

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG073115\  
 Data File : BG018212.D  
 Acq On : 1 Aug 2015 9:53  
 Operator : TP/UM  
 Sample : G3073-21  
 Misc :  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C02L5

Manual Integrations  
 APPROVED

MMDadoda  
 8/4/2015 12:23:55 PM

Quant Time: Aug 11 16:50:49 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG073115.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sat Aug 01 07:09:30 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.49  | 152  | 52872    | 20.00 | ng/ul | 0.01     |
| 18) Naphthalene-d8        | 10.27 | 136  | 204779   | 20.00 | ng/ul | 0.01     |
| 36) Acenaphthene-d10      | 14.17 | 164  | 101689   | 20.00 | ng/ul | 0.02     |
| 62) Phenanthrene-d10      | 16.92 | 188  | 200848   | 20.00 | ng/ul | 0.02     |
| 78) Chrysene-d12          | 21.13 | 240  | 244147   | 20.00 | ng/ul | 0.02     |
| 86) Perylene-d12          | 23.32 | 264  | 266084   | 20.00 | ng/ul | 0.03     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 2.98  | 96  | 1841    | 2.63  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.69  | 99  | 81225   | 17.09 | ng/ul | 0.02 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.83  | 67  | 47535   | 19.56 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.02  | 132 | 68813   | 19.16 | ng/ul | 0.01 |
| 13) 4-Methylphenol-d8          | 8.22  | 113 | 62626   | 16.18 | ng/ul | 0.01 |
| 19) Nitrobenzene-d5            | 8.64  | 128 | 34787   | 21.57 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.36  | 143 | 28984   | 15.66 | ng/ul | 0.01 |
| 26) 2,4-Dichlorophenol-d3      | 9.91  | 165 | 66325   | 20.27 | ng/ul | 0.02 |
| 29) 4-Chloroaniline-d4         | 10.42 | 131 | 38789   | 9.51  | ng/ul | 0.02 |
| 44) Dimethylphthalate-d6       | 13.58 | 166 | 166344  | 21.17 | ng/ul | 0.01 |
| 47) Acenaphthylene-d8          | 13.86 | 160 | 167099  | 18.34 | ng/ul | 0.02 |
| 52) 4-Nitrophenol-d4           | 0.00  | 143 | 0d      | 0.00  | ng/ul |      |
| 58) Fluorene-d10               | 15.17 | 176 | 116854  | 16.43 | ng/ul | 0.02 |
| 63) 4,6-Dinitro-2-methylphenol | 15.34 | 200 | 1342    | 0.96  | ng/ul | 0.05 |
| 71) Anthracene-d10             | 17.02 | 188 | 152129m | 17.42 | ng/ul | 0.02 |
| 79) Pyrene-d10                 | 19.33 | 212 | 151743  | 12.85 | ng/ul | 0.02 |
| 90) Benzo(a)pyrene-d12         | 23.17 | 264 | 181157  | 13.46 | ng/ul | 0.03 |

## Target Compounds

|                                |       |     |        |       |        | Qvalue |
|--------------------------------|-------|-----|--------|-------|--------|--------|
| 28) Naphthalene                | 10.33 | 128 | 72616  | 7.37  | ng/ul  | 97     |
| 34) 2-Methylnaphthalene        | 11.95 | 142 | 37233  | 4.77  | ng/ul  | 98     |
| 45) Dimethylphthalate          | 13.63 | 163 | 71849  | 9.19  | ng/ul# | 92     |
| 50) Acenaphthene               | 14.23 | 153 | 29484  | 5.00  | ng/ul  | 98     |
| 54) Dibenzofuran               | 14.57 | 168 | 24355  | 2.74  | ng/ul# | 66     |
| 59) Fluorene                   | 15.23 | 166 | 30121  | 3.93  | ng/ul# | 79     |
| 70) Phenanthrene               | 16.97 | 178 | 113315 | 11.11 | ng/ul  | 96     |
| 72) Anthracene                 | 17.06 | 178 | 30041  | 2.96  | ng/ul# | 86     |
| 77) Fluoranthene               | 19.00 | 202 | 222315 | 19.84 | ng/ul# | 93     |
| 80) Pyrene                     | 19.36 | 202 | 206297 | 13.93 | ng/ul# | 93     |
| 83) Benzo(a)anthracene         | 21.11 | 228 | 103036 | 7.84  | ng/ul# | 92     |
| 84) Bis(2-ethylhexyl)phthalate | 21.05 | 149 | 45443  | 5.60  | ng/ul# | 98     |
| 85) Chrysene                   | 21.17 | 228 | 124933 | 10.37 | ng/ul# | 93     |
| 88) Benzo(b)fluoranthene       | 22.66 | 252 | 200191 | 12.52 | ng/ul# | 75     |
| 89) Benzo(k)fluoranthene       | 22.69 | 252 | 68983m | 4.70  | ng/ul  |        |
| 91) Benzo(a)pyrene             | 23.22 | 252 | 127179 | 8.89  | ng/ul# | 72     |
| 92) Indeno(1,2,3-cd)pyrene     | 25.52 | 276 | 68570  | 4.14  | ng/ul# | 86     |
| 94) Benzo(g,h,i)perylene       | 26.21 | 276 | 54331  | 4.02  | ng/ul  | 95     |

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

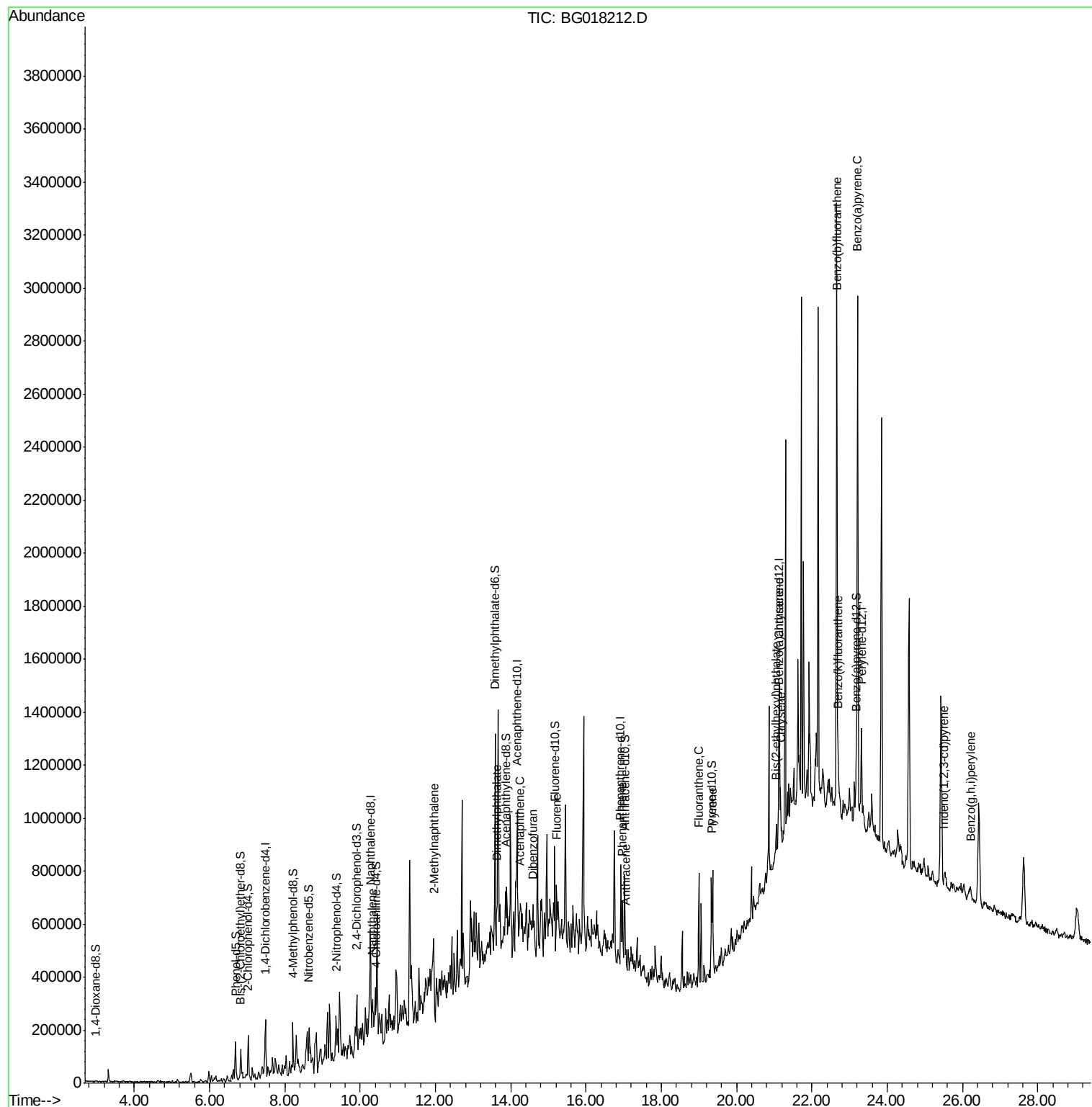
Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG073115\  
Data File : BG018212.D  
Acq On : 1 Aug 2015 9:53  
Operator : TP/UM  
Sample : G3073-21  
Misc :  
ALS Vial : 32 Sample Multiplier: 1

