

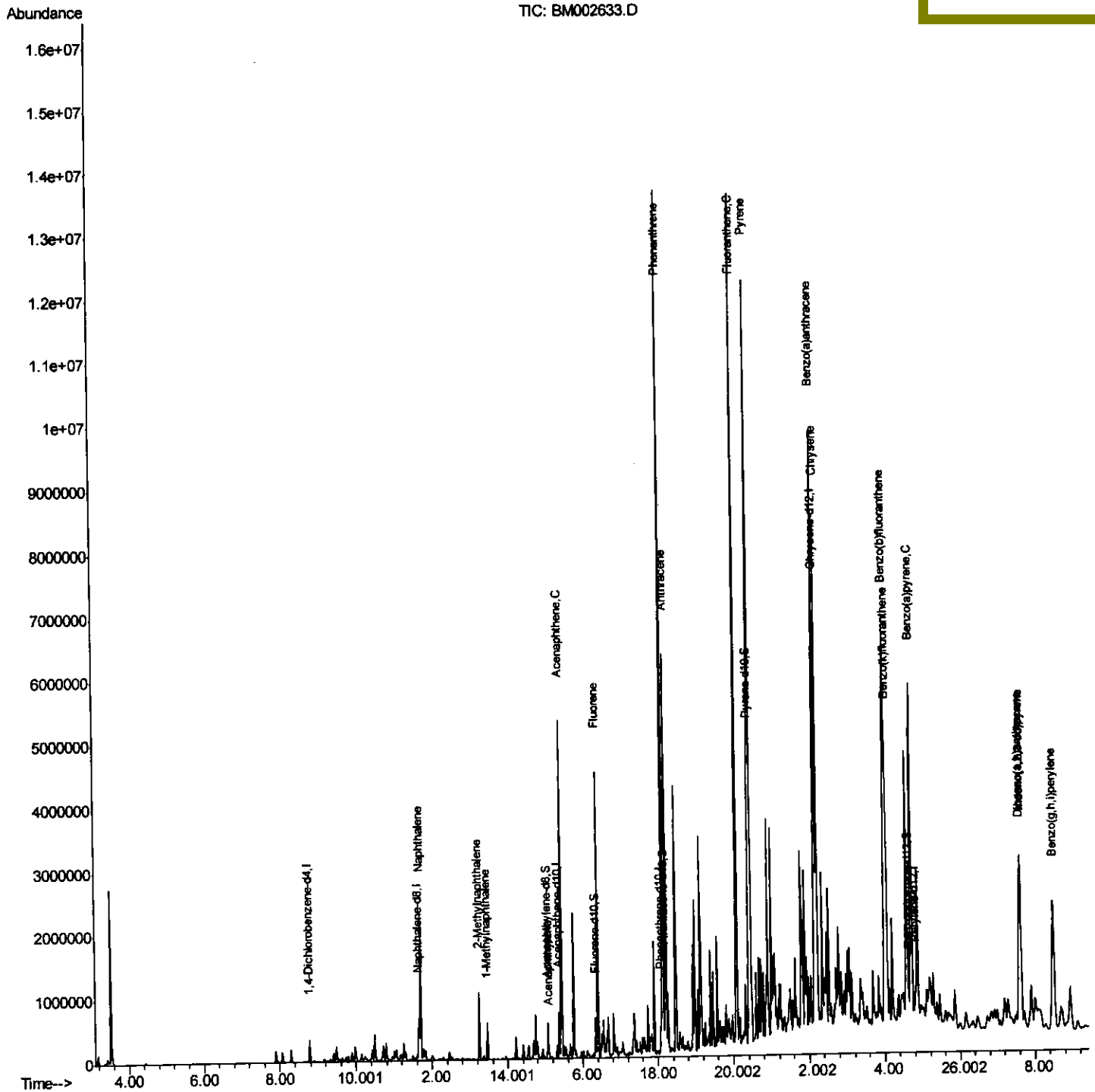
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
Data File : BM002633.D
Acq On : 01 Sep 2015 17:56
Operator : UM/IZ
Sample : G3456-21
Misc :
ALS Vial : 45 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampled :
D9EA6

Quant Time: Sep 01 18:38:18 2015
Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Sep 01 07:11:38 2015
Response via : Initial Calibration

Manual Integrations
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MMDadoda
9/2/2015 1:36:10 PM



Quantitation Report (Qedit)

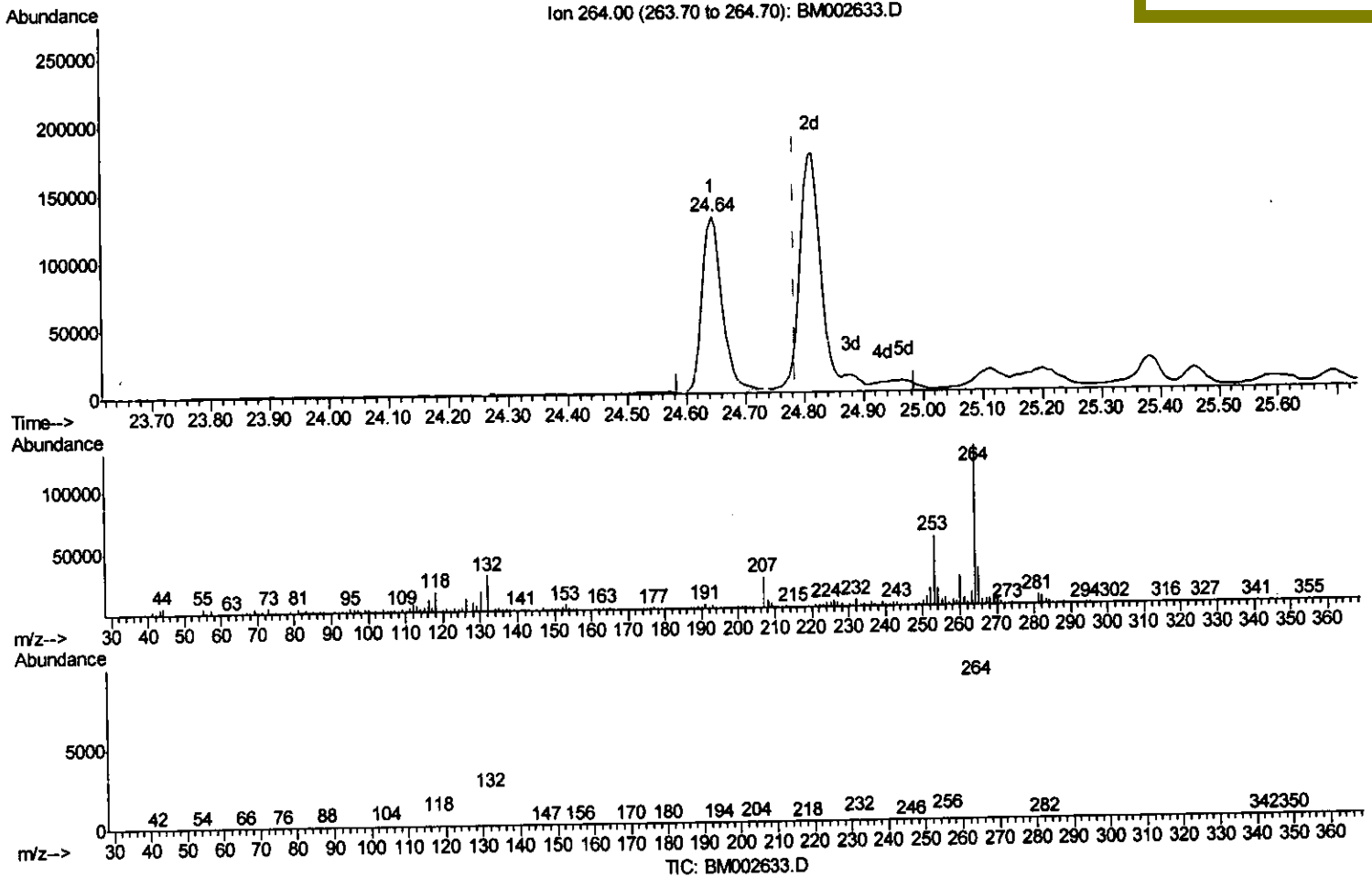
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:33:06 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
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(22) Perylene-d12 (I)

24.644min (-0.141) 20.00ng/ul

response 289339

Ion	Exp%	Act%
264.00	100	100
260.00	23.60	18.95
265.00	21.40	23.75
0.00	0.00	0.00

Quantitation Report (Qedit)

