

Data Path : Z:\HPCHEM1\BNA G\DATA\BG080615\  
 Data File : BG018302.D  
 Acq On : 6 Aug 2015 13:34  
 Operator : UM/TP  
 Sample : G3109-20DL 10X  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C02F4DL

Manual Integrations  
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MMDadoda  
 8/10/2015 10:12:25 AM

Quant Time: Aug 07 02:07:46 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080515.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Aug 07 01:32:43 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.43  | 152  | 22049    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.21 | 136  | 104468   | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.12 | 164  | 69800    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 16.88 | 188  | 144855   | 20.00 | ng/ul | -0.01    |
| 78) Chrysene-d12          | 21.09 | 240  | 86589    | 20.00 | ng/ul | -0.01    |
| 86) Perylene-d12          | 23.26 | 264  | 88823    | 20.00 | ng/ul | -0.02    |

## System Monitoring Compounds

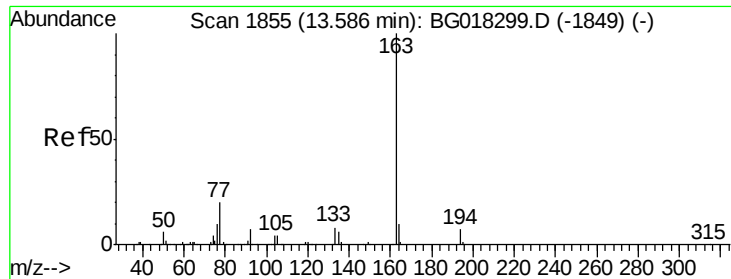
|                                |       |     |       |      |       |       |
|--------------------------------|-------|-----|-------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 0.00  | 96  | 0     | 0.00 | ng/uL |       |
| 5) Phenol-d5                   | 6.64  | 99  | 3871  | 2.23 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.77  | 67  | 2090  | 2.49 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 6.97  | 132 | 3172  | 2.20 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.17  | 113 | 2682  | 1.83 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.59  | 128 | 1712m | 2.12 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.32  | 143 | 2335  | 2.50 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.86  | 165 | 3396  | 1.97 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 0.00  | 131 | 0d    | 0.00 | ng/ul |       |
| 44) Dimethylphthalate-d6       | 13.53 | 166 | 14357 | 2.66 | ng/ul | -0.01 |
| 47) Acenaphthylene-d8          | 13.80 | 160 | 12300 | 2.01 | ng/ul | 0.00  |
| 52) 4-Nitrophenol-d4           | 14.39 | 143 | 269   | 0.30 | ng/ul | 0.00  |
| 58) Fluorene-d10               | 15.11 | 176 | 10281 | 2.12 | ng/ul | -0.01 |
| 63) 4,6-Dinitro-2-methylphenol | 0.00  | 200 | 0d    | 0.00 | ng/ul |       |
| 71) Anthracene-d10             | 16.97 | 188 | 12535 | 1.97 | ng/ul | -0.01 |
| 79) Pyrene-d10                 | 19.29 | 212 | 10994 | 2.27 | ng/ul | 0.00  |
| 90) Benzo(a)pyrene-d12         | 23.12 | 264 | 6243  | 1.35 | ng/ul | -0.02 |

## Target Compounds

|                                |       |     |        |       |        | Ovalue |
|--------------------------------|-------|-----|--------|-------|--------|--------|
| 45) Dimethylphthalate          | 13.58 | 163 | 7311   | 1.36  | ng/ul# | 86     |
| 50) Acenaphthene               | 14.17 | 153 | 4697   | 1.15  | ng/ul# | 82     |
| 59) Fluorene                   | 15.17 | 166 | 6315   | 1.20  | ng/ul# | 91     |
| 70) Phenanthrene               | 16.92 | 178 | 62321  | 8.53  | ng/ul  | 96     |
| 72) Anthracene                 | 17.01 | 178 | 18493  | 2.53  | ng/ul  | 99     |
| 75) Carbazole                  | 17.29 | 167 | 6804   | 1.11  | ng/ul  | 96     |
| 77) Fluoranthene               | 18.95 | 202 | 84872  | 10.47 | ng/ul# | 94     |
| 80) Pyrene                     | 19.32 | 202 | 73928  | 12.28 | ng/ul# | 95     |
| 83) Benzo(a)anthracene         | 21.07 | 228 | 26433  | 5.78  | ng/ul  | 97     |
| 84) Bis(2-ethylhexyl)phthalate | 21.01 | 149 | 13794  | 4.91  | ng/ul# | 95     |
| 85) Chrysene                   | 21.13 | 228 | 24548  | 5.98  | ng/ul  | 96     |
| 88) Benzo(b)fluoranthene       | 22.61 | 252 | 32809  | 6.02  | ng/ul# | 96     |
| 89) Benzo(k)fluoranthene       | 22.65 | 252 | 8867   | 1.70  | ng/ul# | 88     |
| 91) Benzo(a)pyrene             | 23.16 | 252 | 20846  | 4.38  | ng/ul# | 88     |
| 92) Indeno(1,2,3-cd)pyrene     | 25.43 | 276 | 13719m | 2.33  | ng/ul  |        |
| 94) Benzo(g,h,i)perylene       | 26.11 | 276 | 13649  | 2.86  | ng/ul# | 90     |

