

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM082115\  
 Data File : BM002545.D  
 Acq On : 22 Aug 2015 05:56  
 Operator : UM/IZ  
 Sample : G3372-24  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9DX4

Quant Time: Aug 22 07:37:46 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM081415MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Aug 21 23:16:58 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.82  | 152  | 122960   | 20.00 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 11.69 | 136  | 574203   | 20.00 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 15.40 | 164  | 306923   | 20.00 | ng/ul | 0.00     |
| 12) Phenanthrene-d10      | 18.12 | 188  | 632573   | 20.00 | ng/ul | 0.00     |
| 17) Chrysene-d12          | 22.20 | 240  | 546957   | 20.00 | ng/ul | 0.00     |
| 22) Perylene-d12          | 24.84 | 264  | 451884   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                        |       |     |        |       |       |      |
|------------------------|-------|-----|--------|-------|-------|------|
| 7) Acenaphthylene-d8   | 15.11 | 160 | 334035 | 10.64 | ng/ul | 0.00 |
| 10) Fluorene-d10       | 16.37 | 176 | 224582 | 10.19 | ng/ul | 0.00 |
| 14) Anthracene-d10     | 18.21 | 188 | 322908 | 10.58 | ng/ul | 0.00 |
| 18) Pyrene-d10         | 20.43 | 212 | 301144 | 12.42 | ng/ul | 0.00 |
| 25) Benzo(a)pyrene-d12 | 24.67 | 264 | 191905 | 8.08  | ng/ul | 0.00 |

## Target Compounds

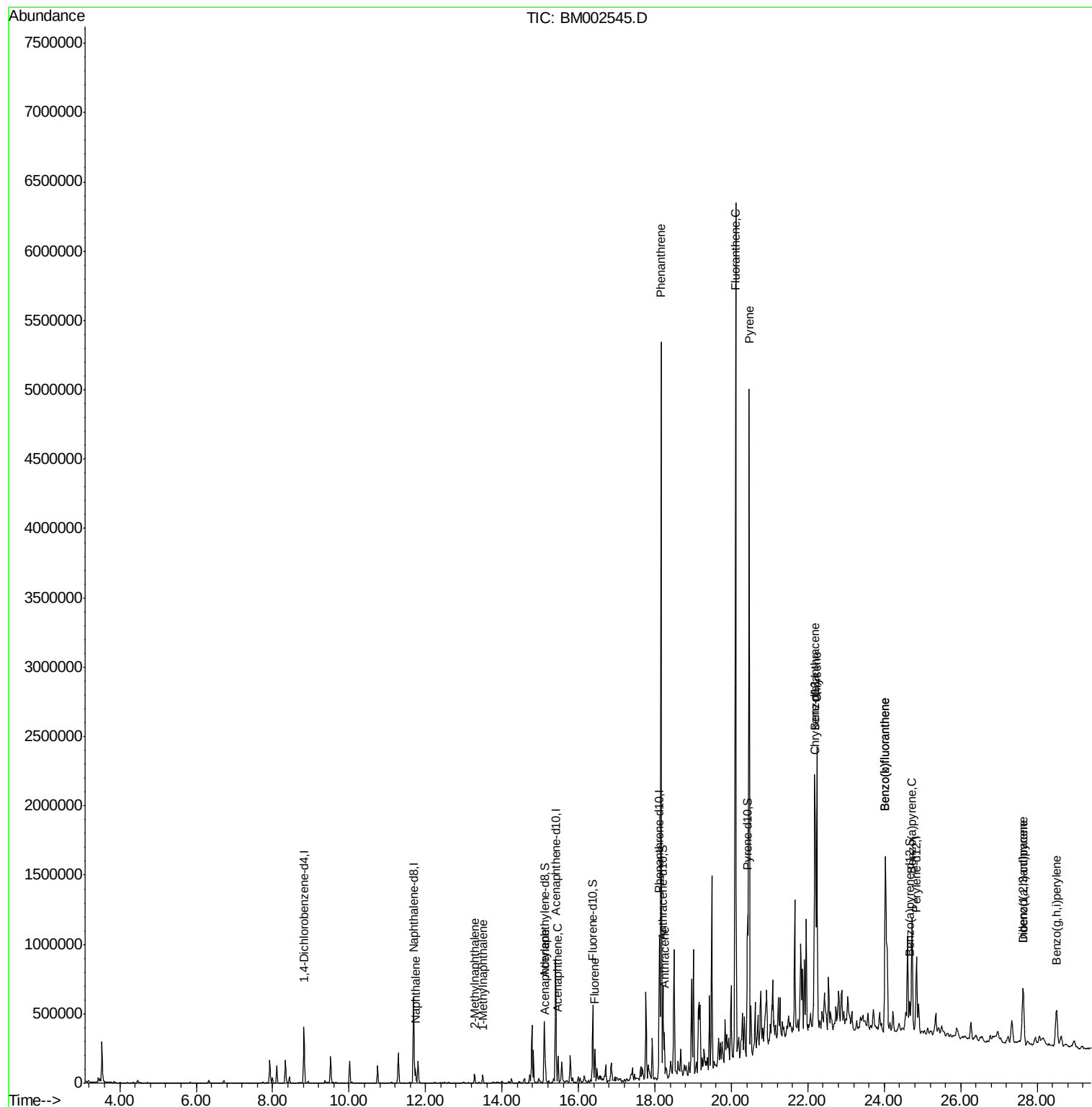
|                            |       |     |         |       |        | Qvalue |
|----------------------------|-------|-----|---------|-------|--------|--------|
| 3) Naphthalene             | 11.74 | 128 | 99044   | 3.38  | ng/ul  | 99     |
| 4) 2-Methylnaphthalene     | 13.28 | 142 | 35659   | 1.62  | ng/ul  | 100    |
| 5) 1-Methylnaphthalene     | 13.50 | 142 | 28764   | 1.32  | ng/ul  | 99     |
| 8) Acenaphthylene          | 15.13 | 152 | 112974  | 3.44  | ng/ul  | 99     |
| 9) Acenaphthene            | 15.47 | 153 | 79211   | 3.66  | ng/ul  | 99     |
| 11) Fluorene               | 16.43 | 166 | 106860  | 4.31  | ng/ul  | 99     |
| 13) Phenanthrene           | 18.16 | 178 | 3433401 | 93.99 | ng/ul  | 99     |
| 15) Anthracene             | 18.25 | 178 | 213508  | 5.77  | ng/ul  | 99     |
| 16) Fluoranthene           | 20.11 | 202 | 4075368 | 98.55 | ng/ul  | 95     |
| 19) Pyrene                 | 20.47 | 202 | 3038586 | 94.83 | ng/ul  | 98     |
| 20) Benzo(a)anthracene     | 22.18 | 228 | 804189  | 24.59 | ng/ul  | 99     |
| 21) Chrysene               | 22.24 | 228 | 1267209 | 41.42 | ng/ul  | 98     |
| 23) Benzo(b)fluoranthene   | 24.03 | 252 | 1187245 | 43.46 | ng/ul  | 97     |
| 24) Benzo(k)fluoranthene   | 24.03 | 252 | 282052  | 10.89 | ng/ul  | 98     |
| 26) Benzo(a)pyrene         | 24.73 | 252 | 635426  | 24.35 | ng/ul  | 97     |
| 27) Indeno(1,2,3-cd)pyrene | 27.63 | 276 | 449680  | 14.99 | ng/ul  | 94     |
| 28) Dibenzo(a,h)anthracene | 27.63 | 278 | 113695  | 4.53  | ng/ul# | 73     |
| 29) Benzo(g,h,i)perylene   | 28.51 | 276 | 372178  | 14.90 | ng/ul  | 97     |

