

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM080715\  
 Data File : BM002249.D  
 Acq On : 07 Aug 2015 22:18  
 Operator : TP/UM  
 Sample : SSTD00507  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 SSTD00507

Quant Time: Aug 08 04:18:58 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM080715MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sat Aug 08 04:17:56 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.93  | 152  | 159477   | 20.00 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 11.80 | 136  | 761055   | 20.00 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 15.50 | 164  | 438994   | 20.00 | ng/ul | 0.00     |
| 12) Phenanthrene-d10      | 18.21 | 188  | 942640   | 20.00 | ng/ul | 0.00     |
| 17) Chrysene-d12          | 22.30 | 240  | 967270   | 20.00 | ng/ul | 0.00     |
| 22) Perylene-d12          | 25.00 | 264  | 989268   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                        |       |     |        |      |       |      |
|------------------------|-------|-----|--------|------|-------|------|
| 7) Acenaphthylene-d8   | 15.21 | 160 | 234262 | 5.59 | ng/ul | 0.00 |
| 10) Fluorene-d10       | 16.47 | 176 | 166230 | 5.67 | ng/ul | 0.00 |
| 14) Anthracene-d10     | 18.31 | 188 | 239071 | 5.51 | ng/ul | 0.00 |
| 18) Pyrene-d10         | 20.52 | 212 | 237770 | 5.07 | ng/ul | 0.00 |
| 25) Benzo(a)pyrene-d12 | 24.81 | 264 | 269017 | 5.43 | ng/ul | 0.00 |

## Target Compounds

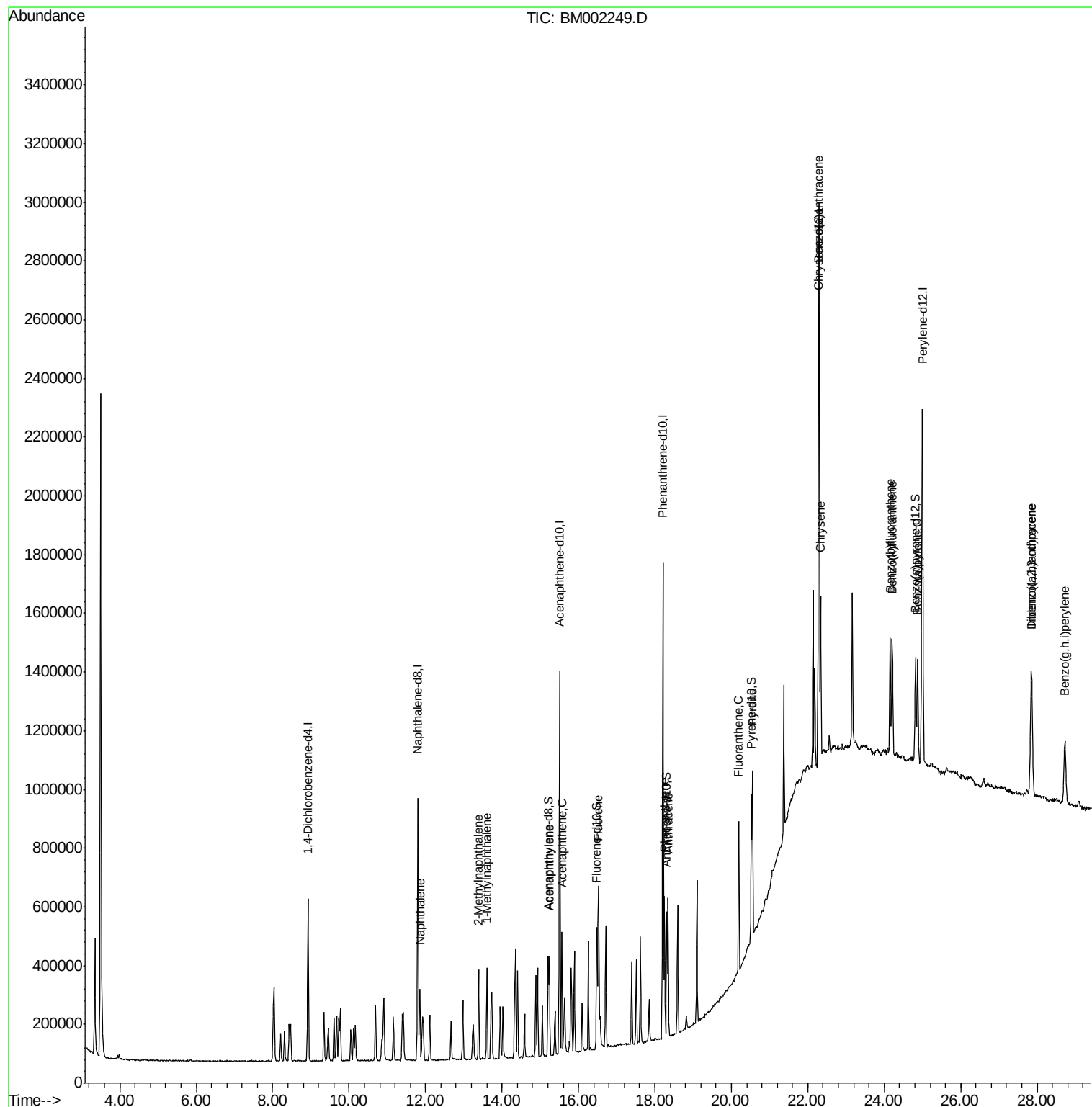
|                            |       |     |        |      |       | Qvalue |
|----------------------------|-------|-----|--------|------|-------|--------|
| 3) Naphthalene             | 11.85 | 128 | 206624 | 5.56 | ng/ul | 99     |
| 4) 2-Methylnaphthalene     | 13.39 | 142 | 148052 | 5.25 | ng/ul | 99     |
| 5) 1-Methylnaphthalene     | 13.60 | 142 | 145051 | 5.34 | ng/ul | 97     |
| 8) Acenaphthylene          | 15.24 | 152 | 241313 | 5.62 | ng/ul | 99     |
| 9) Acenaphthene            | 15.57 | 153 | 162648 | 5.75 | ng/ul | 99     |
| 11) Fluorene               | 16.53 | 166 | 186236 | 5.59 | ng/ul | 100    |
| 13) Phenanthrene           | 18.25 | 178 | 282438 | 5.61 | ng/ul | 99     |
| 15) Anthracene             | 18.34 | 178 | 293574 | 5.69 | ng/ul | 99     |
| 16) Fluoranthene           | 20.19 | 202 | 310054 | 5.56 | ng/ul | 98     |
| 19) Pyrene                 | 20.55 | 202 | 320563 | 5.29 | ng/ul | 98     |
| 20) Benzo(a)anthracene     | 22.28 | 228 | 308351 | 5.53 | ng/ul | 99     |
| 21) Chrysene               | 22.34 | 228 | 292785 | 5.68 | ng/ul | 100    |
| 23) Benzo(b)fluoranthene   | 24.16 | 252 | 318090 | 5.54 | ng/ul | 99     |
| 24) Benzo(k)fluoranthene   | 24.21 | 252 | 301349 | 5.38 | ng/ul | 98     |
| 26) Benzo(a)pyrene         | 24.87 | 252 | 303985 | 5.52 | ng/ul | 95     |
| 27) Indeno(1,2,3-cd)pyrene | 27.84 | 276 | 353359 | 5.67 | ng/ul | 98     |
| 28) Dibenzo(a,h)anthracene | 27.86 | 278 | 300035 | 5.66 | ng/ul | 97     |
| 29) Benzo(g,h,i)perylene   | 28.73 | 276 | 297276 | 5.72 | ng/ul | 97     |

