

Data Path : Z:\HPCHEM1\BNA_M\Data\BM061215\
 Data File : BM001665.D
 Acq On : 12 Jun 2015 07:15
 Operator : TP/IZ
 Sample : G2449-03 5X
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 BNA_M
 ClientSampleId :

Quant Time: Jun 12 15:04:09 2015
 Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SIM-BM061215.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jun 12 03:22:19 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.70	152	24813	5.00	ng	0.00
6) Naphthalene-d8	10.47	136	97192	5.00	ng	0.00
12) Acenaphthene-d10	14.34	164	48864	5.00	ng	0.00
18) Phenanthrene-d10	17.06	188	57263	5.00	ng	0.00
25) Chrysene-d12	21.27	240	68751	5.00	ng	0.00
32) Perylene-d12	23.50	264	56915	5.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	5.27	112	14147	2.41	ng	0.00
5) Phenol-d6	6.84	99	20678	2.80	ng	0.00
7) Nitrobenzene-d5	8.85	82	12995	1.75	ng	0.00
13) 2,4,6-Tribromophenol	15.83	330	4802	2.70	ng	0.00
14) 2-Fluorobiphenyl	12.96	172	29299	1.72	ng	0.00
27) Terphenyl-d14	19.71	244	19269	1.86	ng	-0.01

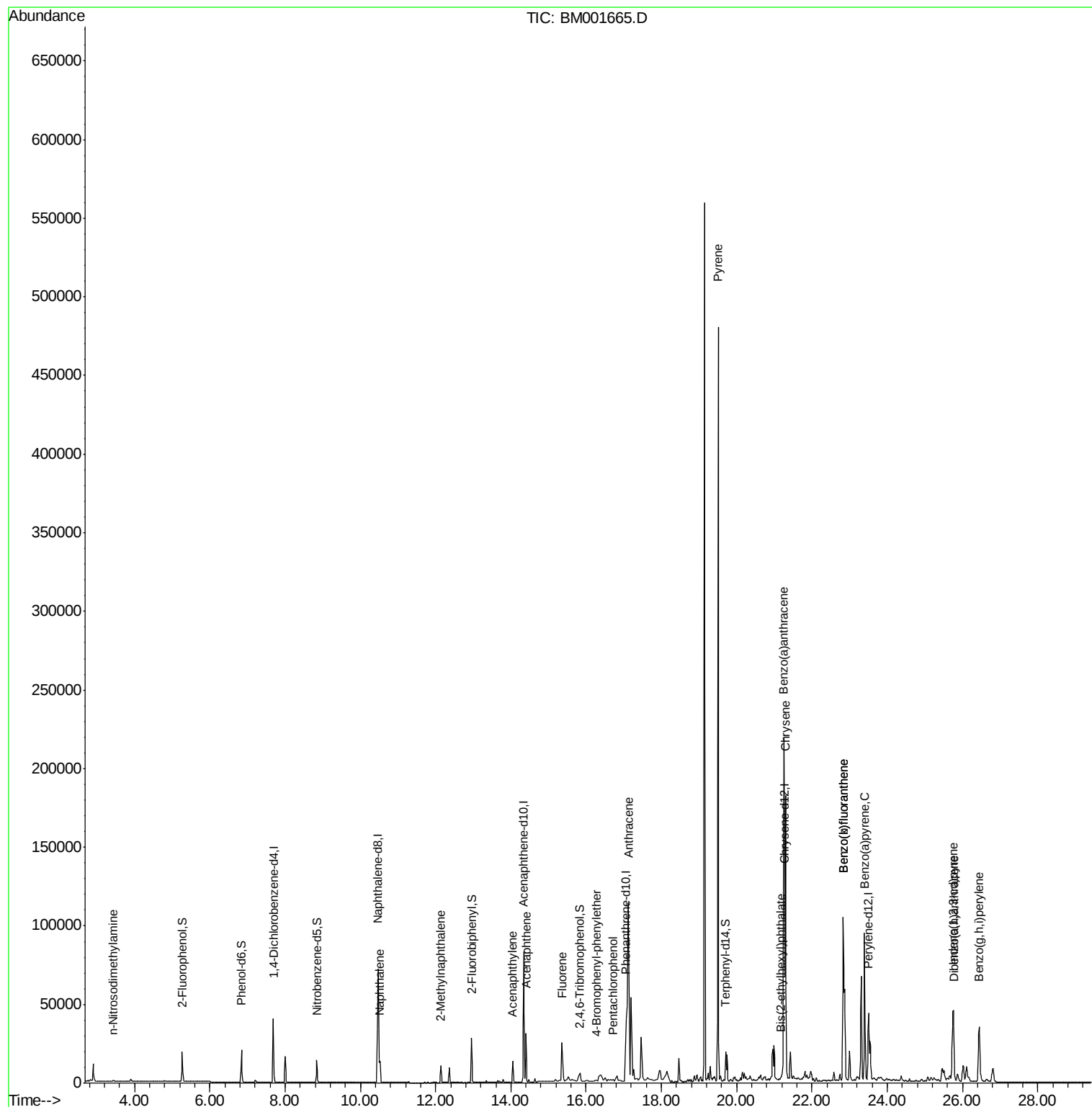
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) n-Nitrosodimethylamine	3.43	42	268	0.06	ng	# 1
9) Naphthalene	10.52	128	23466	1.00	ng	100
11) 2-Methylnaphthalene	12.14	142	7965	0.52	ng	# 86
15) Acenaphthylene	14.05	152	18396	0.81	ng	99
16) Acenaphthene	14.40	154	16068	1.11	ng	99
17) Fluorene	15.36	166	24061	1.80	ng	# 96
19) 4-Bromophenyl-phenylether	16.27	248	2	0.08	ng	# 1
21) Pentachlorophenol	16.72	266	41	0.31	ng	# 70
22) Phenanthrene	17.12	178	233657	Below Cal		# 99
23) Anthracene	17.12	178	317541	14.30	ng	# 82
24) Fluoranthene	19.14	202	499790	Below Cal		99
26) Pyrene	19.50	202	453721	19.22	ng	# 96
28) Benzo(a)anthracene	21.25	228	215371	9.97	ng	97
29) Chrysene	21.30	228	146434	7.08	ng	98
30) Bis(2-ethylhexyl)phthalate	21.18	149	1029	0.29	ng	# 97
31) Indeno(1,2,3-cd)pyrene	25.75	276	71547	4.41	ng	95
33) Benzo(b)fluoranthene	22.82	252	234984	12.66	ng	99
34) Benzo(k)fluoranthene	22.82	252	234984	13.03	ng	99
35) Benzo(a)pyrene	23.40	252	126805	8.20	ng	98
36) Dibenzo(a,h)anthracene	25.76	278	18039	1.39	ng	96
37) Benzo(g,h,i)perylene	26.44	276	68637	5.19	ng	99

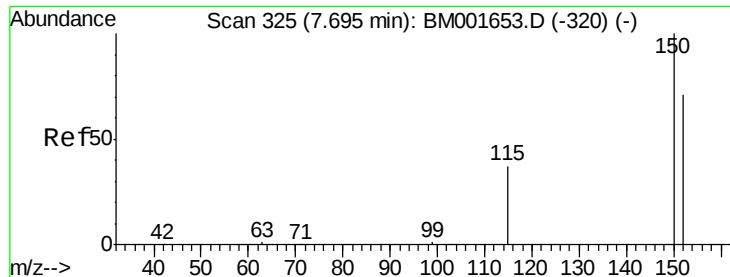
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA_M\Data\BM061215\
Data File : BM001665.D
Acq On : 12 Jun 2015 07:15
Operator : TP/IZ
Sample : G2449-03 5X
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_M
ClientSampleId :

Quant Time: Jun 12 15:04:09 2015
Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SIM-BM061215.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jun 12 03:22:19 2015
Response via : Initial Calibration



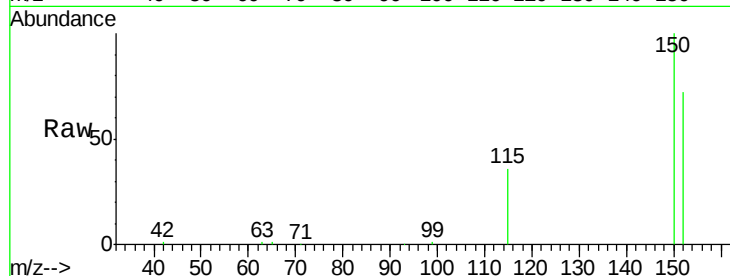


#1

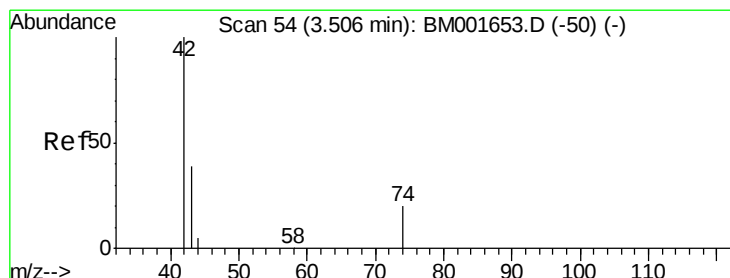
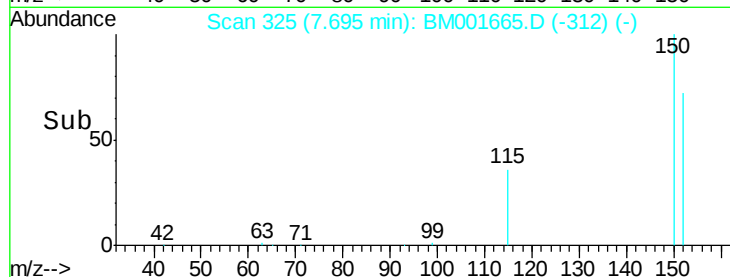
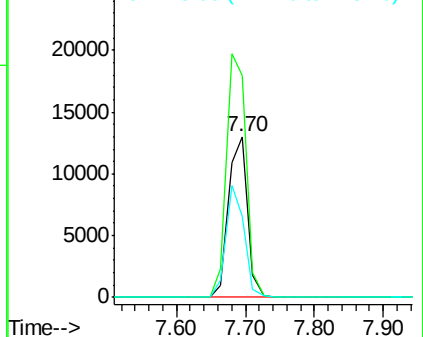
1,4-Dichlorobenzene-d4
Concen: 5.00 ng
RT: 7.70 min Scan# 325
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

Instrument :
BNA_M
ClientSampled :

Tgt Ion:152 Resp: 24813
Ion Ratio Lower Upper
152 100
150 138.2 112.2 168.2
115 50.3 41.7 62.5



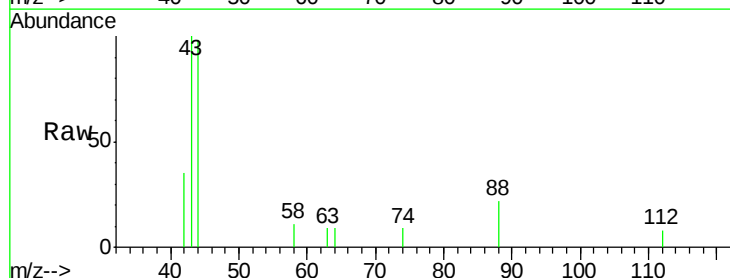
Abundance Ion 152.00 (151.70 to 152.70): E
Ion 150.00 (149.70 to 150.70): E
Ion 115.00 (114.70 to 115.70): E



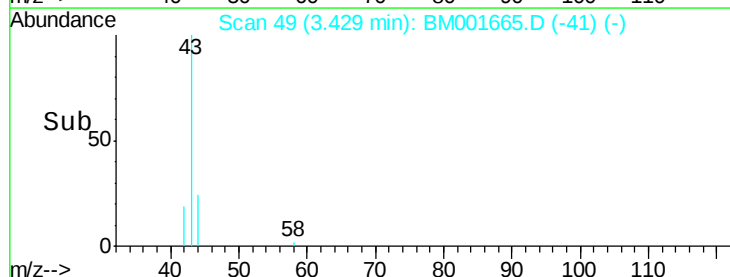
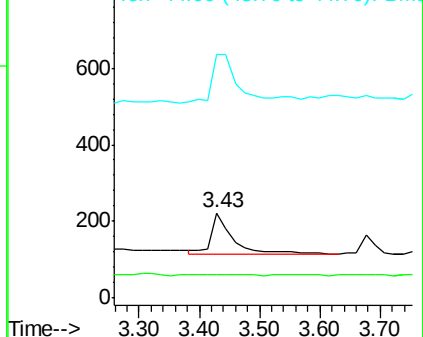
#3