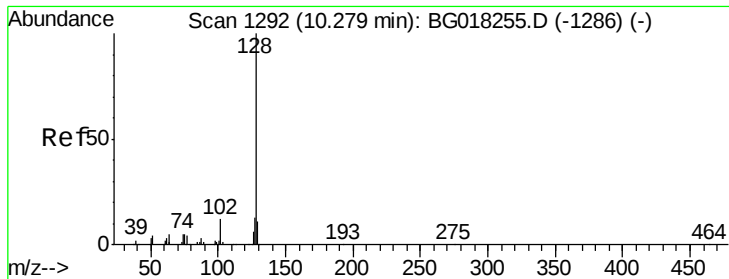
Instrument :  
BNA\_G  
ClientSampleId :  
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Quant Time: Aug 11 16:50:49 2015  
Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG073115.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Sat Aug 01 07:09:30 2015  
Response via : Initial Calibration





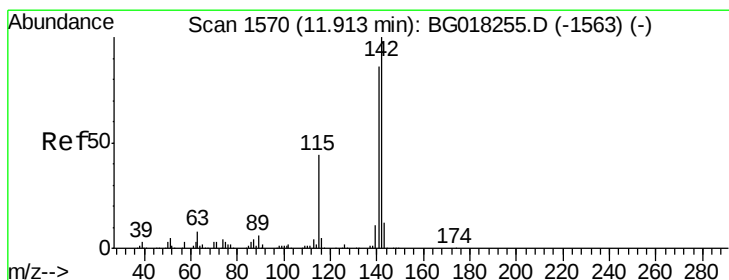
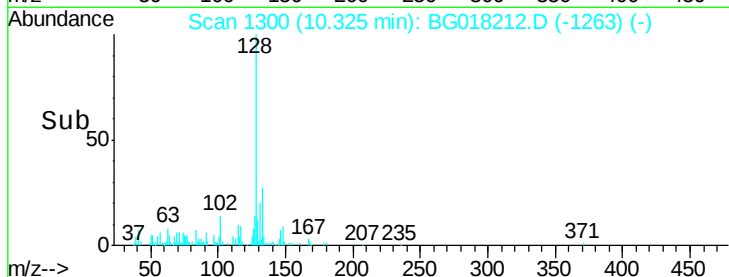
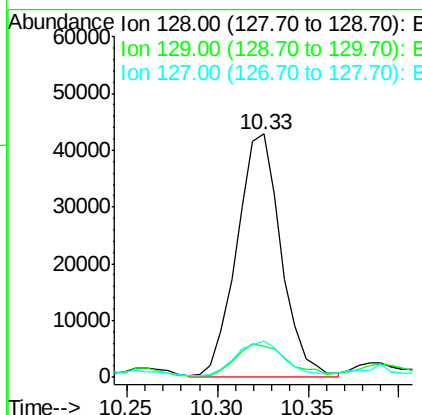
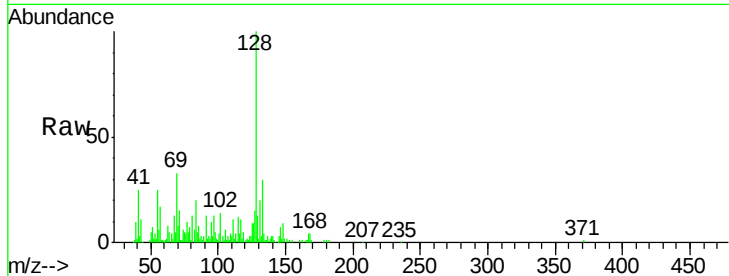
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Naphthalene  
Concen: 7.37 ng/ul  
RT: 10.33 min Scan# 1300  
Delta R.T. 0.02 min  
Lab File: BG018212.D  
Acq: 1 Aug 2015 9:53

Instrument :  
BNA\_G  
ClientSampleId :  
C02L5

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 128     | 100   |            |            |
| 129     | 12.9  | 9.1        | 13.7       |
| 127     | 14.8  | 11.2       | 16.8       |

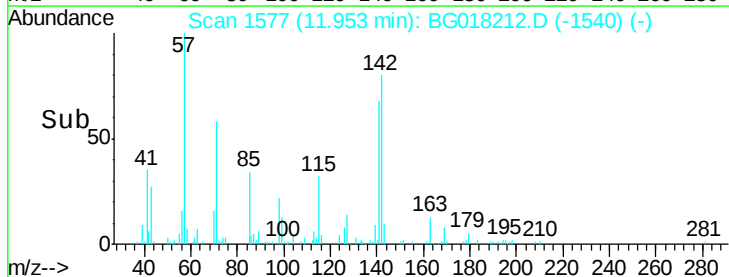
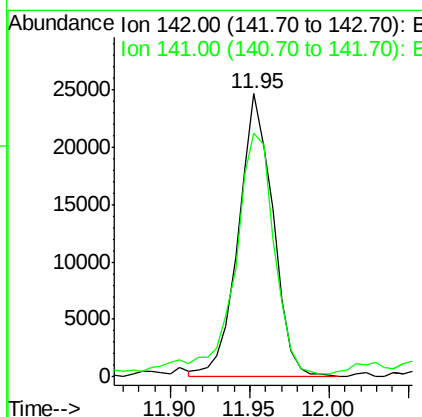
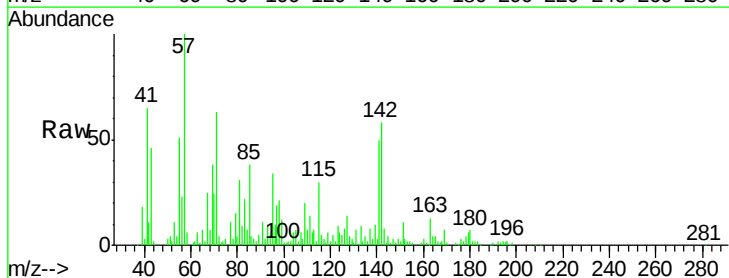
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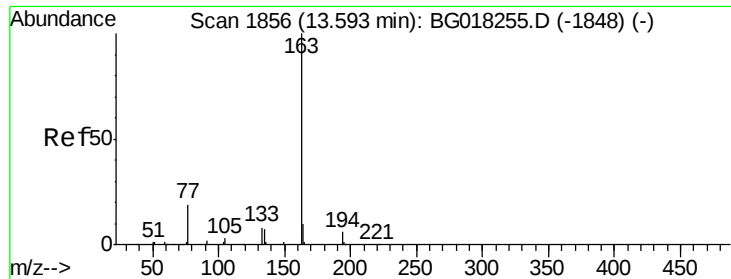
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#34  
2-Methylnaphthalene  
Concen: 4.77 ng/ul  
RT: 11.95 min Scan# 1577  
Delta R.T. 0.02 min  
Lab File: BG018212.D  
Acq: 1 Aug 2015 9:53

