

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\  
 Data File : BM002397.D  
 Acq On : 14 Aug 2015 22:16  
 Operator : UM/IZ  
 Sample : SSTD08036  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: Aug 17 01:38:01 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  | 96282    | 20.00 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 11.74 | 136  | 466244   | 20.00 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 15.45 | 164  | 261457   | 20.00 | ng/ul | 0.00     |
| 12) Phenanthrene-d10      | 18.16 | 188  | 558721   | 20.00 | ng/ul | 0.00     |
| 17) Chrysene-d12          | 22.23 | 240  | 572176   | 20.00 | ng/ul | 0.00     |
| 22) Perylene-d12          | 24.89 | 264  | 576743   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                        |       |     |         |       |       |      |
|------------------------|-------|-----|---------|-------|-------|------|
| 7) Acenaphthylene-d8   | 15.16 | 160 | 2146056 | 80.28 | ng/ul | 0.00 |
| 10) Fluorene-d10       | 16.42 | 176 | 1455815 | 77.54 | ng/ul | 0.00 |
| 14) Anthracene-d10     | 18.26 | 188 | 2112301 | 78.38 | ng/ul | 0.00 |
| 18) Pyrene-d10         | 20.47 | 212 | 2163826 | 85.32 | ng/ul | 0.00 |
| 25) Benzo(a)pyrene-d12 | 24.73 | 264 | 2428783 | 80.17 | ng/ul | 0.01 |

## Target Compounds

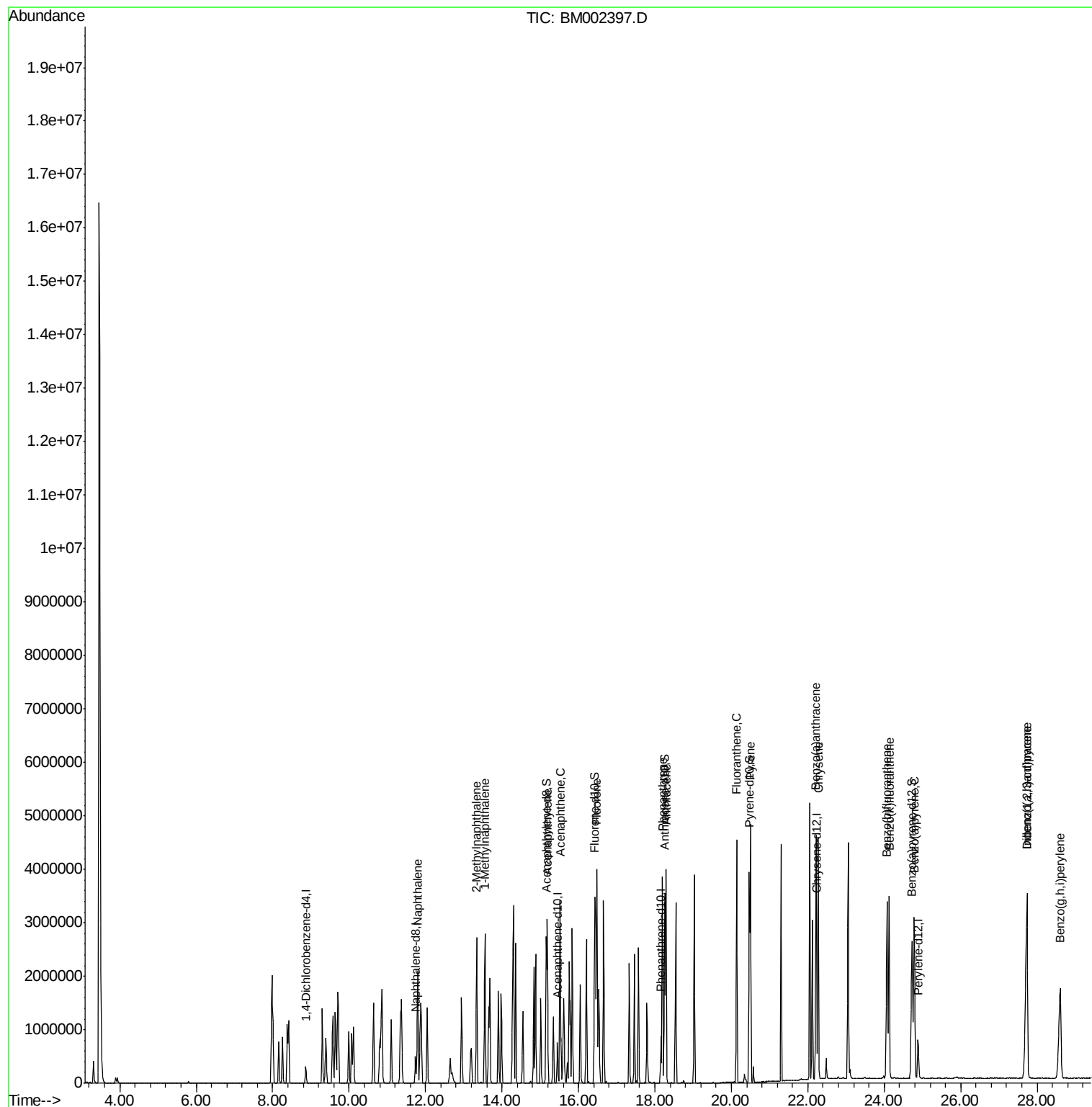
|                            |       |     |         |       |       | Ovalue |
|----------------------------|-------|-----|---------|-------|-------|--------|
| 3) Naphthalene             | 11.79 | 128 | 1914225 | 80.45 | ng/ul | 99     |
| 4) 2-Methylnaphthalene     | 13.33 | 142 | 1410788 | 79.13 | ng/ul | 99     |
| 5) 1-Methylnaphthalene     | 13.55 | 142 | 1386952 | 78.65 | ng/ul | 100    |
| 8) Acenaphthylene          | 15.19 | 152 | 2226122 | 79.56 | ng/ul | 99     |
| 9) Acenaphthene            | 15.52 | 153 | 1460976 | 79.27 | ng/ul | 99     |
| 11) Fluorene               | 16.48 | 166 | 1642506 | 77.78 | ng/ul | 100    |
| 13) Phenanthrene           | 18.20 | 178 | 2543935 | 78.85 | ng/ul | 100    |
| 15) Anthracene             | 18.29 | 178 | 2555530 | 78.16 | ng/ul | 99     |
| 16) Fluoranthene           | 20.14 | 202 | 2753194 | 75.37 | ng/ul | 96     |
| 19) Pyrene                 | 20.50 | 202 | 2821782 | 84.18 | ng/ul | 98     |
| 20) Benzo(a)anthracene     | 22.21 | 228 | 2690132 | 78.62 | ng/ul | 99     |
| 21) Chrysene               | 22.27 | 228 | 2521018 | 78.77 | ng/ul | 99     |
| 23) Benzo(b)fluoranthene   | 24.07 | 252 | 2788115 | 79.96 | ng/ul | 99     |
| 24) Benzo(k)fluoranthene   | 24.13 | 252 | 2618972 | 79.26 | ng/ul | 99     |
| 26) Benzo(a)pyrene         | 24.79 | 252 | 2648129 | 79.52 | ng/ul | 99     |
| 27) Indeno(1,2,3-cd)pyrene | 27.73 | 276 | 2945389 | 76.90 | ng/ul | 97     |
| 28) Dibenzo(a,h)anthracene | 27.73 | 278 | 2455639 | 76.71 | ng/ul | 100    |
| 29) Benzo(g,h,i)perylene   | 28.60 | 276 | 2460243 | 77.17 | ng/ul | 99     |

