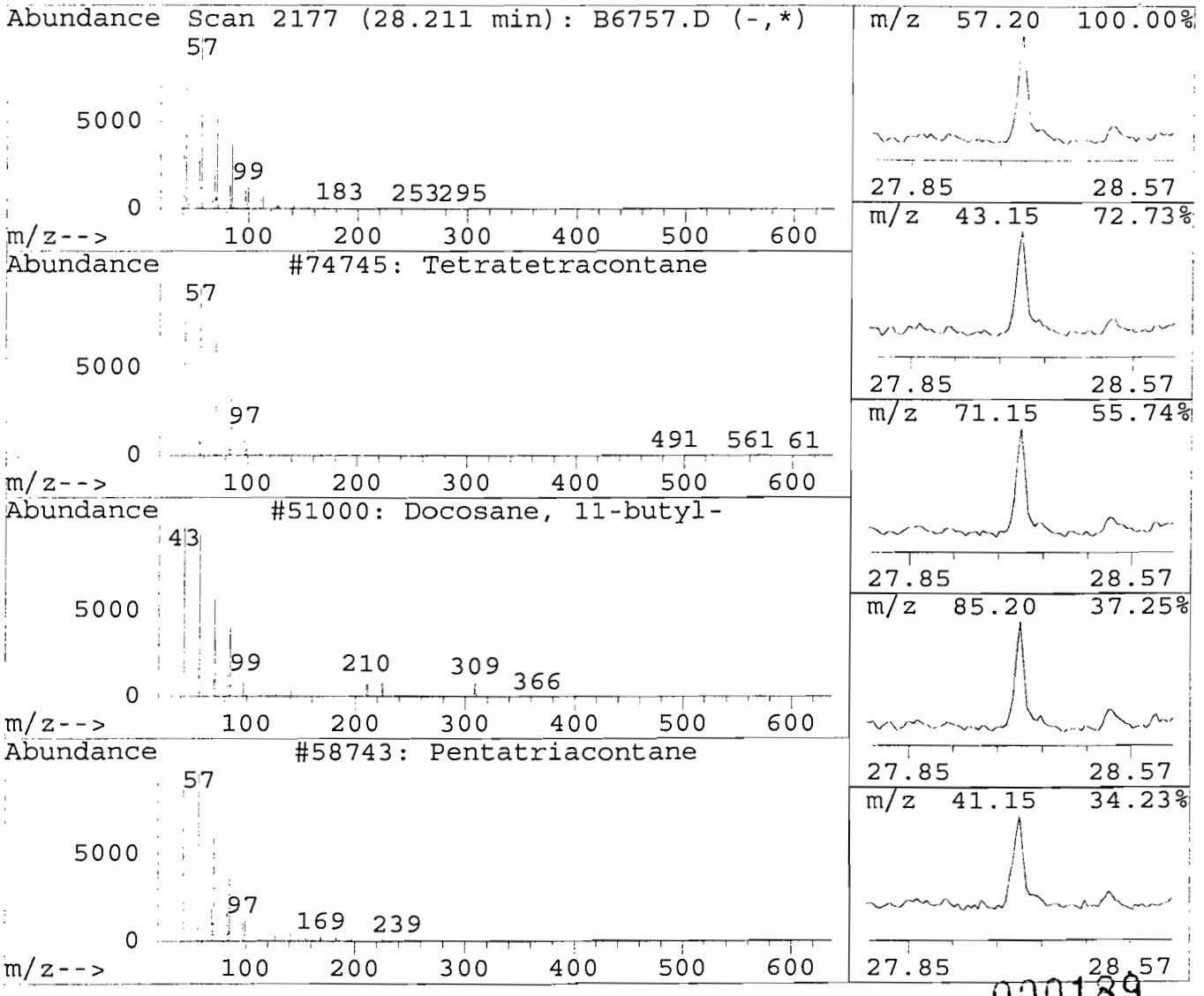
Data File : D:\HPCHEM\1\DATA\B11104\B6757.D
Acq Time : 4 Nov 99 5:01 pm
Sample : 13826ASP-87997-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.21	48.66 ng	3380554	Chrysene-d12	28.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetratetracontane	74745	007098-22-8	91
2	Docosane, 11-butyl-	51000	013475-76-8	91
3	Pentatriacontane	58743	000630-07-9	91
4	Tetracosane	73543	000646-31-1	91
5	Hexatriacontane	74636	000630-06-8	91



000189

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS30RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87997RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6838.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	34	U
621-64-7	n-Nitroso-di-n-propylamine	34	U
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	34	U
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	68	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	1500	
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	34	U
132-64-9	Dibenzofuran	54	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	34	U
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	200	
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS30RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87997RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6838.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	340	
120-12-7	Anthracene	34	U
86-74-8	Carbazole	50	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	84	
129-00-0	Pyrene	130	
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	35	
218-01-9	Chrysene	40	
117-81-7	bis(2-Ethylhexyl)phthalate	120	
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	55	J
207-08-9	Benzo[k]fluoranthene	60	J
50-32-8	Benzo[a]pyrene	46	
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-009-SS30RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87997RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6838.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/Kg

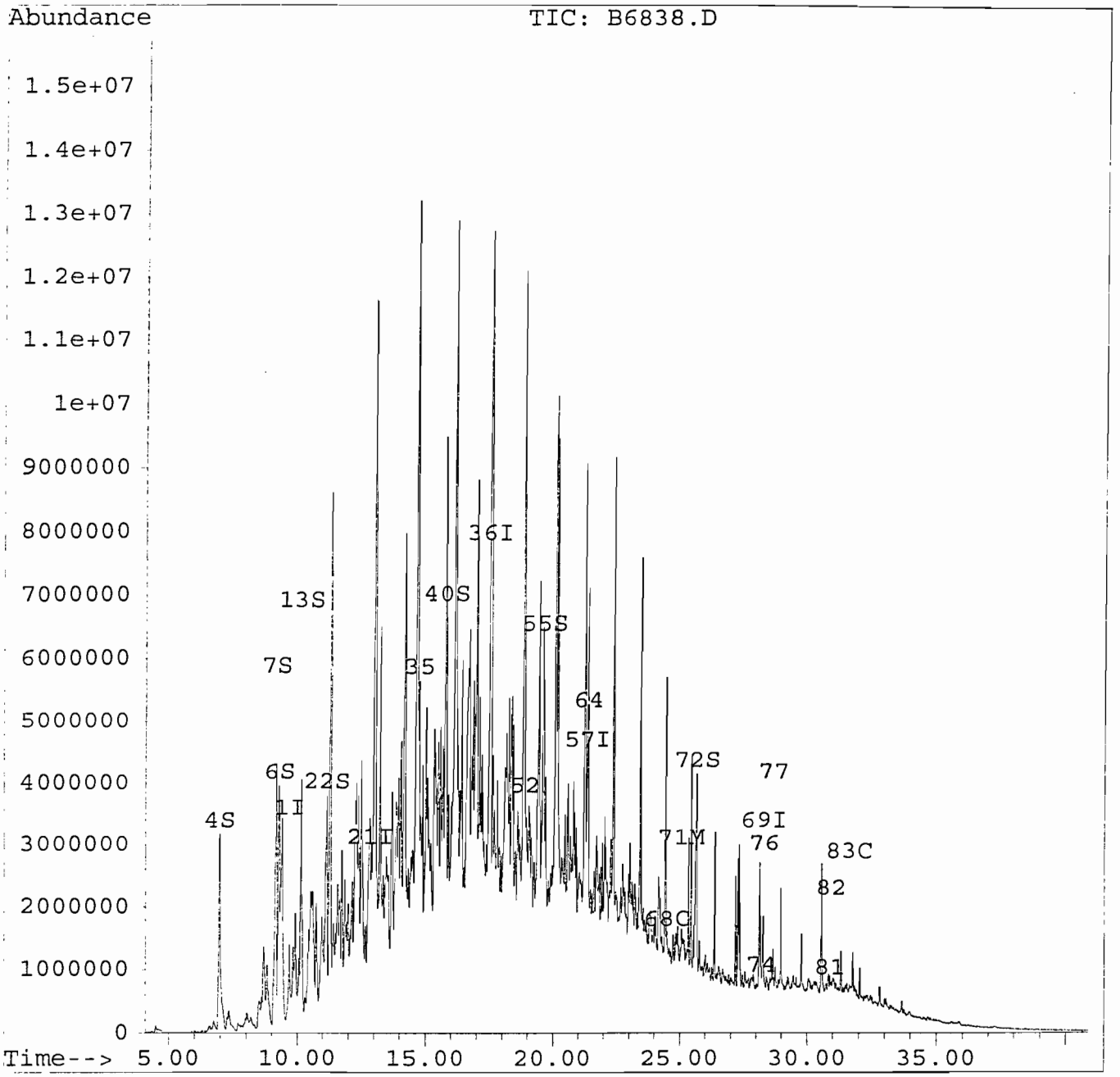
CAS Number	Compound Name	RT	Est. Conc.	Q
1. 124-18-5	Decane	9.39	2300	J
2. 527-84-4	Benzene, 1-methyl-2-(1-methy	10.58	890	J
3. 629-50-5	Tridecane	11.31	1400	J
4.	Unknown	13.04	2000	J
5. 629-62-9	Pentadecane	14.20	1400	J
6.	Unknown	14.67	2800	J
7. 17301-22-3	Undecane, 2,5-dimethyl-	19.45	870	J
8. 544-76-3	Hexadecane	20.13	1300	J
9. 593-45-3	Octadecane	21.29	1000	J
10.	Unknown	22.41	790	J
11.	Unknown	25.34	910	J
12. 55045-10-8	Tridecane, 6-propyl-	26.38	1000	J
13.	Unknown	27.29	920	J
14. 103-23-1	Hexanedioic acid, bis(2-ethy	27.33	850	J
15. 7098-22-8	Tetratetracontane	28.15	1100	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :
Quant Time: Nov 10 14:09 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



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Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :
Quant Time: Nov 10 14:09 1999

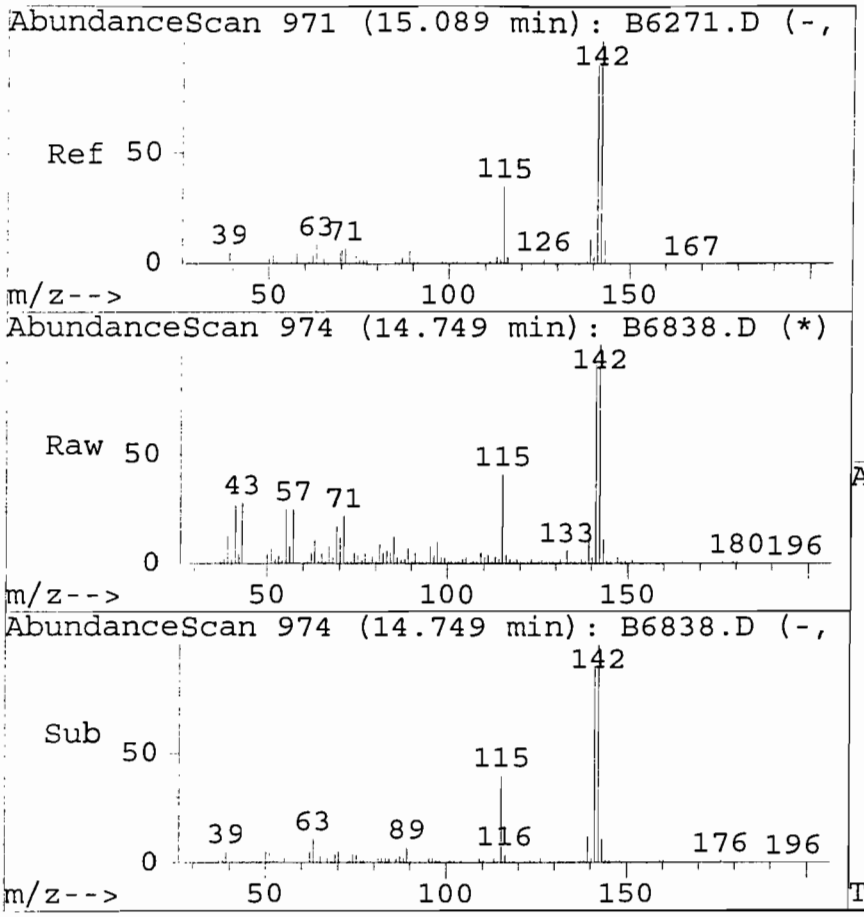
Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.69	152	475618	40.00	ng		-0.04
21) Naphthalene-d8	12.86	136	1672832	40.00	ng		-0.02
36) Acenaphthene-d10	17.49	164	714416	40.00	ng		0.02
57) Phenanthrene-d10	21.34	188	1397502	40.00	ng		0.02
69) Chrysene-d12	28.29	240	1085001	40.00	ng		-0.04
80) Perylene-d12	31.78	264	585625	40.00	ng		-0.05
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	6.96	112	3832818	203.16	ng		
6) 2-Chlorophenol-d4	9.28	132	4361311	246.29	ng		
7) Phenol-d5	9.17	99	4997472	224.08	ng		
13) 1,2-Dichlorobenzene-d4	10.14	152	1451936	125.69	ng		
22) Nitrobenzene-d5	11.17	82	2740006	119.57	ng		
40) 2-Fluorobiphenyl	15.81	172	3521382	134.12	ng		
55) 2,4,6-Tribromophenol	19.65	330	1349848	230.72	ng		
72) Terphenyl-d14	25.67	244	4603376	146.82	ng		
Target Compounds							Qvalue
35) 2-Methylnaphthalene	14.75	142	2496781	85.37	ng		91
52) Fluorene	18.90	166	275913	11.86	ng		81
64) Phenanthrene	21.40	178	691394	19.79	ng		98
68) Fluoranthene	24.51	202	191787	4.90	ng		97
71) Pyrene	25.06	202	257247	7.54	ng		97
74) Benzo[a]anthracene	28.23	228	61129	2.01	ng	m	92
76) Chrysene	28.34	228	64473	2.34	ng		92
77) bis(2-Ethylhexyl)phthalate	28.67	149	222921	6.86	ng		95
81) Benzo[b]fluoranthene	30.90	252	61981	3.21	ng		85
82) Benzo[k]fluoranthene	30.94	252	46572	3.48	ng	m	85
83) Benzo[a]pyrene	31.63	252	40205	2.70	ng		91

000194

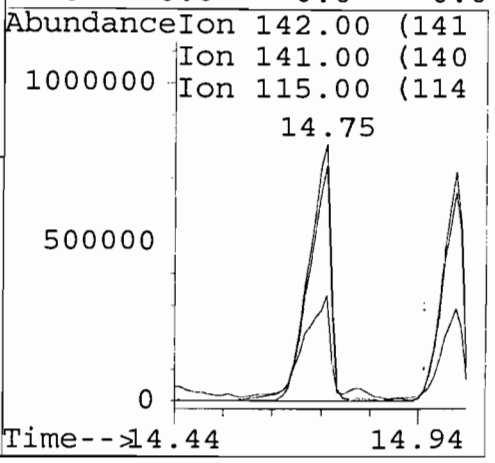
(#) = qualifier out of range (m) = manual integration

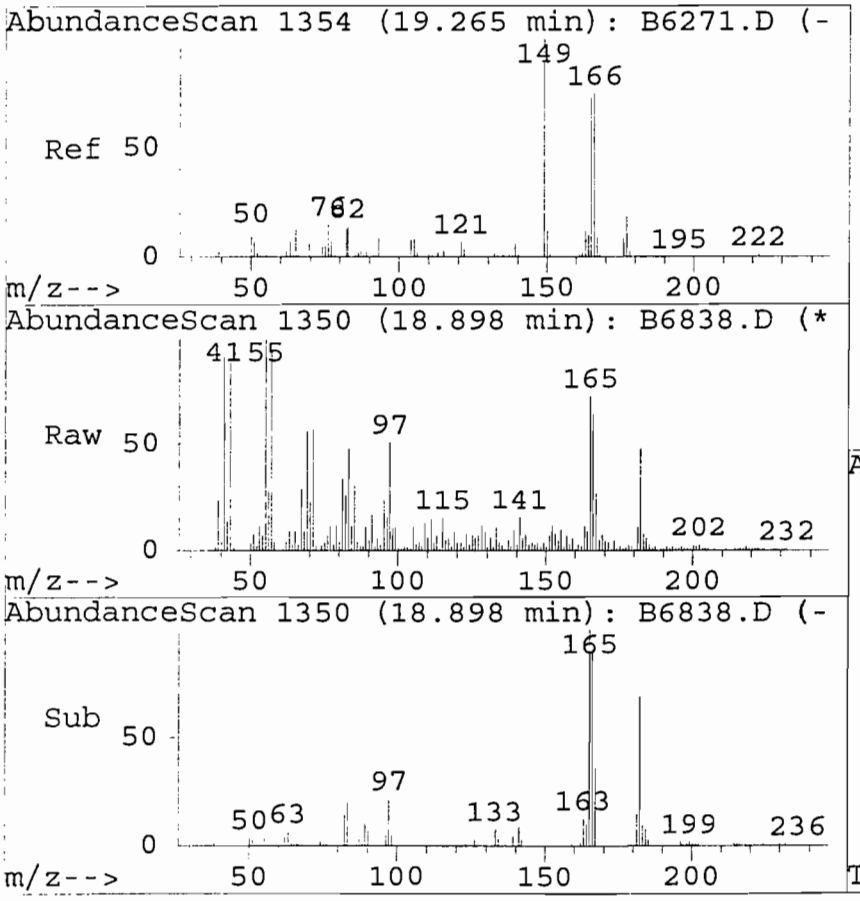


#35
2-Methylnaphthalene
Concen: 85.37 ng
RT: 14.75 min Scan# 974
Delta R.T. 0.03 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:142 Resp: 2496781

Ion	Ratio	Lower	Upper
142	100		
141	91.5	42.5	127.5
115	41.1	16.7	50.1
0	0.0	0.0	0.0

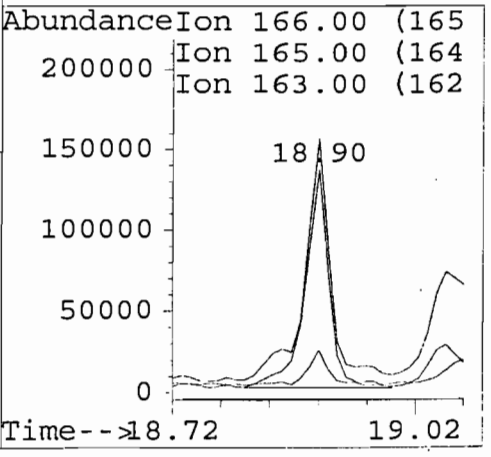




#52
Fluorene
Concen: 11.86 ng
RT: 18.90 min Scan# 1350
Delta R.T. 0.00 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:166 Resp: 275913

Ion	Ratio	Lower	Upper
166	100		
165	114.2	47.2	141.7
163	18.9	7.3	21.9
0	0.0	0.0	0.0



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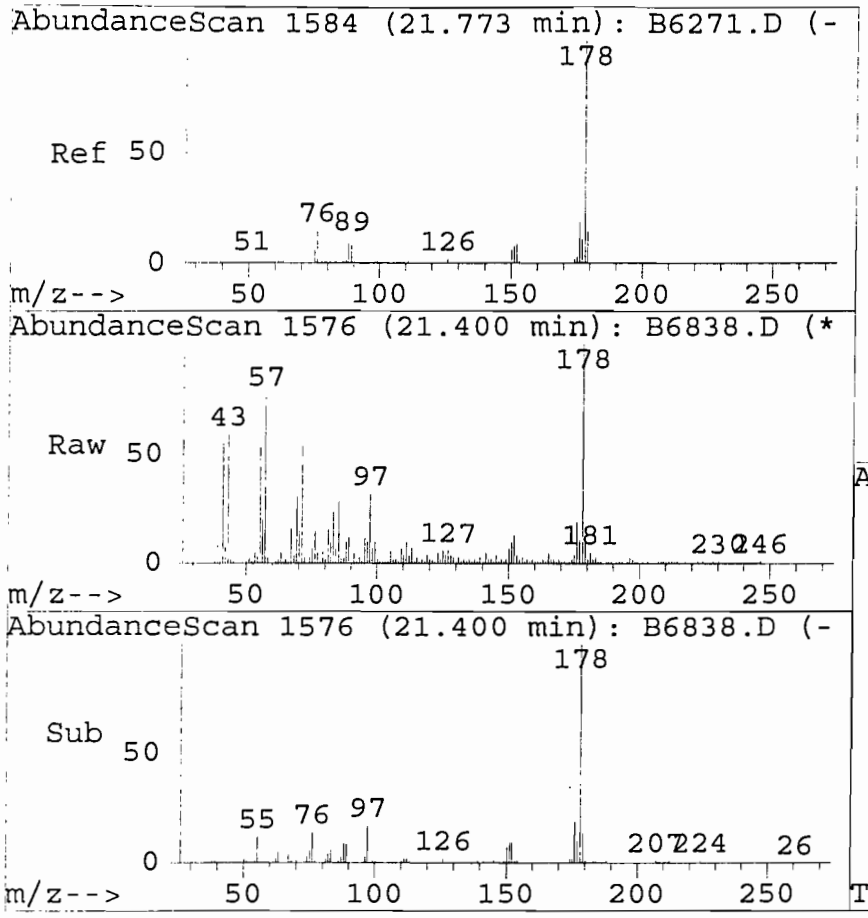
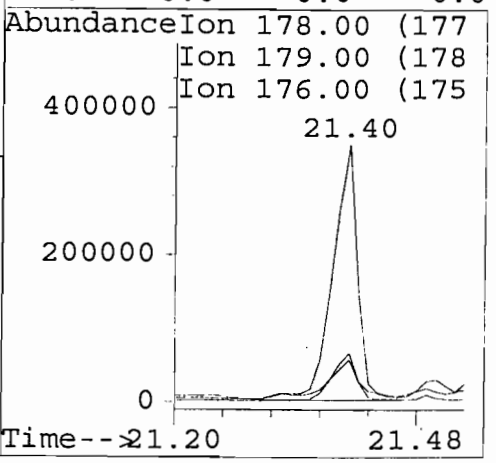
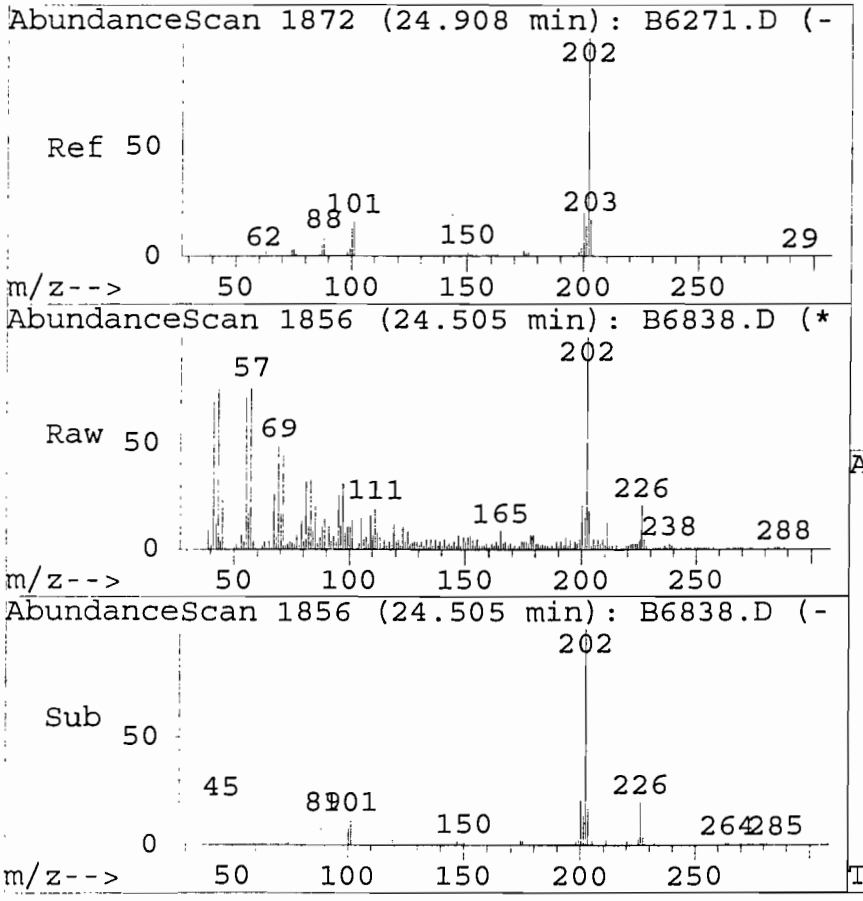


#64
Phenanthrene
Concen: 19.79 ng
RT: 21.40 min Scan# 1576
Delta R.T. 0.01 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:178 Resp: 691394

Ion	Ratio	Lower	Upper
178	100		
179	16.6	7.4	22.3
176	19.3	9.4	28.2
0	0.0	0.0	0.0

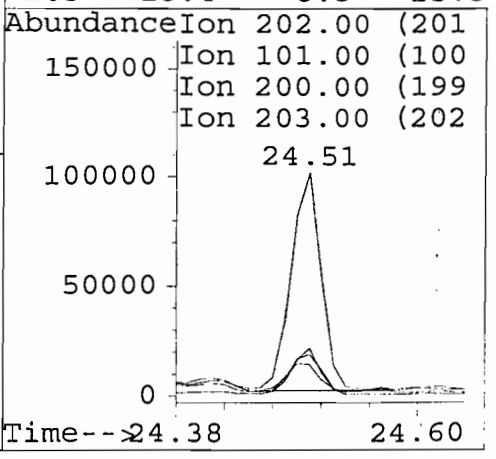


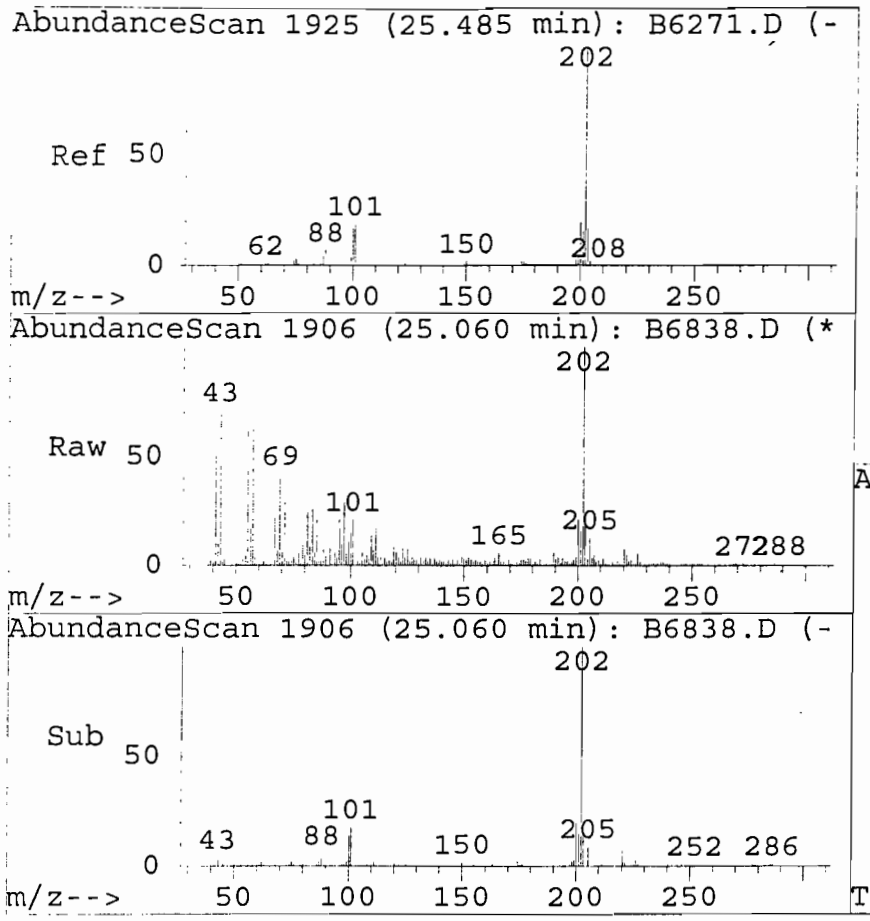


#68
Fluoranthene
Concen: 4.90 ng
RT: 24.51 min Scan# 1856
Delta R.T. -0.03 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:202 Resp: 191787

Ion	Ratio	Lower	Upper
202	100		
101	14.1	7.4	22.2
200	21.1	9.9	29.7
203	18.4	8.5	25.5

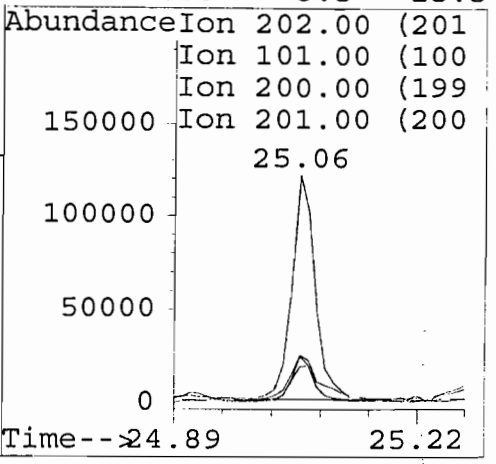


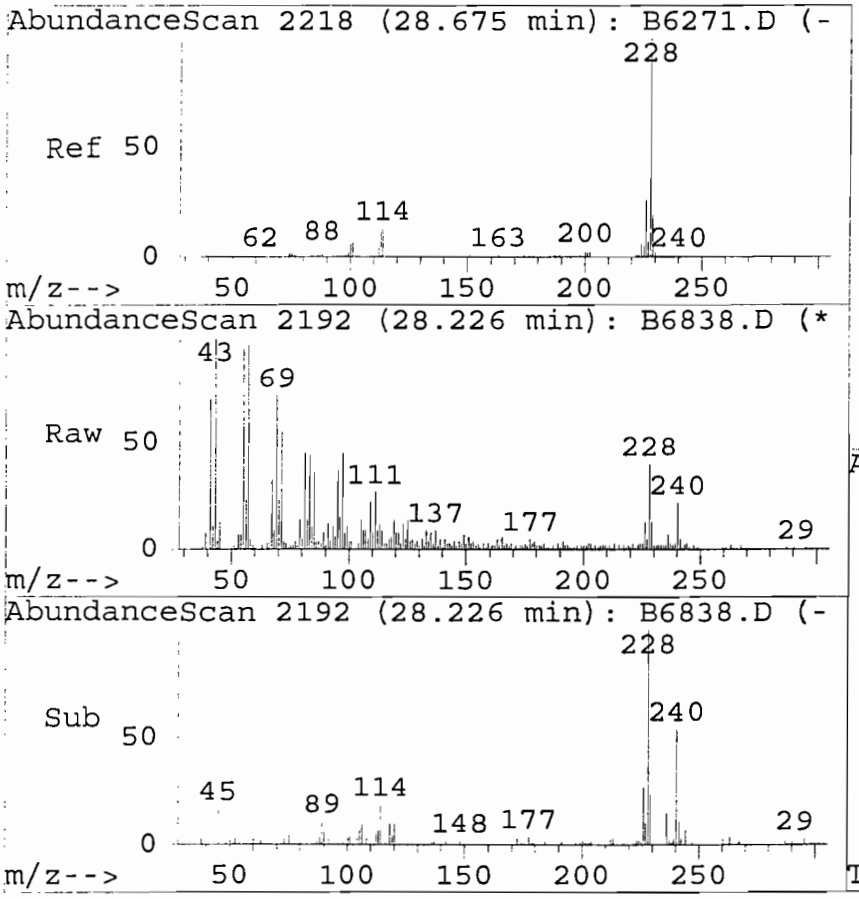


#71
Pyrene
Concen: 7.54 ng
RT: 25.06 min Scan# 1906
Delta R.T. -0.04 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:202 Resp: 257247

Ion	Ratio	Lower	Upper
202	100		
101	21.1	9.2	27.7
200	20.6	10.5	31.6
201	16.0	8.5	25.5

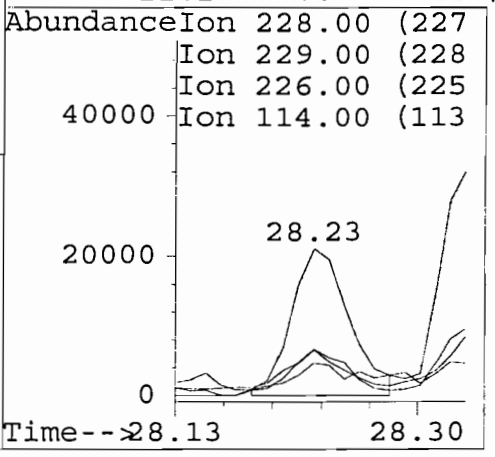


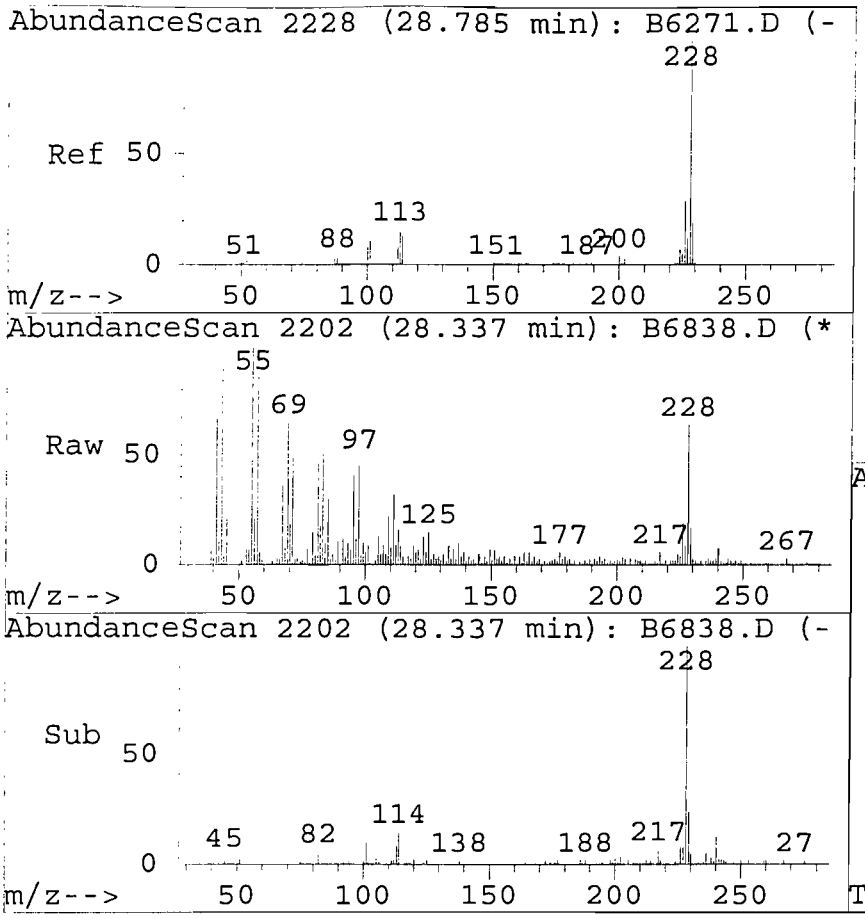


#74
Benzo[a]anthracene
Concen: 2.01 ng m
RT: 28.23 min Scan# 2192
Delta R.T. -0.07 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:228 Resp: 61129

Ion	Ratio	Lower	Upper
228	100		
229	31.4	9.4	28.2#
226	31.7	13.3	39.8
114	22.2	7.1	21.4#

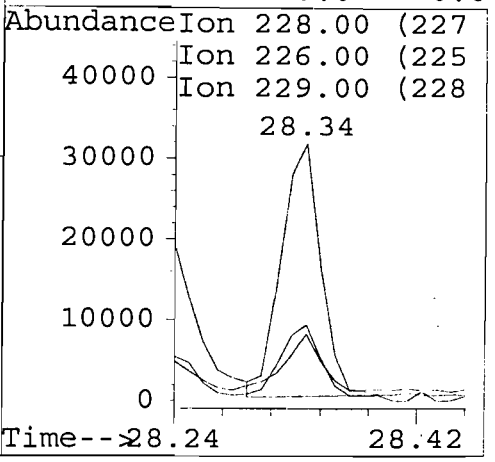


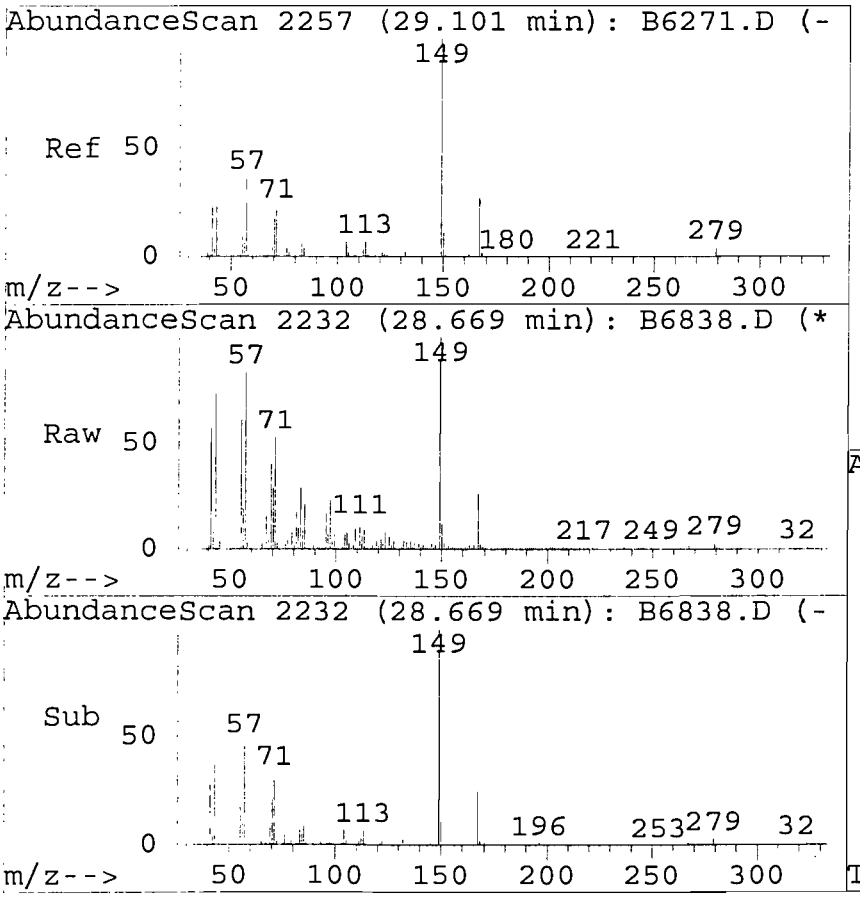


#76
Chrysene
Concen: 2.34 ng
RT: 28.34 min Scan# 2202
Delta R.T. -0.08 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:228 Resp: 64473

Ion	Ratio	Lower	Upper
228	100		
226	29.5	14.0	41.9
229	25.9	9.7	29.0
0	0.0	0.0	0.0

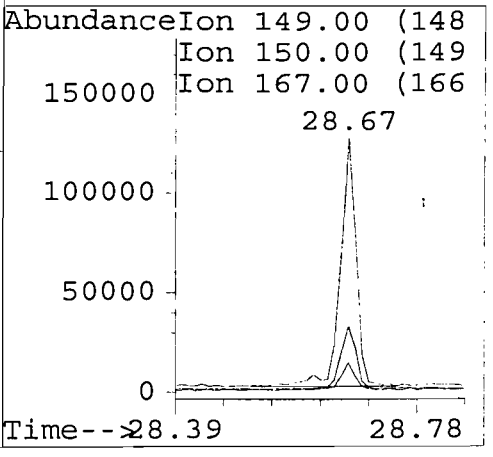


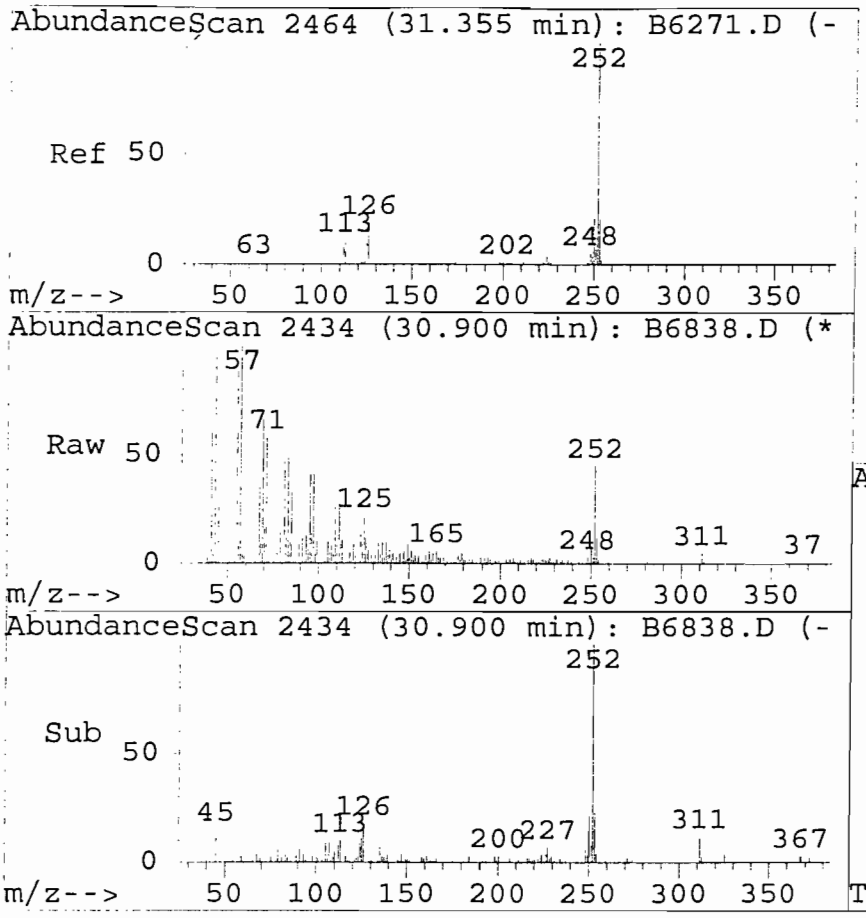


#77
bis(2-Ethylhexyl)phthalate
Concen: 6.86 ng
RT: 28.67 min Scan# 2232
Delta R.T. -0.06 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:149 Resp: 222921

Ion	Ratio	Lower	Upper
149	100		
150	11.7	5.6	16.8
167	26.1	14.7	44.1
0	0.0	0.0	0.0

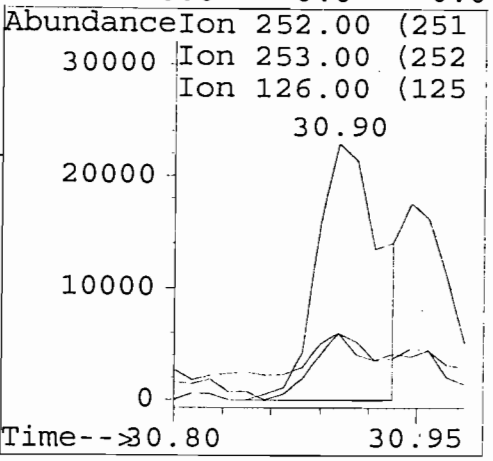


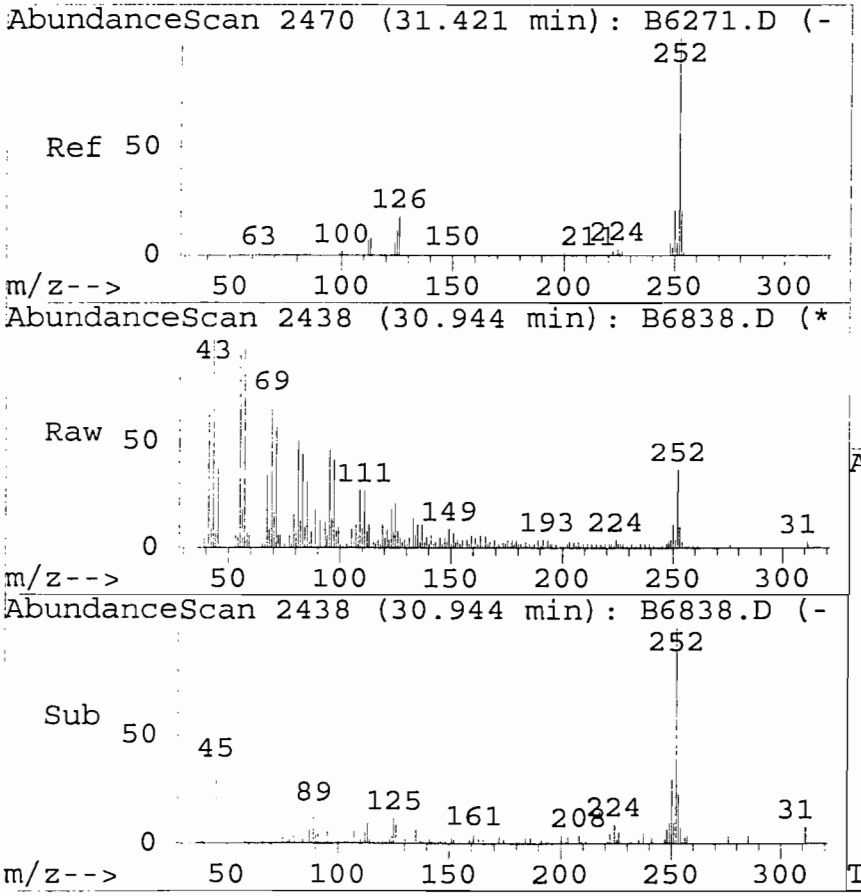


#81
Benzo[b]fluoranthene
Concen: 3.21 ng
RT: 30.90 min Scan# 2434
Delta R.T. -0.09 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:252 Resp: 61981

Ion	Ratio	Lower	Upper
252	100		
253	26.2	10.6	31.9
126	26.4	8.9	26.7
0	0.0	0.0	0.0

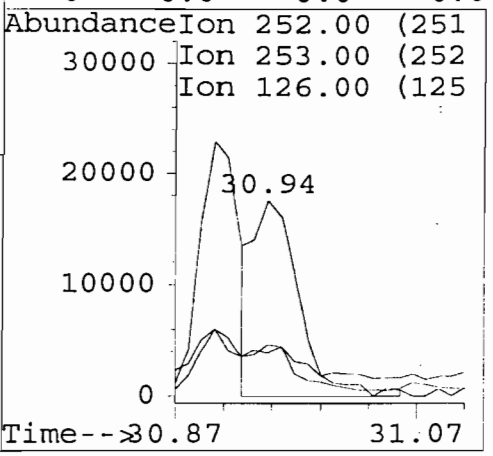




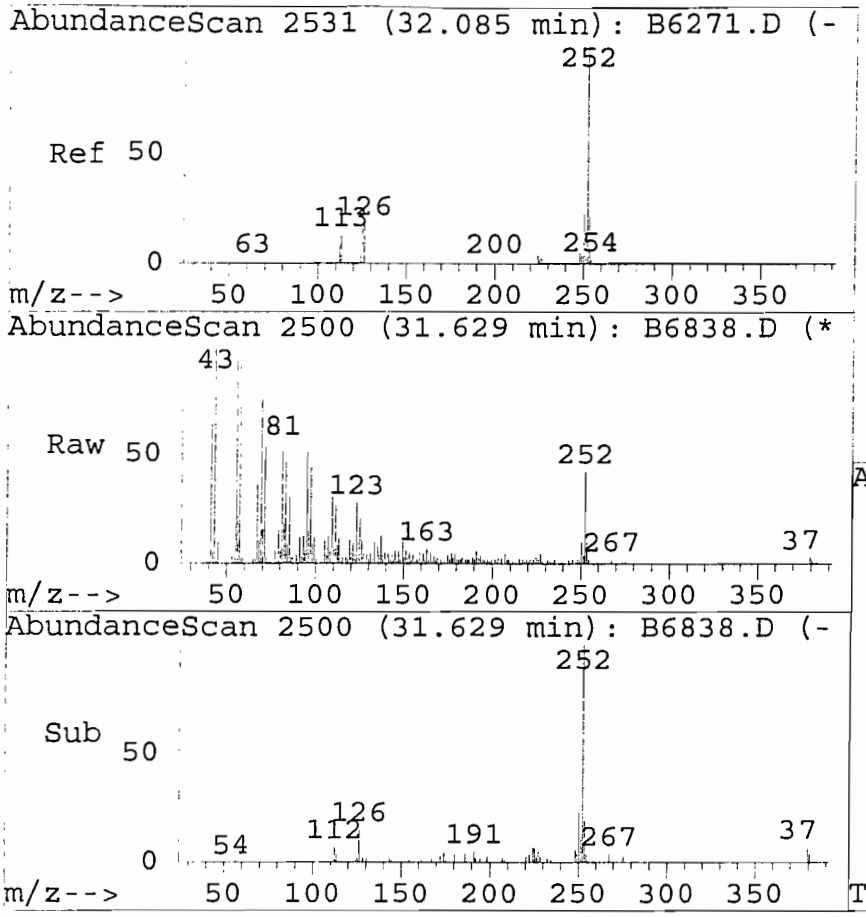
#82
Benzo[k]fluoranthene
Concen: 3.48 ng m
RT: 30.94 min Scan# 2438
Delta R.T. -0.10 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:252 Resp: 46572

Ion	Ratio	Lower	Upper
252	100		
253	26.2	10.5	31.6
126	22.2	9.0	27.1
0	0.0	0.0	0.0



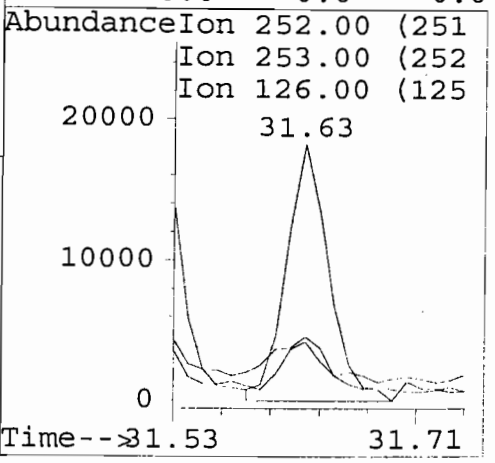
000199



#83
Benzo[a]pyréne
Concen: 2.70 ng
RT: 31.63 min Scan# 2500
Delta R.T. -0.08 min
Lab File: B6838.D
Acq: 9 Nov 99 2:10 pm

Tgt Ion:252 Resp: 40205

Ion	Ratio	Lower	Upper
252	100		
253	23.1	10.6	31.9
126	25.0	9.0	27.0
0	0.0	0.0	0.0



000200

Library Search Compound Report

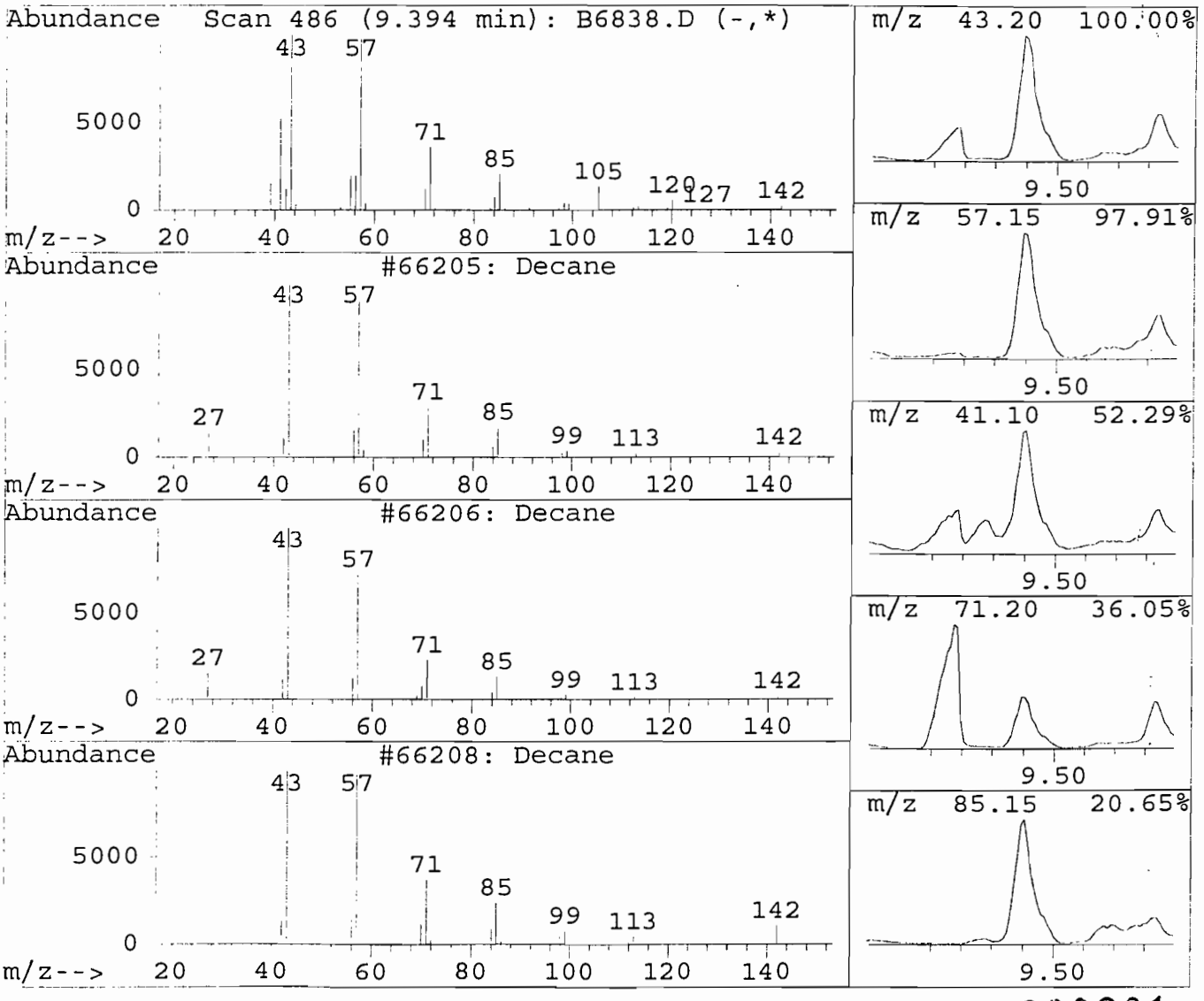
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
9.39	135.66 ng	18860461	1,4-Dichlorobenzene-d4	9.69

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane	66205	000124-18-5	94
2	Decane	66206	000124-18-5	83
3	Decane	66208	000124-18-5	81
4	Octane, 4-ethyl-	8095	015869-86-0	74
5	Undecane	67317	001120-21-4	72



000201

Library Search Compound Report

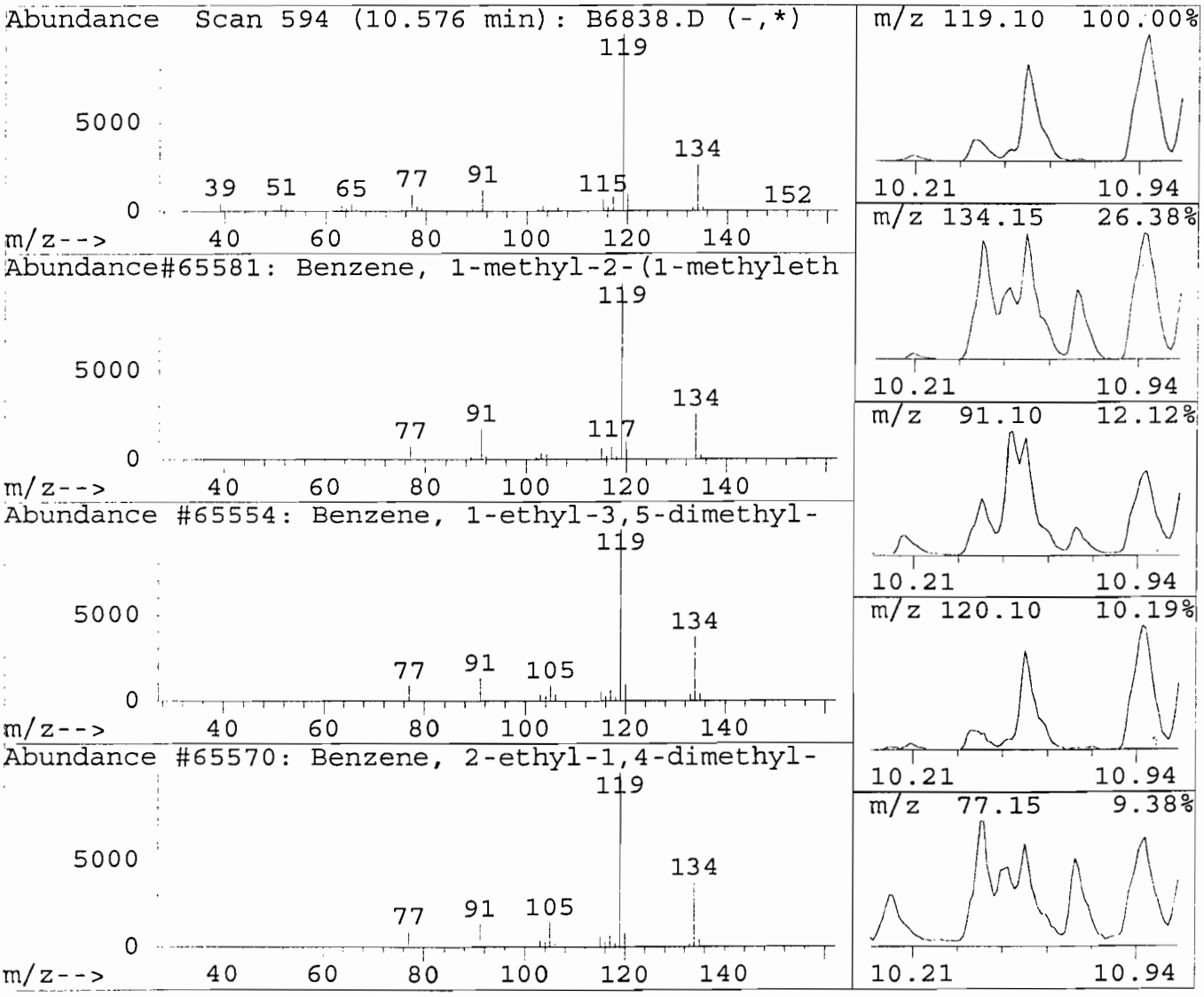
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.58	52.05 ng	7236976	1,4-Dichlorobenzene-d4	9.69

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methylethyl)	65581	000527-84-4	91
2	Benzene, 1-ethyl-3,5-dimethyl-	65554	000934-74-7	91
3	Benzene, 2-ethyl-1,4-dimethyl-	65570	001758-88-9	91
4	Benzene, 1-methyl-3-(1-methylethyl)	65579	000535-77-3	91
5	Benzene, 1-methyl-3-(1-methylethyl)	6225	000535-77-3	91



000202

Library Search Compound Report

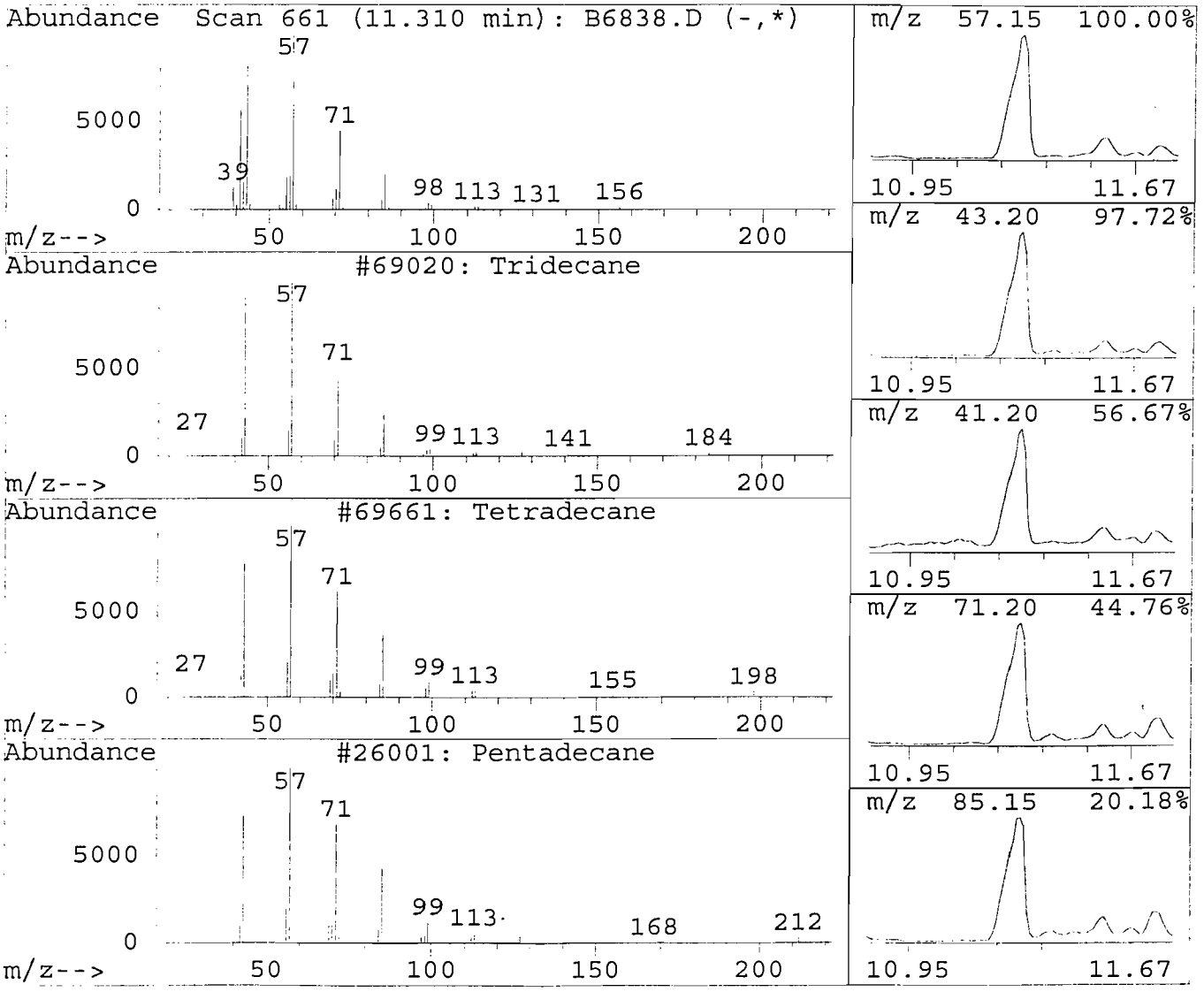
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
11.31	84.23 ng	30279374	Naphthalene-d8	12.86

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	69020	000629-50-5	90
2	Tetradecane	69661	000629-59-4	90
3	Pentadecane	26001	000629-62-9	83
4	Undecane	67318	001120-21-4	83
5	Undecane	11611	001120-21-4	83



000203

Library Search Compound Report

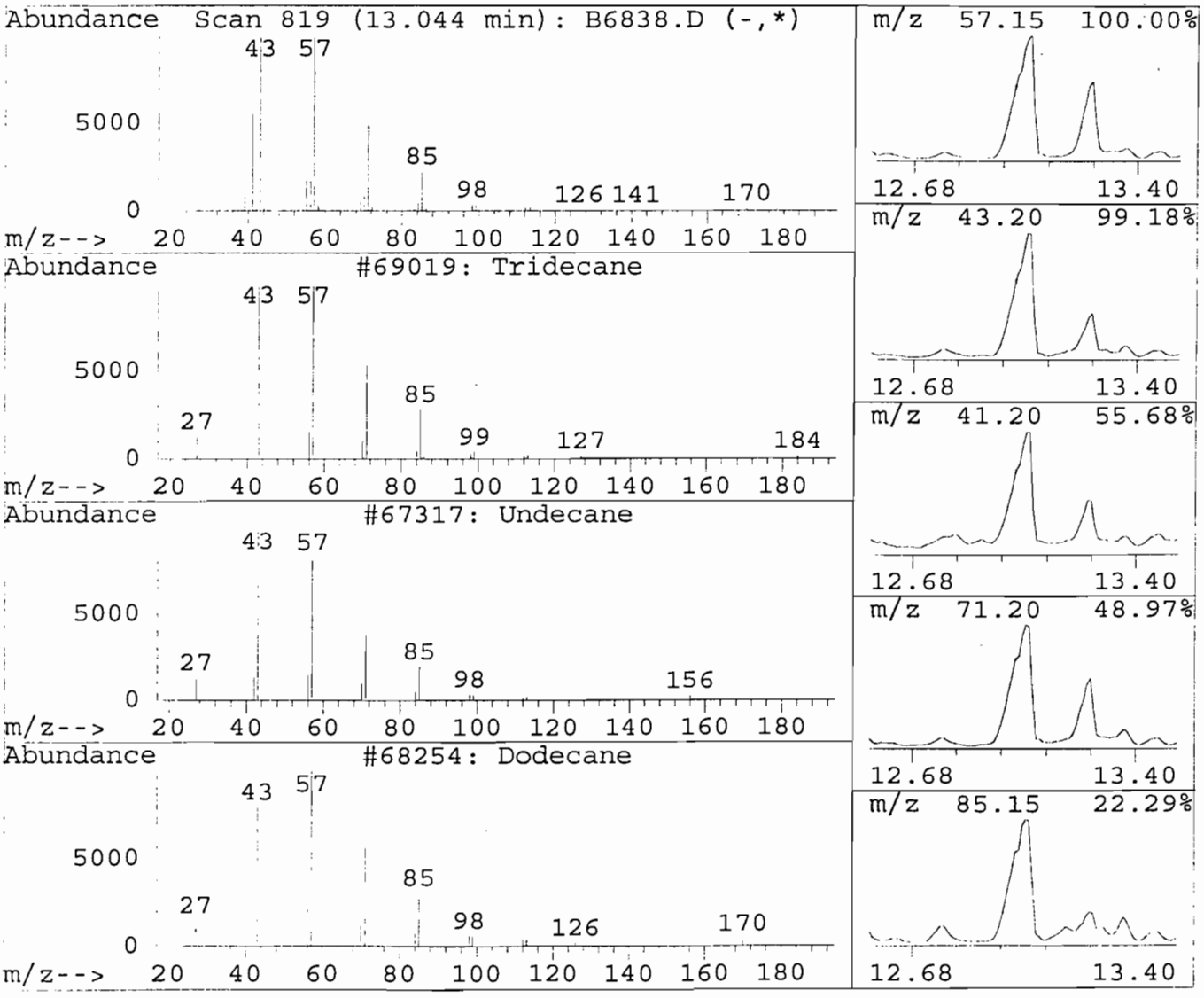
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
13.04	117.22 ng	42136918	Naphthalene-d8	12.86

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	69019	000629-50-5	90
2	Undecane	67317	001120-21-4	90
3	Dodecane	68254	000112-40-3	90
4	Dodecane	68250	000112-40-3	86
5	Dodecane	68249	000112-40-3	83



000204

Library Search Compound Report

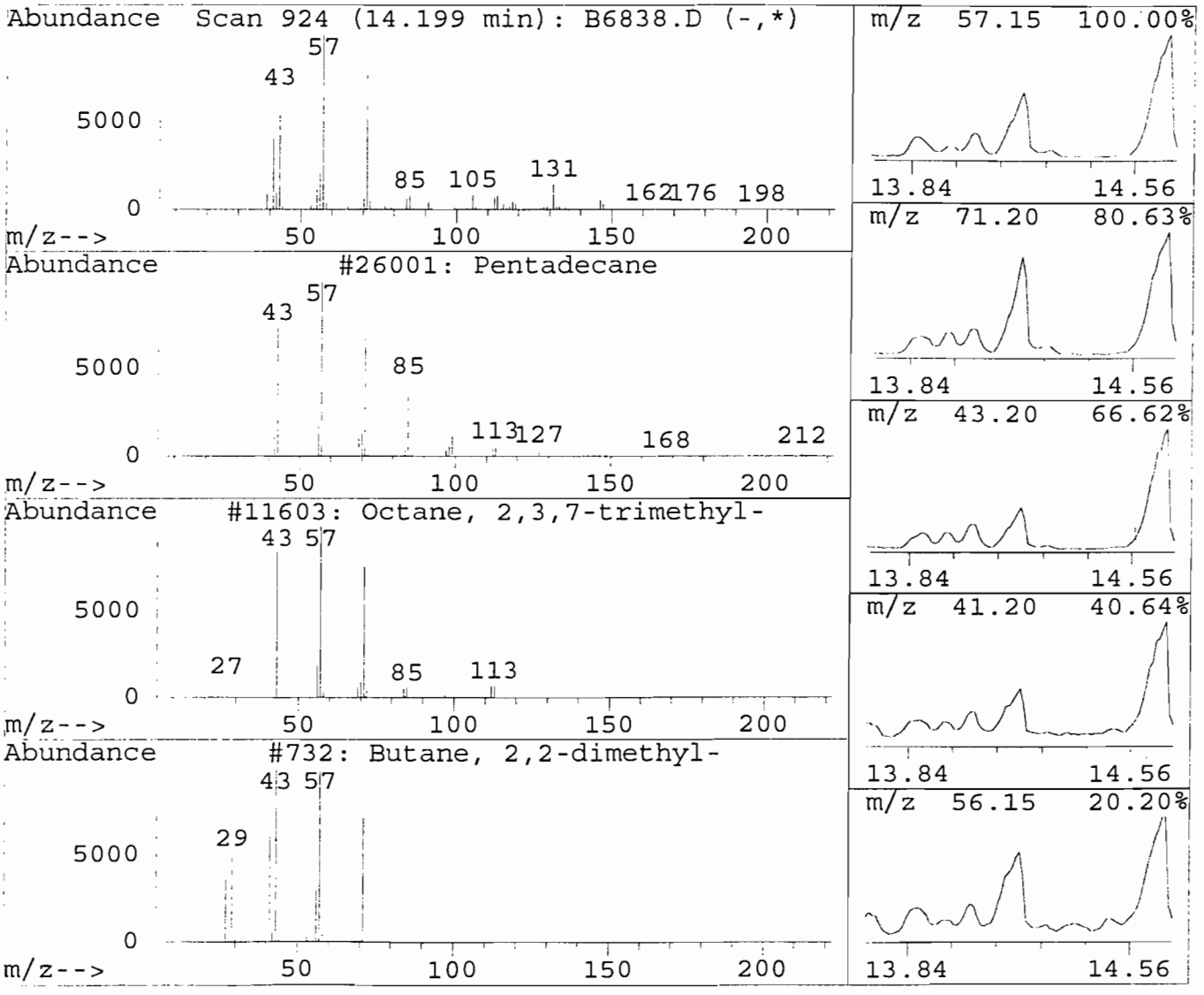
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.20	78.91 ng	28364943	Naphthalene-d8	12.86

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentadecane	26001	000629-62-9	64
2	Octane, 2,3,7-trimethyl-	11603	062016-34-6	64
3	Butane, 2,2-dimethyl-	732	000075-83-2	59
4	Eicosane	72326	000112-95-8	59
5	Heptane, 3-ethyl-5-methyl-	8092	052896-90-9	59



Library Search Compound Report

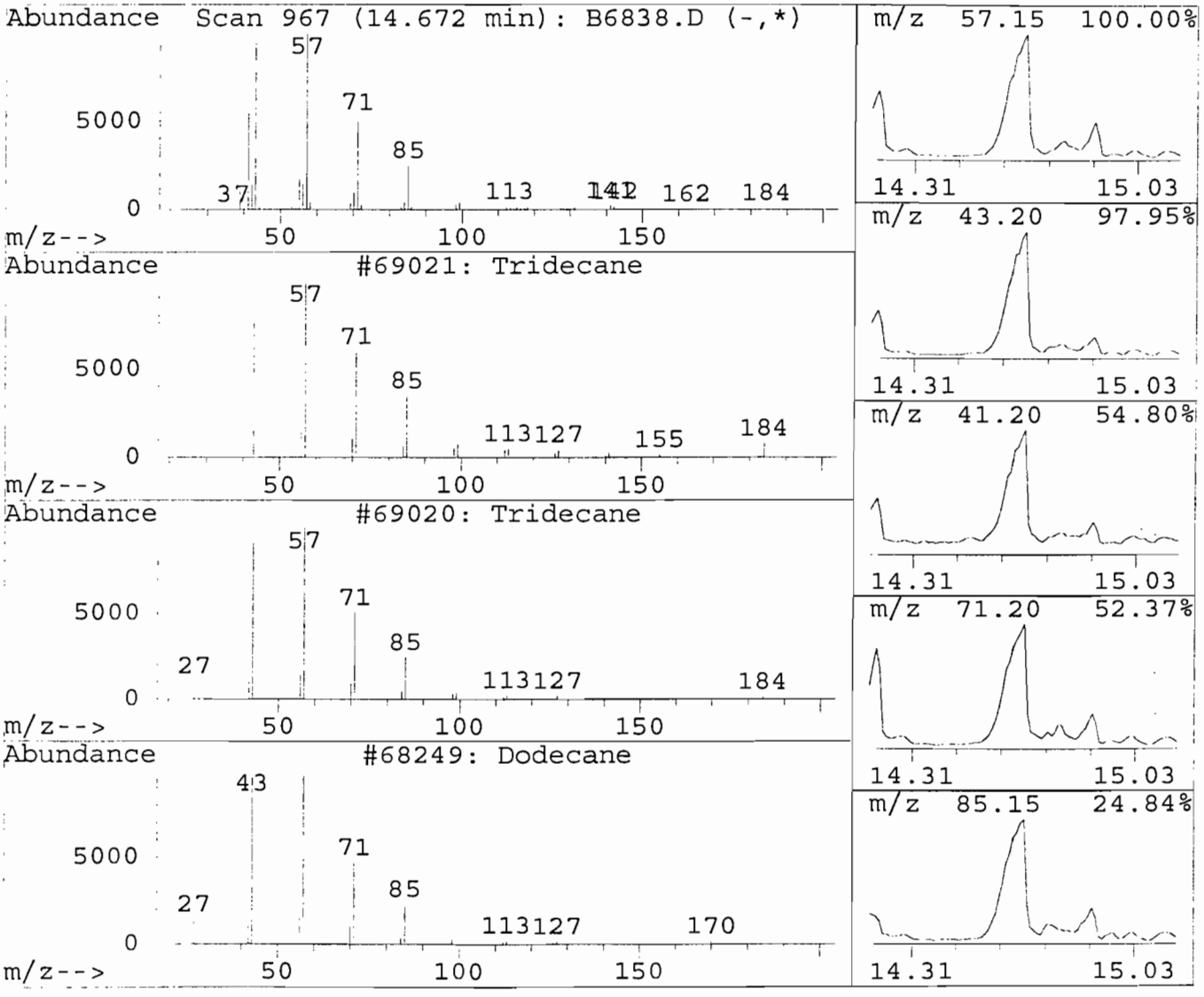
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.67	162.54 ng	58428992	Naphthalene-d8	12.86

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	69021	000629-50-5	93
2	Tridecane	69020	000629-50-5	91
3	Dodecane	68249	000112-40-3	90
4	Hexadecane	70787	000544-76-3	83
5	Octadecane	71559	000593-45-3	78



000206

Library Search Compound Report

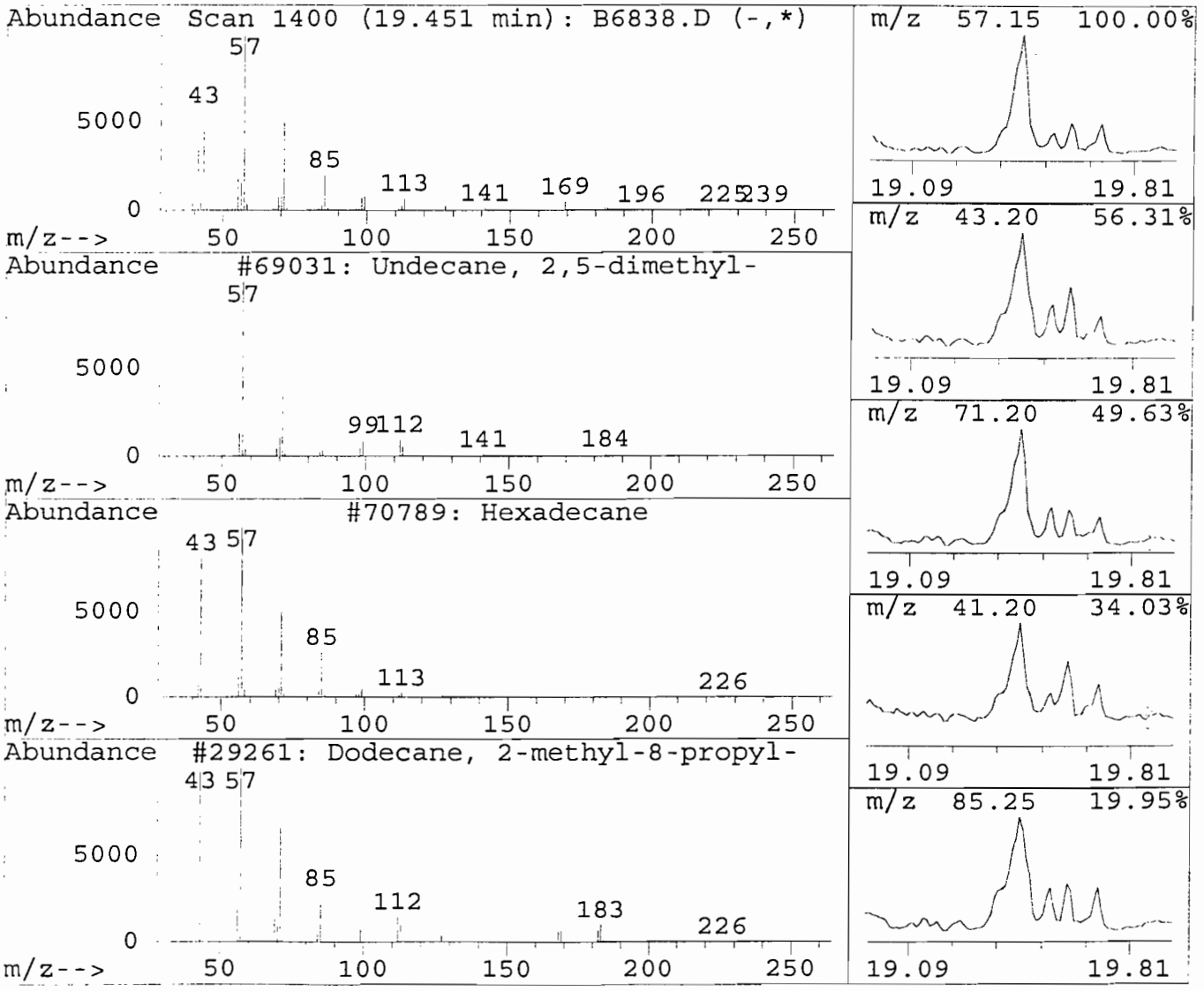
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.45	50.78 ng	21336470	Phenanthrene-d10	21.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,5-dimethyl-	69031	017301-22-3	81
2	Hexadecane	70789	000544-76-3	80
3	Dodecane, 2-methyl-8-propyl-	29261	055045-07-3	72
4	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	64
5	Undecane, 3,6-dimethyl-	19000	017301-28-9	64



000207

Library Search Compound Report

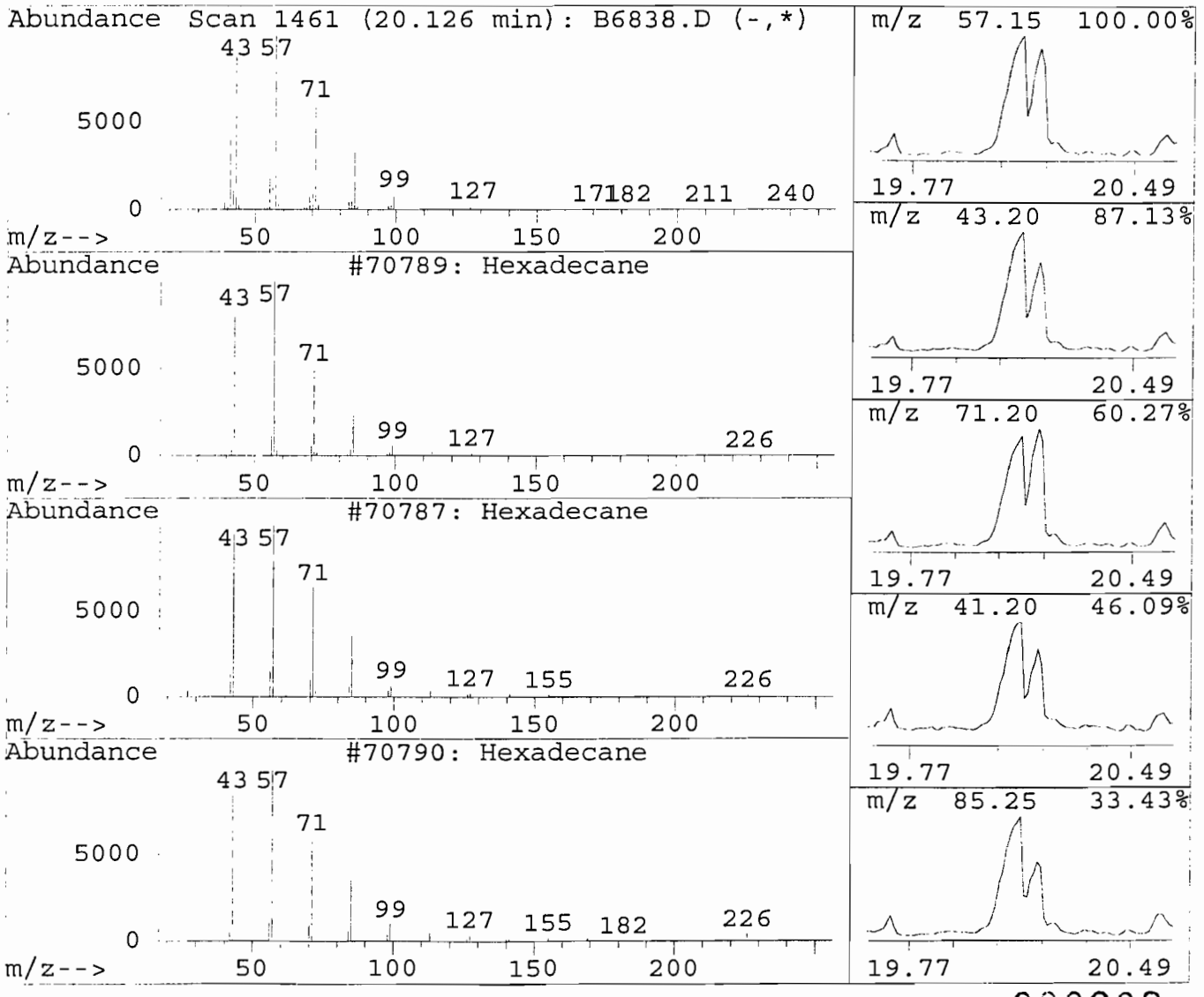
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.13	74.49 ng	31298086	Phenanthrene-d10	21.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecane	70789	000544-76-3	91
2	Hexadecane	70787	000544-76-3	90
3	Hexadecane	70790	000544-76-3	90
4	Hexatriacontane	74636	000630-06-8	86
5	Tridecane	69019	000629-50-5	83



000208

Library Search Compound Report

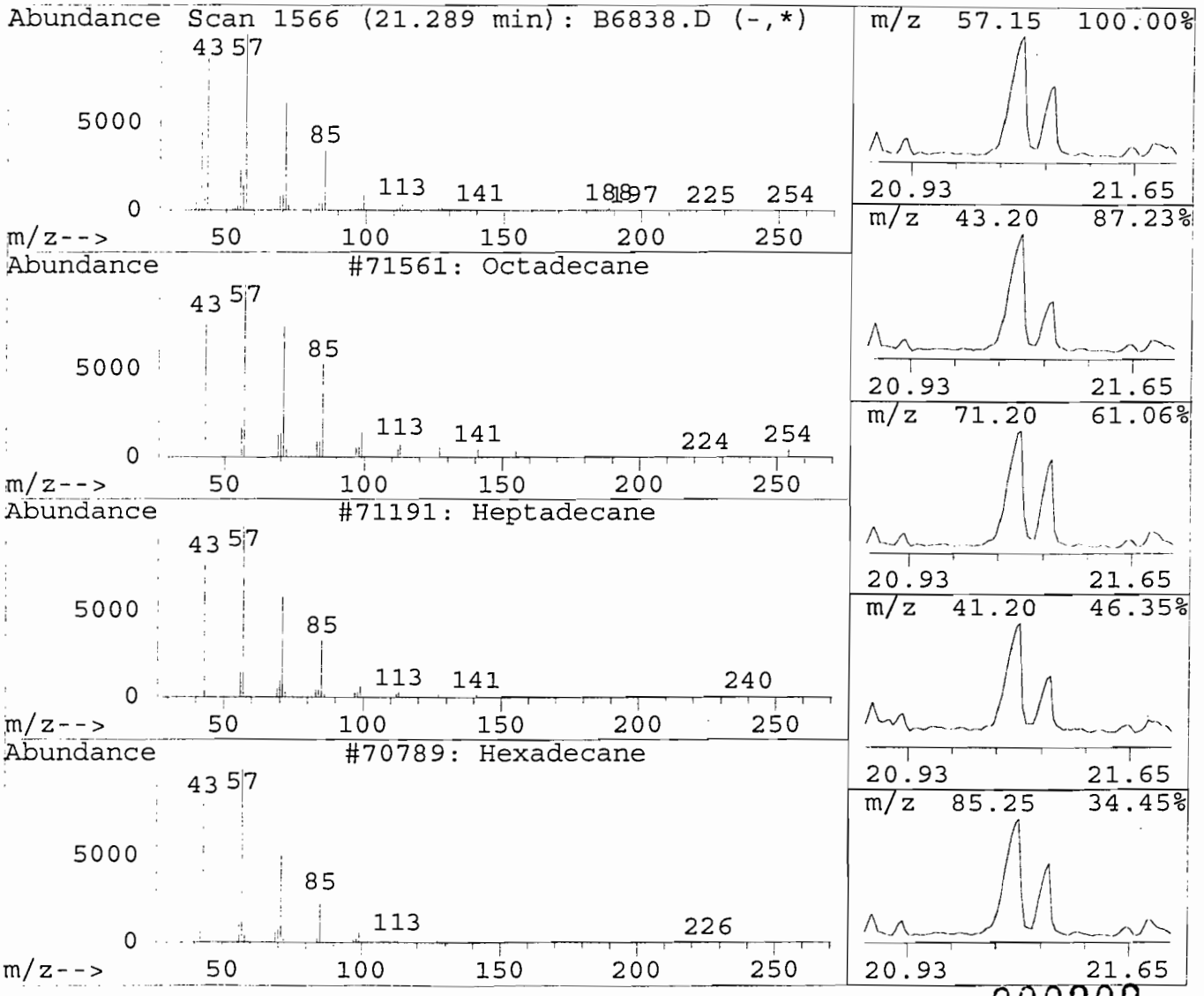
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.29	58.98 ng	24782514	Phenanthrene-d10	21.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octadecane	71561	000593-45-3	96
2	Heptadecane	71191	000629-78-7	91
3	Hexadecane	70789	000544-76-3	91
4	Pentadecane	70274	000629-62-9	86
5	Dodecane, 2-methyl-6-propyl-	29264	055045-08-4	86



000209

Library Search Compound Report

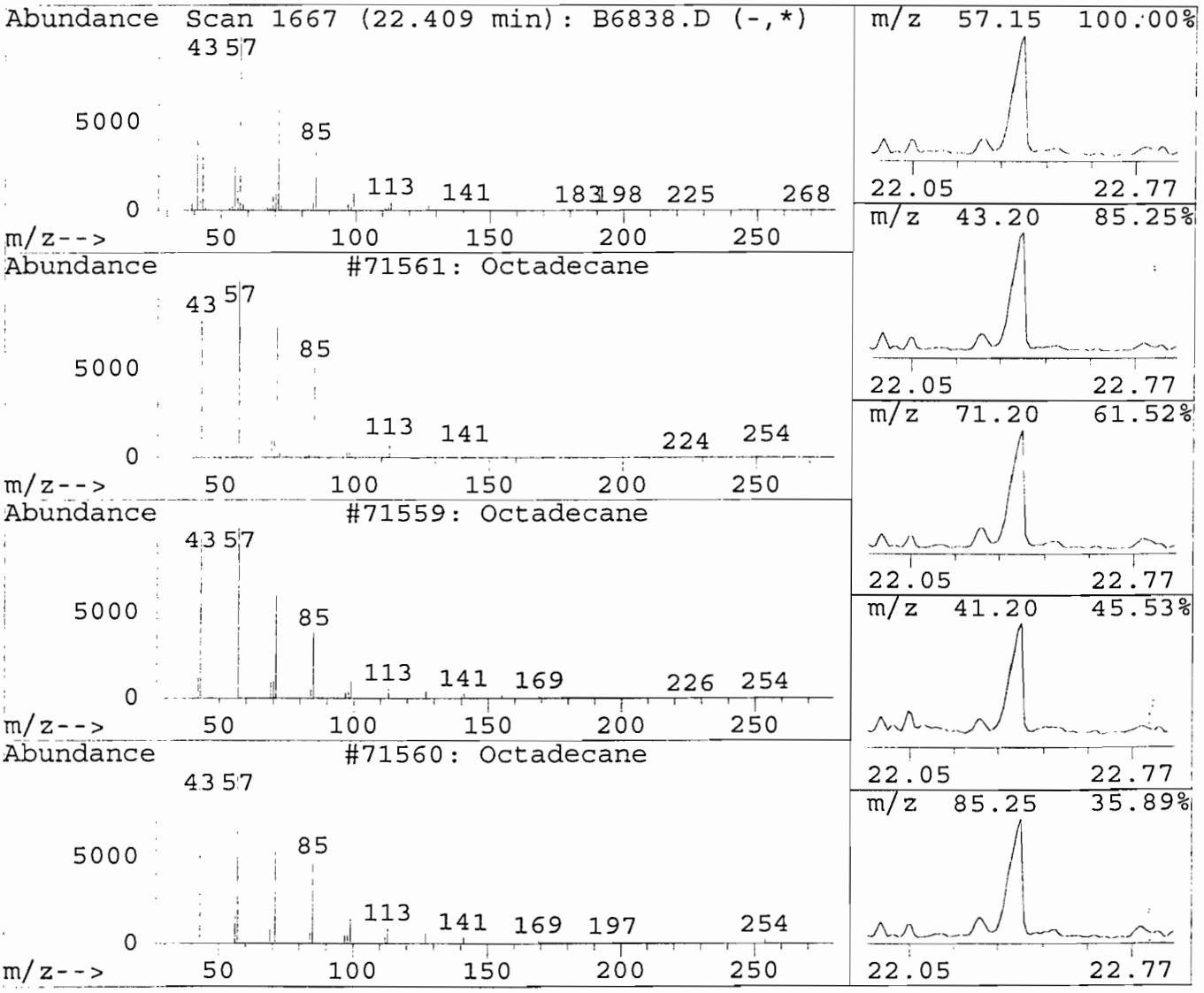
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.41	46.17 ng	19397205	Phenanthrene-d10	21.34

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octadecane	71561	000593-45-3	95
2	Octadecane	71559	000593-45-3	94
3	Octadecane	71560	000593-45-3	92
4	Hexadecane	70789	000544-76-3	91
5	Heptadecane	71191	000629-78-7	91



Library Search Compound Report

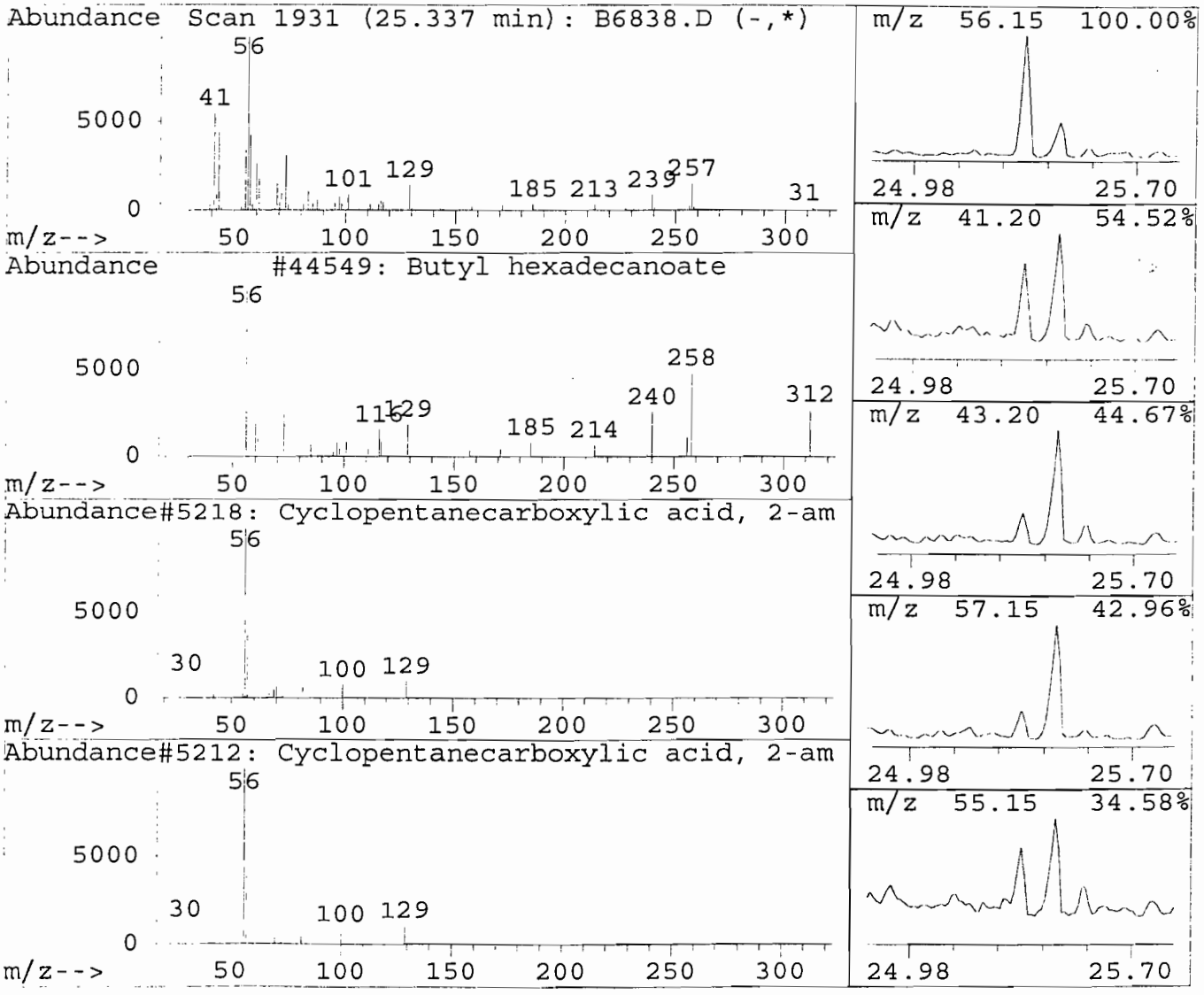
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
25.34	53.05 ng	4583443	Chrysene-d12	28.29

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butyl hexadecanoate	44549	000000-00-0	56
2	Cyclopentanecarboxylic acid, 2-amin	5218	037910-65-9	46
3	Cyclopentanecarboxylic acid, 2-amin	5212	040482-05-1	46
4	1-Hexene, 2,5-dimethyl-	64038	006975-92-4	38
5	1-Hexene, 2-methyl-	63261	006094-02-6	38



000211

Library Search Compound Report

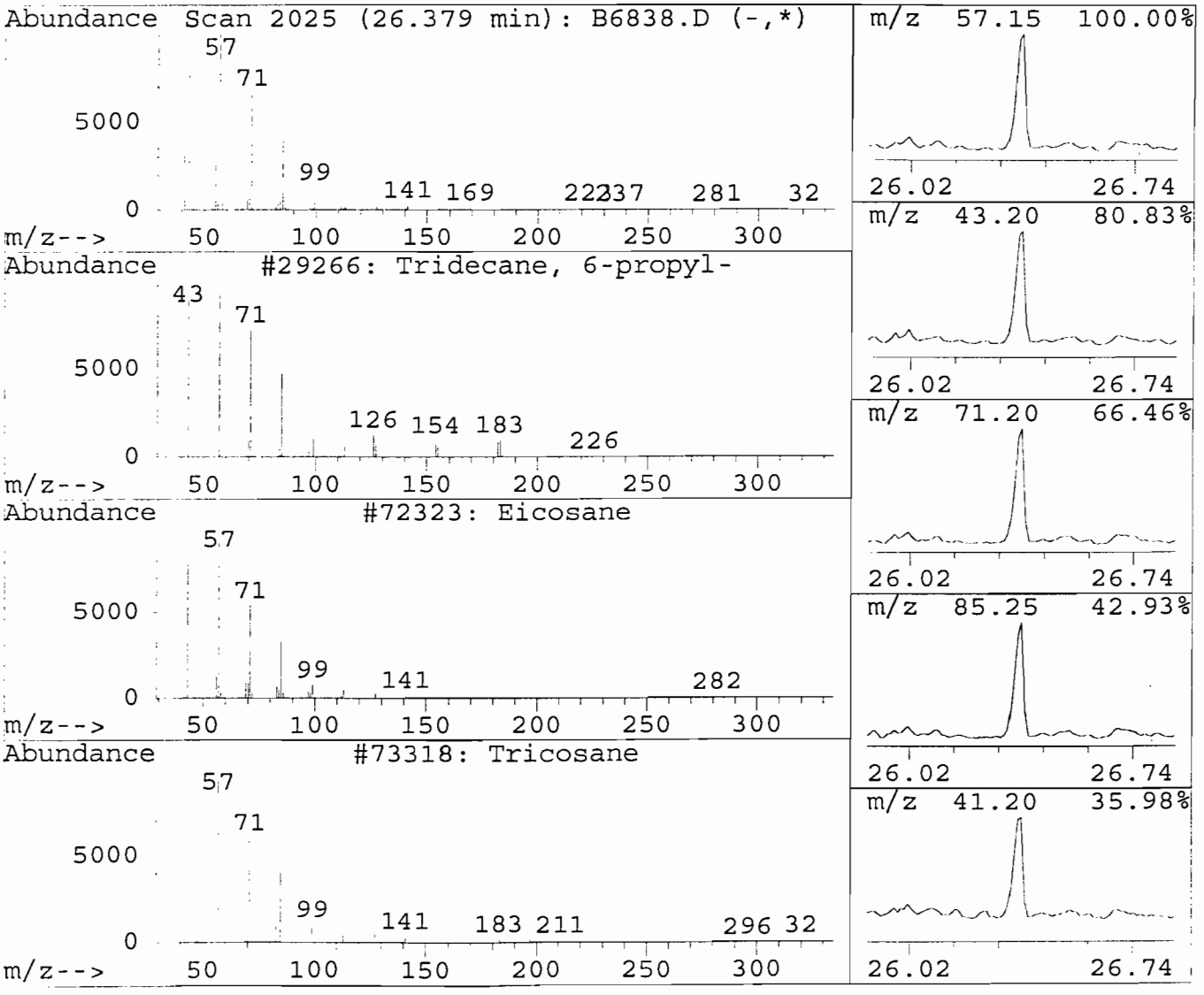
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
26.38	60.00 ng	5184289	Chrysene-d12	28.29

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane, 6-propyl-	29266	055045-10-8	91
2	Eicosane	72323	000112-95-8	91
3	Tricosane	73318	000638-67-5	91
4	Heptadecane	71191	000629-78-7	91
5	Docosane	44318	000629-97-0	91



Library Search Compound Report

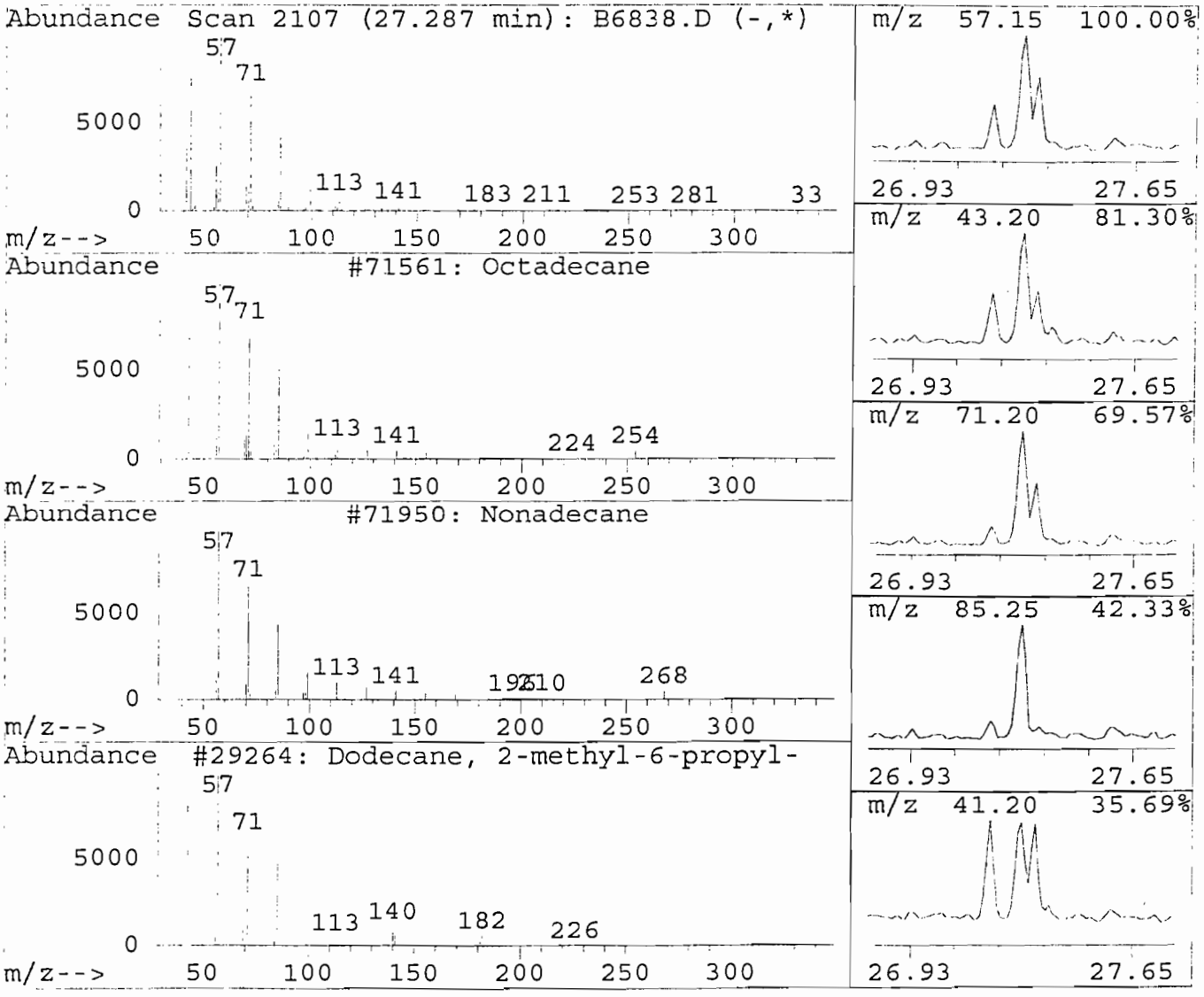
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.29	53.70 ng	4639688	Chrysene-d12	28.29

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octadecane	71561	000593-45-3	95
2	Nonadecane	71950	000629-92-5	93
3	Dodecane, 2-methyl-6-propyl-	29264	055045-08-4	91
4	Eicosane	72323	000112-95-8	91
5	Tetracosane	73543	000646-31-1	91



Library Search Compound Report

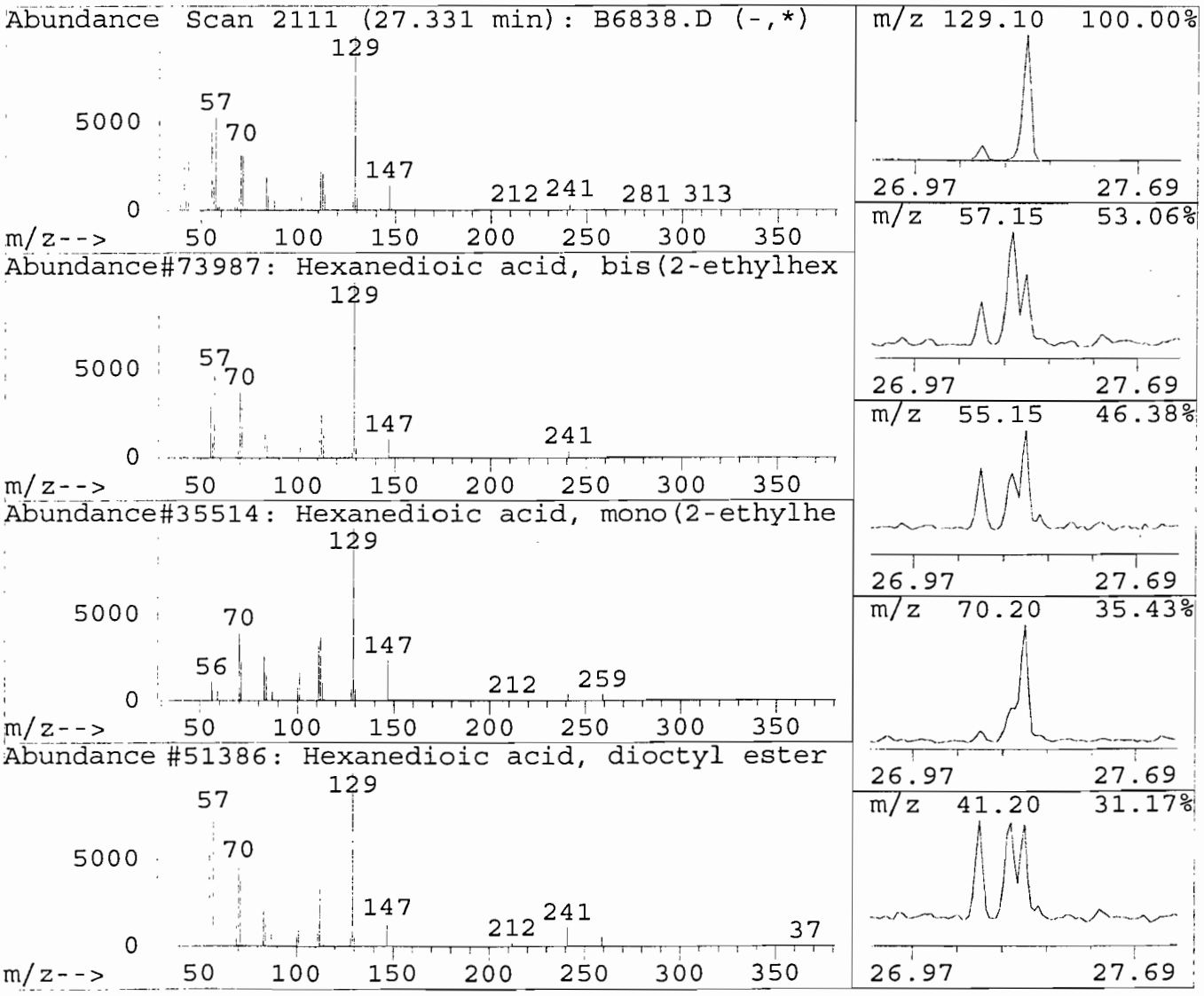
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.33	49.37 ng	4266192	Chrysene-d12	28.29

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	87
2	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	64
3	Hexanedioic acid, dioctyl ester	51386	000123-79-5	52
4	Thiophene, 2-nitro-	5172	000609-40-5	43
5	Hexanedioic acid, bis(1-methylpropy	71655	038447-22-2	43



000214

Library Search Compound Report

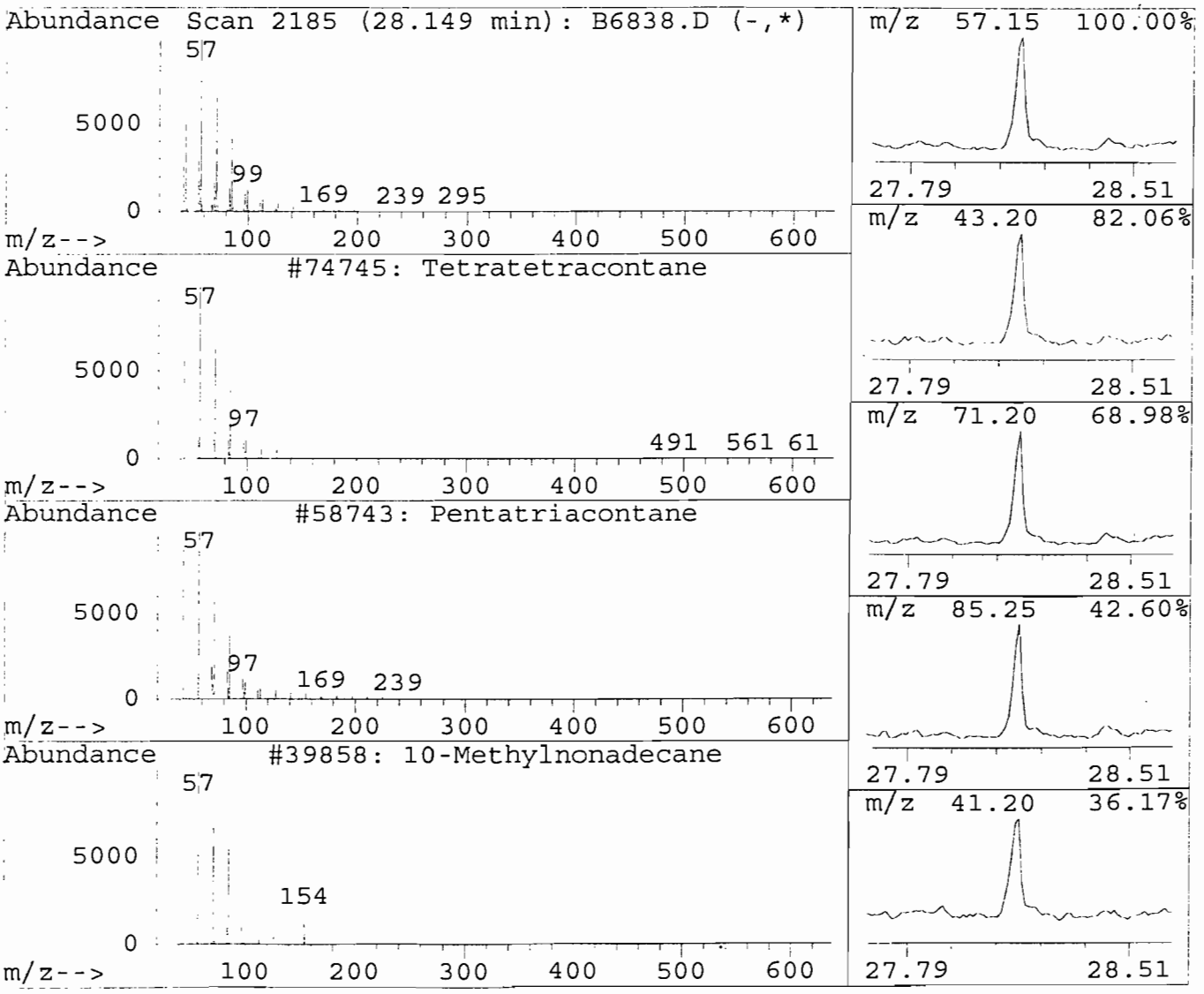
Data File : D:\HPCHEM\1\DATA\B11109\B6838.D
Acq Time : 9 Nov 99 2:10 pm
Sample : 13826ASP-87997-QB505 RE
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.15	65.45 ng	5655553	Chrysene-d12	28.29

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetratetracontane	74745	007098-22-8	91
2	Pentatriacontane	58743	000630-07-9	91
3	10-Methylnonadecane	39858	000000-00-0	91
4	Triacontane	55461	000638-68-6	91
5	Heneicosane	42201	000629-94-7	91



000215

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87998

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6744.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 1 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	33	U
108-60-1	bis(2-chloroisopropyl)ether	33	U
95-50-1	1,2-Dichlorobenzene	33	U
541-73-1	1,3-Dichlorobenzene	33	U
106-46-7	1,4-Dichlorobenzene	33	U
621-64-7	n-Nitroso-di-n-propylamine	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
78-59-1	Isophorone	33	U
111-91-1	bis(2-Chloroethoxy)methane	33	U
120-82-1	1,2,4-Trichlorobenzene	33	U
91-20-3	Naphthalene	33	U
106-47-8	4-Chloroaniline	67	U
87-68-3	Hexachlorobutadiene	33	U
91-57-6	2-Methylnaphthalene	57	U
77-47-4	Hexachlorocyclopentadiene	33	U
91-58-7	2-Chloronaphthalene	33	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	33	U
208-96-8	Acenaphthylene	33	U
606-20-2	2,6-Dinitrotoluene	33	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	33	U
132-64-9	Dibenzofuran	53	U
121-14-2	2,4-Dinitrotoluene	33	U
84-66-2	Diethylphthalate	33	U
7005-72-3	4-Chlorophenyl-phenylether	33	U
86-73-7	Fluorene	33	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	33	U
122-66-7	1,2-Diphenylhydrazine	33	U
101-55-3	4-Bromophenyl-phenylether	33	U
118-74-1	Hexachlorobenzene	33	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-009-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87998

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6744.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 1 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	35	
120-12-7	Anthracene	33	U
86-74-8	Carbazole	49	U
84-74-2	Di-n-butylphthalate	33	U
206-44-0	Fluoranthene	34	
129-00-0	Pyrene	33	U
85-68-7	Butylbenzylphthalate	33	U
91-94-1	3,3'-Dichlorobenzidine	130	U
56-55-3	Benzo[a]anthracene	33	U
218-01-9	Chrysene	33	U
117-81-7	bis(2-Ethylhexyl)phthalate	62	U
117-84-0	Di-n-octylphthalate	33	U
205-99-2	Benzo[b]fluoranthene	100	U
207-08-9	Benzo[k]fluoranthene	97	U
50-32-8	Benzo[a]pyrene	33	U
193-39-5	Indeno(1,2,3-cd)pyrene	33	U
53-70-3	Dibenz[a,h]anthracene	50	U
191-24-2	Benzo[g,h,i]perylene	33	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-009-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87998

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6744.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 1 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/Kg

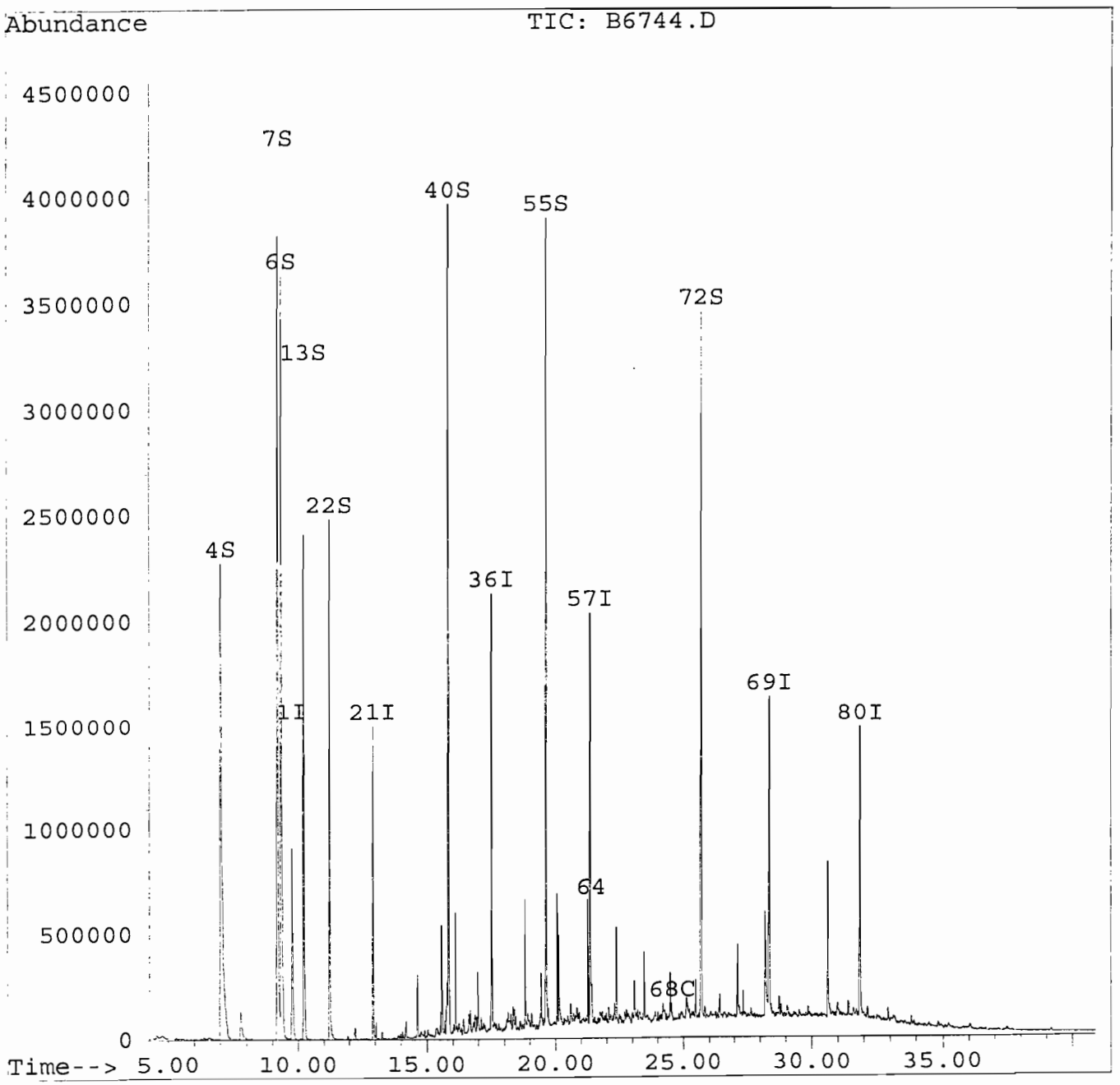
CAS Number	Compound Name	RT	Est. Conc.	Q
1. 79-34-5	Ethane, 1,1,2,2-tetrachloro-	7.79	150	J
2. 629-50-5	Tridecane	14.63	110	J
3. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.56	170	J
4. 629-59-4	Tetradecane	16.11	130	J
5. 6975-98-0	Decane, 2-methyl-	16.98	87	J
6. 544-76-3	Hexadecane	18.83	160	J
7. 17301-22-3	Undecane, 2,5-dimethyl-	19.44	130	J
8. 629-78-7	Heptadecane	20.07	160	J
9. 74645-98-0	Dodecane, 2,7,10-trimethyl-	20.14	170	J
10. 112-95-8	Eicosane	21.26	140	J
11.	Unknown	22.39	120	J
12.	Unknown	23.47	82	J
13. 1120-16-7	Dodecanamide	27.13	160	J
14. 6624-79-9	1-Dotriacontanol	28.20	270	J
15. 301-02-0	9-Octadecenamide, (Z)-	30.62	340	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :
Quant Time: Nov 10 14:15 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000219

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :
Quant Time: Nov 10 14:15 1999

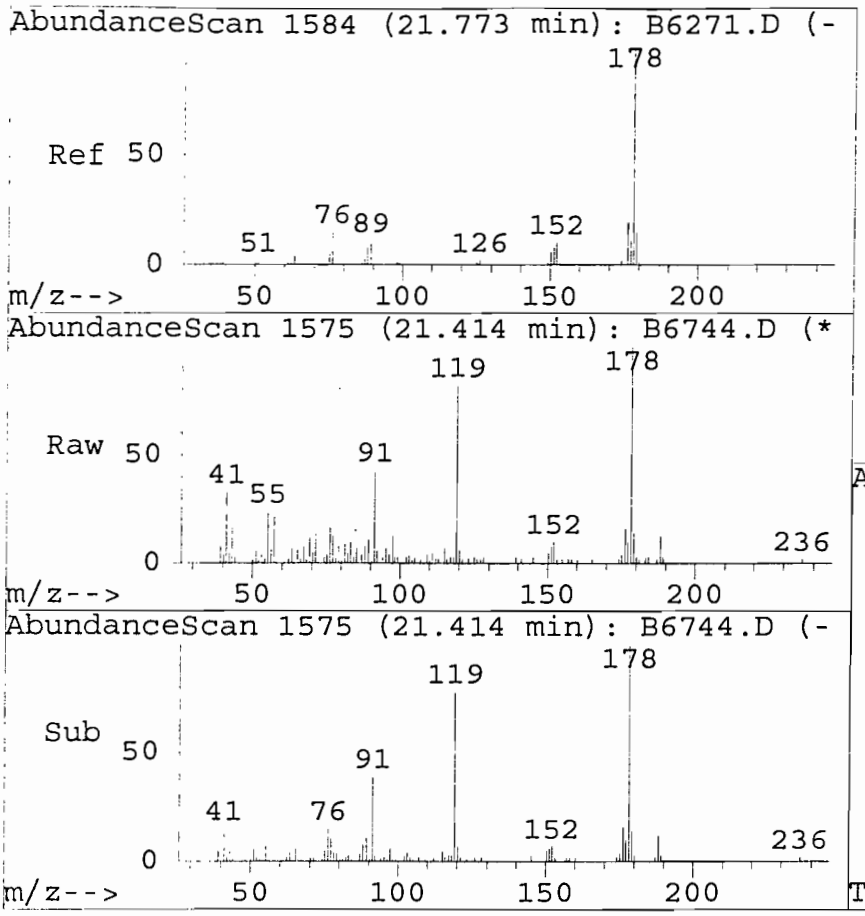
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.77	152	391173	40.00	ng	-0.04
21) Naphthalene-d8	12.92	136	1328058	40.00	ng	-0.33
36) Acenaphthene-d10	17.52	164	699037	40.00	ng	-0.33
57) Phenanthrene-d10	21.36	188	1303211	40.00	ng	-0.34
69) Chrysene-d12	28.36	240	1242711	40.00	ng	-0.34
80) Perylene-d12	31.87	264	1311659	40.00	ng	-0.35
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.02	112	2757072	202.43	ng	
6) 2-Chlorophenol-d4	9.34	132	2769432	219.18	ng	
7) Phenol-d5	9.21	99	3579889	229.68	ng	
13) 1,2-Dichlorobenzene-d4	10.21	152	952778	108.33	ng	
22) Nitrobenzene-d5	11.22	82	1800486	113.26	ng	
40) 2-Fluorobiphenyl	15.84	172	2571503	106.94	ng	
55) 2,4,6-Tribromophenol	19.66	330	1373223	298.21	ng	
72) Terphenyl-d14	25.71	244	3123286	85.34	ng	
Target Compounds						Qvalue
64) Phenanthrene	21.41	178	63194	2.07	ng	95
68) Fluoranthene	24.55	202	65282	2.04	ng	96

000220

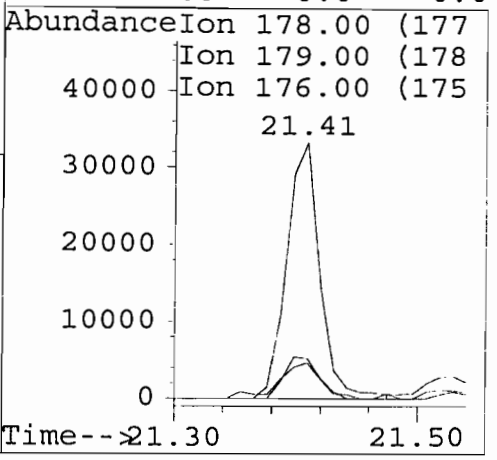
(#) = qualifier out of range (m) = manual integration

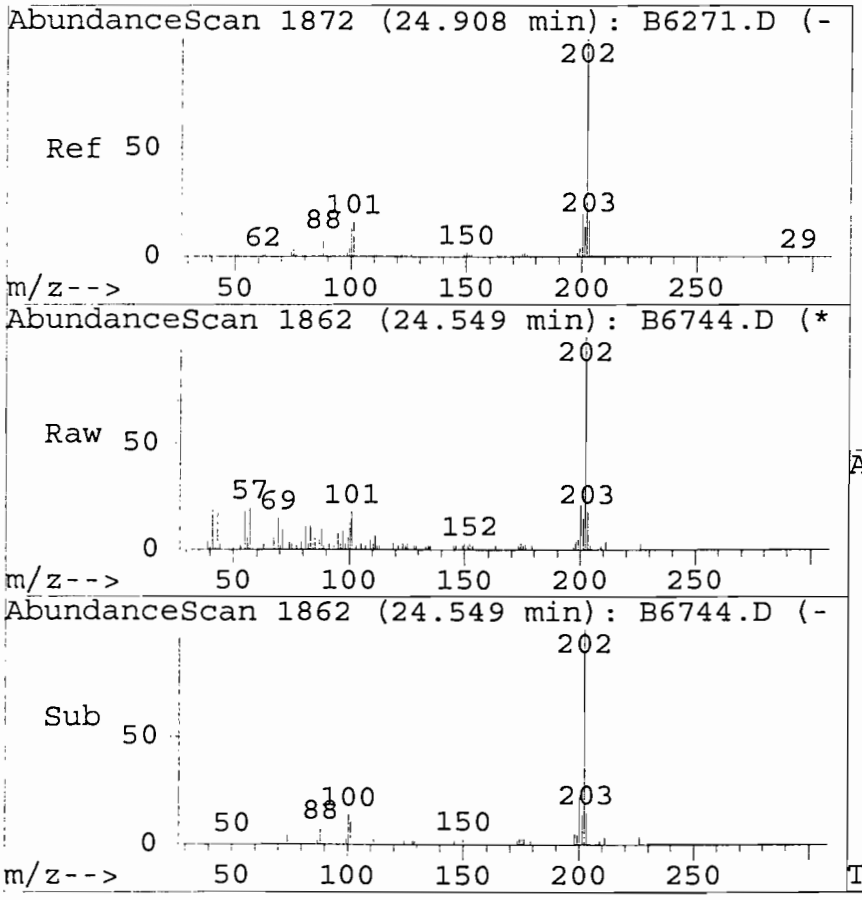


#64
Phenanthrene
Concen: 2.07 ng
RT: 21.41 min Scan# 1575
Delta R.T. -0.36 min
Lab File: B6744.D
Acq: 4 Nov 99 3:04 am

Tgt Ion:178 Resp: 63194

Ion	Ratio	Lower	Upper
178	100		
179	14.0	7.2	21.7
176	15.6	9.6	28.8
0	0.0	0.0	0.0

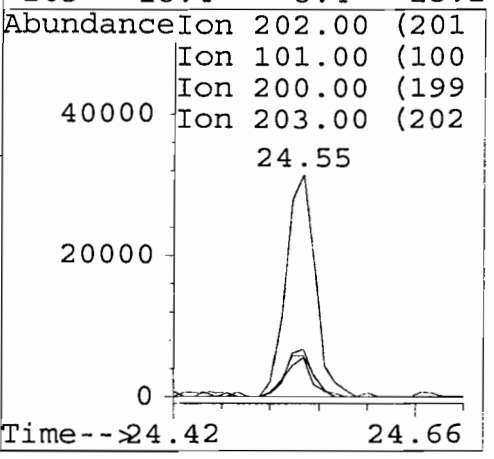




#68
Fluoranthene
Concen: 2.04 ng
RT: 24.55 min Scan# 1862
Delta R.T. -0.36 min
Lab File: B6744.D
Acq: 4 Nov 99 3:04 am

Tgt Ion:202 Resp: 65282

Ion	Ratio	Lower	Upper
202	100		
101	17.6	7.8	23.4
200	21.5	9.9	29.6
203	18.4	8.4	25.1



Library Search Compound Report

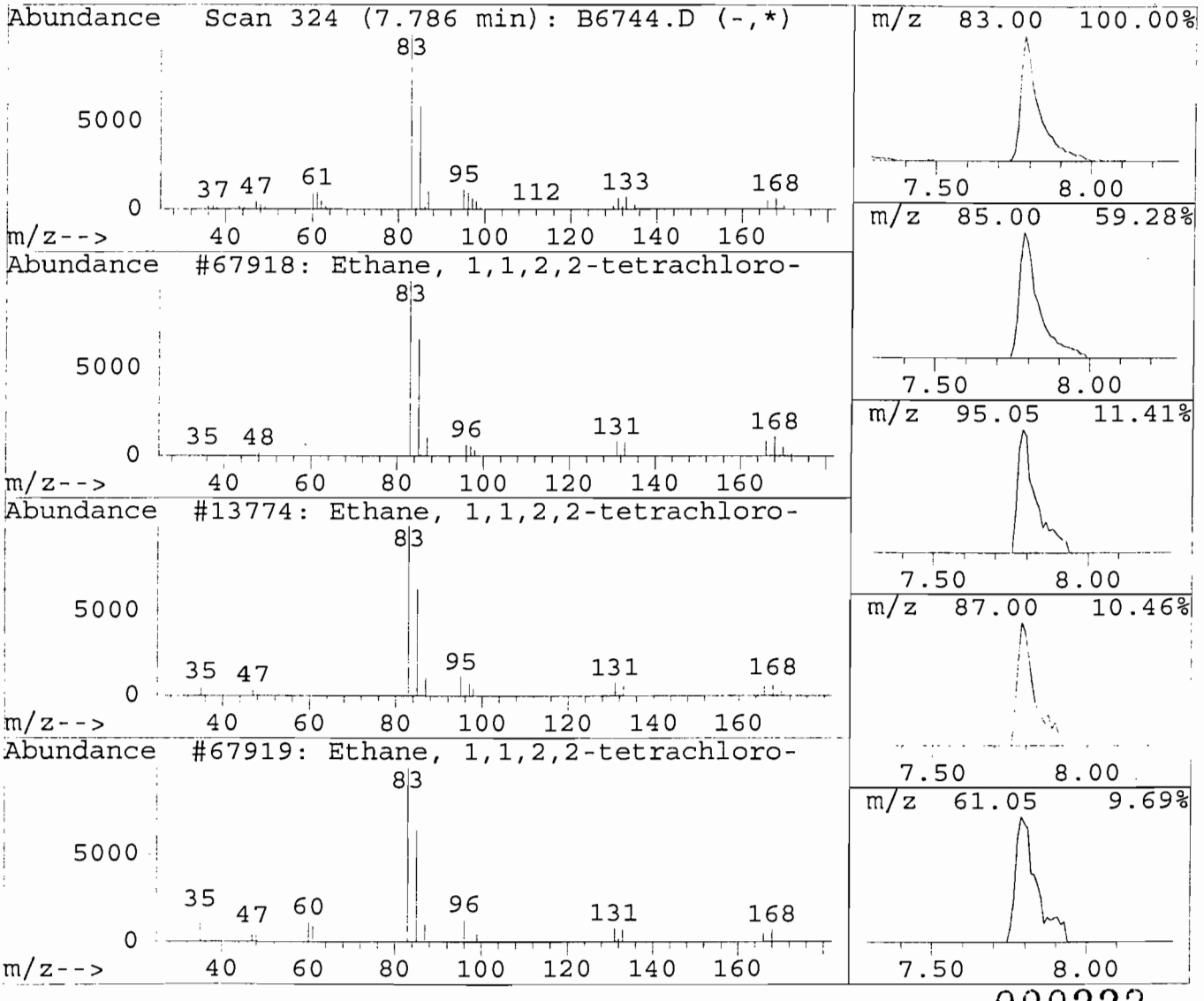
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
7.79	8.76 ng	566471	1,4-Dichlorobenzene-d4	9.77

Hit# of 8	Tentative ID	Ref#	CAS#	Qual
1	Ethane, 1,1,2,2-tetrachloro-	67918	000079-34-5	87
2	Ethane, 1,1,2,2-tetrachloro-	13774	000079-34-5	87
3	Ethane, 1,1,2,2-tetrachloro-	67919	000079-34-5	55
4	Ethane, 1,1,2-trichloro-2-fluoro-	9542	000359-28-4	50
5	Ethane, 2,2-dichloro-1,1,1-trifluor	66872	000306-83-2	45



000222

Library Search Compound Report

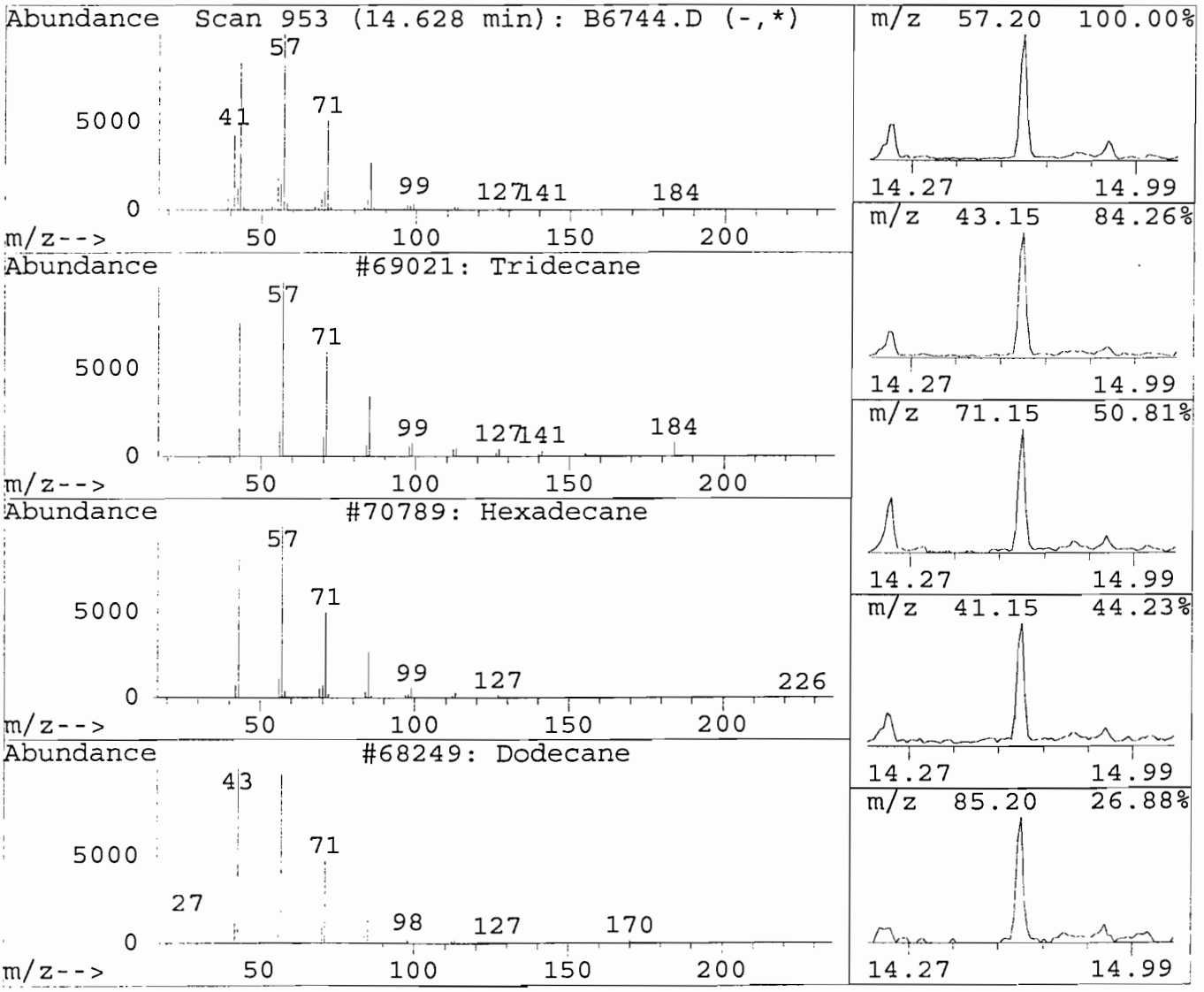
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.63	6.57 ng	500859	Naphthalene-d8	12.92

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	69021	000629-50-5	93
2	Hexadecane	70789	000544-76-3	91
3	Dodecane	68249	000112-40-3	90
4	Hexadecane	70787	000544-76-3	90
5	Tetradecane	69661	000629-59-4	90



Library Search Compound Report

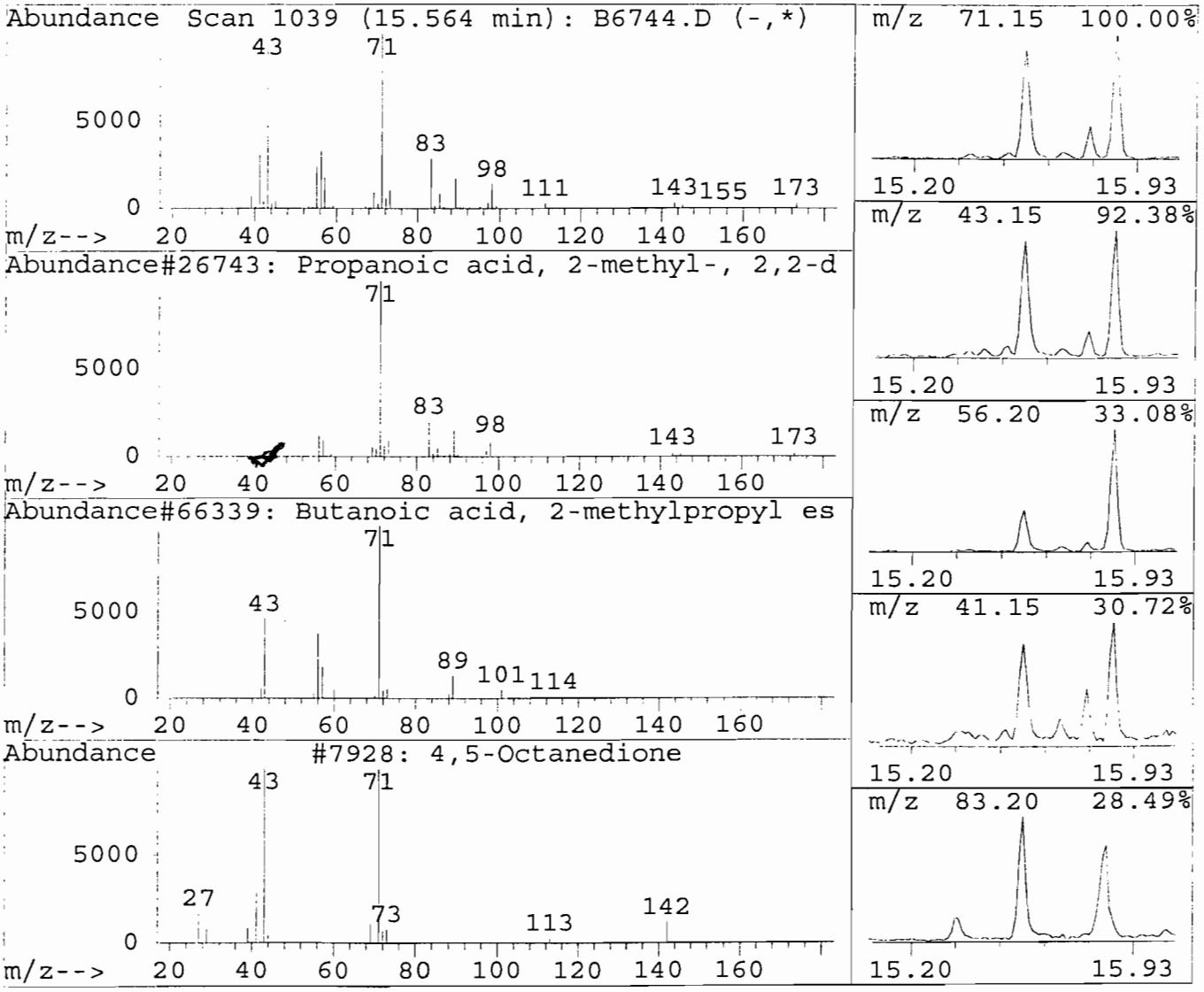
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.56	9.87 ng	1082001	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	83
2	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	50
3	4,5-Octanedione	7928	005455-24-3	47
4	Ether, hexyl pentyl	15858	032357-83-8	47
5	3-Buten-2-ol, 2-methyl-	730	000115-18-4	43



Library Search Compound Report

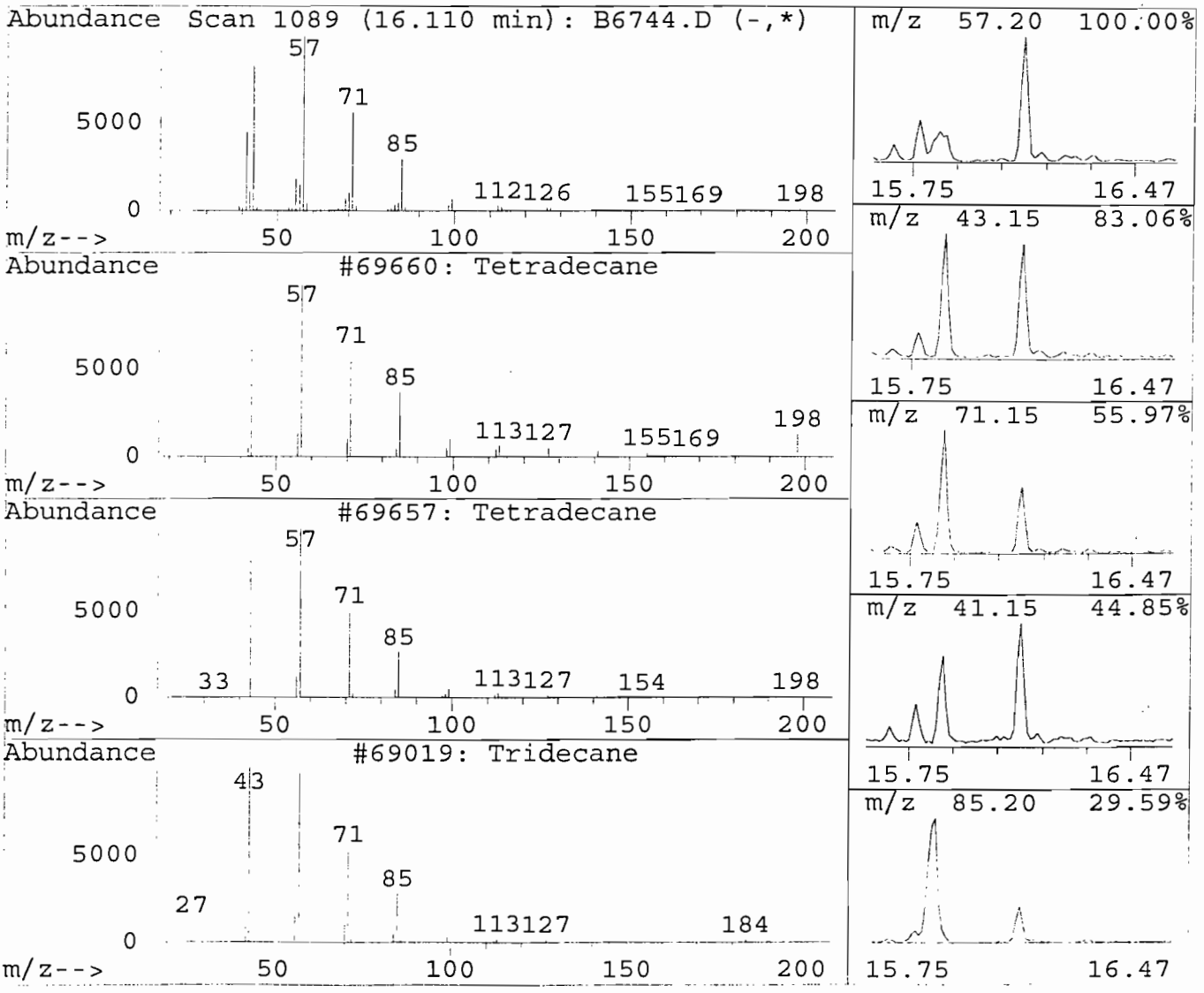
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.11	7.65 ng	838467	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	69660	000629-59-4	95
2	Tetradecane	69657	000629-59-4	95
3	Tridecane	69019	000629-50-5	90
4	Hexadecane	70789	000544-76-3	90
5	Heptadecane	71191	000629-78-7	87



Library Search Compound Report

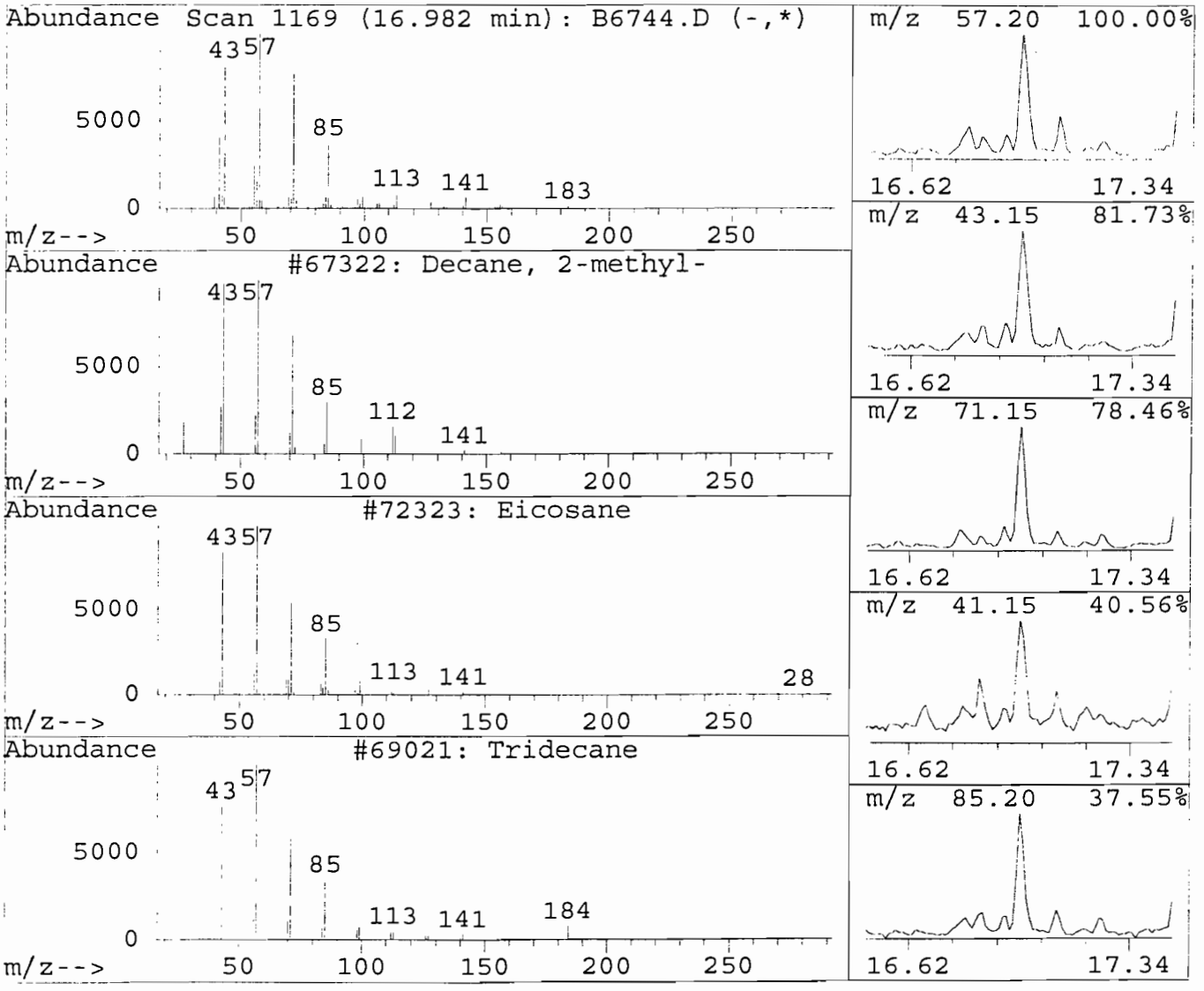
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.98	5.15 ng	564141	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Decane, 2-methyl-	67322	006975-98-0	87
2	Eicosane	72323	000112-95-8	87
3	Tridecane	69021	000629-50-5	86
4	Eicosane	72326	000112-95-8	86
5	Heptadecane	71191	000629-78-7	86



Library Search Compound Report

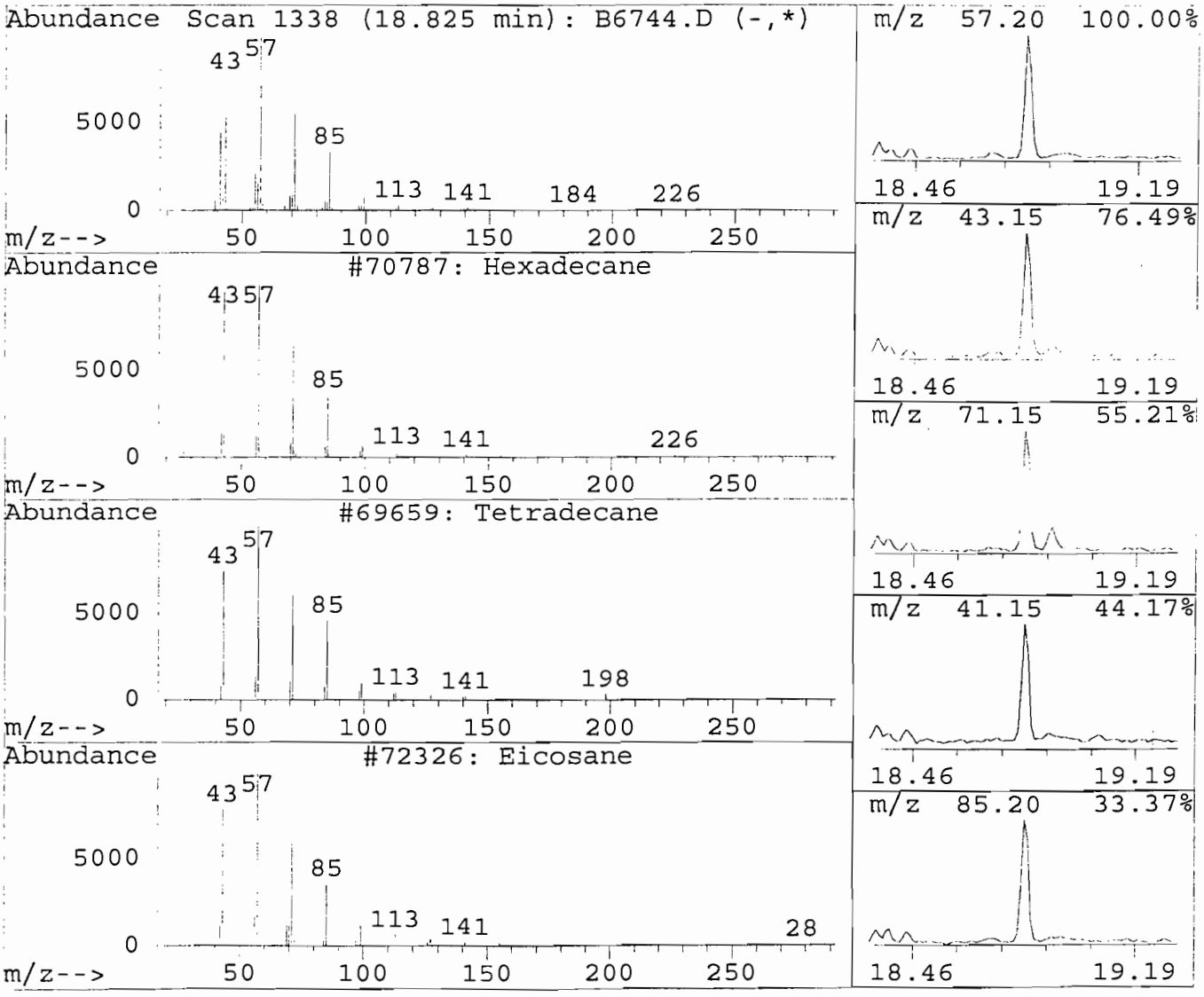
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
18.83	9.61 ng	1053471	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecane	70787	000544-76-3	91
2	Tetradecane	69659	000629-59-4	90
3	Eicosane	72326	000112-95-8	90
4	Heptadecane	71191	000629-78-7	87
5	Hexadecane	70788	000544-76-3	87



000227

Library Search Compound Report

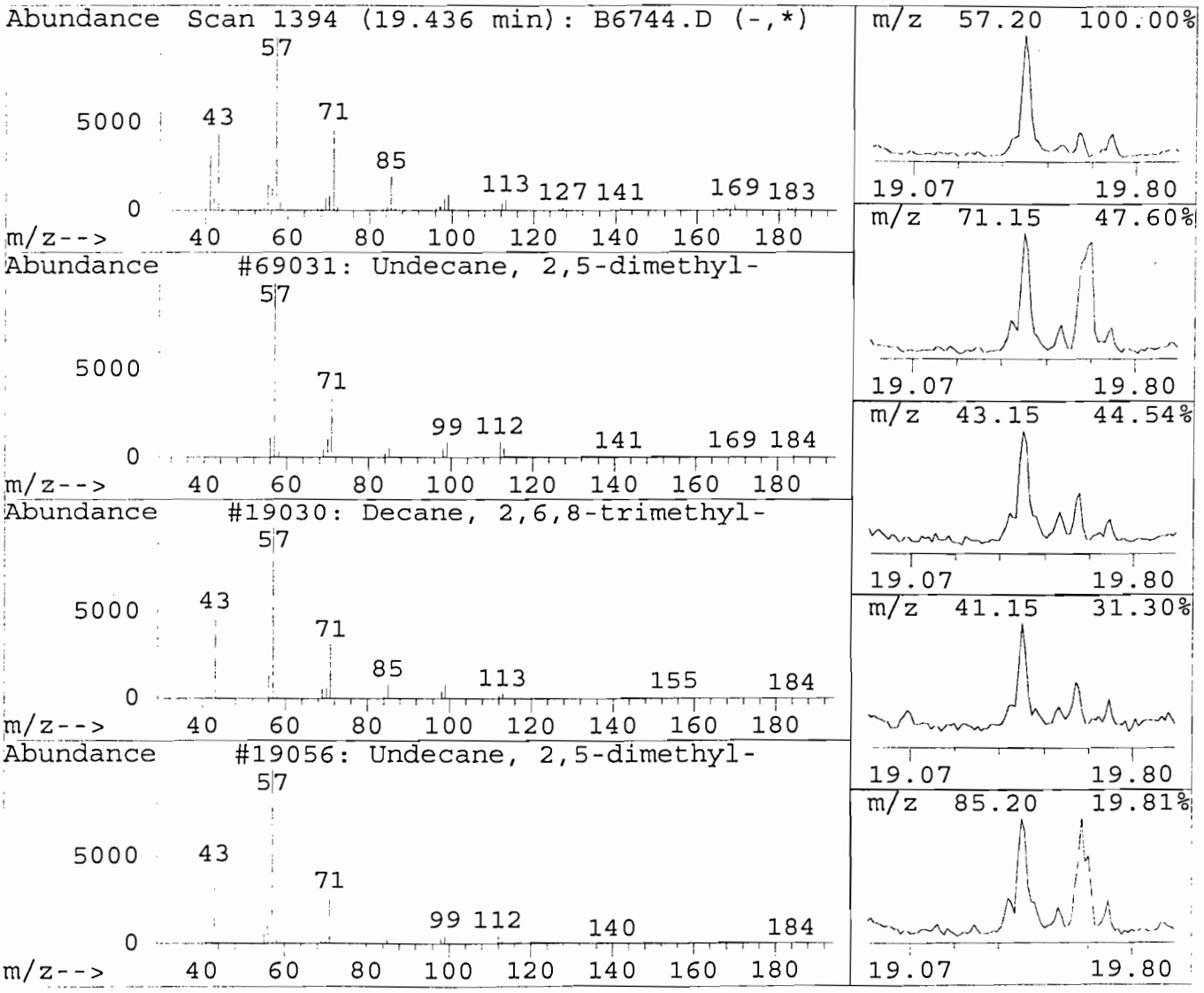
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.44	7.87 ng	861961	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,5-dimethyl-	69031	017301-22-3	81
2	Decane, 2,6,8-trimethyl-	19030	062108-26-3	74
3	Undecane, 2,5-dimethyl-	19056	017301-22-3	74
4	Tridecane	69020	000629-50-5	74
5	Nonane, 3-methyl-	8075	005911-04-6	60



000228

Library Search Compound Report

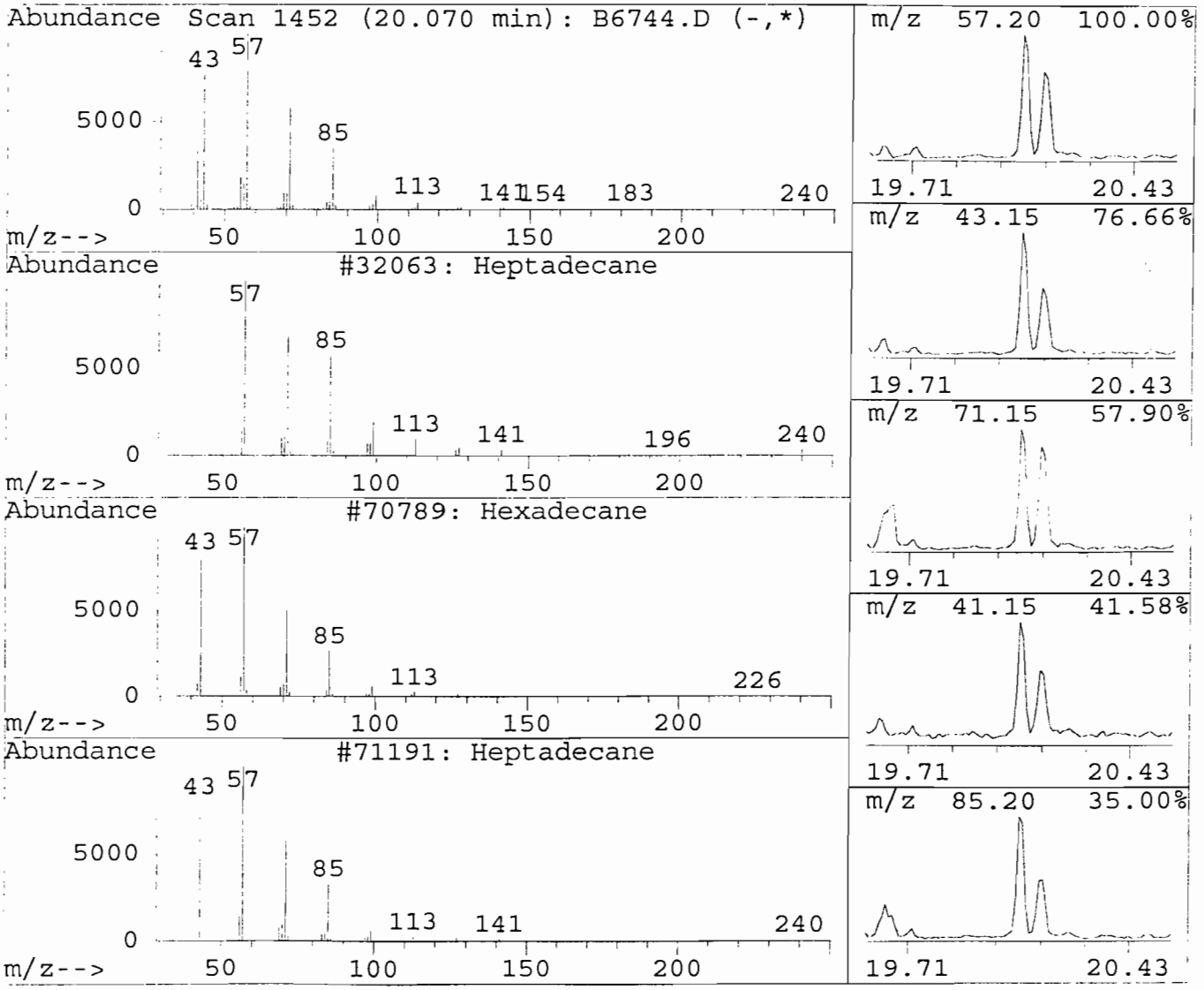
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.07	9.64 ng	1062984	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptadecane	32063	000629-78-7	91
2	Hexadecane	70789	000544-76-3	91
3	Heptadecane	71191	000629-78-7	91
4	Pentadecane	26001	000629-62-9	90
5	Pentadecane	70274	000629-62-9	87



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Library Search Compound Report

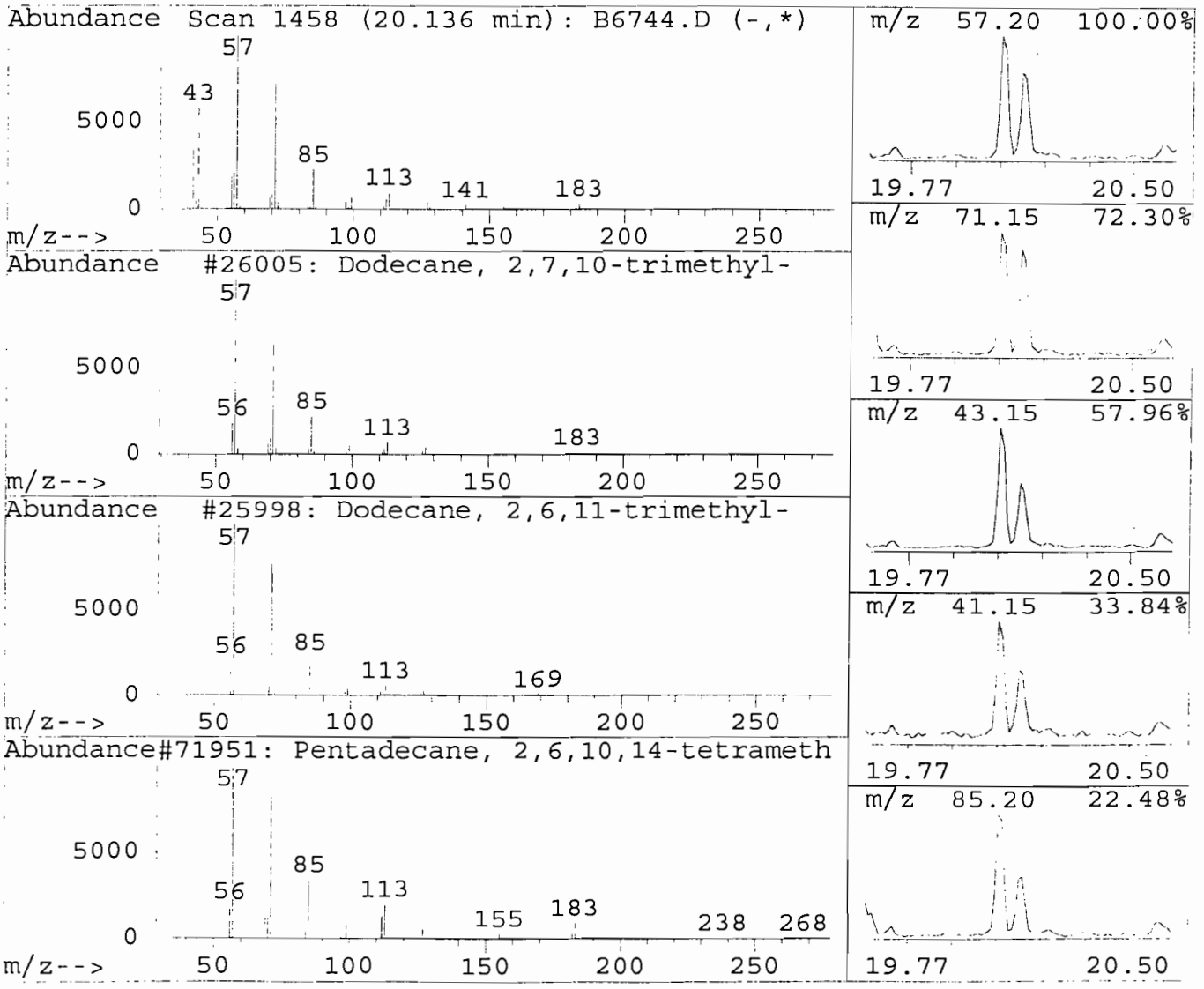
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.14	9.83 ng	1083619	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	90
2	Dodecane, 2,6,11-trimethyl-	25998	031295-56-4	90
3	Pentadecane, 2,6,10,14-tetramethyl-	71951	001921-70-6	80
4	Heptadecane, 7-methyl-	34817	020959-33-5	72
5	Heptadecane, 2,6-dimethyl-	37466	054105-67-8	64



Library Search Compound Report

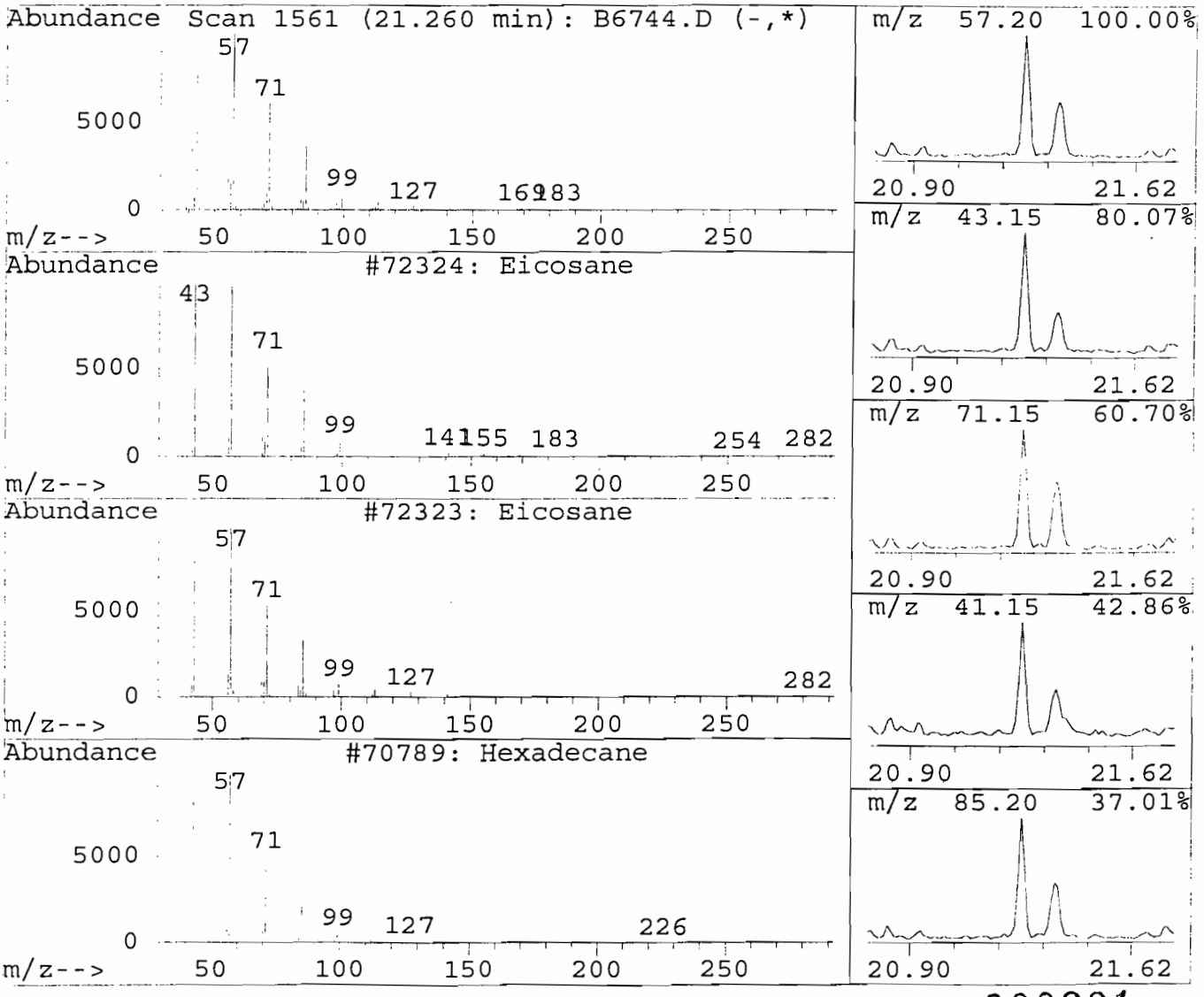
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.26	8.36 ng	922364	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Eicosane	72324	000112-95-8	91
2	Eicosane	72323	000112-95-8	91
3	Hexadecane	70789	000544-76-3	91
4	Heptadecane	71191	000629-78-7	91
5	Tetracosane	73543	000646-31-1	90



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Library Search Compound Report

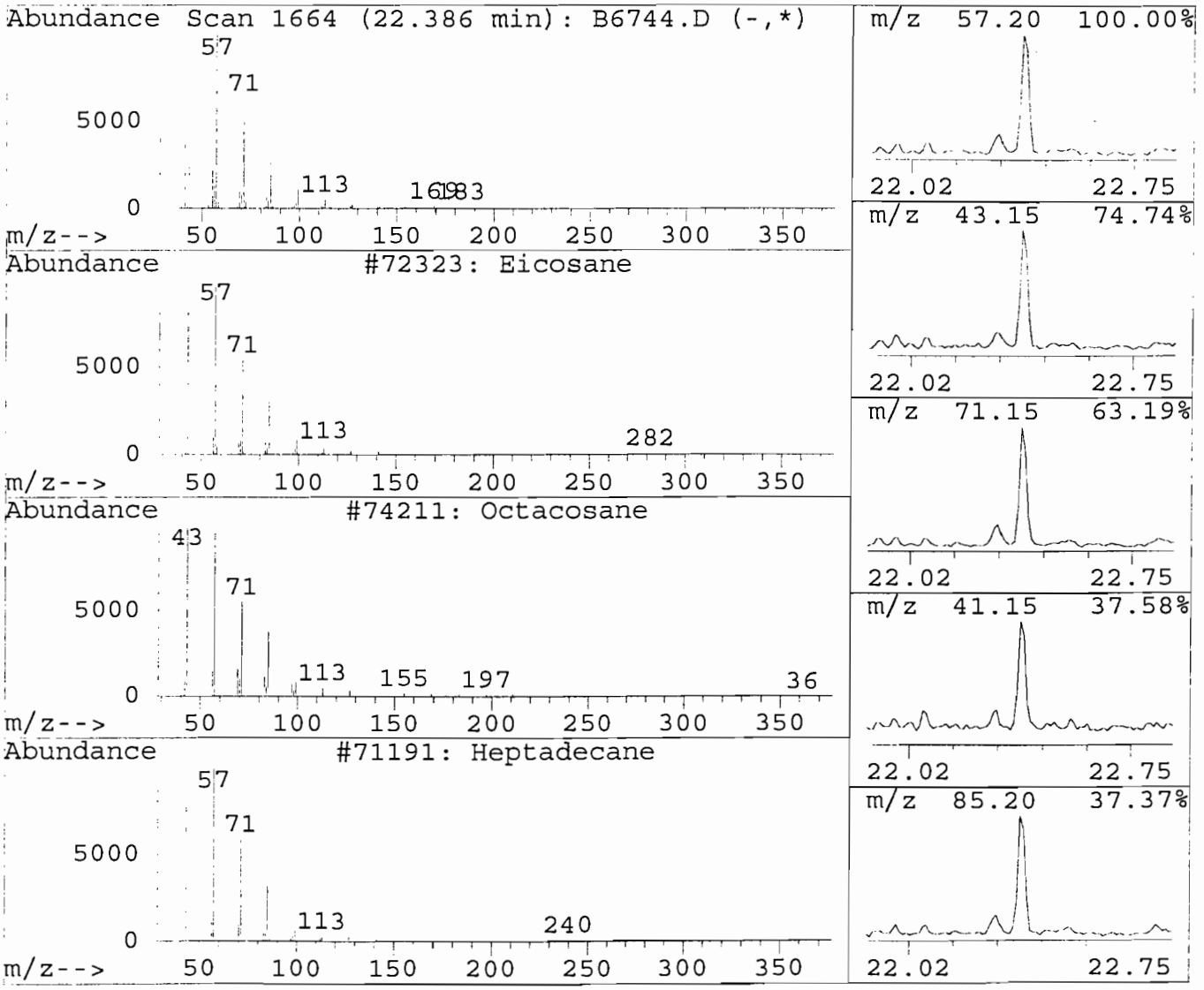
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.39	7.26 ng	800790	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Eicosane	72323	000112-95-8	91
2	Octacosane	74211	000630-02-4	91
3	Heptadecane	71191	000629-78-7	91
4	Hexadecane	70789	000544-76-3	90
5	Heptadecane, 2,6,10,15-tetramethyl-	42196	054833-48-6	86



Library Search Compound Report

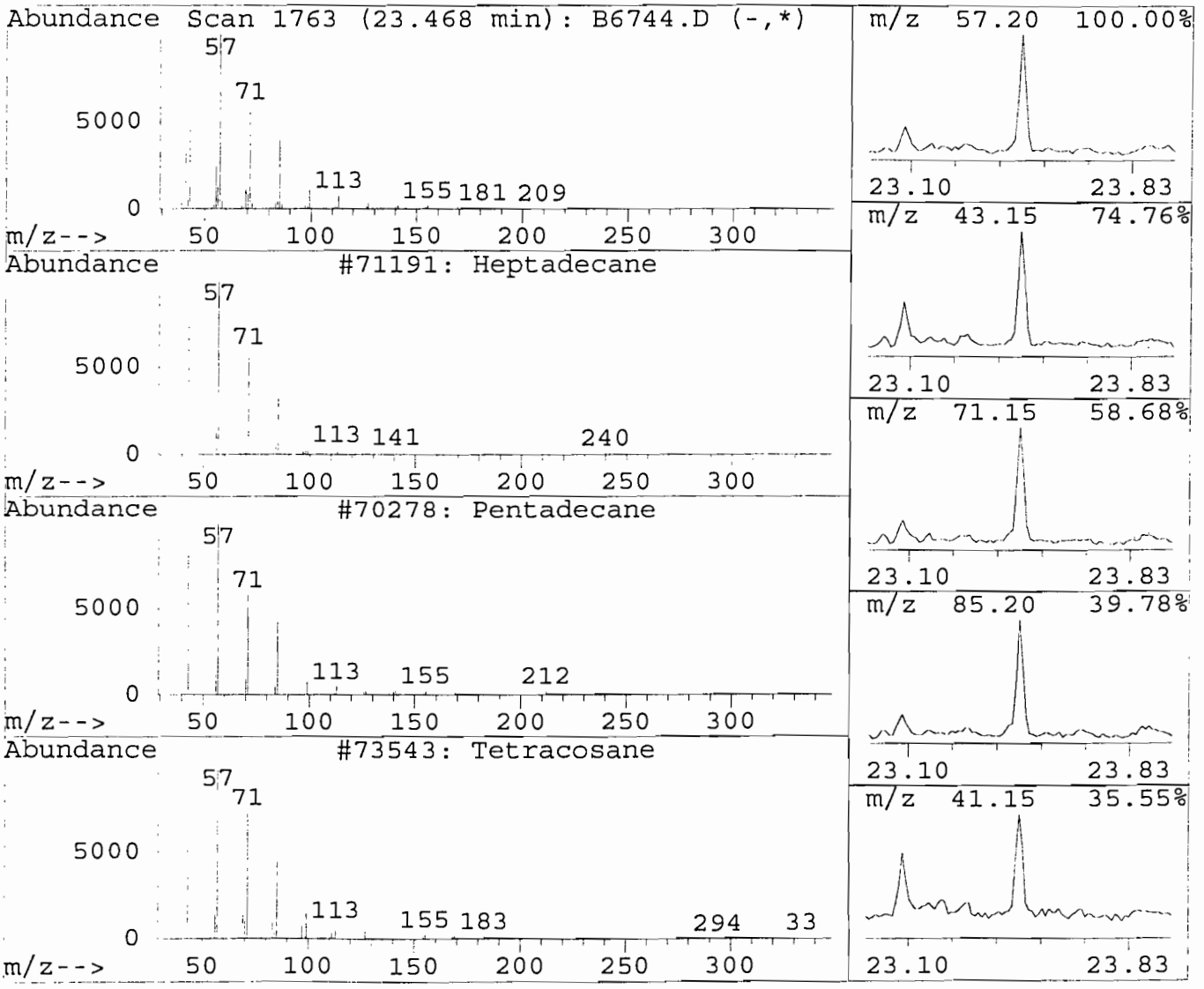
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
23.47	4.88 ng	538545	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptadecane	71191	000629-78-7	91
2	Pentadecane	70278	000629-62-9	87
3	Tetracosane	73543	000646-31-1	87
4	Dodecane, 1-iodo-	41998	004292-19-7	86
5	Heptadecane	32063	000629-78-7	72



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Library Search Compound Report

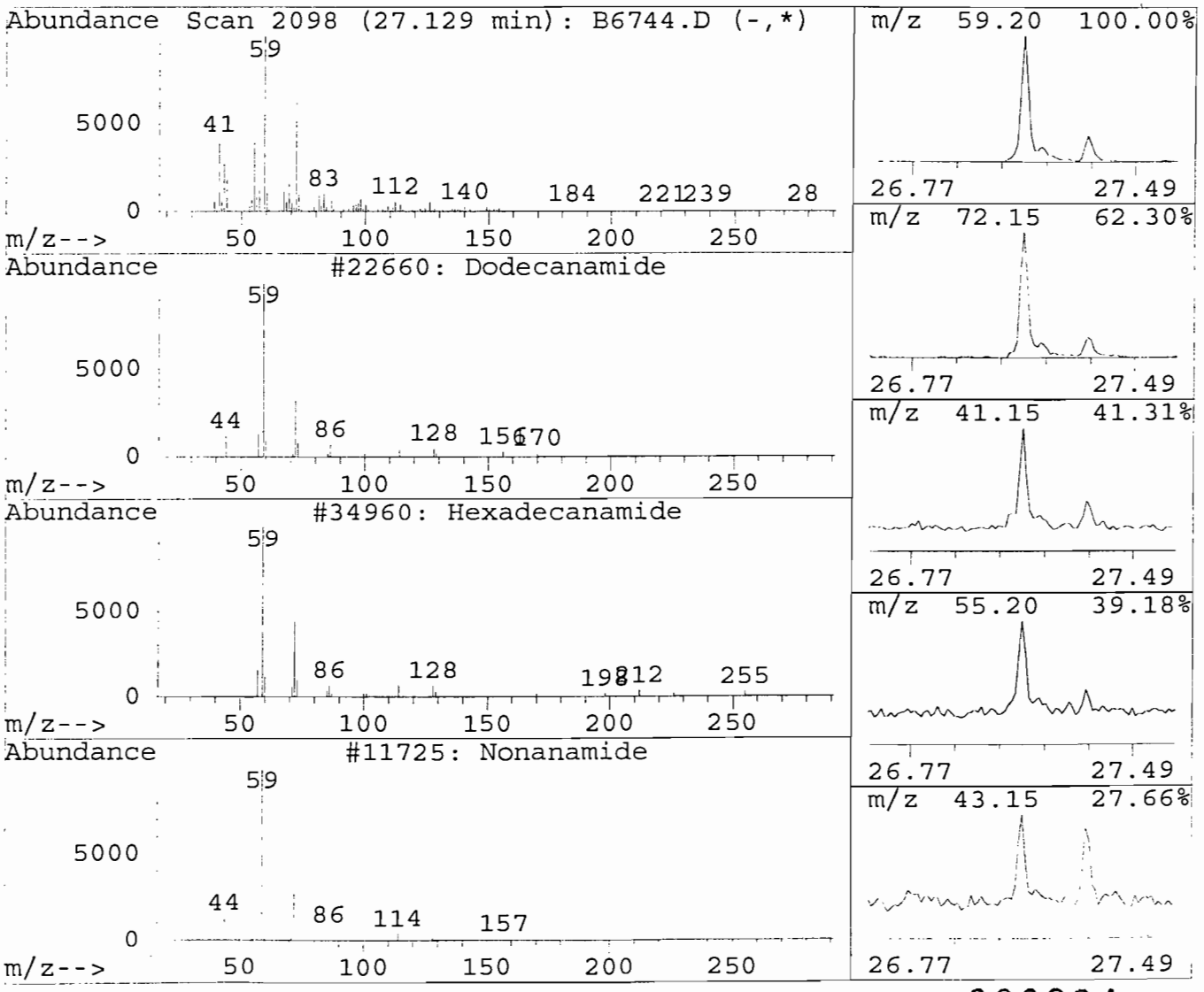
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.13	9.41 ng	858045	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecanamide	22660	001120-16-7	56
2	Hexadecanamide	34960	000629-54-9	56
3	Nonanamide	11725	001120-07-6	53
4	9-Octadecenamide, (Z)-	72284	000301-02-0	47
5	Butanamide, 3-methyl-	1621	000541-46-8	43



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Library Search Compound Report

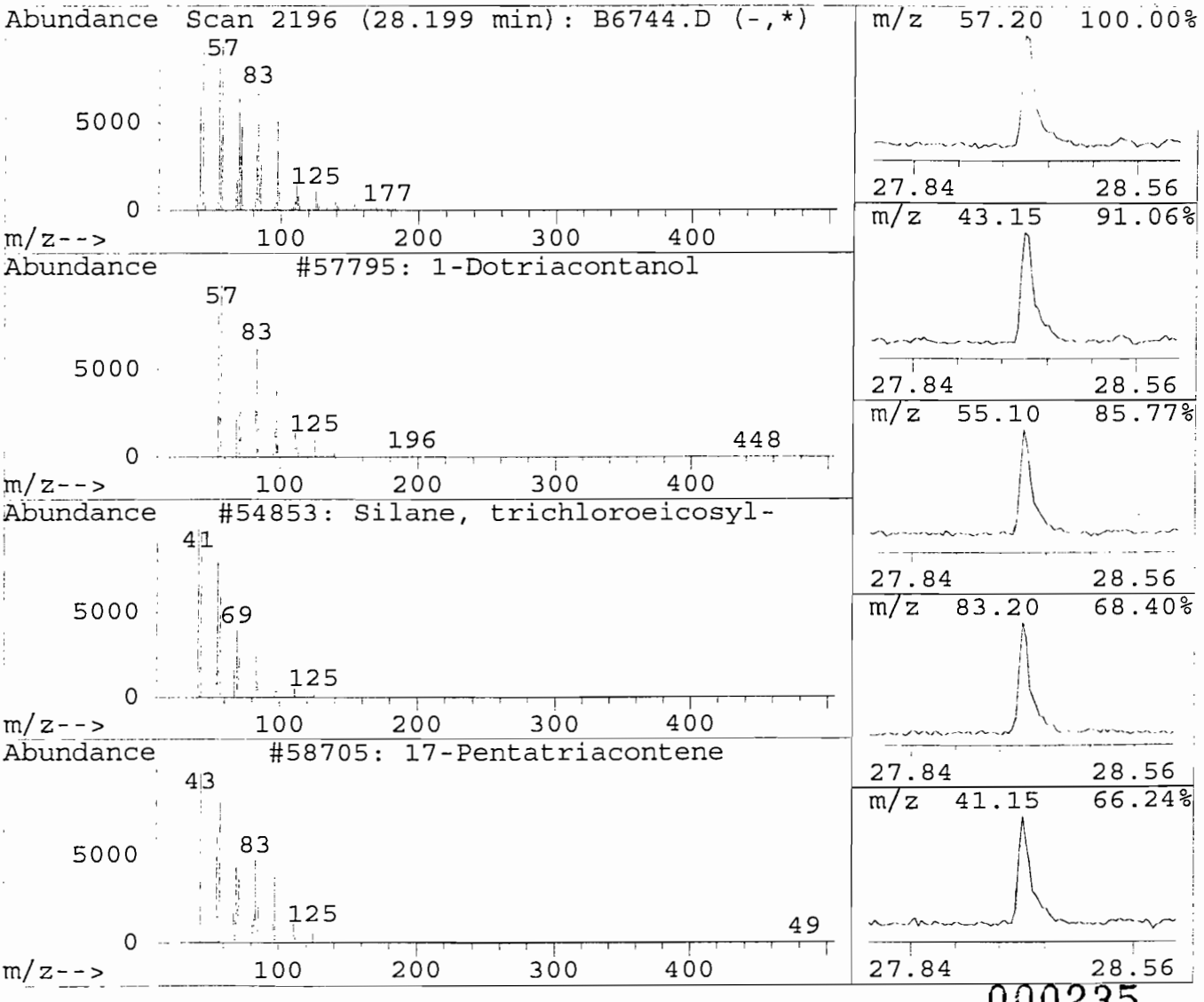
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.20	15.86 ng	1446230	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Dotriacontanol	57795	006624-79-9	94
2	Silane, trichloroeicosyl-	54853	018733-57-8	91
3	17-Pentatriacontene	58705	006971-40-0	91
4	1-Hexacosanol	52385	000506-52-5	87
5	1-Heptadecanol	35210	001454-85-9	87



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Library Search Compound Report

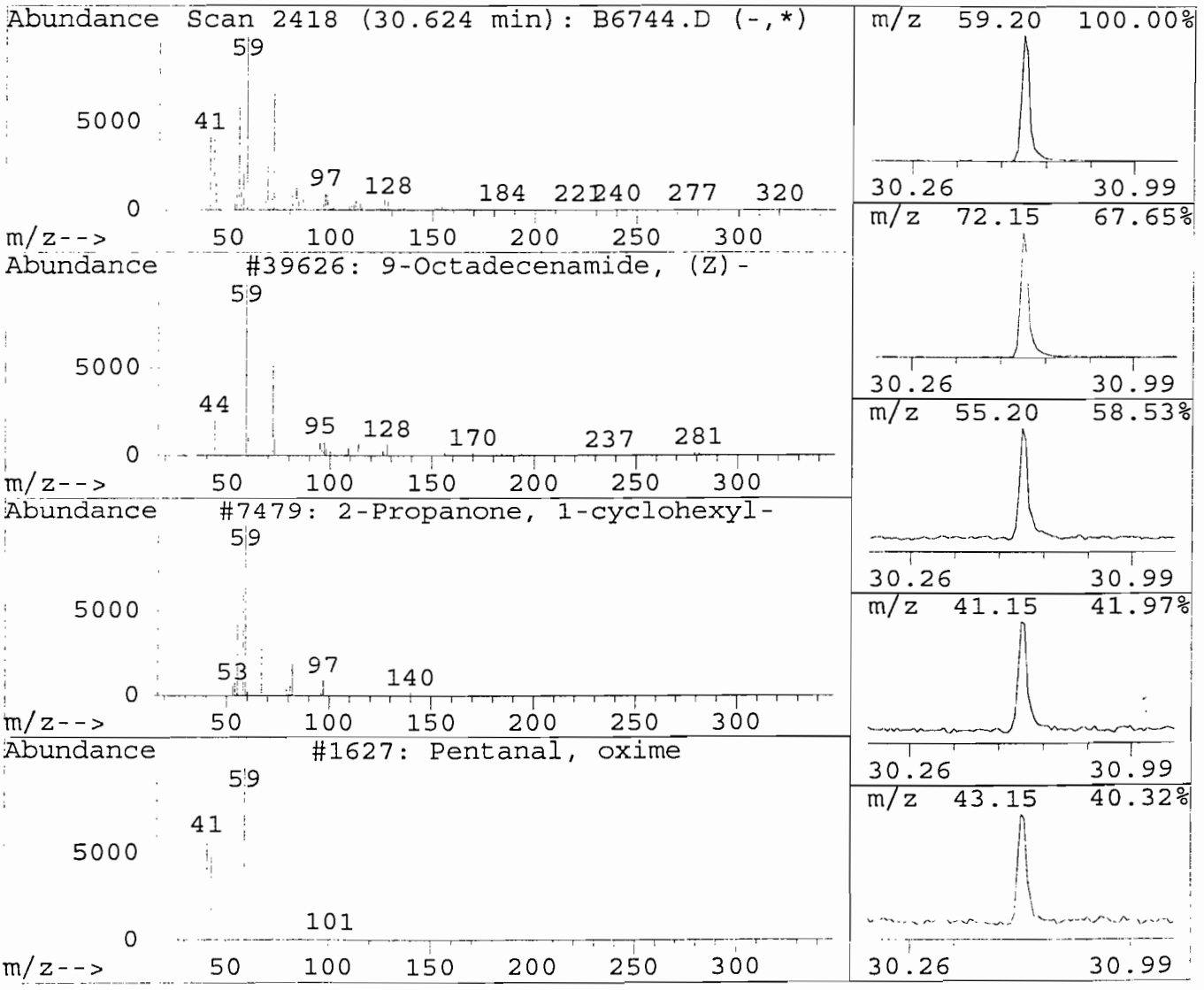
Data File : D:\HPCHEM\1\DATA\B11103\B6744.D
Acq Time : 4 Nov 99 3:04 am
Sample : 13826ASP-87998-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.62	19.94 ng	1733367	Perylene-d12	31.87

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	43
2	2-Propanone, 1-cyclohexyl-	7479	000103-78-6	43
3	Pentanal, oxime	1627	000628-79-5	43
4	Dodecanamide	22660	001120-16-7	42
5	Methyl 17-methoxy-10-methoxycarbony	52728	000000-00-0	38



000236

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87999

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6743.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	34	U
621-64-7	n-Nitroso-di-n-propylamine	34	U
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	34	U
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	69	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	59	U
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	34	U
132-64-9	Dibenzofuran	54	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	34	U
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	34	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O87999

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6743.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
86-74-8	Carbazole	51	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	34	U
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
117-81-7	bis(2-Ethylhexyl)phthalate	64	U
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-010-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O87999

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6743.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 5 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 104-76-7	1-Hexanol, 2-ethyl-	10.08	140	J
2. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.56	180	J
3. 103-23-1	Hexanedioic acid, bis(2-ethy	27.40	930	J
4. 6624-79-9	1-Dotriacontanol	28.19	270	J
5. 1120-07-6	Nonanamide	30.63	540	J
6.				
7.				
8.				
9.				
10.				
11.				
12.				
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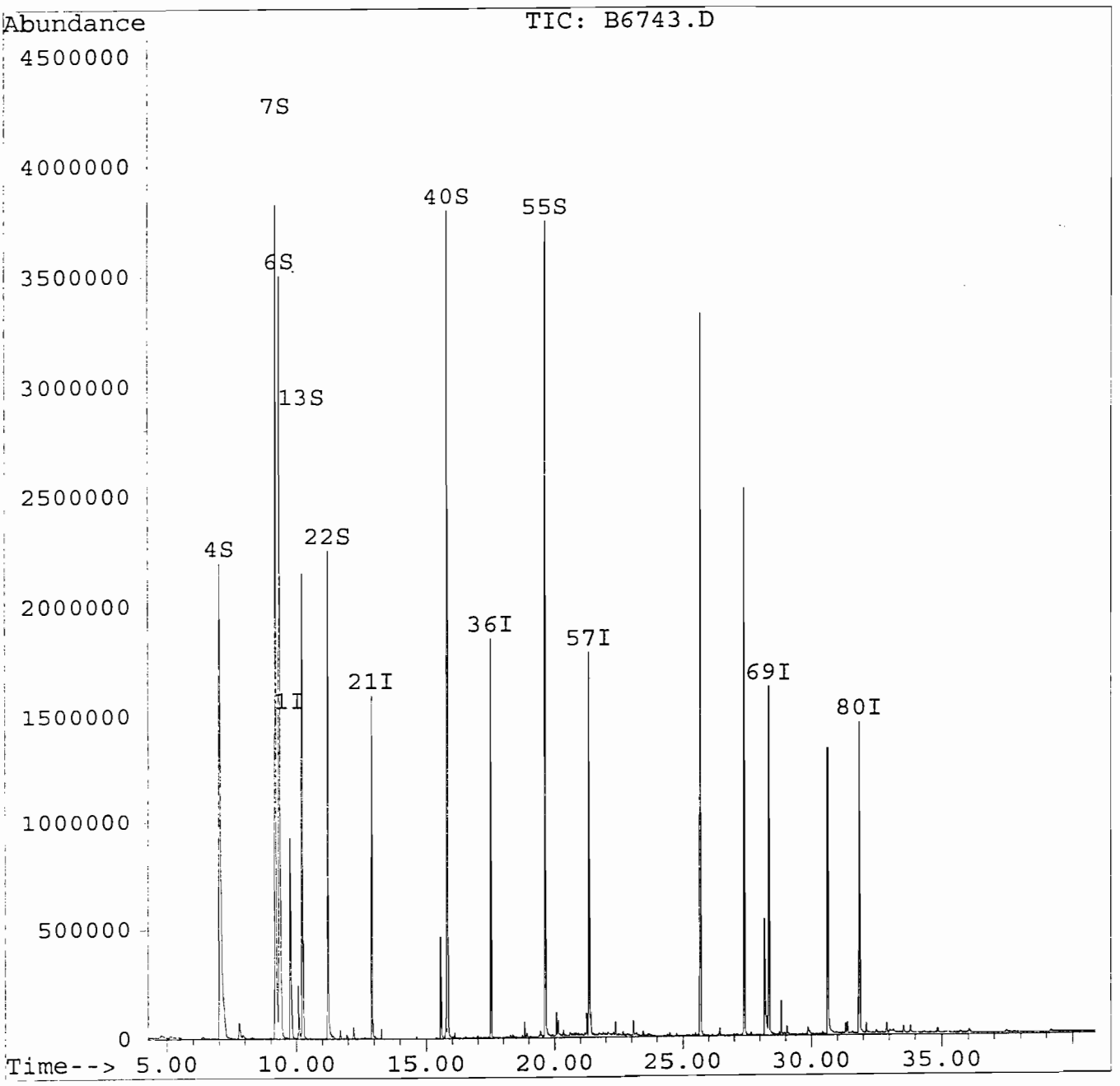
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6743.D
Acq Time : 4 Nov 99 2:14 am
Sample : 13826ASP-87999-QB505
Misc :
Quant Time: Nov 10 14:18 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000240

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6743.D
Acq Time : 4 Nov 99 2:14 am
Sample : 13826ASP-87999-QB505
Misc :
Quant Time: Nov 10 14:18 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.77	152	405612	40.00	ng	-0.04
21) Naphthalene-d8	12.92	136	1351980	40.00	ng	-0.33
36) Acenaphthene-d10	17.52	164	739962	40.00	ng	-0.33
57) Phenanthrene-d10	21.36	188	1381475	40.00	ng	-0.34
69) Chrysene-d12	28.35	240	1274015	40.00	ng	-0.35
80) Perylene-d12	31.87	264	1350887	40.00	ng	-0.35
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.03	112	2560651	181.32	ng	
6) 2-Chlorophenol-d4	9.35	132	2527273	192.89	ng	
7) Phenol-d5	9.21	99	3350053	207.28	ng	
13) 1,2-Dichlorobenzene-d4	10.22	152	871291	95.54	ng	
22) Nitrobenzene-d5	11.22	82	1662951	102.76	ng	
40) 2-Fluorobiphenyl	15.83	172	2344458	92.11	ng	
55) 2,4,6-Tribromophenol	19.65	330	1283374	263.28	ng	
72) Terphenyl-d14	25.70	244	2875962	76.65	ng	#
Target Compounds						Qvalue