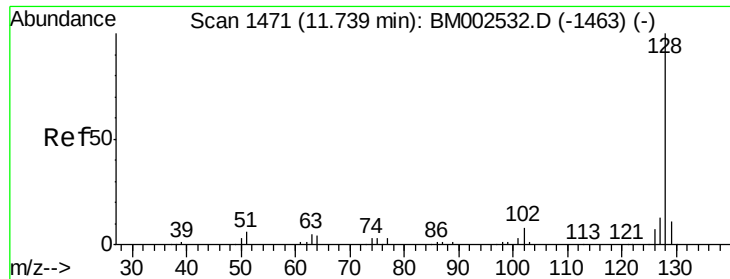
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM082115\  
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ALS Vial : 27 Sample Multiplier: 1

Instrument :  
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D9DX4

Quant Time: Aug 22 07:37:46 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM081415MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Aug 21 23:16:58 2015  
Response via : Initial Calibration





#3

Naphthalene

Concen: 3.38 ng/ul

RT: 11.74 min Scan# 1471

Delta R.T. 0.00 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

Instrument :

BNA\_M

ClientSampleId :

D9DX4

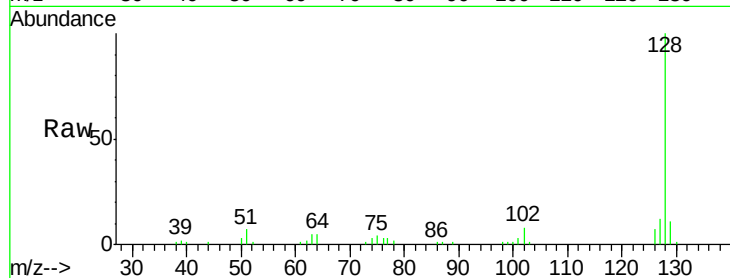
Tgt Ion:128 Resp: 99044

Ion Ratio Lower Upper

128 100

129 10.9 8.6 12.8

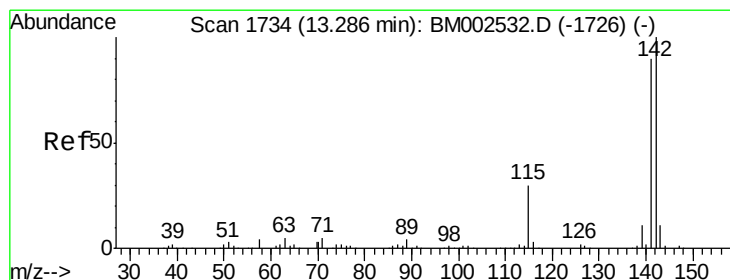
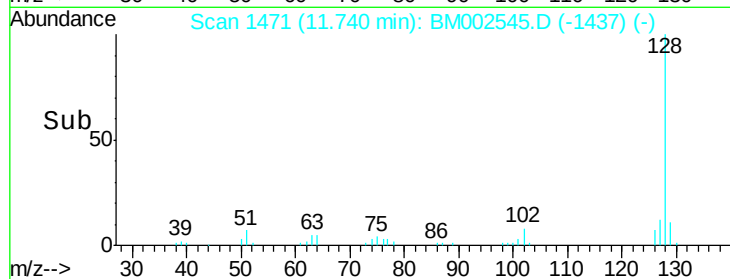
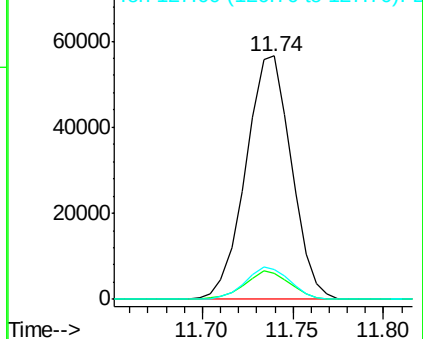
127 12.5 10.4 15.6



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: 1.62 ng/ul

RT: 13.28 min Scan# 1733

Delta R.T. -0.01 min

Lab File: BM002545.D

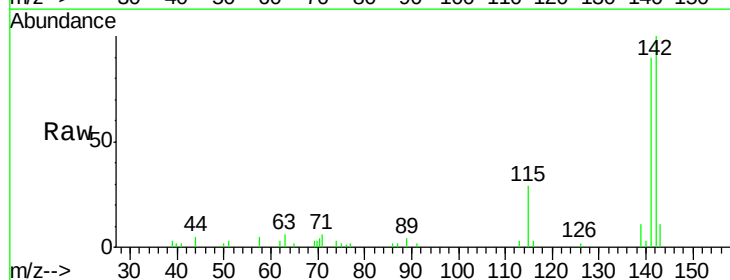
Acq: 22 Aug 2015 05:56

Tgt Ion:142 Resp: 35659

Ion Ratio Lower Upper

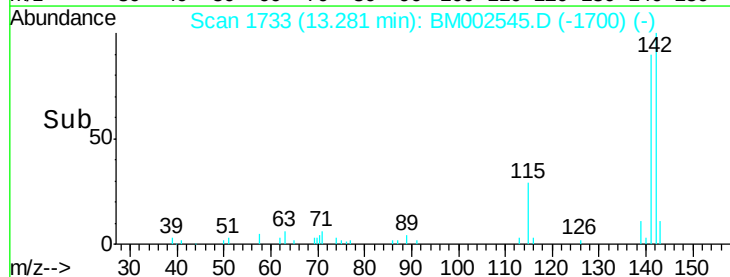
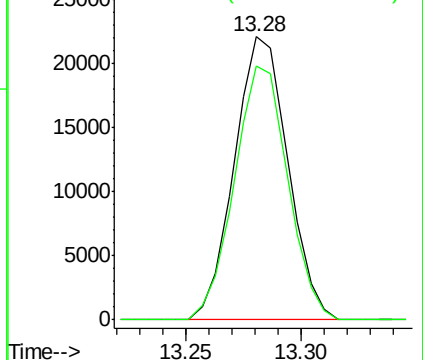
142 100

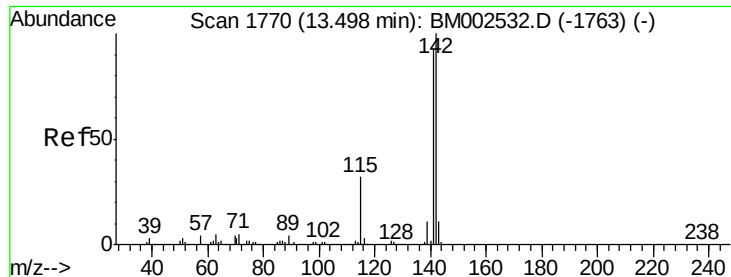
141 89.8 72.2 108.2



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#5

1-Methylnaphthalene

Concen: 1.32 ng/ul

RT: 13.50 min Scan# 1770

Delta R.T. 0.00 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

Instrument :

BNA\_M

ClientSampleId :

