

Data Path : Z:\HPCHEM1\BNA M\DATA\BM110417\  
 Data File : BM012738.D  
 Acq On : 05 Nov 2017 09:37  
 Operator : SJ/JU  
 Sample : I5933-01 5X  
 Misc :  
 ALS Vial : 30 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 B-9(0-1) 101617

Quant Time: Nov 06 03:30:26 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM110417MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Nov 06 03:22:07 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.82  | 152  | 132595   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.60 | 136  | 523632   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.45 | 164  | 298228   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.20 | 188  | 585097   | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.38 | 240  | 598115   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.67 | 264  | 688471   | 20.00 | ng/ul | 0.02     |

## System Monitoring Compounds

|                                |       |     |        |      |       |      |
|--------------------------------|-------|-----|--------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.30  | 96  | 1932   | 0.79 | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.99  | 99  | 54539  | 5.53 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.15  | 67  | 29459  | 5.51 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.35  | 132 | 47780  | 5.81 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.53  | 113 | 44291  | 5.20 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.97  | 128 | 22508  | 5.82 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.69  | 143 | 25473  | 5.75 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.24 | 165 | 50946  | 5.61 | ng/ul | 0.01 |
| 29) 4-Chloroaniline-d4         | 10.75 | 131 | 14674  | 1.68 | ng/ul | 0.01 |
| 43) Dimethylphthalate-d6       | 13.86 | 166 | 161619 | 6.55 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.14 | 160 | 190288 | 6.23 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.67 | 143 | 16983  | 4.29 | ng/ul | 0.02 |
| 57) Fluorene-d10               | 15.44 | 176 | 134499 | 6.36 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.58 | 200 | 4030   | 1.04 | ng/ul | 0.01 |
| 70) Anthracene-d10             | 17.30 | 188 | 196789 | 6.96 | ng/ul | 0.00 |
| 78) Pyrene-d10                 | 19.59 | 212 | 192128 | 6.92 | ng/ul | 0.01 |
| 89) Benzo(a)pyrene-d12         | 23.53 | 264 | 230457 | 7.08 | ng/ul | 0.02 |

## Target Compounds

|                                |       |     |         |              | Ovalue |
|--------------------------------|-------|-----|---------|--------------|--------|
| 28) Naphthalene                | 10.66 | 128 | 69541   | 2.66 ng/ul   | 98     |
| 30) 4-Chloroaniline            | 10.66 | 127 | 9535    | 1.08 ng/ul#  | 3      |
| 44) Dimethylphthalate          | 13.91 | 163 | 49381   | 2.02 ng/ul   | 96     |
| 47) Acenaphthylene             | 14.17 | 152 | 37906   | 1.28 ng/ul   | 98     |
| 49) Acenaphthene               | 14.52 | 153 | 78762   | 3.91 ng/ul   | 96     |
| 53) Dibenzofuran               | 14.85 | 168 | 62220   | 2.12 ng/ul   | 95     |
| 58) Fluorene                   | 15.50 | 166 | 79306   | 3.25 ng/ul   | 99     |
| 69) Phenanthrene               | 17.24 | 178 | 1327865 | 41.52 ng/ul  | 99     |
| 71) Anthracene                 | 17.33 | 178 | 249178  | 7.51 ng/ul   | 100    |
| 74) Carbazole                  | 17.60 | 167 | 113341  | 4.10 ng/ul   | 97     |
| 75) Di-n-butylphthalate        | 18.16 | 149 | 69039   | 2.13 ng/ul   | 97     |
| 79) Pyrene                     | 19.62 | 202 | 1777321 | 49.81 ng/ul# | 92     |
| 82) Benzo(a)anthracene         | 21.36 | 228 | 930881  | 25.72 ng/ul  | 99     |
| 83) Bis(2-ethylhexyl)phthalate | 21.29 | 149 | 138980  | 7.33 ng/ul#  | 94     |
| 84) Chrysene                   | 21.42 | 228 | 914955  | 27.89 ng/ul  | 97     |
| 87) Benzo(b)fluoranthene       | 22.99 | 252 | 1346594 | 32.01 ng/ul# | 96     |
| 88) Benzo(k)fluoranthene       | 22.99 | 252 | 1346594 | 33.67 ng/ul# | 96     |
| 90) Benzo(a)pyrene             | 23.47 | 252 | 662025  | 16.54 ng/ul  | 95     |
| 91) Indeno(1,2,3-cd)pyrene     | 25.99 | 276 | 732829  | 15.19 ng/ul# | 85     |
| 92) Dibenzo(a,h)anthracene     | 25.99 | 278 | 176548  | 4.32 ng/ul#  | 94     |
| 93) Benzo(a,h,i)perylene       | 26.71 | 276 | 677868  | 17.05 ng/ul# | 90     |

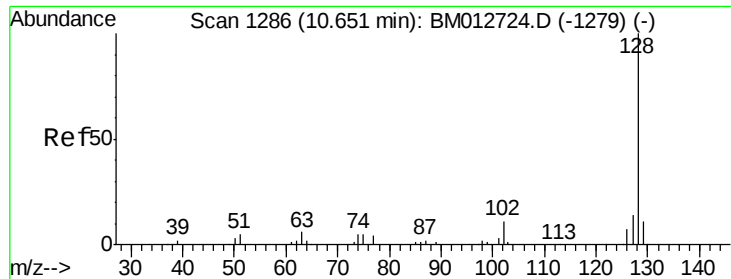
Data Path : Z:\HPCHEM1\BNA M\DATA\BM110417\  
Data File : BM012738.D  
Acq On : 05 Nov 2017 09:37  
Operator : SJ/JU  
Sample : I5933-01 5X  
Misc :  
ALS Vial : 30 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
B-9(0-1) 101617

Quant Time: Nov 06 03:30:26 2017  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM110417MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Nov 06 03:22:07 2017  
Response via : Initial Calibration

| Internal Standards                                                         | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                      |      |      |          |      |       |          |
| (#) = qualifier out of range (m) = manual integration (+) = signals summed |      |      |          |      |       |          |

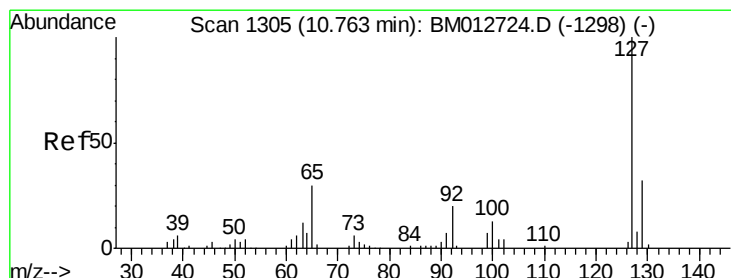
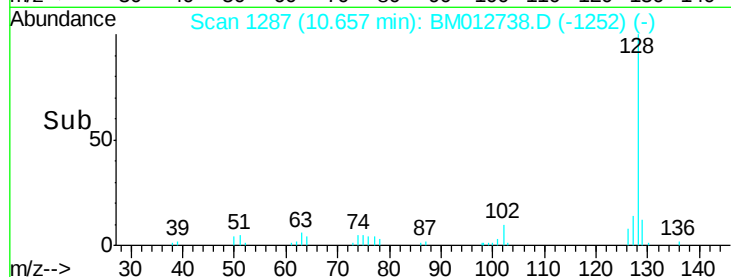
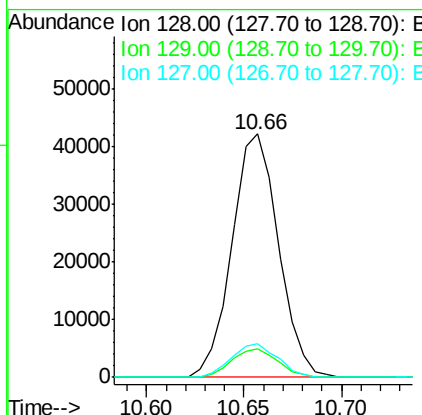
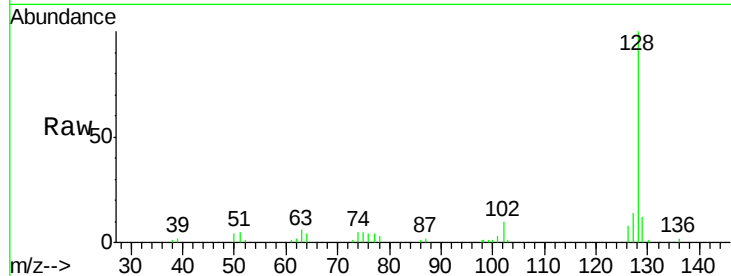




