

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081319\  
 Data File : BG042210.D  
 Acq On : 14 Aug 2019 15:09  
 Operator : HP/JU  
 Sample : K4304-16  
 Misc :  
 ALS Vial : 72 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 CB5P7

Manual Integrations  
 APPROVED

mohammad  
 8/15/2019 5:12:02 PM

Quant Time: Aug 14 17:49:17 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\SOM-EPA-BG080319MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Aug 14 10:42:59 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.03  | 152  | 100002   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.85 | 136  | 412101   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.68 | 164  | 274961   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.44 | 188  | 557273   | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.72 | 240  | 547773   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 24.99 | 264  | 650838   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.41  | 96  | 7675   | 3.36  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.18  | 99  | 175362 | 22.34 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.34  | 67  | 88499  | 20.16 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.55  | 132 | 161515 | 24.07 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.73  | 113 | 146500 | 22.23 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.19  | 128 | 80143  | 25.84 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.92  | 143 | 98925  | 27.47 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.47 | 165 | 182306 | 25.07 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.98 | 131 | 215706 | 26.73 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 14.08 | 166 | 555768 | 26.06 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.38 | 160 | 642903 | 26.39 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.88 | 143 | 73921  | 20.64 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.68 | 176 | 488444 | 25.74 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.80 | 200 | 74106  | 20.73 | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.54 | 188 | 696421 | 26.05 | ng/ul | 0.00 |
| 78) Pyrene-d10                 | 19.82 | 212 | 812901 | 26.59 | ng/ul | 0.00 |
| 89) Benzo(a)pyrene-d12         | 24.77 | 264 | 932720 | 27.43 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |        | Ovalue    |
|----------------------------|-------|-----|---------|--------|-----------|
| 44) Dimethylphthalate      | 14.13 | 163 | 96801   | 4.572  | ng/ul 98  |
| 49) Acenaphthene           | 14.75 | 153 | 26376   | 1.534  | ng/ul 96  |
| 53) Dibenzofuran           | 15.08 | 168 | 25699   | 1.002  | ng/ul 96  |
| 58) Fluorene               | 15.74 | 166 | 28835   | 1.395  | ng/ul 96  |
| 69) Phenanthrene           | 17.48 | 178 | 455997  | 14.947 | ng/ul 99  |
| 71) Anthracene             | 17.57 | 178 | 93512   | 3.022  | ng/ul 95  |
| 74) Carbazole              | 17.84 | 167 | 43194   | 1.685  | ng/ul 98  |
| 76) Fluoranthene           | 19.49 | 202 | 708623  | 20.103 | ng/ul 98  |
| 79) Pvrene                 | 19.85 | 202 | 588396  | 15.969 | ng/ul 99  |
| 82) Benzo(a)anthracene     | 21.70 | 228 | 352170  | 9.273  | ng/ul 98  |
| 84) Chrysene               | 21.77 | 228 | 330305  | 9.318  | ng/ul 99  |
| 87) Benzo(b)fluoranthene   | 23.95 | 252 | 435366  | 10.659 | ng/ul 100 |
| 88) Benzo(k)fluoranthene   | 24.02 | 252 | 180508m | 4.597  | ng/ul     |
| 90) Benzo(a)pyrene         | 24.84 | 252 | 307638  | 7.904  | ng/ul 99  |
| 91) Indeno(1,2,3-cd)pyrene | 28.73 | 276 | 178667  | 3.936  | ng/ul 99  |
| 92) Dibenzo(a,h)anthracene | 28.77 | 278 | 51845m  | 1.400  | ng/ul     |
| 93) Benzo(g,h,i)perylene   | 29.89 | 276 | 156171m | 4.120  | ng/ul     |

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

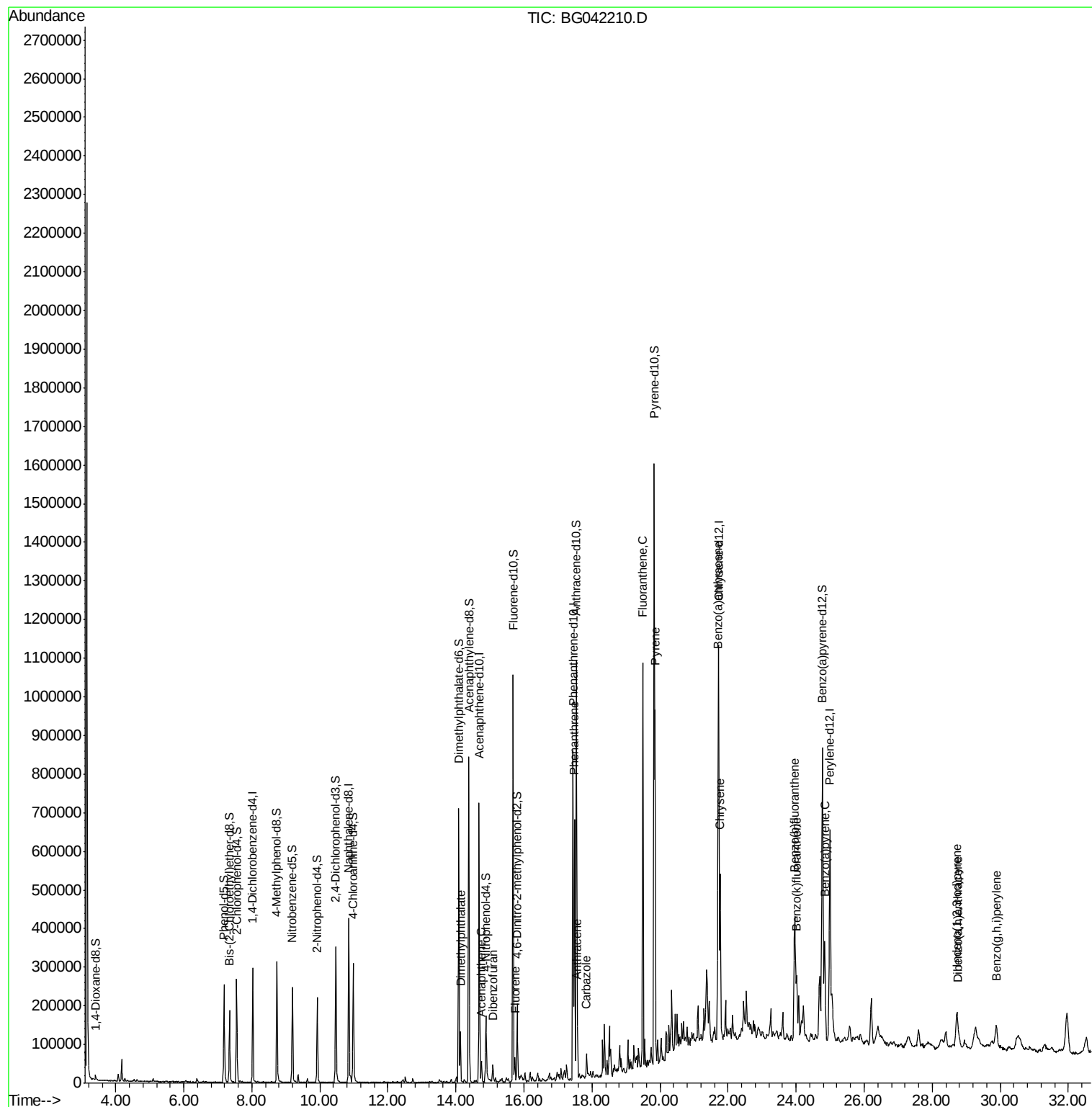
Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081319\  
Data File : BG042210.D  
Acq On : 14 Aug 2019 15:09  
Operator : HP/JU  
Sample : K4304-16  
Misc :  
ALS Vial : 72 Sample Multiplier: 1

