

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\  
 Data File : BM002396.D  
 Acq On : 14 Aug 2015 21:39  
 Operator : UM/IZ  
 Sample : SST04035  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 SST04035

Quant Time: Aug 17 01:37:47 2015  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Aug 17 01:34:51 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.87  | 152  | 92465    | 20.00 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 11.74 | 136  | 463640   | 20.00 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 15.45 | 164  | 261128   | 20.00 | ng/ul | 0.00     |
| 12) Phenanthrene-d10      | 18.15 | 188  | 562143   | 20.00 | ng/ul | 0.00     |
| 17) Chrysene-d12          | 22.23 | 240  | 861034   | 20.00 | ng/ul | 0.00     |
| 22) Perylene-d12          | 24.89 | 264  | 587835   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                        |       |     |         |       |       |      |
|------------------------|-------|-----|---------|-------|-------|------|
| 7) Acenaphthylene-d8   | 15.15 | 160 | 1053281 | 39.45 | ng/ul | 0.00 |
| 10) Fluorene-d10       | 16.42 | 176 | 724897  | 38.66 | ng/ul | 0.00 |
| 14) Anthracene-d10     | 18.25 | 188 | 1064762 | 39.27 | ng/ul | 0.00 |
| 18) Pyrene-d10         | 20.47 | 212 | 1077054 | 28.22 | ng/ul | 0.00 |
| 25) Benzo(a)pyrene-d12 | 24.72 | 264 | 1207738 | 39.11 | ng/ul | 0.00 |

## Target Compounds

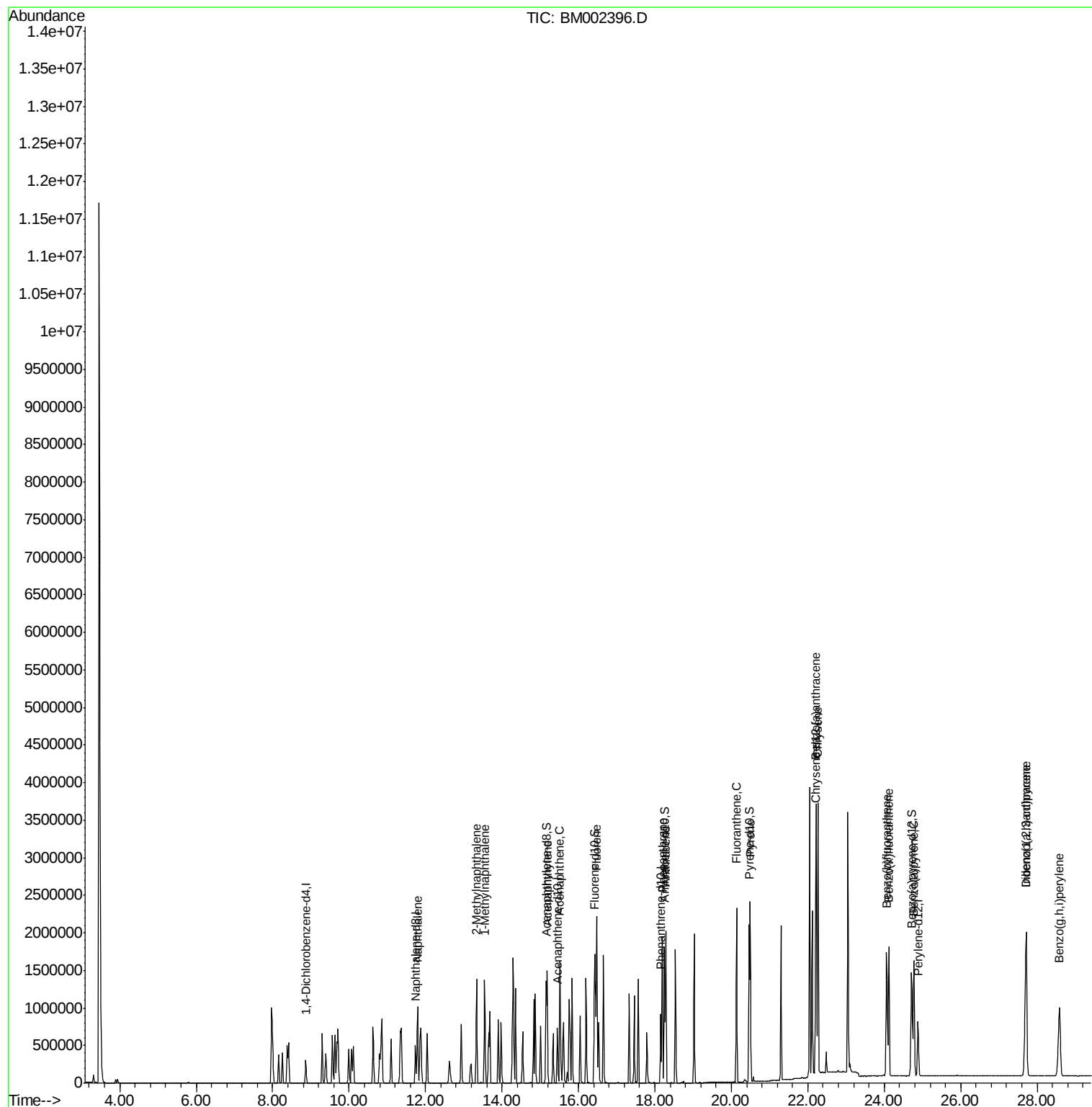
|                            |       |     |         |       |       | Ovalue |
|----------------------------|-------|-----|---------|-------|-------|--------|
| 3) Naphthalene             | 11.79 | 128 | 918679  | 38.82 | ng/ul | 100    |
| 4) 2-Methylnaphthalene     | 13.33 | 142 | 681794  | 38.46 | ng/ul | 99     |
| 5) 1-Methylnaphthalene     | 13.55 | 142 | 672523  | 38.35 | ng/ul | 100    |
| 8) Acenaphthylene          | 15.18 | 152 | 1098621 | 39.31 | ng/ul | 99     |
| 9) Acenaphthene            | 15.51 | 153 | 721253  | 39.18 | ng/ul | 99     |
| 11) Fluorene               | 16.47 | 166 | 816288  | 38.70 | ng/ul | 99     |
| 13) Phenanthrene           | 18.20 | 178 | 1260258 | 38.82 | ng/ul | 99     |
| 15) Anthracene             | 18.29 | 178 | 1279569 | 38.90 | ng/ul | 99     |
| 16) Fluoranthene           | 20.14 | 202 | 1387074 | 37.74 | ng/ul | 99     |
| 19) Pyrene                 | 20.49 | 202 | 1434685 | 28.44 | ng/ul | 99     |
| 20) Benzo(a)anthracene     | 22.21 | 228 | 2003079 | 38.90 | ng/ul | 99     |
| 21) Chrysene               | 22.27 | 228 | 1887499 | 39.19 | ng/ul | 99     |
| 23) Benzo(b)fluoranthene   | 24.06 | 252 | 1397075 | 39.31 | ng/ul | 100    |
| 24) Benzo(k)fluoranthene   | 24.12 | 252 | 1304625 | 38.74 | ng/ul | 99     |
| 26) Benzo(a)pyrene         | 24.77 | 252 | 1328349 | 39.13 | ng/ul | 99     |
| 27) Indeno(1,2,3-cd)pyrene | 27.71 | 276 | 1518789 | 38.91 | ng/ul | 99     |
| 28) Dibenzo(a,h)anthracene | 27.71 | 278 | 1273244 | 39.02 | ng/ul | 99     |
| 29) Benzo(g,h,i)perylene   | 28.59 | 276 | 1273839 | 39.20 | ng/ul | 99     |