D9DX4

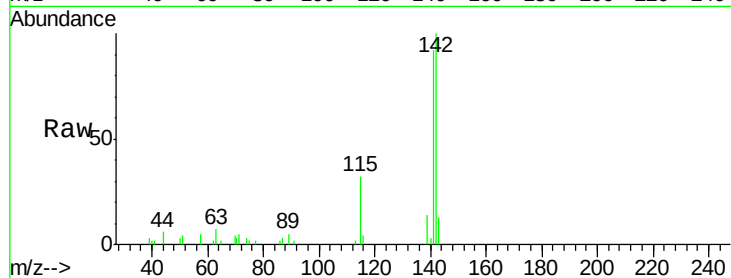
Tgt Ion:142 Resp: 28764

Ion Ratio Lower Upper

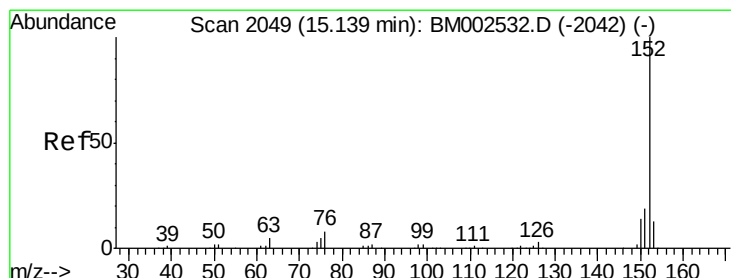
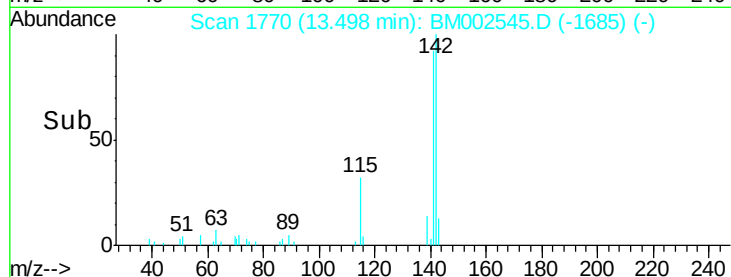
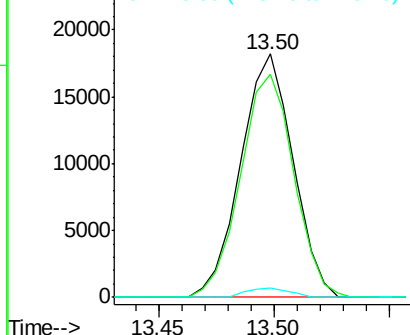
142 100

141 91.8 73.9 110.9

116 3.9 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: 3.44 ng/ul

RT: 15.13 min Scan# 2048

Delta R.T. -0.01 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

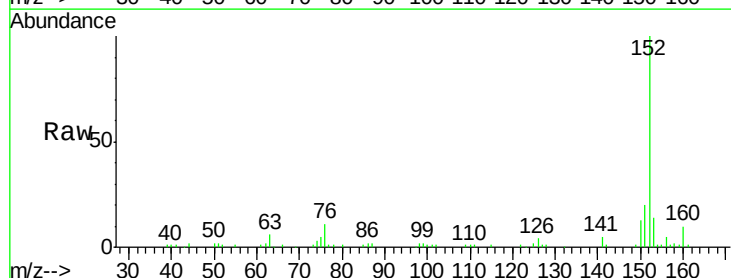
Tgt Ion:152 Resp: 112974

Ion Ratio Lower Upper

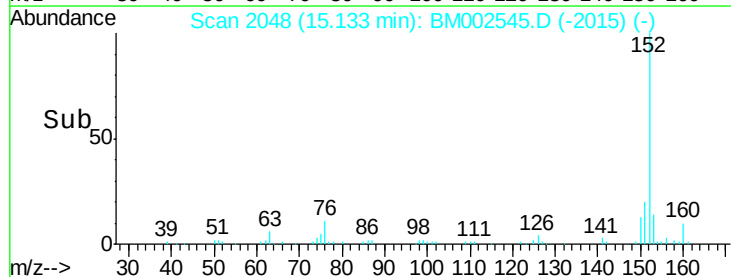
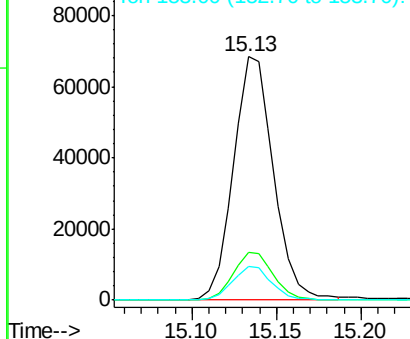
152 100

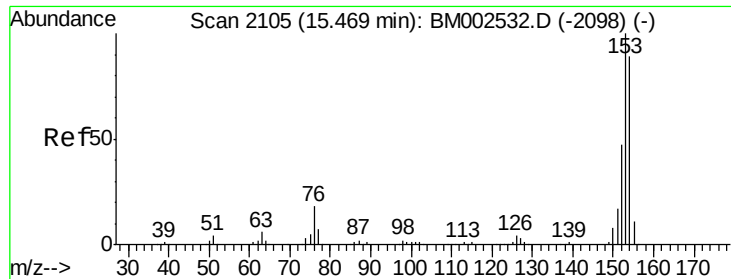
151 19.6 15.7 23.5

153 13.6 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: 3.66 ng/ul

RT: 15.47 min Scan# 2105

Delta R.T. 0.00 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

Instrument :

BNA\_M

ClientSampleId :

D9DX4

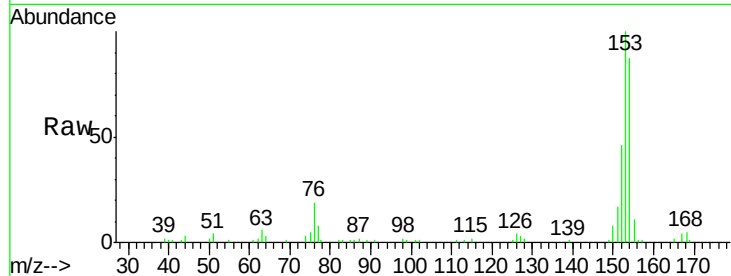
Tgt Ion:153 Resp: 79211

Ion Ratio Lower Upper

153 100

152 45.9 36.9 55.3

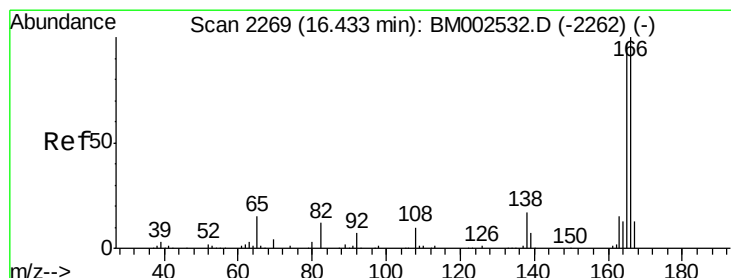
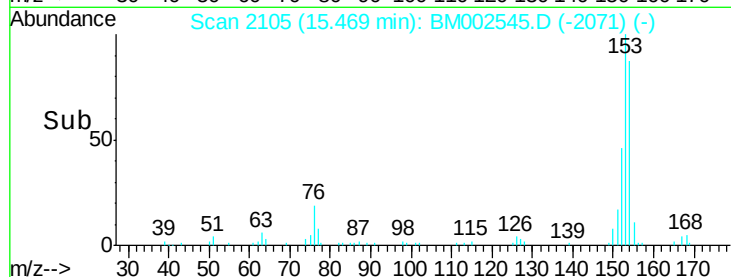
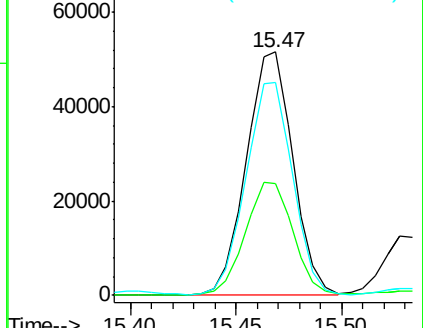
154 87.2 71.3 106.9



