

Data Path : Z:\HPCHEM1\BNA M\DATA\BM101017\  
 Data File : BM012061.D  
 Acq On : 11 Oct 2017 02:38  
 Operator : SJ/JU  
 Sample : I5669-14  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 CB3M1

Manual Integrations  
 APPROVED

Sohil  
 10/11/2017 7:29:38 PM

Quant Time: Oct 11 04:02:14 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM100317.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Oct 11 02:39:56 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.84  | 152  | 306256   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.65 | 136  | 1338474  | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.49 | 164  | 814169   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.23 | 188  | 1931253  | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.41 | 240  | 2302616  | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.73 | 264  | 1983546  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

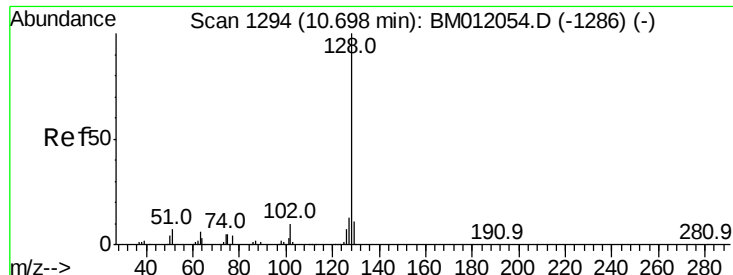
|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.26  | 96  | 18881   | 2.92  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.00  | 99  | 402886  | 15.29 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.17  | 67  | 290835  | 18.65 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.37  | 132 | 367323  | 17.38 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.55  | 113 | 336573  | 14.78 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.01  | 128 | 191861  | 20.13 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.73  | 143 | 166805  | 15.54 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.26 | 165 | 359055  | 16.55 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.79 | 131 | 90682   | 3.83  | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.90 | 166 | 1250998 | 17.73 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.18 | 160 | 1738855 | 20.97 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.70 | 143 | 31367m  | 2.54  | ng/ul | 0.01 |
| 57) Fluorene-d10               | 15.48 | 176 | 1262822 | 20.28 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.61 | 200 | 40186   | 3.09  | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.33 | 188 | 1940398 | 20.39 | ng/ul | 0.00 |
| 76) Pyrene-d10                 | 19.63 | 212 | 2391089 | 23.02 | ng/ul | 0.00 |
| 87) Benzo(a)pyrene-d12         | 23.58 | 264 | 1985287 | 20.81 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |        | Ovalue |     |
|----------------------------|-------|-----|---------|--------|--------|-----|
| 28) Naphthalene            | 10.69 | 128 | 251705  | 3.749  | ng/ul  | 100 |
| 34) 2-Methylnaphthalene    | 12.31 | 142 | 79505   | 1.553  | ng/ul  | 97  |
| 44) Dimethylphthalate      | 13.94 | 163 | 390262  | 5.749  | ng/ul  | 99  |
| 49) Acenaphthene           | 14.55 | 153 | 372677  | 6.699  | ng/ul  | 98  |
| 53) Dibenzofuran           | 14.89 | 168 | 245687  | 3.043  | ng/ul  | 99  |
| 58) Fluorene               | 15.54 | 166 | 346860  | 5.144  | ng/ul  | 99  |
| 69) Phenanthrene           | 17.28 | 178 | 3752426 | 35.323 | ng/ul  | 98  |
| 71) Anthracene             | 17.37 | 178 | 822709  | 7.611  | ng/ul  | 98  |
| 72) Carbazole              | 17.64 | 167 | 402620  | 4.300  | ng/ul  | 98  |
| 74) Fluoranthene           | 19.29 | 202 | 5021469 | 38.741 | ng/ul# | 90  |
| 77) Pyrene                 | 19.66 | 202 | 4071079 | 31.886 | ng/ul# | 90  |
| 80) Benzo(a)anthracene     | 21.40 | 228 | 2422609 | 18.365 | ng/ul  | 99  |
| 82) Chrysene               | 21.45 | 228 | 2264431 | 18.067 | ng/ul  | 99  |
| 85) Benzo(b)fluoranthene   | 23.03 | 252 | 2580280 | 21.401 | ng/ul# | 96  |
| 86) Benzo(k)fluoranthene   | 23.07 | 252 | 908305m | 7.546  | ng/ul  |     |
| 88) Benzo(a)pyrene         | 23.63 | 252 | 1604773 | 13.852 | ng/ul# | 96  |
| 89) Indeno(1,2,3-cd)pyrene | 26.09 | 276 | 916803  | 7.395  | ng/ul# | 94  |
| 90) Dibenzo(a,h)anthracene | 26.09 | 278 | 260428  | 2.557  | ng/ul# | 90  |
| 91) Benzo(g,h,i)perylene   | 26.82 | 276 | 717137  | 6.993  | ng/ul# | 93  |

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





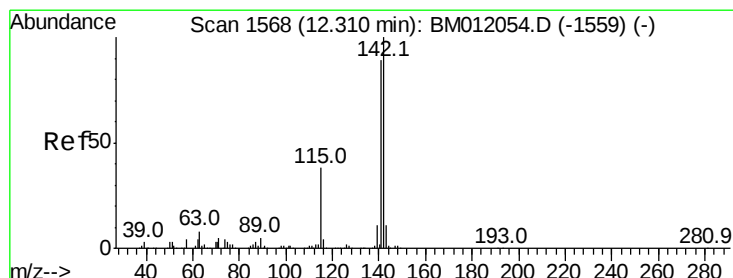
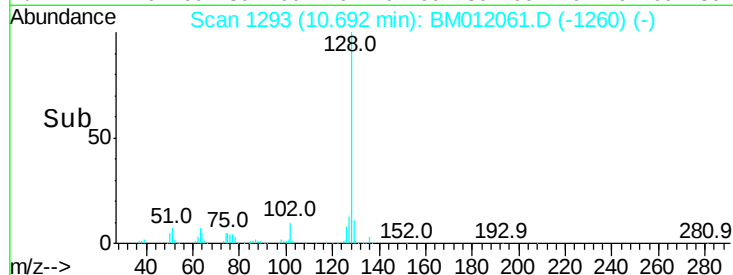
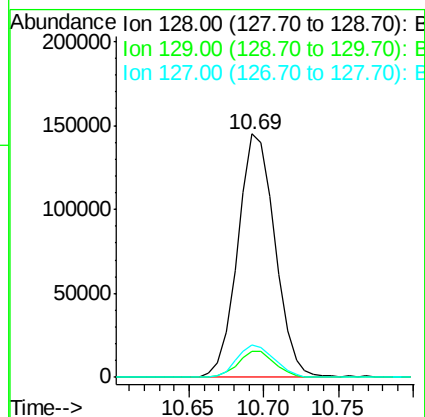
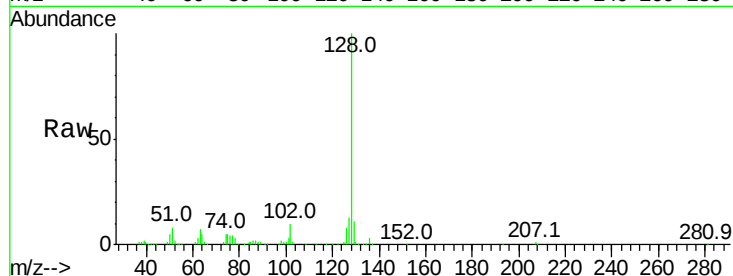
#28  
Naphthalene  
Concen: 3.749 ng/ul  
RT: 10.69 min Scan# 1293  
Delta R.T. -0.01 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

