

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM061616\  
 Data File : BM005822.D  
 Acq On : 16 Jun 2016 02:14  
 Operator : UM/SJ  
 Sample : SSTDC0020  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 SSTD02043

Quant Time: Jun 16 04:28:13 2016  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM061516.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Jun 16 01:45:55 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.73  | 152  | 84436    | 20.00 | ng/ul | 0.00     |
| 7) Naphthalene-d8         | 10.52 | 136  | 435395   | 20.00 | ng/ul | 0.00     |
| 15) Acenaphthene-d10      | 14.38 | 164  | 284566   | 20.00 | ng/ul | 0.00     |
| 23) Phenanthrene-d10      | 17.13 | 188  | 676743   | 20.00 | ng/ul | 0.00     |
| 29) Chrysene-d12          | 21.31 | 240  | 631504   | 20.00 | ng/ul | 0.00     |
| 34) Perylene-d12          | 23.56 | 264  | 513576   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 2) 1,4-Dioxane-d8              | 3.18  | 96  | 14322  | 7.85  | ng/uL | 0.00 |
| 3) Phenol-d5                   | 6.92  | 99  | 143310 | 20.66 | ng/ul | 0.00 |
| 4) Bis-(2-Chloroethyl)ether-d  | 7.07  | 67  | 85315  | 20.67 | ng/ul | 0.00 |
| 5) 2-Chlorophenol-d4           | 7.27  | 132 | 118787 | 20.56 | ng/ul | 0.00 |
| 6) 4-Methylphenol-d8           | 8.46  | 113 | 128860 | 21.99 | ng/ul | 0.00 |
| 8) Nitrobenzene-d5             | 8.90  | 128 | 63124  | 20.48 | ng/ul | 0.00 |
| 9) 2-Nitrophenol-d4            | 9.62  | 143 | 72645  | 21.20 | ng/ul | 0.00 |
| 10) 2,4-Dichlorophenol-d3      | 10.16 | 165 | 137469 | 20.97 | ng/ul | 0.00 |
| 12) 4-Chloroaniline-d4         | 10.67 | 131 | 188112 | 26.11 | ng/ul | 0.00 |
| 16) Dimethylphthalate-d6       | 13.79 | 166 | 475466 | 21.05 | ng/ul | 0.00 |
| 17) Acenaphthylene-d8          | 14.07 | 160 | 579204 | 20.18 | ng/ul | 0.00 |
| 20) 4-Nitrophenol-d4           | 14.62 | 143 | 64413  | 24.80 | ng/ul | 0.00 |
| 21) Fluorene-d10               | 15.37 | 176 | 406752 | 21.62 | ng/ul | 0.00 |
| 24) 4,6-Dinitro-2-methylphenol | 15.52 | 200 | 74241  | 24.52 | ng/ul | 0.00 |
| 26) Anthracene-d10             | 17.23 | 188 | 626364 | 19.95 | ng/ul | 0.00 |
| 30) Pyrene-d10                 | 19.52 | 212 | 689079 | 22.42 | ng/ul | 0.00 |
| 37) Benzo(a)pyrene-d12         | 23.42 | 264 | 483289 | 20.37 | ng/ul | 0.00 |

## Target Compounds

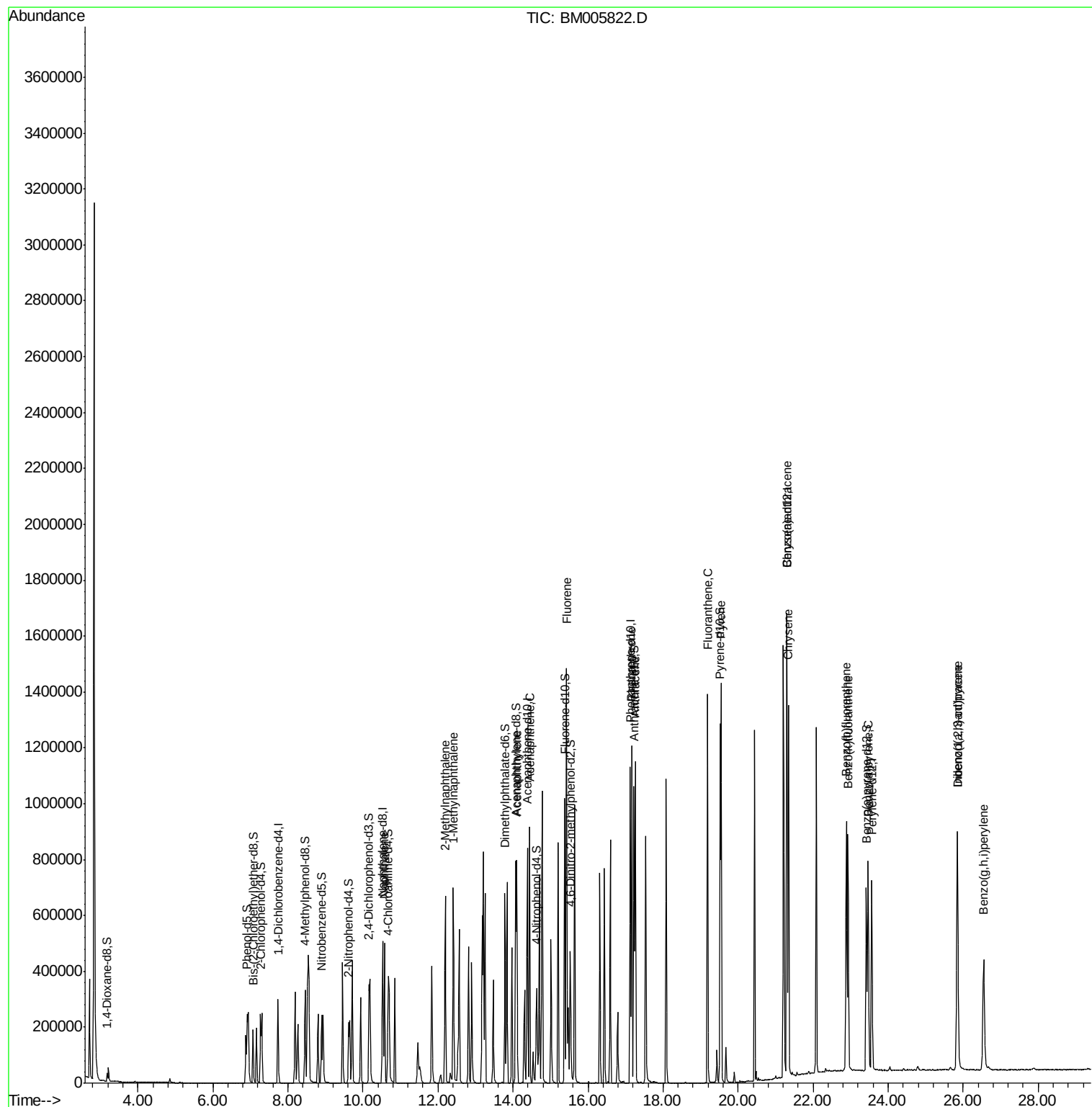
|                            |       |     |        |       |       | Qvalue |
|----------------------------|-------|-----|--------|-------|-------|--------|
| 11) Naphthalene            | 10.57 | 128 | 427428 | 19.69 | ng/ul | 99     |
| 13) 2-Methylnaphthalene    | 12.19 | 142 | 331288 | 21.22 | ng/ul | 99     |
| 14) 1-Methylnaphthalene    | 12.41 | 142 | 332365 | 21.10 | ng/ul | 99     |
| 18) Acenaphthylene         | 14.10 | 152 | 577722 | 19.96 | ng/ul | 99     |
| 19) Acenaphthene           | 14.44 | 153 | 380647 | 20.08 | ng/ul | 99     |
| 22) Fluorene               | 15.43 | 166 | 438832 | 21.56 | ng/ul | 99     |
| 25) Phenanthrene           | 17.17 | 178 | 734573 | 19.79 | ng/ul | 99     |
| 27) Anthracene             | 17.26 | 178 | 742086 | 20.20 | ng/ul | 99     |
| 28) Fluoranthene           | 19.19 | 202 | 858112 | 21.72 | ng/ul | 99     |
| 31) Pyrene                 | 19.55 | 202 | 856297 | 22.08 | ng/ul | 97     |
| 32) Benzo(a)anthracene     | 21.30 | 228 | 737818 | 20.20 | ng/ul | 100    |
| 33) Chrysene               | 21.35 | 228 | 704406 | 19.67 | ng/ul | 99     |
| 35) Benzo(b)fluoranthene   | 22.89 | 252 | 657025 | 21.42 | ng/ul | 100    |
| 36) Benzo(k)fluoranthene   | 22.93 | 252 | 603136 | 21.23 | ng/ul | 98     |
| 38) Benzo(a)pyrene         | 23.47 | 252 | 588479 | 20.08 | ng/ul | 99     |
| 39) Indeno(1,2,3-cd)pyrene | 25.84 | 276 | 630628 | 18.76 | ng/ul | 98     |
| 40) Dibenzo(a,h)anthracene | 25.85 | 278 | 524865 | 18.66 | ng/ul | 99     |
| 41) Benzo(g,h,i)perylene   | 26.54 | 276 | 534313 | 18.36 | ng/ul | 99     |

