

Data Path : Z:\HPCHEM1\BNA M\DATA\BM111615\  
 Data File : BM003137.D  
 Acq On : 16 Nov 2015 11:30  
 Operator : UM/IZ  
 Sample : PB86422BL  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: Nov 16 18:34:04 2015  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\8270-SIM-BM110415.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 05 10:29:18 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.74  | 152  | 70137    | 5.00 | ng    | -0.02    |
| 7) Naphthalene-d8         | 10.53 | 136  | 269935   | 5.00 | ng    | -0.01    |
| 13) Acenaphthene-d10      | 14.39 | 164  | 121985   | 5.00 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 17.14 | 188  | 228912   | 5.00 | ng    | 0.00     |
| 26) Chrysene-d12          | 21.33 | 240  | 234724   | 5.00 | ng    | -0.01    |
| 35) Perylene-d12          | 23.59 | 264  | 192616   | 5.00 | ng    | -0.01    |

|                             |       |     |        |      |    |       |
|-----------------------------|-------|-----|--------|------|----|-------|
| System Monitoring Compounds |       |     |        |      |    |       |
| 4) 2-Fluorophenol           | 5.33  | 112 | 95722  | 6.45 | ng | -0.02 |
| 5) Phenol-d6                | 6.90  | 99  | 114985 | 6.64 | ng | -0.02 |
| 8) Nitrobenzene-d5          | 8.90  | 82  | 41833  | 3.36 | ng | -0.02 |
| 14) 2,4,6-Tribromophenol    | 15.88 | 330 | 20223  | 6.40 | ng | 0.00  |
| 15) 2-Fluorobiphenyl        | 13.01 | 172 | 147924 | 3.85 | ng | -0.02 |
| 29) Terphenyl-d14           | 19.77 | 244 | 105570 | 3.12 | ng | 0.00  |

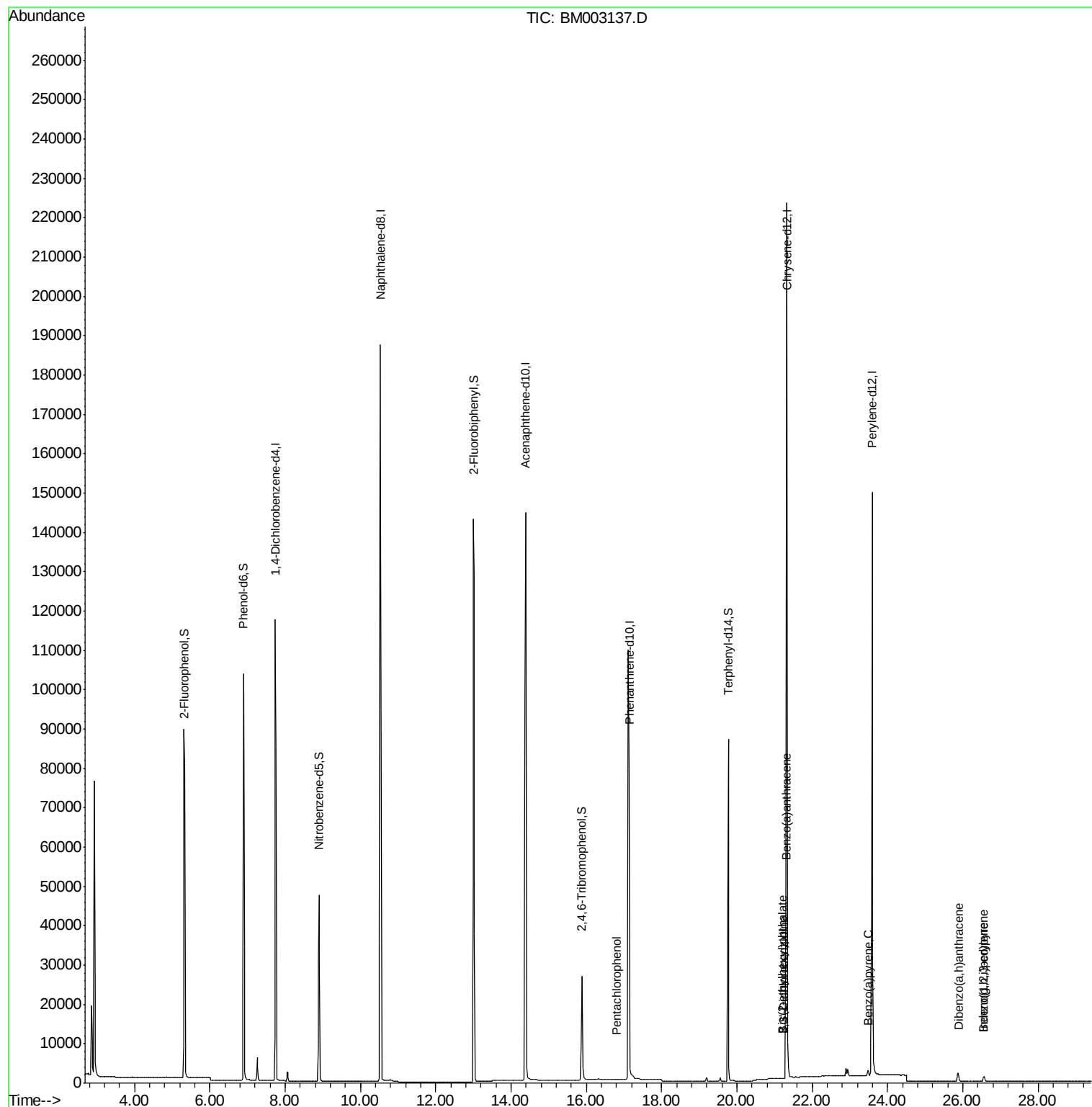
|                                |       |     |      |           |   |    |
|--------------------------------|-------|-----|------|-----------|---|----|
| Target Compounds               |       |     |      | Qvalue    |   |    |
| 20) 4-Bromophenyl-phenylether  | 16.32 | 248 | 12   | Below Cal | # | 6  |
| 21) Hexachlorobenzene          | 16.45 | 284 | 12   | Below Cal | # | 51 |
| 22) Pentachlorophenol          | 16.81 | 266 | 26   | 0.19 ng   | # | 65 |
| 23) Phenanthrene               | 17.16 | 178 | 261  | Below Cal | # | 81 |
| 25) Fluoranthene               | 19.19 | 202 | 977  | Below Cal |   | 97 |
| 27) Benzidine                  | 19.38 | 184 | 99   | Below Cal | # | 1  |
| 30) Benzo(a)anthracene         | 21.31 | 228 | 5735 | 0.13 ng   | # | 94 |
| 31) 3,3'-Dichlorobenzidine     | 21.25 | 252 | 94   | 0.21 ng   | # | 83 |
| 32) Chrysene                   | 21.31 | 228 | 5761 | Below Cal |   | 92 |
| 33) Bis(2-ethylhexyl)phthalate | 21.23 | 149 | 146  | 0.26 ng   | # | 51 |
| 34) Indeno(1,2,3-cd)pyrene     | 26.56 | 276 | 2491 | 0.10 ng   |   | 96 |
| 37) Benzo(k)fluoranthene       | 22.95 | 252 | 2231 | Below Cal | # | 64 |
| 38) Benzo(a)pyrene             | 23.49 | 252 | 2048 | 0.04 ng   | # | 54 |
| 39) Dibenzo(a,h)anthracene     | 25.89 | 278 | 2054 | 0.04 ng   | # | 76 |
| 40) Benzo(a,h,i)perylene       | 26.56 | 276 | 2491 | 0.05 ng   | # | 82 |

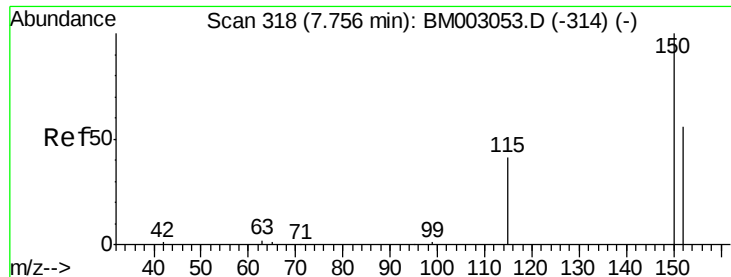
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA M\DATA\BM111615\  
Data File : BM003137.D  
Acq On : 16 Nov 2015 11:30  
Operator : UM/IZ  
Sample : PB86422BL  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :

Quant Time: Nov 16 18:34:04 2015  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\8270-SIM-BM110415.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Nov 05 10:29:18 2015  
Response via : Initial Calibration



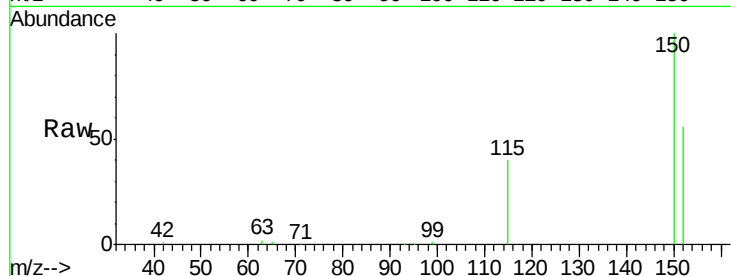


#1

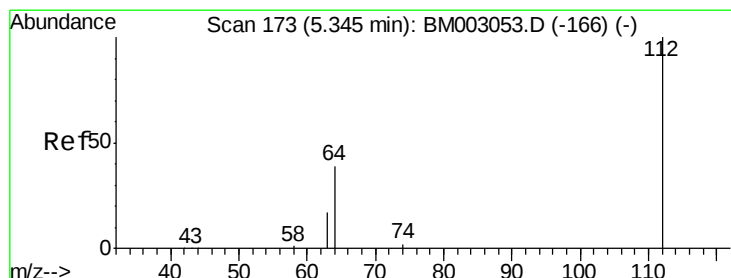
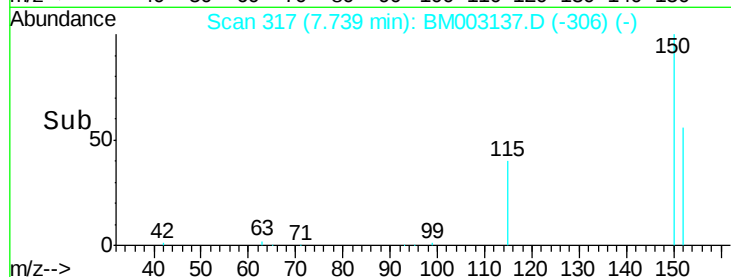
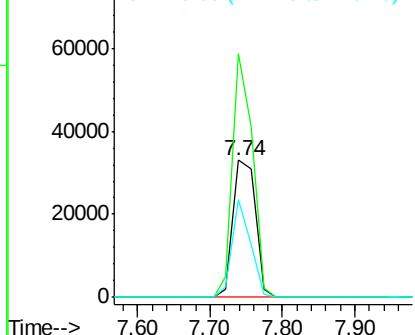
1,4-Dichlorobenzene-d4  
Concen: 5.00 ng  
RT: 7.74 min Scan# 317  
Delta R.T. -0.02 min  
Lab File: BM003137.D  
Acq: 16 Nov 2015 11:30

