

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG121715\  
 Data File : BG020218.D  
 Acq On : 16 Dec 2015 10:08  
 Operator : UM/SJ  
 Sample : G4786-11  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9BQ7

Quant Time: Dec 17 00:40:20 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG121415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 17 00:37:15 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.09  | 152  | 18788    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.91 | 136  | 84086    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.73 | 164  | 66082    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.47 | 188  | 172883   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.74 | 240  | 197232   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.02 | 264  | 181496   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.46  | 96  | 1903   | 5.59  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 7.25  | 99  | 57652  | 34.80 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.41  | 67  | 32700  | 33.08 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.62  | 132 | 44965  | 37.32 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.80  | 113 | 50235  | 35.46 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.26  | 128 | 22363  | 34.12 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.99  | 143 | 28044  | 38.45 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.53 | 165 | 55067  | 37.27 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 11.04 | 131 | 61764  | 37.22 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 14.13 | 166 | 193872 | 36.27 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.42 | 160 | 222772 | 35.82 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.92 | 143 | 35962  | 37.51 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.72 | 176 | 177837 | 36.68 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.83 | 200 | 36553  | 35.67 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.57 | 188 | 298346 | 37.45 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.85 | 212 | 339803 | 36.96 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 24.79 | 264 | 354987 | 39.21 | ng/ul | 0.00 |

## Target Compounds

|                                |       |     |        |       |        | Qvalue |
|--------------------------------|-------|-----|--------|-------|--------|--------|
| 4) Benzaldehyde                | 7.23  | 77  | 2699   | 2.52  | ng/ul  | 96     |
| 10) 2-Chlorophenol             | 7.66  | 128 | 48283  | 38.26 | ng/ul  | 97     |
| 12) 2,2'-oxybis(1-Chloropropan | 8.63  | 45  | 88747  | 50.62 | ng/ul  | 99     |
| 14) Acetophenone               | 8.92  | 105 | 81470  | 36.72 | ng/ul  | 97     |
| 15) N-Nitroso-di-n-propylamine | 8.80  | 70  | 1272   | 1.08  | ng/ul# | 1      |
| 17) Hexachloroethane           | 9.19  | 117 | 9279   | 17.50 | ng/ul  | 95     |
| 20) Nitrobenzene               | 9.31  | 77  | 96266  | 55.42 | ng/ul  | 99     |
| 23) 2-Nitrophenol              | 10.02 | 139 | 37642  | 48.13 | ng/ul  | 98     |
| 27) 2,4-Dichlorophenol         | 10.56 | 162 | 37697  | 24.84 | ng/ul  | 93     |
| 28) Naphthalene                | 10.97 | 128 | 68052  | 15.50 | ng/ul  | 99     |
| 30) 4-Chloroaniline            | 11.07 | 127 | 3122   | 1.84  | ng/ul  | 91     |
| 33) 4-Chloro-3-methylphenol    | 12.18 | 107 | 89628  | 49.70 | ng/ul  | 93     |
| 35) 1-Methylnaphthalene        | 12.78 | 142 | 144380 | 44.77 | ng/ul  | 97     |
| 37) 1,2,4,5-Tetrachlorobenzene | 12.92 | 216 | 44786  | 18.06 | ng/ul  | 96     |
| 39) 2,4,6-Trichlorophenol      | 13.16 | 196 | 49034  | 30.82 | ng/ul  | 98     |
| 40) 2,4,5-Trichlorophenol      | 13.16 | 196 | 43483  | 24.59 | ng/ul  | 99     |
| 41) 1,1'-Biphenyl              | 13.56 | 154 | 184145 | 36.94 | ng/ul  | 95     |
| 43) 2-Nitroaniline             | 13.81 | 65  | 85184  | 62.77 | ng/ul  | 96     |
| 46) 2,6-Dinitrotoluene         | 14.30 | 165 | 46607  | 41.27 | ng/ul  | 98     |
| 48) Acenaphthylene             | 14.45 | 152 | 316671 | 47.93 | ng/ul  | 100    |
| 50) Acenaphthene               | 14.79 | 153 | 18730  | 4.21  | ng/ul  | 98     |
| 53) 4-Nitrophenol              | 14.94 | 109 | 54928  | 59.57 | ng/ul  | 96     |
| 54) Dibenzofuran               | 15.13 | 168 | 129276 | 19.55 | ng/ul  | 99     |

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 Data File : BG020218.D  
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 Sample : G4786-11  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9BQ7

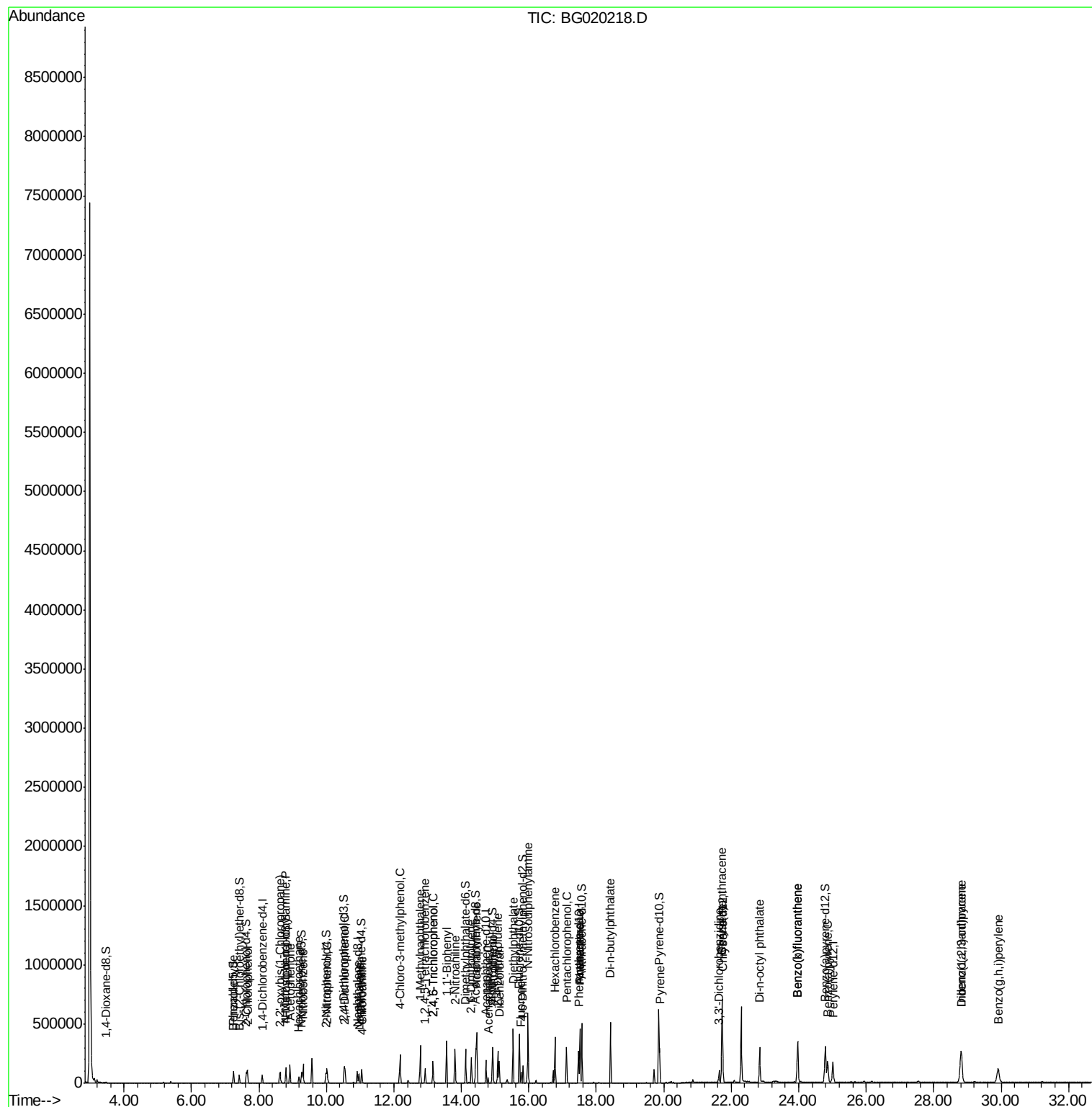
Quant Time: Dec 17 00:40:20 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG121415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 17 00:37:15 2015  
 Response via : Initial Calibration