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





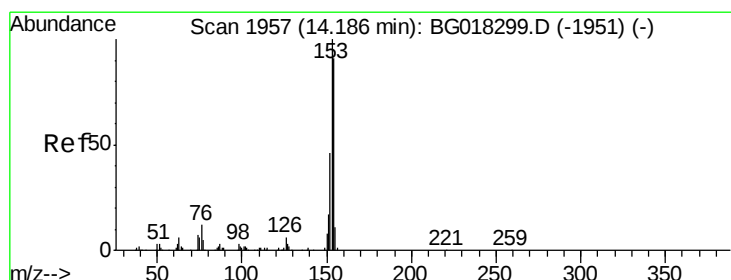
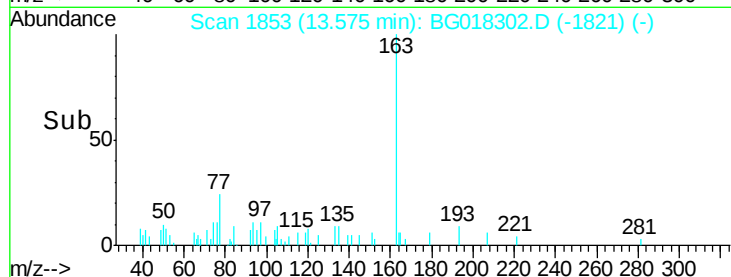
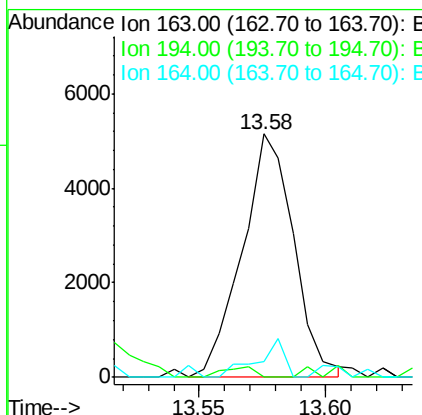
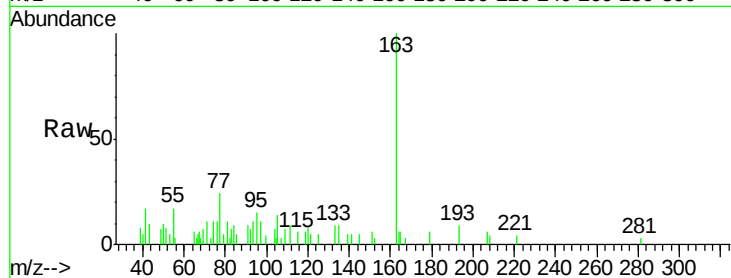
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Dimethylphthalate  
Concen: 1.36 ng/ul  
RT: 13.58 min Scan# 1853  
Delta R.T. -0.01 min  
Lab File: BG018302.D  
Acq: 6 Aug 2015 13:34

Instrument :  
BNA\_G  
ClientSampleId :  
C02F4DL

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 163     | 100   | 7311 |       |       |
| 194     | 0.0   | 5.4  | 8.2#  |       |
| 164     | 6.4   | 7.8  | 11.8# |       |

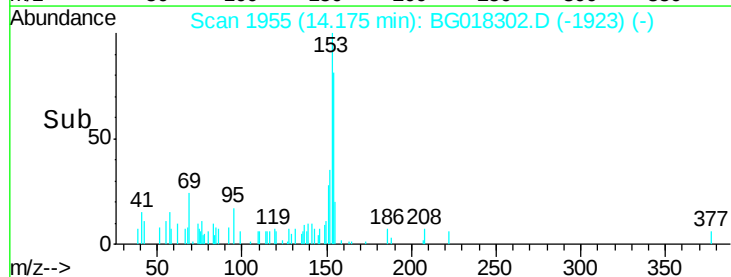
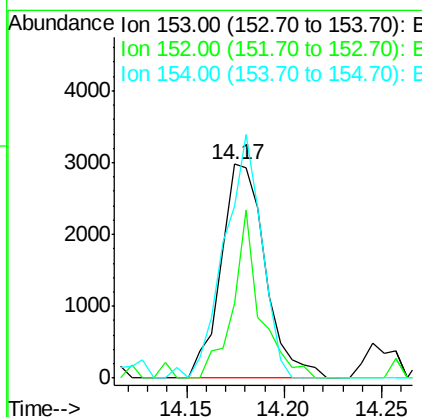
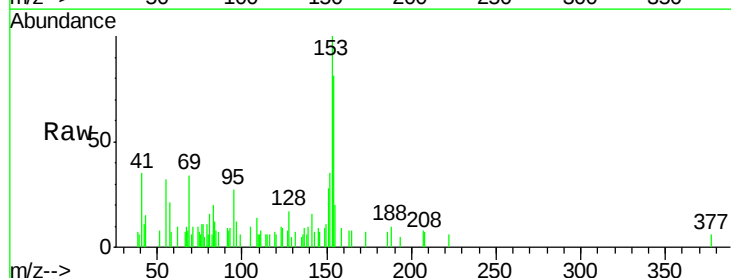
Manual Integrations  
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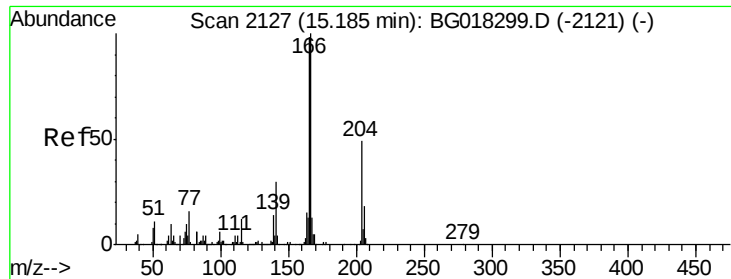
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8/10/2015 10:12:25 AM



#50  
Acenaphthene  
Concen: 1.15 ng/ul  
RT: 14.17 min Scan# 1955  
Delta R.T. -0.01 min  
Lab File: BG018302.D  
Acq: 6 Aug 2015 13:34

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 153     | 100   | 4697 |       |       |
| 152     | 35.1  | 39.0 | 58.4# |       |
| 154     | 80.6  | 77.4 | 116.2 |       |





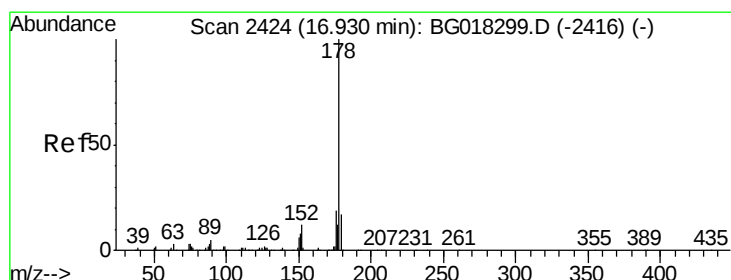
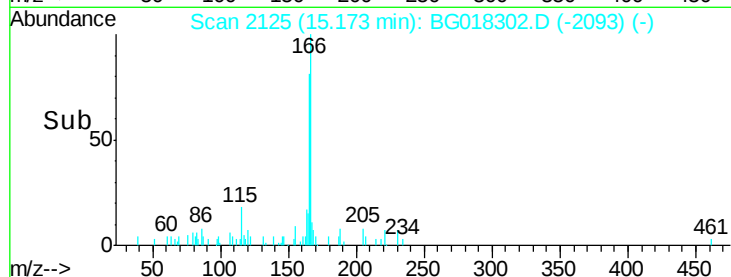
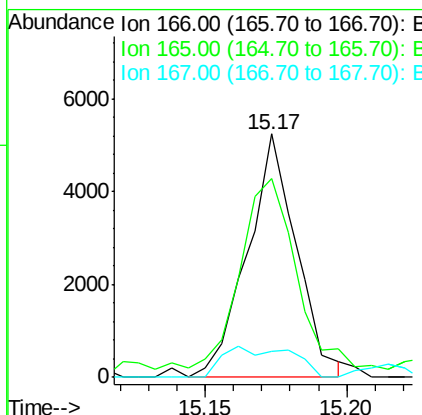
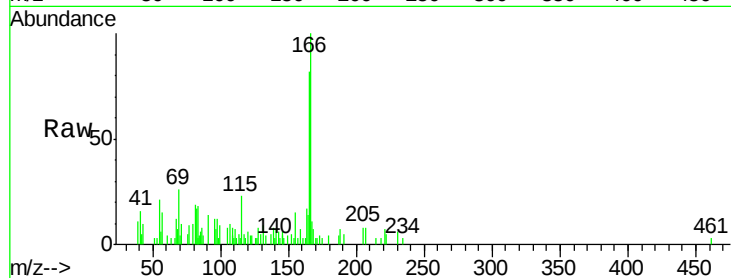
#59  
**Fluorene**  
 Concen: 1.20 ng/ul  
 RT: 15.17 min Scan# 2125  
 Delta R.T. -0.01 min  
 Lab File: BG018302.D  
 Acq: 6 Aug 2015 13:34

