

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM080715\  
 Data File : BM002265.D  
 Acq On : 08 Aug 2015 07:57  
 Operator : TP/UM  
 Sample : SSTD02014  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 SSTD02014

Quant Time: Aug 09 05:28:31 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM080715MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sun Aug 09 05:27:43 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.92  | 152  | 173583   | 20.00 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 11.79 | 136  | 842386   | 20.00 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 15.50 | 164  | 464455   | 20.00 | ng/ul | 0.00     |
| 12) Phenanthrene-d10      | 18.20 | 188  | 979768   | 20.00 | ng/ul | 0.00     |
| 17) Chrysene-d12          | 22.29 | 240  | 1002107  | 20.00 | ng/ul | 0.00     |
| 22) Perylene-d12          | 24.99 | 264  | 1001246  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                        |       |     |         |       |       |      |
|------------------------|-------|-----|---------|-------|-------|------|
| 7) Acenaphthylene-d8   | 15.20 | 160 | 986645  | 20.51 | ng/ul | 0.00 |
| 10) Fluorene-d10       | 16.47 | 176 | 682099  | 20.38 | ng/ul | 0.00 |
| 14) Anthracene-d10     | 18.30 | 188 | 977130  | 20.55 | ng/ul | 0.00 |
| 18) Pyrene-d10         | 20.52 | 212 | 989518  | 20.36 | ng/ul | 0.00 |
| 25) Benzo(a)pyrene-d12 | 24.81 | 264 | 1091560 | 20.53 | ng/ul | 0.00 |

## Target Compounds

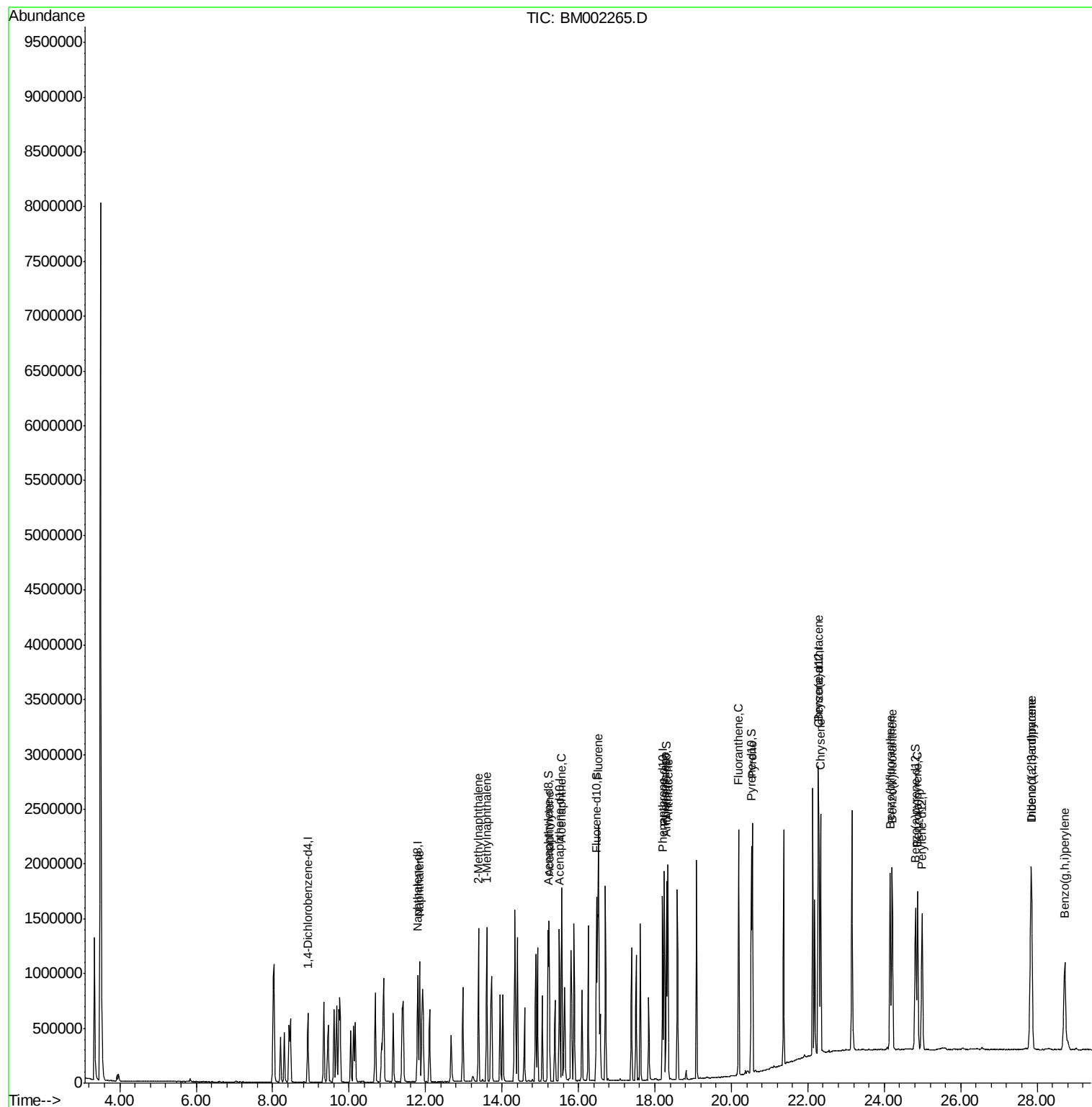
|                            |       |     |         |       |       | Qvalue |
|----------------------------|-------|-----|---------|-------|-------|--------|
| 3) Naphthalene             | 11.85 | 128 | 907923  | 20.47 | ng/ul | 99     |
| 4) 2-Methylnaphthalene     | 13.39 | 142 | 647738  | 20.44 | ng/ul | 98     |
| 5) 1-Methylnaphthalene     | 13.60 | 142 | 636669  | 20.39 | ng/ul | 100    |
| 8) Acenaphthylene          | 15.23 | 152 | 1031440 | 20.65 | ng/ul | 100    |
| 9) Acenaphthene            | 15.56 | 153 | 694312  | 20.66 | ng/ul | 99     |
| 11) Fluorene               | 16.53 | 166 | 774910  | 20.48 | ng/ul | 99     |
| 13) Phenanthrene           | 18.25 | 178 | 1164773 | 20.65 | ng/ul | 99     |
| 15) Anthracene             | 18.34 | 178 | 1206430 | 20.71 | ng/ul | 100    |
| 16) Fluoranthene           | 20.19 | 202 | 1282882 | 20.55 | ng/ul | 99     |
| 19) Pyrene                 | 20.55 | 202 | 1328524 | 20.51 | ng/ul | 99     |
| 20) Benzo(a)anthracene     | 22.27 | 228 | 1251996 | 20.47 | ng/ul | 100    |
| 21) Chrysene               | 22.33 | 228 | 1183036 | 20.41 | ng/ul | 99     |
| 23) Benzo(b)fluoranthene   | 24.16 | 252 | 1299065 | 20.87 | ng/ul | 99     |
| 24) Benzo(k)fluoranthene   | 24.21 | 252 | 1209238 | 20.23 | ng/ul | 99     |
| 26) Benzo(a)pyrene         | 24.87 | 252 | 1217295 | 20.44 | ng/ul | 99     |
| 27) Indeno(1,2,3-cd)pyrene | 27.84 | 276 | 1345302 | 19.71 | ng/ul | 99     |
| 28) Dibenzo(a,h)anthracene | 27.86 | 278 | 1150502 | 19.89 | ng/ul | 99     |
| 29) Benzo(g,h,i)perylene   | 28.72 | 276 | 1092649 | 18.97 | ng/ul | 97     |

