

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081319\  
 Data File : BG042200.D  
 Acq On : 14 Aug 2019 8:03  
 Operator : HP/JU  
 Sample : K4304-06  
 Misc :  
 ALS Vial : 62 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 CB5N7

Manual Integrations  
 APPROVED

mohammad  
 8/15/2019 5:11:40 PM

Quant Time: Aug 14 10:50:27 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 | 8.02  | 152  | 89143    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.85 | 136  | 368736   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.69 | 164  | 250574   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.44 | 188  | 507358   | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.72 | 240  | 493725   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 24.99 | 264  | 591093   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.41  | 96  | 8266   | 4.06  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.18  | 99  | 198436 | 28.37 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.34  | 67  | 102318 | 26.15 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.55  | 132 | 180027 | 30.10 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.73  | 113 | 170472 | 29.02 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.19  | 128 | 89493  | 32.24 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.92  | 143 | 112669 | 34.96 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.47 | 165 | 205525 | 31.59 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.98 | 131 | 230087 | 31.87 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 14.09 | 166 | 586385 | 30.17 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.38 | 160 | 696216 | 31.36 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.89 | 143 | 76990  | 23.59 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.68 | 176 | 520095 | 30.08 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.80 | 200 | 76853  | 23.61 | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.54 | 188 | 752687 | 30.92 | ng/ul | 0.00 |
| 78) Pyrene-d10                 | 19.83 | 212 | 841228 | 30.53 | ng/ul | 0.00 |
| 89) Benzo(a)pyrene-d12         | 24.77 | 264 | 961340 | 31.13 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |              | Ovalue |
|----------------------------|-------|-----|---------|--------------|--------|
| 28) Naphthalene            | 10.90 | 128 | 21904   | 1.162 ng/ul  | 99     |
| 44) Dimethylphthalate      | 14.13 | 163 | 73068   | 3.787 ng/ul  | 99     |
| 49) Acenaphthene           | 14.75 | 153 | 24019   | 1.533 ng/ul  | 94     |
| 53) Dibenzofuran           | 15.09 | 168 | 23725   | 1.015 ng/ul  | 97     |
| 58) Fluorene               | 15.73 | 166 | 25762   | 1.368 ng/ul  | 98     |
| 69) Phenanthrene           | 17.48 | 178 | 431198  | 15.524 ng/ul | 100    |
| 71) Anthracene             | 17.57 | 178 | 90331   | 3.207 ng/ul  | 97     |
| 74) Carbazole              | 17.84 | 167 | 38555   | 1.652 ng/ul  | 97     |
| 76) Fluoranthene           | 19.49 | 202 | 718446  | 22.387 ng/ul | 97     |
| 79) Pyrene                 | 19.86 | 202 | 599800  | 18.060 ng/ul | 97     |
| 82) Benzo(a)anthracene     | 21.70 | 228 | 362152  | 10.579 ng/ul | 98     |
| 84) Chrysene               | 21.77 | 228 | 334807  | 10.479 ng/ul | 98     |
| 87) Benzo(b)fluoranthene   | 23.96 | 252 | 458910  | 12.371 ng/ul | 98     |
| 88) Benzo(k)fluoranthene   | 24.01 | 252 | 183528m | 5.146 ng/ul  |        |
| 90) Benzo(a)pyrene         | 24.84 | 252 | 323410  | 9.149 ng/ul  | 99     |
| 91) Indeno(1,2,3-cd)pyrene | 28.72 | 276 | 196796  | 4.773 ng/ul  | 97     |
| 92) Dibenzo(a,h)anthracene | 28.76 | 278 | 54060m  | 1.607 ng/ul  |        |
| 93) Benzo(g,h,i)perylene   | 29.89 | 276 | 155051  | 4.504 ng/ul  | 97     |

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

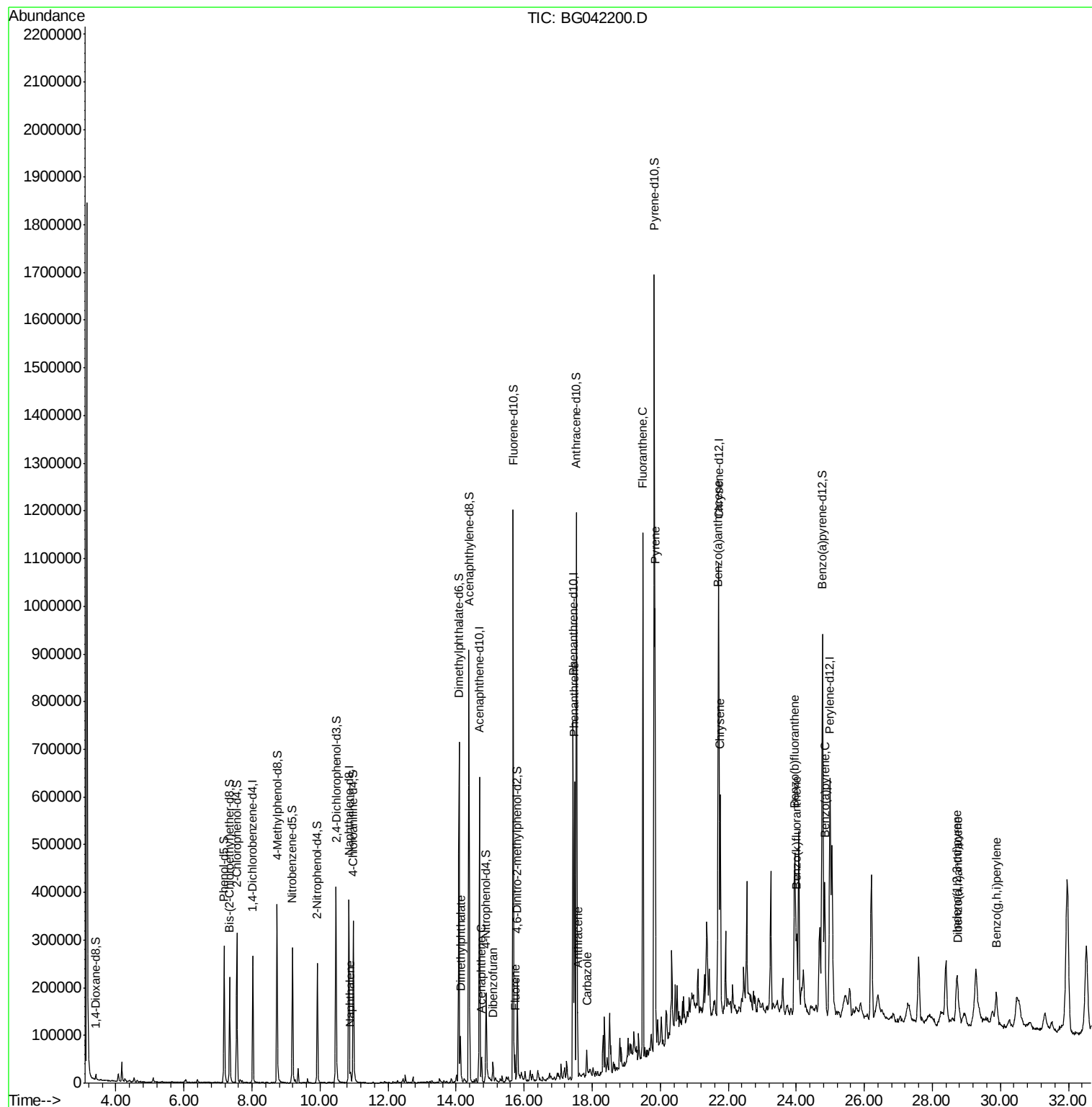
Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081319\  
Data File : BG042200.D  
Acq On : 14 Aug 2019 8:03  
Operator : HP/JU  
Sample : K4304-06  
Misc :  
ALS Vial : 62 Sample Multiplier: 1