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: 4.31 ng/ul

RT: 16.43 min Scan# 2268

Delta R.T. -0.01 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

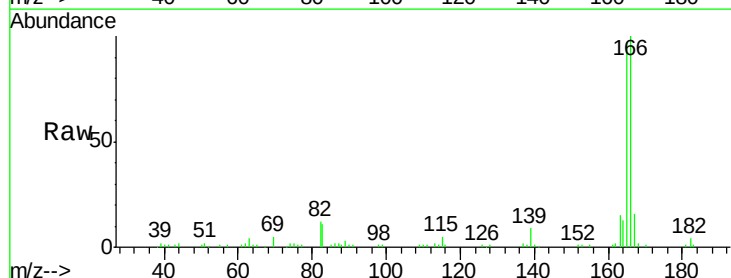
Tgt Ion:166 Resp: 106860

Ion Ratio Lower Upper

166 100

165 97.3 77.6 116.4

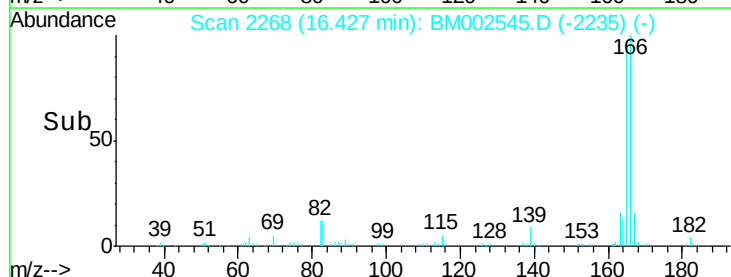
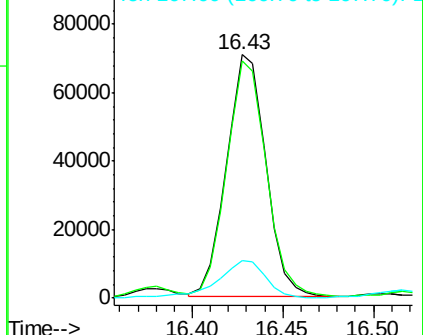
167 15.7 10.7 16.1

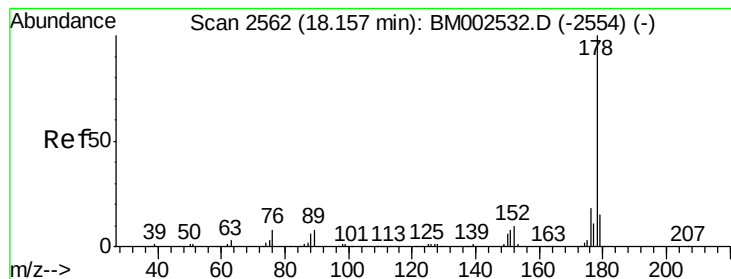


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene

Concen: 93.99 ng/ul

RT: 18.16 min Scan# 2563

Delta R.T. 0.01 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

Instrument :

BNA\_M

ClientSampleId :

D9DX4

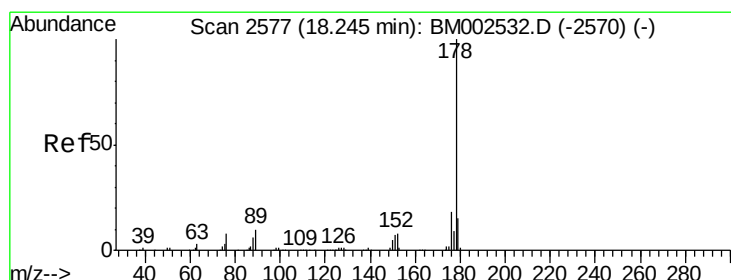
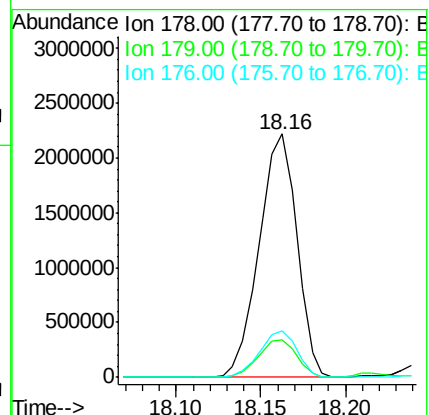
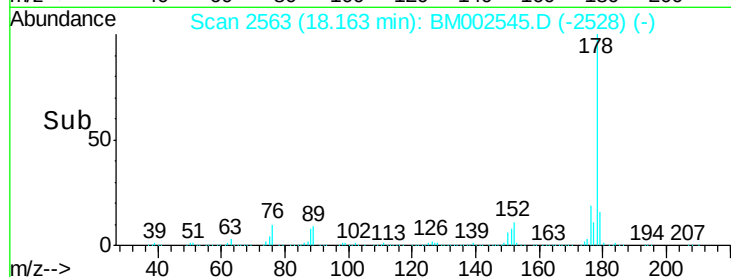
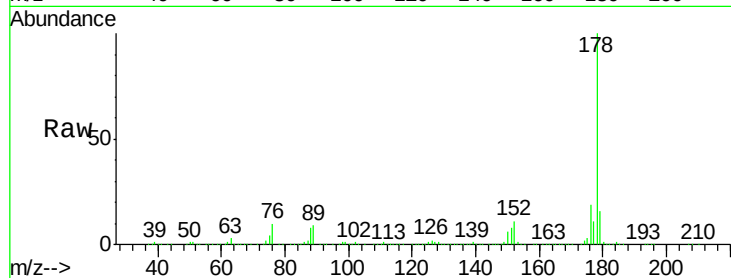
Tgt Ion:178 Resp: 3433401