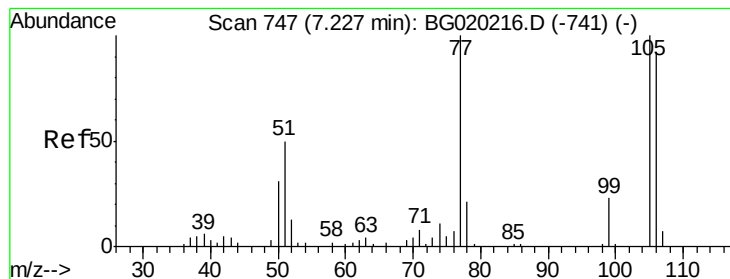
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|----------------------------|-------|------|----------|-------|--------|----------|
| -----                      |       |      |          |       |        |          |
| 55) 2,4-Dinitrotoluene     | 15.09 | 165  | 81682    | 49.28 | ng/ul  | 96       |
| 57) Diethylphthalate       | 15.54 | 149  | 260347   | 45.95 | ng/ul  | 98       |
| 59) Fluorene               | 15.77 | 166  | 43939    | 8.27  | ng/ul  | 99       |
| 65) N-Nitrosodiphenylamine | 15.98 | 169  | 244489   | 50.86 | ng/ul  | 98       |
| 67) Hexachlorobenzene      | 16.78 | 284  | 88953    | 40.82 | ng/ul  | 91       |
| 69) Pentachlorophenol      | 17.12 | 266  | 57906    | 44.07 | ng/ul  | 95       |
| 70) Phenanthrene           | 17.51 | 178  | 299364   | 31.66 | ng/ul  | 99       |
| 72) Anthracene             | 17.51 | 178  | 299364   | 31.21 | ng/ul  | 99       |
| 76) Di-n-butylphthalate    | 18.42 | 149  | 381715   | 40.76 | ng/ul  | 99       |
| 80) Pyrene                 | 19.88 | 202  | 185721   | 15.56 | ng/ul  | 98       |
| 82) 3,3'-Dichlorobenzidine | 21.64 | 252  | 40668    | 11.29 | ng/ul  | 94       |
| 83) Benzo(a)anthracene     | 21.72 | 228  | 454193   | 39.47 | ng/ul  | 99       |
| 85) Chrysene               | 21.72 | 228  | 454193   | 41.90 | ng/ul  | 98       |
| 87) Di-n-octyl phthalate   | 22.85 | 149  | 279168   | 27.99 | ng/ul  | 100      |
| 88) Benzo(b)fluoranthene   | 23.98 | 252  | 353996   | 32.41 | ng/ul  | 98       |
| 89) Benzo(k)fluoranthene   | 23.98 | 252  | 353996   | 33.77 | ng/ul  | 98       |
| 91) Benzo(a)pyrene         | 24.86 | 252  | 205570   | 19.85 | ng/ul  | 100      |
| 92) Indeno(1,2,3-cd)pyrene | 28.82 | 276  | 116221   | 9.42  | ng/ul# | 70       |
| 93) Dibenzo(a,h)anthracene | 28.82 | 278  | 490484   | 47.92 | ng/ul  | 98       |
| 94) Benzo(g,h,i)perylene   | 29.92 | 276  | 244700   | 24.21 | ng/ul  | 99       |
| -----                      |       |      |          |       |        |          |

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

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#4

Benzaldehyde

Concen: 2.52 ng/ul

RT: 7.23 min Scan# 747

Delta R.T. 0.00 min

Lab File: BG020218.D

Acq: 16 Dec 2015 10:08

Instrument :

BNA\_G

ClientSampleId :

G9BQ7

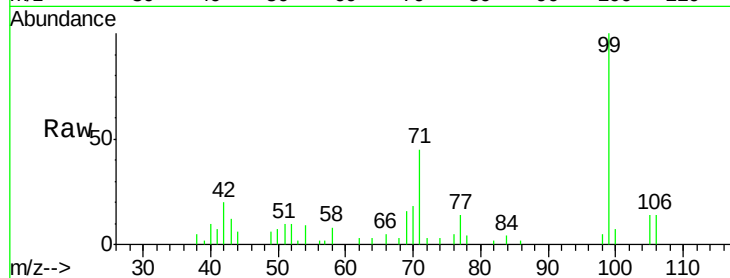
Tgt Ion: 77 Resp: 2699

Ion Ratio Lower Upper

77 100

105 97.2 77.8 116.6

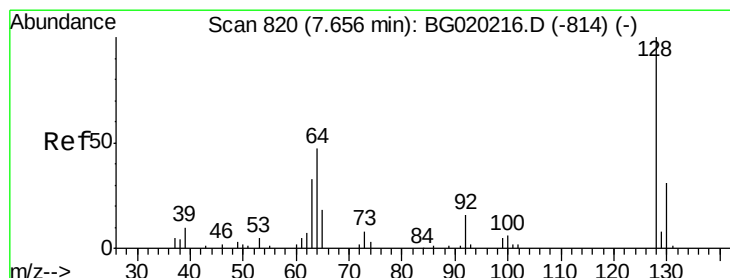
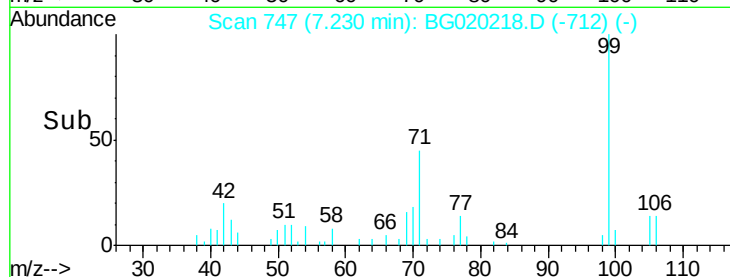
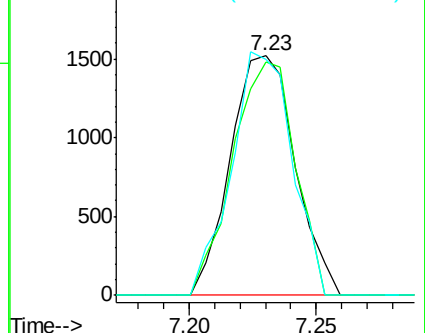
106 98.4 72.6 109.0