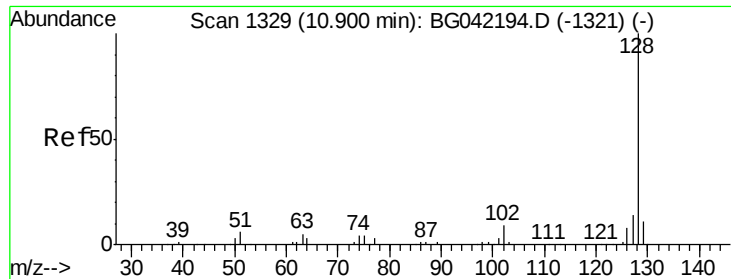
Instrument :  
BNA\_G  
ClientSampled :  
CB5N7

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Quant Time: Aug 14 10:50:27 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





#28

Naphthalene

Concen: 1.162 ng/ul

RT: 10.90 min Scan# 1329

Delta R.T. -0.00 min

Lab File: BG042200.D

Acq: 14 Aug 2019 8:03

Instrument :

BNA\_G

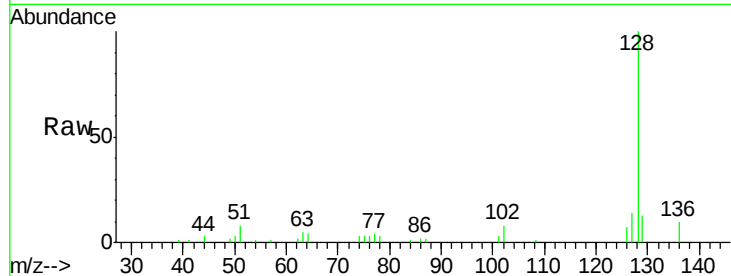
ClientSampleId :

CB5N7

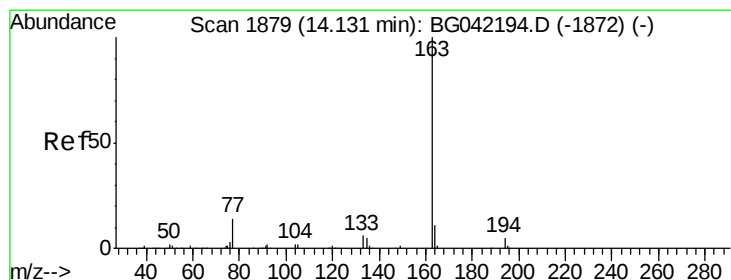
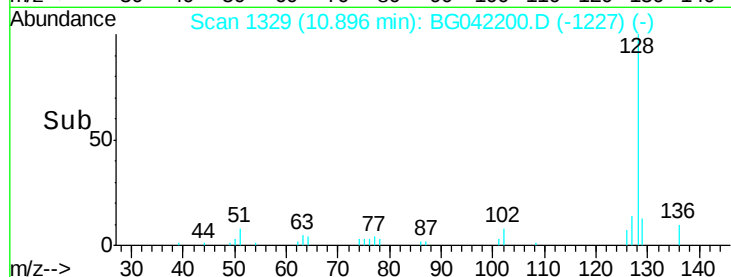
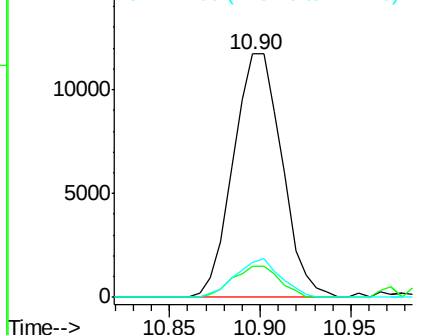
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 128   | Resp: | 21904 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 12.7  | 9.5   | 14.3  |
| 127       | 14.3  | 11.4  | 17.0  |

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Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E



#44

Dimethylphthalate

Concen: 3.787 ng/ul

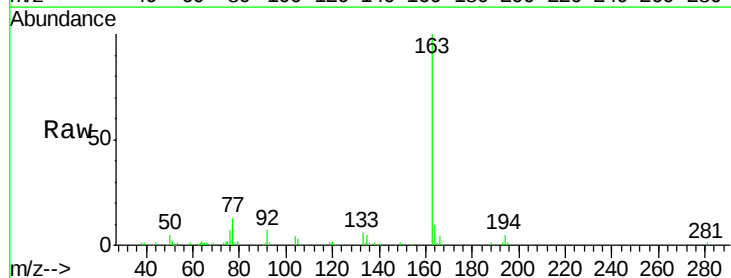
RT: 14.13 min Scan# 1879

Delta R.T. -0.00 min

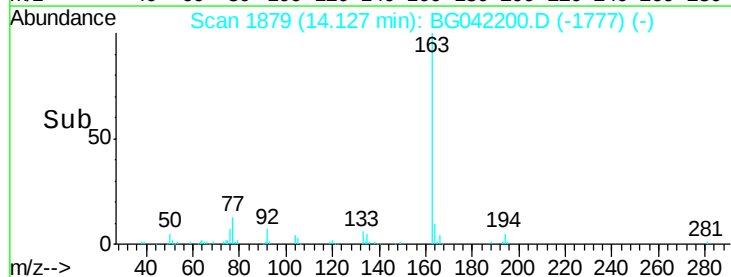
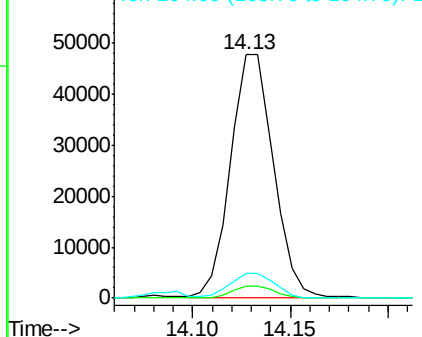
Lab File: BG042200.D

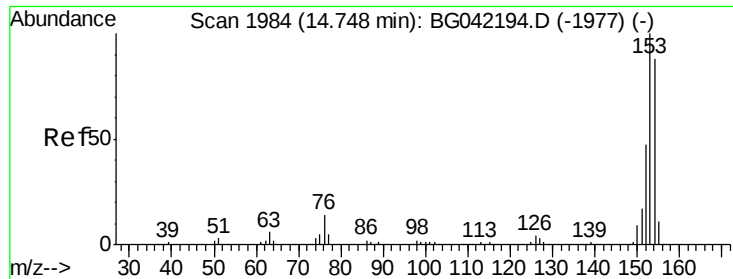
Acq: 14 Aug 2019 8:03

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 163   | Resp: | 73068 |
| Ion Ratio | Lower | Upper |       |
| 163       | 100   |       |       |
| 194       | 4.8   | 4.2   | 6.2   |
| 164       | 9.9   | 7.8   | 11.8  |



Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E





#49

Acenaphthene

Concen: 1.533 ng/ul

RT: 14.75 min Scan# 1985

Delta R.T. 0.00 min

Lab File: BG042200.D

Acq: 14 Aug 2019 8:03

Instrument :

