

Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
 Data File : BG020284.D  
 Acq On : 18 Dec 2015 20:52  
 Operator : UM/SJ  
 Sample : G4768-05  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N29

Manual Integrations  
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apatel  
 12/22/2015 12:34:48 PM

Quant Time: Dec 19 02:47:58 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Sat Dec 19 00:45:12 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.09  | 152  | 18208    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.92 | 136  | 78299    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.73 | 164  | 54232    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.47 | 188  | 135413   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.75 | 240  | 178335   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.01 | 264  | 167613   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.46  | 96  | 429    | 1.30  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.24  | 99  | 10855  | 6.76  | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.41  | 67  | 28269  | 29.51 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.62  | 132 | 28758  | 24.63 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.79  | 113 | 21562  | 15.70 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.26  | 128 | 20140  | 33.00 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.99  | 143 | 22757  | 33.51 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.53 | 165 | 40218  | 29.23 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 11.06 | 131 | 1499   | 0.97  | ng/ul | 0.02 |
| 44) Dimethylphthalate-d6       | 14.13 | 166 | 143875 | 32.80 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.42 | 160 | 165455 | 32.42 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.92 | 143 | 5140   | 6.53  | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.72 | 176 | 128424 | 32.28 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.83 | 200 | 23307  | 29.03 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.57 | 188 | 208635 | 33.44 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.85 | 212 | 253014 | 30.44 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.79 | 264 | 265870 | 31.80 | ng/ul | 0.00 |

## Target Compounds

|                         |       |     |          |        |        | Ovalue |
|-------------------------|-------|-----|----------|--------|--------|--------|
| 28) Naphthalene         | 11.00 | 128 | 3906594  | 955.41 | ng/ul# | 75     |
| 34) 2-Methylnaphthalene | 12.57 | 142 | 974511   | 312.02 | ng/ul  | 98     |
| 35) 1-Methylnaphthalene | 12.79 | 142 | 588099   | 195.86 | ng/ul# | 97     |
| 41) 1,1'-Biphenyl       | 13.56 | 154 | 357431   | 87.36  | ng/ul  | 96     |
| 48) Acenaphthylene      | 14.45 | 152 | 175894   | 32.44  | ng/ul  | 98     |
| 50) Acenaphthene        | 14.81 | 153 | 1481541  | 406.11 | ng/ul  | 94     |
| 54) Dibenzofuran        | 15.13 | 168 | 1142671  | 210.55 | ng/ul  | 93     |
| 59) Fluorene            | 15.78 | 166 | 892584   | 204.81 | ng/ul  | 98     |
| 70) Phenanthrene        | 17.53 | 178 | 1692783m | 228.54 | ng/ul  |        |
| 72) Anthracene          | 17.60 | 178 | 139361m  | 18.55  | ng/ul  |        |
| 75) Carbazole           | 17.88 | 167 | 1086739  | 172.16 | ng/ul  | 96     |
| 77) Fluoranthene        | 19.52 | 202 | 330030   | 38.13  | ng/ul  | 98     |
| 80) Pyrene              | 19.88 | 202 | 194511   | 18.02  | ng/ul  | 99     |
| 83) Benzo(a)anthracene  | 21.72 | 228 | 10707    | 1.03   | ng/ul  | 98     |

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

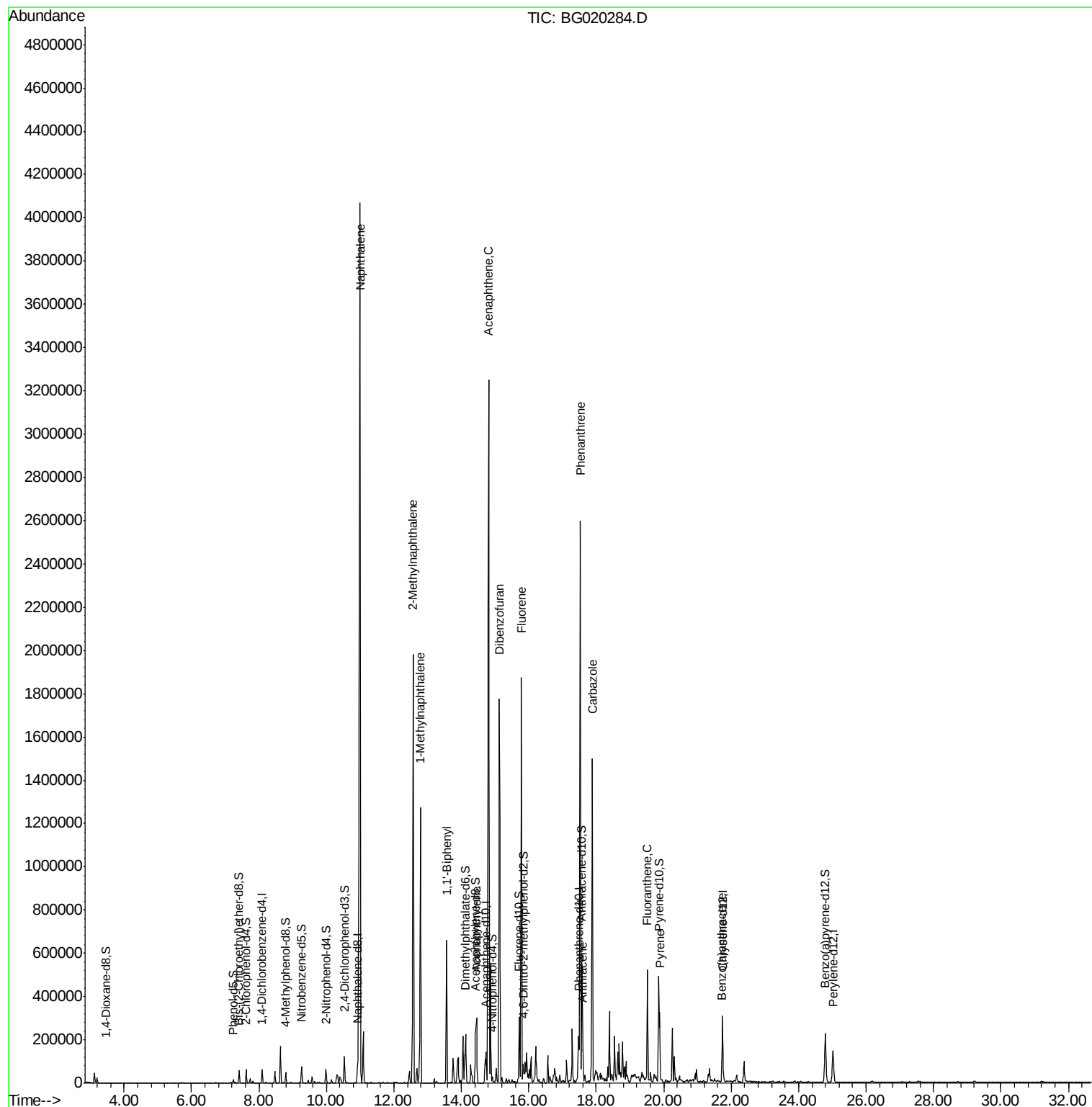
Data Path : Z:\HPCHEM1\BNA G\DATA\BG121915\  
Data File : BG020284.D  
Acq On : 18 Dec 2015 20:52  
Operator : UM/SJ  
Sample : G4768-05  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

