

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081319\  
 Data File : BG042196.D  
 Acq On : 14 Aug 2019 5:29  
 Operator : HP/JU  
 Sample : K4304-02  
 Misc :  
 ALS Vial : 58 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 CB5N3

Manual Integrations  
 APPROVED

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 8/15/2019 5:11:26 PM

Quant Time: Aug 14 08:47:04 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\SOM-EPA-BG080319MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Aug 14 08:30:54 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.02  | 152  | 87893    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.85 | 136  | 364551   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.69 | 164  | 252294   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.44 | 188  | 522200   | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.72 | 240  | 506620   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 24.99 | 264  | 599472   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.41  | 96  | 6557   | 3.26  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.18  | 99  | 171348 | 24.84 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.34  | 67  | 86021  | 22.30 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.55  | 132 | 156278 | 26.50 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.73  | 113 | 133182 | 23.00 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.19  | 128 | 79332  | 28.91 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.92  | 143 | 98967  | 31.06 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.47 | 165 | 179418 | 27.89 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.98 | 131 | 204014 | 28.58 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 14.08 | 166 | 535749 | 27.38 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.38 | 160 | 635925 | 28.45 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.88 | 143 | 70737  | 21.53 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.68 | 176 | 478845 | 27.51 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.80 | 200 | 71250  | 21.27 | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.54 | 188 | 695388 | 27.76 | ng/ul | 0.00 |
| 78) Pyrene-d10                 | 19.82 | 212 | 784405 | 27.75 | ng/ul | 0.00 |
| 89) Benzo(a)pyrene-d12         | 24.76 | 264 | 890299 | 28.43 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |              | Ovalue |
|----------------------------|-------|-----|---------|--------------|--------|
| 28) Naphthalene            | 10.90 | 128 | 22927   | 1.230 ng/ul  | 97     |
| 44) Dimethylphthalate      | 14.13 | 163 | 33276   | 1.713 ng/ul  | 96     |
| 49) Acenaphthene           | 14.75 | 153 | 33345   | 2.114 ng/ul  | 96     |
| 53) Dibenzofuran           | 15.09 | 168 | 28569   | 1.214 ng/ul  | 95     |
| 58) Fluorene               | 15.73 | 166 | 33428   | 1.763 ng/ul  | 96     |
| 69) Phenanthrene           | 17.48 | 178 | 526922  | 18.432 ng/ul | 100    |
| 71) Anthracene             | 17.57 | 178 | 110570  | 3.813 ng/ul  | 96     |
| 74) Carbazole              | 17.84 | 167 | 43457   | 1.809 ng/ul  | 99     |
| 76) Fluoranthene           | 19.49 | 202 | 840239  | 25.438 ng/ul | 98     |
| 79) Pyrene                 | 19.86 | 202 | 695698  | 20.415 ng/ul | 97     |
| 82) Benzo(a)anthracene     | 21.70 | 228 | 418657  | 11.919 ng/ul | 99     |
| 84) Chrysene               | 21.77 | 228 | 401373  | 12.243 ng/ul | 98     |
| 87) Benzo(b)fluoranthene   | 23.95 | 252 | 553236  | 14.706 ng/ul | 97     |
| 88) Benzo(k)fluoranthene   | 24.01 | 252 | 182778m | 5.053 ng/ul  |        |
| 90) Benzo(a)pyrene         | 24.83 | 252 | 366330  | 10.219 ng/ul | 97     |
| 91) Indeno(1,2,3-cd)pyrene | 28.71 | 276 | 221443  | 5.296 ng/ul  | 94     |
| 92) Dibenzo(a,h)anthracene | 28.78 | 278 | 64109m  | 1.880 ng/ul  |        |
| 93) Benzo(g,h,i)perylene   | 29.87 | 276 | 187982  | 5.385 ng/ul  | 96     |

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

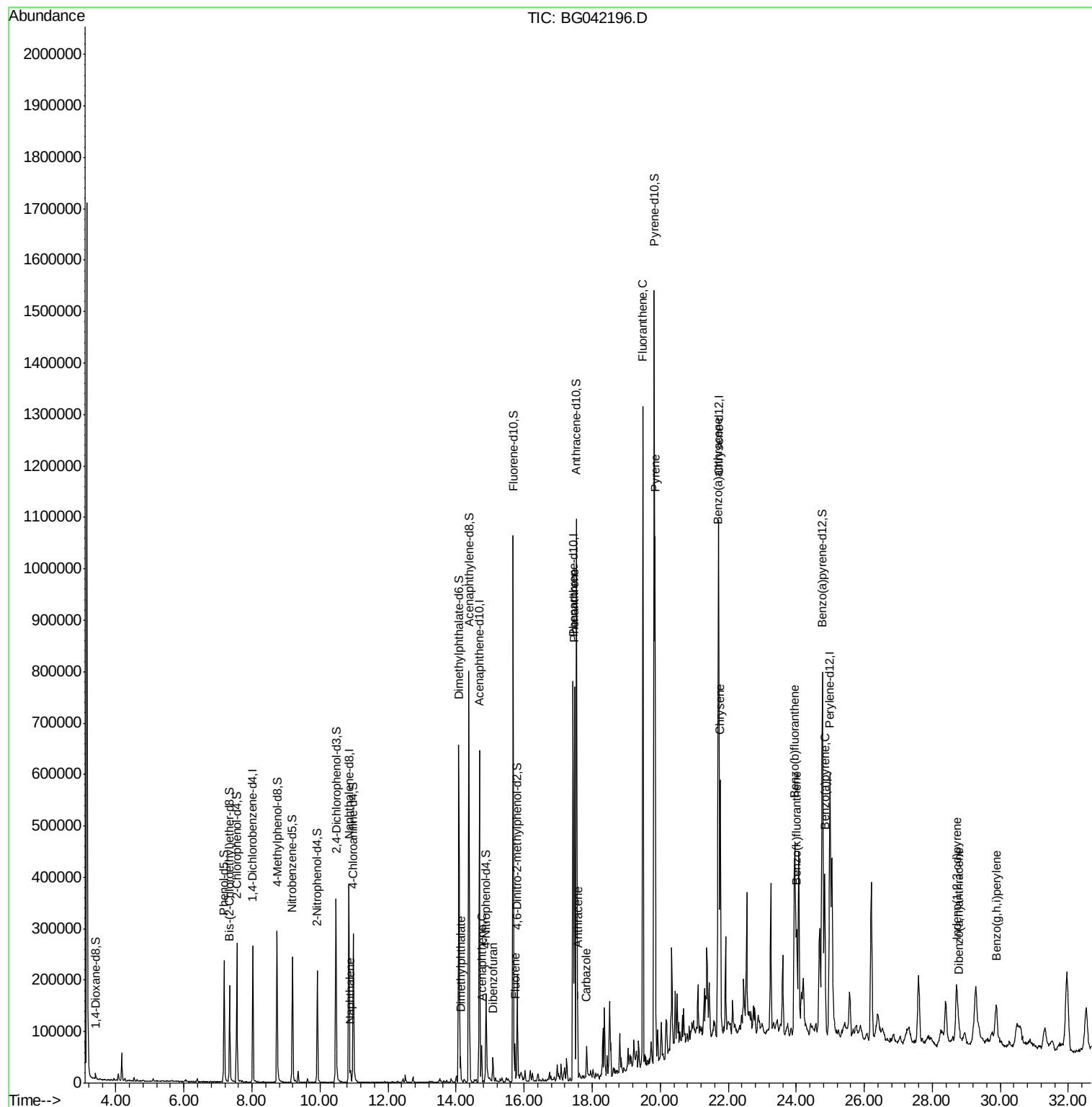
Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081319\  
Data File : BG042196.D  
Acq On : 14 Aug 2019 5:29  
Operator : HP/JU  
Sample : K4304-02  
Misc :  
ALS Vial : 58 Sample Multiplier: 1

