

Data Path : Z:\HPCHEM1\BNA M\DATA\BM073016\  
 Data File : BM006801.D  
 Acq On : 31 Jul 2016 22:53  
 Operator : UM/SJ  
 Sample : H4188-22  
 Misc :  
 ALS Vial : 69 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: Aug 01 04:29:50 2016  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM072016.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sat Jul 30 01:37:26 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.60  | 152  | 217416   | 20.00 | ng/ul | 0.00     |
| 7) Naphthalene-d8         | 10.38 | 136  | 938088   | 20.00 | ng/ul | 0.00     |
| 15) Acenaphthene-d10      | 14.26 | 164  | 523426   | 20.00 | ng/ul | 0.00     |
| 23) Phenanthrene-d10      | 17.01 | 188  | 1172621  | 20.00 | ng/ul | 0.00     |
| 29) Chrysene-d12          | 21.22 | 240  | 1280586  | 20.00 | ng/ul | 0.00     |
| 34) Perylene-d12          | 23.41 | 264  | 1359110  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 2) 1,4-Dioxane-d8              | 3.13  | 96  | 7816    | 1.45  | ng/uL | 0.00 |
| 3) Phenol-d5                   | 6.79  | 99  | 311638  | 16.85 | ng/ul | 0.00 |
| 4) Bis-(2-Chloroethyl)ether-d  | 6.95  | 67  | 207530  | 18.11 | ng/ul | 0.00 |
| 5) 2-Chlorophenol-d4           | 7.14  | 132 | 257545  | 17.43 | ng/ul | 0.00 |
| 6) 4-Methylphenol-d8           | 8.32  | 113 | 207045  | 14.43 | ng/ul | 0.00 |
| 8) Nitrobenzene-d5             | 8.76  | 128 | 126963  | 17.88 | ng/ul | 0.00 |
| 9) 2-Nitrophenol-d4            | 9.47  | 143 | 139556  | 18.48 | ng/ul | 0.00 |
| 10) 2,4-Dichlorophenol-d3      | 10.02 | 165 | 244661  | 17.15 | ng/ul | 0.00 |
| 12) 4-Chloroaniline-d4         | 10.53 | 131 | 294077  | 18.71 | ng/ul | 0.00 |
| 16) Dimethylphthalate-d6       | 13.67 | 166 | 741265  | 18.06 | ng/ul | 0.00 |
| 17) Acenaphthylene-d8          | 13.94 | 160 | 961186  | 18.35 | ng/ul | 0.00 |
| 20) 4-Nitrophenol-d4           | 14.49 | 143 | 99034   | 13.89 | ng/ul | 0.00 |
| 21) Fluorene-d10               | 15.26 | 176 | 671904  | 18.31 | ng/ul | 0.00 |
| 24) 4,6-Dinitro-2-methylphenol | 15.40 | 200 | 76442   | 12.56 | ng/ul | 0.00 |
| 26) Anthracene-d10             | 17.11 | 188 | 1026926 | 18.44 | ng/ul | 0.00 |
| 30) Pyrene-d10                 | 19.42 | 212 | 1153470 | 19.77 | ng/ul | 0.00 |
| 37) Benzo(a)pyrene-d12         | 23.28 | 264 | 1161221 | 18.57 | ng/ul | 0.00 |