000241

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

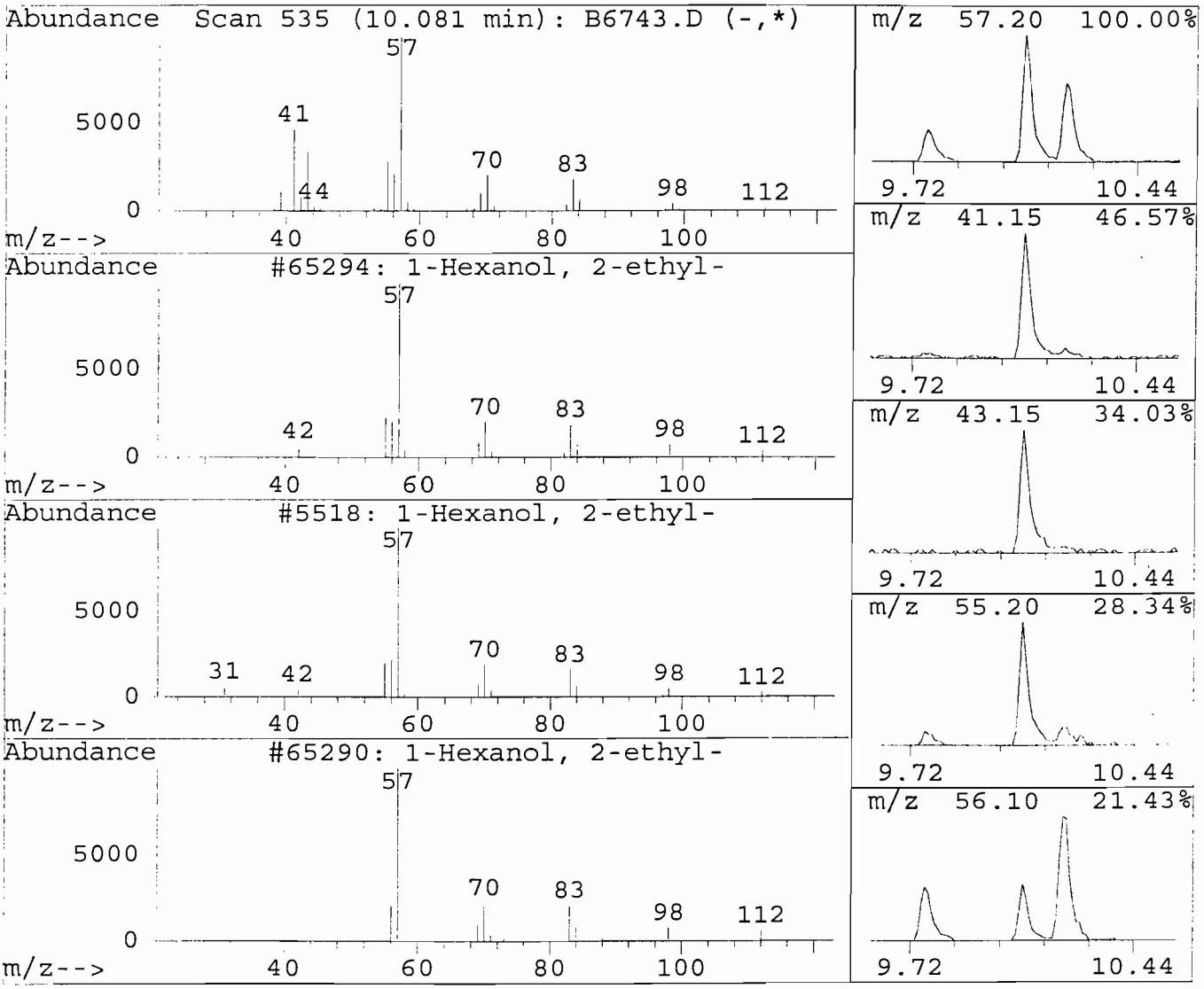
Data File : D:\HPCHEM\1\DATA\B11103\B6743.D
Acq Time : 4 Nov 99 2:14 am
Sample : 13826ASP-87999-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
10.08	8.07 ng	544376	1,4-Dichlorobenzene-d4	9.77

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Hexanol, 2-ethyl-	65294	000104-76-7	83
2	1-Hexanol, 2-ethyl-	5518	000104-76-7	78
3	1-Hexanol, 2-ethyl-	65290	000104-76-7	74
4	1-Hexanol, 2-ethyl-	65291	000104-76-7	64
5	Octane, 2,3-dimethyl-	66214	007146-60-3	59



000242

Library Search Compound Report

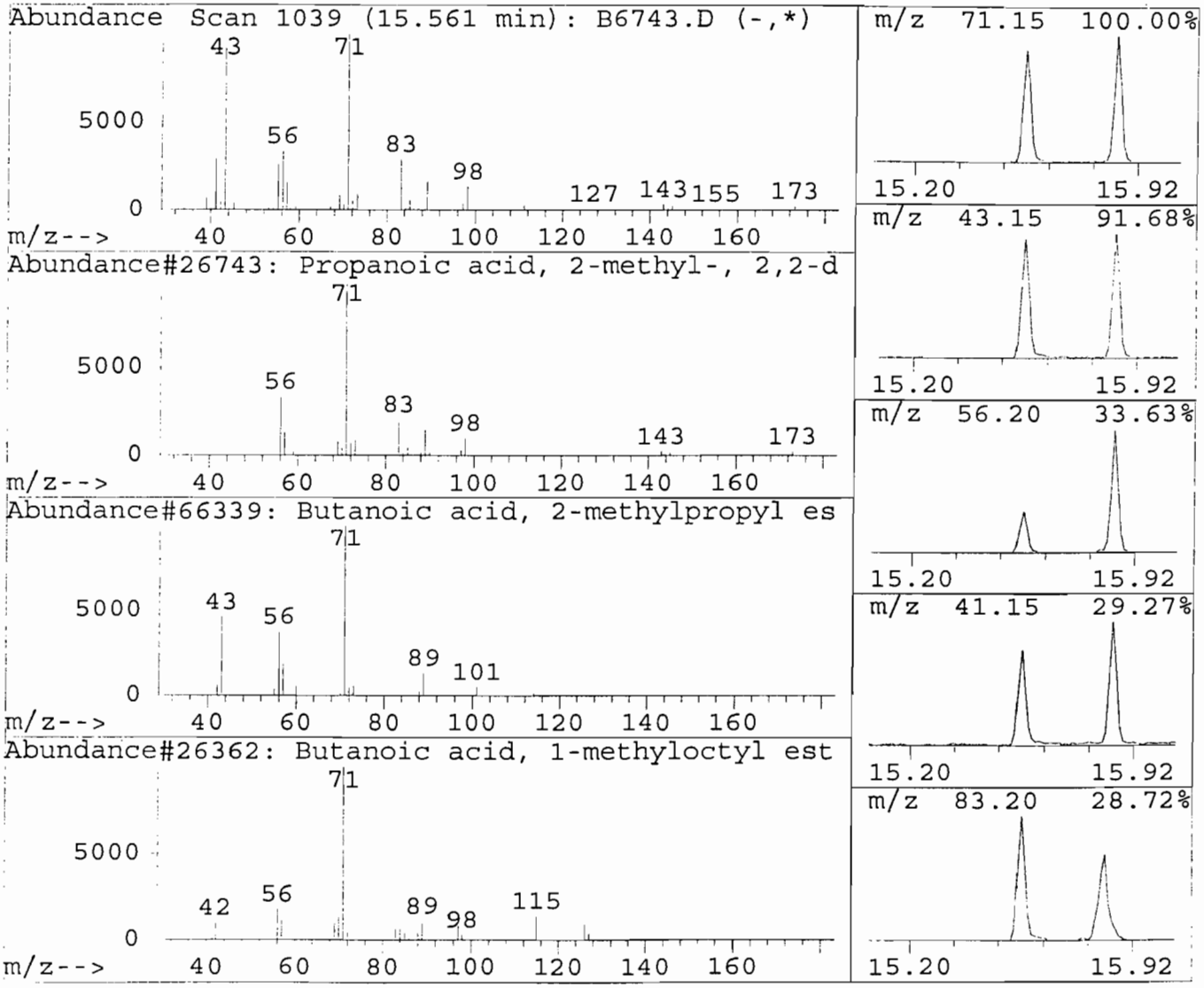
Data File : D:\HPCHEM\1\DATA\B11103\B6743.D
Acq Time : 4 Nov 99 2:14 am
Sample : 13826ASP-87999-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.56	10.24 ng	914510	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	83
2	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	50
3	Butanoic acid, 1-methyloctyl ester	26362	069727-42-0	42
4	Propanoic acid, 2-methyl-, 2-methyl	66303	000097-85-8	42
5	Butanoic acid, 2-methylpropyl ester	66338	000539-90-2	40



Library Search Compound Report

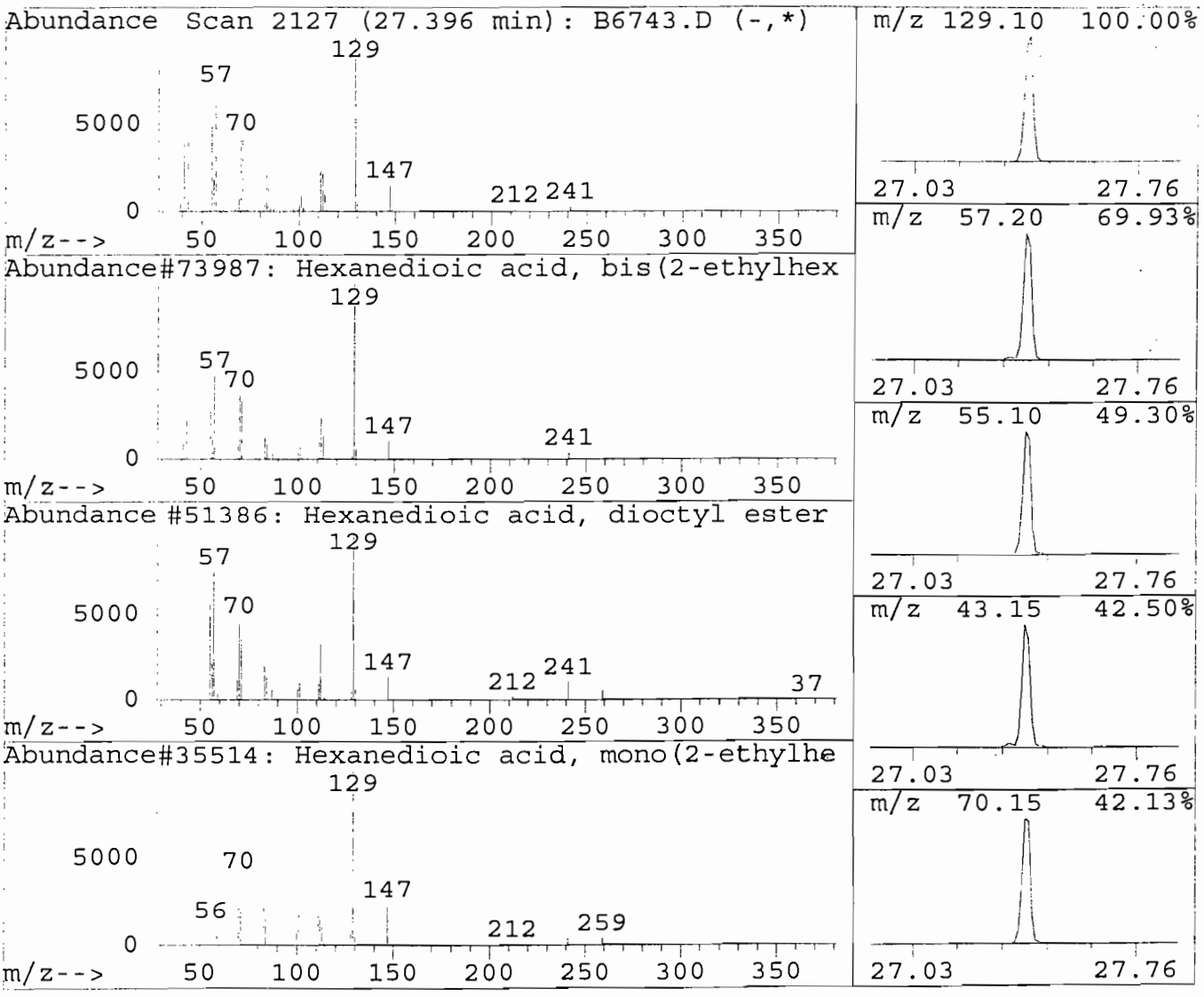
Data File : D:\HPCHEM\1\DATA\B11103\B6743.D
Acq Time : 4 Nov 99 2:14 am
Sample : 13826ASP-87999-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.40	53.62 ng	4826159	Chrysene-d12	28.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	87
2	Hexanedioic acid, dioctyl ester	51386	000123-79-5	68
3	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	58
4	Propanedioic acid, hexyl-, diethyl	32687	005398-10-7	27
5	2-Ethyl-1-dodecanol	26412	000000-00-0	25



000244

Library Search Compound Report

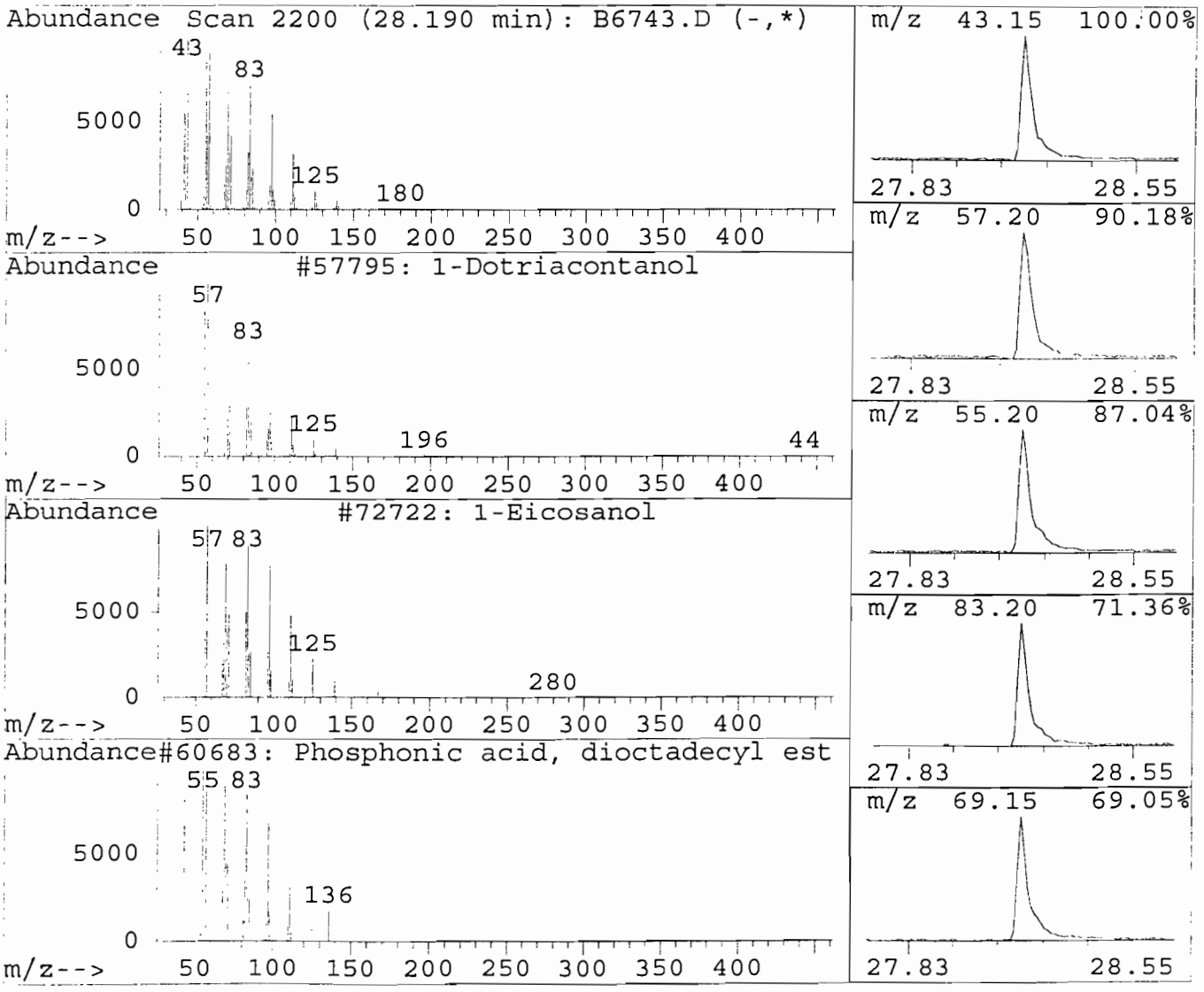
Data File : D:\HPCHEM\1\DATA\B11103\B6743.D
Acq Time : 4 Nov 99 2:14 am
Sample : 13826ASP-87999-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.19	15.70 ng	1413592	Chrysene-d12	28.35

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Dotriacontanol	57795	006624-79-9	94
2	1-Eicosanol	72722	000629-96-9	94
3	Phosphonic acid, dioctadecyl ester	60683	019047-85-9	93
4	1-Docosene	72943	001599-67-3	91
5	Silane, trichloroeicosyl-	54853	018733-57-8	91



Library Search Compound Report

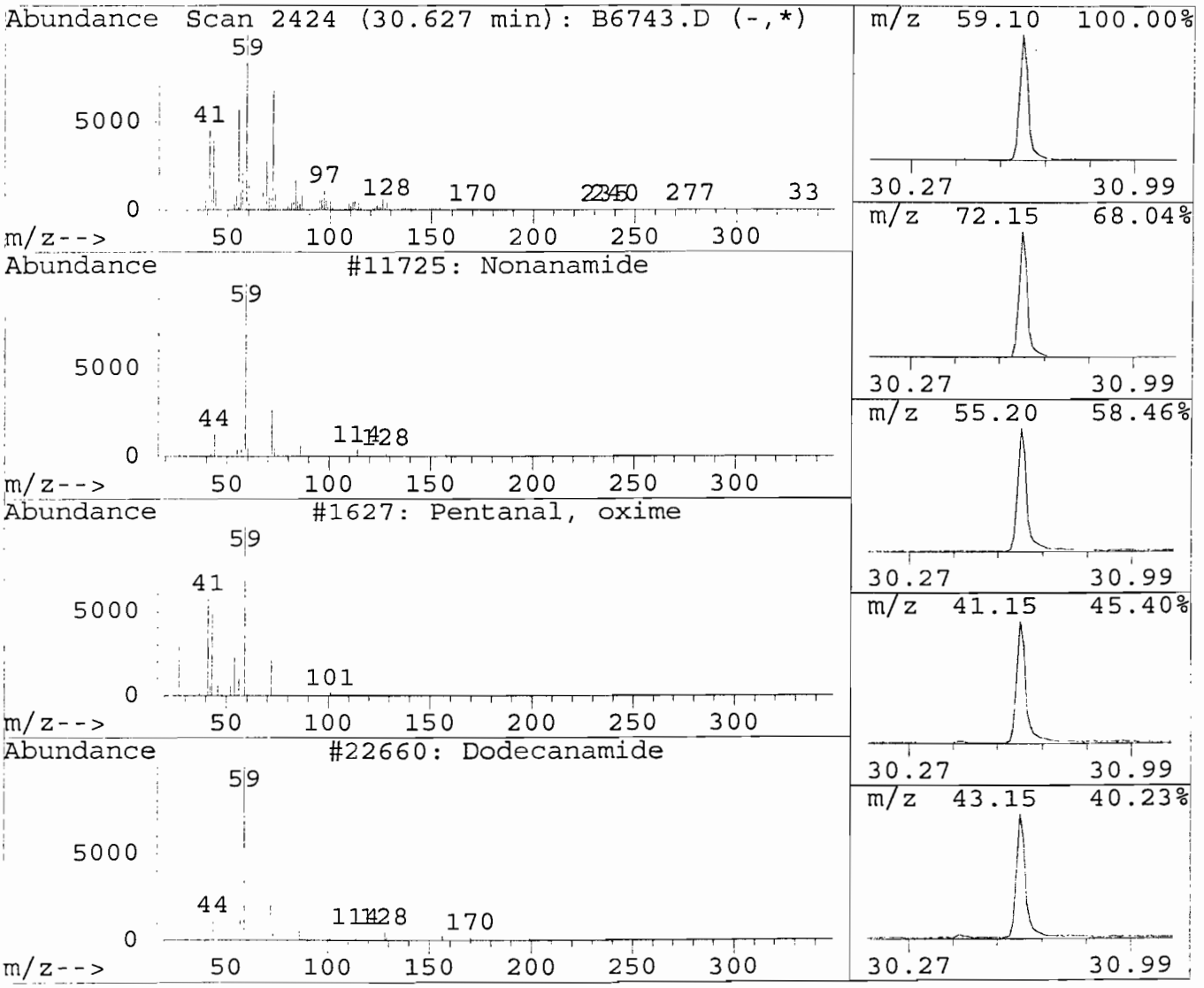
Data File : D:\HPCHEM\1\DATA\B11103\B6743.D
Acq Time : 4 Nov 99 2:14 am
Sample : 13826ASP-87999-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.63	31.36 ng	2788973	Perylene-d12	31.87

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonanamide	11725	001120-07-6	53
2	Pentanal, oxime	1627	000628-79-5	43
3	Dodecanamide	22660	001120-16-7	42
4	2-Propanone, 1-cyclopentyl-	4580	001122-98-1	38
5	9-Octadecenamide, (Z)-	72284	000301-02-0	38



000246

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88000

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6834.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	34	U
621-64-7	n-Nitroso-di-n-propylamine	34	U
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	34	U
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	69	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	59	U
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	34	U
132-64-9	Dibenzofuran	54	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	97	
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	34	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88000

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6834.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
86-74-8	Carbazole	51	U
84-74-2	Di-n-butylphthalate	120	
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	34	U
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
117-81-7	bis(2-Ethylhexyl)phthalate	64	U
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-010-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O88000

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6834.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 6 Concentration Units: (ug/L or ug/Kg) ug/Kg

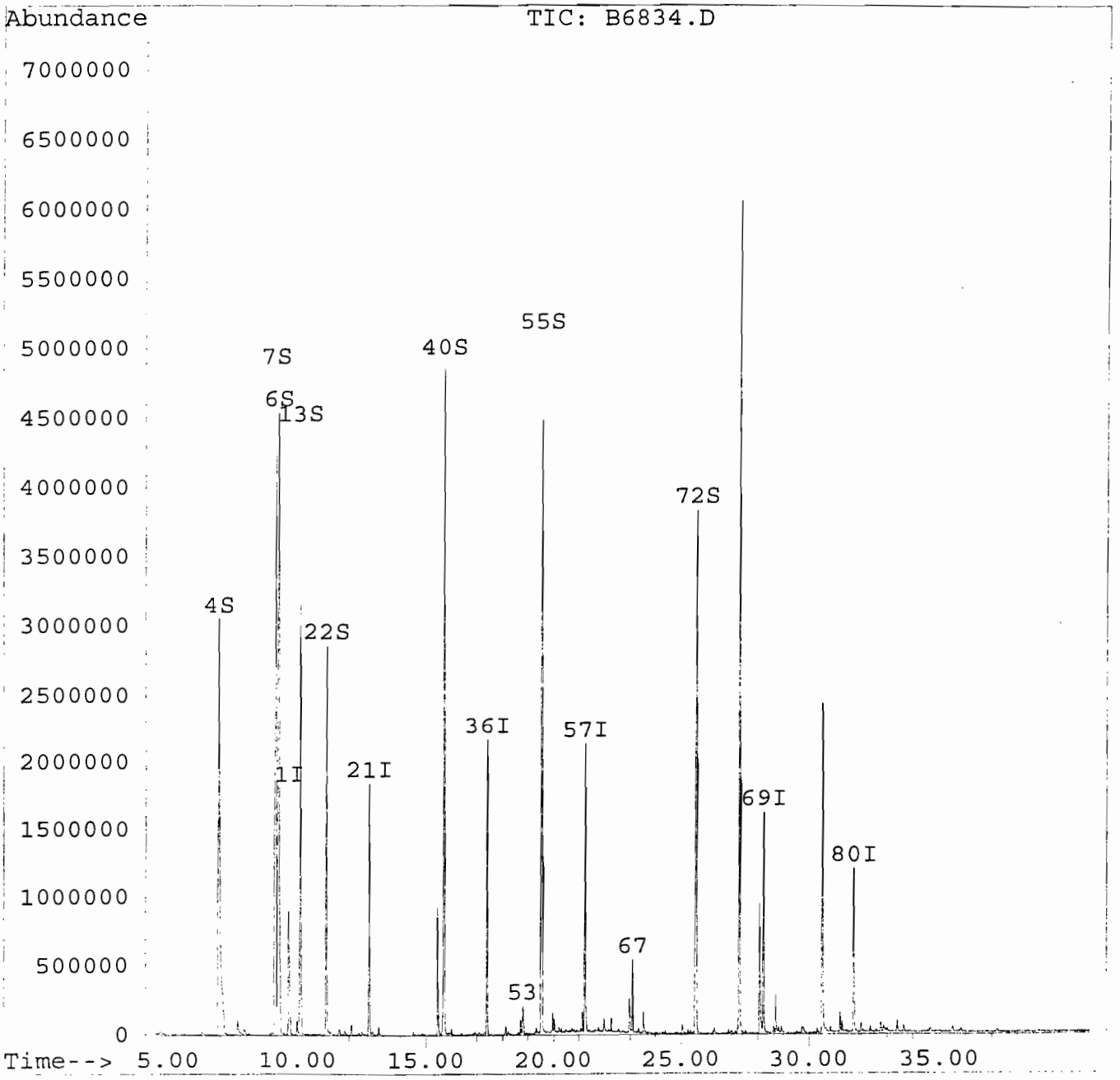
CAS Number	Compound Name	RT	Est. Conc.	Q
1. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.45	330	J
2. 57-10-3	Hexadecanoic acid	22.99	77	J
3. 103-23-1	Hexanedioic acid, bis(2-ethy	27.32	2700	J
4.	Unknown	28.08	400	J
5.	Unknown	28.71	110	J
6. 301-02-0	9-Octadecenamide, (Z)-	30.53	1400	J
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6834.D
Acq Time : 9 Nov 99 10:48 am
Sample : 13826ASP-88000-QB505
Misc :
Quant Time: Nov 10 7:39 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration



000250

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6834.D
Acq Time : 9 Nov 99 10:48 am
Sample : 13826ASP-88000-QB505
Misc :
Quant Time: Nov 10 7:39 1999

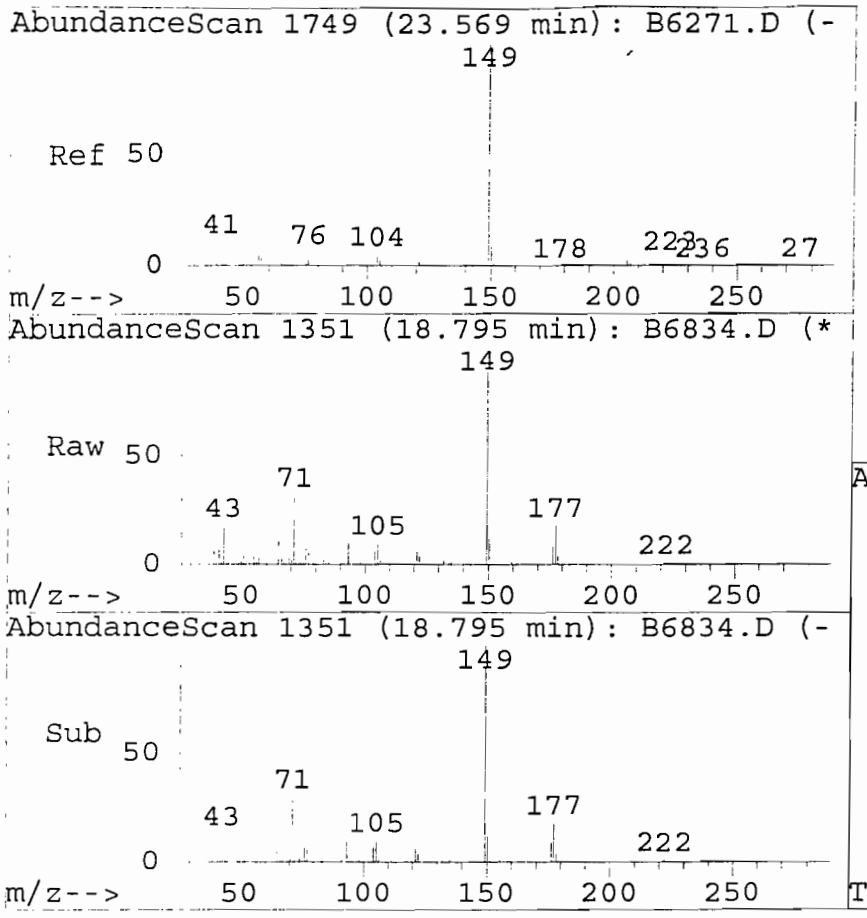
Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.66	152	424963	40.00	ng	-0.08
21) Naphthalene-d8	12.80	136	1601986	40.00	ng	-0.08
36) Acenaphthene-d10	17.40	164	930112	40.00	ng	-0.07
57) Phenanthrene-d10	21.25	188	1710093	40.00	ng	-0.08
69) Chrysene-d12	28.25	240	1338109	40.00	ng	-0.09
80) Perylene-d12	31.74	264	1089686	40.00	ng	-0.09
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.94	112	3566289	211.56	ng	
6) 2-Chlorophenol-d4	9.25	132	3776219	238.67	ng	
7) Phenol-d5	9.15	99	4616489	231.67	ng	
13) 1,2-Dichlorobenzene-d4	10.11	152	1245539	120.68	ng	
22) Nitrobenzene-d5	11.12	82	2503822	114.09	ng	
40) 2-Fluorobiphenyl	15.73	172	3814473	111.59	ng	
55) 2,4,6-Tribromophenol	19.56	330	1893754	248.63	ng	
72) Terphenyl-d14	25.61	244	5133720	132.76	ng	
Target Compounds						Qvalue
53) Diethylphthalate	18.80	149	198361	5.60	ng	96
67) Di-n-butylphthalate	23.11	149	503380	7.12	ng	97

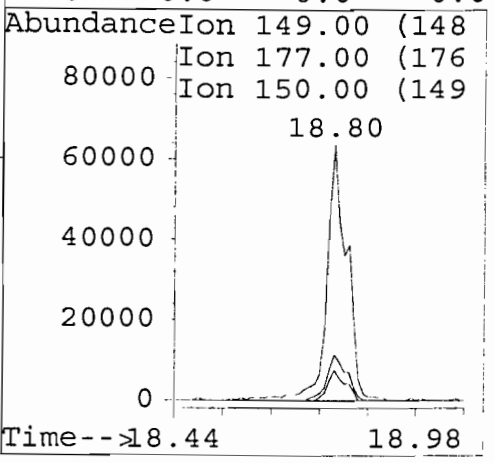
000251

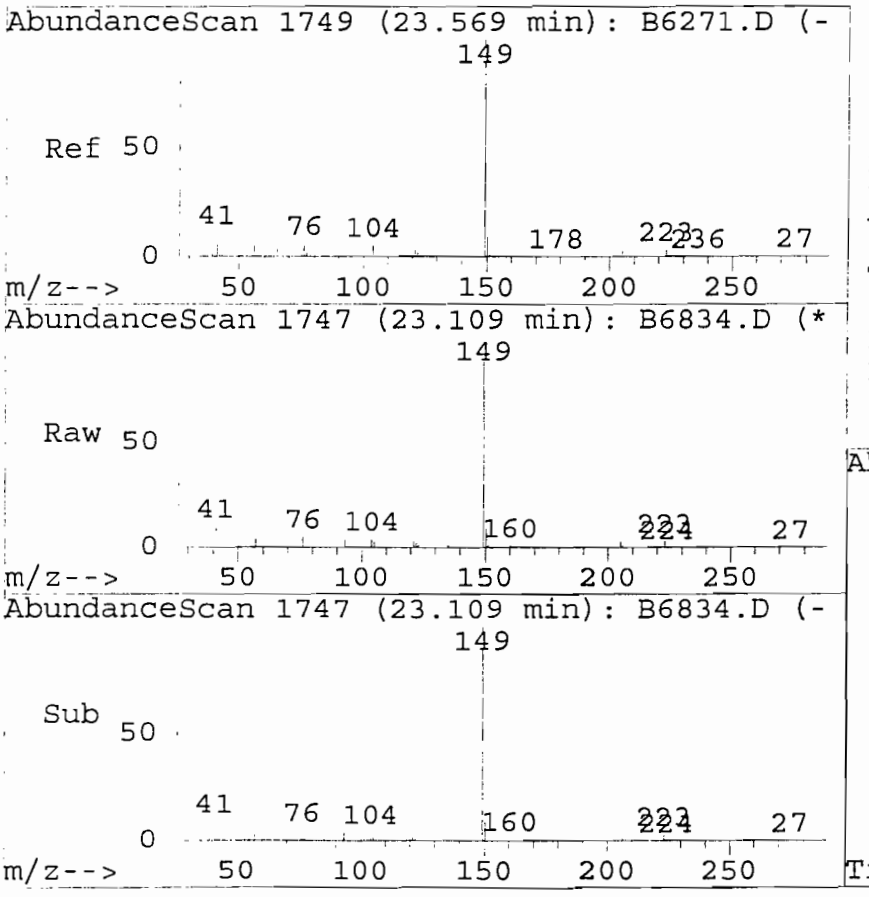
(#) = qualifier out of range (m) = manual integration



#53
Diethylphthalate
Concen: 5.60 ng
RT: 18.80 min Scan# 1351
Delta R.T. -0.13 min
Lab File: B6834.D
Acq: 9 Nov 99 10:48 am

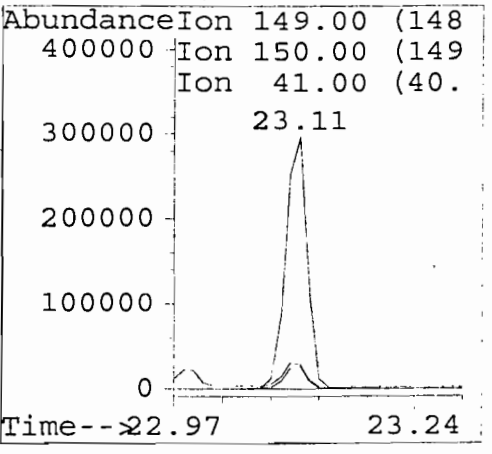
Tgt Ion:149	Resp:	198361	
Ion	Ratio	Lower	Upper
149	100		
177	17.9	10.2	30.6
150	11.9	5.8	17.3
0	0.0	0.0	0.0





#67
Di-n-butylphthalate
Concen: 7.12 ng
RT: 23.11 min Scan# 1747
Delta R.T. -0.10 min
Lab File: B6834.D
Acq: 9 Nov 99 10:48 am

Tgt Ion:149	Resp:	503380	
Ion	Ratio	Lower	Upper
149	100		
150	8.9	4.5	13.6
41	9.7	5.7	17.0
0	0.0	0.0	0.0



000252

Library Search Compound Report

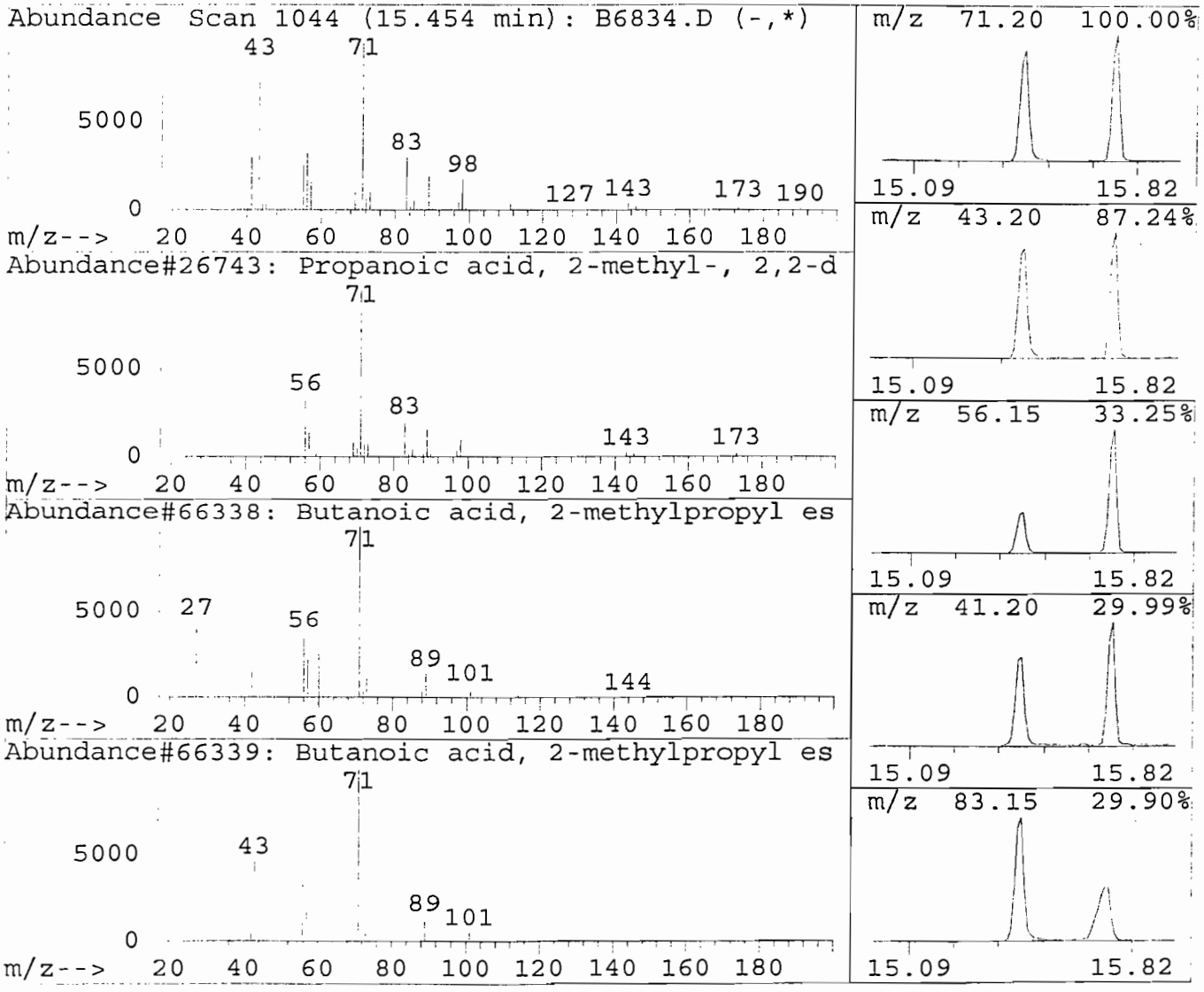
Data File : D:\HPCHEM\1\DATA\B11109\B6834.D
Acq Time : 9 Nov 99 10:48 am
Sample : 13826ASP-88000-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.45	18.76 ng	2077813	Acenaphthene-d10	17.40

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	90
2	Butanoic acid, 2-methylpropyl ester	66338	000539-90-2	50
3	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	47
4	Butanoic acid, 1-methylethyl ester	65238	000638-11-9	38
5	1-Propanol, 2,2-dimethyl-, carbonat	23337	013183-14-7	37



000253

Library Search Compound Report

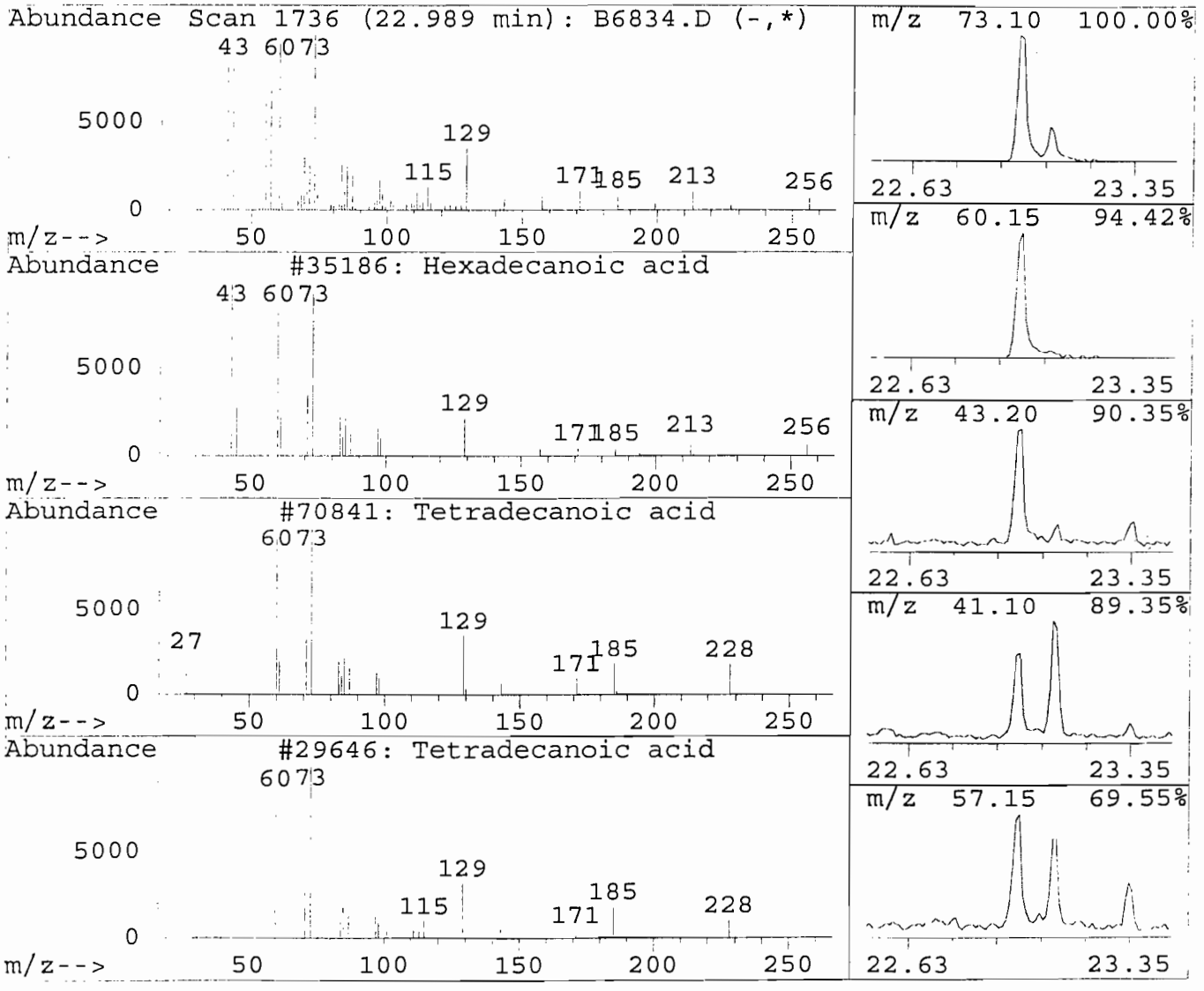
Data File : D:\HPCHEM\1\DATA\B11109\B6834.D
Acq Time : 9 Nov 99 10:48 am
Sample : 13826ASP-88000-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.99	4.46 ng	537007	Phenanthrene-d10	21.25

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecanoic acid	35186	000057-10-3	93
2	Tetradecanoic acid	70841	000544-63-8	90
3	Tetradecanoic acid	29646	000544-63-8	90
4	Dodecanamide, N,N-bis(2-hydroxyethy	40673	000120-40-1	87
5	Tetradecanoic acid	70840	000544-63-8	87



000254

Library Search Compound Report

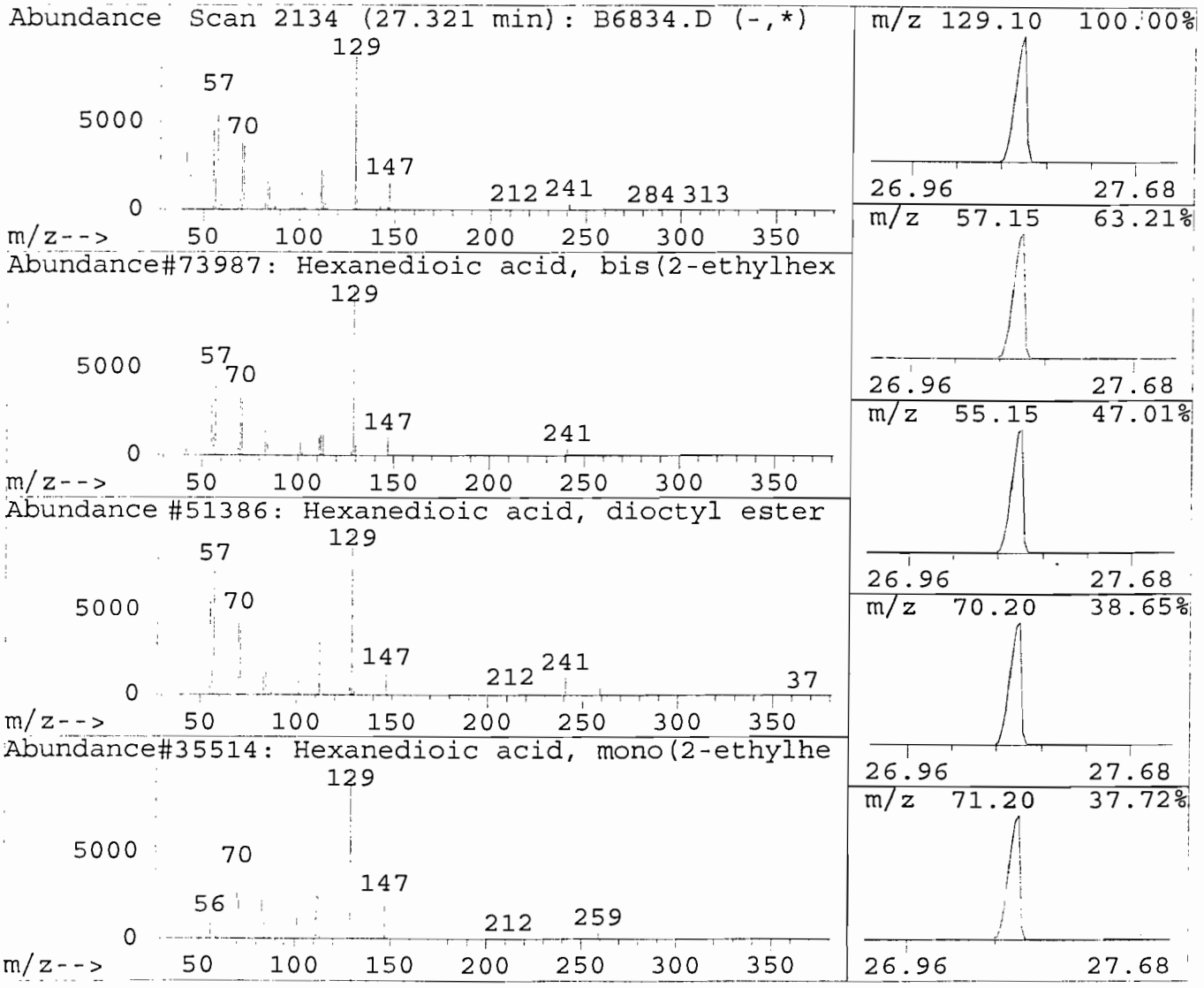
Data File : D:\HPCHEM\1\DATA\B11109\B6834.D
Acq Time : 9 Nov 99 10:48 am
Sample : 13826ASP-88000-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.32	157.60 ng	14970028	Chrysene-d12	28.25

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	87
2	Hexanedioic acid, dioctyl ester	51386	000123-79-5	74
3	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	62
4	Octane, 4-ethyl-	8095	015869-86-0	25
5	Butanedioic acid, 2,3-dimethyl-, bi	35499	057983-29-6	22



000255

Library Search Compound Report

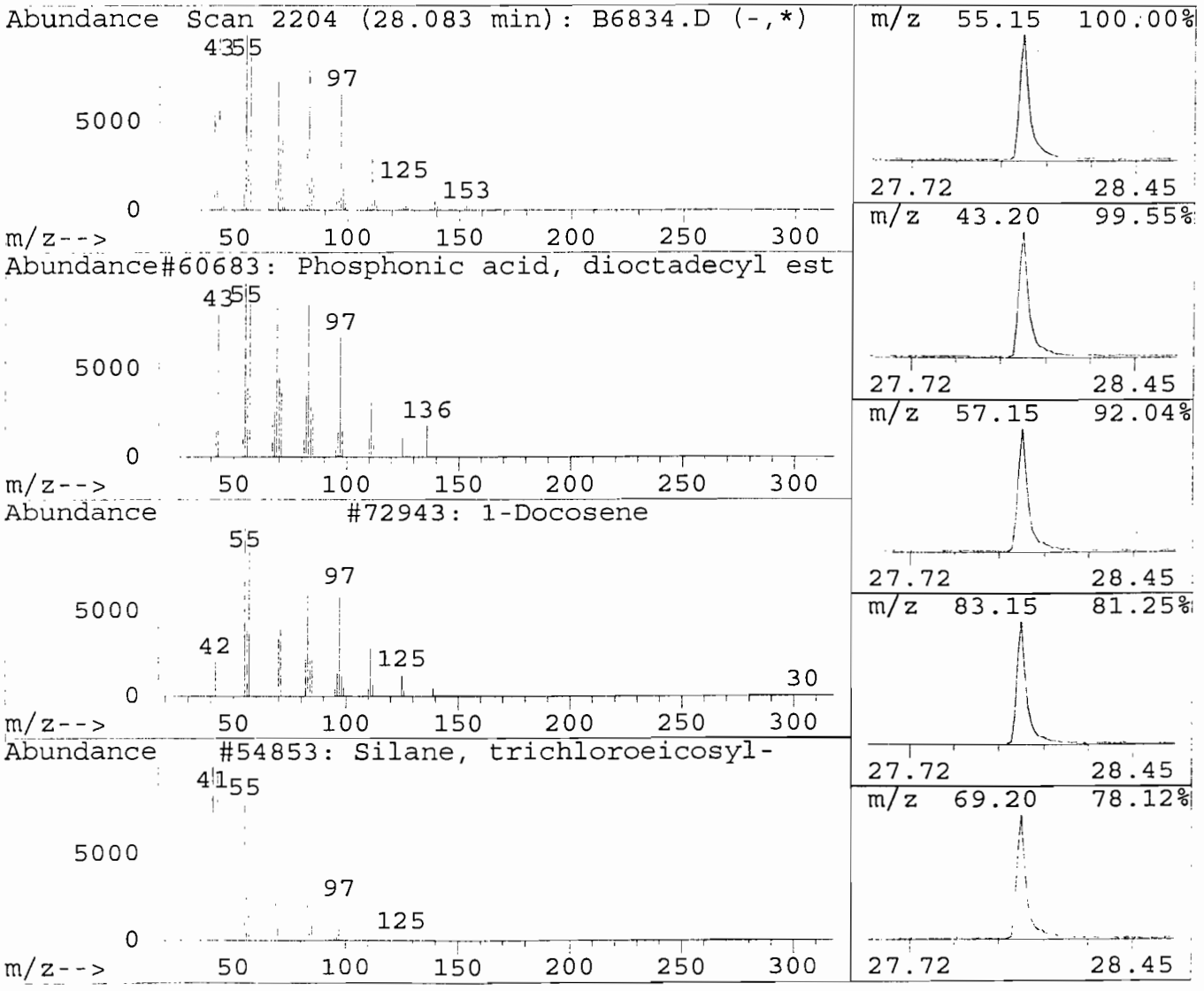
Data File : D:\HPCHEM\1\DATA\B11109\B6834.D
Acq Time : 9 Nov 99 10:48 am
Sample : 13826ASP-88000-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.08	23.19 ng	2202687	Chrysene-d12	28.25

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Phosphonic acid, dioctadecyl ester	60683	019047-85-9	94
2	1-Docosene	72943	001599-67-3	91
3	Silane, trichloroeicosyl-	54853	018733-57-8	91
4	9-Eicosene, (E)-	39519	074685-29-3	91
5	1-Nonadecanol	40236	001454-84-8	90



Library Search Compound Report

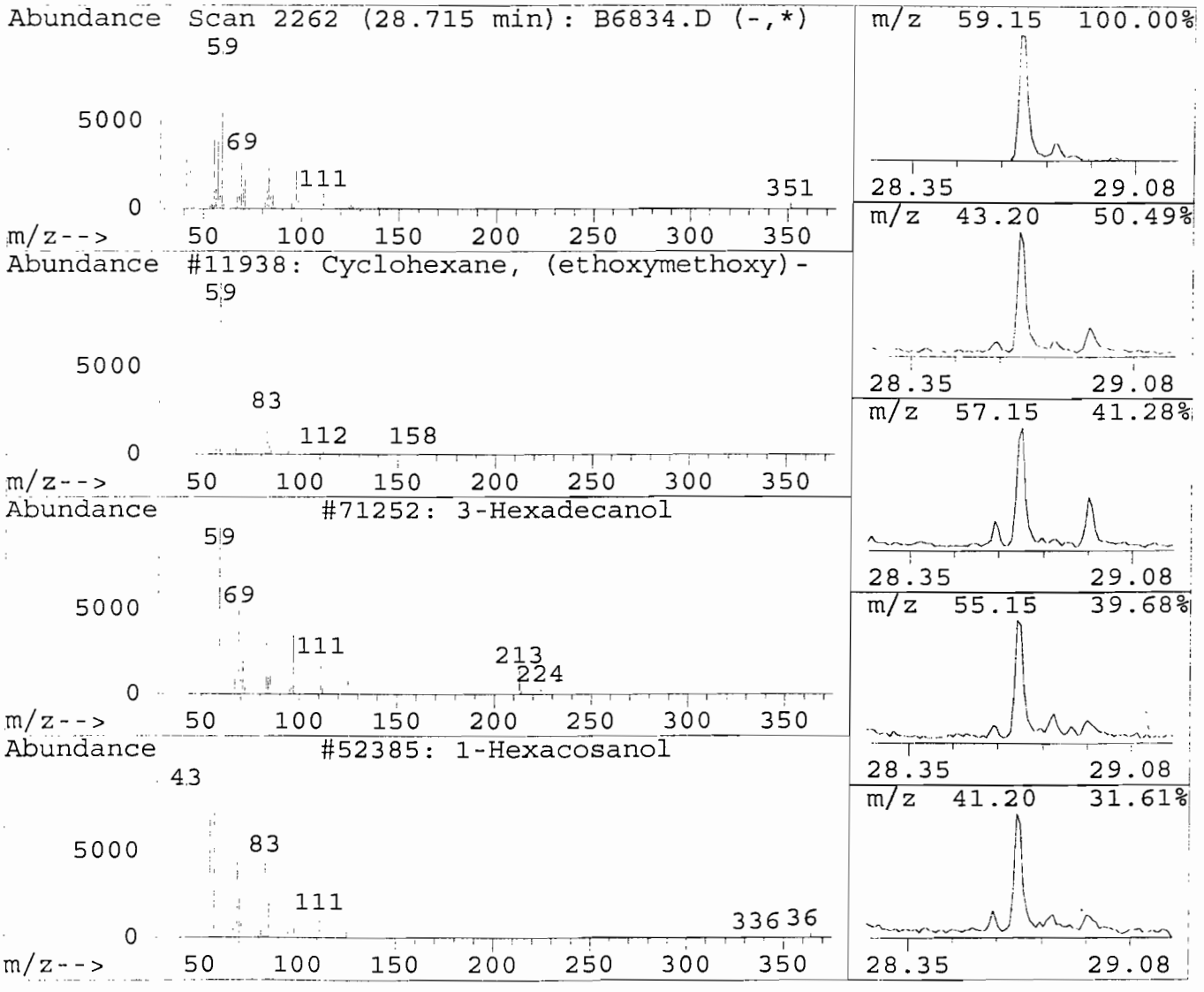
Data File : D:\HPCHEM\1\DATA\B11109\B6834.D
Acq Time : 9 Nov 99 10:48 am
Sample : 13826ASP-88000-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.71	6.45 ng	612710	Chrysene-d12	28.25

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane, (ethoxymethoxy)-	11938	054699-29-5	50
2	3-Hexadecanol	71252	000593-03-3	47
3	1-Hexacosanol	52385	000506-52-5	35
4	1-Docosanol	73356	000661-19-8	22
5	1-Tetracosanol	49775	000506-51-4	20



Library Search Compound Report

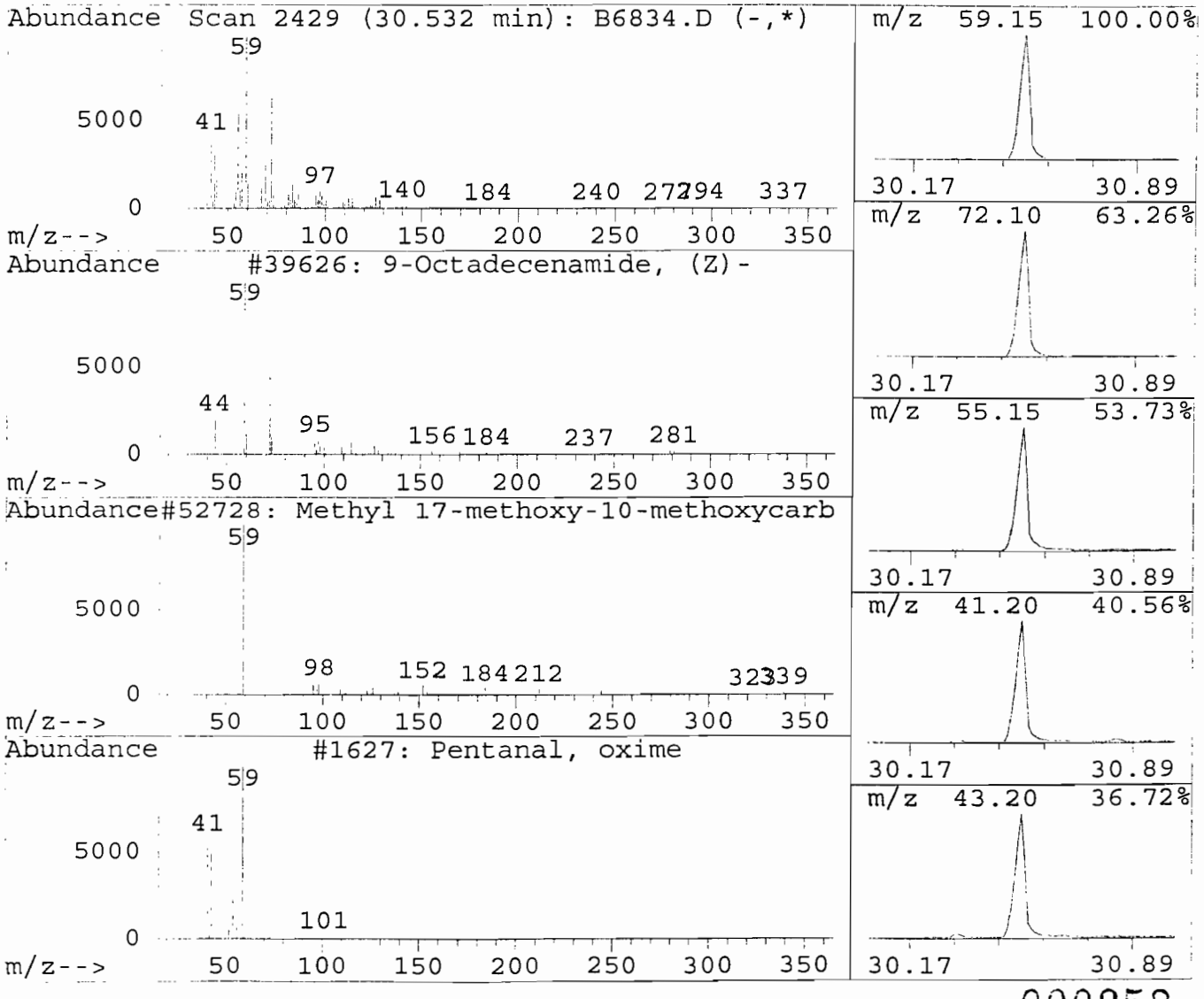
Data File : D:\HPCHEM\1\DATA\B11109\B6834.D
Acq Time : 9 Nov 99 10:48 am
Sample : 13826ASP-88000-QB505
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.53	79.02 ng	5632155	Perylene-d12	31.74

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	83
2	Methyl 17-methoxy-10-methoxycarbony	52728	000000-00-0	47
3	Pentanal, oxime	1627	000628-79-5	43
4	Pentanamide, 4-methyl-	3136	001119-29-5	42
5	Nonanamide	11725	001120-07-6	40



000258

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6740.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	34	U
621-64-7	n-Nitroso-di-n-propylamine	34	U
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	34	U
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	69	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	59	U
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	34	U
132-64-9	Dibenzofuran	54	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	34	U
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	34	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6740.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
86-74-8	Carbazole	51	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	34	U
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
117-81-7	bis(2-Ethylhexyl)phthalate	64	U
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-010-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O88001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6740.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 4 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.56	190	J
2. 103-23-1	Hexanedioic acid, bis(2-ethy	27.41	1300	J
3. 1599-67-3	1-Docosene	28.20	270	J
4. 1120-07-6	Nonanamide	30.63	830	J
5.				
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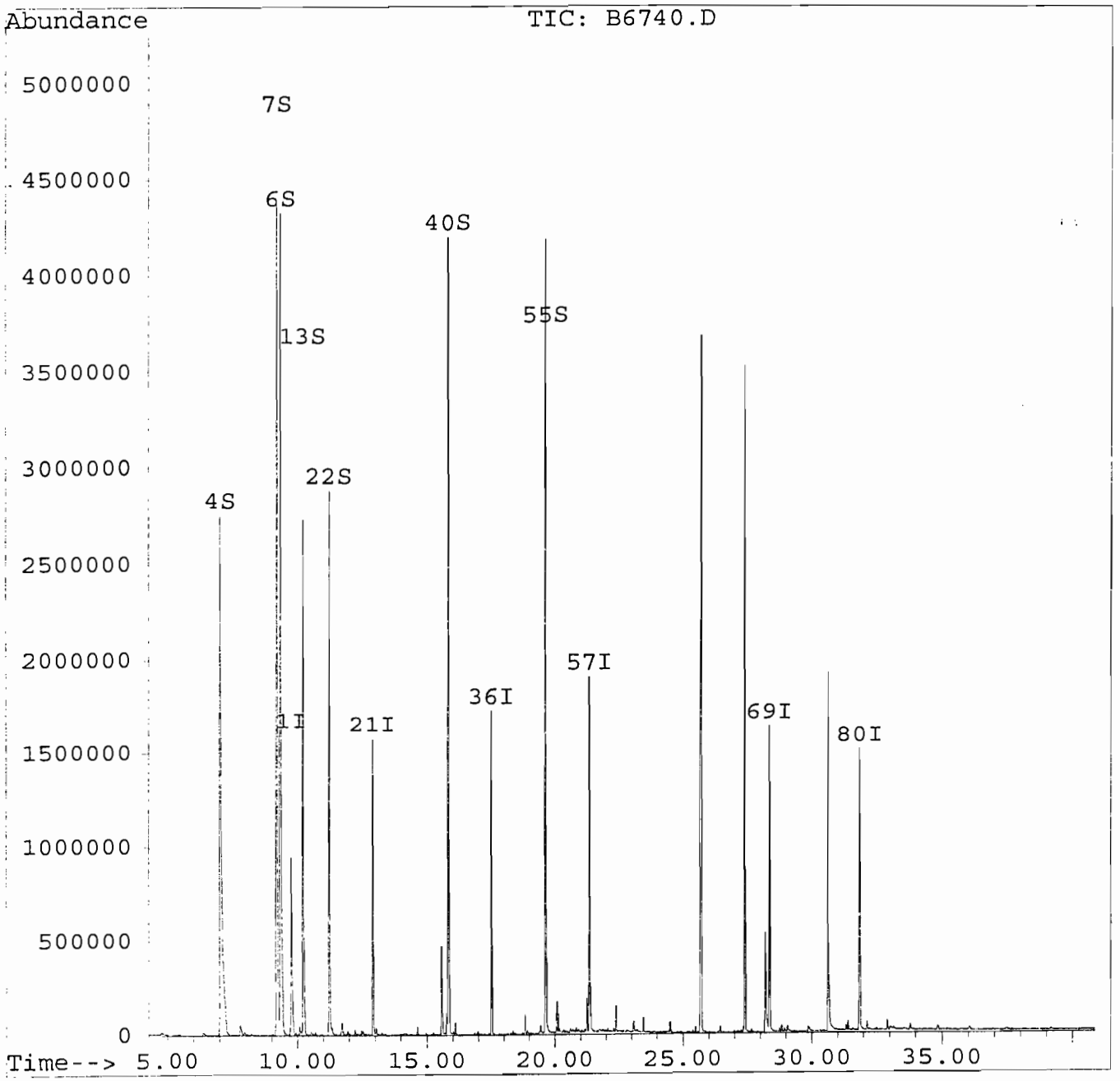
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6740.D
Acq Time : 3 Nov 99 11:44 pm
Sample : 13826ASP-88001-QB505
Misc :
Quant Time: Nov 10 14:27 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B1CLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 10 00:06:43 1999
Response via : Multiple Level Calibration



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Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6740.D
Acq Time : 3 Nov 99 11:44 pm
Sample : 13826ASP-88001-QB505
Misc :
Quant Time: Nov 10 14:27 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B1CLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 10 00:06:43 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.78	152	406809	40.00	ng	-0.03
21) Naphthalene-d8	12.92	136	1368560	40.00	ng	-0.33
36) Acenaphthene-d10	17.52	164	716673	40.00	ng	-0.33
57) Phenanthrene-d10	21.36	188	1383593	40.00	ng	-0.33
69) Chrysene-d12	28.36	240	1288969	40.00	ng	-0.35
80) Perylene-d12	31.87	264	1379317	40.00	ng	-0.35
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.03	112	3126807	220.76	ng	
6) 2-Chlorophenol-d4	9.35	132	3070910	233.69	ng	
7) Phenol-d5	9.22	99	4024568	248.28	ng	
13) 1,2-Dichlorobenzene-d4	10.22	152	1065625	116.51	ng	
22) Nitrobenzene-d5	11.23	82	2023235	123.51	ng	
40) 2-Fluorobiphenyl	15.84	172	2746805	111.42	ng	
55) 2,4,6-Tribromophenol	19.67	330	1549774	328.26	ng	
72) Terphenyl-d14	25.72	244	3718603	97.96	ng	#
Target Compounds						Qvalue

000263

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

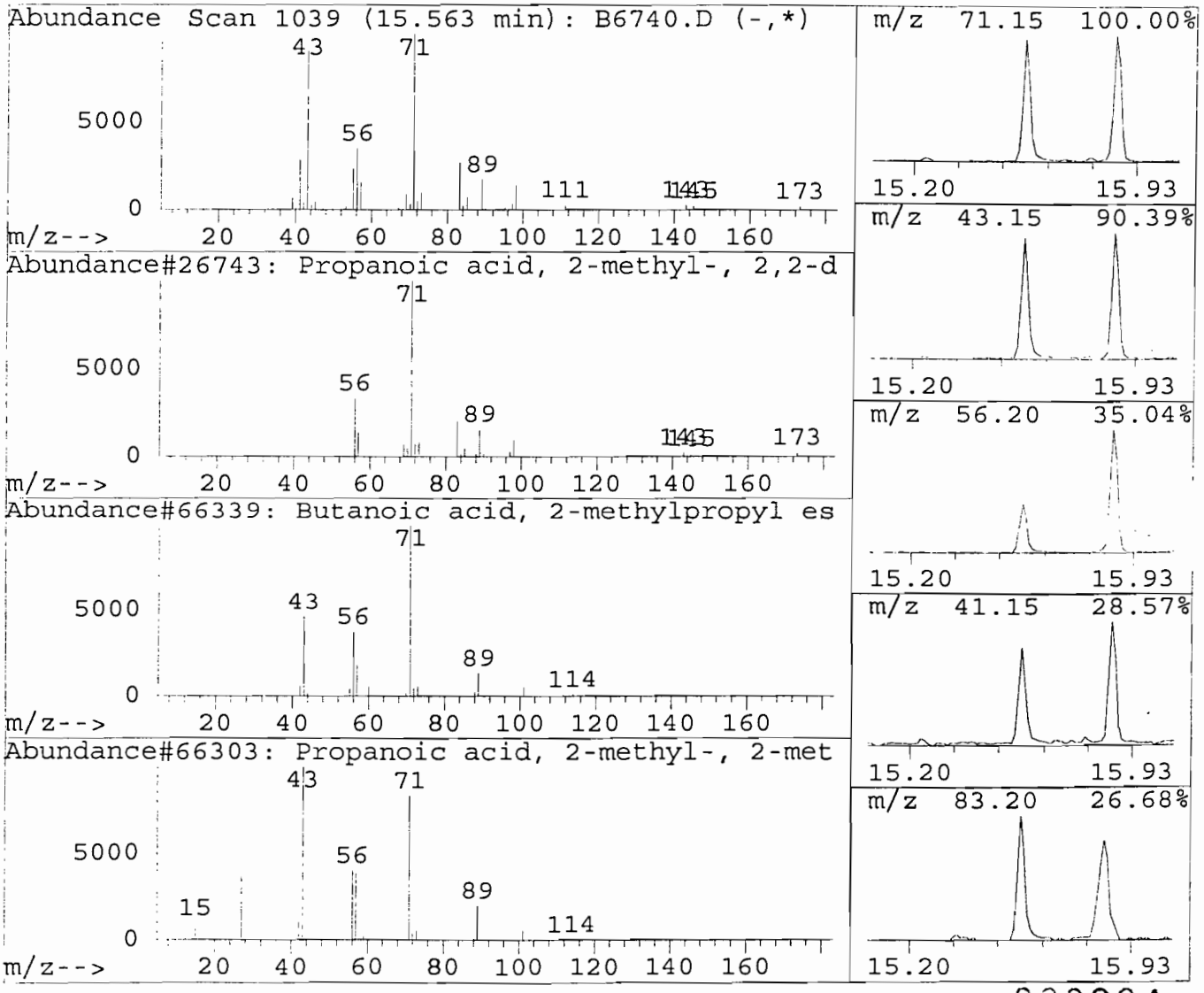
Data File : D:\HPCHEM\1\DATA\B11103\B6740.D
Acq Time : 3 Nov 99 11:44 pm
Sample : 13826ASP-88001-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.56	11.09 ng	972980	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	90
2	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	59
3	Propanoic acid, 2-methyl-, 2-methyl	66303	000097-85-8	42
4	Propanoic acid, 2-methyl-, 2-methyl	66305	000097-85-8	40
5	4,5-Octanedione	7928	005455-24-3	37



000264

Library Search Compound Report

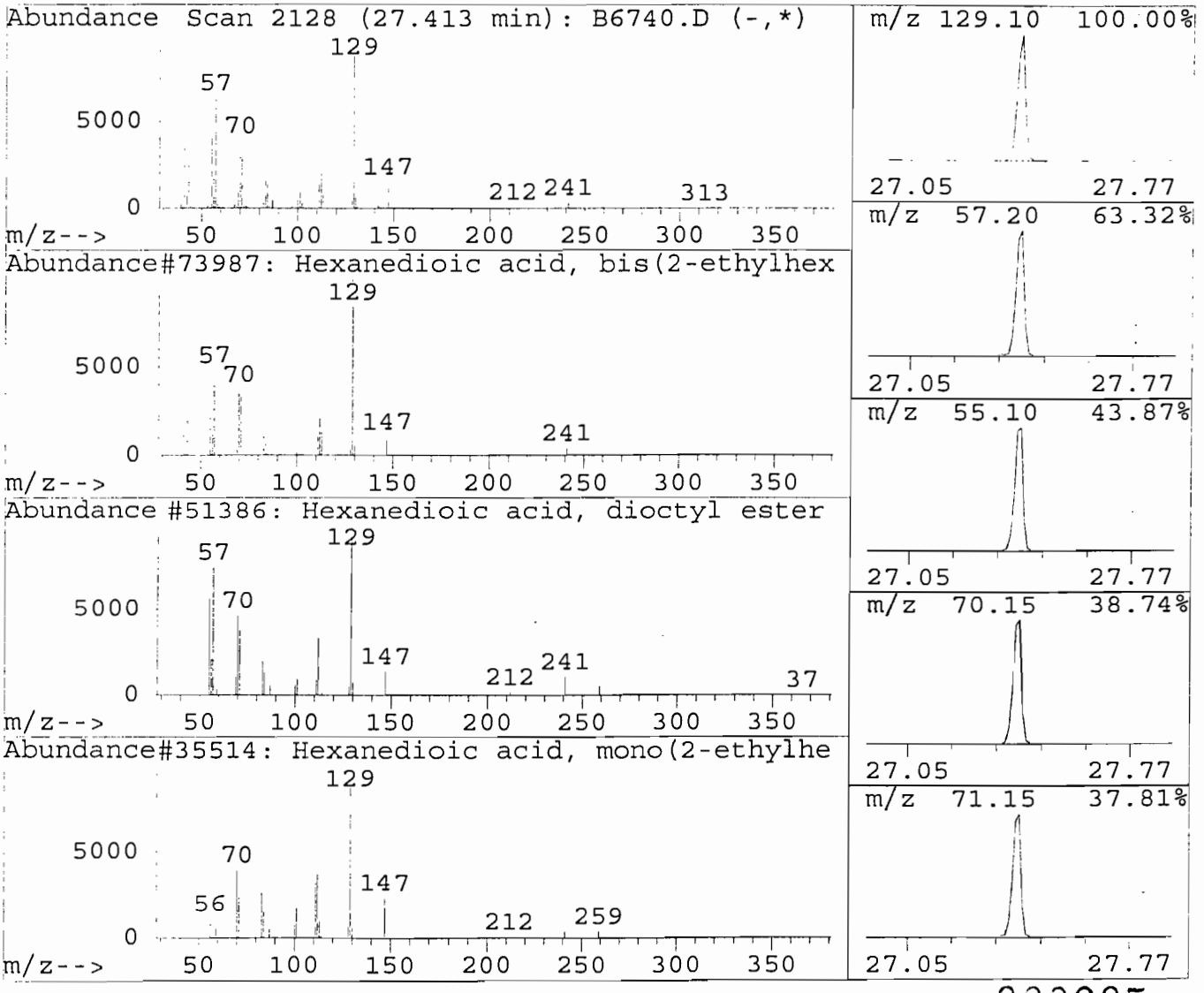
Data File : D:\HPCHEM\1\DATA\B11103\B6740.D
Acq Time : 3 Nov 99 11:44 pm
Sample : 13826ASP-88001-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.41	72.45 ng	6492451	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	87
2	Hexanedioic acid, dioctyl ester	51386	000123-79-5	52
3	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	42
4	Octane, 4-ethyl-	8095	015869-86-0	25
5	2,6-Difluoroaniline	65154	005509-65-9	25



000265

Library Search Compound Report

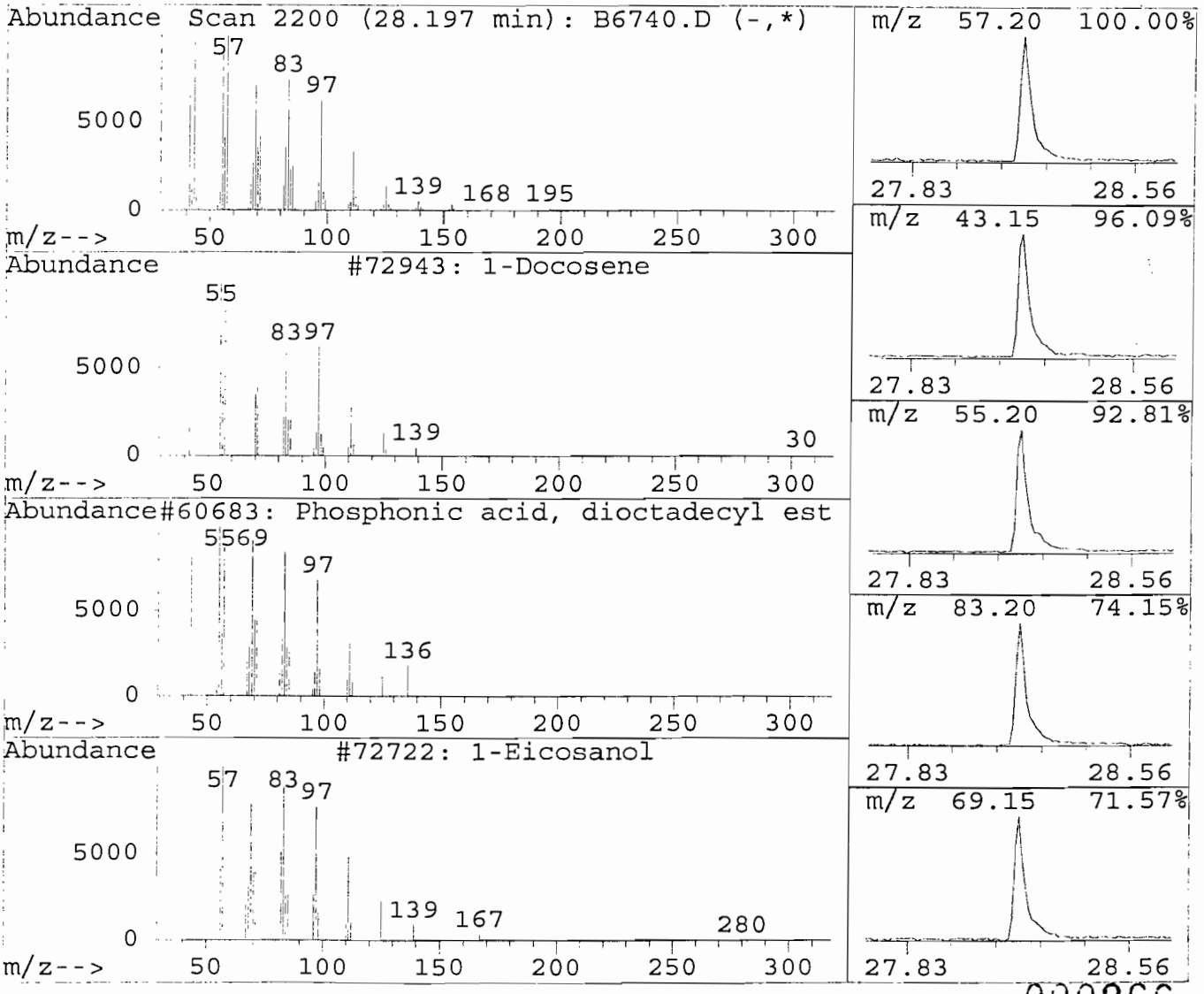
Data File : D:\HPCHEM\1\DATA\B11103\B6740.D
Acq Time : 3 Nov 99 11:44 pm
Sample : 13826ASP-88001-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.20	15.46 ng	1385549	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Docosene	72943	001599-67-3	95
2	Phosphonic acid, dioctadecyl ester	60683	019047-85-9	94
3	1-Eicosanol	72722	000629-96-9	91
4	3-Eicosene, (E)-	39521	074685-33-9	91
5	1-Octadecanol	72028	000112-92-5	91



000266

Library Search Compound Report

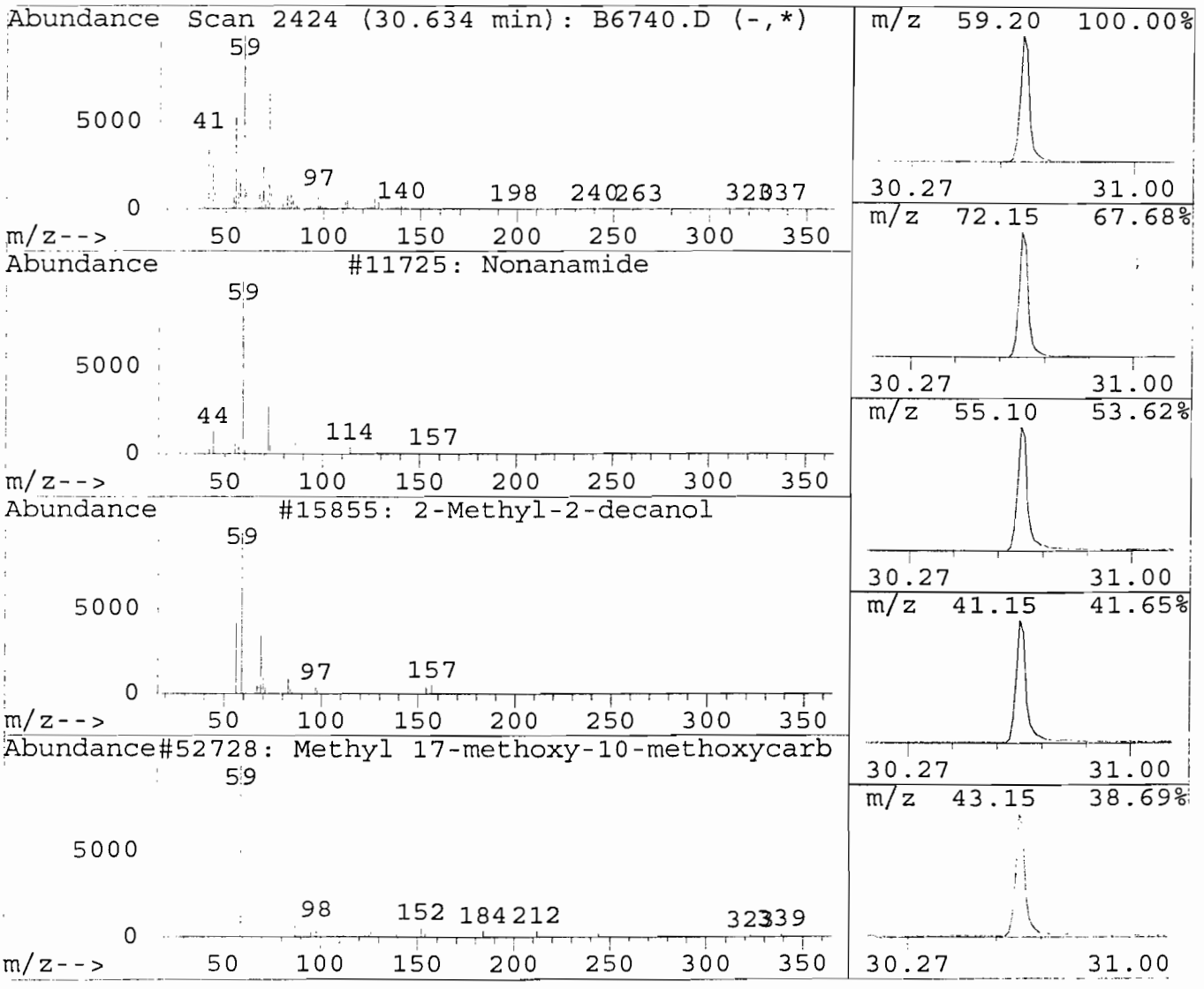
Data File : D:\HPCHEM\1\DATA\B11103\B6740.D
Acq Time : 3 Nov 99 11:44 pm
Sample : 13826ASP-88001-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.63	48.10 ng	4326419	Perylene-d12	31.87

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonanamide	11725	001120-07-6	53
2	2-Methyl-2-decanol	15855	003396-02-9	43
3	Methyl 17-methoxy-10-methoxycarbony	52728	000000-00-0	43
4	Pentanal, oxime	1627	000628-79-5	43
5	Dodecanamide	22660	001120-16-7	40



000267

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-011-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6741.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 2 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	34	U
621-64-7	n-Nitroso-di-n-propylamine	34	U
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	34	U
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	68	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	58	U
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	34	U
132-64-9	Dibenzofuran	53	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	34	U
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	34	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-011-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6741.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 2 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
86-74-8	Carbazole	50	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	34	U
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
117-81-7	bis(2-Ethylhexyl)phthalate	63	U
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	100	U
207-08-9	Benzo[k]fluoranthene	98	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	50	U
191-24-2	Benzo[g,h,i]perylene	34	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-011-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O88002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6741.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 4 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.56	180	J
2. 103-23-1	Hexanedioic acid, bis(2-ethy	27.39	450	J
3.	Unknown	28.19	270	J
4. 301-02-0	9-Octadecenamide, (Z)-	30.63	76	J
5.				
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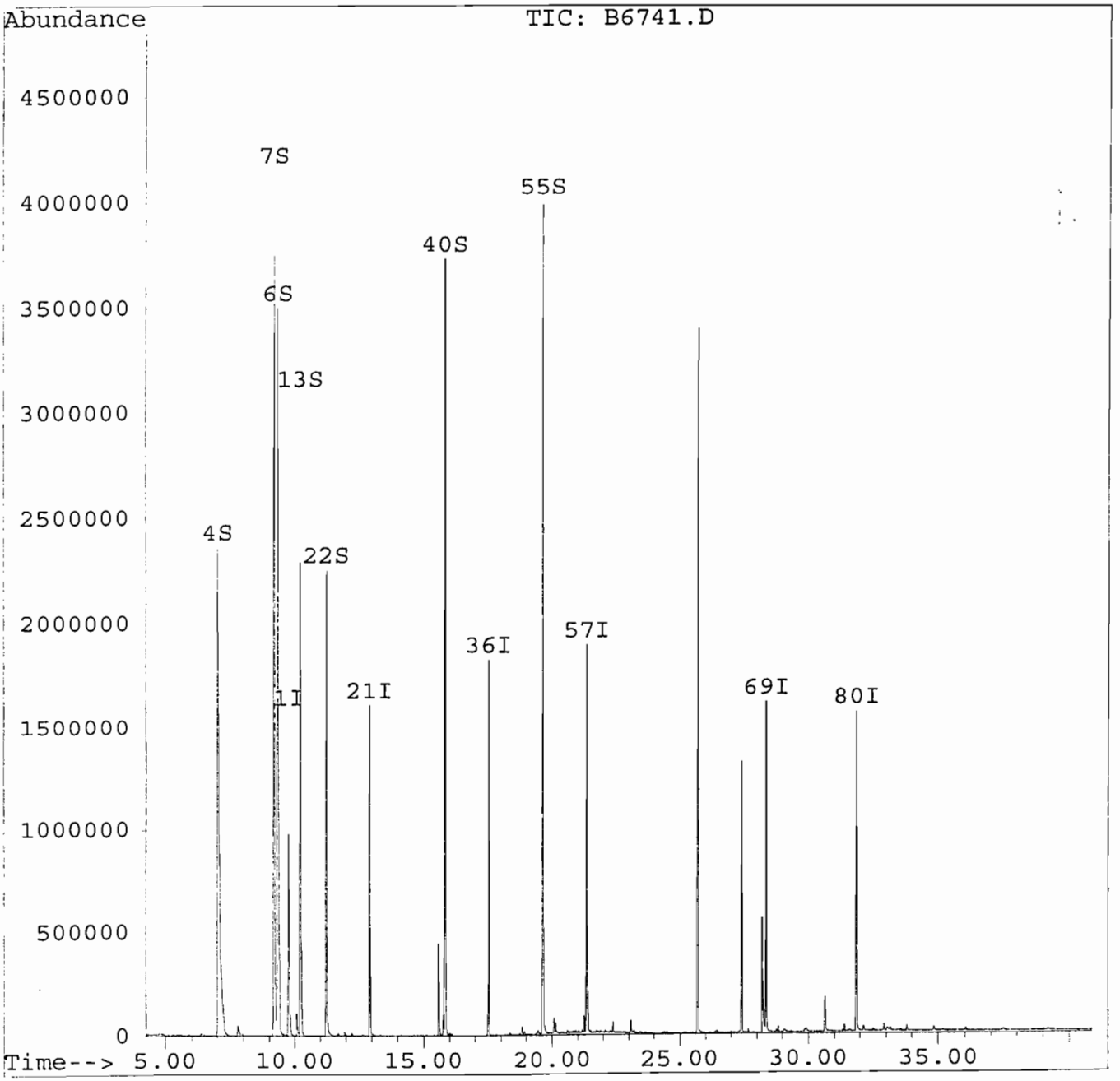
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6741.D
Acq Time : 4 Nov 99 12:34 am
Sample : 13826ASP-88002-QB505
Misc :
Quant Time: Nov 10 14:29 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B1CLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 10 00:06:43 1999
Response via : Multiple Level Calibration



000271

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6741.D
Acq Time : 4 Nov 99 12:34 am
Sample : 13826ASP-88002-QB505
Misc :
Quant Time: Nov 10 14:29 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B1CLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 10 00:06:43 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.78	152	408813	40.00	ng	-0.03
21) Naphthalene-d8	12.92	136	1369044	40.00	ng	-0.33
36) Acenaphthene-d10	17.52	164	731588	40.00	ng	-0.33
57) Phenanthrene-d10	21.36	188	1389437	40.00	ng	-0.34
69) Chrysene-d12	28.36	240	1277536	40.00	ng	-0.34
80) Perylene-d12	31.87	264	1360647	40.00	ng	-0.35
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.03	112	2725594	191.49	ng	
6) 2-Chlorophenol-d4	9.35	132	2665079	201.82	ng	
7) Phenol-d5	9.22	99	3407947	209.21	ng	
13) 1,2-Dichlorobenzene-d4	10.22	152	905333	98.50	ng	
22) Nitrobenzene-d5	11.23	82	1707344	104.19	ng	
40) 2-Fluorobiphenyl	15.83	172	2412874	95.88	ng	
55) 2,4,6-Tribromophenol	19.65	330	1353067	280.76	ng	
72) Terphenyl-d14	25.71	244	3277581	87.11	ng	#
Target Compounds						Qvalue

000272

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

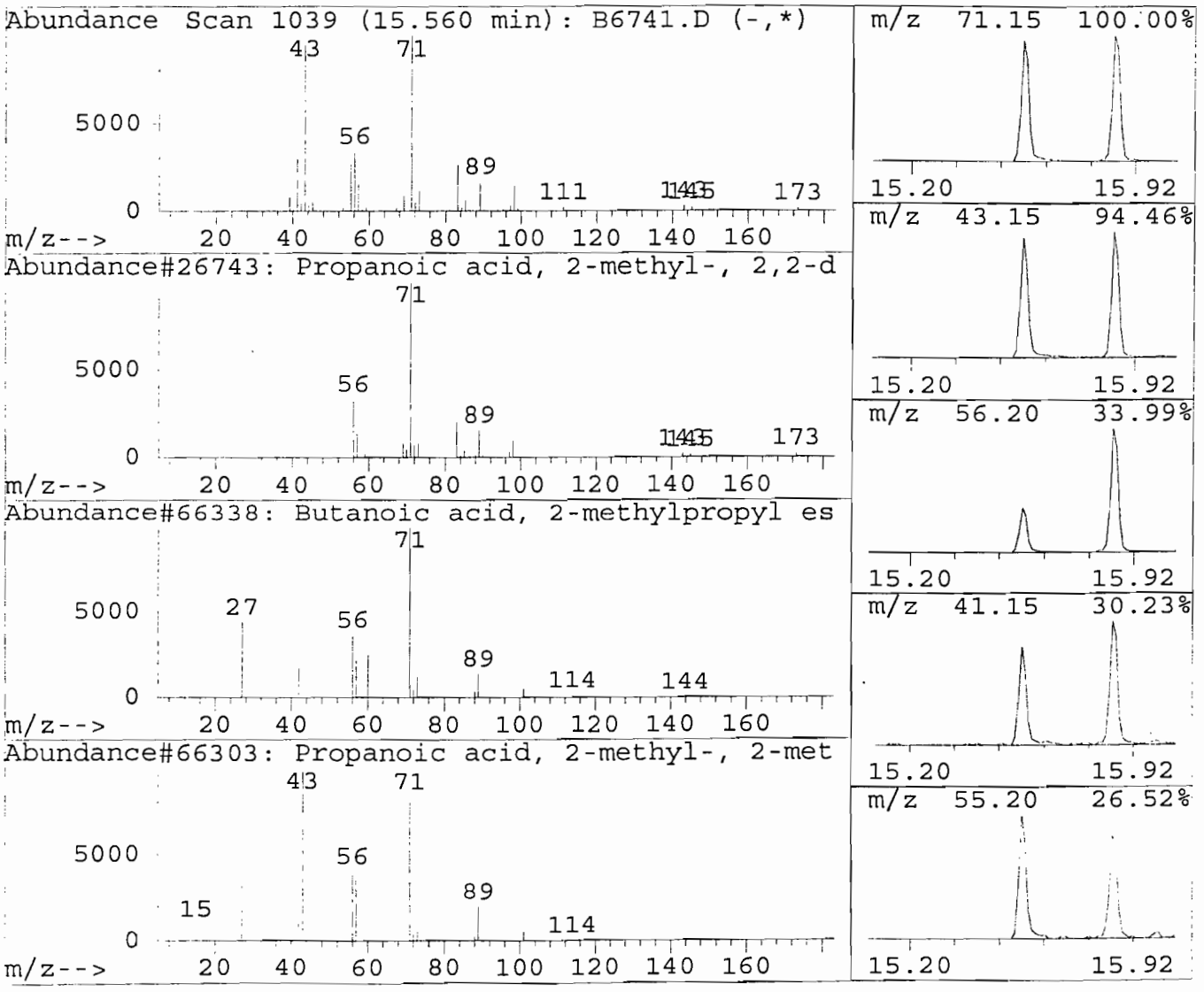
Data File : D:\HPCHEM\1\DATA\B11103\B6741.D
Acq Time : 4 Nov 99 12:34 am
Sample : 13826ASP-88002-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.56	10.55 ng	920355	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	90
2	Butanoic acid, 2-methylpropyl ester	66338	000539-90-2	59
3	Propanoic acid, 2-methyl-, 2-methyl	66303	000097-85-8	40
4	Butanoic acid, 1-methylethyl ester	65238	000638-11-9	38
5	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	38



Library Search Compound Report

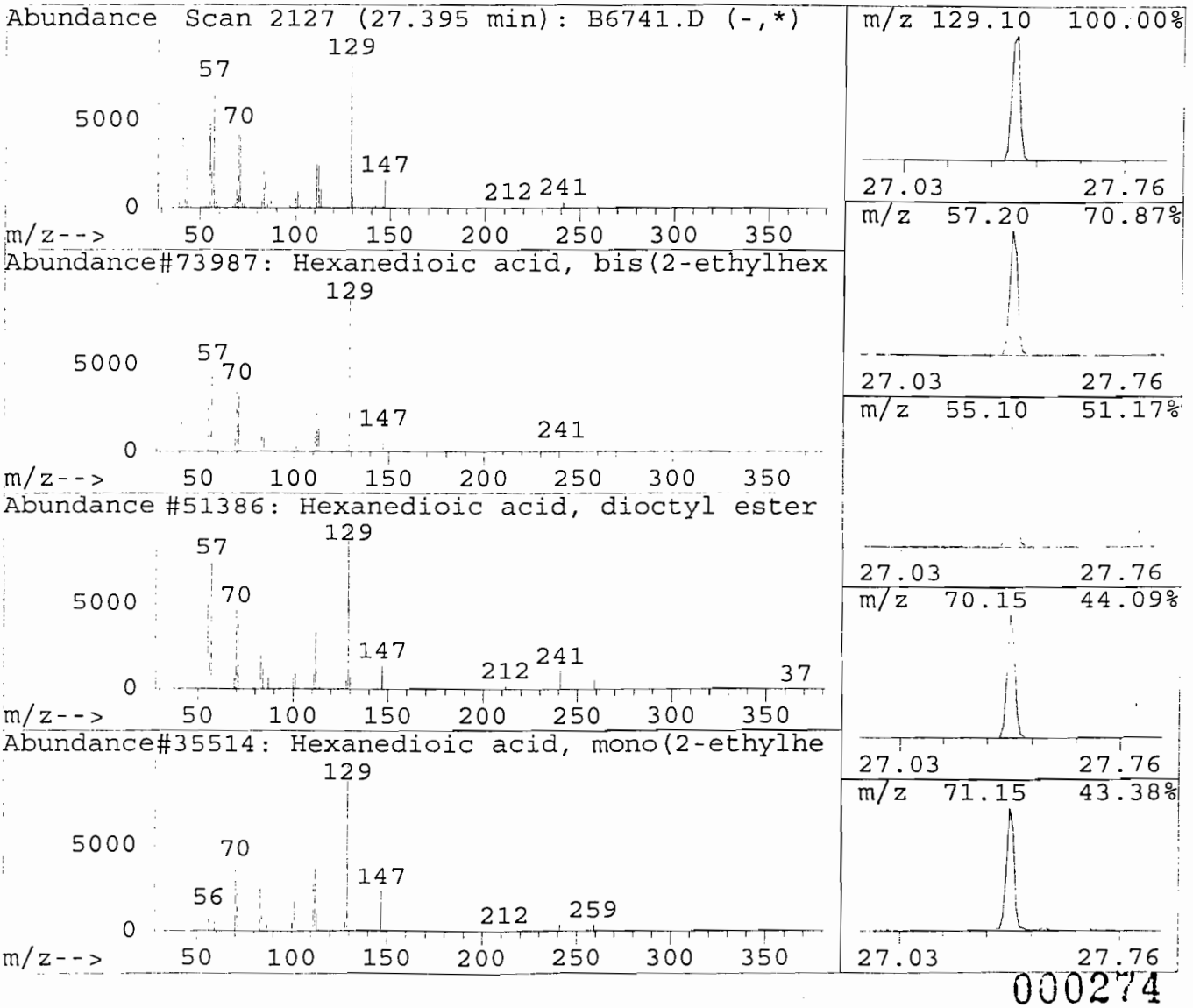
Data File : D:\HPCHEM\1\DATA\B11103\B6741.D
Acq Time : 4 Nov 99 12:34 am
Sample : 13826ASP-88002-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.39	26.29 ng	2389488	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	87
2	Hexanedioic acid, dioctyl ester	51386	000123-79-5	74
3	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	52
4	Octane, 4-ethyl-	8095	015869-86-0	35
5	2-Ethyl-1-dodecanol	26412	000000-00-0	25



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Library Search Compound Report

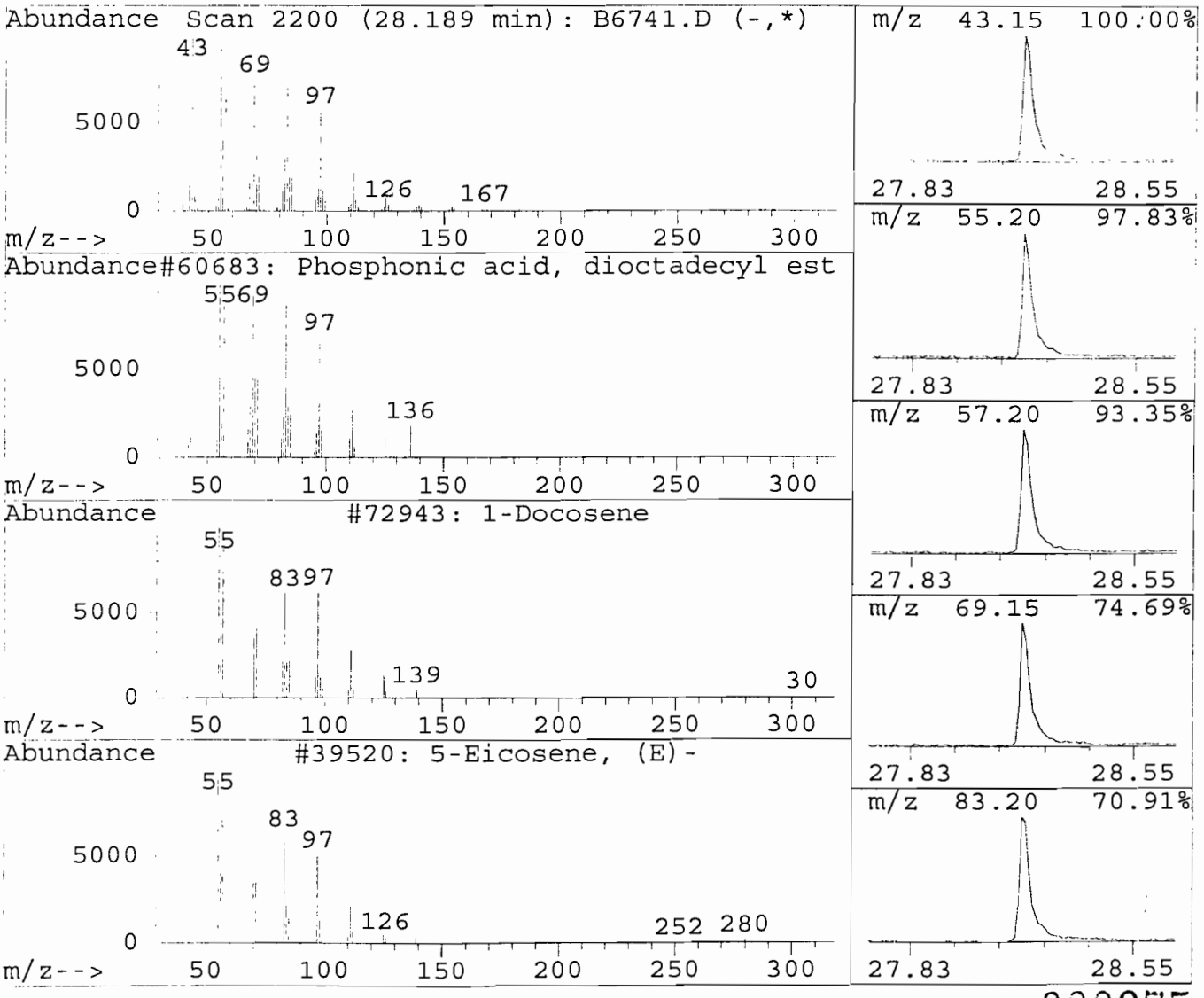
Data File : D:\HPCHEM\1\DATA\B11103\B6741.D
Acq Time : 4 Nov 99 12:34 am
Sample : 13826ASP-88002-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.19	15.66 ng	1423249	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Phosphonic acid, dioctadecyl ester	60683	019047-85-9	94
2	1-Docosene	72943	001599-67-3	93
3	5-Eicosene, (E)-	39520	074685-30-6	92
4	1-Hexadecanol	32424	036653-82-4	91
5	1-Octadecanol	72029	000112-92-5	91



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Library Search Compound Report

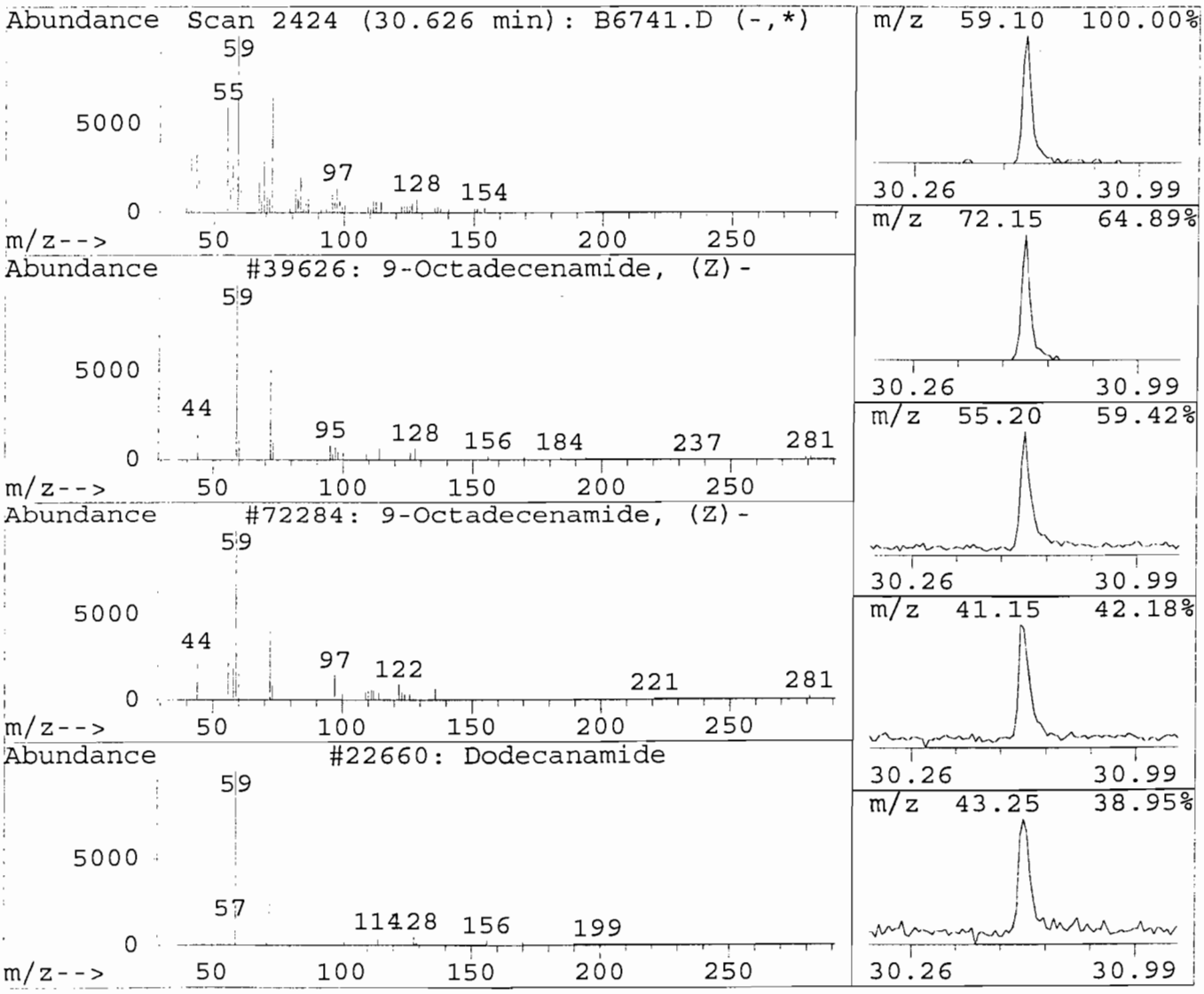
Data File : D:\HPCHEM\1\DATA\B11103\B6741.D
Acq Time : 4 Nov 99 12:34 am
Sample : 13826ASP-88002-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.63	4.50 ng	400757	Perylene-d12	31.87

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	72
2	9-Octadecenamide, (Z)-	72284	000301-02-0	58
3	Dodecanamide	22660	001120-16-7	43
4	5-Hydroxy-5-(1-hydroxy-1-isopropyl)	18816	097762-08-8	23
5	2-Propanone, 1-cyclopentyl-	4580	001122-98-1	23



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-012-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6738.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 2 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	34	U
621-64-7	n-Nitroso-di-n-propylamine	34	U
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	34	U
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	68	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	58	U
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	34	U
132-64-9	Dibenzofuran	53	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	34	U
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	34	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-012-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6738.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 2 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
86-74-8	Carbazole	50	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	34	U
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
117-81-7	bis(2-Ethylhexyl)phthalate	63	U
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	100	U
207-08-9	Benzo[k]fluoranthene	98	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	50	U
191-24-2	Benzo[g,h,i]perylene	34	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-012-SS30

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O88003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6738.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 5 Concentration Units: (ug/L or ug/Kg) ug/Kg

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.57	190	J
2. 10544-50-0	Sulfur, mol. (S8)	24.43	220	J
3. 103-23-1	Hexanedioic acid, bis(2-ethy	27.41	1200	J
4. 1599-67-3	1-Docosene	28.20	230	J
5. 301-02-0	9-Octadecenamide, (Z)-	30.63	530	J
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
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20.				
21.				
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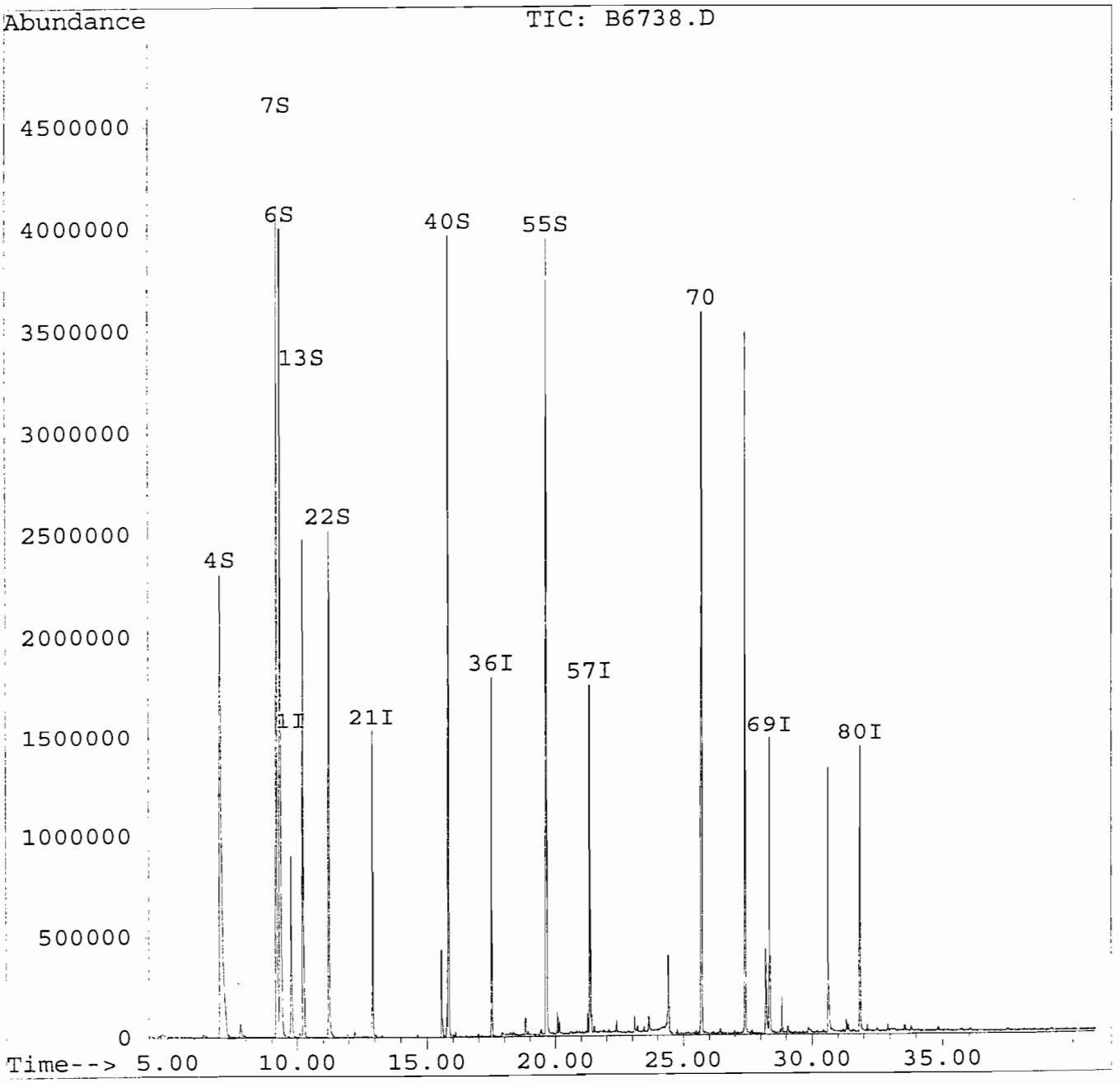
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6738.D
Acq Time : 3 Nov 99 10:04 pm
Sample : 13826ASP-88003-QB505
Misc :
Quant Time: Nov 4 8:32 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000230

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6738.D
Acq Time : 3 Nov 99 10:04 pm
Sample : 13826ASP-88003-QB505
Misc :
Quant Time: Nov 4 8:32 1999

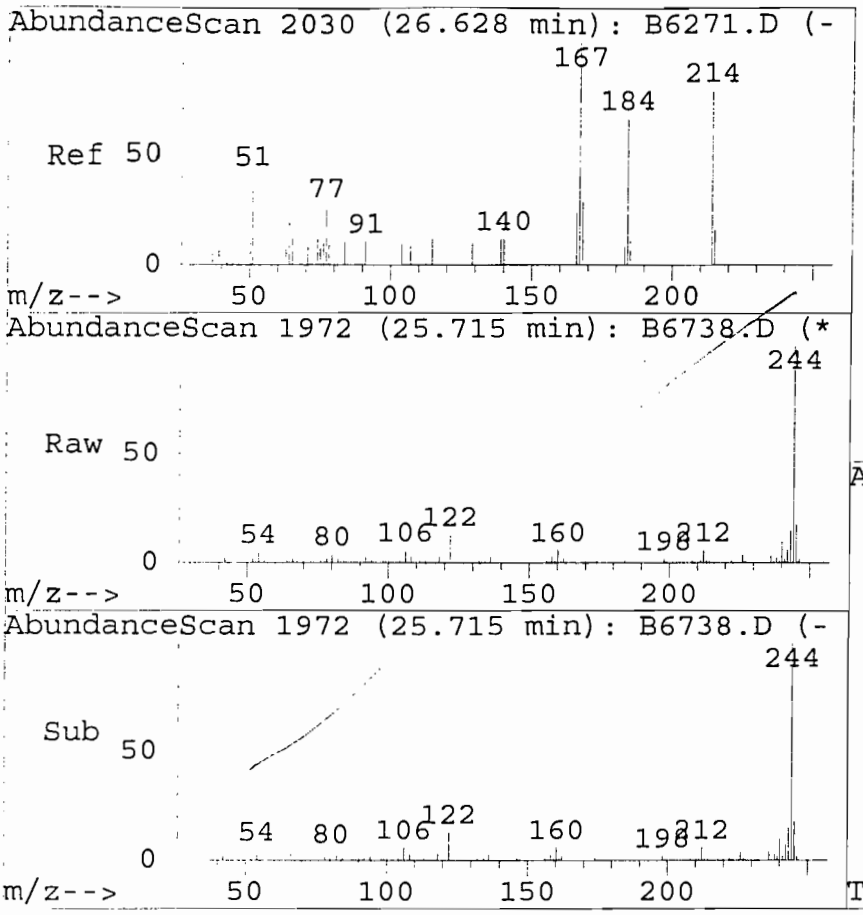
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.78	152	375229	40.00	ng	-0.03
21) Naphthalene-d8	12.92	136	1298336	40.00	ng	-0.33
36) Acenaphthene-d10	17.52	164	689107	40.00	ng	-0.33
57) Phenanthrene-d10	21.36	188	1334067	40.00	ng	-0.34
69) Chrysene-d12	28.36	240	1236974	40.00	ng	-0.35
80) Perylene-d12	31.87	264	1329619	40.00	ng	-0.34
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.03	112	2788019	213.40	ng	
6) 2-Chlorophenol-d4	9.35	132	2813297	232.11	ng	
7) Phenol-d5	9.22	99	3620378	242.14	ng	
13) 1,2-Dichlorobenzene-d4	10.22	152	941183	111.56	ng	
22) Nitrobenzene-d5	11.23	82	1820325	117.13	ng	
40) 2-Fluorobiphenyl	15.84	172	2607512	110.00	ng	
55) 2,4,6-Tribromophenol	19.66	330	1466507	323.05	ng	
72) Terphenyl-d14	25.71	244	3705333	101.71	ng	#
Target Compounds						Qvalue
70) ~~Benzidine~~	25.71	184	34173	360.33	ng	97

000231

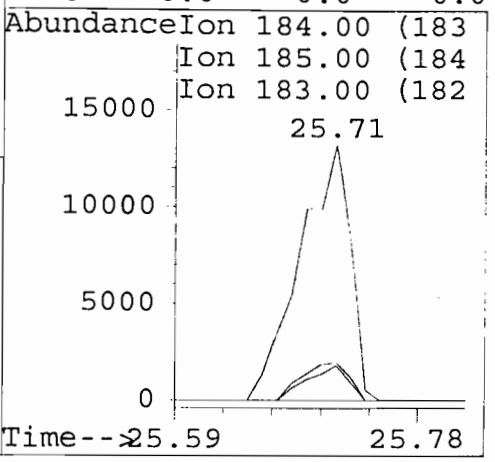
(#) = qualifier out of range (m) = manual integration



#70
Benzidine
Concen: 360.33 ng
RT: 25.71 min Scan# 1972
Delta R.T. -0.91 min
Lab File: B6738.D
Acq: 3 Nov 99 10:04 pm

Tgt Ion:184 Resp: 34173

Ion	Ratio	Lower	Upper
184	100		
185	14.6	8.2	24.6
183	13.7	7.1	21.3
0	0.0	0.0	0.0



000282

Library Search Compound Report

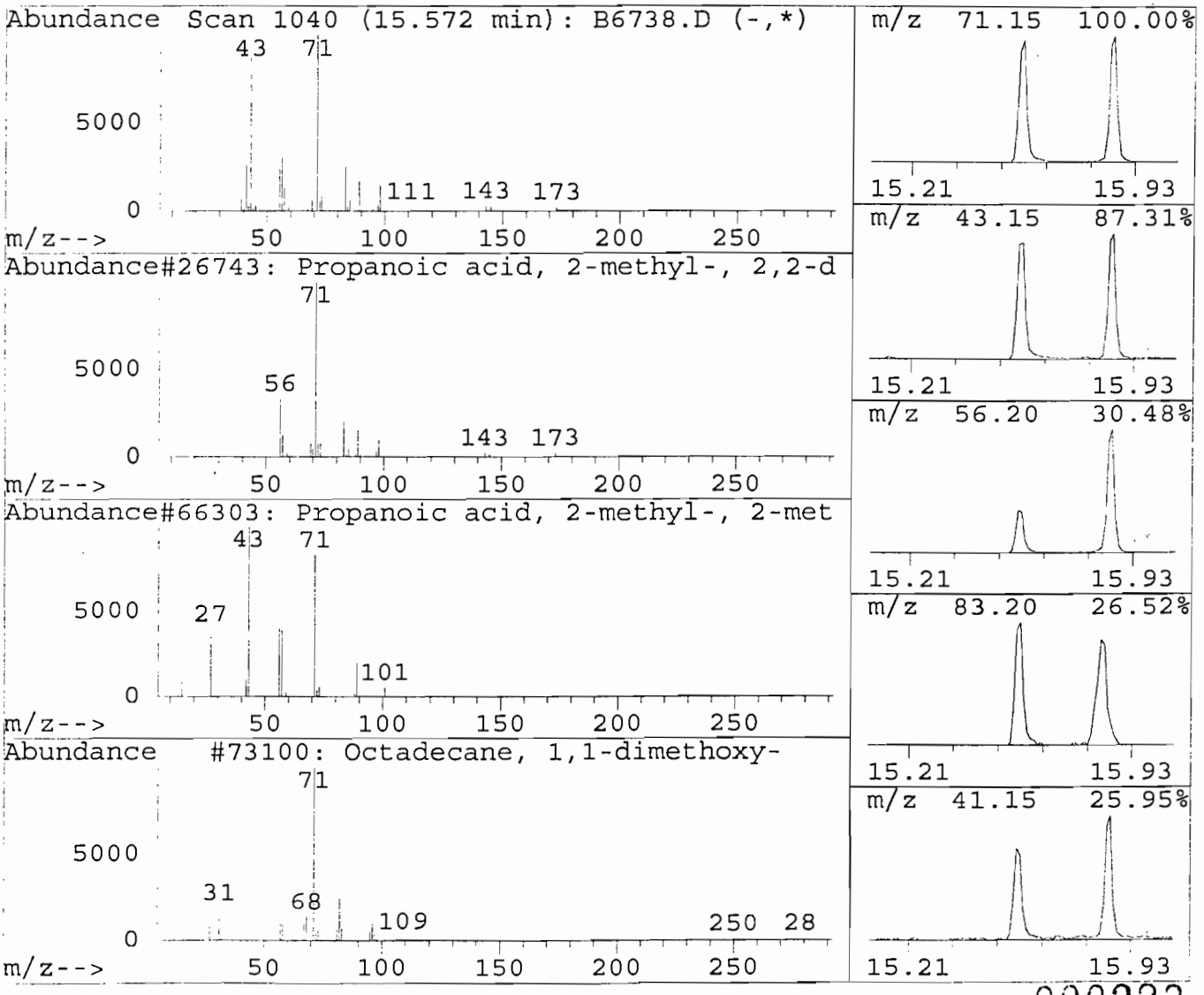
Data File : D:\HPCHEM\1\DATA\B11103\B6738.D
Acq Time : 3 Nov 99 10:04 pm
Sample : 13826ASP-88003-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.57	11.21 ng	958586	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	86
2	Propanoic acid, 2-methyl-, 2-methyl	66303	000097-85-8	42
3	Octadecane, 1,1-dimethoxy-	73100	014620-55-4	40
4	Butanoic acid, 1-methylethyl ester	65238	000638-11-9	38
5	Butanoic acid, 1-methyloctyl ester	26362	069727-42-0	36



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Library Search Compound Report

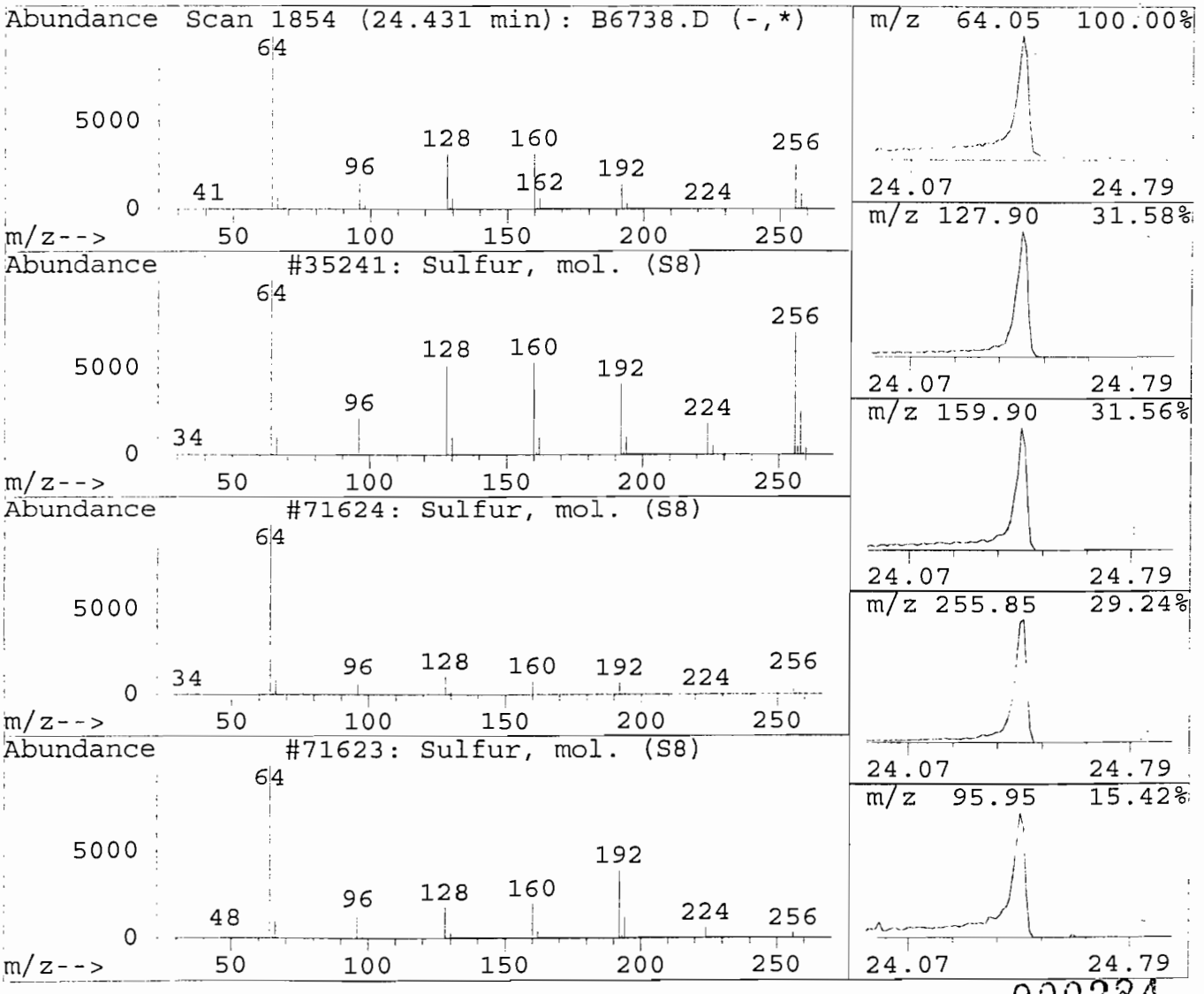
Data File : D:\HPCHEM\1\DATA\B11103\B6738.D
Acq Time : 3 Nov 99 10:04 pm
Sample : 13826ASP-88003-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.43	13.22 ng	1225784	Phenanthrene-d10	21.36

Hit# of 6	Tentative ID	Ref#	CAS#	Qual
1	Sulfur, mol. (S8)	35241	010544-50-0	95
2	Sulfur, mol. (S8)	71624	010544-50-0	90
3	Sulfur, mol. (S8)	71623	010544-50-0	40
4	Sulfur	35240	007704-34-9	25
5	N,N'-Bis(pentamethylene)thiuramtetr	52456	000000-00-0	20



000234

Library Search Compound Report

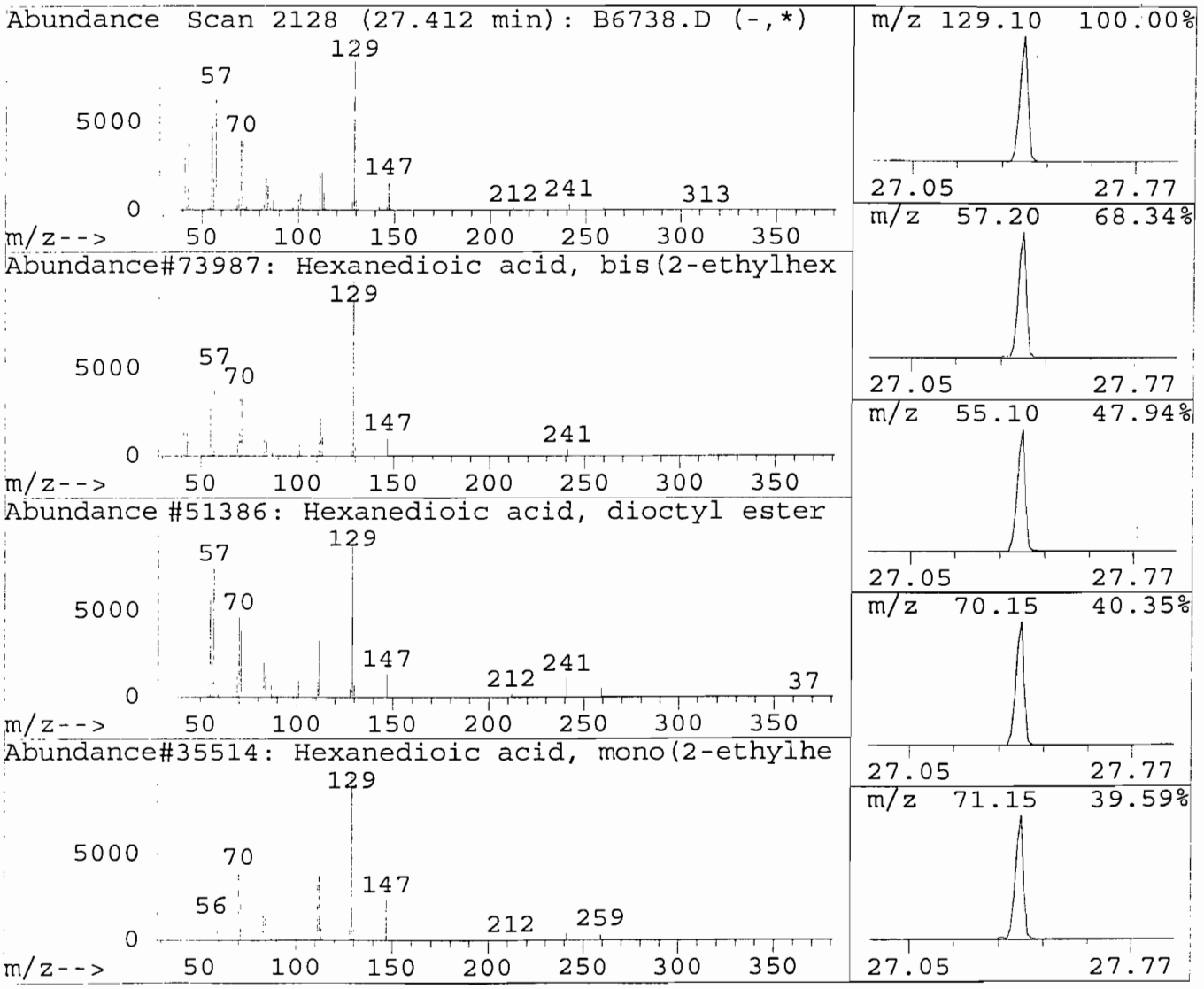
Data File : D:\HPCHEM\1\DATA\B11103\B6738.D
Acq Time : 3 Nov 99 10:04 pm
Sample : 13826ASP-88003-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.41	73.00 ng	6276341	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	87
2	Hexanedioic acid, dioctyl ester	51386	000123-79-5	74
3	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	58
4	Octane, 4-ethyl-	8095	015869-86-0	35
5	2-Ethyl-1-dodecanol	26412	000000-00-0	25



000285

Library Search Compound Report

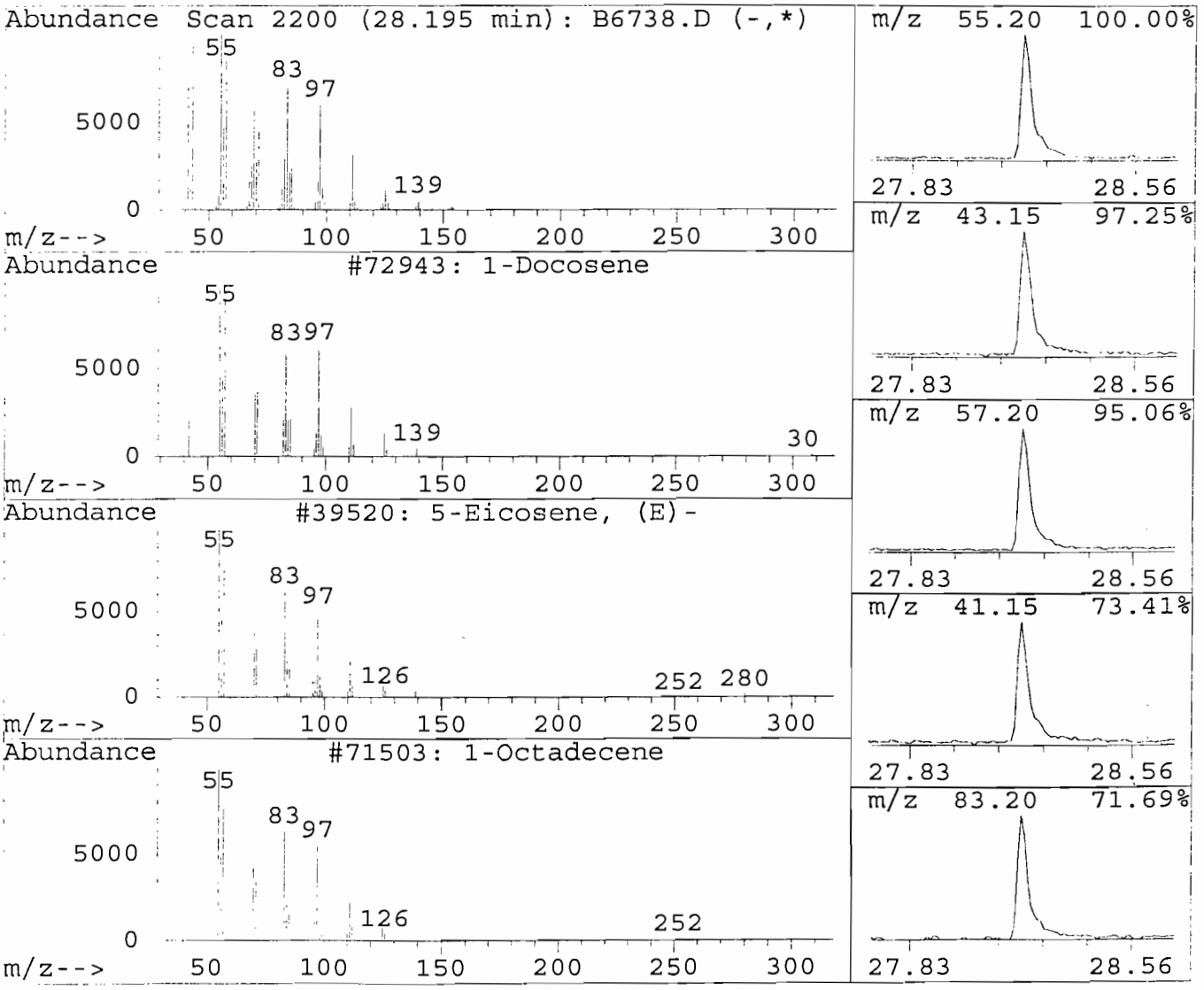
Data File : D:\HPCHEM\1\DATA\B11103\B6738.D
Acq Time : 3 Nov 99 10:04 pm
Sample : 13826ASP-88003-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.20	13.24 ng	1138541	Chrysene-d12	28.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Docosene	72943	001599-67-3	94
2	5-Eicosene, (E)-	39520	074685-30-6	91
3	1-Octadecene	71503	000112-88-9	91
4	3-Eicosene, (E)-	39521	074685-33-9	91
5	11-Tricosene	45916	052078-56-5	91



Library Search Compound Report

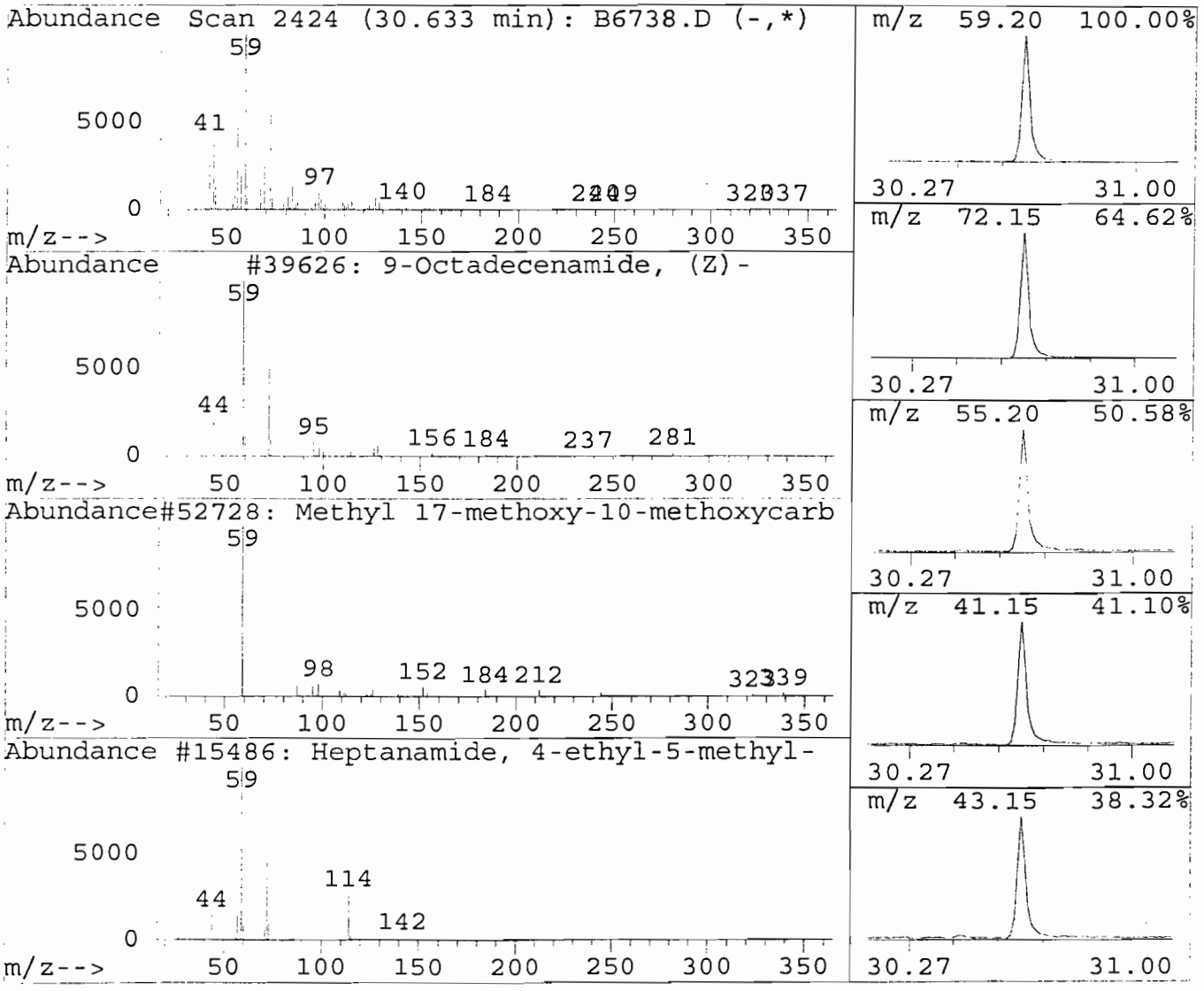
Data File : D:\HPCHEM\1\DATA\B11103\B6738.D
Acq Time : 3 Nov 99 10:04 pm
Sample : 13826ASP-88003-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.63	31.45 ng	2798282	Perylene-d12	31.87

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	64
2	Methyl 17-methoxy-10-methoxycarbony	52728	000000-00-0	47
3	Heptanamide, 4-ethyl-5-methyl-	15486	054789-40-1	45
4	Nonanamide	11725	001120-07-6	40
5	2-Hexanol, 2,5-dimethyl-, (S)-	5548	003730-60-7	37



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-012-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6739.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	34	U
621-64-7	n-Nitroso-di-n-propylamine	34	U
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	34	U
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	68	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	58	U
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	34	U
132-64-9	Dibenzofuran	54	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	34	U
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	34	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-012-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6739.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
86-74-8	Carbazole	50	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	34	U
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
117-81-7	bis(2-Ethylhexyl)phthalate	64	U
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	100	U
207-08-9	Benzo[k]fluoranthene	99	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
GP-012-SS45

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: O88004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6739.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 15 Concentration Units: (ug/L or ug/Kg) ug/Kg

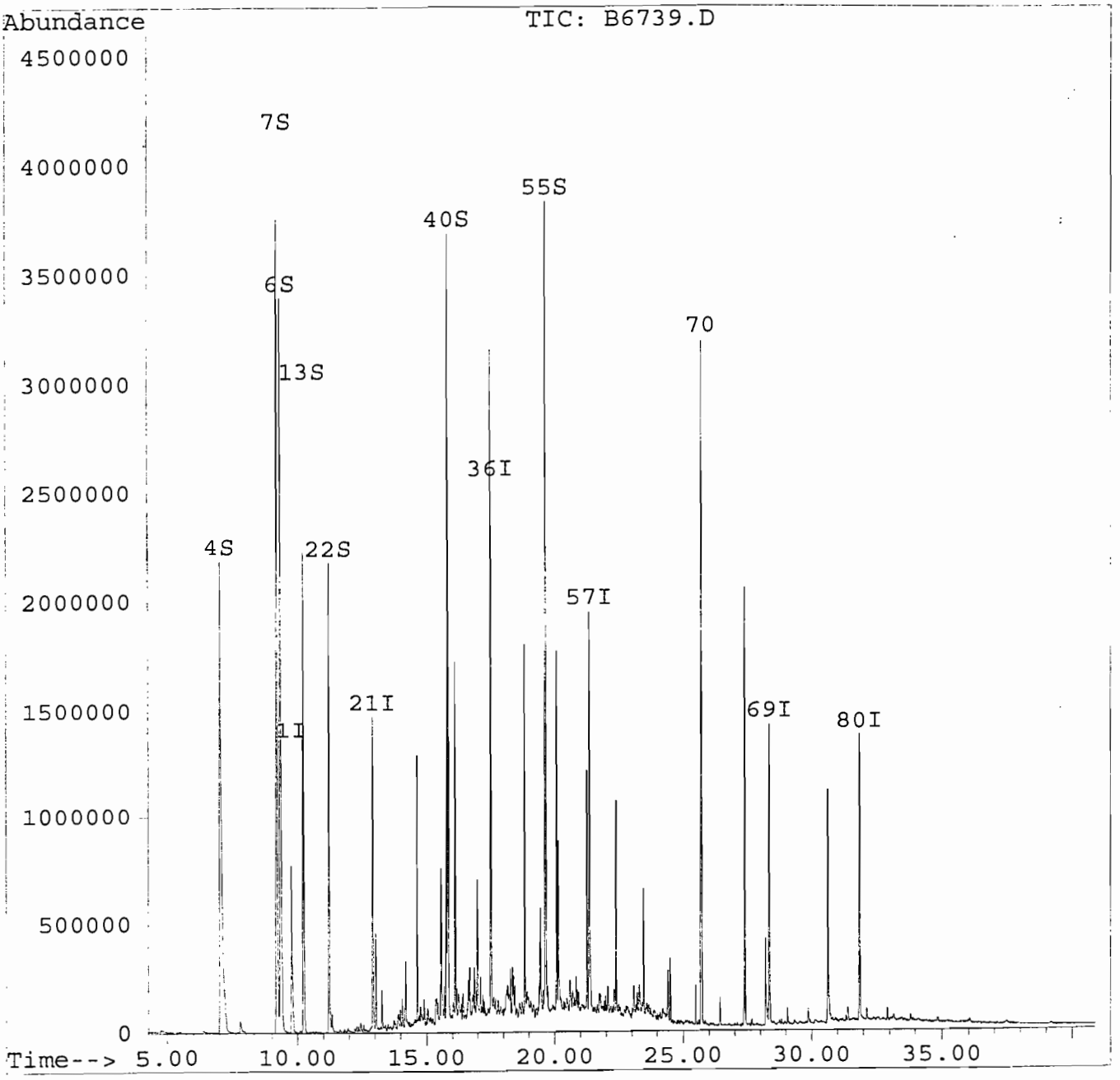
CAS Number	Compound Name	RT	Est. Conc.	Q
1. 112-40-3	Dodecane	13.04	200	J
2. 17312-79-7	Undecane, 4,5-dimethyl-	14.21	180	J
3. 629-50-5	Tridecane	14.63	470	J
4. 74367-33-2	Propanoic acid, 2-methyl-, 2	15.57	190	J
5. 629-59-4	Tetradecane	16.12	300	J
6. 629-78-7	Heptadecane	16.99	160	J
7. 544-76-3	Hexadecane	18.84	320	J
8. 17301-22-3	Undecane, 2,5-dimethyl-	19.45	250	J
9.	Unknown	20.08	430	J
10.	Unknown	20.15	250	J
11. 593-45-3	Octadecane	21.26	310	J
12. 629-92-5	Nonadecane	22.40	250	J
13. 103-23-1	Hexanedioic acid, bis(2-ethy	27.41	810	J
14. 6624-79-9	1-Dotriacontanol	28.20	270	J
15. 629-54-9	Hexadecanamide	30.63	550	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :
Quant Time: Nov 4 8:33 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



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Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :
Quant Time: Nov 4 8:33 1999

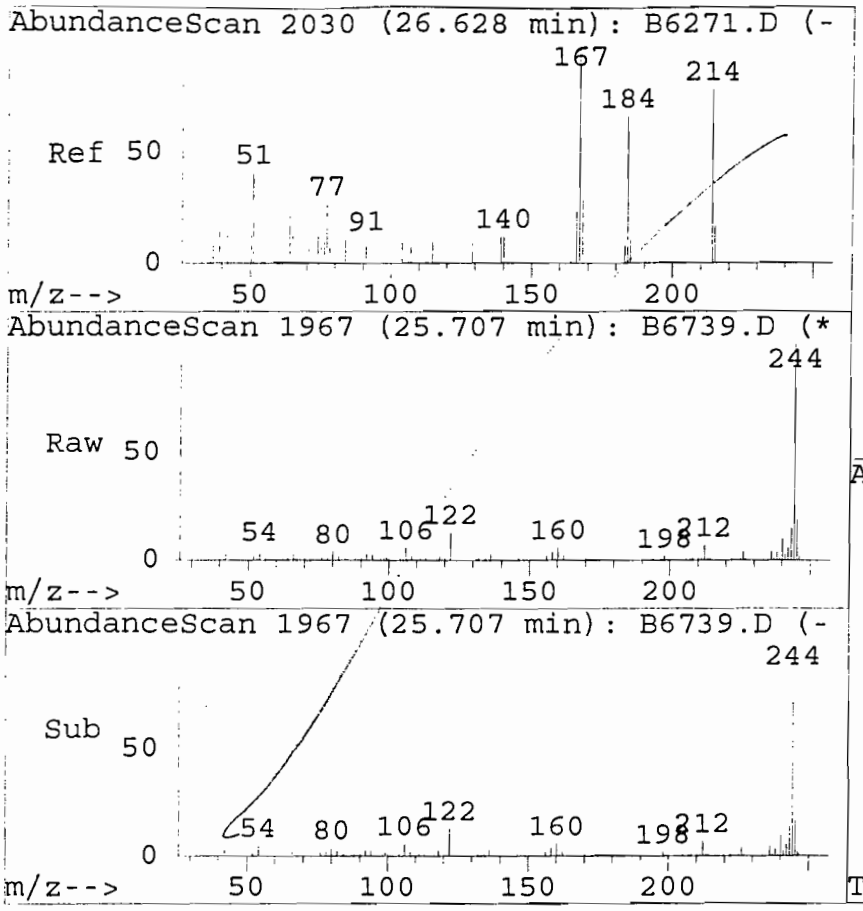
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.78	152	346689	40.00	ng	-0.03
21) Naphthalene-d8	12.92	136	1223557	40.00	ng	-0.33
36) Acenaphthene-d10	17.52	164	600676	40.00	ng	-0.32
57) Phenanthrene-d10	21.36	188	1193518	40.00	ng	-0.33
69) Chrysene-d12	28.37	240	1114274	40.00	ng	-0.34
80) Perylene-d12	31.86	264	1160495	40.00	ng	-0.35
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.03	112	2647013	219.29	ng	
6) 2-Chlorophenol-d4	9.35	132	2631334	234.97	ng	
7) Phenol-d5	9.22	99	3417832	247.41	ng	
13) 1,2-Dichlorobenzene-d4	10.22	152	907422	116.41	ng	
22) Nitrobenzene-d5	11.22	82	1667699	113.87	ng	
40) 2-Fluorobiphenyl	15.84	172	2349335	113.70	ng	
55) 2,4,6-Tribromophenol	19.66	330	1274358	322.05	ng	
72) Terphenyl-d14	25.71	244	2982183	90.87	ng	#
Target Compounds						Qvalue
70) Benzidine	25.71	184	30060	351.86	ng	98

000292

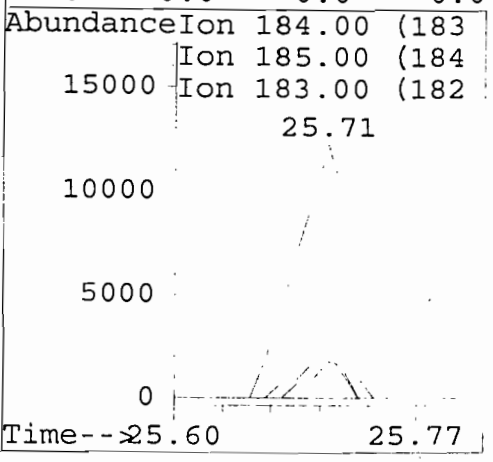
(#) = qualifier out of range (m) = manual integration



#70
Benzidine
Concen: 351.86 ng
RT: 25.71 min Scan# 1967
Delta R.T. -0.92 min
Lab File: B6739.D
Acq: 3 Nov 99 10:54 pm

Tgt Ion:184 Resp: 30060

Ion	Ratio	Lower	Upper
184	100		
185	15.5	8.2	24.6
183	14.6	7.1	21.3
0	0.0	0.0	0.0



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Library Search Compound Report

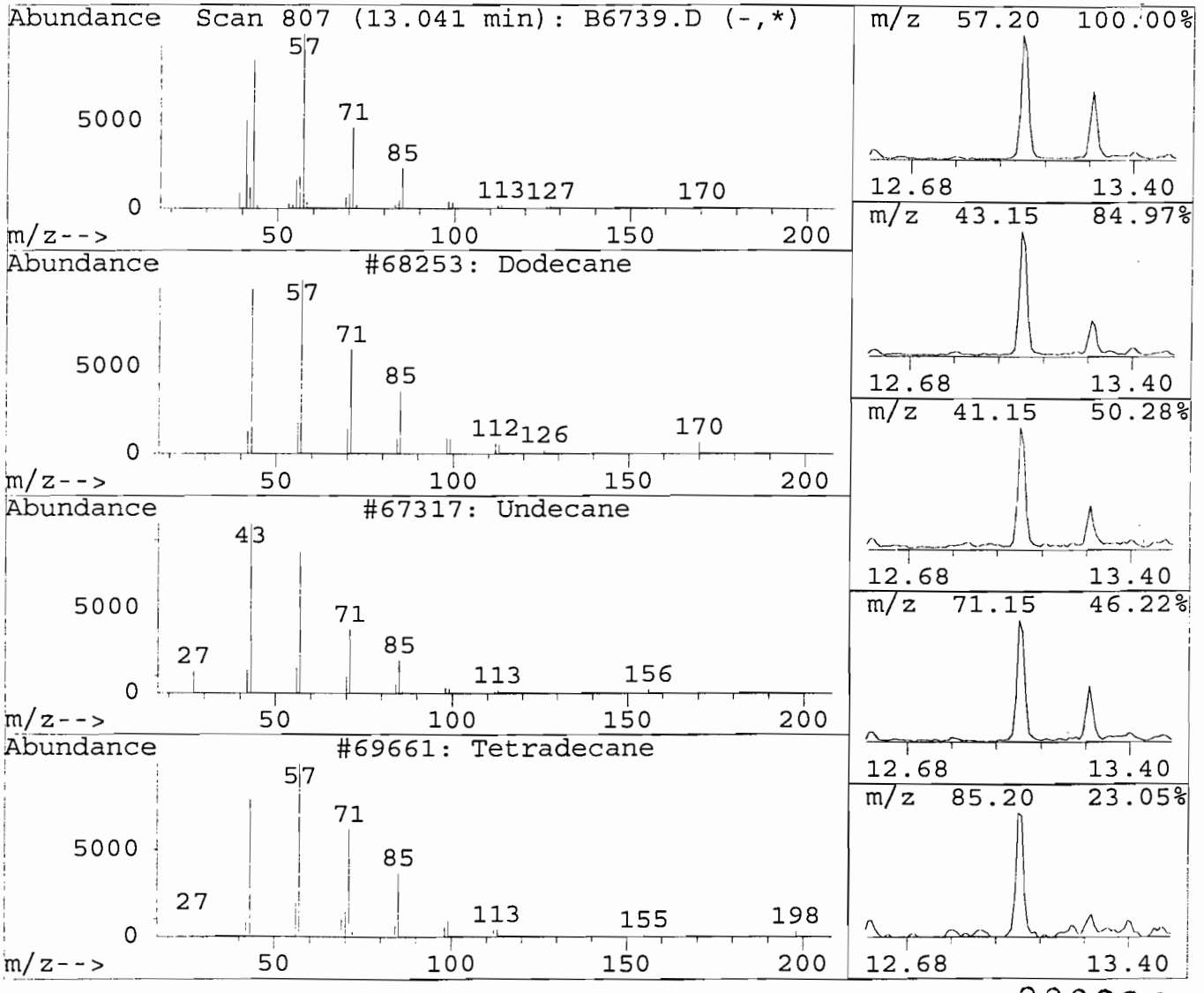
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
13.04	11.36 ng	796507	Naphthalene-d8	12.92

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Dodecane	68253	000112-40-3	91
2	Undecane	67317	001120-21-4	90
3	Tetradecane	69661	000629-59-4	90
4	Hexadecane	70789	000544-76-3	90
5	Tridecane	69019	000629-50-5	86



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Library Search Compound Report

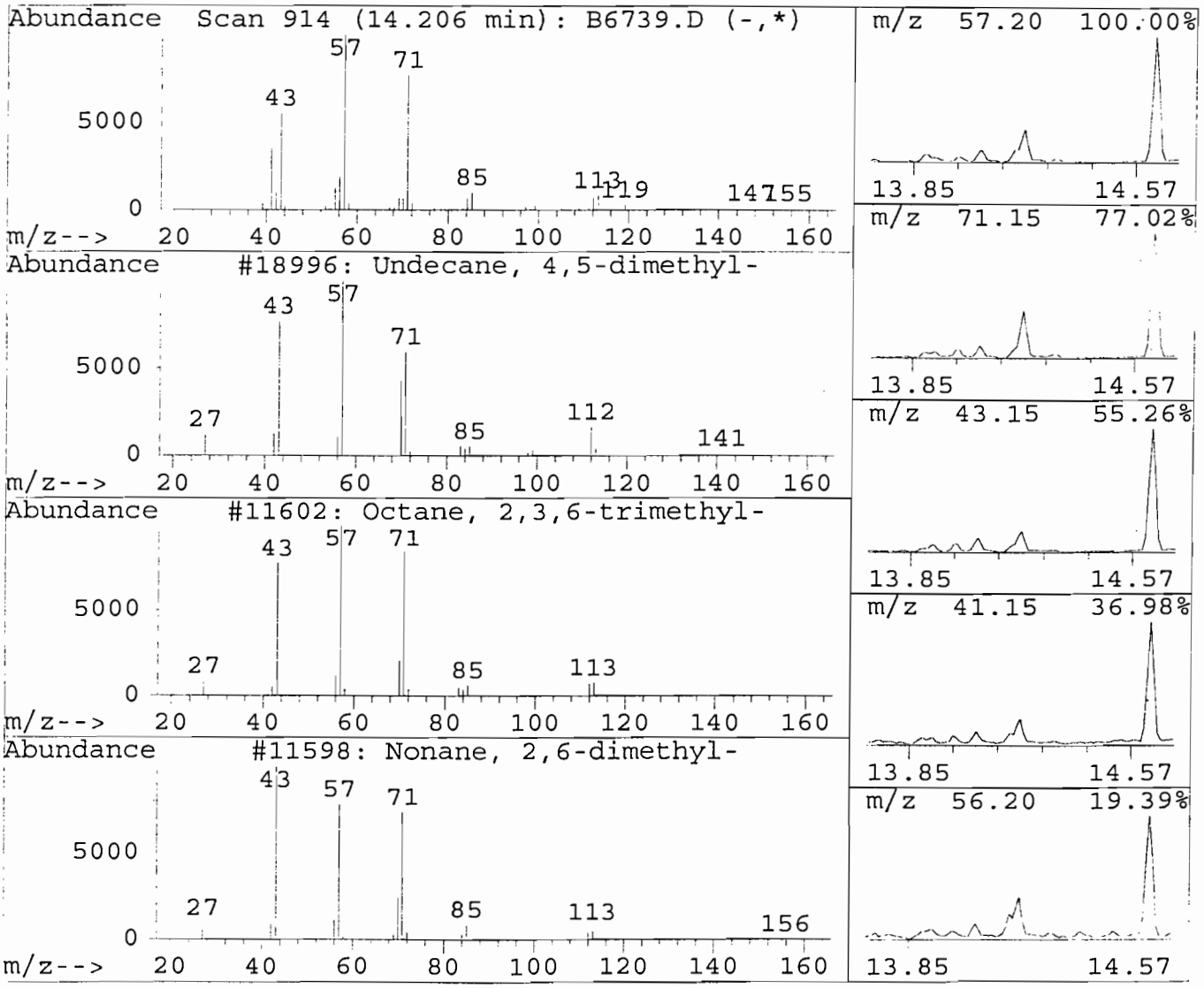
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.21	10.35 ng	726220	Naphthalene-d8	12.92

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 4,5-dimethyl-	18996	017312-79-7	78
2	Octane, 2,3,6-trimethyl-	11602	062016-33-5	78
3	Nonane, 2,6-dimethyl-	11598	017302-28-2	78
4	Decane, 2-methyl-	67321	006975-98-0	64
5	Decane, 4-methyl-	11615	002847-72-5	64



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Library Search Compound Report

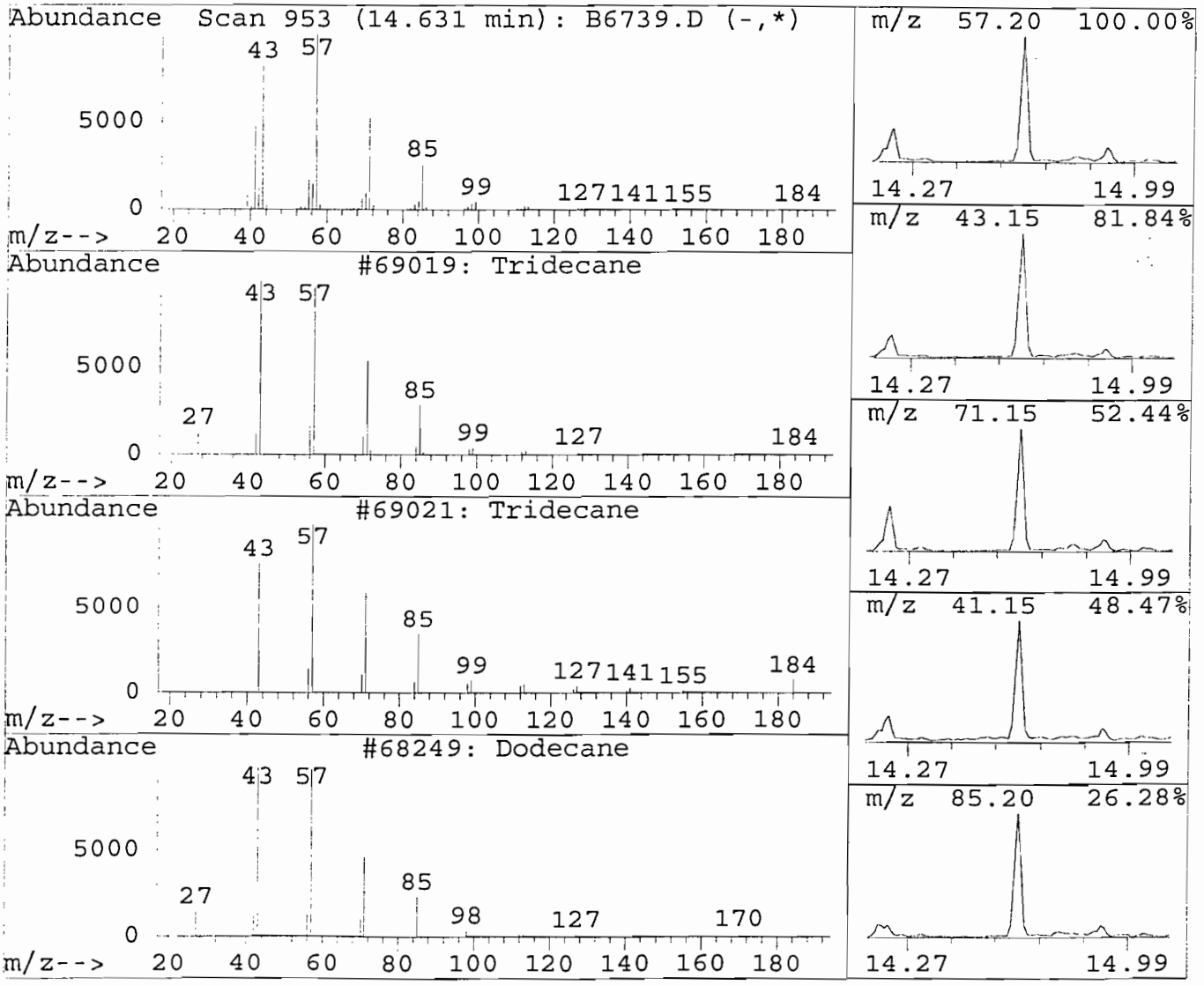
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
14.63	27.49 ng	1928180	Naphthalene-d8	12.92

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tridecane	69019	000629-50-5	95
2	Tridecane	69021	000629-50-5	93
3	Dodecane	68249	000112-40-3	90
4	Tetradecane	69661	000629-59-4	90
5	Heptadecane	71191	000629-78-7	86



Library Search Compound Report

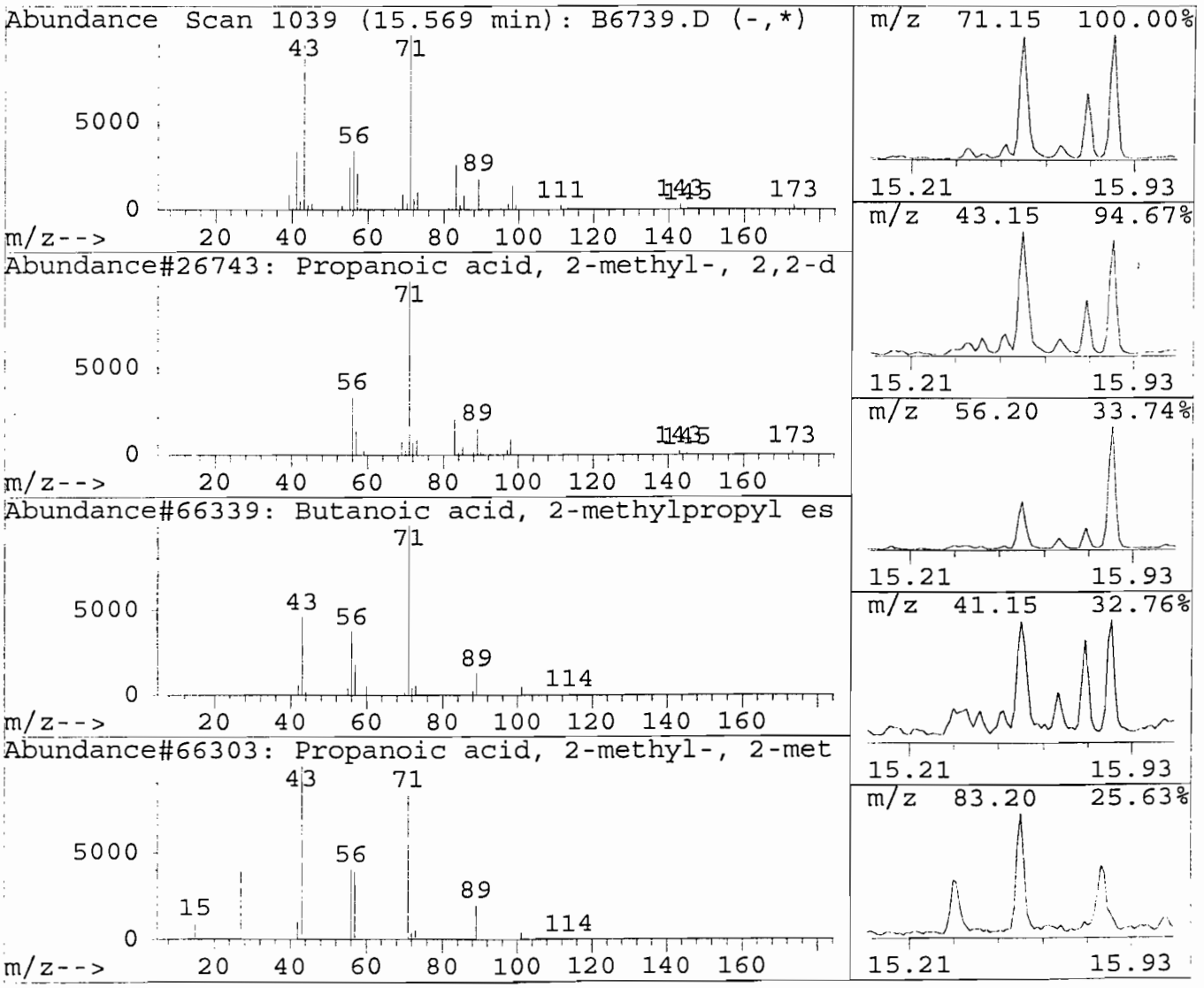
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
15.57	11.30 ng	1638695	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propanoic acid, 2-methyl-, 2,2-dime	26743	074367-33-2	78
2	Butanoic acid, 2-methylpropyl ester	66339	000539-90-2	53
3	Propanoic acid, 2-methyl-, 2-methyl	66303	000097-85-8	45
4	4,5-Octanedione	7928	005455-24-3	40
5	Butanoic acid, 2-methylpropyl ester	66338	000539-90-2	40



Library Search Compound Report

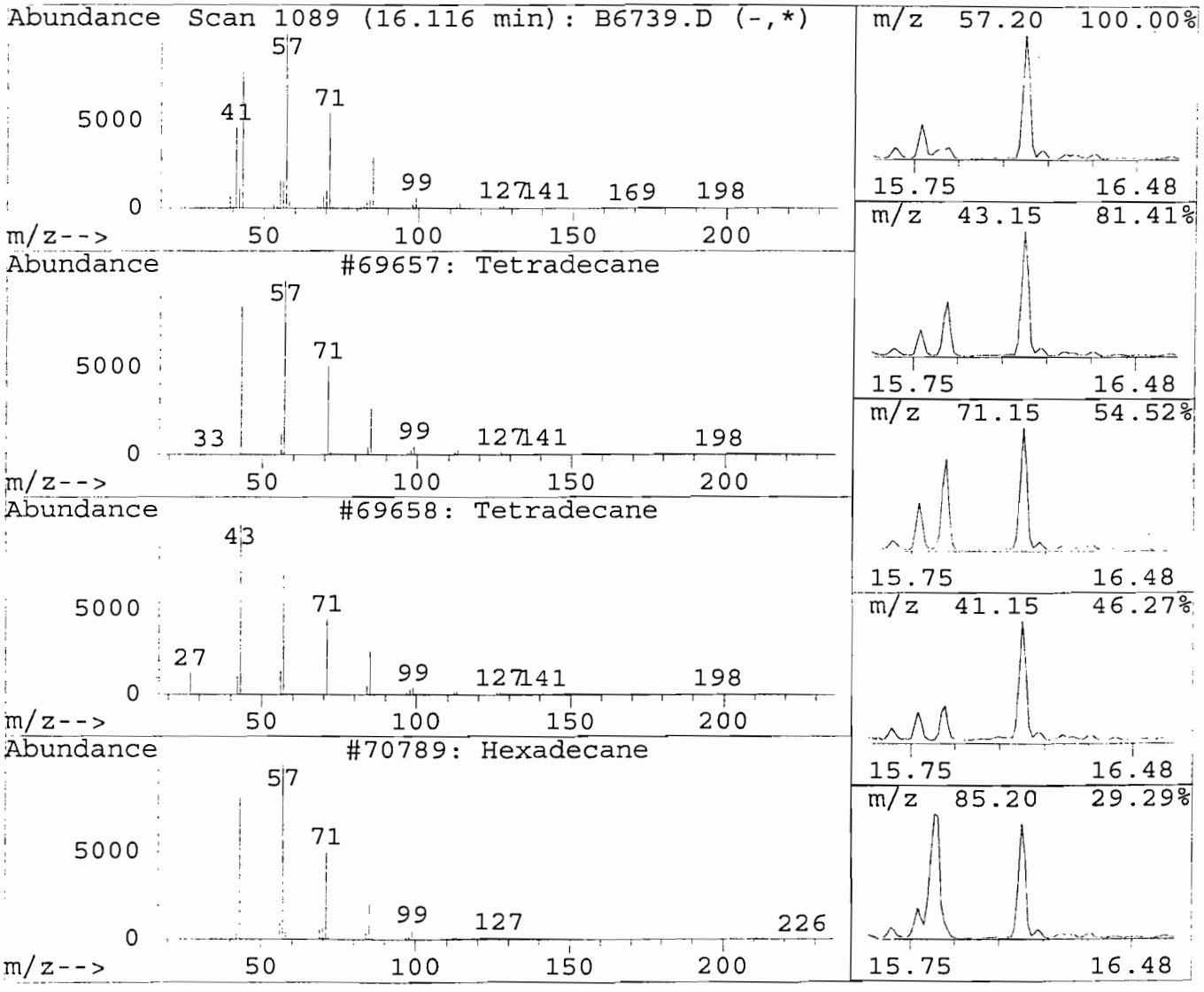
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.12	17.51 ng	2538565	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Tetradecane	69657	000629-59-4	95
2	Tetradecane	69658	000629-59-4	92
3	Hexadecane	70789	000544-76-3	91
4	Tridecane	69019	000629-50-5	90
5	Hexadecane	70787	000544-76-3	90



Library Search Compound Report

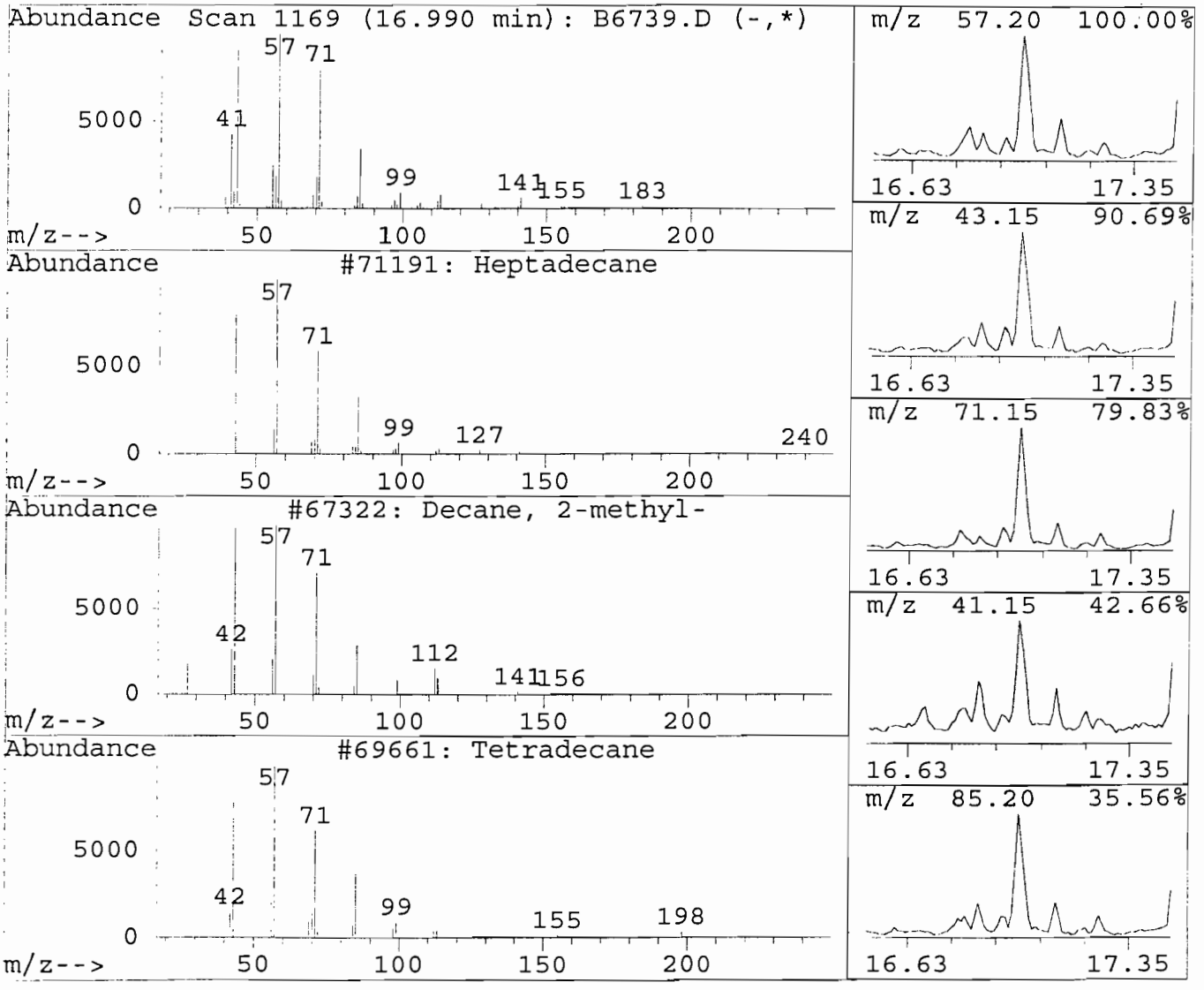
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
16.99	9.40 ng	1362739	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptadecane	71191	000629-78-7	86
2	Decane, 2-methyl-	67322	006975-98-0	83
3	Tetradecane	69661	000629-59-4	80
4	Tridecane	69021	000629-50-5	78
5	Heptadecane, 2,6,10,14-tetramethyl-	42200	018344-37-1	78



Library Search Compound Report

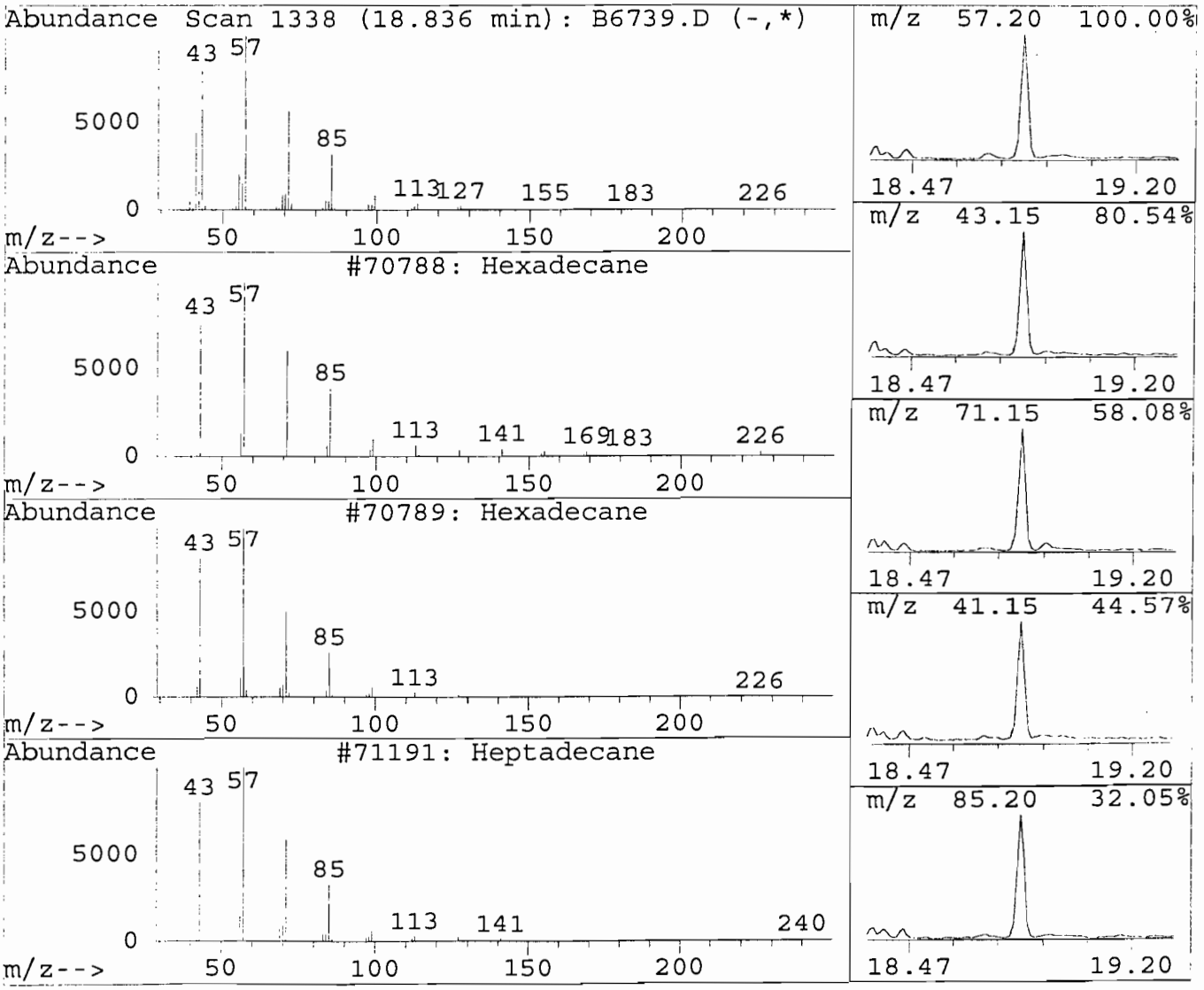
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
18.84	18.91 ng	2741610	Acenaphthene-d10	17.52

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecane	70788	000544-76-3	93
2	Hexadecane	70789	000544-76-3	91
3	Heptadecane	71191	000629-78-7	91
4	Eicosane	72326	000112-95-8	91
5	Pentadecane	70274	000629-62-9	91



000300

Library Search Compound Report

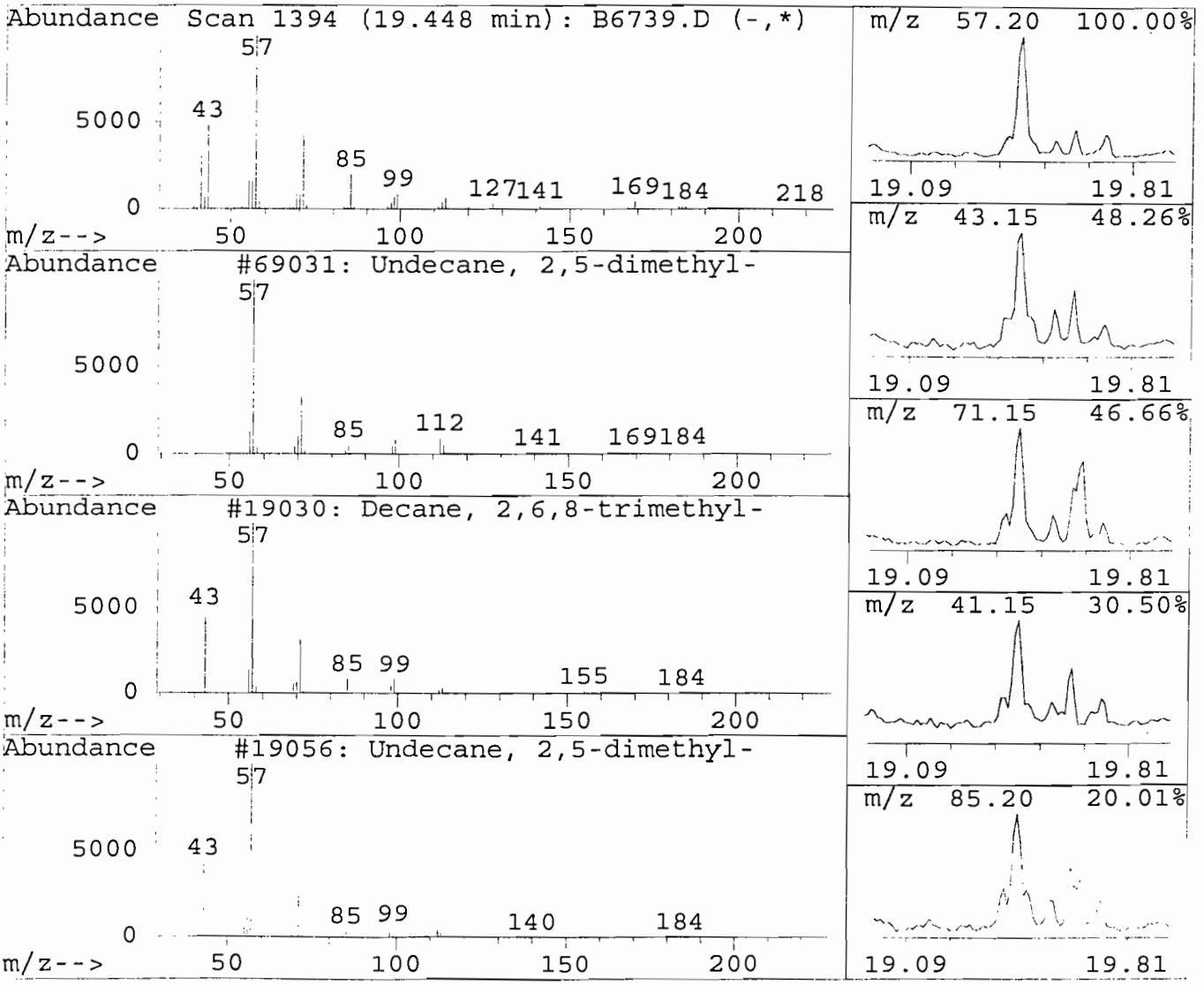
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.45	14.36 ng	1508366	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Undecane, 2,5-dimethyl-	69031	017301-22-3	76
2	Decane, 2,6,8-trimethyl-	19030	062108-26-3	76
3	Undecane, 2,5-dimethyl-	19056	017301-22-3	70
4	Hexadecane, 2,6,10,14-tetramethyl-	72329	000638-36-8	64
5	Undecane, 3,6-dimethyl-	19000	017301-28-9	64



000301

Library Search Compound Report

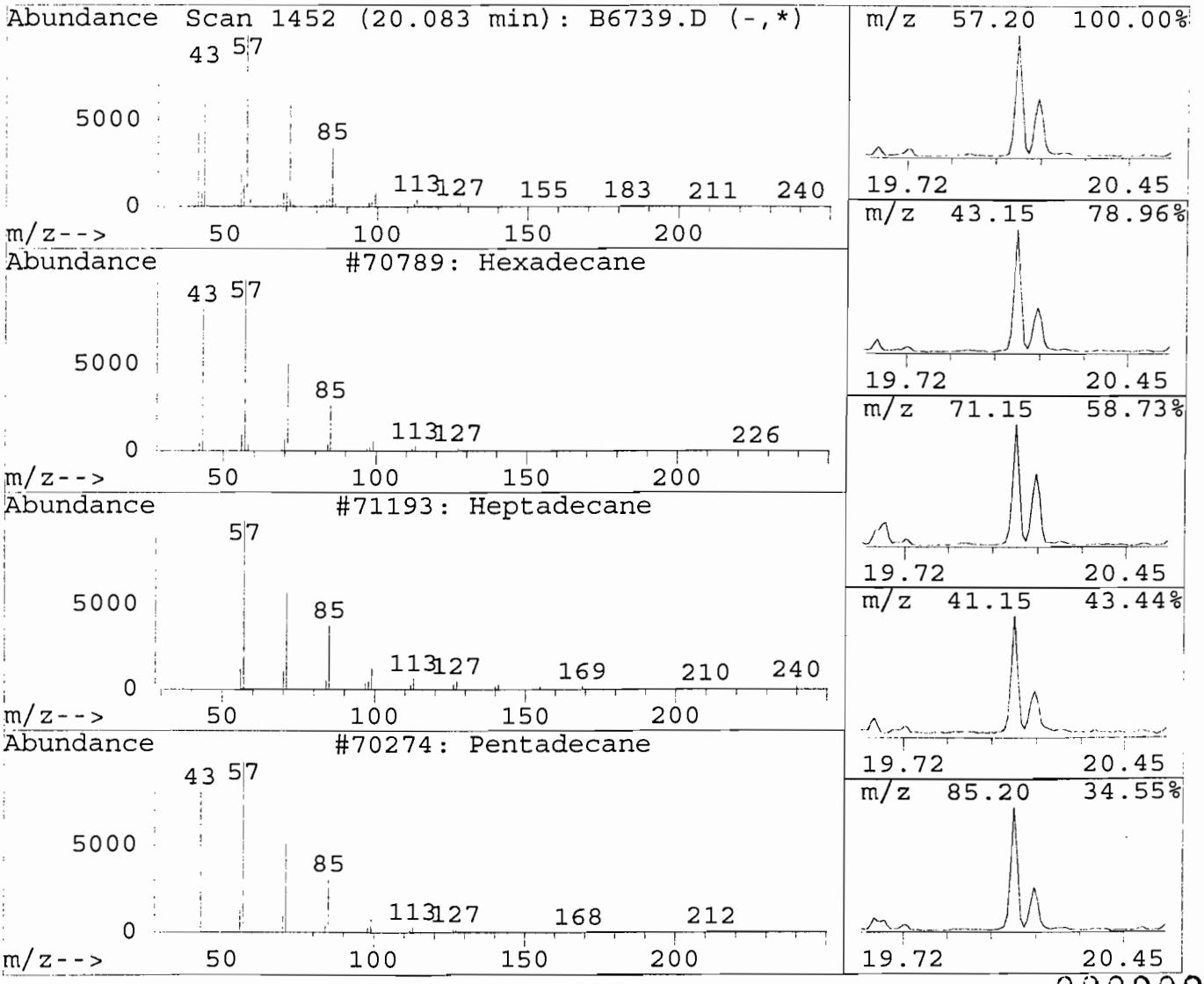
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.08	24.76 ng	2601256	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecane	70789	000544-76-3	91
2	Heptadecane	71193	000629-78-7	90
3	Pentadecane	70274	000629-62-9	87
4	Tridecane	69019	000629-50-5	83
5	Heptadecane	32063	000629-78-7	81



000302

Library Search Compound Report

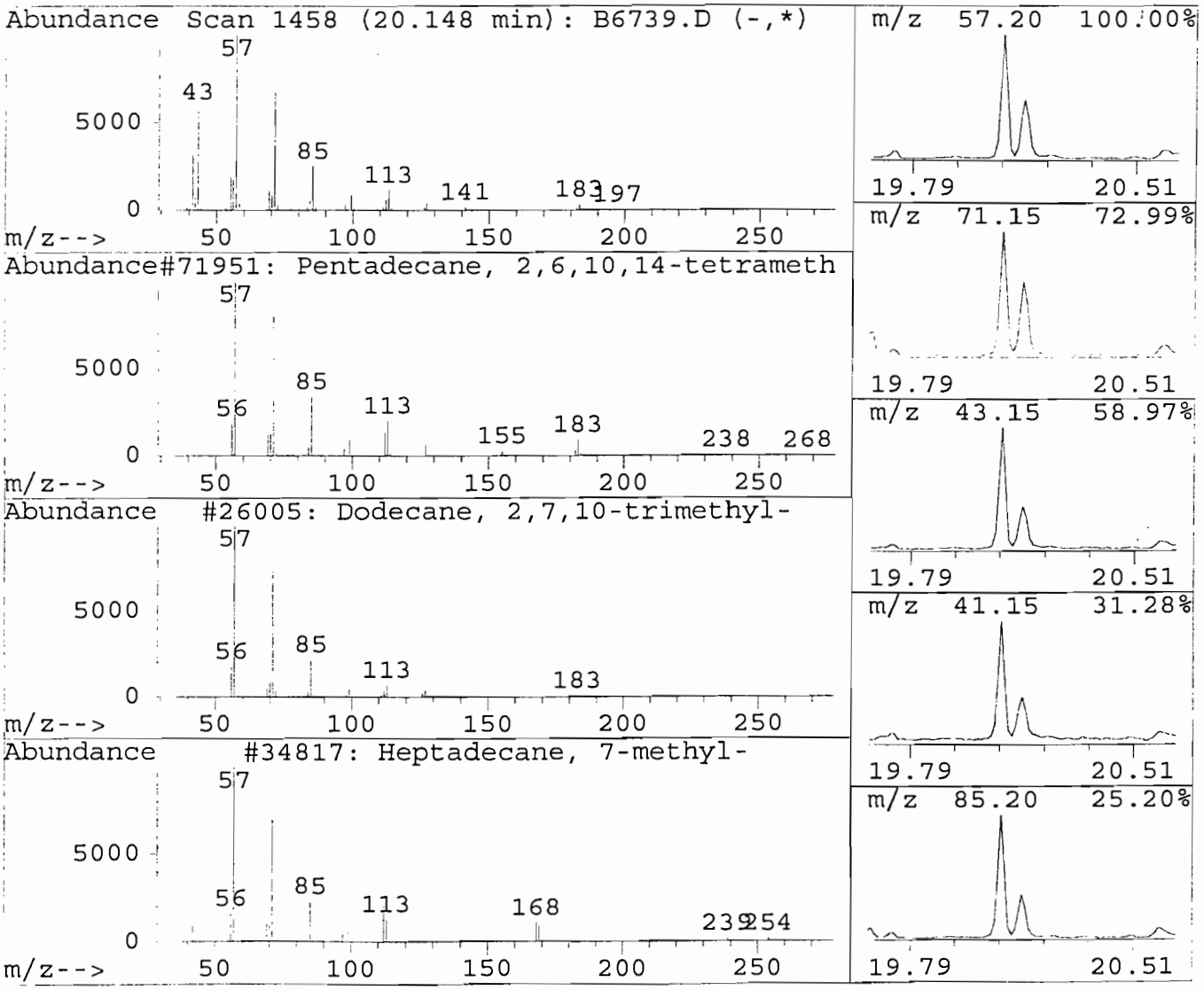
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
20.15	14.38 ng	1510298	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	71951	001921-70-6	90
2	Dodecane, 2,7,10-trimethyl-	26005	074645-98-0	90
3	Heptadecane, 7-methyl-	34817	020959-33-5	86
4	Dodecane, 2,6,11-trimethyl-	25998	031295-56-4	78
5	Hexadecane, 7-methyl-	32066	026730-20-1	78



Library Search Compound Report

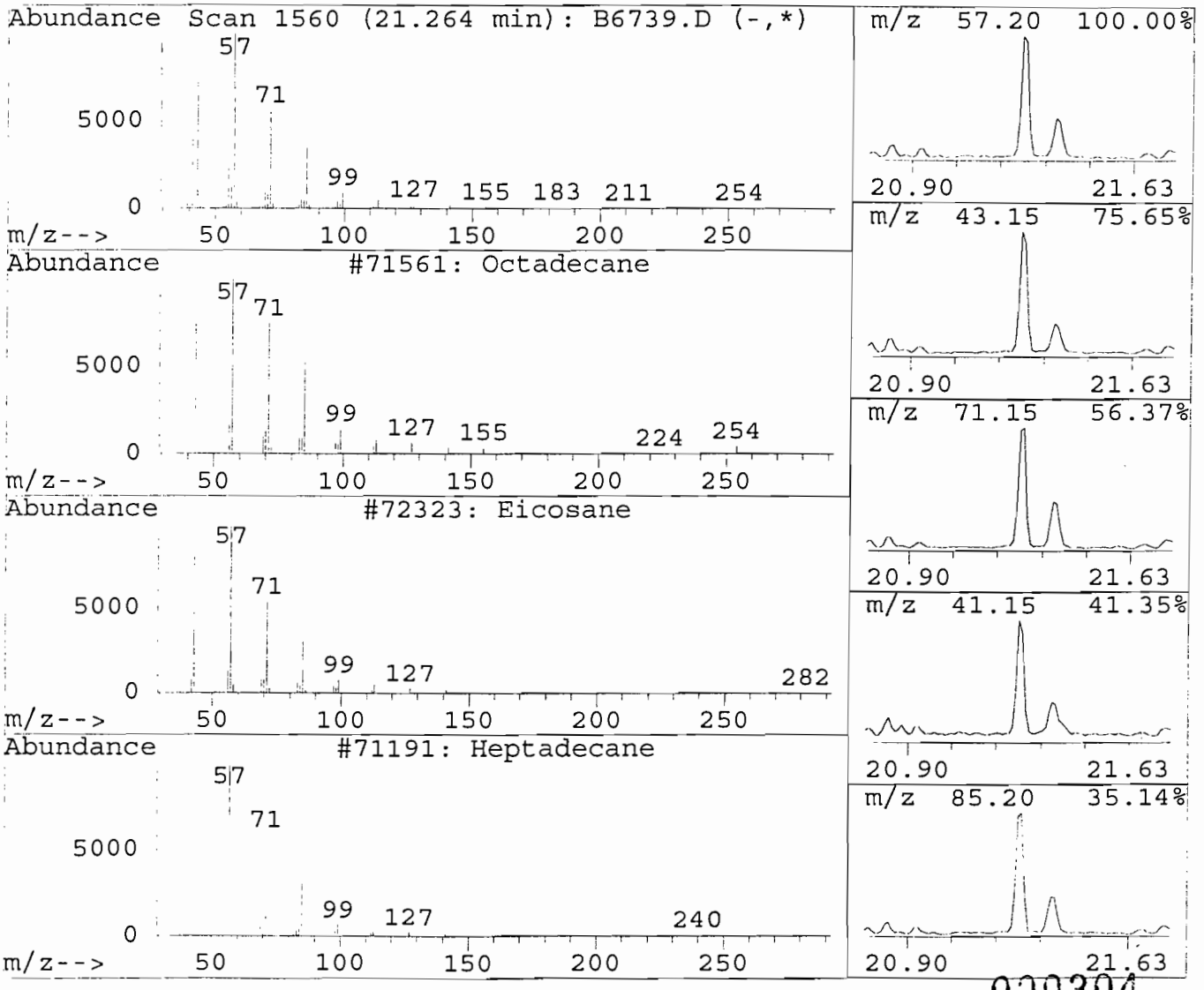
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
21.26	18.33 ng	1925205	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Octadecane	71561	000593-45-3	95
2	Eicosane	72323	000112-95-8	91
3	Heptadecane	71191	000629-78-7	91
4	Pentadecane	70274	000629-62-9	91
5	Hexadecane	70789	000544-76-3	91



000304

Library Search Compound Report

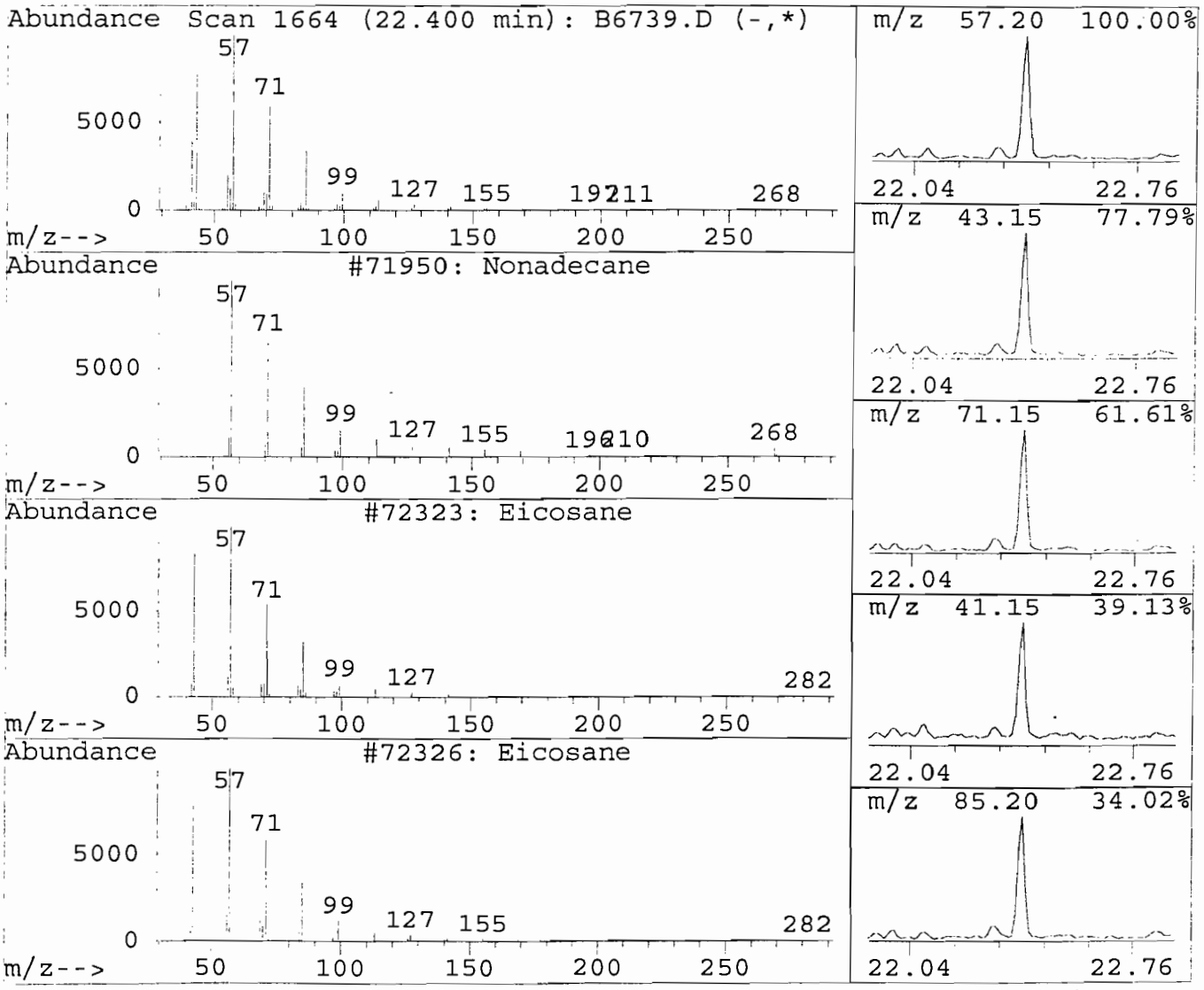
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.40	14.53 ng	1526313	Phenanthrene-d10	21.36

