

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG122615\  
 Data File : BG020551.D  
 Acq On : 27 Dec 2015 12:00  
 Operator : UM/SJ  
 Sample : G4846-15  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N61

Quant Time: Dec 28 02:42:17 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG122415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Dec 28 02:38:20 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.08  | 152  | 19637    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.91 | 136  | 83218    | 20.00 | ng/ul | 0.02     |
| 36) Acenaphthene-d10      | 14.72 | 164  | 58312    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.57 | 188  | 254883   | 20.00 | ng/ul | 0.10     |
| 78) Chrysene-d12          | 21.73 | 240  | 175548   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.00 | 264  | 147268   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.45  | 96  | 511    | 1.44  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.23  | 99  | 12748  | 8.09  | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.40  | 67  | 31560  | 33.80 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.61  | 132 | 34549  | 28.58 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.79  | 113 | 23996  | 18.10 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.25  | 128 | 22710  | 34.81 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.97  | 143 | 25871  | 34.88 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.52 | 165 | 44509  | 31.01 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 11.04 | 131 | 1889   | 1.15  | ng/ul | 0.02 |
| 44) Dimethylphthalate-d6       | 14.12 | 166 | 170186 | 35.41 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.41 | 160 | 199440 | 35.82 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.92 | 143 | 5873   | 7.33  | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.71 | 176 | 161136 | 37.07 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.89 | 200 | 141    | 0.08  | ng/ul | 0.06 |
| 71) Anthracene-d10             | 17.57 | 188 | 254836 | 21.35 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.84 | 212 | 290898 | 38.28 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.78 | 264 | 317793 | 42.68 | ng/ul | 0.00 |

## Target Compounds

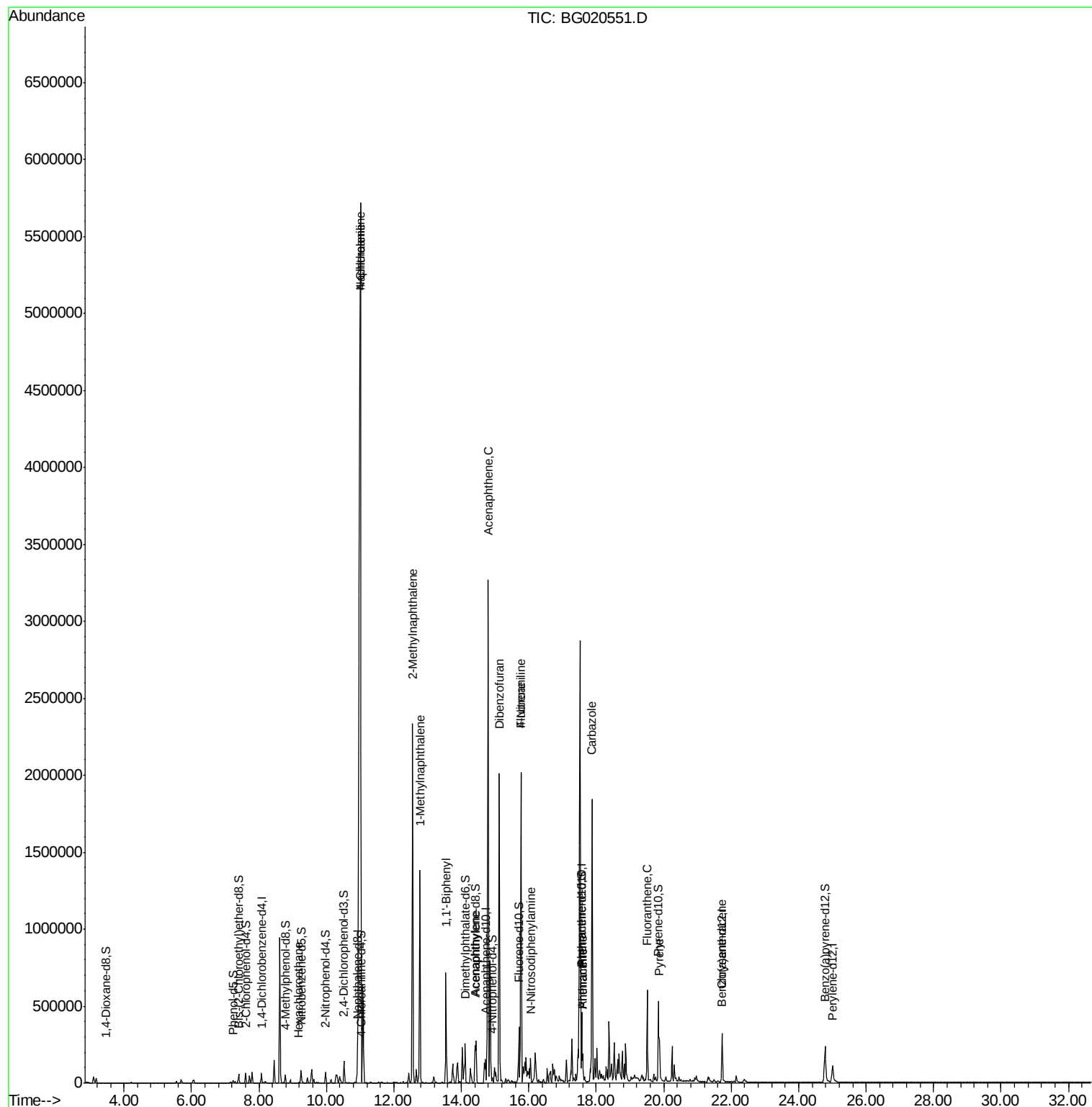
|                            |       |     |         |         |        | Qvalue |
|----------------------------|-------|-----|---------|---------|--------|--------|
| 17) Hexachloroethane       | 9.19  | 117 | 1855    | 3.48    | ng/ul# | 1      |
| 28) Naphthalene            | 11.01 | 128 | 6341722 | 1433.55 | ng/ul# | 57     |
| 30) 4-Chloroaniline        | 11.01 | 127 | 1497085 | 905.56  | ng/ul# | 12     |
| 34) 2-Methylnaphthalene    | 12.56 | 142 | 1155697 | 353.08  | ng/ul  | 98     |
| 35) 1-Methylnaphthalene    | 12.78 | 142 | 671576  | 215.98  | ng/ul  | 97     |
| 41) 1,1'-Biphenyl          | 13.55 | 154 | 384420  | 85.42   | ng/ul  | 96     |
| 48) Acenaphthylene         | 14.44 | 152 | 158218  | 27.03   | ng/ul  | 98     |
| 50) Acenaphthene           | 14.80 | 153 | 1534611 | 387.81  | ng/ul  | 94     |
| 54) Dibenzofuran           | 15.12 | 168 | 1276365 | 216.80  | ng/ul  | 94     |
| 59) Fluorene               | 15.77 | 166 | 988682  | 207.23  | ng/ul  | 97     |
| 61) 4-Nitroaniline         | 15.77 | 138 | 12780   | 12.40   | ng/ul# | 15     |
| 65) N-Nitrosodiphenylamine | 16.05 | 169 | 16712   | 2.35    | ng/ul# | 30     |
| 70) Phenanthrene           | 17.59 | 178 | 107428  | 7.58    | ng/ul  | 99     |
| 72) Anthracene             | 17.59 | 178 | 99928   | 6.89    | ng/ul  | 99     |
| 75) Carbazole              | 17.88 | 167 | 1293328 | 105.83  | ng/ul  | 94     |
| 77) Fluoranthene           | 19.51 | 202 | 405943  | 22.76   | ng/ul  | 98     |
| 80) Pyrene                 | 19.87 | 202 | 237618  | 23.94   | ng/ul  | 98     |
| 83) Benzo(a)anthracene     | 21.71 | 228 | 10431   | 1.01    | ng/ul  | 98     |