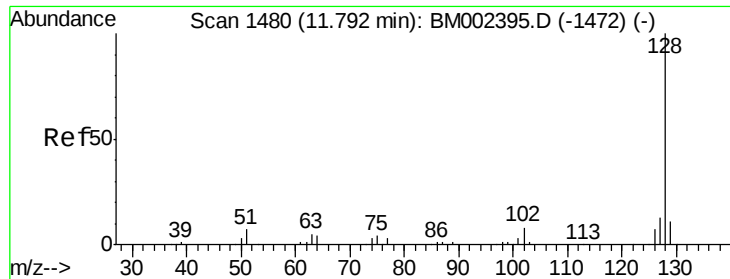
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\  
Data File : BM002396.D  
Acq On : 14 Aug 2015 21:39  
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Sample : SSTD04035  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
SSTD04035

Quant Time: Aug 17 01:37:47 2015  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Aug 17 01:34:51 2015  
Response via : Initial Calibration





#3

Naphthalene

Concen: 38.82 ng/ul

RT: 11.79 min Scan# 1480

Delta R.T. -0.00 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

Instrument :

BNA\_M

ClientSampleId :

SSTD04035

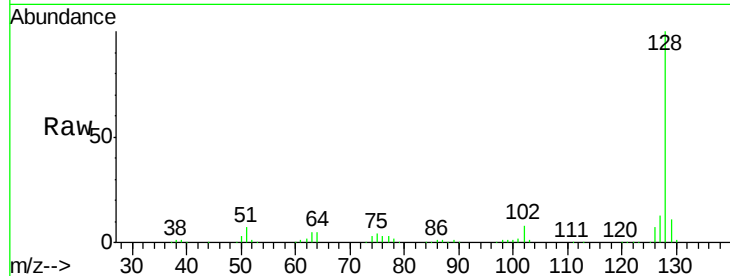
Tot Ion:128 Resp: 918679

Ion Ratio Lower Upper

128 100

129 10.7 8.6 12.8

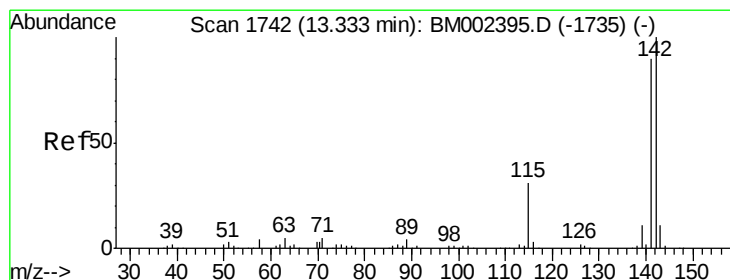
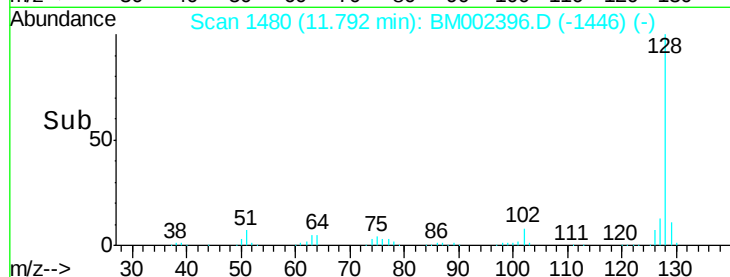
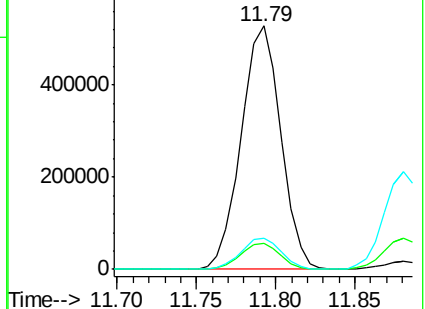
127 13.0 10.4 15.6



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: 38.46 ng/ul

RT: 13.33 min Scan# 1742

Delta R.T. -0.00 min

Lab File: BM002396.D

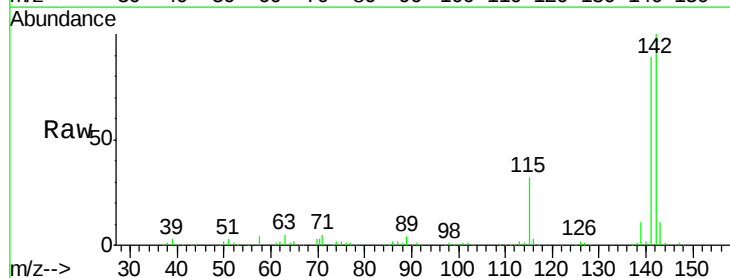
Acq: 14 Aug 2015 21:39

Tgt Ion:142 Resp: 681794

Ion Ratio Lower Upper

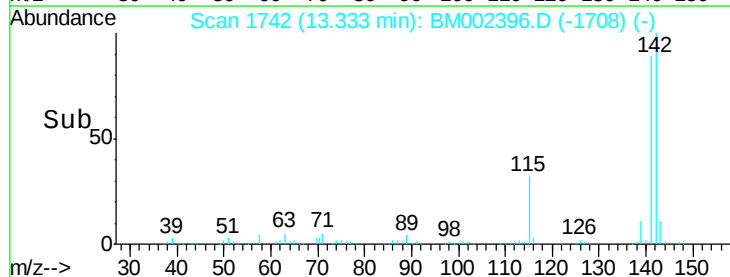
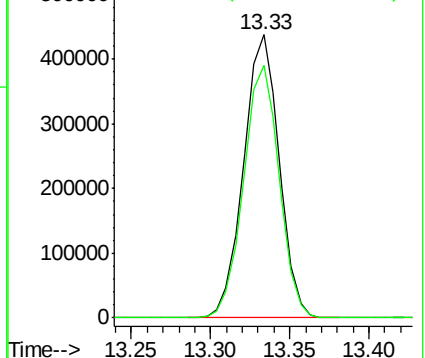
142 100

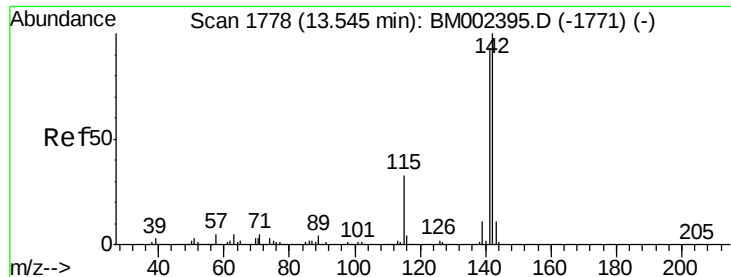
141 89.4 72.2 108.2



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#5

1-Methylnaphthalene

Concen: 38.35 ng/ul

RT: 13.55 min Scan# 1778

Delta R.T. -0.00 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

Instrument :

BNA\_M

ClientSampled :

