

Data Path : Z:\HPCHEM1\BNA M\DATA\BM012718\  
 Data File : BM013916.D  
 Acq On : 28 Jan 2018 11:29  
 Operator : SJ/JU  
 Sample : J1222-06ME 5X  
 Misc :  
 ALS Vial : 40 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :

Quant Time: Jan 29 03:15:47 2018  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM011018.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Jan 29 03:14:13 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.58  | 152  | 139777   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.35 | 136  | 523673   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 298987   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.99 | 188  | 619435   | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.19 | 240  | 634576   | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.37 | 264  | 660897   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |      |       |      |
|--------------------------------|-------|-----|--------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.14  | 96  | 1200   | 0.34 | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.77  | 99  | 48397  | 4.51 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.93  | 67  | 33448  | 5.14 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.12  | 132 | 44407  | 5.08 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.30  | 113 | 39268  | 4.76 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.74  | 128 | 23273  | 5.73 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.46  | 143 | 20251  | 4.72 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.00 | 165 | 33656  | 4.06 | ng/ul | 0.02 |
| 29) 4-Chloroaniline-d4         | 10.52 | 131 | 47015  | 6.53 | ng/ul | 0.01 |
| 43) Dimethylphthalate-d6       | 13.65 | 166 | 122619 | 4.98 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 13.92 | 160 | 154624 | 4.92 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.47 | 143 | 244    | 0.06 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.23 | 176 | 106464 | 4.91 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.39 | 200 | 11150  | 2.99 | ng/ul | 0.01 |
| 70) Anthracene-d10             | 17.09 | 188 | 160791 | 5.33 | ng/ul | 0.00 |
| 76) Pyrene-d10                 | 19.39 | 212 | 174217 | 5.90 | ng/ul | 0.00 |
| 87) Benzo(a)pyrene-d12         | 23.23 | 264 | 170684 | 5.62 | ng/ul | 0.00 |

## Target Compounds

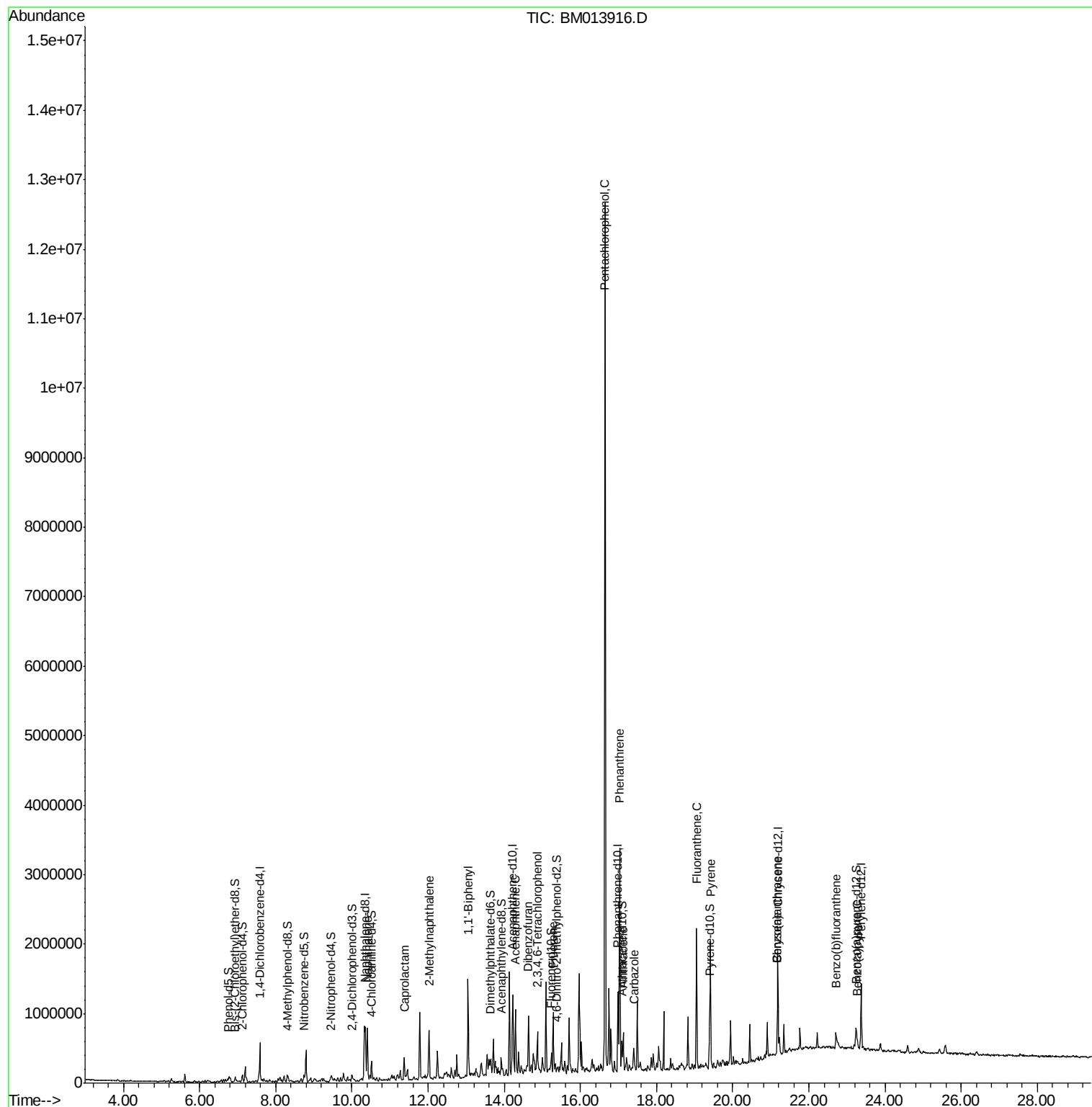
|                               |       |     |         |         | Ovalue |     |
|-------------------------------|-------|-----|---------|---------|--------|-----|
| 28) Naphthalene               | 10.40 | 128 | 573262  | 22.004  | ng/ul  | 99  |
| 32) Caprolactam               | 11.37 | 113 | 12825   | 5.767   | ng/ul  | 96  |
| 34) 2-Methylnaphthalene       | 12.03 | 142 | 317584  | 16.350  | ng/ul  | 92  |
| 40) 1,1'-Biphenyl             | 13.06 | 154 | 109996  | 4.420   | ng/ul  | 97  |
| 49) Acenaphthene              | 14.29 | 153 | 355236  | 17.840  | ng/ul  | 96  |
| 53) Dibenzofuran              | 14.63 | 168 | 396086  | 13.222  | ng/ul  | 96  |
| 55) 2,3,4,6-Tetrachlorophenol | 14.87 | 232 | 116862  | 18.620  | ng/ul# | 86  |
| 58) Fluorene                  | 15.29 | 166 | 346591  | 14.125  | ng/ul  | 98  |
| 68) Pentachlorophenol         | 16.65 | 266 | 2061880 | 492.705 | ng/ul  | 98  |
| 69) Phenanthrene              | 17.03 | 178 | 1868847 | 54.277  | ng/ul  | 99  |
| 71) Anthracene                | 17.12 | 178 | 305543  | 8.603   | ng/ul  | 100 |
| 72) Carbazole                 | 17.40 | 167 | 145679  | 4.969   | ng/ul  | 98  |
| 74) Fluoranthene              | 19.06 | 202 | 1217281 | 29.617  | ng/ul# | 96  |
| 77) Pyrene                    | 19.42 | 202 | 867421  | 22.485  | ng/ul# | 94  |
| 80) Benzo(a)anthracene        | 21.17 | 228 | 155486  | 4.055   | ng/ul  | 98  |
| 82) Chrysene                  | 21.17 | 228 | 155486  | 4.420   | ng/ul  | 95  |
| 85) Benzo(b)fluoranthene      | 22.72 | 252 | 108786  | 2.680   | ng/ul# | 94  |
| 88) Benzo(a)pyrene            | 23.28 | 252 | 49388   | 1.288   | ng/ul# | 92  |