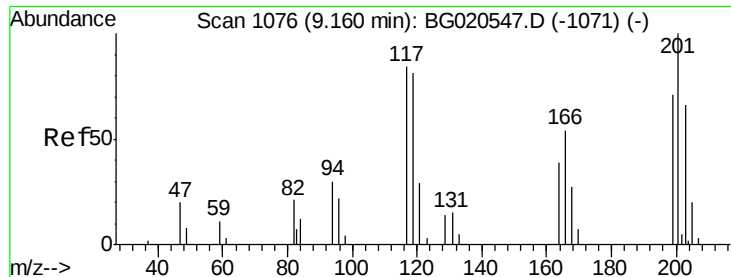
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SVOA CALIBRATION  
QLast Update : Mon Dec 28 02:38:20 2015  
Response via : Initial Calibration





#17

Hexachloroethane

Concen: 3.48 ng/ul

RT: 9.19 min Scan# 1081

Delta R.T. 0.03 min

Lab File: BG020551.D

Acq: 27 Dec 2015 12:00

Instrument :

BNA\_G

ClientSampleId :

D9N61

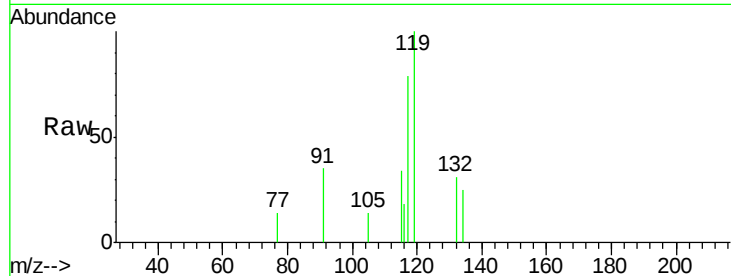
Tgt Ion:117 Resp: 1855

Ion Ratio Lower Upper

117 100

201 0.0 102.7 154.1#

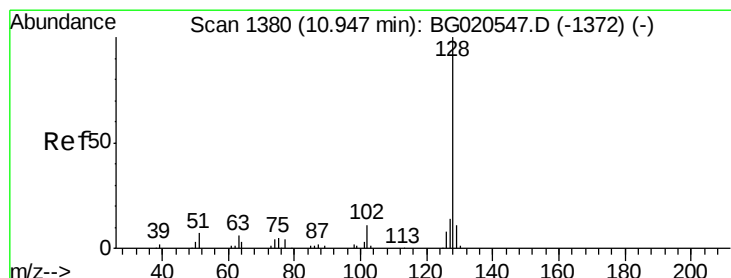
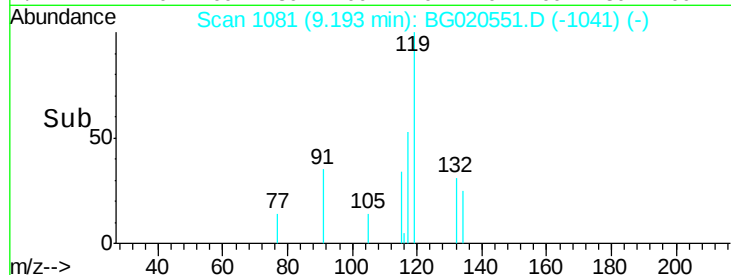
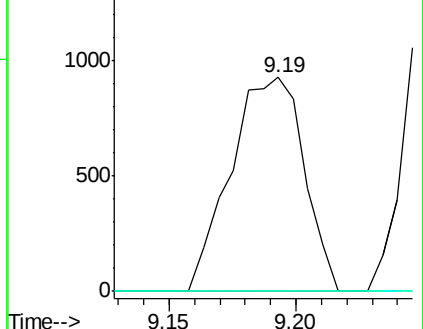
199 0.0 65.8 98.8#



Abundance Ion 117.00 (116.70 to 117.70): E

Ion 201.00 (200.70 to 201.70): E

Ion 199.00 (198.70 to 199.70): E



#28

Naphthalene

Concen: 1433.55 ng/ul

RT: 11.01 min Scan# 1390

Delta R.T. 0.06 min

Lab File: BG020551.D

Acq: 27 Dec 2015 12:00

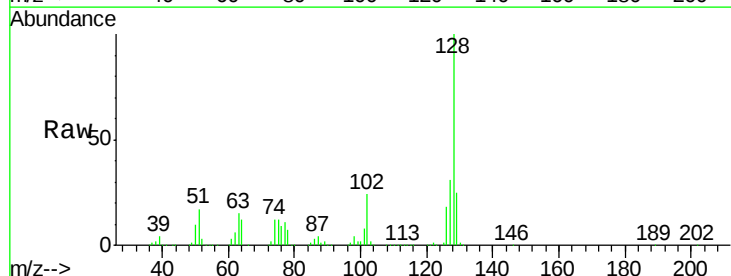
Tgt Ion:128 Resp: 6341722

Ion Ratio Lower Upper

128 100

129 25.2 8.6 12.8#

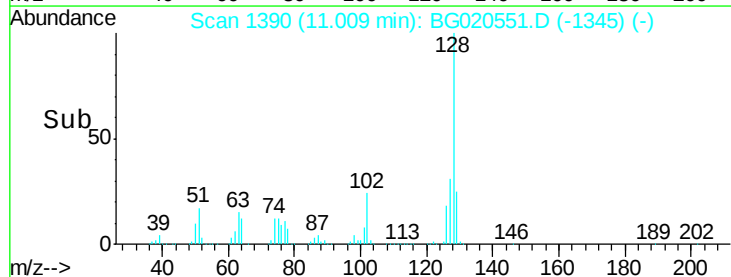
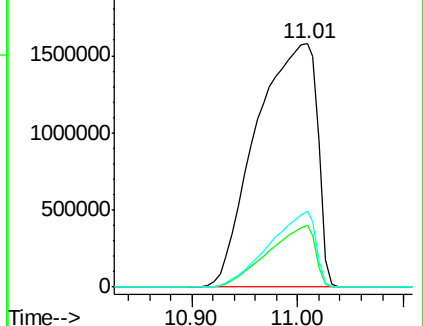
127 31.0 10.1 15.1#