## Target Compounds

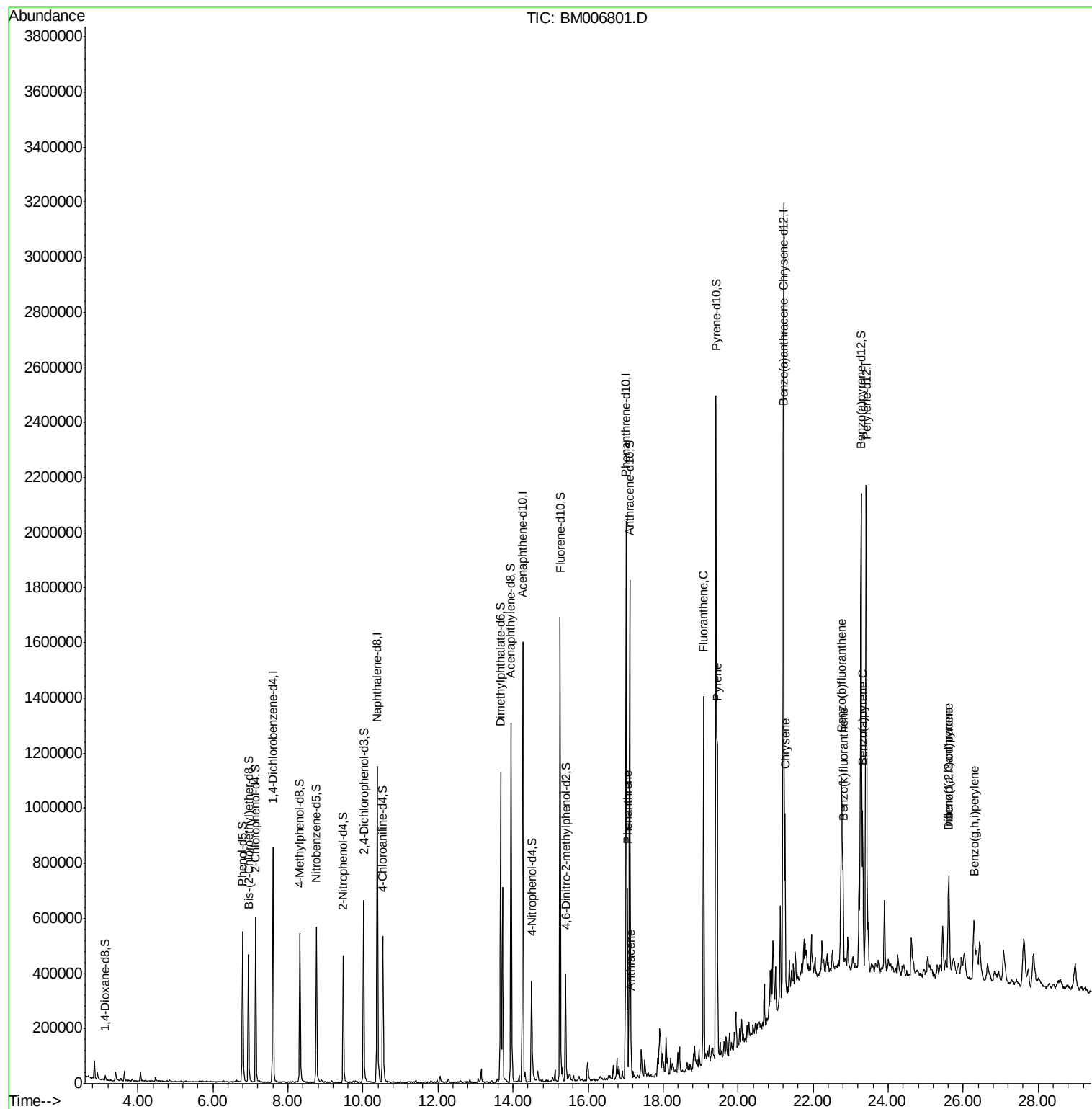
|                            |       |     |        |       |        | Ovalue |
|----------------------------|-------|-----|--------|-------|--------|--------|
| 25) Phenanthrene           | 17.05 | 178 | 409279 | 6.21  | ng/ul  | 98     |
| 27) Anthracene             | 17.14 | 178 | 79438  | 1.17  | ng/ul  | 97     |
| 28) Fluoranthene           | 19.08 | 202 | 836277 | 10.79 | ng/ul  | 97     |
| 31) Pyrene                 | 19.44 | 202 | 686514 | 8.85  | ng/ul  | 97     |
| 32) Benzo(a)anthracene     | 21.20 | 228 | 342401 | 4.41  | ng/ul  | 96     |
| 33) Chrysene               | 21.25 | 228 | 398885 | 5.57  | ng/ul  | 97     |
| 35) Benzo(b)fluoranthene   | 22.76 | 252 | 588964 | 7.23  | ng/ul  | 99     |
| 36) Benzo(k)fluoranthene   | 22.80 | 252 | 186499 | 2.37  | ng/ul  | 95     |
| 38) Benzo(a)pyrene         | 23.32 | 252 | 378953 | 4.78  | ng/ul  | 96     |
| 39) Indeno(1,2,3-cd)pyrene | 25.62 | 276 | 314761 | 3.43  | ng/ul  | 98     |
| 40) Dibenzo(a,h)anthracene | 25.61 | 278 | 77254  | 1.01  | ng/ul  | 92     |
| 41) Benzo(g,h,i)perylene   | 26.29 | 276 | 266033 | 3.38  | ng/ul# | 95     |

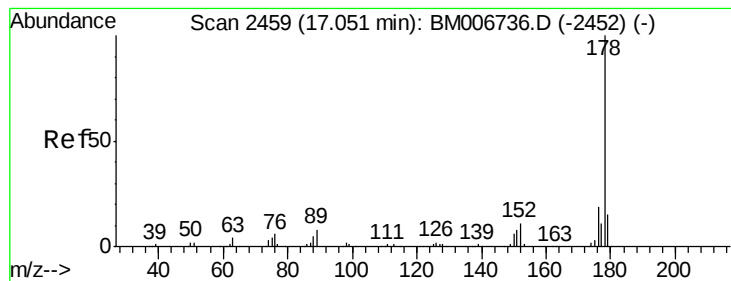
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA M\DATA\BM073016\  
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Quant Time: Aug 01 04:29:50 2016  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM072016.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Sat Jul 30 01:37:26 2016  
Response via : Initial Calibration





#25

Phenanthrene

Concen: 6.21 ng/ul

RT: 17.05 min Scan# 2459

Delta R.T. -0.00 min

Lab File: BM006801.D

Acq: 31 Jul 2016 22:53

Instrument :

BNA\_M

ClientSampleId :

