

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE030316\
 Data File : BE091446.D
 Acq On : 4 Mar 2016 5:34
 Operator : UM/IZ
 Sample : MDL-04-S
 Misc : 0.16PPM
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :

Quant Time: Mar 04 07:54:13 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	36094	5.00	ng	-0.02
4) Naphthalene-d8	9.53	136	161827	5.00	ng	0.00
8) Acenaphthene-d10	13.34	164	99126	5.00	ng	0.00
13) Phenanthrene-d10	16.10	188	162045	5.00	ng	0.00
19) Chrysene-d12	20.21	240	261394	5.00	ng	0.00
25) Perylene-d12	22.09	264	303870	5.00	ng	0.00

System Monitoring Compounds						
5) Nitrobenzene-d5	8.15	82	39536	3.95	ng	-0.03
9) 2-Fluorobiphenyl	11.99	172	110909	4.61	ng	-0.01
21) Terphenyl-d14	18.59	244	184631	4.64	ng	-0.02

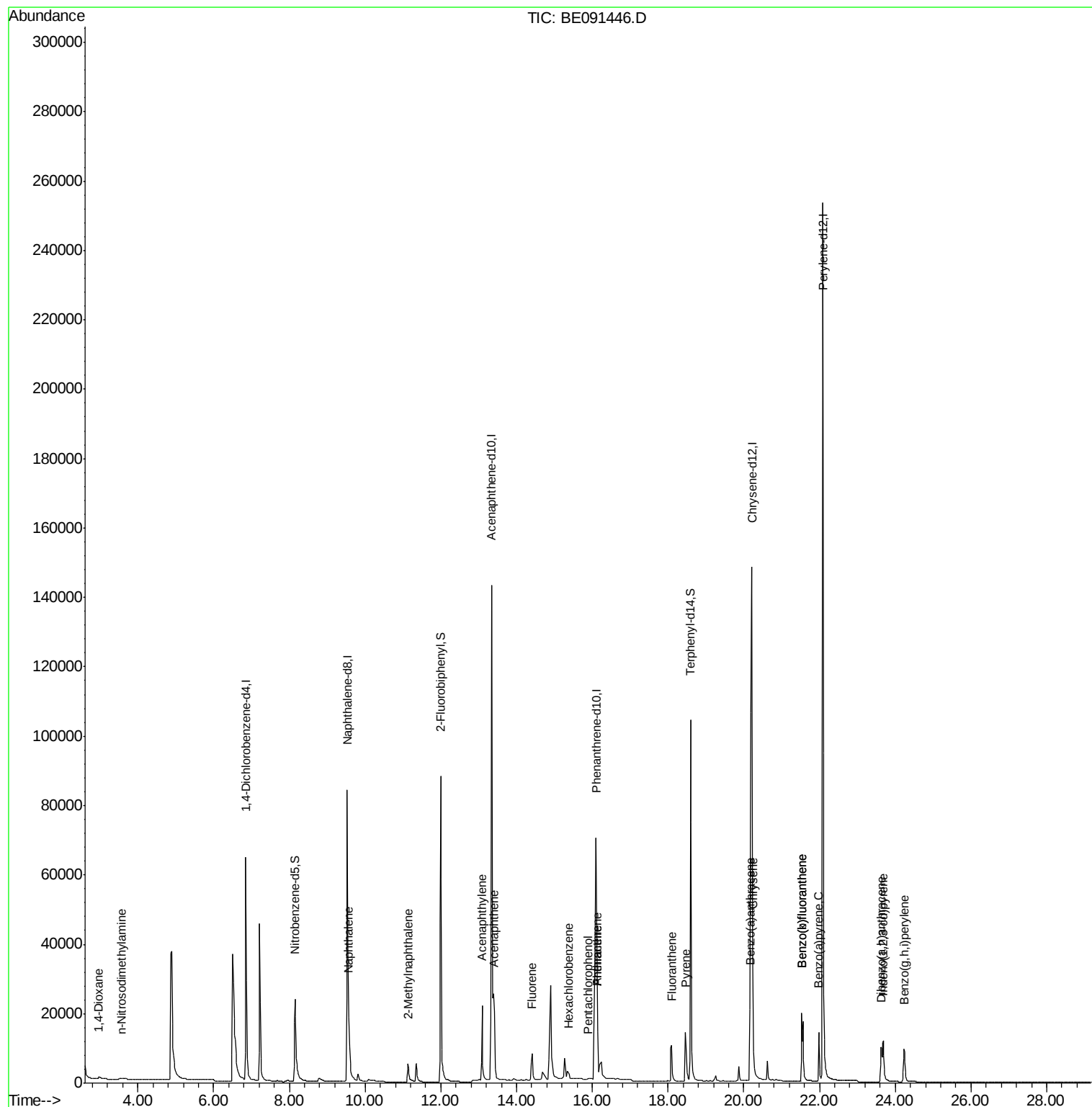
Target Compounds				Qvalue		
2) 1,4-Dioxane	2.97	88	855	0.27	ng	# 91
3) n-Nitrosodimethylamine	3.57	42	622	0.26	ng	# 87
6) Naphthalene	9.57	128	10774	0.29	ng	99
7) 2-Methylnaphthalene	11.14	142	5854	0.27	ng	97
10) Acenaphthylene	13.09	152	38510	0.23	ng	99
11) Acenaphthene	13.41	154	7628	0.26	ng	# 100
12) Fluorene	14.41	166	8852	0.23	ng	99
14) Hexachlorobenzene	15.38	284	2615	0.27	ng	# 100
15) Pentachlorophenol	15.89	266	314	0.55	ng	89
16) Phenanthrene	16.13	178	16052	0.28	ng	99
17) Anthracene	16.13	178	16647	0.31	ng	92
18) Fluoranthene	18.09	202	18882	0.29	ng	98
20) Pyrene	18.46	202	19982	0.27	ng	99
22) Benzo(a)anthracene	20.17	228	23910	0.27	ng	99
23) Chrysene	20.24	228	25077	0.26	ng	100
24) Indeno(1,2,3-cd)pyrene	23.69	276	22275	0.28	ng	94
26) Benzo(b)fluoranthene	21.53	252	43260	0.51	ng	98
27) Benzo(k)fluoranthene	21.53	252	43578	0.53	ng	93
28) Benzo(a)pyrene	21.99	252	18656	0.25	ng	99
29) Dibenzo(a,h)anthracene	23.64	278	17168	0.25	ng	98
30) Benzo(g,h,i)perylene	24.23	276	19230	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: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :

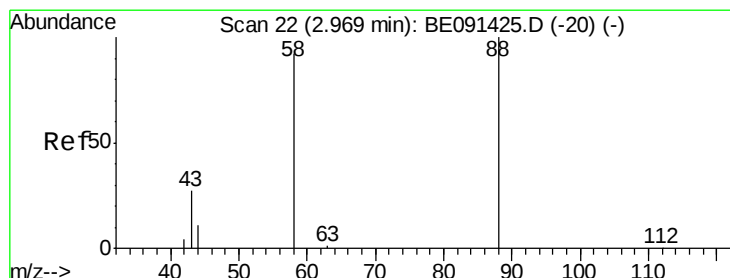
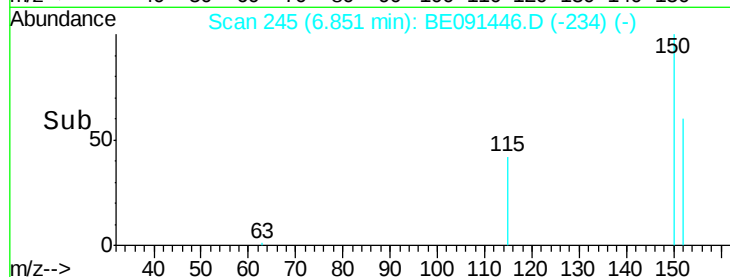
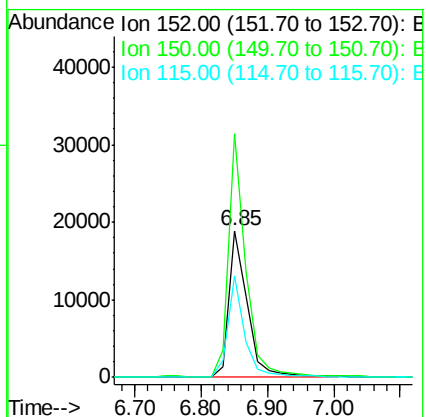
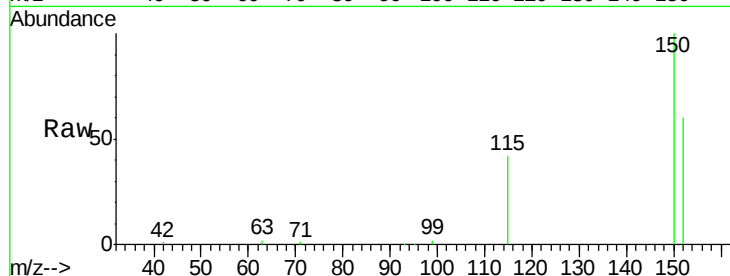
Tgt Ion: 152 Resp: 36094

Ion Ratio Lower Upper

152 100

150 166.2 115.0 172.4

115 69.5 42.2 63.4#



#2

1,4-Dioxane

Concen: 0.27 ng

RT: 2.97 min Scan# 22

Delta R.T. -0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

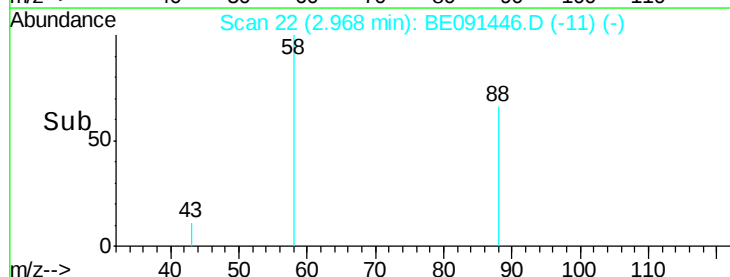
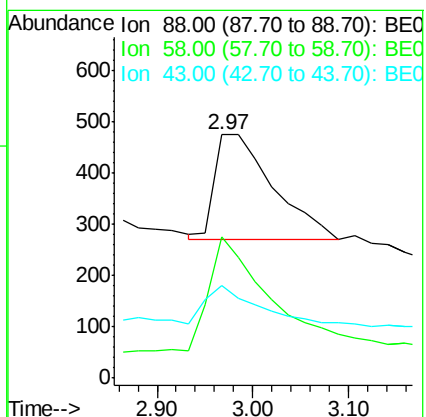
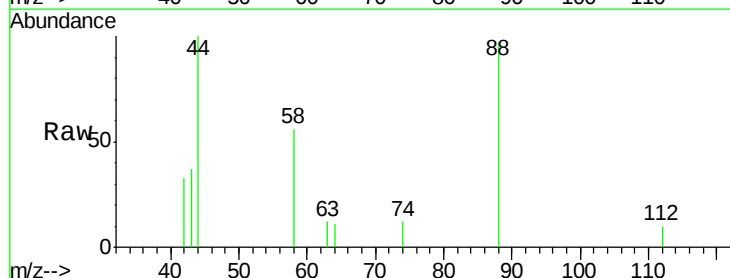
Tgt Ion: 88 Resp: 855