Abundance Ion 77.00 (76.70 to 77.70): BGC

Ion 105.00 (104.70 to 105.70): BGC

Ion 106.00 (105.70 to 106.70): BGC



#10

2-Chlorophenol

Concen: 38.26 ng/ul

RT: 7.66 min Scan# 820

Delta R.T. 0.00 min

Lab File: BG020218.D

Acq: 16 Dec 2015 10:08

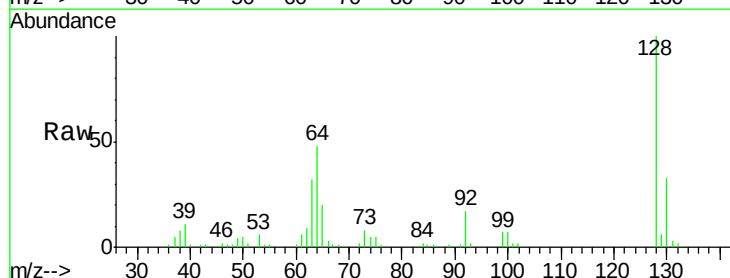
Tgt Ion: 128 Resp: 48283

Ion Ratio Lower Upper

128 100

64 48.1 39.4 59.0

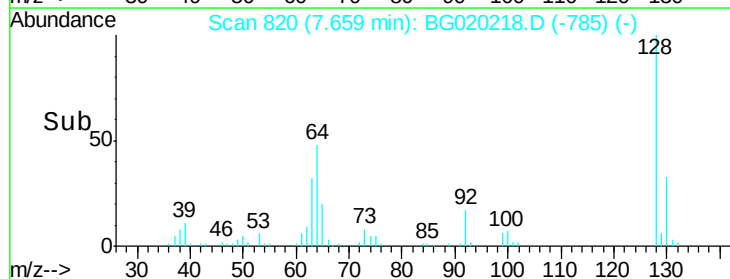
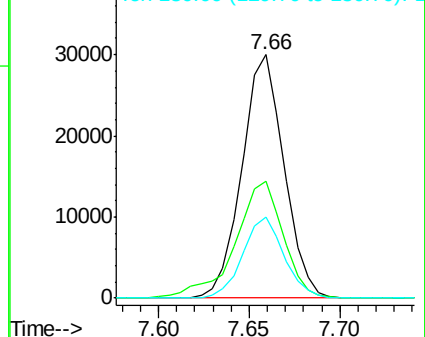
130 33.1 24.6 36.8

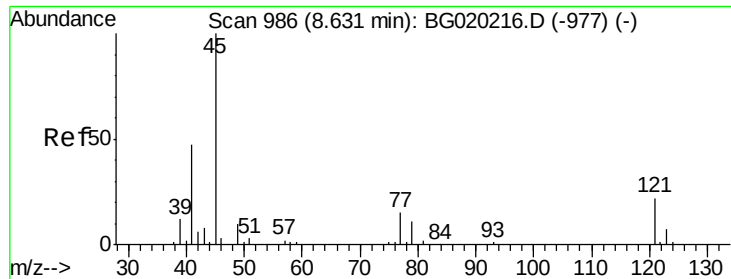


Abundance Ion 128.00 (127.70 to 128.70): BGC

Ion 64.00 (63.70 to 64.70): BGC

Ion 130.00 (129.70 to 130.70): BGC





#12

2,2'-oxybis(1-Chloropropane)

Concen: 50.62 ng/ul

RT: 8.63 min Scan# 985

Delta R.T. -0.00 min

Lab File: BG020218.D

Acq: 16 Dec 2015 10:08

Instrument :

BNA\_G

ClientSampleId :

G9BQ7

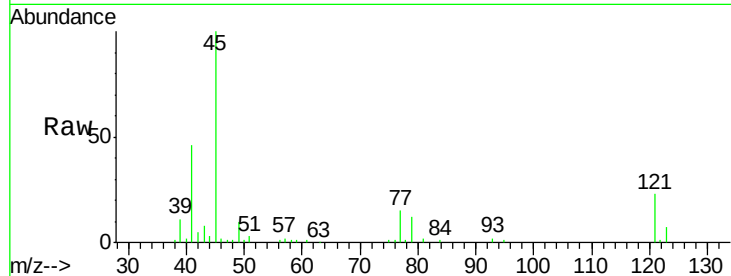
Tgt Ion: 45 Resp: 88747

Ion Ratio Lower Upper

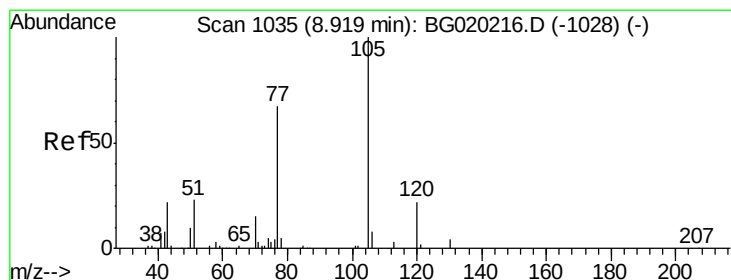
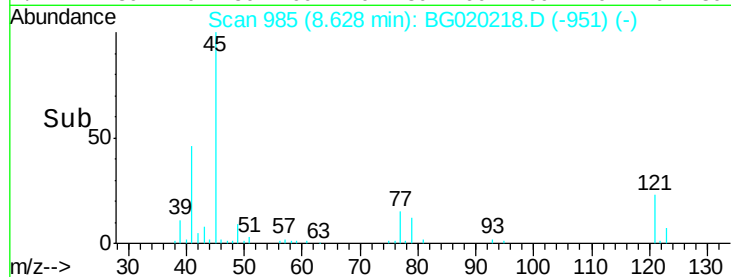
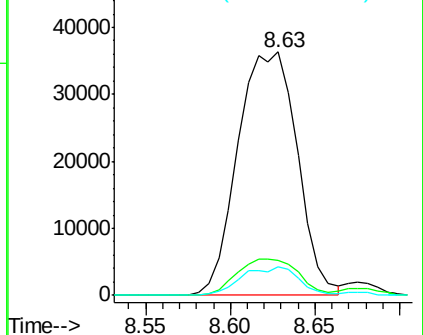
45 100

77 14.6 12.1 18.1

79 11.6 9.0 13.4



Abundance Ion 45.00 (44.70 to 45.70): BGC  
Ion 77.00 (76.70 to 77.70): BGC  
Ion 79.00 (78.70 to 79.70): BGC



