

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE030316\
 Data File : BE091448.D
 Acq On : 4 Mar 2016 6:46
 Operator : UM/IZ
 Sample : MDL-06-S
 Misc : 0.16PPM
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :

Quant Time: Mar 04 07:54:45 2016
 Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SIM-BE030316.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Mar 04 06:35:39 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.85	152	36102	5.00	ng	-0.02
4) Naphthalene-d8	9.53	136	160615	5.00	ng	0.00
8) Acenaphthene-d10	13.34	164	100536	5.00	ng	0.00
13) Phenanthrene-d10	16.10	188	150343	5.00	ng	0.00
19) Chrysene-d12	20.21	240	259353	5.00	ng	0.00
25) Perylene-d12	22.09	264	304132	5.00	ng	0.00

System Monitoring Compounds						
5) Nitrobenzene-d5	8.15	82	40848	4.11	ng	-0.03
9) 2-Fluorobiphenyl	11.99	172	114648	4.70	ng	-0.01
21) Terphenyl-d14	18.59	244	194884	4.94	ng	-0.02

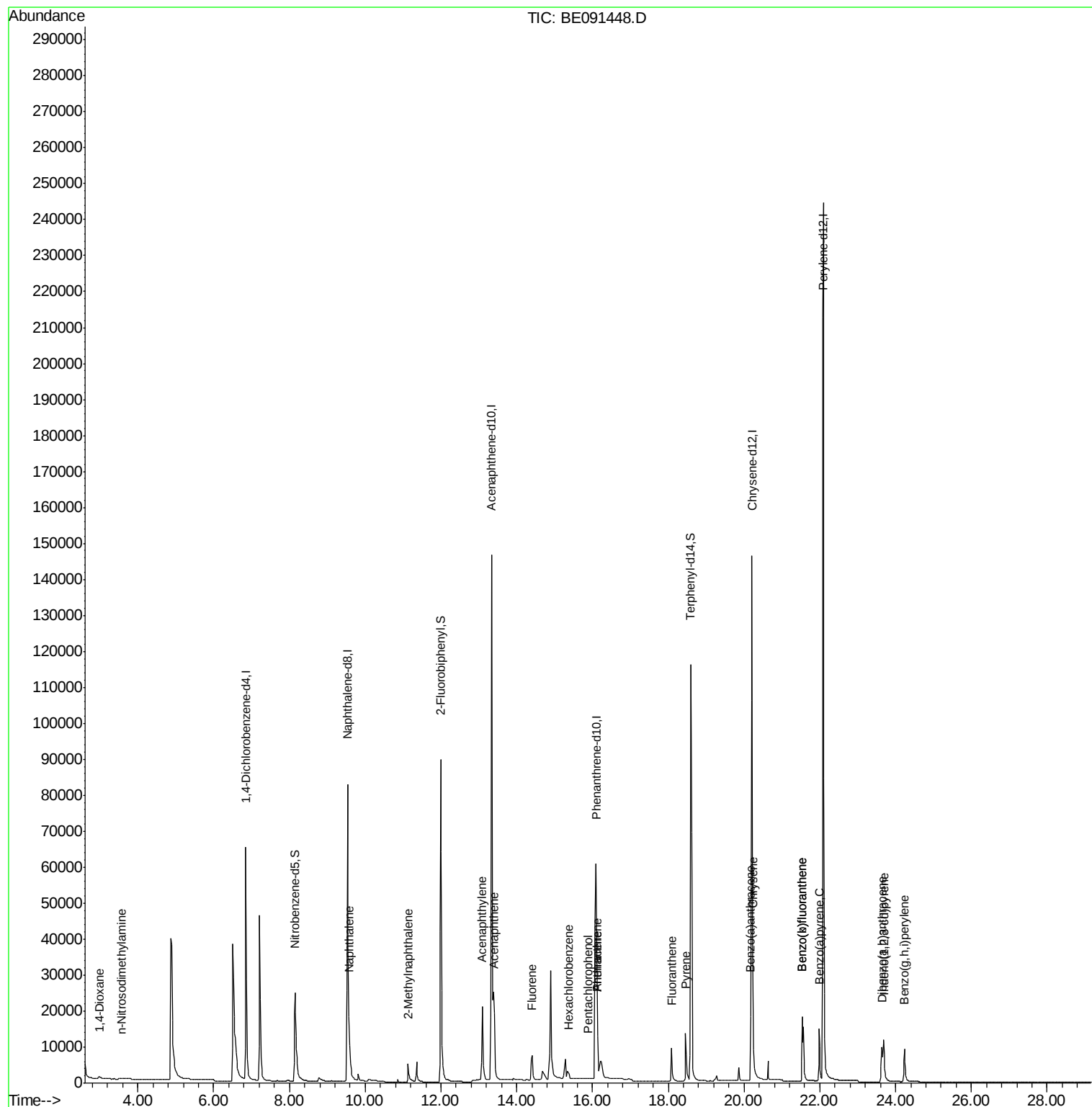
Target Compounds				Qvalue		
2) 1,4-Dioxane	2.99	88	834	0.26	ng	91
3) n-Nitrosodimethylamine	3.57	42	565	0.24	ng	# 89
6) Naphthalene	9.57	128	9590	0.26	ng	99
7) 2-Methylnaphthalene	11.13	142	7160	0.33	ng	95
10) Acenaphthylene	13.09	152	36353	0.22	ng	99
11) Acenaphthene	13.41	154	7275	0.24	ng	# 100
12) Fluorene	14.41	166	8783	0.23	ng	# 12
14) Hexachlorobenzene	15.38	284	2287	0.26	ng	# 100
15) Pentachlorophenol	15.89	266	334	0.60	ng	92
16) Phenanthrene	16.13	178	14231	0.27	ng	100
17) Anthracene	16.13	178	23003	0.37	ng	# 67
18) Fluoranthene	18.09	202	17053	0.29	ng	99
20) Pyrene	18.46	202	18442	0.25	ng	99
22) Benzo(a)anthracene	20.17	228	21363	0.24	ng	100
23) Chrysene	20.24	228	23483	0.24	ng	100
24) Indeno(1,2,3-cd)pyrene	23.69	276	21471	0.27	ng	# 90
26) Benzo(b)fluoranthene	21.53	252	40369	0.48	ng	100
27) Benzo(k)fluoranthene	21.53	252	40691	0.50	ng	94
28) Benzo(a)pyrene	21.99	252	18178	0.25	ng	98
29) Dibenzo(a,h)anthracene	23.64	278	16565	0.24	ng	99
30) Benzo(g,h,i)perylene	24.23	276	18638	0.25	ng	98

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

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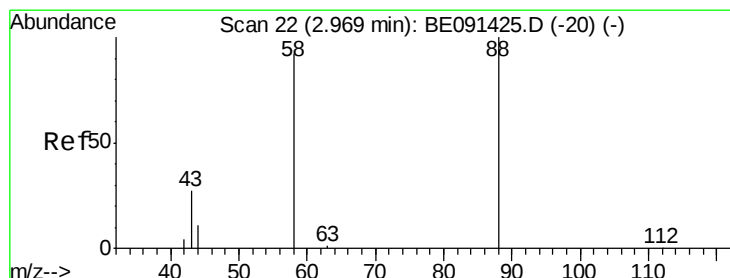
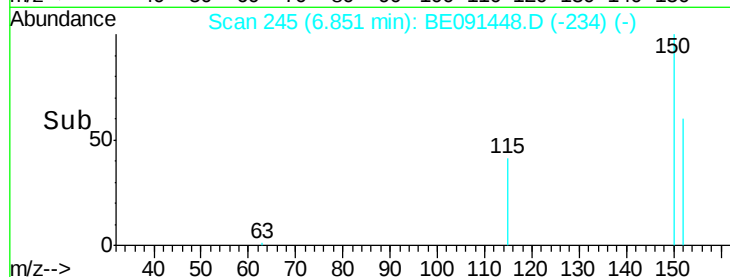
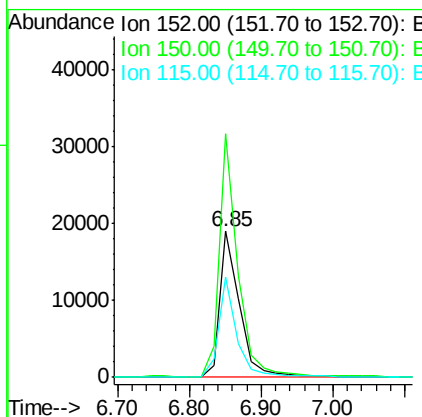
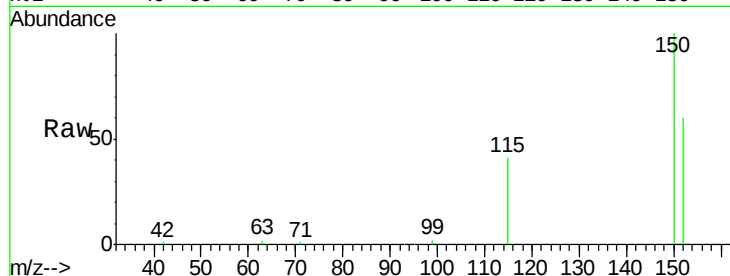




#1
 1,4-Dichlorobenzene-d4
 Concen: 5.00 ng
 RT: 6.85 min Scan# 245
 Delta R.T. -0.02 min
 Lab File: BE091448.D
 Acq: 4 Mar 2016 6:46

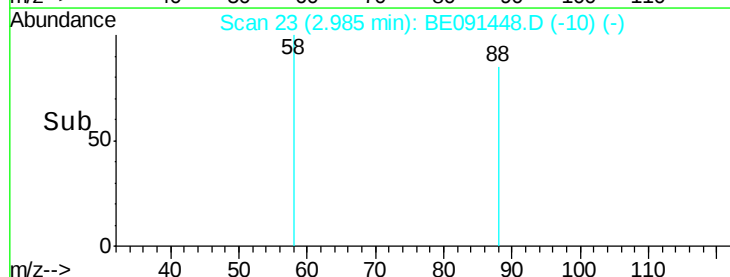
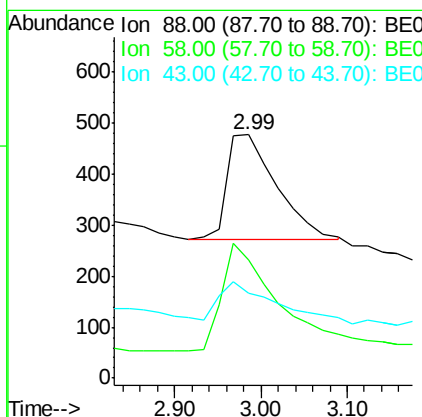
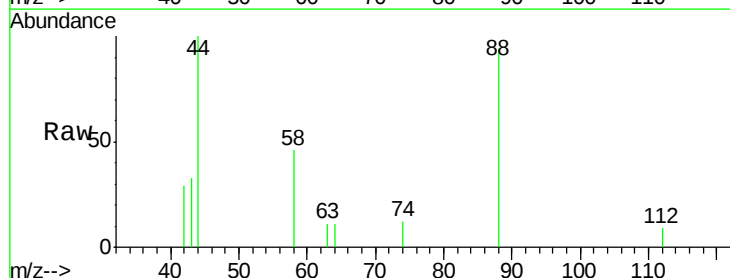
Instrument :
 BNA_E
 ClientSampleId :