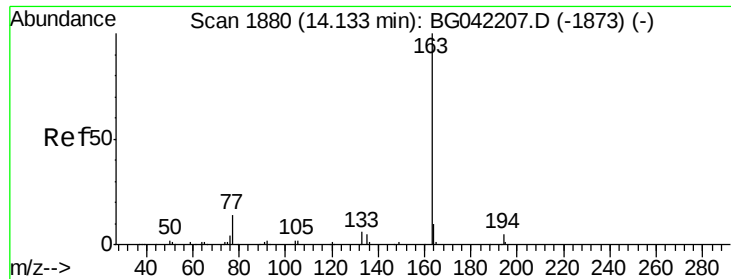
Instrument :  
BNA\_G  
ClientSampleId :  
CB5P7

Manual Integrations  
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Quant Time: Aug 14 17:49:17 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\SOM-EPA-BG080319MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Aug 14 10:42:59 2019  
Response via : Initial Calibration





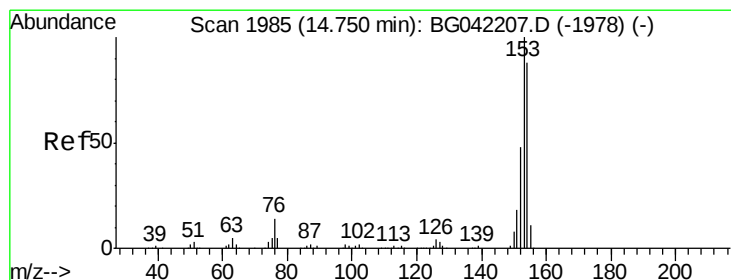
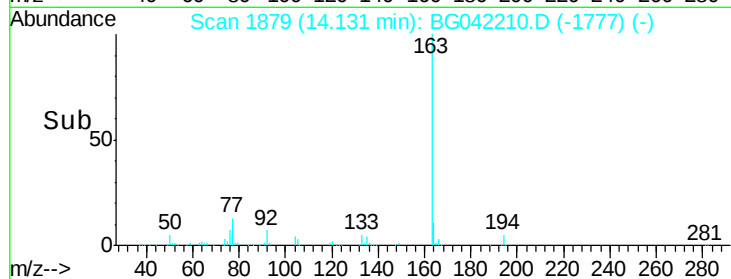
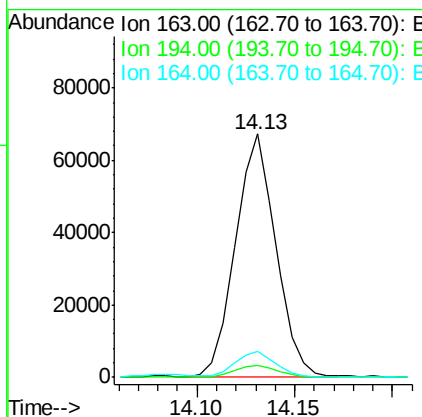
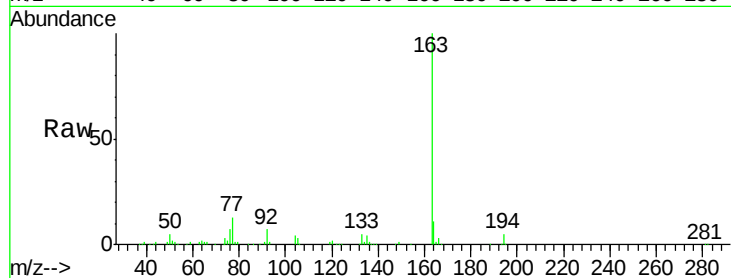
#44  
Dimethylphthalate  
Concen: 4.572 ng/ul  
RT: 14.13 min Scan# 1879  
Delta R.T. 0.00 min  
Lab File: BG042210.D  
Acq: 14 Aug 2019 15:09

Instrument :  
BNA\_G  
ClientSampleId :  
CB5P7

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 163     | 100   | 96801 |       |       |
| 194     | 5.1   | 4.2   | 6.2   |       |
| 164     | 10.8  | 7.8   | 11.8  |       |

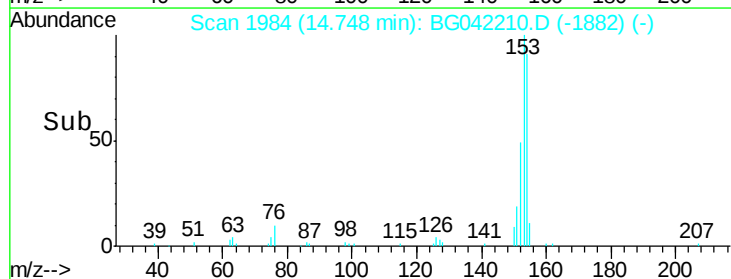
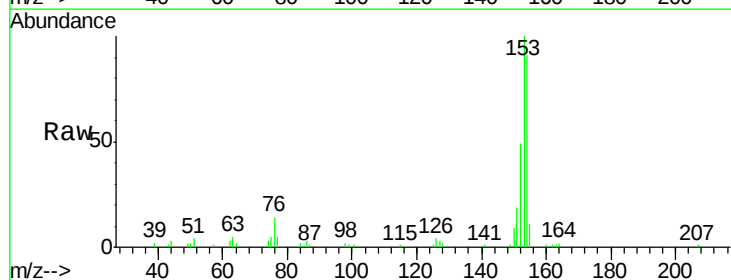
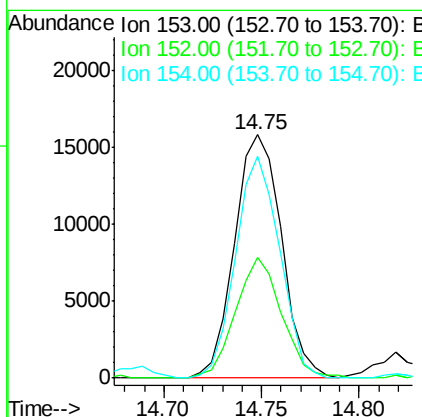
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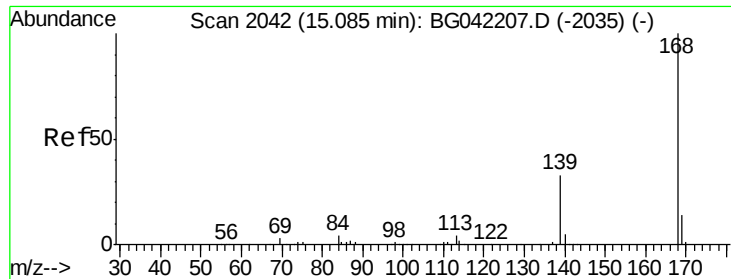
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#49  
Acenaphthene  
Concen: 1.534 ng/ul  
RT: 14.75 min Scan# 1984  
Delta R.T. 0.00 min  
Lab File: BG042210.D  
Acq: 14 Aug 2019 15:09