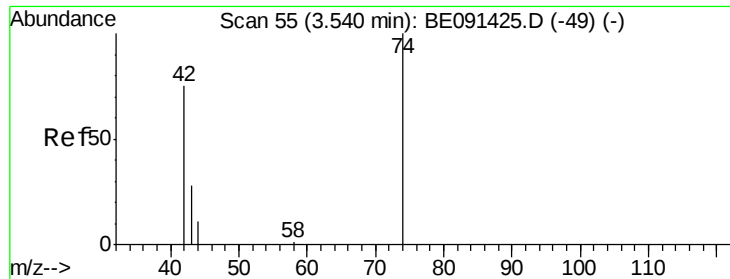
Ion Ratio Lower Upper

88 100

58 113.8 97.9 146.9

43 28.8 29.0 43.4#





#3

n-Nitrosodimethylamine

Concen: 0.26 ng

RT: 3.57 min Scan# 57

Delta R.T. 0.03 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :

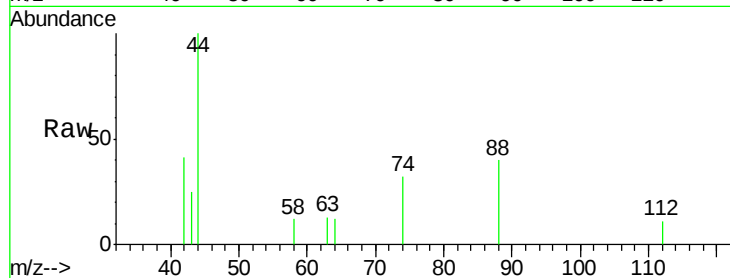
Tgt Ion: 42 Resp: 622

Ion Ratio Lower Upper

42 100

74 132.0 93.8 140.6

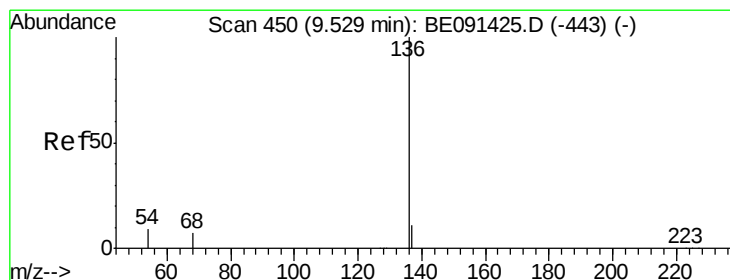
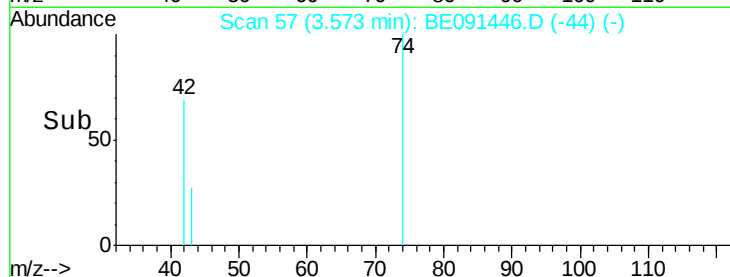
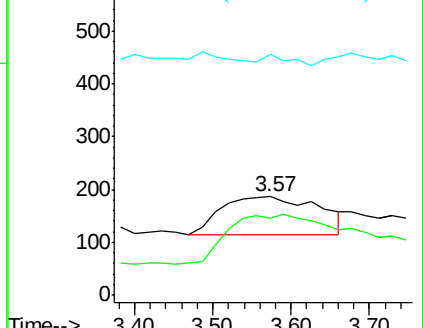
44 7.6 0.0 0.0#



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: BE091446.D

Acq: 4 Mar 2016 5:34

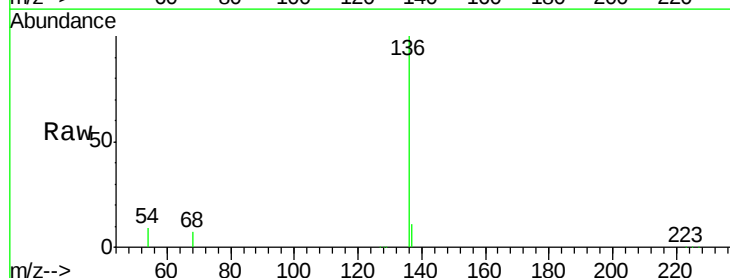
Tgt Ion: 136 Resp: 161827

Ion Ratio Lower Upper

136 100

137 10.8 8.7 13.1

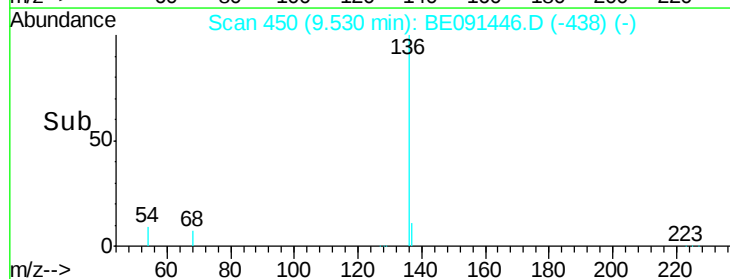
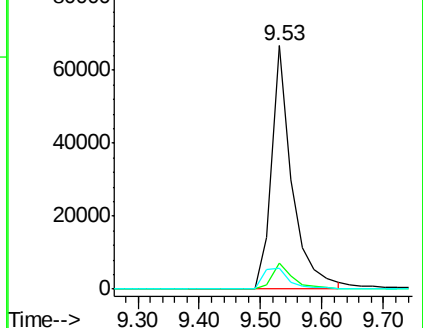
54 8.7 6.9 10.3

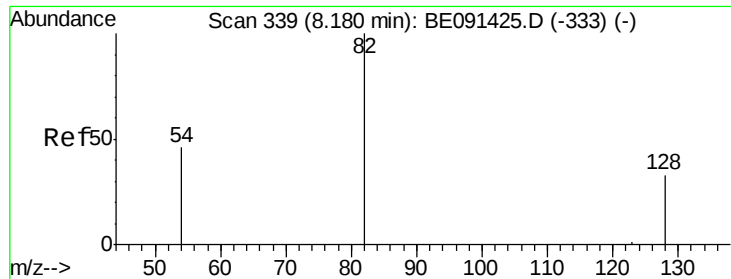


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0





#5

Nitrobenzene-d5

Concen: 3.95 ng

RT: 8.15 min Scan# 336

Delta R.T. -0.03 min

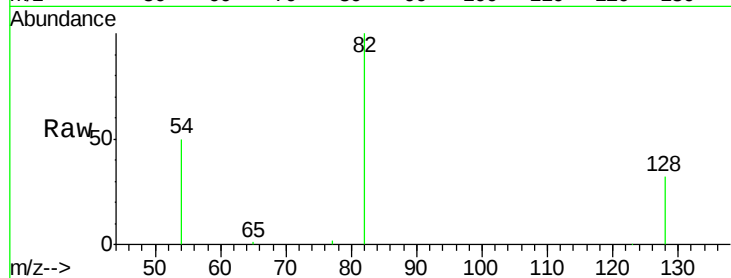
Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :



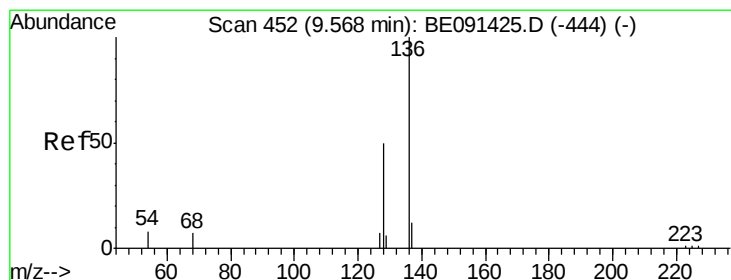
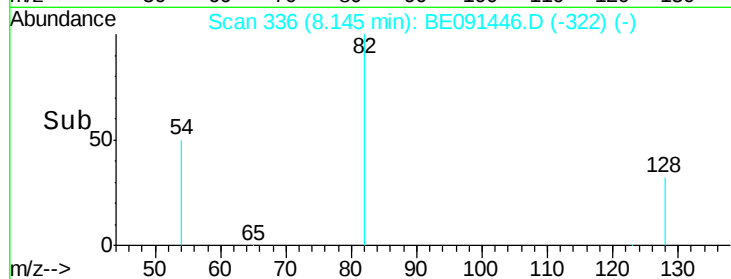
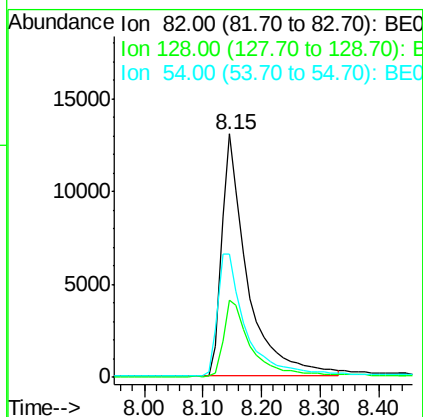
Tgt Ion: 82 Resp: 39536

Ion Ratio Lower Upper

82 100

128 31.9 30.0 45.0

54 50.5 41.5 62.3



#6

Naphthalene

Concen: 0.29 ng

RT: 9.57 min Scan# 452

Delta R.T. 0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

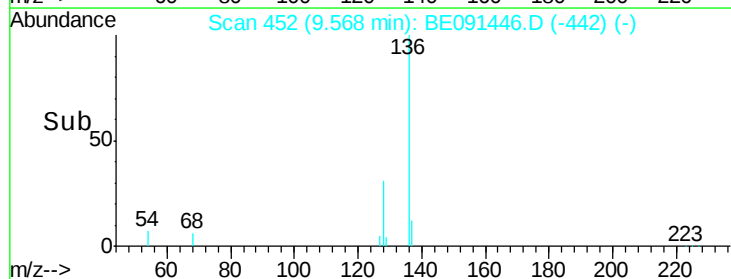
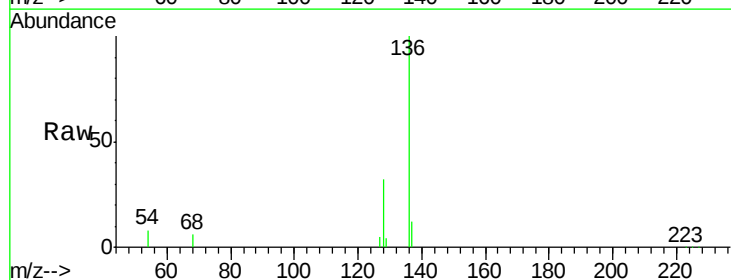
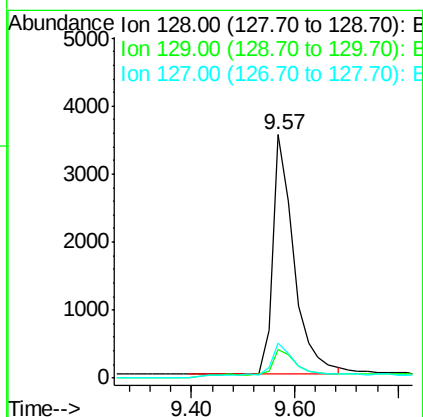
Tgt Ion: 128 Resp: 10774

