

Data Path : Z:\HPCHEM1\BNA E\DATA\BE031616\  
 Data File : BE091458.D  
 Acq On : 17 Mar 2016 00:21  
 Operator : UM/SJ  
 Sample : SSTDICV001  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :

Quant Time: Mar 17 07:37:03 2016  
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\SIM-BE031616.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Mar 17 07:33:14 2016  
 Response via : Initial Calibration

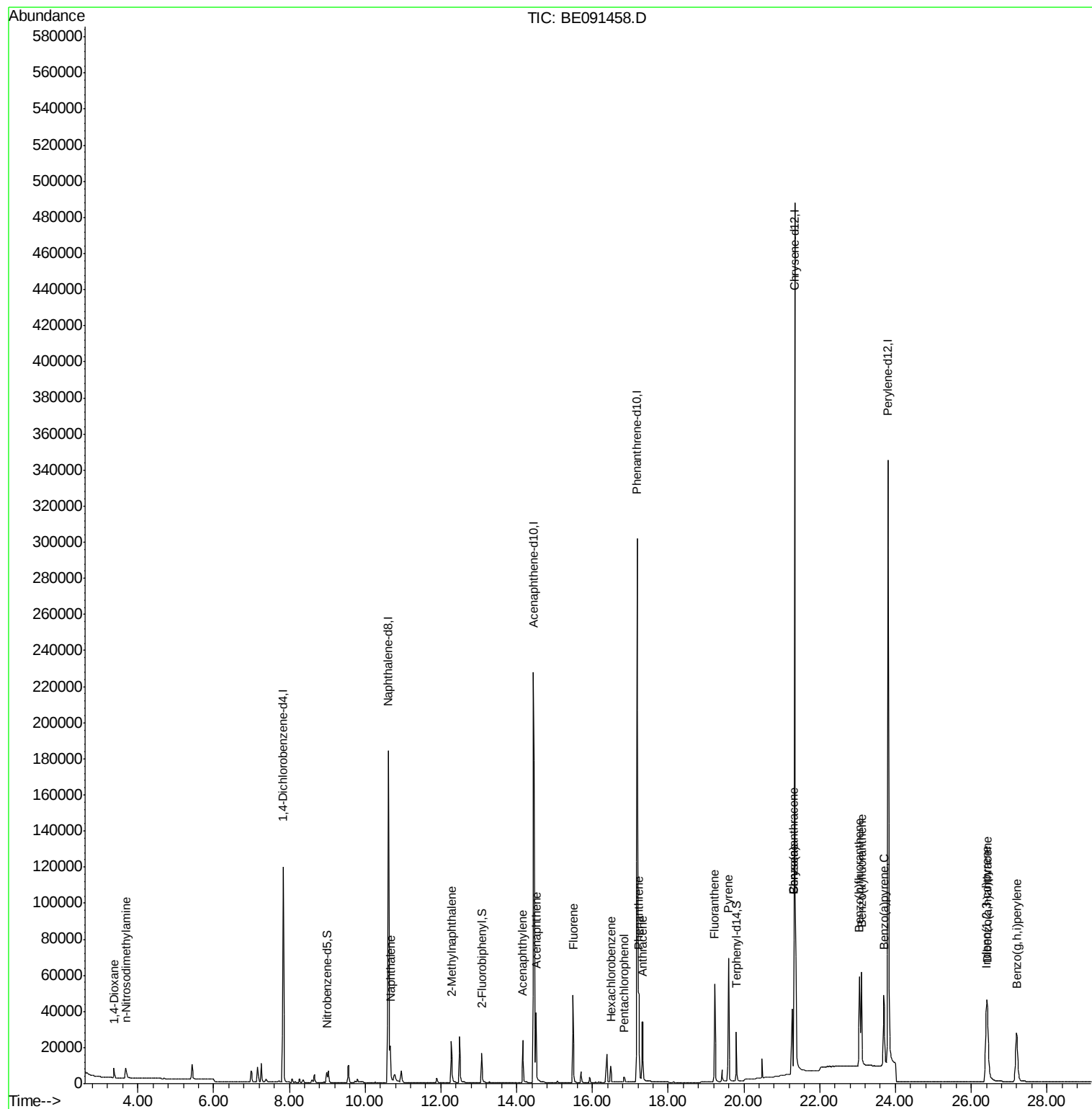
| Internal Standards          | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.84  | 152  | 59263    | 5.00 | ng    | 0.00     |
| 4) Naphthalene-d8           | 10.61 | 136  | 266570   | 5.00 | ng    | 0.00     |
| 8) Acenaphthene-d10         | 14.45 | 164  | 161891   | 5.00 | ng    | 0.00     |
| 13) Phenanthrene-d10        | 17.18 | 188  | 408172   | 5.00 | ng    | 0.00     |
| 19) Chrysene-d12            | 21.34 | 240  | 568011   | 5.00 | ng    | 0.00     |
| 25) Perylene-d12            | 23.81 | 264  | 526215   | 5.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |      |       |          |
| 5) Nitrobenzene-d5          | 8.99  | 82   | 5781     | 0.48 | ng    | 0.00     |
| 9) 2-Fluorobiphenyl         | 13.08 | 172  | 20319    | 0.49 | ng    | 0.00     |
| 21) Terphenyl-d14           | 19.80 | 244  | 35572    | 0.42 | ng    | 0.00     |
| Target Compounds            |       |      |          |      |       | Ovalue   |
| 2) 1,4-Dioxane              | 3.37  | 88   | 3751     | 0.49 | ng    | # 100    |
| 3) n-Nitrosodimethylamine   | 3.68  | 42   | 5288     | 0.46 | ng    | # 100    |
| 6) Naphthalene              | 10.67 | 128  | 32415    | 0.50 | ng    | 100      |
| 7) 2-Methylnaphthalene      | 12.27 | 142  | 20504    | 0.48 | ng    | 97       |
| 10) Acenaphthylene          | 14.16 | 152  | 30917    | 0.44 | ng    | # 100    |
| 11) Acenaphthene            | 14.51 | 154  | 24673    | 0.50 | ng    | # 100    |
| 12) Fluorene                | 15.49 | 166  | 31223    | 0.49 | ng    | # 100    |
| 14) Hexachlorobenzene       | 16.48 | 284  | 8636     | 0.48 | ng    | # 100    |
| 15) Pentachlorophenol       | 16.83 | 266  | 3182     | 0.60 | ng    | # 79     |
| 16) Phenanthrene            | 17.23 | 178  | 57481    | 0.49 | ng    | # 100    |
| 17) Anthracene              | 17.32 | 178  | 48513    | 0.47 | ng    | # 100    |
| 18) Fluoranthene            | 19.22 | 202  | 64204    | 0.48 | ng    | # 68     |
| 20) Pyrene                  | 19.59 | 202  | 70084    | 0.43 | ng    | # 93     |
| 22) Benzo(a)anthracene      | 21.31 | 228  | 94786    | 0.48 | ng    | 98       |
| 23) Chrysene                | 21.31 | 228  | 94766    | 0.65 | ng    | # 87     |
| 24) Indeno(1,2,3-cd)pyrene  | 26.40 | 276  | 81665    | 0.43 | ng    | # 100    |
| 26) Benzo(b)fluoranthene    | 23.04 | 252  | 85449    | 0.48 | ng    | 96       |
| 27) Benzo(k)fluoranthene    | 23.10 | 252  | 73714    | 0.44 | ng    | 98       |
| 28) Benzo(a)pyrene          | 23.69 | 252  | 68560    | 0.45 | ng    | 98       |
| 29) Dibenzo(a,h)anthracene  | 26.43 | 278  | 67734    | 0.46 | ng    | 99       |
| 30) Benzo(g,h,i)perylene    | 27.20 | 276  | 72507    | 0.47 | ng    | 99       |

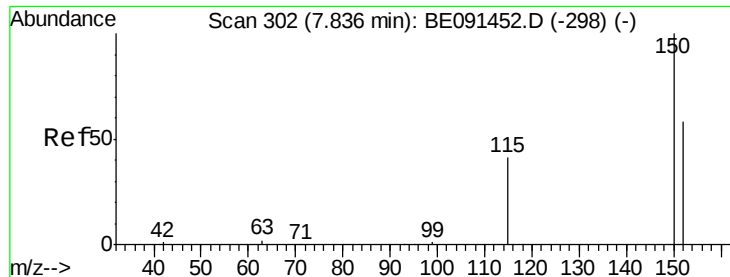
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA E\DATA\BE031616\  
Data File : BE091458.D  
Acq On : 17 Mar 2016 00:21  
Operator : UM/SJ  
Sample : SSTDICV001  
Misc :  
ALS Vial : 10 Sample Multiplier: 1

Instrument :  
BNA\_E  
ClientSampleId :

Quant Time: Mar 17 07:37:03 2016  
Quant Method : Z:\HPCHEM1\BNA E\METHODS\SIM-BE031616.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Mar 17 07:33:14 2016  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 7.84 min Scan# 302

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

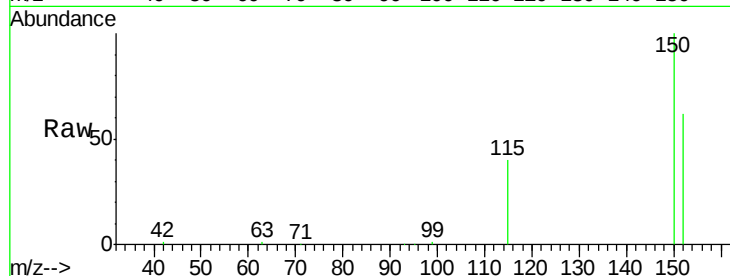
Tot Ion:152 Resp: 59263

Ion Ratio Lower Upper

152 100

150 161.7 136.8 205.2

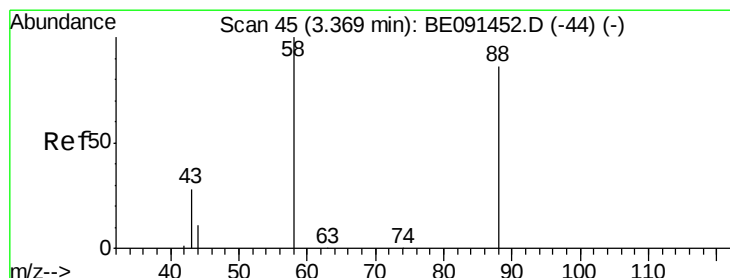
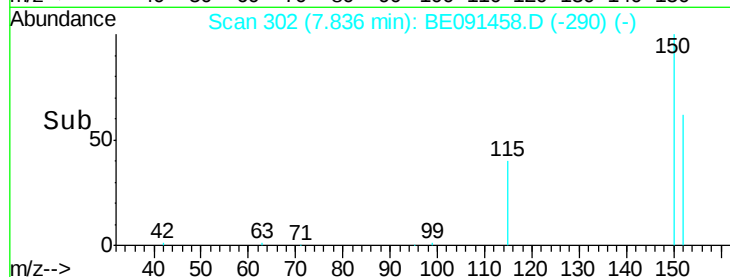
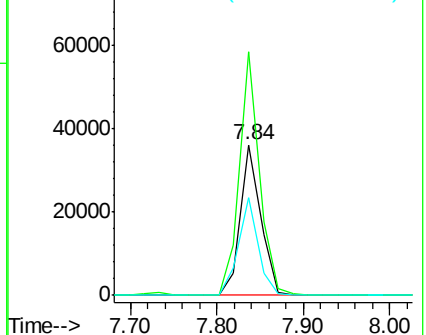
115 64.6 56.9 85.3