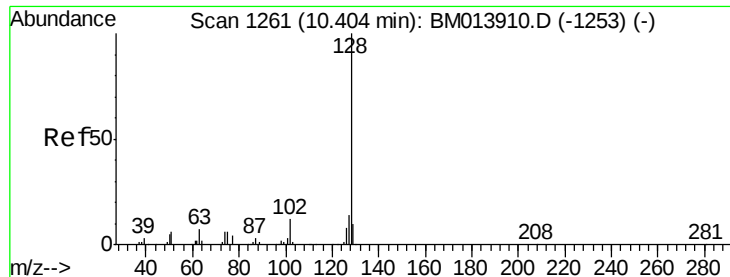
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Misc :  
ALS Vial : 40 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :

Quant Time: Jan 29 03:15:47 2018  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM011018.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Jan 29 03:14:13 2018  
Response via : Initial Calibration

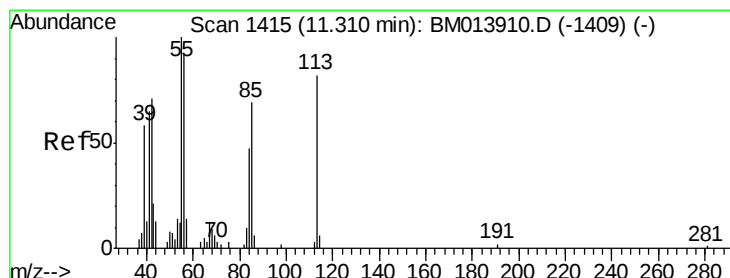
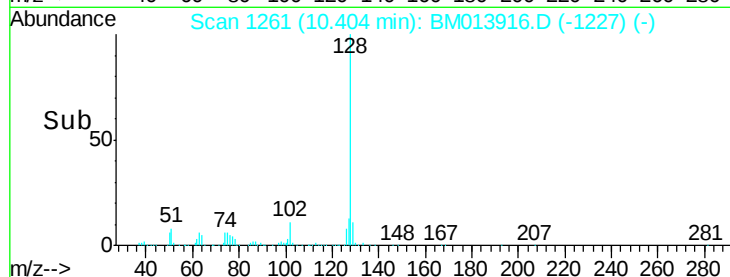
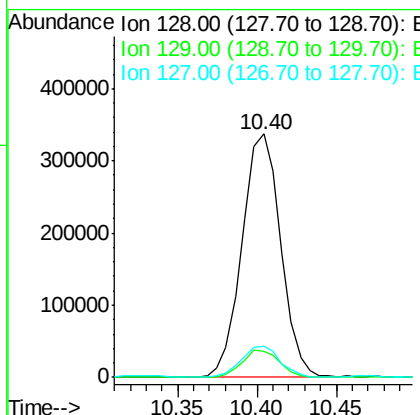
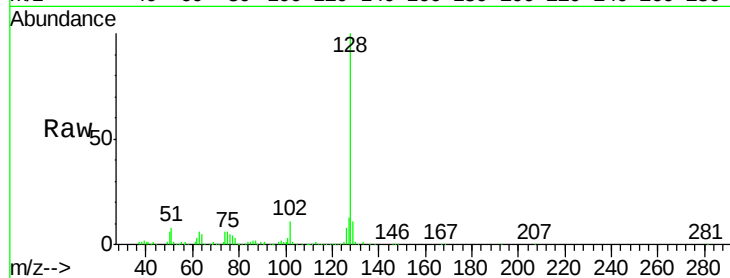




#28  
Naphthalene  
Concen: 22.004 ng/ul  
RT: 10.40 min Scan# 1261  
Delta R.T. 0.00 min  
Lab File: BM013916.D  
Acq: 28 Jan 2018 11:29

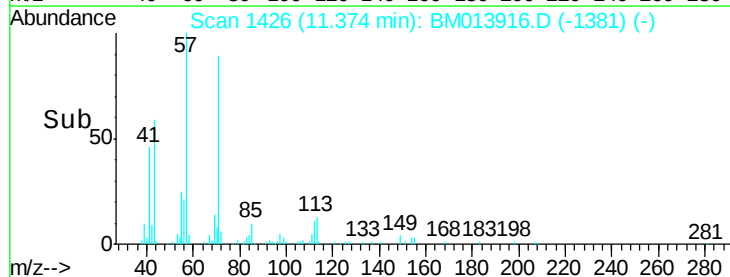
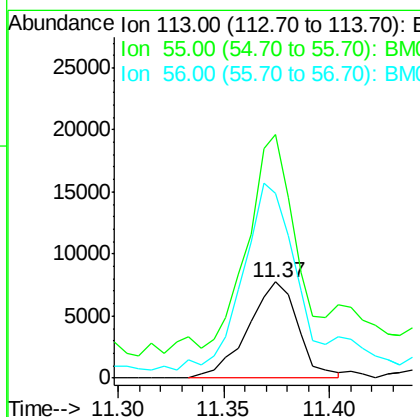
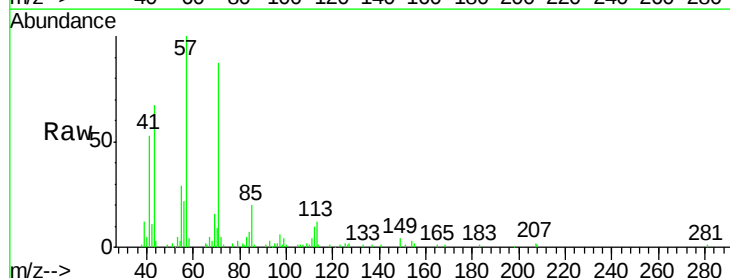
Instrument :  
BNA\_M  
ClientSampleId :

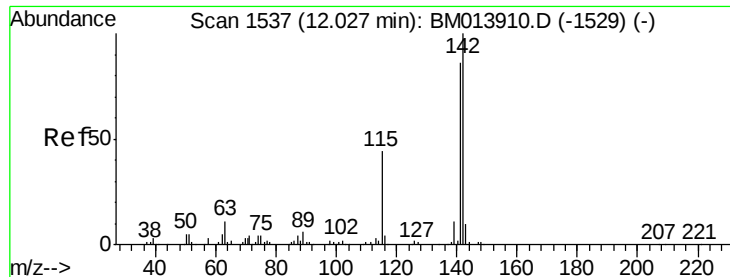
Tot Ion:128 Resp: 573262  
Ion Ratio Lower Upper  
128 100  
129 10.9 8.8 13.2  
127 12.6 10.6 16.0



#32  
Caprolactam  
Concen: 5.767 ng/ul  
RT: 11.37 min Scan# 1426  
Delta R.T. 0.06 min  
Lab File: BM013916.D  
Acq: 28 Jan 2018 11:29

Tgt Ion:113 Resp: 12825  
Ion Ratio Lower Upper  
113 100  
55 253.8 208.0 312.0  
56 192.1 160.0 240.0