SSTD04035

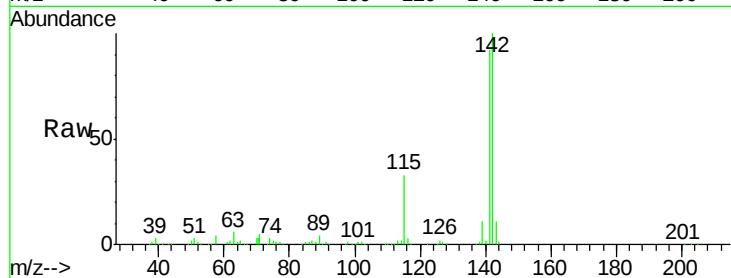
Tot Ion:142 Resp: 672523

Ion Ratio Lower Upper

142 100

141 92.1 73.9 110.9

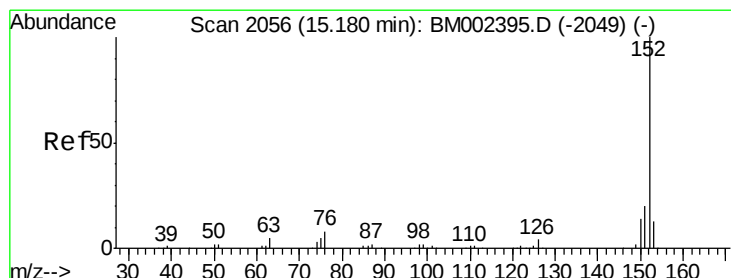
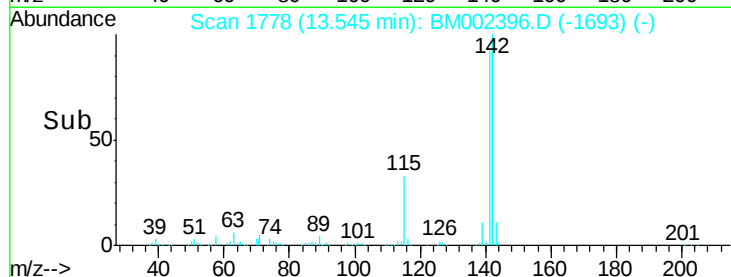
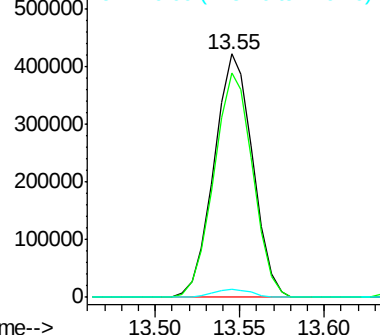
116 3.4 3.0 4.4



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 116.00 (115.70 to 116.70): E



#8

Acenaphthylene

Concen: 39.31 ng/ul

RT: 15.18 min Scan# 2056

Delta R.T. -0.00 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

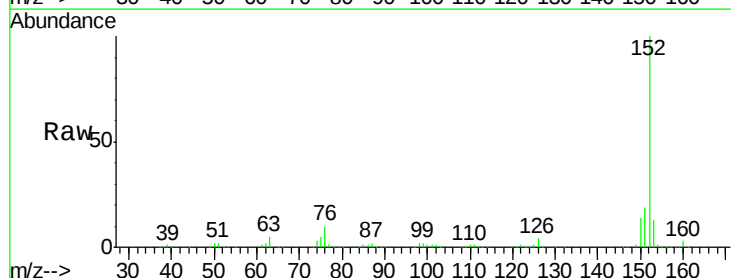
Tgt Ion:152 Resp: 1098621

Ion Ratio Lower Upper

152 100

151 19.3 15.7 23.5

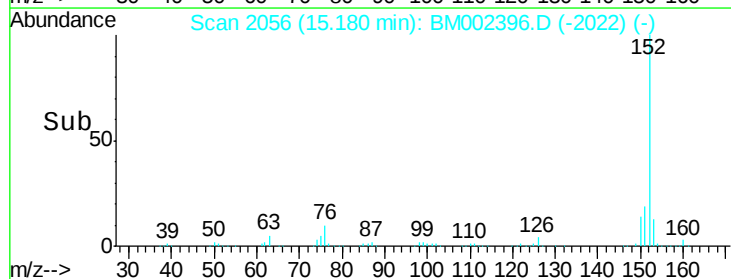
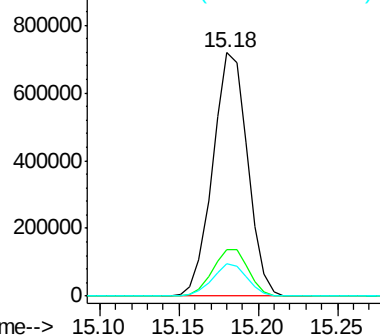
153 13.1 10.2 15.4

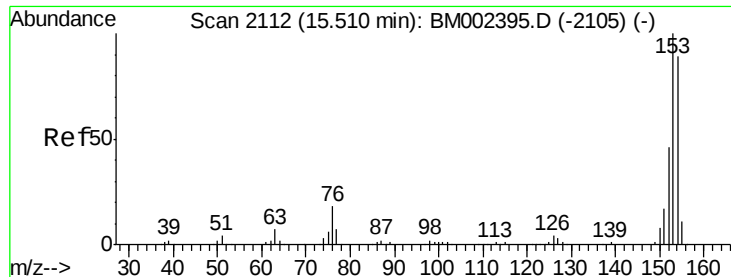


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#9

Acenaphthene

Concen: 39.18 ng/ul

RT: 15.51 min Scan# 2112

Delta R.T. -0.00 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

Instrument :

BNA\_M

ClientSampleId :

SSTD04035

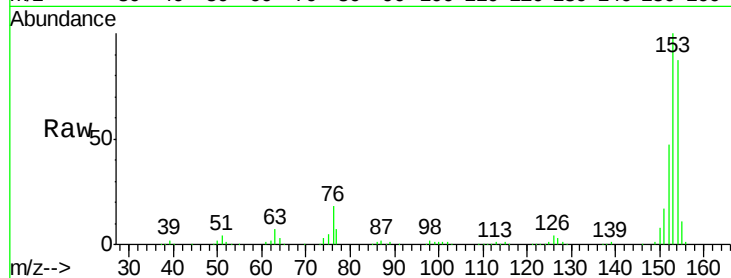
Tot Ion:153 Resp: 721253

Ion Ratio Lower Upper

153 100

152 46.7 36.9 55.3

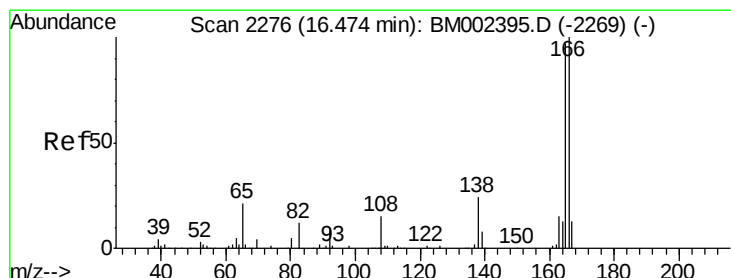
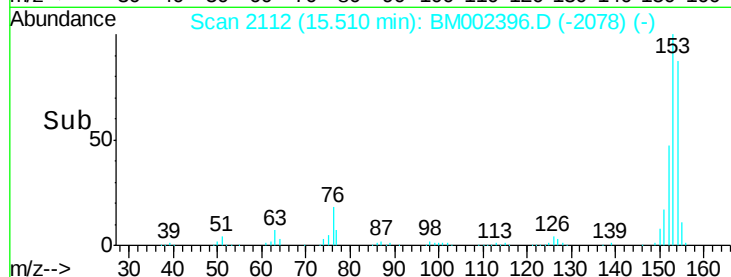
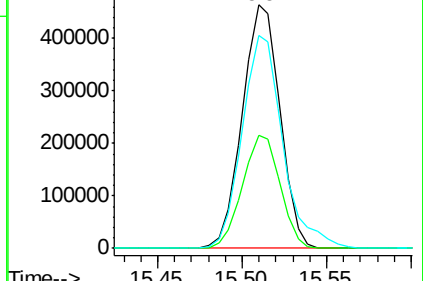
154 87.4 71.3 106.9