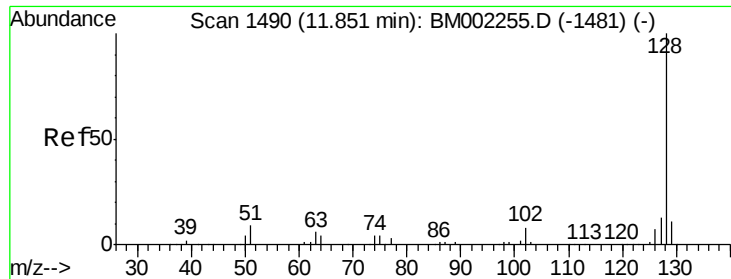
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM080715\  
Data File : BM002265.D  
Acq On : 08 Aug 2015 07:57  
Operator : TP/UM  
Sample : SSTD02014  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
SSTD02014

Quant Time: Aug 09 05:28:31 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM080715MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Sun Aug 09 05:27:43 2015  
Response via : Initial Calibration





#3

Naphthalene

Concen: 20.47 ng/ul

RT: 11.85 min Scan# 1489

Delta R.T. -0.01 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

Instrument :

BNA\_M

ClientSampleId :

SSTD02014

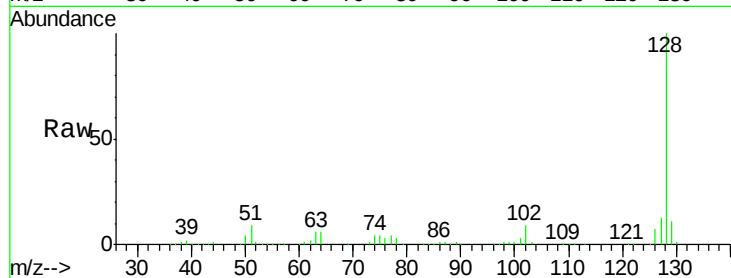
Tgt Ion:128 Resp: 907923

Ion Ratio Lower Upper

128 100

129 11.2 8.6 12.8

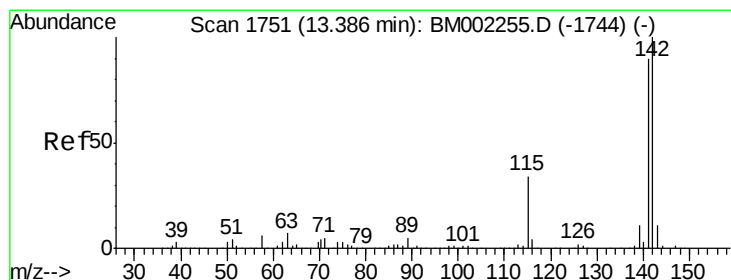
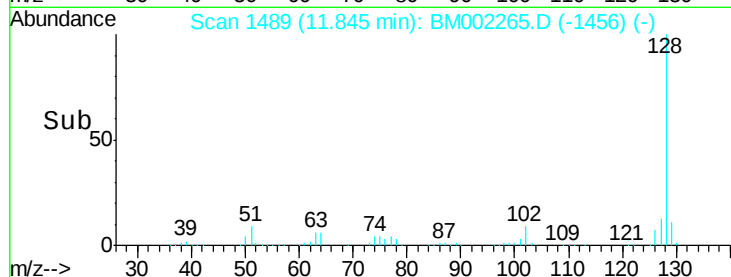
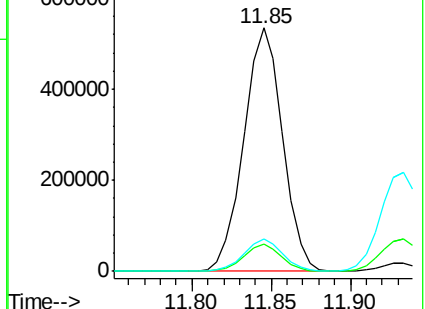
127 13.1 10.4 15.6



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: 20.44 ng/ul

RT: 13.39 min Scan# 1751

Delta R.T. 0.00 min

Lab File: BM002265.D

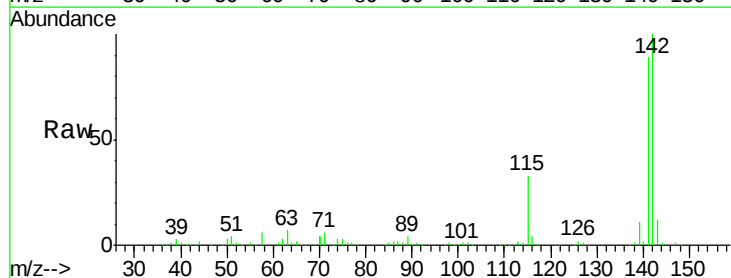
Acq: 08 Aug 2015 07:57

Tgt Ion:142 Resp: 647738

Ion Ratio Lower Upper

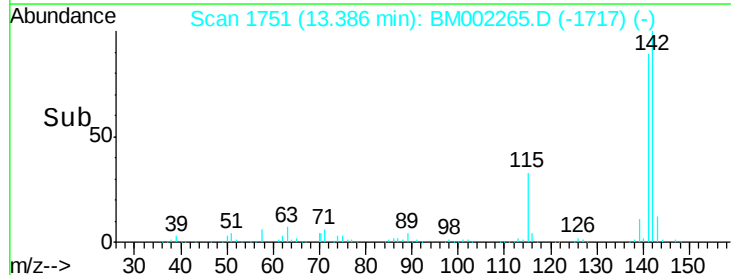
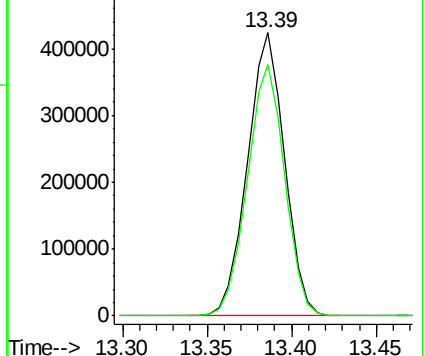
142 100