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Nonadecane	71950	000629-92-5	93
2	Eicosane	72323	000112-95-8	91
3	Eicosane	72326	000112-95-8	91
4	Heptadecane	71191	000629-78-7	91
5	Hexadecane	70789	000544-76-3	91



000305

Library Search Compound Report

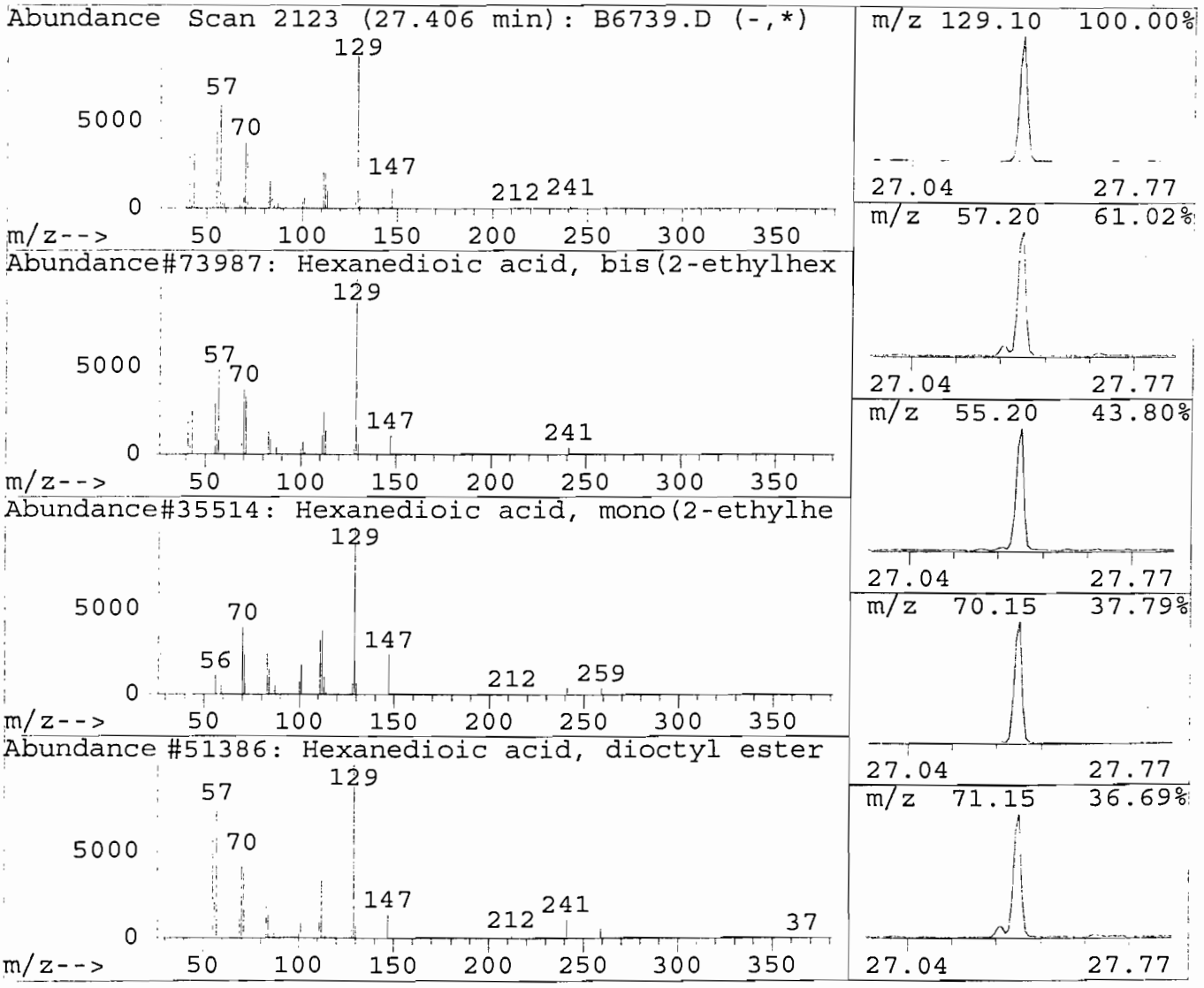
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
27.41	47.35 ng	3635100	Chrysene-d12	28.37

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexanedioic acid, bis(2-ethylhexyl)	73987	000103-23-1	83
2	Hexanedioic acid, mono(2-ethylhexyl	35514	004337-65-9	68
3	Hexanedioic acid, dioctyl ester	51386	000123-79-5	58
4	Hexanedioic acid, bis(1,3-dimethylb	44807	055125-22-9	37
5	Octane, 4-ethyl-	8095	015869-86-0	35



000306

Library Search Compound Report

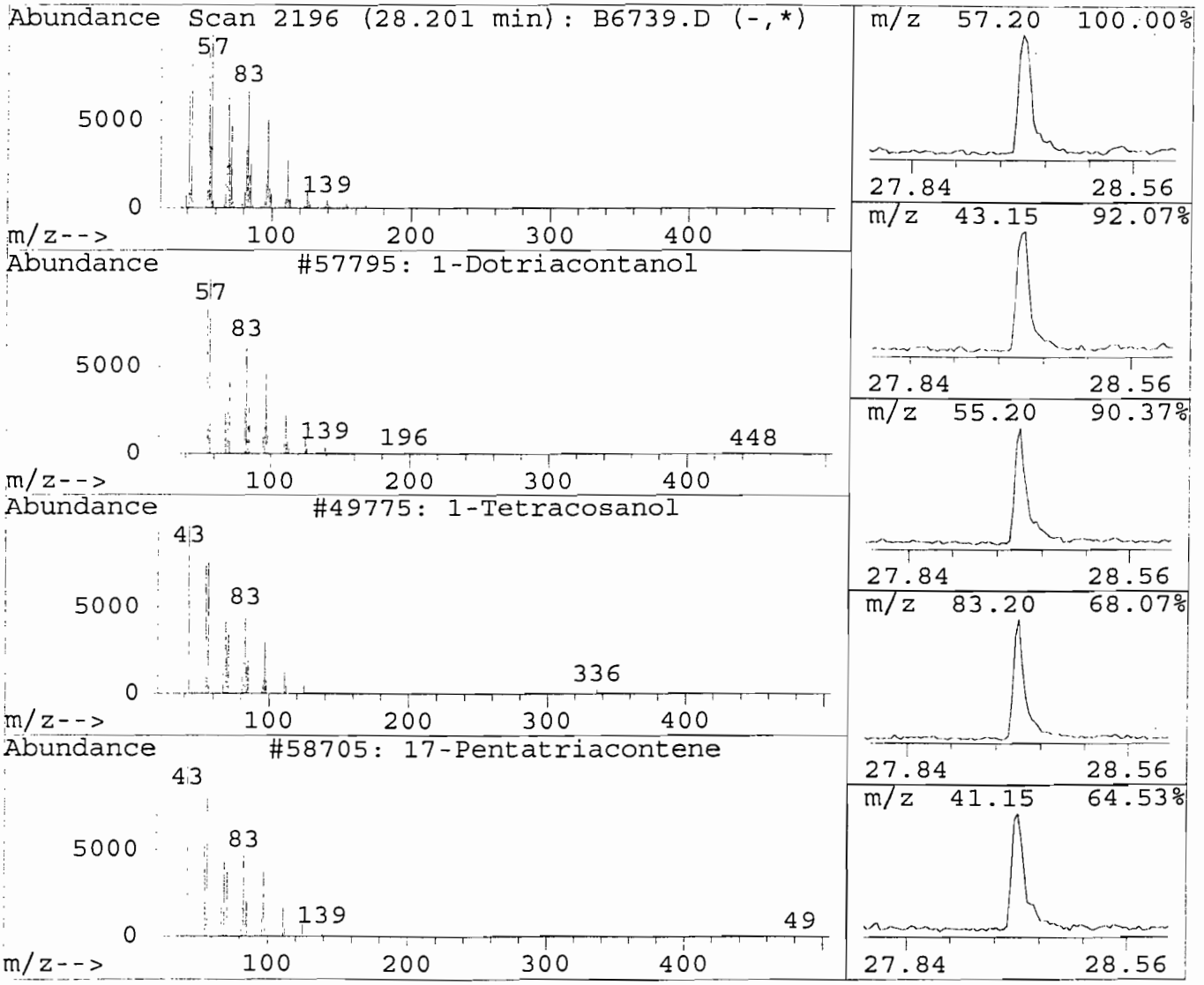
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
28.20	15.72 ng	1207027	Chrysene-d12	28.37

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1-Dotriacontanol	57795	006624-79-9	94
2	1-Tetracosanol	49775	000506-51-4	91
3	17-Pentatriacontene	58705	006971-40-0	91
4	1-Octadecanol	72029	000112-92-5	87
5	1-Heptadecanol	35210	001454-85-9	87



Library Search Compound Report

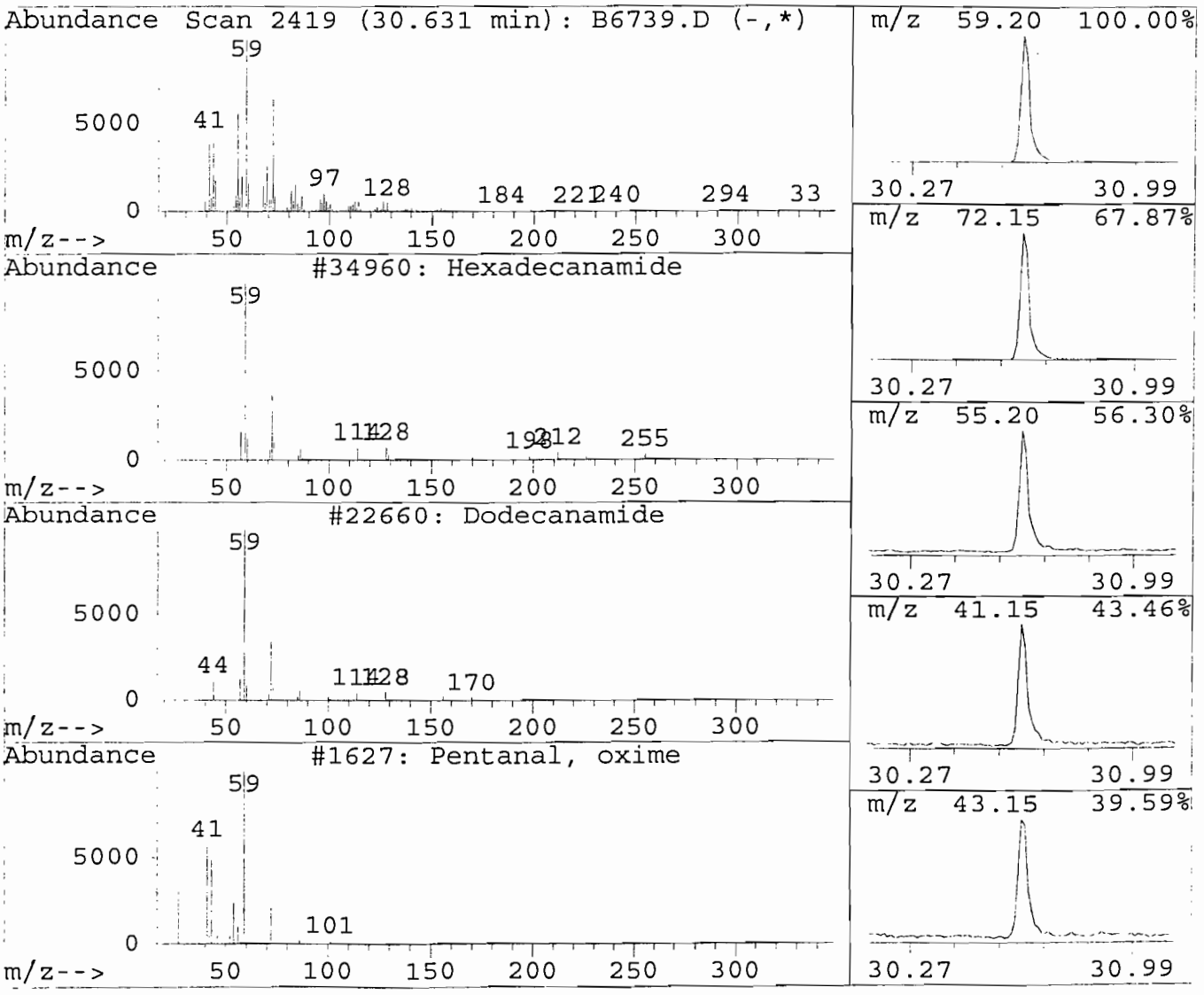
Data File : D:\HPCHEM\1\DATA\B11103\B6739.D
Acq Time : 3 Nov 99 10:54 pm
Sample : 13826ASP-88004-QB505
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Library : D:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
30.63	31.92 ng	2563317	Perylene-d12	31.86

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecanamide	34960	000629-54-9	50
2	Dodecanamide	22660	001120-16-7	42
3	Pentanal, oxime	1627	000628-79-5	38
4	9-Octadecenamide, (Z)-	39626	000301-02-0	37
5	Oxirane, tetramethyl-	63415	005076-20-0	35



000308

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-013-SS8

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88005

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6759.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

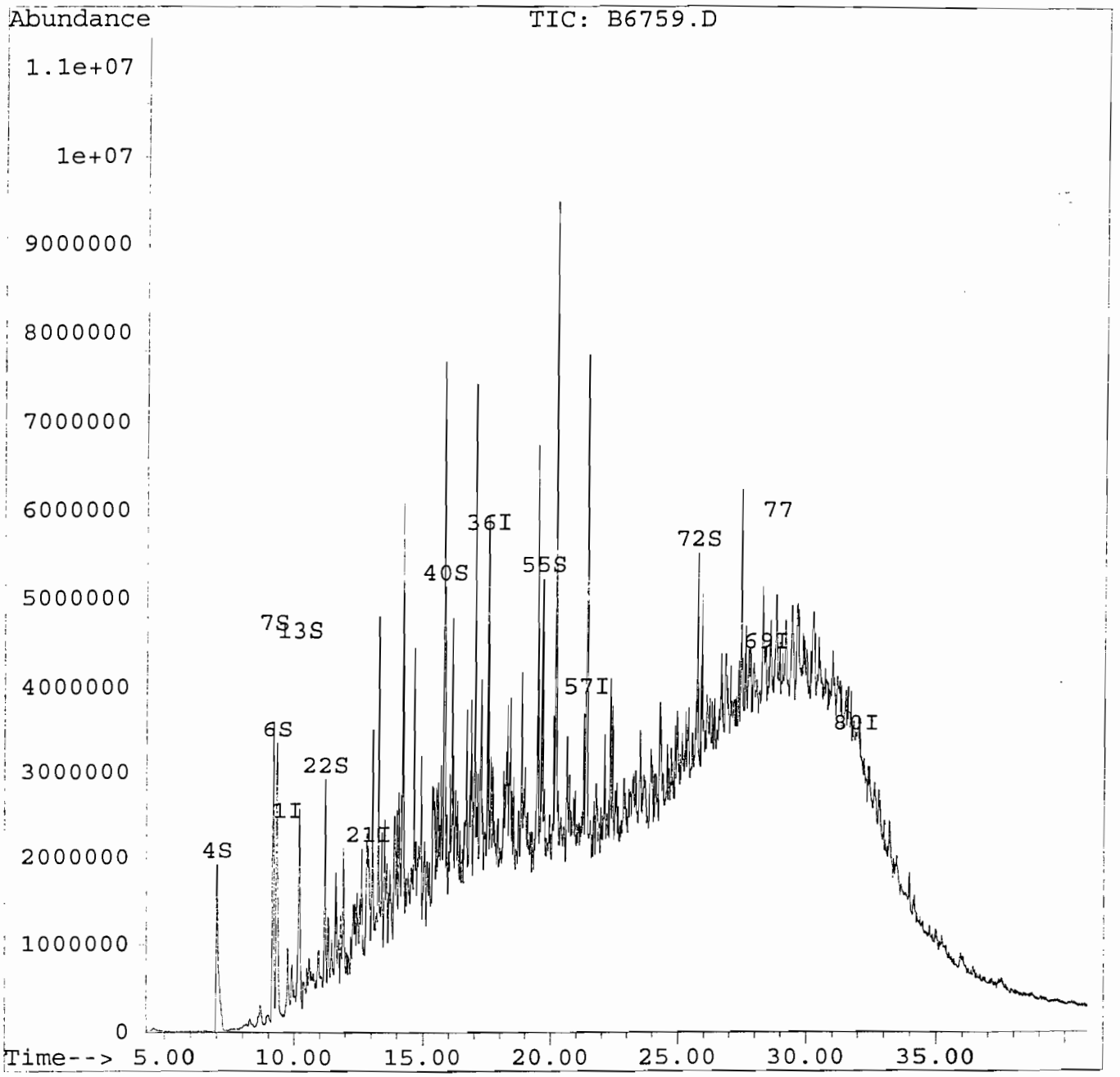
CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
91-20-3	Naphthalene	34	U
208-96-8	Acenaphthylene	34	U
83-32-9	Acenaphthene	34	U
86-73-7	Fluorene	34	U
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	34	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno [1,2,3-cd] pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11104\B6759.D
Acq Time : 4 Nov 99 6:42 pm
Sample : 13826ASP-88005-QB505
Misc :
Quant Time: Nov 10 14:35 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000310

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11104\B6759.D
Acq Time : 4 Nov 99 6:42 pm
Sample : 13826ASP-88005-QB505
Misc :
Quant Time: Nov 10 14:35 1999

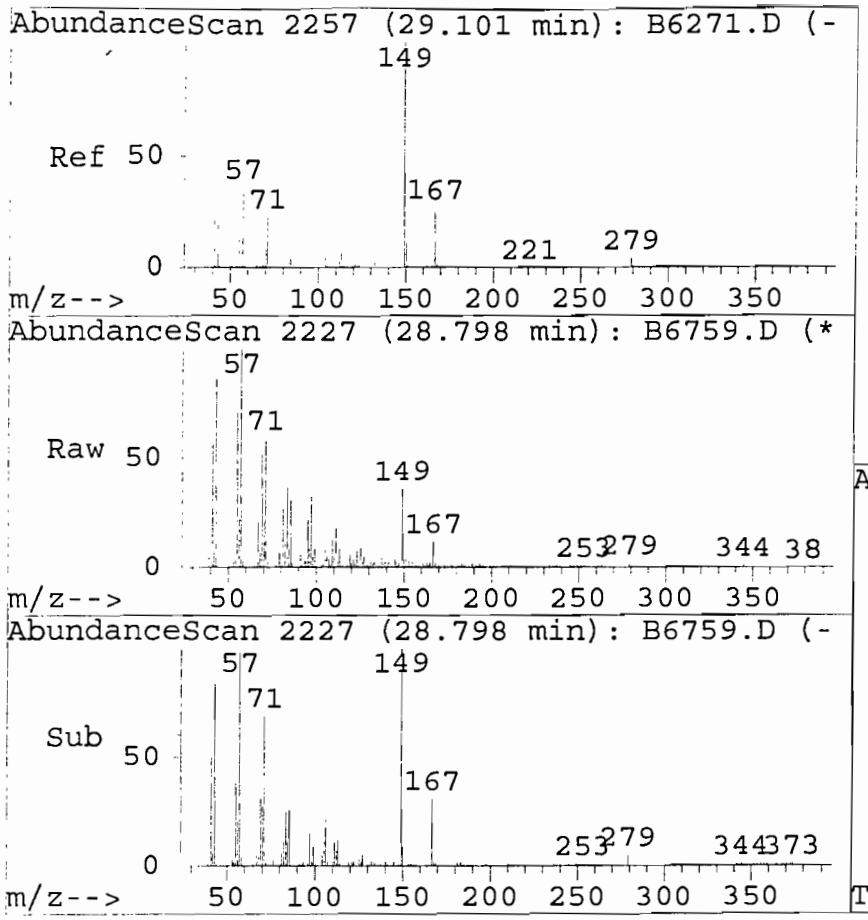
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.74	152	345381	40.00	ng	-0.05
21) Naphthalene-d8	12.90	136	1097883	40.00	ng	-0.04
36) Acenaphthene-d10	17.52	164	519847	40.00	ng	-0.01
57) Phenanthrene-d10	21.37	188	906095	40.00	ng	-0.01
69) Chrysene-d12	28.40	240	364405	40.00	ng	0.00
80) Perylene-d12	31.90	264	143949	40.00	ng	0.00
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.00	112	3035924	252.46	ng	
6) 2-Chlorophenol-d4	9.33	132	3116430	279.34	ng	
7) Phenol-d5	9.18	99	3757523	273.03	ng	
13) 1,2-Dichlorobenzene-d4	10.19	152	1049284	135.12	ng	
22) Nitrobenzene-d5	11.21	82	1833344	139.51	ng	
40) 2-Fluorobiphenyl	15.84	172	2521346	141.00	ng	
55) 2,4,6-Tribromophenol	19.67	330	1350152	394.26	ng	
72) Terphenyl-d14	25.73	244	2176092	202.76	ng	
Target Compounds						Qvalue
77) bis(2-Ethylhexyl)phthalate	28.80	149	288902	28.81	ng	85

000311

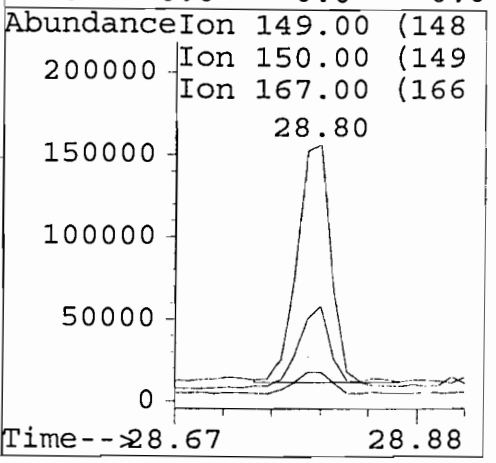
(#) = qualifier out of range (m) = manual integration



#77
bis(2-Ethylhexyl)phthalate
Concen: 28.81 ng
RT: 28.80 min Scan# 2227
Delta R.T. 0.01 min
Lab File: B6759.D
Acq: 4 Nov 99 6:42 pm

Tgt Ion:149 Resp: 288902

Ion	Ratio	Lower	Upper
149	100		
150	11.5	5.2	15.7
167	37.1	13.5	40.5
0	0.0	0.0	0.0



000312

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-013-SS8RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88005RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6840.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

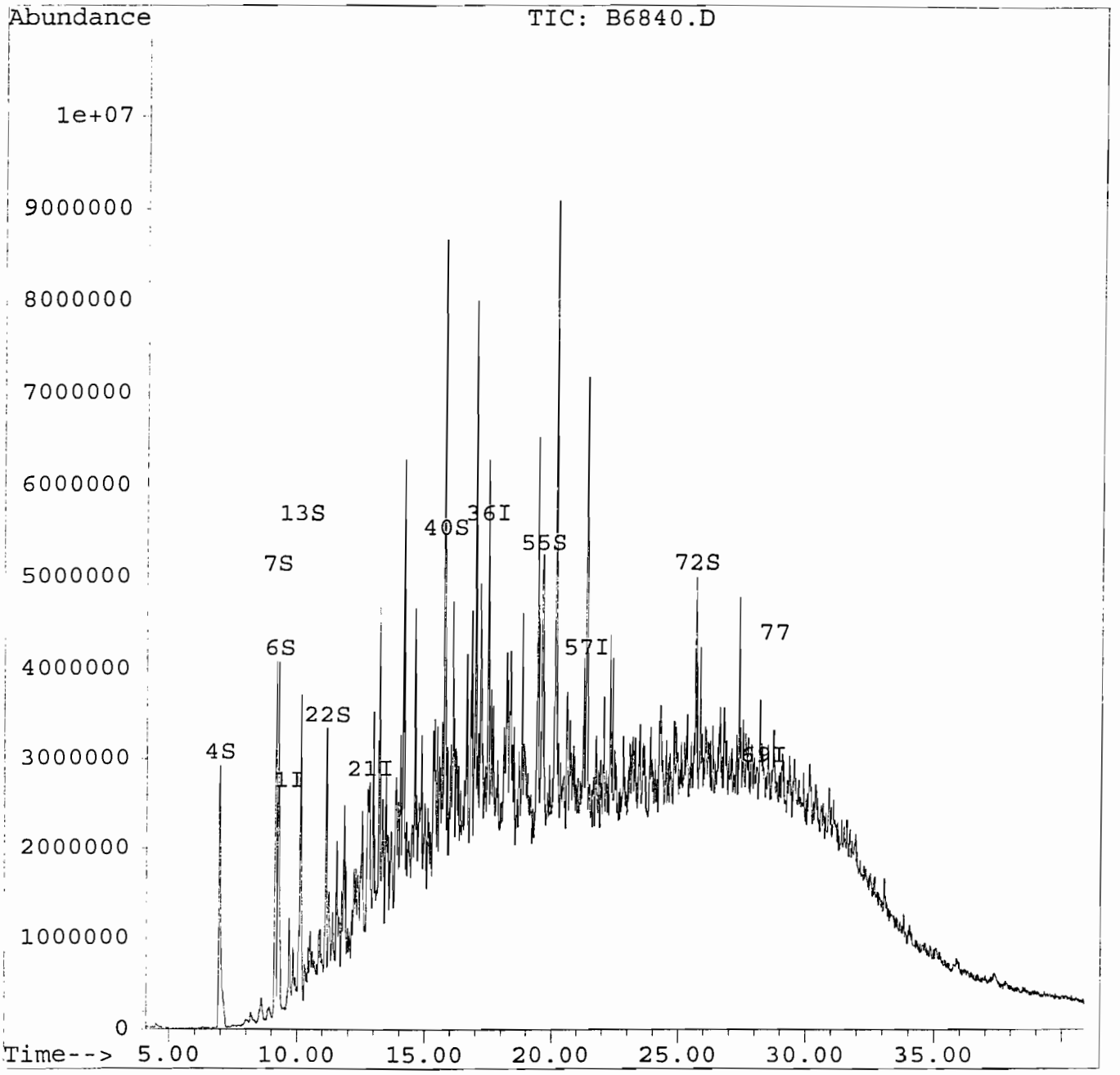
CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
91-20-3	Naphthalene	34	U
208-96-8	Acenaphthylene	34	U
83-32-9	Acenaphthene	34	U
86-73-7	Fluorene	34	U
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	34	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno [1,2,3-cd] pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6840.D
Acq Time : 9 Nov 99 3:52 pm
Sample : 13826ASP-88005-QB505 RE
Misc :
Quant Time: Nov 10 14:38 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000314

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6840.D
Acq Time : 9 Nov 99 3:52 pm
Sample : 13826ASP-88005-QB505 RE
Misc :
Quant Time: Nov 10 14:38 1999

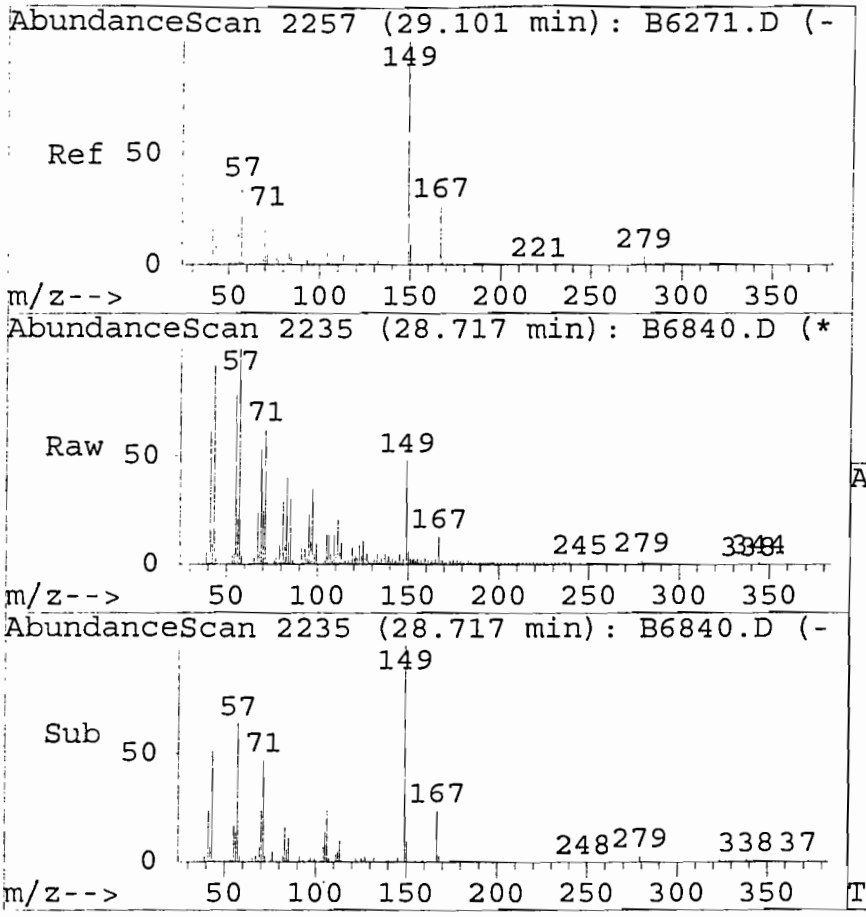
Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.68	152	437444	40.00	ng	-0.05
21) Naphthalene-d8	12.85	136	1471817	40.00	ng	-0.03
36) Acenaphthene-d10	17.48	164	644352	40.00	ng	0.00
57) Phenanthrene-d10	21.33	188	946756	40.00	ng	0.00
69) Chrysene-d12	28.33	240	293070	40.00	ng	0.00
80) Perylene-d12	31.83	264	97793	40.00	ng	0.00
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.96	112	3707376	213.66	ng	
6) 2-Chlorophenol-d4	9.28	132	4031009	247.50	ng	
7) Phenol-d5	9.18	99	4827627	235.36	ng	
13) 1,2-Dichlorobenzene-d4	10.14	152	1335066	125.66	ng	
22) Nitrobenzene-d5	11.16	82	2459575	121.99	ng	
40) 2-Fluorobiphenyl	15.79	172	3008934	127.07	ng	
55) 2,4,6-Tribromophenol	19.64	330	1252957	237.45	ng	
72) Terphenyl-d14	25.68	244	2168268	256.02	ng	
Target Compounds						Qvalue
77) bis(2-Ethylhexyl)phthalate	28.72	149	234821	26.74	ng	97

000315

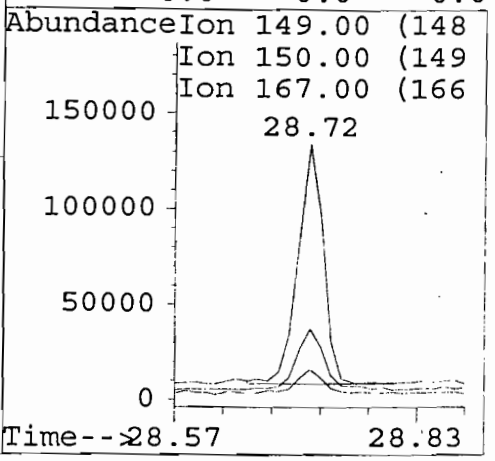
(#) = qualifier out of range (m) = manual integration



#77
bis(2-Ethylhexyl)phthalate
Concen: 26.74 ng
RT: 28.72 min Scan# 2235
Delta R.T. -0.01 min
Lab File: B6840.D
Acq: 9 Nov 99 3:52 pm

Tgt Ion:149 Resp: 234821

Ion	Ratio	Lower	Upper
149	100		
150	11.8	5.6	16.8
167	27.8	14.7	44.1
0	0.0	0.0	0.0



000316

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-013-SS12

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88006

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6758.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/4/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

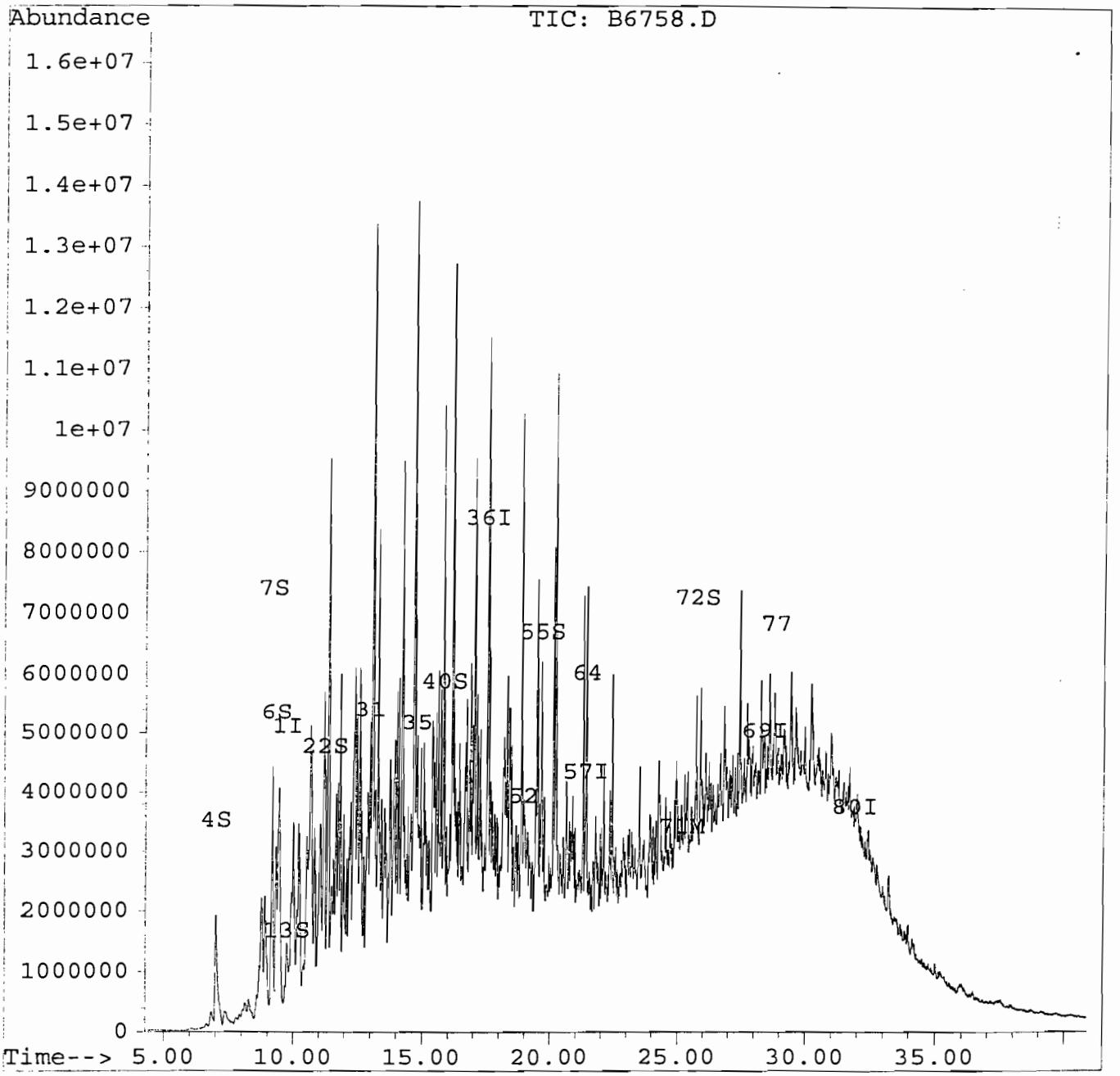
CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
91-20-3	Naphthalene	910	
208-96-8	Acenaphthylene	34	U
83-32-9	Acenaphthene	34	U
86-73-7	Fluorene	290	
85-01-8	Phenanthrene	220	
120-12-7	Anthracene	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	150	
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno [1,2,3-cd] pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11104\B6758.D
Acq Time : 4 Nov 99 5:52 pm
Sample : 13826ASP-88006-QB505
Misc :
Quant Time: Nov 10 14:43 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000318

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11104\B6758.D
Acq Time : 4 Nov 99 5:52 pm
Sample : 13826ASP-88006-QB505
Misc :
Quant Time: Nov 10 14:43 1999

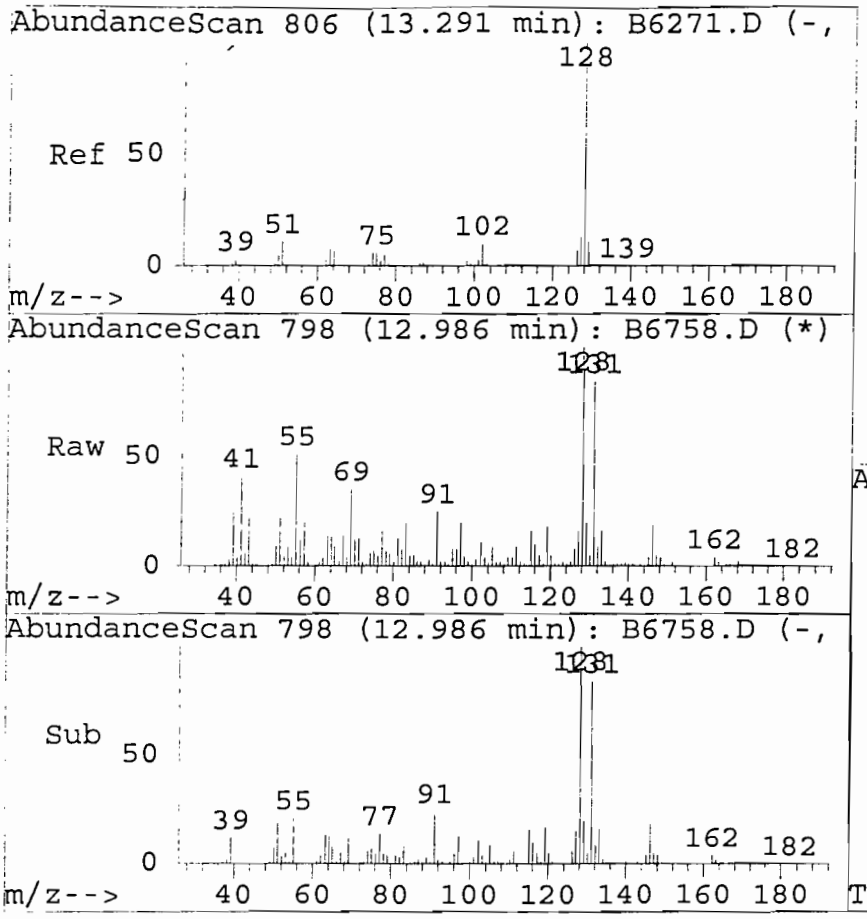
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.76	152	331001	40.00	ng	-0.03
21) Naphthalene-d8	12.93	136	1074290	40.00	ng	0.00
36) Acenaphthene-d10	17.55	164	462117	40.00	ng	0.00
57) Phenanthrene-d10	21.39	188	871510	40.00	ng	0.00
69) Chrysene-d12	28.40	240	388521	40.00	ng	0.00
80) Perylene-d12	31.92	264	140273	40.00	ng	0.02
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.01	112	2945172	255.55	ng	
6) 2-Chlorophenol-d4	9.33	132	3001742	280.75	ng	
7) Phenol-d5	9.20	99	3584220	271.76	ng	
13) 1,2-Dichlorobenzene-d4	9.76	152	331001	44.48	ng	
22) Nitrobenzene-d5	11.23	82	1775419	138.07	ng	
40) 2-Fluorobiphenyl	15.85	172	2322562	146.11	ng	
55) 2,4,6-Tribromophenol	19.68	330	1067906	350.80	ng	
72) Terphenyl-d14	25.73	244	2184478	190.91	ng	
Target Compounds						Qvalue
31) Naphthalene	12.99	128	1376213	52.59	ng	m 85
35) 2-Methylnaphthalene	14.79	142	1508247	91.36	ng	97
52) Fluorene	18.94	166	201409	16.47	ng	82
64) Phenanthrene	21.44	178	263156	12.91	ng	95
71) Pyrene	25.15	202	113972	8.55	ng	m 91
77) bis(2-Ethylhexyl)phthalate	28.80	149	273359	25.57	ng	90

000319

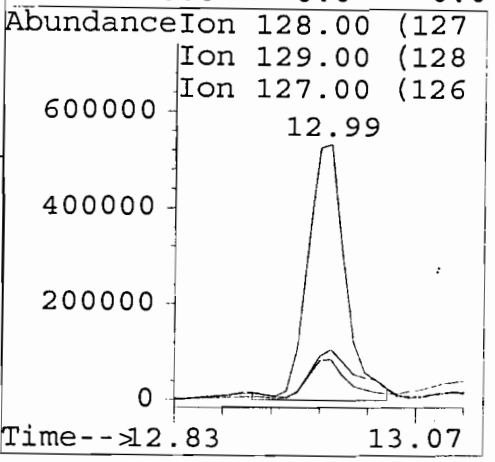
(#) = qualifier out of range (m) = manual integration

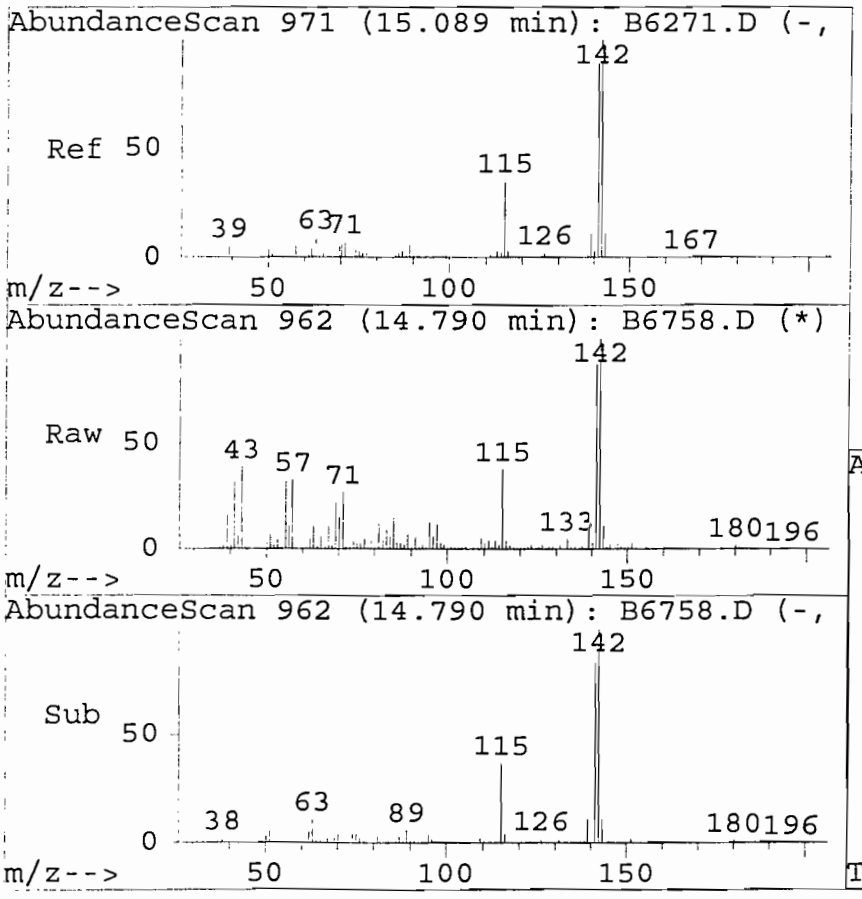


#31
Naphthalene
Concen: 52.59 ng m
RT: 12.99 min Scan# 798
Delta R.T. -0.01 min
Lab File: B6758.D
Acq: 4 Nov 99 5:52 pm

Tgt Ion:128 Resp: 1376213

Ion	Ratio	Lower	Upper
128	100		
129	19.8	5.3	15.9#
127	16.0	6.6	19.8
0	0.0	0.0	0.0

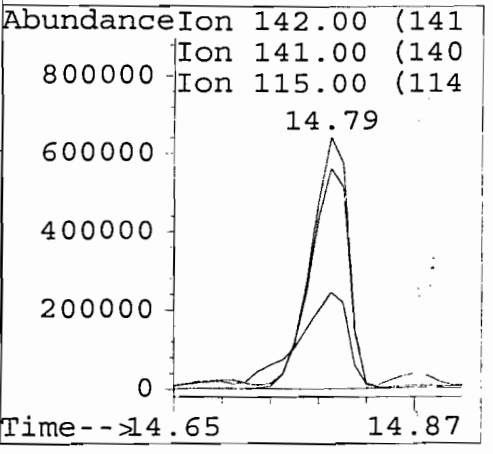




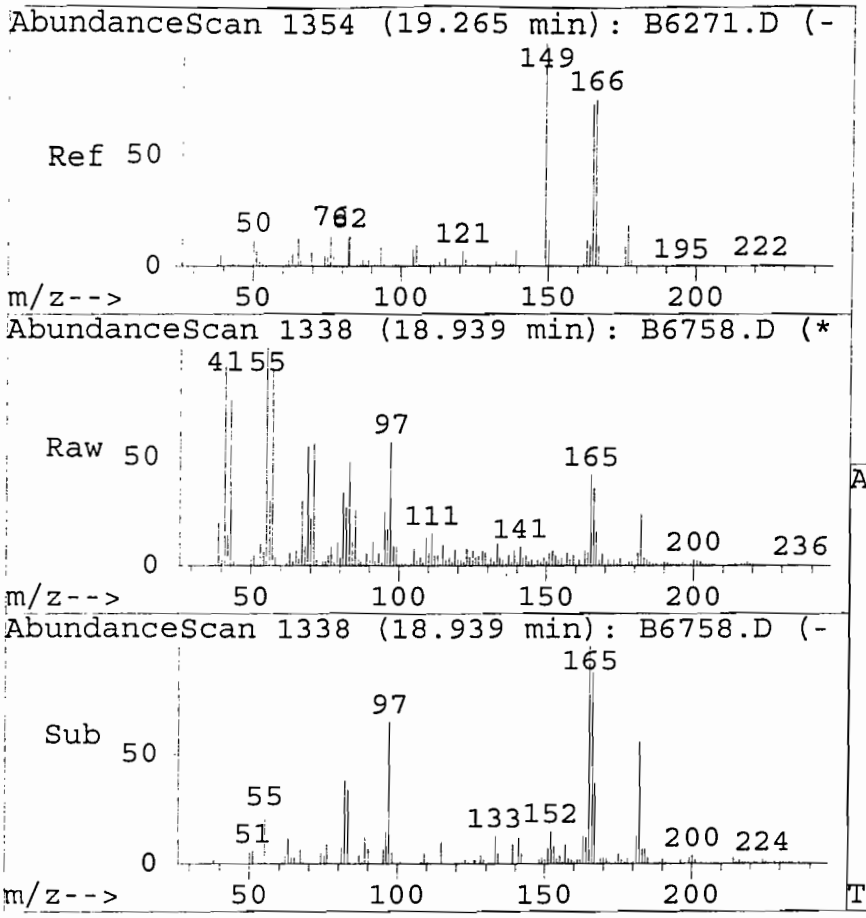
#35
2-Methylnaphthalene
Concen: 91.36 ng
RT: 14.79 min Scan# 962
Delta R.T. 0.01 min
Lab File: B6758.D
Acq: 4 Nov 99 5:52 pm

Tgt Ion:142 Resp: 1508247

Ion	Ratio	Lower	Upper
142	100		
141	87.6	44.4	133.2
115	38.3	17.5	52.5
0	0.0	0.0	0.0



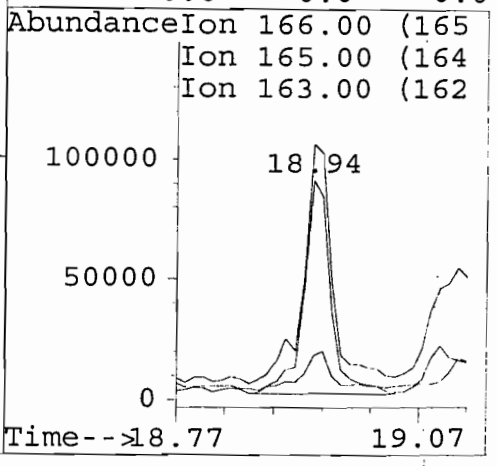
000320

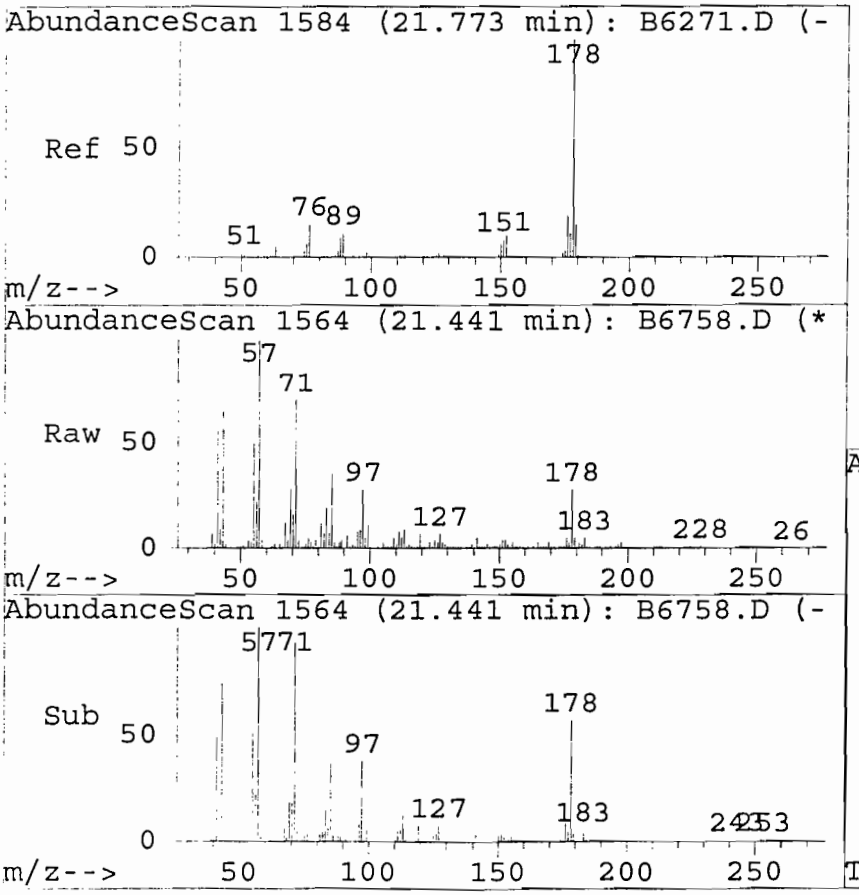


#52
Fluorene
Concen: 16.47 ng
RT: 18.94 min Scan# 1338
Delta R.T. -0.01 min
Lab File: B6758.D
Acq: 4 Nov 99 5:52 pm

Tgt Ion:166 Resp: 201409

Ion	Ratio	Lower	Upper
166	100		
165	116.7	48.8	146.4
163	20.2	8.1	24.3
0	0.0	0.0	0.0

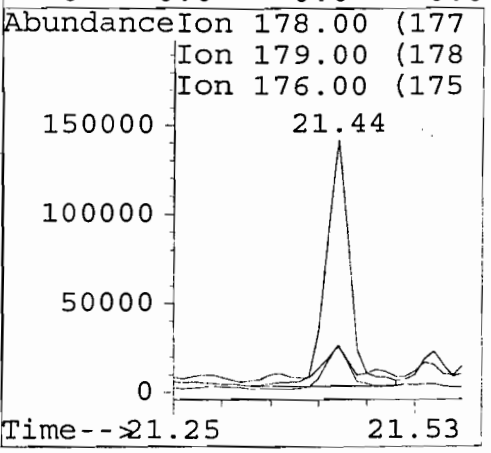




#64
Phenanthrene
Concen: 12.91 ng
RT: 21.44 min Scan# 1564
Delta R.T. -0.01 min
Lab File: B6758.D
Acq: 4 Nov 99 5:52 pm

Tgt Ion:178 Resp: 263156

Ion	Ratio	Lower	Upper
178	100		
179	18.2	7.2	21.7
176	18.6	9.6	28.8
0	0.0	0.0	0.0



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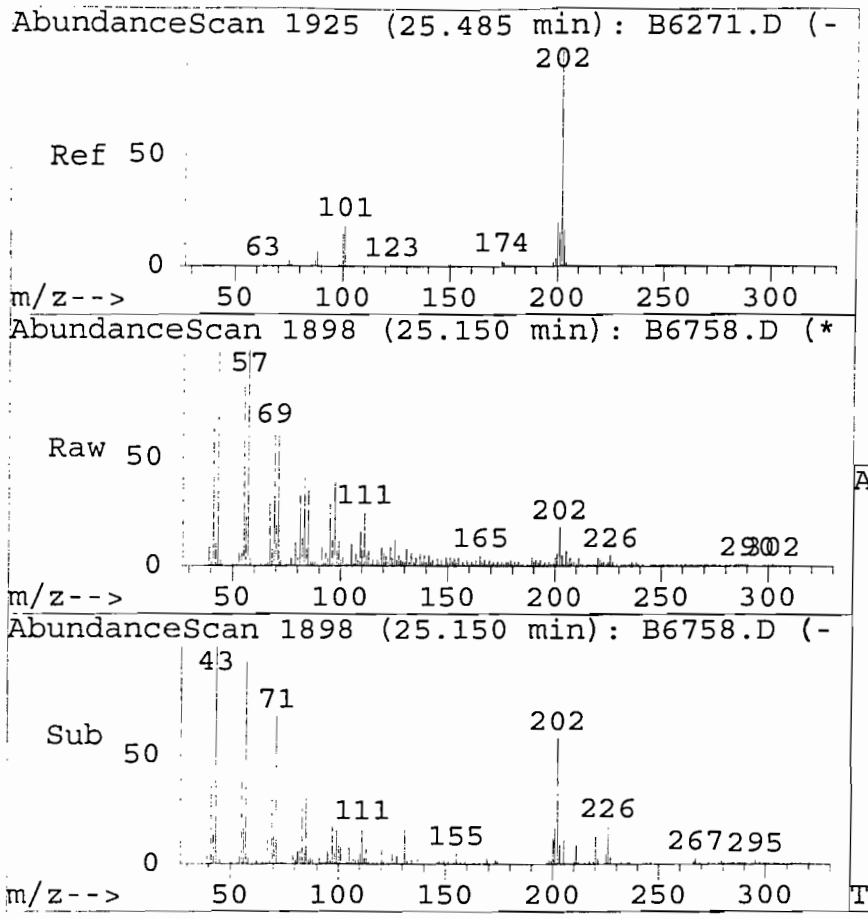
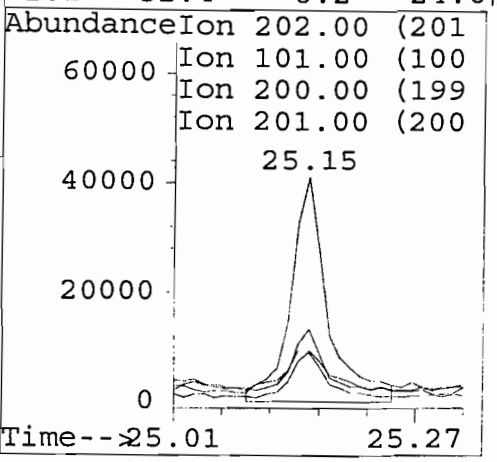
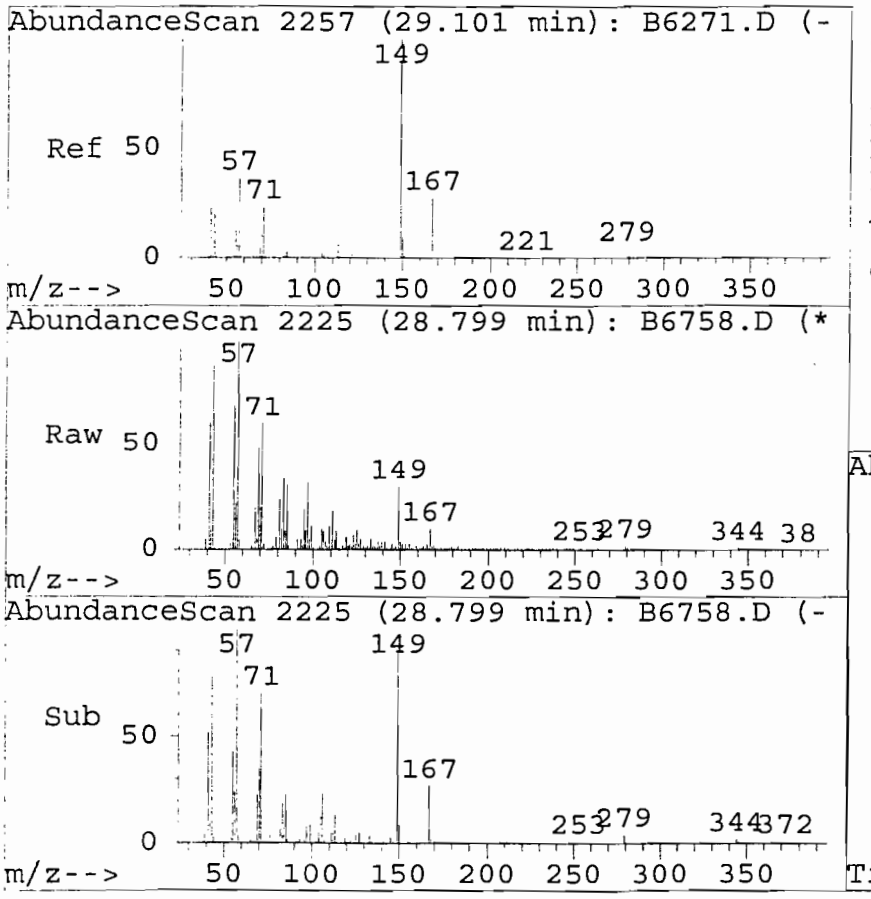


#71
Pyrene
Concen: 8.55 ng m
RT: 25.15 min Scan# 1898
Delta R.T. -0.01 min
Lab File: B6758.D
Acq: 4 Nov 99 5:52 pm

Tgt Ion:202 Resp: 113972

Ion	Ratio	Lower	Upper
202	100		
101	22.7	9.5	28.5
200	22.2	10.2	30.6
201	32.4	8.2	24.6#

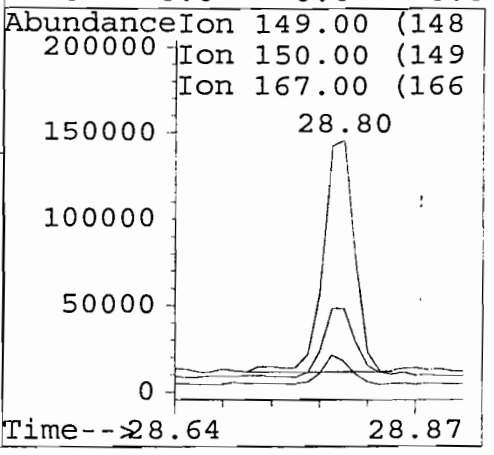




#77
bis(2-Ethylhexyl)phthalate
Concen: 25.57 ng
RT: 28.80 min Scan# 2225
Delta R.T. 0.01 min
Lab File: B6758.D
Acq: 4 Nov 99 5:52 pm

Tgt Ion:149 Resp: 273359

Ion	Ratio	Lower	Upper
149	100		
150	12.2	5.2	15.7
167	33.1	13.5	40.5
0	0.0	0.0	0.0



000322

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-013-SS12RE

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88006RE

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6839.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

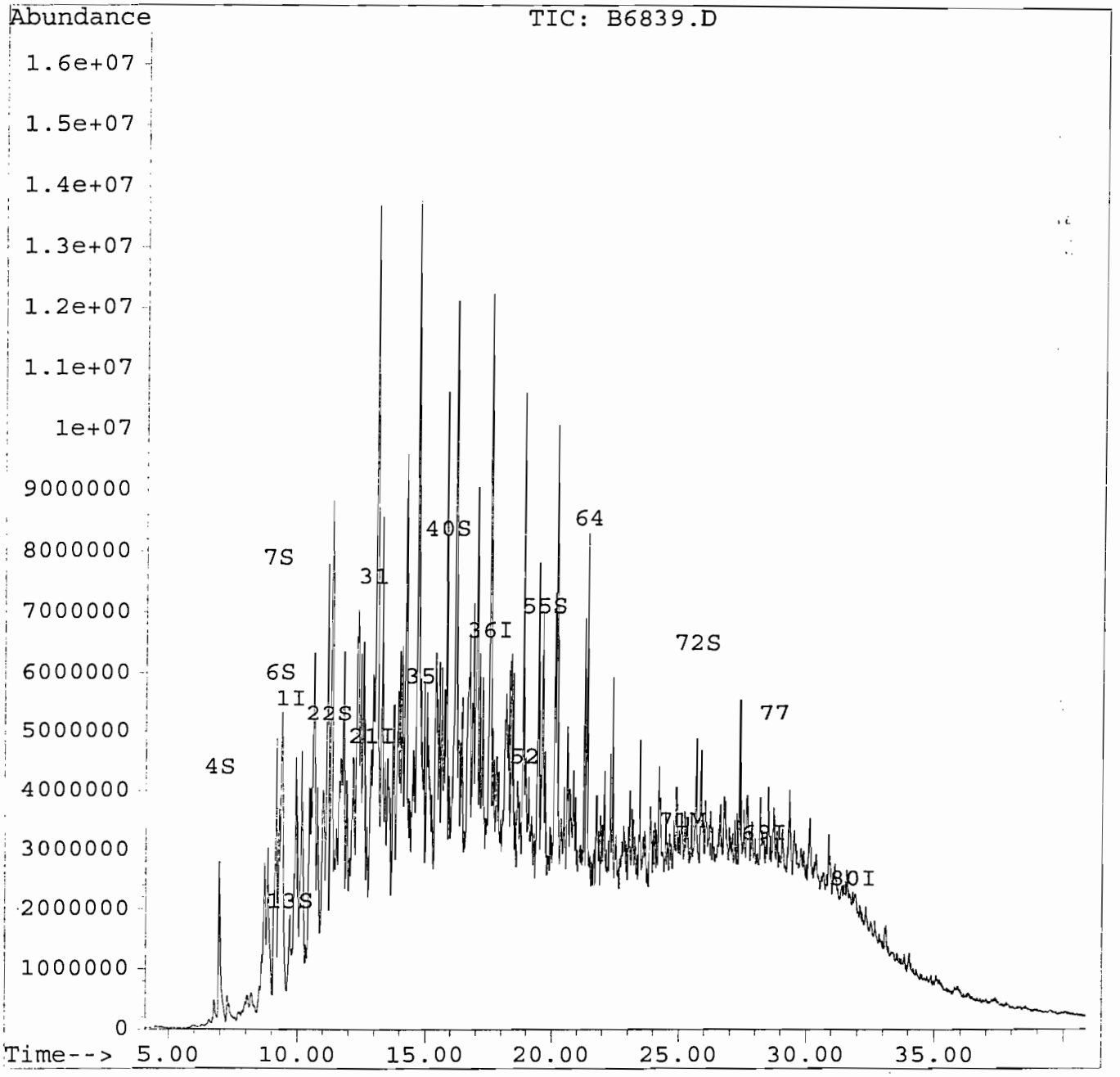
CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
91-20-3	Naphthalene	930	
208-96-8	Acenaphthylene	34	U
83-32-9	Acenaphthene	34	U
86-73-7	Fluorene	210	
85-01-8	Phenanthrene	200	
120-12-7	Anthracene	34	U
206-44-0	Fluoranthene	34	U
129-00-0	Pyrene	200	
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno [1,2,3-cd] pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6839.D
Acq Time : 9 Nov 99 3:01 pm
Sample : 13826ASP-88006-QB505 RE
Misc :
Quant Time: Nov 10 14:46 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000324

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6839.D
Acq Time : 9 Nov 99 3:01 pm
Sample : 13826ASP-88006-QB505 RE
Misc :
Quant Time: Nov 10 14:46 1999

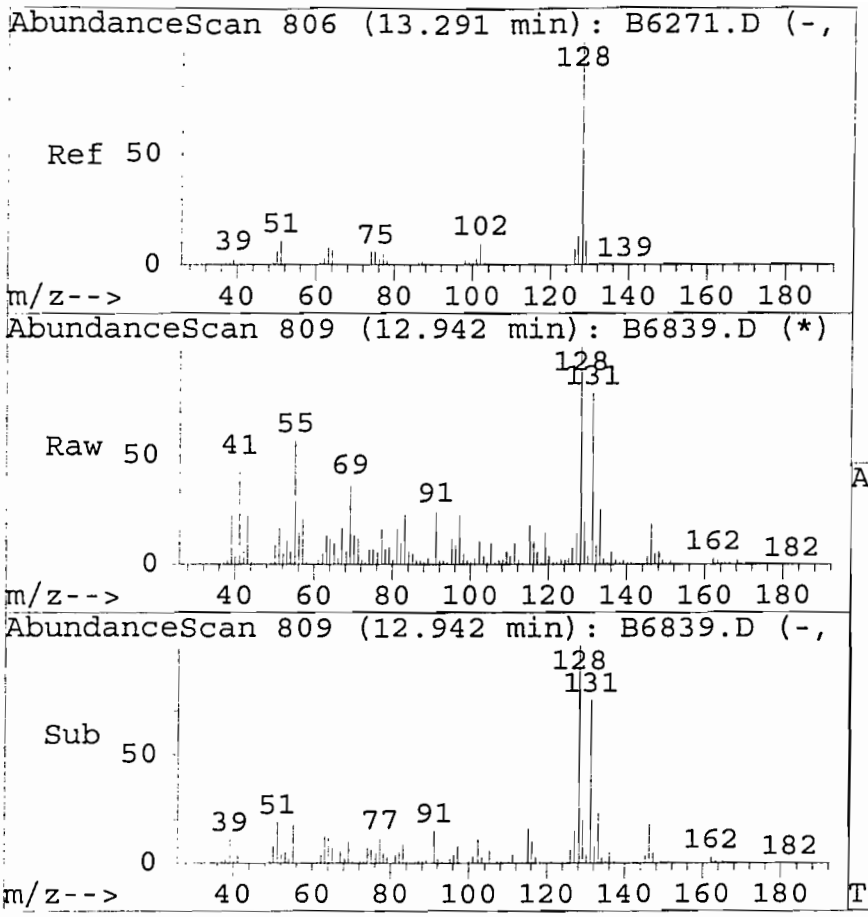
Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.71	152	466972	40.00	ng		-0.03
21) Naphthalene-d8	12.89	136	1450624	40.00	ng		0.00
36) Acenaphthene-d10	17.51	164	602300	40.00	ng		0.03
57) Phenanthrene-d10	21.36	188	1071807	40.00	ng		0.04
69) Chrysene-d12	28.33	240	318023	40.00	ng		0.00
80) Perylene-d12	31.82	264	110034	40.00	ng		0.00
System Monitoring Compounds							**%Recovery**
4) 2-Fluorophenol	6.96	112	3663716	197.79	ng		
6) 2-Chlorophenol-d4	9.29	132	4209490	242.12	ng		
7) Phenol-d5	9.19	99	4851311	221.56	ng		
13) 1,2-Dichlorobenzene-d4	9.71	152	466972	41.17	ng		
22) Nitrobenzene-d5	11.21	82	2478210	124.71	ng		
40) 2-Fluorobiphenyl	15.83	172	2991170	135.13	ng		
55) 2,4,6-Tribromophenol	19.66	330	1064922	215.91	ng		
72) Terphenyl-d14	25.68	244	2129145	231.67	ng		
Target Compounds							**Qvalue**
31) Naphthalene	12.94	128	1970863	53.60	ng	m	84
35) 2-Methylnaphthalene	14.77	142	2121779	83.66	ng		94
52) Fluorene	18.91	166	238018	12.14	ng		81
64) Phenanthrene	21.41	178	308021	11.49	ng		95
71) Pyrene	25.10	202	113948	11.40	ng	m	93
77) bis(2-Ethylhexyl)phthalate	28.71	149	244766	25.69	ng		98

000325

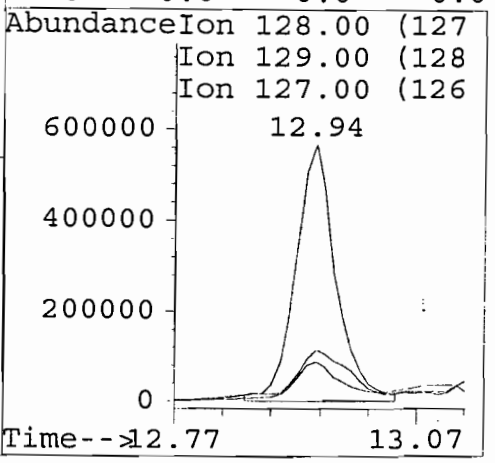
(#) = qualifier out of range (m) = manual integration

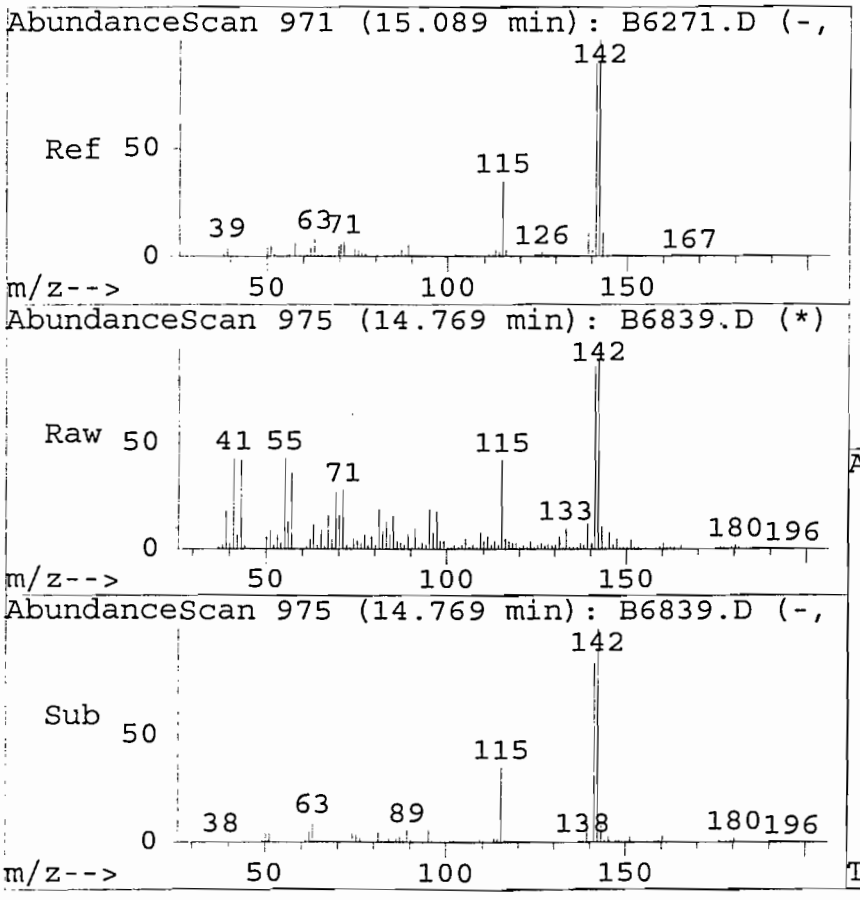


#31
Naphthalene
Concen: 53.60 ng m
RT: 12.94 min Scan# 809
Delta R.T. 0.01 min
Lab File: B6839.D
Acq: 9 Nov 99 3:01 pm

Tgt Ion:128 Resp: 1970863

Ion	Ratio	Lower	Upper
128	100		
129	20.0	5.1	15.3#
127	15.4	6.4	19.1
0	0.0	0.0	0.0

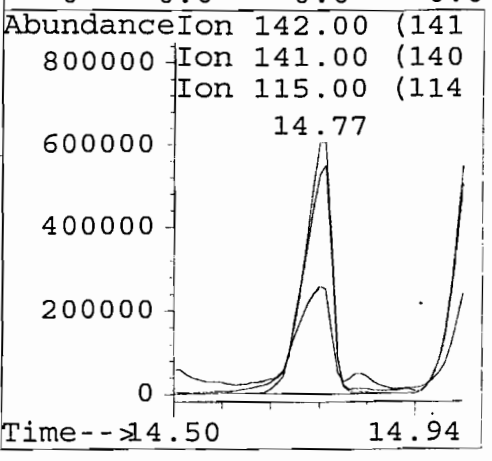




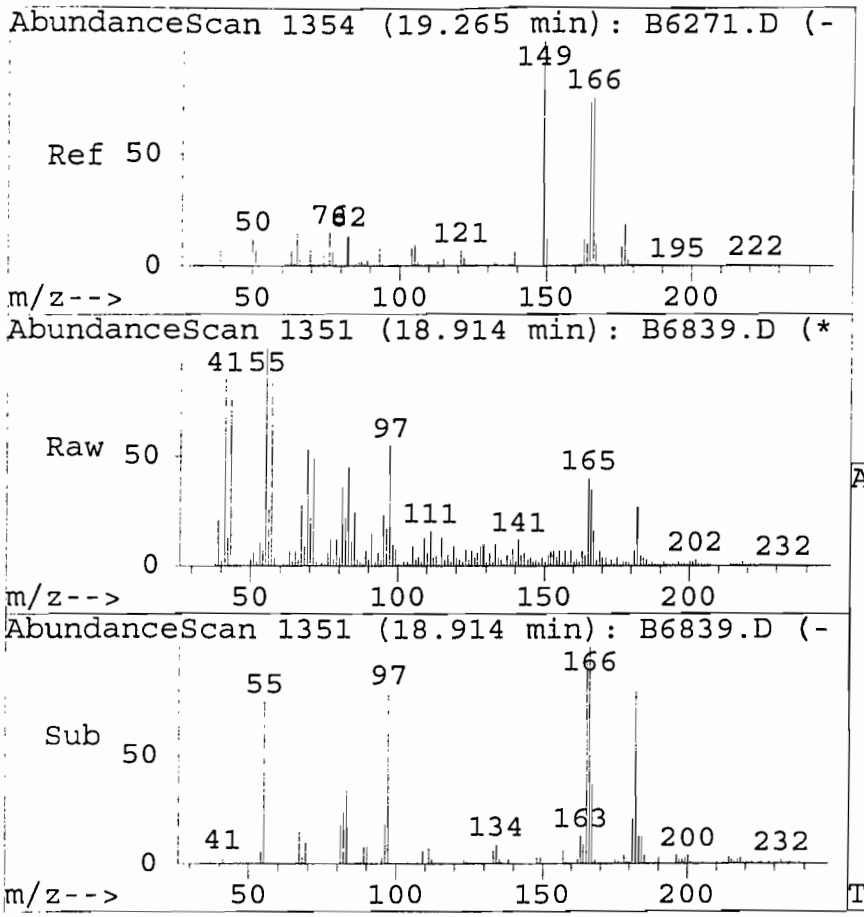
#35
2-Methylnaphthalene
Concen: 83.66 ng
RT: 14.77 min Scan# 975
Delta R.T. 0.05 min
Lab File: B6839.D
Acq: 9 Nov 99 3:01 pm

Tgt Ion:142 Resp: 2121779

Ion	Ratio	Lower	Upper
142	100		
141	86.9	42.5	127.5
115	42.5	16.7	50.1
0	0.0	0.0	0.0



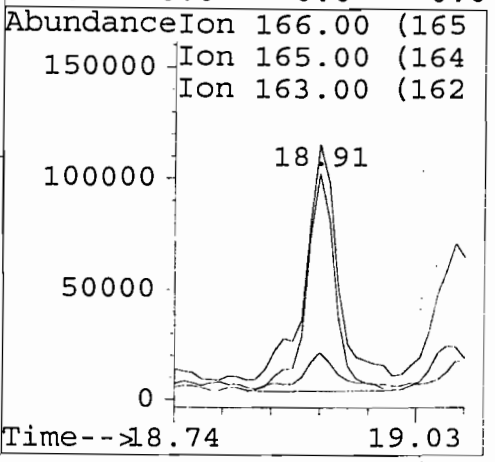
000326

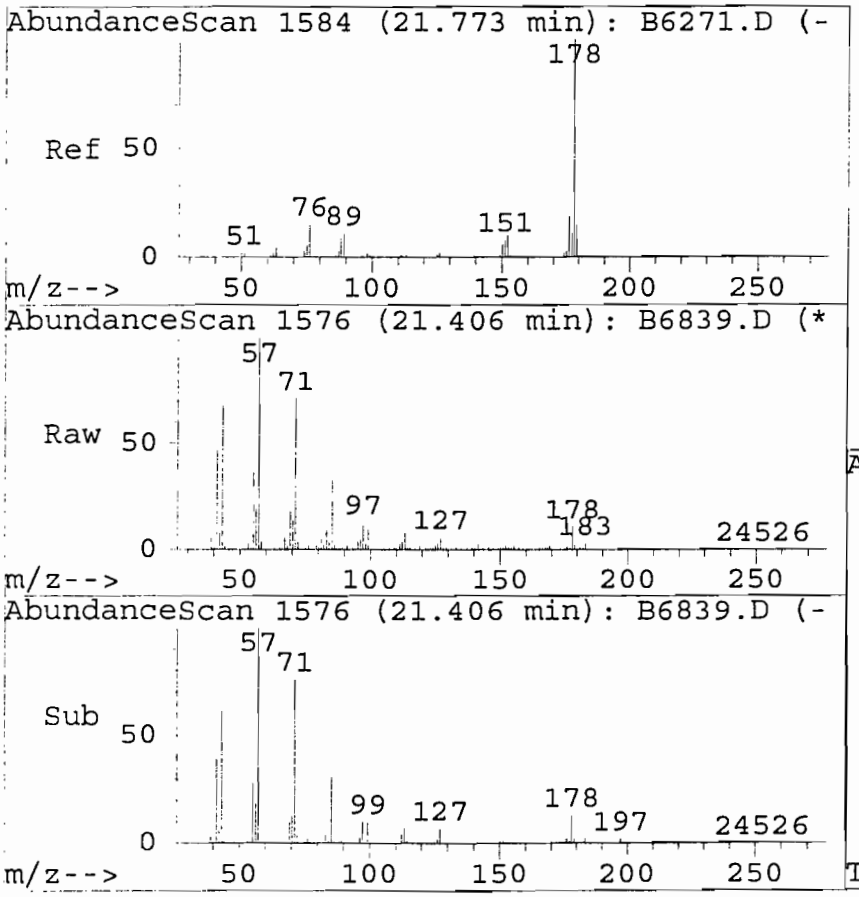


#52
Fluorene
Concen: 12.14 ng
RT: 18.91 min Scan# 1351
Delta R.T. 0.02 min
Lab File: B6839.D
Acq: 9 Nov 99 3:01 pm

Tgt Ion:166 Resp: 238018

Ion	Ratio	Lower	Upper
166	100		
165	113.0	47.2	141.7
163	21.0	7.3	21.9
0	0.0	0.0	0.0

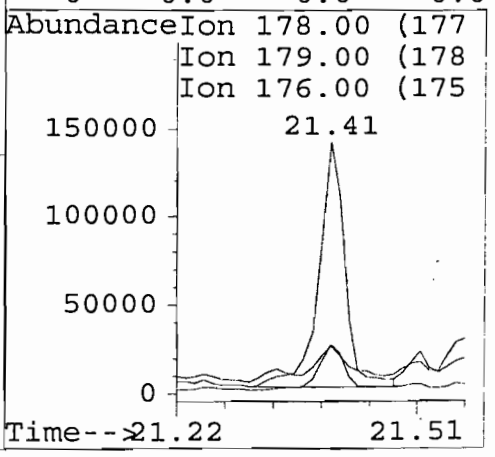




#64
Phenanthrene
Concen: 11.49 ng
RT: 21.41 min Scan# 1576
Delta R.T. 0.02 min
Lab File: B6839.D
Acq: 9 Nov 99 3:01 pm

Tgt Ion:178 Resp: 308021

Ion	Ratio	Lower	Upper
178	100		
179	18.9	7.4	22.3
176	19.3	9.4	28.2
0	0.0	0.0	0.0



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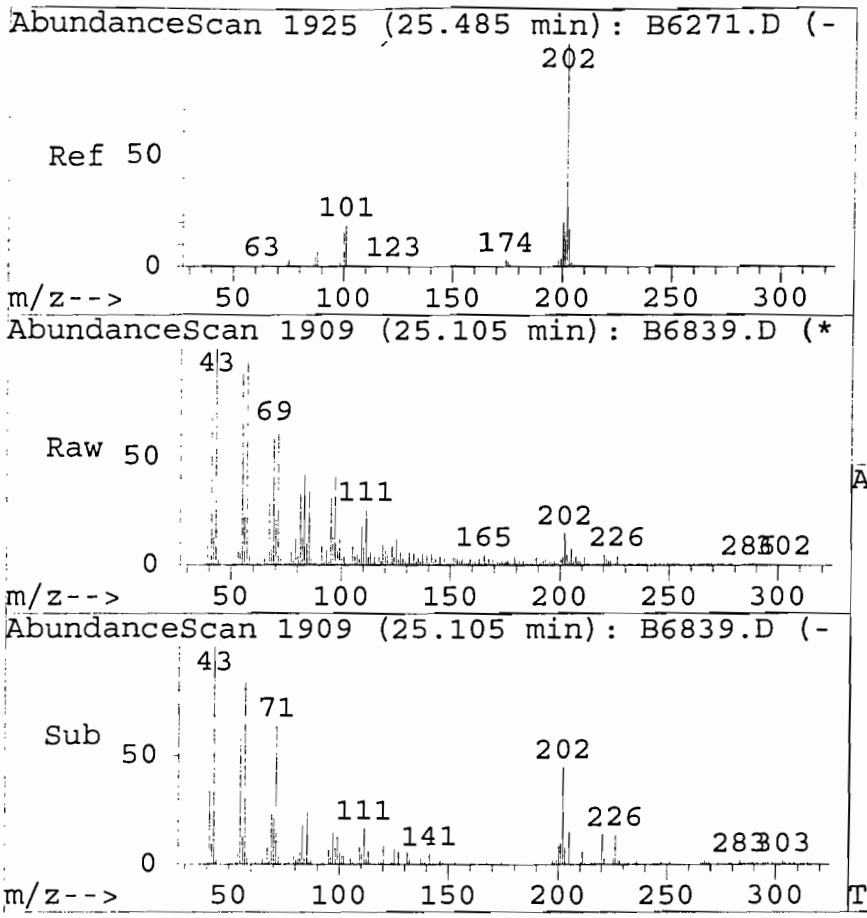
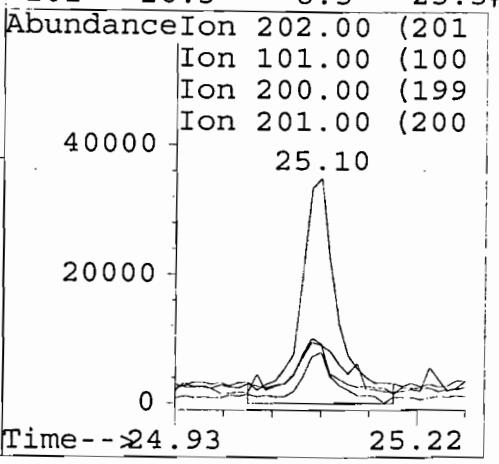
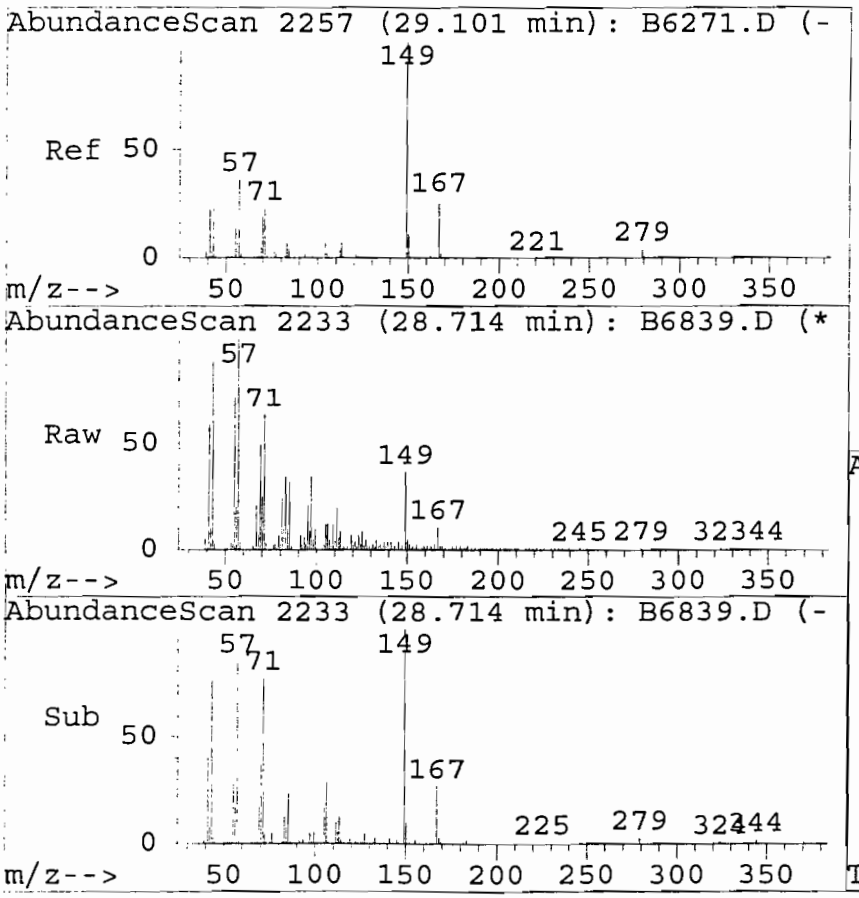


#71
Pyrene
Concen: 11.40 ng m
RT: 25.10 min Scan# 1909
Delta R.T. 0.00 min
Lab File: B6839.D
Acq: 9 Nov 99 3:01 pm

Tgt Ion:202 Resp: 113948

Ion	Ratio	Lower	Upper
202	100		
101	25.7	9.2	27.7
200	22.8	10.5	31.6
201	26.3	8.5	25.5#

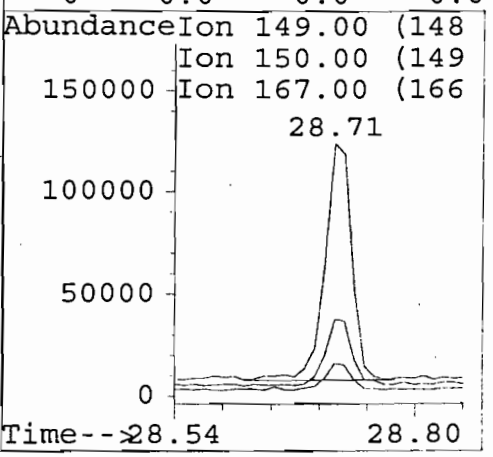




#77
bis(2-Ethylhexyl)phthalate
Concen: 25.69 ng
RT: 28.71 min Scan# 2233
Delta R.T. -0.02 min
Lab File: B6839.D
Acq: 9 Nov 99 3:01 pm

Tgt Ion:149 Resp: 244766

Ion	Ratio	Lower	Upper
149	100		
150	12.9	5.6	16.8
167	30.2	14.7	44.1
0	0.0	0.0	0.0



000328

CHEMTECH CONSULTING GROUP

SEMIVOLATILE

CALIBRATION DATA

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: CREEK Group: GP-008-SS

Instrument ID: BNA1 Calibration Date(s): 11/5/99 11/5/99

Calibration Times: 1027 1423

Lab File ID: RRF20 = B6763.D RRF50 = B6764.D
RRF80 = B6765.D RRF120 = B6766.D RRF160 = B6767.D

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
bis(2-Chloroethyl)ether	2.294	1.886	1.739	1.638	1.714	1.854	14.1	
bis(2-chloroisopropyl)ether	3.800	3.454	3.063	3.234	3.337	3.378	8.2	
1,2-Dichlorobenzene	1.739	1.605	1.469	1.437	1.418	1.534	8.9	
1,3-Dichlorobenzene	1.843	1.697	1.585	1.651	1.658	1.687	5.7	
1,4-Dichlorobenzene *	1.866	1.742	1.600	1.629	1.660	1.699	6.3	*
n-Nitroso-di-n-propylamine *	1.531	1.376	1.303	1.357	1.334	1.380	6.4	*
Hexachloroethane	0.739	0.658	0.621	0.660	0.705	0.677	6.8	
Nitrobenzene	0.522	0.492	0.473	0.473	0.451	0.482	5.5	
Isophorone	1.116	1.031	0.980	1.036	1.005	1.034	5.0	
bis(2-Chloroethoxy)methane	0.658	0.622	0.579	0.580	0.555	0.599	6.9	
1,2,4-Trichlorobenzene	0.384	0.367	0.345	0.358	0.329	0.357	5.8	
Naphthalene	1.166	1.038	0.984	0.976	0.907	1.014	9.5	
4-Chloroaniline	0.104	0.098	0.109	0.118	0.100	0.106	7.7	
Hexachlorobutadiene *	0.233	0.223	0.209	0.215	0.200	0.216	5.8	*
2-Methylnaphthalene	0.787	0.742	0.661	0.666	0.641	0.699	8.9	
Hexachlorocyclopentadiene *	0.334	0.355	0.347	0.352	0.321	0.342	4.1	*
2-Chloronaphthalene	1.352	1.316	1.181	1.175	1.080	1.221	9.1	
2-Nitroaniline	0.603	0.546	0.519	0.529	0.528	0.545	6.2	
Dimethylphthalate	1.717	1.635	1.473	1.312	1.202	1.468	14.7	
Acenaphthylene	2.263	2.105	1.844	1.377	1.237	1.765	25.3	
2,6-Dinitrotoluene	0.371	0.374	0.347	0.350	0.325	0.354	5.6	
3-Nitroaniline	0.027	0.028	0.015	0.008	0.061	0.028	72.9	
Acenaphthene *	1.364	1.312	1.152	1.125	0.994	1.190	12.6	*
Dibenzofuran	1.900	1.879	1.674	1.625	1.520	1.720	9.6	
2,4-Dinitrotoluene	0.529	0.543	0.491	0.509	0.478	0.510	5.2	
Diethylphthalate	1.876	1.722	1.522	1.363	1.137	1.524	19.1	
4-Chlorophenyl-phenylether	0.767	0.731	0.658	0.583	0.499	0.647	16.9	
Fluorene	1.493	1.388	1.298	1.215	1.116	1.302	11.3	
4-Nitroaniline	0.197	0.172	0.145	0.134	0.101	0.150	24.3	
N-Nitrosodiphenylamine *	0.458	0.374	0.319	0.320	0.221	0.339	25.7	*
1,2-Diphenylhydrazine	1.330	1.154	1.072	1.063	0.997	1.123	11.4	
4-Bromophenyl-phenylether	0.268	0.241	0.227	0.223	0.216	0.235	8.8	
Hexachlorobenzene	0.345	0.311	0.316	0.303	0.287	0.312	6.9	
Phenanthrene	1.191	1.062	0.943	0.922	0.883	1.000	12.6	
Anthracene	1.179	1.057	0.996	0.931	0.856	1.004	12.3	
Carbazole	0.282	0.180	0.135	0.118	0.142	0.172	38.4	
Di-n-butylphthalate	1.993	1.762	1.569	1.505	1.435	1.653	13.7	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: CREEK Group: GP-008-SS

Instrument ID: BNA1 Calibration Date(s): 11/5/99 11/5/99

Calibration Times: 1027 1423

Lab File ID: RRF20 = B6763.D RRF50 = B6764.D
RRF80 = B6765.D RRF120 = B6766.D RRF160 = B6767.D

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD	
Fluoranthene	*	1.317	1.165	1.091	1.035	0.997	1.121	11.3	*
Pyrene		1.385	1.297	1.259	1.224	1.121	1.257	7.7	
Butylbenzylphthalate		0.945	0.874	0.789	0.813	0.805	0.845	7.6	
3,3'-Dichlorobenzidine		0.224	0.263	0.277	0.267	0.266	0.259	7.9	
Benzo[a]anthracene		1.200	1.159	1.117	1.079	1.043	1.119	5.5	
Chrysene		1.146	1.060	1.022	0.961	0.893	1.017	9.5	
bis(2-Ethylhexyl)phthalate		1.382	1.260	1.157	1.134	1.059	1.198	10.4	
Di-n-octylphthalate	*	2.441	2.312	2.002	1.970	1.877	2.120	11.4	*
Benzo[b]fluoranthene		1.232	1.245	1.215	1.406	1.506	1.321	9.8	
Benzo[k]fluoranthene		1.208	1.027	0.966	0.743	0.628	0.914	25.2	
Benzo[a]pyrene	*	1.106	1.024	1.006	0.970	0.974	1.016	5.4	*
Indeno(1,2,3-cd)pyrene		0.936	0.816	0.969	0.933	0.875	0.906	6.7	
Dibenz[a,h]anthracene		0.895	0.937	0.851	0.818	0.792	0.858	6.8	
Benzo[g,h,i]perylene		0.901	0.880	0.814	0.820	0.762	0.835	6.7	
Nitrobenzene-d5		0.578	0.561	0.512	0.558	0.531	0.548	4.8	
2-Fluorobiphenyl		1.683	1.599	1.420	1.403	1.245	1.470	11.8	
Terphenyl-d14		1.196	1.200	1.150	1.151	1.082	1.156	4.1	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: CREEK Group: GP-008-SS

Instrument ID: BNA1 Calibration Date(s): 10/6/99 10/6/99

Calibration Times: 1021 1342

Lab File ID: RRF20 = B6269.D RRF50 = B6270.D
RRF80 = B6271.D RRF120 = B6272.D RRF160 = B6273.D

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
bis(2-Chloroethyl)ether	1.698	1.797	1.652	1.651	1.575	1.675	4.9	
bis(2-chloroisopropyl)ether	2.541	2.360	2.483	2.533	2.631	2.510	4.0	
1,2-Dichlorobenzene	1.500	1.326	1.375	1.335	1.238	1.355	7.0	
1,3-Dichlorobenzene	1.581	1.432	1.520	1.469	1.459	1.492	4.0	
1,4-Dichlorobenzene *	1.541	1.466	1.515	1.493	1.439	1.491	2.7	*
n-Nitroso-di-n-propylamine *	1.244	1.086	1.140	1.167	1.227	1.173	5.5	*
Hexachloroethane	0.682	0.600	0.586	0.591	0.621	0.616	6.4	
Nitrobenzene	0.429	0.402	0.425	0.427	0.425	0.422	2.7	
Isophorone	0.953	0.872	0.862	0.872	0.919	0.896	4.3	
bis(2-Chloroethoxy)methane	0.523	0.490	0.502	0.507	0.505	0.505	2.3	
1,2,4-Trichlorobenzene	0.368	0.335	0.332	0.314	0.307	0.331	7.2	
Naphthalene	1.063	0.996	0.972	0.913	0.929	0.974	6.1	
4-Chloroaniline	0.203	0.071	0.022	0.030	0.055	0.076	96.6	
Hexachlorobutadiene *	0.248	0.226	0.222	0.203	0.196	0.219	9.5	*
2-Methylnaphthalene	0.671	0.622	0.634	0.582	0.564	0.615	6.9	
Hexachlorocyclopentadiene *	0.251	0.286	0.312	0.288	0.316	0.291	8.9	*
2-Chloronaphthalene	1.227	1.143	1.120	1.096	1.068	1.131	5.4	
2-Nitroaniline	0.356	0.330	0.258	0.289	0.310	0.308	12.1	
Dimethylphthalate	1.522	1.397	1.422	1.338	1.290	1.394	6.3	
Acenaphthylene	2.023	1.818	1.818	1.596	1.440	1.739	13.0	
2,6-Dinitrotoluene	0.255	0.269	0.299	0.297	0.301	0.284	7.4	
3-Nitroaniline	0.062	0.020	0.016	0.017	0.015	0.026	76.1	
Acenaphthene *	1.262	1.142	1.136	1.085	1.031	1.131	7.6	*
Dibenzofuran	1.614	1.438	1.493	1.430	1.405	1.476	5.7	
2,4-Dinitrotoluene	0.334	0.332	0.384	0.387	0.415	0.370	9.8	
Diethylphthalate	1.572	1.445	1.359	1.231	1.149	1.351	12.4	
4-Chlorophenyl-phenylether	0.645	0.592	0.600	0.560	0.541	0.587	6.8	
Fluorene	1.237	1.101	1.044	0.970	0.941	1.059	11.1	
4-Nitroaniline	0.124	0.080	0.065	0.067	0.061	0.079	32.4	
N-Nitrosodiphenylamine *	0.456	0.333	0.238	0.204	0.190	0.284	39.1	*
1,2-Diphenylhydrazine	1.150	1.017	1.034	0.965	0.998	1.033	6.8	
4-Bromophenyl-phenylether	0.251	0.225	0.219	0.205	0.200	0.220	9.2	
Hexachlorobenzene	0.355	0.313	0.315	0.293	0.286	0.312	8.7	
Phenanthrene	1.062	0.948	0.930	0.873	0.866	0.936	8.4	
Anthracene	1.050	0.918	0.896	0.858	0.836	0.912	9.2	
Carbazole	0.520	0.130	0.083	0.093	0.127	0.190	97.3	
Di-n-butylphthalate	1.675	1.521	1.476	1.339	1.303	1.463	10.2	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: CREEK Group: GP-008-SS

Instrument ID: BNA1 Calibration Date(s): 10/6/99 10/6/99

Calibration Times: 1021 1342

Lab File ID: RRF20 = B6269.D RRF50 = B6270.D
RRF80 = B6271.D RRF120 = B6272.D RRF160 = B6273.D

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
Fluoranthene	*	1.114	0.951	0.992	0.936	0.921	0.983	7.9	*
Pyrene		1.493	1.381	1.491	1.235	1.258	1.372	9.0	
Butylbenzylphthalate		0.909	0.833	0.906	0.774	0.763	0.837	8.3	
3,3'-Dichlorobenzidine		0.180	0.107	0.127	0.171	0.207	0.158	25.5	
Benzo[a]anthracene		1.138	1.050	1.109	1.055	1.056	1.082	3.7	
Chrysene		1.069	0.977	1.019	0.923	0.955	0.989	5.8	
bis(2-Ethylhexyl)phthalate		1.263	1.120	1.149	1.007	0.966	1.101	10.7	
Di-n-octylphthalate	*	2.028	1.747	1.830	1.689	1.587	1.776	9.4	*
Benzo[b]fluoranthene		1.130	1.148	1.090	1.236	1.085	1.138	5.3	
Benzo[k]fluoranthene		1.095	0.977	1.028	0.948	1.102	1.030	6.7	
Benzo[a]pyrene	*	0.931	0.883	0.914	0.943	0.961	0.926	3.2	*
Indeno(1,2,3-cd)pyrene		0.547	0.667	0.689	0.627	0.753	0.657	11.6	
Dibenz[a,h]anthracene		0.585	0.629	0.621	0.689	0.724	0.649	8.6	
Benzo[g,h,i]perylene		0.659	0.694	0.690	0.736	0.719	0.700	4.2	
Nitrobenzene-d5		0.481	0.466	0.486	0.470	0.491	0.479	2.2	
2-Fluorobiphenyl		1.587	1.404	1.367	1.275	1.247	1.376	9.8	
Terphenyl-d14		1.201	1.207	1.279	1.119	1.084	1.178	6.6	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Response Factor Report BNA-RTE

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Initial Calibration

Calibration Files
80 =B6765.D 160 =B6767.D 120 =B6766.D
50 =B6764.D 20 =B6763.D

		Compound	80	160	120	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d4	----------ISTD----------						
2)		Pyridine	1.807	1.712	1.717	1.892	2.012	1.828	6.94
3)		N-nitroso-dimethylamine	0.921	1.030	0.973	0.888	1.056	0.974	7.27
4)	S	2-Fluorophenol	1.506	1.628	1.548	1.575	1.677	1.587	4.25
5)		Aniline	0.900	1.526	1.335	0.871	1.358	1.198	24.62
6)	S	2-Chlorophenol-d4	1.424	1.417	1.439	1.509	1.658	1.489	6.80
7)	S	Phenol-d5	1.781	1.867	1.807	1.860	2.064	1.876	5.92
8)	CM	Phenol	1.908	2.012	1.932	2.039	2.357	2.050	8.80
9)		bis(2-Chloroethyl)ether	1.739	1.714	1.638	1.886	2.294	1.854	14.12
10)	M	2-Chlorophenol	1.430	1.425	1.434	1.515	1.630	1.487	5.94
11)		1,3-Dichlorobenzene	1.585	1.658	1.651	1.697	1.843	1.687	5.69
12)	CM	1,4-Dichlorobenzene	1.600	1.660	1.629	1.742	1.866	1.699	6.31
13)	S	1,2-Dichlorobenzene-d4	0.922	0.929	0.902	0.996	1.108	0.971	8.66
14)		1,2-Dichlorobenzene	1.469	1.418	1.437	1.605	1.739	1.534	8.87
15)		Benzyl alcohol	0.904	0.942	0.901	0.967	0.993	0.942	4.24
16)		2-Methylphenol	1.139	1.155	1.129	1.289	1.385	1.219	9.28
17)		bis(2-chloroisopropyl)eth	3.063	3.337	3.234	3.454	3.800	3.378	8.18
18)		Hexachloroethane	0.621	0.705	0.660	0.658	0.739	0.677	6.80
19)		3+4-Methyphenols	1.230	1.287	1.239	1.318	1.480	1.311	7.70
20)	PM	N-Nitroso-di-n-propylamin	1.303	1.334	1.357	1.375	1.531	1.380	6.43
21)	I	Naphthalene-d8	----------ISTD----------						
22)	S	Nitrobenzene-d5	0.512	0.531	0.558	0.561	0.578	0.548	4.82
23)		Nitrobenzene	0.473	0.451	0.473	0.492	0.522	0.482	5.52
24)		Isophorone	0.980	1.005	1.036	1.031	1.116	1.034	4.96
25)	C	2-Nitrophenol	0.209	0.211	0.220	0.210	0.219	0.214	2.38
26)		2,4-Dimethylphenol	0.389	0.393	0.400	0.418	0.413	0.403	3.08
27)		bis(2-Chloroethoxy)methan	0.579	0.555	0.580	0.622	0.658	0.599	6.87
28)	C	2,4-Dichlorophenol	0.325	0.307	0.316	0.332	0.353	0.327	5.40
29)		Benzoic Acid	0.275	0.292	0.295	0.286	0.265	0.283	4.51
30)	M	1,2,4-Trichlorobenzene	0.345	0.329	0.358	0.367	0.384	0.357	5.83
31)		Naphthalene	0.984	0.907	0.976	1.038	1.166	1.014	9.54
32)		4-Chloroaniline	0.109	0.100	0.118	0.098	0.104	0.106	7.70
33)	C	Hexachlorobutadiene	0.209	0.200	0.215	0.223	0.233	0.216	5.83
34)	CM	4-Chloro-3-methylphenol	0.356	0.368	0.365	0.372	0.404	0.373	4.94
35)		2-Methylnaphthalene	0.661	0.640	0.666	0.742	0.787	0.699	8.93
36)	I	Acenaphthene-d10	----------ISTD----------						
37)	P	Hexachlorocyclopentadiene	0.347	0.321	0.352	0.355	0.334	0.342	4.14
38)	C	2,4,6-Trichlorophenol	0.435	0.404	0.439	0.475	0.464	0.443	6.21
39)		2,4,5-Trichlorophenol	0.462	0.424	0.474	0.503	0.489	0.470	6.38
40)	S	2-Fluorobiphenyl	1.419	1.245	1.403	1.599	1.683	1.470	11.77
41)		2-Chloronaphthalene	1.181	1.080	1.175	1.316	1.352	1.221	9.15

000334

(#) = Out of Range

Response Factor Report BNA-RTE

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Initial Calibration

Calibration Files
80 =B6765.D 160 =B6767.D 120 =B6766.D
50 =B6764.D 20 =B6763.D

		Compound	80	160	120	50	20	Avg	%RSD
42)		2-Nitroaniline	0.519	0.528	0.529	0.546	0.603	0.545	6.22
43)		Dimethylphthalate	1.473	1.202	1.312	1.635	1.717	1.468	14.65
44)		Acenaphthylene	1.844	1.237	1.377	2.105	2.263	1.765	25.33
45)		2,6-Dinitrotoluene	0.347	0.325	0.350	0.374	0.371	0.354	5.64
46)		3-Nitroaniline	0.015	0.061	0.008	0.028	0.027	0.028	72.88
47)	CM	Acenaphthene	1.152	0.994	1.125	1.312	1.364	1.190	12.58
48)	P	2,4-Dinitrophenol	0.181	0.210	0.206	0.170	0.142	0.182	15.29
49)		Dibenzofuran	1.674	1.519	1.625	1.879	1.900	1.720	9.60
50)	PM	4-Nitrophenol	0.145	0.157	0.162	0.160	0.154	0.156	4.24
51)	M	2,4-Dinitrotoluene	0.491	0.478	0.508	0.543	0.529	0.510	5.25
52)		Fluorene	1.298	1.116	1.215	1.388	1.493	1.302	11.27
53)		Diethylphthalate	1.521	1.137	1.363	1.722	1.876	1.524	19.10
54)		4-Chlorophenyl-phenylethe	0.658	0.499	0.583	0.731	0.767	0.647	16.86
55)	S	2,4,6-Tribromophenol	0.332	0.307	0.339	0.337	0.323	0.328	3.95
56)		4-Nitroaniline	0.145	0.101	0.134	0.172	0.197	0.150	24.34
57)	I	Phenanthrene-d10	----------ISTD----------						
58)		4,6-Dinitro-2-methylpheno	0.134	0.126	0.136	0.127	0.131	0.131	3.24
59)	C	N-Nitrosodiphenylamine	0.319	0.221	0.320	0.374	0.458	0.339	25.66
60)		1,2-Diphenylhydrazine	1.072	0.997	1.063	1.154	1.330	1.123	11.41
61)		4-Bromophenyl-phenylether	0.227	0.215	0.223	0.241	0.268	0.235	8.78
62)		Hexachlorobenzene	0.316	0.287	0.302	0.311	0.345	0.312	6.91
63)	CM	Pentachlorophenol	0.177	0.186	0.190	0.182	0.186	0.184	2.67
64)		Phenanthrene	0.943	0.883	0.922	1.062	1.191	1.000	12.58
65)		Anthracene	0.996	0.856	0.931	1.057	1.179	1.004	12.29
66)		Carbazole	0.135	0.142	0.118	0.180	0.282	0.172	38.37
67)		Di-n-butylphthalate	1.569	1.435	1.505	1.762	1.993	1.653	13.68
68)	C	Fluoranthene	1.091	0.997	1.035	1.165	1.317	1.121	11.31
69)	I	Chrysene-d12	----------ISTD----------						
70)		Benzidine	0.011	0.004	0.007	0.008	0.003	0.007#	50.57
71)	M	Pyrene	1.259	1.121	1.224	1.297	1.385	1.257	7.72
72)	S	Terphenyl-d14	1.150	1.082	1.151	1.200	1.196	1.156	4.12
73)		Butylbenzylphthalate	0.789	0.805	0.813	0.874	0.945	0.845	7.60
74)		Benzo[a]anthracene	1.117	1.043	1.079	1.159	1.200	1.119	5.55
75)		3,3'-Dichlorobenzidine	0.277	0.266	0.267	0.263	0.224	0.259	7.88
76)		Chrysene	1.022	0.893	0.961	1.060	1.146	1.017	9.46
77)		bis(2-Ethylhexyl)phthalat	1.157	1.059	1.134	1.260	1.382	1.198	10.45
78)		Di-n-octylphthalate	2.002	1.877	1.970	2.311	2.441	2.120	11.43
79)		Indeno(1,2,3-cd)pyrene	0.969	0.875	0.933	0.816	0.936	0.906	6.67
80)	I	Perylene-d12	----------ISTD----------						
81)		Benzo[b]fluoranthene	1.215	1.506	1.406	1.245	1.232	1.321	9.76
82)		Benzo[k]fluoranthene	0.966	0.628	0.743	1.027	1.208	0.914	25.21

000335

(#) = Out of Range

Response Factor Report BNA-RTE

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Initial Calibration

Calibration Files
80 =B6765.D 160 =B6767.D 120 =B6766.D
50 =B6764.D 20 =B6763.D

		Compound	80	160	120	50	20	Avg	%RSD
83)	C	Benzo[a]pyrene	1.006	0.974	0.970	1.024	1.106	1.016	5.44
84)		Dibenz[a,h]anthracene	0.851	0.792	0.818	0.937	0.895	0.858	6.80
85)		Benzo[g,h,i]perylene	0.814	0.762	0.820	0.880	0.901	0.835	6.68

(#) = Out of Range

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6763.D
Acq Time : 5 Nov 99 10:27 am
Sample : 20 NG BNA CCC
Misc :
Quant Time: Nov 7 11:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.72	152	393402	40.00	ng	-0.01
21) Naphthalene-d8	12.87	136	1581972	40.00	ng	-0.01
36) Acenaphthene-d10	17.47	164	853852	40.00	ng	0.00
57) Phenanthrene-d10	21.31	188	1553270	40.00	ng	0.00
69) Chrysene-d12	28.32	240	1473413	40.00	ng	-0.02
80) Perylene-d12	31.82	264	1461300	40.00	ng	0.00
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.99	112	329895	22.28	ng	
6) 2-Chlorophenol-d4	9.28	132	326191	23.29	ng	
7) Phenol-d5	9.14	99	405911	23.18	ng	
13) 1,2-Dichlorobenzene-d4	10.17	152	217941	24.04	ng	
22) Nitrobenzene-d5	11.16	82	457075	22.59	ng	
40) 2-Fluorobiphenyl	15.76	172	718589	23.72	ng	
55) 2,4,6-Tribromophenol	19.57	330	138026	19.48	ng	
72) Terphenyl-d14	25.63	244	880776	20.79	ng	
Target Compounds						Qvalue
2) Pyridine	4.32	79	395836	22.28	ng	m 0
3) N-nitroso-dimethylamine	4.36	42	207705	22.92	ng	99
5) Aniline	9.10	93	267180	30.20	ng	98
8) Phenol	9.16	94	463722	24.71	ng	97
9) bis(2-Chloroethyl)ether	9.27	93	451272	26.38	ng	94
10) 2-Chlorophenol	9.33	128	320658	22.80	ng	100
11) 1,3-Dichlorobenzene	9.62	146	362456	23.25	ng	98
12) 1,4-Dichlorobenzene	9.75	146	367107	23.33	ng	98
14) 1,2-Dichlorobenzene	10.20	146	341980	23.66	ng	98
15) Benzyl alcohol	10.20	108	195422	21.98	ng	96
16) 2-Methylphenol	10.55	108	272458	24.33	ng	96
17) bis(2-chloroisopropyl)ethe	10.55	45	747478	24.81	ng	98
18) Hexachloroethane	10.91	117	145441	23.82	ng	95
19) 3+4-Methyphenols	10.94	108	582081	48.11	ng	100
20) N-Nitroso-di-n-propylamine	10.92	70	301152	23.51	ng	97
23) Nitrobenzene	11.21	77	412918	22.06	ng	98
24) Isophorone	11.80	82	882756	22.79	ng	99
25) 2-Nitrophenol	12.01	139	172913	20.95	ng	98
26) 2,4-Dimethylphenol	12.21	107	326799	21.22	ng	97
27) bis(2-Chloroethoxy)methane	12.44	93	520735	22.74	ng	95
28) 2,4-Dichlorophenol	12.62	162	279475	21.74	ng	98
29) Benzoic Acid	12.66	105	209272	19.25	ng	90
30) 1,2,4-Trichlorobenzene	12.79	180	303473	22.21	ng	100
31) Naphthalene	12.92	128	922002	23.70	ng	100
32) 4-Chloroaniline	13.24	127	82615	19.12	ng	95
33) Hexachlorobutadiene	13.41	225	184444	22.27	ng	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6763.D
Acq Time : 5 Nov 99 10:27 am
Sample : 20 NG BNA CCC
Misc :
Quant Time: Nov 7 11:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.54	107	319878	22.70	ng		92
35) 2-Methylnaphthalene	14.71	142	622669	23.82	ng		96
37) Hexachlorocyclopentadiene	15.31	237	142404	19.20	ng		97
38) 2,4,6-Trichlorophenol	15.58	196	198249	21.34	ng		97
39) 2,4,5-Trichlorophenol	15.68	196	208641	21.14	ng		97
41) 2-Chloronaphthalene	15.96	162	577194	22.89	ng		99
42) 2-Nitroaniline	16.42	65	257490	23.23	ng		93
43) Dimethylphthalate	17.01	163	733048	23.32	ng		96
44) Acenaphthylene	17.05	152	966283	24.55	ng		99
45) 2,6-Dinitrotoluene	17.19	165	158450	21.39	ng		80
46) 3-Nitroaniline	17.56	138	11553	35.78	ng	m	89
47) Acenaphthene	17.55	153	582494	23.69	ng		96
48) 2,4-Dinitrophenol	17.80	184	60575	15.68	ng		93
49) Dibenzofuran	17.96	168	811104	22.70	ng		100
50) 4-Nitrophenol	18.10	109	65788	21.22	ng		95
51) 2,4-Dinitrotoluene	18.20	165	225777	21.55	ng		92
52) Fluorene	18.86	166	637586	23.01	ng		99
53) Diethylphthalate	18.89	149	800846	24.66	ng		99
54) 4-Chlorophenyl-phenylether	18.93	204	327293	23.31	ng		99
56) 4-Nitroaniline	19.19	138	83922	27.19	ng		95
58) 4,6-Dinitro-2-methylphenol	19.26	198	101477	19.51	ng		96
59) N-Nitrosodiphenylamine	19.30	169	356047	28.71	ng		98
60) 1,2-Diphenylhydrazine	19.33	77	1032811	24.81	ng		97
61) 4-Bromophenyl-phenylether	20.20	248	208026	23.63	ng		94
62) Hexachlorobenzene	20.53	284	268085	21.83	ng		97
63) Pentachlorophenol	21.05	266	144650	21.02	ng		98
64) Phenanthrene	21.37	178	924606	25.26	ng		99
65) Anthracene	21.48	178	915949	23.69	ng		98
66) Carbazole	21.99	167	219185	41.76	ng		95
67) Di-n-butylphthalate	23.19	149	1548164	25.41	ng		99
68) Fluoranthene	24.50	202	1023169	24.15	ng		97
70) Benzidine	25.01	184	2102	5.10	ng	m	0
71) Pyrene	25.08	202	1020528	22.00	ng		97
73) Butylbenzylphthalate	27.10	149	695835	23.94	ng		94
74) Benzo[a]anthracene	28.26	228	883778	21.48	ng		98
75) 3,3'-Dichlorobenzidine	28.35	252	165141	16.18	ng		99
76) Chrysene	28.38	228	844325	22.42	ng		98
77) bis(2-Ethylhexyl)phthalate	28.72	149	1018215	23.89	ng		96
78) Di-n-octylphthalate	30.24	149	1798035	24.38	ng		100
79) Indeno(1,2,3-cd)pyrene	34.44	276	689439	19.32	ng		93
81) Benzo[b]fluoranthene	30.95	252	899952	20.28	ng	m	96
82) Benzo[k]fluoranthene	31.01	252	882504	25.02	ng		97
83) Benzo[a]pyrene	31.67	252	808343	22.00	ng		97
84) Dibenz[a,h]anthracene	34.49	278	653867	21.04	ng		94

(#) = qualifier out of range (m) = manual integration

000338

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6763.D
Acq Time : 5 Nov 99 10:27 am
Sample : 20 NG BNA CCC
Misc :
Quant Time: Nov 7 11:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.18	276	658399	22.15 ng	99

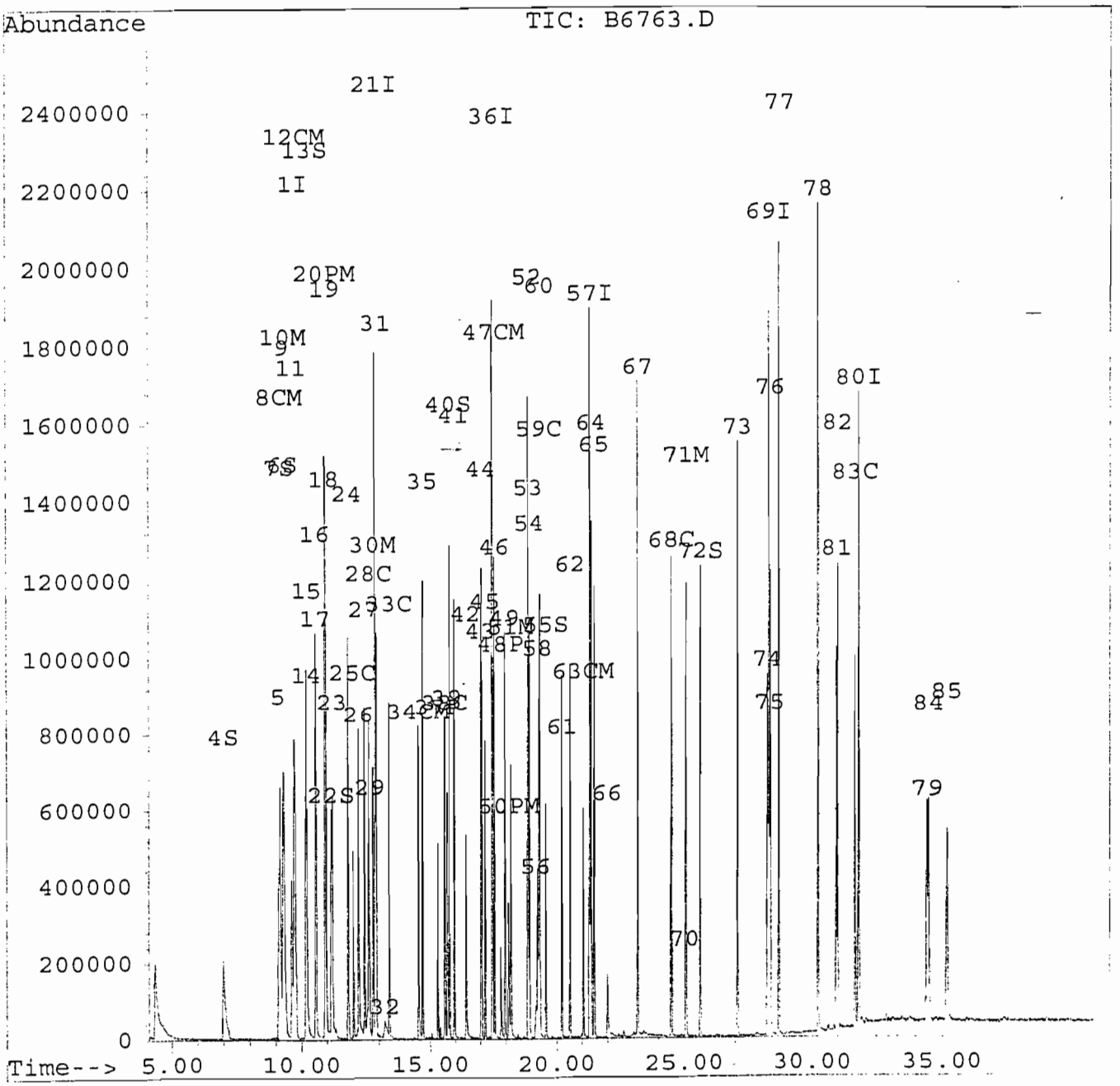
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6763.D
Acq Time : 5 Nov 99 10:27 am
Sample : 20 NG BNA CCC
Misc :
Quant Time: Nov 7 11:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

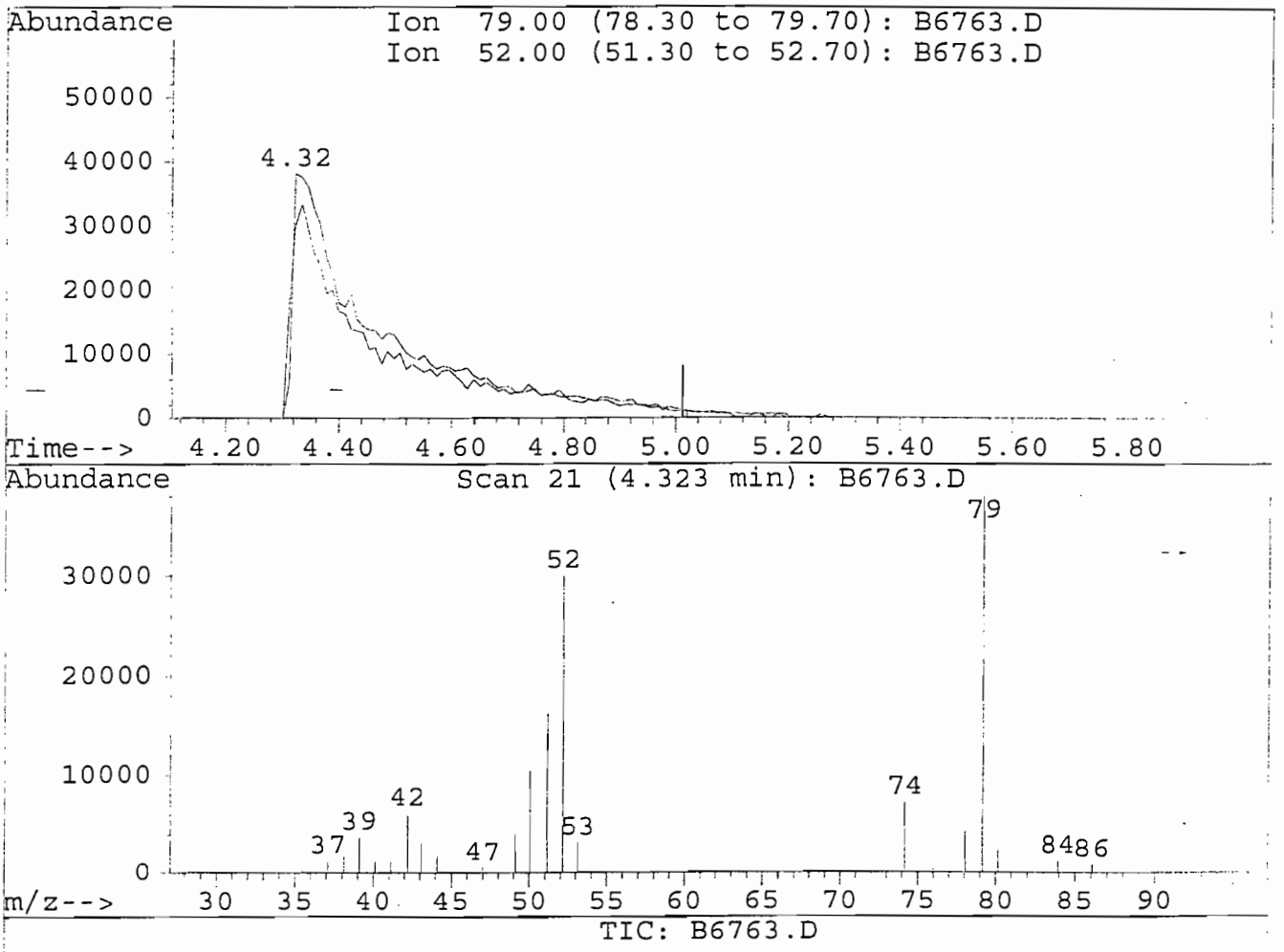


Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6763.D
Acq Time : 5 Nov 99 10:27 am
Sample : 20 NG BNA CCC
Misc :
Quant Time: Nov 7 11:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



(2) Pyridine
4.32min 22.28ng m
response 395836

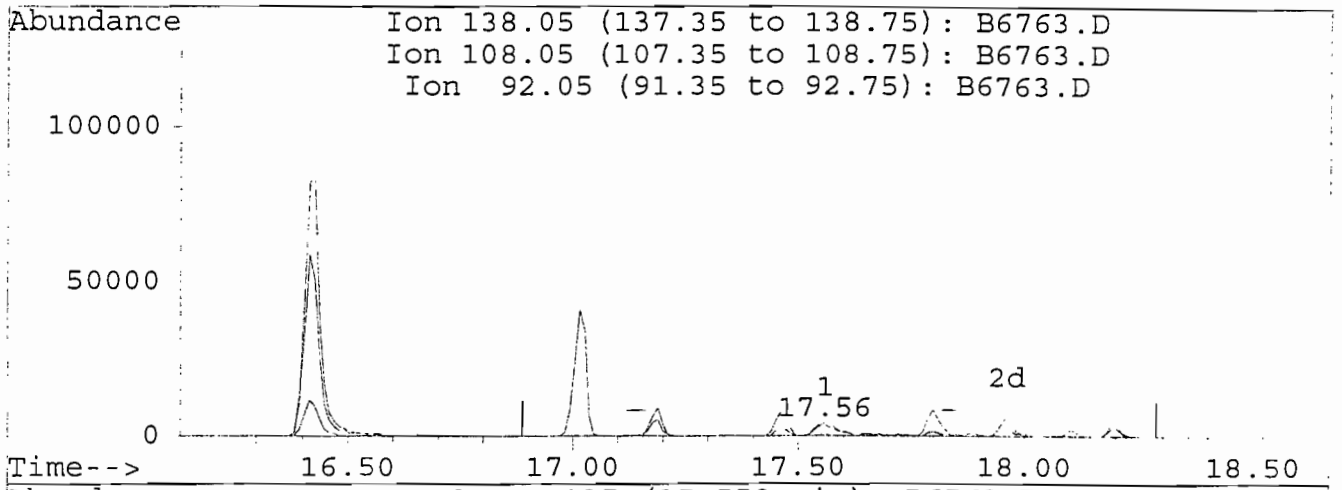
Ion	Exp%	Act%
79.00	100	100
52.00	86.60	78.67
0.00	0.00	0.00
0.00	0.00	0.00

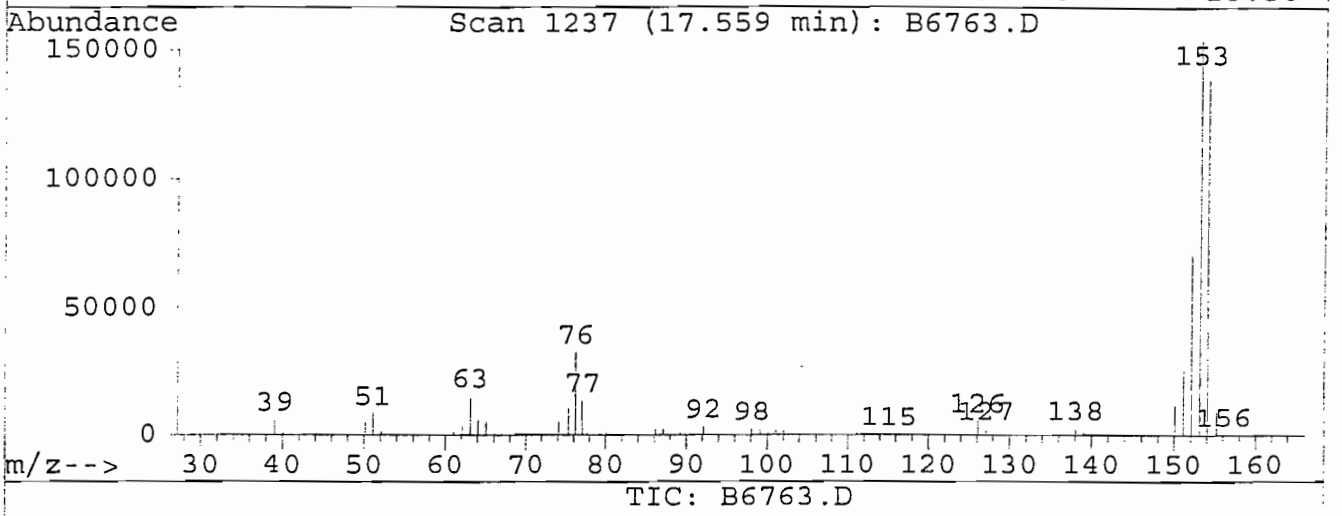
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6763.D
Acq Time : 5 Nov 99 10:27 am
Sample : 20 NG BNA CCC
Misc :
Quant Time: Nov 7 11:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6763.D

(46) 3-Nitroaniline
17.56min 35.78ng m
response 11553

Ion	Exp%	Act%
138.05	100	100
108.05	11.10	21.83
92.05	106.30	116.36
0.00	0.00	0.00

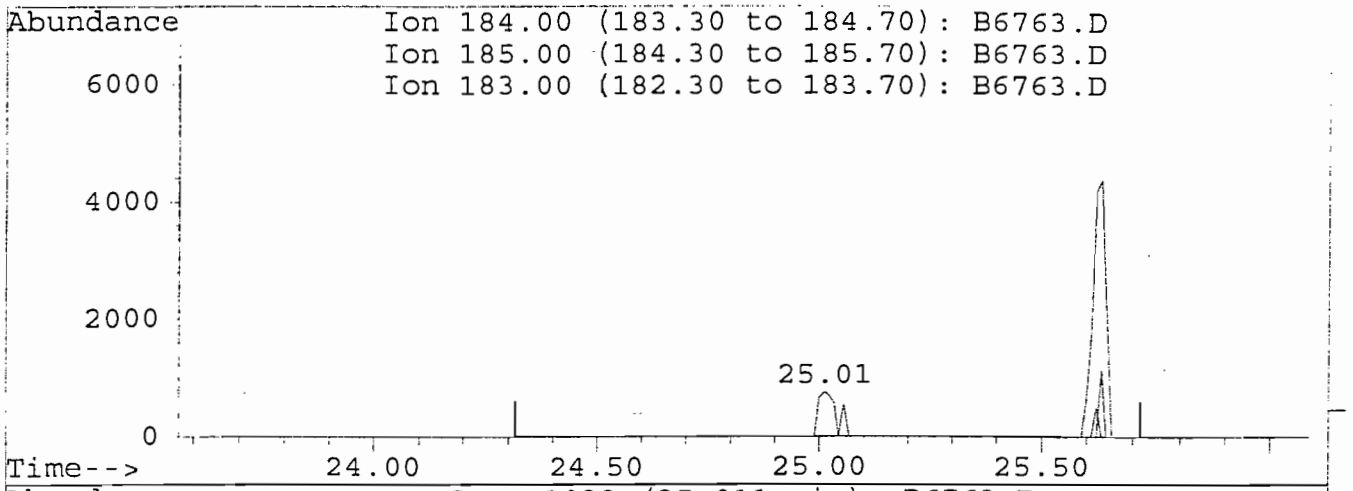
000342

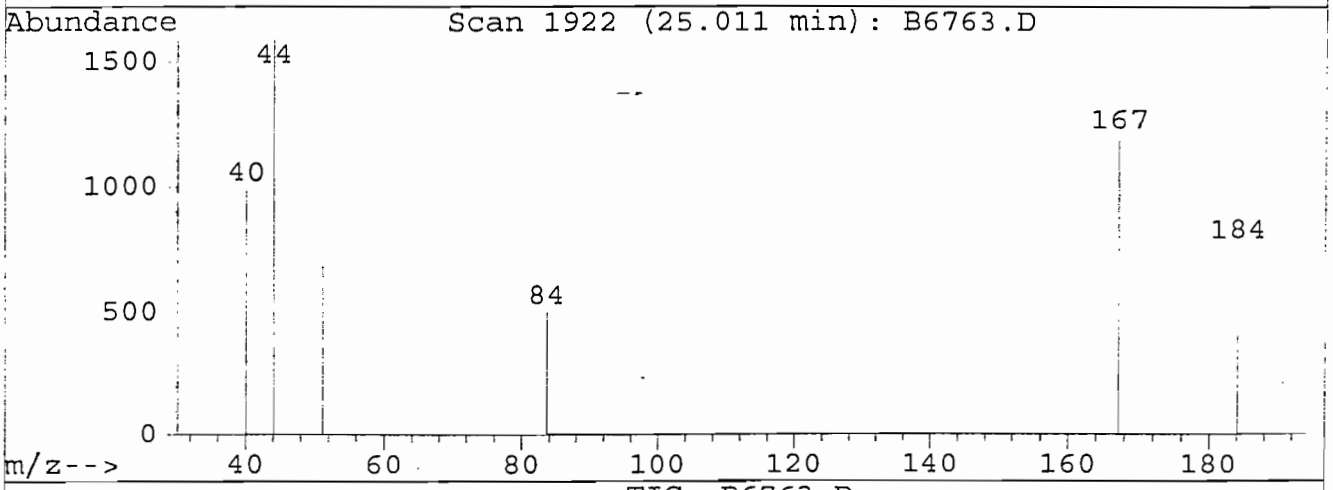
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6763.D
Acq Time : 5 Nov 99 10:27 am
Sample : 20 NG BNA CCC
Misc :
Quant Time: Nov 7 11:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6763.D

(70) Benzidine
25.01min 5.10ng m
response 2102

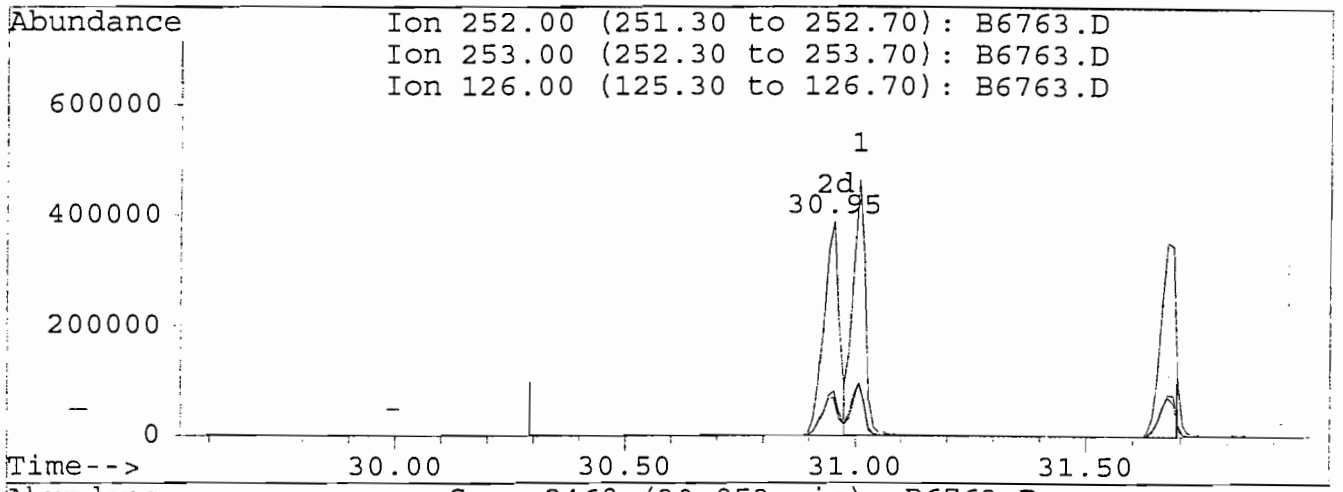
Ion	Exp%	Act%
184.00	100	100
185.00	15.60	0.00
183.00	13.00	0.00
0.00	0.00	0.00

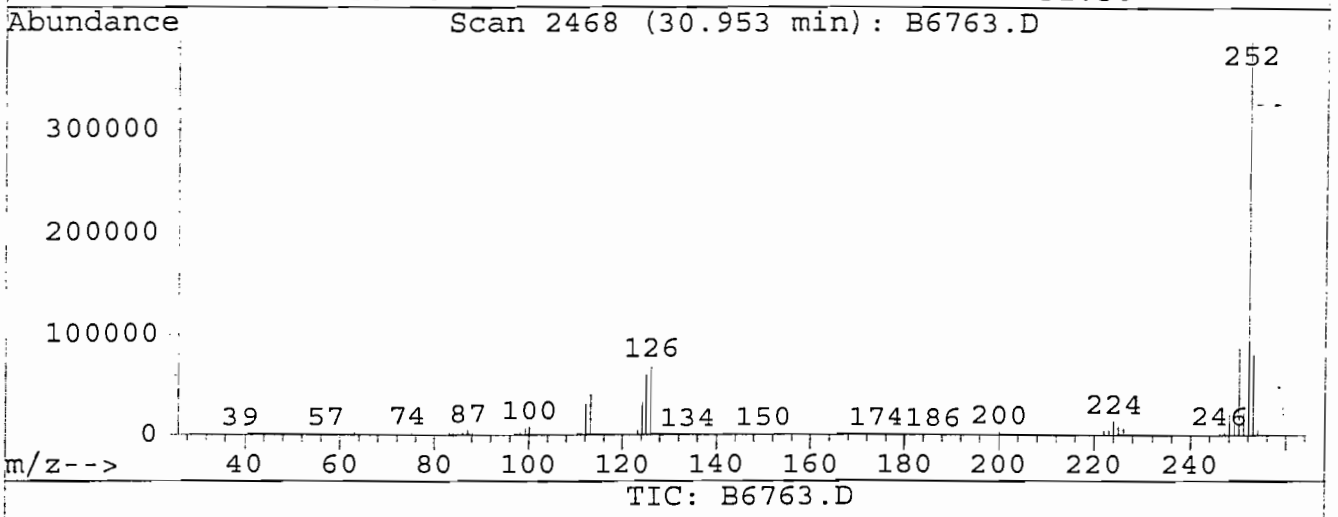
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6763.D
Acq Time : 5 Nov 99 10:27 am
Sample : 20 NG BNA CCC
Misc :
Quant Time: Nov 7 11:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6763.D

(81) Benzo[b]fluoranthene
30.95min 20.28ng m
response 899952

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	20.98
126.00	17.80	17.92
0.00	0.00	0.00

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6764.D
Acq Time : 5 Nov 99 11:44 am
Sample : 50 NG BNA CCC
Misc :
Quant Time: Nov 7 11:41 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.72	152	349752	40.00	ng	-0.01
21) Naphthalene-d8	12.88	136	1276729	40.00	ng	0.00
36) Acenaphthene-d10	17.47	164	669391	40.00	ng	0.00
57) Phenanthrene-d10	21.32	188	1366067	40.00	ng	0.00
69) Chrysene-d12	28.33	240	1214791	40.00	ng	0.00
80) Perylene-d12	31.83	264	1062533	40.00	ng	0.00
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.00	112	688442	52.30	ng	
6) 2-Chlorophenol-d4	9.29	132	659554	52.97	ng	
7) Phenol-d5	9.15	99	813260	52.23	ng	
13) 1,2-Dichlorobenzene-d4	10.17	152	435576	54.03	ng	
22) Nitrobenzene-d5	11.18	82	895686	54.85	ng	
40) 2-Fluorobiphenyl	15.78	172	1338281	56.34	ng	
55) 2,4,6-Tribromophenol	19.60	330	281804	50.73	ng	
72) Terphenyl-d14	25.65	244	1822815	52.18	ng	
Target Compounds						Qvalue
2) Pyridine	4.31	79	827279	52.37	ng	m 0
3) N-nitroso-dimethylamine	4.36	42	388136	48.18	ng	96
5) Aniline	9.10	93	380753	48.41	ng	98
8) Phenol	9.17	94	891604	53.45	ng	99
9) bis(2-Chloroethyl)ether	9.27	93	824353	54.21	ng	92
10) 2-Chlorophenol	9.33	128	662424	52.97	ng	97
11) 1,3-Dichlorobenzene	9.62	146	741818	53.52	ng	96
12) 1,4-Dichlorobenzene	9.75	146	761523	54.43	ng	99
14) 1,2-Dichlorobenzene	10.20	146	701743	54.62	ng	98
15) Benzyl alcohol	10.21	108	422697	53.47	ng	96
16) 2-Methylphenol	10.56	108	563531	56.59	ng	97
17) bis(2-chloroisopropyl)ethe	10.56	45	1510089	56.38	ng	98
18) Hexachloroethane	10.91	117	287826	53.02	ng	91
19) 3+4-Methyphenols	10.96	108	1152592	107.16	ng	100
20) N-Nitroso-di-n-propylamine	10.94	70	601336	52.79	ng	95
23) Nitrobenzene	11.22	77	785681	52.01	ng	99
24) Isophorone	11.82	82	1645677	52.64	ng	99
25) 2-Nitrophenol	12.02	139	335425	50.35	ng	99
26) 2,4-Dimethylphenol	12.23	107	666672	53.63	ng	100
27) bis(2-Chloroethoxy)methane	12.45	93	992863	53.73	ng	97
28) 2,4-Dichlorophenol	12.63	162	530497	51.14	ng	97
29) Benzoic Acid	12.74	105	456355	52.00	ng	99
30) 1,2,4-Trichlorobenzene	12.79	180	586041	53.15	ng	98
31) Naphthalene	12.92	128	1656456	52.75	ng	98
32) 4-Chloroaniline	13.26	127	155634	44.62	ng	m 98
33) Hexachlorobutadiene	13.42	225	356081	53.27	ng	98

(#) = qualifier out of range (m) = manual integration

000345

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6764.D
Acq Time : 5 Nov 99 11:44 am
Sample : 50 NG BNA CCC
Misc :
Quant Time: Nov 7 11:41 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.56	107	593692	52.19	ng		97
35) 2-Methylnaphthalene	14.71	142	1184168	56.13	ng		98
37) Hexachlorocyclopentadiene	15.32	237	297306	51.14	ng		99
38) 2,4,6-Trichlorophenol	15.59	196	397082	54.53	ng		99
39) 2,4,5-Trichlorophenol	15.68	196	420961	54.42	ng		96
41) 2-Chloronaphthalene	15.97	162	1101434	55.72	ng		98
42) 2-Nitroaniline	16.44	65	456696	52.55	ng		98
43) Dimethylphthalate	17.04	163	1368414	55.52	ng		99
44) Acenaphthylene	17.06	152	1761256	57.08	ng		99
45) 2,6-Dinitrotoluene	17.21	165	312925	53.89	ng		84
46) 3-Nitroaniline	17.56	138	23270	91.92	ng		85
47) Acenaphthene	17.56	153	1098028	56.95	ng		99
48) 2,4-Dinitrophenol	17.81	184	142476	47.04	ng		98
49) Dibenzofuran	17.98	168	1572317	56.12	ng		98
50) 4-Nitrophenol	18.13	109	134151	55.20	ng		91
51) 2,4-Dinitrotoluene	18.22	165	454702	55.36	ng		98
52) Fluorene	18.88	166	1161259	53.46	ng		98
53) Diethylphthalate	18.91	149	1440617	56.58	ng		100
54) 4-Chlorophenyl-phenylether	18.95	204	612031	55.61	ng		95
56) 4-Nitroaniline	19.19	138	144169	59.58	ng		93
58) 4,6-Dinitro-2-methylphenol	19.28	198	217144	47.47	ng		91
59) N-Nitrosodiphenylamine	19.32	169	638877	58.57	ng		99
60) 1,2-Diphenylhydrazine	19.36	77	1970817	53.84	ng		99
61) 4-Bromophenyl-phenylether	20.21	248	410836	53.06	ng		98
62) Hexachlorobenzene	20.54	284	530991	49.17	ng		99
63) Pentachlorophenol	21.07	266	310166	51.24	ng		98
64) Phenanthrene	21.38	178	1814038	56.35	ng		100
65) Anthracene	21.50	178	1805145	53.10	ng		99
66) Carbazole	21.99	167	306728	66.46	ng		96
67) Di-n-butylphthalate	23.20	149	3009190	56.15	ng		99
68) Fluoranthene	24.52	202	1988574	53.38	ng		98
70) Benzidine	25.02	184	11444	33.67	ng	m	94
71) Pyrene	25.09	202	1970040	51.51	ng		98
73) Butylbenzylphthalate	27.12	149	1326952	55.38	ng		94
74) Benzo[a]anthracene	28.28	228	1759372	51.86	ng		99
75) 3,3'-Dichlorobenzidine	28.36	252	398621	47.36	ng		98
76) Chrysene	28.40	228	1609692	51.85	ng		99
77) bis(2-Ethylhexyl)phthalate	28.73	149	1912908	54.44	ng		99
78) Di-n-octylphthalate	30.26	149	3509923	57.72	ng		100
79) Indeno(1,2,3-cd)pyrene	34.45	276	1239308	42.13	ng		93
81) Benzo[b]fluoranthene	30.97	252	1653626	51.25	ng		98
82) Benzo[k]fluoranthene	31.04	252	1364073	53.18	ng		98
83) Benzo[a]pyrene	31.70	252	1360214	50.92	ng		96
84) Dibenz[a,h]anthracene	34.53	278	1244291	55.06	ng		96

(#) = qualifier out of range (m) = manual integration

000346

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6764.D
Acq Time : 5 Nov 99 11:44 am
Sample : 50 NG BNA CCC
Misc :
Quant Time: Nov 7 11:41 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.22	276	1168909	54.07 ng	99

000347

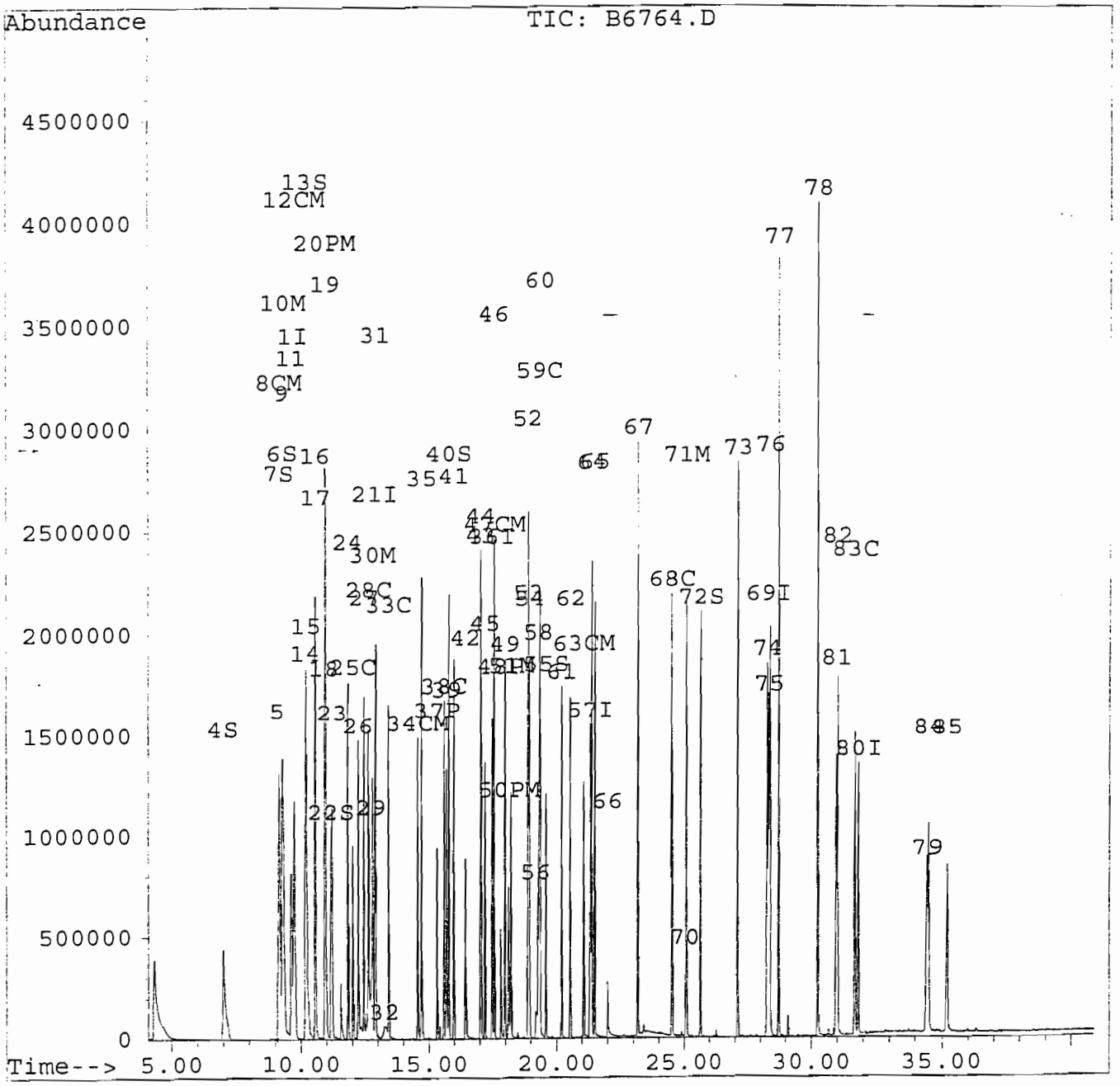
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6764.D
Acq Time : 5 Nov 99 11:44 am
Sample : 50 NG BNA CCC
Misc :
Quant Time: Nov 7 11:41 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



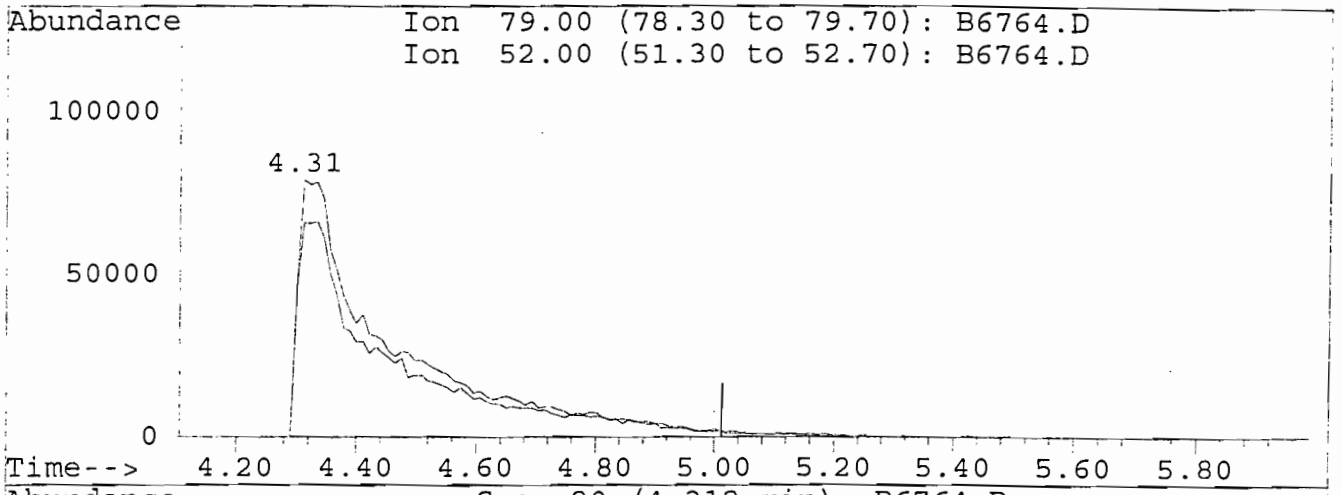
000348

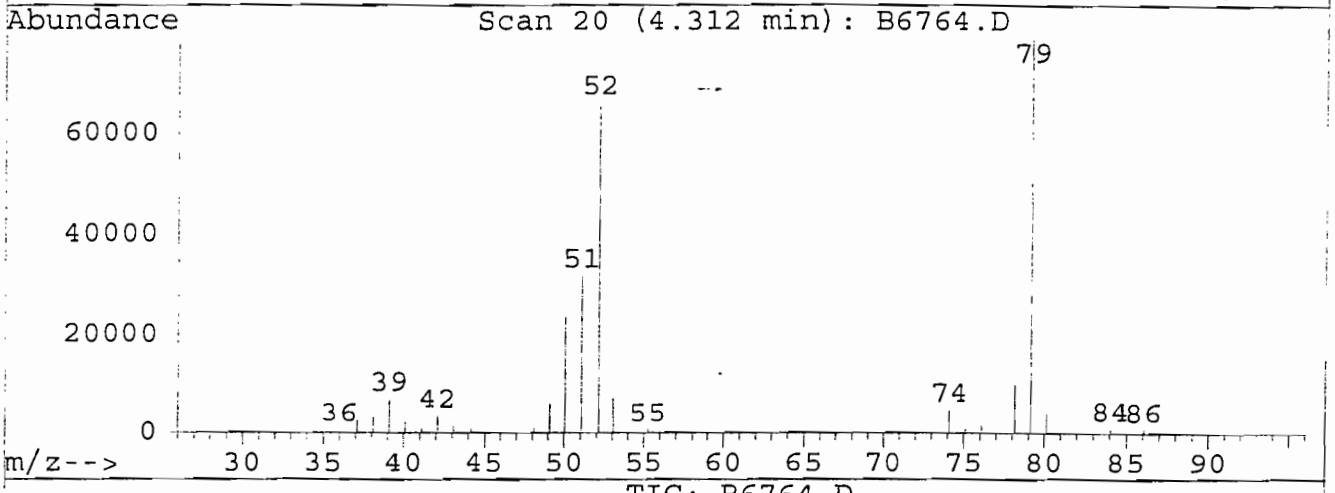
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6764.D
Acq Time : 5 Nov 99 11:44 am
Sample : 50 NG BNA CCC
Misc :
Quant Time: Nov 7 11:41 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6764.D

(2) Pyridine
4.31min 52.37ng m
response 827279

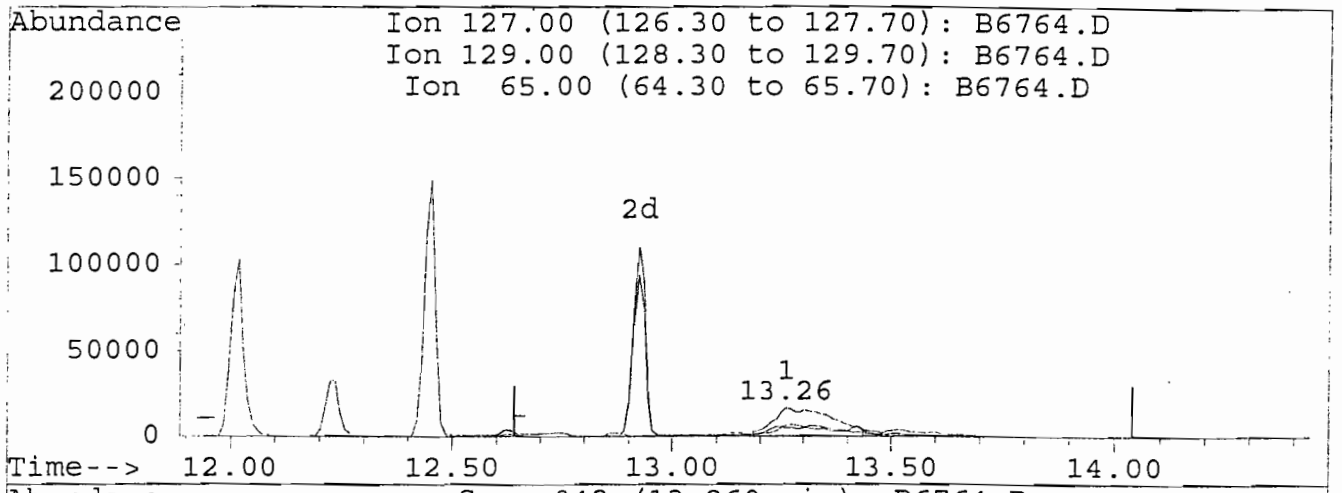
Ion	Exp%	Act%
79.00	100	100
52.00	86.60	83.60
0.00	0.00	0.00
0.00	0.00	0.00

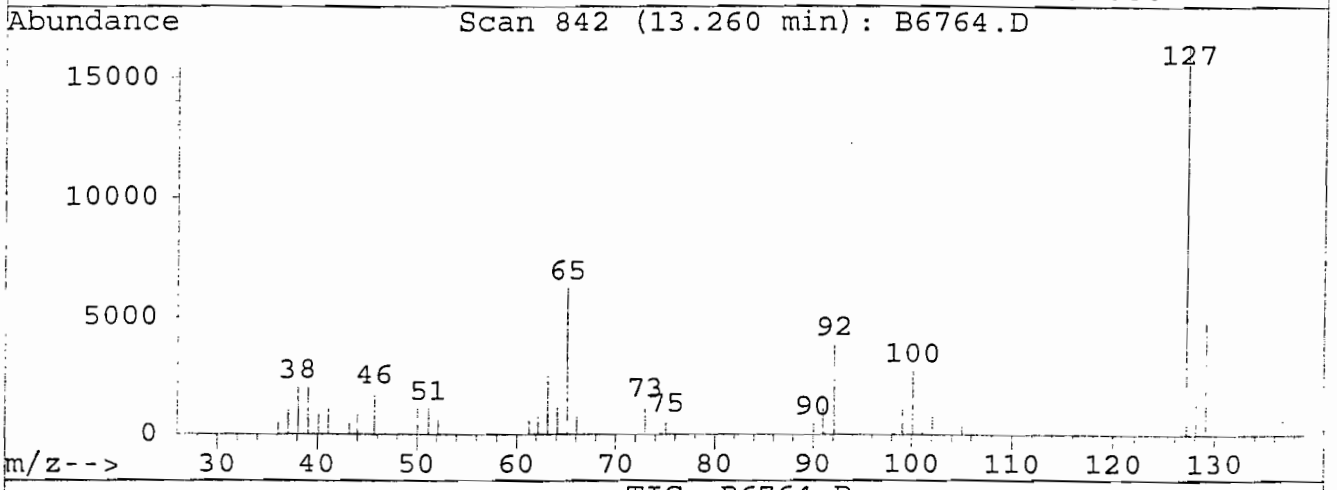
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6764.D
Acq Time : 5 Nov 99 11:44 am
Sample : 50 NG BNA CCC
Misc :
Quant Time: Nov 7 11:41 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6764.D

(32) 4-Chloroaniline
13.26min 44.62ng m
response 155634

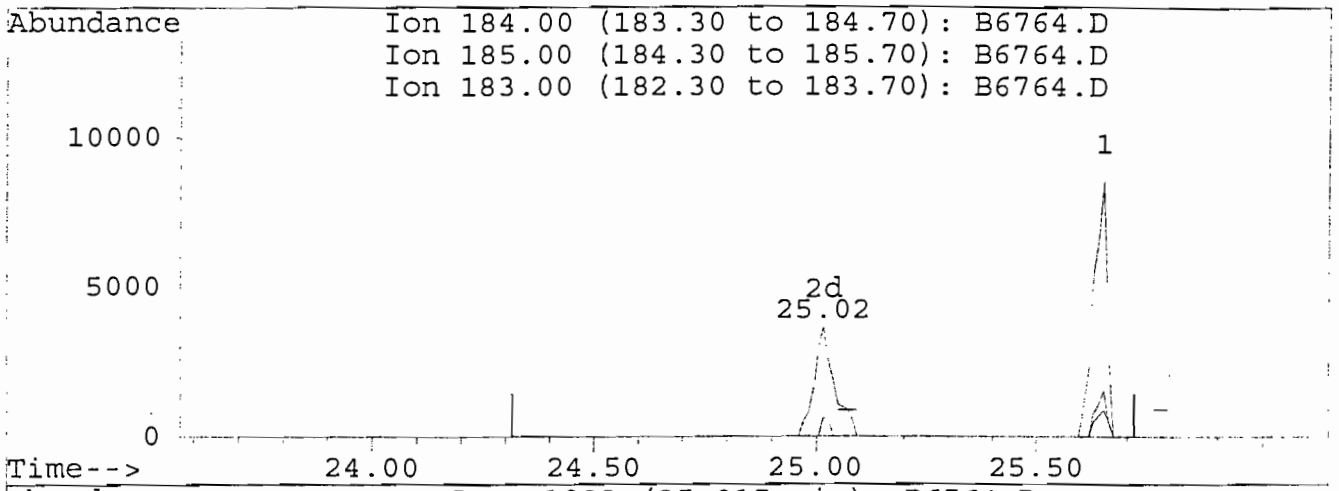
Ion	Exp%	Act%
127.00	100	100
129.00	29.60	29.17
65.00	36.20	37.67
0.00	0.00	0.00

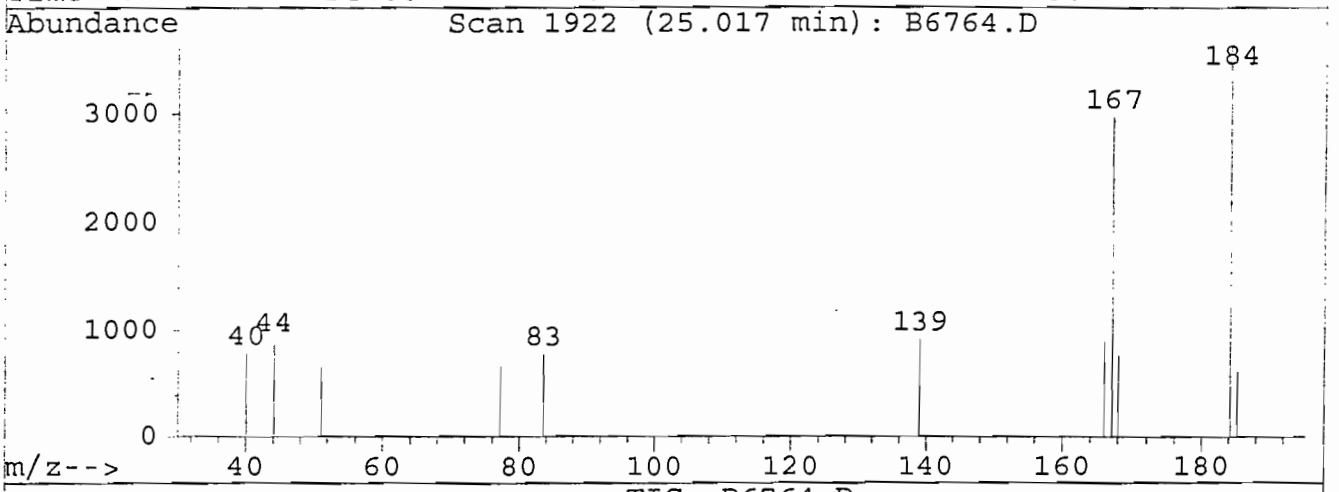
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6764.D
Acq Time : 5 Nov 99 11:44 am
Sample : 50 NG BNA CCC
Misc :
Quant Time: Nov 7 11:41 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6764.D

(70) Benzidine
25.02min 33.67ng m
response 11444

Ion	Exp%	Act%
184.00	100	100
185.00	15.60	16.88
183.00	13.00	0.00
0.00	0.00	0.00

000351

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6765.D
Acq Time : 5 Nov 99 12:35 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 7 11:23 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.73	152	352755	40.00	ng		0.00
21) Naphthalene-d8	12.88	136	1262422	40.00	ng		0.00
36) Acenaphthene-d10	17.48	164	693616	40.00	ng		0.00
57) Phenanthrene-d10	21.32	188	1355974	40.00	ng		0.00
69) Chrysene-d12	28.34	240	1178417	40.00	ng		0.00
80) Perylene-d12	31.83	264	1129788	40.00	ng		0.00
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	7.00	112	1062175	80.00	ng		
6) 2-Chlorophenol-d4	9.29	132	1004694	80.00	ng		
7) Phenol-d5	9.16	99	1256236	80.00	ng		
13) 1,2-Dichlorobenzene-d4	10.17	152	650436	80.00	ng		
22) Nitrobenzene-d5	11.19	82	1291856	80.00	ng		
40) 2-Fluorobiphenyl	15.79	172	1969147	80.00	ng		
55) 2,4,6-Tribromophenol	19.60	330	460519	80.00	ng		
72) Terphenyl-d14	25.66	244	2710850	80.00	ng		
Target Compounds							Qvalue
2) Pyridine	4.31	79	1274639	79.54	ng	m	0
3) N-nitroso-dimethylamine	4.36	42	650050	80.00	ng		100
5) Aniline	9.11	93	634632	80.00	ng		100
8) Phenol	9.20	94	1345960	80.00	ng		100
9) bis(2-Chloroethyl)ether	9.29	93	1226931	80.00	ng		100
10) 2-Chlorophenol	9.34	128	1009007	80.00	ng		100
11) 1,3-Dichlorobenzene	9.63	146	1118300	80.00	ng		100
12) 1,4-Dichlorobenzene	9.76	146	1128981	80.00	ng		100
14) 1,2-Dichlorobenzene	10.20	146	1036671	80.00	ng		100
15) Benzyl alcohol	10.23	108	637830	80.00	ng		100
16) 2-Methylphenol	10.57	108	803454	80.00	ng		100
17) bis(2-chloroisopropyl)ethe	10.57	45	2161048	80.00	ng		100
18) Hexachloroethane	10.92	117	437994	80.00	ng		100
19) 3+4-Methyphenols	10.98	108	1735699	160.00	ng		100
20) N-Nitroso-di-n-propylamine	10.95	70	919028	79.99	ng	m	100
23) Nitrobenzene	11.24	77	1194963	80.00	ng		100
24) Isophorone	11.83	82	2473100	80.00	ng		100
25) 2-Nitrophenol	12.02	139	526946	80.00	ng		100
26) 2,4-Dimethylphenol	12.25	107	983383	80.00	ng		100
27) bis(2-Chloroethoxy)methane	12.47	93	1461865	80.00	ng		100
28) 2,4-Dichlorophenol	12.64	162	820577	80.00	ng		100
29) Benzoic Acid	12.83	105	694176	80.53	ng	m	97
30) 1,2,4-Trichlorobenzene	12.81	180	872127	80.00	ng		100
31) Naphthalene	12.94	128	2483970	80.00	ng		100
32) 4-Chloroaniline	13.34	127	275896	80.00	ng		100
33) Hexachlorobutadiene	13.43	225	528797	80.00	ng		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6765.D
Acq Time : 5 Nov 99 12:35 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 7 11:23 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
34) 4-Chloro-3-methylphenol	14.56	107	899797	80.00	ng	100
35) 2-Methylnaphthalene	14.72	142	1668855	80.00	ng	100
37) Hexachlorocyclopentadiene	15.32	237	481883	80.00	ng	100
38) 2,4,6-Trichlorophenol	15.59	196	603616	80.00	ng	100
39) 2,4,5-Trichlorophenol	15.69	196	641251	80.00	ng	100
41) 2-Chloronaphthalene	15.97	162	1638668	80.00	ng	100
42) 2-Nitroaniline	16.45	65	720468	80.00	ng	100
43) Dimethylphthalate	17.04	163	2043141	80.00	ng	100
44) Acenaphthylene	17.06	152	2557936	80.00	ng	100
45) 2,6-Dinitrotoluene	17.23	165	481335	80.00	ng	100
46) 3-Nitroaniline	17.59	138	20986	76.00	ng	100
47) Acenaphthene	17.56	153	1598242	80.00	ng	100
48) 2,4-Dinitrophenol	17.83	184	251078	80.00	ng	100
49) Dibenzofuran	17.99	168	2322445	80.00	ng	100
50) 4-Nitrophenol	18.14	109	201441	80.00	ng	100
51) 2,4-Dinitrotoluene	18.23	165	680921	80.00	ng	100
52) Fluorene	18.89	166	1800631	80.00	ng	100
53) Diethylphthalate	18.93	149	2110616	80.00	ng	100
54) 4-Chlorophenyl-phenylether	18.96	204	912355	80.00	ng	100
56) 4-Nitroaniline	19.23	138	200587	76.19	ng	100
58) 4,6-Dinitro-2-methylphenol	19.30	198	363248	80.00	ng	100
59) N-Nitrosodiphenylamine	19.34	169	866227	80.00	ng	100
60) 1,2-Diphenylhydrazine	19.36	77	2906881	80.00	ng	100
61) 4-Bromophenyl-phenylether	20.21	248	614884	80.00	ng	100
62) Hexachlorobenzene	20.55	284	857572	80.00	ng	100
63) Pentachlorophenol	21.08	266	480655	80.00	ng	100
64) Phenanthrene	21.39	178	2556139	80.00	ng	100
65) Anthracene	21.51	178	2699745	80.00	ng	100
66) Carbazole	22.00	167	366517	80.00	ng	100
67) Di-n-butylphthalate	23.21	149	4255712	80.00	ng	100
68) Fluoranthene	24.54	202	2958401	80.00	ng	100
70) Benzidine	25.02	184	26373	80.00	ng	100
71) Pyrene	25.10	202	2967817	80.00	ng	100
73) Butylbenzylphthalate	27.13	149	1859439	80.00	ng	100
74) Benzo[a]anthracene	28.29	228	2632821	80.00	ng	100
75) 3,3'-Dichlorobenzidine	28.37	252	653172	80.00	ng	100
76) Chrysene	28.41	228	2409433	80.00	ng	100
77) bis(2-Ethylhexyl)phthalate	28.73	149	2726671	80.00	ng	100
78) Di-n-octylphthalate	30.27	149	4718898	80.00	ng	100
79) Indeno(1,2,3-cd)pyrene	34.48	276	2282797	80.00	ng	100
81) Benzo[b]fluoranthene	30.99	252	2744690	80.00	ng	100
82) Benzo[k]fluoranthene	31.05	252	2182021	80.00	ng	100
83) Benzo[a]pyrene	31.71	252	2272314	80.00	ng	100
84) Dibenz[a,h]anthracene	34.55	278	1922378	80.00	ng	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6765.D
Acq Time : 5 Nov 99 12:35 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 7 11:23 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.24	276	1838824	80.00 ng	100

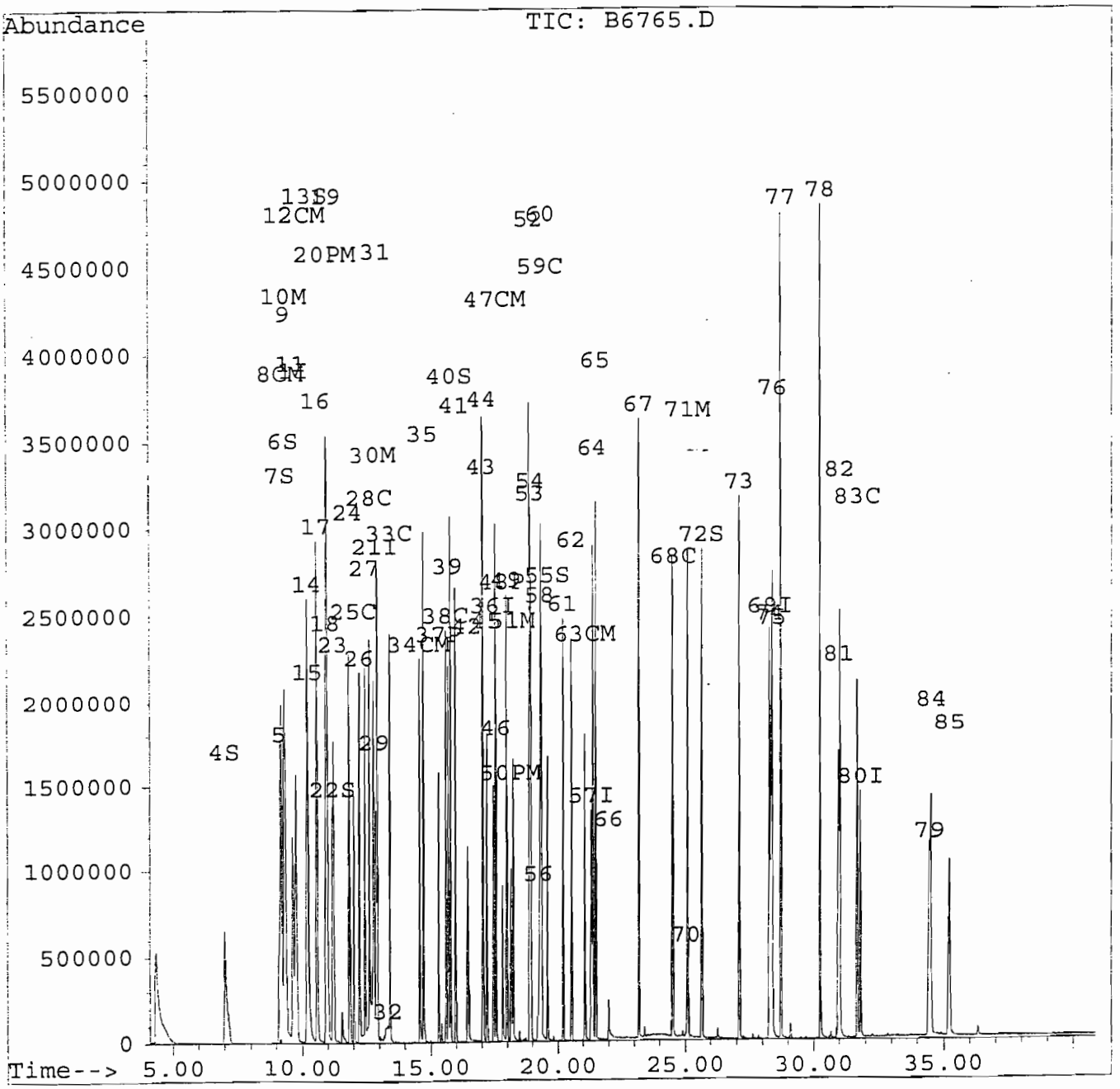
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6765.D
Acq Time : 5 Nov 99 12:35 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 7 11:23 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



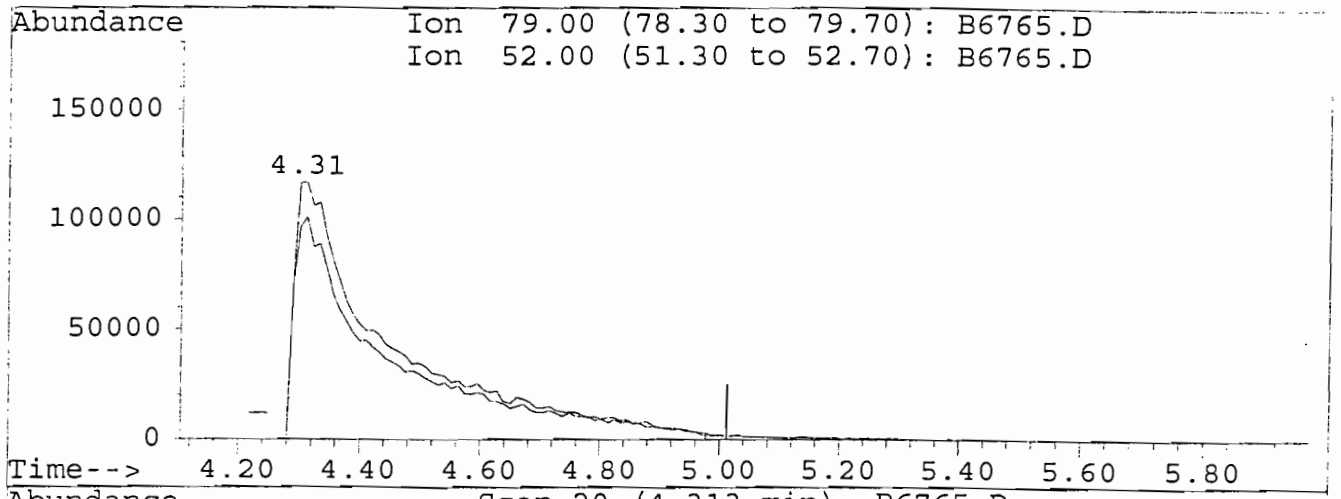
000355

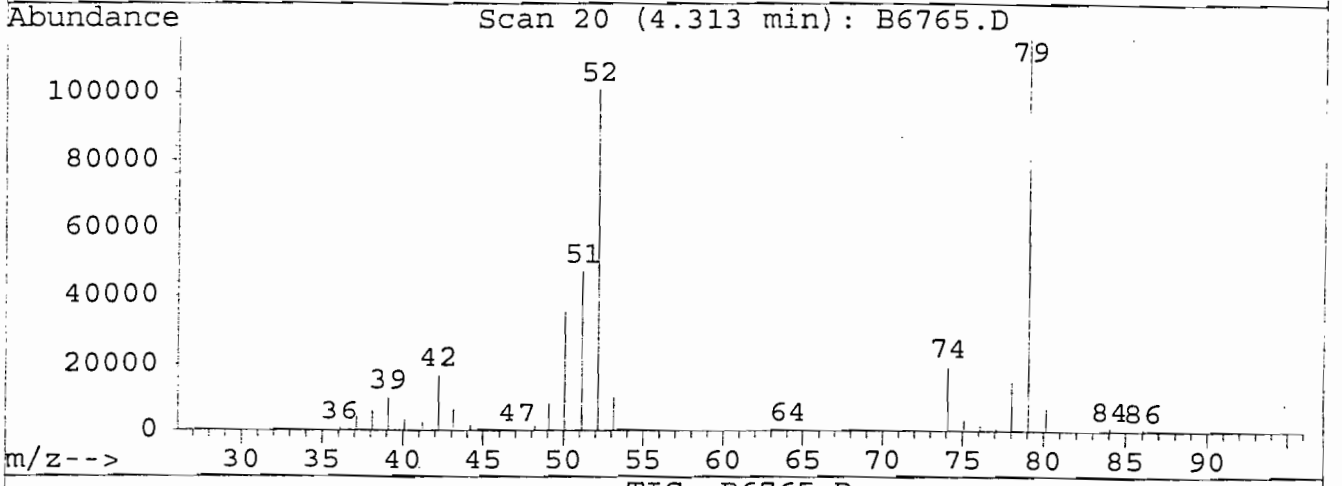
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6765.D
Acq Time : 5 Nov 99 12:35 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 7 11:23 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6765.D

(2) Pyridine
4.31min 79.54ng m
response 1274639

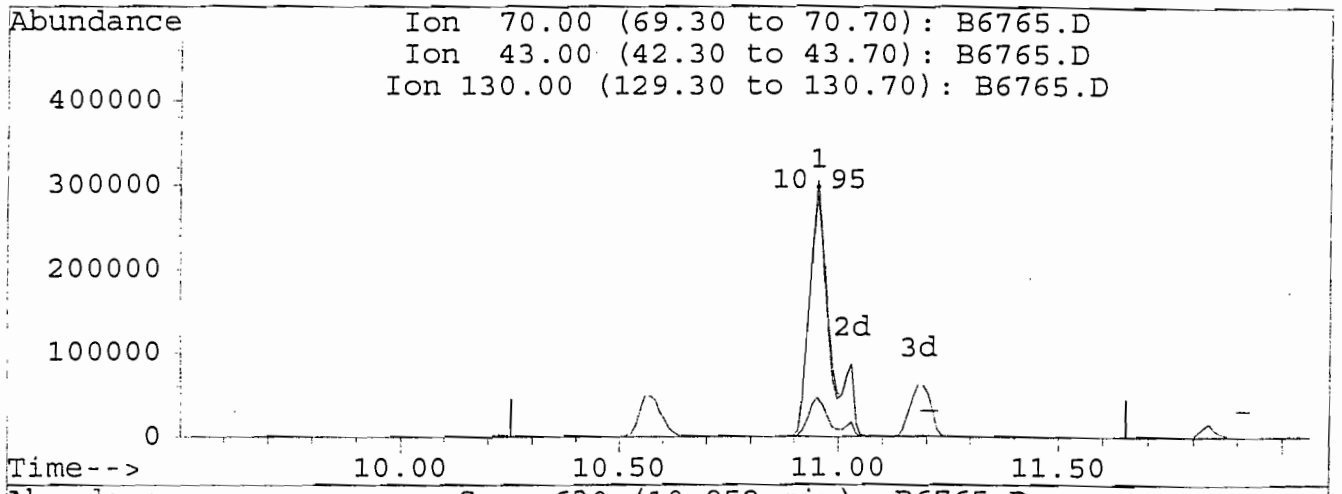
Ion	Exp%	Act%
79.00	100	100
52.00	86.60	86.61
0.00	0.00	0.00
0.00	0.00	0.00

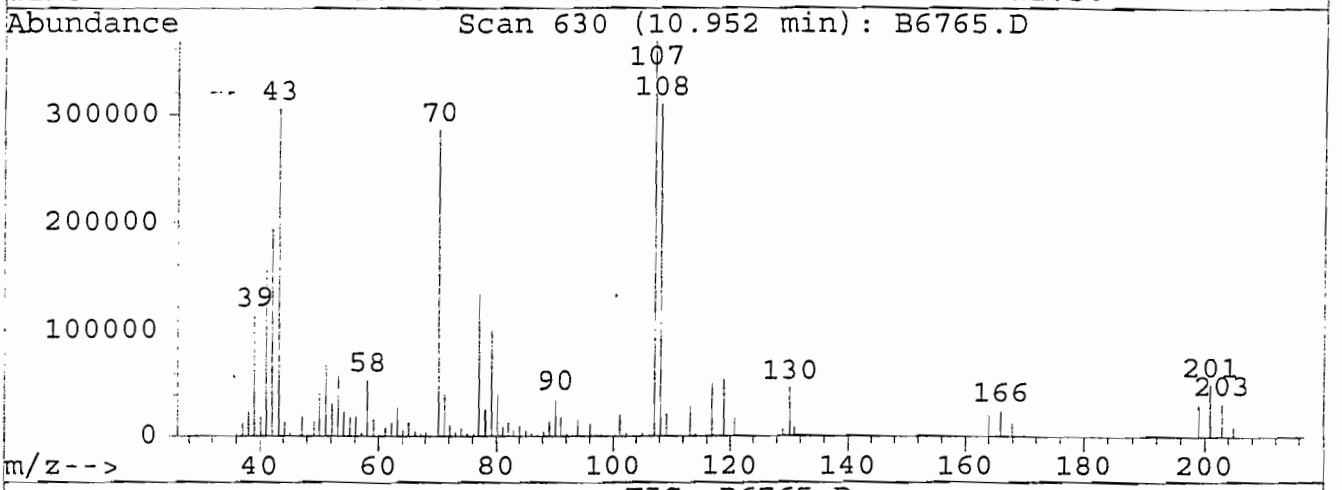
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6765.D
Acq Time : 5 Nov 99 12:35 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 7 11:23 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6765.D

(20) N-Nitroso-di-n-propylamine (PM)
10.95min 79.99ng m
response 919028

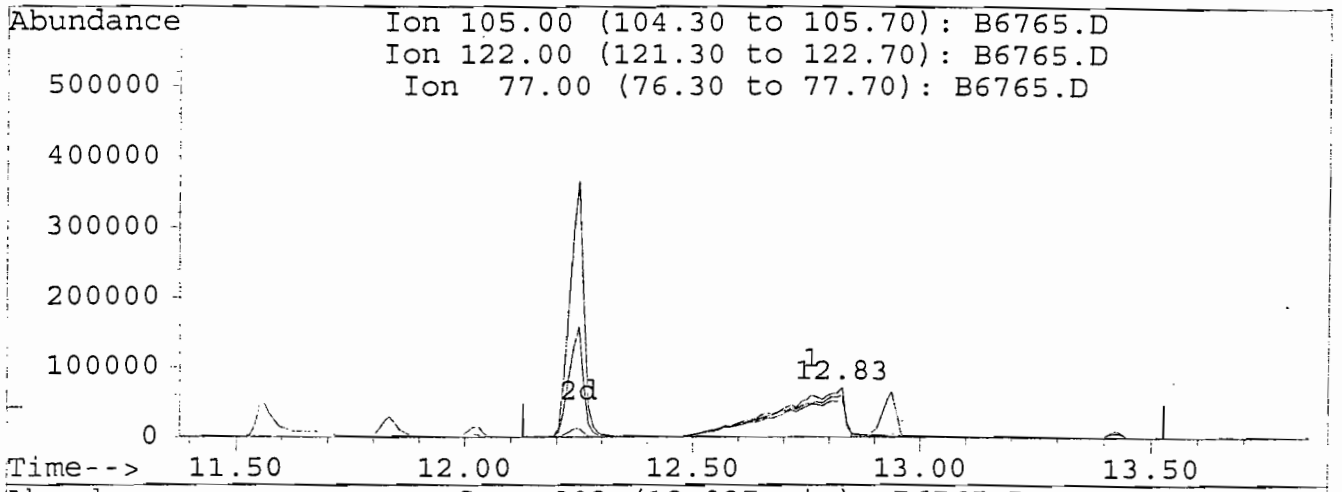
Ion	Exp%	Act%
70.00	100	100
43.00	106.70	106.73
130.00	16.20	16.24
0.00	0.00	0.00

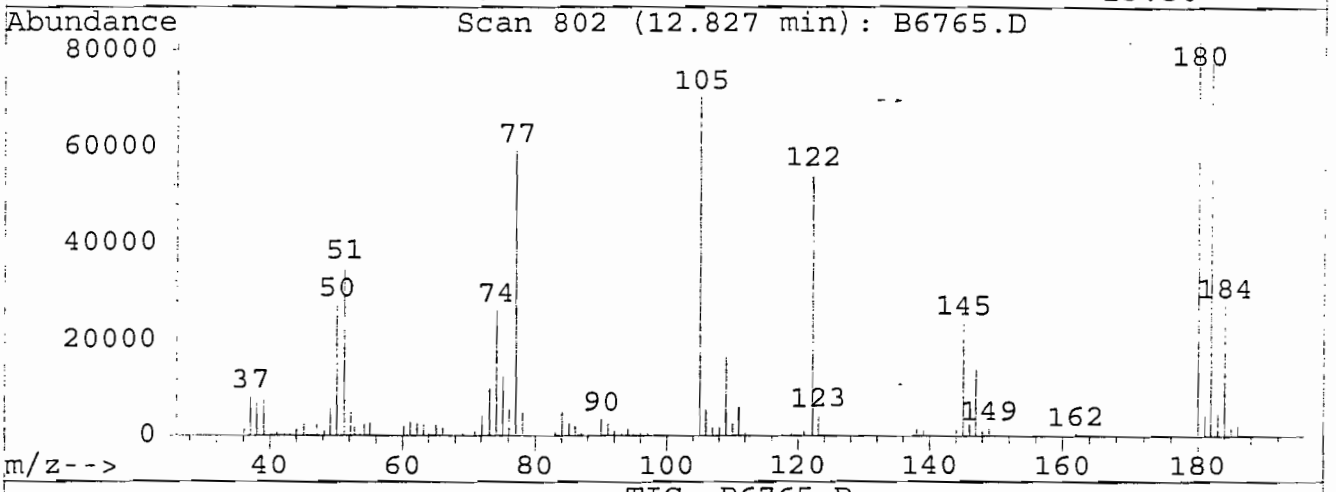
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6765.D
Acq Time : 5 Nov 99 12:35 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 7 11:23 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6765.D

(29) Benzoic Acid
12.83min 80.53ng m
response 694176

Ion	Exp%	Act%
105.00	100	100
122.00	77.30	77.25
77.00	84.30	84.27
0.00	0.00	0.00

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.74	152	392927	40.00	ng		0.01
21) Naphthalene-d8	12.90	136	1404706	40.00	ng		0.01
36) Acenaphthene-d10	17.48	164	771473	40.00	ng		0.00
57) Phenanthrene-d10	21.33	188	1502240	40.00	ng		0.01
69) Chrysene-d12	28.35	240	1264499	40.00	ng		0.02
80) Perylene-d12	31.85	264	1169405	40.00	ng		0.02
System Monitoring Compounds							**%Recovery**
4) 2-Fluorophenol	7.02	112	1824211	123.35	ng		
6) 2-Chlorophenol-d4	9.32	132	1696084	121.25	ng		
7) Phenol-d5	9.20	99	2130262	121.79	ng		
13) 1,2-Dichlorobenzene-d4	10.19	152	1063027	117.38	ng		
22) Nitrobenzene-d5	11.20	82	2352780	130.94	ng		
40) 2-Fluorobiphenyl	15.82	172	3246561	118.59	ng		
55) 2,4,6-Tribromophenol	19.62	330	783951	122.44	ng		
72) Terphenyl-d14	25.68	244	4367886	120.13	ng		
Target Compounds							**Qvalue**
2) Pyridine	4.30	79	2023770	114.03	ng		99
3) N-nitroso-dimethylamine	4.35	42	1147089	126.74	ng		99
5) Aniline	9.11	93	1573358	178.06	ng		97
8) Phenol	9.23	94	2277993	121.55	ng		99
9) bis(2-Chloroethyl)ether	9.30	93	1930539	113.01	ng		98
10) 2-Chlorophenol	9.36	128	1690820	120.35	ng		97
11) 1,3-Dichlorobenzene	9.63	146	1946304	125.00	ng		98
12) 1,4-Dichlorobenzene	9.78	146	1920083	122.15	ng		98
14) 1,2-Dichlorobenzene	10.21	146	1693422	117.32	ng		98
15) Benzyl alcohol	10.26	108	1062472	119.64	ng		98
16) 2-Methylphenol	10.59	108	1330845	118.96	ng		96
17) bis(2-chloroisopropyl)ethe	10.57	45	3812315	126.70	ng		100
18) Hexachloroethane	10.92	117	778169	127.60	ng		98
19) 3+4-Methyphenols	11.02	108	2921482	241.77	ng		91
20) N-Nitroso-di-n-propylamine	11.07	70	1599537	125.00	ng	m	97
23) Nitrobenzene	11.26	77	1993102	119.92	ng		98
24) Isophorone	11.87	82	4367226	126.96	ng		100
25) 2-Nitrophenol	12.04	139	925935	126.33	ng		99
26) 2,4-Dimethylphenol	12.28	107	1686432	123.30	ng		97
27) bis(2-Chloroethoxy)methane	12.49	93	2445512	120.27	ng		99
28) 2,4-Dichlorophenol	12.67	162	1331662	116.68	ng		99
29) Benzoic Acid	12.93	105	1243891	128.83	ng	m	71
30) 1,2,4-Trichlorobenzene	12.82	180	1507853	124.30	ng		100
31) Naphthalene	12.95	128	4110896	118.99	ng		99
32) 4-Chloroaniline	13.32	127	497669	129.69	ng	m	93
33) Hexachlorobutadiene	13.44	225	906737	123.28	ng		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.58	107	1536673	122.79	ng		99
35) 2-Methylnaphthalene	14.74	142	2806300	120.90	ng		97
37) Hexachlorocyclopentadiene	15.32	237	813534	121.43	ng		98
38) 2,4,6-Trichlorophenol	15.62	196	1015377	120.99	ng		99
39) 2,4,5-Trichlorophenol	15.72	196	1095983	122.93	ng		99
41) 2-Chloronaphthalene	16.00	162	2720011	119.39	ng		98
42) 2-Nitroaniline	16.46	65	1224261	122.22	ng		93
43) Dimethylphthalate	17.07	163	3036257	106.89	ng		93
44) Acenaphthylene	17.08	152	3186252	89.59	ng		99
45) 2,6-Dinitrotoluene	17.26	165	810909	121.18	ng		79
46) 3-Nitroaniline	17.62	138	19096	65.45	ng	m	92
47) Acenaphthene	17.59	153	2604685	117.22	ng	-	96
48) 2,4-Dinitrophenol	17.85	184	476854	136.60	ng		93
49) Dibenzofuran	18.01	168	3761577	116.50	ng		98
50) 4-Nitrophenol	18.18	109	374765	133.81	ng		97
51) 2,4-Dinitrotoluene	18.27	165	1176882	124.32	ng		97
52) Fluorene	18.91	166	2812019	112.33	ng		99
53) Diethylphthalate	18.95	149	3154633	107.50	ng		99
54) 4-Chlorophenyl-phenylether	18.98	204	1348498	106.31	ng		98
56) 4-Nitroaniline	19.32	138	310147	111.21	ng	m	86
58) 4,6-Dinitro-2-methylphenol	19.34	198	614213	122.10	ng	m	74
59) N-Nitrosodiphenylamine	19.36	169	1442615	120.26	ng	m	98
60) 1,2-Diphenylhydrazine	19.39	77	4792488	119.05	ng		99
61) 4-Bromophenyl-phenylether	20.23	248	1005864	118.13	ng		99
62) Hexachlorobenzene	20.58	284	1363078	114.78	ng		100
63) Pentachlorophenol	21.10	266	856658	128.70	ng		97
64) Phenanthrene	21.42	178	4153833	117.35	ng		98
65) Anthracene	21.53	178	4195199	112.21	ng		100
66) Carbazole	22.02	167	533249	105.06	ng	m	99
67) Di-n-butylphthalate	23.22	149	6780417	115.05	ng		97
68) Fluoranthene	24.56	202	4663469	113.83	ng		100
70) Benzidine	25.02	184	27505	77.75	ng		95
71) Pyrene	25.13	202	4644762	116.68	ng		99
73) Butylbenzylphthalate	27.14	149	3083058	123.61	ng		99
74) Benzo[a]anthracene	28.32	228	4092037	115.87	ng		99
75) 3,3'-Dichlorobenzidine	28.40	252	1013321	115.66	ng		98
76) Chrysene	28.45	228	3646868	112.84	ng		98
77) bis(2-Ethylhexyl)phthalate	28.75	149	4302834	117.65	ng		98
78) Di-n-octylphthalate	30.29	149	7472403	118.06	ng		100
79) Indeno(1,2,3-cd)pyrene	34.54	276	3538894	115.58	ng		95
81) Benzo[b]fluoranthene	31.03	252	4930939	138.85	ng		98
82) Benzo[k]fluoranthene	31.09	252	2608000	92.38	ng	m	98
83) Benzo[a]pyrene	31.74	252	3402545	115.73	ng		98
84) Dibenz[a,h]anthracene	34.60	278	2870820	115.42	ng		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.30	276	2877608	120.95 ng	99

000361

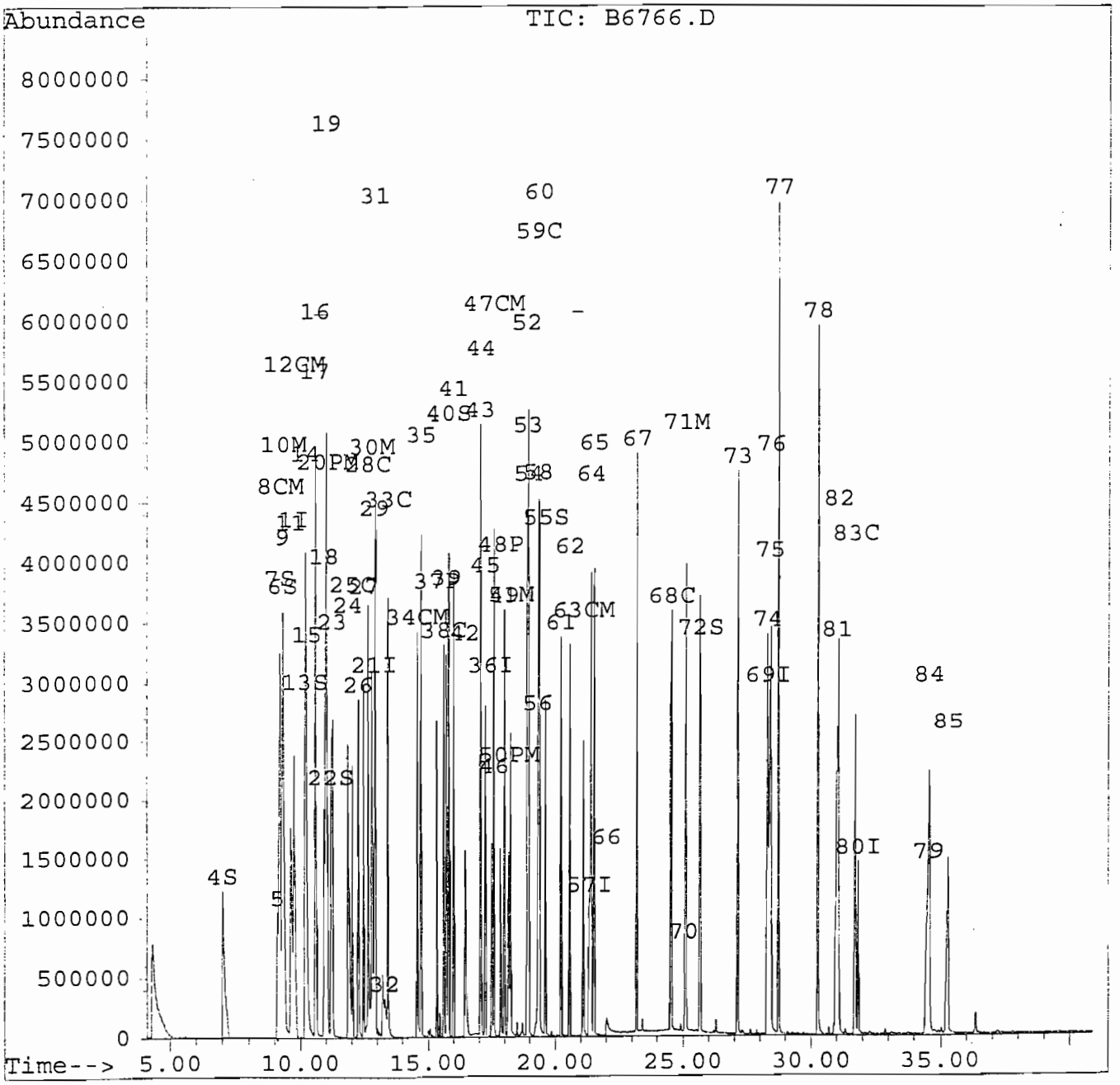
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