BNA\_G

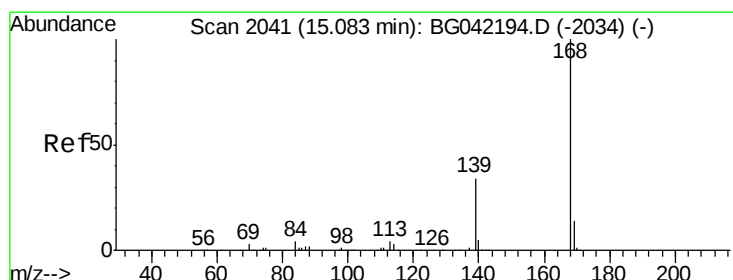
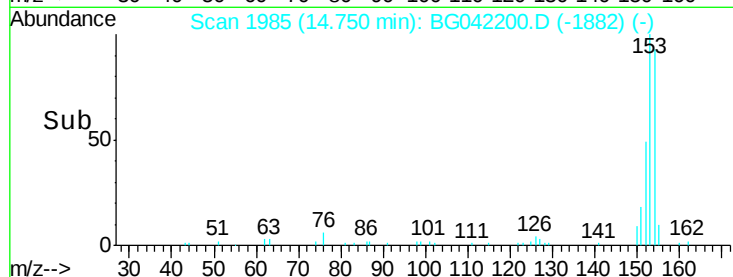
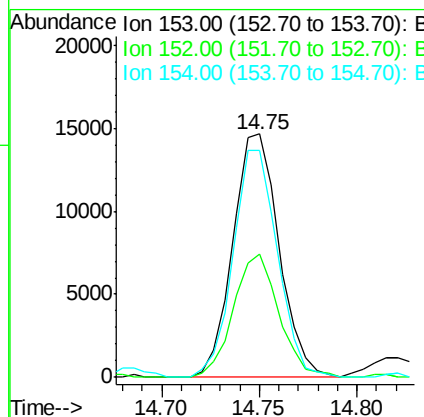
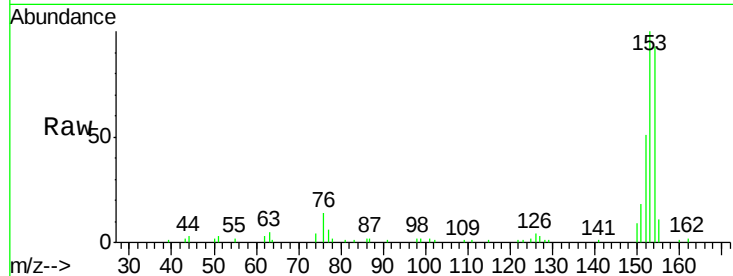
ClientSampleId :

CB5N7

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 153   | Resp: | 24019 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 50.9  | 37.8  | 56.8  |
| 154       | 93.4  | 69.4  | 104.2 |

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#53

Dibenzofuran

Concen: 1.015 ng/ul

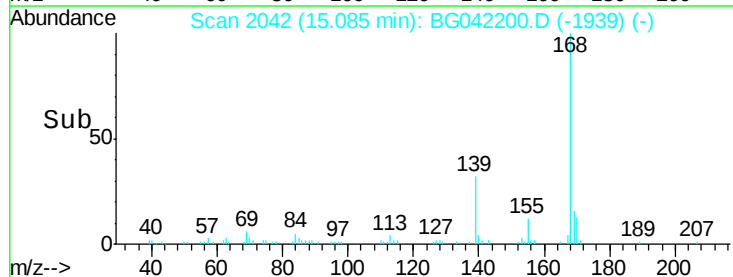
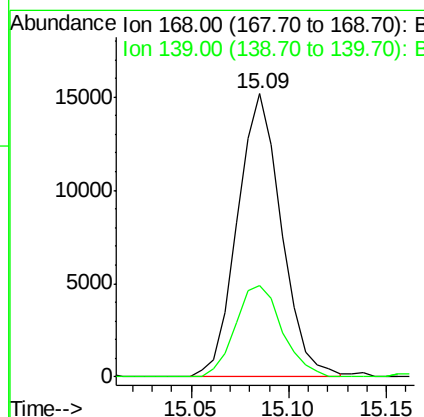
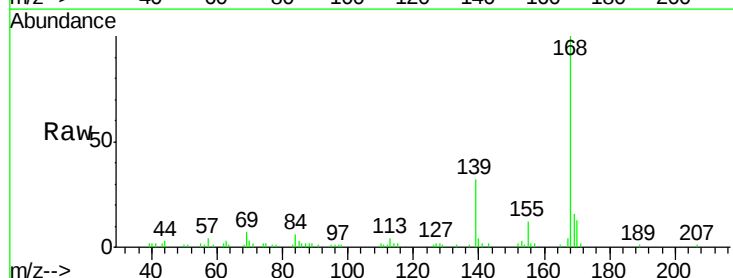
RT: 15.09 min Scan# 2042

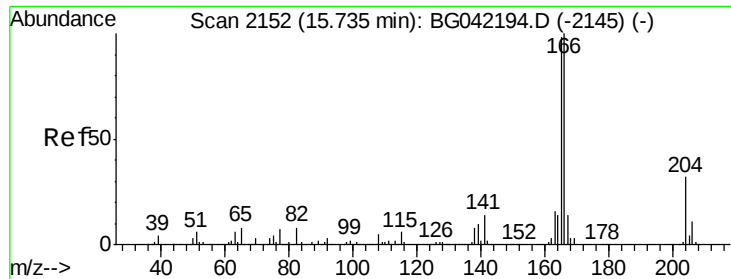
Delta R.T. 0.00 min

Lab File: BG042200.D

Acq: 14 Aug 2019 8:03

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 168   | Resp: | 23725 |
| Ion Ratio | Lower | Upper |       |
| 168       | 100   |       |       |
| 139       | 32.4  | 27.3  | 40.9  |





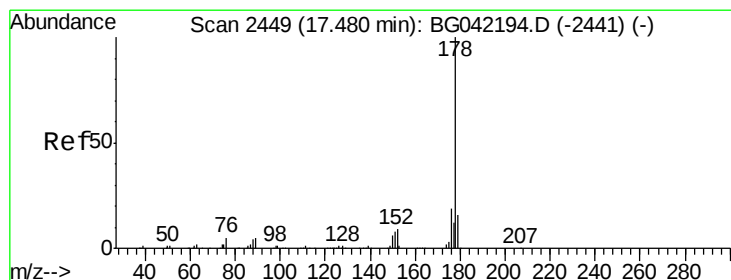
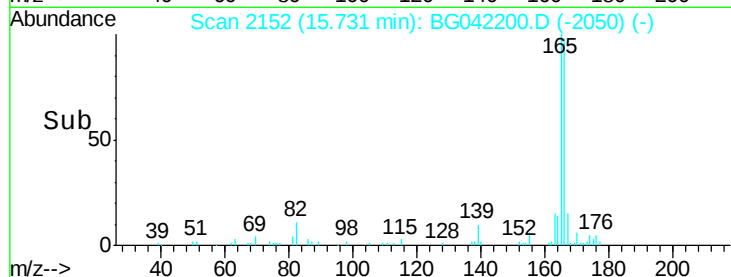
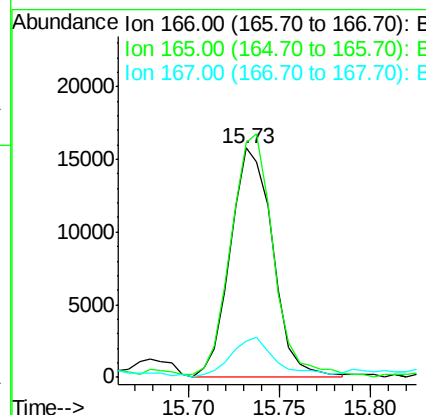
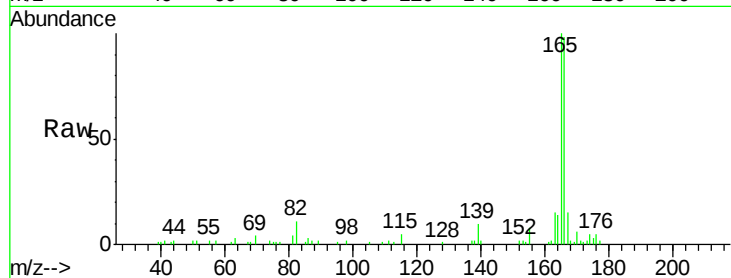
#58  
Fluorene  
Concen: 1.368 ng/ul  
RT: 15.73 min Scan# 2152  
Delta R.T. -0.00 min  
Lab File: BG042200.D  
Acq: 14 Aug 2019 8:03