#28  
Naphthalene  
Concen: 2.66 ng/ul  
RT: 10.66 min Scan# 1287  
Delta R.T. 0.01 min  
Lab File: BM012738.D  
Acq: 05 Nov 2017 09:37

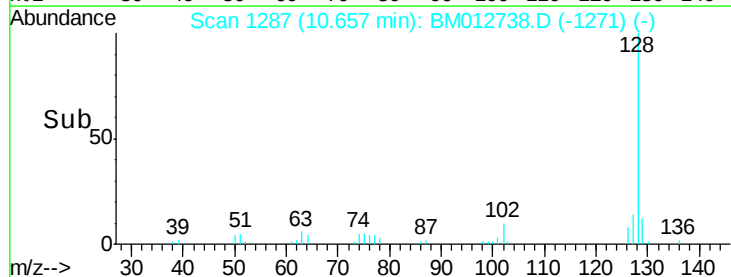
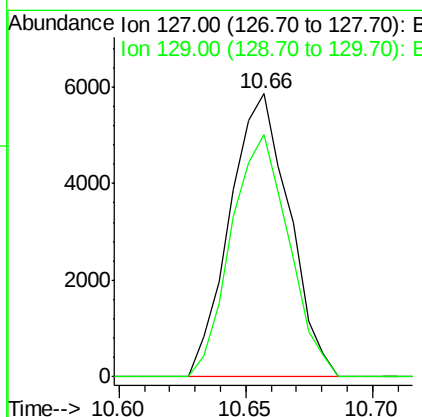
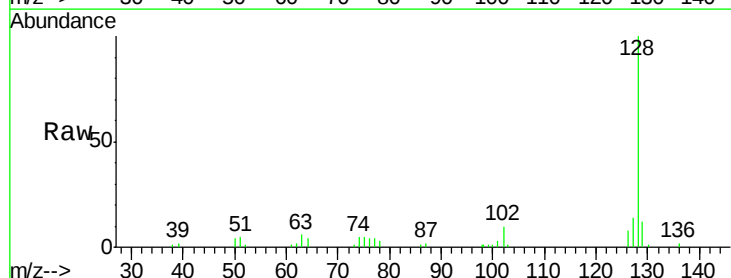
Instrument :  
BNA\_M  
ClientSampleId :  
B-9(0-1) 101617

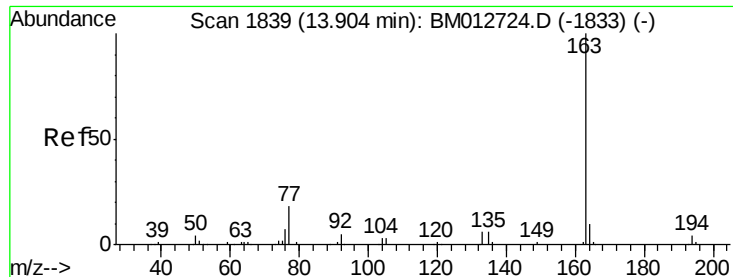
Tot Ion:128 Resp: 69541  
Ion Ratio Lower Upper  
128 100  
129 11.9 8.8 13.2  
127 13.9 10.5 15.7



#30  
4-Chloroaniline  
Concen: 1.08 ng/ul  
RT: 10.66 min Scan# 1287  
Delta R.T. -0.11 min  
Lab File: BM012738.D  
Acq: 05 Nov 2017 09:37

Tgt Ion:127 Resp: 9535  
Ion Ratio Lower Upper  
127 100  
129 85.6 25.4 38.2#





#44

Dimethylphthalate

Concen: 2.02 ng/ul

RT: 13.91 min Scan# 1840

Delta R.T. 0.01 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

Instrument :

BNA\_M

ClientSampleId :

B-9(0-1) 101617

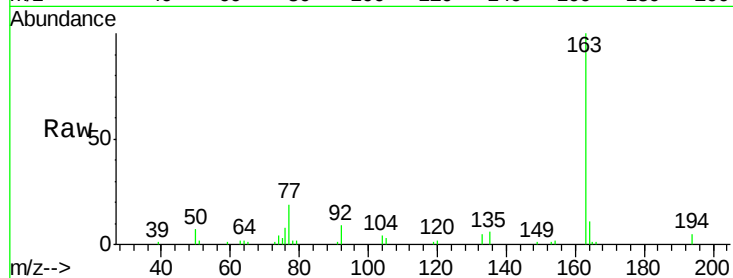
Tot Ion:163 Resp: 49381

Ion Ratio Lower Upper

163 100

194 4.5 3.2 4.8

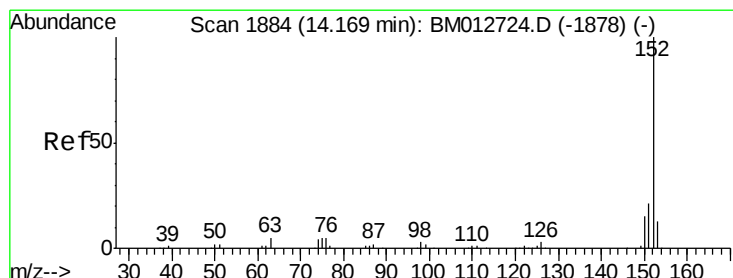
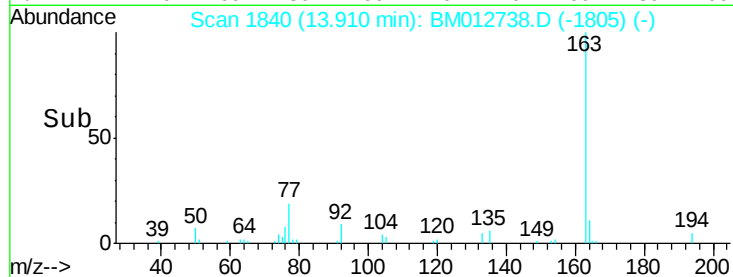
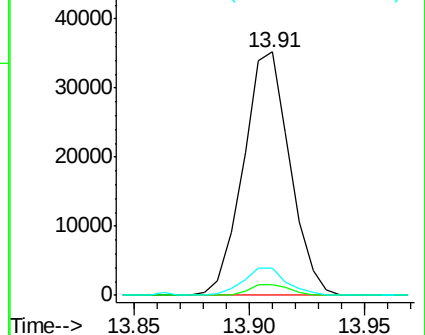
164 11.4 7.8 11.8



Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#47

Acenaphthylene

Concen: 1.28 ng/ul

RT: 14.17 min Scan# 1885

Delta R.T. 0.01 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

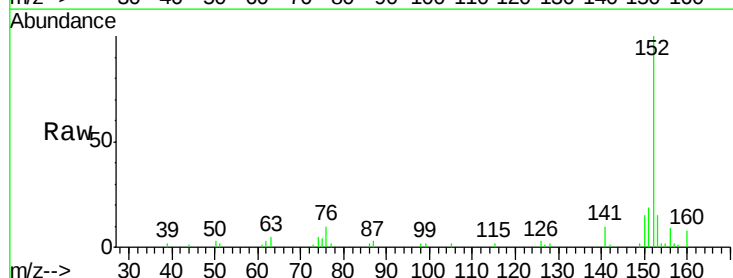
Tgt Ion:152 Resp: 37906

Ion Ratio Lower Upper

152 100

151 19.4 15.7 23.5

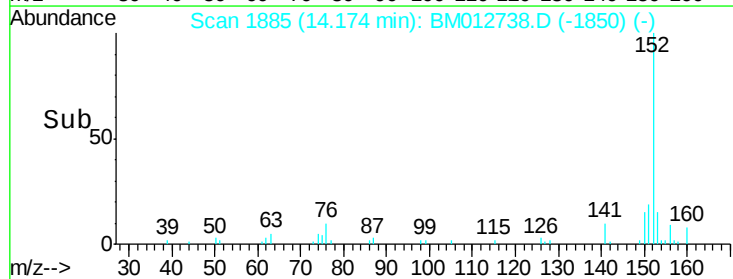
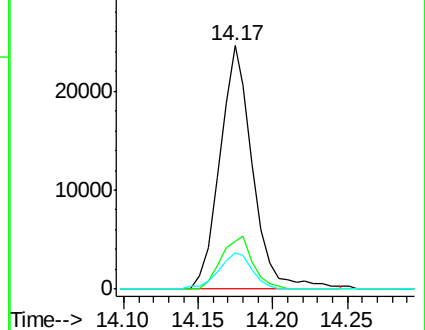
153 14.7 10.5 15.7