Instrument :  
BNA\_M  
ClientSampleId :

Tot Ion:152 Resp: 70137  
Ion Ratio Lower Upper  
152 100  
150 177.9 143.6 215.4  
115 71.7 58.5 87.7



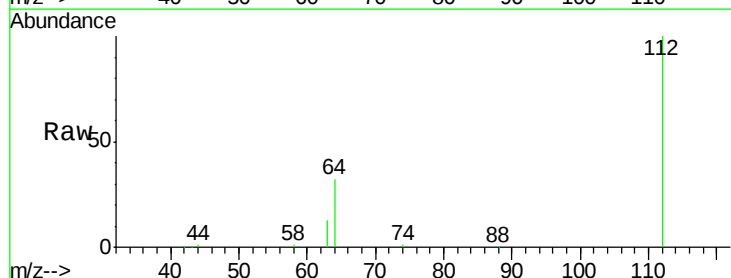
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



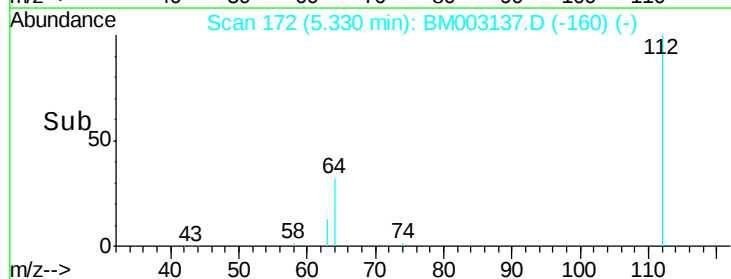
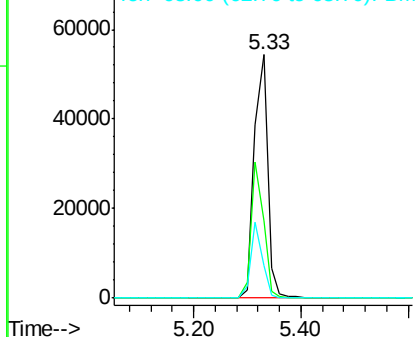
#4

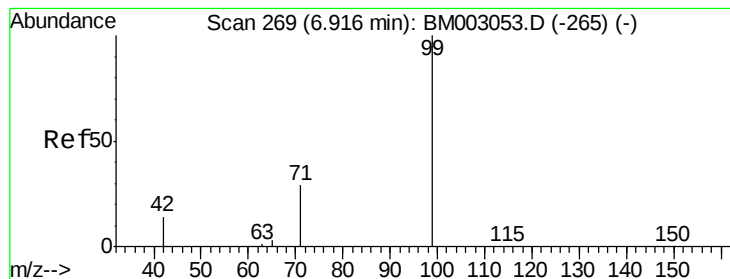
2-Fluorophenol  
Concen: 6.45 ng  
RT: 5.33 min Scan# 172  
Delta R.T. -0.02 min  
Lab File: BM003137.D  
Acq: 16 Nov 2015 11:30

Tgt Ion:112 Resp: 95722  
Ion Ratio Lower Upper  
112 100  
64 51.3 41.2 61.8  
63 26.6 21.2 31.8



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BM0  
Ion 63.00 (62.70 to 63.70): BM0





#5

Phenol-d6

Concen: 6.64 ng

RT: 6.90 min Scan# 268

Delta R.T. -0.02 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Instrument :

BNA\_M

ClientSampleId :

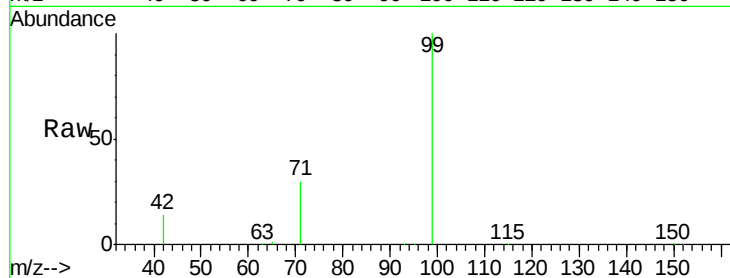
Tot Ion: 99 Resp: 114985

Ion Ratio Lower Upper

99 100

42 16.9 14.6 22.0

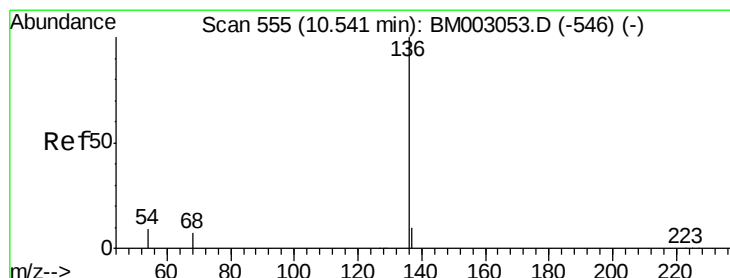
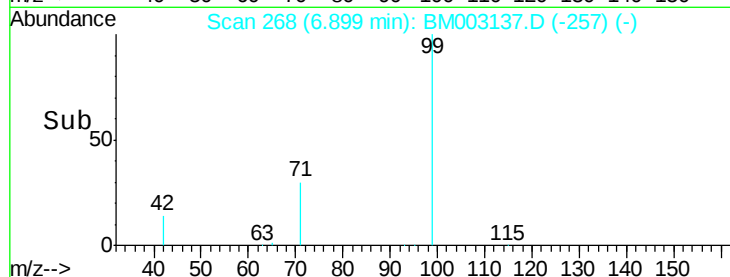
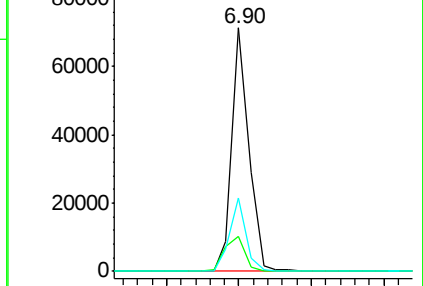
71 28.9 23.3 34.9



Abundance Ion 99.00 (98.70 to 99.70): BM003137.D (-268) (-)

Ion 42.00 (41.70 to 42.70): BM003137.D (-268) (-)

Ion 71.00 (70.70 to 71.70): BM003137.D (-268) (-)



#7

Naphthalene-d8

Concen: 5.00 ng

RT: 10.53 min Scan# 555

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Tgt Ion: 136 Resp: 269935

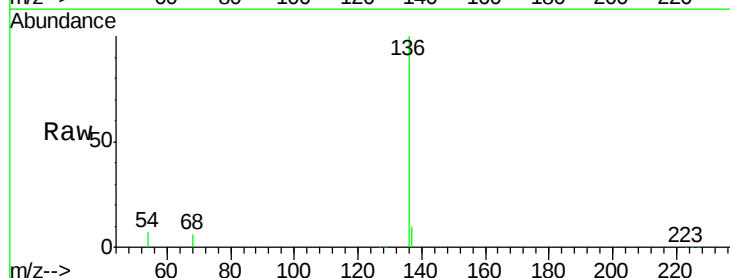
Ion Ratio Lower Upper

136 100

137 10.3 8.0 12.0

54 7.1 7.4 11.0#

68 5.8 5.8 8.6

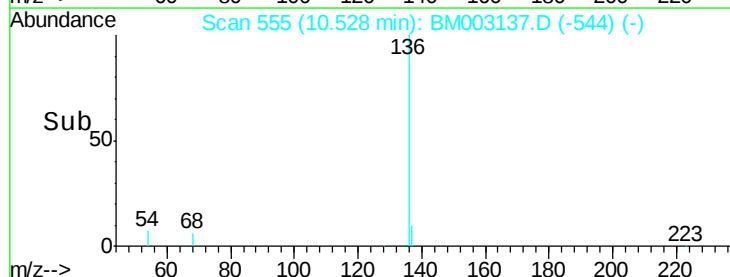
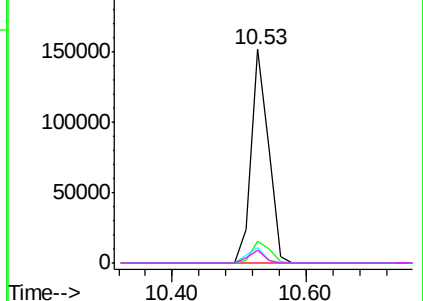


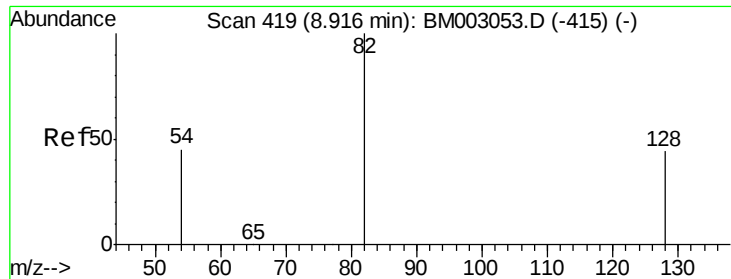
Abundance Ion 136.00 (135.70 to 136.70): BM003137.D (-549) (-)

Ion 137.00 (136.70 to 137.70): BM003137.D (-549) (-)

Ion 54.00 (53.70 to 54.70): BM003137.D (-549) (-)

Ion 68.00 (67.70 to 68.70): BM003137.D (-549) (-)





#8

Nitrobenzene-d5

Concen: 3.36 ng

RT: 8.90 min Scan# 418

Delta R.T. -0.02 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Instrument :