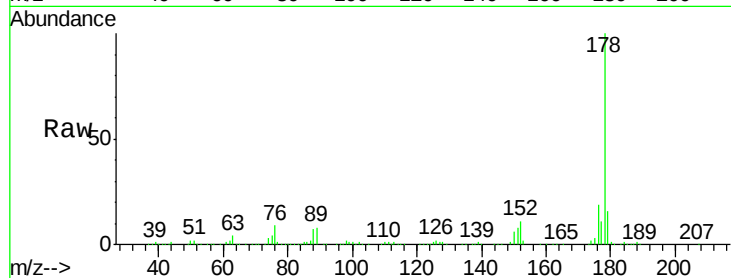
Tot Ion:178 Resp: 409279

Ion Ratio Lower Upper

178 100

179 16.0 11.8 17.8

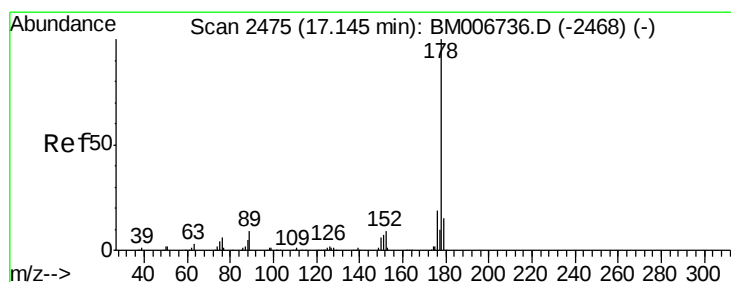
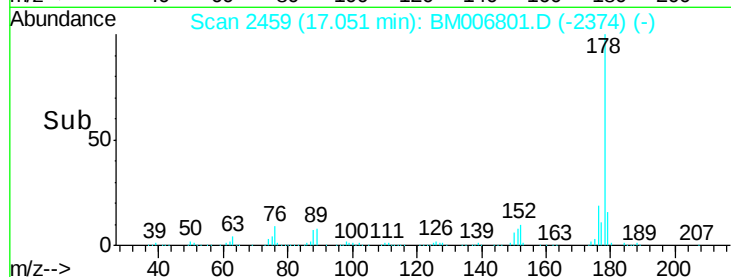
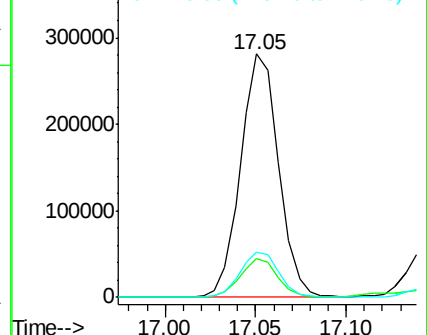
176 18.8 14.8 22.2



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: 1.17 ng/ul

RT: 17.14 min Scan# 2475

Delta R.T. -0.00 min

Lab File: BM006801.D

Acq: 31 Jul 2016 22:53

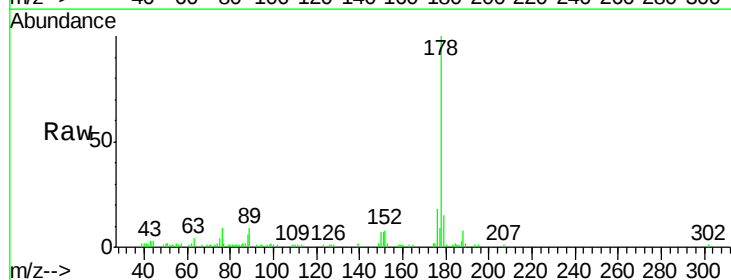
Tgt Ion:178 Resp: 79438

Ion Ratio Lower Upper

178 100

179 15.3 12.9 19.3

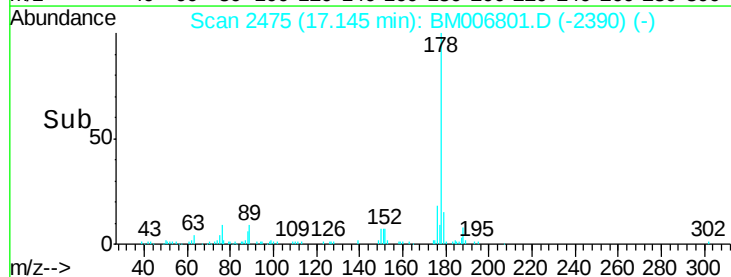
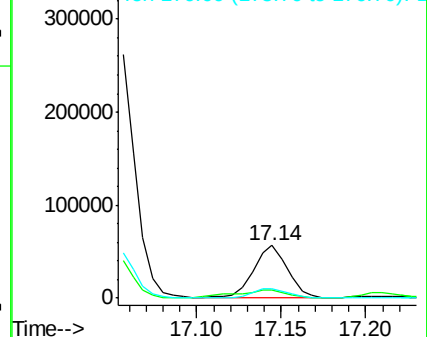
176 17.6 15.6 23.4

