

Data Path : Z:\HPCHEM1\BNA E\DATA\BE041116\  
 Data File : BE091635.D  
 Acq On : 11 Apr 2016 19:17  
 Operator : UM/SJ  
 Sample : PB89409BSD  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB89409BSD

Quant Time: Apr 12 01:48:00 2016  
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE040816.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 08 16:48:14 2016  
 Response via : Initial Calibration

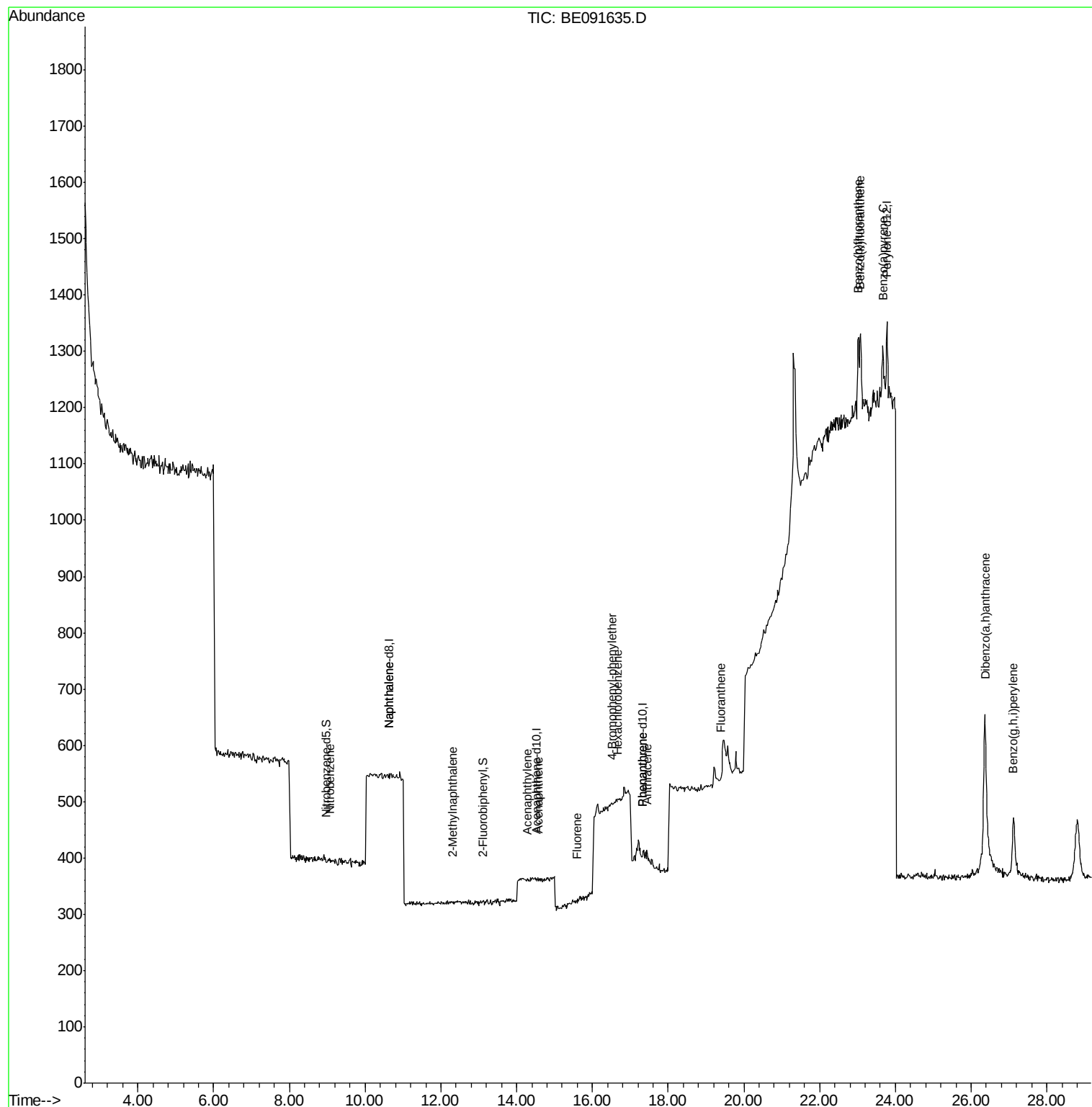
| Internal Standards            | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4     | 0.00  | 152  | 0        | 0.00   | ng    | -7.82    |
| 7) Naphthalene-d8             | 10.63 | 136  | 9        | 5.00   | ng    | 0.04     |
| 13) Acenaphthene-d10          | 14.51 | 164  | 2        | 5.00   | ng    | 0.09     |
| 19) Phenanthrene-d10          | 17.33 | 188  | 3        | 5.00   | ng    | 0.17     |
| 26) Chrysene-d12              | 0.00  | 240  | 0        | 0.00   | ng    | -21.31   |
| 35) Perylene-d12              | 23.77 | 264  | 327      | 5.00   | ng    | 0.01     |
| System Monitoring Compounds   |       |      |          |        |       |          |
| 4) 2-Fluorophenol             | 5.44  | 112  | 17       | 0.00   | ng    | 0.03     |
| 5) Phenol-d6                  | 7.04  | 99   | 7        | 0.00   | ng    | 0.07     |
| 8) Nitrobenzene-d5            | 8.98  | 82   | 4        | 7.65   | ng    | 0.02     |
| 14) 2,4,6-Tribromophenol      | 0.00  | 330  | 0        | 0.00   | ng    |          |
| 15) 2-Fluorobiphenyl          | 13.10 | 172  | 5        | 8.99   | ng    | 0.06     |
| 29) Terphenyl-d14             | 19.78 | 244  | 105      | 0.00   | ng    | 0.02     |
| Target Compounds              |       |      |          |        |       |          |
| 9) Nitrobenzene               | 9.06  | 77   | 8        | 11.92  | ng    | # 22     |
| 10) Naphthalene               | 10.63 | 128  | 16       | 8.62   | ng    | # 1      |
| 12) 2-Methylnaphthalene       | 12.29 | 142  | 6        | 5.06   | ng    | # 48     |
| 16) Acenaphthylene            | 14.27 | 152  | 5        | 6.44   | ng    | # 14     |
| 17) Acenaphthene              | 14.57 | 154  | 5        | 10.19  | ng    | # 1      |
| 18) Fluorene                  | 15.60 | 166  | 7        | 11.41  | ng    | # 7      |
| 20) 4-Bromophenyl-phenylether | 16.52 | 248  | 1        | 9.45   | ng    | # 1      |
| 21) Hexachlorobenzene         | 16.66 | 284  | 22       | 200.36 | ng    | # 50     |
| 23) Phenanthrene              | 17.33 | 178  | 28       | 40.89  | ng    | # 54     |
| 24) Anthracene                | 17.44 | 178  | 35       | 57.68  | ng    | # 1      |
| 25) Fluoranthene              | 19.40 | 202  | 16       | 22.08  | ng    | # 63     |
| 36) Benzo(b)fluoranthene      | 23.02 | 252  | 301      | 3.96   | ng    | # 1      |
| 37) Benzo(k)fluoranthene      | 23.07 | 252  | 359      | 4.79   | ng    | # 1      |
| 38) Benzo(a)pyrene            | 23.67 | 252  | 304      | 4.31   | ng    | # 1      |
| 39) Dibenzo(a,h)anthracene    | 26.38 | 278  | 694      | 9.99   | ng    | # 39     |
| 40) Benzo(g,h,i)perylene      | 27.12 | 276  | 384      | 5.37   | ng    | # 28     |

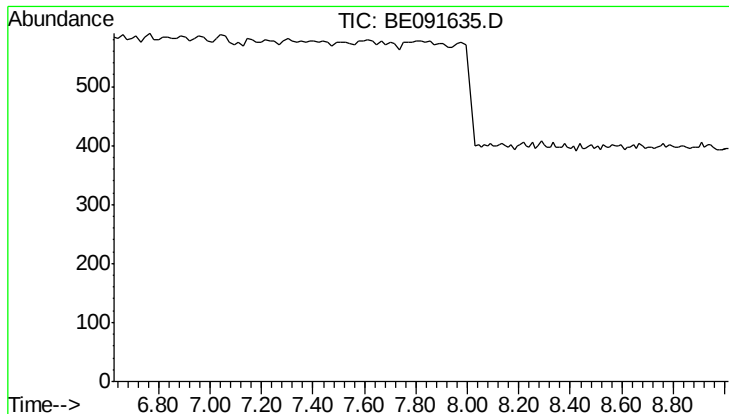
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
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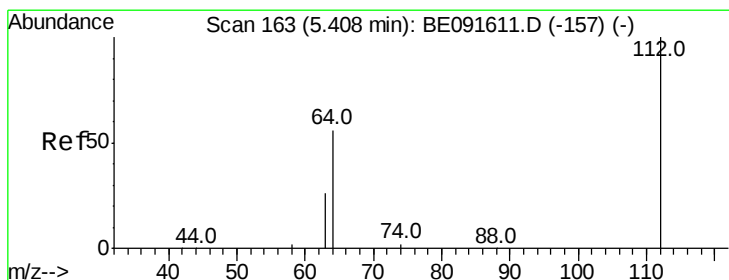
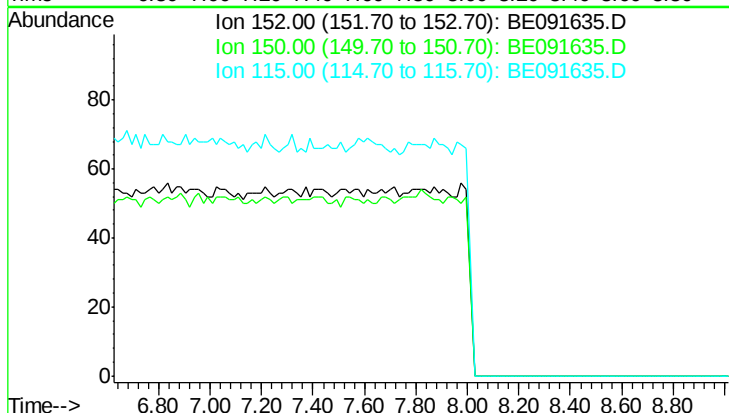




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.00 ng  
 Expected RT: 7.82 min  
 Lab File: BE091635.D  
 Acq: 11 Apr 2016 19:17