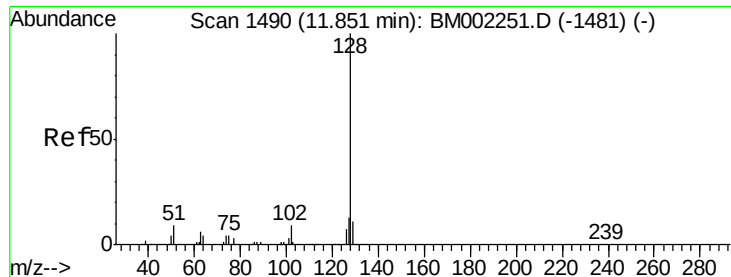
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM080715\  
Data File : BM002249.D  
Acq On : 07 Aug 2015 22:18  
Operator : TP/UM  
Sample : SSTD00507  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
SSTD00507

Quant Time: Aug 08 04:18:58 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM080715MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Sat Aug 08 04:17:56 2015  
Response via : Initial Calibration





#3

Naphthalene

Concen: 5.56 ng/ul

RT: 11.85 min Scan# 1490

Delta R.T. 0.00 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

Instrument :

BNA\_M

ClientSampleId :

SSTD00507

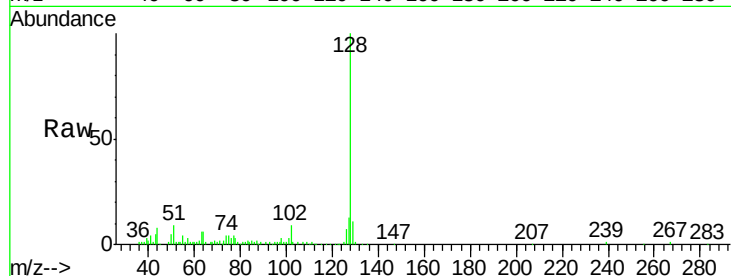
Tgt Ion:128 Resp: 206624

Ion Ratio Lower Upper

128 100

129 10.8 8.6 12.8

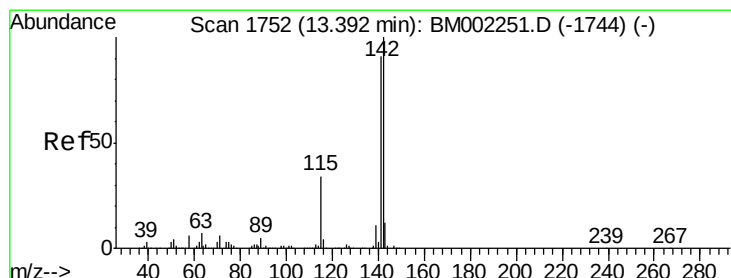
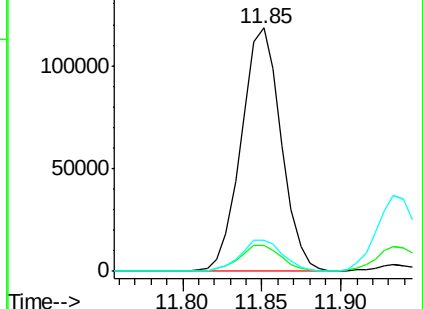
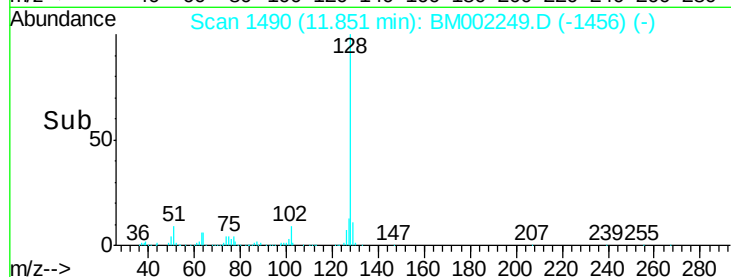
127 12.7 10.4 15.6



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: 5.25 ng/ul

RT: 13.39 min Scan# 1751

Delta R.T. -0.01 min

Lab File: BM002249.D

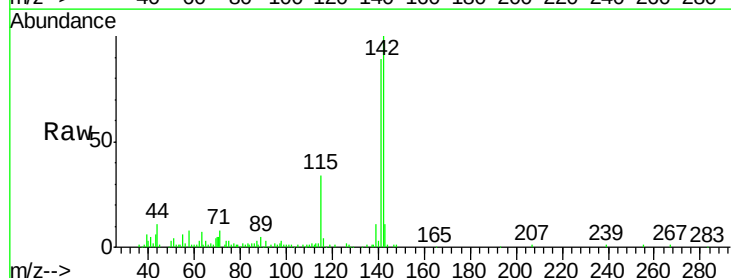
Acq: 07 Aug 2015 22:18

Tgt Ion:142 Resp: 148052

Ion Ratio Lower Upper

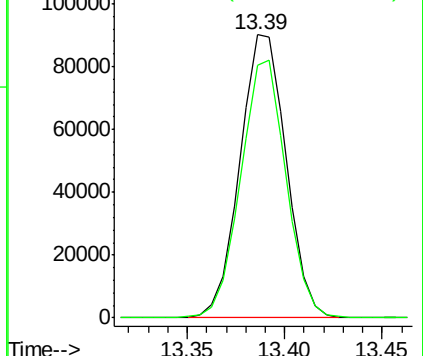
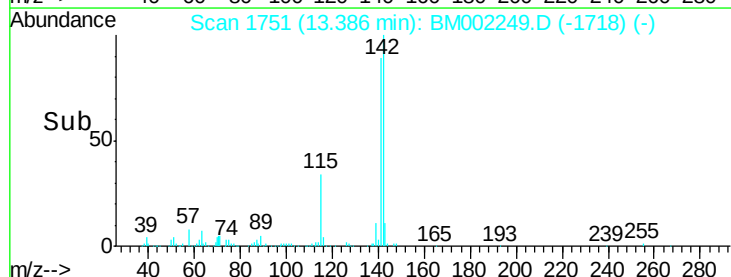
142 100

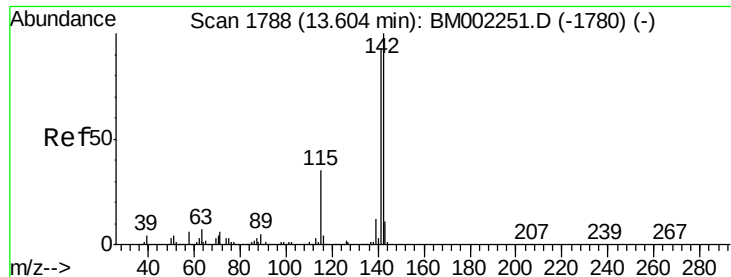
141 89.2 72.5 108.7



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#5

1-Methylnaphthalene

Concen: 5.34 ng/ul

RT: 13.60 min Scan# 1788

Delta R.T. 0.00 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

Instrument :