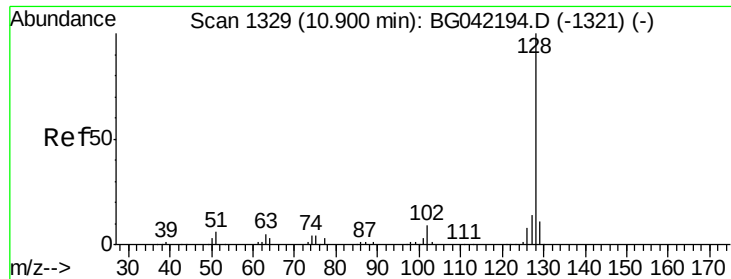
Instrument :  
BNA\_G  
ClientSampleId :  
CB5N3

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Quant Time: Aug 14 08:47:04 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\SOM-EPA-BG080319MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Aug 14 08:30:54 2019  
Response via : Initial Calibration





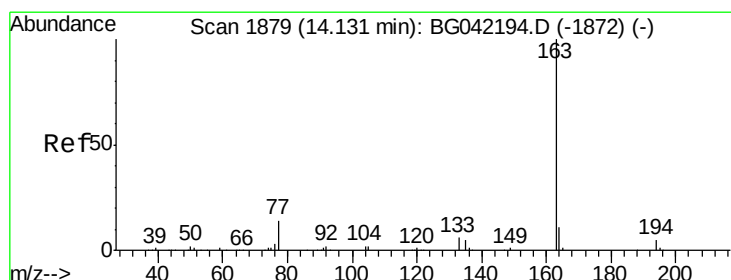
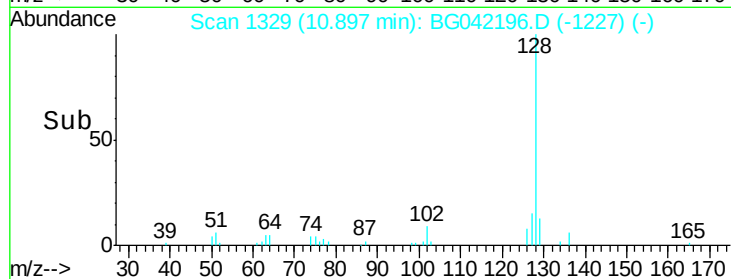
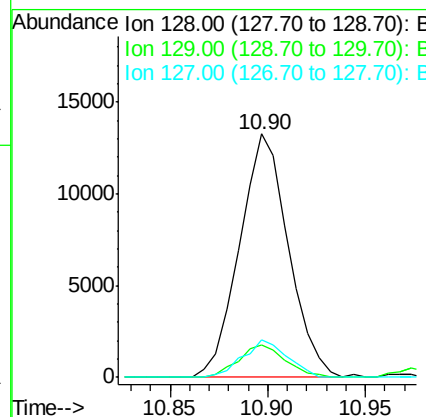
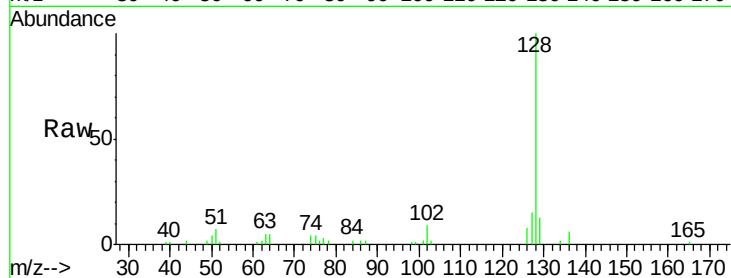
#28  
Naphthalene  
Concen: 1.230 ng/ul  
RT: 10.90 min Scan# 1329  
Delta R.T. -0.00 min  
Lab File: BG042196.D  
Acq: 14 Aug 2019 5:29

Instrument :  
BNA\_G  
ClientSampleId :  
CB5N3

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 13.4  | 9.5   | 14.3  |
| 127     | 15.5  | 11.4  | 17.0  |

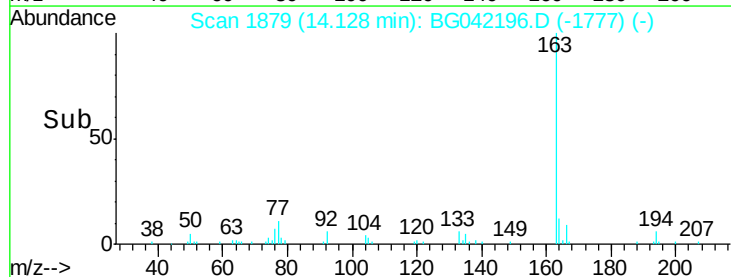
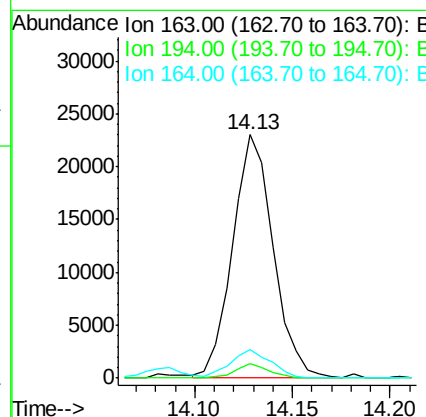
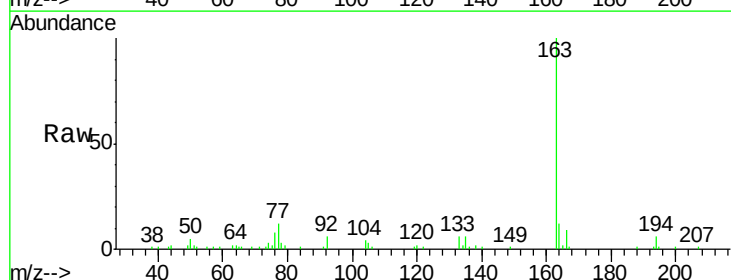
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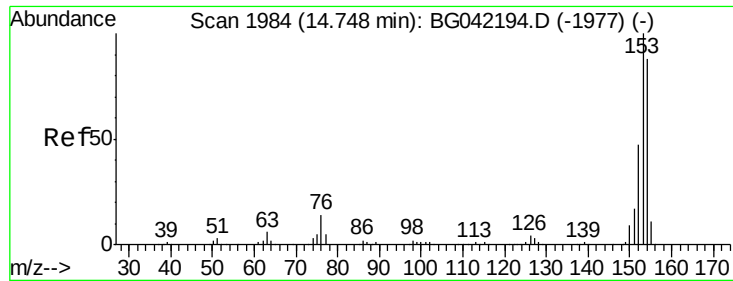
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#44  
Dimethylphthalate  
Concen: 1.713 ng/ul  
RT: 14.13 min Scan# 1879  
Delta R.T. -0.00 min  
Lab File: BG042196.D  
Acq: 14 Aug 2019 5:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 5.9   | 4.2   | 6.2   |
| 164     | 11.7  | 7.8   | 11.8  |





#49

Acenaphthene

Concen: 2.114 ng/ul

RT: 14.75 min Scan# 1984

Delta R.T. -0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

Instrument :