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C02F4DL

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 166     | 100   | 6315 |       |       |
| 165     | 81.6  |      | 72.4  | 108.6 |
| 167     | 10.6  |      | 11.4  | 17.0# |

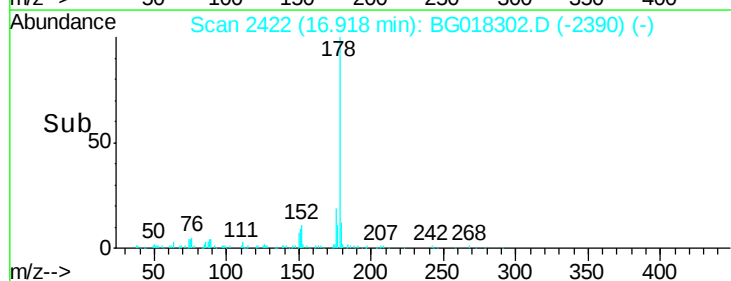
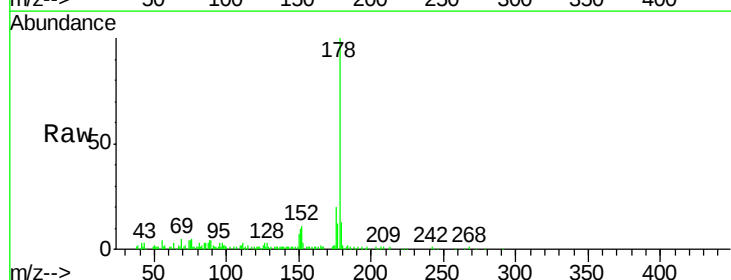
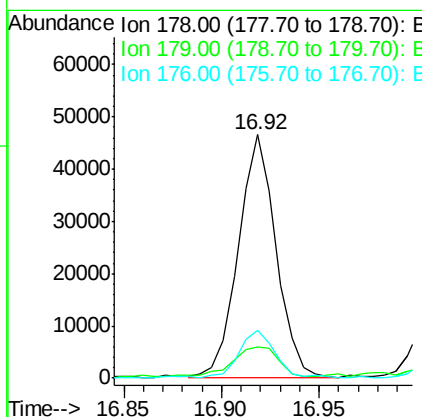
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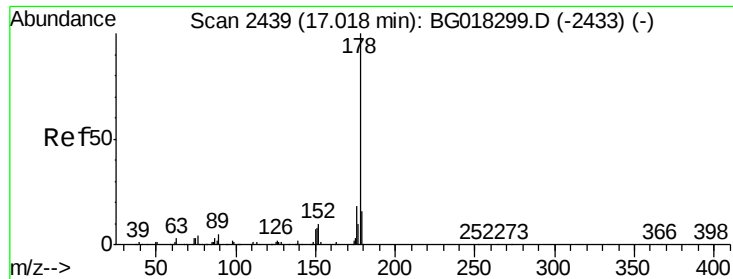
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#70  
**Phenanthrene**  
 Concen: 8.53 ng/ul  
 RT: 16.92 min Scan# 2422  
 Delta R.T. -0.01 min  
 Lab File: BG018302.D  
 Acq: 6 Aug 2015 13:34

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 178     | 100   | 62321 |       |       |
| 179     | 12.9  |       | 12.2  | 18.4  |
| 176     | 19.6  |       | 14.5  | 21.7  |





#72

Anthracene

Concen: 2.53 ng/ul

RT: 17.01 min Scan# 2437

Delta R.T. -0.01 min

Lab File: BG018302.D

Acq: 6 Aug 2015 13:34

Instrument :

BNA\_G

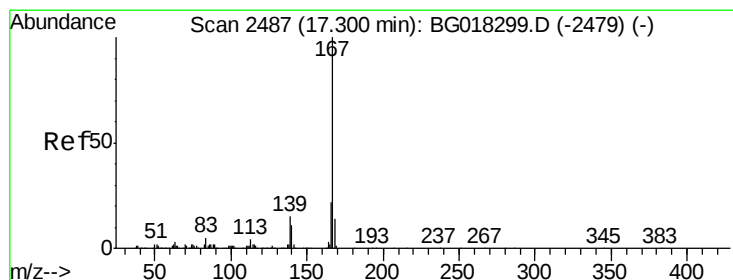
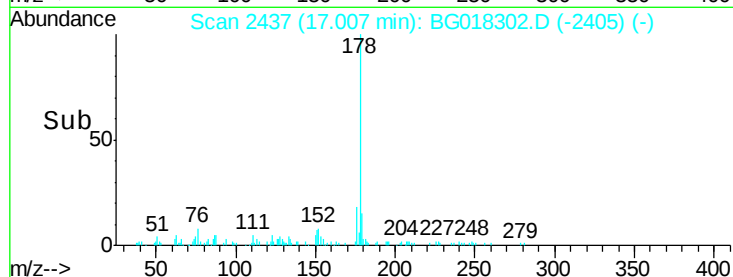
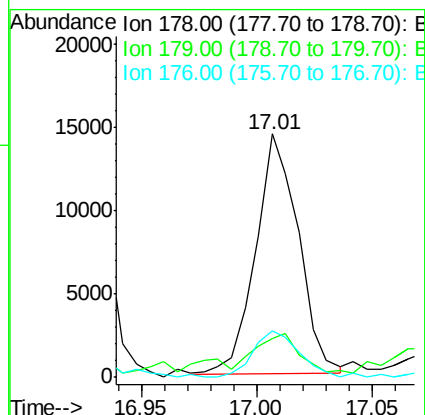
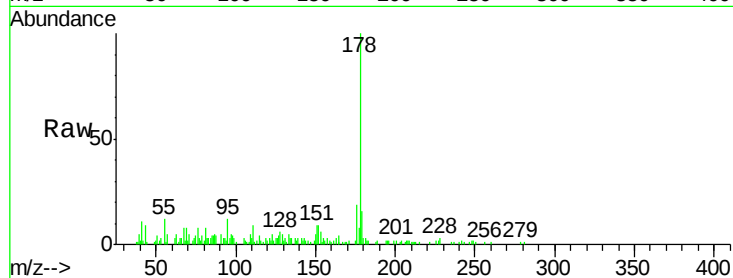
ClientSampleId :