BNA\_M

ClientSampleId :

SSTD00507

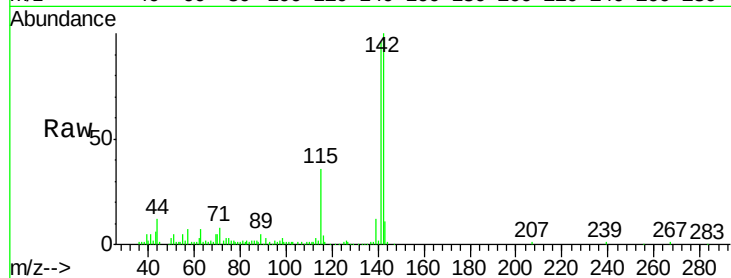
Tgt Ion:142 Resp: 145051

Ion Ratio Lower Upper

142 100

141 95.9 74.5 111.7

116 4.0 3.0 4.4

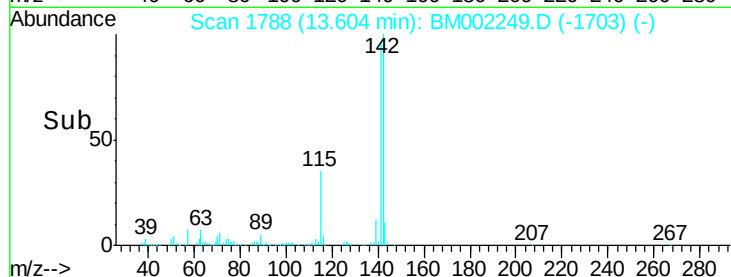


Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 116.00 (115.70 to 116.70): E

Time-->



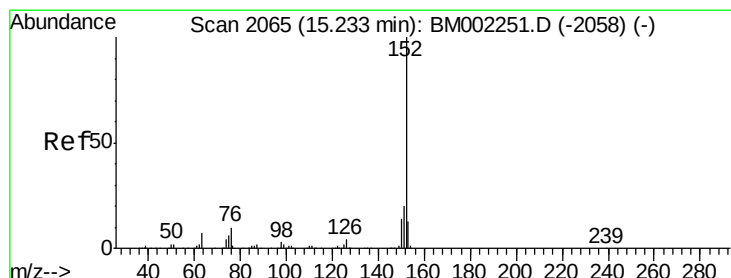
Abundance

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

Time-->



#8

Acenaphthylene

Concen: 5.62 ng/ul

RT: 15.24 min Scan# 2066

Delta R.T. 0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

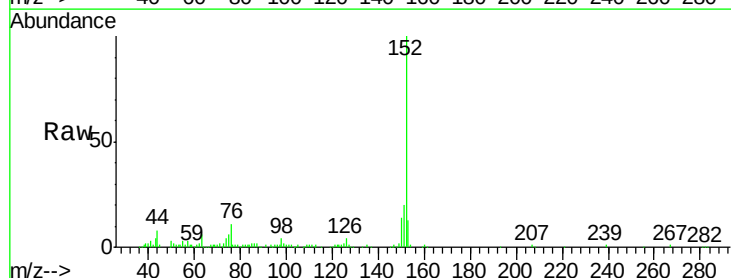
Tgt Ion:152 Resp: 241313

Ion Ratio Lower Upper

152 100

151 20.2 15.9 23.9

153 12.8 10.6 15.8

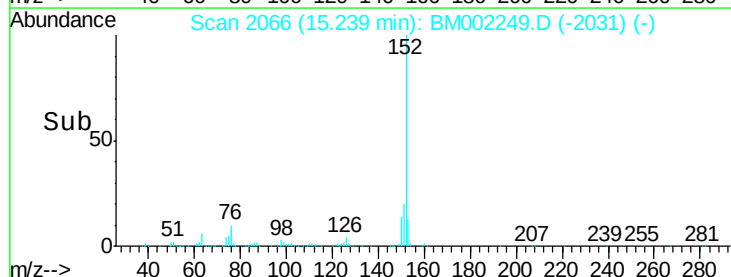


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E

Time-->



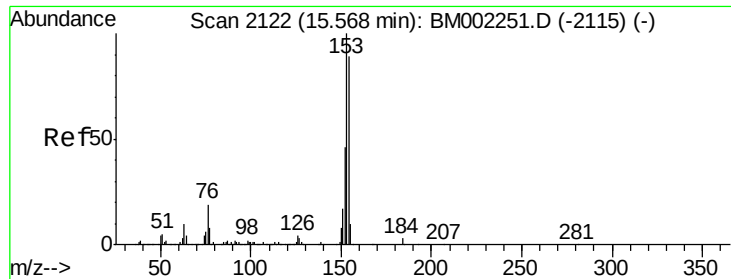
Abundance

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

Time-->



#9

Acenaphthene

Concen: 5.75 ng/ul

RT: 15.57 min Scan# 2122

Delta R.T. 0.00 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

Instrument :

BNA\_M

ClientSampleId :

SSTD00507

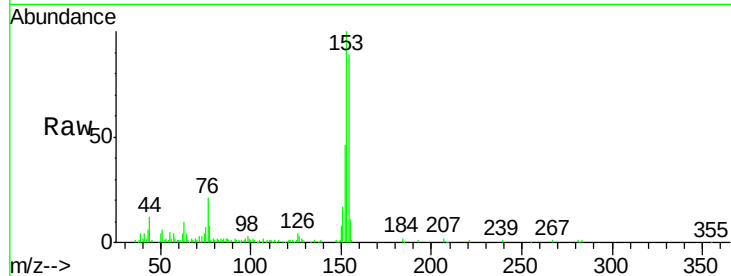
Tgt Ion:153 Resp: 162648

Ion Ratio Lower Upper

153 100

152 46.4 36.6 55.0

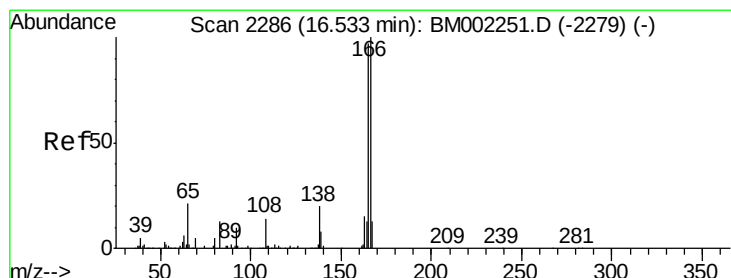
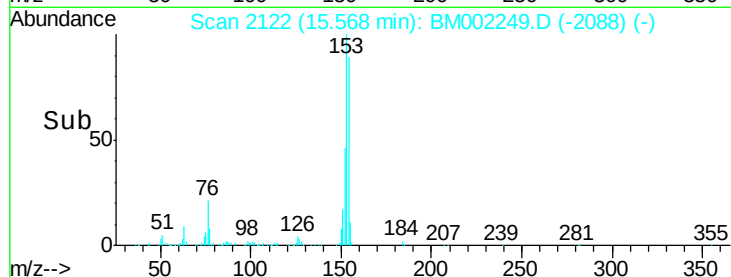
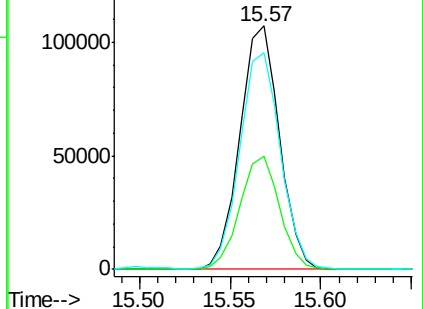
154 89.0 71.5 107.3