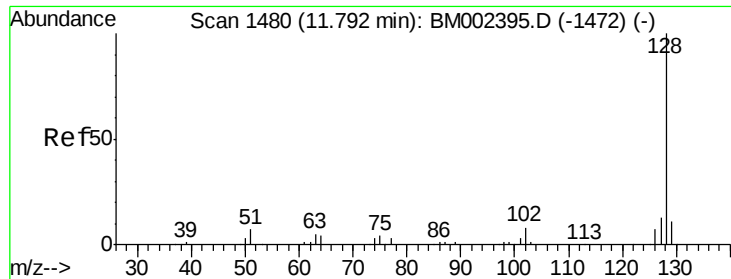
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\  
Data File : BM002397.D  
Acq On : 14 Aug 2015 22:16  
Operator : UM/IZ  
Sample : SSTD08036  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :

Quant Time: Aug 17 01:38:01 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: 80.45 ng/ul

RT: 11.79 min Scan# 1480

Delta R.T. -0.00 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

Instrument :

BNA\_M

ClientSampleId :

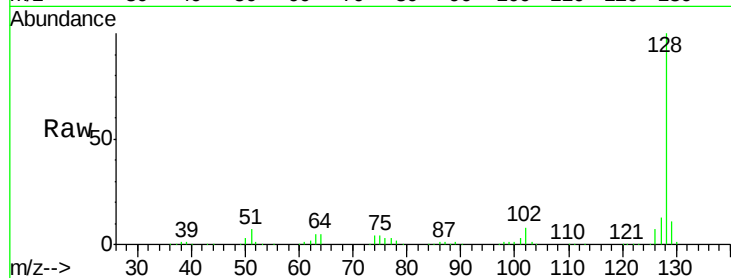
Tot Ion:128 Resp: 1914225

Ion Ratio Lower Upper

128 100

129 11.0 8.6 12.8

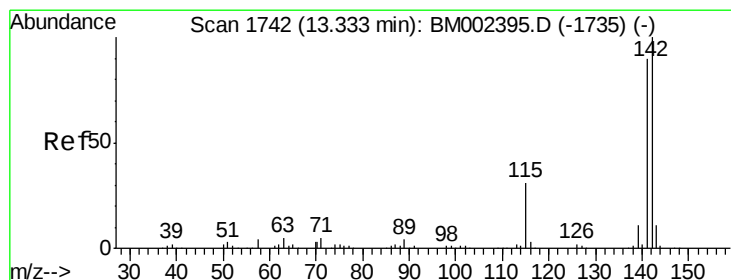
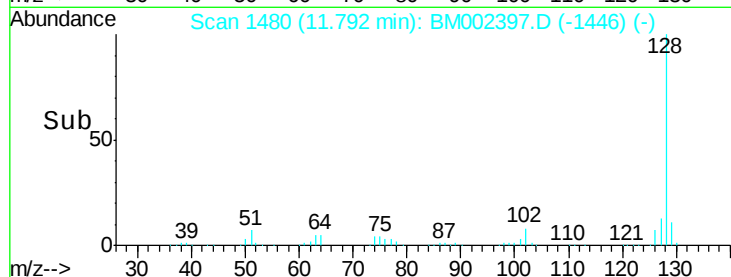
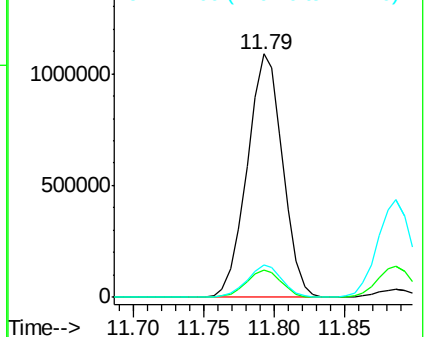
127 13.2 10.4 15.6



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: 79.13 ng/ul

RT: 13.33 min Scan# 1742

Delta R.T. -0.00 min

Lab File: BM002397.D

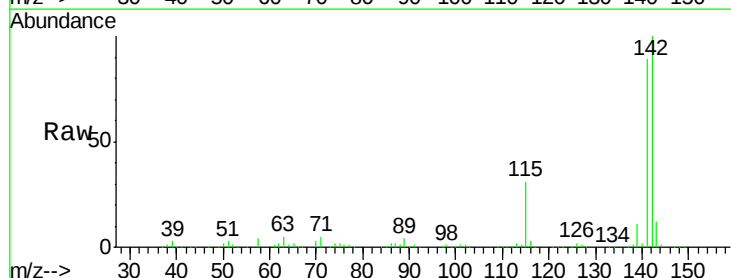
Acq: 14 Aug 2015 22:16

Tgt Ion:142 Resp: 1410788

Ion Ratio Lower Upper

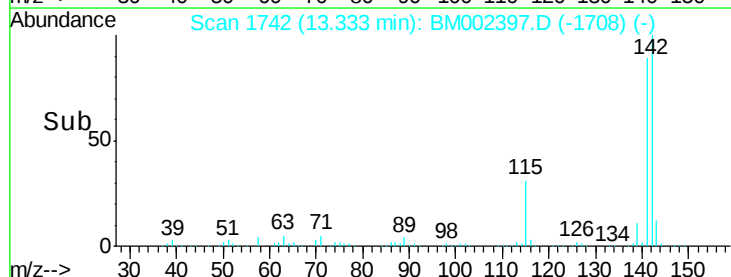
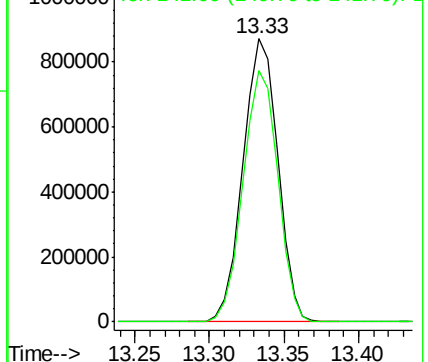
142 100

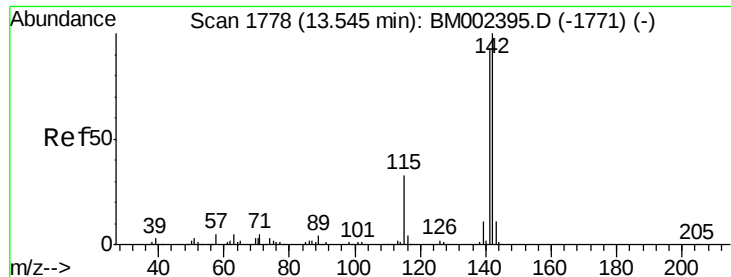
141 88.9 72.2 108.2



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#5

1-Methylnaphthalene

Concen: 78.65 ng/ul

RT: 13.55 min Scan# 1779

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

Instrument :

BNA\_M

ClientSampled :