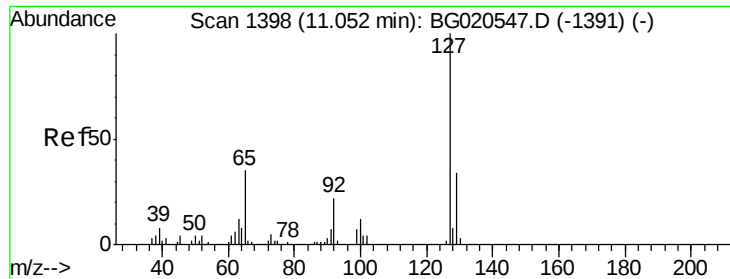


Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E

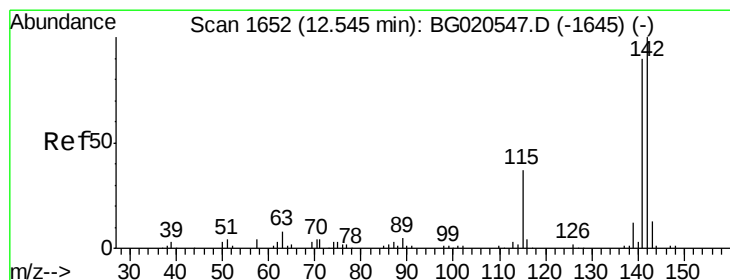
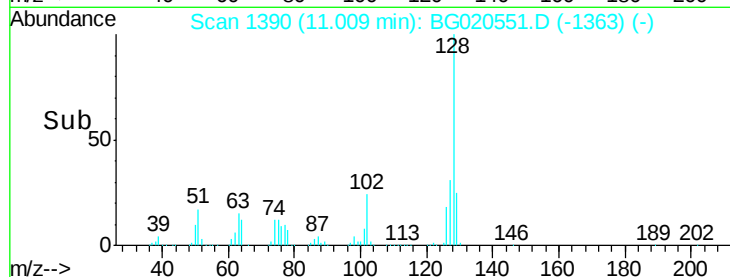
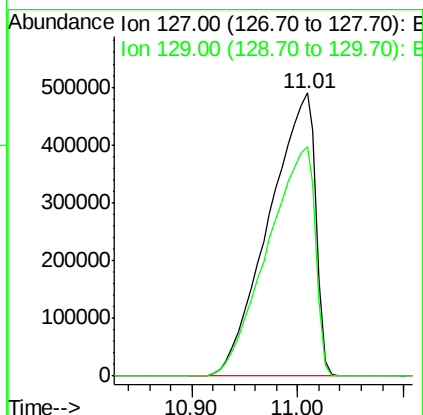
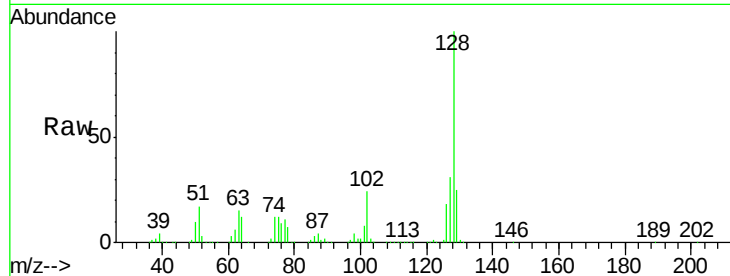




#30  
4-Chloroaniline  
Concen: 905.56 ng/ul  
RT: 11.01 min Scan# 1390  
Delta R.T. -0.04 min  
Lab File: BG020551.D  
Acq: 27 Dec 2015 12:00

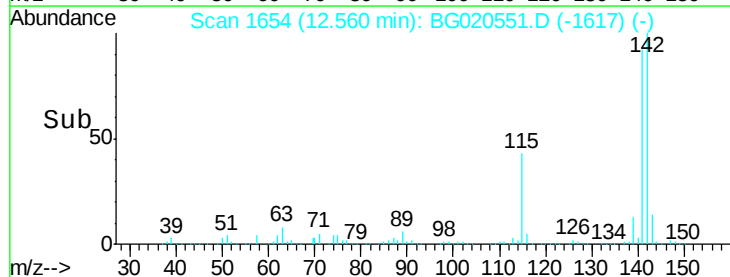
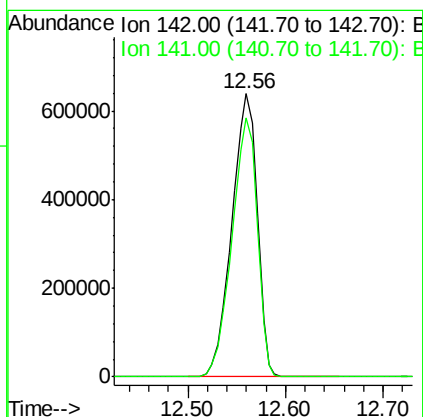
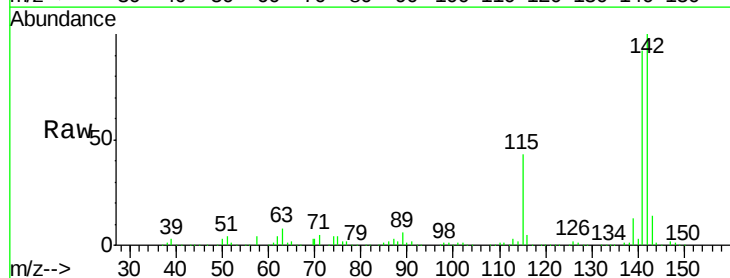
Instrument :  
BNA\_G  
ClientSampled :  
D9N61

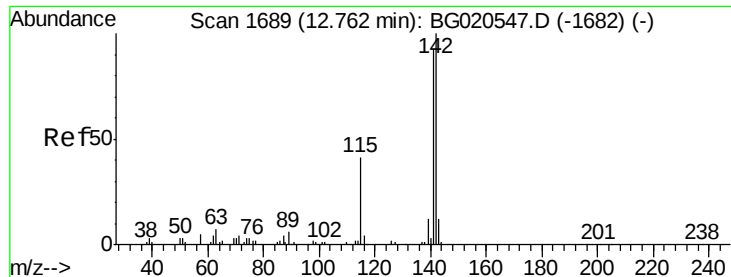
Tgt Ion:127 Resp: 1497085  
Ion Ratio Lower Upper  
127 100  
129 81.3 25.7 38.5#



#34  
2-Methylnaphthalene  
Concen: 353.08 ng/ul  
RT: 12.56 min Scan# 1654  
Delta R.T. 0.02 min  
Lab File: BG020551.D  
Acq: 27 Dec 2015 12:00

Tgt Ion:142 Resp: 1155697  
Ion Ratio Lower Upper  
142 100  
141 91.7 74.9 112.3

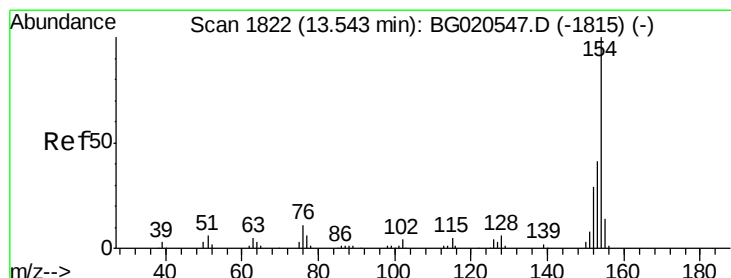
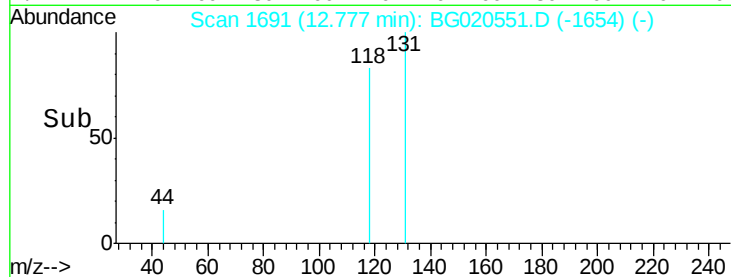
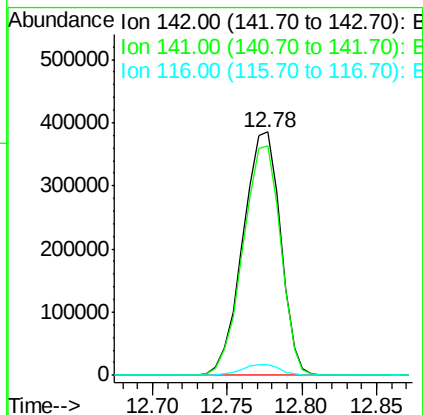
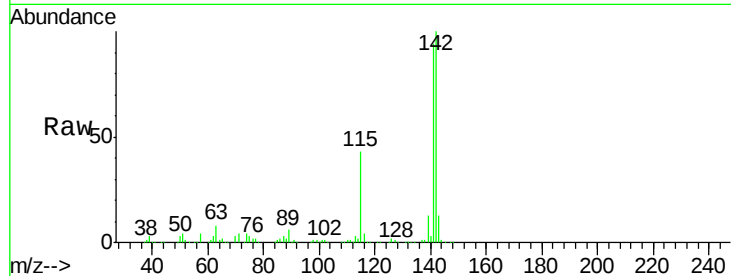