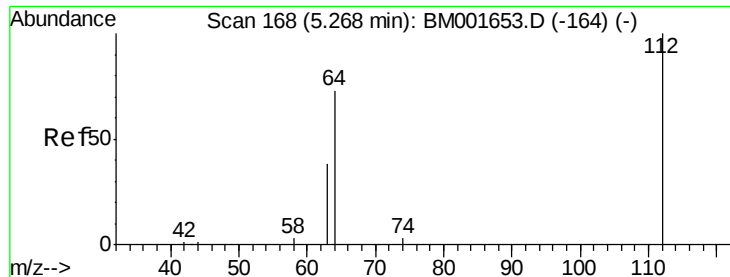
n-Nitrosodimethylamine
Concen: 0.06 ng
RT: 3.43 min Scan# 49
Delta R.T. -0.08 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

Tgt Ion: 42 Resp: 268
Ion Ratio Lower Upper
42 100
74 0.0 75.7 113.5#
44 131.0 6.7 10.1#



Abundance Ion 42.00 (41.70 to 42.70): BM0
Ion 74.00 (73.70 to 74.70): BM0
Ion 44.00 (43.70 to 44.70): BM0





#4

2-Fluorophenol

Concen: 2.41 ng

RT: 5.27 min Scan# 168

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :

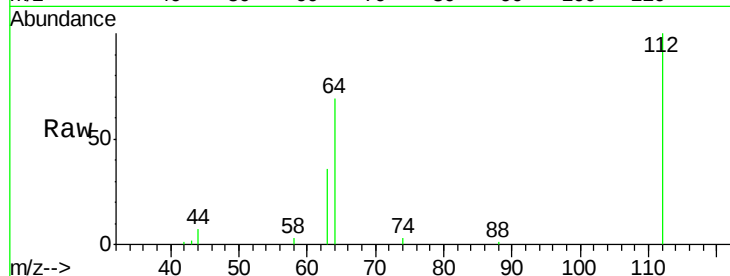
Tgt Ion: 112 Resp: 14147

Ion Ratio Lower Upper

112 100

64 69.0 55.5 83.3

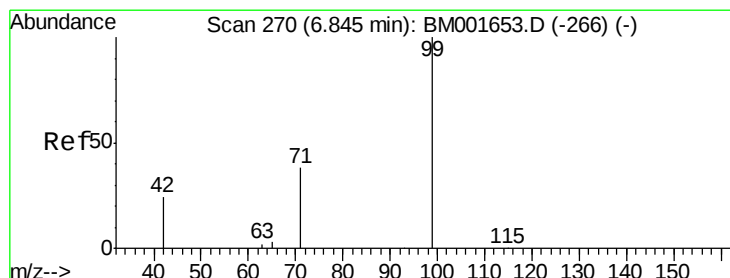
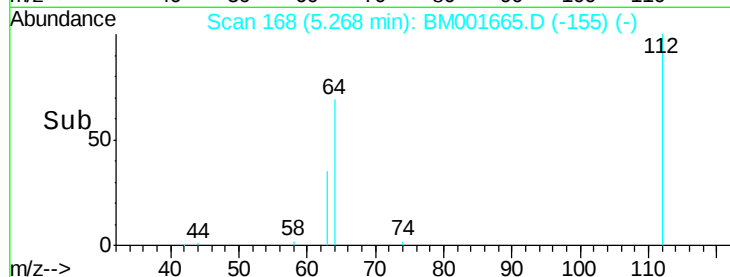
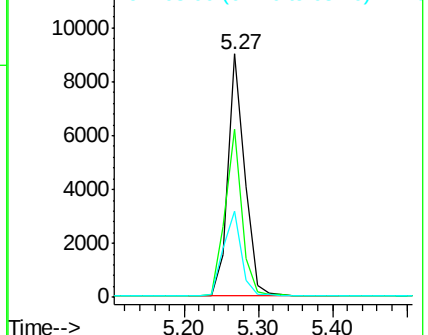
63 37.6 29.9 44.9



Abundance Ion 112.00 (111.70 to 112.70): B

Ion 64.00 (63.70 to 64.70): BM

Ion 63.00 (62.70 to 63.70): BM



#5

Phenol-d6

Concen: 2.80 ng

RT: 6.84 min Scan# 270

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

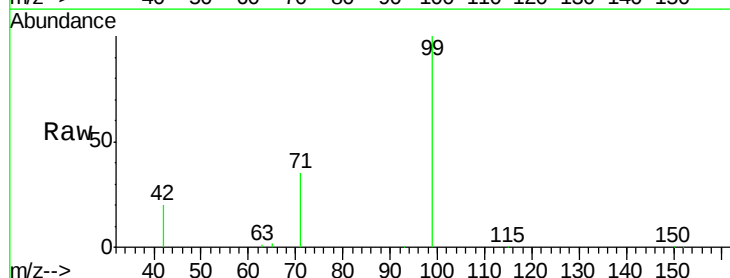
Tgt Ion: 99 Resp: 20678

Ion Ratio Lower Upper

99 100

42 24.2 21.6 32.4

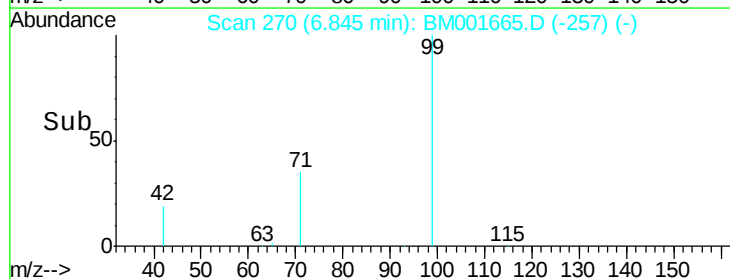
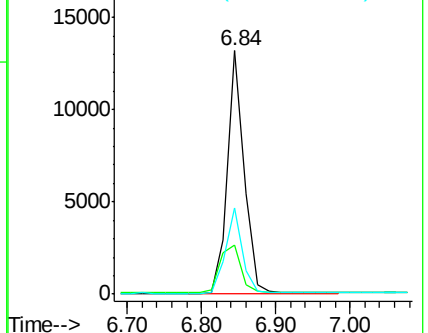
71 34.9 28.7 43.1

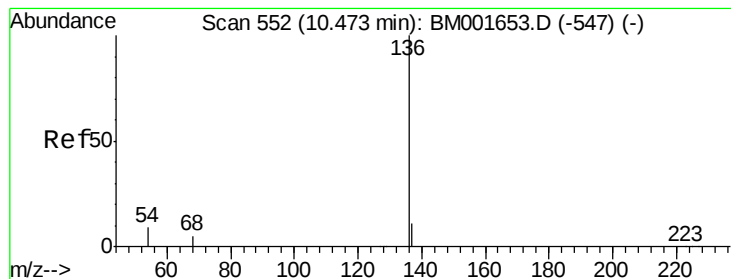


Abundance Ion 99.00 (98.70 to 99.70): BM

Ion 42.00 (41.70 to 42.70): BM

Ion 71.00 (70.70 to 71.70): BM





#6

Naphthalene-d8

Concen: 5.00 ng

RT: 10.47 min Scan# 552

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :

Tgt Ion: 136 Resp: 97192

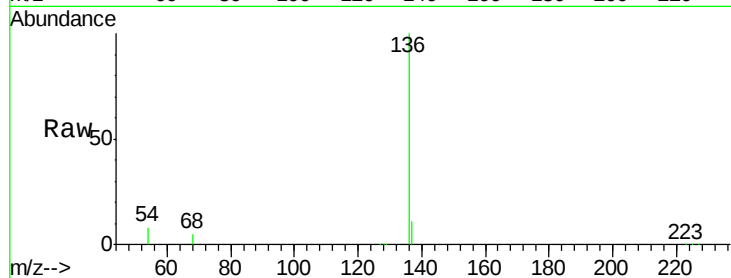
Ion Ratio Lower Upper

136 100

137 11.0 8.7 13.1

54 7.8 6.9 10.3

68 5.3 4.4 6.6

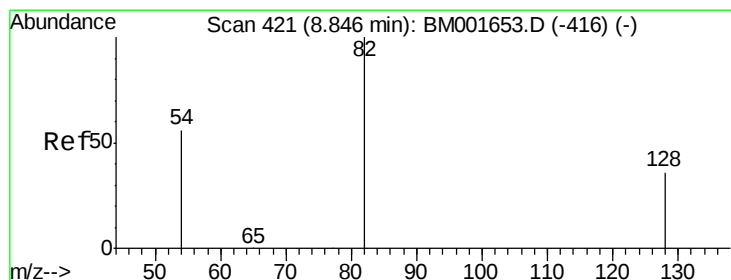
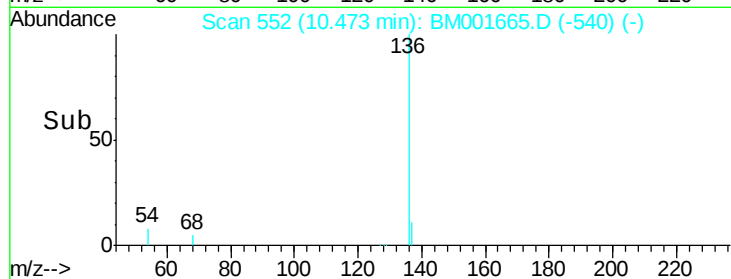
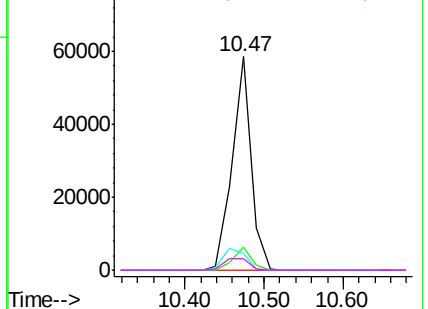


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BM

Ion 68.00 (67.70 to 68.70): BM



#7

Nitrobenzene-d5

Concen: 1.75 ng

RT: 8.85 min Scan# 421

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

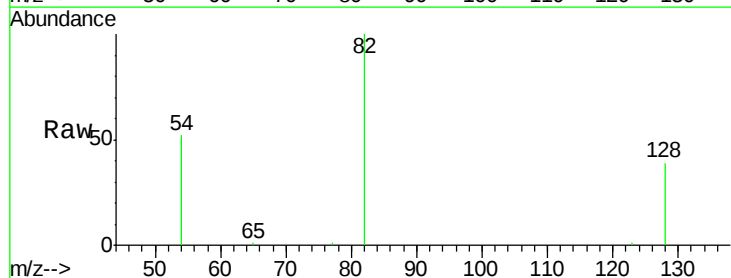
Tgt Ion: 82 Resp: 12995

Ion Ratio Lower Upper

82 100

128 38.9 29.7 44.5

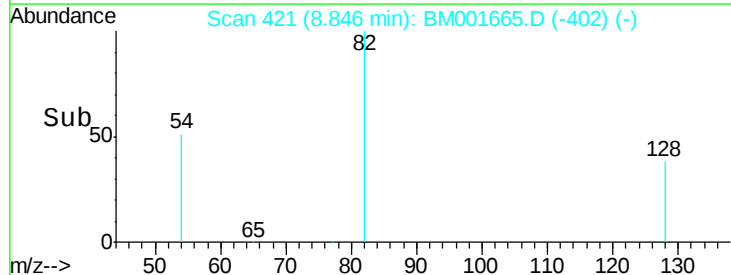
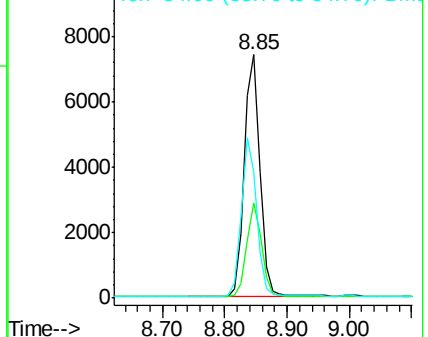
54 51.6 45.1 67.7

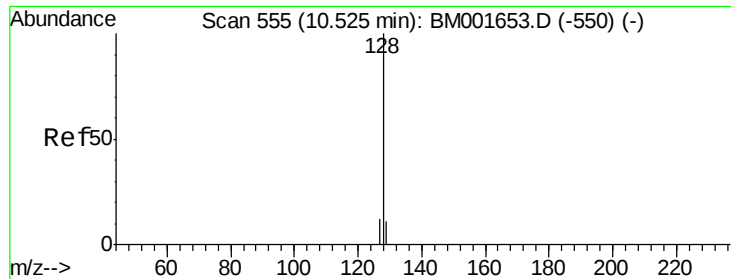


Abundance Ion 82.00 (81.70 to 82.70): BM

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BM





#9

Naphthalene

Concen: 1.00 ng

RT: 10.52 min Scan# 555

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :