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 153     | 100   | 26376 |       |       |
| 152     | 49.3  | 37.8  | 56.8  |       |
| 154     | 91.0  | 69.4  | 104.2 |       |





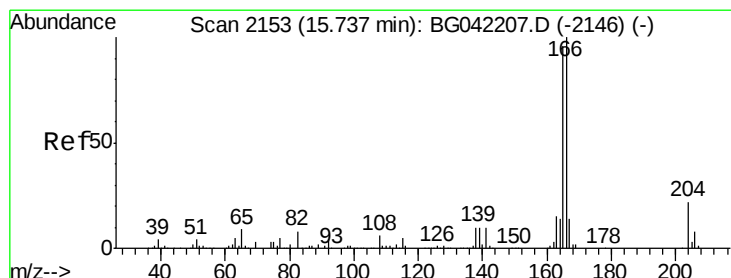
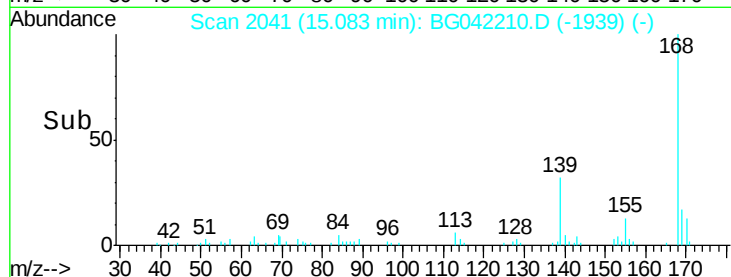
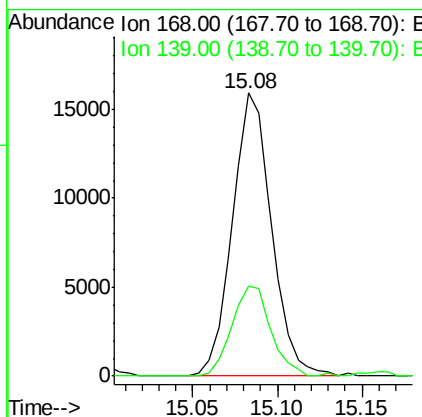
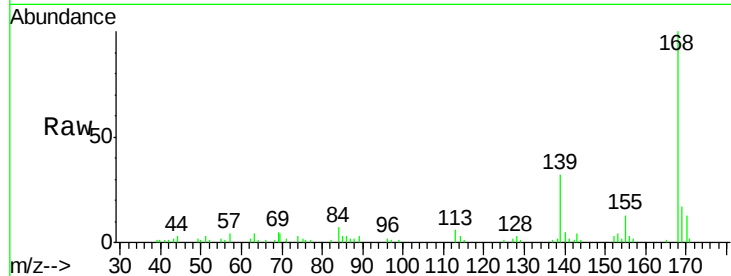
#53  
Dibenzenofuran  
Concen: 1.002 ng/ul  
RT: 15.08 min Scan# 2041  
Delta R.T. 0.00 min  
Lab File: BG042210.D  
Acq: 14 Aug 2019 15:09

Instrument :  
BNA\_G  
ClientSampleId :  
CB5P7

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 168     | 100   | 25699 |       |       |
| 139     | 31.9  |       | 27.3  | 40.9  |

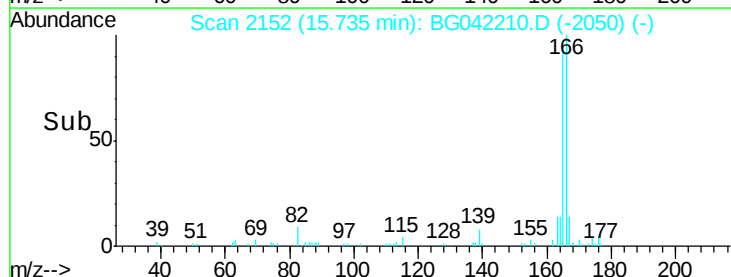
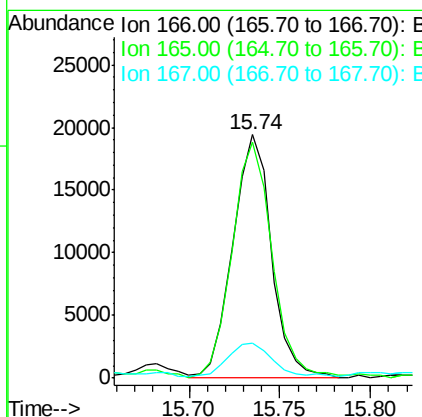
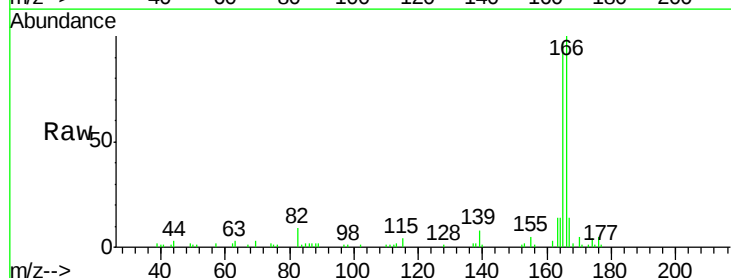
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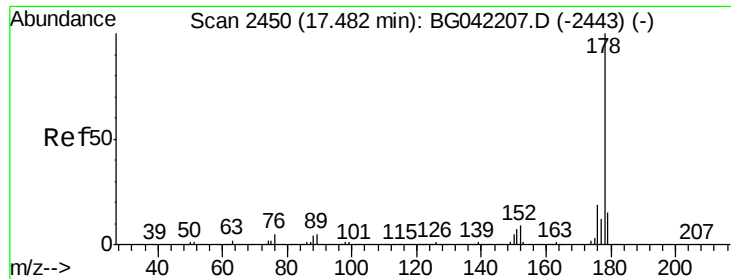
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#58  
Fluorene  
Concen: 1.395 ng/ul  
RT: 15.74 min Scan# 2152  
Delta R.T. 0.00 min  
Lab File: BG042210.D  
Acq: 14 Aug 2019 15:09

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 166     | 100   | 28835 |       |       |
| 165     | 97.1  |       | 81.1  | 121.7 |
| 167     | 14.4  |       | 11.0  | 16.4  |