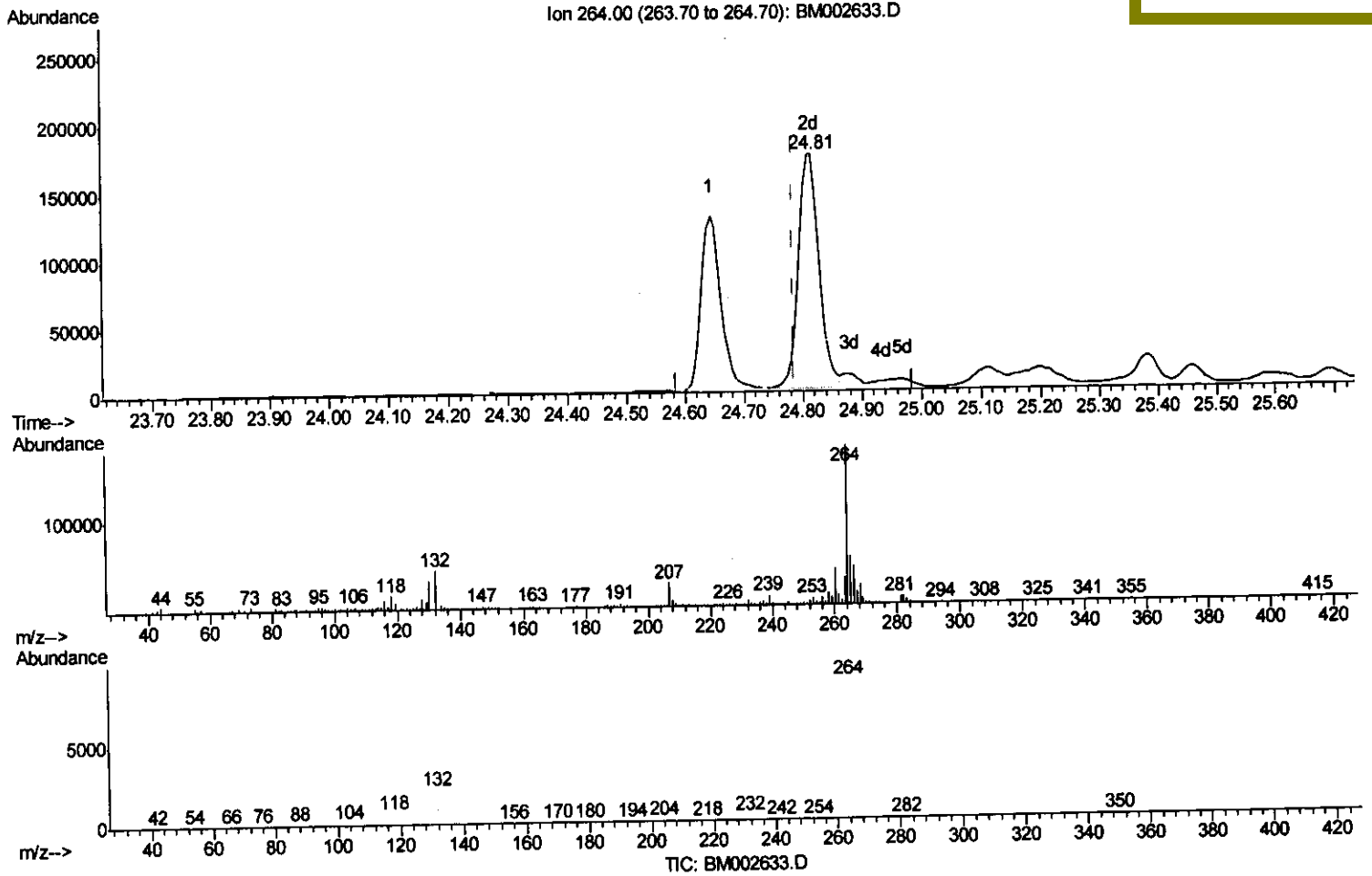
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:33:06 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
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(22) Perylene-d12 (I)

24.815min (+0.030) 20.00ng/ul m

response 420159

Ion	Exp%	Act%
264.00	100	100
260.00	23.60	22.85
265.00	21.40	30.51#
0.00	0.00	0.00

U.M
 09/03/15

Quantitation Report (Qedit)

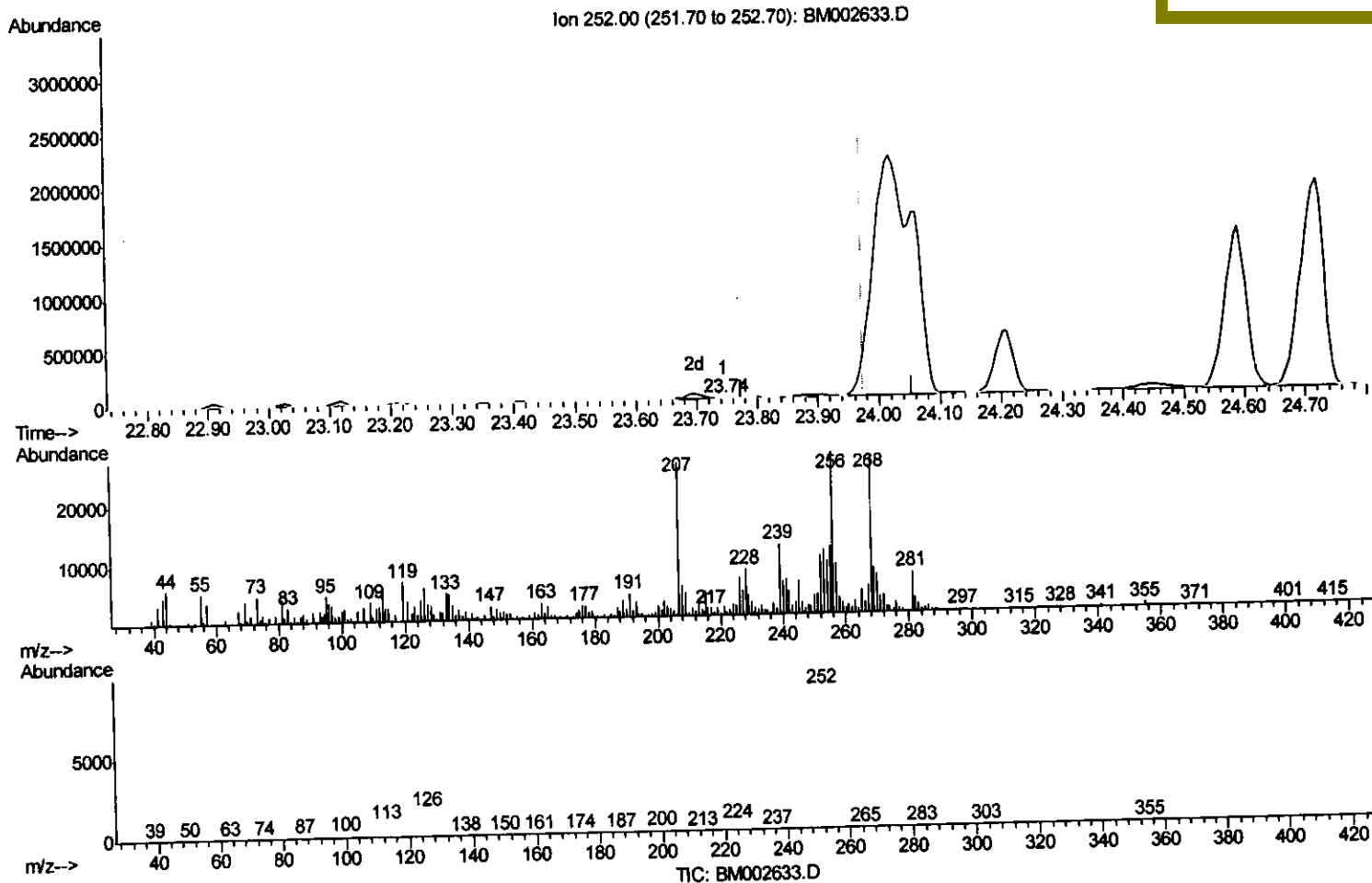
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(23) Benzo(b)fluoranthene

23.744min (-0.229) 0.10ng/ul

response 2618

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	107.95#
125.00	12.50	38.24#
0.00	0.00	0.00

Quantitation Report (Qedit)

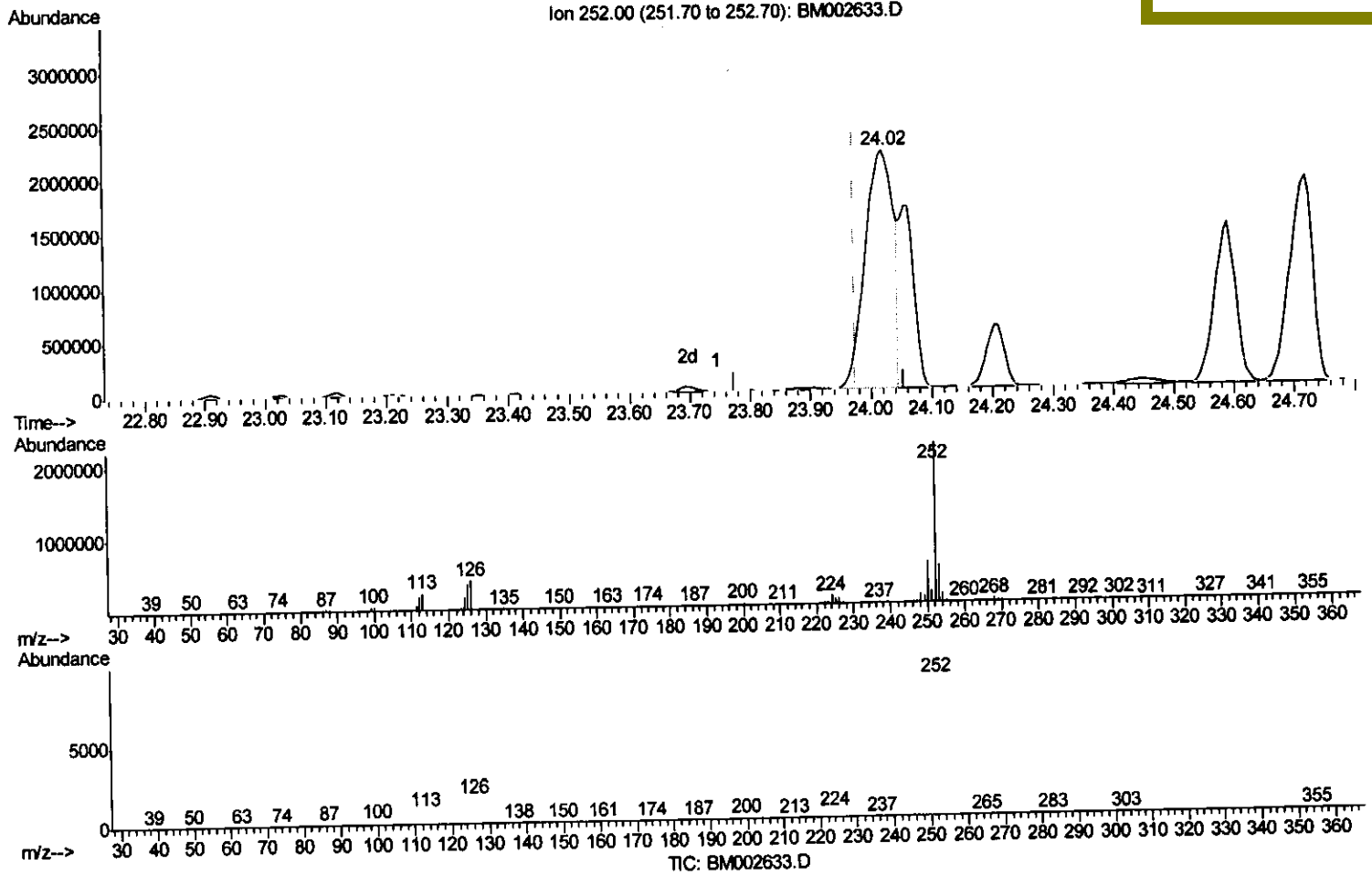
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampled :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(23) Benzo(b)fluoranthene