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 142     | 100   |            |            |
| 141     | 86.3  | 70.3       | 105.5      |





#45

Dimethylphthalate

Concen: 9.19 ng/ul

RT: 13.63 min Scan# 1862

Delta R.T. 0.01 min

Lab File: BG018212.D

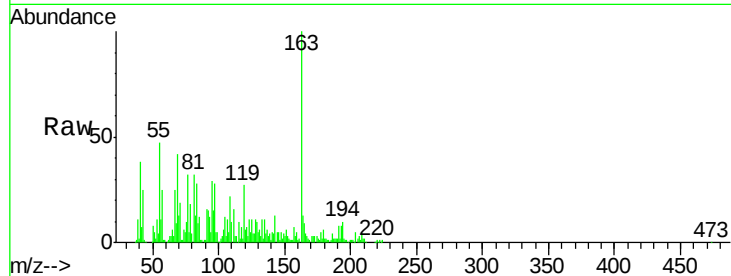
Acq: 1 Aug 2015 9:53

Instrument :

BNA\_G

ClientSampleId :

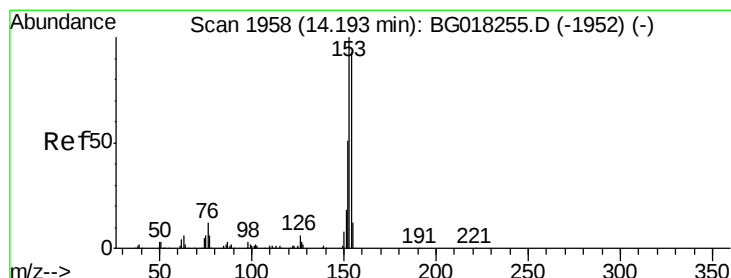
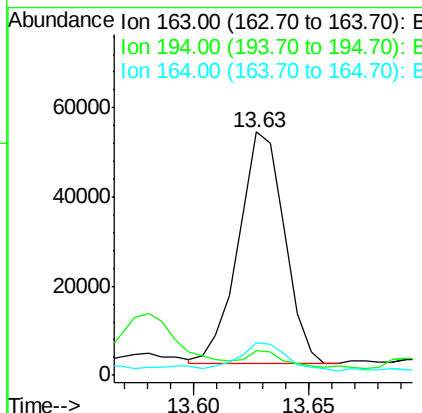
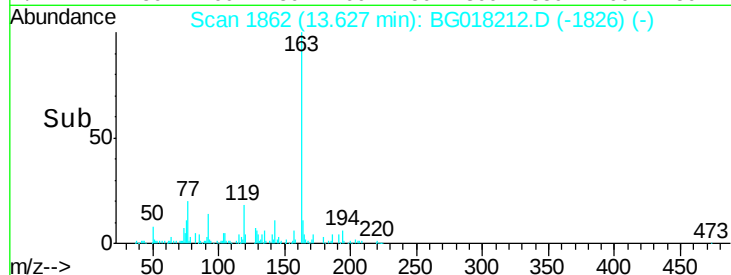
C02L5



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 163   | Resp: | 71849 |
| Ion Ratio | Lower | Upper |       |
| 163       | 100   |       |       |
| 194       | 10.0  | 5.2   | 7.8#  |
| 164       | 13.1  | 8.4   | 12.6# |

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#50

Acenaphthene

Concen: 5.00 ng/ul

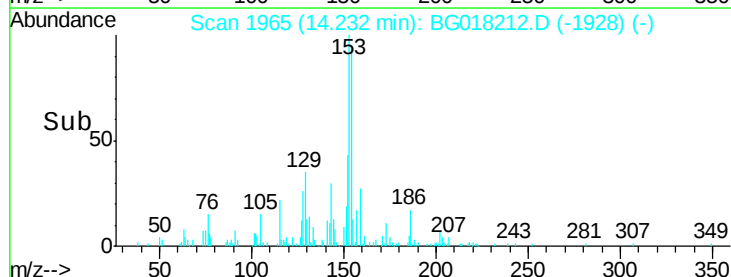
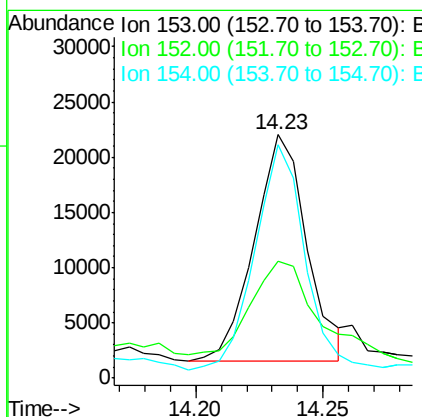
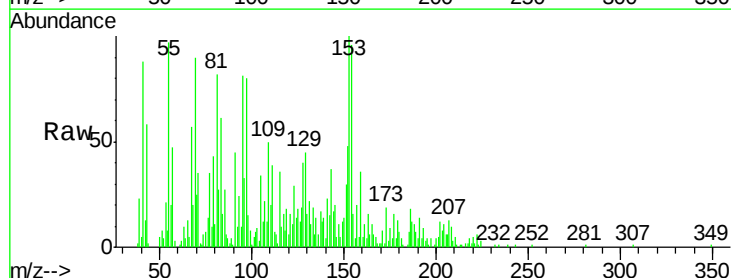
RT: 14.23 min Scan# 1965

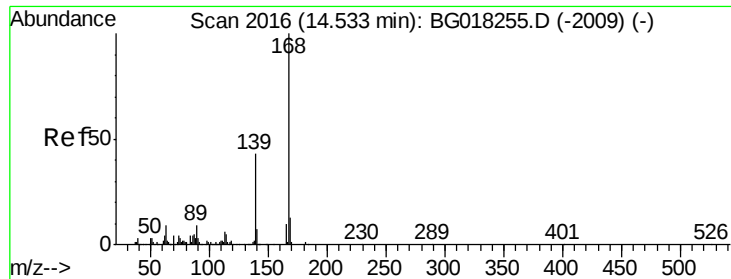
Delta R.T. 0.02 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 29484 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 47.8  | 38.7  | 58.1  |
| 154       | 95.8  | 74.8  | 112.2 |