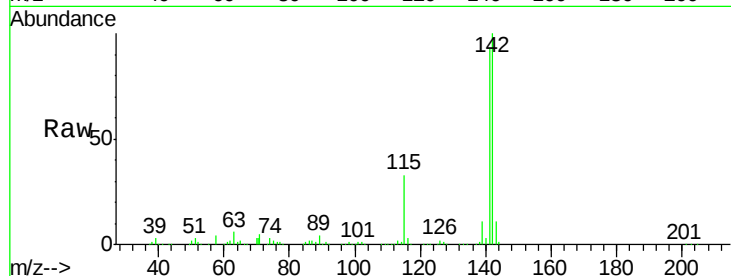
Tot Ion:142 Resp: 1386952

Ion Ratio Lower Upper

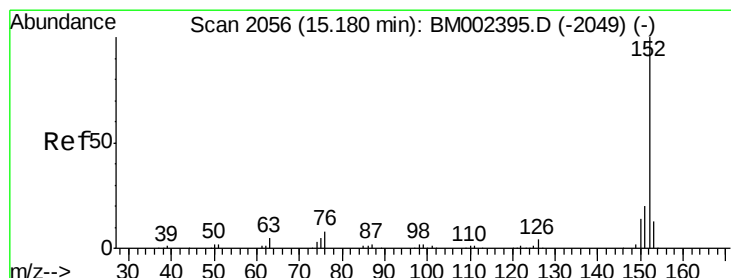
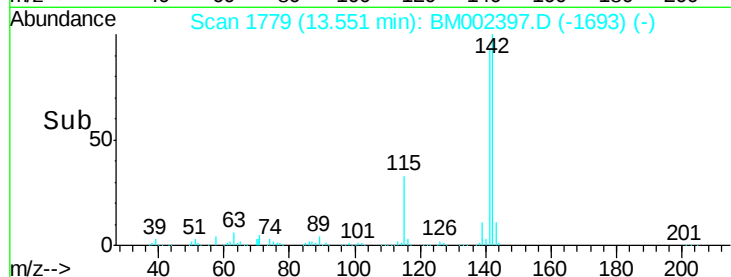
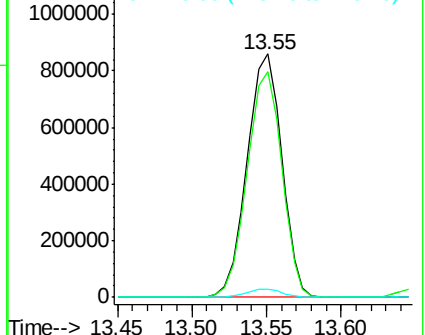
142 100

141 92.9 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: 79.56 ng/ul

RT: 15.19 min Scan# 2057

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

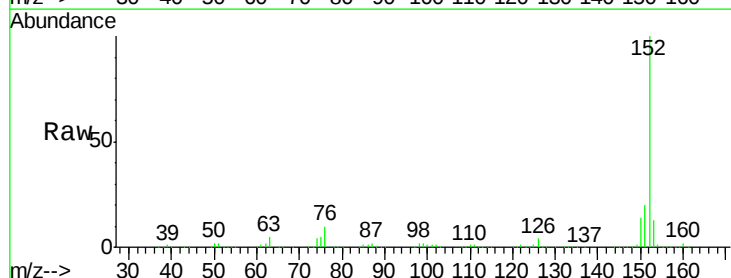
Tgt Ion:152 Resp: 2226122

Ion Ratio Lower Upper

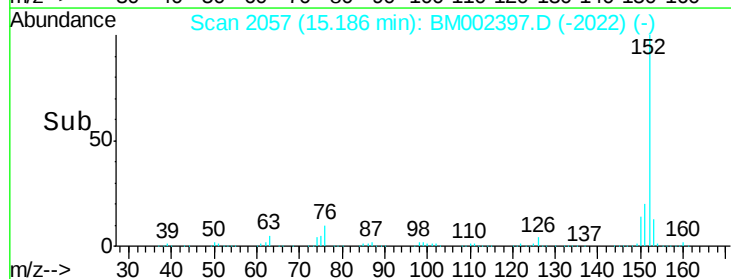
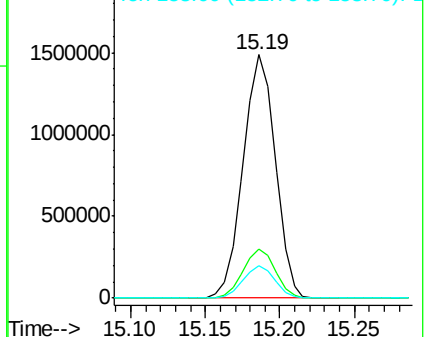
152 100

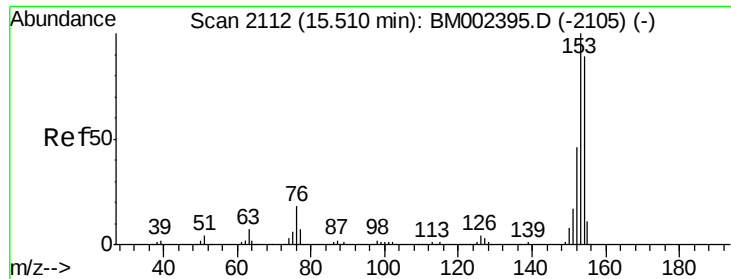
151 20.2 15.7 23.5

153 13.3 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: 79.27 ng/ul

RT: 15.52 min Scan# 2113

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

Instrument :

BNA\_M

ClientSampleId :

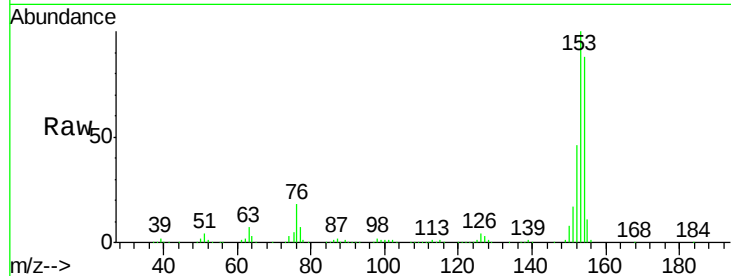
Tot Ion:153 Resp: 1460976

Ion Ratio Lower Upper

153 100

152 46.4 36.9 55.3

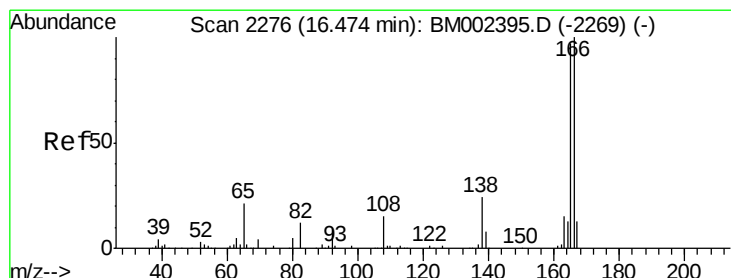
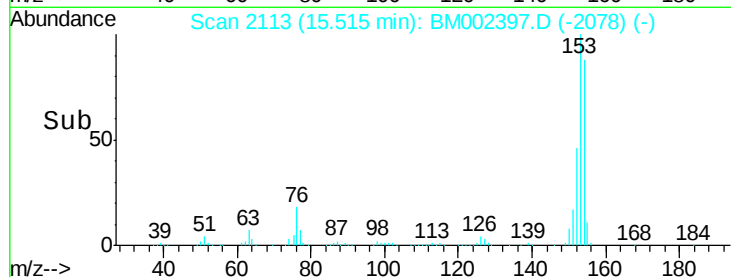
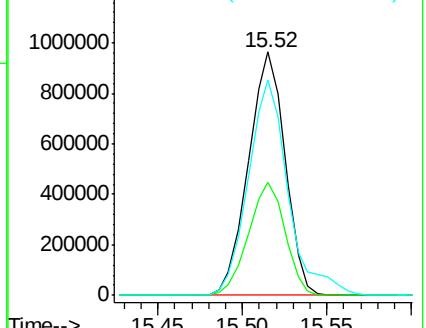
154 88.2 71.3 106.9