24.021min (+0.047) 285.01ng/ul m > U.M
 09/09/15

response 7239422

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	23.24
125.00	12.50	15.99#
0.00	0.00	0.00

Quantitation Report (Qedit)

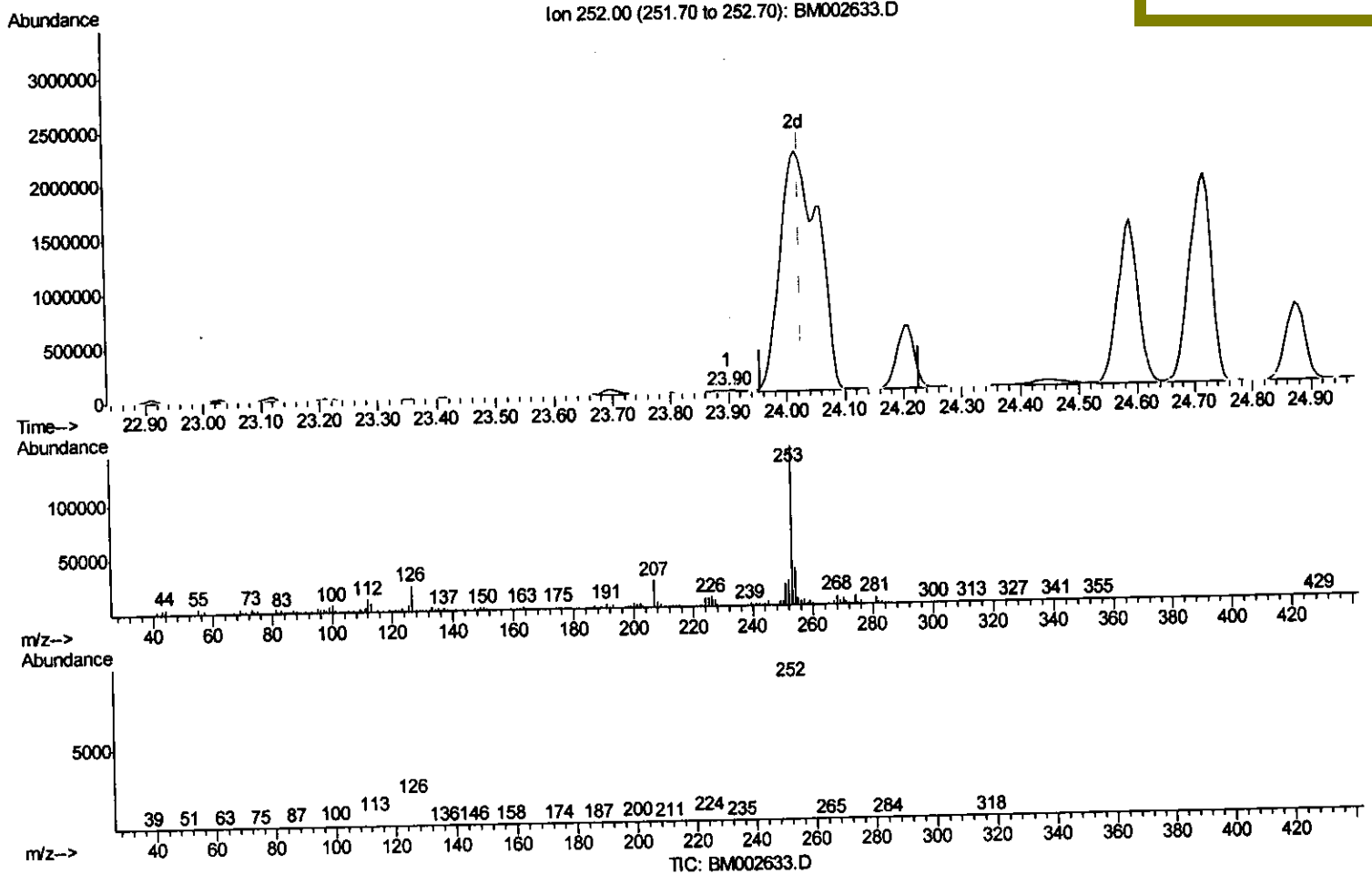
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
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(24) Benzo(k)fluoranthene

23.897min (-0.129) 2.19ng/ul

response 52774

Ion	Exp%	Act%
252.00	100	100
253.00	22.20	628.65#
125.00	12.30	25.55#
0.00	0.00	0.00

Quantitation Report (Qedit)

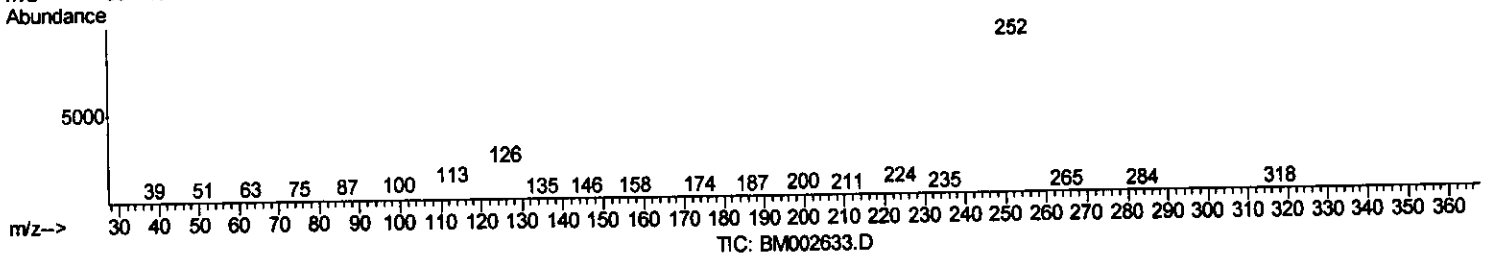
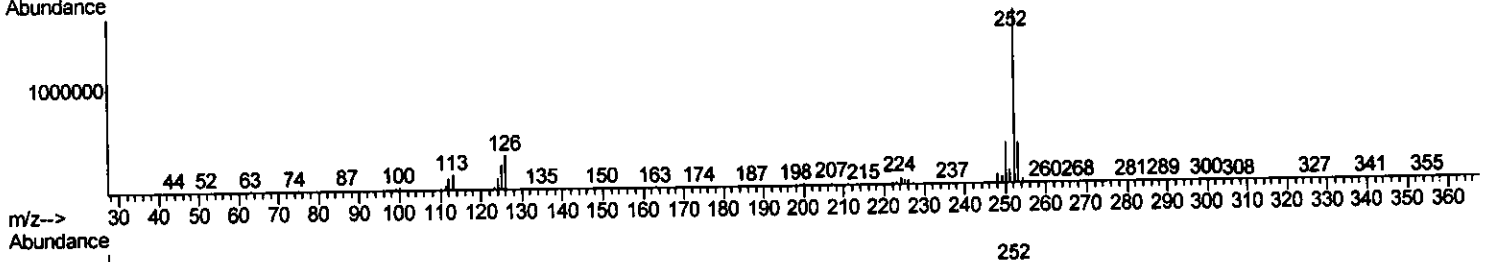
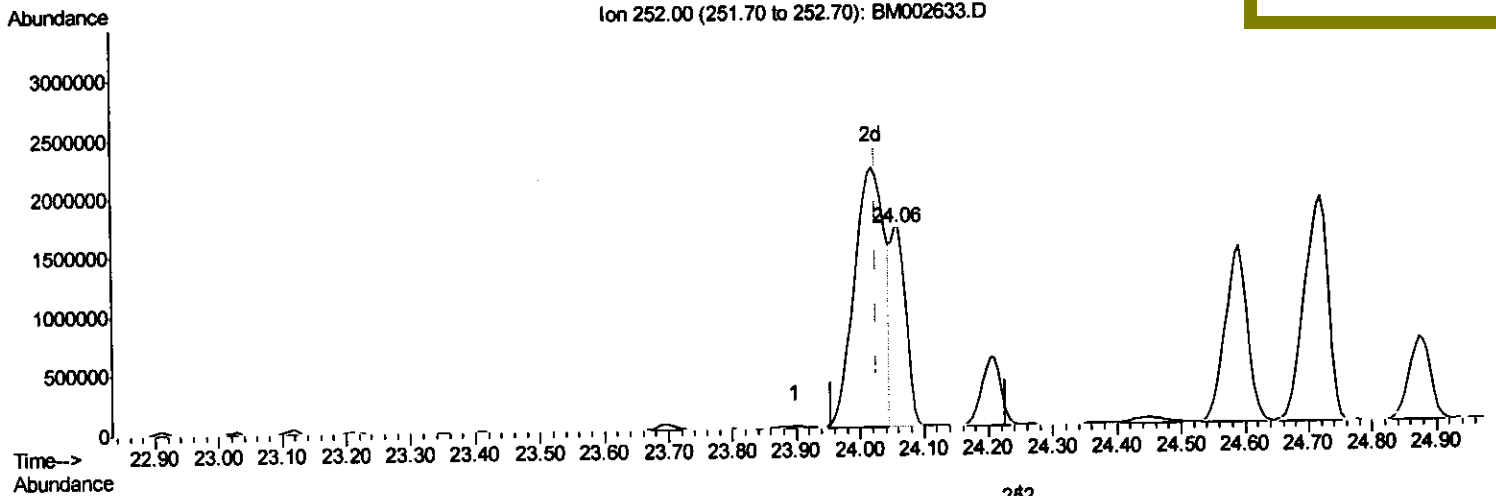
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(24) Benzo(k)fluoranthene