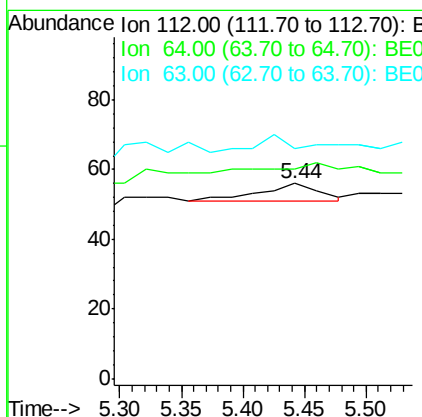
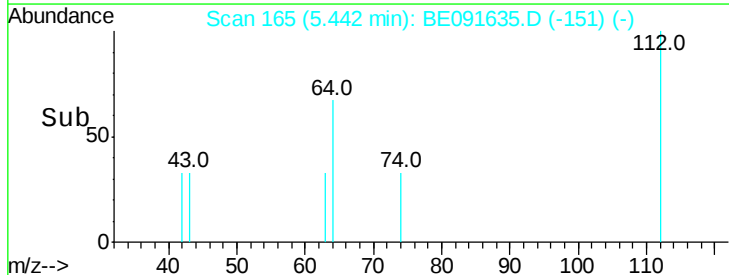
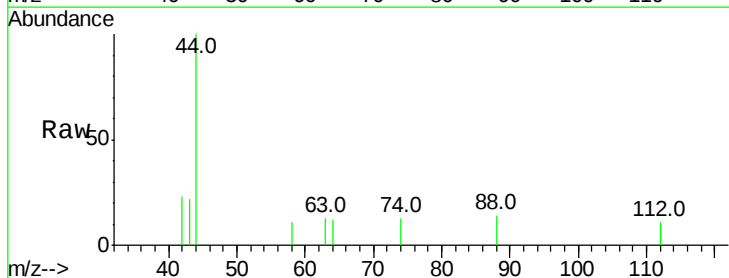
Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB89409BSD

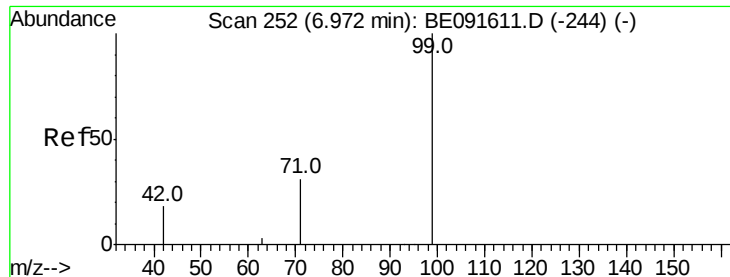
Tot Ion: 152  
 Sig Exp Ratio  
 152 100  
 150 153.2  
 115 66.0



#4  
 2-Fluorophenol  
 Concen: 0.00 ng  
 RT: 5.44 min Scan# 165  
 Delta R.T. 0.03 min  
 Lab File: BE091635.D  
 Acq: 11 Apr 2016 19:17

Tgt Ion: 112 Resp: 17  
 Ion Ratio Lower Upper  
 112 100  
 64 117.6 30.9 46.3#  
 63 0.0 16.7 25.1#





#5

Phenol-d6

Concen: 0.00 ng

RT: 7.04 min Scan# 256

Delta R.T. 0.07 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

Instrument :

BNA\_E

ClientSampleId :

PB89409BSD

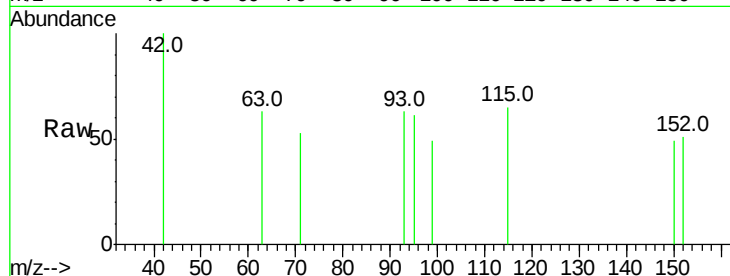
Tot Ion: 99 Resp: 7

Ion Ratio Lower Upper

99 100

42 0.0 16.2 24.2#

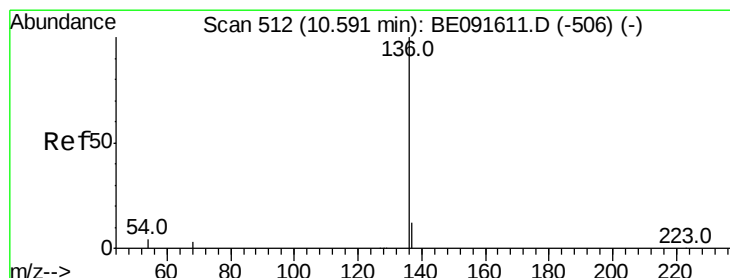
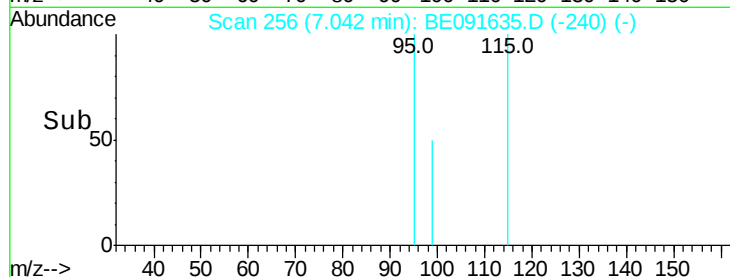
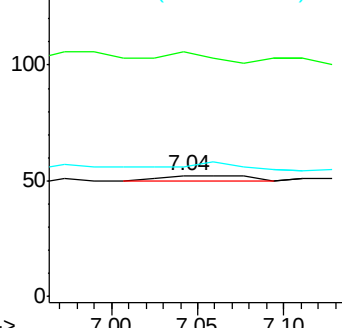
71 128.6 29.0 43.4#



Abundance Ion 99.00 (98.70 to 99.70): BE0

Ion 42.00 (41.70 to 42.70): BE0

Ion 71.00 (70.70 to 71.70): BE0



#7

Naphthalene-d8

Concen: 5.00 ng

RT: 10.63 min Scan# 514

Delta R.T. 0.04 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

Tgt Ion: 136 Resp: 9

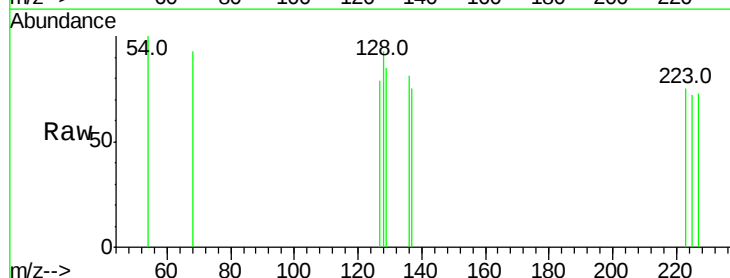
Ion Ratio Lower Upper

136 100

137 92.6 8.9 13.3#

54 124.1 8.2 12.4#

68 114.8 6.2 9.4#

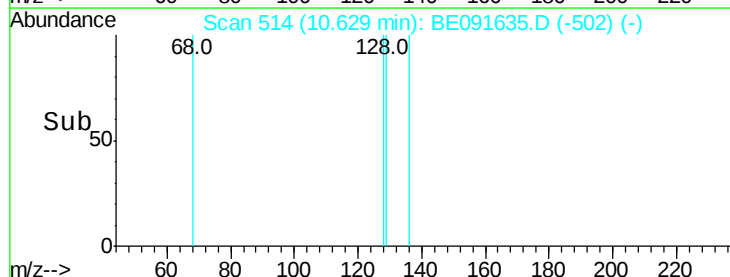
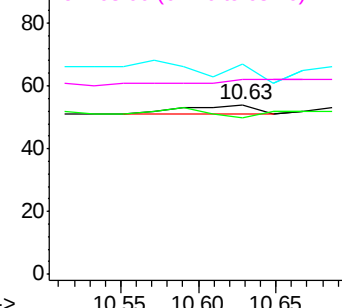


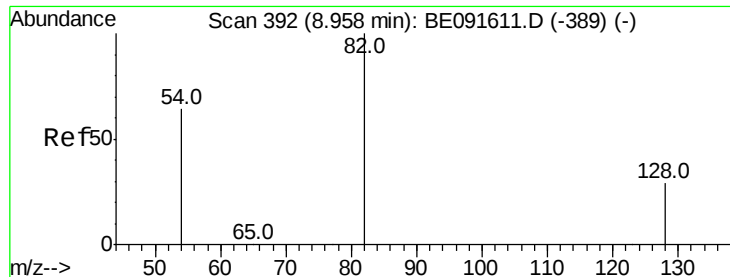
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0

Ion 68.00 (67.70 to 68.70): BE0





#8

Nitrobenzene-d5

Concen: 7.65 ng

RT: 8.98 min Scan# 394

Delta R.T. 0.02 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

Instrument :

BNA\_E

ClientSampleId :

PB89409BSD

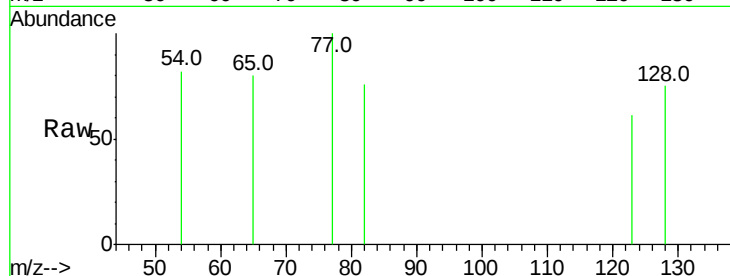
Tot Ion: 82 Resp: 4

Ion Ratio Lower Upper

82 100

128 98.4 25.4 38.0#

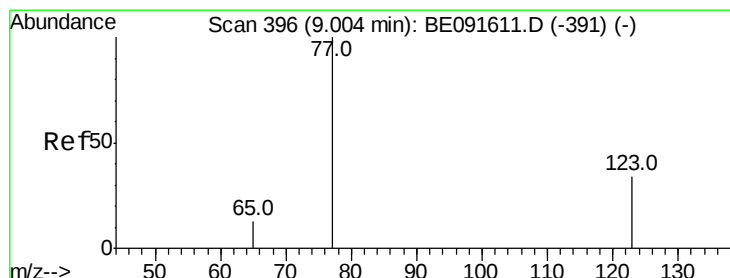
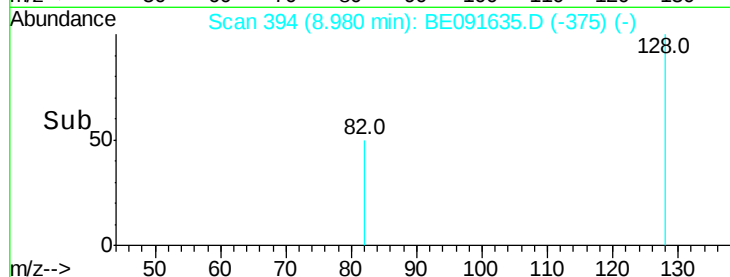
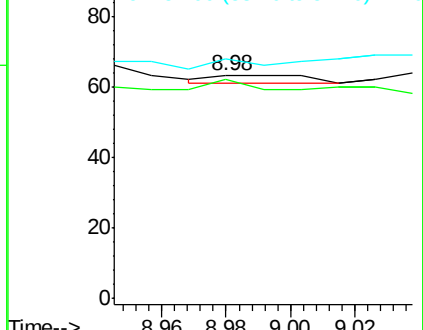
54 107.9 48.4 72.6#



Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): BE0

Ion 54.00 (53.70 to 54.70): BE0



#9

Nitrobenzene

Concen: 11.92 ng

RT: 9.06 min Scan# 401

Delta R.T. 0.06 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

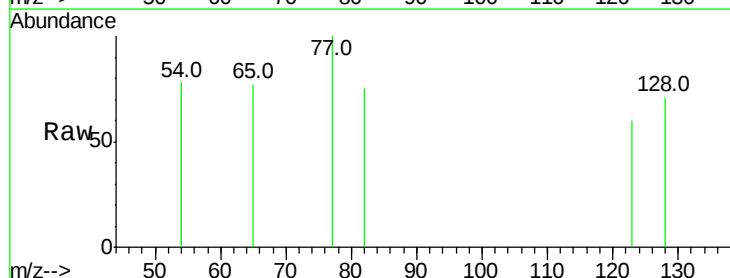
Tgt Ion: 77 Resp: 8

Ion Ratio Lower Upper

77 100

123 0.0 26.9 40.3#

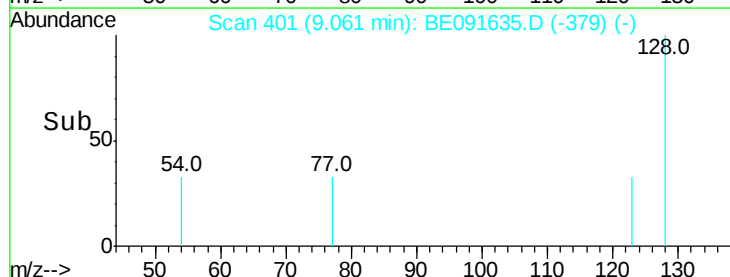
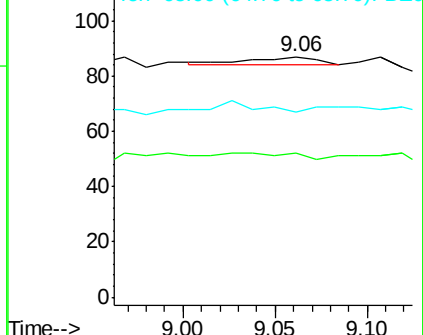
65 62.5 9.4 14.2#

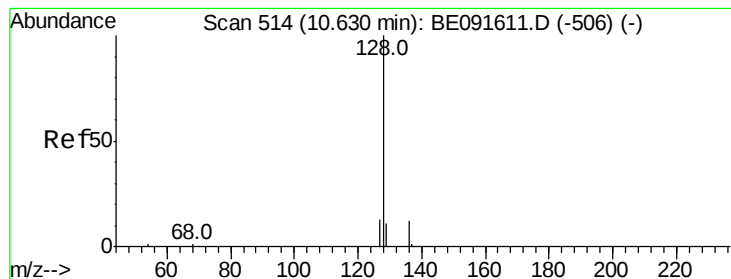


Abundance Ion 77.00 (76.70 to 77.70): BE0

Ion 123.00 (122.70 to 123.70): BE0

Ion 65.00 (64.70 to 65.70): BE0





#10

Naphthalene

Concen: 8.62 ng

RT: 10.63 min Scan# 514

Delta R.T. -0.00 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

Instrument :

BNA\_E

ClientSampleId :

PB89409BSD

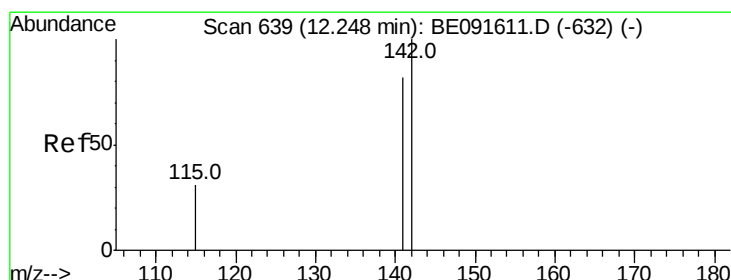
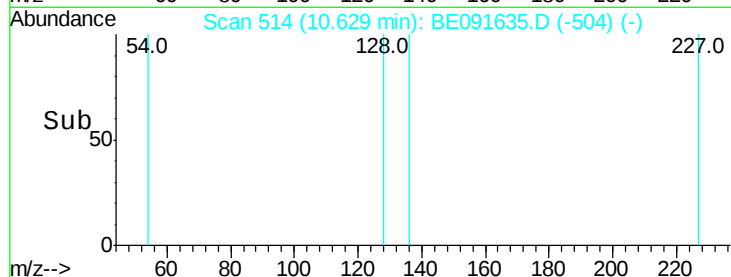
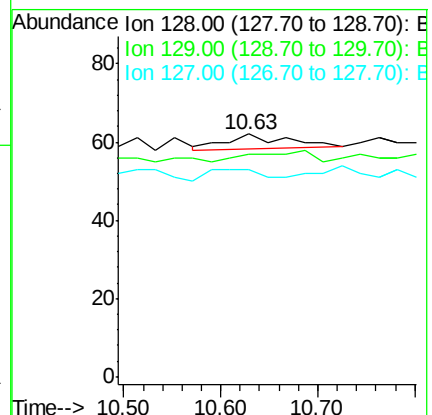
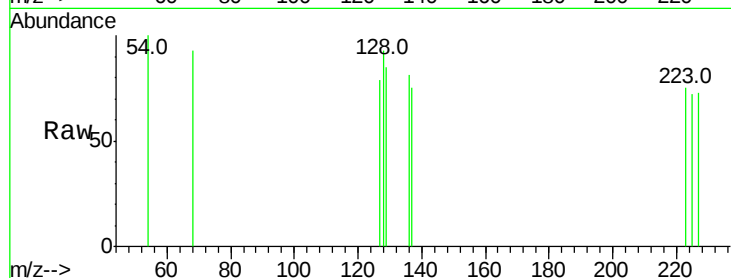
Tot Ion:128 Resp: 16

Ion Ratio Lower Upper

128 100

129 91.9 9.3 13.9#

127 85.5 10.7 16.1#



#12

2-Methylnaphthalene

Concen: 5.06 ng

RT: 12.29 min Scan# 643

Delta R.T. 0.05 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

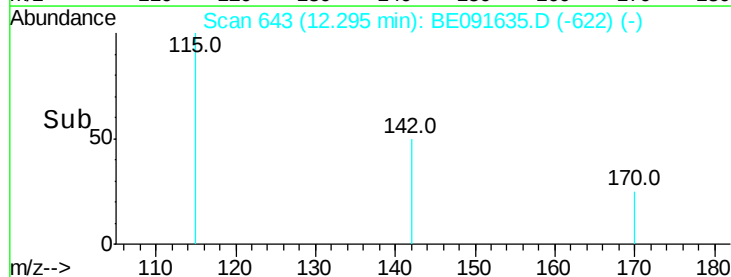
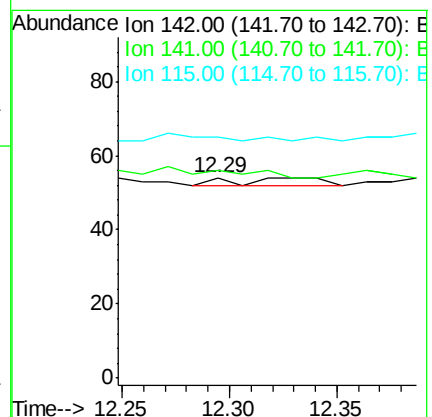
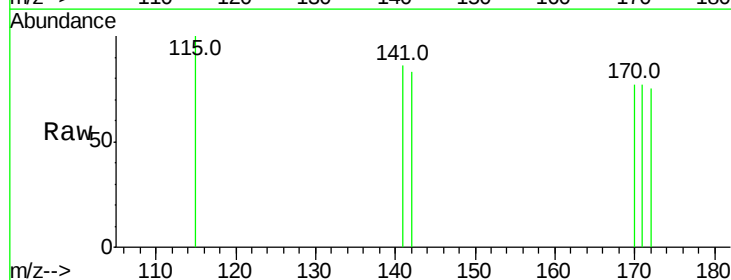
Tgt Ion:142 Resp: 6

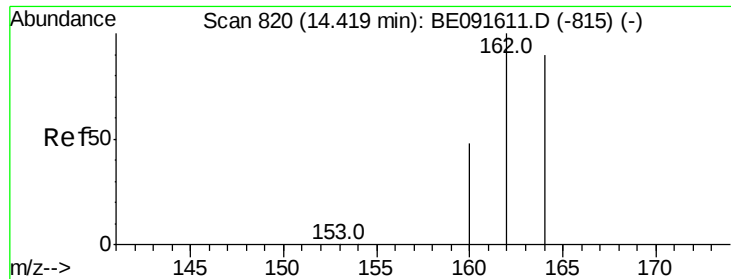
Ion Ratio Lower Upper

142 100

141 103.7 71.4 107.0

115 120.4 30.3 45.5#

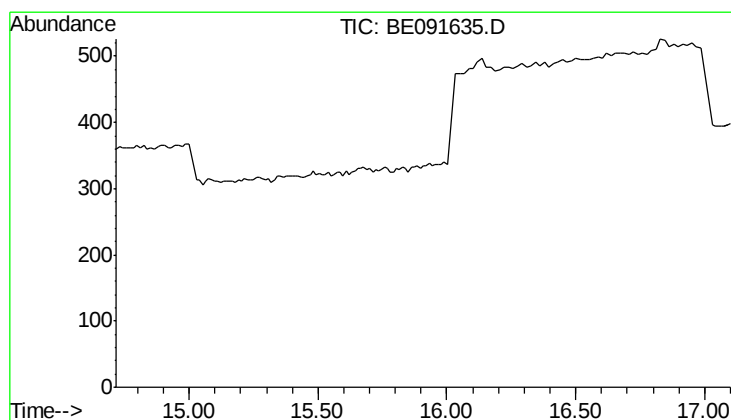
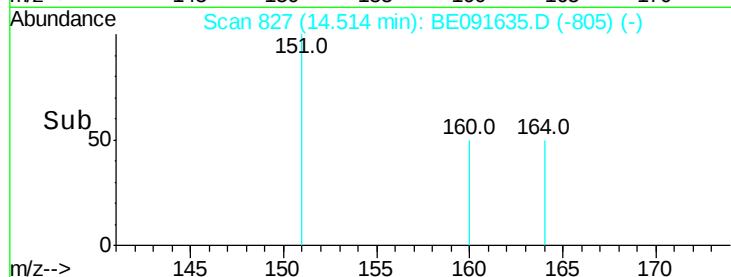
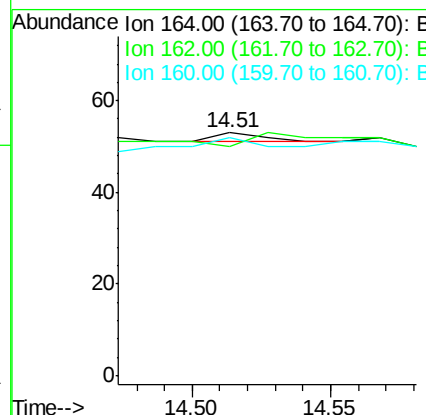
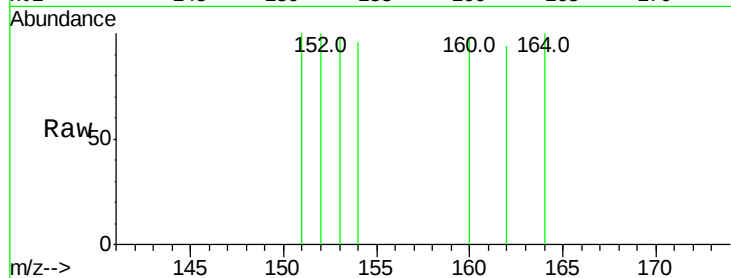




