

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081715\  
 Data File : BM002454.D  
 Acq On : 17 Aug 2015 16:48  
 Operator : UM/IZ  
 Sample : G3227-05MS  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: Aug 18 02:01:59 2015  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Aug 18 01:54:16 2015  
 Response via : Initial Calibration

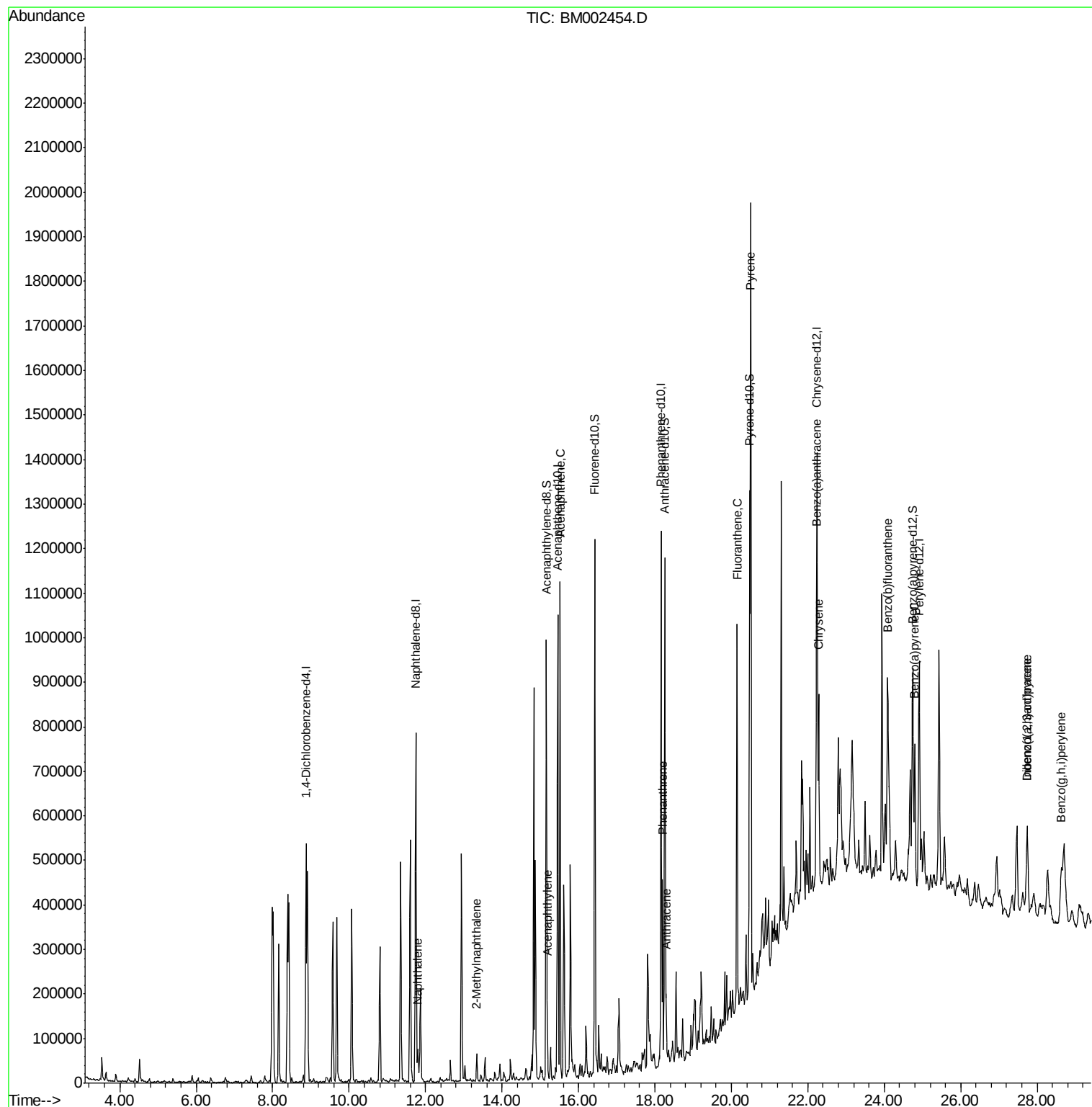
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 8.87  | 152  | 160139   | 20.00  | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 11.75 | 136  | 714653   | 20.00  | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 15.46 | 164  | 359660   | 20.00  | ng/ul  | 0.00     |
| 12) Phenanthrene-d10        | 18.16 | 188  | 689077   | 20.00  | ng/ul  | 0.00     |
| 17) Chrysene-d12            | 22.24 | 240  | 459306   | 20.00  | ng/ul  | 0.00     |
| 22) Perylene-d12            | 24.91 | 264  | 431718   | 20.00  | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 7) Acenaphthylene-d8        | 15.16 | 160  | 758581   | 20.63  | ng/ul  | 0.00     |
| 10) Fluorene-d10            | 16.43 | 176  | 500218   | 19.37  | ng/ul  | 0.00     |
| 14) Anthracene-d10          | 18.26 | 188  | 675476   | 20.32  | ng/ul  | 0.00     |
| 18) Pyrene-d10              | 20.48 | 212  | 556151   | 27.32  | ng/ul  | 0.00     |
| 25) Benzo(a)pyrene-d12      | 24.74 | 264  | 420608   | 18.55  | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Ovalue |        |          |
| 3) Naphthalene              | 11.80 | 128  | 66142    | 1.81   | ng/ul  | 98       |
| 4) 2-Methylnaphthalene      | 13.34 | 142  | 31600    | 1.16   | ng/ul  | 94       |
| 8) Acenaphthylene           | 15.19 | 152  | 46672    | 1.21   | ng/ul  | 98       |
| 9) Acenaphthene             | 15.52 | 153  | 476927   | 18.81  | ng/ul  | 99       |
| 13) Phenanthrene            | 18.20 | 178  | 249239   | 6.26   | ng/ul  | 100      |
| 15) Anthracene              | 18.29 | 178  | 88931    | 2.21   | ng/ul  | 99       |
| 16) Fluoranthene            | 20.15 | 202  | 524354   | 11.64  | ng/ul  | 100      |
| 19) Pyrene                  | 20.51 | 202  | 1086108  | 40.36  | ng/ul  | 98       |
| 20) Benzo(a)anthracene      | 22.22 | 228  | 262283   | 9.55   | ng/ul  | 98       |
| 21) Chrysene                | 22.28 | 228  | 290744   | 11.32  | ng/ul  | 96       |
| 23) Benzo(b)fluoranthene    | 24.09 | 252  | 417774   | 16.01  | ng/ul  | 96       |
| 26) Benzo(a)pyrene          | 24.80 | 252  | 249498   | 10.01  | ng/ul  | 96       |
| 27) Indeno(1,2,3-cd)pyrene  | 27.74 | 276  | 192536   | 6.72   | ng/ul  | 96       |
| 28) Dibenzo(a,h)anthracene  | 27.74 | 278  | 54240    | 2.26   | ng/ul# | 80       |
| 29) Benzo(g,h,i)perylene    | 28.63 | 276  | 166790   | 6.99   | ng/ul  | 97       |

