

Data Path : Z:\HPCHEM1\BNA G\DATA\BG081115\  
 Data File : BG018389.D  
 Acq On : 11 Aug 2015 19:58  
 Operator : UM/MA  
 Sample : G3154-10  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C02L7

Manual Integrations  
 APPROVED

MMDadoda  
 8/12/2015 3:53:32 PM

Quant Time: Aug 12 03:40:01 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080915.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Aug 12 00:54:17 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.04  | 152  | 134475   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.85 | 136  | 615522   | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.67 | 164  | 355271   | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.42 | 188  | 710323   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.69 | 240  | 611960   | 20.00 | ng/ul | 0.01     |
| 86) Perylene-d12          | 24.92 | 264  | 617227   | 20.00 | ng/ul | 0.03     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.48  | 96  | 5151   | 1.69  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.20  | 99  | 96965  | 7.94  | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.36  | 67  | 82242  | 10.87 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.57  | 132 | 82853  | 8.86  | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.74  | 113 | 33348  | 3.25  | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.20  | 128 | 55554  | 11.58 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.92  | 143 | 56116  | 11.48 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.47 | 165 | 93962  | 9.06  | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.98 | 131 | 38805  | 3.31  | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 14.07 | 166 | 328858 | 11.00 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.36 | 160 | 413593 | 10.99 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.86 | 143 | 35865  | 6.67  | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.66 | 176 | 267298 | 10.27 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.77 | 200 | 5911   | 1.69  | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.51 | 188 | 338797 | 9.97  | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.80 | 212 | 288796 | 9.10  | ng/ul | 0.01 |
| 90) Benzo(a)pyrene-d12         | 24.69 | 264 | 216442 | 6.61  | ng/ul | 0.02 |

## Target Compounds

|                                |       |     |         |       |        | Ovalue |
|--------------------------------|-------|-----|---------|-------|--------|--------|
| 28) Naphthalene                | 10.90 | 128 | 64210   | 1.97  | ng/ul  | 97     |
| 45) Dimethylphthalate          | 14.11 | 163 | 99741   | 3.38  | ng/ul  | 99     |
| 50) Acenaphthene               | 14.74 | 153 | 45677   | 1.72  | ng/ul  | 93     |
| 54) Dibenzofuran               | 15.07 | 168 | 48051   | 1.39  | ng/ul  | 97     |
| 59) Fluorene                   | 15.71 | 166 | 51697   | 1.74  | ng/ul  | 97     |
| 70) Phenanthrene               | 17.46 | 178 | 1047997 | 27.19 | ng/ul  | 100    |
| 72) Anthracene                 | 17.54 | 178 | 288359  | 7.34  | ng/ul  | 100    |
| 75) Carbazole                  | 17.81 | 167 | 117517  | 3.41  | ng/ul  | 100    |
| 76) Di-n-butylphthalate        | 18.37 | 149 | 52382   | 1.16  | ng/ul# | 95     |
| 77) Fluoranthene               | 19.47 | 202 | 1667761 | 40.52 | ng/ul  | 96     |
| 80) Pyrene                     | 19.84 | 202 | 1444285 | 34.90 | ng/ul  | 98     |
| 83) Benzo(a)anthracene         | 21.67 | 228 | 802344  | 21.15 | ng/ul  | 93     |
| 84) Bis(2-ethylhexyl)phthalate | 21.58 | 149 | 112812  | 4.56  | ng/ul# | 99     |
| 85) Chrysene                   | 21.73 | 228 | 735540  | 20.73 | ng/ul  | 97     |
| 88) Benzo(b)fluoranthene       | 23.90 | 252 | 847609  | 21.86 | ng/ul# | 93     |
| 89) Benzo(k)fluoranthene       | 23.95 | 252 | 334661m | 8.96  | ng/ul  |        |
| 91) Benzo(a)pyrene             | 24.77 | 252 | 582955  | 15.81 | ng/ul# | 90     |
| 92) Indeno(1,2,3-cd)pyrene     | 28.61 | 276 | 282554  | 6.62  | ng/ul# | 92     |
| 94) Benzo(g,h,i)perylene       | 29.77 | 276 | 236952  | 6.61  | ng/ul  | 94     |

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

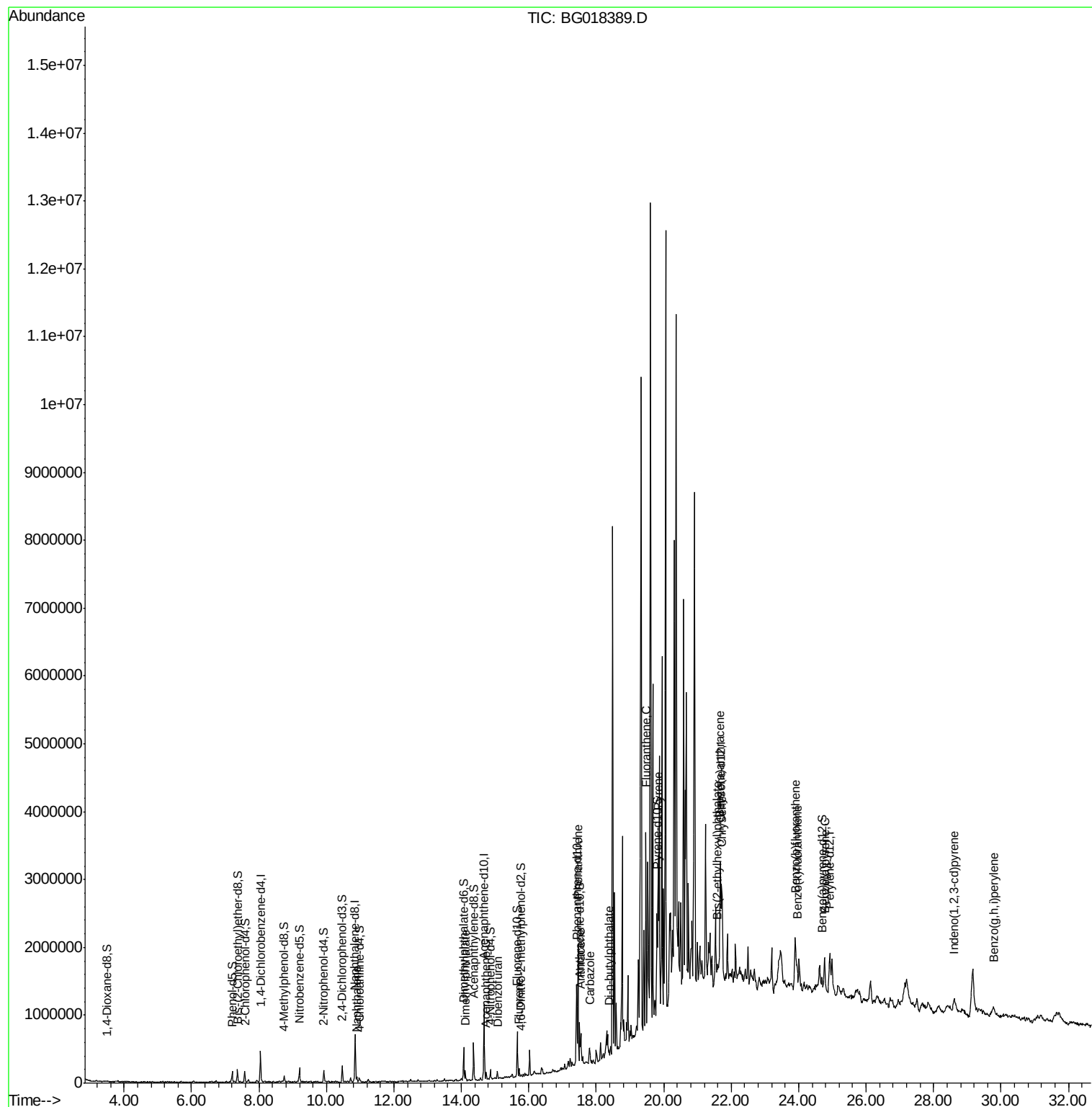
Data Path : Z:\HPCHEM1\BNA G\DATA\BG081115\  
Data File : BG018389.D  
Acq On : 11 Aug 2015 19:58  
Operator : UM/MA  
Sample : G3154-10  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