#13  
 Acenaphthene-d10  
 Concen: 5.00 ng  
 RT: 14.51 min Scan# 827  
 Delta R.T. 0.09 min  
 Lab File: BE091635.D  
 Acq: 11 Apr 2016 19:17

Instrument :  
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 ClientSampleId :  
 PB89409BSD

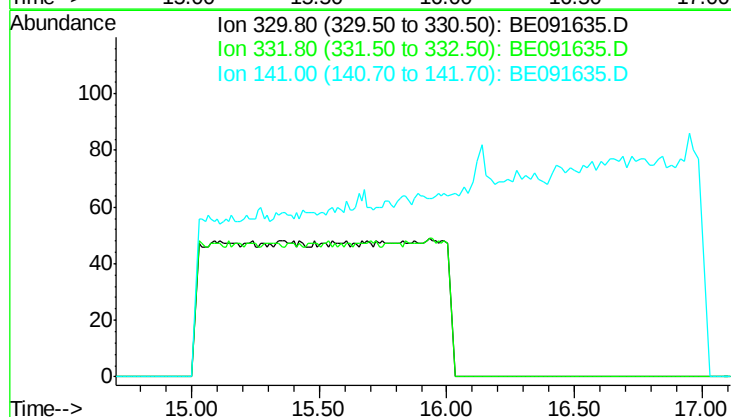
Tot Ion: 164 Resp: 2  
 Ion Ratio Lower Upper  
 164 100  
 162 94.3 85.3 127.9  
 160 98.1 46.2 69.2#

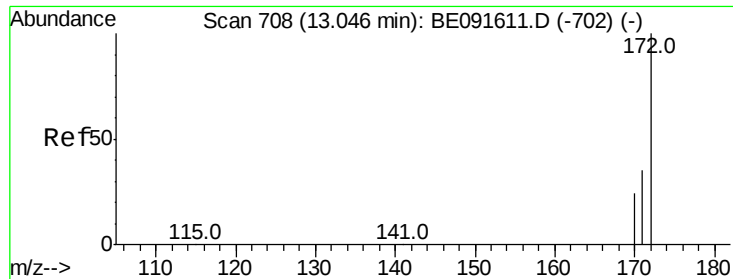


#14  
 2,4,6-Tribromophenol  
 Concen: 0.00 ng  
 Expected RT: 15.91 min

Lab File: BE091635.D  
 Acq: 11 Apr 2016 19:17

Tgt Ion: 330  
 Sig Exp Ratio  
 330 100  
 332 98.9  
 141 156.7

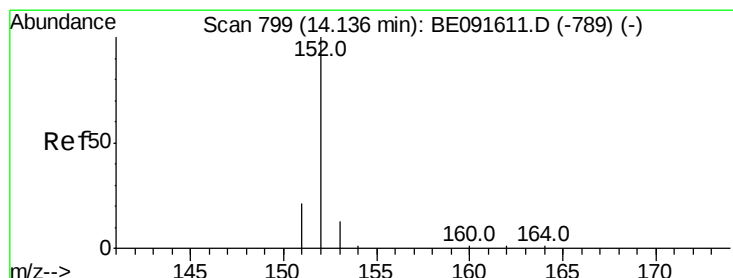
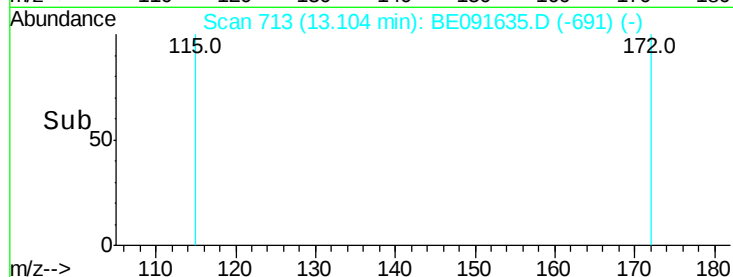
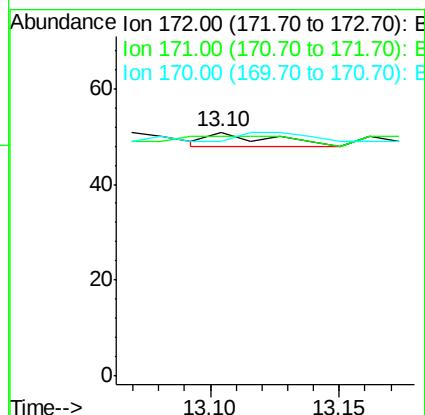
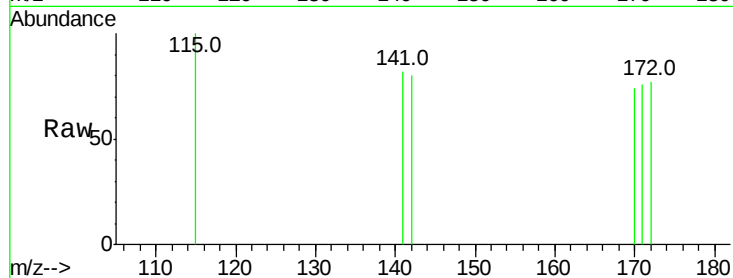




#15  
2-Fluorobiphenyl  
Concen: 8.99 ng  
RT: 13.10 min Scan# 713  
Delta R.T. 0.06 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

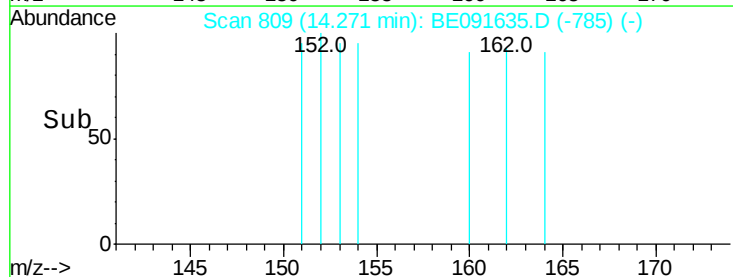
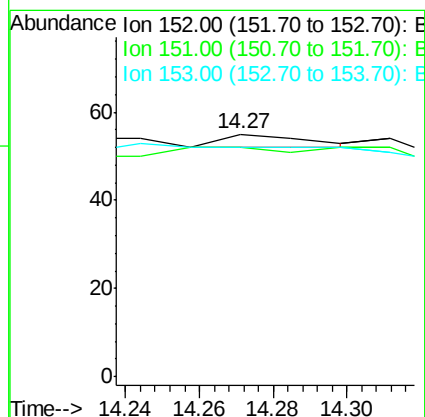
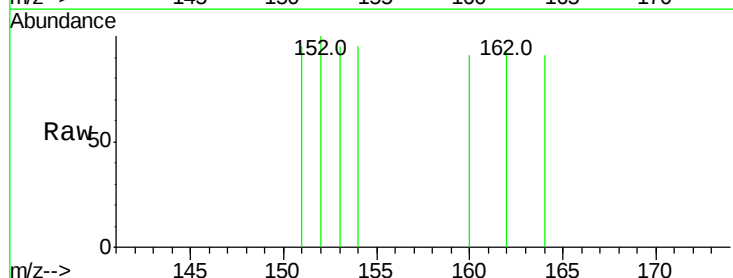
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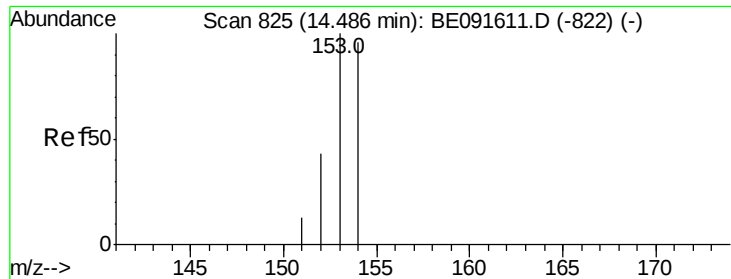
Tot Ion:172 Resp: 5  
Ion Ratio Lower Upper  
172 100  
171 98.0 28.8 43.2#  
170 96.1 19.3 28.9#



#16  
Acenaphthylene  
Concen: 6.44 ng  
RT: 14.27 min Scan# 809  
Delta R.T. 0.14 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

Tgt Ion:152 Resp: 5  
Ion Ratio Lower Upper  
152 100  
151 80.0 3.9 5.9#  
153 0.0 10.3 15.5#