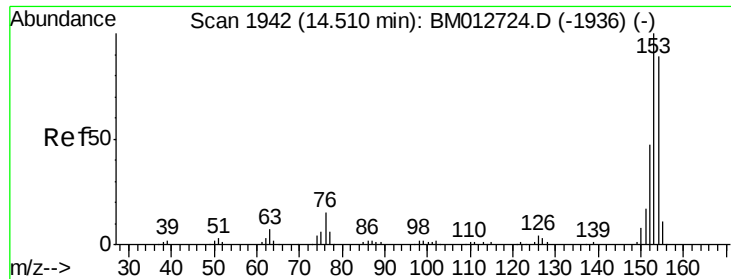


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#49

Acenaphthene

Concen: 3.91 ng/ul

RT: 14.52 min Scan# 1943

Delta R.T. 0.01 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

Instrument :

BNA\_M

ClientSampleId :

B-9(0-1) 101617

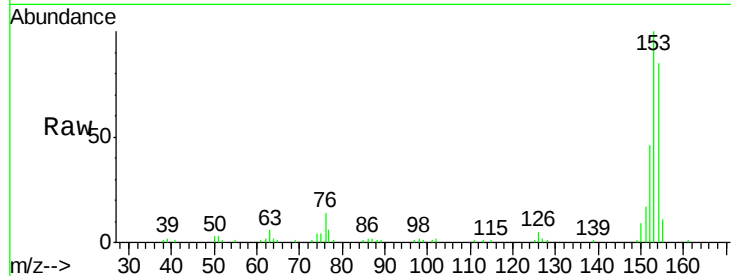
Tot Ion:153 Resp: 78762

Ion Ratio Lower Upper

153 100

152 45.5 38.3 57.5

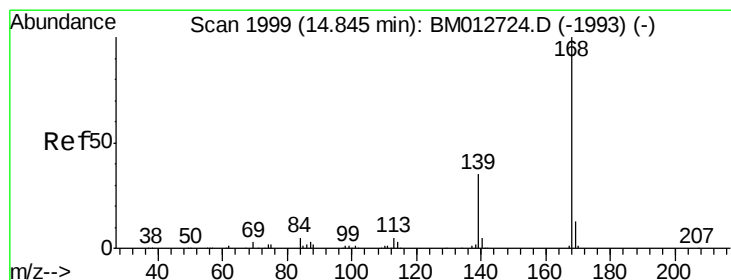
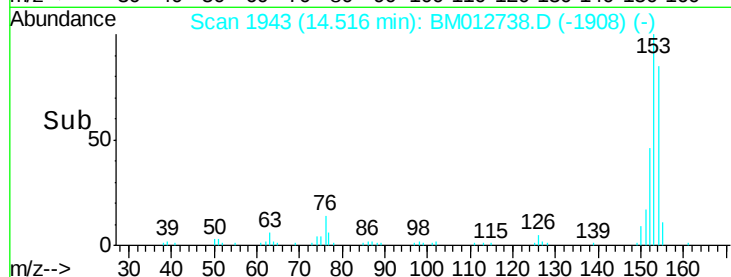
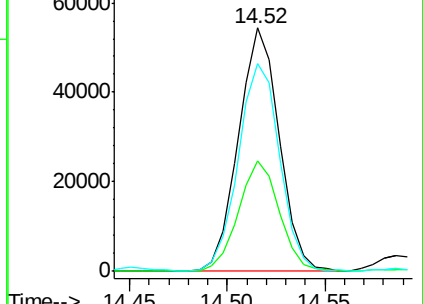
154 85.2 71.8 107.8



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



#53

Dibenzofuran

Concen: 2.12 ng/ul

RT: 14.85 min Scan# 2000

Delta R.T. 0.01 min

Lab File: BM012738.D

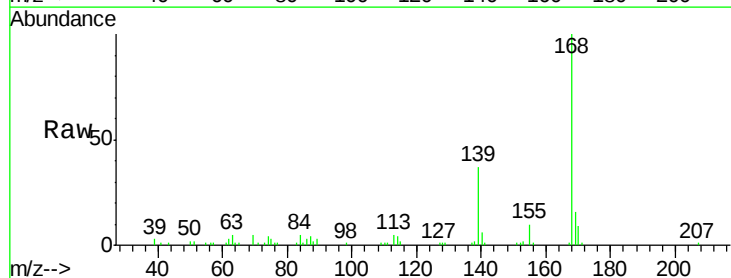
Acq: 05 Nov 2017 09:37

Tgt Ion:168 Resp: 62220

Ion Ratio Lower Upper

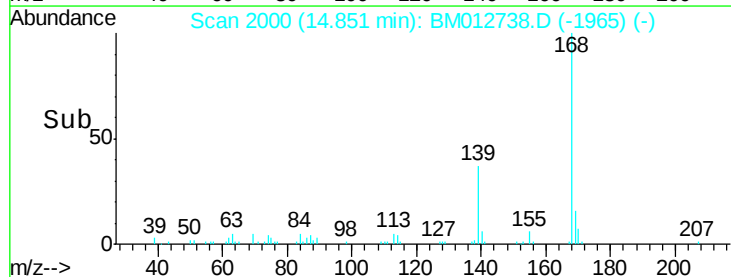
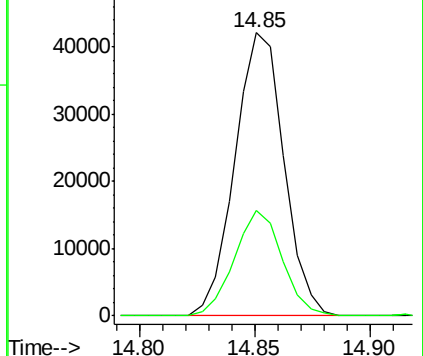
168 100

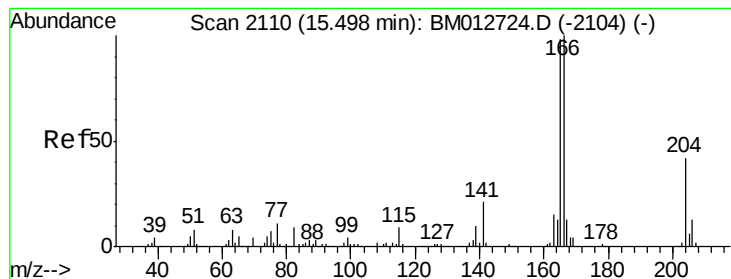
139 37.3 32.2 48.2



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E





#58

Fluorene

Concen: 3.25 ng/ul

RT: 15.50 min Scan# 2111

Delta R.T. 0.01 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

Instrument :

BNA\_M

ClientSampleId :