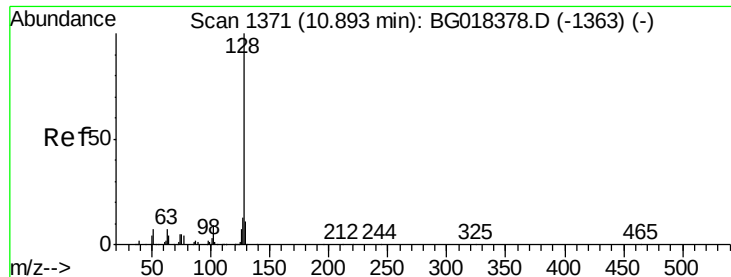
Instrument :  
BNA\_G  
ClientSampleId :  
C02L7

Manual Integrations  
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8/12/2015 3:53:32 PM

Quant Time: Aug 12 03:40:01 2015  
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG080915.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Aug 12 00:54:17 2015  
Response via : Initial Calibration





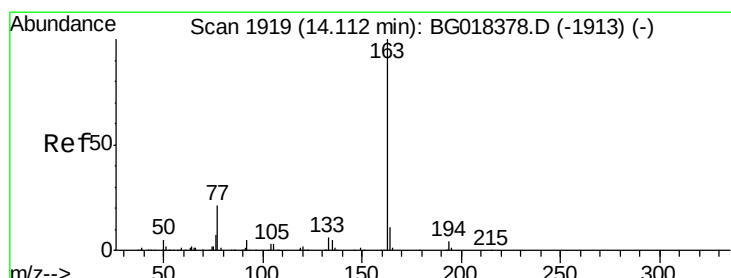
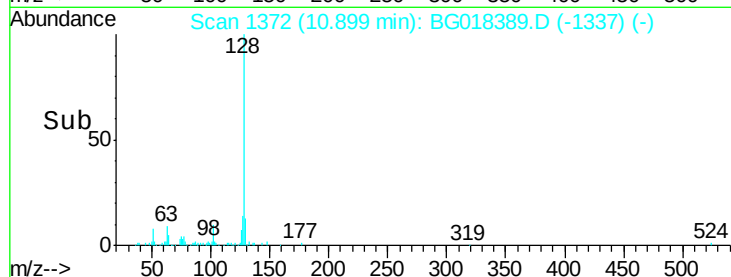
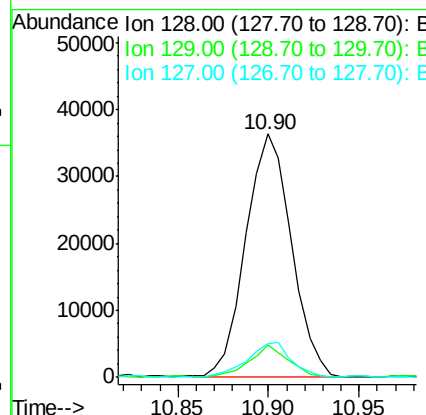
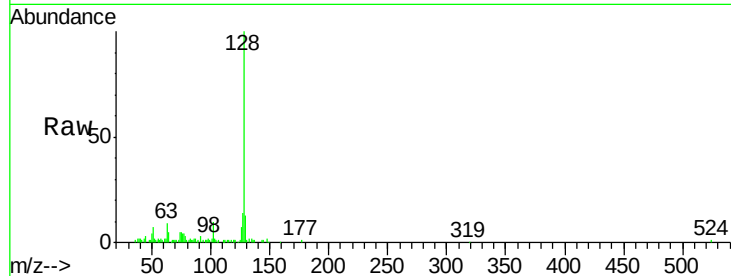
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Naphthalene  
Concen: 1.97 ng/ul  
RT: 10.90 min Scan# 1372  
Delta R.T. 0.01 min  
Lab File: BG018389.D  
Acq: 11 Aug 2015 19:58

Instrument :  
BNA\_G  
ClientSampleId :  
C02L7

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:128 | Resp: | 64210     |
| Ion Ratio   | Lower | Upper     |
| 128         | 100   |           |
| 129         | 13.5  | 9.6 14.4  |
| 127         | 13.8  | 10.5 15.7 |

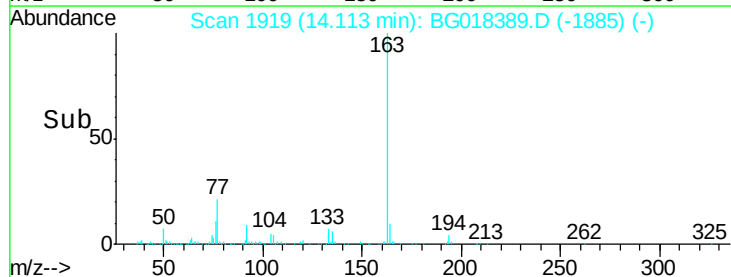
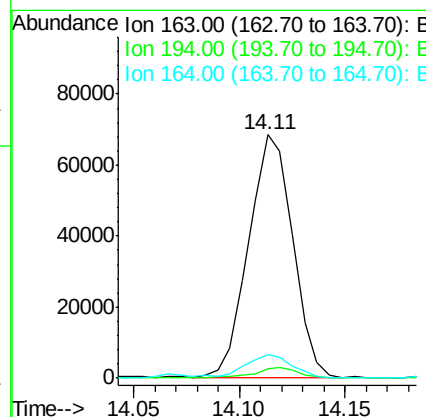
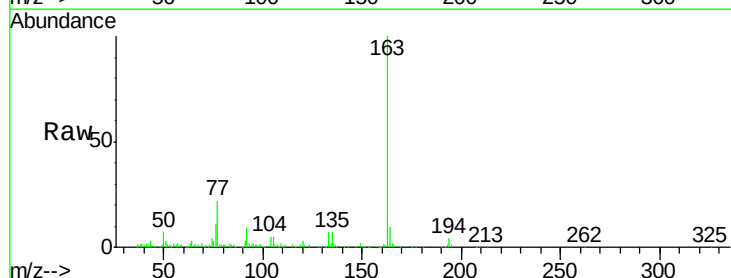
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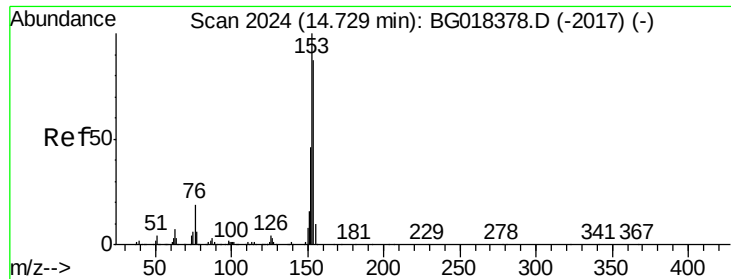
MMDadoda  
8/12/2015 3:53:32 PM



#45  
Dimethylphthalate  
Concen: 3.38 ng/ul  
RT: 14.11 min Scan# 1919  
Delta R.T. 0.00 min  
Lab File: BG018389.D  
Acq: 11 Aug 2015 19:58

|             |       |          |
|-------------|-------|----------|
| Tgt Ion:163 | Resp: | 99741    |
| Ion Ratio   | Lower | Upper    |
| 163         | 100   |          |
| 194         | 3.8   | 2.9 4.3  |
| 164         | 9.9   | 7.7 11.5 |





#50

Acenaphthene

Concen: 1.72 ng/ul

RT: 14.74 min Scan# 2025

Delta R.T. 0.01 min

Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

Instrument :