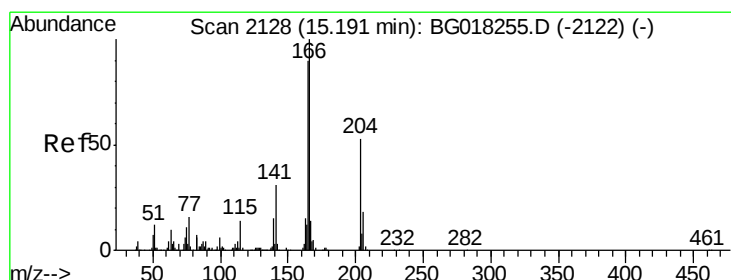
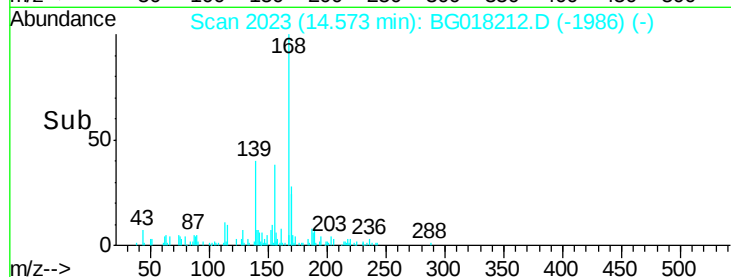
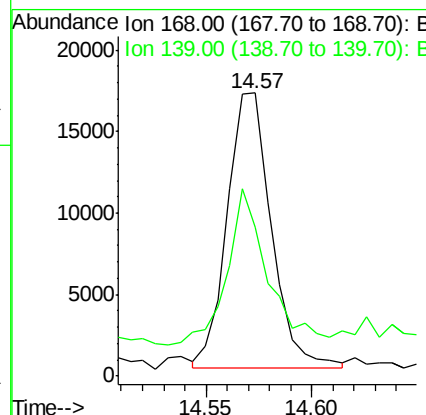
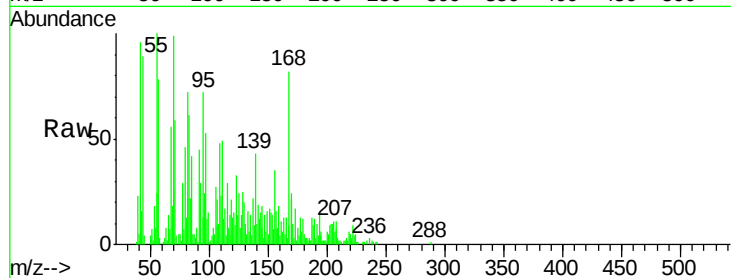
#54  
Dibenzenofuran  
Concen: 2.74 ng/ul  
RT: 14.57 min Scan# 2023  
Delta R.T. 0.02 min  
Lab File: BG018212.D  
Acq: 1 Aug 2015 9:53

Instrument :  
BNA\_G  
ClientSampleId :  
C02L5

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 52.6  | 26.8  | 40.2# |

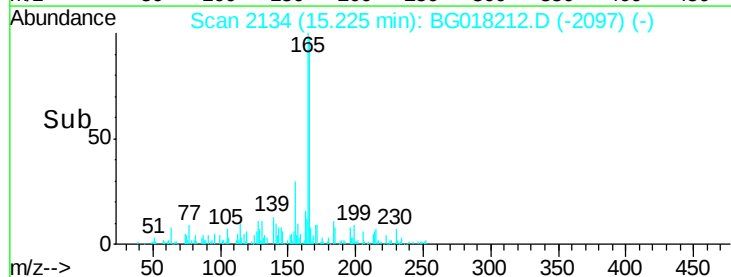
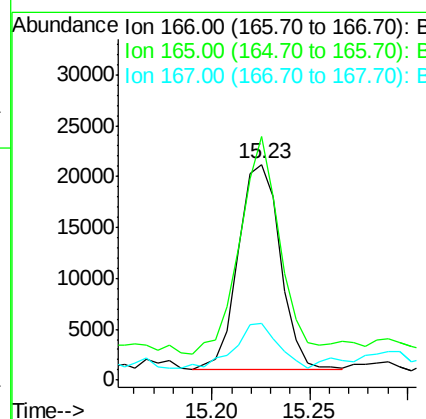
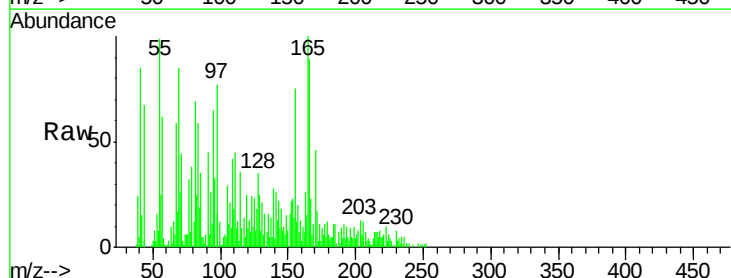
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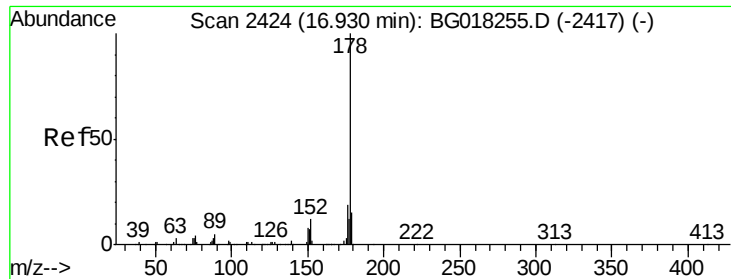
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#59  
Fluorene  
Concen: 3.93 ng/ul  
RT: 15.23 min Scan# 2134  
Delta R.T. 0.02 min  
Lab File: BG018212.D  
Acq: 1 Aug 2015 9:53

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 166     | 100   |       |        |
| 165     | 112.9 | 75.1  | 112.7# |
| 167     | 26.1  | 11.8  | 17.6#  |





#70

Phenanthrene

Concen: 11.11 ng/ul

RT: 16.97 min Scan# 2431

Delta R.T. 0.02 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

Instrument :

BNA\_G

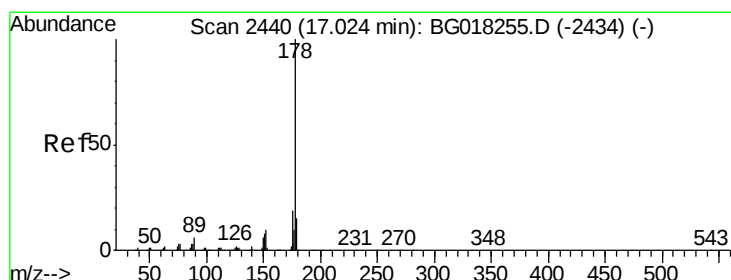
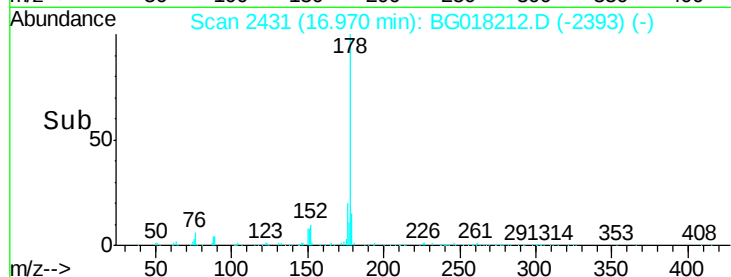
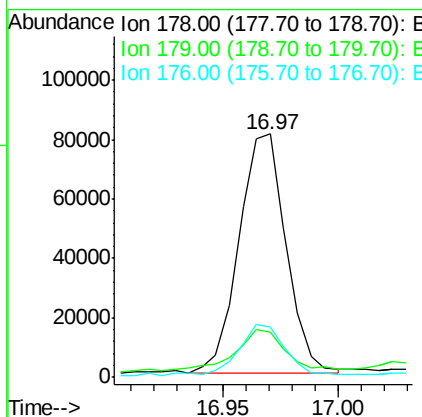
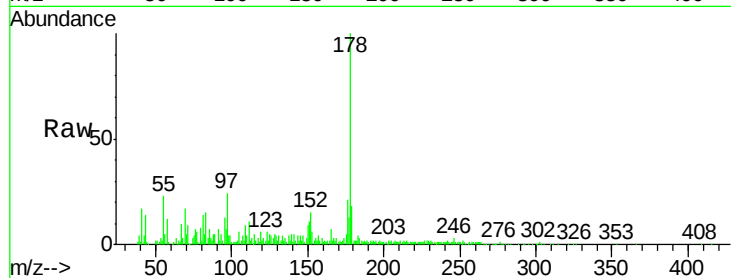
ClientSampleId :