BNA\_G

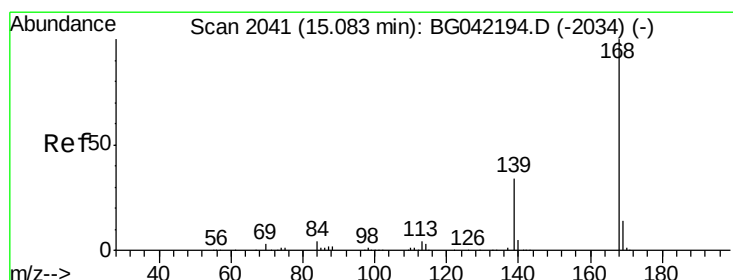
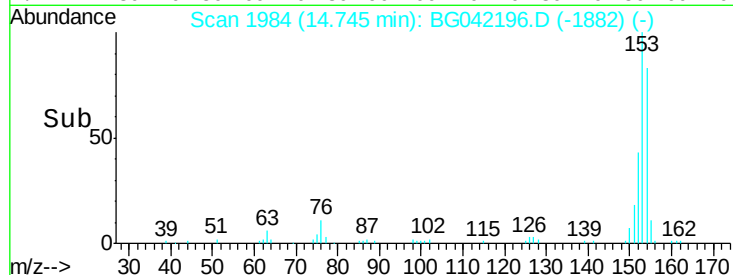
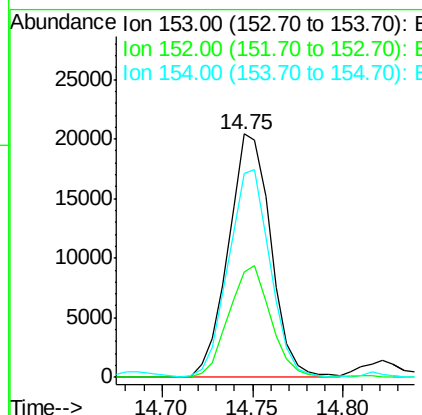
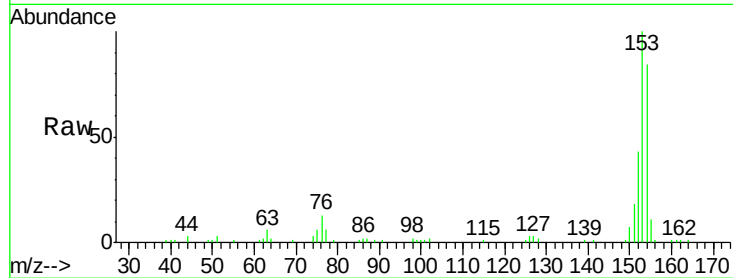
ClientSampled :

CB5N3

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 153   | Resp: | 33345 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 43.2  | 37.8  | 56.8  |
| 154       | 83.6  | 69.4  | 104.2 |

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#53

Dibenzofuran

Concen: 1.214 ng/ul

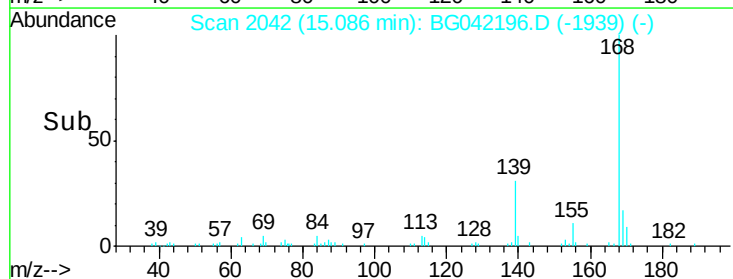
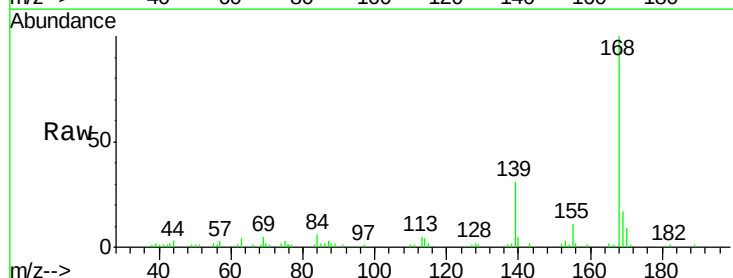
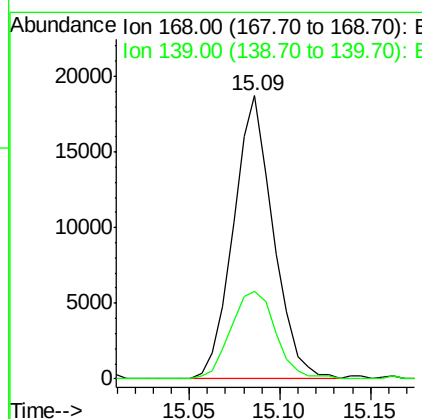
RT: 15.09 min Scan# 2042

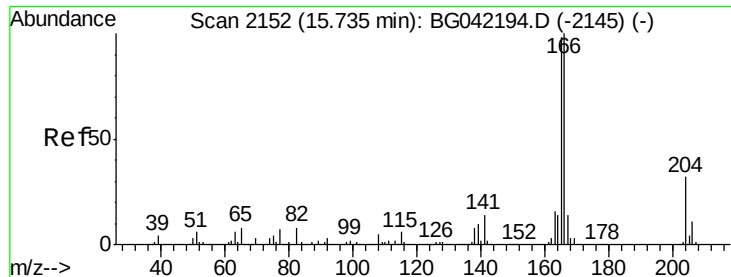
Delta R.T. 0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 168   | Resp: | 28569 |
| Ion Ratio | Lower | Upper |       |
| 168       | 100   |       |       |
| 139       | 31.1  | 27.3  | 40.9  |





#58

Fluorene

Concen: 1.763 ng/ul

RT: 15.73 min Scan# 2152

Delta R.T. -0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

Instrument :

BNA\_G

ClientSampleId :