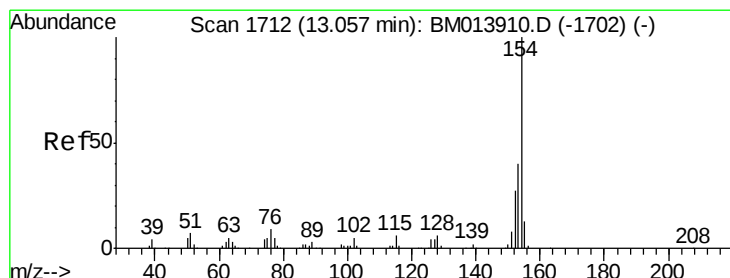
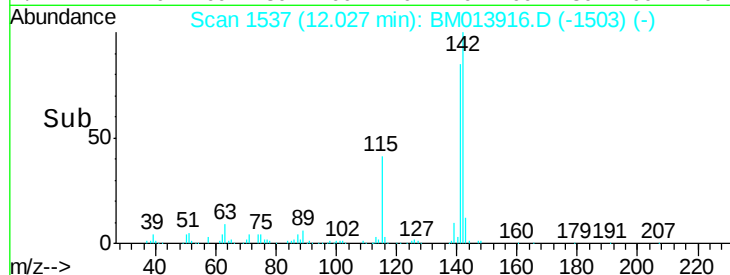
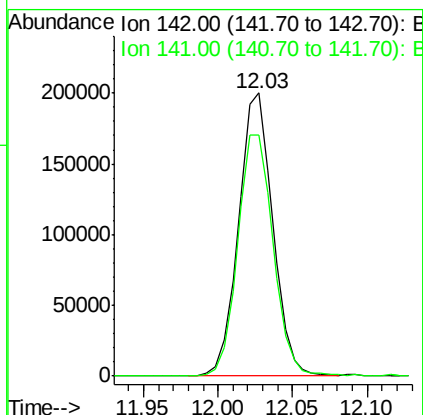
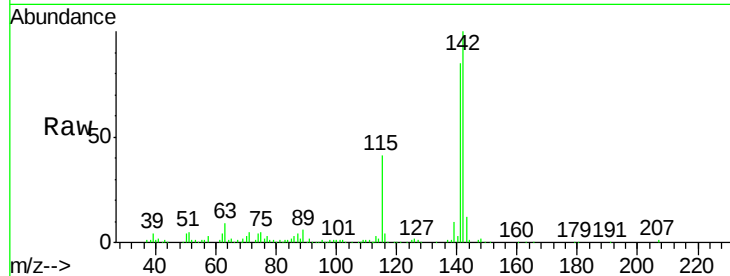




#34  
 2-Methylnaphthalene  
 Concen: 16.350 ng/ul  
 RT: 12.03 min Scan# 1537  
 Delta R.T. 0.00 min  
 Lab File: BM013916.D  
 Acq: 28 Jan 2018 11:29

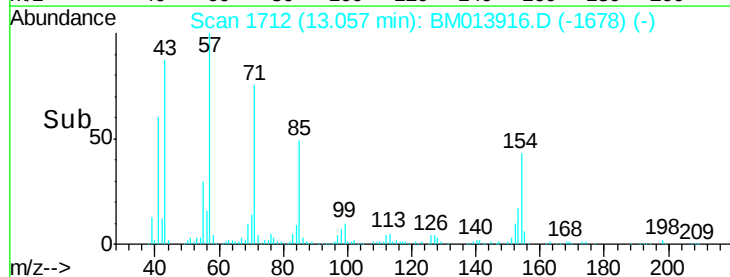
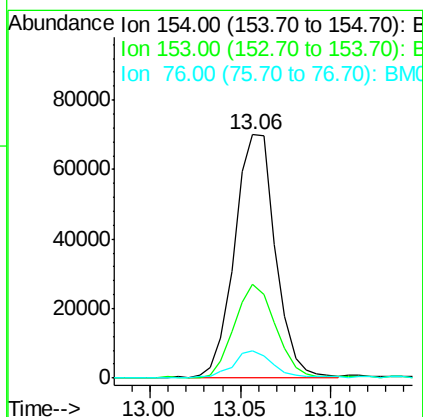
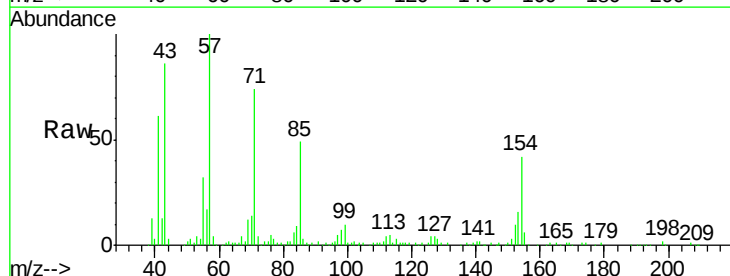
Instrument :  
 BNA\_M  
 ClientSampleId :

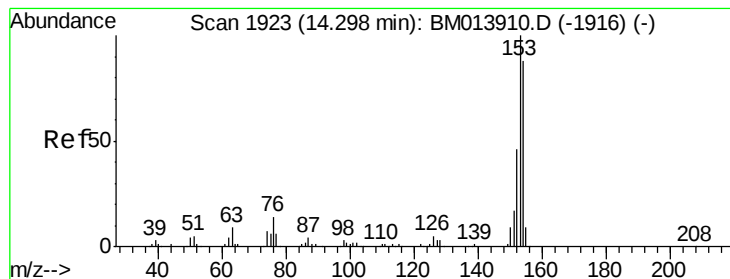
Tot Ion:142 Resp: 317584  
 Ion Ratio Lower Upper  
 142 100  
 141 85.3 74.1 111.1



#40  
 1,1'-Biphenyl  
 Concen: 4.420 ng/ul  
 RT: 13.06 min Scan# 1712  
 Delta R.T. 0.00 min  
 Lab File: BM013916.D  
 Acq: 28 Jan 2018 11:29

Tgt Ion:154 Resp: 109996  
 Ion Ratio Lower Upper  
 154 100  
 153 38.8 32.6 48.8  
 76 11.4 8.5 12.7





#49

Acenaphthene

Concen: 17.840 ng/ul

RT: 14.29 min Scan# 1922

Delta R.T. -0.01 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

Instrument :

BNA\_M

ClientSampleId :