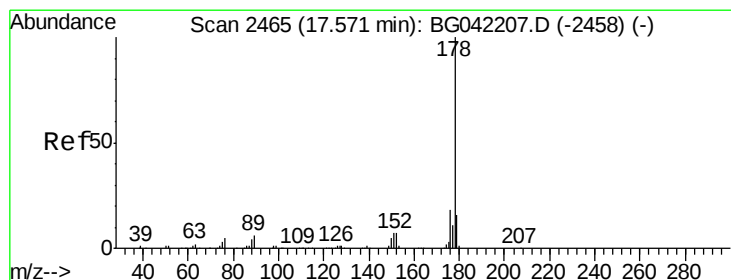
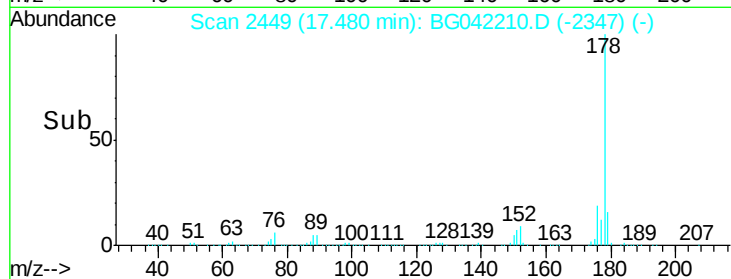
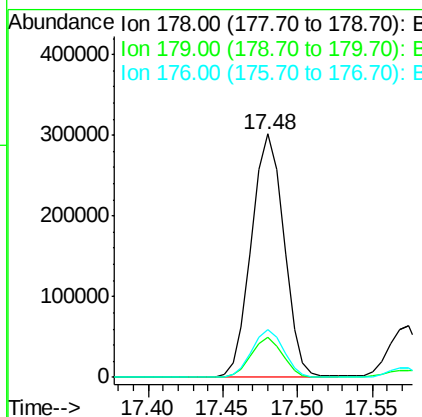
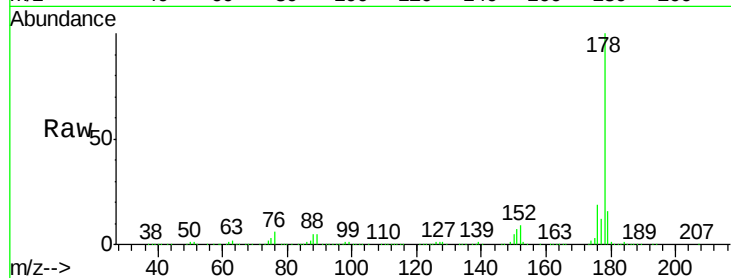
#69  
Phenanthrene  
Concen: 14.947 ng/ul  
RT: 17.48 min Scan# 2449  
Delta R.T. 0.00 min  
Lab File: BG042210.D  
Acq: 14 Aug 2019 15:09

Instrument :  
BNA\_G  
ClientSampleId :  
CB5P7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 16.4  | 12.8  | 19.2  |
| 176     | 19.5  | 15.4  | 23.2  |

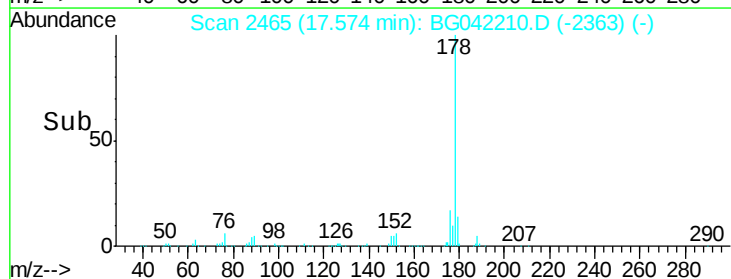
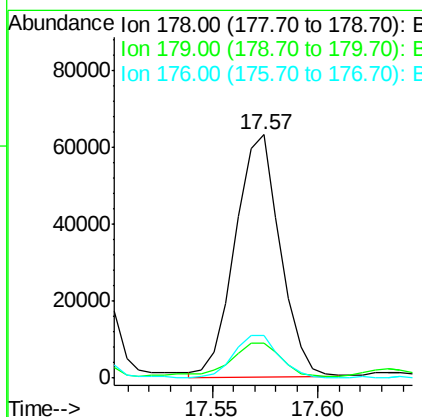
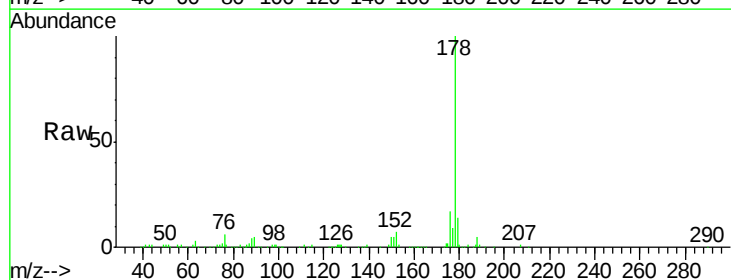
Manual Integrations  
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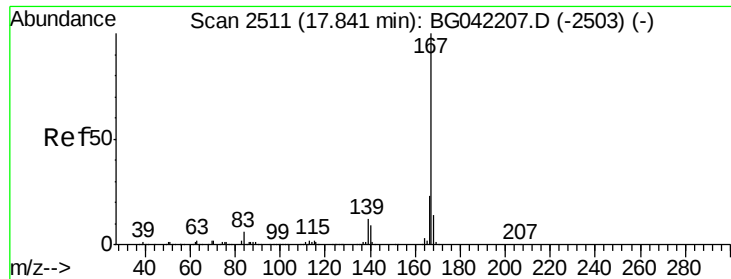
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#71  
Anthracene  
Concen: 3.022 ng/ul  
RT: 17.57 min Scan# 2465  
Delta R.T. 0.00 min  
Lab File: BG042210.D  
Acq: 14 Aug 2019 15:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 14.3  | 13.4  | 20.0  |
| 176     | 17.4  | 15.4  | 23.2  |





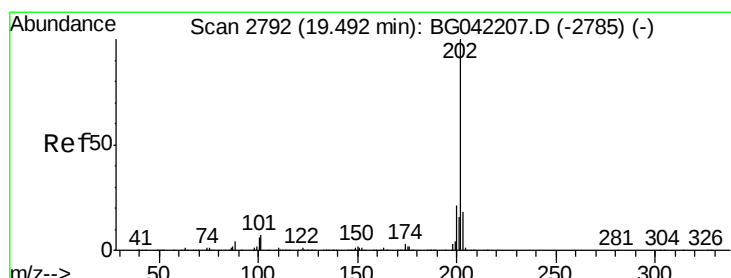
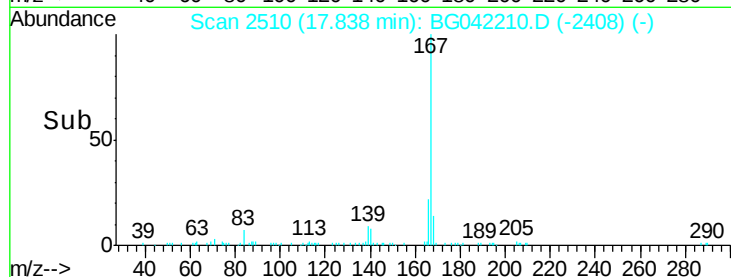
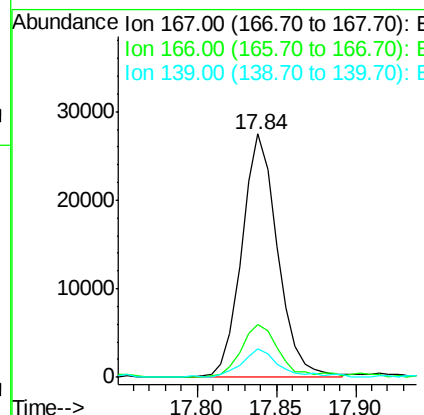
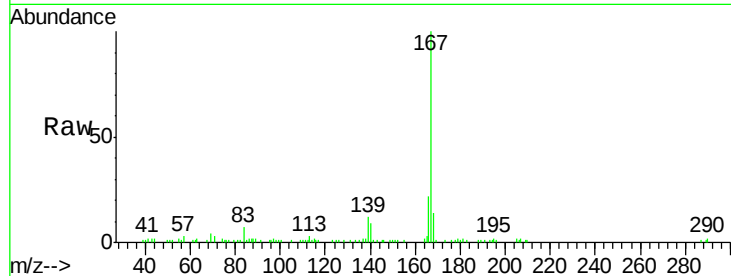
#74  
 Carbazole  
 Concen: 1.685 ng/ul  
 RT: 17.84 min Scan# 2510  
 Delta R.T. 0.00 min  
 Lab File: BG042210.D  
 Acq: 14 Aug 2019 15:09