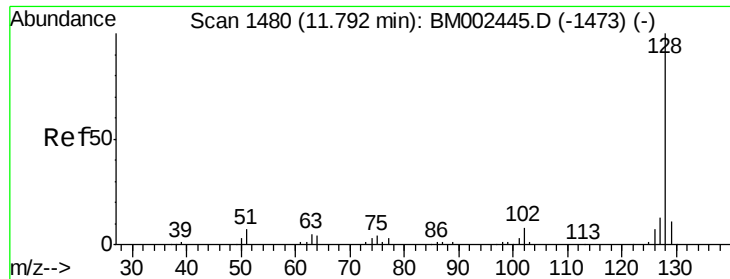
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081715\  
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Misc :  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :

Quant Time: Aug 18 02:01:59 2015  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Tue Aug 18 01:54:16 2015  
Response via : Initial Calibration





#3

Naphthalene

Concen: 1.81 ng/ul

RT: 11.80 min Scan# 1481

Delta R.T. 0.01 min

Lab File: BM002454.D

Acq: 17 Aug 2015 16:48

Instrument :

BNA\_M

ClientSampleId :

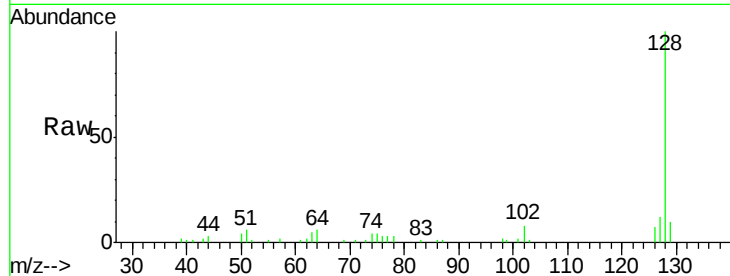
Tot Ion:128 Resp: 66142

Ion Ratio Lower Upper

128 100

129 10.1 8.6 12.8

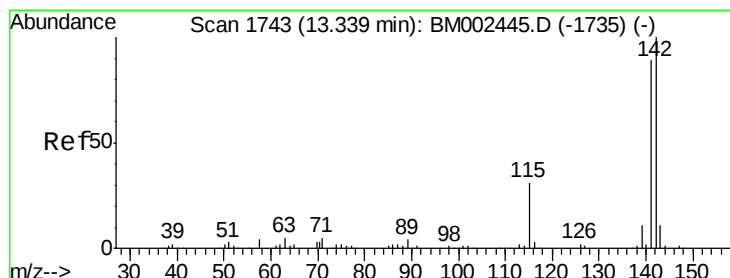
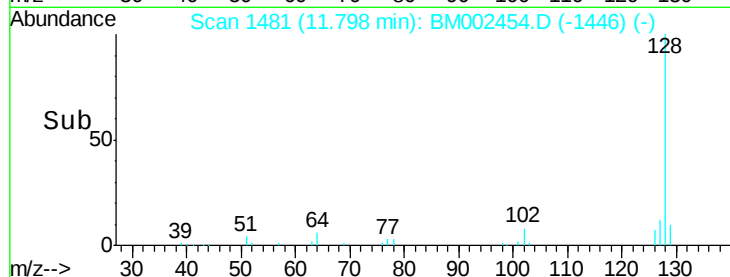
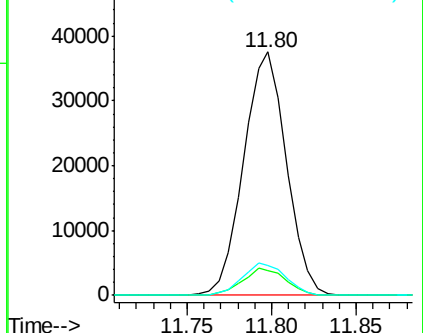
127 12.2 10.4 15.6



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#4

2-Methylnaphthalene

Concen: 1.16 ng/ul

RT: 13.34 min Scan# 1743

Delta R.T. 0.00 min

Lab File: BM002454.D

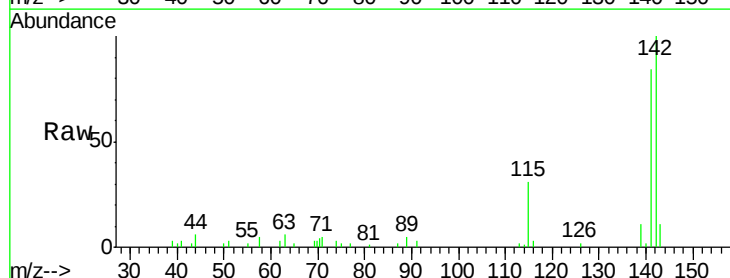
Acq: 17 Aug 2015 16:48

Tgt Ion:142 Resp: 31600

Ion Ratio Lower Upper

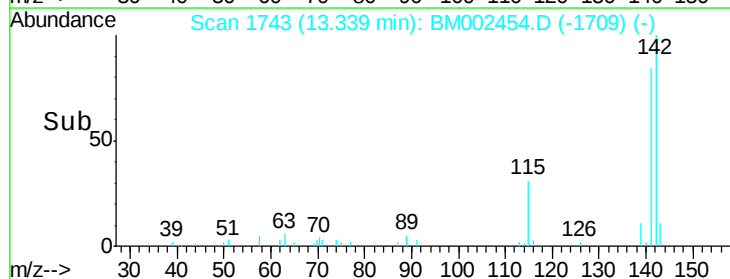
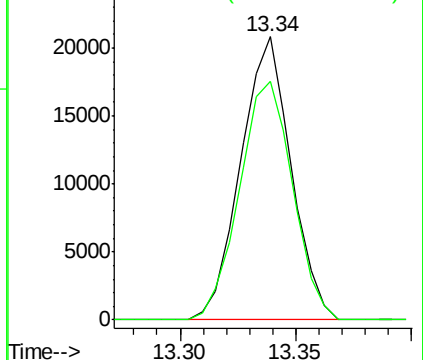
142 100