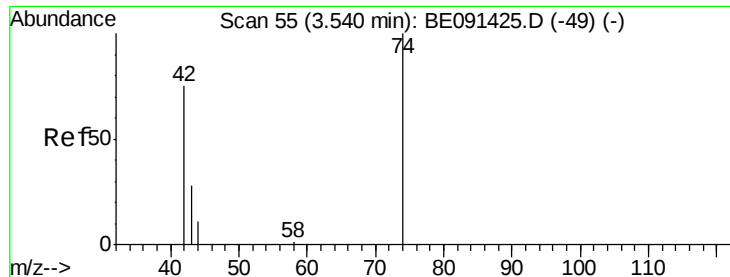
Tgt Ion: 152 Resp: 36102
 Ion Ratio Lower Upper
 152 100
 150 167.0 115.0 172.4
 115 69.2 42.2 63.4#



#2
 1,4-Dioxane
 Concen: 0.26 ng
 RT: 2.99 min Scan# 23
 Delta R.T. 0.02 min
 Lab File: BE091448.D
 Acq: 4 Mar 2016 6:46

Tgt Ion: 88 Resp: 834
 Ion Ratio Lower Upper
 88 100
 58 111.6 97.9 146.9
 43 31.3 29.0 43.4





#3

n-Nitrosodimethylamine

Concen: 0.24 ng

RT: 3.57 min Scan# 57

Delta R.T. 0.03 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

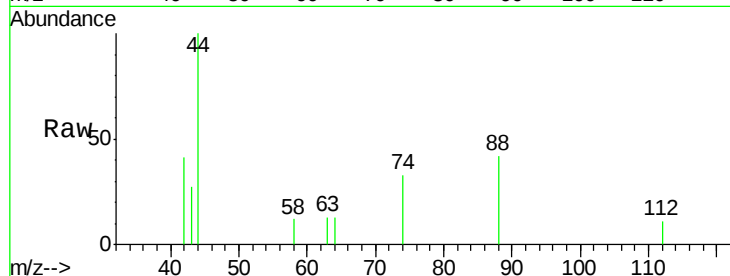
Tgt Ion: 42 Resp: 565

Ion Ratio Lower Upper

42 100

74 129.0 93.8 140.6

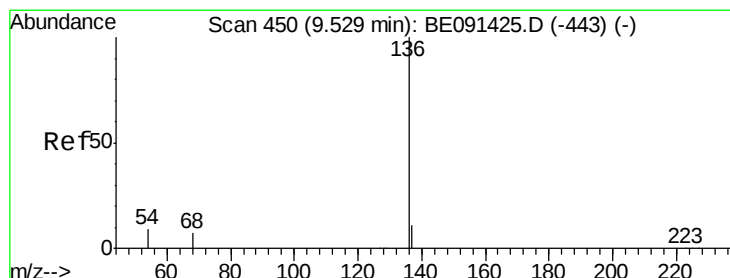
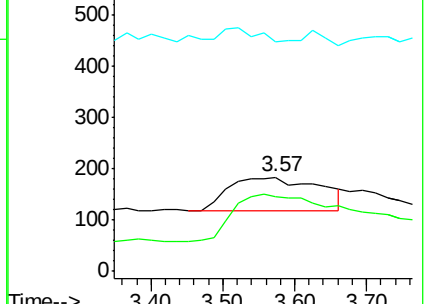
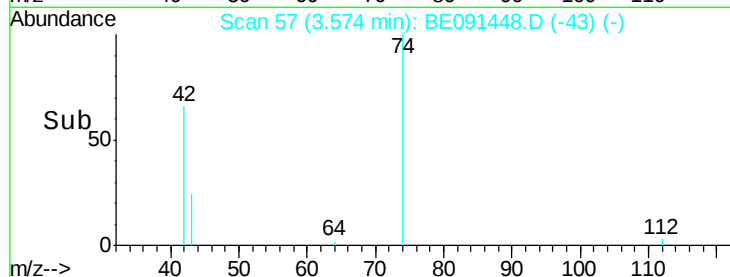
44 0.0 0.0 0.0



Abundance Ion 42.00 (41.70 to 42.70): BE0

Ion 74.00 (73.70 to 74.70): BE0

Ion 44.00 (43.70 to 44.70): BE0



#4

Naphthalene-d8

Concen: 5.00 ng

RT: 9.53 min Scan# 450

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

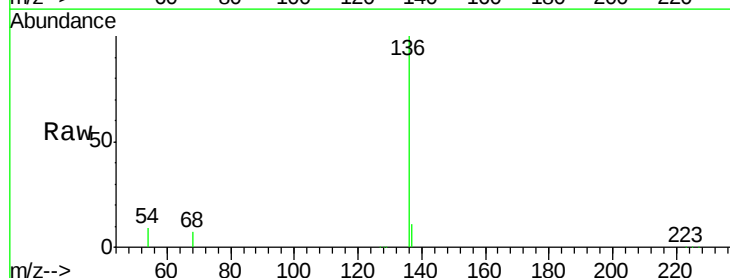
Tgt Ion: 136 Resp: 160615

Ion Ratio Lower Upper

136 100

137 11.0 8.7 13.1

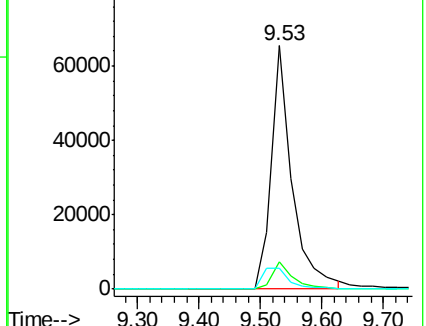
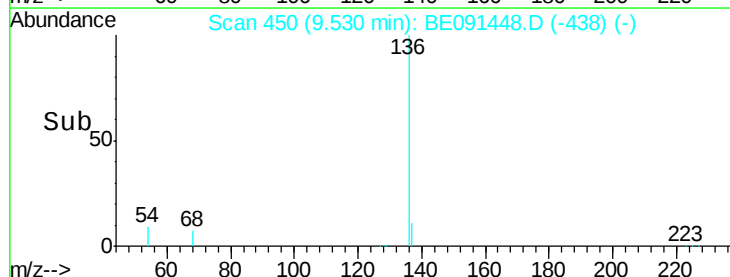
54 8.6 6.9 10.3

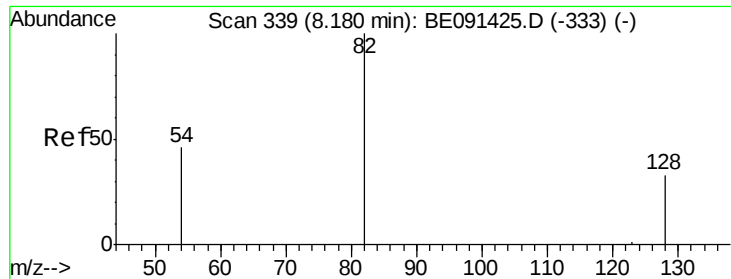


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0





#5

Nitrobenzene-d5

Concen: 4.11 ng

RT: 8.15 min Scan# 336

Delta R.T. -0.03 min

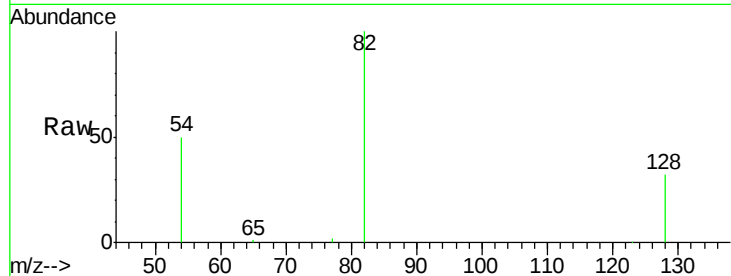
Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :



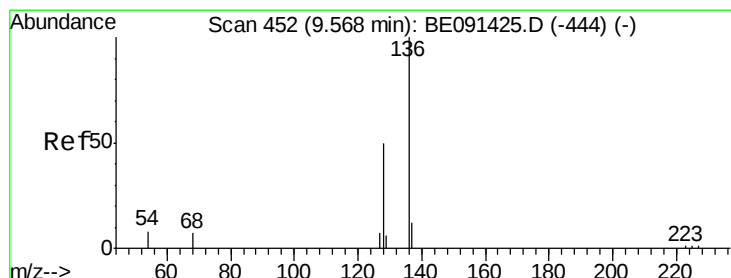
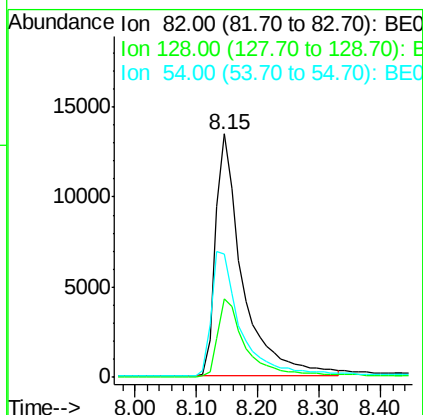
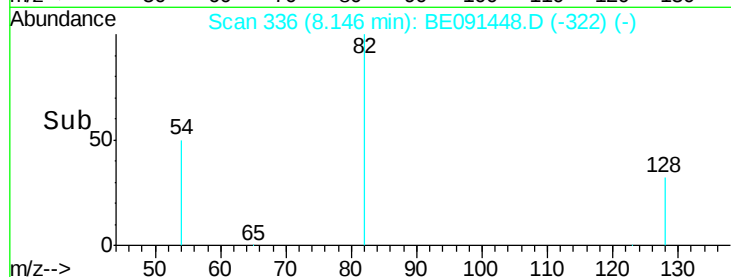
Tgt Ion: 82 Resp: 40848

Ion Ratio Lower Upper

82 100

128 32.3 30.0 45.0

54 50.4 41.5 62.3



#6

Naphthalene

Concen: 0.26 ng

RT: 9.57 min Scan# 452

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

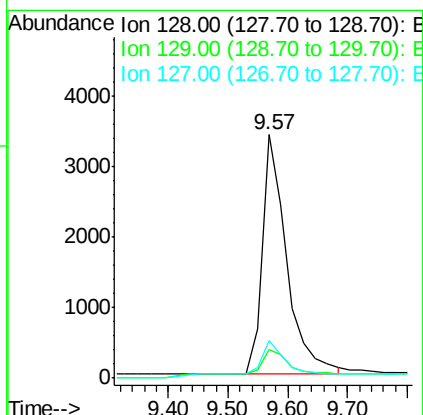
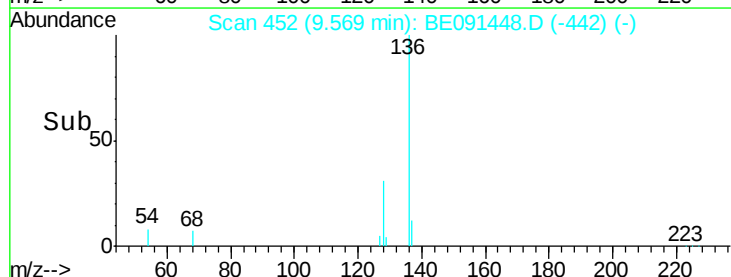
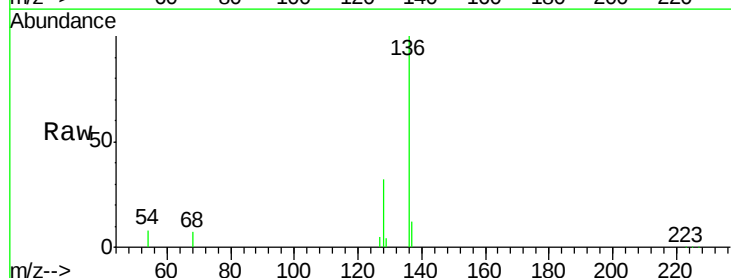
Tgt Ion: 128 Resp: 9590