Instrument :  
BNA\_G  
ClientSampleId :  
CB5N7

| Tot Ion | Ion   | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|-------|
| 166     | 100   |       | 25762 |       |       |
| 165     | 102.5 | 81.1  | 121.7 |       |       |
| 167     | 15.7  | 11.0  | 16.4  |       |       |

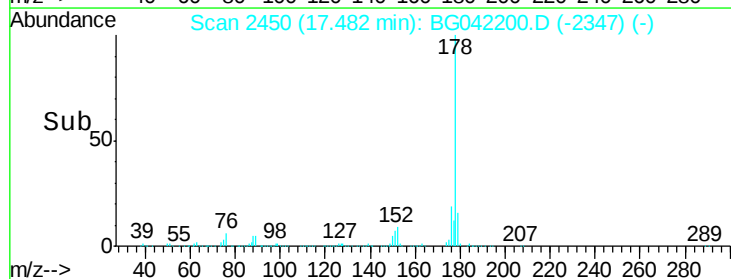
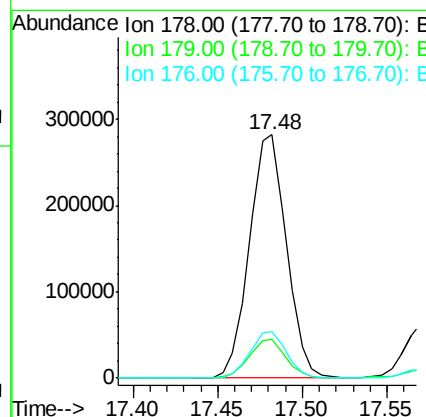
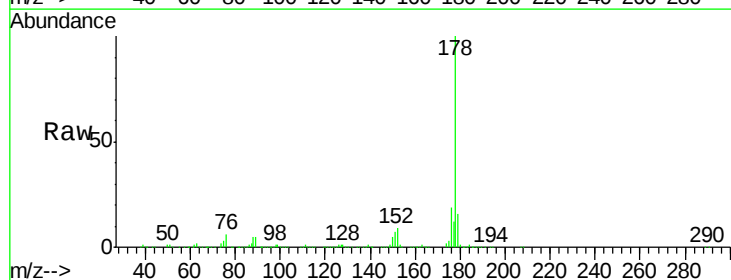
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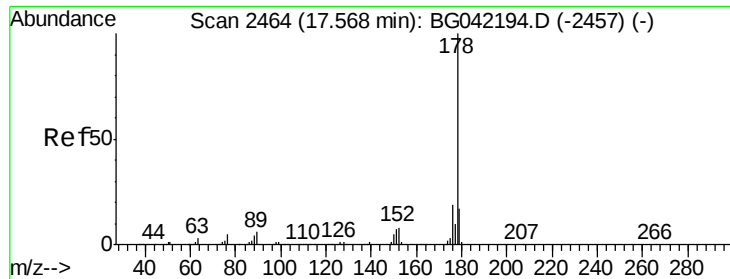
mohammad  
8/15/2019 5:11:40 PM



#69  
Phenanthrene  
Concen: 15.524 ng/ul  
RT: 17.48 min Scan# 2450  
Delta R.T. 0.00 min  
Lab File: BG042200.D  
Acq: 14 Aug 2019 8:03

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 178     | 100  |       | 431198 |       |       |
| 179     | 15.7 | 12.8  | 19.2   |       |       |
| 176     | 19.3 | 15.4  | 23.2   |       |       |





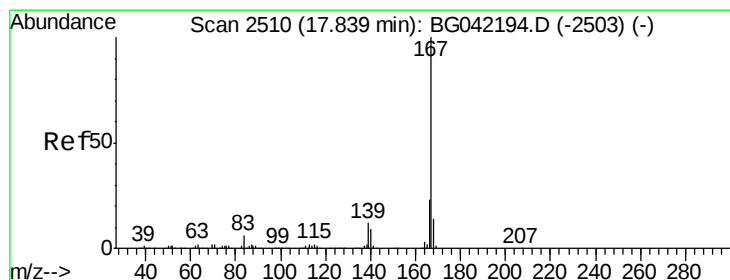
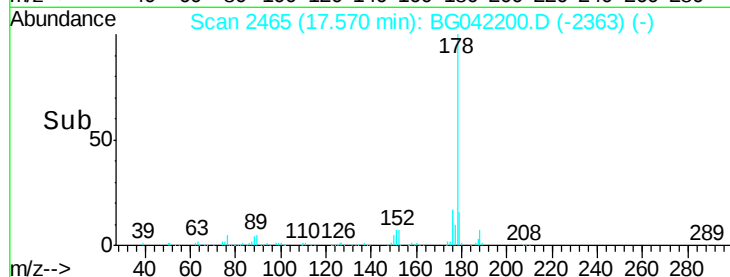
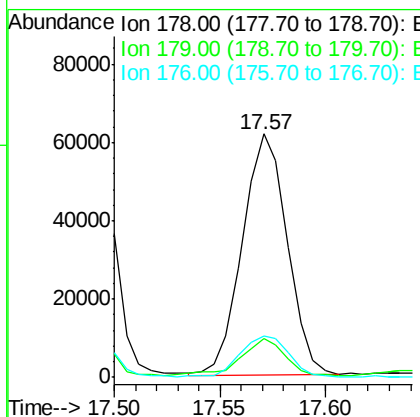
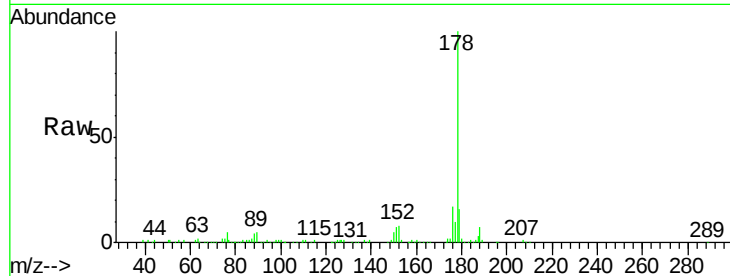
#71  
 Anthracene  
 Concen: 3.207 ng/ul  
 RT: 17.57 min Scan# 2465  
 Delta R.T. -0.00 min  
 Lab File: BG042200.D  
 Acq: 14 Aug 2019 8:03

Instrument :  
 BNA\_G  
 ClientSampleId :  
 CB5N7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 16.0  | 13.4  | 20.0  |
| 176     | 17.2  | 15.4  | 23.2  |