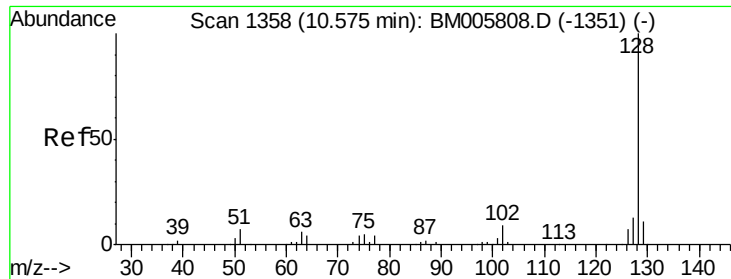
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM061616\  
Data File : BM005822.D  
Acq On : 16 Jun 2016 02:14  
Operator : UM/SJ  
Sample : SSTDCCC020  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
SSTD02043

Quant Time: Jun 16 04:28:13 2016  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM061516.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Jun 16 01:45:55 2016  
Response via : Initial Calibration

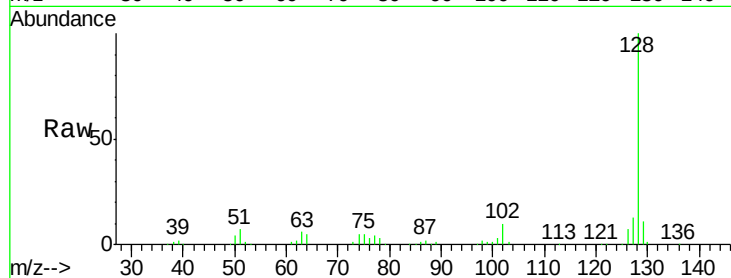




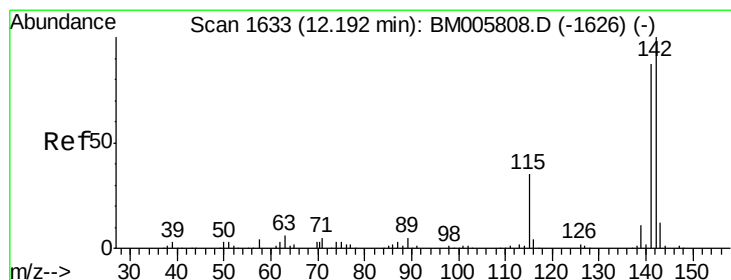
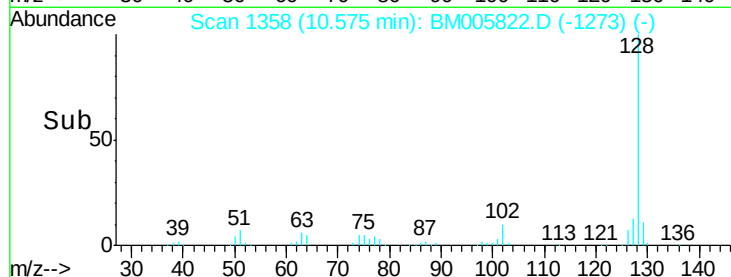
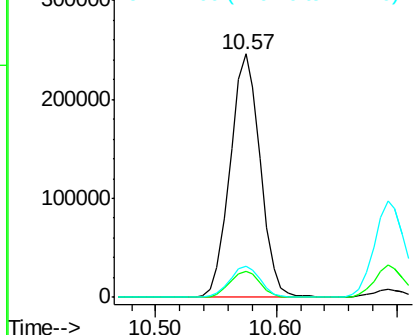
#11  
Naphthalene  
Concen: 19.69 ng/ul  
RT: 10.57 min Scan# 1358  
Delta R.T. -0.00 min  
Lab File: BM005822.D  
Acq: 16 Jun 2016 02:14

Instrument :  
BNA\_M  
ClientSampleId :  
SSTD02043

Tgt Ion:128 Resp: 427428  
Ion Ratio Lower Upper  
128 100  
129 10.9 8.9 13.3  
127 12.8 10.5 15.7

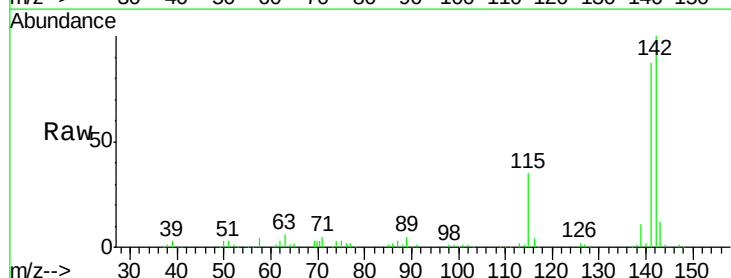


Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E

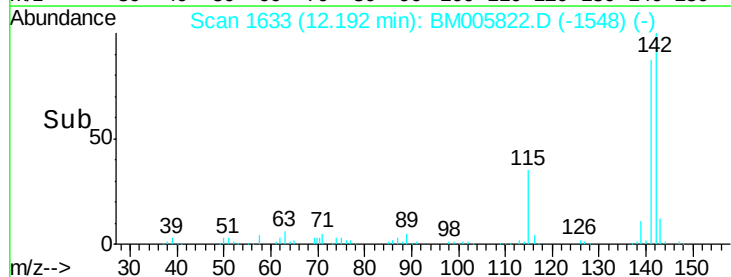
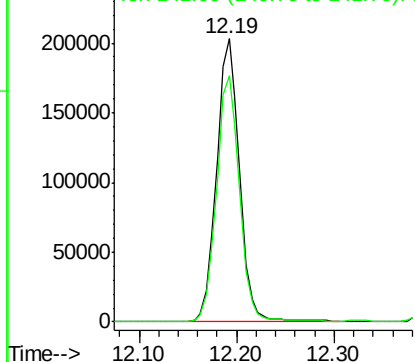