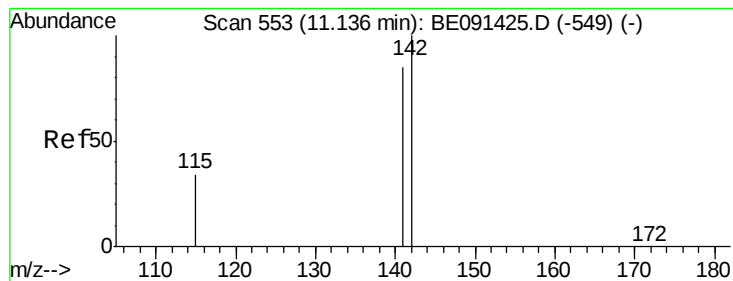
Ion Ratio Lower Upper

128 100

129 11.6 9.5 14.3

127 14.5 11.4 17.0





#7

2-Methylnaphthalene

Concen: 0.27 ng

RT: 11.14 min Scan# 553

Delta R.T. 0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :

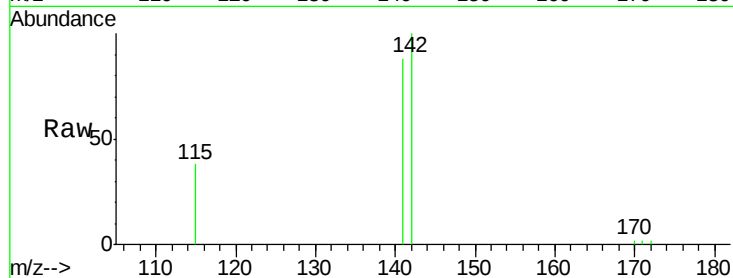
Tgt Ion:142 Resp: 5854

Ion Ratio Lower Upper

142 100

141 88.1 68.3 102.5

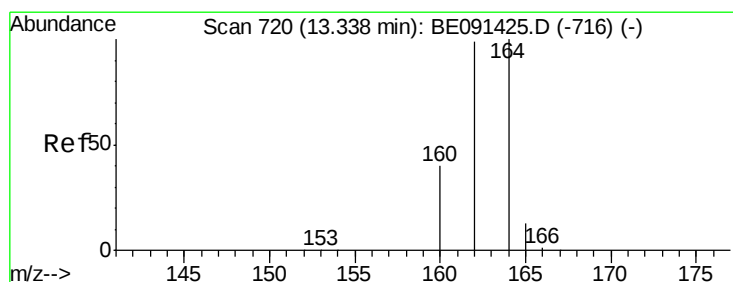
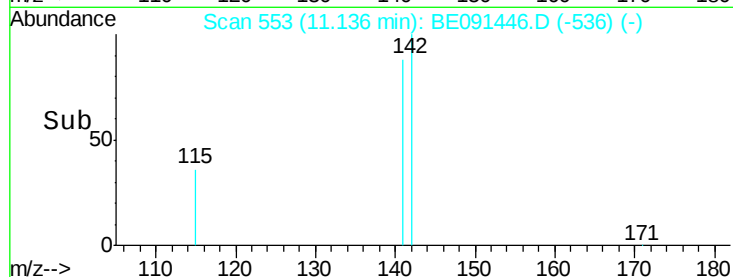
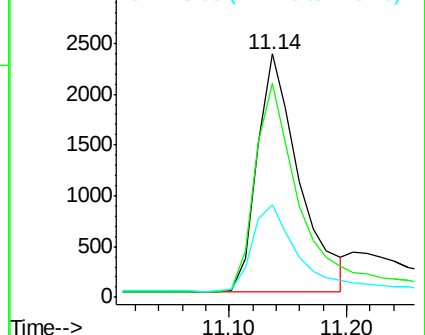
115 38.1 28.9 43.3



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: BE091446.D

Acq: 4 Mar 2016 5:34

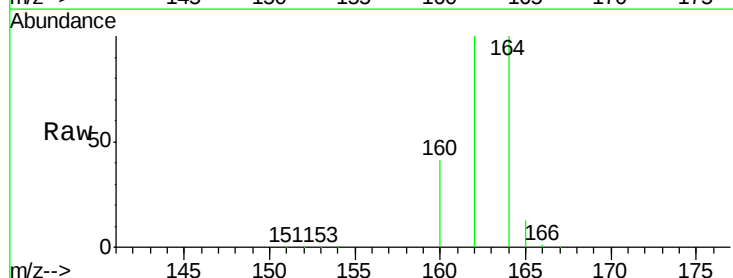
Tgt Ion:164 Resp: 99126

Ion Ratio Lower Upper

164 100

162 99.5 79.1 118.7

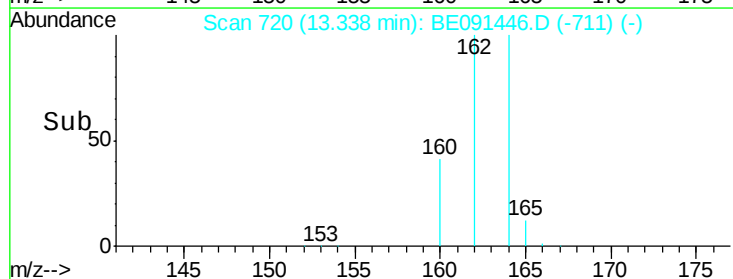
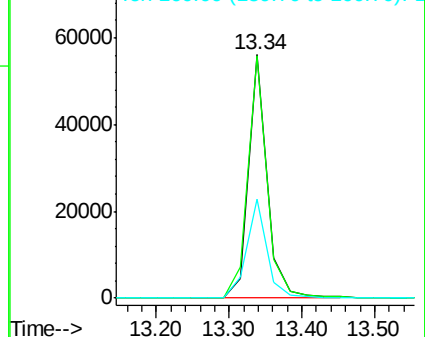
160 40.5 32.4 48.6

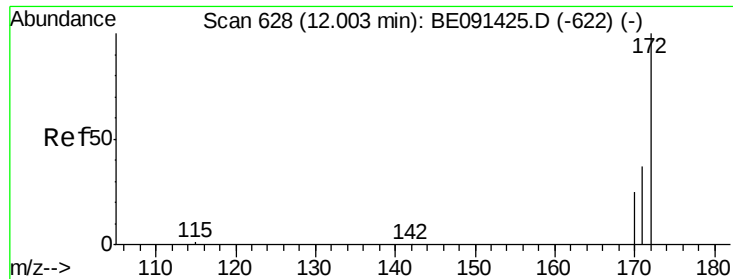


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#9

2-Fluorobiphenyl

Concen: 4.61 ng

RT: 11.99 min Scan# 627

Delta R.T. -0.01 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :

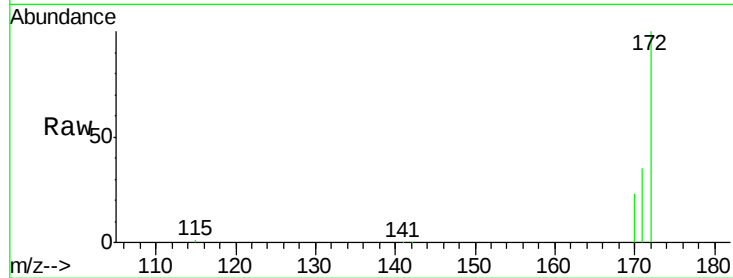
Tgt Ion:172 Resp: 110909

Ion Ratio Lower Upper

172 100

171 34.9 30.2 45.4

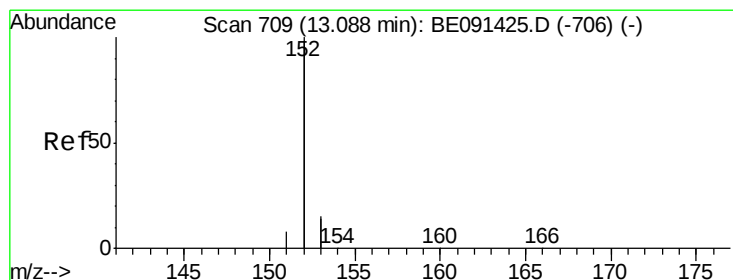
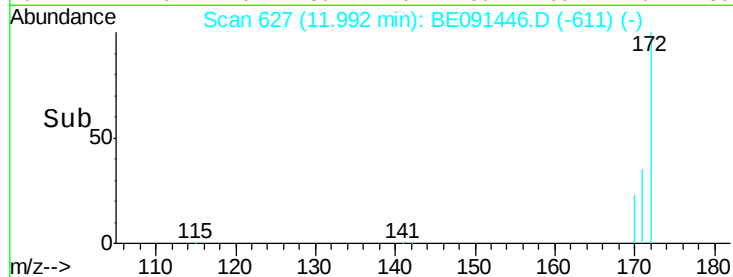
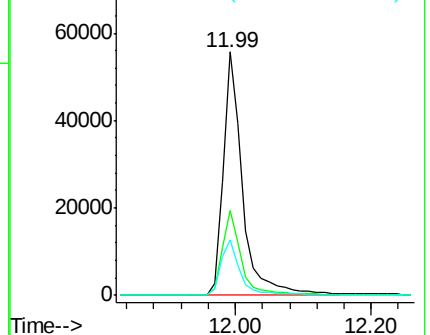
170 23.0 20.9 31.3



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: 0.23 ng

RT: 13.09 min Scan# 709

Delta R.T. 0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

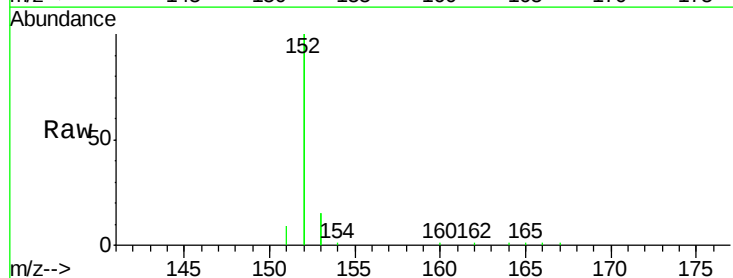
Tgt Ion:152 Resp: 38510

Ion Ratio Lower Upper

152 100

151 4.8 3.9 5.9

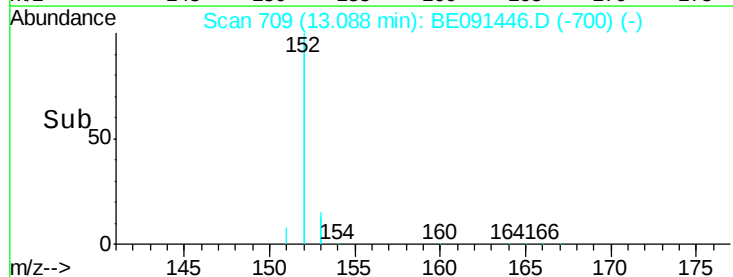
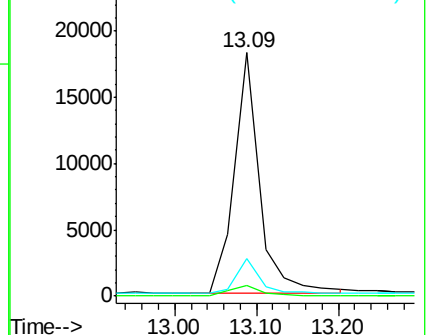
153 13.5 10.5 15.7