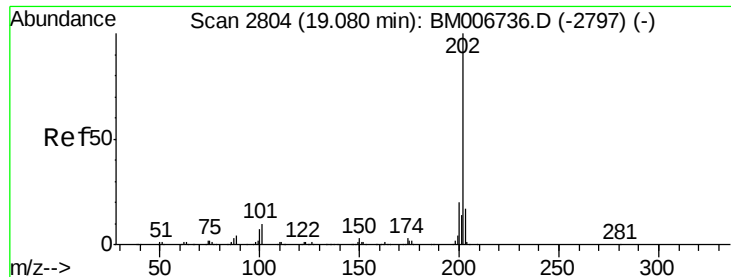


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E

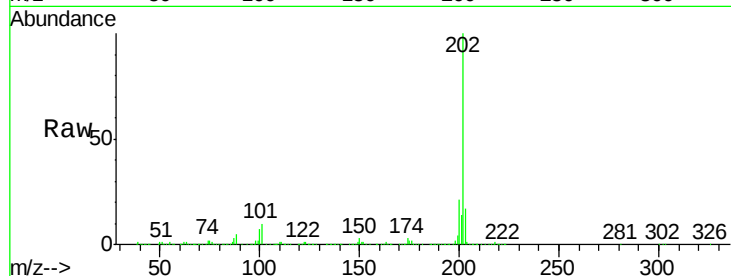




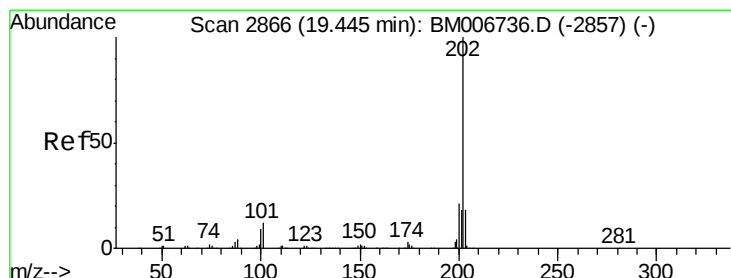
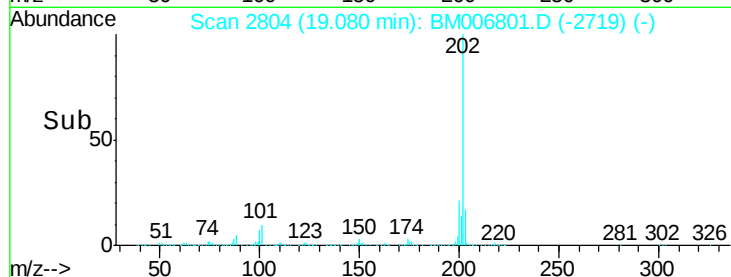
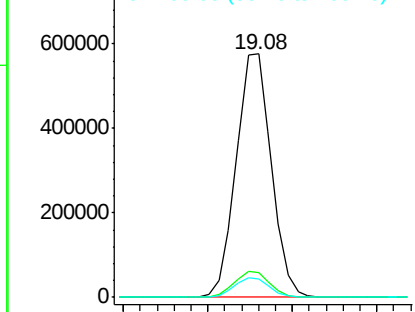
#28  
Fluoranthene  
Concen: 10.79 ng/ul  
RT: 19.08 min Scan# 2804  
Delta R.T. -0.00 min  
Lab File: BM006801.D  
Acq: 31 Jul 2016 22:53

Instrument :  
BNA\_M  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.3  | 8.9   | 13.3  |
| 100     | 7.5   | 7.0   | 10.4  |

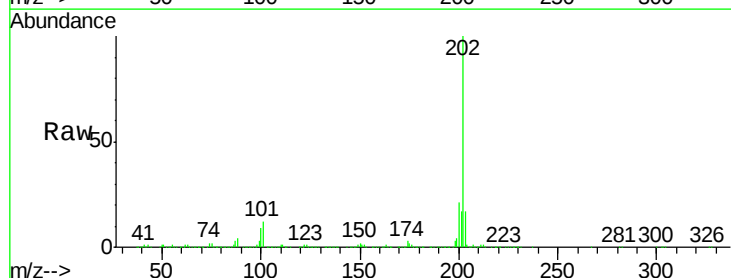


Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B

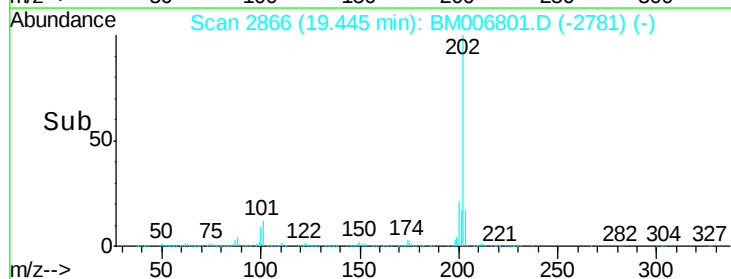
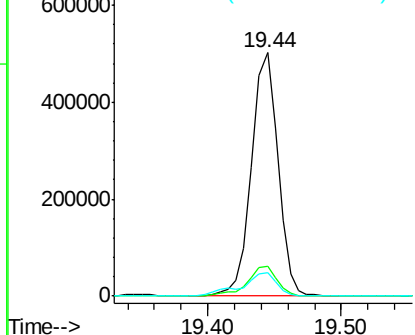


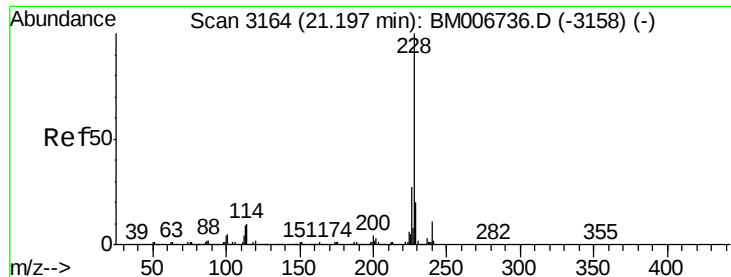
#31  
Pyrene  
Concen: 8.85 ng/ul  
RT: 19.44 min Scan# 2866  
Delta R.T. -0.00 min  
Lab File: BM006801.D  
Acq: 31 Jul 2016 22:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.3  | 9.8   | 14.8  |
| 100     | 9.4   | 9.3   | 13.9  |