#14

Acetophenone

Concen: 36.72 ng/ul

RT: 8.92 min Scan# 1035

Delta R.T. 0.00 min

Lab File: BG020218.D

Acq: 16 Dec 2015 10:08

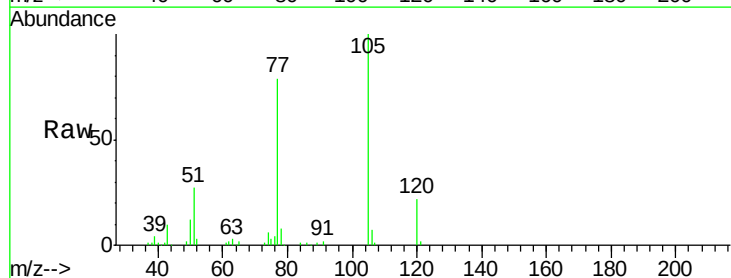
Tgt Ion: 105 Resp: 81470

Ion Ratio Lower Upper

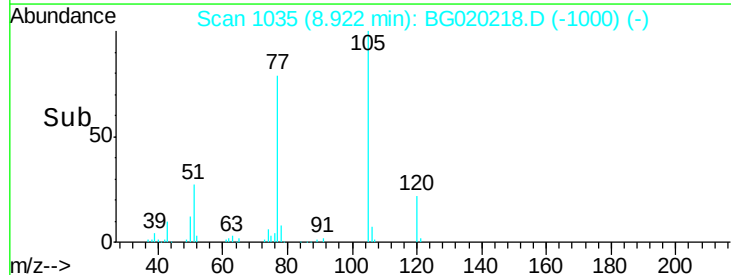
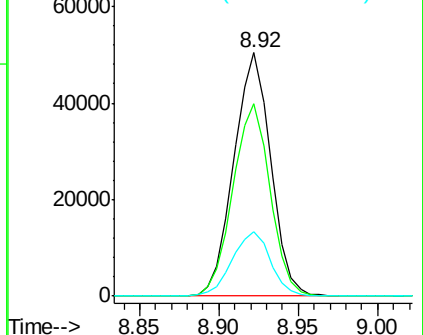
105 100

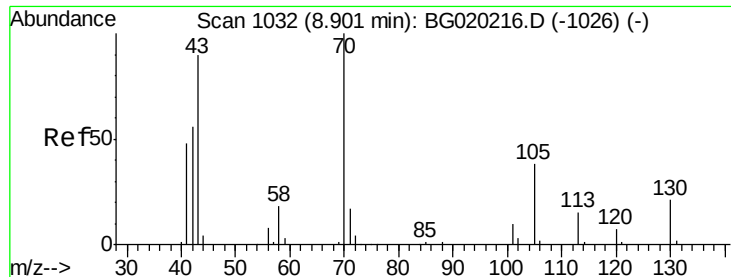
77 78.9 65.2 97.8

51 26.6 22.6 33.8



Abundance Ion 105.00 (104.70 to 105.70): BGC  
Ion 77.00 (76.70 to 77.70): BGC  
Ion 51.00 (50.70 to 51.70): BGC





#15

N-Nitroso-di-n-propylamine

Concen: 1.08 ng/ul

RT: 8.80 min Scan# 1015

Delta R.T. -0.10 min

Lab File: BG020218.D

Acq: 16 Dec 2015 10:08

Instrument :

BNA\_G

ClientSampleId :

G9BQ7

Tgt Ion: 70 Resp: 1272

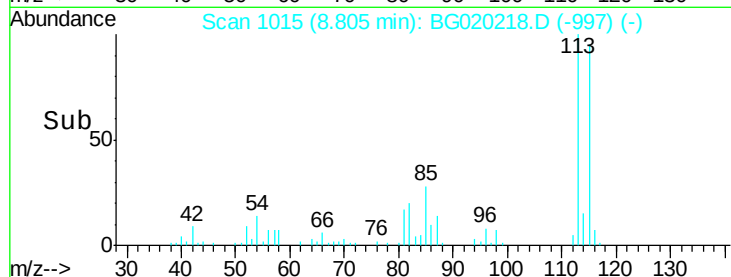
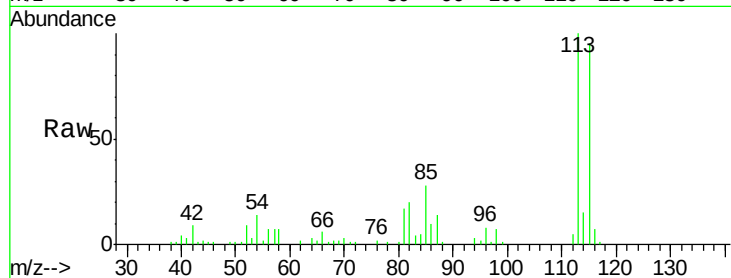
Ion Ratio Lower Upper

70 100

42 286.1 44.3 66.5#

101 0.0 7.6 11.4#

130 0.0 17.0 25.4#

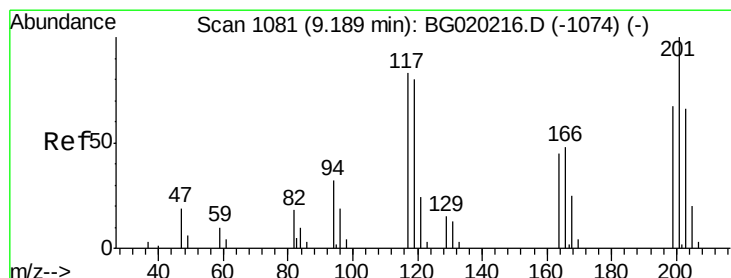
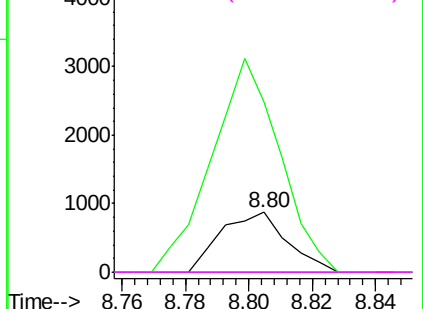


Abundance Ion 70.00 (69.70 to 70.70): BG0

Ion 42.00 (41.70 to 42.70): BG0

Ion 101.00 (100.70 to 101.70): E

Ion 130.00 (129.70 to 130.70): E



#17

Hexachloroethane

Concen: 17.50 ng/ul

RT: 9.19 min Scan# 1080

Delta R.T. -0.00 min

Lab File: BG020218.D

Acq: 16 Dec 2015 10:08

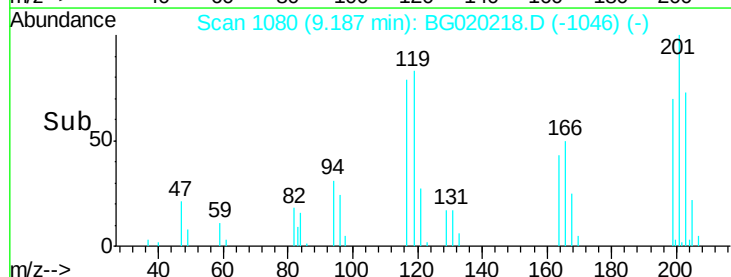
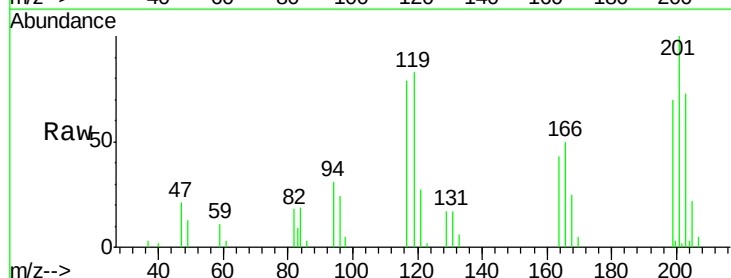
Tgt Ion: 117 Resp: 9279