CB5N3

Tot Ion:166 Resp: 33428

Ion Ratio Lower Upper

166 100

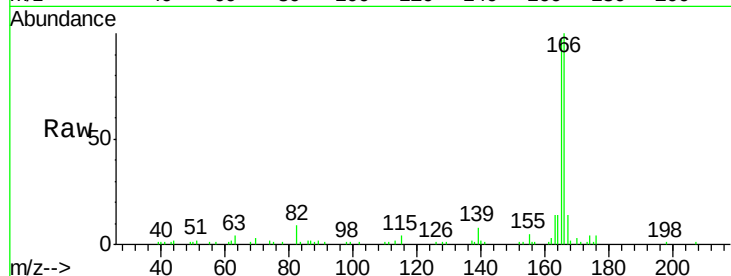
165 97.3 81.1 121.7

167 14.1 11.0 16.4

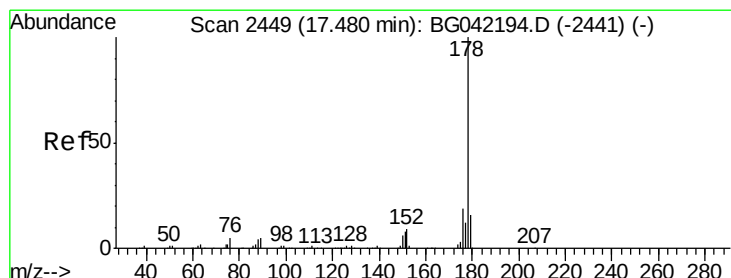
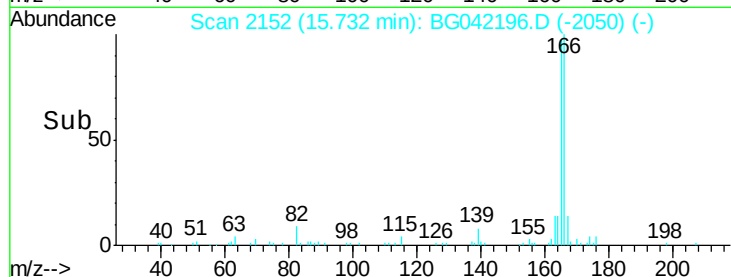
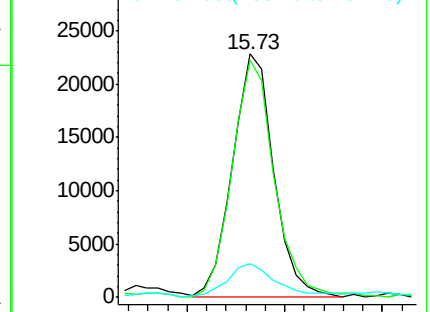
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Abundance Ion 166.00 (165.70 to 166.70): E  
Ion 165.00 (164.70 to 165.70): E  
Ion 167.00 (166.70 to 167.70): E



#69

Phenanthrene

Concen: 18.432 ng/ul

RT: 17.48 min Scan# 2449

Delta R.T. -0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

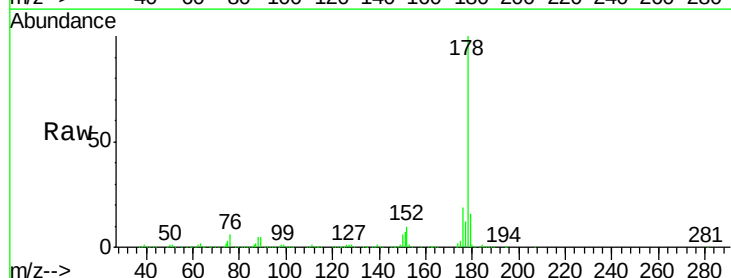
Tgt Ion:178 Resp: 526922

Ion Ratio Lower Upper

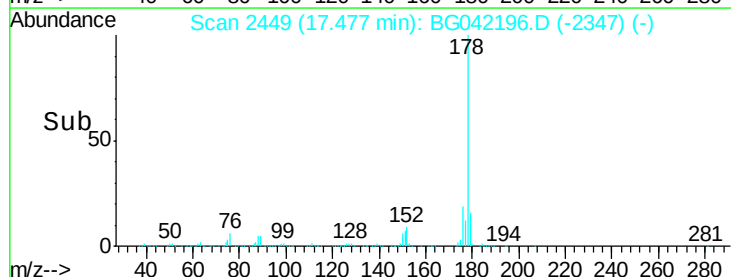
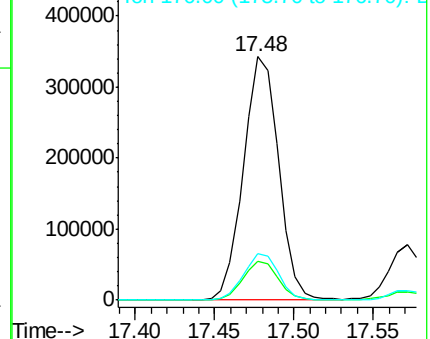
178 100

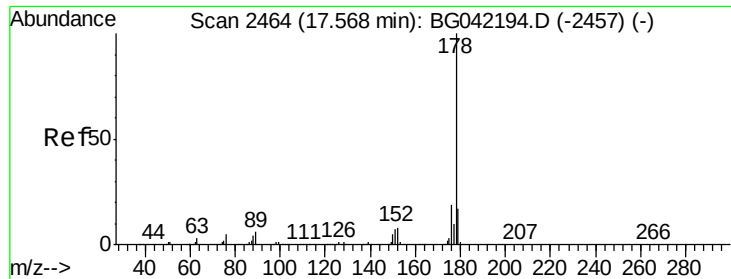
179 16.0 12.8 19.2

176 19.0 15.4 23.2



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





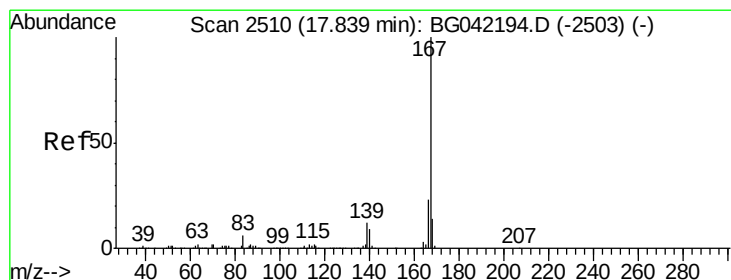
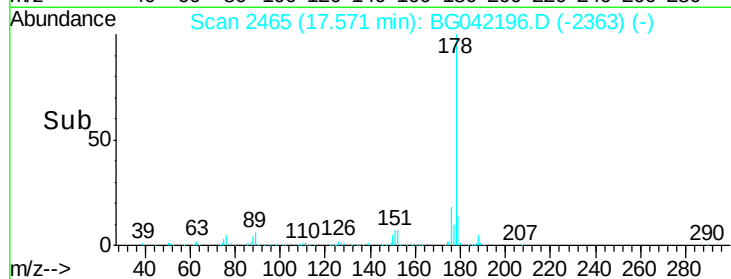
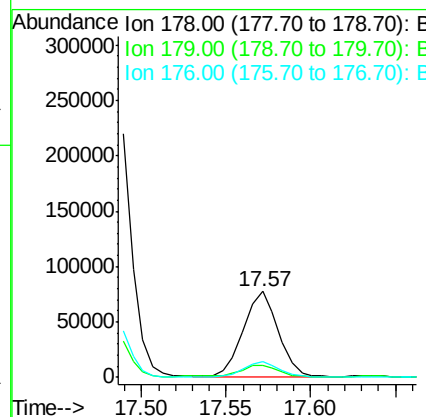
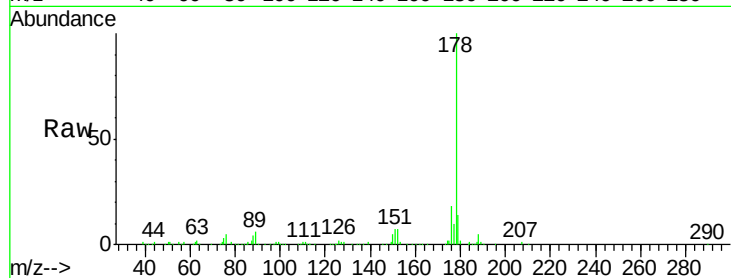
#71  
 Anthracene  
 Concen: 3.813 ng/ul  
 RT: 17.57 min Scan# 2465  
 Delta R.T. -0.00 min  
 Lab File: BG042196.D  
 Acq: 14 Aug 2019 5:29

Instrument :  
 BNA\_G  
 ClientSampleId :  
 CB5N3

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 14.4  | 13.4  | 20.0  |
| 176     | 18.1  | 15.4  | 23.2  |