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

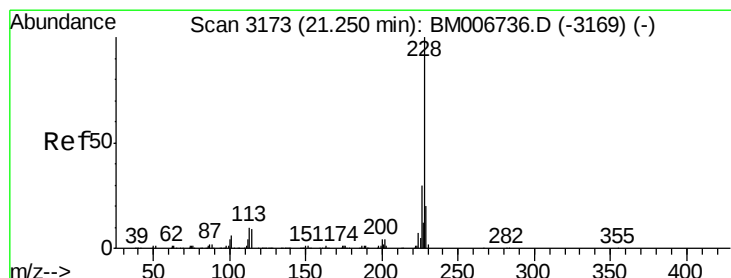
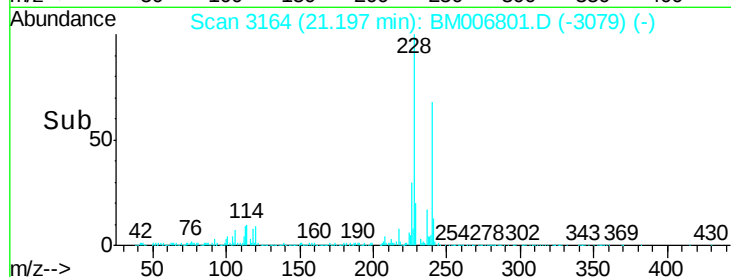
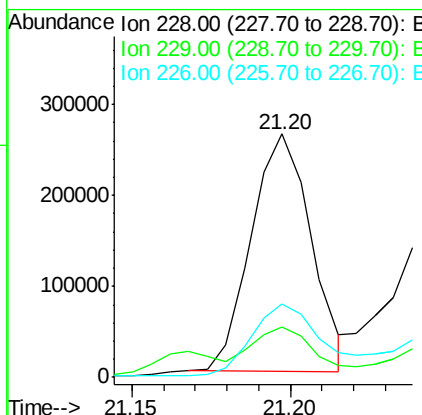
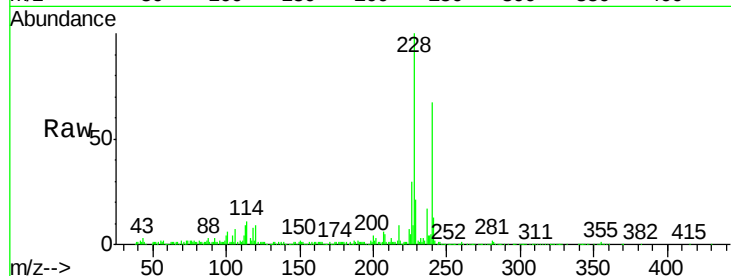




#32  
Benzo(a)anthracene  
Concen: 4.41 ng/ul  
RT: 21.20 min Scan# 3164  
Delta R.T. -0.00 min  
Lab File: BM006801.D  
Acq: 31 Jul 2016 22:53

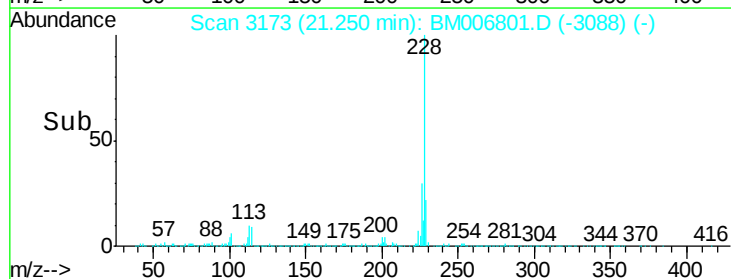
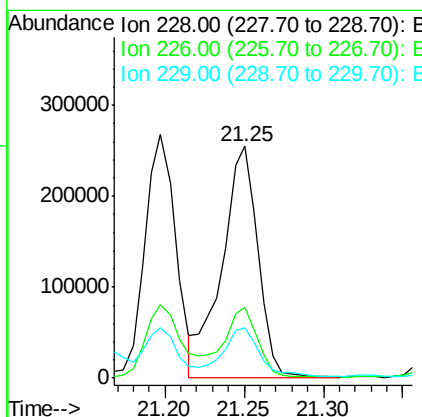
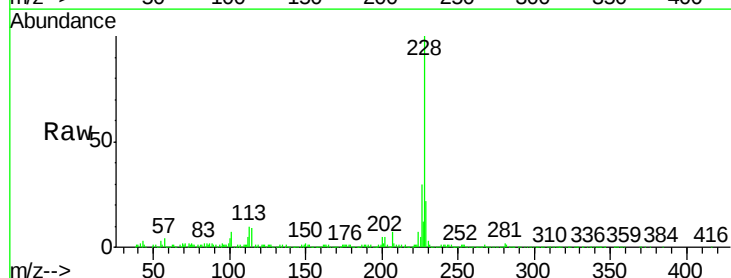
Instrument :  
BNA\_M  
ClientSampleId :

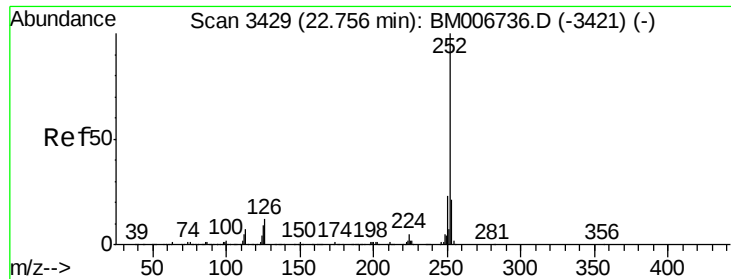
Tot Ion:228 Resp: 342401  
Ion Ratio Lower Upper  
228 100  
229 20.8 16.6 25.0  
226 30.1 21.0 31.4