Ion Ratio Lower Upper

117 100

201 127.4 102.7 154.1

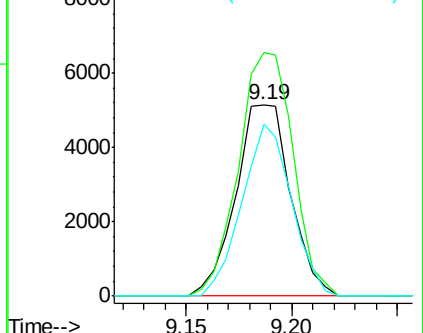
199 93.5 65.8 98.8

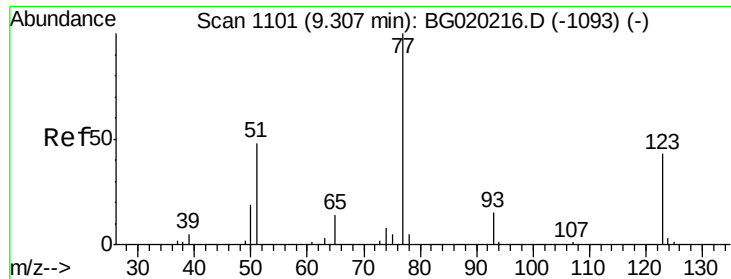


Abundance Ion 117.00 (116.70 to 117.70): E

Ion 201.00 (200.70 to 201.70): E

Ion 199.00 (198.70 to 199.70): E

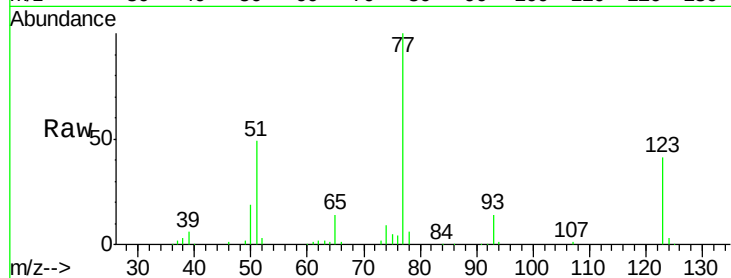




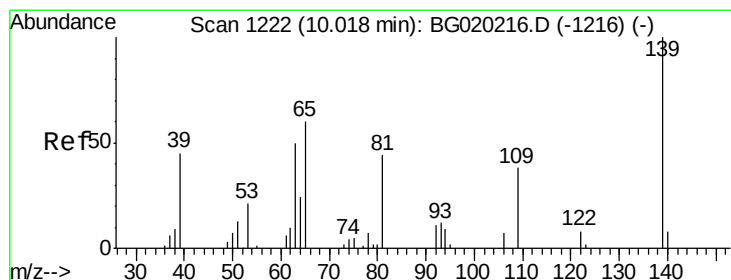
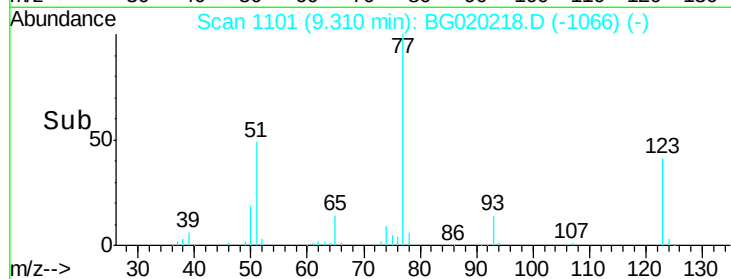
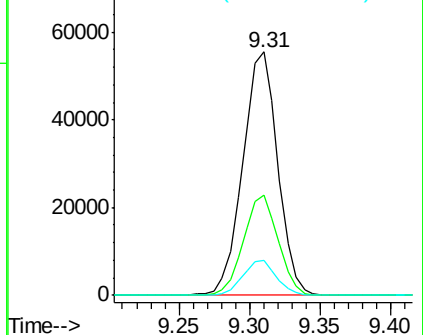
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Nitrobenzene  
Concen: 55.42 ng/ul  
RT: 9.31 min Scan# 1101  
Delta R.T. 0.00 min  
Lab File: BG020218.D  
Acq: 16 Dec 2015 10:08

Instrument :  
BNA\_G  
ClientSampleId :  
G9BQ7

Tgt Ion: 77 Resp: 96266  
Ion Ratio Lower Upper  
77 100  
123 41.1 33.4 50.0  
65 14.2 11.7 17.5

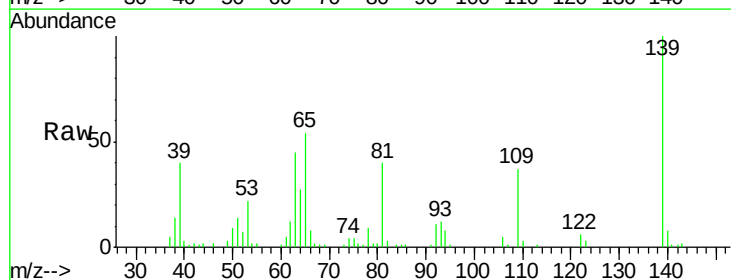


Abundance Ion 77.00 (76.70 to 77.70): BGC  
Ion 123.00 (122.70 to 123.70): BGC  
Ion 65.00 (64.70 to 65.70): BGC

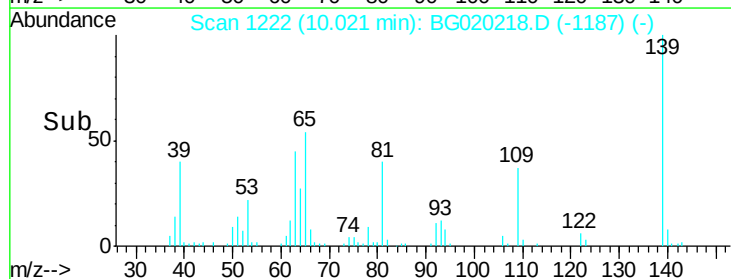
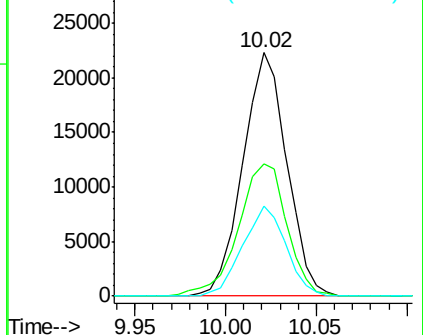


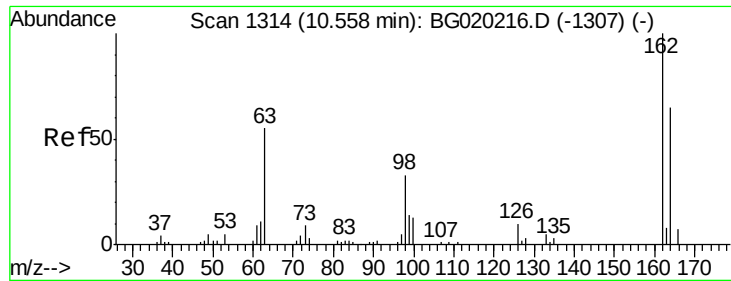
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2-Nitrophenol  
Concen: 48.13 ng/ul  
RT: 10.02 min Scan# 1222  
Delta R.T. 0.00 min  
Lab File: BG020218.D  
Acq: 16 Dec 2015 10:08

Tgt Ion: 139 Resp: 37642  
Ion Ratio Lower Upper  
139 100  
65 54.4 45.1 67.7  
109 37.2 29.6 44.4