Instrument :  
BNA\_M  
ClientSampleId :  
CB3M1

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 128  | Resp: | 251705 |
| Ion Ratio |      | Lower | Upper  |
| 128       | 100  |       |        |
| 129       | 10.8 | 8.8   | 13.2   |
| 127       | 13.3 | 10.6  | 16.0   |

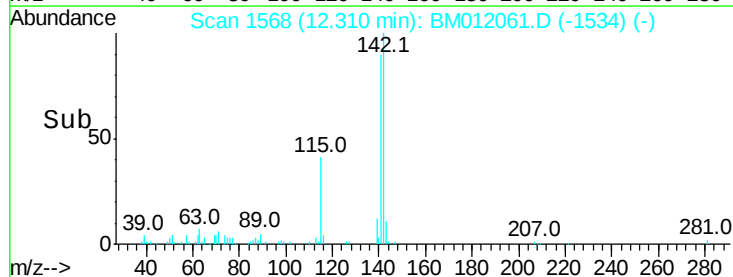
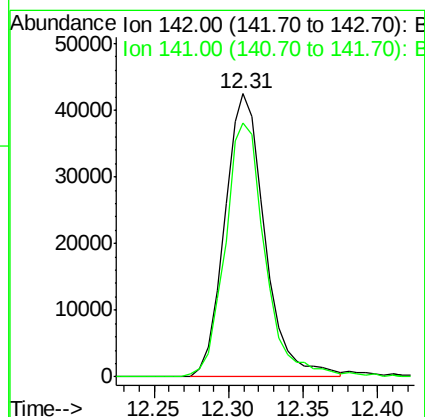
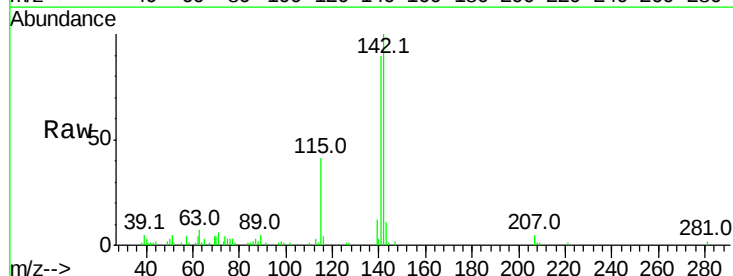
Manual Integrations  
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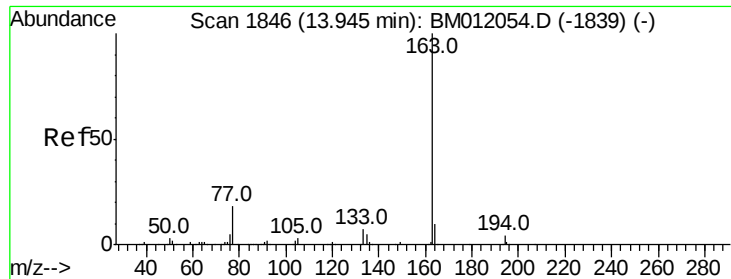
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10/11/2017 7:29:38 PM



#34  
2-Methylnaphthalene  
Concen: 1.553 ng/ul  
RT: 12.31 min Scan# 1568  
Delta R.T. -0.00 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 142  | Resp: | 79505 |
| Ion Ratio |      | Lower | Upper |
| 142       | 100  |       |       |
| 141       | 89.9 | 74.1  | 111.1 |





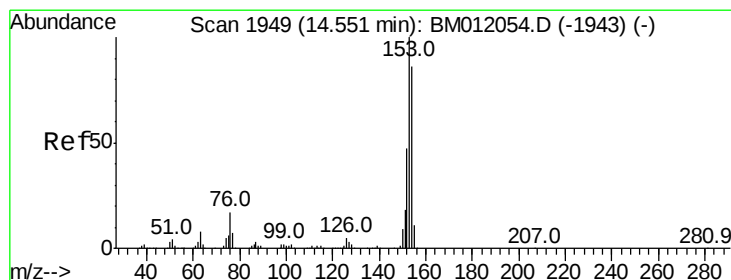
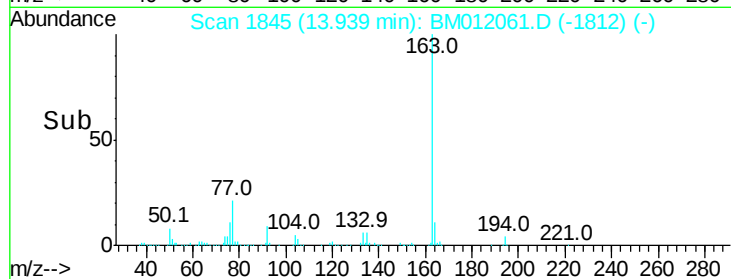
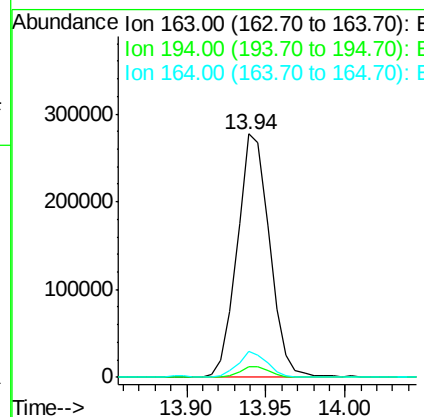
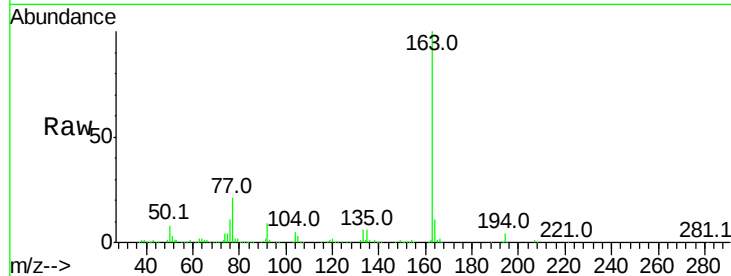
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Dimethylphthalate  
Concen: 5.749 ng/ul  
RT: 13.94 min Scan# 1845  
Delta R.T. -0.01 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

Instrument :  
BNA\_M  
ClientSampled :  
CB3M1

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 390262 |       |       |
| 194     | 4.3   |        | 3.5   | 5.3   |
| 164     | 10.6  |        | 8.2   | 12.4  |