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: 5.59 ng/ul

RT: 16.53 min Scan# 2285

Delta R.T. -0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

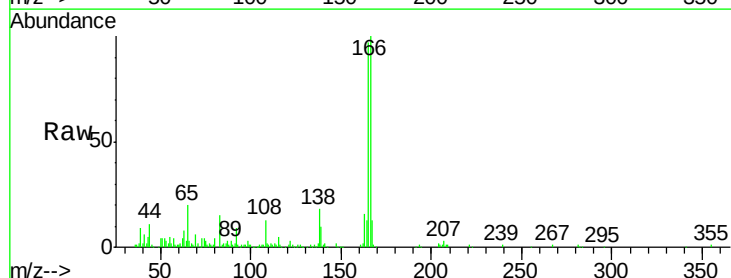
Tgt Ion:166 Resp: 186236

Ion Ratio Lower Upper

166 100

165 97.1 77.5 116.3

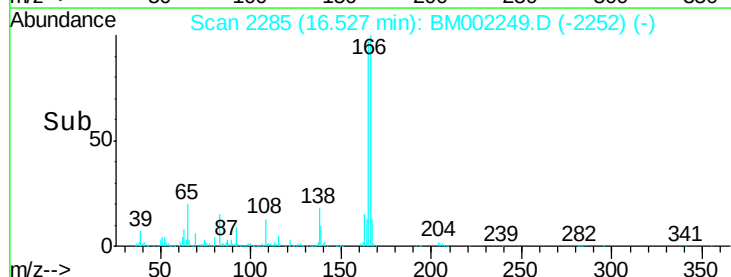
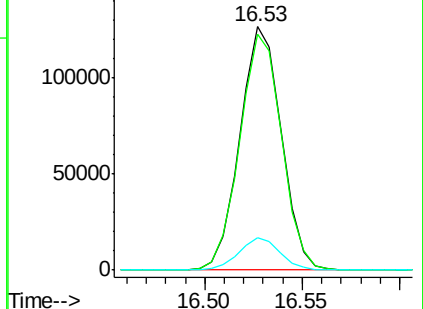
167 13.3 10.4 15.6

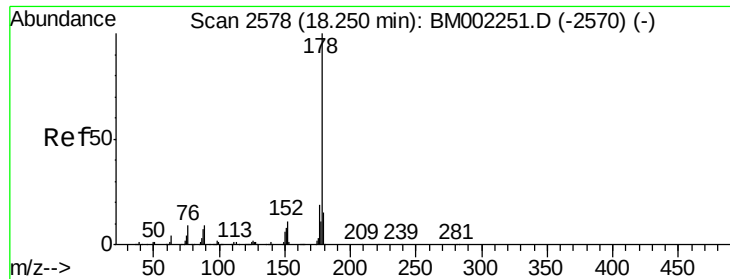


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene

Concen: 5.61 ng/ul

RT: 18.25 min Scan# 2578

Delta R.T. 0.00 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

Instrument :

BNA\_M

ClientSampleId :

SSTD00507

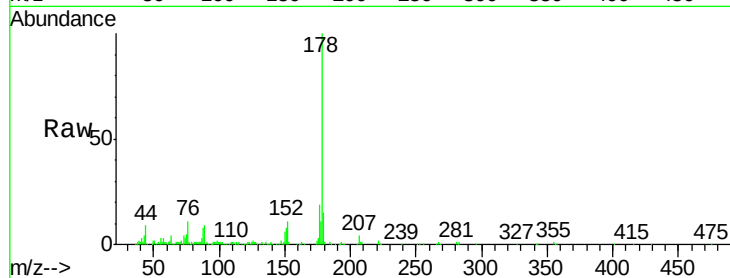
Tgt Ion:178 Resp: 282438

Ion Ratio Lower Upper

178 100

179 15.1 12.3 18.5

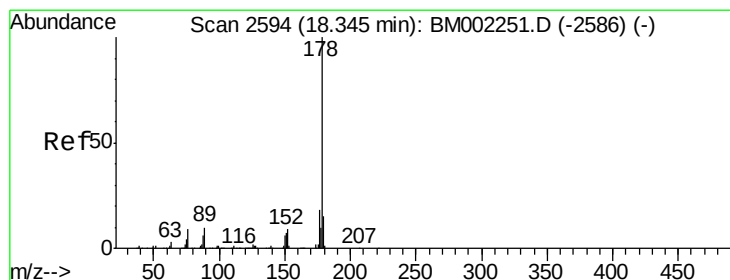
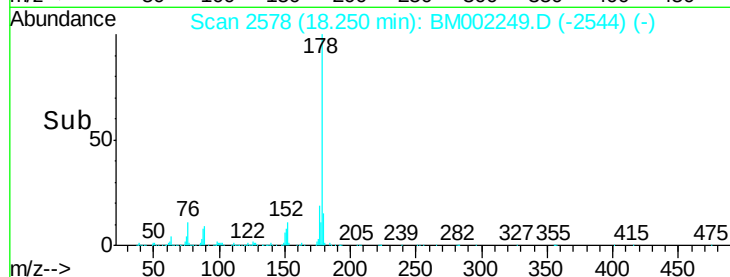
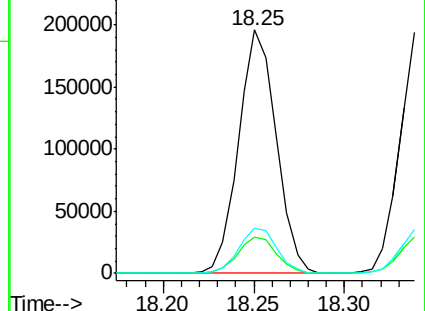
176 18.8 15.3 22.9



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: 5.69 ng/ul

RT: 18.34 min Scan# 2593

Delta R.T. -0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

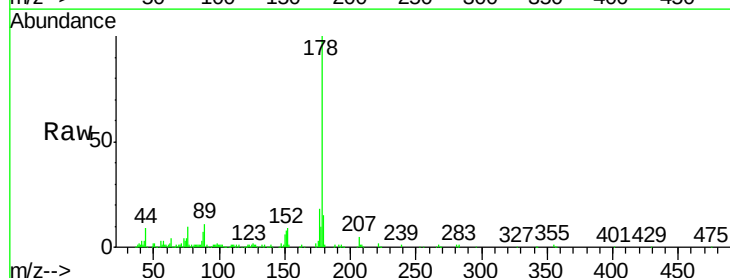
Tgt Ion:178 Resp: 293574

Ion Ratio Lower Upper

178 100

179 15.1 12.3 18.5

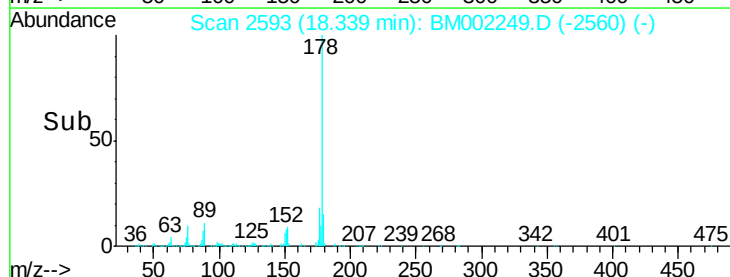
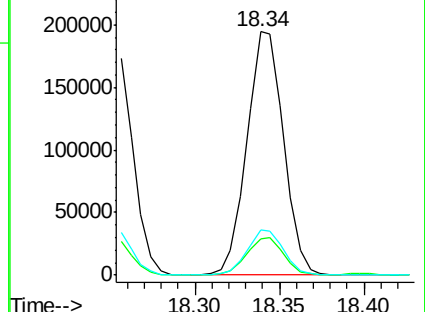
176 18.4 14.5 21.7