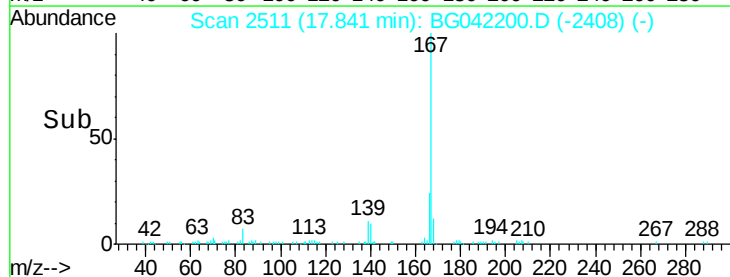
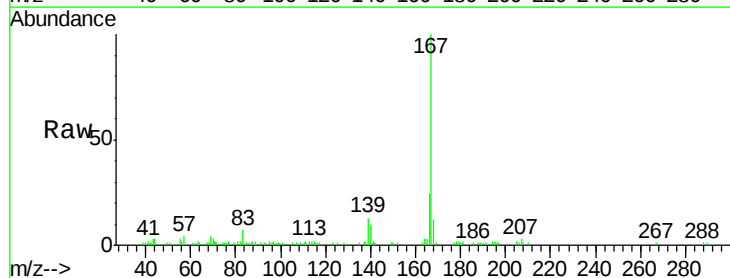
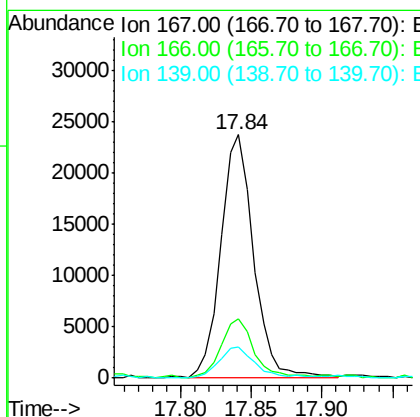
Manual Integrations  
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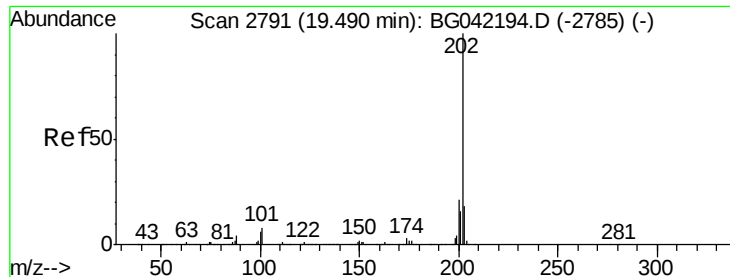
mohammad  
 8/15/2019 5:11:40 PM



#74  
 Carbazole  
 Concen: 1.652 ng/ul  
 RT: 17.84 min Scan# 2511  
 Delta R.T. 0.00 min  
 Lab File: BG042200.D  
 Acq: 14 Aug 2019 8:03

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 24.2  | 18.2  | 27.4  |
| 139     | 12.7  | 9.6   | 14.4  |





#76

Fluoranthene

Concen: 22.387 ng/ul

RT: 19.49 min Scan# 2792

Delta R.T. 0.00 min

Lab File: BG042200.D

Acq: 14 Aug 2019 8:03

Instrument :

BNA\_G

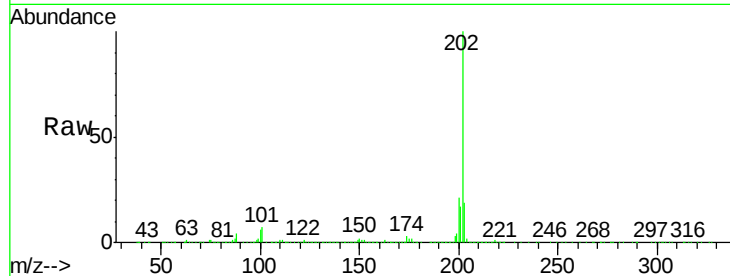
ClientSampleId :

CB5N7

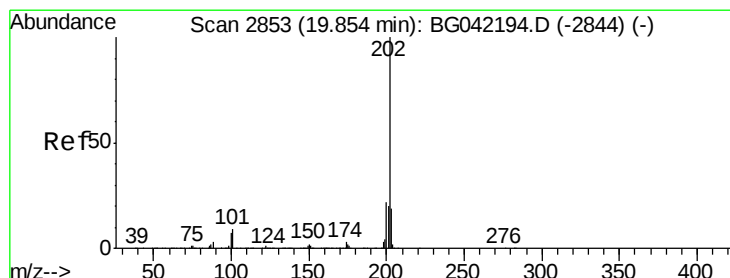
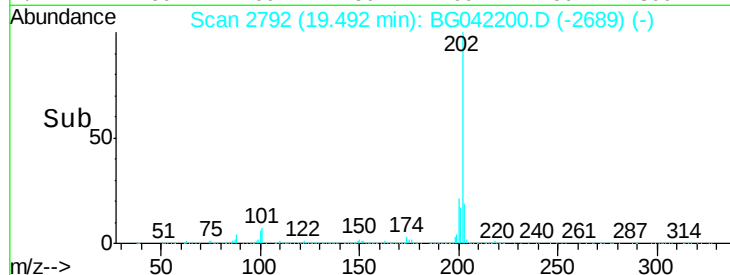
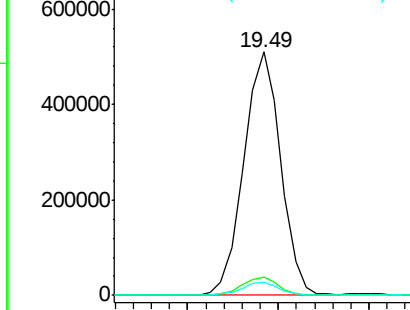
| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 718446 |       |       |
| 101     | 7.5   | 6.7    | 10.1  |       |
| 100     | 5.6   | 5.3    | 7.9   |       |

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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



#79

Pyrene

Concen: 18.060 ng/ul

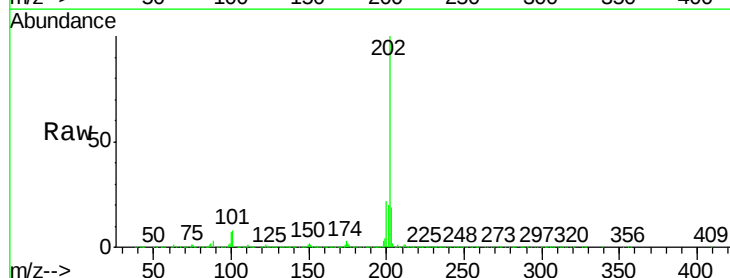
RT: 19.86 min Scan# 2854

Delta R.T. 0.00 min

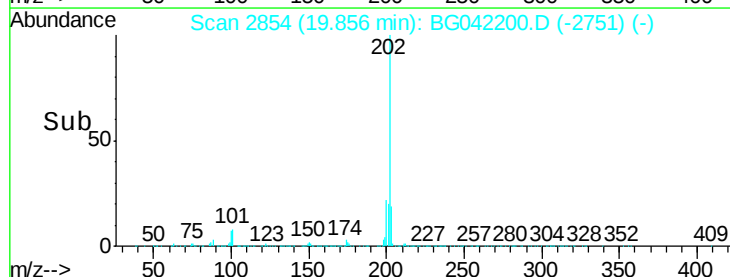
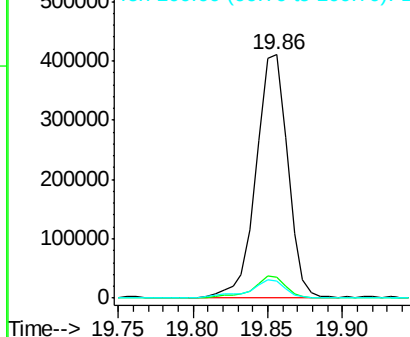
Lab File: BG042200.D