#33  
Chrysene  
Concen: 5.57 ng/ul  
RT: 21.25 min Scan# 3173  
Delta R.T. -0.00 min  
Lab File: BM006801.D  
Acq: 31 Jul 2016 22:53

Tgt Ion:228 Resp: 398885  
Ion Ratio Lower Upper  
228 100  
226 30.4 23.4 35.2  
229 21.9 16.2 24.2

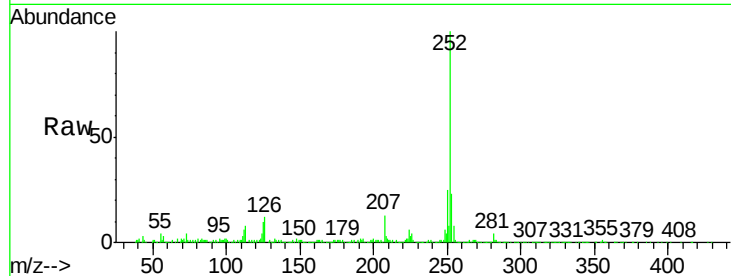




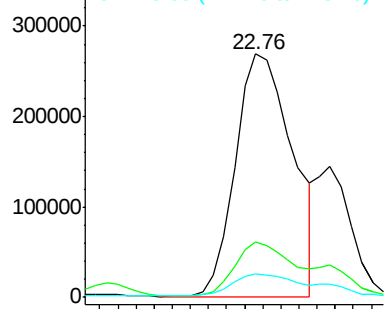
#35  
Benzo(b)fluoranthene  
Concen: 7.23 ng/ul  
RT: 22.76 min Scan# 3429  
Delta R.T. -0.00 min  
Lab File: BM006801.D  
Acq: 31 Jul 2016 22:53

Instrument :  
BNA\_M  
ClientSampleId :

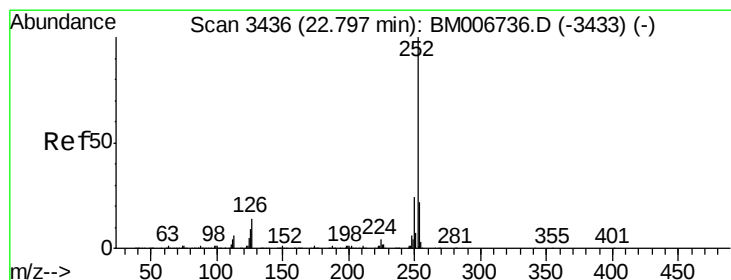
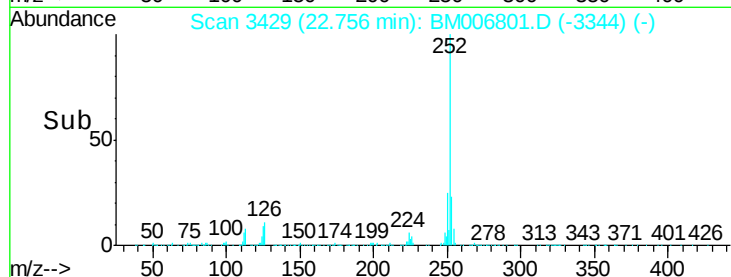
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 18.1  | 27.1  |
| 125     | 9.9   | 7.6   | 11.4  |



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

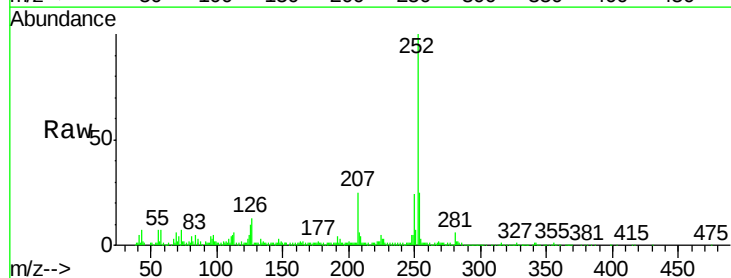


Time-->

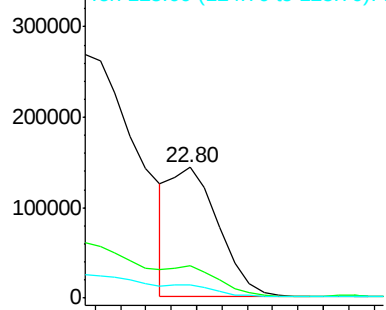


#36  
Benzo(k)fluoranthene  
Concen: 2.37 ng/ul  
RT: 22.80 min Scan# 3436  
Delta R.T. -0.00 min  
Lab File: BM006801.D  
Acq: 31 Jul 2016 22:53

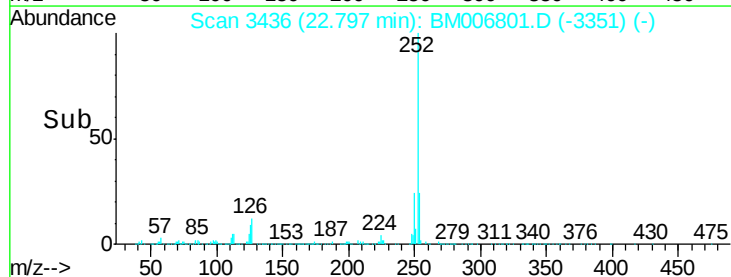
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.3  | 17.8  | 26.8  |
| 125     | 10.1  | 7.7   | 11.5  |