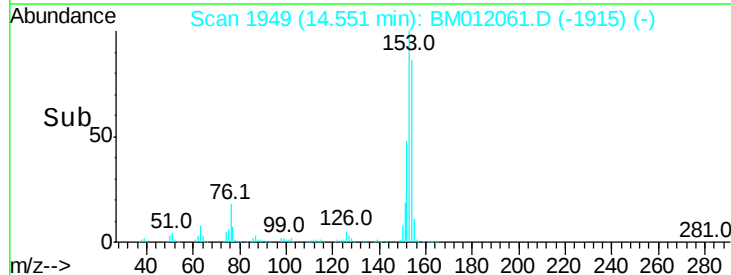
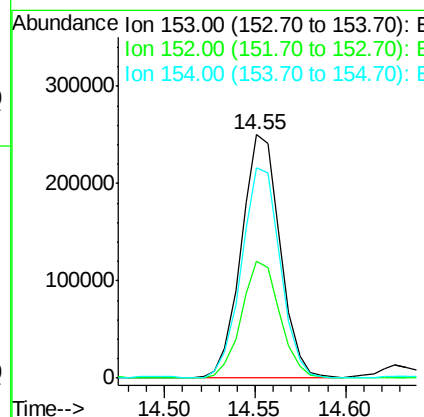
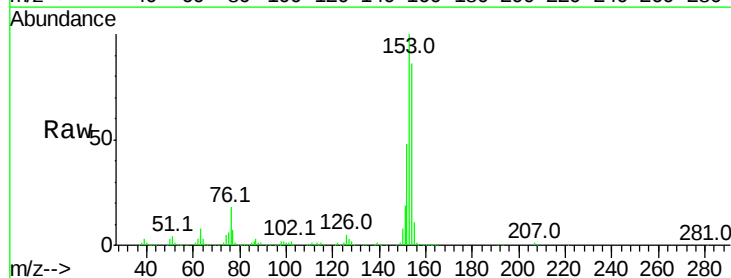
Manual Integrations  
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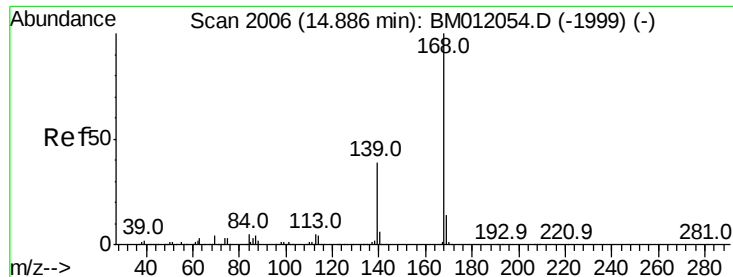
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#49  
Acenaphthene  
Concen: 6.699 ng/ul  
RT: 14.55 min Scan# 1949  
Delta R.T. -0.00 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 153     | 100   | 372677 |       |       |
| 152     | 48.1  |        | 37.6  | 56.4  |
| 154     | 86.4  |        | 70.4  | 105.6 |





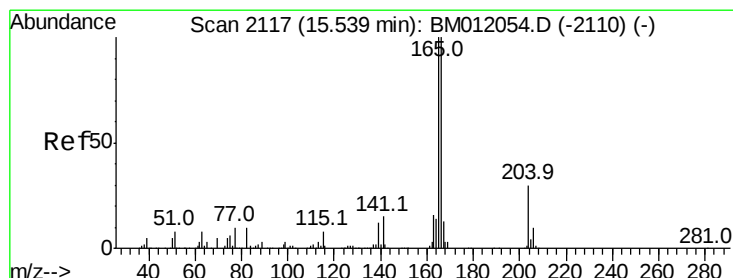
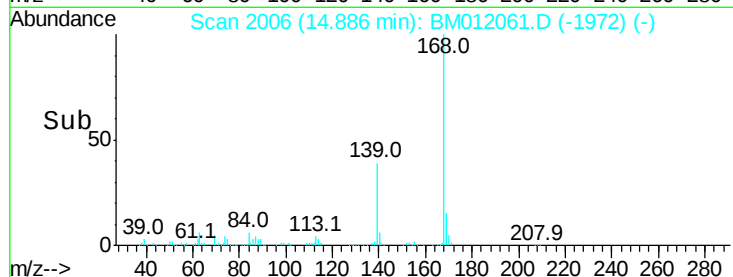
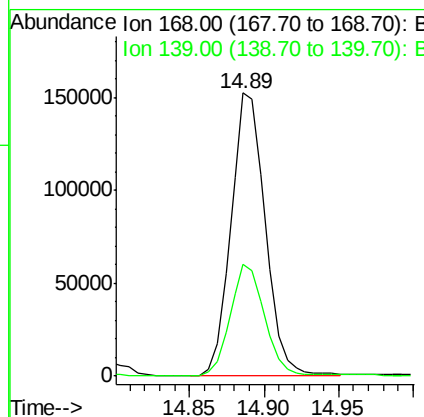
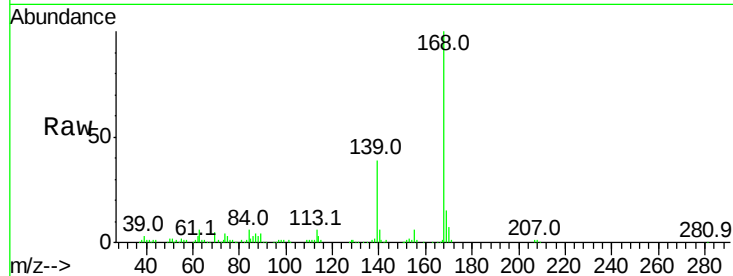
#53  
Dibenzenofuran  
Concen: 3.043 ng/ul  
RT: 14.89 min Scan# 2006  
Delta R.T. -0.00 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

Instrument :  
BNA\_M  
ClientSampleId :  
CB3M1

Tot Ion:168 Resp: 245687  
Ion Ratio Lower Upper  
168 100  
139 39.3 30.8 46.2

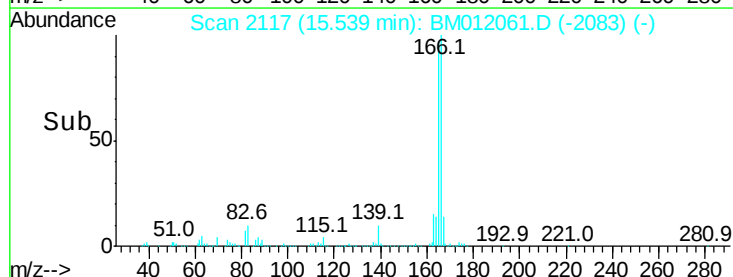
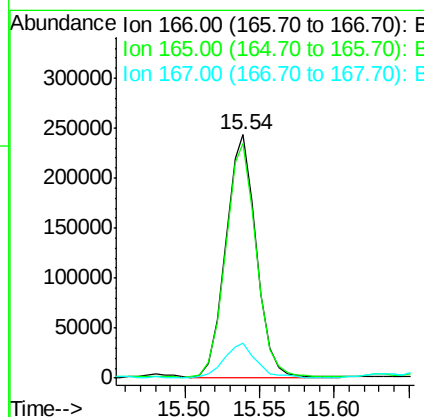
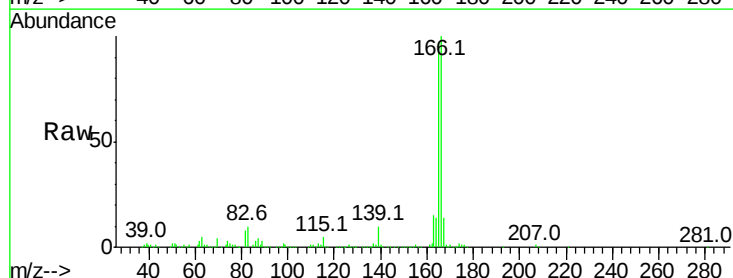
Manual Integrations  
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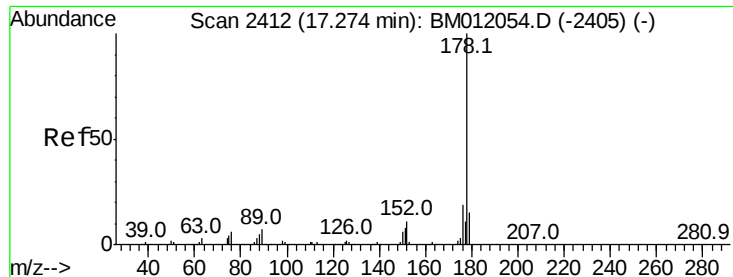
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#58  
Fluorene  
Concen: 5.144 ng/ul  
RT: 15.54 min Scan# 2117  
Delta R.T. -0.00 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