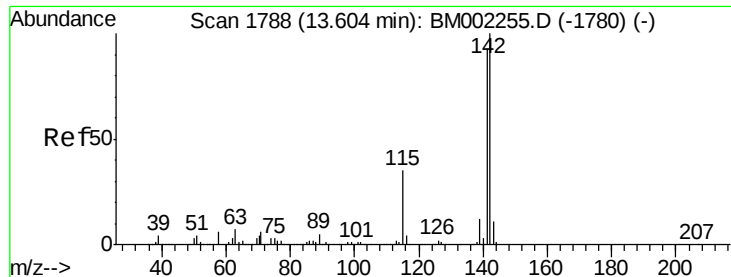
141 88.9 72.5 108.7



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

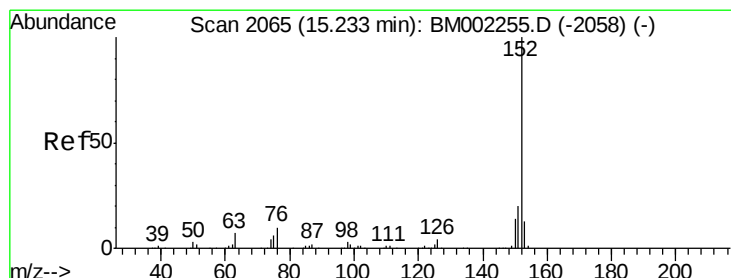
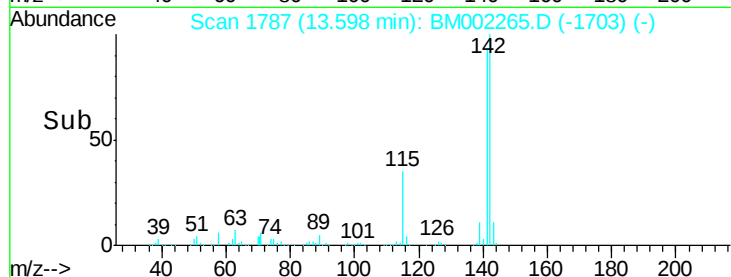
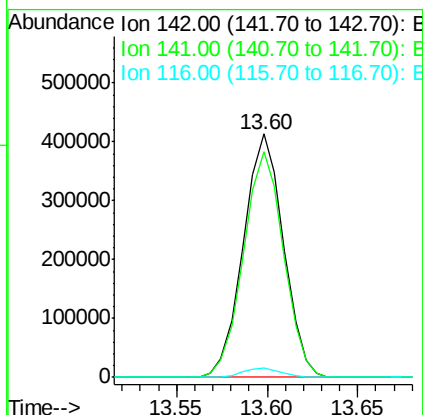
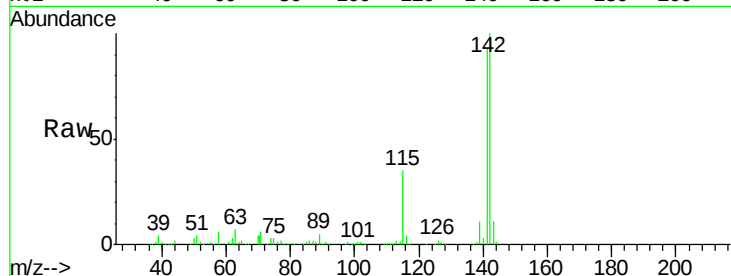




#5  
1-Methylnaphthalene  
Concen: 20.39 ng/ul  
RT: 13.60 min Scan# 1787  
Delta R.T. -0.01 min  
Lab File: BM002265.D  
Acq: 08 Aug 2015 07:57

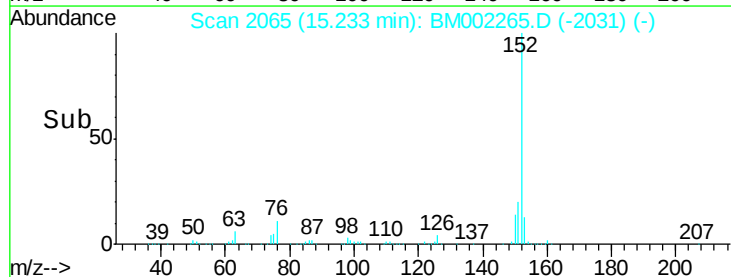
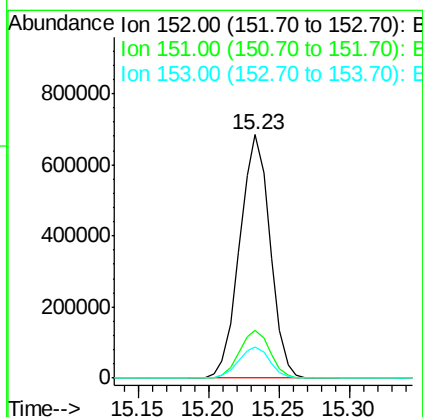
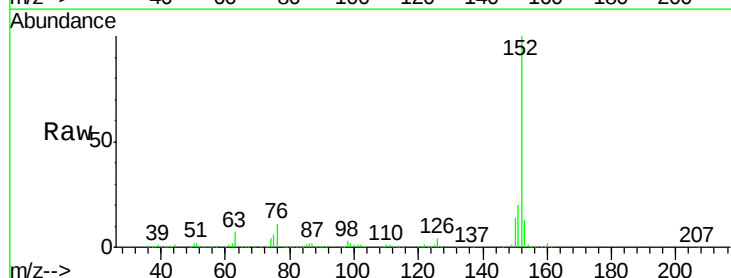
Instrument :  
BNA\_M  
ClientSampleId :  
SSTD02014

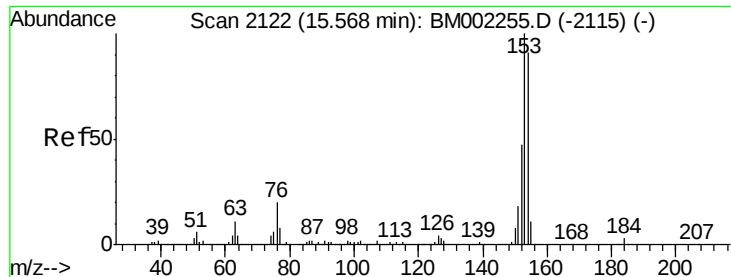
Tgt Ion:142 Resp: 636669  
Ion Ratio Lower Upper  
142 100  
141 92.7 74.5 111.7  
116 3.7 3.0 4.4



#8  
Acenaphthylene  
Concen: 20.65 ng/ul  
RT: 15.23 min Scan# 2065  
Delta R.T. 0.00 min  
Lab File: BM002265.D  
Acq: 08 Aug 2015 07:57

Tgt Ion:152 Resp: 1031440  
Ion Ratio Lower Upper  
152 100  
151 19.9 15.9 23.9  
153 12.9 10.6 15.8





#9

Acenaphthene

Concen: 20.66 ng/ul

RT: 15.56 min Scan# 2121

Delta R.T. -0.01 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

Instrument :

BNA\_M

ClientSampled :