Instrument :  
 BNA\_G  
 ClientSampleId :  
 CB5P7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 21.5  | 18.2  | 27.4  |
| 139     | 11.9  | 9.6   | 14.4  |

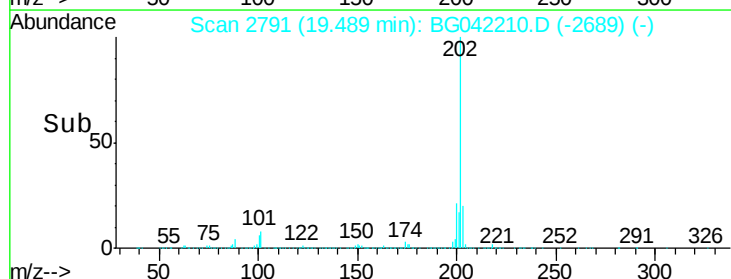
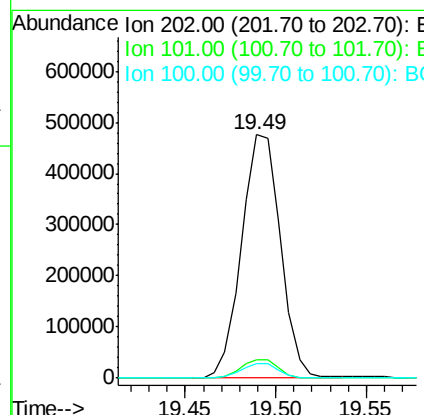
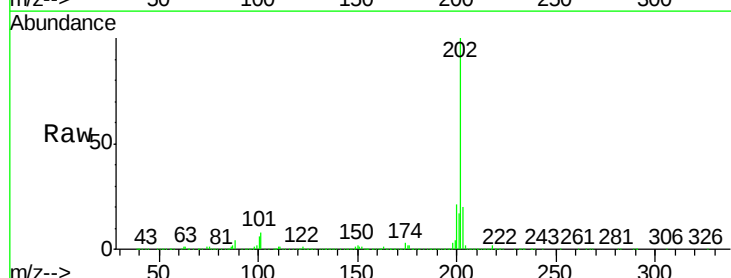
Manual Integrations  
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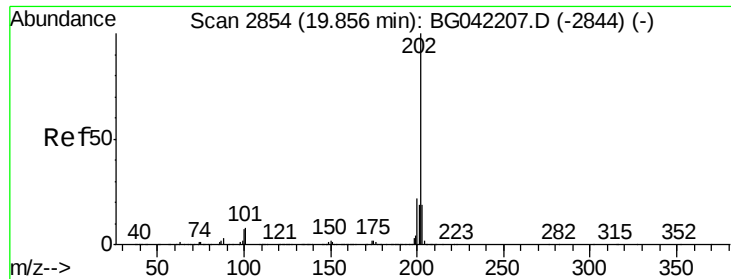
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 8/15/2019 5:12:02 PM



#76  
 Fluoranthene  
 Concen: 20.103 ng/ul  
 RT: 19.49 min Scan# 2791  
 Delta R.T. 0.00 min  
 Lab File: BG042210.D  
 Acq: 14 Aug 2019 15:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 7.7   | 6.7   | 10.1  |
| 100     | 6.2   | 5.3   | 7.9   |





#79

Pvrene

Concen: 15.969 ng/ul

RT: 19.85 min Scan# 2853

Delta R.T. 0.00 min

Lab File: BG042210.D

Acq: 14 Aug 2019 15:09

Instrument :

BNA\_G

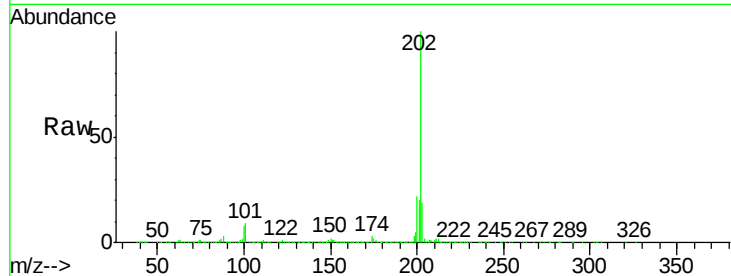
ClientSampled :

CB5P7

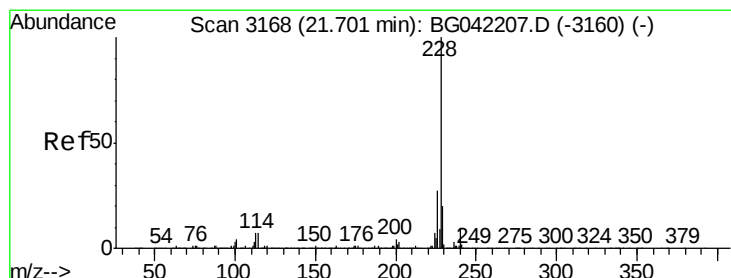
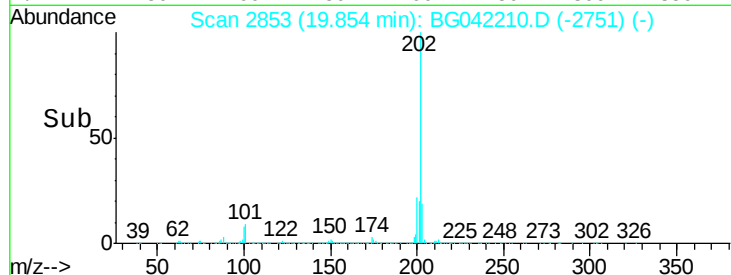
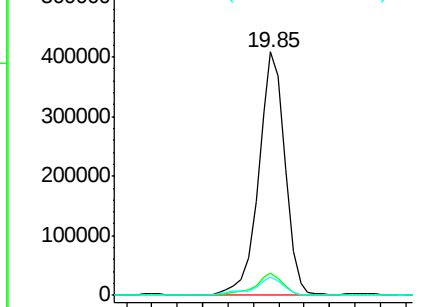
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 588396 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 9.1   | 7.6   | 11.4   |
| 100       | 7.6   | 6.5   | 9.7    |

Manual Integrations  
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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