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



#2

1,4-Dioxane

Concen: 0.49 ng

RT: 3.37 min Scan# 45

Delta R.T. -0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

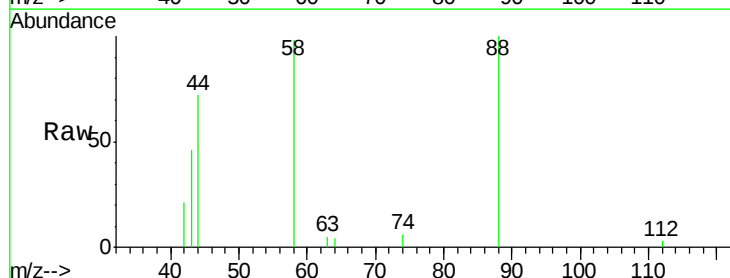
Tgt Ion: 88 Resp: 3751

Ion Ratio Lower Upper

88 100

58 82.0 0.0 0.0#

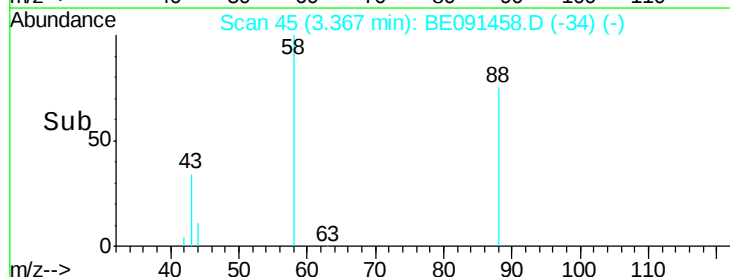
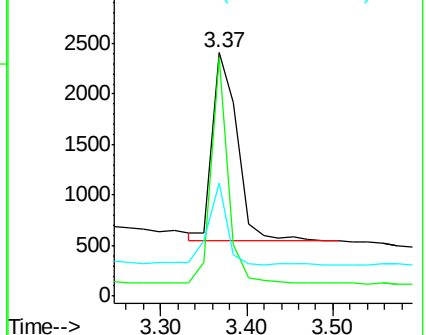
43 32.2 0.0 0.0#

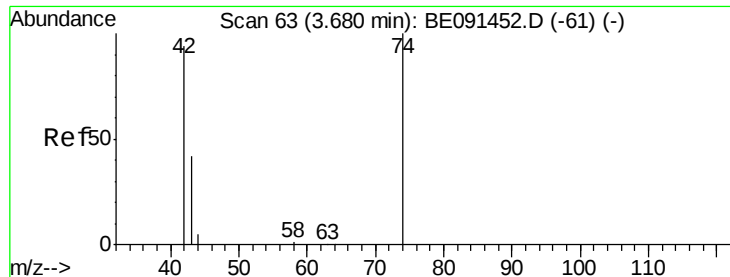


Abundance Ion 88.00 (87.70 to 88.70): BE0

Ion 58.00 (57.70 to 58.70): BE0

Ion 43.00 (42.70 to 43.70): BE0





#3

n-Nitrosodimethylamine

Concen: 0.46 ng

RT: 3.68 min Scan# 63

Delta R.T. -0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

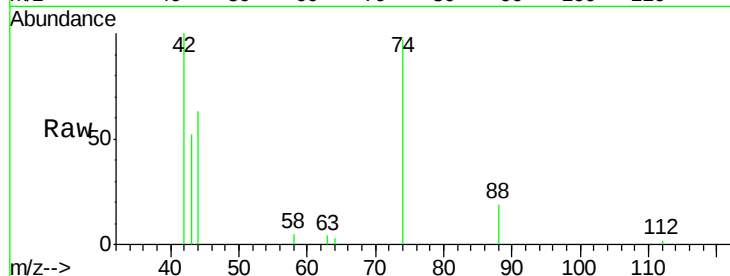
Tot Ion: 42 Resp: 5288

Ion Ratio Lower Upper

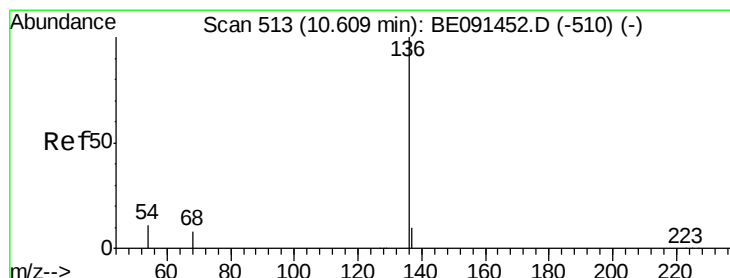
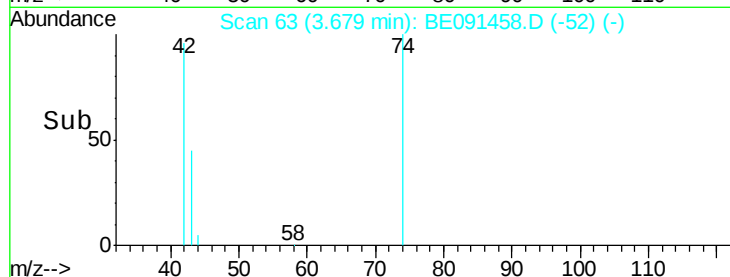
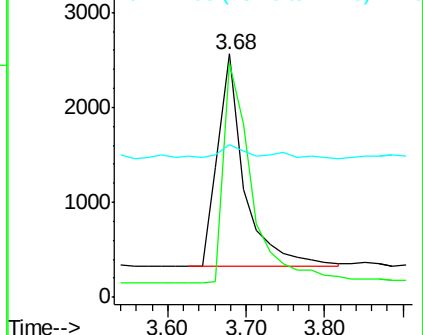
42 100

74 110.3 0.0 0.0#

44 4.8 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: 10.61 min Scan# 513

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

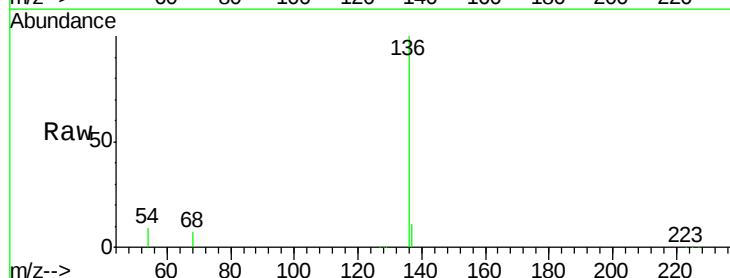
Tgt Ion: 136 Resp: 266570

Ion Ratio Lower Upper

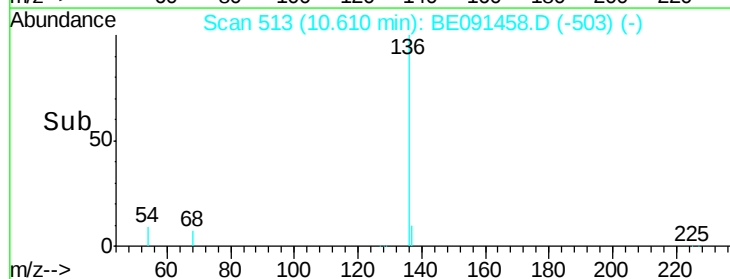
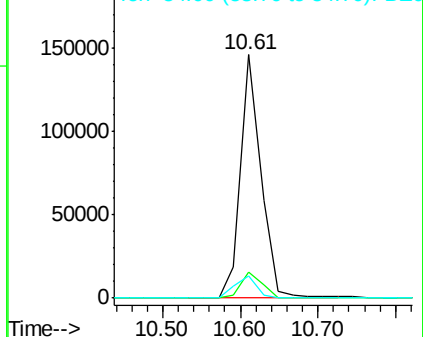
136 100

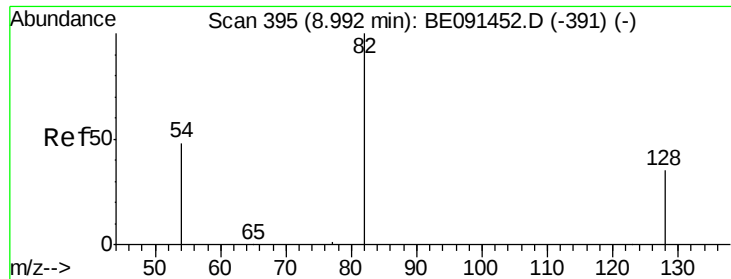
137 10.5 8.0 12.0

54 9.0 9.1 13.7#



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: 0.48 ng

RT: 8.99 min Scan# 395

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

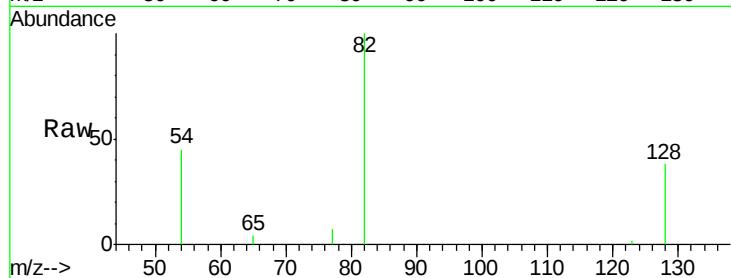
Tot Ion: 82 Resp: 5781

Ion Ratio Lower Upper

82 100

128 38.4 29.4 44.2

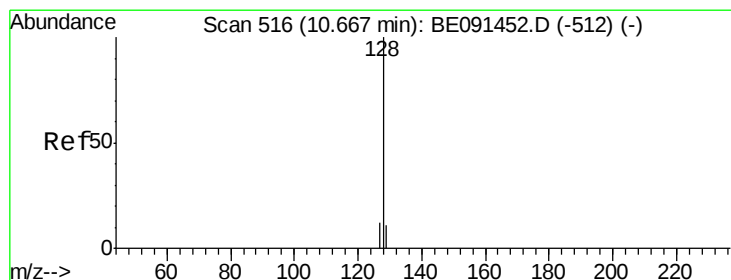
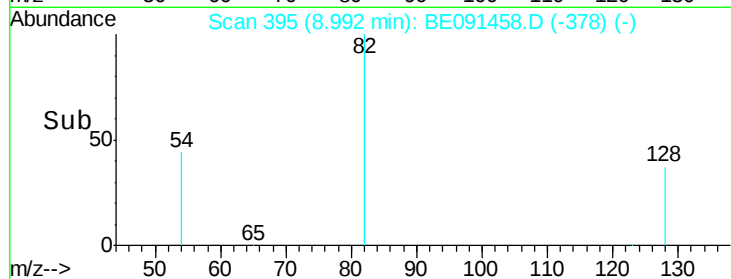
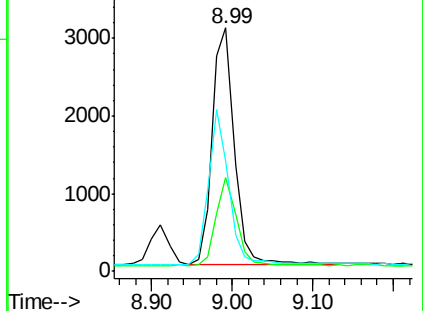
54 45.3 39.8 59.8



Abundance Ion 82.00 (81.70 to 82.70): BE091458.D (-391) (-)

Ion 128.00 (127.70 to 128.70): BE091458.D (-391) (-)