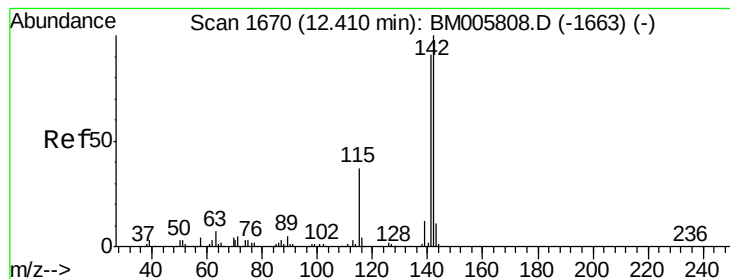
#13  
2-Methylnaphthalene  
Concen: 21.22 ng/ul  
RT: 12.19 min Scan# 1633  
Delta R.T. -0.00 min  
Lab File: BM005822.D  
Acq: 16 Jun 2016 02:14

Tgt Ion:142 Resp: 331288  
Ion Ratio Lower Upper  
142 100  
141 87.1 69.0 103.6



Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E





#14

1-Methylnaphthalene

Concen: 21.10 ng/ul

RT: 12.41 min Scan# 1670

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

Instrument :

BNA\_M

ClientSampleId :

SSTD02043

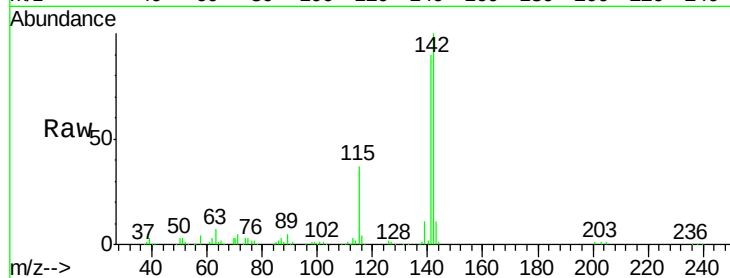
Tgt Ion:142 Resp: 332365

Ion Ratio Lower Upper

142 100

141 90.2 73.0 109.4

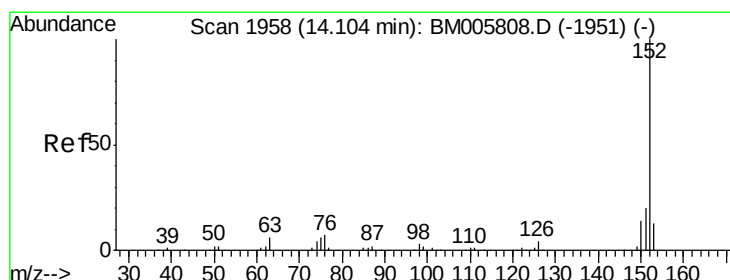
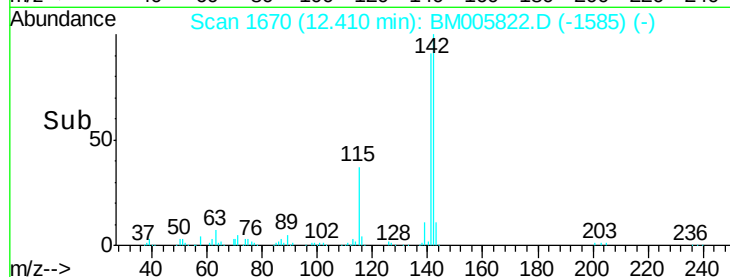
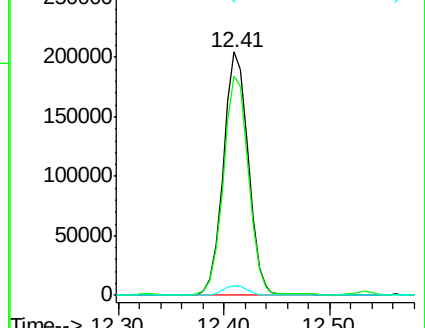
116 4.1 3.0 4.6



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



#18

Acenaphthylene

Concen: 19.96 ng/ul

RT: 14.10 min Scan# 1958

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

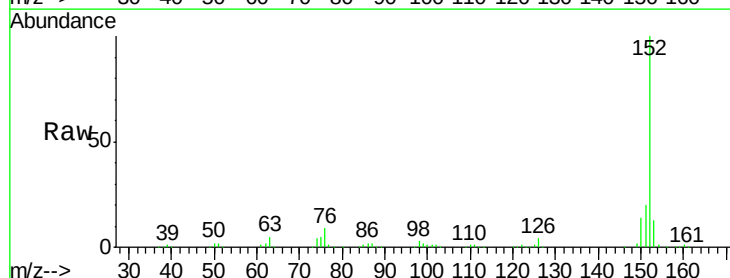
Tgt Ion:152 Resp: 577722

Ion Ratio Lower Upper

152 100

151 20.0 15.8 23.6

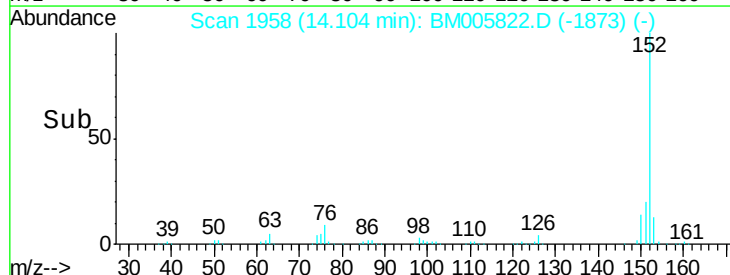
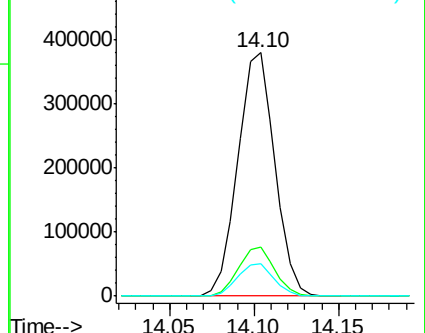
153 13.1 10.3 15.5

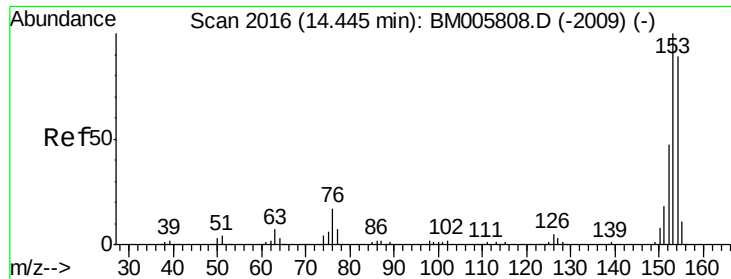


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#19

Acenaphthene

Concen: 20.08 ng/ul

RT: 14.44 min Scan# 2016

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

Instrument :

BNA\_M

ClientSampleId :

