

Data Path : Z:\HPCHEM1\BNA M\DATA\BM022818\  
 Data File : BM014399.D  
 Acq On : 28 Feb 2018 12:12  
 Operator : SJ/JU  
 Sample : J1646-13  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BE5X7

Quant Time: Feb 28 15:54:25 2018  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM021418.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Feb 28 12:00:03 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.52  | 152  | 111533   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.29 | 136  | 464946   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.17 | 164  | 260083   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.94 | 188  | 578474   | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.15 | 240  | 568996   | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.33 | 264  | 546547   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.09  | 96  | 10111  | 3.88  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.72  | 99  | 226284 | 24.01 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.87  | 67  | 139227 | 24.40 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.06  | 132 | 193252 | 26.74 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.25  | 113 | 172823 | 20.95 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.68  | 128 | 97015  | 28.24 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.39  | 143 | 110642 | 31.11 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 9.94  | 165 | 178133 | 24.18 | ng/ul | 0.01 |
| 29) 4-Chloroaniline-d4         | 10.45 | 131 | 145173 | 20.00 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.60 | 166 | 606447 | 28.24 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 13.87 | 160 | 779323 | 29.42 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.46 | 143 | 60894  | 20.53 | ng/ul | 0.02 |
| 57) Fluorene-d10               | 15.18 | 176 | 517964 | 26.92 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.35 | 200 | 34234  | 9.87  | ng/ul | 0.01 |
| 70) Anthracene-d10             | 17.04 | 188 | 775257 | 27.78 | ng/ul | 0.00 |
| 76) Pyrene-d10                 | 19.35 | 212 | 831239 | 28.32 | ng/ul | 0.00 |
| 87) Benzo(a)pyrene-d12         | 23.20 | 264 | 717089 | 26.96 | ng/ul | 0.01 |

## Target Compounds

|                                |       |     |         |        | Ovalue |    |
|--------------------------------|-------|-----|---------|--------|--------|----|
| 6) Phenol                      | 6.75  | 94  | 27932   | 2.824  | ng/ul  | 91 |
| 28) Naphthalene                | 10.34 | 128 | 74409   | 3.116  | ng/ul  | 96 |
| 44) Dimethylphthalate          | 13.65 | 163 | 161644  | 7.632  | ng/ul  | 99 |
| 47) Acenaphthylene             | 13.90 | 152 | 86447   | 3.453  | ng/ul# | 93 |
| 49) Acenaphthene               | 14.24 | 153 | 44591   | 2.530  | ng/ul  | 99 |
| 53) Dibenzofuran               | 14.59 | 168 | 35882   | 1.358  | ng/ul  | 97 |
| 58) Fluorene                   | 15.24 | 166 | 48424   | 2.122  | ng/ul# | 97 |
| 63) 4,6-Dinitro-2-methylphenol | 15.25 | 198 | 6055    | 1.714  | ng/ul# | 61 |
| 69) Phenanthrene               | 16.98 | 178 | 1162549 | 34.881 | ng/ul  | 99 |
| 71) Anthracene                 | 17.07 | 178 | 271686  | 8.105  | ng/ul  | 99 |
| 72) Carbazole                  | 17.36 | 167 | 94193   | 3.342  | ng/ul  | 96 |
| 74) Fluoranthene               | 19.02 | 202 | 2108047 | 52.940 | ng/ul# | 94 |
| 77) Pyrene                     | 19.38 | 202 | 1847158 | 48.849 | ng/ul# | 93 |
| 80) Benzo(a)anthracene         | 21.14 | 228 | 978787  | 27.563 | ng/ul  | 98 |
| 82) Chrysene                   | 21.19 | 228 | 831881  | 25.112 | ng/ul  | 97 |
| 85) Benzo(b)fluoranthene       | 22.69 | 252 | 1109755 | 30.325 | ng/ul# | 98 |
| 86) Benzo(k)fluoranthene       | 22.69 | 252 | 1109755 | 31.895 | ng/ul# | 96 |
| 88) Benzo(a)pyrene             | 23.24 | 252 | 756186  | 23.123 | ng/ul# | 97 |
| 89) Indeno(1,2,3-cd)pyrene     | 25.49 | 276 | 478839  | 15.090 | ng/ul  | 98 |
| 90) Dibenz(a,h)anthracene      | 25.50 | 278 | 139545  | 5.292  | ng/ul# | 84 |
| 91) Benzo(a,h,i)perylene       | 26.16 | 276 | 341986  | 13.303 | ng/ul# | 93 |

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Instrument :  
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ClientSampleId :  
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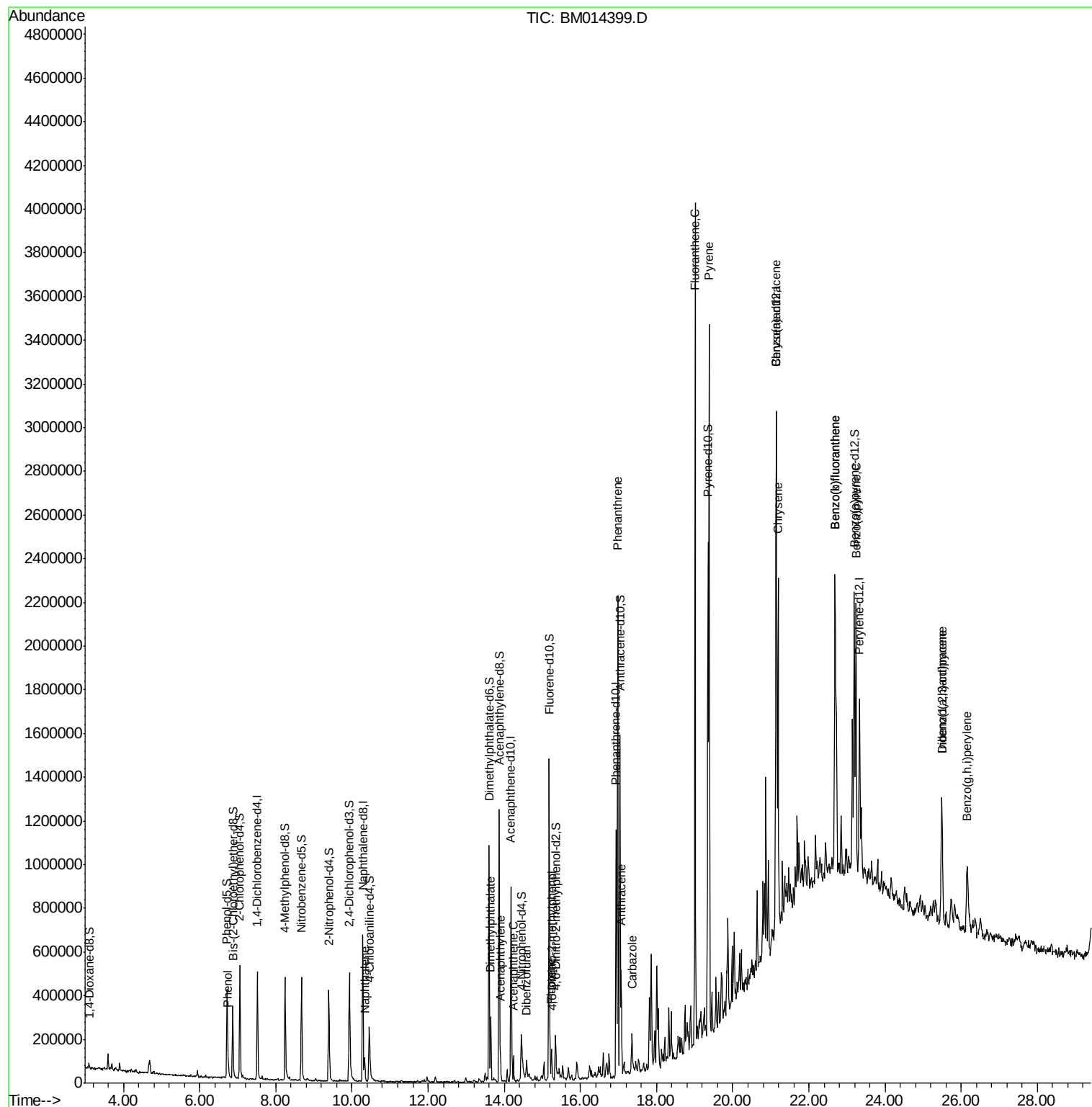
Quant Time: Feb 28 15:54:25 2018  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM021418.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Feb 28 12:00:03 2018  
Response via : Initial Calibration