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: 38.70 ng/ul

RT: 16.47 min Scan# 2276

Delta R.T. -0.00 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

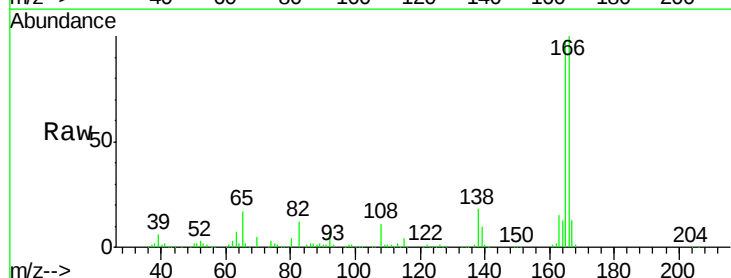
Tgt Ion:166 Resp: 816288

Ion Ratio Lower Upper

166 100

165 98.0 77.6 116.4

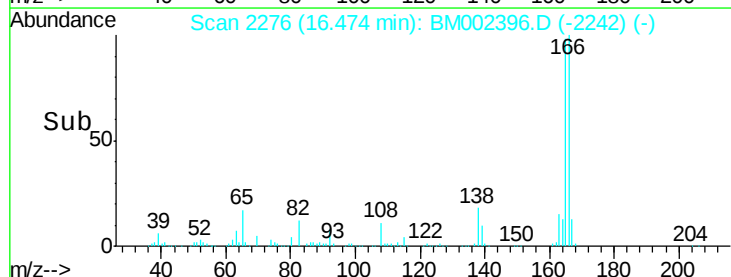
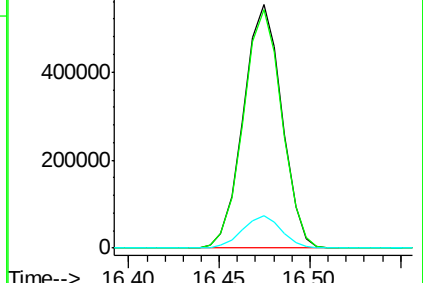
167 13.2 10.7 16.1

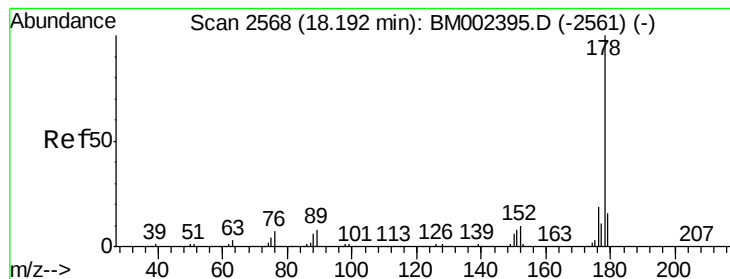


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene

Concen: 38.82 ng/ul

RT: 18.20 min Scan# 2569

Delta R.T. 0.01 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

Instrument :

BNA\_M

ClientSampleId :

SSTD04035

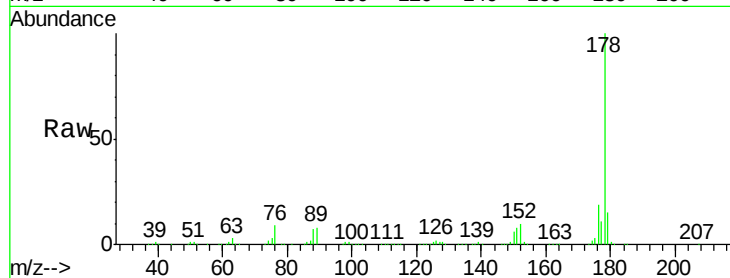
Tot Ion:178 Resp: 1260258

Ion Ratio Lower Upper

178 100

179 15.2 12.4 18.6

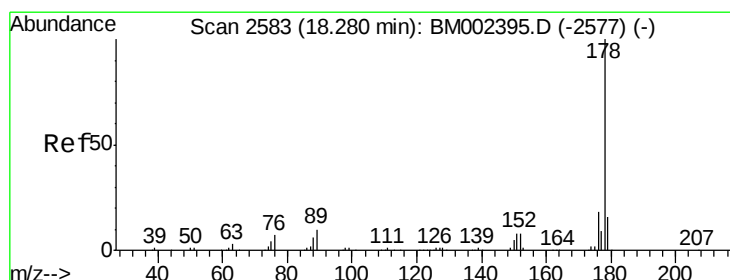
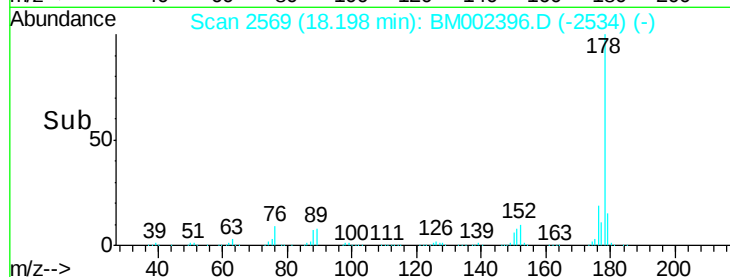
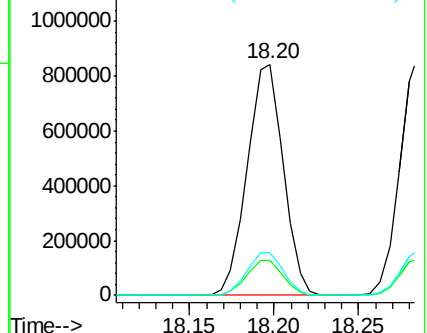
176 18.6 15.1 22.7