Tgt Ion:166 Resp: 346860  
Ion Ratio Lower Upper  
166 100  
165 96.6 77.9 116.9  
167 14.1 10.6 16.0





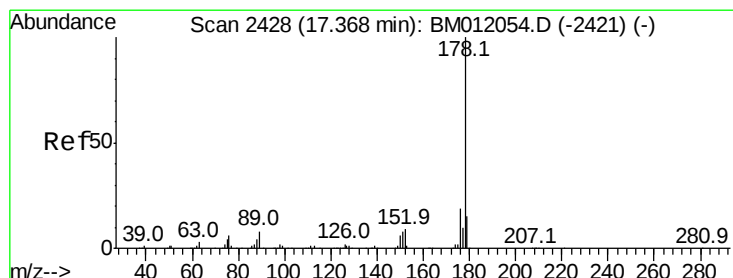
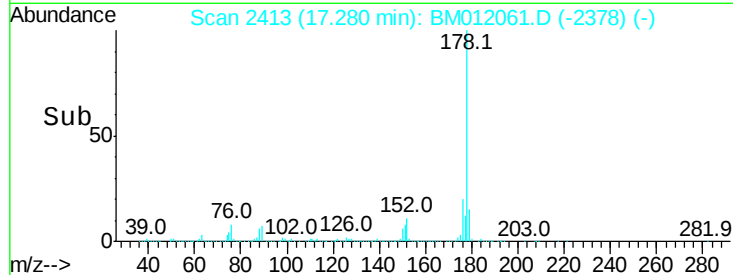
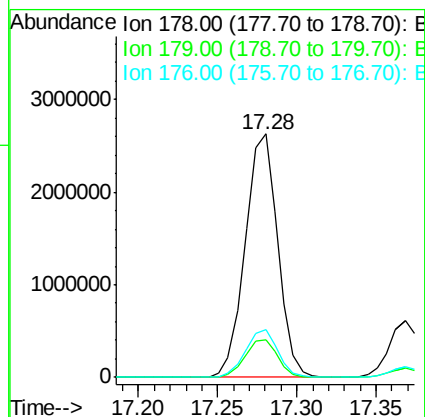
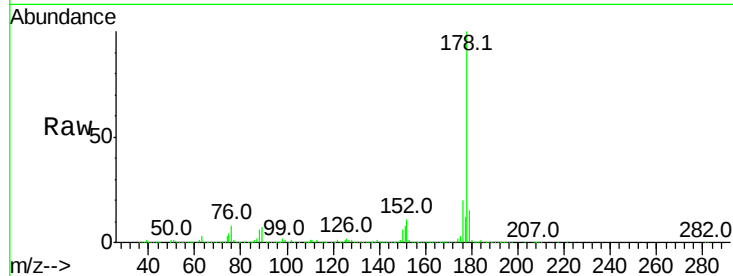
#69  
Phenanthrene  
Concen: 35.323 ng/ul  
RT: 17.28 min Scan# 2413  
Delta R.T. 0.01 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

Instrument :  
BNA\_M  
ClientSampleId :  
CB3M1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.4  | 12.6  | 19.0  |
| 176     | 19.5  | 14.9  | 22.3  |

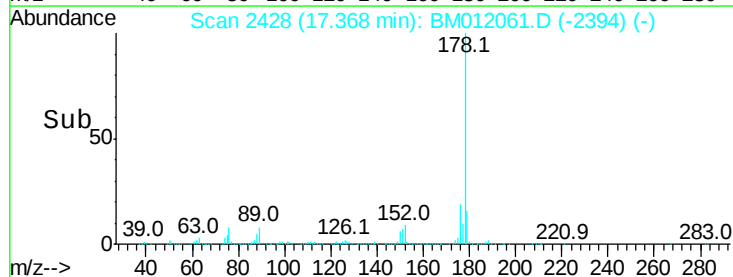
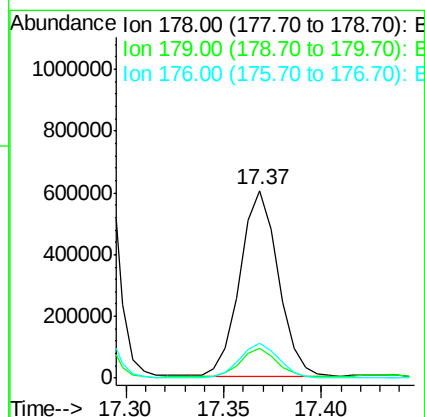
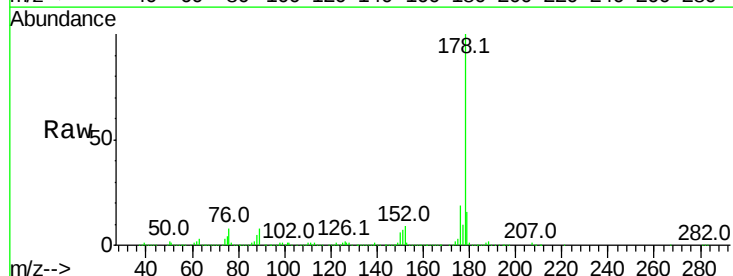
Manual Integrations  
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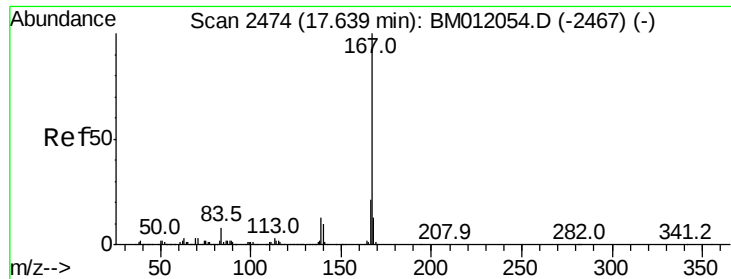
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#71  
Anthracene  
Concen: 7.611 ng/ul  
RT: 17.37 min Scan# 2428  
Delta R.T. -0.00 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 16.0  | 11.7  | 17.5  |
| 176     | 18.7  | 14.6  | 21.8  |





#72

Carbazole

Concen: 4.300 ng/ul

RT: 17.64 min Scan# 2474

Delta R.T. -0.00 min

Lab File: BM012061.D

Acq: 11 Oct 2017 02:38

Instrument :