Ion Ratio Lower Upper

178 100

179 15.7 12.4 18.6

176 19.3 15.1 22.7



#15

Anthracene

Concen: 5.77 ng/ul

RT: 18.25 min Scan# 2577

Delta R.T. 0.00 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

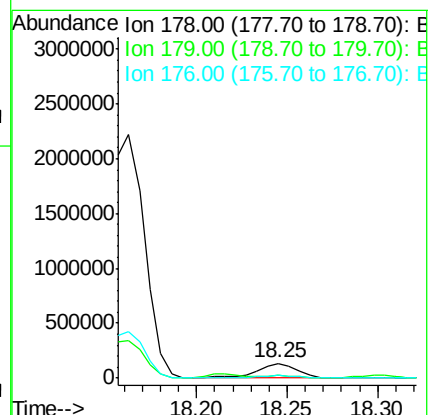
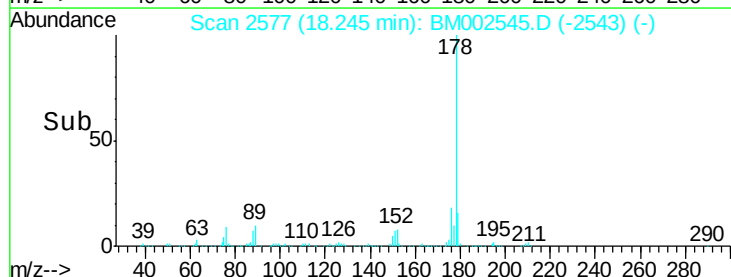
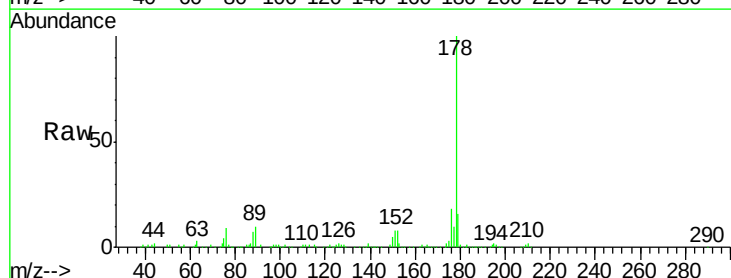
Tgt Ion:178 Resp: 213508

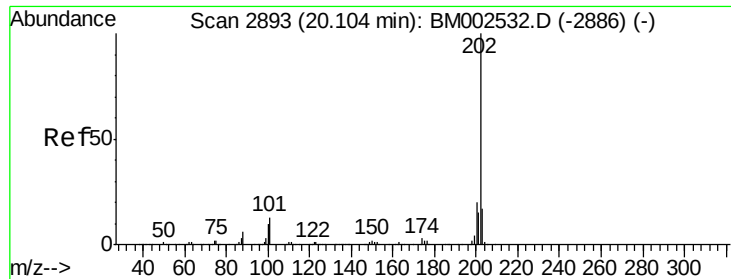
Ion Ratio Lower Upper

178 100

179 16.1 12.6 18.8

176 18.4 14.5 21.7

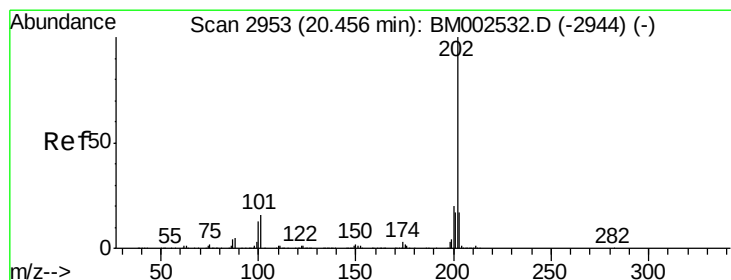
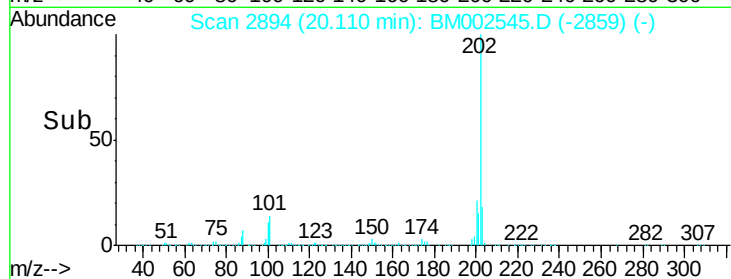
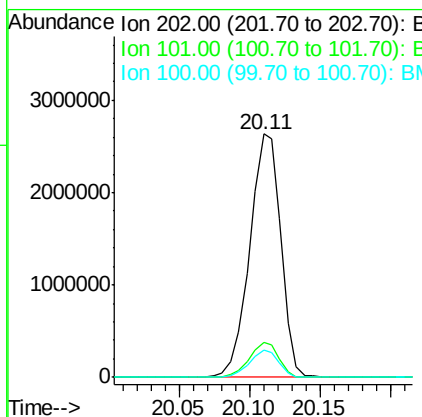
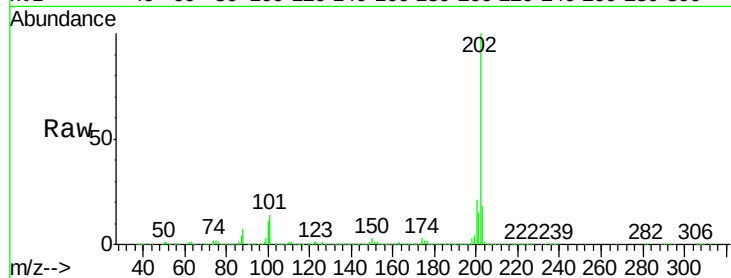




#16  
Fluoranthene  
Concen: 98.55 ng/ul  
RT: 20.11 min Scan# 2894  
Delta R.T. 0.01 min  
Lab File: BM002545.D  
Acq: 22 Aug 2015 05:56

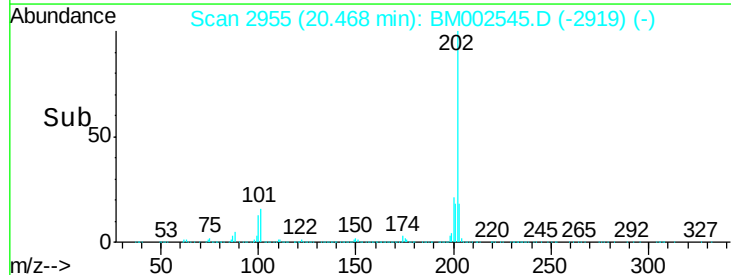
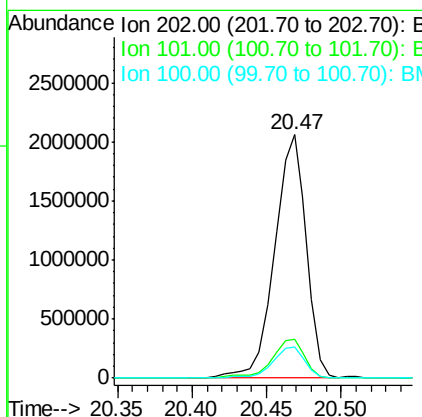
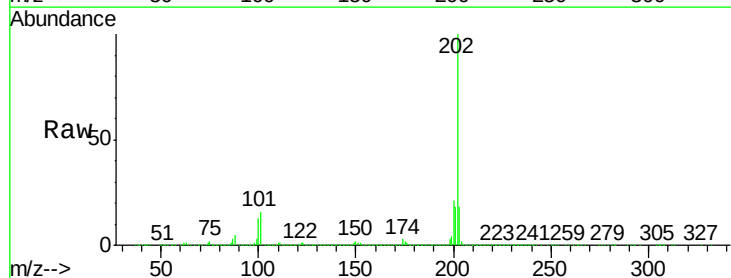
Instrument :  
BNA\_M  
ClientSampleId :  
D9DX4

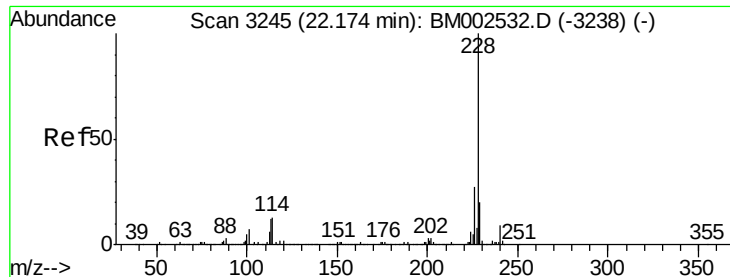
Tgt Ion:202 Resp: 4075368  
Ion Ratio Lower Upper  
202 100  
101 14.5 9.7 14.5  
100 11.0 7.4 11.2