24.056min (+0.030) 116.74ng/ul m

response 2810095

Ion	Exp%	Act%
252.00	100	100
253.00	22.20	23.59
125.00	12.30	14.75
0.00	0.00	0.00

U.M
 09/03/15

Quantitation Report (Qedit)

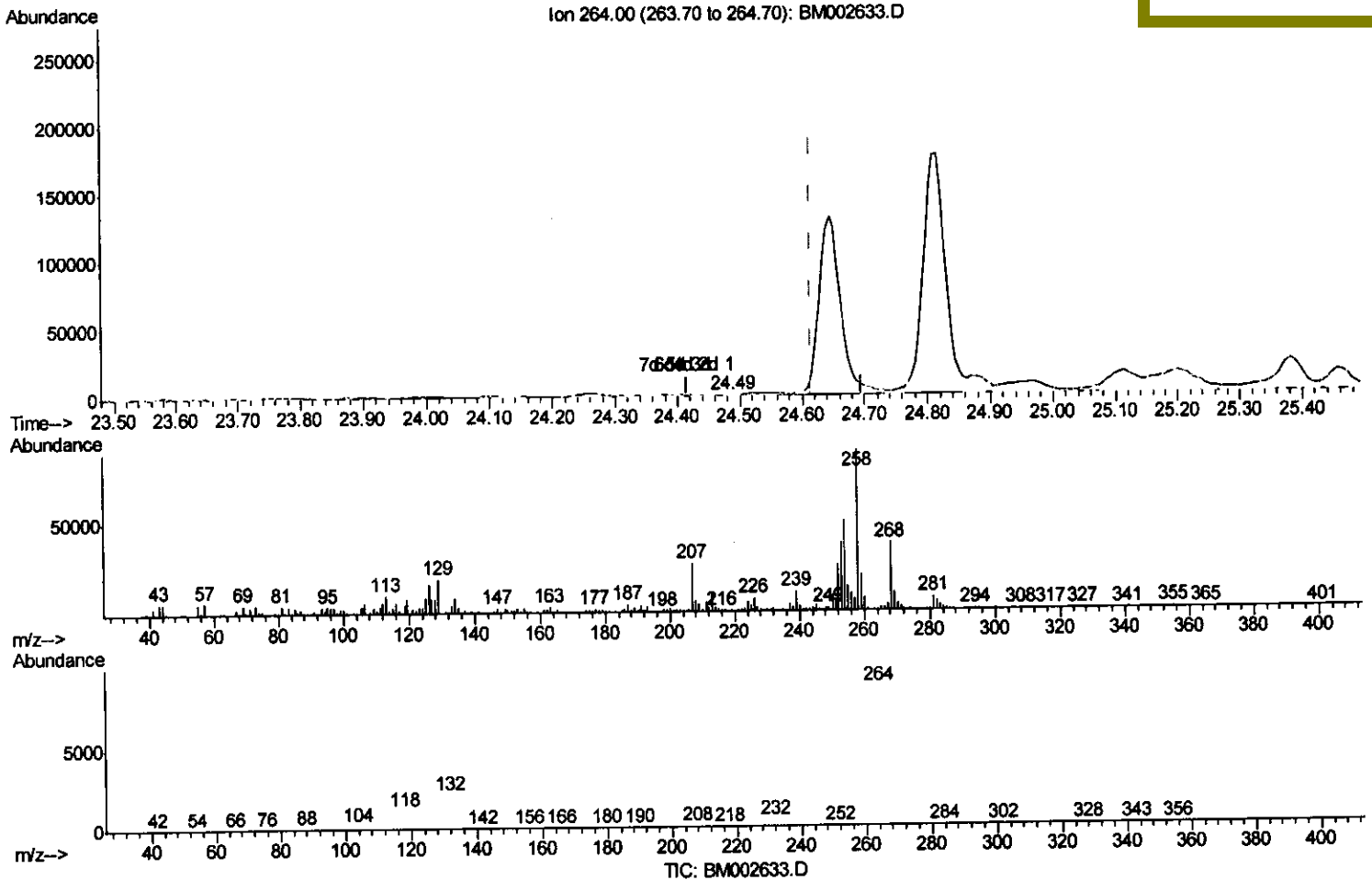
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(25) Benzo(a)pyrene-d12 (S)

24.486min (-0.129) 0.00ng/ul

response 54

Ion	Exp%	Act%
264.00	100	100
132.00	20.40	134.38#
118.00	11.60	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

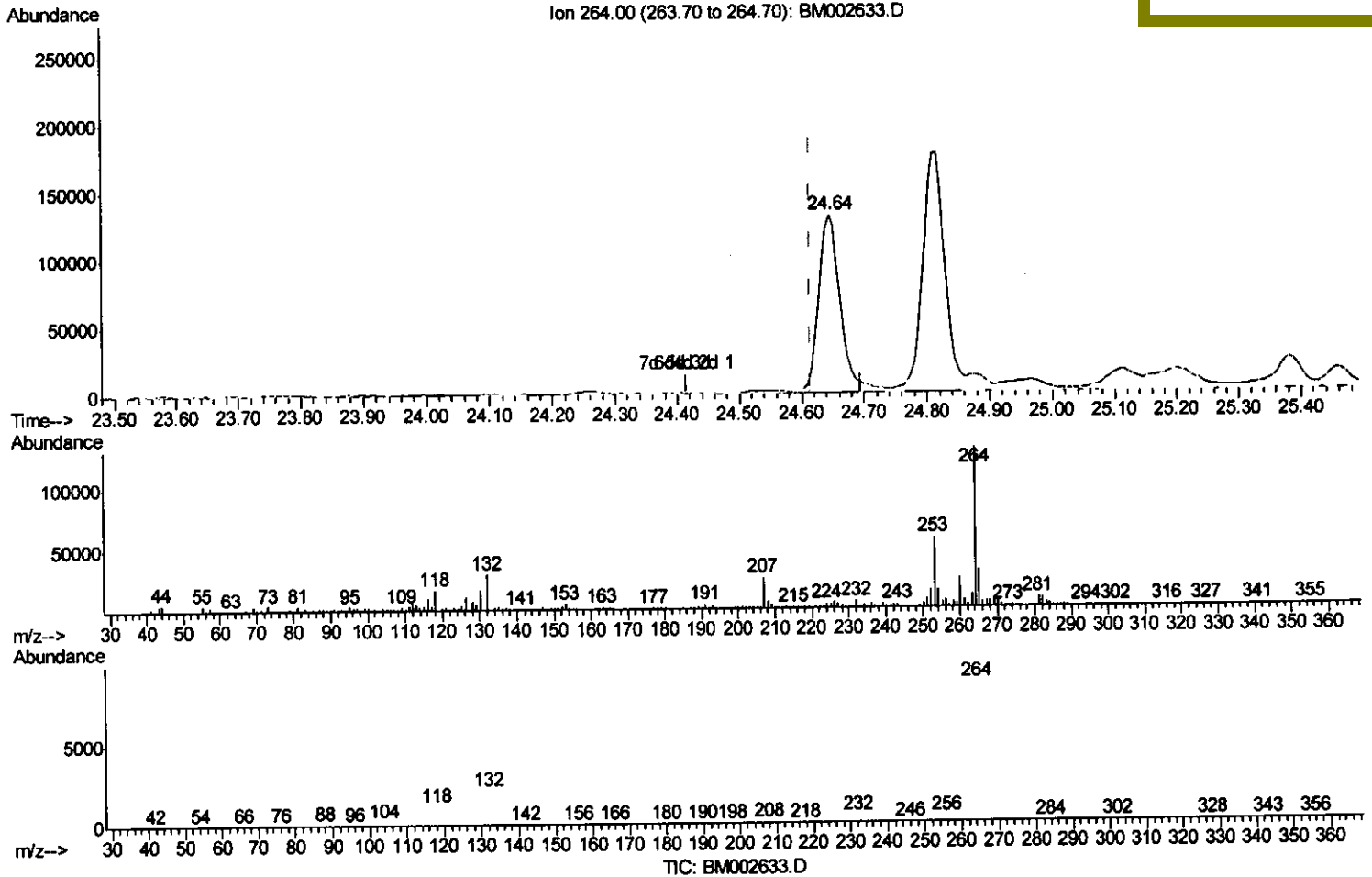
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(25) Benzo(a)pyrene-d12 (S)

24.644min (+0.030) 14.01ng/ul m

response 309208

Ion	Exp%	Act%
264.00	100	100
132.00	20.40	22.62
118.00	11.60	12.77
0.00	0.00	0.00

U.M
 09/05/15

Quantitation Report (Qedit)