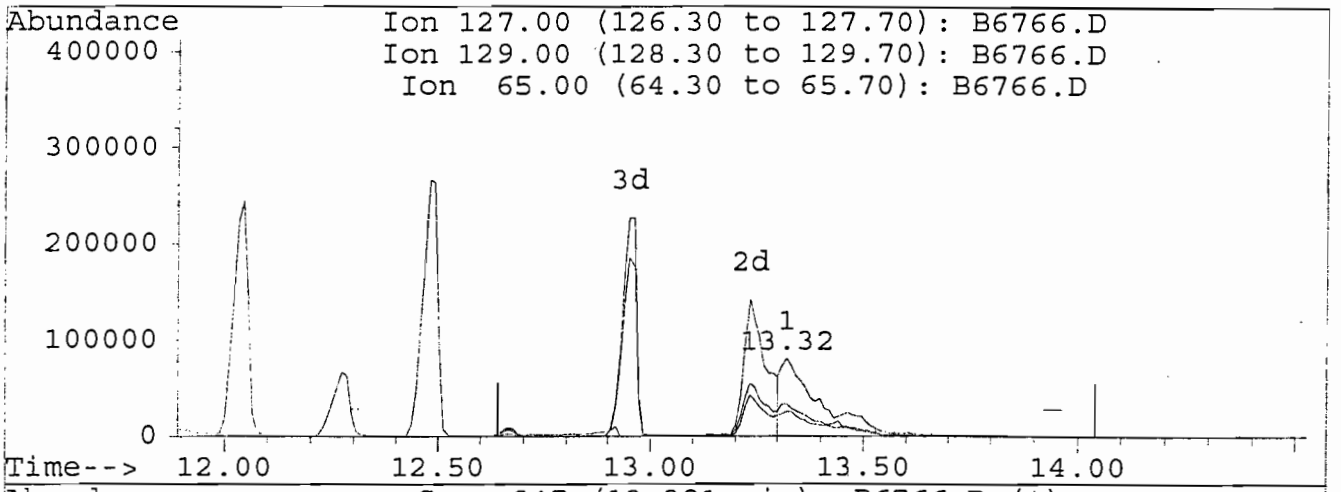
000362

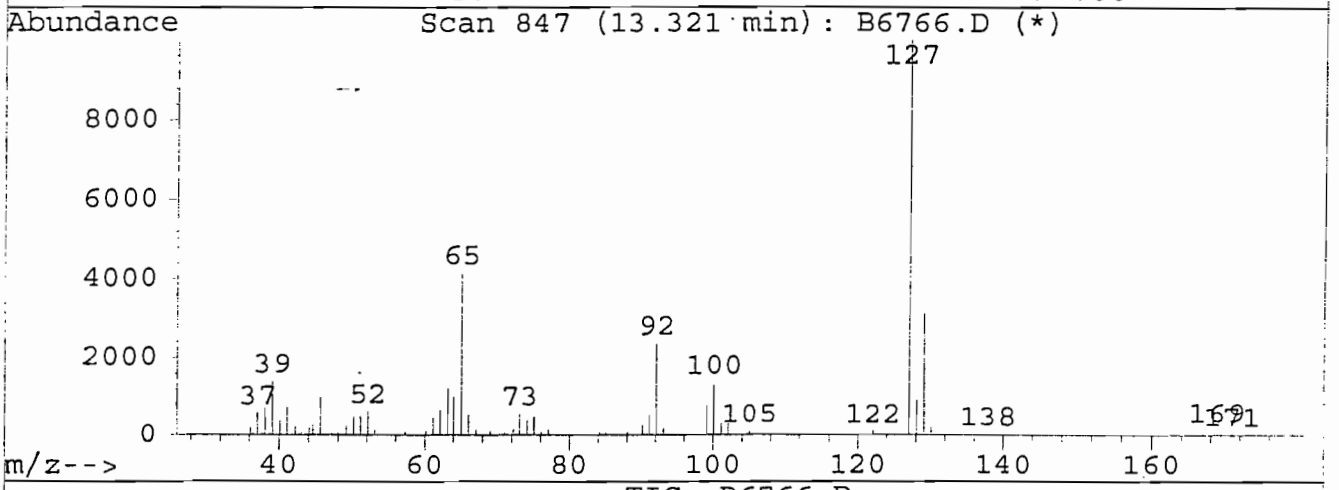
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6766.D

(32) 4-Chloroaniline
13.32min 129.69ng m
response 497669

Ion	Exp%	Act%
127.00	100	100
129.00	29.60	31.46
65.00	36.20	41.67
0.00	0.00	0.00

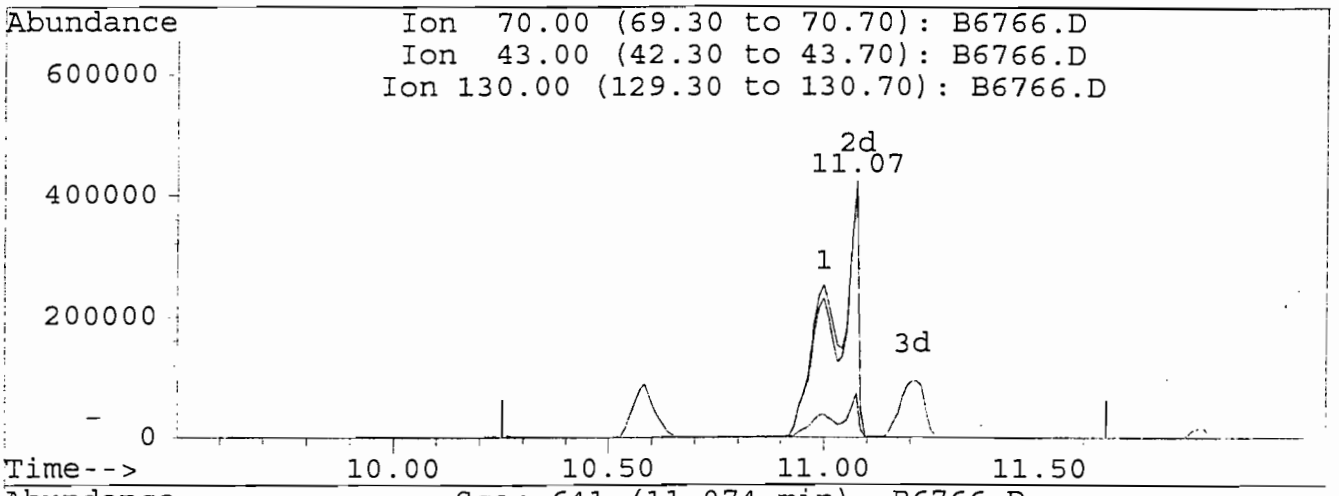
000363

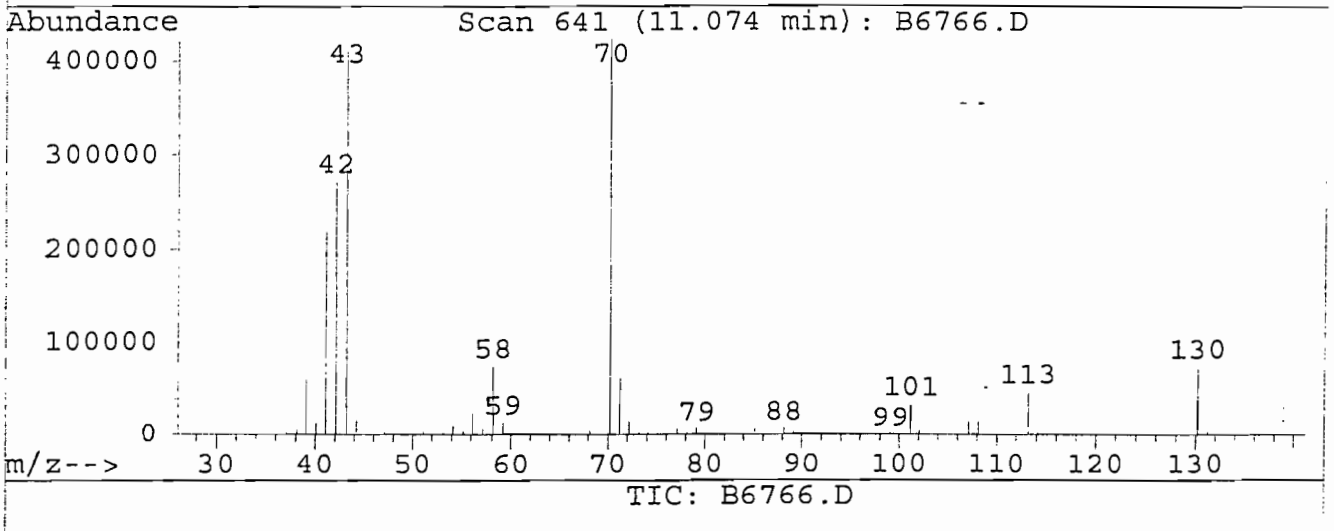
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6766.D

(20) N-Nitroso-di-n-propylamine (PM)
11.07min 125.00ng m
response 1599537

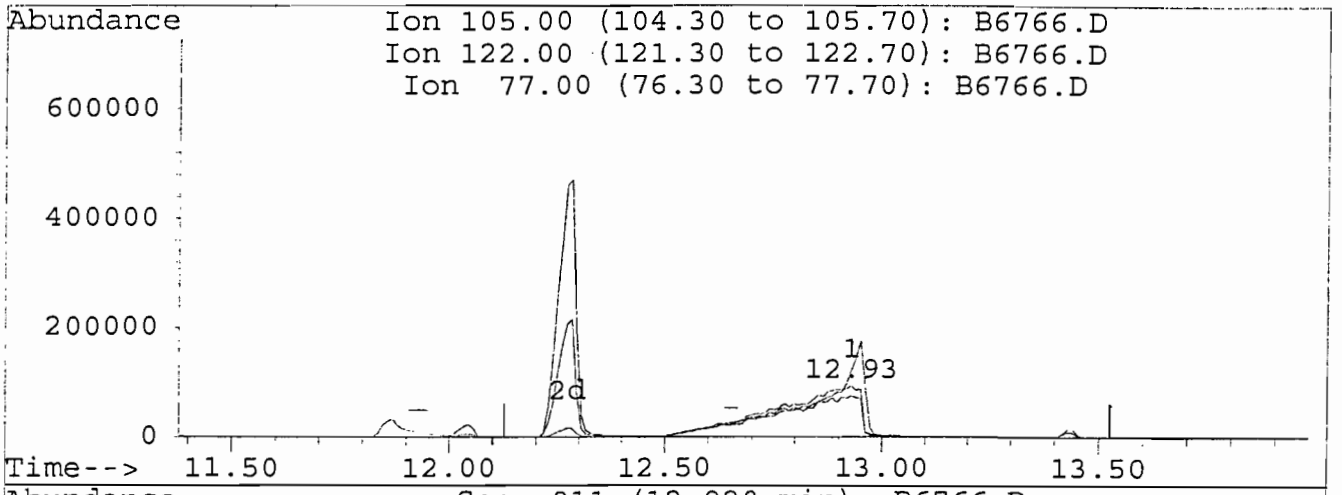
Ion	Exp%	Act%
70.00	100	100
43.00	106.70	96.80
130.00	16.20	17.35
0.00	0.00	0.00

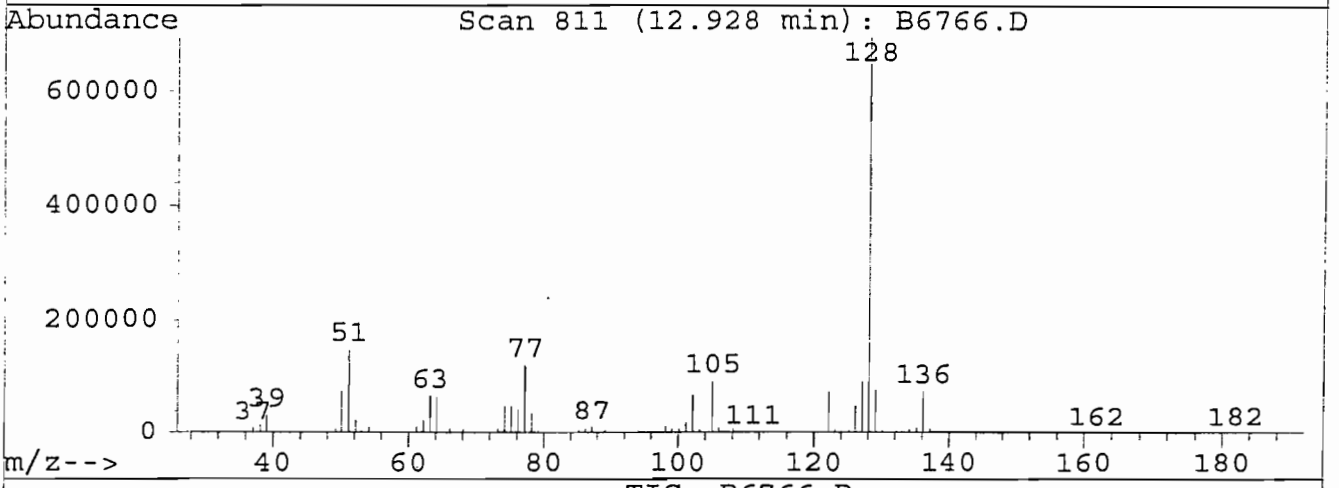
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6766.D

(29) Benzoic Acid
12.93min 128.83ng m
response 1243891

Ion	Exp%	Act%
105.00	100	100
122.00	77.30	80.91
77.00	84.30	130.45
0.00	0.00	0.00

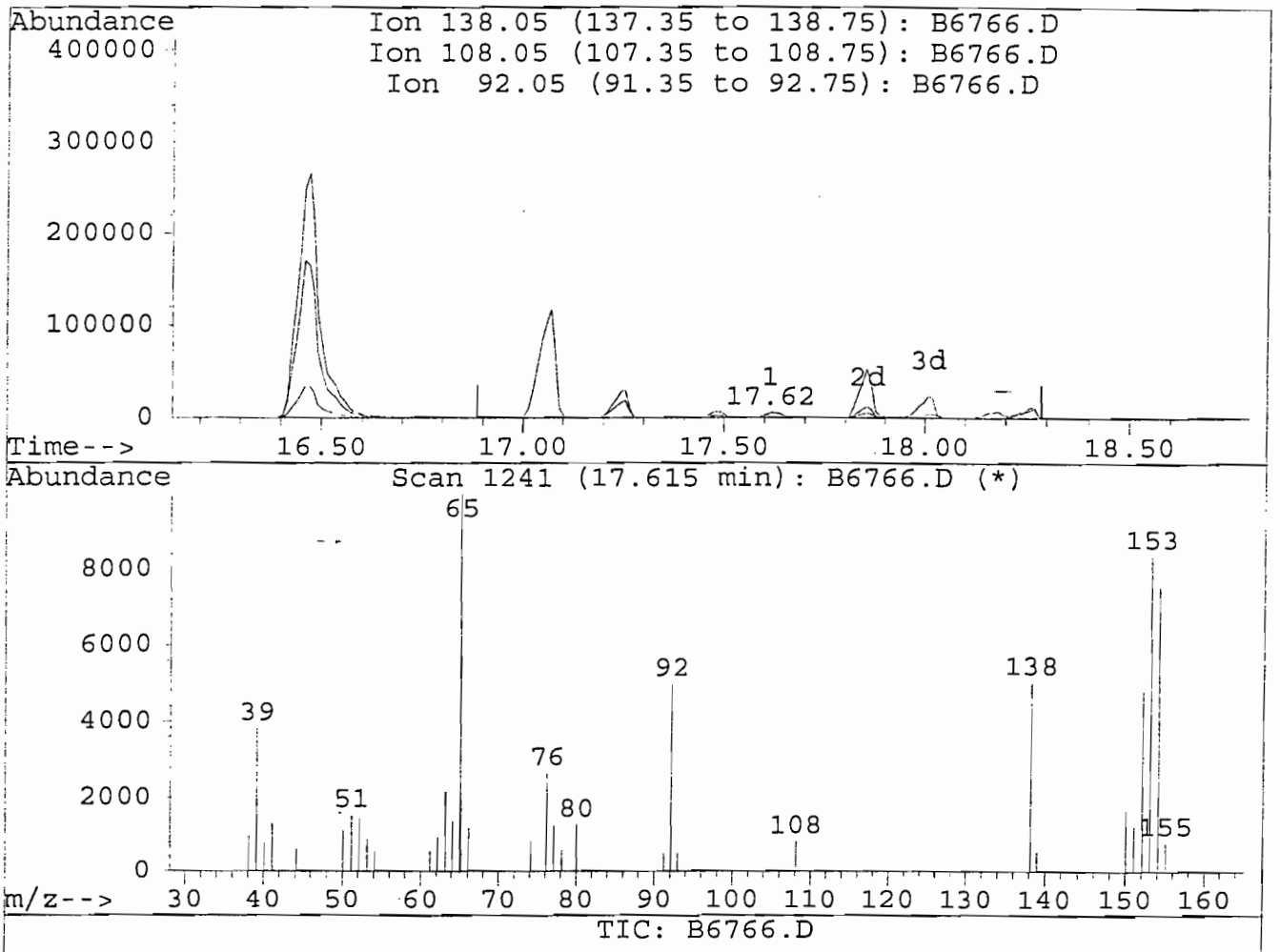
000365

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



(46) 3-Nitroaniline
17.62min 65.45ng m
response 19096

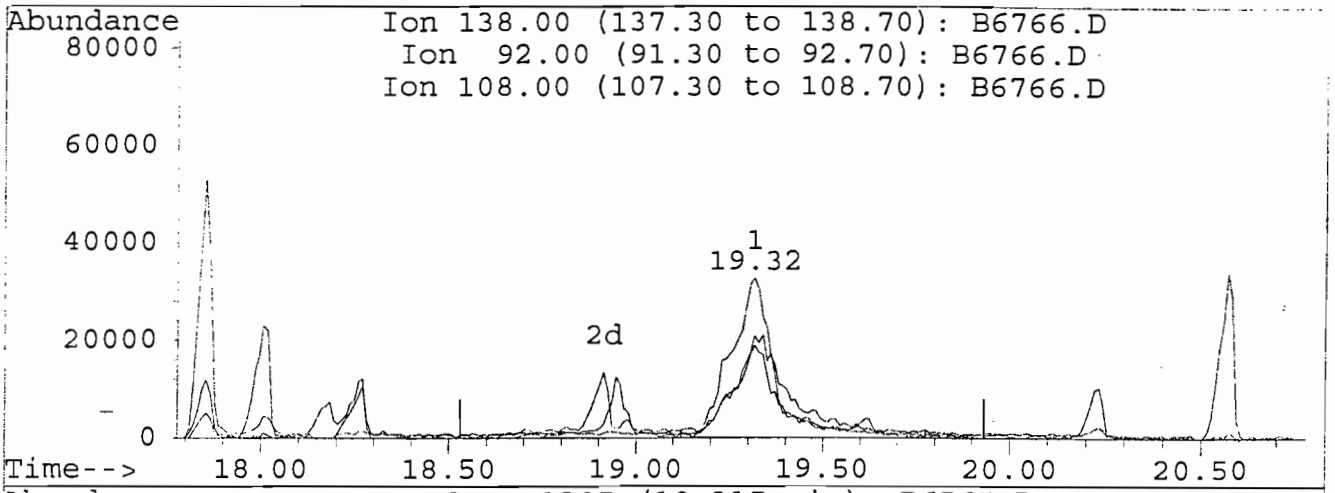
Ion	Exp%	Act%
138.05	100	100
108.05	11.10	16.79
92.05	106.30	98.88
0.00	0.00	0.00

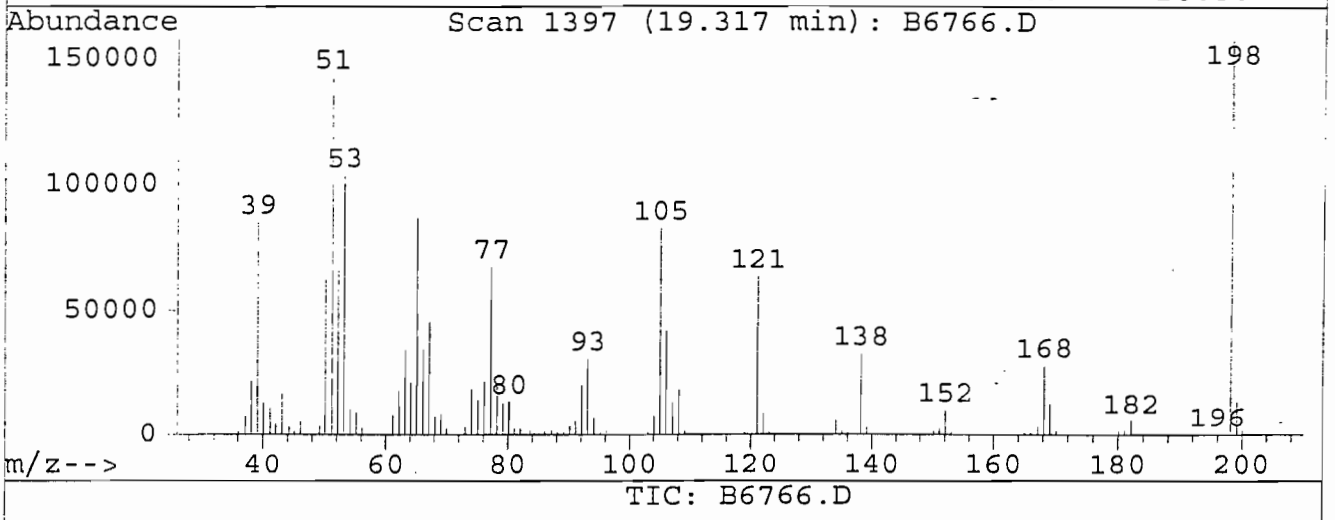
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6766.D

(56) 4-Nitroaniline
19.32min 111.21ng m
response 310147

Ion	Exp%	Act%
138.00	100	100
92.00	47.20	63.91
108.00	54.90	57.75
0.00	0.00	0.00

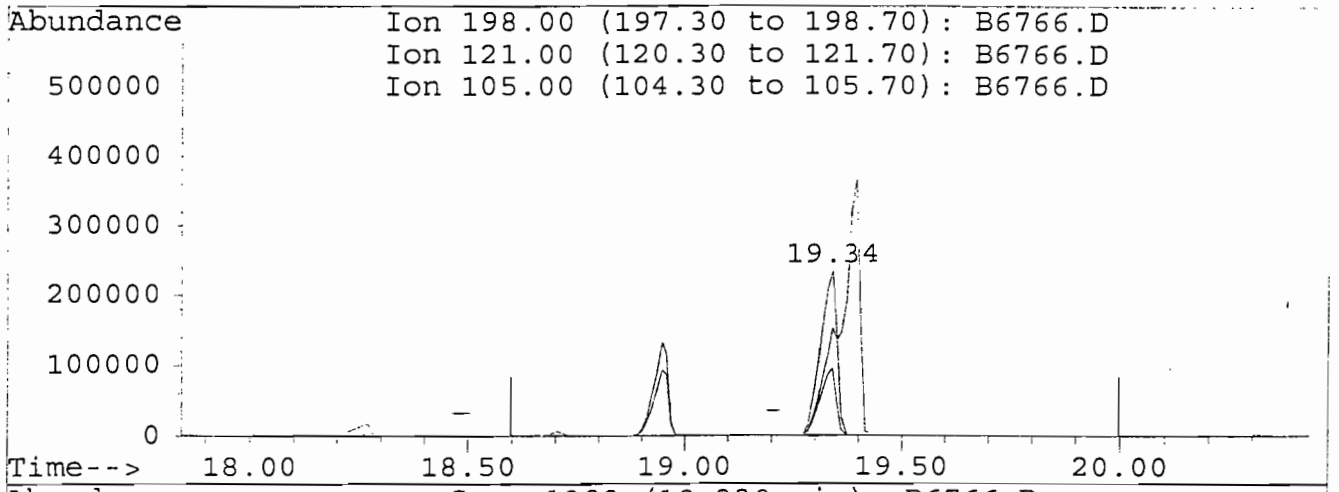
000367

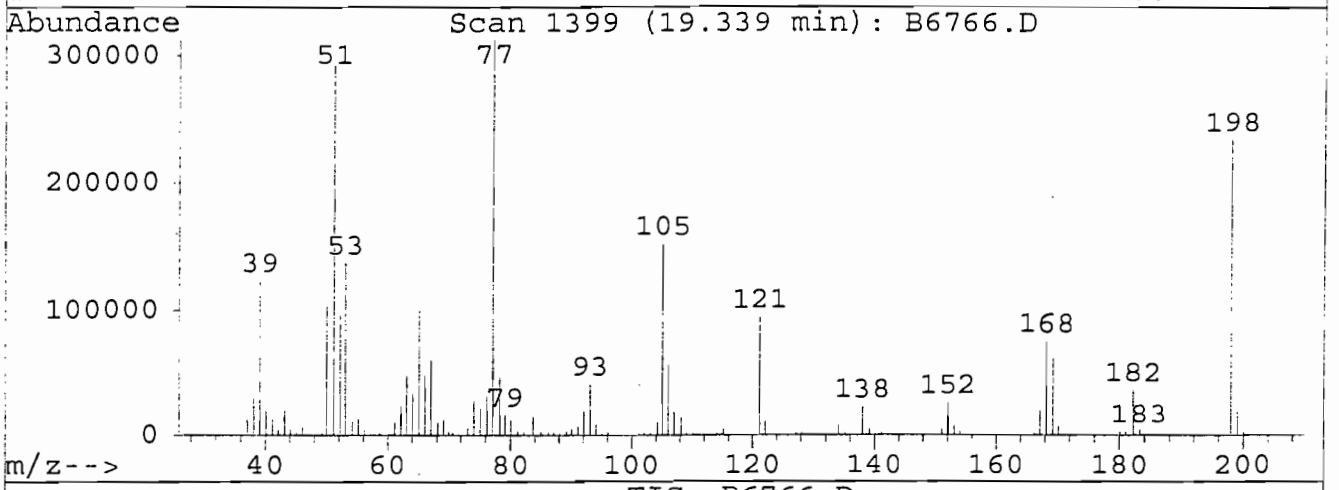
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6766.D

(58) 4,6-Dinitro-2-methylphenol
19.34min 122.10ng m
response 614213

Ion	Exp%	Act%
198.00	100	100
121.00	33.50	40.43
105.00	41.30	64.97
0.00	0.00	0.00

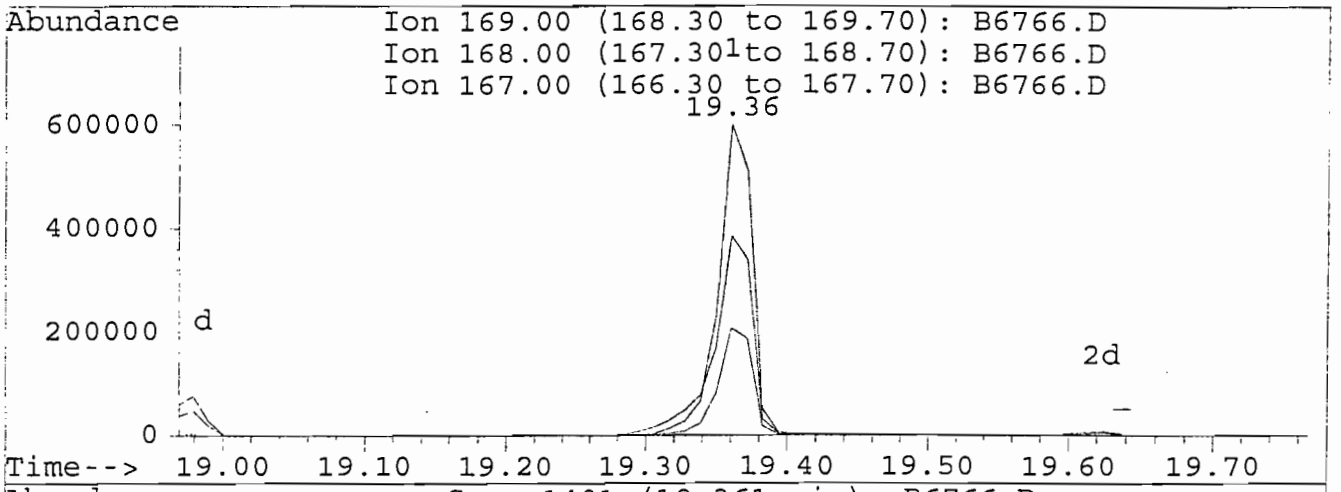
000368

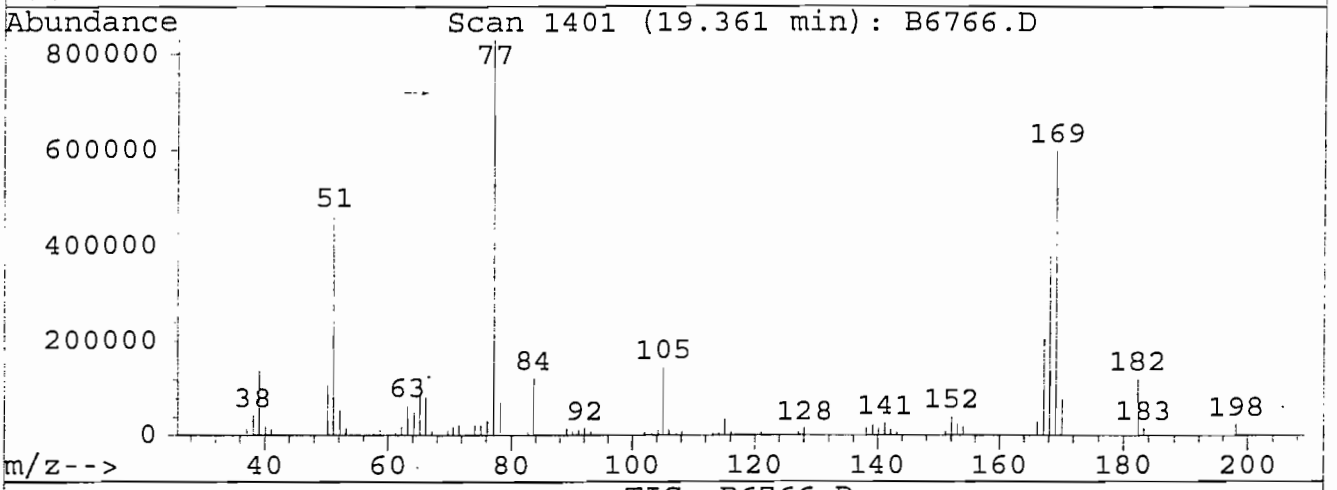
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6766.D

(59) N-Nitrosodiphenylamine (C)
19.36min 120.26ng m
response 1442615

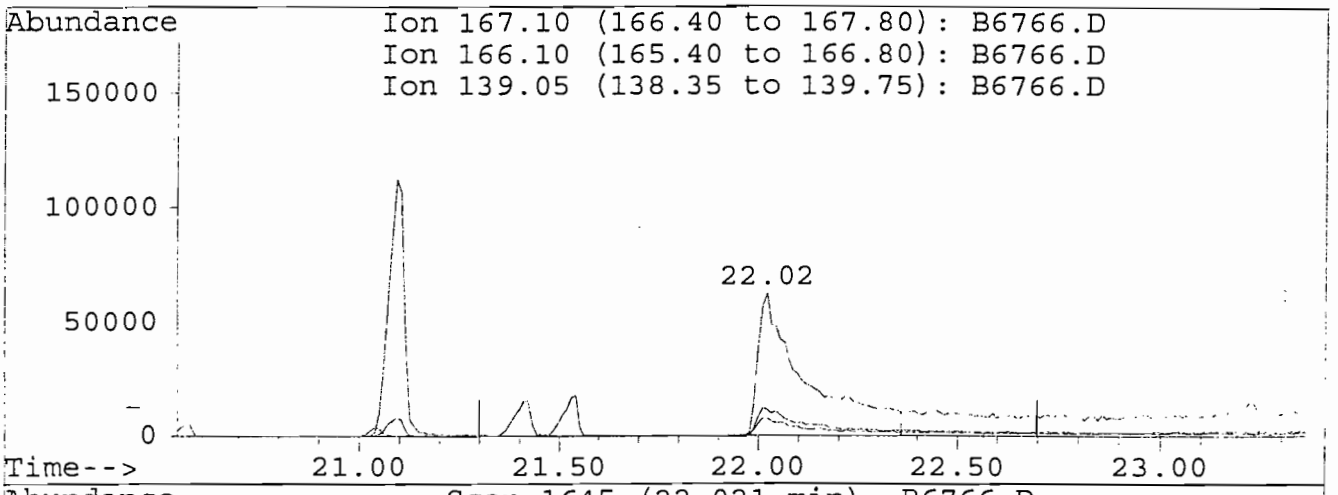
Ion	Exp%	Act%
169.00	100	100
168.00	65.40	64.13
167.00	36.10	34.48
0.00	0.00	0.00

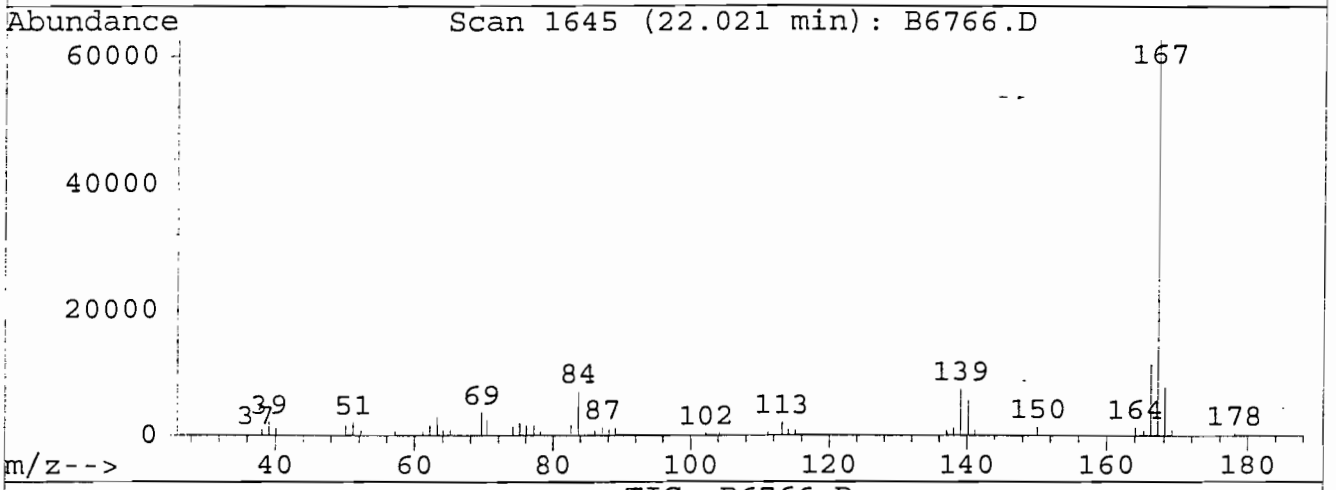
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6766.D

(66) Carbazole
22.02min 105.06ng m
response 533249

Ion	Exp%	Act%
167.10	100	100
166.10	17.90	18.29
139.05	12.80	12.04
0.00	0.00	0.00

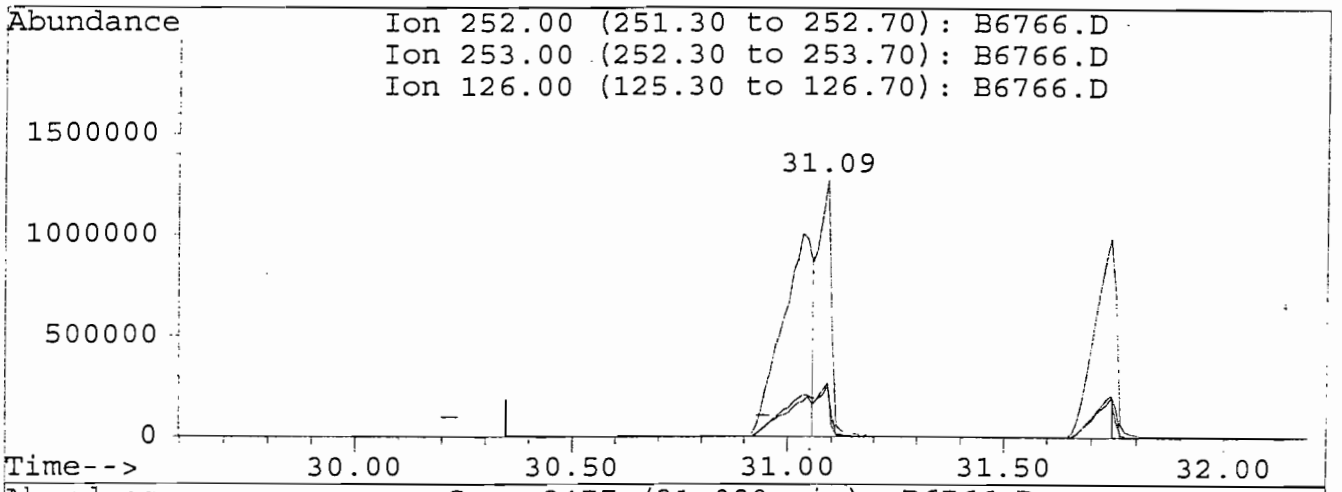
000370

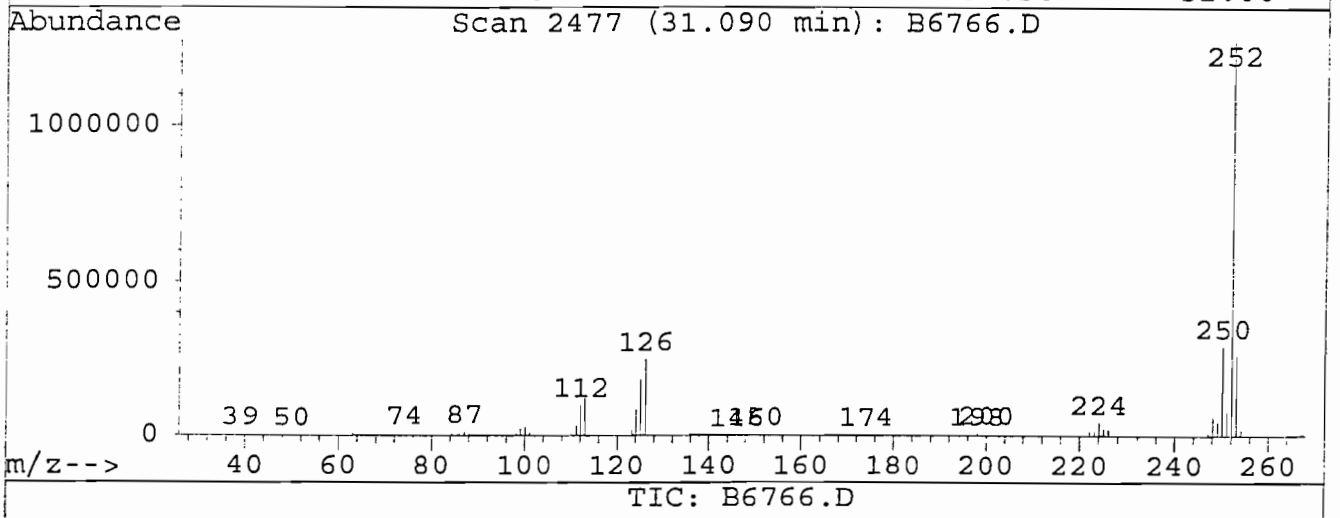
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6766.D
Acq Time : 5 Nov 99 1:26 pm
Sample : 120 NG BNA CCC
Misc :
Quant Time: Nov 7 11:45 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6766.D

(82) Benzo[k]fluoranthene
31.09min 92.38ng m
response 2608000

Ion	Exp%	Act%
252.00	100	100
253.00	21.10	20.90
126.00	18.10	19.64
0.00	0.00	0.00

000371

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm
Sample : 160 NG BNA CCC
Misc :
Quant Time: Nov 7 11:49 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.74	152	369050	40.00	ng		0.01
21) Naphthalene-d8	12.91	136	1429431	40.00	ng		0.03
36) Acenaphthene-d10	17.49	164	849713	40.00	ng		0.00
57) Phenanthrene-d10	21.35	188	1581949	40.00	ng		0.03
69) Chrysene-d12	28.36	240	1345122	40.00	ng		0.03
80) Perylene-d12	31.85	264	1212207	40.00	ng		0.02
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	7.03	112	2403797	173.05	ng		
6) 2-Chlorophenol-d4	9.33	132	2091079	159.15	ng		
7) Phenol-d5	9.23	99	2755357	167.72	ng		
13) 1,2-Dichlorobenzene-d4	10.19	152	1371986	161.30	ng		-
22) Nitrobenzene-d5	11.23	82	3034493	165.96	ng		
40) 2-Fluorobiphenyl	15.83	172	4232478	140.36	ng		
55) 2,4,6-Tribromophenol	19.64	330	1043610	147.99	ng		
72) Terphenyl-d14	25.69	244	5821873	150.52	ng		
Target Compounds							Qvalue
2) Pyridine	4.30	79	2526922	151.59	ng		97
3) N-nitroso-dimethylamine	4.36	42	1520729	178.89	ng		99
5) Aniline	9.13	93	2252093	271.36	ng		96
8) Phenol	9.26	94	2969903	168.73	ng		96
9) bis(2-Chloroethyl)ether	9.32	93	2530415	157.71	ng		99
10) 2-Chlorophenol	9.38	128	2103121	159.39	ng		98
11) 1,3-Dichlorobenzene	9.65	146	2447400	167.35	ng		98
12) 1,4-Dichlorobenzene	9.79	146	2450580	165.98	ng		98
14) 1,2-Dichlorobenzene	10.22	146	2093446	154.42	ng		100
15) Benzyl alcohol	10.29	108	1390936	166.76	ng		97
16) 2-Methylphenol	10.61	108	1704490	162.22	ng		99
17) bis(2-chloroisopropyl)ethe	10.59	45	4926471	174.32	ng		99
18) Hexachloroethane	10.93	117	1040972	181.74	ng		95
19) 3+4-Methyphenols	11.04	108	3799896	334.82	ng		96
20) N-Nitroso-di-n-propylamine	11.11	70	1968968	163.83	ng	m	95
23) Nitrobenzene	11.28	77	2578348	152.45	ng		99
24) Isophorone	11.89	82	5748810	164.24	ng		99
25) 2-Nitrophenol	12.06	139	1207977	161.97	ng		100
26) 2,4-Dimethylphenol	12.31	107	2245367	161.32	ng		96
27) bis(2-Chloroethoxy)methane	12.50	93	3171850	153.30	ng		98
28) 2,4-Dichlorophenol	12.69	162	1755456	151.15	ng		99
29) Benzoic Acid	13.01	105	1671821	170.16	ng	m	99
30) 1,2,4-Trichlorobenzene	12.83	180	1881370	152.41	ng		97
31) Naphthalene	12.96	128	5184734	147.47	ng		99
32) 4-Chloroaniline	13.27	127	572369	146.58	ng	m	93
33) Hexachlorobutadiene	13.44	225	1145138	153.00	ng		97

(#) = qualifier out of range (m) = manual integration

000372

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm
Sample : 160 NG BNA CCC
Misc :
Quant Time: Nov 7 11:49 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.60	107	2104335	165.23	ng		99
35) 2-Methylnaphthalene	14.75	142	3662109	155.04	ng		95
37) Hexachlorocyclopentadiene	15.34	237	1091582	147.93	ng		100
38) 2,4,6-Trichlorophenol	15.63	196	1374016	148.65	ng		98
39) 2,4,5-Trichlorophenol	15.73	196	1442422	146.89	ng		100
41) 2-Chloronaphthalene	16.02	162	3669610	146.24	ng		98
42) 2-Nitroaniline	16.48	65	1793360	162.55	ng		95
43) Dimethylphthalate	17.08	163	4086146	130.60	ng		96
44) Acenaphthylene	17.09	152	4204906	107.35	ng		99
45) 2,6-Dinitrotoluene	17.28	165	1104965	149.91	ng		87
46) 3-Nitroaniline	17.60	138	207524	645.77	ng	m	79
47) Acenaphthene	17.61	153	3376862	137.98	ng		99
48) 2,4-Dinitrophenol	17.88	184	712618	185.35	ng		95
49) Dibenzofuran	18.02	168	5164494	145.22	ng		100
50) 4-Nitrophenol	18.21	109	533155	172.84	ng		95
51) 2,4-Dinitrotoluene	18.29	165	1624728	155.82	ng		97
52) Fluorene	18.93	166	3793785	137.59	ng		100
53) Diethylphthalate	18.98	149	3864076	119.56	ng		100
54) 4-Chlorophenyl-phenylether	18.99	204	1695446	121.35	ng		97
56) 4-Nitroaniline	19.28	138	344587	112.18	ng		94
58) 4,6-Dinitro-2-methylphenol	19.38	198	800175	151.05	ng	m	49
59) N-Nitrosodiphenylamine	19.39	169	1397770	110.65	ng		97
60) 1,2-Diphenylhydrazine	19.41	77	6310734	148.87	ng		100
61) 4-Bromophenyl-phenylether	20.25	248	1363560	152.07	ng		98
62) Hexachlorobenzene	20.59	284	1813028	144.97	ng		100
63) Pentachlorophenol	21.11	266	1176008	167.77	ng		99
64) Phenanthrene	21.44	178	5588208	149.91	ng		99
65) Anthracene	21.56	178	5417705	137.61	ng		99
66) Carbazole	22.02	167	900706	168.51	ng		97
67) Di-n-butylphthalate	23.24	149	9080050	146.31	ng		97
68) Fluoranthene	24.57	202	6306168	146.17	ng		98
70) Benzidine	25.03	184	20882	55.49	ng	m	81
71) Pyrene	25.15	202	6031023	142.42	ng		98
73) Butylbenzylphthalate	27.15	149	4332754	163.31	ng		97
74) Benzo[a]anthracene	28.33	228	5612774	149.41	ng		99
75) 3,3'-Dichlorobenzidine	28.42	252	1432280	153.68	ng		99
76) Chrysene	28.46	228	4805302	139.78	ng		98
77) bis(2-Ethylhexyl)phthalate	28.76	149	5699540	146.50	ng		98
78) Di-n-octylphthalate	30.31	149	10099558	150.00	ng		100
79) Indeno(1,2,3-cd)pyrene	34.54	276	4706718	144.50	ng	m	30
81) Benzo[b]fluoranthene	31.06	252	7302408	198.37	ng		99
82) Benzo[k]fluoranthene	31.11	252	3046552	104.10	ng	m	98
83) Benzo[a]pyrene	31.75	252	4723814	155.00	ng		100
84) Dibenz[a,h]anthracene	34.62	278	3837932	148.86	ng		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm Operator:
Sample : 160 NG BNA CCC Inst : BNA-RTE
Misc : Multiplr: 1.00
Quant Time: Nov 7 11:49 1999

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Benzo[g,h,i]perylene	35.32	276	3693239	149.75	ng	100

000374

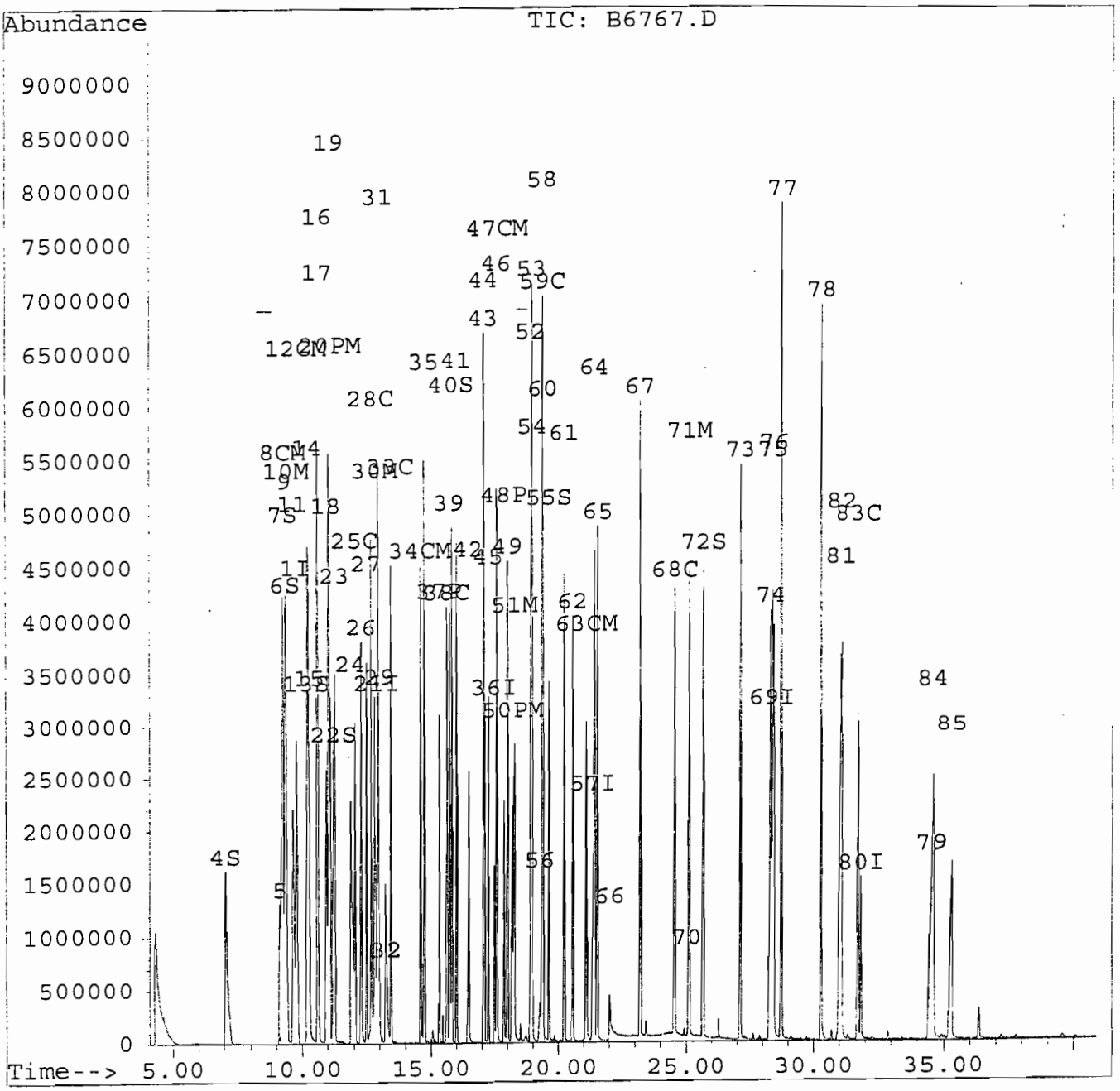
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm
Sample : 160 NG BNA CCC
Misc :
Quant Time: Nov 7 11:49 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



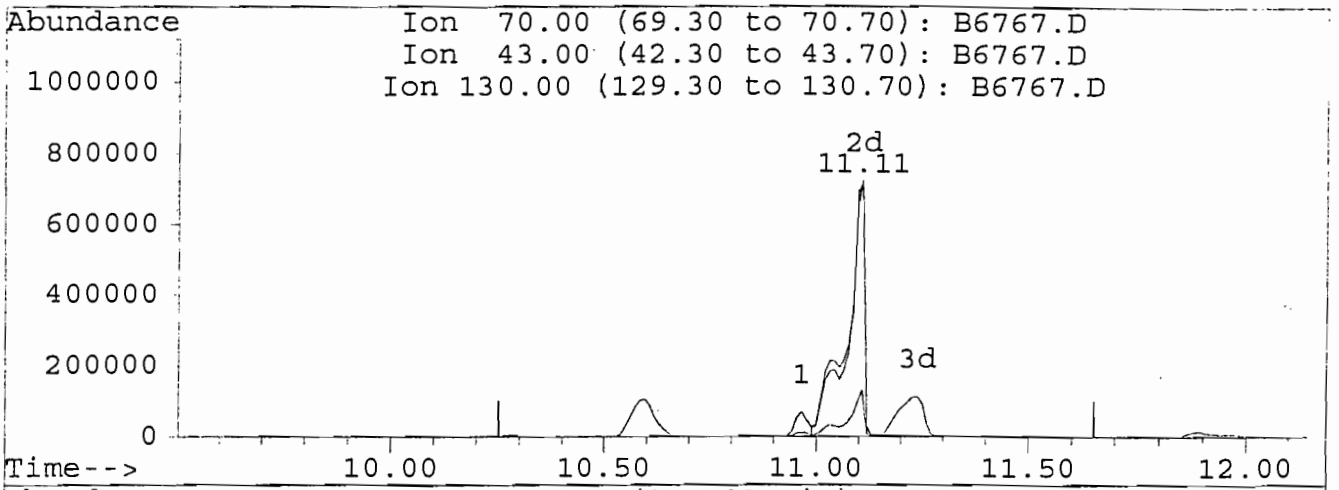
000375

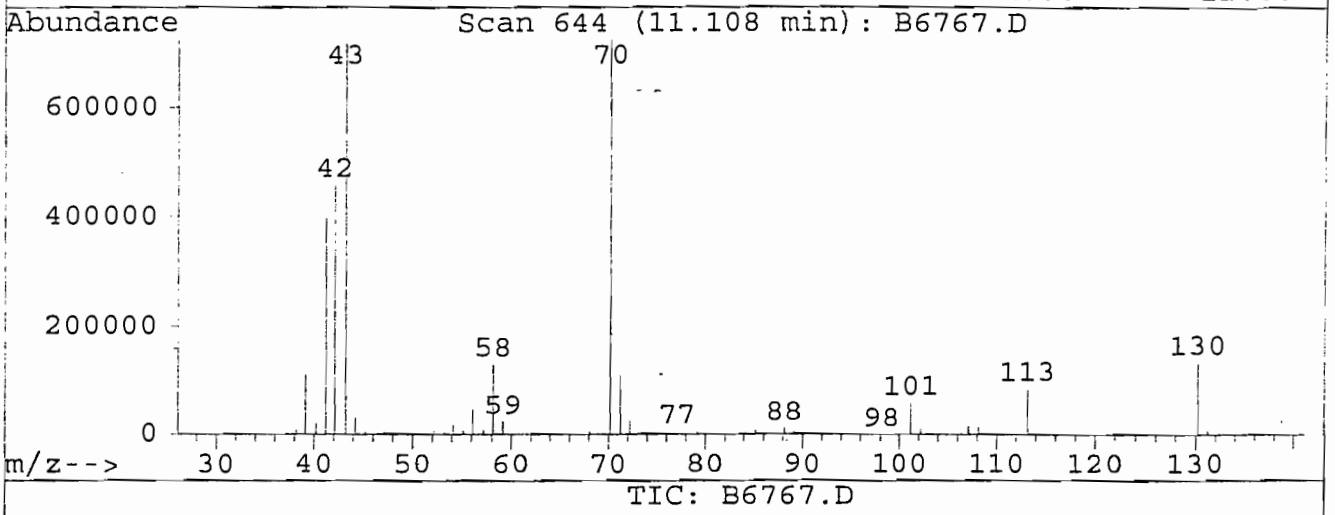
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm
Sample : 160 NG BNA CCC
Misc :
Quant Time: Nov 7 11:49 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6767.D

(20) N-Nitroso-di-n-propylamine (PM)
11.11min 163.83ng m
response 1968968

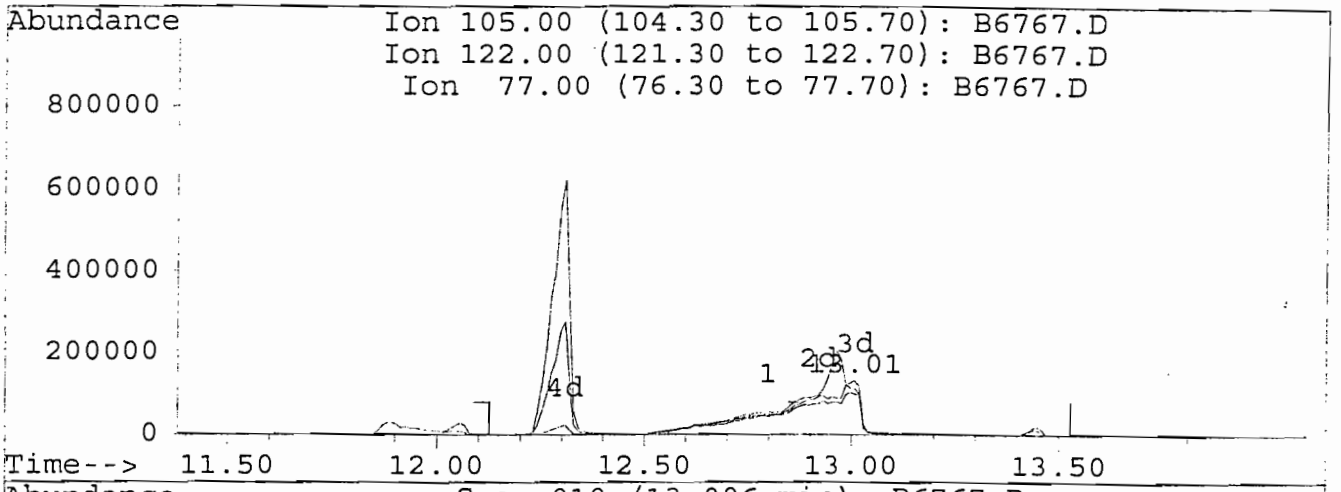
Ion	Exp%	Act%
70.00	100	100
43.00	106.70	99.19
130.00	16.20	18.23
0.00	0.00	0.00

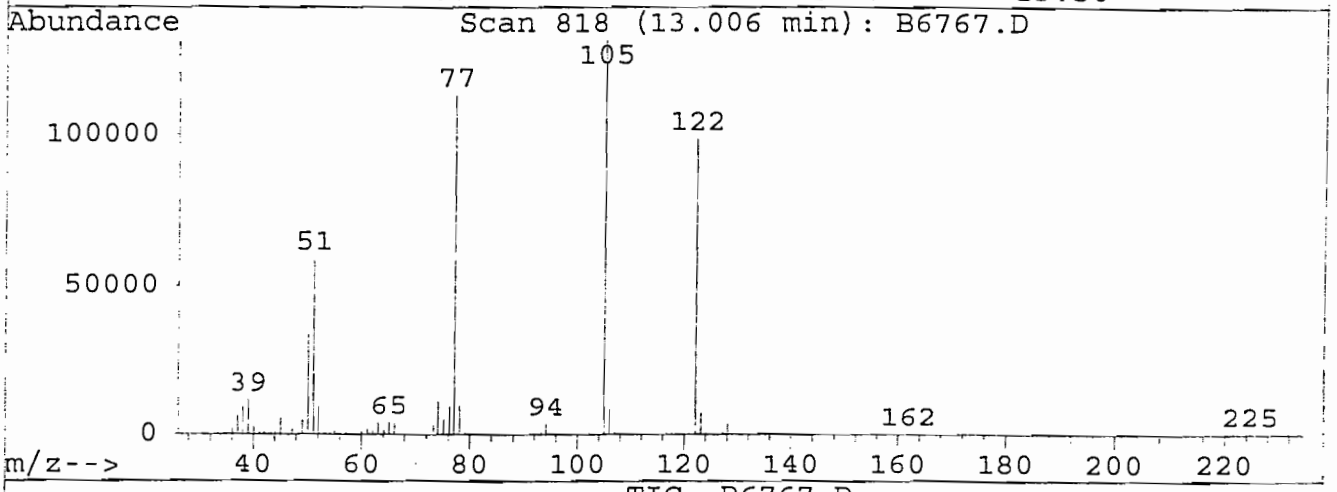
Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm
Sample : 160 NG BNA CCC
Misc :
Quant Time: Nov 7 11:49 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration





TIC: B6767.D

(29) Benzoic Acid
13.01min 170.16ng m
response 1671821

Ion	Exp%	Act%
105.00	100	100
122.00	77.30	75.02
77.00	84.30	86.15
0.00	0.00	0.00

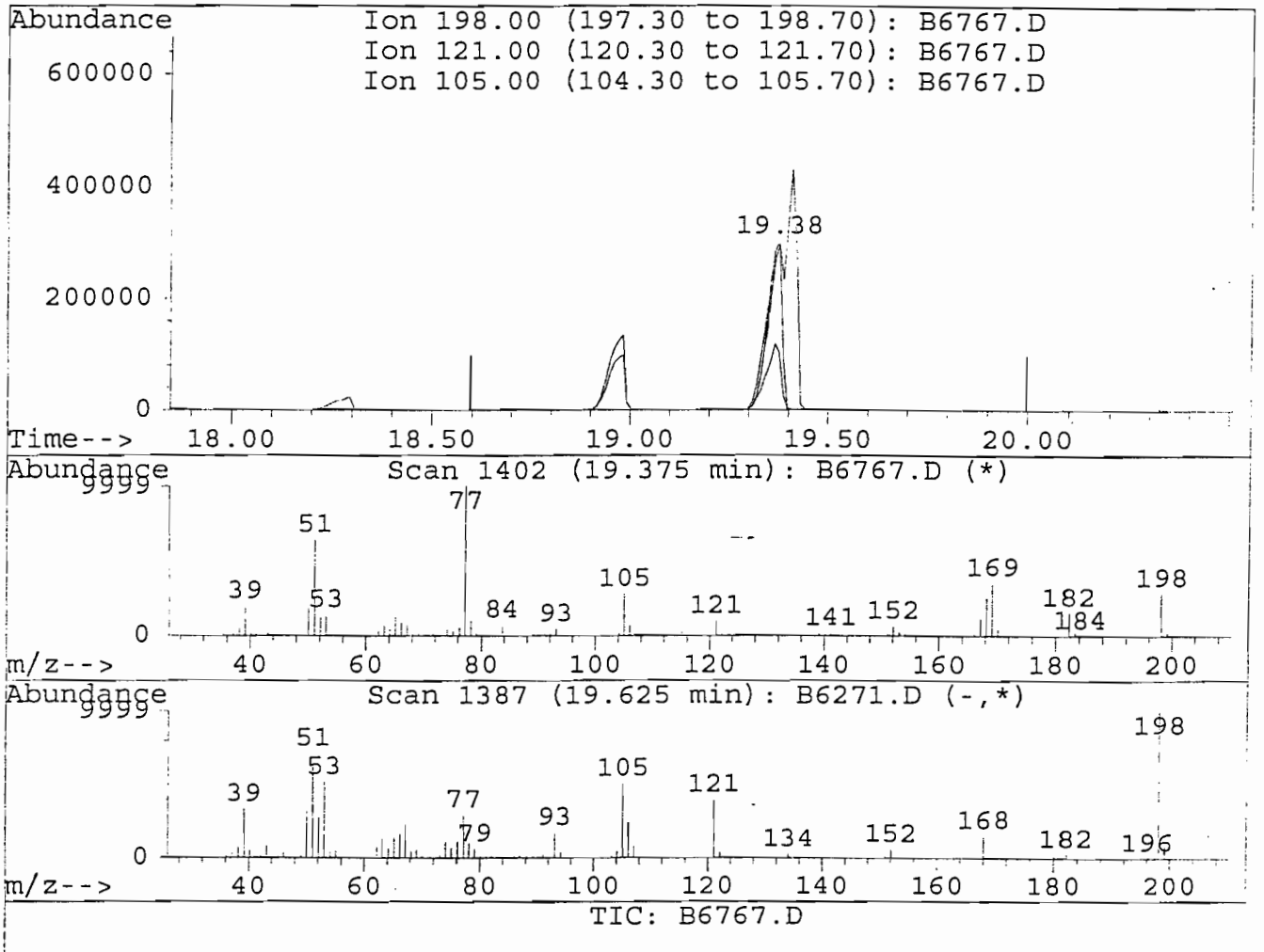
000377

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm
Sample : 160 NG BNA CCC
Misc :
Quant Time: Nov 7 11:49 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



TIC: B6767.D

(58) 4,6-Dinitro-2-methylphenol
19.38min 151.05ng m
response 800175

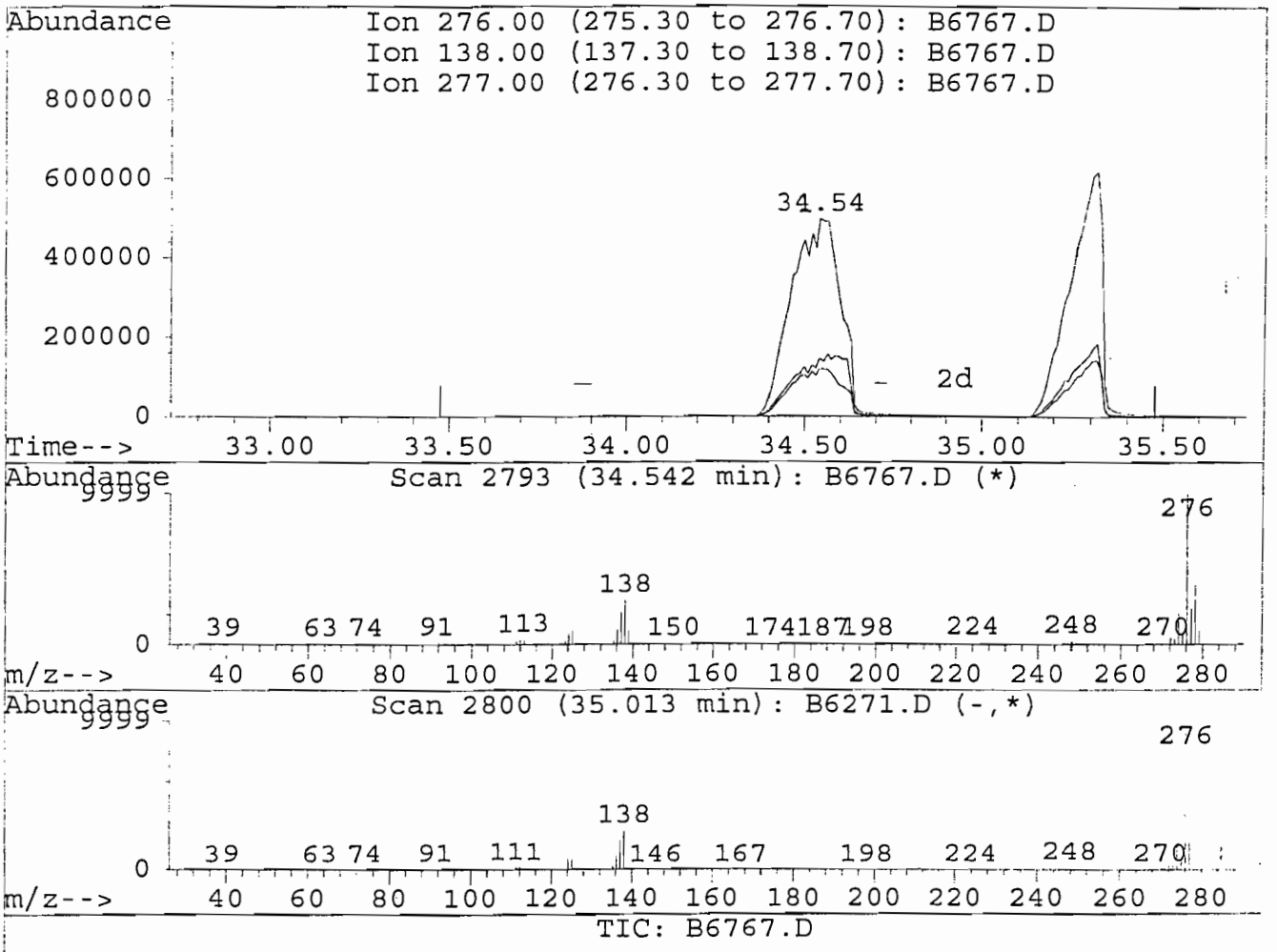
Ion	Exp%	Act%
198.00	100	100
121.00	33.50	33.91
105.00	41.30	98.39
0.00	0.00	0.00

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm
Sample : 160 NG BNA CCC
Misc :
Quant Time: Nov 7 11:49 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



(79) Indeno(1,2,3-cd)pyrene
34.54min 144.50ng m
response 4706718

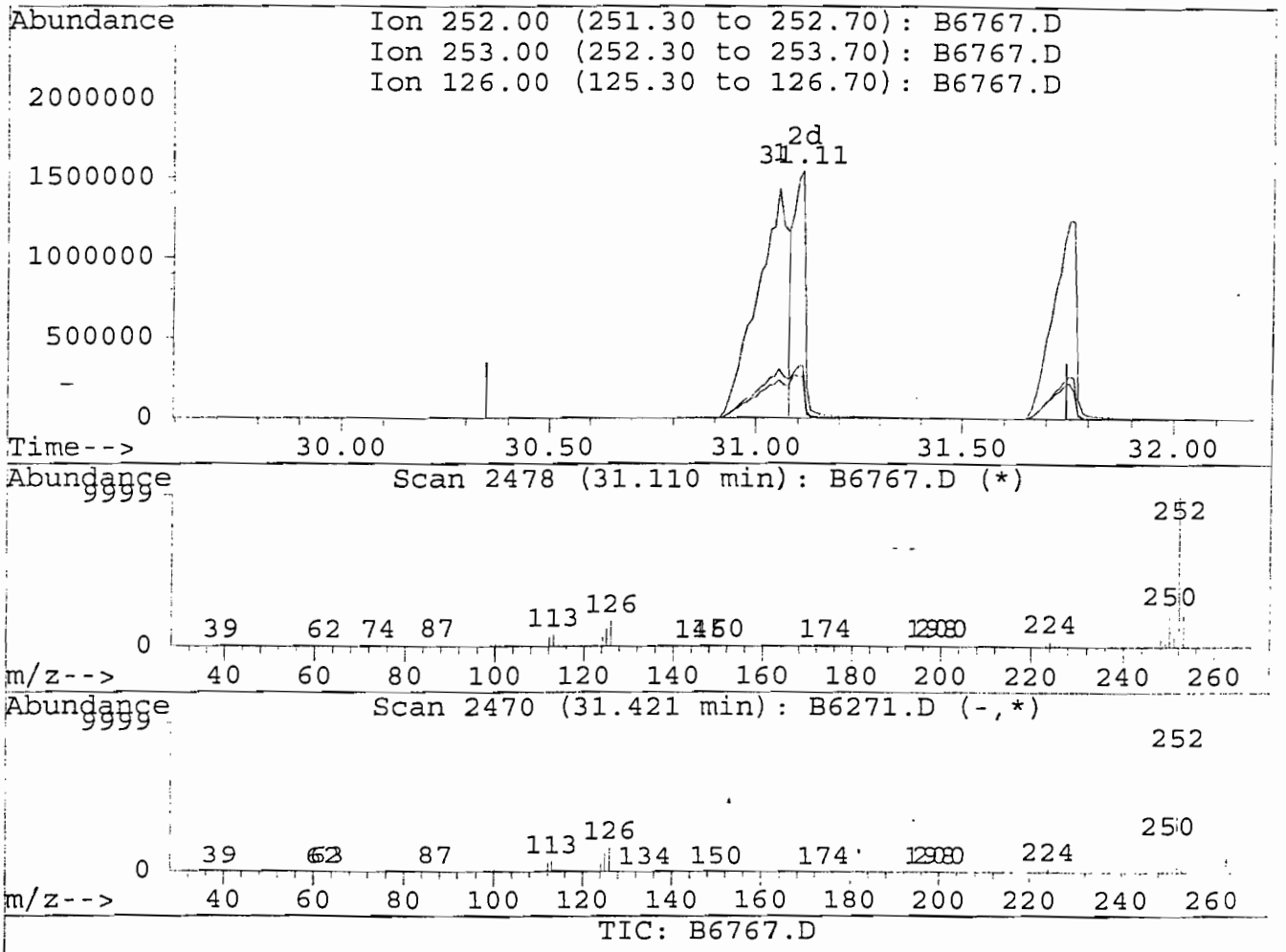
Ion	Exp%	Act%
276.00	100	100
138.00	25.60	29.14
277.00	20.70	23.91
0.00	0.00	0.00

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11105\B6767.D
Acq Time : 5 Nov 99 2:23 pm
Sample : 160 NG BNA CCC
Misc :
Quant Time: Nov 7 11:49 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Single Level Calibration



(82) Benzo[k]fluoranthene

31.11min 104.10ng m

response 3046552

Ion	Exp%	Act%
252.00	100	100
253.00	21.10	21.12
126.00	18.10	16.82
0.00	0.00	0.00

Response Factor Report BNA-RTE

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 08 09:56:39 1999
Response via : Initial Calibration

Calibration Files
80 =B6271.D 20 =B6269.D 50 =B6270.D
120 =B6272.D 160 =B6273.D

		Compound	80	20	50	120	160	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d4	ISTD						
2)		Pyridine	1.476	1.399	1.360	1.371	1.483	1.418	4.11
3)		N-nitroso-dimethylamine	0.751	0.649	0.698	0.725	0.711	0.707	5.36
4)	S	2-Fluorophenol	1.399	1.413	1.301	1.425	1.426	1.393	3.77
5)		Aniline	0.544	0.636	0.821	0.560	0.729	0.658	17.74
6)	S	2-Chlorophenol-d4	1.295	1.360	1.227	1.311	1.267	1.292	3.82
7)	S	Phenol-d5	1.602	1.625	1.531	1.582	1.630	1.594	2.51
8)	CM	Phenol	1.634	1.724	1.561	1.608	1.695	1.644	3.98
9)		bis(2-Chloroethyl)ether	1.652	1.698	1.797	1.651	1.575	1.675	4.86
10)	M	2-Chlorophenol	1.263	1.339	1.203	1.300	1.249	1.271	4.07
11)		1,3-Dichlorobenzene	1.520	1.581	1.432	1.469	1.459	1.492	3.95
12)	CM	1,4-Dichlorobenzene	1.514	1.541	1.466	1.493	1.439	1.491	2.66
13)	S	1,2-Dichlorobenzene-d4	0.915	0.965	0.883	0.880	0.854	0.899	4.74
14)		1,2-Dichlorobenzene	1.375	1.499	1.326	1.335	1.238	1.355	7.02
15)		Benzyl alcohol	0.707	0.762	0.730	0.724	0.748	0.734	2.91
16)		2-Methylphenol	1.103	1.138	1.038	1.057	1.008	1.069	4.84
17)		bis(2-chloroisopropyl)eth	2.483	2.541	2.360	2.533	2.631	2.509	3.96
18)		Hexachloroethane	0.586	0.682	0.600	0.590	0.621	0.616	6.37
19)		3+4-Methyphenols	1.062	1.198	1.065	1.062	1.091	1.095	5.35
20)	PM	N-Nitroso-di-n-propylamin	1.139	1.244	1.086	1.167	1.227	1.173	5.50
21)	I	Naphthalene-d8	ISTD						
22)	S	Nitrobenzene-d5	0.486	0.481	0.466	0.470	0.491	0.479	2.21
23)		Nitrobenzene	0.425	0.429	0.402	0.427	0.425	0.422	2.68
24)		Isophorone	0.862	0.953	0.872	0.872	0.919	0.896	4.34
25)	C	2-Nitrophenol	0.191	0.229	0.185	0.182	0.189	0.195	9.82
26)		2,4-Dimethylphenol	0.360	0.379	0.361	0.348	0.347	0.359	3.55
27)		bis(2-Chloroethoxy)methan	0.501	0.523	0.490	0.507	0.505	0.505	2.29
28)	C	2,4-Dichlorophenol	0.290	0.303	0.285	0.282	0.275	0.287	3.58
29)		Benzoic Acid	0.203	0.121	0.158	0.225	0.241	0.190	26.05
30)	M	1,2,4-Trichlorobenzene	0.332	0.368	0.335	0.314	0.307	0.331	7.15
31)		Naphthalene	0.971	1.063	0.996	0.913	0.929	0.974	6.10
32)		4-Chloroaniline	0.022	0.203	0.070	0.030	0.055	0.076	96.63
33)	C	Hexachlorobutadiene	0.222	0.248	0.225	0.203	0.196	0.219	9.50
34)	CM	4-Chloro-3-methylphenol	0.318	0.317	0.304	0.311	0.315	0.313	1.86
35)		2-Methylnaphthalene	0.634	0.671	0.622	0.582	0.564	0.615	6.93
36)	I	Acenaphthene-d10	ISTD						
37)	P	Hexachlorocyclopentadiene	0.312	0.251	0.286	0.288	0.316	0.291	8.91
38)	C	2,4,6-Trichlorophenol	0.404	0.397	0.391	0.389	0.392	0.395	1.55
39)		2,4,5-Trichlorophenol	0.427	0.393	0.395	0.425	0.411	0.410	3.86
40)	S	2-Fluorobiphenyl	1.367	1.587	1.404	1.275	1.247	1.376	9.76
41)		2-Chloronaphthalene	1.119	1.227	1.143	1.096	1.068	1.131	5.35

(#) = Out of Range

Response Factor Report BNA-RTE

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 08 09:56:39 1999
Response via : Initial Calibration

Calibration Files
80 =B6271.D 20 =B6269.D 50 =B6270.D
120 =B6272.D 160 =B6273.D

		Compound	80	20	50	120	160	Avg	%RSD
42)		2-Nitroaniline	0.258	0.356	0.330	0.289	0.310	0.308	12.15
43)		Dimethylphthalate	1.421	1.522	1.397	1.338	1.290	1.394	6.34
44)		Acenaphthylene	1.818	2.023	1.817	1.596	1.440	1.739	12.96
45)		2,6-Dinitrotoluene	0.299	0.255	0.269	0.297	0.301	0.284	7.40
46)		3-Nitroaniline	0.016	0.062	0.020	0.017	0.015	0.026	76.02
47)	CM	Acenaphthene	1.136	1.262	1.142	1.085	1.031	1.131	7.58
48)	P	2,4-Dinitrophenol	0.081	0.032	0.050	0.102	0.119	0.077	46.83
49)		Dibenzofuran	1.493	1.614	1.438	1.430	1.405	1.476	5.66
50)	PM	4-Nitrophenol	0.115	0.086	0.101	0.131	0.114	0.109	15.31
51)	M	2,4-Dinitrotoluene	0.383	0.334	0.332	0.387	0.415	0.370	9.79
52)		Fluorene	1.044	1.237	1.101	0.970	0.941	1.059	11.15
53)		Diethylphthalate	1.359	1.572	1.445	1.231	1.149	1.351	12.43
54)		4-Chlorophenyl-phenylethe	0.600	0.645	0.592	0.560	0.541	0.587	6.79
55)	S	2,4,6-Tribromophenol	0.275	0.244	0.241	0.273	0.284	0.264	7.52
56)		4-Nitroaniline	0.065	0.124	0.080	0.067	0.061	0.079	32.43
57)	I	Phenanthrene-d10	----------ISTD----------						
58)		4,6-Dinitro-2-methylpheno	0.088	0.054	0.068	0.096	0.108	0.083	26.31
59)	C	N-Nitrosodiphenylamine	0.238	0.343	0.333	0.204	0.190	0.262	27.52
60)		1,2-Diphenylhydrazine	1.034	1.150	1.017	0.965	0.998	1.033	6.82
61)		4-Bromophenyl-phenylether	0.219	0.251	0.225	0.205	0.200	0.220	9.18
62)		Hexachlorobenzene	0.315	0.355	0.313	0.293	0.286	0.312	8.68
63)	CM	Pentachlorophenol	0.155	0.138	0.144	0.160	0.165	0.152	7.43
64)		Phenanthrene	0.930	1.062	0.948	0.873	0.866	0.936	8.44
65)		Anthracene	0.896	1.050	0.918	0.858	0.836	0.912	9.16
66)		Carbazole	0.083	0.520	0.130	0.093	0.127	0.190	97.27
67)		Di-n-butylphthalate	1.476	1.675	1.521	1.339	1.303	1.463	10.23
68)	C	Fluoranthene	0.992	1.114	0.951	0.936	0.921	0.983	7.94
69)	I	Chrysene-d12	----------ISTD----------						
70)		Benzidine	0.003	0.001	0.002	0.004	0.005	0.003#	47.00
71)	M	Pyrene	1.491	1.493	1.381	1.235	1.258	1.372	8.97
72)	S	Terphenyl-d14	1.279	1.201	1.207	1.119	1.084	1.178	6.57
73)		Butylbenzylphthalate	0.905	0.909	0.833	0.774	0.763	0.837	8.30
74)		Benzo[a]anthracene	1.109	1.138	1.050	1.055	1.056	1.082	3.66
75)		3,3'-Dichlorobenzidine	0.127	0.179	0.107	0.171	0.207	0.158	25.49
76)		Chrysene	1.019	1.069	0.977	0.923	0.955	0.989	5.76
77)		bis(2-Ethylhexyl)phthalat	1.149	1.263	1.120	1.007	0.966	1.101	10.73
78)		Di-n-octylphthalate	1.830	2.028	1.747	1.689	1.587	1.776	9.36
79)		Indeno(1,2,3-cd)pyrene	0.689	0.547	0.667	0.627	0.753	0.657	11.63
80)	I	Perylene-d12	----------ISTD----------						
81)		Benzo[b]fluoranthene	1.090	1.130	1.148	1.236	1.085	1.138	5.35
82)		Benzo[k]fluoranthene	1.028	1.095	0.976	0.948	1.102	1.030	6.70

(#) = Out of Range

000382

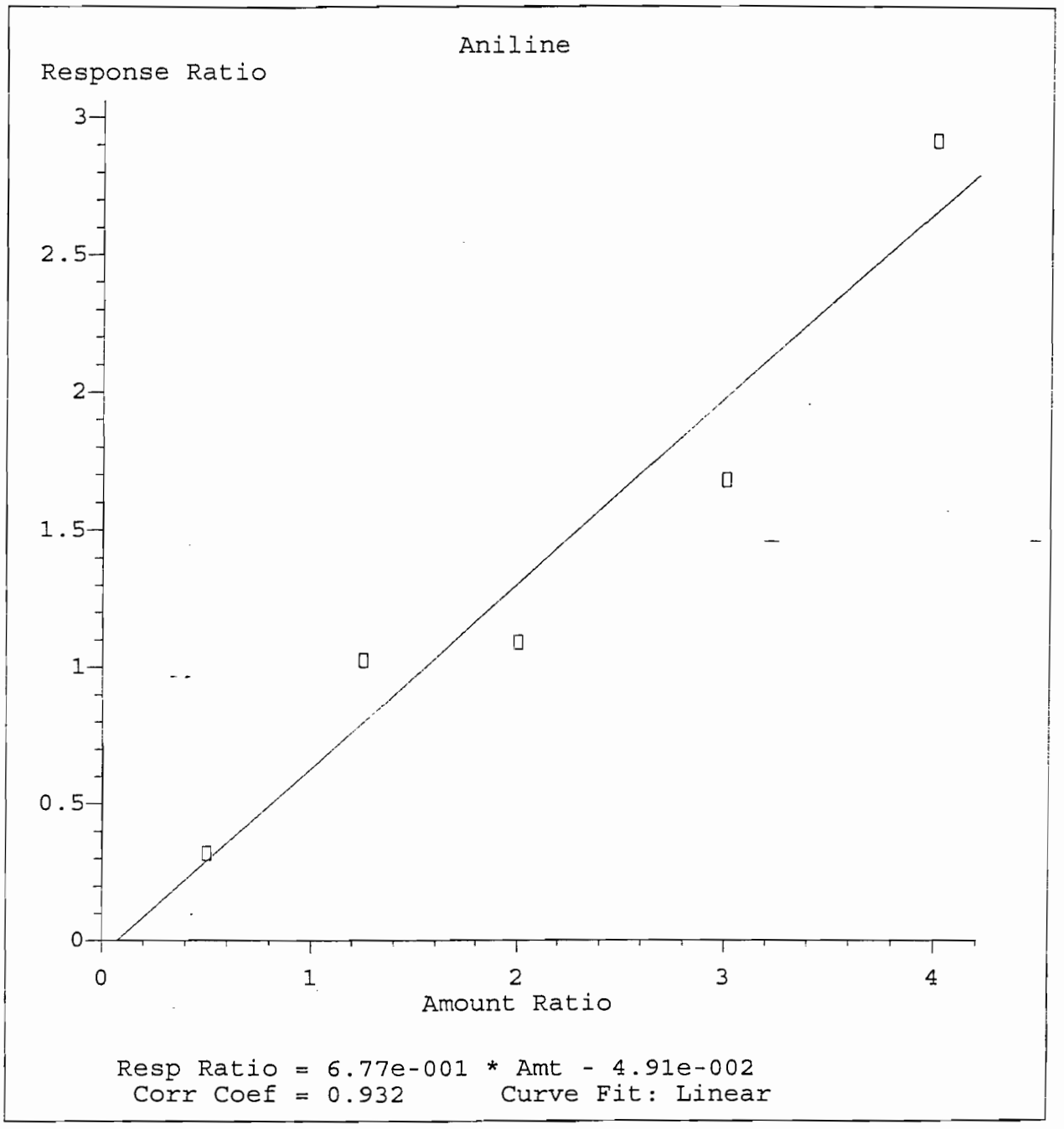
Response Factor Report BNA-RTE

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 08 09:56:39 1999
Response via : Initial Calibration

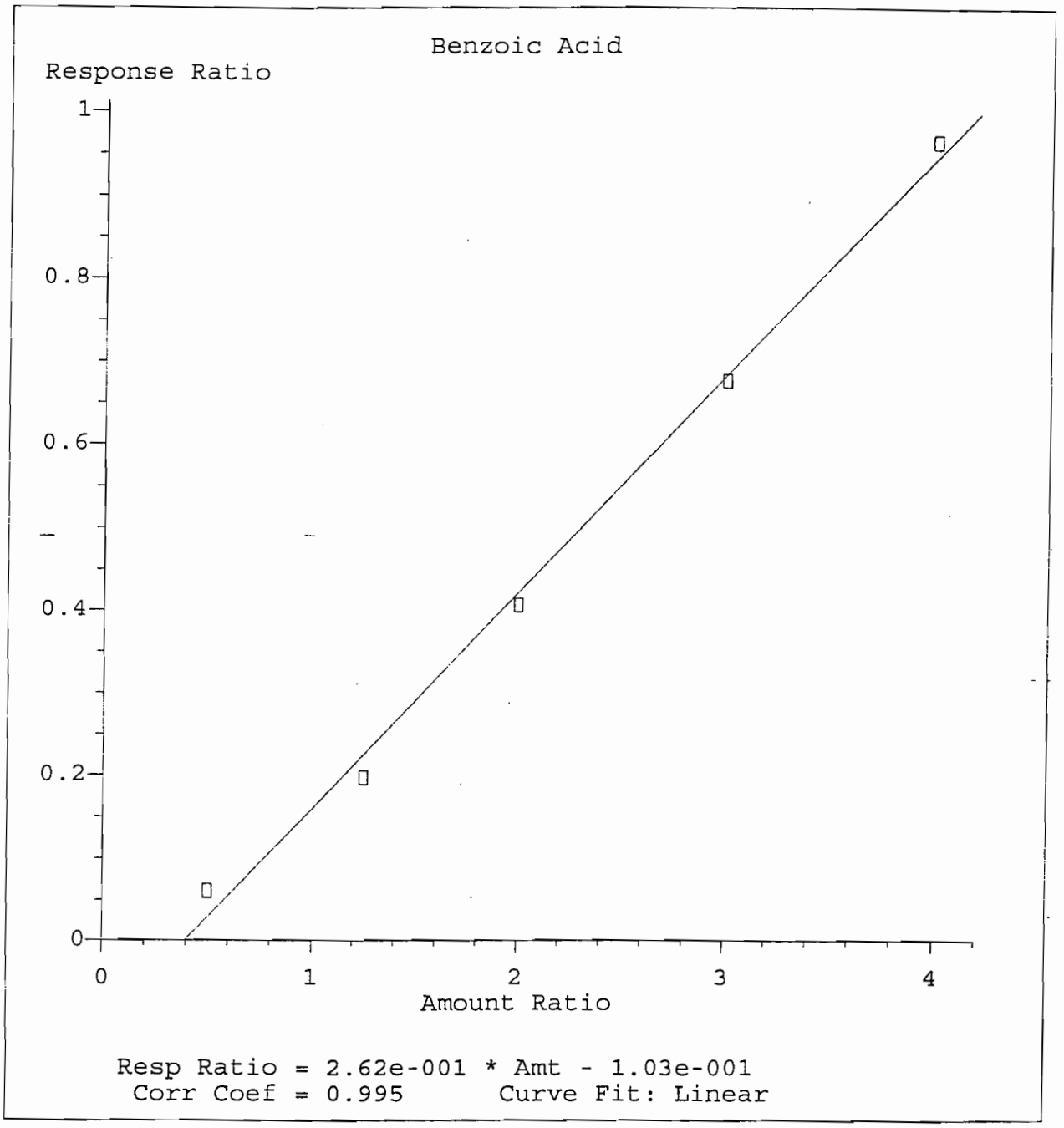
Calibration Files
80 =B6271.D 20 =B6269.D 50 =B6270.D
120 =B6272.D 160 =B6273.D

	Compound	80	20	50	120	160	Avg	%RSD
83) C	Benzo[a]pyrene	0.914	0.931	0.883	0.943	0.961	0.926	3.21
84)	Dibenz[a,h]anthracene	0.621	0.585	0.629	0.689	0.724	0.649	8.63
85)	Benzo[g,h,i]perylene	0.690	0.659	0.694	0.736	0.719	0.700	4.23

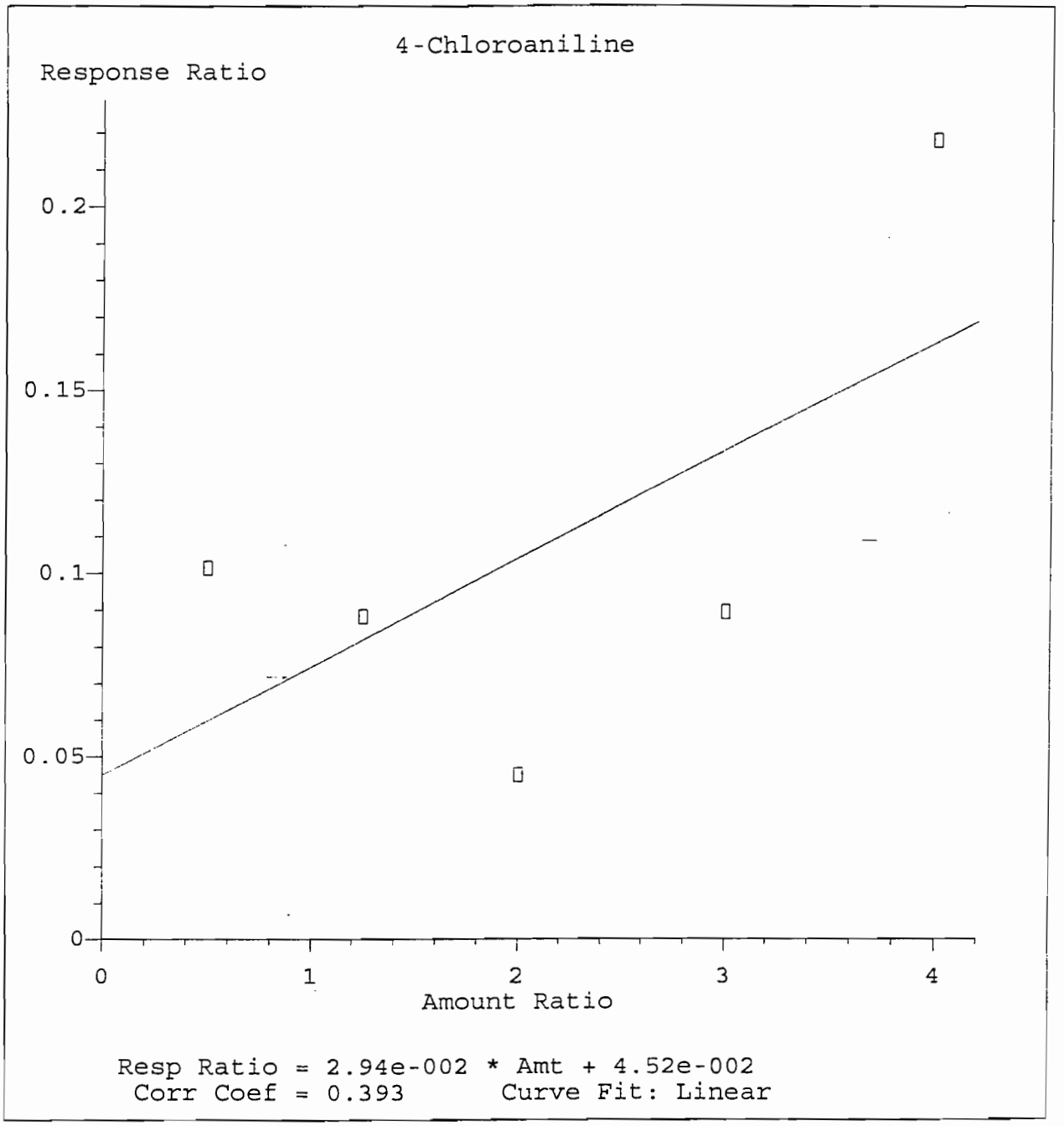
(#) = Out of Range



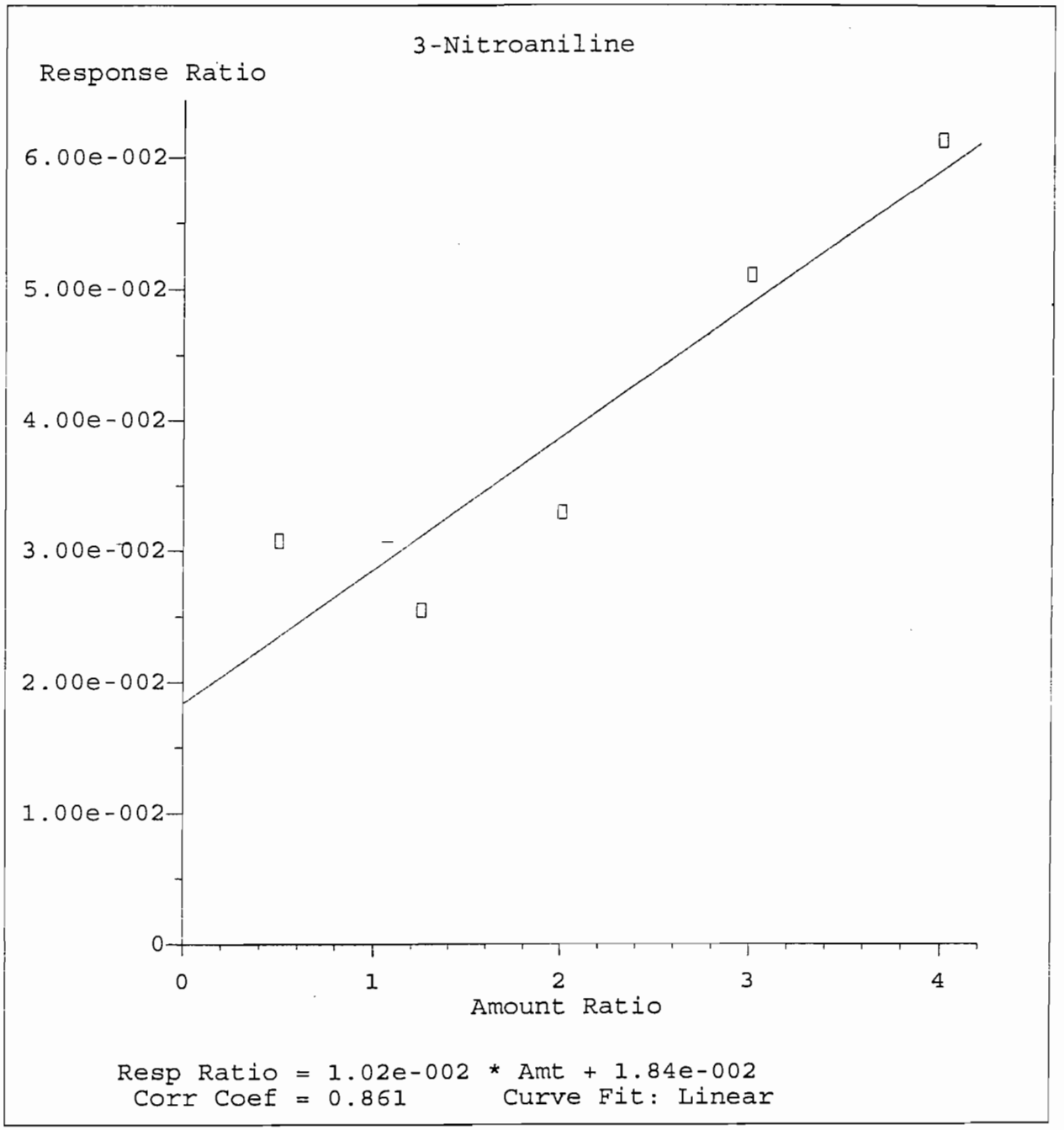
Method Name: F:\HPCHEM\1\METHODS\B11006C.M
Calibration Table Last Updated: Thu Oct 07 11:24:12 1999



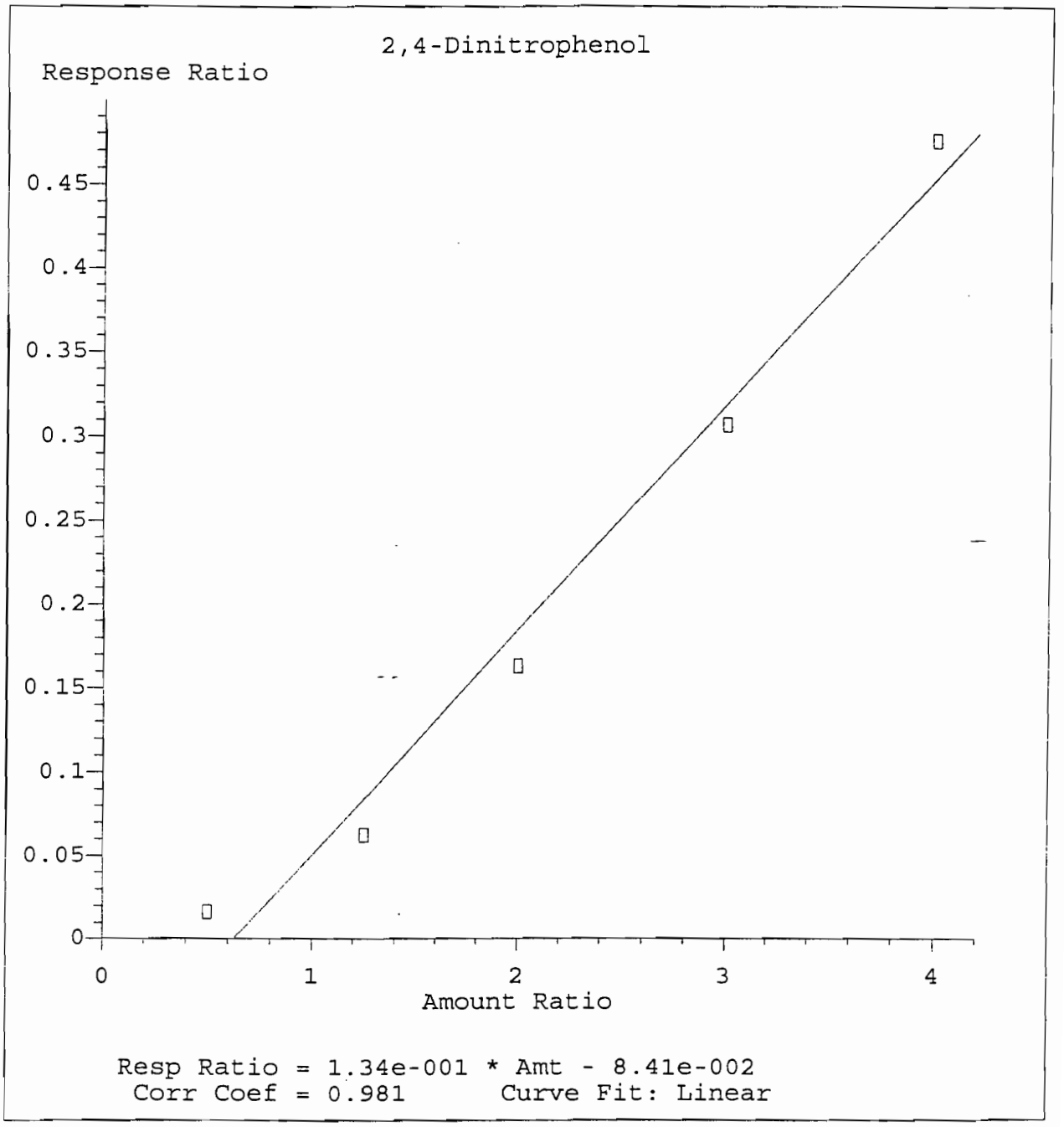
Method Name: F:\HPCHEM\1\METHODS\B11006C.M
Calibration Table Last Updated: Fri Oct 08 09:55:02 1999



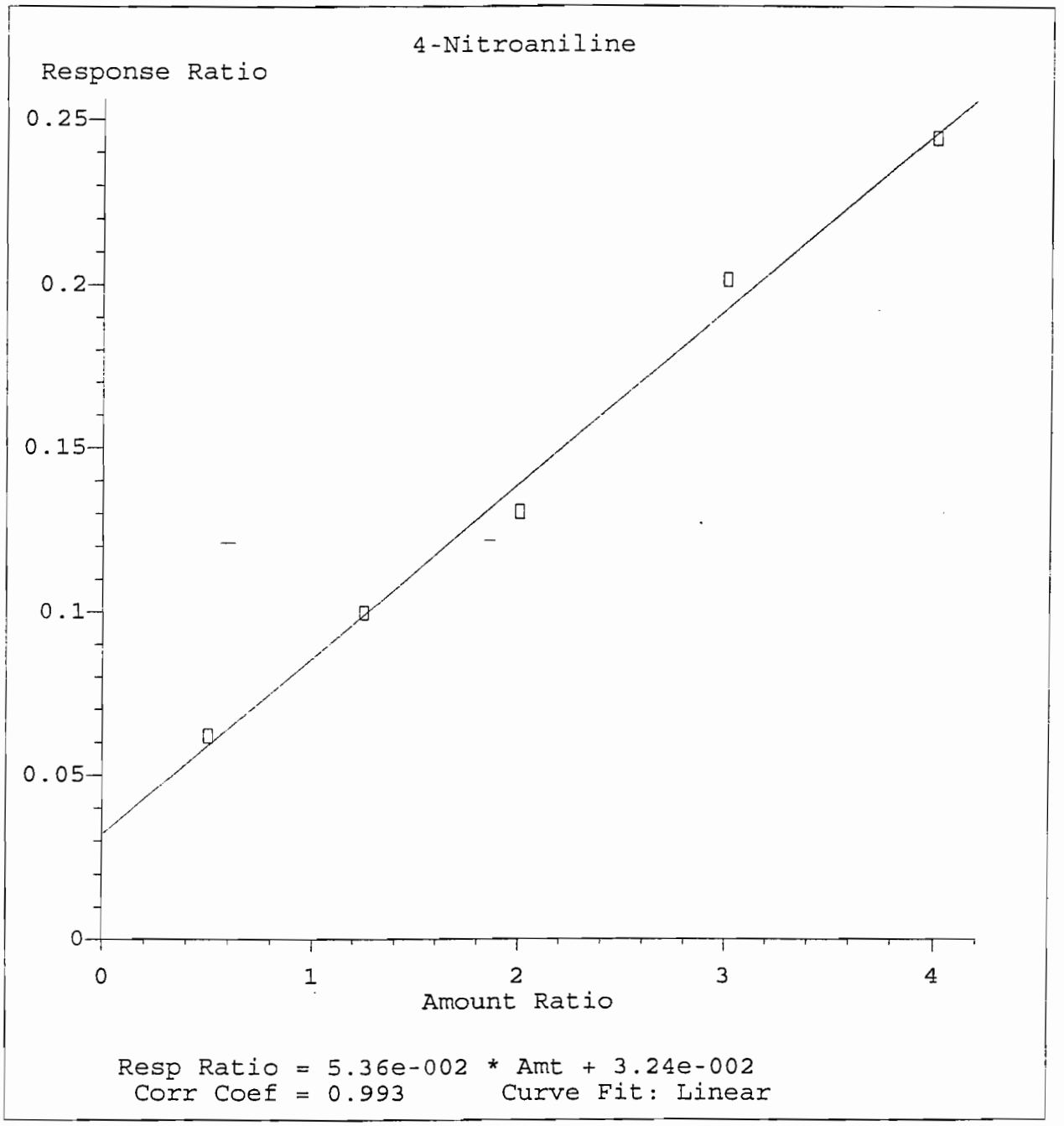
Method Name: F:\HPCHEM\1\METHODS\B11006C.M
Calibration Table Last Updated: Fri Oct 08 09:55:18 1999



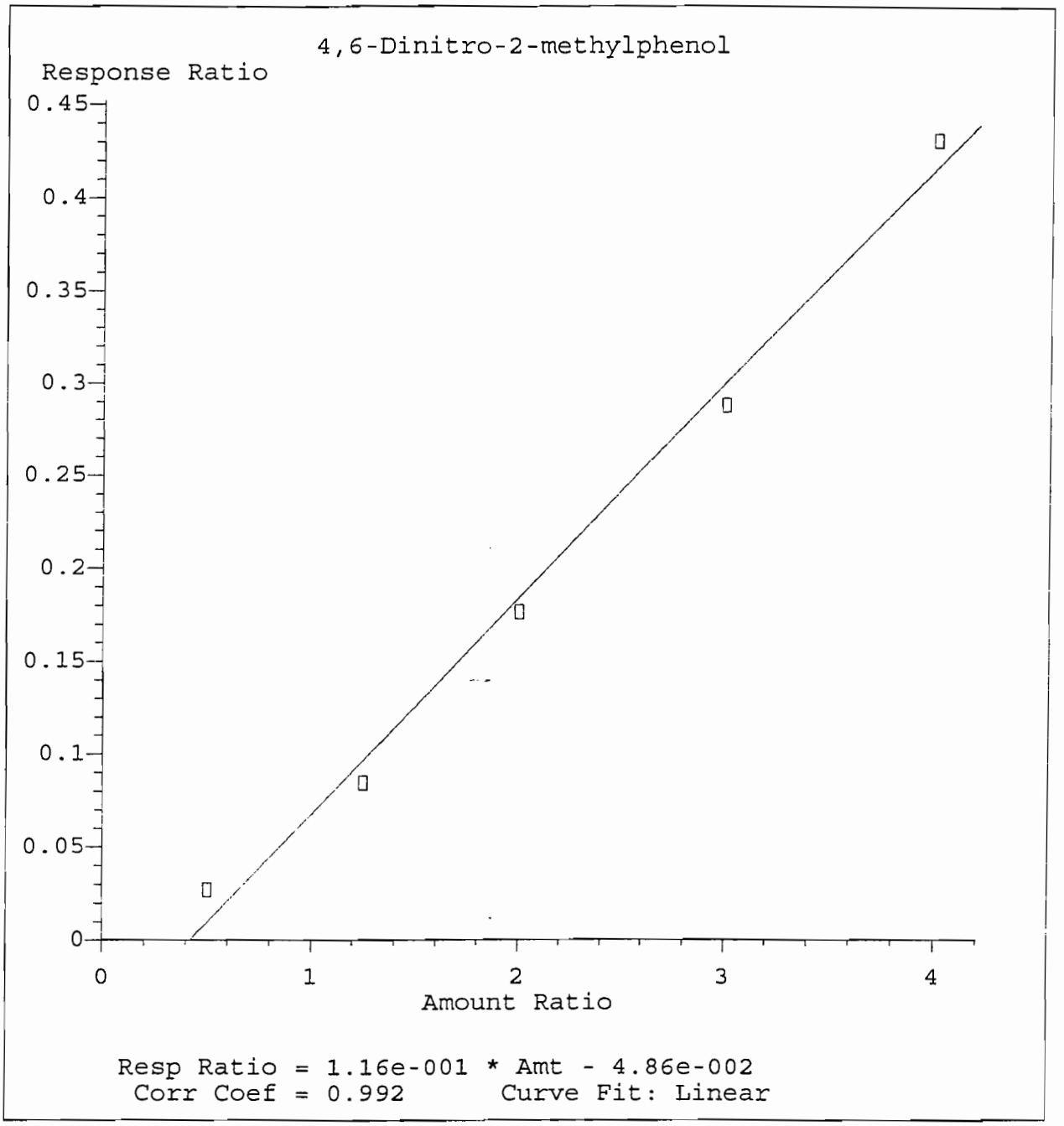
Method Name: F:\HPCHEM\1\METHODS\B11006C.M
Calibration Table Last Updated: Fri Oct 08 09:55:37 1999



Method Name: F:\HPCHEM\1\METHODS\B11006C.M
Calibration Table Last Updated: Fri Oct 08 09:55:54 1999



Method Name: F:\HPCHEM\1\METHODS\B11006C.M
Calibration Table Last Updated: Fri Oct 08 09:55:54 1999



Method Name: F:\HPCHEM\1\METHODS\B11006C.M
Calibration Table Last Updated: Fri Oct 08 09:56:27 1999

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6269.D
Acq Time : 6 Oct 99 10:21 am
Sample : 20 BNA ICC
Misc :
Quant Time: Oct 8 9:57 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 08 09:56:39 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.06	152	417542	40.00	ng		0.00
21) Naphthalene-d8	13.23	136	1416298	40.00	ng		-0.02
36) Acenaphthene-d10	17.84	164	725299	40.00	ng		0.00
57) Phenanthrene-d10	21.68	188	1195398	40.00	ng		-0.01
69) Chrysene-d12	28.70	240	893755	40.00	ng		-0.01
80) Perylene-d12	32.20	264	784018	40.00	ng		-0.02
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	7.26	112	294918	20.19	ng		
6) 2-Chlorophenol-d4	9.61	132	283872	21.00	ng		
7) Phenol-d5	9.42	99	339196	20.29	ng		
13) 1,2-Dichlorobenzene-d4	10.51	152	201460	21.10	ng		
22) Nitrobenzene-d5	11.51	82	340604	19.79	ng		
40) 2-Fluorobiphenyl	16.12	172	575423	23.22	ng		
55) 2,4,6-Tribromophenol	19.94	330	88391	17.71	ng		
72) Terphenyl-d14	26.01	244	536728	18.78	ng		
Target Compounds							Qvalue
2) Pyridine	4.59	79	291967	18.95	ng	m	0
3) N-nitroso-dimethylamine	4.60	42	135399	17.27	ng		93
5) Aniline	9.43	93	132838	23.37	ng	m	19
8) Phenol	9.44	94	359844	21.10	ng		83
9) bis(2-Chloroethyl)ether	9.59	93	354570	20.56	ng		95
10) 2-Chlorophenol	9.65	128	279631	21.21	ng		98
11) 1,3-Dichlorobenzene	9.96	146	330106	20.81	ng		99
12) 1,4-Dichlorobenzene	10.09	146	321621	20.34	ng		98
14) 1,2-Dichlorobenzene	10.54	146	313050	21.81	ng		98
15) Benzyl alcohol	10.51	108	159153	21.55	ng		96
16) 2-Methylphenol	10.86	108	237611	20.64	ng		98
17) bis(2-chloroisopropyl)ethe	10.90	45	530397	20.46	ng		97
18) Hexachloroethane	11.27	117	142303	23.28	ng		97
19) 3+4-Methyphenols	11.24	108	500240	45.11	ng		99
20) N-Nitroso-di-n-propylamine	11.25	70	259681	21.83	ng		91
23) Nitrobenzene	11.54	77	303868	20.21	ng		95
24) Isophorone	12.14	82	674756	22.10	ng		98
25) 2-Nitrophenol	12.36	139	162108	24.02	ng		100
26) 2,4-Dimethylphenol	12.53	107	268330	21.07	ng		97
27) bis(2-Chloroethoxy)methane	12.77	93	370060	20.84	ng		99
28) 2,4-Dichlorophenol	12.95	162	214356	20.87	ng		99
29) Benzoic Acid	12.83	105	86020	11.97	ng		87
30) 1,2,4-Trichlorobenzene	13.14	180	260327	22.15	ng		97
31) Naphthalene	13.27	128	752500	21.88	ng		99
32) 4-Chloroaniline	13.57	127	143681	180.86	ng		89
33) Hexachlorobutadiene	13.78	225	175836	22.38	ng		99

(#) = qualifier out of range (m) = manual integration

000391

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6269.D
Acq Time : 6 Oct 99 10:21 am
Sample : 20 BNA ICC
Misc :
Quant Time: Oct 8 9:57 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 08 09:56:39 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.86	107	224306	19.93	ng		96
35) 2-Methylnaphthalene	15.07	142	475319	21.17	ng		98
37) Hexachlorocyclopentadiene	15.69	237	91101	16.10	ng		97
38) 2,4,6-Trichlorophenol	15.93	196	144053	19.65	ng		99
39) 2,4,5-Trichlorophenol	16.00	196	142653	18.42	ng		97
41) 2-Chloronaphthalene	16.32	162	444872	21.92	ng		99
42) 2-Nitroaniline	16.75	65	128926	27.56	ng		99
43) Dimethylphthalate	17.36	163	551961	21.42	ng		99
44) Acenaphthylene	17.42	152	733667	22.25	ng		98
45) 2,6-Dinitrotoluene	17.53	165	92401	17.03	ng		94
46) 3-Nitroaniline	17.86	138	22307	74.79	ng	m	1
47) Acenaphthene	17.92	153	457617	22.21	ng		99
48) 2,4-Dinitrophenol	18.14	184	11637	7.90	ng	m	96
49) Dibenzofuran	18.33	168	585334	21.62	ng		97
50) 4-Nitrophenol	18.39	109	31114	14.97	ng		91
51) 2,4-Dinitrotoluene	18.54	165	121058	17.41	ng		96
52) Fluorene	19.23	166	448730	23.71	ng		97
53) Diethylphthalate	19.23	149	570134	23.15	ng		99
54) 4-Chlorophenyl-phenylether	19.30	204	233807	21.49	ng		98
56) 4-Nitroaniline	19.49	138	44850	37.96	ng		92
58) 4,6-Dinitro-2-methylphenol	19.58	198	32168	12.21	ng		87
59) N-Nitrosodiphenylamine	19.66	169	205207	28.88	ng	m	99
60) 1,2-Diphenylhydrazine	19.70	77	687366	22.24	ng		98
61) 4-Bromophenyl-phenylether	20.57	248	149886	22.91	ng		95
62) Hexachlorobenzene	20.91	284	212387	22.59	ng		98
63) Pentachlorophenol	21.41	266	82415	17.81	ng		96
64) Phenanthrene	21.74	178	634926	22.85	ng		98
65) Anthracene	21.86	178	627485	23.43	ng		100
66) Carbazole	22.36	167	310677	124.75	ng		97
67) Di-n-butylphthalate	23.55	149	1001221	22.70	ng		96
68) Fluoranthene	24.88	202	666004	22.46	ng		99
70) Benzidine	26.62	184	455	5.90	ng	m	0
71) Pyrene	25.45	202	667110	20.02	ng		99
73) Butylbenzylphthalate	27.48	149	406304	20.08	ng		98
74) Benzo[a]anthracene	28.64	228	508553	20.53	ng		98
75) 3,3'-Dichlorobenzidine	28.72	252	80200	28.21	ng		95
76) Chrysene	28.75	228	477804	20.99	ng		100
77) bis(2-Ethylhexyl)phthalate	29.09	149	564284	21.99	ng		98
78) Di-n-octylphthalate	30.61	149	906091	22.16	ng		99
79) Indeno(1,2,3-cd)pyrene	34.97	276	244263	15.87	ng		97
81) Benzo[b]fluoranthene	31.33	252	442831	20.73	ng		98
82) Benzo[k]fluoranthene	31.38	252	429355	21.30	ng		97
83) Benzo[a]pyrene	32.06	252	364986	20.37	ng		98
84) Dibenz[a,h]anthracene	35.05	278	229164	18.83	ng		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6269.D
Acq Time : 6 Oct 99 10:21 am
Sample : 20 BNA ICC
Misc :
Quant Time: Oct 8 9:57 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 08 09:56:39 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.78	276	258299	19.09 ng	95

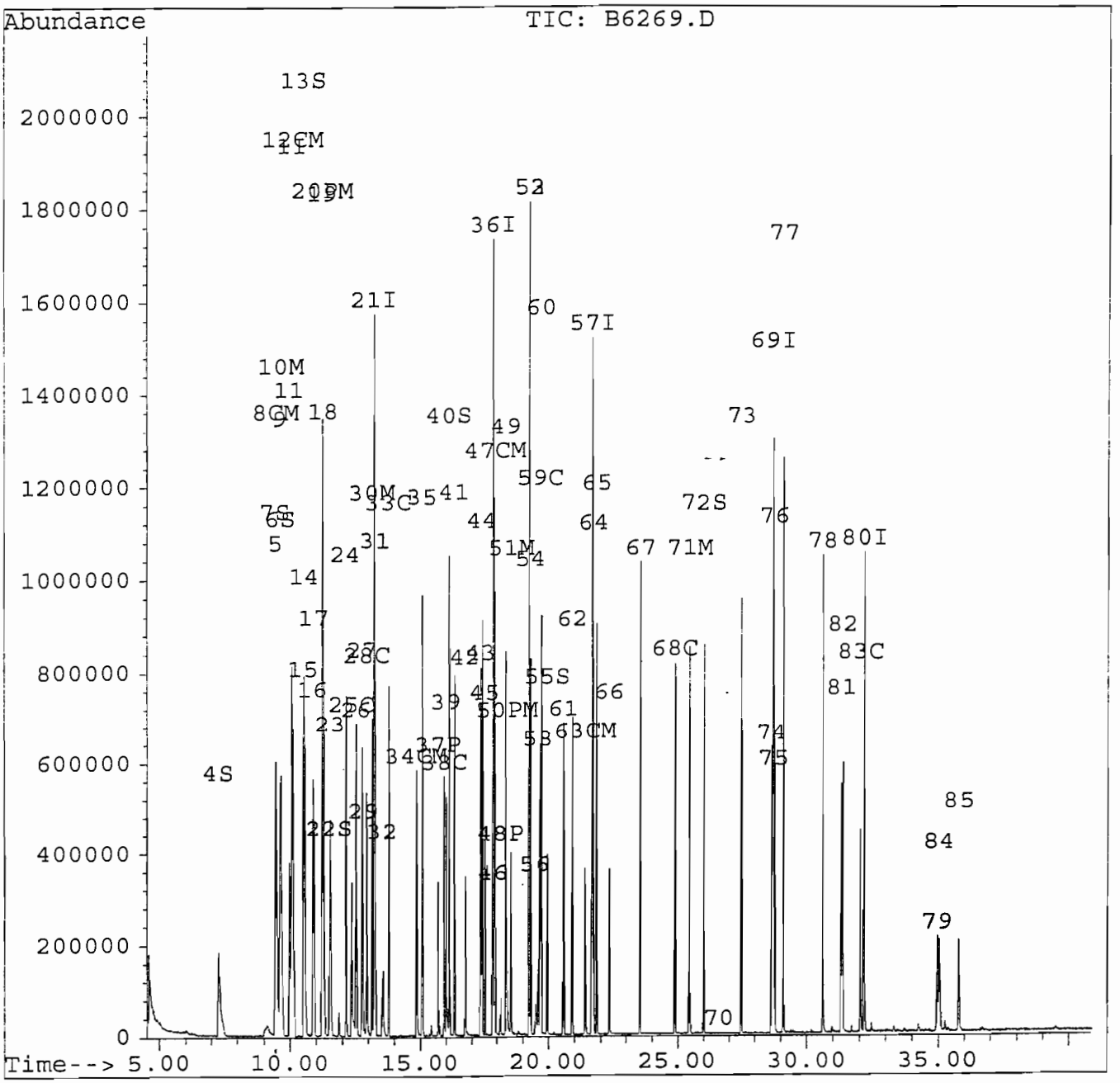
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6269.D
Acq Time : 6 Oct 99 10:21 am
Sample : 20 BNA ICC
Misc :
Quant Time: Oct 8 9:57 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 08 09:56:39 1999
Response via : Single Level Calibration



Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.06	152	439705	40.00	ng	0.00
21) Naphthalene-d8	13.23	136	1469983	40.00	ng	-0.01
36) Acenaphthene-d10	17.84	164	777480	40.00	ng	0.00
57) Phenanthrene-d10	21.69	188	1296281	40.00	ng	0.00
69) Chrysene-d12	28.70	240	911963	40.00	ng	0.00
80) Perylene-d12	32.21	264	761157	40.00	ng	-0.01
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.26	112	714963	46.49	ng	
6) 2-Chlorophenol-d4	9.61	132	674656	47.39	ng	
7) Phenol-d5	9.43	99	841440	47.79	ng	
13) 1,2-Dichlorobenzene-d4	10.51	152	485181	48.24	ng	
22) Nitrobenzene-d5	11.51	82	856184	47.94	ng	
40) 2-Fluorobiphenyl	16.14	172	1364532	51.36	ng	
55) 2,4,6-Tribromophenol	19.95	330	234180	43.77	ng	
72) Terphenyl-d14	26.01	244	1376228	47.19	ng	#
Target Compounds						Qvalue
2) Pyridine	4.57	79	747472	46.06	ng	m 0
3) N-nitroso-dimethylamine	4.58	42	383887	46.50	ng	92
5) Aniline	9.43	93	451034	75.36	ng	m 50
8) Phenol	9.45	94	858148	47.77	ng	90
9) bis(2-Chloroethyl)ether	9.59	93	987674	54.39	ng	96
10) 2-Chlorophenol	9.65	128	661263	47.62	ng	99
11) 1,3-Dichlorobenzene	9.96	146	787120	47.11	ng	98
12) 1,4-Dichlorobenzene	10.09	146	805997	48.41	ng	99
14) 1,2-Dichlorobenzene	10.54	146	728678	48.20	ng	98
15) Benzyl alcohol	10.52	108	401062	51.57	ng	95
16) 2-Methylphenol	10.86	108	570670	47.08	ng	100
17) bis(2-chloroisopropyl)ethe	10.90	45	1297068	47.52	ng	98
18) Hexachloroethane	11.27	117	329715	51.22	ng	97
19) 3+4-Methyphenols	11.26	108	1170516	100.24	ng	96
20) N-Nitroso-di-n-propylamine	11.26	70	597010	47.66	ng	95
23) Nitrobenzene	11.55	77	737863	47.29	ng	97
24) Isophorone	12.15	82	1602981	50.59	ng	100
25) 2-Nitrophenol	12.36	139	339534	48.47	ng	98
26) 2,4-Dimethylphenol	12.55	107	664241	50.25	ng	96
27) bis(2-Chloroethoxy)methane	12.79	93	901073	48.89	ng	98
28) 2,4-Dichlorophenol	12.95	162	524493	49.20	ng	98
29) Benzoic Acid	12.93	105	289534	38.81	ng	94
30) 1,2,4-Trichlorobenzene	13.15	180	615531	50.45	ng	99
31) Naphthalene	13.28	128	1830024	51.26	ng	100
32) 4-Chloroaniline	13.58	127	129541	157.10	ng	96
33) Hexachlorobutadiene	13.79	225	414318	50.81	ng	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.87	107	557745	47.74	ng		97
35) 2-Methylnaphthalene	15.07	142	1142960	49.04	ng		99
37) Hexachlorocyclopentadiene	15.68	237	277979	45.83	ng		99
38) 2,4,6-Trichlorophenol	15.93	196	380169	48.38	ng		97
39) 2,4,5-Trichlorophenol	16.01	196	384332	46.29	ng		99
41) 2-Chloronaphthalene	16.34	162	1110873	51.05	ng		98
42) 2-Nitroaniline	16.77	65	320906	64.00	ng		91
43) Dimethylphthalate	17.38	163	1357931	49.15	ng		99
44) Acenaphthylene	17.43	152	1766325	49.98	ng		100
45) 2,6-Dinitrotoluene	17.55	165	261515	44.97	ng		96
46) 3-Nitroaniline	17.92	138	19794	61.91	ng	m	1
47) Acenaphthene	17.93	153	1109956	50.25	ng		99
48) 2,4-Dinitrophenol	18.14	184	48198	30.51	ng		94
49) Dibenzofuran	18.34	168	1397715	48.16	ng		99
50) 4-Nitrophenol	18.39	109	98564	44.23	ng		89
51) 2,4-Dinitrotoluene	18.55	165	322554	43.27	ng		96
52) Fluorene	19.24	166	1069680	52.72	ng		100
53) Diethylphthalate	19.26	149	1404708	53.20	ng		99
54) 4-Chlorophenyl-phenylether	19.31	204	575123	49.32	ng		99
56) 4-Nitroaniline	19.52	138	77336	61.06	ng		94
58) 4,6-Dinitro-2-methylphenol	19.60	198	109596	38.35	ng		94
59) N-Nitrosodiphenylamine	19.67	169	538933	69.94	ng		98
60) 1,2-Diphenylhydrazine	19.71	77	1648494	49.20	ng		100
61) 4-Bromophenyl-phenylether	20.57	248	365177	51.48	ng		99
62) Hexachlorobenzene	20.91	284	507884	49.82	ng		92
63) Pentachlorophenol	21.42	266	233100	46.45	ng		97
64) Phenanthrene	21.75	178	1536270	50.98	ng		99
65) Anthracene	21.87	178	1486786	51.20	ng		99
66) Carbazole	22.36	167	210134	77.81	ng		95
67) Di-n-butylphthalate	23.56	149	2464836	51.53	ng		99
68) Fluoranthene	24.89	202	1540601	47.90	ng		99
70) Benzidine	26.62	184	2563	32.57	ng	m	95
71) Pyrene	25.47	202	1574490	46.32	ng		99
73) Butylbenzylphthalate	27.48	149	949346	45.99	ng		97
74) Benzo[a]anthracene	28.65	228	1197171	47.35	ng		99
75) 3,3'-Dichlorobenzidine	28.73	252	122243	42.14	ng		95
76) Chrysene	28.77	228	1113496	47.94	ng		99
77) bis(2-Ethylhexyl)phthalate	29.09	149	1276394	48.74	ng		100
78) Di-n-octylphthalate	30.62	149	1991636	47.73	ng		100
79) Indeno(1,2,3-cd)pyrene	34.99	276	760674	48.44	ng	m	98
81) Benzo[b]fluoranthene	31.33	252	1092094	52.66	ng		98
82) Benzo[k]fluoranthene	31.40	252	929047	47.48	ng		99
83) Benzo[a]pyrene	32.06	252	839991	48.29	ng		98
84) Dibenz[a,h]anthracene	35.07	278	598002	50.61	ng		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Benzo[g,h,i]perylene	35.80	276	659886	50.25	ng	98

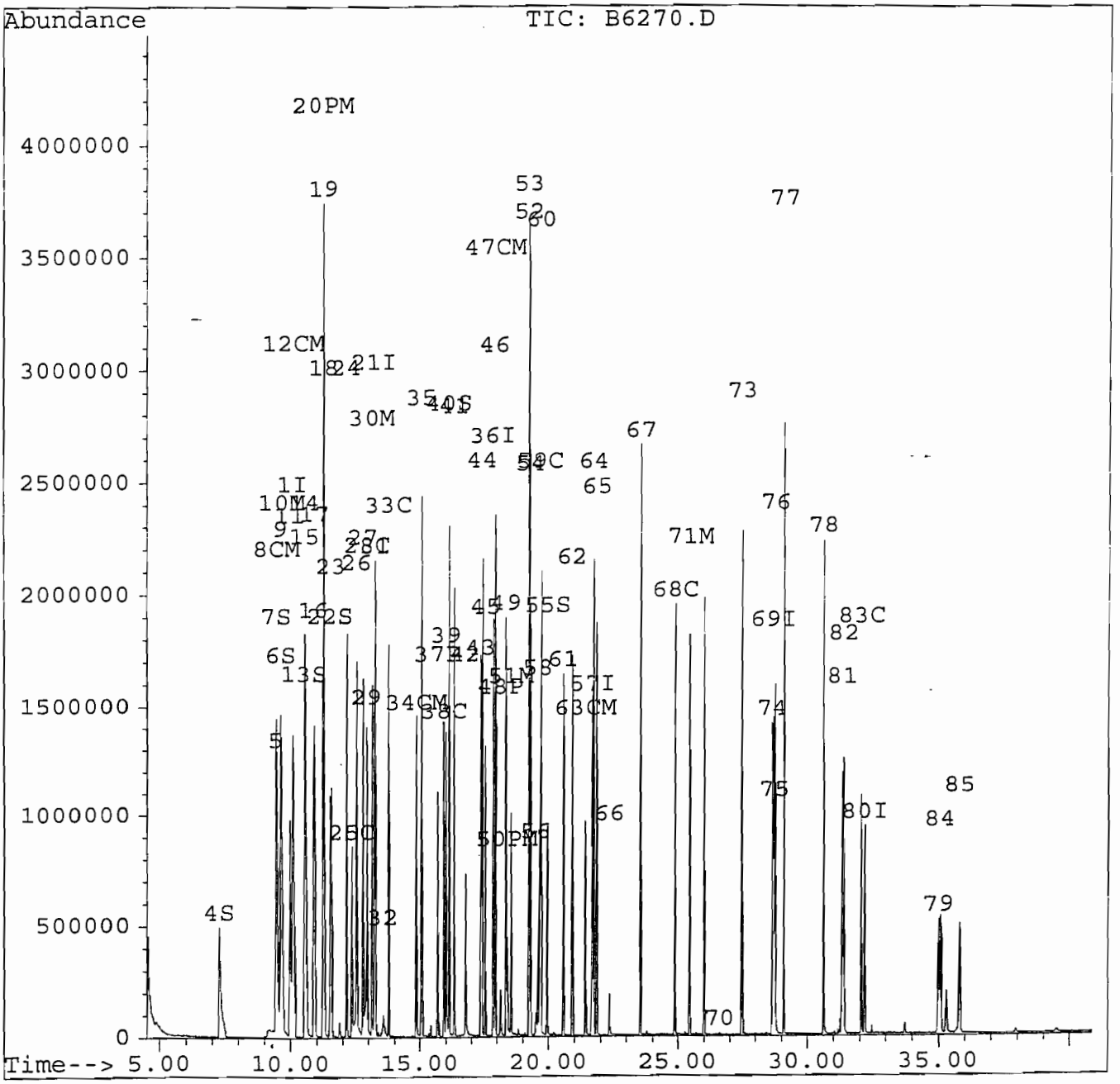
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration



Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.06	152	533591	40.00	ng	0.00
21) Naphthalene-d8	13.25	136	1851247	40.00	ng	0.00
36) Acenaphthene-d10	17.85	164	962516	40.00	ng	0.00
57) Phenanthrene-d10	21.70	188	1696248	40.00	ng	0.00
69) Chrysene-d12	28.71	240	1119301	40.00	ng	0.00
80) Perylene-d12	32.22	264	969505	40.00	ng	0.00
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.27	112	1493063	80.00	ng	
6) 2-Chlorophenol-d4	9.63	132	1382036	80.00	ng	
7) Phenol-d5	9.45	99	1709441	80.00	ng	
13) 1,2-Dichlorobenzene-d4	10.52	152	976352	80.00	ng	
22) Nitrobenzene-d5	11.52	82	1799333	80.00	ng	
40) 2-Fluorobiphenyl	16.15	172	2631352	80.00	ng	
55) 2,4,6-Tribromophenol	19.96	330	529919	80.00	ng	
72) Terphenyl-d14	26.03	244	2863304	80.03	ng	#
Target Compounds						Qvalue
2) Pyridine	4.53	79	1575490	79.44	ng	m 0
3) N-nitroso-dimethylamine	4.59	42	801470	80.00	ng	100
5) Aniline	9.43	93	581061	80.00	ng	100
8) Phenol	9.48	94	1743926	80.00	ng	100
9) bis(2-Chloroethyl)ether	9.61	93	1762972	80.00	ng	100
10) 2-Chlorophenol	9.66	128	1348143	80.00	ng	100
11) 1,3-Dichlorobenzene	9.97	146	1621886	80.00	ng	100
12) 1,4-Dichlorobenzene	10.11	146	1616197	80.00	ng	100
14) 1,2-Dichlorobenzene	10.55	146	1467599	80.00	ng	100
15) Benzyl alcohol	10.53	108	754970	80.00	ng	100
16) 2-Methylphenol	10.88	108	1176786	80.00	ng	100
17) bis(2-chloroisopropyl)ethe	10.90	45	2649877	80.00	ng	100
18) Hexachloroethane	11.28	117	624965	80.00	ng	100
19) 3+4-Methyphenols	11.28	108	2267254	160.00	ng	100
20) N-Nitroso-di-n-propylamine	11.28	70	1216049	80.01	ng	m 100
23) Nitrobenzene	11.58	77	1572107	80.00	ng	100
24) Isophorone	12.18	82	3192179	80.00	ng	100
25) 2-Nitrophenol	12.37	139	705776	80.00	ng	100
26) 2,4-Dimethylphenol	12.56	107	1331883	80.00	ng	100
27) bis(2-Chloroethoxy)methane	12.80	93	1856789	80.00	ng	100
28) 2,4-Dichlorophenol	12.97	162	1074035	80.00	ng	100
29) Benzoic Acid	13.04	105	751525	80.00	ng	100
30) 1,2,4-Trichlorobenzene	13.16	180	1229231	80.00	ng	100
31) Naphthalene	13.29	128	3596798	80.00	ng	100
32) 4-Chloroaniline	13.59	127	83074	77.51	ng	m 100
33) Hexachlorobutadiene	13.79	225	821505	80.00	ng	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.88	107	1177124	80.00	ng		100
35) 2-Methylnaphthalene	15.09	142	2348050	80.00	ng		100
37) Hexachlorocyclopentadiene	15.69	237	600719	80.00	ng		100
38) 2,4,6-Trichlorophenol	15.94	196	778176	80.00	ng		100
39) 2,4,5-Trichlorophenol	16.03	196	822240	80.00	ng		100
41) 2-Chloronaphthalene	16.34	162	2155018	80.00	ng		100
42) 2-Nitroaniline	16.79	65	496580	80.00	ng		100
43) Dimethylphthalate	17.40	163	2736347	80.00	ng		100
44) Acenaphthylene	17.44	152	3499984	80.00	ng		100
45) 2,6-Dinitrotoluene	17.56	165	575973	80.00	ng		100
46) 3-Nitroaniline	18.16	138	31666	80.00	ng	m	100
47) Acenaphthene	17.93	153	2187593	80.00	ng		100
48) 2,4-Dinitrophenol	18.16	184	156458	80.00	ng		100
49) Dibenzofuran	18.36	168	2874102	80.00	ng		100
50) 4-Nitrophenol	18.41	109	220722	80.00	ng		100
51) 2,4-Dinitrotoluene	18.57	165	738218	80.00	ng		100
52) Fluorene	19.27	166	2009375	80.00	ng		100
53) Diethylphthalate	19.27	149	2615166	80.00	ng		100
54) 4-Chlorophenyl-phenylether	19.32	204	1154860	80.00	ng		100
56) 4-Nitroaniline	19.55	138	125439	80.00	ng		100
58) 4,6-Dinitro-2-methylphenol	19.63	198	299131	80.00	ng		100
59) N-Nitrosodiphenylamine	19.69	169	806714	80.00	ng		100
60) 1,2-Diphenylhydrazine	19.73	77	3507756	80.00	ng		100
61) 4-Bromophenyl-phenylether	20.58	248	742590	80.00	ng		100
62) Hexachlorobenzene	20.93	284	1067286	80.00	ng		100
63) Pentachlorophenol	21.43	266	525302	80.00	ng		100
64) Phenanthrene	21.77	178	3154708	80.00	ng		100
65) Anthracene	21.88	178	3040008	80.00	ng		100
66) Carbazole	22.36	167	282716	80.00	ng		100
67) Di-n-butylphthalate	23.57	149	5007245	80.00	ng		100
68) Fluoranthene	24.91	202	3366722	80.00	ng		100
70) Benzidine	26.63	184	7727	79.98	ng	m	94
71) Pyrene	25.48	202	3337769	80.00	ng		100
73) Butylbenzylphthalate	27.50	149	2027021	80.00	ng		100
74) Benzo[a]anthracene	28.67	228	2482332	80.00	ng		100
75) 3,3'-Dichlorobenzidine	28.74	252	284839	80.00	ng		100
76) Chrysene	28.79	228	2280547	80.00	ng		100
77) bis(2-Ethylhexyl)phthalate	29.10	149	2571208	80.00	ng		100
78) Di-n-octylphthalate	30.64	149	4097316	80.00	ng		100
79) Indeno(1,2,3-cd)pyrene	35.01	276	1541846	79.84	ng	m	99
81) Benzo[b]fluoranthene	31.36	252	2113378	80.00	ng		100
82) Benzo[k]fluoranthene	31.42	252	1993770	80.00	ng		100
83) Benzo[a]pyrene	32.09	252	1772572	80.00	ng		100
84) Dibenz[a,h]anthracene	35.09	278	1204008	80.00	ng		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm Operator: Bob
Sample : 80 BNA ICC Inst : BNA-RTE
Misc : Multiplr: 1.00
Quant Time: Oct 7 10:24 1999

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.83	276	1338235	80.00 ng	100

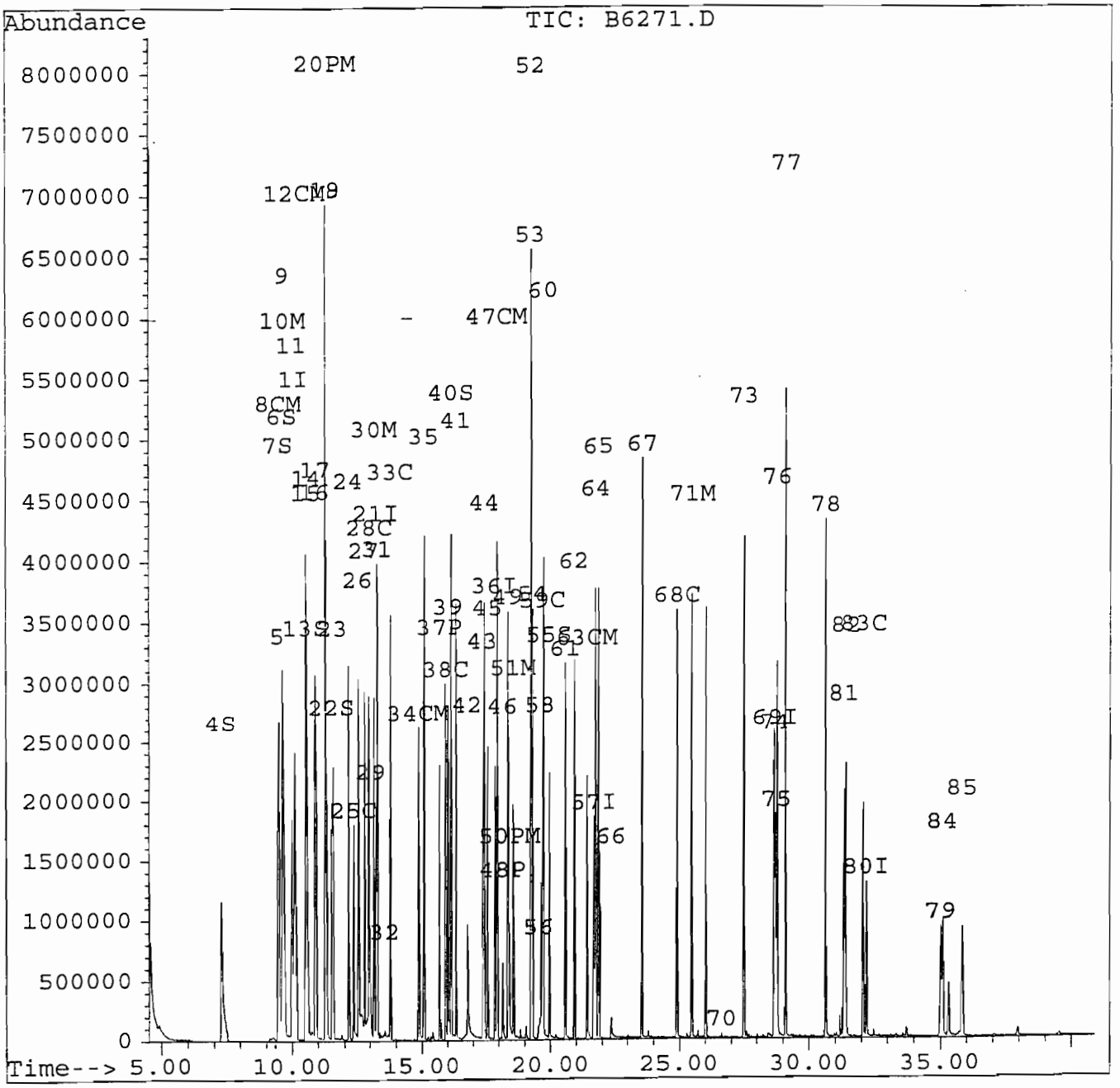
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration



Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6272.D
Acq Time : 6 Oct 99 12:52 pm
Sample : 120 BNA ICC
Misc :
Quant Time: Oct 7 11:01 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.07	152	525302	40.00	ng	0.01
21) Naphthalene-d8	13.25	136	1901348	40.00	ng	0.00
36) Acenaphthene-d10	17.85	164	983413	40.00	ng	0.00
57) Phenanthrene-d10	21.71	188	1796582	40.00	ng	0.01
69) Chrysene-d12	28.72	240	1320458	40.00	ng	0.02
80) Perylene-d12	32.23	264	1109653	40.00	ng	0.01
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.30	112	2246280	122.26	ng	
6) 2-Chlorophenol-d4	9.63	132	2066024	121.48	ng	
7) Phenol-d5	9.47	99	2493154	118.52	ng	
13) 1,2-Dichlorobenzene-d4	10.52	152	1387395	115.47	ng	
22) Nitrobenzene-d5	11.54	82	2681006	116.06	ng	
40) 2-Fluorobiphenyl	16.16	172	3762098	111.95	ng	
55) 2,4,6-Tribromophenol	19.98	330	805538	119.03	ng	
72) Terphenyl-d14	26.04	244	4433651	105.00	ng	#
Target Compounds						Qvalue
2) Pyridine	4.54	79	2161113	111.47	ng	m 0
3) N-nitroso-dimethylamine	4.60	42	1141761	115.77	ng	94
5) Aniline	9.43	93	882046	123.36	ng	89
8) Phenol	9.50	94	2533505	118.05	ng	97
9) bis(2-Chloroethyl)ether	9.64	93	2601119	119.90	ng	96
10) 2-Chlorophenol	9.67	128	2048798	123.50	ng	98
11) 1,3-Dichlorobenzene	9.98	146	2315258	116.00	ng	97
12) 1,4-Dichlorobenzene	10.11	146	2352818	118.30	ng	98
14) 1,2-Dichlorobenzene	10.55	146	2104055	116.50	ng	97
15) Benzyl alcohol	10.54	108	1141219	122.84	ng	97
16) 2-Methylphenol	10.89	108	1664992	114.98	ng	98
17) bis(2-chloroisopropyl)ethe	10.92	45	3991216	122.40	ng	99
18) Hexachloroethane	11.29	117	930541	121.00	ng	98
19) 3+4-Methyphenols	11.32	108	3346141	239.86	ng	97
20) N-Nitroso-di-n-propylamine	11.37	70	1838652	122.87	ng	89
23) Nitrobenzene	11.59	77	2437062	120.75	ng	96
24) Isophorone	12.19	82	4972124	121.32	ng	98
25) 2-Nitrophenol	12.39	139	1040301	114.81	ng	98
26) 2,4-Dimethylphenol	12.58	107	1987776	116.25	ng	98
27) bis(2-Chloroethoxy)methane	12.81	93	2890665	121.26	ng	99
28) 2,4-Dichlorophenol	12.99	162	1607813	116.60	ng	98
29) Benzoic Acid	13.12	105	1285013	133.19	ng	m 95
30) 1,2,4-Trichlorobenzene	13.17	180	1789264	113.38	ng	98
31) Naphthalene	13.31	128	5206178	112.74	ng	100
32) 4-Chloroaniline	13.60	127	169950	159.35	ng	98
33) Hexachlorobutadiene	13.80	225	1155861	109.59	ng	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6272.D
Acq Time : 6 Oct 99 12:52 pm
Sample : 120 BNA ICC
Misc :
Quant Time: Oct 7 11:01 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.89	107	1773843	117.38	ng		96
35) 2-Methylnaphthalene	15.09	142	3317872	110.06	ng		99
37) Hexachlorocyclopentadiene	15.69	237	849514	110.73	ng		98
38) 2,4,6-Trichlorophenol	15.95	196	1147221	115.43	ng		98
39) 2,4,5-Trichlorophenol	16.04	196	1253307	119.35	ng		98
41) 2-Chloronaphthalene	16.36	162	3233792	117.50	ng		98
42) 2-Nitroaniline	16.81	65	852684	134.45	ng		96
43) Dimethylphthalate	17.41	163	3946121	112.92	ng		94
44) Acenaphthylene	17.45	152	4707781	105.32	ng		100
45) 2,6-Dinitrotoluene	17.58	165	875623	119.04	ng		97
46) 3-Nitroaniline	18.18	138	50159	124.03	ng	m	63
47) Acenaphthene	17.95	153	3199628	114.52	ng		100
48) 2,4-Dinitrophenol	18.18	184	301516	150.89	ng		95
49) Dibenzofuran	18.37	168	4218334	114.92	ng		99
50) 4-Nitrophenol	18.44	109	385353	136.70	ng		99
51) 2,4-Dinitrotoluene	18.60	165	1140494	120.97	ng		92
52) Fluorene	19.27	166	2861412	111.50	ng		99
53) Diethylphthalate	19.30	149	3633009	108.78	ng		98
54) 4-Chlorophenyl-phenylether	19.34	204	1651962	112.00	ng		99
56) 4-Nitroaniline	19.60	138	198075	123.64	ng		91
58) 4,6-Dinitro-2-methylphenol	19.66	198	516904	130.52	ng		93
59) N-Nitrosodiphenylamine	19.70	169	1100295	103.02	ng		100
60) 1,2-Diphenylhydrazine	19.74	77	5198483	111.94	ng		97
61) 4-Bromophenyl-phenylether	20.61	248	1102698	112.16	ng		95
62) Hexachlorobenzene	20.94	284	1577478	111.64	ng		99
63) Pentachlorophenol	21.44	266	864405	124.29	ng		99
64) Phenanthrene	21.78	178	4704197	112.63	ng		100
65) Anthracene	21.90	178	4626270	114.94	ng		99
66) Carbazole	22.37	167	499979	133.58	ng		100
67) Di-n-butylphthalate	23.58	149	7218071	108.88	ng		99
68) Fluoranthene	24.93	202	5046464	113.22	ng		100
70) Benzidine	26.63	184	15765	138.36	ng		93
71) Pyrene	25.50	202	4894052	99.43	ng		99
73) Butylbenzylphthalate	27.50	149	3065719	102.56	ng		91
74) Benzo[a]anthracene	28.69	228	4180508	114.20	ng		99
75) 3,3'-Dichlorobenzidine	28.75	252	675513	160.82	ng		95
76) Chrysene	28.81	228	3657621	108.76	ng		99
77) bis(2-Ethylhexyl)phthalate	29.11	149	3989466	105.22	ng		99
78) Di-n-octylphthalate	30.64	149	6690639	110.73	ng		100
79) Indeno(1,2,3-cd)pyrene	35.06	276	2485529	109.32	ng		98
81) Benzo[b]fluoranthene	31.39	252	4112950	136.03	ng		99
82) Benzo[k]fluoranthene	31.44	252	3156018	110.64	ng		98
83) Benzo[a]pyrene	32.11	252	3137645	123.72	ng		98
84) Dibenz[a,h]anthracene	35.12	278	2293436	133.14	ng		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6272.D
Acq Time : 6 Oct 99 12:52 pm
Sample : 120 BNA ICC
Misc :
Quant Time: Oct 7 11:01 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.88	276	2451365	128.03 ng	99

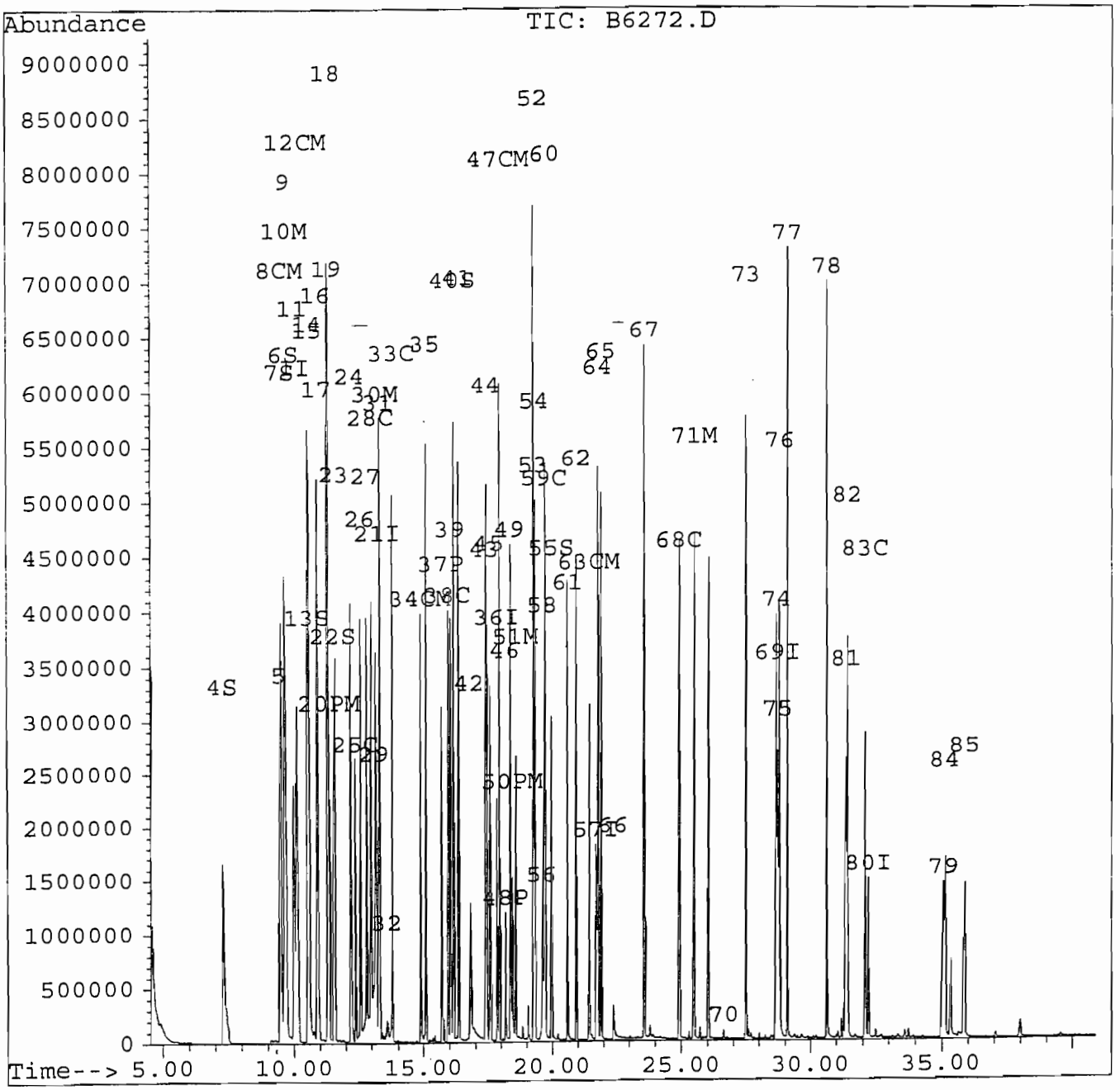
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6272.D
Acq Time : 6 Oct 99 12:52 pm
Sample : 120 BNA ICC
Misc :
Quant Time: Oct 7 11:01 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration



000406

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6273.D
Acq Time : 6 Oct 99 1:42 pm
Sample : 160 BNA ICC
Misc :
Quant Time: Oct 7 11:20 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	10.08	152	564955	40.00	ng	0.01
21) Naphthalene-d8	13.26	136	2014191	40.00	ng	0.00
36) Acenaphthene-d10	17.86	164	1045406	40.00	ng	0.01
57) Phenanthrene-d10	21.72	188	1921147	40.00	ng	0.02
69) Chrysene-d12	28.73	240	1374792	40.00	ng	0.03
80) Perylene-d12	32.23	264	1164460	40.00	ng	0.01
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.30	112	3221574	163.03	ng	
6) 2-Chlorophenol-d4	9.64	132	2863514	156.55	ng	
7) Phenol-d5	9.50	99	3682878	162.79	ng	
13) 1,2-Dichlorobenzene-d4	10.52	152	1929341	149.31	ng	
22) Nitrobenzene-d5	11.56	82	3956232	161.67	ng	
40) 2-Fluorobiphenyl	16.18	172	5213485	145.94	ng	
55) 2,4,6-Tribromophenol	19.99	330	1189630	165.35	ng	
72) Terphenyl-d14	26.05	244	5959640	135.57	ng	#
Target Compounds						Qvalue
2) Pyridine	4.53	79	3351443	160.73	ng	m 0
3) N-nitroso-dimethylamine	4.59	42	1606458	151.45	ng	94
5) Aniline	9.43	93	1647105	214.18	ng	84
8) Phenol	9.53	94	3829574	165.92	ng	98
9) bis(2-Chloroethyl)ether	9.62	93	3559344	152.55	ng	98
10) 2-Chlorophenol	9.68	128	2822431	158.19	ng	95
11) 1,3-Dichlorobenzene	9.98	146	3297930	153.64	ng	97
12) 1,4-Dichlorobenzene	10.11	146	3252097	152.04	ng	99
14) 1,2-Dichlorobenzene	10.56	146	2797727	144.04	ng	99
15) Benzyl alcohol	10.58	108	1691235	169.26	ng	93
16) 2-Methylphenol	10.91	108	2278714	146.31	ng	99
17) bis(2-chloroisopropyl)ethe	10.92	45	5946342	169.55	ng	98
18) Hexachloroethane	11.28	117	1402601	169.58	ng	96
19) 3+4-Methyphenols	11.34	108	4928679	328.51	ng	98
20) N-Nitroso-di-n-propylamine	11.40	70	2773090	172.30	ng	96
23) Nitrobenzene	11.61	77	3424479	160.16	ng	95
24) Isophorone	12.22	82	7401401	170.48	ng	98
25) 2-Nitrophenol	12.39	139	1522814	158.65	ng	93
26) 2,4-Dimethylphenol	12.61	107	2797911	154.46	ng	97
27) bis(2-Chloroethoxy)methane	12.83	93	4067603	161.08	ng	98
28) 2,4-Dichlorophenol	13.00	162	2218087	151.85	ng	97
29) Benzoic Acid	13.22	105	1941760	189.98	ng	m 93
30) 1,2,4-Trichlorobenzene	13.18	180	2471895	147.86	ng	99
31) Naphthalene	13.32	128	7482737	152.97	ng	99
32) 4-Chloroaniline	13.62	127	439591	389.08	ng	95
33) Hexachlorobutadiene	13.80	225	1575268	140.99	ng	99

(#) = qualifier out of range (m) = manual integration

000407

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6273.D
Acq Time : 6 Oct 99 1:42 pm
Sample : 160 BNA ICC
Misc :
Quant Time: Oct 7 11:20 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.90	107	2537517	158.50	ng		97
35) 2-Methylnaphthalene	15.10	142	4546209	142.36	ng		99
37) Hexachlorocyclopentadiene	15.70	237	1321255	162.00	ng		99
38) 2,4,6-Trichlorophenol	15.96	196	1639676	155.20	ng		98
39) 2,4,5-Trichlorophenol	16.05	196	1718772	153.97	ng		98
41) 2-Chloronaphthalene	16.38	162	4464988	152.61	ng		97
42) 2-Nitroaniline	16.81	65	1294909	192.07	ng		98
43) Dimethylphthalate	17.43	163	5392661	145.16	ng		92
44) Acenaphthylene	17.46	152	6021716	126.73	ng		100
45) 2,6-Dinitrotoluene	17.61	165	1260264	161.17	ng		93
46) 3-Nitroaniline	18.20	138	64114	149.13	ng	m	49
47) Acenaphthene	17.96	153	4311256	145.16	ng		99
48) 2,4-Dinitrophenol	18.20	184	497080	234.01	ng		95
49) Dibenzofuran	18.39	168	5875779	150.58	ng		98
50) 4-Nitrophenol	18.46	109	476499	159.01	ng		97
51) 2,4-Dinitrotoluene	18.62	165	1735647	173.18	ng		95
52) Fluorene	19.29	166	3934092	144.21	ng		99
53) Diethylphthalate	19.30	149	4805543	135.35	ng		99
54) 4-Chlorophenyl-phenylether	19.35	204	2262602	144.31	ng		99
56) 4-Nitroaniline	19.64	138	255587	150.08	ng		91
58) 4,6-Dinitro-2-methylphenol	19.68	198	827817	195.48	ng		96
59) N-Nitrosodiphenylamine	19.72	169	1459824	127.82	ng		98
60) 1,2-Diphenylhydrazine	19.76	77	7670377	154.46	ng		98
61) 4-Bromophenyl-phenylether	20.62	248	1533808	145.90	ng		94
62) Hexachlorobenzene	20.95	284	2197213	145.42	ng		94
63) Pentachlorophenol	21.46	266	1268309	170.54	ng		98
64) Phenanthrene	21.80	178	6657100	149.05	ng		100
65) Anthracene	21.92	178	6425348	149.29	ng		99
66) Carbazole	22.37	167	972722	243.03	ng		98
67) Di-n-butylphthalate	23.58	149	10012029	141.23	ng		96
68) Fluoranthene	24.94	202	7078260	148.50	ng		99
70) Benzidine	26.64	184	25494	214.90	ng		94
71) Pyrene	25.52	202	6917210	134.98	ng		99
73) Butylbenzylphthalate	27.52	149	4198269	134.90	ng		97
74) Benzo[a]anthracene	28.70	228	5805437	152.33	ng		98
75) 3,3'-Dichlorobenzidine	28.76	252	1136255	259.82	ng		97
76) Chrysene	28.82	228	5249397	149.92	ng		100
77) bis(2-Ethylhexyl)phthalate	29.12	149	5311702	134.55	ng		98
78) Di-n-octylphthalate	30.66	149	8726120	138.71	ng		99
79) Indeno(1,2,3-cd)pyrene	35.06	276	4138819	174.84	ng		96
81) Benzo[b]fluoranthene	31.41	252	5053111	159.26	ng	m	99
82) Benzo[k]fluoranthene	31.46	252	5134217	171.52	ng	m	100
83) Benzo[a]pyrene	32.12	252	4476537	168.21	ng		99
84) Dibenz[a,h]anthracene	35.15	278	3371583	186.52	ng		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6273.D
Acq Time : 6 Oct 99 1:42 pm
Sample : 160 BNA ICC
Misc :
Quant Time: Oct 7 11:20 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.90	276	3347576	166.61 ng	98

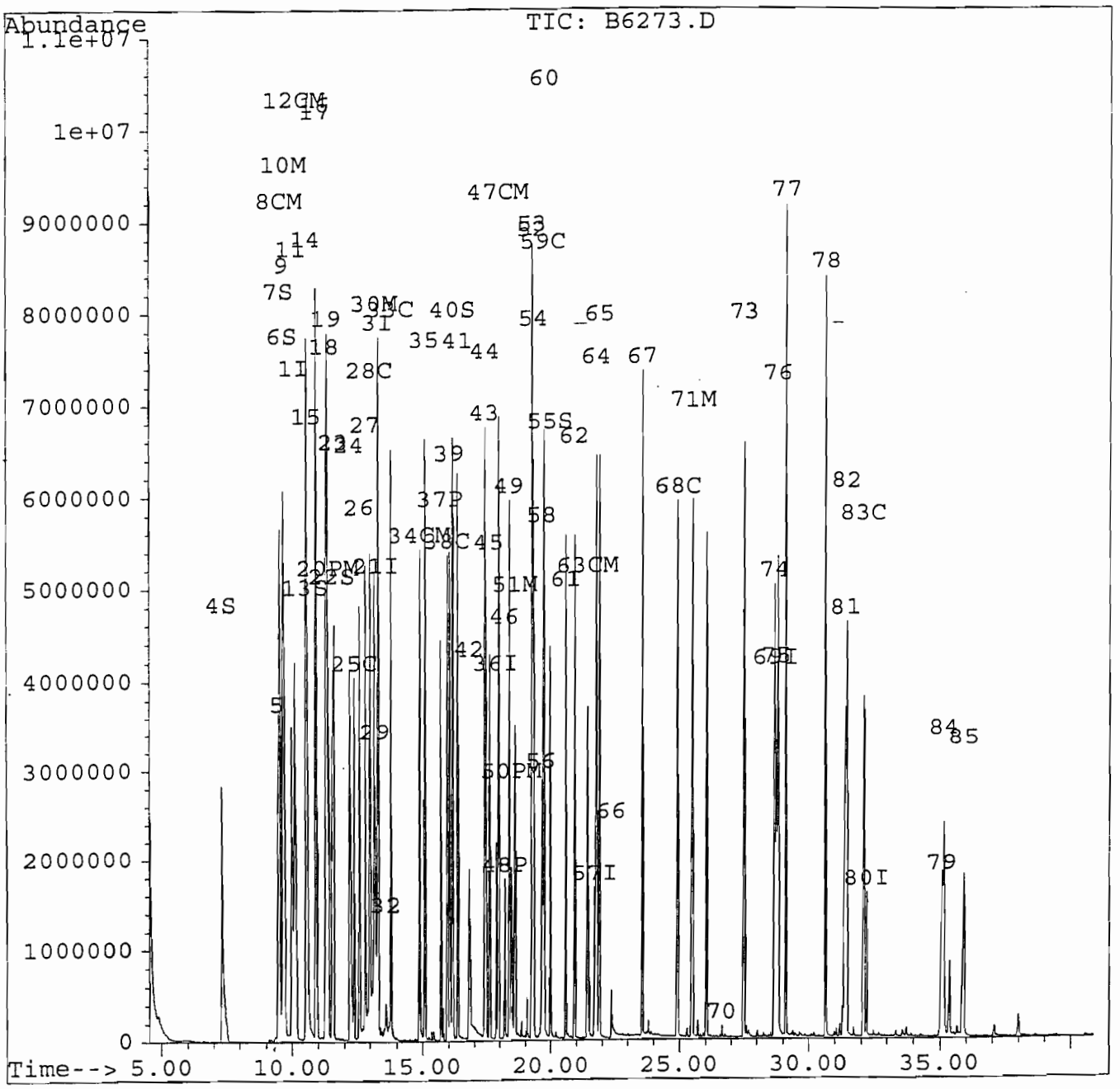
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6273.D
Acq Time : 6 Oct 99 1:42 pm
Sample : 160 BNA ICC
Misc :
Quant Time: Oct 7 11:20 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Oct 07 11:24:12 1999
Response via : Single Level Calibration



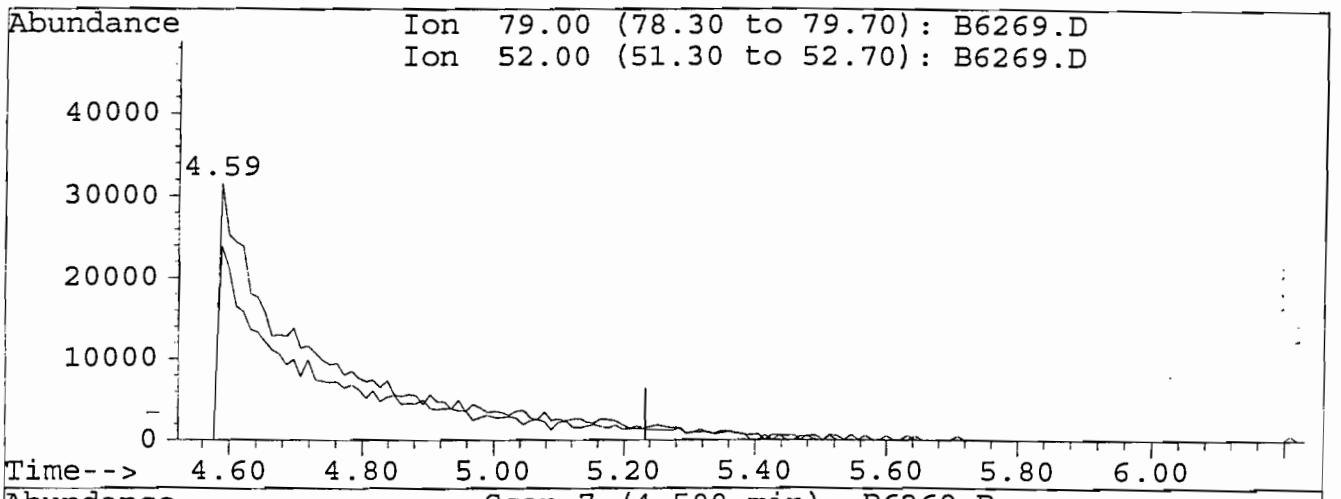
000410

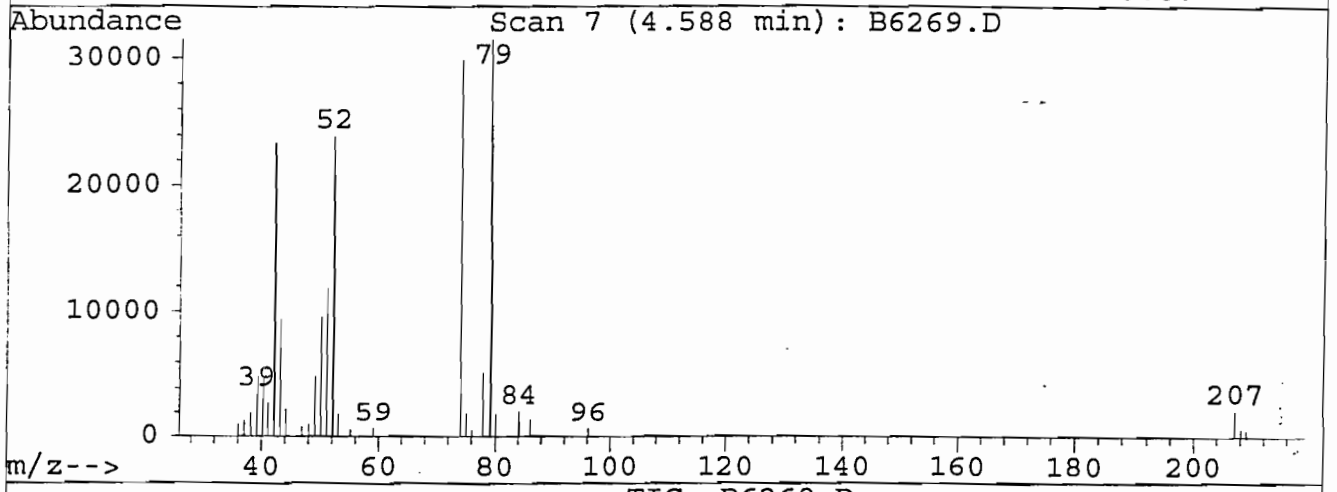
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6269.D
Acq Time : 6 Oct 99 10:21 am
Sample : 20 BNA ICC
Misc :
Quant Time: Oct 8 9:57 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6269.D

(2) Pyridine
4.59min 18.95ng m
response 291967

Ion	Exp%	Act%
79.00	100	100
52.00	79.40	75.91
0.00	0.00	0.00
0.00	0.00	0.00

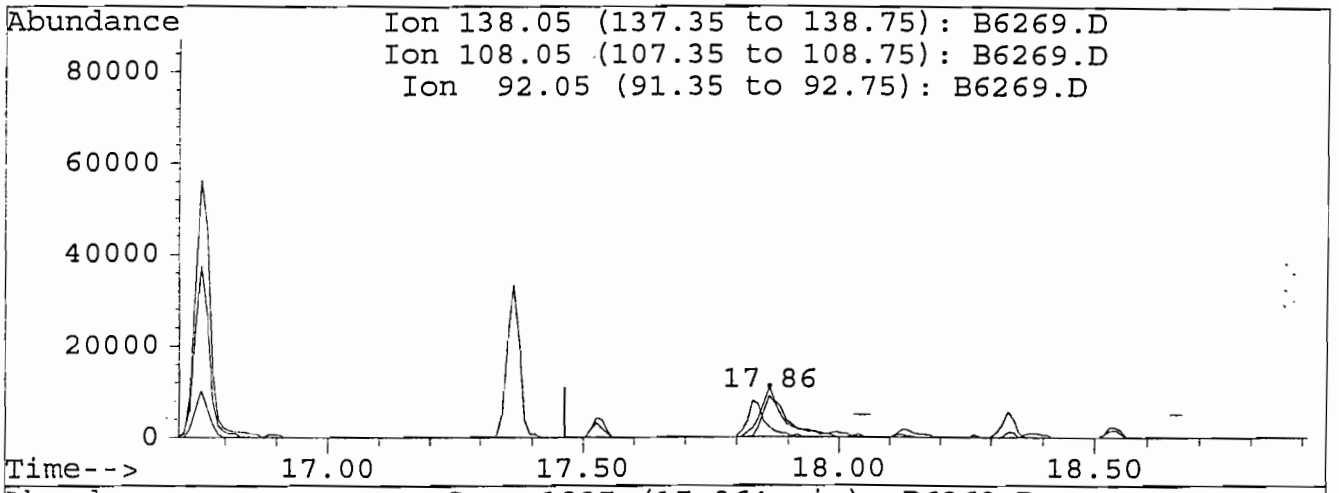
000411

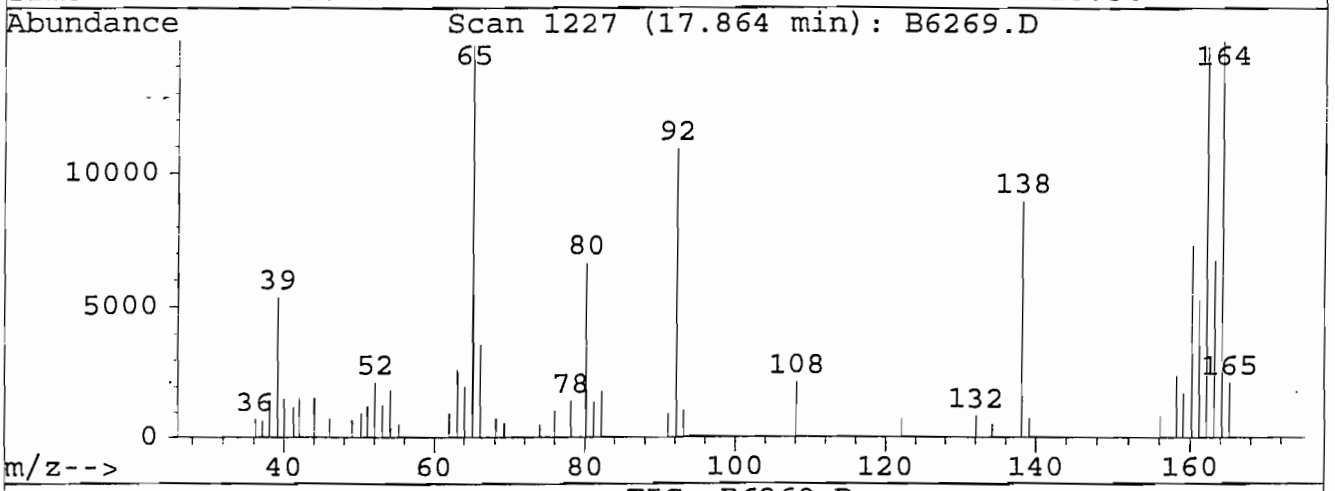
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6269.D
Acq Time : 6 Oct 99 10:21 am
Sample : 20 BNA ICC
Misc :
Quant Time: Oct 8 9:57 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6269.D

(46) 3-Nitroaniline
17.86min 74.79ng m
response 22307

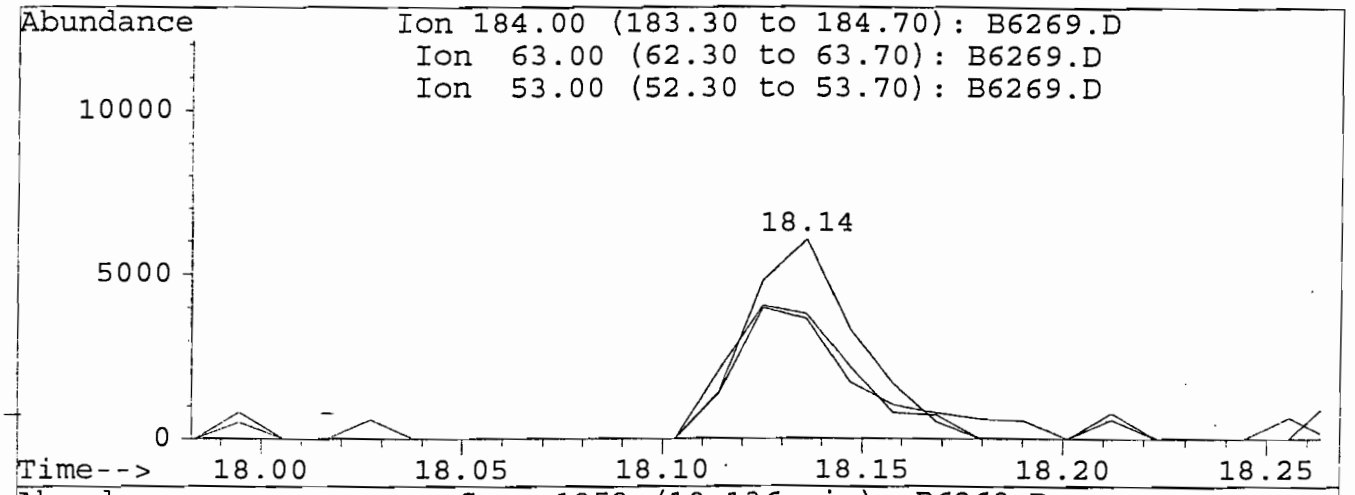
Ion	Exp%	Act%
138.05	100	100
108.05	127.20	24.15
92.05	580.00	121.70
0.00	0.00	0.00

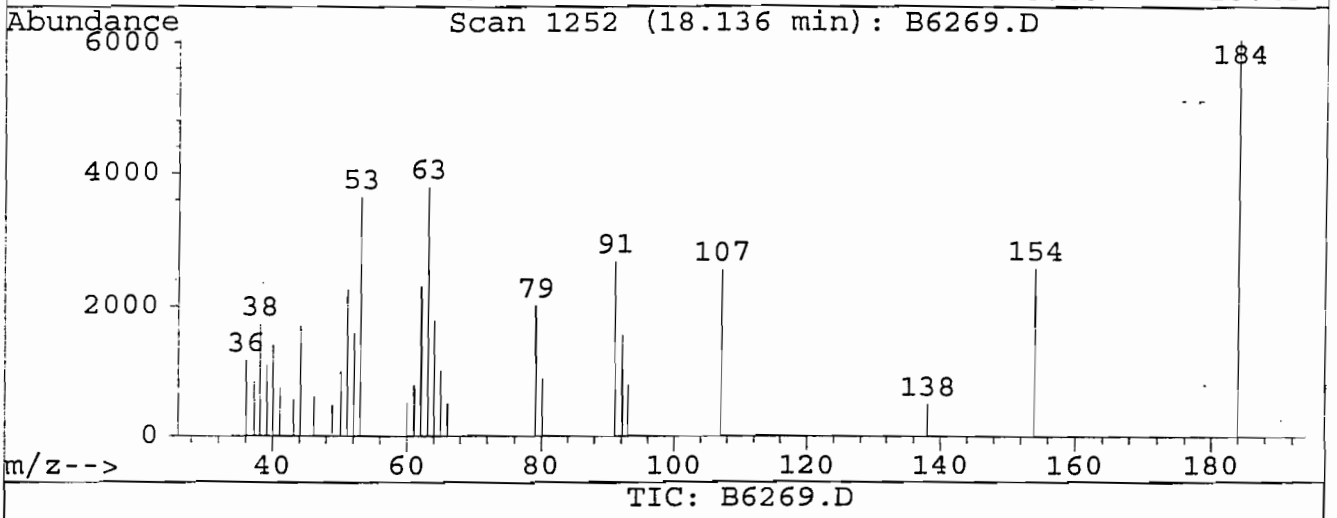
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6269.D
Acq Time : 6 Oct 99 10:21 am
Sample : 20 BNA ICC
Misc :
Quant Time: Oct 8 9:57 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6269.D

(48) 2,4-Dinitrophenol (P)
18.14min 7.90ng m
response 11637

Ion	Exp%	Act%
184.00	100	100
63.00	67.80	62.70
53.00	61.70	60.24
0.00	0.00	0.00

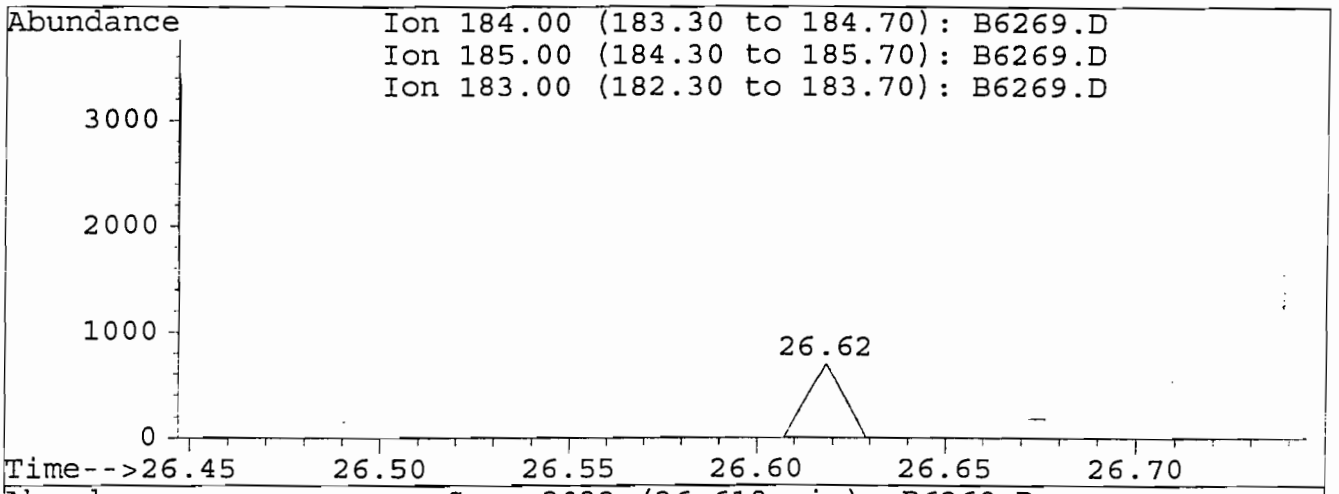
000413

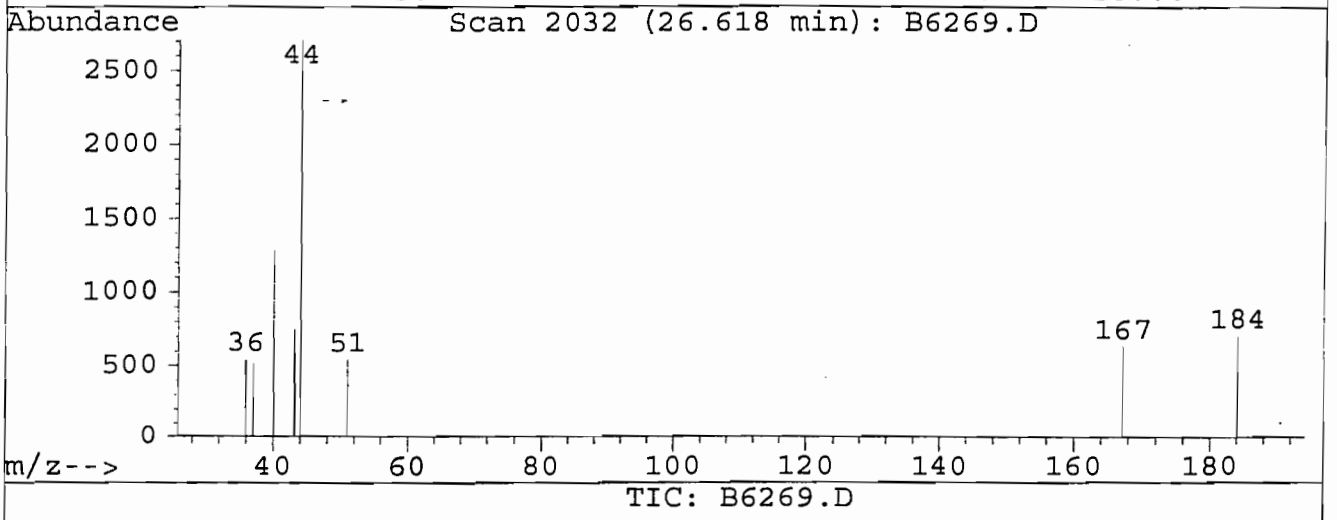
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6269.D
Acq Time : 6 Oct 99 10:21 am
Sample : 20 BNA ICC
Misc :
Quant Time: Oct 8 9:57 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6269.D

(70) Benzidine
26.62min 5.90ng m
response 455

Ion	Exp%	Act%
184.00	100	100
185.00	16.40	0.00
183.00	14.20	0.00
0.00	0.00	0.00

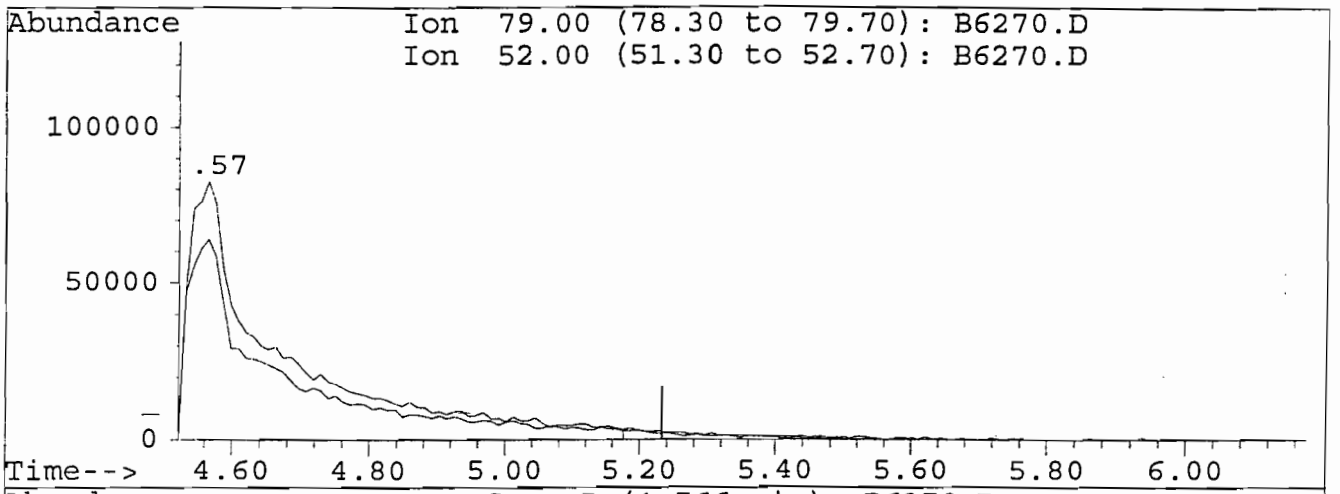
000414

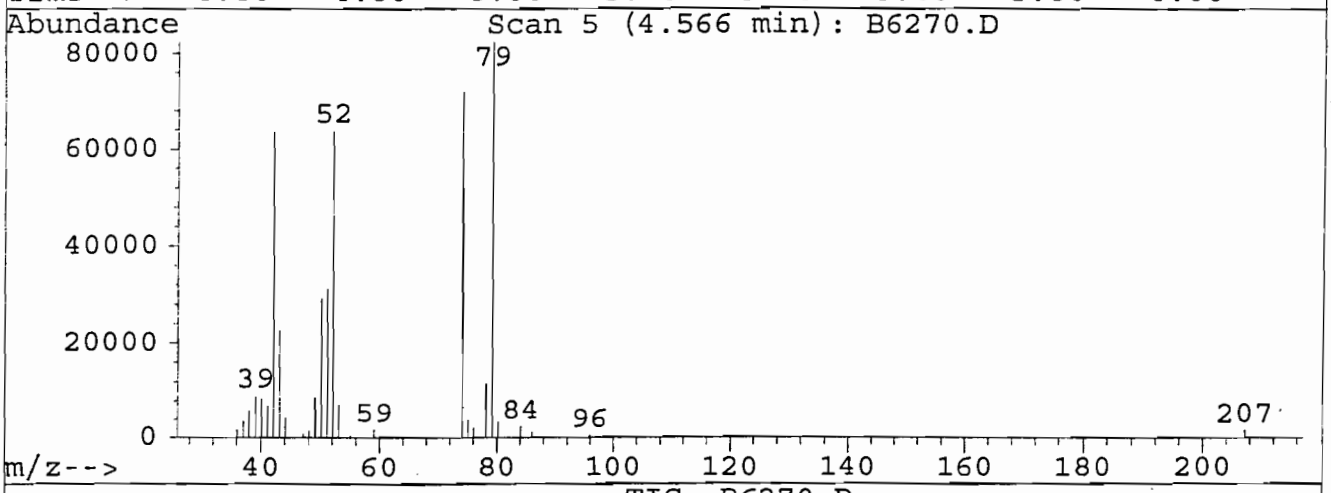
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6270.D

(2) Pyridine
4.57min 46.06ng m
response 747472

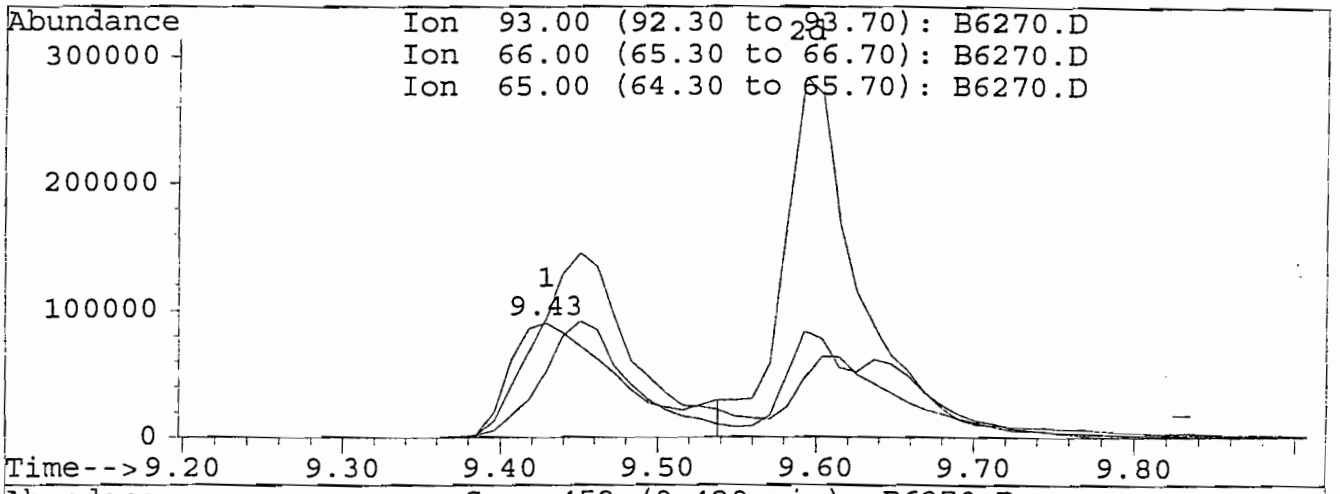
Ion	Exp%	Act%
79.00	100	100
52.00	79.40	77.47
0.00	0.00	0.00
0.00	0.00	0.00

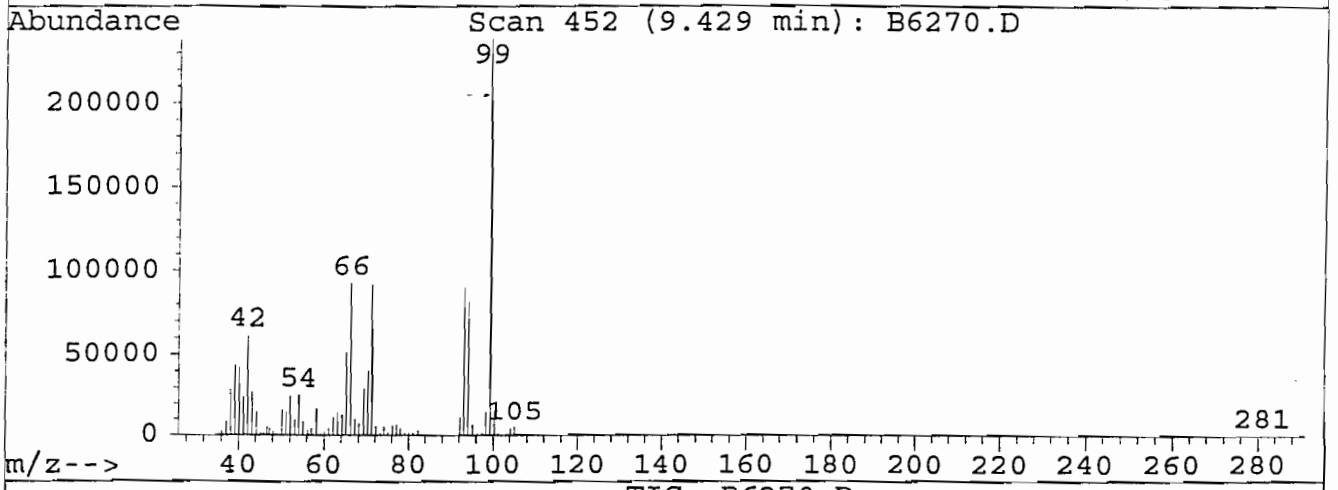
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6270.D

(5) Aniline
9.43min 75.36ng m
response 451034

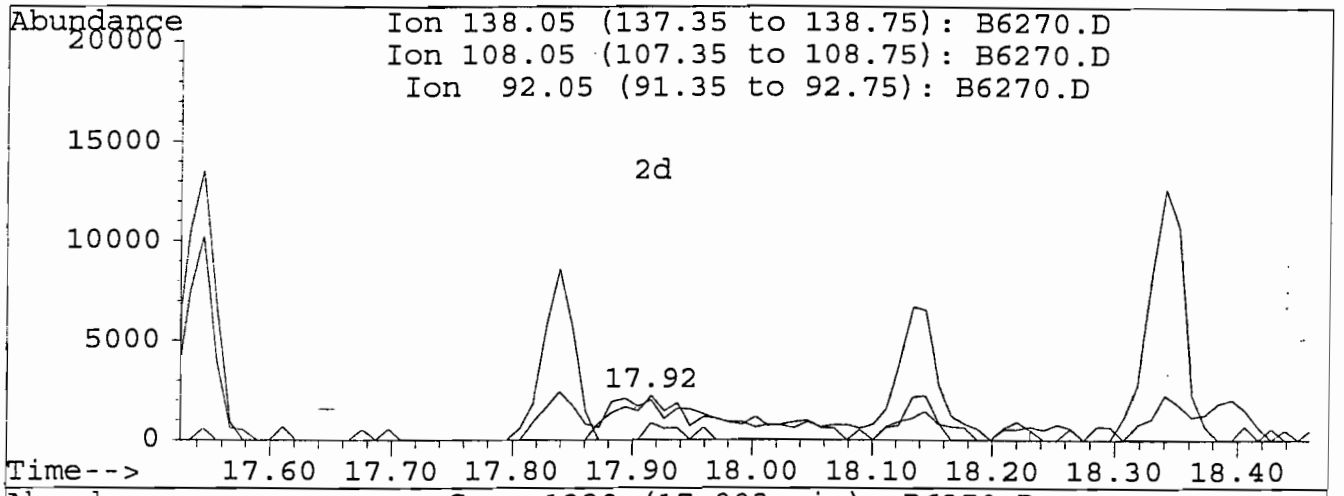
Ion	Exp%	Act%
93.00	100	100
66.00	65.50	103.31
65.00	28.10	57.14
0.00	0.00	0.00

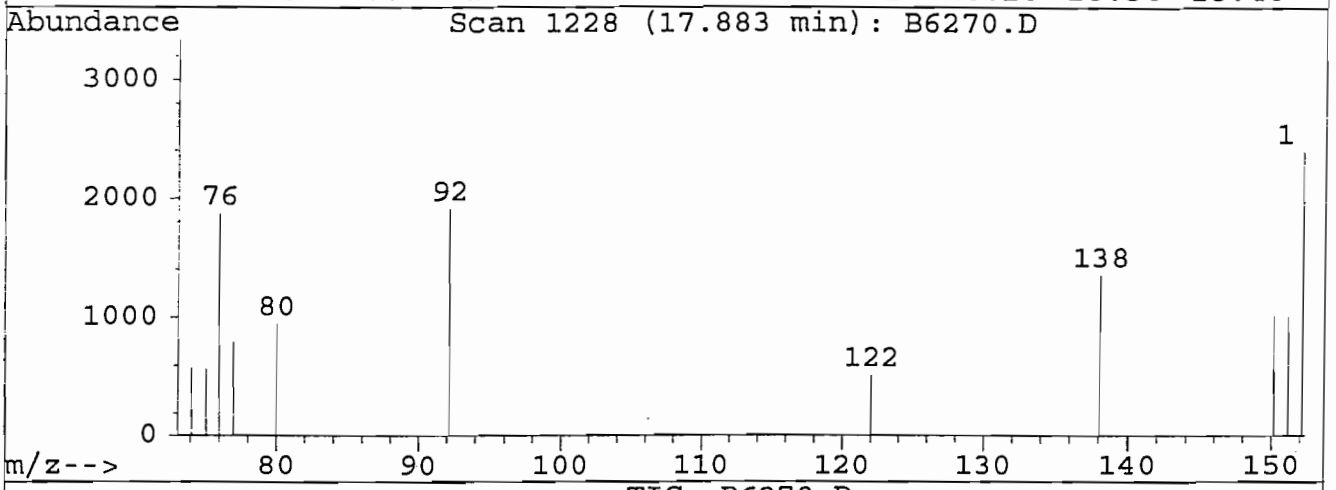
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6270.D

(46) 3-Nitroaniline
17.92min 61.91ng m
response 19794

Ion	Exp%	Act%
138.05	100	100
108.05	127.20	37.30
92.05	580.00	89.53
0.00	0.00	0.00