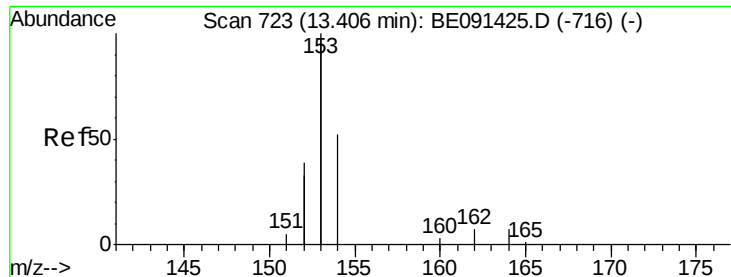


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E

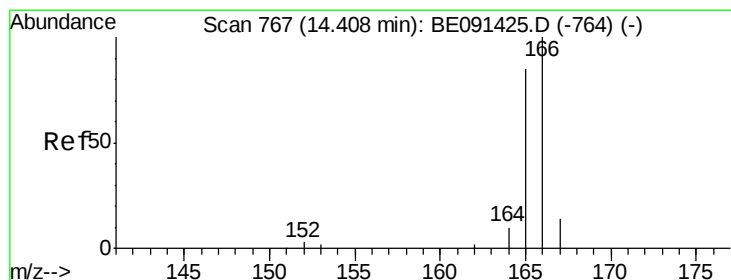
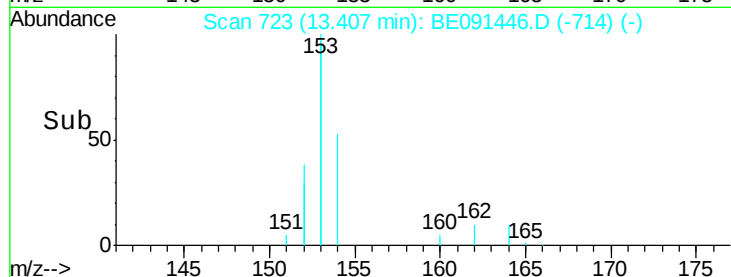
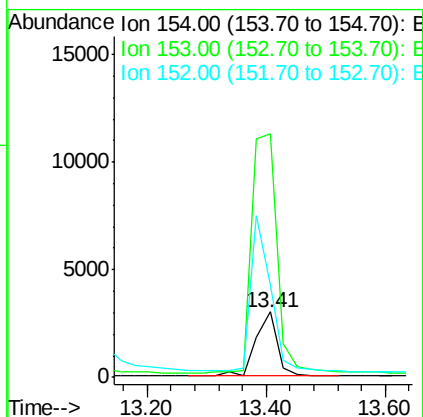
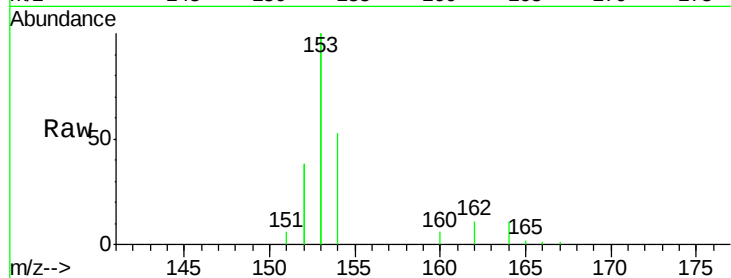




#11
Acenaphthene
Concen: 0.26 ng
RT: 13.41 min Scan# 723
Delta R.T. 0.00 min
Lab File: BE091446.D
Acq: 4 Mar 2016 5:34

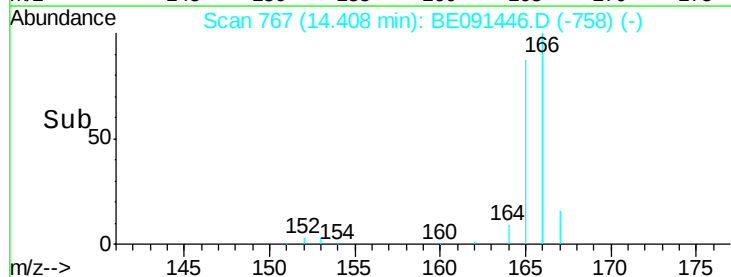
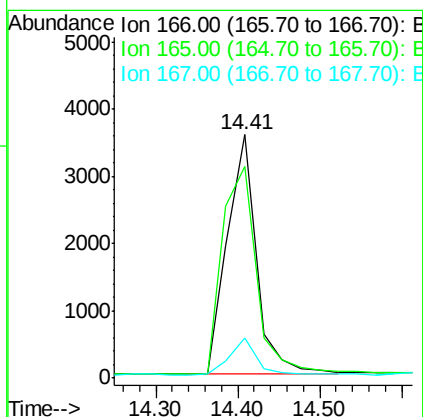
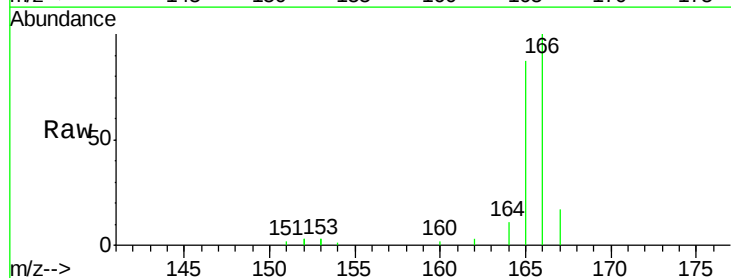
Instrument :
BNA_E
ClientSampleId :

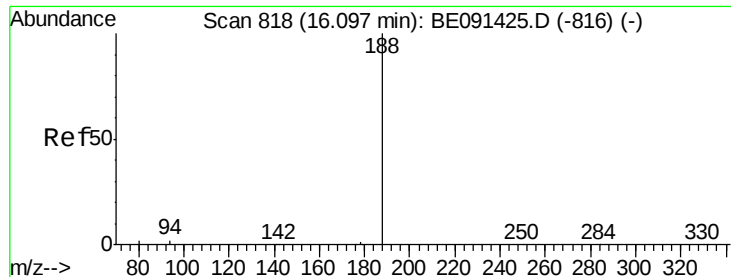
Tgt Ion:154 Resp: 7628
Ion Ratio Lower Upper
154 100
153 430.5 0.0 0.0#
152 0.0 0.0 0.0



#12
Fluorene
Concen: 0.23 ng
RT: 14.41 min Scan# 767
Delta R.T. 0.00 min
Lab File: BE091446.D
Acq: 4 Mar 2016 5:34

Tgt Ion:166 Resp: 8852
Ion Ratio Lower Upper
166 100
165 100.3 79.4 119.2
167 14.2 10.7 16.1





#13

Phenanthrene-d10

Concen: 5.00 ng

RT: 16.10 min Scan# 818

Delta R.T. 0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :

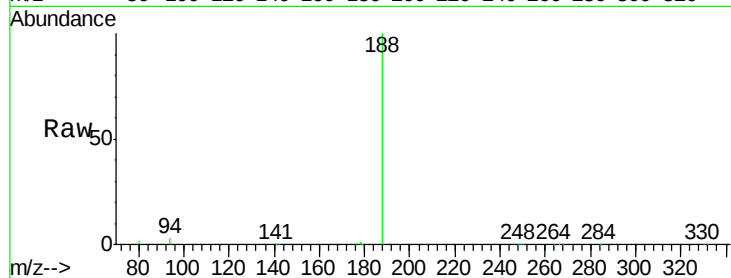
Tgt Ion:188 Resp: 162045

Ion Ratio Lower Upper

188 100

94 2.6 2.1 3.1

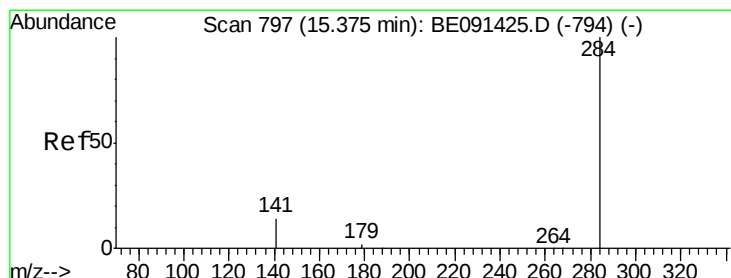
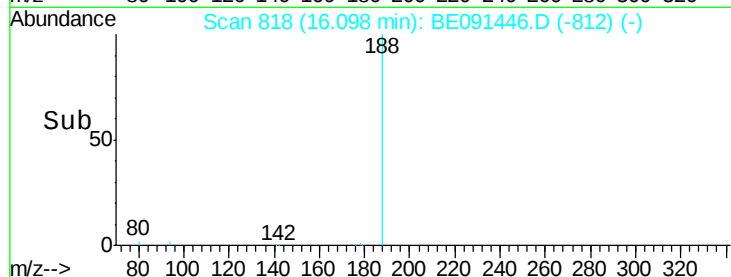
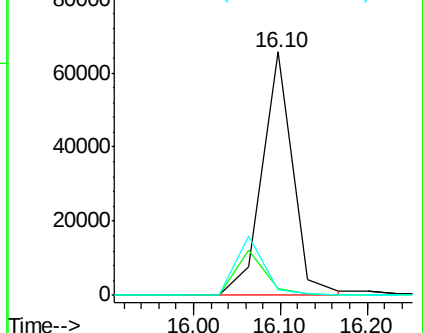
80 2.5 1.9 2.9



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: 0.27 ng

RT: 15.38 min Scan# 797

Delta R.T. 0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

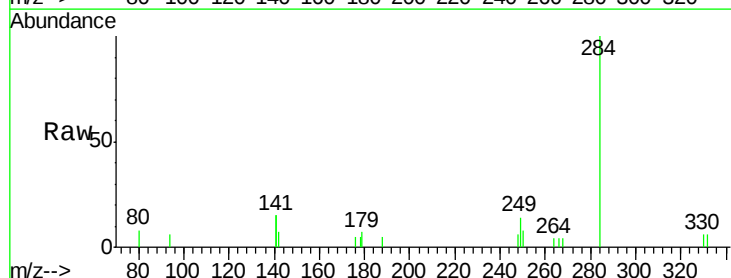
Tgt Ion:284 Resp: 2615

Ion Ratio Lower Upper

284 100

142 0.0 0.0 0.0

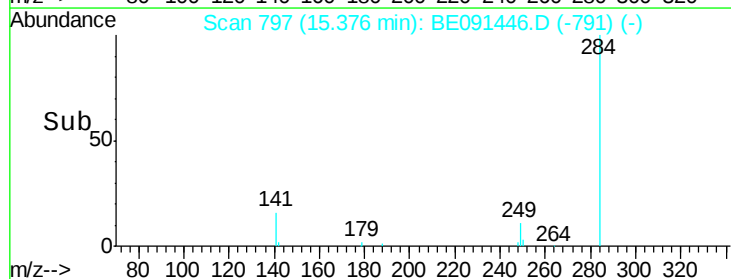
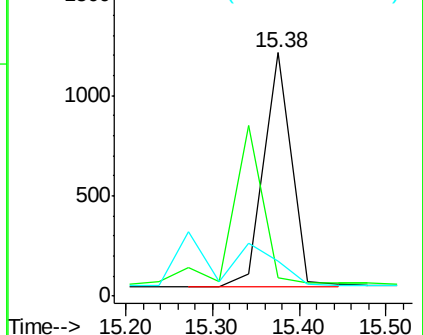
249 0.0 0.0 0.0