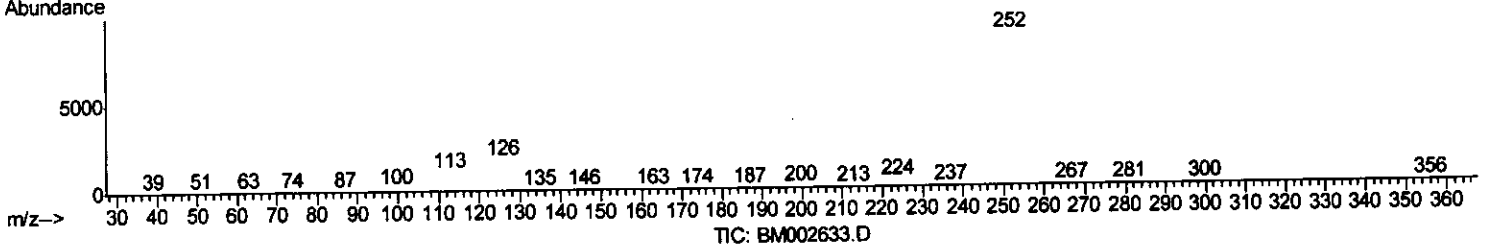
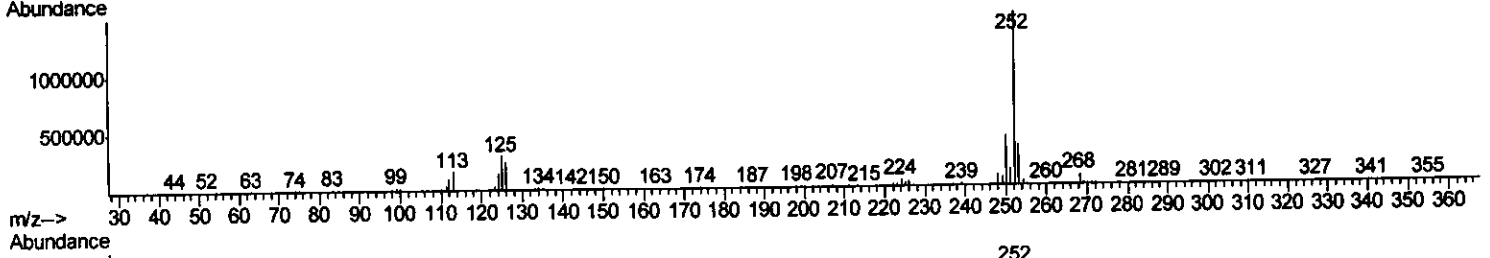
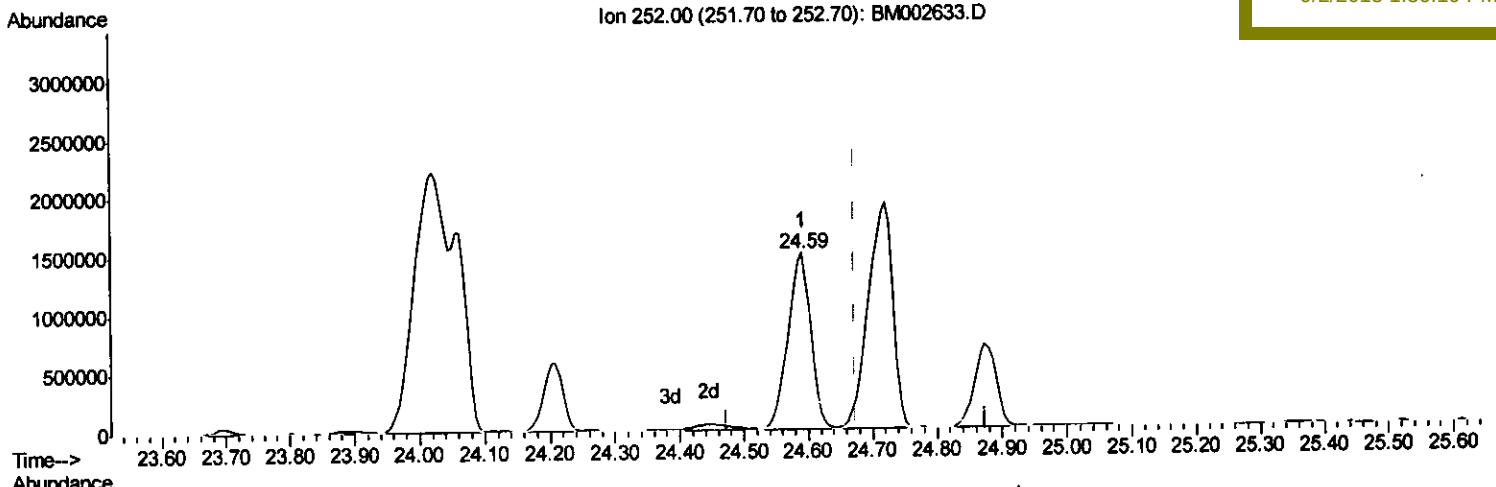
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(26) Benzo(a)pyrene (C)

24.591min (-0.082) 150.83ng/ul

response 3659418

Ion	Exp%	Act%
252.00	100	100
253.00	22.00	23.34
125.00	13.40	19.77#
0.00	0.00	0.00

Quantitation Report (Qedit)

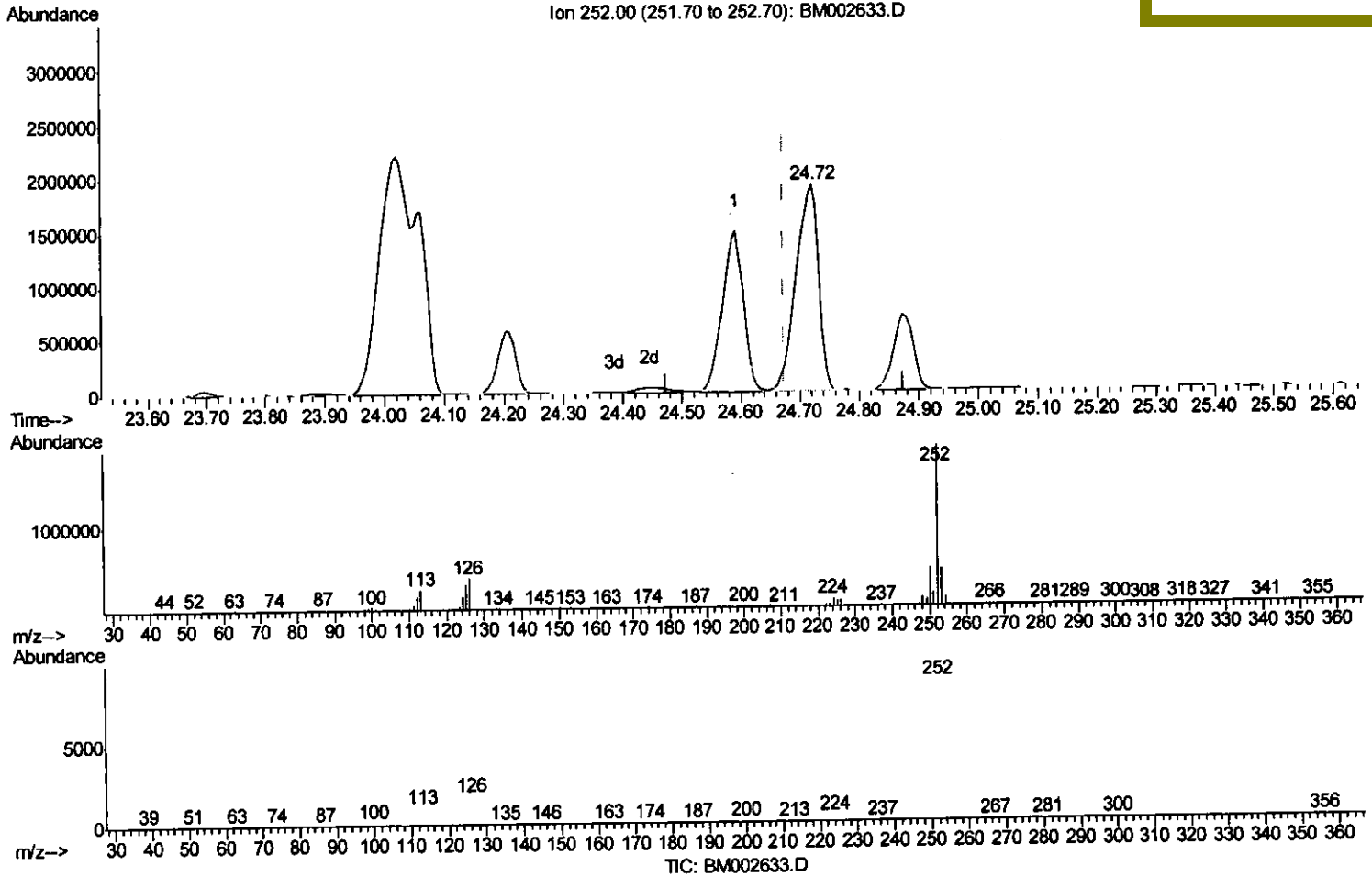
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(26) Benzo(a)pyrene (C)

24.721min (+0.047) 209.50ng/ul m

response 5082794

Ion	Exp%	Act%
252.00	100	100
253.00	22.00	23.59
125.00	13.40	15.57
0.00	0.00	0.00

> $\frac{0.4}{0.9105115}$

Quantitation Report (Qedit)