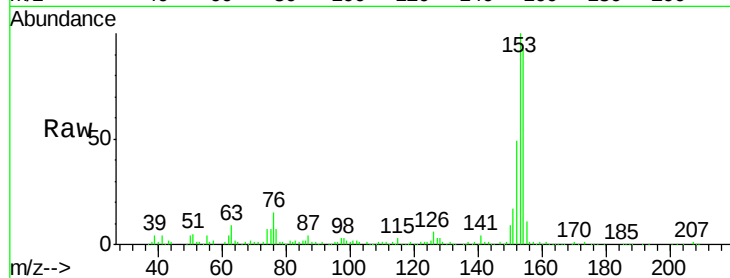
Tot Ion:153 Resp: 355236

Ion Ratio Lower Upper

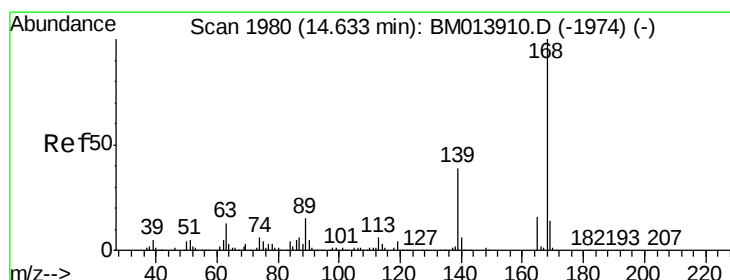
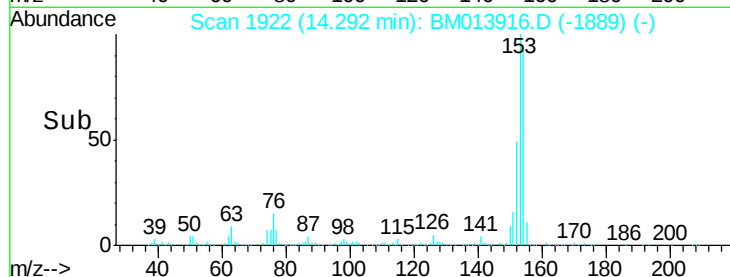
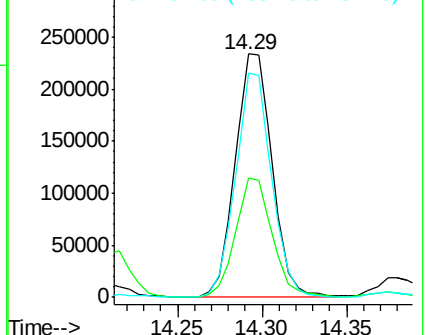
153 100

152 49.2 37.6 56.4

154 92.0 70.4 105.6



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



#53

Dibenzofuran

Concen: 13.222 ng/ul

RT: 14.63 min Scan# 1980

Delta R.T. 0.00 min

Lab File: BM013916.D

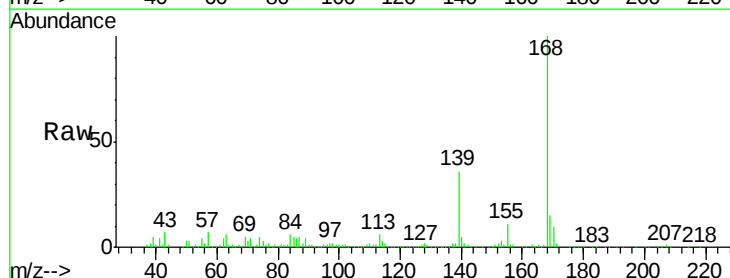
Acq: 28 Jan 2018 11:29

Tgt Ion:168 Resp: 396086

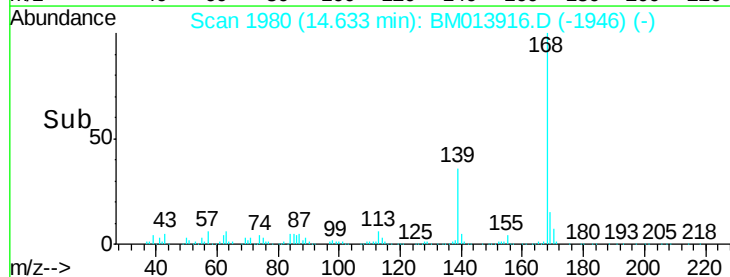
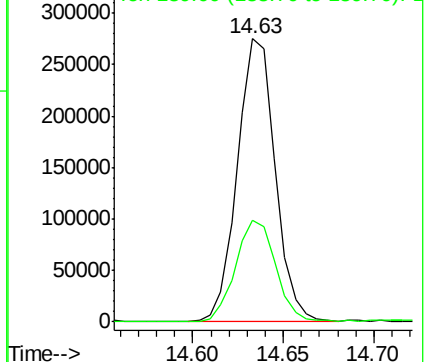
Ion Ratio Lower Upper

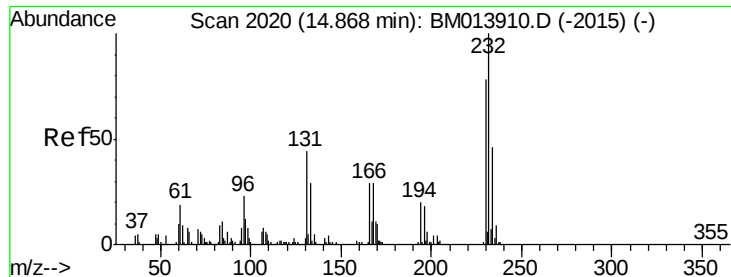
168 100

139 36.0 30.8 46.2



Abundance Ion 168.00 (167.70 to 168.70): E  
Ion 139.00 (138.70 to 139.70): E





#55

2,3,4,6-Tetrachlorophenol

Concen: 18.620 ng/ul

RT: 14.87 min Scan# 2020

Delta R.T. 0.00 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

Instrument :

BNA\_M

ClientSampled :

Tot Ion:232 Resp: 116862

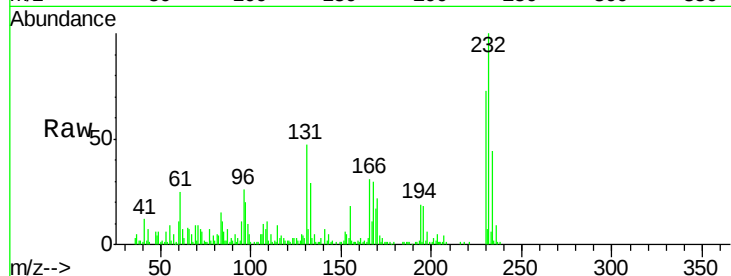
Ion Ratio Lower Upper

232 100

131 47.4 29.0 43.4#

130 2.8 2.0 3.0

166 31.5 21.4 32.2

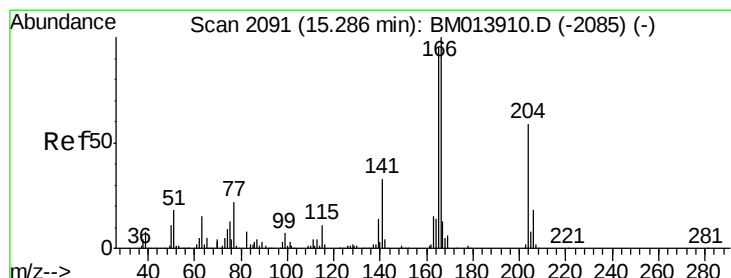
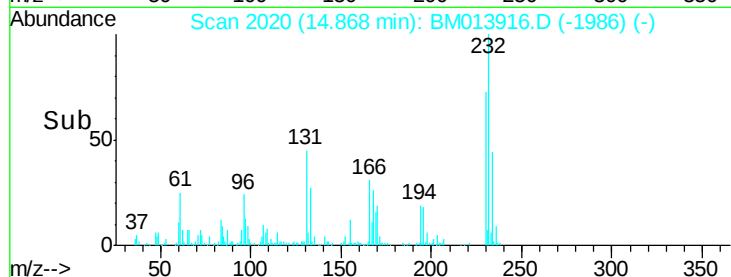
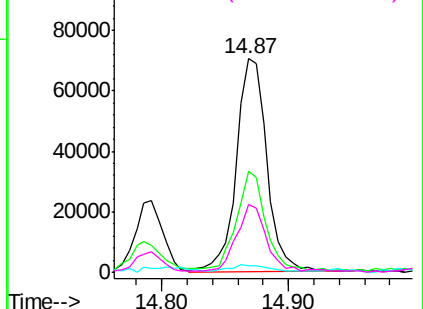