SSTD02043

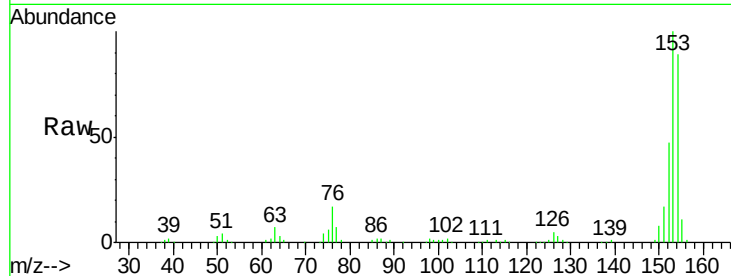
Tgt Ion:153 Resp: 380647

Ion Ratio Lower Upper

153 100

152 47.2 38.1 57.1

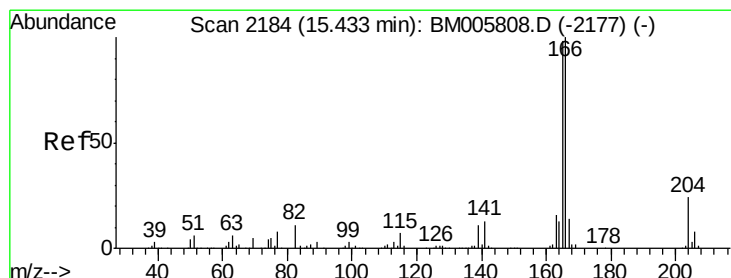
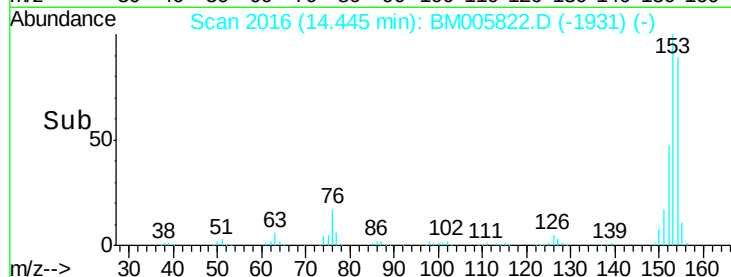
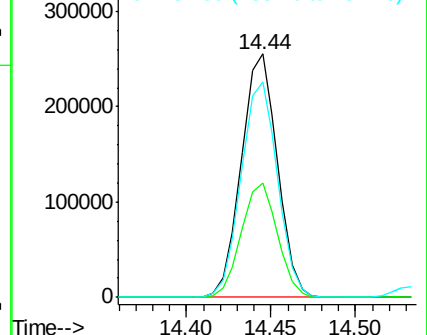
154 88.5 71.6 107.4



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



#22

Fluorene

Concen: 21.56 ng/ul

RT: 15.43 min Scan# 2184

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

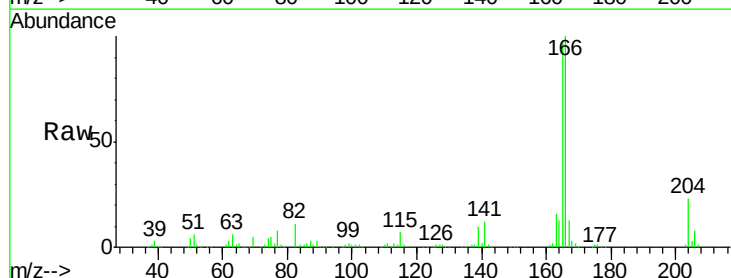
Tgt Ion:166 Resp: 438832

Ion Ratio Lower Upper

166 100

165 96.7 78.4 117.6

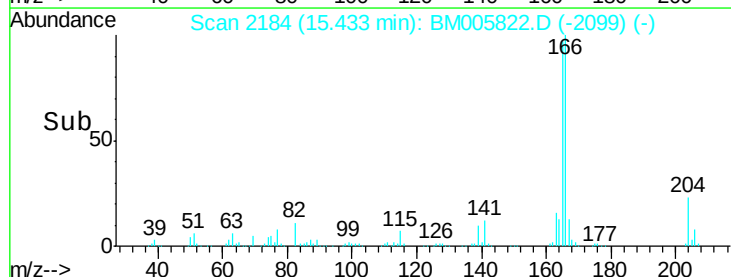
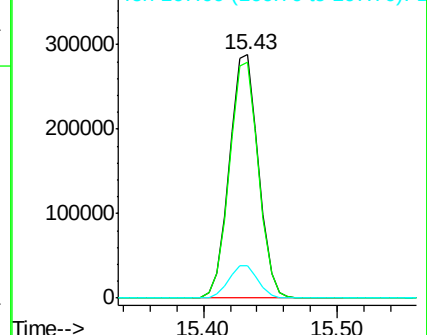
167 13.1 10.6 16.0

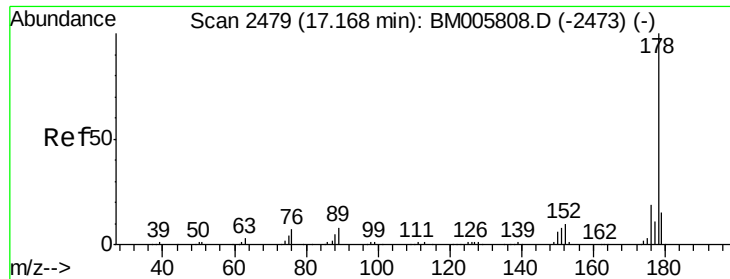


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E





#25

Phenanthrene

Concen: 19.79 ng/ul

RT: 17.17 min Scan# 2479

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

Instrument :

BNA\_M

ClientSampleId :

SSTD02043

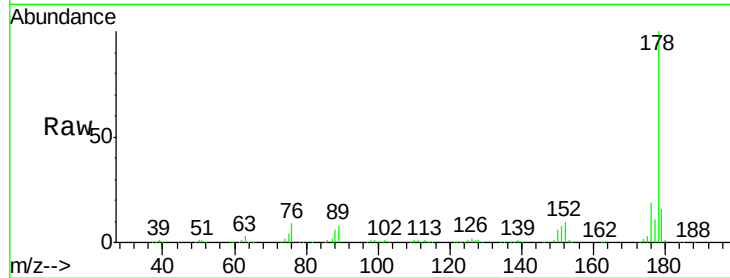
Tgt Ion:178 Resp: 734573

Ion Ratio Lower Upper

178 100

179 15.6 12.2 18.2

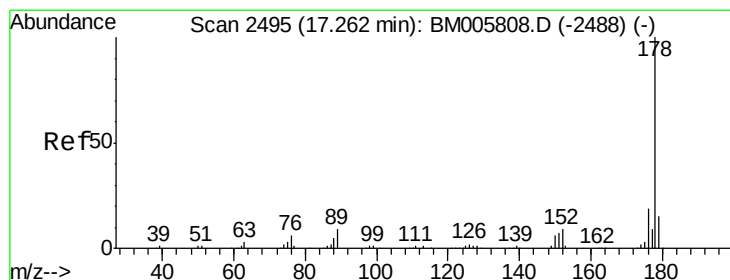
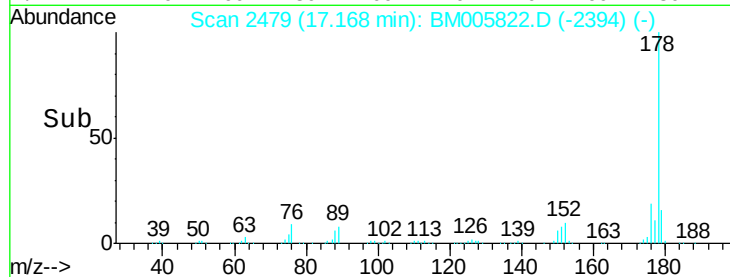
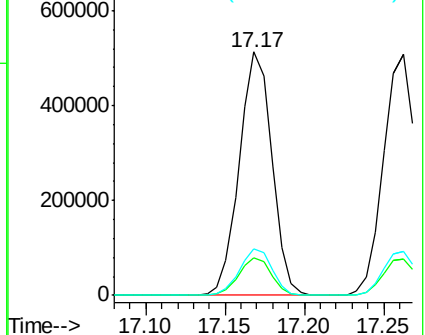
176 19.3 15.3 22.9