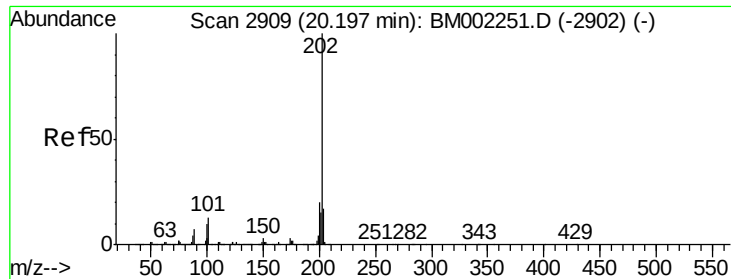


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E

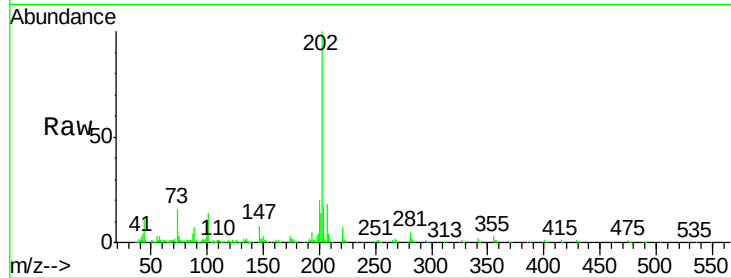




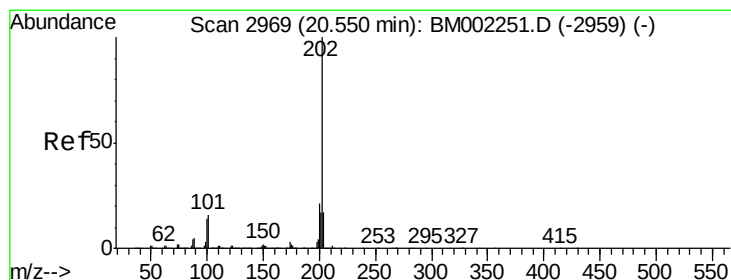
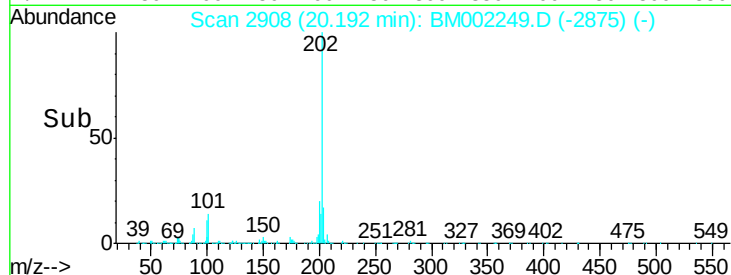
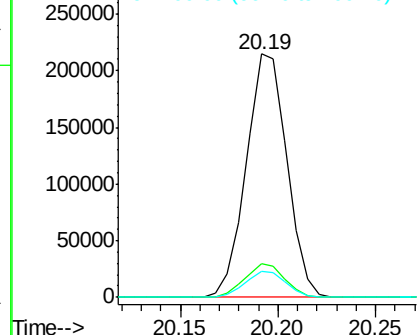
#16  
Fluoranthene  
Concen: 5.56 ng/ul  
RT: 20.19 min Scan# 2908  
Delta R.T. -0.01 min  
Lab File: BM002249.D  
Acq: 07 Aug 2015 22:18

Instrument :  
BNA\_M  
ClientSampleId :  
SSTD00507

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 14.0  | 10.6  | 15.8  |
| 100     | 10.9  | 8.2   | 12.4  |

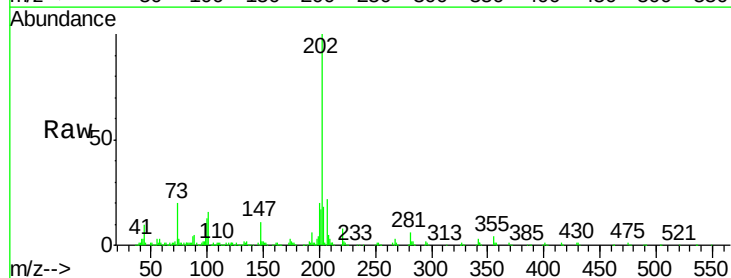


Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B

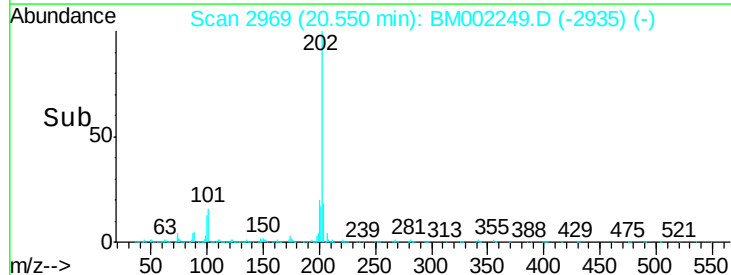
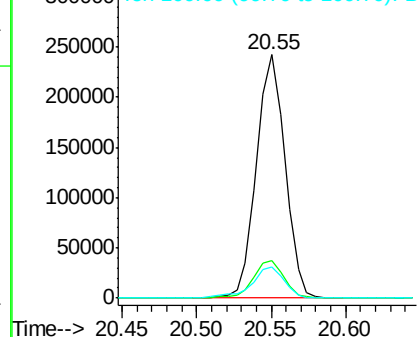


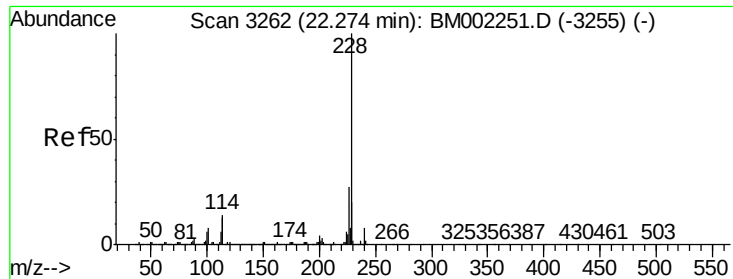
#19  
Pyrene  
Concen: 5.29 ng/ul  
RT: 20.55 min Scan# 2969  
Delta R.T. 0.00 min  
Lab File: BM002249.D  
Acq: 07 Aug 2015 22:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 15.6  | 13.0  | 19.6  |
| 100     | 12.7  | 11.0  | 16.4  |