BNA\_M

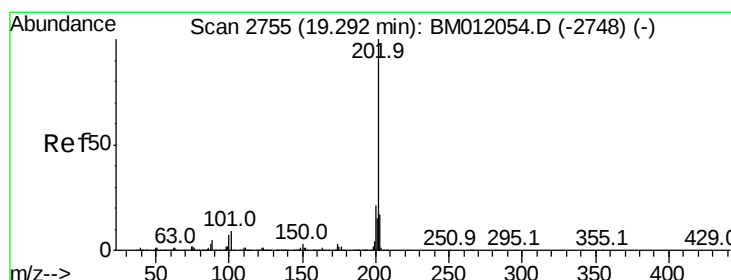
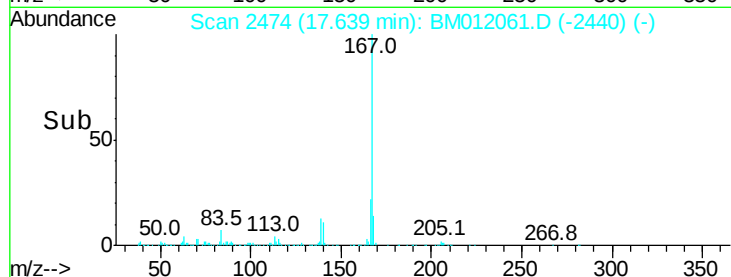
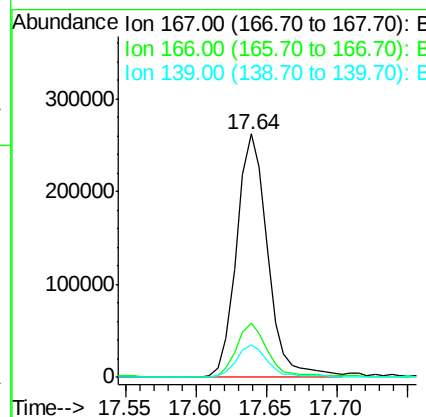
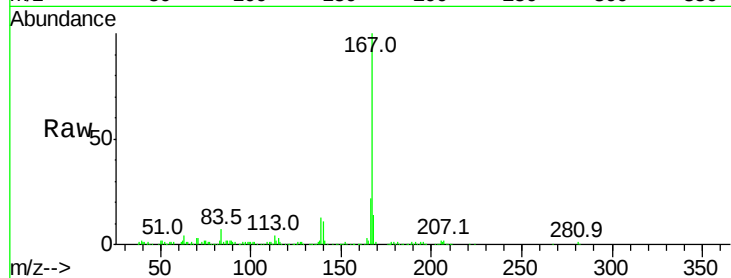
ClientSampleId :

CB3M1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 167   | Resp: | 402620 |
| Ion Ratio | Lower | Upper |        |
| 167       | 100   |       |        |
| 166       | 22.4  | 17.1  | 25.7   |
| 139       | 13.4  | 10.0  | 15.0   |

Manual Integrations  
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#74

Fluoranthene

Concen: 38.741 ng/ul

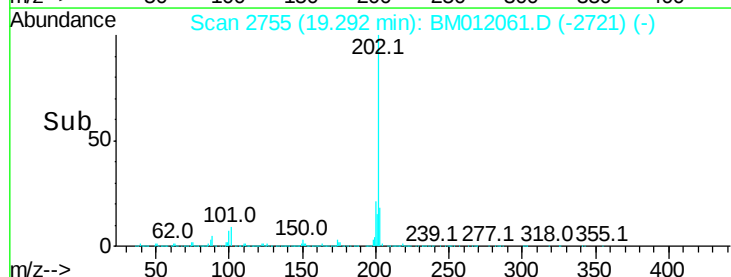
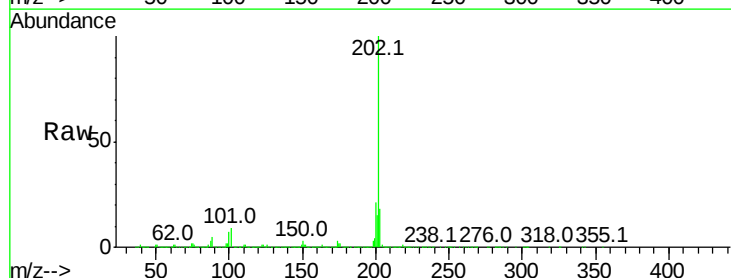
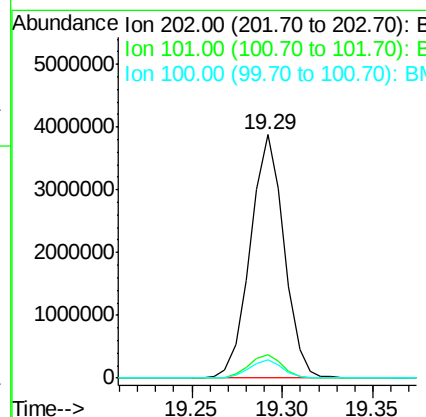
RT: 19.29 min Scan# 2755

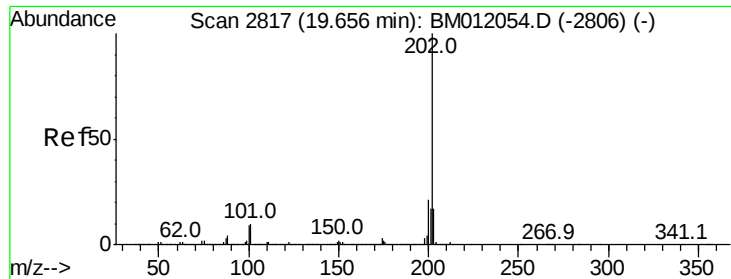
Delta R.T. -0.00 min

Lab File: BM012061.D

Acq: 11 Oct 2017 02:38

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 5021469 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 9.5   | 4.6   | 7.0#    |
| 100       | 7.5   | 3.4   | 5.2#    |





#77

Pvrene

Concen: 31.886 ng/ul

RT: 19.66 min Scan# 2817

Delta R.T. -0.00 min

Lab File: BM012061.D

Acq: 11 Oct 2017 02:38

Instrument :

BNA\_M

ClientSampleId :

CB3M1

Tot Ion:202 Resp: 4071079

Ion Ratio Lower Upper

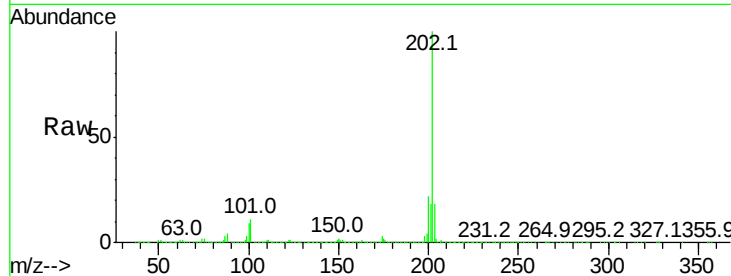
202 100

101 10.6 5.1 7.7#

100 8.8 4.9 7.3#

Manual Integrations  
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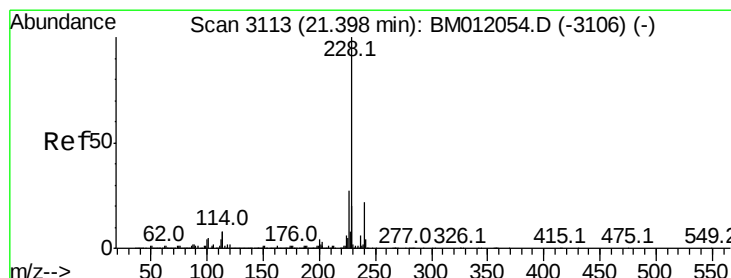
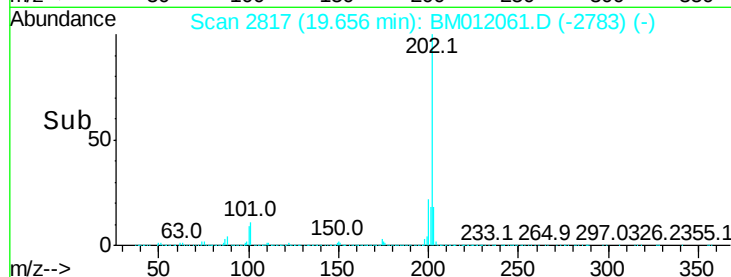
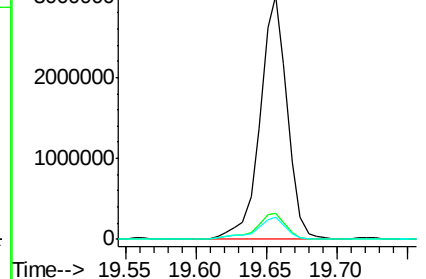
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Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B