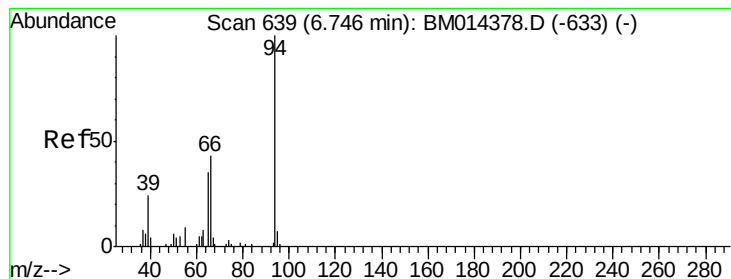
| Internal Standards                                                   | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------------------------------------------------|------|------|----------|------|-------|----------|
| -----                                                                |      |      |          |      |       |          |
| (#)=qualifier out of range (m)=manual integration (+)=signals summed |      |      |          |      |       |          |

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QLast Update : Wed Feb 28 12:00:03 2018  
Response via : Initial Calibration





#6

Phenol

Concen: 2.824 ng/ul

RT: 6.75 min Scan# 640

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Instrument :

BNA\_M

ClientSampleId :

BE5X7

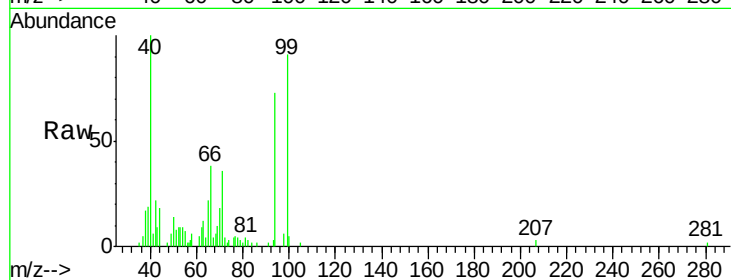
Tot Ion: 94 Resp: 27932

Ion Ratio Lower Upper

94 100

65 29.6 28.2 42.4

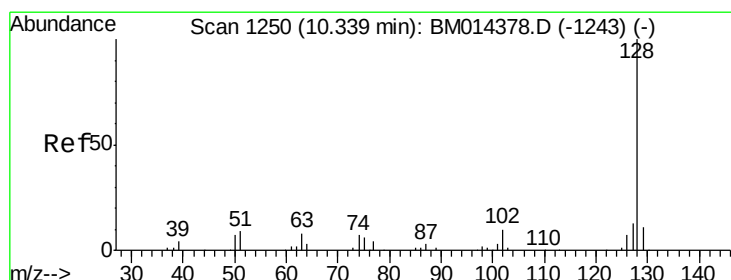
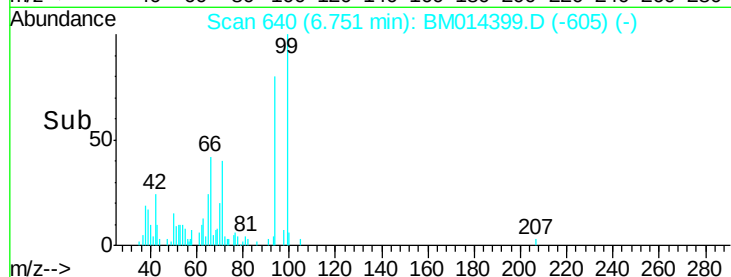
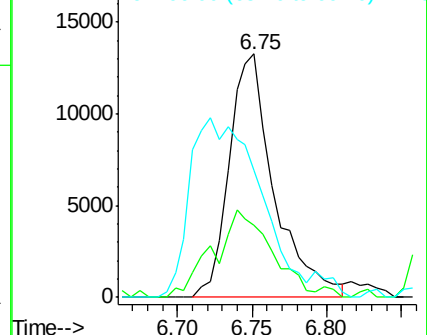
66 52.4 47.2 70.8



Abundance Ion 94.00 (93.70 to 94.70): BM014378.D (-633) (-)

Ion 65.00 (64.70 to 65.70): BM014378.D (-633) (-)

Ion 66.00 (65.70 to 66.70): BM014378.D (-633) (-)



#28

Naphthalene

Concen: 3.116 ng/ul

RT: 10.34 min Scan# 1250

Delta R.T. -0.00 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

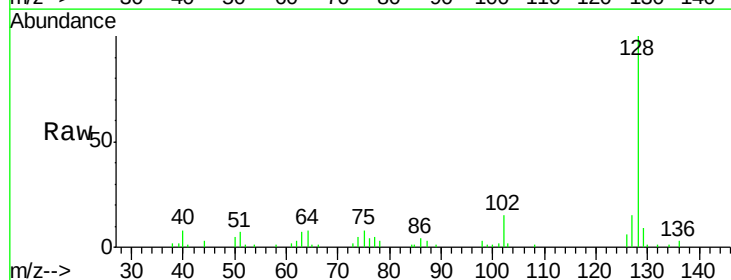
Tgt Ion: 128 Resp: 74409

Ion Ratio Lower Upper

128 100

129 9.4 8.8 13.2

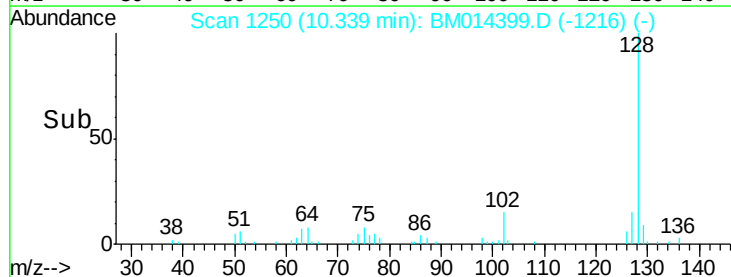
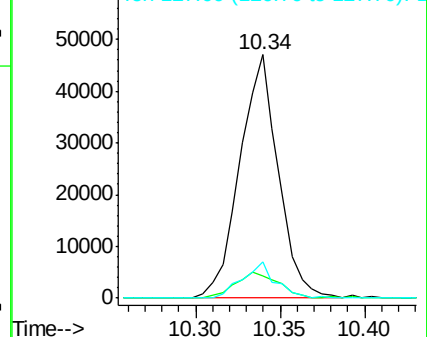
127 14.8 10.6 16.0

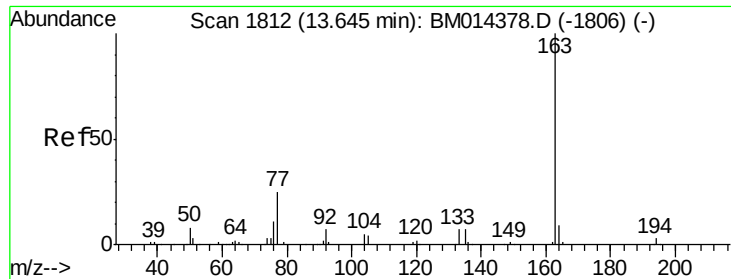


Abundance Ion 128.00 (127.70 to 128.70): BM014378.D (-1243) (-)

Ion 129.00 (128.70 to 129.70): BM014378.D (-1243) (-)

Ion 127.00 (126.70 to 127.70): BM014378.D (-1243) (-)





#44

Dimethylphthalate

Concen: 7.632 ng/ul

RT: 13.65 min Scan# 1813

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Instrument :

BNA\_M

ClientSampleId :

