

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081715\  
 Data File : BM002459.D  
 Acq On : 17 Aug 2015 19:55  
 Operator : UM/IZ  
 Sample : G3227-10  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: Aug 18 02:03:04 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  | 144258   | 20.00 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 11.75 | 136  | 642545   | 20.00 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 15.46 | 164  | 322454   | 20.00 | ng/ul | 0.00     |
| 12) Phenanthrene-d10      | 18.17 | 188  | 586587   | 20.00 | ng/ul | 0.00     |
| 17) Chrysene-d12          | 22.25 | 240  | 392284   | 20.00 | ng/ul | 0.01     |
| 22) Perylene-d12          | 24.76 | 264  | 299663   | 20.00 | ng/ul | -0.15    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 7) Acenaphthylene-d8        | 15.16 | 160  | 531613   | 16.13 | ng/ul | 0.00     |
| 10) Fluorene-d10            | 16.43 | 176  | 351895   | 15.20 | ng/ul | 0.00     |
| 14) Anthracene-d10          | 18.26 | 188  | 456203   | 16.12 | ng/ul | 0.00     |
| 18) Pyrene-d10              | 20.49 | 212  | 356983   | 20.53 | ng/ul | 0.01     |
| 25) Benzo(a)pyrene-d12      | 24.58 | 264  | 304      | 0.02  | ng/ul | -0.16    |

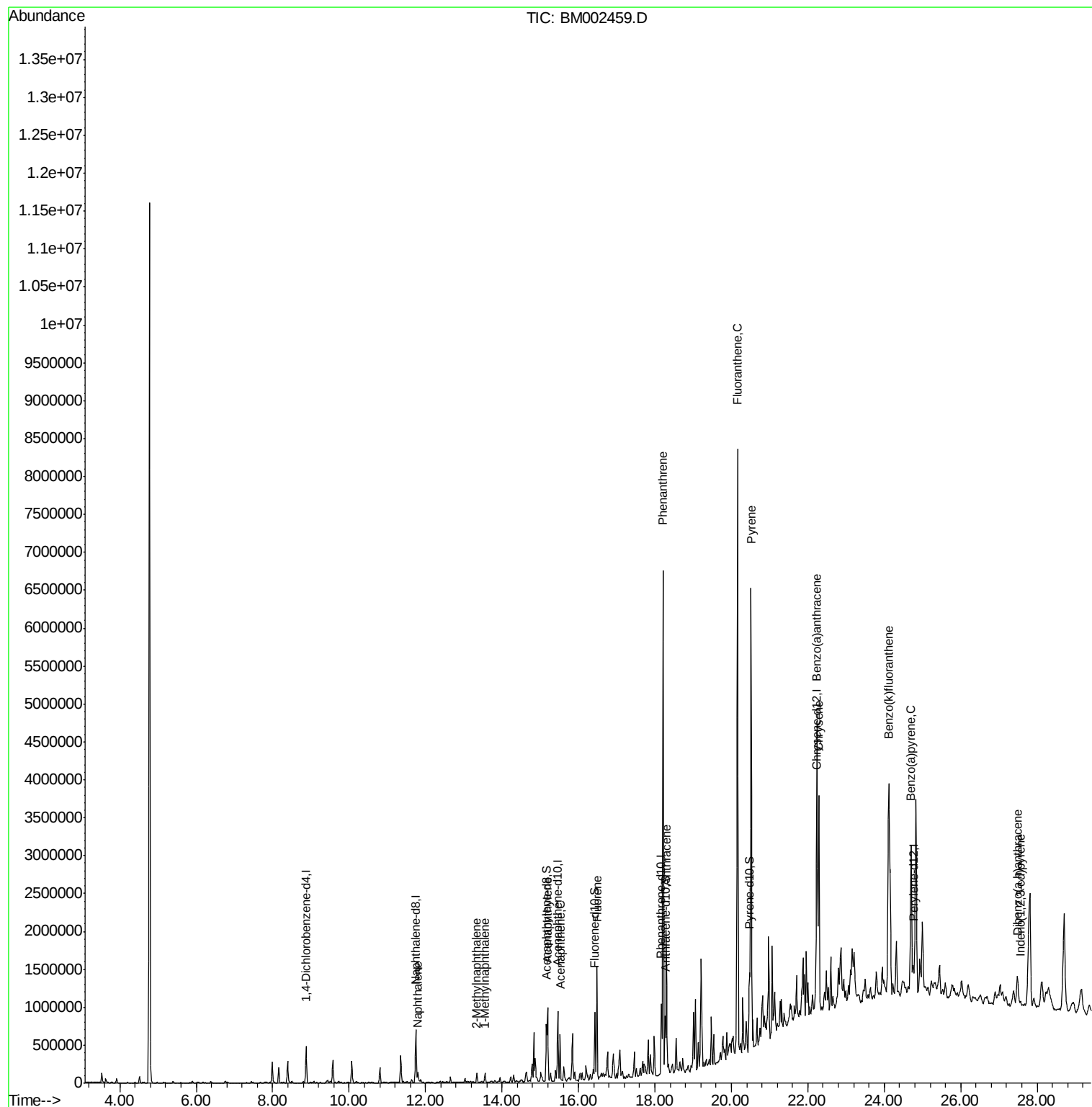
| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 3) Naphthalene             | 11.80 | 128  | 124365   | 3.79   | ng/ul  | 99     |
| 4) 2-Methylnaphthalene     | 13.34 | 142  | 59706    | 2.43   | ng/ul  | 99     |
| 5) 1-Methylnaphthalene     | 13.56 | 142  | 59023    | 2.43   | ng/ul  | 99     |
| 8) Acenaphthylene          | 15.19 | 152  | 733538   | 21.26  | ng/ul  | 100    |
| 9) Acenaphthene            | 15.52 | 153  | 254191   | 11.18  | ng/ul  | 98     |
| 11) Fluorene               | 16.49 | 166  | 721823   | 27.72  | ng/ul  | 100    |
| 13) Phenanthrene           | 18.22 | 178  | 4349991  | 128.42 | ng/ul  | 98     |
| 15) Anthracene             | 18.30 | 178  | 1189680  | 34.66  | ng/ul  | 100    |
| 16) Fluoranthene           | 20.16 | 202  | 5267697  | 137.36 | ng/ul  | 95     |
| 19) Pyrene                 | 20.52 | 202  | 3938044  | 171.36 | ng/ul  | 97     |
| 20) Benzo(a)anthracene     | 22.23 | 228  | 2034613  | 86.73  | ng/ul  | 97     |
| 21) Chrysene               | 22.29 | 228  | 1767113  | 80.54  | ng/ul  | 96     |
| 24) Benzo(k)fluoranthene   | 24.11 | 252  | 3062847  | 178.41 | ng/ul  | 98     |
| 26) Benzo(a)pyrene         | 24.70 | 252  | 1704836  | 98.53  | ng/ul# | 93     |
| 27) Indeno(1,2,3-cd)pyrene | 27.57 | 276  | 45172    | 2.27   | ng/ul# | 73     |
| 28) Dibenzo(a,h)anthracene | 27.50 | 278  | 84885    | 5.10   | ng/ul# | 87     |