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



#27

Anthracene

Concen: 20.20 ng/ul

RT: 17.26 min Scan# 2495

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

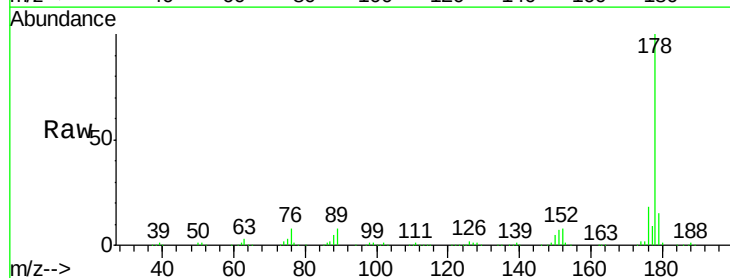
Tgt Ion:178 Resp: 742086

Ion Ratio Lower Upper

178 100

179 15.1 12.3 18.5

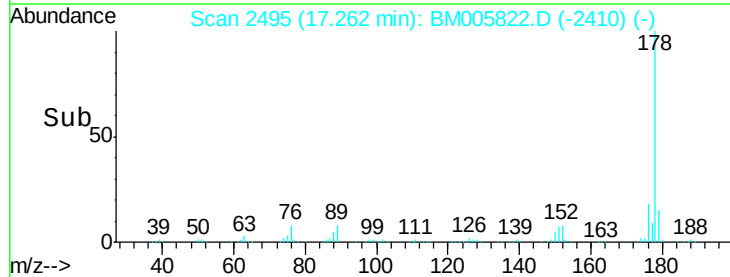
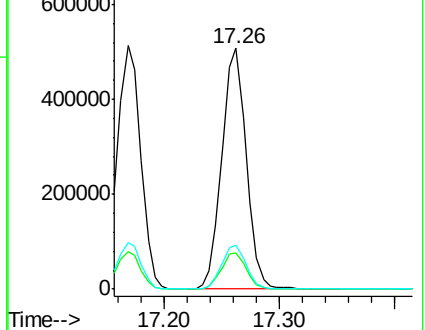
176 18.5 14.6 22.0

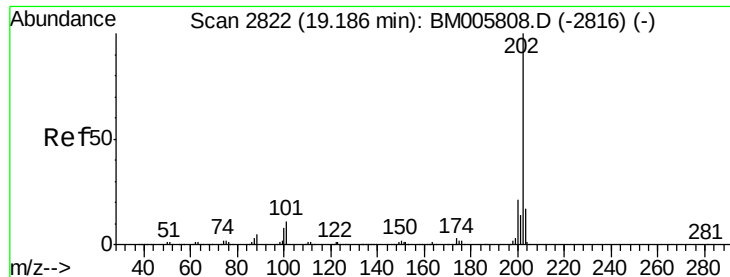


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





#28

Fluoranthene

Concen: 21.72 ng/ul

RT: 19.19 min Scan# 2822

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

Instrument :

BNA\_M

ClientSampleId :

SSTD02043

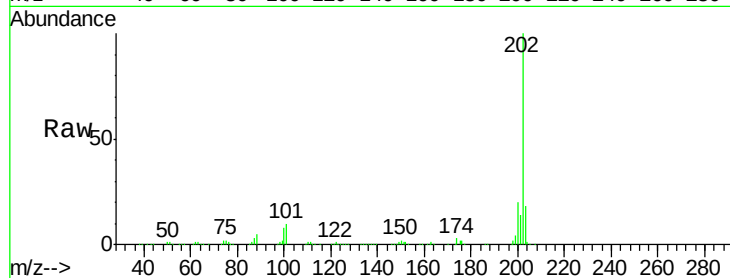
Tgt Ion:202 Resp: 858112

Ion Ratio Lower Upper

202 100

101 10.4 8.5 12.7

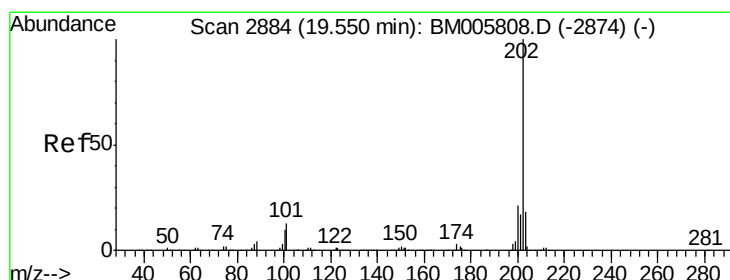
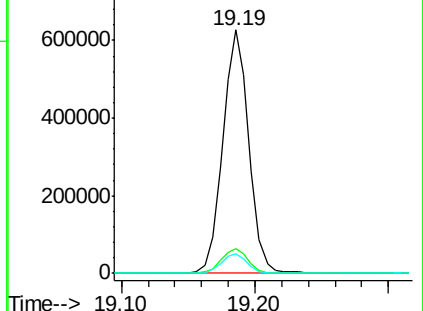
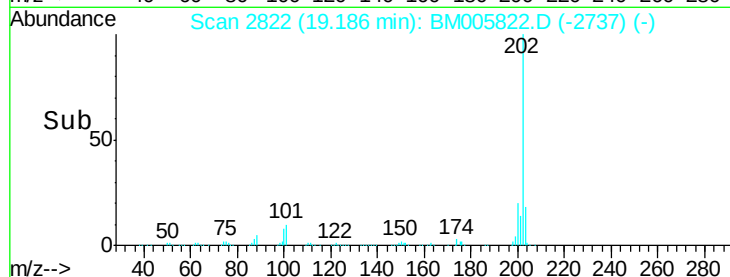
100 7.8 6.5 9.7



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



#31

Pyrene

Concen: 22.08 ng/ul

RT: 19.55 min Scan# 2884

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

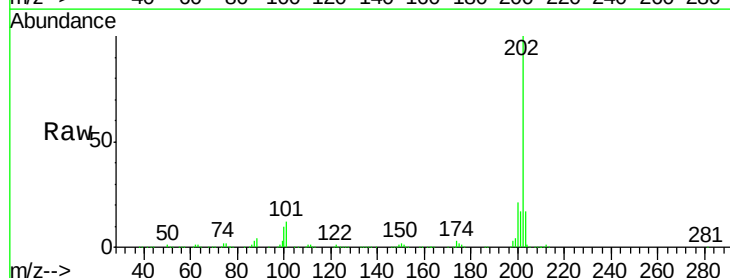
Tgt Ion:202 Resp: 856297

Ion Ratio Lower Upper

202 100

101 12.4 11.0 16.4

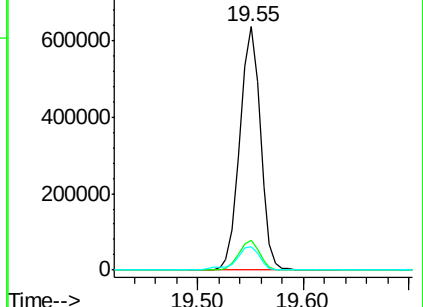
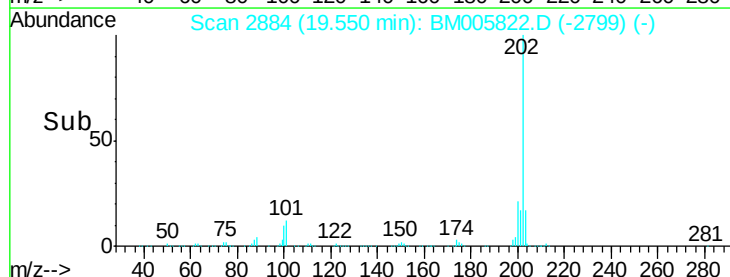
100 9.8 8.9 13.3