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#15

Anthracene

Concen: 38.90 ng/ul

RT: 18.29 min Scan# 2584

Delta R.T. 0.01 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

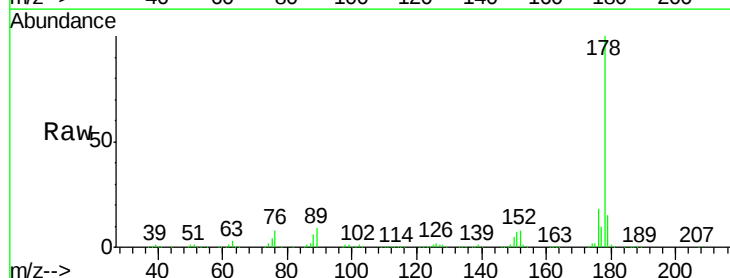
Tgt Ion:178 Resp: 1279569

Ion Ratio Lower Upper

178 100

179 15.5 12.6 18.8

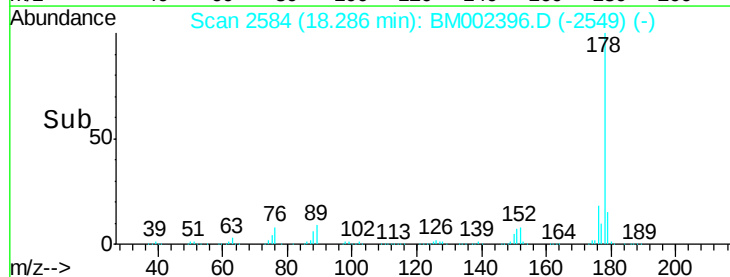
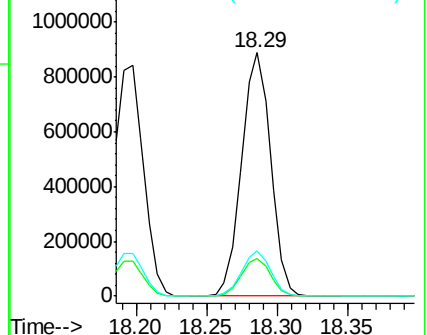
176 18.4 14.5 21.7

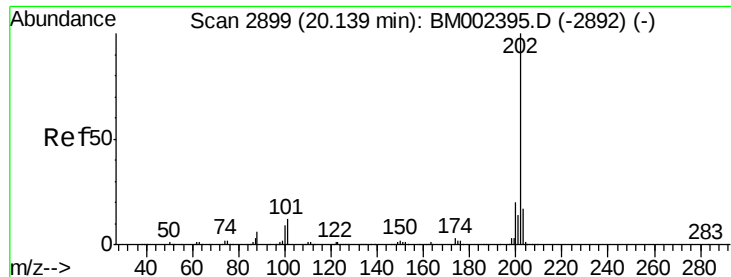


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E

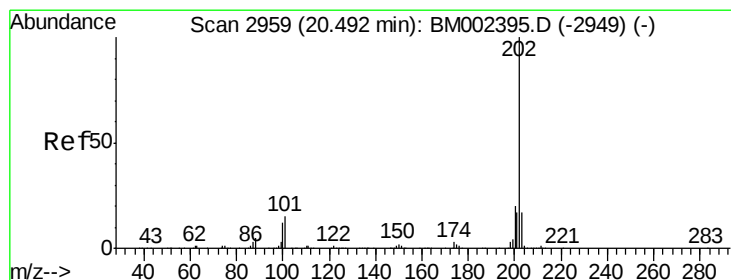
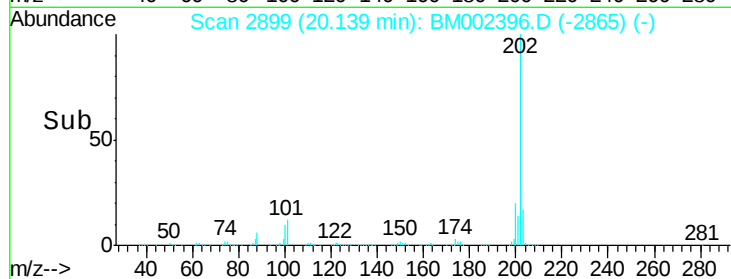
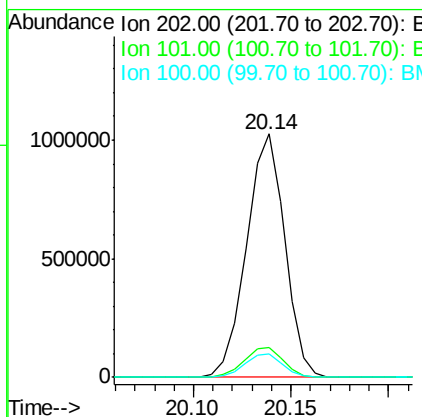
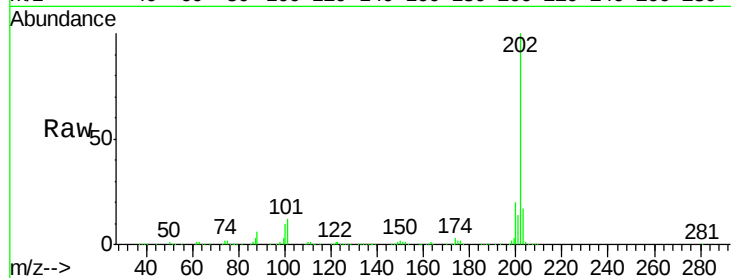




#16  
 Fluoranthene  
 Concen: 37.74 ng/ul  
 RT: 20.14 min Scan# 2899  
 Delta R.T. -0.00 min  
 Lab File: BM002396.D  
 Acq: 14 Aug 2015 21:39

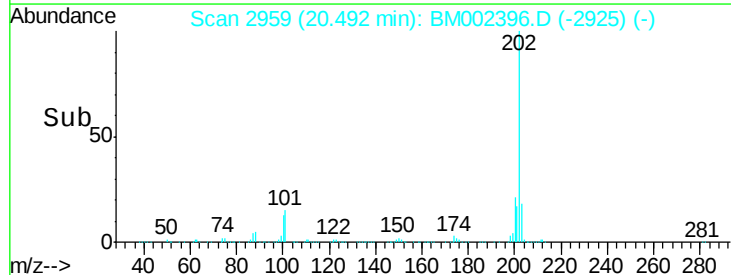
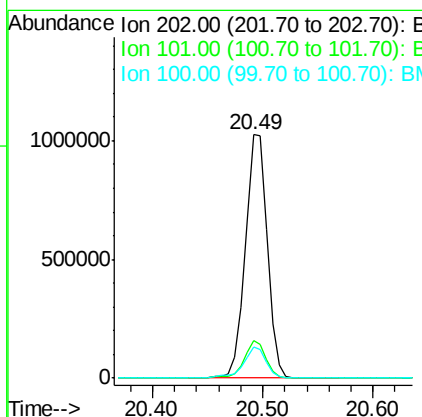
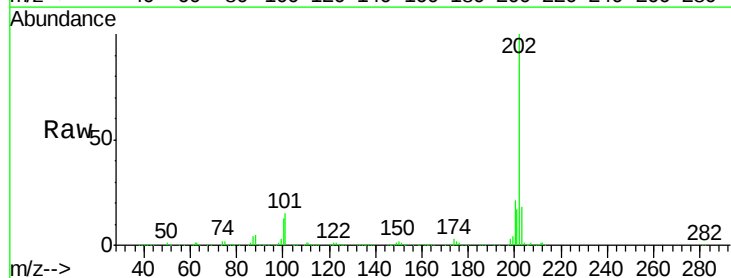
Instrument :  
 BNA\_M  
 ClientSampleId :  
 SST04035