#35  
 1-Methylnaphthalene  
 Concen: 215.98 ng/ul  
 RT: 12.78 min Scan# 1691  
 Delta R.T. 0.02 min  
 Lab File: BG020551.D  
 Acq: 27 Dec 2015 12:00

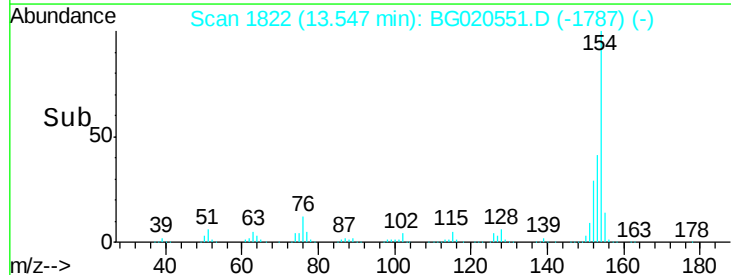
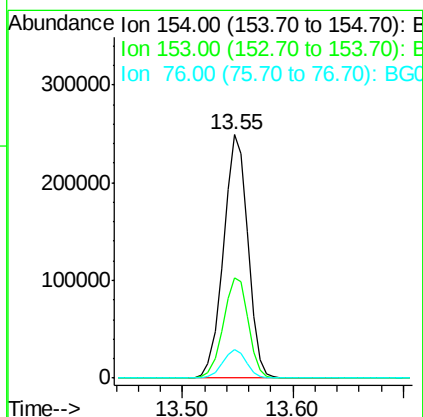
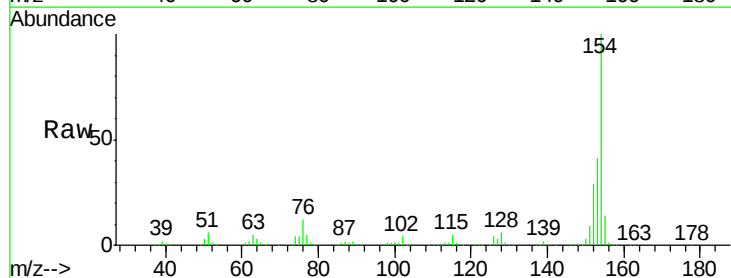
Instrument :  
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 ClientSampleId :  
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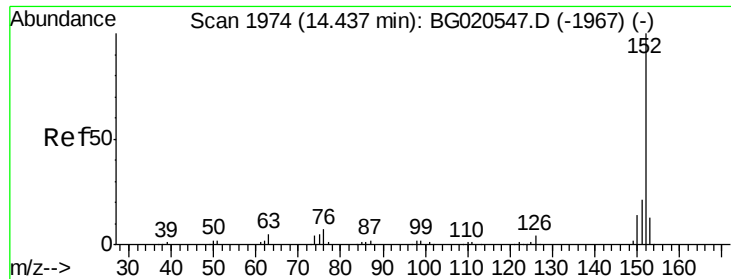
Tgt Ion:142 Resp: 671576  
 Ion Ratio Lower Upper  
 142 100  
 141 94.4 73.0 109.6  
 116 4.4 3.0 4.6



#41  
 1,1'-Biphenyl  
 Concen: 85.42 ng/ul  
 RT: 13.55 min Scan# 1822  
 Delta R.T. 0.00 min  
 Lab File: BG020551.D  
 Acq: 27 Dec 2015 12:00

Tgt Ion:154 Resp: 384420  
 Ion Ratio Lower Upper  
 154 100  
 153 41.4 35.5 53.3  
 76 11.7 10.4 15.6





#48

Acenaphthylene

Concen: 27.03 ng/ul

RT: 14.44 min Scan# 1974

Delta R.T. 0.00 min

Lab File: BG020551.D

Acq: 27 Dec 2015 12:00

Instrument :

BNA\_G

ClientSampleId :

D9N61

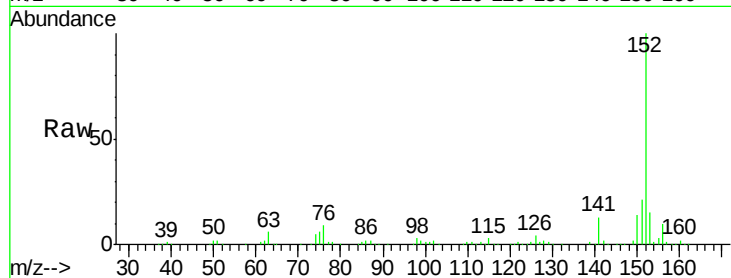
Tgt Ion:152 Resp: 158218

Ion Ratio Lower Upper

152 100

151 20.7 16.4 24.6

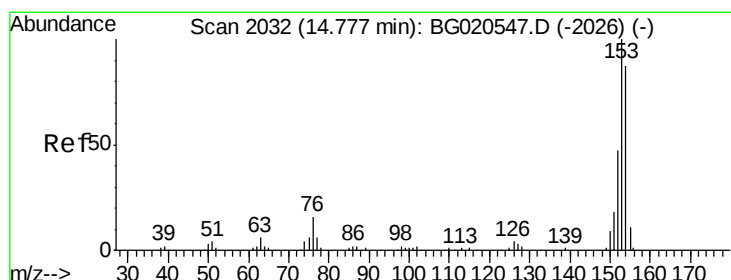
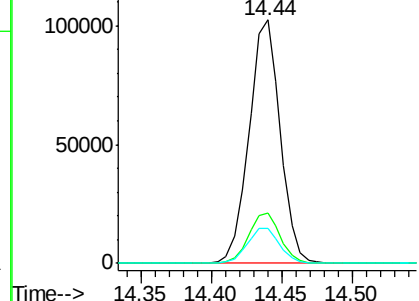
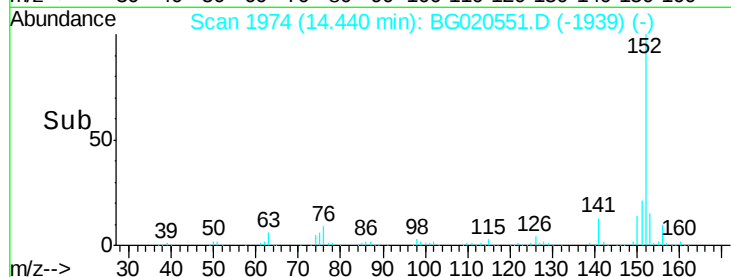
153 14.6 10.4 15.6