#80

Benzo(a)anthracene

Concen: 18.365 ng/ul

RT: 21.40 min Scan# 3113

Delta R.T. -0.00 min

Lab File: BM012061.D

Acq: 11 Oct 2017 02:38

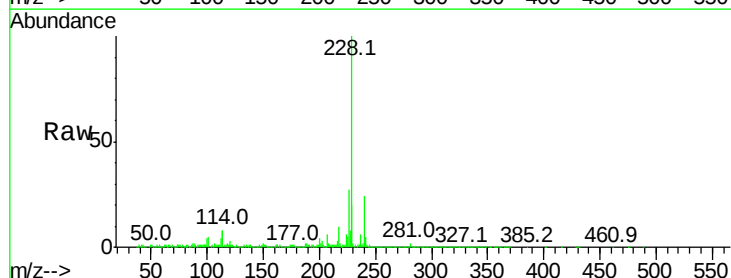
Tgt Ion:228 Resp: 2422609

Ion Ratio Lower Upper

228 100

229 20.0 15.4 23.0

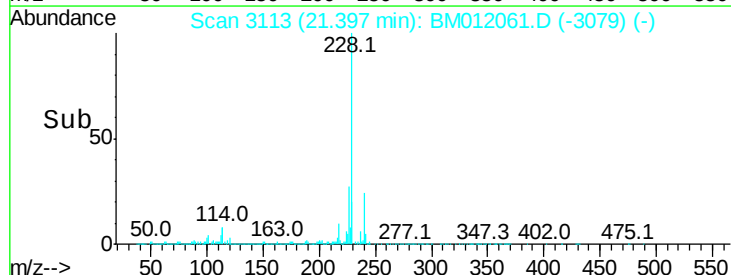
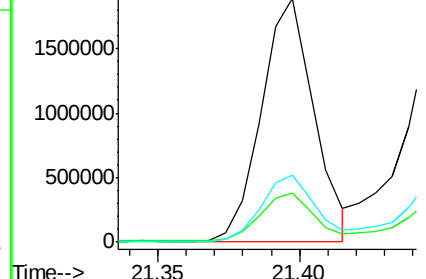
226 27.4 21.4 32.0

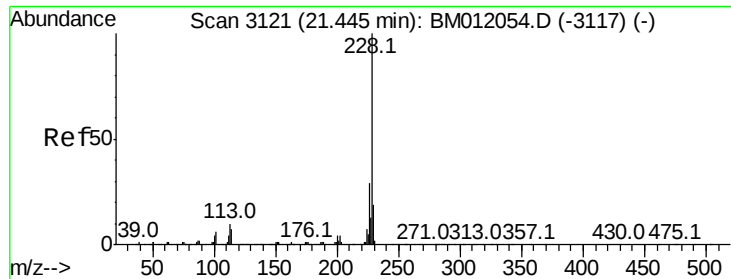


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 229.00 (228.70 to 229.70): E

Ion 226.00 (225.70 to 226.70): E





#82

Chrysene

Concen: 18.067 ng/ul

RT: 21.45 min Scan# 3122

Delta R.T. 0.01 min

Lab File: BM012061.D

Acq: 11 Oct 2017 02:38

Instrument :

BNA\_M

ClientSampleId :

CB3M1

Tot Ion:228 Resp: 2264431

Ion Ratio Lower Upper

228 100

226 29.9 23.4 35.2

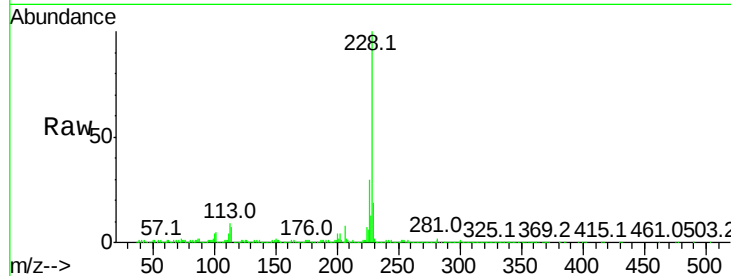
229 19.5 15.5 23.3

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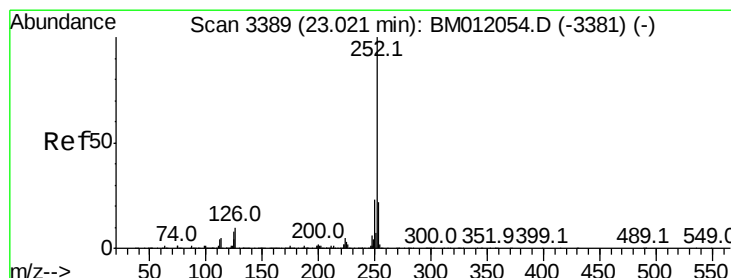
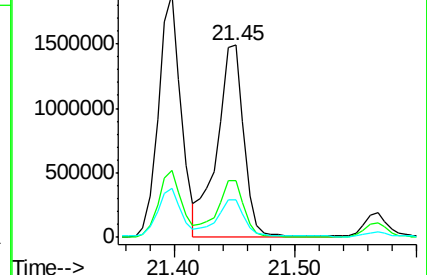
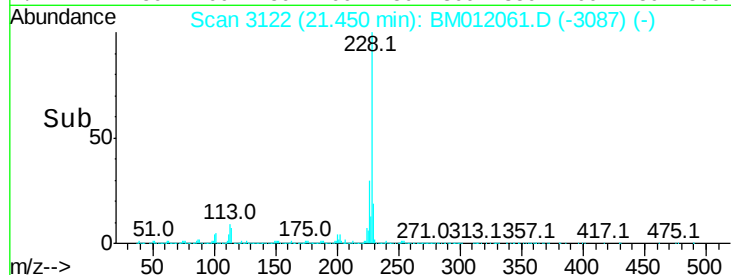
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Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#85