Ion 54.00 (53.70 to 54.70): BE091458.D (-391) (-)



#6

Naphthalene

Concen: 0.50 ng

RT: 10.67 min Scan# 516

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

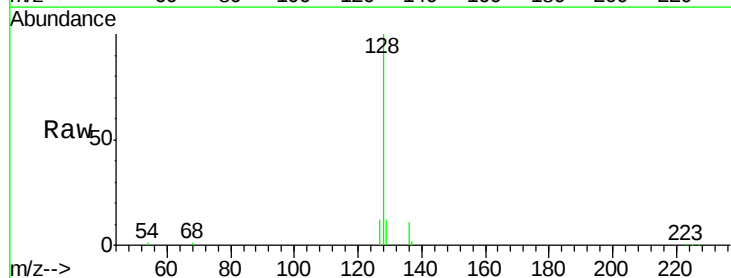
Tgt Ion: 128 Resp: 32415

Ion Ratio Lower Upper

128 100

129 11.9 9.4 14.0

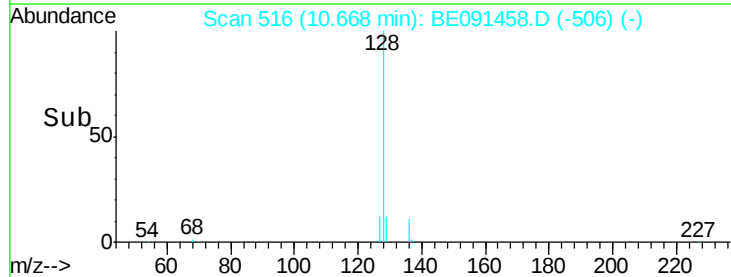
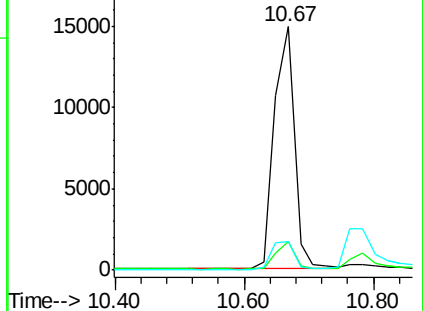
127 12.0 9.7 14.5

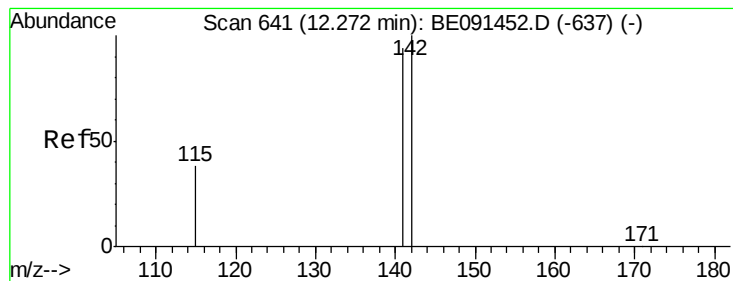


Abundance Ion 128.00 (127.70 to 128.70): BE091458.D (-512) (-)

Ion 129.00 (128.70 to 129.70): BE091458.D (-512) (-)

Ion 127.00 (126.70 to 127.70): BE091458.D (-512) (-)





#7

2-Methylnaphthalene

Concen: 0.48 ng

RT: 12.27 min Scan# 641

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

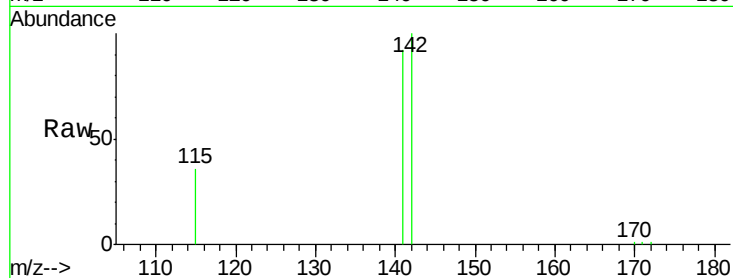
Tot Ion:142 Resp: 20504

Ion Ratio Lower Upper

142 100

141 91.6 75.0 112.4

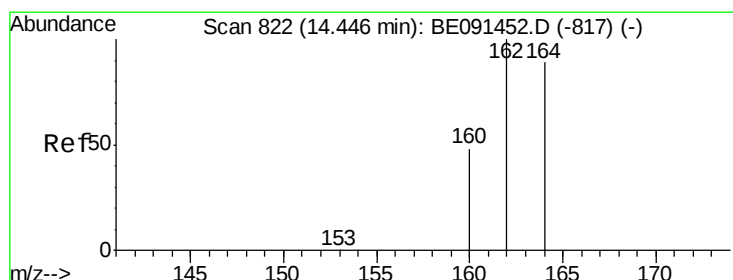
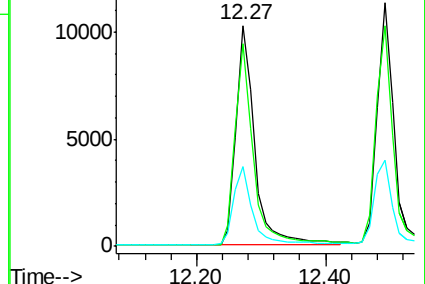
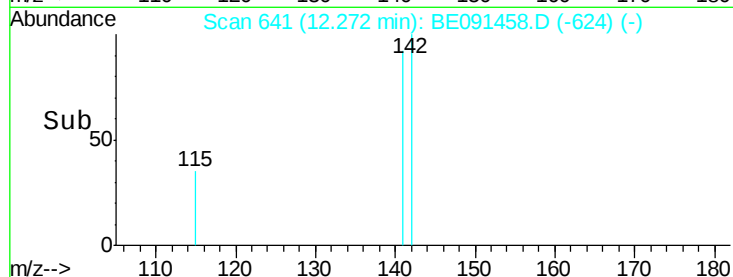
115 36.0 30.8 46.2



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: 14.45 min Scan# 822

Delta R.T. -0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

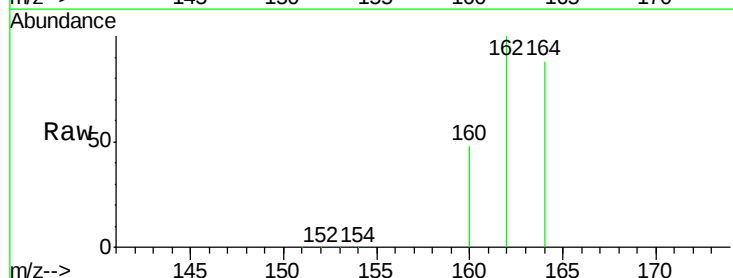
Tgt Ion:164 Resp: 161891

Ion Ratio Lower Upper

164 100

162 114.0 89.8 134.8

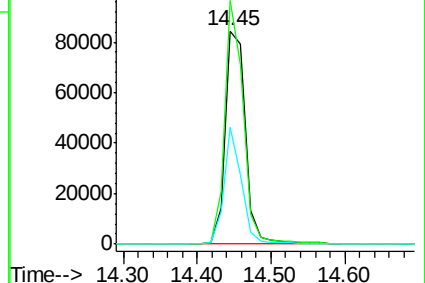
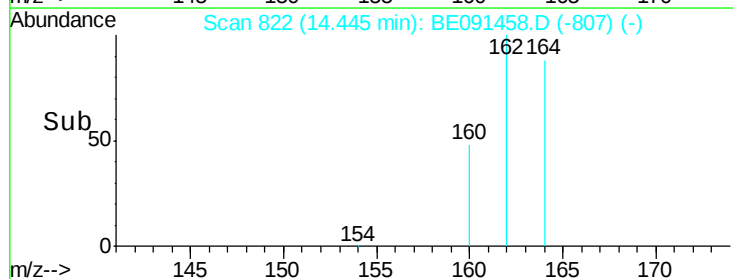
160 54.5 43.1 64.7

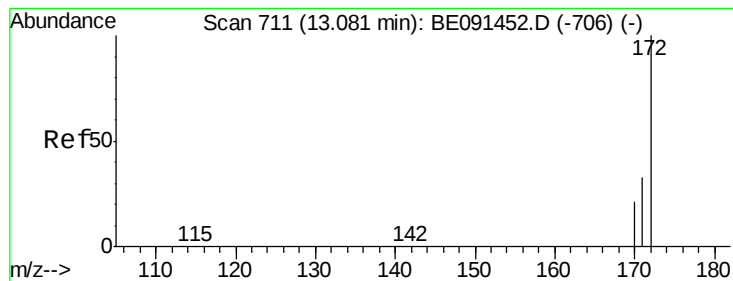


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#9

2-Fluorobiphenyl

Concen: 0.49 ng

RT: 13.08 min Scan# 711

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

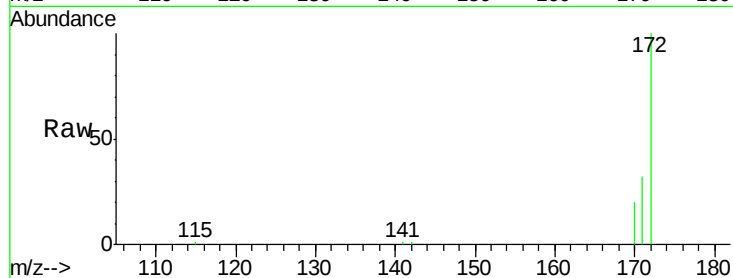
Tot Ion:172 Resp: 20319

Ion Ratio Lower Upper

172 100

171 31.6 26.7 40.1

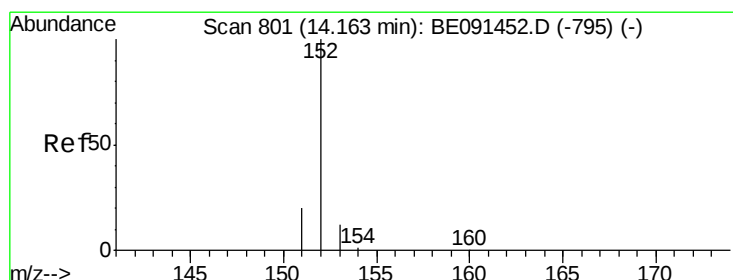
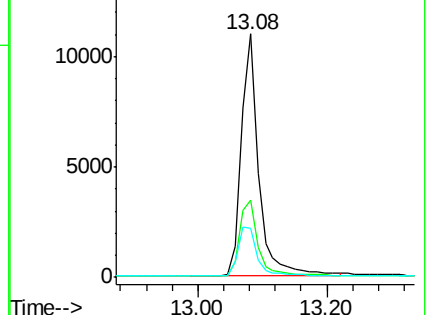
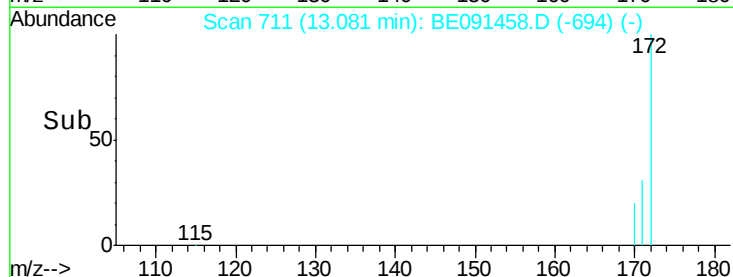
170 20.1 17.4 26.2