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E



#50

Acenaphthene

Concen: 387.81 ng/ul

RT: 14.80 min Scan# 2035

Delta R.T. 0.02 min

Lab File: BG020551.D

Acq: 27 Dec 2015 12:00

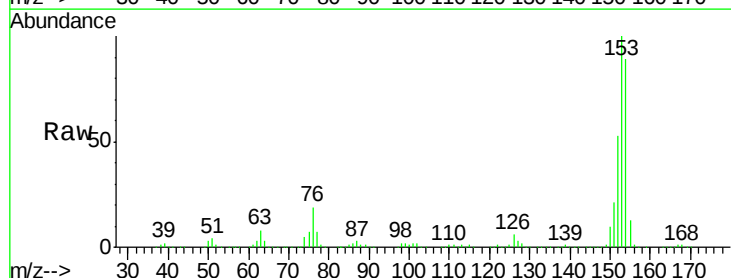
Tgt Ion:153 Resp: 1534611

Ion Ratio Lower Upper

153 100

152 53.1 37.6 56.4

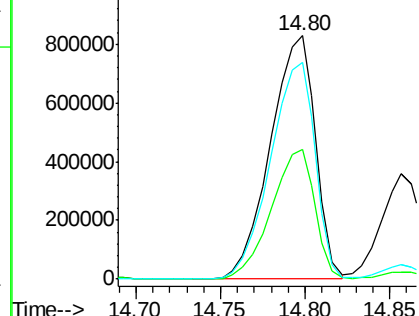
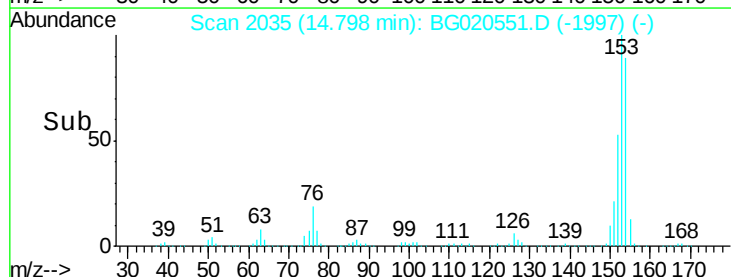
154 88.8 67.9 101.9

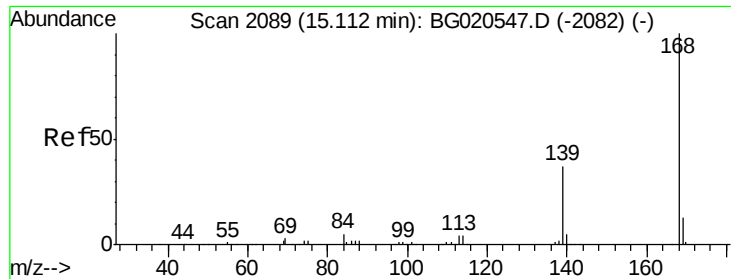


Abundance Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

Ion 154.00 (153.70 to 154.70): E

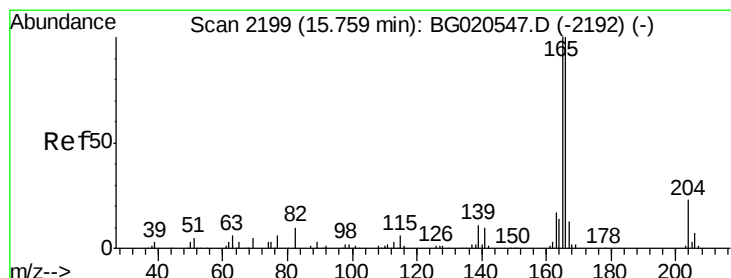
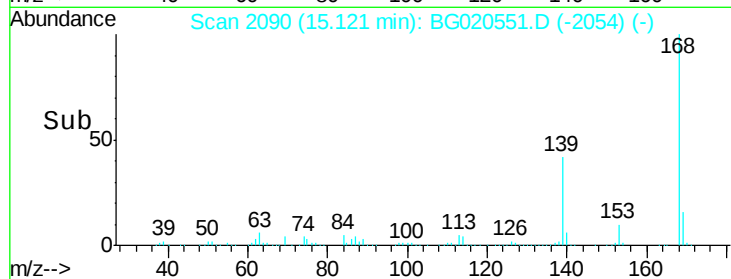
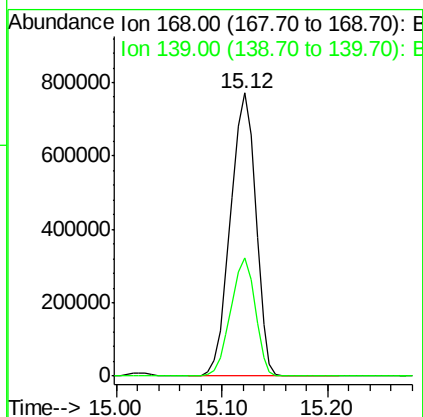
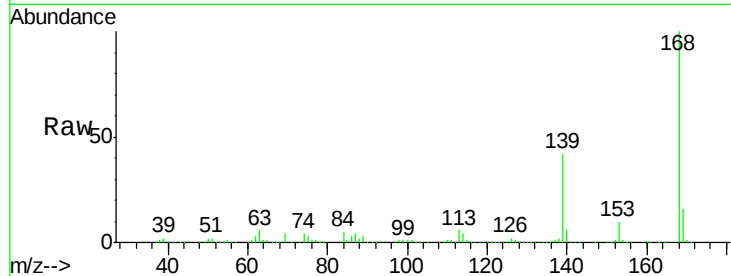




#54  
Dibenzenofuran  
Concen: 216.80 ng/ul  
RT: 15.12 min Scan# 2090  
Delta R.T. 0.01 min  
Lab File: BG020551.D  
Acq: 27 Dec 2015 12:00

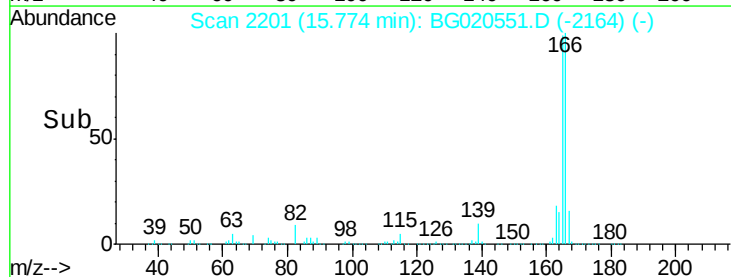
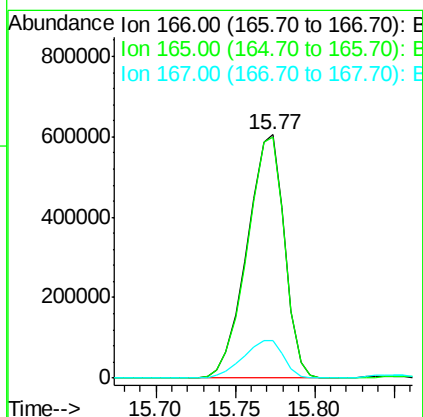
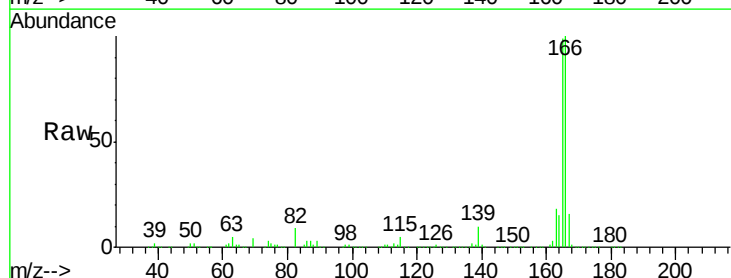
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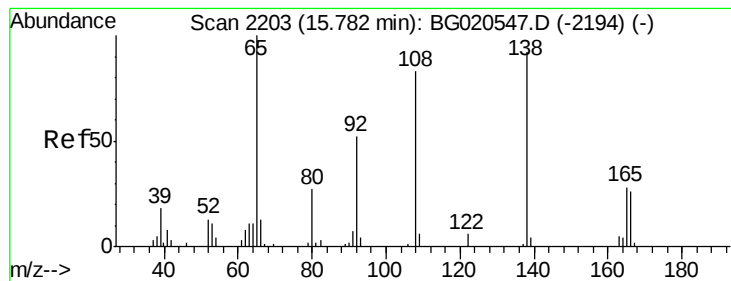
Tgt Ion:168 Resp: 1276365  
Ion Ratio Lower Upper  
168 100  
139 41.7 30.5 45.7