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: 77.78 ng/ul

RT: 16.48 min Scan# 2277

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

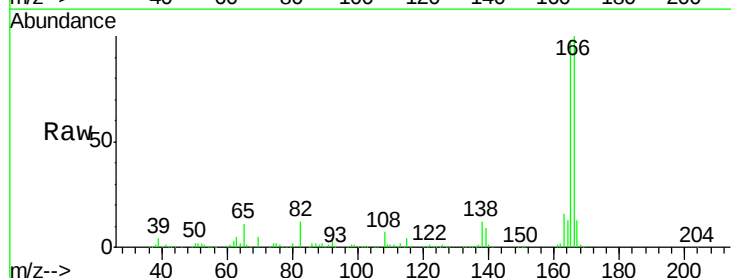
Tgt Ion:166 Resp: 1642506

Ion Ratio Lower Upper

166 100

165 97.5 77.6 116.4

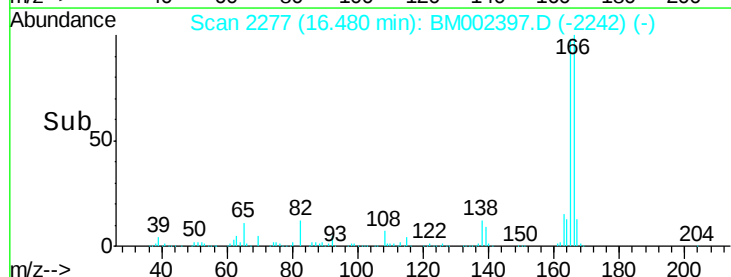
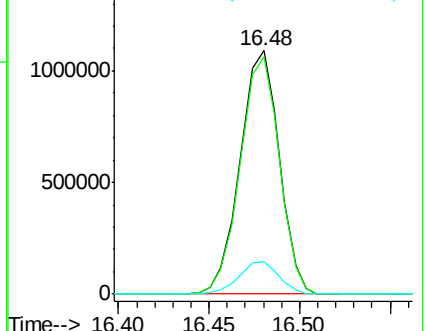
167 13.3 10.7 16.1

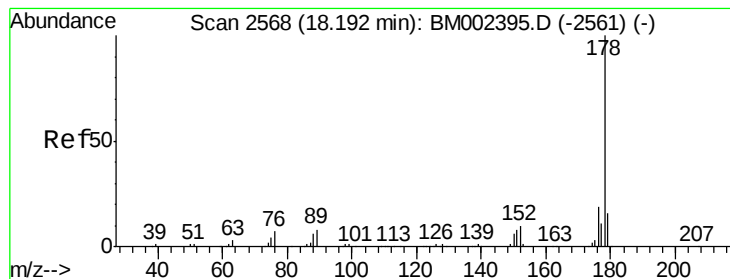


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#13

Phenanthrene

Concen: 78.85 ng/ul

RT: 18.20 min Scan# 2569

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

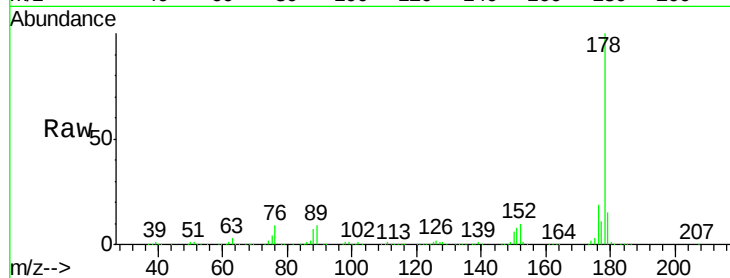
Instrument :

BNA\_M

ClientSampleId :

Tot Ion:178 Resp: 2543935

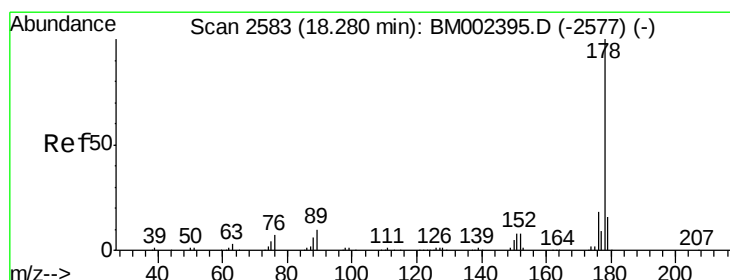
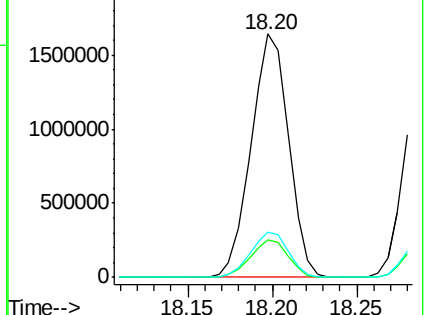
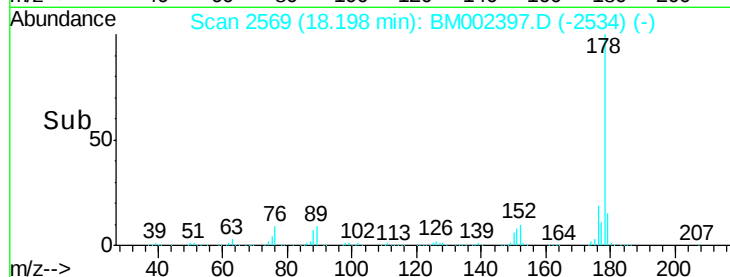
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 178 | 100   |       |       |
| 179 | 15.3  | 12.4  | 18.6  |
| 176 | 18.8  | 15.1  | 22.7  |



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: 78.16 ng/ul

RT: 18.29 min Scan# 2585

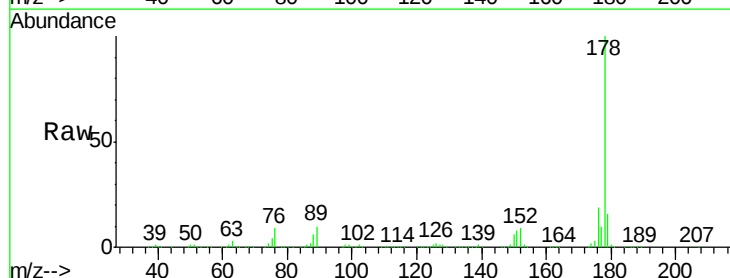
Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