BE5X7

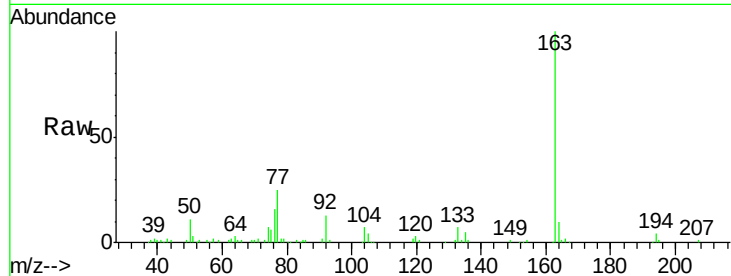
Tot Ion:163 Resp: 161644

Ion Ratio Lower Upper

163 100

194 3.9 3.5 5.3

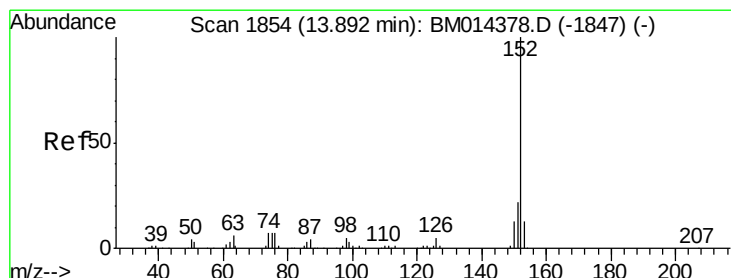
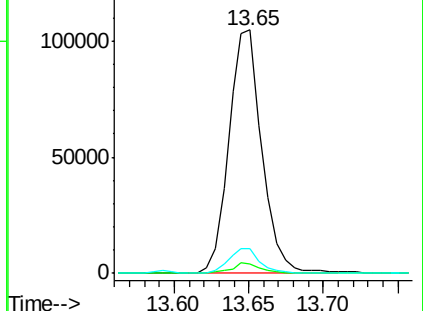
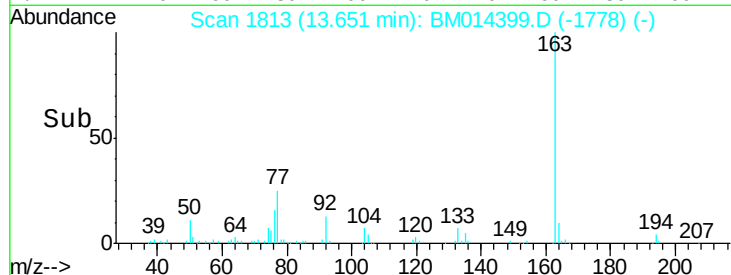
164 9.9 8.2 12.4



Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#47

Acenaphthylene

Concen: 3.453 ng/ul

RT: 13.90 min Scan# 1855

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

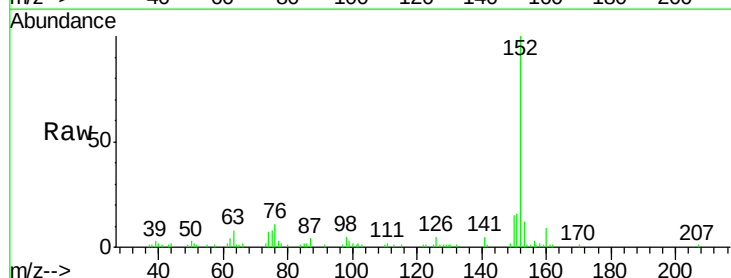
Tgt Ion:152 Resp: 86447

Ion Ratio Lower Upper

152 100

151 15.5 16.3 24.5#

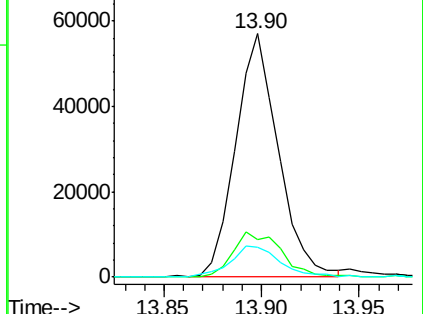
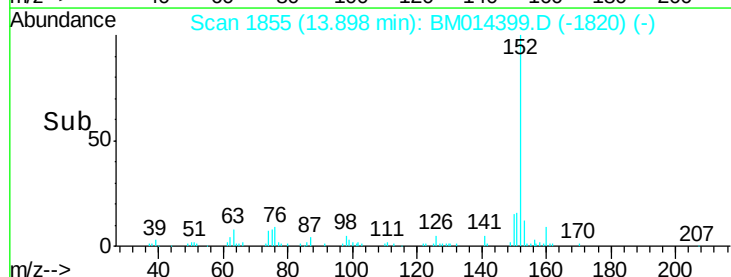
153 12.4 10.2 15.4

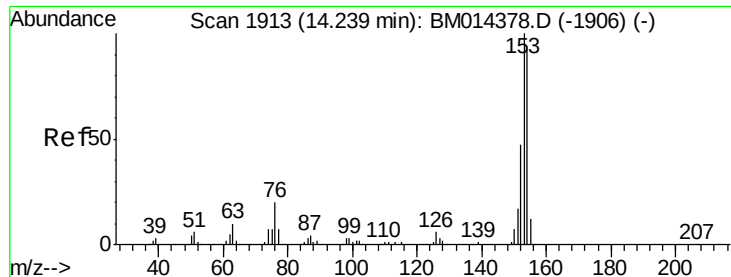


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#49

Acenaphthene

Concen: 2.530 ng/ul

RT: 14.24 min Scan# 1913

Delta R.T. -0.00 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Instrument :

BNA\_M

ClientSampleId :

BE5X7

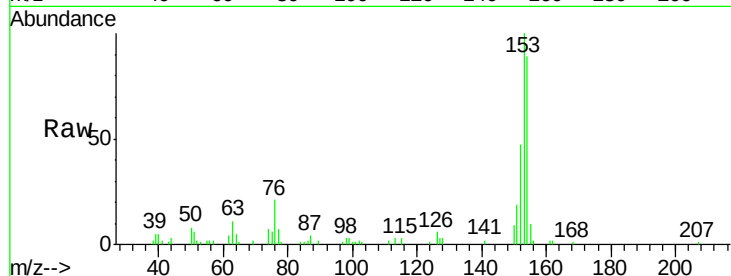
Tot Ion:153 Resp: 44591

Ion Ratio Lower Upper

153 100

152 46.6 37.6 56.4

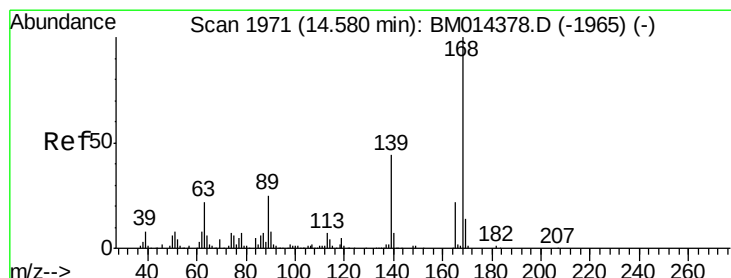
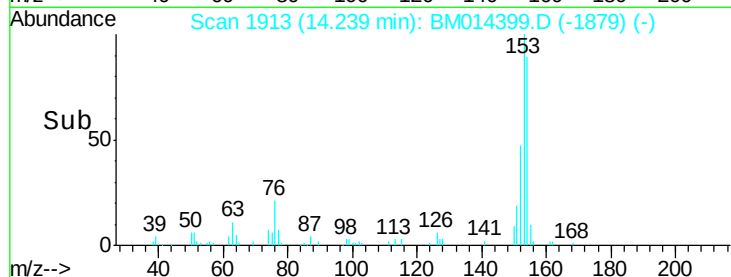
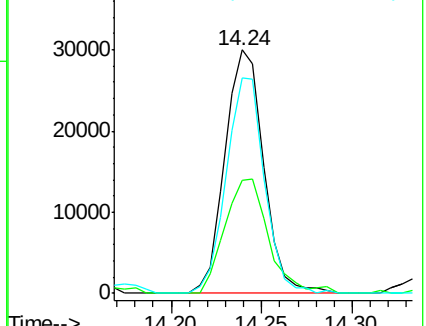
154 88.7 70.4 105.6



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: 1.358 ng/ul

RT: 14.59 min Scan# 1972

Delta R.T. 0.01 min

Lab File: BM014399.D

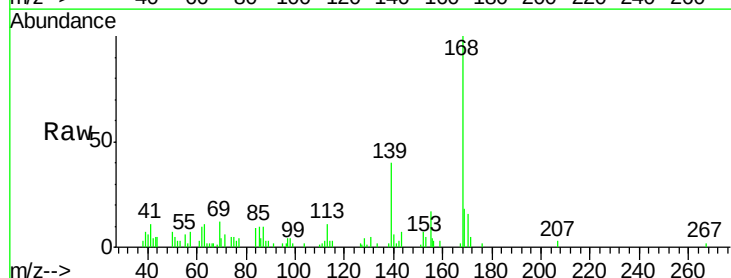
Acq: 28 Feb 2018 12:12

Tgt Ion:168 Resp: 35882

Ion Ratio Lower Upper

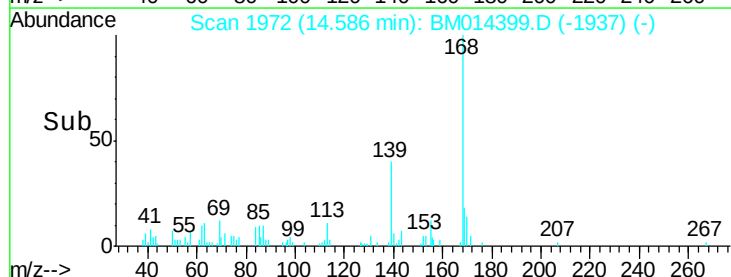
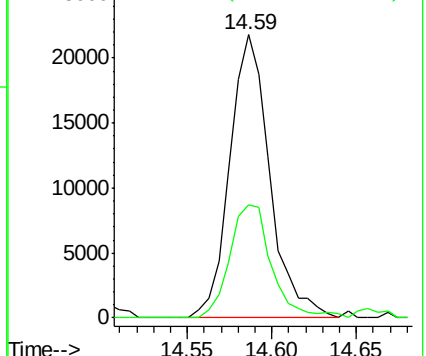
168 100