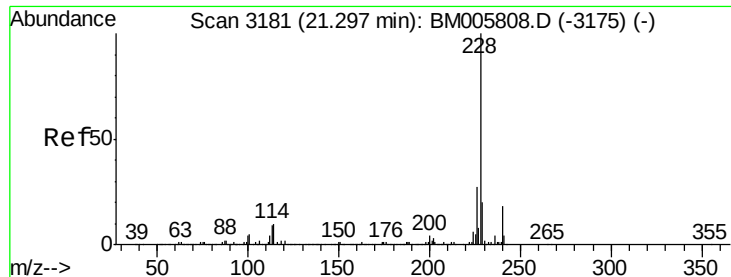


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





#32

Benzo(a)anthracene

Concen: 20.20 ng/ul

RT: 21.30 min Scan# 3181

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

Instrument :

BNA\_M

ClientSampleId :

SSTD02043

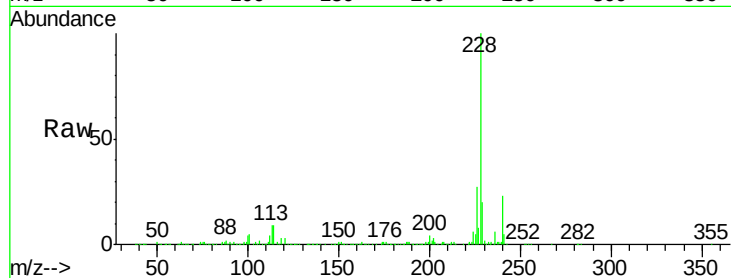
Tgt Ion:228 Resp: 737818

Ion Ratio Lower Upper

228 100

229 19.7 15.6 23.4

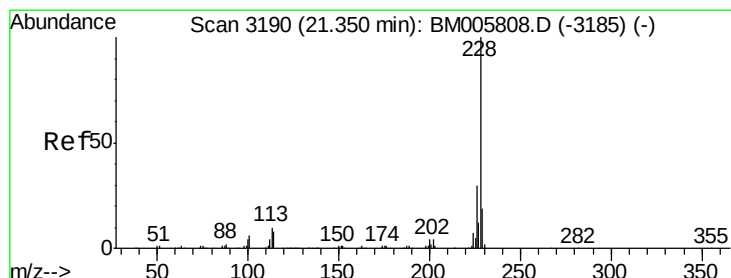
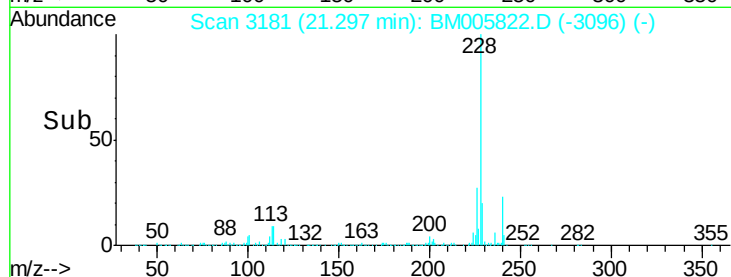
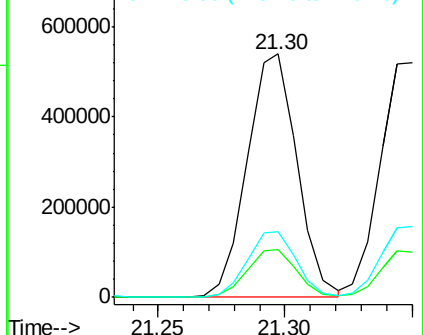
226 27.2 21.6 32.4



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



#33

Chrysene

Concen: 19.67 ng/ul

RT: 21.35 min Scan# 3190

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

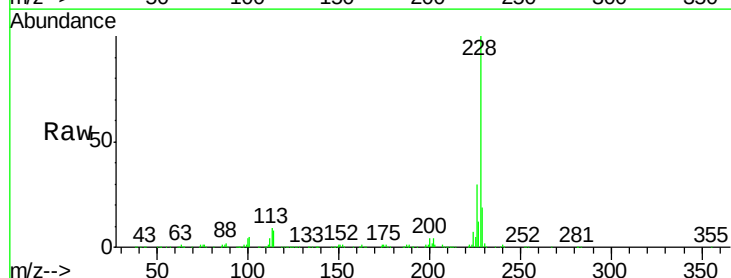
Tgt Ion:228 Resp: 704406

Ion Ratio Lower Upper

228 100

226 30.0 23.8 35.6

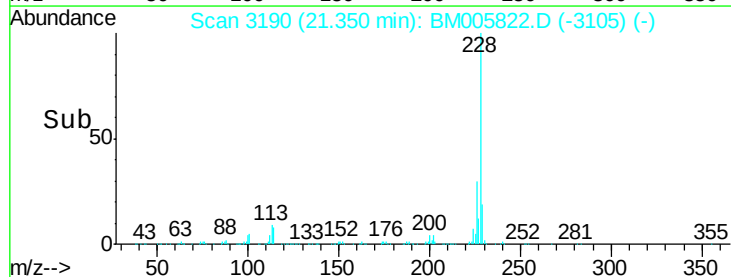
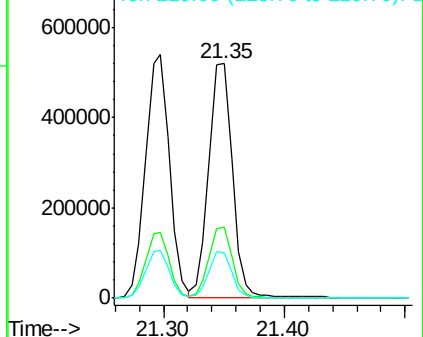
229 19.4 15.8 23.6



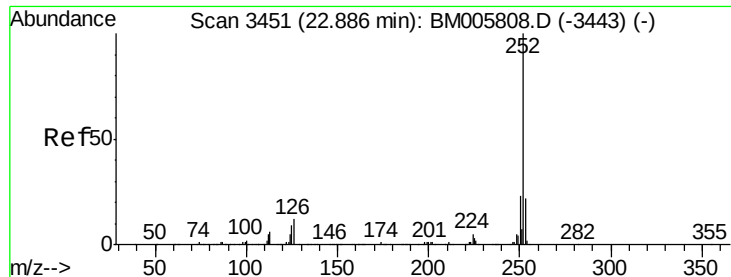
Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