C02F4DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 178   | Resp: | 18493 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 15.9  | 12.2  | 18.4  |
| 176       | 19.1  | 15.3  | 22.9  |

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#75

Carbazole

Concen: 1.11 ng/ul

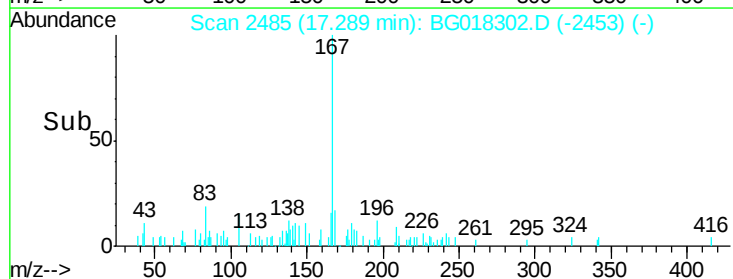
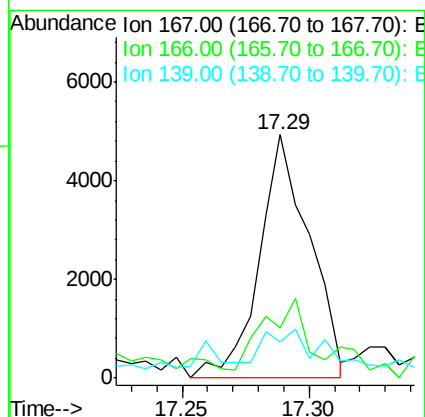
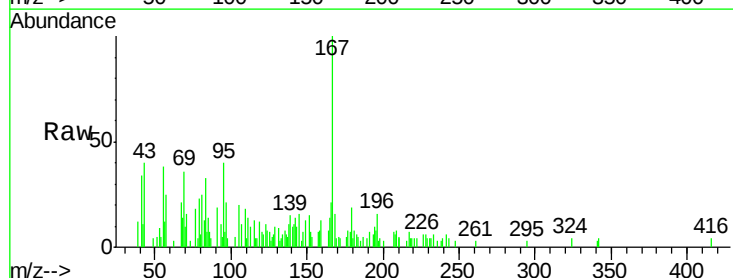
RT: 17.29 min Scan# 2485

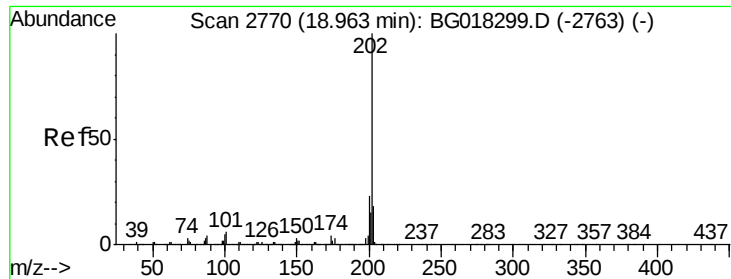
Delta R.T. -0.01 min

Lab File: BG018302.D

Acq: 6 Aug 2015 13:34

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 167   | Resp: | 6804 |
| Ion Ratio | Lower | Upper |      |
| 167       | 100   |       |      |
| 166       | 20.9  | 17.8  | 26.8 |
| 139       | 15.1  | 10.6  | 16.0 |





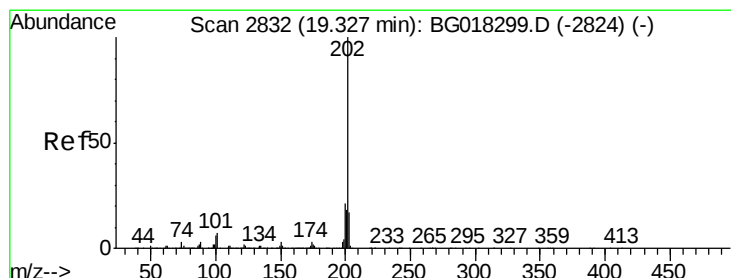
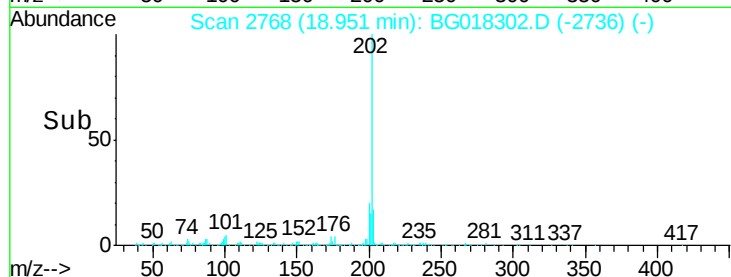
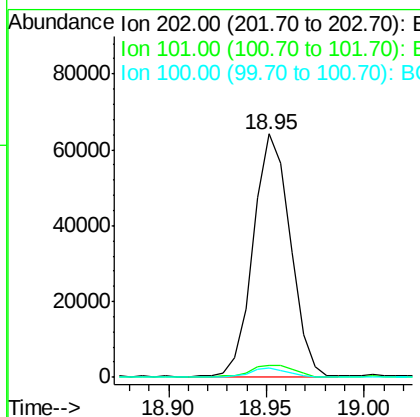
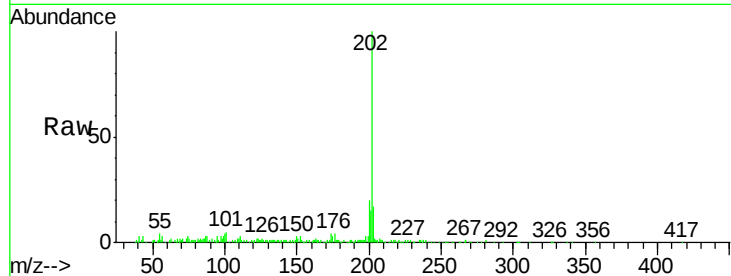
#77  
 Fluoranthene  
 Concen: 10.47 ng/ul  
 RT: 18.95 min Scan# 2768  
 Delta R.T. -0.01 min  
 Lab File: BG018302.D  
 Acq: 6 Aug 2015 13:34