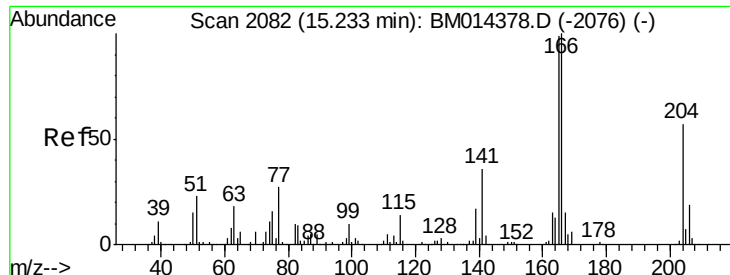
139 40.0 30.8 46.2



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E





#58

Fluorene

Concen: 2.122 ng/ul

RT: 15.24 min Scan# 2083

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Instrument :

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ClientSampleId :

BE5X7

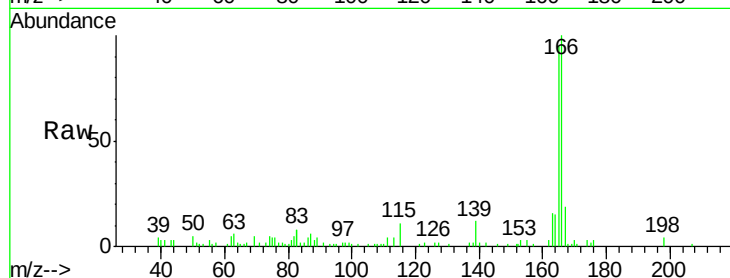
Tot Ion:166 Resp: 48424

Ion Ratio Lower Upper

166 100

165 95.5 77.9 116.9

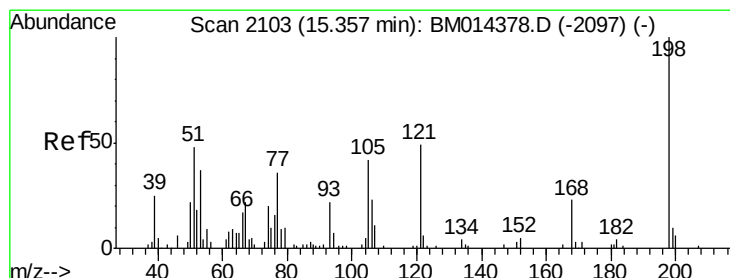
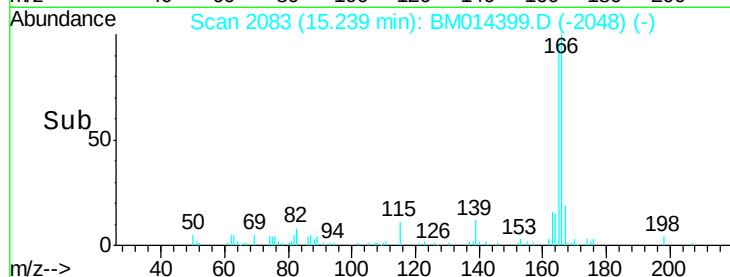
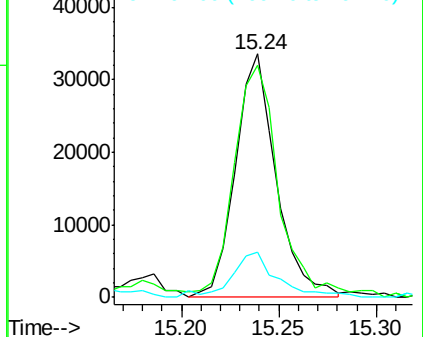
167 18.7 10.6 16.0#



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



#63

4,6-Dinitro-2-methylphenol

Concen: 1.714 ng/ul

RT: 15.25 min Scan# 2085

Delta R.T. -0.11 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

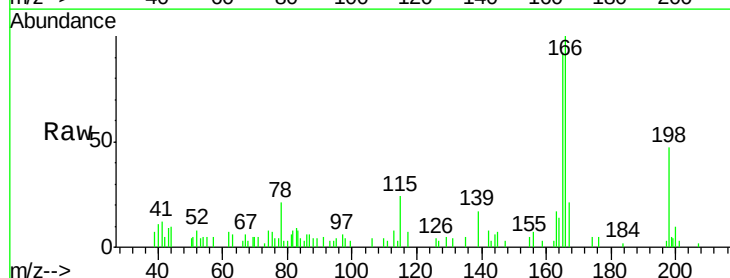
Tgt Ion:198 Resp: 6055

Ion Ratio Lower Upper

198 100

182 0.0 3.8 5.6#

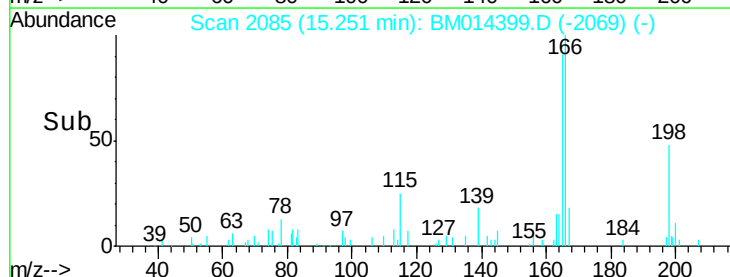
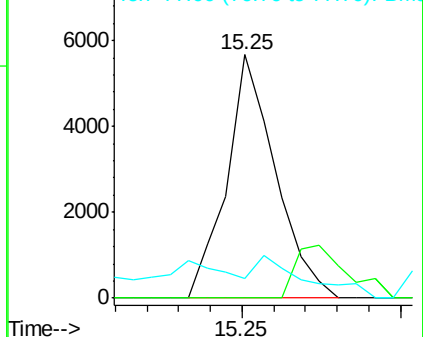
77 8.2 25.2 37.8#

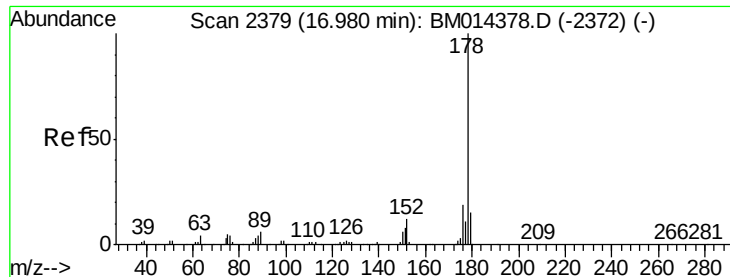


Abundance Ion 198.00 (197.70 to 198.70): E

Ion 182.00 (181.70 to 182.70): E

Ion 77.00 (76.70 to 77.70): BM





#69

Phenanthrene

Concen: 34.881 ng/ul

RT: 16.98 min Scan# 2379

Delta R.T. -0.00 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

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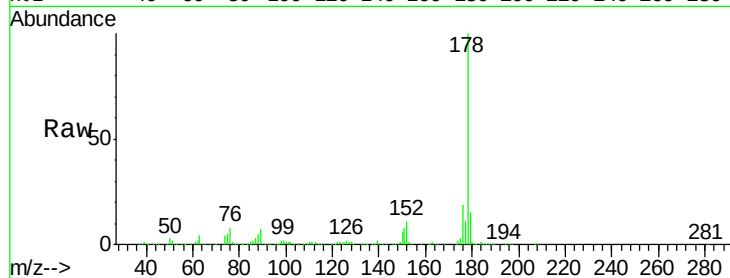
Tot Ion:178 Resp: 1162549