Abundance Ion 139.00 (138.70 to 139.70): BGC  
Ion 65.00 (64.70 to 65.70): BGC  
Ion 109.00 (108.70 to 109.70): BGC

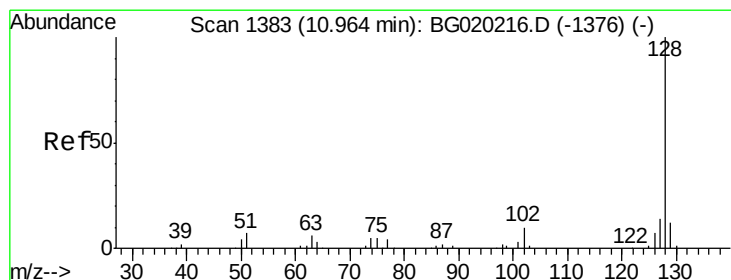
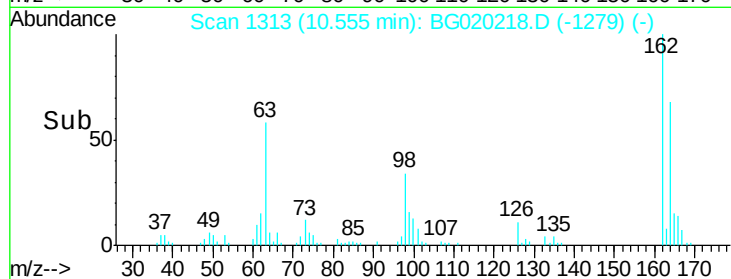
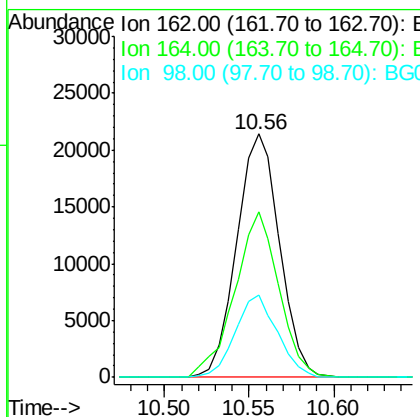
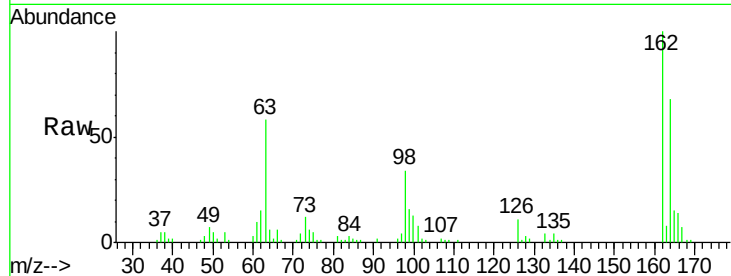




#27  
 2,4-Dichlorophenol  
 Concen: 24.84 ng/ul  
 RT: 10.56 min Scan# 1313  
 Delta R.T. -0.00 min  
 Lab File: BG020218.D  
 Acq: 16 Dec 2015 10:08

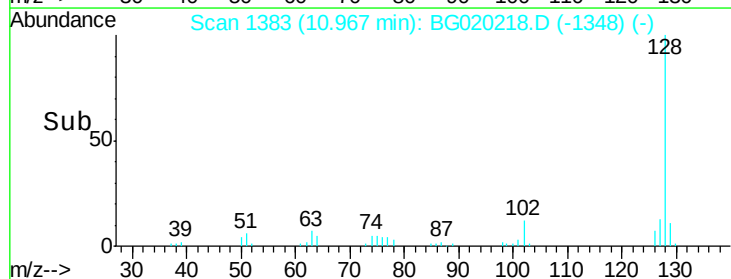
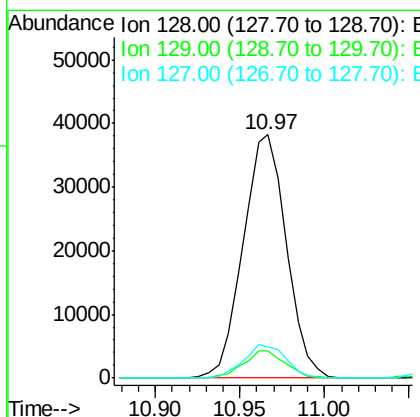
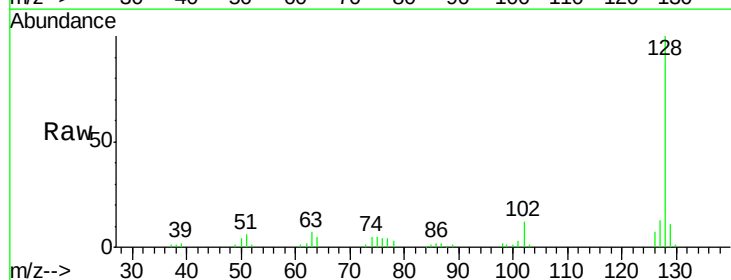
Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9BQ7

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 162     | 100   |       |       |
| 164     | 67.9  | 48.2  | 72.2  |
| 98      | 33.7  | 27.2  | 40.8  |

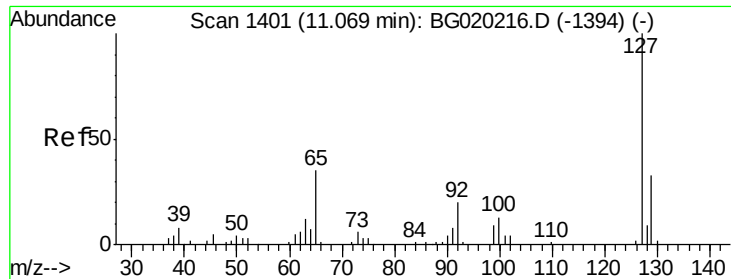


#28  
 Naphthalene  
 Concen: 15.50 ng/ul  
 RT: 10.97 min Scan# 1383  
 Delta R.T. 0.00 min  
 Lab File: BG020218.D  
 Acq: 16 Dec 2015 10:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.3  | 8.6   | 12.8  |
| 127     | 12.8  | 10.1  | 15.1  |