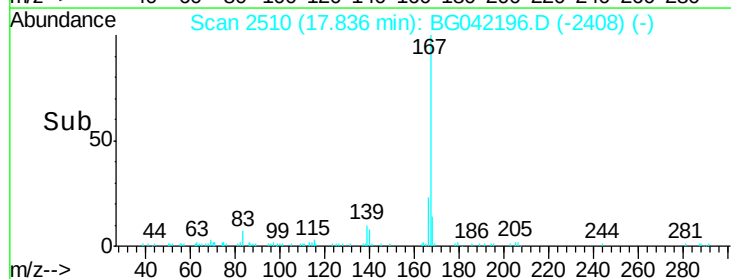
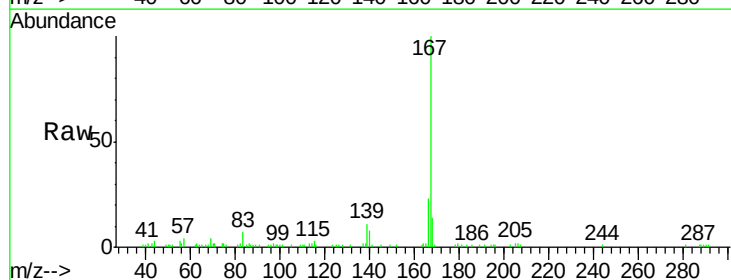
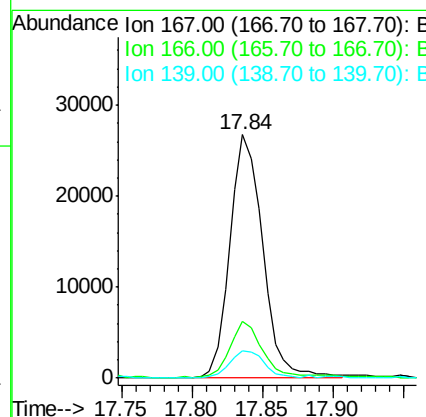
Manual Integrations  
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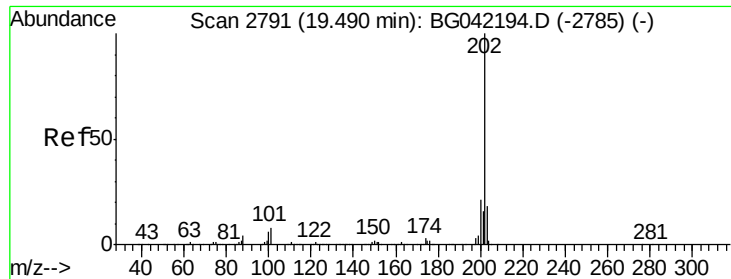
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#74  
 Carbazole  
 Concen: 1.809 ng/ul  
 RT: 17.84 min Scan# 2510  
 Delta R.T. -0.00 min  
 Lab File: BG042196.D  
 Acq: 14 Aug 2019 5:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 23.2  | 18.2  | 27.4  |
| 139     | 11.3  | 9.6   | 14.4  |





#76

Fluoranthene

Concen: 25.438 ng/ul

RT: 19.49 min Scan# 2792

Delta R.T. 0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

Instrument :

BNA\_G

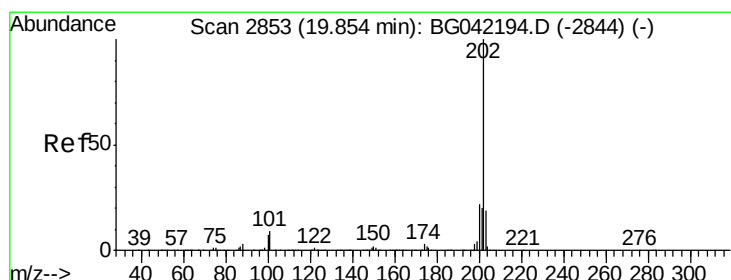
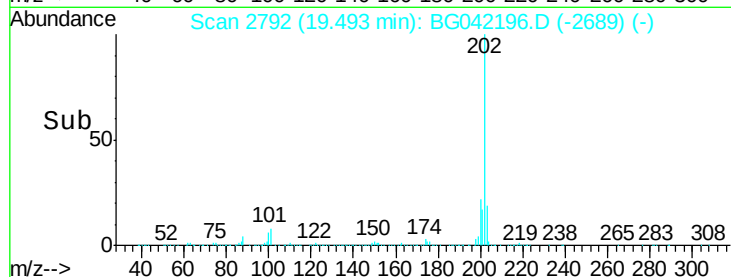
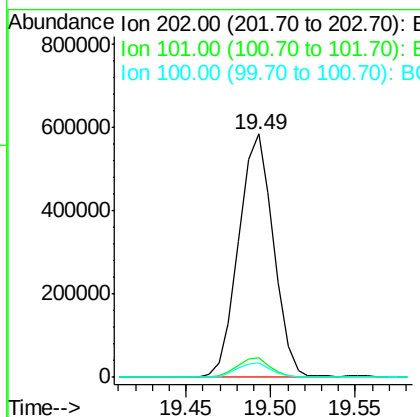
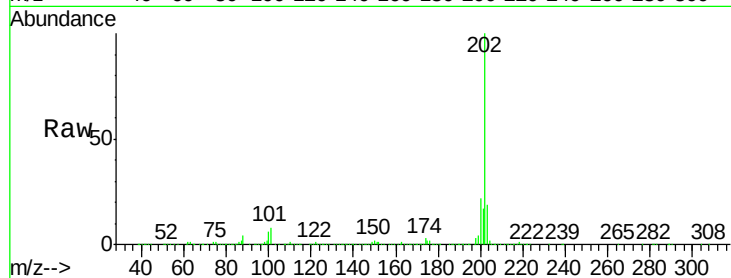
ClientSampleId :

CB5N3

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 202   | Resp: | 840239 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 7.8   | 6.7   | 10.1   |
| 100       | 6.0   | 5.3   | 7.9    |

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#79

Pyrene

Concen: 20.415 ng/ul

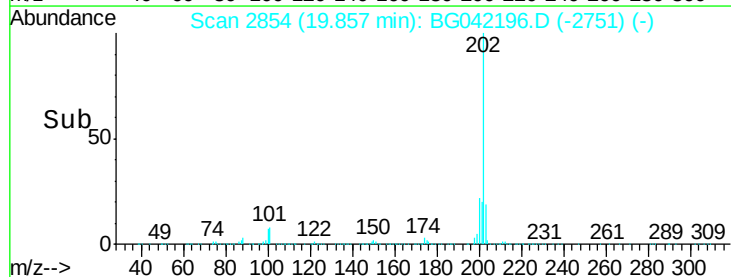
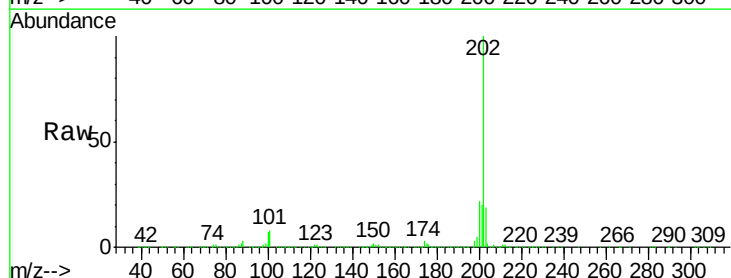
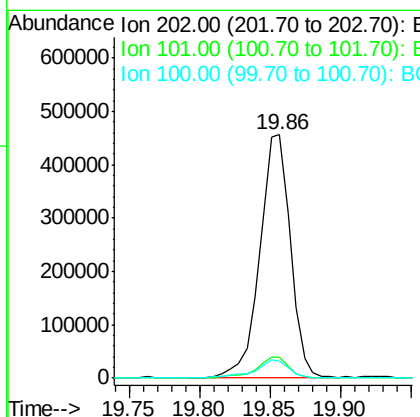
RT: 19.86 min Scan# 2854