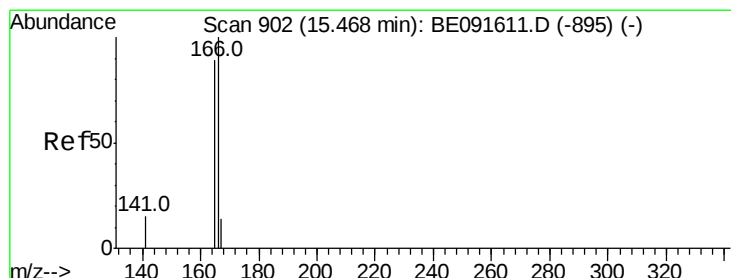
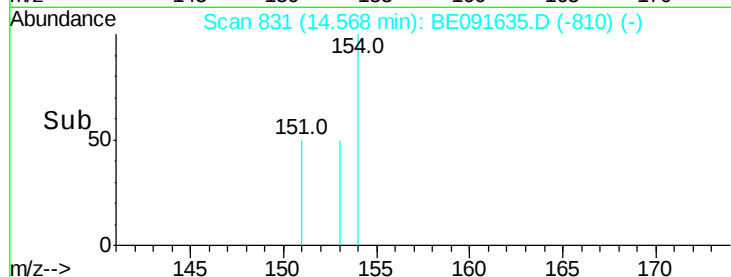
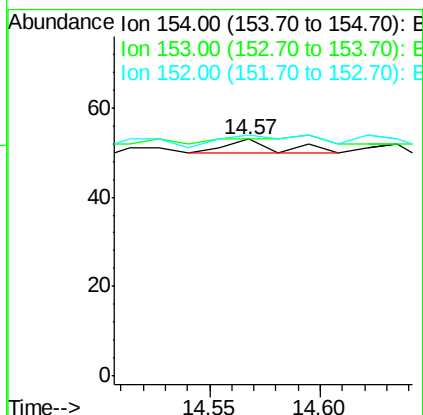
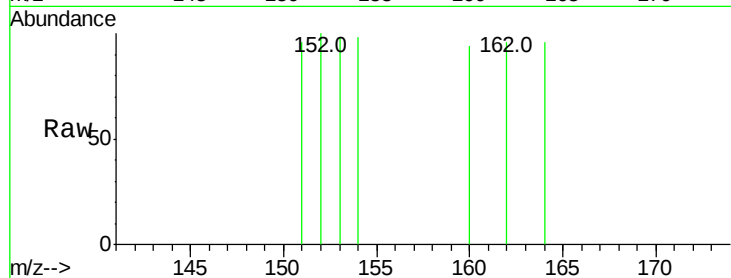




#17  
Acenaphthene  
Concen: 10.19 ng  
RT: 14.57 min Scan# 831  
Delta R.T. 0.08 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

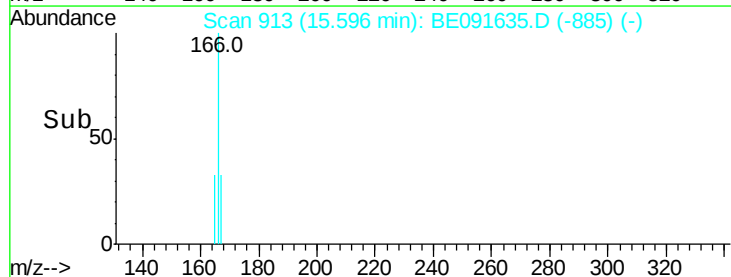
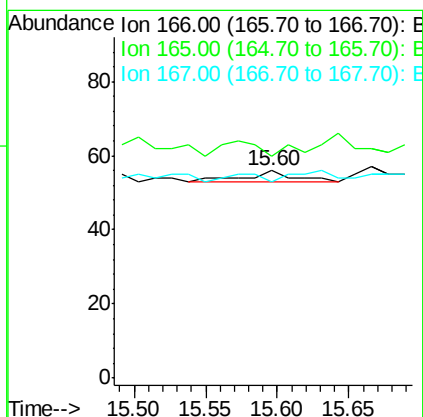
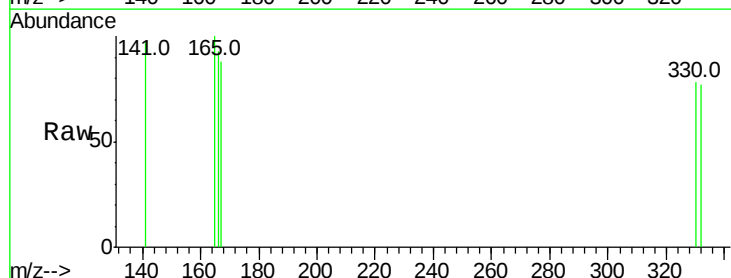
Instrument :  
BNA\_E  
ClientSampleId :  
PB89409BSD

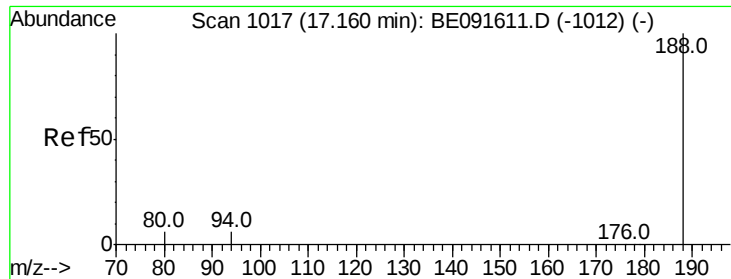
Tot Ion:154 Resp: 5  
Ion Ratio Lower Upper  
154 100  
153 0.0 80.0 120.0#  
152 180.0 40.0 60.0#



#18  
Fluorene  
Concen: 11.41 ng  
RT: 15.60 min Scan# 913  
Delta R.T. 0.13 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

Tgt Ion:166 Resp: 7  
Ion Ratio Lower Upper  
166 100  
165 0.0 80.8 121.2#  
167 0.0 10.9 16.3#





#19

Phenanthrene-d10

Concen: 5.00 ng

RT: 17.33 min Scan# 1031

Delta R.T. 0.17 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

Instrument :

BNA\_E

ClientSampleId :

PB89409BSD

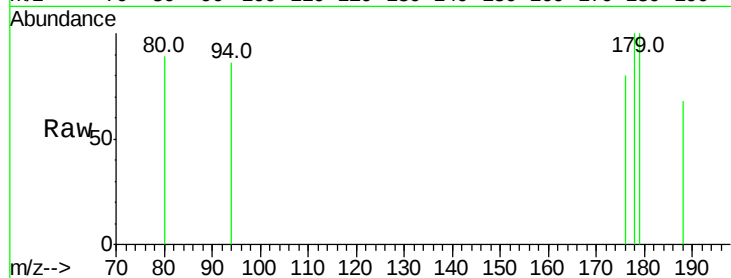
Tot Ion:188 Resp: 3

Ion Ratio Lower Upper

188 100

94 125.9 8.7 13.1#

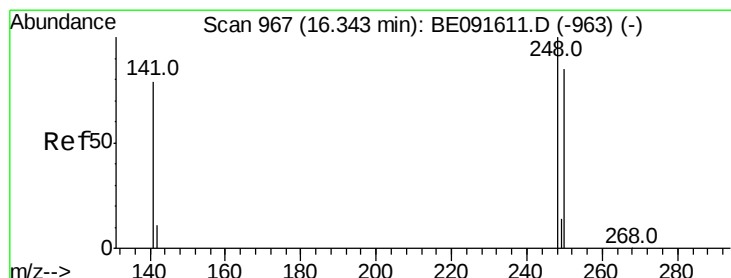
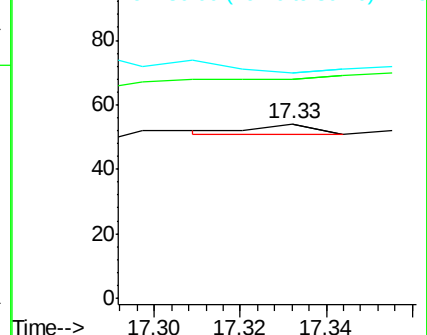
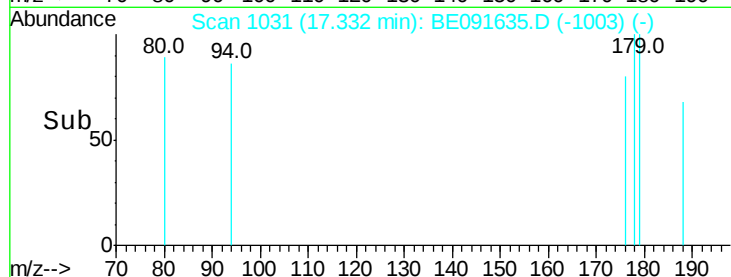
80 129.6 9.4 14.0#



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



#20

4-Bromophenyl-phenylether

Concen: 9.45 ng

RT: 16.52 min Scan# 977

Delta R.T. 0.17 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

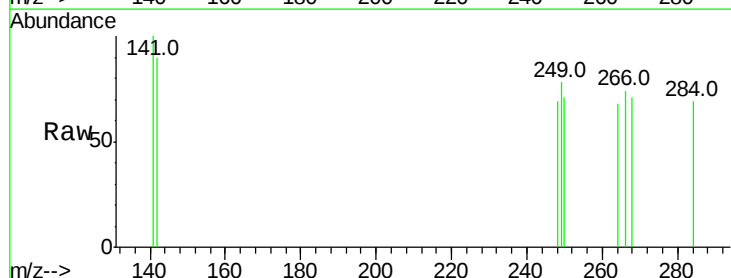
Tgt Ion:248 Resp: 1

Ion Ratio Lower Upper

248 100

250 500.0 80.5 120.7#

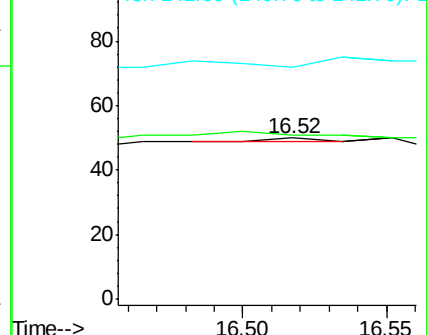
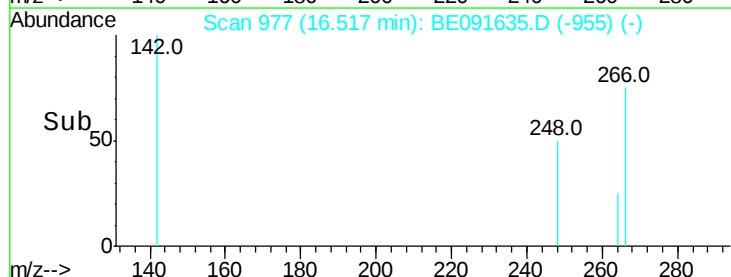
141 0.0 72.0 108.0#