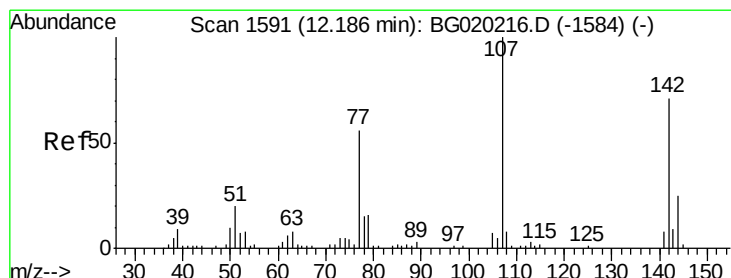
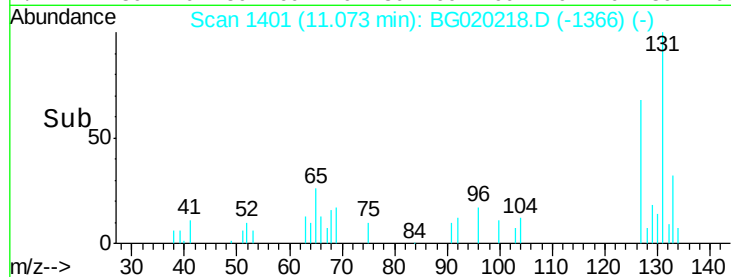
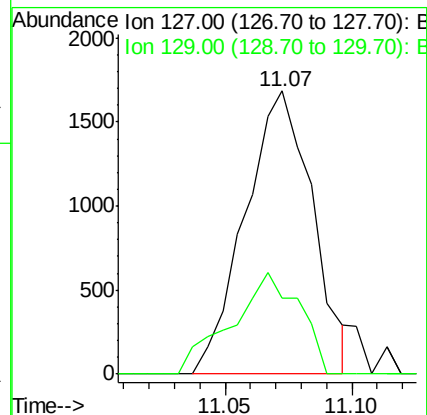
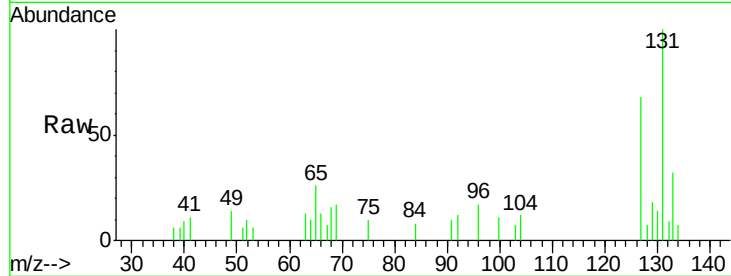




#30  
4-Chloroaniline  
Concen: 1.84 ng/ul  
RT: 11.07 min Scan# 1401  
Delta R.T. 0.00 min  
Lab File: BG020218.D  
Acq: 16 Dec 2015 10:08

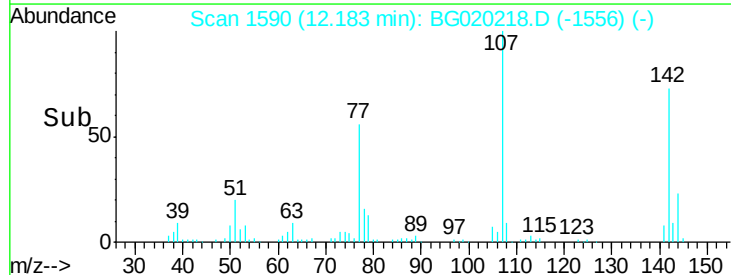
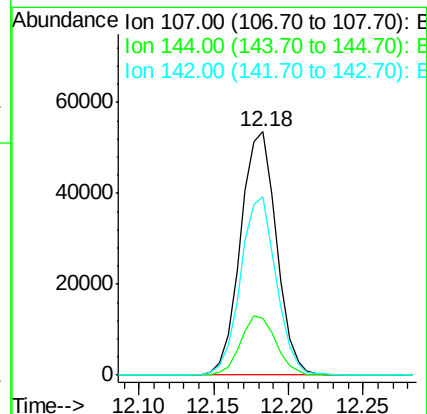
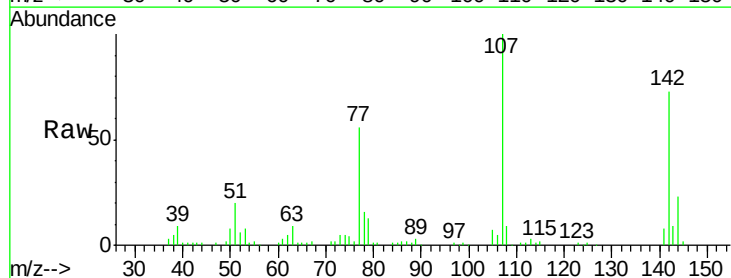
Instrument :  
BNA\_G  
ClientSampleId :  
G9BQ7

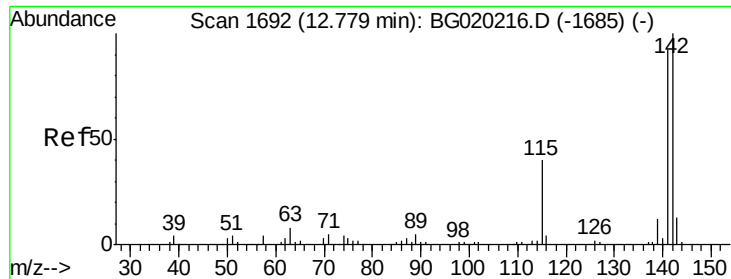
Tgt Ion:127 Resp: 3122  
Ion Ratio Lower Upper  
127 100  
129 26.9 25.7 38.5



#33  
4-Chloro-3-methylphenol  
Concen: 49.70 ng/ul  
RT: 12.18 min Scan# 1590  
Delta R.T. -0.00 min  
Lab File: BG020218.D  
Acq: 16 Dec 2015 10:08

Tgt Ion:107 Resp: 89628  
Ion Ratio Lower Upper  
107 100  
144 23.2 18.7 28.1  
142 73.4 52.8 79.2





#35

1-Methylnaphthalene

Concen: 44.77 ng/ul

RT: 12.78 min Scan# 1692

Delta R.T. 0.00 min

Lab File: BG020218.D

Acq: 16 Dec 2015 10:08

Instrument :

BNA\_G

ClientSampleId :

G9BQ7

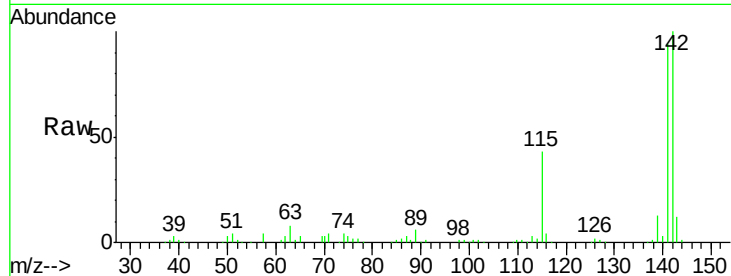
Tgt Ion:142 Resp: 144380

Ion Ratio Lower Upper

142 100

141 94.5 73.0 109.6

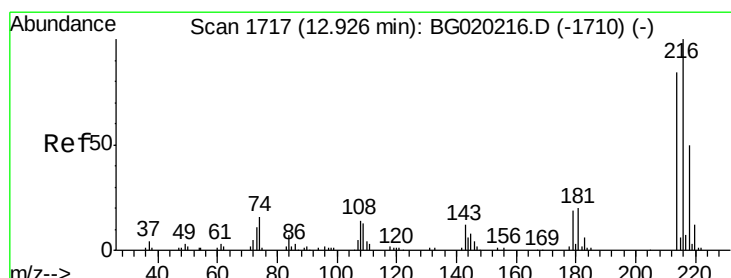
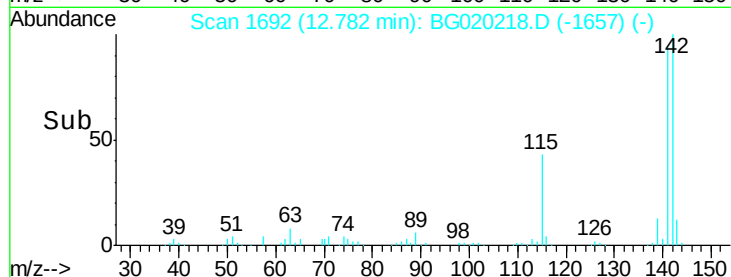
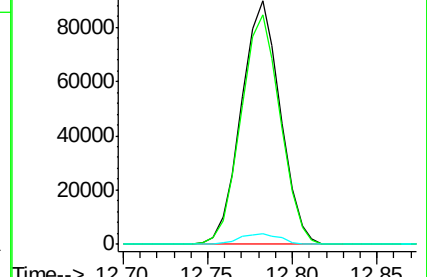
116 4.2 3.0 4.6