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: 0.44 ng

RT: 14.16 min Scan# 801

Delta R.T. -0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

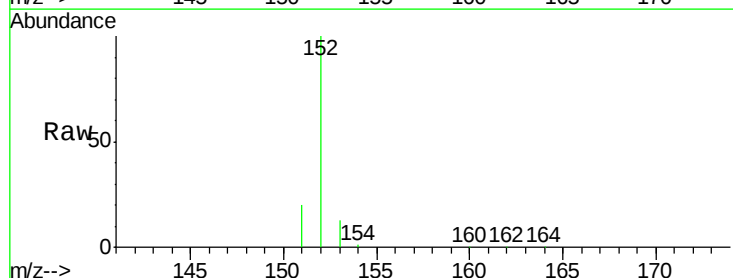
Tgt Ion:152 Resp: 30917

Ion Ratio Lower Upper

152 100

151 20.3 0.0 0.0#

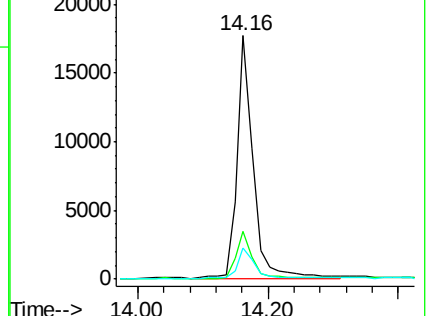
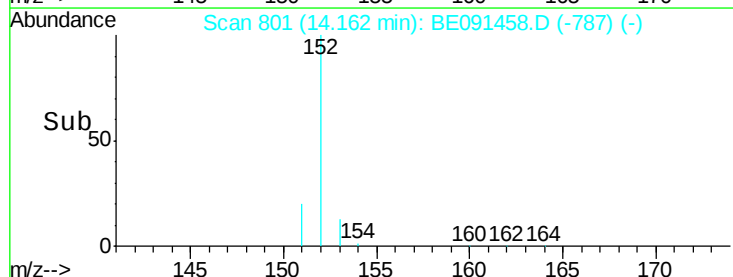
153 13.5 0.0 0.0#

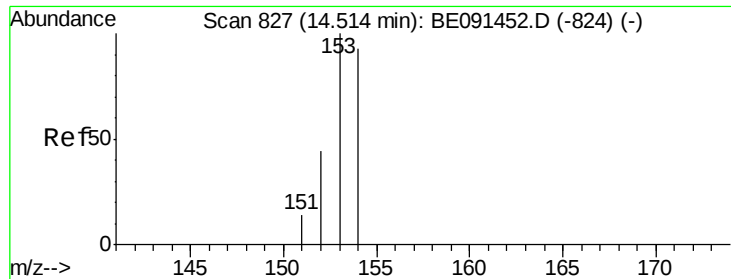


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#11

Acenaphthene

Concen: 0.50 ng

RT: 14.51 min Scan# 827

Delta R.T. -0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

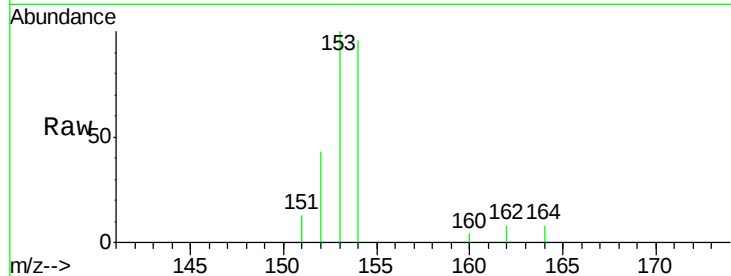
Tot Ion:154 Resp: 24673

Ion Ratio Lower Upper

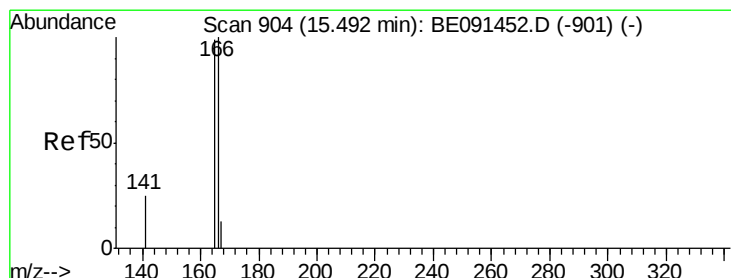
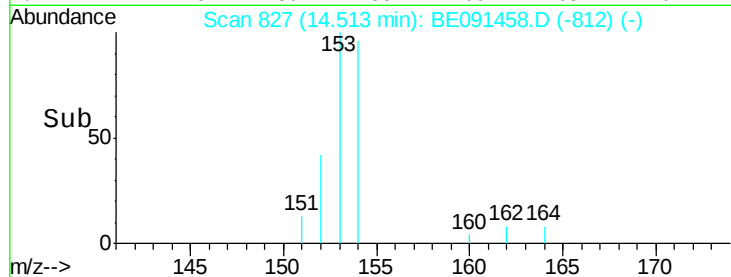
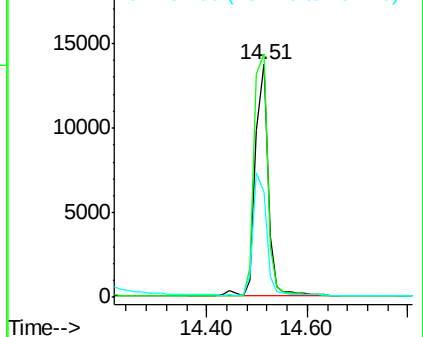
154 100

153 109.9 0.0 0.0#

152 53.5 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: 0.49 ng

RT: 15.49 min Scan# 904

Delta R.T. -0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

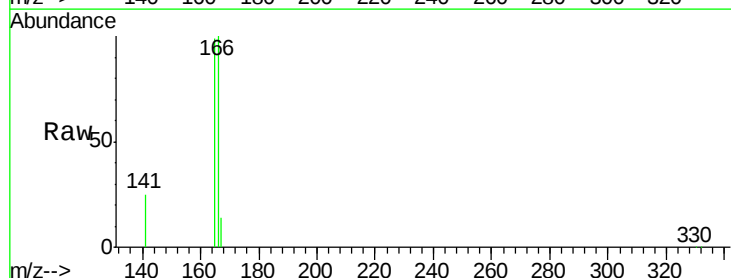
Tgt Ion:166 Resp: 31223

Ion Ratio Lower Upper

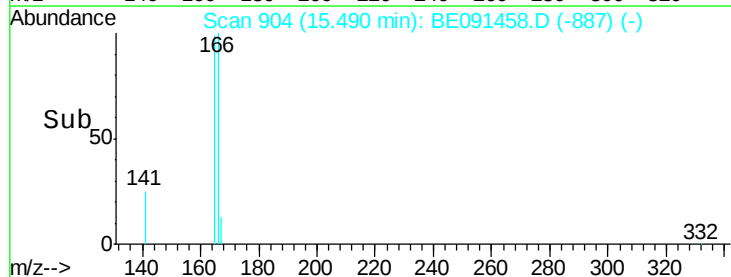
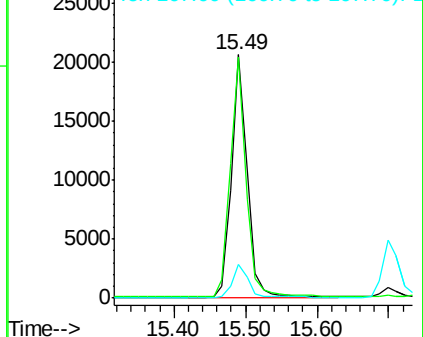
166 100

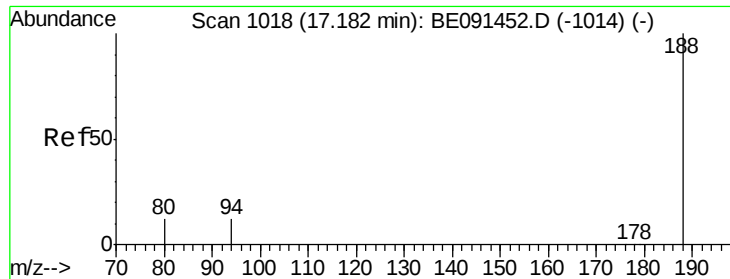
165 99.6 0.0 0.0#

167 13.6 0.0 0.0#



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

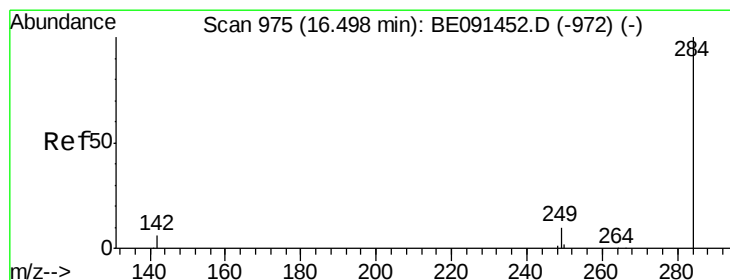
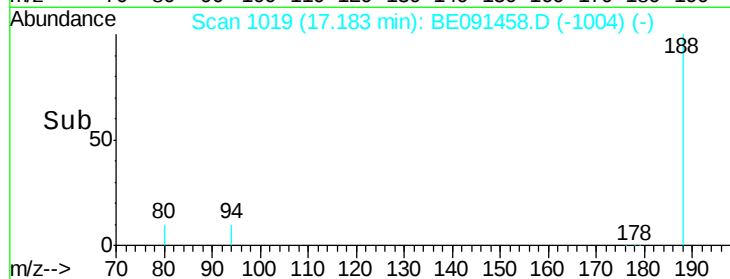
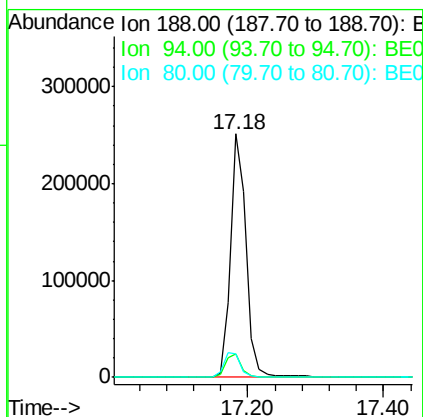
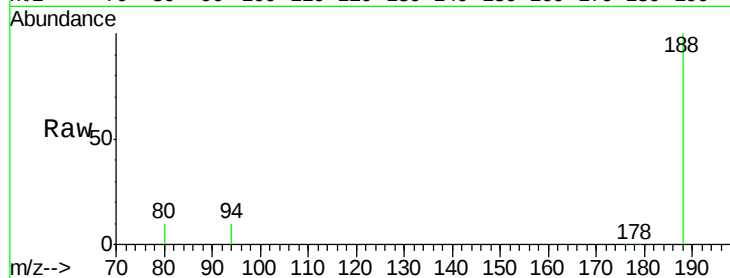




#13  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 17.18 min Scan# 1019  
Delta R.T. 0.00 min  
Lab File: BE091458.D  
Acq: 17 Mar 2016 00:21