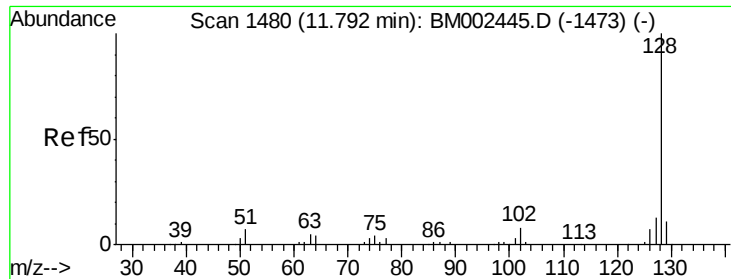
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
BNA\_M  
ClientSampleId :

Quant Time: Aug 18 02:03:04 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: 3.79 ng/ul

RT: 11.80 min Scan# 1481

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

Instrument :

BNA\_M

ClientSampleId :

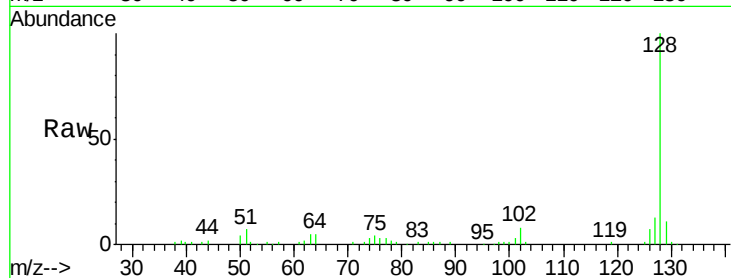
Tot Ion:128 Resp: 124365

Ion Ratio Lower Upper

128 100

129 11.3 8.6 12.8

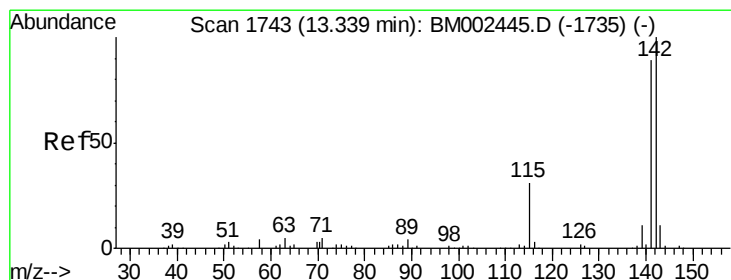
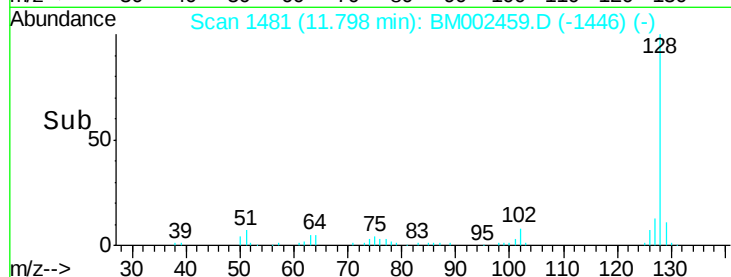
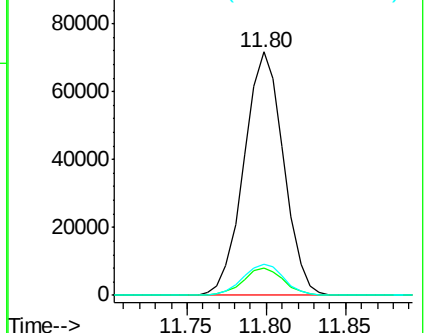
127 12.8 10.4 15.6



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: 2.43 ng/ul

RT: 13.34 min Scan# 1743

Delta R.T. 0.00 min

Lab File: BM002459.D

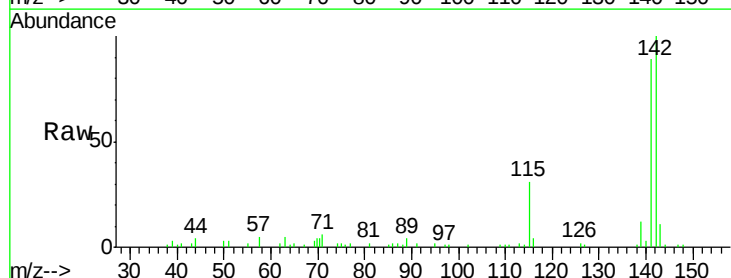
Acq: 17 Aug 2015 19:55

Tgt Ion:142 Resp: 59706

Ion Ratio Lower Upper

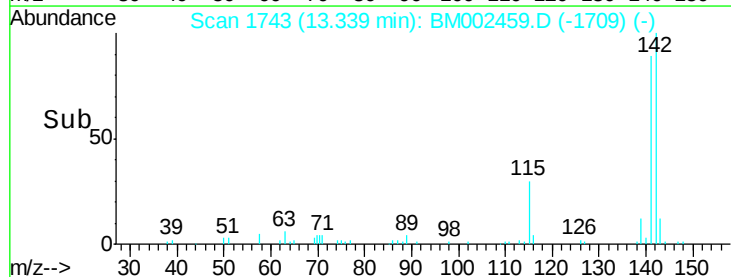
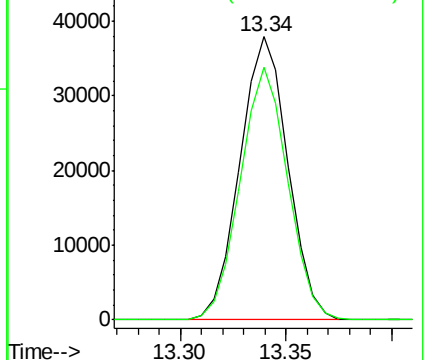
142 100