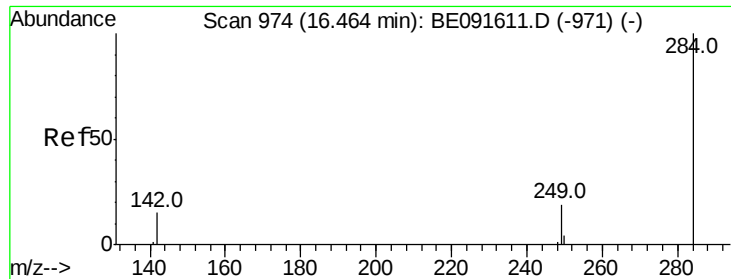


Abundance Ion 248.00 (247.70 to 248.70): E

Ion 250.00 (249.70 to 250.70): E

Ion 141.00 (140.70 to 141.70): E

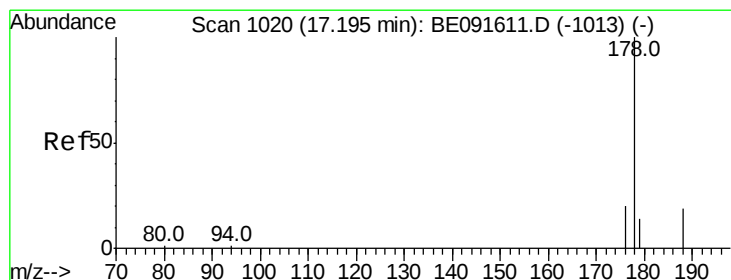
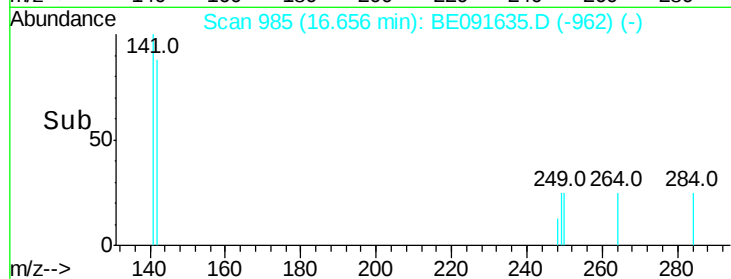
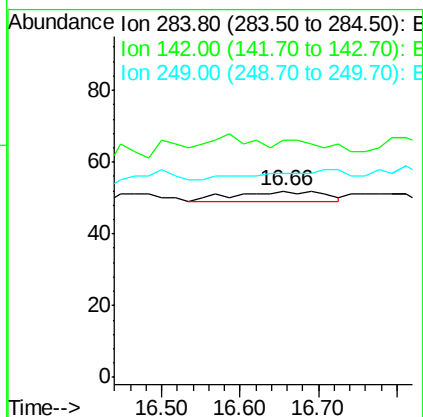
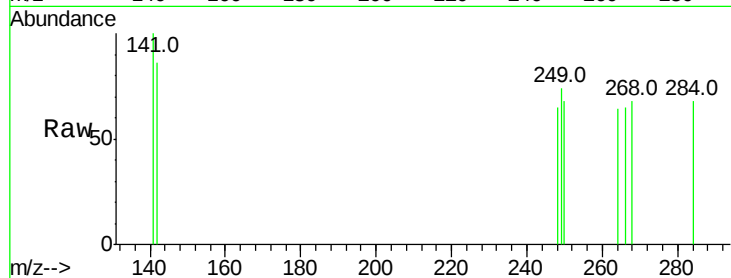




#21  
Hexachlorobenzene  
Concen: 200.36 ng  
RT: 16.66 min Scan# 985  
Delta R.T. 0.19 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

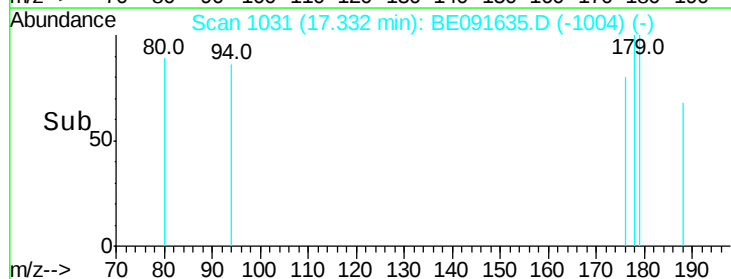
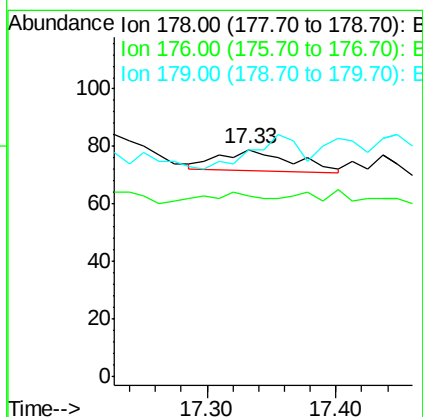
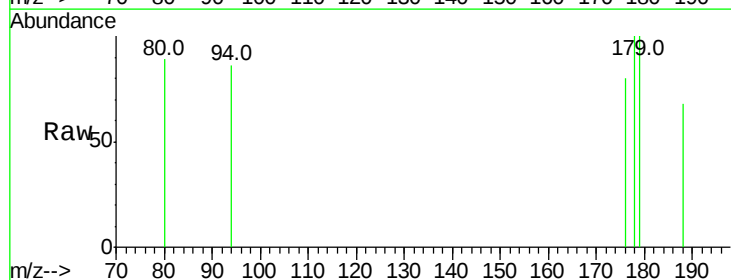
Instrument :  
BNA\_E  
ClientSampleId :  
PB89409BSD

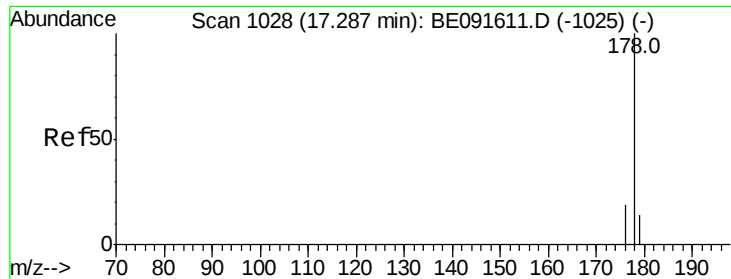
Tot Ion:284 Resp: 22  
Ion Ratio Lower Upper  
284 100  
142 68.2 32.2 48.2#  
249 0.0 25.4 38.2#



#23  
Phenanthrene  
Concen: 40.89 ng  
RT: 17.33 min Scan# 1031  
Delta R.T. 0.14 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

Tgt Ion:178 Resp: 28  
Ion Ratio Lower Upper  
178 100  
176 42.9 15.3 22.9#  
179 0.0 12.6 18.8#





#24

Anthracene

Concen: 57.68 ng

RT: 17.44 min Scan# 1040

Delta R.T. 0.15 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

Instrument :

BNA\_E

ClientSampleId :

PB89409BSD

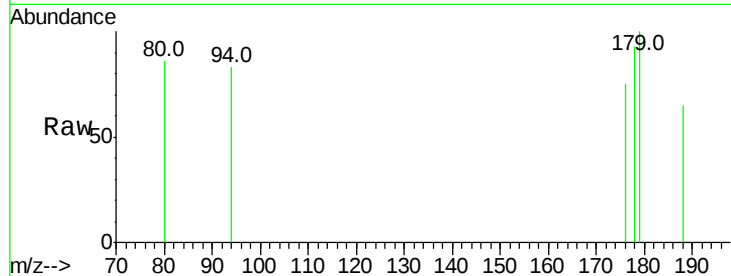
Tot Ion:178 Resp: 35

Ion Ratio Lower Upper

178 100

176 0.0 14.6 21.8#

179 108.6 11.8 17.6#

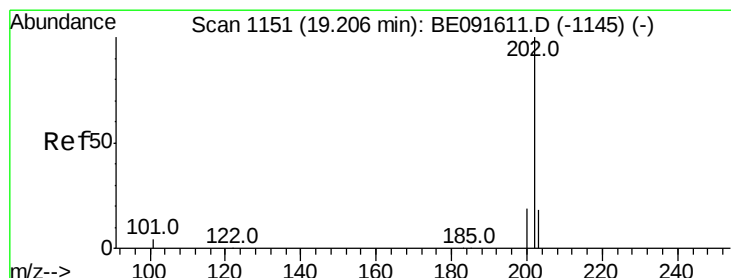
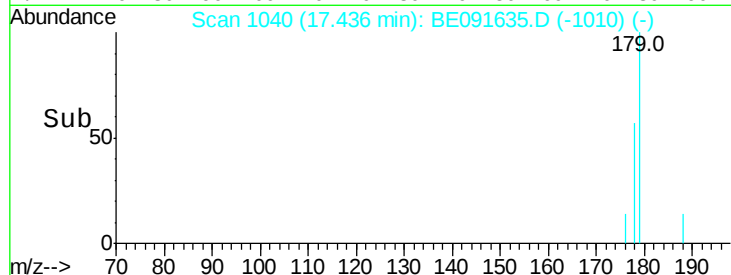
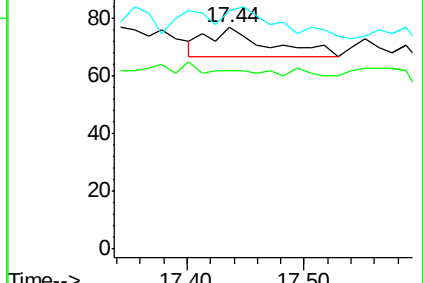


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E

17.44



#25

Fluoranthene

Concen: 22.08 ng

RT: 19.40 min Scan# 1160

Delta R.T. 0.19 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

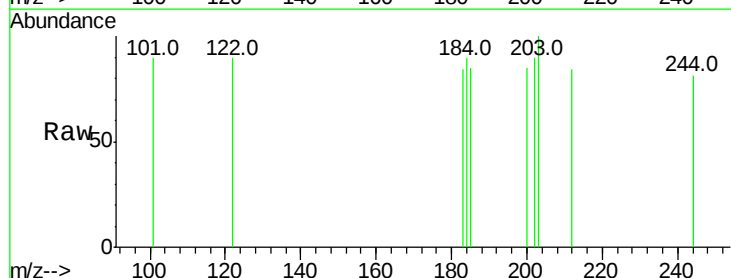
Tgt Ion:202 Resp: 16

Ion Ratio Lower Upper

202 100

101 0.0 11.0 16.6#

203 0.0 13.9 20.9#

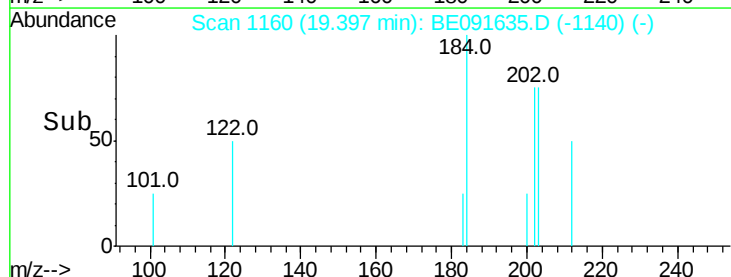
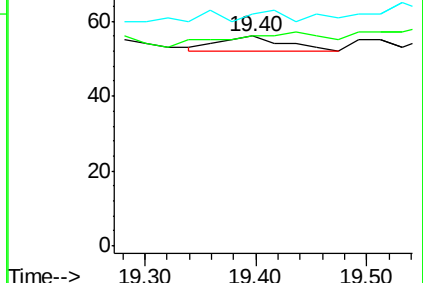