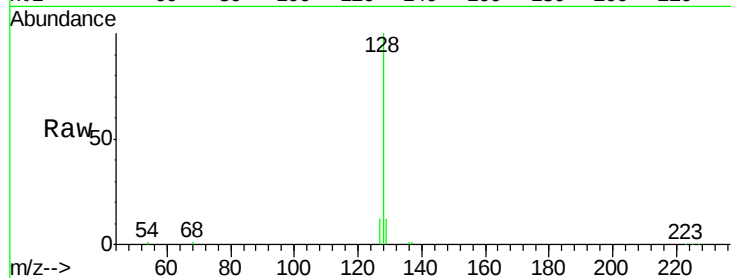
Tgt Ion:128 Resp: 23466

Ion Ratio Lower Upper

128 100

129 12.0 9.4 14.2

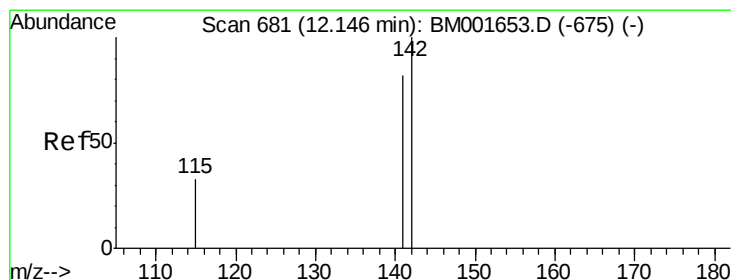
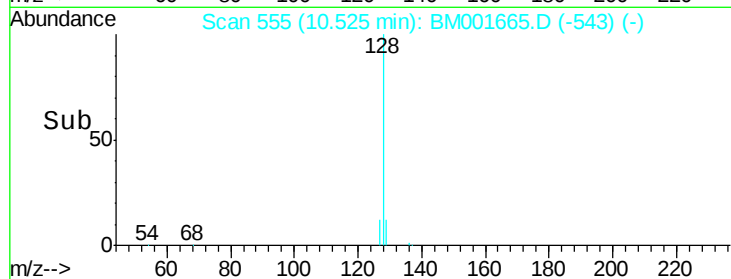
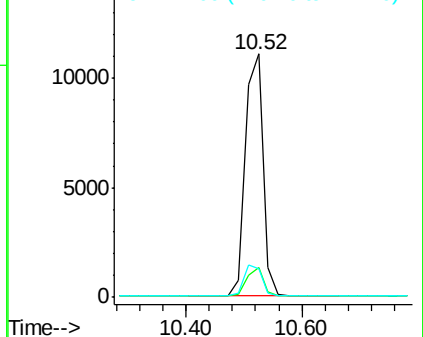
127 12.0 9.7 14.5



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#11

2-Methylnaphthalene

Concen: 0.52 ng

RT: 12.14 min Scan# 680

Delta R.T. -0.01 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

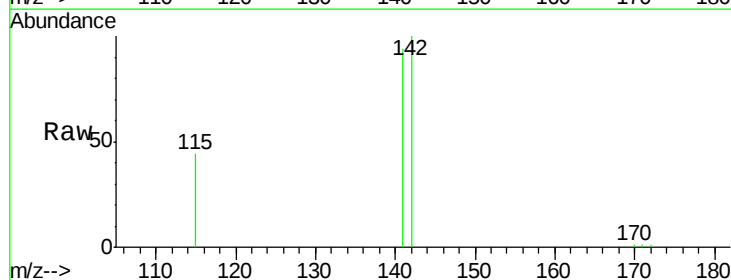
Tgt Ion:142 Resp: 7965

Ion Ratio Lower Upper

142 100

141 93.9 65.8 98.6

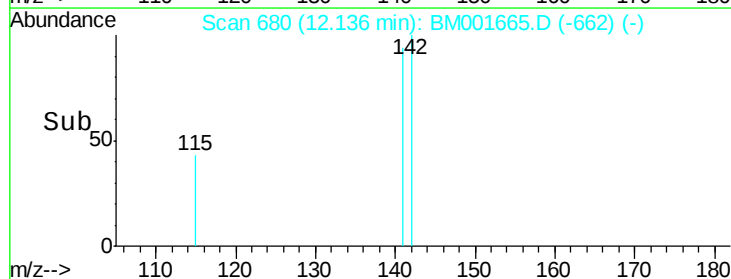
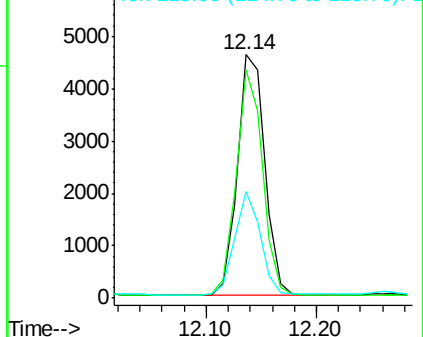
115 43.8 27.0 40.6#

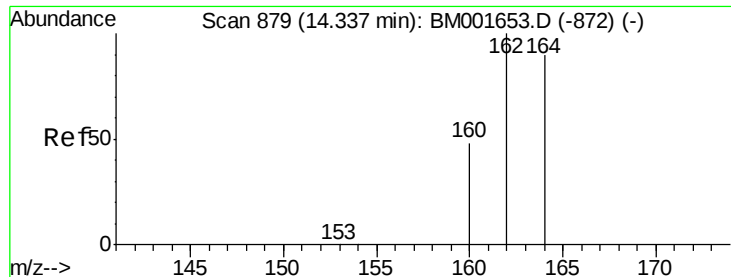


Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E

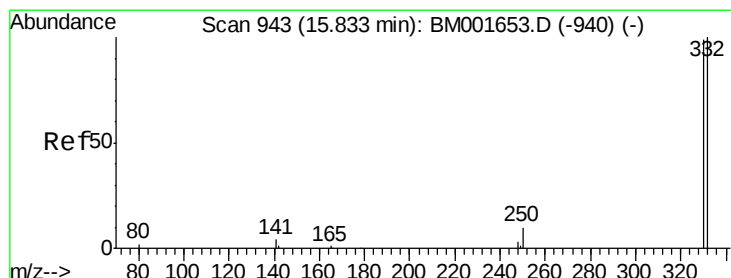
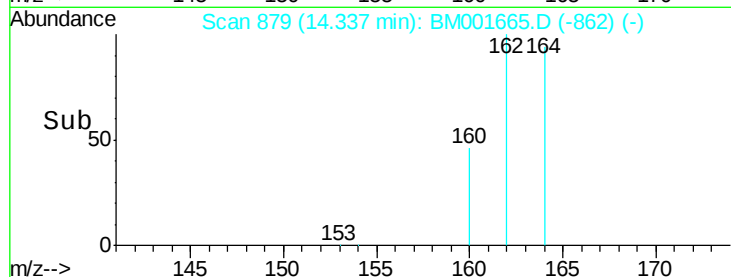
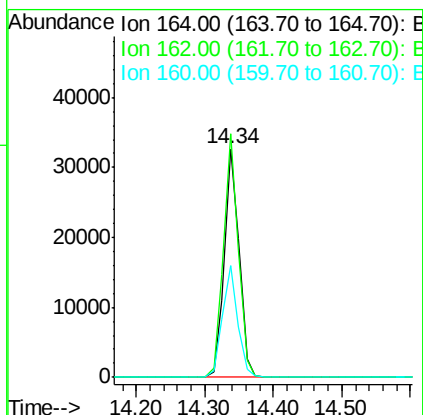
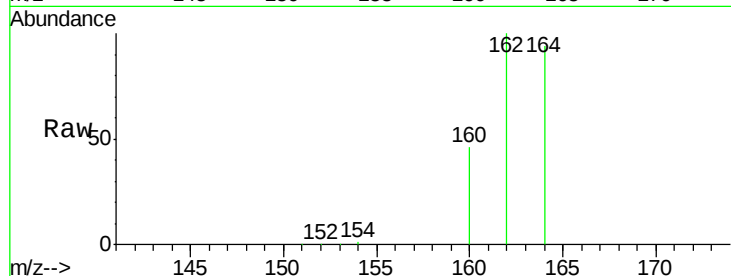




#12
Acenaphthene-d10
Concen: 5.00 ng
RT: 14.34 min Scan# 879
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

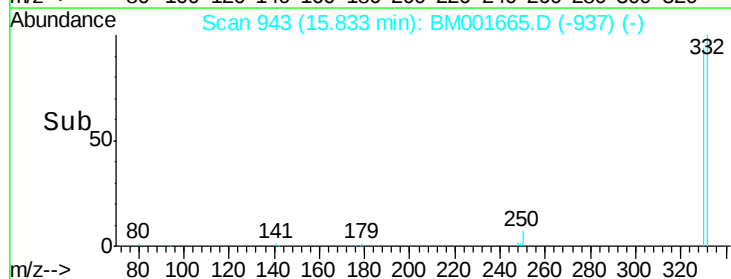
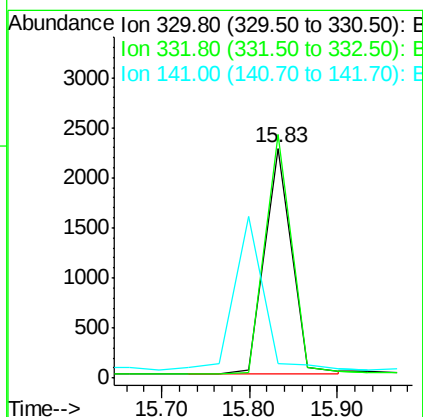
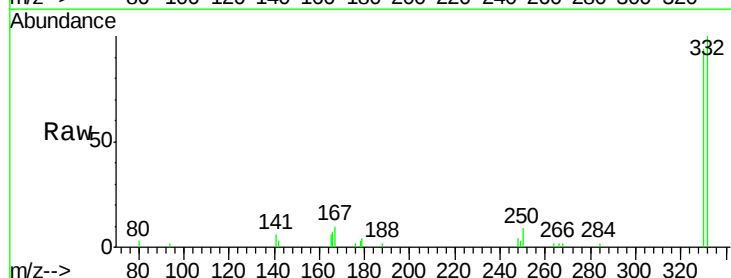
Instrument :
BNA_M
ClientSampleId :

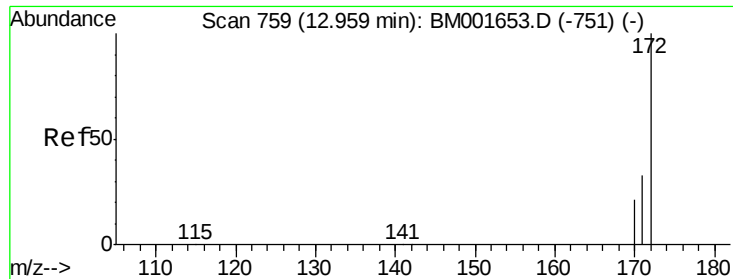
Tgt Ion:164 Resp: 48864
Ion Ratio Lower Upper
164 100
162 106.6 89.0 133.4
160 48.9 42.6 63.8



#13
2,4,6-Tribromophenol
Concen: 2.70 ng
RT: 15.83 min Scan# 943
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

Tgt Ion:330 Resp: 4802
Ion Ratio Lower Upper
330 100
332 105.4 80.6 120.8
141 0.0 0.0 0.0

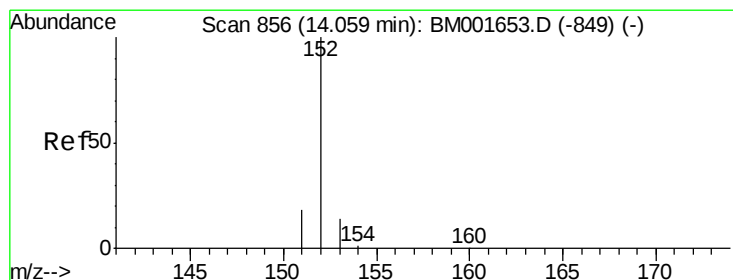
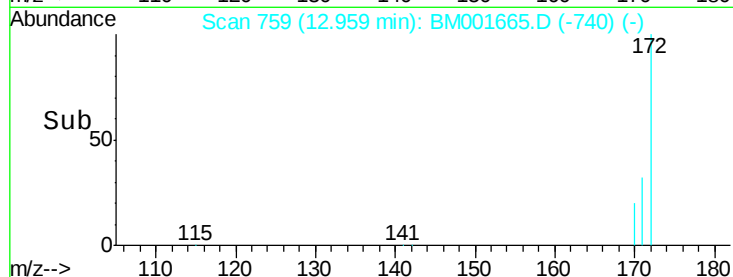
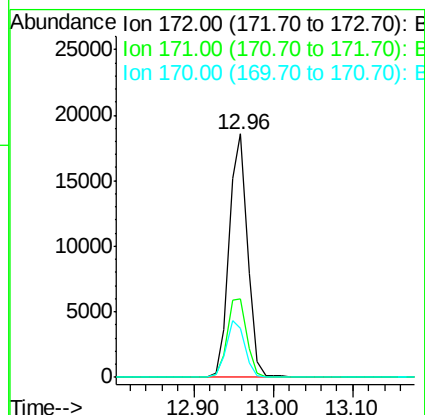
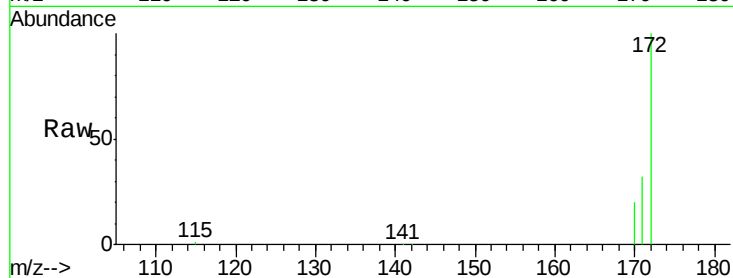