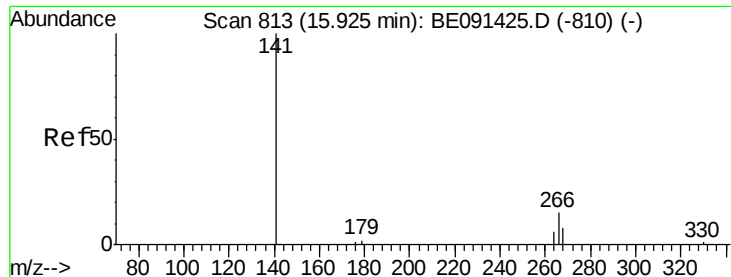


Abundance Ion 283.80 (283.50 to 284.50): E

Ion 142.00 (141.70 to 142.70): E

Ion 249.00 (248.70 to 249.70): E





#15

Pentachlorophenol

Concen: 0.55 ng

RT: 15.89 min Scan# 812

Delta R.T. -0.03 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampled :

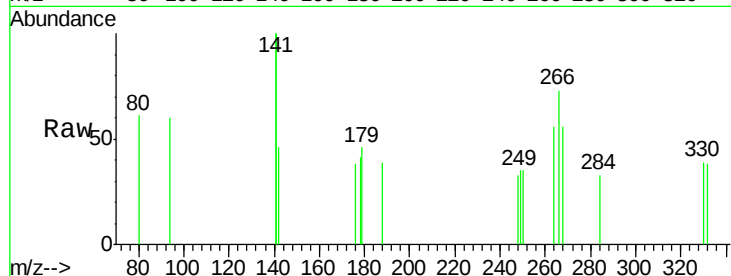
Tgt Ion:266 Resp: 314

Ion Ratio Lower Upper

266 100

268 77.6 73.0 109.6

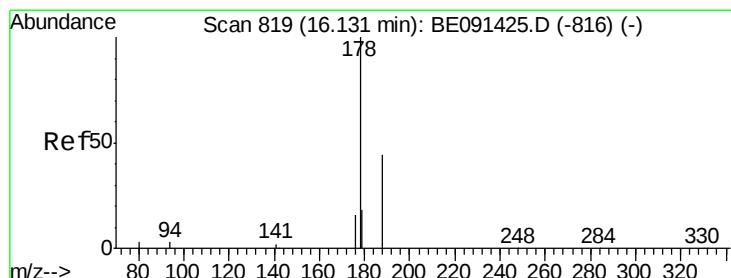
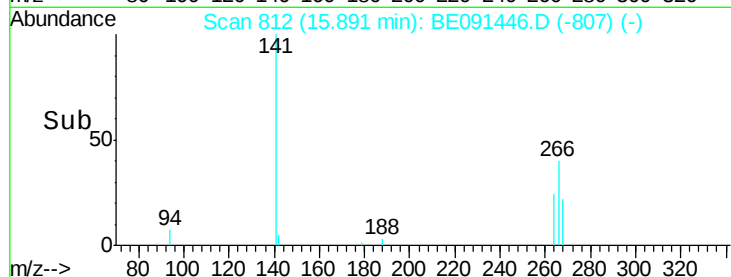
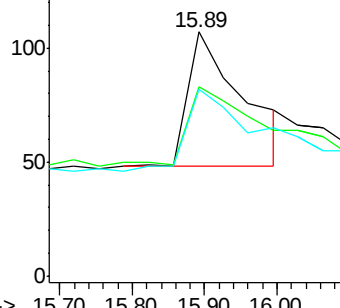
264 76.6 66.1 99.1



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: 0.28 ng

RT: 16.13 min Scan# 819

Delta R.T. 0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

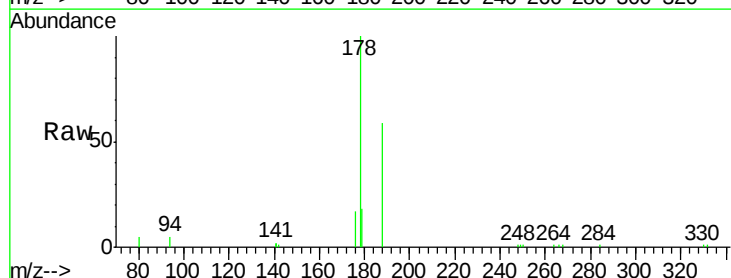
Tgt Ion:178 Resp: 16052

Ion Ratio Lower Upper

178 100

176 16.9 13.8 20.8

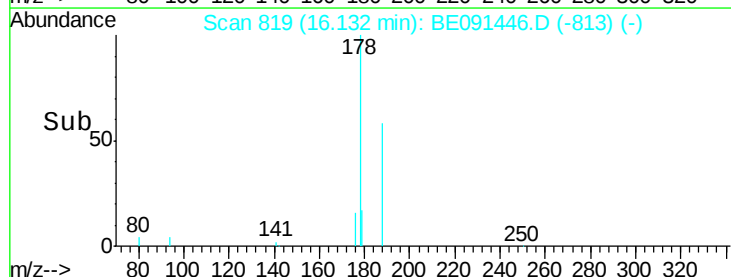
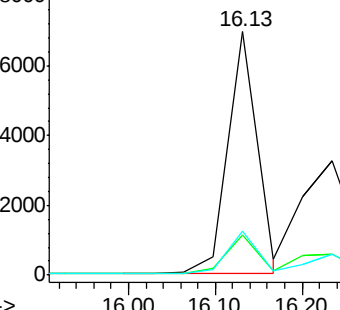
179 17.6 14.2 21.4

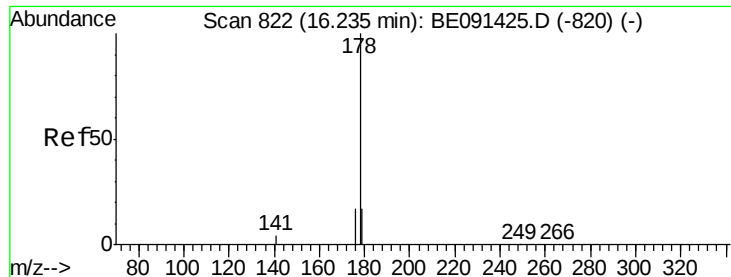


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E

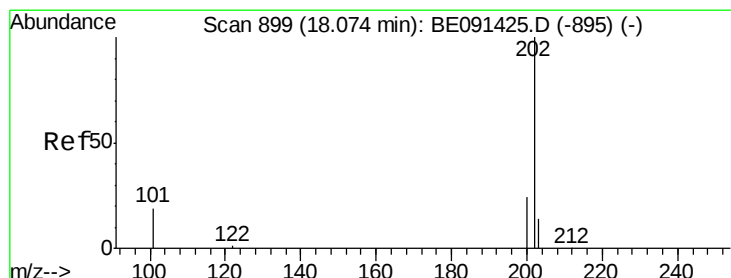
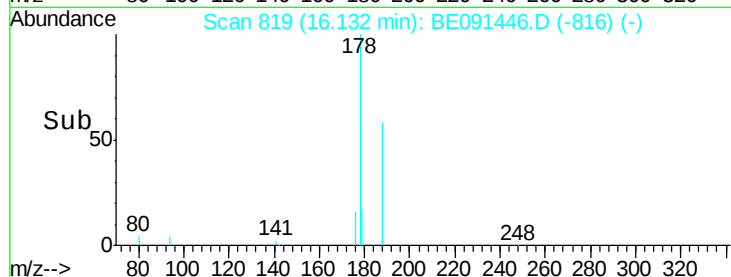
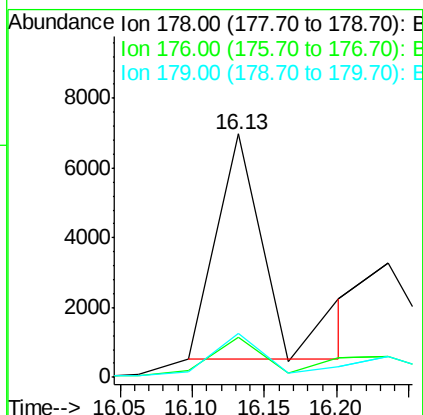
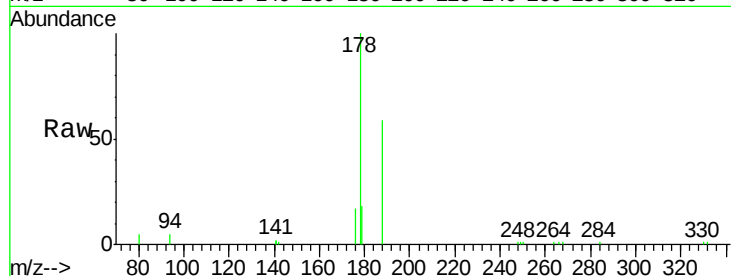




#17
 Anthracene
 Concen: 0.31 ng
 RT: 16.13 min Scan# 819
 Delta R.T. -0.10 min
 Lab File: BE091446.D
 Acq: 4 Mar 2016 5:34

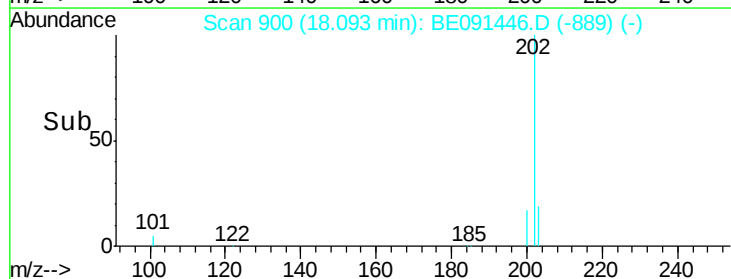
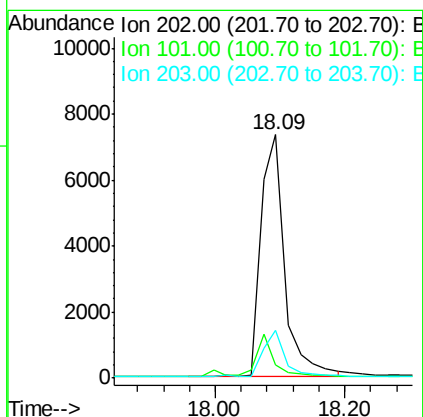
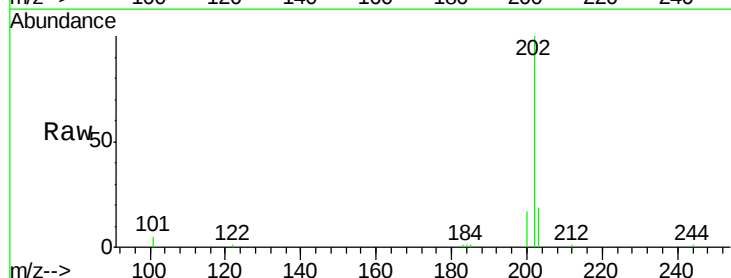
Instrument :
 BNA_E
 ClientSampled :