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: 5.53 ng/ul

RT: 22.28 min Scan# 3263

Delta R.T. 0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

Instrument :

BNA\_M

ClientSampled :

SSTD00507

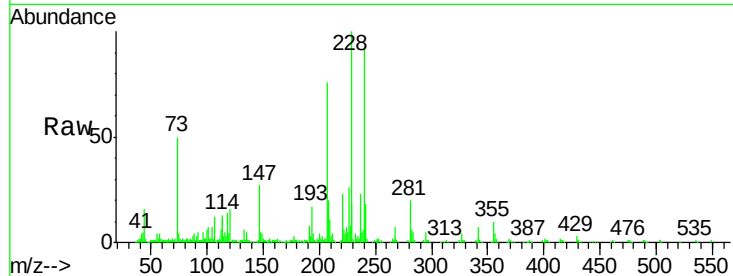
Tgt Ion:228 Resp: 308351

Ion Ratio Lower Upper

228 100

229 19.1 15.7 23.5

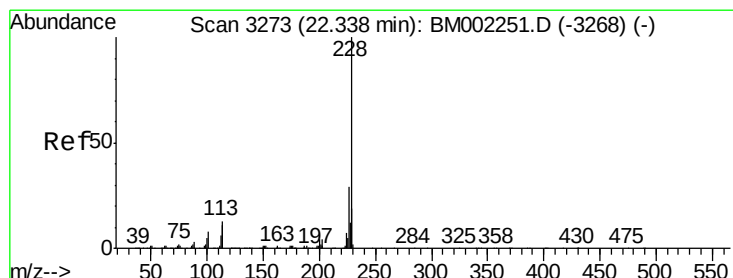
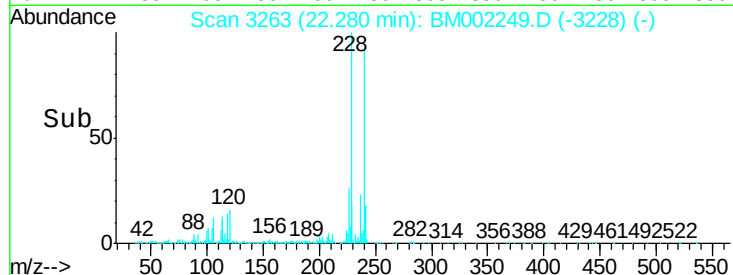
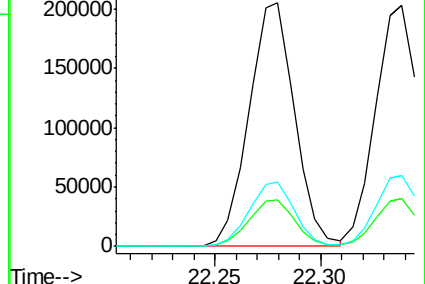
226 26.3 21.4 32.0



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: 5.68 ng/ul

RT: 22.34 min Scan# 3273

Delta R.T. 0.00 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

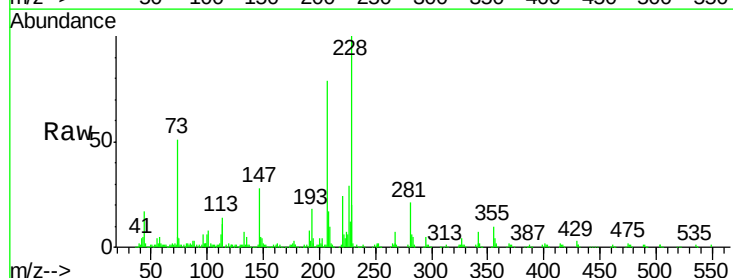
Tgt Ion:228 Resp: 292785

Ion Ratio Lower Upper

228 100

226 29.1 23.4 35.0

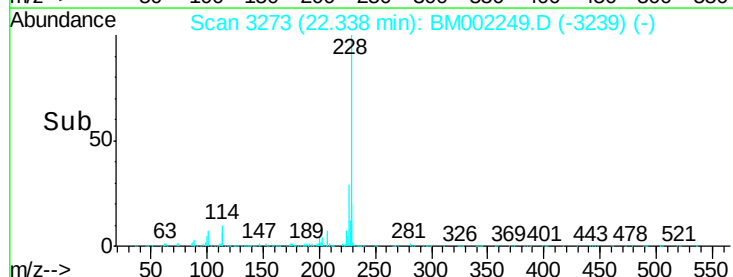
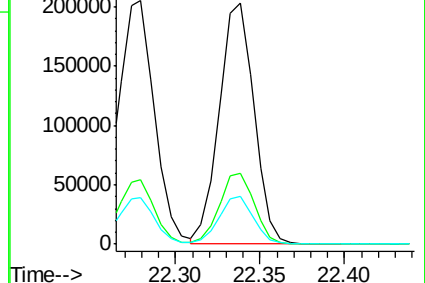
229 19.6 15.5 23.3



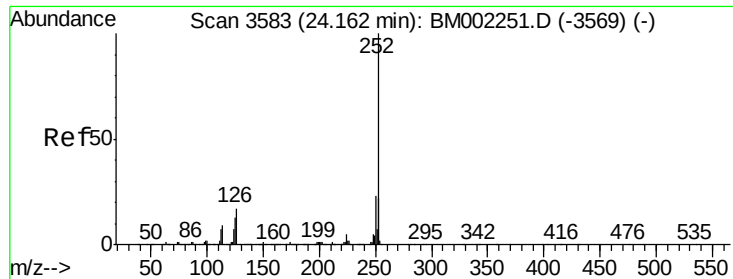
Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E







#23

Benzo(b)fluoranthene

Concen: 5.54 ng/ul

RT: 24.16 min Scan# 3582

Delta R.T. -0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

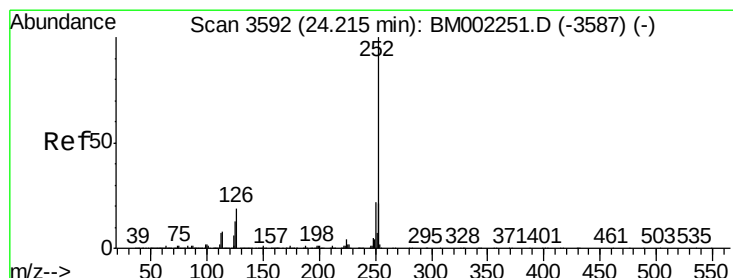
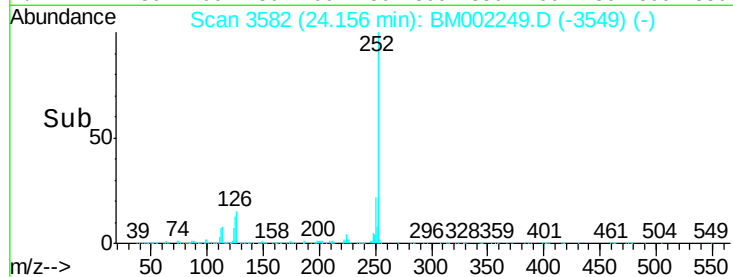
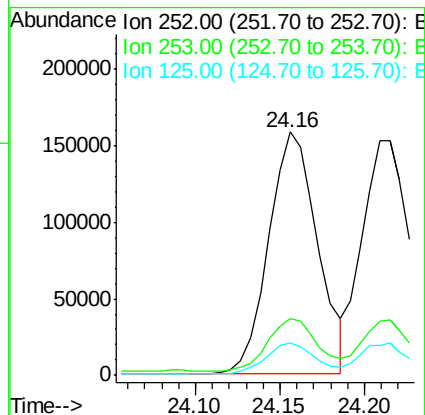
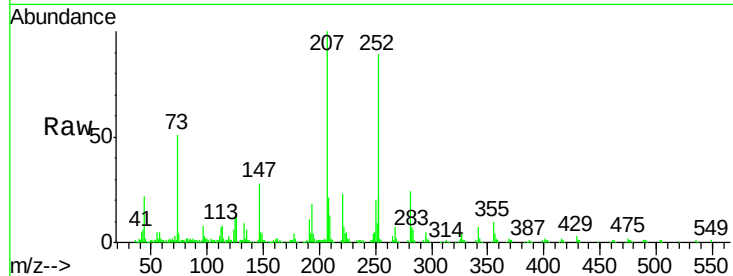
Instrument :