B-9(0-1) 101617

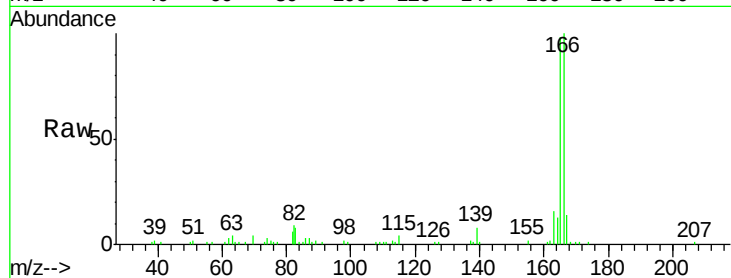
Tot Ion:166 Resp: 79306

Ion Ratio Lower Upper

166 100

165 97.7 78.5 117.7

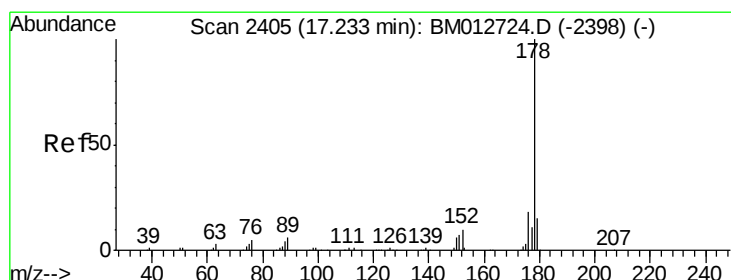
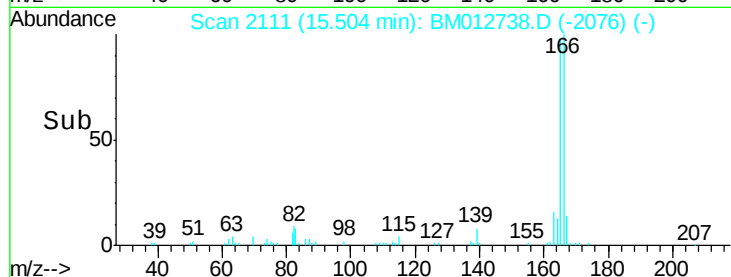
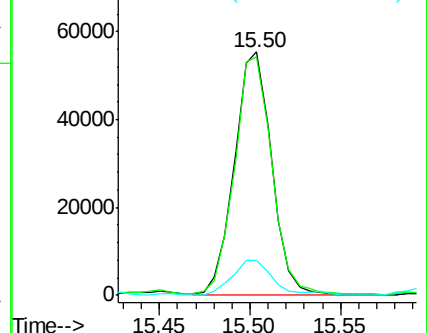
167 14.5 10.7 16.1



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



#69

Phenanthrene

Concen: 41.52 ng/ul

RT: 17.24 min Scan# 2407

Delta R.T. 0.01 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

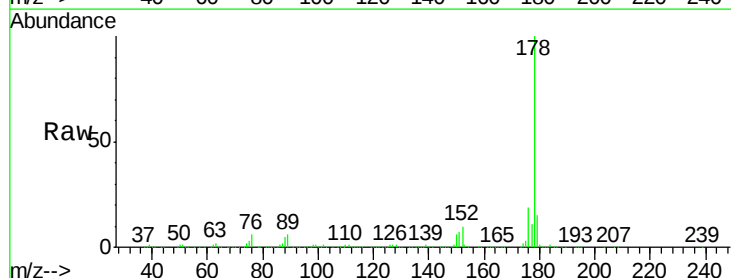
Tgt Ion:178 Resp: 1327865

Ion Ratio Lower Upper

178 100

179 15.1 12.2 18.4

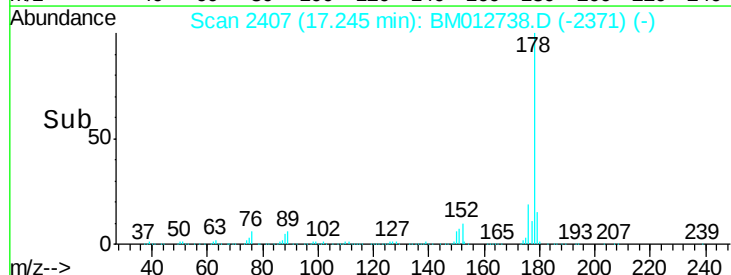
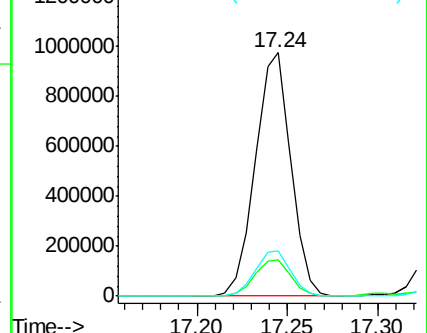
176 18.5 15.6 23.4

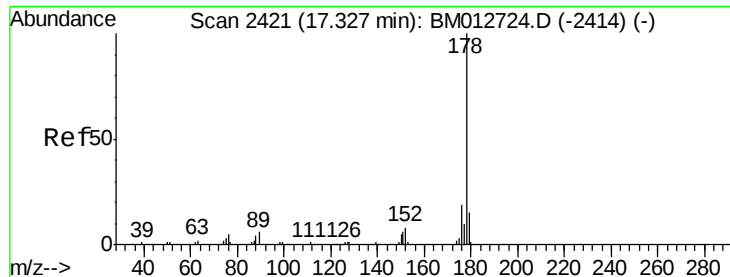


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E

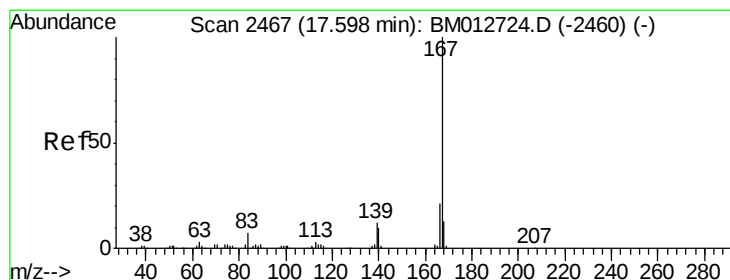
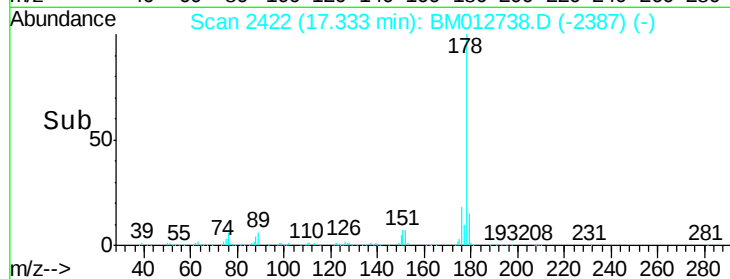
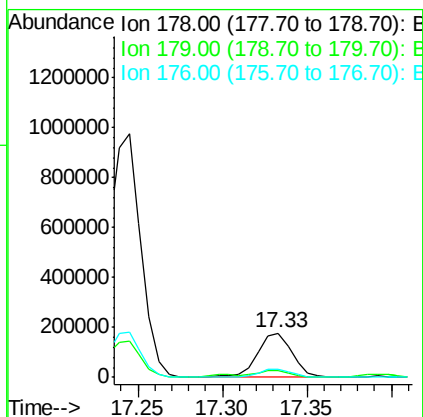
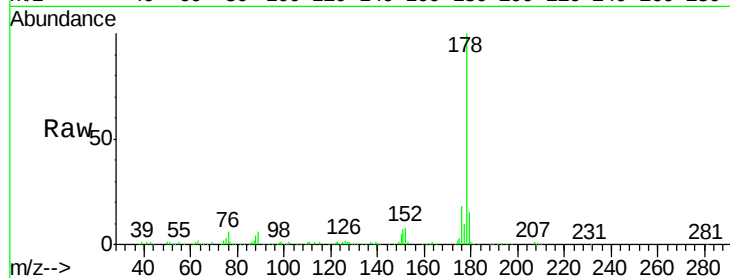




#71  
 Anthracene  
 Concen: 7.51 ng/ul  
 RT: 17.33 min Scan# 2422  
 Delta R.T. 0.01 min  
 Lab File: BM012738.D  
 Acq: 05 Nov 2017 09:37