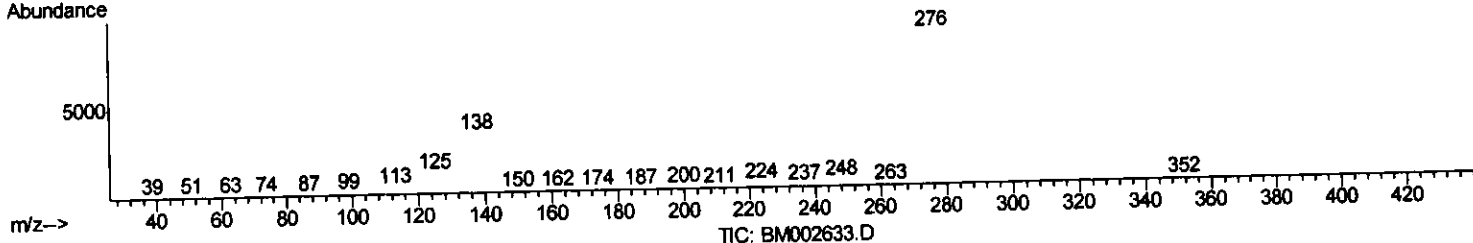
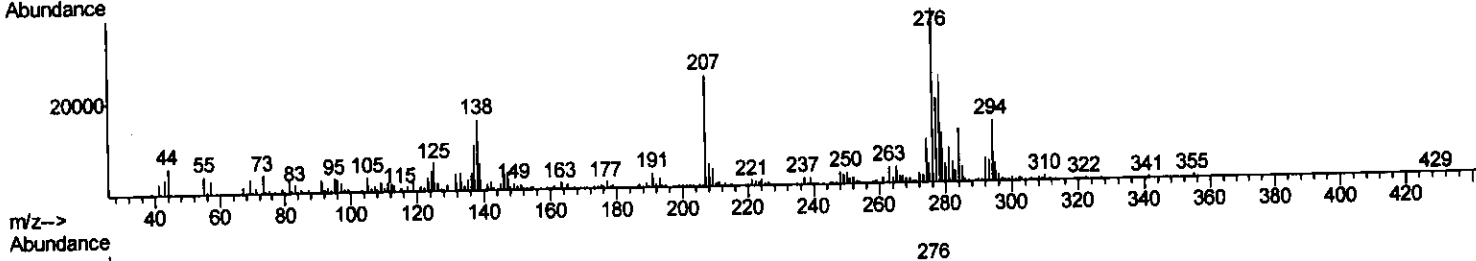
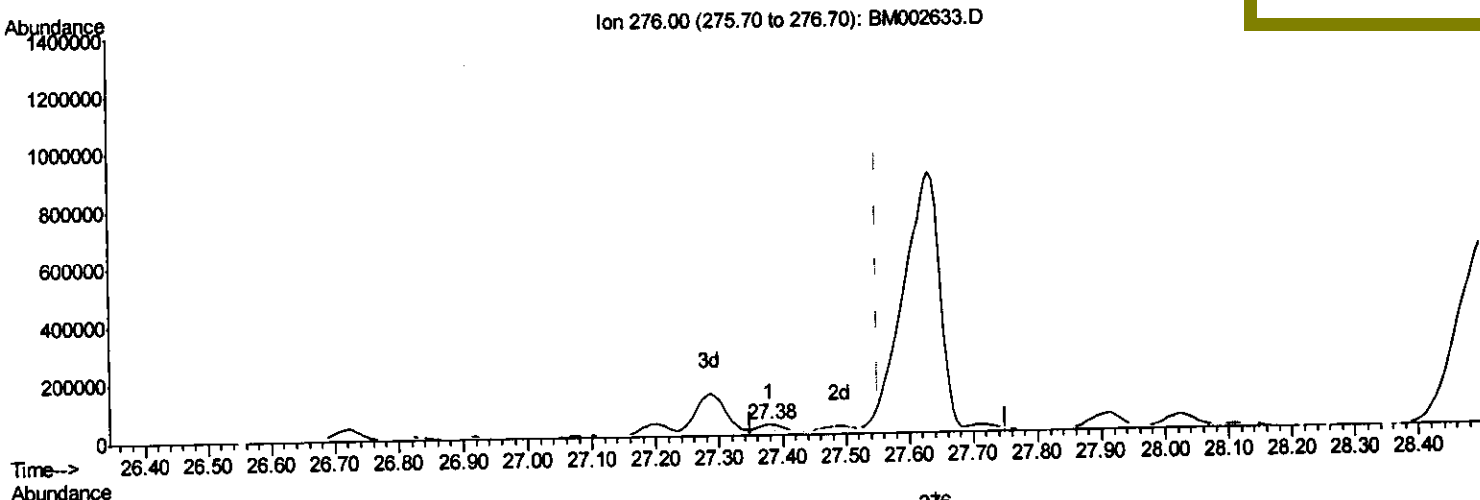
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(27) Indeno(1,2,3-cd)pyrene

27.380min (-0.170) 2.76ng/ul

response 76892

Ion	Exp%	Act%
276.00	100	100
138.00	31.60	40.99#
277.00	25.20	49.36#
0.00	0.00	0.00

Quantitation Report (Qedit)

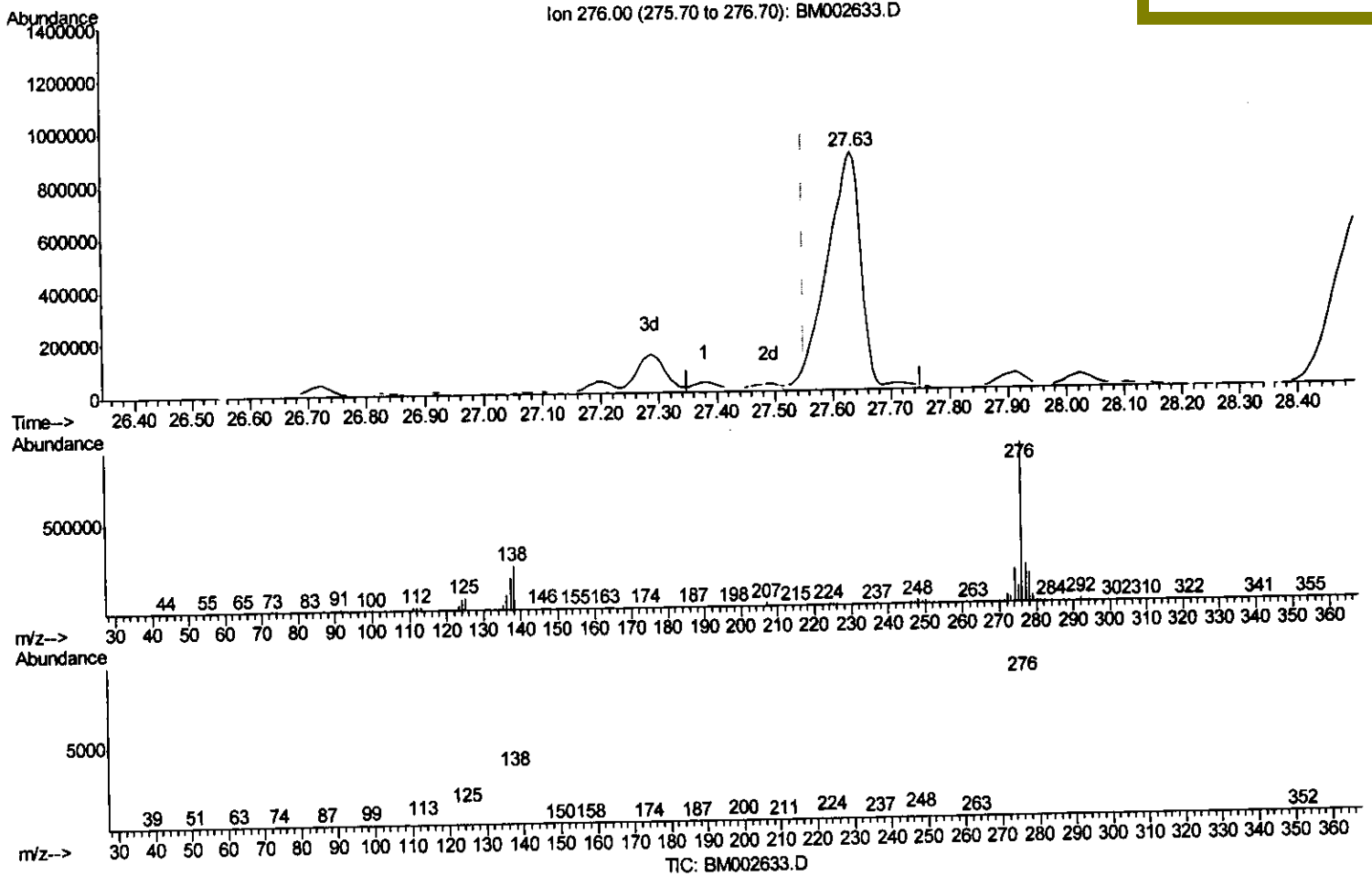
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampled :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
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MMDadoda
 9/2/2015 1:36:10 PM



(27) Indeno(1,2,3-cd)pyrene

27.632min (+0.083) 129.81ng/ul m > $\frac{0.4}{0.910315}$

response 3621940

Ion	Exp%	Act%
276.00	100	100
138.00	31.60	27.77
277.00	25.20	24.36
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
Data File : BM002633.D
Acq On : 01 Sep 2015 17:56
Operator : UM/IZ
Sample : G3456-21
Misc :
ALS Vial : 45 Sample Multiplier: 1

Instrument :

BNA_M

ClientSampled :