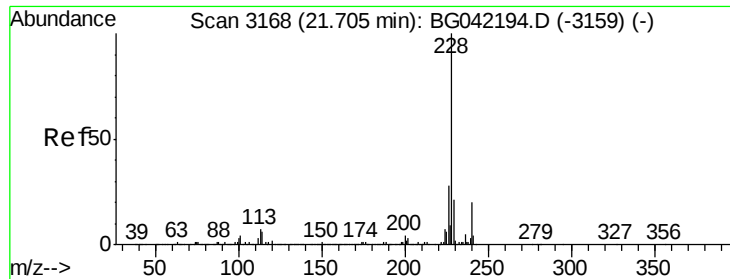
Acq: 14 Aug 2019 8:03

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 599800 |       |       |
| 101     | 8.4   | 7.6    | 11.4  |       |
| 100     | 7.3   | 6.5    | 9.7   |       |



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





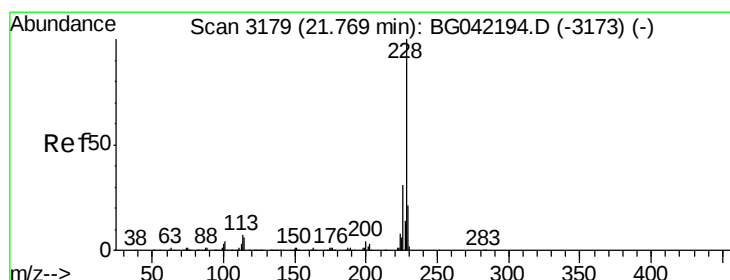
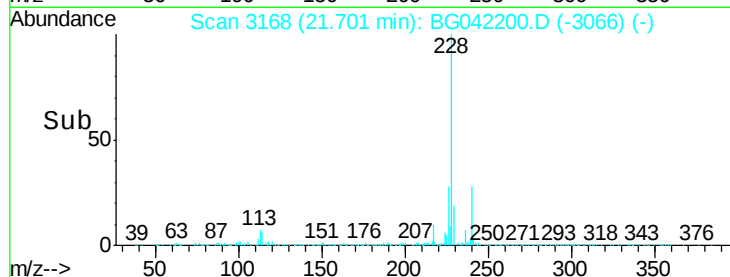
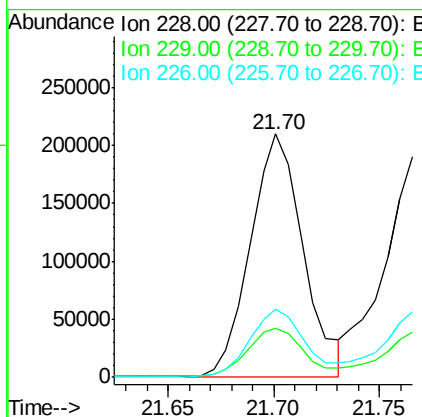
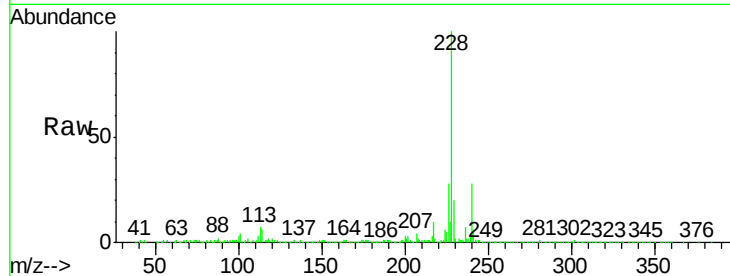
#82  
Benzo(a)anthracene  
Concen: 10.579 ng/ul  
RT: 21.70 min Scan# 3168  
Delta R.T. -0.00 min  
Lab File: BG042200.D  
Acq: 14 Aug 2019 8:03

Instrument :  
BNA\_G  
ClientSampleId :  
CB5N7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 20.4  | 17.0  | 25.6  |
| 226     | 28.2  | 23.3  | 34.9  |

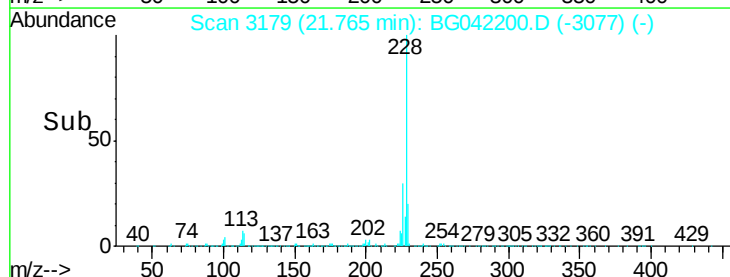
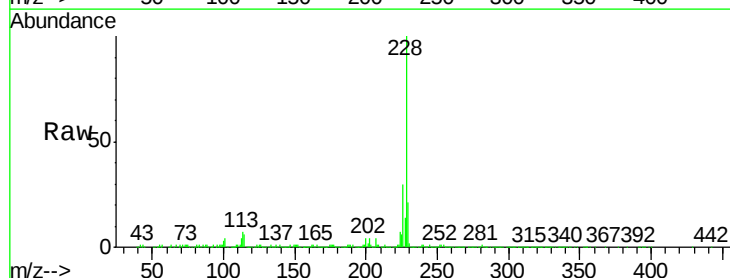
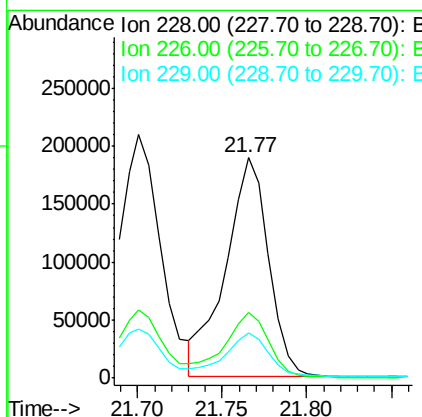
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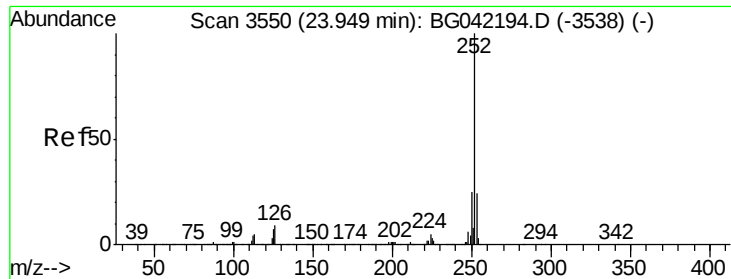
mohammad  
8/15/2019 5:11:40 PM



#84  
Chrysene  
Concen: 10.479 ng/ul  
RT: 21.77 min Scan# 3179  
Delta R.T. -0.00 min  
Lab File: BG042200.D  
Acq: 14 Aug 2019 8:03

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.9  | 25.7  | 38.5  |
| 229     | 20.8  | 16.6  | 24.8  |