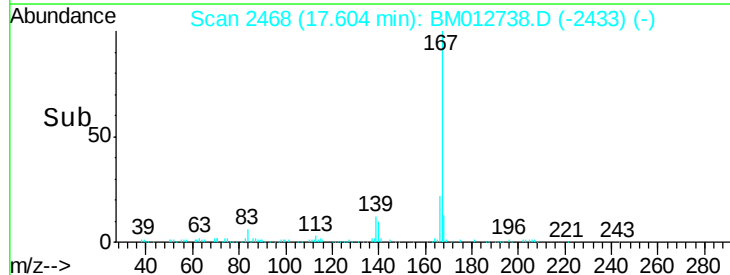
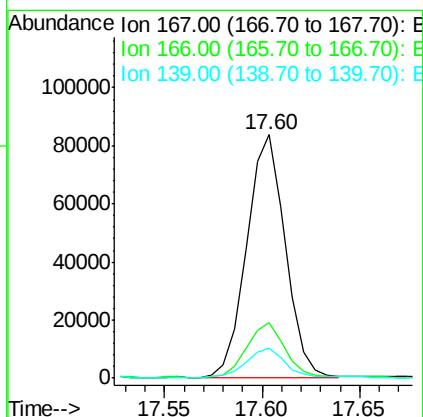
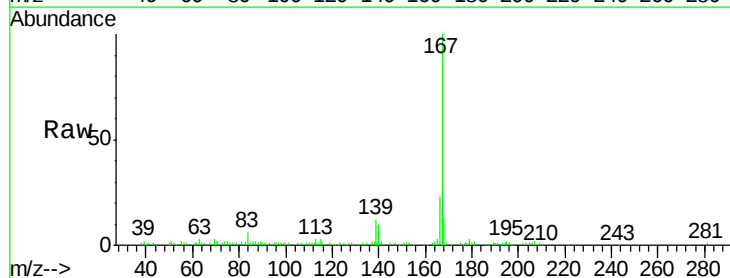
Instrument :  
 BNA\_M  
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 B-9(0-1) 101617

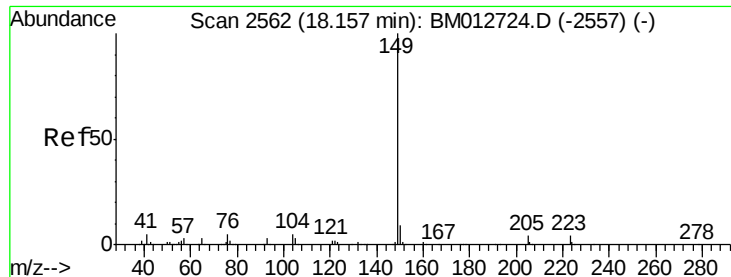
Tot Ion:178 Resp: 249178  
 Ion Ratio Lower Upper  
 178 100  
 179 15.4 12.1 18.1  
 176 18.5 14.8 22.2



#74  
 Carbazole  
 Concen: 4.10 ng/ul  
 RT: 17.60 min Scan# 2468  
 Delta R.T. 0.01 min  
 Lab File: BM012738.D  
 Acq: 05 Nov 2017 09:37

Tgt Ion:167 Resp: 113341  
 Ion Ratio Lower Upper  
 167 100  
 166 22.8 17.0 25.6  
 139 12.1 11.0 16.4

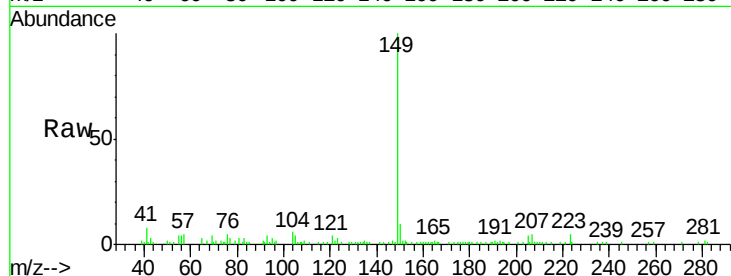




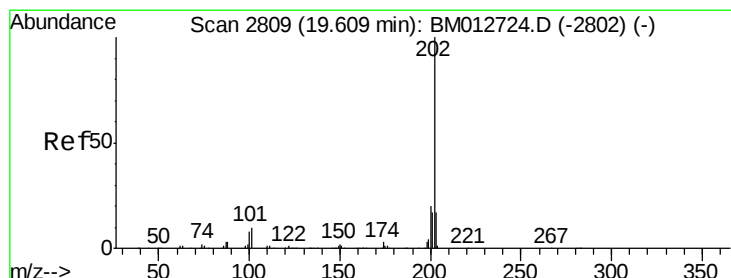
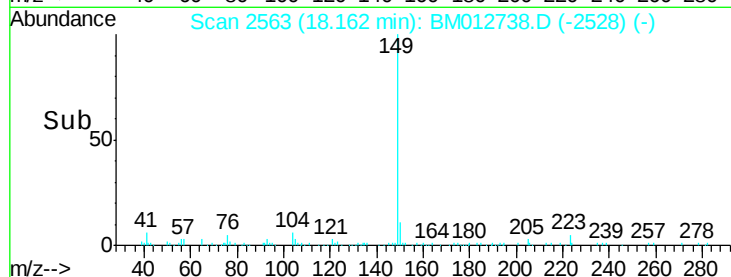
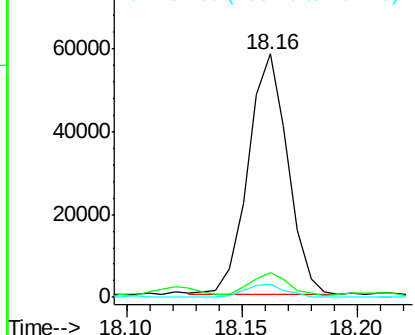
#75  
Di-n-butylphthalate  
Concen: 2.13 ng/ul  
RT: 18.16 min Scan# 2563  
Delta R.T. 0.01 min  
Lab File: BM012738.D  
Acq: 05 Nov 2017 09:37

Instrument :  
BNA\_M  
ClientSampleId :  
B-9(0-1) 101617

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 149     | 100  |       |       |       |
| 150     | 10.4 | 7.4   | 11.0  |       |
| 104     | 5.5  | 4.0   | 6.0   |       |

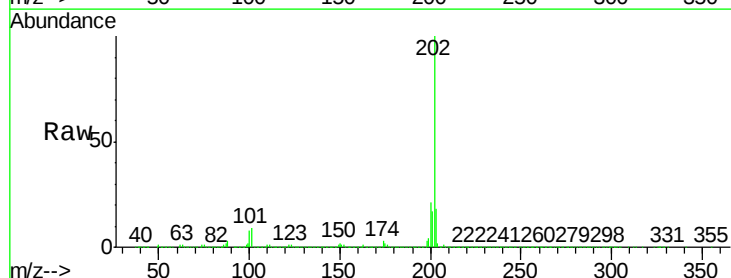


Abundance Ion 149.00 (148.70 to 149.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 104.00 (103.70 to 104.70): E

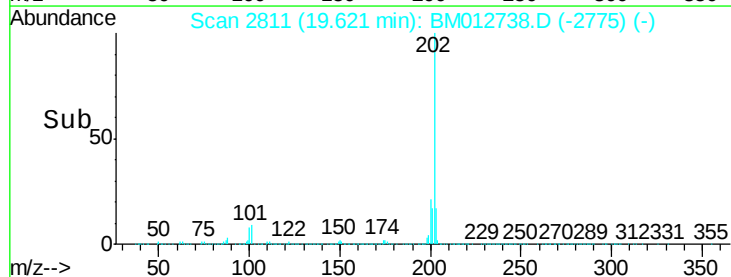
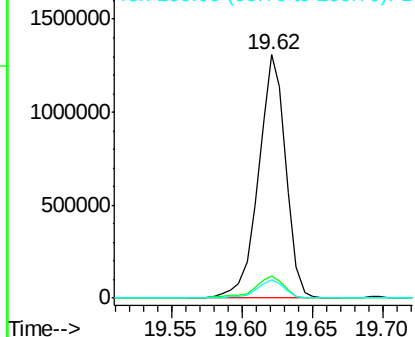


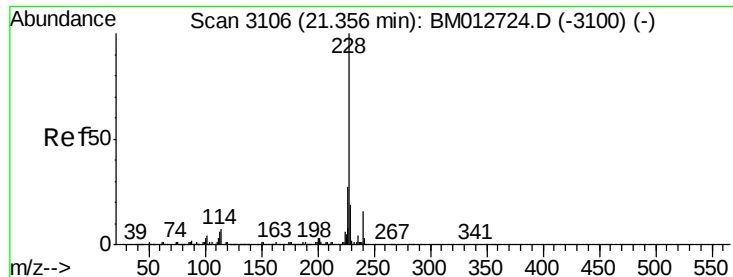
#79  
Pyrene  
Concen: 49.81 ng/ul  
RT: 19.62 min Scan# 2811  
Delta R.T. 0.01 min  
Lab File: BM012738.D  
Acq: 05 Nov 2017 09:37

| Tgt Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 202     | 100 |       |       |       |
| 101     | 9.2 | 10.2  | 15.2# |       |
| 100     | 7.7 | 8.5   | 12.7# |       |