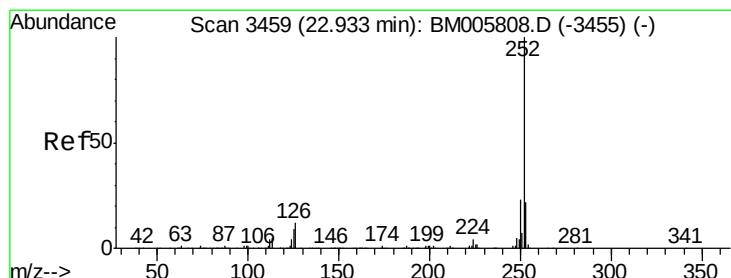
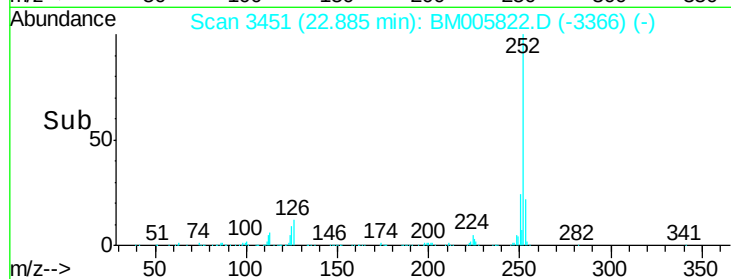
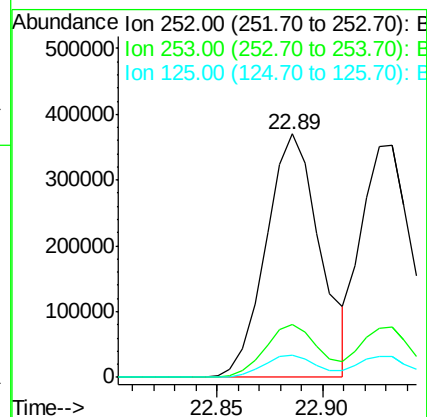
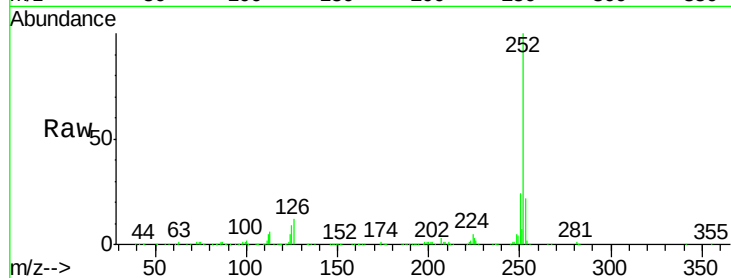




#35  
Benzo(b)fluoranthene  
Concen: 21.42 ng/ul  
RT: 22.89 min Scan# 3451  
Delta R.T. -0.00 min  
Lab File: BM005822.D  
Acq: 16 Jun 2016 02:14

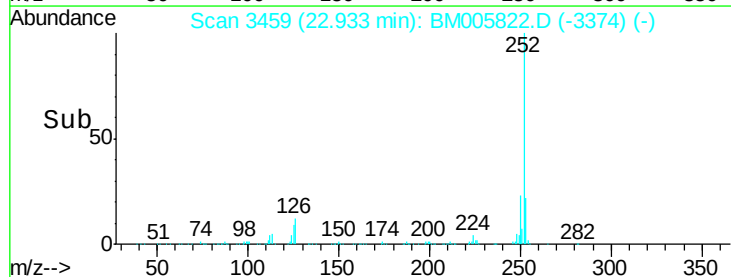
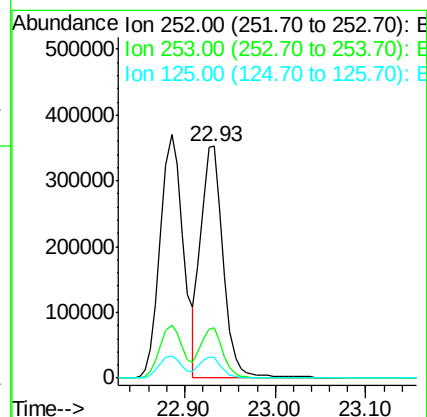
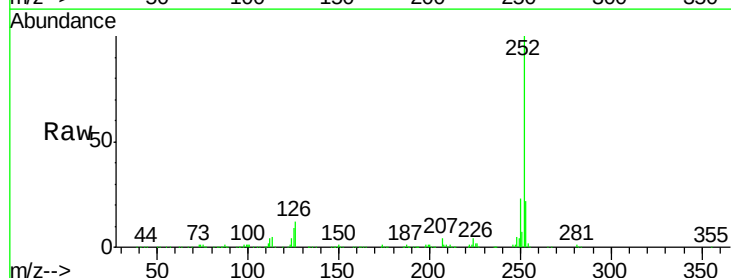
Instrument :  
BNA\_M  
ClientSampleId :  
SSTD02043

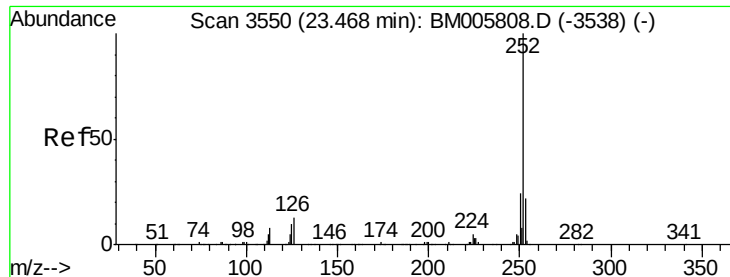
Tgt Ion:252 Resp: 657025  
Ion Ratio Lower Upper  
252 100  
253 21.6 17.2 25.8  
125 9.3 7.8 11.6



#36  
Benzo(k)fluoranthene  
Concen: 21.23 ng/ul  
RT: 22.93 min Scan# 3459  
Delta R.T. -0.00 min  
Lab File: BM005822.D  
Acq: 16 Jun 2016 02:14

Tgt Ion:252 Resp: 603136  
Ion Ratio Lower Upper  
252 100  
253 21.5 17.6 26.4  
125 8.8 8.1 12.1





#38

Benzo(a)pyrene

Concen: 20.08 ng/ul

RT: 23.47 min Scan# 3550

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

Instrument :

BNA\_M

ClientSampleId :

SSTD02043

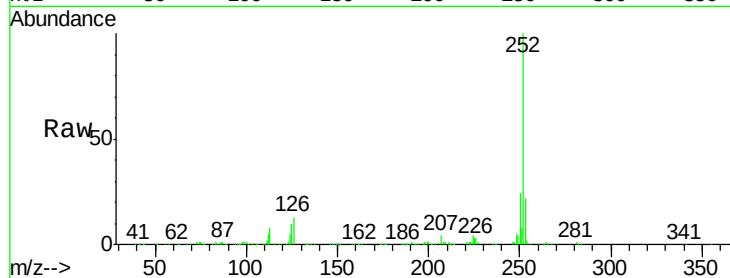
Tgt Ion:252 Resp: 588479

Ion Ratio Lower Upper

252 100

253 21.7 17.8 26.6

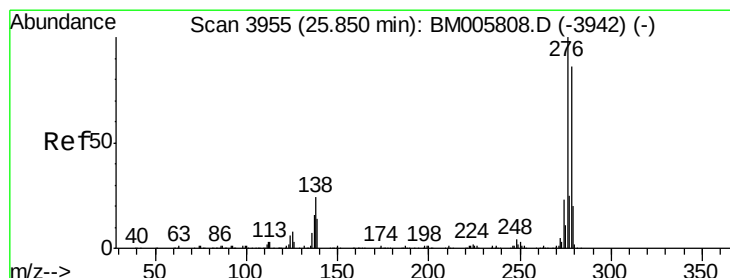
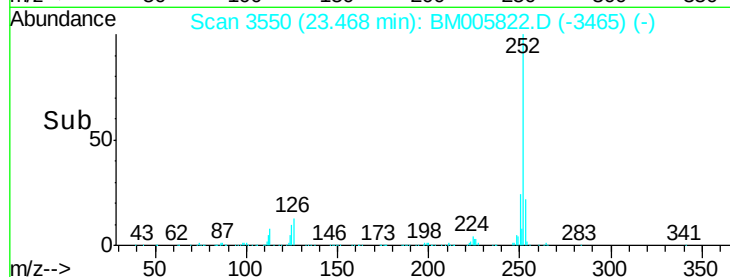
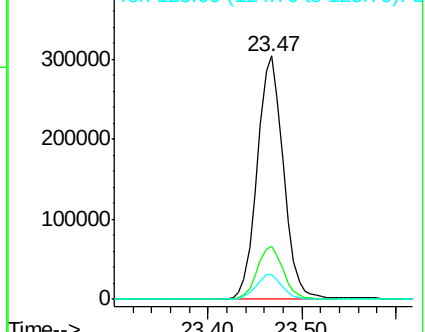
125 9.9 8.7 13.1