BNA\_M

ClientSampleId :

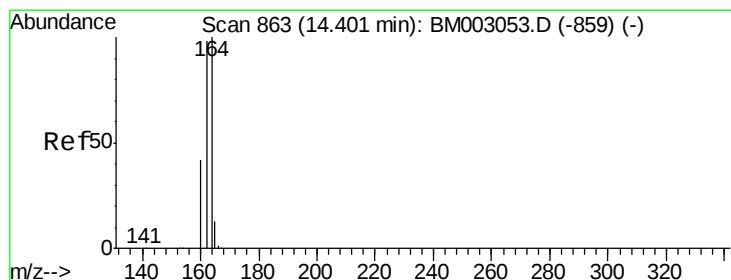
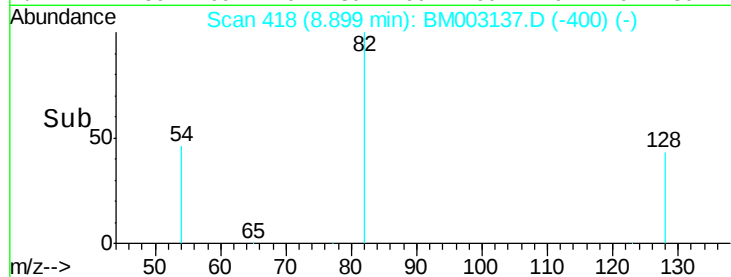
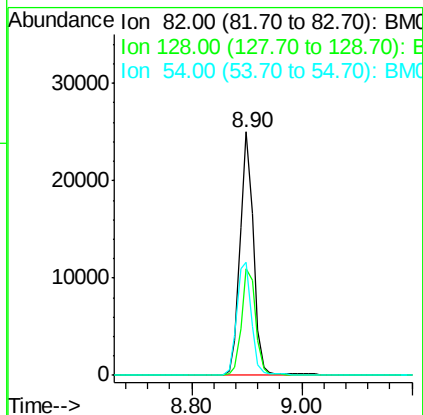
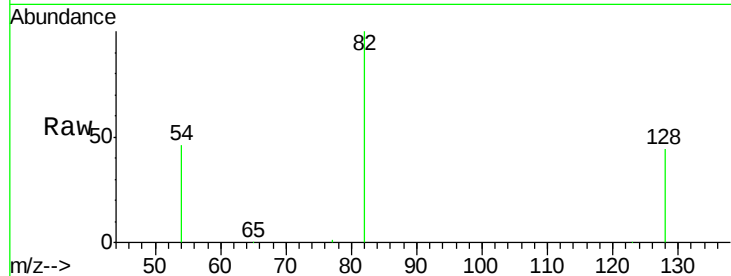
Tot Ion: 82 Resp: 41833

Ion Ratio Lower Upper

82 100

128 43.6 35.2 52.8

54 46.4 36.4 54.6



#13

Acenaphthene-d10

Concen: 5.00 ng

RT: 14.39 min Scan# 863

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

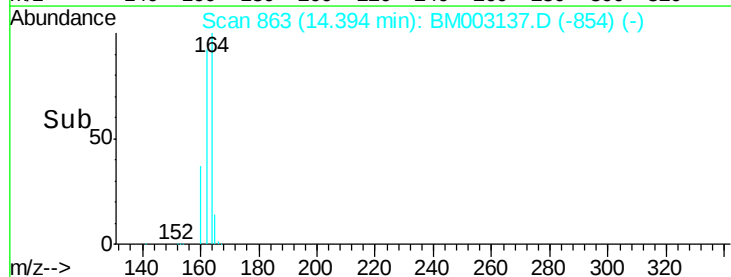
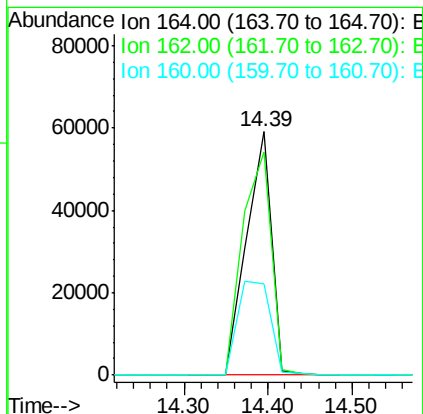
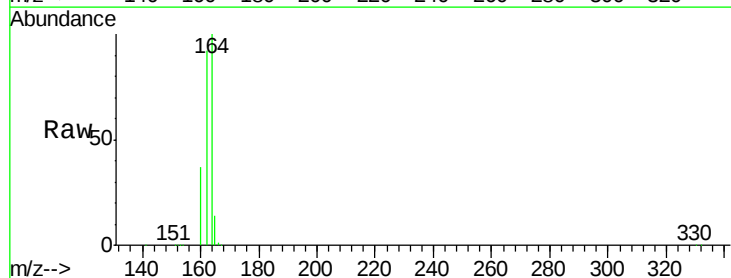
Tgt Ion: 164 Resp: 121985

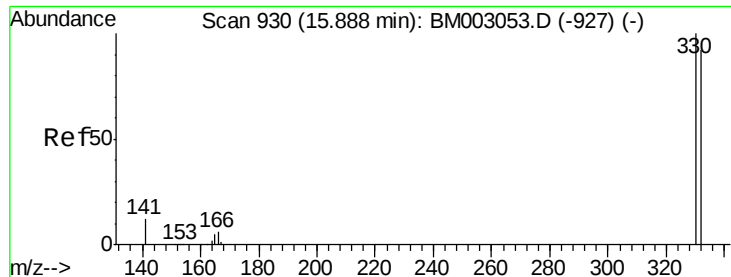
Ion Ratio Lower Upper

164 100

162 91.9 78.3 117.5

160 37.4 33.8 50.6

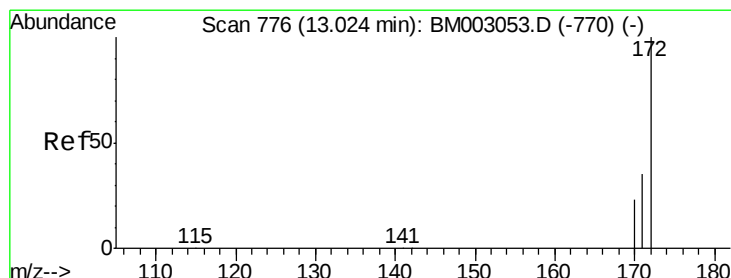
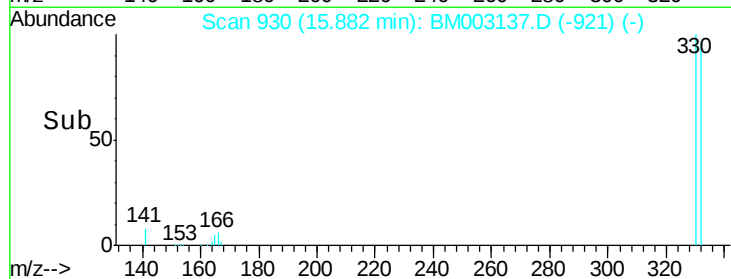
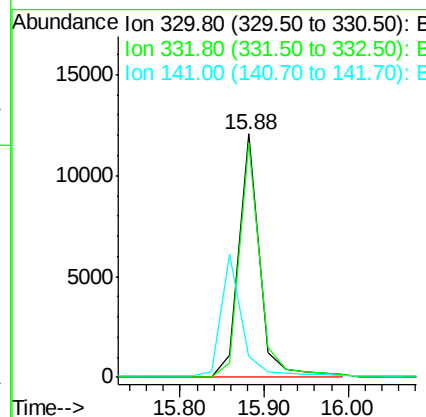
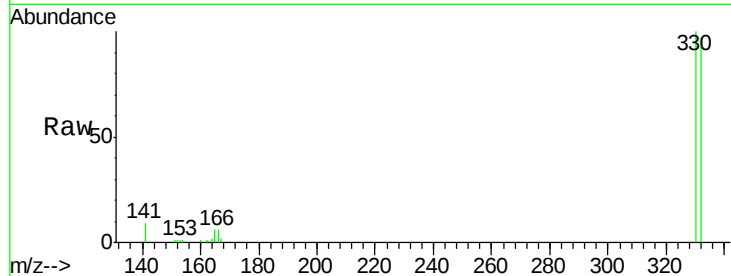




#14  
 2,4,6-Tribromophenol  
 Concen: 6.40 ng  
 RT: 15.88 min Scan# 930  
 Delta R.T. -0.01 min  
 Lab File: BM003137.D  
 Acq: 16 Nov 2015 11:30

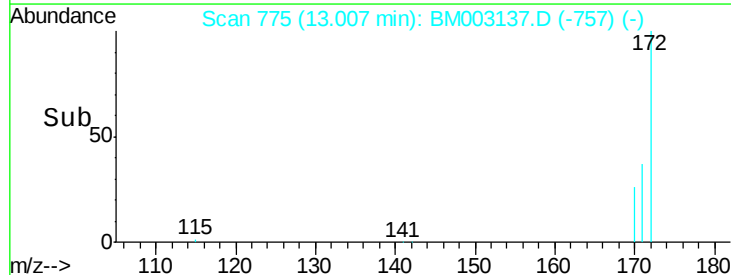
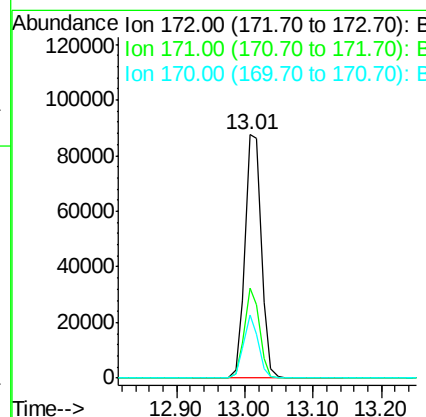
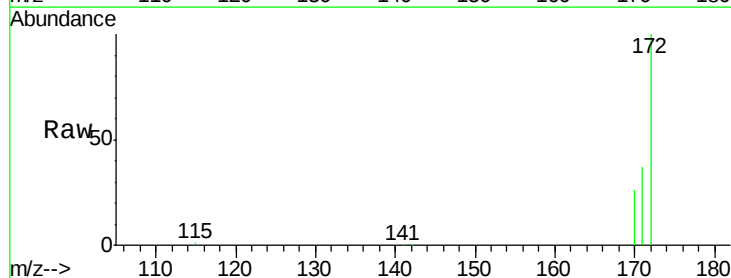
Instrument :  
 BNA\_M  
 ClientSampleId :