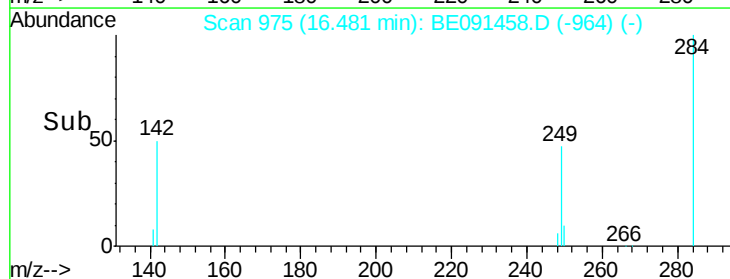
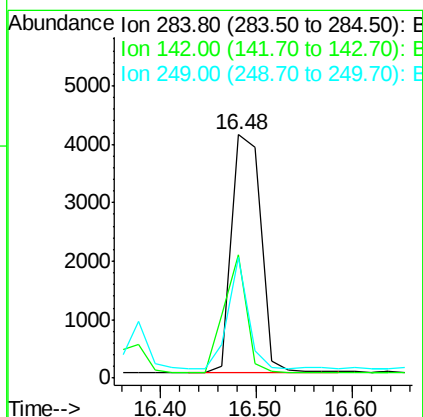
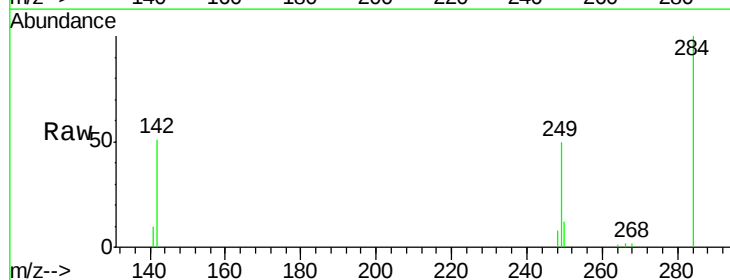
Instrument :  
BNA\_E  
ClientSampleId :

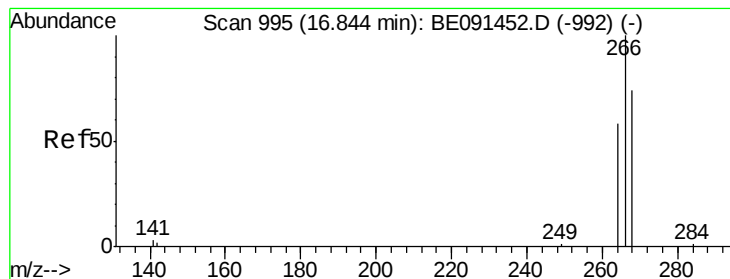
Tot Ion:188 Resp: 408172  
Ion Ratio Lower Upper  
188 100  
94 9.9 9.5 14.3  
80 9.8 9.8 14.8



#14  
Hexachlorobenzene  
Concen: 0.48 ng  
RT: 16.48 min Scan# 975  
Delta R.T. -0.02 min  
Lab File: BE091458.D  
Acq: 17 Mar 2016 00:21

Tgt Ion:284 Resp: 8636  
Ion Ratio Lower Upper  
284 100  
142 38.6 0.0 0.0#  
249 31.8 0.0 0.0#





#15

Pentachlorophenol

Concen: 0.60 ng

RT: 16.83 min Scan# 995

Delta R.T. -0.02 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

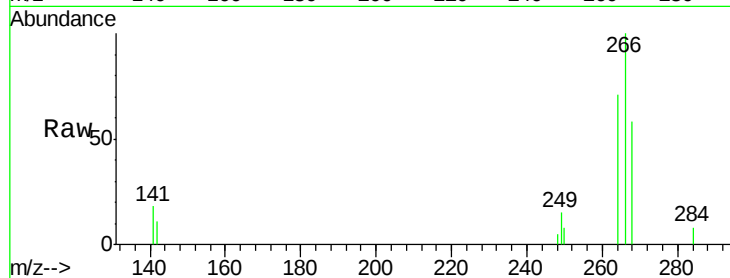
Tot Ion:266 Resp: 3182

Ion Ratio Lower Upper

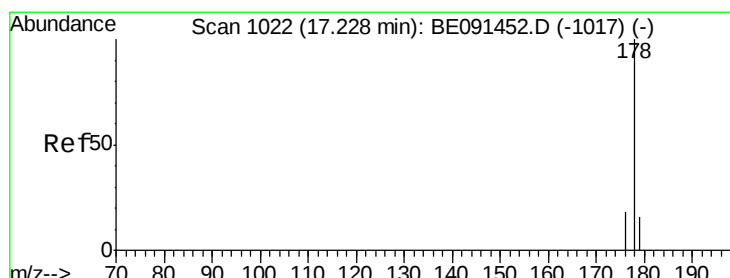
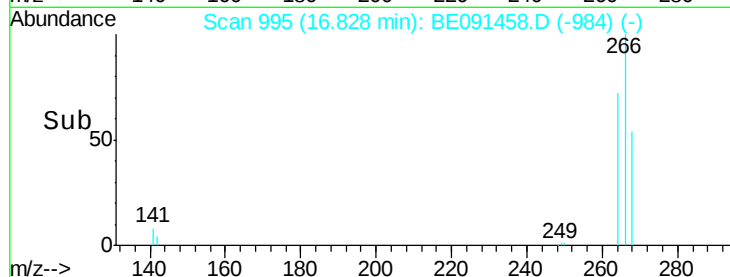
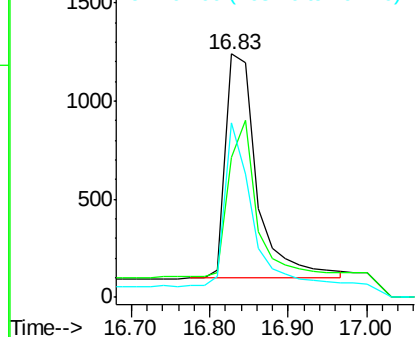
266 100

268 57.5 61.0 91.6#

264 71.5 45.7 68.5#



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: 0.49 ng

RT: 17.23 min Scan# 1023

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

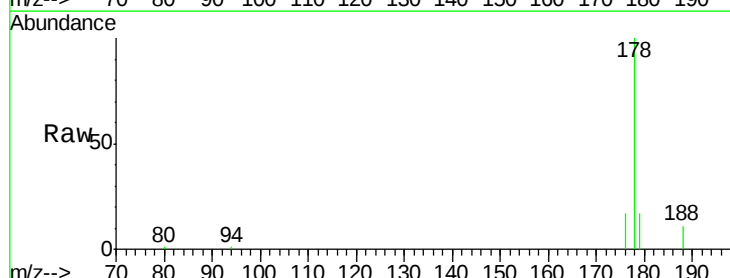
Tgt Ion:178 Resp: 57481

Ion Ratio Lower Upper

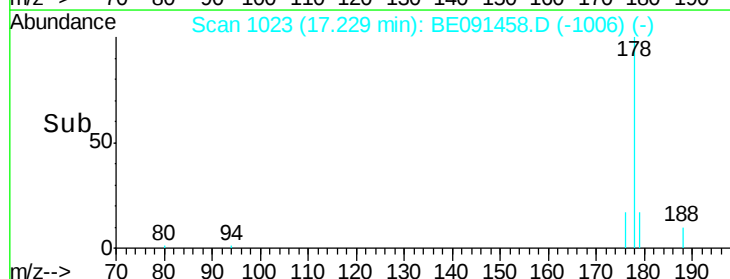
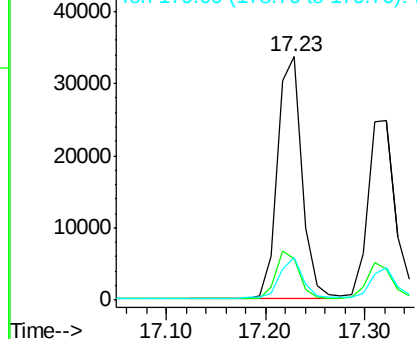
178 100

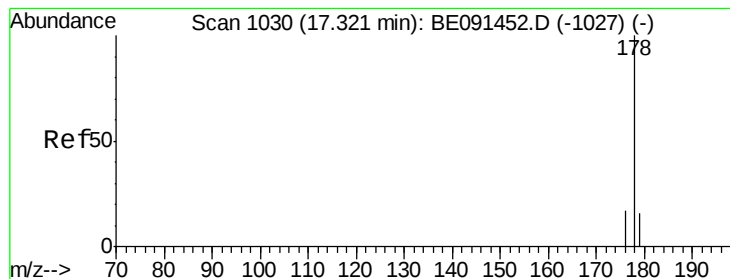
176 19.2 0.0 0.0#

179 16.1 0.0 0.0#



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





#17

Anthracene

Concen: 0.47 ng

RT: 17.32 min Scan# 1031

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampled :

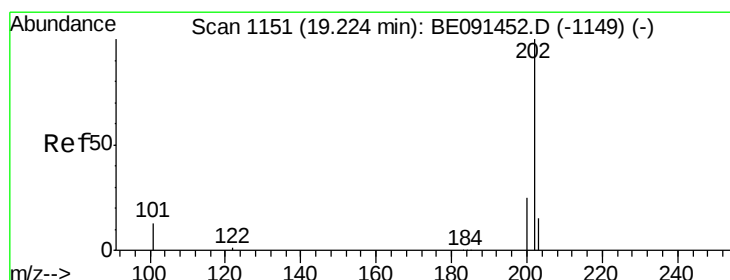
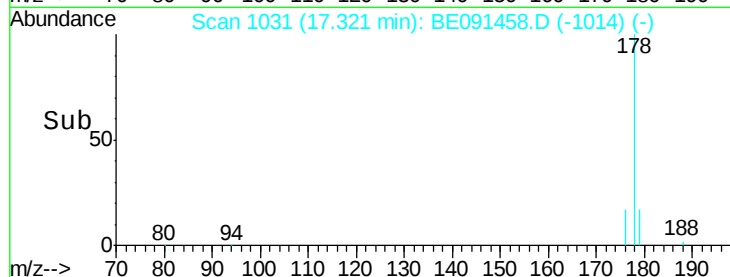
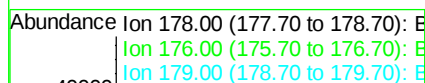
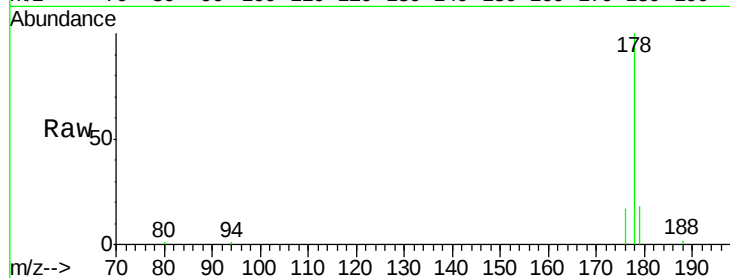
Tot Ion:178 Resp: 48513

Ion Ratio Lower Upper

178 100

176 18.7 0.0 0.0#

179 15.1 0.0 0.0#



#18

Fluoranthene

Concen: 0.48 ng

RT: 19.22 min Scan# 1152

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

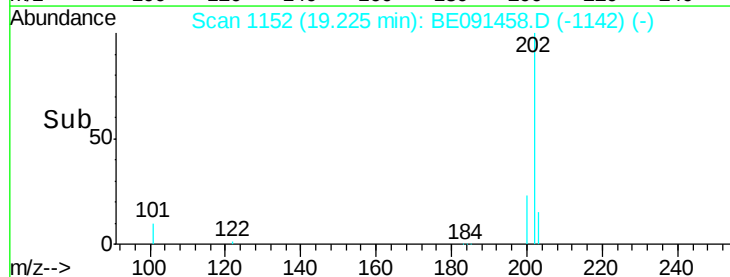
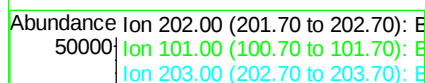
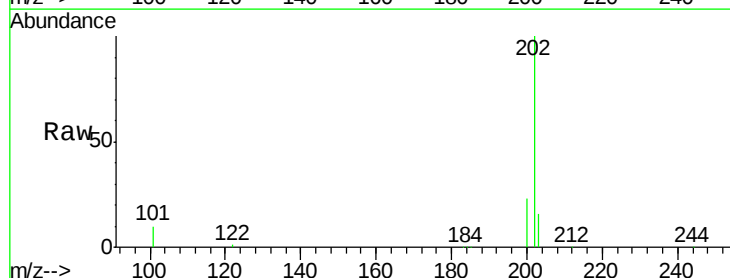
Tgt Ion:202 Resp: 64204