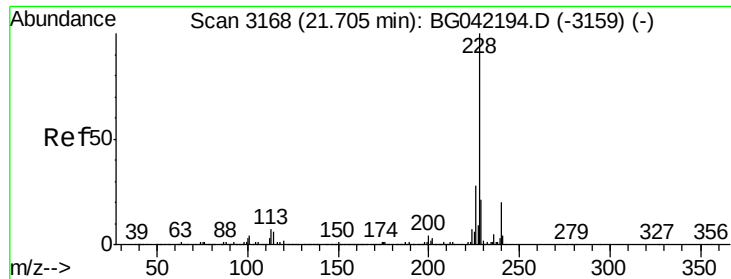
Delta R.T. 0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 695698 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 101       | 8.4   | 7.6   | 11.4   |
| 100       | 7.1   | 6.5   | 9.7    |





#82

Benzo(a)anthracene

Concen: 11.919 ng/ul

RT: 21.70 min Scan# 3168

Delta R.T. -0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

Instrument :

BNA\_G

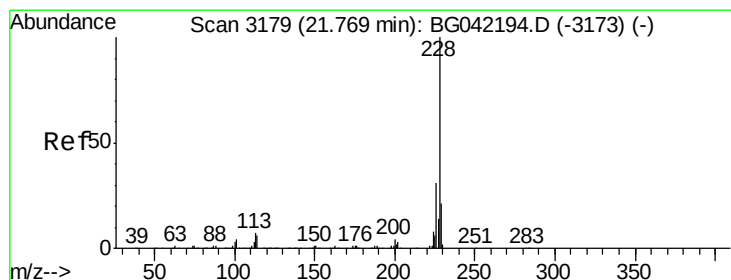
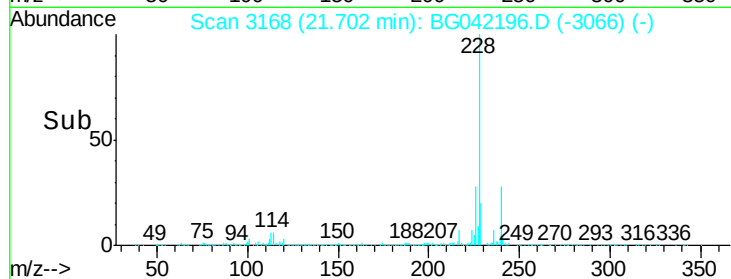
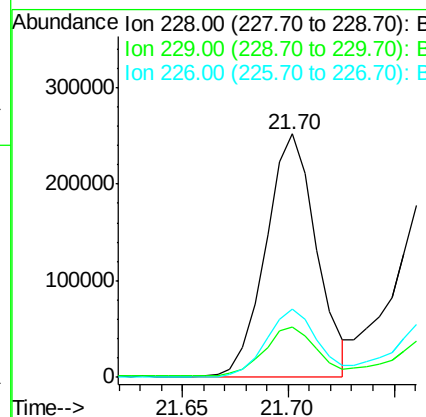
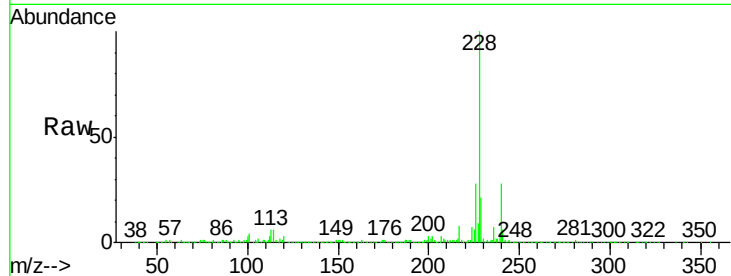
ClientSampleId :

CB5N3

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 228  | Resp: | 418657 |
| Ion Ratio |      | Lower | Upper  |
| 228       | 100  |       |        |
| 229       | 20.7 | 17.0  | 25.6   |
| 226       | 28.3 | 23.3  | 34.9   |

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#84

Chrysene

Concen: 12.243 ng/ul

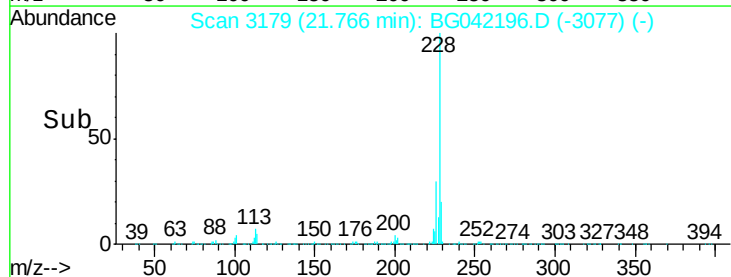
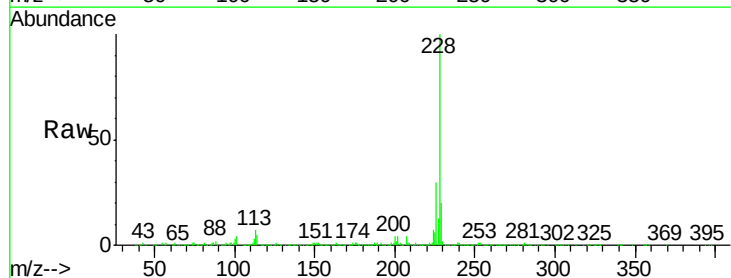
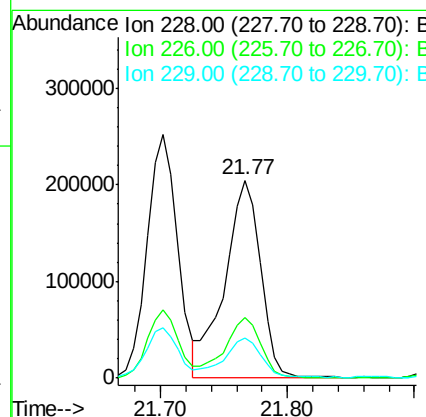
RT: 21.77 min Scan# 3179

Delta R.T. -0.00 min

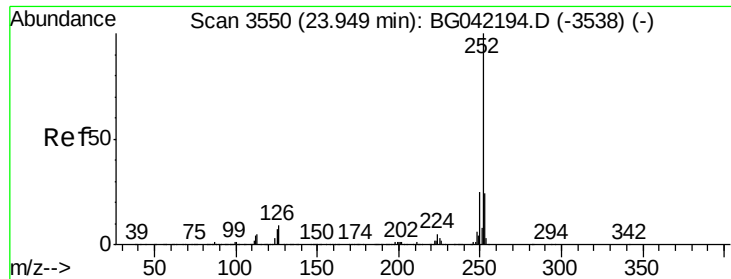
Lab File: BG042196.D

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|           |      |       |        |
|-----------|------|-------|--------|
| Tgt Ion:  | 228  | Resp: | 401373 |
| Ion Ratio |      | Lower | Upper  |
| 228       | 100  |       |        |
| 226       | 30.5 | 25.7  | 38.5   |
| 229       | 20.4 | 16.6  | 24.8   |







#87

Benzo(b)fluoranthene

Concen: 14.706 ng/ul

RT: 23.95 min Scan# 3551

Delta R.T. 0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

Instrument :