C02L5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 113315 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 179       | 18.4  | 12.8  | 19.2   |
| 176       | 20.9  | 16.0  | 24.0   |

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#72

Anthracene

Concen: 2.96 ng/ul

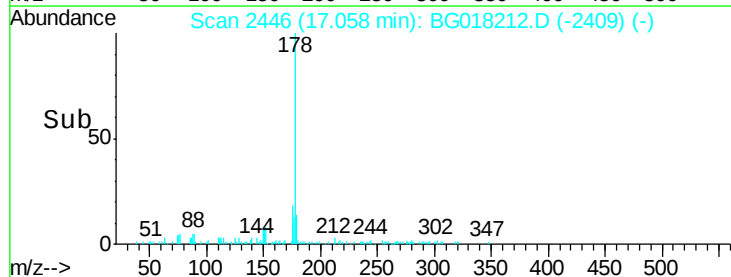
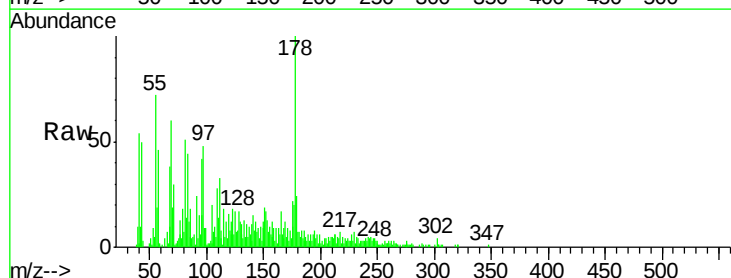
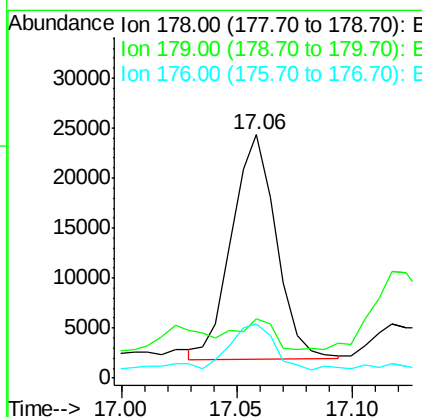
RT: 17.06 min Scan# 2446

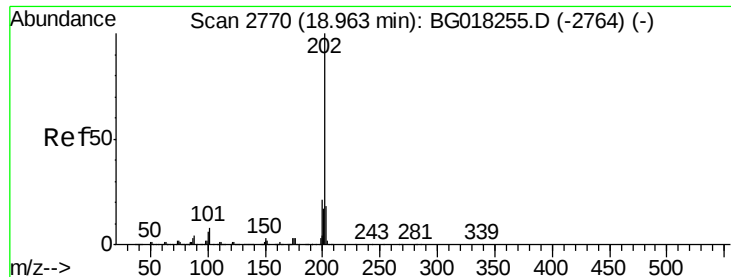
Delta R.T. 0.02 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 30041 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 24.1  | 12.2  | 18.2# |
| 176       | 22.1  | 14.8  | 22.2  |





#77

Fluoranthene

Concen: 19.84 ng/ul

RT: 19.00 min Scan# 2776

Delta R.T. 0.02 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

Instrument :

BNA\_G

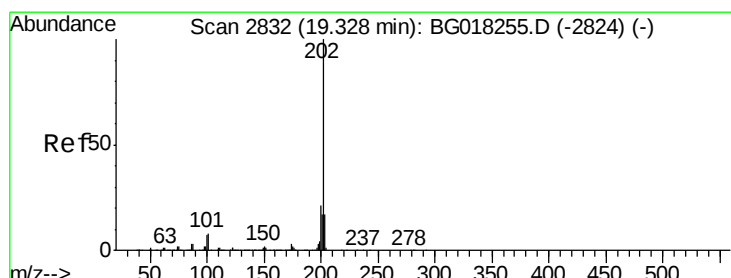
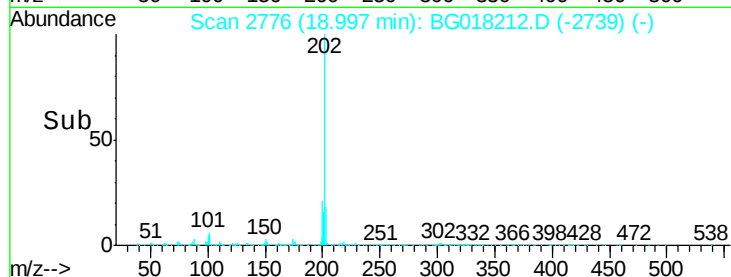
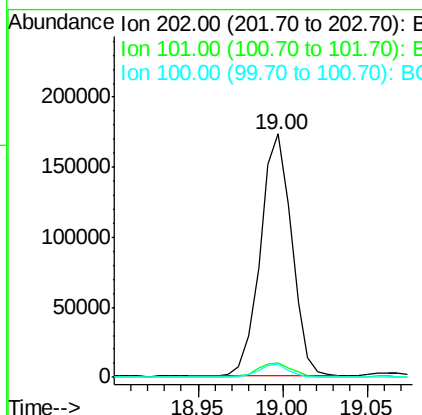
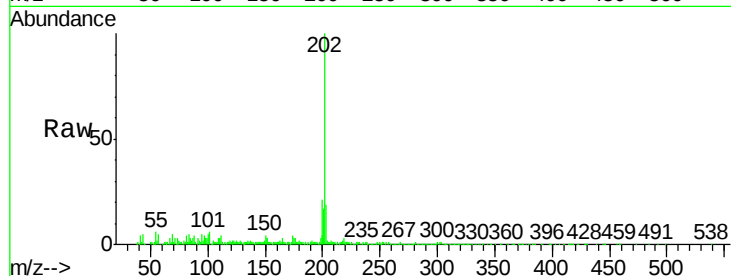
ClientSampleId :

C02L5

|     |       |       |       |        |
|-----|-------|-------|-------|--------|
| Tgt | Ion   | 202   | Resp: | 222315 |
| Ion | Ratio | Lower | Upper |        |
| 202 | 100   |       |       |        |
| 101 | 6.1   | 7.5   | 11.3# |        |
| 100 | 5.3   | 5.5   | 8.3#  |        |

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#80

Pyrene

Concen: 13.93 ng/ul

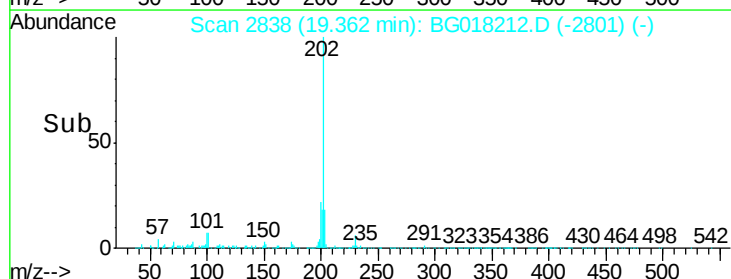
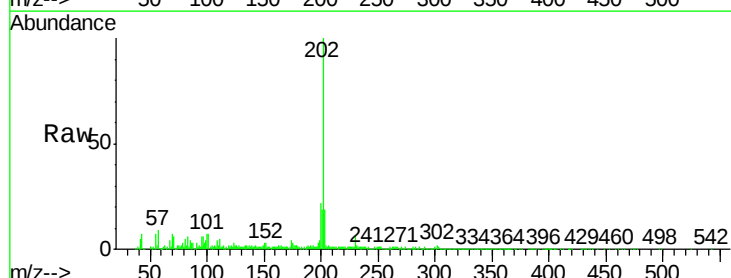
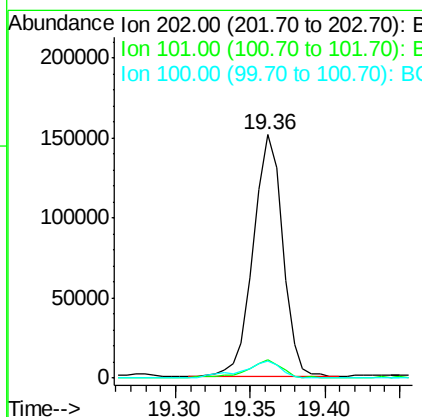
RT: 19.36 min Scan# 2838