SSTD02014

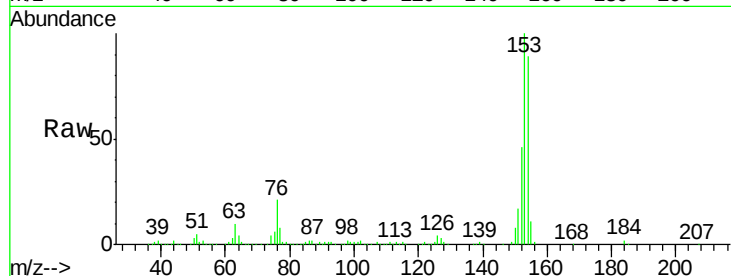
Tgt Ion:153 Resp: 694312

Ion Ratio Lower Upper

153 100

152 46.5 36.6 55.0

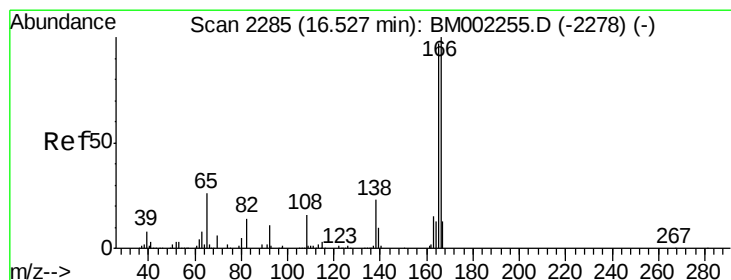
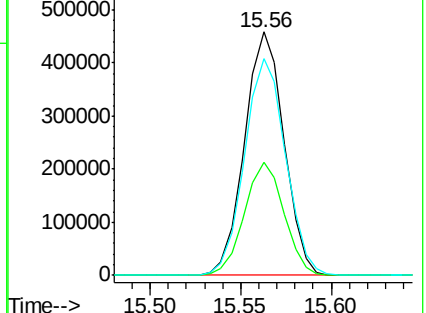
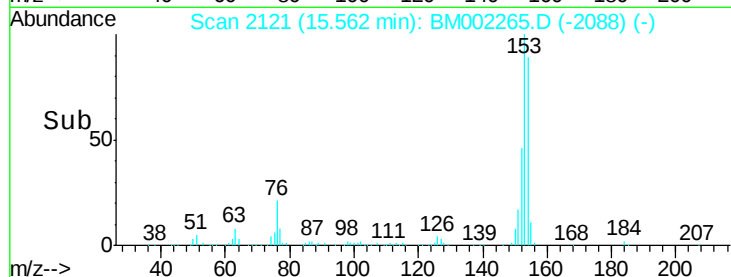
154 89.1 71.5 107.3



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: 20.48 ng/ul

RT: 16.53 min Scan# 2285

Delta R.T. 0.00 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

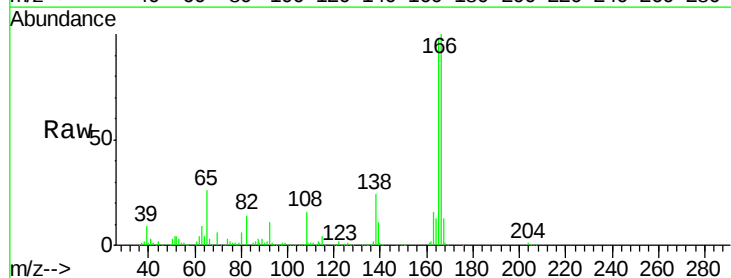
Tgt Ion:166 Resp: 774910

Ion Ratio Lower Upper

166 100

165 97.6 77.5 116.3

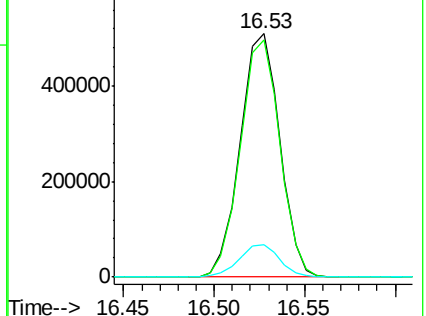
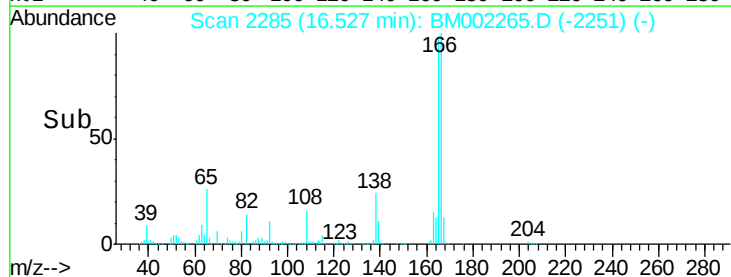
167 13.1 10.4 15.6

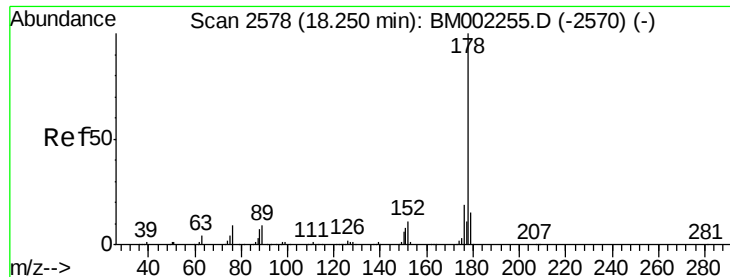


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene

Concen: 20.65 ng/ul

RT: 18.25 min Scan# 2578

Delta R.T. 0.00 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

Instrument :

BNA\_M

ClientSampleId :

SSTD02014

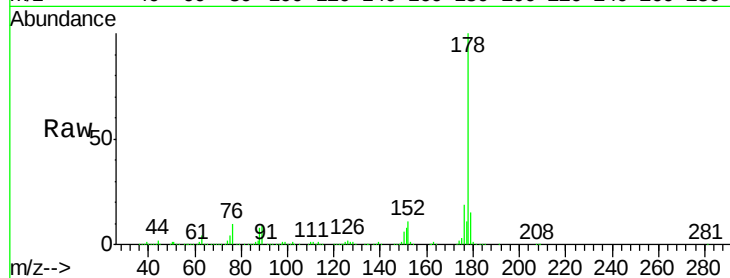
Tgt Ion:178 Resp: 1164773

Ion Ratio Lower Upper

178 100

179 15.1 12.3 18.5

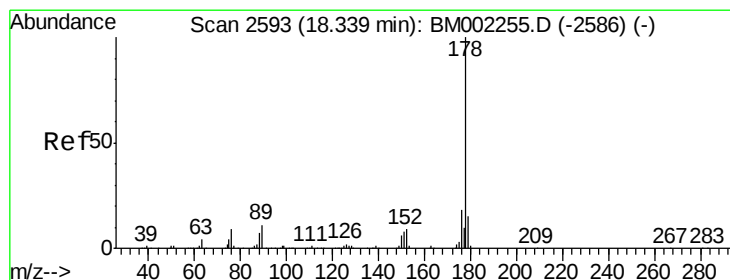
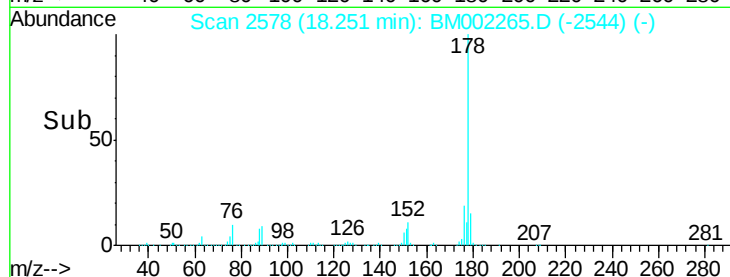
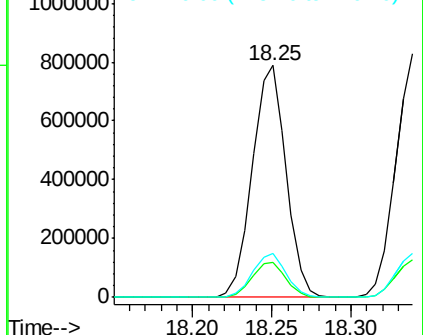
176 18.8 15.3 22.9