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





#82

Benzo(a)anthracene

Concen: 25.72 ng/ul

RT: 21.36 min Scan# 3107

Delta R.T. 0.01 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

Instrument :

BNA\_M

ClientSampleId :

B-9(0-1) 101617

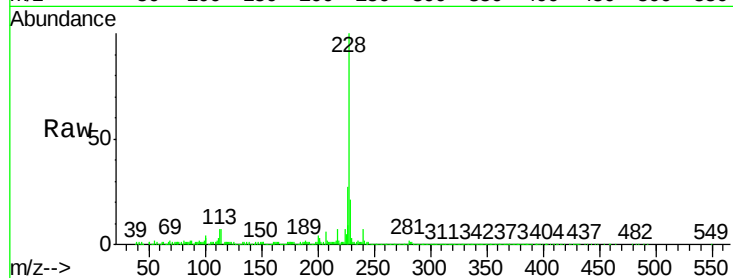
Tot Ion:228 Resp: 930881

Ion Ratio Lower Upper

228 100

229 20.9 15.7 23.5

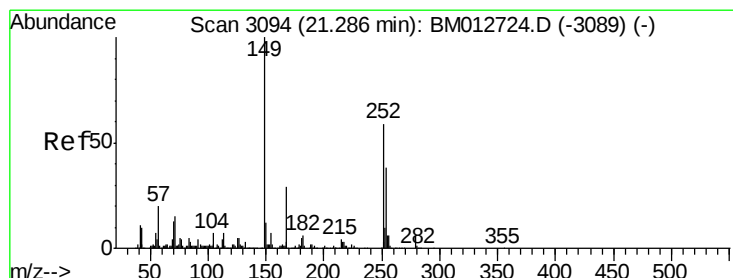
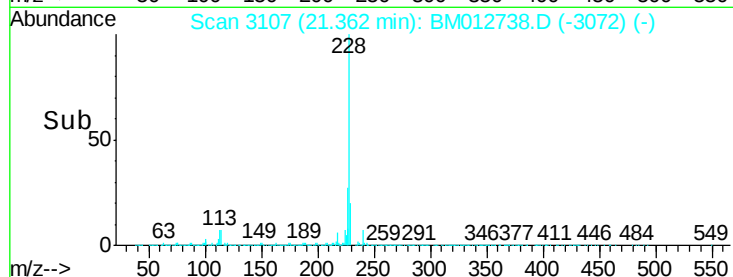
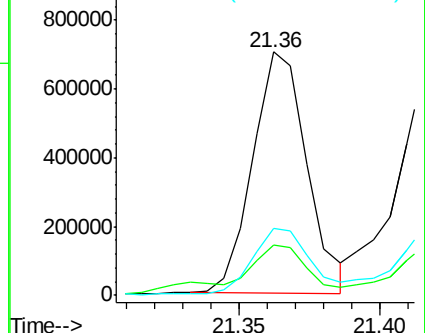
226 27.3 21.8 32.6



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



#83

Bis(2-ethylhexyl)phthalate

Concen: 7.33 ng/ul

RT: 21.29 min Scan# 3094

Delta R.T. -0.00 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

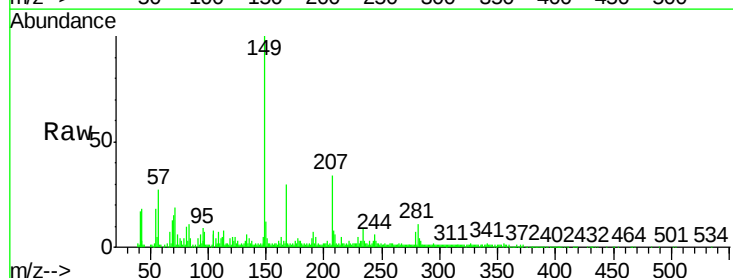
Tgt Ion:149 Resp: 138980

Ion Ratio Lower Upper

149 100

167 29.9 21.6 32.4

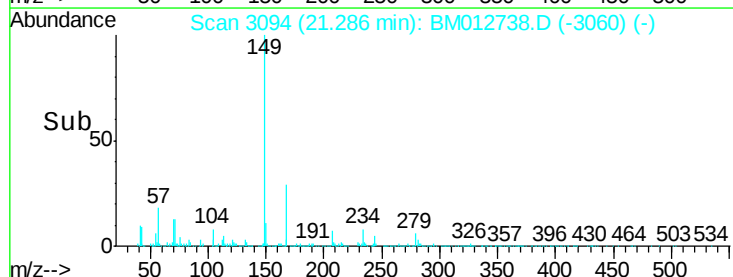
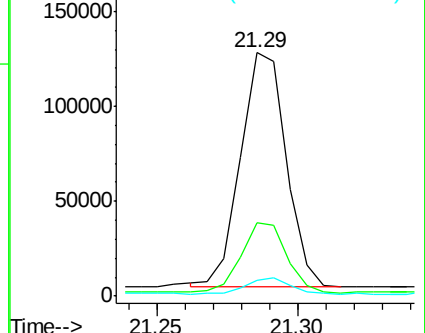
279 6.5 3.0 4.4#

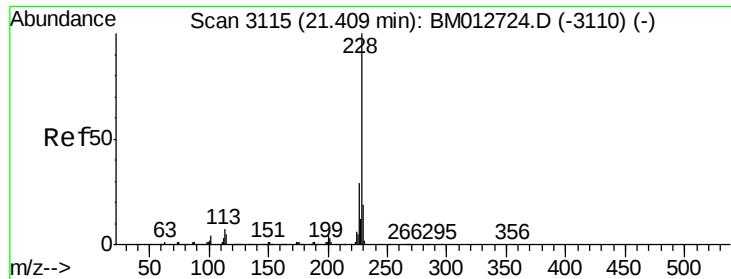


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E





#84

Chrysene

Concen: 27.89 ng/ul

RT: 21.42 min Scan# 3116

Delta R.T. 0.01 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

Instrument :

BNA\_M

ClientSampleId :

B-9(0-1) 101617

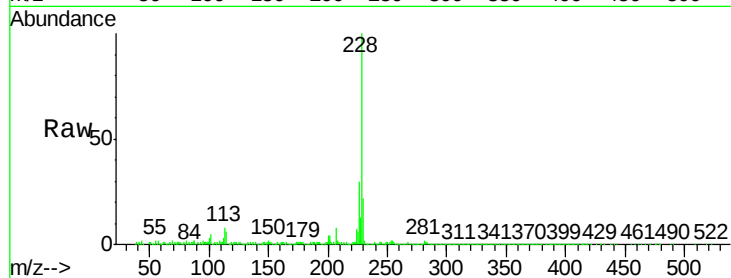
Tot Ion:228 Resp: 914955

Ion Ratio Lower Upper

228 100

226 29.7 24.0 36.0

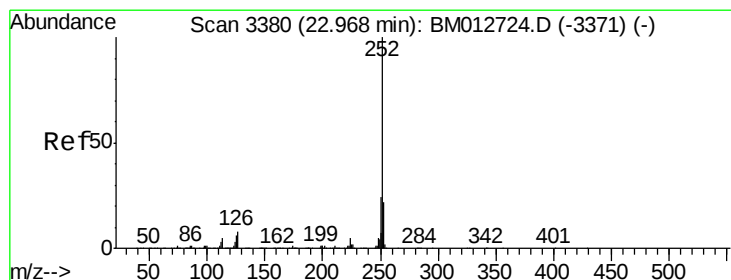
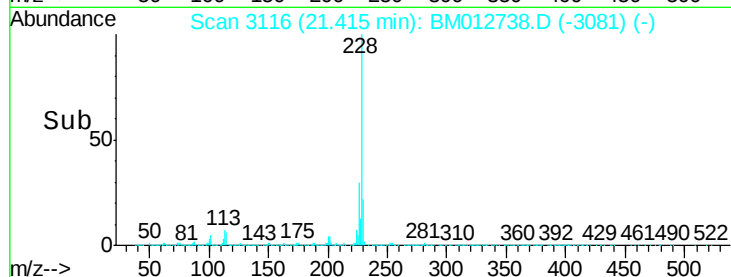
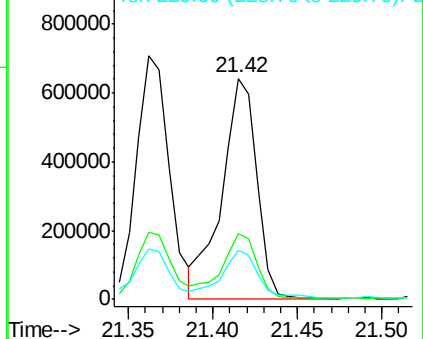
229 22.3 15.6 23.4