#14
2-Fluorobiphenyl
Concen: 1.72 ng
RT: 12.96 min Scan# 759
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

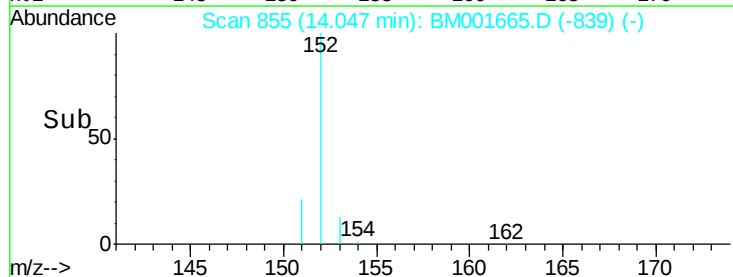
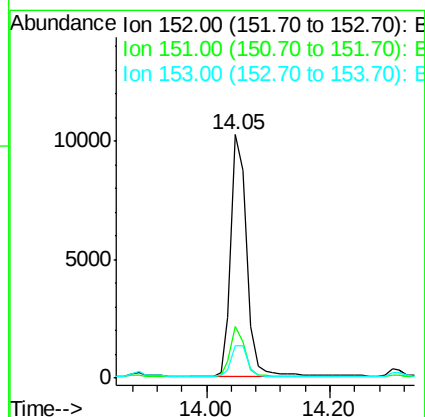
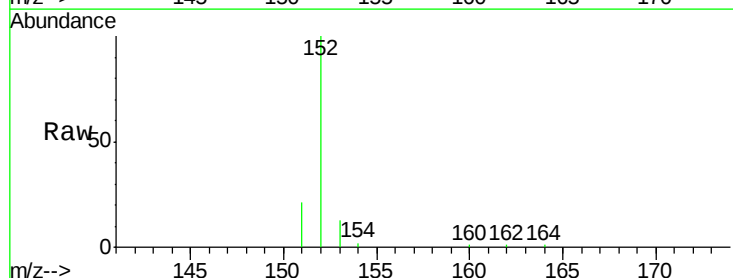
Instrument :
BNA_M
ClientSampleId :

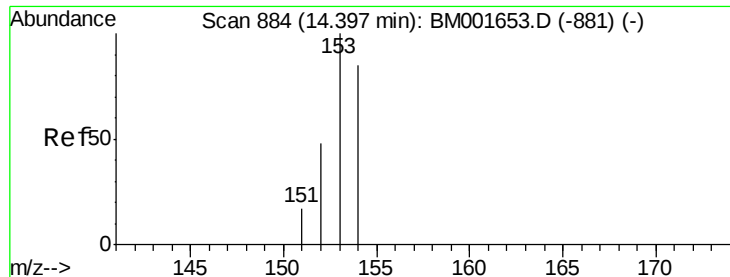
Tgt Ion:172 Resp: 29299
Ion Ratio Lower Upper
172 100
171 32.4 26.6 40.0
170 20.1 17.1 25.7



#15
Acenaphthylene
Concen: 0.81 ng
RT: 14.05 min Scan# 855
Delta R.T. -0.01 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

Tgt Ion:152 Resp: 18396
Ion Ratio Lower Upper
152 100
151 19.3 15.5 23.3
153 13.9 10.2 15.4

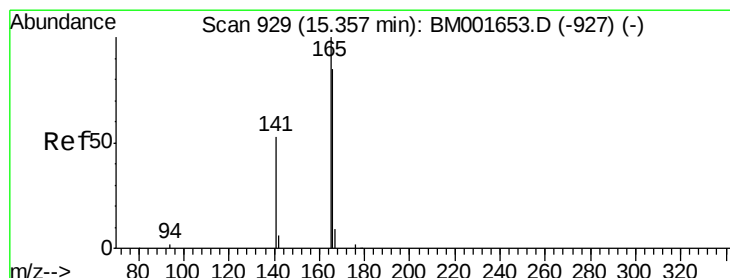
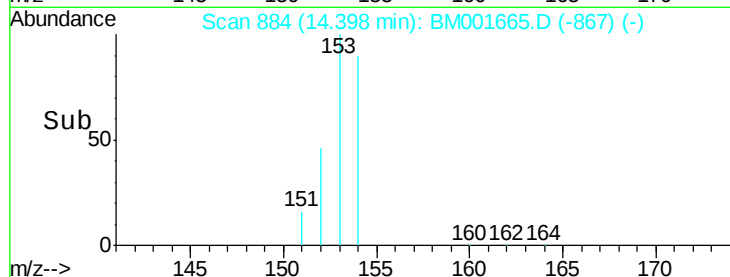
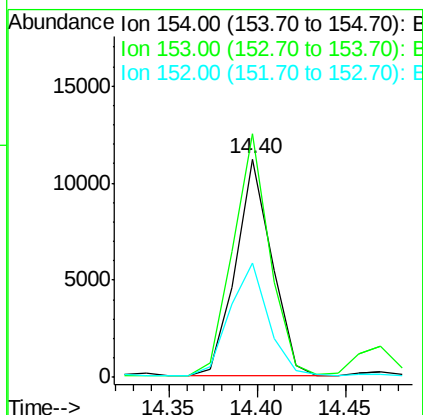
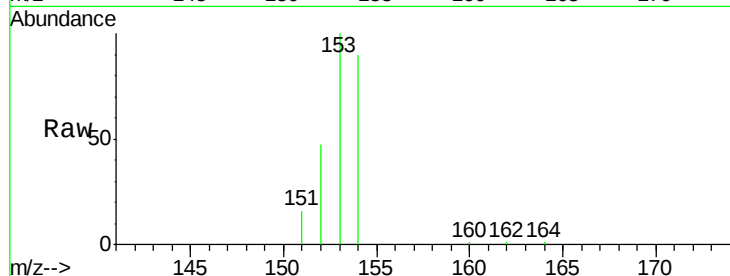




#16
Acenaphthene
Concen: 1.11 ng
RT: 14.40 min Scan# 884
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

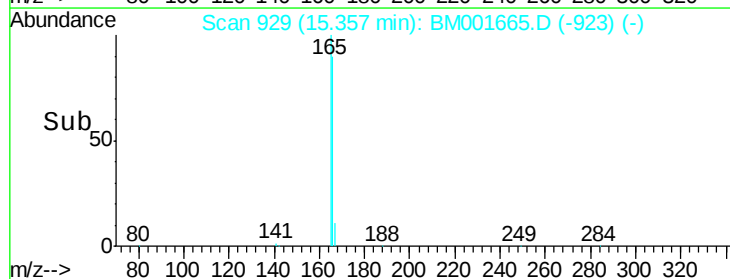
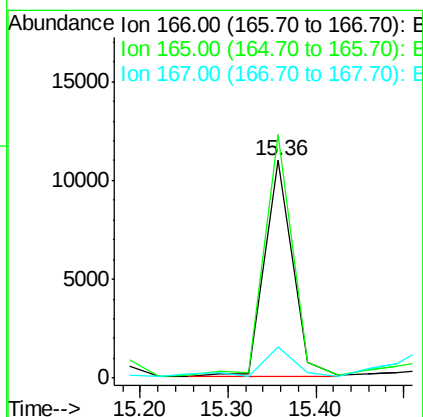
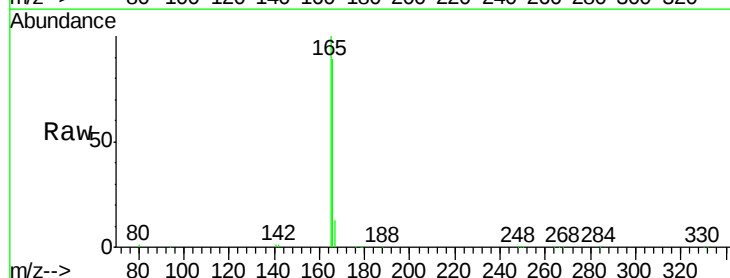
Instrument :
BNA_M
ClientSampleId :

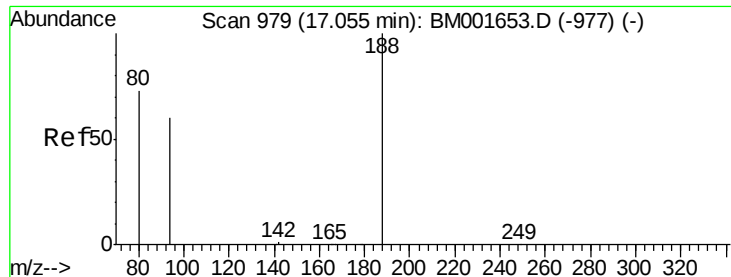
Tgt Ion:154 Resp: 16068
Ion Ratio Lower Upper
154 100
153 113.0 91.0 136.6
152 55.1 43.8 65.8



#17
Fluorene
Concen: 1.80 ng
RT: 15.36 min Scan# 929
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

Tgt Ion:166 Resp: 24061
Ion Ratio Lower Upper
166 100
165 111.0 90.7 136.1
167 18.3 9.4 14.0#

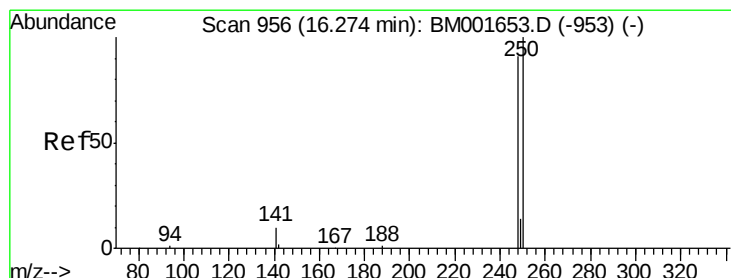
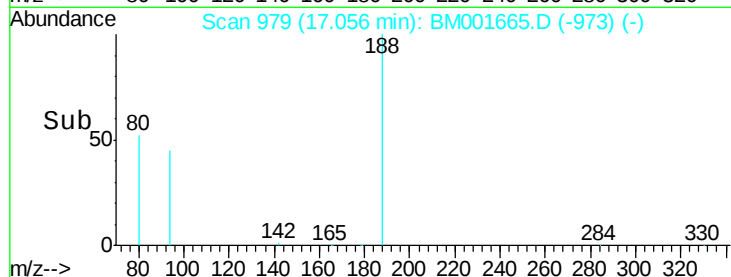
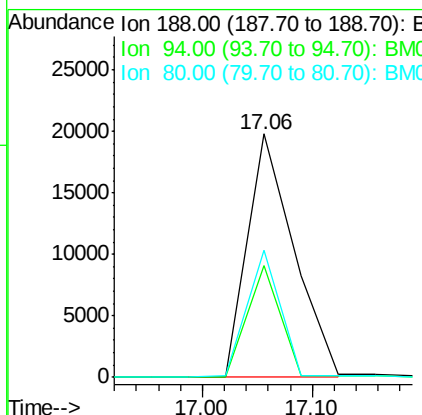
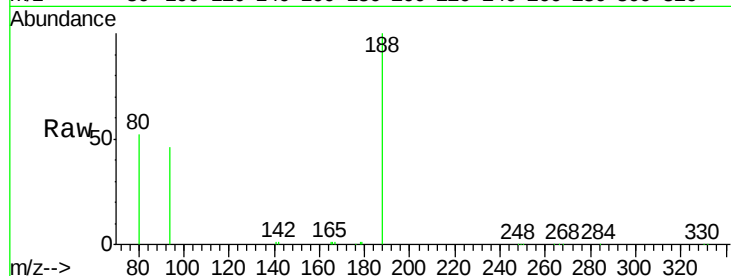