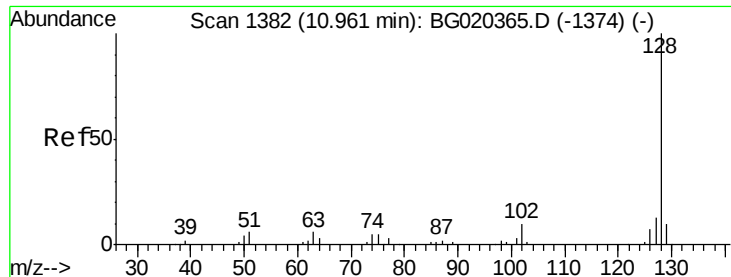
Instrument :  
BNA\_G  
ClientSampleId :  
D9N29

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Quant Time: Dec 19 02:47:58 2015  
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Sat Dec 19 00:45:12 2015  
Response via : Initial Calibration





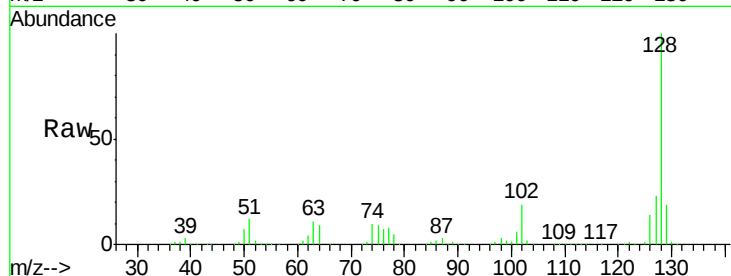
#28  
Naphthalene  
Concen: 955.41 ng/ul  
RT: 11.00 min Scan# 1389  
Delta R.T. 0.04 min  
Lab File: BG020284.D  
Acq: 18 Dec 2015 20:52

Instrument :  
BNA\_G  
ClientSampleId :  
D9N29

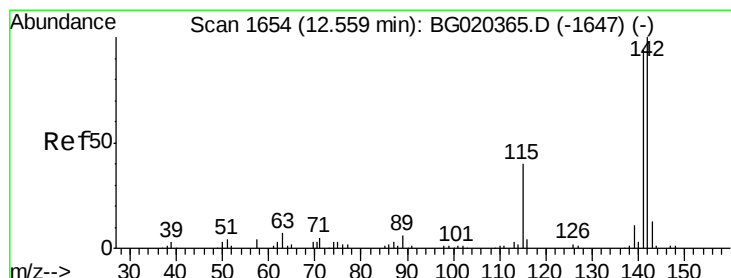
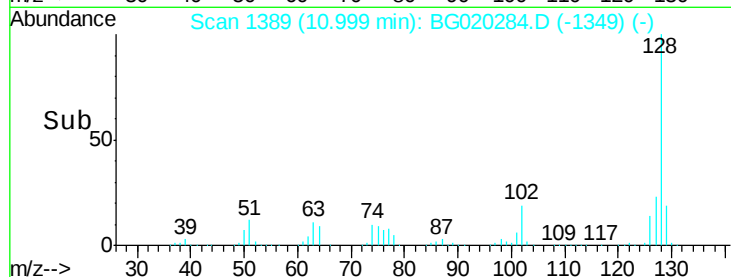
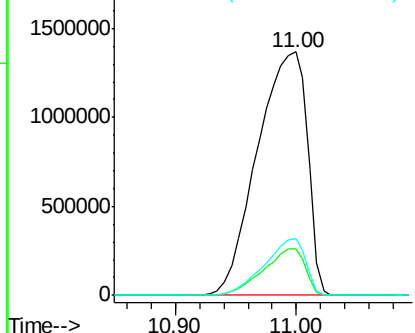
Tot Ion:128 Resp: 3906594  
Ion Ratio Lower Upper  
128 100  
129 19.2 8.6 12.8#  
127 23.4 10.1 15.1#

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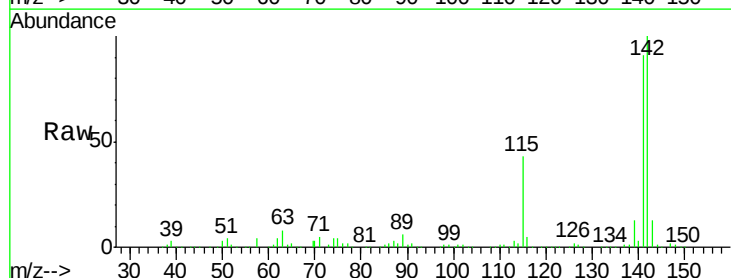


Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E

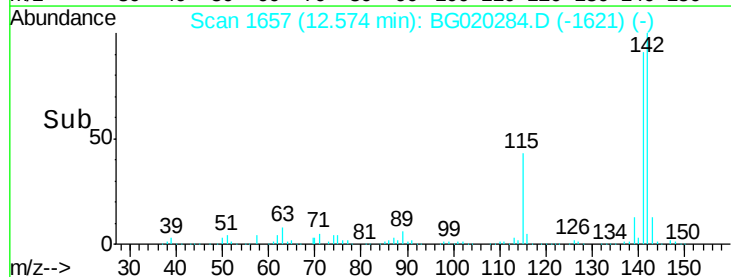
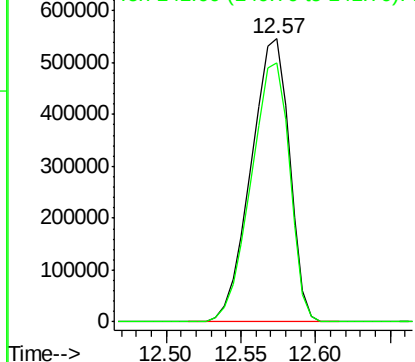


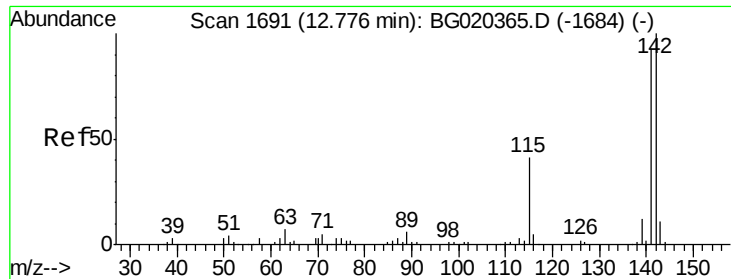
#34  
2-Methylnaphthalene  
Concen: 312.02 ng/ul  
RT: 12.57 min Scan# 1657  
Delta R.T. 0.01 min  
Lab File: BG020284.D  
Acq: 18 Dec 2015 20:52

Tgt Ion:142 Resp: 974511  
Ion Ratio Lower Upper  
142 100  
141 91.3 74.9 112.3



Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E





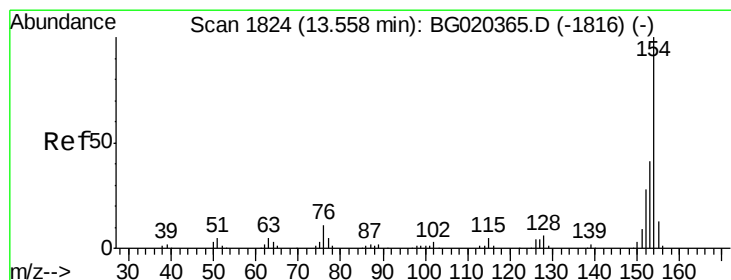
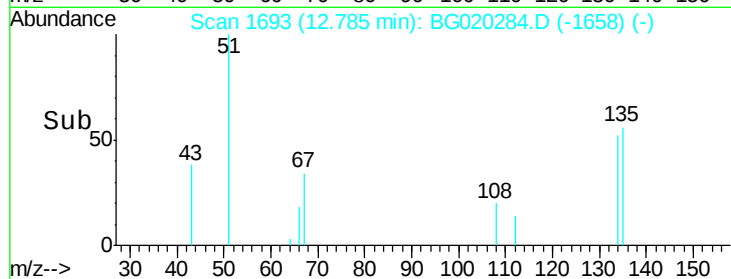
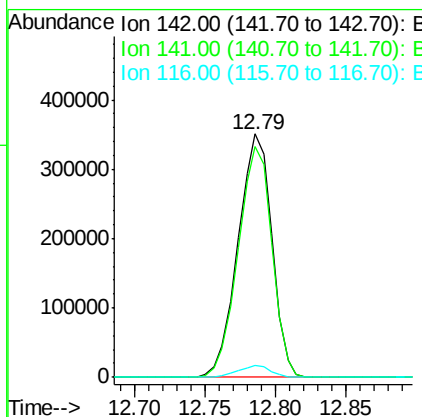
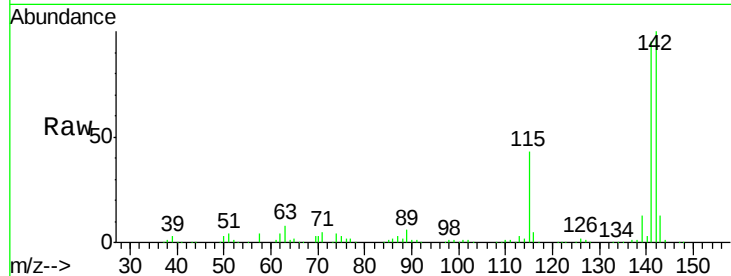
#35  
 1-Methylnaphthalene  
 Concen: 195.86 ng/ul  
 RT: 12.79 min Scan# 1693  
 Delta R.T. 0.01 min  
 Lab File: BG020284.D  
 Acq: 18 Dec 2015 20:52

Instrument :  
 BNA\_G  
 ClientSampleID :  
 D9N29

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 142     | 100   |            |       |
| 141     | 94.6  | 73.0       | 109.6 |
| 116     | 4.8   | 3.0        | 4.6   |