BNA\_M

ClientSampleId :

SSTD00507

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 252   | Resp: | 318090 |
| Ion      | Ratio | Lower | Upper  |
| 252      | 100   |       |        |
| 253      | 23.1  | 17.9  | 26.9   |
| 125      | 13.3  | 10.3  | 15.5   |



#24

Benzo(k)fluoranthene

Concen: 5.38 ng/ul

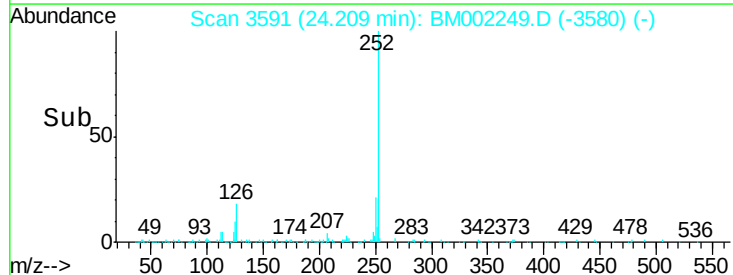
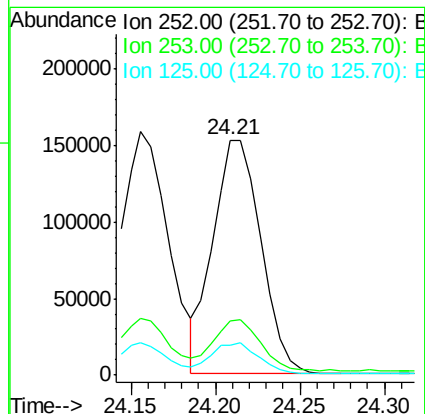
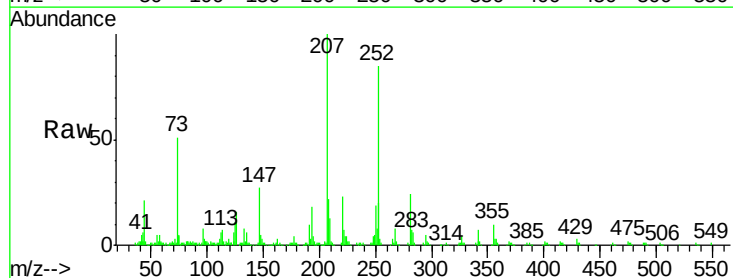
RT: 24.21 min Scan# 3591

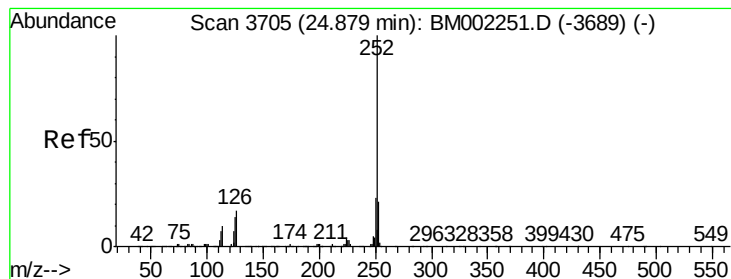
Delta R.T. -0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 252   | Resp: | 301349 |
| Ion      | Ratio | Lower | Upper  |
| 252      | 100   |       |        |
| 253      | 23.2  | 17.3  | 25.9   |
| 125      | 12.7  | 10.2  | 15.4   |





#26

Benzo(a)pyrene

Concen: 5.52 ng/ul

RT: 24.87 min Scan# 3704

Delta R.T. -0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

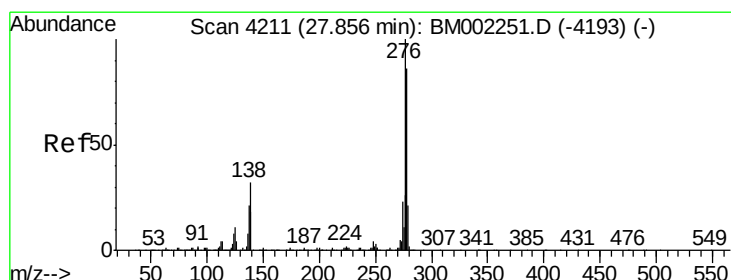
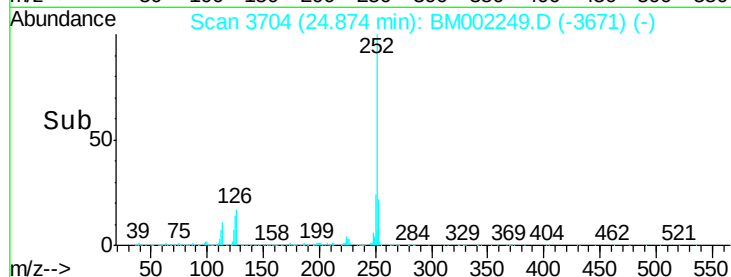
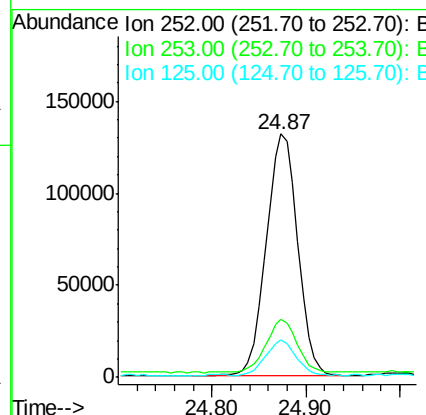
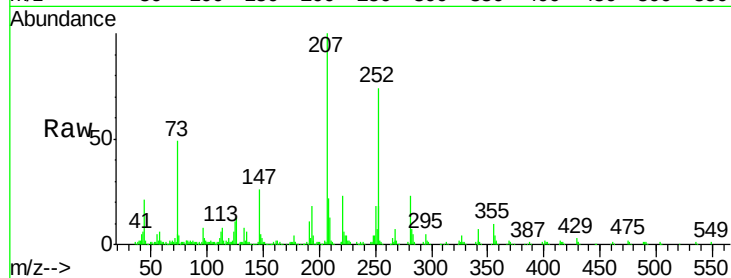
Instrument :