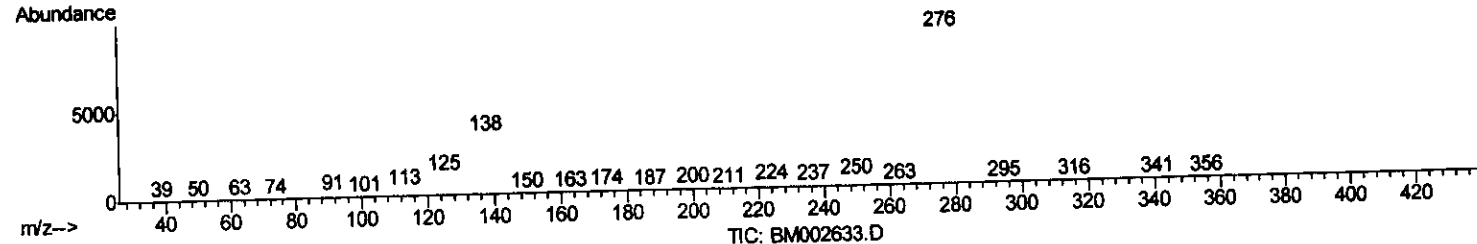
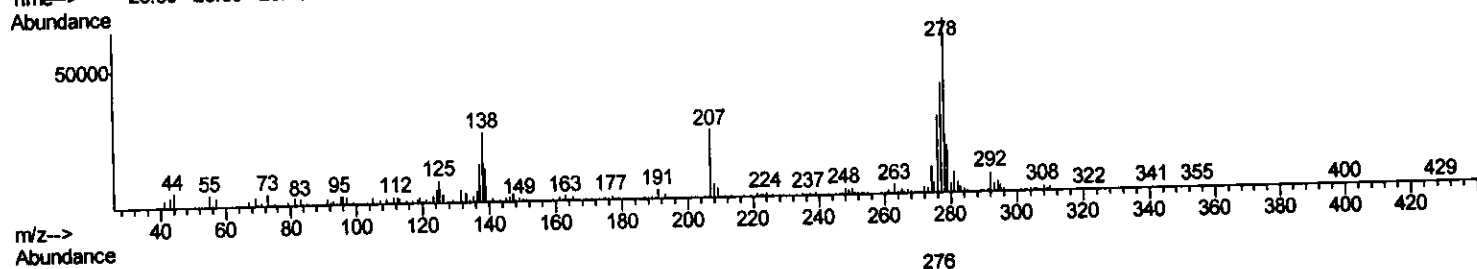
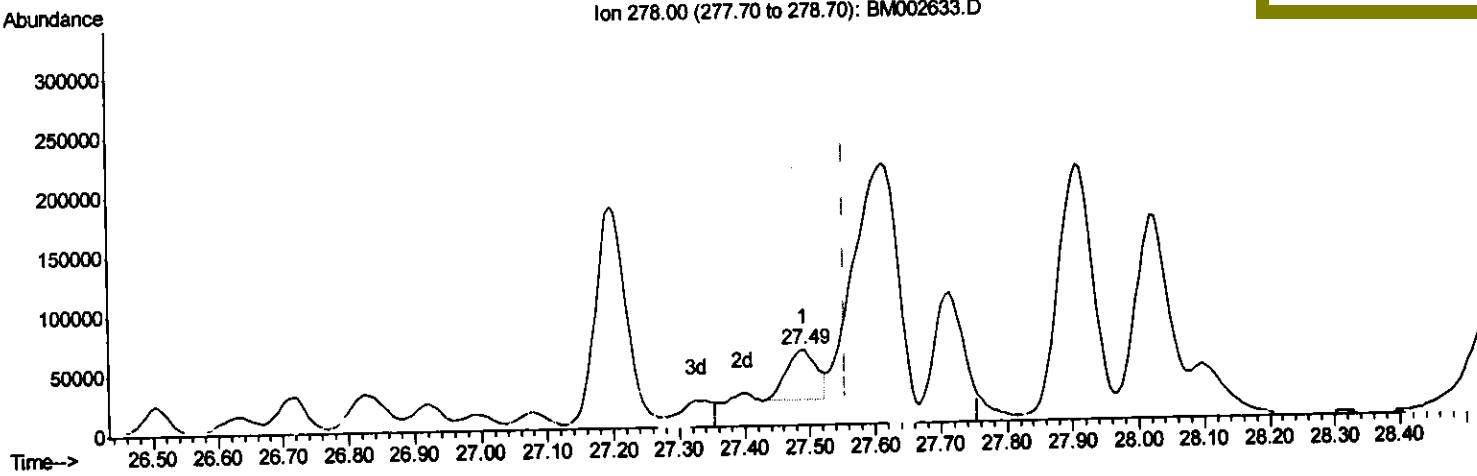
D9EA6

Quant Time: Sep 01 18:35:13 2015
Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Tue Sep 01 07:11:38 2015
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Manual Integration
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Ion 278.00 (277.70 to 278.70): BM002633.D



(28) Dibenzo(a,h)anthracene

27.491min (-0.064) 5.78ng/ul

response 134778

Ion	Exp%	Act%
278.00	100	100
139.00	20.60	19.57
279.00	23.50	27.70
0.00	0.00	0.00

Quantitation Report (Qedit)

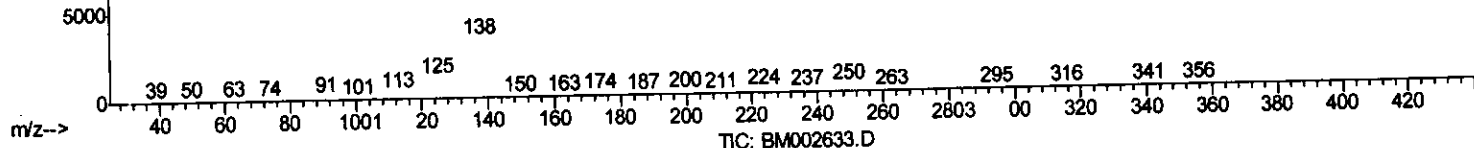
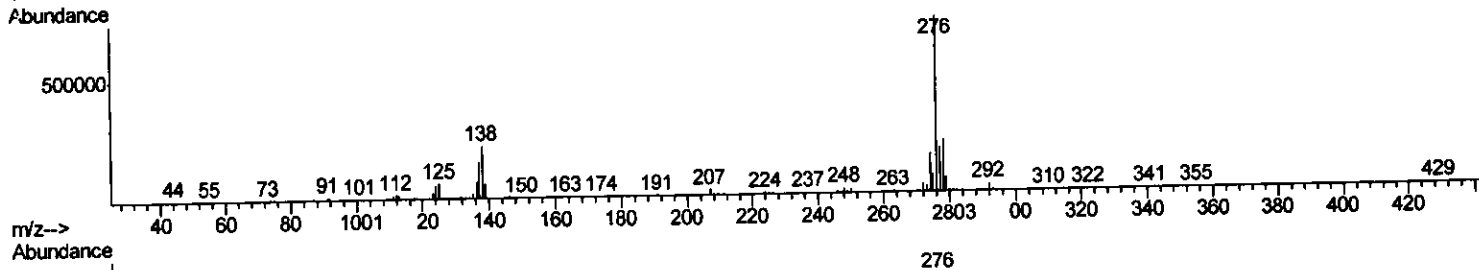
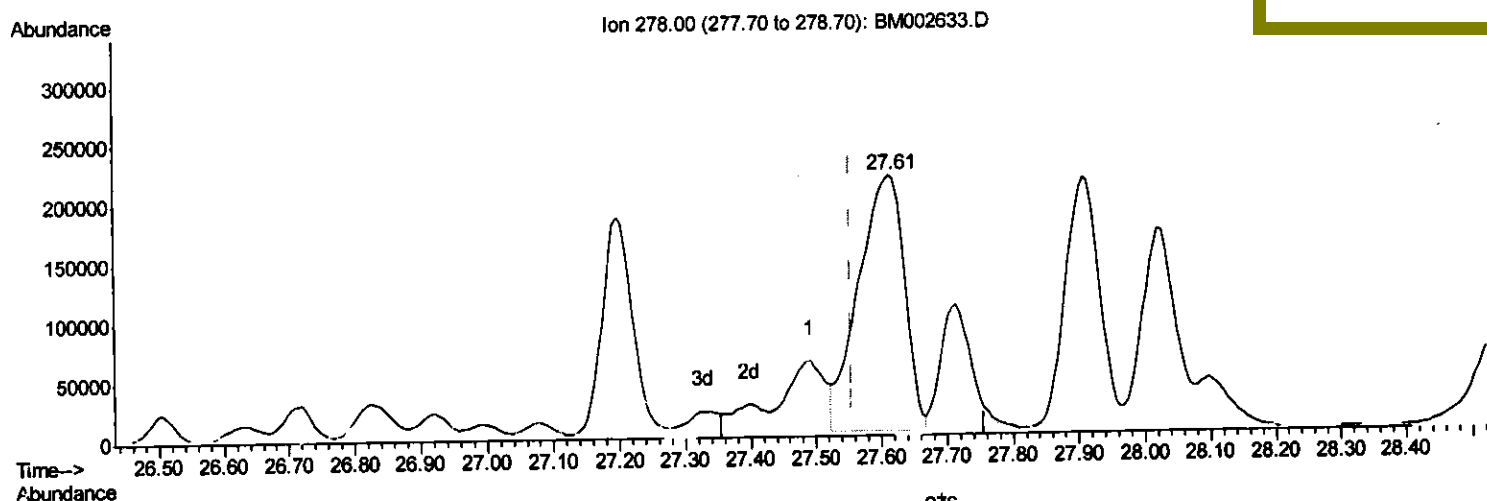
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(28) Dibenzo(a,h)anthracene

27.615min (+0.059) 44.85ng/ul m

response 1046080

> $\frac{U.H}{09/03/15}$

Ion	Exp%	Act%
278.00	100	100
139.00	20.60	27.29#
279.00	23.50	26.99
0.00	0.00	0.00

Quantitation Report (Qedit)