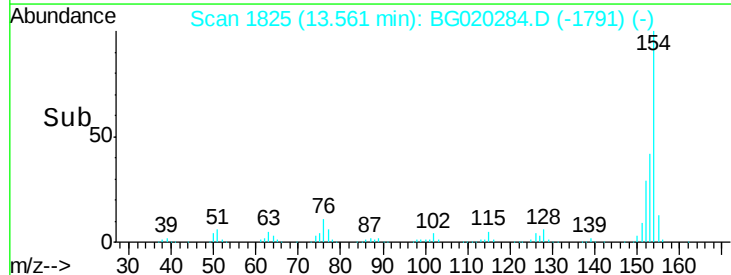
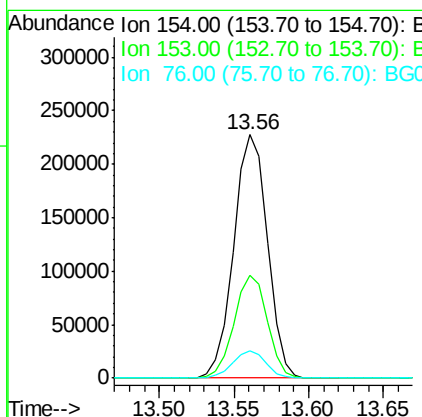
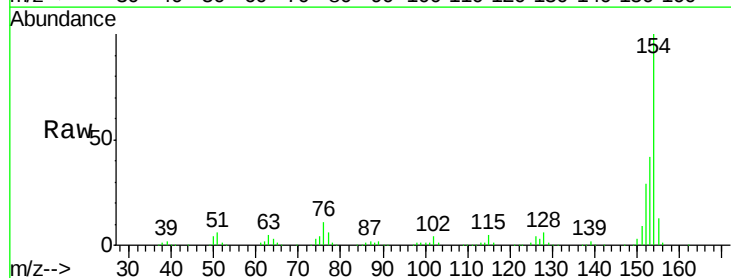
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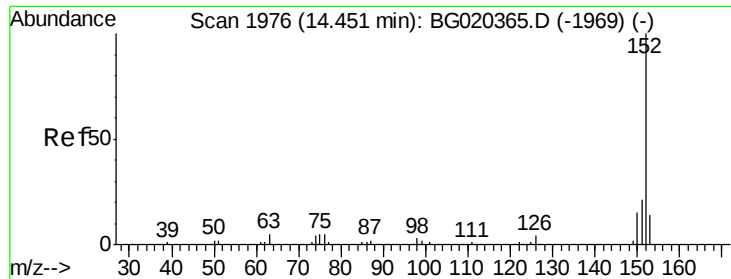
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#41  
 1,1'-Biphenyl  
 Concen: 87.36 ng/ul  
 RT: 13.56 min Scan# 1825  
 Delta R.T. 0.00 min  
 Lab File: BG020284.D  
 Acq: 18 Dec 2015 20:52

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 154     | 100   |            |       |
| 153     | 42.0  | 35.5       | 53.3  |
| 76      | 11.2  | 10.4       | 15.6  |





#48

Acenaphthylene

Concen: 32.44 ng/ul

RT: 14.45 min Scan# 1976

Delta R.T. 0.00 min

Lab File: BG020284.D

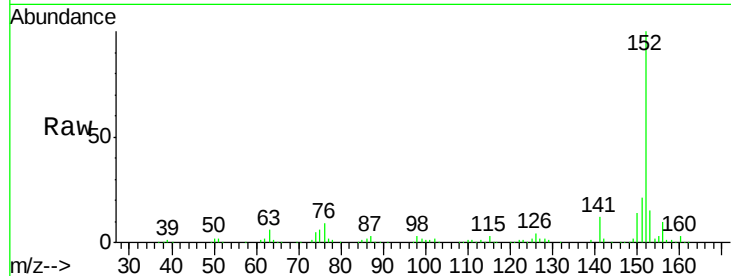
Acq: 18 Dec 2015 20:52

Instrument :

BNA\_G

ClientSampleId :

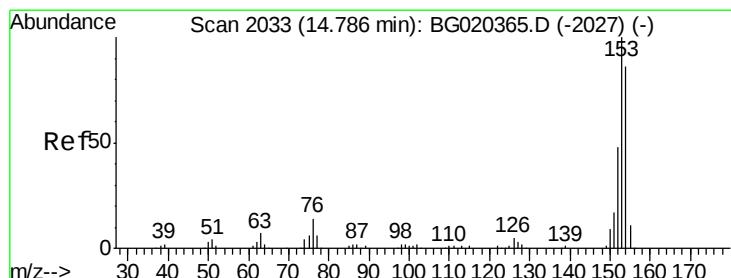
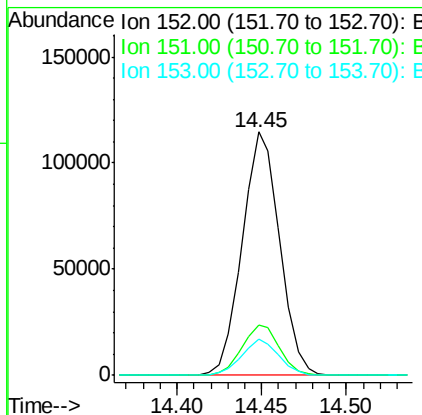
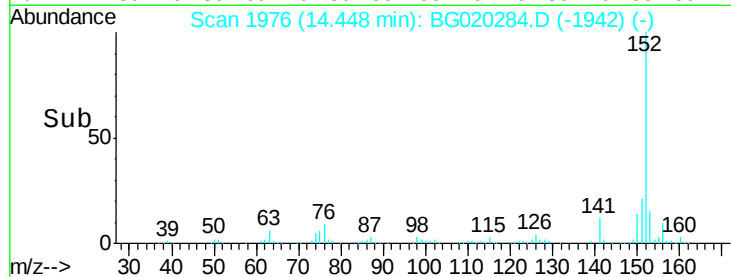
D9N29



| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 152     | 100  |       | 175894 |       |       |
| 151     | 20.8 | 16.4  | 24.6   |       |       |
| 153     | 14.9 | 10.4  | 15.6   |       |       |