Ion Ratio Lower Upper

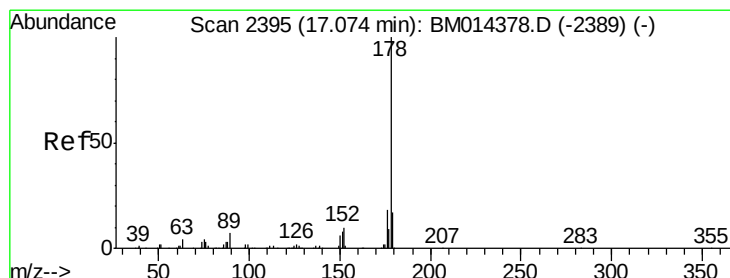
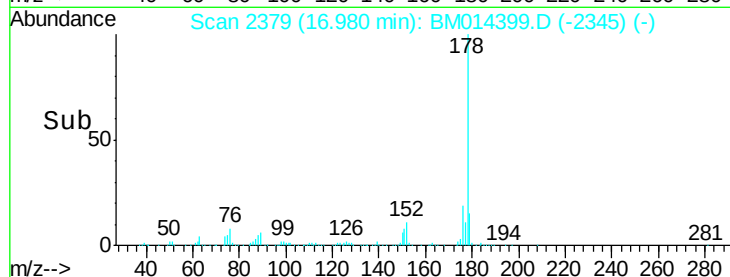
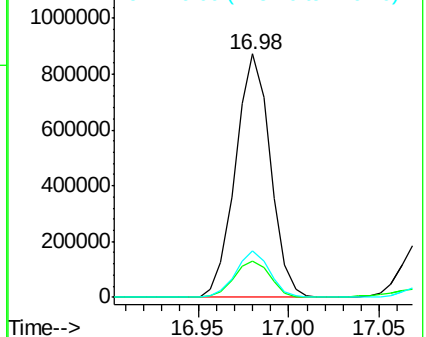
178 100

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: 8.105 ng/ul

RT: 17.07 min Scan# 2395

Delta R.T. -0.00 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

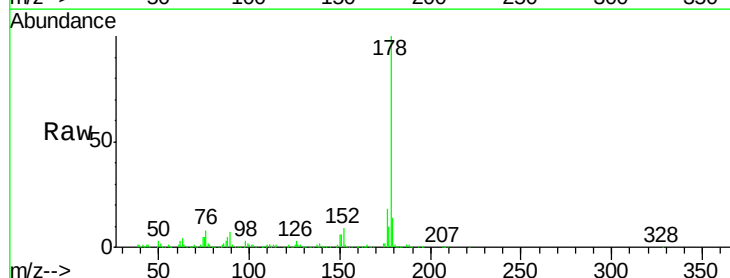
Tgt Ion:178 Resp: 271686

Ion Ratio Lower Upper

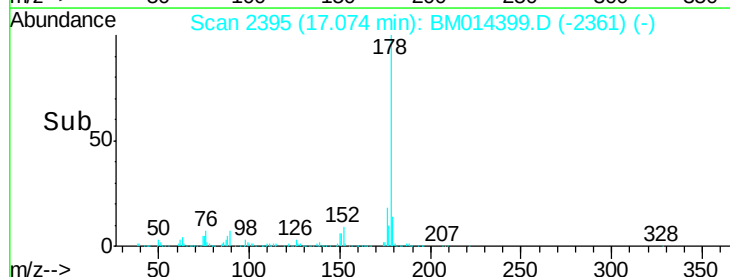
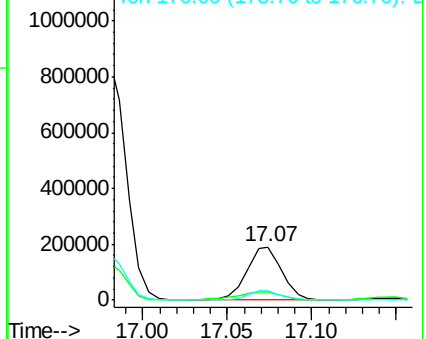
178 100

179 14.4 11.7 17.5

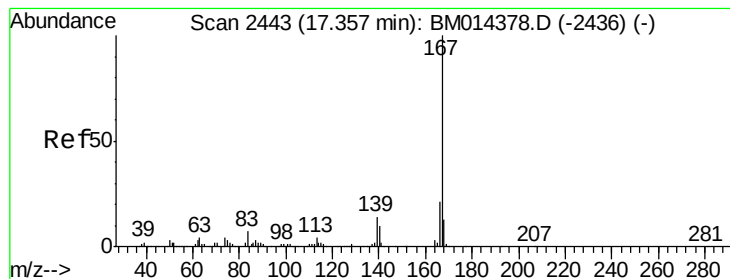
176 17.8 14.6 21.8



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







#72

Carbazole

Concen: 3.342 ng/ul

RT: 17.36 min Scan# 2443

Delta R.T. -0.00 min

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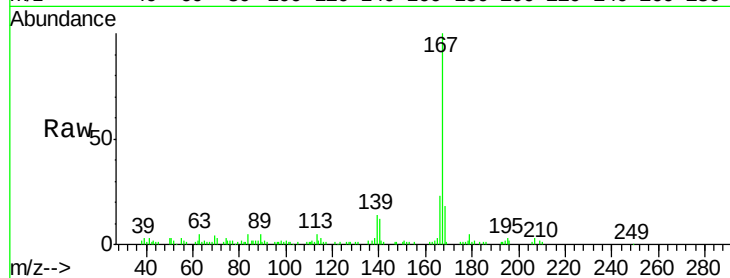
Tot Ion:167 Resp: 94193

Ion Ratio Lower Upper

167 100

166 23.1 17.1 25.7

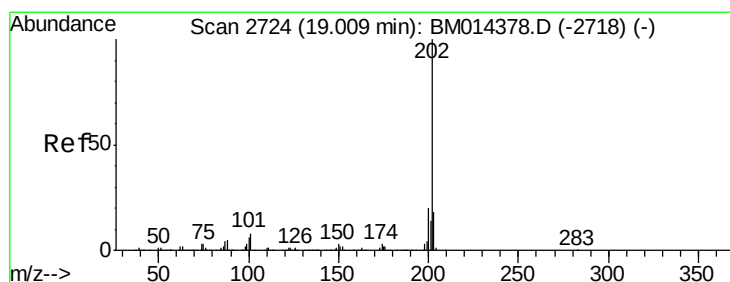
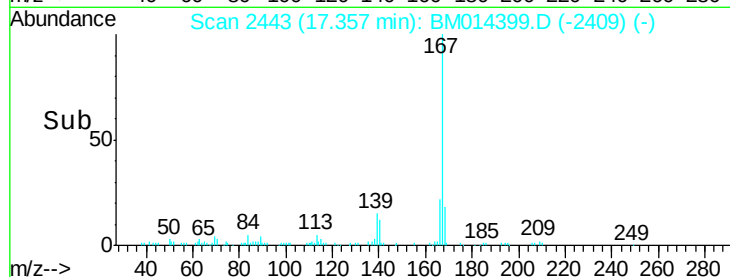
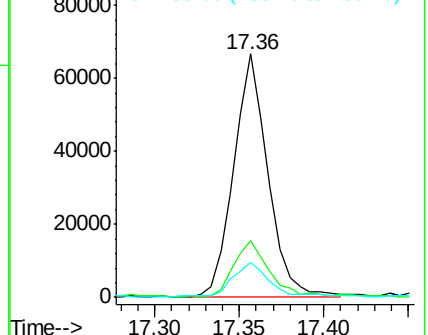
139 14.5 10.0 15.0



Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E



#74

Fluoranthene

Concen: 52.940 ng/ul

RT: 19.02 min Scan# 2725

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

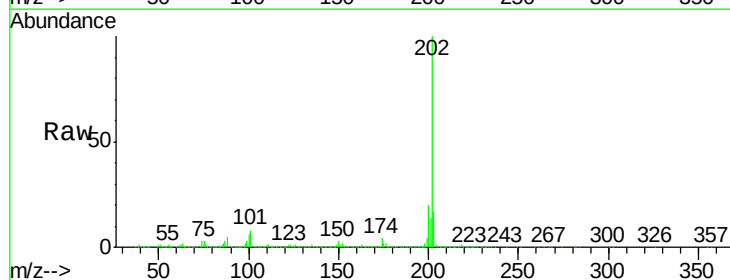
Tgt Ion:202 Resp: 2108047

Ion Ratio Lower Upper

202 100

101 7.7 4.6 7.0#

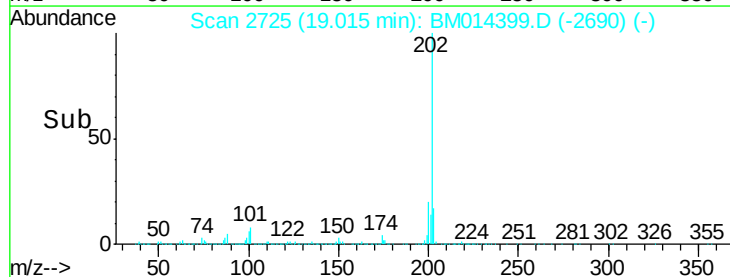
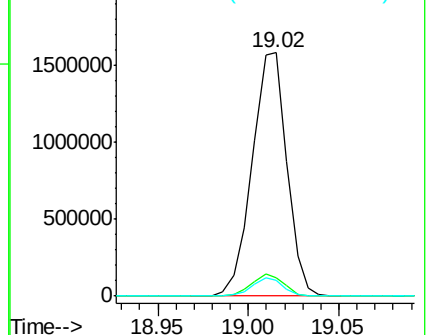
100 6.3 3.4 5.2#