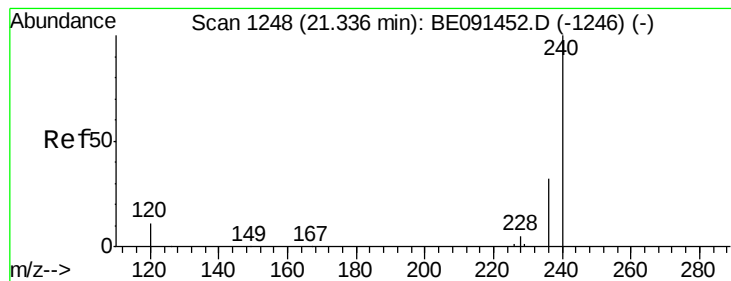
Ion Ratio Lower Upper

202 100

101 10.9 1.1 1.7#

203 17.3 1.0 1.6#





#19

Chrysene-d12

Concen: 5.00 ng

RT: 21.34 min Scan# 1249

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

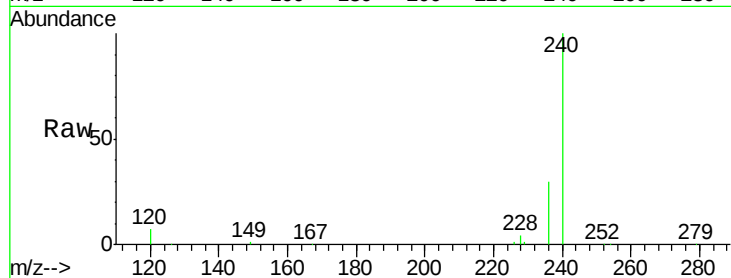
Tot Ion:240 Resp: 568011

Ion Ratio Lower Upper

240 100

120 7.2 8.8 13.2#

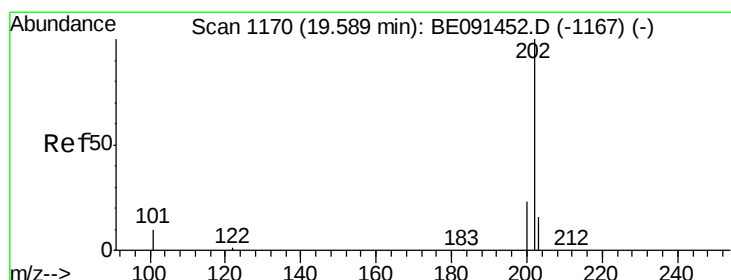
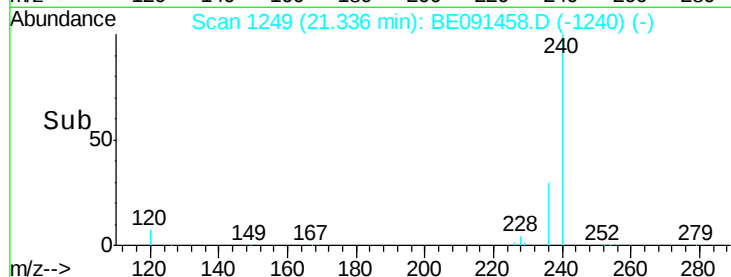
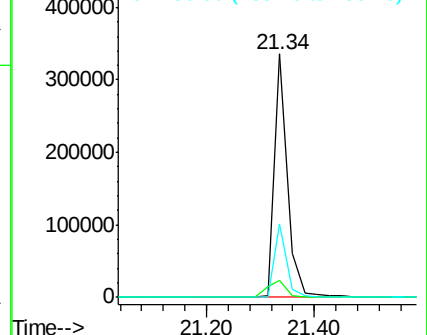
236 30.4 25.7 38.5



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: 0.43 ng

RT: 19.59 min Scan# 1171

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

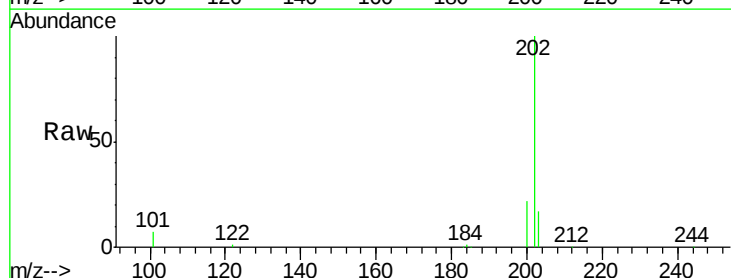
Tgt Ion:202 Resp: 70084

Ion Ratio Lower Upper

202 100

200 21.0 0.0 0.0#

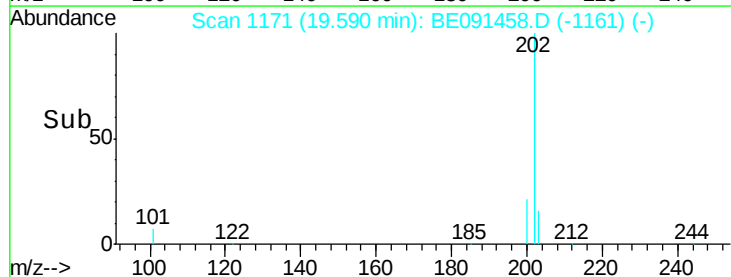
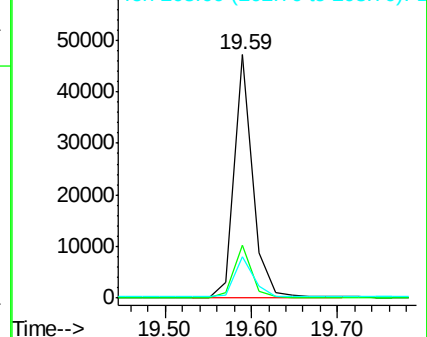
203 17.5 0.1 0.1#

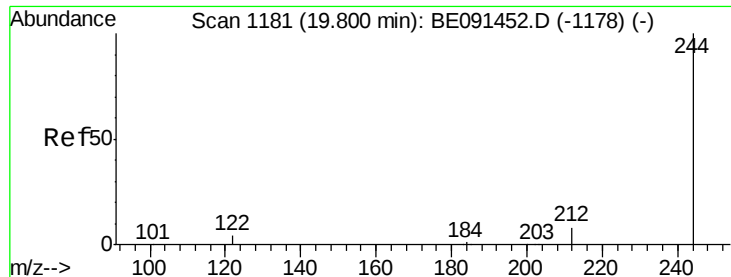


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#21

Terphenyl-d14

Concen: 0.42 ng

RT: 19.80 min Scan# 1182

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :

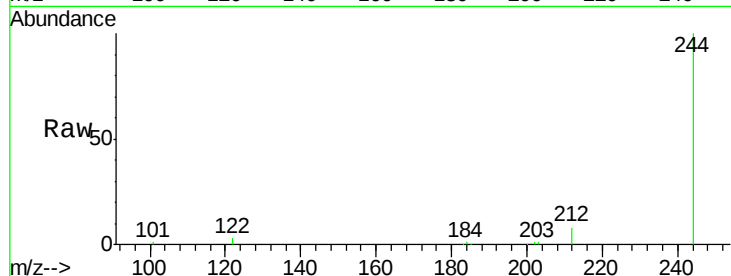
Tot Ion:244 Resp: 35572

Ion Ratio Lower Upper

244 100

212 7.9 6.6 10.0

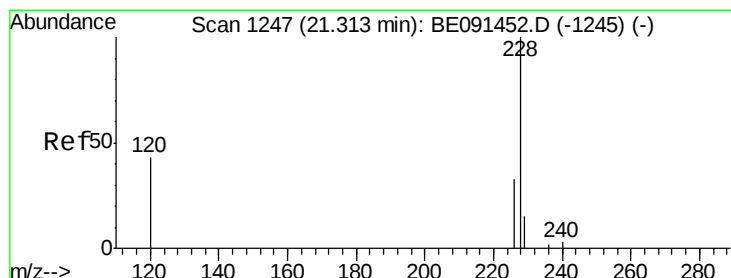
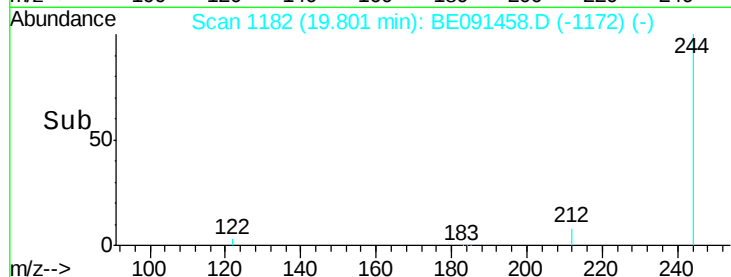
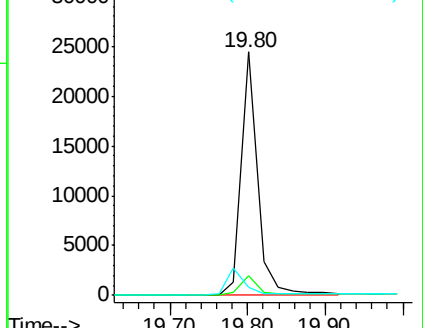
122 3.4 3.4 5.0



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: 0.48 ng

RT: 21.31 min Scan# 1248

Delta R.T. 0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

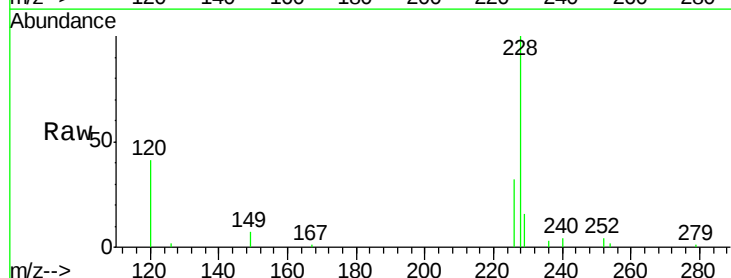
Tgt Ion:228 Resp: 94786

Ion Ratio Lower Upper

228 100

226 32.5 27.1 40.7

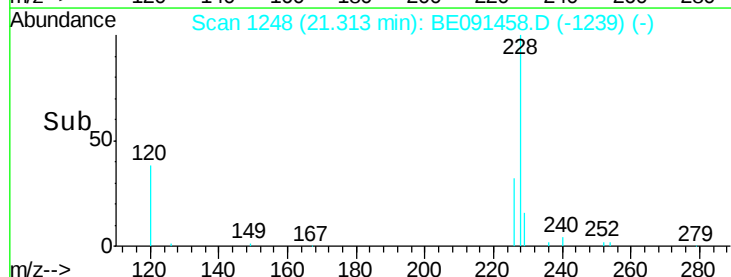
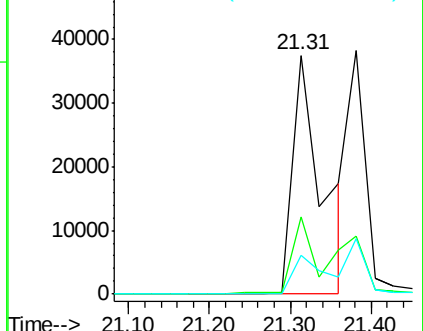
229 16.4 12.3 18.5