BNA\_G

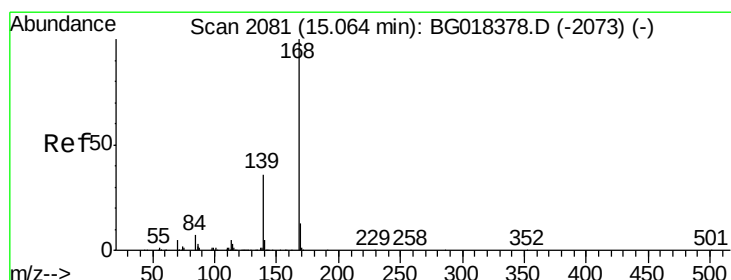
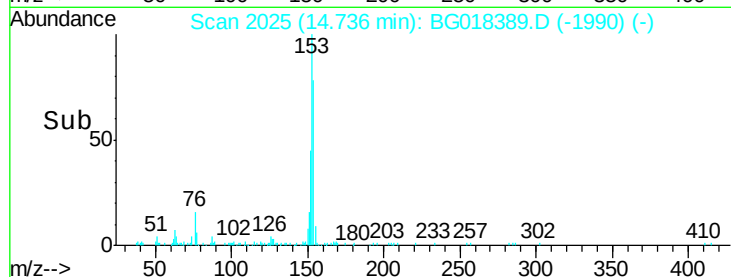
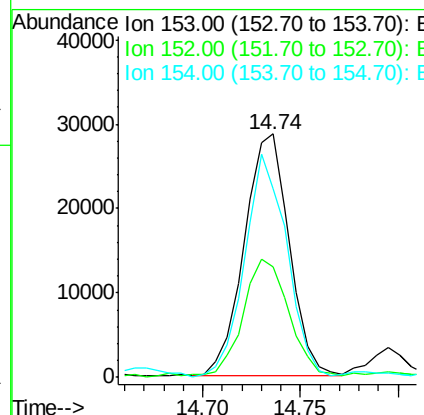
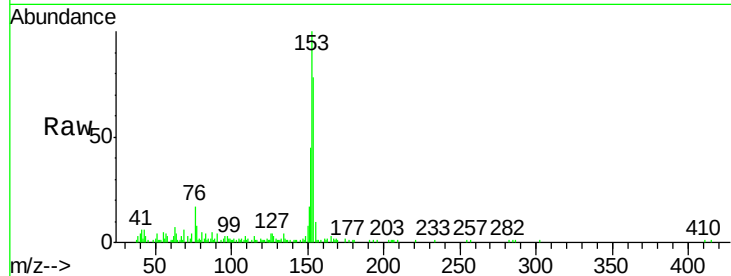
ClientSampleId :

C02L7

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 153   | Resp: | 45677 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 45.4  | 38.2  | 57.4  |
| 154       | 77.7  | 68.6  | 103.0 |

Manual Integrations  
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#54

Dibenzofuran

Concen: 1.39 ng/ul

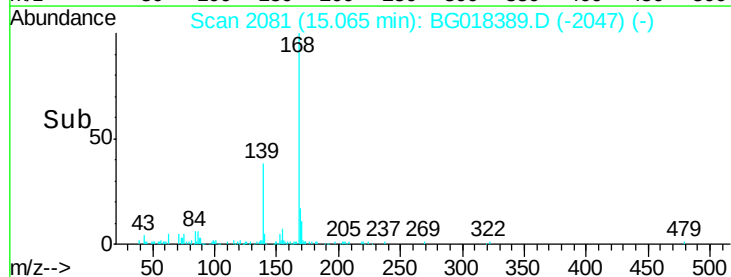
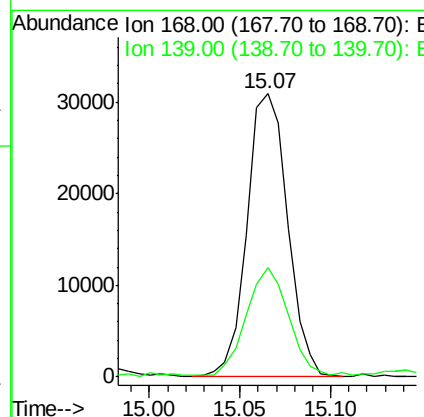
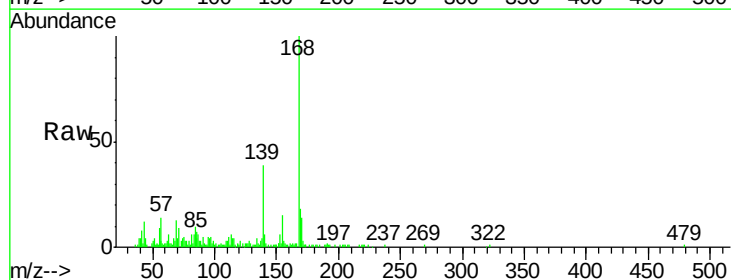
RT: 15.07 min Scan# 2081

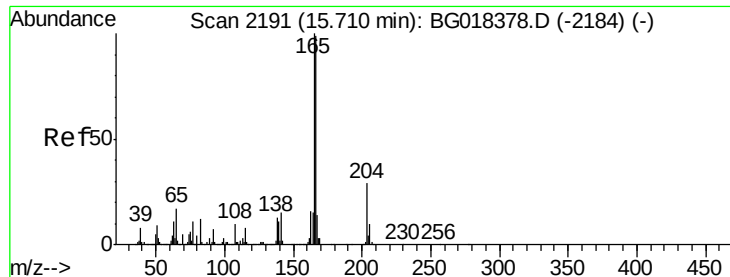
Delta R.T. 0.00 min

Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 168   | Resp: | 48051 |
| Ion Ratio | Lower | Upper |       |
| 168       | 100   |       |       |
| 139       | 38.8  | 29.7  | 44.5  |





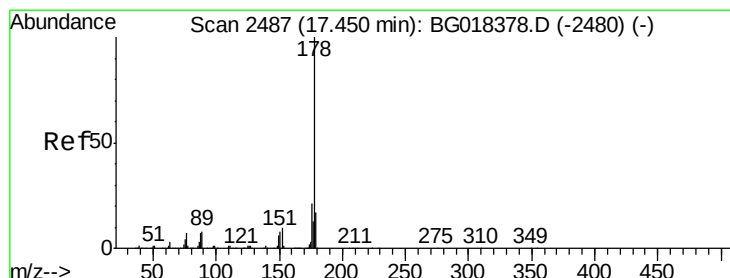
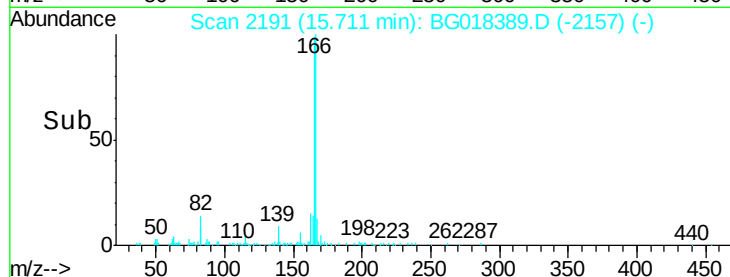
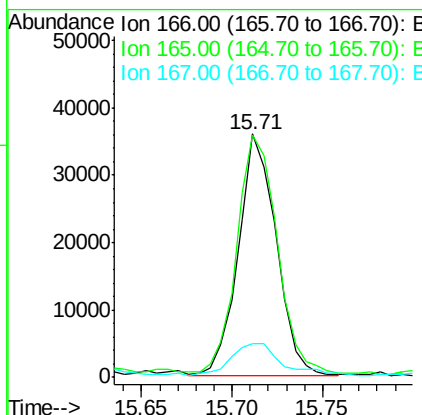
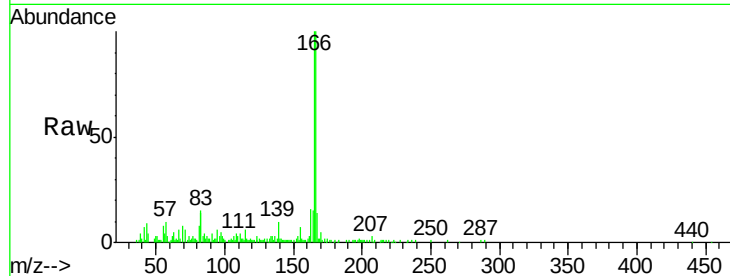
#59  
**Fluorene**  
 Concen: 1.74 ng/ul  
 RT: 15.71 min Scan# 2191  
 Delta R.T. 0.00 min  
 Lab File: BG018389.D  
 Acq: 11 Aug 2015 19:58

Instrument :  
 BNA\_G  
 ClientSampleId :  
 C02L7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 99.7  | 82.6  | 124.0 |
| 167     | 13.9  | 11.4  | 17.0  |