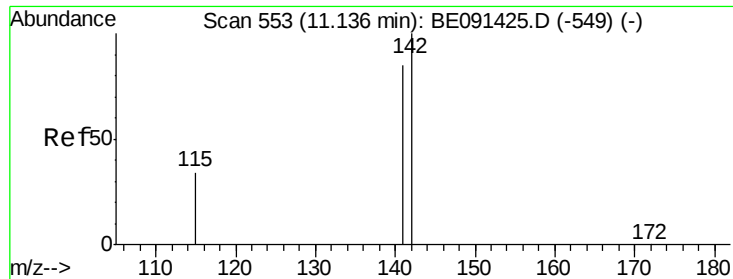
Ion Ratio Lower Upper

128 100

129 11.8 9.5 14.3

127 15.2 11.4 17.0





#7

2-Methylnaphthalene

Concen: 0.33 ng

RT: 11.13 min Scan# 553

Delta R.T. -0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

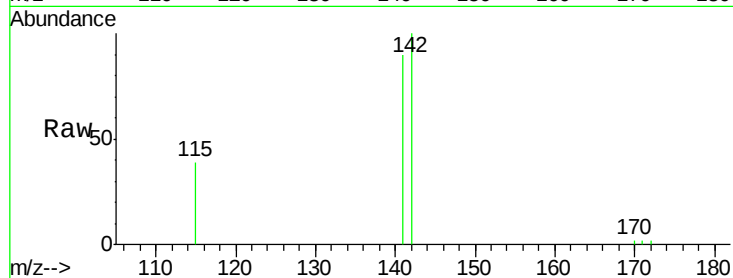
Tgt Ion:142 Resp: 7160

Ion Ratio Lower Upper

142 100

141 90.0 68.3 102.5

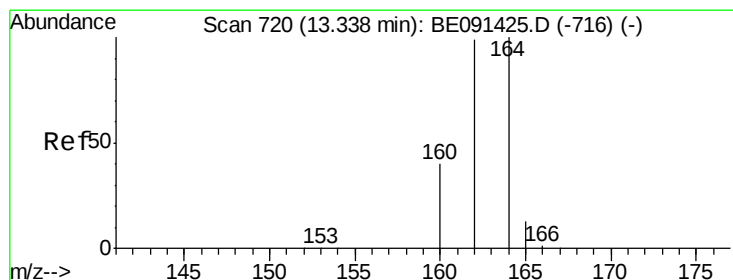
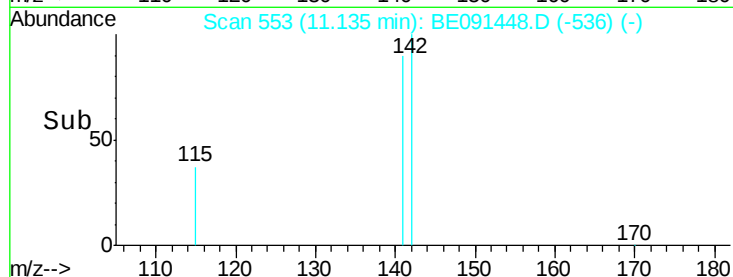
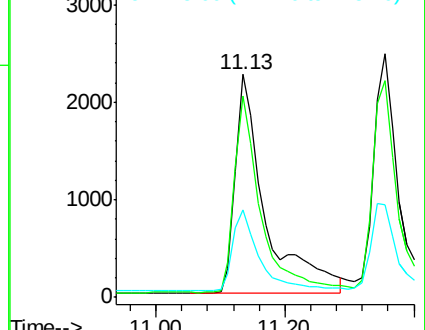
115 39.2 28.9 43.3



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



#8

Acenaphthene-d10

Concen: 5.00 ng

RT: 13.34 min Scan# 720

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

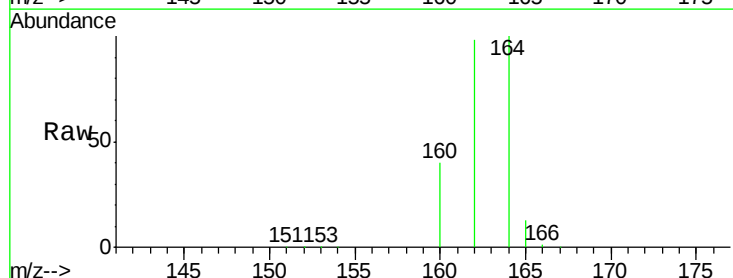
Tgt Ion:164 Resp: 100536

Ion Ratio Lower Upper

164 100

162 98.3 79.1 118.7

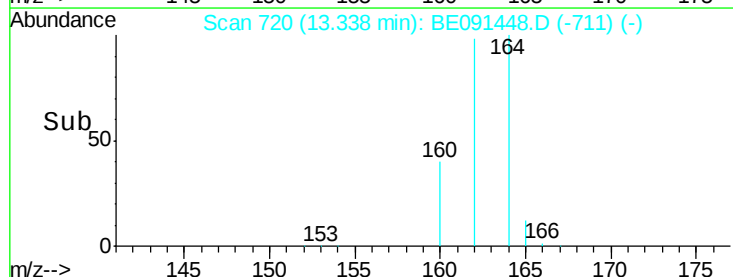
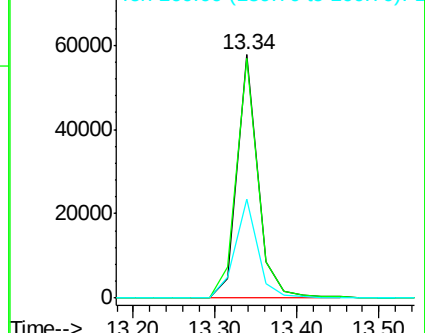
160 40.4 32.4 48.6

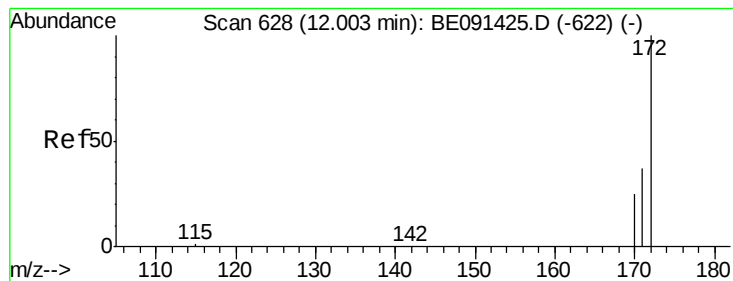


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#9

2-Fluorobiphenyl

Concen: 4.70 ng

RT: 11.99 min Scan# 627

Delta R.T. -0.01 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

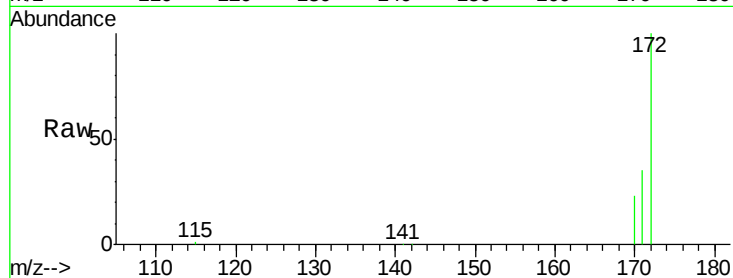
Tgt Ion:172 Resp: 114648

Ion Ratio Lower Upper

172 100

171 34.8 30.2 45.4

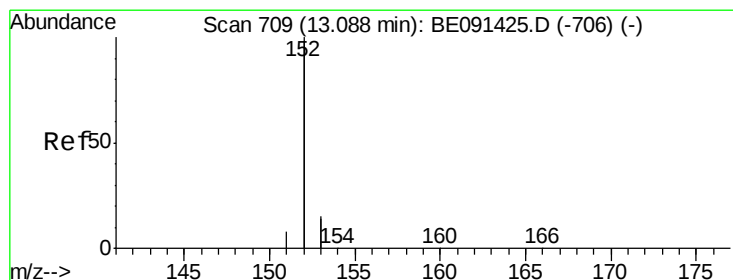
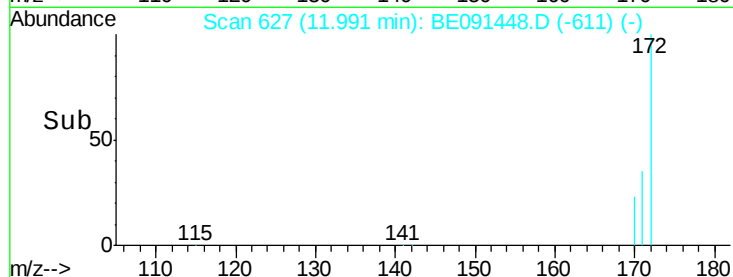
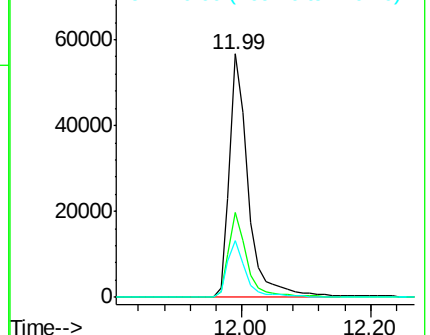
170 23.2 20.9 31.3



Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E



#10

Acenaphthylene

Concen: 0.22 ng

RT: 13.09 min Scan# 709

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

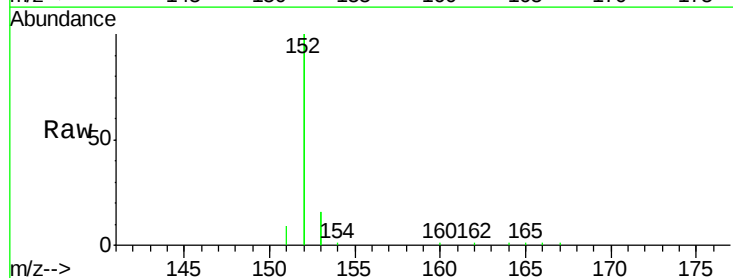
Tgt Ion:152 Resp: 36353

Ion Ratio Lower Upper

152 100

151 4.6 3.9 5.9

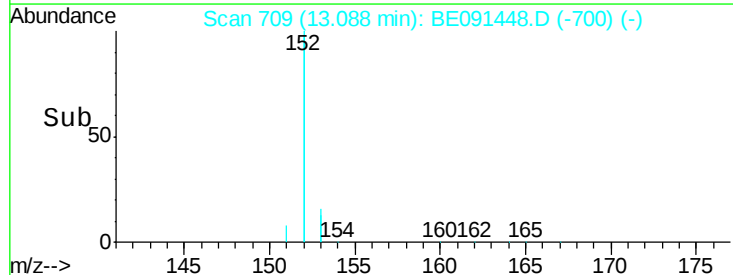
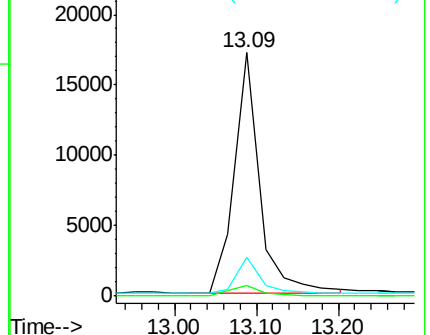
153 13.6 10.5 15.7