Abundance Ion 232.00 (231.70 to 232.70): E

Ion 131.00 (130.70 to 131.70): E

Ion 130.00 (129.70 to 130.70): E

Ion 166.00 (165.70 to 166.70): E



#58

Fluorene

Concen: 14.125 ng/ul

RT: 15.29 min Scan# 2091

Delta R.T. 0.00 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

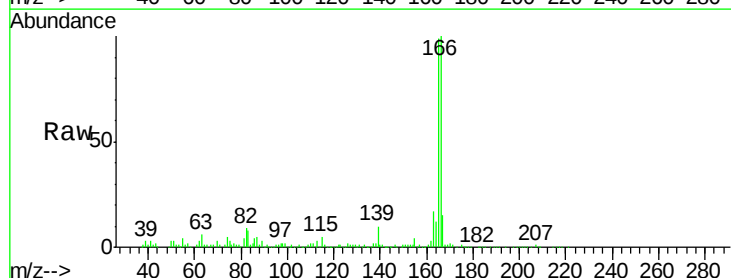
Tgt Ion:166 Resp: 346591

Ion Ratio Lower Upper

166 100

165 98.9 77.9 116.9

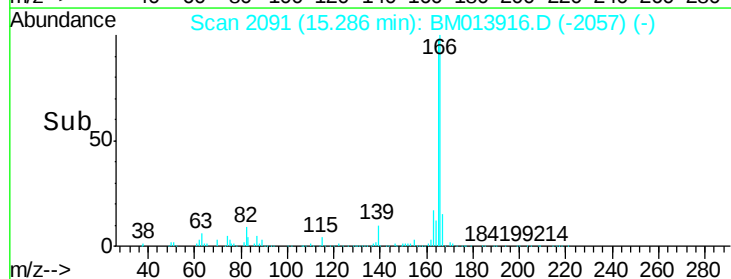
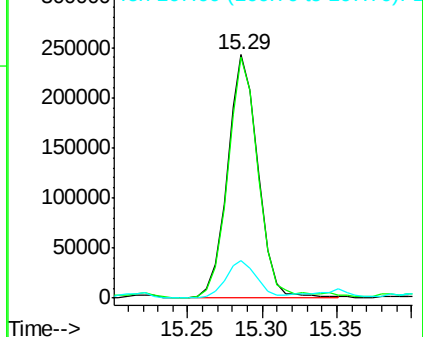
167 15.2 10.6 16.0

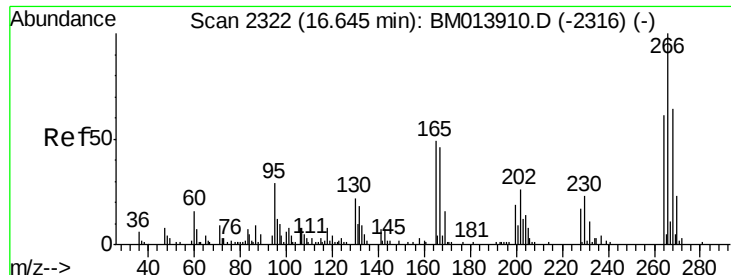


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

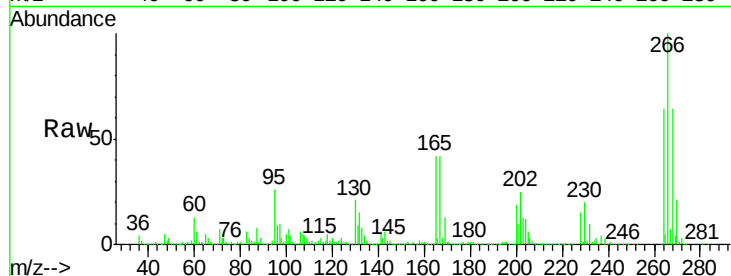




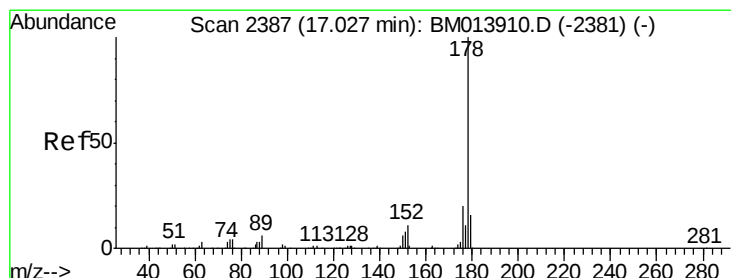
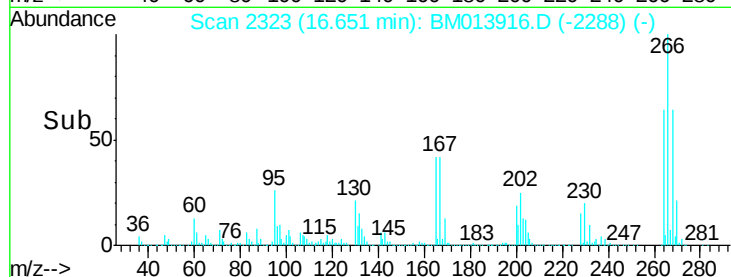
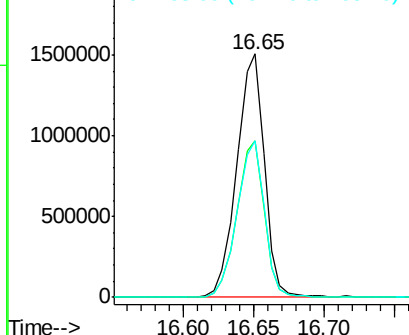
#68  
 Pentachlorophenol  
 Concen: 492.705 ng/ul  
 RT: 16.65 min Scan# 2323  
 Delta R.T. 0.01 min  
 Lab File: BM013916.D  
 Acq: 28 Jan 2018 11:29

Instrument :  
 BNA\_M  
 ClientSampleId :

Tot Ion:266 Resp: 2061880  
 Ion Ratio Lower Upper  
 266 100  
 264 64.1 49.3 73.9  
 268 64.4 52.6 78.8

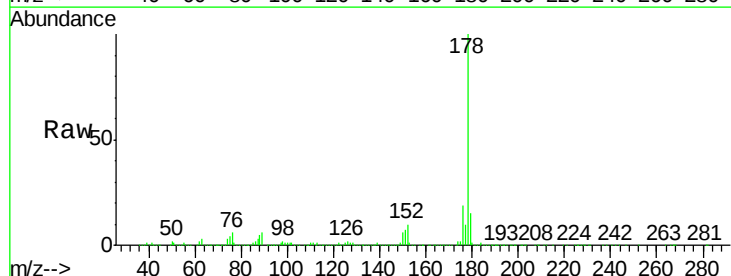


Abundance Ion 265.70 (265.40 to 266.40): E  
 Ion 264.00 (263.70 to 264.70): E  
 Ion 268.00 (267.70 to 268.70): E

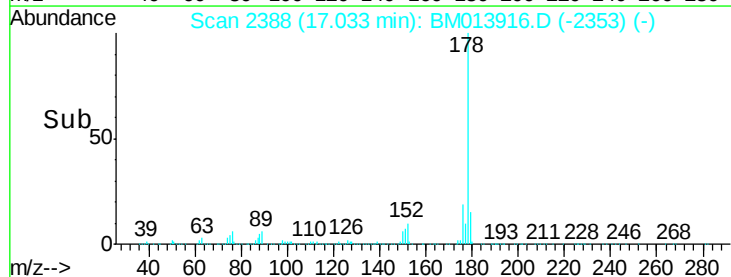
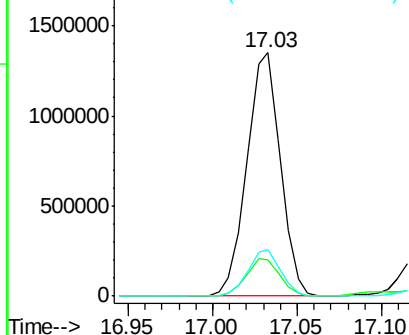