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#50

Acenaphthene

Concen: 406.11 ng/ul

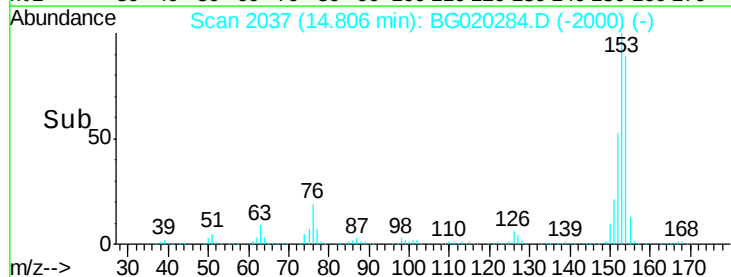
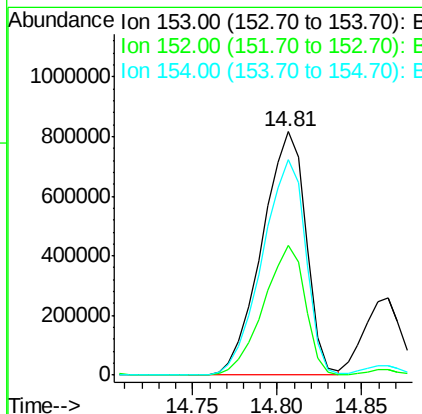
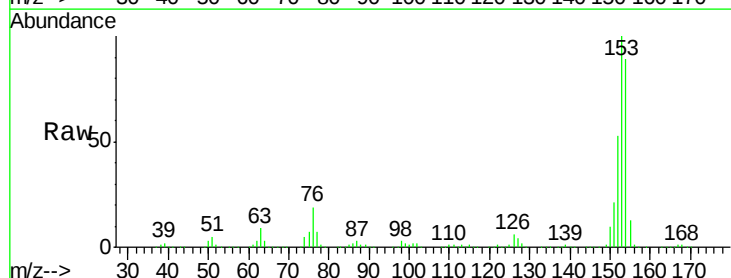
RT: 14.81 min Scan# 2037

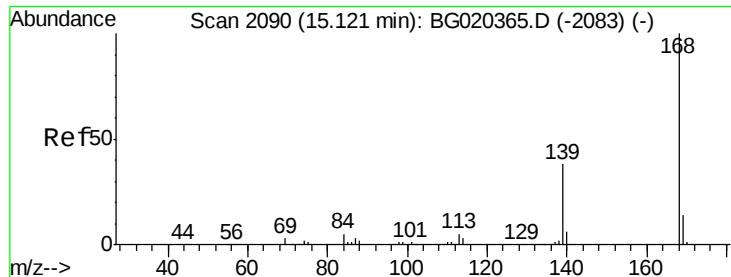
Delta R.T. 0.02 min

Lab File: BG020284.D

Acq: 18 Dec 2015 20:52

| Tgt Ion | Ion  | Ratio | Resp    | Lower | Upper |
|---------|------|-------|---------|-------|-------|
| 153     | 100  |       | 1481541 |       |       |
| 152     | 53.5 | 37.6  | 56.4    |       |       |
| 154     | 88.5 | 67.9  | 101.9   |       |       |





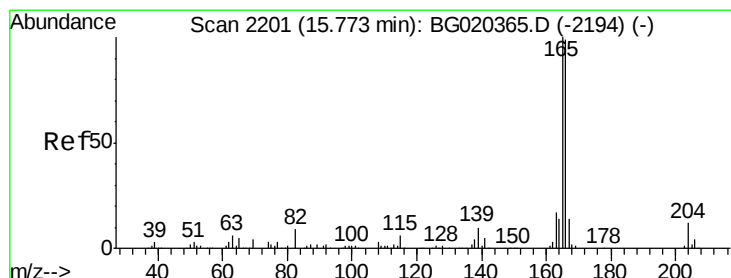
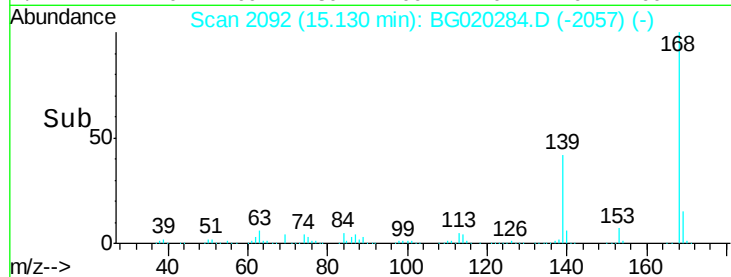
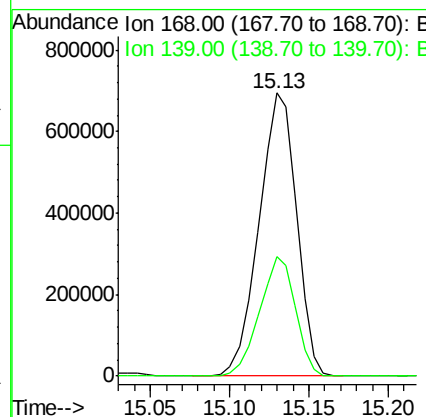
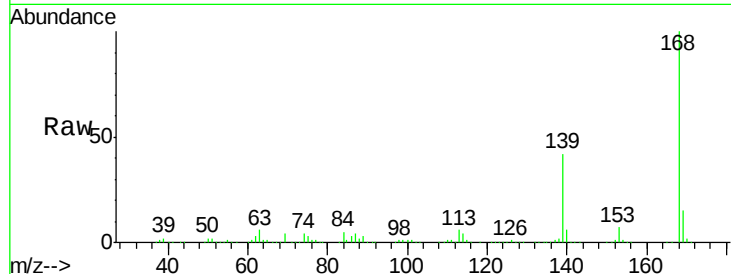
#54  
Dibenzenofuran  
Concen: 210.55 ng/ul  
RT: 15.13 min Scan# 2092  
Delta R.T. 0.01 min  
Lab File: BG020284.D  
Acq: 18 Dec 2015 20:52