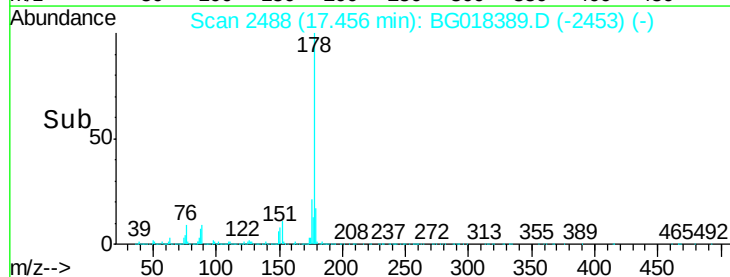
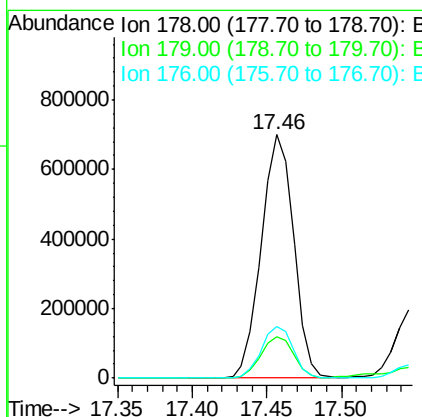
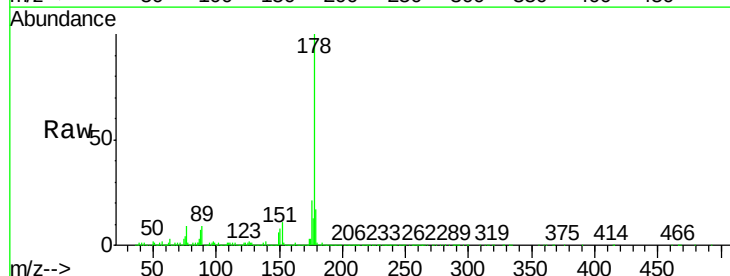
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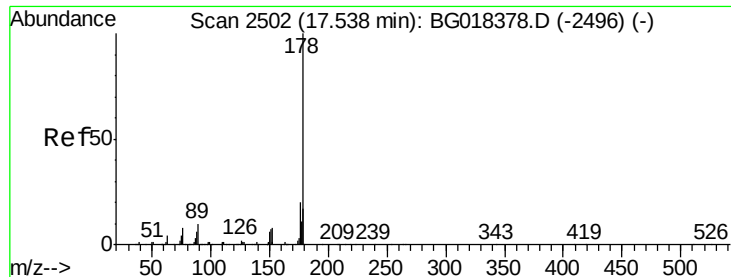
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 8/12/2015 3:53:32 PM



#70  
**Phenanthrene**  
 Concen: 27.19 ng/ul  
 RT: 17.46 min Scan# 2488  
 Delta R.T. 0.01 min  
 Lab File: BG018389.D  
 Acq: 11 Aug 2015 19:58

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 17.1  | 13.7  | 20.5  |
| 176     | 20.9  | 16.6  | 24.8  |





#72

Anthracene

Concen: 7.34 ng/ul

RT: 17.54 min Scan# 2503

Delta R.T. 0.01 min

Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

Instrument :

BNA\_G

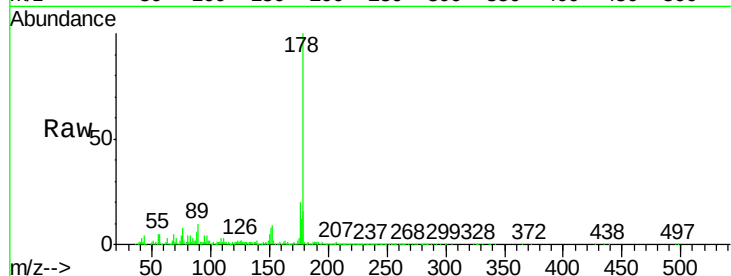
ClientSampleId :

C02L7

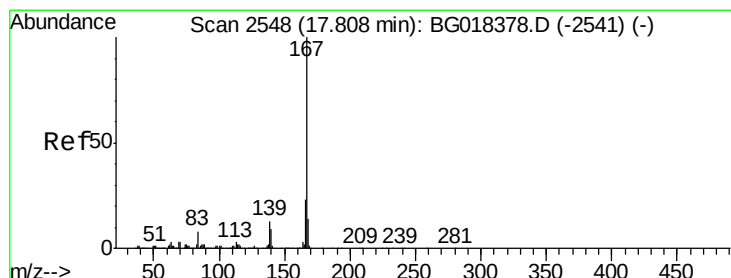
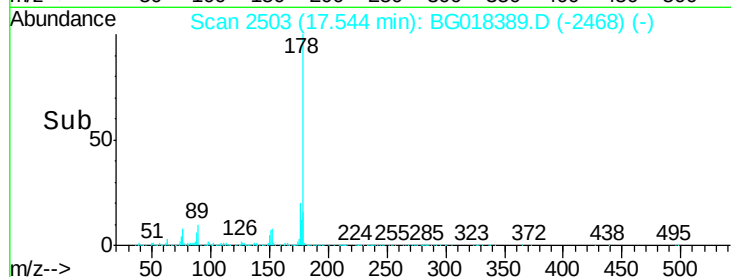
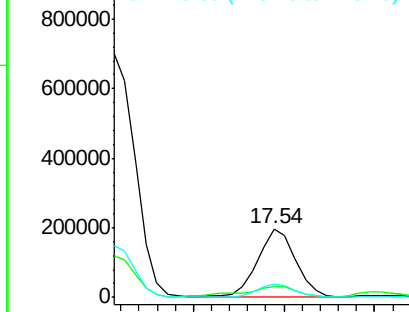
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 288359 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 179       | 16.1  | 13.0  | 19.4   |
| 176       | 19.8  | 16.0  | 24.0   |

Manual Integrations  
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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



#75

Carbazole

Concen: 3.41 ng/ul

RT: 17.81 min Scan# 2548

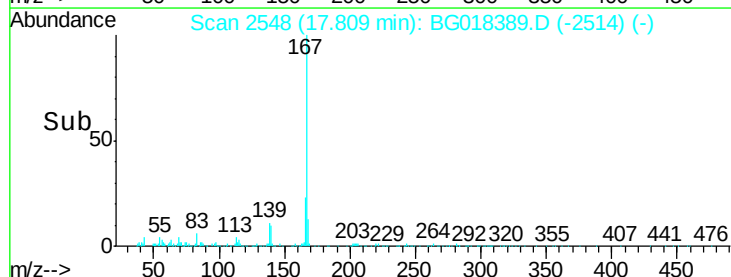
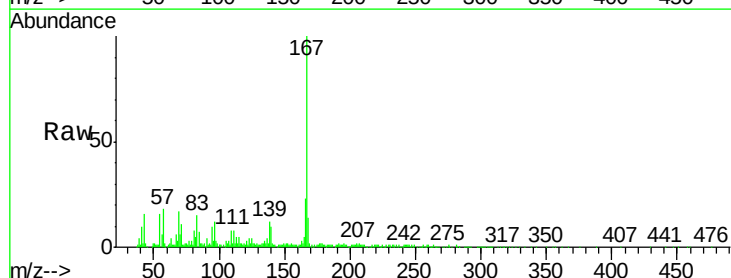
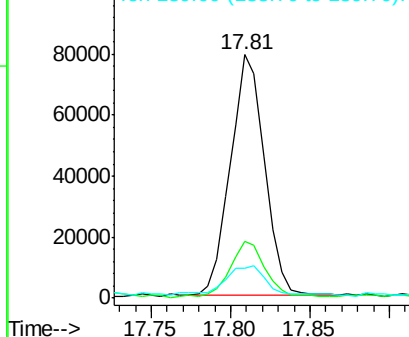
Delta R.T. 0.00 min