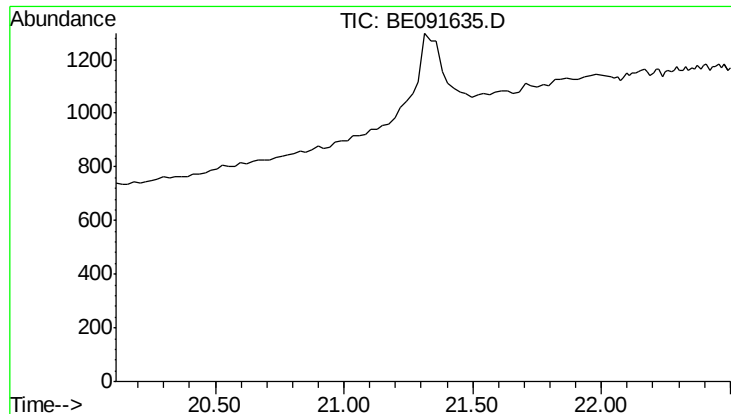
Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E

19.40

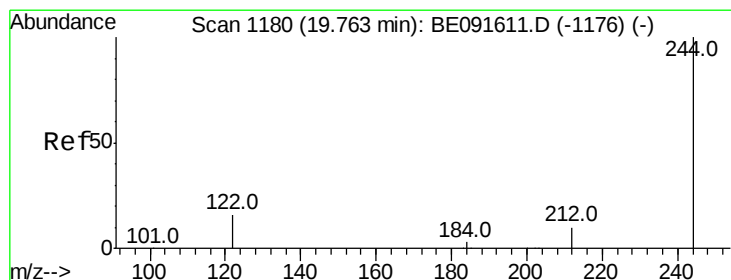
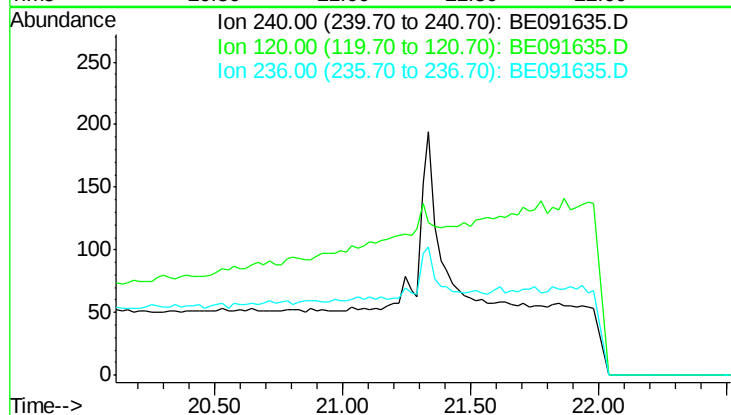




#26  
 Chrvsene-d12  
 Concen: 0.00 ng  
 Expected RT: 21.31 min  
 Lab File: BE091635.D  
 Acq: 11 Apr 2016 19:17

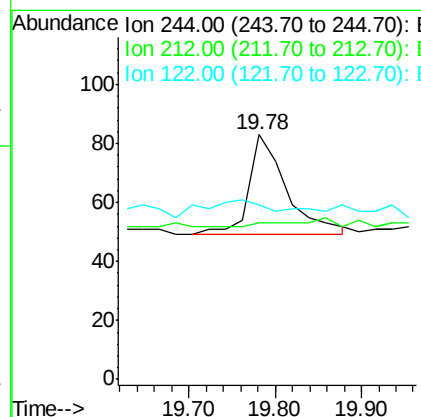
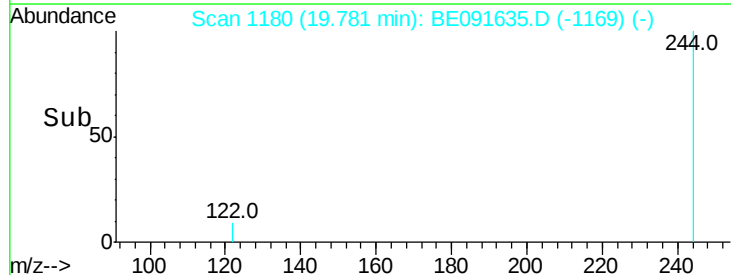
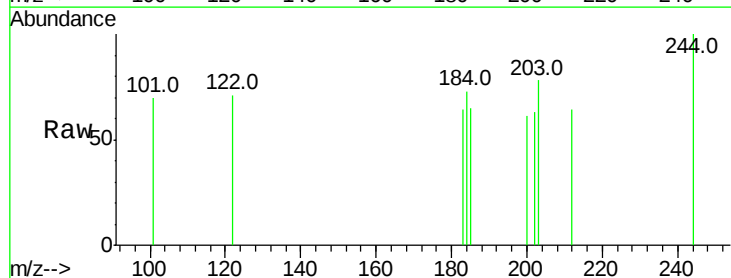
Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB89409BSD

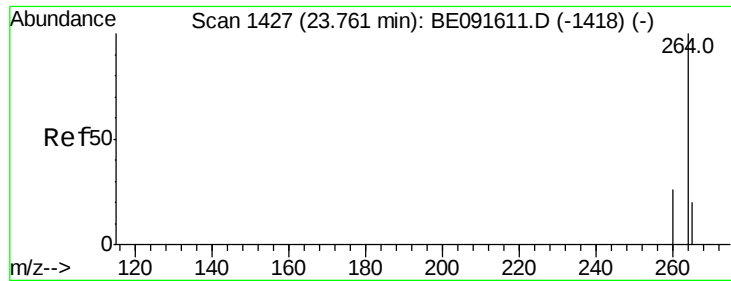
Tot Ion: 240  
 Sig Exp Ratio  
 240 100  
 120 13.7  
 236 27.1



#29  
 Terphenyl-d14  
 Concen: 0.00 ng  
 RT: 19.78 min Scan# 1180  
 Delta R.T. 0.02 min  
 Lab File: BE091635.D  
 Acq: 11 Apr 2016 19:17

Tgt Ion: 244 Resp: 105  
 Ion Ratio Lower Upper  
 244 100  
 212 63.9 6.9 10.3#  
 122 71.1 11.0 16.4#

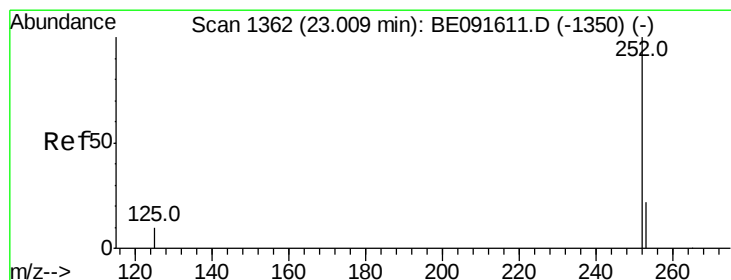
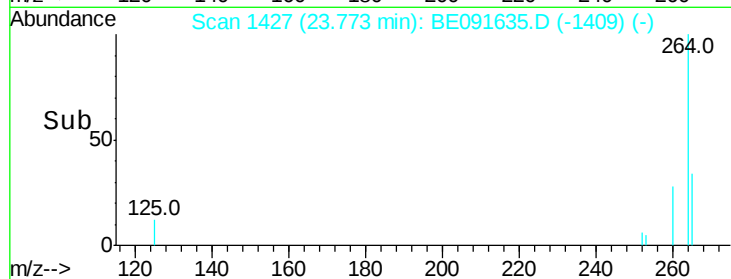
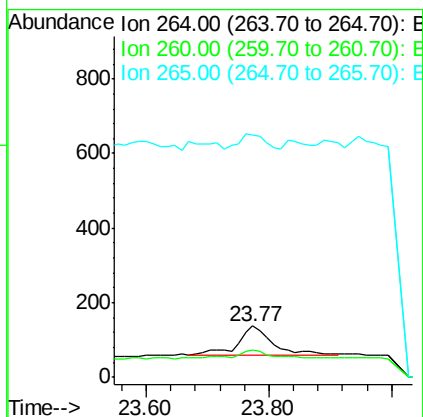
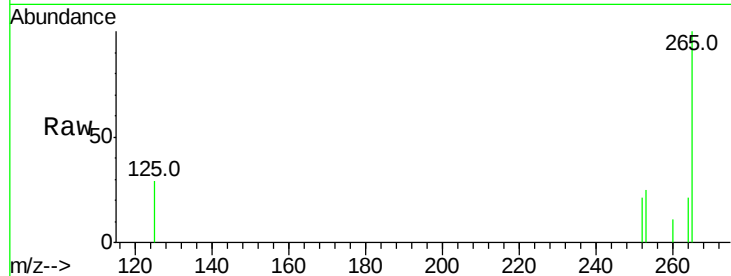




#35  
Pervlene-d12  
Concen: 5.00 ng  
RT: 23.77 min Scan# 1427  
Delta R.T. 0.01 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

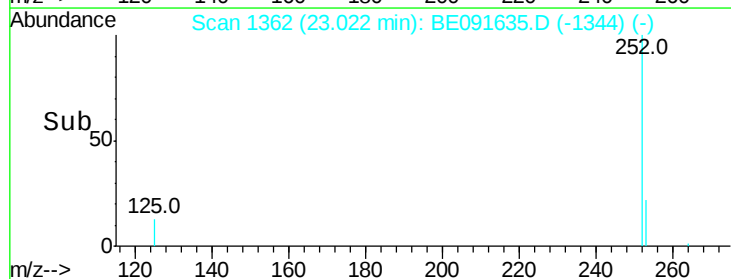
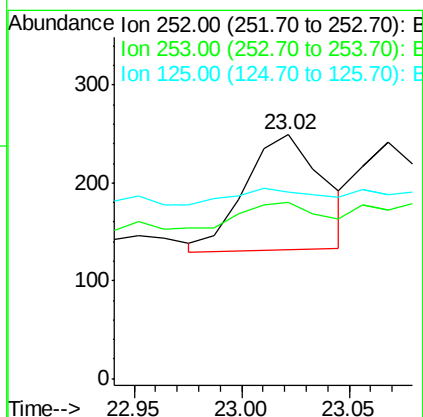
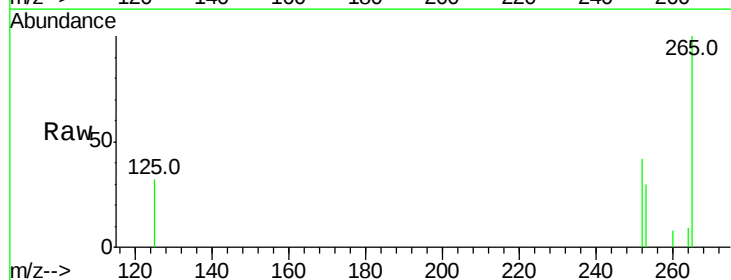
Instrument :  
BNA\_E  
ClientSampleId :  
PB89409BSD

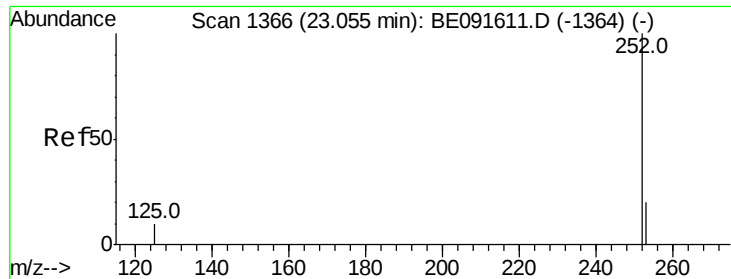
Tot Ion:264 Resp: 327  
Ion Ratio Lower Upper  
264 100  
260 53.3 20.0 30.0#  
265 475.2 17.5 26.3#