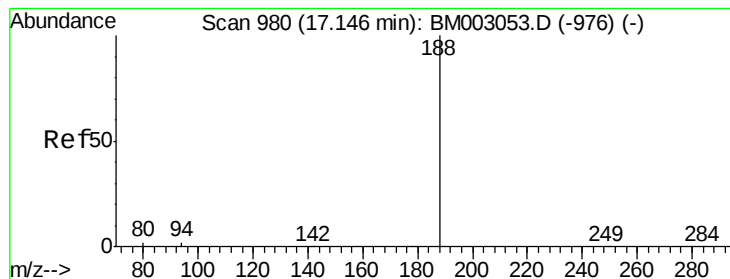
Tot Ion:330 Resp: 20223  
 Ion Ratio Lower Upper  
 330 100  
 332 96.1 76.0 114.0  
 141 0.0 0.0 0.0



#15  
 2-Fluorobiphenyl  
 Concen: 3.85 ng  
 RT: 13.01 min Scan# 775  
 Delta R.T. -0.02 min  
 Lab File: BM003137.D  
 Acq: 16 Nov 2015 11:30

Tgt Ion:172 Resp: 147924  
 Ion Ratio Lower Upper  
 172 100  
 171 36.8 28.0 42.0  
 170 26.2 18.9 28.3





#19

Phenanthrene-d10

Concen: 5.00 ng

RT: 17.14 min Scan# 980

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Instrument :

BNA\_M

ClientSampled :

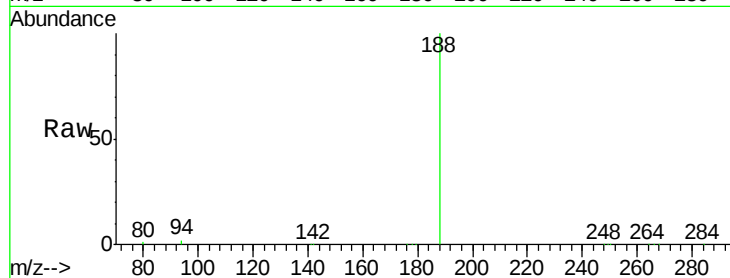
Tot Ion:188 Resp: 228912

Ion Ratio Lower Upper

188 100

94 1.8 1.8 2.6

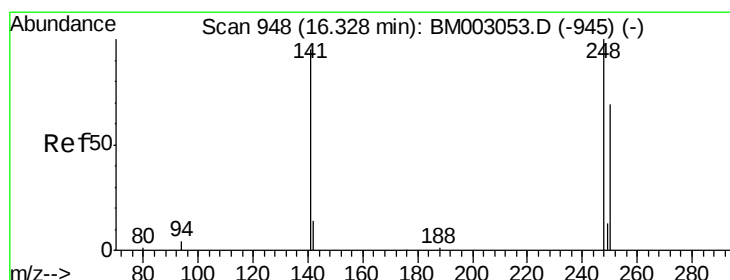
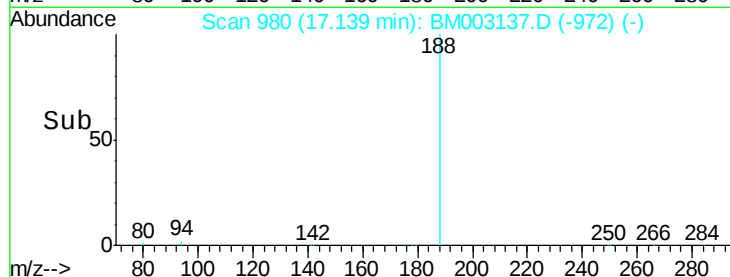
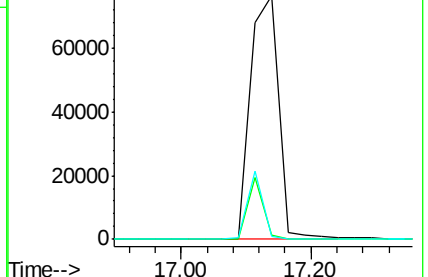
80 1.5 1.4 2.0



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BM0

Ion 80.00 (79.70 to 80.70): BM0



#20

4-Bromophenyl-phenylether

Concen: Below Cal

RT: 16.32 min Scan# 948

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

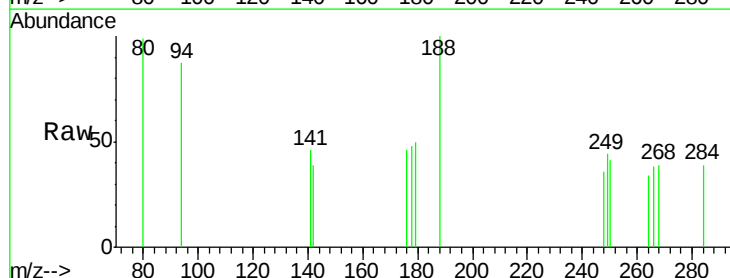
Tgt Ion:248 Resp: 12

Ion Ratio Lower Upper

248 100

250 0.0 65.4 98.0#

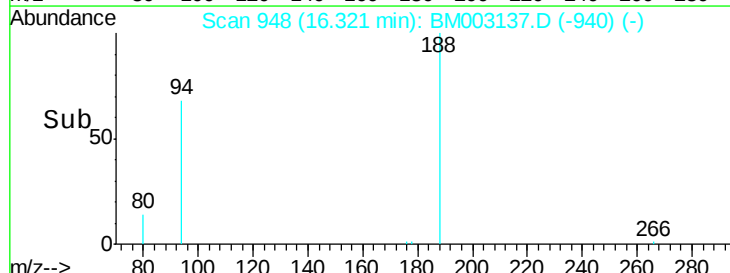
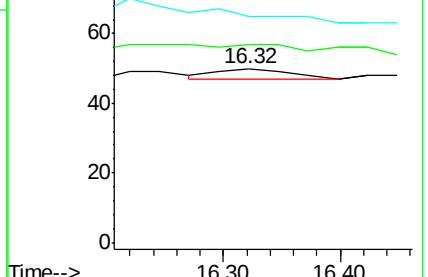
141 0.0 72.8 109.2#

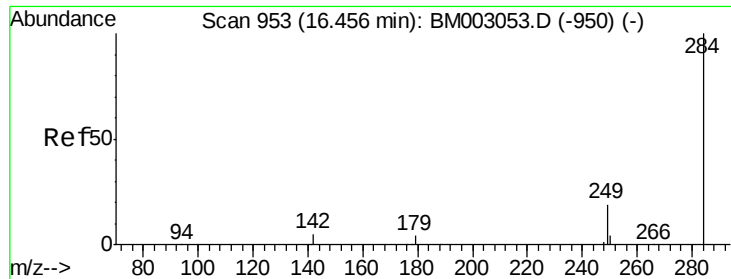


Abundance Ion 248.00 (247.70 to 248.70): E

Ion 250.00 (249.70 to 250.70): E

Ion 141.00 (140.70 to 141.70): E

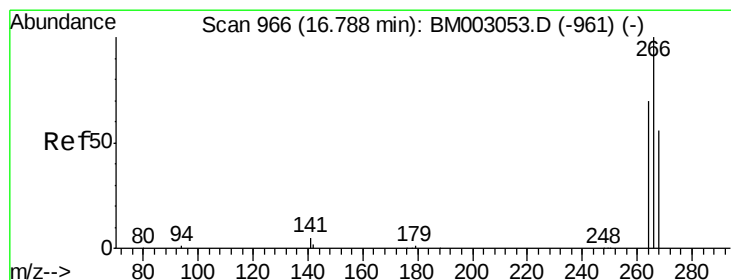
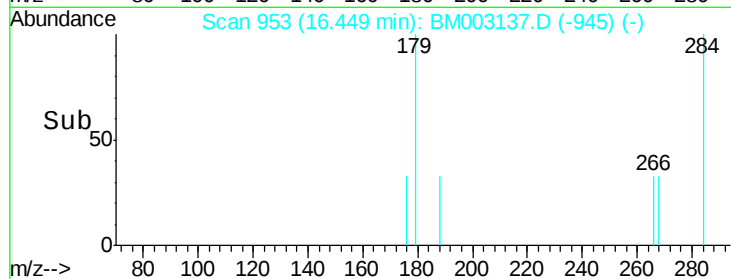
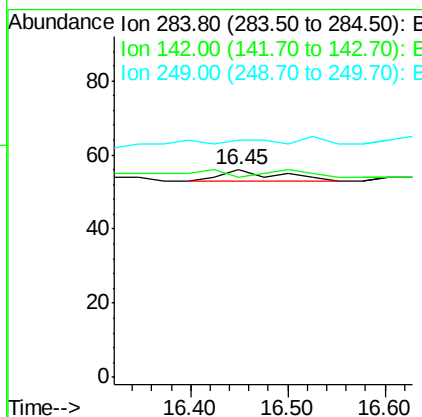
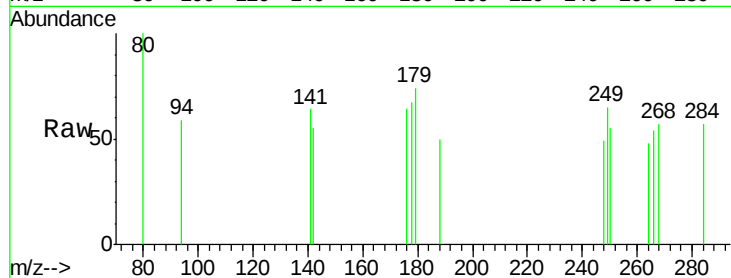




#21  
Hexachlorobenzene  
Concen: Below Cal  
RT: 16.45 min Scan# 953  
Delta R.T. -0.01 min  
Lab File: BM003137.D  
Acq: 16 Nov 2015 11:30