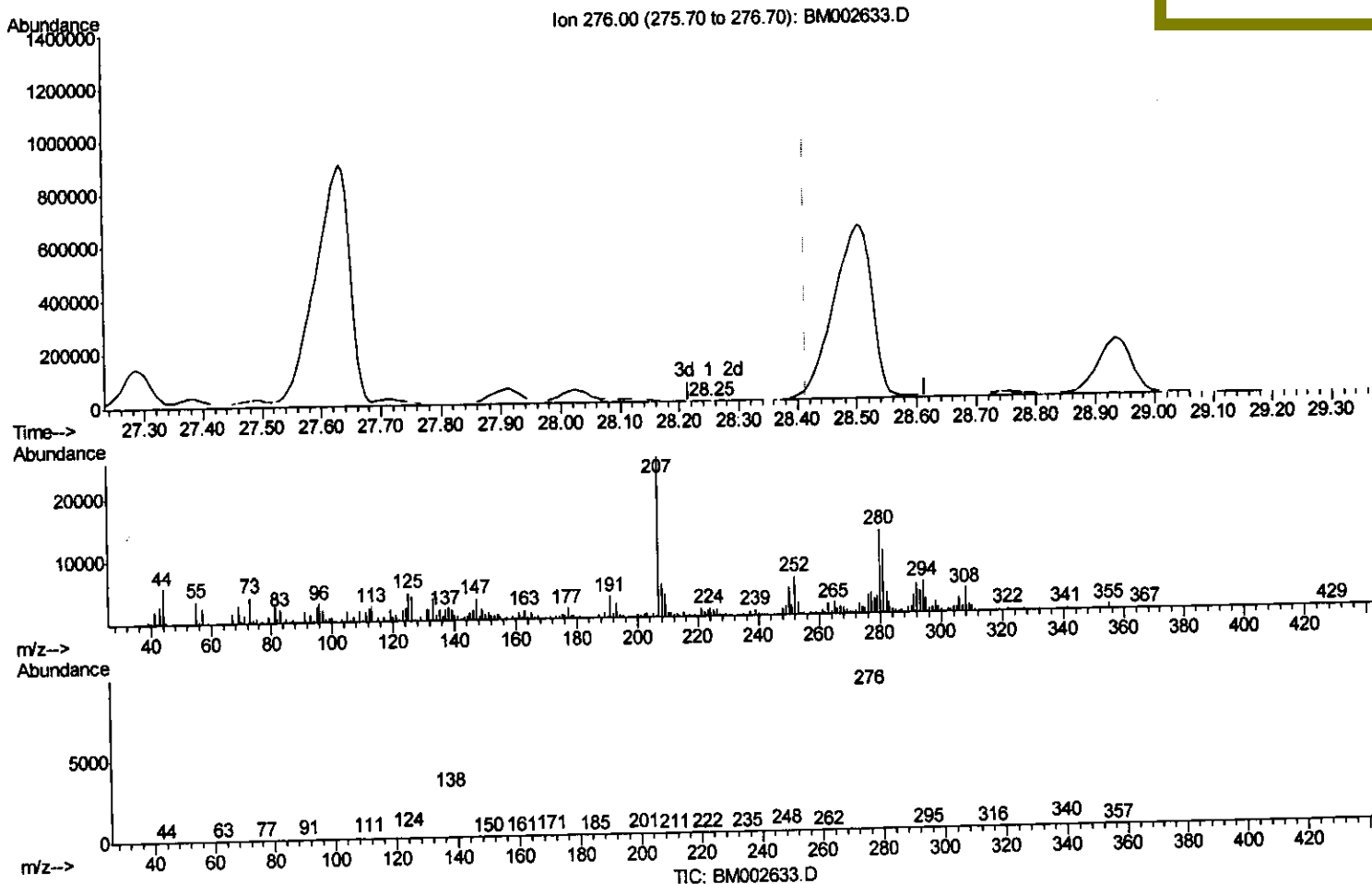
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
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 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(29) Benzo(g,h,i)perylene

28.250min (-0.165) 0.02ng/ul

response 391

Ion	Exp%	Act%
276.00	100	100
138.00	26.30	72.80#
277.00	24.00	110.30#
0.00	0.00	0.00

Quantitation Report (Qedit)

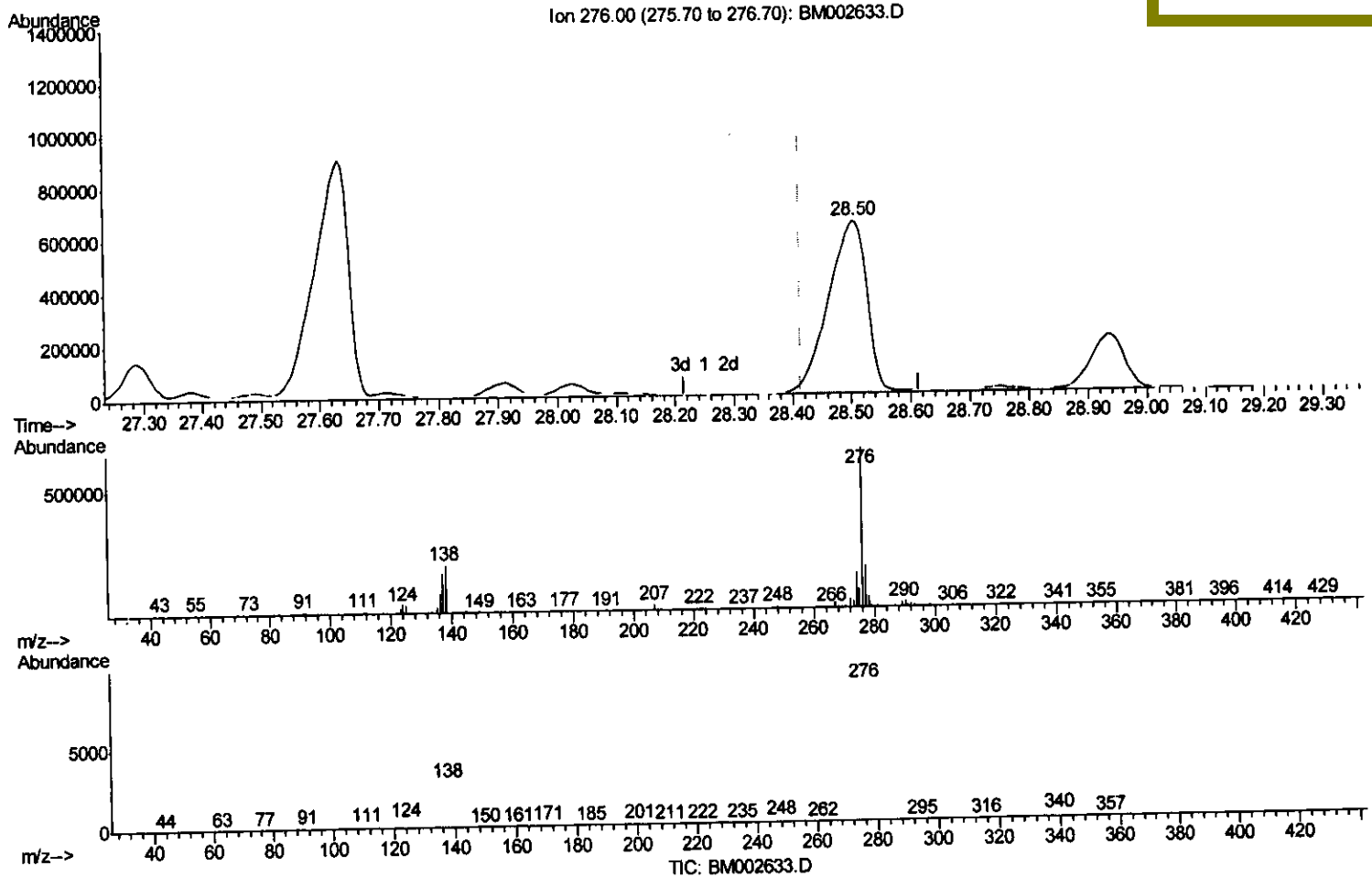
Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:35:13 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Tue Sep 01 07:11:38 2015
 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM



(29) Benzo(g,h,i)perylene

28.503min (+0.088) 125.70ng/ul m

response 2919346

Ion	Exp%	Act%
276.00	100	100
138.00	26.30	29.69
277.00	24.00	26.00
0.00	0.00	0.00

U.M
 09/03/15

Data Path : Z:\HPCHEM1\BNA_M\Data\BM083115\
 Data File : BM002633.D
 Acq On : 01 Sep 2015 17:56
 Operator : UM/IZ
 Sample : G3456-21
 Misc :
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :
 D9EA6

Quant Time: Sep 01 18:38:18 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
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 Response via : Initial Calibration

Manual Integrations
 APPROVED

MMDadoda
 9/2/2015 1:36:10 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.78	152	115206	20.00	ng/ul	0.00
2) Naphthalene-d8	11.65	136	509931	20.00	ng/ul	0.00
6) Acenaphthene-d10	15.37	164	262906	20.00	ng/ul	0.00
12) Phenanthrene-d10	18.09	188	443739	20.00	ng/ul	0.00
17) Chrysene-d12	22.18	240	331105	20.00	ng/ul	0.02
22) Perylene-d12	24.81	264	420159m	20.00	ng/ul	0.03
System Monitoring Compounds						
7) Acenaphthylene-d8	15.07	160	423917	15.77	ng/ul	0.00
10) Fluorene-d10	16.34	176	277850	14.72	ng/ul	0.00
14) Anthracene-d10	18.19	188	346933	16.21	ng/ul	0.01
18) Pyrene-d10	20.41	212	285811	19.47	ng/ul	0.01
25) Benzo(a)pyrene-d12	24.64	264	309208m	14.01	ng/ul	0.03
Target Compounds						
3) Naphthalene	11.70	128	2156192	82.85	ng/ul	99
4) 2-Methylnaphthalene	13.25	142	555718	28.50	ng/ul	98
5) 1-Methylnaphthalene	13.46	142	293055	15.20	ng/ul	99
8) Acenaphthylene	15.10	152	80275	2.85	ng/ul	98
9) Acenaphthene	15.44	153	2341962	126.37	ng/ul	99
11) Fluorene	16.40	166	2199949	103.60	ng/ul	99
13) Phenanthrene	18.15	178	11995459	468.14	ng/ul	94
15) Anthracene	18.23	178	4057634	156.25	ng/ul	99
16) Fluoranthene	20.10	202	11520781	397.13	ng/ul#	91
19) Pyrene	20.46	202	9897165	510.24	ng/ul#	91
20) Benzo(a)anthracene	22.16	228	5778538	291.84	ng/ul	96
21) Chrysene	22.23	228	5207837	281.21	ng/ul	95
23) Benzo(b)fluoranthene	24.02	252	7239422m	285.01	ng/ul	
24) Benzo(k)fluoranthene	24.06	252	2810095m	116.74	ng/ul	
26) Benzo(a)pyrene	24.72	252	5082794m	209.50	ng/ul	
27) Indeno(1,2,3-cd)pyrene	27.63	276	3621940m	129.81	ng/ul	
28) Dibenzo(a,h)anthracene	27.61	278	1046080m	44.85	ng/ul	
29) Benzo(g,h,i)perylene	28.50	276	2919346m	125.70	ng/ul	

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(#) = qualifier out of range (m) = manual integration (+) = signals summed