#18
Phenanthrene-d10
Concen: 5.00 ng
RT: 17.06 min Scan# 979
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

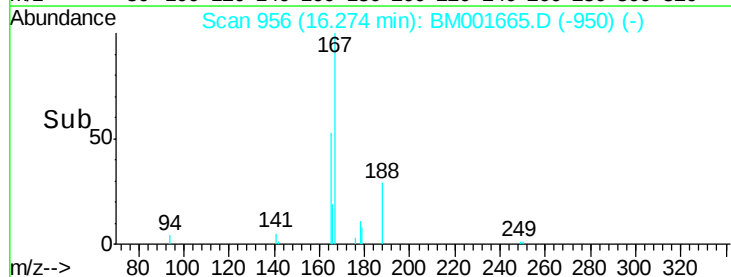
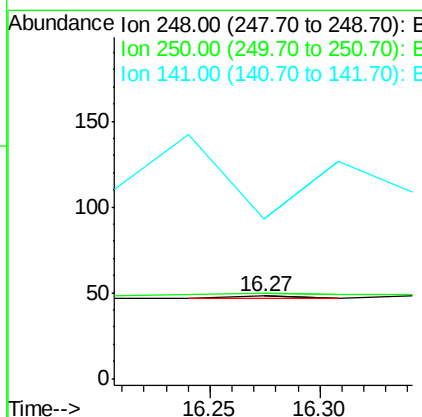
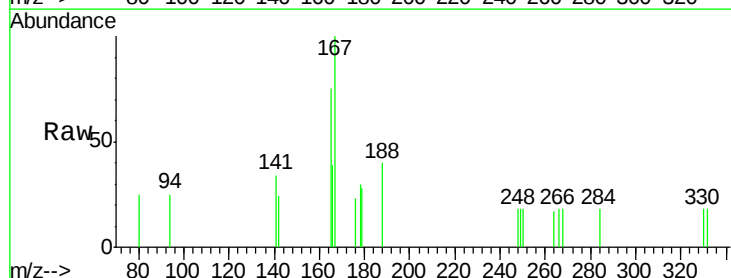
Instrument :
BNA_M
ClientSampleId :

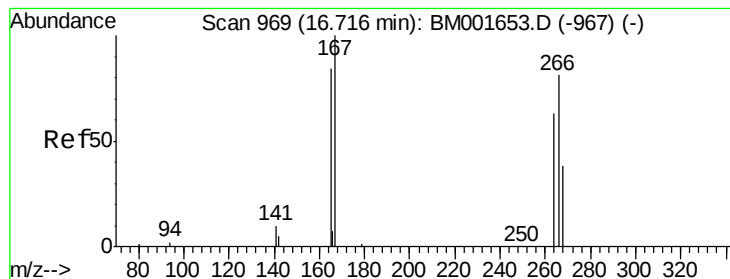
Tgt Ion:188 Resp: 57263
Ion Ratio Lower Upper
188 100
94 45.7 48.3 72.5#
80 52.5 58.6 88.0#



#19
4-Bromophenyl-phenylether
Concen: 0.08 ng
RT: 16.27 min Scan# 956
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

Tgt Ion:248 Resp: 2
Ion Ratio Lower Upper
248 100
250 400.0 87.5 131.3#
141 0.0 0.0 0.0





#21

Pentachlorophenol

Concen: 0.31 ng

RT: 16.72 min Scan# 969

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :

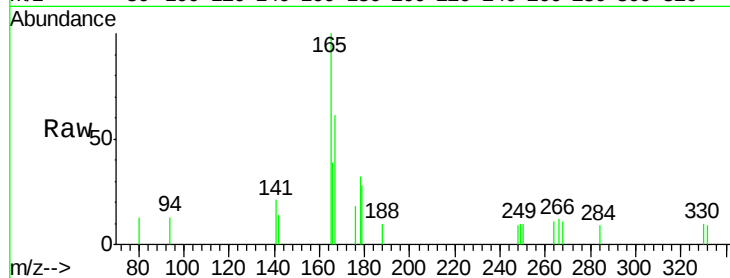
Tgt Ion:266 Resp: 41

Ion Ratio Lower Upper

266 100

268 91.8 43.3 64.9#

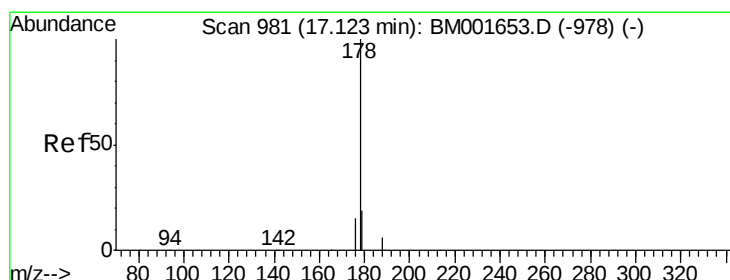
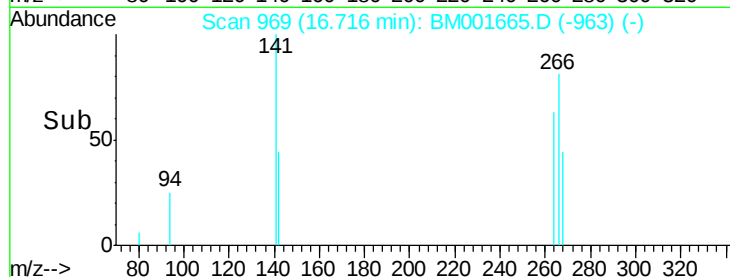
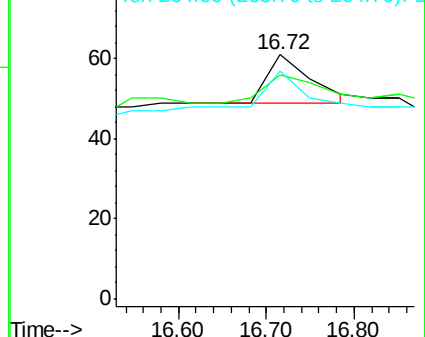
264 93.4 64.5 96.7



Abundance Ion 265.70 (265.40 to 266.40): E

Ion 268.00 (267.70 to 268.70): E

Ion 264.00 (263.70 to 264.70): E



#22

Phenanthrene

Concen: Below Cal

RT: 17.12 min Scan# 981

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

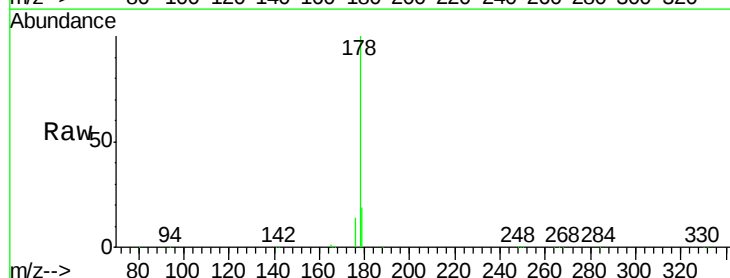
Tgt Ion:178 Resp: 233657

Ion Ratio Lower Upper

178 100

176 17.5 0.0 0.0#

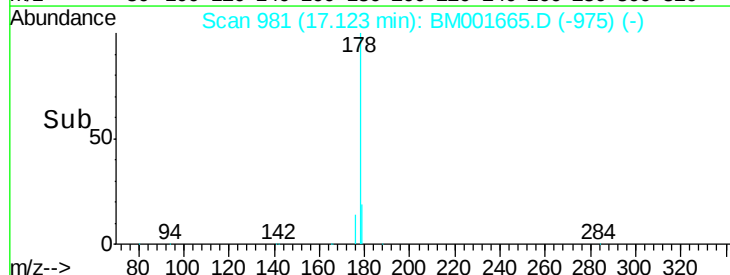
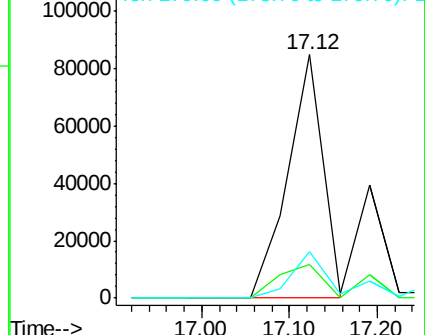
179 18.2 14.2 21.2

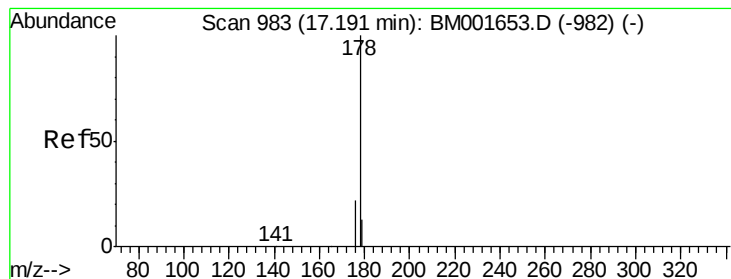


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#23

Anthracene

Concen: 14.30 ng

RT: 17.12 min Scan# 981

Delta R.T. -0.07 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :

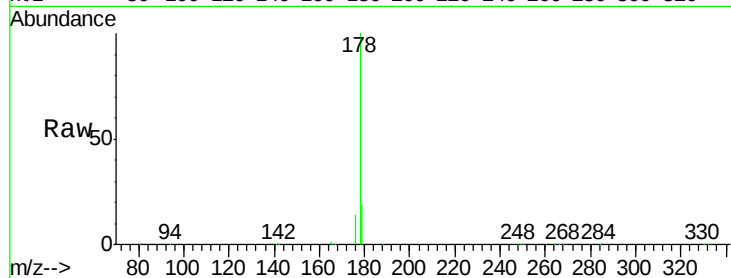
Tgt Ion:178 Resp: 317541

Ion Ratio Lower Upper

178 100

176 18.4 0.0 0.0#

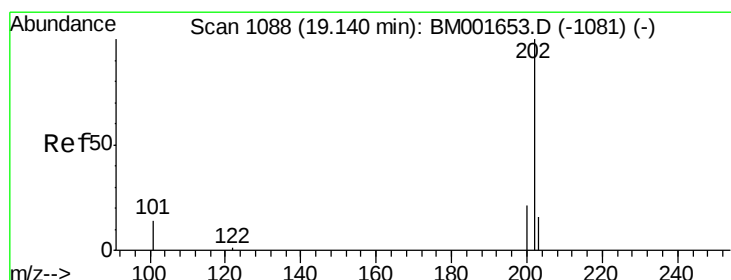
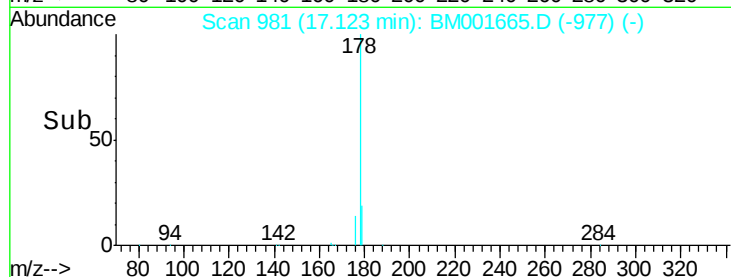
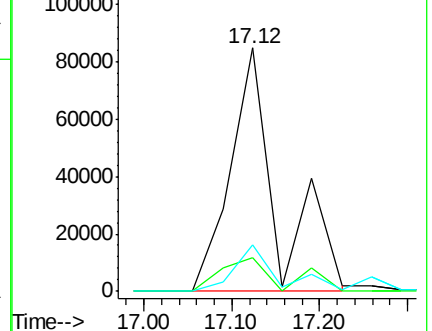
179 17.3 21.4 32.0#



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#24

Fluoranthene

Concen: Below Cal

RT: 19.14 min Scan# 1088

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

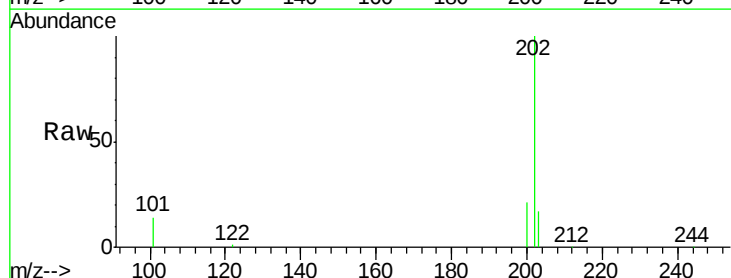
Tgt Ion:202 Resp: 499790

Ion Ratio Lower Upper

202 100

101 13.9 10.8 16.2

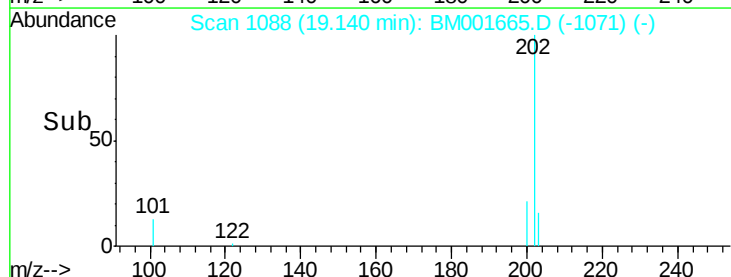
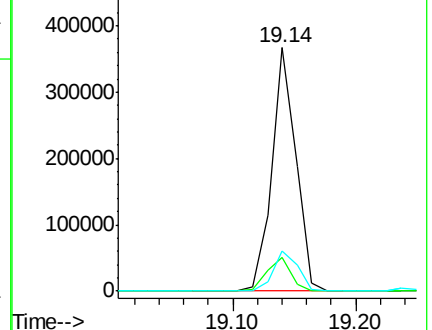
203 17.5 13.8 20.8