#59  
Fluorene  
Concen: 207.23 ng/ul  
RT: 15.77 min Scan# 2201  
Delta R.T. 0.02 min  
Lab File: BG020551.D  
Acq: 27 Dec 2015 12:00

Tgt Ion:166 Resp: 988682  
Ion Ratio Lower Upper  
166 100  
165 98.9 81.4 122.0  
167 15.5 11.2 16.8

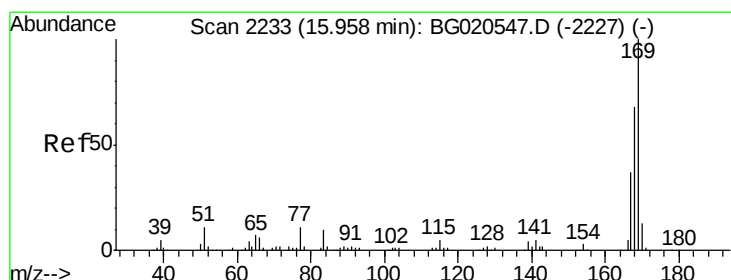
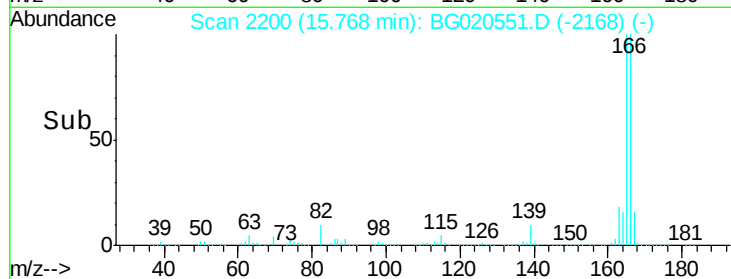
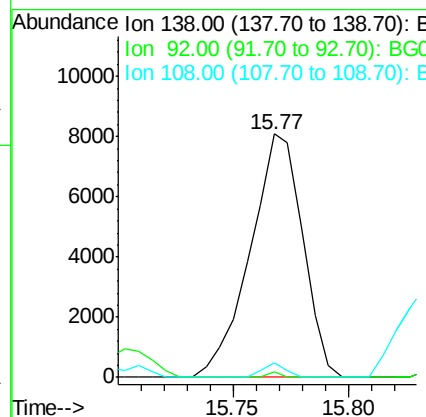
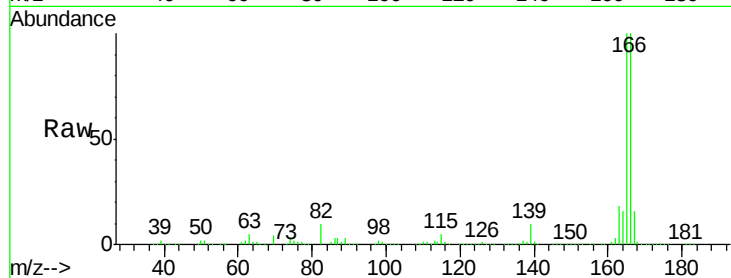




#61  
4-Nitroaniline  
Concen: 12.40 ng/ul  
RT: 15.77 min Scan# 2200  
Delta R.T. -0.01 min  
Lab File: BG020551.D  
Acq: 27 Dec 2015 12:00

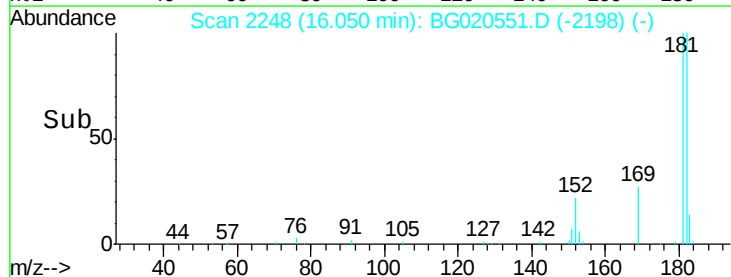
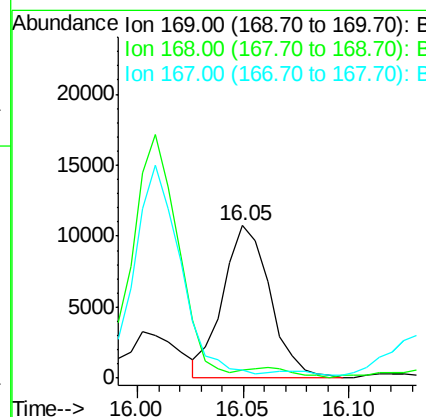
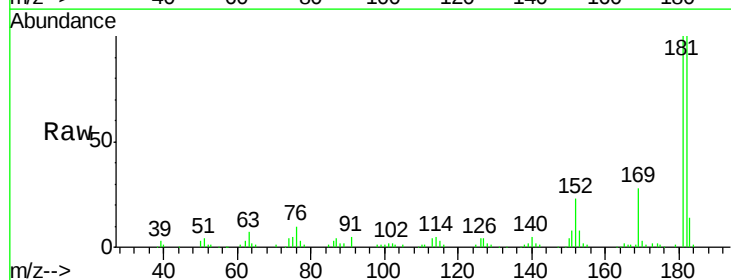
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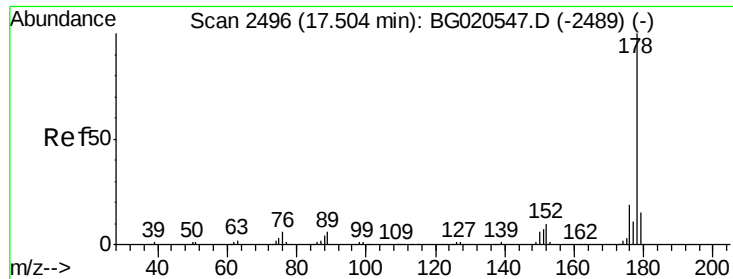
Tgt Ion:138 Resp: 12780  
Ion Ratio Lower Upper  
138 100  
92 2.1 45.2 67.8#  
108 5.9 75.4 113.0#



#65  
N-Nitrosodiphenylamine  
Concen: 2.35 ng/ul  
RT: 16.05 min Scan# 2248  
Delta R.T. 0.09 min  
Lab File: BG020551.D  
Acq: 27 Dec 2015 12:00

Tgt Ion:169 Resp: 16712  
Ion Ratio Lower Upper  
169 100  
168 5.1 54.3 81.5#  
167 5.3 31.8 47.8#