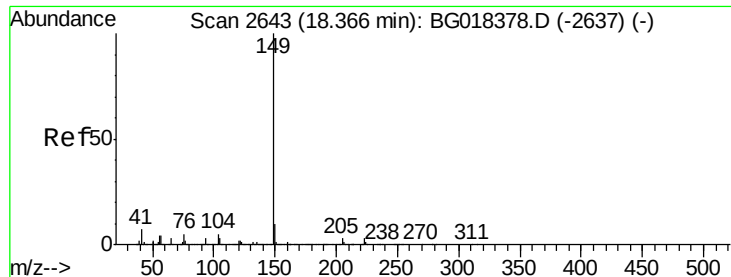
Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 167   | Resp: | 117517 |
| Ion Ratio | Lower | Upper |        |
| 167       | 100   |       |        |
| 166       | 23.3  | 18.9  | 28.3   |
| 139       | 12.5  | 10.1  | 15.1   |

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





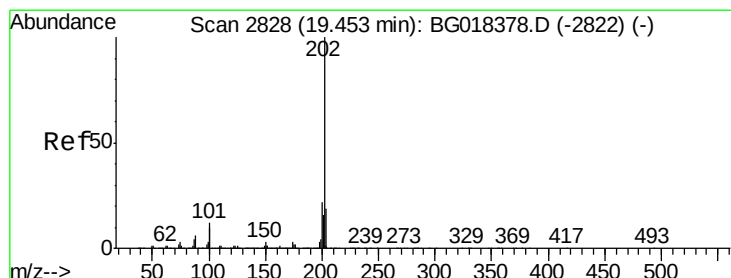
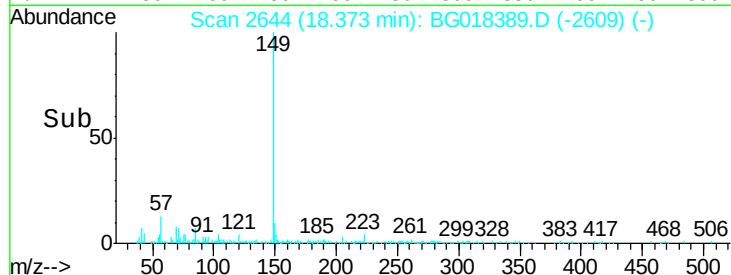
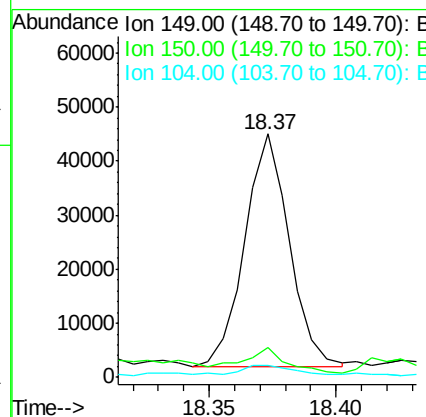
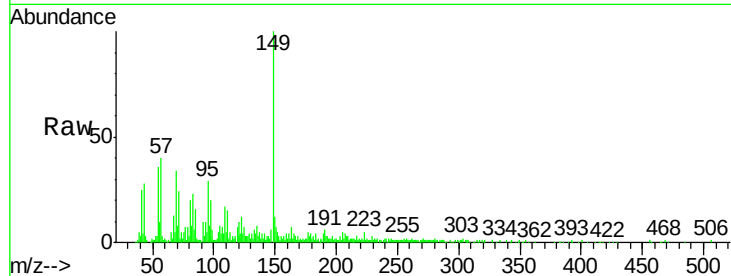
#76  
Di-n-butylphthalate  
Concen: 1.16 ng/ul  
RT: 18.37 min Scan# 2644  
Delta R.T. 0.01 min  
Lab File: BG018389.D  
Acq: 11 Aug 2015 19:58

Instrument :  
BNA\_G  
ClientSampleId :  
C02L7

| Tot Ion | Ion  | Ratio | Resp  | Lower | Upper |
|---------|------|-------|-------|-------|-------|
| 149     | 100  |       |       |       |       |
| 150     | 12.2 | 7.5   | 11.3# |       |       |
| 104     | 4.9  | 4.3   | 6.5   |       |       |

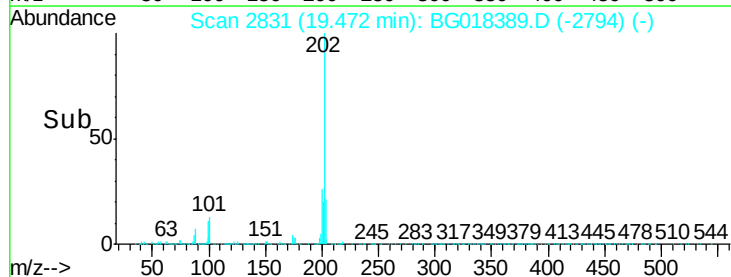
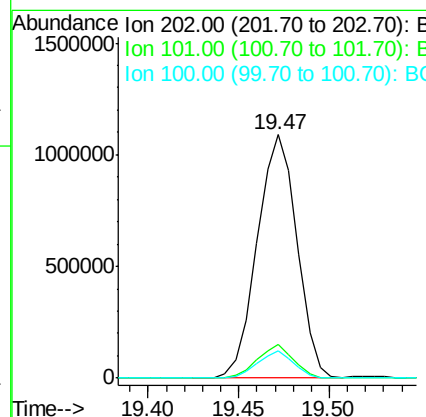
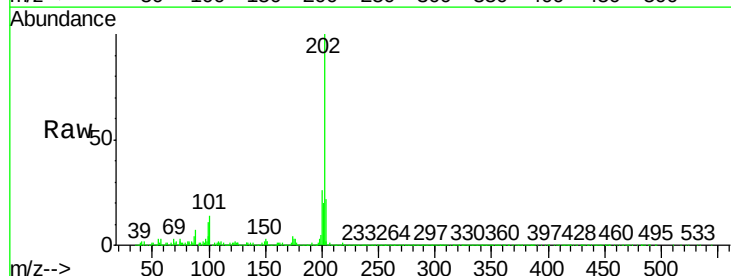
Manual Integrations  
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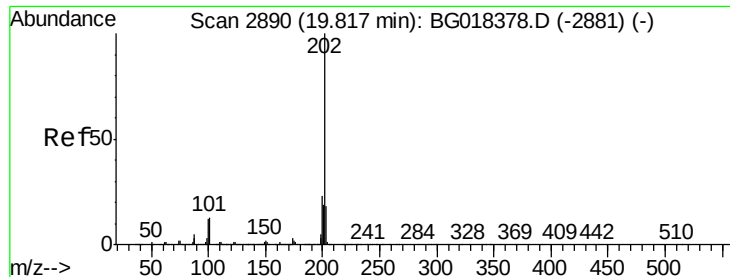
MMDadoda  
8/12/2015 3:53:32 PM



#77  
Fluoranthene  
Concen: 40.52 ng/ul  
RT: 19.47 min Scan# 2831  
Delta R.T. 0.02 min  
Lab File: BG018389.D  
Acq: 11 Aug 2015 19:58

| Tgt Ion | Ion  | Ratio | Resp | Lower | Upper |
|---------|------|-------|------|-------|-------|
| 202     | 100  |       |      |       |       |
| 101     | 13.6 | 9.7   | 14.5 |       |       |
| 100     | 11.3 | 7.8   | 11.8 |       |       |





#80

Pvrene

Concen: 34.90 ng/ul

RT: 19.84 min Scan# 2893

Delta R.T. 0.02 min

Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

Instrument :