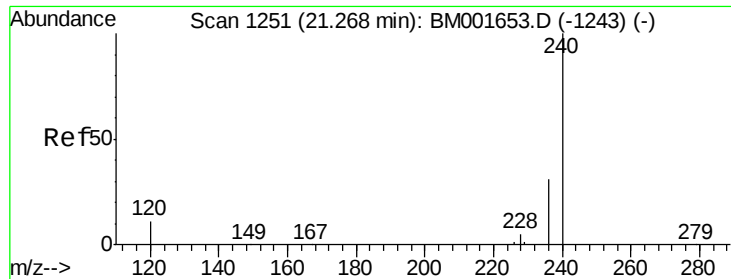


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E

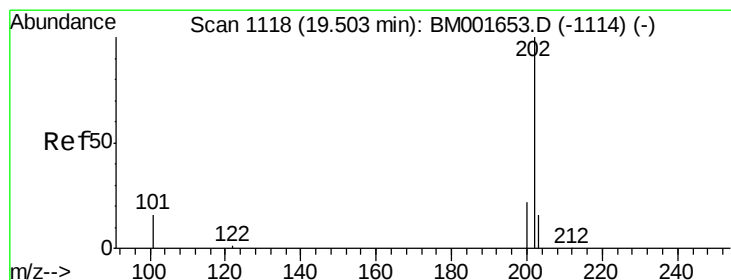
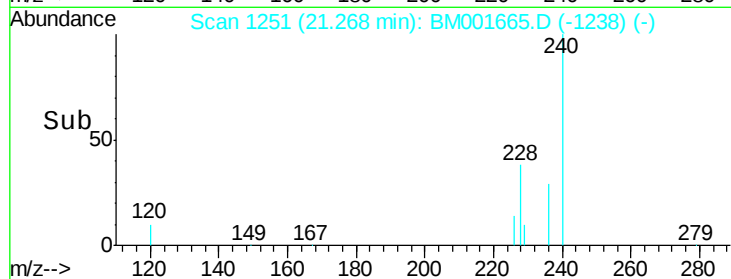
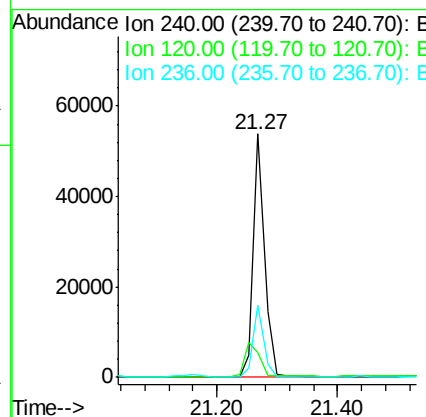
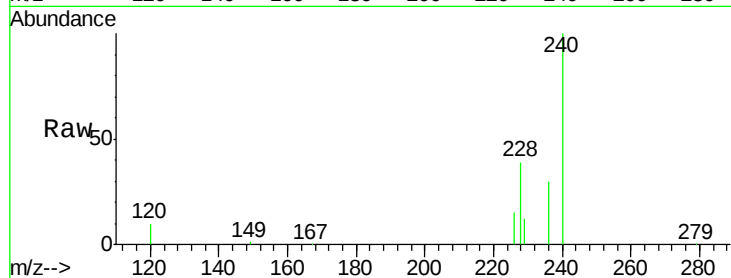




#25
Chrysene-d12
Concen: 5.00 ng
RT: 21.27 min Scan# 1251
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

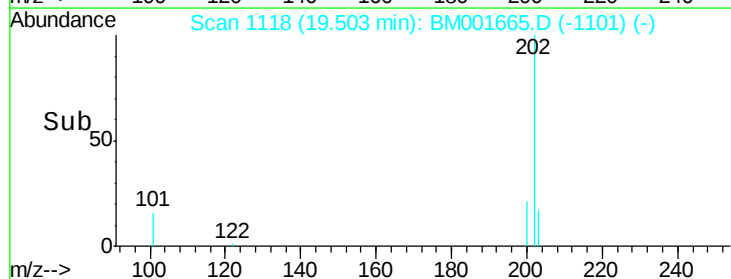
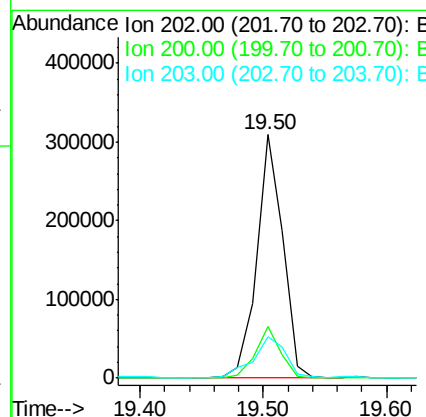
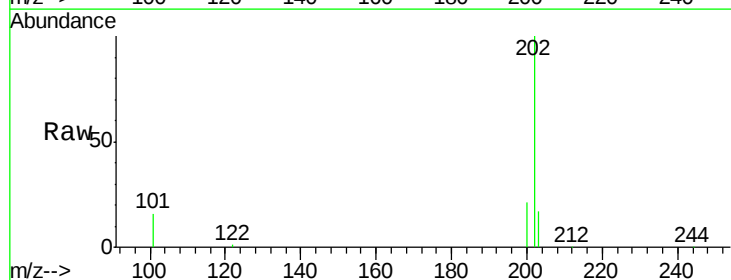
Instrument :
BNA_M
ClientSampleId :

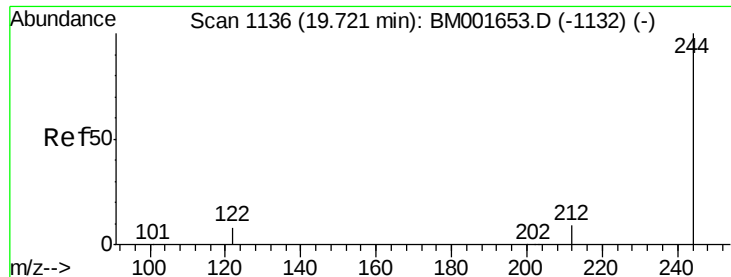
Tgt Ion:240 Resp: 68751
Ion Ratio Lower Upper
240 100
120 10.3 8.9 13.3
236 29.6 24.6 36.8



#26
Pyrene
Concen: 19.22 ng
RT: 19.50 min Scan# 1118
Delta R.T. 0.00 min
Lab File: BM001665.D
Acq: 12 Jun 2015 07:15

Tgt Ion:202 Resp: 453721
Ion Ratio Lower Upper
202 100
200 20.7 16.6 24.8
203 21.4 13.8 20.8#

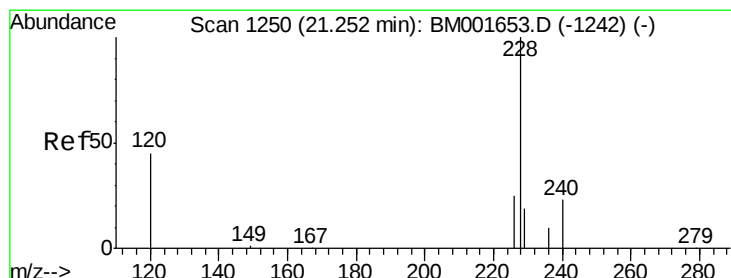
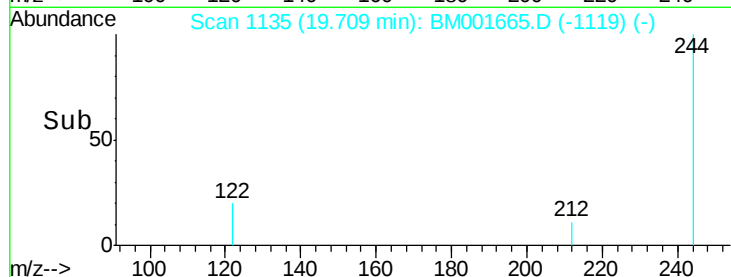
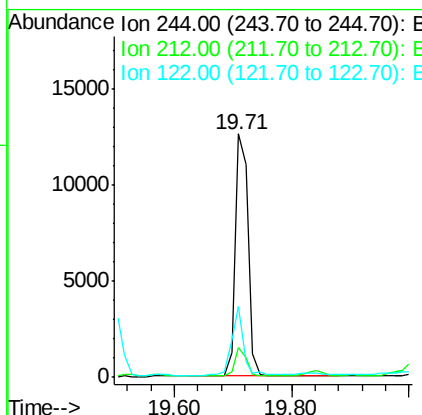
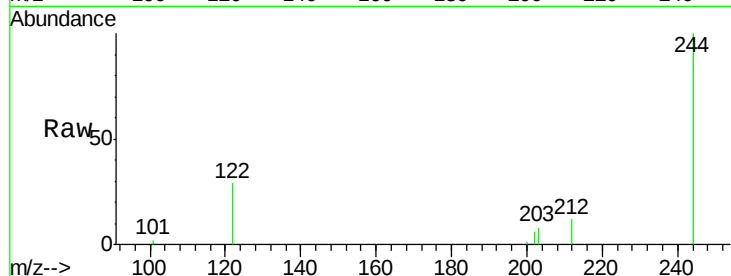




#27
 Terphenyl-d14
 Concen: 1.86 ng
 RT: 19.71 min Scan# 1135
 Delta R.T. -0.01 min
 Lab File: BM001665.D
 Acq: 12 Jun 2015 07:15

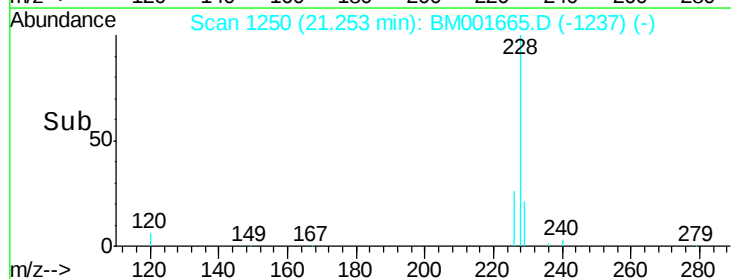
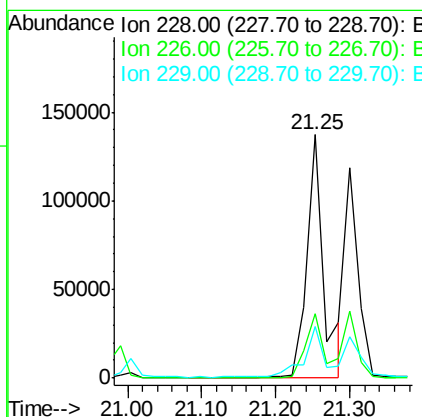
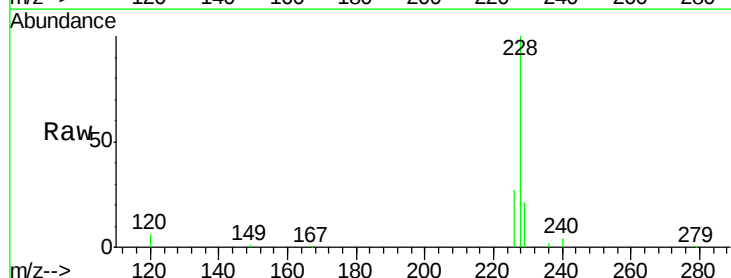
Instrument :
 BNA_M
 ClientSampleId :