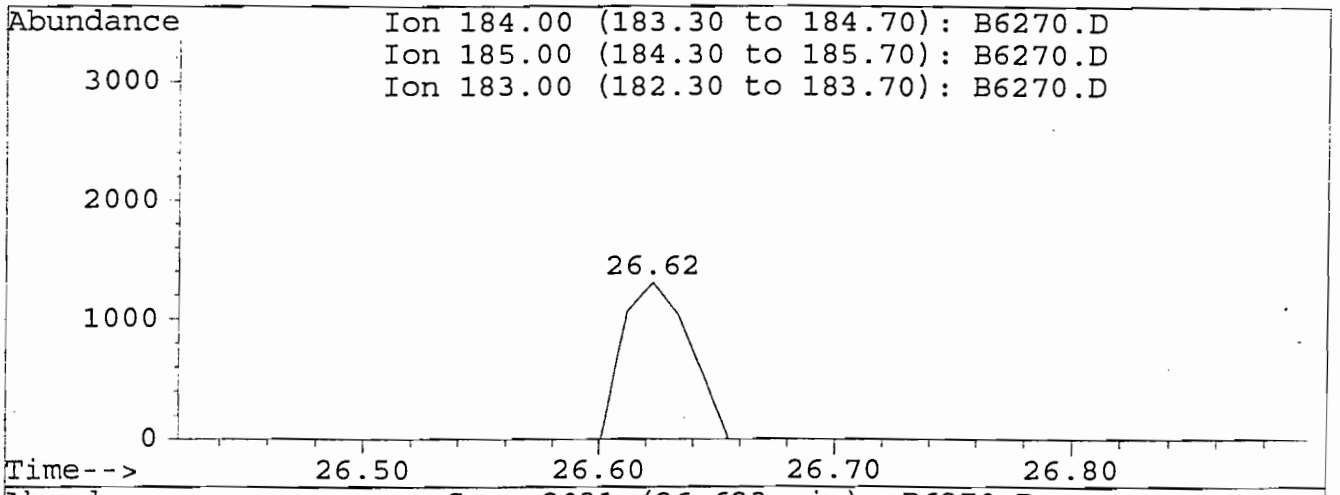
000417

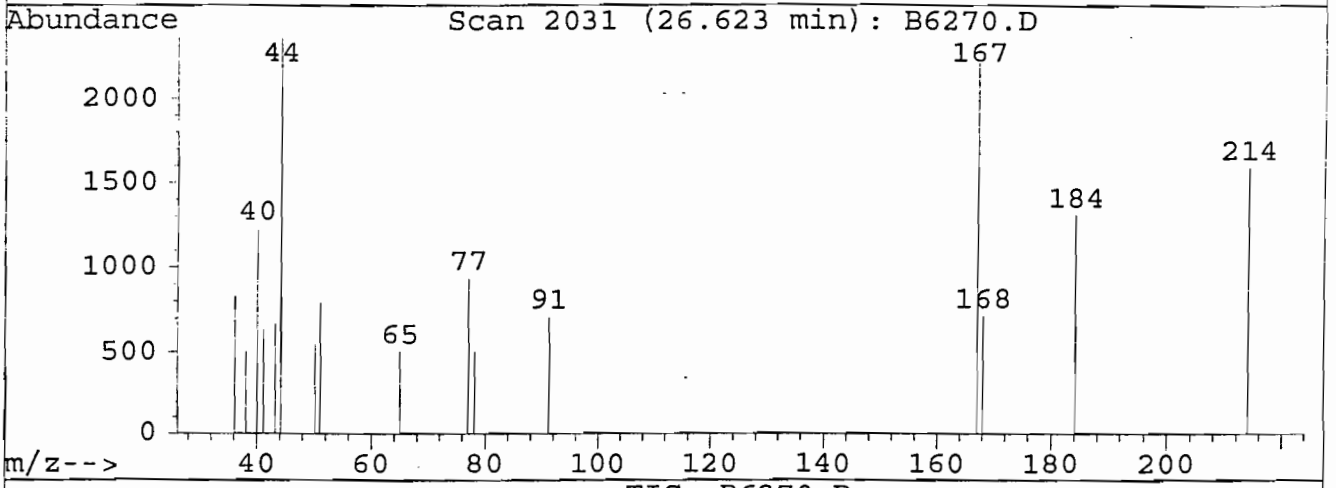
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6270.D

(70) Benzidine
26.62min 32.57ng m
response 2563

Ion	Exp%	Act%
184.00	100	100
185.00	16.40	0.00
183.00	14.20	0.00
0.00	0.00	0.00

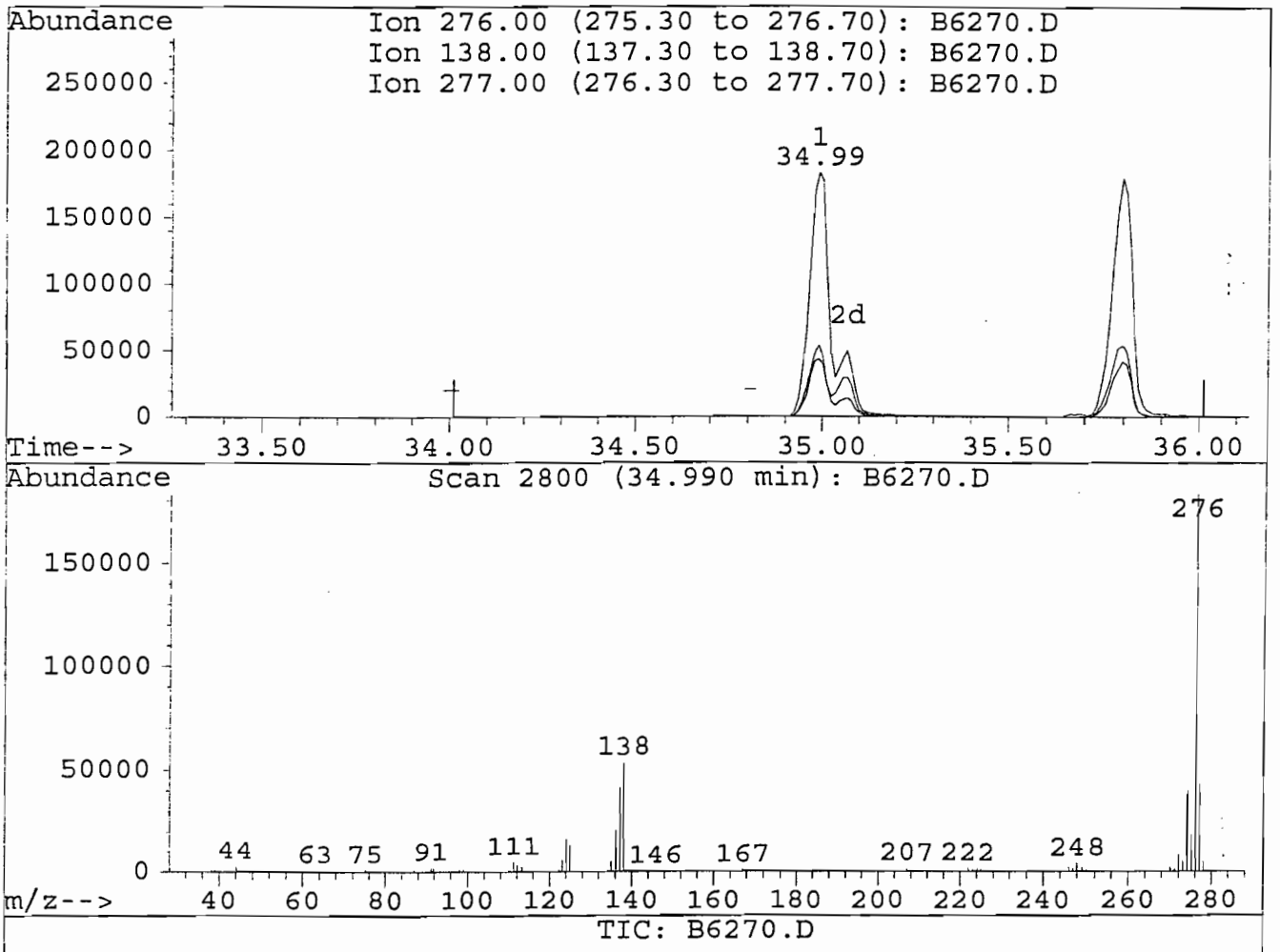
000418

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6270.D
Acq Time : 6 Oct 99 11:11 am
Sample : 50 BNA ICC
Misc :
Quant Time: Oct 7 10:59 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration



TIC: B6270.D

(79) Indeno(1,2,3-cd)pyrene
34.99min 48.44ng m
response 760674

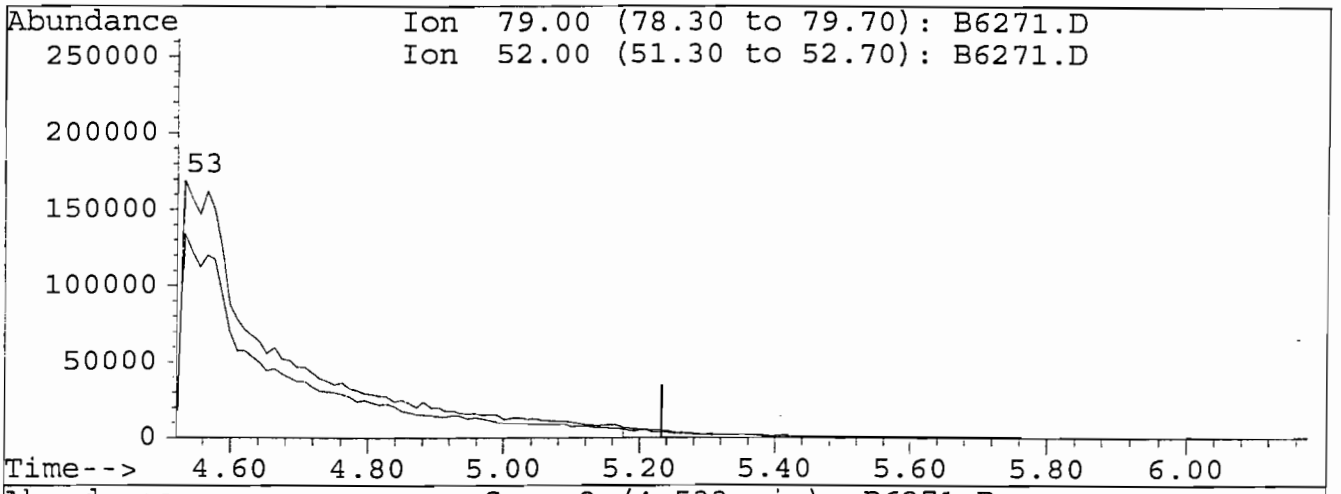
Ion	Exp%	Act%
276.00	100	100
138.00	27.00	29.01
277.00	21.80	23.53
0.00	0.00	0.00

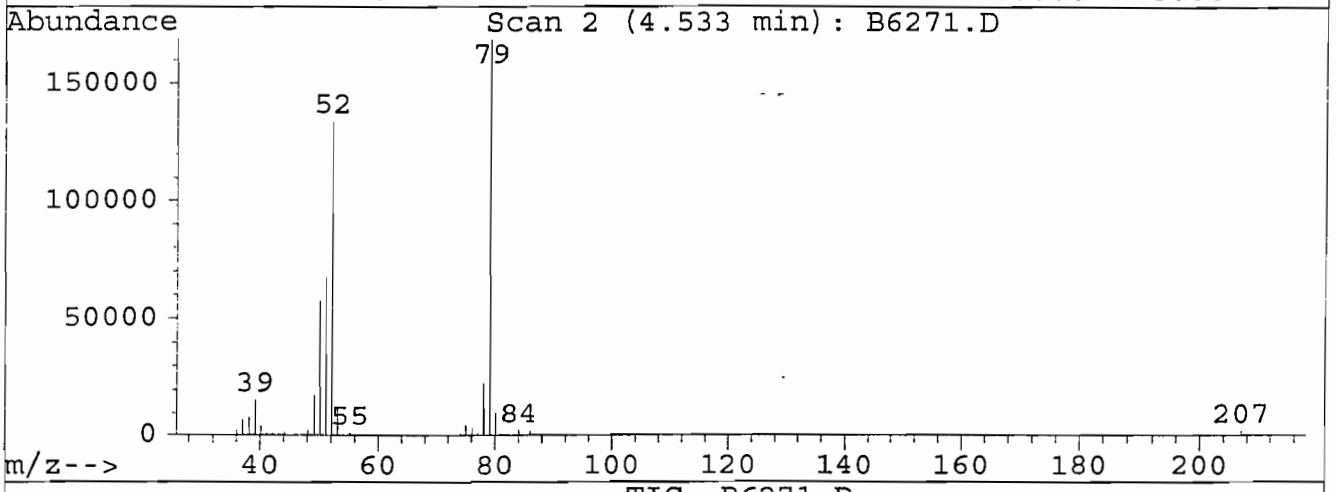
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6271.D

(2) Pyridine
4.53min 79.44ng m
response 1575490

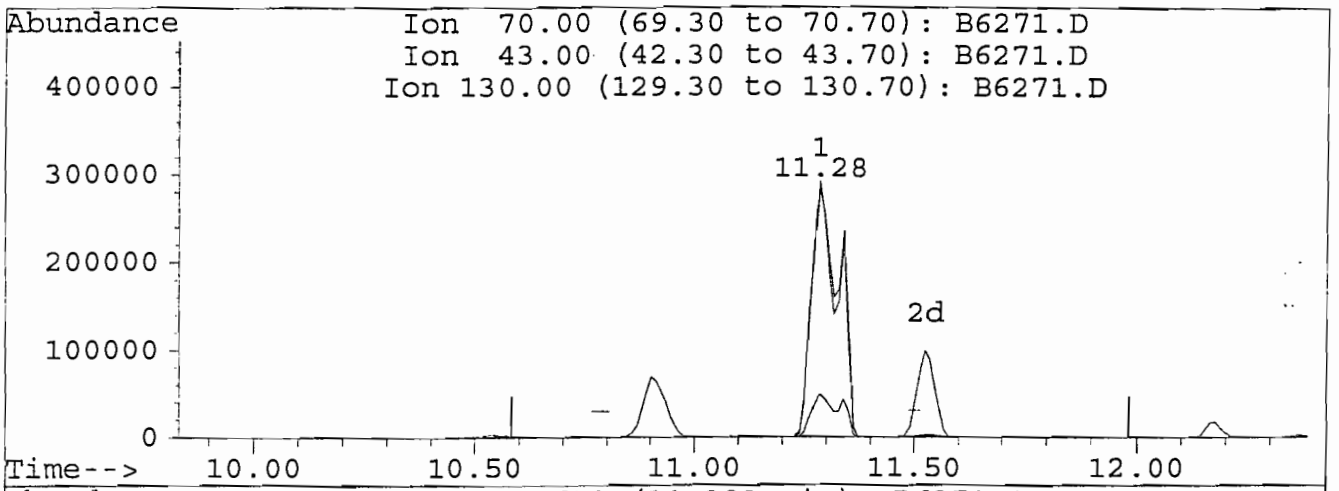
Ion	Exp%	Act%
79.00	100	100
52.00	79.40	79.41
0.00	0.00	0.00
0.00	0.00	0.00

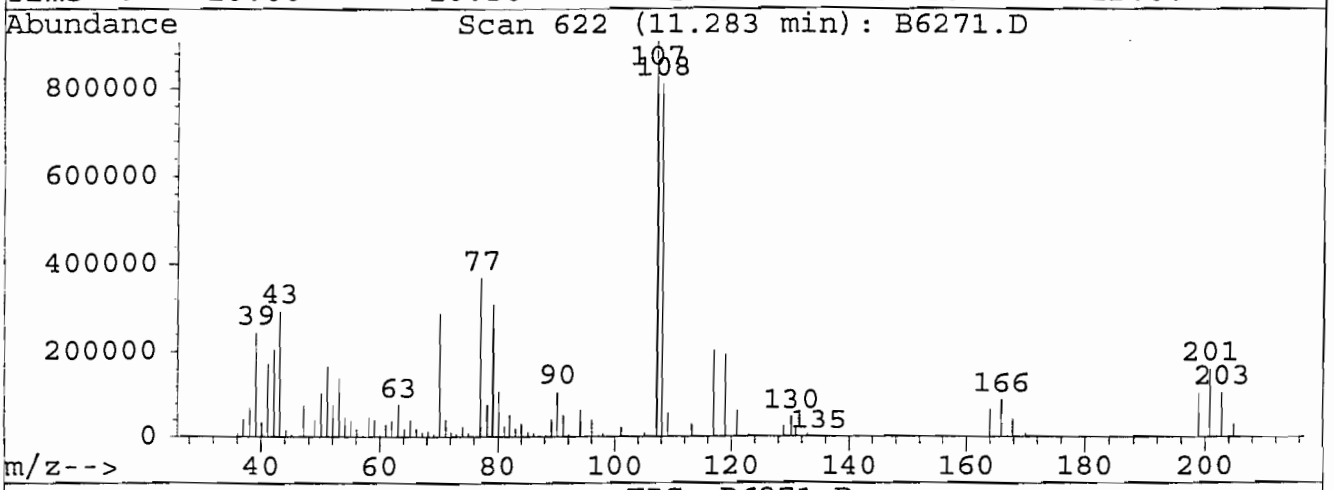
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6271.D

(20) N-Nitroso-di-n-propylamine (PM)
11.28min 80.01ng m
response 1216049

Ion	Exp%	Act%
70.00	100	100
43.00	101.60	101.65
130.00	17.00	16.96
0.00	0.00	0.00

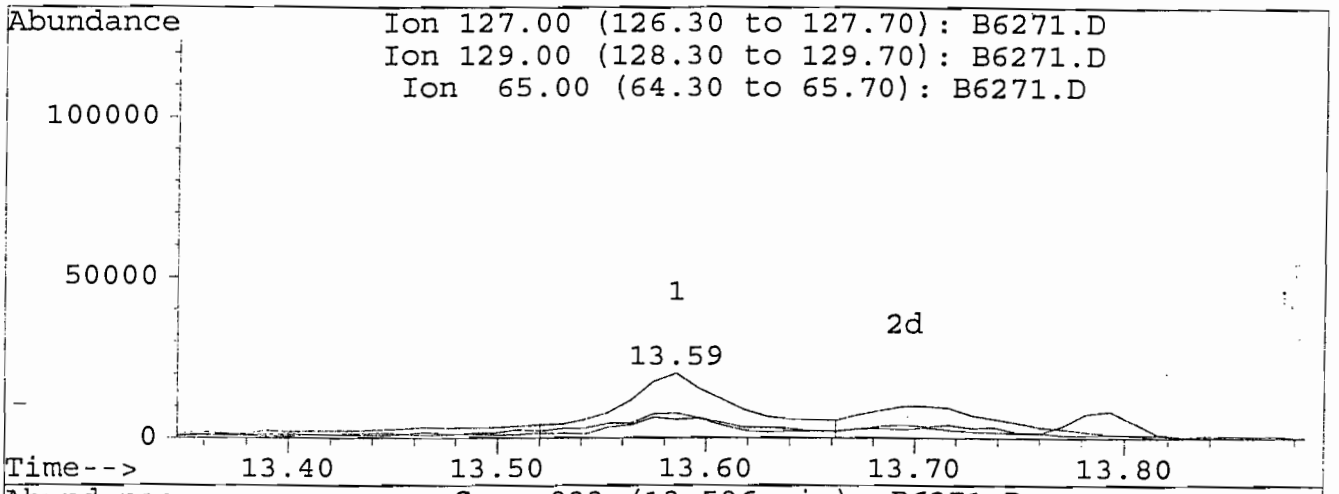
000421

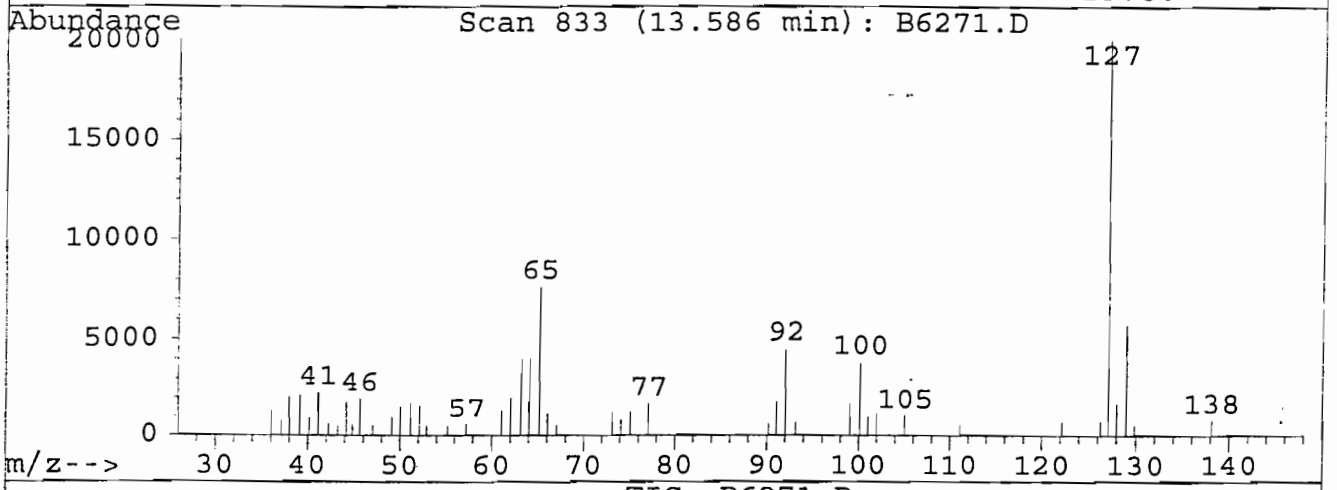
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6271.D

(32) 4-Chloroaniline
13.59min 77.51ng m
response 83074

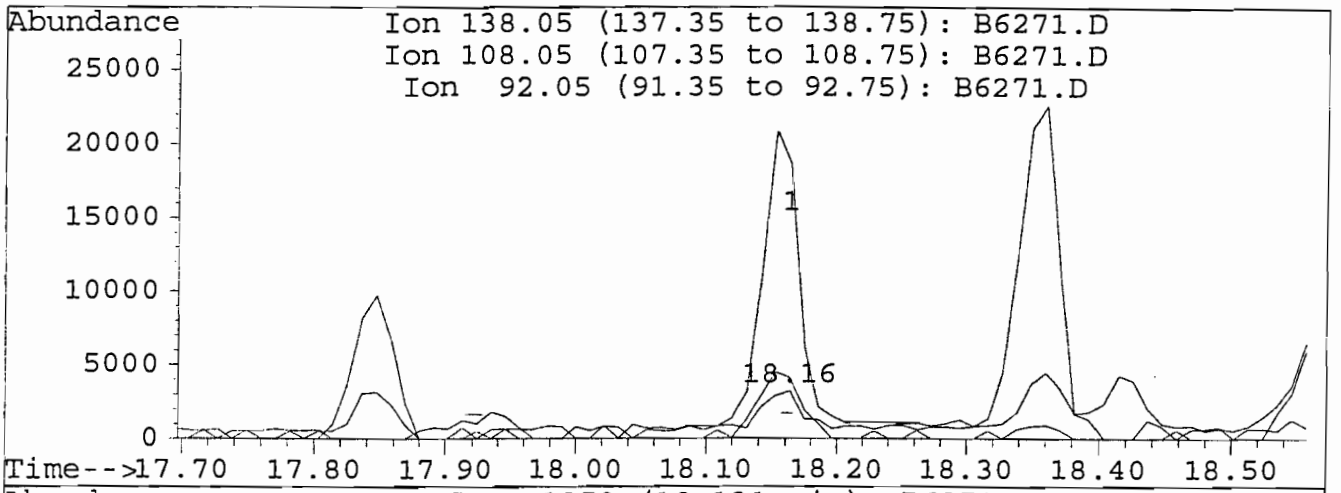
Ion	Exp%	Act%
127.00	100	100
129.00	28.40	28.36
65.00	37.80	37.82
0.00	0.00	0.00

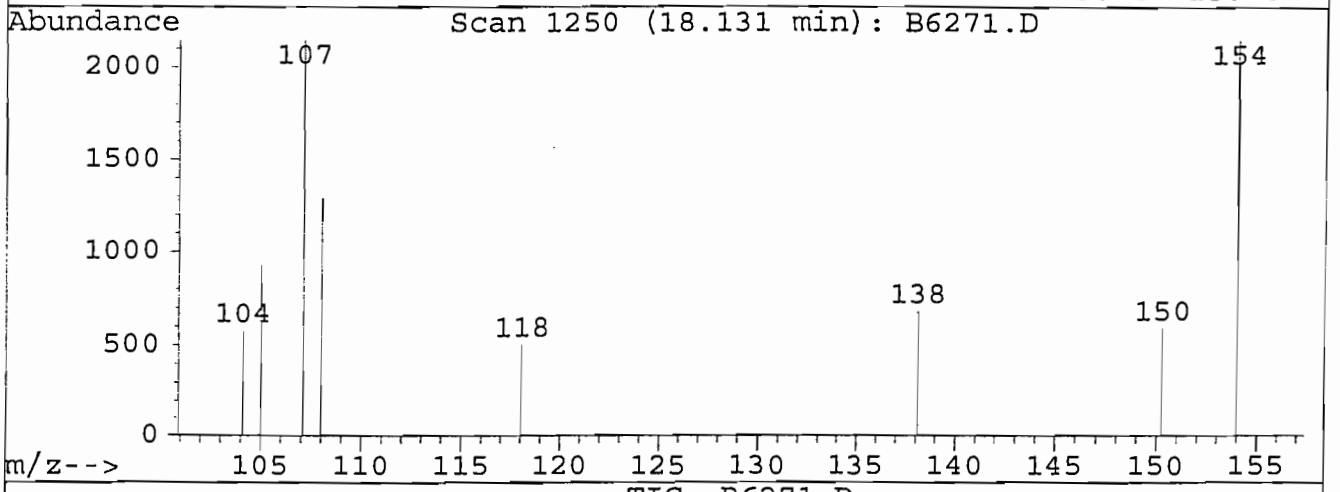
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6271.D

(46) 3-Nitroaniline
18.16min 80.00ng m
response 31666

Ion	Exp%	Act%
138.05	100	100
108.05	127.20	127.22
92.05	580.00	580.02
0.00	0.00	0.00

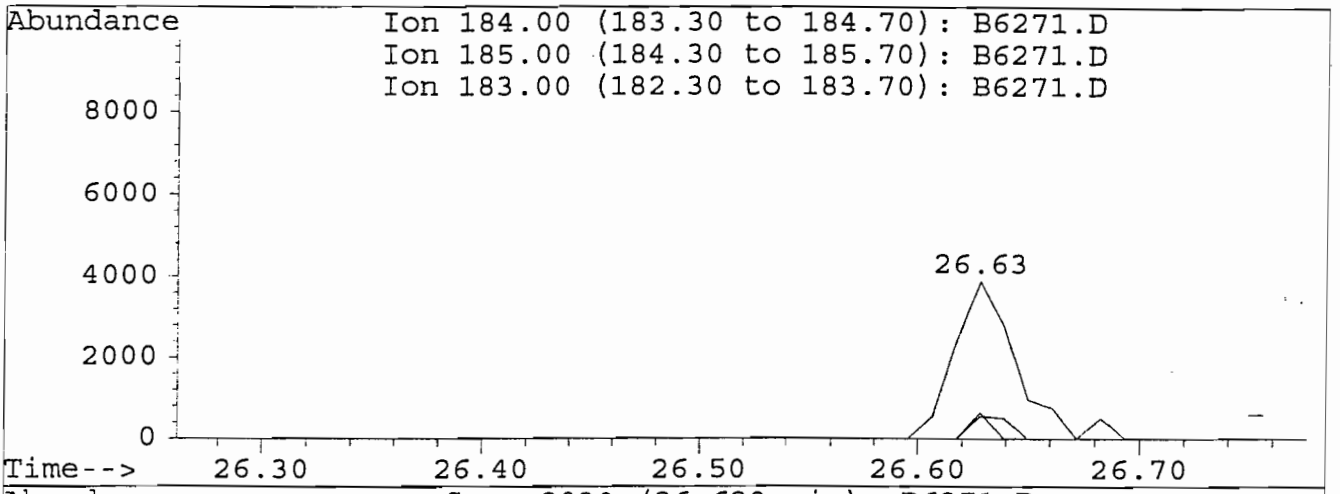
000423

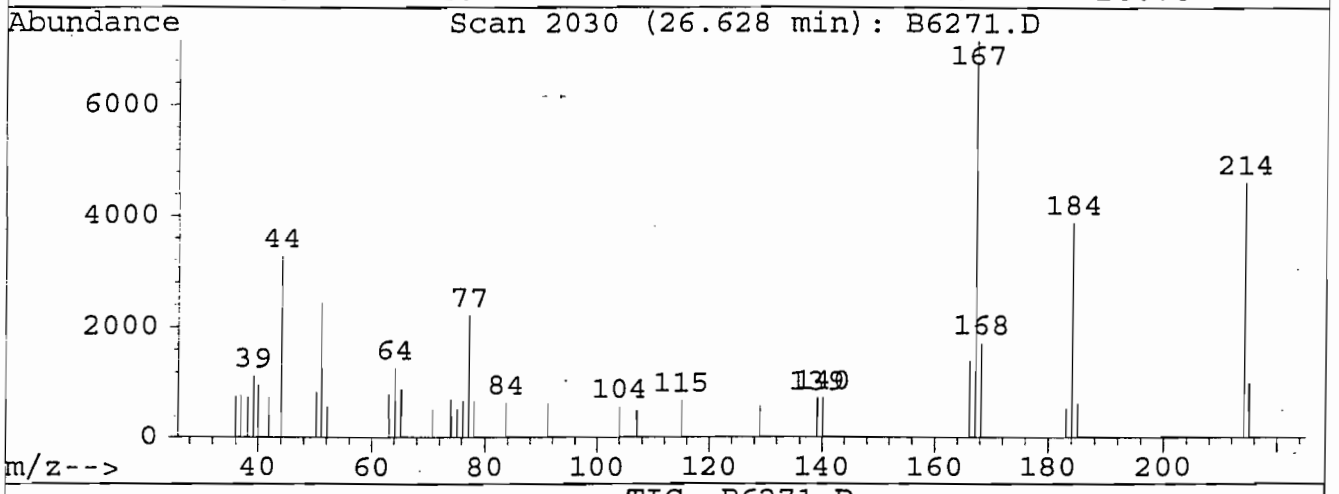
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6271.D

(70) Benzidine
26.63min 79.98ng m
response 7727

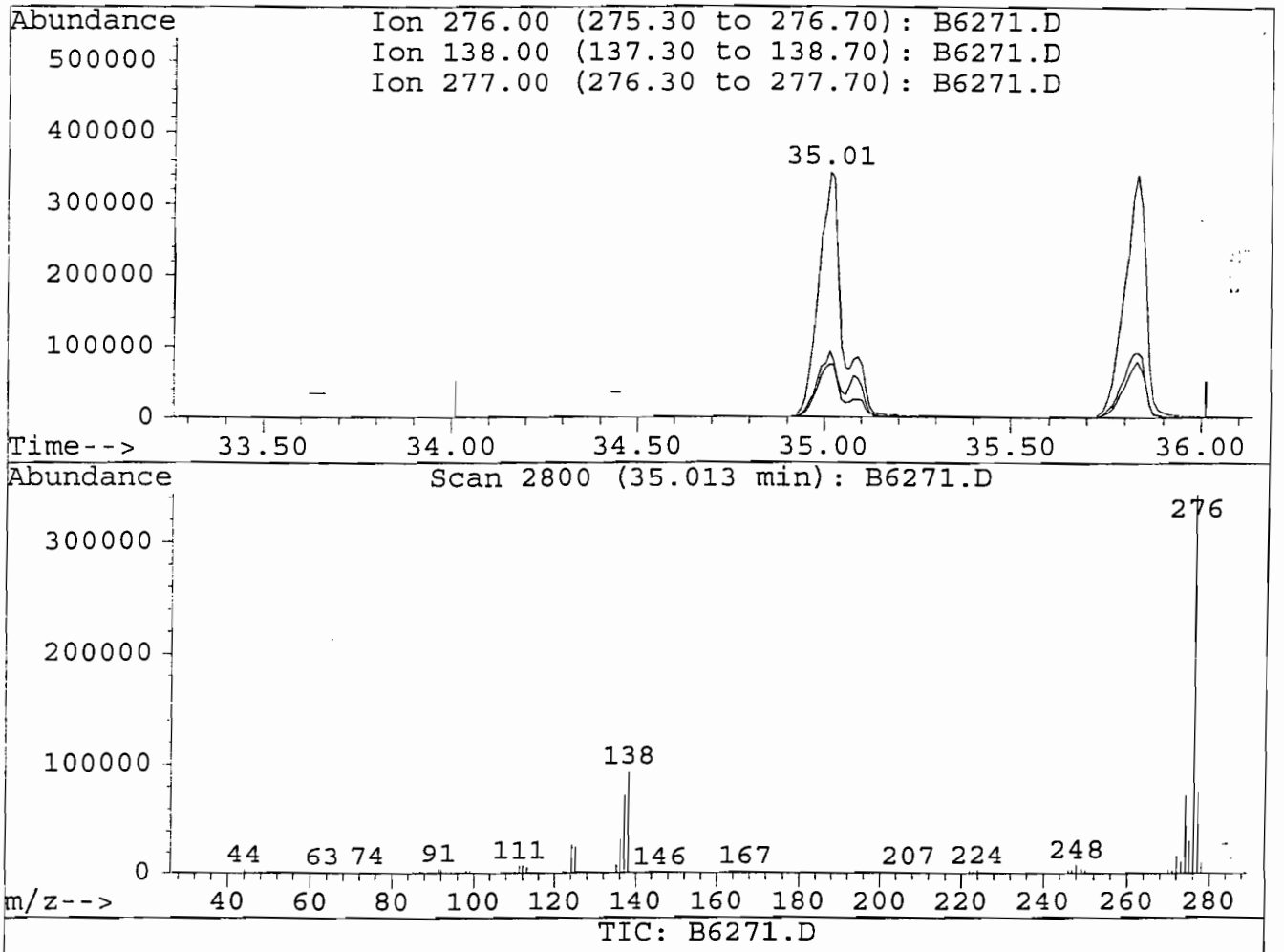
Ion	Exp%	Act%
184.00	100	100
185.00	16.40	16.43
183.00	14.20	14.19
0.00	0.00	0.00

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6271.D
Acq Time : 6 Oct 99 12:01 pm
Sample : 80 BNA ICC
Misc :
Quant Time: Oct 7 10:24 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration



TIC: B6271.D

(79) Indeno(1,2,3-cd)pyrene
35.01min 79.84ng m
response 1541846

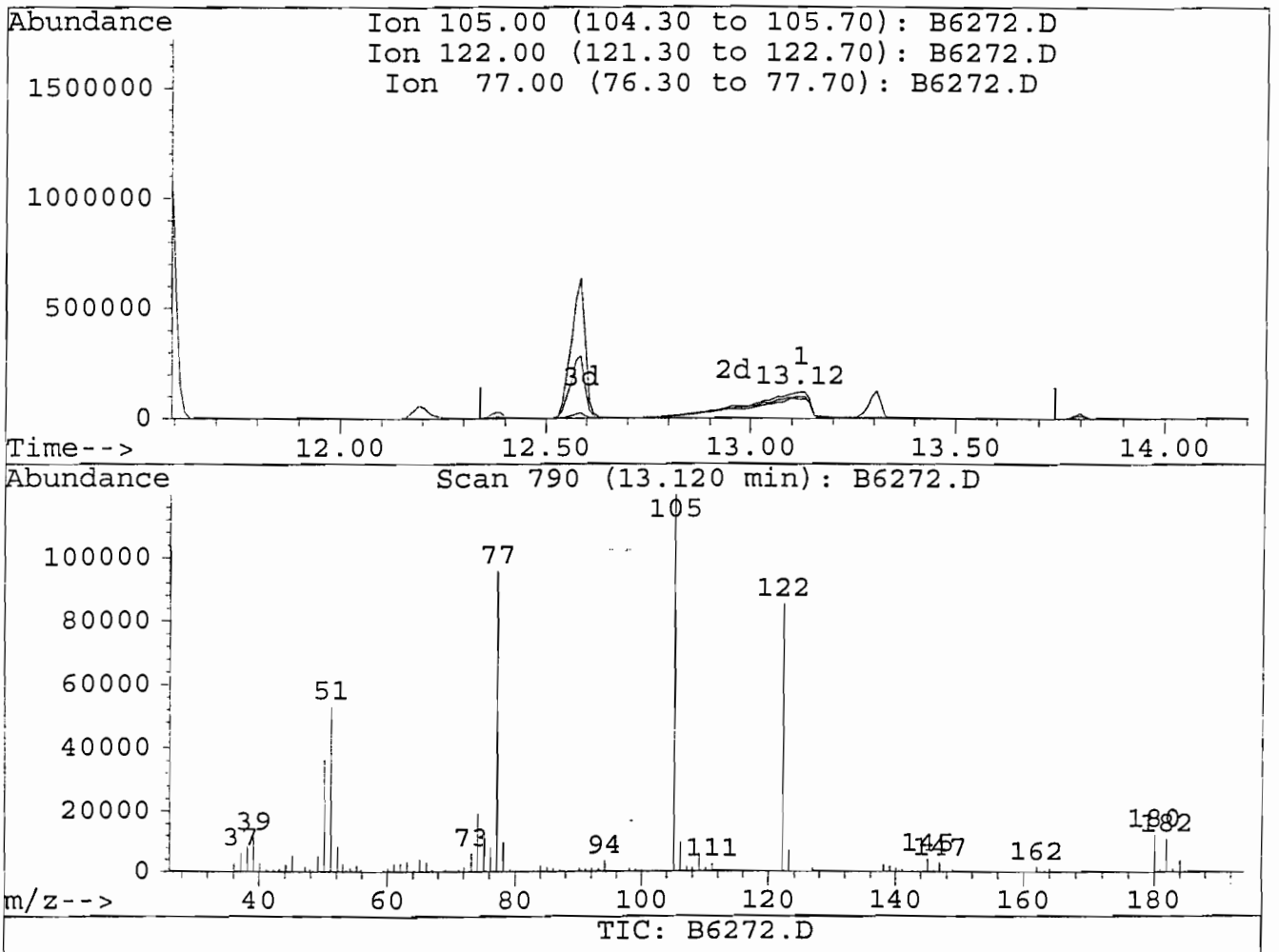
Ion	Exp%	Act%
276.00	100	100
138.00	27.00	27.00
277.00	21.80	21.85
0.00	0.00	0.00

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6272.D
Acq Time : 6 Oct 99 12:52 pm
Sample : 120 BNA ICC
Misc :
Quant Time: Oct 7 11:01 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration



TIC: B6272.D

(29) Benzoic Acid
13.12min 133.19ng m
response 1285013

Ion	Exp%	Act%
105.00	100	100
122.00	72.80	71.04
77.00	86.40	79.84
0.00	0.00	0.00

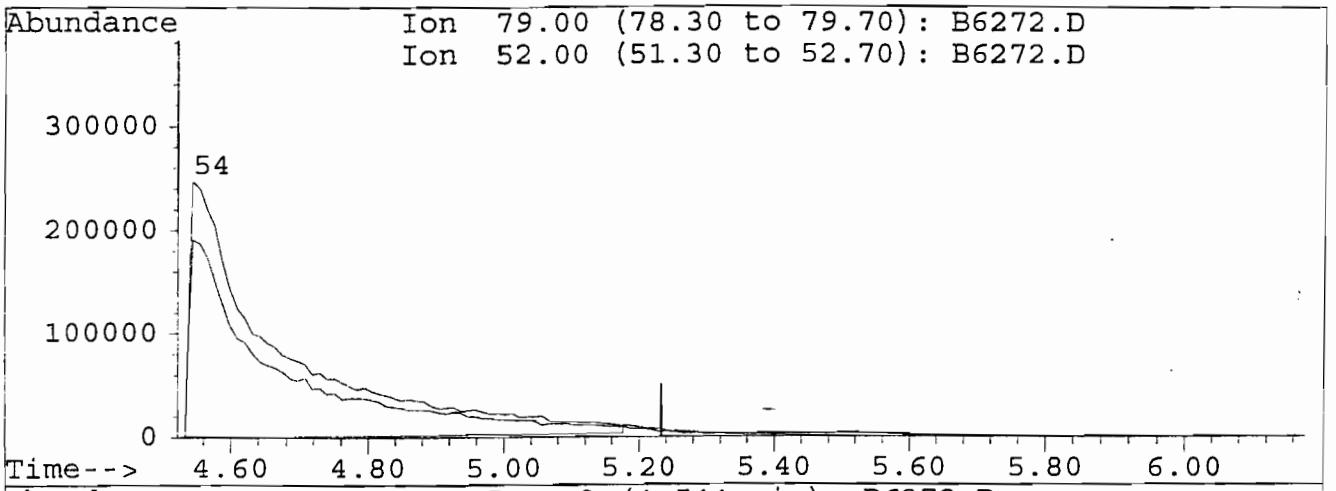
000426

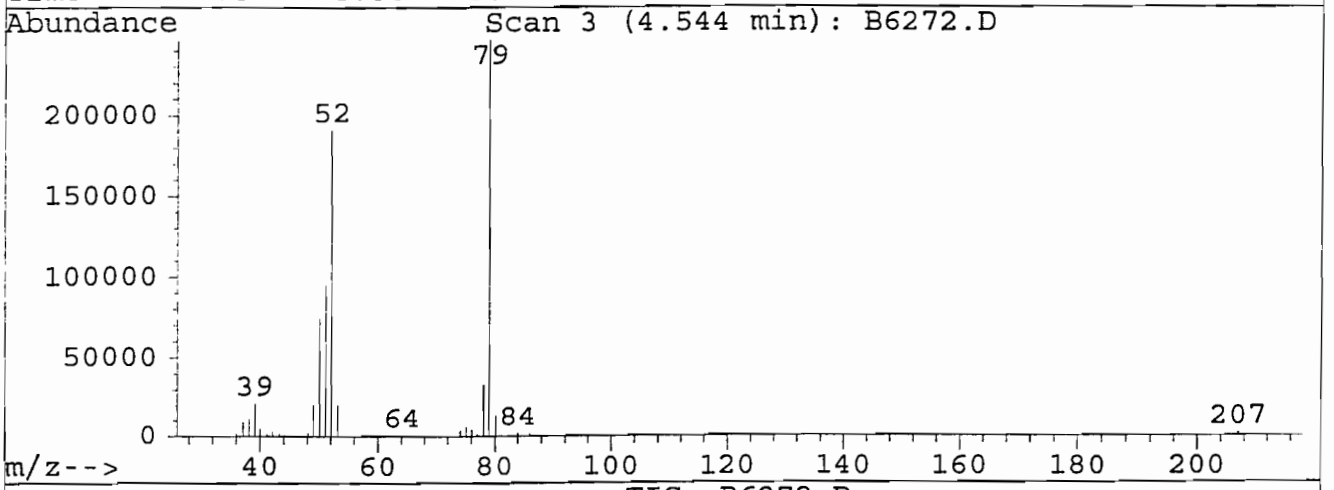
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6272.D
Acq Time : 6 Oct 99 12:52 pm
Sample : 120 BNA ICC
Misc :
Quant Time: Oct 7 11:01 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6272.D

(2) Pyridine
4.54min 111.47ng m
response 2161113

Ion	Exp%	Act%
79.00	100	100
52.00	79.40	77.50
0.00	0.00	0.00
0.00	0.00	0.00

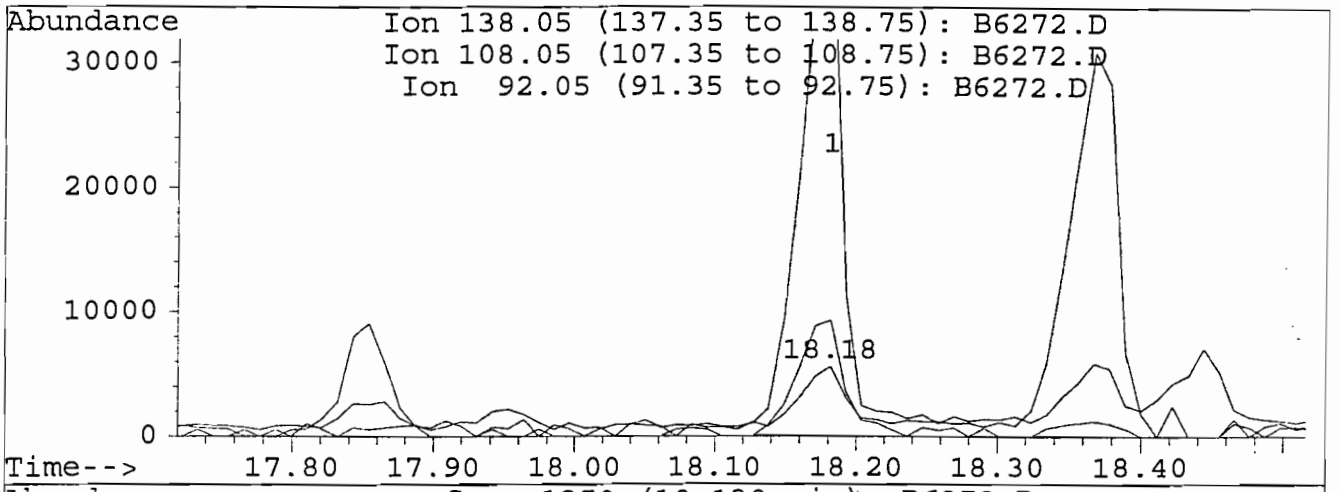
000427

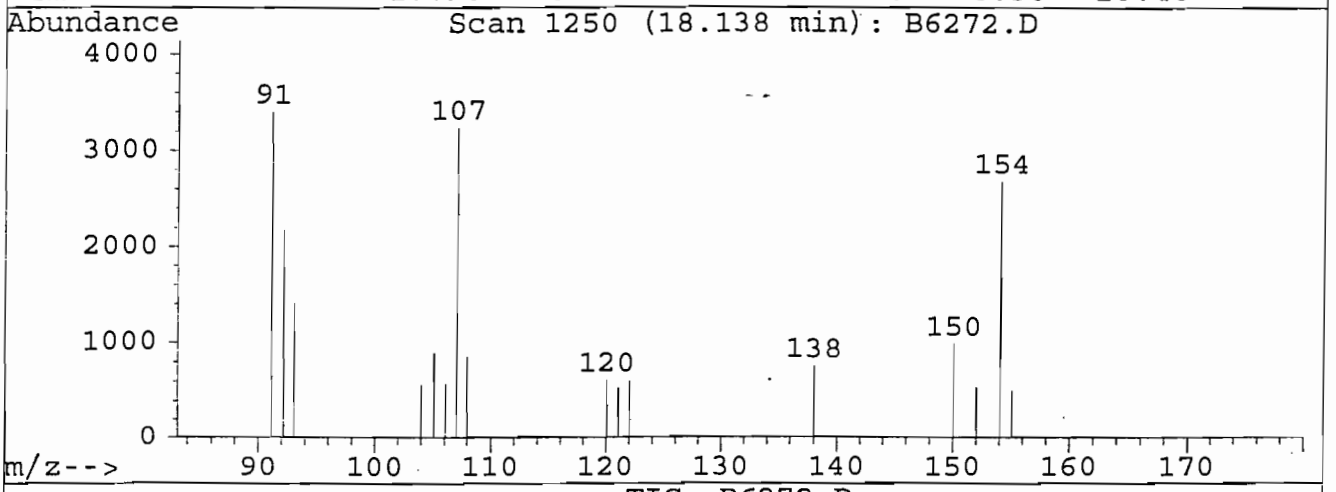
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6272.D
Acq Time : 6 Oct 99 12:52 pm
Sample : 120 BNA ICC
Misc :
Quant Time: Oct 7 11:01 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6272.D

(46) 3-Nitroaniline
18.18min 124.03ng m
response 50159

Ion	Exp%	Act%
138.05	100	100
108.05	127.20	167.03
92.05	580.00	694.44
0.00	0.00	0.00

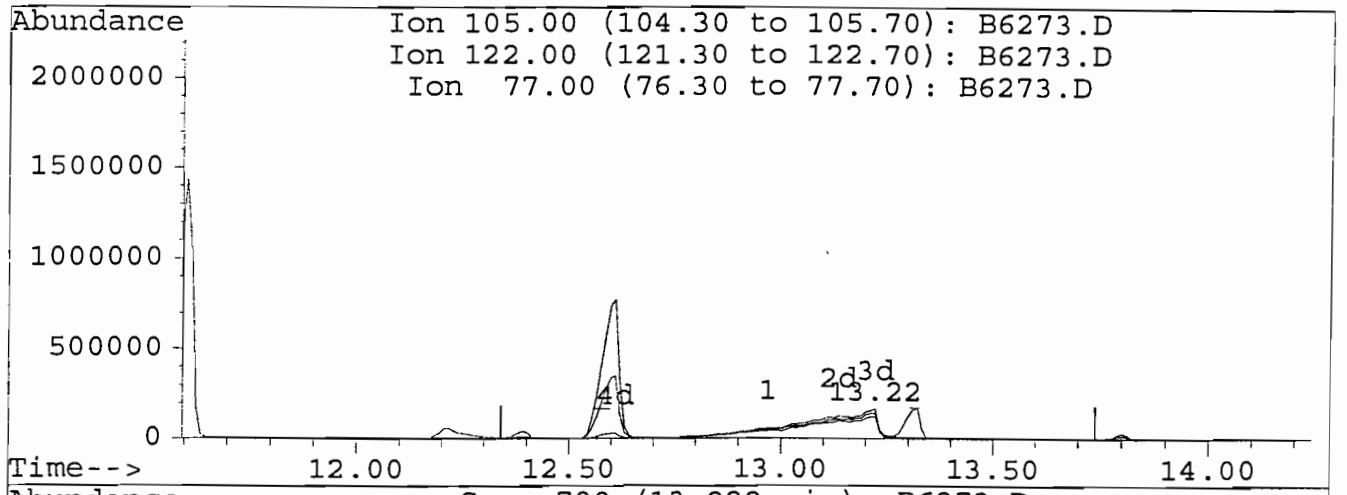
000428

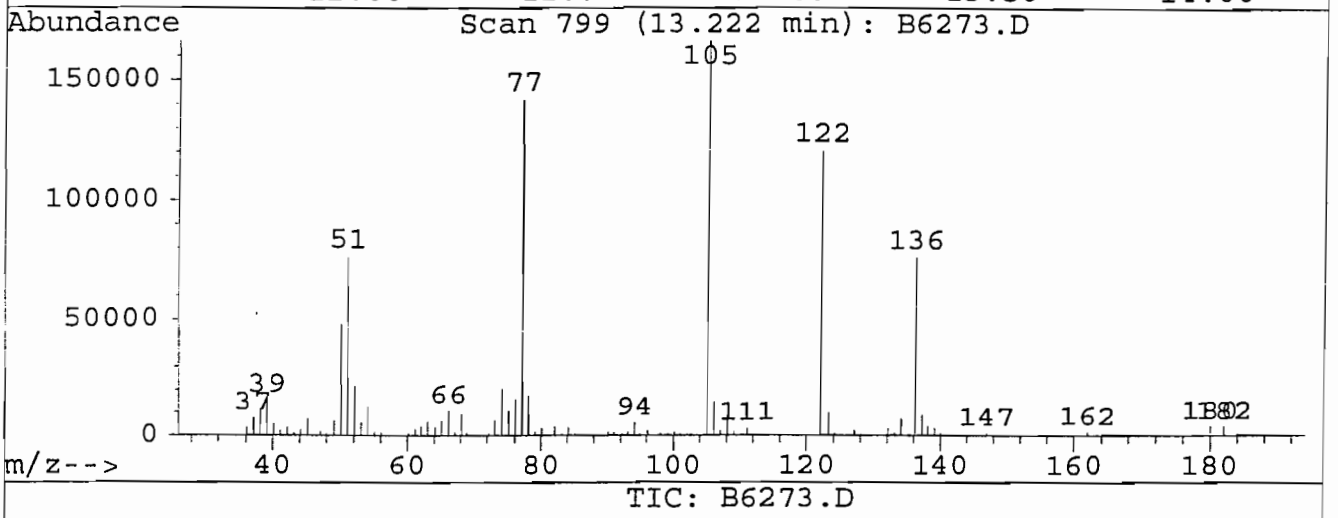
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6273.D
Acq Time : 6 Oct 99 1:42 pm
Sample : 160 BNA ICC
Misc :
Quant Time: Oct 7 11:20 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6273.D

(29) Benzoic Acid
13.22min 189.98ng m
response 1941760

Ion	Exp%	Act%
105.00	100	100
122.00	72.80	72.43
77.00	86.40	85.20
0.00	0.00	0.00

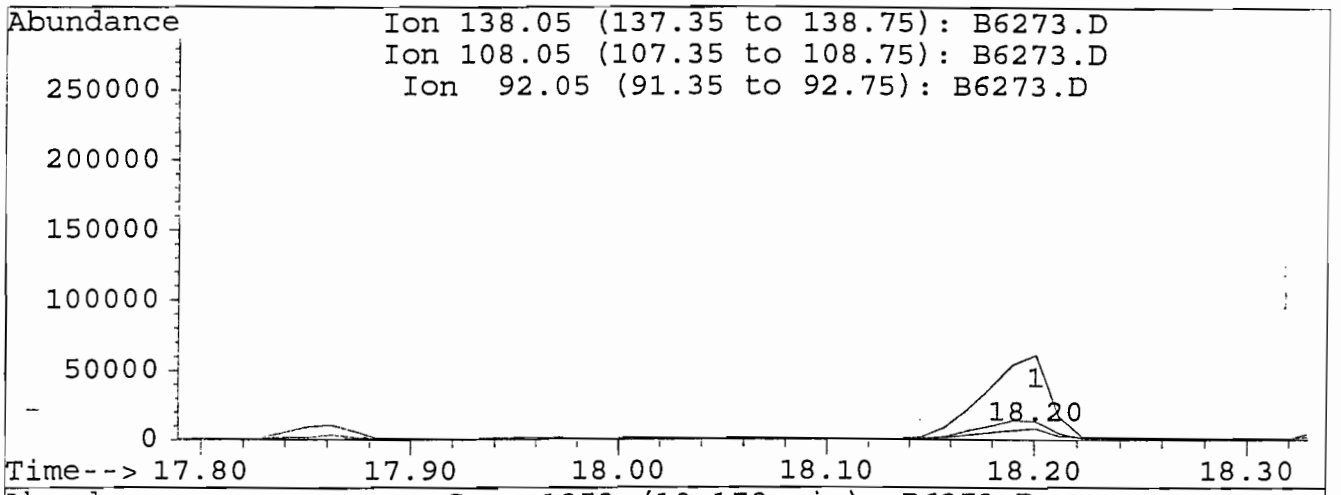
000429

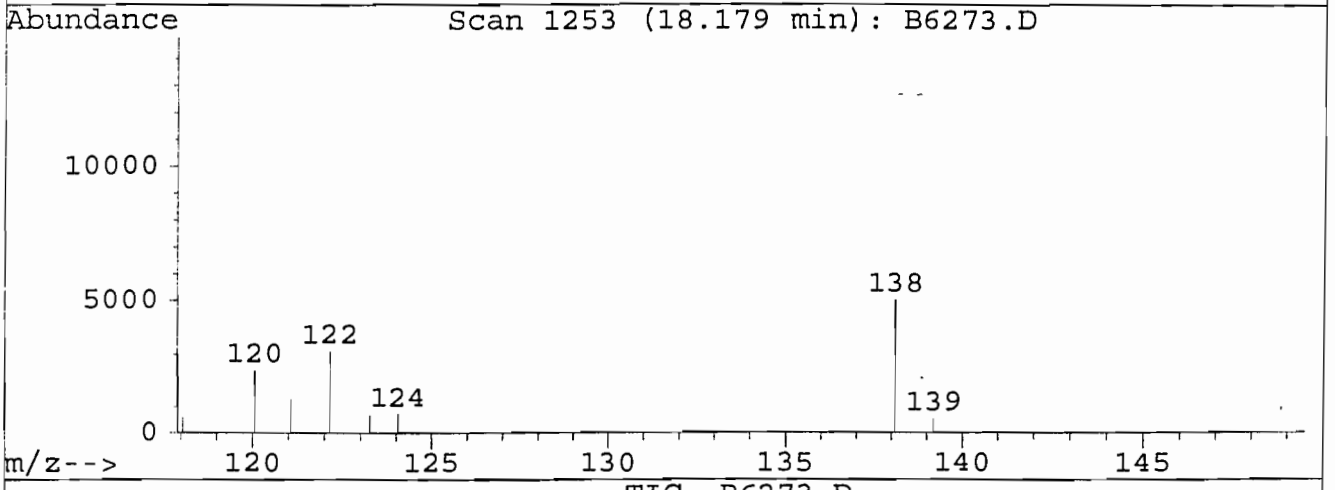
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6273.D
Acq Time : 6 Oct 99 1:42 pm
Sample : 160 BNA ICC
Misc :
Quant Time: Oct 7 11:20 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6273.D

(46) 3-Nitroaniline
18.20min 149.13ng m
response 64114

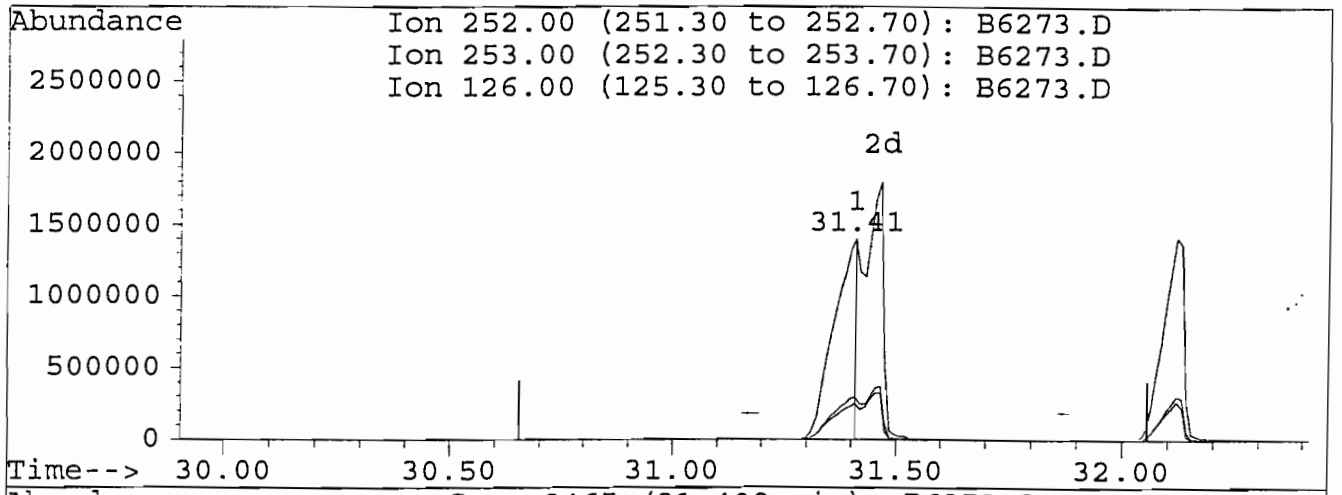
Ion	Exp%	Act%
138.05	100	100
108.05	127.20	161.31
92.05	580.00	750.03
0.00	0.00	0.00

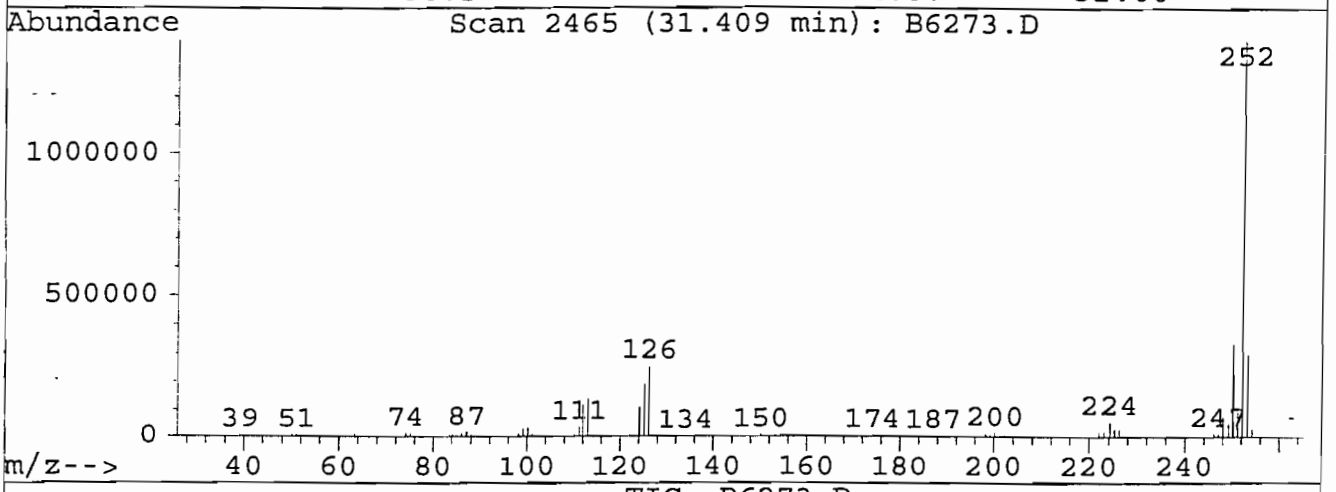
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6273.D
Acq Time : 6 Oct 99 1:42 pm
Sample : 160 BNA ICC
Misc :
Quant Time: Oct 7 11:20 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6273.D

(81) Benzo[b]fluoranthene
31.41min 159.26ng m
response 5053111

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	21.01
126.00	18.60	17.81
0.00	0.00	0.00

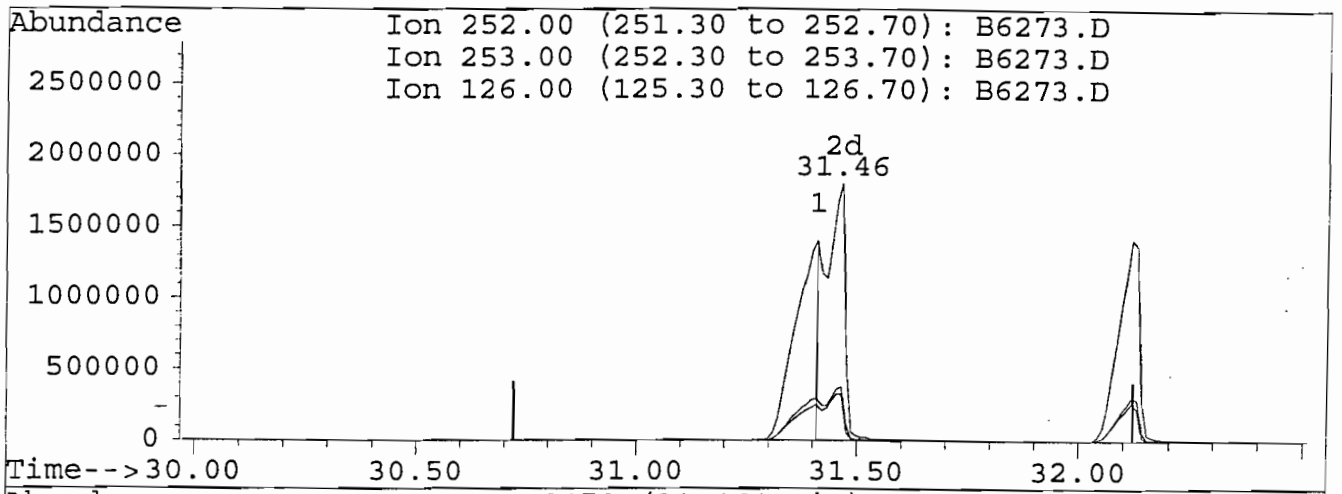
000431

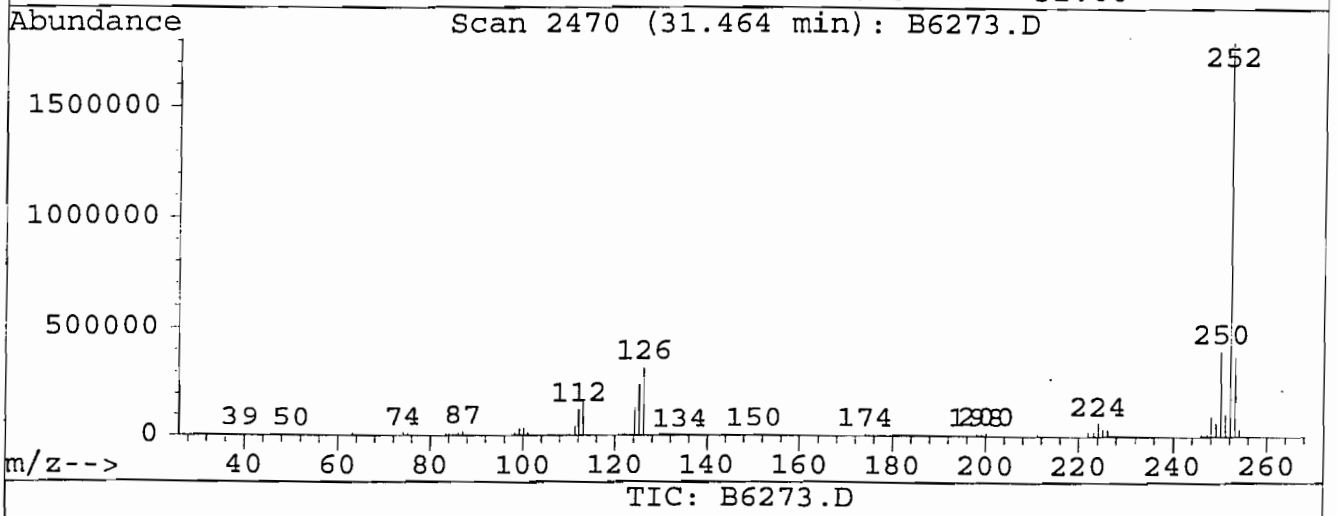
Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11006\B6273.D
Acq Time : 6 Oct 99 1:42 pm
Sample : 160 BNA ICC
Misc :
Quant Time: Oct 7 11:20 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Single Level Calibration





TIC: B6273.D

(82) Benzo[k]fluoranthene
31.46min 171.52ng m
response 5134217

Ion	Exp%	Act%
252.00	100	100
253.00	21.30	20.73
126.00	17.70	17.77
0.00	0.00	0.00

000432

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CR Group: GP-008-SS

Instrument ID: BNA1 Calibration Date: 11/1/99 Time: 1031

Lab File ID: B6691.D Init. Calib. Date(s): 10/6/99 10/6/99

Init. Calib. Times: 1021 1342

COMPOUND	RRF	RRF80	MIN RRF	%D	MAX %D
bis(2-Chloroethyl)ether	1.675	1.725		-3.0	
bis(2-chloroisopropyl)ether	2.509	3.771		-50.3	
1,2-Dichlorobenzene	1.355	1.503		-10.9	
1,3-Dichlorobenzene	1.492	1.627		-9.0	
1,4-Dichlorobenzene	1.491	1.661	0.050	-11.4	20.0
n-Nitroso-di-n-propylamine	1.173	1.225	0.050	-4.4	
Hexachloroethane	0.616	0.678		-10.1	
Nitrobenzene	0.422	0.498		-18.0	
Isophorone	0.896	1.036		-15.6	
bis(2-Chloroethoxy)methane	0.505	0.567		-12.3	
1,2,4-Trichlorobenzene	0.331	0.357		-7.9	
Naphthalene	0.974	1.005		-3.2	
4-Chloroaniline	0.076	0.050		34.2	
Hexachlorobutadiene	0.219	0.241	0.050	-10.0	20.0
2-Methylnaphthalene	0.615	0.644		-4.7	
Hexachlorocyclopentadiene	0.291	0.427	0.050	-46.7	
2-Chloronaphthalene	1.131	1.180		-4.3	
2-Nitroaniline	0.308	0.537		-74.4	
Dimethylphthalate	1.394	1.485		-6.5	
Acenaphthylene	1.739	1.848		-6.3	
2,6-Dinitrotoluene	0.284	0.368		-29.6	
3-Nitroaniline	0.026	0.020		23.1	
Acenaphthene	1.131	1.172	0.050	-3.6	20.0
Dibenzofuran	1.476	1.736		-17.6	
2,4-Dinitrotoluene	0.370	0.498		-34.6	
Diethylphthalate	1.351	1.544		-14.3	
4-Chlorophenyl-phenylether	0.587	0.682		-16.2	
Fluorene	1.059	1.227		-15.9	
4-Nitroaniline	0.079	0.134		-69.6	
N-Nitrosodiphenylamine	0.262	0.239	0.050	8.8	20.0
1,2-Diphenylhydrazine	1.033	1.069		-3.5	
4-Bromophenyl-phenylether	0.220	0.245		-11.4	
Hexachlorobenzene	0.312	0.344		-10.3	
Phenanthrene	0.936	0.951		-1.6	
Anthracene	0.912	0.965		-5.8	
Carbazole	0.190	0.200		-5.3	
Di-n-butylphthalate	1.463	1.503		-2.7	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH　　Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP　　Site: ______　　Location: EAST SOLIDER CR　　Group: GP-008-SS

Instrument ID: BNA1　　Calibration Date: 11/1/99　　Time: 1031

Lab File ID: B6691.D　　Init. Calib. Date(s): 10/6/99　10/6/99

Init. Calib. Times: 1021　1342

COMPOUND	$\overline{RRF}$	RRF80	MIN RRF	%D	MAX %D
Fluoranthene	0.983	1.067	0.050	-8.5	20.0
Pyrene	1.372	1.181		13.9	
Butylbenzylphthalate	0.837	0.751		10.3	
3,3'-Dichlorobenzidine	0.158	0.196		-24.1	
Benzo[a]anthracene	1.082	1.084		-0.2	
Chrysene	0.989	0.966		2.3	
bis(2-Ethylhexyl)phthalate	1.101	1.027		6.7	
Di-n-octylphthalate	1.776	1.800	0.050	-1.4	20.0
Benzo[b]fluoranthene	1.138	1.170		-2.8	
Benzo[k]fluoranthene	1.030	0.940		8.7	
Benzo[a]pyrene	0.926	0.931	0.050	-0.5	20.0
Indeno(1,2,3-cd)pyrene	0.657	0.902		-37.3	
Dibenz[a,h]anthracene	0.649	0.847		-30.5	
Benzo[g,h,i]perylene	0.700	0.853		-21.9	
Nitrobenzene-d5	0.479	0.549	0.010	-14.6	
2-Fluorobiphenyl	1.376	1.434	0.010	-4.2	
Terphenyl-d14	1.178	0.935	0.010	20.6	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CR Group: GP-008-SS

Instrument ID: BNA1 Calibration Date: 11/3/99 Time: 1842

Lab File ID: B6734.D Init. Calib. Date(s): 10/6/99 10/6/99

Init. Calib. Times: 1021 1342

COMPOUND	RRF	RRF80	MIN RRF	%D	MAX %D
bis(2-Chloroethyl)ether	1.675	1.812		-8.2	
bis(2-chloroisopropyl)ether	2.509	3.391		-35.2	
1,2-Dichlorobenzene	1.355	1.377		-1.6	
1,3-Dichlorobenzene	1.492	1.570		-5.2	
1,4-Dichlorobenzene	1.491	1.584	0.050	-6.2	20.0
n-Nitroso-di-n-propylamine	1.173	1.179	0.050	-0.5	
Hexachloroethane	0.616	0.640		-3.9	
Nitrobenzene	0.422	0.500		-18.5	
Isophorone	0.896	0.983		-9.7	
bis(2-Chloroethoxy)methane	0.505	0.562		-11.3	
1,2,4-Trichlorobenzene	0.331	0.342		-3.3	
Naphthalene	0.974	0.956		1.8	
4-Chloroaniline	0.076	0.078		-2.6	
Hexachlorobutadiene	0.219	0.237	0.050	-8.2	20.0
2-Methylnaphthalene	0.615	0.647		-5.2	
Hexachlorocyclopentadiene	0.291	0.350	0.050	-20.3	
2-Chloronaphthalene	1.131	1.150		-1.7	
2-Nitroaniline	0.308	0.550		-78.6	
Dimethylphthalate	1.394	1.424		-2.2	
Acenaphthylene	1.739	1.728		0.6	
2,6-Dinitrotoluene	0.284	0.328		-15.5	
3-Nitroaniline	0.026	0.024		7.7	
Acenaphthene	1.131	1.105	0.050	2.3	20.0
Dibenzofuran	1.476	1.652		-11.9	
2,4-Dinitrotoluene	0.370	0.498		-34.6	
Diethylphthalate	1.351	1.431		-5.9	
4-Chlorophenyl-phenylether	0.587	0.633		-7.8	
Fluorene	1.059	1.175		-11.0	
4-Nitroaniline	0.079	0.154		-94.9	
N-Nitrosodiphenylamine	0.262	0.237	0.050	9.5	20.0
1,2-Diphenylhydrazine	1.033	1.093		-5.8	
4-Bromophenyl-phenylether	0.220	0.240		-9.1	
Hexachlorobenzene	0.312	0.325		-4.2	
Phenanthrene	0.936	0.952		-1.7	
Anthracene	0.912	0.941		-3.2	
Carbazole	0.190	0.154		18.9	
Di-n-butylphthalate	1.463	1.444		1.3	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CR Group: GP-008-SS

Instrument ID: BNA1 Calibration Date: 11/3/99 Time: 1842

Lab File ID: B6734.D Init. Calib. Date(s): 10/6/99 10/6/99

Init. Calib. Times: 1021 1342

COMPOUND	$\overline{RRF}$	RRF80	MIN RRF	%D	MAX %D
Fluoranthene	0.983	1.068	0.050	-8.6	20.0
Pyrene	1.372	1.125		18.0	
Butylbenzylphthalate	0.837	0.698		16.6	
3,3'-Dichlorobenzidine	0.158	0.206		-30.4	
Benzo[a]anthracene	1.082	1.050		3.0	
Chrysene	0.989	0.966		2.3	
bis(2-Ethylhexyl)phthalate	1.101	0.947		14.0	
Di-n-octylphthalate	1.776	1.780	0.050	-0.2	20.0
Benzo[b]fluoranthene	1.138	1.275		-12.0	
Benzo[k]fluoranthene	1.030	0.848		17.7	
Benzo[a]pyrene	0.926	0.984	0.050	-6.3	20.0
Indeno(1,2,3-cd)pyrene	0.657	0.845		-28.6	
Dibenz[a,h]anthracene	0.649	0.865		-33.3	
Benzo[g,h,i]perylene	0.700	0.872		-24.6	
Nitrobenzene-d5	0.479	0.536	0.010	-11.9	
2-Fluorobiphenyl	1.376	1.381	0.010	-0.4	
Terphenyl-d14	1.178	0.940	0.010	20.2	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CR Group: GP-008-SS

Instrument ID: BNA1 Calibration Date: 11/4/99 Time: 1017

Lab File ID: B6749.D Init. Calib. Date(s): 10/6/99 10/6/99

Init. Calib. Times: 1021 1342

COMPOUND	$\overline{RRF}$	RRF80	MIN RRF	%D	MAX %D
bis(2-Chloroethyl)ether	1.675	1.712		-2.2	
bis(2-chloroisopropyl)ether	2.509	3.370		-34.3	
1,2-Dichlorobenzene	1.355	1.412		-4.2	
1,3-Dichlorobenzene	1.492	1.555		-4.2	
1,4-Dichlorobenzene	1.491	1.520	0.050	-1.9	20.0
n-Nitroso-di-n-propylamine	1.173	1.215	0.050	-3.6	
Hexachloroethane	0.616	0.658		-6.8	
Nitrobenzene	0.422	0.472		-11.8	
Isophorone	0.896	1.003		-11.9	
bis(2-Chloroethoxy)methane	0.505	0.548		-8.5	
1,2,4-Trichlorobenzene	0.331	0.346		-4.5	
Naphthalene	0.974	1.011		-3.8	
4-Chloroaniline	0.076	0.051		32.9	
Hexachlorobutadiene	0.219	0.243	0.050	-11.0	20.0
2-Methylnaphthalene	0.615	0.658		-7.0	
Hexachlorocyclopentadiene	0.291	0.341	0.050	-17.2	
2-Chloronaphthalene	1.131	1.141		-0.9	
2-Nitroaniline	0.308	0.399		-29.5	
Dimethylphthalate	1.394	1.403		-0.6	
Acenaphthylene	1.739	1.653		4.9	
2,6-Dinitrotoluene	0.284	0.330		-16.2	
3-Nitroaniline	0.026	0.020		23.1	
Acenaphthene	1.131	1.093	0.050	3.4	20.0
Dibenzofuran	1.476	1.628		-10.3	
2,4-Dinitrotoluene	0.370	0.475		-28.4	
Diethylphthalate	1.351	1.472		-9.0	
4-Chlorophenyl-phenylether	0.587	0.657		-11.9	
Fluorene	1.059	1.177		-11.1	
4-Nitroaniline	0.079	0.104		-31.6	
N-Nitrosodiphenylamine	0.262	0.213	0.050	18.7	20.0
1,2-Diphenylhydrazine	1.033	1.090		-5.5	
4-Bromophenyl-phenylether	0.220	0.240		-9.1	
Hexachlorobenzene	0.312	0.332		-6.4	
Phenanthrene	0.936	0.945		-1.0	
Anthracene	0.912	0.921		-1.0	
Carbazole	0.190	0.137		27.9	
Di-n-butylphthalate	1.463	1.473		-0.7	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CR Group: GP-008-SS

Instrument ID: BNA1 Calibration Date: 11/4/99 Time: 1017

Lab File ID: B6749.D Init. Calib. Date(s): 10/6/99 10/6/99

Init. Calib. Times: 1021 1342

COMPOUND	RRF	RRF80	MIN RRF	%D	MAX %D
Fluoranthene	0.983	1.064	0.050	-8.2	20.0
Pyrene	1.372	1.223		10.9	
Butylbenzylphthalate	0.837	0.741		11.5	
3,3'-Dichlorobenzidine	0.158	0.209		-32.3	
Benzo[a]anthracene	1.082	1.095		-1.2	
Chrysene	0.989	0.990		-0.1	
bis(2-Ethylhexyl)phthalate	1.101	1.042		5.4	
Di-n-octylphthalate	1.776	1.901	0.050	-7.0	20.0
Benzo[b]fluoranthene	1.138	1.261		-10.8	
Benzo[k]fluoranthene	1.030	0.865		16.0	
Benzo[a]pyrene	0.926	0.940	0.050	-1.5	20.0
Indeno(1,2,3-cd)pyrene	0.657	0.867		-32.0	
Dibenz[a,h]anthracene	0.649	0.897		-38.2	
Benzo[g,h,i]perylene	0.700	0.898		-28.3	
Nitrobenzene-d5	0.479	0.549	0.010	-14.6	
2-Fluorobiphenyl	1.376	1.335	0.010	3.0	
Terphenyl-d14	1.178	0.961	0.010	18.4	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: EAST SOLIDER CR Group: GP-008-SS

Instrument ID: BNA1 Calibration Date: 11/9/99 Time: 0958

Lab File ID: B6833.D Init. Calib. Date(s): 10/6/99 10/6/99

Init. Calib. Times: 1021 1342

COMPOUND	$\overline{RRF}$	RRF80	MIN RRF	%D	MAX %D
bis(2-Chloroethyl)ether	1.854	1.628		12.2	
bis(2-chloroisopropyl)ether	3.378	2.641		21.8	
1,2-Dichlorobenzene	1.534	1.443		5.9	
1,3-Dichlorobenzene	1.687	1.584		6.1	
1,4-Dichlorobenzene	1.699	1.573	0.050	7.4	20.0
n-Nitroso-di-n-propylamine	1.380	1.335	0.050	3.3	
Hexachloroethane	0.677	0.693		-2.4	
Nitrobenzene	0.482	0.447		7.3	
Isophorone	1.034	0.982		5.0	
bis(2-Chloroethoxy)methane	0.599	0.568		5.2	
1,2,4-Trichlorobenzene	0.357	0.354		0.8	
Naphthalene	1.014	1.023		-0.9	
4-Chloroaniline	0.106	0.048		54.7	
Hexachlorobutadiene	0.216	0.222	0.050	-2.8	20.0
2-Methylnaphthalene	0.699	0.694		0.7	
Hexachlorocyclopentadiene	0.342	0.334	0.050	2.3	
2-Chloronaphthalene	1.221	1.180		3.4	
2-Nitroaniline	0.545	0.401		26.4	
Dimethylphthalate	1.468	1.448		1.4	
Acenaphthylene	1.765	1.584		10.3	
2,6-Dinitrotoluene	0.354	0.369		-4.2	
3-Nitroaniline	0.028	0.021		25.0	
Acenaphthene	1.190	1.142	0.050	4.0	20.0
Dibenzofuran	1.720	1.656		3.7	
2,4-Dinitrotoluene	0.510	0.498		2.4	
Diethylphthalate	1.524	1.537		-0.9	
4-Chlorophenyl-phenylether	0.647	0.611		5.6	
Fluorene	1.302	1.234		5.2	
4-Nitroaniline	0.150	0.094		37.3	
N-Nitrosodiphenylamine	0.339	0.285	0.050	15.9	20.0
1,2-Diphenylhydrazine	1.123	1.012		9.9	
4-Bromophenyl-phenylether	0.235	0.217		7.7	
Hexachlorobenzene	0.312	0.309		1.0	
Phenanthrene	1.000	0.940		6.0	
Anthracene	1.004	0.969		3.5	
Carbazole	0.172	0.133		22.7	
Di-n-butylphthalate	1.653	1.509		8.7	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER CR Group: GP-008-SS

Instrument ID: BNA1 Calibration Date: 11/9/99 Time: 0958

Lab File ID: B6833.D Init. Calib. Date(s): 10/6/99 10/6/99

Init. Calib. Times: 1021 1342

COMPOUND	RRF	RRF80	MIN RRF	%D	MAX %D
Fluoranthene	1.121	1.023	0.050	8.7	20.0
Pyrene	1.257	1.359		-8.1	
Butylbenzylphthalate	0.845	0.851		-0.7	
3,3'-Dichlorobenzidine	0.259	0.158		39.0	
Benzo[a]anthracene	1.119	1.123		-0.4	
Chrysene	1.017	1.015		0.2	
bis(2-Ethylhexyl)phthalate	1.198	1.219		-1.8	
Di-n-octylphthalate	2.120	2.041	0.050	3.7	20.0
Benzo[b]fluoranthene	1.321	1.401		-6.1	
Benzo[k]fluoranthene	0.914	0.887		3.0	
Benzo[a]pyrene	1.016	1.036	0.050	-2.0	20.0
Indeno(1,2,3-cd)pyrene	0.906	0.873		3.6	
Dibenz[a,h]anthracene	0.858	0.845		1.5	
Benzo[g,h,i]perylene	0.835	0.813		2.6	
Nitrobenzene-d5	0.548	0.523	0.010	4.6	
2-Fluorobiphenyl	1.470	1.392	0.010	5.3	
Terphenyl-d14	1.156	1.204	0.010	-4.2	

All other compounds must meet a minimum RRF of 0.010.

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6833.D
Acq Time : 9 Nov 99 9:58 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 9 11:40 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.65	152	416493	40.00	ng		-0.08
21) Naphthalene-d8	12.81	136	1537267	40.00	ng		-0.07
36) Acenaphthene-d10	17.40	164	876072	40.00	ng		-0.08
57) Phenanthrene-d10	21.25	188	1706104	40.00	ng		-0.07
69) Chrysene-d12	28.27	240	1295522	40.00	ng		-0.07
80) Perylene-d12	31.76	264	1110918	40.00	ng		-0.07
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	6.94	112	1262603	76.43	ng		
6) 2-Chlorophenol-d4	9.23	132	1202089	77.52	ng		
7) Phenol-d5	9.12	99	1480456	75.81	ng		
13) 1,2-Dichlorobenzene-d4	10.09	152	778634	76.97	ng		
22) Nitrobenzene-d5	11.12	82	1606877	76.30	ng		
40) 2-Fluorobiphenyl	15.73	172	2438488	75.74	ng		
55) 2,4,6-Tribromophenol	19.54	330	595162	82.96	ng		
72) Terphenyl-d14	25.59	244	3118751	83.30	ng		
Target Compounds							Qvalue
2) Pyridine	4.21	79	1283292	67.42	ng	m	0
3) N-nitroso-dimethylamine	4.28	42	704076	69.45	ng		97
5) Aniline	9.04	93	495079	47.36	ng		97
8) Phenol	9.16	94	1569931	73.56	ng		98
9) bis(2-Chloroethyl)ether	9.22	93	1356460	70.26	ng		92
10) 2-Chlorophenol	9.28	128	1179032	76.15	ng		96
11) 1,3-Dichlorobenzene	9.56	146	1319532	75.13	ng		98
12) 1,4-Dichlorobenzene	9.69	146	1310085	74.04	ng		99
14) 1,2-Dichlorobenzene	10.13	146	1202374	75.30	ng		100
15) Benzyl alcohol	10.16	108	781270	79.69	ng		96
16) 2-Methylphenol	10.52	108	987685	77.80	ng		98
17) bis(2-chloroisopropyl)ethe	10.50	45	2199663	62.54	ng		91
18) Hexachloroethane	10.84	117	576900	81.87	ng		95
19) 3+4-Methyphenols	10.95	108	2117441	155.14	ng		99
20) N-Nitroso-di-n-propylamine	10.90	70	1111989	77.39	ng	m	93
23) Nitrobenzene	11.18	77	1374653	74.16	ng		96
24) Isophorone	11.77	82	3020585	76.03	ng		99
25) 2-Nitrophenol	11.96	139	681641	83.00	ng		97
26) 2,4-Dimethylphenol	12.20	107	1248655	80.69	ng		97
27) bis(2-Chloroethoxy)methane	12.41	93	1747707	75.93	ng		96
28) 2,4-Dichlorophenol	12.59	162	1022315	81.41	ng		96
29) Benzoic Acid	12.83	105	933484	84.43	ng		94
30) 1,2,4-Trichlorobenzene	12.73	180	1089909	79.52	ng		99
31) Naphthalene	12.87	128	3146192	80.74	ng		100
32) 4-Chloroaniline	13.39	127	148630	35.71	ng		95
33) Hexachlorobutadiene	13.36	225	682155	82.08	ng		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6833.D
Acq Time : 9 Nov 99 9:58 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 9 11:40 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.51	107	1176910	82.08	ng		97
35) 2-Methylnaphthalene	14.65	142	2133083	79.37	ng		97
37) Hexachlorocyclopentadiene	15.24	237	584542	78.09	ng		99
38) 2,4,6-Trichlorophenol	15.54	196	791210	81.47	ng		98
39) 2,4,5-Trichlorophenol	15.63	196	854016	82.89	ng		99
41) 2-Chloronaphthalene	15.92	162	2067874	77.33	ng		98
42) 2-Nitroaniline	16.40	65	702550	58.86	ng		95
43) Dimethylphthalate	16.99	163	2537899	78.94	ng		97
44) Acenaphthylene	17.00	152	2775684	71.80	ng		99
45) 2,6-Dinitrotoluene	17.17	165	646389	83.48	ng		94
46) 3-Nitroaniline	17.77	138	37144	65.87	ng	m	1
47) Acenaphthene	17.50	153	2001776	76.83	ng		97
48) 2,4-Dinitrophenol	17.77	184	312257	74.49	ng		97
49) Dibenzofuran	17.93	168	2900919	77.03	ng		100
50) 4-Nitrophenol	18.10	109	259709	76.17	ng		83
51) 2,4-Dinitrotoluene	18.18	165	872017	78.08	ng		100
52) Fluorene	18.83	166	2162474	75.83	ng		99
53) Diethylphthalate	18.86	149	2693176	80.70	ng		100
54) 4-Chlorophenyl-phenylether	18.90	204	1070174	75.47	ng		96
56) 4-Nitroaniline	19.23	138	164152	43.88	ng		79
58) 4,6-Dinitro-2-methylphenol	19.25	198	450909	80.70	ng		92
59) N-Nitrosodiphenylamine	19.28	169	972531	72.96	ng	m	98
60) 1,2-Diphenylhydrazine	19.30	77	3451934	72.05	ng		99
61) 4-Bromophenyl-phenylether	20.15	248	740108	73.91	ng		97
62) Hexachlorobenzene	20.49	284	1054731	79.19	ng		99
63) Pentachlorophenol	21.02	266	619624	78.86	ng		98
64) Phenanthrene	21.33	178	3206263	75.17	ng		100
65) Anthracene	21.45	178	3305100	77.19	ng		99
66) Carbazole	21.94	167	453198	69.74	ng		96
67) Di-n-butylphthalate	23.14	149	5150311	73.05	ng		100
68) Fluoranthene	24.47	202	3489618	72.99	ng		99
70) Benzidine	26.20	184	8960	42.29	ng	m	94
71) Pyrene	25.03	202	3520596	86.45	ng		100
73) Butylbenzylphthalate	27.06	149	2203870	80.52	ng		99
74) Benzo[a]anthracene	28.23	228	2910932	80.29	ng		99
75) 3,3'-Dichlorobenzidine	28.30	252	410426	48.85	ng		96
76) Chrysene	28.35	228	2628683	79.84	ng		99
77) bis(2-Ethylhexyl)phthalate	28.66	149	3159746	81.40	ng		96
78) Di-n-octylphthalate	30.21	149	5289095	77.02	ng		100
79) Indeno(1,2,3-cd)pyrene	34.37	276	2263029	77.15	ng		93
81) Benzo[b]fluoranthene	30.93	252	3112984	84.88	ng		98
82) Benzo[k]fluoranthene	30.99	252	1971533	77.63	ng		99
83) Benzo[a]pyrene	31.65	252	2301516	81.56	ng		97
84) Dibenz[a,h]anthracene	34.45	278	1876363	78.70	ng		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6833.D
Acq Time : 9 Nov 99 9:58 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 9 11:40 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.14	276	1807033	77.89 ng	98

000443

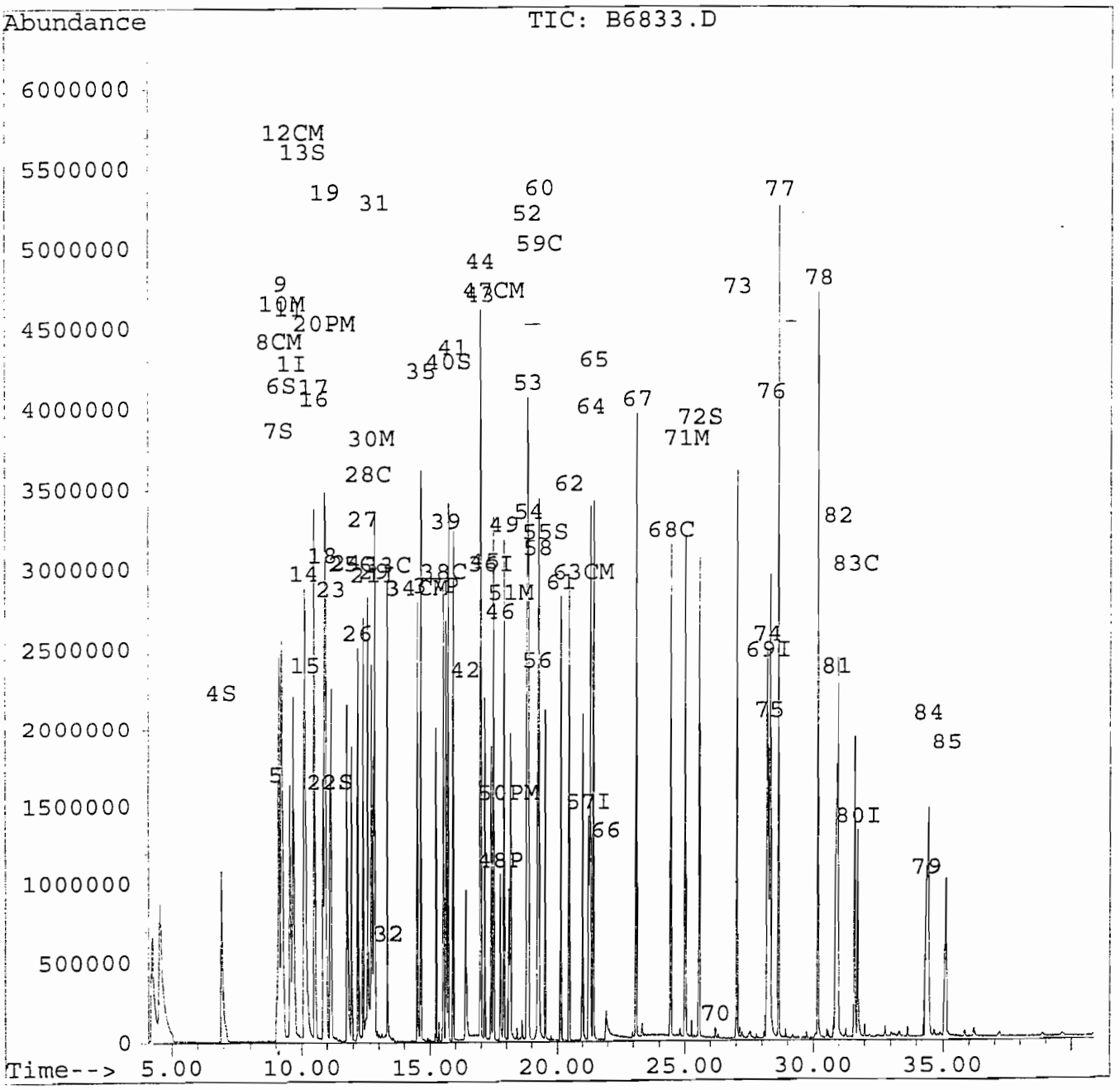
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6833.D
Acq Time : 9 Nov 99 9:58 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 9 11:40 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration



000444

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11109\B6833.D
Acq Time : 9 Nov 99 9:58 am
Sample : 80 NG BNA CCC
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	-0.08
2		Pyridine	1.828	1.541	15.7	101	-0.10
3		N-nitroso-dimethylamine	0.974	0.845	13.2	108	-0.08
4	S	2-Fluorophenol	1.587	1.516	4.5	119	-0.06
5		Aniline	1.198	0.594	50.4	78	-0.07
6	S	2-Chlorophenol-d4	1.489	1.443	3.1	120	-0.06
7	S	Phenol-d5	1.876	1.777	5.2	118	-0.04
8	CM	Phenol	2.050	1.885	8.1	117	-0.04
9		bis(2-Chloroethyl)ether	1.854	1.628	12.2	111	-0.07
10	M	2-Chlorophenol	1.487	1.415	4.8	117	-0.06
11		1,3-Dichlorobenzene	1.687	1.584	6.1	118	-0.07
12	CM	1,4-Dichlorobenzene	1.699	1.573	7.5	116	-0.07
13	S	1,2-Dichlorobenzene-d4	0.971	0.935	3.8	120	-0.07
14		1,2-Dichlorobenzene	1.534	1.443	5.9	116	-0.07
15		Benzyl alcohol	0.942	0.938	0.4	122	-0.07
16		2-Methylphenol	1.219	1.186	2.8	123	-0.05
17		bis(2-chloroisopropyl)ether	3.378	2.641	21.8	102	-0.07
18		Hexachloroethane	0.677	0.693	-2.3	132	-0.08
19		3+4-Methyphenols	1.311	1.271	3.0	122	-0.04
20	PM	N-Nitroso-di-n-propylamine	1.380	1.335	3.3	121	-0.05
21	I	Naphthalene-d8	1.000	1.000	0.0	122	-0.07
22	S	Nitrobenzene-d5	0.548	0.523	4.6	124	-0.07
23		Nitrobenzene	0.482	0.447	7.3	115	-0.06
24		Isophorone	1.034	0.982	5.0	122	-0.06
25	C	2-Nitrophenol	0.214	0.222	-3.7	129	-0.06
26		2,4-Dimethylphenol	0.403	0.406	-0.9	127	-0.05
27		bis(2-Chloroethoxy)methane	0.599	0.568	5.1	120	-0.06
28	C	2,4-Dichlorophenol	0.327	0.333	-1.8	125	-0.05
29		Benzoic Acid	0.283	0.304	-7.4	134	0.00
30	M	1,2,4-Trichlorobenzene	0.357	0.354	0.6	125	-0.07
31		Naphthalene	1.014	1.023	-0.9	127	-0.07
32		4-Chloroaniline	0.106	0.048	54.3	54	0.05
33	C	Hexachlorobutadiene	0.216	0.222	-2.6	129	-0.07
34	CM	4-Chloro-3-methylphenol	0.373	0.383	-2.6	131	-0.05
35		2-Methylnaphthalene	0.699	0.694	0.8	128	-0.07
36	I	Acenaphthene-d10	1.000	1.000	0.0	126	-0.08
37	P	Hexachlorocyclopentadiene	0.342	0.334	2.4	121	-0.08
38	C	2,4,6-Trichlorophenol	0.443	0.452	-1.8	131	-0.06
39		2,4,5-Trichlorophenol	0.470	0.487	-3.6	133	-0.06
40	S	2-Fluorobiphenyl	1.470	1.392	5.3	124	-0.06

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11109\B6833.D
Acq Time : 9 Nov 99 9:58 am
Sample : 80 NG BNA CCC
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
41		2-Chloronaphthalene	1.221	1.180	3.3	126	-0.06
42		2-Nitroaniline	0.545	0.401	26.4	98	-0.06
43		Dimethylphthalate	1.468	1.448	1.3	124	-0.05
44		Acenaphthylene	1.765	1.584	10.3	109	-0.07
45		2,6-Dinitrotoluene	0.354	0.369	-4.4	134	-0.05
46		3-Nitroaniline	0.028	0.021	23.9	177	0.19
47	CM	Acenaphthene	1.190	1.142	4.0	125	-0.06
48	P	2,4-Dinitrophenol	0.182	0.178	2.0	124	-0.05
49		Dibenzofuran	1.720	1.656	3.7	125	-0.06
50	PM	4-Nitrophenol	0.156	0.148	4.8	129	-0.04
51	M	2,4-Dinitrotoluene	0.510	0.498	2.4	128	-0.05
52		Fluorene	1.302	1.234	5.2	120	-0.06
53		Diethylphthalate	1.524	1.537	-0.9	128	-0.06
54		4-Chlorophenyl-phenylether	0.647	0.611	5.7	117	-0.06
55	S	2,4,6-Tribromophenol	0.328	0.340	-3.7	129	-0.06
56		4-Nitroaniline	0.150	0.094	37.4	82	0.00
57	I	Phenanthrene-d10	1.000	1.000	0.0	126	-0.07
58		4,6-Dinitro-2-methylphenol	0.131	0.132	-0.9	124	-0.05
59	C	N-Nitrosodiphenylamine	0.339	0.285	15.8	112	-0.06
60		1,2-Diphenylhydrazine	1.123	1.012	9.9	119	-0.06
61		4-Bromophenyl-phenylether	0.235	0.217	7.6	120	-0.06
62		Hexachlorobenzene	0.312	0.309	1.0	123	-0.06
63	CM	Pentachlorophenol	0.184	0.182	1.4	129	-0.06
64		Phenanthrene	1.000	0.940	6.0	125	-0.06
65		Anthracene	1.004	0.969	3.5	122	-0.06
66		Carbazole	0.172	0.133	22.6	124	-0.06
67		Di-n-butylphthalate	1.653	1.509	8.7	121	-0.07
68	C	Fluoranthene	1.121	1.023	8.8	118	-0.07
69	I	Chrysene-d12	1.000	1.000	0.0	110	-0.07
70		Benzidine	0.007	0.003#	47.1	34	1.18#
71	M	Pyrene	1.257	1.359	-8.1	119	-0.07
72	S	Terphenyl-d14	1.156	1.204	-4.1	115	-0.07
73		Butylbenzylphthalate	0.845	0.851	-0.7	119	-0.07
74		Benzo[a]anthracene	1.119	1.123	-0.4	111	-0.07
75		3,3'-Dichlorobenzidine	0.259	0.158	38.9	63	-0.07
76		Chrysene	1.017	1.015	0.2	109	-0.07
77		bis(2-Ethylhexyl)phthalate	1.198	1.219	-1.8	116	-0.06
78		Di-n-octylphthalate	2.120	2.041	3.7	112	-0.06
79		Indeno(1,2,3-cd)pyrene	0.906	0.873	3.6	99	-0.10

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11109\B6833.D
Acq Time : 9 Nov 99 9:58 am
Sample : 80 NG BNA CCC
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
81		Benzo[b]fluoranthene	1.321	1.401	-6.1	113	-0.06
82		Benzo[k]fluoranthene	0.914	0.887	3.0	90	-0.06
83	C	Benzo[a]pyrene	1.016	1.036	-2.0	101	-0.06
84		Dibenz[a,h]anthracene	0.858	0.845	1.6	98	-0.10
85		Benzo[g,h,i]perylene	0.835	0.813	2.6	98	-0.10

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6734.D
Acq Time : 3 Nov 99 6:42 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 3 19:48 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.79	152	379529	40.00	ng		-0.02
21) Naphthalene-d8	12.94	136	1324553	40.00	ng		-0.31
36) Acenaphthene-d10	17.54	164	685759	40.00	ng		-0.31
57) Phenanthrene-d10	21.38	188	1338420	40.00	ng		-0.31
69) Chrysene-d12	28.40	240	1284899	40.00	ng		-0.31
80) Perylene-d12	31.90	264	1306036	40.00	ng		-0.32
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	7.05	112	1137581	86.09	ng		
6) 2-Chlorophenol-d4	9.36	132	1011610	82.52	ng		
7) Phenol-d5	9.22	99	1344515	88.91	ng		
13) 1,2-Dichlorobenzene-d4	10.22	152	699530	81.98	ng		
22) Nitrobenzene-d5	11.25	82	1418857	89.49	ng		
40) 2-Fluorobiphenyl	15.85	172	1894207	80.30	ng		
55) 2,4,6-Tribromophenol	19.66	330	547307	121.15	ng		
72) Terphenyl-d14	25.72	244	2414777	63.81	ng		
Target Compounds							Qvalue
2) Pyridine	4.33	79	1108400	82.39	ng	m	0
3) N-nitroso-dimethylamine	4.36	42	733083	109.33	ng		95
5) Aniline	9.17	93	1020330	161.85	ng		87
8) Phenol	9.25	94	1440107	92.31	ng		96
9) bis(2-Chloroethyl)ether	9.34	93	1375144	86.55	ng		93
10) 2-Chlorophenol	9.40	128	1044506	86.61	ng		91
11) 1,3-Dichlorobenzene	9.68	146	1191395	84.14	ng		96
12) 1,4-Dichlorobenzene	9.82	146	1202560	85.02	ng		94
14) 1,2-Dichlorobenzene	10.26	146	1045263	81.32	ng		100
15) Benzyl alcohol	10.27	108	661608	94.95	ng		92
16) 2-Methylphenol	10.63	108	864807	85.28	ng	m	77
17) bis(2-chloroisopropyl)ethe	10.62	45	2574150	108.11	ng		94
18) Hexachloroethane	10.98	117	485762	83.16	ng		97
19) 3+4-Methyphenols	11.03	108	1810140	174.15	ng		99
20) N-Nitroso-di-n-propylamine	11.01	70	894663	80.41	ng	m	98
23) Nitrobenzene	11.29	77	1324477	94.89	ng		92
24) Isophorone	11.89	82	2603146	87.78	ng		95
25) 2-Nitrophenol	12.09	139	573502	88.75	ng		94
26) 2,4-Dimethylphenol	12.31	107	1049182	88.21	ng		97
27) bis(2-Chloroethoxy)methane	12.52	93	1488828	88.99	ng		95
28) 2,4-Dichlorophenol	12.70	162	878408	92.40	ng		95
29) Benzoic Acid	12.86	105	674266	93.37	ng	m	95
30) 1,2,4-Trichlorobenzene	12.86	180	905703	82.63	ng		96
31) Naphthalene	12.99	128	2533175	78.52	ng		99
32) 4-Chloroaniline	13.35	127	206119	150.24	ng	m	94
33) Hexachlorobutadiene	13.49	225	626556	86.49	ng		99

(#) = qualifier out of range (m) = manual integration

000448

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6734.D
Acq Time : 3 Nov 99 6:42 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 3 19:48 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	4-Chloro-3-methylphenol	14.63	107	956716	92.36	ng	m	97
35)	2-Methylnaphthalene	14.78	142	1714297	84.22	ng		98
37)	Hexachlorocyclopentadiene	15.38	237	479408	96.21	ng		95
38)	2,4,6-Trichlorophenol	15.65	196	635708	93.94	ng		94
39)	2,4,5-Trichlorophenol	15.75	196	675515	96.02	ng		97
41)	2-Chloronaphthalene	16.04	162	1577831	81.40	ng		97
42)	2-Nitroaniline	16.50	65	753722	142.52	ng		95
43)	Dimethylphthalate	17.10	163	1953555	81.77	ng		91
44)	Acenaphthylene	17.13	152	2369653	79.49	ng		100
45)	2,6-Dinitrotoluene	17.28	165	450056	92.35	ng		93
46)	3-Nitroaniline	18.05	138	32805	115.72	ng	m	1
47)	Acenaphthene	17.62	153	1515839	78.16	ng		99
48)	2,4-Dinitrophenol	17.89	184	181978	104.13	ng	m	88
49)	Dibenzofuran	18.05	168	2265283	89.52	ng		98
50)	4-Nitrophenol	18.20	109	194699	103.91	ng	m	86
51)	2,4-Dinitrotoluene	18.29	165	682584	107.56	ng		94
52)	Fluorene	18.95	166	1611269	88.79	ng		99
53)	Diethylphthalate	18.98	149	1962699	84.72	ng		99
54)	4-Chlorophenyl-phenylether	19.02	204	867922	86.17	ng		99
56)	4-Nitroaniline	19.29	138	210637	205.24	ng		89
58)	4,6-Dinitro-2-methylphenol	19.35	198	288186	90.83	ng	m	95
59)	N-Nitrosodiphenylamine	19.39	169	635645	82.88	ng	m	99
60)	1,2-Diphenylhydrazine	19.42	77	2925722	84.66	ng		96
61)	4-Bromophenyl-phenylether	20.27	248	642615	87.36	ng		97
62)	Hexachlorobenzene	20.61	284	870116	83.24	ng		94
63)	Pentachlorophenol	21.14	266	461562	90.51	ng	m	96
64)	Phenanthrene	21.45	178	2548504	81.38	ng		100
65)	Anthracene	21.57	178	2519739	82.61	ng		98
66)	Carbazole	22.06	167	412064	103.84	ng		96
67)	Di-n-butylphthalate	23.26	149	3864901	78.96	ng		96
68)	Fluoranthene	24.60	202	2858302	86.90	ng		98
70)	Benzidine	26.33	184	7730	78.47	ng	m	95
71)	Pyrene	25.16	202	2890611	65.60	ng		100
73)	Butylbenzylphthalate	27.18	149	1794709	66.75	ng		98
74)	Benzo[a]anthracene	28.35	228	2698434	77.67	ng		99
75)	3,3'-Dichlorobenzidine	28.43	252	530307	104.34	ng	m	98
76)	Chrysene	28.47	228	2481869	78.16	ng		99
77)	bis(2-Ethylhexyl)phthalate	28.79	149	2433256	68.81	ng		93
78)	Di-n-octylphthalate	30.33	149	4573610	80.16	ng		100
79)	Indeno(1,2,3-cd)pyrene	34.57	276	2170336	102.91	ng	m	95
81)	Benzo[b]fluoranthene	31.05	252	3330808	89.68	ng		97
82)	Benzo[k]fluoranthene	31.11	252	2215349	65.87	ng		99
83)	Benzo[a]pyrene	31.78	252	2570327	84.98	ng		97
84)	Dibenz[a,h]anthracene	34.64	278	2259947	106.59	ng		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6734.D
Acq Time : 3 Nov 99 6:42 pm Operator: Bob
Sample : 80 NG BNA CCC Inst : BNA-RTE
Misc : Multiplr: 1.00
Quant Time: Nov 3 19:48 1999

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Benzo[g,h,i]perylene	35.34	276	2276847	99.68	ng	100

000450

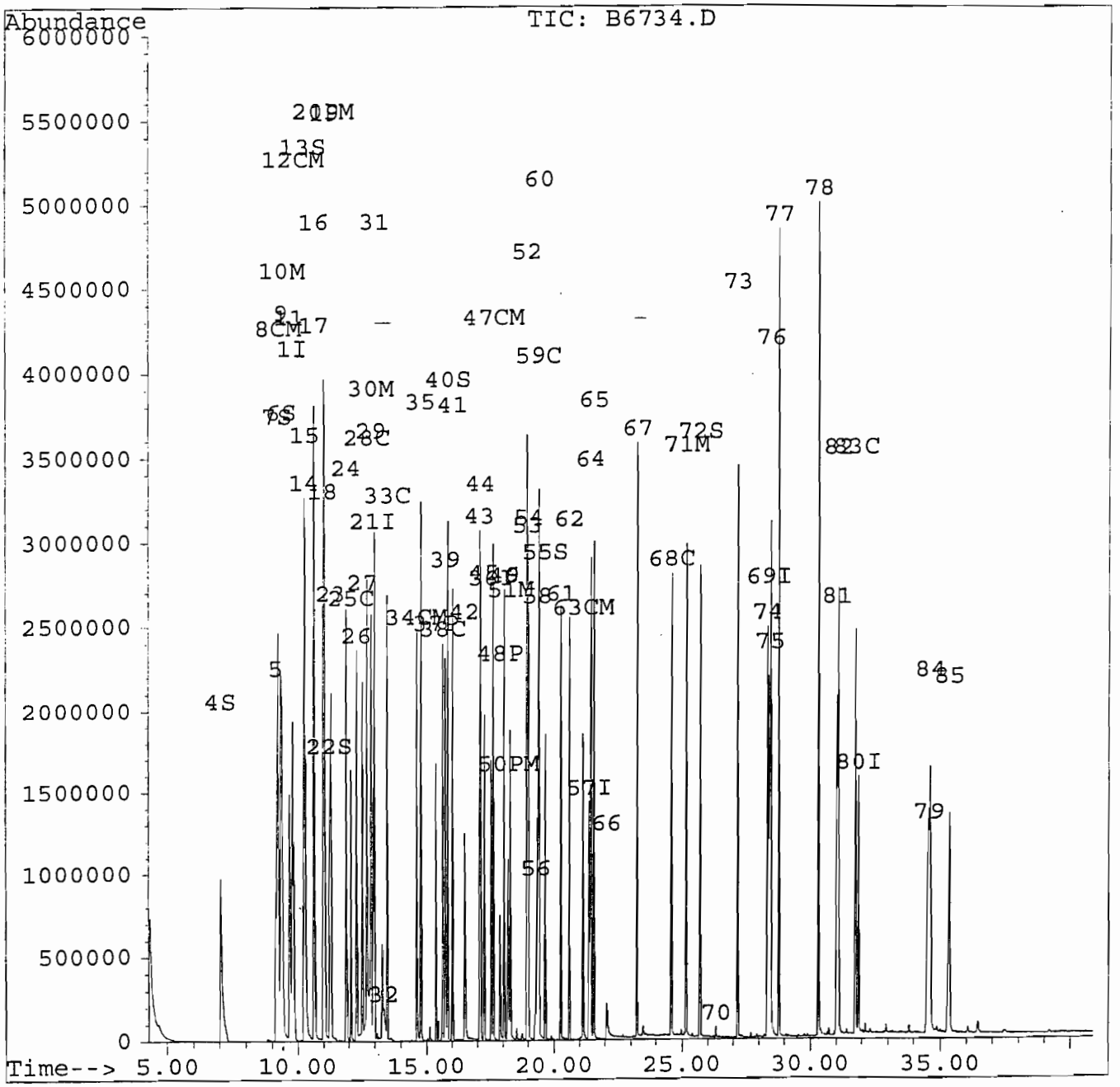
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6734.D
Acq Time : 3 Nov 99 6:42 pm
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 3 19:48 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration



000451

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11103\B6734.D
Acq Time : 3 Nov 99 6:42 pm
Sample : 80 NG BNA CCC
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	-0.02
2		Pyridine	1.418	1.460	-3.0	70	-0.21
3		N-nitroso-dimethylamine	0.707	0.966	-36.7	91	-0.23
4	S	2-Fluorophenol	1.393	1.499	-7.6	76	-0.23
5		Aniline	0.658	1.344	-104.3#	176	-0.26
6	S	2-Chlorophenol-d4	1.292	1.333	-3.1	73	-0.26
7	S	Phenol-d5	1.594	1.771	-11.1	79	-0.23
8	CM	Phenol	1.644	1.897	-15.4	83	-0.23
9		bis(2-Chloroethyl)ether	1.675	1.812	-8.2	78	-0.27
10	M	2-Chlorophenol	1.271	1.376	-8.3	77	-0.26
11		1,3-Dichlorobenzene	1.492	1.570	-5.2	73	-0.03
12	CM	1,4-Dichlorobenzene	1.491	1.584	-6.3	74	-0.02
13	S	1,2-Dichlorobenzene-d4	0.899	0.922	-2.5	72	-0.29
14		1,2-Dichlorobenzene	1.355	1.377	-1.6	71	-0.29
15		Benzyl alcohol	0.734	0.872	-18.7	88	-0.26
16		2-Methylphenol	1.069	1.139	-6.6	73	-0.25
17		bis(2-chloroisopropyl)ether	2.509	3.391	-35.1	97	-0.28
18		Hexachloroethane	0.616	0.640	-3.9	78	-0.31
19		3+4-Methyphenols	1.095	1.192	-8.8	80	-0.25
20	PM	N-Nitroso-di-n-propylamine	1.173	1.179	-0.5	74	-0.27
21	I	Naphthalene-d8	1.000	1.000	0.0	72	-0.31
22	S	Nitrobenzene-d5	0.479	0.536	-11.9	79	-0.27
23		Nitrobenzene	0.422	0.500	-18.6	84	-0.28
24		Isophorone	0.896	0.983	-9.7	82	-0.28
25	C	2-Nitrophenol	0.195	0.216	-10.9	81	-0.28
26		2,4-Dimethylphenol	0.359	0.396	-10.3	79	-0.25
27		bis(2-Chloroethoxy)methane	0.505	0.562	-11.2	80	-0.27
28	C	2,4-Dichlorophenol	0.287	0.332	-15.5	82	-0.27
29		Benzoic Acid	0.190	0.255	-34.2	90	-0.18
30	M	1,2,4-Trichlorobenzene	0.331	0.342	-3.3	74	-0.30
31		Naphthalene	0.974	0.956	1.9	70	-0.30
32		4-Chloroaniline	0.076	0.078	-2.3	248	-0.23
33	C	Hexachlorobutadiene	0.219	0.237	-8.1	76	-0.31
34	CM	4-Chloro-3-methylphenol	0.313	0.361	-15.4	81	-0.25
35		2-Methylnaphthalene	0.615	0.647	-5.3	73	-0.31
36	I	Acenaphthene-d10	1.000	1.000	0.0	71	-0.31
37	P	Hexachlorocyclopentadiene	0.291	0.350	-20.3	80	-0.31
38	C	2,4,6-Trichlorophenol	0.395	0.464	-17.4	82	-0.29
39		2,4,5-Trichlorophenol	0.410	0.493	-20.0	82	-0.28
40	S	2-Fluorobiphenyl	1.376	1.381	-0.4	72	-0.30

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11103\B6734.D
Acq Time : 3 Nov 99 6:42 pm
Sample : 80 NG BNA CCC
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
41		2-Chloronaphthalene	1.131	1.150	-1.8	73	-0.30
42		2-Nitroaniline	0.308	0.550	-78.2	152	-0.29
43		Dimethylphthalate	1.394	1.424	-2.2	71	-0.30
44		Acenaphthylene	1.739	1.728	0.6	68	-0.31
45		2,6-Dinitrotoluene	0.284	0.328	-15.4	78	-0.29
46		3-Nitroaniline	0.026	0.024	8.5	104	-0.11
47	CM	Acenaphthene	1.131	1.105	2.3	69	-0.31
48	P	2,4-Dinitrophenol	0.077	0.133	-72.8	116	-0.28
49		Dibenzofuran	1.476	1.652	-11.9	79	-0.31
50	PM	4-Nitrophenol	0.109	0.142	-29.9	88	-0.21
51	M	2,4-Dinitrotoluene	0.370	0.498	-34.4	92	-0.28
52		Fluorene	1.059	1.175	-11.0	80	-0.31
53		Diethylphthalate	1.351	1.431	-5.9	75	-0.29
54		4-Chlorophenyl-phenylether	0.587	0.633	-7.7	75	-0.30
55	S	2,4,6-Tribromophenol	0.264	0.399	-51.4	103	-0.30
56		4-Nitroaniline	0.079	0.154	-93.6	168	-0.26
57	I	Phenanthrene-d10	1.000	1.000	0.0	79	-0.31
58		4,6-Dinitro-2-methylphenol	0.083	0.108	-30.3	96	-0.28
59	C	N-Nitrosodiphenylamine	0.262	0.237	9.2	79	-0.30
60		1,2-Diphenylhydrazine	1.033	1.093	-5.8	83	-0.31
61		4-Bromophenyl-phenylether	0.220	0.240	-9.2	87	-0.31
62		Hexachlorobenzene	0.312	0.325	-4.1	82	-0.32
63	CM	Pentachlorophenol	0.152	0.172	-13.1	88	-0.29
64		Phenanthrene	0.936	0.952	-1.7	81	-0.32
65		Anthracene	0.912	0.941	-3.3	83	-0.31
66		Carbazole	0.190	0.154	19.2	146	-0.30
67		Di-n-butylphthalate	1.463	1.444	1.3	77	-0.31
68	C	Fluoranthene	0.983	1.068	-8.6	85	-0.31
69	I	Chrysene-d12	1.000	1.000	0.0	115	-0.31
70		Benzidine	0.003	0.003#	1.9	100	-0.30
71	M	Pyrene	1.372	1.125	18.0	87	-0.32
72	S	Terphenyl-d14	1.178	0.940	20.2	84	-0.31
73		Butylbenzylphthalate	0.837	0.698	16.6	89	-0.32
74		Benzo[a]anthracene	1.082	1.050	2.9	109	-0.32
75		3,3'-Dichlorobenzidine	0.158	0.206	-30.4	186	-0.31
76		Chrysene	0.989	0.966	2.3	109	-0.31
77		bis(2-Ethylhexyl)phthalate	1.101	0.947	14.0	95	-0.31
78		Di-n-octylphthalate	1.776	1.780	-0.2	112	-0.31
79		Indeno(1,2,3-cd)pyrene	0.657	0.845	-28.6	141	-0.45

000453

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11103\B6734.D
Acq Time : 3 Nov 99 6:42 pm
Sample : 80 NG BNA CCC
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
81		Benzo[b]fluoranthene	1.138	1.275	-12.1	158	-0.31
82		Benzo[k]fluoranthene	1.030	0.848	17.7	111	-0.31
83	C	Benzo[a]pyrene	0.926	0.984	-6.2	145	-0.31
84		Dibenz[a,h]anthracene	0.649	0.865	-33.2	188	-0.44
85		Benzo[g,h,i]perylene	0.700	0.872	-24.6	170	-0.49

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11101\B6691.D
Acq Time : 1 Nov 99 10:31 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 2 8:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.79	152	380294	40.00	ng	-0.02
21) Naphthalene-d8	12.96	136	1390978	40.00	ng	-0.29
36) Acenaphthene-d10	17.54	164	761383	40.00	ng	-0.30
57) Phenanthrene-d10	21.39	188	1500124	40.00	ng	-0.30
69) Chrysene-d12	28.41	240	1390763	40.00	ng	-0.30
80) Perylene-d12	31.90	264	1441155	40.00	ng	-0.31
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.04	112	1200702	90.68	ng	
6) 2-Chlorophenol-d4	9.35	132	1075235	87.53	ng	
7) Phenol-d5	9.21	99	1429027	94.30	ng	
13) 1,2-Dichlorobenzene-d4	10.23	152	735856	86.06	ng	
22) Nitrobenzene-d5	11.24	82	1526551	91.69	ng	
40) 2-Fluorobiphenyl	15.86	172	2183195	83.36	ng	
55) 2,4,6-Tribromophenol	19.67	330	653703	130.33	ng	
72) Terphenyl-d14	25.73	244	2601428	63.51	ng	
Target Compounds						Qvalue
2) Pyridine	4.32	79	1195112	88.66	ng	m 0
3) N-nitroso-dimethylamine	4.35	42	697265	103.78	ng	100
5) Aniline	9.16	93	382991	62.45	ng	87
8) Phenol	9.25	94	1405434	89.90	ng	m 94
9) bis(2-Chloroethyl)ether	9.34	93	1311926	82.40	ng	94
10) 2-Chlorophenol	9.39	128	1101146	91.13	ng	87
11) 1,3-Dichlorobenzene	9.68	146	1237716	87.24	ng	95
12) 1,4-Dichlorobenzene	9.82	146	1263341	89.14	ng	97
14) 1,2-Dichlorobenzene	10.26	146	1143190	88.76	ng	97
15) Benzyl alcohol	10.28	108	721396	103.32	ng	95
16) 2-Methylphenol	10.63	108	911313	89.68	ng	m 80
17) bis(2-chloroisopropyl)ethe	10.63	45	2868355	120.22	ng	92
18) Hexachloroethane	10.98	117	515943	88.15	ng	95
19) 3+4-Methyphenols	11.04	108	1853355	177.95	ng	98
20) N-Nitroso-di-n-propylamine	11.01	70	931504	83.55	ng	m 91
23) Nitrobenzene	11.30	77	1384153	94.43	ng	92
24) Isophorone	11.90	82	2882947	92.57	ng	93
25) 2-Nitrophenol	12.09	139	589330	86.85	ng	87
26) 2,4-Dimethylphenol	12.30	107	1128760	90.37	ng	99
27) bis(2-Chloroethoxy)methane	12.53	93	1577743	89.80	ng	93
28) 2,4-Dichlorophenol	12.70	162	929518	93.11	ng	94
29) Benzoic Acid	12.87	105	865725	110.66	ng	99
30) 1,2,4-Trichlorobenzene	12.87	180	992343	86.21	ng	96
31) Naphthalene	13.00	128	2795793	82.52	ng	100
32) 4-Chloroaniline	13.45	127	138977	74.43	ng	m 95
33) Hexachlorobutadiene	13.50	225	669979	88.07	ng	98

000455

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11101\B6691.D
Acq Time : 1 Nov 99 10:31 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 2 8:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.62	107	1025310	94.25	ng	m	96
35) 2-Methylnaphthalene	14.79	142	1792129	83.84	ng		99
37) Hexachlorocyclopentadiene	15.39	237	650740	117.63	ng		98
38) 2,4,6-Trichlorophenol	15.66	196	696399	92.69	ng		93
39) 2,4,5-Trichlorophenol	15.76	196	734189	93.99	ng		98
41) 2-Chloronaphthalene	16.05	162	1796680	83.49	ng		99
42) 2-Nitroaniline	16.52	65	817527	139.23	ng		96
43) Dimethylphthalate	17.11	163	2260899	85.23	ng		90
44) Acenaphthylene	17.14	152	2813338	85.00	ng		100
45) 2,6-Dinitrotoluene	17.29	165	560322	103.56	ng		90
46) 3-Nitroaniline	17.89	138	30049	82.76	ng	m	89
47) Acenaphthene	17.64	153	1784744	82.89	ng		96
48) 2,4-Dinitrophenol	17.89	184	239944	118.96	ng	m	94
49) Dibenzofuran	18.06	168	2643171	94.08	ng		100
50) 4-Nitrophenol	18.20	109	253196	121.71	ng		80
51) 2,4-Dinitrotoluene	18.30	165	757886	107.56	ng		91
52) Fluorene	18.96	166	1868443	92.73	ng		99
53) Diethylphthalate	18.98	149	2350538	91.38	ng		98
54) 4-Chlorophenyl-phenylether	19.03	204	1038258	92.85	ng		96
56) 4-Nitroaniline	19.33	138	204569	176.50	ng		88
58) 4,6-Dinitro-2-methylphenol	19.36	198	417936	112.61	ng		92
59) N-Nitrosodiphenylamine	19.40	169	716551	83.58	ng	m	99
60) 1,2-Diphenylhydrazine	19.43	77	3207799	82.82	ng		94
61) 4-Bromophenyl-phenylether	20.29	248	733731	88.99	ng		94
62) Hexachlorobenzene	20.63	284	1033574	88.22	ng		94
63) Pentachlorophenol	21.14	266	547002	95.70	ng	m	97
64) Phenanthrene	21.47	178	2852129	81.26	ng		99
65) Anthracene	21.58	178	2894685	84.67	ng		98
66) Carbazole	22.08	167	601063	153.67	ng	m	98
67) Di-n-butylphthalate	23.28	149	4510645	82.22	ng		96
68) Fluoranthene	24.61	202	3201817	86.85	ng		98
70) Benzidine	26.35	184	9919	93.02	ng	m	93
71) Pyrene	25.17	202	3284668	68.87	ng		99
73) Butylbenzylphthalate	27.20	149	2088575	71.77	ng		96
74) Benzo[a]anthracene	28.36	228	3015635	80.19	ng		99
75) 3,3'-Dichlorobenzidine	28.44	252	546026	99.26	ng		95
76) Chrysene	28.48	228	2688064	78.21	ng		100
77) bis(2-Ethylhexyl)phthalate	28.81	149	2855358	74.60	ng		94
78) Di-n-octylphthalate	30.33	149	5005499	81.05	ng		100
79) Indeno(1,2,3-cd)pyrene	34.58	276	2510061	109.96	ng	m	94
81) Benzo[b]fluoranthene	31.07	252	3370970	82.25	ng		96
82) Benzo[k]fluoranthene	31.12	252	2710399	73.03	ng		100
83) Benzo[a]pyrene	31.78	252	2683139	80.39	ng		99
84) Dibenz[a,h]anthracene	34.66	278	2440438	104.31	ng		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11101\B6691.D
Acq Time : 1 Nov 99 10:31 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 2 8:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

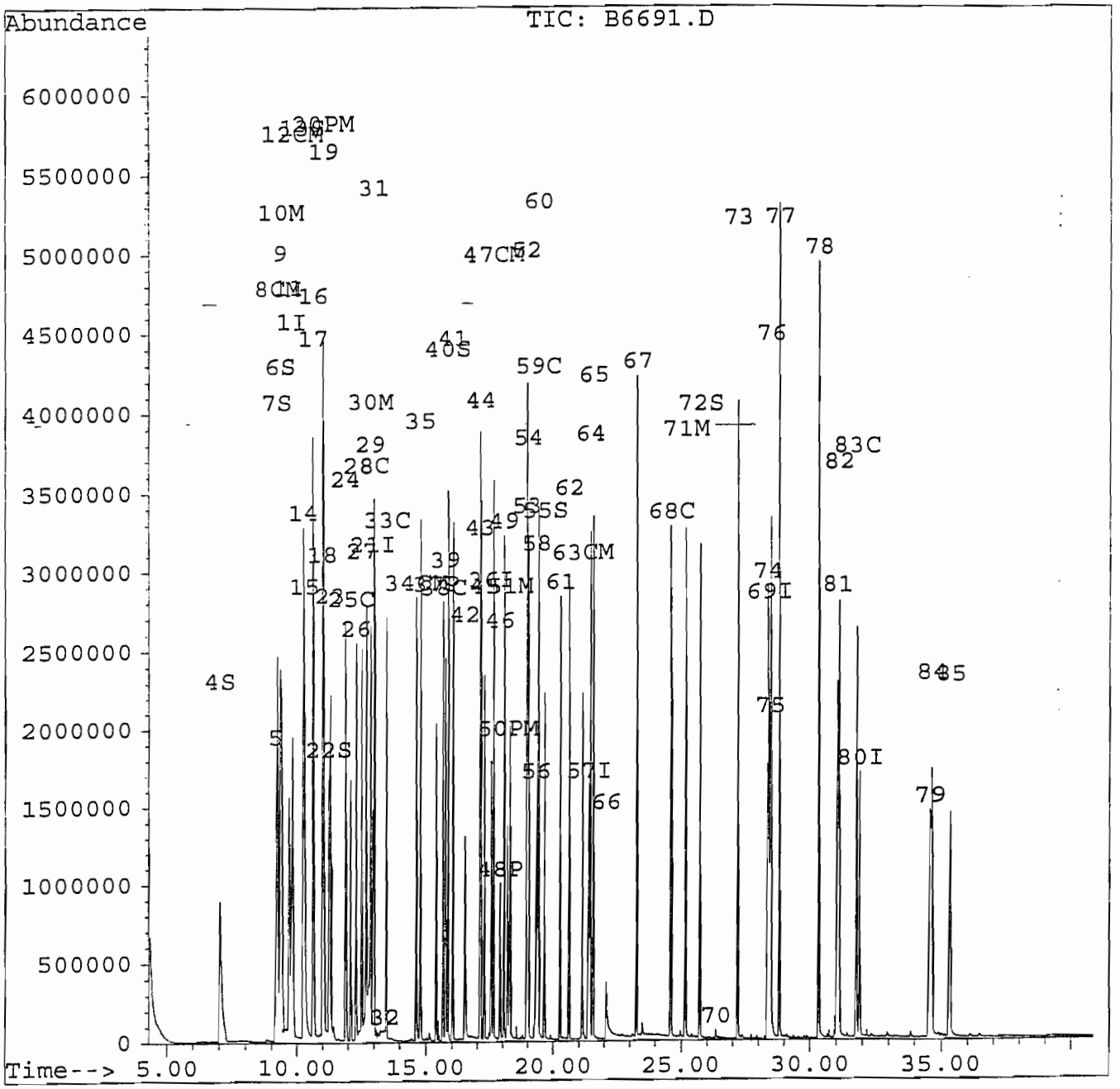
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) Benzo[g,h,i]perylene	35.36	276	2459051	97.57 ng	99

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11101\B6691.D
Acq Time : 1 Nov 99 10:31 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 2 8:38 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration



000458

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11101\B6691.D
Acq Time : 1 Nov 99 10:31 am
Sample : 80 NG BNA CCC
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	-0.02
2		Pyridine	1.418	1.571	-10.8	76	-0.22
3		N-nitroso-dimethylamine	0.707	0.917	-29.7	87	-0.24
4	S	2-Fluorophenol	1.393	1.579	-13.4	80	-0.24
5		Aniline	0.658	0.504	23.5	66	-0.27
6	S	2-Chlorophenol-d4	1.292	1.414	-9.4	78	-0.27
7	S	Phenol-d5	1.594	1.879	-17.9	84	-0.24
8	CM	Phenol	1.644	1.848	-12.4	81	-0.24
9		bis(2-Chloroethyl)ether	1.675	1.725	-3.0	74	-0.27
10	M	2-Chlorophenol	1.271	1.448	-13.9	82	-0.27
11		1,3-Dichlorobenzene	1.492	1.627	-9.0	76	-0.03
12	CM	1,4-Dichlorobenzene	1.491	1.661	-11.4	78	-0.02
13	S	1,2-Dichlorobenzene-d4	0.899	0.967	-7.6	75	-0.29
14		1,2-Dichlorobenzene	1.355	1.503	-10.9	78	-0.29
15		Benzyl alcohol	0.734	0.948	-29.1	96	-0.25
16		2-Methylphenol	1.069	1.198	-12.1	77	-0.25
17		bis(2-chloroisopropyl)ether	2.509	3.771	-50.3	108	-0.27
18		Hexachloroethane	0.616	0.678	-10.2	83	-0.30
19		3+4-Methyphenols	1.095	1.218	-11.2	82	-0.25
20	PM	N-Nitroso-di-n-propylamine	1.173	1.225	-4.4	77	-0.27
21	I	Naphthalene-d8	1.000	1.000	0.0	75	-0.29
22	S	Nitrobenzene-d5	0.479	0.549	-14.6	85	-0.28
23		Nitrobenzene	0.422	0.498	-18.0	88	-0.28
24		Isophorone	0.896	1.036	-15.7	90	-0.28
25	C	2-Nitrophenol	0.195	0.212	-8.6	84	-0.28
26		2,4-Dimethylphenol	0.359	0.406	-13.0	85	-0.26
27		bis(2-Chloroethoxy)methane	0.505	0.567	-12.3	85	-0.27
28	C	2,4-Dichlorophenol	0.287	0.334	-16.4	87	-0.27
29		Benzoic Acid	0.190	0.311	-64.1	115	-0.17
30	M	1,2,4-Trichlorobenzene	0.331	0.357	-7.8	81	-0.29
31		Naphthalene	0.974	1.005	-3.1	78	-0.29
32		4-Chloroaniline	0.076	0.050	34.3	167	-0.14
33	C	Hexachlorobutadiene	0.219	0.241	-10.1	82	-0.29
34	CM	4-Chloro-3-methylphenol	0.313	0.369	-17.8	87	-0.26
35		2-Methylnaphthalene	0.615	0.644	-4.8	76	-0.30
36	I	Acenaphthene-d10	1.000	1.000	0.0	79	-0.30
37	P	Hexachlorocyclopentadiene	0.291	0.427	-47.0	108	-0.30
38	C	2,4,6-Trichlorophenol	0.395	0.457	-15.9	89	-0.28
39		2,4,5-Trichlorophenol	0.410	0.482	-17.5	89	-0.27
40	S	2-Fluorobiphenyl	1.376	1.434	-4.2	83	-0.29

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11101\B6691.D
Acq Time : 1 Nov 99 10:31 am
Sample : 80 NG BNA CCC
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
41		2-Chloronaphthalene	1.131	1.180	-4.4	83	-0.29
42		2-Nitroaniline	0.308	0.537	-74.0	165	-0.27
43		Dimethylphthalate	1.394	1.485	-6.5	83	-0.29
44		Acenaphthylene	1.739	1.848	-6.2	80	-0.30
45		2,6-Dinitrotoluene	0.284	0.368	-29.4	97	-0.27
46		3-Nitroaniline	0.026	0.020	24.5	95	-0.27
47	CM	Acenaphthene	1.131	1.172	-3.6	82	-0.29
48	P	2,4-Dinitrophenol	0.077	0.158	-105.2#	153	-0.27
49		Dibenzofuran	1.476	1.736	-17.6	92	-0.30
50	PM	4-Nitrophenol	0.109	0.166	-52.1	115	-0.22
51	M	2,4-Dinitrotoluene	0.370	0.498	-34.5	103	-0.27
52		Fluorene	1.059	1.227	-15.9	93	-0.30
53		Diethylphthalate	1.351	1.544	-14.2	90	-0.28
54		4-Chlorophenyl-phenylether	0.587	0.682	-16.1	90	-0.29
55	S	2,4,6-Tribromophenol	0.264	0.429	-62.9	123	-0.29
56		4-Nitroaniline	0.079	0.134	-69.3	163	-0.21
57	I	Phenanthrene-d10	1.000	1.000	0.0	88	-0.30
58		4,6-Dinitro-2-methylphenol	0.083	0.139	-68.5	140	-0.27
59	C	N-Nitrosodiphenylamine	0.262	0.239	8.7	89	-0.29
60		1,2-Diphenylhydrazine	1.033	1.069	-3.5	91	-0.30
61		4-Bromophenyl-phenylether	0.220	0.245	-11.2	99	-0.29
62		Hexachlorobenzene	0.312	0.344	-10.3	97	-0.30
63	CM	Pentachlorophenol	0.152	0.182	-19.6	104	-0.29
64		Phenanthrene	0.936	0.951	-1.6	90	-0.30
65		Anthracene	0.912	0.965	-5.8	95	-0.30
66		Carbazole	0.190	0.200	-5.2	213	-0.28
67		Di-n-butylphthalate	1.463	1.503	-2.8	90	-0.29
68	C	Fluoranthene	0.983	1.067	-8.6	95	-0.30
69	I	Chrysene-d12	1.000	1.000	0.0	124	-0.30
70		Benzidine	0.003	0.004#	-16.3	128	-0.28
71	M	Pyrene	1.372	1.181	13.9	98	-0.31
72	S	Terphenyl-d14	1.178	0.935	20.6	91	-0.30
73		Butylbenzylphthalate	0.837	0.751	10.3	103	-0.30
74		Benzo[a]anthracene	1.082	1.084	-0.2	121	-0.31
75		3,3'-Dichlorobenzidine	0.158	0.196	-24.1	192	-0.30
76		Chrysene	0.989	0.966	2.2	118	-0.30
77		bis(2-Ethylhexyl)phthalate	1.101	1.027	6.7	111	-0.29
78		Di-n-octylphthalate	1.776	1.800	-1.3	122	-0.30
79		Indeno(1,2,3-cd)pyrene	0.657	0.902	-37.4	163	-0.43

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\B11101\B6691.D
Acq Time : 1 Nov 99 10:31 am
Sample : 80 NG BNA CCC
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Fri Oct 29 10:43:06 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
81		Benzo[b]fluoranthene	1.138	1.170	-2.8	160	-0.29
82		Benzo[k]fluoranthene	1.030	0.940	8.7	136	-0.30
83	C	Benzo[a]pyrene	0.926	0.931	-0.5	151	-0.30
84		Dibenz[a,h]anthracene	0.649	0.847	-30.4	203	-0.43
85		Benzo[g,h,i]perylene	0.700	0.853	-22.0	184	-0.47

000461

Evaluate Continuing Calibration Report

Data File : F:\HPCHEM\1\DATA\B11104\B6749.D
Acq Time : 4 Nov 99 10:17 am
Sample : 80 NG BNA CCC
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	73	-0.04
2		Pyridine	1.418	1.564	-10.3	77	-0.03
3		N-nitroso-dimethylamine	0.707	0.835	-18.1	81	-0.02
4	S	2-Fluorophenol	1.393	1.494	-7.3	78	-0.03
5		Aniline	0.658	0.521	20.9	70	-0.03
6	S	2-Chlorophenol-d4	1.292	1.349	-4.4	76	-0.04
7	S	Phenol-d5	1.594	1.787	-12.1	81	-0.03
8	CM	Phenol	1.644	1.919	-16.7	86	-0.03
9		bis(2-Chloroethyl)ether	1.675	1.712	-2.3	76	-0.03
10	M	2-Chlorophenol	1.271	1.370	-7.8	79	-0.03
11		1,3-Dichlorobenzene	1.492	1.555	-4.2	75	-0.03
12	CM	1,4-Dichlorobenzene	1.491	1.520	-2.0	73	-0.03
13	S	1,2-Dichlorobenzene-d4	0.899	0.952	-5.9	76	-0.03
14		1,2-Dichlorobenzene	1.355	1.412	-4.2	75	-0.03
15		Benzyl alcohol	0.734	0.841	-14.6	87	-0.02
16		2-Methylphenol	1.069	1.169	-9.4	77	-0.03
17		bis(2-chloroisopropyl)ether	2.509	3.370	-34.3	99	-0.02
18		Hexachloroethane	0.616	0.658	-6.9	82	-0.03
19		3+4-Methyphenols	1.095	1.195	-9.1	82	-0.02
20	PM	N-Nitroso-di-n-propylamine	1.173	1.215	-3.6	78	-0.03
21	I	Naphthalene-d8	1.000	1.000	0.0	74	-0.02
22	S	Nitrobenzene-d5	0.479	0.549	-14.8	84	-0.03
23		Nitrobenzene	0.422	0.472	-12.0	82	-0.03
24		Isophorone	0.896	1.003	-12.0	86	-0.03
25	C	2-Nitrophenol	0.195	0.214	-9.7	83	-0.03
26		2,4-Dimethylphenol	0.359	0.388	-8.0	80	-0.03
27		bis(2-Chloroethoxy)methane	0.505	0.548	-8.5	81	-0.03
28	C	2,4-Dichlorophenol	0.287	0.325	-13.1	83	-0.03
29		Benzoic Acid	0.190	0.244	-28.8	89	-0.02
30	M	1,2,4-Trichlorobenzene	0.331	0.346	-4.5	77	-0.03
31		Naphthalene	0.974	1.011	-3.7	77	-0.03
32		4-Chloroaniline	0.076	0.051	32.5	169	0.03
33	C	Hexachlorobutadiene	0.219	0.243	-10.9	81	-0.03
34	CM	4-Chloro-3-methylphenol	0.313	0.367	-17.4	86	-0.03
35		2-Methylnaphthalene	0.615	0.658	-7.1	77	-0.03
36	I	Acenaphthene-d10	1.000	1.000	0.0	80	-0.03
37	P	Hexachlorocyclopentadiene	0.291	0.341	-17.2	87	-0.03
38	C	2,4,6-Trichlorophenol	0.395	0.443	-12.2	87	-0.02
39		2,4,5-Trichlorophenol	0.410	0.479	-16.8	89	-0.03
40	S	2-Fluorobiphenyl	1.376	1.335	3.0	78	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : F:\HPCHEM\1\DATA\B11104\B6749.D
Acq Time : 4 Nov 99 10:17 am
Sample : 80 NG BNA CCC
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
41		2-Chloronaphthalene	1.131	1.141	-0.9	81	-0.03
42		2-Nitroaniline	0.308	0.399	-29.5	123	-0.02
43		Dimethylphthalate	1.394	1.403	-0.6	79	-0.02
44		Acenaphthylene	1.739	1.653	4.9	72	-0.03
45		2,6-Dinitrotoluene	0.284	0.330	-16.2	88	-0.02
46		3-Nitroaniline	0.026	0.020	23.9	96	-0.03
47	CM	Acenaphthene	1.131	1.093	3.4	77	-0.02
48	P	2,4-Dinitrophenol	0.077	0.128	-66.7	126	-0.03
49		Dibenzofuran	1.476	1.628	-10.3	87	-0.03
50	PM	4-Nitrophenol	0.109	0.114	-4.1	79	-0.03
51	M	2,4-Dinitrotoluene	0.370	0.475	-28.3	99	-0.02
52		Fluorene	1.059	1.177	-11.2	90	-0.03
53		Diethylphthalate	1.351	1.472	-8.9	86	-0.02
54		4-Chlorophenyl-phenylether	0.587	0.657	-11.8	87	-0.03
55	S	2,4,6-Tribromophenol	0.264	0.396	-50.5	115	-0.03
56		4-Nitroaniline	0.079	0.104	-30.8	127	0.01
57	I	Phenanthrene-d10	1.000	1.000	0.0	87	-0.03
58		4,6-Dinitro-2-methylphenol	0.083	0.121	-46.6	119	-0.02
59	C	N-Nitrosodiphenylamine	0.262	0.213	18.5	78	-0.03
60		1,2-Diphenylhydrazine	1.033	1.090	-5.5	92	-0.03
61		4-Bromophenyl-phenylether	0.220	0.240	-9.2	95	-0.03
62		Hexachlorobenzene	0.312	0.332	-6.2	92	-0.02
63	CM	Pentachlorophenol	0.152	0.162	-6.4	91	-0.03
64		Phenanthrene	0.936	0.945	-1.0	88	-0.02
65		Anthracene	0.912	0.921	-1.1	89	-0.03
66		Carbazole	0.190	0.137	28.3	142	-0.02
67		Di-n-butylphthalate	1.463	1.473	-0.7	87	-0.02
68	C	Fluoranthene	0.983	1.064	-8.2	93	-0.03
69	I	Chrysene-d12	1.000	1.000	0.0	117	-0.03
70		Benzidine	0.003	0.003#	-9.0	113	-0.03
71	M	Pyrene	1.372	1.223	10.8	96	-0.03
72	S	Terphenyl-d14	1.178	0.961	18.4	88	-0.03
73		Butylbenzylphthalate	0.837	0.741	11.5	95	-0.02
74		Benzo[a]anthracene	1.082	1.095	-1.3	115	-0.03
75		3,3'-Dichlorobenzidine	0.158	0.209	-31.9	191	-0.03
76		Chrysene	0.989	0.990	-0.1	113	-0.03
77		bis(2-Ethylhexyl)phthalate	1.101	1.042	5.4	106	-0.03
78		Di-n-octylphthalate	1.776	1.901	-7.0	121	-0.03
79		Indeno(1,2,3-cd)pyrene	0.657	0.867	-32.0	147	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : F:\HPCHEM\1\DATA\B11104\B6749.D
Acq Time : 4 Nov 99 10:17 am Operator: Bob
Sample : 80 NG BNA CCC Inst : BNA-RTE
Misc : Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 100% Max. Rel. Area : 500%

		Compound	AvgRRF	CCRRF	%Dev	Area%	Dev(Min)
81		Benzo[b]fluoranthene	1.138	1.261	-10.9	158	-0.03
82		Benzo[k]fluoranthene	1.030	0.865	16.0	115	-0.03
83	C	Benzo[a]pyrene	0.926	0.940	-1.5	141	-0.03
84		Dibenz[a,h]anthracene	0.649	0.897	-38.1	198	-0.04
85		Benzo[g,h,i]perylene	0.700	0.898	-28.4	178	-0.04

000464

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11104\B6749.D
Acq Time : 4 Nov 99 10:17 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 4 12:08 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.75	152	389512	40.00	ng		-0.06
21) Naphthalene-d8	12.92	136	1370782	40.00	ng		-0.33
36) Acenaphthene-d10	17.51	164	767102	40.00	ng		-0.34
57) Phenanthrene-d10	21.35	188	1472717	40.00	ng		-0.34
69) Chrysene-d12	28.37	240	1304148	40.00	ng		-0.34
80) Perylene-d12	31.87	264	1327542	40.00	ng		-0.35
System Monitoring Compounds							%Recovery
4) 2-Fluorophenol	7.01	112	1163721	85.81	ng		
6) 2-Chlorophenol-d4	9.32	132	1051201	83.55	ng		
7) Phenol-d5	9.19	99	1391992	89.69	ng		
13) 1,2-Dichlorobenzene-d4	10.19	152	741651	84.69	ng		
22) Nitrobenzene-d5	11.22	82	1506312	91.80	ng		
40) 2-Fluorobiphenyl	15.83	172	2048113	77.62	ng		
55) 2,4,6-Tribromophenol	19.63	330	608250	120.37	ng		
72) Terphenyl-d14	25.69	244	2505976	65.24	ng		
Target Compounds							Qvalue
2) Pyridine	4.29	79	1218351	88.24	ng	m	0
3) N-nitroso-dimethylamine	4.34	42	650366	94.51	ng		94
5) Aniline	9.13	93	405541	64.46	ng		85
8) Phenol	9.22	94	1494686	93.35	ng		96
9) bis(2-Chloroethyl)ether	9.31	93	1333999	81.81	ng		94
10) 2-Chlorophenol	9.36	128	1067346	86.24	ng		95
11) 1,3-Dichlorobenzene	9.65	146	1211759	83.39	ng		100
12) 1,4-Dichlorobenzene	9.79	146	1183999	81.56	ng		98
14) 1,2-Dichlorobenzene	10.23	146	1099660	83.36	ng		99
15) Benzyl alcohol	10.25	108	655528	91.66	ng		94
16) 2-Methylphenol	10.60	108	910955	87.53	ng	m	80
17) bis(2-chloroisopropyl)ethe	10.60	45	2625261	107.43	ng		96
18) Hexachloroethane	10.95	117	512802	85.54	ng		95
19) 3+4-Methyphenols	11.01	108	1862251	174.57	ng		98
20) N-Nitroso-di-n-propylamine	10.98	70	946739	82.91	ng	m	97
23) Nitrobenzene	11.26	77	1293750	89.56	ng		90
24) Isophorone	11.86	82	2749493	89.59	ng		94
25) 2-Nitrophenol	12.06	139	586632	87.72	ng		92
26) 2,4-Dimethylphenol	12.27	107	1063698	86.42	ng		99
27) bis(2-Chloroethoxy)methane	12.49	93	1502524	86.78	ng		94
28) 2,4-Dichlorophenol	12.67	162	889975	90.46	ng		97
29) Benzoic Acid	12.84	105	669601	90.24	ng	m	94
30) 1,2,4-Trichlorobenzene	12.83	180	948763	83.64	ng		98
31) Naphthalene	12.96	128	2770974	82.99	ng		100
32) 4-Chloroaniline	13.39	127	140794	78.24	ng	m	96
33) Hexachlorobutadiene	13.45	225	665417	88.76	ng		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11104\B6749.D
Acq Time : 4 Nov 99 10:17 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 4 12:08 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34) 4-Chloro-3-methylphenol	14.60	107	1006622	93.90	ng		98
35) 2-Methylnaphthalene	14.75	142	1804657	85.67	ng		99
37) Hexachlorocyclopentadiene	15.35	237	522759	93.79	ng		97
38) 2,4,6-Trichlorophenol	15.63	196	679499	89.76	ng		97
39) 2,4,5-Trichlorophenol	15.72	196	735190	93.42	ng		99
41) 2-Chloronaphthalene	16.01	162	1750856	80.75	ng		98
42) 2-Nitroaniline	16.48	65	612731	103.58	ng		93
43) Dimethylphthalate	17.08	163	2151880	80.52	ng		97
44) Acenaphthylene	17.10	152	2536761	76.07	ng		100
45) 2,6-Dinitrotoluene	17.26	165	506926	92.99	ng		95
46) 3-Nitroaniline	18.02	138	30509	83.96	ng	m	1
47) Acenaphthene	17.60	153	1677140	77.31	ng		97
48) 2,4-Dinitrophenol	17.85	184	196387	101.34	ng	m	88
49) Dibenzofuran	18.02	168	2497952	88.25	ng		100
50) 4-Nitrophenol	18.17	109	174499	83.26	ng	m	87
51) 2,4-Dinitrotoluene	18.27	165	728445	102.61	ng		93
52) Fluorene	18.92	166	1805596	88.95	ng		99
53) Diethylphthalate	18.96	149	2257661	87.12	ng		97
54) 4-Chlorophenyl-phenylether	18.99	204	1007919	89.46	ng		98
56) 4-Nitroaniline	19.30	138	159154	130.79	ng		88
58) 4,6-Dinitro-2-methylphenol	19.33	198	356890	100.13	ng		85
59) N-Nitrosodiphenylamine	19.36	169	628269	70.45	ng		98
60) 1,2-Diphenylhydrazine	19.39	77	3209905	84.41	ng		96
61) 4-Bromophenyl-phenylether	20.24	248	706893	87.33	ng		93
62) Hexachlorobenzene	20.59	284	977624	85.00	ng		98
63) Pentachlorophenol	21.11	266	477423	85.08	ng	m	97
64) Phenanthrene	21.43	178	2783478	80.78	ng		99
65) Anthracene	21.54	178	2713568	80.85	ng		99
66) Carbazole	22.04	167	402277	85.19	ng		94
67) Di-n-butylphthalate	23.24	149	4339307	80.57	ng		98
68) Fluoranthene	24.57	202	3133356	86.58	ng		99
70) Benzidine	26.30	184	8715	87.16	ng	m	95
71) Pyrene	25.13	202	3190743	71.35	ng		98
73) Butylbenzylphthalate	27.16	149	1931651	70.79	ng		97
74) Benzo[a]anthracene	28.33	228	2856950	81.01	ng		98
75) 3,3'-Dichlorobenzidine	28.40	252	544150	105.49	ng		94
76) Chrysene	28.45	228	2581143	80.09	ng		100
77) bis(2-Ethylhexyl)phthalate	28.76	149	2717498	75.72	ng		99
78) Di-n-octylphthalate	30.30	149	4958020	85.62	ng		100
79) Indeno(1,2,3-cd)pyrene	34.53	276	2260248	105.59	ng	m	93
81) Benzo[b]fluoranthene	31.02	252	3348851	88.70	ng		96
82) Benzo[k]fluoranthene	31.08	252	2297788	67.21	ng		98
83) Benzo[a]pyrene	31.75	252	2495755	81.18	ng		98
84) Dibenz[a,h]anthracene	34.61	278	2381152	110.49	ng		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11104\B6749.D
Acq Time : 4 Nov 99 10:17 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 4 12:08 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration

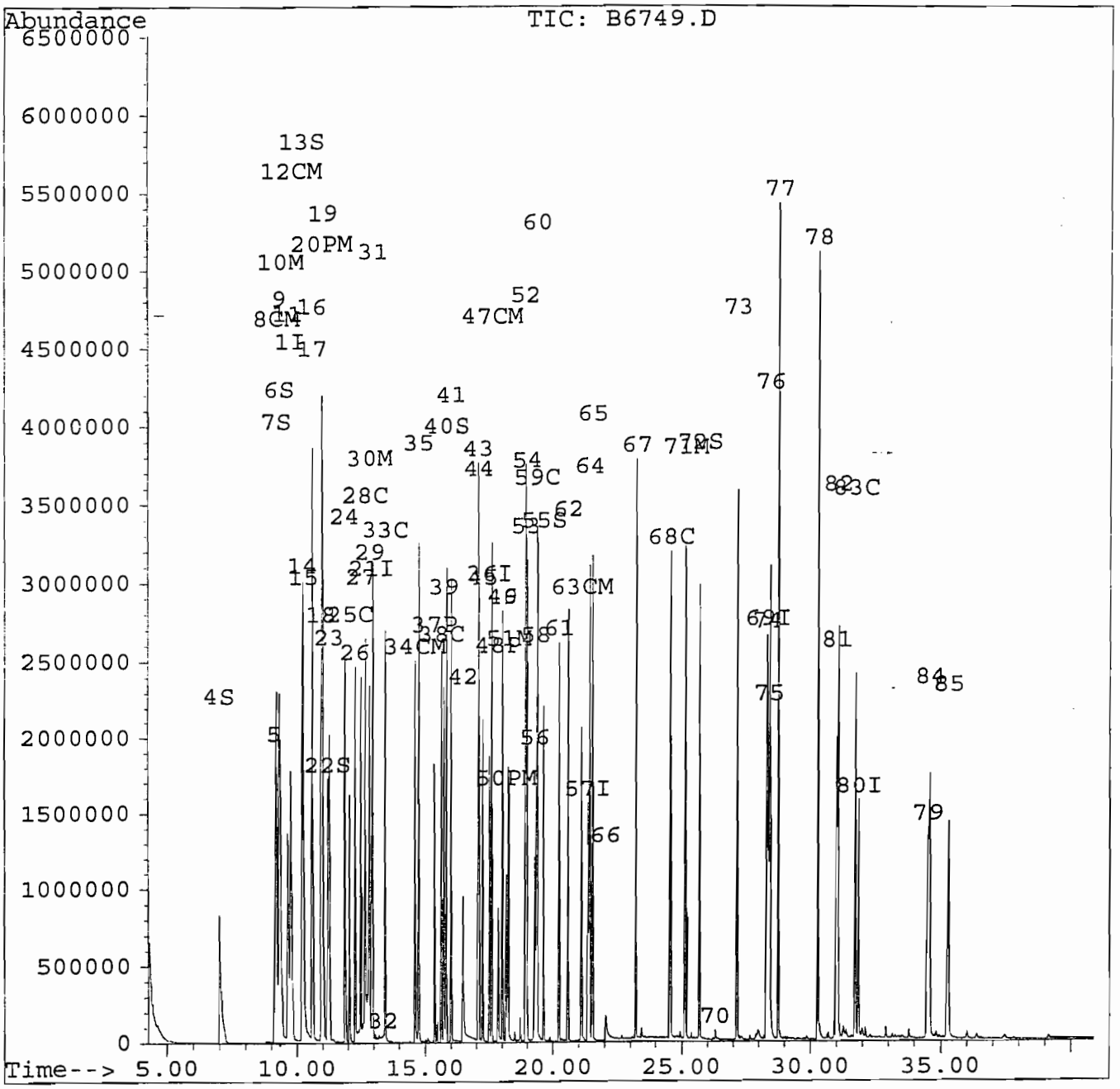
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) Benzo[g,h,i]perylene	35.30	276	2384312	102.70	ng	97

Quantitation Report

Data File : F:\HPCHEM\1\DATA\B11104\B6749.D
Acq Time : 4 Nov 99 10:17 am
Sample : 80 NG BNA CCC
Misc :
Quant Time: Nov 4 12:08 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration
Last Update : Thu Nov 04 12:09:42 1999
Response via : Multiple Level Calibration



000468

CHEMTECH CONSULTING GROUP

SEMIVOLATILE

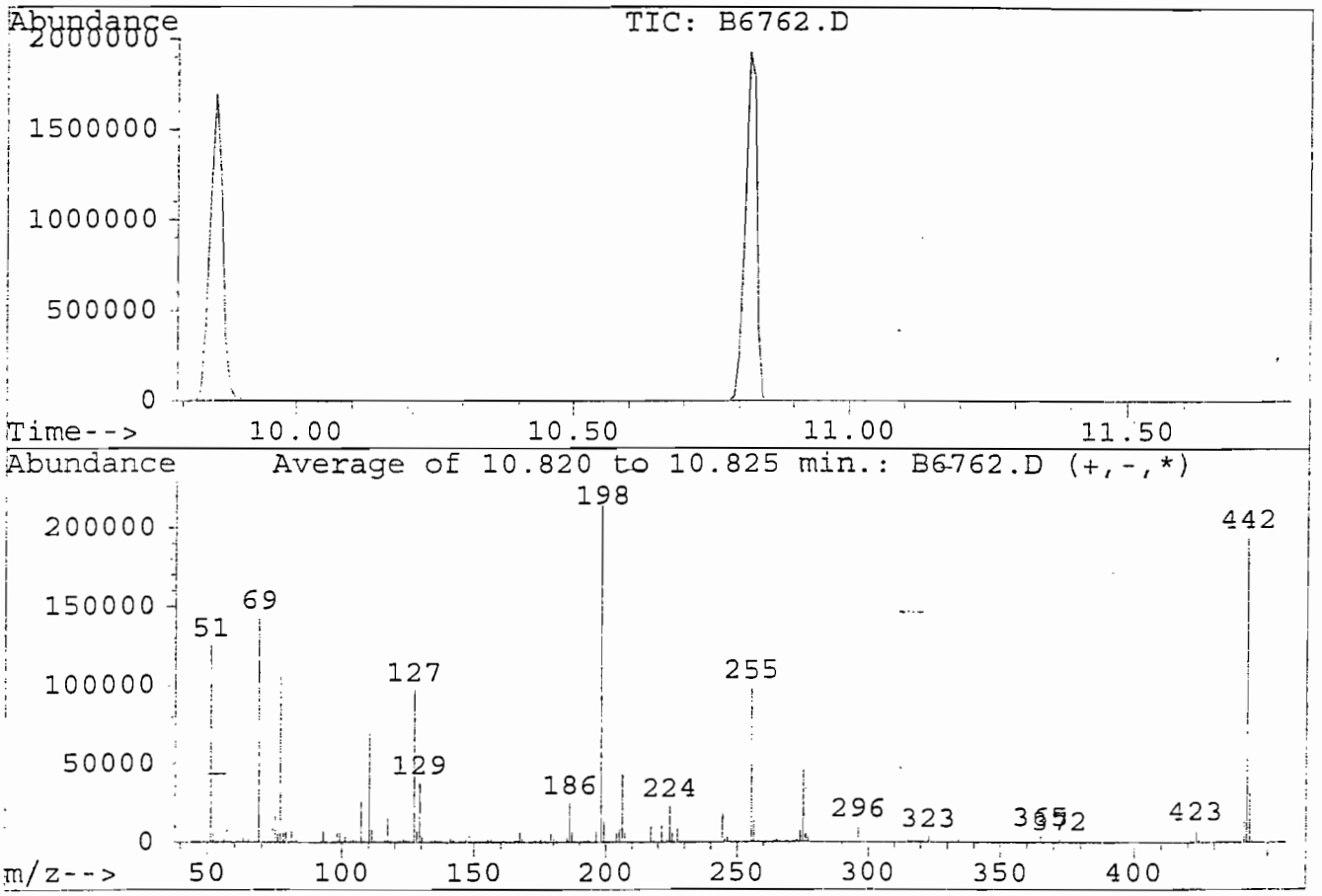
RAW QC DATA

DFTPP

Data File : D:\HPCHEM\1\DATA\B11105\B6762.D
Acq Time : 5 Nov 99 10:00 am
Sample : 50 NG DFTPP
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105.M
Title : CLP BNA Calibration



Peak Apex is scan: 675

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.5	125874	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	65.5	143384	PASS
70	69	0	2	0.4	599	PASS
127	198	40	60	44.7	97689	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	218788	PASS
199	198	5	9	6.2	13528	PASS
275	198	10	30	22.0	48236	PASS
365	198	1	100	2.4	5251	PASS
441	443	0	100	79.0	28952	PASS
442	198	40	100	89.0	194752	PASS
443	442	17	23	18.8	36640	PASS

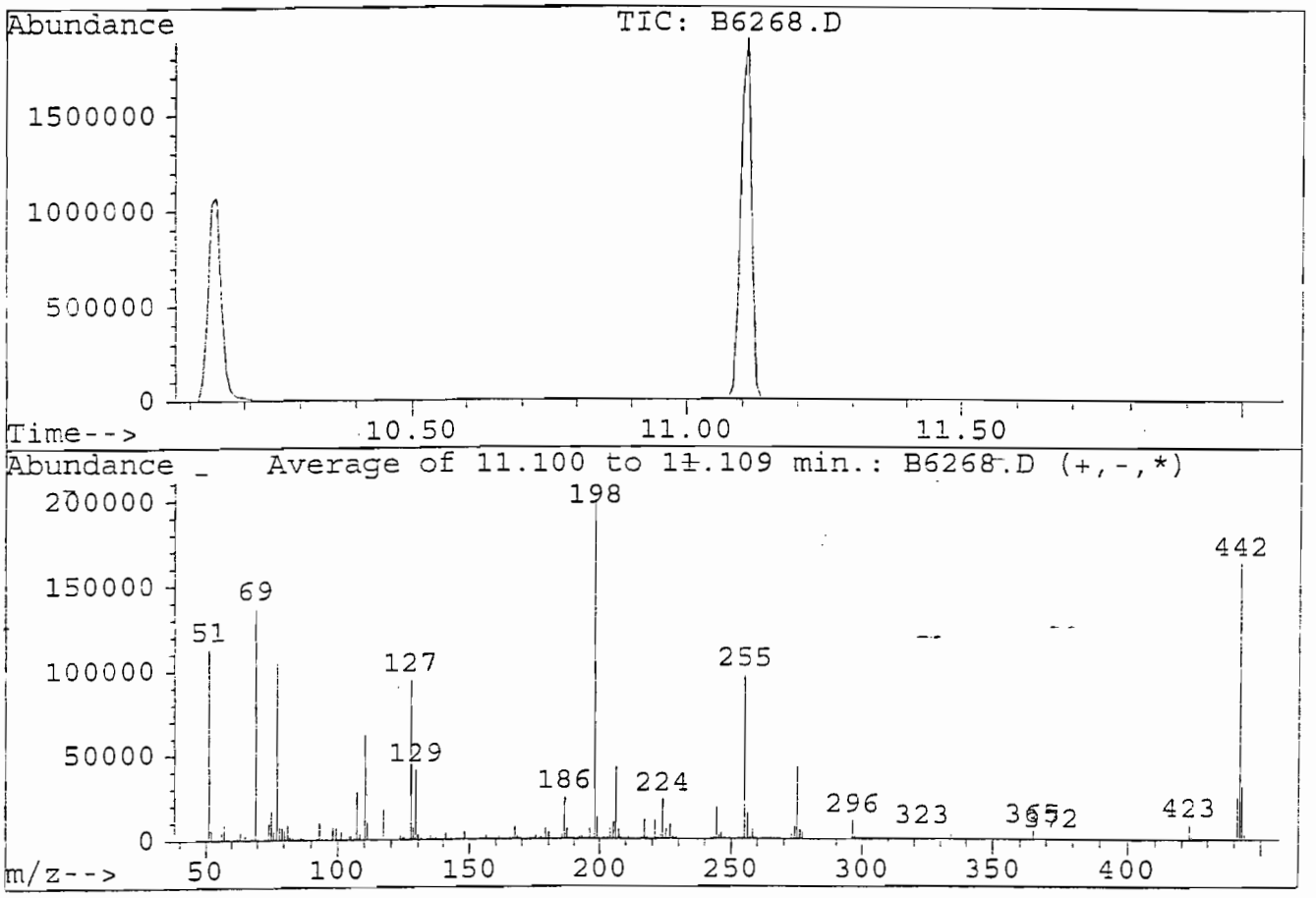
B6762.D B11105.M Sun Nov 07 19:05:03 1999 BNA

DFTPP

Data File : F:\HPCHEM\1\DATA\B11006\B6268.D
Acq Time : 6 Oct 99 9:55 am
Sample : 50 ng DFTPP
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration



Peak Apex is scan: 708

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	56.3	113436	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	68.3	137595	PASS
70	69	0	2	0.5	751	PASS
127	198	40	60	47.0	94712	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	201472	PASS
199	198	5	9	6.5	13074	PASS
275	198	10	30	21.4	43072	PASS
365	198	1	100	2.4	4906	PASS
441	443	0	100	79.7	24868	PASS
442	198	40	100	81.0	163256	PASS
443	442	17	23	19.1	31212	PASS

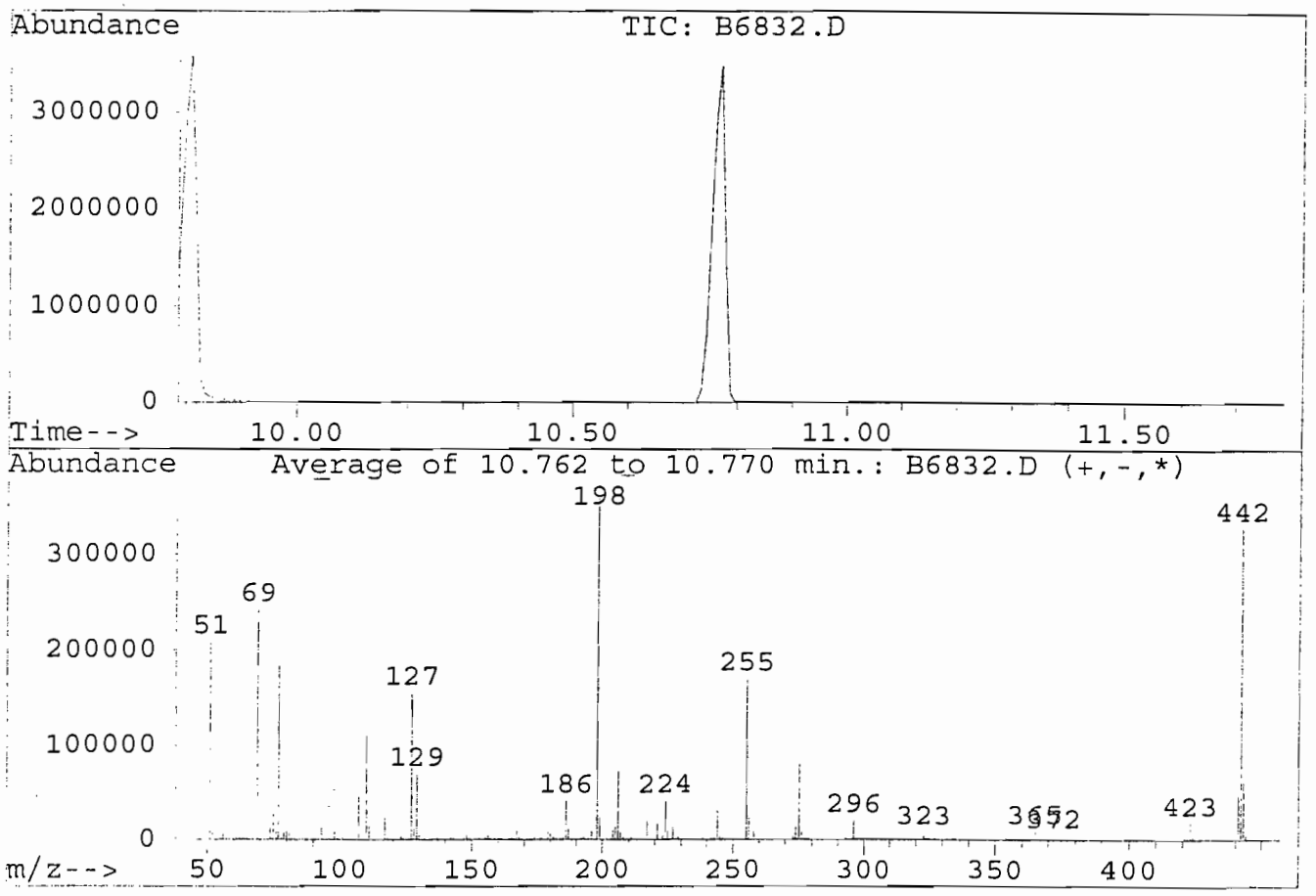
B6268.D B11006C.M Fri Oct 08 09:48:13 1999 BNA2

DFTPP

Data File : D:\HPCHEM\1\DATA\B11109\B6832.D
Acq Time : 9 Nov 99 9:31 am
Sample : 50 NG DFTPP
Misc :

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration



Peak Apex is scan: 674

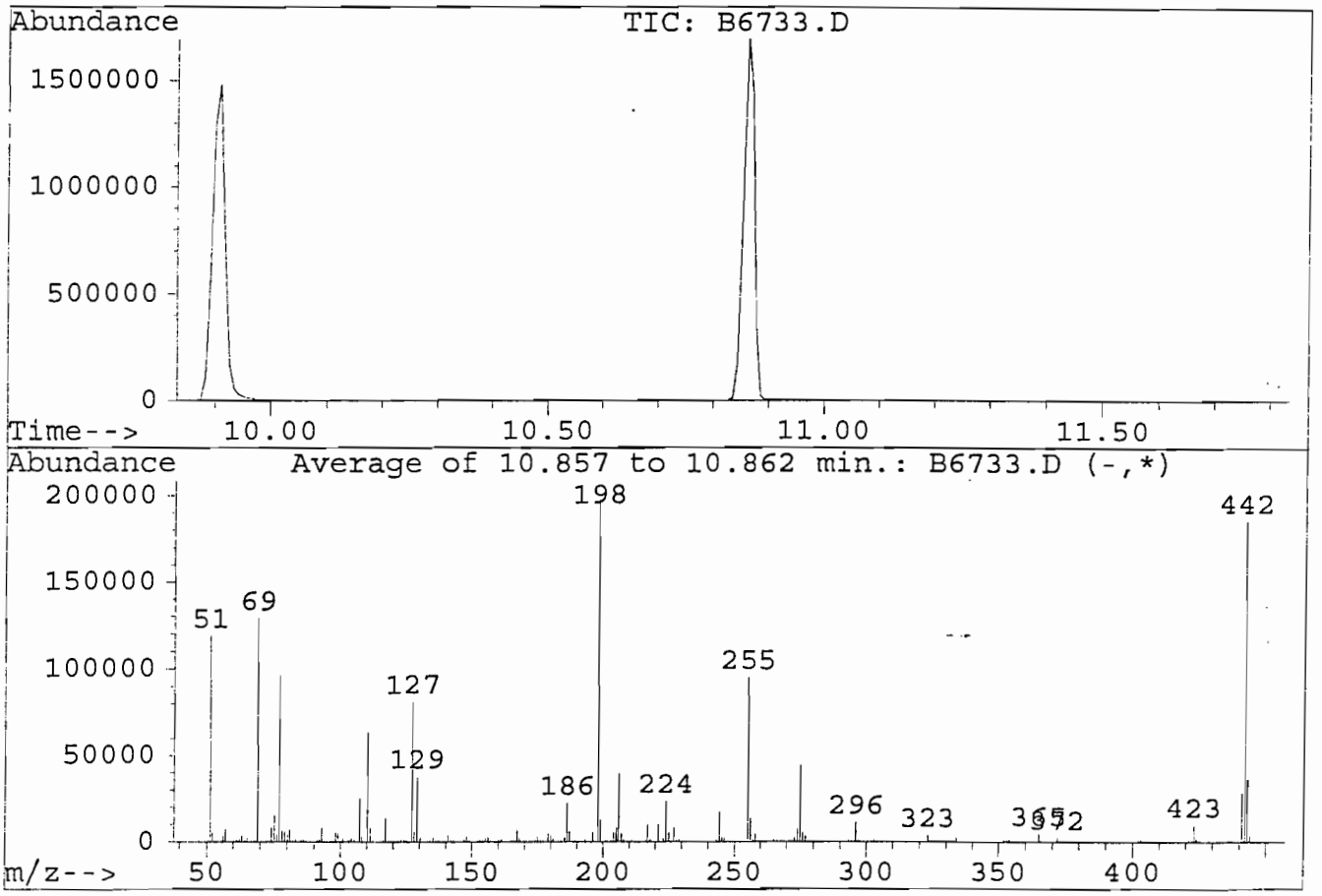
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.9	207987	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	67.3	241817	PASS
70	69	0	2	0.5	1254	PASS
127	198	40	60	43.2	155166	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	359343	PASS
199	198	5	9	6.7	24028	PASS
275	198	10	30	22.4	80563	PASS
365	198	1	100	2.5	8842	PASS
441	443	0	100	74.7	46722	PASS
442	198	40	100	91.4	328456	PASS
443	442	17	23	19.0	62518	PASS

DFTPP

Data File : D:\HPCHEM\1\DATA\B11103\B6733.D
Acq Time : 3 Nov 99 6:14 pm
Sample : 50 NG DFTPP
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration



Peak Apex is scan: 680

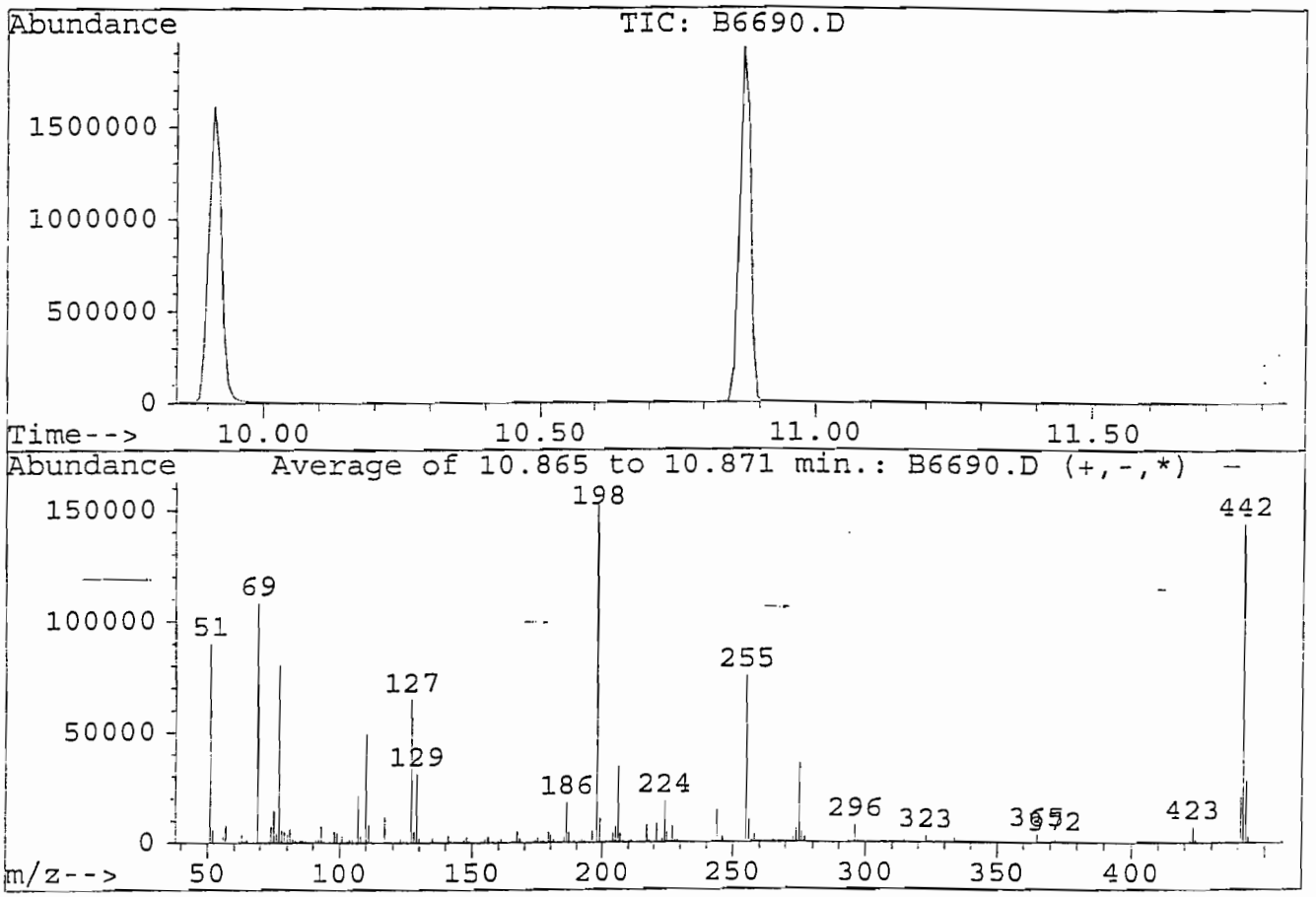
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	59.7	118877	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	64.8	129020	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	40.8	81114	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	198965	PASS
199	198	5	9	6.4	12799	PASS
275	198	10	30	22.4	44504	PASS
365	198	1	100	2.4	4711	PASS
441	443	0	100	77.4	28544	PASS
442	198	40	100	93.3	185536	PASS
443	442	17	23	19.9	36880	PASS

DFTPP

Data File : D:\HPCHEM\1\DATA\B11101\B6690.D
Acq Time : 1 Nov 99 10:05 am
Sample : 50 NG DFTPP
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : J:\HPCHEM\1\METHODS\B2CLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 681

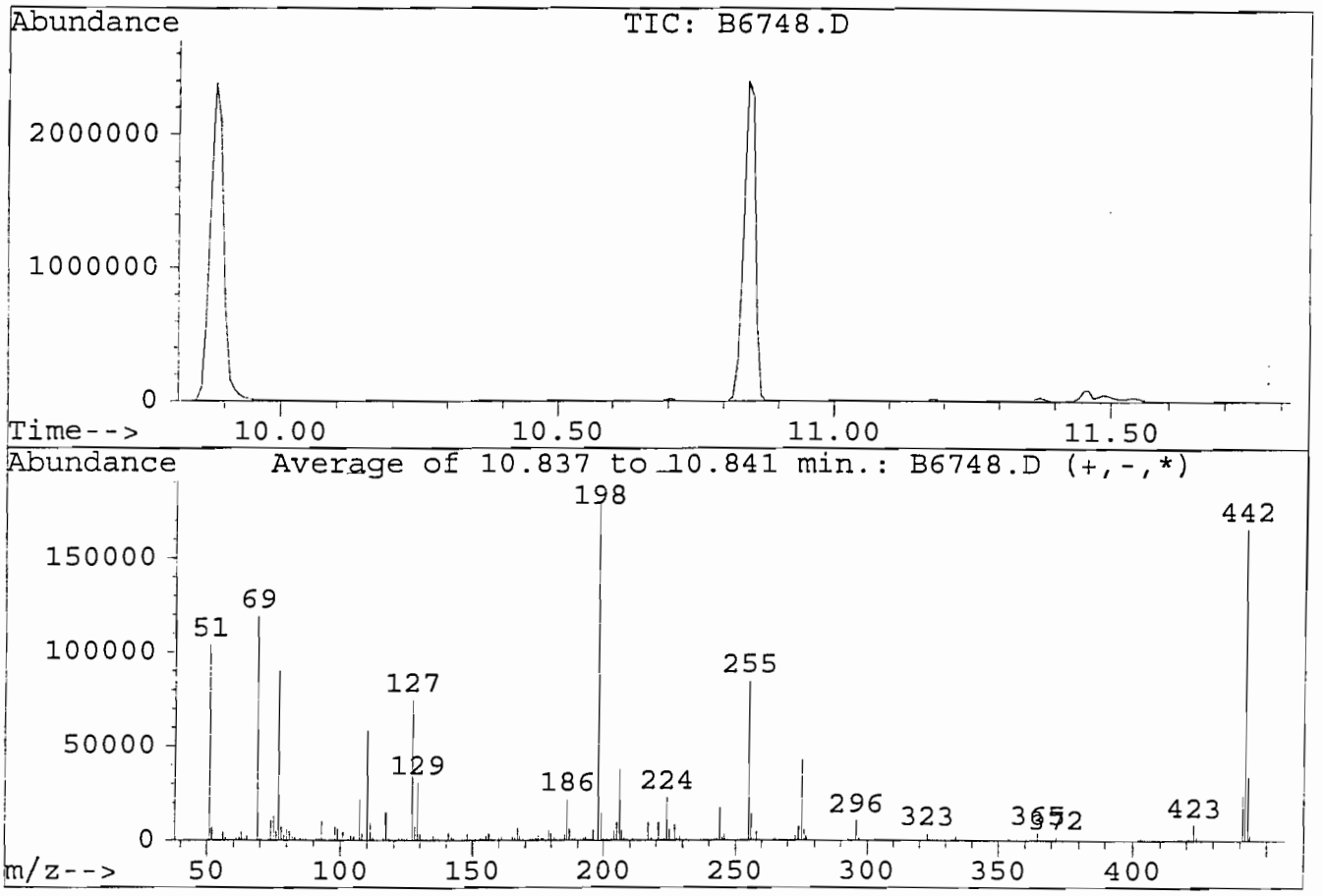
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.0	89987	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	69.7	108084	PASS
70	69	0	2	0.6	598	PASS
127	198	40	60	41.8	64760	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	155102	PASS
199	198	5	9	7.0	10892	PASS
275	198	10	30	23.0	35636	PASS
365	198	1	100	2.5	3811	PASS
441	443	0	100	73.4	20683	PASS
442	198	40	100	92.8	143960	PASS
443	442	17	23	19.6	28191	PASS

DFTPP

Data File : F:\HPCHEM\1\DATA\B11104\B6748.D
Acq Time : 4 Nov 99 9:50 am
Sample : 50 NG DFTPP
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : F:\HPCHEM\1\METHODS\B11006C.M
Title : CLP BNA Calibration



Peak Apex is scan: 678

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.2	104056	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	65.5	119064	PASS
70	69	0	2	0.7	774	PASS
127	198	40	60	41.1	74716	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	181832	PASS
199	198	5	9	8.0	14496	PASS
275	198	10	30	23.7	43004	PASS
365	198	1	100	2.4	4419	PASS
441	443	0	100	71.2	24195	PASS
442	198	40	100	91.2	165872	PASS
443	442	17	23	20.5	33964	PASS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK01

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: SBLK01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6735.D

Level: (low/med) LOW Date Received:

% Moisture: 0 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	33	U
108-60-1	bis(2-chloroisopropyl)ether	33	U
95-50-1	1,2-Dichlorobenzene	33	U
541-73-1	1,3-Dichlorobenzene	33	U
106-46-7	1,4-Dichlorobenzene	33	U
621-64-7	n-Nitroso-di-n-propylamine	33	U
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
78-59-1	Isophorone	33	U
111-91-1	bis(2-Chloroethoxy)methane	33	U
120-82-1	1,2,4-Trichlorobenzene	33	U
91-20-3	Naphthalene	33	U
106-47-8	4-Chloroaniline	66	U
87-68-3	Hexachlorobutadiene	33	U
91-57-6	2-Methylnaphthalene	56	U
77-47-4	Hexachlorocyclopentadiene	33	U
91-58-7	2-Chloronaphthalene	33	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	33	U
208-96-8	Acenaphthylene	33	U
606-20-2	2,6-Dinitrotoluene	33	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	33	U
132-64-9	Dibenzofuran	52	U
121-14-2	2,4-Dinitrotoluene	33	U
84-66-2	Diethylphthalate	33	U
7005-72-3	4-Chlorophenyl-phenylether	33	U
86-73-7	Fluorene	33	U
100-01-6	4-Nitroaniline	170	U
86-30-6	N-Nitrosodiphenylamine	33	U
122-66-7	1,2-Diphenylhydrazine	33	U
101-55-3	4-Bromophenyl-phenylether	33	U
118-74-1	Hexachlorobenzene	33	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK01

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: SBLK01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6735.D

Level: (low/med) LOW Date Received:

% Moisture: 0 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	33	U
120-12-7	Anthracene	33	U
86-74-8	Carbazole	49	U
84-74-2	Di-n-butylphthalate	33	U
206-44-0	Fluoranthene	33	U
129-00-0	Pyrene	33	U
85-68-7	Butylbenzylphthalate	33	U
91-94-1	3,3'-Dichlorobenzidine	130	U
56-55-3	Benzo[a]anthracene	33	U
218-01-9	Chrysene	33	U
117-81-7	bis(2-Ethylhexyl)phthalate	62	U
117-84-0	Di-n-octylphthalate	33	U
205-99-2	Benzo[b]fluoranthene	100	U
207-08-9	Benzo[k]fluoranthene	96	U
50-32-8	Benzo[a]pyrene	33	U
193-39-5	Indeno(1,2,3-cd)pyrene	33	U
53-70-3	Dibenz[a,h]anthracene	49	U
191-24-2	Benzo[g,h,i]perylene	33	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SBLK01

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 1382 Site: Location: EAST SOLIDER Group: GP-008-S

Matrix: (soil/water) SOIL Lab Sample ID: SBLK01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6735.D

Level: (low/med) LOW Date Received:

% Moisture: 0 decanted: (Y/N) N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/3/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/Kg

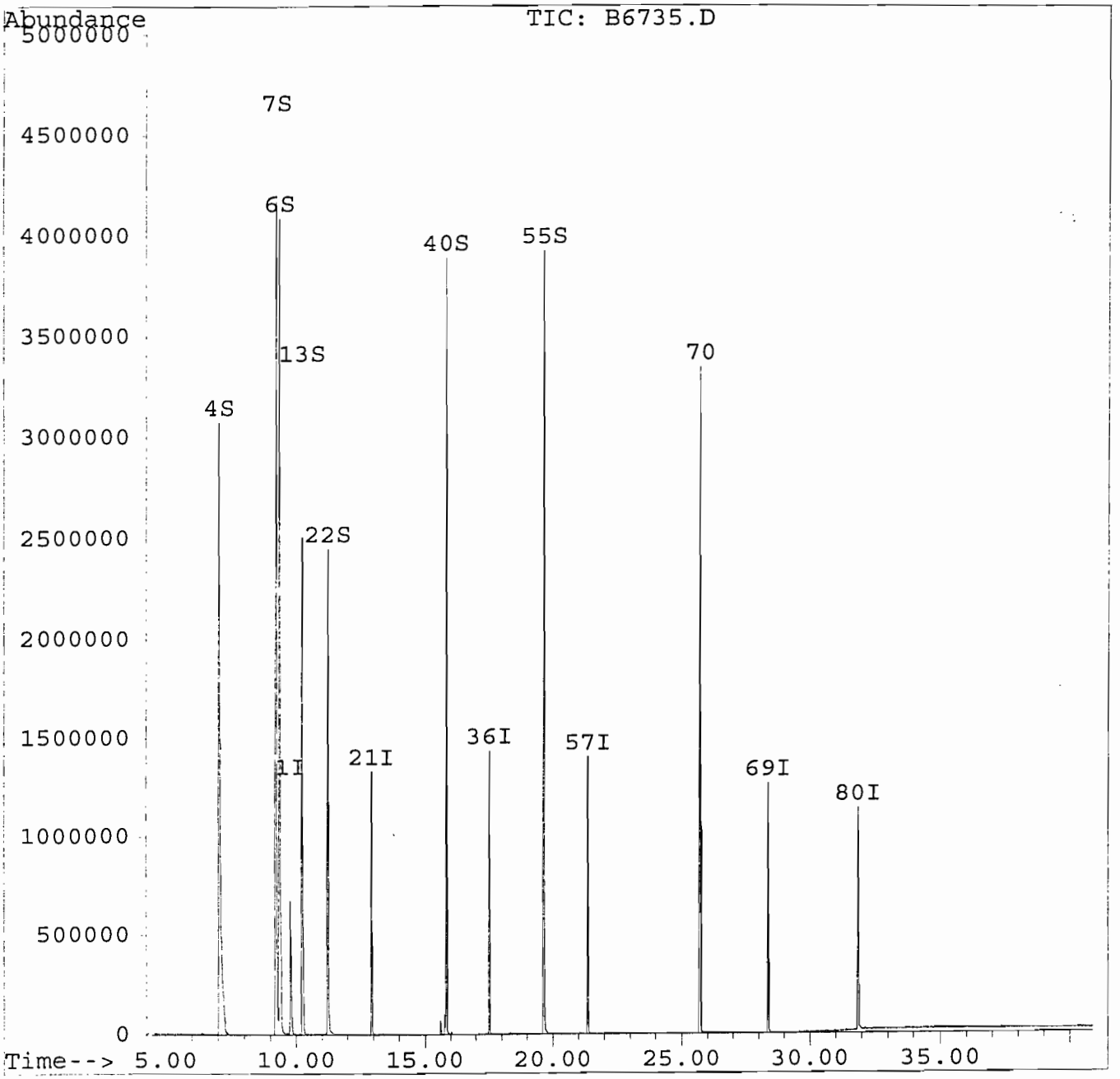
CAS Number	Compound Name	RT	Est. Conc.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6735.D
Acq Time : 3 Nov 99 7:32 pm
Sample : BLANK
Misc :
Quant Time: Nov 4 8:26 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration



000479

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11103\B6735.D
Acq Time : 3 Nov 99 7:32 pm
Sample : BLANK
Misc :
Quant Time: Nov 4 8:26 1999

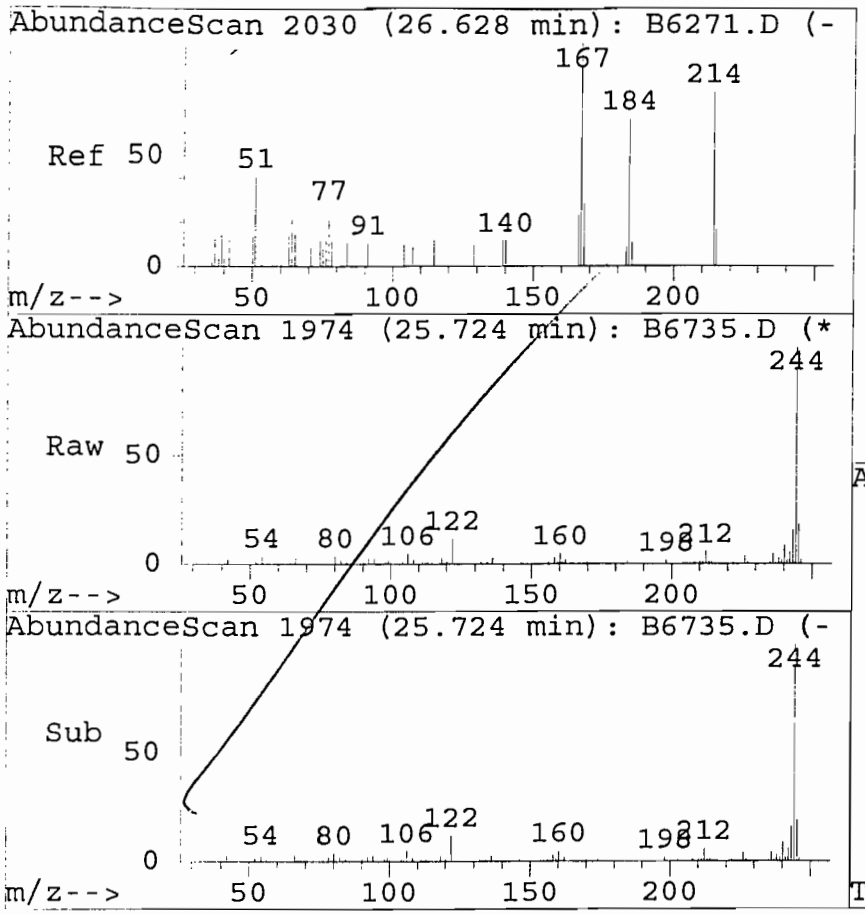
Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.79	152	308235	40.00	ng	-0.02
21) Naphthalene-d8	12.93	136	1063933	40.00	ng	-0.32
36) Acenaphthene-d10	17.53	164	569025	40.00	ng	-0.32
57) Phenanthrene-d10	21.37	188	1061706	40.00	ng	-0.33
69) Chrysene-d12	28.36	240	964019	40.00	ng	-0.34
80) Perylene-d12	31.87	264	967450	40.00	ng	-0.35
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	7.06	112	3037640	283.05	ng	
6) 2-Chlorophenol-d4	9.36	132	2839479	285.19	ng	
7) Phenol-d5	9.24	99	3755276	305.75	ng	
13) 1,2-Dichlorobenzene-d4	10.23	152	989668	142.80	ng	
22) Nitrobenzene-d5	11.24	82	1843338	144.74	ng	
40) 2-Fluorobiphenyl	15.84	172	2543184	129.93	ng	
55) 2,4,6-Tribromophenol	19.67	330	1404374	374.65	ng	
72) Terphenyl-d14	25.72	244	3337797	117.56	ng	#
Target Compounds						Qvalue
70) Benzidine	25.72	184	31564	427.06	ng	96

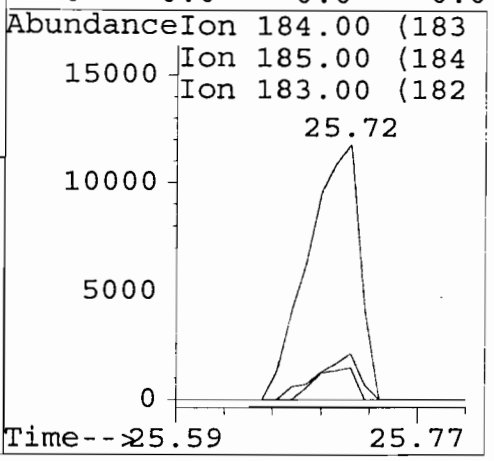
000430

(#) = qualifier out of range (m) = manual integration



#70
Benzidine
Concen: 427.06 ng
RT: 25.72 min Scan# 1974
Delta R.T. -0.90 min
Lab File: B6735.D
Acq: 3 Nov 99 7:32 pm

Tgt Ion:184	Resp:	31564	
Ion	Ratio	Lower	Upper
184	100		
185	18.0	8.2	24.6
183	12.5	7.1	21.3
0	0.0	0.0	0.0



000481

Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\B11103\B6735.D
Acq Time : 3 Nov 99 7:32 pm
Sample : BLANK
Misc :

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Library : NBS75K.L

No Library Search Compounds Detected

000482

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BLKSPK1

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: BLKSPK1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6693.D

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/1/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	33	U
108-60-1	bis(2-chloroisopropyl)ether	33	U
95-50-1	1,2-Dichlorobenzene	33	U
541-73-1	1,3-Dichlorobenzene	33	U
106-46-7	1,4-Dichlorobenzene	2900	
621-64-7	n-Nitroso-di-n-propylamine	3300	
67-72-1	Hexachloroethane	33	U
98-95-3	Nitrobenzene	33	U
78-59-1	Isophorone	33	U
111-91-1	bis(2-Chloroethoxy)methane	33	U
120-82-1	1,2,4-Trichlorobenzene	3100	
91-20-3	Naphthalene	33	U
106-47-8	4-Chloroaniline	66	U
87-68-3	Hexachlorobutadiene	33	U
91-57-6	2-Methylnaphthalene	56	U
77-47-4	Hexachlorocyclopentadiene	33	U
91-58-7	2-Chloronaphthalene	33	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	33	U
208-96-8	Acenaphthylene	33	U
606-20-2	2,6-Dinitrotoluene	33	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	2600	
132-64-9	Dibenzofuran	52	U
121-14-2	2,4-Dinitrotoluene	2900	
84-66-2	Diethylphthalate	33	U
7005-72-3	4-Chlorophenyl-phenylether	33	U
86-73-7	Fluorene	33	U
100-01-6	4-Nitroaniline	170	U
86-30-6	N-Nitrosodiphenylamine	33	U
122-66-7	1,2-Diphenylhydrazine	33	U
101-55-3	4-Bromophenyl-phenylether	33	U
118-74-1	Hexachlorobenzene	33	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