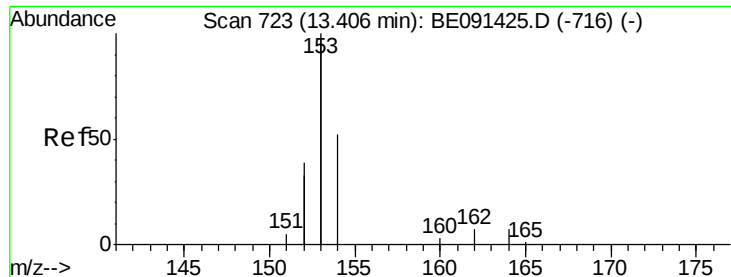


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#11

Acenaphthene

Concen: 0.24 ng

RT: 13.41 min Scan# 723

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

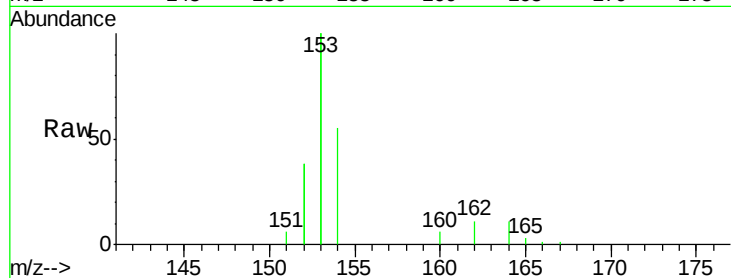
Tgt Ion:154 Resp: 7275

Ion Ratio Lower Upper

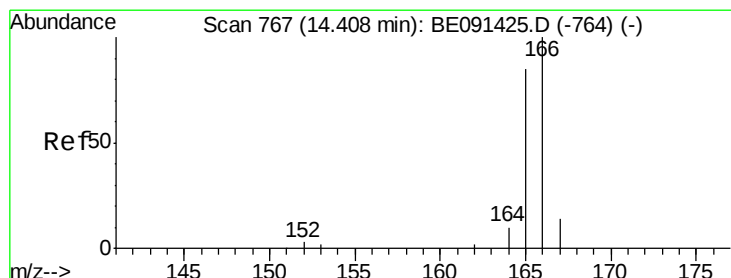
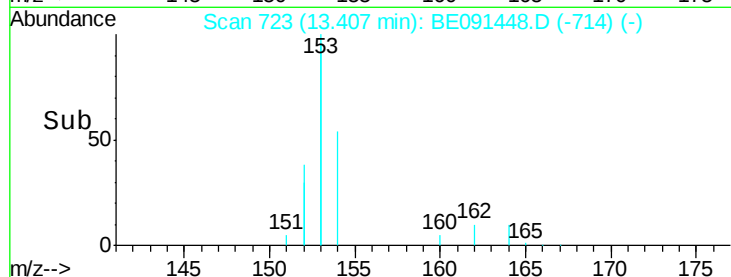
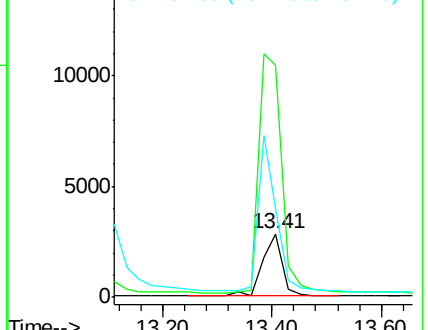
154 100

153 0.0 0.0 0.0

152 0.0 0.0 0.0



Abundance Ion 154.00 (153.70 to 154.70): E
Ion 153.00 (152.70 to 153.70): E
Ion 152.00 (151.70 to 152.70): E



#12

Fluorene

Concen: 0.23 ng

RT: 14.41 min Scan# 767

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

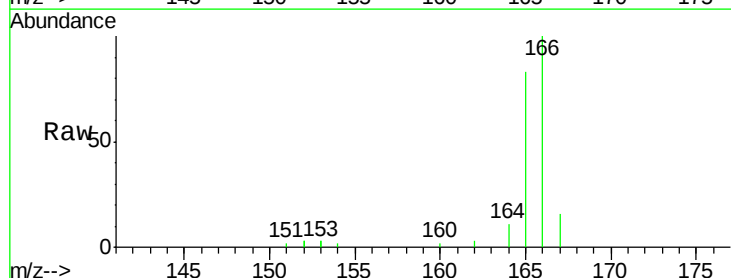
Tgt Ion:166 Resp: 8783

Ion Ratio Lower Upper

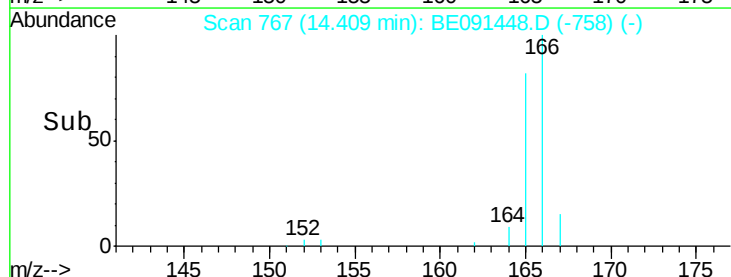
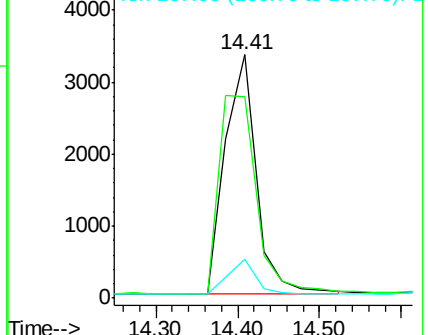
166 100

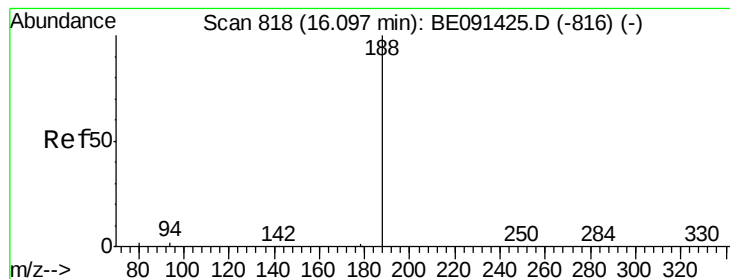
165 0.0 79.4 119.2#

167 13.8 10.7 16.1



Abundance Ion 166.00 (165.70 to 166.70): E
Ion 165.00 (164.70 to 165.70): E
Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene-d10

Concen: 5.00 ng

RT: 16.10 min Scan# 818

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

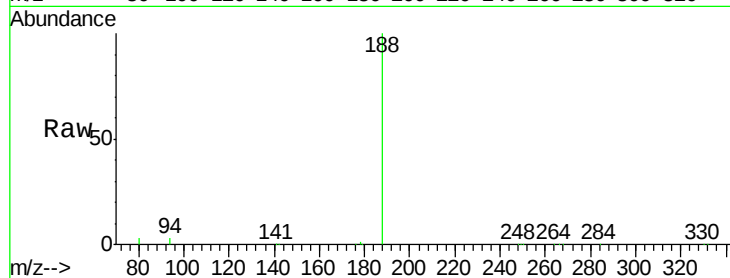
Tgt Ion:188 Resp: 150343

Ion Ratio Lower Upper

188 100

94 2.7 2.1 3.1

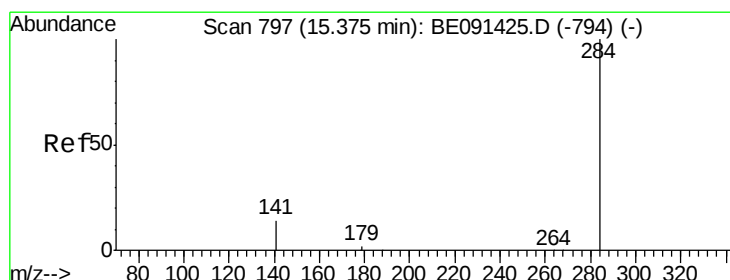
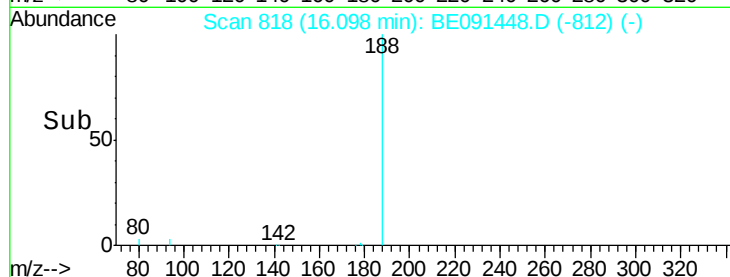
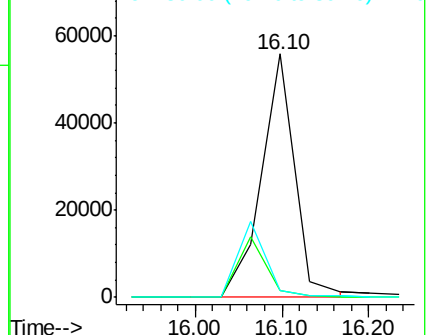
80 2.7 1.9 2.9



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BE0

Ion 80.00 (79.70 to 80.70): BE0



#14

Hexachlorobenzene

Concen: 0.26 ng

RT: 15.38 min Scan# 797

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

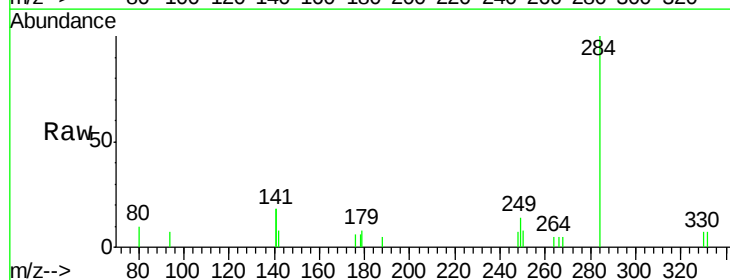
Tgt Ion:284 Resp: 2287

Ion Ratio Lower Upper

284 100

142 0.0 0.0 0.0

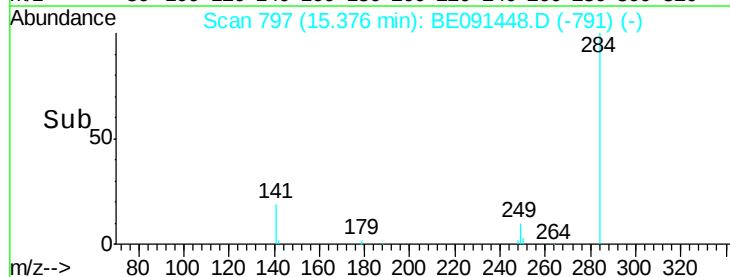
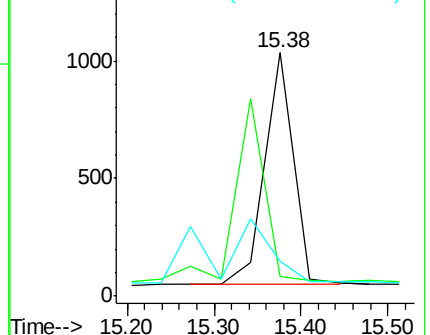
249 0.0 0.0 0.0