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C02F4DL

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 5.1   | 6.2        | 9.2#  |
| 100     | 4.0   | 4.6        | 6.8#  |

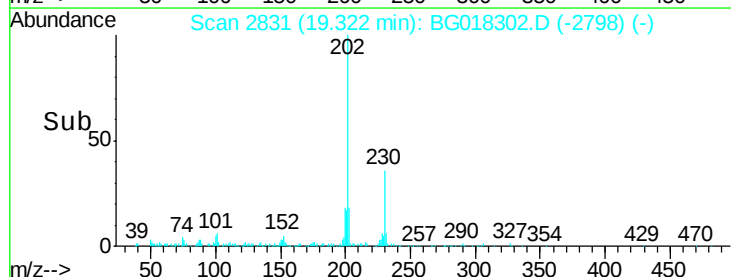
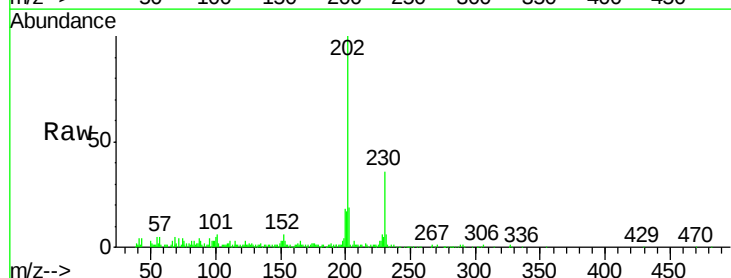
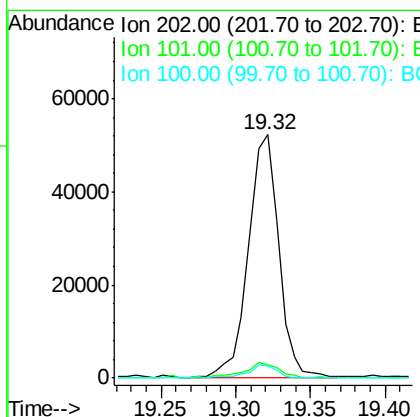
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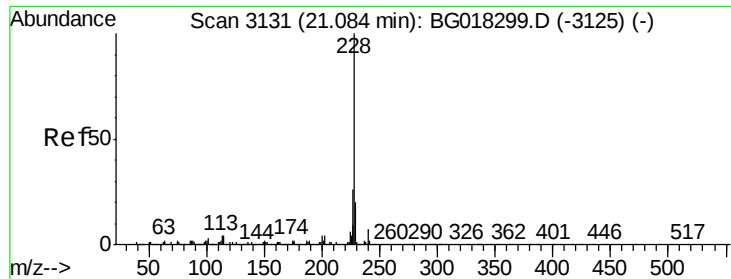
MMDadoda  
 8/10/2015 10:12:25 AM



#80  
 Pyrene  
 Concen: 12.28 ng/ul  
 RT: 19.32 min Scan# 2831  
 Delta R.T. -0.01 min  
 Lab File: BG018302.D  
 Acq: 6 Aug 2015 13:34

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 5.6   | 6.2        | 9.2#  |
| 100     | 5.0   | 4.6        | 7.0   |





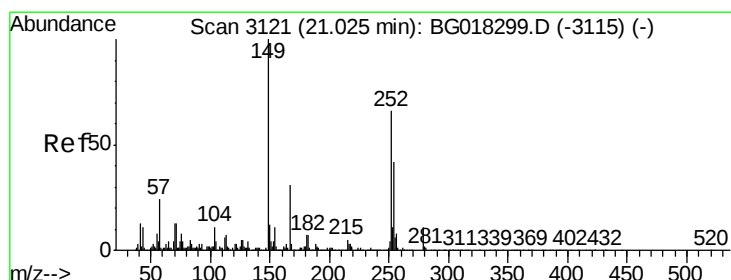
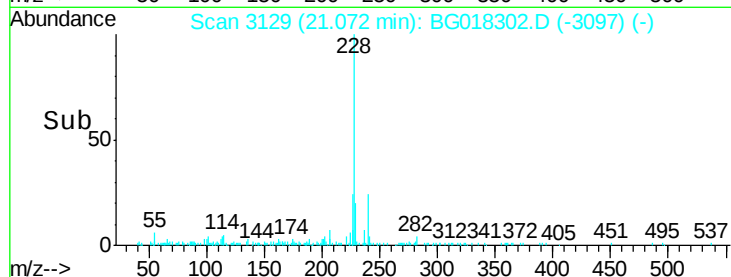
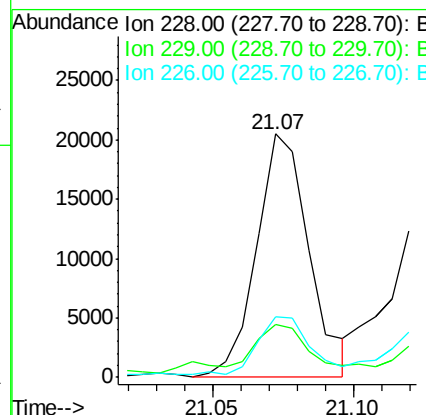
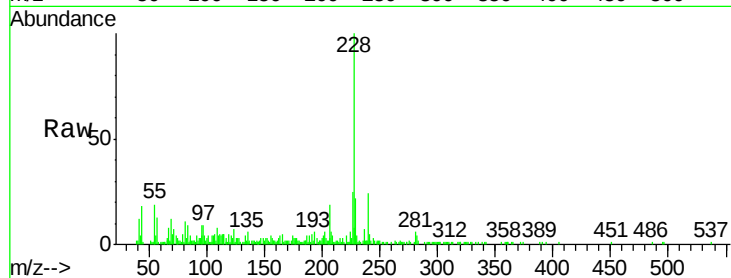
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Benzo(a)anthracene  
Concen: 5.78 ng/ul  
RT: 21.07 min Scan# 3129  
Delta R.T. -0.01 min  
Lab File: BG018302.D  
Acq: 6 Aug 2015 13:34