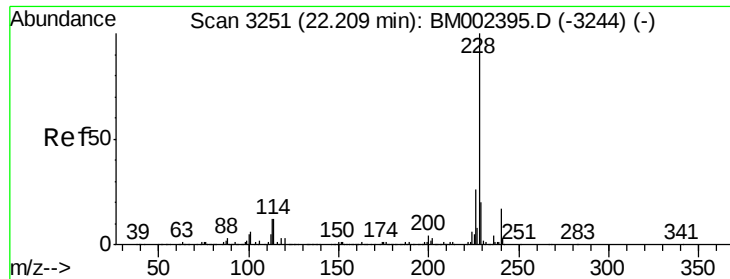
Tot Ion:202 Resp: 1387074  
 Ion Ratio Lower Upper  
 202 100  
 101 12.4 9.7 14.5  
 100 9.6 7.4 11.2



#19  
 Pyrene  
 Concen: 28.44 ng/ul  
 RT: 20.49 min Scan# 2959  
 Delta R.T. -0.00 min  
 Lab File: BM002396.D  
 Acq: 14 Aug 2015 21:39

Tgt Ion:202 Resp: 1434685  
 Ion Ratio Lower Upper  
 202 100  
 101 15.5 12.0 18.0  
 100 12.8 9.7 14.5





#20

Benzo(a)anthracene

Concen: 38.90 ng/ul

RT: 22.21 min Scan# 3251

Delta R.T. -0.00 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

Instrument :

BNA\_M

ClientSampleId :

SSTD04035

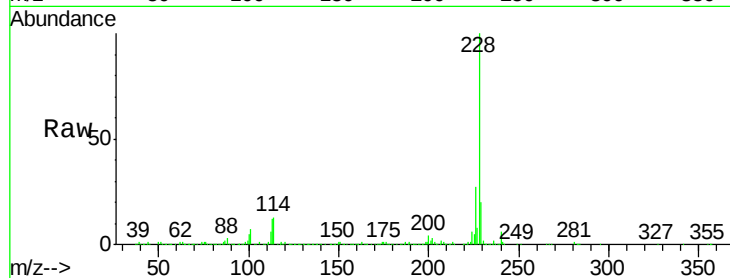
Tot Ion:228 Resp: 2003079

Ion Ratio Lower Upper

228 100

229 19.9 15.8 23.6

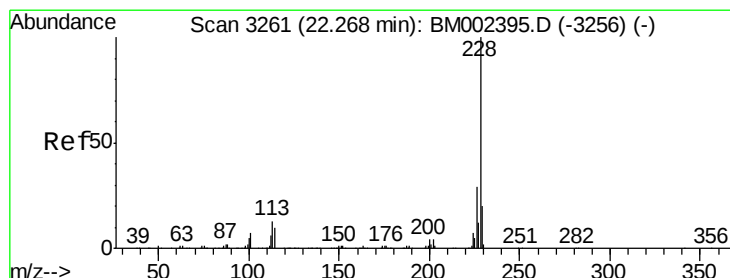
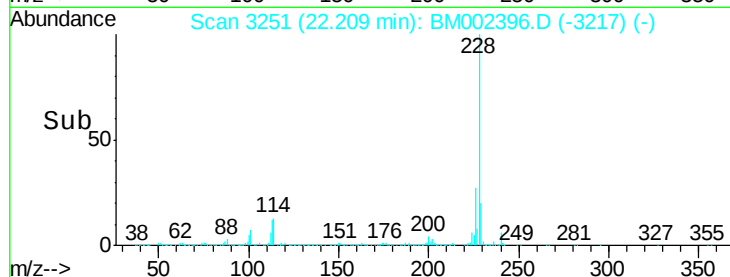
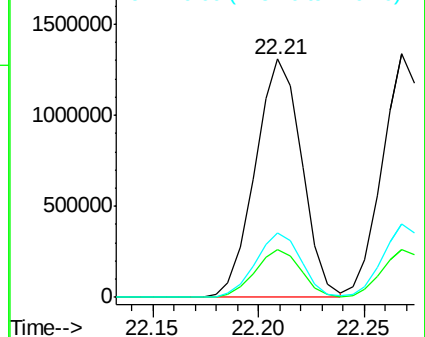
226 26.9 21.1 31.7



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: 39.19 ng/ul

RT: 22.27 min Scan# 3261

Delta R.T. -0.00 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

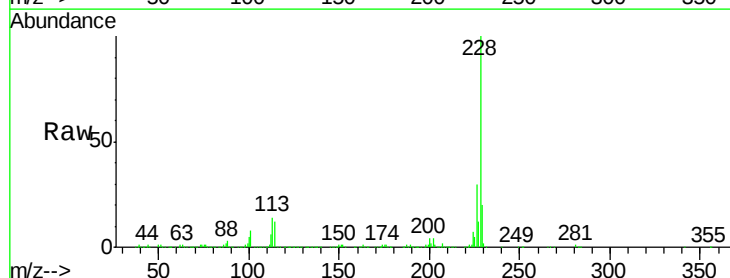
Tgt Ion:228 Resp: 1887499

Ion Ratio Lower Upper

228 100

226 30.0 23.4 35.2

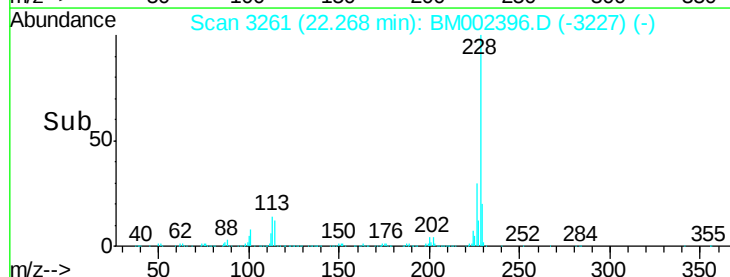
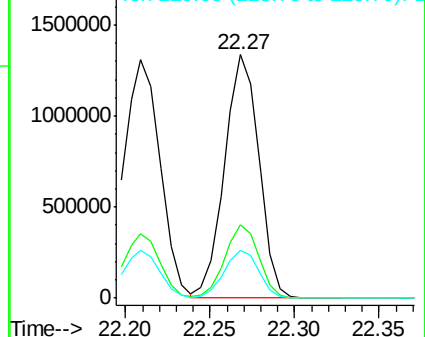
229 19.8 15.7 23.5

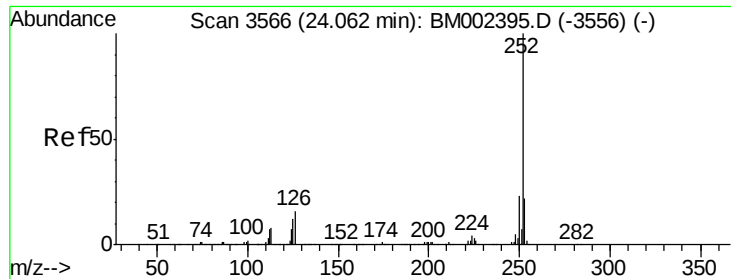


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#23

Benzo(b)fluoranthene

Concen: 39.31 ng/ul

RT: 24.06 min Scan# 3566

Delta R.T. -0.00 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

Instrument :

BNA\_M

ClientSampleId :