Tgt Ion:178 Resp: 2555530

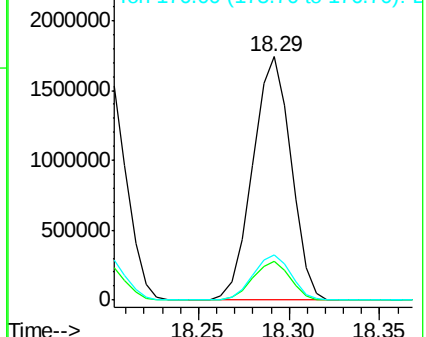
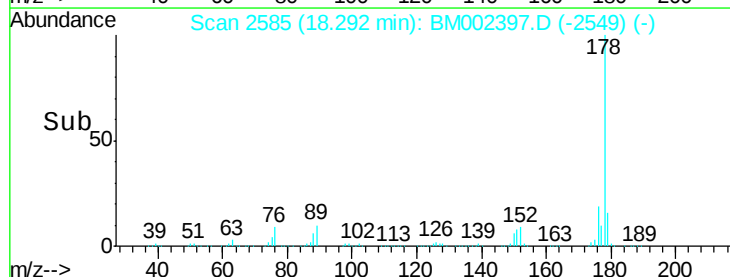
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 178 | 100   |       |       |
| 179 | 15.7  | 12.6  | 18.8  |
| 176 | 18.6  | 14.5  | 21.7  |

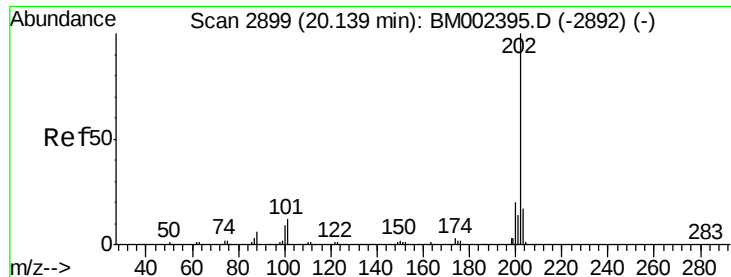


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E

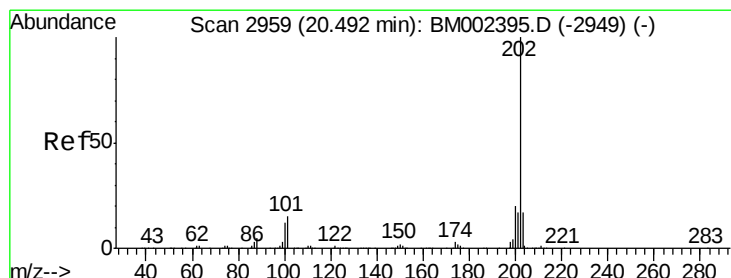
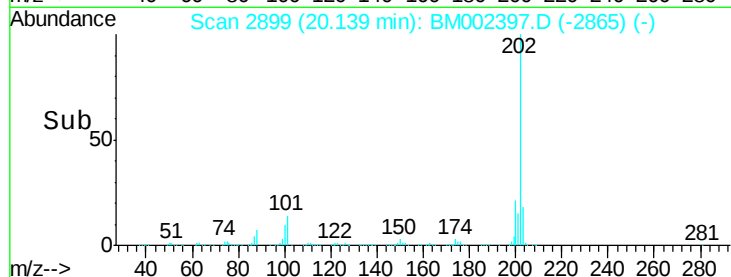
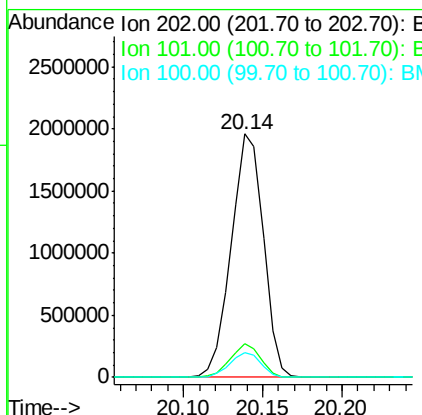
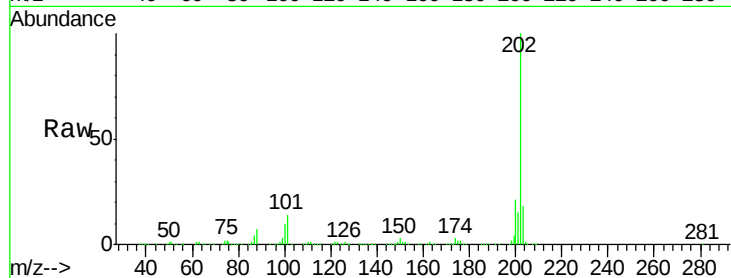




#16  
 Fluoranthene  
 Concen: 75.37 ng/ul  
 RT: 20.14 min Scan# 2899  
 Delta R.T. -0.00 min  
 Lab File: BM002397.D  
 Acq: 14 Aug 2015 22:16

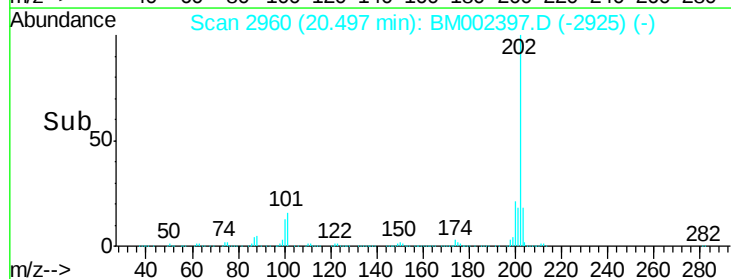
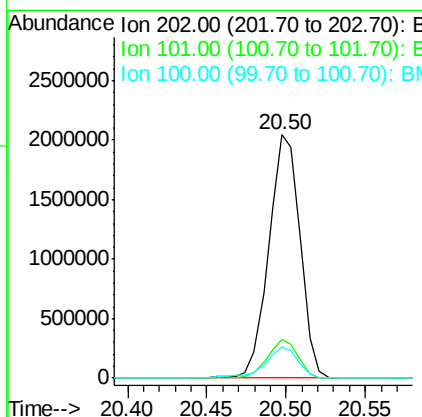
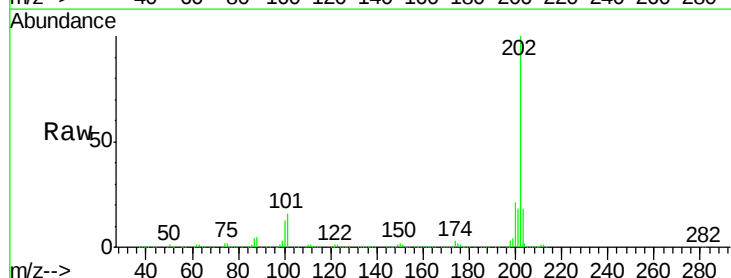
Instrument :  
 BNA\_M  
 ClientSampleId :