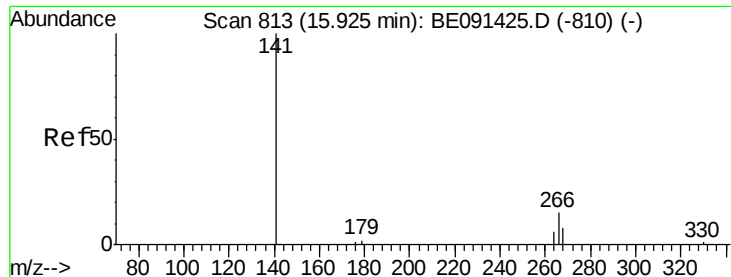


Abundance Ion 283.80 (283.50 to 284.50): E

Ion 142.00 (141.70 to 142.70): E

Ion 249.00 (248.70 to 249.70): E





#15

Pentachlorophenol

Concen: 0.60 ng

RT: 15.89 min Scan# 812

Delta R.T. -0.03 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampled :

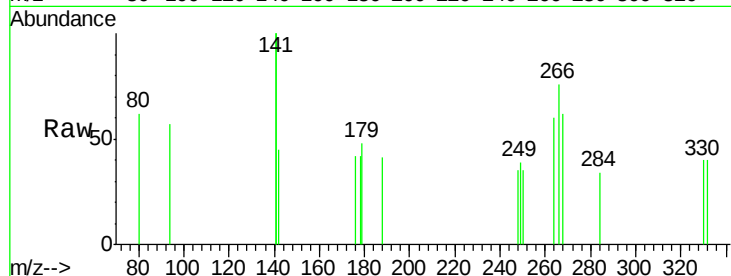
Tgt Ion: 266 Resp: 334

Ion Ratio Lower Upper

266 100

268 80.7 73.0 109.6

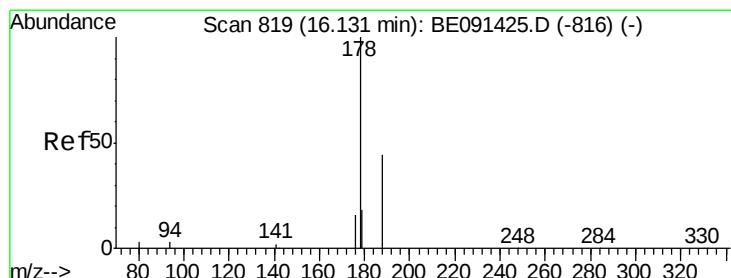
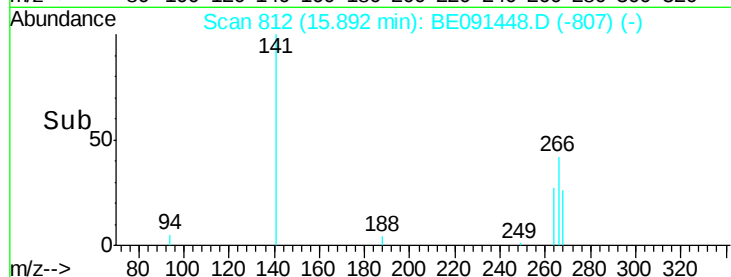
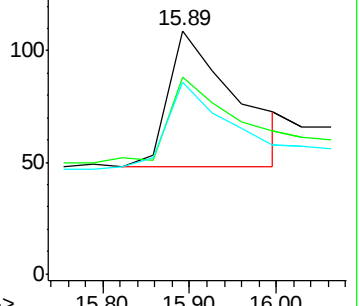
264 78.9 66.1 99.1



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



#16

Phenanthrene

Concen: 0.27 ng

RT: 16.13 min Scan# 819

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

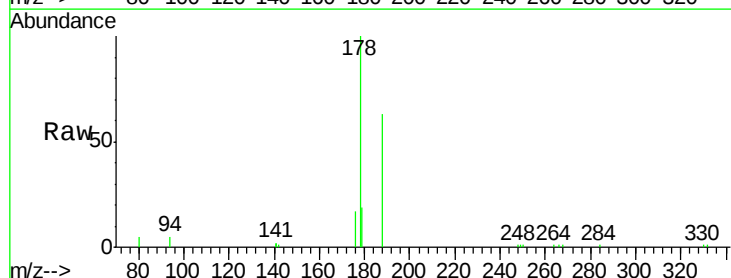
Tgt Ion: 178 Resp: 14231

Ion Ratio Lower Upper

178 100

176 17.3 13.8 20.8

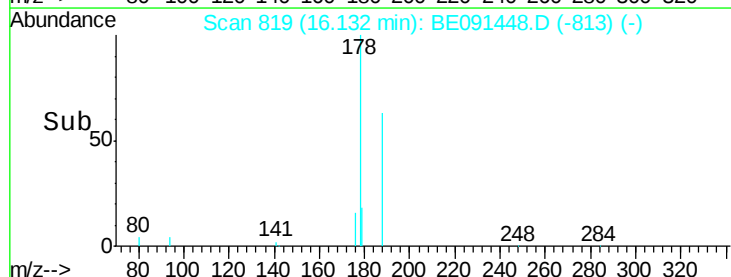
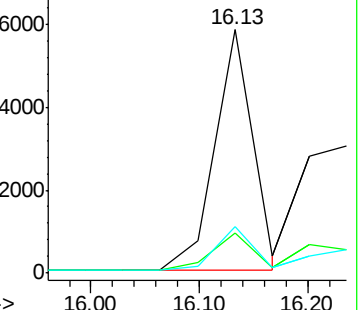
179 17.9 14.2 21.4

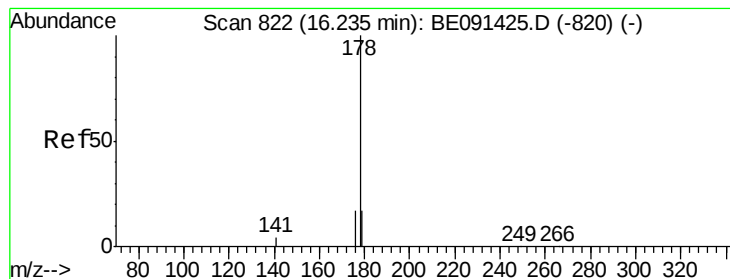


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#17

Anthracene

Concen: 0.37 ng

RT: 16.13 min Scan# 819

Delta R.T. -0.10 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

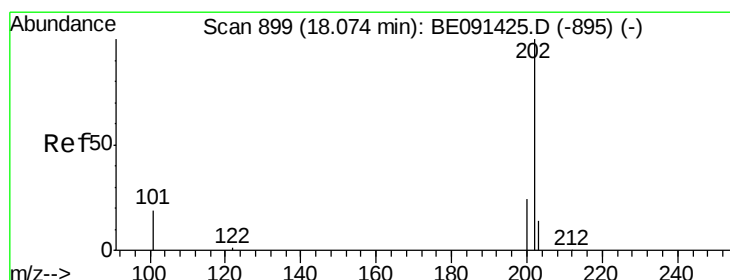
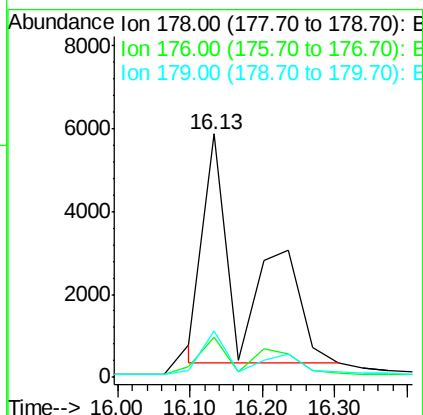
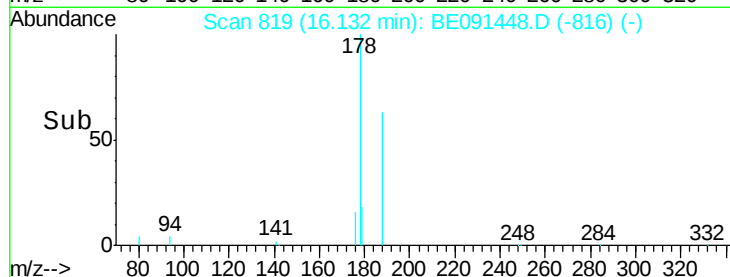
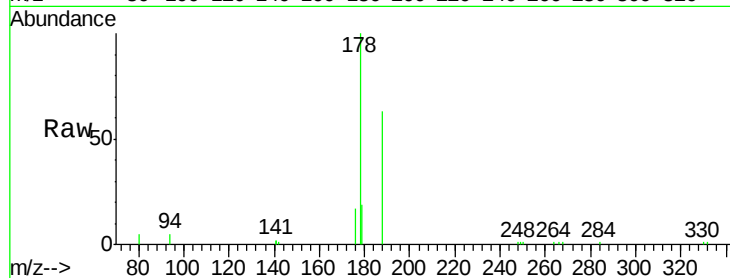
Tgt Ion:178 Resp: 23003

Ion Ratio Lower Upper

178 100

176 7.7 24.4 36.6#

179 10.1 14.8 22.2#



#18

Fluoranthene

Concen: 0.29 ng

RT: 18.09 min Scan# 900

Delta R.T. 0.02 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

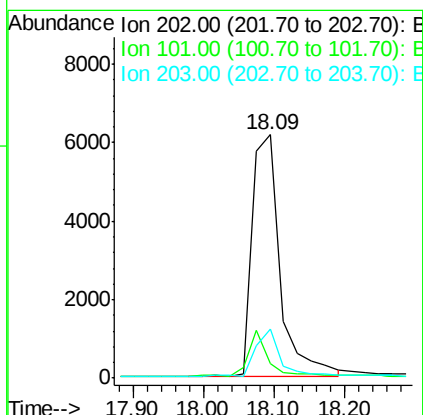
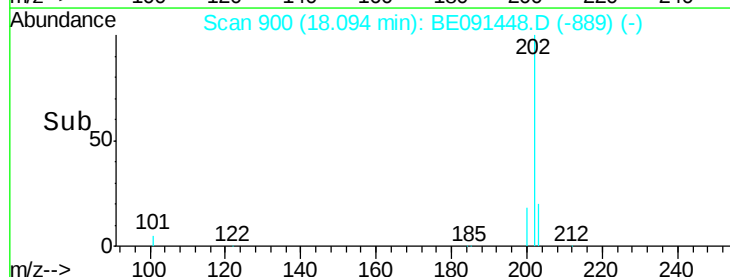
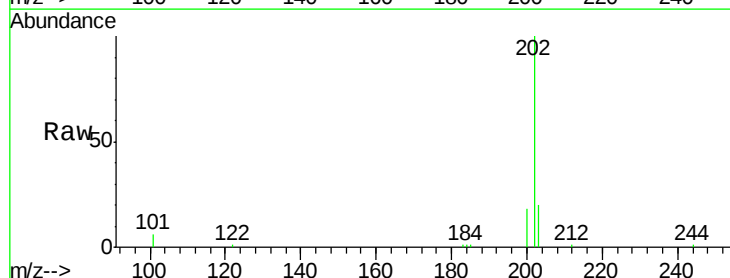
Tgt Ion:202 Resp: 17053