Instrument :  
BNA\_G  
ClientSampleId :  
D9N29

Tot Ion:168 Resp: 1142671  
Ion Ratio Lower Upper  
168 100  
139 42.2 30.5 45.7

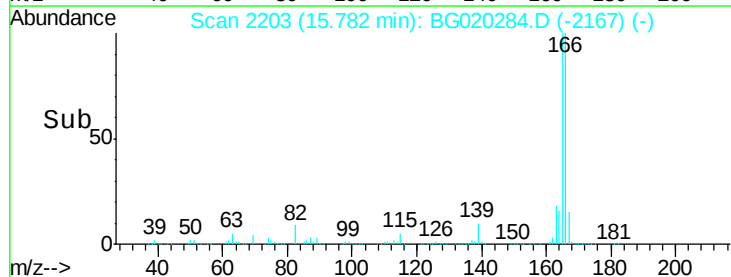
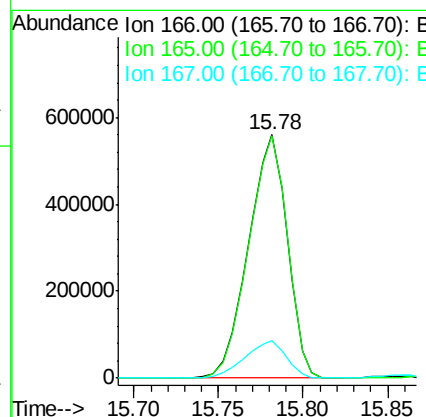
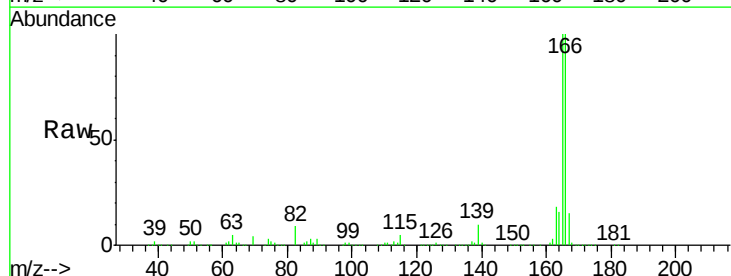
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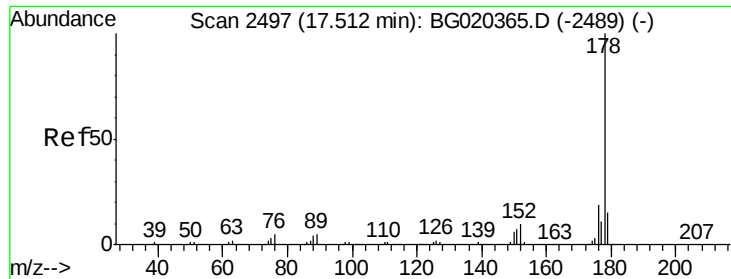
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#59  
Fluorene  
Concen: 204.81 ng/ul  
RT: 15.78 min Scan# 2203  
Delta R.T. 0.01 min  
Lab File: BG020284.D  
Acq: 18 Dec 2015 20:52

Tgt Ion:166 Resp: 892584  
Ion Ratio Lower Upper  
166 100  
165 99.7 81.4 122.0  
167 15.3 11.2 16.8





#70

Phenanthrene

Concen: 228.54 ng/ul m

RT: 17.53 min Scan# 2500

Delta R.T. 0.02 min

Lab File: BG020284.D

Acq: 18 Dec 2015 20:52

Instrument :

BNA\_G

ClientSampleId :

D9N29

Tot Ion:178 Resp: 1692783

Ion Ratio Lower Upper

178 100

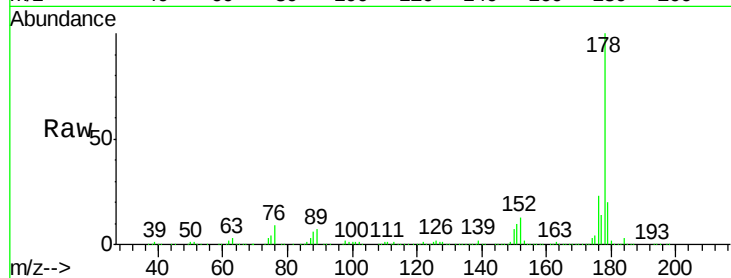
179 19.7 12.9 19.3#

176 23.3 15.3 22.9#

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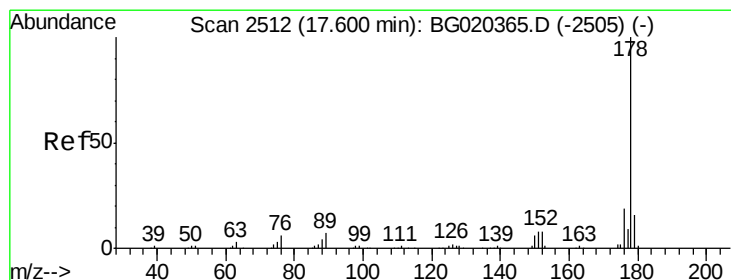
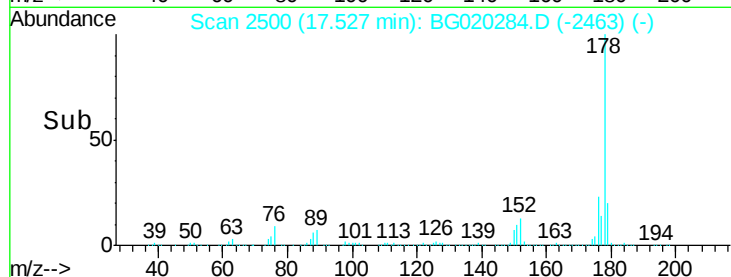
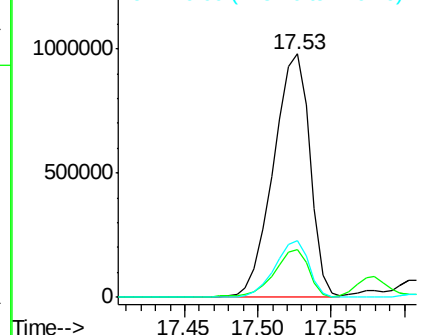
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Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#72