BNA\_G

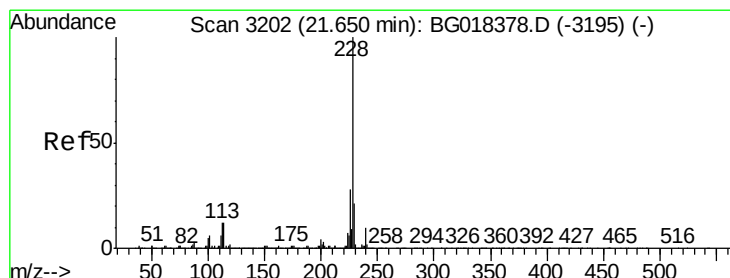
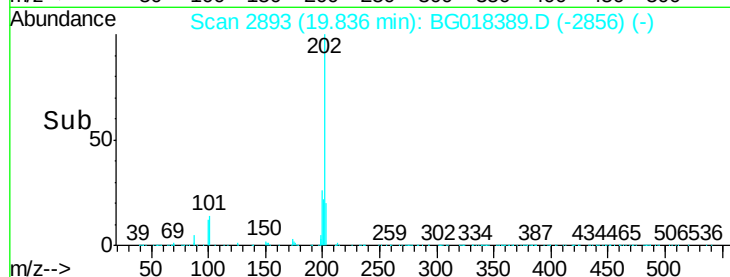
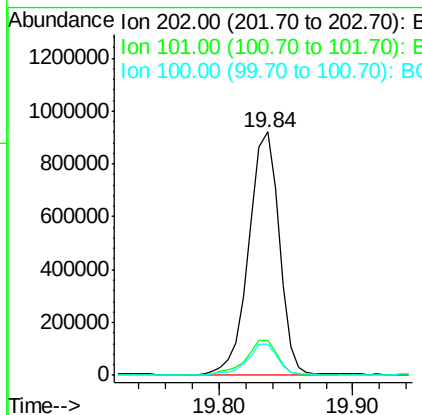
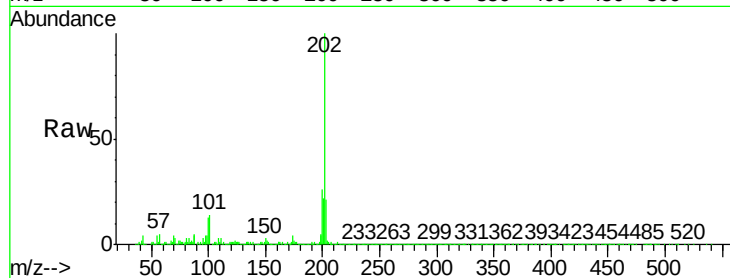
ClientSampleId :

C02L7

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 202   | Resp: | 1444285 |
| Ion      | Ratio | Lower | Upper   |
| 202      | 100   |       |         |
| 101      | 14.4  | 11.0  | 16.4    |
| 100      | 12.8  | 9.8   | 14.6    |

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#83

Benzo(a)anthracene

Concen: 21.15 ng/ul

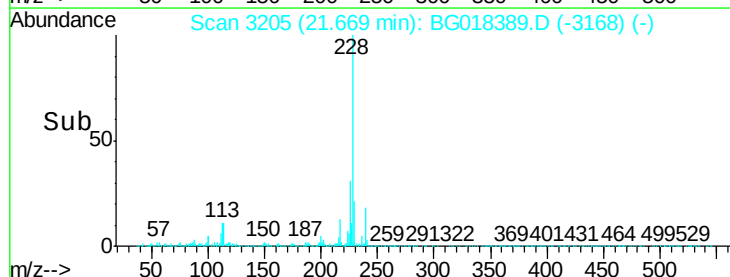
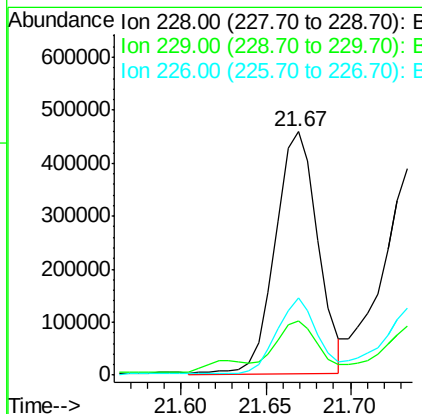
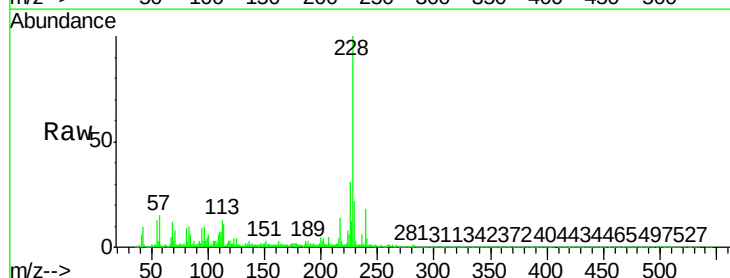
RT: 21.67 min Scan# 3205

Delta R.T. 0.02 min

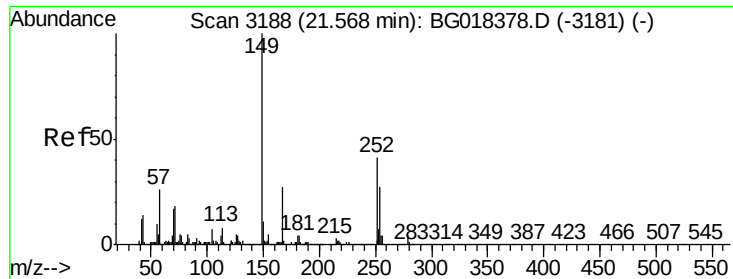
Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 228   | Resp: | 802344 |
| Ion      | Ratio | Lower | Upper  |
| 228      | 100   |       |        |
| 229      | 22.4  | 15.5  | 23.3   |
| 226      | 31.5  | 22.1  | 33.1   |







#84

Bis(2-ethylhexyl)phthalate

Concen: 4.56 ng/ul

RT: 21.58 min Scan# 3189

Delta R.T. 0.01 min

Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

Instrument :

BNA\_G

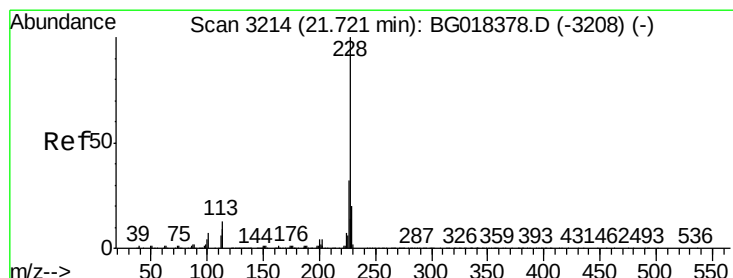
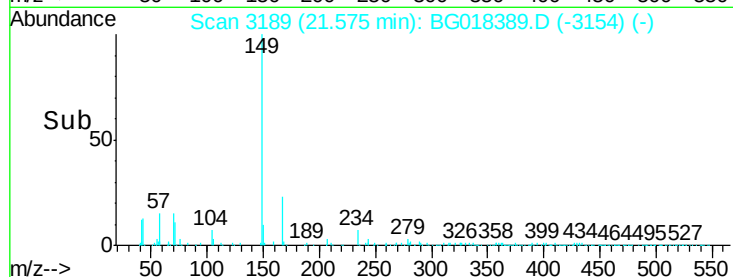
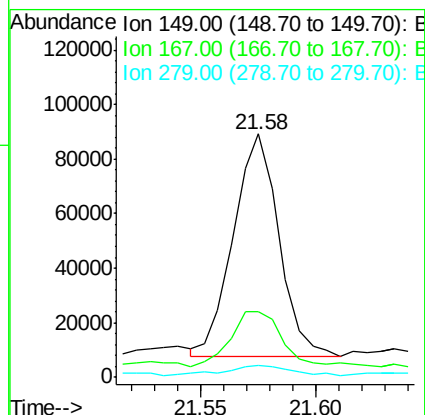
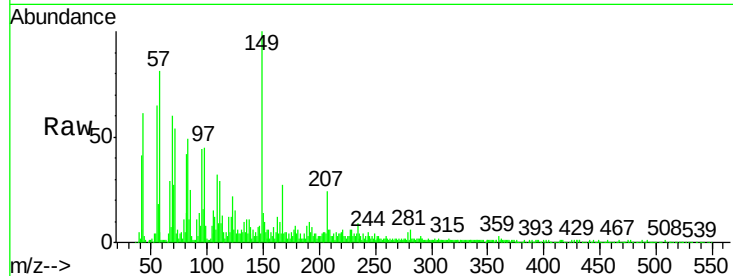
ClientSampleId :

C02L7

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 149   | Resp: | 112812 |
| Ion Ratio | Lower | Upper |        |
| 149       | 100   |       |        |
| 167       | 27.1  | 22.2  | 33.2   |
| 279       | 4.7   | 2.8   | 4.2#   |