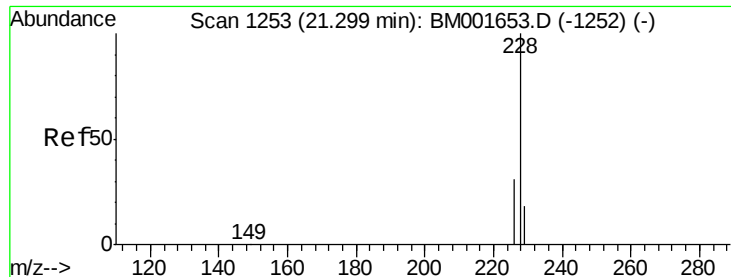
Tgt Ion:244 Resp: 19269
 Ion Ratio Lower Upper
 244 100
 212 12.3 7.7 11.5#
 122 28.9 6.9 10.3#



#28
 Benzo(a)anthracene
 Concen: 9.97 ng
 RT: 21.25 min Scan# 1250
 Delta R.T. 0.00 min
 Lab File: BM001665.D
 Acq: 12 Jun 2015 07:15

Tgt Ion:228 Resp: 215371
 Ion Ratio Lower Upper
 228 100
 226 26.5 20.2 30.4
 229 21.3 15.7 23.5





#29

Chrysene

Concen: 7.08 ng

RT: 21.30 min Scan# 1253

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :

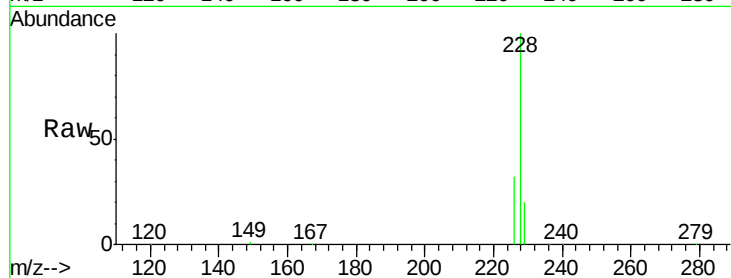
Tgt Ion:228 Resp: 146434

Ion Ratio Lower Upper

228 100

226 32.1 25.8 38.8

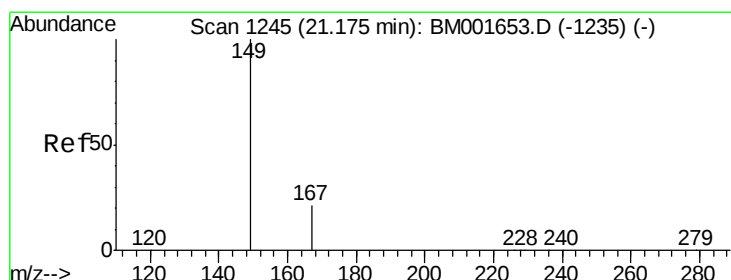
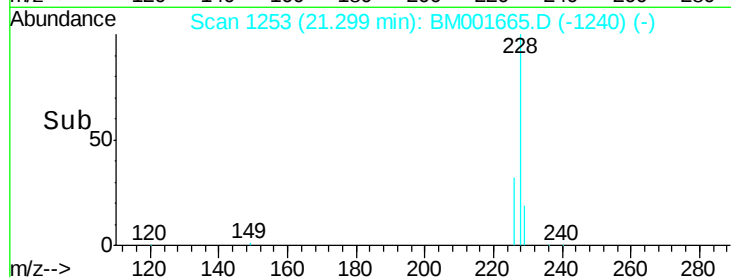
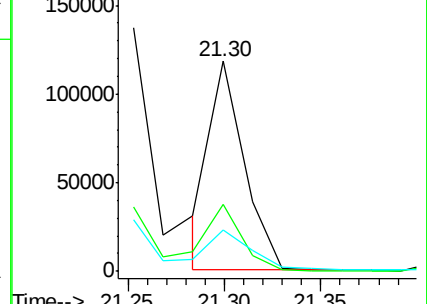
229 19.9 14.1 21.1



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#30

Bis(2-ethylhexyl)phthalate

Concen: 0.29 ng

RT: 21.18 min Scan# 1245

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

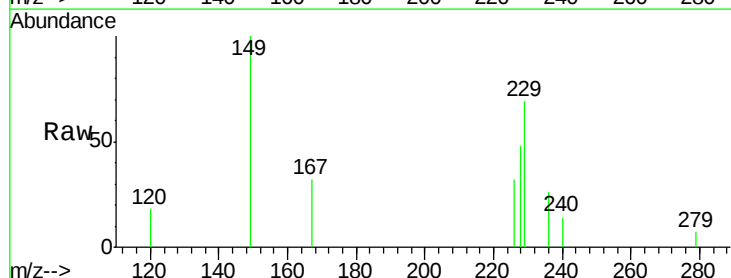
Tgt Ion:149 Resp: 1029

Ion Ratio Lower Upper

149 100

167 27.0 20.2 30.2

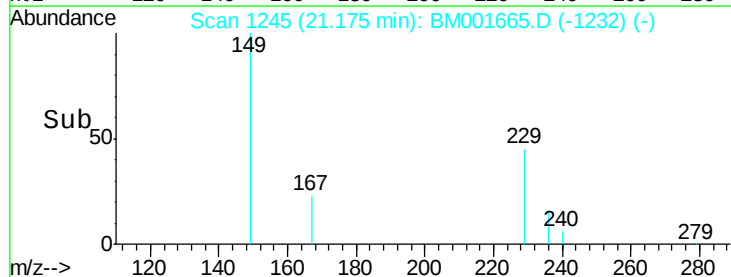
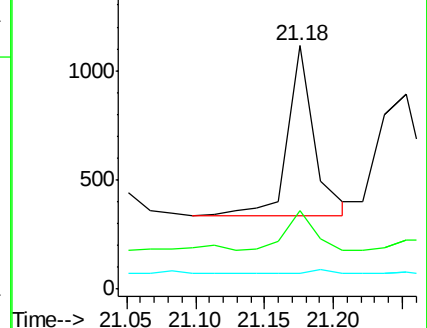
279 2.8 1.7 2.5#

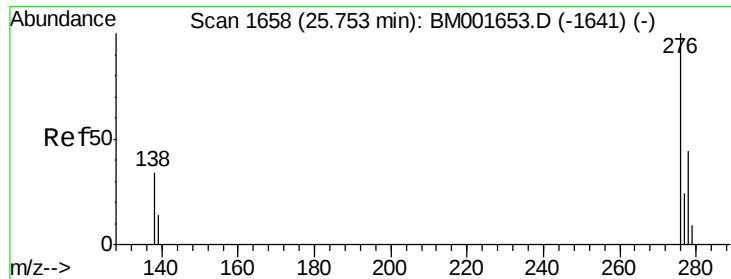


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E





#31

Indeno(1,2,3-cd)pyrene

Concen: 4.41 ng

RT: 25.75 min Scan# 1658

Delta R.T. 0.00 min

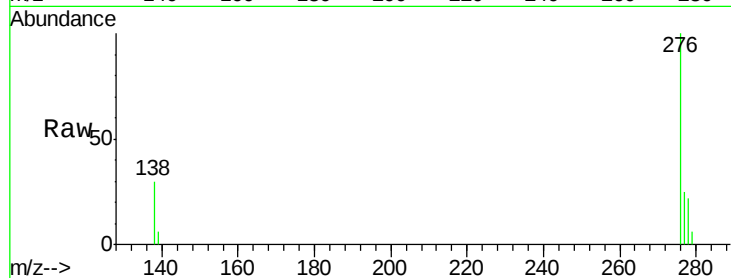
Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :



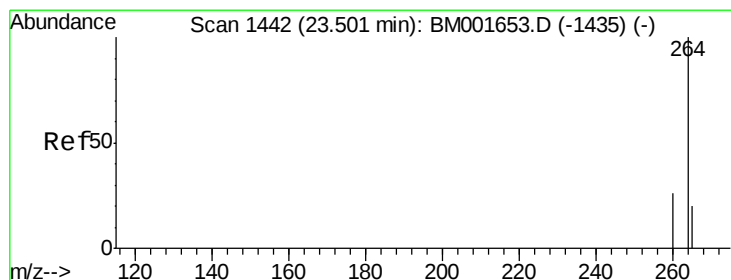
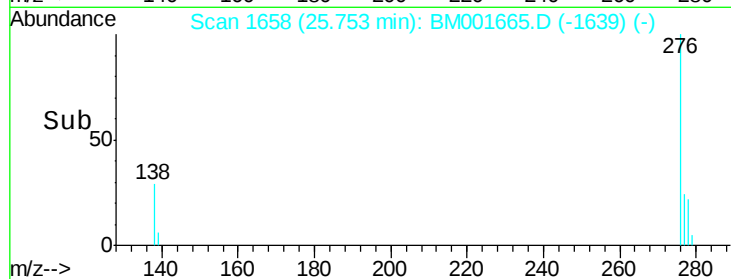
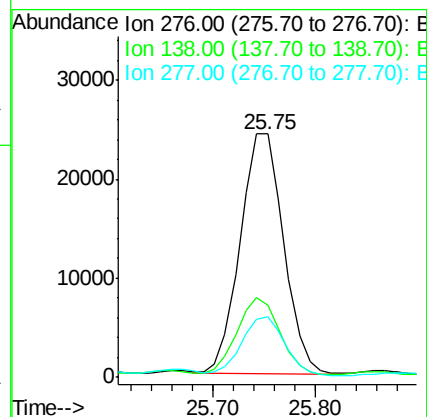
Tgt Ion:276 Resp: 71547

Ion Ratio Lower Upper

276 100

138 31.5 28.8 43.2

277 24.5 19.6 29.4



#32

Perylene-d12

Concen: 5.00 ng

RT: 23.50 min Scan# 1442

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

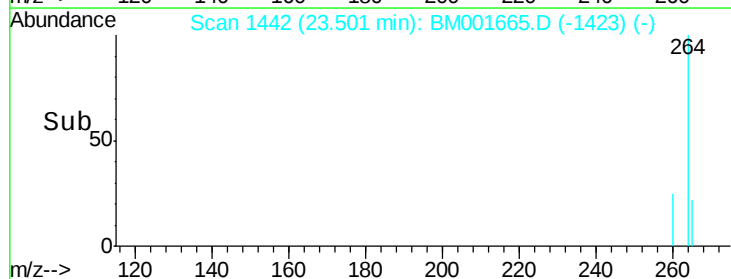
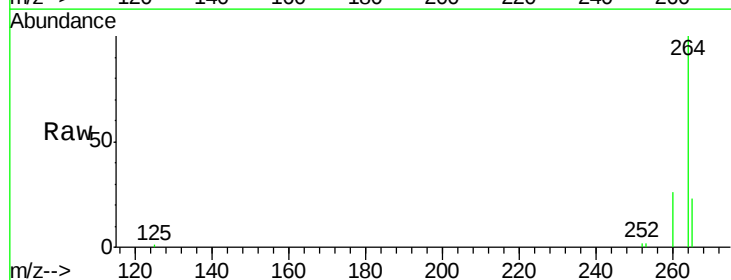
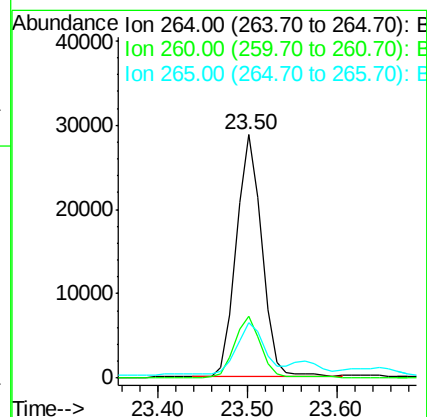
Tgt Ion:264 Resp: 56915

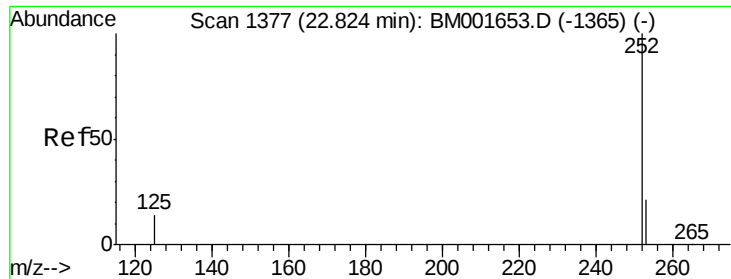
Ion Ratio Lower Upper

264 100

260 25.6 20.8 31.2

265 22.6 16.9 25.3





#33

Benzo(b)fluoranthene

Concen: 12.66 ng

RT: 22.82 min Scan# 1377

Delta R.T. 0.00 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :