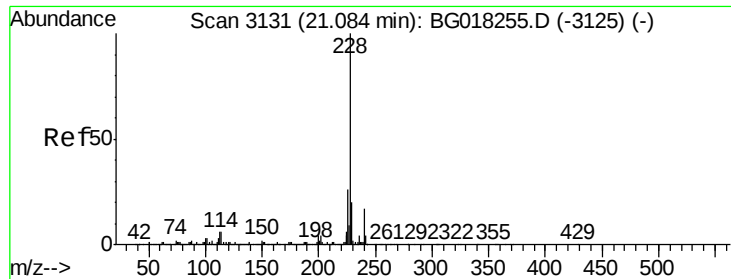
Delta R.T. 0.02 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

|     |       |       |       |        |
|-----|-------|-------|-------|--------|
| Tgt | Ion   | 202   | Resp: | 206297 |
| Ion | Ratio | Lower | Upper |        |
| 202 | 100   |       |       |        |
| 101 | 7.4   | 8.1   | 12.1# |        |
| 100 | 6.7   | 7.4   | 11.0# |        |





#83

Benzo(a)anthracene

Concen: 7.84 ng/ul

RT: 21.11 min Scan# 3136

Delta R.T. 0.02 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

Instrument :

BNA\_G

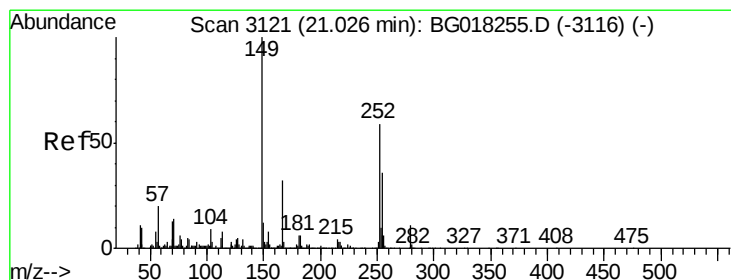
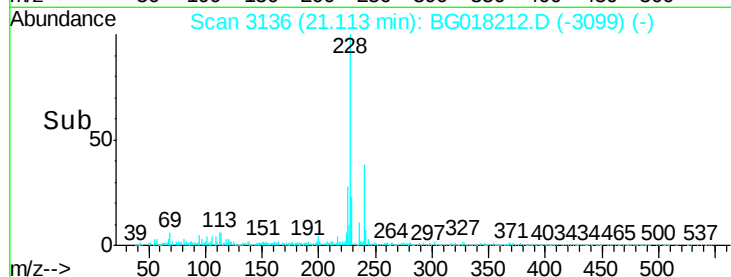
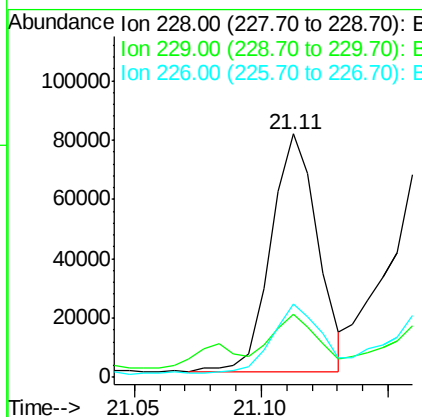
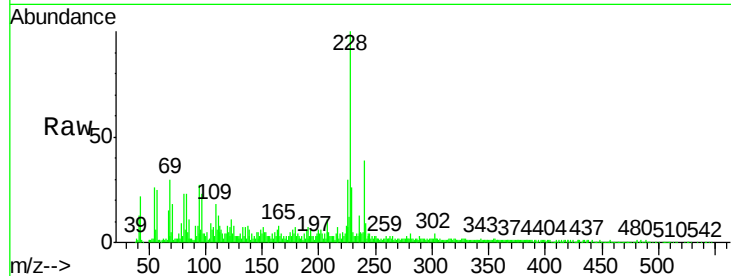
ClientSampleId :

C02L5

|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 228  | Resp: | 103036 |
| Ion Ratio |      | Lower | Upper  |
| 228       | 100  |       |        |
| 229       | 26.1 | 16.5  | 24.7#  |
| 226       | 29.9 | 21.5  | 32.3   |

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#84

Bis(2-ethylhexyl)phthalate

Concen: 5.60 ng/ul

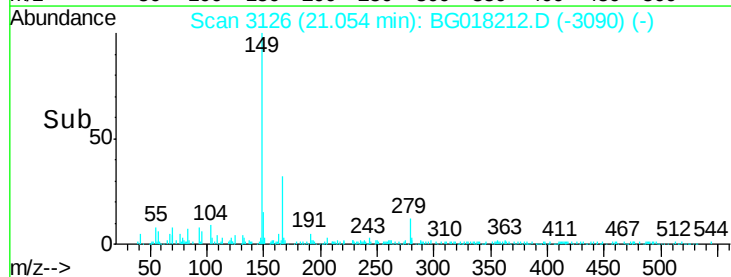
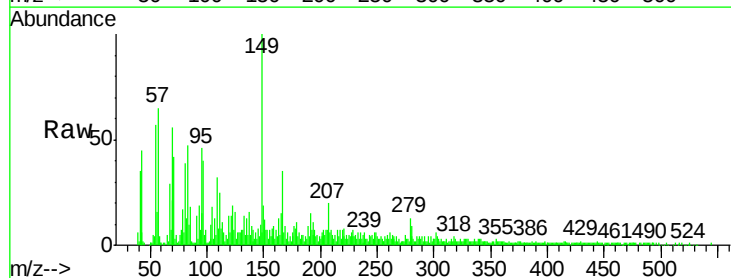
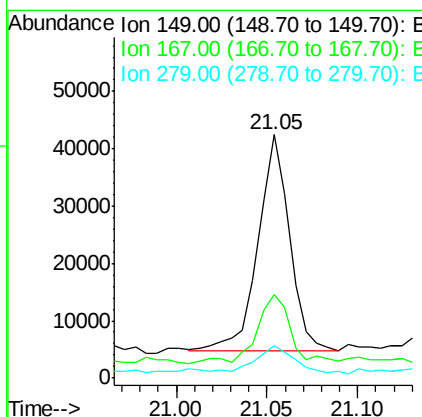
RT: 21.05 min Scan# 3126

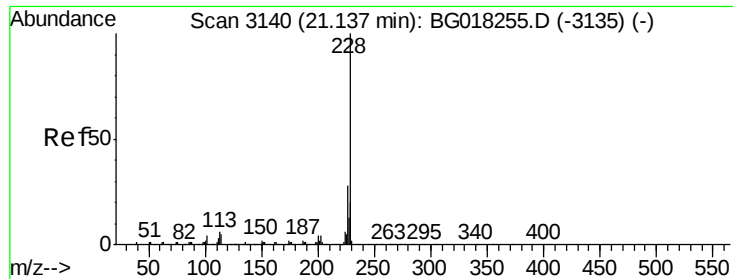
Delta R.T. 0.01 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 149  | Resp: | 45443 |
| Ion Ratio |      | Lower | Upper |
| 149       | 100  |       |       |
| 167       | 34.6 | 27.4  | 41.2  |
| 279       | 13.4 | 8.3   | 12.5# |