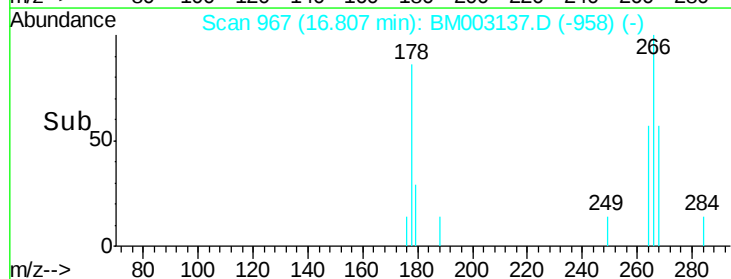
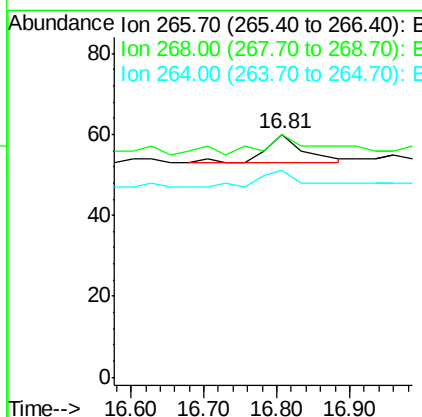
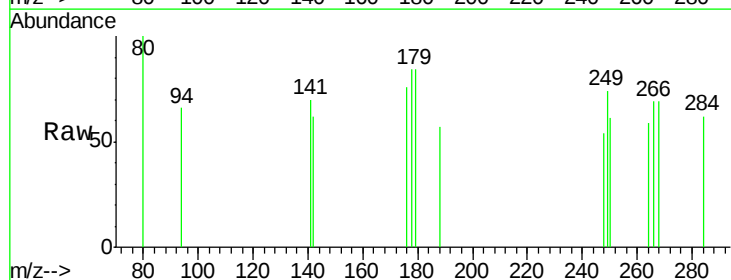
Instrument :  
BNA\_M  
ClientSampleId :

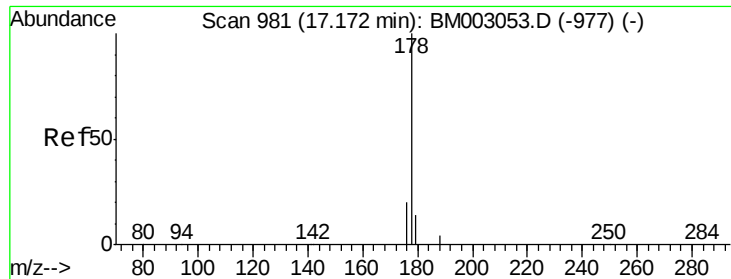
Tot Ion:284 Resp: 12  
Ion Ratio Lower Upper  
284 100  
142 0.0 0.0 0.0  
249 0.0 19.4 29.2#



#22  
Pentachlorophenol  
Concen: 0.19 ng  
RT: 16.81 min Scan# 967  
Delta R.T. 0.02 min  
Lab File: BM003137.D  
Acq: 16 Nov 2015 11:30

Tgt Ion:266 Resp: 26  
Ion Ratio Lower Upper  
266 100  
268 100.0 45.8 68.8#  
264 85.0 56.7 85.1





#23

Phenanthrene

Concen: Below Cal

RT: 17.16 min Scan# 981

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Instrument :

BNA\_M

ClientSampled :

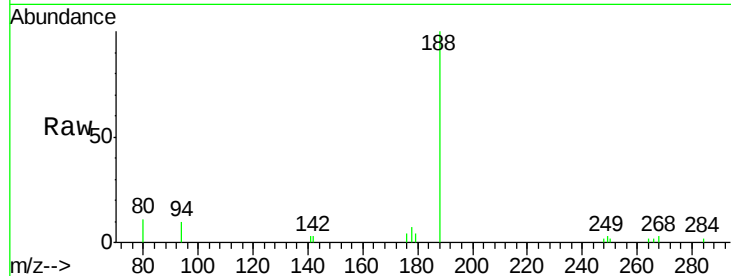
Tot Ion:178 Resp: 261

Ion Ratio Lower Upper

178 100

176 16.9 15.9 23.9

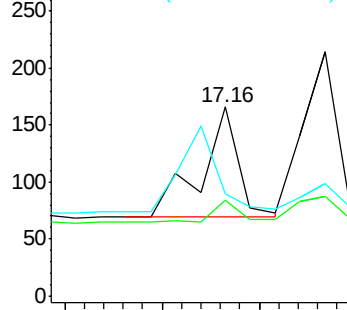
179 0.0 11.7 17.5#



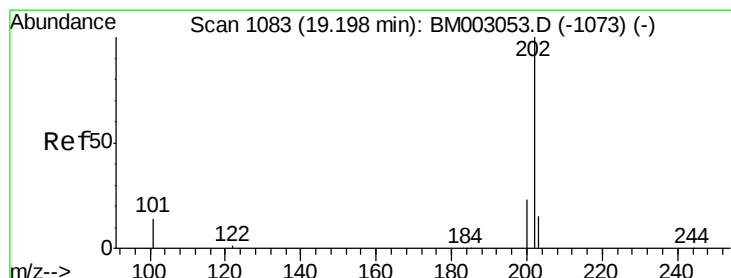
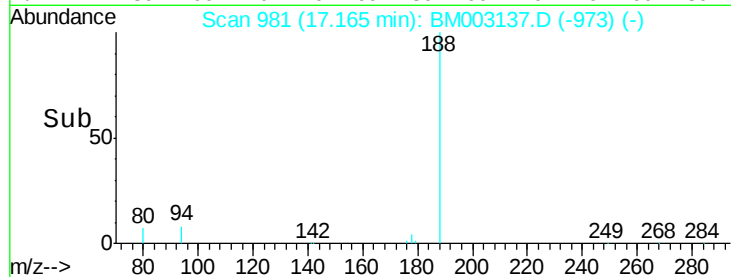
Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



Time-->



#25

Fluoranthene

Concen: Below Cal

RT: 19.19 min Scan# 1083

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

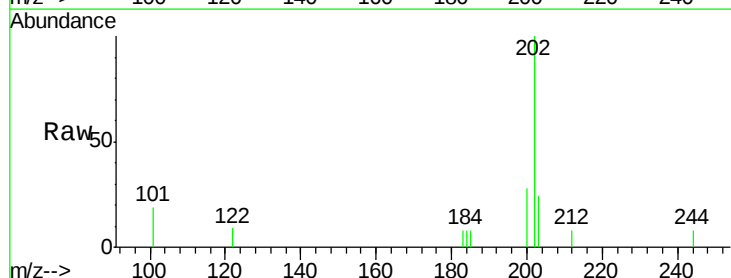
Tgt Ion:202 Resp: 977

Ion Ratio Lower Upper

202 100

101 12.5 9.9 14.9

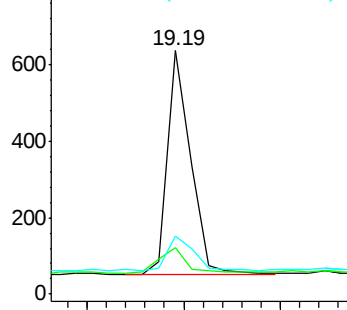
203 19.4 13.9 20.9



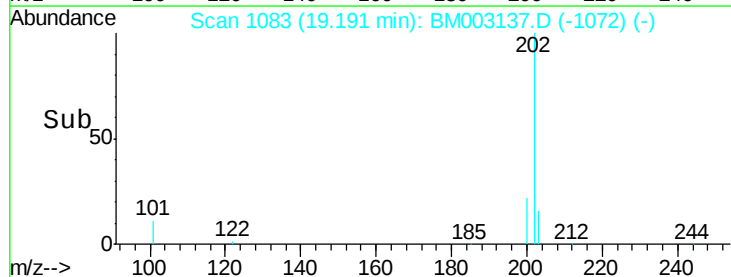
Abundance Ion 202.00 (201.70 to 202.70): E

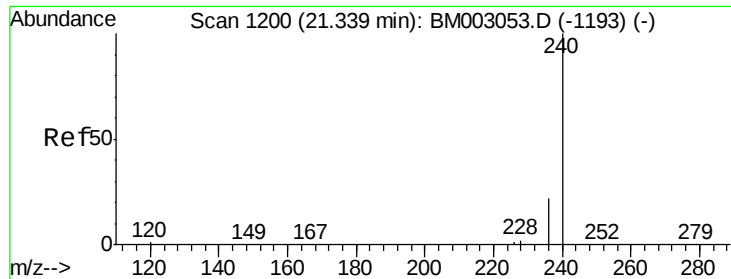
Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



Time-->

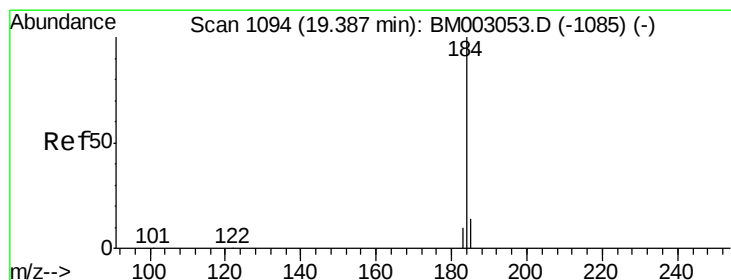
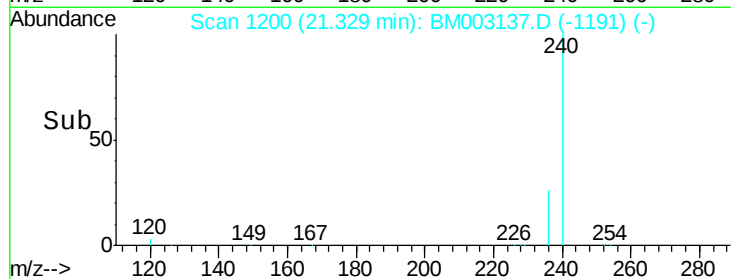
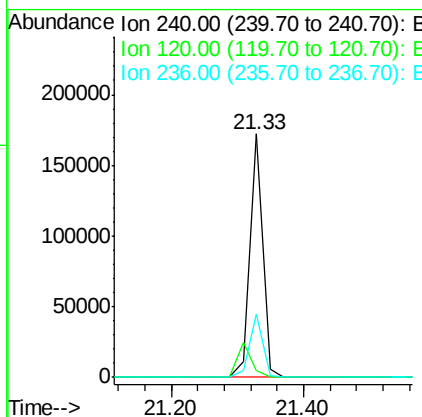
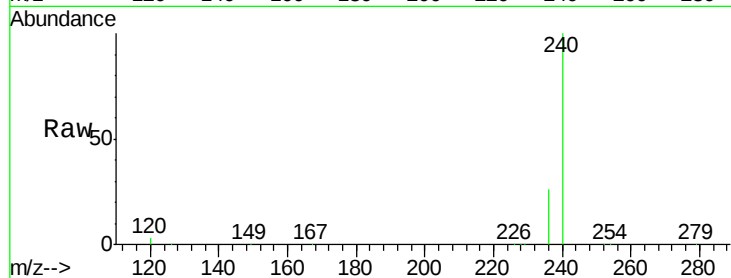