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: 20.71 ng/ul

RT: 18.34 min Scan# 2593

Delta R.T. 0.00 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

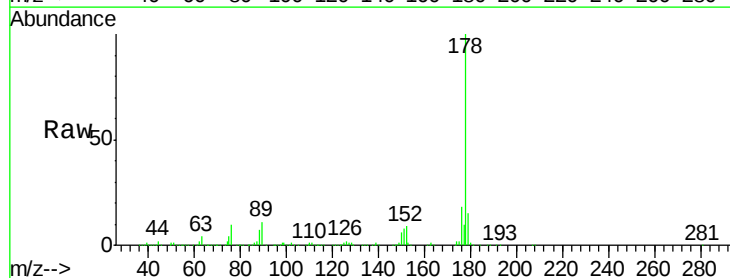
Tgt Ion:178 Resp: 1206430

Ion Ratio Lower Upper

178 100

179 15.5 12.3 18.5

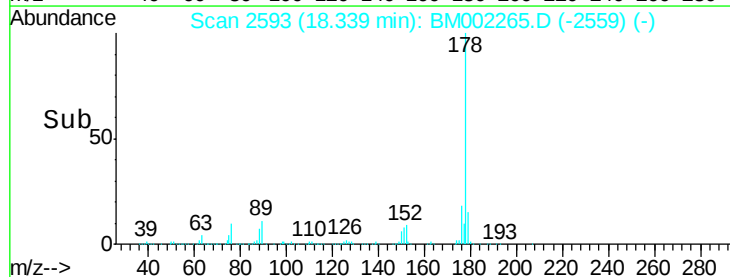
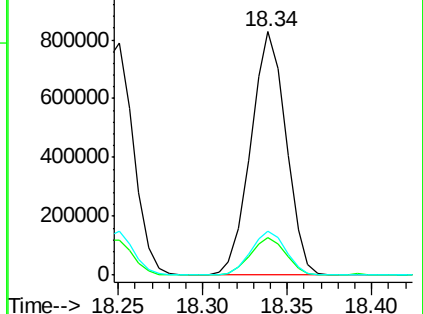
176 18.0 14.5 21.7

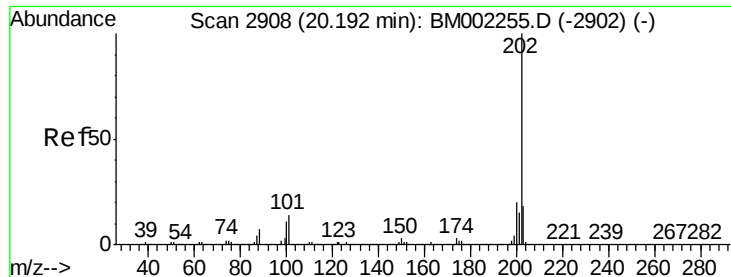


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E

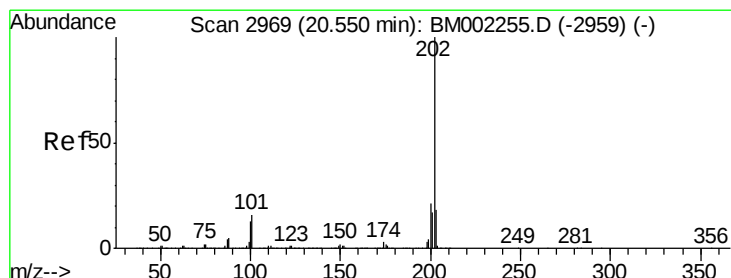
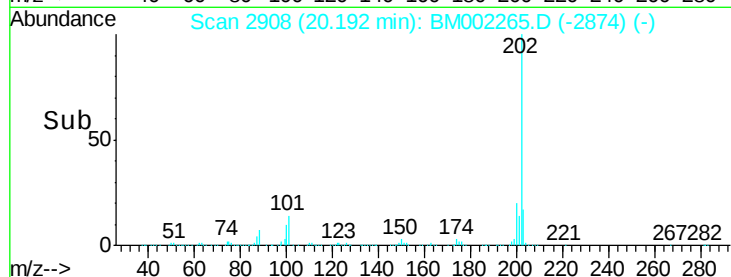
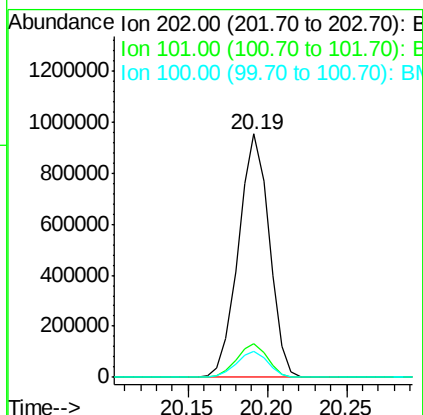
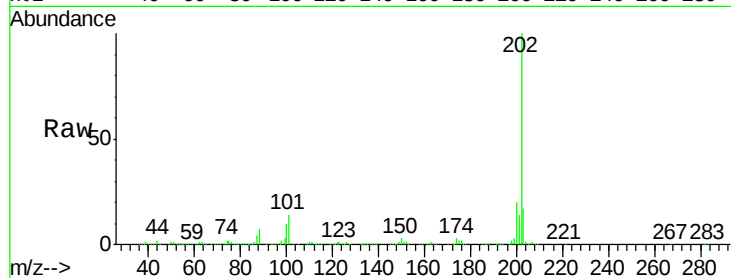




#16  
 Fluoranthene  
 Concen: 20.55 ng/ul  
 RT: 20.19 min Scan# 2908  
 Delta R.T. 0.00 min  
 Lab File: BM002265.D  
 Acq: 08 Aug 2015 07:57

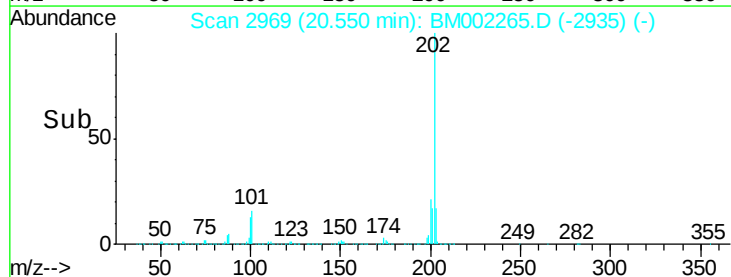
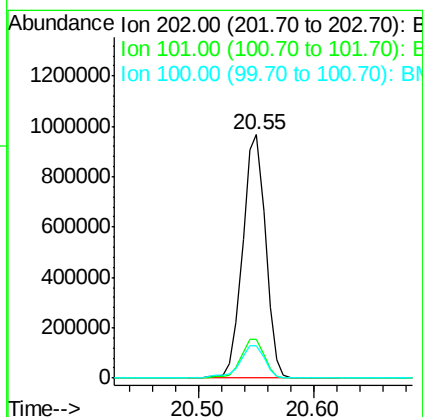
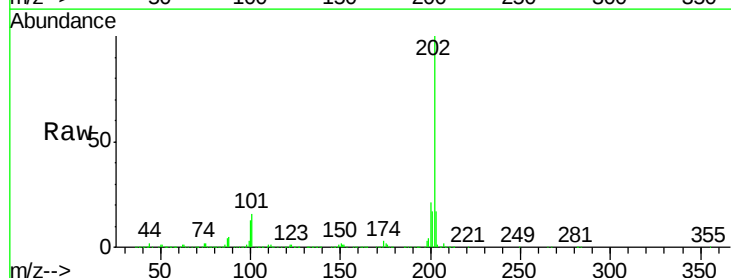
Instrument :  
 BNA\_M  
 ClientSampleId :  
 SSTD02014