BLKSPK1

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: _____ Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: BLKSPK1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6693.D

Level: (low/med) LOW Date Received: _____

% Moisture: 0 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/1/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

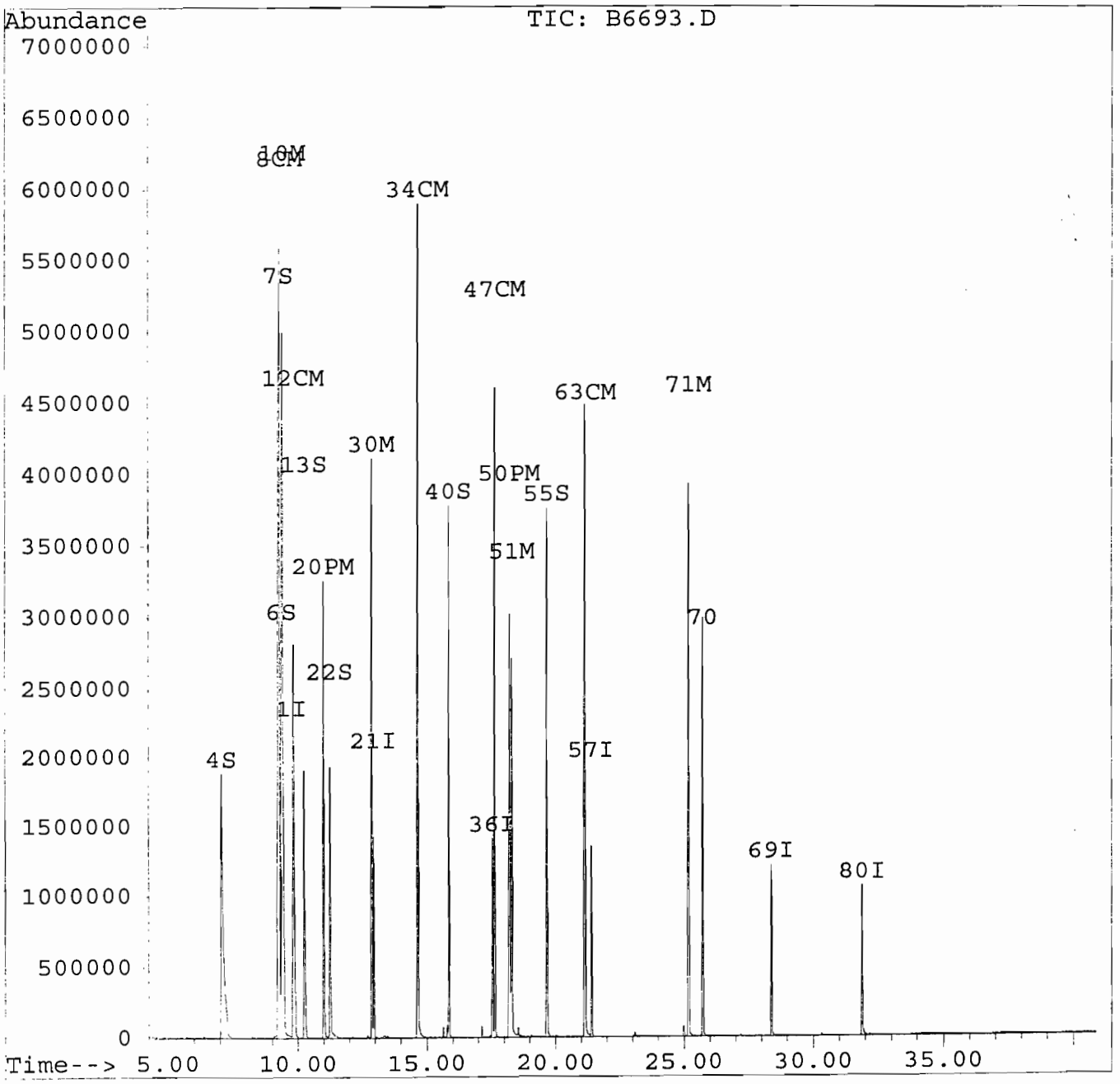
CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	33	U
120-12-7	Anthracene	33	U
86-74-8	Carbazole	49	U
84-74-2	Di-n-butylphthalate	33	U
206-44-0	Fluoranthene	33	U
129-00-0	Pyrene	2400	
85-68-7	Butylbenzylphthalate	33	U
91-94-1	3,3'-Dichlorobenzidine	130	U
56-55-3	Benzo[a]anthracene	33	U
218-01-9	Chrysene	33	U
117-81-7	bis(2-Ethylhexyl)phthalate	62	U
117-84-0	Di-n-octylphthalate	33	U
205-99-2	Benzo[b]fluoranthene	100	U
207-08-9	Benzo[k]fluoranthene	96	U
50-32-8	Benzo[a]pyrene	33	U
193-39-5	Indeno(1,2,3-cd)pyrene	33	U
53-70-3	Dibenz[a,h]anthracene	49	U
191-24-2	Benzo[g,h,i]perylene	33	U

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11101\B6693.D
Acq Time : 1 Nov 99 12:13 pm
Sample : BL.SPIKE
Misc :
Quant Time: Nov 10 17:46 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration



000485

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11101\B6693.D
Acq Time : 1 Nov 99 12:13 pm
Sample : BL.SPIKE
Misc :
Quant Time: Nov 10 17:46 1999

Operator: Bob
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.80	152	296056	40.00	ng		0.00
21) Naphthalene-d8	12.96	136	1092756	40.00	ng		-0.29
36) Acenaphthene-d10	17.55	164	612878	40.00	ng		-0.30
57) Phenanthrene-d10	21.40	188	1076918	40.00	ng		-0.30
69) Chrysene-d12	28.38	240	936629	40.00	ng		-0.32
80) Perylene-d12	31.89	264	964696	40.00	ng		-0.32
System Monitoring Compounds							**%Recovery**
4) 2-Fluorophenol	7.06	112	2483091	240.89	ng		
6) 2-Chlorophenol-d4	9.38	132	2334700	244.13	ng		
7) Phenol-d5	9.27	99	2898244	245.68	ng		
13) 1,2-Dichlorobenzene-d4	10.25	152	821330	123.39	ng		
22) Nitrobenzene-d5	11.26	82	1511770	115.58	ng		
40) 2-Fluorobiphenyl	15.86	172	2223848	105.49	ng		
55) 2,4,6-Tribromophenol	19.68	330	1206865	298.92	ng		
72) Terphenyl-d14	25.74	244	2922206	105.93	ng	#	
Target Compounds							**Qvalue**
8) Phenol	9.30	94	4276142	351.37	ng		94
10) 2-Chlorophenol	9.42	128	3337373	354.78	ng		90
12) 1,4-Dichlorobenzene	9.84	146	1908010	172.93	ng		94
20) N-Nitroso-di-n-propylamine	11.01	70	1730081	199.33	ng		93
30) 1,2,4-Trichlorobenzene	12.88	180	1663682	183.97	ng		99
34) 4-Chloro-3-methylphenol	14.65	107	3090862	361.67	ng		89
47) Acenaphthene	17.66	153	2686155	154.98	ng		97
50) 4-Nitrophenol	18.23	109	800144	477.84	ng		91
51) 2,4-Dinitrotoluene	18.32	165	987780	174.16	ng	m	87
63) Pentachlorophenol	21.17	266	1693012	412.62	ng		97
70) Benzidine	25.73	184	26289	366.09	ng		90
71) Pyrene	25.20	202	4697795	146.26	ng		100

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS30MS

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88001MS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6835.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	1900	
621-64-7	n-Nitroso-di-n-propylamine	2400	
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	2500	
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	69	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	59	U
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	2100	
132-64-9	Dibenzofuran	54	U
121-14-2	2,4-Dinitrotoluene	2100	
84-66-2	Diethylphthalate	73	
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	34	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS30MS

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88001MS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6835.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

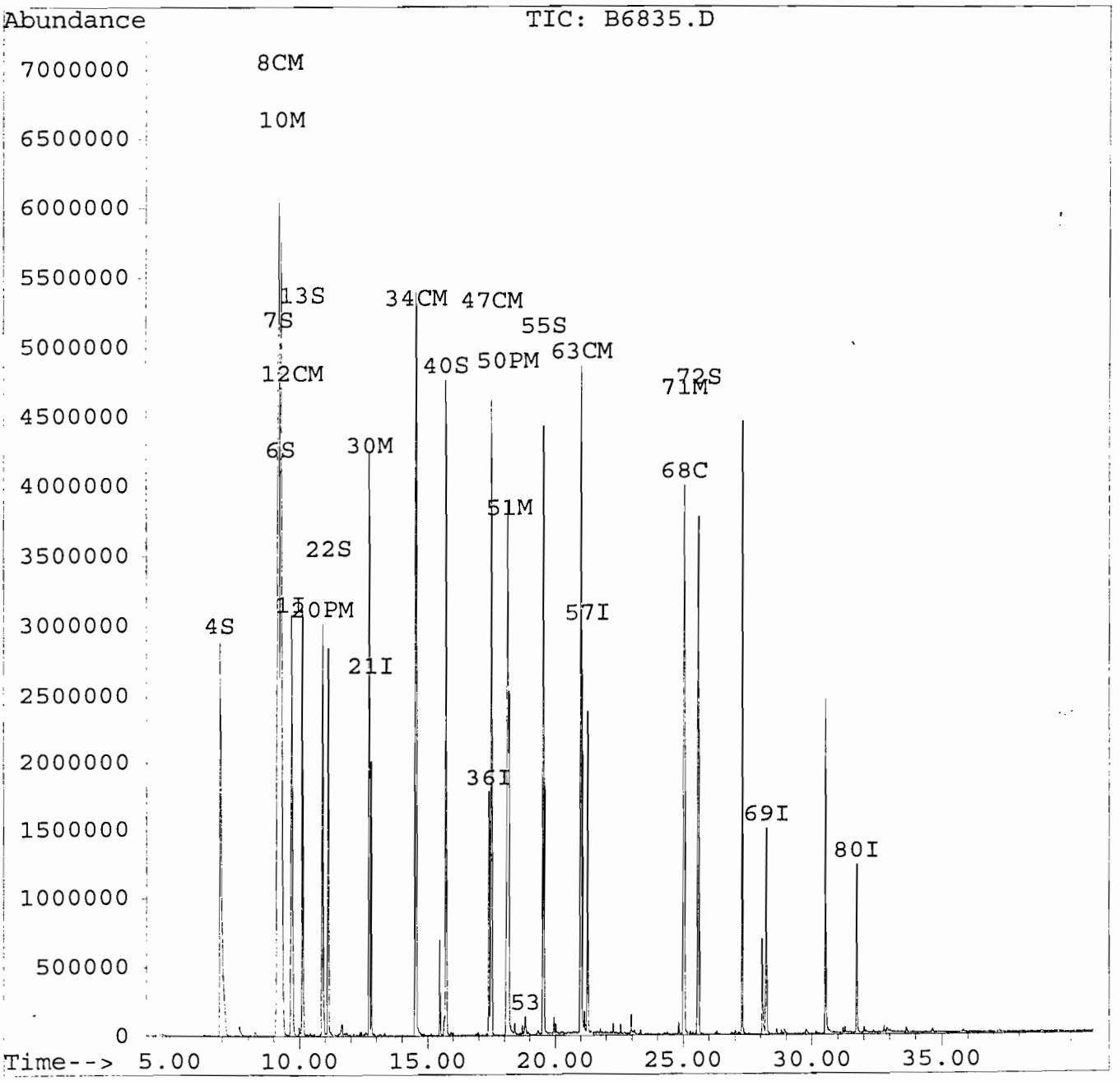
CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
86-74-8	Carbazole	51	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	2200	
129-00-0	Pyrene	2600	
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
117-81-7	bis(2-Ethylhexyl)phthalate	64	U
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6835.D
Acq Time : 9 Nov 99 11:38 am
Sample : 13826ASP-88001-QB505 MS
Misc :
Quant Time: Nov 10 18:42 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration



000489

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6835.D
Acq Time : 9 Nov 99 11:38 am
Sample : 13826ASP-88001-QB505 MS
Misc :
Quant Time: Nov 10 18:42 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.68	152	457225	40.00	ng	-0.05
21) Naphthalene-d8	12.82	136	1658695	40.00	ng	-0.07
36) Acenaphthene-d10	17.41	164	969952	40.00	ng	-0.07
57) Phenanthrene-d10	21.28	188	1819162	40.00	ng	-0.05
69) Chrysene-d12	28.24	240	1364597	40.00	ng	-0.09
80) Perylene-d12	31.75	264	1122377	40.00	ng	-0.09
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.94	112	3451094	190.28	ng	
6) 2-Chlorophenol-d4	9.27	132	3367059	197.79	ng	
7) Phenol-d5	9.18	99	4435770	206.90	ng	
13) 1,2-Dichlorobenzene-d4	10.12	152	1235087	111.22	ng	
22) Nitrobenzene-d5	11.14	82	2523747	111.07	ng	
40) 2-Fluorobiphenyl	15.73	172	3864615	108.42	ng	
55) 2,4,6-Tribromophenol	19.57	330	1860089	234.18	ng	
72) Terphenyl-d14	25.62	244	5066358	128.48	ng	
Target Compounds						Qvalue
8) Phenol	9.22	94	4941991	210.92	ng	91
10) 2-Chlorophenol	9.32	128	3836097	225.70	ng	100
12) 1,4-Dichlorobenzene	9.72	146	2181058	112.28	ng	98
20) N-Nitroso-di-n-propylamine	10.91	70	2137231	135.49	ng	93
30) 1,2,4-Trichlorobenzene	12.75	180	2098868	141.93	ng	99
34) 4-Chloro-3-methylphenol	14.56	107	3939814	254.65	ng	98
47) Acenaphthene	17.52	153	3469781	120.29	ng	99
50) 4-Nitrophenol	18.16	109	1048391	277.71	ng	79
51) 2,4-Dinitrotoluene	18.20	165	1490472	120.54	ng	97
53) Diethylphthalate	18.84	149	156124	4.23	ng	97
63) Pentachlorophenol	21.05	266	2245709	268.05	ng	97
68) Fluoranthene	25.06	202	6345659	124.49	ng	98
71) Pyrene	25.06	202	6357890	148.21	ng	98

000490

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS30MSD

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88001SD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6836.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
111-44-4	bis(2-Chloroethyl)ether	34	U
108-60-1	bis(2-chloroisopropyl)ether	34	U
95-50-1	1,2-Dichlorobenzene	34	U
541-73-1	1,3-Dichlorobenzene	34	U
106-46-7	1,4-Dichlorobenzene	2200	
621-64-7	n-Nitroso-di-n-propylamine	2400	
67-72-1	Hexachloroethane	34	U
98-95-3	Nitrobenzene	34	U
78-59-1	Isophorone	34	U
111-91-1	bis(2-Chloroethoxy)methane	34	U
120-82-1	1,2,4-Trichlorobenzene	2600	
91-20-3	Naphthalene	34	U
106-47-8	4-Chloroaniline	69	U
87-68-3	Hexachlorobutadiene	34	U
91-57-6	2-Methylnaphthalene	59	U
77-47-4	Hexachlorocyclopentadiene	34	U
91-58-7	2-Chloronaphthalene	34	U
88-74-4	2-Nitroaniline	120	U
131-11-3	Dimethylphthalate	34	U
208-96-8	Acenaphthylene	34	U
606-20-2	2,6-Dinitrotoluene	34	U
99-09-2	3-Nitroaniline	130	U
83-32-9	Acenaphthene	2300	
132-64-9	Dibenzofuran	54	U
121-14-2	2,4-Dinitrotoluene	2300	
84-66-2	Diethylphthalate	63	
7005-72-3	4-Chlorophenyl-phenylether	34	U
86-73-7	Fluorene	34	U
100-01-6	4-Nitroaniline	180	U
86-30-6	N-Nitrosodiphenylamine	34	U
122-66-7	1,2-Diphenylhydrazine	34	U
101-55-3	4-Bromophenyl-phenylether	34	U
118-74-1	Hexachlorobenzene	34	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

GP-010-SS30MSD

Lab Name: CHEMTECH Contract: IMPACT ENVIRONMENTAL

Project No.: 13826ASP Site: Location: EAST SOLIDER C Group: GP-008-SS

Matrix: (soil/water) SOIL Lab Sample ID: O88001SD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: B6836.D

Level: (low/med) LOW Date Received: 10/18/99

% Moisture: 4 decanted: (Y/N): N Date Extracted: 10/18/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/9/99

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

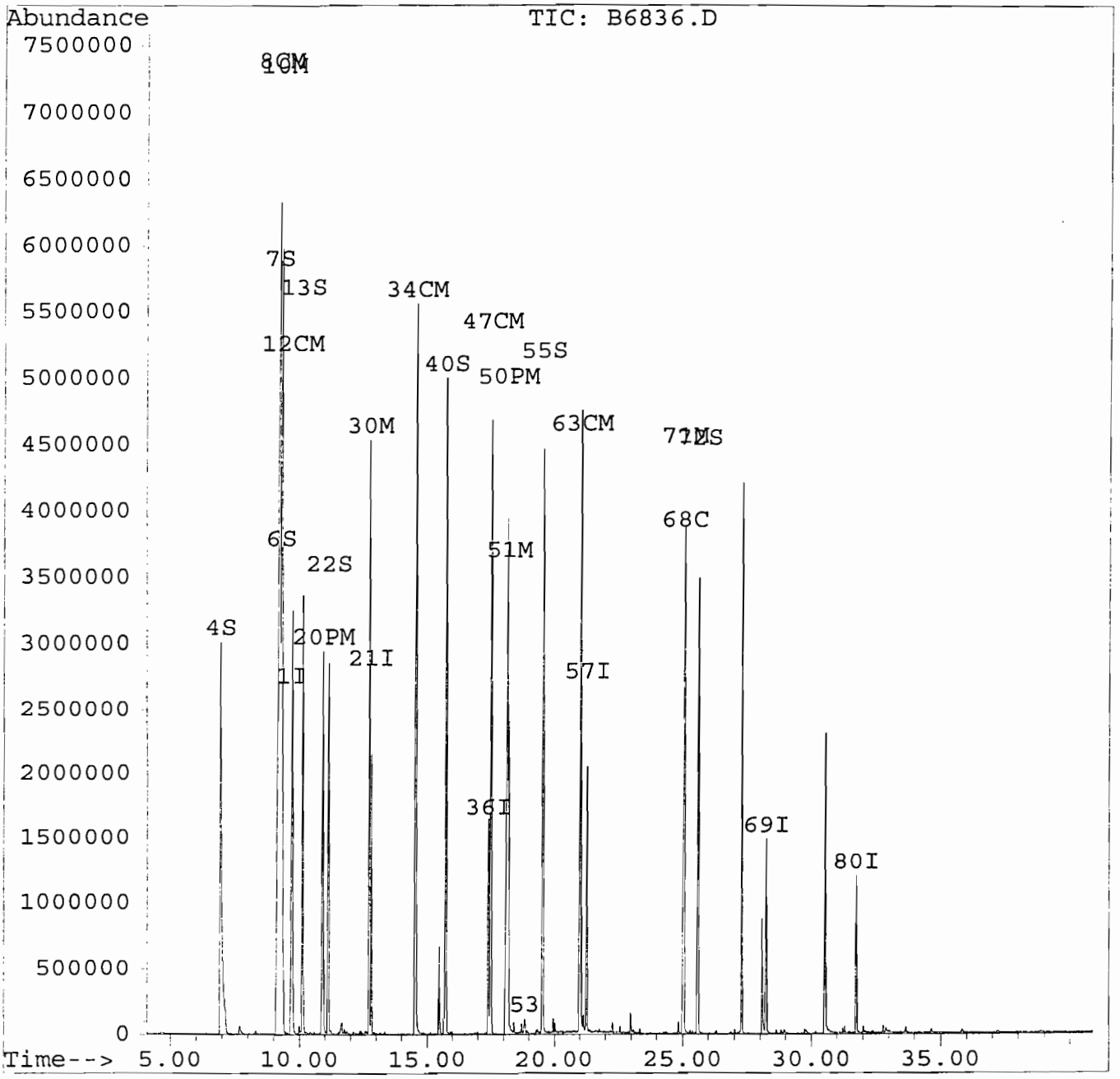
CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/Kg	Q
85-01-8	Phenanthrene	34	U
120-12-7	Anthracene	34	U
86-74-8	Carbazole	51	U
84-74-2	Di-n-butylphthalate	34	U
206-44-0	Fluoranthene	2200	
129-00-0	Pyrene	2500	
85-68-7	Butylbenzylphthalate	34	U
91-94-1	3,3'-Dichlorobenzidine	140	U
56-55-3	Benzo[a]anthracene	34	U
218-01-9	Chrysene	34	U
117-81-7	bis(2-Ethylhexyl)phthalate	64	U
117-84-0	Di-n-octylphthalate	34	U
205-99-2	Benzo[b]fluoranthene	110	U
207-08-9	Benzo[k]fluoranthene	100	U
50-32-8	Benzo[a]pyrene	34	U
193-39-5	Indeno(1,2,3-cd)pyrene	34	U
53-70-3	Dibenz[a,h]anthracene	51	U
191-24-2	Benzo[g,h,i]perylene	34	U

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6836.D
Acq Time : 9 Nov 99 12:29 pm
Sample : 13826ASP-88001-QB505 MSD
Misc :
Quant Time: Nov 10 18:43 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration



000493

Quantitation Report

Data File : D:\HPCHEM\1\DATA\B11109\B6836.D
Acq Time : 9 Nov 99 12:29 pm
Sample : 13826ASP-88001-QB505 MSD
Misc :
Quant Time: Nov 10 18:43 1999

Operator:
Inst : BNA-RTE
Multiplr: 1.00

Method : D:\HPCHEM\1\METHODS\B11105C.M
Title : CLP BNA Calibration
Last Update : Sun Nov 07 11:51:02 1999
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.68	152	434654	40.00	ng	-0.06
21) Naphthalene-d8	12.82	136	1626026	40.00	ng	-0.06
36) Acenaphthene-d10	17.41	164	915228	40.00	ng	-0.06
57) Phenanthrene-d10	21.28	188	1646067	40.00	ng	-0.04
69) Chrysene-d12	28.25	240	1337812	40.00	ng	-0.09
80) Perylene-d12	31.75	264	1101326	40.00	ng	-0.08
System Monitoring Compounds						%Recovery
4) 2-Fluorophenol	6.94	112	3525352	204.47	ng	
6) 2-Chlorophenol-d4	9.26	132	3351680	207.11	ng	
7) Phenol-d5	9.20	99	4440677	217.88	ng	
13) 1,2-Dichlorobenzene-d4	10.12	152	1215632	115.15	ng	
22) Nitrobenzene-d5	11.15	82	2507513	112.57	ng	
40) 2-Fluorobiphenyl	15.74	172	3789462	112.66	ng	
55) 2,4,6-Tribromophenol	19.56	330	1835125	244.85	ng	
72) Terphenyl-d14	25.61	244	4894366	126.60	ng	
Target Compounds						Qvalue
8) Phenol	9.23	94	4943064	221.92	ng	90
10) 2-Chlorophenol	9.32	128	3872396	239.67	ng	95
12) 1,4-Dichlorobenzene	9.72	146	2327330	126.03	ng	100
20) N-Nitroso-di-n-propylamine	10.92	70	2078234	138.59	ng	93
30) 1,2,4-Trichlorobenzene	12.75	180	2162369	149.16	ng	99
34) 4-Chloro-3-methylphenol	14.55	107	3882829	256.01	ng	95
47) Acenaphthene	17.52	153	3655746	134.32	ng	98
50) 4-Nitrophenol	18.17	109	1067085	299.56	ng	85
51) 2,4-Dinitrotoluene	18.21	165	1520322	130.30	ng	97
53) Diethylphthalate	18.84	149	126050	3.62	ng	96
63) Pentachlorophenol	21.05	266	2237714	295.19	ng	98
68) Fluoranthene	25.06	202	5972053	129.48	ng	97
71) Pyrene	25.06	202	5983475	142.28	ng	99

000494

(#) = qualifier out of range (m) = manual integration

CHEMTECH CONSULTING GROUP

MISCELLANEOUS DATA

CHEMTECH

Daily Analysis Runlog For GC/MS #: BNA 1

Start Date: 11/09/99 End Date: 11/9/99 Analyst N.J Review by: _____

STD. NAME	STD REF. #:	STD NAME	STD REF. #:
DFTPP	B0385	QC Check Std.	
CCC 25	B0388	Initial Calibration Stds.	
Internal Stds.	S0207		

SR. #:	Sample ID	Batch #:	Data File Name	Dil. Fact.	Method #:	Comment
1	50NG DFTPP		B6832			O.K. 9.31am
2	50NG BNA CCC		B6833			O.K.
3	1384/AMP-88000	QB505	B6834		8270	O.K.
4	88001MS		B6835			O.K.
5	88001MSD		B6836			O.K.
6	87994		B6837			RR
7	87997		B6838			O.K.
8	88006		B6839			Confirm 4 ries
9	88005		B6840			
10	87996		B6841			
11	87993		B6842			
12	87994		B6843			
13	15298N3-91677	QB521	B6844			IS + RR
14	91680		B6845			IS + RR
15	91686		B6846			IS + RR 8.56pm
16						
17						
18						
19						
20						

Logbook Page 000070

000496

CHEMTECH

Daily Analysis Runlog For GC/MS #: BNA 1

Start Date: 11/05/99 End Date: 11/5/99 Analyst GM Review by: _____

STD. NAME	STD REF. #:	STD NAME	STD REF. #:
DFTPP	B03385	QC Check Std.	
CCC 25		Initial Calibration Stds.	B0387, 388, 389, 390, 391
Internal Stds.	S0207		

SR. #:	Sample ID	Batch #:	Data File Name	Dil. Fact.	Method #:	Comment
1	50ng DFTPP		B6762			OK.
2	20ng BNA ICC		B6763			OK
3	50ng BNA ICC		B6764			OK
4	80ng BNA ICC		B6765			OK
5	120ng BNA ICC		B6766			OK
6	160ng BNA ICC		B6767			OK
7	20ng BNA ICC		B6768			OK
8	50ng BNA ICC		B6769			OK
9	80ng BNA ICC		B6770			OK
10	120ng BNA ICC		B6771			OK
11	160ng BNA ICC		B6772			OK
12						
13						
14						
15						
16						
17						
18						
19						
20						

B1105C.IN FOR 8270

B1105.M FOR CLP

000497

Logbook Page 000065

CHEMTECH

Daily Analysis Runlog For GC/MS #: BNA 1

Start Date: 11/09/99 End Date: 11/24/99 Analyst ~~JAA~~ Review by: _____

STD. NAME	STD REF. #:	STD NAME	STD REF. #:
DFTPP	BC378	QC Check Std.	
CCC 25	BC389	Initial Calibration Stds.	
Internal Stds.	SC207		

SR. #:	Sample ID	Batch #:	Data File Name	Dil. Fact.	Method #:	Comment
1	50ng DFTPP		B6748			ok
2	50ng BNA CCC		B6749			ok
3	Blank		B6750		8270	ok
4	13943Asp-SP02	OR05	B6751	-		-OK-
5	~~SPIKE~~ - S9308	|	B6752	10x	|	o.k.
6	S9308	|	B6753		|	o.k.
7	13943Asf-S9303	|	B6754		|	Confirm run
8	S9304	|	B6755		|	o.k.
9	S9307	|	B6756		|	Confirm run
10	13806Asp-S7997	OR04	B6757		|	ISV RR
11	S9306	|	B6758		|	ISV RR
12	S8000S	|	B6759		|	ISV RR
13	S7996	|	B6760		|	ISV RR
14	S7993	|	B6761		|	ISV RR
15						
16						
17						
18						
19						
20						

000498

Logbook Page 000064

CHEMTECH

Daily Analysis Runlog For GC/MS #: BNA 1

Start Date: 11/03/99 End Date: 11/04/99 Analyst N.P Review by: _____

STD. NAME	STD REF. #:	STD NAME	STD REF. #:
DFTPP	B0378	QC Check Std.	
CCC 25	B0389	Initial Calibration Stds.	
Internal Stds.	S0207		

SR. #:	Sample ID	Batch #:	Data File Name	Dil. Fact.	Method #:	Comment
1	50ng DFTPP		B6733			0.6
2	50ng BNA cpd		B6734			0.6
3	Blank		B6735		8270	0.6
4	Blank	B5525	B6736			0.6
5	BI spike	↓	B6737			0.6
6	13926Anp-88803	Q8025	B6738			0.6
7	-88804		B6739			0.6
8	88001		B6740			0.6
9	88002		B6741			0.6
10	87995		B6742			0.6
11	87999		B6743			0.6
12	87998	↓	B6744			0.6
13	13943 89305	Q6525	B6745			0.6
14	89306		B6746			0.6
15	89308	↓	B6747		↓	RR & DL 10X
16						
17						
18						
19						
20						

CHEMTECH

Daily Analysis Runlog For GC/MS #: BNA 1

Start Date: 11/04/99 End Date: 11/2/99 Analyst CM Review by: _____

STD. NAME	STD REF. #:	STD NAME	STD REF. #:
DFTPP	B1378	QC Check Std.	
CCC 25	B0389	Initial Calibration Stds.	
Internal Stds.	50204		

SR. #:	Sample ID	Batch #:	Data File Name	Dil. Fact.	Method #:	Comment
1	50ng DFTPP		B 6690			o.k.
2	80ng BNA CCC		B 6691			o.k.
3	Blank	QB497	B 6692		8270	o.k.
4	BI. Spike	QB505	B 6693			o.k.
5	139126A-p-89103	MSCCR98	B 6694			o.k.
6	-89103MSD		B 6695			o.k.
7	138528NI-88278	QB497	B 6696			o.k.
8	88271		B 6697			o.k.
9	88272		B 6698			o.k.
10	88273		B 6699			o.k.
11	-88569		B 6700			o.k.
12	88275	QB497	B 6701			o.k.
13	138788 17-87663	QB493	B 6702			o.k.
14	87664		B 6703			o.k.
15						
16						
17						
18						
19						
20						

000500

CHEMTECH

Daily Analysis Runlog For GC/MS #: BNA 1

Start Date: 10/06/99 End Date: 10/6/99 Analyst CM Review by: _____

STD. NAME	STD REF. #:	STD NAME	STD REF. #:
DFTPP	B0378	QC Check Std.	
CCC 25		Initial Calibration Stds.	B378, 381, 382 383, 384
Internal Stds.	Soul4		

SR. #:	Sample ID	Batch #:	Data File Name	Dil. Fact.	Method #:	Comment
1	50ng DFTPP		B6268			OK
2	20ng BNA ICC		B6269			OK
3	50ng BNA ICC		B6270			OK
4	80ng BNA ICC		B6271			OK B1106C.M
5	120ng BNA ICC		B6272			OK
6	160ng BNA ICC		B6273			OK
7	20ng BNA ICC		B6274			OK
8	50ng BNA ICC		B6275			OK B1106.M
9	80ng BNA ICC		B6276			OK
10	120ng BNA ICC		B6277			OK
11	160ng BNA ICC		B6278			OK
12						
13						
14						
15						
16						
17						
18						
19						
20						

Logbook Page 000030

000501

CHEMTECH

Extraction Logpage For: SEMI VOLATILE

Batch #: Ø13505

Reg BNA (Soil) 8270

Sr. #:	Sample #:	Proj. #:	Wt. / Vol. (g. / mL.)	Date	pH	Final Vol. (mL)	Ver. Sur.	Ver. Spk.	Comment
1	87993	13826 ASP	30.5	10/18		1.0	Mg		
2	87994	↓	30.5	↓		↓	Mg		
3	87995		30.2				Mg		
4	87996		30.0		—		Mg		
5	87997		30.3				Mg		
6	87998		30.2				Mg		
7	87999		30.4				Mg		
8	88000		30.5				Mg		
9	88001		30.1				Mg		
10	88002		30.0				Mg		
11	88003		30.4				Mg		
12	88004		30.1				Mg		
13	88005		30.2				Mg		
14	88006	↓	30.0	↓		↓	Mg		
15									
16									
17									
18									
19									
20									
MS	88001	13826 ASP	30.1	10/18		1.0	Mg	Mg	
MSD	88001	↓	30.2	↓		↓	Mg	Mg	

* BLK, BLK SPIKE Extracted per day of Extraction Batch

Logbook Page No.:

CHEMTECH

Extraction Logpage For: SEMI VOLATILE

Matrix: Soil Method #: 3550 Batch #: Ø13505

Cleanup Method: _____ By: _____ Date: 10/18/99

Setup by: _____ Date: __/__/__

Concentraction by: _____ Date: __/__/__

QC	mL. Spike	Std. Ref. #: From logbook
Blank Spike	1.0	X.0310.
Matrix Spike		
Matrix Spike Duplicate		
Surrogate	1.0	X 0320

Solvent/Chemical Used	Lot #:	Comment
Dichlro Methane	N 29270	
Aceton	M 50262	JT Baker
Hexane	L 20317	
Sodium Sulfate	L 42158	
Ether		

Daily QC

Sr. #:	Sample #:	Proj. #:	Wt. / Vol. (g. / mL.)	Date	pH	Final Vol. (mL)	Ver. Sur.	Ver. Spk.	Balance Chack
1	BLK1	13826 ASP	30.0	10/18		1.0	Mg		
2	BLK SPK1	↓	↓	↓		↓	Mg	Mg	
3	BLK2								
4	BLK SPK2								
5	BLK3								
6	BLKSPK3								

CHEMTECH

SEMIVOLATILE ANALYSIS
CASE NARRATIVE SUPPORT DOCUMENT

Project No.: 13826 ASP. Date: 11/11/99

Project Name: Impact Environmental Analyst: NP.

Supervisor: Bob. Department Head: _____ QC Review by: _____

LAB SAMPLE NO.	COMMENTS
87995	none.
87998	
87999	
88000	
88002	
88003	
88004	
87993	Samples were re-run to confirm poor internal std. recovery due to sample matrix
87994	
87996	
87997	
88001	
88005	
88006	

GENERAL COMMENTS: Star list provided for samples 88005, 88006. Remaining compounds reported 8270 BN compound list.

8270C Method.

NOTES:

1. Please report unusual (e.g. different matrix, analytical problems, etc.) items.
2. For no unusual items, please write 'NONE.'
3. Return the completed document to QC Department with the analytical data.

SHIPPING AND RECEIVING DOCUMENTATION

CHEMTECH

CHAIN OF CUSTODY RECORD

Please check one:

☐ 110 Route 4, Englewood, NJ 07631, (201) 567-6868, Fax (201) 567-1333

☐ 205 Campus Plaza 1, Edison, NJ 08837, (732) 225-4111, Fax (732) 225-4110

☐ 515 Route 9 South, Barnegat, NJ 08005, (609) 698-0199, Fax (609) 698-0910

CHEMTECH JOB NO.:

CHEMTECH QUOTE NO.:

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Impact Environmental

ADDRESS: 1 Village Plaza

CITY: Kings Park STATE: NY ZIP: 11754

ATTENTION: Kevin Kleaka

PHONE: (516) 269-8800 FAX: (516) 269-1599

PROJECT INFORMATION

PROJECT NAME: # 1-30-0435

PROJECT NO.: 98-335, Westbury

PROJECT MANAGER: Richard Parrish

LOCATION: 299 Main St, Westbury, NY

PHONE: — FAX: —

BILLING INFORMATION

BILL TO: Client PO #:

ADDRESS:

CITY: STATE: ZIP:

ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *

HARD COPY: _____ DAYS *

EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH

** NORMAL TURNAROUND TIME - 14 DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP

☐ RESULTS + QC ☒ NYS ASP "B"

☐ NJ REDUCED ☐ NYS ASP "A"

☐ NJ CLP ☐ EDD

☐ EDD FORMAT: _____

ANALYSIS

1. RIFS Target volatile list
2. 8270 BN
3. 8260 VOC
4. 6010 Metals
5. 8015 TPH
6. 7
7. 8
8. 9

CHEMTECH SAMPLE ID	SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 4°C (1)	2	3	4	5	6	7	8	9	COMMENTS
1.	335-GP-008-SS30	S		X	10/12/99	9:40	1	X									
2.	335-GP-008-SS45	S		X	10/12/99	10:23	1	X									
3.	335-GP-009-SS10	S		X	10/12/99	11:43	2		X	X	X	X					
4.	335-GP-009-SS30	S		X	10/12/99	11:56	2		X	X	■	X					
5.	335-GP-009-SS45	S		X	10/12/99	12:40	2		X	X	■	X					
6.	335-GP-010-SS15	S		X	10/12/99	2:13	2		X	X	X	X					
7.	335-GP-010-SS30	S		X	10/12/99	2:47	2		X	X	■	X					
8.	335-GP-010-SS45	S		X	10/12/99	3:40	2		X	X	■	X					

← Specify Preservatives: A – HCl, B – HNO_3, C – H_2SO_4, D – NaOH, E – ICE, F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	10/15/99 8:10	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.	10/18/99 14:00	3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non-Compliant ☐ Temp. of Cooler 4c

Comments:

* RIFS included. / ■: Denotes a clerical error (Do not run method for these spls).

Page _____ of _____

Shipment Complete: Yes _____ No _____

er. 9-99

WHITE – CHEMTECH COPY FOR RETURN TO CLIENT YELLOW – CHEMTECH COPY PINK – SAMPLER COPY

CHEMTECH
CHAIN OF CUSTODY RECORD

Please check one:

☐ 110 Route 4, Englewood, NJ 07631, (201) 567-6868, Fax (201) 567-1333

☐ 205 Campus Plaza 1, Edison, NJ 08837, (732) 225-4111, Fax (732) 225-4110

☐ 515 Route 9 South, Barnegat, NJ 08005, (609) 698-0199, Fax (609) 698-0910

CHEMTECH JOB NO.:

CHEMTECH QUOTE NO.:

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Impact Environmental

ADDRESS: 1 Village Plaza

CITY: King Park STATE: NY ZIP: 11754

ATTENTION: Kevin Kleaka

PHONE: (516) 269-8800 FAX: (516) 269-1599

PROJECT INFORMATION

PROJECT NAME: # 1-30-0435

PROJECT NO.: 98-335, Westbury

PROJECT MANAGER: Richard Parrish

LOCATION: 299 Main St, Westbury, NY

PHONE: — FAX: —

BILLING INFORMATION

BILL TO: Client PO #:

ADDRESS:

CITY: STATE: ZIP:

ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *

HARD COPY: _____ DAYS *

EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH

** NORMAL TURNAROUND TIME - 14 DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP

☐ RESULTS + QC ☐ NYS ASP "B"

☐ NJ REDUCED ☐ NYS ASP "A"

☐ NJ CLP ☐ EDD

☐ EDD FORMAT: _____

ANALYSIS

1 [illegible] 2 8270 BN 3 8260 VOC 4 6010 metals 5 8015 TPH 6 8021 (STARS) 7 8240 (STARS) 8 9 [illegible]

CHEMTECH SAMPLE ID	SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
								4c	—	—	—	—	—	—	—	—	← Specify Preservatives A – HCl B – HNO_3 C – H_2SO_4 D – NaOH E – ICE F – Other
1.	335-GP-011-SS15	S		X	10/13/99	820	2		X	X	X	X					
2.	335-GP-011-SS30	S		X	10/13/99	910	2		X	X	■	X					
3.	335-GP-011-SS45	S		X	10/13/99	1013	2		X	X	■	X					
4.	335-GP-012-SS15	S		X	10/13/99	1212	2		X	X	X	X					
5.	335-GP-012-SS30	S		X	10/13/99	249	2		X	X	■	X					
6.	335-GP-012-SS45	S		X	10/13/99	342	2		X	X	■	X					
7.	335-GP-013-SS8	S		X	10/14/99	920	2						X	X			
8.	335-GP-013-SS12	S		X	10/14/99	1000	2						X	X			

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [signature]	10/15/99 2:10	1. [signature]
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2. [signature]
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.	10/18/99 1400	3. [signature]

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non-Compliant ☐ Temp. of Cooler 4°C

Comments:

■ : Denotes a clerical error (Do not run method for these spls.)

Page _____ of _____

Shipment Complete: Yes _____ No _____

/er. 9-99

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RECORD OF COMMUNICATION
VERBAL/ TELEPHONE COMMUNICATION LOG

Date 10/20/99 Client IMPACT

Chemtech Project No. 13826 ASP Chain of Custody No. 29273 & 28989

Chemtech Contact Joe Dockery Client Contact KEVIN KLEAKA

Project Reference 229 MAIN STREET

Call Initiated By: X Chemtech ____ Client

In reference to the following: TAL metals list submitted By IMACT

Questions/ Issues

IS Total Cyanide required as PART of The TAL metals analysis

Resolution Perform Total Cyanide on the following samples

87993 - GP-009-SS10
87994 - GP 010 SS15
87995 - GP 011 SS15
87996 - GP 012 SS15

Signature John Jarpain Date 10/20/99

000507

CHEMTECH
ANALAB/ICM DIVISION

205 Campus Plaza 1 • Raritan Center • Edison, NJ • 08837
Tel: 732.225.4111 Fax: 732.225.4110

DATA PACKAGE FOR TPH BY GC

PART III

PROJECT NAME: # 1-30-0435
PROJECT # 98-335, WESTBURY

IMPACT ENVIRONMENTAL
1 VILLAGE PLAZA
KING PARK NY 11754
916-269-8800

CHEMTECH PROJECT	**13826ASP**
ATTENTION	**KEVIN KLEAKA**

CHEMTECH
ANALAB/ICM DIVISION
205 Campus Plaza 1 • Raritan Center • Edison, NJ • 08837
Tel: 732.225.4111 Fax: 732.225.4110

CASE NARRATIVE- GENERAL CHEMISTRY

Impact Environmental
Project Name: # 1-30-0435
Project # 98-335, Westbury
Chemtech Project # 13826ASP

A. Number of Samples and Date of Receipt
16 Soil samples were delivered to the laboratory intact on 10/18/99.

B. Parameters
Test requested was Volatile Organics, Semivolatile Organics, TPH BY GC & Total Metals. This Case Narrative reviews results for TPH by GC.

C. Analytical Techniques
TPH (by GC) was analyzed according to Method 8015B.

D. QA/ QC Samples
A Method Blank, Spike and Duplicate sample were analyzed along with the samples.

Blank analysis did not indicate the presence of contamination. Spike Sample recoveries were within QC limits. Duplicate recoveries and RPDs met QC requirements. Calibrations met requirements. Holding Times were met.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature _____ Name: Divyajit Mehta

Date: 11/11/99 Title: Lab Manager

CHEMTECH
ANALAB/ICM DIVISION

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COVER PAGE

Lab Name: Chemtech Consulting Group Client: IMPACT ENVIRONMENTAL

Lab Code: CHEM Project No.: 13826ASP

Client Sample No.	Lab Sample ID
GP-008-SS30	87991
GP-008-SS45	87992
GP-009-SS10	87993
GP-010-SS15	87994
GP-011-SS15	87995
GP-012-SS15	87996
GP-009-SS30	87997
GP-009-SS45	87998
GP-010-SS30	87999
GP-010-SS45	88000
GP-011-SS30	88001
GP-011-SS45	88002
GP-012-SS30	88003
GP-012-SS45	88004
GP-013-SS8	88005
GP-013-SS12	88006

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designed, as verified by the following signature.

Signature: _____ Name: DIVYAJIT MEHTA

Date : 11/11/99 Title: LAB DIRECTOR

CHEMTECH
ANALAB/ICM DIVISION

205 Campus Plaza 1 • Raritan Center • Edison, NJ • 08837
Tel: 732.225.4111 Fax: 732.225.4110

DATA REPORTING QUALIFIERS - ORGANIC

For reporting results, the following "Results Qualifiers" are used:

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates the compound was analyzed for, but was not detected. Report the minimum detection limit for the sample with the U, ie "10 U". This is not necessarily the instrument detection limit. The figure represents the minimum detection limit attainable for this particular sample based on any concentration or dilution that may have been required.

J - Indicates an estimated value. This flag is used:

(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed).

(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit but greater than zero. If the detection limit was 10 ug/L and a concentration of 3 ug/L was calculated, report as "3 J".

B - Indicates the analyte was found in the blank as well as the sample; report as "12 B".

E - Indicates the analyte's's concentration exceeds the calibrated range of the GC/MS instrument for that specific analysis.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

P - This flag is used for a Pesticide/Aroclor target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".

N - This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.

CHEMTECH CONSULTING GROUP

GC DATA

CHEMTECH CONSULTING GROUP

A

ANALYTICAL RESULTS SUMMARY

Chemtech Inc., 205 Campus Drive, Plaza1 Edison, NJ 08837 Tel(732)225-4110 Fax(732)225-4111

TABULATED RESULTS
TOTAL PETROLEUM HYDROCARBONS
(C8-C40)

Client: IMPACT ENVIRONMENTAL
Report Date: 11/2/99
Received Date: 10/18/99
Extraction Date: 10/22/99

Project: # I-30-0435
Analyst: SK
Matrix: SOIL

CLIENT ID	LAB ID	RESULTS (mg/Kg)	MDL (mg/Kg)	ANALYSIS DATE
GP-009-SS10	91392 1:100	3670	366	10/27/99
GP-009-SS30	L5235-91393 1:10	154	33	10/23/99
GP-009-SS45	L5235/91394	ND	3.2	10/23/99
GP-010-SS15	91395 1:20	1520	69	10/28/99
GP-010-SS30	L5235/91396	ND	3	10/23/99
GP-010-SS45	L5235-91397	ND	3.3	10/23/99
GP-011-SS15	L5235/91398	41	3.2	10/23/99
GP-011-SS30	L5235/91399	ND	3.3	10/23/99
GP-011-SS45	L5235/91400	ND	3.2	10/23/99
GP-012-SS15	L5235\91401 1:10	ND	33	10/23/99
GP-012-SS30	L5235/91402	ND	3.2	10/23/99
GP-012-SS45	L5235/91403	6.9	3.3	10/23/99

*ANALYSIS PERFORMED BY ANALAB/ICM

CHEMTECH CONSULTING GROUP

B

METHOD BLANK RESULTS SUMMARY

Chemtech Inc, 205 Campus Plaza 1, Raritan Center, Edison, NJ 08837 Tel (732)225-4111 Fax (732)225-4110

TABULATED ANALYTICAL REPORT
TOTAL PETROLEUM HYDROCARBONS
(C8-C40)

Method Blank

Matrix: SOIL
File name: C:\TC4\DATA\D102136.RAW

Date Extracted: 10/22/99
Analysis Date: 10/22/99
Analyst: SK

COMPOUNDS	RESULTS (mg/Kg)	MDL (mg/Kg)
C8-C40	ND	3.2

MDL - Method Detection Limit
ND - Not detected at or above MDL

000008

*ANALYSIS PERFORMED BY ANALAB/ICM

CHEMTECH CONSULTING GROUP

C

CALIBRATION SUMMARY

INITIAL CALIBRATION SUMMARY
TOTAL PETROLEUM HYDROCARBONS
EPA - METHOD 8015

Date: 9/1/99				
	TPH			
	C8-C40			
Data File:	Conc	Area		
C:/TC4/DATA/D090107.RAW	95	446288	corr. coef	0.99920403
C:/TC4/DATA/D090106.RAW	190	802848	slope	3975.55298
C:/TC4/DATA/D090105.RAW	380	1724360	inter	137705.655
C:/TC4/DATA/D090104.RAW	950	4086634		
C:/TC4/DATA/D090103.RAW	1900	7602467		
	DRO			
	C8-C22			
Data File:	Conc	Area		
C:/TC4/DATA/D090112.RAW	50	213107	corr. coef	0.9991397
C:/TC4/DATA/D090111.RAW	100	388459	slope	3790.38006
C:/TC4/DATA/D090110.RAW	200	853872	inter	57663.5761
C:/TC4/DATA/D090109.RAW	500	2043422		
C:/TC4/DATA/D090108.RAW	1000	3801661		

Chemtech Inc., 205 Campus Drive, Plaza 1, Raritan Center, Edison, NJ 08837 Tel.732.225.4111 Fax.732.225.4110

Continuing Calibration Summary
Total Petroleum Hydrocarbons (C8-C40)

20 PPM TRPH STD

Date: 10/22/99
FileName: C:\TC4\DATA\D102134.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec
PRISTINE	22	20	109
PHYTANE	22	20	109
TOTAL CONC	336	380	89

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4110 Fax(732)225-4111

Continuing Calibration Summary
Petroleum Fuels By GC/FID

500PPM #2 F.O.

Date: 10/22/99
Filename: C:\TC4\DATA\D102135.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec	Flag
#2 FUEL OIL	530	500	106	

Chemtech Inc., 205 Campus Drive, Plaza 1, Raritan Center, Edison, NJ 08837 Tel.732.225.4111 Fax.732.225.4110

Continuing Calibration Summary
Total Petroleum Hydrocarbons (C8-C40)

20 PPM TRPH STD

Date: 10/23/99
FileName: C:\TC4\DATA\D102146.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec
PRISTINE	22	20	109
PHYTANE	22	20	109
TOTAL CONC	345	380	91

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4110 Fax(732)225-4111

Continuing Calibration Summary
Petroleum Fuels By GC/FID

500PPM #2 F.O.

Date: 10/23/99
Filename: C:\TC4\DATA\D102147.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec	Flag
#2 FUEL OIL	537	500	107	

Chemtech Inc., 205 Campus Drive, Plaza 1, Raritan Center, Edison, NJ 08837 Tel.732.225.4111 Fax.732.225.4110

Continuing Calibration Summary
Total Petroleum Hydrocarbons (C8-C40)

20 PPM TRPH STD

Date: 10/23/99
FileName: C:\TC4\DATA\D102160.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec
PRISTINE	23	20	117
PHYTANE	24	20	118
TOTAL CONC	373	380	98

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4110 Fax(732)225-4111

Continuing Calibration Summary
Petroleum Fuels By GC/FID

500PPM #2 F.O.

Date: 10/23/99
Filename: C:\TC4\DATA\D102161.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec	Flag
#2 FUEL OIL	526	500	105	

Chemtech Inc., 205 Campus Drive, Plaza 1, Raritan Center, Edison, NJ 08837 Tel.732.225.4111 Fax.732.225.4110

Continuing Calibration Summary
Total Petroleum Hydrocarbons (C8-C40)

20 PPM TRPH STD

Date: 10/27/99
FileName: C:\TC4\DATA\D102701.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec
PRISTINE	26	20	129
PHYTANE	26	20	130
TOTAL CONC	347	380	91

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4110 Fax(732)225-4111

Continuing Calibration Summary
Petroleum Fuels By GC/FID

500PPM #2 F.O.

Date: 10/27/99
Filename: C:\TC4\DATA\D102702.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec	Flag
#2 FUEL OIL	509	500	102	

Chemtech Inc., 205 Campus Drive, Plaza 1, Raritan Center, Edison, NJ 08837 Tel.732.225.4111 Fax.732.225.4110

Continuing Calibration Summary
Total Petroleum Hydrocarbons (C8-C40)

20 PPM TRPH STD

Date: 10/27/99
FileName: C:\TC4\DATA\D102712.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec
PRISTINE	23	20	116
PHYTANE	23	20	116
TOTAL CONC	317	380	83

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4110 Fax(732)225-4111

Continuing Calibration Summary
Petroleum Fuels By GC/FID

500PPM #2 F.O.

Date: 10/27/99
Filename: C:\TC4\DATA\D102713.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec	Flag
#2 FUEL OIL	545	500	109	

Chemtech Inc., 205 Campus Drive, Plaza 1, Raritan Center, Edison, NJ 08837 Tel.732.225.4111 Fax.732.225.4110

Continuing Calibration Summary
Total Petroleum Hydrocarbons (C8-C40)

20 PPM TRPH STD

Date: 10/28/99
FileName: C:\TC4\DATA\D102721.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec
PRISTINE	25	20	126
PHYTANE	25	20	127
TOTAL CONC	344	380	91

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4110 Fax(732)225-4111

Continuing Calibration Summary
Petroleum Fuels By GC/FID

500PPM #2 F.O.

Date: 10/28/99
Filename: C:\TC4\DATA\D102722.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec	Flag
#2 FUEL OIL	543	500	109	

Chemtech Inc., 205 Campus Drive, Plaza 1, Raritan Center, Edison, NJ 08837 Tel.732.225.4111 Fax.732.225.4110

Continuing Calibration Summary
Total Petroleum Hydrocarbons (C8-C40)

20 PPM TRPH STD

Date: 10/28/99
FileName: C:\TC4\DATA\D102729.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec
PRISTINE	26	20	131
PHYTANE	26	20	132
TOTAL CONC	347	380	91

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4110 Fax(732)225-4111

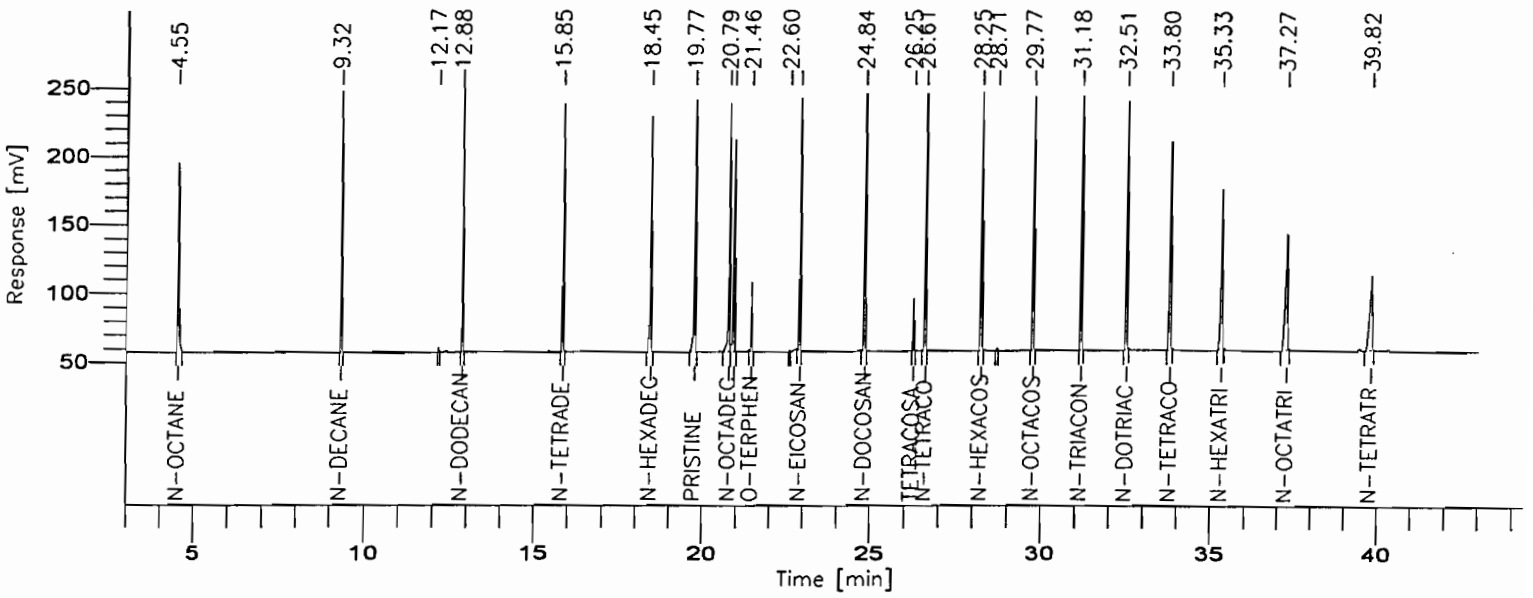
Continuing Calibration Summary
Petroleum Fuels By GC/FID

500PPM #2 F.O.

Date: 10/28/99
Filename: C:\TC4\DATA\D102730.RAW
Analyst: SK

Analyte	Conc Found (ppm)	Conc Added (ppm)	% Rec	Flag
#2 FUEL OIL	565	500	113	

Software Version: 4.1<1L22>
Date: 9/3/99 14:59
Sample Name : 100 PPM TRPH STD
Data File : C:\TC4\DATA\D090103.RAW Date: 9/1/99 16:53
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 3 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/1 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

090025

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.55	346115.20	138360.00	114.417	11441.660
2	N-DECANE	9.32	357856.00	189923.10	134.527	13452.650
3		12.17	5488.00	3210.43	0.005	0.549
4	N-DODECANE	12.88	359372.80	195065.17	133.383	13338.258
5	N-TETRADECANE	15.85	366318.40	180876.61	132.529	13252.922
6	N-HEXADECANE	18.45	379364.80	176522.10	131.188	13118.777
7	PRISTINE	19.77	415936.00	187707.72	112.184	11218.364
8	N-OCTADECANE	20.79	400965.89	181145.84	134.767	13476.713
9	PHYTANE	20.94	364458.11	154769.21	111.935	11193.518
10	O-TERPHENYL (SURROGATE	21.46	94588.80	50335.02	24.692	2469.248
11		22.60	1888.00	1129.44	0.002	0.189
12	N-EICOSANE	22.90	390924.80	184587.64	125.569	12556.944
13	N-DOCOSANE	24.84	412972.80	192008.60	127.192	12719.179
14	TETRACOSANE-d50 (SURRO	26.25	75696.00	37809.03	23.277	2327.721
15	N-TETRACOSANE	26.61	431065.60	187741.92	126.539	12653.914
16	N-HEXACOSANE	28.25	447345.60	189006.73	128.125	12812.463
17		28.71	4764.80	2024.61	0.005	0.476
18	N-OCTACOSANE	29.77	452280.00	186386.60	128.387	12838.744
19	N-TRIACONTANE	31.18	451870.40	185579.00	131.641	13164.104

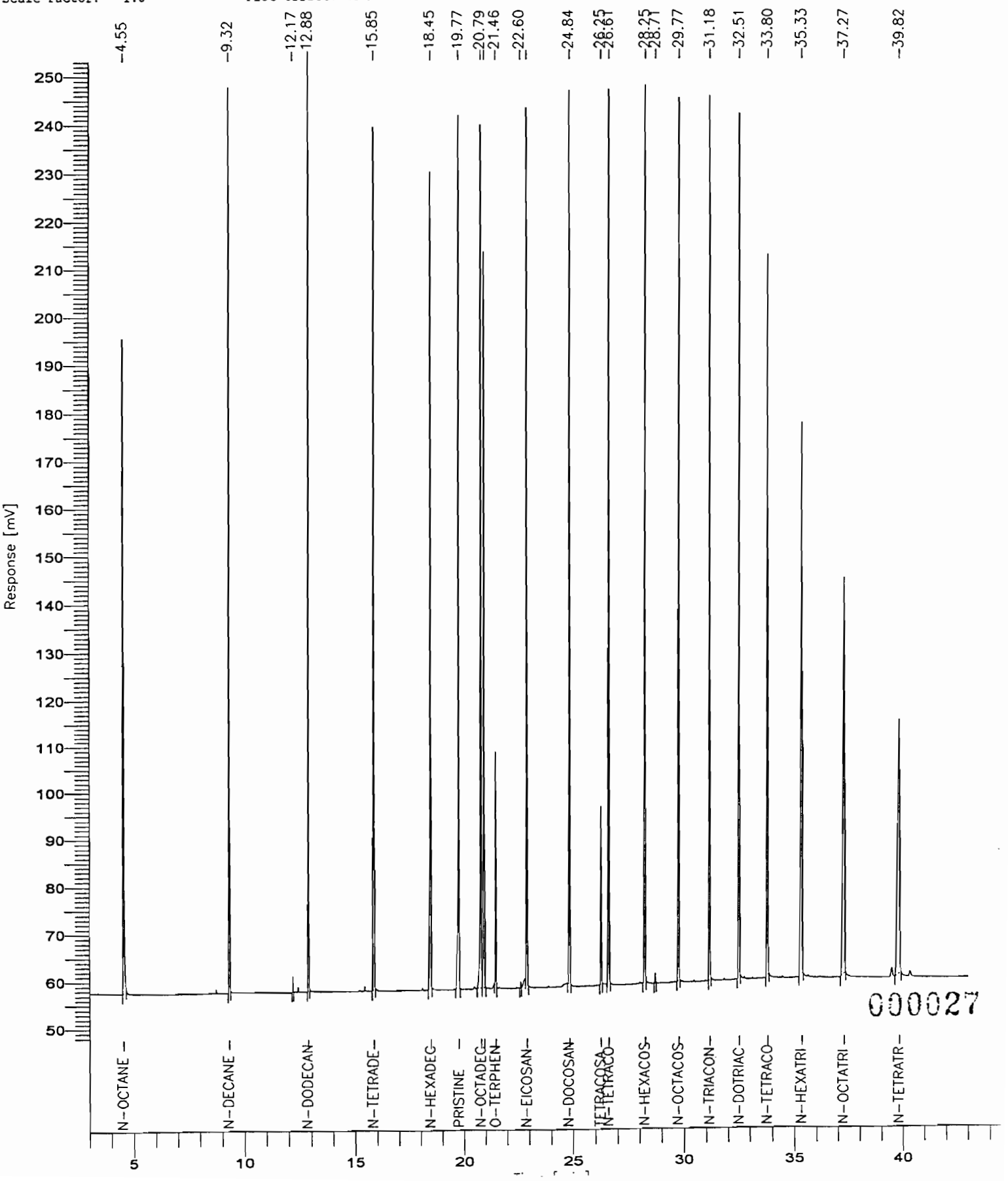
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-DOTRIACONTANE	32.51	449976.00	183471.42	138.262	13826.234
21	N-TETRACONTANE	33.80	432592.00	154545.74	150.871	15087.106
22	N-HEXATRIACONTANE	35.33	413420.80	116725.83	130.357	13035.747
23	N-OCTATRIACONTANE	37.27	386208.00	83946.04	133.495	13349.542
24	N-TETRATRIACONTANE	39.82	331283.20	54251.27	138.069	13806.877
			7772752.00	3.22e+06	2511.419	251141.899

Report stored in ASCII file: C:\TC4\DATA\D090103.TX0

Chromatogram

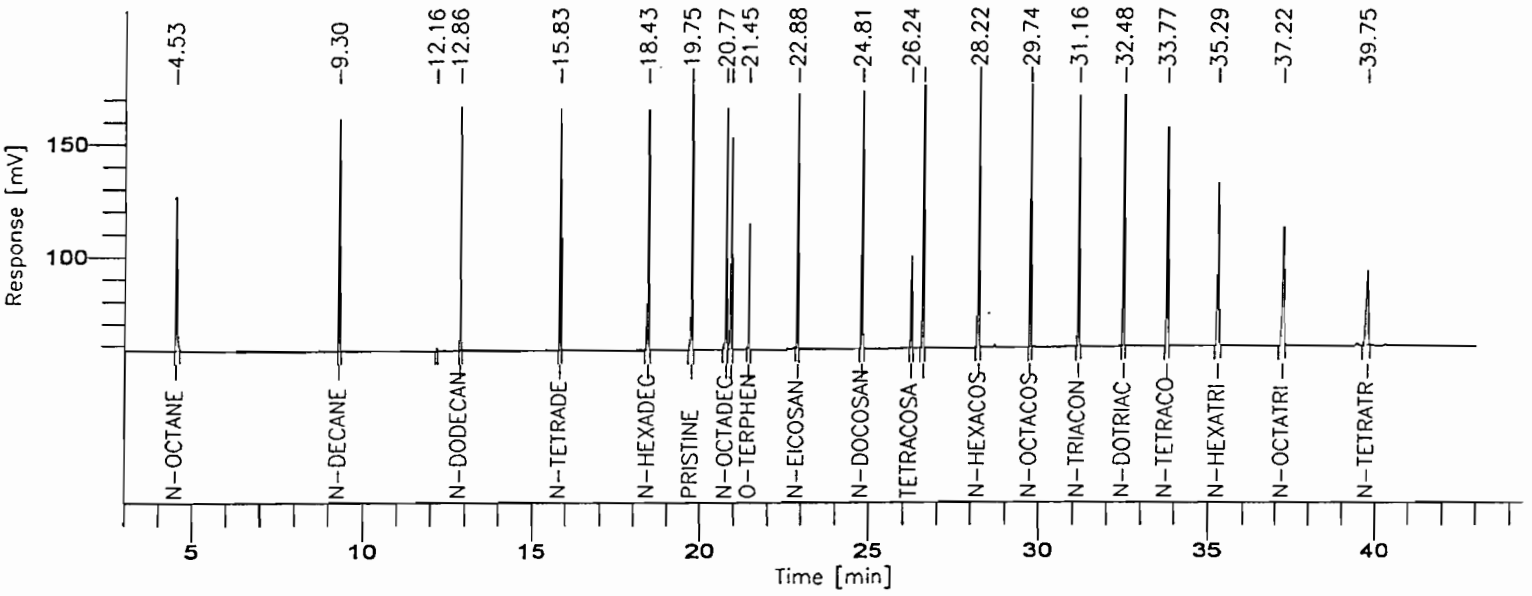
Sample Name : 100 PPM TRPH STD
FileName : C:\TC4\DATA\D090103.raw
Method : TRPH909
Start Time : 3.00 min
End Time : 45.00 min
Scale Factor: 1.0
Plot Offset: 48 mV

Sample #:
Date : 9/3/99 14:59
Time of Injection: 9/1/99 16:53
Low Point : 47.64 mV
High Point : 253.15 mV
Plot Scale: 205.5 mV



000027

Software Version: 4.1<1L22>
Date: 9/3/99 14:59
Sample Name : 50PPM TRPH STD
Data File : C:\TC4\DATA\D090104.RAW Date: 9/1/99 17:47
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 4 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/2 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

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Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.53	171995.20	69456.65	58.553	5855.304
2	N-DECANE	9.30	185224.00	104066.23	69.630	6963.007
3		12.16	2787.20	1620.44	0.003	0.279
4	N-DODECANE	12.86	188892.80	111804.12	70.108	7010.828
5	N-TETRADECANE	15.83	195516.80	109495.60	70.735	7073.543
6	N-HEXADECANE	18.43	204137.60	107174.75	70.593	7059.262
7	PRISTINE	19.75	234040.00	119194.49	63.124	6312.379
8	N-OCTADECANE	20.77	211516.03	107165.74	71.092	7109.185
9	PHYTANE	20.92	207658.37	94506.35	63.778	6377.764
10	O-TERPHENYL (SURROGATE	21.45	106428.80	56455.39	27.783	2778.332
11	N-EICOSANE	22.88	215520.00	113233.55	69.227	6922.745
12	N-DOCOSANE	24.81	226134.40	114784.14	69.647	6964.729
13	TETRACOSANE-d50 (SURRO	26.24	83888.00	41806.91	25.796	2579.633
14	N-TETRACOSANE	26.58	234540.80	119476.24	68.849	6884.936
15	N-HEXACOSANE	28.22	241817.60	120902.14	69.259	6925.918
16	N-OCTACOSANE	29.74	243251.20	118870.43	69.051	6905.103
17	N-TRIACONTANE	31.16	242150.40	111859.80	70.544	7054.441
18	N-DOTRIACONTANE	32.48	240518.40	113585.51	73.903	7390.313
19	N-TETRACONTANE	33.77	231915.20	97068.75	80.883	8088.289

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-HEXATRIACONTANE	35.29	222422.40	71987.01	71.866	7186.579
21	N-OCTATRIACONTANE	37.22	208496.00	52475.65	74.150	7414.981
22	N-TETRATRIACONTANE	39.75	178099.20	33131.43	76.705	7670.475
			4276950.40	1.99e+06	1385.280	138528.026

Report stored in ASCII file: C:\TC4\DATA\D090104.TXO

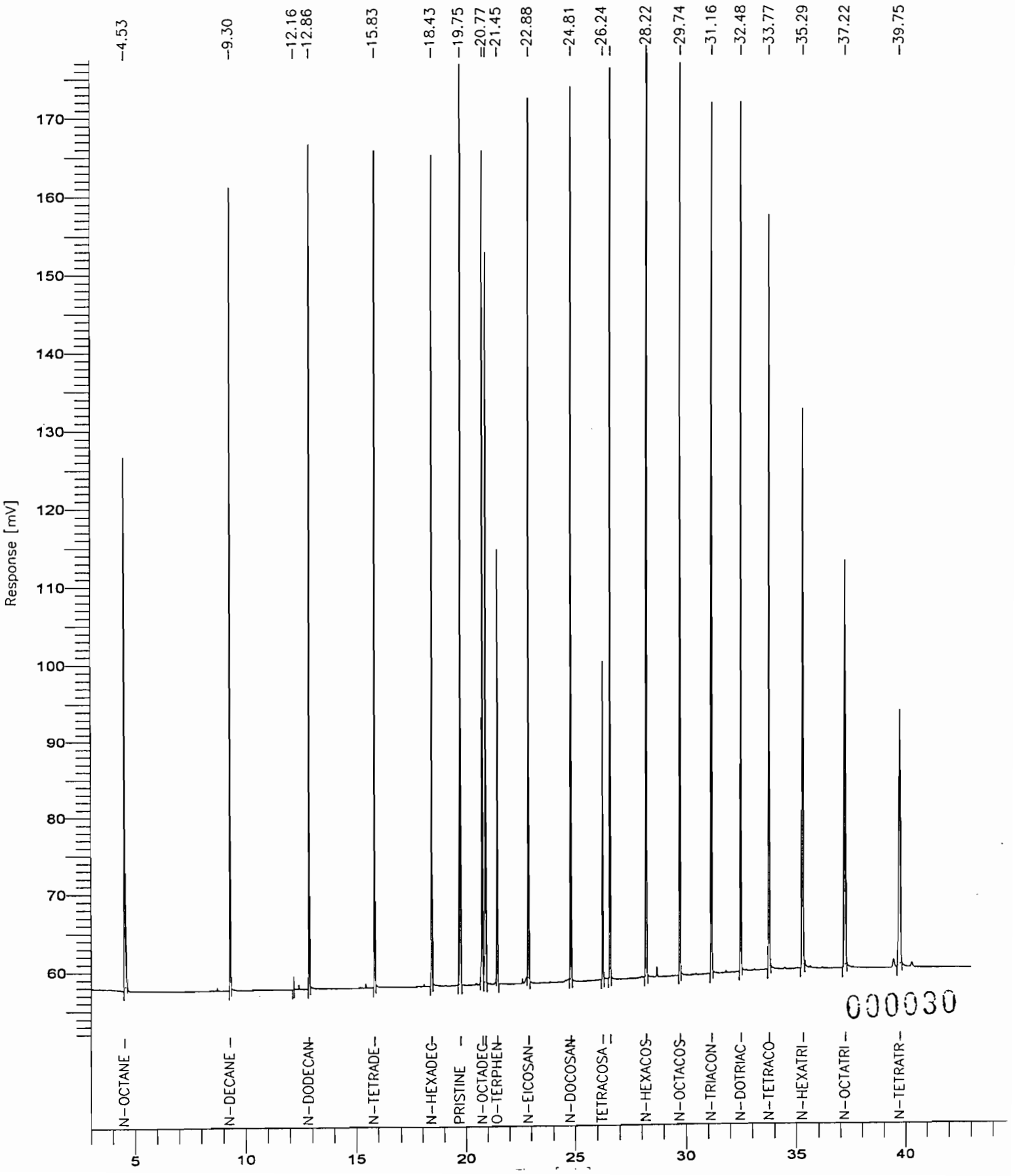
Chromatogram

Sample Name : 50PPM TRPH STD
FileName : C:\TC4\DATA\D090104.raw
Method : TRPH909
Start Time : 3.00 min
Scale Factor: 1.0

End Time : 45.00 min
Plot Offset: 52 mV

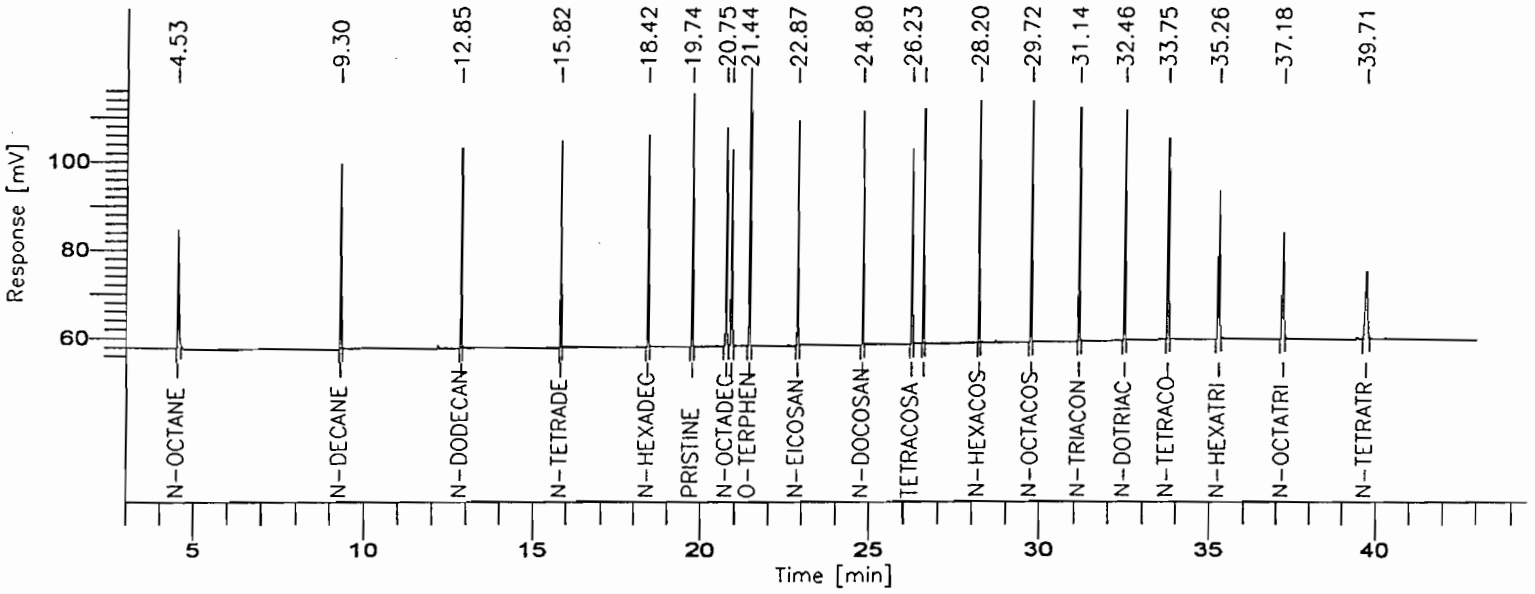
Sample #:
Date : 9/3/99 14:59
Time of Injection: 9/1/99 17:47
Low Point : 51.54 mV
Plot Scale: 125.9 mV

High Point : 177.47 mV



000030

Software Version: 4.1<1L22>
Date: 9/3/99 14:59
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D090105.RAW Date: 9/1/99 18:42
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 5 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/3 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

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Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.53	65064.00	26896.69	24.246	2424.591
2	N-DECANE	9.30	74272.00	41807.16	27.921	2792.060
3	N-DODECANE	12.85	76307.20	46310.57	28.322	2832.171
4	N-TETRADECANE	15.82	80067.20	47136.74	28.967	2896.727
5	N-HEXADECANE	18.42	85091.20	49142.57	29.425	2942.530
6	PRISTINE	19.73	101772.80	57706.03	27.450	2744.952
7	N-OCTADECANE	20.75	89320.00	49699.26	30.021	3002.101
8	PHYTANE	20.90	90774.40	44628.98	27.879	2787.933
9	O-TERPHENYL (SURROGATE	21.44	114059.20	60970.67	29.775	2977.525
10	N-EICOSANE	22.87	93888.00	51634.05	30.158	3015.788
11	N-DOCOSANE	24.80	97315.20	52891.99	29.972	2997.218
12	TETRACOSANE-d50 (SURRO	26.23	88072.00	44113.71	27.083	2708.294
13	N-TETRACOSANE	26.57	100614.40	54112.64	29.535	2953.532
14	N-HEXACOSANE	28.20	103494.40	55084.52	29.642	2964.192
15	N-OCTACOSANE	29.72	104128.00	54339.74	29.559	2955.852
16	N-TRIACONTANE	31.14	103481.60	53264.22	30.147	3014.675
17	N-DOTRIACONTANE	32.46	103027.20	51969.20	31.657	3165.676
18	N-TETRACONTANE	33.75	98817.60	45425.09	34.464	3446.369
19	N-HEXATRIACONTANE	35.26	94524.80	33678.80	32.698	3269.821

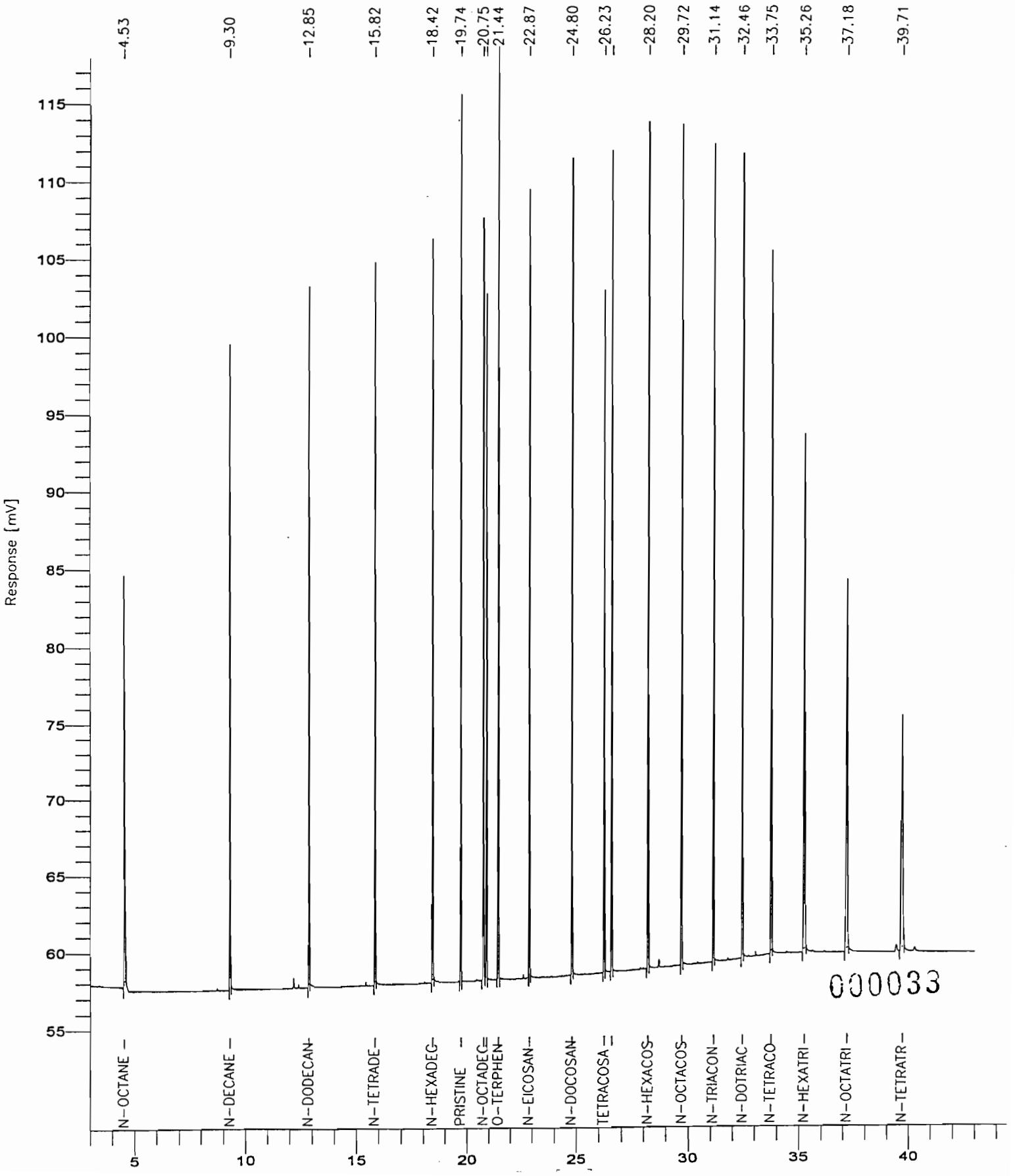
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTATRIACONTANE	37.18	88288.00	24202.45	34.007	3400.723
21	N-TETRATRIACONTANE	39.70	74112.00	15240.63	35.048	3504.849
			1926491.20	960255.71	627.976	62797.579

Report stored in ASCII file: C:\TC4\DATA\D090105.TX0

Chromatogram

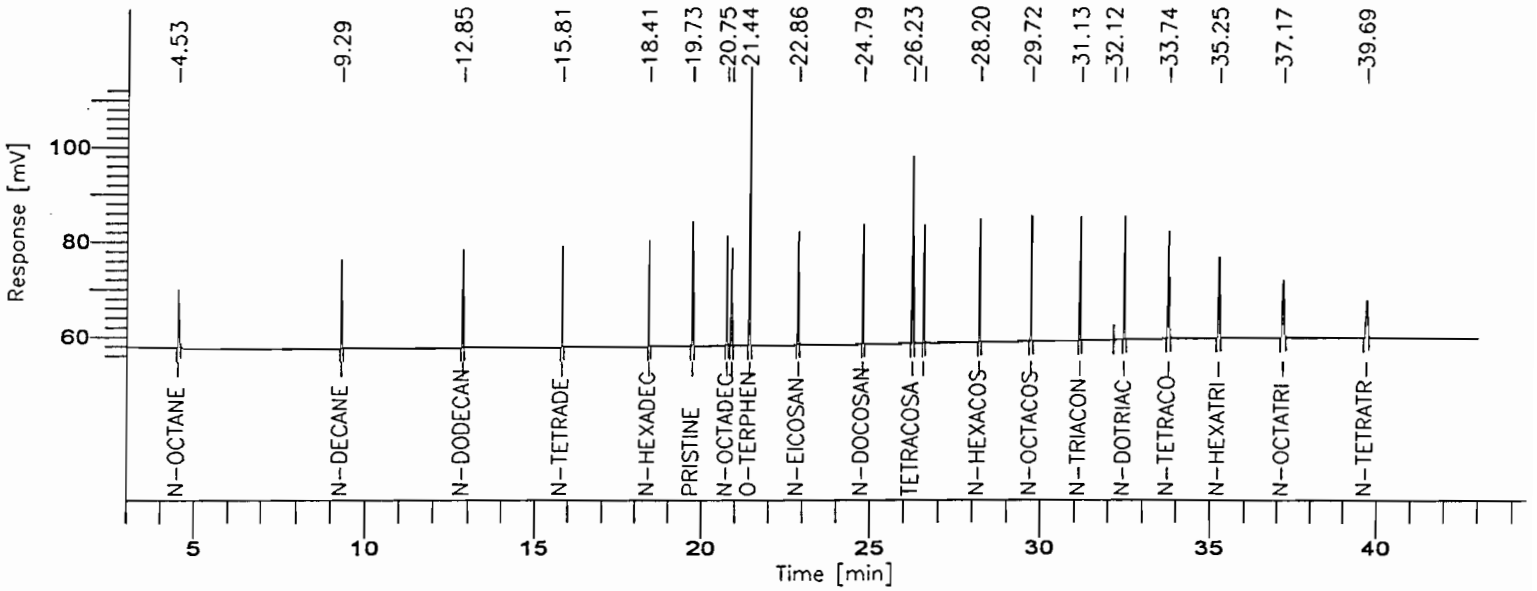
Sample Name : 20 PPM TRPH STD
FileName : C:\TC4\DATA\D090105.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 54 mV

Sample #:
Date : 9/3/99 14:59
Time of Injection: 9/1/99 18:42
Low Point : 54.48 mV High Point : 117.91 mV
Plot Scale: 63.4 mV



000033

Software Version: 4.1<1L22>
Date: 9/3/99 14:59
Sample Name : 10 PPM TRPH STD
Data File : C:\TC4\DATA\D090106.RAW Date: 9/1/99 19:37
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 6 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/4 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

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Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.53	28697.60	12029.40	12.578	1257.835
2	N-DECANE	9.29	33888.00	18919.33	12.739	1273.930
3	N-DODECANE	12.85	34152.00	20576.55	12.676	1267.564
4	N-TETRADECANE	15.81	35660.80	21149.61	12.902	1290.161
5	N-HEXADECANE	18.41	38211.20	22402.72	13.214	1321.378
6	PRISTINE	19.73	47292.80	26548.31	12.756	1275.552
7	N-OCTADECANE	20.75	40438.40	23263.05	13.592	1359.160
8	PHYTANE	20.90	42412.80	20465.96	13.026	1302.615
9	O-TERPHENYL (SURROGATE	21.44	103766.40	55707.80	27.088	2708.830
10	N-EICOSANE	22.86	42892.80	24151.58	13.778	1377.765
11	N-DOCOSANE	24.79	44812.80	24999.43	13.802	1380.193
12	TETRACOSANE-d50 (SURRO	26.23	79926.40	39792.12	24.578	2457.810
13	N-TETRACOSANE	26.56	46412.80	25005.00	13.624	1362.446
14	N-HEXACOSANE	28.20	48028.80	25753.24	13.756	1375.597
15	N-OCTACOSANE	29.72	48761.60	26307.39	13.842	1384.182
16	N-TRIACONTANE	31.13	49020.80	26114.66	14.281	1428.097
17		32.12	1129.60	3142.08	0.001	0.113
18	N-DOTRIACONTANE	32.46	49185.60	25784.53	15.113	1511.306
19	N-TETRACONTANE	33.74	47806.40	22320.63	16.673	1667.299

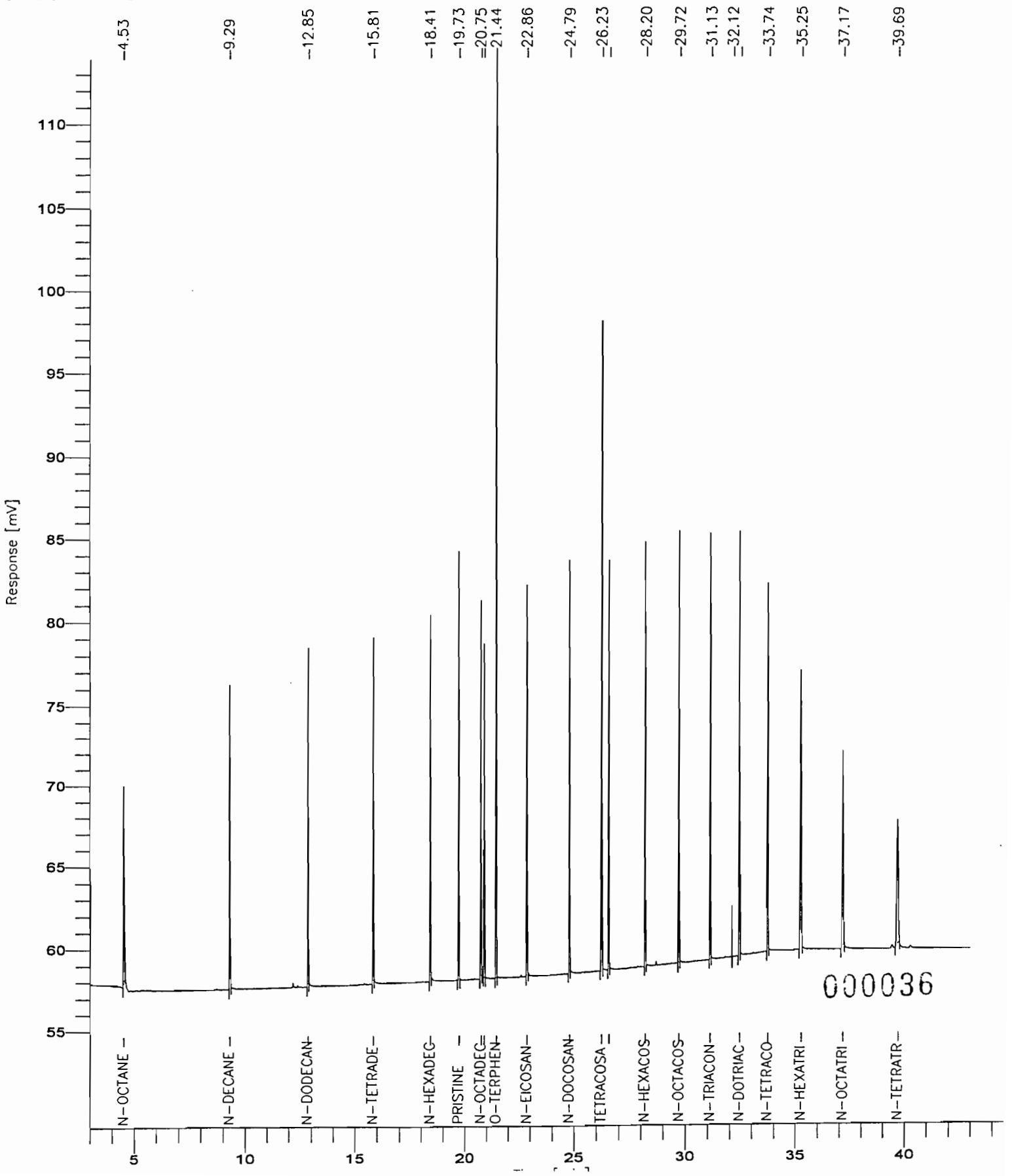
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-HEXATRIACONTANE	35.25	45995.20	16976.67	17.836	1783.642
21	N-OCTATRIACONTANE	37.17	42889.60	11958.00	18.847	1884.677
22	N-TETRATRIACONTANE	39.69	35158.40	7531.85	19.444	1944.406
			986540.80	500899.90	326.146	32614.557

Report stored in ASCII file: C:\TC4\DATA\D090106.TX0

Chromatogram

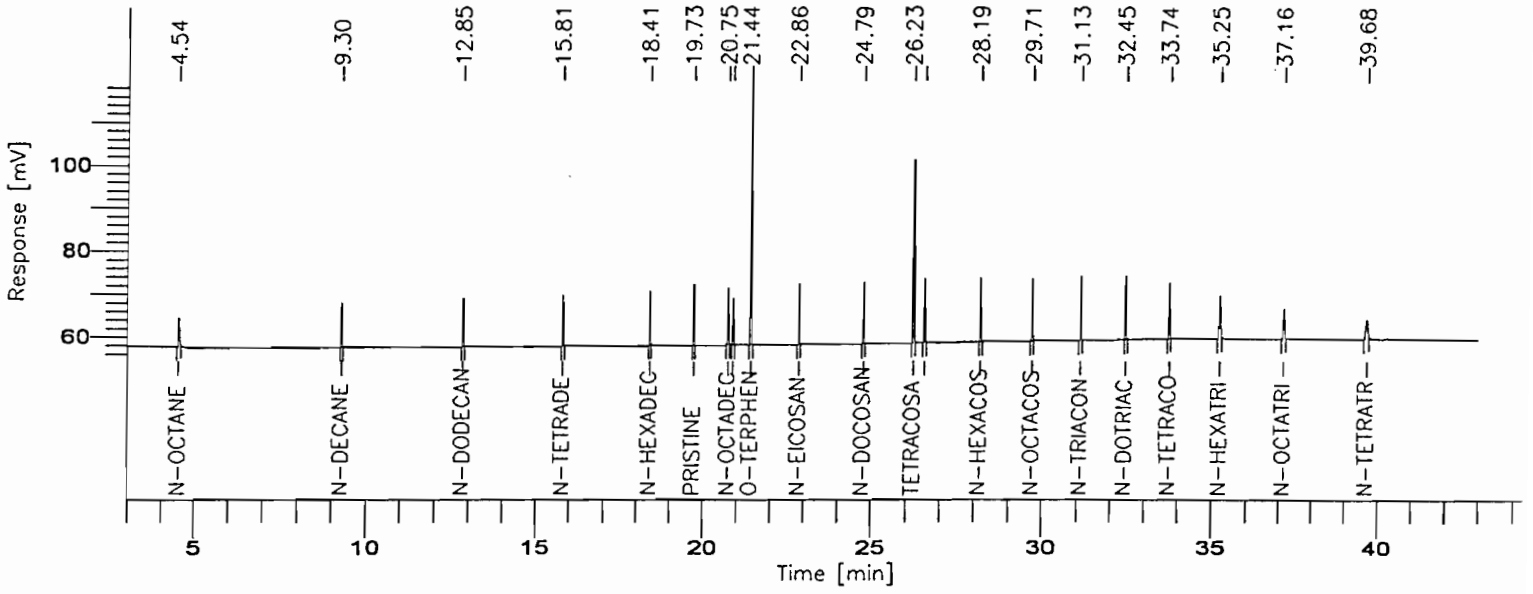
Sample Name : 10 PPM TRPH STD
FileName : C:\TC4\DATA\D090106.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 55 mV

Sample #: Page 1 of 1
Date : 9/3/99 14:59
Time of Injection: 9/1/99 19:37
Low Point : 54.68 mV High Point : 113.90 mV
Plot Scale: 59.2 mV



000036

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : 5 PPM TRPH STD
Data File : C:\TC4\DATA\D090107.RAW Date: 9/1/99 20:32
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 7 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/5 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000037

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.54	14934.40	6490.81	8.163	816.265
2	N-DECANE	9.29	18406.40	10363.17	6.919	691.940
3	N-DODECANE	12.85	18579.20	11180.42	6.896	689.574
4	N-TETRADECANE	15.81	19740.80	11713.72	7.142	714.196
5	N-HEXADECANE	18.41	21603.20	12621.09	7.471	747.058
6	PRISTINE	19.73	24251.20	13965.08	6.541	654.088
7	N-OCTADECANE	20.75	23225.60	13193.74	7.806	780.627
8	PHYTANE	20.90	21804.80	10795.59	6.697	669.686
9	O-TERPHENYL (SURROGATE	21.44	115849.60	61505.88	30.243	3024.263
10	N-EICOSANE	22.86	24785.60	13924.66	7.961	796.141
11	N-DOCOSANE	24.79	25776.00	14215.20	7.939	793.877
12	TETRACOSANE-d50 (SURRO	26.23	87755.20	43124.44	26.986	2698.552
13	N-TETRACOSANE	26.56	26772.80	14745.75	7.859	785.915
14	N-HEXACOSANE	28.19	27446.40	14938.96	7.861	786.095
15	N-OCTACOSANE	29.71	27824.00	14428.75	7.898	789.832
16	N-TRIACONTANE	31.13	28016.00	14918.02	8.162	816.175
17	N-DOTRIACONTANE	32.45	28076.80	14812.28	8.627	862.705
18	N-TETRACONTANE	33.74	27225.60	12775.28	9.495	949.522
19	N-HEXATRIACONTANE	35.25	26076.80	9785.61	11.737	1173.658

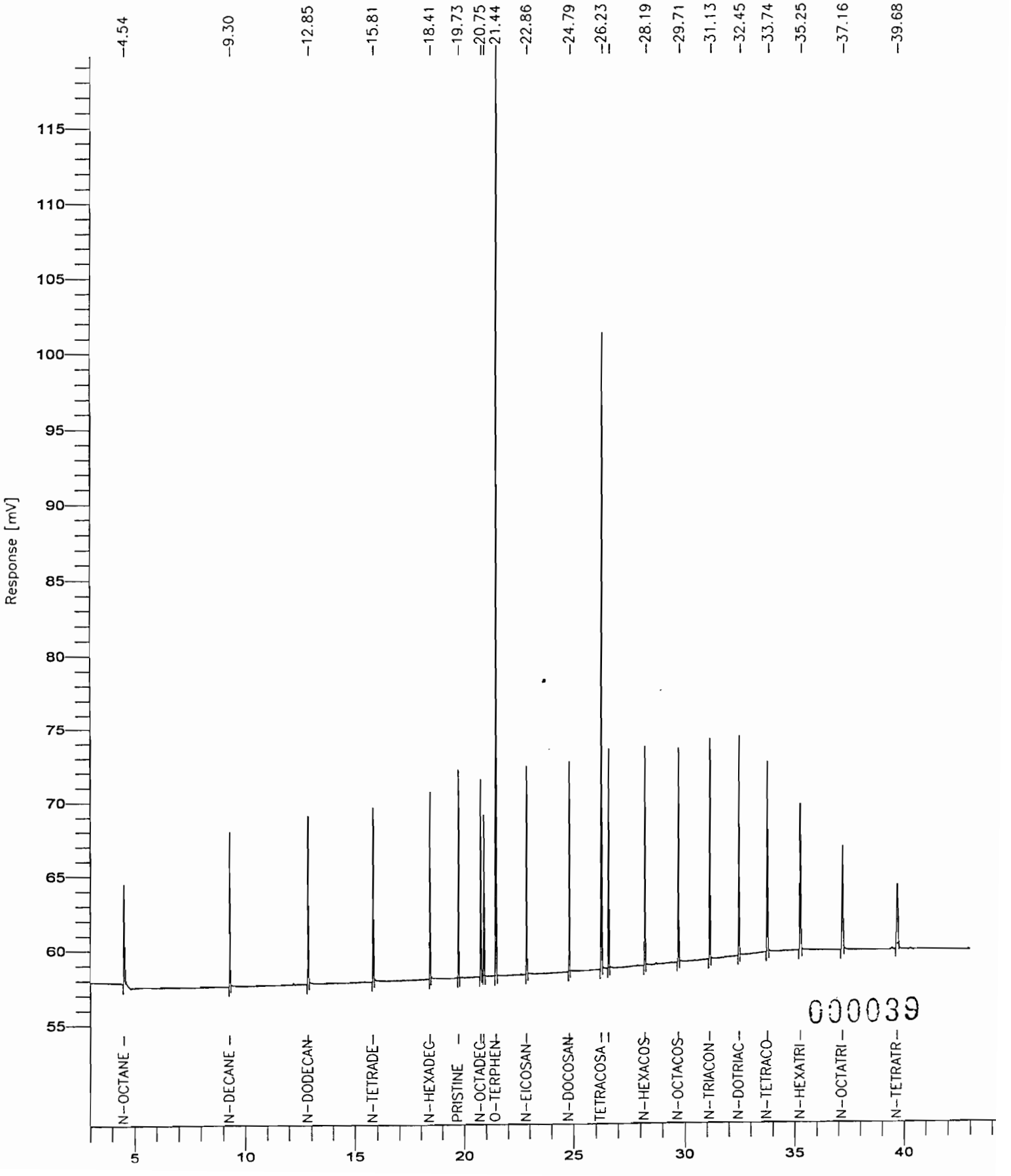
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTATRIACONTANE	37.16	23910.40	6842.74	12.509	1250.881
21	N-TETRATRIACONTANE	39.68	17832.00	3992.28	12.503	1250.328
			649892.80	330333.48	217.414	21741.377

Report stored in ASCII file: C:\TC4\DATA\D090107.TX0

Chromatogram

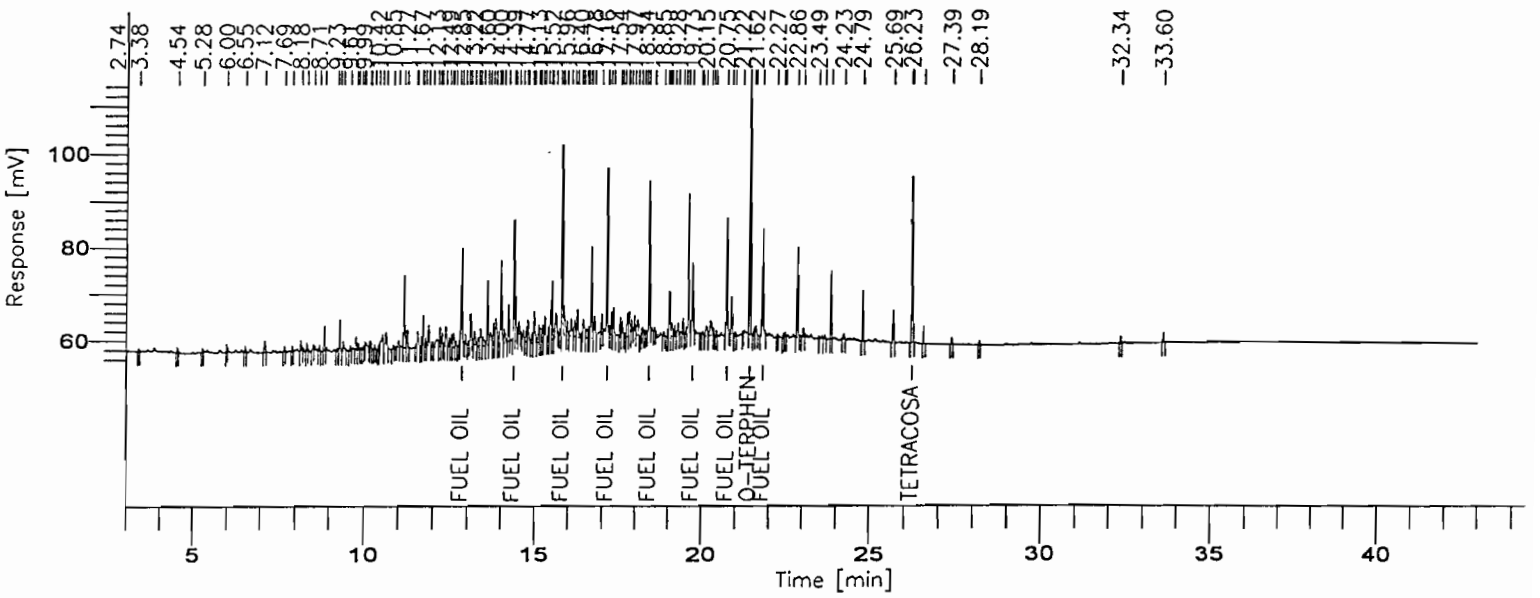
Sample Name : 5 PPM TRPH STD
FileName : C:\TC4\DATA\D090107.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 54 mV

Sample #: Page 1 of 1
Date : 9/3/99 15:00
Time of Injection: 9/1/99 20:32
Low Point : 54.35 mV High Point : 119.69 mV
Plot Scale: 65.3 mV



000039

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : 1000PPM # 2 F.O.STD
Data File : C:\TC4\DATA\D090108.RAW Date: 9/1/99 21:27
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 8 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/6 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000040

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		2.74	2438.40	1195.52	0.002	0.244
2		3.38	1022.40	629.77	0.001	0.102
3		4.54	1948.80	940.80	0.002	0.195
4		5.28	1724.80	878.10	0.002	0.172
5		6.00	2355.20	1323.18	0.002	0.236
6		6.55	2348.80	1215.78	0.002	0.235
7		7.12	6158.40	2442.22	0.006	0.616
8		7.69	1987.20	1092.25	0.002	0.199
9		7.92	2057.60	1082.92	0.002	0.206
10		8.18	4065.60	2144.21	0.004	0.407
11		8.35	3329.60	1744.62	0.003	0.333
12		8.53	1803.20	767.07	0.002	0.180
13		8.71	2299.20	1340.40	0.002	0.230
14		8.85	10236.80	5288.98	0.010	1.024
15		9.23	1648.90	789.60	0.002	0.165
16		9.30	12526.65	6715.19	0.013	1.253
17		9.40	5218.05	1955.19	0.005	0.522
18		9.61	1995.20	1045.73	0.002	0.200
19		9.77	4560.00	2762.80	0.005	0.456

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		9.84	2256.00	1361.68	0.002	0.226
21		9.92	1091.20	738.04	0.001	0.109
22		9.99	1277.51	666.39	0.001	0.128
23		10.03	1586.49	1156.62	0.002	0.159
24		10.16	2682.95	1656.76	0.003	0.268
25		10.20	3235.45	1805.03	0.003	0.324
26		10.31	1521.60	939.66	0.002	0.152
27		10.42	2674.31	1424.66	0.003	0.267
28		10.54	13641.42	3398.72	0.014	1.364
29		10.65	11455.48	3601.05	0.011	1.146
30		10.85	1460.80	843.73	0.001	0.146
31		10.99	3676.80	1366.25	0.004	0.368
32		11.17	30212.90	15477.92	0.030	3.021
33		11.27	7535.90	3869.78	0.008	0.754
34		11.50	1610.80	820.00	0.002	0.161
35		11.55	10210.00	3581.20	0.010	1.021
36		11.67	5283.20	2516.25	0.005	0.528
37		11.72	12318.40	6858.05	0.012	1.232
38		11.80	3472.00	1970.70	0.003	0.347
39		11.89	9228.80	4293.43	0.009	0.923
40		12.00	2027.20	1168.18	0.002	0.203
41		12.13	9096.00	1794.97	0.009	0.910
42		12.21	7663.23	4132.88	0.008	0.766
43		12.27	4104.77	2688.94	0.004	0.410
44		12.39	11561.60	4161.87	0.012	1.156
45		12.49	4905.60	2006.64	0.005	0.491
46		12.55	4844.93	2579.80	0.005	0.484
47		12.60	7819.89	2889.18	0.008	0.782
48		12.68	2429.58	1250.49	0.002	0.243
49		12.77	2347.10	1342.95	0.002	0.235
50	FUEL OIL 2 #1	12.85	43256.10	20561.71	0.043	4.326
51		12.96	3382.40	2233.94	0.003	0.338
52		13.05	900.80	523.30	0.001	0.090
53		13.10	8883.20	5433.94	0.009	0.888
54		13.22	8024.00	3069.23	0.008	0.802
55		13.34	5647.29	1796.34	0.006	0.565
56		13.39	12175.09	3811.48	0.012	1.218
57		13.48	5803.43	2039.75	0.006	0.580
58		13.60	27340.57	13864.91	0.027	2.734
59		13.68	10857.97	2667.42	0.011	1.086
60		13.78	10115.74	4615.53	0.010	1.012
61		13.85	16880.46	5337.04	0.017	1.688
62		13.95	6237.94	2852.17	0.006	0.624
63		14.00	44712.91	17759.37	0.045	4.471
64		14.10	9431.80	3062.23	0.009	0.943
65		14.22	14208.00	7803.55	0.014	1.421
66	FUEL OIL 2 #2	14.39	42292.18	25541.71	0.042	4.229
67		14.44	12946.22	7729.53	0.013	1.295
68		14.54	5849.60	2785.38	0.006	0.585
69		14.67	3580.80	2001.16	0.004	0.358

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		14.77	8637.47	3330.26	0.009	0.864
71		14.81	10557.73	4685.85	0.011	1.056
72		14.93	5460.52	2262.51	0.005	0.546
73		14.99	17691.48	6614.22	0.018	1.769
74		15.13	9585.36	3773.29	0.010	0.959
75		15.18	10019.13	3144.01	0.010	1.002
76		15.25	8605.70	3724.47	0.009	0.861
77		15.31	12024.17	5366.63	0.012	1.202
78		15.41	6315.97	2894.72	0.006	0.632
79		15.48	17240.85	7040.70	0.017	1.724
80		15.52	21920.82	12763.87	0.022	2.192
81		15.64	14931.20	4685.89	0.015	1.493
82		15.76	2652.94	1626.78	0.003	0.265
83	FUEL OIL 2 #3	15.82	74753.70	41093.36	0.075	7.475
84		15.87	16460.80	6201.10	0.016	1.646
85		15.96	7389.83	3235.11	0.007	0.739
86		16.09	12478.72	3867.24	0.012	1.248
87		16.20	11219.24	3682.82	0.011	1.122
88		16.28	15131.16	5942.49	0.015	1.513
89		16.40	1728.74	1148.90	0.002	0.173
90		16.45	13485.43	3994.06	0.013	1.349
91		16.54	7185.23	2240.10	0.007	0.719
92		16.61	5038.59	2574.05	0.005	0.504
93		16.69	41037.51	19433.18	0.041	4.104
94		16.78	11770.90	4747.25	0.012	1.177
95		16.99	8214.40	4240.83	0.008	0.821
96	FUEL OIL 2 #4	17.16	62264.00	35525.42	0.062	6.226
97		17.20	2339.20	1643.24	0.002	0.234
98		17.27	10490.94	4928.30	0.010	1.049
99		17.34	12005.06	5953.41	0.012	1.201
##		17.54	7408.00	4093.51	0.007	0.741
##		17.59	5324.80	2897.66	0.005	0.532
##		17.67	1294.40	979.63	0.001	0.129
##		17.76	15268.63	4987.97	0.015	1.527
##		17.81	11576.17	4929.42	0.012	1.158
##		17.89	3040.00	2546.74	0.003	0.304
##		17.97	5276.70	3143.41	0.005	0.528
##		18.07	10254.50	3433.52	0.010	1.025
##		18.18	1529.60	854.58	0.002	0.153
##		18.27	2265.60	1182.94	0.002	0.227
##		18.33	1425.80	862.62	0.001	0.143
##	FUEL OIL 2 #5	18.42	57300.60	32479.43	0.057	5.730
##		18.58	1206.40	806.74	0.001	0.121
##		18.85	2737.60	983.50	0.003	0.274
##		18.98	3611.63	1892.89	0.004	0.361
##		19.04	23245.85	9734.29	0.023	2.325
##		19.10	8689.72	2936.20	0.009	0.869
##		19.19	3937.88	2248.18	0.004	0.394
##		19.28	5966.12	2604.11	0.006	0.597
##		19.44	5833.60	3330.11	0.006	0.583

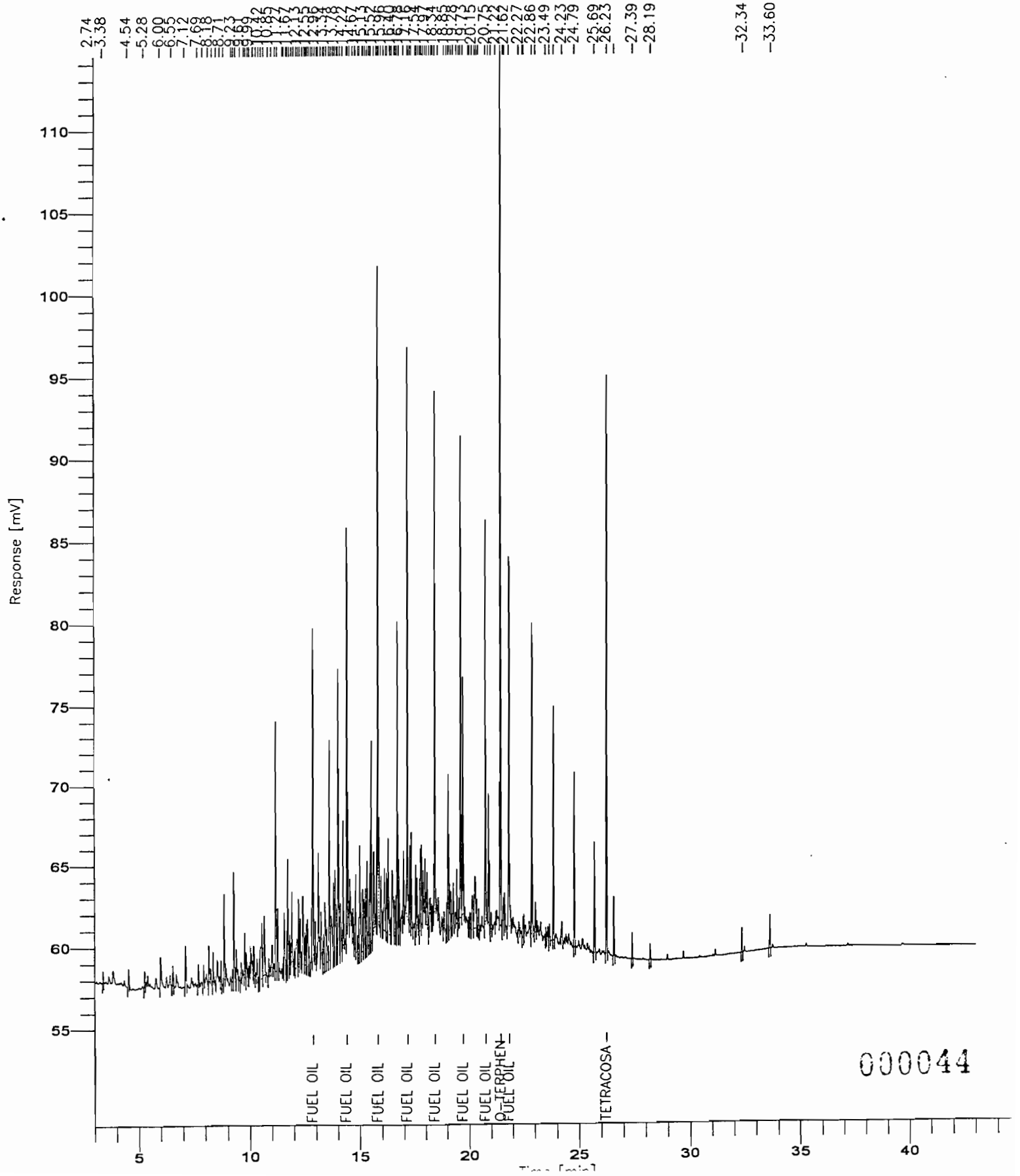
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		19.54	2833.19	1366.53	0.003	0.283
##		19.61	55084.68	29905.42	0.055	5.508
##	FUEL OIL 2 #6	19.73	32155.73	14848.66	0.032	3.216
##		19.97	1564.62	711.63	0.002	0.156
##		20.03	2464.18	1041.25	0.002	0.246
##		20.15	8345.14	2053.63	0.008	0.835
##		20.28	13337.14	3144.14	0.013	1.334
##		20.34	2756.11	1750.25	0.003	0.276
##		20.44	2020.80	1279.43	0.002	0.202
##	FUEL OIL 2 #7	20.75	46412.80	24655.34	0.046	4.641
##		20.90	17440.00	8079.70	0.017	1.744
##		21.00	2844.80	1099.06	0.003	0.284
##		21.22	1052.80	607.46	0.001	0.105
##	O-TERPHENYL (SURROGATE	21.44	101616.00	54100.24	26.527	2652.694
##		21.57	5012.11	1857.37	0.005	0.501
##		21.62	3989.49	2003.13	0.004	0.399
##	FUEL OIL 2 #8	21.83	49193.60	23009.99	0.049	4.919
##		22.27	1120.00	576.44	0.001	0.112
##		22.44	2623.42	1264.41	0.003	0.262
##		22.50	2192.58	1258.53	0.002	0.219
##		22.86	36358.40	19482.49	0.036	3.636
##		23.03	3920.00	1829.96	0.004	0.392
##		23.49	1027.20	664.57	0.001	0.103
##		23.66	2236.80	949.43	0.002	0.224
##		23.85	25875.20	14553.66	0.026	2.588
##		24.23	2576.00	1007.00	0.003	0.258
##		24.79	19104.00	10801.18	0.019	1.910
##		25.69	12758.40	6812.38	0.013	1.276
##	TETRACOSANE-D50 (SURRO	26.23	73641.60	36072.75	22.645	2264.546
##		26.56	6595.20	3602.36	0.007	0.660
##		27.39	2814.40	1550.67	0.003	0.281
##		28.19	1734.40	950.06	0.002	0.173
##		32.34	2918.40	1536.95	0.003	0.292
##		33.60	4179.20	2057.70	0.004	0.418
			1731112.00	828981.08	50.728	5072.826

Report stored in ASCII file: C:\TC4\DATA\D090108.TXO

Chromatogram

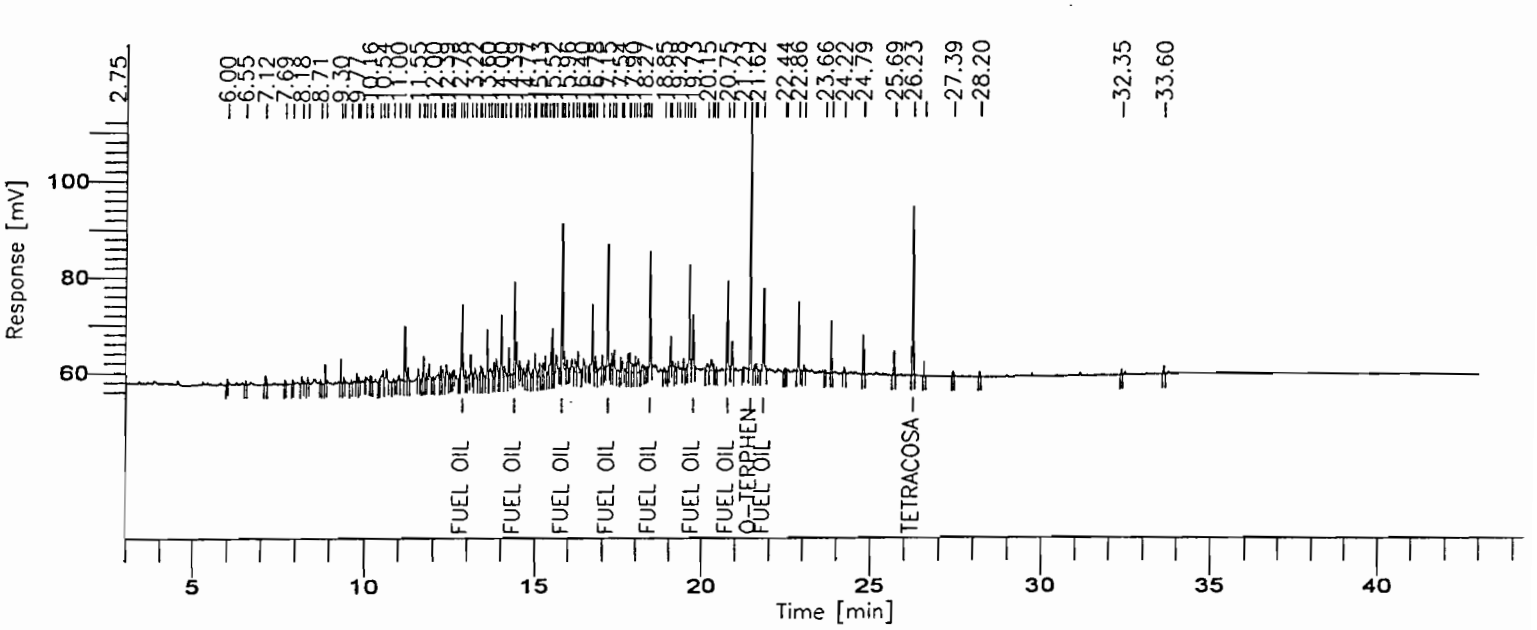
Sample Name : 1000PPM # 2 F.O.STD
FileName : C:\TC4\DATA\D090108.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 55 mV

Sample #:
Date : 9/3/99 15:00
Time of Injection: 9/1/99 21:27
Low Point : 54.61 mV High Point : 114.47 mV
Plot Scale: 59.9 mV



000044

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : 750PPM # 2 F.O STD
Data File : C:\TC4\DATA\D090109.RAW Date: 9/1/99 22:22
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 9 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/7 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000045

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		2.74	1780.80	881.78	0.002	0.178
2		6.00	1728.00	963.75	0.002	0.173
3		6.55	1644.80	867.14	0.002	0.164
4		7.12	4412.80	1759.82	0.004	0.441
5		7.69	1302.40	754.86	0.001	0.130
6		7.92	1334.40	759.66	0.001	0.133
7		8.18	2880.00	1517.97	0.003	0.288
8		8.35	2424.00	1283.75	0.002	0.242
9		8.71	1644.80	959.09	0.002	0.164
10		8.86	7507.20	3867.29	0.008	0.751
11		9.30	8905.60	5002.62	0.009	0.891
12		9.40	2145.60	1319.21	0.002	0.215
13		9.61	1481.60	765.77	0.001	0.148
14		9.77	3363.20	2058.89	0.003	0.336
15		9.84	1665.60	1023.71	0.002	0.167
16		10.03	924.80	744.33	0.001	0.092
17		10.16	2201.43	1248.49	0.002	0.220
18		10.20	2227.37	1356.85	0.002	0.223
19		10.42	1951.62	1039.69	0.002	0.195

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		10.54	9804.96	2491.62	0.010	0.980
21		10.65	7688.22	2601.09	0.008	0.769
22		10.85	1390.40	691.08	0.001	0.139
23		11.00	2606.40	991.18	0.003	0.261
24		11.17	22307.20	11480.71	0.022	2.231
25		11.27	5686.40	2900.42	0.006	0.569
26		11.55	5030.40	2236.56	0.005	0.503
27		11.67	3902.05	1871.86	0.004	0.390
28		11.72	9105.95	5128.63	0.009	0.911
29		11.80	2518.40	1441.19	0.003	0.252
30		11.89	6806.40	3210.71	0.007	0.681
31		12.00	1513.60	874.55	0.002	0.151
32		12.21	5956.77	3054.45	0.006	0.596
33		12.27	4866.82	2206.96	0.005	0.487
34		12.39	8882.01	3152.85	0.009	0.888
35		12.49	2861.77	1296.05	0.003	0.286
36		12.55	2143.03	1440.45	0.002	0.214
37		12.60	1734.40	1083.92	0.002	0.173
38		12.77	1832.45	1082.01	0.002	0.183
39	FUEL OIL 2 #1	12.85	35281.18	15594.96	0.035	3.528
40		12.96	2947.17	1814.16	0.003	0.295
41		13.10	6614.40	4064.28	0.007	0.661
42		13.22	5963.20	2292.47	0.006	0.596
43		13.34	4198.91	1305.48	0.004	0.420
44		13.39	9039.85	2786.79	0.009	0.904
45		13.48	4270.17	1546.79	0.004	0.427
46		13.60	20325.03	10276.53	0.020	2.033
47		13.68	8099.83	1996.87	0.008	0.810
48		13.78	7557.92	3386.30	0.008	0.756
49		13.85	12549.94	3955.92	0.013	1.255
50		13.95	4661.79	2110.08	0.005	0.466
51		14.00	33088.15	12980.12	0.033	3.309
52		14.10	7082.00	2341.01	0.007	0.708
53		14.22	10550.40	5773.32	0.011	1.055
54	FUEL OIL 2 #2	14.39	32701.40	19333.04	0.033	3.270
55		14.44	14610.60	6588.53	0.015	1.461
56		14.54	3299.20	1841.90	0.003	0.330
57		14.67	2672.00	1497.23	0.003	0.267
58		14.77	6530.60	2492.57	0.007	0.653
59		14.80	7847.00	3499.31	0.008	0.785
60		14.93	4038.21	1685.40	0.004	0.404
61		14.99	13132.99	4907.16	0.013	1.313
62		15.13	7161.06	2773.66	0.007	0.716
63		15.18	7407.39	2298.66	0.007	0.741
64		15.25	6404.12	2786.75	0.006	0.640
65		15.31	8635.37	4060.79	0.009	0.864
66		15.41	4913.06	2130.55	0.005	0.491
67		15.48	12860.46	5260.05	0.013	1.286
68		15.52	16244.15	9601.65	0.016	1.624
69		15.62	12027.20	3600.39	0.012	1.203

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		15.76	1828.05	1119.03	0.002	0.183
71	FUEL OIL 2 #3	15.82	55654.71	30852.49	0.056	5.565
72		15.87	11097.60	4184.51	0.011	1.110
73		15.96	4096.44	2117.61	0.004	0.410
74		16.09	5960.00	2414.11	0.006	0.596
75		16.20	8271.88	2718.47	0.008	0.827
76		16.28	11220.92	4325.02	0.011	1.122
77		16.40	912.00	676.36	0.001	0.091
78		16.45	4947.20	2242.80	0.005	0.495
79		16.54	1305.60	738.00	0.001	0.131
80		16.61	1803.02	1171.98	0.002	0.180
81		16.69	28219.38	13959.99	0.028	2.822
82		16.78	8344.00	3424.98	0.008	0.834
83		16.99	5926.40	3026.46	0.006	0.593
84	FUEL OIL 2 #4	17.15	43107.20	25586.18	0.043	4.311
85		17.27	7695.48	3619.76	0.008	0.770
86		17.34	9040.52	4312.21	0.009	0.904
87		17.54	5475.97	3021.12	0.005	0.548
88		17.59	3872.83	2131.00	0.004	0.387
89		17.76	12555.76	3980.44	0.013	1.256
90		17.81	11038.09	4214.75	0.011	1.104
91		17.90	7845.19	1944.95	0.008	0.785
92		17.97	8425.93	3484.19	0.008	0.843
93		18.07	10400.62	2961.15	0.010	1.040
94		18.21	4816.88	1257.22	0.005	0.482
95		18.27	1754.32	873.58	0.002	0.175
96		18.34	942.40	576.44	0.001	0.094
97	FUEL OIL 2 #5	18.42	42537.60	24165.75	0.043	4.254
98		18.85	1849.60	685.71	0.002	0.185
99		18.98	1676.80	986.75	0.002	0.168
##		19.04	12001.60	6182.10	0.012	1.200
##		19.19	2856.27	1577.41	0.003	0.286
##		19.28	3764.53	1800.93	0.004	0.376
##		19.44	4299.20	2431.42	0.004	0.430
##		19.54	1627.53	878.87	0.002	0.163
##		19.61	40672.78	21905.09	0.041	4.067
##	FUEL OIL 2 #6	19.73	24014.88	11366.98	0.024	2.401
##		20.15	6139.20	1486.88	0.006	0.614
##		20.28	9747.20	2321.43	0.010	0.975
##		20.34	1979.20	1306.52	0.002	0.198
##		20.44	1545.60	963.39	0.002	0.155
##	FUEL OIL 2 #7	20.75	35120.00	18689.40	0.035	3.512
##		20.90	13076.80	6018.65	0.013	1.308
##		21.23	865.60	441.59	0.001	0.087
##	O-TERPHENYL (SURROGATE	21.44	99180.80	52876.13	25.891	2589.123
##		21.57	3703.31	1321.96	0.004	0.370
##		21.62	2837.49	1424.48	0.003	0.284
##	FUEL OIL 2 #8	21.83	36675.20	17102.33	0.037	3.668
##		22.44	1975.27	932.86	0.002	0.198
##		22.49	1663.13	944.29	0.002	0.166

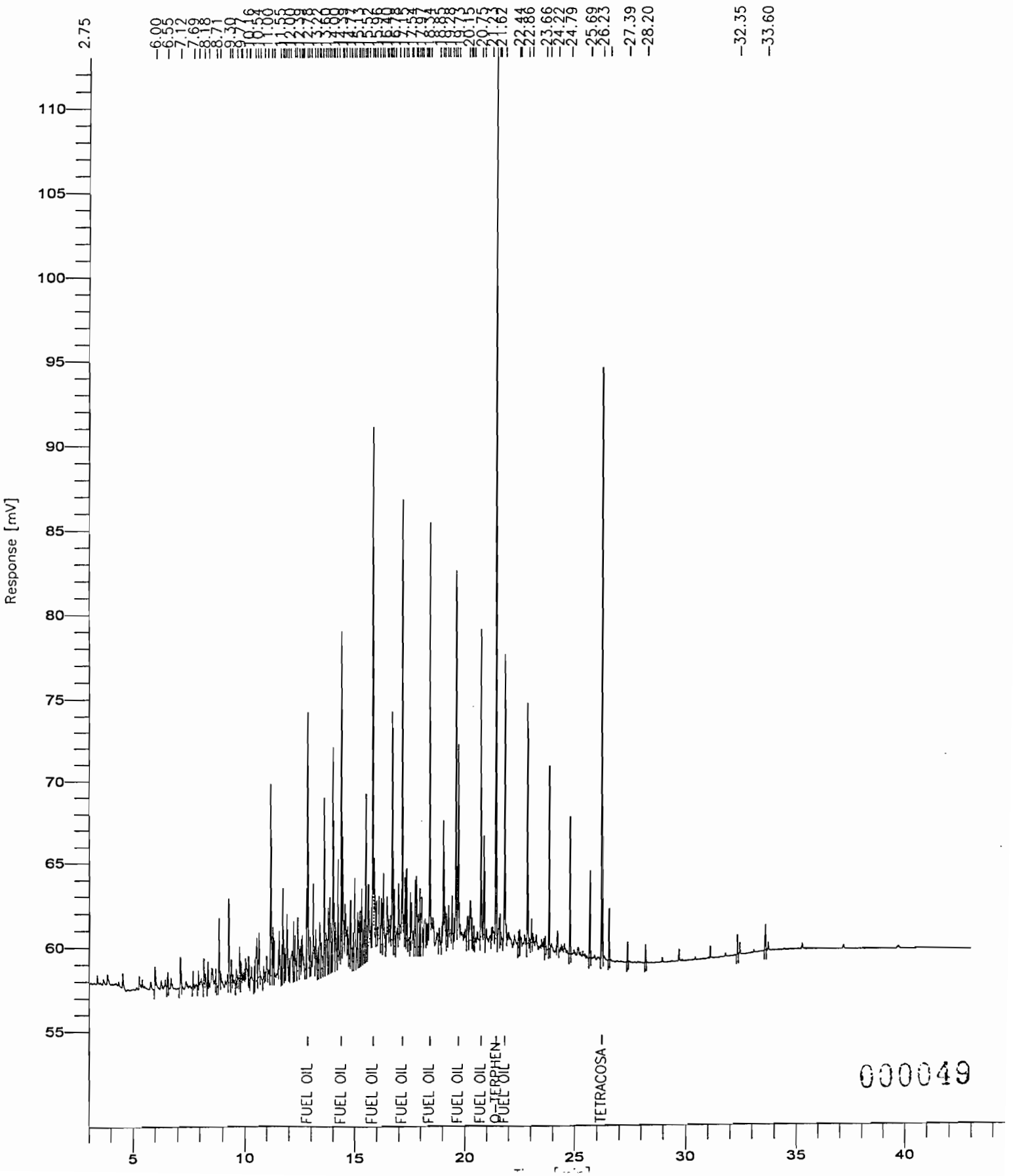
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		22.86	27417.60	14706.29	0.027	2.742
##		23.03	2876.80	1376.90	0.003	0.288
##		23.66	1556.80	690.67	0.002	0.156
##		23.85	19366.40	11006.76	0.019	1.937
##		24.22	2396.80	932.97	0.002	0.240
##		24.79	14806.40	8239.96	0.015	1.481
##		25.69	9528.00	5151.55	0.010	0.953
##	TETRACOSANE-D50 (SURRO	26.23	72321.60	35909.56	22.240	2223.955
##		26.56	5417.60	3024.59	0.005	0.542
##		27.39	2028.80	1140.68	0.002	0.203
##		28.19	1862.40	1023.56	0.002	0.186
##		32.34	2134.40	1167.23	0.002	0.213
##		33.60	3148.80	1513.76	0.003	0.315
			1282108.80	618623.90	49.241	4924.139

Report stored in ASCII file: C:\TC4\DATA\D090109.TX0

Chromatogram

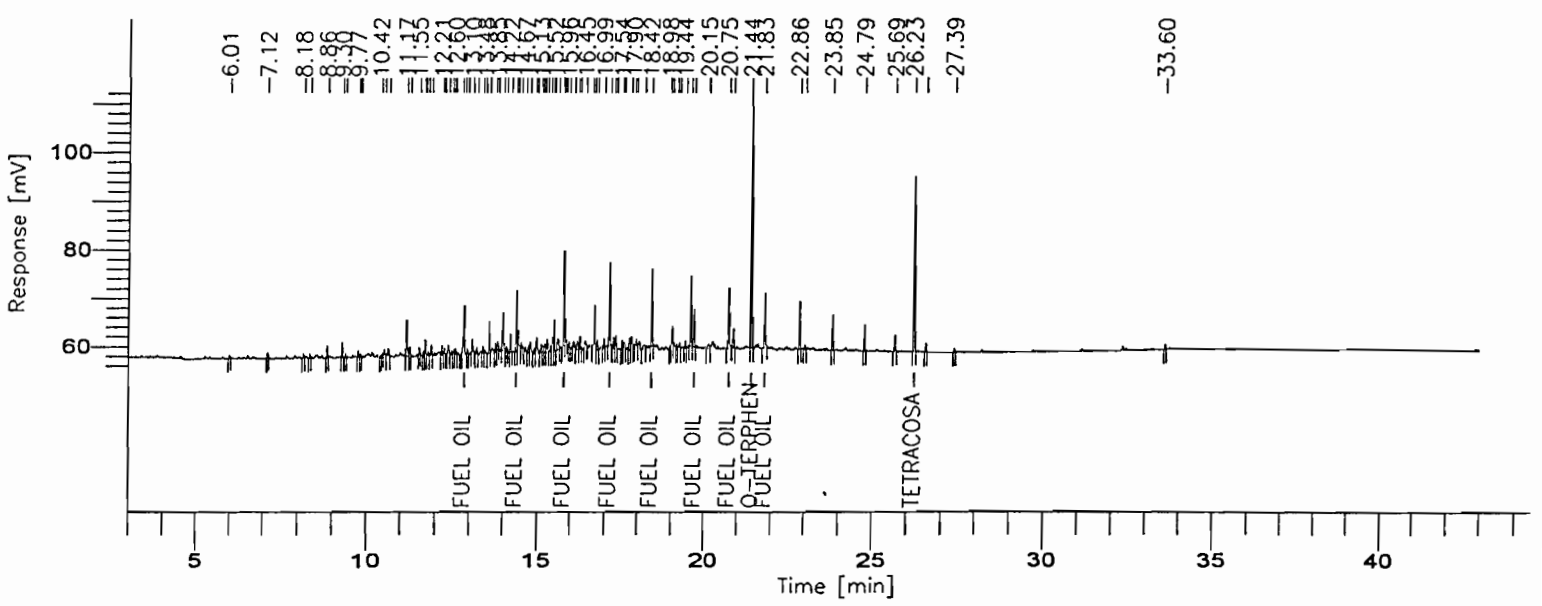
Sample Name : 750PPM # 2 F.O STD
FileName : C:\TC4\DATA\D090109.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 55 mV

Sample #:
Date : 9/3/99 15:00
Time of Injection: 9/1/99 22:22
Low Point : 54.67 mV High Point : 112.96 mV



000049

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : 500 PPM # 2 F.O. STD
Data File : C:\TC4\DATA\D090110.RAW Date: 9/1/99 23:17
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 10 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/8 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000050

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		6.01	1132.80	619.36	0.001	0.113
2		7.12	1643.20	850.54	0.002	0.164
3		8.18	1521.60	880.41	0.002	0.152
4		8.35	1408.00	788.17	0.001	0.141
5		8.86	4785.60	2485.04	0.005	0.479
6		9.30	5492.80	3088.42	0.005	0.549
7		9.40	1352.00	830.53	0.001	0.135
8		9.77	2259.20	1371.04	0.002	0.226
9		9.84	1107.20	683.98	0.001	0.111
10		10.42	886.40	547.00	0.001	0.089
11		10.54	2272.00	1191.41	0.002	0.227
12		10.65	3340.80	1462.49	0.003	0.334
13		11.17	14398.86	7343.34	0.014	1.440
14		11.27	3623.54	1878.70	0.004	0.362
15		11.55	2019.20	1150.56	0.002	0.202
16		11.67	2563.81	1194.07	0.003	0.256
17		11.72	5941.02	3346.42	0.006	0.594
18		11.80	1639.18	921.50	0.002	0.164
19		11.89	4128.00	2018.05	0.004	0.413

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		12.21	3596.87	1907.85	0.004	0.360
21		12.27	2031.93	1313.11	0.002	0.203
22		12.39	3203.20	1501.90	0.003	0.320
23		12.49	2117.05	914.26	0.002	0.212
24		12.55	1942.40	1121.75	0.002	0.194
25		12.60	2865.35	1214.45	0.003	0.287
26		12.77	1208.36	713.61	0.001	0.121
27	FUEL OIL 2 #1	12.85	22531.13	10098.63	0.023	2.253
28		12.96	1774.11	1147.64	0.002	0.177
29		13.10	4308.80	2678.76	0.004	0.431
30		13.22	3033.60	1336.15	0.003	0.303
31		13.39	4170.54	1504.00	0.004	0.417
32		13.48	2130.26	838.53	0.002	0.213
33		13.60	12070.40	6479.02	0.012	1.207
34		13.78	3276.80	1814.61	0.003	0.328
35		13.85	2580.80	1530.44	0.003	0.258
36		14.00	17753.60	7723.32	0.018	1.775
37		14.10	2313.60	1137.68	0.002	0.231
38		14.22	6872.00	3662.44	0.007	0.687
39	FUEL OIL 2 #2	14.38	21334.00	12518.79	0.021	2.133
40		14.44	9712.40	4302.24	0.010	0.971
41		14.54	1984.00	1151.08	0.002	0.198
42		14.67	1742.40	982.43	0.002	0.174
43		14.77	3978.90	1495.06	0.004	0.398
44		14.80	3761.90	2050.20	0.004	0.376
45		14.93	2677.46	1112.52	0.003	0.268
46		14.99	8640.94	3228.85	0.009	0.864
47		15.13	3510.65	1634.64	0.004	0.351
48		15.18	4380.34	1350.33	0.004	0.438
49		15.24	3794.74	1696.67	0.004	0.379
50		15.31	5225.35	2574.65	0.005	0.523
51		15.41	2765.05	1338.29	0.003	0.277
52		15.48	8543.09	3471.13	0.009	0.854
53		15.52	10654.38	6384.42	0.011	1.065
54		15.64	6707.20	2067.57	0.007	0.671
55		15.76	774.40	591.09	0.001	0.077
56	FUEL OIL 2 #3	15.81	32371.78	19367.67	0.032	3.237
57		15.87	2601.02	1714.18	0.003	0.260
58		15.96	1980.80	1224.62	0.002	0.198
59		16.09	2566.40	1339.78	0.003	0.257
60		16.20	5211.20	1759.39	0.005	0.521
61		16.28	5657.60	2644.58	0.006	0.566
62		16.45	2836.80	1353.75	0.003	0.284
63		16.61	1141.81	739.76	0.001	0.114
64		16.69	18616.59	9202.60	0.019	1.862
65		16.77	5443.20	2215.03	0.005	0.544
66		16.99	3846.40	1921.22	0.004	0.385
67	FUEL OIL 2 #4	17.15	28457.60	17160.40	0.028	2.846
68		17.27	4816.00	2291.22	0.005	0.482
69		17.34	5184.00	2682.76	0.005	0.518

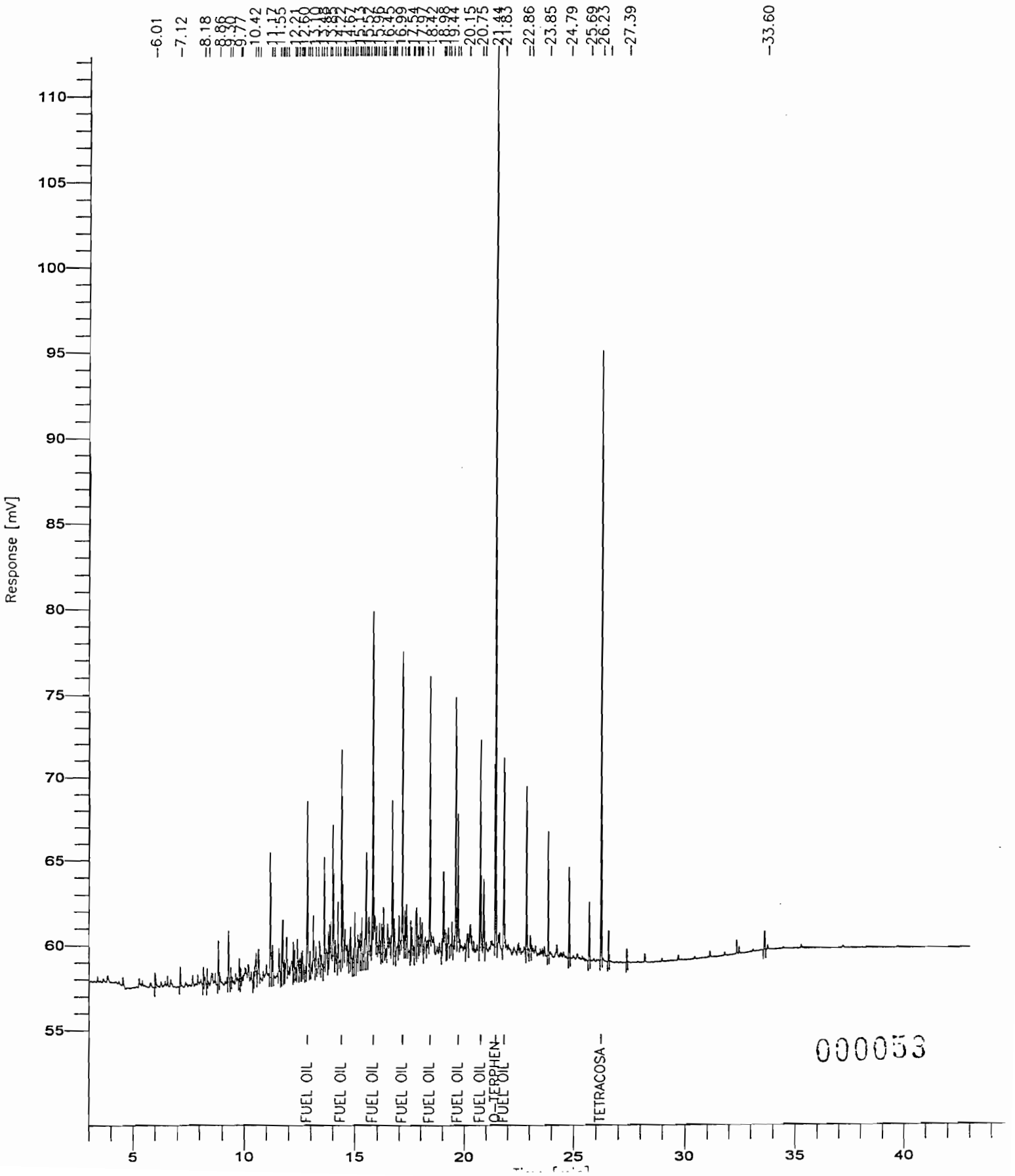
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		17.54	3606.40	1965.99	0.004	0.361
71		17.59	2355.20	1314.87	0.002	0.236
72		17.76	7819.45	2494.95	0.008	0.782
73		17.81	6064.42	2586.60	0.006	0.606
74		17.90	2418.44	814.74	0.002	0.242
75		17.97	3452.88	1650.60	0.003	0.345
76		18.21	2985.60	800.64	0.003	0.299
77	FUEL OIL 2 #5	18.41	27779.20	15839.29	0.028	2.778
78		18.97	1171.20	713.17	0.001	0.117
79		19.04	8107.20	4033.35	0.008	0.811
80		19.19	1725.49	1076.41	0.002	0.173
81		19.28	3058.51	1293.16	0.003	0.306
82		19.44	2803.20	1596.25	0.003	0.280
83		19.61	25734.95	14527.90	0.026	2.573
84	FUEL OIL 2 #6	19.72	15866.65	7632.36	0.016	1.587
85		20.15	3606.40	954.09	0.004	0.361
86	FUEL OIL 2 #7	20.75	23238.40	12315.02	0.023	2.324
87		20.90	8905.60	4052.04	0.009	0.891
88	O-TERPHENYL (SURROGATE	21.44	98041.60	52468.71	25.594	2559.384
89	FUEL OIL 2 #8	21.83	22262.40	11168.07	0.022	2.226
90		22.86	17902.40	9783.27	0.018	1.790
91		23.03	2012.80	937.13	0.002	0.201
92		23.84	13099.20	7319.58	0.013	1.310
93		24.79	9683.20	5411.68	0.010	0.968
94		25.69	6374.40	3402.28	0.006	0.637
95	TETRACOSANE-D50 (SURRO	26.23	72908.80	36468.97	22.420	2242.012
96		26.56	3276.80	1796.90	0.003	0.328
97		27.39	1324.80	755.99	0.001	0.132
98		33.60	2046.40	1037.27	0.002	0.205
			781846.40	401067.35	48.625	4862.486

Report stored in ASCII file: C:\TC4\DATA\D090110.TX0

Chromatogram

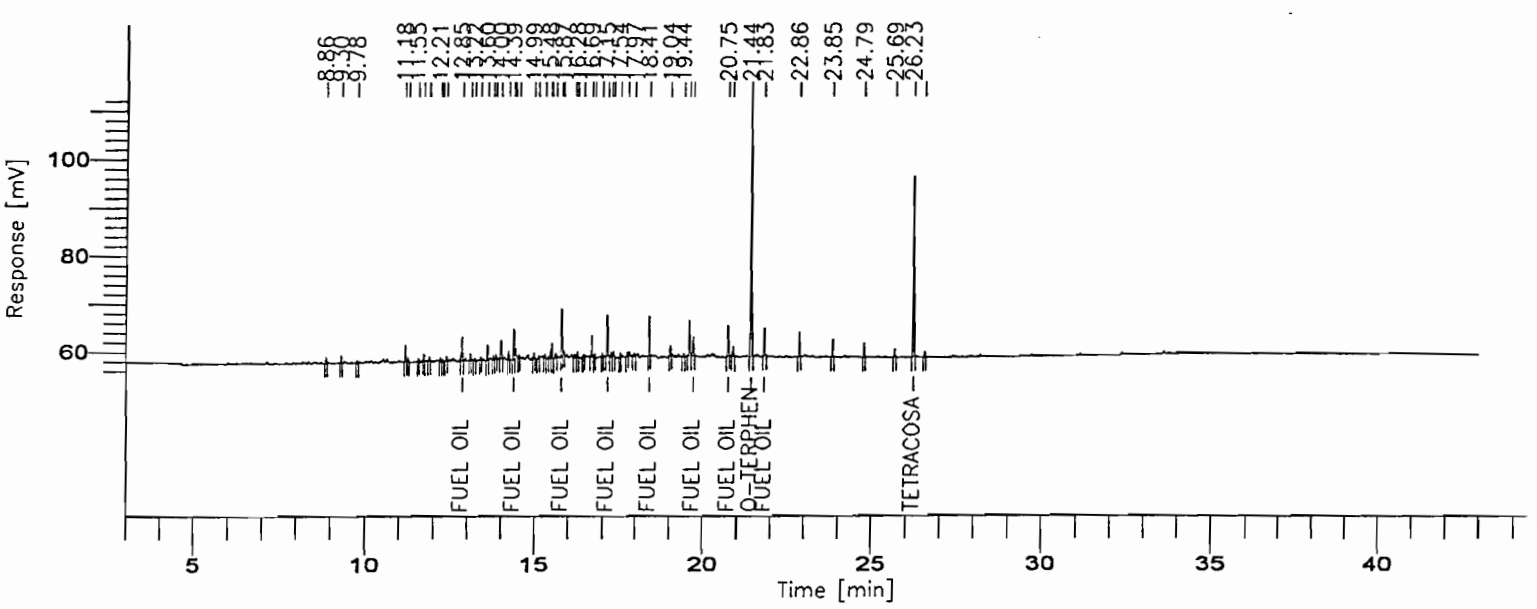
Sample Name : 500 PPM # 2 F.O. STD
FileName : C:\TC4\DATA\D090110.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 55 mV

Sample #: Page 1 of 1
Date : 9/3/99 15:00
Time of Injection: 9/1/99 23:17
Low Point : 54.70 mV High Point : 112.31 mV
Plot Scale: 57.6 mV



000053

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : 250 PPM # 2 F.O. STD
Data File : C:\TC4\DATA\D090111.RAW Date: 9/2/99 00:12
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 11 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/9 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000054

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		8.86	2212.80	1195.89	0.002	0.221
2		9.30	2710.40	1565.87	0.003	0.271
3		9.78	1158.40	706.67	0.001	0.116
4		11.17	5996.80	3472.91	0.006	0.600
5		11.27	1451.20	842.86	0.001	0.145
6		11.55	1097.60	591.68	0.001	0.110
7		11.72	2406.40	1495.20	0.002	0.241
8		11.89	1708.80	938.36	0.002	0.171
9		12.21	1731.93	889.55	0.002	0.173
10		12.28	1036.07	646.75	0.001	0.104
11		12.39	1499.20	712.88	0.001	0.150
12	FUEL OIL 2 #1	12.85	9984.00	4963.35	0.010	0.998
13		13.10	2134.40	1340.21	0.002	0.213
14		13.22	1200.00	571.00	0.001	0.120
15		13.40	966.40	513.25	0.001	0.097
16		13.60	6065.60	3212.81	0.006	0.607
17		13.78	1620.80	888.92	0.002	0.162
18		13.85	1236.80	760.91	0.001	0.124
19		14.00	8137.60	3653.37	0.008	0.814

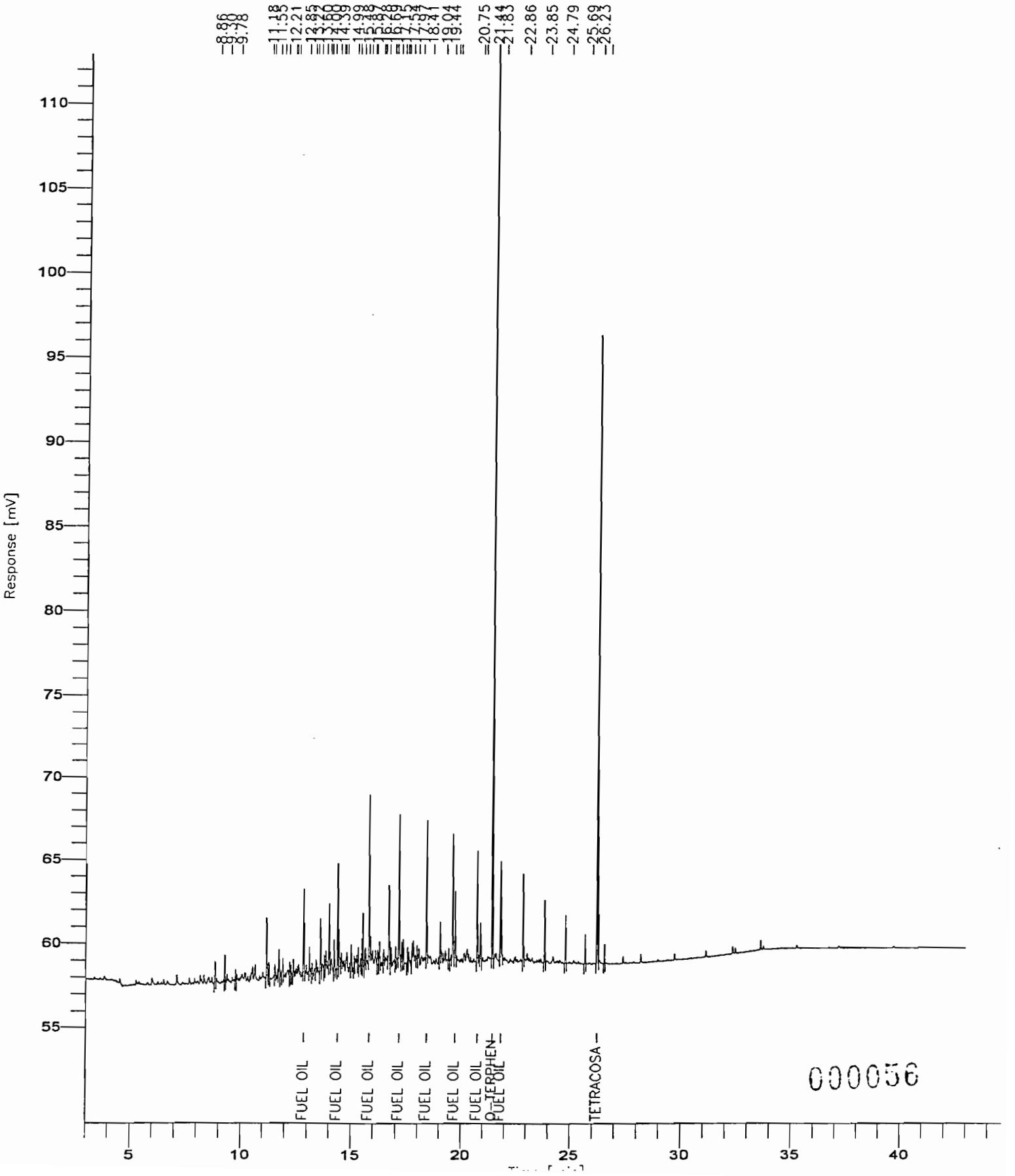
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		14.22	3356.80	1779.55	0.003	0.336
21	FUEL OIL 2 #2	14.38	10640.60	6246.22	0.011	1.064
22		14.44	4975.40	2218.01	0.005	0.498
23		14.54	963.20	563.60	0.001	0.096
24		14.99	2332.80	1231.98	0.002	0.233
25		15.13	1020.80	609.52	0.001	0.102
26		15.31	1808.00	1090.83	0.002	0.181
27		15.48	3478.40	1647.69	0.003	0.348
28		15.52	5331.20	3218.56	0.005	0.533
29		15.64	2902.40	919.10	0.003	0.290
30	FUEL OIL 2 #3	15.81	16499.12	9666.77	0.016	1.650
31		15.87	1115.28	781.48	0.001	0.112
32		16.20	2649.60	882.50	0.003	0.265
33		16.28	2572.80	1260.86	0.003	0.257
34		16.45	1209.60	626.14	0.001	0.121
35		16.69	9089.60	4675.61	0.009	0.909
36		16.78	1388.80	795.00	0.001	0.139
37		16.99	1777.60	881.54	0.002	0.178
38	FUEL OIL 2 #4	17.15	14672.00	8561.23	0.015	1.467
39		17.27	2302.70	1139.68	0.002	0.230
40		17.34	2361.30	1293.40	0.002	0.236
41		17.54	1705.60	979.44	0.002	0.171
42		17.76	1606.40	619.24	0.002	0.161
43		17.97	1377.60	762.50	0.001	0.138
44	FUEL OIL 2 #5	18.41	14092.80	8220.54	0.014	1.409
45		19.04	4129.60	2073.21	0.004	0.413
46		19.44	1390.40	779.94	0.001	0.139
47		19.61	13099.40	7346.39	0.013	1.310
48	FUEL OIL 2 #6	19.72	8276.60	3911.77	0.008	0.828
49	FUEL OIL 2 #7	20.75	11491.20	6297.50	0.011	1.149
50		20.90	4489.60	2167.72	0.004	0.449
51	O-TERPHENYL (SURROGATE	21.44	100323.20	53806.45	26.189	2618.945
52	FUEL OIL 2 #8	21.83	10825.60	5703.87	0.011	1.083
53		22.86	9241.60	5087.75	0.009	0.924
54		23.84	6580.80	3660.67	0.007	0.658
55		24.79	5283.20	2873.42	0.005	0.528
56		25.69	3156.80	1708.38	0.003	0.316
57	TETRACOSANE-D50 (SURRO	26.23	75353.60	37903.48	23.172	2317.192
58		26.56	1980.80	1073.62	0.002	0.198
			421208.00	224027.61	49.607	4960.690

Report stored in ASCII file: C:\TC4\DATA\D090111.TX0

Chromatogram

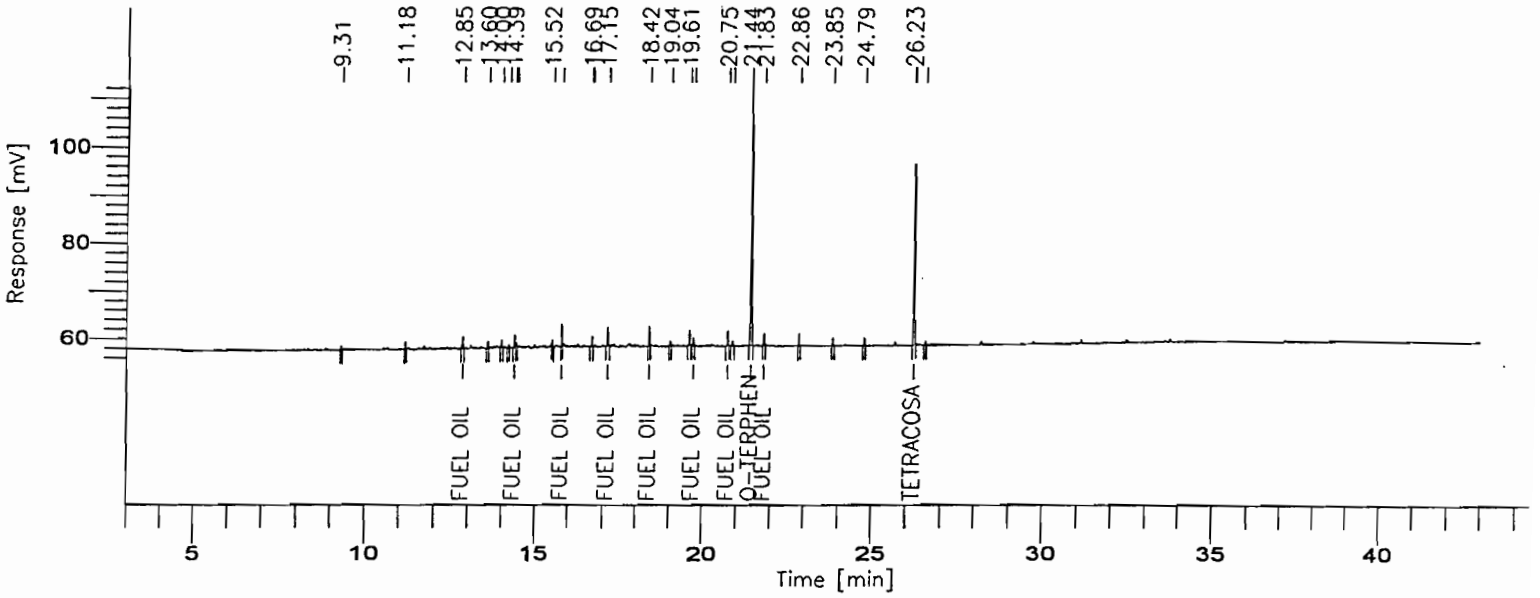
Sample Name : 250 PPM # 2 F.O. STD
FileName : C:\TC4\DATA\D090111.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 55 mV

Sample #: Page 1 of 1
Date : 9/3/99 15:00
Time of Injection: 9/2/99 00:12
Low Point : 54.67 mV High Point : 112.89 mV
Plot Scale: 58.2 mV



000056

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : 100 PPM # 2 F.O. STD
Data File : C:\TC4\DATA\D090112.RAW Date: 9/2/99 01:06
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 12 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/10 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000057

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		9.30	1355.20	824.77	0.001	0.136
2		11.18	2262.40	1419.39	0.002	0.226
3	FUEL OIL 2 #1	12.85	4676.80	2428.69	0.005	0.468
4		13.60	2745.60	1475.67	0.003	0.275
5		14.00	3534.40	1603.07	0.004	0.353
6		14.23	1225.60	688.75	0.001	0.123
7	FUEL OIL 2 #2	14.38	4439.47	2661.02	0.004	0.444
8		14.44	1378.13	833.24	0.001	0.138
9		15.52	1697.60	1208.03	0.002	0.170
10	FUEL OIL 2 #3	15.81	7574.40	4464.39	0.008	0.757
11		16.69	4160.00	2208.52	0.004	0.416
12	FUEL OIL 2 #4	17.15	6521.60	3866.72	0.007	0.652
13	FUEL OIL 2 #5	18.41	6820.80	4035.30	0.007	0.682
14		19.04	1942.40	976.83	0.002	0.194
15		19.61	5596.80	3246.65	0.006	0.560
16	FUEL OIL 2 #6	19.72	3529.60	1780.16	0.004	0.353
17	FUEL OIL 2 #7	20.75	5721.60	3141.83	0.006	0.572
18		20.90	2044.80	969.30	0.002	0.204
19	O-TERPHENYL (SURROGATE	21.44	104208.00	55078.46	27.204	2720.358

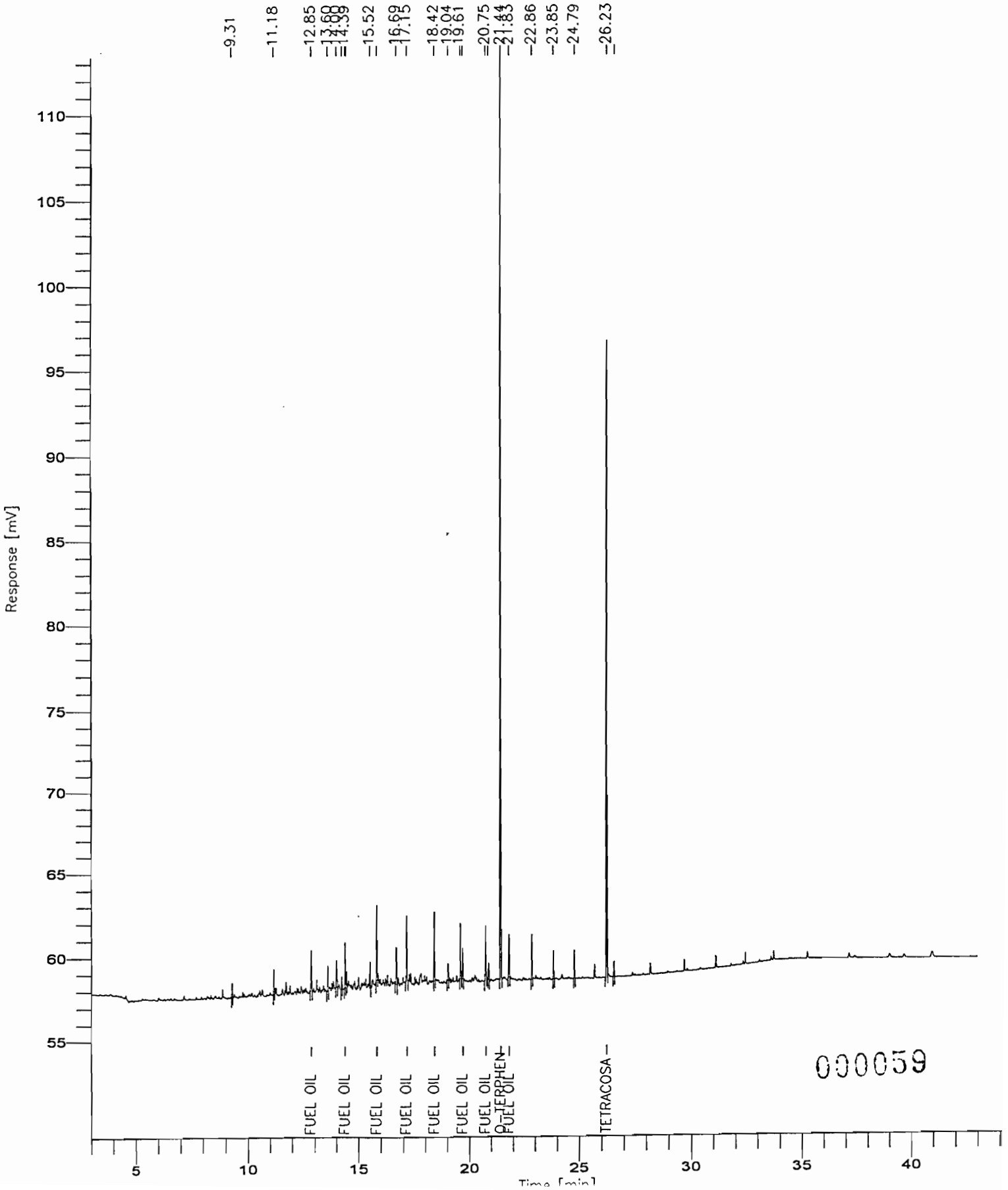
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	FUEL OIL 2 #8	21.83	4606.40	2512.71	0.005	0.461
21		22.86	4768.00	2621.09	0.005	0.477
22		23.84	2956.80	1671.38	0.003	0.296
23		24.79	3048.00	1651.92	0.003	0.305
24	TETRACOSANE-D50 (SURRO	26.23	77241.60	38073.23	23.752	2375.250
25		26.56	1587.20	878.57	0.002	0.159
			265643.20	140319.70	51.040	5104.027

Report stored in ASCII file: C:\TC4\DATA\D090112.TX0

Chromatogram

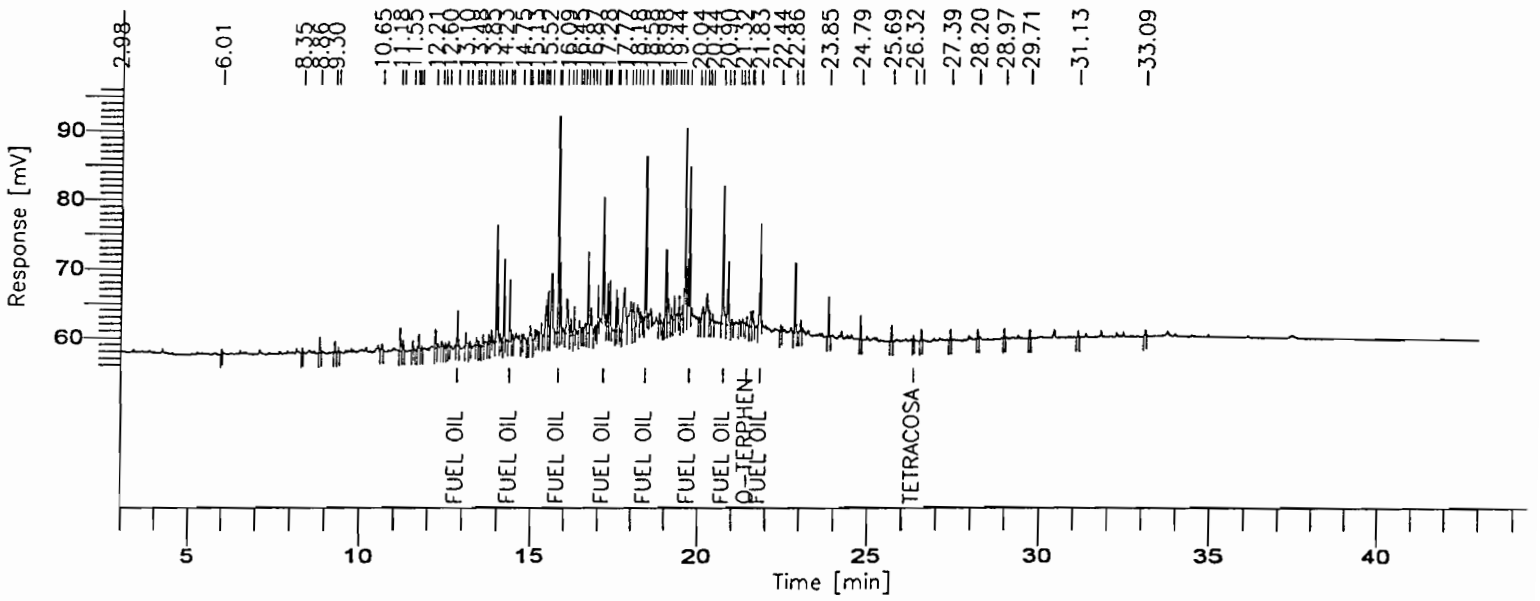
Sample Name : 100 PPM # 2 F.O. STD
FileName : C:\TC4\DATA\D090112.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 55 mV

Sample #:
Date : 9/3/99 15:00
Time of Injection: 9/2/99 01:06
Low Point : 54.65 mV High Point : 113.39 mV



000059

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : FUEL OIL # 4
Data File : C:\TC4\DATA\D090113.RAW Date: 9/2/99 02:01
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 13 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/11 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

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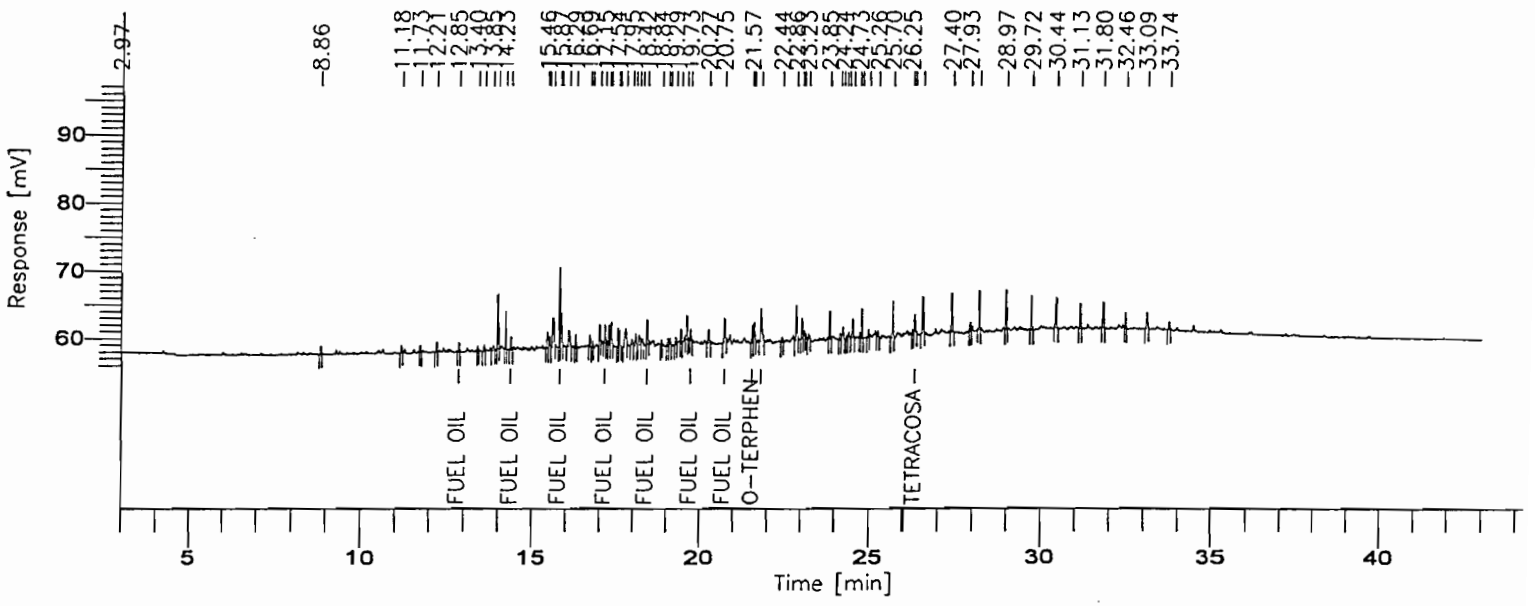
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		2.02	21337.60	11121.64	0.021	2.134
2		2.18	6076.80	4173.06	0.006	0.608
3		2.98	857.60	626.76	0.001	0.086
4		6.01	1028.80	548.05	0.001	0.103
5		8.35	1388.80	756.83	0.001	0.139
6		8.86	4257.60	2230.61	0.004	0.426
7		9.30	2865.60	1635.47	0.003	0.287
8		9.40	1227.20	773.49	0.001	0.123
9		10.65	1792.00	841.25	0.002	0.179
10		11.18	7363.84	3420.17	0.007	0.736
11		11.27	3096.96	1571.62	0.003	0.310
12		11.55	2147.20	1182.28	0.002	0.215
13		11.68	1512.22	743.14	0.002	0.151
14		11.72	4407.44	2398.19	0.004	0.441
15		11.81	1369.95	773.66	0.001	0.137
16		12.21	5299.20	2846.01	0.005	0.530
17		12.39	1936.00	867.15	0.002	0.194
18		12.49	1843.20	815.89	0.002	0.184
19		12.60	1049.60	679.25	0.001	0.105

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	FUEL OIL 2 #1	12.85	8496.00	5158.11	0.008	0.850
21		13.10	3673.60	1942.06	0.004	0.367
22		13.22	1502.40	807.33	0.002	0.150
23		13.40	3139.20	1173.92	0.003	0.314
24		13.48	1203.20	699.81	0.001	0.120
25		13.60	3708.80	1704.53	0.004	0.371
26		13.78	2731.20	1504.16	0.003	0.273
27		13.85	2472.00	1378.00	0.002	0.247
28		13.99	36227.20	16864.51	0.036	3.623
29		14.10	1729.60	931.86	0.002	0.173
30		14.23	21052.80	11914.90	0.021	2.105
31	FUEL OIL 2 #2	14.39	15905.93	9173.34	0.016	1.591
32		14.47	2351.67	1096.32	0.002	0.235
33		14.75	1640.00	957.27	0.002	0.164
34		14.92	2033.88	935.48	0.002	0.203
35		14.99	8148.52	2562.99	0.008	0.815
36		15.13	2511.20	1314.52	0.003	0.251
37		15.18	1140.00	650.18	0.001	0.114
38		15.25	1201.53	777.65	0.001	0.120
39		15.32	3862.47	2066.72	0.004	0.386
40		15.41	1621.62	995.90	0.002	0.162
41		15.46	13956.80	5280.55	0.014	1.396
42		15.52	11299.98	6584.03	0.011	1.130
43		15.64	29443.20	8644.69	0.029	2.944
44	FUEL OIL 2 #3	15.82	57982.34	31261.11	0.058	5.798
45		15.87	19000.06	10003.75	0.019	1.900
46		16.09	15981.89	5126.33	0.016	1.598
47		16.20	5122.11	2512.37	0.005	0.512
48		16.29	7600.00	3969.99	0.008	0.760
49		16.45	3792.00	1702.38	0.004	0.379
50		16.55	1873.08	773.16	0.002	0.187
51		16.61	4254.70	1611.33	0.004	0.425
52		16.69	22894.54	11815.24	0.023	2.289
53		16.78	9080.08	3784.41	0.009	0.908
54		16.87	1044.80	546.45	0.001	0.104
55		16.99	10937.60	5651.77	0.011	1.094
56	FUEL OIL 2 #4	17.16	33155.20	18612.82	0.033	3.316
57		17.21	2342.40	1601.43	0.002	0.234
58		17.28	11633.32	6183.26	0.012	1.163
59		17.34	12291.48	6667.10	0.012	1.229
60		17.54	10996.00	5873.69	0.011	1.100
61		17.59	8197.60	4476.13	0.008	0.820
62		17.77	30046.42	6334.47	0.030	3.005
63		17.97	20720.00	3978.33	0.021	2.072
64		18.07	13756.78	3734.68	0.014	1.376
65		18.18	10846.05	3016.14	0.011	1.085
66		18.28	3193.95	1466.28	0.003	0.319
67	FUEL OIL 2 #5	18.42	42609.60	23809.08	0.043	4.261
68		18.58	1296.00	745.79	0.001	0.130
69		18.85	3774.40	1499.47	0.004	0.377

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		18.98	2922.66	1659.98	0.003	0.292
71		19.05	25729.48	10918.97	0.026	2.573
72		19.10	10665.84	3494.34	0.011	1.067
73		19.19	3797.22	2293.07	0.004	0.380
74		19.29	6918.40	3342.41	0.007	0.692
75		19.44	6038.40	3405.20	0.006	0.604
76		19.54	5605.63	2037.83	0.006	0.561
77		19.62	51769.37	27249.71	0.052	5.177
78	FUEL OIL 2 #6	19.73	44868.20	21241.47	0.045	4.487
79		20.04	1894.07	894.27	0.002	0.189
80		20.15	9273.08	2368.84	0.009	0.927
81		20.27	16776.63	4161.51	0.017	1.678
82		20.35	3364.80	1800.23	0.003	0.336
83		20.44	2918.62	1347.04	0.003	0.292
84	FUEL OIL 2 #7	20.75	43176.13	19944.98	0.043	4.318
85		20.90	22659.07	9304.95	0.023	2.266
86		21.00	2107.20	835.30	0.002	0.211
87		21.23	1345.60	655.54	0.001	0.135
88		21.32	1041.60	636.30	0.001	0.104
89	O-TERPHENYL (SURROGATE	21.45	2465.60	1355.96	0.644	64.365
90		21.57	5428.52	2220.97	0.005	0.543
91		21.62	4232.28	2189.09	0.004	0.423
92	FUEL OIL 2 #8	21.83	29304.00	14348.08	0.029	2.930
93		22.44	1953.60	1008.21	0.002	0.195
94		22.86	19526.40	10168.87	0.020	1.953
95		23.03	3443.20	1734.04	0.003	0.344
96		23.85	10150.40	5813.83	0.010	1.015
97		24.79	6072.00	3468.61	0.006	0.607
98		25.69	4460.80	2269.09	0.004	0.446
99	TETRACOSANE-D50 (SURRO	26.32	1227.20	701.70	0.377	37.738
##		26.56	2916.80	1590.19	0.003	0.292
##		27.39	2726.40	1502.89	0.003	0.273
##		28.20	2350.40	1313.35	0.002	0.235
##		28.97	2668.80	1426.62	0.003	0.267
##		29.71	2190.40	1205.79	0.002	0.219
##		31.13	1692.80	927.63	0.002	0.169
##		33.09	1456.00	681.61	0.001	0.146
			983470.40	461398.79	2.001	200.080

Report stored in ASCII file: C:\TC4\DATA\D090113.TX0

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : FUEL OIL # 6
Data File : C:\TC4\DATA\D090114.RAW Date: 9/2/99 02:55
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 14 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/12 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

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Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		2.02	21331.20	11470.30	0.021	2.133
2		2.18	4696.00	3228.78	0.005	0.470
3		2.97	1132.80	835.08	0.001	0.113
4		8.86	1984.00	1102.29	0.002	0.198
5		11.18	1902.40	1091.24	0.002	0.190
6		11.73	1617.60	1038.26	0.002	0.162
7		12.21	2793.60	1510.74	0.003	0.279
8	FUEL OIL 2 #1	12.85	2299.20	1344.53	0.002	0.230
9		13.40	1088.00	690.00	0.001	0.109
10		13.60	1996.80	955.25	0.002	0.200
11		13.85	2443.20	732.17	0.002	0.244
12		13.99	14913.60	7986.01	0.015	1.491
13		14.23	9936.00	5613.29	0.010	0.994
14	FUEL OIL 2 #2	14.39	3555.20	2016.56	0.004	0.356
15		15.46	5998.21	2387.64	0.006	0.600
16		15.52	2896.19	1797.84	0.003	0.290
17		15.64	14592.00	4233.33	0.015	1.459
18	FUEL OIL 2 #3	15.82	21758.40	11693.87	0.022	2.176
19		15.87	8897.60	4849.06	0.009	0.890

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		16.09	7115.20	2443.98	0.007	0.712
21		16.29	3686.40	1992.17	0.004	0.369
22		16.69	3049.60	1663.60	0.003	0.305
23		16.77	1446.40	814.22	0.001	0.145
24		16.99	5923.20	2962.44	0.006	0.592
25	FUEL OIL 2 #4	17.15	4412.80	2739.83	0.004	0.441
26		17.27	5339.32	3051.57	0.005	0.534
27		17.34	5740.68	3267.00	0.006	0.574
28		17.54	5432.45	2872.47	0.005	0.543
29		17.59	4353.15	2437.66	0.004	0.435
30		17.77	7761.60	2454.24	0.008	0.776
31		17.95	1944.00	656.40	0.002	0.194
32		18.07	4449.60	1758.12	0.004	0.445
33		18.18	4757.40	1440.99	0.005	0.476
34		18.27	2157.80	912.93	0.002	0.216
35	FUEL OIL 2 #5	18.42	6705.60	3512.71	0.007	0.671
36		18.84	1708.80	732.08	0.002	0.171
37		19.04	2646.18	1093.68	0.003	0.265
38		19.11	2382.62	1182.18	0.002	0.238
39		19.29	2195.20	1112.50	0.002	0.220
40		19.44	3790.40	2118.24	0.004	0.379
41		19.61	6457.60	3490.78	0.006	0.646
42	FUEL OIL 2 #6	19.73	3296.00	1615.61	0.003	0.330
43		20.27	4625.60	1994.93	0.005	0.463
44	FUEL OIL 2 #7	20.75	7121.60	3371.51	0.007	0.712
45	O-TERPHENYL (SURROGATE	21.57	5313.66	2571.89	1.387	138.714
46		21.62	5374.34	2778.84	0.005	0.537
47	FUEL OIL 2 #8	21.83	12662.40	4775.86	0.013	1.266
48		22.44	1473.60	674.19	0.001	0.147
49		22.86	12008.00	5148.70	0.012	1.201
50		23.03	5863.47	2925.42	0.006	0.586
51		23.10	1758.93	966.15	0.002	0.176
52		23.22	1732.80	739.48	0.002	0.173
53		23.85	7283.20	4185.22	0.007	0.728
54		24.15	3045.33	1010.88	0.003	0.305
55		24.24	4593.07	1814.81	0.005	0.459
56		24.34	1423.55	729.56	0.001	0.142
57		24.41	2578.05	1060.67	0.003	0.258
58		24.52	5273.60	2762.75	0.005	0.527
59		24.72	1568.00	880.00	0.002	0.157
60		24.79	7696.00	4436.46	0.008	0.770
61		24.97	2321.60	1179.38	0.002	0.232
62		25.26	1657.60	890.87	0.002	0.166
63		25.70	10883.20	5341.41	0.011	1.088
64		26.25	1530.88	858.94	0.002	0.153
65	TETRACOSANE-D50 (SURRO	26.32	5400.32	2713.83	1.661	166.065
66		26.56	9659.20	5380.80	0.010	0.966
67		27.39	10473.60	5752.15	0.010	1.047
68		27.93	2920.00	1299.53	0.008	0.292
69		28.20	10267.20	5691.81	0.010	1.027

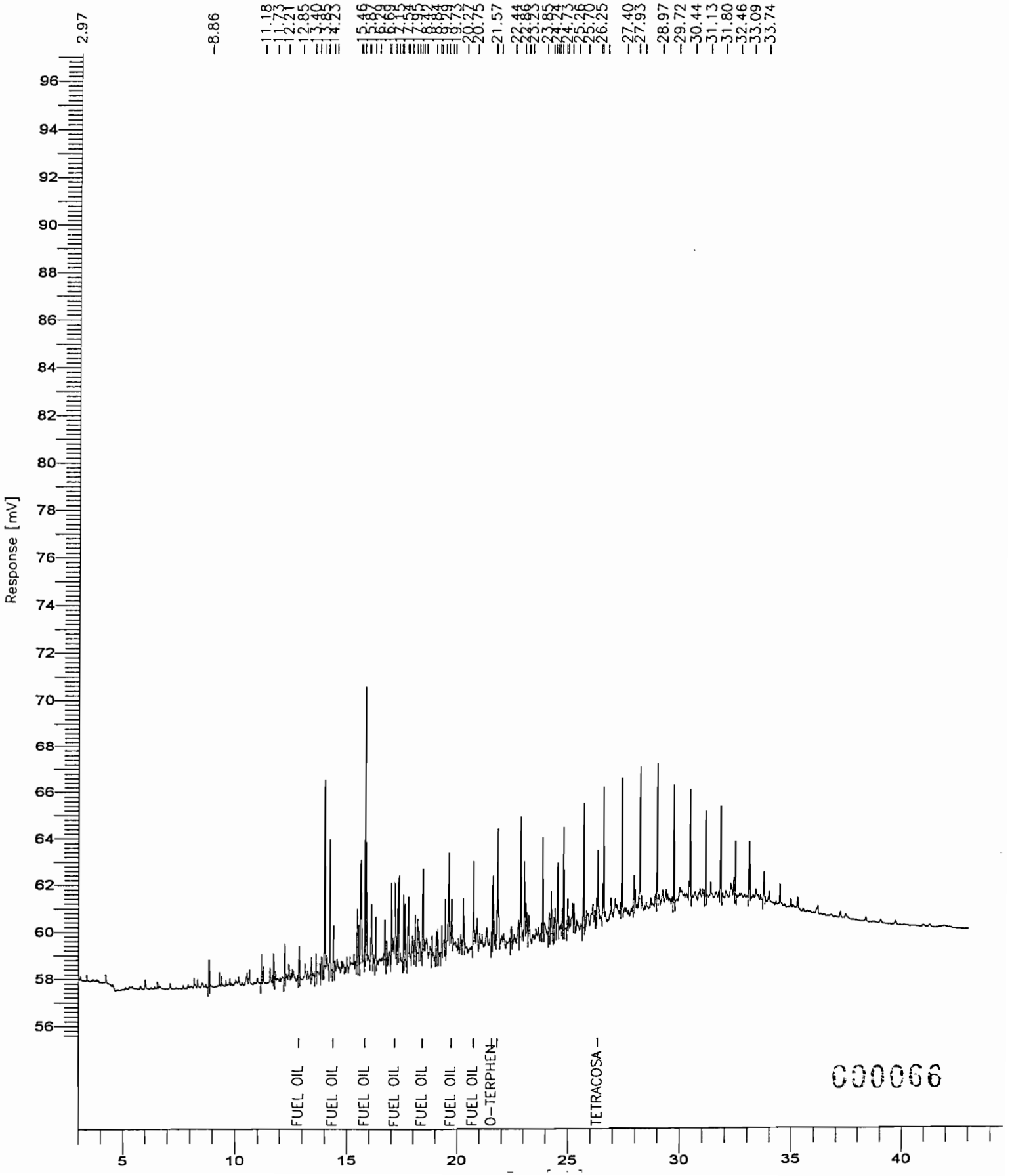
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		28.97	10955.20	5854.92	0.011	1.096
71		29.72	9353.60	5087.87	0.009	0.935
72		30.44	8937.60	4586.60	0.009	0.894
73		31.13	7065.60	3663.74	0.007	0.707
74		31.80	7824.00	3810.19	0.008	0.782
75		32.46	4350.40	2355.36	0.004	0.435
76		33.09	5430.40	2278.05	0.005	0.543
77		33.74	2409.60	1073.05	0.002	0.241
			425419.20	211547.47	3.462	346.249

Report stored in ASCII file: C:\TC4\DATA\D090114.TX0

Chromatogram

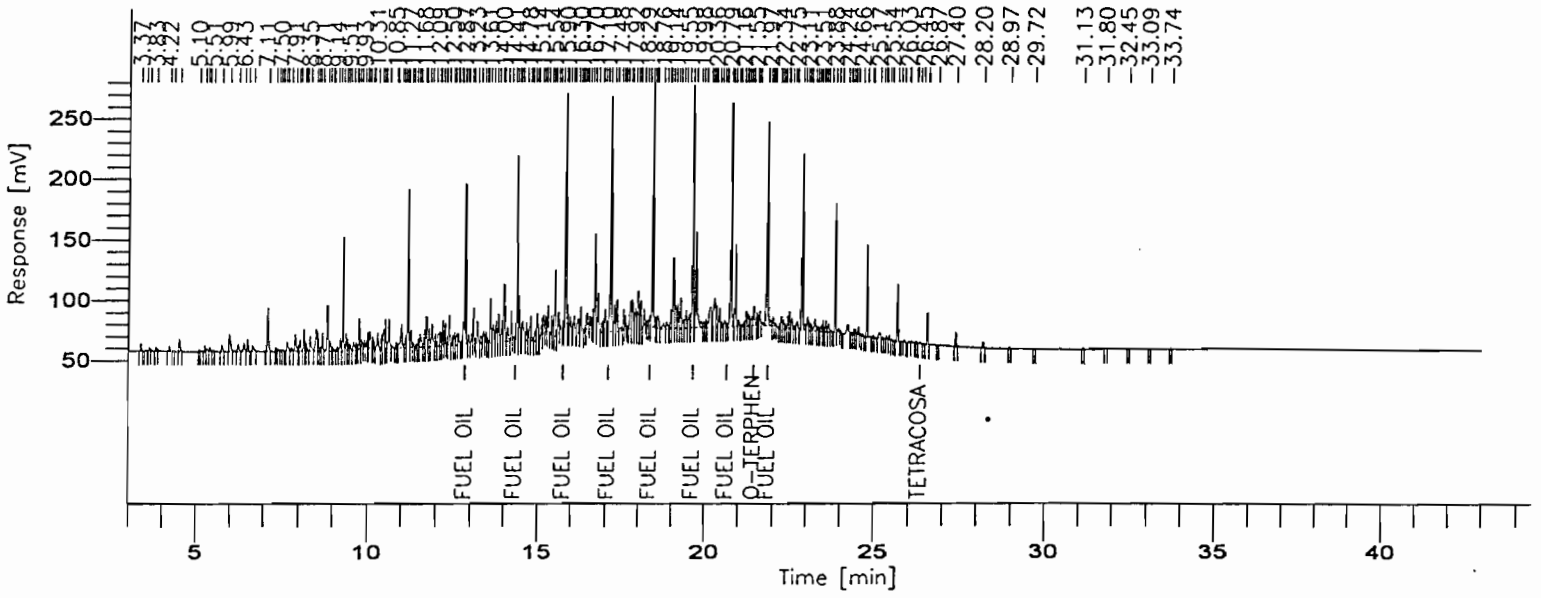
Sample Name : FUEL OIL # 6
FileName : C:\TC4\DATA\D090114.raw
Method : TRPH909
Start Time : 3.00 min
End Time : 45.00 min
Scale Factor: 1.0
Plot Offset: 55 mV

Sample #:
Date : 9/3/99 15:00
Time of Injection: 9/2/99 02:55
Low Point : 55.50 mV
High Point : 97.14 mV
Plot Scale: 41.6 mV



000066

Software Version: 4.1<1L22>
Date: 9/3/99 15:00
Sample Name : DIESEL
Data File : C:\TC4\DATA\D090115.RAW Date: 9/2/99 03:50
Sequence File: C:\TC4\DATA\DB090199.SEQ Cycle: 15 Channel : B
Instrument : 5890_SERIES Rack/Vial: 0/13 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000067

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		2.02	8940.80	9359.27	0.009	0.894
2		2.17	14342.40	11694.57	0.014	1.434
3		2.45	10153.60	4986.52	0.010	1.015
4		2.74	7795.20	3543.48	0.008	0.780
5		3.37	11907.20	6296.49	0.012	1.191
6		3.52	1385.60	868.04	0.001	0.139
7		3.63	5110.40	2286.51	0.005	0.511
8		3.83	7481.60	2437.66	0.007	0.748
9		4.22	8782.40	4036.27	0.009	0.878
10		4.34	2324.80	1000.41	0.002	0.232
11		4.53	25422.40	9841.59	0.025	2.542
12		5.10	2838.40	1679.38	0.003	0.284
13		5.27	11322.47	4764.94	0.011	1.132
14		5.34	6150.69	2583.62	0.006	0.615
15		5.41	8005.24	3486.24	0.008	0.801
16		5.51	2044.80	1017.23	0.002	0.204
17		5.77	14198.40	5155.67	0.014	1.420
18		5.99	43168.00	14183.58	0.043	4.317
19		6.26	20318.16	5864.37	0.020	2.032

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		6.43	20657.10	7276.01	0.021	2.066
21		6.54	21415.15	9658.23	0.021	2.142
22		6.69	18028.80	4933.85	0.018	1.803
23		7.11	82984.00	35987.20	0.083	8.298
24		7.34	2019.20	1212.50	0.002	0.202
25		7.43	2252.80	1331.92	0.002	0.225
26		7.50	3382.40	1505.73	0.003	0.338
27		7.56	3481.60	1737.07	0.003	0.348
28		7.63	1116.16	716.91	0.001	0.112
29		7.68	21626.59	7733.68	0.022	2.163
30		7.79	10294.42	2593.34	0.010	1.029
31		7.91	36801.80	14006.19	0.037	3.680
32		8.00	13326.31	5267.34	0.013	1.333
33		8.06	24883.75	9738.29	0.025	2.488
34		8.17	34695.79	17716.26	0.035	3.470
35		8.21	13459.22	8058.41	0.013	1.346
36		8.25	12882.35	6460.07	0.013	1.288
37		8.35	35182.40	12604.52	0.035	3.518
38		8.53	53476.97	18177.44	0.053	5.348
39		8.57	29912.39	15045.56	0.030	2.991
40		8.65	8872.39	3513.77	0.009	0.887
41		8.71	30483.86	14781.94	0.030	3.048
42		8.85	79838.86	38155.65	0.080	7.984
43		8.93	22178.06	8273.79	0.022	2.218
44		8.99	7781.19	3624.05	0.008	0.778
45		9.04	3878.68	1974.70	0.004	0.388
46		9.14	8824.41	3330.66	0.009	0.882
47		9.22	24789.43	10247.47	0.025	2.479
48		9.30	175733.47	93835.27	0.176	17.573
49		9.40	26702.42	13933.34	0.027	2.670
50		9.45	17593.89	8974.73	0.018	1.759
51		9.51	11665.19	5658.47	0.012	1.167
52		9.61	18244.17	6547.82	0.018	1.824
53		9.68	12401.67	6115.60	0.012	1.240
54		9.72	8471.65	4007.34	0.008	0.847
55		9.77	44808.90	25410.16	0.045	4.481
56		9.84	8484.80	5318.98	0.008	0.848
57		9.93	8350.38	5738.39	0.008	0.835
58		9.98	11321.09	5505.55	0.011	1.132
59		10.02	24677.57	13011.19	0.025	2.468
60		10.07	42688.95	13417.41	0.043	4.269
61		10.16	17895.03	9714.62	0.018	1.790
62		10.20	16224.02	8045.30	0.016	1.622
63		10.31	39766.15	13705.44	0.040	3.977
64		10.42	23451.05	12874.78	0.023	2.345
65		10.48	47761.14	16906.74	0.048	4.776
66		10.54	53088.83	24486.65	0.053	5.309
67		10.65	65279.79	23353.28	0.065	6.528
68		10.84	11400.62	5266.12	0.011	1.140
69		10.88	7578.58	4436.52	0.008	0.758

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		11.01	69177.60	19392.14	0.069	6.918
71		11.07	7232.00	3023.99	0.007	0.723
72		11.12	14868.00	8265.07	0.015	1.487
73		11.18	246492.80	130421.14	0.246	24.649
74		11.27	33566.22	14269.86	0.034	3.357
75		11.34	6023.38	3511.33	0.006	0.602
76		11.43	9058.06	2933.86	0.009	0.906
77		11.51	19678.29	8060.54	0.020	1.968
78		11.56	38473.24	11176.18	0.038	3.847
79		11.68	32557.06	14752.98	0.033	3.256
80		11.72	46797.58	25222.01	0.047	4.680
81		11.80	31118.16	15185.58	0.031	3.112
82		11.89	58698.66	18760.92	0.059	5.870
83		12.00	18735.74	10501.00	0.019	1.874
84		12.09	33692.80	10598.75	0.034	3.369
85		12.14	30572.80	11796.39	0.031	3.057
86		12.21	35593.60	19813.76	0.036	3.559
87		12.28	26187.20	17074.43	0.026	2.619
88		12.39	52748.80	24993.92	0.053	5.275
89		12.50	23399.94	9054.46	0.023	2.340
90		12.55	24431.26	10730.27	0.024	2.443
91		12.62	27957.50	9265.63	0.028	2.796
92		12.67	23171.30	10103.81	0.023	2.317
93		12.74	4124.80	2553.88	0.004	0.412
94		12.78	7580.20	4300.42	0.008	0.758
95	FUEL OIL 2 #1	12.87	269543.80	132444.16	0.270	26.954
96		12.92	6384.00	3832.59	0.006	0.638
97		12.96	12056.80	7497.39	0.012	1.206
98		13.05	12760.51	6663.37	0.013	1.276
99		13.11	45756.29	27241.10	0.046	4.576
##		13.23	39017.60	18275.64	0.039	3.902
##		13.33	20394.40	6615.22	0.020	2.039
##		13.42	23413.60	9169.66	0.023	2.341
##		13.49	16265.24	8757.86	0.016	1.627
##		13.53	5133.16	3667.92	0.005	0.513
##		13.61	77183.74	36993.05	0.077	7.718
##		13.69	54787.17	15102.23	0.055	5.479
##		13.79	42513.99	18142.53	0.043	4.251
##		13.86	59762.84	23339.13	0.060	5.976
##		13.96	38091.62	17508.28	0.038	3.809
##		14.00	131375.84	47097.05	0.131	13.138
##		14.11	35414.40	12124.26	0.035	3.541
##		14.23	44291.20	23842.89	0.044	4.429
##	FUEL OIL 2 #2	14.34	1934.39	1648.75	0.002	0.193
##		14.41	280875.90	151006.99	0.281	28.088
##		14.45	73496.06	35511.56	0.073	7.350
##		14.50	14470.22	9243.52	0.014	1.447
##		14.55	65859.71	16041.96	0.066	6.586
##		14.68	31437.41	14606.50	0.031	3.144
##		14.78	33090.98	12256.16	0.033	3.309