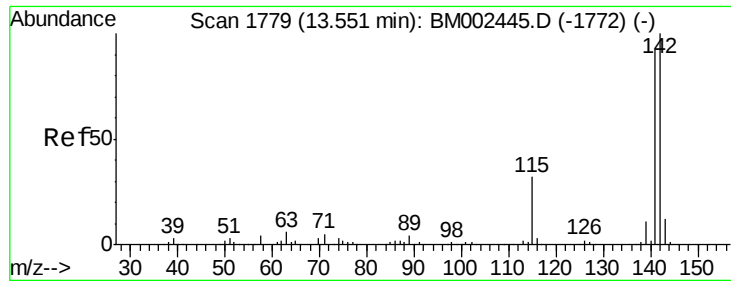
141 89.4 72.2 108.2



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#5

1-Methylnaphthalene

Concen: 2.43 ng/ul

RT: 13.56 min Scan# 1780

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

Instrument :

BNA\_M

ClientSampled :

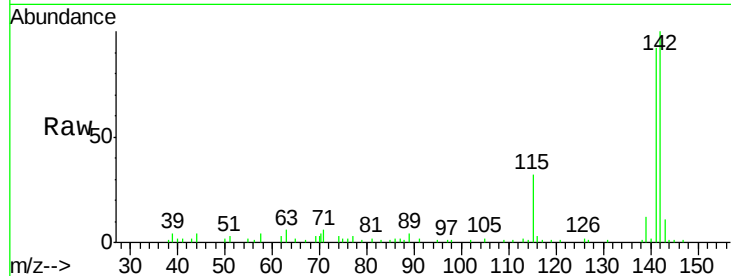
Tot Ion:142 Resp: 59023

Ion Ratio Lower Upper

142 100

141 91.9 73.9 110.9

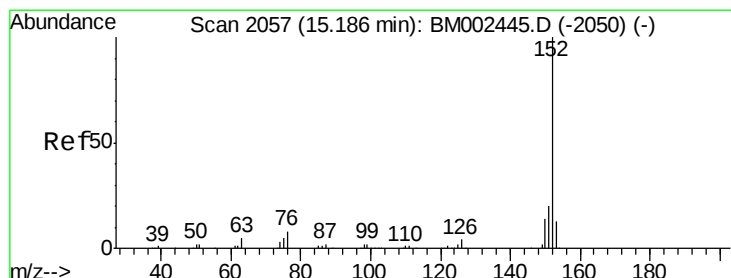
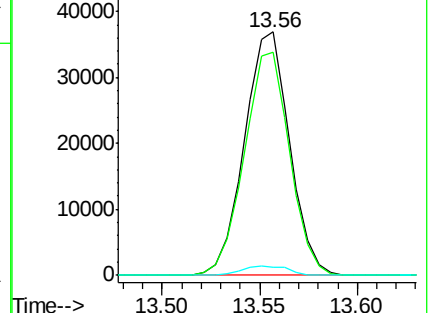
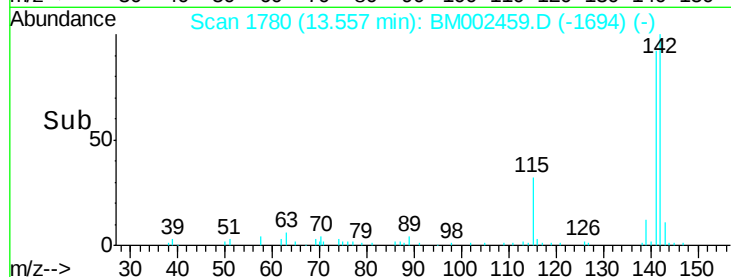
116 3.4 3.0 4.4



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 116.00 (115.70 to 116.70): E



#8

Acenaphthylene

Concen: 21.26 ng/ul

RT: 15.19 min Scan# 2058

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

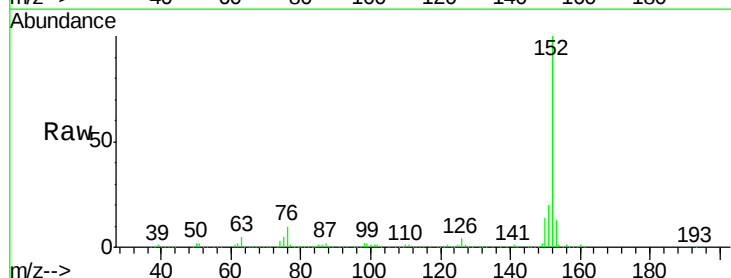
Tgt Ion:152 Resp: 733538

Ion Ratio Lower Upper

152 100

151 19.7 15.7 23.5

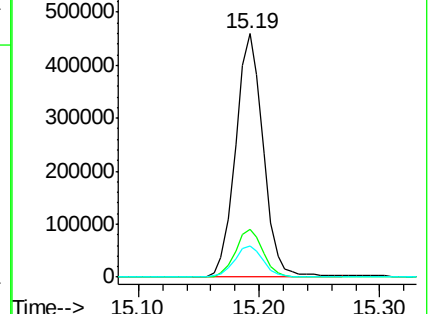
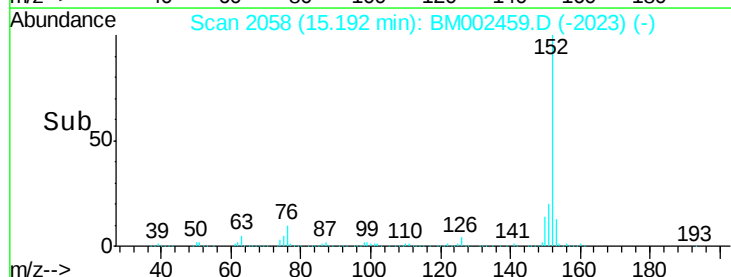
153 13.0 10.2 15.4

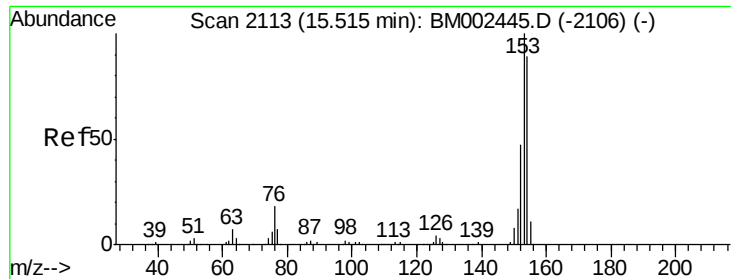


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#9

Acenaphthene

Concen: 11.18 ng/ul

RT: 15.52 min Scan# 2114

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

Instrument :