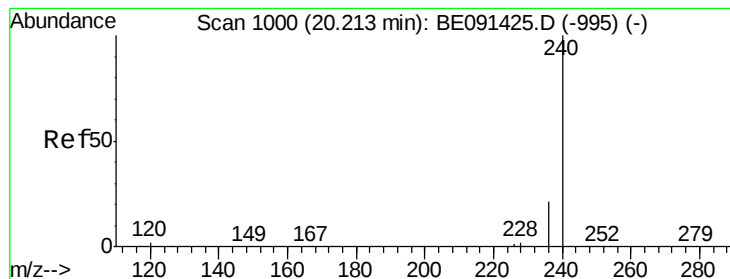
Ion Ratio Lower Upper

202 100

101 13.2 11.0 16.6

203 17.3 13.7 20.5





#19

Chrysene-d12

Concen: 5.00 ng

RT: 20.21 min Scan# 1000

Delta R.T. -0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

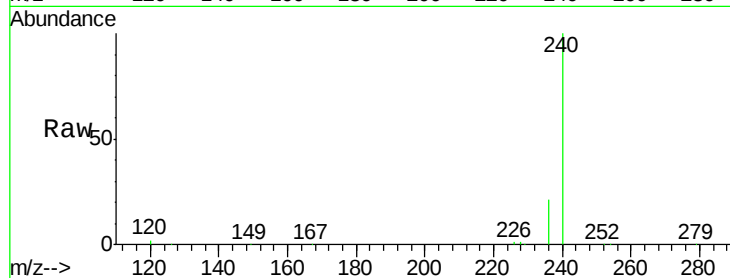
Tgt Ion:240 Resp: 259353

Ion Ratio Lower Upper

240 100

120 1.8 1.4 2.0

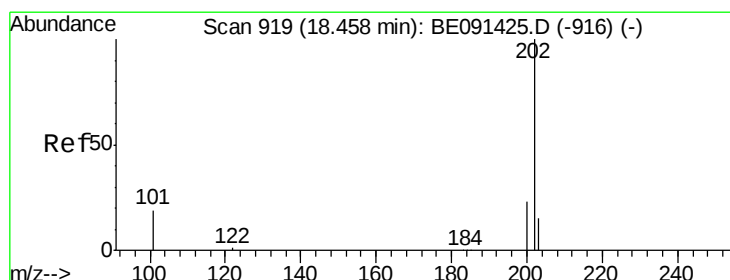
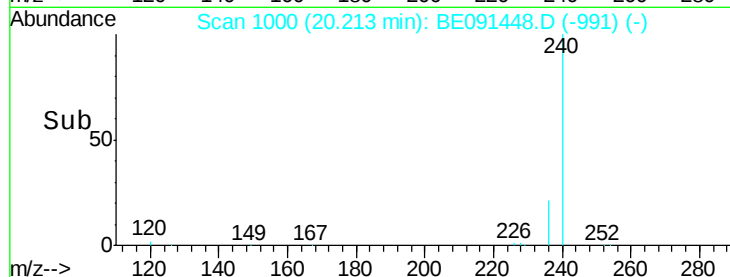
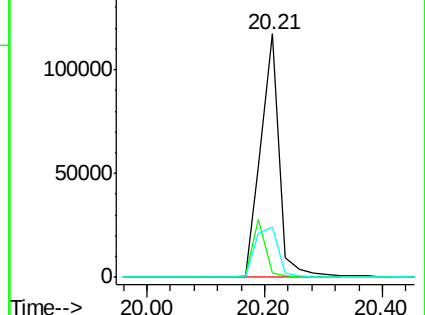
236 20.6 16.7 25.1



Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E



#20

Pyrene

Concen: 0.25 ng

RT: 18.46 min Scan# 919

Delta R.T. 0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

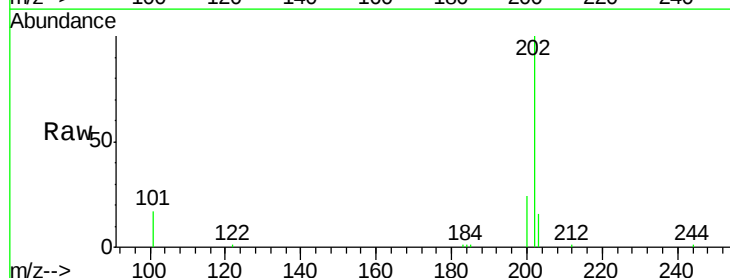
Tgt Ion:202 Resp: 18442

Ion Ratio Lower Upper

202 100

200 21.1 16.5 24.7

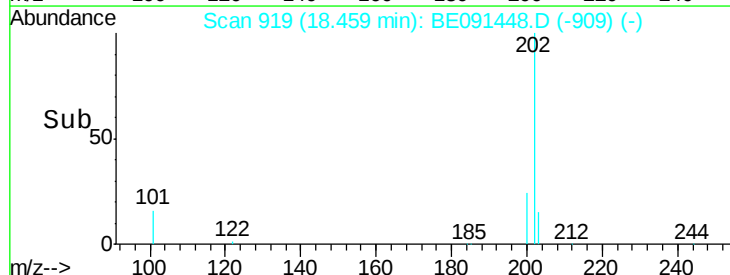
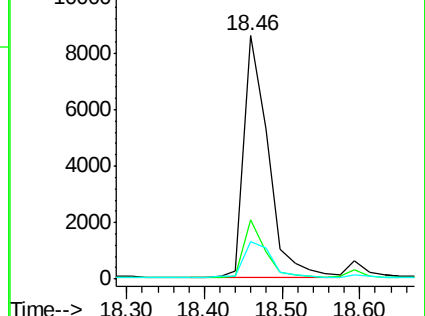
203 17.4 13.8 20.6

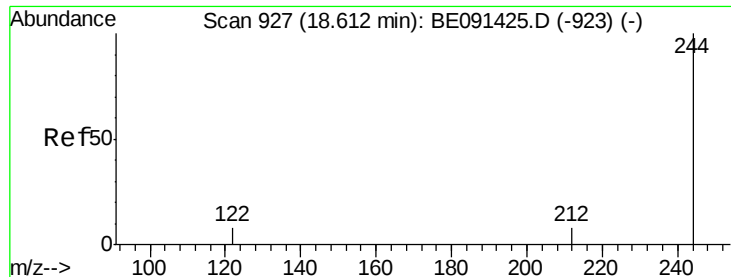


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

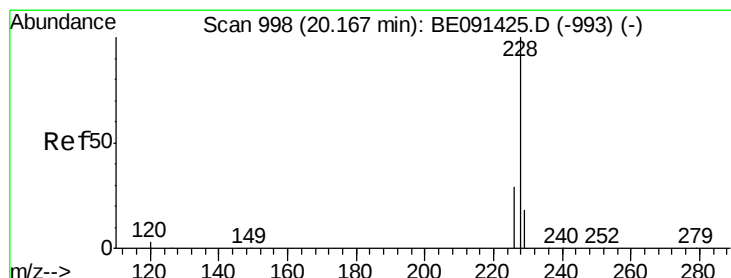
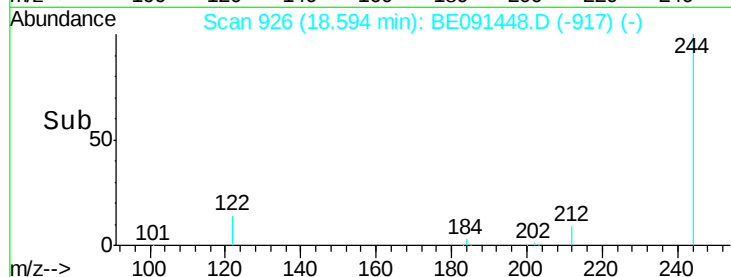
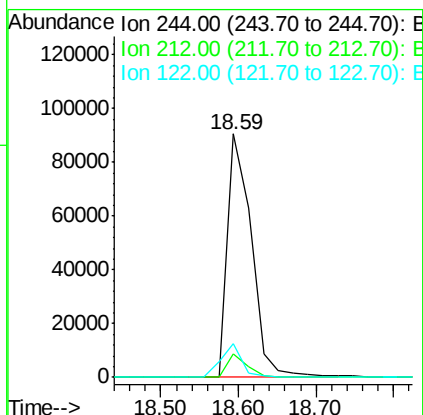
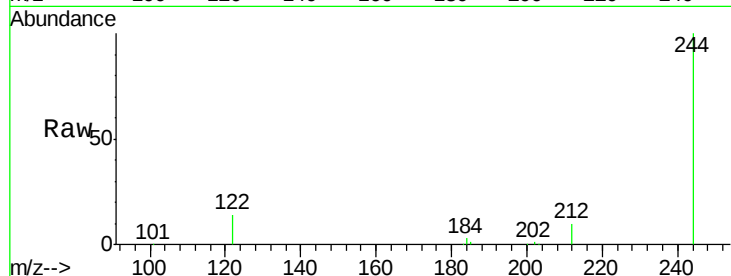




#21
 Terphenyl-d14
 Concen: 4.94 ng
 RT: 18.59 min Scan# 926
 Delta R.T. -0.02 min
 Lab File: BE091448.D
 Acq: 4 Mar 2016 6:46

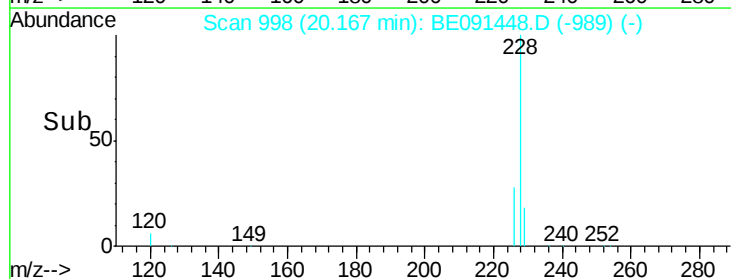
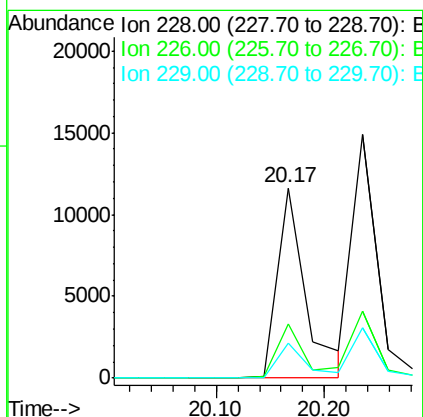
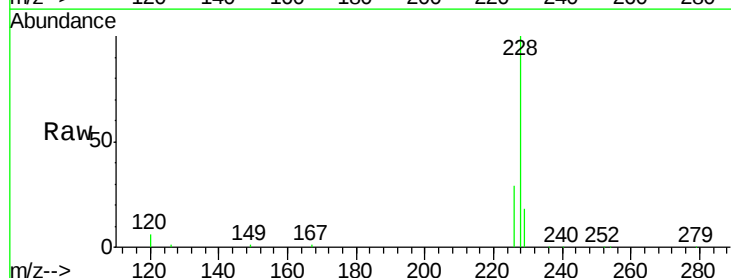
Instrument :
 BNA_E
 ClientSampleId :