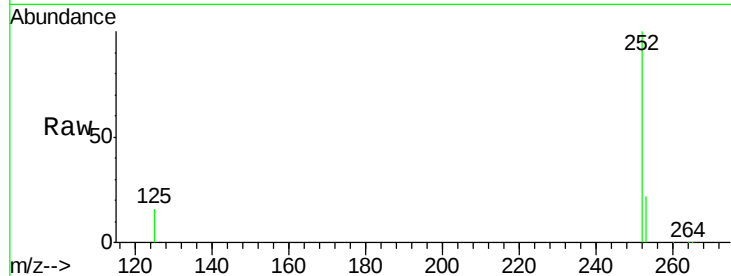
Tgt Ion:252 Resp: 234984

Ion Ratio Lower Upper

252 100

253 21.9 17.4 26.2

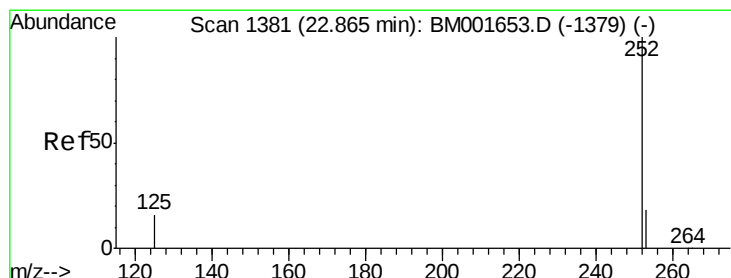
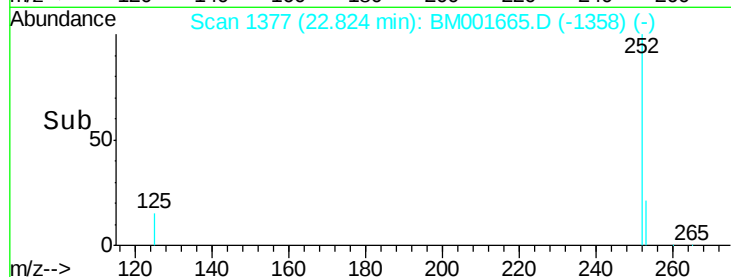
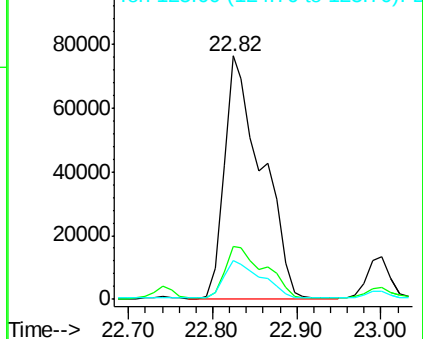
125 15.7 12.0 18.0



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#34

Benzo(k)fluoranthene

Concen: 13.03 ng

RT: 22.82 min Scan# 1377

Delta R.T. -0.04 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

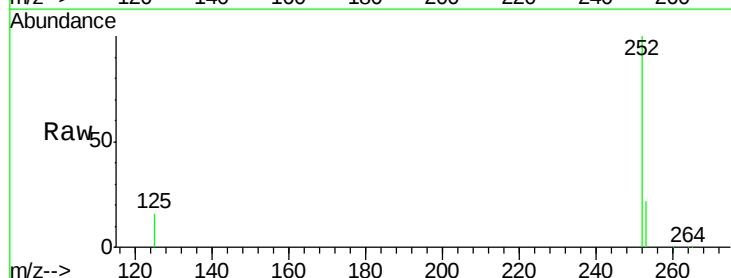
Tgt Ion:252 Resp: 234984

Ion Ratio Lower Upper

252 100

253 21.9 17.0 25.6

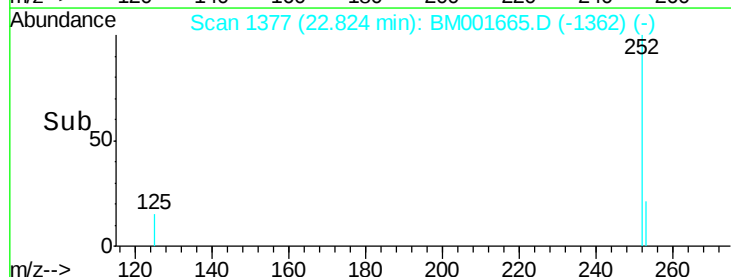
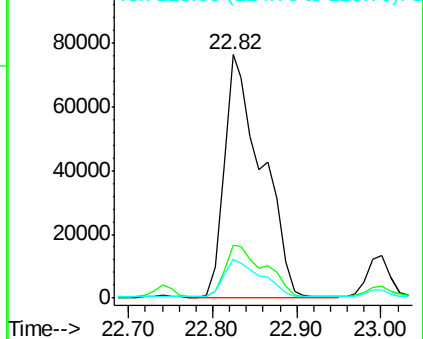
125 15.7 12.5 18.7

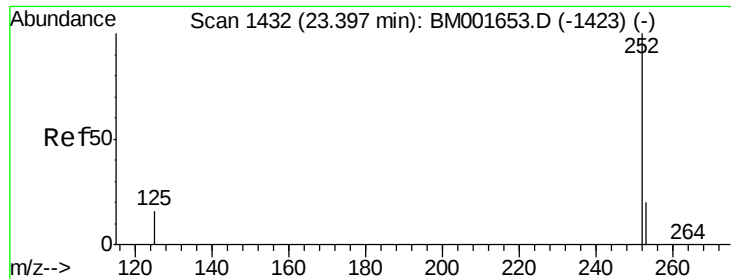


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#35

Benzo(a)pyrene

Concen: 8.20 ng

RT: 23.40 min Scan# 1432

Delta R.T. 0.00 min

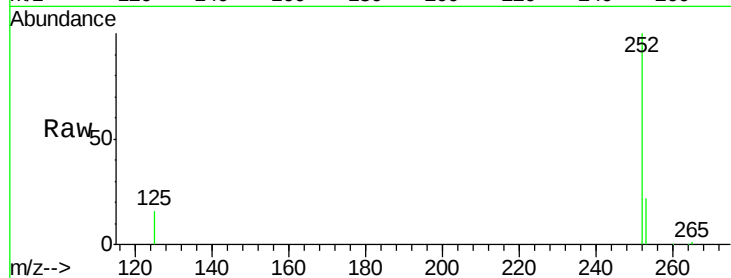
Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :



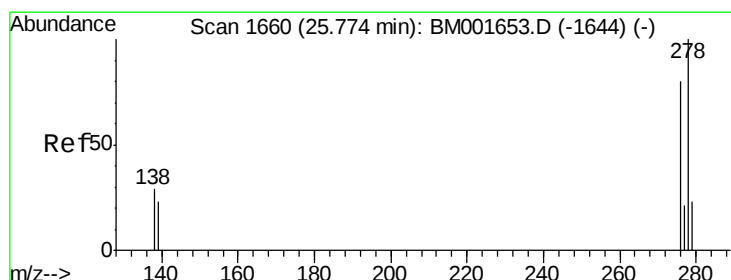
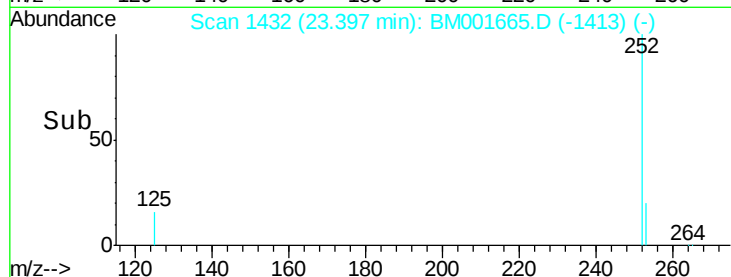
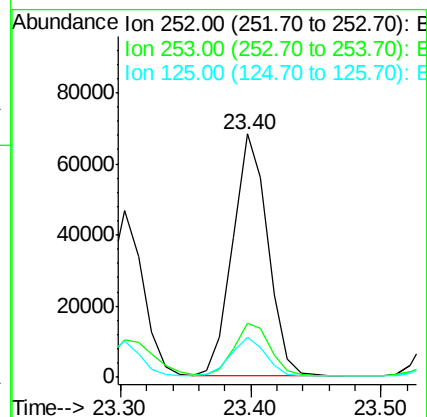
Tgt Ion:252 Resp: 126805

Ion Ratio Lower Upper

252 100

253 22.2 17.4 26.0

125 16.5 14.0 21.0



#36

Dibenzo(a,h)anthracene

Concen: 1.39 ng

RT: 25.76 min Scan# 1659

Delta R.T. -0.01 min

Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

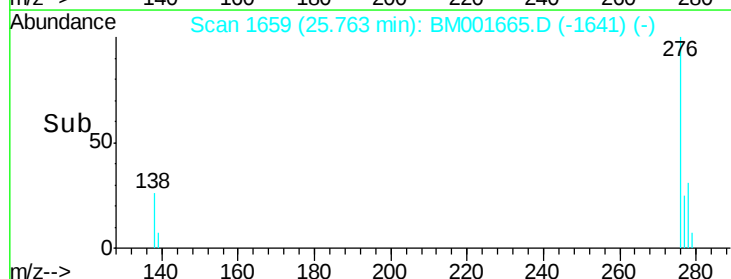
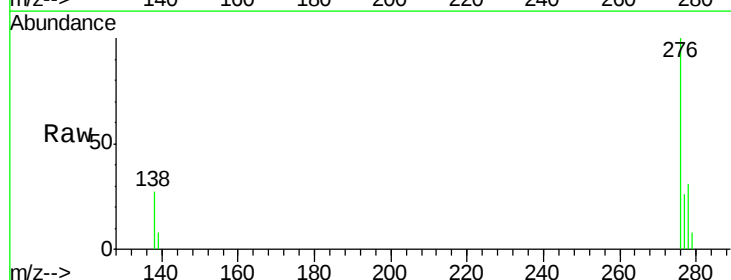
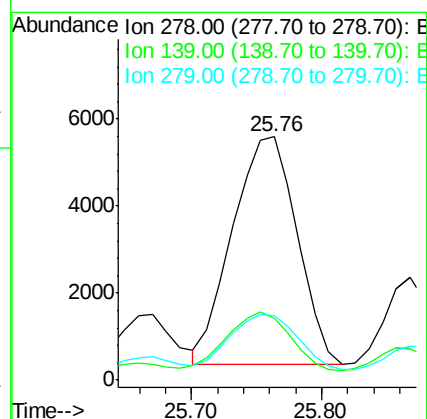
Tgt Ion:278 Resp: 18039

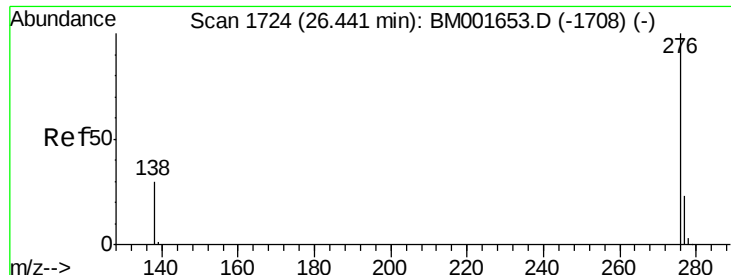
Ion Ratio Lower Upper

278 100

139 25.6 19.1 28.7

279 26.7 19.7 29.5





#37

Benzo(g,h,i)perylene

Concen: 5.19 ng

RT: 26.44 min Scan# 1724

Delta R.T. 0.00 min

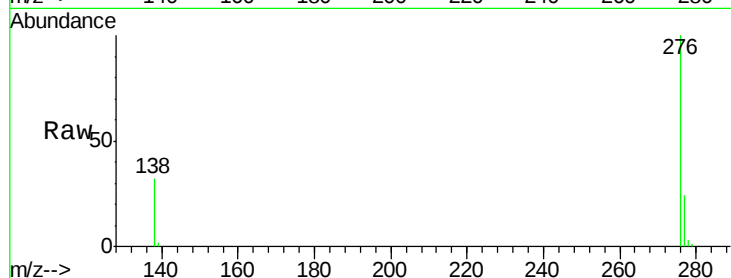
Lab File: BM001665.D

Acq: 12 Jun 2015 07:15

Instrument :

BNA_M

ClientSampleId :



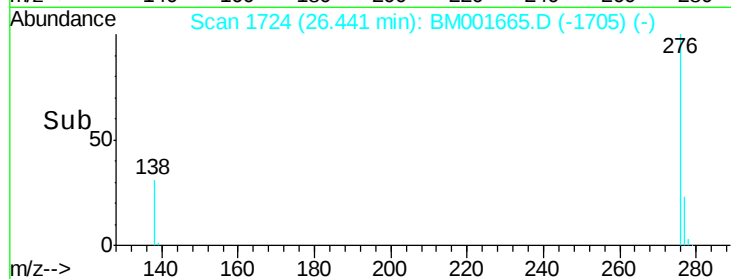
Tgt Ion: 276 Resp: 68637

Ion Ratio Lower Upper

276 100

277 24.0 19.3 28.9

138 31.7 25.0 37.4



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