#87

Benzo(b)fluoranthene

Concen: 12.371 ng/ul

RT: 23.96 min Scan# 3552

Delta R.T. 0.01 min

Lab File: BG042200.D

Acq: 14 Aug 2019 8:03

Instrument :

BNA\_G

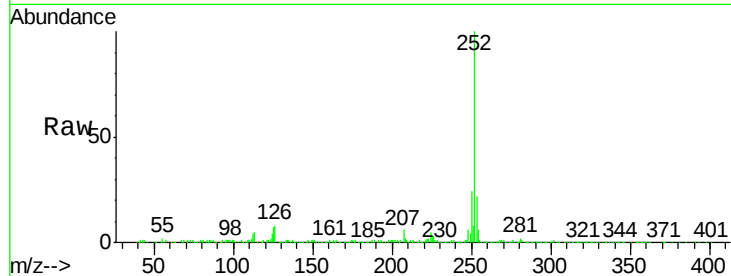
ClientSampleId :

CB5N7

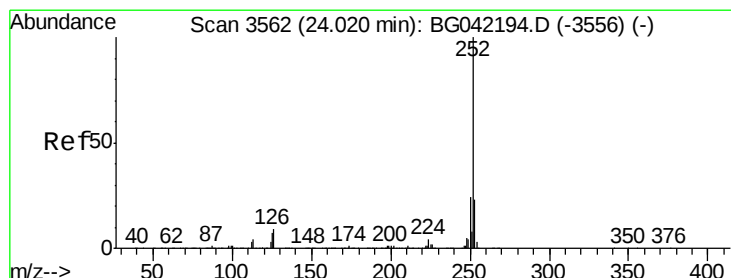
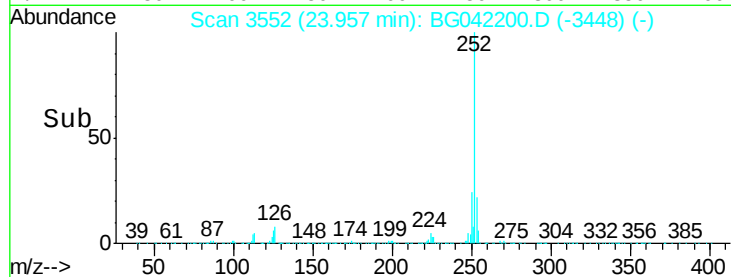
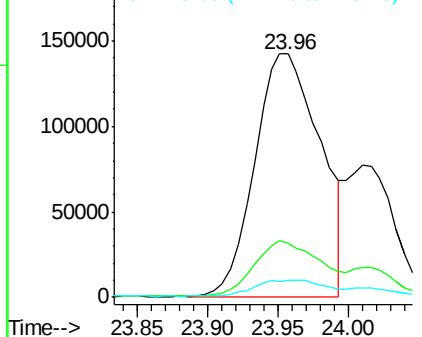
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 458910 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.2  | 18.4  | 27.6   |
| 125       | 6.7   | 5.8   | 8.8    |

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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: 5.146 ng/ul m

RT: 24.01 min Scan# 3561

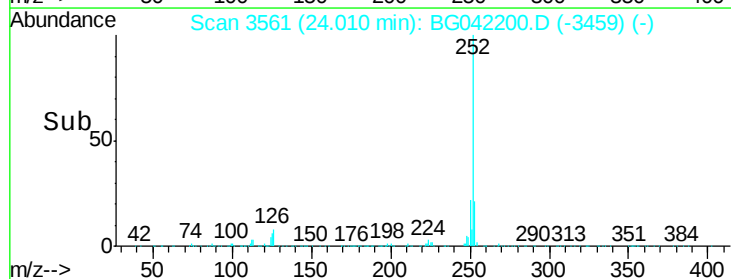
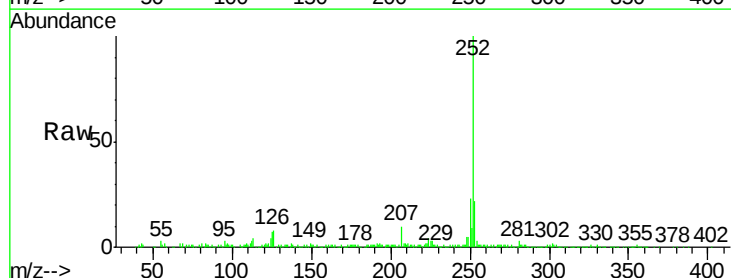
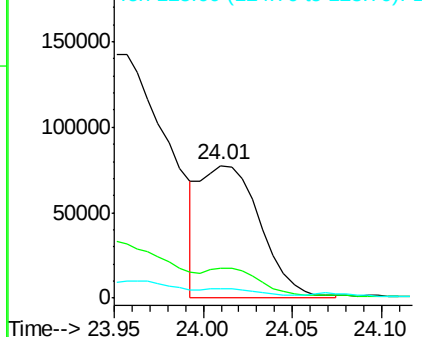
Delta R.T. -0.00 min

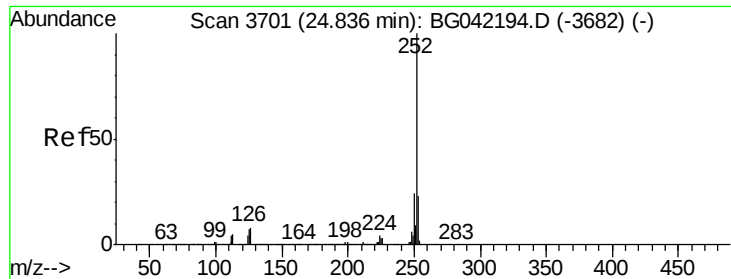
Lab File: BG042200.D

Acq: 14 Aug 2019 8:03

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 183528 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.2  | 18.3  | 27.5   |
| 125       | 7.1   | 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





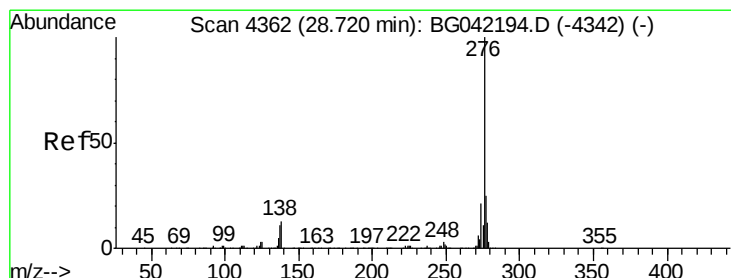
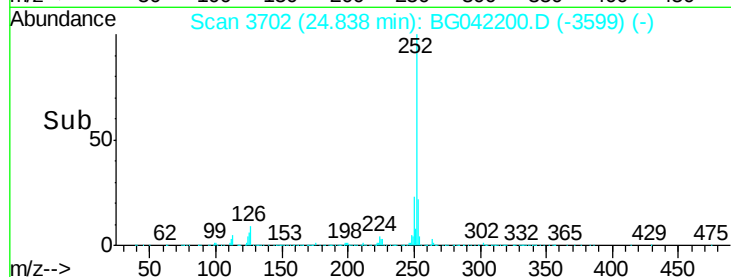
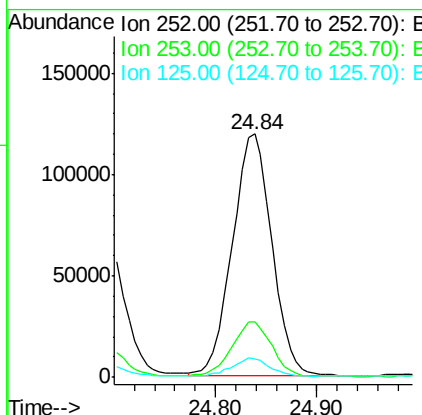
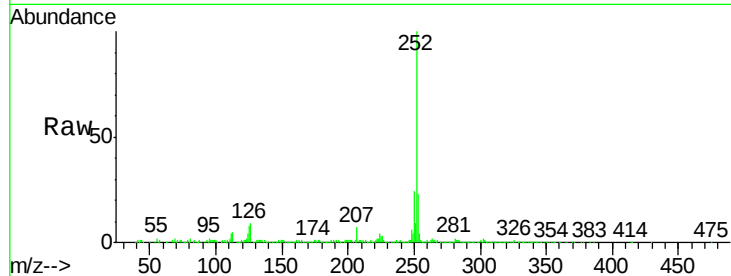
#90  
Benzo(a)pyrene  
Concen: 9.149 ng/ul  
RT: 24.84 min Scan# 3702  
Delta R.T. 0.00 min  
Lab File: BG042200.D  
Acq: 14 Aug 2019 8:03