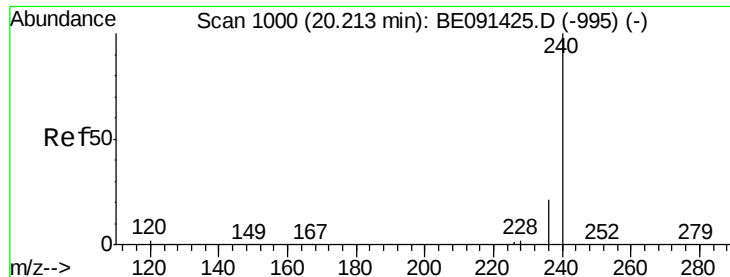
Tgt Ion:178 Resp: 16647
 Ion Ratio Lower Upper
 178 100
 176 26.0 24.4 36.6
 179 15.3 14.8 22.2



#18
 Fluoranthene
 Concen: 0.29 ng
 RT: 18.09 min Scan# 900
 Delta R.T. 0.02 min
 Lab File: BE091446.D
 Acq: 4 Mar 2016 5:34

Tgt Ion:202 Resp: 18882
 Ion Ratio Lower Upper
 202 100
 101 12.1 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: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :

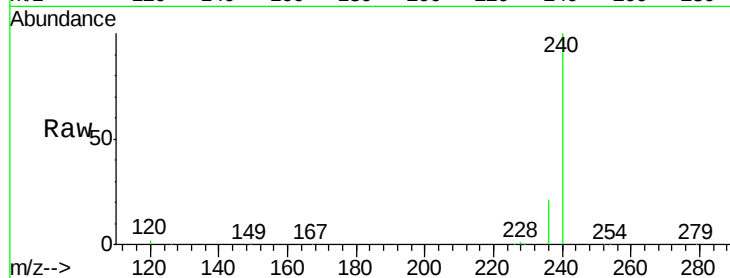
Tgt Ion:240 Resp: 261394

Ion Ratio Lower Upper

240 100

120 1.7 1.4 2.0

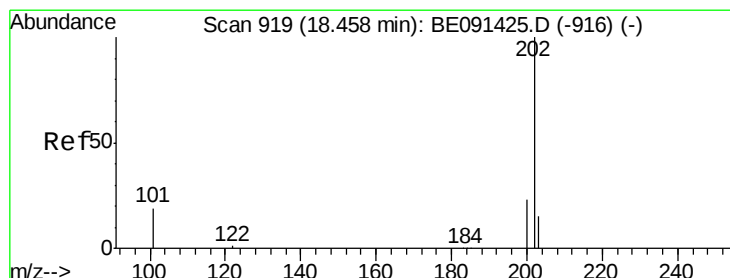
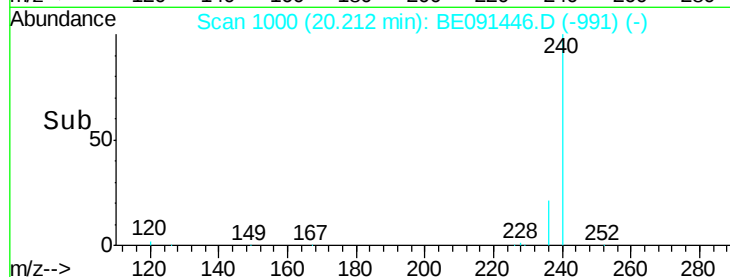
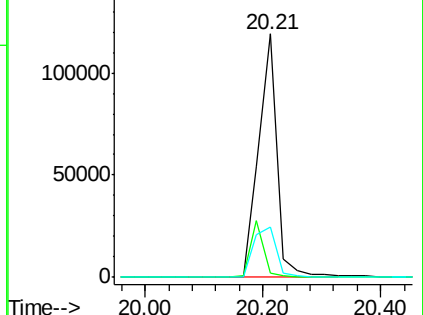
236 20.7 16.7 25.1



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: 0.27 ng

RT: 18.46 min Scan# 919

Delta R.T. 0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

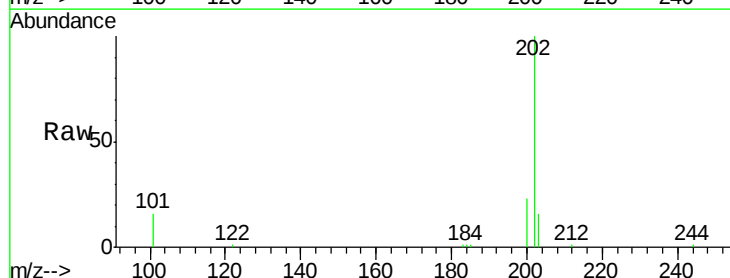
Tgt Ion:202 Resp: 19982

Ion Ratio Lower Upper

202 100

200 20.2 16.5 24.7

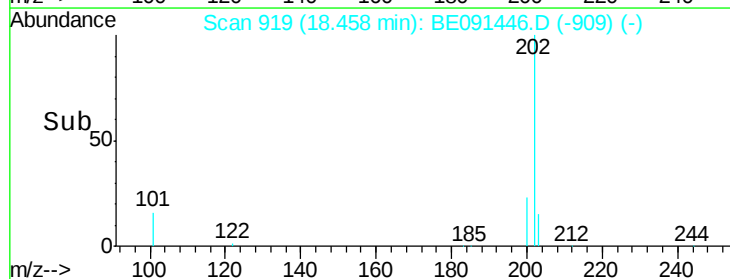
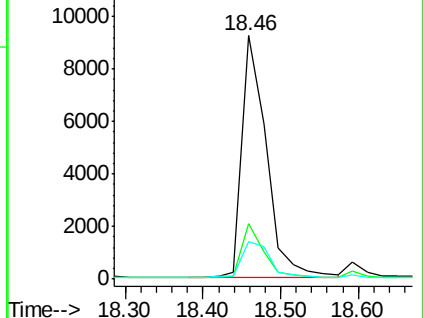
203 17.5 13.8 20.6

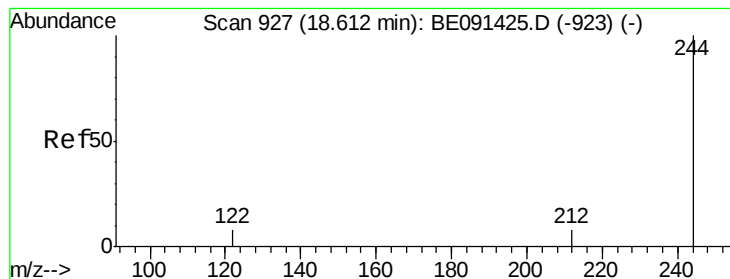


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#21

Terphenyl-d14

Concen: 4.64 ng

RT: 18.59 min Scan# 926

Delta R.T. -0.02 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :

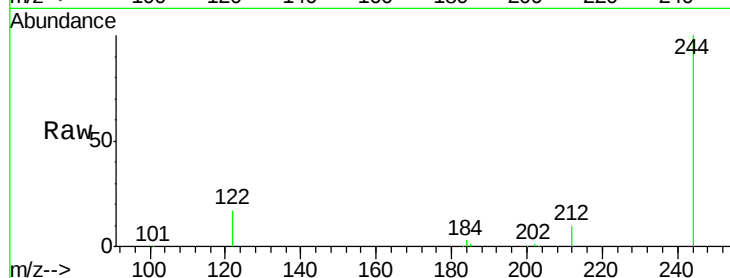
Tgt Ion:244 Resp: 184631

Ion Ratio Lower Upper

244 100

212 10.0 7.0 10.6

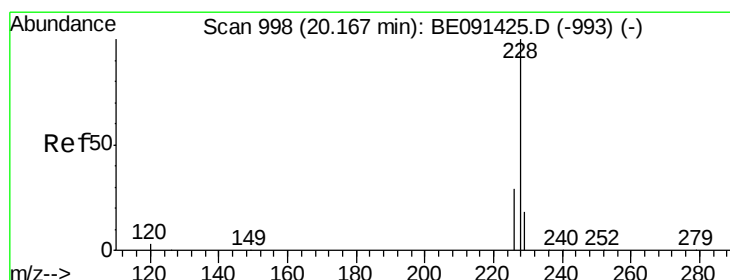
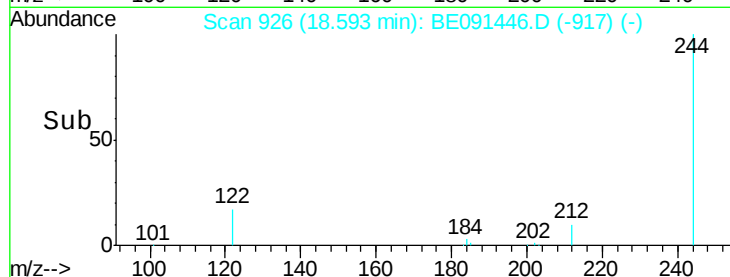
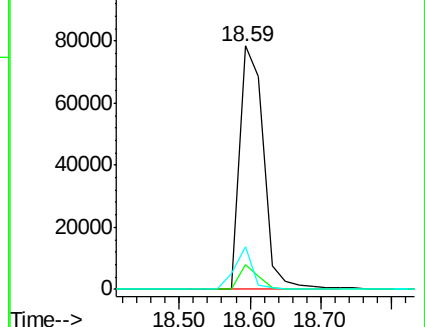
122 17.4 6.8 10.2#



Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#22

Benzo(a)anthracene

Concen: 0.27 ng

RT: 20.17 min Scan# 998

Delta R.T. -0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

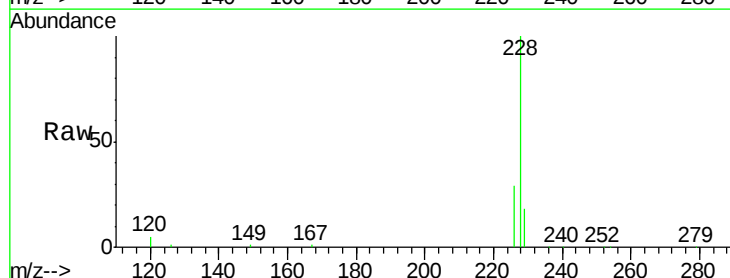
Tgt Ion:228 Resp: 23910

Ion Ratio Lower Upper

228 100

226 28.5 23.1 34.7

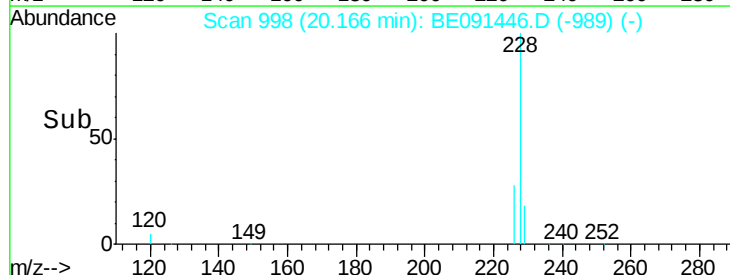
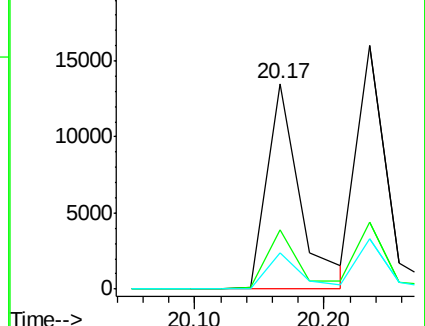
229 17.9 14.5 21.7