#36  
Benzo(b)fluoranthene  
Concen: 3.96 ng  
RT: 23.02 min Scan# 1362  
Delta R.T. 0.01 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

Tgt Ion:252 Resp: 301  
Ion Ratio Lower Upper  
252 100  
253 72.3 17.4 26.0#  
125 76.7 10.2 15.2#

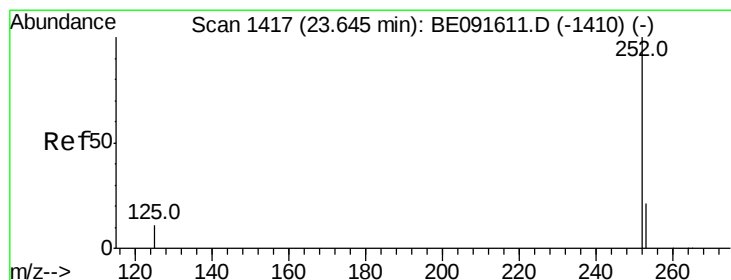
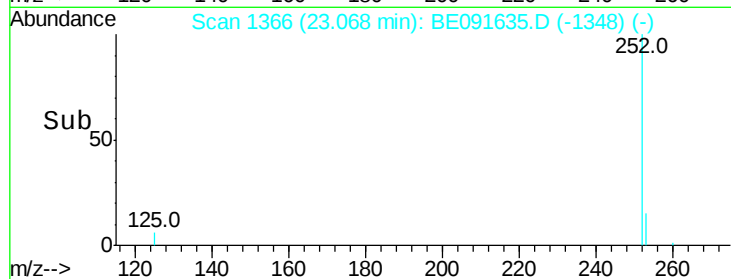
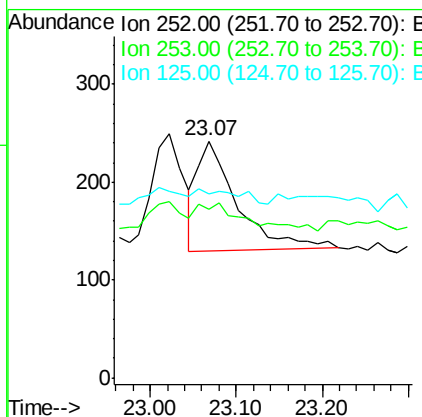
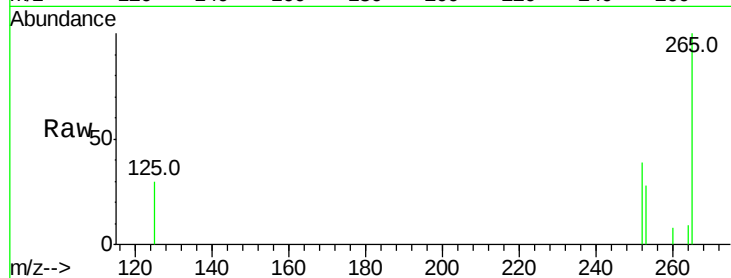




#37  
Benzo(k)fluoranthene  
Concen: 4.79 ng  
RT: 23.07 min Scan# 1366  
Delta R.T. 0.01 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

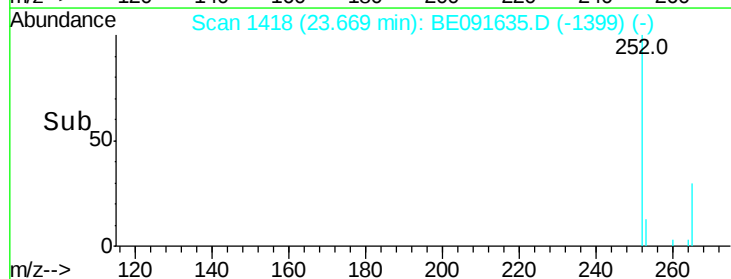
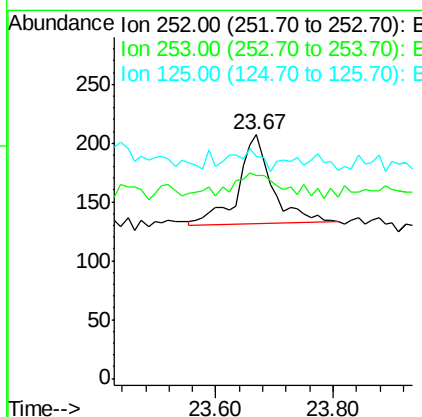
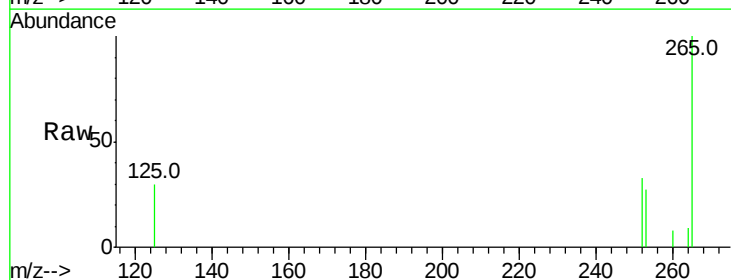
Instrument :  
BNA\_E  
ClientSampleId :  
PB89409BSD

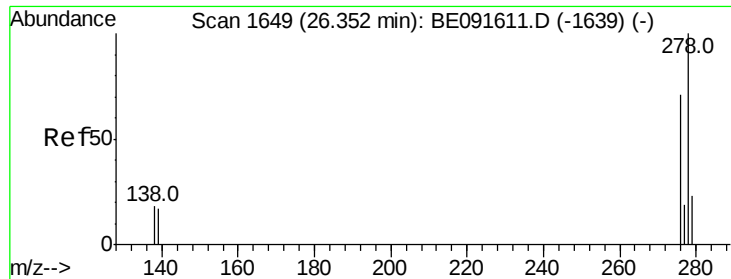
Tot Ion:252 Resp: 359  
Ion Ratio Lower Upper  
252 100  
253 71.5 17.6 26.4#  
125 77.7 9.9 14.9#



#38  
Benzo(a)pyrene  
Concen: 4.31 ng  
RT: 23.67 min Scan# 1418  
Delta R.T. 0.02 min  
Lab File: BE091635.D  
Acq: 11 Apr 2016 19:17

Tgt Ion:252 Resp: 304  
Ion Ratio Lower Upper  
252 100  
253 83.1 18.1 27.1#  
125 91.3 11.0 16.4#





#39

Dibenzo(a,h)anthracene

Concen: 9.99 ng

RT: 26.38 min Scan# 1650

Delta R.T. 0.02 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

Instrument :

BNA\_E

ClientSampleId :

PB89409BSD

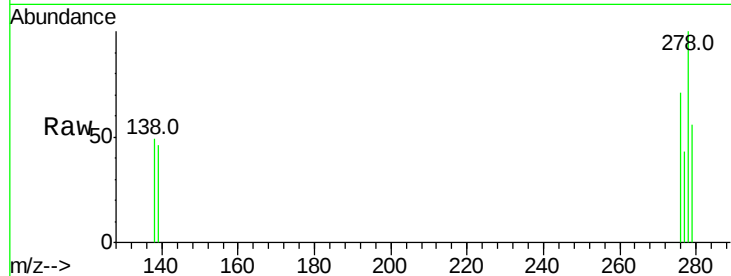
Tot Ion:278 Resp: 694

Ion Ratio Lower Upper

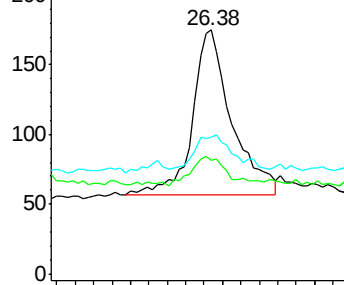
278 100

139 46.3 16.0 24.0#

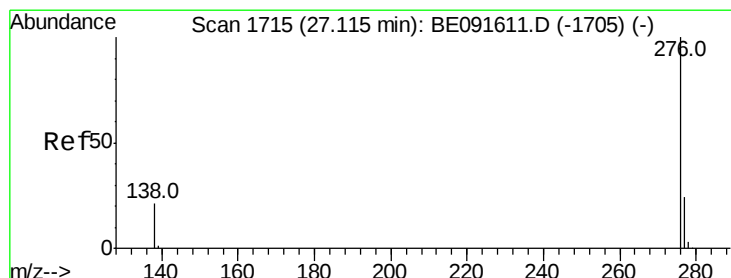
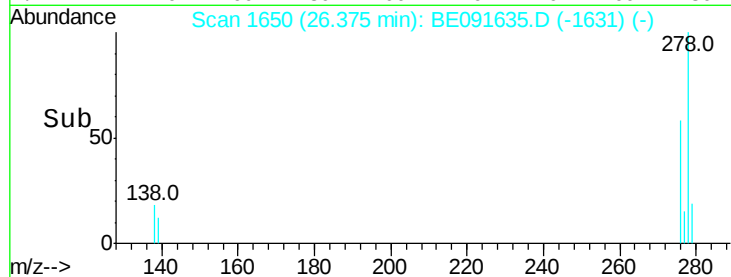
279 56.0 19.4 29.2#



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



Time-->



#40

Benzo(g,h,i)perylene

Concen: 5.37 ng

RT: 27.12 min Scan# 1714

Delta R.T. 0.00 min

Lab File: BE091635.D

Acq: 11 Apr 2016 19:17

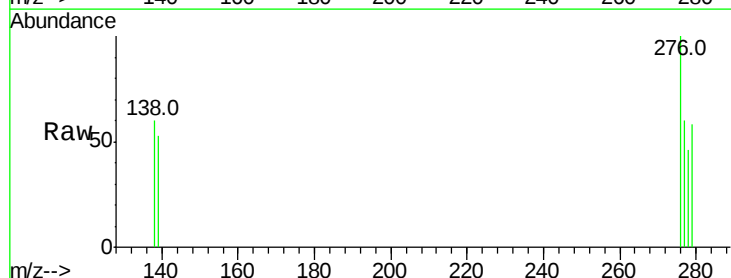
Tgt Ion:276 Resp: 384

Ion Ratio Lower Upper

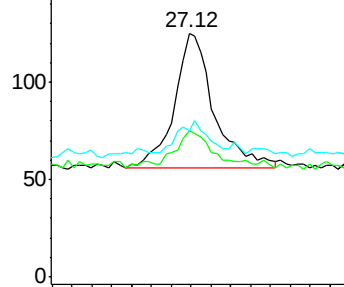
276 100

277 60.0 18.6 28.0#

138 60.0 20.4 30.6#



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



Time-->