Instrument :  
BNA\_G  
ClientSampleId :  
CB5N7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.6  | 18.3  | 27.5  |
| 125     | 7.6   | 6.5   | 9.7   |

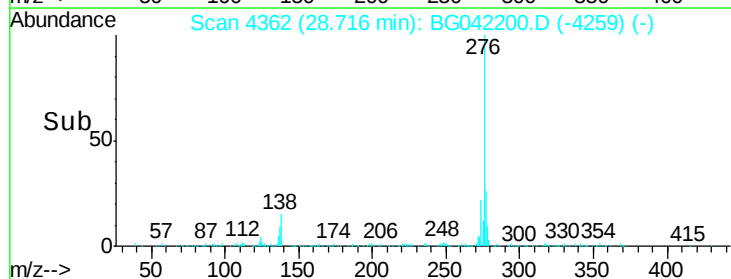
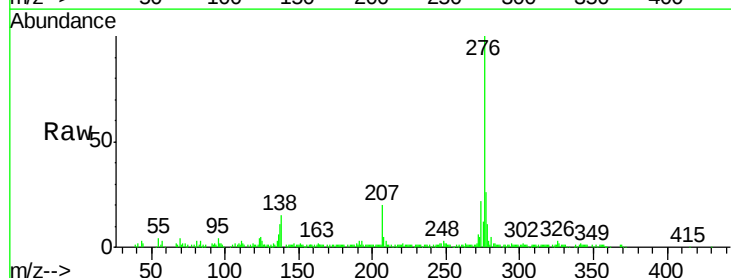
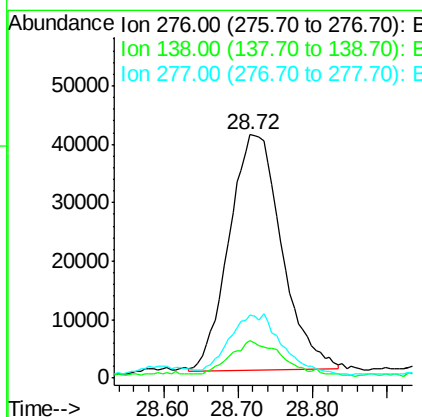
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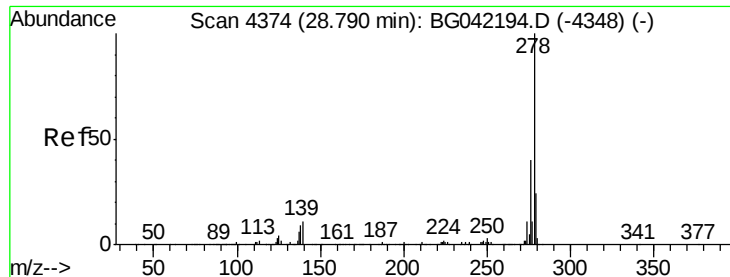
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#91  
Indeno(1,2,3-cd)pyrene  
Concen: 4.773 ng/ul  
RT: 28.72 min Scan# 4362  
Delta R.T. 0.00 min  
Lab File: BG042200.D  
Acq: 14 Aug 2019 8:03

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 15.2  | 12.0  | 18.0  |
| 277     | 26.1  | 19.2  | 28.8  |





#92

Dibenzo(a,h)anthracene

Concen: 1.607 ng/ul m

RT: 28.76 min Scan# 4369

Delta R.T. -0.02 min

Lab File: BG042200.D

Acq: 14 Aug 2019 8:03

Instrument :

BNA\_G

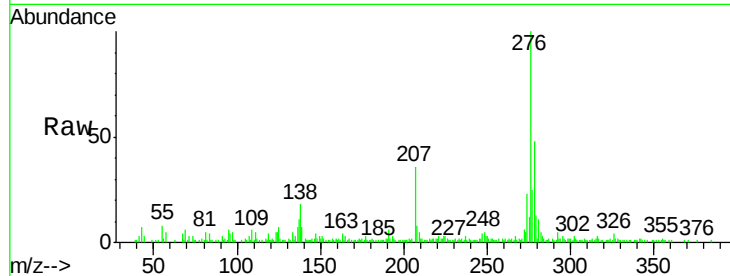
ClientSampled :

CB5N7

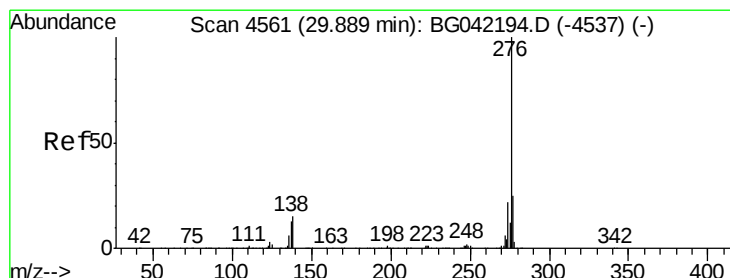
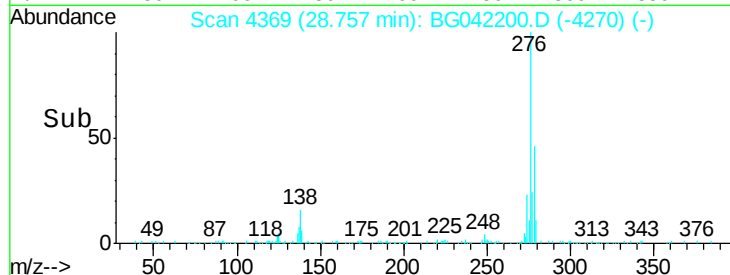
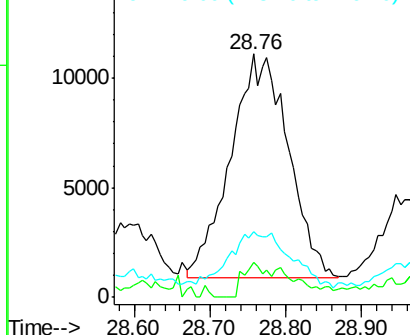
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 278   | Resp: | 54060 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 14.1  | 9.4   | 14.0# |
| 279       | 26.7  | 19.2  | 28.8  |

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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(g,h,i)perylene

Concen: 4.504 ng/ul

RT: 29.89 min Scan# 4561

Delta R.T. 0.01 min

Lab File: BG042200.D

Acq: 14 Aug 2019 8:03

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 155051 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 14.4  | 12.6  | 18.8   |
| 277       | 25.8  | 19.2  | 28.8   |

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