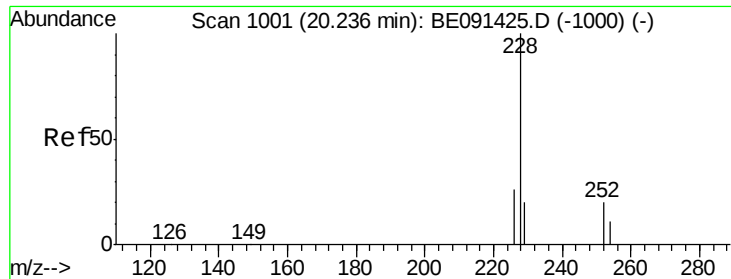


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

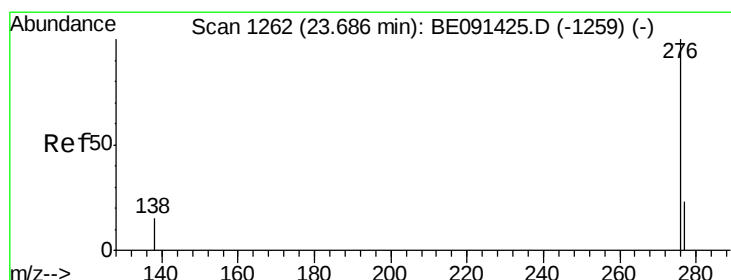
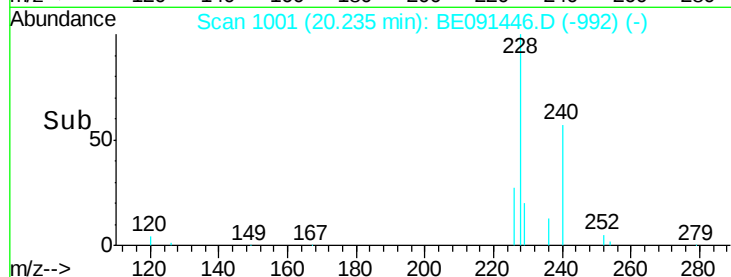
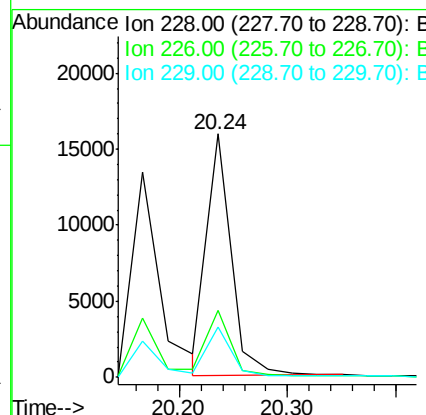
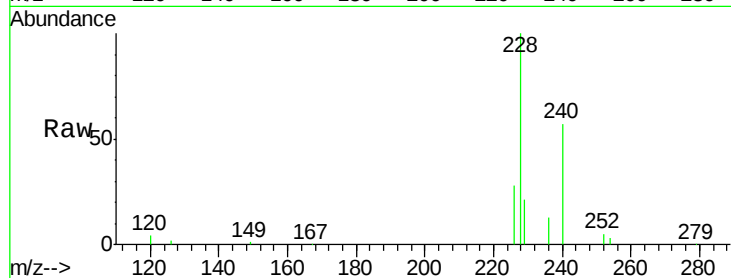




#23
Chrysene
Concen: 0.26 ng
RT: 20.24 min Scan# 1001
Delta R.T. -0.00 min
Lab File: BE091446.D
Acq: 4 Mar 2016 5:34

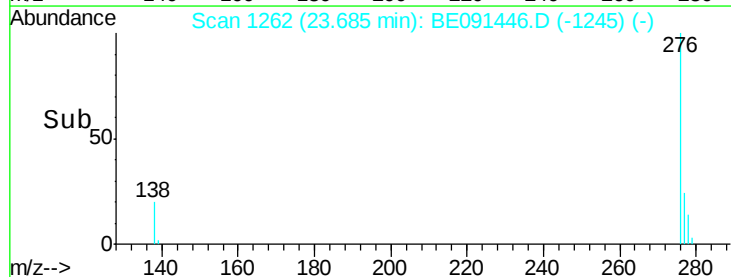
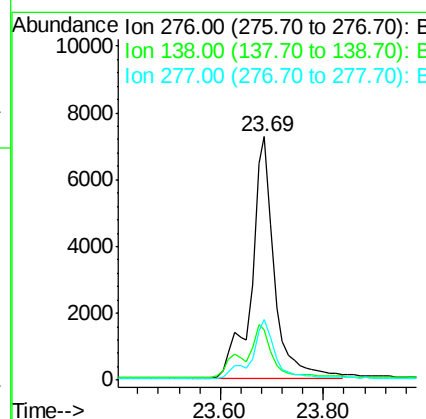
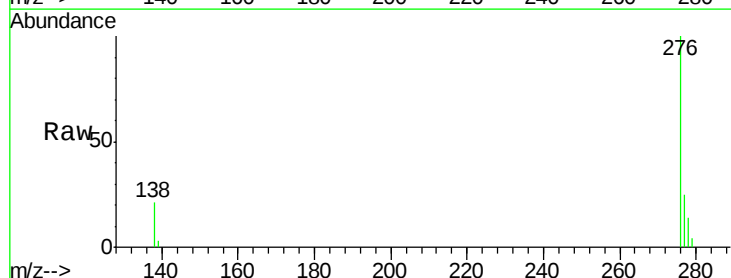
Instrument :
BNA_E
ClientSampleId :

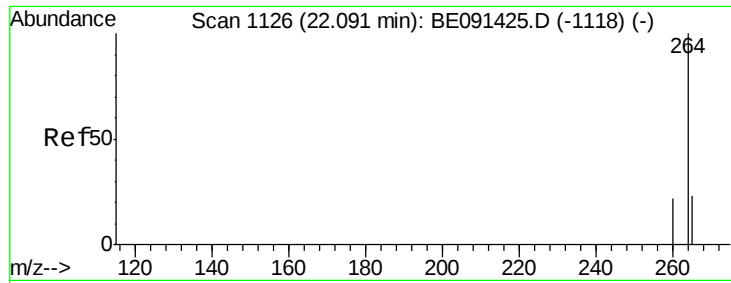
Tgt Ion: 228 Resp: 25077
Ion Ratio Lower Upper
228 100
226 27.5 22.0 33.0
229 20.6 16.2 24.2



#24
Indeno(1,2,3-cd)pyrene
Concen: 0.28 ng
RT: 23.69 min Scan# 1262
Delta R.T. -0.00 min
Lab File: BE091446.D
Acq: 4 Mar 2016 5:34

Tgt Ion: 276 Resp: 22275
Ion Ratio Lower Upper
276 100
138 17.4 16.1 24.1
277 24.9 22.9 34.3

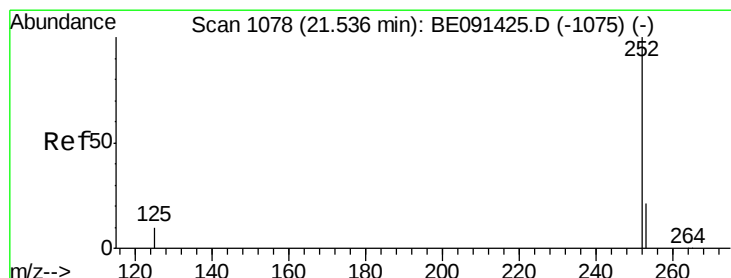
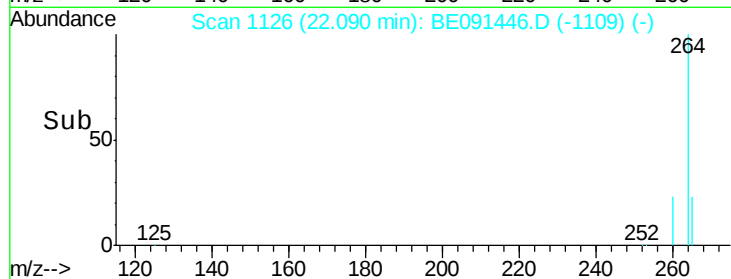
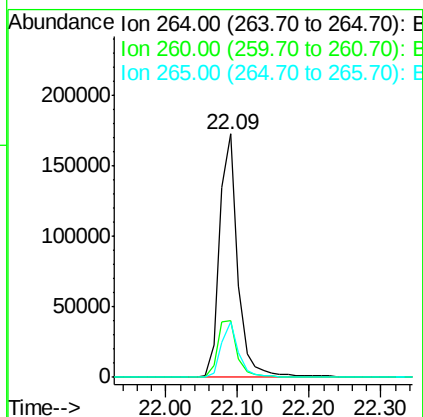
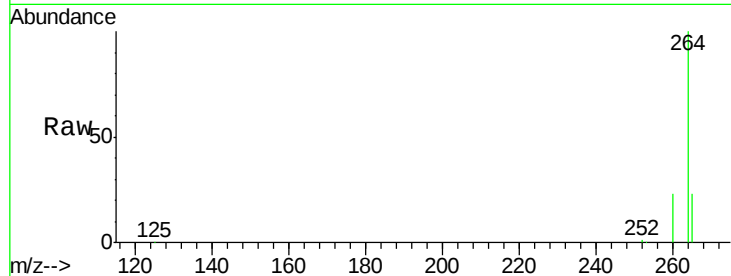




#25
 Perylene-d12
 Concen: 5.00 ng
 RT: 22.09 min Scan# 1126
 Delta R.T. -0.00 min
 Lab File: BE091446.D
 Acq: 4 Mar 2016 5:34

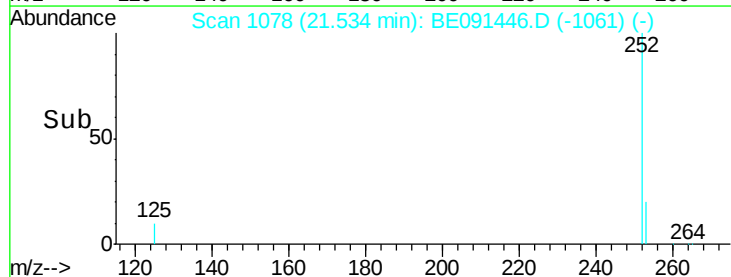
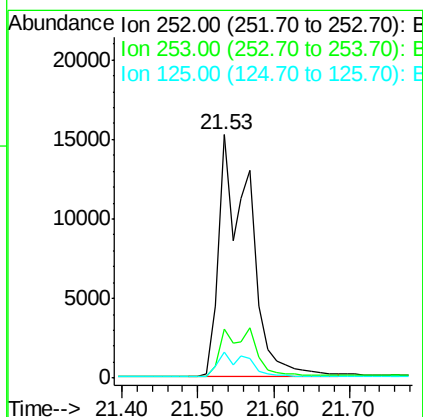
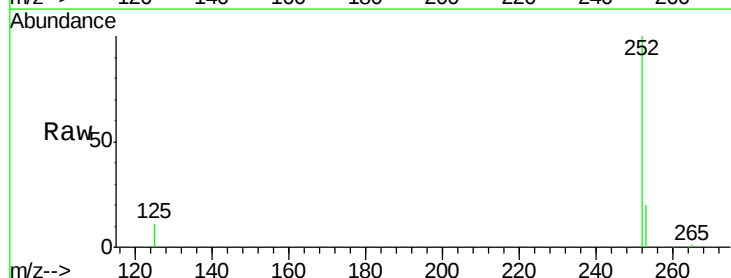
Instrument :
 BNA_E
 ClientSampleId :