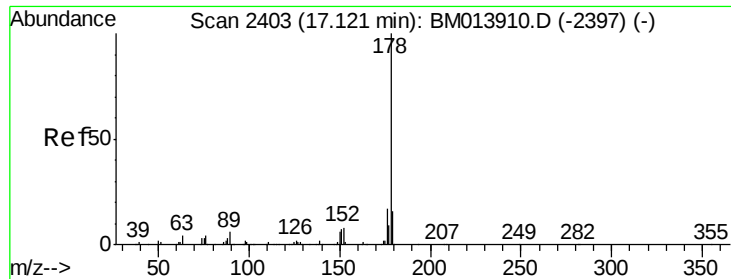
#69  
 Phenanthrene  
 Concen: 54.277 ng/ul  
 RT: 17.03 min Scan# 2388  
 Delta R.T. 0.01 min  
 Lab File: BM013916.D  
 Acq: 28 Jan 2018 11:29

Tgt Ion:178 Resp: 1868847  
 Ion Ratio Lower Upper  
 178 100  
 179 15.1 12.6 19.0  
 176 18.9 14.9 22.3



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

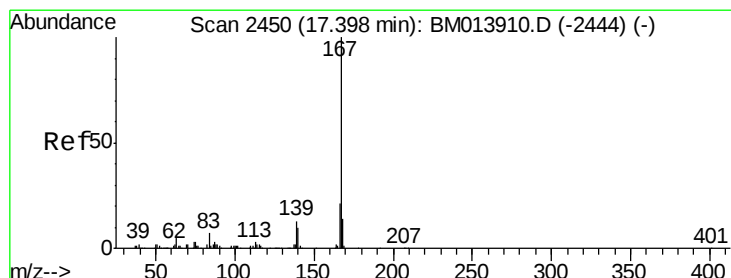
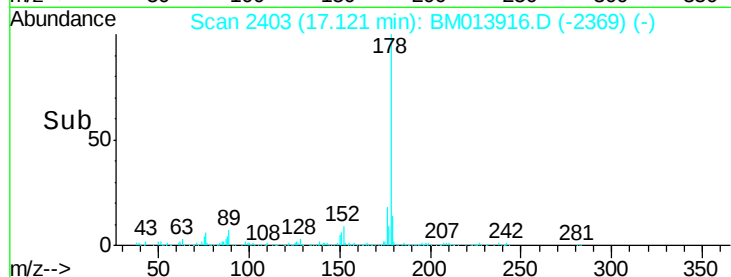
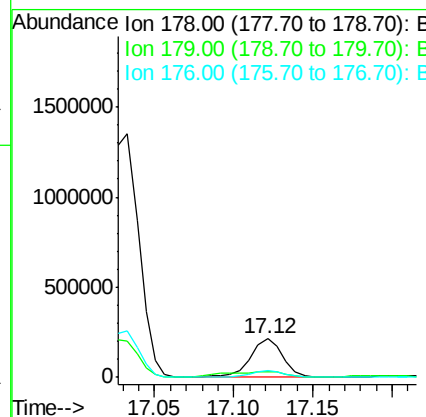
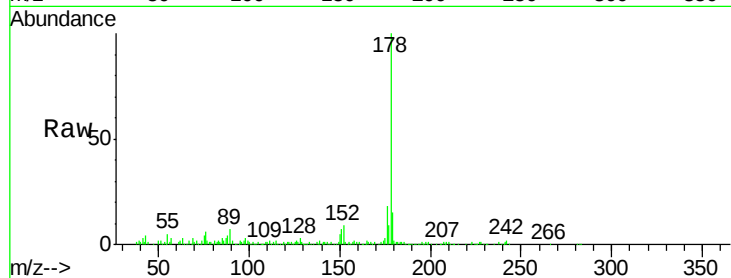




#71  
 Anthracene  
 Concen: 8.603 ng/ul  
 RT: 17.12 min Scan# 2403  
 Delta R.T. 0.00 min  
 Lab File: BM013916.D  
 Acq: 28 Jan 2018 11:29

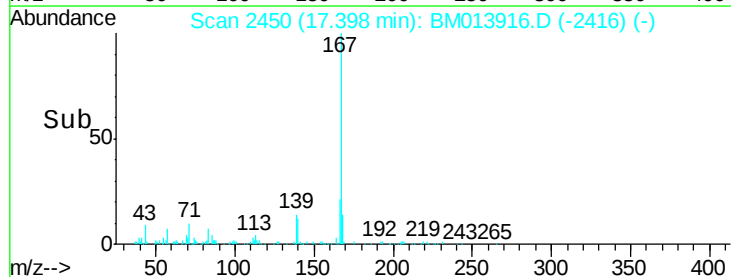
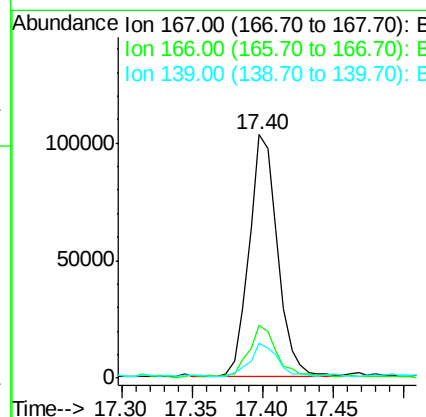
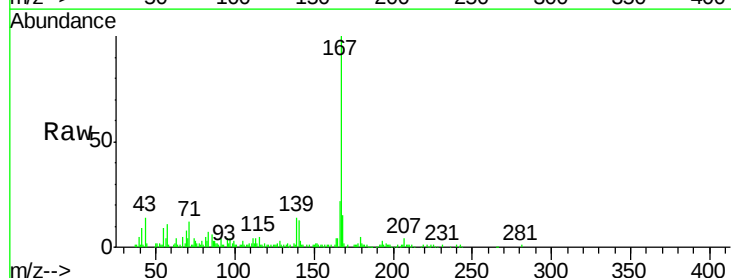
Instrument :  
 BNA\_M  
 ClientSampleId :

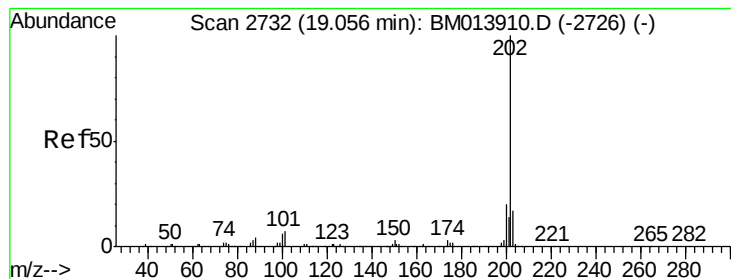
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 14.6  | 11.7  | 17.5  |
| 176     | 17.8  | 14.6  | 21.8  |



#72  
 Carbazole  
 Concen: 4.969 ng/ul  
 RT: 17.40 min Scan# 2450  
 Delta R.T. 0.00 min  
 Lab File: BM013916.D  
 Acq: 28 Jan 2018 11:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 21.5  | 17.1  | 25.7  |
| 139     | 14.4  | 10.0  | 15.0  |





#74

Fluoranthene

Concen: 29.617 ng/ul

RT: 19.06 min Scan# 2732

Delta R.T. 0.00 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

Instrument :