#82

Benzo(a)anthracene

Concen: 9.273 ng/ul

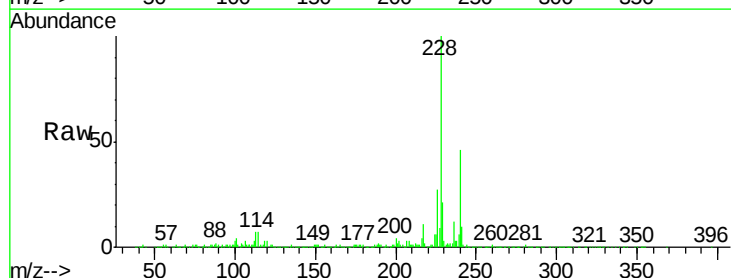
RT: 21.70 min Scan# 3168

Delta R.T. 0.00 min

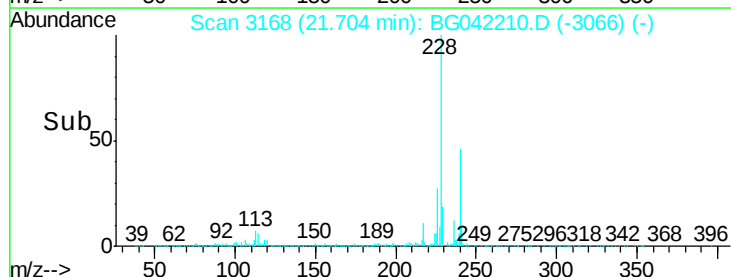
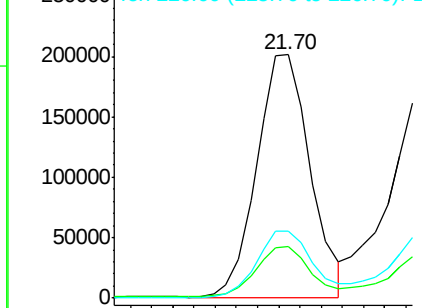
Lab File: BG042210.D

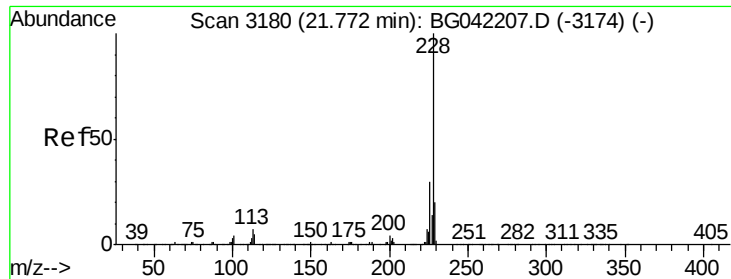
Acq: 14 Aug 2019 15:09

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 352170 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 229       | 20.9  | 17.0  | 25.6   |
| 226       | 27.3  | 23.3  | 34.9   |



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





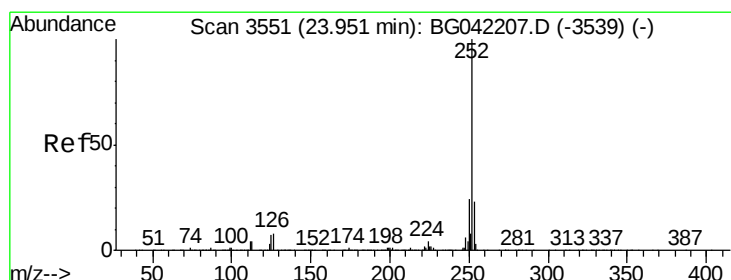
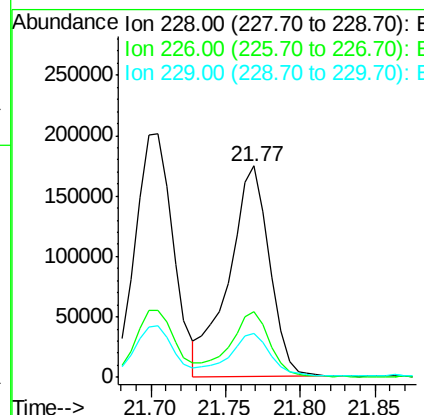
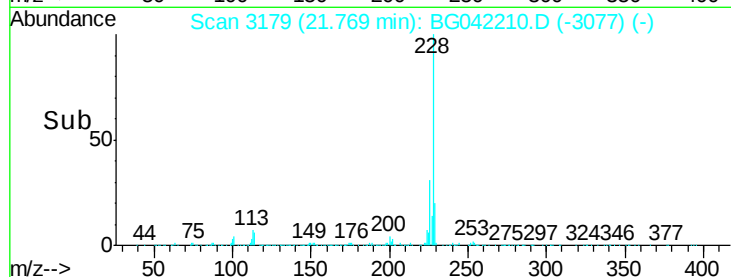
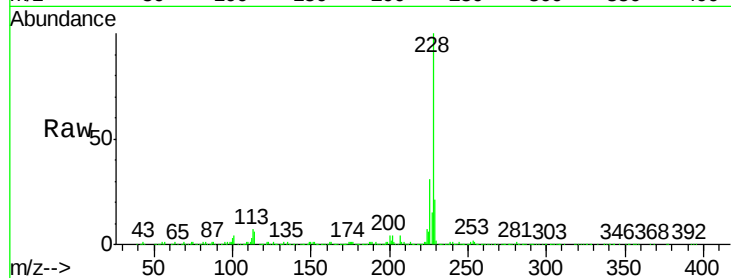
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Chrysene  
Concen: 9.318 ng/ul  
RT: 21.77 min Scan# 3179  
Delta R.T. 0.00 min  
Lab File: BG042210.D  
Acq: 14 Aug 2019 15:09

Instrument :  
BNA\_G  
ClientSampleId :  
CB5P7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.2  | 25.7  | 38.5  |
| 229     | 20.8  | 16.6  | 24.8  |