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



#87

Benzo(b)fluoranthene

Concen: 32.01 ng/ul

RT: 22.99 min Scan# 3383

Delta R.T. 0.02 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

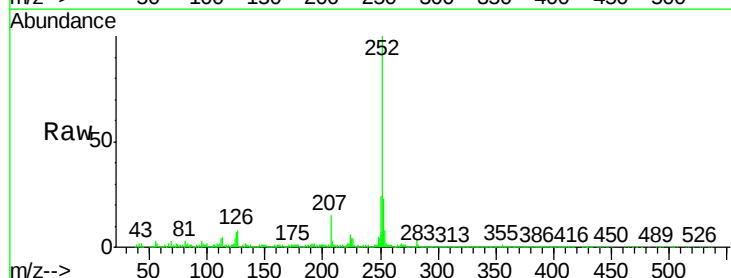
Tgt Ion:252 Resp: 1346594

Ion Ratio Lower Upper

252 100

253 22.8 17.5 26.3

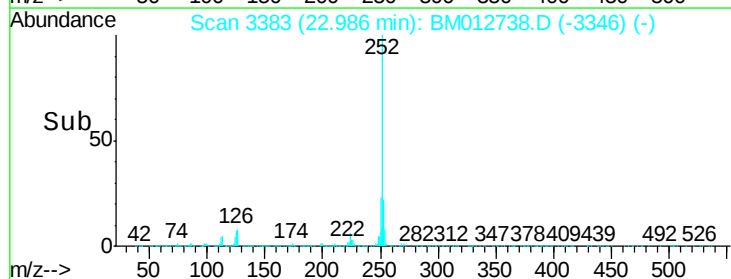
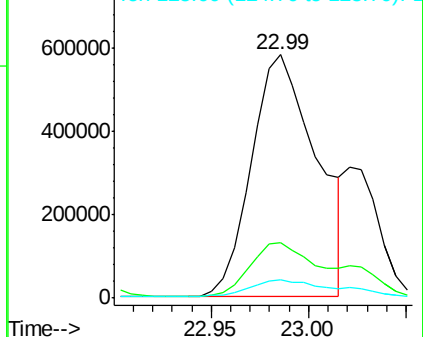
125 7.3 8.5 12.7#

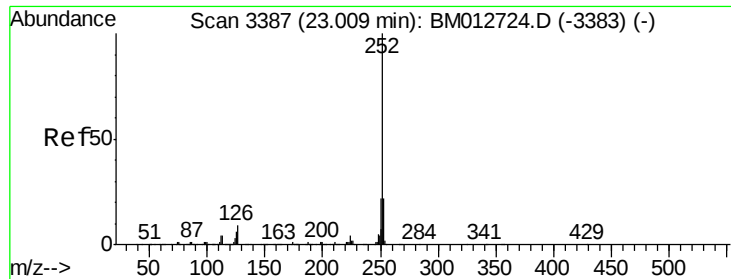


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#88

Benzo(k)fluoranthene

Concen: 33.67 ng/ul

RT: 22.99 min Scan# 3383

Delta R.T. -0.02 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

Instrument :

BNA\_M

ClientSampleId :

B-9(0-1) 101617

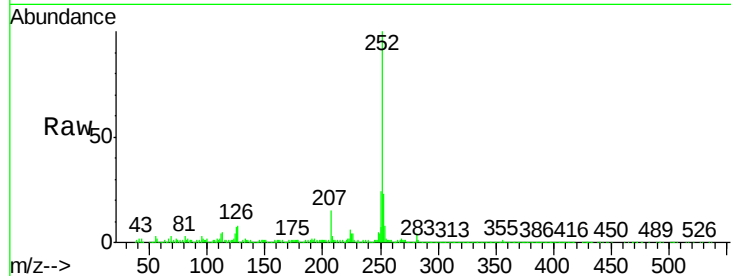
Tot Ion:252 Resp: 1346594

Ion Ratio Lower Upper

252 100

253 22.8 17.3 25.9

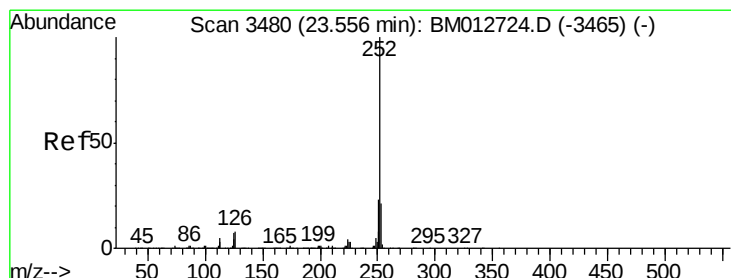
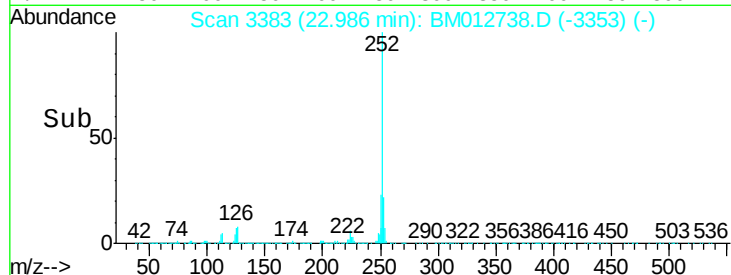
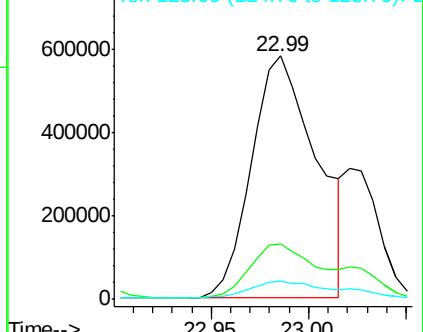
125 7.3 8.2 12.2#



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



#90

Benzo(a)pyrene

Concen: 16.54 ng/ul

RT: 23.47 min Scan# 3466

Delta R.T. -0.08 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

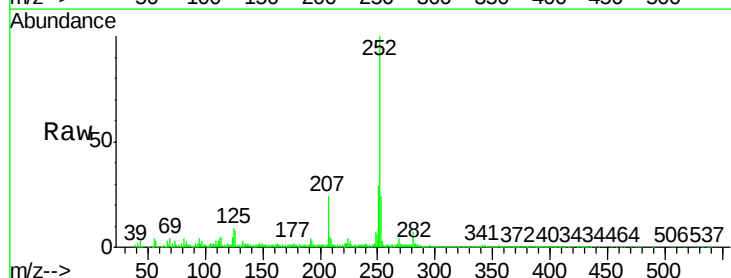
Tgt Ion:252 Resp: 662025

Ion Ratio Lower Upper

252 100

253 23.6 17.2 25.8

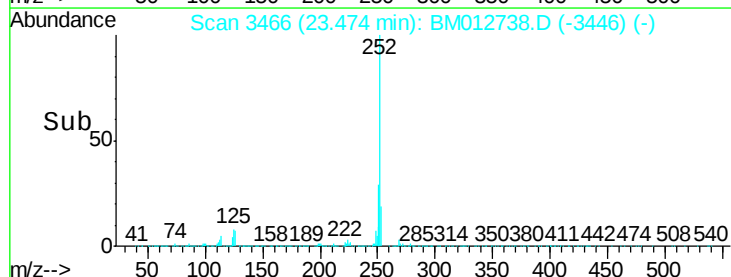
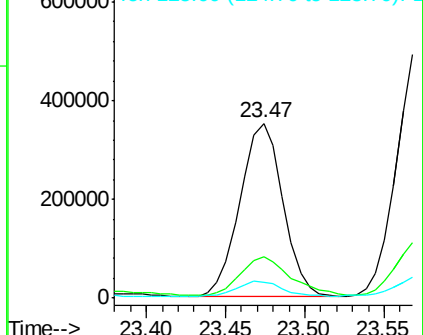
125 9.3 9.0 13.6