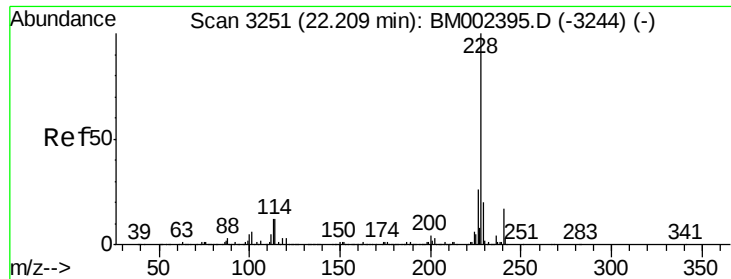
Tot Ion:202 Resp: 2753194  
 Ion Ratio Lower Upper  
 202 100  
 101 13.7 9.7 14.5  
 100 10.3 7.4 11.2



#19  
 Pyrene  
 Concen: 84.18 ng/ul  
 RT: 20.50 min Scan# 2960  
 Delta R.T. 0.01 min  
 Lab File: BM002397.D  
 Acq: 14 Aug 2015 22:16

Tgt Ion:202 Resp: 2821782  
 Ion Ratio Lower Upper  
 202 100  
 101 16.0 12.0 18.0  
 100 13.0 9.7 14.5





#20

Benzo(a)anthracene

Concen: 78.62 ng/ul

RT: 22.21 min Scan# 3252

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

Instrument :

BNA\_M

ClientSampleId :

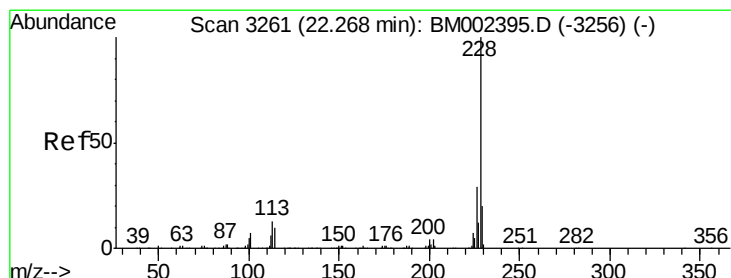
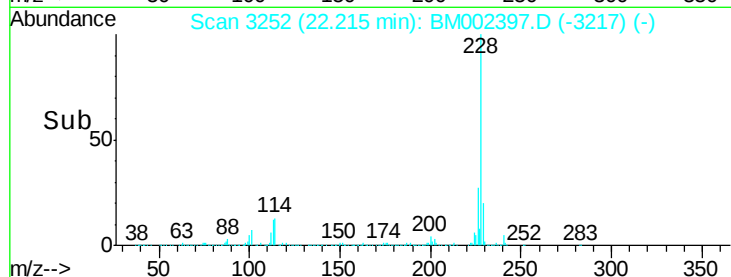
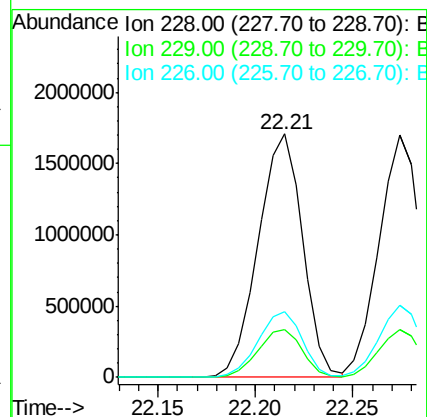
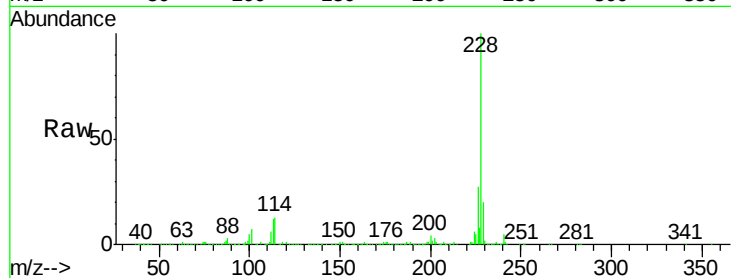
Tot Ion:228 Resp: 2690132

Ion Ratio Lower Upper

228 100

229 19.8 15.8 23.6

226 27.1 21.1 31.7



#21

Chrysene

Concen: 78.77 ng/ul

RT: 22.27 min Scan# 3262

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

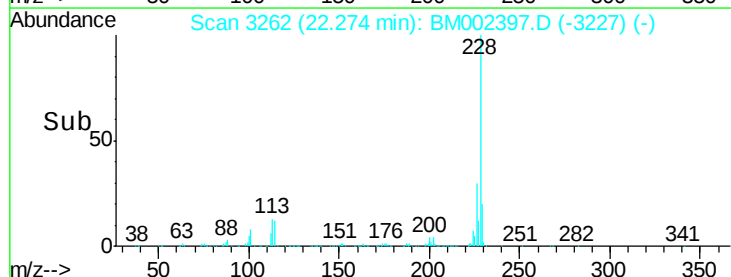
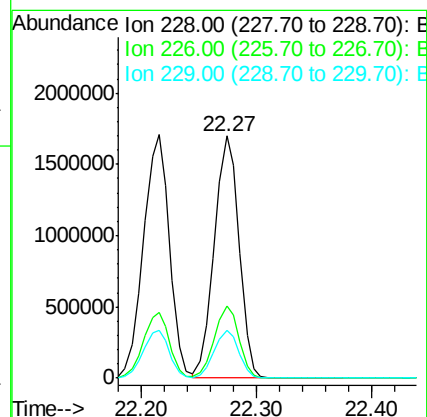
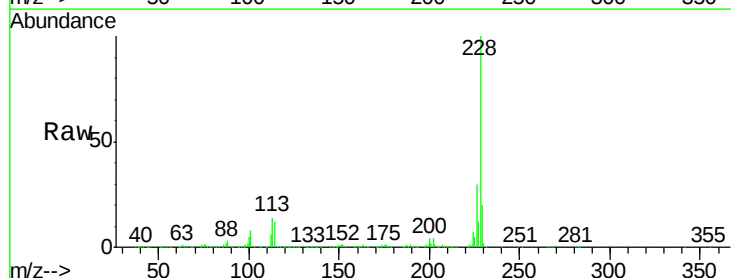
Tgt Ion:228 Resp: 2521018

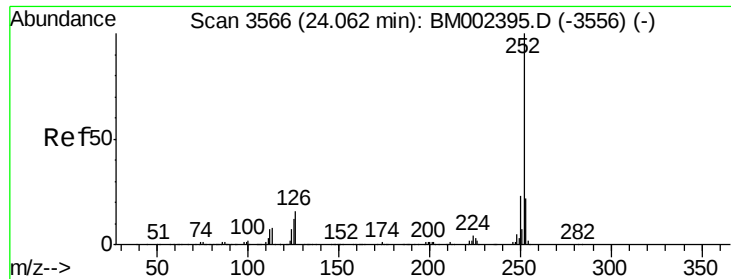
Ion Ratio Lower Upper

228 100

226 29.8 23.4 35.2

229 19.8 15.7 23.5





#23

Benzo(b)fluoranthene

Concen: 79.96 ng/ul

RT: 24.07 min Scan# 3568

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

Instrument :

BNA\_M

ClientSampleId :