BNA\_M

ClientSampleId :

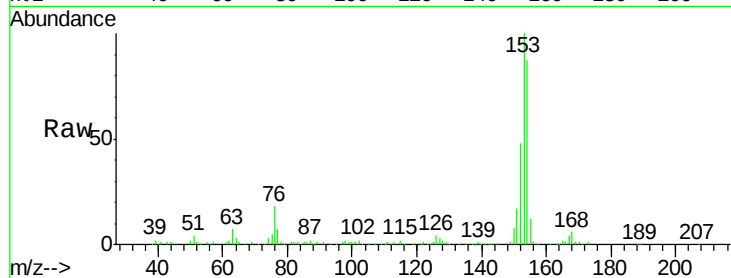
Tot Ion:153 Resp: 254191

Ion Ratio Lower Upper

153 100

152 47.9 36.9 55.3

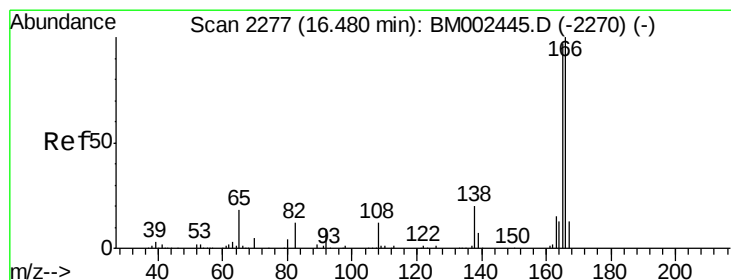
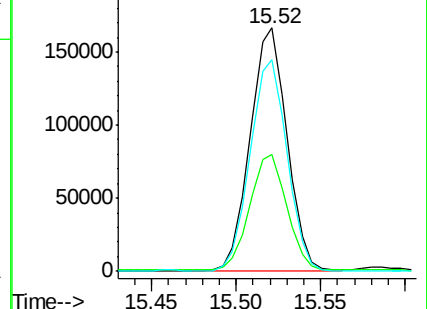
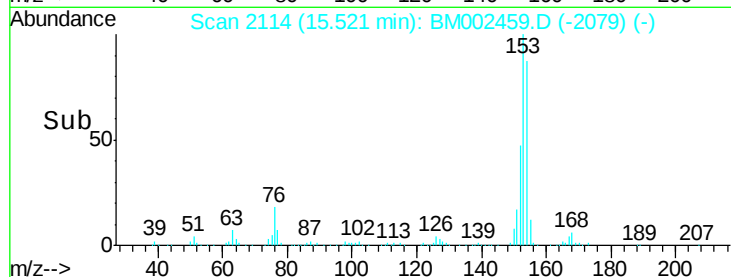
154 87.1 71.3 106.9



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



#11

Fluorene

Concen: 27.72 ng/ul

RT: 16.49 min Scan# 2278

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

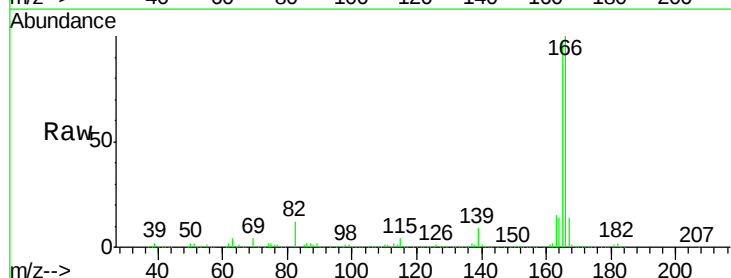
Tgt Ion:166 Resp: 721823

Ion Ratio Lower Upper

166 100

165 97.3 77.6 116.4

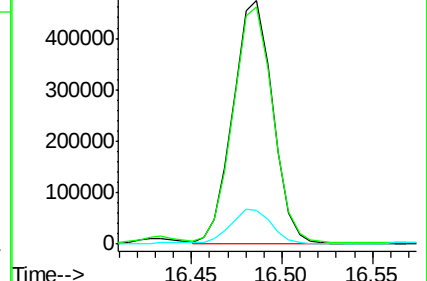
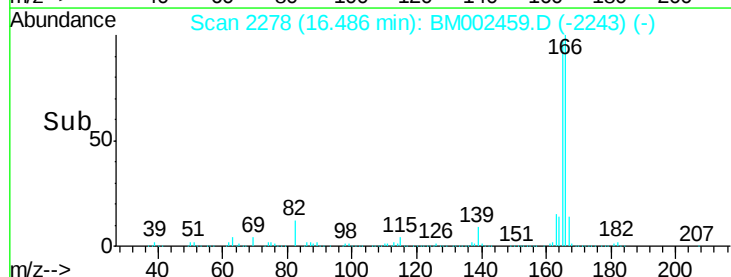
167 14.0 10.7 16.1

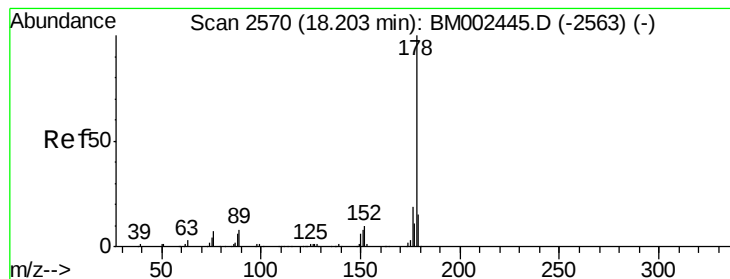


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene

Concen: 128.42 ng/ul

RT: 18.22 min Scan# 2572

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

Instrument :

BNA\_M

ClientSampleId :