Benzo(b)fluoranthene

Concen: 21.401 ng/ul

RT: 23.03 min Scan# 3390

Delta R.T. 0.01 min

Lab File: BM012061.D

Acq: 11 Oct 2017 02:38

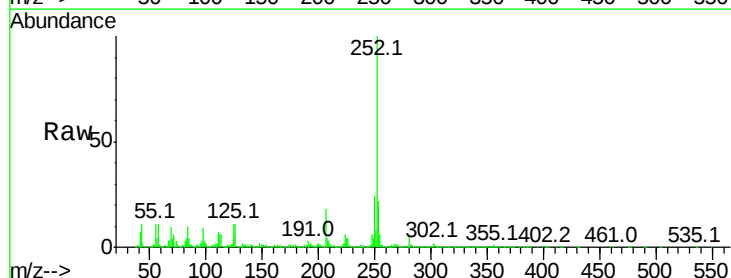
Tgt Ion:252 Resp: 2580280

Ion Ratio Lower Upper

252 100

253 22.0 17.9 26.9

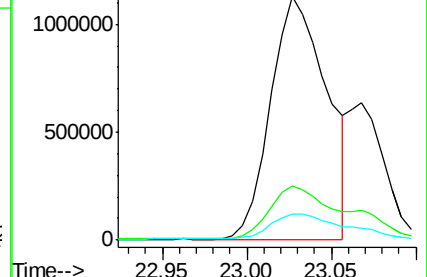
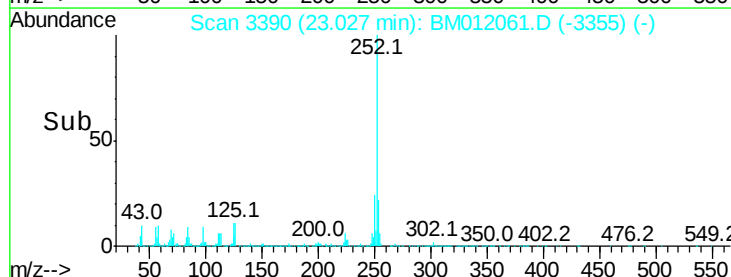
125 10.9 3.6 5.4#

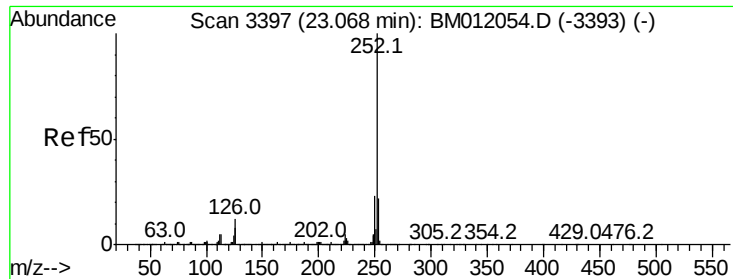


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





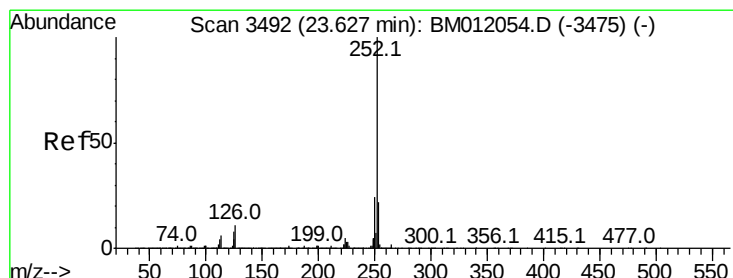
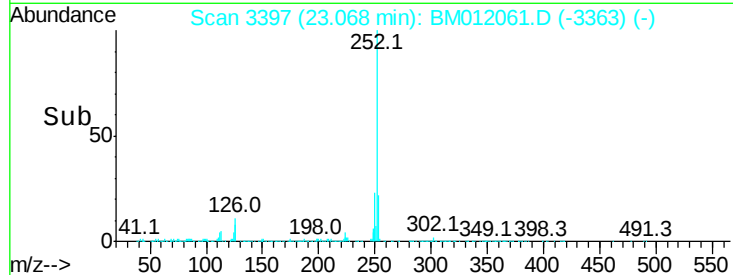
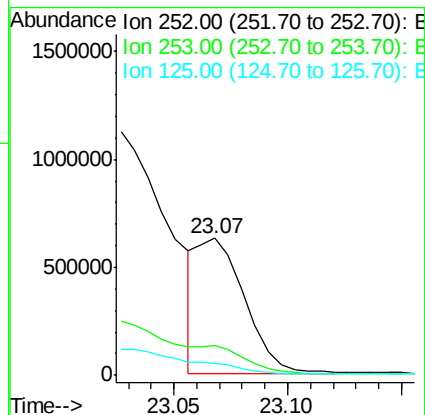
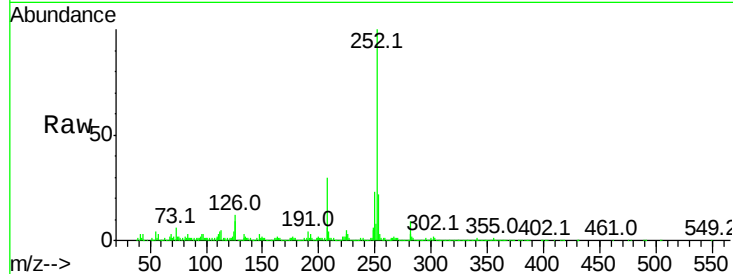
#86  
Benzo(k)fluoranthene  
Concen: 7.546 ng/ul m  
RT: 23.07 min Scan# 3397  
Delta R.T. -0.00 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

Instrument :  
BNA\_M  
ClientSampled :  
CB3M1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.1  | 17.1  | 25.7  |
| 125     | 8.6   | 3.4   | 5.2   |

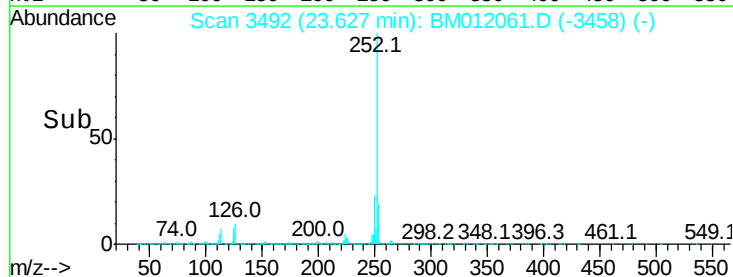
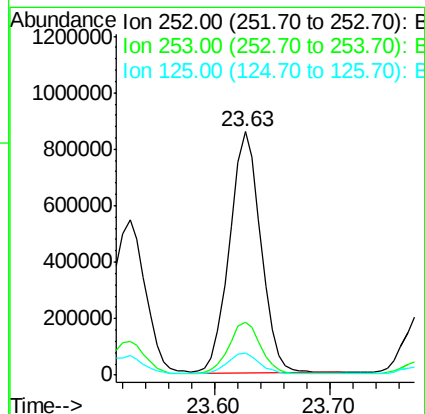
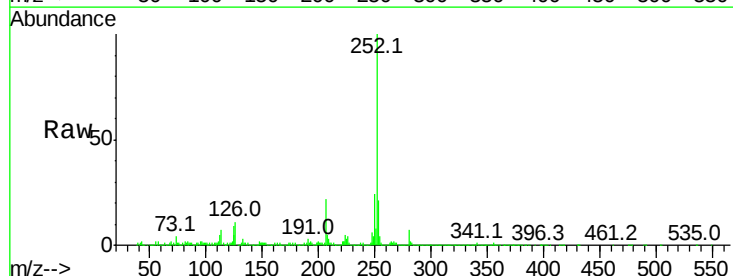
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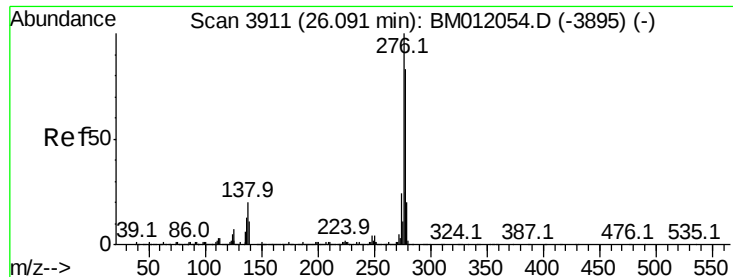
Sohil  
10/11/2017 7:29:38 PM