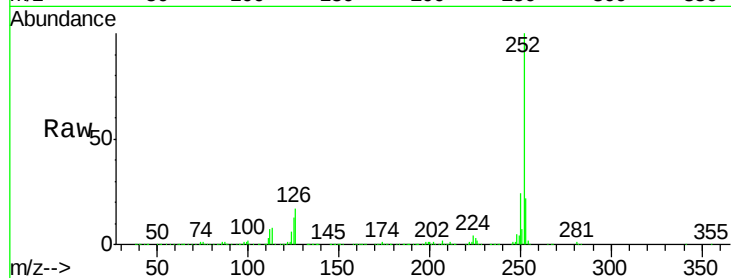
Tot Ion:252 Resp: 2788115

Ion Ratio Lower Upper

252 100

253 22.0 17.4 26.0

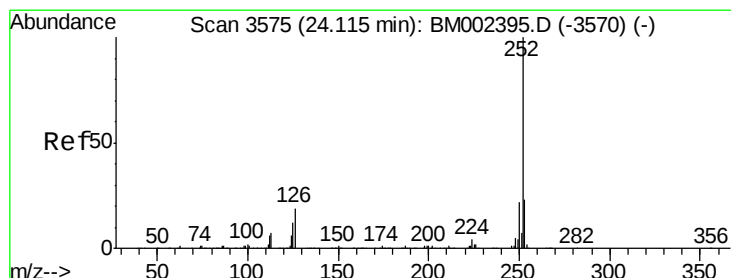
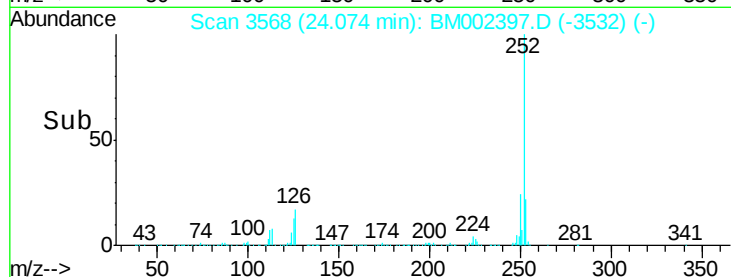
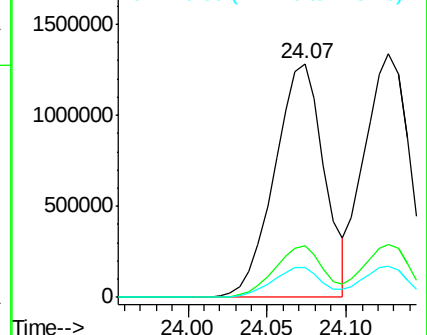
125 12.7 10.0 15.0



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: 79.26 ng/ul

RT: 24.13 min Scan# 3577

Delta R.T. 0.01 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

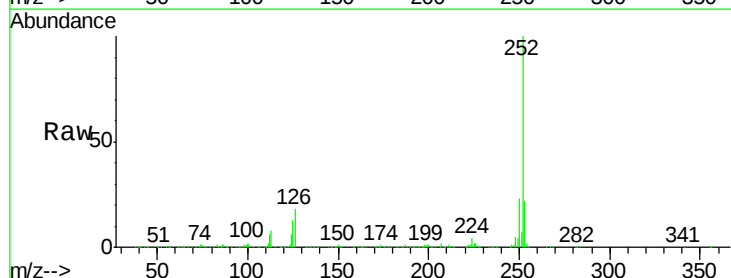
Tgt Ion:252 Resp: 2618972

Ion Ratio Lower Upper

252 100

253 22.0 17.8 26.6

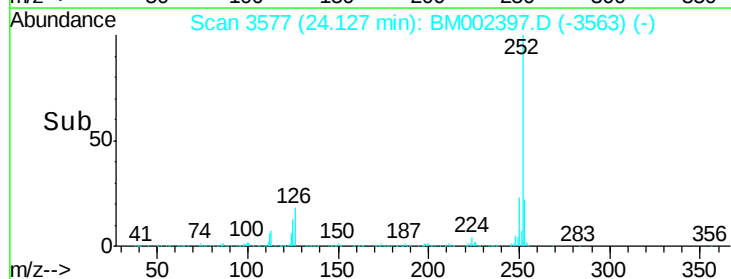
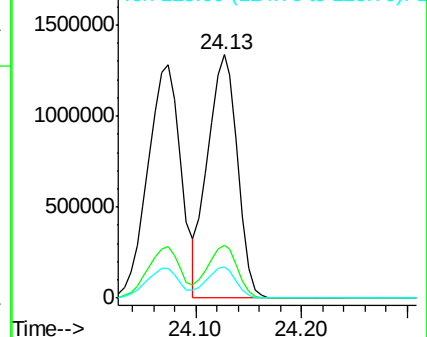
125 13.0 9.8 14.8

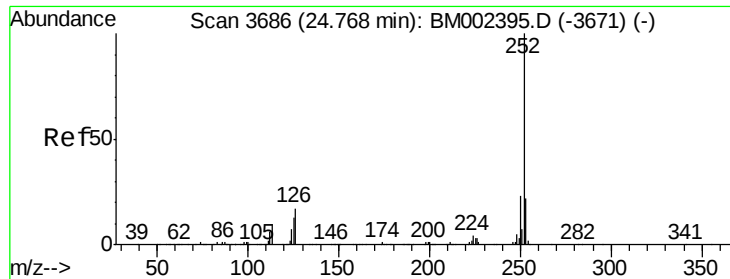


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#26

Benzo(a)pyrene

Concen: 79.52 ng/ul

RT: 24.79 min Scan# 3689

Delta R.T. 0.02 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

Instrument :

BNA\_M

ClientSampleId :

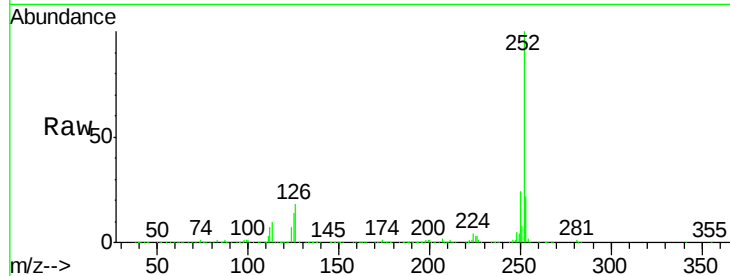
Tot Ion:252 Resp: 2648129

Ion Ratio Lower Upper

252 100

253 21.7 17.6 26.4

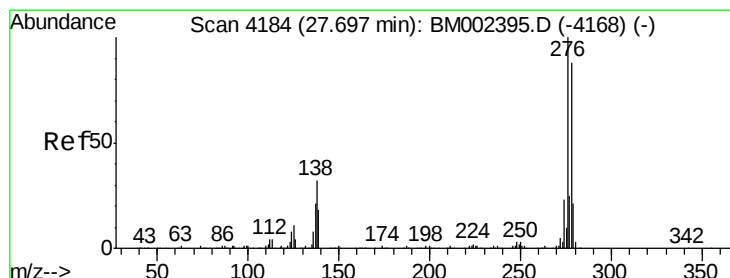
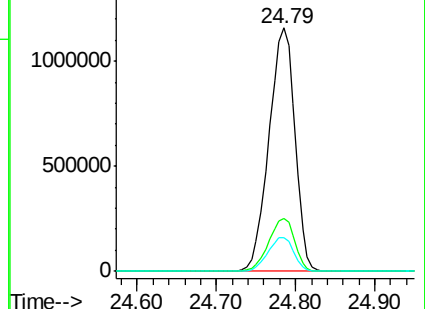
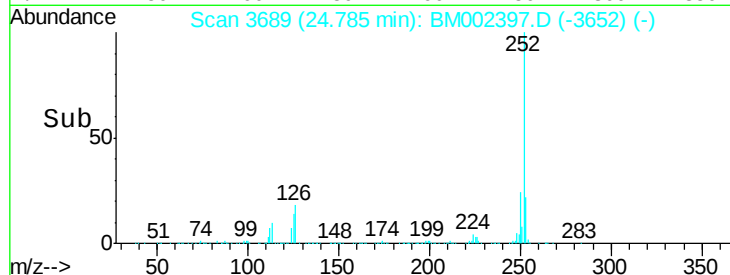
125 13.8 10.7 16.1