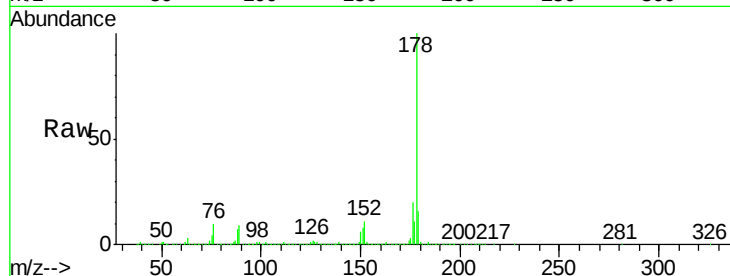
Tot Ion:178 Resp: 4349991

Ion Ratio Lower Upper

178 100

179 16.0 12.4 18.6

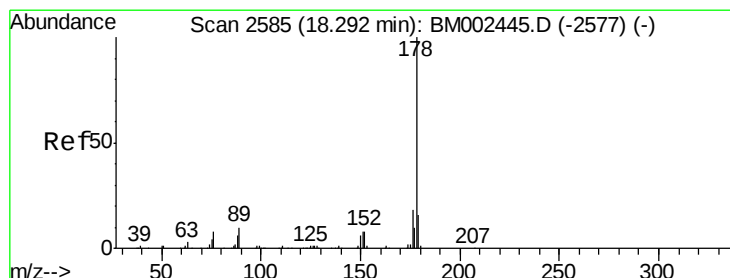
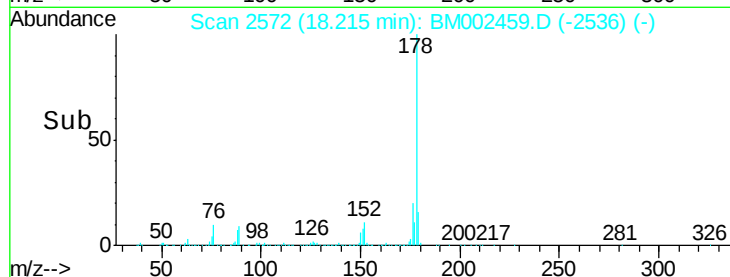
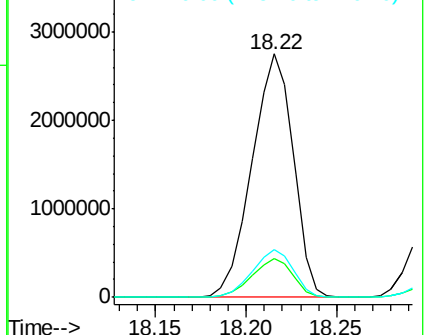
176 19.8 15.1 22.7



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: 34.66 ng/ul

RT: 18.30 min Scan# 2586

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

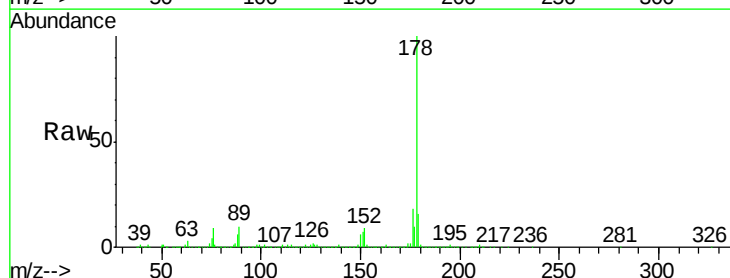
Tgt Ion:178 Resp: 1189680

Ion Ratio Lower Upper

178 100

179 15.7 12.6 18.8

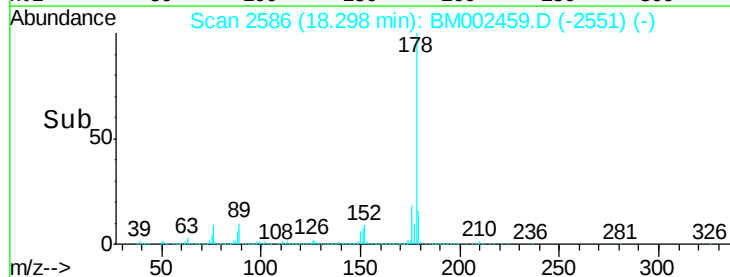
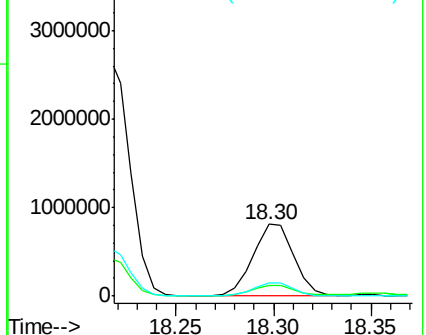
176 18.4 14.5 21.7

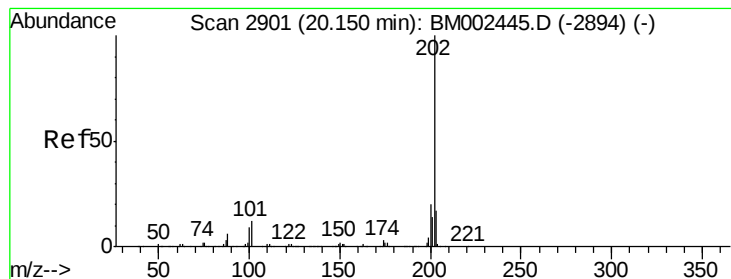


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





#16

Fluoranthene

Concen: 137.36 ng/ul

RT: 20.16 min Scan# 2903

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

Instrument :

BNA\_M

ClientSampleId :

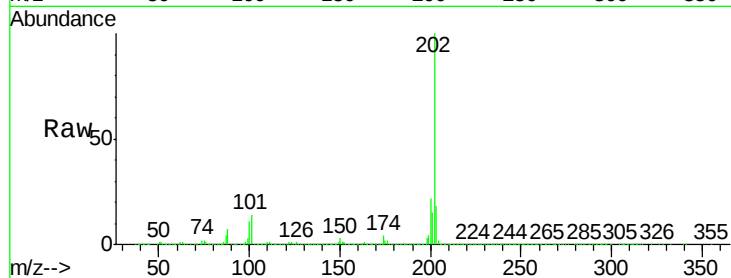
Tot Ion:202 Resp: 5267697

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 101 | 14.1  | 9.7   | 14.5  |
| 100 | 10.7  | 7.4   | 11.2  |