BNA\_M

ClientSampled :

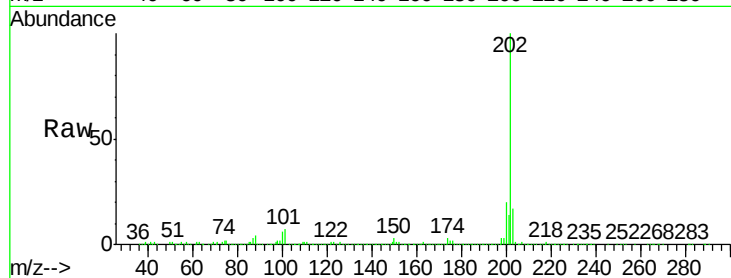
Tot Ion:202 Resp: 1217281

Ion Ratio Lower Upper

202 100

101 7.3 4.6 7.0#

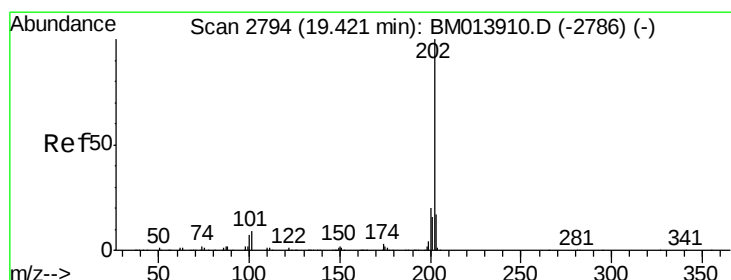
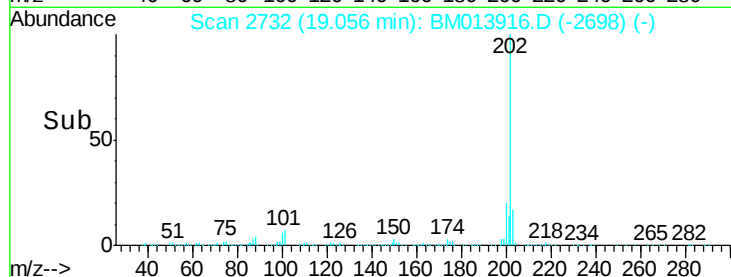
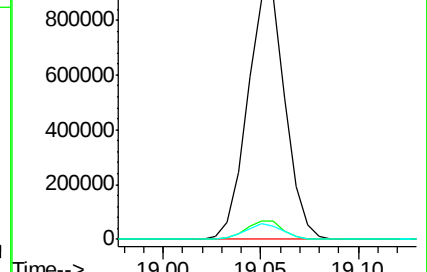
100 5.6 3.4 5.2#



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



#77

Pyrene

Concen: 22.485 ng/ul

RT: 19.42 min Scan# 2793

Delta R.T. -0.01 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

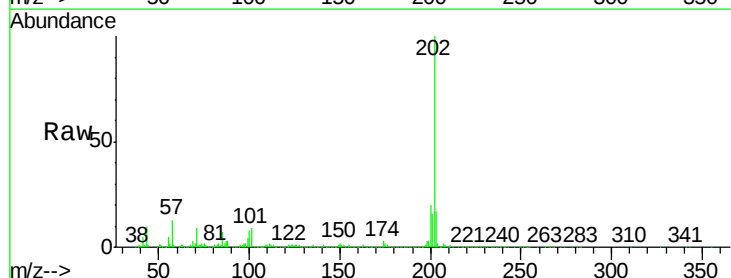
Tgt Ion:202 Resp: 867421

Ion Ratio Lower Upper

202 100

101 9.1 5.1 7.7#

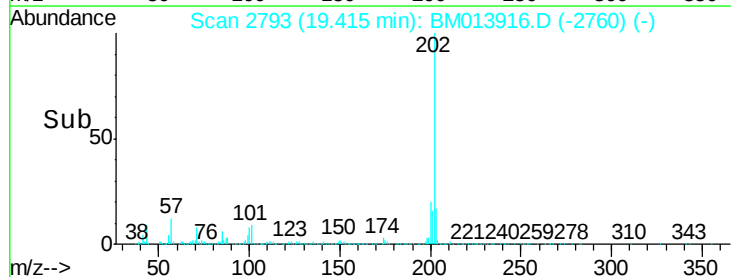
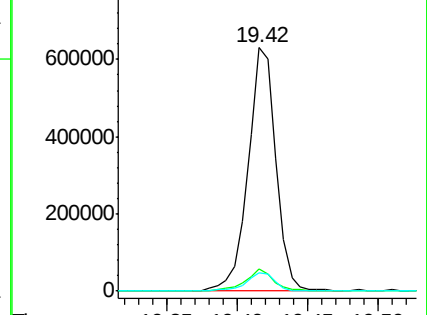
100 7.7 4.9 7.3#

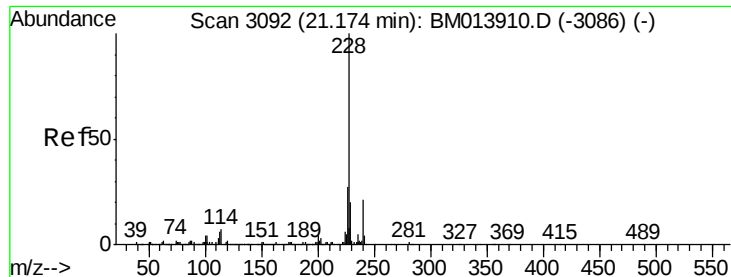


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





#80

Benzo(a)anthracene

Concen: 4.055 ng/ul

RT: 21.17 min Scan# 3091

Delta R.T. -0.01 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

Instrument :

BNA\_M

ClientSampleId :

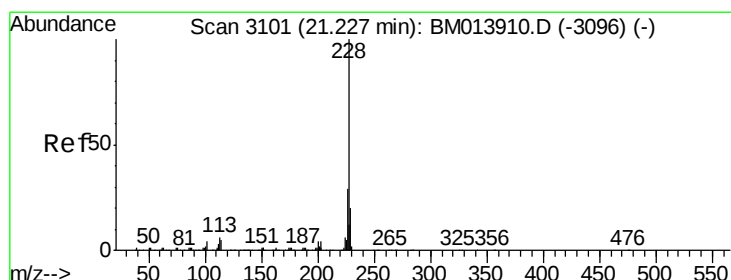
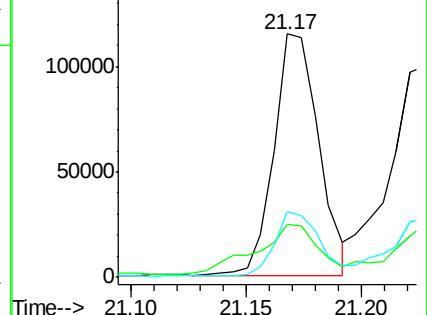
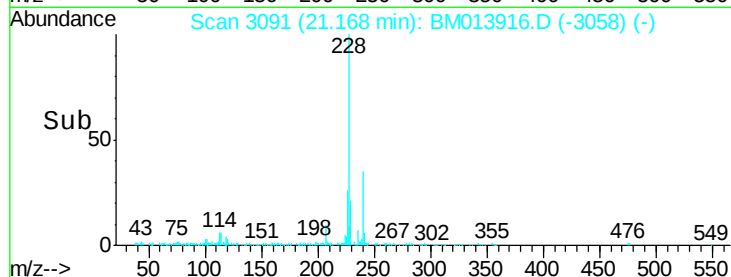
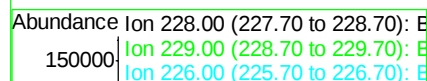
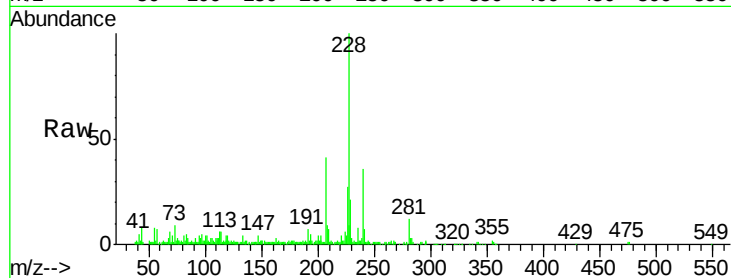
Tot Ion:228 Resp: 155486