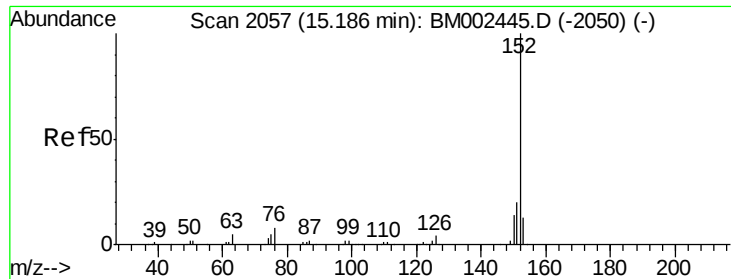
141 84.4 72.2 108.2



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#8

Acenaphthylene

Concen: 1.21 ng/ul

RT: 15.19 min Scan# 2057

Delta R.T. 0.00 min

Lab File: BM002454.D

Acq: 17 Aug 2015 16:48

Instrument :

BNA\_M

ClientSampleId :

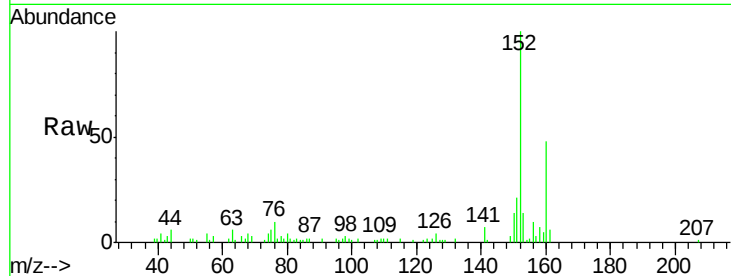
Tot Ion:152 Resp: 46672

Ion Ratio Lower Upper

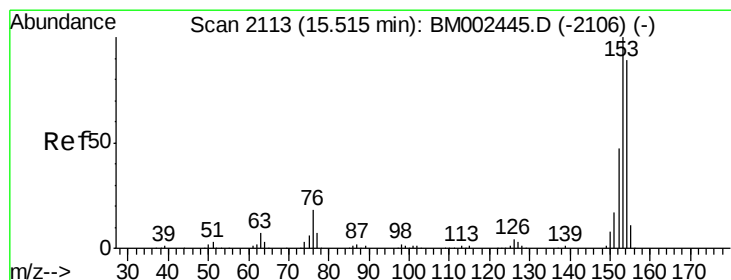
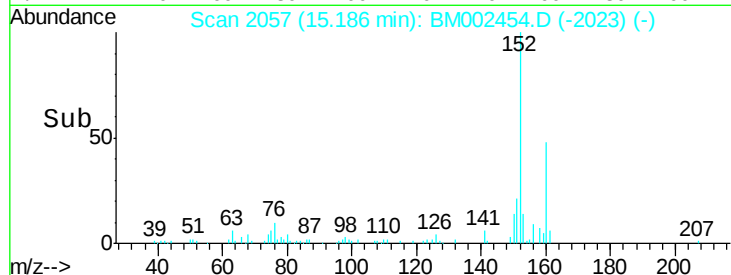
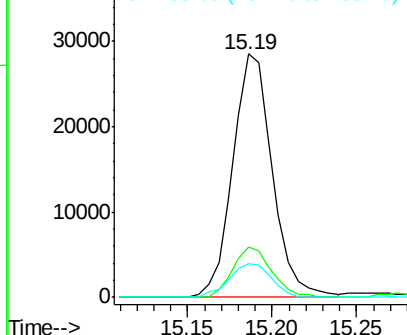
152 100

151 20.6 15.7 23.5

153 13.9 10.2 15.4



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



#9

Acenaphthene

Concen: 18.81 ng/ul

RT: 15.52 min Scan# 2113

Delta R.T. 0.00 min

Lab File: BM002454.D

Acq: 17 Aug 2015 16:48

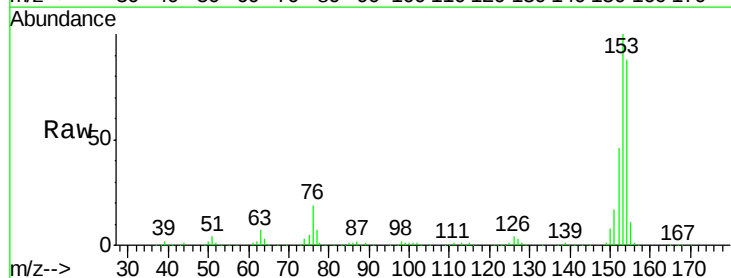
Tgt Ion:153 Resp: 476927

Ion Ratio Lower Upper

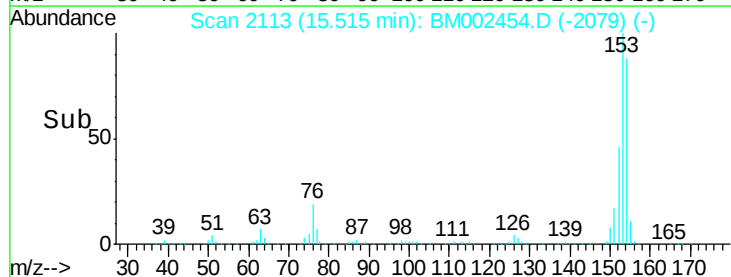
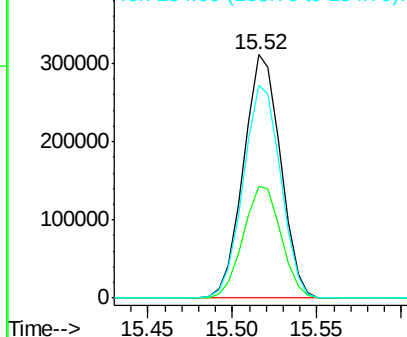
153 100