202 100

101 14.1 9.7 14.5

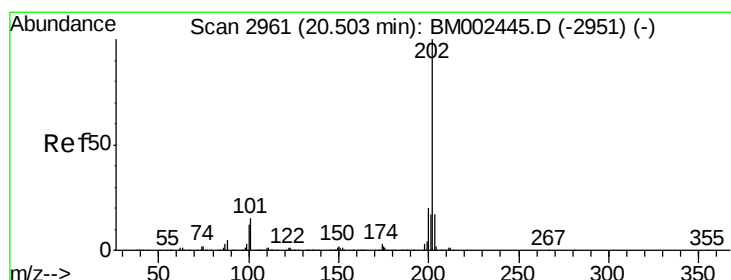
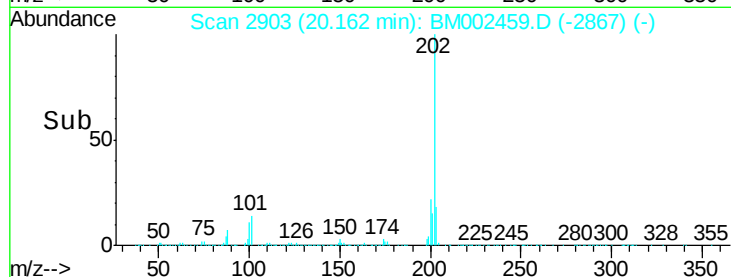
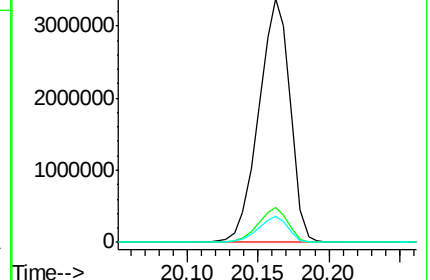
100 10.7 7.4 11.2



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: 171.36 ng/ul

RT: 20.52 min Scan# 2963

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

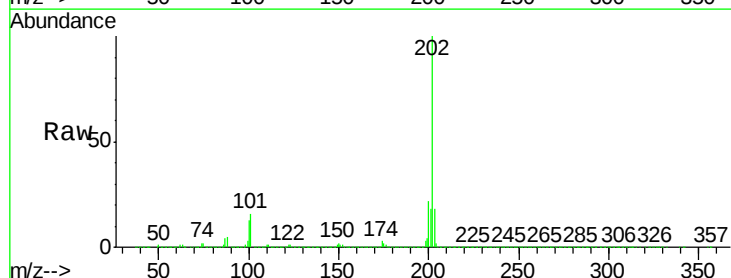
Tgt Ion:202 Resp: 3938044

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 101 | 16.1  | 12.0  | 18.0  |
| 100 | 13.3  | 9.7   | 14.5  |

202 100

101 16.1 12.0 18.0

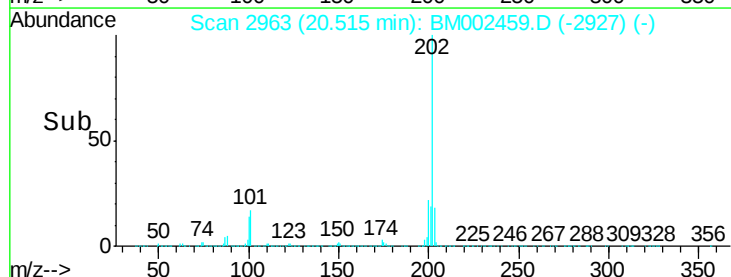
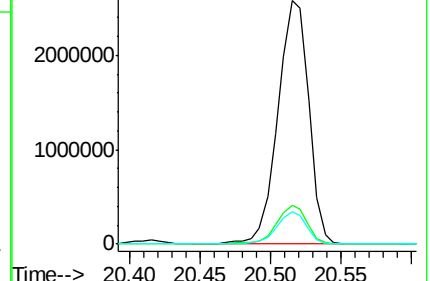
100 13.3 9.7 14.5

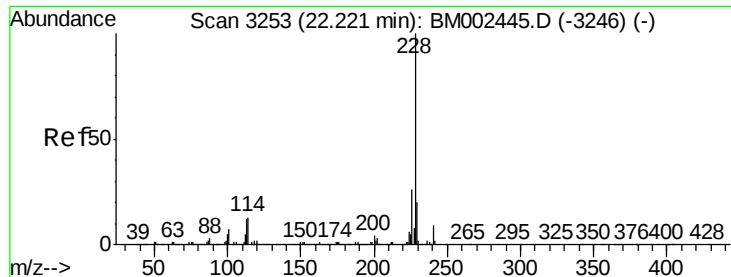


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





#20

Benzo(a)anthracene

Concen: 86.73 ng/ul

RT: 22.23 min Scan# 3255

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

Instrument :

BNA\_M

ClientSampleId :

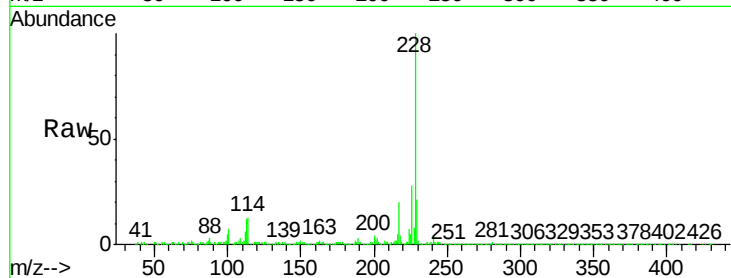
Tot Ion:228 Resp: 2034613

Ion Ratio Lower Upper

228 100

229 20.7 15.8 23.6

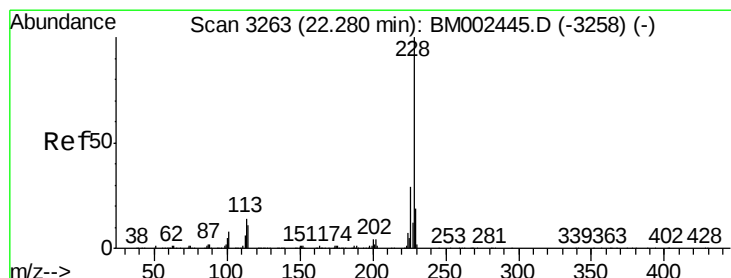
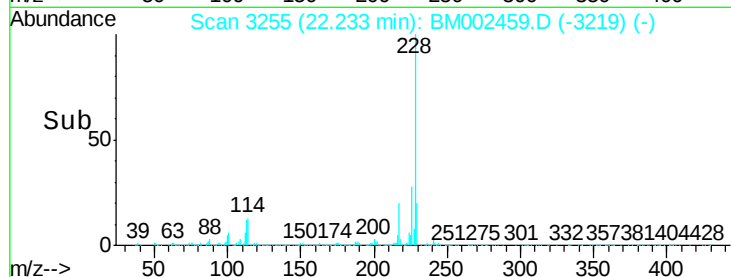
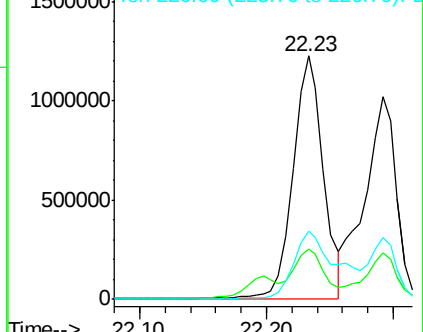
226 27.9 21.1 31.7