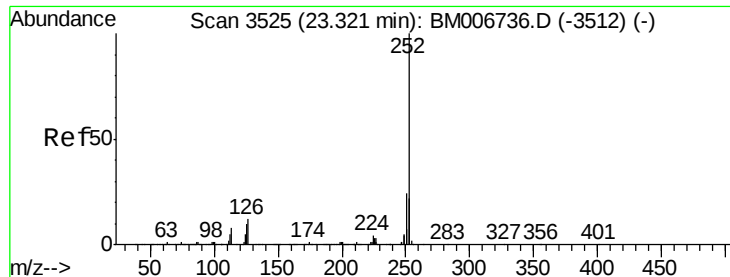


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



Time-->





#38

Benzo(a)pyrene

Concen: 4.78 ng/ul

RT: 23.32 min Scan# 3525

Delta R.T. -0.00 min

Lab File: BM006801.D

Acq: 31 Jul 2016 22:53

Instrument :

BNA\_M

ClientSampleId :

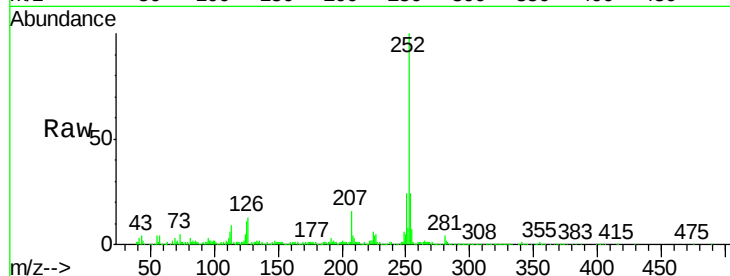
Tot Ion:252 Resp: 378953

Ion Ratio Lower Upper

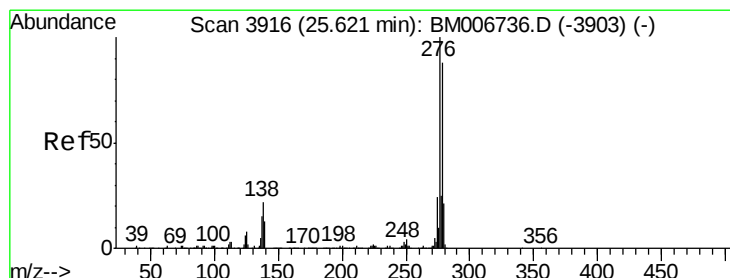
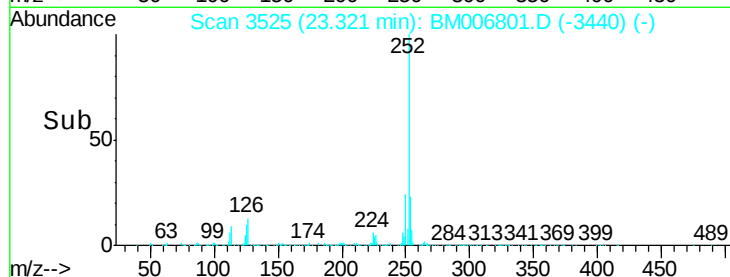
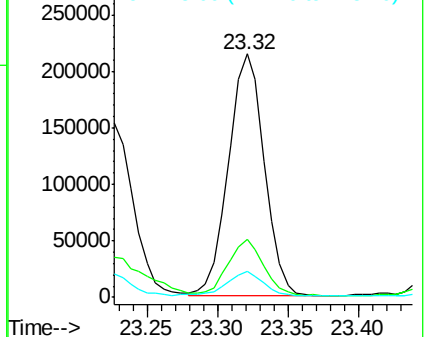
252 100

253 23.9 17.4 26.0

125 10.7 8.2 12.2



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: 3.43 ng/ul

RT: 25.62 min Scan# 3916

Delta R.T. -0.00 min

Lab File: BM006801.D

Acq: 31 Jul 2016 22:53

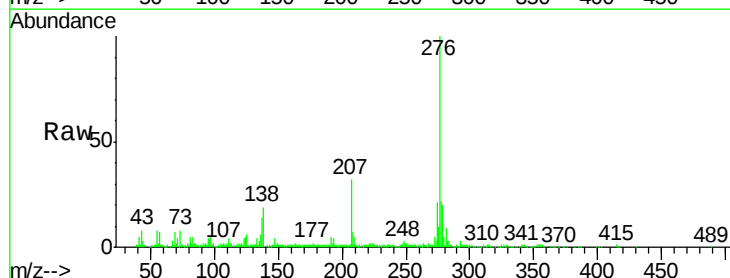
Tgt Ion:276 Resp: 314761

Ion Ratio Lower Upper

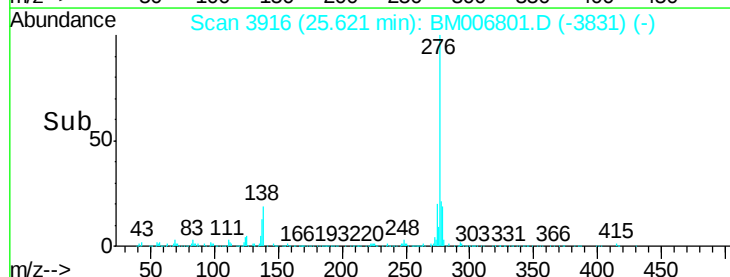
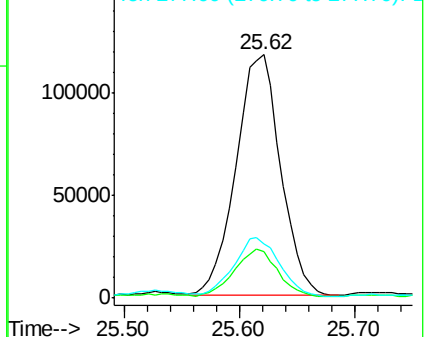
276 100