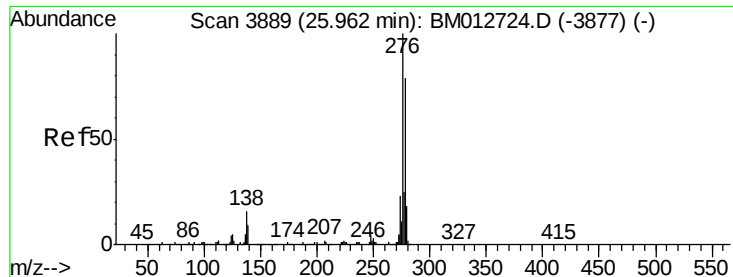


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#91

Indeno(1,2,3-cd)pyrene

Concen: 15.19 ng/ul

RT: 25.99 min Scan# 3894

Delta R.T. 0.03 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

Instrument :

BNA\_M

ClientSampleId :

B-9(0-1) 101617

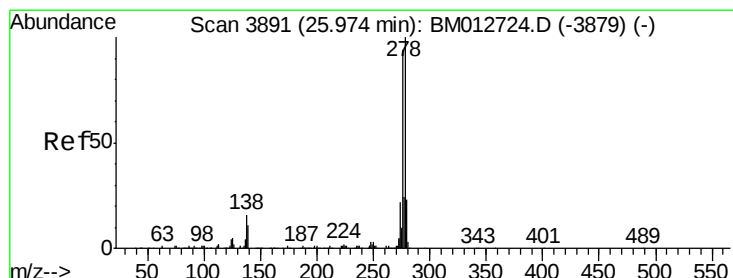
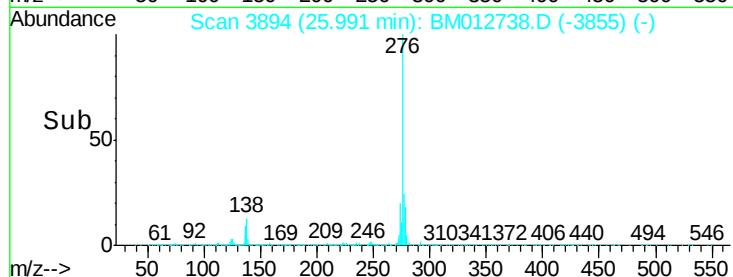
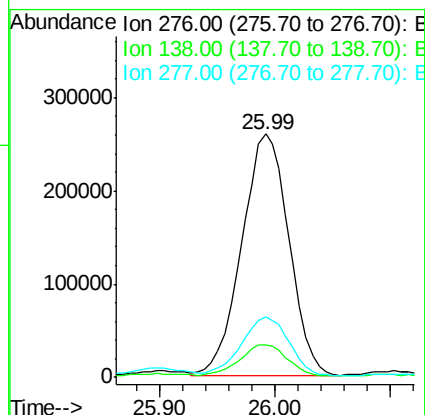
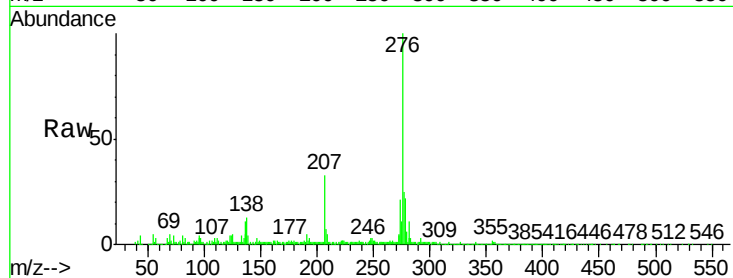
Tot Ion:276 Resp: 732829

Ion Ratio Lower Upper

276 100

138 13.4 22.3 33.5#

277 24.6 20.2 30.2



#92

Dibenzo(a,h)anthracene

Concen: 4.32 ng/ul

RT: 25.99 min Scan# 3894

Delta R.T. 0.02 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

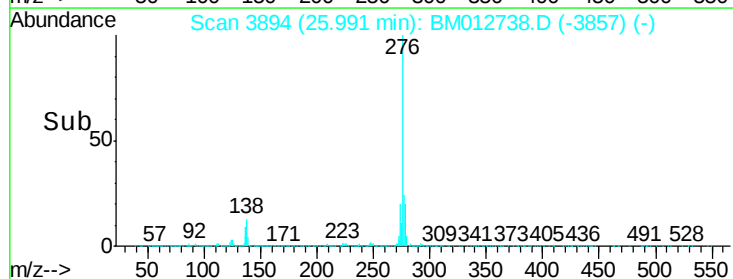
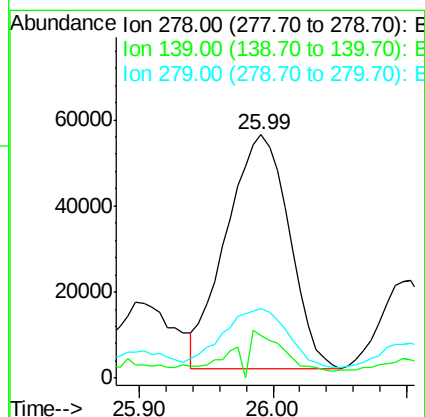
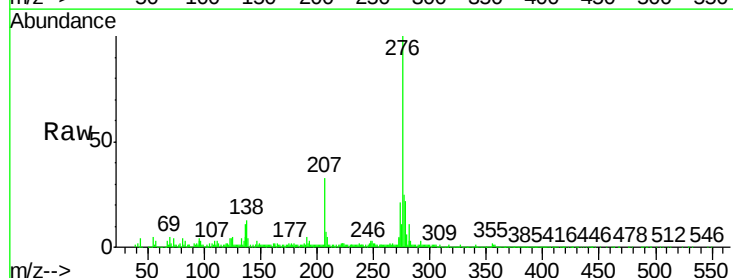
Tgt Ion:278 Resp: 176548

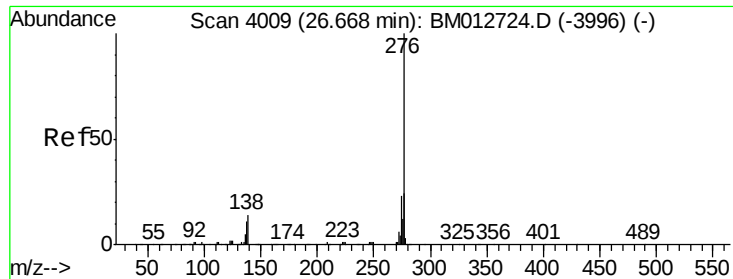
Ion Ratio Lower Upper

278 100

139 17.4 13.9 20.9

279 28.6 19.0 28.4#





#93

Benzo(a,h,i)perylene

Concen: 17.05 ng/ul

RT: 26.71 min Scan# 4016

Delta R.T. 0.04 min

Lab File: BM012738.D

Acq: 05 Nov 2017 09:37

Instrument :

BNA\_M

ClientSampleId :

B-9(0-1) 101617

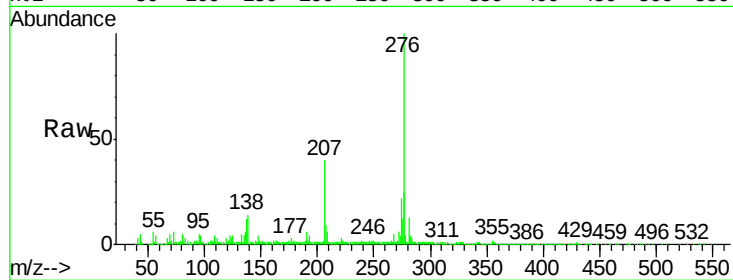
Tot Ion:276 Resp: 677868

Ion Ratio Lower Upper

276 100

138 14.2 18.9 28.3#

277 24.6 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