#26  
 Chrysene-d12  
 Concen: 5.00 ng  
 RT: 21.33 min Scan# 1200  
 Delta R.T. -0.01 min  
 Lab File: BM003137.D  
 Acq: 16 Nov 2015 11:30

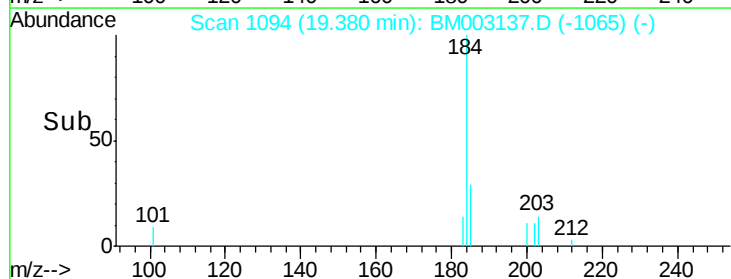
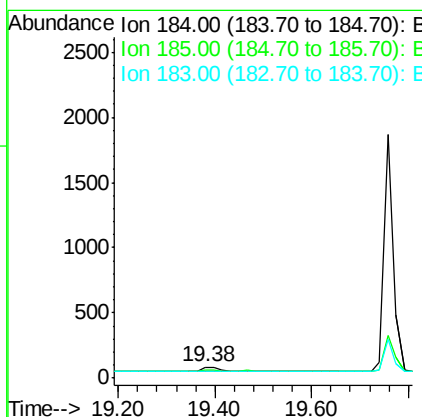
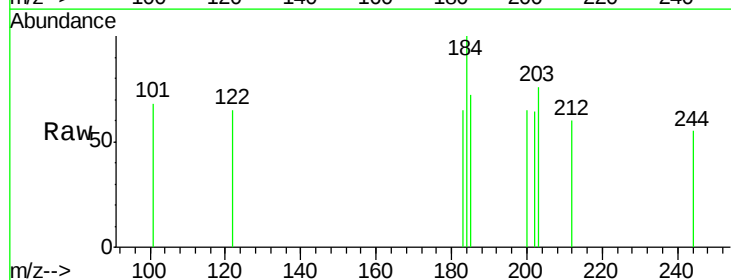
Instrument :  
 BNA\_M  
 ClientSampleId :

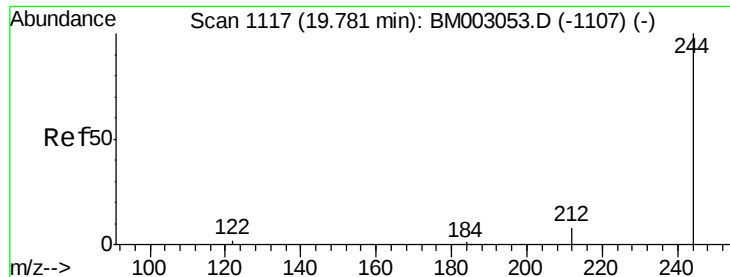
Tot Ion:240 Resp: 234724  
 Ion Ratio Lower Upper  
 240 100  
 120 3.0 1.0 1.4#  
 236 25.8 17.9 26.9



#27  
 Benzidine  
 Concen: Below Cal  
 RT: 19.38 min Scan# 1094  
 Delta R.T. -0.01 min  
 Lab File: BM003137.D  
 Acq: 16 Nov 2015 11:30

Tgt Ion:184 Resp: 99  
 Ion Ratio Lower Upper  
 184 100  
 185 71.8 11.6 17.4#  
 183 64.7 8.6 13.0#





#29

Terphenyl-d14

Concen: 3.12 ng

RT: 19.77 min Scan# 1117

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Instrument :

BNA\_M

ClientSampleId :

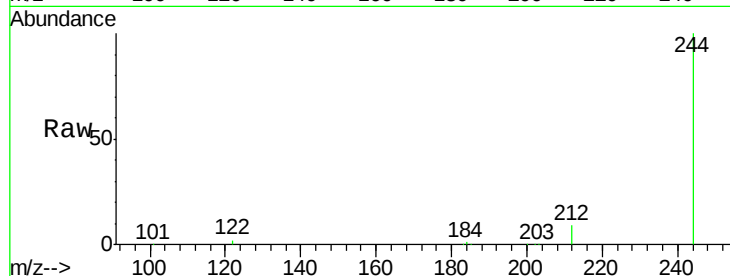
Tot Ion:244 Resp: 105570

Ion Ratio Lower Upper

244 100

212 8.5 6.5 9.7

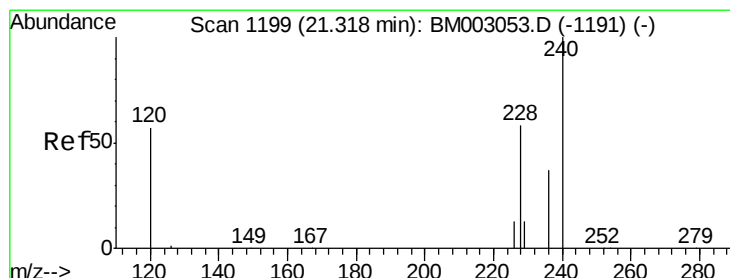
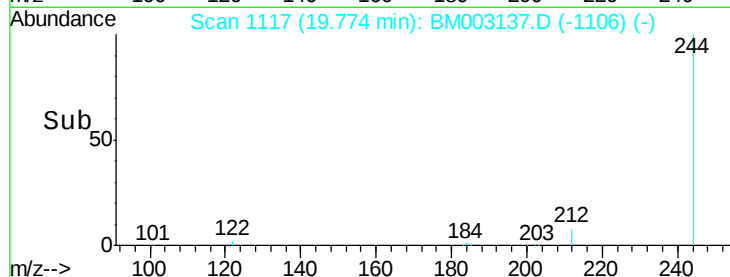
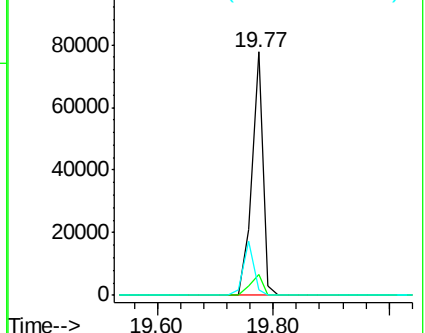
122 2.1 2.0 3.0



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



#30

Benzo(a)anthracene

Concen: 0.13 ng

RT: 21.31 min Scan# 1199

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

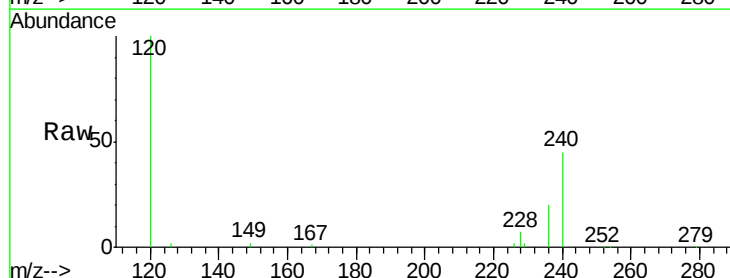
Tgt Ion:228 Resp: 5735

Ion Ratio Lower Upper

228 100

226 27.1 17.8 26.6#

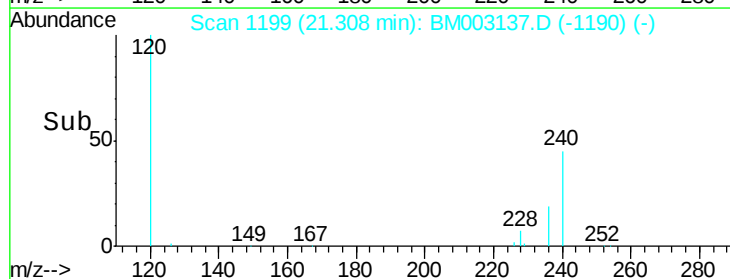
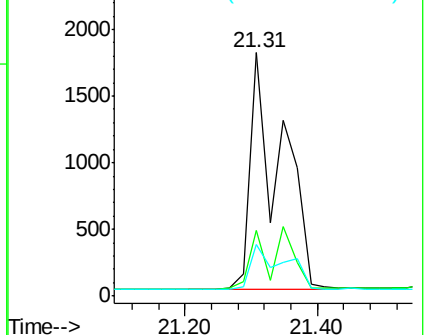
229 21.2 18.0 27.0