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#85

Chrysene

Concen: 20.73 ng/ul

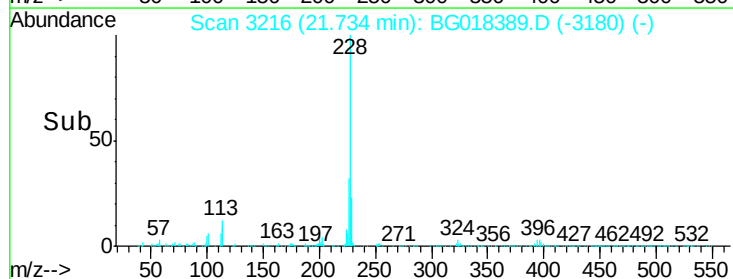
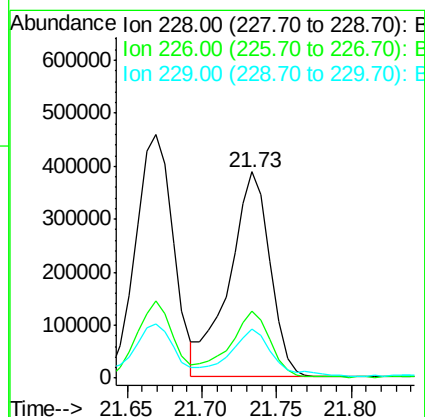
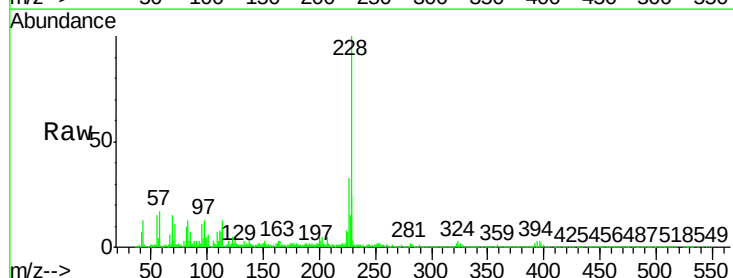
RT: 21.73 min Scan# 3216

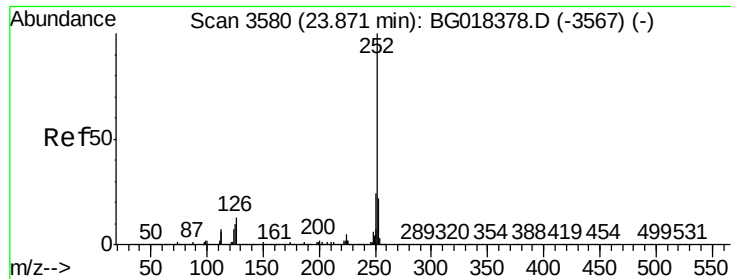
Delta R.T. 0.01 min

Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 735540 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 32.5  | 26.5  | 39.7   |
| 229       | 23.6  | 16.9  | 25.3   |





#88

Benzo(b)fluoranthene

Concen: 21.86 ng/ul

RT: 23.90 min Scan# 3585

Delta R.T. 0.03 min

Lab File: BG018389.D

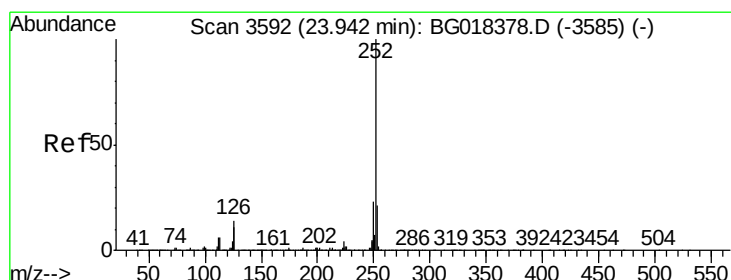
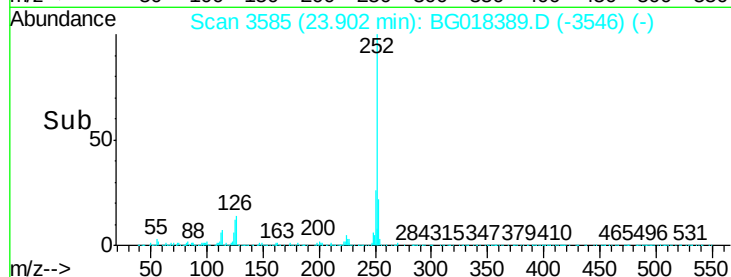
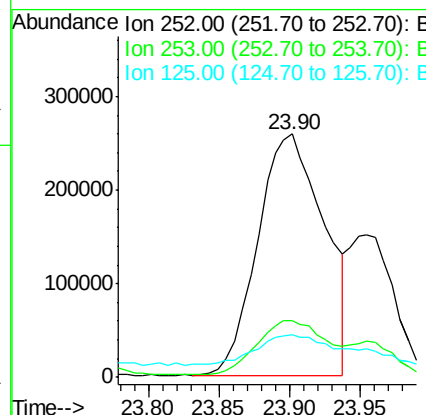
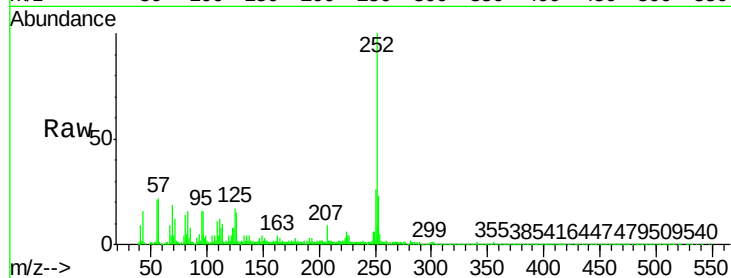
Acq: 11 Aug 2015 19:58

Instrument :  
BNA\_G  
ClientSampleId :  
C02L7

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 23.1  | 18.1       | 27.1  |
| 125     | 17.3  | 8.3        | 12.5  |

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#89

Benzo(k)fluoranthene

Concen: 8.96 ng/ul m

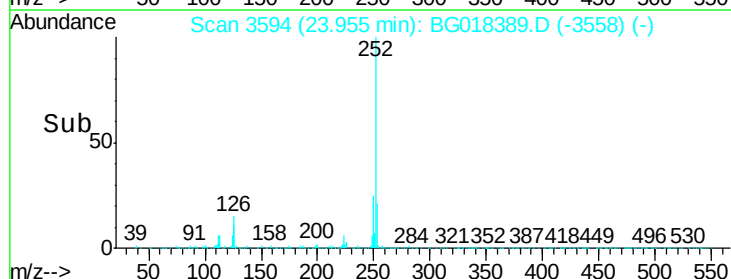
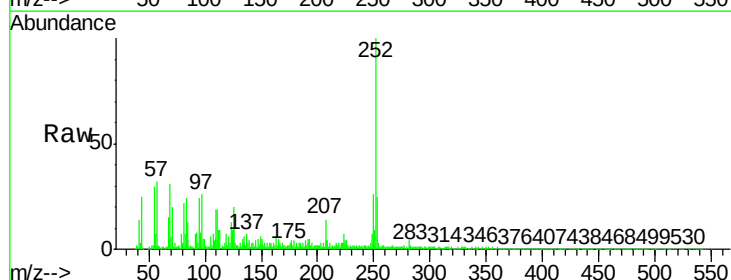
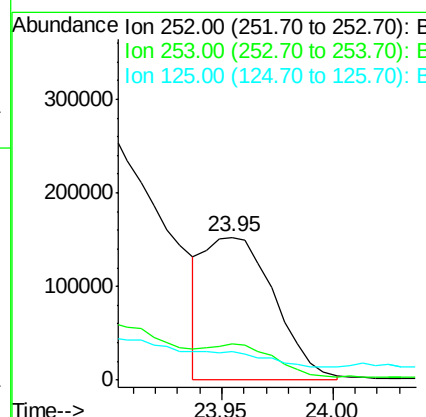
RT: 23.95 min Scan# 3594

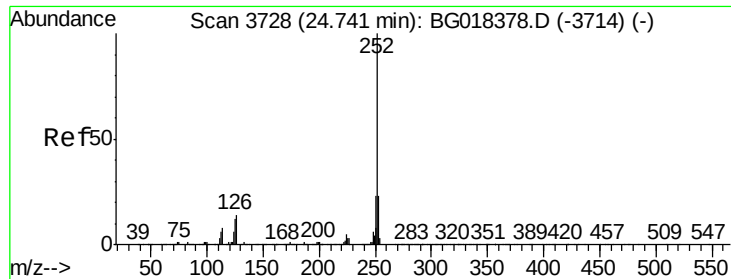
Delta R.T. 0.01 min

Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 25.1  | 17.8       | 26.6  |
| 125     | 20.4  | 9.0        | 13.4  |