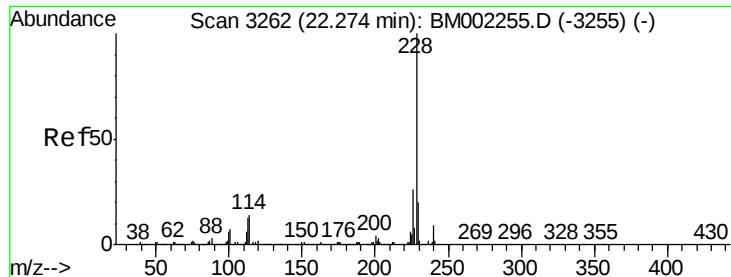
Tgt Ion:202 Resp: 1282882  
 Ion Ratio Lower Upper  
 202 100  
 101 14.0 10.6 15.8  
 100 10.5 8.2 12.4



#19  
 Pyrene  
 Concen: 20.51 ng/ul  
 RT: 20.55 min Scan# 2969  
 Delta R.T. 0.00 min  
 Lab File: BM002265.D  
 Acq: 08 Aug 2015 07:57

Tgt Ion:202 Resp: 1328524  
 Ion Ratio Lower Upper  
 202 100  
 101 15.9 13.0 19.6  
 100 13.3 11.0 16.4





#20

Benzo(a)anthracene

Concen: 20.47 ng/ul

RT: 22.27 min Scan# 3262

Delta R.T. 0.00 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

Instrument :

BNA\_M

ClientSampleId :

SSTD02014

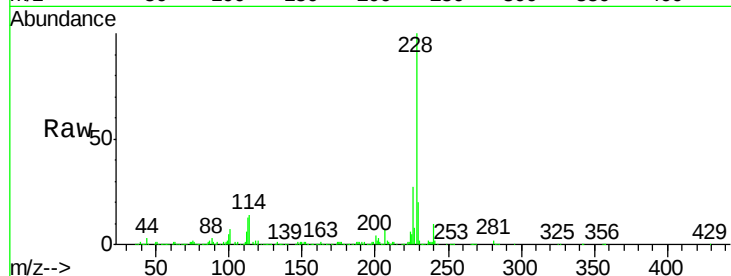
Tgt Ion:228 Resp: 1251996

Ion Ratio Lower Upper

228 100

229 20.1 15.7 23.5

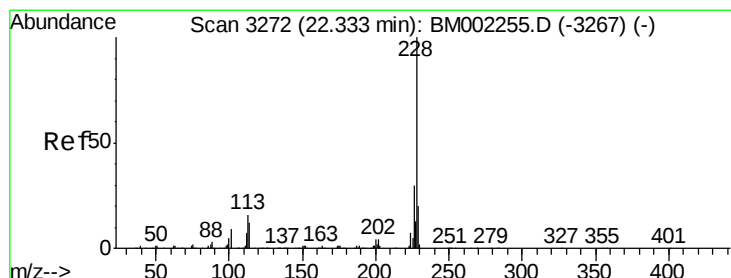
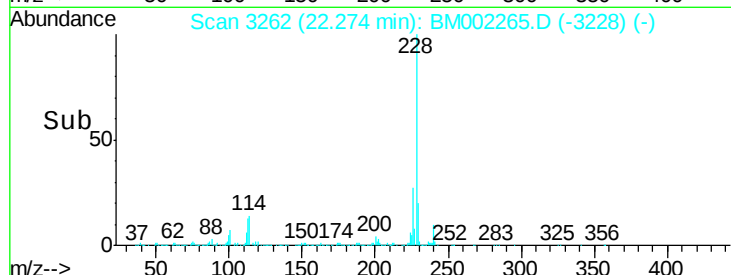
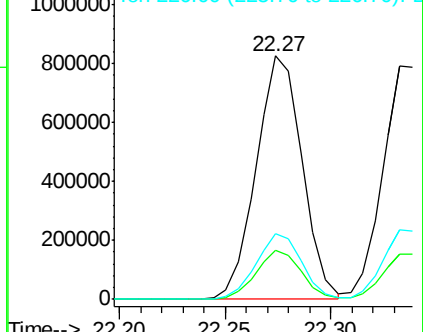
226 26.8 21.4 32.0



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: 20.41 ng/ul

RT: 22.33 min Scan# 3272

Delta R.T. 0.00 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

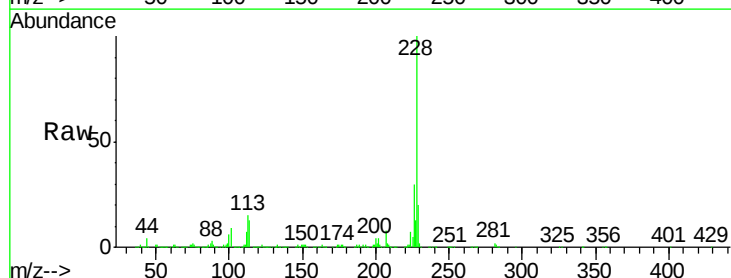
Tgt Ion:228 Resp: 1183036

Ion Ratio Lower Upper

228 100

226 29.7 23.4 35.0

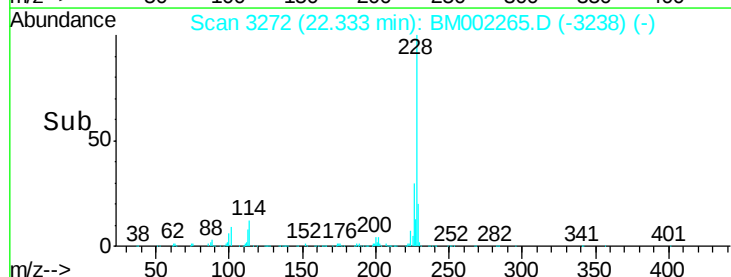
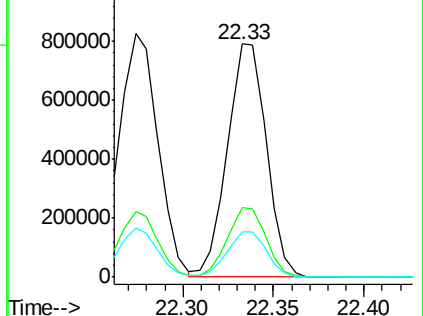
229 19.6 15.5 23.3

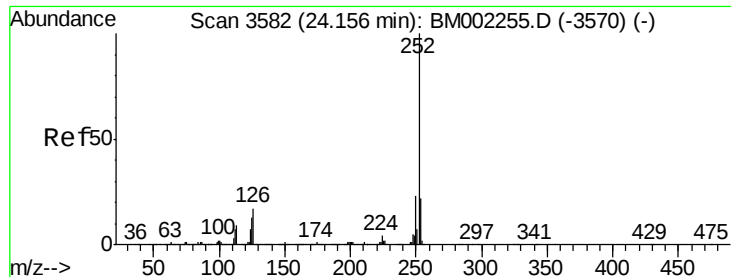


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#23

Benzo(b)fluoranthene

Concen: 20.87 ng/ul

RT: 24.16 min Scan# 3582

Delta R.T. 0.00 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

Instrument :

BNA\_M

ClientSampleId :