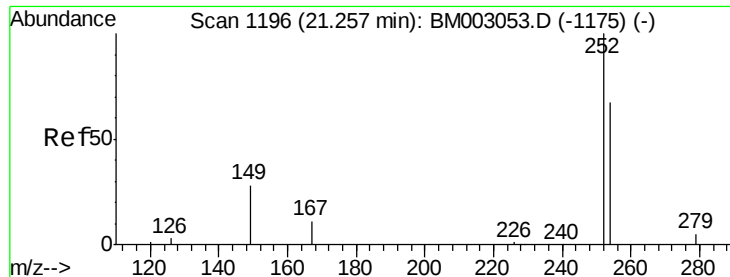


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

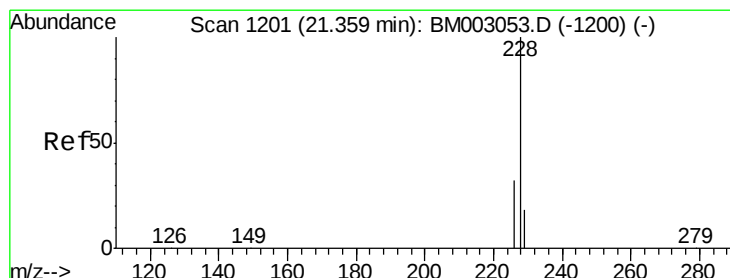
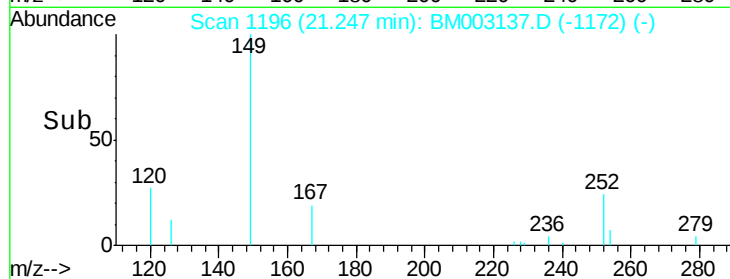
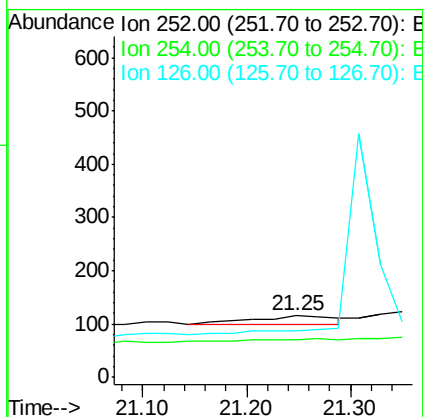
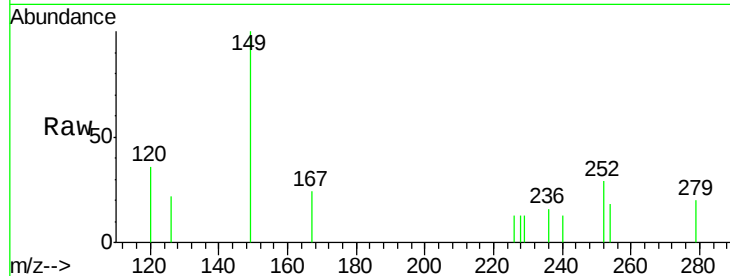




#31  
 3,3'-Dichlorobenzidine  
 Concen: 0.21 ng  
 RT: 21.25 min Scan# 1196  
 Delta R.T. -0.01 min  
 Lab File: BM003137.D  
 Acq: 16 Nov 2015 11:30

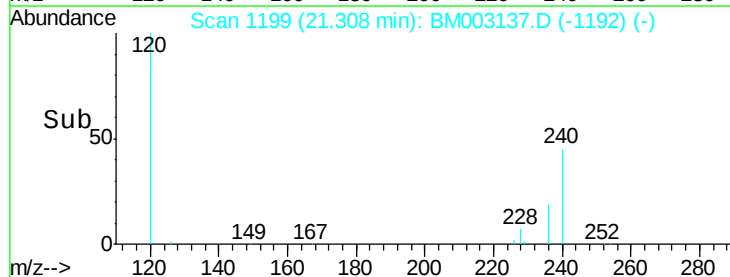
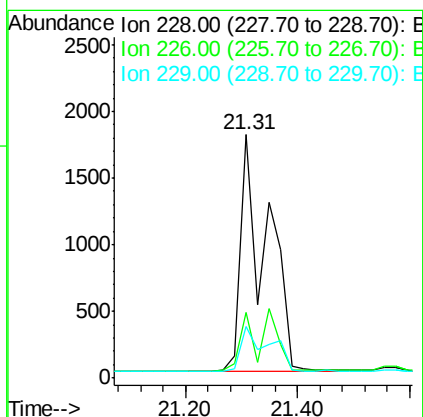
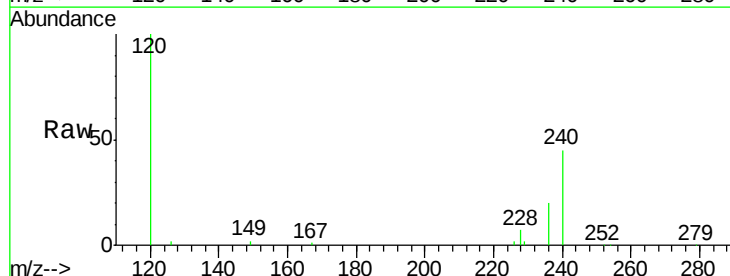
Instrument :  
 BNA\_M  
 ClientSampleId :

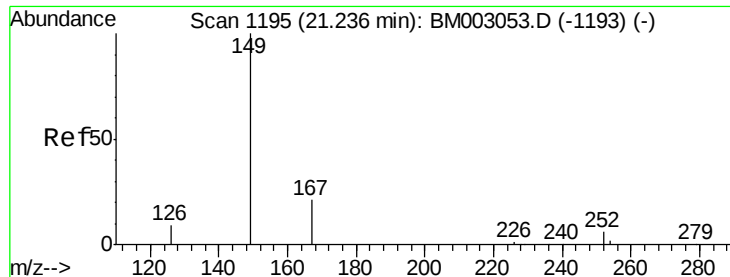
Tot Ion:252 Resp: 94  
 Ion Ratio Lower Upper  
 252 100  
 254 61.7 53.7 80.5  
 126 76.5 2.8 4.2#



#32  
 Chrysene  
 Concen: Below Cal  
 RT: 21.31 min Scan# 1199  
 Delta R.T. -0.05 min  
 Lab File: BM003137.D  
 Acq: 16 Nov 2015 11:30

Tgt Ion:228 Resp: 5761  
 Ion Ratio Lower Upper  
 228 100  
 226 27.1 25.5 38.3  
 229 21.2 14.3 21.5





#33

Bis(2-ethylhexyl)phthalate

Concen: 0.26 ng

RT: 21.23 min Scan# 1195

Delta R.T. -0.01 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Instrument :

BNA\_M

ClientSampled :

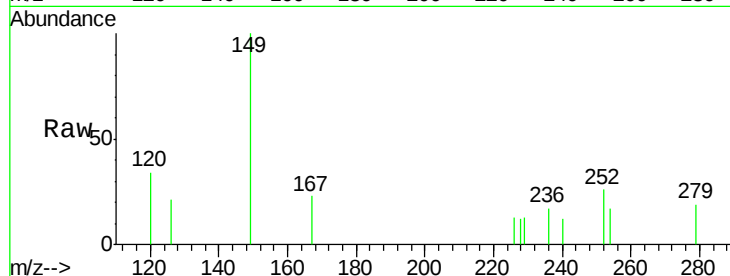
Tot Ion:149 Resp: 146

Ion Ratio Lower Upper

149 100

167 0.0 19.6 29.4#

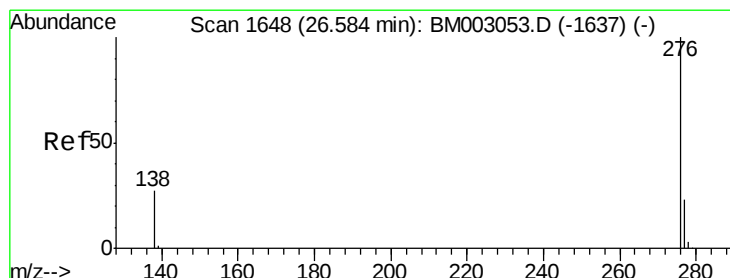
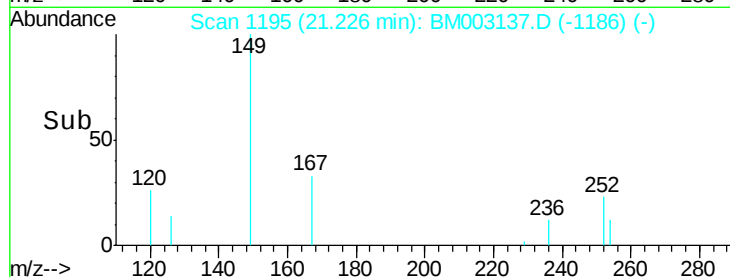
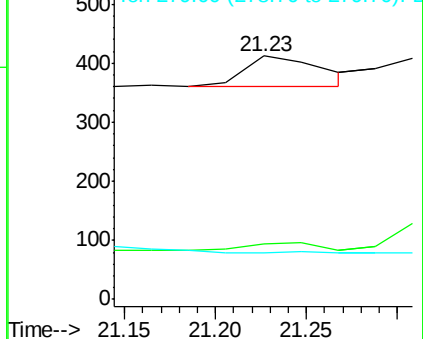
279 0.0 0.0 0.0



Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E



#34

Indeno(1,2,3-cd)pyrene

Concen: 0.10 ng

RT: 26.56 min Scan# 1646

Delta R.T. -0.02 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

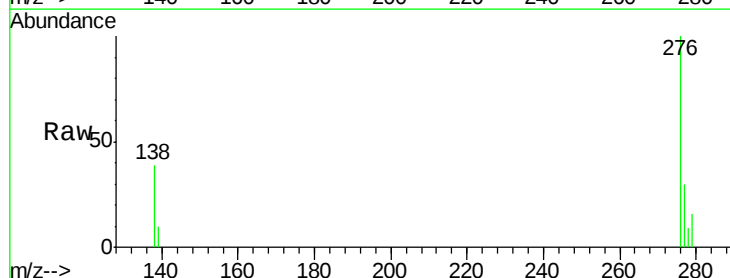
Tgt Ion:276 Resp: 2491

Ion Ratio Lower Upper

276 100

138 32.0 22.6 33.8

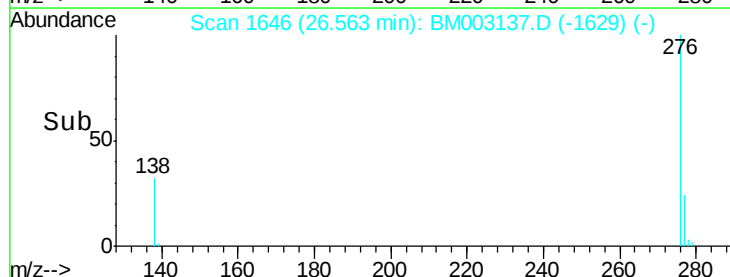
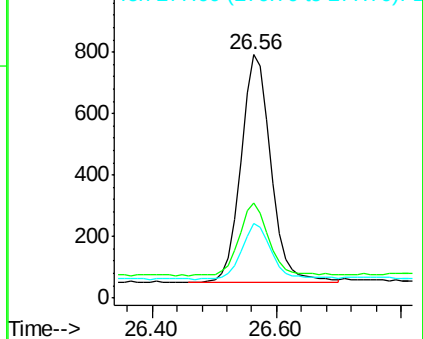
277 24.0 18.7 28.1