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 229 | 21.5  | 15.4  | 23.0  |
| 226 | 26.8  | 21.4  | 32.0  |

228 100

229 21.5 15.4 23.0

226 26.8 21.4 32.0



#82

Chrysene

Concen: 4.420 ng/ul

RT: 21.17 min Scan# 3091

Delta R.T. -0.06 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

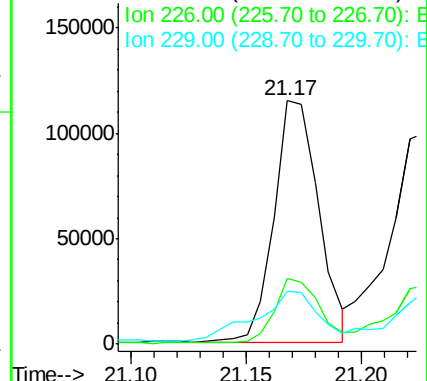
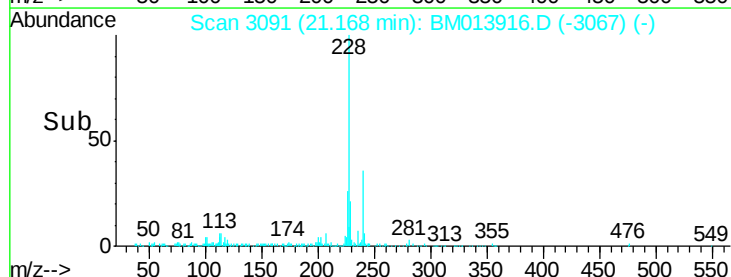
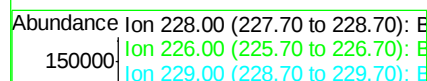
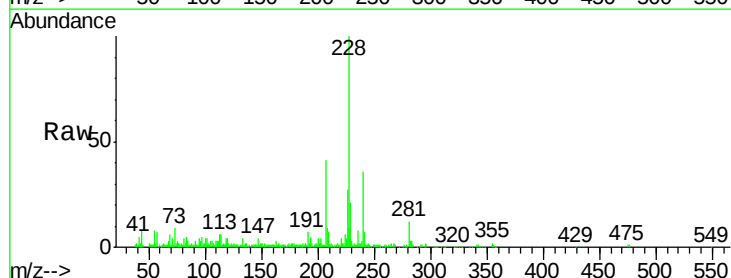
Tgt Ion:228 Resp: 155486

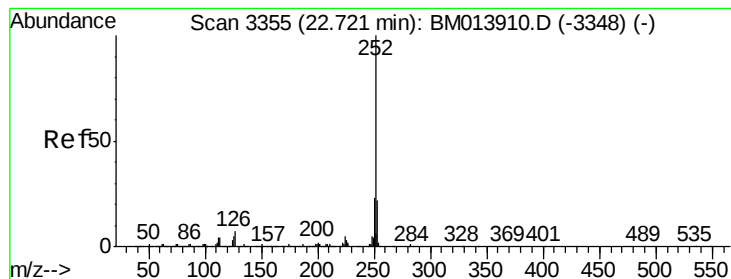
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 26.8  | 23.4  | 35.2  |
| 229 | 21.5  | 15.5  | 23.3  |

228 100

226 26.8 23.4 35.2

229 21.5 15.5 23.3





#85

Benzo(b)fluoranthene

Concen: 2.680 ng/ul

RT: 22.72 min Scan# 3355

Delta R.T. 0.00 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

Instrument :

BNA\_M

ClientSampleId :

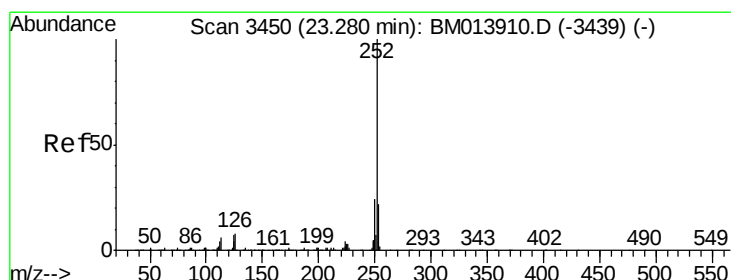
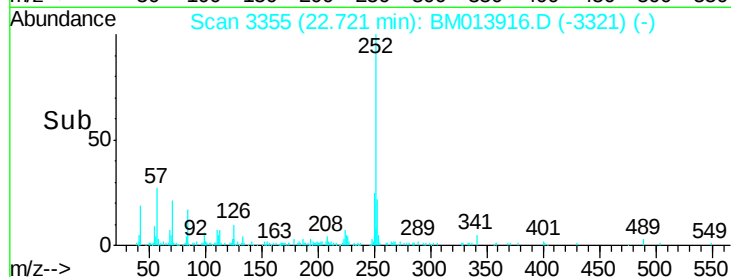
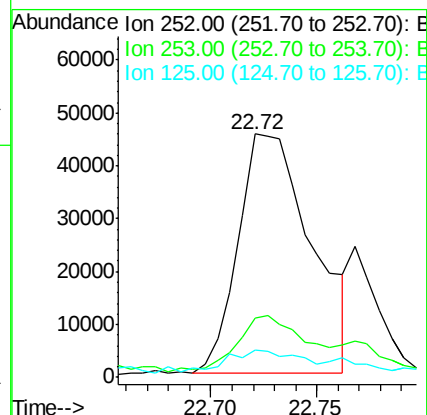
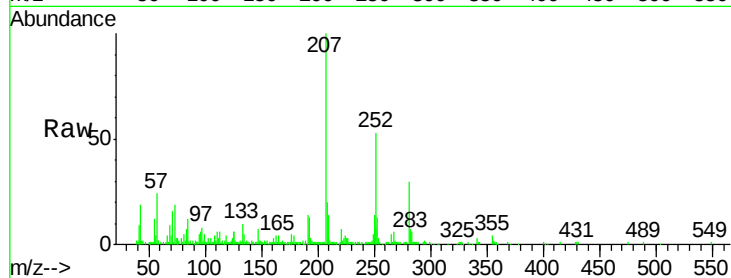
Tot Ion:252 Resp: 108786

Ion Ratio Lower Upper

252 100

253 24.2 17.9 26.9

125 11.2 3.6 5.4#



#88

Benzo(a)pyrene

Concen: 1.288 ng/ul

RT: 23.28 min Scan# 3450

Delta R.T. 0.00 min

Lab File: BM013916.D

Acq: 28 Jan 2018 11:29

Tgt Ion:252 Resp: 49388

Ion Ratio Lower Upper

252 100

253 24.6 18.2 27.2

125 14.1 4.0 6.0#