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		14.81	41912.13	20718.69	0.042	4.191
##		14.86	2960.00	2164.72	0.003	0.296
##		14.94	23156.48	9068.65	0.023	2.316
##		15.00	54636.80	22546.72	0.055	5.464
##		15.03	17094.72	12369.10	0.017	1.709
##		15.14	34834.56	15588.48	0.035	3.483
##		15.19	37715.84	15151.93	0.038	3.772
##		15.26	22372.03	13842.90	0.022	2.237
##		15.33	39543.17	23003.95	0.040	3.954
##		15.42	30831.38	16460.47	0.031	3.083
##		15.49	52178.46	19787.09	0.052	5.218
##		15.53	96063.75	55229.68	0.096	9.606
##		15.63	10561.60	5344.94	0.011	1.056
##		15.70	5107.20	2828.07	0.005	0.511
##	FUEL OIL 2 #3	15.78	12799.15	8263.91	0.013	1.280
##		15.84	392486.40	196346.24	0.392	39.249
##		15.88	33948.80	21932.90	0.034	3.395
##		15.90	32211.60	21879.90	0.032	3.221
##		15.98	29619.20	12409.42	0.030	2.962
##		16.06	14026.80	7057.19	0.014	1.403
##		16.10	33618.64	13250.76	0.034	3.362
##		16.23	38216.96	11797.82	0.038	3.822
##		16.30	50422.85	21597.42	0.050	5.042
##		16.36	4880.00	2950.98	0.005	0.488
##		16.41	5337.60	3943.26	0.005	0.534
##		16.47	25449.60	10250.67	0.025	2.545
##		16.56	15196.80	7827.41	0.015	1.520
##		16.63	28950.86	15458.66	0.029	2.895
##		16.70	180697.14	78465.54	0.181	18.070
##		16.79	73385.60	32037.55	0.073	7.339
##		16.91	21297.96	9449.18	0.021	2.130
##		16.95	25171.07	11875.67	0.025	2.517
##		17.00	47623.23	19467.23	0.048	4.762
##		17.06	15688.59	7855.90	0.016	1.569
##	FUEL OIL 2 #4	17.09	17715.51	10265.99	0.018	1.772
##		17.19	440629.16	195232.56	0.441	44.063
##		17.29	56347.54	21645.94	0.056	5.635
##		17.36	57393.37	26093.38	0.057	5.739
##		17.48	10946.37	3031.26	0.011	1.095
##		17.55	29275.20	15978.32	0.029	2.928
##		17.61	14371.20	8450.58	0.014	1.437
##		17.69	2326.40	1987.02	0.002	0.233
##		17.78	67132.55	23870.49	0.067	6.713
##		17.82	80110.03	24765.81	0.080	8.011
##		17.92	63588.43	18641.85	0.064	6.359
##		17.99	74915.20	31832.05	0.075	7.492
##		18.04	42096.18	22907.12	0.042	4.210
##		18.08	51725.60	24495.62	0.052	5.173
##		18.18	23598.40	12490.74	0.024	2.360
##		18.29	13093.40	5862.87	0.013	1.309

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##	FUEL OIL 2 #5	18.35	22857.60	9118.08	0.023	2.286
##		18.45	434495.34	205365.00	0.434	43.450
##		18.51	22675.20	9757.25	0.023	2.268
##		18.54	21301.53	8893.31	0.021	2.130
##		18.59	36844.14	10557.62	0.037	3.684
##		18.76	21804.37	4961.78	0.022	2.180
##		18.87	22905.62	6664.36	0.023	2.291
##		18.95	4164.81	2440.56	0.004	0.416
##		18.99	33801.68	16082.20	0.034	3.380
##		19.07	152238.30	58053.48	0.152	15.224
##		19.14	63603.16	19517.40	0.064	6.360
##		19.21	43009.36	20913.67	0.043	4.301
##		19.30	65717.59	25225.37	0.066	6.572
##		19.38	25823.43	7384.17	0.026	2.582
##		19.46	40460.15	14798.77	0.040	4.046
##		19.55	40225.61	11660.13	0.040	4.023
##	FUEL OIL 2 #6	19.65	448145.45	204619.26	0.448	44.815
##		19.75	228057.03	80094.51	0.228	22.806
##		19.90	22592.00	5142.24	0.023	2.259
##		19.98	15301.75	5130.62	0.015	1.530
##		20.05	16865.81	7360.80	0.017	1.687
##		20.18	80827.51	16673.83	0.081	8.083
##		20.24	20553.62	11309.58	0.021	2.055
##		20.30	92116.89	23903.03	0.092	9.212
##		20.36	32387.97	17790.48	0.032	3.239
##		20.45	40650.97	15517.95	0.041	4.065
##		20.52	11279.03	4305.30	0.011	1.128
##		20.60	16718.56	5765.80	0.017	1.672
##	FUEL OIL 2 #7	20.66	9028.53	3014.63	0.009	0.903
##		20.79	417842.29	185341.45	0.418	41.784
##		20.84	22787.20	9681.33	0.023	2.279
##		20.92	161183.12	67673.40	0.161	16.118
##		21.01	14105.80	5457.79	0.014	1.411
##		21.08	2365.62	1692.90	0.002	0.237
##		21.16	8445.95	3501.56	0.008	0.845
##		21.19	8379.44	4516.45	0.008	0.838
##		21.24	34537.92	12540.48	0.035	3.454
##		21.29	19746.27	9724.20	0.020	1.975
##		21.33	17296.28	8656.74	0.017	1.730
##		21.40	22235.50	8542.26	0.022	2.224
##	O-TERPHENYL (SURROGATE	21.46	40384.22	16052.97	10.542	1054.233
##		21.55	20217.76	10605.21	0.020	2.022
##		21.58	12560.64	7993.30	0.013	1.256
##		21.64	23628.00	10429.26	0.024	2.363
##	FUEL OIL 2 #8	21.87	388691.89	168602.54	0.389	38.869
##		21.97	24243.20	4798.24	0.024	2.424
##		22.03	16572.16	7205.02	0.017	1.657
##		22.09	3955.15	2511.84	0.004	0.396
##		22.23	10604.86	4804.75	0.011	1.060
##		22.28	28057.78	9930.95	0.028	2.806

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		22.34	15241.21	7091.99	0.015	1.524
##		22.39	8395.87	4843.68	0.008	0.840
##		22.46	24260.22	11541.29	0.024	2.426
##		22.51	28814.36	14456.95	0.029	2.881
##		22.60	29374.16	9414.98	0.029	2.937
##		22.70	13588.38	3721.83	0.014	1.359
##		22.75	22727.18	7171.62	0.023	2.273
##		22.90	303738.36	145443.73	0.304	30.374
##		22.97	19344.00	5937.41	0.019	1.934
##		23.05	34358.01	11671.42	0.034	3.436
##		23.11	16162.57	7313.09	0.016	1.616
##		23.17	13955.94	5814.06	0.014	1.396
##		23.28	33463.91	9629.35	0.033	3.346
##		23.34	7186.85	4322.86	0.007	0.719
##		23.39	7227.06	4076.72	0.007	0.723
##		23.46	13043.39	5635.68	0.013	1.304
##		23.51	16529.94	9187.80	0.017	1.653
##		23.55	7625.22	4568.89	0.008	0.763
##		23.60	17113.54	9291.85	0.017	1.711
##		23.67	18661.93	6683.82	0.019	1.866
##		23.76	1955.67	1208.33	0.002	0.196
##		23.87	202714.16	107280.06	0.203	20.271
##		23.97	5205.84	2590.09	0.005	0.521
##		24.07	1164.80	929.13	0.001	0.116
##		24.23	32816.47	8238.75	0.033	3.282
##		24.30	2914.73	2178.24	0.003	0.291
##		24.35	3785.60	2538.36	0.004	0.379
##		24.42	8443.20	4528.63	0.008	0.844
##		24.47	8068.80	5309.51	0.008	0.807
##		24.55	11126.40	5880.90	0.011	1.113
##		24.66	5523.20	2053.75	0.006	0.552
##		24.81	142506.84	76301.42	0.143	14.251
##		24.94	2837.09	1582.02	0.003	0.284
##		24.98	4611.27	2264.68	0.005	0.461
##		25.17	14896.00	4233.25	0.015	1.490
##		25.27	2873.60	1793.42	0.003	0.287
##		25.33	1708.80	1219.75	0.002	0.171
##		25.38	4358.40	2679.76	0.004	0.436
##		25.47	6416.00	3790.00	0.006	0.642
##		25.54	2227.20	1215.32	0.002	0.223
##		25.71	87889.60	47168.29	0.088	8.789
##		25.80	950.40	594.17	0.001	0.095
##		25.90	2801.60	1360.87	0.003	0.280
##		26.03	3020.80	1434.36	0.003	0.302
##		26.21	1960.89	1199.07	0.002	0.196
##		26.26	3295.67	1932.03	0.003	0.330
##	TETRACOSANE-D50 (SURRO	26.34	5893.84	2101.65	1.812	181.241
##		26.45	1145.60	655.92	0.001	0.000.113
##		26.57	47544.00	26543.40	0.048	4.754
##		26.87	1513.60	777.12	0.002	0.151

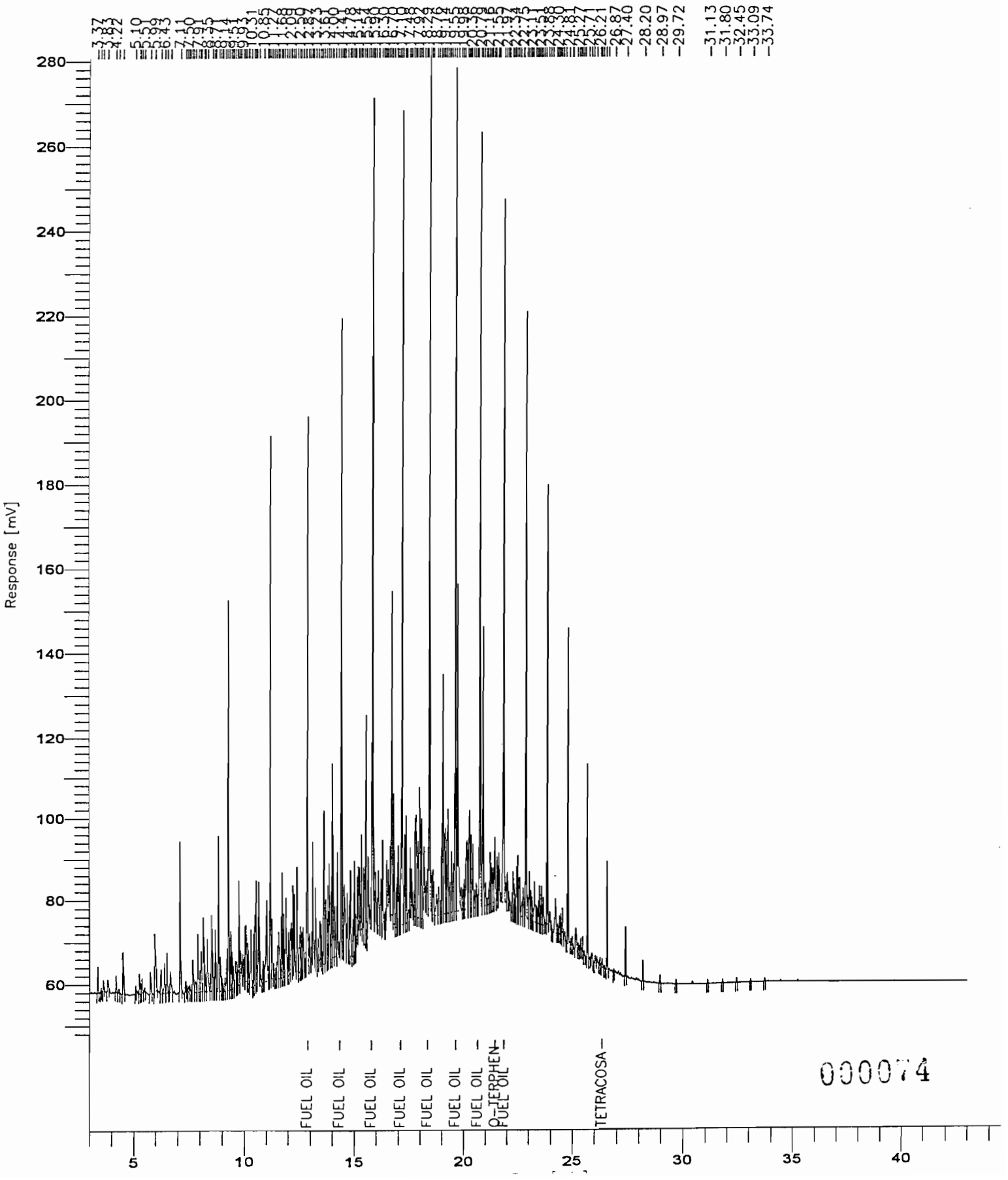
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		27.40	21276.80	11778.63	0.021	2.128
##		28.20	9072.00	4955.68	0.009	0.907
##		28.97	3668.80	1978.91	0.004	0.367
##		29.72	1843.20	1012.50	0.002	0.184
##		31.13	1667.20	928.93	0.002	0.167
##		31.80	1545.60	822.30	0.002	0.155
##		32.45	2112.00	1125.25	0.002	0.211
##		33.09	1276.80	727.88	0.001	0.128
##		33.74	1576.00	763.77	0.002	0.158
			11187632.00	4.98e+06	23.496	2349.610

Report stored in ASCII file: C:\TC4\DATA\D090115.TX0

Chromatogram

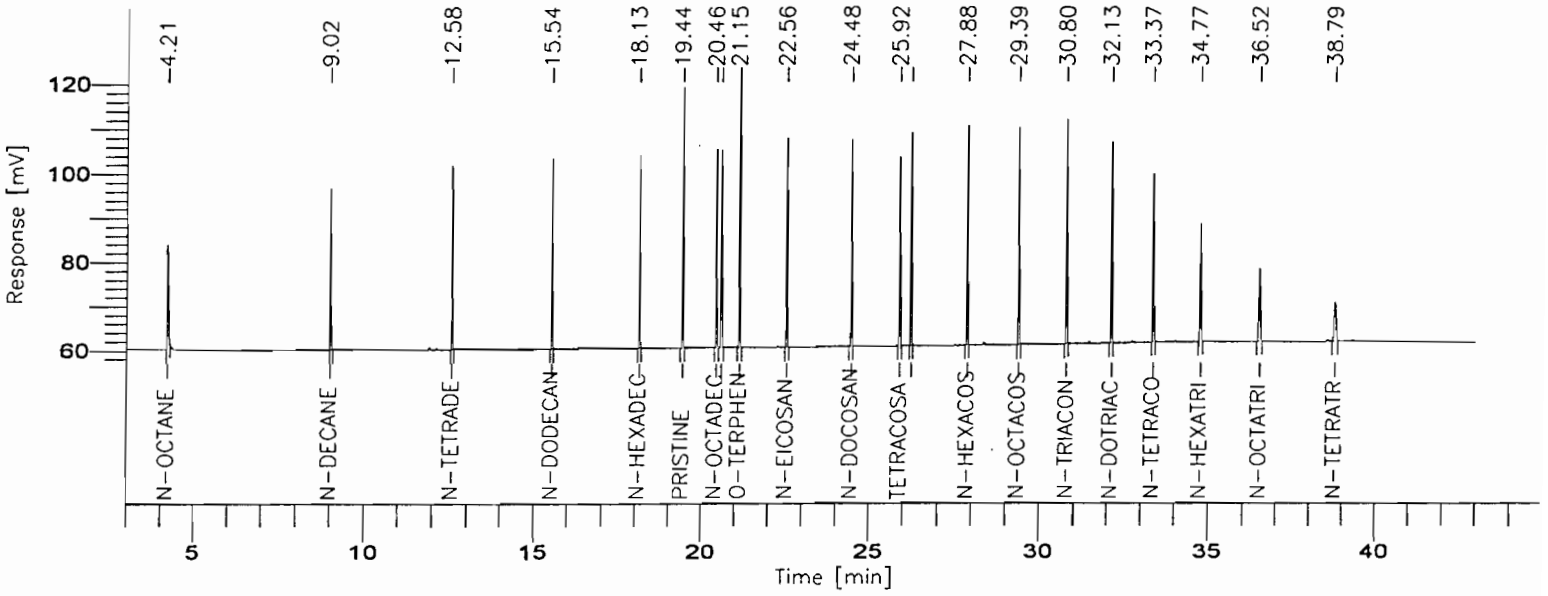
Sample Name : DIESEL
FileName : C:\TC4\DATA\D090115.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 46 mV

Sample #: Page 1 of 1
Date : 9/3/99 15:00
Time of Injection: 9/2/99 03:50
Low Point : 46.43 mV High Point : 280.66 mV
Plot Scale: 234.2 mV



000074

Software Version: 4.1<1L22>
Date: 10/26/99 12:19
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D102134.RAW Date: 10/22/99 20:17
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 34 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000075

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.21	55147.20	23261.35	16.987	1698.729
2	N-DECANE	9.02	66492.80	37326.66	18.441	1844.145
3	N-TETRADECANE	12.58	69052.80	42188.33	18.558	1855.824
4	N-DODECANE	15.54	72230.40	43370.06	19.872	1987.224
5	N-HEXADECANE	18.13	76097.60	44806.72	19.691	1969.137
6	PRISTINE	19.44	102444.80	58983.64	21.789	2178.905
7	N-OCTADECANE	20.46	79294.40	45947.96	19.495	1949.459
8	PHYTANE	20.60	91604.80	44724.02	21.875	2187.451
9	O-TERPHENYL (SURROGATE	21.15	114265.60	61008.32	21.370	2137.033
10	N-EICOSANE	22.56	83003.20	47188.40	18.728	1872.778
11	N-DOCOSANE	24.48	86534.40	47028.45	20.446	2044.559
12	TETRACOSANE-d50 (SURRO	25.92	86220.80	43225.18	20.759	2075.921
13	N-TETRACOSANE	26.25	89315.20	49091.20	20.252	2025.160
14	N-HEXACOSANE	27.88	91926.40	49843.95	20.119	2011.904
15	N-OCTACOSANE	29.39	92763.20	48930.89	20.104	2010.389
16	N-TRIACONTANE	30.80	93280.00	50783.10	20.251	2025.140
17	N-DOTRIACONTANE	32.12	89782.40	45826.70	18.505	1850.505
18	N-TETRACONTANE	33.37	79131.20	38499.77	16.294	1629.418
19	N-HEXATRIACONTANE	34.77	66894.40	27026.28	14.464	1446.442

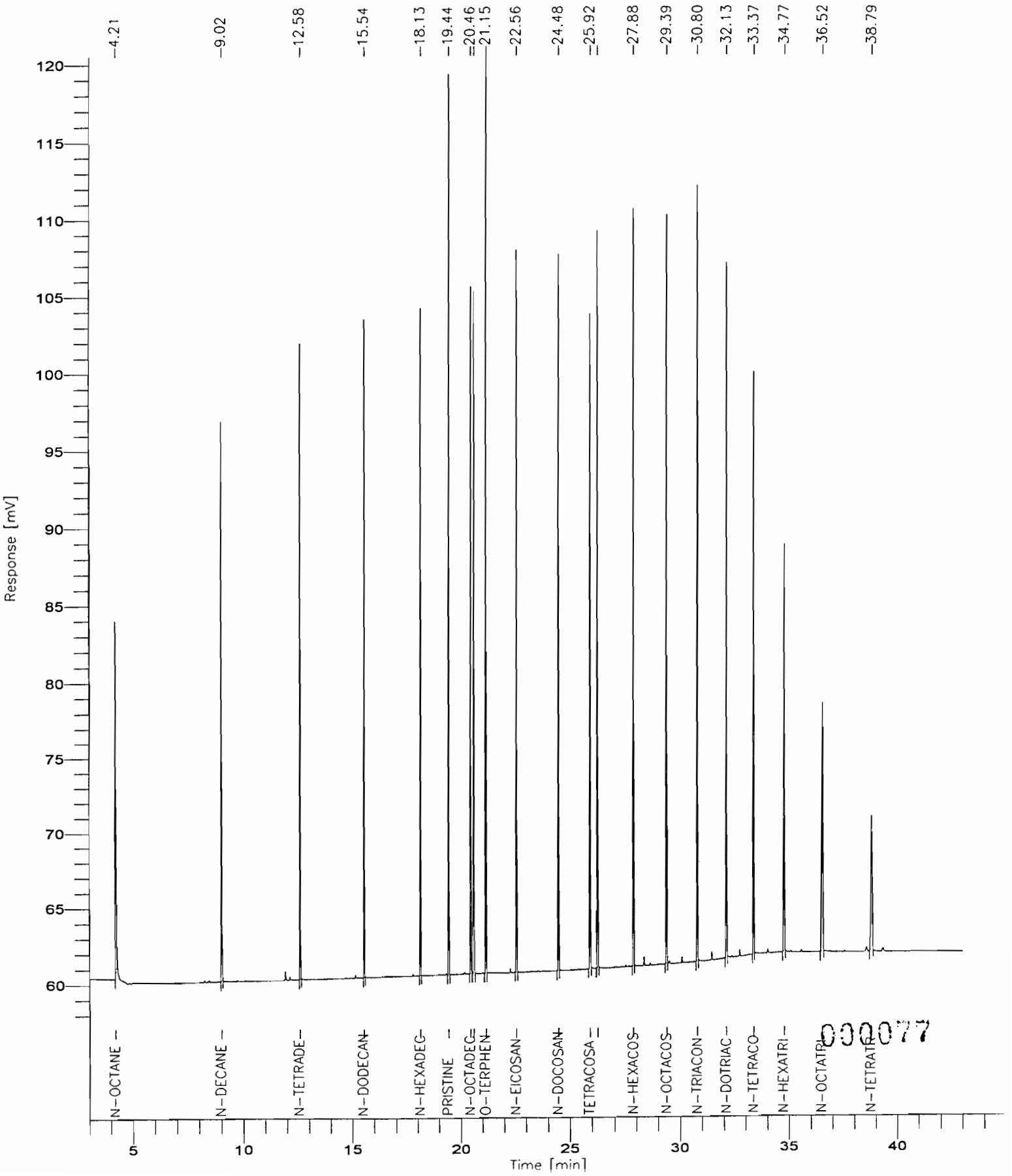
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTATRIACONTANE	36.52	52990.40	16378.62	12.313	1231.336
21	N-TETRATRIACONTANE	38.79	37107.20	8753.57	10.504	1050.442
			1675579.20	874193.17	390.819	39081.900

Report stored in ASCII file: C:\TC4\DATA\D102134.TXO

Chromatogram

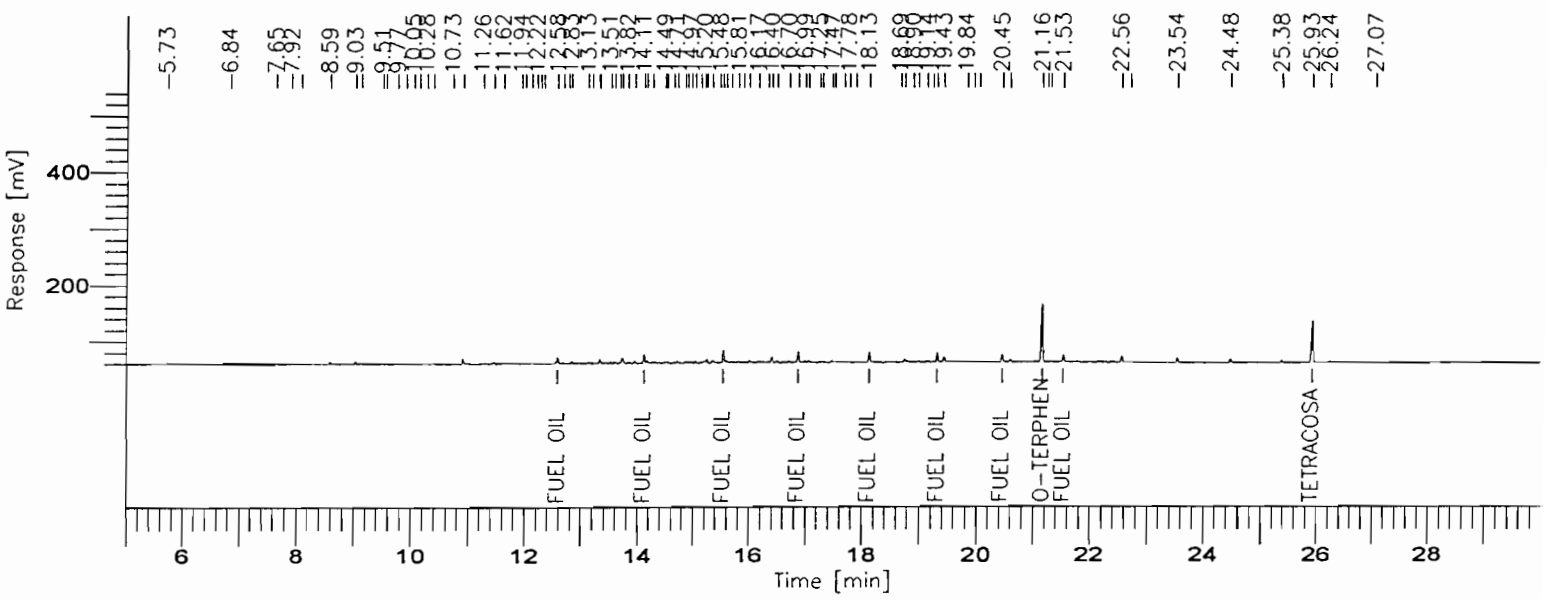
Sample Name : 20 PPM TRPH STD
FileName : C:\TC4\DATA\D102134.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 57 mV

Sample #:
Date : 10/26/99 12:19
Time of Injection: 10/22/99 20:17
Low Point : 57.08 mV High Point : 120.50 mV
Plot Scale: 63.4 mV



000077

Software Version: 4.1<1L22>
Date: 10/26/99 12:19
Sample Name : 500 PPM #2 F.O
Data File : C:\TC4\DATA\D102135.RAW Date: 10/22/99 21:12
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 35 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		5.73	1547.20	835.71	0.002	0.155
2		6.84	2915.20	1343.53	0.003	0.292
3		7.65	993.60	523.36	0.001	0.099
4		7.92	1478.40	968.00	0.001	0.148
5		8.09	1574.40	897.80	0.002	0.157
6		8.59	5072.00	2833.23	0.005	0.507
7		9.03	6108.80	3400.93	0.006	0.611
8		9.14	1625.60	953.96	0.002	0.163
9		9.51	2185.60	1380.32	0.002	0.219
10		9.57	1126.40	757.88	0.001	0.113
11		9.77	1248.00	744.21	0.001	0.125
12		9.91	3236.80	1420.00	0.003	0.324
13		10.05	822.40	526.83	0.001	0.082
14		10.16	851.20	552.79	0.001	0.085
15		10.28	2793.60	1448.57	0.003	0.279
16		10.39	3680.00	1845.16	0.004	0.368
17		10.73	1332.80	562.31	0.001	0.133
18		10.91	12510.40	8119.88	0.013	1.251
19		11.26	870.40	461.11	0.001	0.087

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		11.46	8758.40	3092.39	0.009	0.876
21		11.62	5040.00	2364.57	0.005	0.504
22		11.94	4368.00	2332.11	0.004	0.437
23		12.01	2124.80	1455.55	0.002	0.212
24		12.13	2483.20	1351.84	0.002	0.248
25		12.22	1697.60	850.87	0.002	0.170
26		12.29	1620.80	1129.74	0.002	0.162
27		12.33	1196.80	696.57	0.001	0.120
28	FUEL OIL 2 #1	12.58	21606.40	10927.49	485.349	48534.892
29		12.69	1851.20	1194.77	0.002	0.185
30		12.78	707.20	436.50	0.001	0.071
31		12.83	5030.40	2965.01	0.005	0.503
32		13.13	4140.80	1567.46	0.004	0.414
33		13.20	1536.00	981.25	0.002	0.154
34		13.33	12798.40	7346.70	0.013	1.280
35		13.51	2844.43	1643.72	0.003	0.284
36		13.58	6080.37	2465.89	0.006	0.608
37		13.68	2557.49	1308.54	0.003	0.256
38		13.72	21861.71	9594.26	0.022	2.186
39		13.82	1868.80	1187.32	0.002	0.187
40		13.95	8224.00	4326.46	0.008	0.822
41	FUEL OIL 2 #2	14.11	22671.62	14149.32	529.177	52917.652
42		14.17	6545.98	4099.95	0.007	0.655
43		14.27	1857.60	1193.87	0.002	0.186
44		14.49	3384.07	1469.95	0.003	0.338
45		14.53	3225.53	1794.90	0.003	0.323
46		14.65	2072.53	941.35	0.002	0.207
47		14.71	4783.47	2770.06	0.005	0.478
48		14.86	3929.32	1807.94	0.004	0.393
49		14.90	4896.12	1598.06	0.005	0.490
50		14.97	3824.09	1888.42	0.004	0.382
51		15.04	5339.43	2797.78	0.005	0.534
52		15.14	3447.20	1563.28	0.003	0.345
53		15.20	9118.08	3685.68	0.009	0.912
54		15.24	10837.76	6438.47	0.011	1.084
55		15.34	9537.60	3031.18	0.010	0.954
56		15.48	1315.20	871.37	0.001	0.132
57	FUEL OIL 2 #3	15.54	35622.40	21336.06	493.366	49336.594
58		15.58	2579.20	2042.19	0.003	0.258
59		15.68	2422.40	1285.32	0.002	0.242
60		15.81	3910.40	1751.53	0.004	0.391
61		15.90	4848.00	1809.11	0.005	0.485
62		16.00	6361.60	2939.76	0.006	0.636
63		16.17	2344.00	1273.06	0.002	0.234
64		16.33	1497.91	981.85	0.001	0.150
65		16.40	20098.89	9505.51	0.020	2.010
66		16.50	5888.00	2500.90	0.006	0.589
67		16.70	4764.80	2514.95	0.005	0.476
68	FUEL OIL 2 #4	16.87	29424.00	18409.59	494.105	49410.539
69		16.99	5557.90	2538.61	0.006	55.556

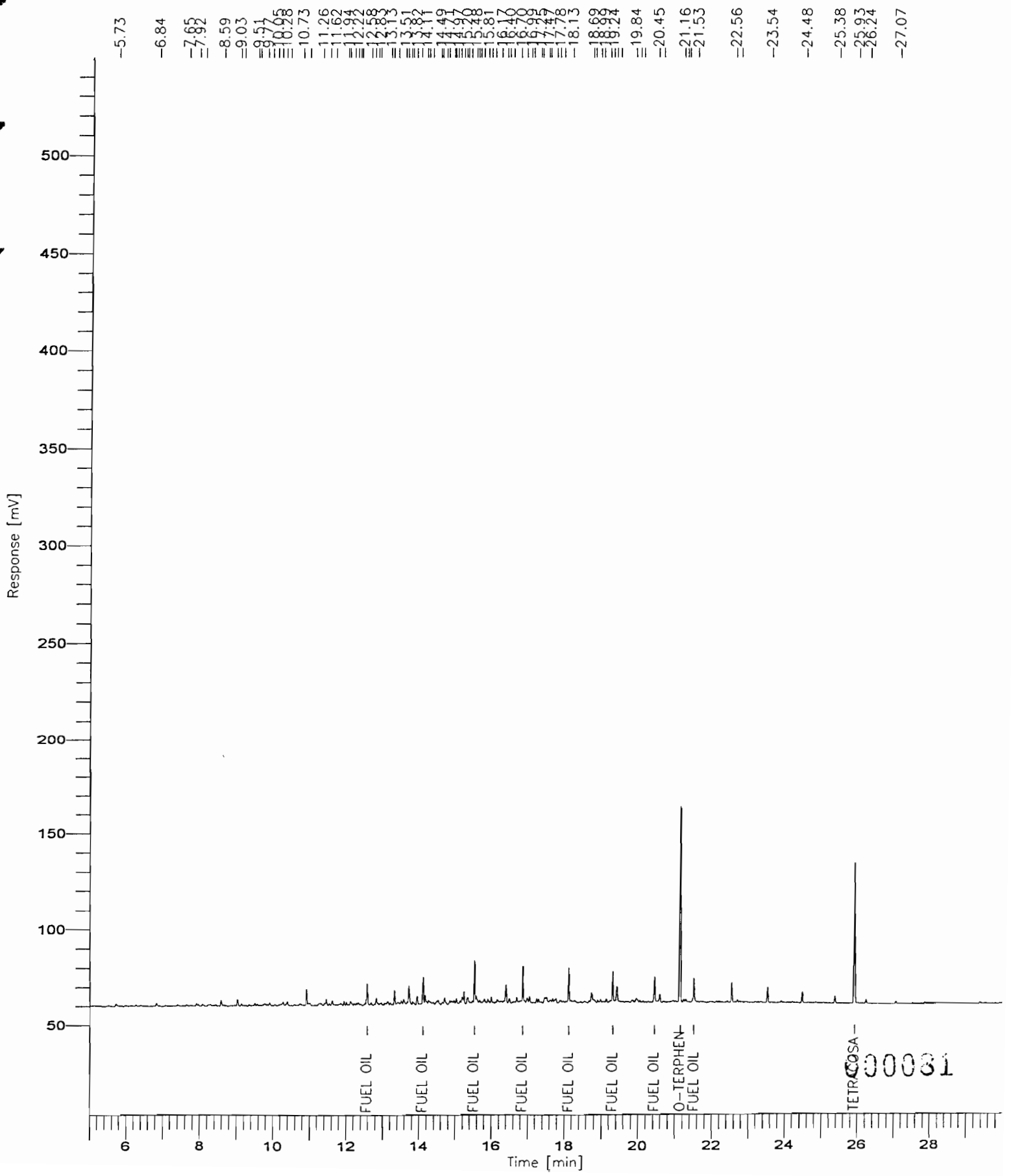
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		17.05	5752.50	2999.59	0.006	0.575
71		17.25	3712.00	2093.11	0.004	0.371
72		17.30	3072.00	1857.38	0.003	0.307
73		17.47	8243.42	2846.85	0.008	0.824
74		17.52	5534.18	2664.45	0.006	0.553
75		17.69	3117.07	1838.30	0.003	0.312
76		17.78	5910.13	2019.83	0.006	0.591
77		17.89	3755.20	1136.71	0.004	0.376
78	FUEL OIL 2 #5	18.13	29680.00	17487.28	519.535	51953.548
79		18.68	1341.08	814.42	0.001	0.134
80		18.75	9306.92	4353.08	0.009	0.931
81		18.90	2540.80	1292.11	0.003	0.254
82		18.99	3014.40	1505.71	0.003	0.301
83		19.14	3380.80	1844.33	0.003	0.338
84		19.24	1337.60	570.96	0.001	0.134
86		19.32	12455.26	15230.77	0.012	1.246
85	FUEL OIL 2 #6	19.32	13072.74	15230.77	403.599	40359.868
87		19.43	14665.60	7588.60	0.015	1.467
88		19.84	1670.40	655.78	0.002	0.167
89		19.96	2283.20	1075.15	0.002	0.228
90		20.05	1177.60	848.33	0.001	0.118
91	FUEL OIL 2 #7	20.45	24368.00	13093.57	519.371	51937.051
92		20.60	8656.00	4083.89	0.009	0.866
93	O-TERPHENYL (SURROGATE	21.16	205886.40	102609.74	40.998	4099.755
94		21.25	3189.70	1371.40	0.003	0.319
95		21.31	2603.90	1313.88	0.003	0.260
96	FUEL OIL 2 #8	21.53	23619.20	12021.10	494.587	49458.713
97		22.56	19632.00	10453.77	0.020	1.963
98		22.71	2187.20	1114.88	0.002	0.219
99		23.54	14209.60	7944.67	0.014	1.421
##		24.48	10259.20	5842.05	0.010	1.026
##		25.38	7027.20	3811.61	0.007	0.703
##	TETRACOSANE-D50 (SURRO	25.93	152192.00	72785.36	40.881	4088.084
##		26.24	3542.40	2043.51	0.004	0.354
##		27.07	1814.40	1024.34	0.002	0.181
##		30.79	1790.40	982.26	0.002	0.179
##		31.46	1596.80	888.10	0.002	0.160
##		32.11	2083.20	1131.95	0.002	0.208
##		33.24	1750.40	924.06	0.002	0.175
			1013905.60	537178.27	4021.423	402142.272

Report stored in ASCII file: C:\TC4\DATA\D102135.TX0

Chromatogram

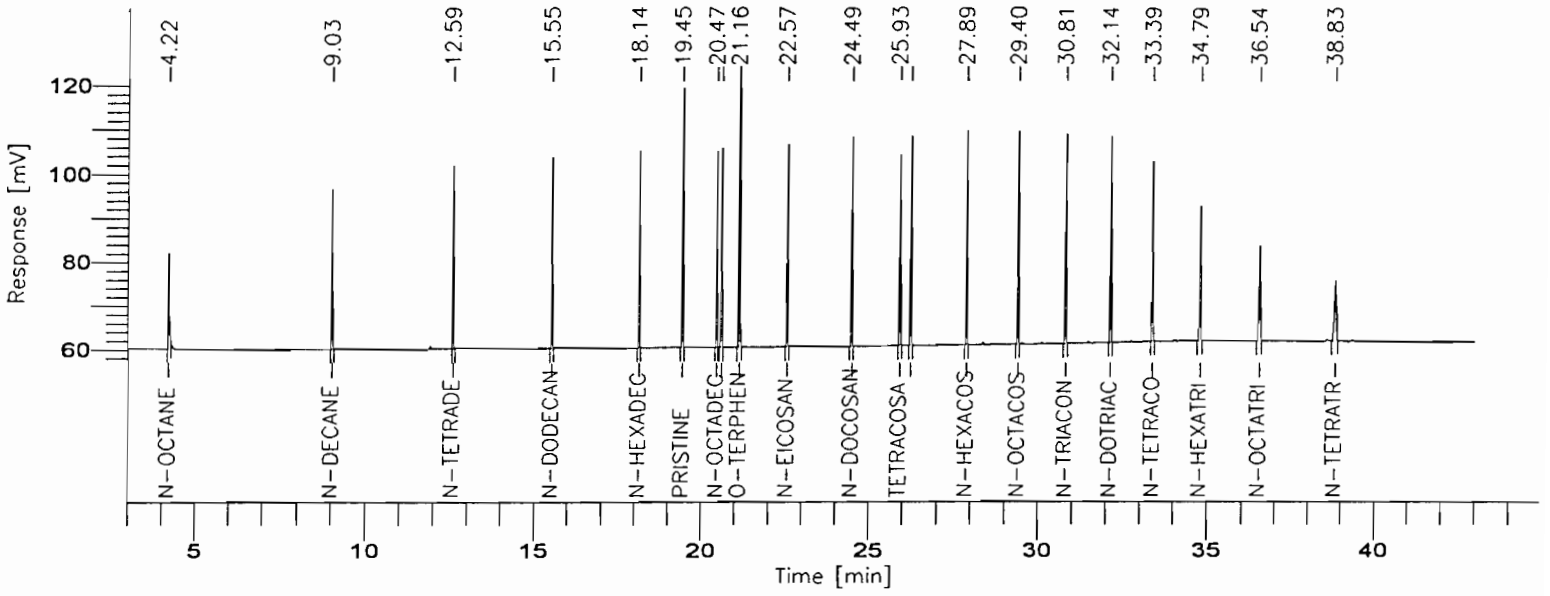
Sample Name : 500 PPM #2 F.O
FileName : C:\TC4\DATA\D102135.raw
Method : TRPH909
Start Time : 5.00 min End Time : 30.00 min
Scale Factor: 0.0 Plot Offset: 50 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:19
Time of Injection: 10/22/99 21:12
Low Point : 50.00 mV High Point : 550.00 mV
Plot Scale: 500.0 mV



000081

Software Version: 4.1<1L22>
Date: 10/26/99 12:20
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D102146.RAW Date: 10/23/99 07:09
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 46 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000032

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.22	53827.20	21437.42	16.611	1661.106
2	N-DECANE	9.03	64979.20	36417.57	18.022	1802.166
3	N-TETRADECANE	12.59	68016.00	41620.80	18.280	1827.959
4	N-DODECANE	15.55	71289.60	43261.01	19.613	1961.340
5	N-HEXADECANE	18.14	74827.20	44652.67	19.363	1936.264
6	PRISTINE	19.45	102364.80	58782.86	21.772	2177.204
7	N-OCTADECANE	20.46	77619.20	44351.86	19.083	1908.274
8	PHYTANE	20.61	91286.40	45027.18	21.798	2179.848
9	O-TERPHENYL (SURROGATE	21.16	111323.20	60231.82	20.820	2082.003
10	N-EICOSANE	22.57	80908.80	46408.52	18.255	1825.523
11	N-DOCOSANE	24.49	84364.80	47349.95	19.933	1993.298
12	TETRACOSANE-d50 (SURRO	25.93	84060.80	43074.06	20.239	2023.915
13	N-TETRACOSANE	26.26	87097.60	47885.79	19.749	1974.877
14	N-HEXACOSANE	27.89	90028.80	48539.70	19.704	1970.373
15	N-OCTACOSANE	29.40	91064.00	48229.53	19.736	1973.563
16	N-TRIACONTANE	30.81	91004.80	47961.08	19.757	1975.744
17	N-DOTRIACONTANE	32.13	89744.00	46923.63	18.496	1849.649
18	N-TETRACONTANE	33.39	84065.60	40700.88	17.448	1744.813
19	N-HEXATRIACONTANE	34.79	78054.40	30931.24	16.878	1687.752

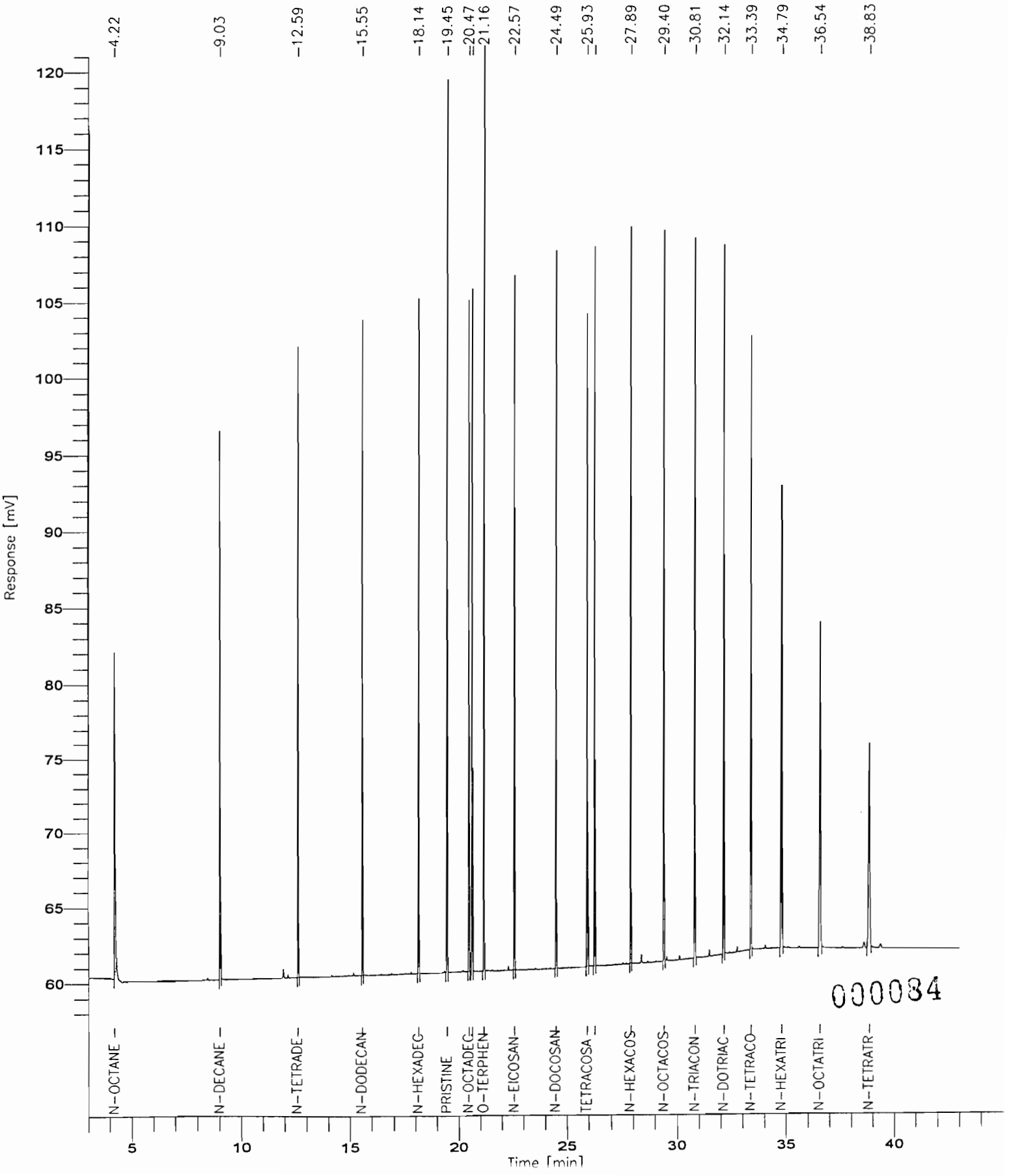
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTATRIACONTANE	36.54	71081.60	21619.50	16.517	1651.721
21	N-TETRATRIACONTANE	38.83	58430.40	13607.54	16.541	1654.066
			1705438.40	879014.62	398.615	39861.458

Report stored in ASCII file: C:\TC4\DATA\D102146.TX0

Chromatogram

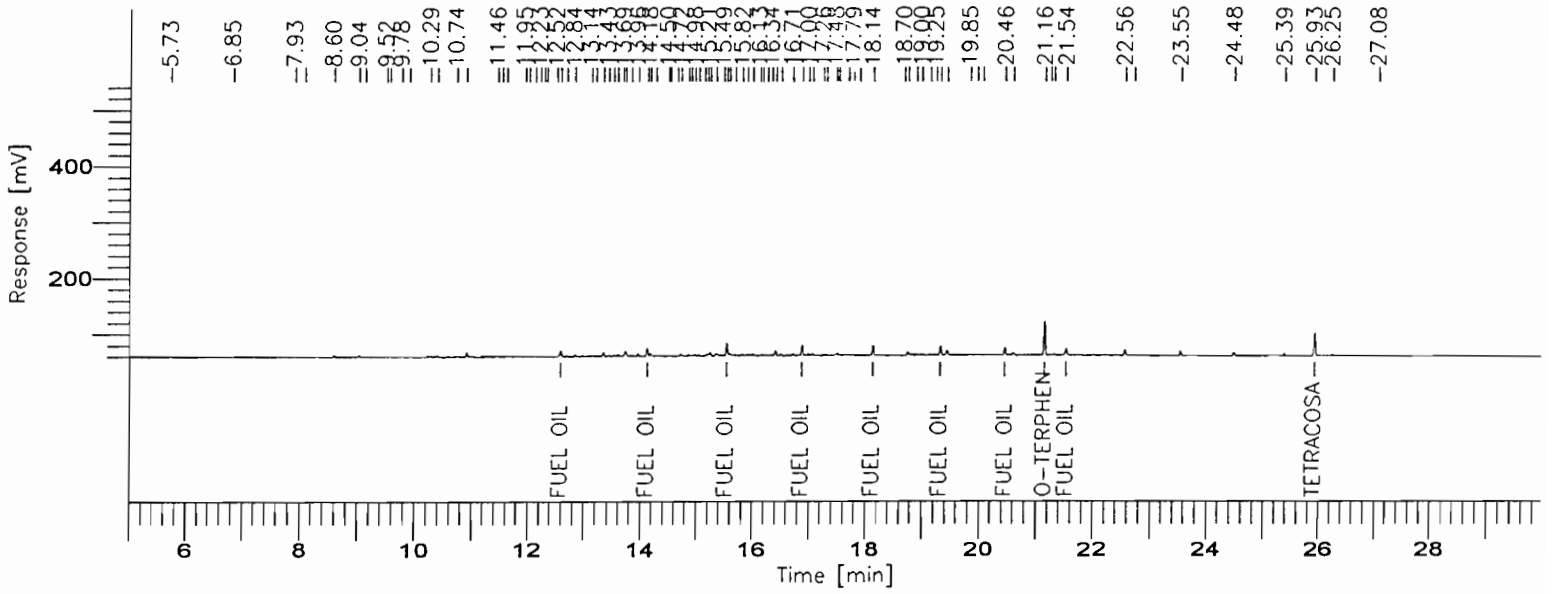
Sample Name : 20 PPM TRPH STD
FileName : C:\TC4\DATA\D102146.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 57 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:20
Time of Injection: 10/23/99 07:09
Low Point : 57.08 mV High Point : 121.01 mV
Plot Scale: 63.9 mV



000084

Software Version: 4.1<1L22>
Date: 10/26/99 12:20
Sample Name : 500 PPM # 2 F.O.
Data File : C:\TC4\DATA\D102147.RAW Date: 10/23/99 08:03
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 47 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000085

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		5.73	1558.40	805.45	0.002	0.156
2		6.85	2771.20	1263.05	0.003	0.277
3		7.93	1425.60	938.65	0.001	0.143
4		8.09	1446.40	826.88	0.001	0.145
5		8.60	4936.00	2740.00	0.005	0.494
6		9.04	5899.20	3282.05	0.006	0.590
7		9.15	1492.80	895.45	0.001	0.149
8		9.52	2107.20	1317.01	0.002	0.211
9		9.57	979.20	677.50	0.001	0.098
10		9.78	1184.00	726.01	0.001	0.118
11		9.92	3049.60	1347.43	0.003	0.305
12		10.28	2886.40	1422.94	0.003	0.289
13		10.40	3915.20	1801.01	0.004	0.392
14		10.74	1393.60	562.21	0.001	0.139
15		10.92	12121.60	7809.27	0.012	1.212
16		11.46	8966.92	3059.42	0.009	0.897
17		11.55	2076.28	1016.34	0.002	0.208
18		11.63	4944.00	2327.56	0.005	0.494
19		11.95	4259.20	2286.58	0.004	0.426

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		12.02	2052.80	1418.28	0.002	0.205
21		12.13	2566.40	1387.53	0.003	0.257
22		12.23	1635.20	843.65	0.002	0.164
23		12.29	1558.40	1085.60	0.002	0.156
24		12.34	1177.60	681.25	0.001	0.118
25		12.52	1335.38	785.66	0.001	0.134
26	FUEL OIL 2 #1	12.59	22877.91	10795.84	513.879	51387.900
27		12.70	1911.51	1212.22	0.002	0.191
28		12.84	4704.00	2859.59	0.005	0.470
29		13.14	4044.80	1482.32	0.004	0.404
30		13.21	1500.80	976.50	0.002	0.150
31		13.34	12566.40	7138.97	0.013	1.257
32		13.43	1542.40	622.19	0.002	0.154
33		13.52	2845.97	1609.34	0.003	0.285
34		13.59	5945.92	2399.41	0.006	0.595
35		13.69	2255.28	1288.50	0.002	0.226
36		13.73	21615.23	9415.70	0.022	2.162
37		13.83	2169.60	1236.64	0.002	0.217
38		13.96	8118.40	4220.31	0.008	0.812
39	FUEL OIL 2 #2	14.12	23134.84	14144.67	540.073	54007.349
40		14.18	9911.56	4611.19	0.010	0.991
41		14.28	1875.20	1161.07	0.002	0.188
42		14.50	4102.40	1602.50	0.004	0.410
43		14.54	3750.40	1889.42	0.004	0.375
44		14.66	1940.50	888.69	0.002	0.194
45		14.72	4493.10	2673.15	0.004	0.449
46		14.87	4354.04	1859.39	0.004	0.435
47		14.91	4890.58	1631.80	0.005	0.489
48		14.98	4031.09	1918.07	0.004	0.403
49		15.05	5557.66	2785.51	0.006	0.556
50		15.14	3634.95	1550.42	0.004	0.363
51		15.21	9109.56	3651.41	0.009	0.911
52		15.25	10502.12	6399.22	0.011	1.050
53		15.35	9539.20	3003.21	0.010	0.954
54		15.49	1612.80	979.11	0.002	0.161
55	FUEL OIL 2 #3	15.55	37831.36	21960.53	522.966	52296.555
56		15.59	7078.40	3052.92	0.007	0.708
57		15.69	2335.04	1219.50	0.002	0.234
58		15.82	3795.20	1716.95	0.004	0.380
59		15.91	1948.80	1331.17	0.002	0.195
60		16.01	7350.40	3029.15	0.007	0.735
61		16.13	604.80	440.86	0.001	0.060
62		16.18	2422.40	1282.94	0.002	0.242
63		16.27	1801.60	728.78	0.002	0.180
64		16.34	1585.78	992.76	0.002	0.159
65		16.41	19675.02	9230.54	0.020	1.968
66		16.50	5756.80	2475.29	0.006	0.576
67		16.71	4582.40	2398.34	0.005	0.458
68	FUEL OIL 2 #4	16.88	28936.00	18053.77	486.110	48611.000
69		17.00	5321.60	2461.90	0.006	30532

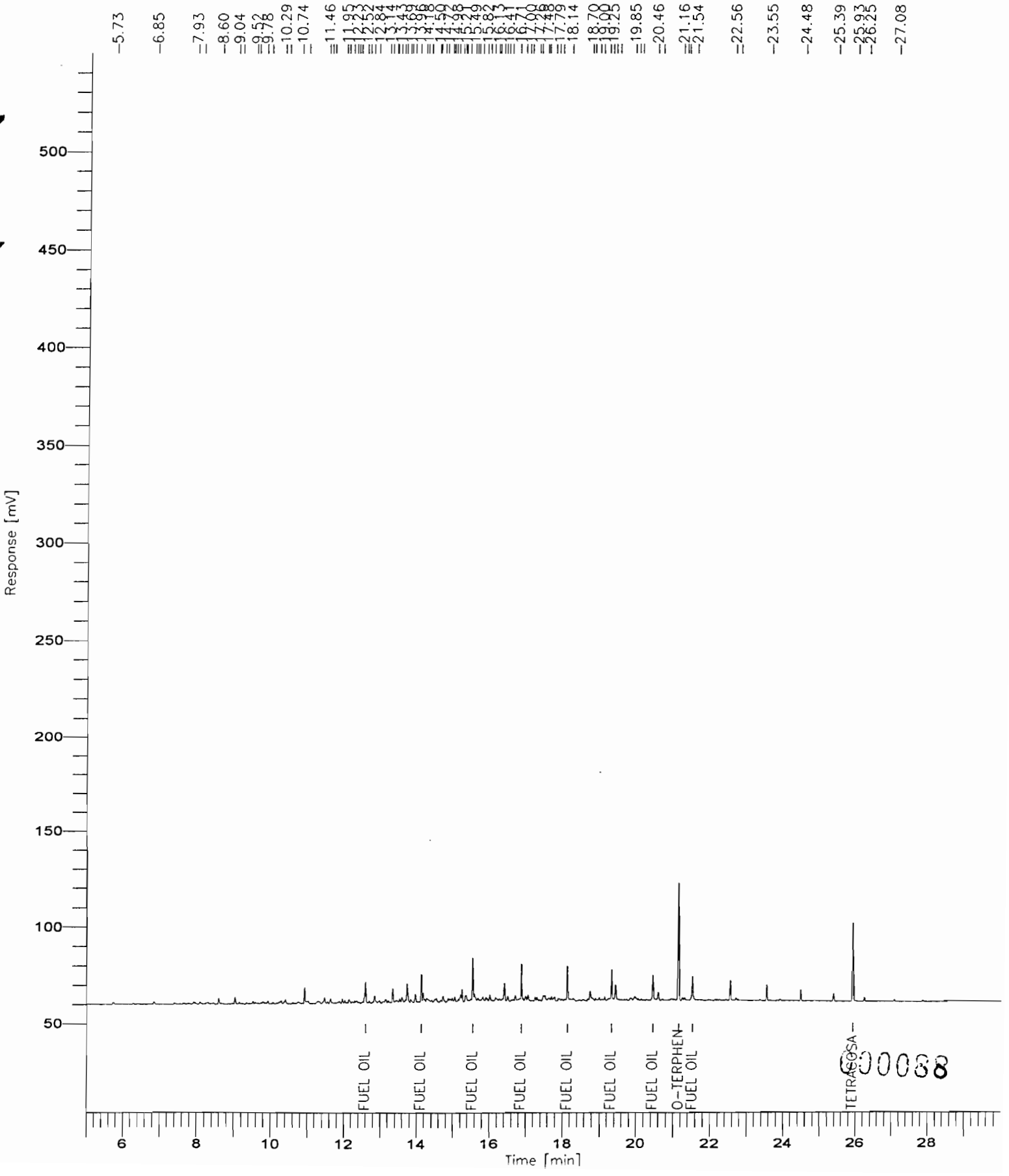
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		17.06	5564.80	2937.14	0.006	0.556
71		17.26	3637.70	2052.00	0.004	0.364
72		17.31	2931.90	1779.58	0.003	0.293
73		17.48	7758.46	2795.37	0.008	0.776
74		17.53	5927.94	2645.67	0.006	0.593
75		17.70	3117.63	1785.17	0.003	0.312
76		17.79	5776.77	1992.36	0.006	0.578
77		17.89	3696.00	1124.30	0.004	0.370
78	FUEL OIL 2 #5	18.14	29350.40	17214.26	513.692	51369.177
79		18.69	1326.90	775.88	0.001	0.133
80		18.76	9399.50	4234.78	0.009	0.940
81		18.91	2386.63	1253.54	0.002	0.239
82		19.00	2638.97	1352.20	0.003	0.264
83		19.15	3254.40	1800.91	0.003	0.325
84		19.25	1866.40	817.98	0.002	0.187
85	FUEL OIL 2 #6	19.33	15853.29	15577.31	491.170	49117.012
86		19.33	12432.68	15577.31	0.012	1.243
87		19.44	15914.83	7676.23	0.016	1.591
88		19.85	4169.60	1116.22	0.004	0.417
89		19.97	2041.60	971.43	0.002	0.204
90		20.06	1107.20	799.01	0.001	0.111
91	FUEL OIL 2 #7	20.46	23737.60	12894.68	505.592	50559.157
92		20.61	8640.00	4088.74	0.009	0.864
93	O-TERPHENYL (SURROGATE	21.16	112643.20	60744.48	22.430	2243.031
94		21.26	3329.97	1405.90	0.003	0.333
95		21.32	2583.63	1352.02	0.003	0.258
96	FUEL OIL 2 #8	21.54	24179.20	11919.43	505.925	50592.543
97		22.56	19366.40	10316.52	0.019	1.937
98		22.72	2140.80	1068.27	0.002	0.214
99		23.55	13753.60	8117.37	0.014	1.375
##		24.48	10083.20	5764.92	0.010	1.008
##		25.38	6768.00	3825.95	0.007	0.677
##	TETRACOSANE-D50 (SURRO	25.93	82419.20	40814.56	22.139	2213.892
##		26.25	3347.20	1926.53	0.003	0.335
##		27.08	1561.60	909.26	0.002	0.156
##		32.02	1337.60	733.45	0.001	0.134
##		33.25	1843.20	986.29	0.002	0.184
			861190.40	460835.54	4124.436	412443.637

Report stored in ASCII file: C:\TC4\DATA\D102147.TX0

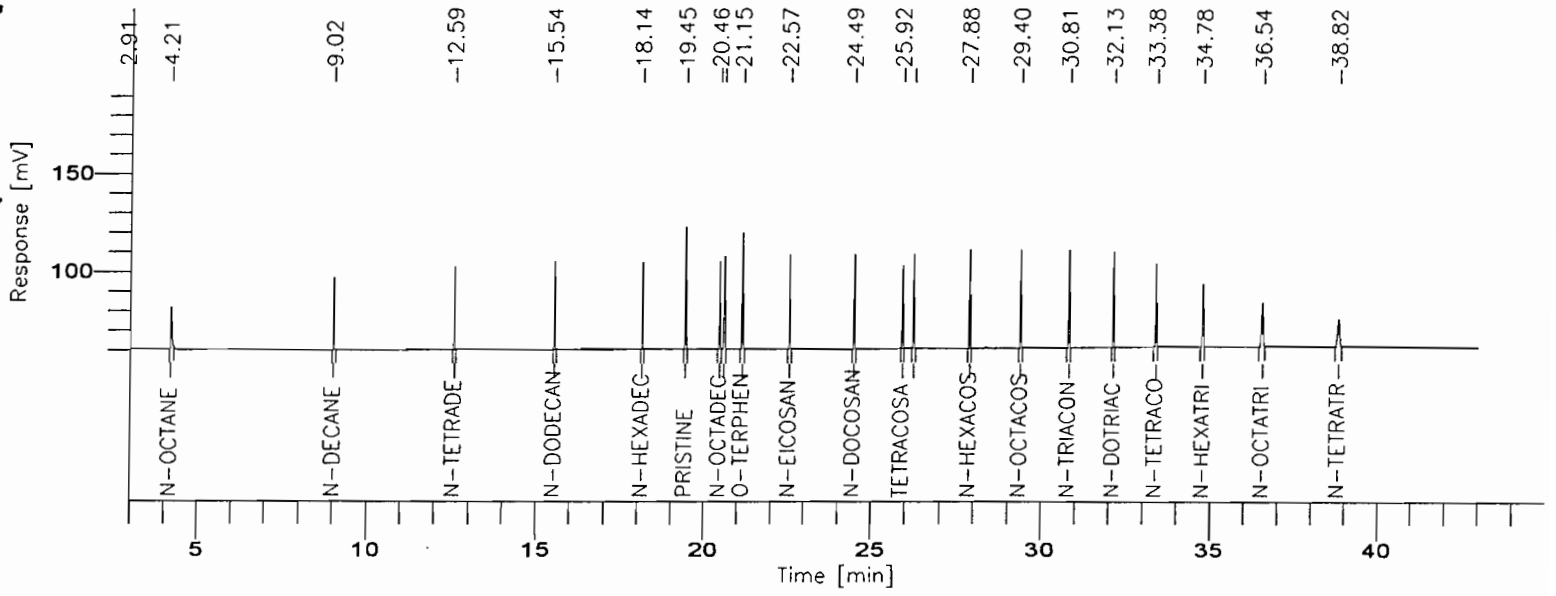
Chromatogram

Sample Name : 500 PPM # 2 F.O.
FileName : C:\TC4\DATA\D102147.raw
Method : TRPH909
Start Time : 5.00 min
End Time : 30.00 min
Scale Factor: 0.0
Plot Offset: 50 mV

Sample #:
Date : 10/26/99 12:20
Time of Injection: 10/23/99 08:03
Low Point : 50.00 mV
High Point : 550.00 mV



Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D102160.RAW Date: 10/23/99 19:46
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 60 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000089

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		2.91	46801.60	137295.14	0.047	4.680
2	N-OCTANE	4.21	54412.80	21381.46	16.778	1677.797
3	N-DECANE	9.02	66083.20	36928.03	18.328	1832.785
4	N-TETRADECANE	12.59	69243.20	42415.91	18.609	1860.941
5	N-DODECANE	15.54	72873.60	44832.91	20.049	2004.920
6	N-HEXADECANE	18.14	76910.40	45189.28	19.902	1990.169
7	PRISTINE	19.45	110438.40	63244.76	23.489	2348.922
8	N-OCTADECANE	20.46	80185.60	45553.42	19.714	1971.369
9	PHYTANE	20.61	98496.00	47926.96	23.520	2352.008
10	O-TERPHENYL (SURROGATE	21.15	111385.60	60138.29	20.832	2083.170
11	N-EICOSANE	22.57	83968.00	48362.83	18.945	1894.547
12	N-DOCOSANE	24.49	87633.60	48702.23	20.705	2070.530
13	TETRACOSANE-d50 (SURRO	25.92	85532.80	42904.61	20.594	2059.356
14	N-TETRACOSANE	26.25	90614.40	49332.06	20.546	2054.618
15	N-HEXACOSANE	27.88	93785.60	50713.20	20.526	2052.594
16	N-OCTACOSANE	29.40	94928.00	50473.80	20.573	2057.305
17	N-TRIACONTANE	30.81	94886.40	50018.51	20.600	2060.015
18	N-DOTRIACONTANE	32.13	93699.20	49422.24	19.377	1937.747
19	N-TETRACONTANE	33.38	87958.40	42696.20	18.358	1835.849

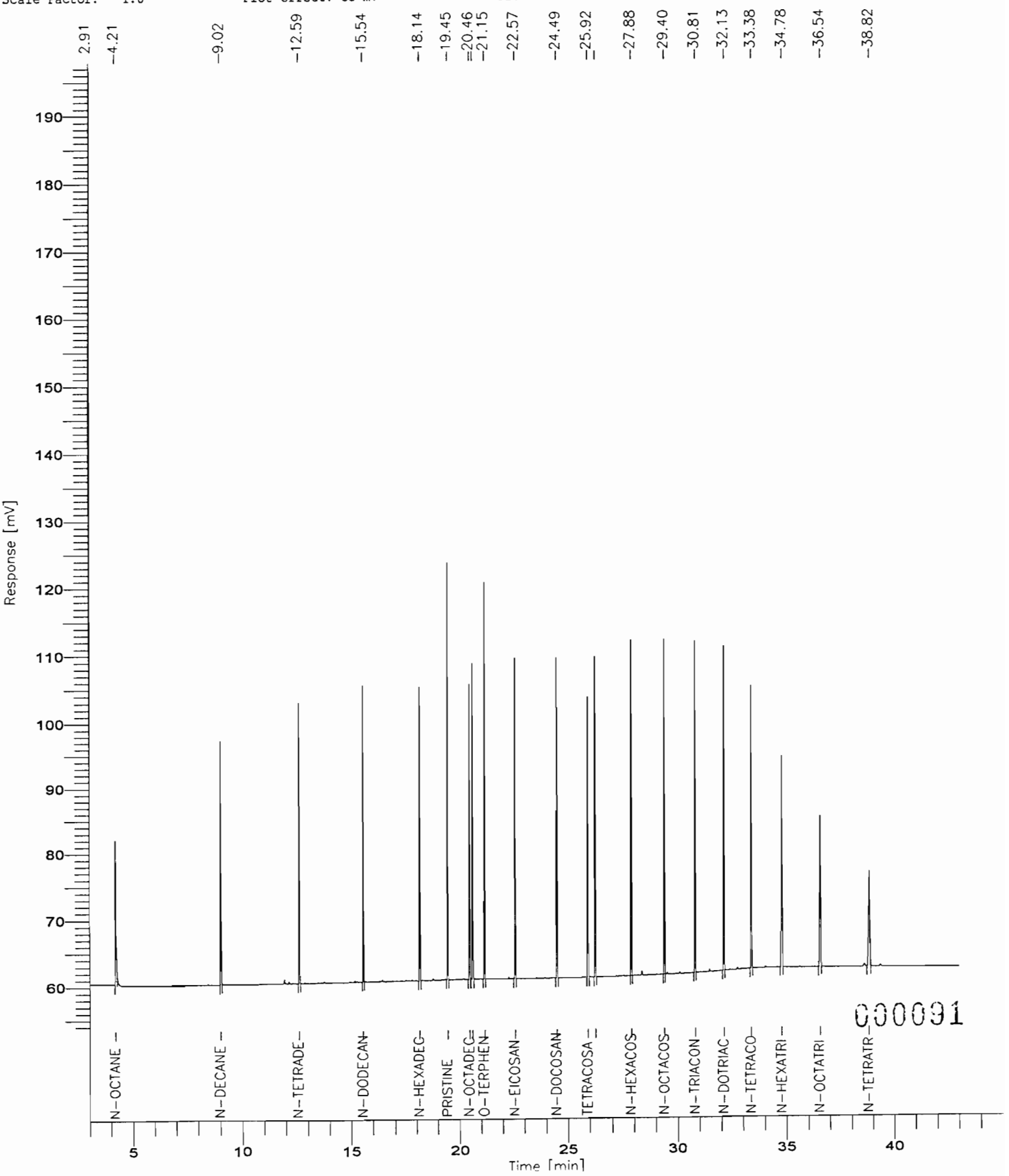
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-HEXATRIACONTANE	34.78	81870.40	31925.66	17.703	1770.265
21	N-OCTATRIACONTANE	36.53	74636.80	22676.01	17.343	1734.333
22	N-TETRATRIACONTANE	38.82	61859.20	14224.85	17.511	1751.130
			1818203.20	1.05e+06	414.050	41405.049

Report stored in ASCII file: C:\TC4\DATA\D102160.TX0

Chromatogram

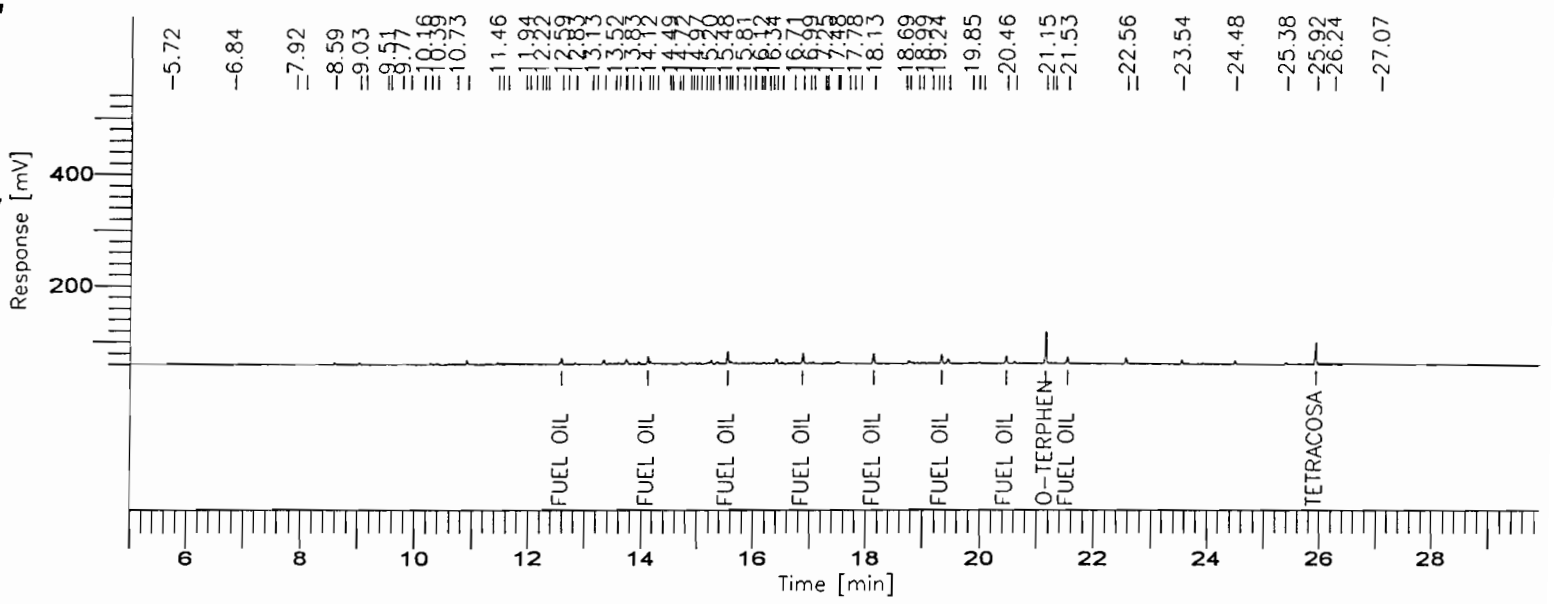
Sample Name : 20 PPM TRPH STD
FileName : C:\TC4\DATA\D102160.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 53 mV

Sample #:
Date : 10/26/99 12:21
Time of Injection: 10/23/99 19:46
Low Point : 53.32 mV High Point : 197.83 mV
Plot Scale: 144.5 mV



000091

Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : 500 PPM # 2 F.O
Data File : C:\TC4\DATA\D102161.RAW Date: 10/23/99 20:40
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 61 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

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Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		5.72	1617.60	811.04	0.002	0.162
2		6.84	2875.20	1309.16	0.003	0.288
3		7.92	1411.20	923.21	0.001	0.141
4		8.08	1444.80	843.31	0.001	0.144
5		8.59	4860.80	2752.07	0.005	0.486
6		9.03	5953.60	3314.40	0.006	0.595
7		9.14	1472.00	885.00	0.001	0.147
8		9.51	2102.40	1314.91	0.002	0.210
9		9.57	958.40	667.50	0.001	0.096
10		9.77	1292.80	775.00	0.001	0.129
11		9.91	3129.60	1390.00	0.003	0.313
12		10.16	880.00	539.66	0.001	0.088
13		10.28	2672.00	1379.94	0.003	0.267
14		10.39	3502.40	1748.03	0.004	0.350
15		10.73	1281.60	536.35	0.001	0.128
16		10.91	12160.00	7664.29	0.012	1.216
17		11.46	8763.50	3031.21	0.009	0.876
18		11.54	1998.10	968.68	0.002	0.200
19		11.62	4816.00	2261.71	0.005	0.482

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		11.94	4201.60	2254.38	0.004	0.420
21		12.01	2019.20	1379.16	0.002	0.202
22		12.13	2355.20	1290.32	0.002	0.236
23		12.22	1592.00	821.25	0.002	0.159
24		12.29	1534.40	1065.04	0.002	0.153
25		12.34	1040.00	602.36	0.001	0.104
26	FUEL OIL 2 #1	12.59	20857.60	10531.63	468.547	46854.738
27		12.69	1771.20	1165.62	0.002	0.177
28		12.83	4774.40	2845.38	0.005	0.477
29		13.13	3964.80	1472.00	0.004	0.396
30		13.20	1516.80	959.18	0.002	0.152
31		13.33	12308.80	6967.03	0.012	1.231
32		13.51	2837.55	1573.26	0.003	0.284
33		13.58	5841.60	2384.19	0.006	0.584
34		13.68	2339.20	1281.12	0.002	0.234
35		13.72	21183.25	9307.01	0.021	2.118
36		13.82	1776.00	1154.35	0.002	0.178
37		13.95	8044.80	4157.50	0.008	0.804
38	FUEL OIL 2 #2	14.12	21848.19	13515.27	509.806	50980.599
39		14.17	6255.81	3925.57	0.006	0.626
40		14.27	1700.80	1100.63	0.002	0.170
41		14.49	4115.20	1568.73	0.004	0.412
42		14.53	3676.80	1898.63	0.004	0.368
43		14.66	1986.96	885.38	0.002	0.199
44		14.72	4574.64	2645.99	0.005	0.457
45		14.86	3928.12	1765.20	0.004	0.393
46		14.90	4945.37	1591.84	0.005	0.495
47		14.97	3854.17	1876.06	0.004	0.385
48		15.04	5374.28	2706.14	0.005	0.537
49		15.14	3332.92	1526.51	0.003	0.333
50		15.20	8704.11	3569.66	0.009	0.870
51		15.25	10718.63	6277.21	0.011	1.072
52		15.36	10736.00	2934.01	0.011	1.074
53		15.48	1252.80	828.00	0.001	0.125
54	FUEL OIL 2 #3	15.54	34592.00	20993.66	479.559	47955.879
55		15.59	2928.00	2067.58	0.003	0.293
56		15.68	2259.20	1180.06	0.002	0.226
57		15.81	3484.80	1640.61	0.003	0.348
58		15.90	4665.60	1778.40	0.005	0.467
59		16.00	5715.20	2826.19	0.006	0.572
60		16.12	613.12	424.66	0.001	0.061
61		16.17	2420.48	1302.42	0.002	0.242
62		16.27	1739.20	708.81	0.002	0.174
63		16.34	1628.55	987.37	0.002	0.163
64		16.41	19475.45	9017.82	0.019	1.948
65		16.50	5803.20	2488.43	0.006	0.580
66		16.71	4566.40	2401.83	0.005	0.457
67	FUEL OIL 2 #4	16.87	30620.80	18108.72	513.714	51371.378
68		16.99	5242.65	2442.65	0.005	0.524
69		17.06	5459.75	2861.23	0.005	0.546

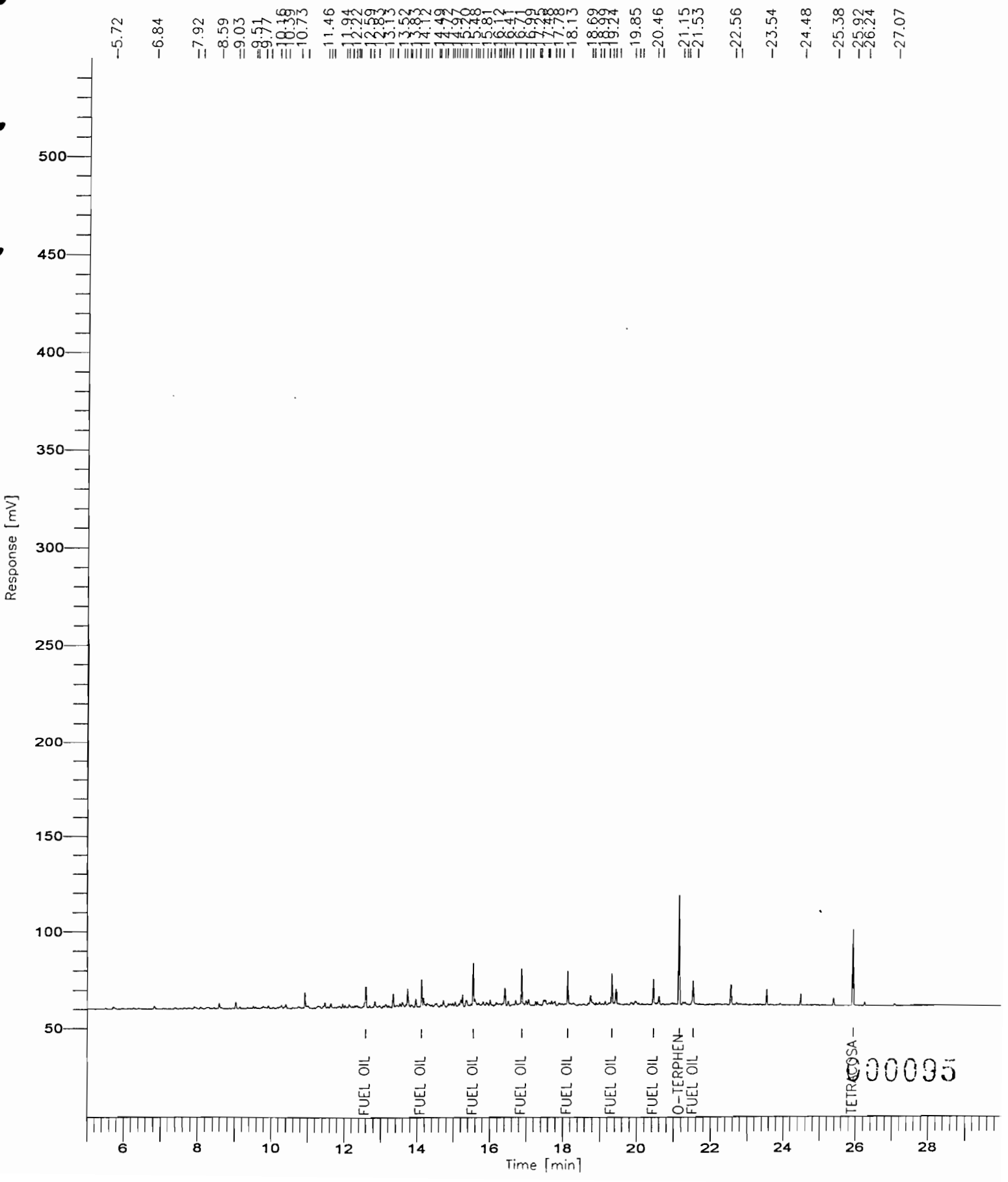
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		17.25	3595.69	2024.02	0.004	0.360
71		17.30	2873.11	1740.01	0.003	0.287
72		17.48	7696.50	2746.04	0.008	0.770
73		17.52	5780.30	2621.02	0.006	0.578
74		17.69	3126.95	1803.66	0.003	0.313
75		17.78	5749.85	1993.31	0.006	0.575
76		17.89	3625.60	1120.56	0.004	0.363
77	FUEL OIL 2 #5	18.13	29017.60	16851.88	507.791	50779.133
78		18.69	1294.74	781.90	0.001	0.129
79		18.76	8801.26	4172.44	0.009	0.880
80		18.90	2513.60	1278.93	0.003	0.251
81		18.99	2868.80	1465.22	0.003	0.287
82		19.14	3286.40	1804.69	0.003	0.329
83		19.24	1560.00	784.69	0.002	0.156
85		19.32	10835.20	15445.00	0.011	1.084
84	FUEL OIL 2 #6	19.32	16100.80	15445.00	498.965	49896.518
86		19.43	14620.80	7521.42	0.015	1.462
87		19.84	4283.20	1124.03	0.004	0.428
88		19.96	2492.80	1107.33	0.002	0.249
89		20.05	1145.60	808.67	0.001	0.115
90	FUEL OIL 2 #7	20.46	23798.40	12950.09	506.921	50692.050
91		20.60	8819.20	4142.20	0.009	0.882
92	O-TERPHENYL (SURROGATE	21.15	104192.00	56108.46	20.747	2074.744
93		21.25	3341.05	1423.40	0.003	0.334
94		21.31	2582.15	1365.65	0.003	0.258
95	FUEL OIL 2 #8	21.53	24652.80	11887.07	515.514	51551.438
96		22.56	19254.40	10333.05	0.019	1.925
97		22.71	2161.60	1079.50	0.002	0.216
98		23.54	13792.00	8052.84	0.014	1.379
99		24.48	10144.00	5820.71	0.010	1.014
##		25.38	6822.40	3818.80	0.007	0.682
##	TETRACOSANE-D50 (SURRO	25.92	77294.40	39041.36	20.762	2076.233
##		26.24	3380.80	1961.50	0.003	0.338
##		27.07	1582.40	906.84	0.002	0.158
##		32.02	1376.00	748.44	0.001	0.138
##		33.25	2011.20	1064.89	0.002	0.201
			827843.20	447516.08	4042.772	404277.198

Report stored in ASCII file: C:\TC4\DATA\D102161.TX0

Chromatogram

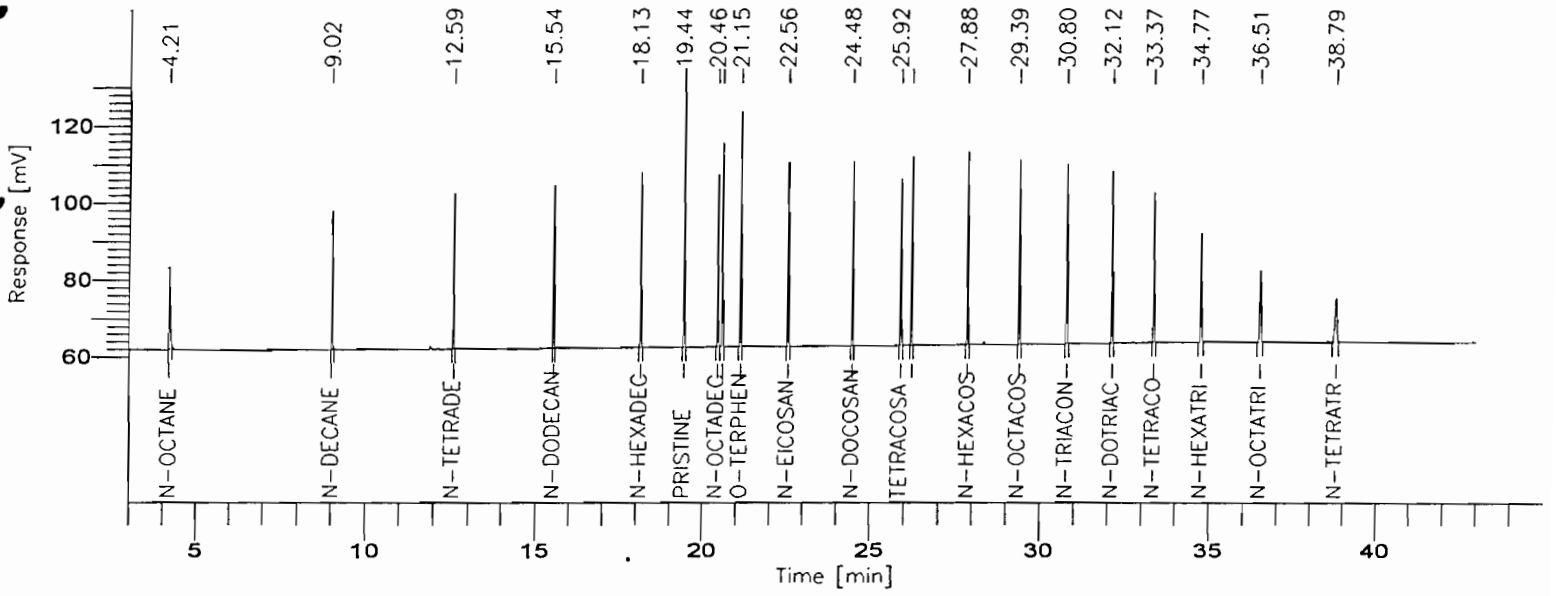
Sample Name : 500 PPM # 2 F.O
FileName : C:\TC4\DATA\D102161.raw
Method : TRPH909
Start Time : 5.00 min End Time : 30.00 min
Scale Factor: 0.0 Plot Offset: 50 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:21
Time of Injection: 10/23/99 20:40
Low Point : 50.00 mV High Point : 550.00 mV
Plot Scale: 500.0 mV



000095

Software Version; 4.1<1L22>
Date: 10/28/99 17:10
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D102701.RAW Date: 10/27/99 09:57
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 1 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

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Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.21	51881.60	21293.67	16.057	1605.651
2	N-DECANE	9.02	62908.80	35691.64	17.447	1744.745
3	N-TETRADECANE	12.58	66592.00	40705.04	17.897	1789.689
4	N-DODECANE	15.54	71044.80	42937.51	19.546	1954.605
5	N-HEXADECANE	18.13	76083.20	45799.97	19.688	1968.764
6	PRISTINE	19.44	121622.40	68926.99	25.868	2586.795
7	N-OCTADECANE	20.46	79888.00	45361.04	19.641	1964.052
8	PHYTANE	20.61	109067.20	53353.40	26.044	2604.440
9	O-TERPHENYL (SURROGATE	21.15	115145.60	61796.81	21.535	2153.491
10	N-EICOSANE	22.56	83795.20	47796.44	18.906	1890.648
11	N-DOCOSANE	24.48	87224.00	48013.99	20.609	2060.853
12	TETRACOSANE-d50 (SURRO	25.92	86804.80	43179.44	20.900	2089.982
13	N-TETRACOSANE	26.25	89484.80	49242.10	20.290	2029.006
14	N-HEXACOSANE	27.88	91544.00	49969.49	20.035	2003.535
15	N-OCTACOSANE	29.39	91174.40	48556.98	19.760	1975.956
16	N-TRIACONTANE	30.80	89161.60	46800.21	19.357	1935.728
17	N-DOTRIACONTANE	32.12	86179.20	44990.14	17.702	1770.247
18	N-TETRACONTANE	33.37	78665.60	38848.38	16.185	1618.530
19	N-HEXATRIACONTANE	34.77	70748.80	28379.35	15.298	1529.785

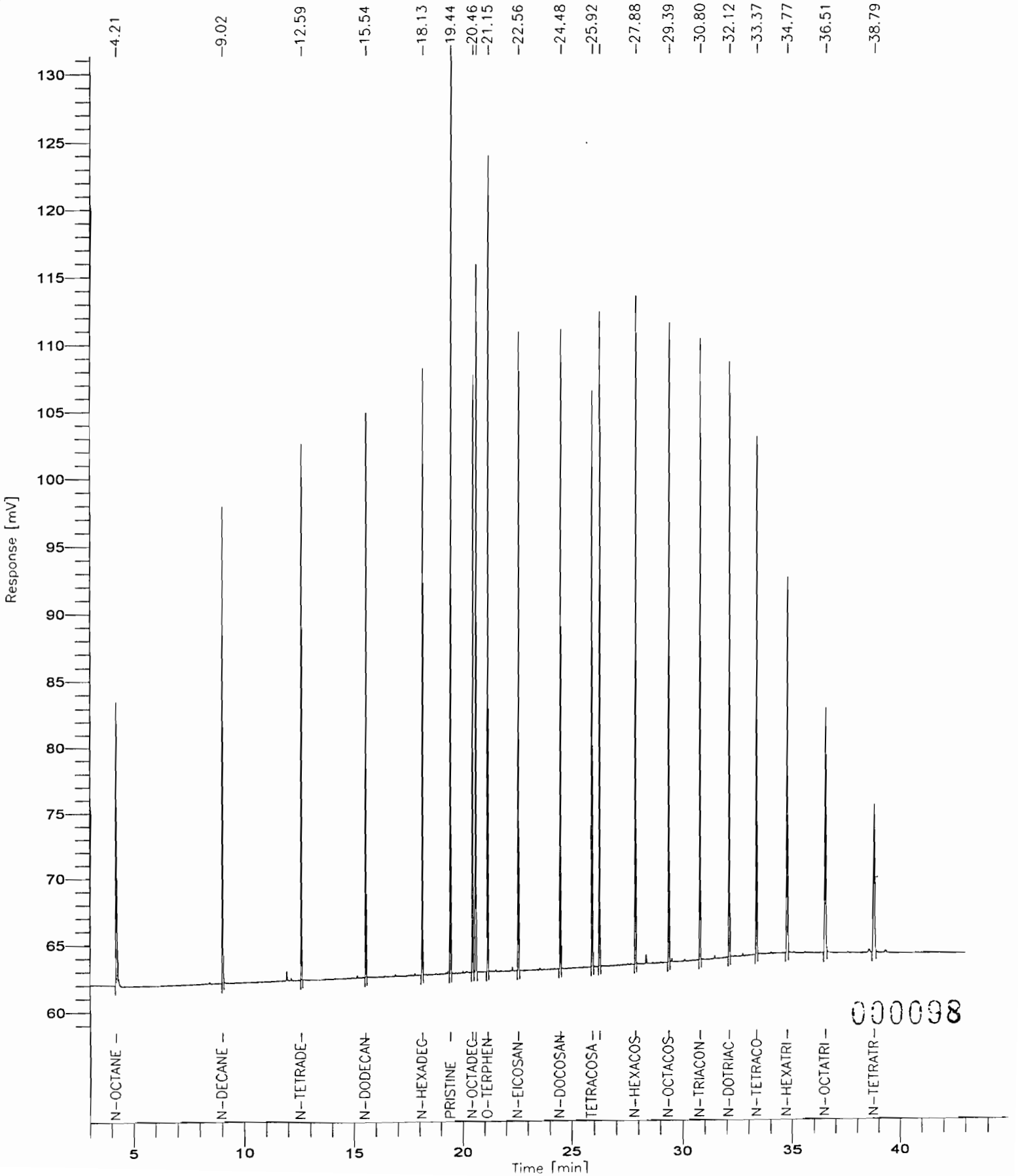
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTATRIACONTANE	36.51	61942.40	18514.12	14.394	1439.353
21	N-TETRATRIACONTANE	38.78	48499.20	11161.26	13.729	1372.931
			1719457.60	891317.97	400.888	40088.783

Report stored in ASCII file: C:\TC4\DATA\D102701.TX0

Chromatogram

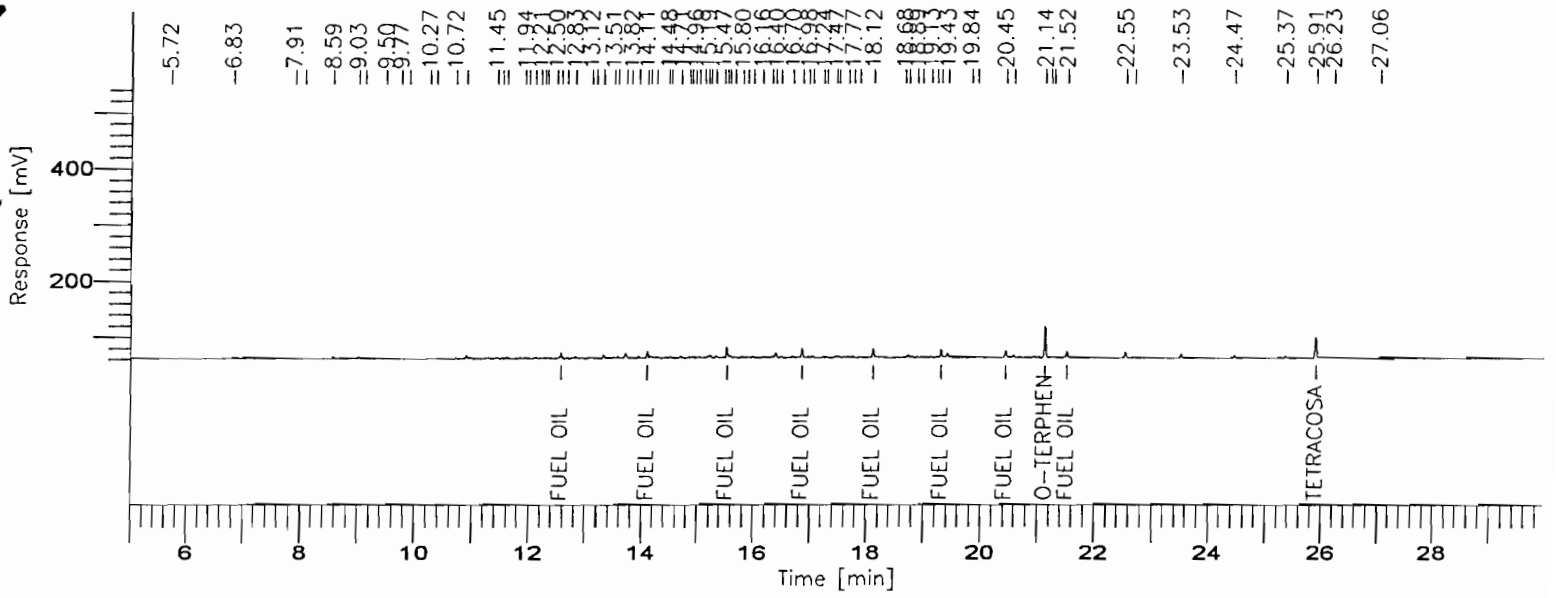
Sample Name : 20 PPM TRPH STD
FileName : C:\TC4\DATA\D102701.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 58 mV

Sample #: Page 1 of 1
Date : 10/28/99 17:10
Time of Injection: 10/27/99 09:57
Low Point : 58.44 mV High Point : 131.32 mV
Plot Scale: 72.9 mV



000098

Software Version: 4.1<1L22>
Date: 10/28/99 17:10
Sample Name : 500 PPM # 2 F.O.
Data File : C:\TC4\DATA\D102702.RAW Date: 10/27/99 10:51
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 2 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000099

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		2.31	1510.40	1191.54	0.002	0.151
2		5.72	1411.20	735.90	0.001	0.141
3		6.83	2569.60	1191.17	0.003	0.257
4		7.91	1267.20	831.84	0.001	0.127
5		8.08	1308.80	765.30	0.001	0.131
6		8.59	4446.40	2466.78	0.004	0.445
7		9.02	5401.60	2994.73	0.005	0.540
8		9.13	1219.20	780.28	0.001	0.122
9		9.50	1923.20	1191.25	0.002	0.192
10		9.77	1216.00	698.86	0.001	0.122
11		9.91	2894.40	1273.47	0.003	0.289
12		10.27	2608.00	1257.74	0.003	0.261
13		10.38	2995.20	1515.03	0.003	0.300
14		10.72	1289.60	524.40	0.001	0.129
15		10.90	10880.00	6948.62	0.011	1.088
16		11.45	8058.12	2755.47	0.008	0.806
17		11.53	1893.88	918.52	0.002	0.189
18		11.62	4473.60	2073.80	0.004	0.447
19		11.94	3836.80	2063.50	0.004	0.384

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		12.00	1838.40	1234.00	0.002	0.184
21		12.12	2224.00	1209.10	0.002	0.222
22		12.21	1464.00	738.46	0.001	0.146
23		12.28	1404.80	969.35	0.001	0.140
24		12.33	1030.40	607.75	0.001	0.103
25		12.50	1261.78	702.22	0.001	0.126
26	FUEL OIL 2 #1	12.58	20724.31	9746.33	465.557	46555.663
27		12.68	1738.71	1088.74	0.002	0.174
28		12.83	4428.80	2631.30	0.004	0.443
29		13.12	3548.80	1321.61	0.004	0.355
30		13.20	1321.60	842.22	0.001	0.132
31		13.32	11184.00	6399.13	0.011	1.118
32		13.51	2511.47	1423.30	0.003	0.251
33		13.58	5316.80	2159.50	0.005	0.532
34		13.72	21400.53	8451.37	0.021	2.140
35		13.82	2166.40	1149.11	0.002	0.217
36		13.94	7209.60	3781.51	0.007	0.721
37	FUEL OIL 2 #2	14.11	19845.38	12163.97	462.691	46269.100
38		14.16	5738.62	3582.04	0.006	0.574
39		14.26	2054.40	1140.80	0.002	0.205
40		14.48	3015.88	1308.73	0.003	0.302
41		14.52	3176.12	1627.69	0.003	0.318
42		14.71	4060.80	2411.67	0.004	0.406
43		14.85	2094.93	1147.41	0.002	0.209
44		14.90	1085.87	642.59	0.001	0.109
45		14.96	1699.20	1141.15	0.002	0.170
46		15.03	3606.40	2140.67	0.004	0.361
47		15.13	2450.19	1270.33	0.002	0.245
48		15.19	7800.76	3220.79	0.008	0.780
49		15.24	9339.45	5605.62	0.009	0.934
50		15.33	8572.80	2713.99	0.009	0.857
51		15.47	1420.37	868.72	0.001	0.142
52	FUEL OIL 2 #3	15.53	34090.03	19468.26	472.833	47283.252
53		15.58	6176.00	2728.67	0.006	0.618
54		15.67	2030.40	1066.57	0.002	0.203
55		15.80	3478.40	1565.56	0.003	0.348
56		15.89	1729.60	1162.71	0.002	0.173
57		16.00	6694.40	2725.68	0.007	0.669
58		16.16	2097.60	1121.38	0.002	0.210
59		16.33	1355.08	857.98	0.001	0.136
60		16.40	17745.72	8416.01	0.018	1.775
61		16.49	5257.60	2222.50	0.005	0.526
62		16.70	4188.80	2193.85	0.004	0.419
63	FUEL OIL 2 #4	16.86	25948.80	16182.39	437.168	43716.767
64		16.98	4872.80	2240.83	0.005	0.487
65		17.05	4887.20	2648.65	0.005	0.489
66		17.24	3293.77	1874.89	0.003	0.329
67		17.29	2667.83	1622.92	0.003	0.267
68		17.47	6332.49	2326.52	0.006	0.633
69		17.51	4009.91	2037.45	0.004	0.401

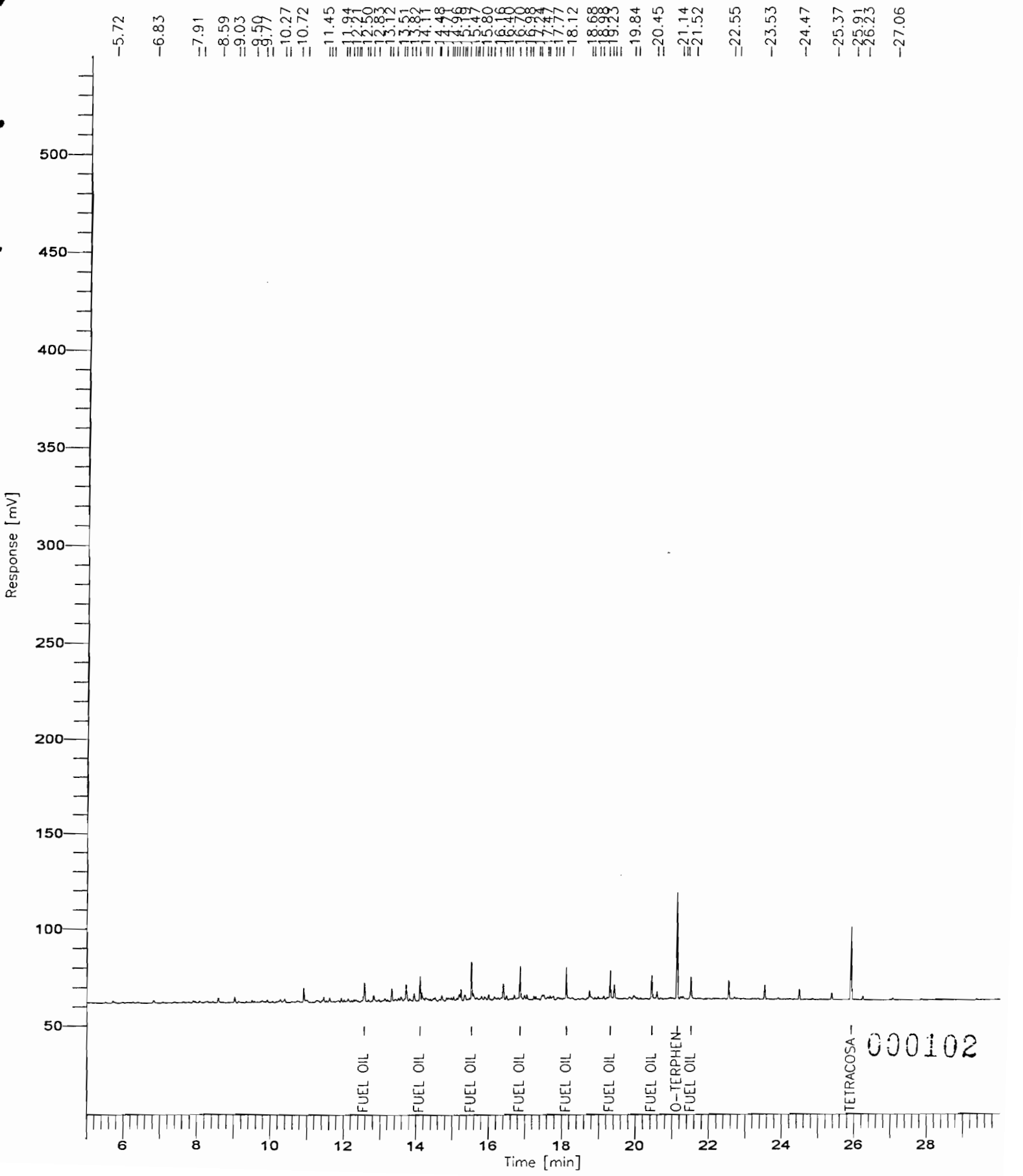
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		17.68	2830.90	1644.69	0.003	0.283
71		17.77	5309.90	1830.72	0.005	0.531
72		17.88	3369.60	1039.89	0.003	0.337
73	FUEL OIL 2 #5	18.12	26582.40	15817.00	464.616	46461.598
74		18.68	1005.40	650.07	0.001	0.101
75		18.75	6956.20	3554.81	0.007	0.696
76		18.89	2281.60	1165.18	0.002	0.228
77		18.98	2636.80	1341.31	0.003	0.264
78		19.13	2988.80	1669.72	0.003	0.299
79		19.23	1543.79	709.22	0.002	0.154
81		19.31	10942.66	14026.45	0.011	1.094
80	FUEL OIL 2 #6	19.31	13473.55	14026.45	416.222	41622.188
82		19.42	13168.00	6850.39	0.013	1.317
83		19.83	3952.00	1030.00	0.004	0.395
84		19.95	2244.80	1024.94	0.002	0.224
85	FUEL OIL 2 #7	20.45	21740.80	11787.08	461.947	46194.662
86		20.59	7916.80	3711.79	0.008	0.792
87	O-TERPHENYL (SURROGATE	21.14	101673.60	54832.57	20.246	2024.596
88		21.24	3088.26	1336.76	0.003	0.309
89		21.30	2246.14	1188.80	0.002	0.225
90	FUEL OIL 2 #8	21.52	22352.00	10811.16	468.930	46893.018
91		22.55	17825.60	9511.14	0.018	1.783
92		22.70	1996.80	1018.92	0.002	0.200
93		23.53	12816.00	7428.67	0.013	1.282
94		24.47	9417.60	5288.57	0.009	0.942
95		25.37	6262.40	3527.67	0.006	0.626
96	TETRACOSANE-D50 (SURRO	25.91	74899.20	37241.86	20.119	2011.894
97		26.23	3072.00	1777.32	0.003	0.307
98		27.06	1464.00	838.60	0.001	0.146
99		33.23	1494.40	811.39	0.001	0.149
			752347.20	407575.33	3690.718	369071.842

Report stored in ASCII file: C:\TC4\DATA\D102702.TX0

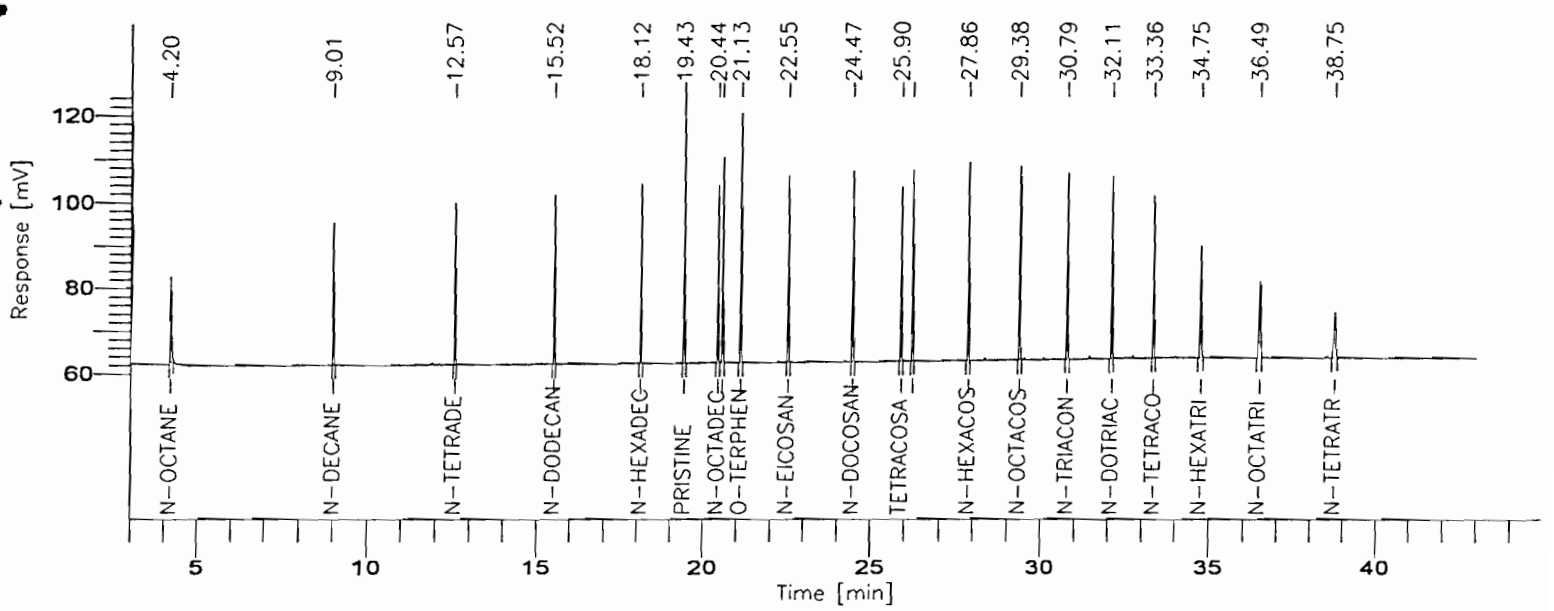
Chromatogram

Sample Name : 500 PPM # 2 F.O.
FileName : C:\TC4\DATA\D102702.raw
Method : TRPH909
Start Time : 5.00 min End Time : 30.00 min
Scale Factor: 0.0 Plot Offset: 50 mV

Sample #: Page 1 of 1
Date : 10/28/99 17:10
Time of Injection: 10/27/99 10:51
Low Point : 50.00 mV High Point : 550.00 mV
Plot Scale: 500.0 mV



Software Version: 4.1<1L22>
Date: 10/28/99 17:11
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D102712.RAW Date: 10/27/99 20:02
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 12 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000103

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.20	49504.00	20299.23	15.379	1537.884
2	N-DECANE	9.01	59056.00	33142.36	16.379	1637.889
3	N-TETRADECANE	12.57	61753.60	37758.99	16.597	1659.655
4	N-DODECANE	15.52	65241.60	39569.81	17.949	1794.946
5	N-HEXADECANE	18.12	69571.20	41802.56	18.003	1800.257
6	PRISTINE	19.43	108881.60	61895.03	23.158	2315.810
7	N-OCTADECANE	20.44	72976.00	41290.09	17.941	1794.120
8	PHYTANE	20.59	97555.20	47741.72	23.295	2329.542
9	O-TERPHENYL (SURROGATE	21.13	106947.20	58834.56	20.002	2000.162
10	N-EICOSANE	22.54	76563.20	43260.82	17.275	1727.474
11	N-DOCOSANE	24.47	79873.60	44454.50	18.872	1887.184
12	TETRACOSANE-d50 (SURRO	25.90	80876.80	40683.83	19.473	1947.254
13	N-TETRACOSANE	26.23	82137.60	45053.81	18.624	1862.413
14	N-HEXACOSANE	27.86	84308.80	45880.99	18.452	1845.185
15	N-OCTACOSANE	29.37	84417.60	45066.39	18.295	1829.521
16	N-TRIACONTANE	30.79	83470.40	43716.44	18.122	1812.170
17	N-DOTRIACONTANE	32.11	81212.80	42293.01	16.596	1659.625
18	N-TETRACONTANE	33.35	73952.00	37598.97	15.083	1508.299
19	N-HEXATRIACONTANE	34.75	66265.60	25951.64	14.328	1432.846

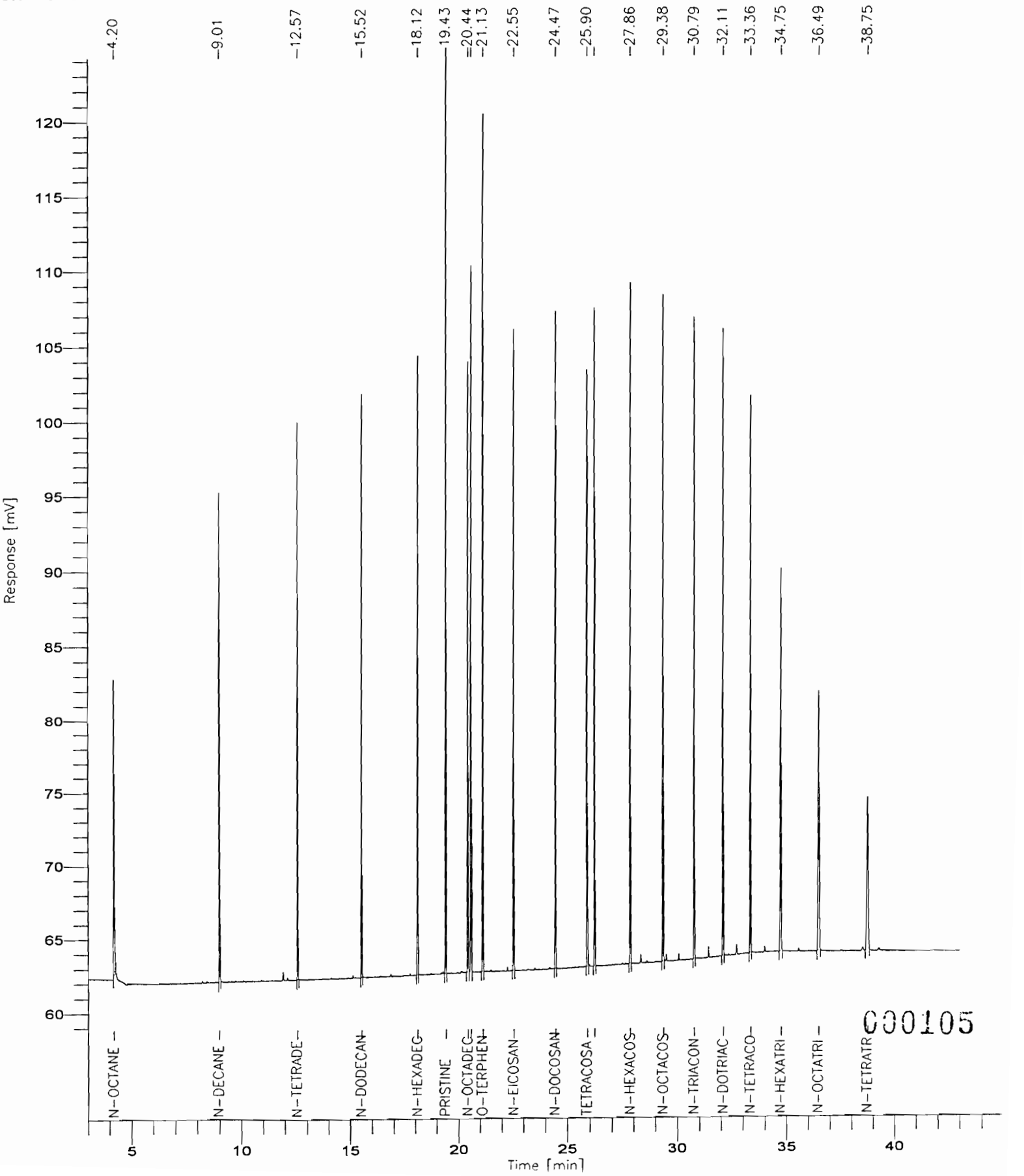
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTATRIACONTANE	36.48	57238.40	17706.91	13.300	1330.047
21	N-TETRATRIACONTANE	38.75	44243.20	10384.31	12.525	1252.450
			1586046.40	824385.99	369.647	36964.731

Report stored in ASCII file: C:\TC4\DATA\D102712.TX0

Chromatogram

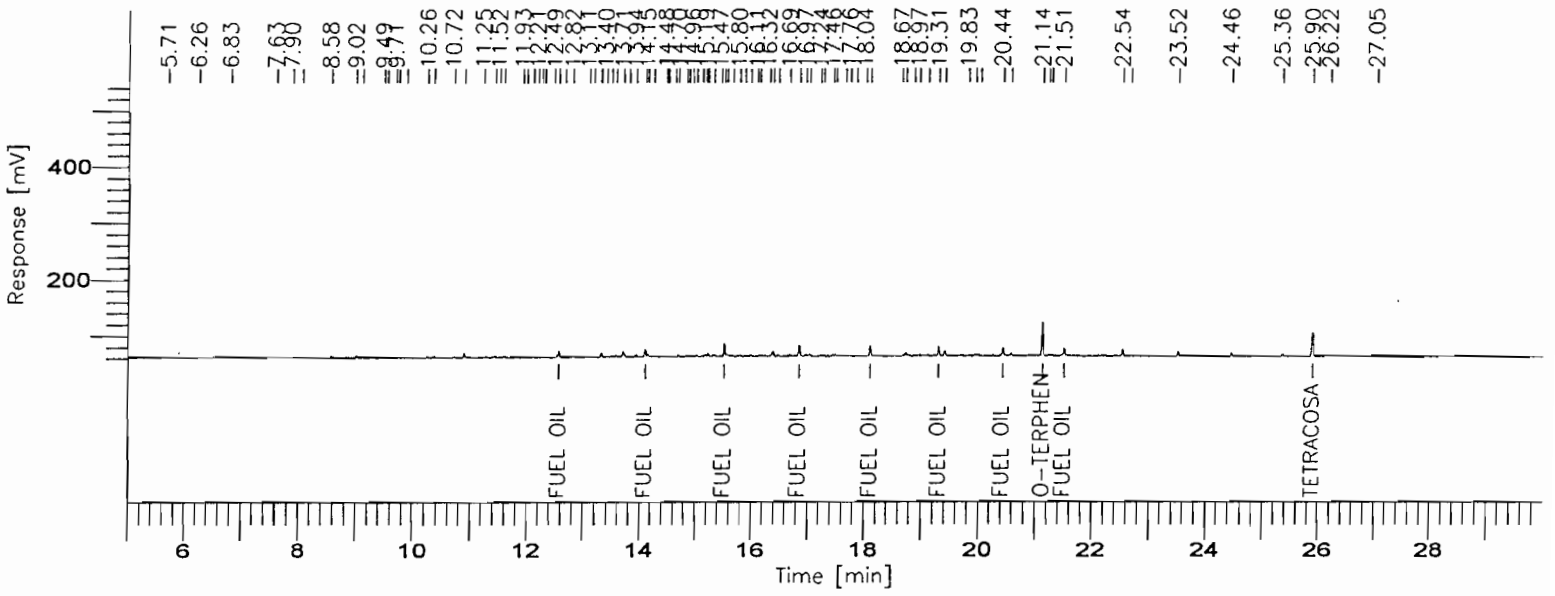
Sample Name : 20 PPM TRPH STD
FileName : C:\TC4\DATA\D102712.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 59 mV

Sample #:
Date : 10/28/99 17:11
Time of Injection: 10/27/99 20:02
Low Point : 58.85 mV High Point : 124.18 mV
Plot Scale: 65.3 mV



000105

Software Version: 4.1<1L22>
Date: 10/28/99 17:11
Sample Name : 500 PPM # 2 F.O.
Data File : C:\TC4\DATA\D102713.RAW Date: 10/27/99 20:57
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 13 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000106

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		5.71	1465.60	815.93	0.001	0.147
2		6.26	972.80	578.75	0.001	0.097
3		6.83	2985.60	1385.00	0.003	0.299
4		7.63	1017.60	548.52	0.001	0.102
5		7.90	1462.40	973.27	0.001	0.146
6		8.07	1619.20	916.18	0.002	0.162
7		8.58	5064.00	2816.49	0.005	0.506
8		9.02	6076.80	3396.33	0.006	0.608
9		9.12	1619.20	936.76	0.002	0.162
10		9.49	2184.00	1379.84	0.002	0.218
11		9.55	1171.20	790.00	0.001	0.117
12		9.71	813.56	510.72	0.001	0.081
13		9.76	1172.04	707.84	0.001	0.117
14		9.90	3180.80	1411.43	0.003	0.318
15		10.26	2872.00	1402.55	0.003	0.287
16		10.38	3790.40	1791.13	0.004	0.379
17		10.72	1529.60	605.19	0.002	0.153
18		10.90	12403.20	7953.60	0.012	1.240
19		11.24	848.00	439.22	0.001	0.085

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		11.44	9144.52	3123.94	0.009	0.914
21		11.52	2201.08	1048.70	0.002	0.220
22		11.61	5174.40	2380.29	0.005	0.517
23		11.93	4387.20	2332.08	0.004	0.439
24		12.00	2038.40	1378.67	0.002	0.204
25		12.11	2694.40	1436.27	0.003	0.269
26		12.21	1427.20	770.52	0.001	0.143
27		12.27	1571.20	1104.45	0.002	0.157
28		12.32	990.40	631.48	0.001	0.099
29		12.49	1332.85	768.77	0.001	0.133
30	FUEL OIL 2 #1	12.57	22495.95	10925.42	505.309	50530.856
31		12.67	1819.20	1182.95	0.002	0.182
32		12.82	4841.60	2961.18	0.005	0.484
33		13.11	4096.00	1516.21	0.004	0.410
34		13.19	1510.40	965.77	0.002	0.151
35		13.32	12825.60	7259.35	0.013	1.283
36		13.40	1452.80	624.16	0.001	0.145
37		13.50	2856.54	1622.33	0.003	0.286
38		13.57	5984.84	2401.99	0.006	0.598
39		13.71	24408.22	9740.50	0.024	2.441
40		13.81	2217.60	1279.22	0.002	0.222
41		13.94	8128.00	4300.49	0.008	0.813
42	FUEL OIL 2 #2	14.10	23463.08	14284.64	547.795	54779.519
43		14.15	10396.12	4711.25	0.010	1.040
44		14.25	2521.60	1362.50	0.003	0.252
45		14.48	4227.20	1646.45	0.004	0.423
46		14.52	3891.20	1971.27	0.004	0.389
47		14.64	2091.26	943.33	0.002	0.209
48		14.70	4654.34	2743.33	0.005	0.465
49		14.84	4099.56	1842.74	0.004	0.410
50		14.89	5204.44	1677.05	0.005	0.520
51		14.96	4029.69	1929.98	0.004	0.403
52		15.03	5555.20	2813.19	0.006	0.556
53		15.12	3383.11	1570.85	0.003	0.338
54		15.19	9078.40	3753.91	0.009	0.908
55		15.23	11094.40	6483.22	0.011	1.109
56		15.33	9827.20	3071.58	0.010	0.983
57		15.47	1653.60	1005.19	0.002	0.165
58	FUEL OIL 2 #3	15.52	38944.80	22557.34	537.885	53788.542
59		15.57	7187.20	3126.94	0.007	0.719
60		15.67	2404.80	1264.35	0.002	0.240
61		15.80	4153.60	1804.64	0.004	0.415
62		15.89	4867.20	1823.19	0.005	0.487
63		15.99	5992.00	2942.07	0.006	0.599
64		16.11	572.80	412.26	0.001	0.057
65		16.15	2316.80	1274.24	0.002	0.232
66		16.32	1741.29	1011.15	0.002	0.174
67		16.39	20268.31	9448.14	0.020	2.027
68		16.48	6012.80	2580.26	0.006	0.601
69		16.69	4809.60	2549.11	0.005	0.481

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70	FUEL OIL 2 #4	16.86	31939.20	18981.15	535.314	53531.446
71		16.97	5508.80	2552.51	0.006	0.551
72		17.04	5780.80	3066.01	0.006	0.578
73		17.24	3819.69	2176.45	0.004	0.382
74		17.29	3097.11	1881.58	0.003	0.310
75		17.46	7353.60	2599.27	0.007	0.735
76		17.50	4057.60	2250.71	0.004	0.406
77		17.67	3144.39	1885.35	0.003	0.314
78		17.76	6044.41	2087.81	0.006	0.604
79		17.87	3820.80	1181.09	0.004	0.382
80		18.03	1324.80	595.00	0.001	0.132
81	FUEL OIL 2 #5	18.12	32776.00	18120.41	574.427	57442.662
82		18.67	1327.12	830.25	0.001	0.133
83		18.74	9332.08	4394.50	0.009	0.933
84		18.88	2535.40	1291.74	0.003	0.254
85		18.97	2863.00	1438.24	0.003	0.286
86		19.12	3507.20	1954.14	0.004	0.351
88		19.31	10043.96	15792.11	0.010	1.004
87	FUEL OIL 2 #6	19.31	17047.24	15792.11	528.773	52877.266
89		19.42	15139.20	7861.17	0.015	1.514
90		19.83	1942.40	683.75	0.002	0.194
91		19.94	2526.40	1148.97	0.003	0.253
92		20.03	1219.20	877.77	0.001	0.122
93	FUEL OIL 2 #7	20.44	25241.60	13521.44	538.465	53846.517
94		20.58	8955.20	4232.52	0.009	0.896
95	O-TERPHENYL (SURROGATE	21.14	112060.80	59716.72	22.314	2231.433
96		21.23	3508.18	1498.56	0.004	0.351
97		21.29	2770.22	1402.32	0.003	0.277
98	FUEL OIL 2 #8	21.51	25817.60	12573.44	539.098	53909.804
99		22.54	20464.00	10889.88	0.020	2.046
##		22.69	2246.40	1147.20	0.002	0.225
##		23.52	14916.80	8431.82	0.015	1.492
##		24.46	10809.60	6146.51	0.011	1.081
##		25.36	7337.60	4073.27	0.007	0.734
##	TETRACOSANE-D50 (SURRO	25.90	81980.80	41385.82	22.021	2202.116
##		26.22	3664.00	2135.13	0.004	0.366
##		27.05	1798.40	998.57	0.002	0.180
##		32.00	1280.00	717.30	0.001	0.128
##		32.10	1395.20	777.32	0.001	0.140
##		33.22	1761.60	934.48	0.002	0.176
			882446.40	471742.04	4351.872	435187.229

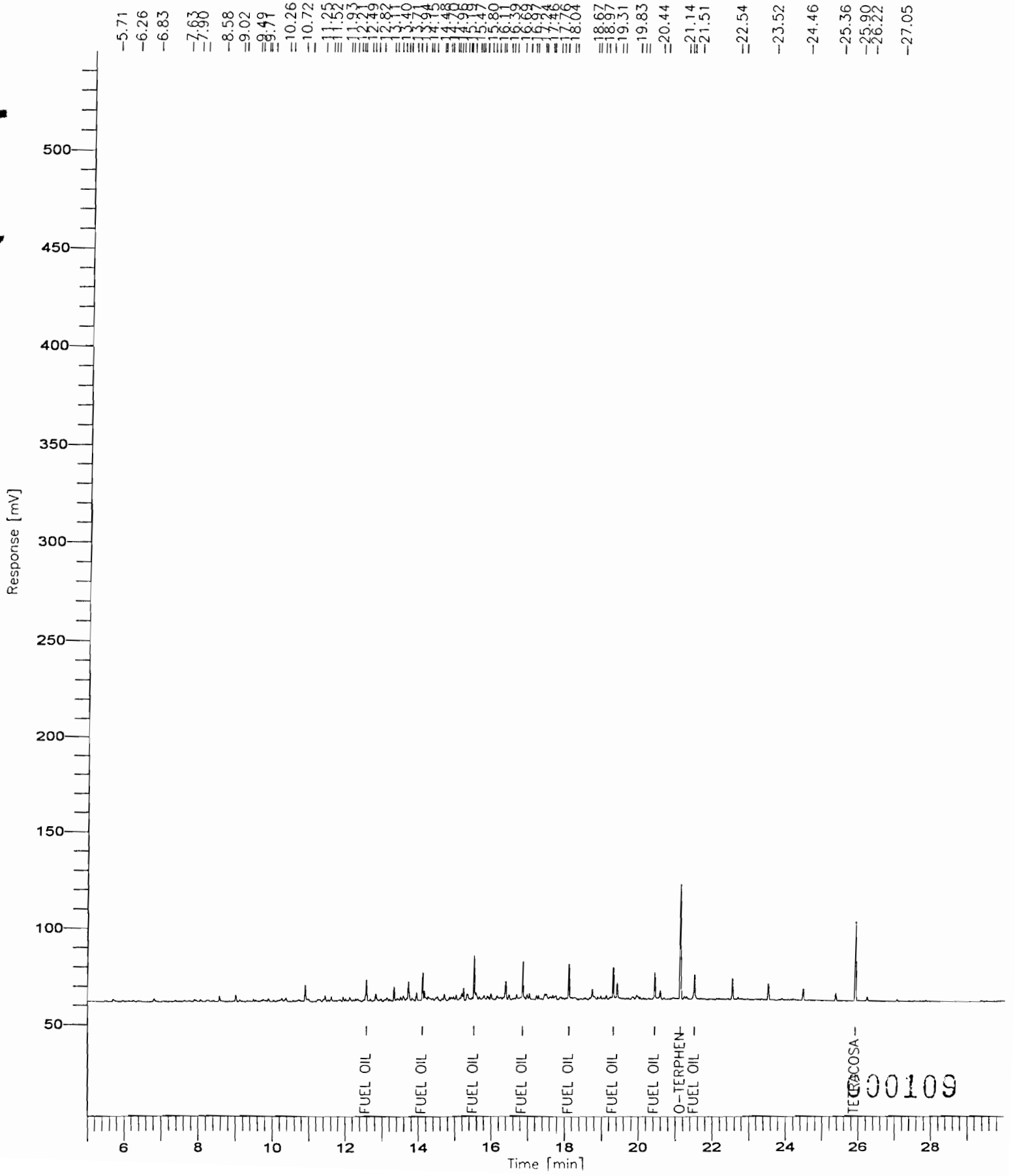
Report stored in ASCII file: C:\TC4\DATA\D102713.TX0

Chromatogram

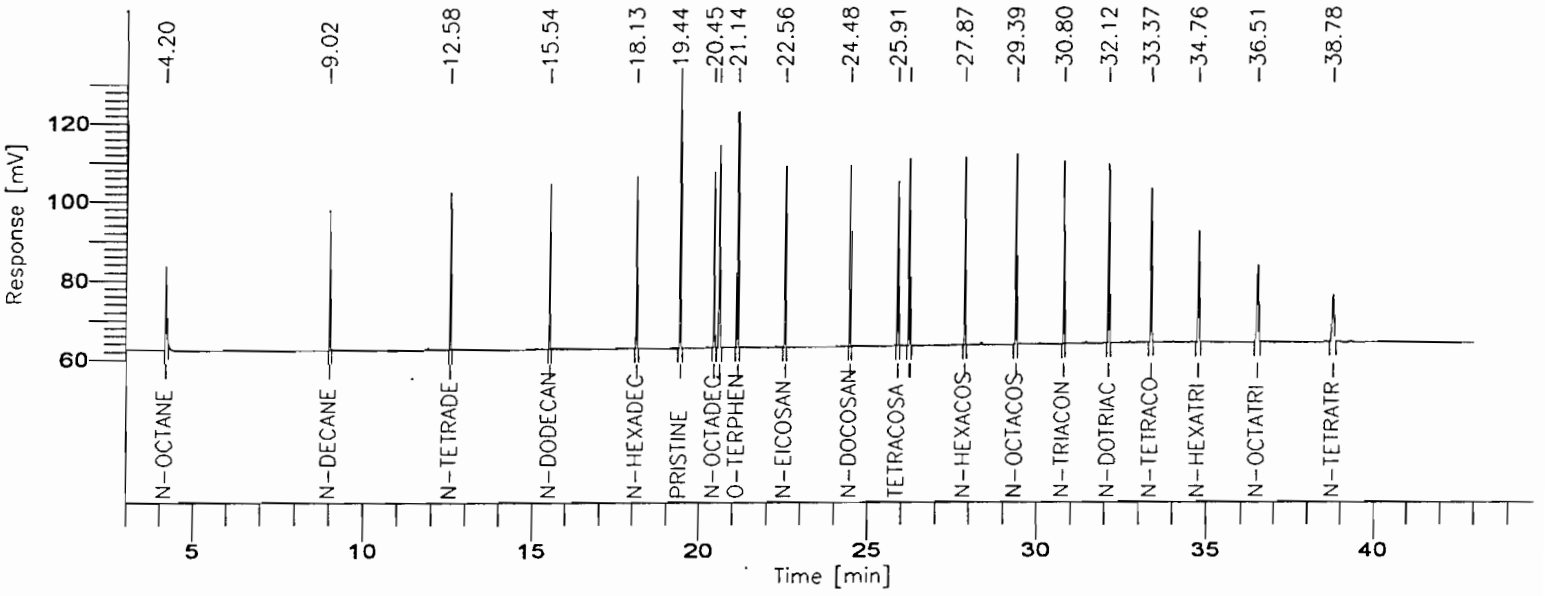
Sample Name : 500 PPM # 2 F.O.
FileName : C:\TC4\DATA\D102713.raw
Method : TRPH909
Start Time : 5.00 min
Scale Factor: 0.0

End Time : 30.00 min
Plot Offset: 50 mV

Sample #:
Date : 10/28/99 17:11
Time of Injection: 10/27/99 20:57
Low Point : 50.00 mV
Plot Scale: 500.0 mV



Software Version: 4.1<1L22>
Date: 10/28/99 17:12
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D102721.RAW Date: 10/28/99 04:07
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 21 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000110

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.20	51161.60	20745.88	15.851	1585.130
2	N-DECANE	9.02	62835.20	35452.02	17.427	1742.703
3	N-TETRADECANE	12.58	65779.20	40053.67	17.678	1767.844
4	N-DODECANE	15.54	69763.20	41975.47	19.193	1919.345
5	N-HEXADECANE	18.13	74326.40	43583.83	19.233	1923.305
6	PRISTINE	19.44	118523.20	67566.56	25.209	2520.878
7	N-OCTADECANE	20.45	77852.80	44593.52	19.140	1914.017
8	PHYTANE	20.60	106227.20	51264.83	25.366	2536.623
9	O-TERPHENYL (SURROGATE	21.14	112377.60	60936.43	21.017	2101.723
10	N-EICOSANE	22.56	81731.20	45945.85	18.441	1844.078
11	N-DOCOSANE	24.48	84977.60	46696.89	20.078	2007.777
12	TETRACOSANE-d50 (SURRO	25.91	84776.00	42220.41	20.411	2041.135
13	N-TETRACOSANE	26.24	87520.00	47926.34	19.845	1984.455
14	N-HEXACOSANE	27.87	89833.60	47786.68	19.661	1966.101
15	N-OCTACOSANE	29.39	90084.80	48312.43	19.523	1952.342
16	N-TRIACONTANE	30.80	89052.80	47214.81	19.334	1933.366
17	N-DOTRIACONTANE	32.12	86886.40	45525.13	17.860	1785.999
18	N-TETRACONTANE	33.37	80176.00	39463.51	16.539	1653.852
19	N-HEXATRIACONTANE	34.76	73062.40	28039.23	15.798	1579.811

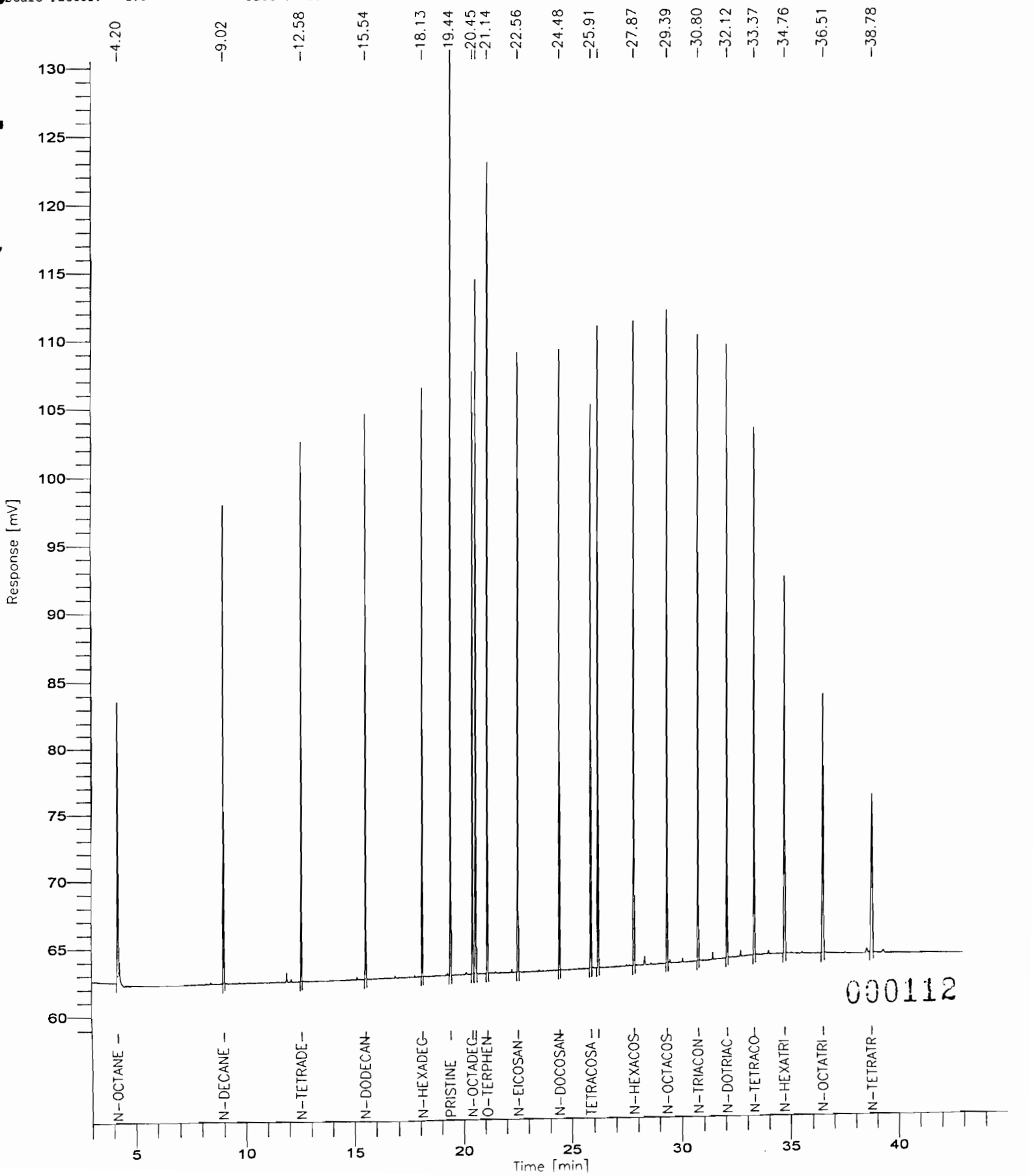
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTATRIACONTANE	36.51	64953.60	19430.89	15.093	1509.325
21	N-TETRATRIACONTANE	38.78	51276.80	11746.20	14.516	1451.560
			1703177.60	876480.59	397.214	39721.366

Report stored in ASCII file: C:\TC4\DATA\D102721.TX0

Chromatogram

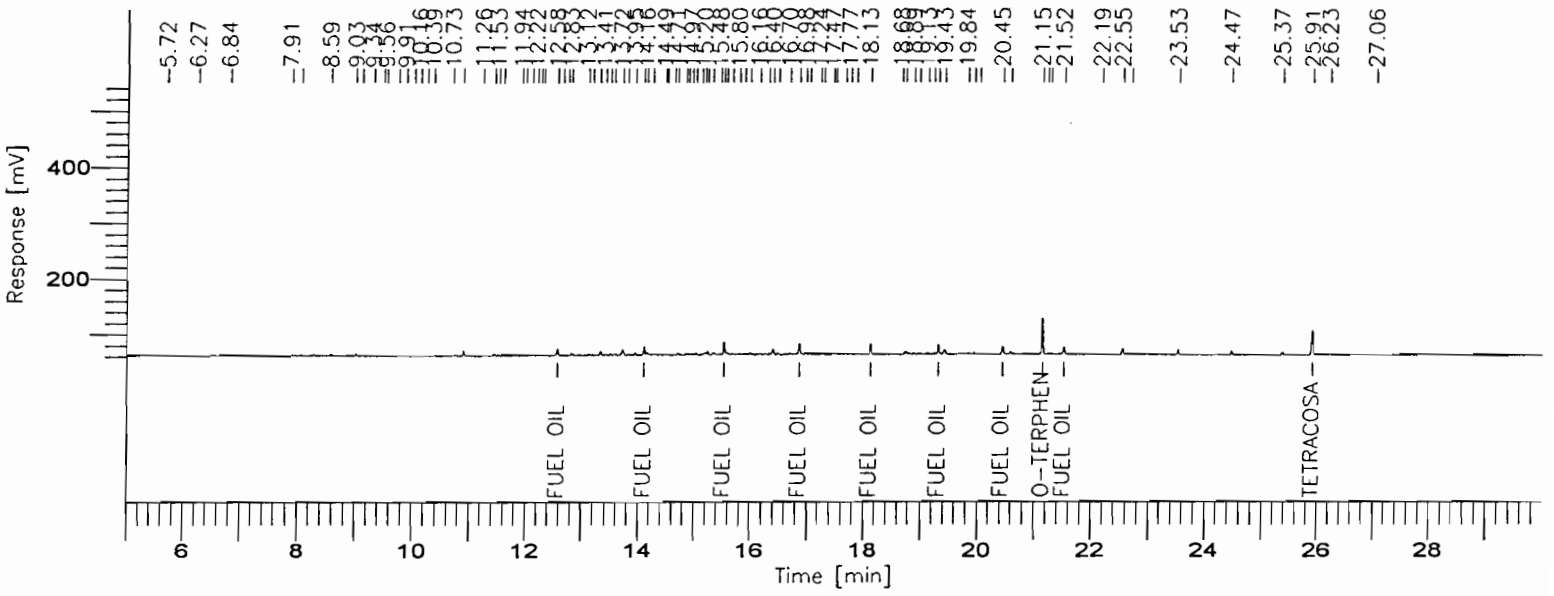
Sample Name : 20 PPM TRPH STD
FileName : C:\TC4\DATA\D102721.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 59 mV

Sample #:
Date : 10/28/99 17:12
Time of Injection: 10/28/99 04:07
Low Point : 58.84 mV High Point : 130.52 mV
Plot Scale: 71.7 mV



000112

Software Version: 4.1<1L22>
Date: 10/28/99 17:12
Sample Name : 500 PPM # 2 F.O. STD
Data File : C:\TC4\DATA\D102722.RAW Date: 10/28/99 05:00
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 22 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000113

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		2.31	2686.40	2167.52	0.003	0.269
2		5.72	1606.40	863.33	0.002	0.161
3		6.27	1030.40	618.75	0.001	0.103
4		6.84	3139.20	1412.82	0.003	0.314
5		7.91	1593.60	1030.75	0.002	0.159
6		8.08	1651.20	945.28	0.002	0.165
7		8.59	5308.80	2916.01	0.005	0.531
8		9.03	6473.60	3542.58	0.006	0.647
9		9.13	1683.20	979.17	0.002	0.168
10		9.34	1212.80	614.98	0.001	0.121
11		9.50	2265.60	1395.50	0.002	0.227
12		9.56	1232.00	793.44	0.001	0.123
13		9.77	1238.40	742.98	0.001	0.124
14		9.91	3339.20	1480.48	0.003	0.334
15		10.05	886.40	560.71	0.001	0.089
16		10.15	838.40	543.10	0.001	0.084
17		10.27	2849.60	1445.30	0.003	0.285
18		10.39	3742.40	1821.27	0.004	0.374
19		10.73	1347.20	587.69	0.001	0.135

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		10.91	12889.60	8280.28	0.013	1.289
21		11.26	952.00	467.88	0.001	0.095
22		11.45	9445.22	3257.61	0.009	0.945
23		11.53	2244.38	1067.20	0.002	0.224
24		11.62	5168.00	2424.67	0.005	0.517
25		11.94	4486.47	2388.24	0.004	0.449
26		12.01	2105.53	1459.39	0.002	0.211
27		12.12	2505.60	1420.56	0.003	0.251
28		12.22	1668.80	843.58	0.002	0.167
29		12.28	1651.20	1165.63	0.002	0.165
30		12.33	1104.00	693.91	0.001	0.110
31	FUEL OIL 2 #1	12.58	22112.00	11126.81	496.694	49669.355
32		12.68	1900.80	1261.66	0.002	0.190
33		12.78	676.80	417.24	0.001	0.068
34		12.83	5104.00	3049.45	0.005	0.510
35		13.12	4188.80	1535.71	0.004	0.419
36		13.20	1603.20	1033.30	0.002	0.160
37		13.33	13257.60	7538.24	0.013	1.326
38		13.41	1702.40	690.97	0.002	0.170
39		13.51	3067.09	1670.49	0.003	0.307
40		13.58	6290.40	2526.98	0.006	0.629
41		13.72	25292.11	9949.33	0.025	2.529
42		13.82	1894.40	1196.36	0.002	0.189
43		13.95	8478.40	4546.75	0.008	0.848
44	FUEL OIL 2 #2	14.11	23328.90	14543.06	544.639	54463.862
45		14.16	6799.10	4296.01	0.007	0.680
46		14.26	1881.60	1216.40	0.002	0.188
47		14.49	4376.77	1632.59	0.004	0.438
48		14.52	3519.23	1958.67	0.004	0.352
49		14.65	2132.50	1004.33	0.002	0.213
50		14.71	4909.10	2882.99	0.005	0.491
51		14.85	4114.35	1831.54	0.004	0.411
52		14.90	5261.17	1677.27	0.005	0.526
53		14.97	4035.47	1980.96	0.004	0.404
54		15.04	5670.40	2881.21	0.006	0.567
55		15.13	3582.29	1630.67	0.004	0.358
56		15.20	9504.64	3851.94	0.010	0.950
57		15.24	11354.88	6683.60	0.011	1.135
58		15.34	10216.00	3182.55	0.010	1.022
59		15.48	1849.60	1072.20	0.002	0.185
60	FUEL OIL 2 #3	15.53	40413.31	22963.41	557.563	55756.318
61		15.58	7699.20	3297.64	0.008	0.770
62		15.68	2725.89	1318.67	0.003	0.273
63		15.80	4532.80	1916.88	0.005	0.453
64		15.90	1956.80	1316.78	0.002	0.196
65		16.00	6166.40	3027.39	0.006	0.617
66		16.16	2377.60	1284.95	0.002	0.238
67		16.33	1810.71	996.58	0.002	0.181
68		16.40	20781.29	9706.65	0.021	2.078
69		16.49	6204.80	2671.54	0.006	0.620

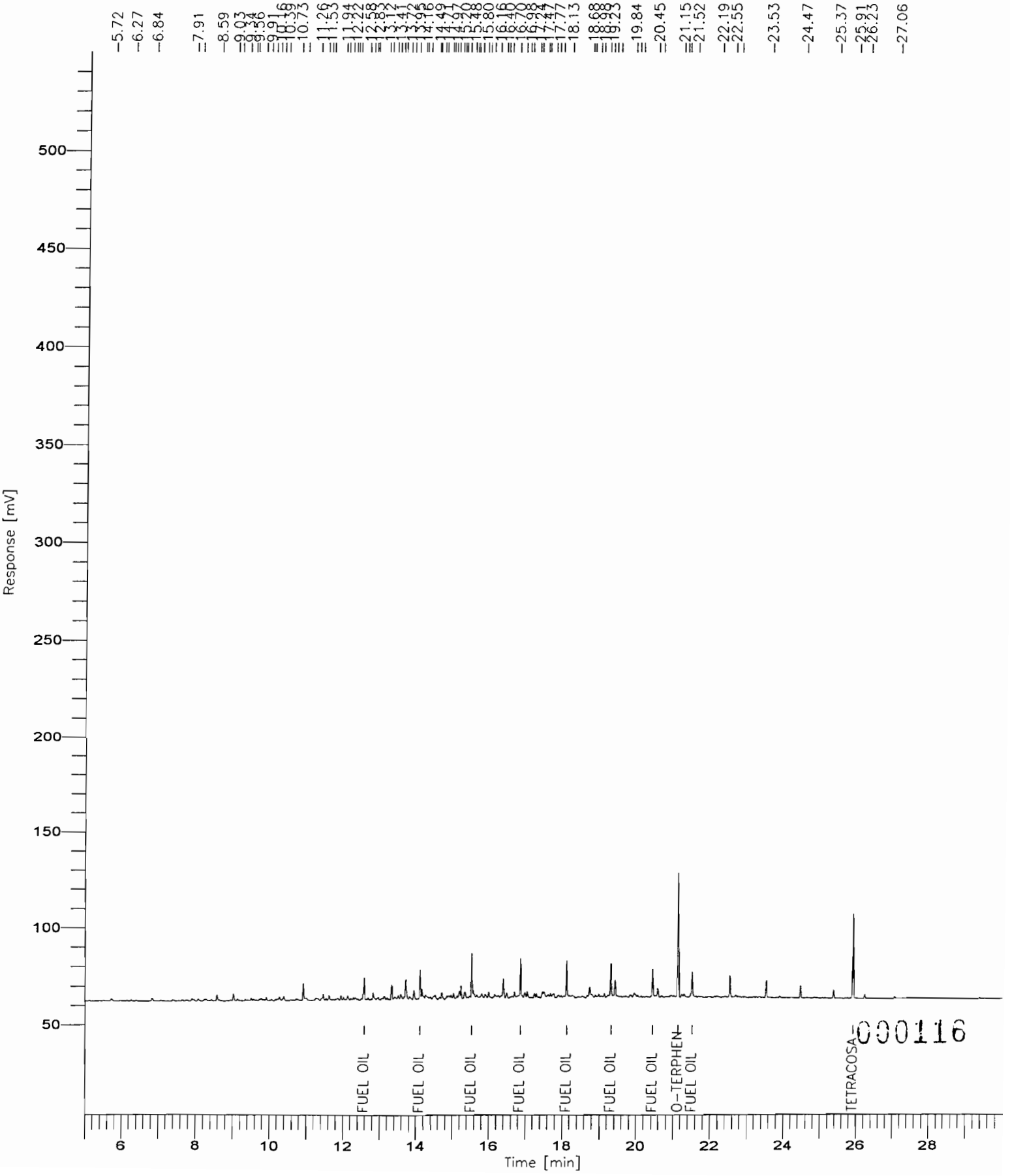
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		16.70	4972.80	2627.64	0.005	0.497
71	FUEL OIL 2 #4	16.87	30366.40	19264.38	509.546	50954.569
72		16.98	5894.68	2667.51	0.006	0.589
73		17.05	6065.32	3140.64	0.006	0.607
74		17.24	3973.36	2256.97	0.004	0.397
75		17.30	3372.24	1982.84	0.003	0.337
76		17.47	7763.20	2724.81	0.008	0.776
77		17.51	4195.20	2398.87	0.004	0.420
78		17.68	3312.32	1962.58	0.003	0.331
79		17.77	6284.48	2161.78	0.006	0.628
80		17.88	4025.60	1222.30	0.004	0.403
81	FUEL OIL 2 #5	18.12	31302.40	18444.52	548.300	54830.014
82		18.68	1451.92	844.22	0.001	0.145
83		18.75	9805.68	4478.50	0.010	0.981
84		18.89	2819.20	1386.08	0.003	0.282
85		18.98	3209.60	1586.50	0.003	0.321
86		19.13	3667.20	2006.59	0.004	0.367
87		19.23	1414.40	637.90	0.001	0.141
89		19.32	9031.63	16334.62	0.009	0.903
88	FUEL OIL 2 #6	19.32	18032.37	16334.62	559.798	55979.849
90		19.43	15457.60	7951.16	0.015	1.546
91		19.83	4611.20	1210.00	0.005	0.461
92		19.95	2652.80	1235.06	0.003	0.265
93		20.04	1232.00	877.27	0.001	0.123
94	FUEL OIL 2 #7	20.45	25824.00	13819.02	551.195	55119.495
95		20.59	9328.00	4412.58	0.009	0.933
96	O-TERPHENYL (SURROGATE	21.15	119275.20	64449.92	23.751	2375.092
97		21.24	3647.26	1559.19	0.004	0.365
98		21.30	2800.74	1471.86	0.003	0.280
99	FUEL OIL 2 #8	21.52	26486.40	12903.55	552.639	55263.921
##		22.19	915.20	626.75	0.001	0.092
##		22.55	21014.40	11014.23	0.021	2.101
##		22.70	2368.00	1165.40	0.002	0.237
##		23.53	15356.80	8781.39	0.015	1.536
##		24.47	10992.00	6385.98	0.011	1.099
##		25.37	7387.20	4173.46	0.007	0.739
##	TETRACOSANE-D50 (SURRO	25.91	87230.40	44153.74	23.431	2343.127
##		26.23	3648.00	2085.54	0.004	0.365
##		27.06	1788.80	1029.14	0.002	0.179
##		30.79	1673.60	963.43	0.002	0.167
##		31.46	1468.80	823.88	0.001	0.147
##		32.11	2072.00	1155.54	0.002	0.207
##		32.73	1153.60	660.00	0.001	0.115
##		33.23	1984.00	1040.14	0.002	0.198
##		33.35	1494.40	783.69	0.001	0.149
			913940.80	494496.19	4368.046	436804.558

Report stored in ASCII file: C:\TC4\DATA\D102722.TX0

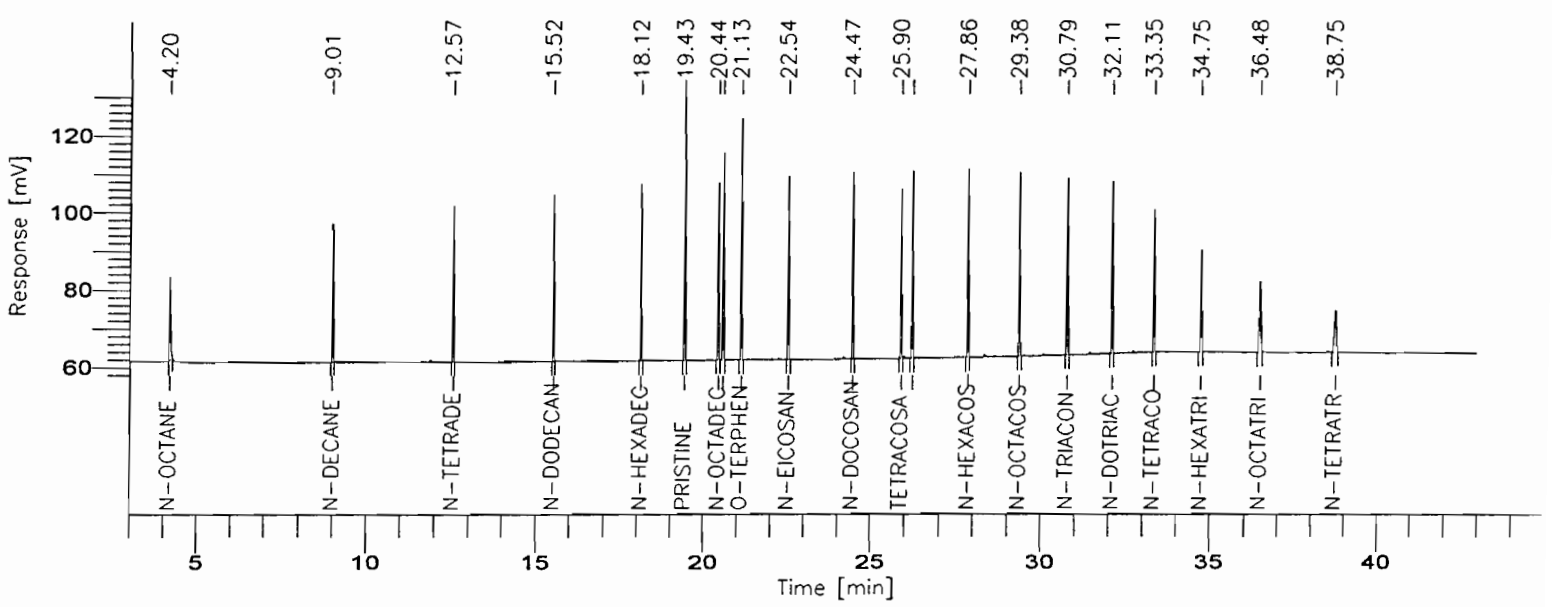
Chromatogram

Sample Name : 500 PPM # 2 F.O. STD
FileName : C:\TC4\DATA\D102722.raw
Method : TRPH909
Start Time : 5.00 min End Time : 30.00 min
Scale Factor: 0.0 Plot Offset: 50 mV

Sample #: Page 1 of 1
Date : 10/28/99 17:12
Time of Injection: 10/28/99 05:00
Low Point : 50.00 mV High Point : 550.00 mV
Plot Scale: 500.0 mV



Software Version: 4.1<1L22>
Date: 11/2/99 08:25
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D102729.RAW Date: 10/28/99 16:39
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 29 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00

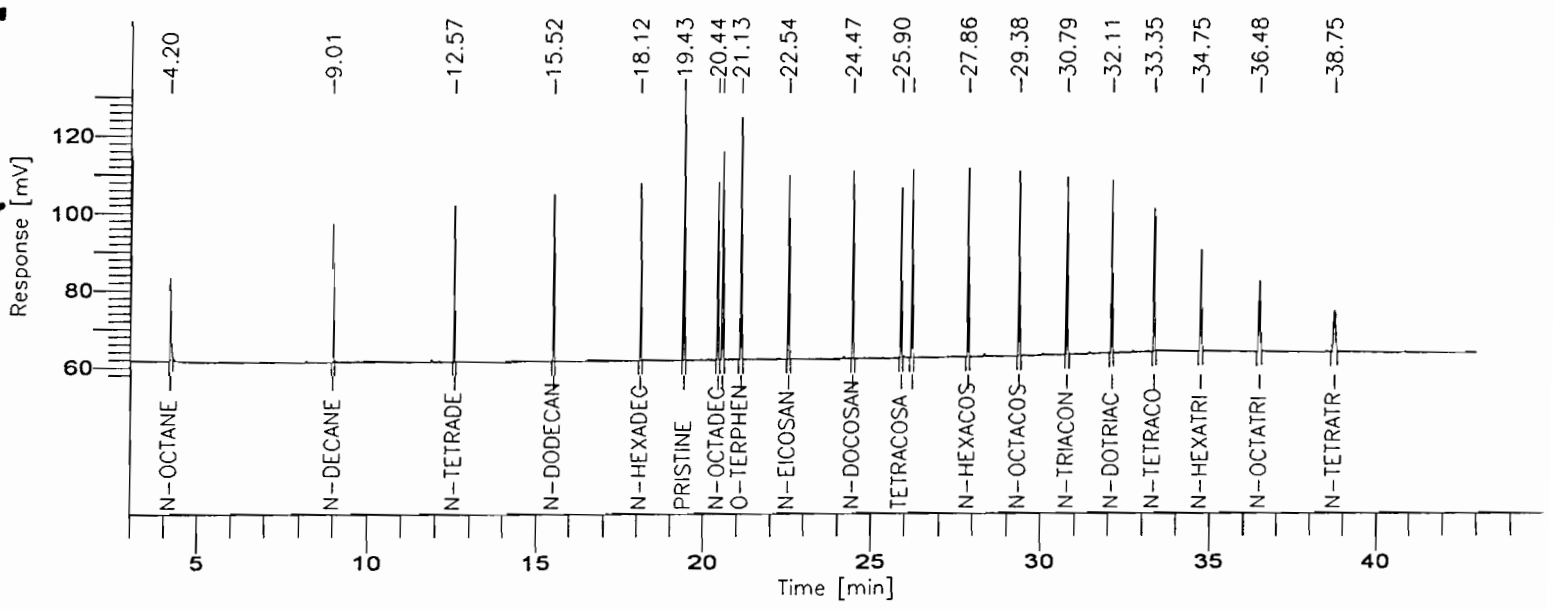


ANALAB INC. COMPOUND LISTINGS & RESULTS

000117

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.19	52905.60	21566.37	16.348	1634.838
2	N-DECANE	9.00	65038.40	36333.76	18.038	1803.808
3	N-TETRADECANE	12.57	68102.40	41436.73	18.303	1830.281
4	N-DODECANE	15.52	72272.00	43833.45	19.884	1988.368
5	N-HEXADECANE	18.12	77260.80	45823.00	19.992	1999.236
6	PRISTINE	19.43	123267.20	69198.00	26.218	2621.778
7	N-OCTADECANE	20.44	80915.20	45855.88	19.893	1989.306
8	PHYTANE	20.59	110486.40	53635.91	26.383	2638.329
9	O-TERPHENYL (SURROGATE	21.13	116262.40	63461.12	21.744	2174.378
10	N-EICOSANE	22.54	84635.20	47399.54	19.096	1909.600
11	N-DOCOSANE	24.47	87688.00	48758.63	20.718	2071.816
12	TETRACOSANE-d50 (SURRO	25.90	87219.20	44153.98	21.000	2099.959
13	N-TETRACOSANE	26.23	90240.00	48892.23	20.461	2046.129
14	N-HEXACOSANE	27.86	91644.80	48722.30	20.057	2005.741
15	N-OCTACOSANE	29.38	90483.20	47548.16	19.610	1960.976
16	N-TRIACONTANE	30.79	87708.80	46414.50	19.042	1904.187
17	N-DOTRIACONTANE	32.11	83870.40	44509.03	17.188	1718.821
18	N-TETRACONTANE	33.35	75580.80	37192.09	15.464	1546.389
19	N-HEXATRIACONTANE	34.75	67408.00	26272.64	14.575	1457.547

Software Version: 4.1<1L22>
Date: 11/2/99 08:35
Sample Name : 20 PPM TRPH STD
Data File : C:\TC4\DATA\D102729.RAW Date: 10/28/99 16:39
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 29 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000118

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-OCTANE	4.19	52905.60	21566.37	16.348	1634.838
2	N-DECANE	9.00	65038.40	36333.76	18.038	1803.808
3	N-TETRADECANE	12.57	68102.40	41436.73	18.303	1830.281
4	N-DODECANE	15.52	72272.00	43833.45	19.884	1988.368
5	N-HEXADECANE	18.12	77260.80	45823.00	19.992	1999.236
6	PRISTINE	19.43	123267.20	69198.00	26.218	2621.778
7	N-OCTADECANE	20.44	80915.20	45855.88	19.893	1989.306
8	PHYTANE	20.59	110486.40	53635.91	26.383	2638.329
9	O-TERPHENYL (SURROGATE	21.13	116262.40	63461.12	21.744	2174.378
10	N-EICOSANE	22.54	84635.20	47399.54	19.096	1909.600
11	N-DOCOSANE	24.47	87688.00	48758.63	20.718	2071.816
12	TETRACOSANE-d50 (SURRO	25.90	87219.20	44153.98	21.000	2099.959
13	N-TETRACOSANE	26.23	90240.00	48892.23	20.461	2046.129
14	N-HEXACOSANE	27.86	91644.80	48722.30	20.057	2005.741
15	N-OCTACOSANE	29.38	90483.20	47548.16	19.610	1960.976
16	N-TRIACONTANE	30.79	87708.80	46414.50	19.042	1904.187
17	N-DOTRIACONTANE	32.11	83870.40	44509.03	17.188	1718.821
18	N-TETRACONTANE	33.35	75580.80	37192.09	15.464	1546.389
19	N-HEXATRIACONTANE	34.75	67408.00	26272.64	14.575	1457.547

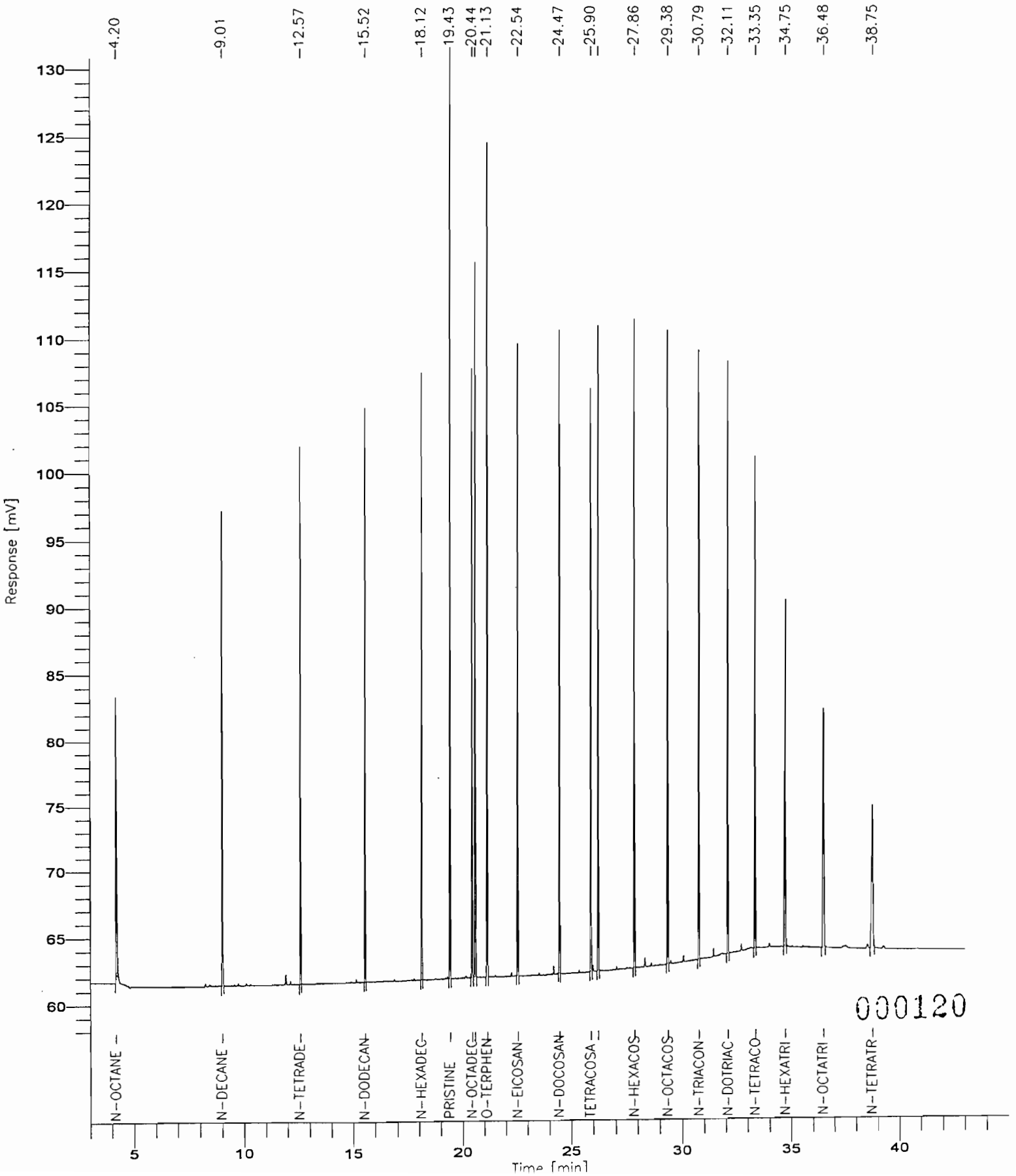
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTATRIACONTANE	36.48	59360.00	18192.64	13.793	1379.346
21	N-TETRATRIACONTANE	38.75	47228.80	10797.86	13.370	1336.968
			1719577.60	889997.82	401.178	40117.802

Report stored in ASCII file: C:\TC4\DATA\D102729.TX0

Chromatogram

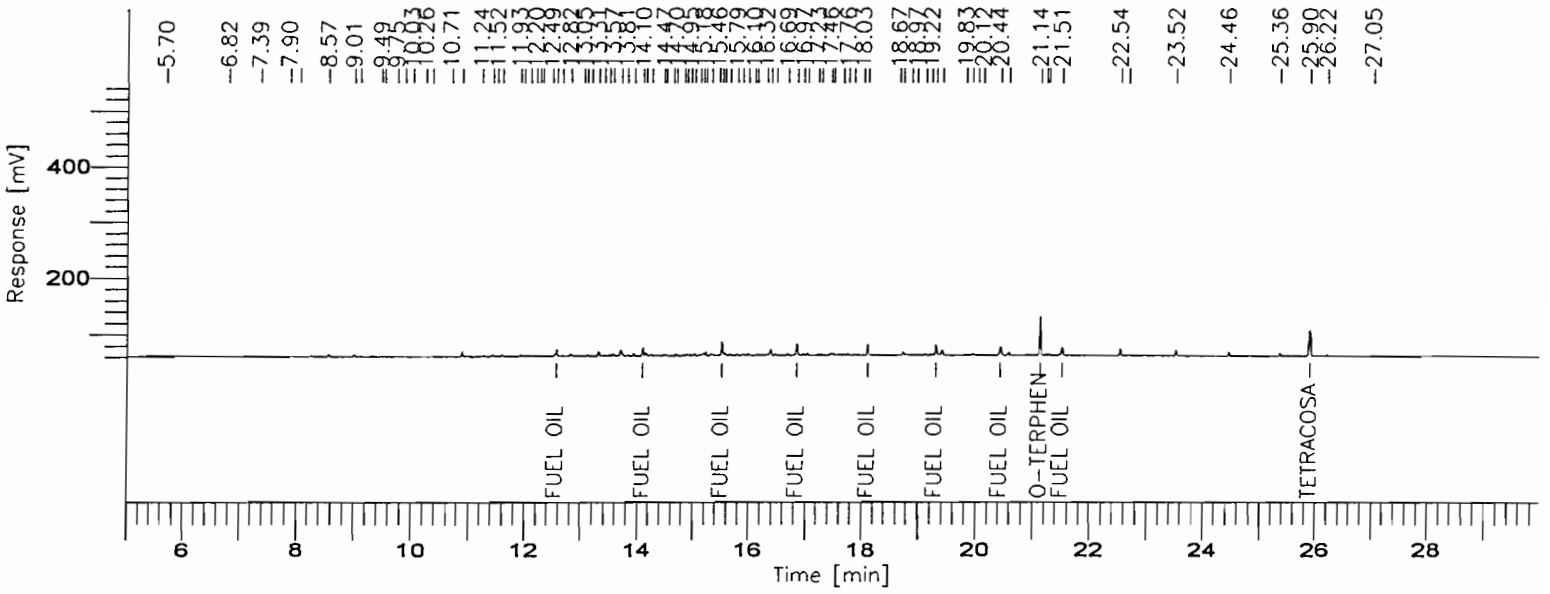
Sample Name : 20 PPM TRPH STD
FileName : C:\TC4\DATA\D102729.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 58 mV

Sample #: Page 1 of 1
Date : 11/2/99 08:35
Time of Injection: 10/28/99 16:39
Low Point : 57.87 mV High Point : 130.80 mV
Plot Scale: 72.9 mV



000120

Software Version: 4.1<1L22>
Date: 11/2/99 14:10 SK 11/02/99
Sample Name : 500 ppm #2 F.O
Data File : C:\TC4\DATA\D102730.RAW Date: 10/28/99 17:34
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 30 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000121

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		5.70	1694.40	918.52	0.002	0.169
2		6.82	3417.60	1546.89	0.003	0.342
3		7.39	1100.80	621.23	0.001	0.110
4		7.90	1652.80	1092.53	0.002	0.165
5		8.07	1744.00	995.54	0.002	0.174
6		8.57	5590.40	3098.74	0.006	0.559
7		9.01	6715.20	3740.00	0.007	0.672
8		9.12	1769.60	1038.52	0.002	0.177
9		9.49	2358.40	1485.08	0.002	0.236
10		9.55	1296.00	849.14	0.001	0.130
11		9.75	1248.00	768.88	0.001	0.125
12		9.89	3436.80	1525.71	0.003	0.344
13		10.03	918.40	575.83	0.001	0.092
14		10.26	3190.40	1566.53	0.003	0.319
15		10.37	4179.20	1957.91	0.004	0.418
16		10.71	1355.20	586.85	0.001	0.136
17		10.89	13449.60	8689.00	0.013	1.345
18		11.24	800.00	407.60	0.001	0.080
19		11.44	9835.24	3433.60	0.010	0.984

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		11.52	2321.56	1116.37	0.002	0.232
21		11.60	5510.40	2549.14	0.006	0.551
22		11.93	4800.00	2557.25	0.005	0.480
23		11.99	2268.80	1569.01	0.002	0.227
24		12.11	2800.00	1501.33	0.003	0.280
25		12.20	1824.00	928.91	0.002	0.182
26		12.27	1738.96	1211.54	0.002	0.174
27		12.32	1345.84	769.34	0.001	0.135
28		12.49	1426.58	841.38	0.001	0.143
29	FUEL OIL 2 #1	12.57	24581.42	11856.82	552.102	55210.226
30		12.67	2035.20	1309.98	0.002	0.204
31		12.81	5531.20	3221.92	0.006	0.553
32		13.05	3038.40	943.75	0.003	0.304
33		13.11	5468.80	1921.05	0.005	0.547
34		13.18	1678.40	1061.14	0.002	0.168
35		13.31	15001.60	8097.15	0.015	1.500
36		13.40	6193.00	1425.16	0.006	0.619
37		13.50	5107.00	2224.79	0.005	0.511
38		13.57	8432.20	3003.34	0.008	0.843
39		13.70	27915.80	10723.10	0.028	2.792
40		13.81	2345.60	1313.40	0.002	0.235
41		13.93	9155.20	4812.15	0.009	0.916
42	FUEL OIL 2 #2	14.10	25675.49	15311.68	599.841	59984.079
43		14.15	11090.91	5104.65	0.011	1.109
44		14.25	2067.20	1287.14	0.002	0.207
45		14.47	4944.60	1930.45	0.005	0.494
46		14.51	5669.80	2416.88	0.006	0.567
47		14.64	2305.24	1053.97	0.002	0.231
48		14.70	5315.56	3038.18	0.005	0.532
49		14.84	4886.93	2034.23	0.005	0.489
50		14.89	5846.86	1845.13	0.006	0.585
51		14.95	4404.50	2126.12	0.004	0.440
52		15.02	6364.27	3096.96	0.006	0.636
53		15.12	3764.71	1756.94	0.004	0.376
54		15.18	10235.15	4101.13	0.010	1.024
55		15.23	11822.38	7025.07	0.012	1.182
56		15.32	10876.80	3358.83	0.011	1.088
57		15.46	1850.02	1139.44	0.002	0.185
58	FUEL OIL 2 #3	15.52	42844.64	24442.02	590.142	59014.248
59		15.57	8009.60	3466.30	0.008	0.801
60		15.66	2908.54	1429.93	0.003	0.291
61		15.79	4419.20	2022.56	0.004	0.442
62		15.88	2124.80	1398.84	0.002	0.212
63		15.98	6588.80	3212.61	0.007	0.659
64		16.10	649.60	463.75	0.001	0.065
65		16.15	2569.60	1369.88	0.003	0.257
66		16.32	1728.95	1112.82	0.002	0.173
67		16.39	22139.85	10271.14	0.022	2.214
68		16.48	6595.20	2833.68	0.007	0.660
69		16.69	5257.60	2789.65	0.005	0.526

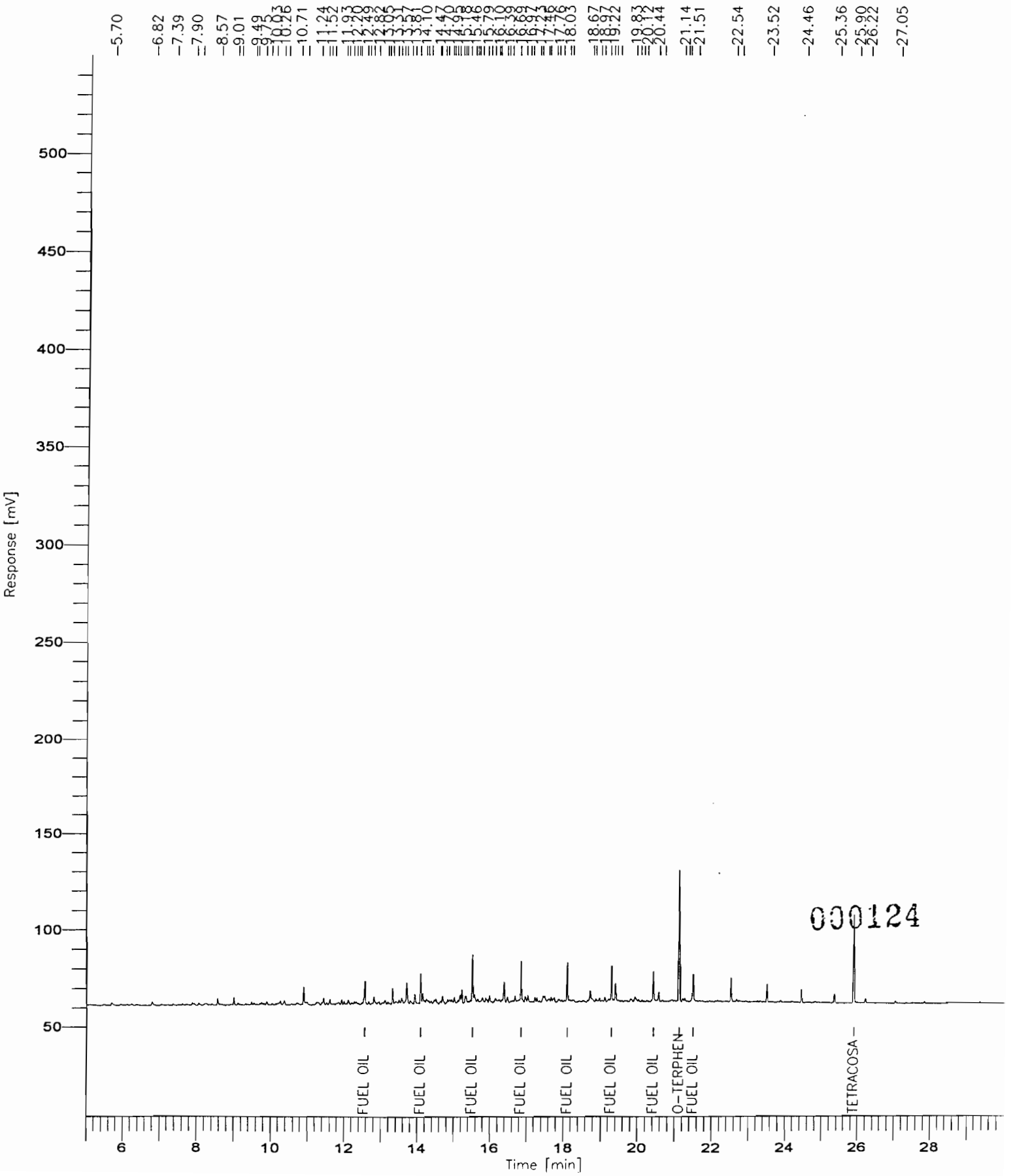
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70	FUEL OIL 2 #4	16.86	32222.40	20169.55	539.954	53995.442
71		16.97	6301.08	2848.84	0.006	0.630
72		17.04	6449.32	3379.33	0.006	0.645
73		17.23	4230.40	2421.99	0.004	0.423
74		17.28	3568.00	2162.47	0.004	0.357
75		17.46	7921.23	2919.35	0.008	0.792
76		17.50	4958.77	2519.46	0.005	0.496
77		17.67	3579.53	2055.17	0.004	0.358
78		17.76	6674.87	2302.49	0.007	0.667
79		17.87	4233.60	1319.37	0.004	0.423
80		18.03	1222.35	607.19	0.001	0.122
81	FUEL OIL 2 #5	18.11	33852.85	19709.95	593.519	59351.890
82		18.67	1624.60	942.98	0.002	0.162
83		18.74	11770.60	4961.27	0.012	1.177
84		18.88	2792.53	1464.58	0.003	0.279
85		18.97	3042.67	1552.92	0.003	0.304
86		19.12	3900.80	2146.27	0.004	0.390
87		19.22	1618.58	875.27	0.002	0.162
88	FUEL OIL 2 #6	19.30	30935.02	17835.53	966.158	96615.769
89		19.41	16638.40	8610.04	0.017	1.664
90		19.83	1929.60	698.57	0.002	0.193
91		19.94	2985.60	1378.23	0.003	0.299
92		20.03	1275.20	934.88	0.001	0.128
93		20.12	1225.60	787.27	0.001	0.123
94	FUEL OIL 2 #7	20.44	27702.40	14927.84	592.252	59225.198
95		20.58	9926.40	4690.10	0.010	0.993
96	O-TERPHENYL (SURROGATE	21.13	126782.40	67680.85	25.246	2524.580
97		21.23	3885.05	1646.02	0.004	0.389
98		21.29	2966.15	1587.47	0.003	0.297
99	FUEL OIL 2 #8	21.51	28608.00	13838.55	595.595	59559.515
##		22.54	22460.80	12184.66	0.022	2.246
##		22.69	2441.60	1203.82	0.002	0.244
##		23.52	15990.40	9240.30	0.016	1.599
##		24.46	11750.40	6765.70	0.012	1.175
##		25.36	7920.00	4446.11	0.008	0.792
##	TETRACOSANE-D50 (SURRO	25.90	92222.40	45567.60	24.772	2477.219
##		26.22	3920.00	2234.87	0.004	0.392
##		27.05	1900.80	1060.10	0.002	0.190
##		30.77	1822.40	1007.08	0.002	0.182
##		31.44	1577.60	862.85	0.002	0.158
##		31.99	1414.40	781.53	0.001	0.141
##		32.09	2185.60	1189.15	0.002	0.219
##		33.22	1968.00	1035.53	0.002	0.197
##		33.34	1488.00	802.14	0.001	0.149
			993115.20	508651.38	5080.109	508010.934

Report stored in ASCII file: C:\TC4\DATA\D102730.TX0

Chromatogram

Sample Name :
FileName : C:\TC4\DATA\D102730.RAW
Method :
Start Time : 5.00 min
End Time : 30.00 min
Scale Factor: 0.0
Plot Offset: 50 mV

Sample #:
Date : 11/2/99 14:10
Time of Injection: 10/28/99 17:34
Low Point : 50.00 mV
High Point : 550.00 mV
Plot Scale: 500.0 mV



CHEMTECH CONSULTING GROUP

D

SURROGATE COMPOUND RECOVERY RESULTS SUMMARY

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4111 Fax(732)225-4110

Total Petroleum Hydrocarbons (C8 - C40)
Surrogate Recovery Table

Client: IMPACT ENVIRONMENTAL
Client Project: # I-30-0435
Matrix: SOIL
Analyst: SK

LAB SAMPLE ID	LAB FILENAME	O-TERPH % REC		TETRA-D50 % REC	
20 PPM TRPH STD	C:\TC4\DATA\D102134.RAW	107%		104%	
500 PPM #2 F.O	C:\TC4\DATA\D102135.RAW	205%	*	204%	*
BLANK-1	C:\TC4\DATA\D102136.RAW	82%		80%	
BLANK SPIKE	C:\TC4\DATA\D102137.RAW	113%		114%	
L5235-91397	C:\TC4\DATA\D102144.RAW	101%		96%	
L5235-91393 1:10	C:\TC4\DATA\D102145.RAW	123%		97%	
20 PPM TRPH STD	C:\TC4\DATA\D102146.RAW	104%		101%	
500 PPM # 2 F.O.	C:\TC4\DATA\D102147.RAW	112%		111%	
L5235/91394	C:\TC4\DATA\D102148.RAW	113%		104%	
L5235/91396	C:\TC4\DATA\D102150.RAW	101%		99%	
L5235/91398	C:\TC4\DATA\D102151.RAW	98%		93%	
L5235/91399	C:\TC4\DATA\D102152.RAW	75%		74%	
L5235/91400	C:\TC4\DATA\D102153.RAW	93%		90%	
L5235/91402	C:\TC4\DATA\D102154.RAW	104%		100%	
L5235/91403	C:\TC4\DATA\D102155.RAW	85%		81%	
L5235\91401 1:10	C:\TC4\DATA\D102157.RAW	64%		62%	
20 PPM TRPH STD	C:\TC4\DATA\D102160.RAW	104%		103%	
500 PPM # 2 F.O	C:\TC4\DATA\D102161.RAW	104%		104%	
20 PPM TRPH STD	C:\TC4\DATA\D102701.RAW	108%		105%	
500 PPM # 2 F.O.	C:\TC4\DATA\D102702.RAW	101%		101%	
91392 1:100	C:\TC4\DATA\D102708.RAW	NA	*	NA	*
91368MS	C:\TC4\DATA\D102710.RAW	NA	*	NA	*
91368MSD	C:\TC4\DATA\D102711.RAW	NA	*	NA	*
20 PPM TRPH STD	C:\TC4\DATA\D102712.RAW	100%		97%	
500 PPM # 2 F.O.	C:\TC4\DATA\D102713.RAW	112%		110%	
20 PPM TRPH STD	C:\TC4\DATA\D102721.RAW	105%		102%	
500 PPM # 2 F.O. STD	C:\TC4\DATA\D102722.RAW	119%		117%	
91395 1:20	C:\TC4\DATA\D102724.RAW	NA	*	NA	*
20 PPM TRPH STD	C:\TC4\DATA\D102729.RAW	116%		117%	
500 PPM # 2 F.O.	C:\TC4\DATA\D102730.RAW	119%		111%	

	Control Limits
O-TERPHENYL	50-150%
TETRACOSANE-D50	50-150%

NA - Surrogate Diluted Out
* - Surrogate Outside Control Limits

*ANALYSIS PERFORMED BY ANALAB/ICM

CHEMTECH CONSULTING GROUP

E

MS/MSD RESULTS SUMMARY

Chemtech Inc, 205 Campus Plaza 1, Raritan Center, Edison, NJ 08837 Tel (732)225-4111 Fax (732)225-4110

TABULATED ANALYTICAL REPORT
TOTAL PETROLEUM HYDROCARBONS
(C8-C40)

Blank Spike

Matrix: SOIL
Filename: C:\TC4\DATA\D102137.RAW

Date Extracted: 10/22/99
Analysis Date: 10/22/99
Analyst: SK

Analyte	Spike Added (mg/Kg)	Blank Conc. (mg/Kg)	BLMS Conc. (mg/Kg)	% Rec	Flag
#2 FUEL OIL	6.7	0.0	7.0	105	

2 Fuel Oil Recovery Limits = 50% - 150%

Chemtech Inc., 205 Campus Plaza 1, Edison, NJ 08837 Tel(732)225-4111 Fax(732)225-4110

TABULATED ANALYTICAL REPORT
TOTAL PETROLEUM HYDROCARBONS
(C8-C40)

Matrix Spike

Matrix: Soil
MS Filename: C:\TC4\DATA\D102710.RAW
MSD Filename: C:\TC4\DATA\D102711.RAW

Sample No. : 91368MS
Date Extracted: 10/22/99
Analysis Date: 10/27/99
Analyst: SK

Analyte	Spike Added (mg/Kg)	Sample Conc. (mg/Kg)	MS Conc (mg/Kg)	% Rec	Flag
#2 FUEL OIL	6.7	0.0	116.5	1747	*

Analyte	Spike Added (mg/Kg)	Sample Conc. (mg/Kg)	MSD Conc (mg/Kg)	% Rec	Flag
#2 FUEL OIL	6.7	0.0	111.1	1666	*

RPD	Flag
5	

MS/MSD Recovery Limits = 50% - 150%
RPD Limit = +/- 20%

* Denotes analyte outside control limits

CHEMTECH CONSULTING GROUP

F

RETENTION TIMES SUMMARY

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4111 Fax(732)225-4110

'92

Total Petroleum Hydrocarbons (C8 - C40)
Sequence Table

Initial Calibration Date: 9/1/99

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION								
O-TERPHENYL	21.45	TETRACOSA 26.24						
LAB SAMPLE ID	LAB FILENAME	DATE ANALYZED	TIME ANALYZED	O-TERPH RT #		TETRA-D50 RT #		
100 PPM TRPH STD	C:\TC4\DATA\D090103	9/1/99	16:53	21.46		26.25		
50PPM TRPH STD	C:\TC4\DATA\D090104	9/1/99	17:47	21.45		26.24		
20 PPM TRPH STD	C:\TC4\DATA\D090105	9/1/99	18:42	21.44		26.23		
10 PPM TRPH STD	C:\TC4\DATA\D090106	9/1/99	19:37	21.44		26.23		
5 PPM TRPH STD	C:\TC4\DATA\D090107	9/1/99	20:32	21.44		26.23		
1000PPM # 2 F.O.STD	C:\TC4\DATA\D090108	9/1/99	21:27	21.44		26.23		
750PPM # 2 F.O STD	C:\TC4\DATA\D090109	9/1/99	22:22	21.44		26.23		
500 PPM # 2 F.O. STD	C:\TC4\DATA\D090110	9/1/99	23:17	21.44		26.23		
250 PPM # 2 F.O. STD	C:\TC4\DATA\D090111	9/2/99	00:12	21.44		26.23		
100 PPM # 2 F.O. STD	C:\TC4\DATA\D090112	9/2/99	01:06	21.44		26.23		
20 PPM TRPH STD	C:\TC4\DATA\D102134	10/22/99	20:17	21.15		25.92		
500 PPM #2 F.O	C:\TC4\DATA\D102135	10/22/99	21:12	21.16		25.93		
BLANK-1	C:\TC4\DATA\D102136	10/22/99	22:07	21.15		25.92		
BLANK SPIKE	C:\TC4\DATA\D102137	10/22/99	23:01	21.15		25.92		
L5235-91397	C:\TC4\DATA\D102144	10/23/99	05:21	21.15		25.93		
L5235-91393 1:10	C:\TC4\DATA\D102145	10/23/99	06:15	21.15		25.92		
20 PPM TRPH STD	C:\TC4\DATA\D102146	10/23/99	07:09	21.16		25.93		
500 PPM # 2 F.O.	C:\TC4\DATA\D102147	10/23/99	08:03	21.16		25.93		
L5235/91394	C:\TC4\DATA\D102148	10/23/99	08:57	21.16		25.93		
L5235/91396	C:\TC4\DATA\D102150	10/23/99	10:44	21.16		25.93		
L5235/91398	C:\TC4\DATA\D102151	10/23/99	11:38	21.16		25.93		
L5235/91399	C:\TC4\DATA\D102152	10/23/99	12:32	21.15		25.92		
L5235/91400	C:\TC4\DATA\D102153	10/23/99	13:26	21.15		25.92		
L5235/91402	C:\TC4\DATA\D102154	10/23/99	14:21	21.15		25.93		
L5235/91403	C:\TC4\DATA\D102155	10/23/99	15:15	21.15		25.92		
L5235\91401 1:10	C:\TC4\DATA\D102157	10/23/99	17:03	21.14		25.91		
20 PPM TRPH STD	C:\TC4\DATA\D102160	10/23/99	19:46	21.15		25.92		
500 PPM # 2 F.O	C:\TC4\DATA\D102161	10/23/99	20:40	21.15		25.92		
20 PPM TRPH STD	C:\TC4\DATA\D102701	10/27/99	09:57	21.15		25.92		
500 PPM # 2 F.O.	C:\TC4\DATA\D102702	10/27/99	10:51	21.14	@	25.91		
91392 1:100	C:\TC4\DATA\D102708	10/27/99	16:21	21.13	*			*
91368MS	C:\TC4\DATA\D102710	10/27/99	18:12	21.22		25.91		
91368MSD	C:\TC4\DATA\D102711	10/27/99	19:07	21.22		25.91		
20 PPM TRPH STD	C:\TC4\DATA\D102712	10/27/99	20:02	21.13		25.90		
500 PPM # 2 F.O.	C:\TC4\DATA\D102713	10/27/99	20:57	21.14		25.90		
20 PPM TRPH STD	C:\TC4\DATA\D102721	10/28/99	04:07	21.14		25.91		
500 PPM # 2 F.O. STD	C:\TC4\DATA\D102722	10/28/99	05:00	21.15		25.91		
91395 1:20	C:\TC4\DATA\D102724	10/28/99	12:04	21.13		25.90		
20 PPM TRPH STD	C:\TC4\DATA\D102729	10/28/99	16:39	21.13		25.90		
500 PPM # 2 F.O.	C:\TC4\DATA\D102730	10/28/99	17:34	21.13		25.90		

Chemtech Inc., 205 Campus Drive, Plaza 1, Edison, NJ 08837 Tel(732)225-4111 Fax(732)225-4110

2 of 2

Total Petroleum Hydrocarbons (C8 - C40)
Sequence Table

	QC Limits	Lower Limit	Upper Limit
O-TERPHENYL	(± 0.50 minutes)	20.95	21.95
TETRACOSANE d50	(± 0.50 minutes)	25.74	26.74

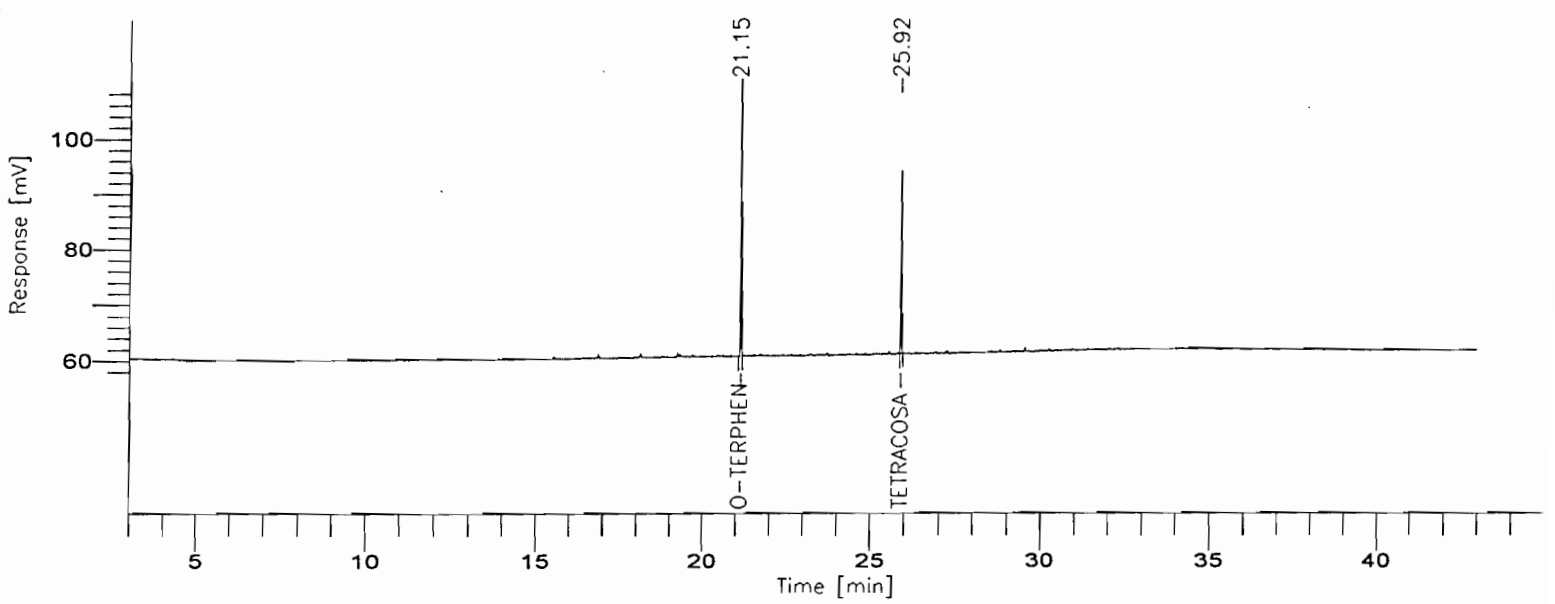
Column used to flag RT values with an asterisk.
* Values outside of QC limits
*.ANALYSIS PERFORMED BY ANALAB/ICM

CHEMTECH CONSULTING GROUP

G

CHROMATOGRAMS

Software Version: 4.1<1L22>
Date: 10/26/99 12:19
Sample Name : BLANK-1
Data File : C:\TC4\DATA\D102136.RAW Date: 10/22/99 22:07
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 36 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

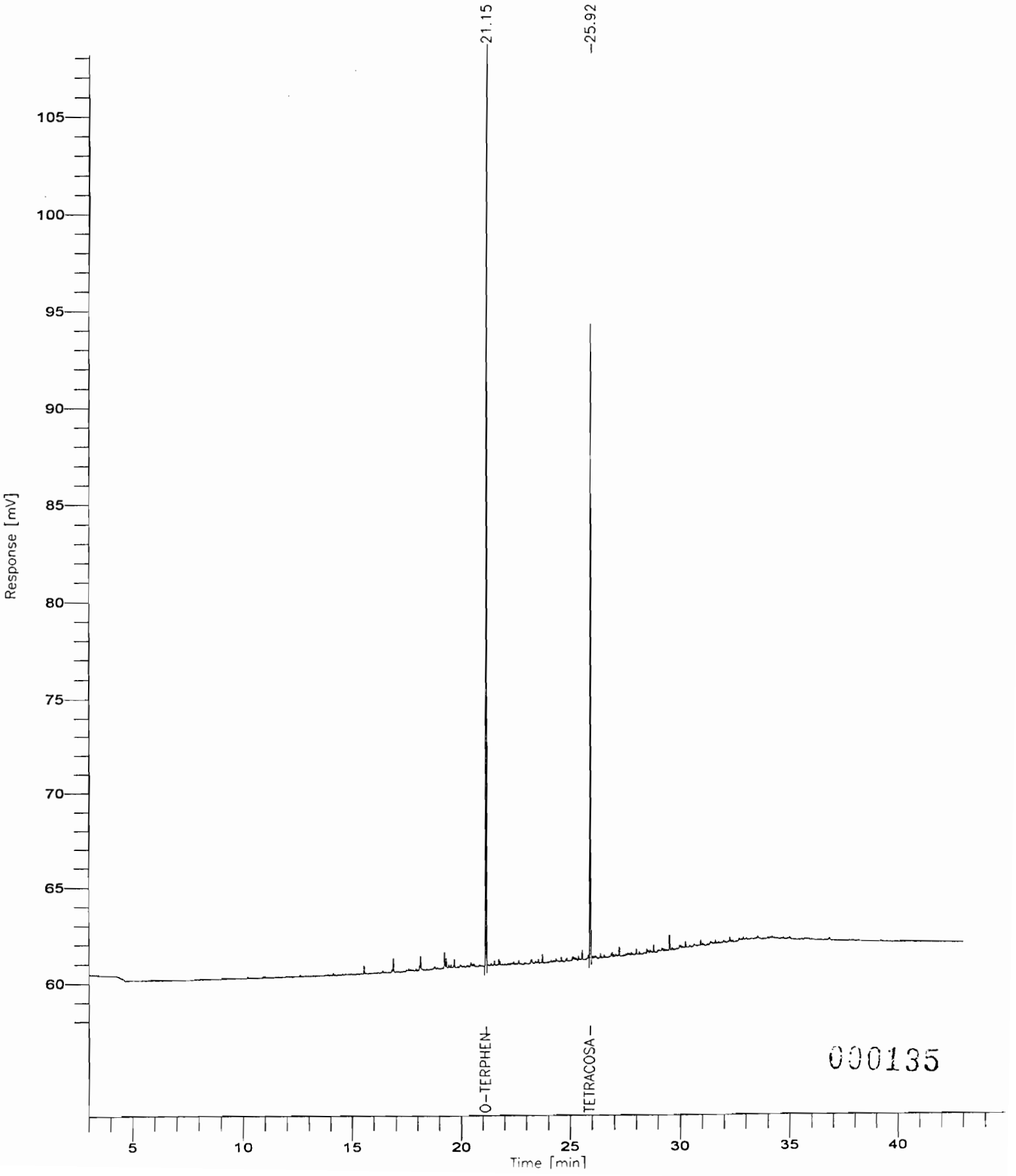
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	O-TERPHENYL (SURROGATE	21.15	87648.00	47454.42	16.392	1639.222
2	TETRACOSANE-d50 (SURRO	25.92	66284.80	33512.73	15.959	1595.926
			153932.80	80967.15	32.351	3235.147