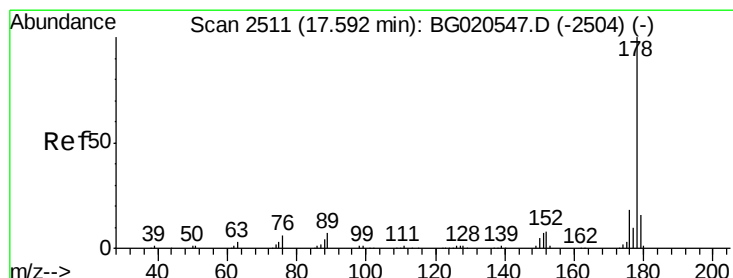
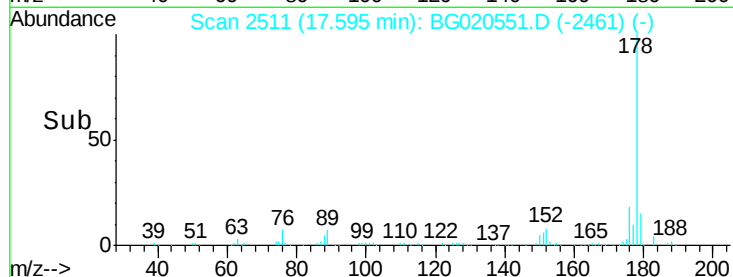
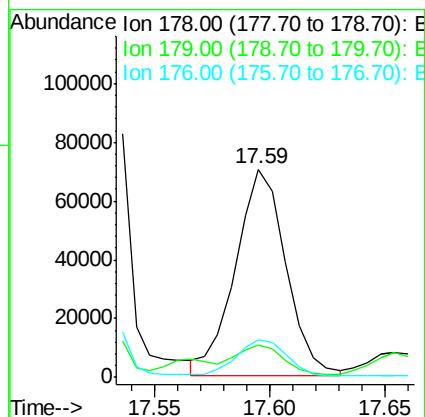
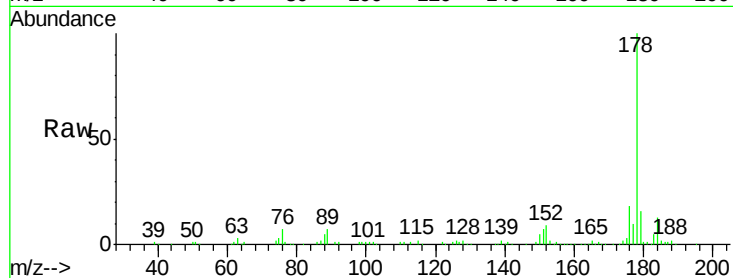




#70  
 Phenanthrene  
 Concen: 7.58 ng/ul  
 RT: 17.59 min Scan# 2511  
 Delta R.T. 0.09 min  
 Lab File: BG020551.D  
 Acq: 27 Dec 2015 12:00

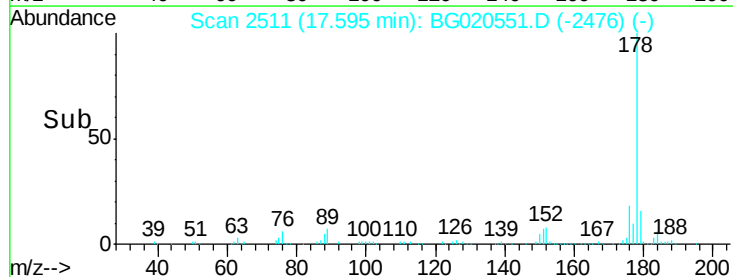
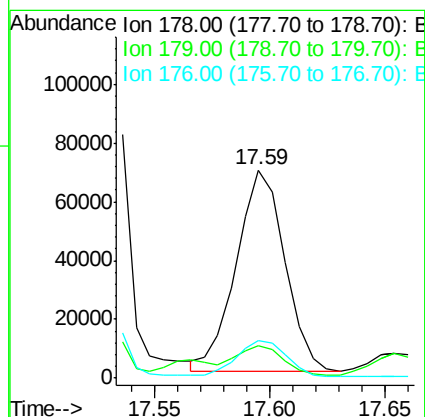
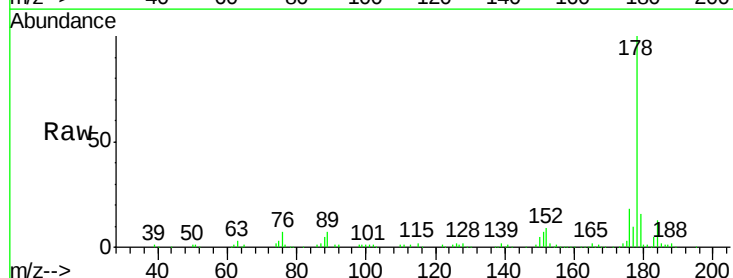
Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N61

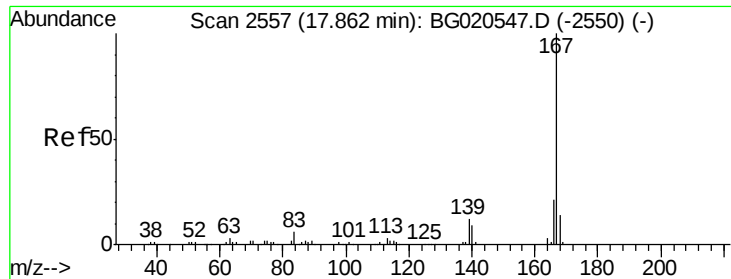
Tgt Ion:178 Resp: 107428  
 Ion Ratio Lower Upper  
 178 100  
 179 15.8 12.9 19.3  
 176 18.3 15.3 22.9



#72  
 Anthracene  
 Concen: 6.89 ng/ul  
 RT: 17.59 min Scan# 2511  
 Delta R.T. 0.00 min  
 Lab File: BG020551.D  
 Acq: 27 Dec 2015 12:00

Tgt Ion:178 Resp: 99928  
 Ion Ratio Lower Upper  
 178 100  
 179 15.8 12.3 18.5  
 176 18.3 14.3 21.5





#75

Carbazole

Concen: 105.83 ng/ul

RT: 17.88 min Scan# 2559

Delta R.T. 0.02 min

Lab File: BG020551.D

Acq: 27 Dec 2015 12:00

Instrument :

BNA\_G

ClientSampleId :