Instrument :  
BNA\_G  
ClientSampleId :  
C02F4DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 21.7  | 16.3  | 24.5  |
| 226     | 25.0  | 21.2  | 31.8  |

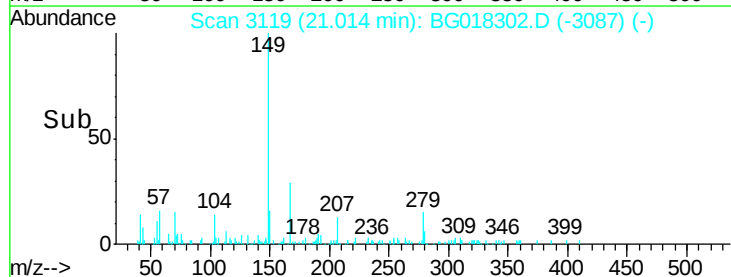
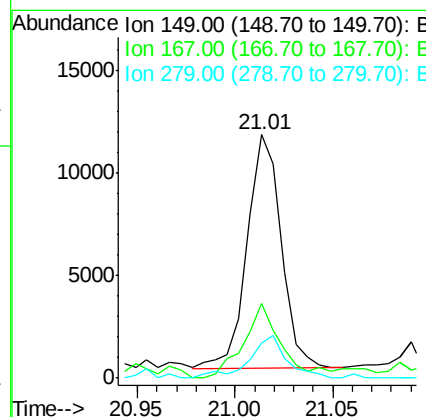
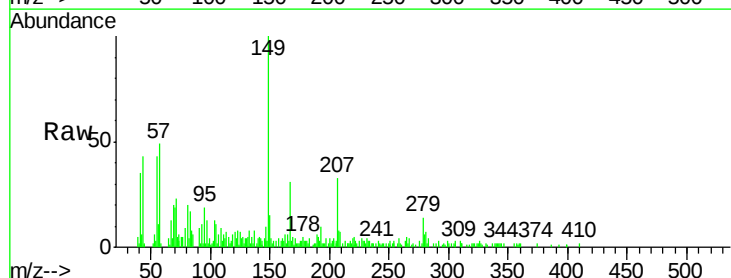
Manual Integrations  
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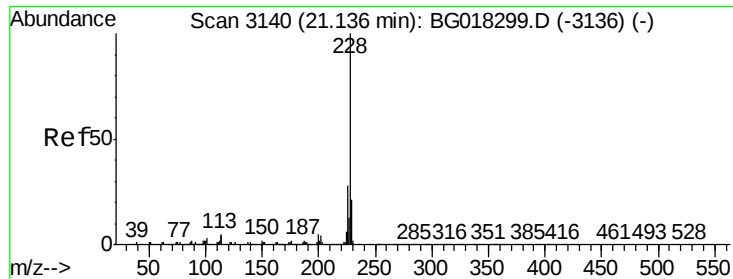
MMDadoda  
8/10/2015 10:12:25 AM



#84  
Bis(2-ethylhexyl)phthalate  
Concen: 4.91 ng/ul  
RT: 21.01 min Scan# 3119  
Delta R.T. -0.01 min  
Lab File: BG018302.D  
Acq: 6 Aug 2015 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 30.6  | 26.4  | 39.6  |
| 279     | 14.2  | 8.6   | 12.8  |





#85

Chrysene

Concen: 5.98 ng/ul

RT: 21.13 min Scan# 3138

Delta R.T. -0.01 min

Lab File: BG018302.D

Acq: 6 Aug 2015 13:34

Instrument :

BNA\_G

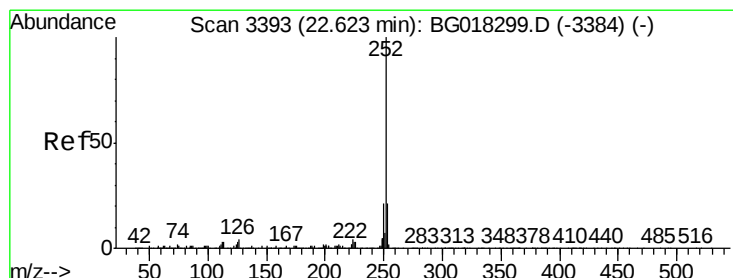
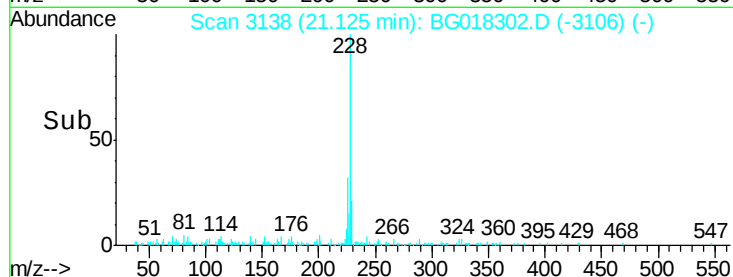
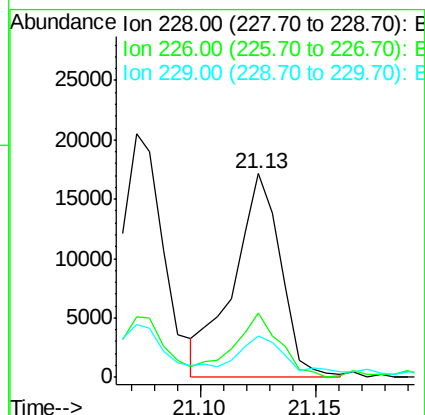
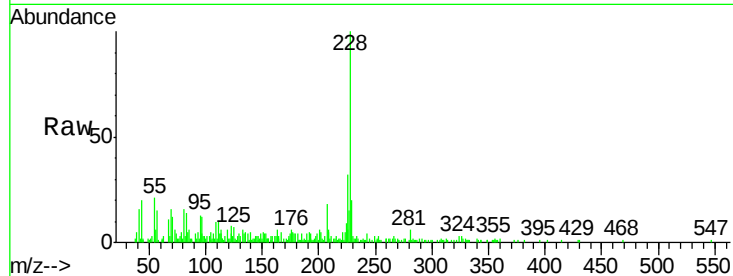
ClientSampled :