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: 76.90 ng/ul

RT: 27.73 min Scan# 4189

Delta R.T. 0.03 min

Lab File: BM002397.D

Acq: 14 Aug 2015 22:16

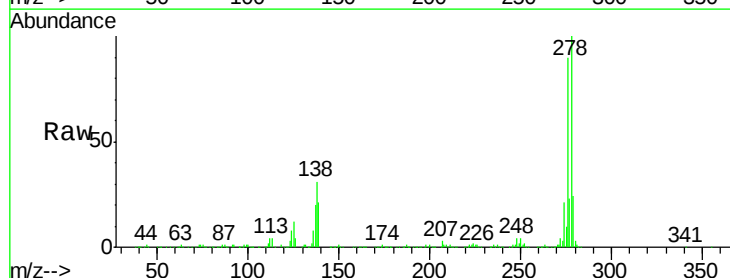
Tgt Ion:276 Resp: 2945389

Ion Ratio Lower Upper

276 100

138 34.7 25.3 37.9

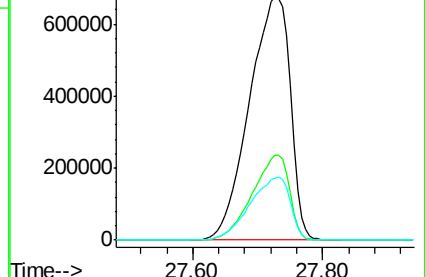
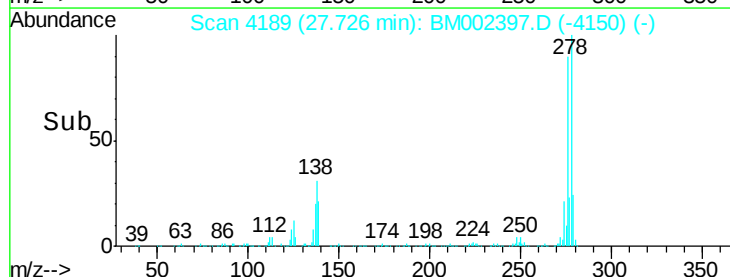
277 25.3 20.2 30.2

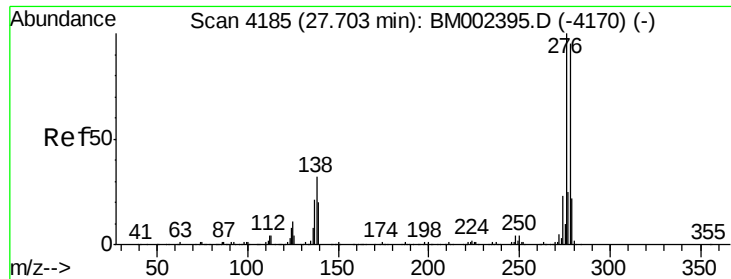


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

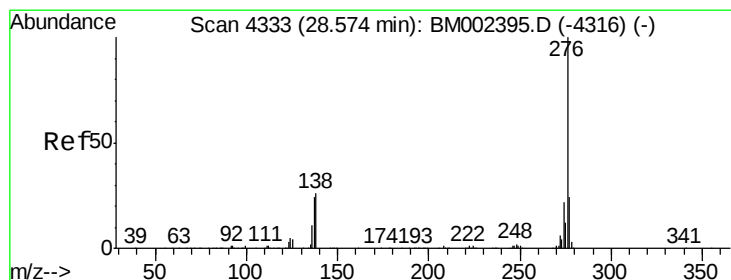
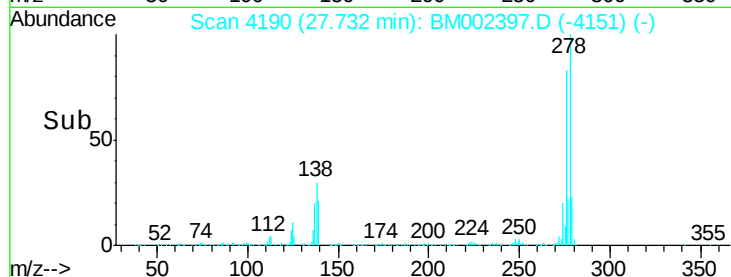
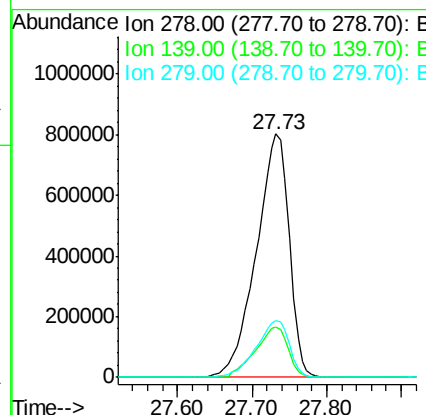
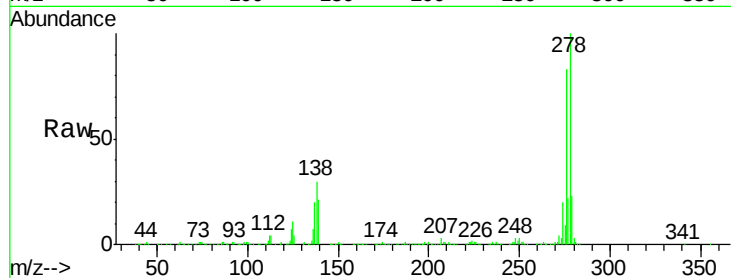




#28  
Dibenzo(a,h)anthracene  
Concen: 76.71 ng/ul  
RT: 27.73 min Scan# 4190  
Delta R.T. 0.03 min  
Lab File: BM002397.D  
Acq: 14 Aug 2015 22:16

Instrument :  
BNA\_M  
ClientSampleId :

Tot Ion:278 Resp: 2455639  
Ion Ratio Lower Upper  
278 100  
139 20.7 16.5 24.7  
279 23.4 18.8 28.2



#29  
Benzo(g,h,i)perylene  
Concen: 77.17 ng/ul  
RT: 28.60 min Scan# 4338  
Delta R.T. 0.03 min  
Lab File: BM002397.D  
Acq: 14 Aug 2015 22:16

Tgt Ion:276 Resp: 2460243  
Ion Ratio Lower Upper  
276 100  
138 26.8 21.0 31.6  
277 23.5 19.2 28.8