Anthracene

Concen: 18.55 ng/ul m

RT: 17.60 min Scan# 2513

Delta R.T. 0.00 min

Lab File: BG020284.D

Acq: 18 Dec 2015 20:52

Tgt Ion:178 Resp: 139361

Ion Ratio Lower Upper

178 100

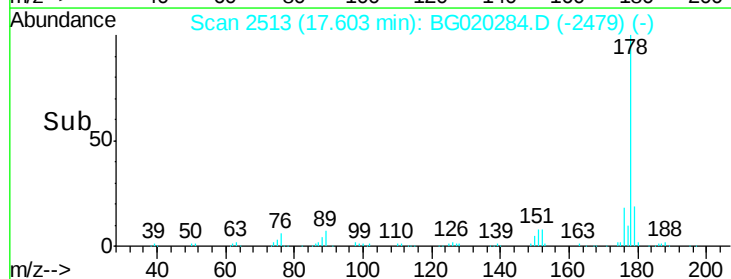
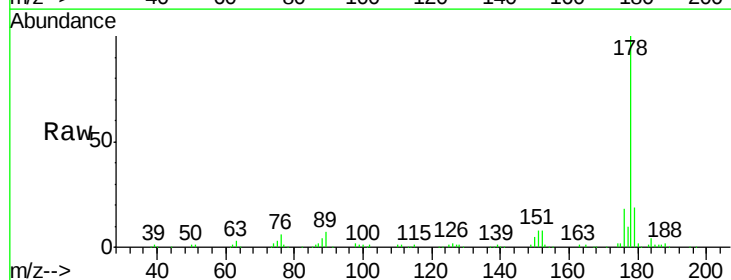
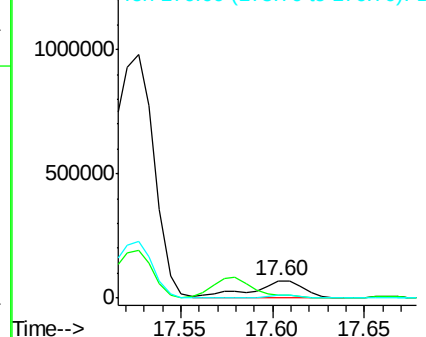
179 18.8 12.3 18.5#

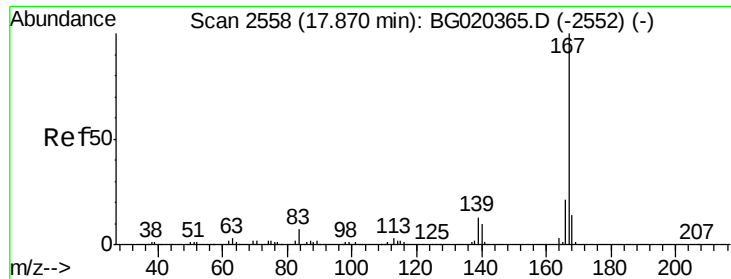
176 18.2 14.3 21.5

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: 172.16 ng/ul

RT: 17.88 min Scan# 2560

Delta R.T. 0.01 min

Lab File: BG020284.D

Acq: 18 Dec 2015 20:52

Instrument :

BNA\_G

ClientSampleId :

D9N29

Tot Ion:167 Resp: 1086739

Ion Ratio Lower Upper

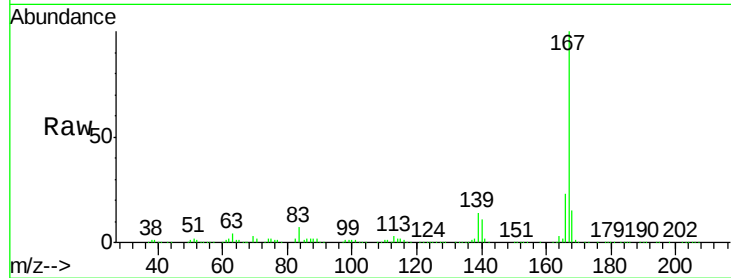
167 100

166 23.4 17.0 25.6

139 13.6 10.1 15.1

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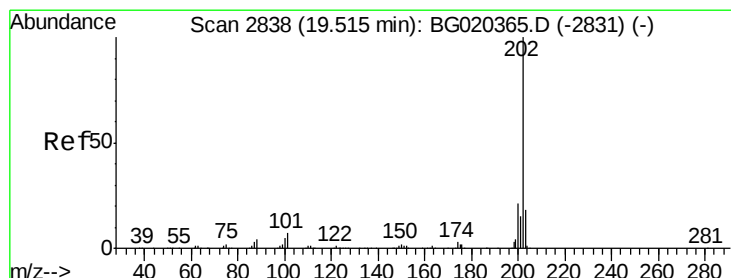
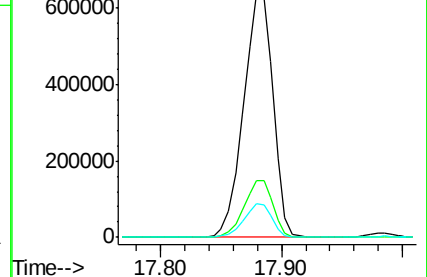
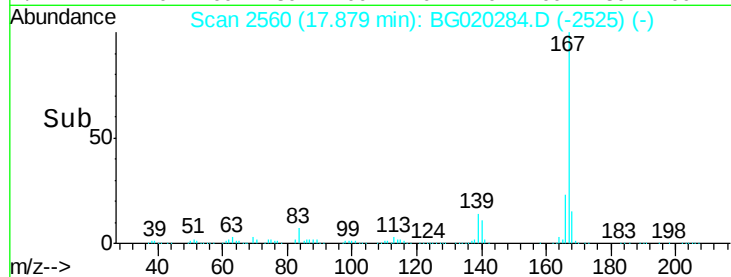


Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E

17.88



#77

Fluoranthene

Concen: 38.13 ng/ul

RT: 19.52 min Scan# 2839

Delta R.T. 0.00 min

Lab File: BG020284.D

Acq: 18 Dec 2015 20:52

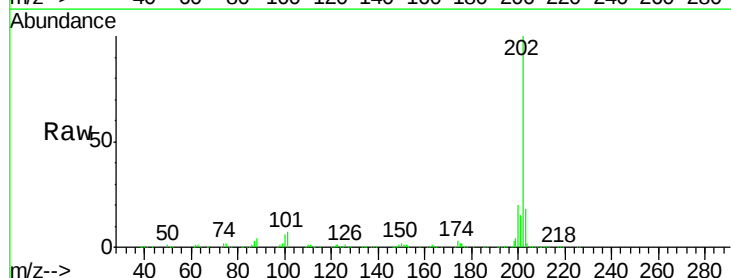
Tgt Ion:202 Resp: 330030

Ion Ratio Lower Upper

202 100

101 6.9 6.2 9.4

100 5.7 5.1 7.7

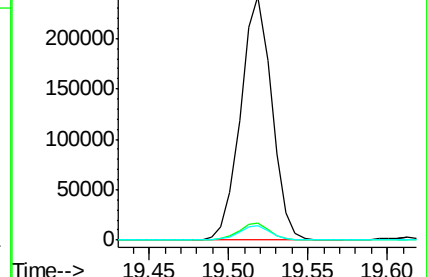
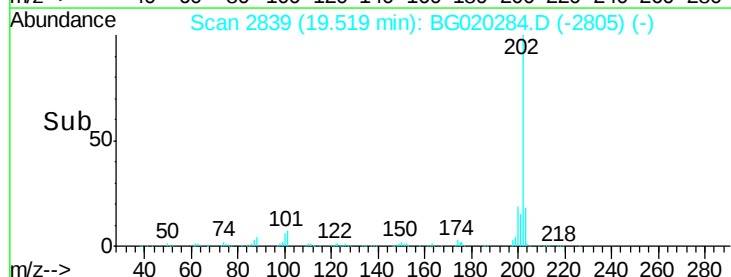


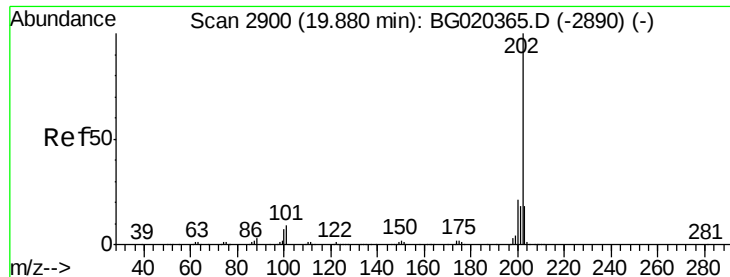
Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): E

19.52





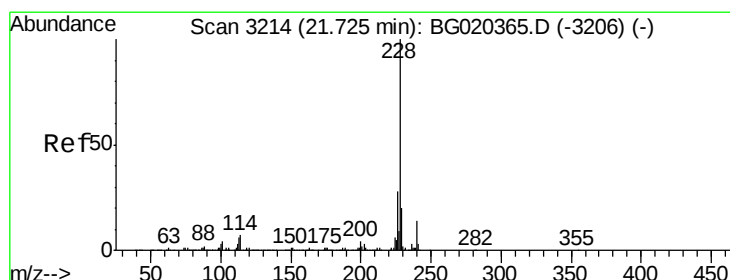
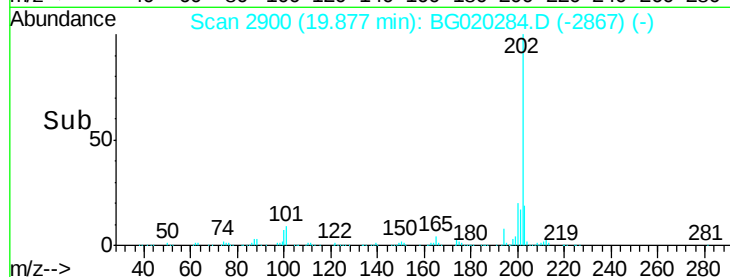
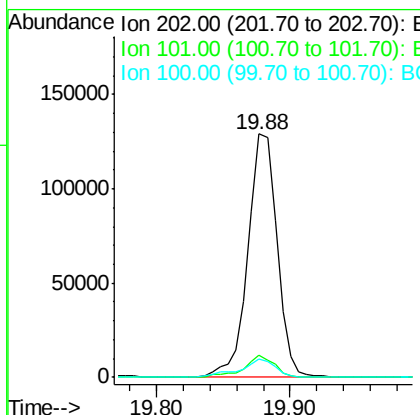
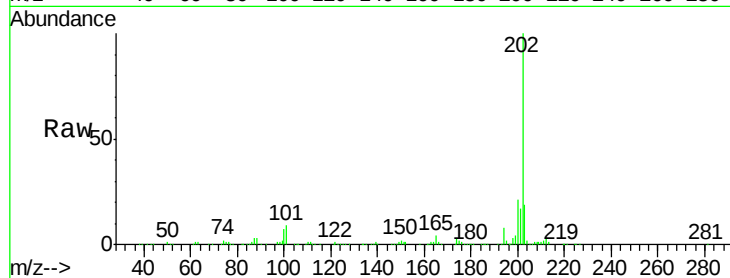
#80  
Pvrene  
Concen: 18.02 ng/ul  
RT: 19.88 min Scan# 2900  
Delta R.T. -0.01 min  
Lab File: BG020284.D  
Acq: 18 Dec 2015 20:52

Instrument :  
BNA\_G  
ClientSampleId :  
D9N29

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 9.0   | 7.0        | 10.4  |
| 100     | 7.5   | 6.4        | 9.6   |

Manual Integrations  
APPROVED

apatel  
12/22/2015 12:34:48 PM



#83  
Benzo(a)anthracene  
Concen: 1.03 ng/ul  
RT: 21.72 min Scan# 3214  
Delta R.T. -0.01 min  
Lab File: BG020284.D  
Acq: 18 Dec 2015 20:52

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 228     | 100   |            |       |
| 229     | 20.0  | 15.8       | 23.8  |
| 226     | 28.5  | 21.8       | 32.6  |