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: 80.54 ng/ul

RT: 22.29 min Scan# 3265

Delta R.T. 0.01 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

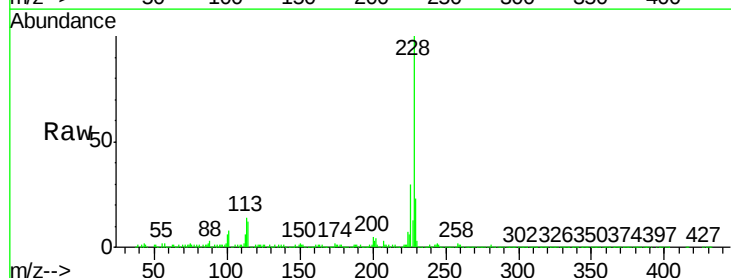
Tgt Ion:228 Resp: 1767113

Ion Ratio Lower Upper

228 100

226 30.4 23.4 35.2

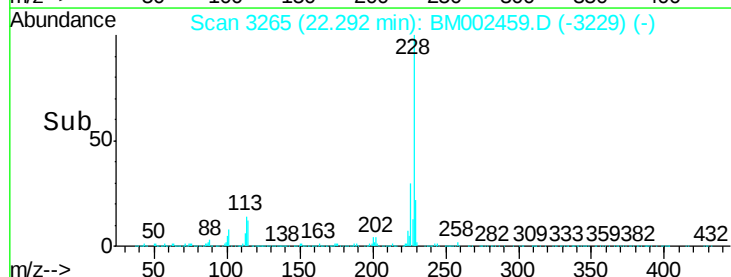
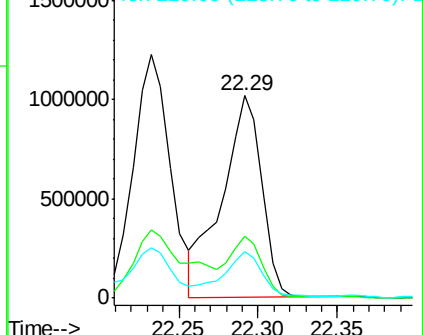
229 22.7 15.7 23.5

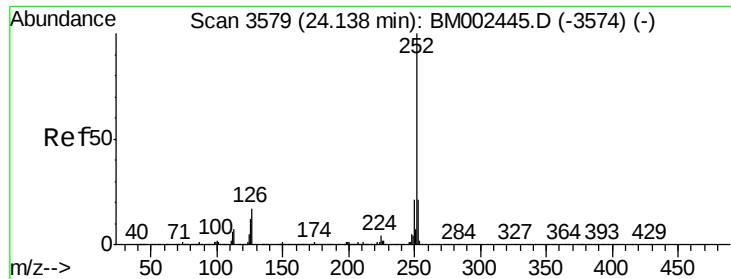


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#24

Benzo(k)fluoranthene

Concen: 178.41 ng/ul

RT: 24.11 min Scan# 3575

Delta R.T. -0.02 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

Instrument :

BNA\_M

ClientSampleId :

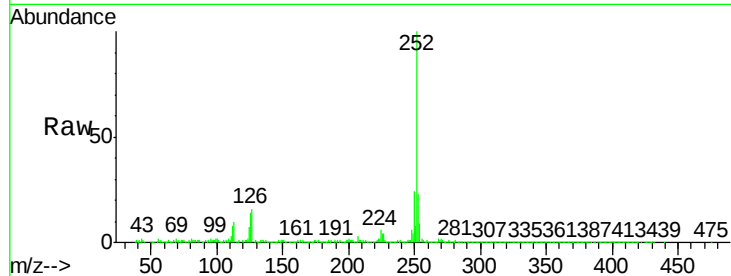
Tot Ion:252 Resp: 3062847

Ion Ratio Lower Upper

252 100

253 22.8 17.8 26.6

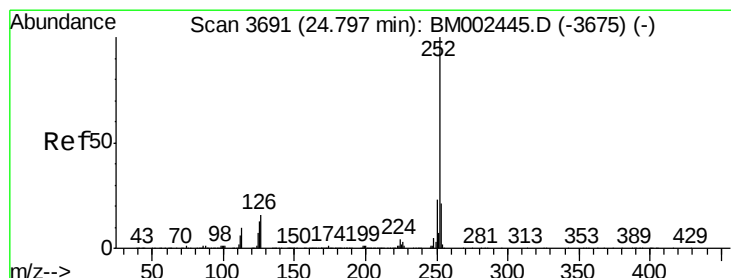
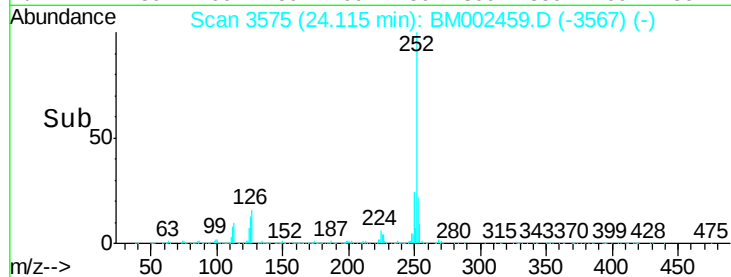
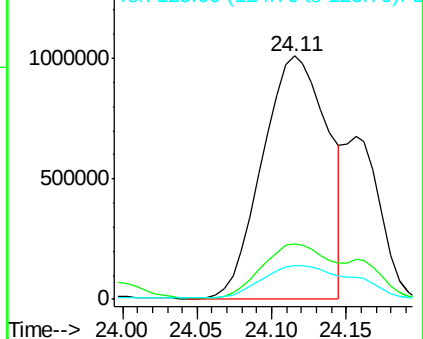
125 14.0 9.8 14.8