BNA\_G

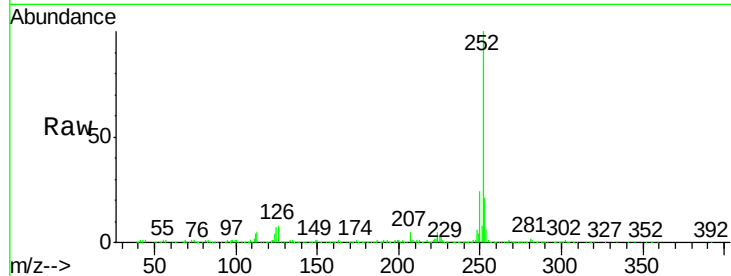
ClientSampled :

CB5N3

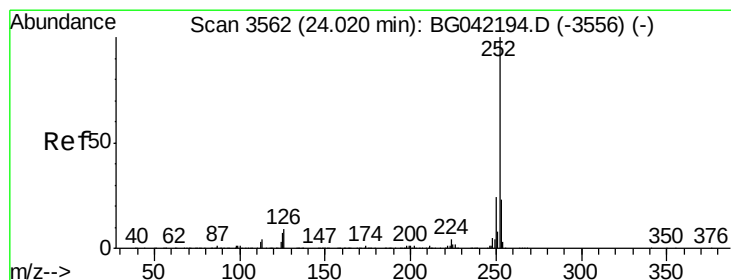
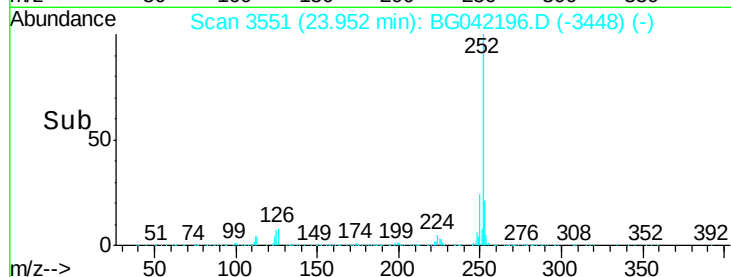
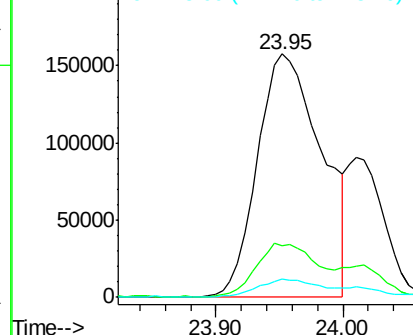
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 553236 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 21.3  | 18.4  | 27.6   |
| 125       | 7.4   | 5.8   | 8.8    |

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Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#88

Benzo(k)fluoranthene

Concen: 5.053 ng/ul m

RT: 24.01 min Scan# 3561

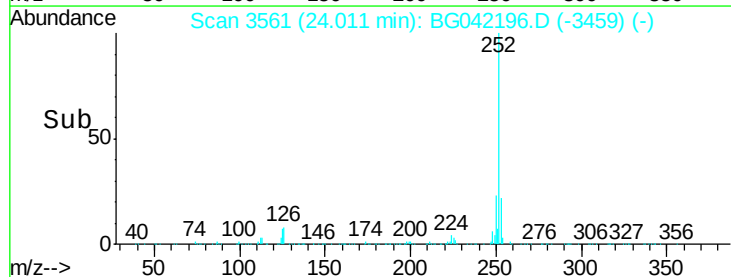
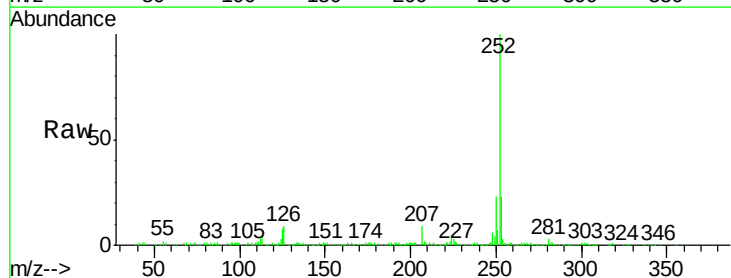
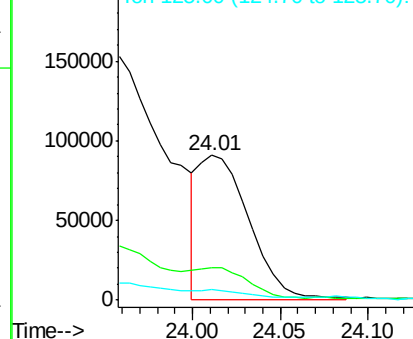
Delta R.T. -0.00 min

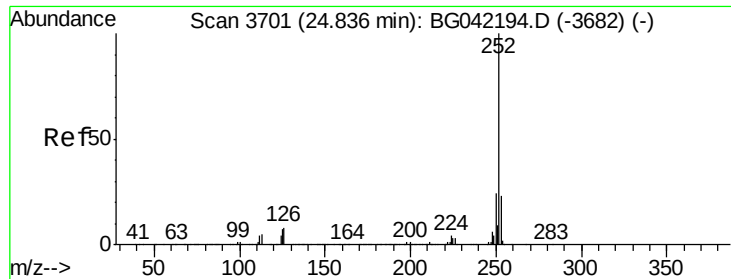
Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 182778 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.5  | 18.3  | 27.5   |
| 125       | 7.6   | 5.5   | 8.3    |

Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E





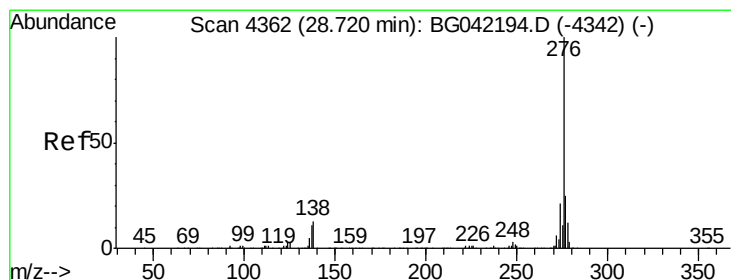
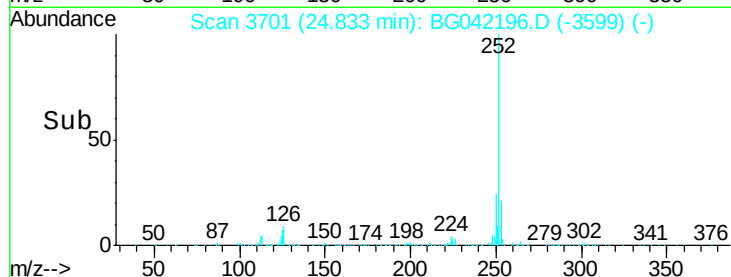
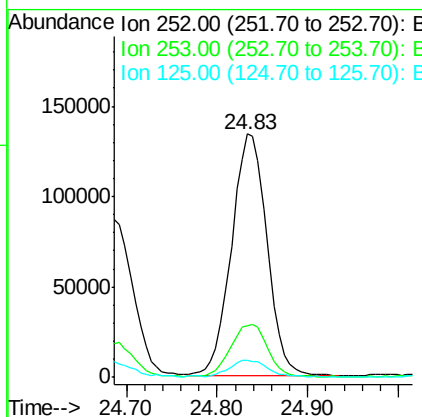
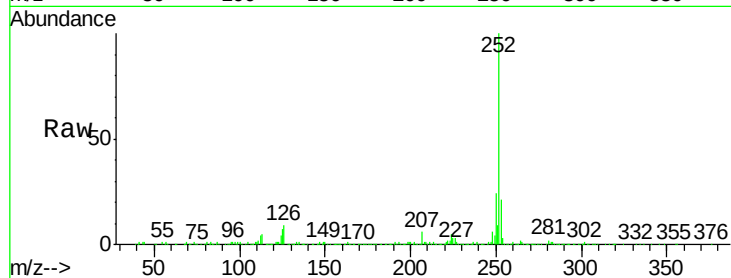
#90  
Benzo(a)pyrene  
Concen: 10.219 ng/ul  
RT: 24.83 min Scan# 3701  
Delta R.T. -0.00 min  
Lab File: BG042196.D  
Acq: 14 Aug 2019 5:29