#19  
Pyrene  
Concen: 94.83 ng/ul  
RT: 20.47 min Scan# 2955  
Delta R.T. 0.01 min  
Lab File: BM002545.D  
Acq: 22 Aug 2015 05:56

Tgt Ion:202 Resp: 3038586  
Ion Ratio Lower Upper  
202 100  
101 15.9 12.0 18.0  
100 12.9 9.7 14.5





#20

Benzo(a)anthracene

Concen: 24.59 ng/ul

RT: 22.18 min Scan# 3246

Delta R.T. 0.01 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

Instrument :

BNA\_M

ClientSampleId :

D9DX4

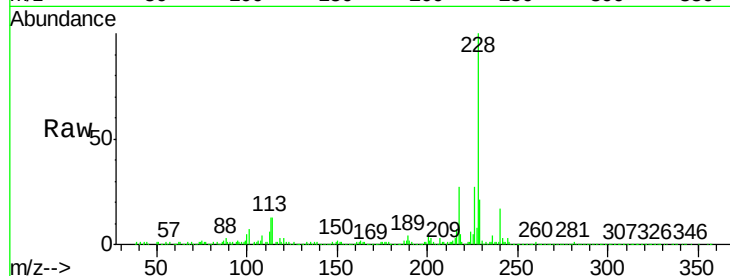
Tgt Ion:228 Resp: 804189

Ion Ratio Lower Upper

228 100

229 20.5 15.8 23.6

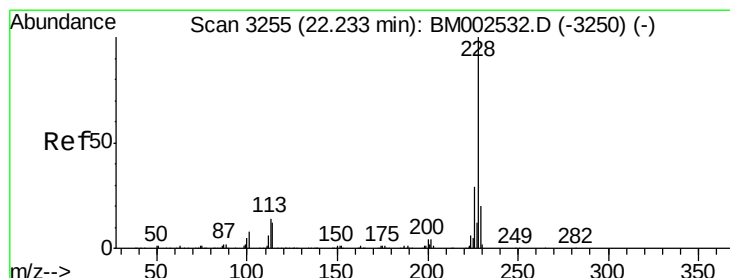
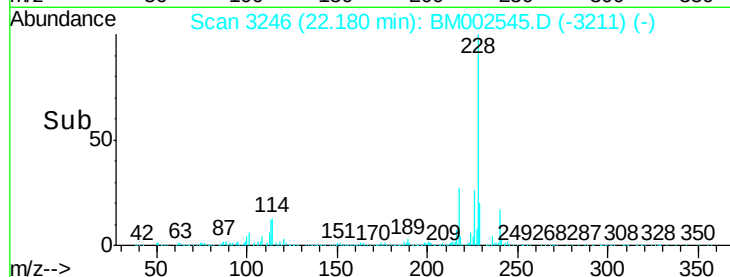
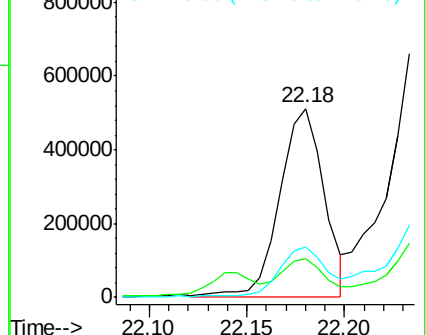
226 26.9 21.1 31.7



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: 41.42 ng/ul

RT: 22.24 min Scan# 3256

Delta R.T. 0.01 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

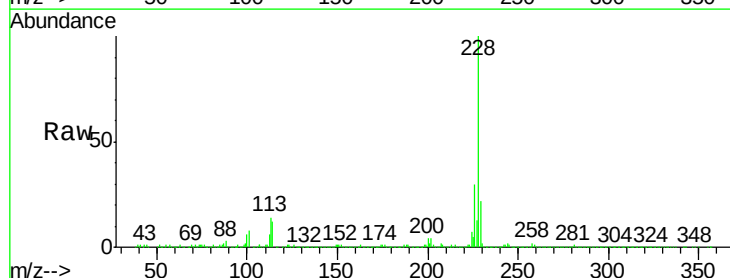
Tgt Ion:228 Resp: 1267209

Ion Ratio Lower Upper

228 100

226 29.6 23.4 35.2

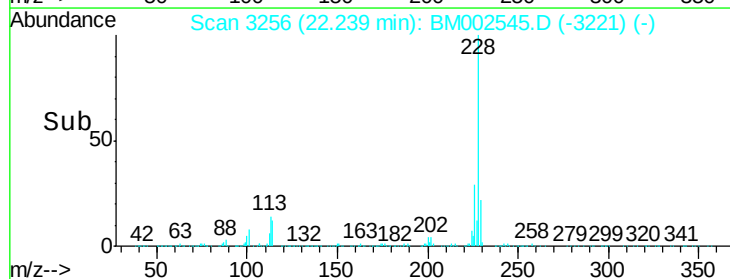
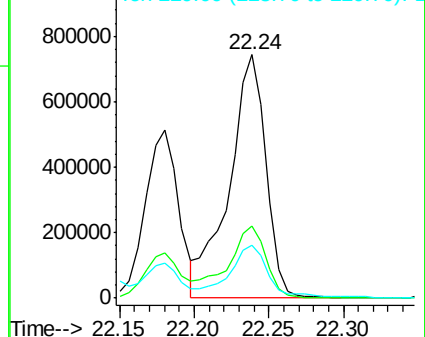
229 21.9 15.7 23.5



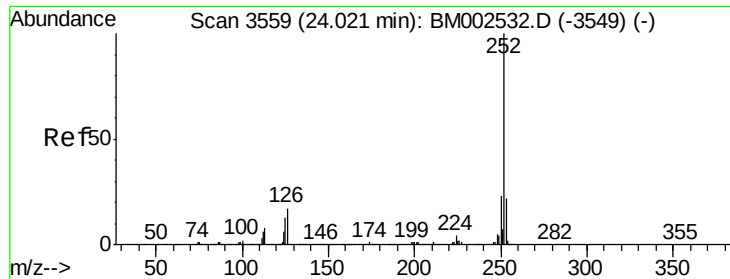
Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