Report stored in ASCII file: C:\TC4\DATA\D102136.TX0

Chromatogram

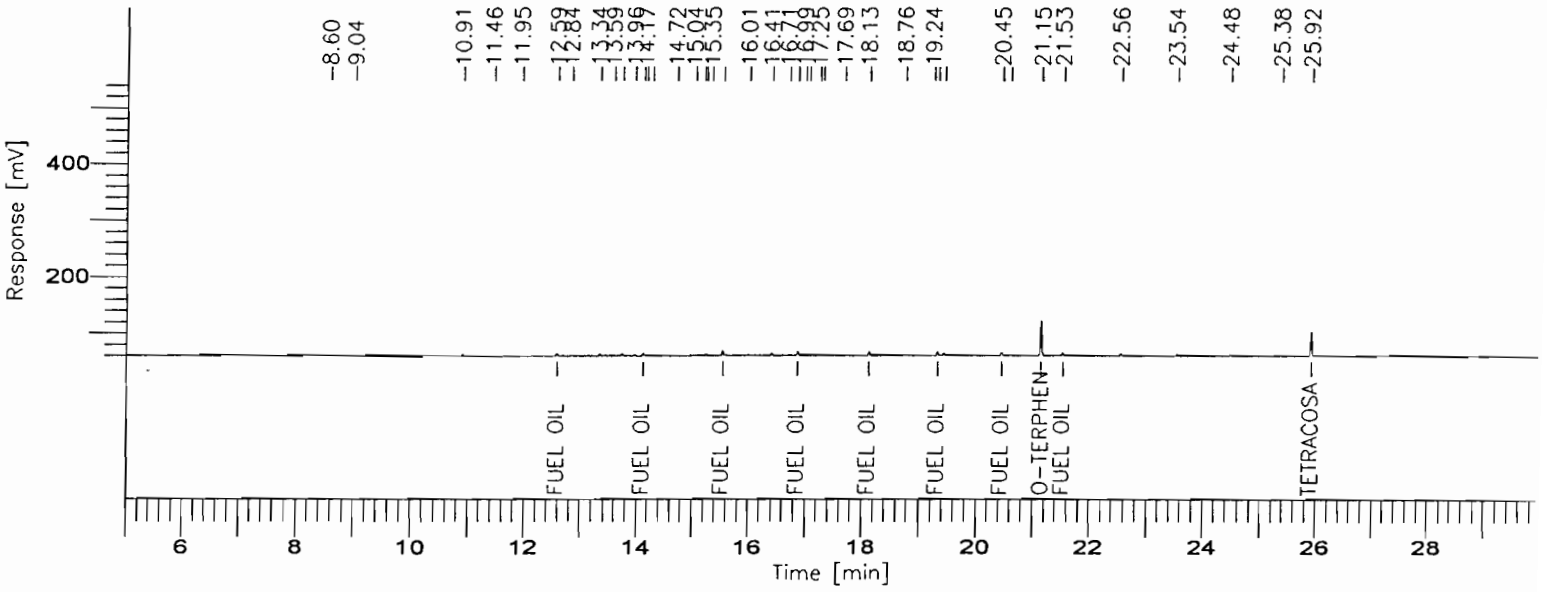
Sample Name : BLANK-1
FileName : C:\TC4\DATA\D102136.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 58 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:19
Time of Injection: 10/22/99 22:07
Low Point : 57.71 mV High Point : 108.15 mV
Plot Scale: 50.4 mV



000135

Software Version: 4.1<1L22>
Date: 10/26/99 12:20
Sample Name : BLANK SPIKE
Data File : C:\TC4\DATA\D102137.RAW Date: 10/22/99 23:01
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 37 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000136

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		8.60	1676.80	966.66	0.002	0.168
2		9.04	1984.00	1151.67	0.002	0.198
3		10.91	4484.80	2869.97	0.004	0.448
4		11.46	1612.80	888.93	0.002	0.161
5		11.95	1299.20	749.06	0.001	0.130
6	FUEL OIL 2 #1	12.59	7814.40	3917.80	175.885	17588.471
7		12.83	1750.40	1060.54	0.002	0.175
8		13.33	4521.60	2567.97	0.005	0.452
9		13.58	1027.20	630.86	0.001	0.103
10		13.73	6652.80	3170.75	0.007	0.665
11		13.95	2707.20	1430.32	0.003	0.271
12	FUEL OIL 2 #2	14.12	8289.07	5106.72	190.836	19083.608
13		14.17	2229.33	1440.57	0.002	0.223
14		14.27	752.00	449.54	0.001	0.075
15		14.72	1553.60	925.00	0.002	0.155
16		15.04	1441.60	898.31	0.001	0.144
17		15.20	2505.40	1214.91	0.003	0.251
18		15.25	3859.40	2304.81	0.004	0.386
19		15.35	3212.80	1012.64	0.003	0.321

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	FUEL OIL 2 #3	15.54	12827.20	8066.41	187.915	18791.491
21		16.01	1926.40	1003.39	0.002	0.193
22		16.41	6784.00	3533.38	0.007	0.678
23		16.71	1577.60	861.07	0.002	0.158
24	FUEL OIL 2 #4	16.87	11868.80	7367.67	206.481	20648.077
25		16.99	1924.27	913.75	0.002	0.192
26		17.06	1910.93	1039.35	0.002	0.191
27		17.25	1352.73	772.27	0.001	0.135
28		17.30	941.67	595.75	0.001	0.094
29		17.69	1014.40	659.64	0.001	0.101
30	FUEL OIL 2 #5	18.13	11822.40	6950.39	202.926	20292.569
31		18.76	2939.20	1521.54	0.003	0.294
32		19.24	2581.24	1076.52	0.003	0.258
33	FUEL OIL 2 #6	19.32	10796.36	6388.09	331.906	33190.598
34		19.43	5705.60	2966.82	0.006	0.571
35	FUEL OIL 2 #7	20.45	9238.40	4996.47	188.676	18867.605
36		20.60	3259.20	1621.23	0.003	0.326
37	O-TERPHENYL (SURROGATE	21.15	113369.60	61747.94	22.575	2257.495
38	FUEL OIL 2 #8	21.53	8779.20	4613.26	194.122	19412.228
39		22.56	7209.60	3911.23	0.007	0.721
40		23.54	5598.40	3245.96	0.006	0.560
41		24.48	3817.60	2193.89	0.004	0.382
42		25.38	2835.20	1608.54	0.003	0.284
43	TETRACOSANE-D50 (SURRO	25.92	84665.60	42372.45	22.742	2274.233
			374120.00	202784.05	1724.158	172415.839

Report stored in ASCII file: C:\TC4\DATA\D102137.TX0

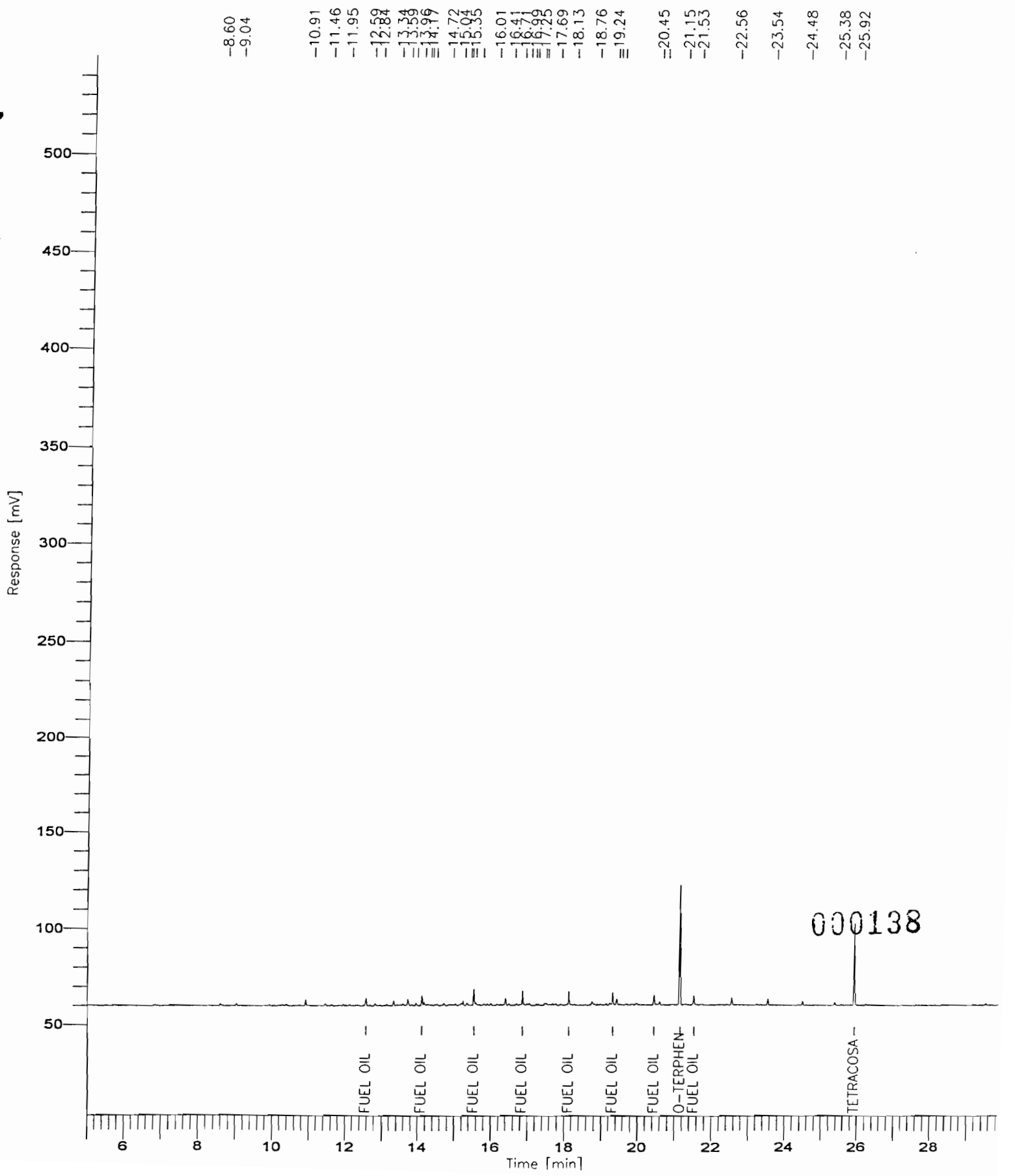
Chromatogram

Sample Name : BLANK SPIKE
FileName : C:\TC4\DATA\D102137.raw
Method : TRPH909
Start Time : 5.00 min
Scale Factor: 0.0

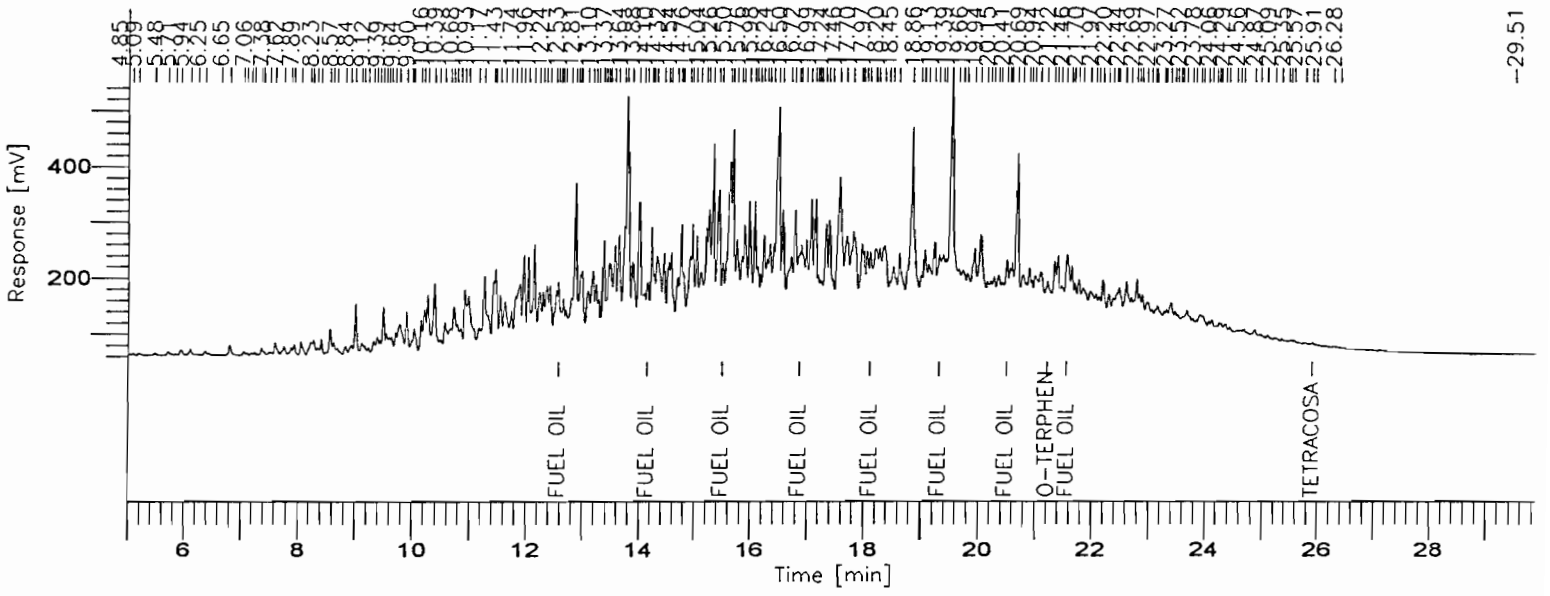
End Time : 30.00 min
Plot Offset: 50 mV

Sample #:
Date : 10/26/99 12:20
Time of Injection: 10/22/99 23:01
Low Point : 50.00 mV
Plot Scale: 500.0 mV

High Point : 550.00 mV



Software Version: 4.1<1L22>
Date: 10/29/99 15:07
Sample Name : 91368MS
Data File : C:\TC4\DATA\D102710.RAW Date: 10/27/99 18:12
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 10 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000139

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		3.56	2019.20	732.92	0.002	0.202
2		4.22	3088.00	1293.30	0.003	0.309
3		4.85	2353.60	1015.53	0.002	0.235
4		4.96	6183.54	2622.26	0.006	0.618
5		5.02	4901.94	1969.11	0.005	0.490
6		5.09	8147.66	3383.06	0.008	0.815
7		5.19	9206.86	3041.52	0.009	0.921
8		5.48	10985.60	3763.10	0.011	1.099
9		5.71	13715.20	5203.98	0.014	1.372
10		5.85	3024.00	1571.74	0.003	0.302
11		5.94	33168.00	8910.28	0.033	3.317
12		6.11	28412.80	9942.97	0.028	2.841
13		6.25	2041.60	1140.29	0.002	0.204
14		6.37	25033.60	6371.48	0.025	2.503
15		6.65	1444.80	752.50	0.001	0.144
16		6.81	52828.80	17731.58	0.053	5.283
17		7.06	12979.10	5681.81	0.013	1.298
18		7.12	8139.30	3695.70	0.008	0.814
19		7.20	6532.86	2858.14	0.007	0.653

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		7.25	7081.54	3306.35	0.007	0.708
21		7.38	26222.25	11615.74	0.026	2.622
22		7.42	8347.35	5174.58	0.008	0.835
23		7.53	15717.95	4928.20	0.016	1.572
24		7.62	59045.25	20491.72	0.059	5.905
25		7.76	48364.80	14550.66	0.048	4.836
26		7.89	29214.49	12199.11	0.029	2.921
27		7.94	41217.51	18012.17	0.041	4.122
28		8.06	76134.58	22758.81	0.076	7.613
29		8.23	85227.57	21992.22	0.085	8.523
30		8.28	61301.90	25540.46	0.061	6.130
31		8.35	32591.45	11240.43	0.033	3.259
32		8.42	69389.35	27178.73	0.069	6.939
33		8.57	120903.56	46187.16	0.121	12.090
34		8.63	60961.29	21509.46	0.061	6.096
35		8.70	36843.90	11399.49	0.037	3.684
36		8.84	40352.87	14560.75	0.040	4.035
37		8.94	56175.12	15347.26	0.056	5.618
38		9.02	214545.14	88337.86	0.215	21.455
39		9.12	56450.04	18154.27	0.056	5.645
40		9.17	26656.65	12332.93	0.027	2.666
41		9.23	20532.33	9636.94	0.021	2.053
42		9.33	67022.15	19991.04	0.067	6.702
43		9.39	72426.78	26883.30	0.072	7.243
44		9.44	47481.81	21389.43	0.047	4.748
45		9.50	186878.61	79725.98	0.187	18.688
46		9.55	71381.47	33802.78	0.071	7.138
47		9.60	67724.38	26191.85	0.068	6.772
48		9.64	60177.39	25838.84	0.060	6.018
49		9.71	88118.43	34689.23	0.088	8.812
50		9.78	259869.52	47206.62	0.260	25.987
51		9.90	197018.65	69656.97	0.197	19.702
52		9.99	42726.19	17089.50	0.043	4.273
53		10.03	120750.46	38603.80	0.121	12.075
54		10.16	127387.14	52230.57	0.127	12.739
55		10.22	203618.87	69241.70	0.204	20.362
56		10.28	265618.21	93504.84	0.266	26.562
57		10.39	366936.17	111318.28	0.367	36.694
58		10.49	22729.60	7080.52	0.023	2.273
59		10.57	114443.14	36416.54	0.114	11.444
60		10.68	87031.72	24096.49	0.087	8.703
61		10.73	205740.47	60670.62	0.206	20.574
62		10.79	62675.97	27586.90	0.063	6.268
63		10.85	42839.50	18092.09	0.043	4.284
64		10.93	197730.07	84469.98	0.198	19.773
65		10.99	247879.53	65649.39	0.248	24.788
66		11.17	73984.18	20414.83	0.074	7.398
67		11.26	490506.56	110410.39	0.491	49.051
68		11.43	214985.79	100908.77	0.215	21.499
69		11.47	330638.06	120489.33	0.331	33.064

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		11.55	204897.29	73544.67	0.205	20.490
71		11.64	257022.64	61955.03	0.257	25.702
72		11.74	121249.77	42250.54	0.121	12.125
73		11.82	178742.84	68816.35	0.179	17.874
74		11.89	386065.57	87795.53	0.386	38.607
75		11.96	355700.78	138606.63	0.356	35.570
76		12.04	335123.99	134534.22	0.335	33.512
77		12.15	470802.77	158237.31	0.471	47.080
78		12.24	228574.63	69063.31	0.229	22.857
79		12.31	169264.91	69585.61	0.169	16.926
80		12.37	262817.61	78031.29	0.263	26.282
81		12.43	189960.10	77878.51	0.190	18.996
82		12.53	198682.78	69489.65	0.199	19.868
83	FUEL OIL 2 #1	12.57	209050.45	82826.61	4691.209	469120.915
84		12.62	45672.84	29769.06	0.046	4.567
85		12.66	116658.77	52350.47	0.117	11.666
86		12.71	60637.89	30521.21	0.061	6.064
87		12.81	156856.57	50811.45	0.157	15.686
88		12.88	710900.21	255779.98	0.711	71.090
89		12.93	57325.86	45508.61	0.057	5.733
90		12.97	188282.12	90956.01	0.188	18.828
91		12.99	196800.88	96720.68	0.197	19.680
92		13.10	222718.82	60217.04	0.223	22.272
93		13.19	313814.37	93546.37	0.314	31.381
94		13.24	169179.40	69297.21	0.169	16.918
95		13.29	81964.08	41826.78	0.082	8.196
96		13.37	400396.65	145866.21	0.400	40.040
97		13.42	64168.60	41809.72	0.064	6.417
98		13.47	258901.49	104742.58	0.259	25.890
99		13.49	208832.71	102380.09	0.209	20.883
##		13.57	377787.98	135514.44	0.378	37.779
##		13.64	485074.01	151298.98	0.485	48.507
##		13.74	474786.94	175740.50	0.475	47.479
##		13.79	1234859.35	397624.78	1.235	123.486
##		13.88	390921.35	99869.09	0.391	39.092
##		14.00	711666.92	206797.54	0.712	71.167
##		14.10	96086.22	42330.37	0.096	9.609
##	FUEL OIL 2 #2	14.15	172947.71	59483.04	4064.327	406432.737
##		14.23	448567.58	159358.79	0.449	44.857
##		14.27	127225.24	73534.96	0.127	12.723
##		14.32	552698.26	105260.53	0.553	55.270
##		14.45	295029.52	110005.09	0.295	29.503
##		14.54	320531.19	90581.79	0.321	32.053
##		14.58	249419.75	108722.42	0.249	24.942
##		14.70	184237.31	61378.18	0.184	18.424
##		14.76	411904.77	155761.76	0.412	41.190
##		14.80	113153.35	68524.78	0.113	11.315
##		14.92	335865.60	95471.14	0.336	33.587
##		14.97	391098.37	153104.11	0.391	39.110
##		15.04	331759.33	131535.79	0.332	33.176

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		15.11	264760.11	66741.53	0.265	26.476
##		15.22	405698.86	143486.81	0.406	40.570
##		15.26	483457.18	175279.05	0.483	48.346
##		15.34	802033.01	298236.79	0.802	80.203
##		15.44	807835.16	207967.81	0.808	80.784
##	FUEL OIL 2 #3	15.50	200869.00	75940.91	2707.637	270763.667
##		15.64	1166273.18	255252.13	1.166	116.627
##		15.69	649853.18	311581.40	0.650	64.985
##		15.75	358848.58	113510.79	0.359	35.885
##		15.84	216976.87	84258.62	0.217	21.698
##		15.89	489709.83	138350.45	0.490	48.971
##		15.98	521338.83	179417.49	0.521	52.134
##		16.08	452402.36	177797.05	0.452	45.240
##		16.12	130493.23	60584.21	0.130	13.049
##		16.18	96572.29	47353.06	0.097	9.657
##		16.24	323849.77	114832.24	0.324	32.385
##		16.30	183574.59	71204.76	0.184	18.357
##		16.34	269135.66	98303.67	0.269	26.914
##		16.41	272278.78	97729.61	0.272	27.228
##		16.50	1246594.29	343614.86	1.247	124.659
##		16.57	420768.41	155893.08	0.421	42.077
##		16.72	342258.14	71059.22	0.342	34.226
##		16.79	469676.94	152328.10	0.470	46.968
##	FUEL OIL 2 #4	16.87	217450.18	73536.47	3574.729	357472.877
##		16.90	333185.59	88083.73	0.333	33.319
##		16.99	242404.40	95182.57	0.242	24.240
##		17.08	490450.43	168857.18	0.490	49.045
##		17.15	486354.09	166807.41	0.486	48.635
##		17.20	49610.11	29178.42	0.050	4.961
##		17.24	33754.20	19657.18	0.034	3.375
##		17.26	21908.98	16235.72	0.022	2.191
##		17.34	323461.92	119383.34	0.323	32.346
##		17.39	306977.64	125817.33	0.307	30.698
##		17.46	24512.67	18986.42	0.025	2.451
##		17.58	827091.85	185912.83	0.827	82.709
##		17.70	227344.95	60876.35	0.227	22.734
##		17.82	43507.20	22205.30	0.044	4.351
##		17.97	187524.02	69973.55	0.188	18.752
##		18.00	79035.10	53019.13	0.079	7.904
##		18.06	97268.49	44980.52	0.097	9.727
##	FUEL OIL 2 #5	18.12	65343.59	35333.08	1151.840	115184.006
##		18.20	85925.17	42659.37	0.086	8.593
##		18.22	84494.12	44586.13	0.084	8.449
##		18.28	159626.34	53154.77	0.160	15.963
##		18.37	321243.97	67764.49	0.321	32.124
##		18.45	9985.60	6100.76	0.010	0.999
##		18.52	53907.20	24367.28	0.054	5.391
##		18.63	188619.20	58196.30	0.189	18.862
##		18.86	1120590.40	290096.97	1.121	112.059
##		19.01	40059.34	19213.04	0.040	4.006

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		19.06	168930.94	61259.51	0.169	16.893
##		19.13	96957.29	29539.87	0.097	9.696
##		19.23	161863.63	63054.49	0.162	16.186
##	FUEL OIL 2 #6	19.32	81185.92	30789.98	2548.772	254877.176
##		19.39	72568.96	22786.83	0.073	7.257
##		19.44	10701.12	6580.04	0.011	1.070
##		19.54	935201.60	326417.34	0.935	93.520
##		19.66	13388.80	7571.89	0.013	1.339
##		19.73	28634.35	14145.69	0.029	2.863
##		19.76	9903.25	9243.08	0.010	0.990
##		19.81	30238.40	13625.67	0.030	3.024
##		19.94	216167.78	63760.92	0.216	21.617
##		20.04	378894.62	92540.21	0.379	37.889
##		20.15	25473.60	11795.93	0.025	2.547
##		20.22	31288.00	12382.03	0.031	3.129
##		20.28	40353.60	20066.87	0.040	4.035
##		20.36	47577.60	19839.57	0.048	4.758
##		20.41	5492.80	4069.37	0.005	0.549
##	FUEL OIL 2 #7	20.50	127550.77	46545.50	2774.683	277468.256
##		20.56	71797.66	33625.00	0.072	7.180
##		20.60	83725.05	43224.03	0.084	8.373
##		20.69	693953.72	240300.55	0.694	69.395
##		20.79	64307.20	18312.10	0.064	6.431
##		20.90	69151.54	34004.39	0.069	6.915
##		20.94	16710.20	12779.02	0.017	1.671
##		21.00	85046.86	23332.22	0.085	8.505
##		21.09	135629.00	34130.80	0.136	13.563
##	O-TERPHENYL (SURROGATE	21.22	27899.20	14223.85	5.555	555.548
##		21.34	152299.56	59010.42	0.152	15.230
##		21.40	163850.67	70435.71	0.164	16.385
##		21.46	60070.93	17964.74	0.060	6.007
##	FUEL OIL 2 #8	21.56	317486.53	76169.48	6444.507	644450.660
##		21.65	120590.93	57897.09	0.121	12.059
##		21.70	65137.78	27865.70	0.065	6.514
##		21.77	119720.89	36740.25	0.120	11.972
##		21.85	116016.00	24715.96	0.116	11.602
##		21.97	107281.47	22398.78	0.107	10.728
##		22.07	52420.93	20526.14	0.052	5.242
##		22.13	45877.91	17401.69	0.046	4.588
##		22.20	133118.40	48518.44	0.133	13.312
##		22.30	62110.73	24168.00	0.062	6.211
##		22.37	40023.97	16785.87	0.040	4.002
##		22.44	64281.48	24276.37	0.064	6.428
##		22.48	109833.42	33783.21	0.110	10.983
##		22.60	54900.80	28634.21	0.055	5.490
##		22.69	12416.85	8710.46	0.012	1.242
##		22.79	118021.55	46738.37	0.118	11.802
##		22.84	54458.71	23441.71	0.054	5.446
##		22.90	47694.89	25578.21	0.048	4.769
##		22.97	13020.80	6098.58	0.013	1.302

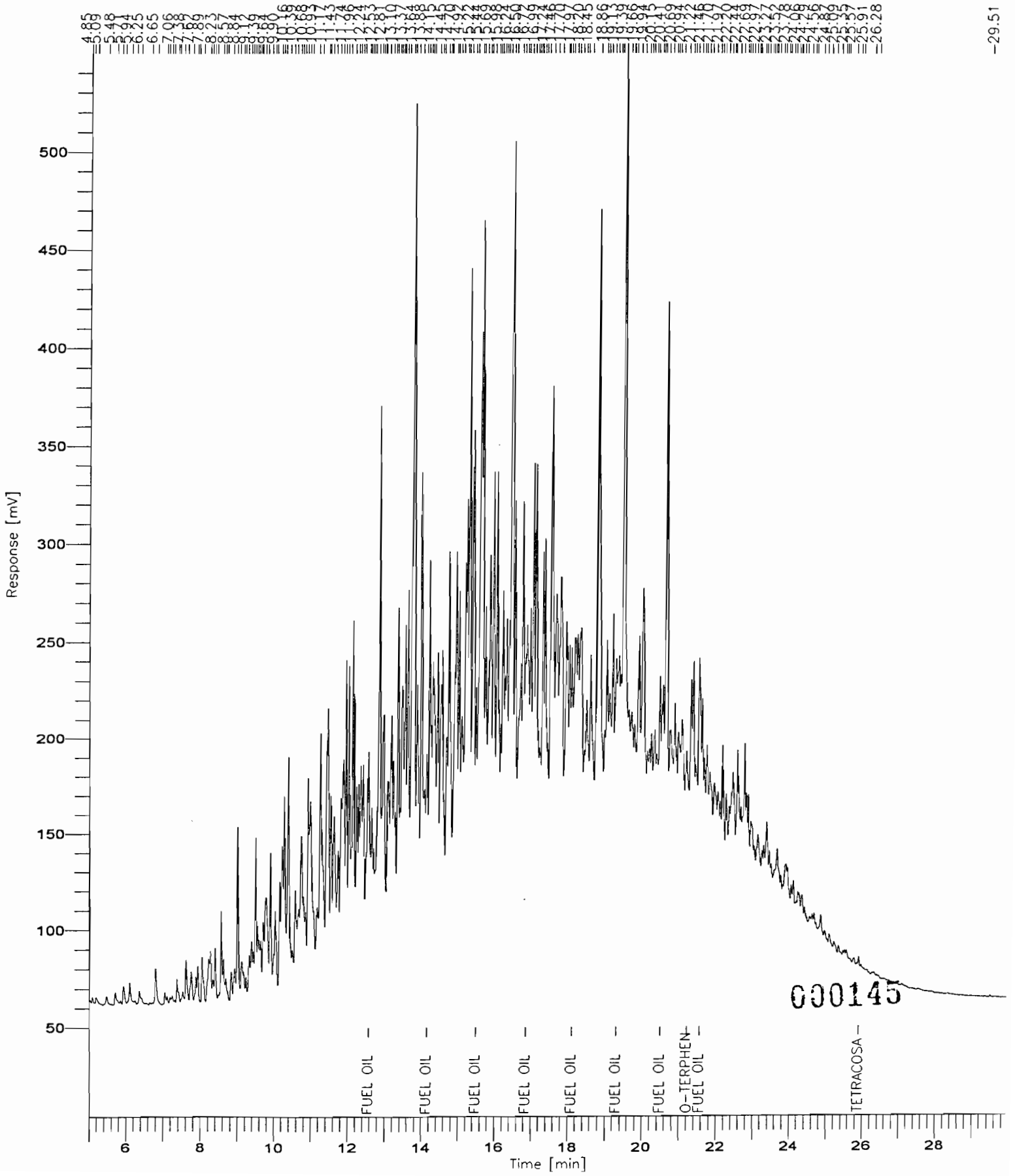
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		23.05	6883.20	4459.33	0.007	0.688
##		23.12	12974.85	8112.19	0.013	1.297
##		23.15	53163.63	15171.46	0.053	5.316
##		23.27	21583.16	9638.51	0.022	2.158
##		23.32	28699.20	13109.13	0.029	2.870
##		23.39	95578.46	27078.82	0.096	9.558
##		23.47	32982.53	13933.15	0.033	3.298
##		23.52	15570.16	7902.75	0.016	1.557
##		23.57	4460.53	3247.02	0.004	0.446
##		23.60	15316.10	6784.41	0.015	1.532
##		23.68	84934.78	19438.47	0.085	8.493
##		23.78	14583.30	7563.27	0.015	1.458
##		23.83	7532.89	4094.62	0.008	0.753
##		23.92	75236.62	16795.49	0.075	7.524
##		23.96	40849.38	15826.87	0.041	4.085
##		24.06	20683.02	9164.39	0.021	2.068
##		24.12	33936.16	12683.65	0.034	3.394
##		24.21	9608.41	4005.29	0.010	0.961
##		24.25	24443.22	10037.95	0.024	2.444
##		24.29	18270.71	10025.13	0.018	1.827
##		24.36	35260.91	10702.71	0.035	3.526
##		24.43	16023.19	5976.28	0.016	1.602
##		24.56	9830.04	3345.96	0.010	0.983
##		24.62	10554.67	4931.22	0.011	1.055
##		24.68	10338.49	5596.74	0.010	1.034
##		24.86	32025.04	9690.51	0.032	3.203
##		24.97	12381.36	3712.75	0.012	1.238
##		25.09	16563.20	4793.68	0.017	1.656
##		25.22	5233.60	2562.92	0.005	0.523
##		25.35	7952.00	3404.32	0.008	0.795
##		25.48	4128.73	2444.16	0.004	0.413
##		25.52	7642.97	3448.26	0.008	0.764
##		25.57	11250.70	3854.30	0.011	1.125
##		25.78	9337.60	2873.70	0.009	0.934
##	TETRACOSANE-D50 (SURRO	25.91	11380.23	4603.00	3.057	305.688
##		25.97	1635.77	1140.63	0.002	0.164
##		26.28	1785.60	761.93	0.002	0.179
##		26.40	921.60	758.22	0.001	0.092
##		29.51	1424.00	793.33	0.001	0.142
##		34.54	2236.80	912.27	0.002	0.224
			43573812.80	1.48e+07	28008.458	2.801e+06

Report stored in ASCII file: C:\TC4\DATA\D102710.TX0

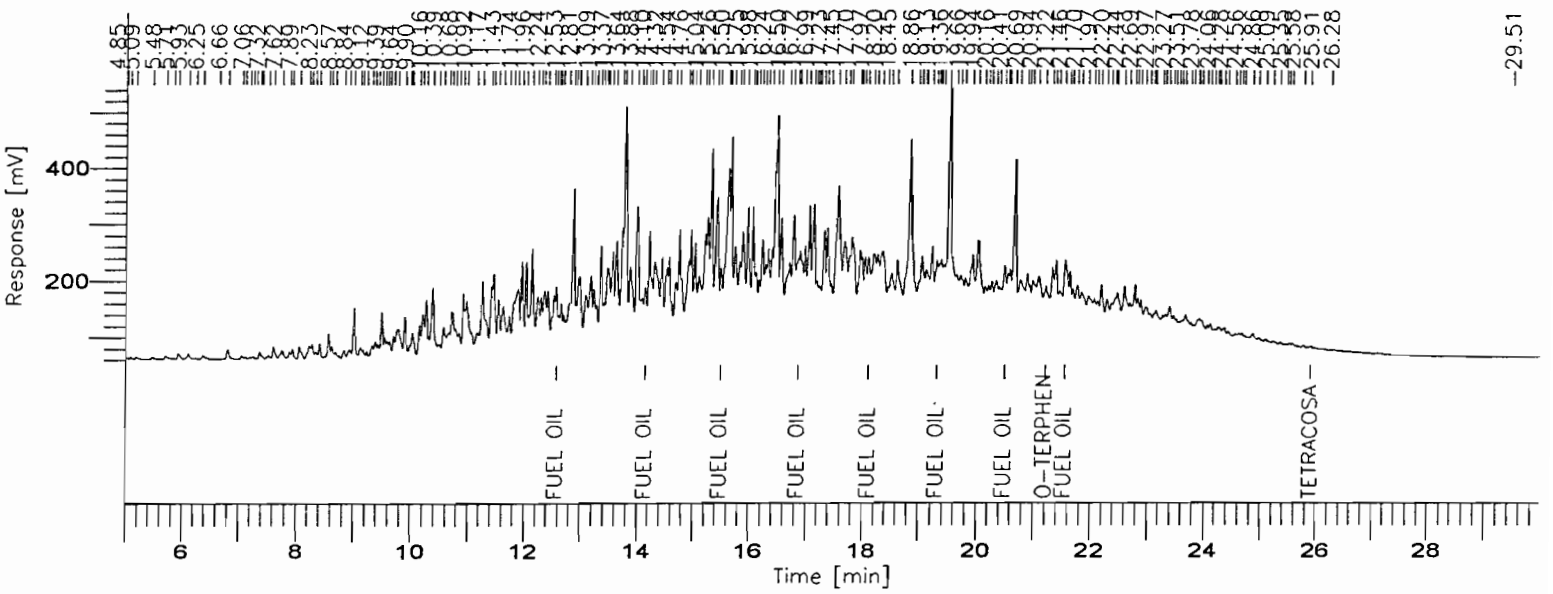
Chromatogram

Sample Name : 91368MS
FileName : C:\TC4\DATA\D102710.raw
Method : TRPH909
Start Time : 5.00 min End Time : 30.00 min
Scale Factor: 0.0 Plot Offset: 50 mV

Sample #: Page 1 of 1
Date : 10/29/99 15:07
Time of Injection: 10/27/99 18:12
Low Point : 50.00 mV High Point : 550.00 mV
Plot Scale: 500.0 mV



Software Version: 4.1<1L22>
Date: 10/29/99 15:07
Sample Name : 91368MSD
Data File : C:\TC4\DATA\D102711.RAW Date: 10/27/99 19:07
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 11 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000146

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		3.56	1920.00	737.14	0.002	0.192
2		4.22	3004.80	1254.23	0.003	0.300
3		4.85	2656.00	1075.89	0.003	0.266
4		4.96	6211.17	2614.98	0.006	0.621
5		5.02	4986.82	1971.24	0.005	0.499
6		5.09	8101.18	3371.57	0.008	0.810
7		5.19	8958.43	3025.09	0.009	0.896
8		5.48	10566.40	3689.99	0.011	1.057
9		5.71	12185.60	4963.63	0.012	1.219
10		5.85	2934.40	1534.23	0.003	0.293
11		5.93	33842.94	8983.39	0.034	3.384
12		6.11	36237.06	10628.76	0.036	3.624
13		6.25	5772.80	1625.02	0.006	0.577
14		6.37	12064.00	4948.90	0.012	1.206
15		6.66	1406.40	728.50	0.001	0.141
16		6.81	51840.00	17502.33	0.052	5.184
17		7.06	12880.04	5635.52	0.013	1.288
18		7.12	8715.57	3788.74	0.009	0.872
19		7.20	7469.32	3176.00	0.007	0.747

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		7.25	8952.22	3749.28	0.009	0.895
21		7.32	1956.28	1161.63	0.002	0.196
22		7.38	25764.39	11557.13	0.026	2.576
23		7.42	8415.78	5113.89	0.008	0.842
24		7.53	15579.20	4883.69	0.016	1.558
25		7.62	58395.20	20456.07	0.058	5.840
26		7.76	47683.20	14425.56	0.048	4.768
27		7.89	28380.80	11930.76	0.028	2.838
28		7.94	40470.40	17629.79	0.040	4.047
29		8.06	74204.80	22363.57	0.074	7.420
30		8.23	82629.26	21450.77	0.083	8.263
31		8.28	59964.47	25005.09	0.060	5.996
32		8.35	31787.77	10987.12	0.032	3.179
33		8.42	67724.09	26839.62	0.068	6.772
34		8.57	117670.02	45095.95	0.118	11.767
35		8.63	59591.76	21209.06	0.060	5.959
36		8.70	36082.22	11129.98	0.036	3.608
37		8.84	39461.35	14376.03	0.039	3.946
38		8.94	54880.41	15064.92	0.055	5.488
39		9.02	211242.22	87993.93	0.211	21.124
40		9.12	53575.08	17752.08	0.054	5.358
41		9.17	24958.28	12195.43	0.025	2.496
42		9.23	21269.99	9576.85	0.021	2.127
43		9.33	65684.14	19589.71	0.066	6.568
44		9.39	70822.90	26342.32	0.071	7.082
45		9.44	46532.23	21109.22	0.047	4.653
46		9.50	182737.66	77650.77	0.183	18.274
47		9.55	69864.15	33446.44	0.070	6.986
48		9.60	66157.30	25709.25	0.066	6.616
49		9.64	58840.57	25353.83	0.059	5.884
50		9.71	86313.56	34149.40	0.086	8.631
51		9.79	253600.41	46169.58	0.254	25.360
52		9.90	192307.86	68076.40	0.192	19.231
53		9.99	41941.37	16723.55	0.042	4.194
54		10.03	117813.69	37905.86	0.118	11.781
55		10.16	125106.71	51155.47	0.125	12.511
56		10.22	199477.41	67399.35	0.199	19.948
57		10.28	258934.62	92178.40	0.259	25.893
58		10.39	356397.62	109774.70	0.356	35.640
59		10.49	25164.80	7114.27	0.025	2.516
60		10.57	113235.35	36071.30	0.113	11.324
61		10.68	86142.85	24132.42	0.086	8.614
62		10.73	201931.81	59589.16	0.202	20.193
63		10.79	61510.80	27233.20	0.062	6.151
64		10.85	42309.23	17826.65	0.042	4.231
65		10.92	178377.13	83133.92	0.178	17.838
66		10.99	255792.47	64590.64	0.256	25.579
67		11.17	67707.55	19812.71	0.068	6.771
68		11.26	478516.50	108101.63	0.478	47.852
69		11.43	210859.04	96915.80	0.211	21.086

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		11.47	316269.87	118228.10	0.316	31.627
71		11.55	196126.53	70909.02	0.196	19.613
72		11.63	239355.01	59106.27	0.239	23.936
73		11.74	113585.14	40787.76	0.114	11.359
74		11.82	175132.68	65509.79	0.175	17.513
75		11.89	366821.99	84813.53	0.367	36.682
76		11.96	339127.55	132600.79	0.339	33.913
77		12.04	319126.14	130542.72	0.319	31.913
78		12.15	445269.27	153091.58	0.445	44.527
79		12.24	213136.17	65907.28	0.213	21.314
80		12.30	158909.56	64943.38	0.159	15.891
81		12.36	246423.57	74041.26	0.246	24.642
82		12.42	174377.39	73682.57	0.174	17.438
83		12.53	183721.94	65506.91	0.184	18.372
84	FUEL OIL 2 #1	12.57	192717.59	78020.64	4324.733	432473.337
85		12.62	40265.85	26224.66	0.040	4.027
86		12.66	104015.61	47760.36	0.104	10.402
87		12.71	51809.01	26922.46	0.052	5.181
88		12.80	139192.95	45949.64	0.139	13.919
89		12.88	674689.91	247985.81	0.675	67.469
90		12.92	52700.15	41915.09	0.053	5.270
91		12.99	350370.24	90994.31	0.350	35.037
92		13.09	196905.32	55209.46	0.197	19.691
93		13.18	272395.09	87107.31	0.272	27.240
94		13.24	157123.90	62269.92	0.157	15.712
95		13.29	60837.18	33967.53	0.061	6.084
96		13.37	355940.33	135531.77	0.356	35.594
97		13.42	50846.69	33395.22	0.051	5.085
98		13.46	204773.63	95047.61	0.205	20.477
99		13.49	189513.79	92534.90	0.190	18.951
##		13.56	347298.75	120990.88	0.347	34.730
##		13.64	417645.65	138170.29	0.418	41.765
##		13.74	379713.89	159465.93	0.380	37.971
##		13.79	1175988.89	376139.83	1.176	117.599
##		13.88	298387.34	86210.40	0.298	29.839
##		14.00	572335.48	189628.87	0.572	57.234
##		14.10	73436.80	24827.91	0.073	7.344
##	FUEL OIL 2 #2	14.15	109759.68	42520.25	2577.869	257786.854
##		14.22	366905.90	140769.04	0.367	36.691
##		14.27	91036.62	55086.38	0.091	9.104
##		14.32	412477.78	84977.59	0.412	41.248
##		14.45	203088.50	86210.21	0.203	20.309
##		14.54	224765.11	76529.69	0.225	22.477
##		14.58	229887.69	98004.46	0.230	22.989
##		14.70	107938.40	37822.35	0.108	10.794
##		14.76	197853.60	101561.47	0.198	19.785
##		14.92	295444.22	88275.79	0.295	29.544
##		14.97	354774.23	143120.51	0.355	35.477
##		15.04	299683.73	120930.86	0.300	29.968
##		15.11	219726.77	60723.42	0.220	21.973

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		15.21	391091.44	133184.18	0.391	39.109
##		15.26	424252.36	163379.42	0.424	42.425
##		15.34	784337.63	283342.43	0.784	78.434
##		15.44	757921.98	197353.19	0.758	75.792
##	FUEL OIL 2 #3	15.50	182839.72	70890.38	2466.048	246604.788
##		15.64	1067520.02	247004.45	1.068	106.752
##		15.68	660299.73	301863.08	0.660	66.030
##		15.75	322163.13	106288.49	0.322	32.216
##		15.84	218262.38	78762.88	0.218	21.826
##		15.89	461213.58	131030.00	0.461	46.121
##		15.98	494293.79	172116.92	0.494	49.429
##		16.07	433600.75	172245.24	0.434	43.360
##		16.12	119706.78	56096.43	0.120	11.971
##		16.18	90580.00	42617.24	0.091	9.058
##		16.23	311577.78	113156.83	0.312	31.158
##		16.29	158351.42	69405.24	0.158	15.835
##		16.34	277853.47	96883.84	0.278	27.785
##		16.41	267178.84	96529.56	0.267	26.718
##		16.50	1193042.66	332048.25	1.193	119.304
##		16.57	420859.15	148349.10	0.421	42.086
##		16.72	339649.12	68245.33	0.340	33.965
##		16.79	463084.14	150649.22	0.463	46.308
##	FUEL OIL 2 #4	16.87	215879.49	73689.07	3548.995	354899.459
##		16.90	330346.33	86407.32	0.330	33.035
##		16.99	240685.36	94949.57	0.241	24.069
##		17.07	488695.15	165358.66	0.489	48.870
##		17.15	480013.18	166477.99	0.480	48.001
##		17.20	48336.44	30278.76	0.048	4.834
##		17.23	36983.46	20835.85	0.037	3.698
##		17.26	32116.88	19367.10	0.032	3.212
##		17.33	331691.30	118659.78	0.332	33.169
##		17.39	306963.17	122262.11	0.307	30.696
##		17.45	36200.04	22186.28	0.036	3.620
##		17.58	949092.24	195160.45	0.949	94.909
##		17.70	451155.61	95353.36	0.451	45.116
##		17.78	135612.41	68993.90	0.136	13.561
##		17.82	432790.51	101780.45	0.433	43.279
##		17.96	174122.40	67553.50	0.174	17.412
##		18.00	87555.20	50946.75	0.088	8.756
##		18.06	95692.80	43980.04	0.096	9.569
##	FUEL OIL 2 #5	18.12	63407.20	35149.16	1117.508	111750.843
##		18.20	158866.09	42682.11	0.159	15.887
##		18.27	167230.80	50578.72	0.167	16.723
##		18.37	310984.71	65872.78	0.311	31.098
##		18.45	8201.60	6120.19	0.008	0.820
##		18.52	96495.70	29576.75	0.096	9.650
##		18.63	194665.90	57927.70	0.195	19.467
##		18.86	961561.60	266432.88	0.962	96.156
##		19.01	33485.67	17261.01	0.033	3.349
##		19.06	168057.25	57226.15	0.168	16.806

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		19.13	95225.89	28854.69	0.095	9.523
##		19.23	159016.79	64328.66	0.159	15.902
##	FUEL OIL 2 #6	19.32	84659.59	30445.17	2658.172	265817.246
##		19.36	33007.49	18245.01	0.033	3.301
##		19.39	37624.08	21739.38	0.038	3.762
##		19.43	8974.48	5424.15	0.009	0.897
##		19.54	907971.14	324734.66	0.908	90.797
##		19.66	12032.00	7029.13	0.012	1.203
##		19.73	15673.60	8856.38	0.016	1.567
##		19.81	33089.43	14213.14	0.033	3.309
##		19.94	216927.26	61489.89	0.217	21.693
##		20.04	374413.71	90838.73	0.374	37.441
##		20.16	29418.97	13119.83	0.029	2.942
##		20.21	36295.59	15883.02	0.036	3.630
##		20.27	53580.96	23203.76	0.054	5.358
##		20.36	74301.51	25170.58	0.074	7.430
##		20.41	37482.41	13687.32	0.037	3.748
##	FUEL OIL 2 #7	20.50	166137.52	52320.25	3618.090	361809.042
##		20.56	89502.35	40483.40	0.090	8.950
##		20.60	98113.39	47653.05	0.098	9.811
##		20.69	716267.94	243432.33	0.716	71.627
##		20.77	143783.70	28208.03	0.144	14.378
##		20.90	107332.77	41255.77	0.107	10.733
##		20.94	33209.06	20247.47	0.033	3.321
##		21.00	111952.40	29056.98	0.112	11.195
##		21.09	141194.24	36516.92	0.141	14.119
##	O-TERPHENYL (SURROGATE	21.22	28131.20	14908.91	5.602	560.168
##		21.34	142965.48	56318.34	0.143	14.297
##		21.40	169238.48	70105.49	0.169	16.924
##		21.46	59702.51	17553.88	0.060	5.970
##	FUEL OIL 2 #8	21.56	312779.11	73860.04	6349.196	634919.563
##		21.64	117224.54	56529.68	0.117	11.722
##		21.70	62861.35	26728.55	0.063	6.286
##		21.77	117772.29	34926.33	0.118	11.777
##		21.85	113194.48	24924.39	0.113	11.319
##		21.97	101571.43	21162.38	0.102	10.157
##		22.07	54713.88	20021.63	0.055	5.471
##		22.13	41715.82	16559.21	0.042	4.172
##		22.19	131372.63	47093.74	0.131	13.137
##		22.30	65496.77	23866.08	0.065	6.550
##		22.37	47328.73	18155.71	0.047	4.733
##		22.44	84256.57	28472.14	0.084	8.426
##		22.48	125474.50	37101.79	0.125	12.547
##		22.60	206050.50	50464.52	0.206	20.605
##		22.69	44339.90	22679.64	0.044	4.434
##		22.79	193568.21	56651.49	0.194	19.357
##		22.84	82704.63	32214.15	0.083	8.270
##		22.89	72540.73	31703.47	0.073	7.254
##		22.97	81597.63	18956.45	0.082	8.160
##		23.05	16814.82	7619.02	0.017	1.681

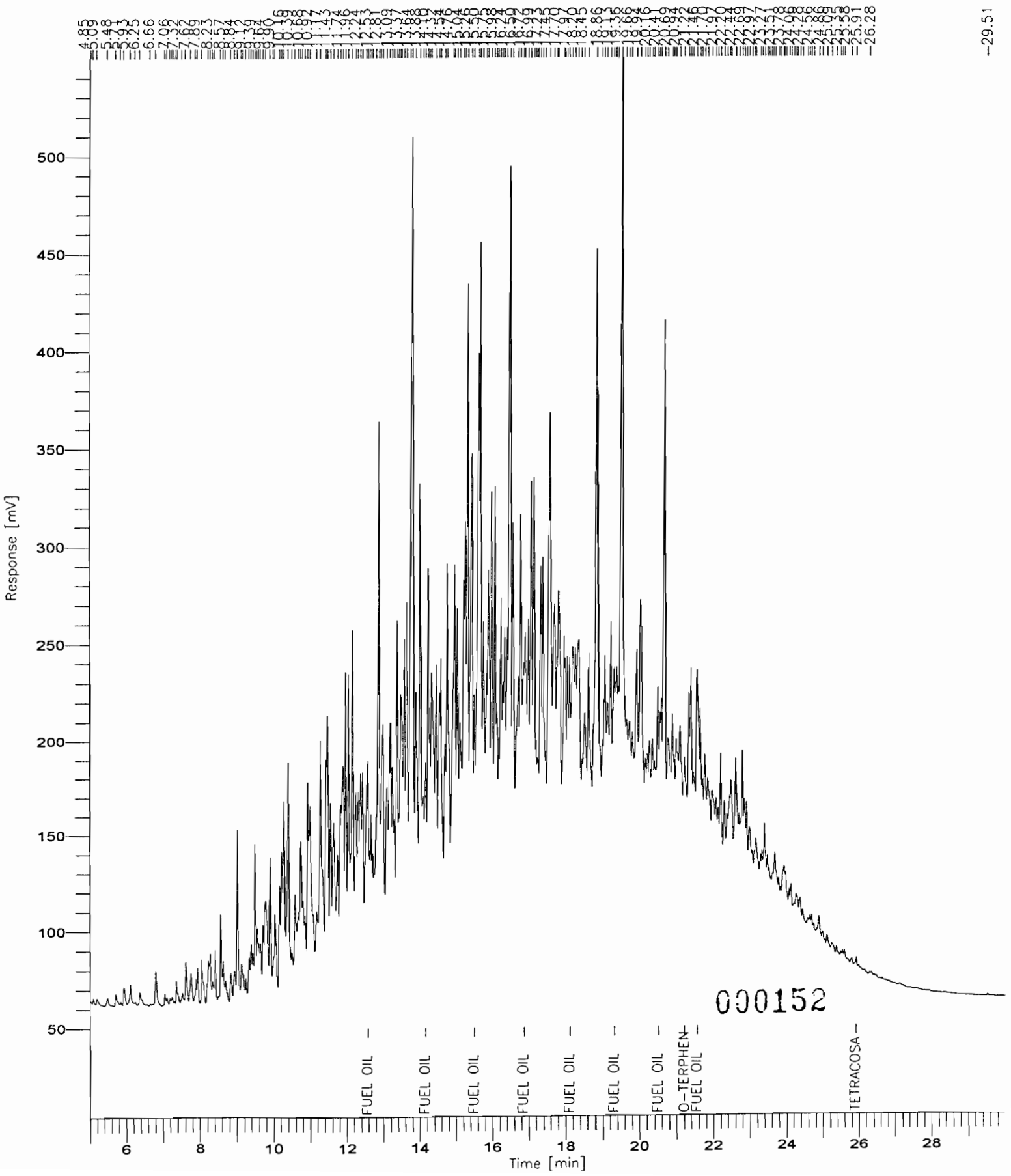
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		23.12	17306.11	8672.34	0.017	1.731
##		23.15	49282.50	15277.72	0.049	4.928
##		23.27	19277.16	9006.05	0.019	1.928
##		23.32	25823.53	11938.37	0.026	2.582
##		23.39	85408.00	26926.12	0.085	8.541
##		23.47	26938.40	11515.24	0.027	2.694
##		23.51	8792.91	5495.84	0.009	0.879
##		23.57	972.80	1019.12	0.001	0.097
##		23.61	4625.60	2121.73	0.005	0.463
##		23.67	21758.40	10878.18	0.022	2.176
##		23.78	6940.80	5236.00	0.007	0.694
##		23.83	4469.65	2959.60	0.004	0.447
##		23.90	30480.29	13377.45	0.030	3.048
##		23.92	35951.71	16236.35	0.036	3.595
##		23.96	33230.39	14045.94	0.033	3.323
##		24.06	16836.57	7761.25	0.017	1.684
##		24.12	28587.62	11184.25	0.029	2.859
##		24.20	7570.26	3022.47	0.008	0.757
##		24.25	21663.25	9344.66	0.022	2.166
##		24.28	16197.25	8543.02	0.016	1.620
##		24.36	32837.94	9725.12	0.033	3.284
##		24.43	13256.66	5350.19	0.013	1.326
##		24.56	11774.13	3674.92	0.012	1.177
##		24.62	14974.10	6223.22	0.015	1.497
##		24.68	16691.55	7828.18	0.017	1.669
##		24.73	9616.44	4188.41	0.010	0.962
##		24.86	42001.58	10715.31	0.042	4.200
##		24.96	16126.19	4538.89	0.016	1.613
##		25.09	12518.40	4320.92	0.013	1.252
##		25.22	13852.80	3269.22	0.014	1.385
##		25.35	6934.40	3186.47	0.007	0.693
##		25.48	4264.56	2314.36	0.004	0.426
##		25.52	6721.64	3483.81	0.007	0.672
##		25.58	10220.19	3979.96	0.010	1.022
##		25.78	9248.00	2878.46	0.009	0.925
##	TETRACOSANE-D50 (SURRO	25.91	6830.40	3796.94	1.835	183.474
##		26.28	1980.80	852.63	0.002	0.198
##		29.51	1396.80	787.39	0.001	0.140
##		34.54	2099.20	863.80	0.002	0.210
			42138732.80	1.42e+07	26708.823	2.671e+06

Report stored in ASCII file: C:\TC4\DATA\D102711.TXO

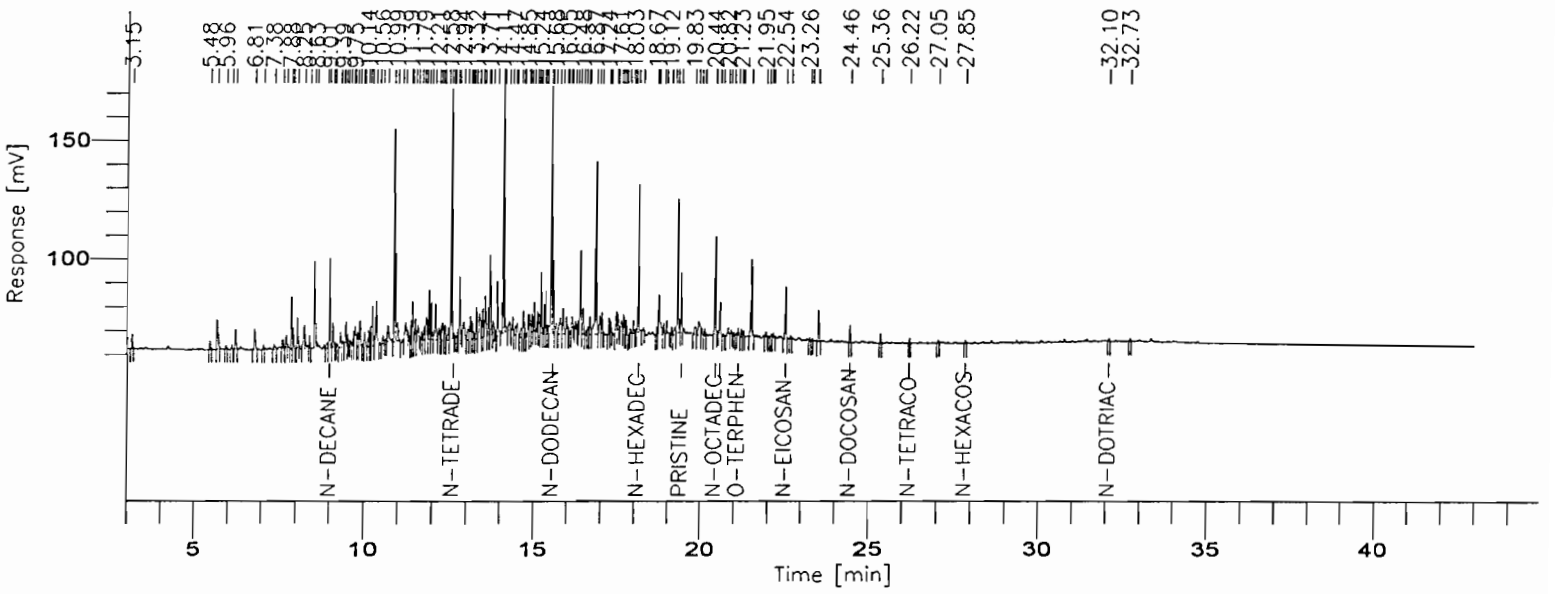
Chromatogram

Sample Name : 91368MSD
FileName : C:\TC4\DATA\D102711.raw
Method : TRPH909
Start Time : 5.00 min End Time : 30.00 min
Scale Factor: 0.0 Plot Offset: 50 mV

Sample #: Page 1 of 1
Date : 10/29/99 15:07
Time of Injection: 10/27/99 19:07
Low Point : 50.00 mV High Point : 550.00 mV
Plot Scale: 500.0 mV



Software Version: 4.1<1L22>
Date: 10/28/99 17:11
Sample Name : 91392 1:100 SK 11/02/99
Data File : C:\TC4\DATA\D102708.RAW Date: 10/27/99 16:21
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 8 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000153

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		3.15	9603.20	5858.48	0.010	0.960
2		5.47	7705.60	3674.58	0.008	0.771
3		5.69	33294.40	12660.41	0.033	3.329
4		5.96	4566.40	1495.05	0.005	0.457
5		6.13	3574.40	1677.51	0.004	0.357
6		6.24	16764.80	8374.55	0.017	1.676
7		6.81	18707.20	8187.95	0.019	1.871
8		7.06	4182.40	1995.00	0.004	0.418
9		7.38	6624.00	2338.66	0.007	0.662
10		7.62	6667.20	3474.04	0.007	0.667
11		7.72	8532.80	4948.06	0.009	0.853
12		7.88	41136.00	21855.63	0.041	4.114
13		7.92	19248.00	9110.56	0.019	1.925
14		8.05	23913.60	12532.61	0.024	2.391
15		8.25	11480.00	5565.59	0.011	1.148
16		8.42	9401.60	5323.30	0.009	0.940
17		8.56	69707.20	36970.85	0.070	6.971
18		8.63	3286.40	1949.77	0.003	0.329
19		8.94	7636.80	2385.98	0.008	0.764

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-DECANE	9.01	67819.20	37262.98	18.809	1880.932
21		9.11	18472.96	10221.59	0.018	1.847
22		9.18	2671.04	1876.57	0.003	0.267
23		9.32	14244.12	6493.09	0.014	1.424
24		9.39	5693.89	2642.73	0.006	0.569
25		9.43	3832.44	2200.63	0.004	0.383
26		9.49	16935.15	10242.39	0.017	1.694
27		9.54	6032.00	4159.12	0.006	0.603
28		9.63	2576.00	1883.15	0.003	0.258
29		9.70	11843.34	6287.89	0.012	1.184
30		9.75	22694.97	8299.19	0.023	2.269
31		9.81	15656.89	6187.88	0.016	1.566
32		9.89	27345.03	10881.83	0.027	2.735
33		9.98	3462.97	1677.70	0.003	0.346
34		10.03	14966.40	6329.81	0.015	1.497
35		10.14	13271.04	7125.61	0.013	1.327
36		10.19	15823.36	8380.03	0.016	1.582
37		10.26	48064.64	16890.21	0.048	4.806
38		10.37	48957.76	18551.93	0.049	4.896
39		10.47	1929.60	1181.99	0.002	0.193
40		10.56	8387.20	3784.19	0.008	0.839
41		10.71	27094.40	6972.13	0.027	2.709
42		10.90	159736.00	90725.21	0.160	15.974
43		10.99	30188.80	8279.67	0.030	3.019
44		11.14	3228.80	1431.70	0.003	0.323
45		11.24	17193.60	5926.30	0.017	1.719
46		11.39	18755.98	9350.43	0.019	1.876
47		11.44	38112.04	17245.49	0.038	3.811
48		11.52	19885.58	9728.15	0.020	1.989
49		11.60	14624.00	5185.93	0.015	1.462
50		11.72	5296.00	3218.44	0.005	0.530
51		11.79	12686.22	5707.37	0.013	1.269
52		11.84	31611.38	9713.32	0.032	3.161
53		11.92	39216.00	20811.22	0.039	3.922
54		11.99	26090.46	15686.74	0.026	2.609
55		12.10	37753.67	15128.32	0.038	3.775
56		12.21	14575.48	5534.99	0.015	1.458
57		12.27	11609.41	6189.77	0.012	1.161
58		12.32	23427.50	7206.70	0.023	2.343
59		12.39	14399.48	6681.13	0.014	1.440
60		12.49	13636.18	5306.67	0.014	1.364
61		12.58	196235.82	107137.26	0.196	19.624
62	N-TETRADECANE	12.63	4547.20	3235.60	1.222	122.208
63		12.67	1420.80	1170.33	0.001	0.142
64		12.77	5628.40	3372.33	0.006	0.563
65		12.82	41482.00	24136.14	0.041	4.148
66		12.94	18992.00	5980.67	0.019	1.899
67		13.05	16720.29	4660.89	0.017	1.672
68		13.13	24268.51	9818.78	0.024	2.427
69		13.19	15902.75	7491.64	0.016	1.590

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		13.24	5790.05	3489.70	0.006	0.579
71		13.32	27875.20	13051.66	0.028	2.788
72		13.40	37000.80	10246.15	0.037	3.700
73		13.50	26683.75	12039.07	0.027	2.668
74		13.57	40310.00	16896.85	0.040	4.031
75		13.67	23463.65	11987.10	0.023	2.346
76		13.71	93837.80	34205.30	0.094	9.384
77		13.81	8080.00	4469.85	0.008	0.808
78		13.94	46068.80	22828.98	0.046	4.607
79		14.11	185481.60	105048.72	0.185	18.548
80		14.16	13296.00	6251.35	0.013	1.330
81		14.29	12220.80	3690.99	0.012	1.222
82		14.39	14179.20	7171.58	0.014	1.418
83		14.47	12343.14	3726.35	0.012	1.234
84		14.52	9087.26	4819.03	0.009	0.909
85		14.64	12206.93	4043.40	0.012	1.221
86		14.70	23988.00	11069.17	0.024	2.399
87		14.74	10742.67	5855.83	0.011	1.074
88		14.85	20478.60	8938.15	0.020	2.048
89		14.89	19758.40	8389.60	0.020	1.976
90		14.96	13513.40	7796.20	0.014	1.351
91		15.03	19680.00	11791.48	0.020	1.968
92		15.13	15698.86	8543.84	0.016	1.570
93		15.18	20533.52	7915.54	0.021	2.053
94		15.24	42951.62	25740.26	0.043	4.295
95		15.33	23206.00	11947.92	0.023	2.321
96		15.35	18916.97	12382.42	0.019	1.892
97		15.41	8039.97	3938.12	0.008	0.804
98		15.53	212071.96	106031.45	0.212	21.207
99	N-DODECANE	15.57	35360.00	13275.25	9.728	972.835
##		15.68	14200.13	4820.86	0.014	1.420
##		15.80	27897.17	6805.77	0.028	2.790
##		15.89	25290.20	10682.08	0.025	2.529
##		15.99	17348.62	7193.38	0.017	1.735
##		16.04	5548.99	3054.62	0.006	0.555
##		16.10	1894.40	1334.61	0.002	0.189
##		16.15	10665.60	5203.34	0.011	1.067
##		16.25	7523.20	3505.67	0.008	0.752
##		16.32	7449.89	4222.08	0.007	0.745
##		16.39	73201.16	34233.48	0.073	7.320
##		16.48	24571.35	10924.86	0.025	2.457
##		16.58	5385.00	2128.30	0.005	0.539
##		16.64	9170.32	3642.11	0.009	0.917
##		16.69	17861.80	7473.75	0.018	1.786
##		16.87	161468.55	73940.59	0.161	16.147
##		16.98	19227.45	7857.21	0.019	1.923
##		17.04	18282.08	9190.46	0.018	1.828
##		17.24	12406.33	6800.12	0.012	1.241
##		17.29	7801.67	5020.93	0.008	0.780
##		17.46	22757.91	8589.82	0.023	2.276

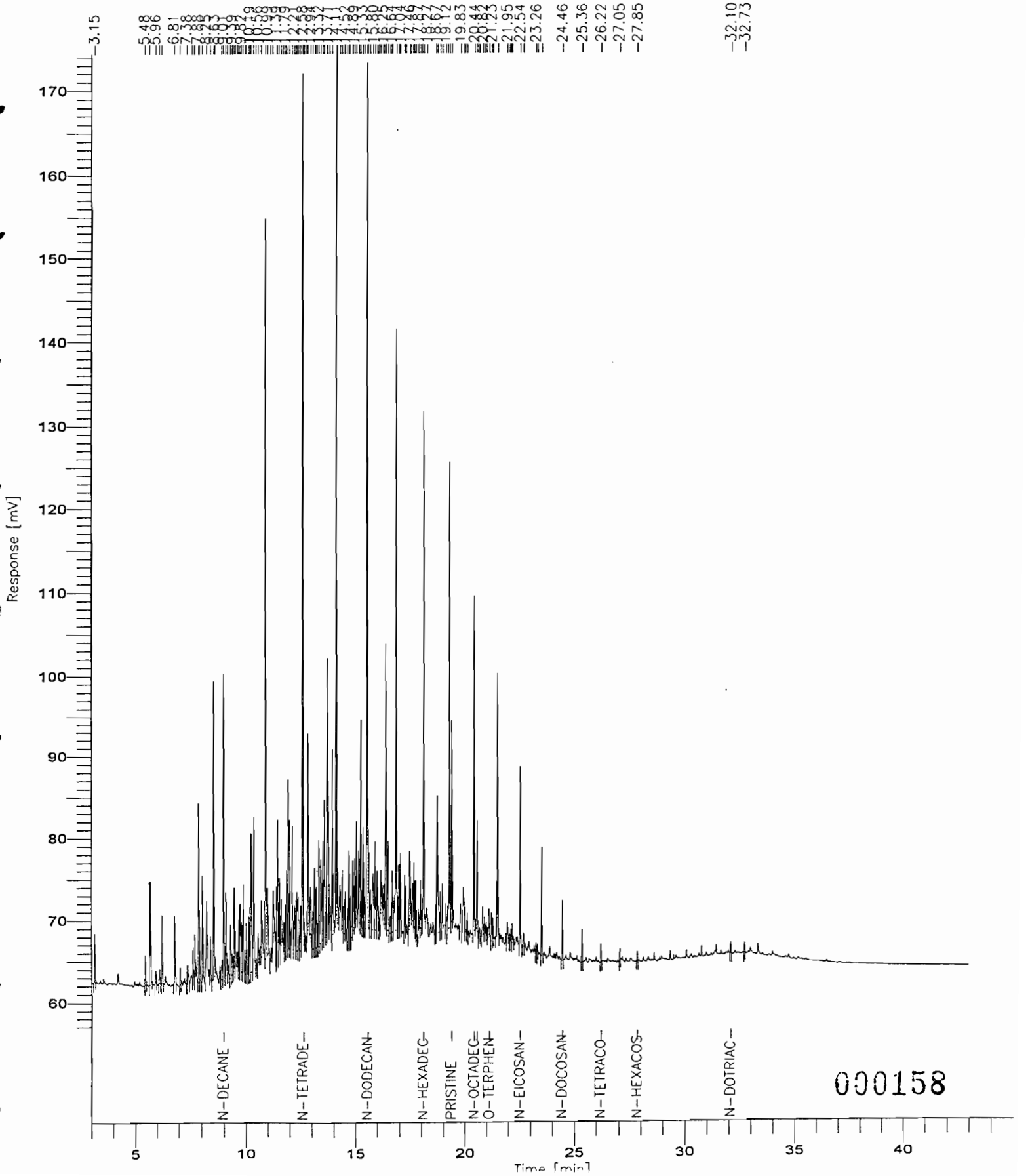
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		17.50	11306.09	6249.56	0.011	1.131
##		17.61	13357.48	4643.99	0.013	1.336
##		17.67	14712.37	7669.19	0.015	1.471
##		17.73	12311.29	5990.02	0.012	1.231
##		17.76	10239.66	6559.02	0.010	1.024
##		17.87	3174.40	2089.63	0.003	0.317
##		17.97	10020.39	5778.49	0.010	1.002
##		18.03	3884.42	1988.06	0.004	0.388
##	N-HEXADECANE	18.12	112847.18	62027.21	29.201	2920.086
##		18.27	2228.80	1047.92	0.002	0.223
##		18.67	7232.95	3669.31	0.007	0.723
##		18.74	55914.79	16837.79	0.056	5.591
##		18.88	7658.67	4792.97	0.008	0.766
##		18.97	10707.20	5546.60	0.011	1.071
##		19.12	6110.40	3530.16	0.006	0.611
##		19.22	10169.88	3166.29	0.010	1.017
##		19.31	111134.40	56706.79	0.111	11.113
##	PRISTINE	19.42	51842.92	25083.99	11.027	1102.650
##		19.82	13846.40	3443.17	0.014	1.385
##		19.94	23714.94	5585.79	0.024	2.371
##		20.04	4662.66	3105.95	0.005	0.466
##		20.13	4494.40	2795.50	0.004	0.449
##	N-OCTADECANE	20.44	75820.80	40699.22	18.641	1864.060
##	PHYTANE	20.58	27451.20	13491.31	6.555	655.513
##		20.68	2889.60	1179.29	0.003	0.289
##		20.82	8606.40	3448.99	0.009	0.861
##		20.91	2809.60	1476.34	0.003	0.281
##		21.00	2161.60	1405.45	0.002	0.216
##	O-TERPHENYL (SURROGATE	21.13	5156.80	3205.23	0.964	96.444
##		21.23	8088.37	3432.56	0.008	0.809
##		21.29	4654.03	2622.09	0.005	0.465
##		21.52	69052.80	33070.21	0.069	6.905
##		21.95	5203.20	2121.16	0.005	0.520
##		22.05	1625.25	1125.22	0.002	0.163
##		22.12	3416.35	1787.34	0.003	0.342
##		22.17	4668.80	2309.92	0.005	0.467
##	N-EICOSANE	22.54	41190.40	22480.05	9.294	929.367
##		22.69	3680.00	1682.50	0.004	0.368
##		23.26	2348.80	1430.42	0.002	0.235
##		23.33	1964.80	1014.88	0.002	0.196
##		23.52	22846.40	13218.33	0.023	2.285
##	N-DOCOSANE	24.46	12966.40	7320.11	3.064	306.359
##		25.36	7248.00	4067.92	0.007	0.725
##	N-TETRACOSANE	26.22	3859.20	2296.22	0.875	87.505
##		27.05	2416.00	1412.20	0.002	0.242
##	N-HEXACOSANE	27.85	1907.20	1175.27	0.417	41.741
##	N-DOTRIACONTANE	32.10	2300.80	1333.28	-0.981	-98.063
##		32.73	2033.60	1168.90	0.002	0.203
			3931785.60	1.88e+06	112.305	11230.510

Report stored in ASCII file: C:\TC4\DATA\D102708.TX0

Chromatogram

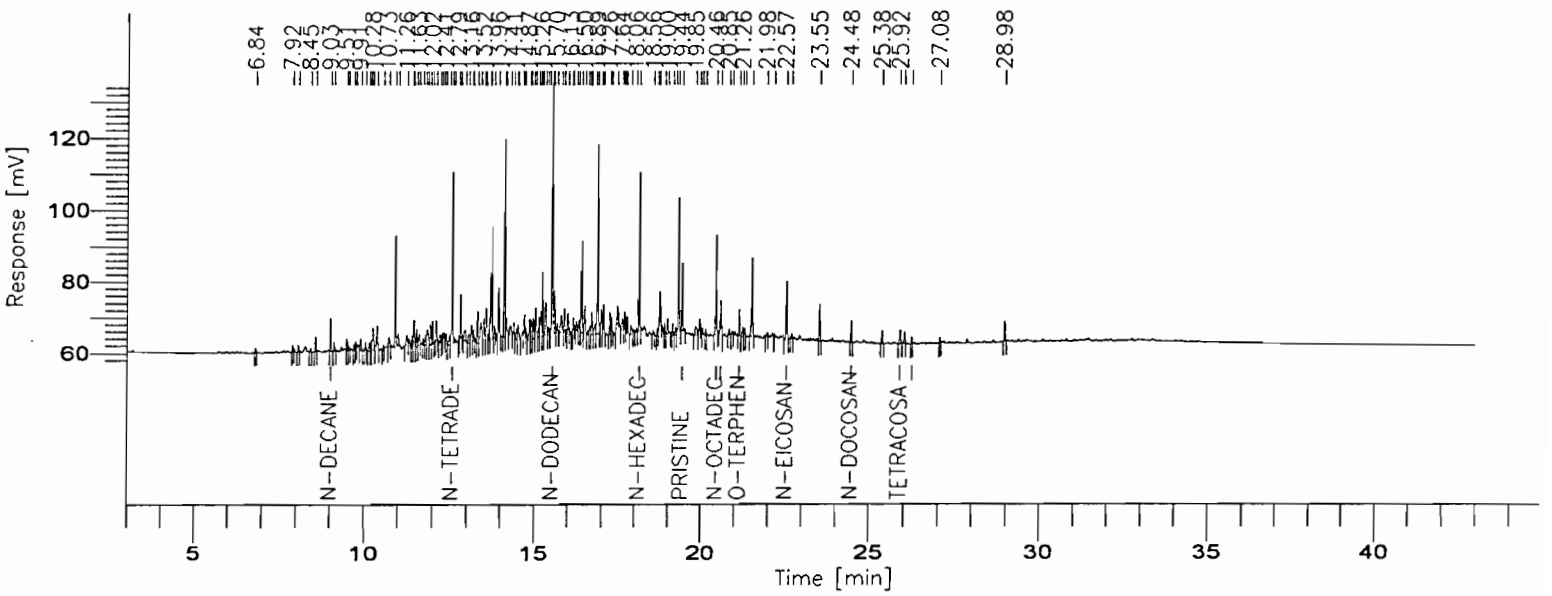
Sample Name : 91392 1'.100 ck 11/02/99
FileName : C:\TC4\DATA\D102708.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 56 mV

Sample #:
Date : 10/28/99 17:11
Time of Injection: 10/27/99 16:21
Low Point : 56.35 mV High Point : 174.34 mV



000158

Software Version: 4.1<1L22>
Date: 10/26/99 12:20
Sample Name : L5235-91393 1:10
Data File : C:\TC4\DATA\D102145.RAW Date: 10/23/99 06:15
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 45 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000159

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		6.84	1841.60	1019.57	0.002	0.184
2		7.92	2598.40	1689.31	0.003	0.260
3		8.09	3510.40	1942.74	0.004	0.351
4		8.44	1977.60	1171.06	0.002	0.198
5		8.59	7668.80	4303.83	0.008	0.767
6	N-DECANE	9.03	16835.20	9368.69	4.669	466.916
7		9.14	4336.00	2511.90	0.004	0.434
8		9.51	5259.20	3265.87	0.005	0.526
9		9.57	1696.00	1172.69	0.002	0.170
10		9.73	2419.20	1508.10	0.002	0.242
11		9.77	2665.60	1630.60	0.003	0.267
12		9.91	7900.80	3263.54	0.008	0.790
13		10.05	3398.40	2057.41	0.003	0.340
14		10.16	4418.22	2442.20	0.004	0.442
15		10.22	5150.26	2829.42	0.005	0.515
16		10.28	16748.80	6230.22	0.017	1.675
17		10.39	15065.11	6569.86	0.015	1.507
18		10.58	1996.80	1173.29	0.002	0.200
19		10.73	7062.40	2575.98	0.007	0.706

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		10.91	55139.20	31802.21	0.055	5.514
21		11.01	11520.00	3406.47	0.012	1.152
22		11.26	6704.00	2510.60	0.007	0.670
23		11.41	9542.27	4113.23	0.010	0.954
24		11.46	16620.63	7827.92	0.017	1.662
25		11.54	10126.70	5066.63	0.010	1.013
26		11.63	7366.40	2733.75	0.007	0.737
27		11.74	3305.60	1991.53	0.003	0.331
28		11.81	6398.34	3141.76	0.006	0.640
29		11.86	15414.46	4562.53	0.015	1.541
30		11.95	11059.20	5868.71	0.011	1.106
31		12.02	9926.40	6608.40	0.010	0.993
32		12.12	9068.80	5464.16	0.009	0.907
33		12.23	5184.00	2349.92	0.005	0.518
34		12.29	3107.20	2292.53	0.003	0.311
35		12.34	2712.00	1627.90	0.003	0.271
36		12.41	3814.40	2237.28	0.004	0.381
37		12.51	7552.91	2958.67	0.008	0.755
38	N-TETRADECANE	12.59	85778.29	47734.22	23.053	2305.329
39		12.65	2300.80	1734.18	0.002	0.230
40		12.79	2946.50	1808.16	0.003	0.295
41		12.84	20474.30	12236.85	0.020	2.047
42		12.97	10384.00	3292.33	0.010	1.038
43		13.07	7940.69	2402.83	0.008	0.794
44		13.16	10648.11	4664.40	0.011	1.065
45		13.21	4681.60	2912.93	0.005	0.468
46		13.34	18162.20	8893.90	0.018	1.816
47		13.42	19565.33	5477.33	0.020	1.957
48		13.52	15467.20	6543.63	0.015	1.547
49		13.59	22279.67	9236.72	0.022	2.228
50		13.69	11277.13	6129.04	0.011	1.128
51		13.73	53901.27	18781.09	0.054	5.390
52		13.83	4577.60	2697.08	0.005	0.458
53		13.96	27766.40	14450.21	0.028	2.777
54		14.13	92574.98	55699.89	0.093	9.257
55		14.18	12082.62	5361.72	0.012	1.208
56		14.31	7932.80	2189.80	0.008	0.793
57		14.41	8272.00	4185.95	0.008	0.827
58		14.50	9714.89	3158.06	0.010	0.971
59		14.54	9957.11	4136.09	0.010	0.996
60		14.66	4395.47	1583.24	0.004	0.440
61		14.72	7316.53	4783.39	0.007	0.732
62		14.87	14164.61	5842.36	0.014	1.416
63		14.91	15916.59	5736.97	0.016	1.592
64		14.98	12963.30	5851.30	0.013	1.296
65		15.05	18046.86	8687.39	0.018	1.805
66		15.15	13293.25	5882.34	0.013	1.329
67		15.20	18959.86	7358.84	0.019	1.896
68		15.26	30300.32	18126.19	0.030	3.030
69		15.35	30741.21	9172.44	0.031	3.074

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		15.43	4253.89	2237.74	0.004	0.425
71		15.49	3710.54	1955.36	0.004	0.371
72	N-DODECANE	15.55	124674.81	70052.33	34.301	3430.089
73		15.59	24876.80	10834.05	0.025	2.488
74		15.70	5147.55	2543.04	0.005	0.515
75		15.82	15212.80	4818.41	0.015	1.521
76		15.91	10243.20	5981.06	0.010	1.024
77		16.01	10467.20	5285.47	0.010	1.047
78		16.12	1478.40	1056.39	0.001	0.148
79		16.18	6457.60	3391.24	0.006	0.646
80		16.28	5498.55	2422.28	0.005	0.550
81		16.34	5373.81	3043.76	0.005	0.537
82		16.42	53452.13	25716.73	0.053	5.345
83		16.50	17678.71	7889.94	0.018	1.768
84		16.60	3180.31	1505.82	0.003	0.318
85		16.66	6267.66	2640.92	0.006	0.627
86		16.71	14908.06	6448.07	0.015	1.491
87		16.83	12027.60	3200.56	0.012	1.203
88		16.88	98968.34	52643.54	0.099	9.897
89		17.00	15221.66	6697.20	0.015	1.522
90		17.06	15592.77	8027.83	0.016	1.559
91		17.26	11212.80	6231.39	0.011	1.121
92		17.31	7280.00	4557.99	0.007	0.728
93		17.49	9404.80	3906.61	0.009	0.940
94		17.64	8601.60	3105.56	0.009	0.860
95		17.70	7331.20	4627.68	0.007	0.733
96		17.75	2566.40	1719.81	0.003	0.257
97		17.89	7612.80	2539.37	0.008	0.761
98		18.05	2352.00	1433.50	0.002	0.235
99	N-HEXADECANE	18.14	76185.60	44554.29	19.714	1971.414
##		18.56	2496.00	1033.52	0.002	0.250
##		18.70	3168.17	1909.03	0.003	0.317
##		18.76	21708.63	10292.46	0.022	2.171
##		18.91	4820.80	3150.86	0.005	0.482
##		19.00	7836.80	4143.50	0.008	0.784
##		19.15	5987.20	3313.11	0.006	0.599
##		19.25	6389.45	2203.19	0.006	0.639
##		19.33	65738.55	37613.15	0.066	6.574
##	PRISTINE	19.44	36552.00	19140.65	7.774	777.427
##		19.85	9982.40	2519.24	0.010	0.998
##		19.97	6009.60	2679.11	0.006	0.601
##		20.06	2323.20	1760.92	0.002	0.232
##		20.15	2876.80	1879.84	0.003	0.288
##	N-OCTADECANE	20.46	51091.20	27651.47	12.561	1256.081
##	PHYTANE	20.61	19984.00	9700.76	4.772	477.202
##		20.85	2868.80	1606.13	0.003	0.287
##		20.94	2704.00	955.33	0.003	0.270
##	O-TERPHENYL (SURROGATE	21.15	13203.20	7266.58	2.469	246.931
##		21.26	6503.63	2838.74	0.007	0.650
##		21.31	4523.57	2376.25	0.005	0.452

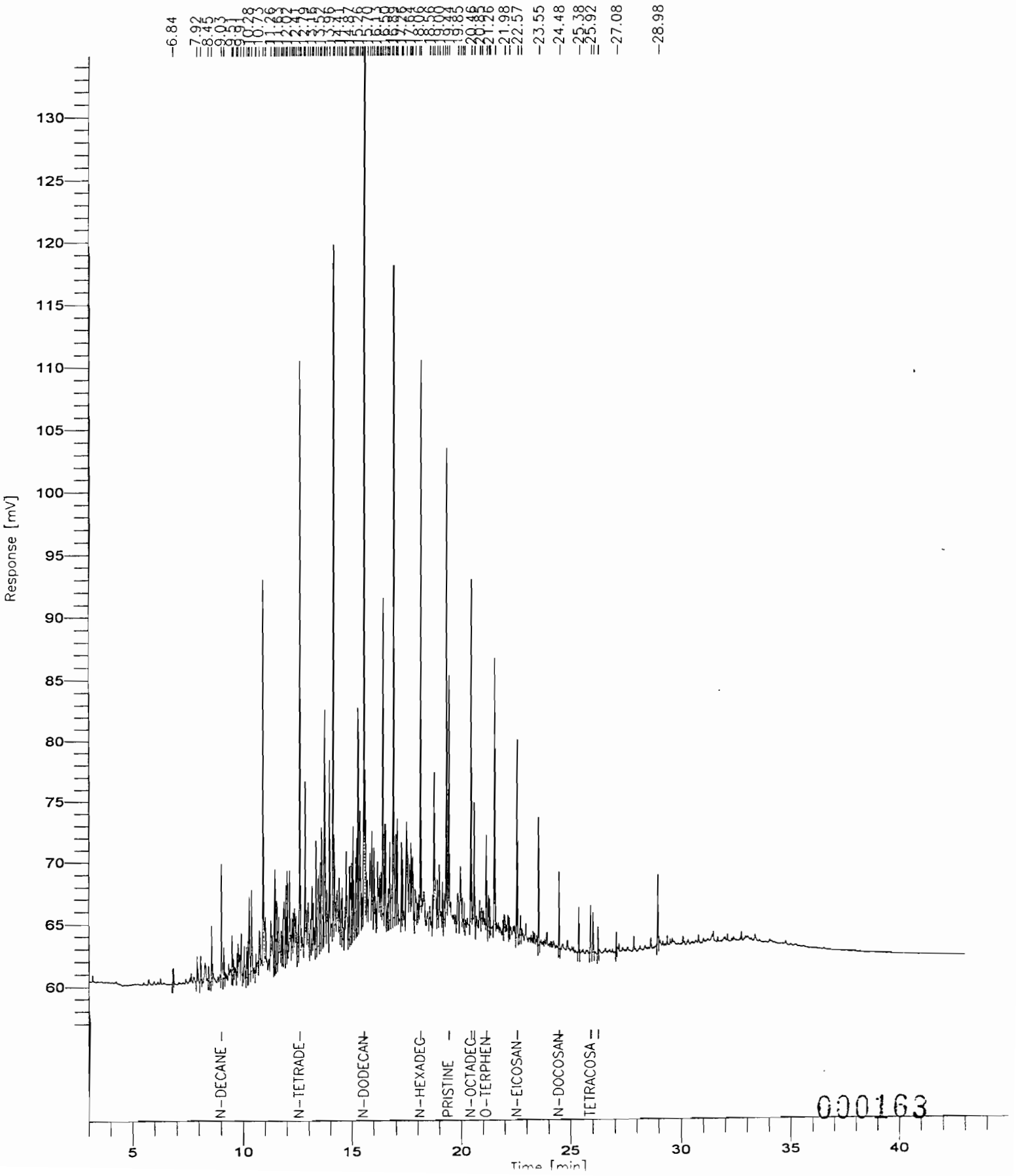
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		21.54	45732.80	22171.27	0.046	4.573
##		21.98	2720.00	1018.49	0.003	0.272
##		22.20	1660.80	1163.33	0.002	0.166
##	N-EICOSANE	22.56	30569.60	16136.62	6.897	689.733
##		22.72	3291.20	1594.33	0.003	0.329
##		23.55	17945.60	10433.54	0.018	1.795
##	N-DOCOSANE	24.48	11129.60	6244.05	2.630	262.960
##		25.38	6524.80	3666.54	0.007	0.652
##	TETRACOSANE-d50 (SURRO	25.92	8051.20	3876.25	1.938	193.847
##		26.03	5860.80	3196.76	0.006	0.586
##	N-TETRACOSANE	26.25	3558.40	2117.83	0.807	80.684
##		27.08	2419.20	1395.43	0.002	0.242
##		28.98	10124.80	5565.70	0.010	1.012
			1945491.20	973723.33	123.054	12305.402

Report stored in ASCII file: C:\TC4\DATA\D102145.TX0

Chromatogram

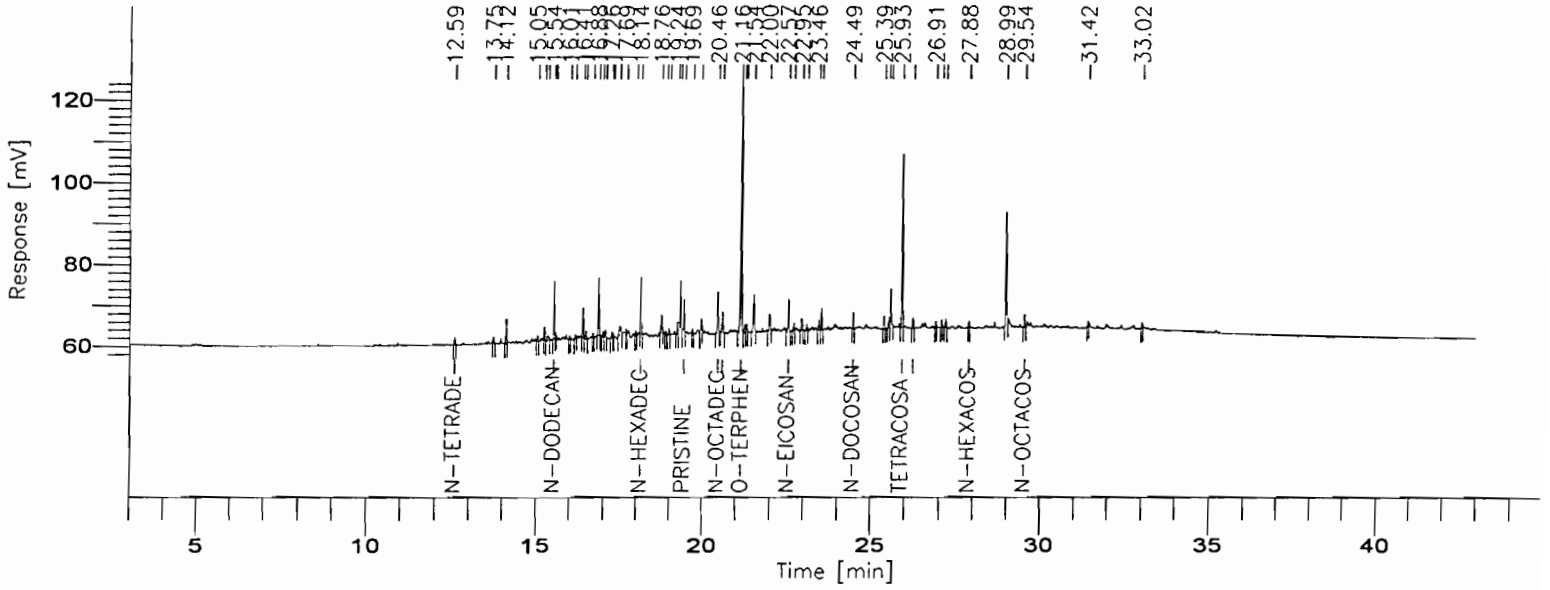
Sample Name : L5235-91393 1:10
FileName : C:\TC4\DATA\D102145.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 56 mV

Sample #:
Date : 10/26/99 12:20
Time of Injection: 10/23/99 06:15
Low Point : 56.35 mV High Point : 134.83 mV



000163

Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : L5235/91394
Data File : C:\TC4\DATA\D102148.RAW Date: 10/23/99 08:57
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 48 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-TETRADECANE	12.59	2864.00	1764.40	0.770	76.971
2		13.75	3811.20	1657.21	0.004	0.381
3		14.12	9897.60	6086.42	0.010	0.990
4		15.05	2348.80	1456.96	0.002	0.235
5		15.25	5392.00	3532.66	0.005	0.539
6		15.35	3963.20	1338.75	0.004	0.396
7	N-DODECANE	15.54	22960.46	14325.58	6.317	631.695
8		15.59	1533.94	1059.59	0.002	0.153
9		16.01	1843.20	994.73	0.002	0.184
10		16.17	2518.40	1005.34	0.003	0.252
11		16.41	13540.80	7356.54	0.014	1.354
12		16.50	4304.00	2061.88	0.004	0.430
13		16.71	2105.60	1187.69	0.002	0.211
14		16.88	23680.00	14429.70	0.024	2.368
15		17.00	3503.64	1601.62	0.004	0.350
16		17.06	3601.96	1964.71	0.004	0.360
17		17.26	2867.71	1608.72	0.003	0.287
18		17.31	1673.09	1131.72	0.002	0.167
19		17.49	8438.40	2232.73	0.008	0.844

030164

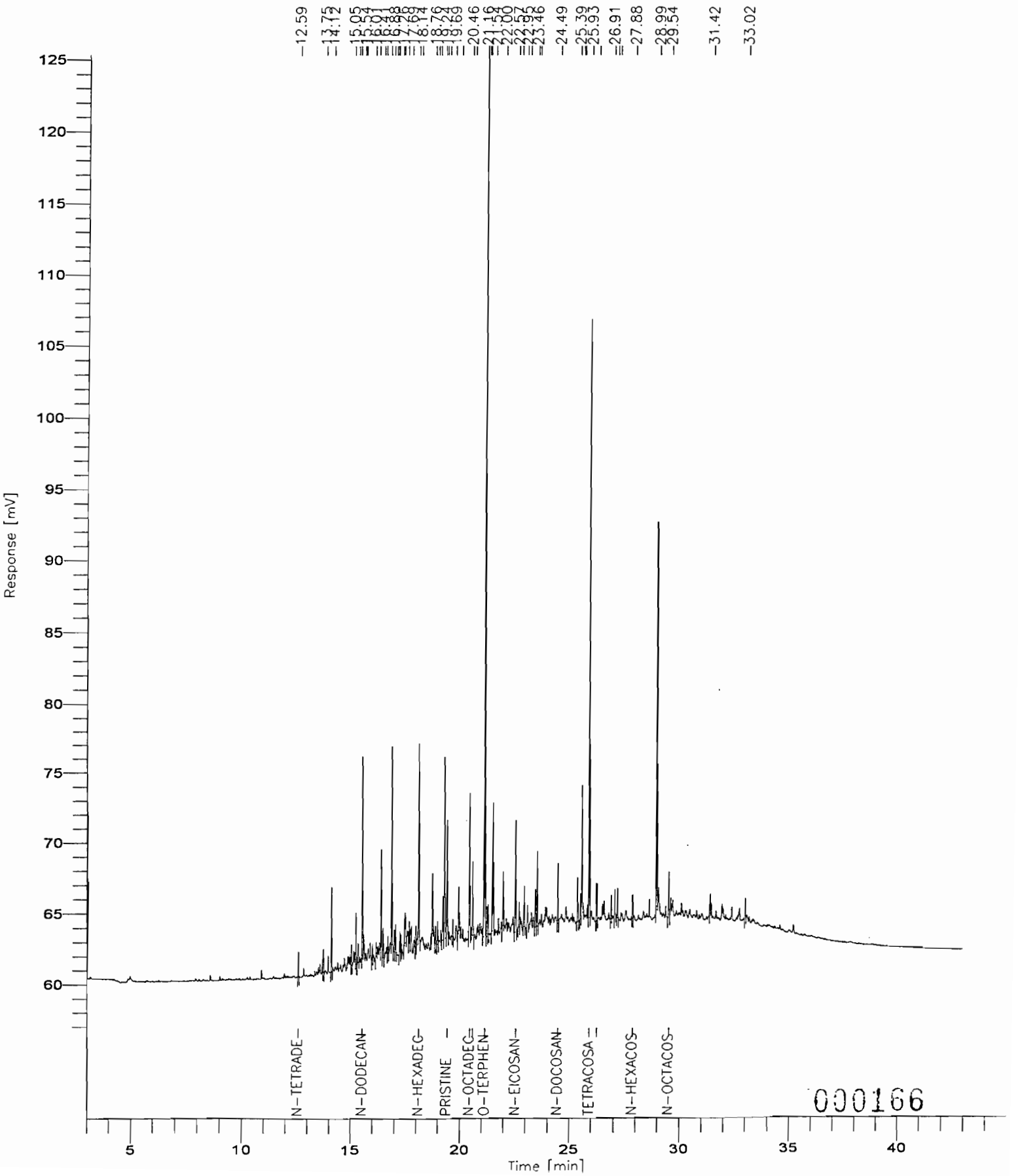
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		17.69	2420.80	1559.41	0.002	0.242
21		17.99	2672.00	1512.92	0.003	0.267
22	N-HEXADECANE	18.14	23003.20	14160.04	5.952	595.242
23		18.76	8393.60	4266.27	0.008	0.839
24		18.91	1972.80	1261.47	0.002	0.197
25		19.00	2948.80	1614.17	0.003	0.295
26		19.24	6503.47	3081.37	0.007	0.650
27		19.33	24110.93	12910.99	0.024	2.411
28	PRISTINE	19.44	17164.80	8230.58	3.651	365.079
29		19.69	1907.20	1254.55	0.002	0.191
30		19.96	6139.20	2984.76	0.006	0.614
31	N-OCTADECANE	20.46	18940.80	10132.96	4.657	465.661
32	PHYTANE	20.61	10928.00	5283.39	2.610	260.952
33	O-TERPHENYL (SURROGATE	21.16	120516.80	62511.03	22.539	2253.945
34		21.26	4832.26	2105.86	0.005	0.483
35		21.31	3814.14	2155.91	0.004	0.381
36		21.54	20464.00	8965.00	0.020	2.046
37		22.00	7833.60	3858.20	0.008	0.783
38	N-EICOSANE	22.56	15680.00	7838.87	3.538	353.783
39		22.72	3625.60	1711.17	0.004	0.363
40		22.95	6046.40	2844.91	0.006	0.605
41		23.11	2857.60	1492.14	0.003	0.286
42		23.46	5718.40	2675.39	0.006	0.572
43		23.55	9260.80	5267.67	0.009	0.926
44	N-DOCOSANE	24.49	7212.80	4212.48	1.704	170.418
45		25.39	6150.40	3072.22	0.006	0.615
46		25.53	3020.95	1728.19	0.003	0.302
47		25.60	17217.45	9130.19	0.017	1.722
48	TETRACOSANE-d50 (SURRO	25.93	86091.20	42318.79	20.728	2072.801
49	N-TETRACOSANE	26.25	4345.60	2592.53	0.985	98.533
50		26.91	2985.60	1506.87	0.003	0.299
51		27.08	3132.80	1821.81	0.003	0.313
52		27.20	3548.80	2068.53	0.004	0.355
53	N-HEXACOSANE	27.88	2782.40	1613.74	0.609	60.896
54		28.99	52806.40	27757.30	0.053	5.281
55	N-OCTACOSANE	29.54	5892.80	3156.61	1.277	127.710
56		31.42	2073.60	1166.85	0.002	0.207
57		33.02	2780.80	1309.06	0.003	0.278
			648644.80	339931.16	75.647	7564.712

Report stored in ASCII file: C:\TC4\DATA\D102148.TXO

Chromatogram

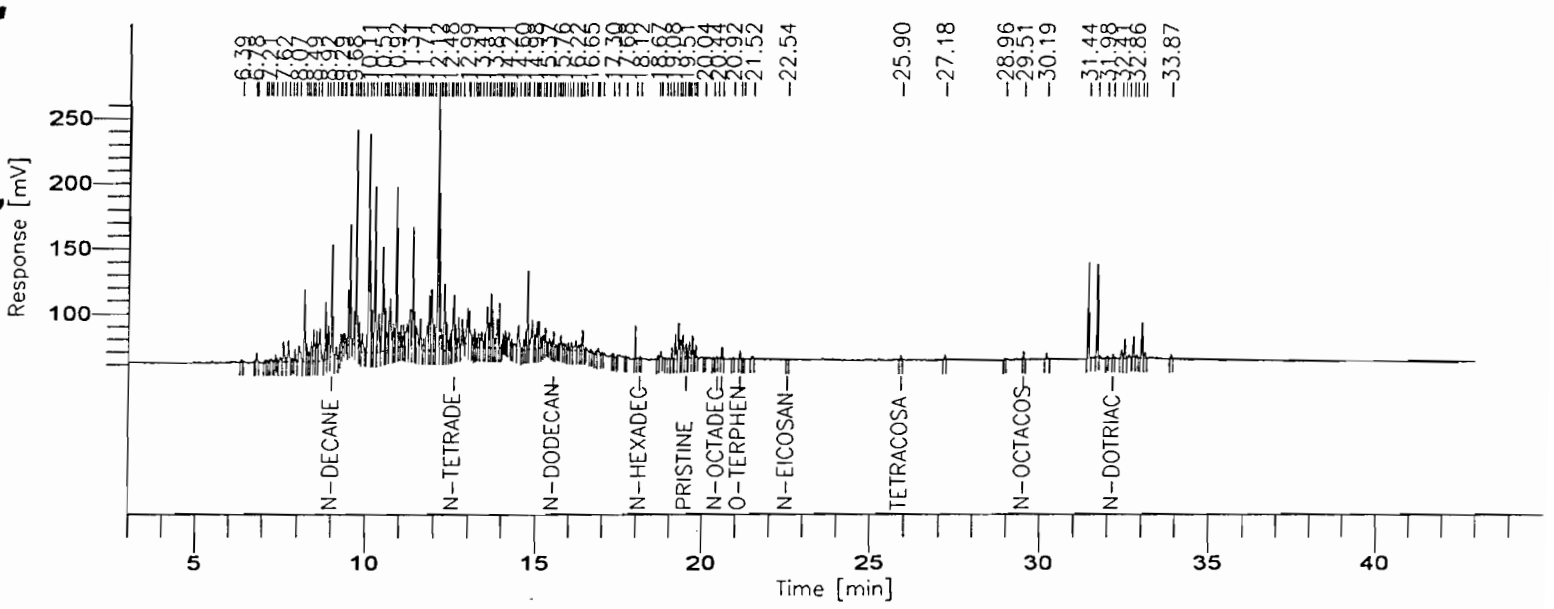
Sample Name : L5235/91394
FileName : C:\TC4\DATA\D102148.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 57 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:21
Time of Injection: 10/23/99 08:57
Low Point : 56.89 mV High Point : 125.33 mV
Plot Scale: 68.4 mV



000166

Software Version: 4.1<1L22>
Date: 10/28/99 17:12
Sample Name : 91395 1:20 SK 11/02/99
Data File : C:\TC4\DATA\D102724.RAW Date: 10/28/99 12:04
Sequence File: C:\TC4\DATA\DB102799.SEQ Cycle: 24 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		6.39	3958.40	1827.52	0.004	0.396
2		6.78	2737.15	1467.20	0.003	0.274
3		6.83	16222.85	7015.90	0.016	1.622
4		7.07	4456.70	1969.55	0.004	0.446
5		7.13	3794.50	1791.69	0.004	0.379
6		7.21	4773.84	2336.07	0.005	0.477
7		7.26	4720.56	2253.03	0.005	0.472
8		7.39	7686.40	4337.78	0.008	0.769
9		7.53	12243.38	3628.37	0.012	1.224
10		7.62	42897.42	15773.47	0.043	4.290
11		7.77	44665.60	16255.08	0.045	4.467
12		7.87	3140.80	1560.90	0.003	0.314
13		7.94	18164.80	9309.89	0.018	1.816
14		8.07	47657.60	12778.02	0.048	4.766
15		8.23	131957.85	56566.39	0.132	13.196
16		8.29	32497.31	14119.99	0.032	3.250
17		8.36	23445.83	7650.78	0.023	2.345
18		8.42	37945.60	15767.59	0.038	3.795
19		8.49	62698.99	24861.06	0.063	6.270

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		8.58	60037.33	23683.00	0.060	6.004
21		8.67	103522.68	25894.82	0.104	10.352
22		8.84	98427.64	45250.09	0.098	9.843
23		8.92	65885.96	26001.93	0.066	6.589
24	N-DECANE	9.02	179888.00	85807.05	49.891	4989.106
25		9.15	21678.40	9444.02	0.022	2.168
26		9.25	11067.44	6186.43	0.011	1.107
27		9.29	36658.32	13781.15	0.037	3.666
28		9.35	17645.68	10169.57	0.018	1.765
29		9.40	11082.96	6993.93	0.011	1.108
30		9.50	77284.43	43499.39	0.077	7.728
31		9.56	177323.57	92308.60	0.177	17.732
32		9.68	54912.75	26711.76	0.055	5.491
33		9.75	352617.87	168790.64	0.353	35.262
34		9.80	25728.00	15781.50	0.026	2.573
35		9.83	46739.78	22632.68	0.047	4.674
36		9.92	40880.76	15207.66	0.041	4.088
37		10.00	4817.27	3086.19	0.005	0.482
38		10.11	483013.41	168392.50	0.483	48.301
39		10.20	69326.44	33877.68	0.069	6.933
40		10.30	292102.92	129426.47	0.292	29.210
41		10.40	92923.56	30678.48	0.093	9.292
42		10.51	248916.10	80716.23	0.249	24.892
43		10.57	65827.79	33240.03	0.066	6.583
44		10.63	40644.00	14792.78	0.041	4.064
45		10.73	152129.20	39863.33	0.152	15.213
46		10.82	45014.80	19794.77	0.045	4.501
47		10.92	251622.35	124029.07	0.252	25.162
48		10.98	26461.40	12545.46	0.026	2.646
49		11.04	31020.80	17595.27	0.031	3.102
50		11.12	34724.00	17596.08	0.035	3.472
51		11.15	20547.20	12200.39	0.021	2.055
52		11.22	72242.40	18906.53	0.072	7.224
53		11.31	97200.80	30739.36	0.097	9.720
54		11.39	202688.00	95975.85	0.203	20.269
55		11.44	53138.40	28964.69	0.053	5.314
56		11.48	30256.00	18534.57	0.030	3.026
57		11.51	44739.20	16232.15	0.045	4.474
58		11.61	52233.60	24449.86	0.052	5.223
59		11.71	22930.04	9354.62	0.023	2.293
60		11.81	62531.35	19754.03	0.063	6.253
61		11.88	104519.56	43117.03	0.105	10.452
62		11.93	144160.58	47144.51	0.144	14.416
63		12.01	48847.85	20608.70	0.049	4.885
64		12.12	469199.42	198591.29	0.469	46.920
65		12.17	237458.33	121988.21	0.237	23.746
66		12.21	32588.80	15482.80	0.033	3.259
67		12.26	22712.58	12174.57	0.023	2.271
68		12.32	131684.22	51927.06	0.132	13.168
69		12.38	52552.87	21971.49	0.053	5.255

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		12.48	26291.87	13135.09	0.026	2.629
71		12.52	36135.52	15829.49	0.036	3.614
72	N-TETRADECANE	12.59	107526.88	41958.78	28.898	2889.832
73		12.65	30175.33	18585.09	0.030	3.018
74		12.73	47385.60	24519.85	0.047	4.739
75		12.83	28182.40	14437.14	0.028	2.818
76		12.99	79425.60	28061.12	0.079	7.943
77		13.04	62890.94	26823.15	0.063	6.289
78		13.13	20027.46	10573.85	0.020	2.003
79		13.20	29176.93	15546.98	0.029	2.918
80		13.25	10637.47	8315.18	0.011	1.064
81		13.32	36026.44	11145.48	0.036	3.603
82		13.41	44706.36	12717.42	0.045	4.471
83		13.51	22183.15	11000.94	0.022	2.218
84		13.58	91759.25	32271.18	0.092	9.176
85		13.62	37979.15	19787.86	0.038	3.798
86		13.68	90911.78	42370.14	0.091	9.091
87		13.73	72509.82	30161.59	0.073	7.251
88		13.81	20714.53	8099.36	0.021	2.071
89		13.88	57688.00	23258.05	0.058	5.769
90		13.95	57707.12	35094.88	0.058	5.771
91		14.04	13004.80	7761.55	0.013	1.300
92		14.11	12720.80	8956.44	0.013	1.272
93		14.16	7832.80	4757.00	0.008	0.783
94		14.21	19379.20	9841.29	0.019	1.938
95		14.25	3174.40	3229.79	0.003	0.317
96		14.30	11599.64	6196.13	0.012	1.160
97		14.37	15815.41	3634.71	0.016	1.582
98		14.51	69316.15	19451.90	0.069	6.932
99		14.60	3342.40	2156.02	0.003	0.334
##		14.65	15085.26	8475.26	0.015	1.509
##		14.71	27504.95	14343.92	0.028	2.750
##		14.77	111128.82	61602.94	0.111	11.113
##		14.90	79080.92	23180.95	0.079	7.908
##		14.98	23505.52	11563.21	0.024	2.351
##		15.05	57488.89	21051.69	0.057	5.749
##		15.11	55327.24	21288.36	0.055	5.533
##		15.19	15271.54	9135.08	0.015	1.527
##		15.25	21241.60	8136.29	0.021	2.124
##		15.30	19896.46	12554.83	0.020	1.990
##		15.36	1532.80	1671.18	0.002	0.153
##		15.41	6321.60	3469.96	0.006	0.632
##		15.49	7985.85	4767.24	0.008	0.799
##	N-DODECANE	15.54	23583.75	12829.45	6.488	648.843
##		15.61	4089.60	2444.83	0.004	0.409
##		15.68	3610.62	2635.12	0.004	0.361
##		15.72	4285.31	2885.03	0.004	0.429
##		15.76	19983.33	10083.11	0.020	1.998
##		15.83	13887.14	4570.07	0.014	1.389
##		15.89	9017.60	4648.63	0.009	0.902

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		15.97	15944.00	6308.78	0.016	1.594
##		16.07	19313.87	7306.76	0.019	1.931
##		16.21	30787.43	7692.76	0.031	3.079
##		16.29	13227.73	4677.06	0.013	1.323
##		16.34	12867.98	5371.82	0.013	1.287
##		16.40	33639.79	15599.46	0.034	3.364
##		16.49	3140.80	1986.30	0.003	0.314
##		16.65	5830.40	2711.70	0.006	0.583
##		16.81	8672.00	2905.83	0.009	0.867
##		16.87	15913.60	5123.71	0.016	1.591
##		17.00	4697.60	1583.81	0.005	0.470
##		17.30	4299.20	2348.40	0.004	0.430
##		17.43	2331.20	1584.00	0.002	0.233
##		17.68	2726.40	1796.45	0.003	0.273
##		17.98	43137.60	26250.20	0.043	4.314
##	N-HEXADECANE	18.12	2944.00	1953.33	0.762	76.180
##		18.67	8267.51	3385.02	0.008	0.827
##		18.75	9666.89	5017.10	0.010	0.967
##		18.89	2064.47	1377.88	0.002	0.206
##		18.98	3305.13	1773.82	0.003	0.331
##		19.08	15609.60	9042.06	0.016	1.561
##		19.19	41073.68	19484.82	0.041	4.107
##		19.28	60297.84	28377.76	0.060	6.030
##		19.35	45268.88	14883.00	0.045	4.527
##		19.41	41430.00	18630.75	0.041	4.143
##	PRISTINE	19.51	22874.72	11925.68	4.865	486.524
##		19.55	8671.17	5580.44	0.009	0.867
##		19.61	31420.41	12890.21	0.031	3.142
##		19.71	34817.99	17457.19	0.035	3.482
##		19.77	9504.20	5493.83	0.010	0.950
##		19.81	19695.52	9954.43	0.020	1.970
##		20.04	2448.00	1319.89	0.002	0.245
##		20.32	1742.40	981.86	0.002	0.174
##	N-OCTADECANE	20.44	3305.60	1814.95	0.813	81.268
##	PHYTANE	20.59	18019.20	8845.52	4.303	430.284
##		20.92	1932.80	961.02	0.002	0.193
##	O-TERPHENYL (SURROGATE	21.13	11712.00	6367.32	2.190	219.042
##		21.23	2291.20	1210.97	0.002	0.229
##		21.52	7145.60	1939.05	0.007	0.715
##	N-EICOSANE	22.54	2713.60	1504.94	0.612	61.226
##	TETRACOSANE-d50 (SURRO	25.90	6739.20	3442.68	1.623	162.258
##		27.18	7812.80	4093.63	0.008	0.781
##		28.96	2294.40	1280.24	0.002	0.229
##	N-OCTACOSANE	29.51	11497.60	6344.27	2.492	249.179
##		30.19	10459.20	5226.01	0.010	1.046
##		31.44	180441.60	74704.12	0.180	18.044
##		31.69	167528.00	72921.07	0.168	16.753
##		31.98	3043.20	1632.50	0.003	0.304
##	N-DOTRIACONTANE	32.16	6340.80	2830.19	-0.081	-8.076
##		32.40	20679.81	6614.08	0.021	2.068

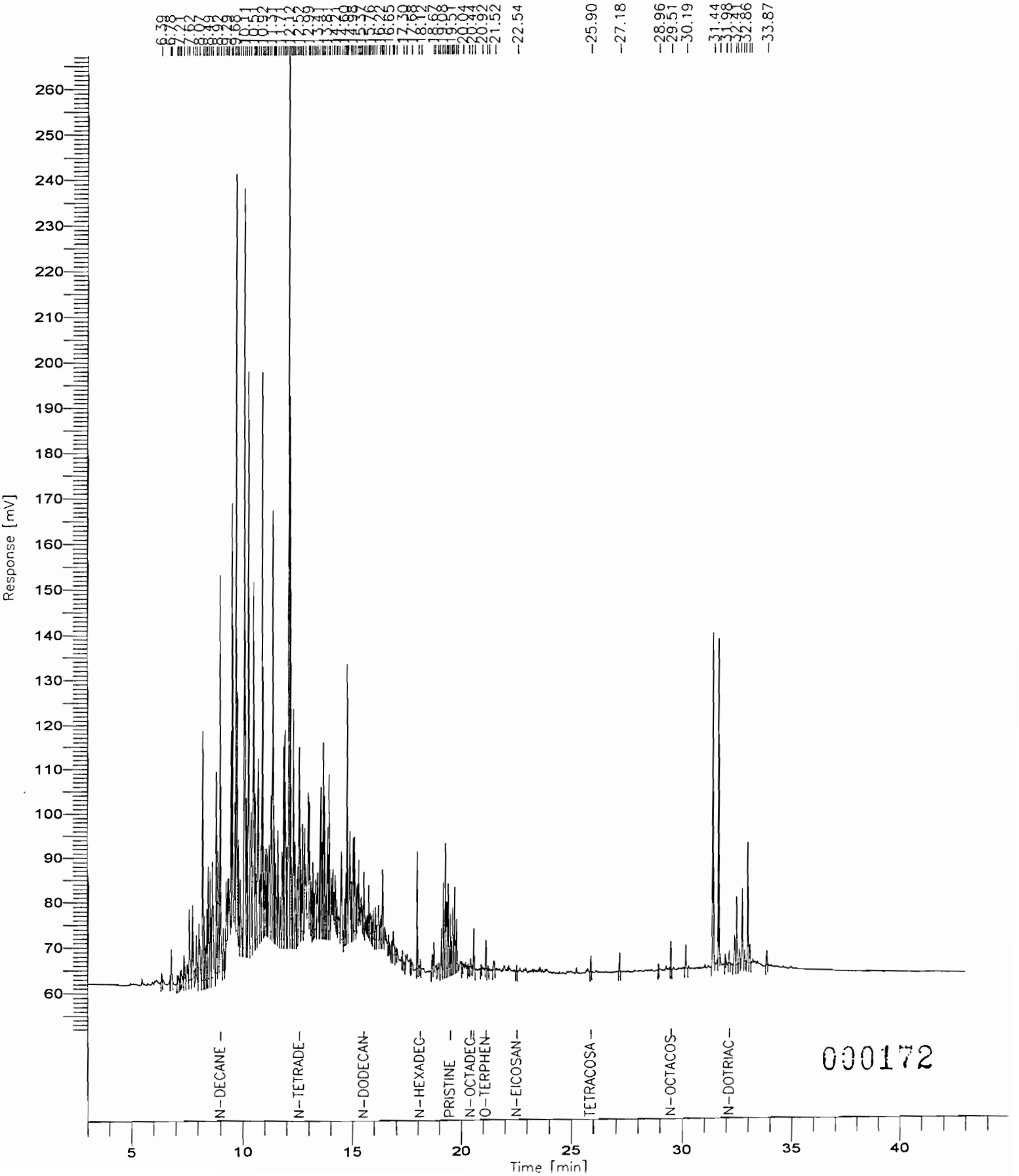
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
##		32.51	32500.99	15278.04	0.033	3.250
##		32.63	8024.00	3064.12	0.008	0.802
##		32.76	33163.20	15979.92	0.033	3.316
##		32.86	5076.80	2527.26	0.005	0.508
##		33.01	63499.00	26845.98	0.063	6.350
##		33.11	12757.00	4191.34	0.013	1.276
##		33.87	7097.60	3046.06	0.007	0.710
			8517585.60	3.66e+06	110.977	11097.710

Report stored in ASCII file: C:\TC4\DATA\D102724.TX0

Chromatogram

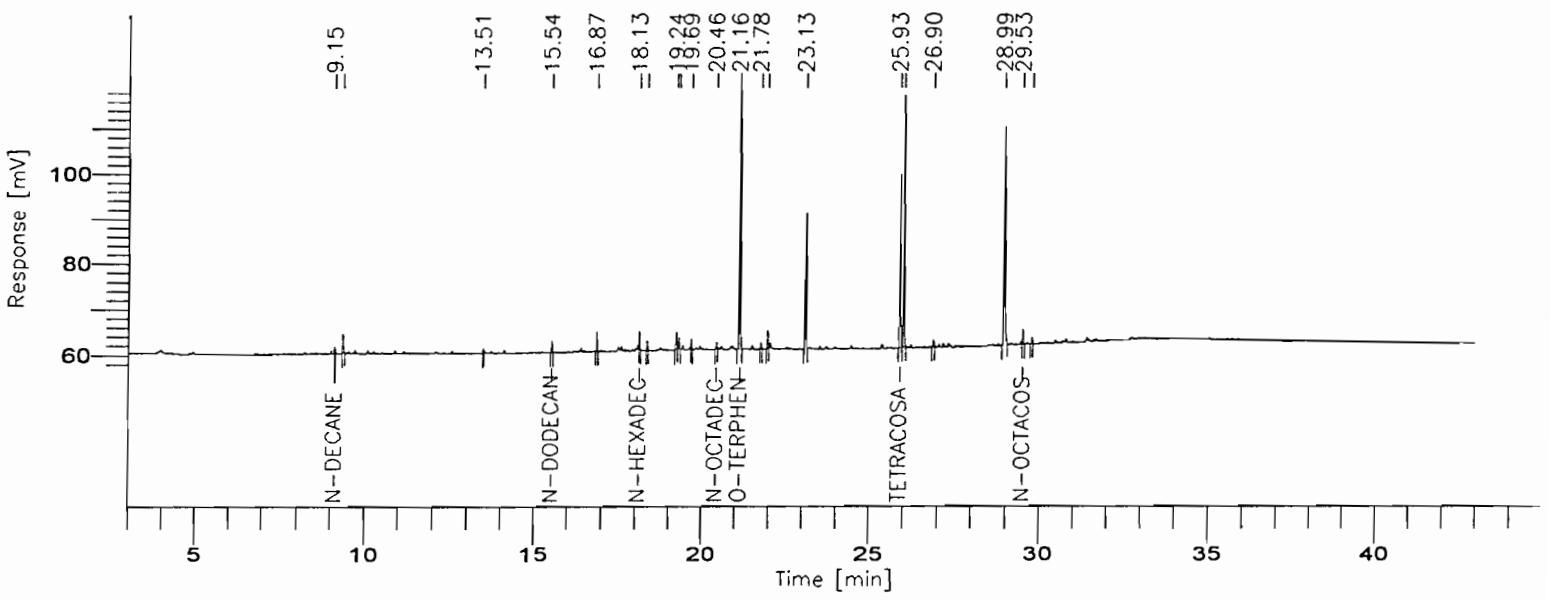
Sample Name : 91395 1:20 cc 11/02/99
FileName : C:\TC4\DATA\D102724.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 51 mV

Sample #: Page 1 of 1
Date : 10/28/99 17:12
Time of Injection: 10/28/99 12:04
Low Point : 51.42 mV High Point : 267.33 mV
Plot Scale: 215.9 mV



000172

Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : L5235/91396
Data File : C:\TC4\DATA\D102150.RAW Date: 10/23/99 10:44
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 50 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000173

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	N-DECANE	9.15	2163.20	1376.29	0.600	59.995
2		9.38	6972.80	4094.72	0.007	0.697
3		13.50	1416.00	975.09	0.001	0.142
4	N-DODECANE	15.54	4032.00	2497.99	1.109	110.930
5		16.87	6966.40	4227.00	0.007	0.697
6	N-HEXADECANE	18.13	6009.60	4002.86	1.555	155.507
7		18.36	3478.40	2094.99	0.003	0.348
8		19.24	7195.20	3609.36	0.007	0.720
9		19.32	3865.60	2443.01	0.004	0.387
10		19.69	3587.20	2214.17	0.004	0.359
11	N-OCTADECANE	20.46	2233.60	1300.75	0.549	54.913
12	O-TERPHENYL (SURROGATE	21.16	107848.00	58629.08	20.170	2017.009
13		21.78	2588.80	1401.12	0.003	0.259
14		21.99	6441.60	3702.90	0.006	0.644
15		23.13	59443.20	29818.89	0.059	5.944
16	TETRACOSANE-d50 (SURRO	25.93	81888.00	39103.24	19.716	1971.601
17		26.05	104016.00	56617.68	0.104	10.402
18		26.90	3040.00	1580.38	0.003	0.304
19		28.99	103804.80	48432.81	0.104	10.380

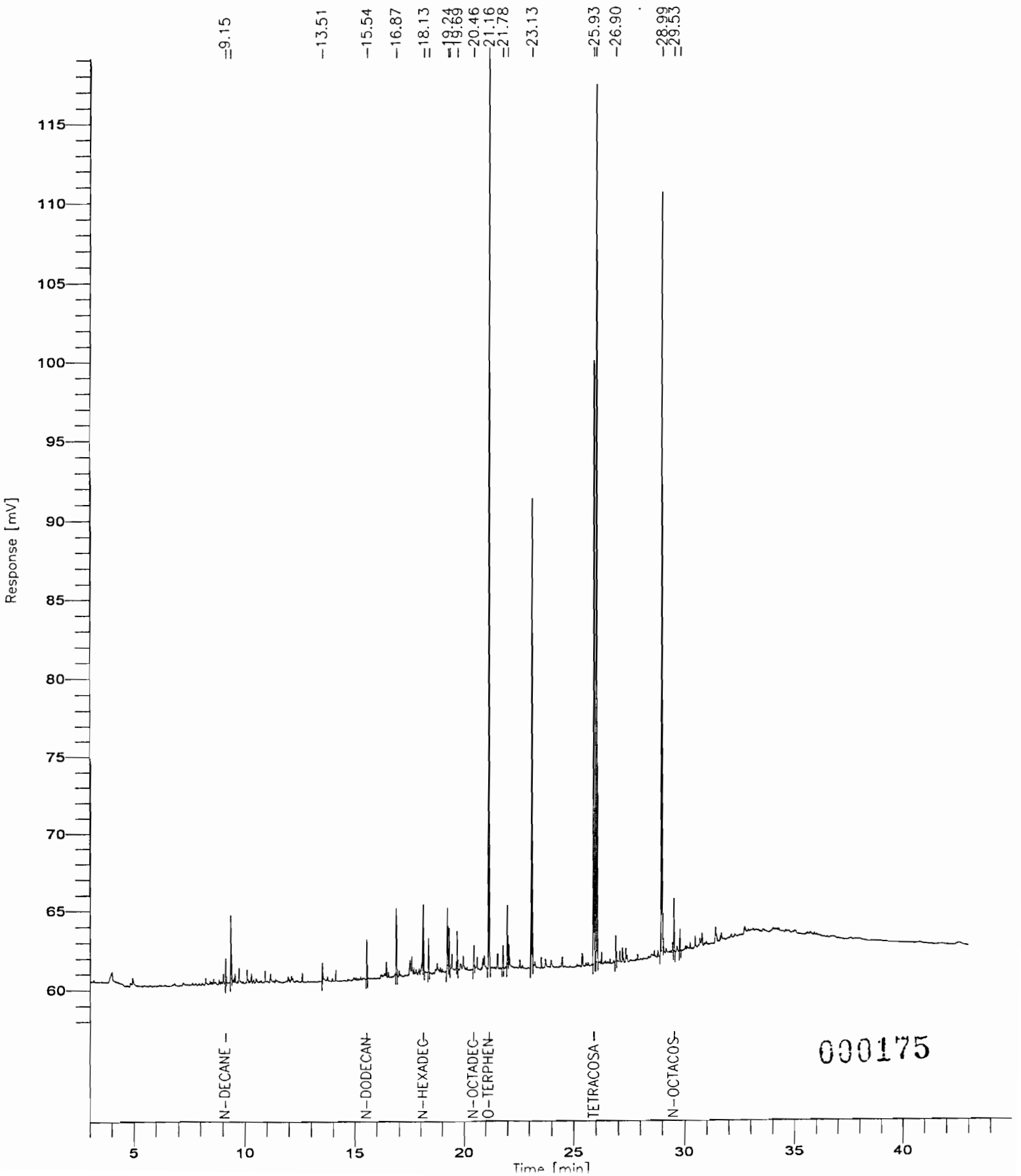
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20	N-OCTACOSANE	29.53	6038.40	3329.14	1.309	130.866
21		29.80	2364.80	1329.81	0.002	0.236
			525393.60	272781.26	45.323	4532.339

Report stored in ASCII file: C:\TC4\DATA\D102150.TX0

Chromatogram

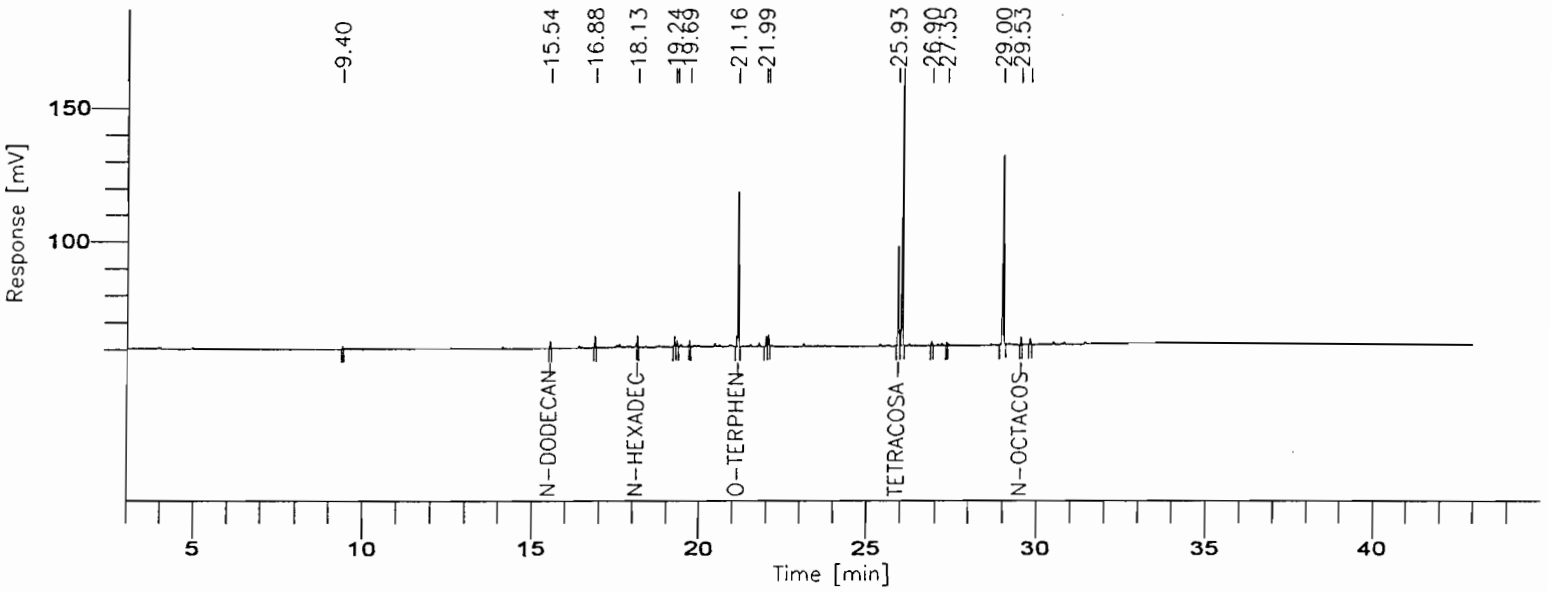
Sample Name : L5235/91396
FileName : C:\TC4\DATA\D102150.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 57 mV

Sample #:
Date : 10/26/99 12:21
Time of Injection: 10/23/99 10:44
Low Point : 57.28 mV High Point : 119.11 mV
Plot Scale: 61.8 mV



000175

Software Version: 4.1<1L22>
Date: 10/26/99 12:20
Sample Name : L5235-91397
Data File : C:\TC4\DATA\D102144.RAW Date: 10/23/99 05:21
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 44 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000176

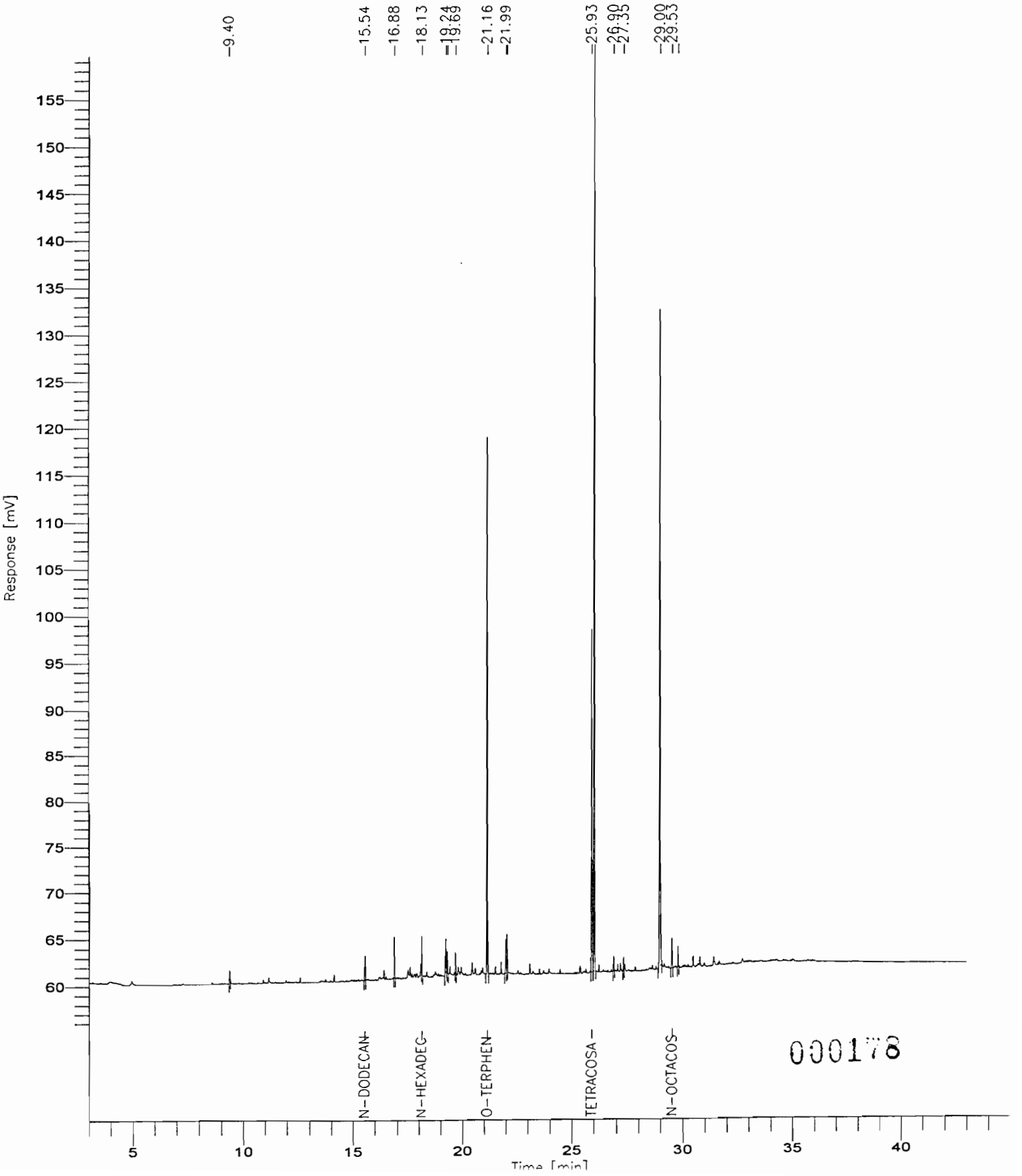
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		9.40	1812.80	1185.00	0.002	0.181
2	N-DODECANE	15.54	4222.40	2584.36	1.162	116.168
3		16.87	7107.20	4350.06	0.007	0.711
4	N-HEXADECANE	18.13	5974.40	3919.11	1.546	154.596
5		19.24	6638.40	3494.73	0.007	0.664
6		19.32	3468.80	2260.03	0.003	0.347
7		19.69	3465.60	2121.49	0.003	0.347
8	O-TERPHENYL (SURROGATE	21.15	107816.00	58907.64	20.164	2016.410
9		21.99	6579.68	3628.85	0.007	0.658
10		22.06	7209.12	3996.69	0.007	0.721
11	TETRACOSANE-d50 (SURRO	25.93	79945.60	37237.47	19.248	1924.834
12		26.06	194411.20	98936.86	0.194	19.441
13		26.90	2649.60	1430.06	0.003	0.265
14		27.35	2248.00	1343.75	0.002	0.225
15		29.00	166264.00	70600.07	0.166	16.626
16	N-OCTACOSANE	29.53	5665.60	3122.26	1.228	122.786
17		29.80	3817.60	2137.45	0.004	0.382
			609296.00	301255.88	43.754	4375.362

Report stored in ASCII file: C:\TC4\DATA\D102144.TX0

Chromatogram

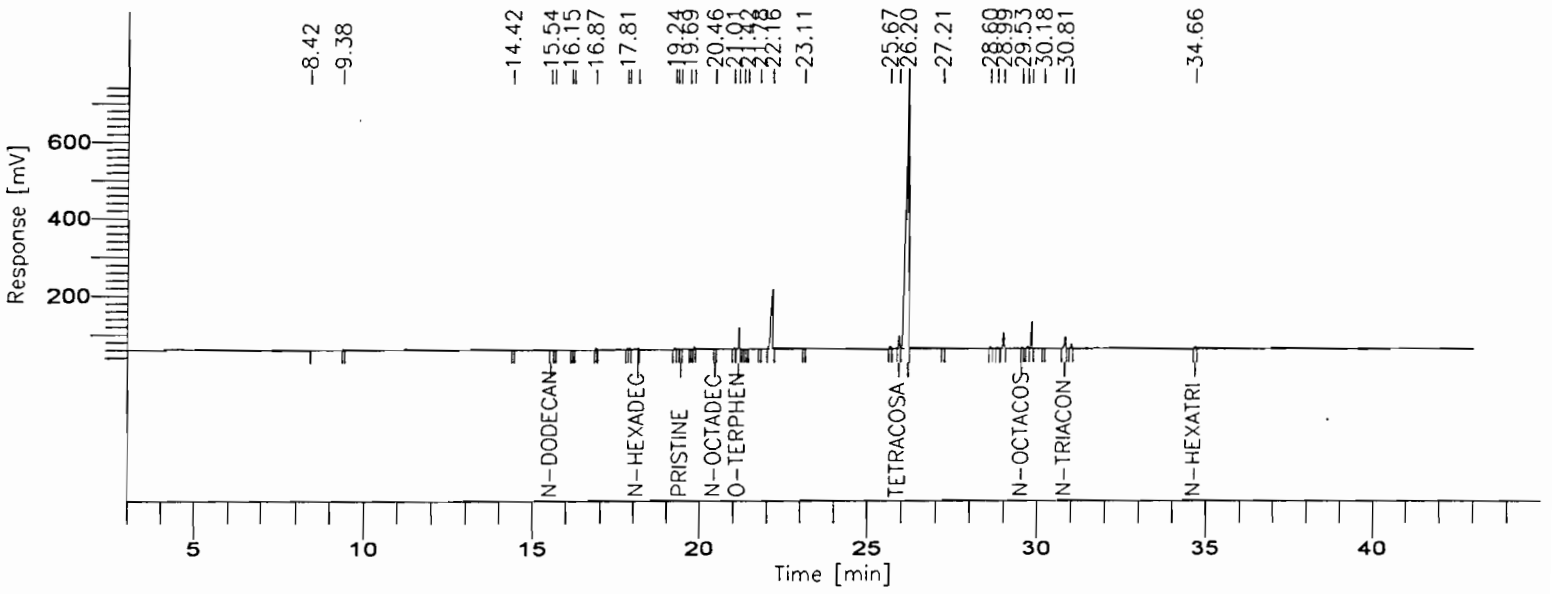
Sample Name : L5235-91397
FileName : C:\TC4\DATA\D102144.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 55 mV

Sample #:
Date : 10/26/99 12:20
Time of Injection: 10/23/99 05:21
Low Point : 55.17 mV High Point : 159.60 mV
Plot Scale: 104.4 mV



000178

Software Version: 4.1<1L22>
Date: 11/2/99 08:14
Sample Name : L5235/91398
Data File : C:\TC4\DATA\D102151.RAW Date: 10/23/99 11:38
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 51 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000179

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		8.42	1881.60	1339.43	0.002	0.188
2		9.38	6665.60	4052.35	0.007	0.667
3		14.42	3384.00	2094.57	0.003	0.338
4	N-DODECANE	15.54	4569.60	2770.45	1.257	125.720
5		15.66	3209.60	1879.00	0.003	0.321
6		16.15	2714.80	1370.00	0.003	0.271
7		16.22	2914.00	1763.11	0.003	0.291
8		16.87	7382.40	4524.18	0.007	0.738
9		17.81	8052.80	4416.18	0.008	0.805
10		17.88	7486.40	4563.57	0.007	0.749
11	N-HEXADECANE	18.13	6153.60	3946.26	1.592	159.233
12		19.24	8035.20	3593.06	0.008	0.804
13		19.32	4545.60	2841.20	0.005	0.455
14	PRISTINE	19.43	2483.20	1194.84	0.528	52.815
15		19.69	3376.00	2040.83	0.003	0.338
16		19.82	12806.40	7093.80	0.013	1.281
17	N-OCTADECANE	20.46	2240.00	1321.07	0.551	55.071
18		21.01	6579.20	2664.86	0.007	0.658
19	O-TERPHENYL (SURROGATE	21.16	104308.80	56304.44	19.508	1950.817

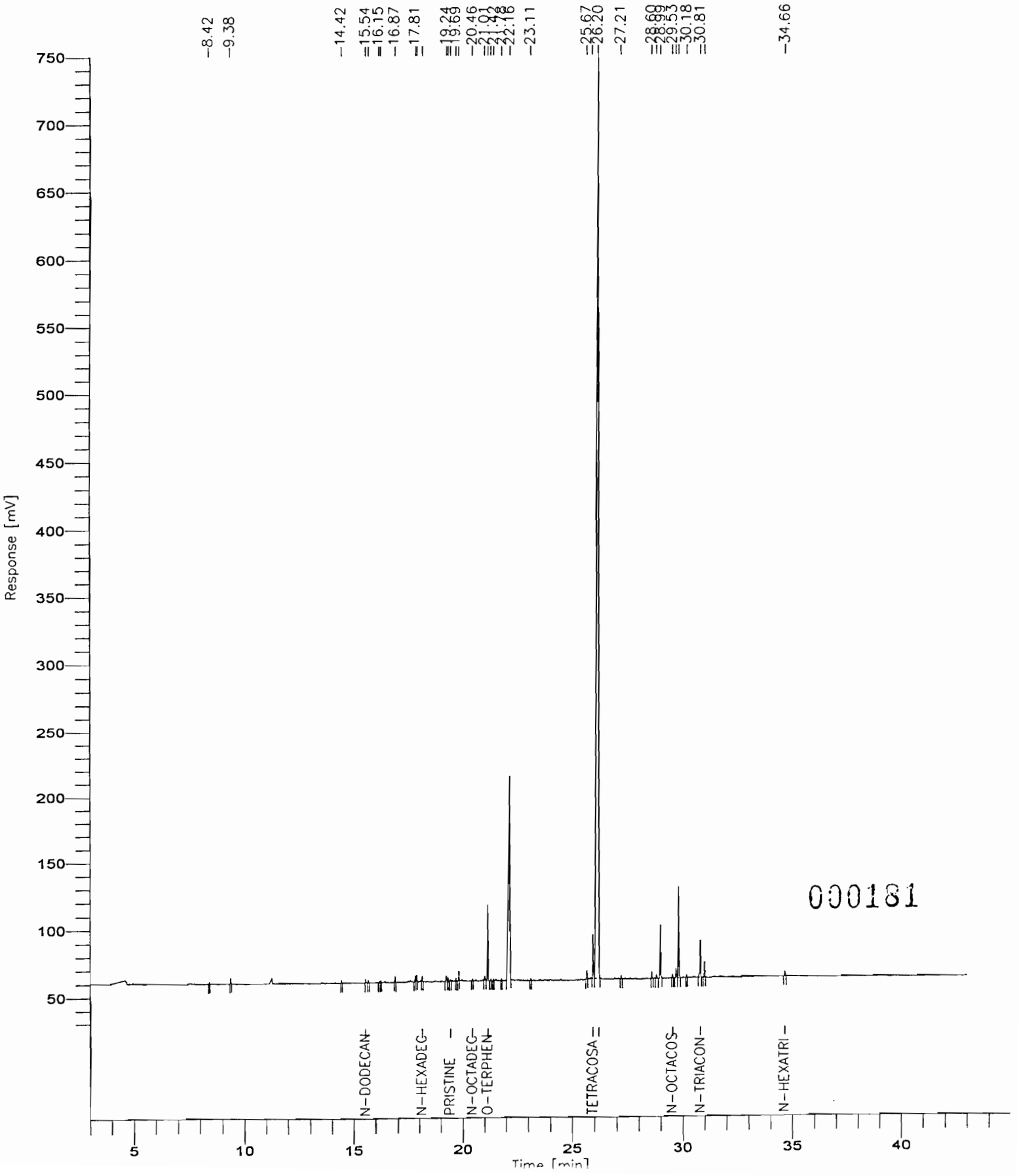
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		21.30	2155.20	1255.79	0.002	0.216
21		21.42	1883.20	1127.46	0.002	0.188
22		21.78	2614.40	1473.03	0.003	0.261
23		22.16	634918.40	153405.72	0.635	63.492
24		23.11	2502.40	1450.56	0.003	0.250
25		25.66	13915.20	6726.13	0.014	1.392
26	TETRACOSANE-d50 (SURRO	25.93	77228.61	32378.45	18.594	1859.418
27	N-TETRACOSANE	26.20	3813340.99	696320.88	864.649	86464.853
28		27.21	4377.60	2457.57	0.004	0.438
29		28.60	9491.20	5236.06	0.009	0.949
30		28.81	5945.60	3002.85	0.006	0.595
31		28.99	83153.60	39456.77	0.083	8.315
32	N-OCTACOSANE	29.53	5273.60	2978.88	1.143	114.291
33		29.70	16319.09	7177.34	0.016	1.632
34		29.82	145860.11	67644.05	0.146	14.586
35		30.18	3430.40	1902.86	0.003	0.343
36	N-TRIACONTANE	30.81	65184.00	27519.64	14.152	1415.166
37		31.00	22326.40	11872.73	0.022	2.233
38	N-HEXATRIACONTANE	34.66	8374.40	3601.58	1.811	181.078
			5117083.20	1.18e+06	924.813	92481.255

Report stored in ASCII file: C:\TC4\DATA\D102151.TX0

Chromatogram

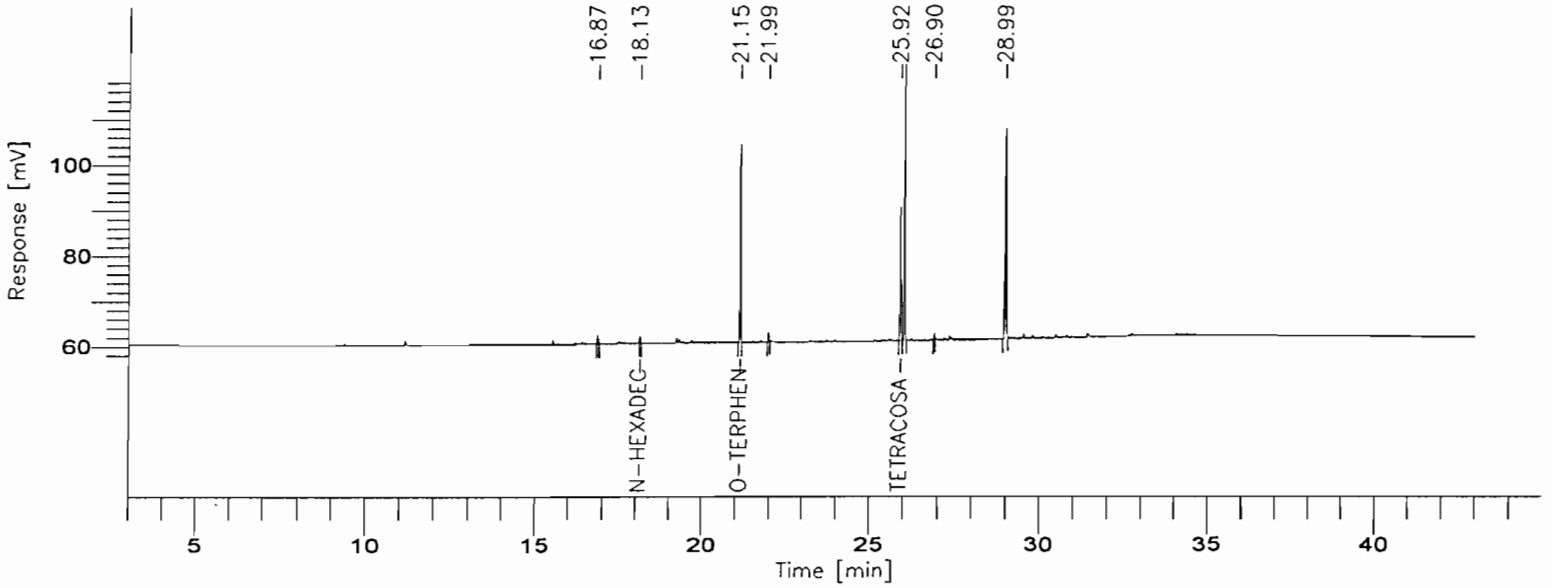
Sample Name : L5235/91398
FileName : C:\TC4\DATA\D102151.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 26 mV

Sample #:
Date : 11/2/99 08:14
Time of Injection: 10/23/99 11:38
Low Point : 25.77 mV High Point : 750.19 mV
Plot Scale: 724.4 mV



000181

Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : L5235/91399
Data File : C:\TC4\DATA\D102152.RAW Date: 10/23/99 12:32
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 52 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

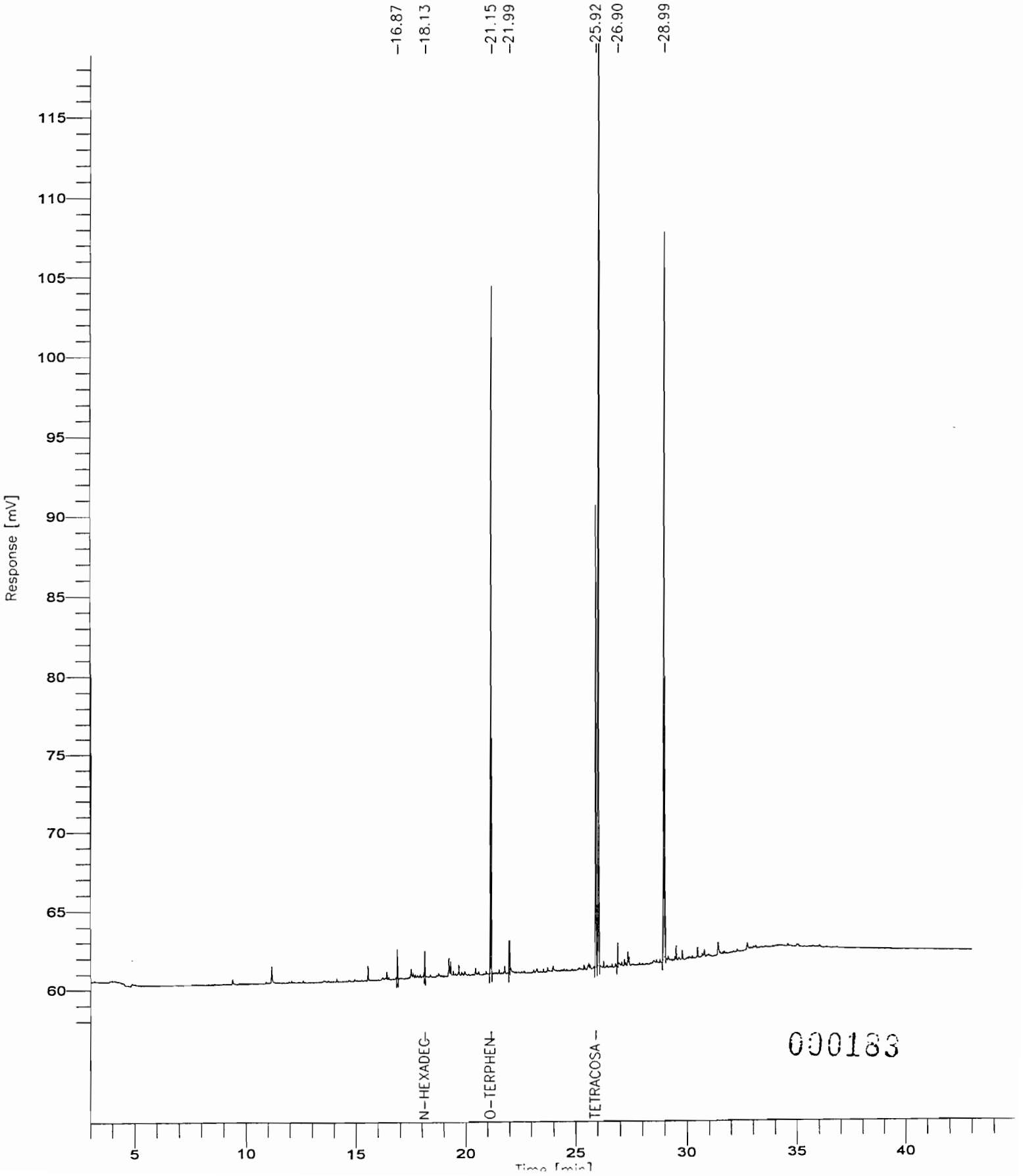
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		16.87	2998.40	1830.26	0.003	0.300
2	N-HEXADECANE	18.13	2342.40	1518.27	0.606	60.613
3	O-TERPHENYL (SURROGATE	21.15	80108.80	43876.87	14.982	1498.221
4		21.99	3206.40	1925.43	0.003	0.321
5	TETRACOSANE-d50 (SURRO	25.92	61651.20	29764.11	14.844	1484.364
6		26.04	105526.40	57632.51	0.106	10.553
7		26.90	2041.60	1147.77	0.002	0.204
8		28.99	99305.60	46469.08	0.099	9.931
			357180.80	184164.30	30.645	3064.505

Report stored in ASCII file: C:\TC4\DATA\D102152.TX0

Chromatogram

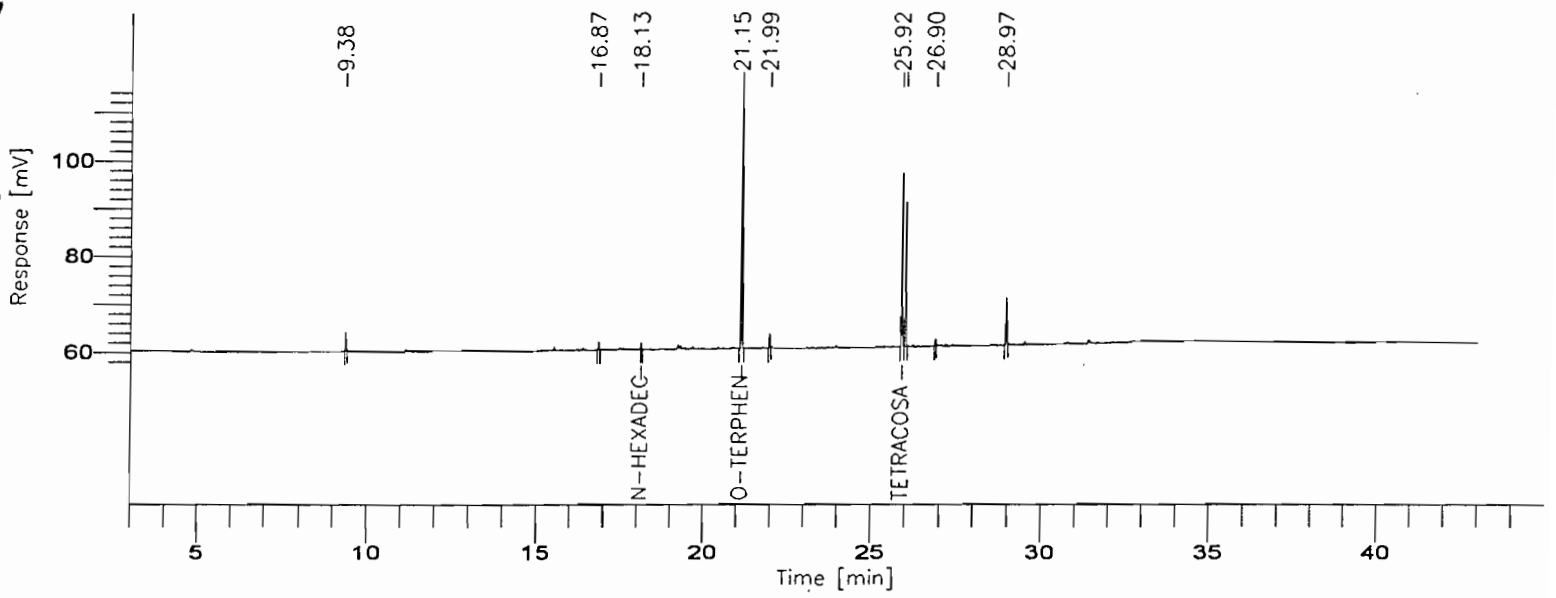
Sample Name : L5235/91399
FileName : C:\TC4\DATA\D102152.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 57 mV

Sample #:
Date : 10/26/99 12:21
Time of Injection: 10/23/99 12:32
Low Point : 57.32 mV High Point : 118.88 mV
Plot Scale: 61.6 mV



000183

Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : L5235/91400
Data File : C:\TC4\DATA\D102153.RAW Date: 10/23/99 13:26
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 53 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

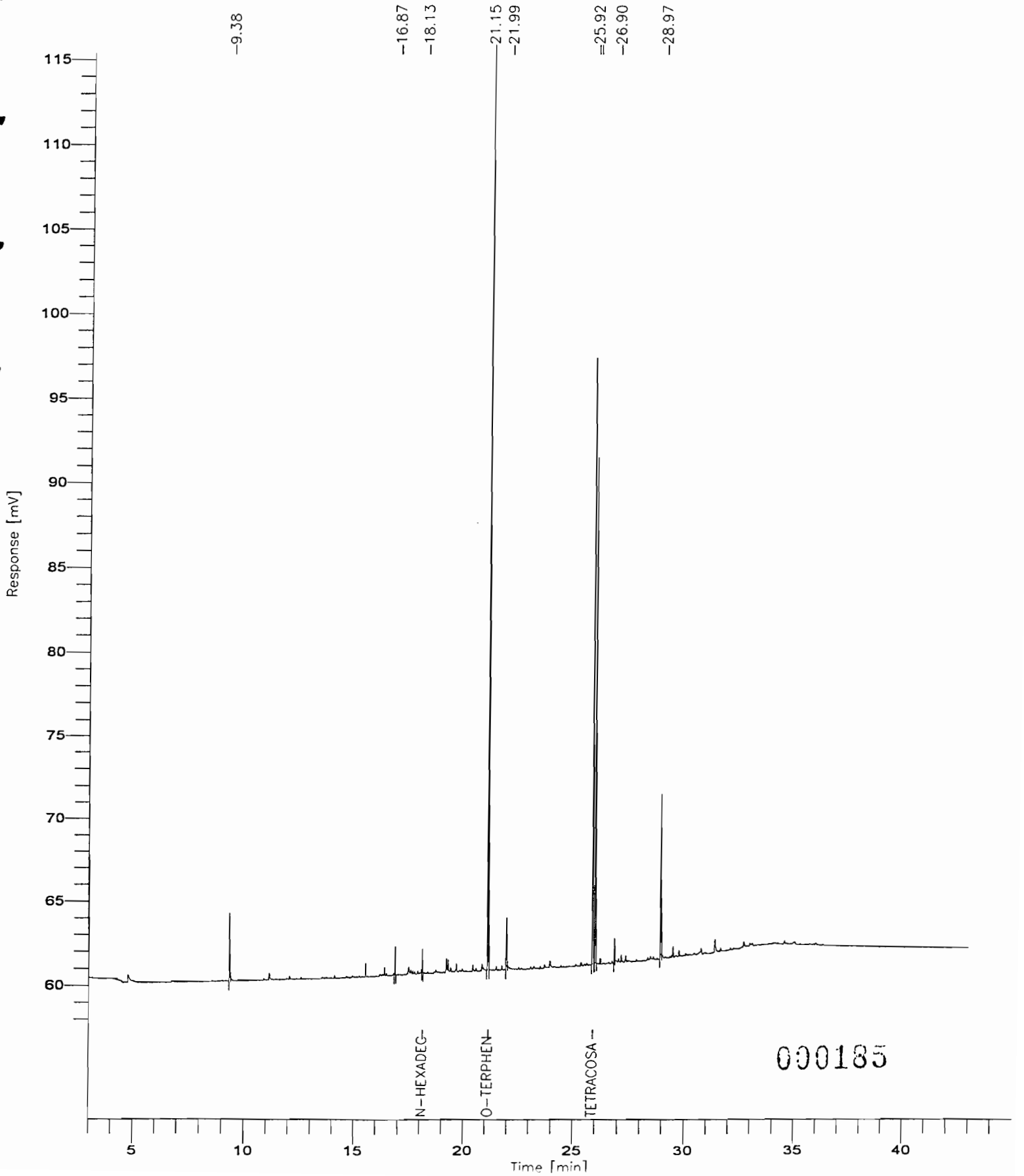
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		9.38	6470.40	3846.51	0.006	0.647
2		16.87	2732.80	1687.05	0.003	0.273
3	N-HEXADECANE	18.13	2123.20	1387.90	0.549	54.941
4	O-TERPHENYL (SURROGATE	21.15	99270.40	54404.74	18.566	1856.588
5		21.99	4888.00	2843.52	0.005	0.489
6	TETRACOSANE-d50 (SURRO	25.92	74668.80	36595.54	17.978	1797.786
7		26.04	54556.80	30175.24	0.055	5.456
8		26.90	2083.20	1210.83	0.002	0.208
9		28.97	18153.60	9803.04	0.018	1.815
			264947.20	141954.39	37.182	3718.203

Report stored in ASCII file: C:\TC4\DATA\D102153.TX0

Chromatogram

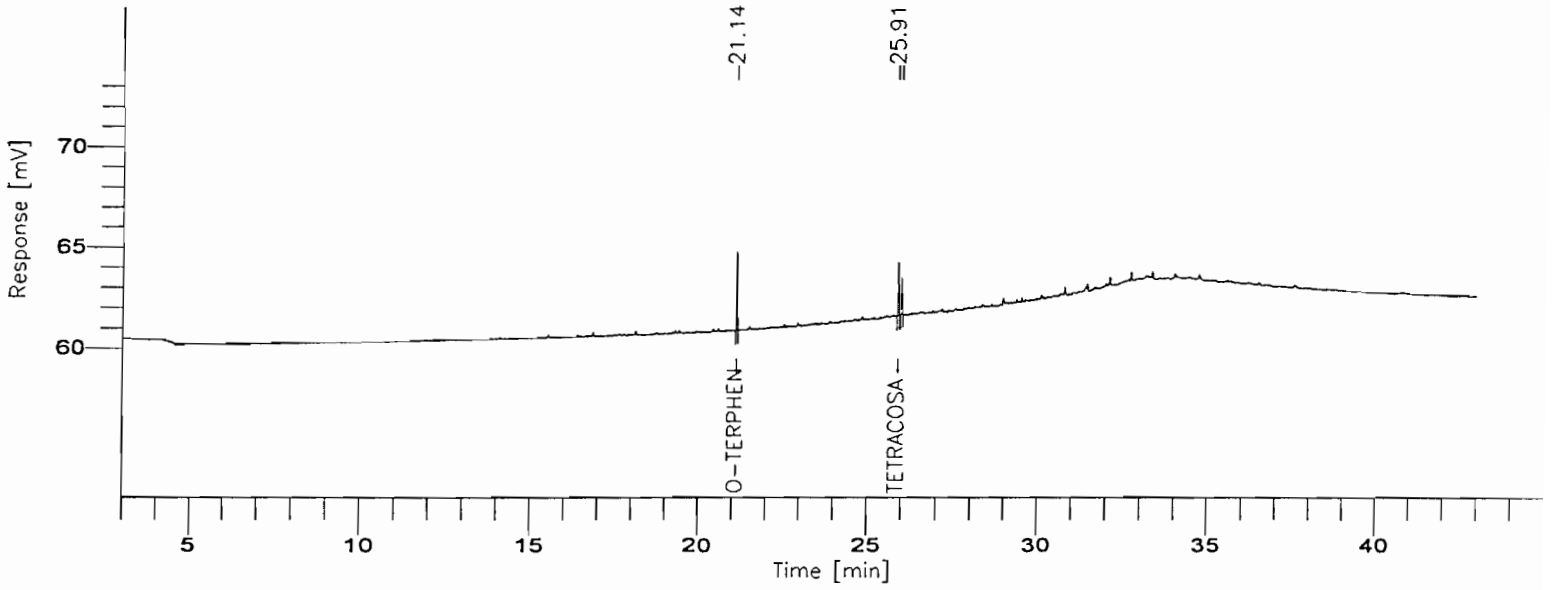
Sample Name : L5235/91400
FileName : C:\TC4\DATA\D102153.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 57 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:21
Time of Injection: 10/23/99 13:26
Low Point : 57.39 mV High Point : 115.35 mV
Plot Scale: 58.0 mV



000185

Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : L5235\91401 1:10
Data File : C:\TC4\DATA\D102157.RAW Date: 10/23/99 17:03
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 57 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

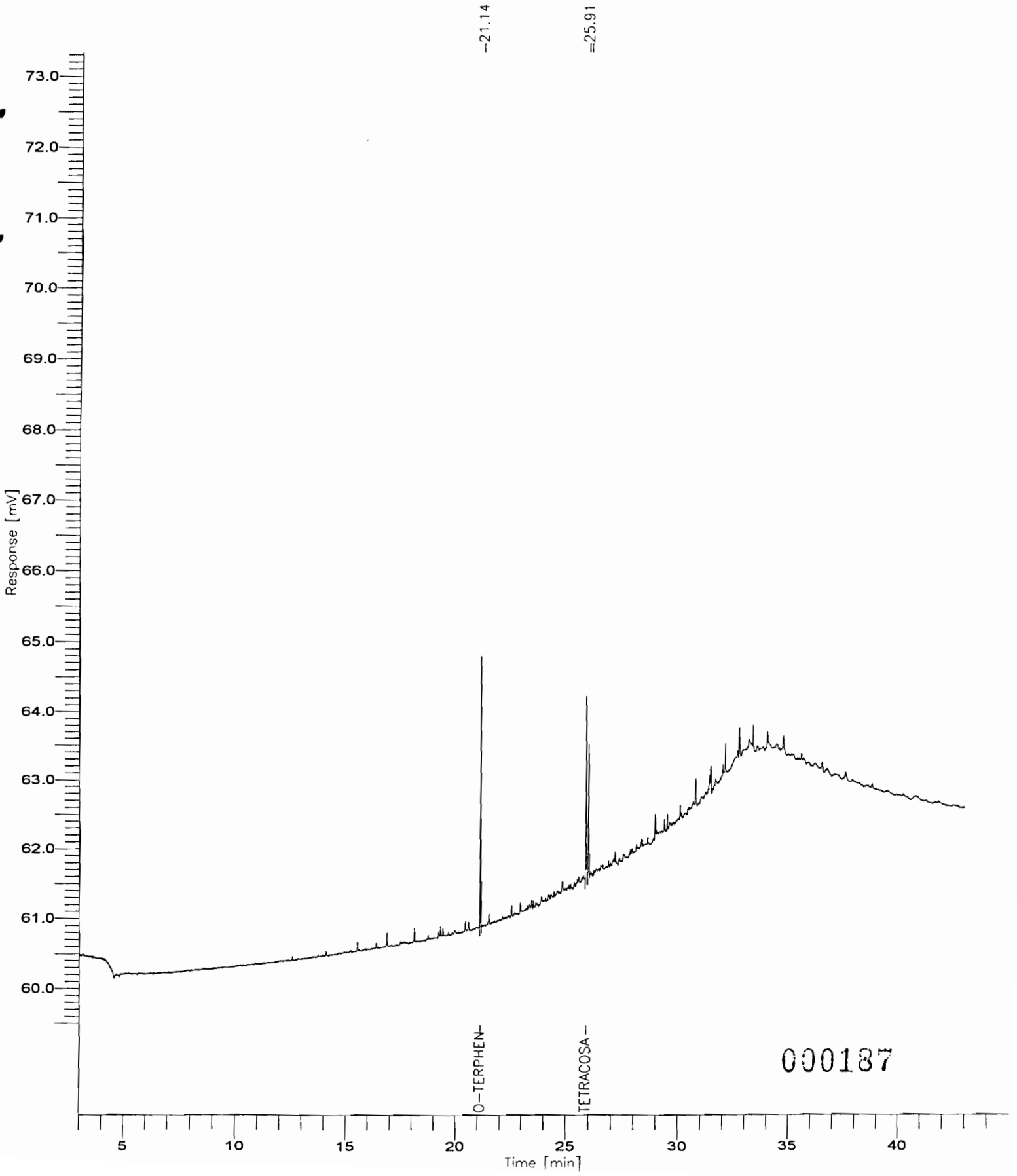
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1	O-TERPHENYL (SURROGATE	21.14	6860.80	3890.79	1.283	128.313
2	TETRACOSANE-d50 (SURRO	25.91	5153.60	2638.36	1.241	124.082
3		26.03	3296.00	1841.45	0.003	0.330
			15310.40	8370.60	2.527	252.725

Report stored in ASCII file: C:\TC4\DATA\D102157.TXO

Chromatogram

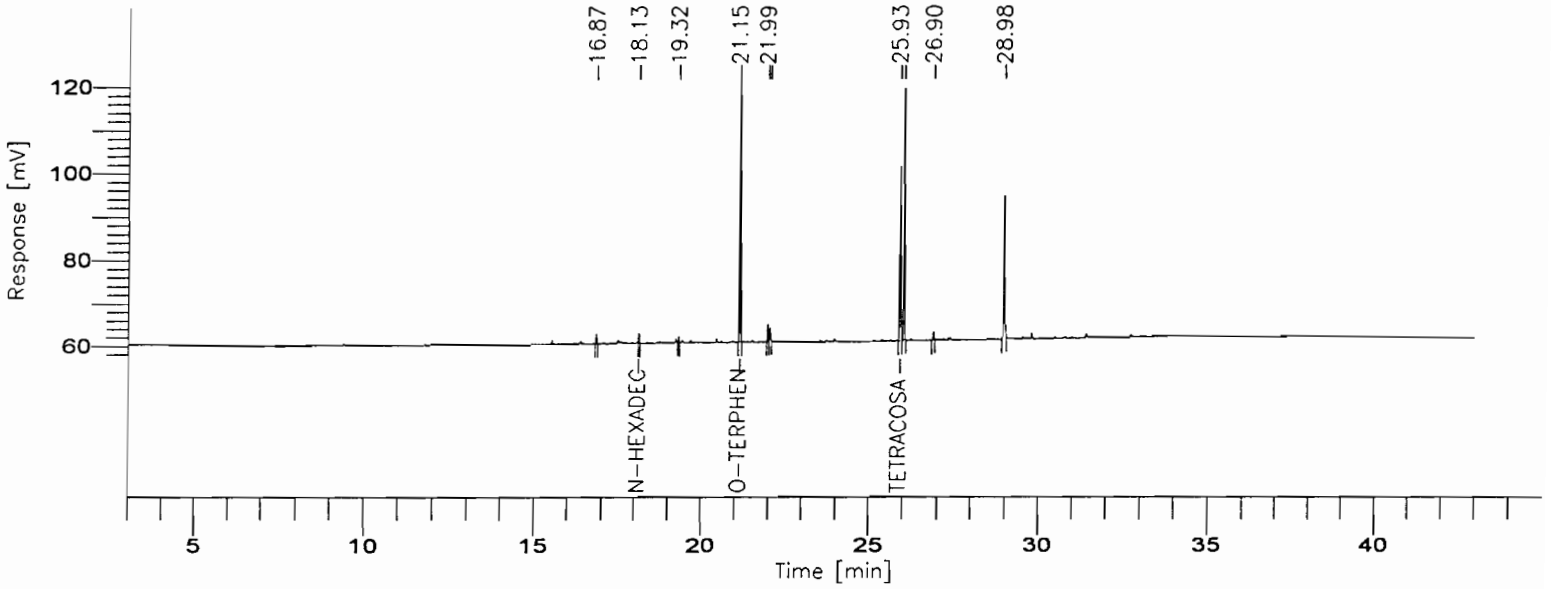
Sample Name : L5235\91401 1:10
FileName : C:\TC4\DATA\D102157.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 59 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:21
Time of Injection: 10/23/99 17:03
Low Point : 59.47 mV High Point : 73.33 mV
Plot Scale: 13.9 mV



000187

Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : L5235/91402
Data File : C:\TC4\DATA\D102154.RAW Date: 10/23/99 14:21
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 54 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

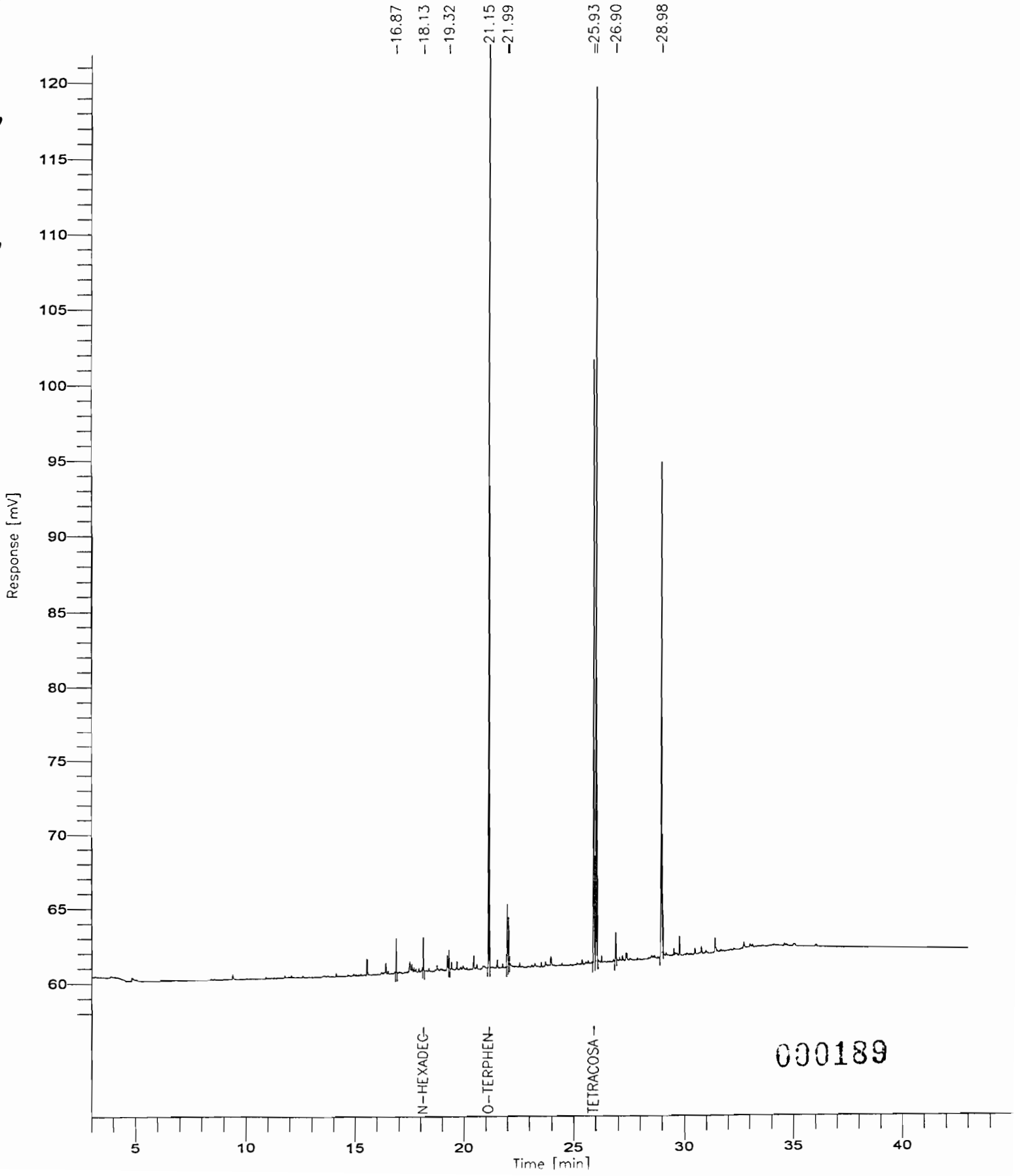
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		16.87	3760.00	2322.19	0.004	0.376
2	N-HEXADECANE	18.13	3363.20	2175.71	0.870	87.028
3		19.32	1964.80	1244.05	0.002	0.196
4	O-TERPHENYL (SURROGATE	21.15	111032.00	61107.50	20.766	2076.557
5		21.99	7787.03	4154.49	0.008	0.779
6		22.06	5723.37	3143.50	0.006	0.572
7	TETRACOSANE-d50 (SURRO	25.93	83289.60	40200.23	20.053	2005.347
8		26.04	106640.00	58169.57	0.107	10.664
9		26.89	3196.80	1776.57	0.003	0.320
10		28.98	70712.00	33456.11	0.071	7.071
			397468.80	207749.90	41.889	4188.910

Report stored in ASCII file: C:\TC4\DATA\D102154.TX0

Chromatogram

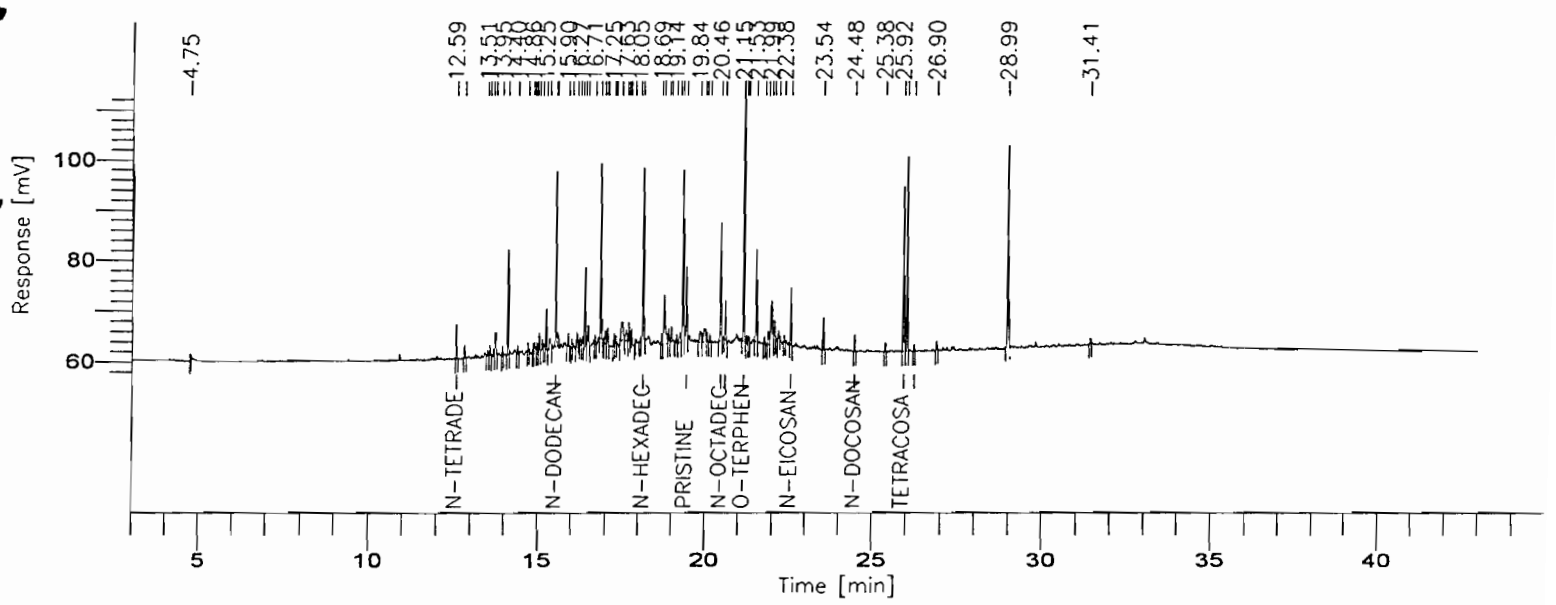
Sample Name : L5235/91402
FileName : C:\TC4\DATA\D102154.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 57 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:21
Time of Injection: 10/23/99 14:21
Low Point : 57.07 mV High Point : 121.84 mV
Plot Scale: 64.8 mV



000189

Software Version: 4.1<1L22>
Date: 10/26/99 12:21
Sample Name : L5235/91403
Data File : C:\TC4\DATA\D102155.RAW Date: 10/23/99 15:15
Sequence File: C:\TC4\DATA\DB102199.SEQ Cycle: 55 Channel : B
Instrument : HP5890_FID Rack/Vial: 0/0 Operator:
Sample Amount : 1.0000 Dilution Factor : 100.00



ANALAB INC. COMPOUND LISTINGS & RESULTS

000190

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
1		4.74	1817.60	1127.78	0.002	0.182
2	N-TETRADECANE	12.59	10944.00	6703.36	2.941	294.125
3		12.83	3947.20	2441.39	0.004	0.395
4		13.51	2051.20	1218.08	0.002	0.205
5		13.58	3267.20	1956.25	0.003	0.327
6		13.68	2669.54	1535.43	0.003	0.267
7		13.75	9308.06	4544.82	0.009	0.931
8		13.95	3472.00	1850.63	0.003	0.347
9		14.12	34118.40	20668.94	0.034	3.412
10		14.40	3662.40	1804.15	0.004	0.366
11		14.71	2348.80	1582.32	0.002	0.235
12		14.86	3308.19	1936.13	0.003	0.331
13		14.90	3926.88	1931.86	0.004	0.393
14		14.97	3617.50	1991.62	0.004	0.362
15		15.04	6155.44	3579.44	0.006	0.616
16		15.14	3139.20	2073.76	0.003	0.314
17		15.25	12412.80	7981.28	0.012	1.241
18		15.34	6521.60	2099.63	0.007	0.652
19	N-DODECANE	15.54	58747.20	34780.87	16.163	1616.270

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
20		15.59	7587.20	2574.41	0.008	0.759
21		15.90	4257.60	2483.87	0.004	0.426
22		16.01	3318.40	1586.14	0.003	0.332
23		16.17	4620.80	2149.36	0.005	0.462
24		16.27	2753.91	1375.41	0.003	0.275
25		16.34	3099.62	1852.63	0.003	0.310
26		16.41	30778.05	15687.82	0.031	3.078
27		16.50	9451.62	4322.46	0.009	0.945
28		16.71	3630.40	1896.53	0.004	0.363
29		16.88	59014.40	35451.32	0.059	5.901
30		16.99	6138.40	2616.76	0.006	0.614
31		17.06	6104.80	3225.56	0.006	0.610
32		17.25	4198.82	2283.99	0.004	0.420
33		17.30	2633.18	1732.74	0.003	0.263
34		17.48	15388.80	3716.18	0.015	1.539
35		17.62	6156.80	2134.33	0.006	0.616
36		17.69	5587.20	3513.56	0.006	0.559
37		17.75	1353.60	919.34	0.001	0.135
38		17.89	1110.40	711.46	0.001	0.111
39		18.05	2083.20	1198.23	0.002	0.208
40	N-HEXADECANE	18.14	60499.20	34869.83	15.655	1565.506
41		18.69	4123.30	2146.94	0.004	0.412
42		18.76	31812.88	9685.85	0.032	3.181
43		18.90	4831.25	2847.90	0.005	0.483
44		18.99	5525.37	3022.74	0.006	0.553
45		19.14	2880.00	1605.51	0.003	0.288
46		19.24	6100.46	1990.88	0.006	0.610
47		19.33	60587.20	33964.05	0.061	6.059
48	PRISTINE	19.44	29592.34	14419.40	6.294	629.401
49		19.84	8307.20	2079.80	0.008	0.831
50		19.99	13167.81	2695.13	0.013	1.317
51		20.05	2870.59	1898.28	0.003	0.287
52		20.14	2700.80	1674.80	0.003	0.270
53	N-OCTADECANE	20.46	43196.80	23507.84	10.620	1061.996
54	PHYTANE	20.60	15836.80	8038.86	3.782	378.170
55	O-TERPHENYL (SURROGATE	21.15	91360.00	49145.86	17.086	1708.645
56		21.25	3987.90	1662.67	0.004	0.399
57		21.31	2868.10	1516.55	0.003	0.287
58		21.53	35356.80	18480.21	0.035	3.536
59		21.77	2662.40	1481.59	0.003	0.266
60		21.89	6430.69	2548.96	0.006	0.643
61		21.99	25281.31	8270.39	0.025	2.528
62		22.07	8630.40	4095.42	0.009	0.863
63		22.20	3467.20	1861.64	0.003	0.347
64		22.38	2214.40	1409.78	0.002	0.221
65	N-EICOSANE	22.56	19561.60	11378.08	4.414	441.363
66		23.54	11033.60	6383.03	0.011	1.103
67	N-DOCOSANE	24.48	5800.00	3307.85	1.370	137.037
68		25.38	3104.00	1756.24	0.003	0.310
69	TETRACOSANE-d50 (SURRO	25.92	67152.00	32997.36	16.168	1616.805

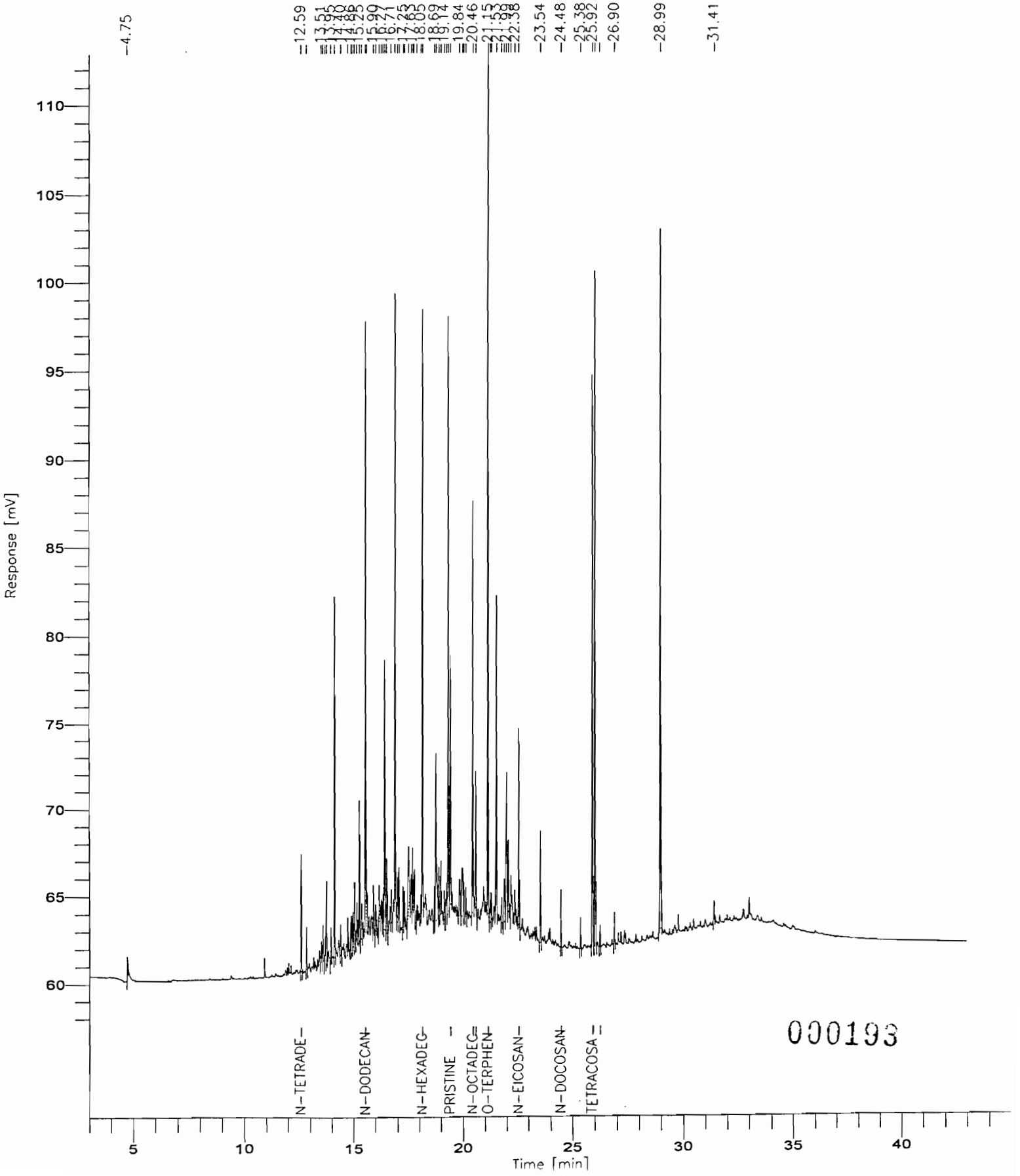
Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Raw Amount	Adjusted Amount
70		26.04	67332.80	38444.28	0.067	6.733
71	N-TETRACOSANE	26.25	2137.60	1249.95	0.485	48.469
72		26.90	3100.80	1714.29	0.003	0.310
73		28.99	84648.00	39861.14	0.085	8.465
74		31.41	1742.40	964.01	0.002	0.174
			1094606.40	566216.94	95.668	9566.765

Report stored in ASCII file: C:\TC4\DATA\D102155.TX0

Chromatogram

Sample Name : L5235/91403
FileName : C:\TC4\DATA\D102155.raw
Method : TRPH909
Start Time : 3.00 min End Time : 45.00 min
Scale Factor: 1.0 Plot Offset: 58 mV

Sample #: Page 1 of 1
Date : 10/26/99 12:21
Time of Injection: 10/23/99 15:15
Low Point : 57.51 mV High Point : 112.89 mV
Plot Scale: 55.4 mV



000193

SHIPPING AND RECEIVING DOCUMENTATION

CHEMTECH

CHAIN OF CUSTODY RECORD

Please check one:

☐ 110 Route 4, Englewood, NJ 07631, (201) 567-6868, Fax (201) 567-1333

☐ 205 Campus Plaza 1, Edison, NJ 08837, (732) 225-4111, Fax (732) 225-4110

☐ 515 Route 9 South, Barnegat, NJ 08005, (609) 698-0199, Fax (609) 698-0910

CHEMTECH JOB NO.:

CHEMTECH QUOTE NO.:

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Impact Environmental

ADDRESS: 1 Village Plaza

CITY: Kings Park STATE: NY ZIP: 11754

ATTENTION: Kevin Kleaka

PHONE: 516) 269-8800 FAX: 516) 269-1599

PROJECT INFORMATION

PROJECT NAME: # 1-30-0435

PROJECT NO.: 98-335, Westbury

PROJECT MANAGER: Richard Parrish

LOCATION: 299 Main St, Westbury, NY

PHONE: — FAX: —

BILLING INFORMATION

BILL TO: Client PO #:

ADDRESS:

CITY: STATE: ZIP:

ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *

HARD COPY: _____ DAYS *

EDD: _____ DAYS *

* TO BE APPROVED BY CHEMTECH

** NORMAL TURNAROUND TIME - 14 DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP

☐ RESULTS + QC ☒ NYS ASP "B"

☐ NJ REDUCED ☐ NYS ASP "A"

☐ NJ CLP ☐ EDD

☐ EDD FORMAT: _____

ANALYSIS

1. RIFS Target volatile list
2. 8270 BN
3. 8260 VOC
4. 6010 Metals
5. 8015 TPH
6.
7.
8.
9.

CHEMTECH SAMPLE ID	SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 40C (1)	2	3	4	5	6	7	8	9	COMMENTS
1.	335-GP-008-SS30	S		X	10/12/99	9:40	1	X									
2.	335-GP-008-SS45	S		X	10/12/99	10:23	1	X									
3.	335-GP-009-SS10	S		X	10/12/99	11:43	2		X	X	X	X					
4.	335-GP-009-SS30	S		X	10/12/99	11:56	2		X	X	■	X					
5.	335-GP-009-SS45	S		X	10/12/99	12:40	2		X	X	■	X					
6.	335-GP-010-SS15	S		X	10/12/99	2:13	2		X	X	X	X					
7.	335-GP-010-SS30	S		X	10/12/99	2:47	2		X	X	■	X					
8.	335-GP-010-SS45	S		X	10/12/99	3:46	2		X	X	■	X					

← Specify Preservatives: A – HCl, B – HNO_3, C – H_2SO_4, D – NaOH, E – ICE, F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	10/15/99 810	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.	10/18/99 1400	3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non-Compliant ☐ Temp. of Cooler 4c

Comments:

* RIFS included. / ■: Denotes a clerical error (Do not run method for these spls)

Page _____ of _____

Shipment Complete: Yes _____ No _____

er. 9-99

WHITE – CHEMTECH COPY FOR RETURN TO CLIENT YELLOW – CHEMTECH COPY PINK – SAMPLER COPY

CHEMTECH
CHAIN OF CUSTODY RECORD

Please check one:

☐ 110 Route 4, Englewood, NJ 07631, (201) 567-6868, Fax (201) 567-1333
☐ 205 Campus Plaza 1, Edison, NJ 08837, (732) 225-4111, Fax (732) 225-4110
☐ 515 Route 9 South, Barnegat, NJ 08005, (609) 698-0199, Fax (609) 698-0910

CHEMTECH JOB NO.:

CHEMTECH QUOTE NO.:

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Impact Environmental
ADDRESS: 1 Village Plaza
CITY: King Park STATE: NY ZIP: 11754
ATTENTION: Kevin Kleaka
PHONE: (516) 269-8800 FAX: (516) 269-1599

PROJECT INFORMATION

PROJECT NAME: # 1-30-0435
PROJECT NO.: 98-335, Westbury
PROJECT MANAGER: Richard Parrish
LOCATION: 299 Main St. Westbury. NY
PHONE: — FAX: —

BILLING INFORMATION

BILL TO: Client PO #:
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *
* TO BE APPROVED BY CHEMTECH
** NORMAL TURNAROUND TIME - 14 DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ NYS ASP "B"
☐ NJ REDUCED ☐ NYS ASP "A"
☐ NJ CLP ☐ EDD
☐ EDD FORMAT: _____

ANALYSIS

1. [illegible] list
2. 8270 BN
3. 8260 VOC
4. 6010 metals
5. 8015 TPH
6. 8021 (STARS)
7. 8240 (STARS)
8.
9.

CHEMTECH SAMPLE ID	SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	335-GP-011-SS15	S		X	10/13/99	820	2		X	X	X	X					
2.	335-GP-011-SS30	S		X	10/13/99	910	2		X	X	■	X					
3.	335-GP-011-SS45	S		X	10/13/99	1013	2		X	X	■	X					
4.	335-GP-012-SS15	S		X	10/13/99	1212	2		X	X	X	X					
5.	335-GP-012-SS30	S		X	10/13/99	249	2		X	X	■	X					
6.	335-GP-012-SS45	S		X	10/13/99	342	2		X	X	■	X					
7.	335-GP-013-SS8	S		X	10/14/99	920	2						X	X			
8.	335-GP-013-SS12	S		X	10/14/99	1000	2						X	X			

← Specify Preservatives: A – HCl, B – HNO_3, C – H_2SO_4, D – NaOH, E – ICE, F – Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. K K	10/15/99 2:10	1.
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
2.		2.
RELINQUISHED BY:	DATE/TIME:	RECEIVED FOR LAB BY:
3.	10/18/99 1400	3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non-Compliant ☐ Temp. of Cooler 4°C
Comments:
■ : Denotes a clerical error (Do not run method for these spls.)

Page _____ of _____ Shipment Complete: Yes _____ No _____

er. 9-99 WHITE – CHEMTECH COPY FOR RETURN TO CLIENT YELLOW – CHEMTECH COPY PINK – SAMPLER COPY

RECORD OF COMMUNICATION
VERBAL/ TELEPHONE COMMUNICATION LOG

Date 10/20/99 Client IMPACT

Chemtech Project No. 13826 ASP Chain of Custody No. 29273 & 28989

Chemtech Contact Joe Dockery Client Contact KEVIN KLEAKA

Project Reference 229 MAIN STREET

Call Initiated By: X Chemtech ____ Client

In reference to the following: TAL metals list submitted By IMACT

Questions/ Issues

IS Total Cyanide required as PART of the TAL metals analysis

Resolution Perform Total Cyanide on the following samples

87993 - GP-009-SS10
87994 - GP 010 SS15
87995 - GP 011 SS15
87996 - GP 012 SS15

Signature John Serpas Date 10/20/99

000197