C02F4DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 228   | Resp: | 24548 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 31.6  | 23.0  | 34.6  |
| 229       | 20.5  | 15.9  | 23.9  |

Manual Integrations  
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8/10/2015 10:12:25 AM



#88

Benzo(b)fluoranthene

Concen: 6.02 ng/ul

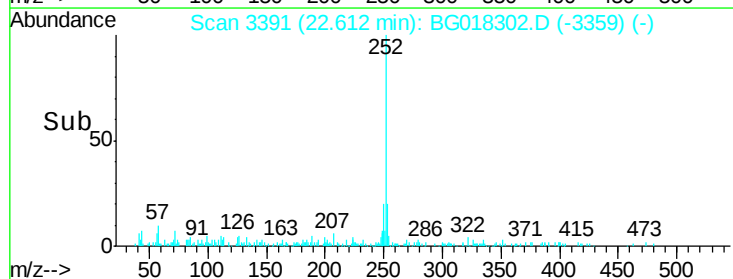
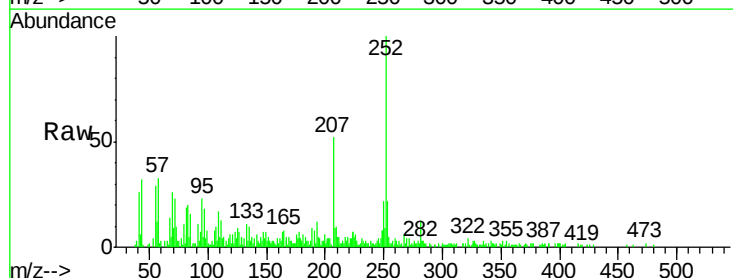
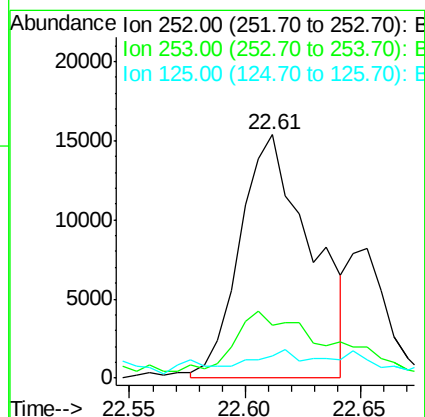
RT: 22.61 min Scan# 3391

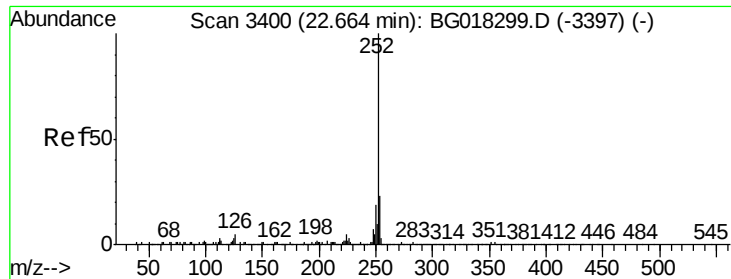
Delta R.T. -0.01 min

Lab File: BG018302.D

Acq: 6 Aug 2015 13:34

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 32809 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 21.6  | 18.1  | 27.1  |
| 125       | 9.1   | 3.1   | 4.7#  |





#89

Benzo(k)fluoranthene

Concen: 1.70 ng/ul

RT: 22.65 min Scan# 3398

Delta R.T. -0.01 min

Lab File: BG018302.D

Acq: 6 Aug 2015 13:34

Instrument :

BNA\_G

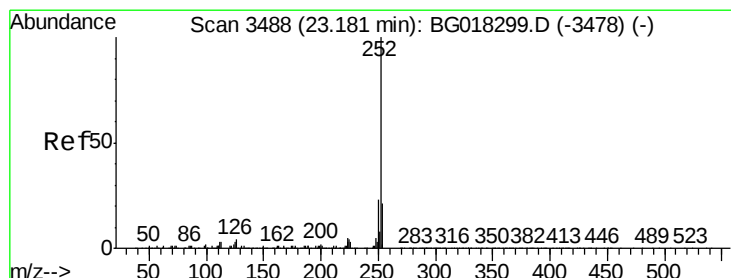
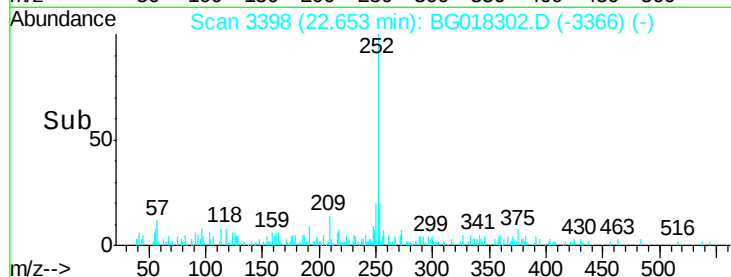
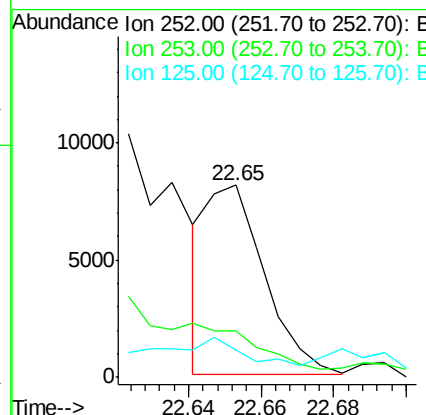
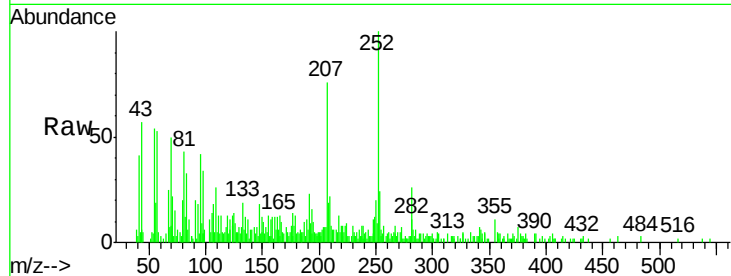
ClientSampleId :

C02F4DL

|           |       |       |      |
|-----------|-------|-------|------|
| Tot Ion:  | 252   | Resp: | 8867 |
| Ion Ratio | Lower | Upper |      |
| 252       | 100   |       |      |
| 253       | 24.3  | 16.4  | 24.6 |
| 125       | 14.2  | 3.4   | 5.2  |

Manual Integrations  
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8/10/2015 10:12:25 AM