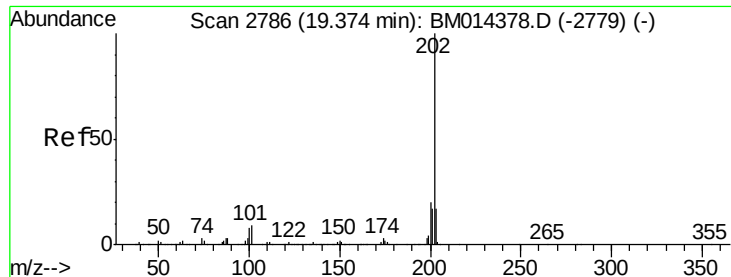


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





#77

Pvrene

Concen: 48.849 ng/ul

RT: 19.38 min Scan# 2787

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Instrument :

BNA\_M

ClientSampleId :

BE5X7

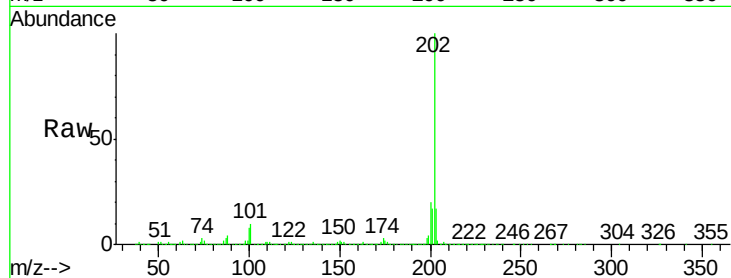
Tot Ion:202 Resp: 1847158

Ion Ratio Lower Upper

202 100

101 9.9 5.1 7.7#

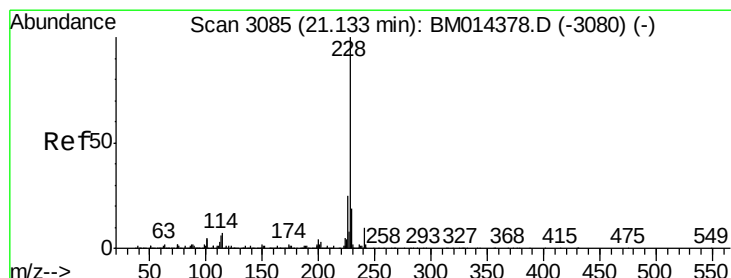
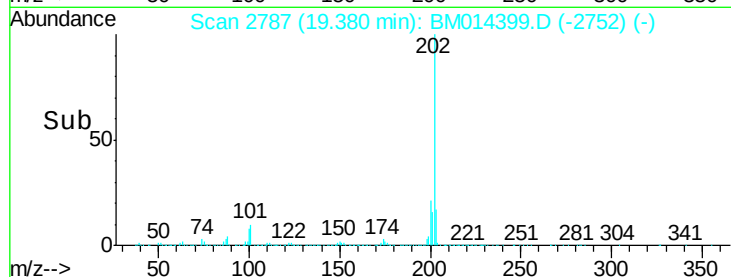
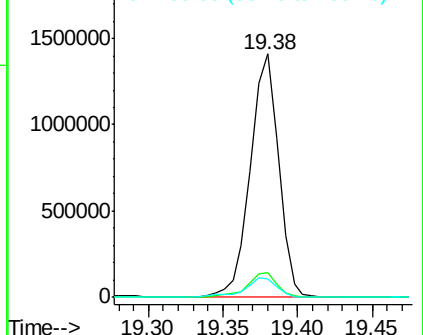
100 7.6 4.9 7.3#



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: 27.563 ng/ul

RT: 21.14 min Scan# 3086

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

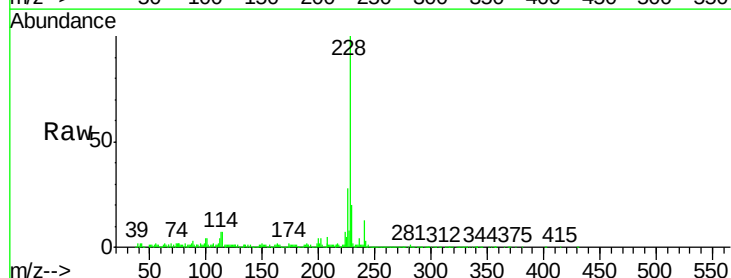
Tgt Ion:228 Resp: 978787

Ion Ratio Lower Upper

228 100

229 20.0 15.4 23.0

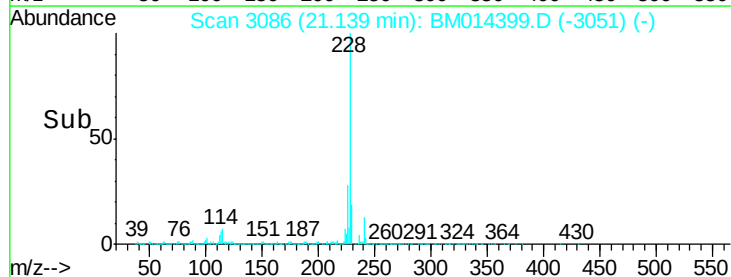
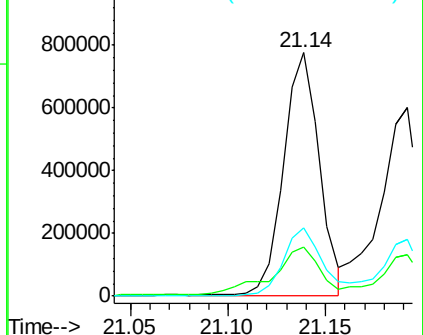
226 27.9 21.4 32.0

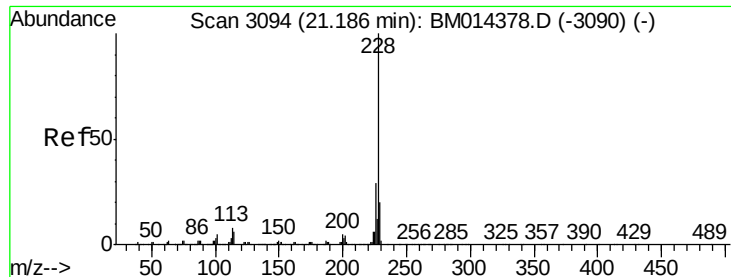


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 229.00 (228.70 to 229.70): E

Ion 226.00 (225.70 to 226.70): E





#82

Chrysene

Concen: 25.112 ng/ul

RT: 21.19 min Scan# 3095

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Instrument :

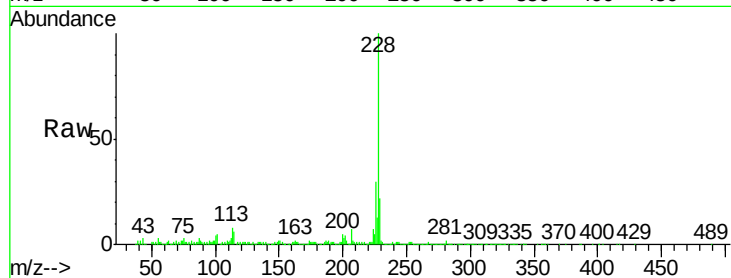
BNA\_M

ClientSampleId :

BE5X7

Tot Ion:228 Resp: 831881

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 30.0  | 23.4  | 35.2  |
| 229 | 22.1  | 15.5  | 23.3  |