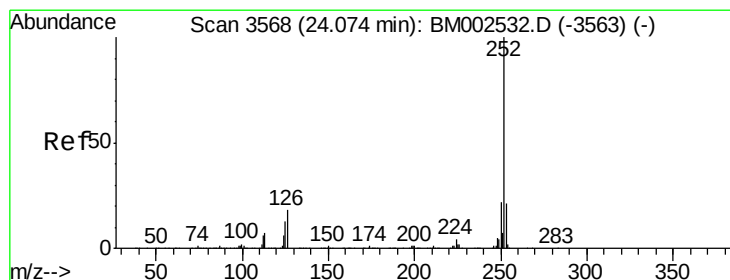
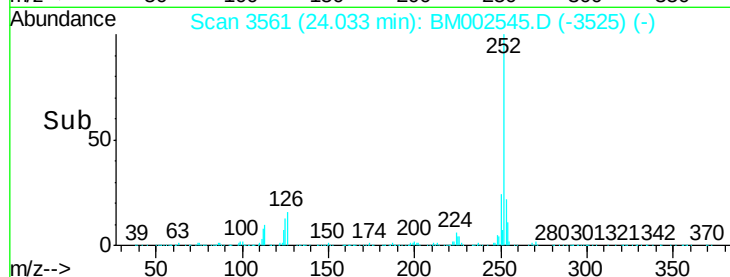
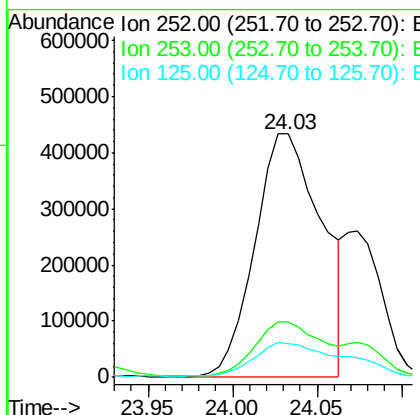
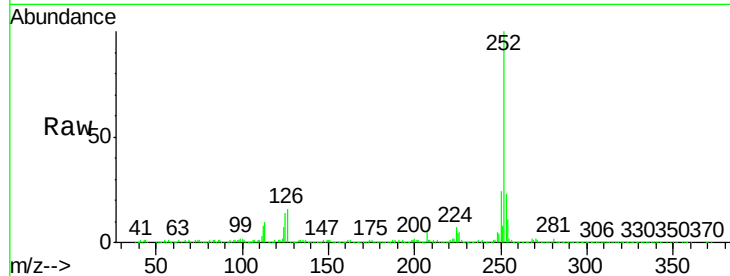




#23  
Benzo(b)fluoranthene  
Concen: 43.46 ng/ul  
RT: 24.03 min Scan# 3561  
Delta R.T. 0.01 min  
Lab File: BM002545.D  
Acq: 22 Aug 2015 05:56

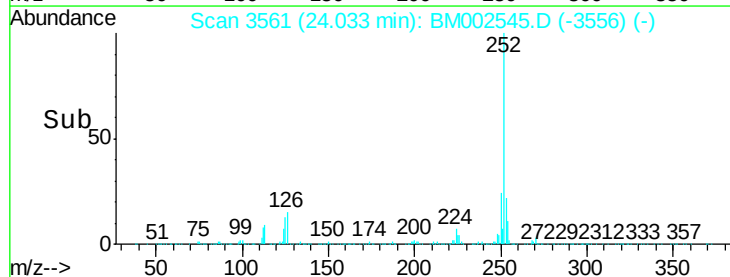
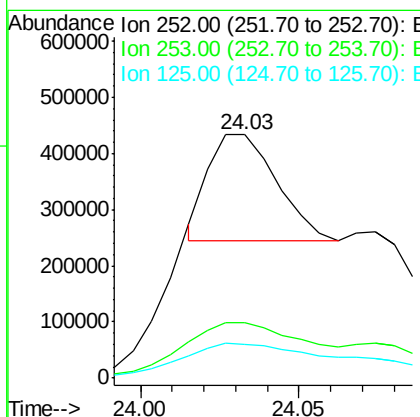
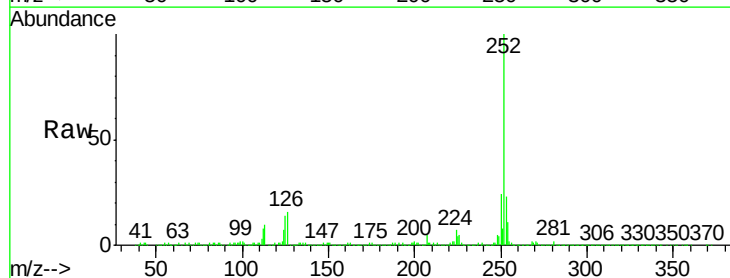
Instrument :  
BNA\_M  
ClientSampleId :  
D9DX4

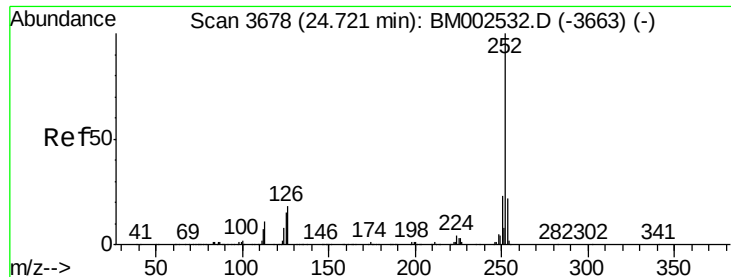
Tgt Ion:252 Resp: 1187245  
Ion Ratio Lower Upper  
252 100  
253 22.9 17.4 26.0  
125 13.9 10.0 15.0



#24  
Benzo(k)fluoranthene  
Concen: 10.89 ng/ul  
RT: 24.03 min Scan# 3561  
Delta R.T. -0.04 min  
Lab File: BM002545.D  
Acq: 22 Aug 2015 05:56

Tgt Ion:252 Resp: 282052  
Ion Ratio Lower Upper  
252 100  
253 22.9 17.8 26.6  
125 13.9 9.8 14.8





#26

Benzo(a)pyrene

Concen: 24.35 ng/ul

RT: 24.73 min Scan# 3679

Delta R.T. 0.01 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

Instrument :

BNA\_M

ClientSampleId :

D9DX4

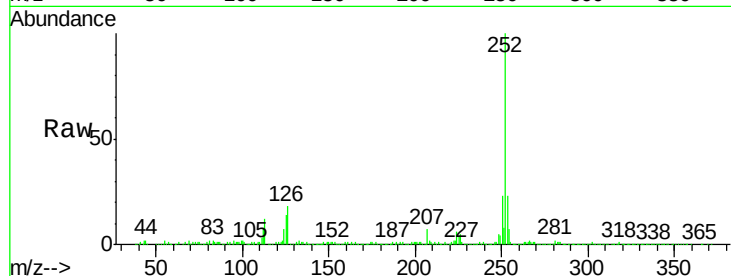
Tgt Ion:252 Resp: 635426

Ion Ratio Lower Upper

252 100

253 23.4 17.6 26.4

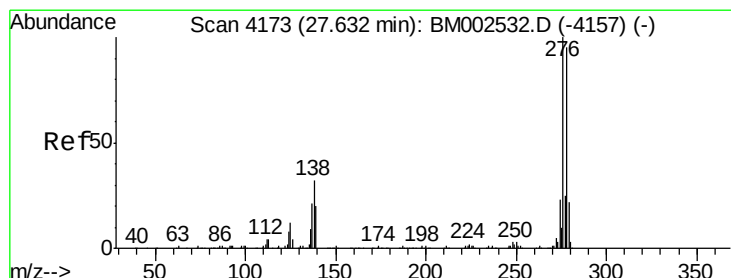
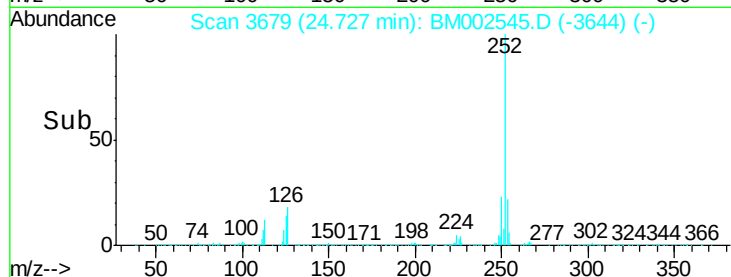
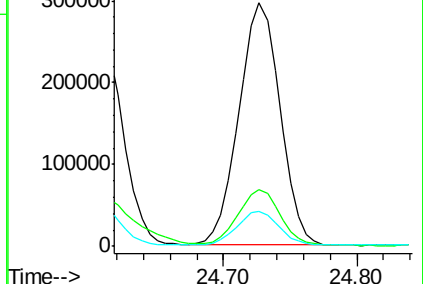
125 14.4 10.7 16.1