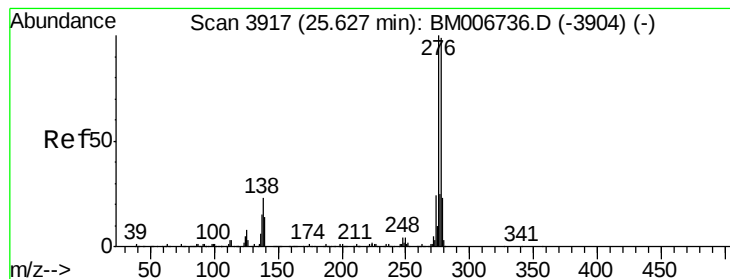
138 19.3 15.8 23.6

277 22.4 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





#40

Dibenzo(a,h)anthracene

Concen: 1.01 ng/ul

RT: 25.61 min Scan# 3915

Delta R.T. -0.01 min

Lab File: BM006801.D

Acq: 31 Jul 2016 22:53

Instrument :

BNA\_M

ClientSampleId :

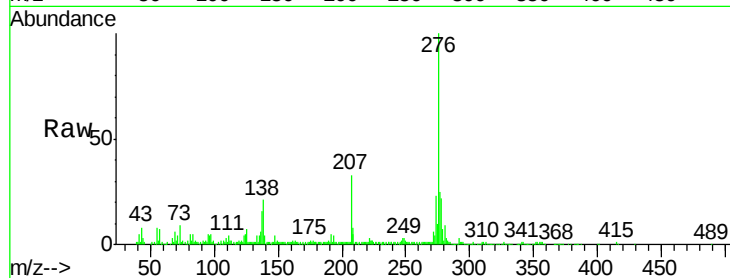
Tot Ion:278 Resp: 77254

Ion Ratio Lower Upper

278 100

139 17.9 12.1 18.1

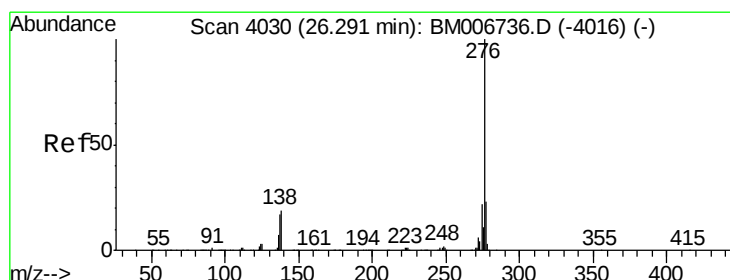
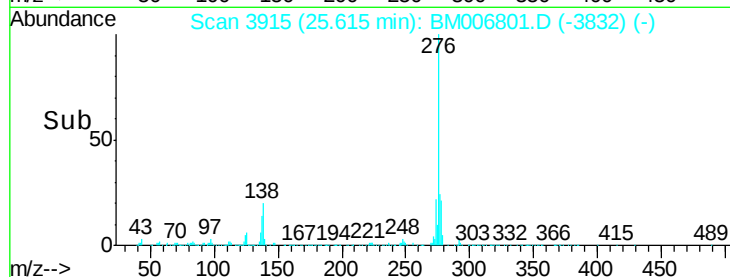
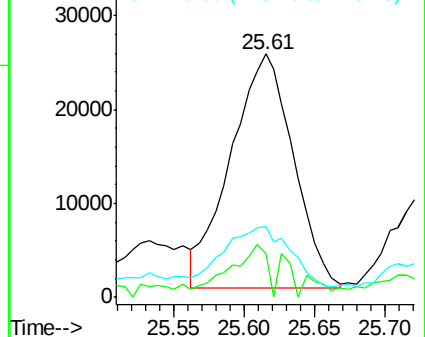
279 29.2 19.8 29.8



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: 3.38 ng/ul

RT: 26.29 min Scan# 4030

Delta R.T. -0.00 min

Lab File: BM006801.D

Acq: 31 Jul 2016 22:53

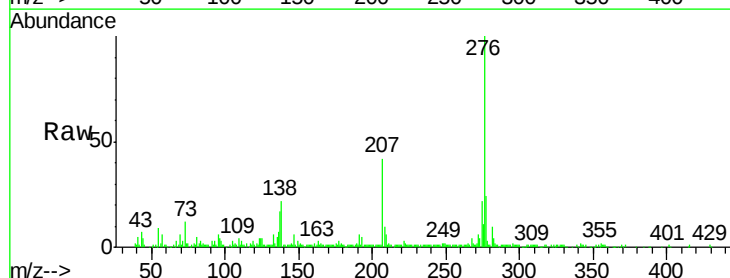
Tgt Ion:276 Resp: 266033

Ion Ratio Lower Upper

276 100

138 21.6 13.9 20.9#

277 23.8 19.8 29.6



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