D9N61

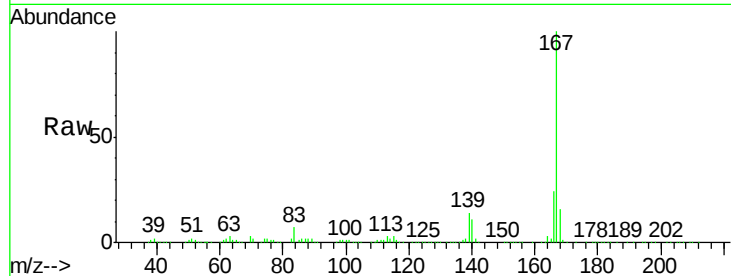
Tgt Ion:167 Resp: 1293328

Ion Ratio Lower Upper

167 100

166 24.4 17.0 25.6

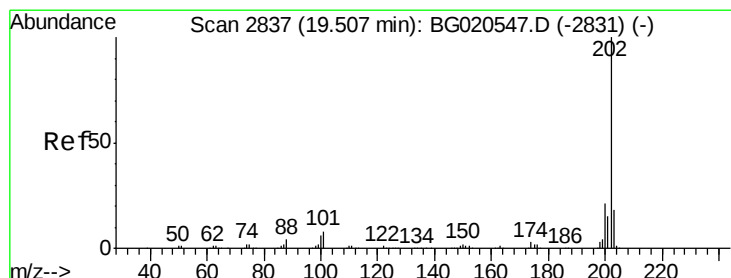
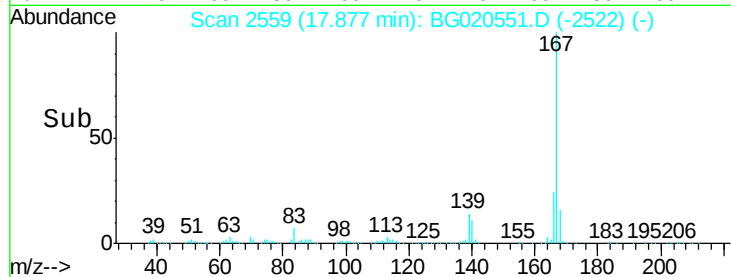
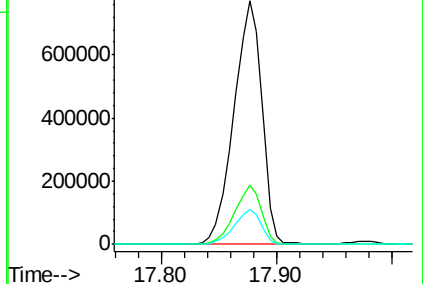
139 14.5 10.1 15.1



Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E



#77

Fluoranthene

Concen: 22.76 ng/ul

RT: 19.51 min Scan# 2837

Delta R.T. 0.00 min

Lab File: BG020551.D

Acq: 27 Dec 2015 12:00

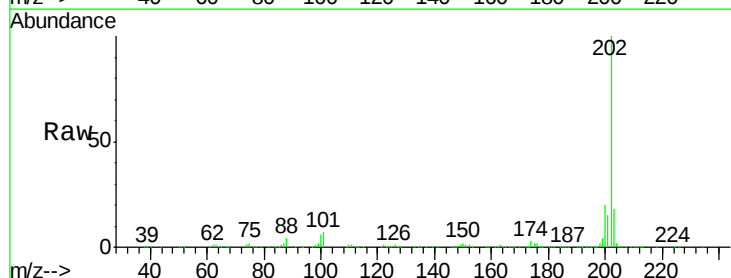
Tgt Ion:202 Resp: 405943

Ion Ratio Lower Upper

202 100

101 7.1 6.2 9.4

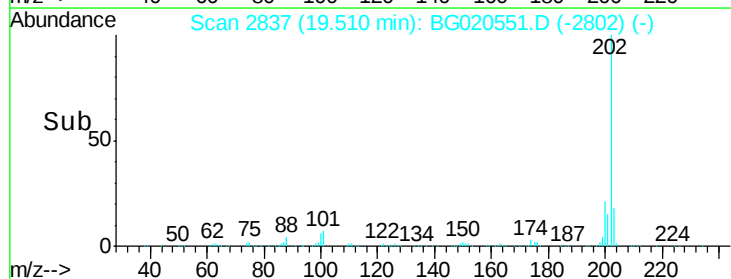
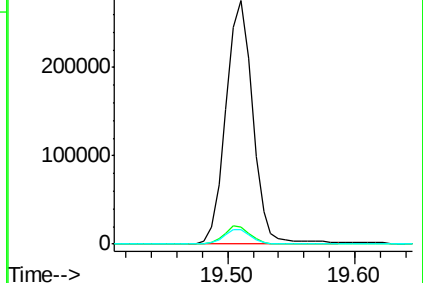
100 5.9 5.1 7.7

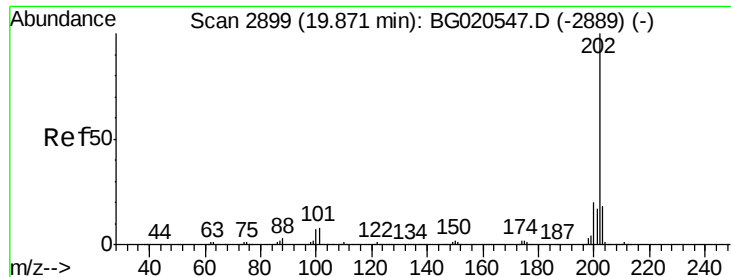


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B

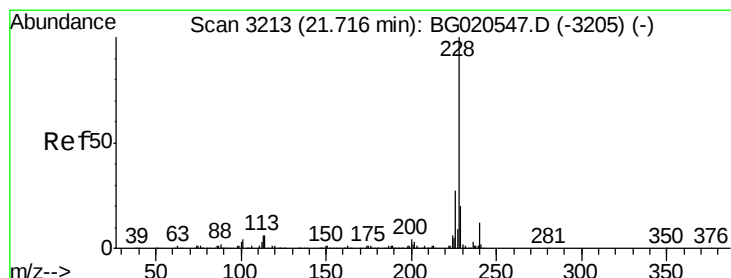
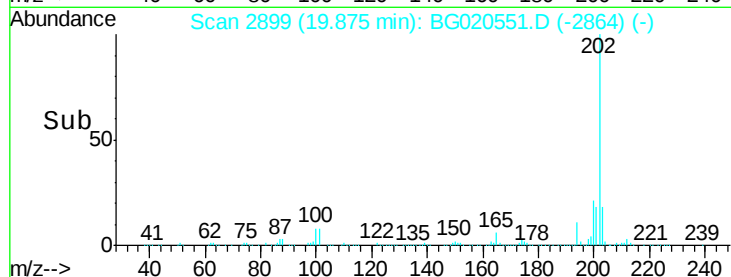
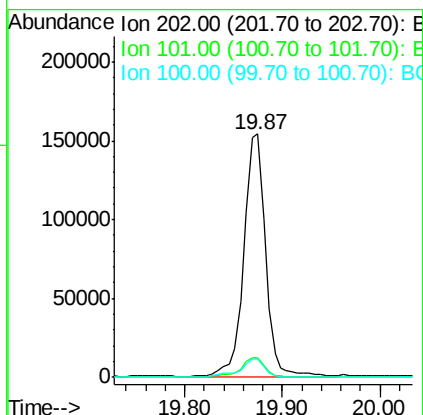
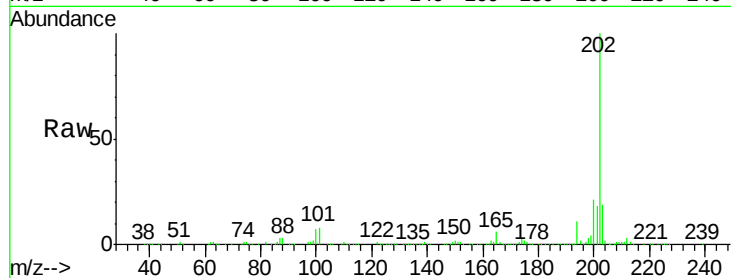




#80  
 Pyrene  
 Concen: 23.94 ng/ul  
 RT: 19.87 min Scan# 2899  
 Delta R.T. 0.00 min  
 Lab File: BG020551.D  
 Acq: 27 Dec 2015 12:00

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N61

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 8.0   | 7.0   | 10.4  |
| 100     | 7.5   | 6.4   | 9.6   |



#83  
 Benzo(a)anthracene  
 Concen: 1.01 ng/ul  
 RT: 21.71 min Scan# 3212  
 Delta R.T. -0.00 min  
 Lab File: BG020551.D  
 Acq: 27 Dec 2015 12:00

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 20.7  | 15.8  | 23.8  |
| 226     | 26.2  | 21.8  | 32.6  |