SSTD02014

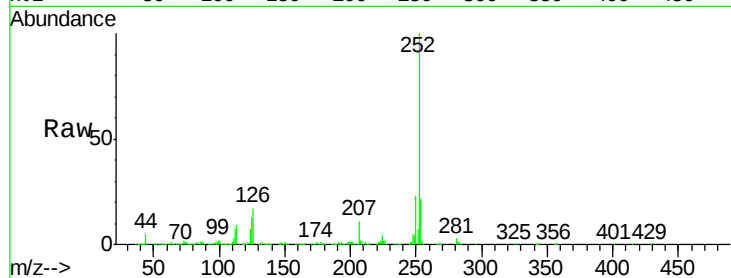
Tgt Ion:252 Resp: 1299065

Ion Ratio Lower Upper

252 100

253 21.7 17.9 26.9

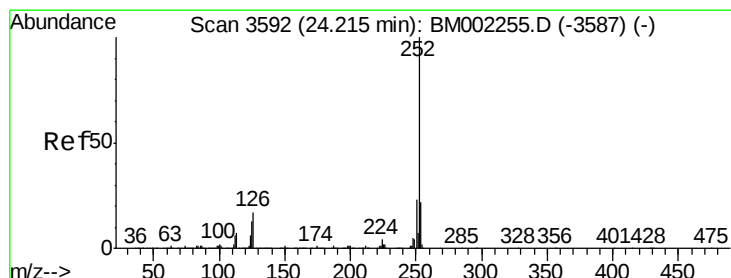
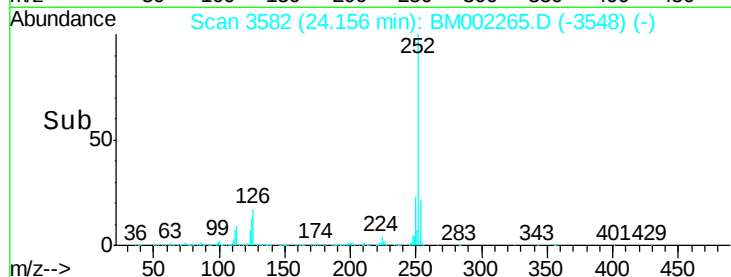
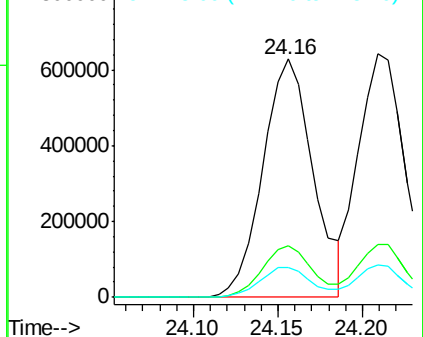
125 12.7 10.3 15.5



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



#24

Benzo(k)fluoranthene

Concen: 20.23 ng/ul

RT: 24.21 min Scan# 3591

Delta R.T. -0.01 min

Lab File: BM002265.D

Acq: 08 Aug 2015 07:57

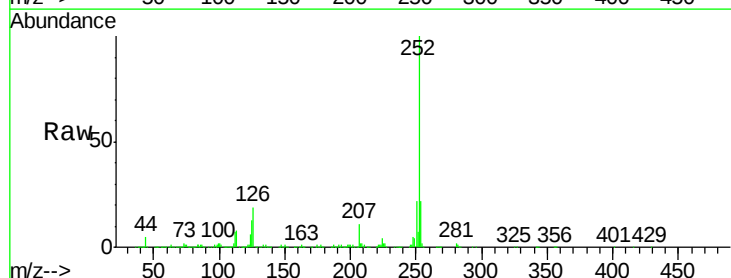
Tgt Ion:252 Resp: 1209238

Ion Ratio Lower Upper

252 100

253 21.8 17.3 25.9

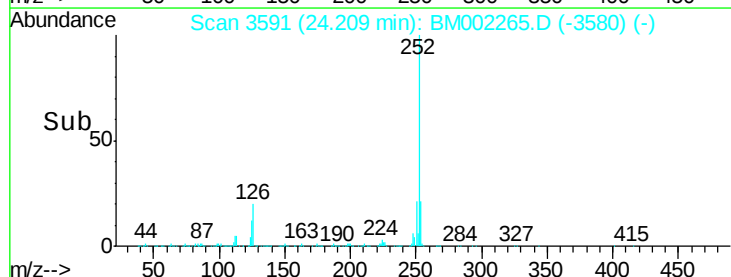
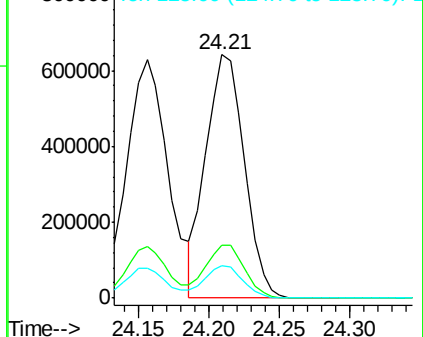
125 13.1 10.2 15.4

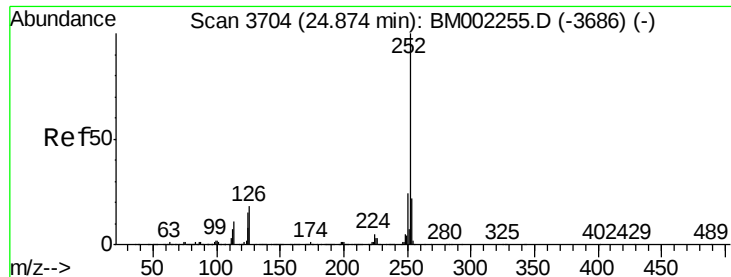


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

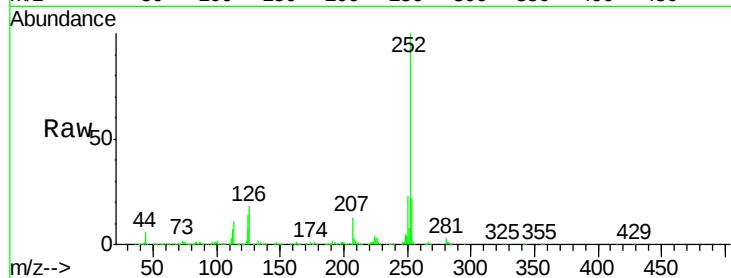




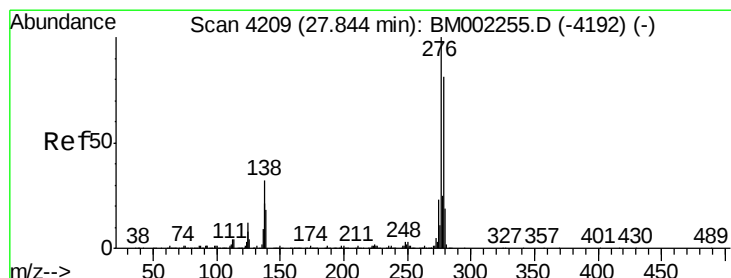
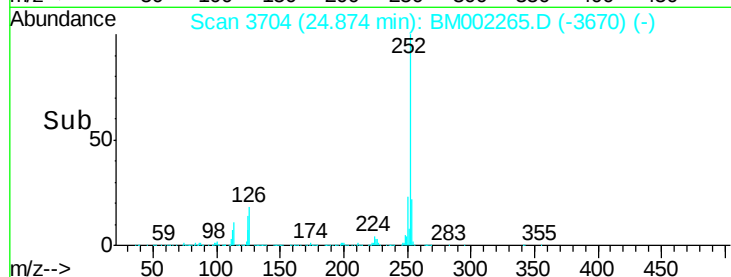
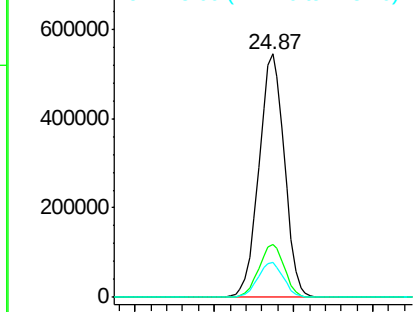
#26  
Benzo(a)pyrene  
Concen: 20.44 ng/ul  
RT: 24.87 min Scan# 3704  
Delta R.T. 0.00 min  
Lab File: BM002265.D  
Acq: 08 Aug 2015 07:57