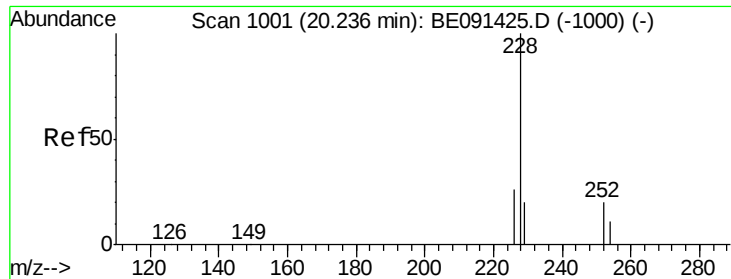
Tgt Ion:244 Resp: 194884
 Ion Ratio Lower Upper
 244 100
 212 9.6 7.0 10.6
 122 13.8 6.8 10.2#



#22
 Benzo(a)anthracene
 Concen: 0.24 ng
 RT: 20.17 min Scan# 998
 Delta R.T. -0.00 min
 Lab File: BE091448.D
 Acq: 4 Mar 2016 6:46

Tgt Ion:228 Resp: 21363
 Ion Ratio Lower Upper
 228 100
 226 28.5 23.1 34.7
 229 18.2 14.5 21.7

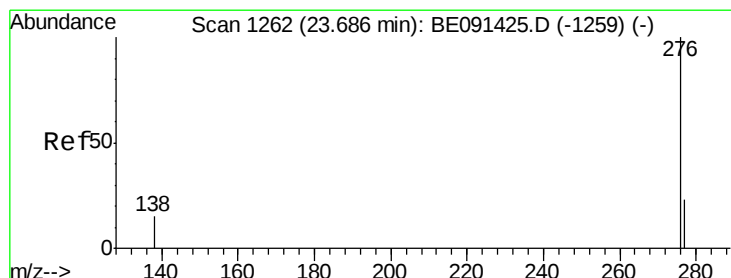
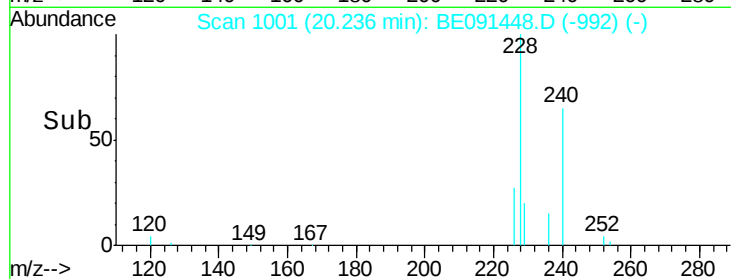
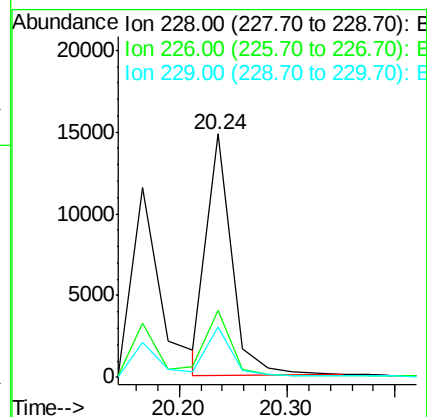
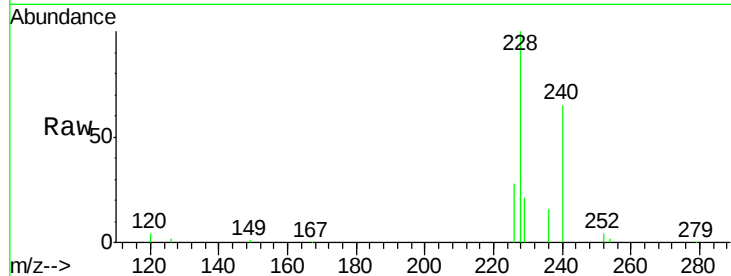




#23
Chrysene
Concen: 0.24 ng
RT: 20.24 min Scan# 1001
Delta R.T. -0.00 min
Lab File: BE091448.D
Acq: 4 Mar 2016 6:46

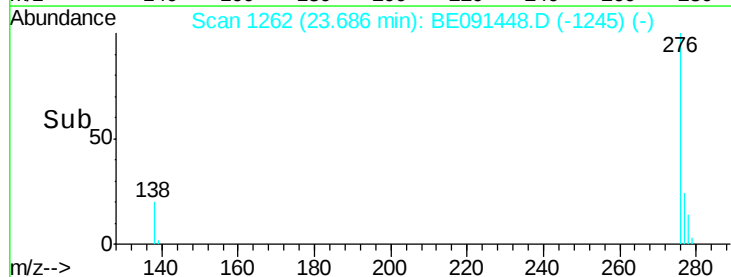
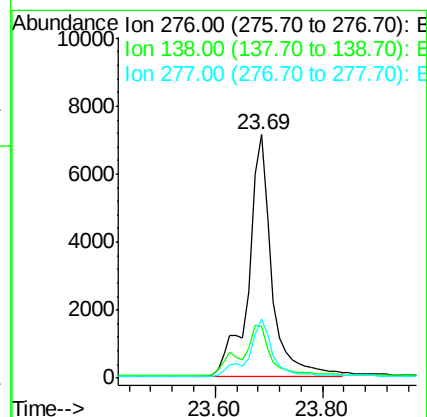
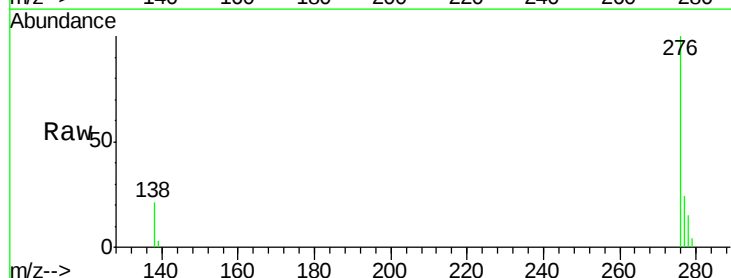
Instrument :
BNA_E
ClientSampleId :

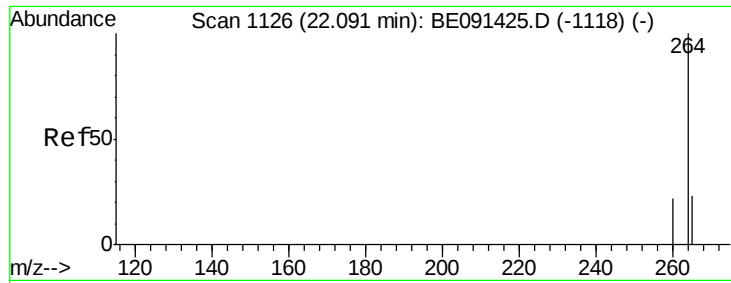
Tgt Ion: 228 Resp: 23483
Ion Ratio Lower Upper
228 100
226 27.5 22.0 33.0
229 20.6 16.2 24.2



#24
Indeno(1,2,3-cd)pyrene
Concen: 0.27 ng
RT: 23.69 min Scan# 1262
Delta R.T. -0.00 min
Lab File: BE091448.D
Acq: 4 Mar 2016 6:46

Tgt Ion: 276 Resp: 21471
Ion Ratio Lower Upper
276 100
138 26.5 16.1 24.1#
277 24.6 22.9 34.3

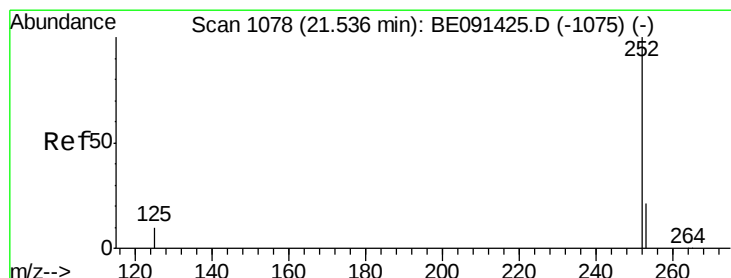
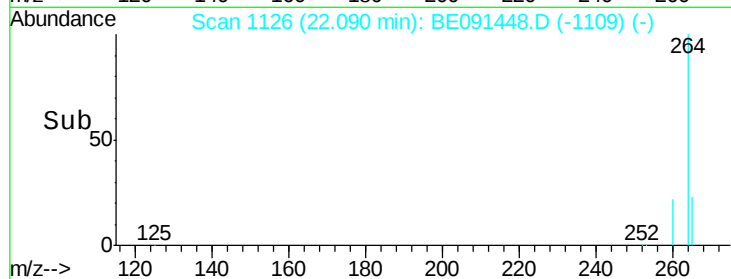
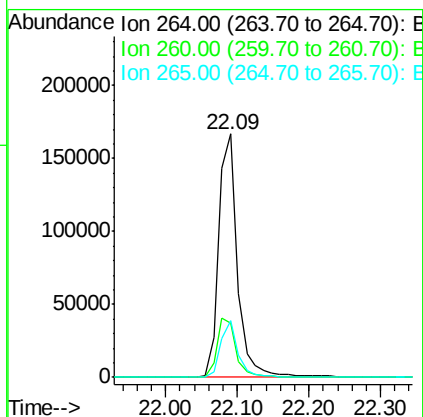
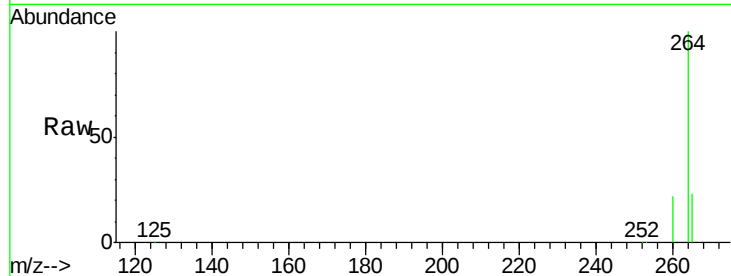




#25
Perylene-d12
Concen: 5.00 ng
RT: 22.09 min Scan# 1126
Delta R.T. -0.00 min
Lab File: BE091448.D
Acq: 4 Mar 2016 6:46

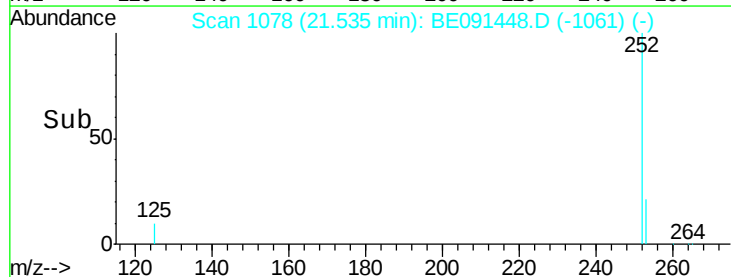
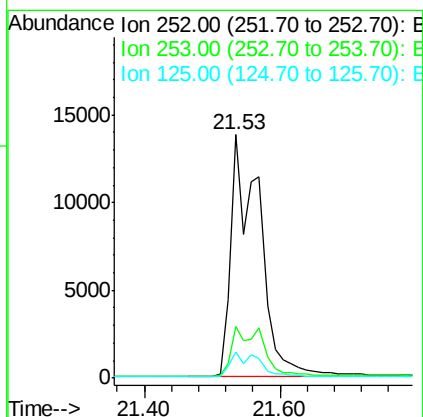
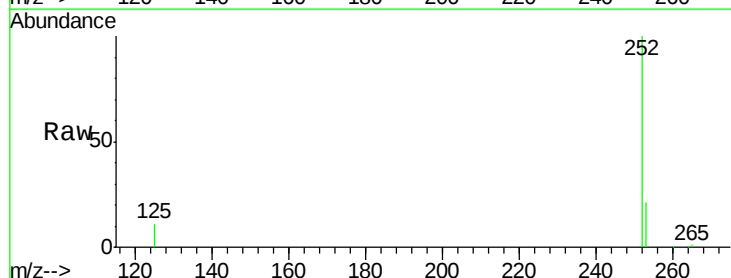
Instrument :
BNA_E
ClientSampleId :