SSTD04035

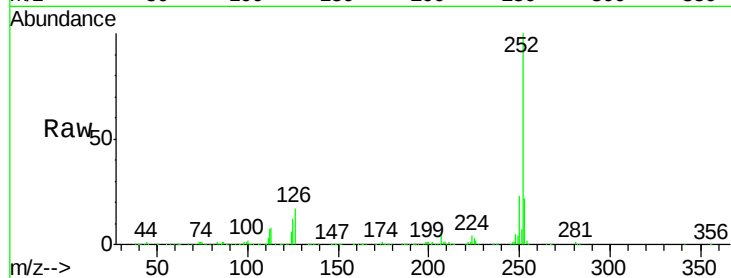
Tot Ion:252 Resp: 1397075

Ion Ratio Lower Upper

252 100

253 21.6 17.4 26.0

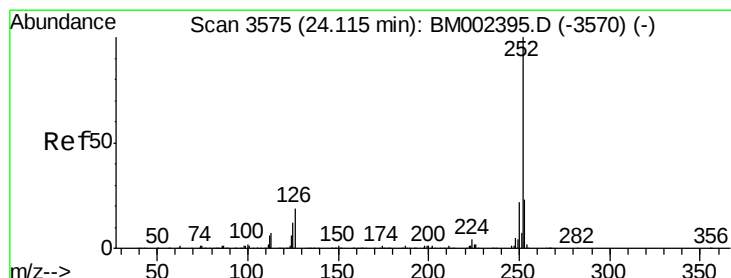
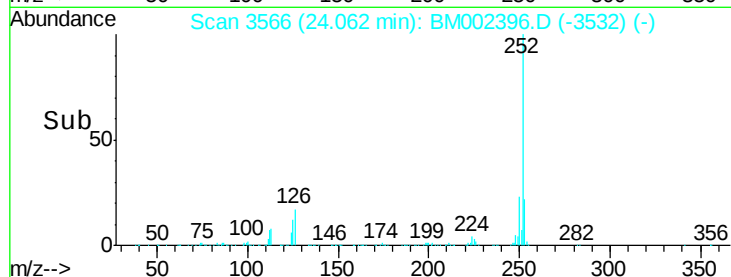
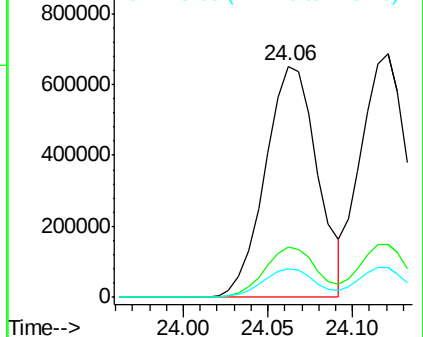
125 12.3 10.0 15.0



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: 38.74 ng/ul

RT: 24.12 min Scan# 3576

Delta R.T. 0.01 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

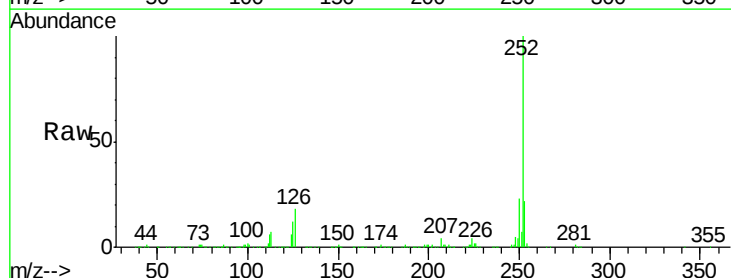
Tgt Ion:252 Resp: 1304625

Ion Ratio Lower Upper

252 100

253 21.7 17.8 26.6

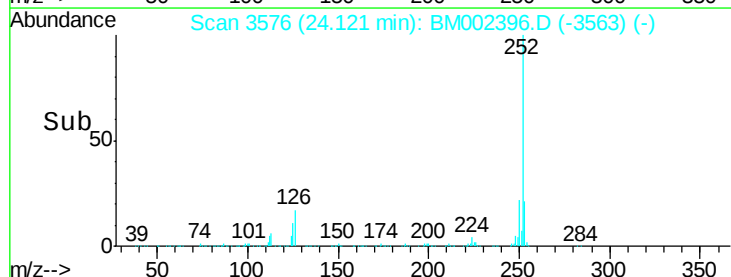
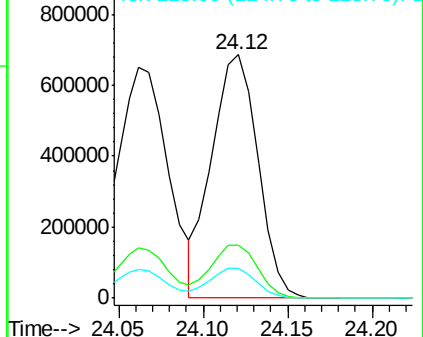
125 12.2 9.8 14.8

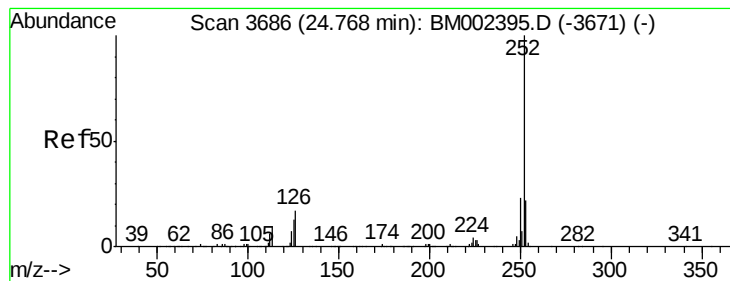


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#26

Benzo(a)pyrene

Concen: 39.13 ng/ul

RT: 24.77 min Scan# 3687

Delta R.T. 0.01 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

Instrument :

BNA\_M

ClientSampleId :

SSTD04035

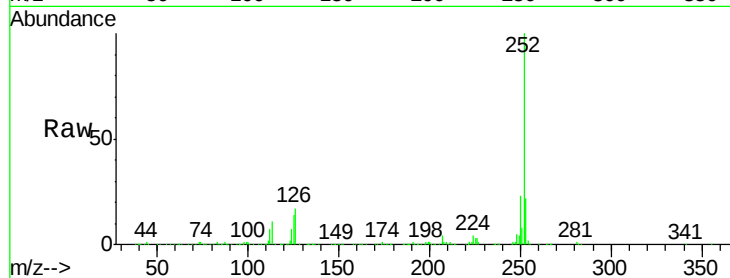
Tot Ion:252 Resp: 1328349

Ion Ratio Lower Upper

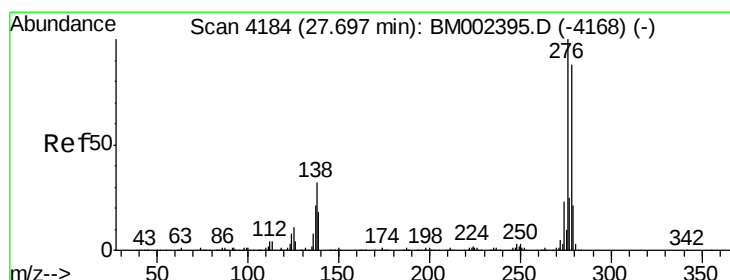
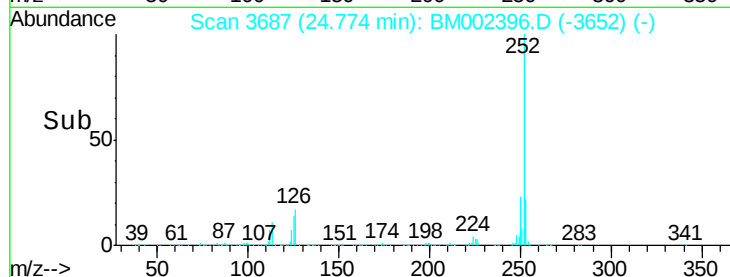
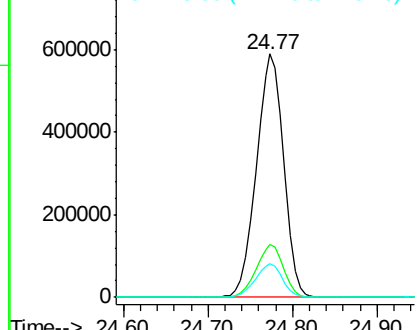
252 100