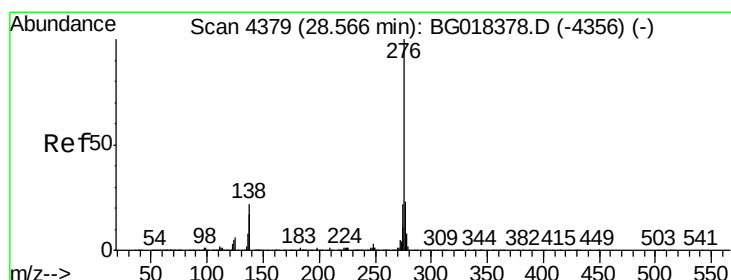
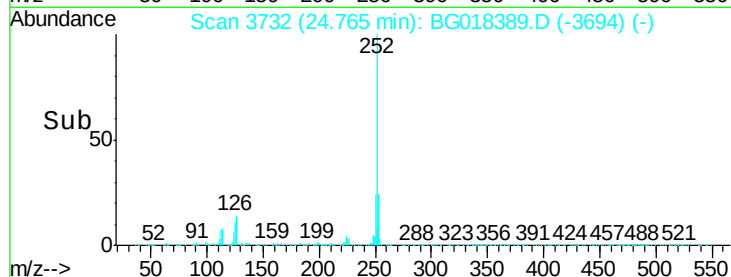
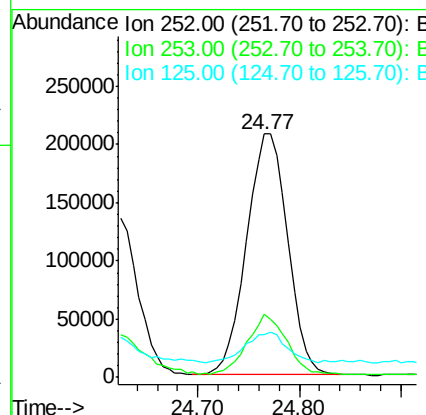
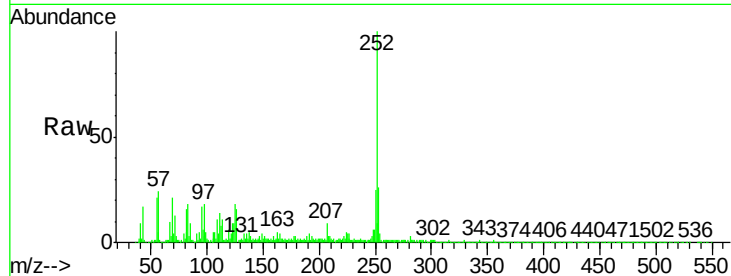
#91  
Benzo(a)pyrene  
Concen: 15.81 ng/ul  
RT: 24.77 min Scan# 3732  
Delta R.T. 0.02 min  
Lab File: BG018389.D  
Acq: 11 Aug 2015 19:58

Instrument :  
BNA\_G  
ClientSampleId :  
C02L7

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 26.1  | 17.7       | 26.5  |
| 125     | 17.7  | 10.2       | 15.2  |

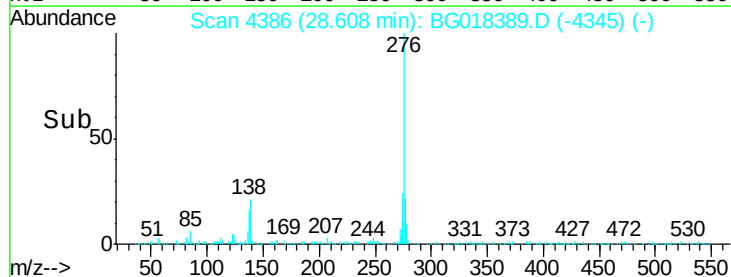
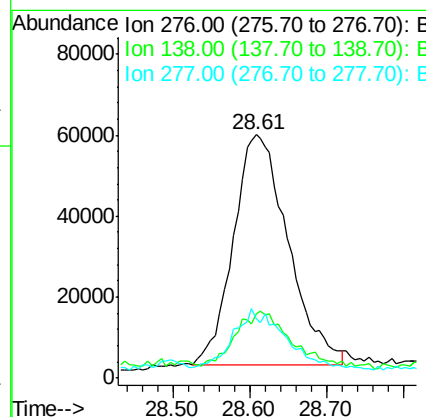
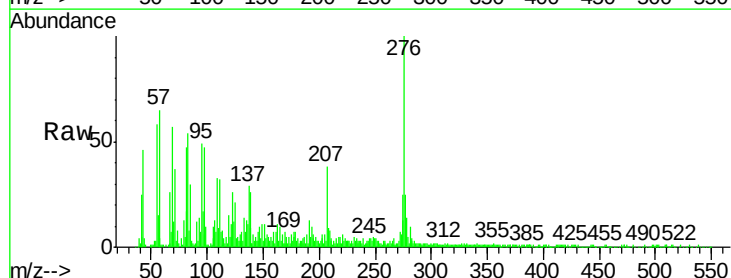
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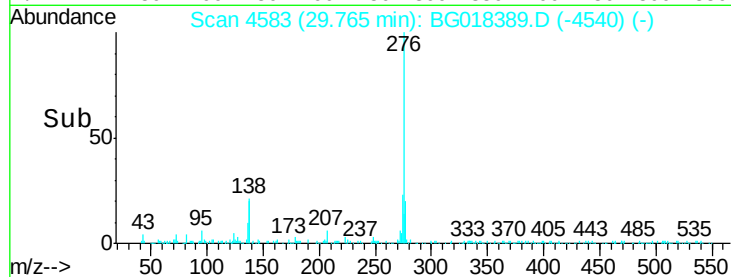
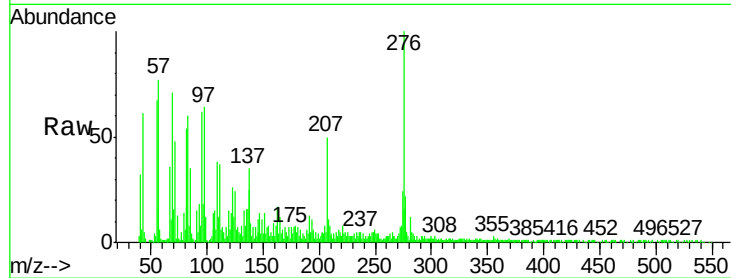
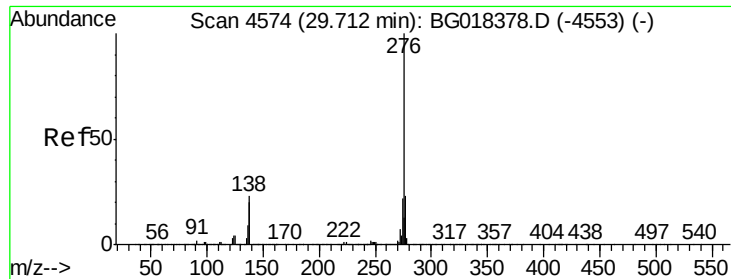
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#92  
Indeno(1,2,3-cd)pyrene  
Concen: 6.62 ng/ul  
RT: 28.61 min Scan# 4386  
Delta R.T. 0.04 min  
Lab File: BG018389.D  
Acq: 11 Aug 2015 19:58

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 276     | 100   |            |       |
| 138     | 26.4  | 15.8       | 23.6  |
| 277     | 24.5  | 18.9       | 28.3  |





#94

Benzo(a,h,i)perylene

Concen: 6.61 ng/ul

RT: 29.77 min Scan# 4583

Delta R.T. 0.05 min

Lab File: BG018389.D

Acq: 11 Aug 2015 19:58

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 236952 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 24.7  | 16.5  | 24.7   |
| 277       | 22.3  | 19.0  | 28.6   |

Instrument :

BNA\_G

ClientSampleId :

C02L7

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