#91

Benzo(a)pyrene

Concen: 4.38 ng/ul

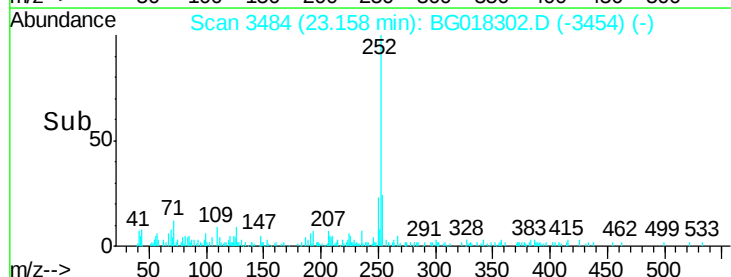
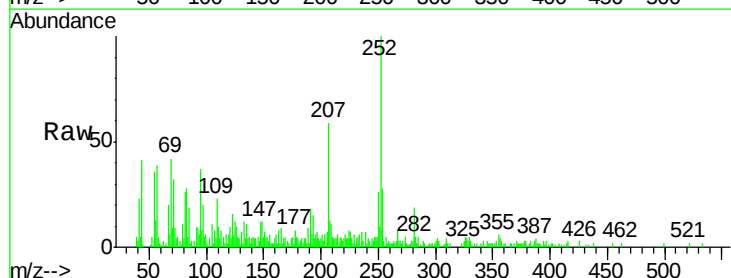
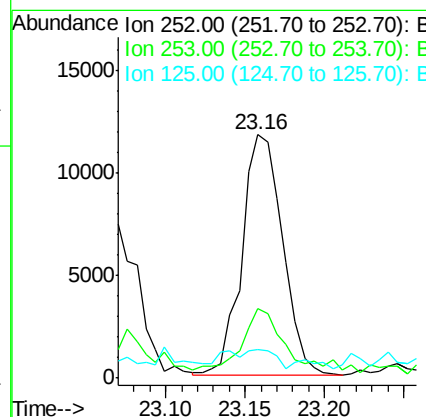
RT: 23.16 min Scan# 3484

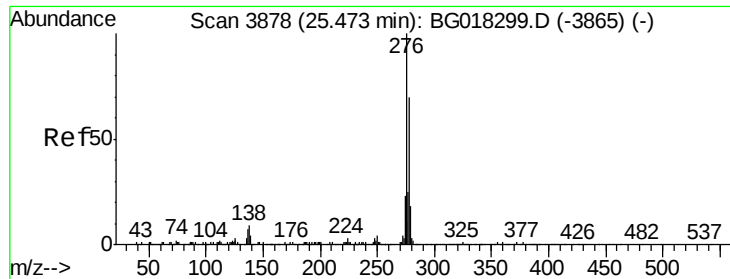
Delta R.T. -0.02 min

Lab File: BG018302.D

Acq: 6 Aug 2015 13:34

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 20846 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 28.4  | 18.9  | 28.3  |
| 125       | 11.8  | 3.2   | 4.8   |





#92

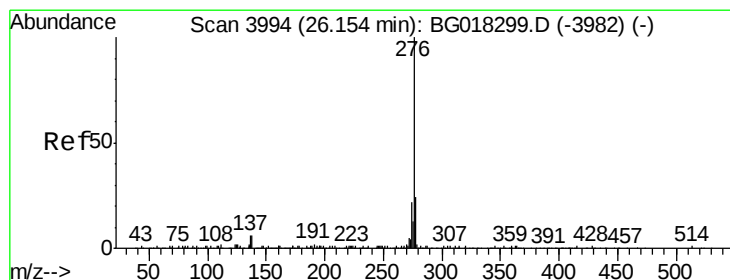
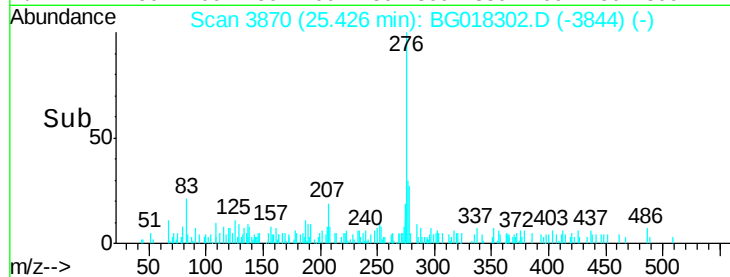
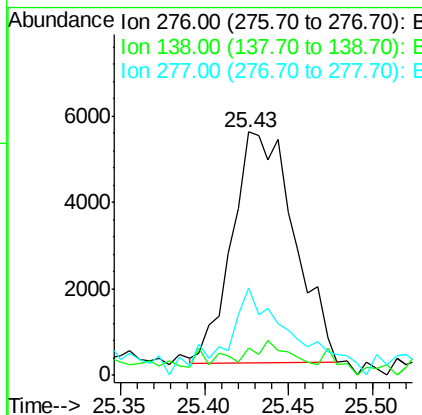
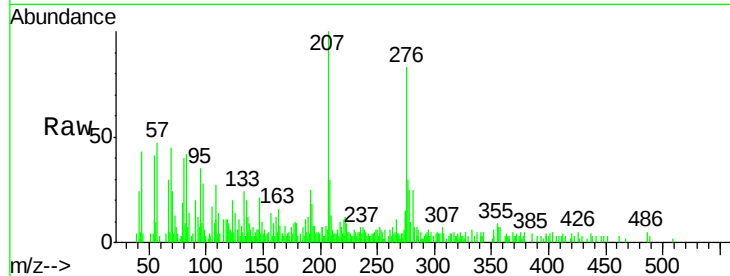
Indeno(1,2,3-cd)pyrene  
Concen: 2.33 ng/ul m  
RT: 25.43 min Scan# 3870  
Delta R.T. -0.05 min  
Lab File: BG018302.D  
Acq: 6 Aug 2015 13:34

Instrument :  
BNA\_G  
ClientSampleId :  
C02F4DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 11.1  | 8.2   | 12.4  |
| 277     | 35.8  | 20.1  | 30.1# |

Manual Integrations  
APPROVED

MMDadoda  
8/10/2015 10:12:25 AM



#94

Benzo(g,h,i)perylene  
Concen: 2.86 ng/ul  
RT: 26.11 min Scan# 3987  
Delta R.T. -0.04 min  
Lab File: BG018302.D  
Acq: 6 Aug 2015 13:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 0.0   | 6.0   | 9.0#  |
| 277     | 29.6  | 21.1  | 31.7  |