253 21.7 17.6 26.4

125 14.0 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: 38.91 ng/ul

RT: 27.71 min Scan# 4186

Delta R.T. 0.01 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

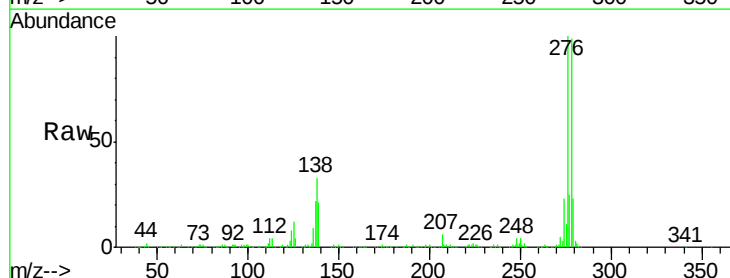
Tgt Ion:276 Resp: 1518789

Ion Ratio Lower Upper

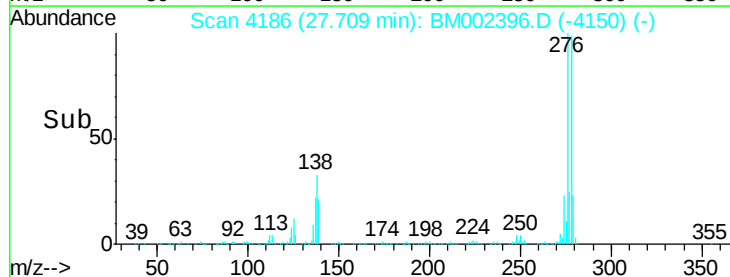
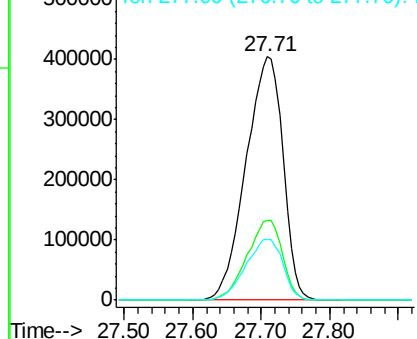
276 100

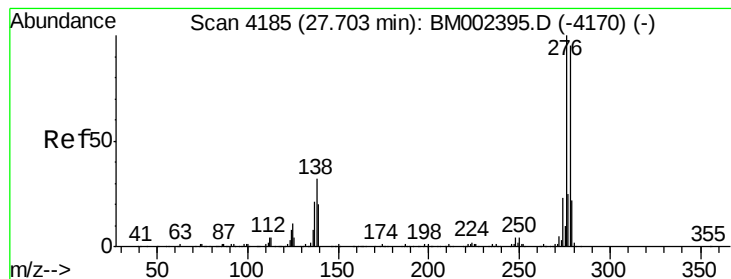
138 33.0 25.3 37.9

277 25.1 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: 39.02 ng/ul

RT: 27.71 min Scan# 4187

Delta R.T. 0.01 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

Instrument :

BNA\_M

ClientSampleId :

SSTD04035

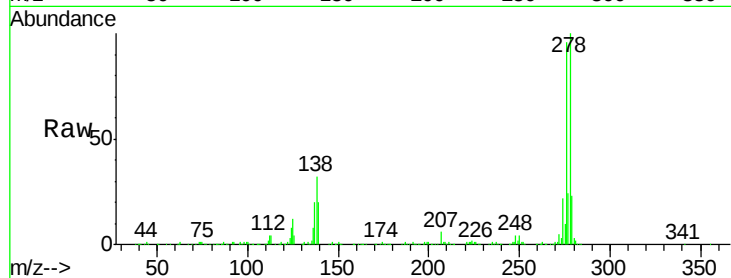
Tot Ion:278 Resp: 1273244

Ion Ratio Lower Upper

278 100

139 20.3 16.5 24.7

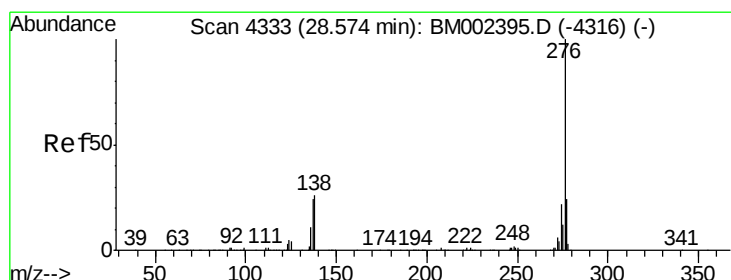
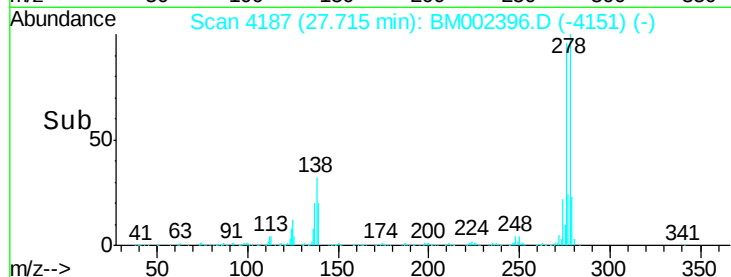
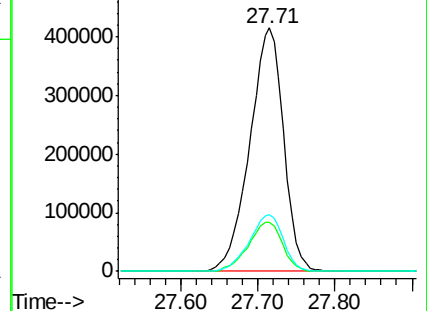
279 23.1 18.8 28.2



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: 39.20 ng/ul

RT: 28.59 min Scan# 4335

Delta R.T. 0.01 min

Lab File: BM002396.D

Acq: 14 Aug 2015 21:39

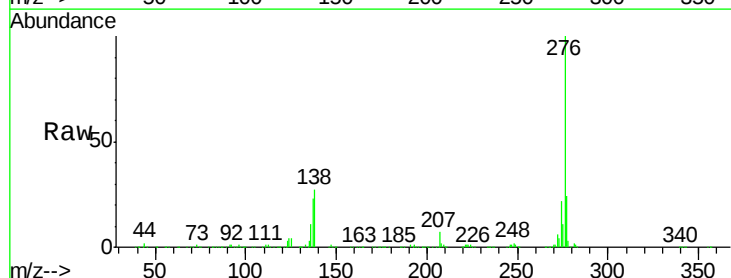
Tgt Ion:276 Resp: 1273839

Ion Ratio Lower Upper

276 100

138 26.6 21.0 31.6

277 23.5 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