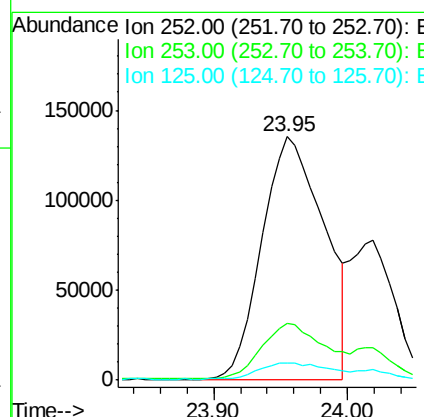
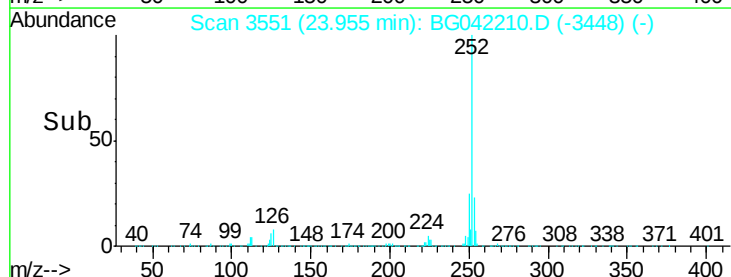
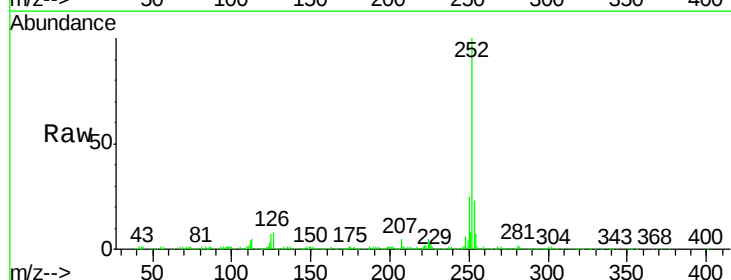
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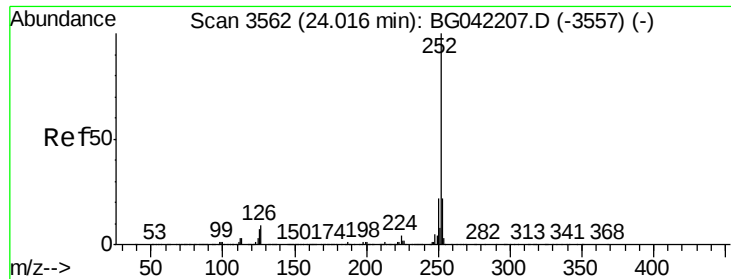
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#87  
Benzo(b)fluoranthene  
Concen: 10.659 ng/ul  
RT: 23.95 min Scan# 3551  
Delta R.T. 0.01 min  
Lab File: BG042210.D  
Acq: 14 Aug 2019 15:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.1  | 18.4  | 27.6  |
| 125     | 6.9   | 5.8   | 8.8   |





#88

Benzo(k)fluoranthene

Concen: 4.597 ng/ul

RT: 24.02 min Scan# 3562

Delta R.T. 0.01 min

Lab File: BG042210.D

Acq: 14 Aug 2019 15:09

Instrument :

BNA\_G

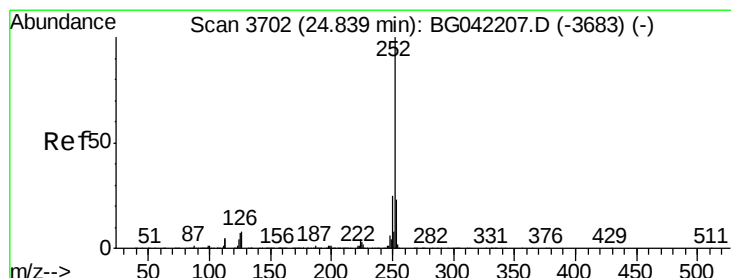
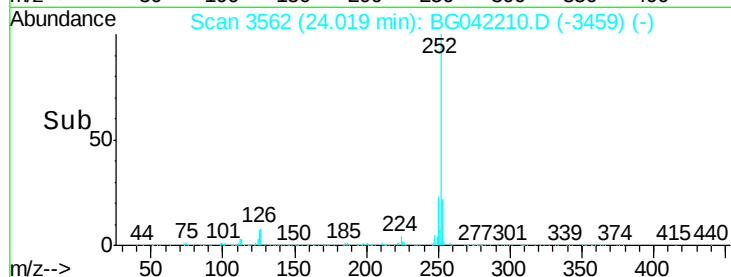
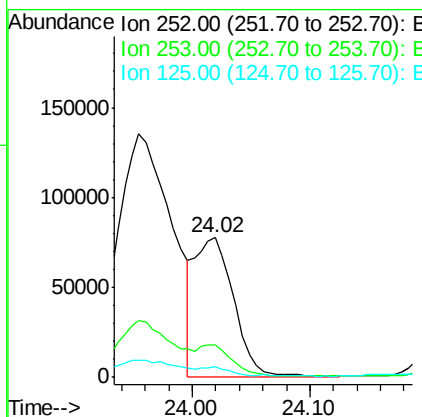
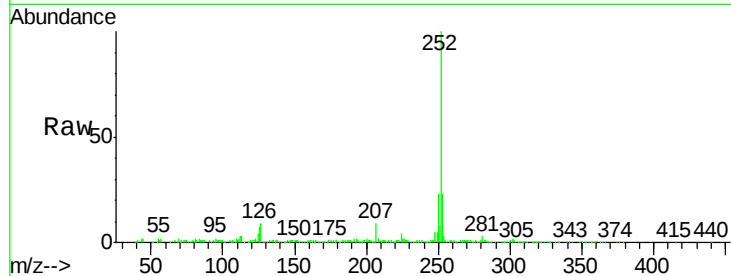
ClientSampled :

CB5P7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 18.3  | 27.5  |
| 125     | 7.3   | 5.5   | 8.3   |

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#90

Benzo(a)pyrene

Concen: 7.904 ng/ul

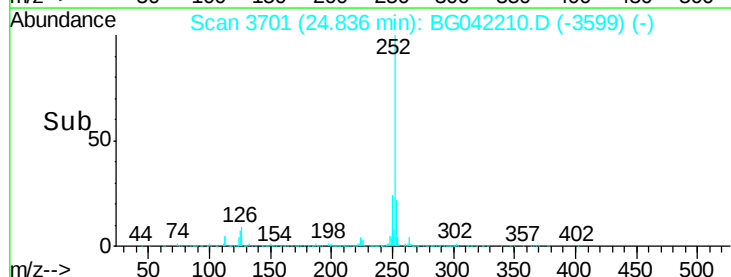
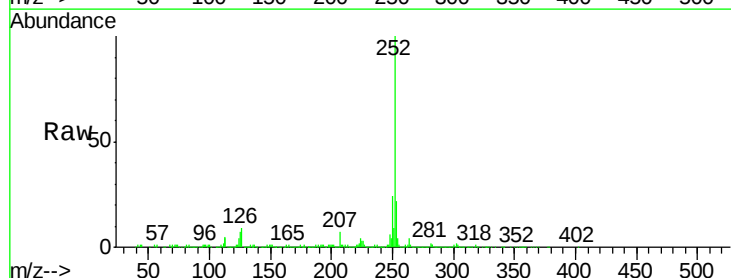
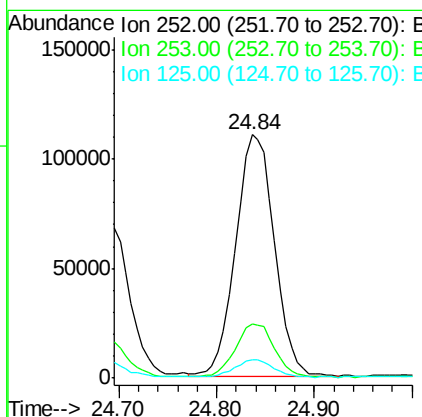
RT: 24.84 min Scan# 3701

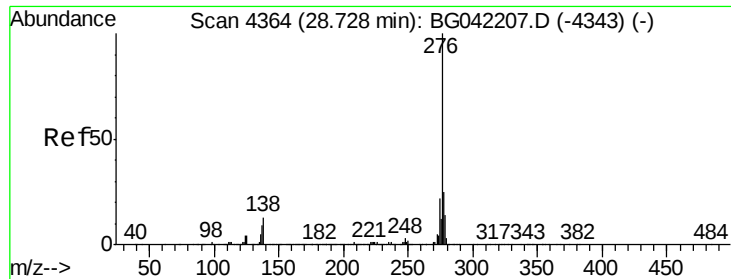
Delta R.T. 0.00 min

Lab File: BG042210.D

Acq: 14 Aug 2019 15:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.3  | 18.3  | 27.5  |
| 125     | 7.3   | 6.5   | 9.7   |