#88  
Benzo(a)pyrene  
Concen: 13.852 ng/ul  
RT: 23.63 min Scan# 3492  
Delta R.T. -0.00 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.5  | 18.2  | 27.2  |
| 125     | 9.1   | 4.0   | 6.0   |





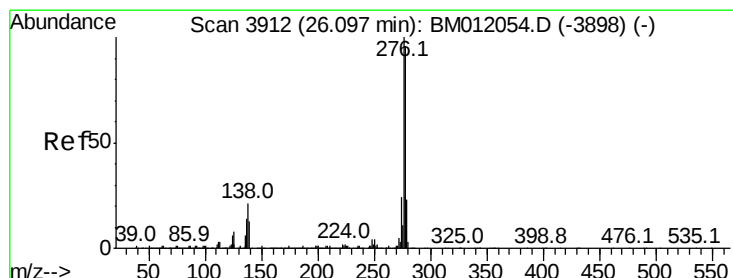
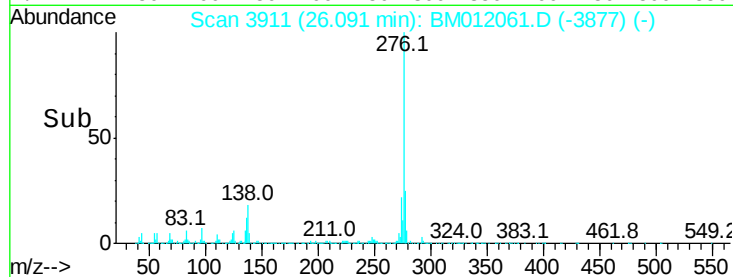
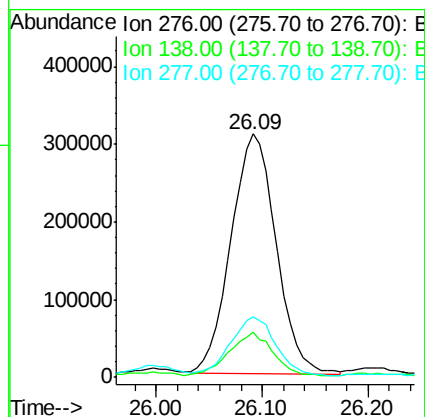
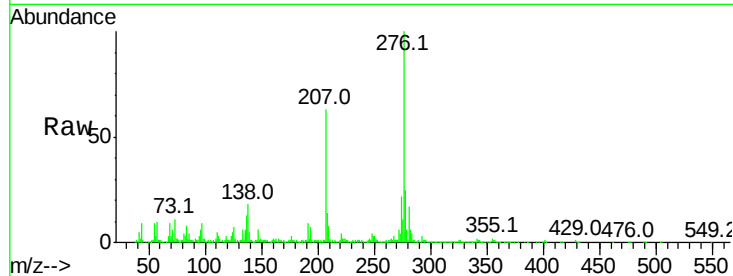
#89  
Indeno(1,2,3-cd)pyrene  
Concen: 7.395 ng/ul  
RT: 26.09 min Scan# 3911  
Delta R.T. -0.00 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

Instrument :  
BNA\_M  
ClientSampleId :  
CB3M1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 18.4  | 9.3   | 13.9# |
| 277     | 25.0  | 19.9  | 29.9  |

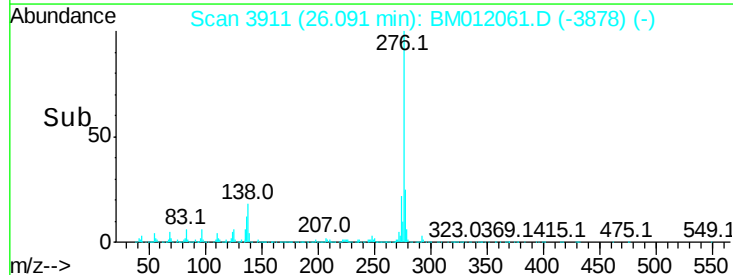
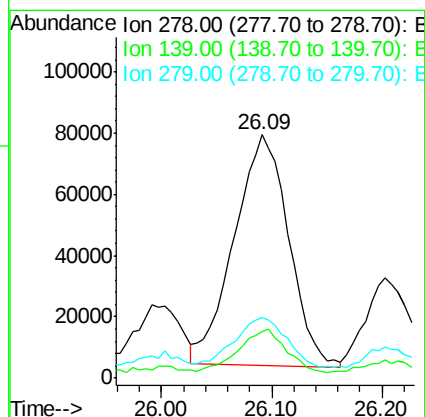
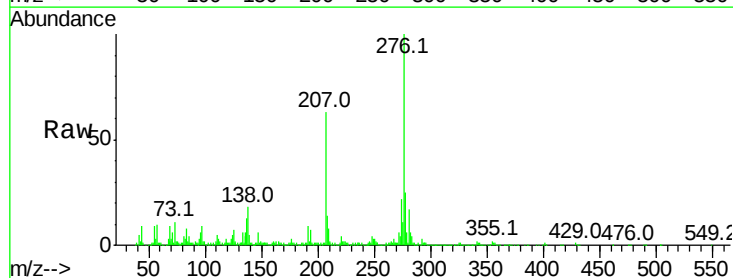
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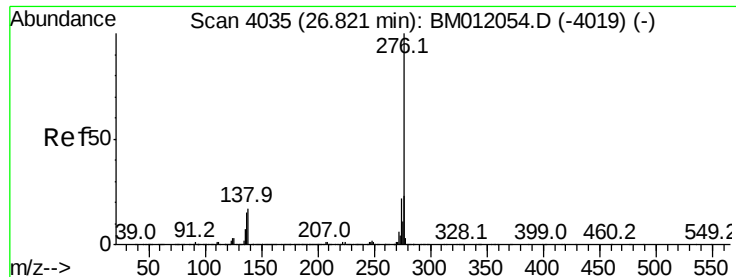
Sohil  
10/11/2017 7:29:38 PM



#90  
Dibenzo(a,h)anthracene  
Concen: 2.557 ng/ul  
RT: 26.09 min Scan# 3911  
Delta R.T. -0.01 min  
Lab File: BM012061.D  
Acq: 11 Oct 2017 02:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 18.8  | 5.8   | 8.8#  |
| 279     | 24.8  | 18.6  | 27.8  |





#91

Benzo(a,h,i)perylene

Concen: 6.993 ng/ul

RT: 26.82 min Scan# 4035

Delta R.T. -0.00 min

Lab File: BM012061.D

Acq: 11 Oct 2017 02:38

Instrument :

BNA\_M

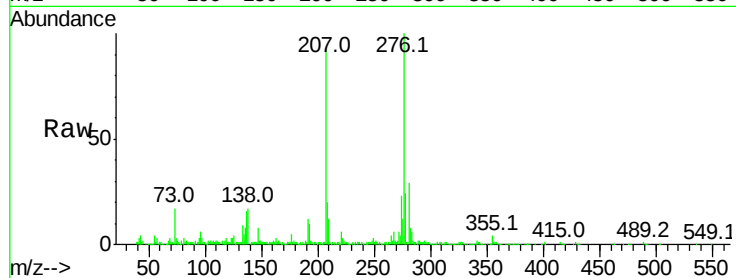
ClientSampleId :

CB3M1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 717137 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 17.2  | 8.5   | 12.7#  |
| 277       | 24.3  | 18.6  | 28.0   |

Manual Integrations  
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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