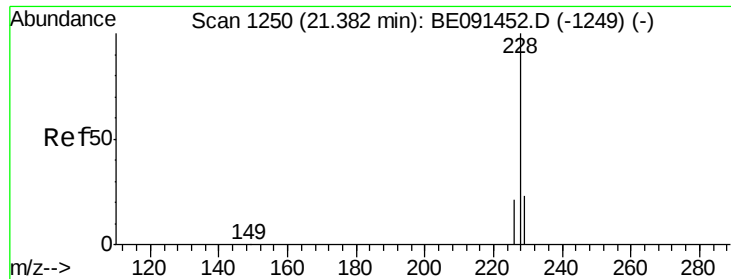


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

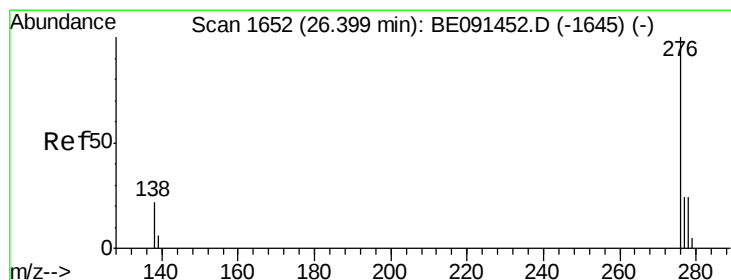
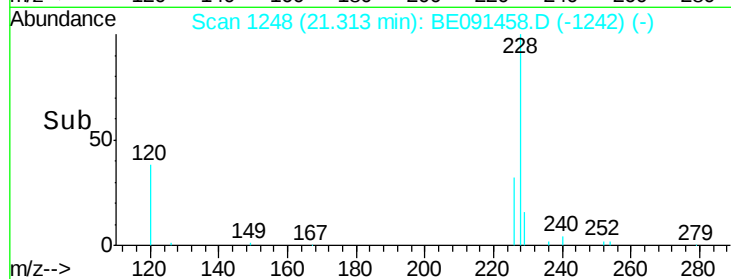
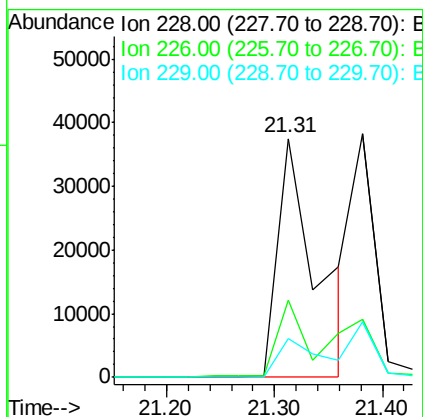
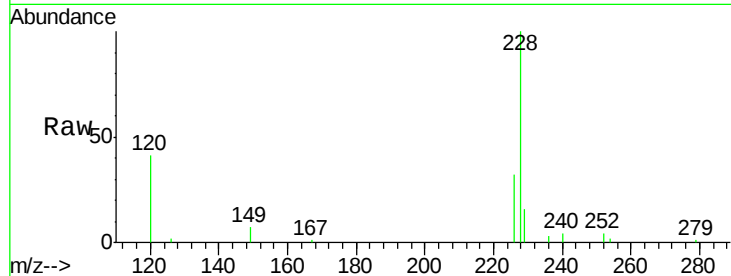




#23  
Chrysene  
Concen: 0.65 ng  
RT: 21.31 min Scan# 1248  
Delta R.T. -0.07 min  
Lab File: BE091458.D  
Acq: 17 Mar 2016 00:21

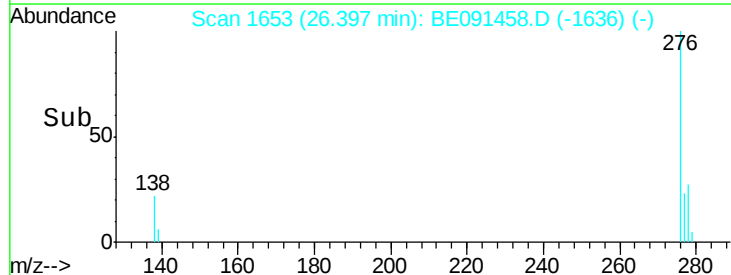
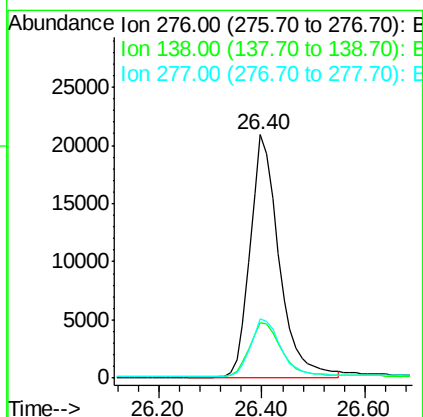
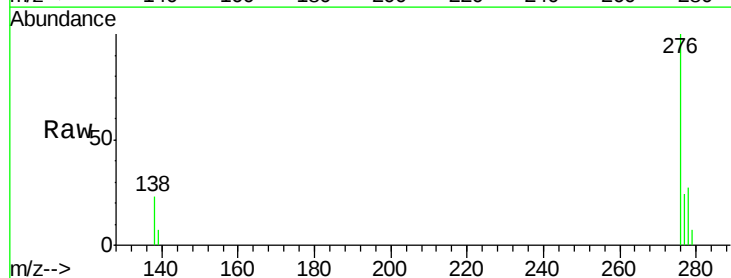
Instrument :  
BNA\_E  
ClientSampleId :

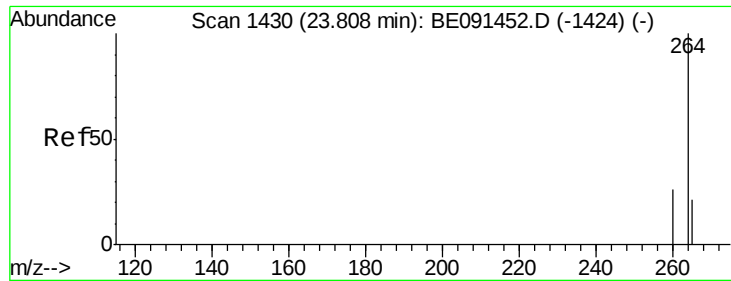
Tot Ion:228 Resp: 94766  
Ion Ratio Lower Upper  
228 100  
226 32.5 20.3 30.5#  
229 16.4 17.4 26.0#



#24  
Indeno(1,2,3-cd)pyrene  
Concen: 0.43 ng  
RT: 26.40 min Scan# 1653  
Delta R.T. -0.00 min  
Lab File: BE091458.D  
Acq: 17 Mar 2016 00:21

Tgt Ion:276 Resp: 81665  
Ion Ratio Lower Upper  
276 100  
138 24.7 0.0 0.0#  
277 24.7 0.0 0.0#

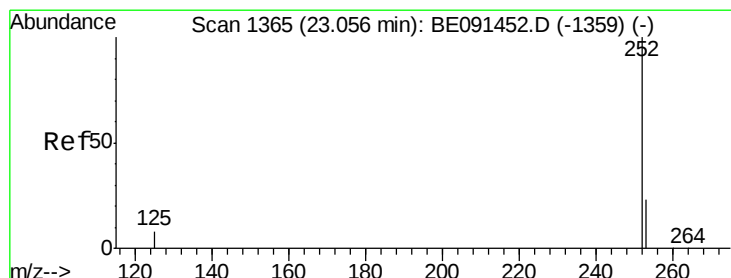
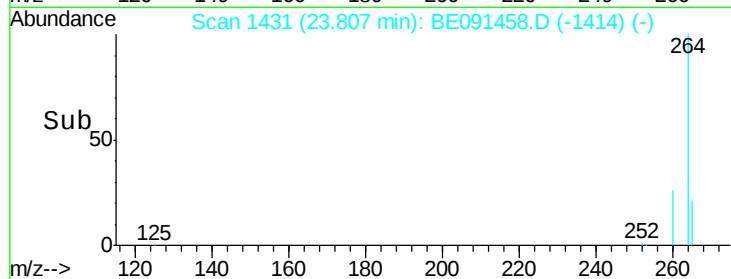
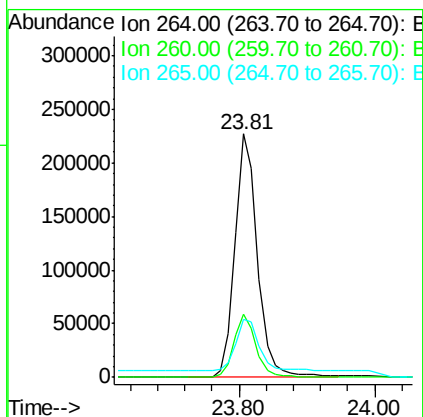
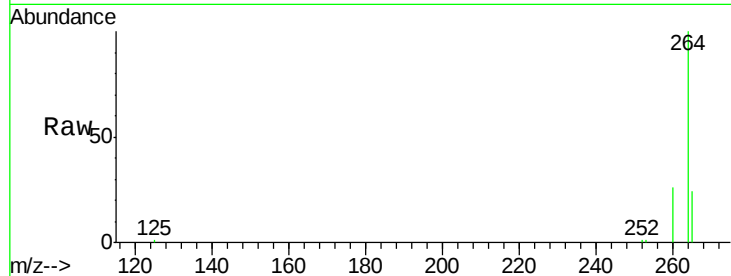




#25  
 Pervlene-d12  
 Concen: 5.00 ng  
 RT: 23.81 min Scan# 1431  
 Delta R.T. -0.00 min  
 Lab File: BE091458.D  
 Acq: 17 Mar 2016 00:21

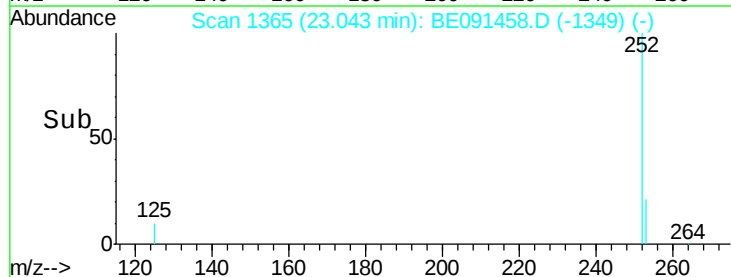
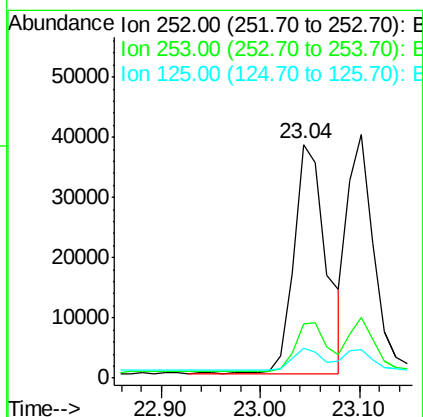
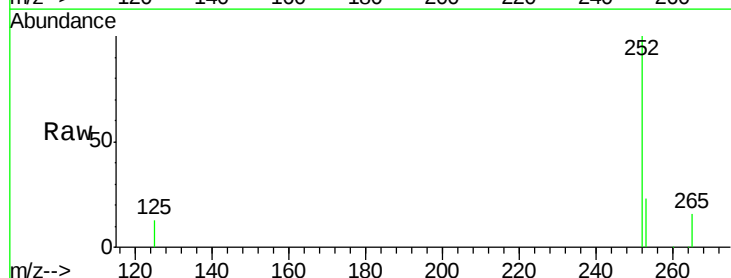
Instrument :  
 BNA\_E  
 ClientSampleId :