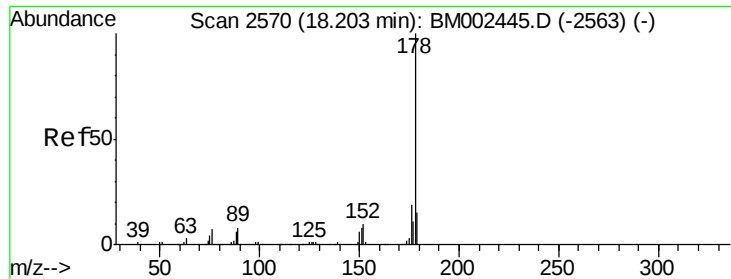
152 46.1 36.9 55.3

154 87.7 71.3 106.9



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

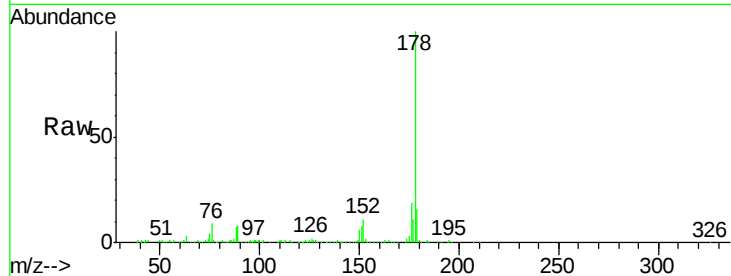




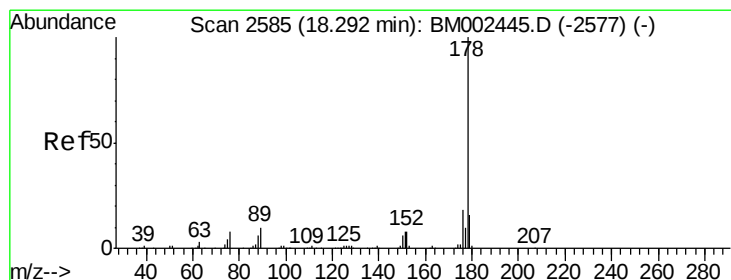
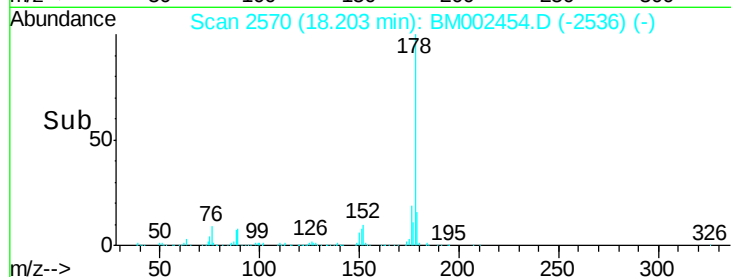
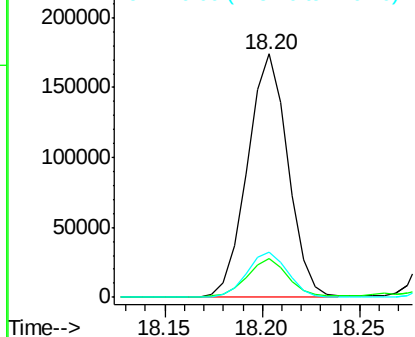
#13  
Phenanthrene  
Concen: 6.26 ng/ul  
RT: 18.20 min Scan# 2570  
Delta R.T. 0.00 min  
Lab File: BM002454.D  
Acq: 17 Aug 2015 16:48

Instrument :  
BNA\_M  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.7  | 12.4  | 18.6  |
| 176     | 18.8  | 15.1  | 22.7  |

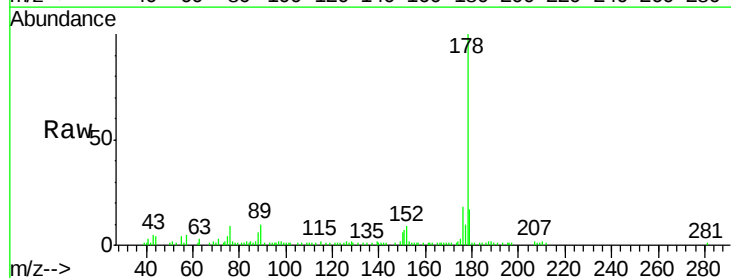


Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 179.00 (178.70 to 179.70): E  
Ion 176.00 (175.70 to 176.70): E

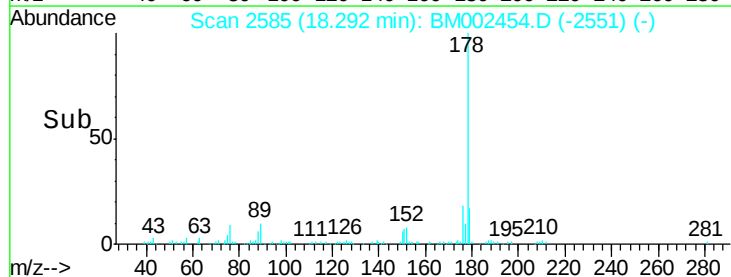
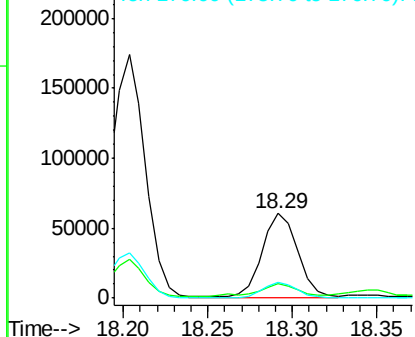


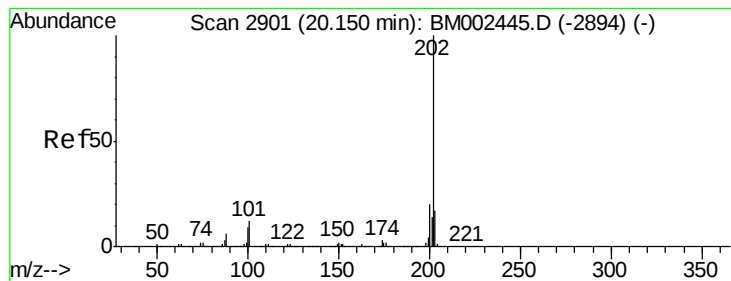
#15  
Anthracene  
Concen: 2.21 ng/ul  
RT: 18.29 min Scan# 2585  
Delta R.T. 0.00 min  
Lab File: BM002454.D  
Acq: 17 Aug 2015 16:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 16.7  | 12.6  | 18.8  |
| 176     | 18.0  | 14.5  | 21.7  |



Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 179.00 (178.70 to 179.70): E  
Ion 176.00 (175.70 to 176.70): E





#16

Fluoranthene

Concen: 11.64 ng/ul

RT: 20.15 min Scan# 2901

Delta R.T. 0.00 min

Lab File: BM002454.D

Acq: 17 Aug 2015 16:48

Instrument :

BNA\_M

ClientSampleId :

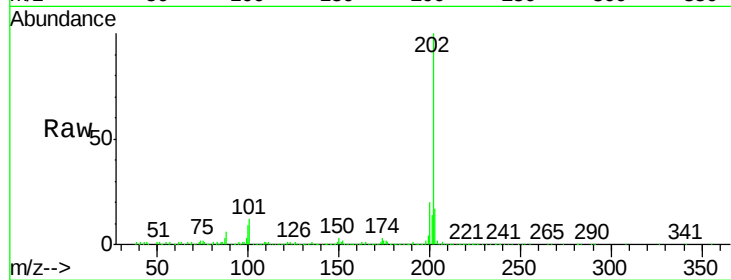
Tot Ion:202 Resp: 524354

Ion Ratio Lower Upper

202 100

101 12.0 9.7 14.5

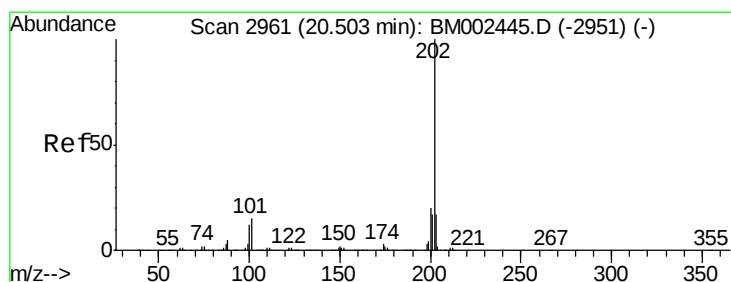
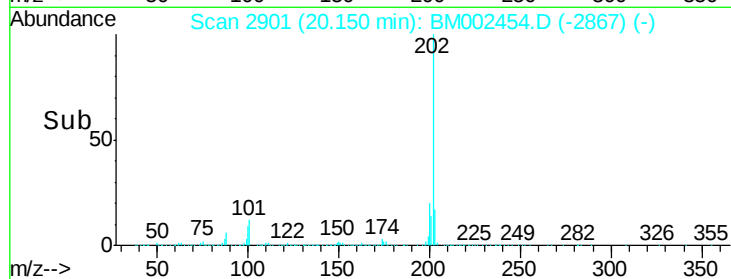
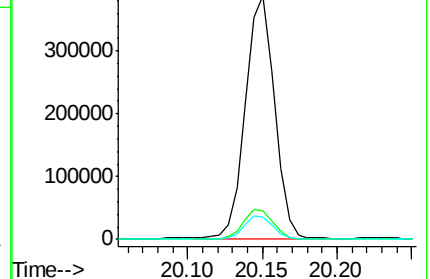
100 9.2 7.4 11.2



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B



#19

Pyrene

Concen: 40.36 ng/ul

RT: 20.51 min Scan# 2962

Delta R.T. 0.01 min

Lab File: BM002454.D

Acq: 17 Aug 2015 16:48

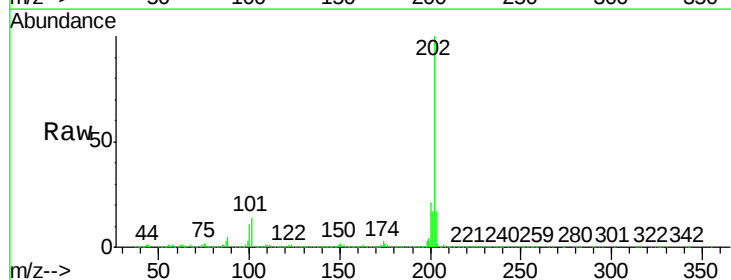
Tgt Ion:202 Resp: 1086108

Ion Ratio Lower Upper

202 100

101 14.3 12.0 18.0

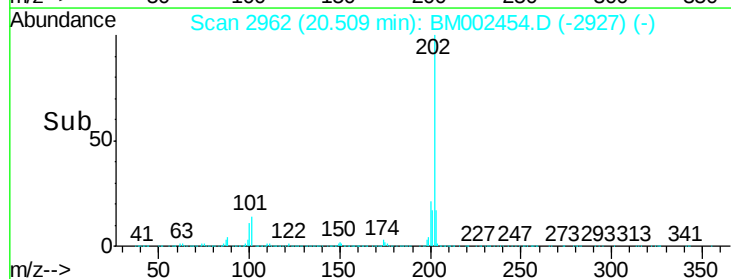
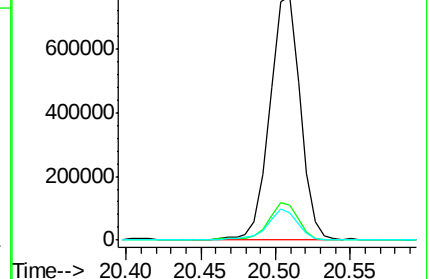
100 11.4 9.7 14.5

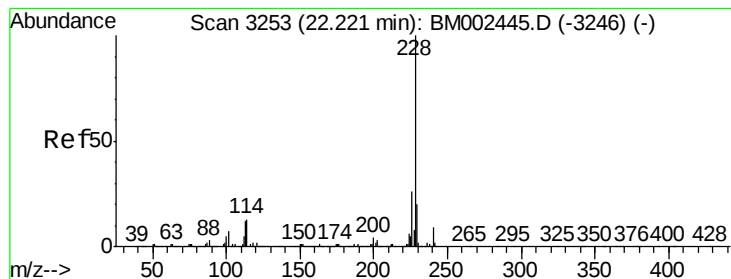


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





#20

Benzo(a)anthracene

Concen: 9.55 ng/ul

RT: 22.22 min Scan# 3253

Delta R.T. 0.00 min

Lab File: BM002454.D

Acq: 17 Aug 2015 16:48

Instrument :