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: 14.99 ng/ul

RT: 27.63 min Scan# 4173

Delta R.T. 0.00 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

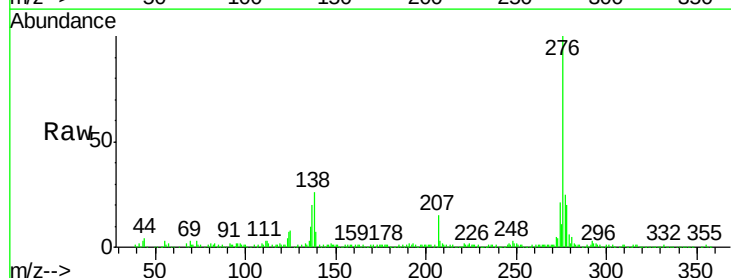
Tgt Ion:276 Resp: 449680

Ion Ratio Lower Upper

276 100

138 26.4 25.3 37.9

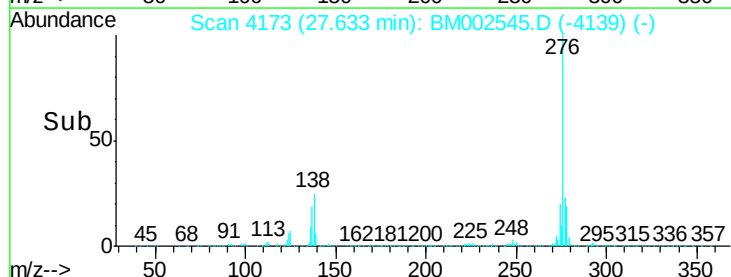
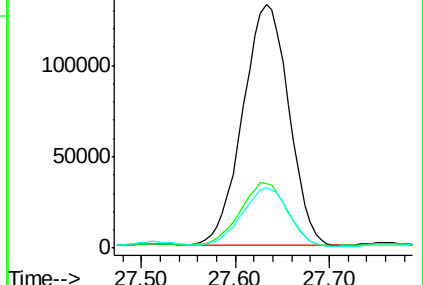
277 24.8 20.2 30.2

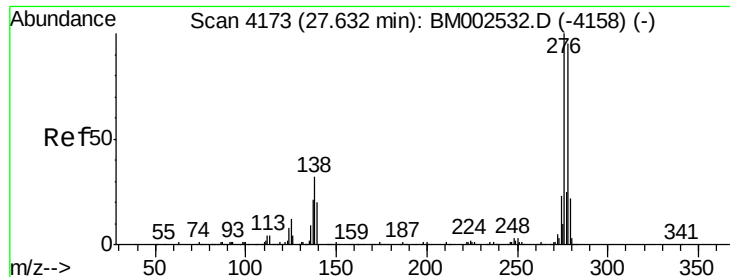


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





#28

Dibenzo(a,h)anthracene

Concen: 4.53 ng/ul

RT: 27.63 min Scan# 4172

Delta R.T. -0.01 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

Instrument :

BNA\_M

ClientSampleId :

D9DX4

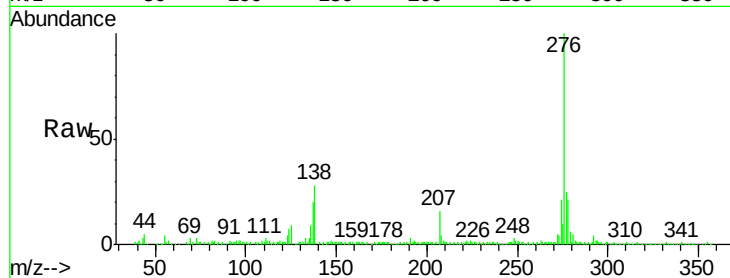
Tgt Ion:278 Resp: 113695

Ion Ratio Lower Upper

278 100

139 0.0 16.5 24.7#

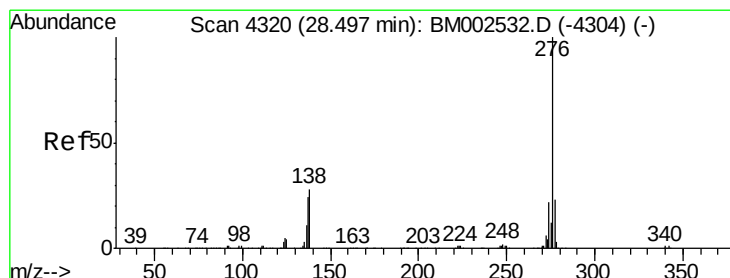
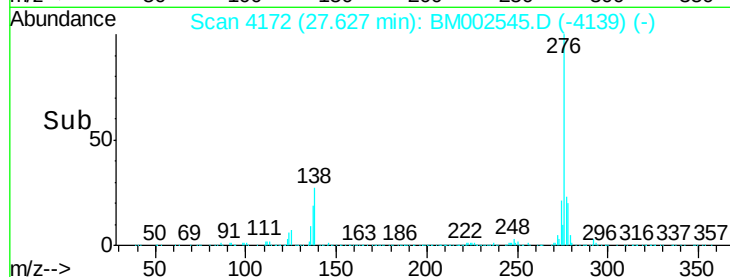
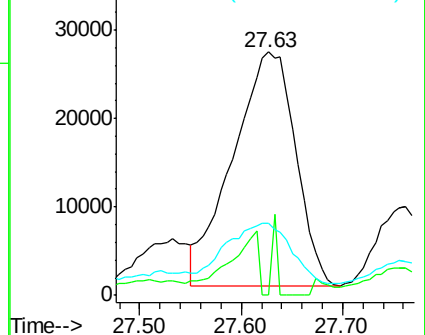
279 29.4 18.8 28.2#



Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#29

Benzo(g,h,i)perylene

Concen: 14.90 ng/ul

RT: 28.51 min Scan# 4322

Delta R.T. 0.01 min

Lab File: BM002545.D

Acq: 22 Aug 2015 05:56

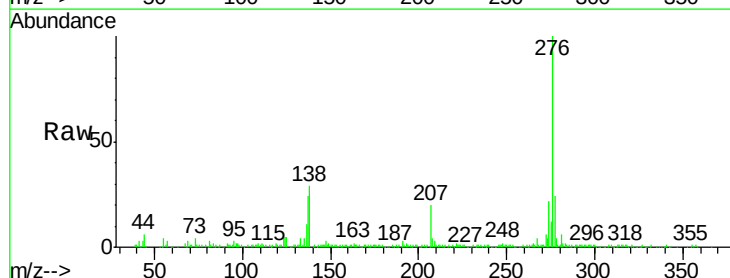
Tgt Ion:276 Resp: 372178

Ion Ratio Lower Upper

276 100

138 29.2 21.0 31.6

277 24.2 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