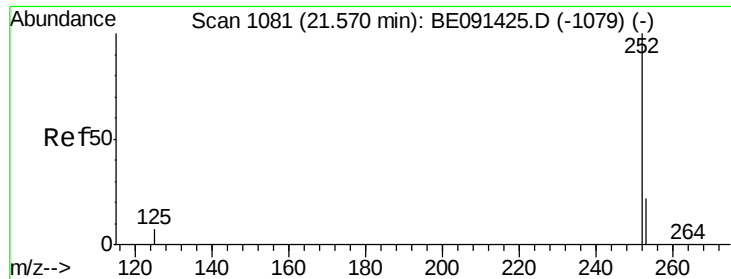
Tgt Ion: 264 Resp: 303870
 Ion Ratio Lower Upper
 264 100
 260 23.3 18.0 27.0
 265 22.7 18.2 27.4



#26
 Benzo(b)fluoranthene
 Concen: 0.51 ng
 RT: 21.53 min Scan# 1078
 Delta R.T. -0.00 min
 Lab File: BE091446.D
 Acq: 4 Mar 2016 5:34

Tgt Ion: 252 Resp: 43260
 Ion Ratio Lower Upper
 252 100
 253 20.2 17.0 25.4
 125 10.8 8.3 12.5

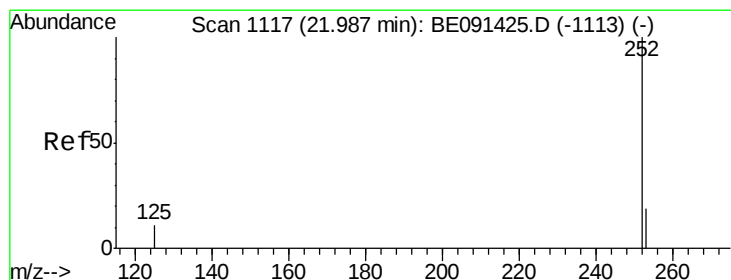
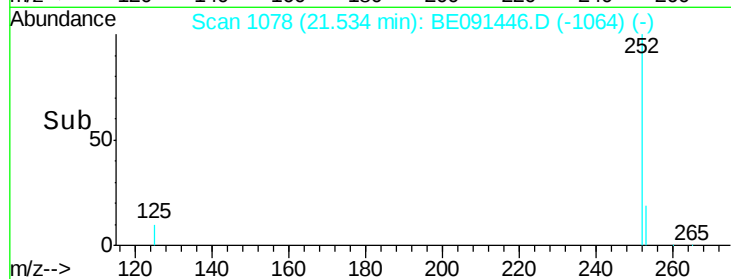
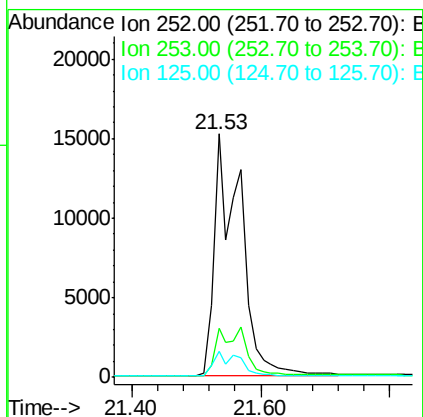
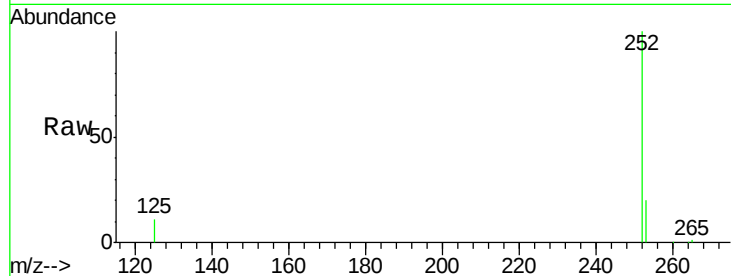




#27
Benzo(k)fluoranthene
Concen: 0.53 ng
RT: 21.53 min Scan# 1078
Delta R.T. -0.04 min
Lab File: BE091446.D
Acq: 4 Mar 2016 5:34

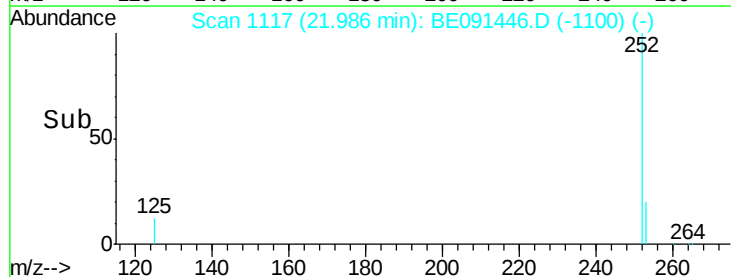
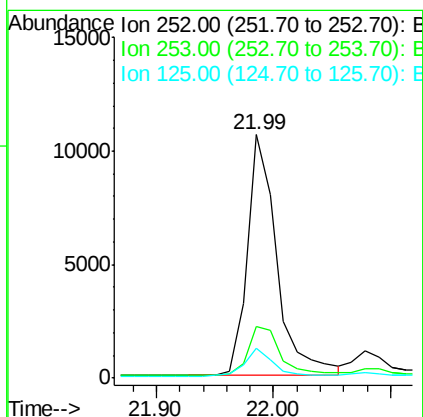
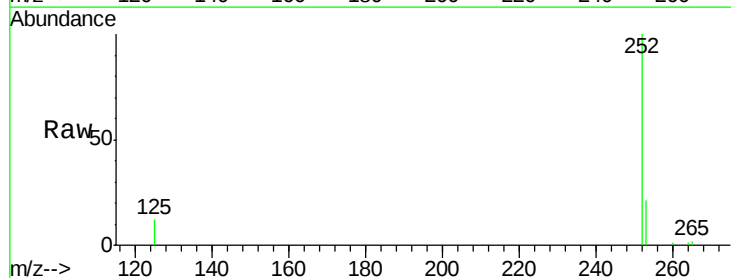
Instrument :
BNA_E
ClientSampleId :

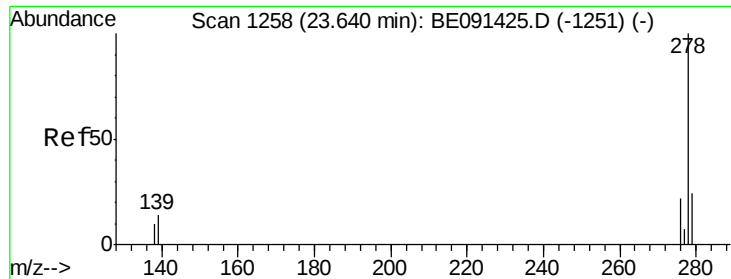
Tgt Ion: 252 Resp: 43578
Ion Ratio Lower Upper
252 100
253 20.2 19.5 29.3
125 10.8 7.3 10.9



#28
Benzo(a)pyrene
Concen: 0.25 ng
RT: 21.99 min Scan# 1117
Delta R.T. -0.00 min
Lab File: BE091446.D
Acq: 4 Mar 2016 5:34

Tgt Ion: 252 Resp: 18656
Ion Ratio Lower Upper
252 100
253 21.1 16.2 24.4
125 12.3 9.6 14.4





#29

Dibenzo(a,h)anthracene

Concen: 0.25 ng

RT: 23.64 min Scan# 1258

Delta R.T. -0.00 min

Lab File: BE091446.D

Acq: 4 Mar 2016 5:34

Instrument :

BNA_E

ClientSampleId :

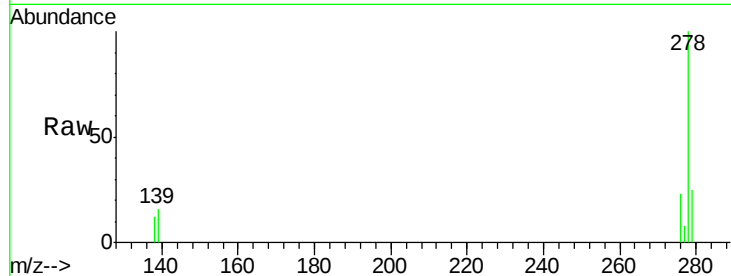
Tgt Ion: 278 Resp: 17168

Ion Ratio Lower Upper

278 100

139 16.1 12.1 18.1

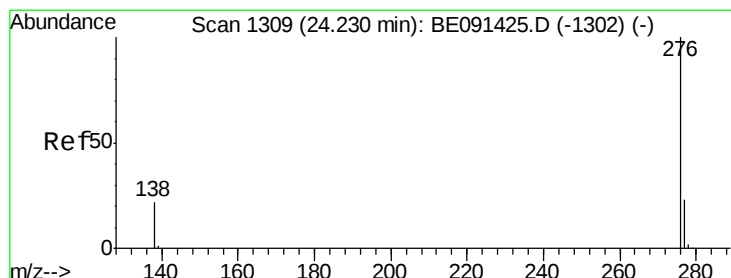
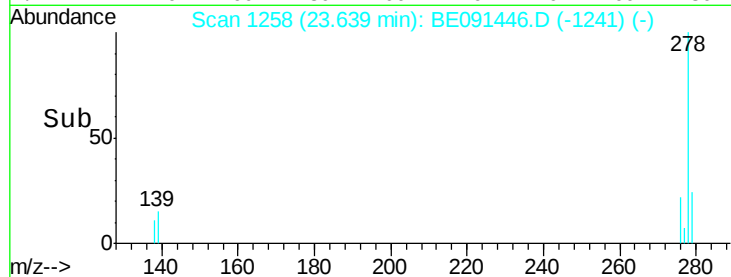
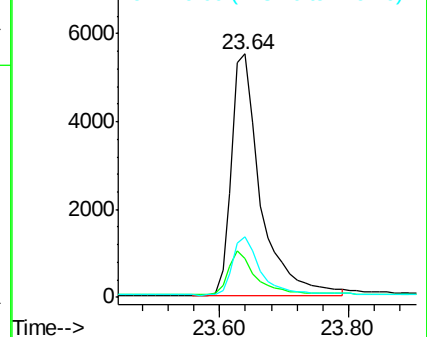
279 25.0 19.4 29.0



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: BE091446.D

Acq: 4 Mar 2016 5:34

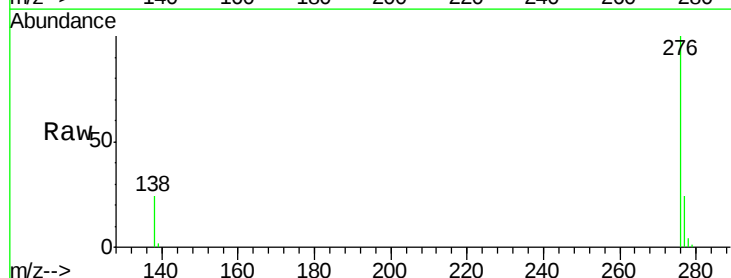
Tgt Ion: 276 Resp: 19230

Ion Ratio Lower Upper

276 100

277 24.2 19.0 28.6

138 24.4 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