#85

Chrysene

Concen: 10.37 ng/ul

RT: 21.17 min Scan# 3145

Delta R.T. 0.02 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

Instrument :

BNA\_G

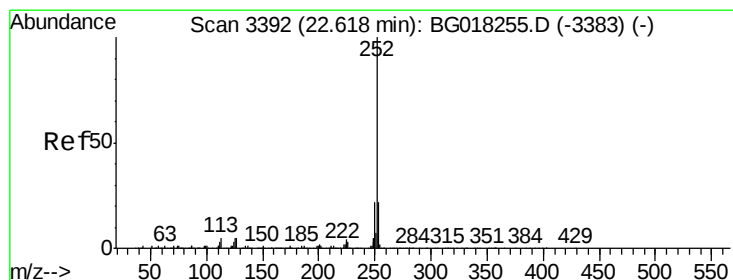
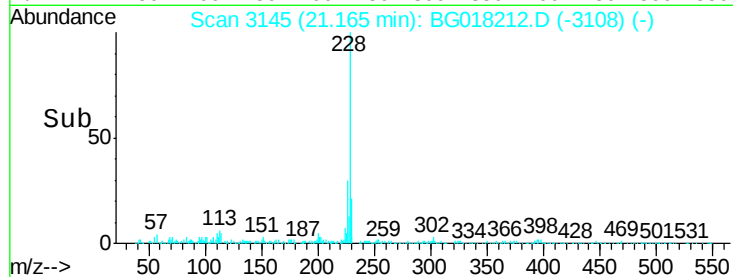
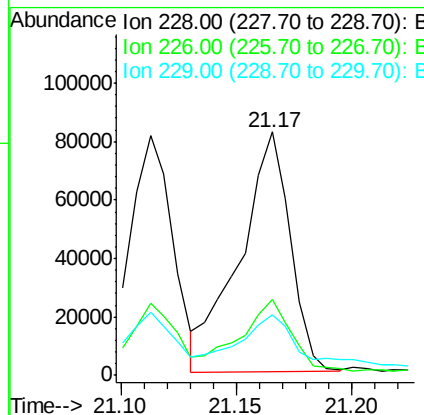
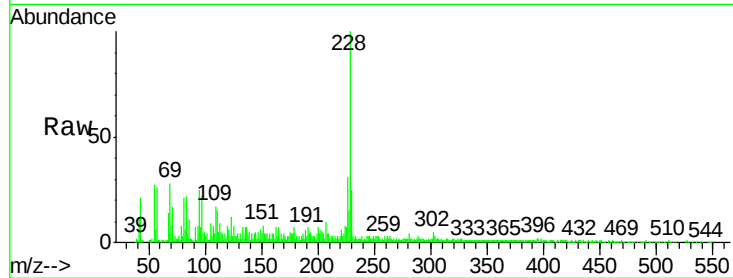
ClientSampleId :

C02L5

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 124933 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 31.4  | 22.7  | 34.1   |
| 229       | 24.8  | 16.2  | 24.2#  |

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#88

Benzo(b)fluoranthene

Concen: 12.52 ng/ul

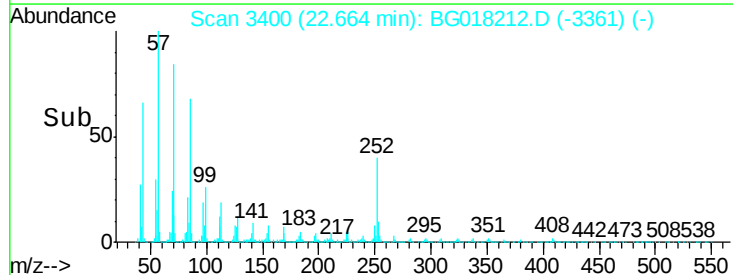
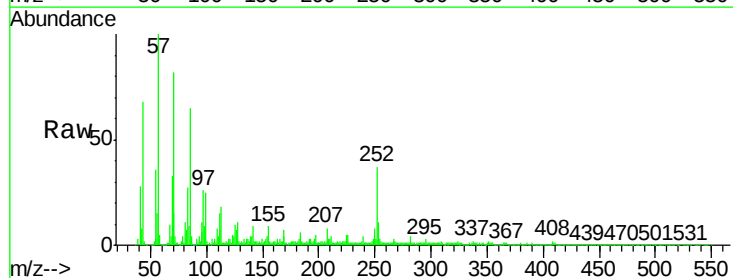
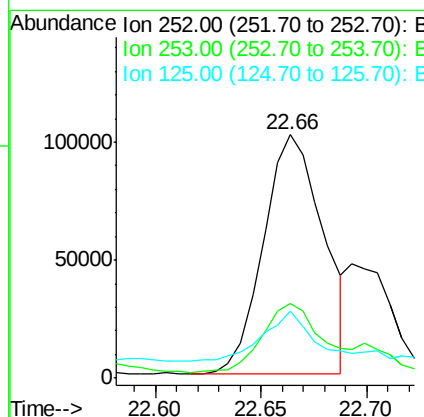
RT: 22.66 min Scan# 3400

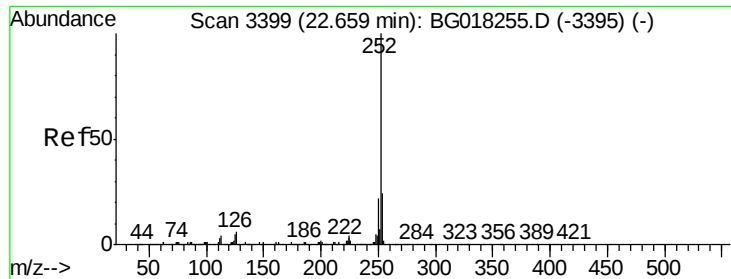
Delta R.T. 0.03 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 200191 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 30.6  | 18.5  | 27.7#  |
| 125       | 27.3  | 7.4   | 11.0#  |





#89

Benzo(k)fluoranthene

Concen: 4.70 ng/ul m

RT: 22.69 min Scan# 3405

Delta R.T. 0.02 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

Instrument :

BNA\_G

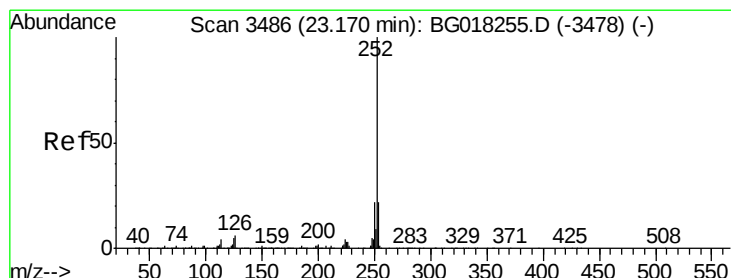
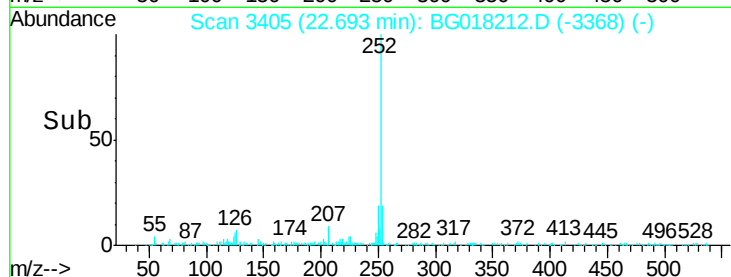
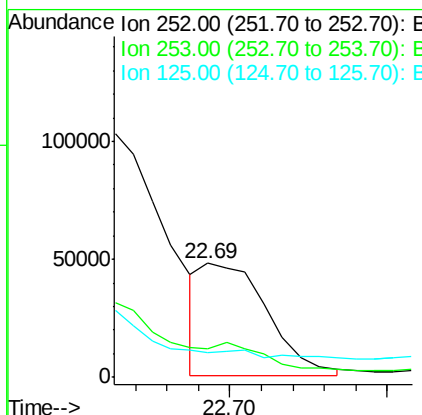
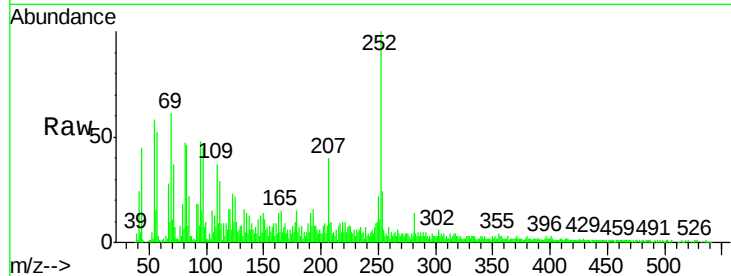
ClientSampleId :