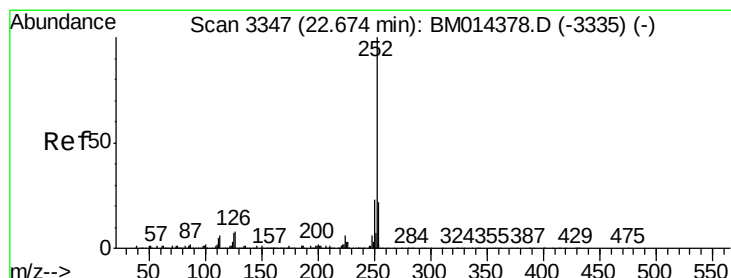
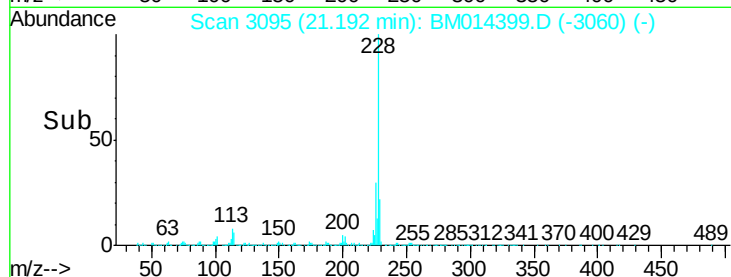
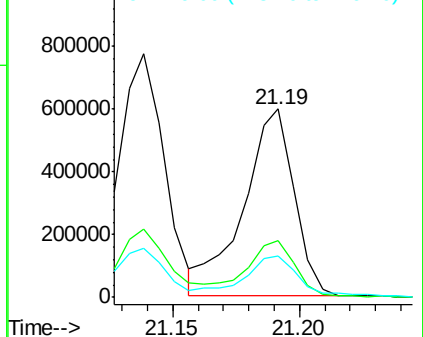


Abundance

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



#85

Benzo(b)fluoranthene

Concen: 30.325 ng/ul

RT: 22.69 min Scan# 3349

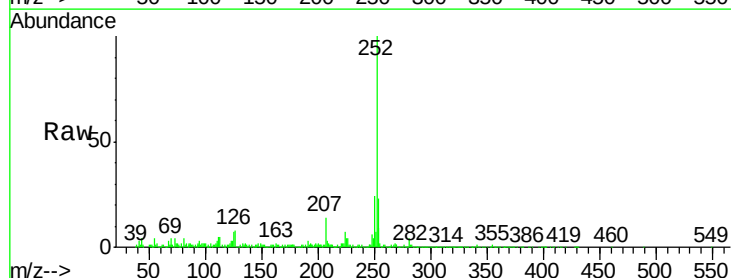
Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Tgt Ion:252 Resp: 1109755

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.8  | 17.9  | 26.9  |
| 125 | 7.4   | 3.6   | 5.4#  |

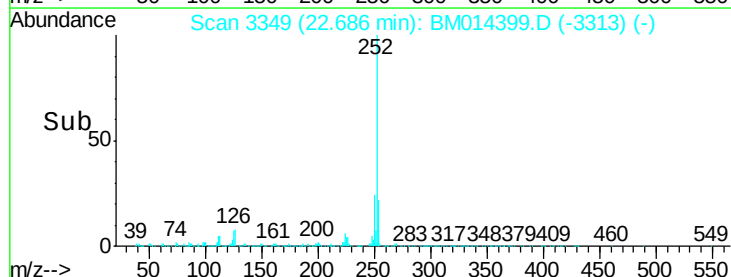
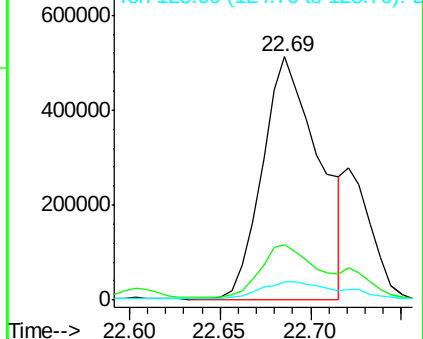


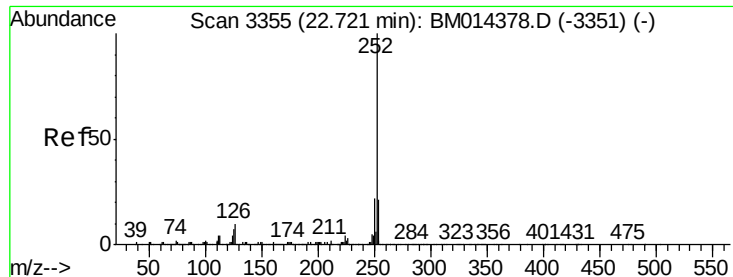
Abundance

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





#86

Benzo(k)fluoranthene

Concen: 31.895 ng/ul

RT: 22.69 min Scan# 3349

Delta R.T. -0.04 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Instrument :

BNA\_M

ClientSampleId :

BE5X7

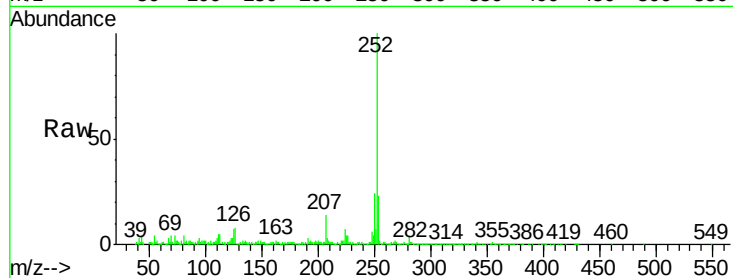
Tot Ion:252 Resp: 1109755

Ion Ratio Lower Upper

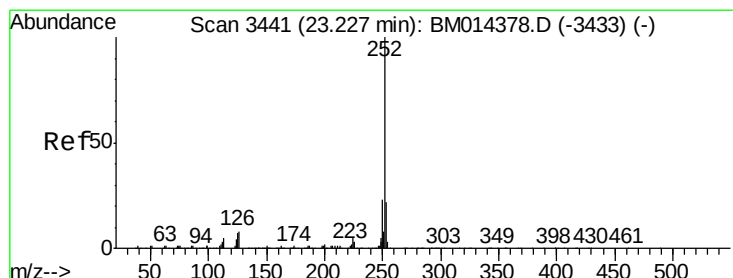
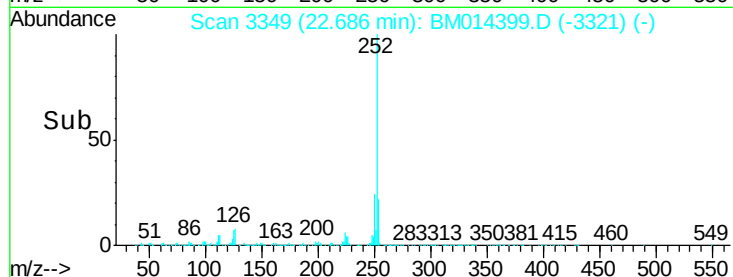
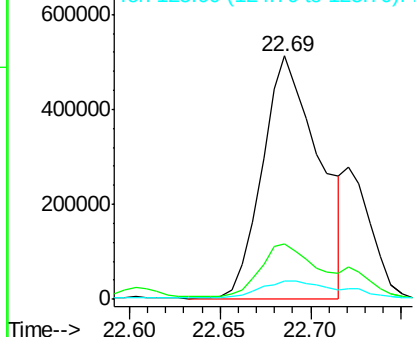
252 100

253 22.8 17.1 25.7

125 7.4 3.4 5.2#



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



#88

Benzo(a)pyrene

Concen: 23.123 ng/ul

RT: 23.24 min Scan# 3443

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

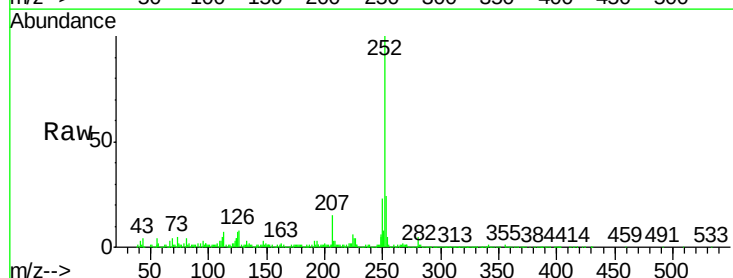
Tgt Ion:252 Resp: 756186

Ion Ratio Lower Upper

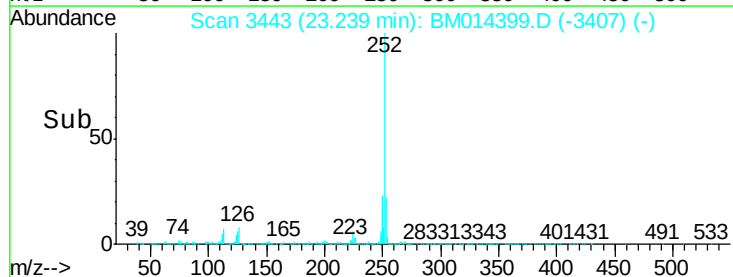
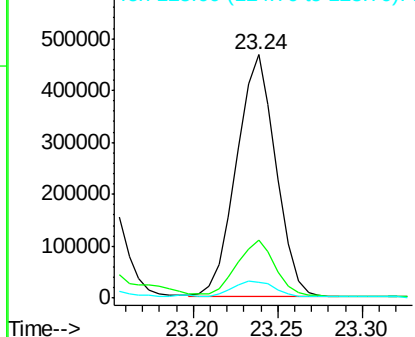
252 100