BNA\_M

ClientSampleId :

SSTD00507

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 252  | Resp: | 303985 |
| Ion Ratio |      | Lower | Upper  |
| 252       | 100  |       |        |
| 253       | 23.9 | 17.3  | 25.9   |
| 125       | 15.4 | 11.0  | 16.6   |



#27

Indeno(1,2,3-cd)pyrene

Concen: 5.67 ng/ul

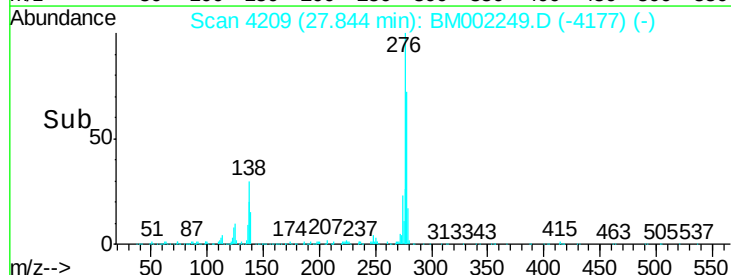
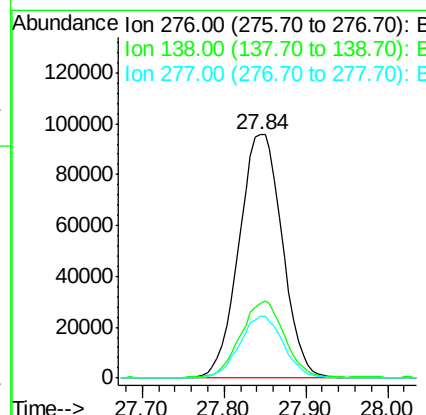
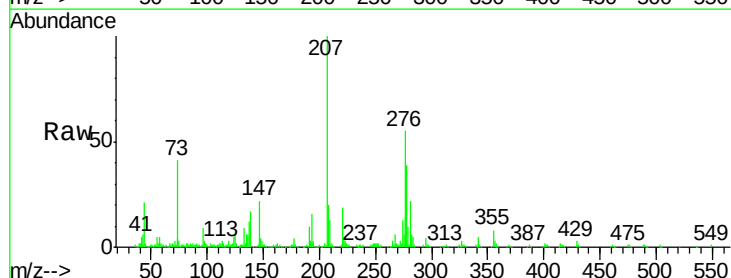
RT: 27.84 min Scan# 4209

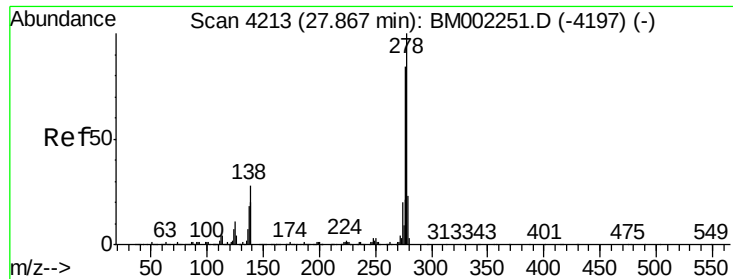
Delta R.T. -0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 276  | Resp: | 353359 |
| Ion Ratio |      | Lower | Upper  |
| 276       | 100  |       |        |
| 138       | 30.7 | 25.6  | 38.4   |
| 277       | 25.5 | 21.0  | 31.4   |





#28

Dibenzo(a,h)anthracene

Concen: 5.66 ng/ul

RT: 27.86 min Scan# 4212

Delta R.T. -0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

Instrument :

BNA\_M

ClientSampleId :

SSTD00507

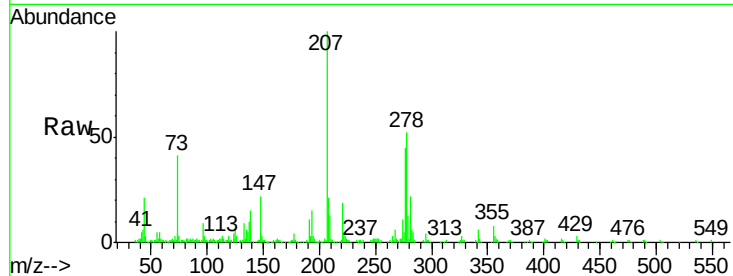
Tgt Ion:278 Resp: 300035

Ion Ratio Lower Upper

278 100

139 21.7 16.4 24.6

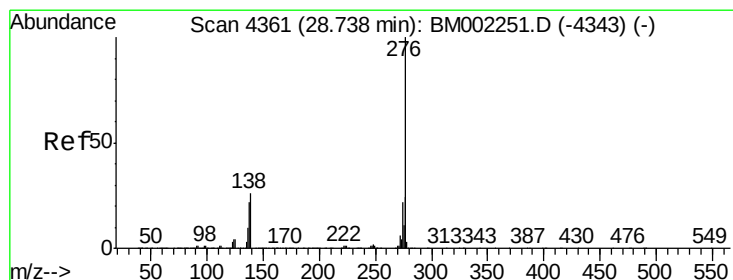
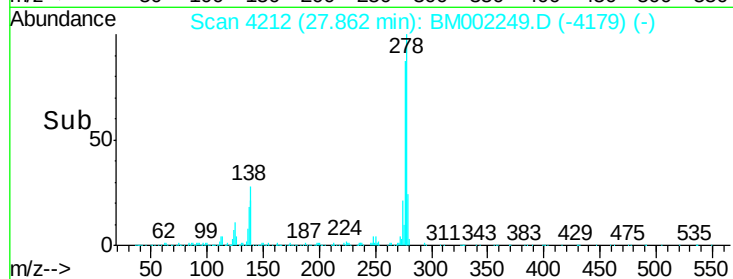
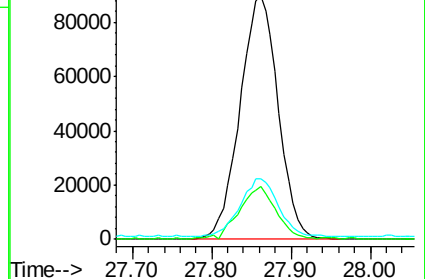
279 24.9 18.8 28.2



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: 5.72 ng/ul

RT: 28.73 min Scan# 4359

Delta R.T. -0.01 min

Lab File: BM002249.D

Acq: 07 Aug 2015 22:18

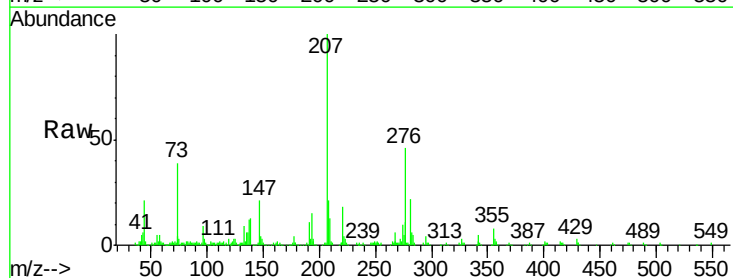
Tgt Ion:276 Resp: 297276

Ion Ratio Lower Upper

276 100

138 28.3 20.5 30.7

277 24.3 19.0 28.6



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