Instrument :  
BNA\_G  
ClientSampleId :  
CB5N3

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 21.3  | 18.3       | 27.5  |
| 125     | 7.2   | 6.5        | 9.7   |

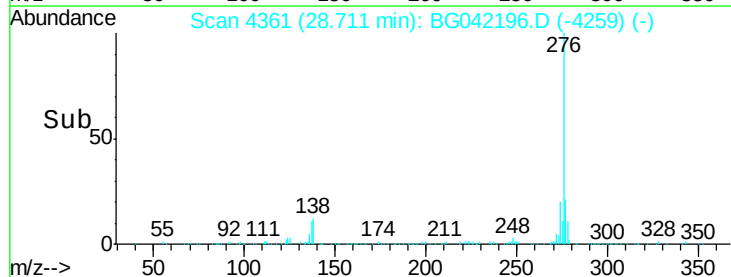
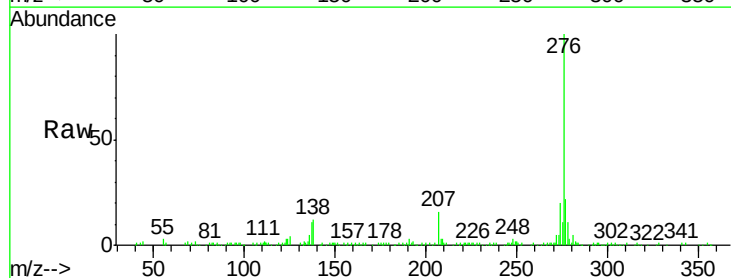
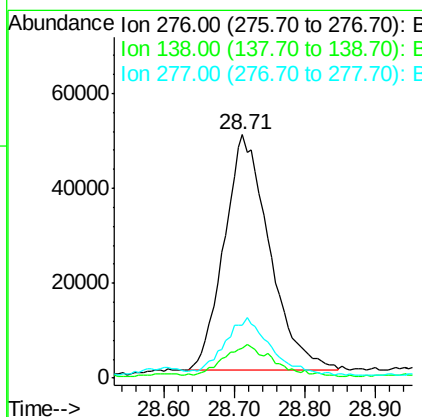
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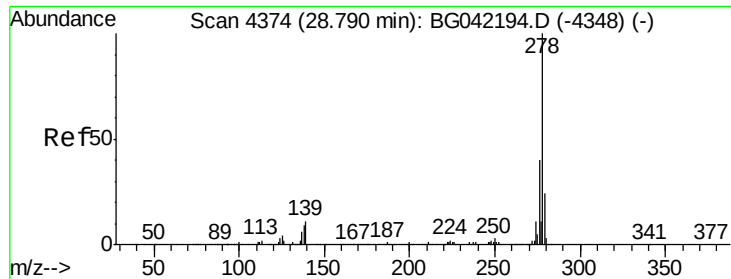
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#91  
Indeno(1,2,3-cd)pyrene  
Concen: 5.296 ng/ul  
RT: 28.71 min Scan# 4361  
Delta R.T. -0.00 min  
Lab File: BG042196.D  
Acq: 14 Aug 2019 5:29

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 276     | 100   |            |       |
| 138     | 12.1  | 12.0       | 18.0  |
| 277     | 21.7  | 19.2       | 28.8  |





#92

Dibenzo(a,h)anthracene

Concen: 1.880 ng/ul

RT: 28.78 min Scan# 4372

Delta R.T. -0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

Instrument :

BNA\_G

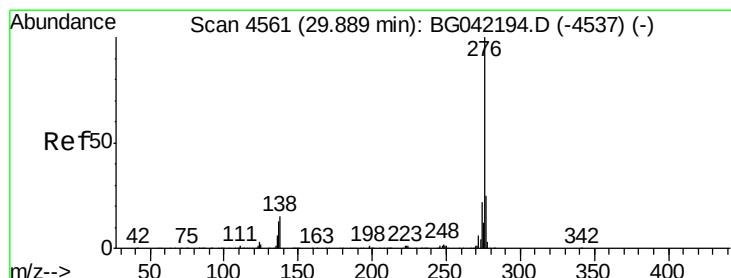
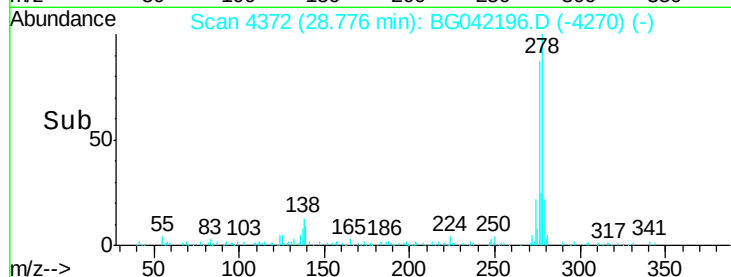
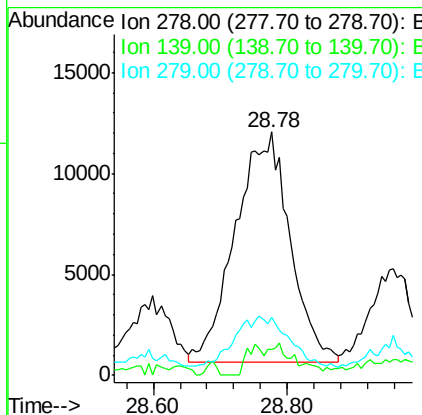
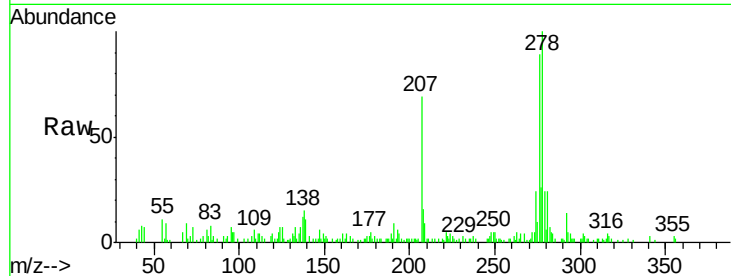
ClientSampleId :

CB5N3

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 278   | Resp: | 64109 |
| Ion      | Ratio | Lower | Upper |
| 278      | 100   |       |       |
| 139      | 10.8  | 9.4   | 14.0  |
| 279      | 23.9  | 19.2  | 28.8  |

Manual Integrations  
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#93

Benzo(g,h,i)perylene

Concen: 5.385 ng/ul

RT: 29.87 min Scan# 4559

Delta R.T. -0.00 min

Lab File: BG042196.D

Acq: 14 Aug 2019 5:29

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 276   | Resp: | 187982 |
| Ion      | Ratio | Lower | Upper  |
| 276      | 100   |       |        |
| 138      | 13.0  | 12.6  | 18.8   |
| 277      | 22.9  | 19.2  | 28.8   |