BNA\_M

ClientSampleId :

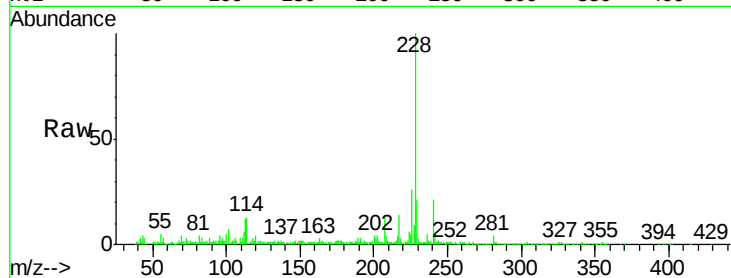
Tot Ion:228 Resp: 262283

Ion Ratio Lower Upper

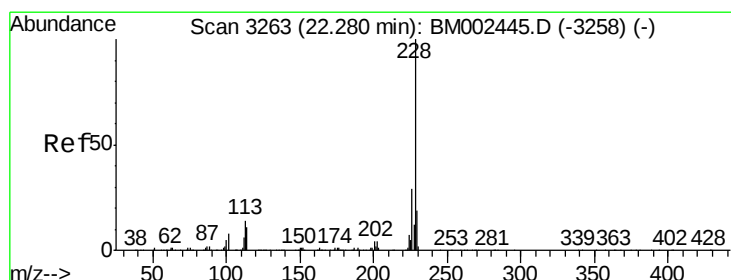
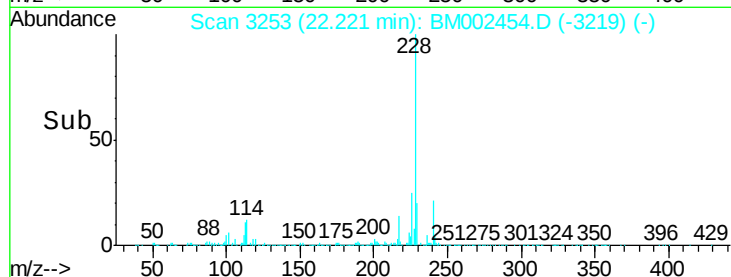
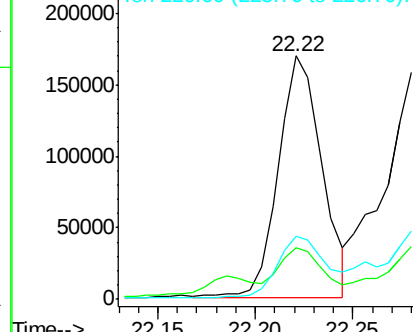
228 100

229 21.4 15.8 23.6

226 26.1 21.1 31.7



Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 229.00 (228.70 to 229.70): E  
Ion 226.00 (225.70 to 226.70): E



#21

Chrysene

Concen: 11.32 ng/ul

RT: 22.28 min Scan# 3263

Delta R.T. 0.00 min

Lab File: BM002454.D

Acq: 17 Aug 2015 16:48

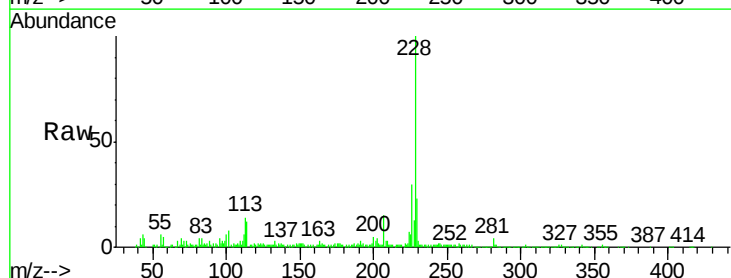
Tgt Ion:228 Resp: 290744

Ion Ratio Lower Upper

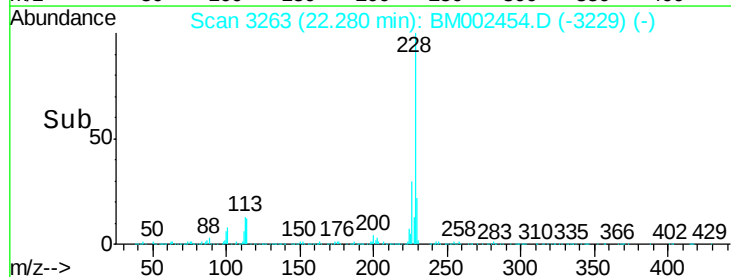
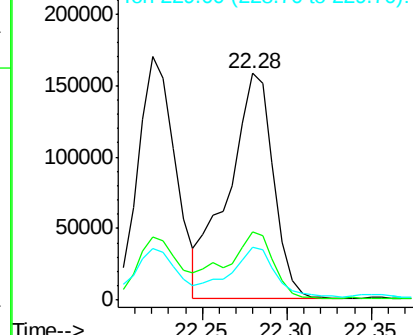
228 100