#91

Indeno(1,2,3-cd)pyrene

Concen: 3.936 ng/ul

RT: 28.73 min Scan# 4363

Delta R.T. 0.01 min

Lab File: BG042210.D

Acq: 14 Aug 2019 15:09

Instrument :

BNA\_G

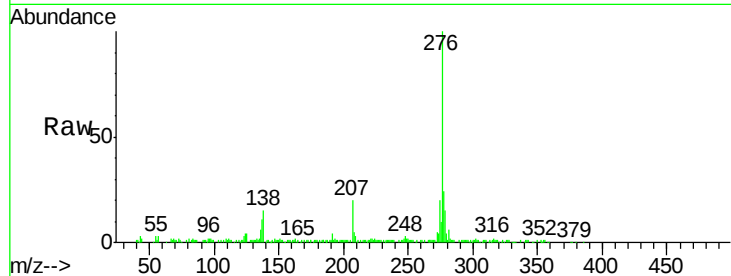
ClientSampled :

CB5P7

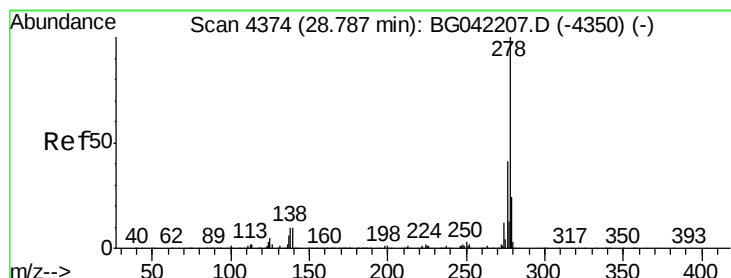
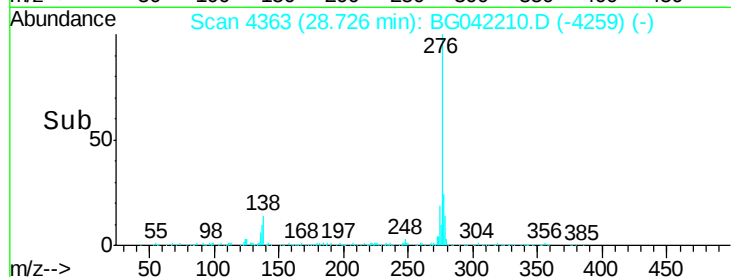
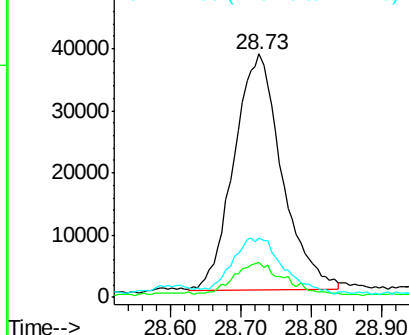
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 178667 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 14.6  | 12.0  | 18.0   |
| 277       | 24.3  | 19.2  | 28.8   |

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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



#92

Dibenzo(a,h)anthracene

Concen: 1.400 ng/ul m

RT: 28.77 min Scan# 4370

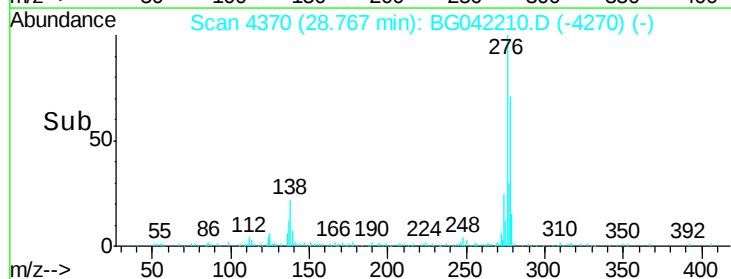
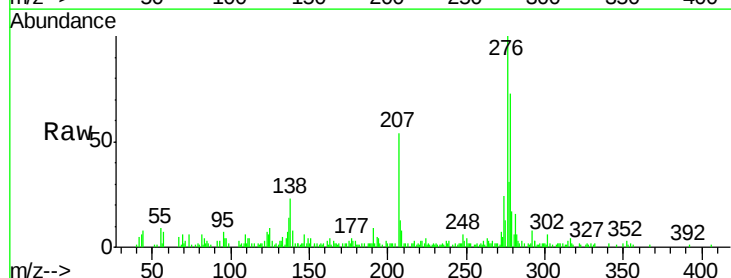
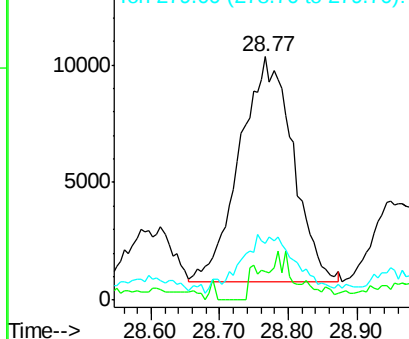
Delta R.T. -0.01 min

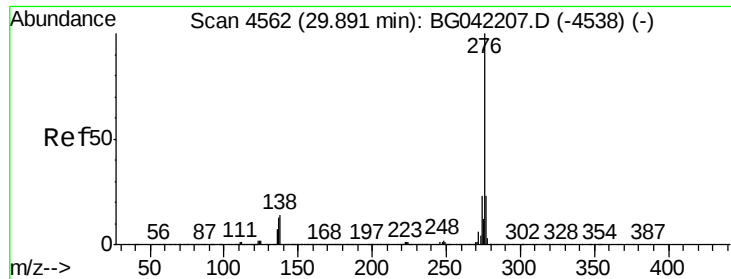
Lab File: BG042210.D

Acq: 14 Aug 2019 15:09

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 51845 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 11.5  | 9.4   | 14.0  |
| 279       | 23.2  | 19.2  | 28.8  |

Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E





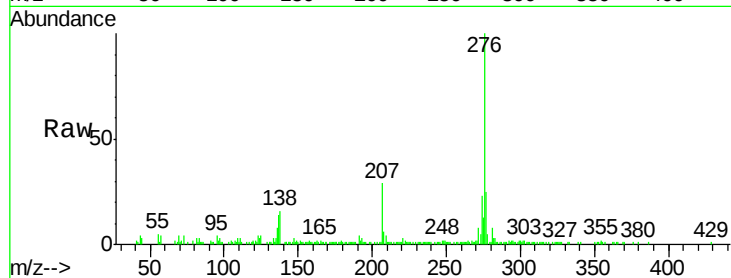
#93  
 Benzo(a,h,i)perylene  
 Concen: 4.120 ng/ul m  
 RT: 29.89 min Scan# 4561  
 Delta R.T. 0.01 min  
 Lab File: BG042210.D  
 Acq: 14 Aug 2019 15:09

Instrument :  
 BNA\_G  
 ClientSampleId :  
 CB5P7

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 156171 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 16.1  | 12.6  | 18.8   |
| 277       | 25.0  | 19.2  | 28.8   |

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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