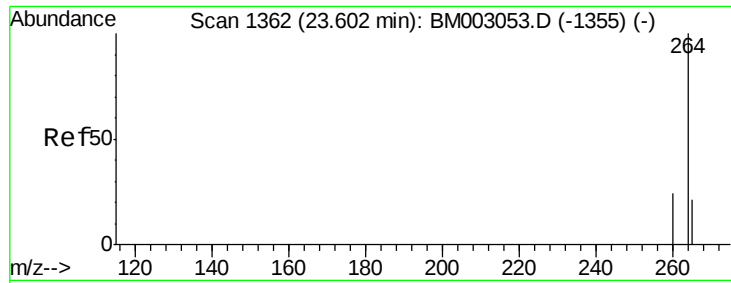


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

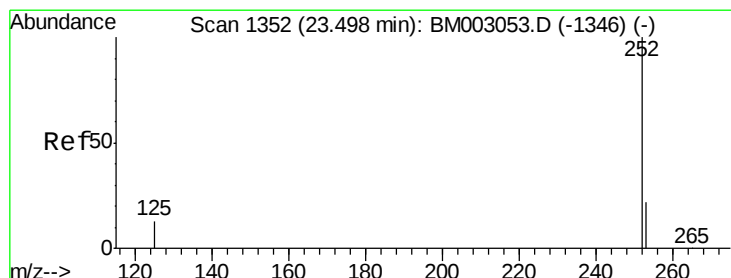
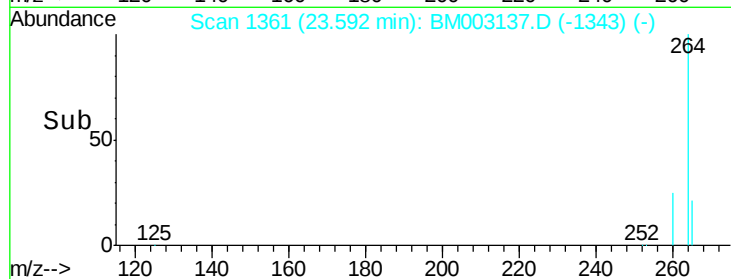
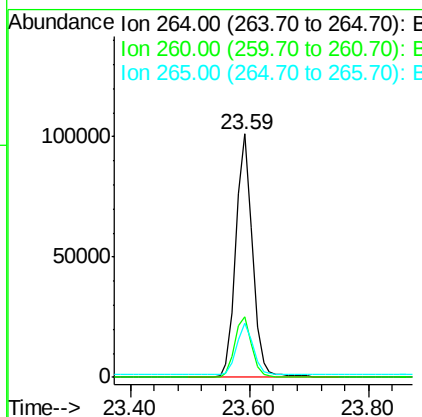
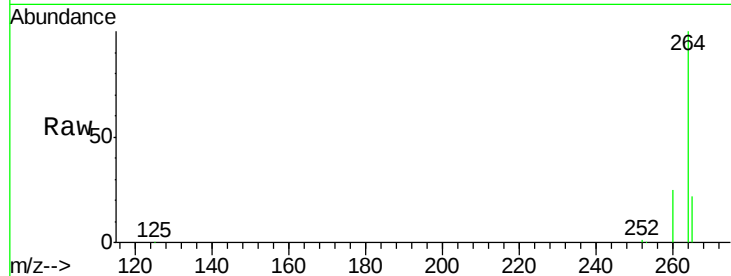




#35  
Pervlene-d12  
Concen: 5.00 ng  
RT: 23.59 min Scan# 1361  
Delta R.T. -0.01 min  
Lab File: BM003137.D  
Acq: 16 Nov 2015 11:30

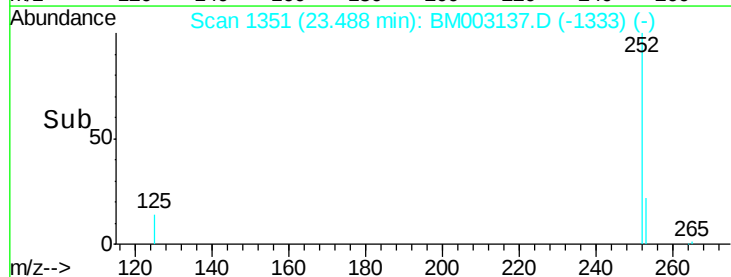
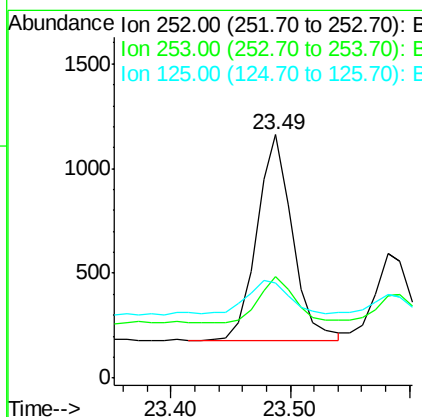
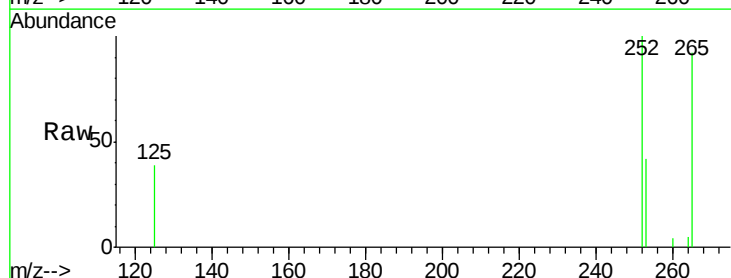
Instrument :  
BNA\_M  
ClientSampleId :

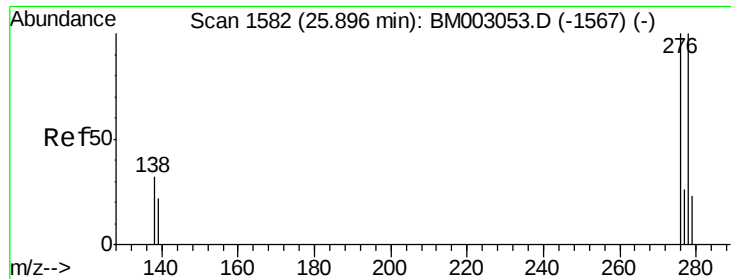
Tot Ion:264 Resp: 192616  
Ion Ratio Lower Upper  
264 100  
260 24.7 19.6 29.4  
265 22.3 18.4 27.6



#38  
Benzo(a)pyrene  
Concen: 0.04 ng  
RT: 23.49 min Scan# 1351  
Delta R.T. -0.01 min  
Lab File: BM003137.D  
Acq: 16 Nov 2015 11:30

Tgt Ion:252 Resp: 2048  
Ion Ratio Lower Upper  
252 100  
253 41.7 18.7 28.1#  
125 38.8 11.6 17.4#





#39

Dibenzo(a,h)anthracene

Concen: 0.04 ng

RT: 25.89 min Scan# 1581

Delta R.T. -0.01 min

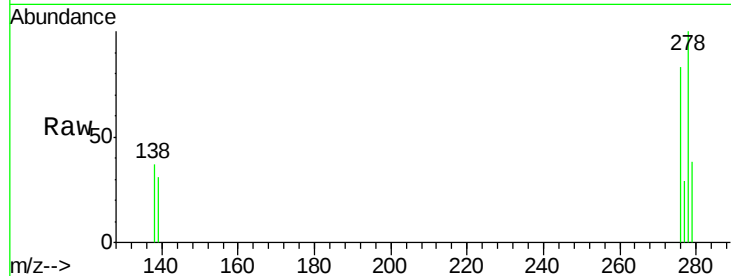
Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Instrument :

BNA\_M

ClientSampleId :



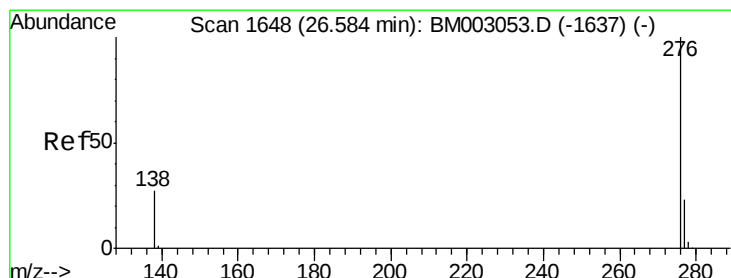
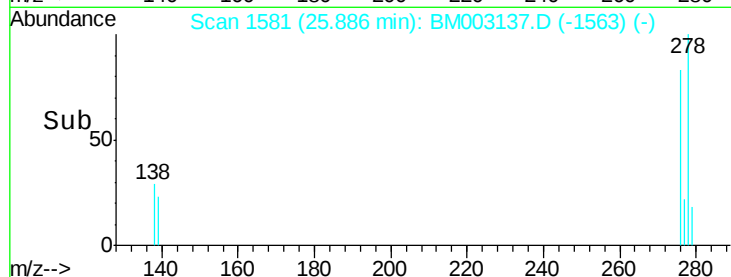
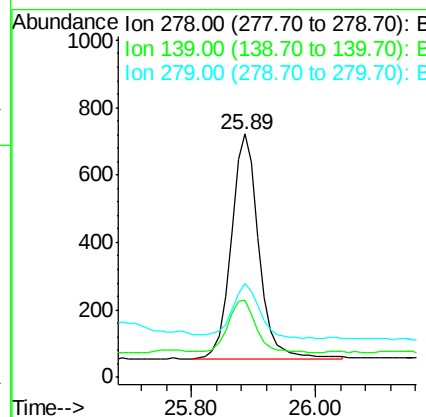
Tot Ion:278 Resp: 2054

Ion Ratio Lower Upper

278 100

139 31.4 18.2 27.4#

279 38.4 18.8 28.2#



#40

Benzo(g,h,i)perylene

Concen: 0.05 ng

RT: 26.56 min Scan# 1646

Delta R.T. -0.02 min

Lab File: BM003137.D

Acq: 16 Nov 2015 11:30

Tgt Ion:276 Resp: 2491

Ion Ratio Lower Upper

276 100

277 30.4 19.0 28.6#

138 39.3 22.3 33.5#