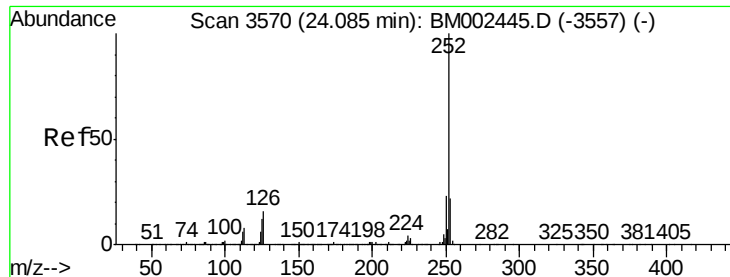
226 30.0 23.4 35.2

229 23.3 15.7 23.5



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

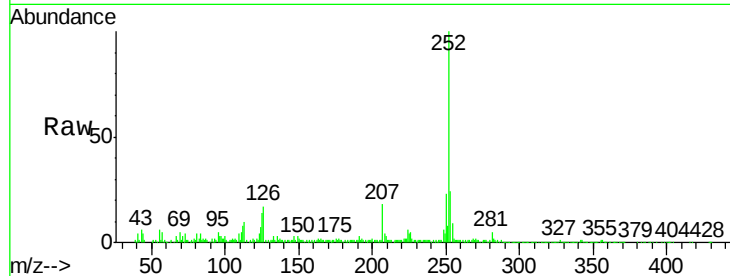




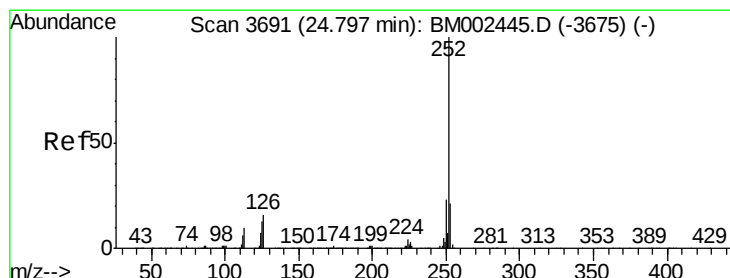
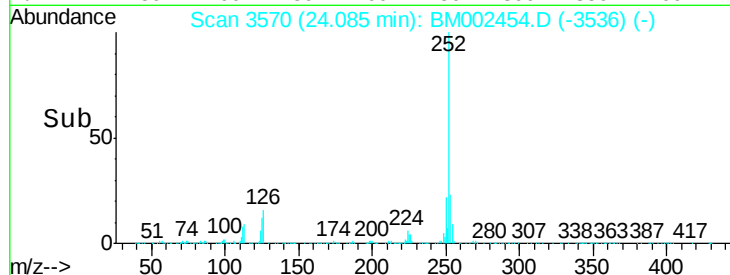
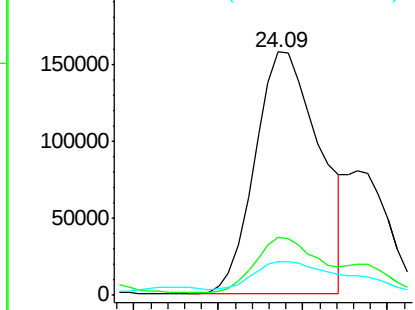
#23  
Benzo(b)fluoranthene  
Concen: 16.01 ng/ul  
RT: 24.09 min Scan# 3570  
Delta R.T. 0.00 min  
Lab File: BM002454.D  
Acq: 17 Aug 2015 16:48

Instrument :  
BNA\_M  
ClientSampleId :

Tot Ion:252 Resp: 417774  
Ion Ratio Lower Upper  
252 100  
253 23.6 17.4 26.0  
125 14.0 10.0 15.0

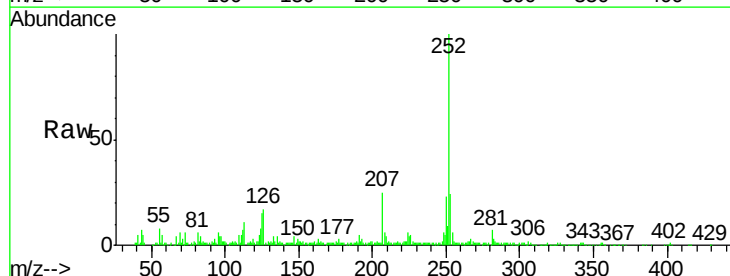


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

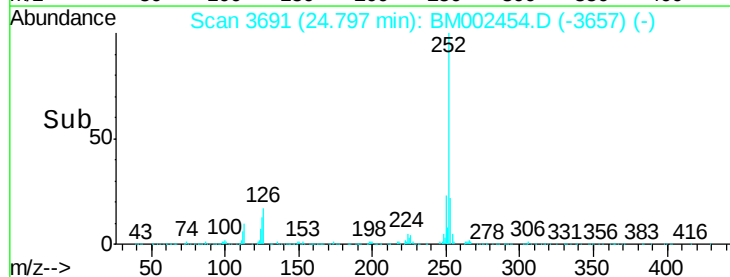
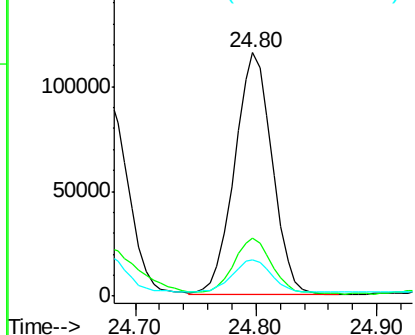


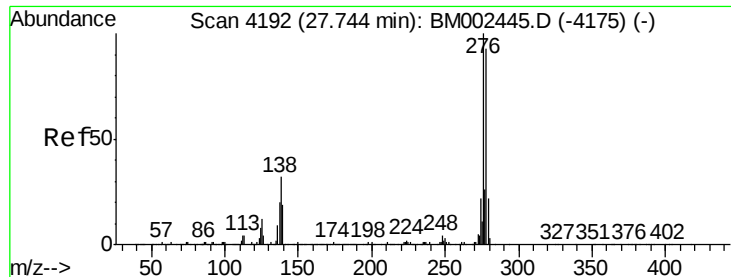
#26  
Benzo(a)pyrene  
Concen: 10.01 ng/ul  
RT: 24.80 min Scan# 3691  
Delta R.T. 0.00 min  
Lab File: BM002454.D  
Acq: 17 Aug 2015 16:48

Tgt Ion:252 Resp: 249498  
Ion Ratio Lower Upper  
252 100  
253 23.9 17.6 26.4  
125 15.0 10.7 16.1



Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

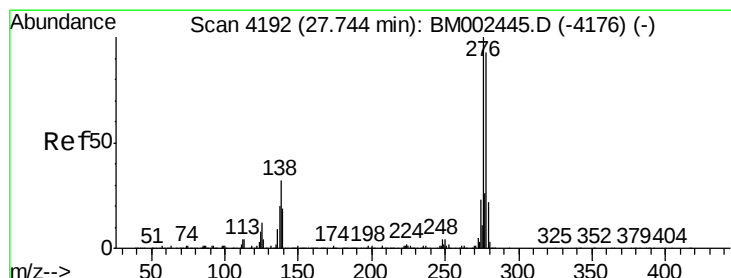
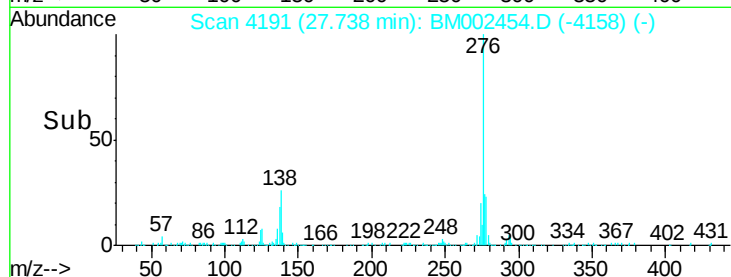
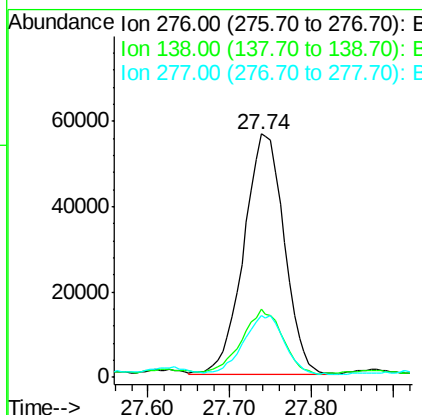
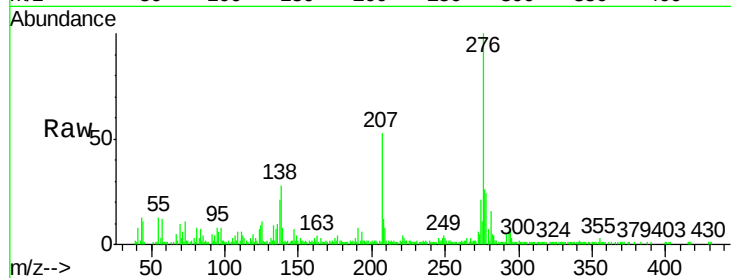




#27  
 Indeno(1,2,3-cd)pyrene  
 Concen: 6.72 ng/ul  
 RT: 27.74 min Scan# 4191  
 Delta R.T. -0.01 min  
 Lab File: BM002454.D  
 Acq: 17 Aug 2015 16:48

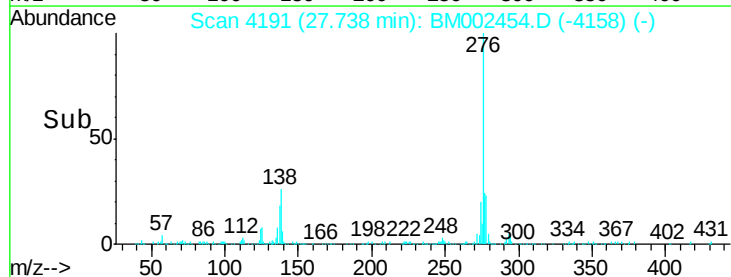
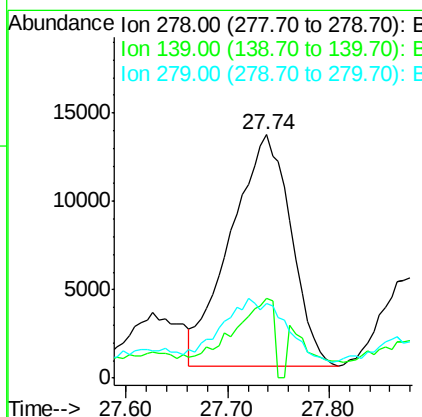
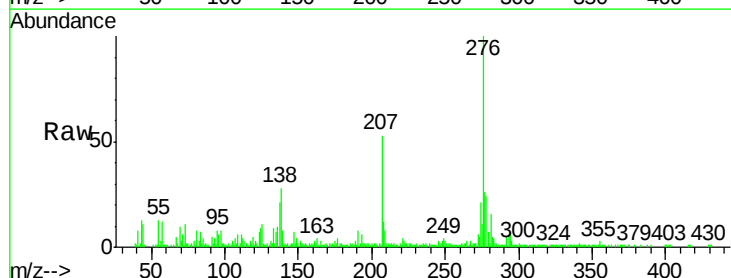
Instrument :  
 BNA\_M  
 ClientSampleId :

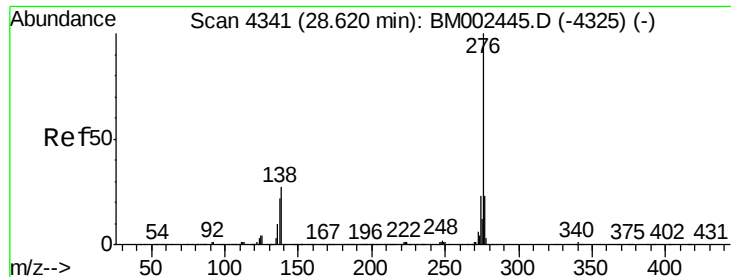
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 28.0  | 25.3  | 37.9  |
| 277     | 25.6  | 20.2  | 30.2  |



#28  
 Dibenzo(a,h)anthracene  
 Concen: 2.26 ng/ul  
 RT: 27.74 min Scan# 4191  
 Delta R.T. -0.01 min  
 Lab File: BM002454.D  
 Acq: 17 Aug 2015 16:48

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 32.6  | 16.5  | 24.7# |
| 279     | 30.6  | 18.8  | 28.2# |





#29

Benzo(a,h,i)perylene

Concen: 6.99 ng/ul

RT: 28.63 min Scan# 4342

Delta R.T. 0.01 min

Lab File: BM002454.D

Acq: 17 Aug 2015 16:48

Instrument :

BNA\_M

ClientSampleId :

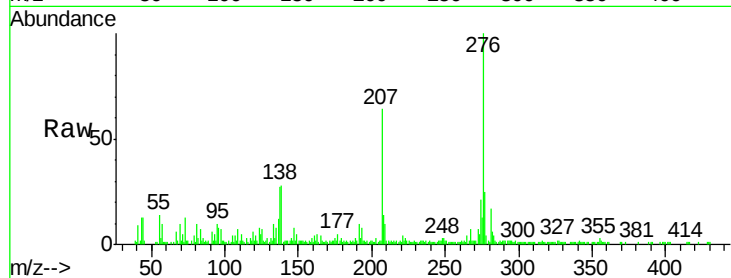
Tot Ion:276 Resp: 166790

Ion Ratio Lower Upper

276 100

138 27.7 21.0 31.6

277 25.2 19.2 28.8



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