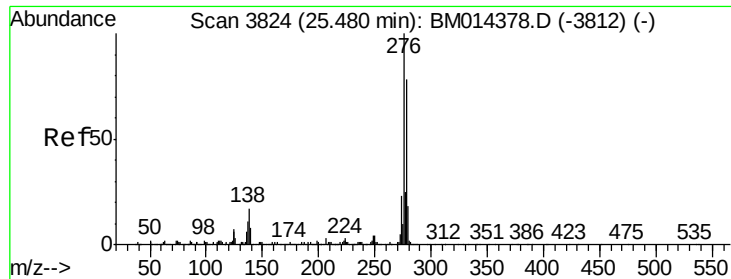
253 23.8 18.2 27.2

125 6.6 4.0 6.0#



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



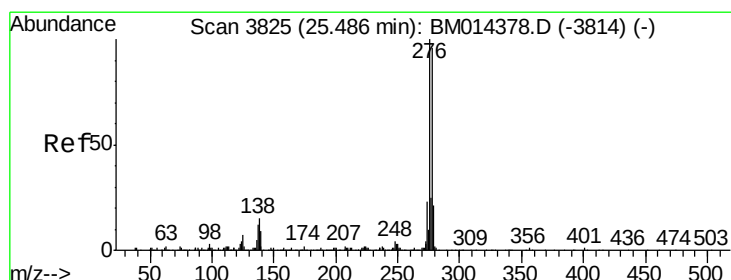
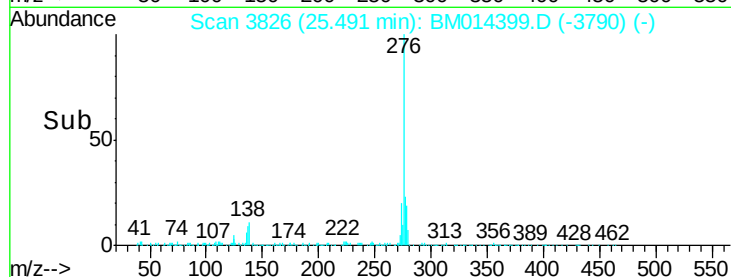
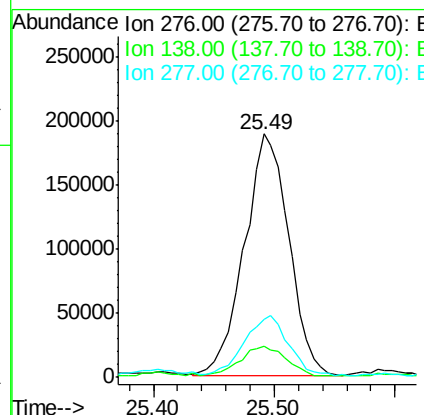
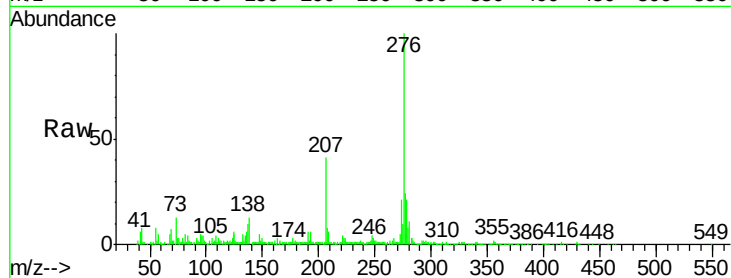


#89

Indeno(1,2,3-cd)pyrene  
Concen: 15.090 ng/ul  
RT: 25.49 min Scan# 3826  
Delta R.T. 0.01 min  
Lab File: BM014399.D  
Acq: 28 Feb 2018 12:12

Instrument :  
BNA\_M  
ClientSampleId :  
BE5X7

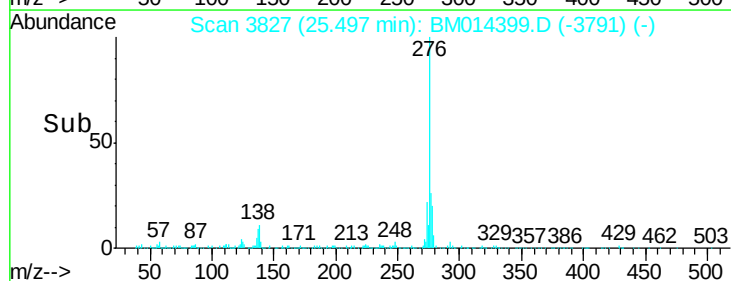
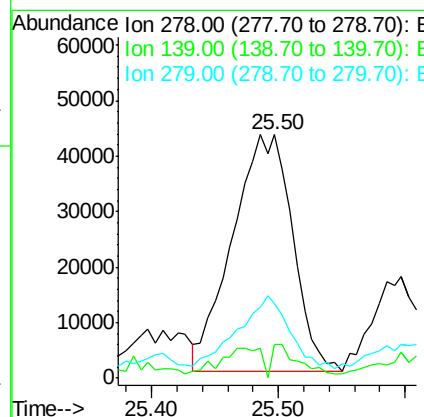
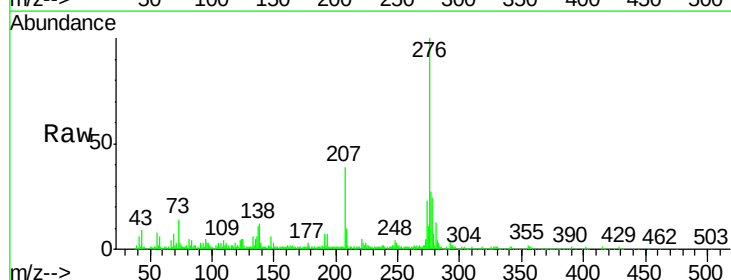
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 12.6  | 9.3   | 13.9  |
| 277     | 24.0  | 19.9  | 29.9  |

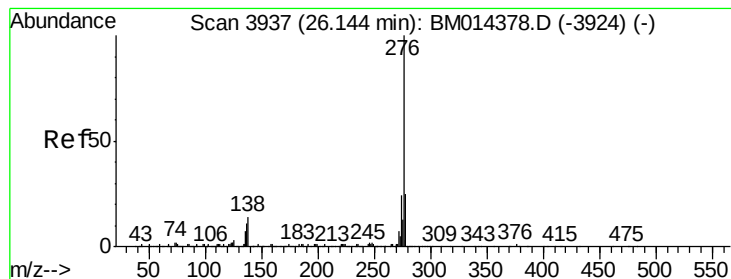


#90

Dibenzo(a,h)anthracene  
Concen: 5.292 ng/ul  
RT: 25.50 min Scan# 3827  
Delta R.T. 0.01 min  
Lab File: BM014399.D  
Acq: 28 Feb 2018 12:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 13.7  | 5.8   | 8.8#  |
| 279     | 30.5  | 18.6  | 27.8# |





#91

Benzo(a,h,i)perylene

Concen: 13.303 ng/ul

RT: 26.16 min Scan# 3939

Delta R.T. 0.01 min

Lab File: BM014399.D

Acq: 28 Feb 2018 12:12

Instrument :

BNA\_M

ClientSampleId :

BE5X7

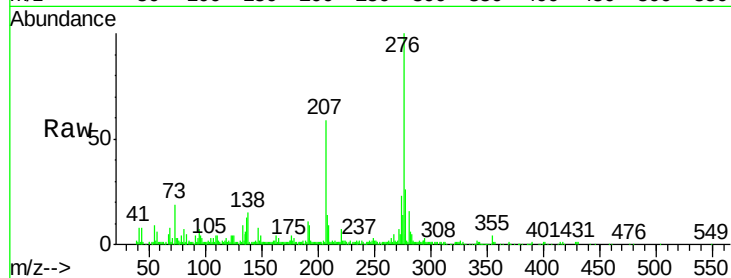
Tot Ion:276 Resp: 341986

Ion Ratio Lower Upper

276 100

138 14.8 8.5 12.7#

277 25.9 18.6 28.0



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