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: 98.53 ng/ul

RT: 24.70 min Scan# 3675

Delta R.T. -0.09 min

Lab File: BM002459.D

Acq: 17 Aug 2015 19:55

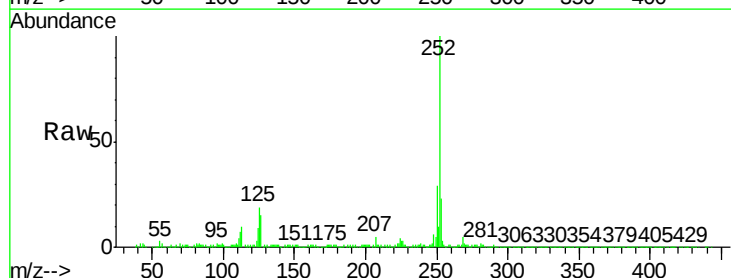
Tgt Ion:252 Resp: 1704836

Ion Ratio Lower Upper

252 100

253 23.2 17.6 26.4

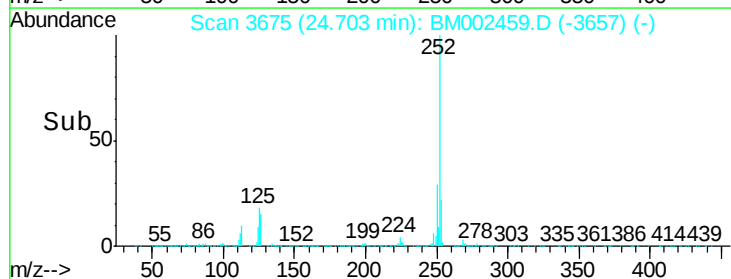
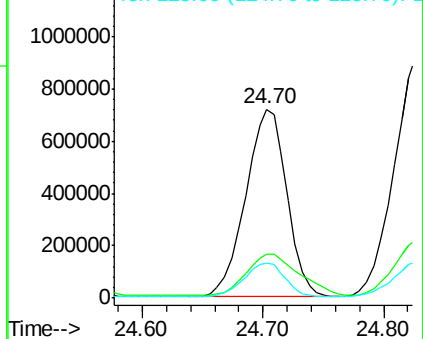
125 18.7 10.7 16.1#

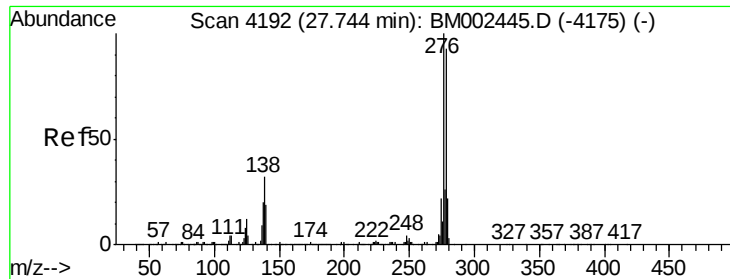


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

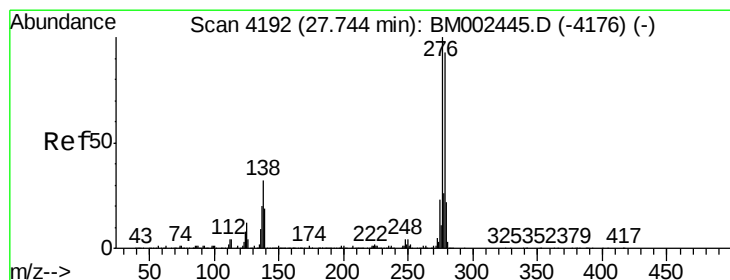
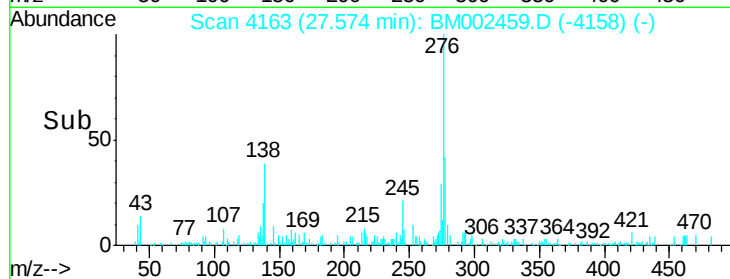
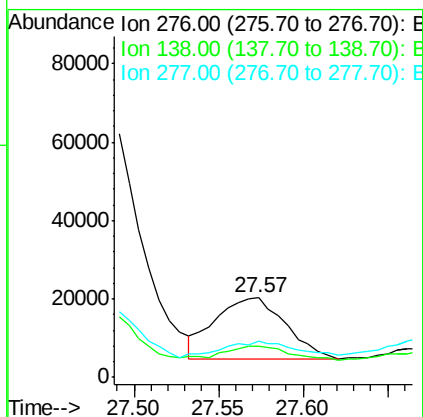
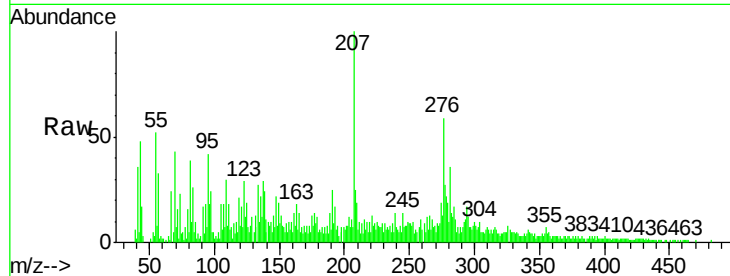




#27  
 Indeno(1,2,3-cd)pyrene  
 Concen: 2.27 ng/ul  
 RT: 27.57 min Scan# 4163  
 Delta R.T. -0.17 min  
 Lab File: BM002459.D  
 Acq: 17 Aug 2015 19:55

Instrument :  
 BNA\_M  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 39.7  | 25.3  | 37.9# |
| 277     | 46.2  | 20.2  | 30.2# |



#28  
 Dibenzo(a,h)anthracene  
 Concen: 5.10 ng/ul  
 RT: 27.50 min Scan# 4151  
 Delta R.T. -0.24 min  
 Lab File: BM002459.D  
 Acq: 17 Aug 2015 19:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 17.4  | 16.5  | 24.7  |
| 279     | 32.4  | 18.8  | 28.2# |