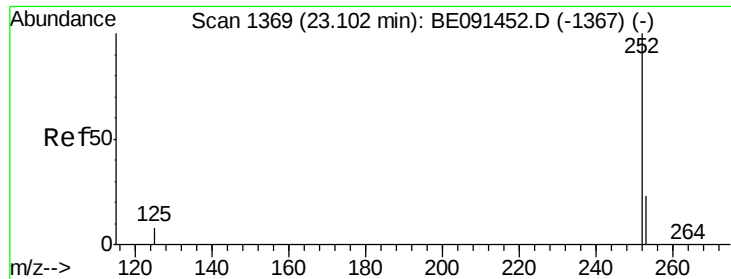
Tot Ion:264 Resp: 526215  
 Ion Ratio Lower Upper  
 264 100  
 260 25.8 20.7 31.1  
 265 24.0 19.4 29.2



#26  
 Benzo(b)fluoranthene  
 Concen: 0.48 ng  
 RT: 23.04 min Scan# 1365  
 Delta R.T. -0.01 min  
 Lab File: BE091458.D  
 Acq: 17 Mar 2016 00:21

Tgt Ion:252 Resp: 85449  
 Ion Ratio Lower Upper  
 252 100  
 253 23.1 20.6 30.8  
 125 13.0 10.2 15.4

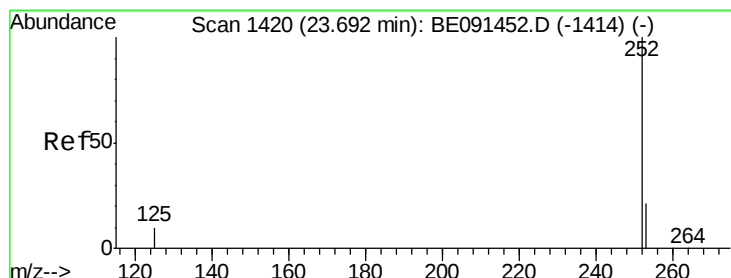
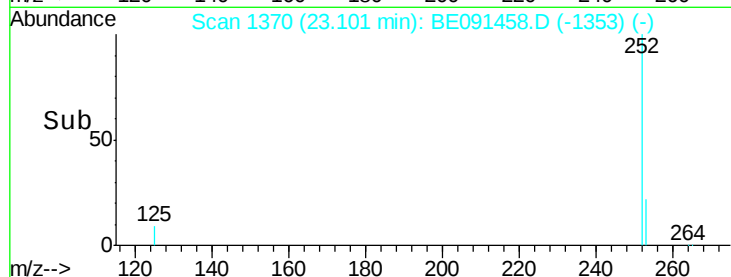
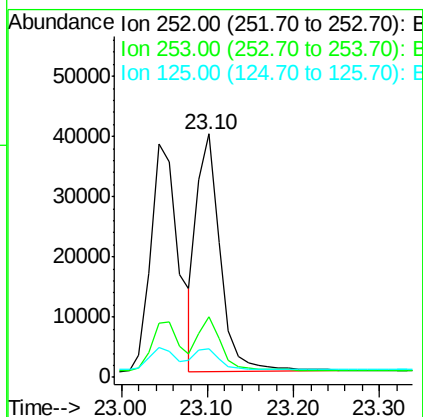
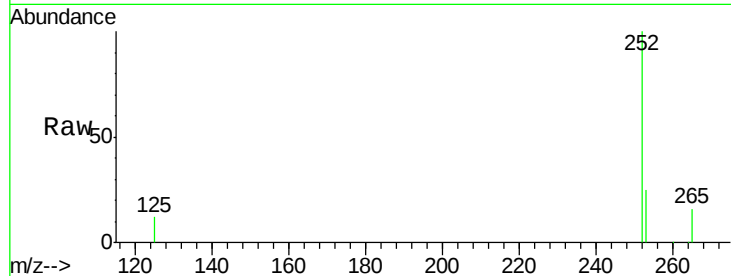




#27  
Benzo(k)fluoranthene  
Concen: 0.44 ng  
RT: 23.10 min Scan# 1370  
Delta R.T. -0.00 min  
Lab File: BE091458.D  
Acq: 17 Mar 2016 00:21

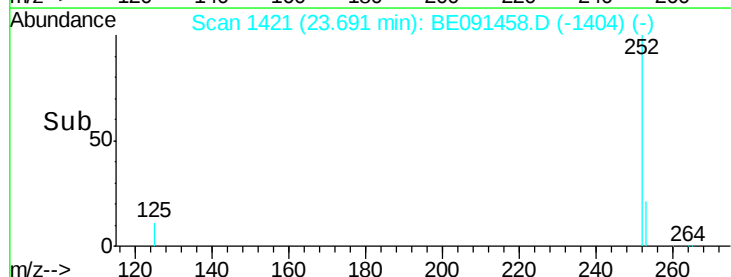
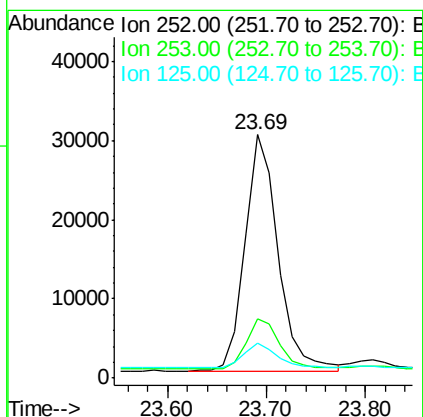
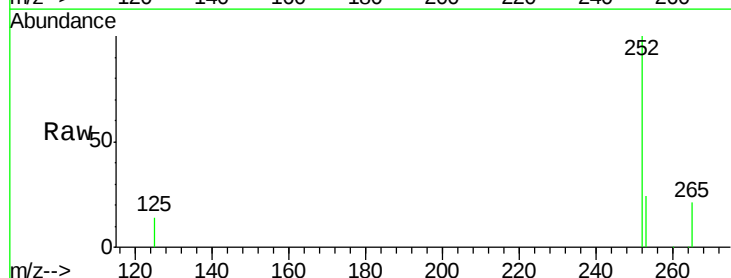
Instrument :  
BNA\_E  
ClientSampleId :

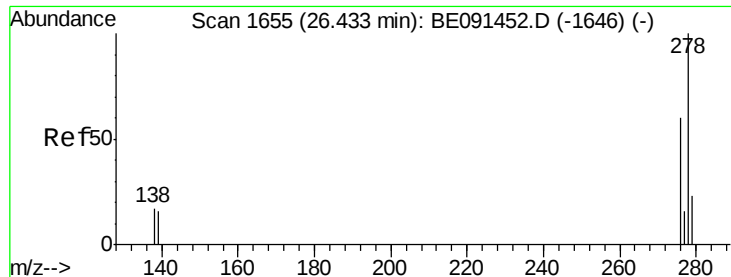
Tot Ion:252 Resp: 73714  
Ion Ratio Lower Upper  
252 100  
253 24.7 20.2 30.2  
125 11.9 10.6 16.0



#28  
Benzo(a)pyrene  
Concen: 0.45 ng  
RT: 23.69 min Scan# 1421  
Delta R.T. -0.00 min  
Lab File: BE091458.D  
Acq: 17 Mar 2016 00:21

Tgt Ion:252 Resp: 68560  
Ion Ratio Lower Upper  
252 100  
253 24.3 20.0 30.0  
125 14.5 12.7 19.1





#29

Dibenzo(a,h)anthracene

Concen: 0.46 ng

RT: 26.43 min Scan# 1656

Delta R.T. -0.00 min

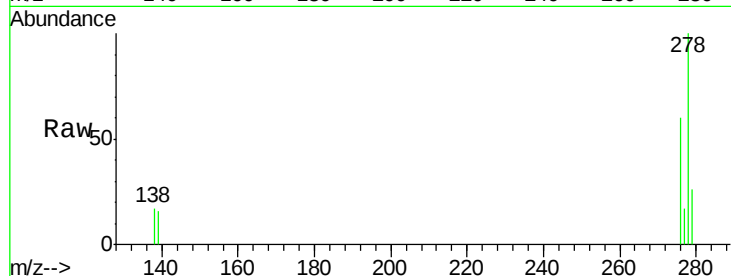
Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Instrument :

BNA\_E

ClientSampleId :



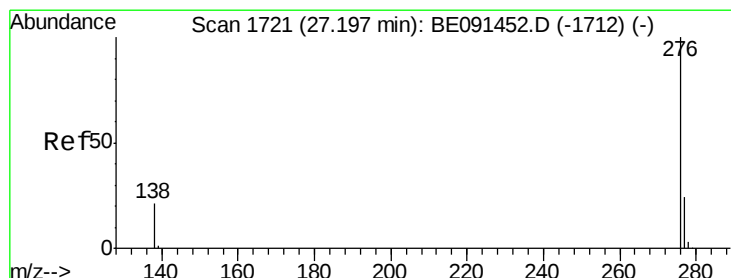
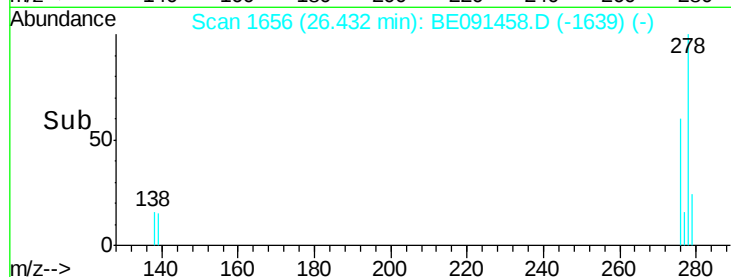
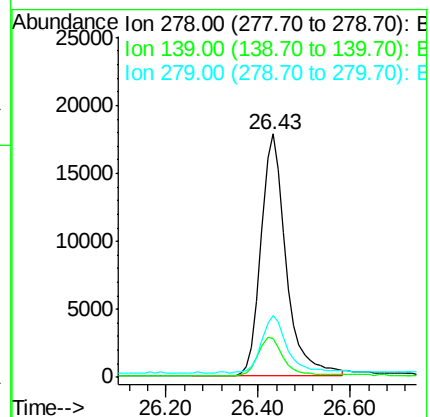
Tot Ion:278 Resp: 67734

Ion Ratio Lower Upper

278 100

139 16.1 13.3 19.9

279 25.6 20.9 31.3



#30

Benzo(g,h,i)perylene

Concen: 0.47 ng

RT: 27.20 min Scan# 1722

Delta R.T. -0.00 min

Lab File: BE091458.D

Acq: 17 Mar 2016 00:21

Tgt Ion:276 Resp: 72507

Ion Ratio Lower Upper

276 100

277 24.2 19.8 29.8

138 21.7 17.6 26.4