C02L5

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 68983 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 24.5  | 18.2  | 27.2  |
| 125       | 21.8  | 7.5   | 11.3# |

Manual Integrations  
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#91

Benzo(a)pyrene

Concen: 8.89 ng/ul

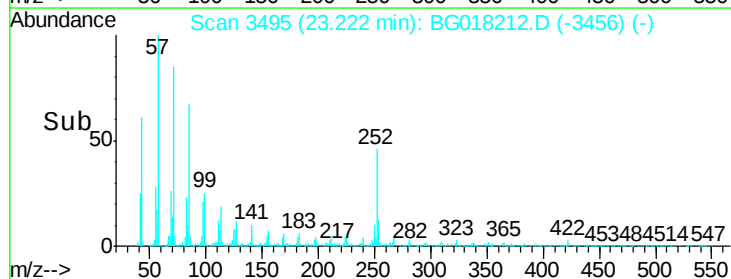
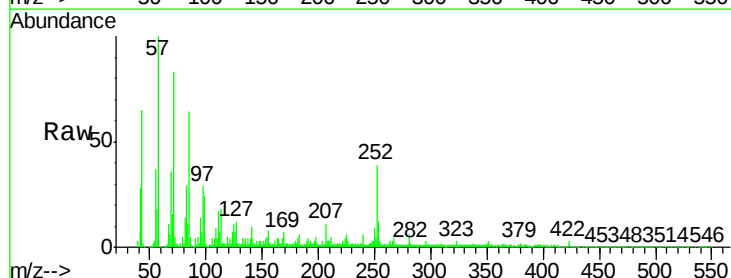
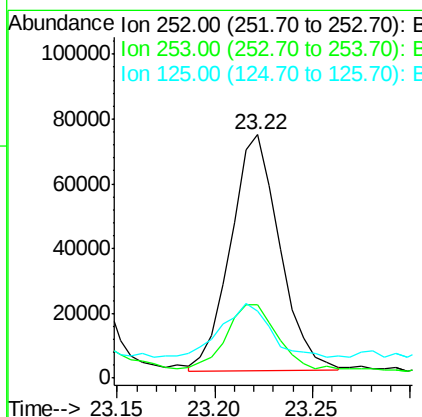
RT: 23.22 min Scan# 3495

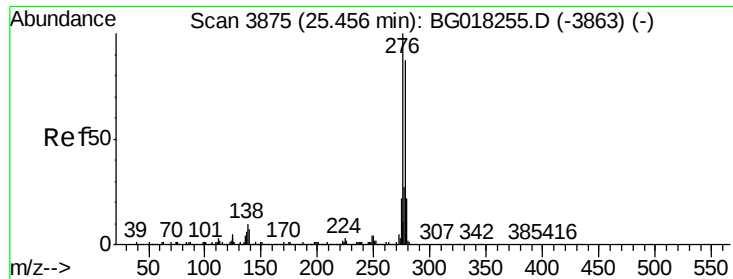
Delta R.T. 0.03 min

Lab File: BG018212.D

Acq: 1 Aug 2015 9:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 127179 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 30.3  | 17.4  | 26.2#  |
| 125       | 27.5  | 7.3   | 10.9#  |





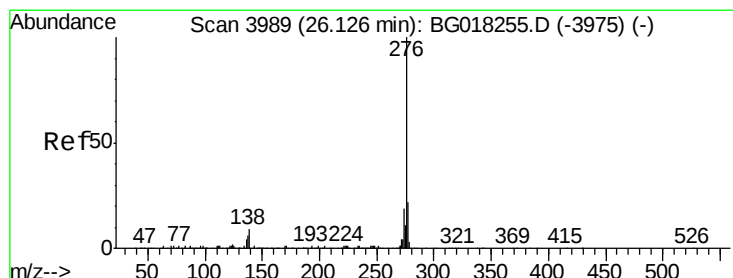
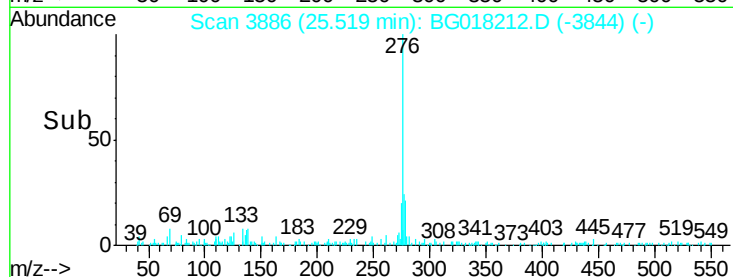
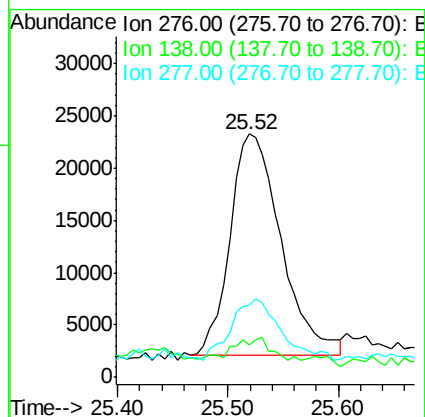
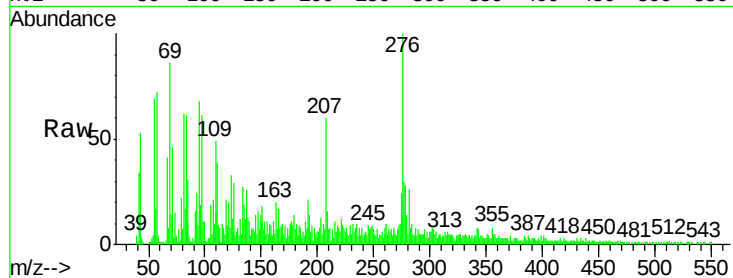
#92  
 Indeno(1,2,3-cd)pyrene  
 Concen: 4.14 ng/ul  
 RT: 25.52 min Scan# 3886  
 Delta R.T. 0.05 min  
 Lab File: BG018212.D  
 Acq: 1 Aug 2015 9:53

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C02L5

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 13.2  | 17.2  | 25.8# |
| 277     | 29.5  | 19.5  | 29.3# |

Manual Integrations  
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#94  
 Benzo(g,h,i)perylene  
 Concen: 4.02 ng/ul  
 RT: 26.21 min Scan# 4003  
 Delta R.T. 0.06 min  
 Lab File: BG018212.D  
 Acq: 1 Aug 2015 9:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 16.1  | 15.1  | 22.7  |
| 277     | 26.9  | 19.8  | 29.6  |