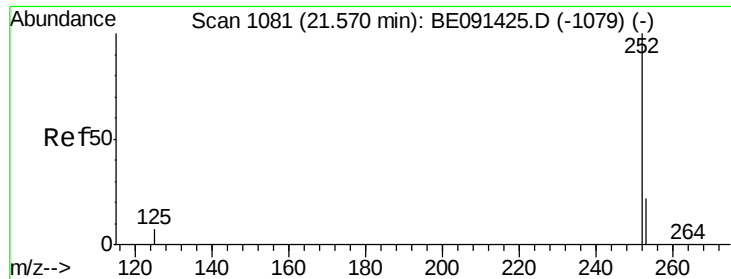
Tgt Ion: 264 Resp: 304132
Ion Ratio Lower Upper
264 100
260 22.4 18.0 27.0
265 23.5 18.2 27.4



#26
Benzo(b)fluoranthene
Concen: 0.48 ng
RT: 21.53 min Scan# 1078
Delta R.T. -0.00 min
Lab File: BE091448.D
Acq: 4 Mar 2016 6:46

Tgt Ion: 252 Resp: 40369
Ion Ratio Lower Upper
252 100
253 21.2 17.0 25.4
125 10.7 8.3 12.5





#27

Benzo(k)fluoranthene

Concen: 0.50 ng

RT: 21.53 min Scan# 1078

Delta R.T. -0.04 min

Lab File: BE091448.D

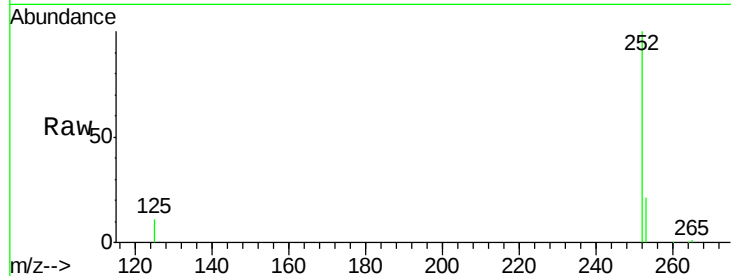
Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

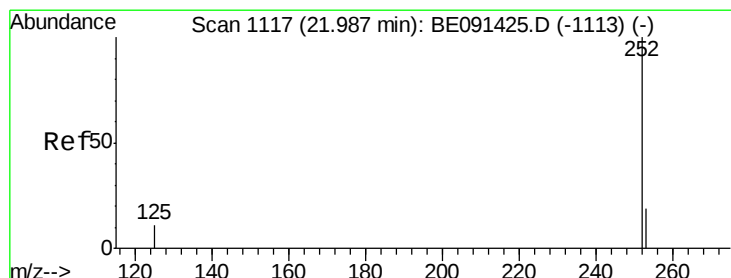
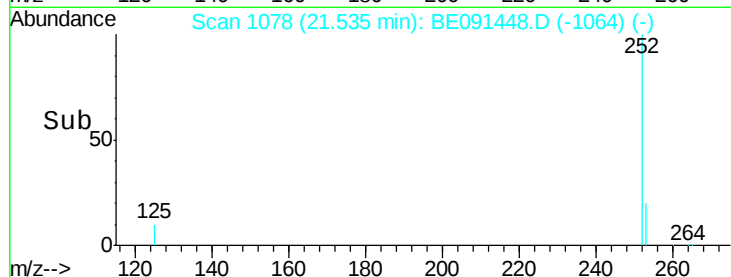
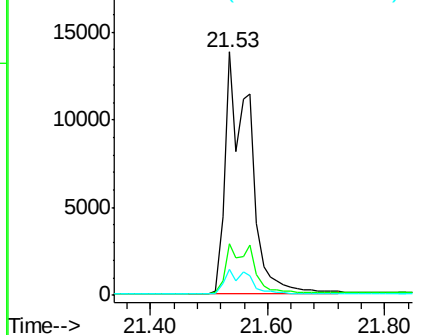
Tgt Ion:	252	Resp:	40691
Ion Ratio	Lower	Upper	
252	100		
253	21.2	19.5	29.3
125	10.7	7.3	10.9



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



#28

Benzo(a)pyrene

Concen: 0.25 ng

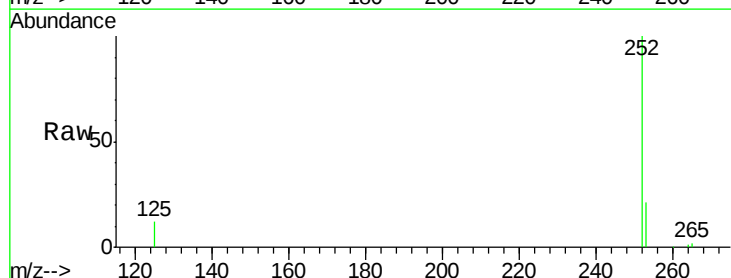
RT: 21.99 min Scan# 1117

Delta R.T. -0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

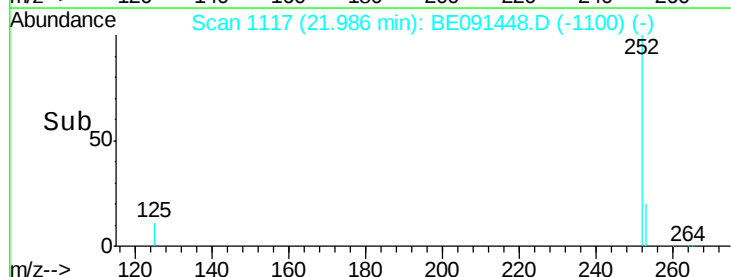
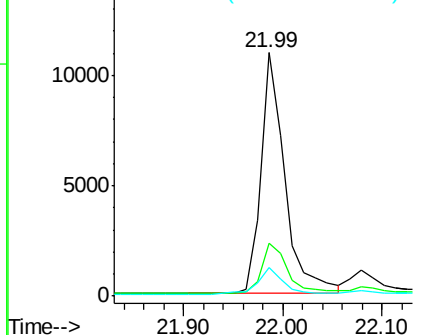
Tgt Ion:	252	Resp:	18178
Ion Ratio	Lower	Upper	
252	100		
253	21.5	16.2	24.4
125	11.8	9.6	14.4

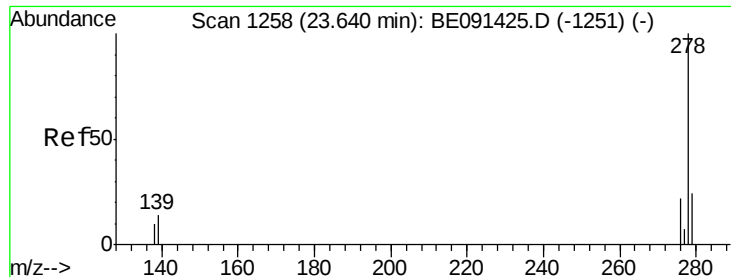


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#29

Dibenzo(a,h)anthracene

Concen: 0.24 ng

RT: 23.64 min Scan# 1258

Delta R.T. -0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

Instrument :

BNA_E

ClientSampleId :

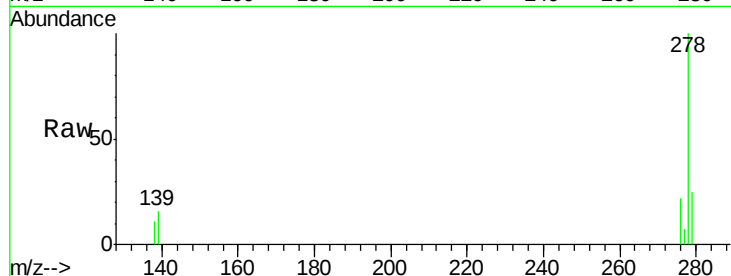
Tgt Ion: 278 Resp: 16565

Ion Ratio Lower Upper

278 100

139 15.5 12.1 18.1

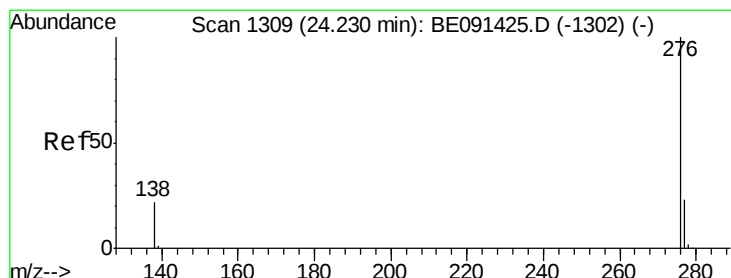
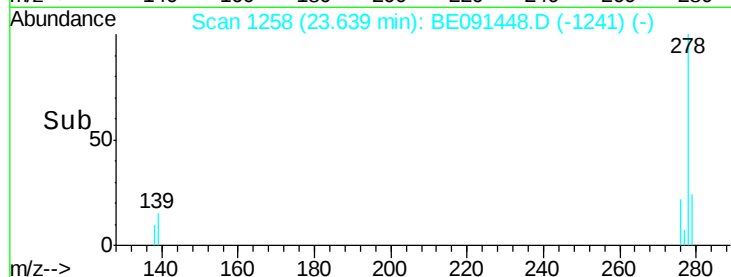
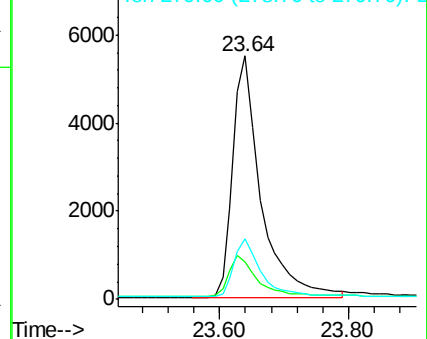
279 25.0 19.4 29.0



Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#30

Benzo(g,h,i)perylene

Concen: 0.25 ng

RT: 24.23 min Scan# 1309

Delta R.T. -0.00 min

Lab File: BE091448.D

Acq: 4 Mar 2016 6:46

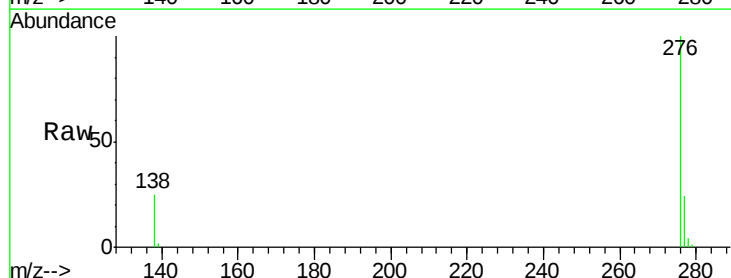
Tgt Ion: 276 Resp: 18638

Ion Ratio Lower Upper

276 100

277 23.7 19.0 28.6

138 25.0 18.2 27.4



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