Instrument :  
BNA\_M  
ClientSampleId :  
SSTD02014

Tgt Ion:252 Resp: 1217295  
Ion Ratio Lower Upper  
252 100  
253 21.7 17.3 25.9  
125 14.4 11.0 16.6

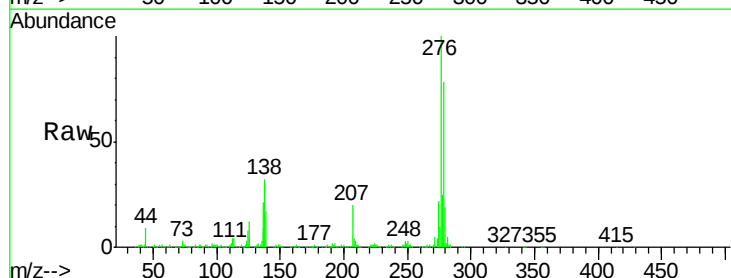


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

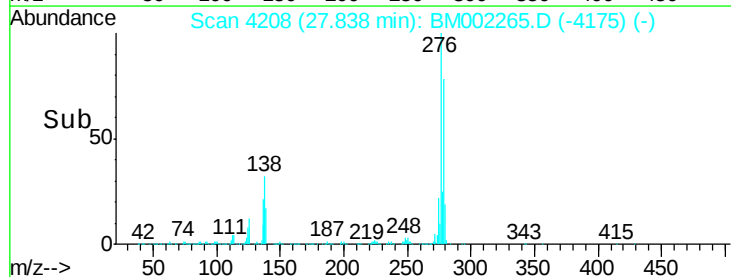
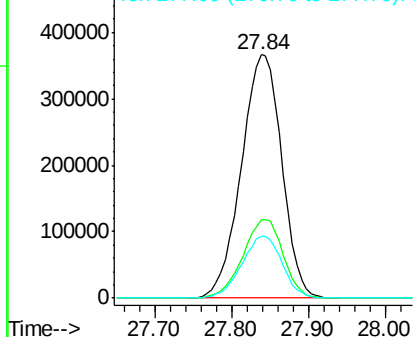


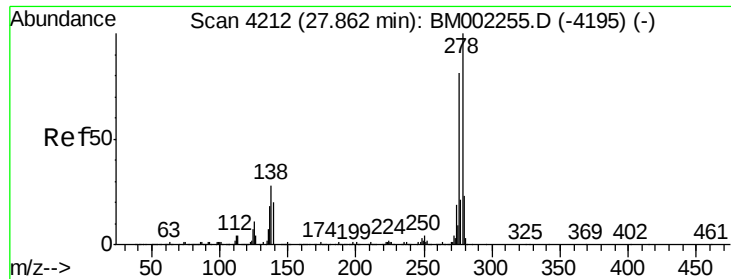
#27  
Indeno(1,2,3-cd)pyrene  
Concen: 19.71 ng/ul  
RT: 27.84 min Scan# 4208  
Delta R.T. -0.01 min  
Lab File: BM002265.D  
Acq: 08 Aug 2015 07:57

Tgt Ion:276 Resp: 1345302  
Ion Ratio Lower Upper  
276 100  
138 32.4 25.6 38.4  
277 25.5 21.0 31.4



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



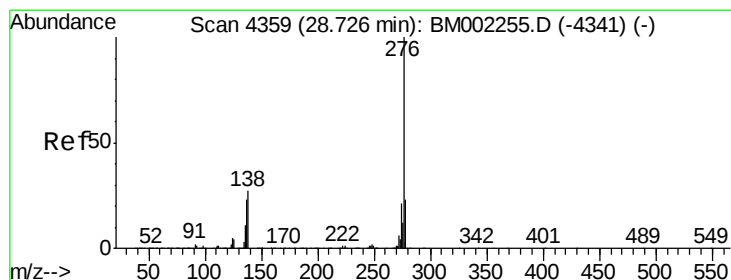
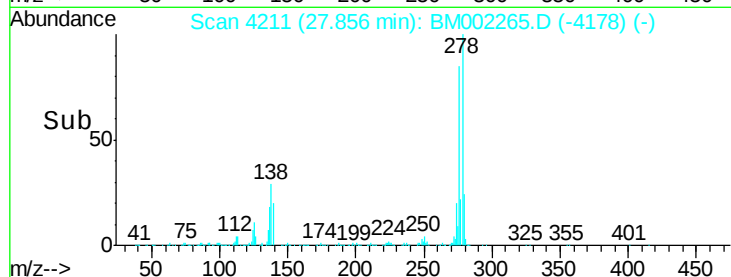
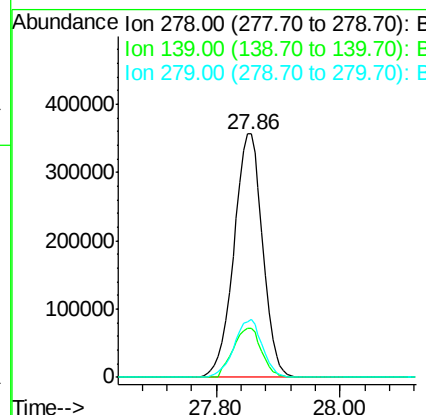
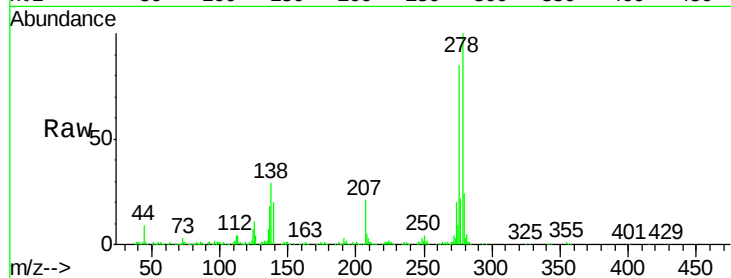


#28  
Dibenzo(a,h)anthracene  
Concen: 19.89 ng/ul  
RT: 27.86 min Scan# 4211  
Delta R.T. -0.01 min  
Lab File: BM002265.D  
Acq: 08 Aug 2015 07:57

Instrument :  
BNA\_M  
ClientSampleId :  
SSTD02014

Tgt Ion:278 Resp: 1150502  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 278 | 100   |       |       |
| 139 | 20.3  | 16.4  | 24.6  |
| 279 | 23.8  | 18.8  | 28.2  |



#29  
Benzo(g,h,i)perylene  
Concen: 18.97 ng/ul  
RT: 28.72 min Scan# 4358  
Delta R.T. -0.01 min  
Lab File: BM002265.D  
Acq: 08 Aug 2015 07:57

Tgt Ion:276 Resp: 1092649  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 276 | 100   |       |       |
| 138 | 28.0  | 20.5  | 30.7  |
| 277 | 23.5  | 19.0  | 28.6  |