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



#39

Indeno(1,2,3-cd)pyrene

Concen: 18.76 ng/ul

RT: 25.84 min Scan# 3954

Delta R.T. -0.01 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

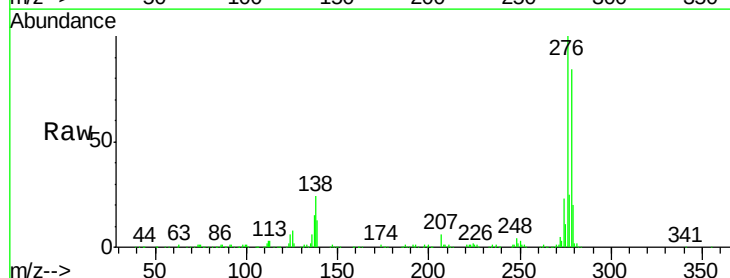
Tgt Ion:276 Resp: 630628

Ion Ratio Lower Upper

276 100

138 23.6 20.4 30.6

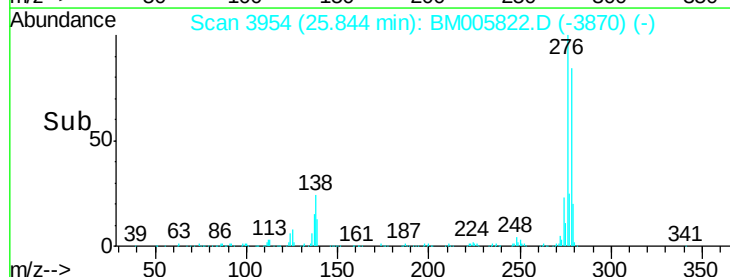
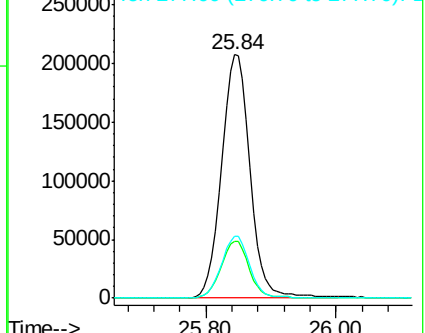
277 25.5 20.6 30.8

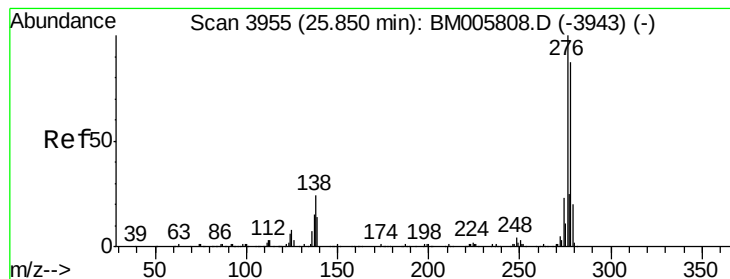


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





#40

Dibenzo(a,h)anthracene

Concen: 18.66 ng/ul

RT: 25.85 min Scan# 3955

Delta R.T. -0.00 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

Instrument :

BNA\_M

ClientSampleId :

SSTD02043

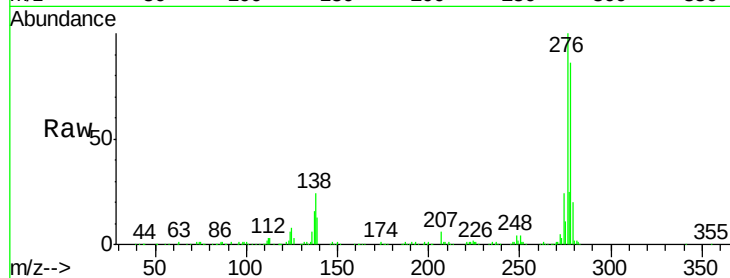
Tgt Ion:278 Resp: 524865

Ion Ratio Lower Upper

278 100

139 15.3 13.0 19.4

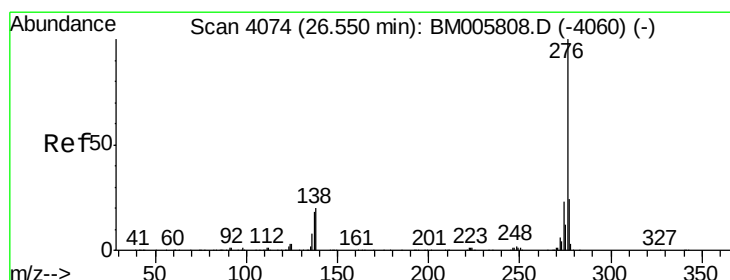
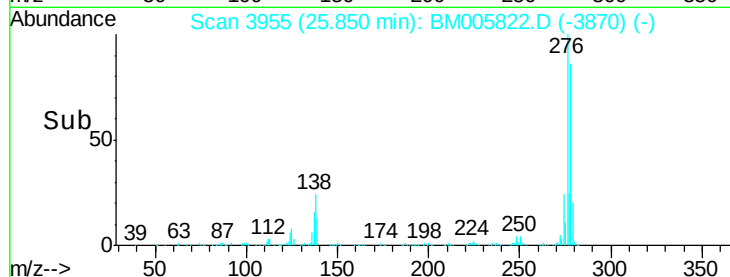
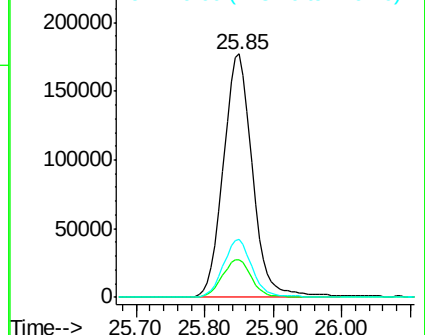
279 23.8 18.8 28.2



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



#41

Benzo(g,h,i)perylene

Concen: 18.36 ng/ul

RT: 26.54 min Scan# 4073

Delta R.T. -0.01 min

Lab File: BM005822.D

Acq: 16 Jun 2016 02:14

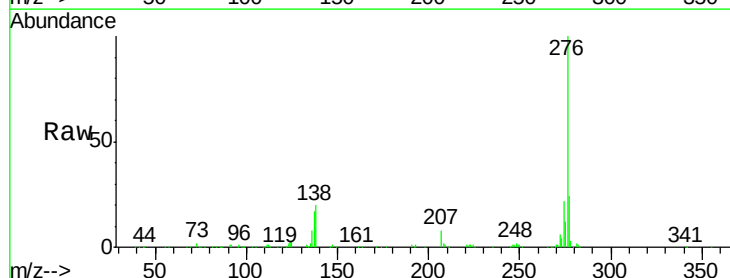
Tgt Ion:276 Resp: 534313

Ion Ratio Lower Upper

276 100

138 20.0 16.6 25.0

277 23.6 18.9 28.3



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