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 116.00 (115.70 to 116.70): E



#37

1,2,4,5-Tetrachlorobenzene

Concen: 18.06 ng/ul

RT: 12.92 min Scan# 1716

Delta R.T. -0.00 min

Lab File: BG020218.D

Acq: 16 Dec 2015 10:08

Tgt Ion:216 Resp: 44786

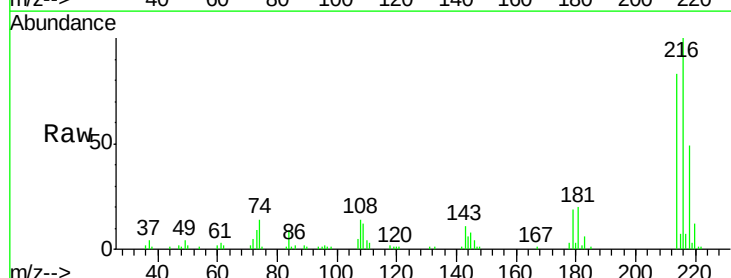
Ion Ratio Lower Upper

216 100

214 82.6 62.6 93.8

179 19.5 14.7 22.1

108 13.7 10.5 15.7

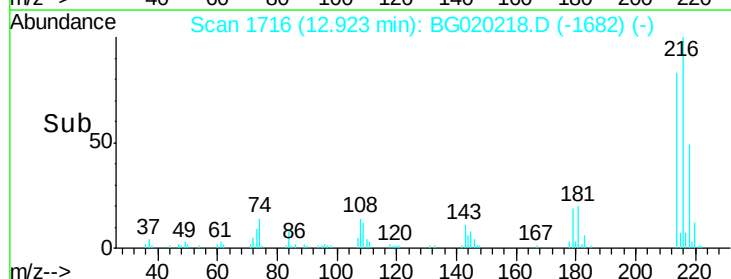
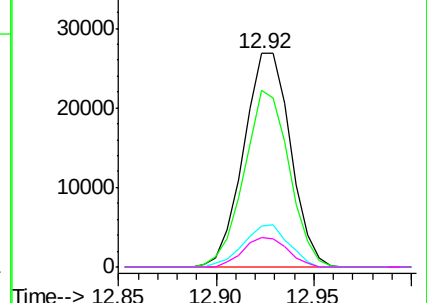


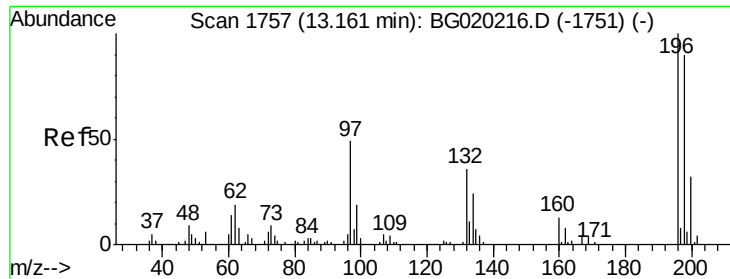
Abundance Ion 216.00 (215.70 to 216.70): E

Ion 214.00 (213.70 to 214.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 108.00 (107.70 to 108.70): E

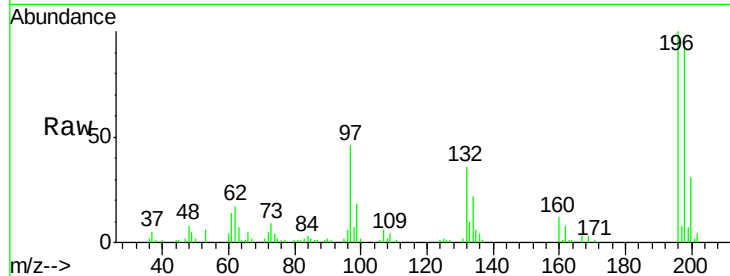




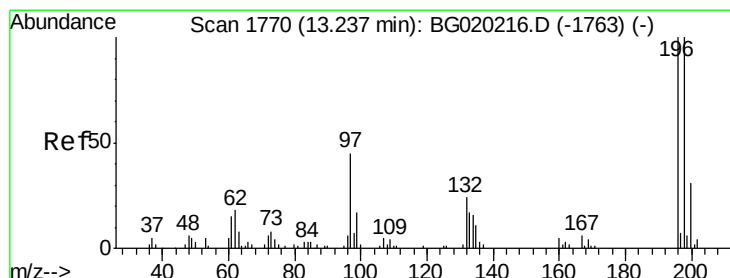
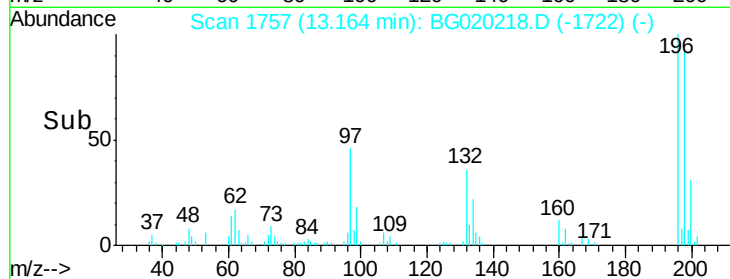
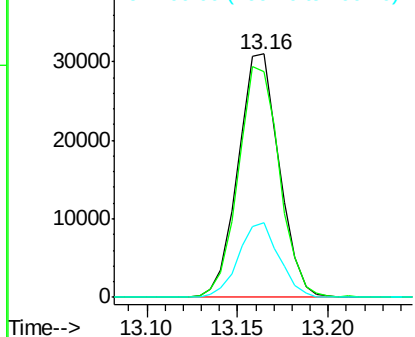
#39  
 2,4,6-Trichlorophenol  
 Concen: 30.82 ng/ul  
 RT: 13.16 min Scan# 1757  
 Delta R.T. 0.00 min  
 Lab File: BG020218.D  
 Acq: 16 Dec 2015 10:08

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9BQ7

Tgt Ion:196 Resp: 49034  
 Ion Ratio Lower Upper  
 196 100  
 198 93.0 75.9 113.9  
 200 30.9 25.8 38.8

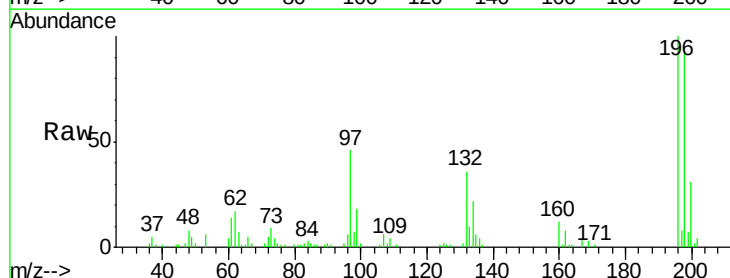


Abundance Ion 196.00 (195.70 to 196.70): E  
 Ion 198.00 (197.70 to 198.70): E  
 Ion 200.00 (199.70 to 200.70): E

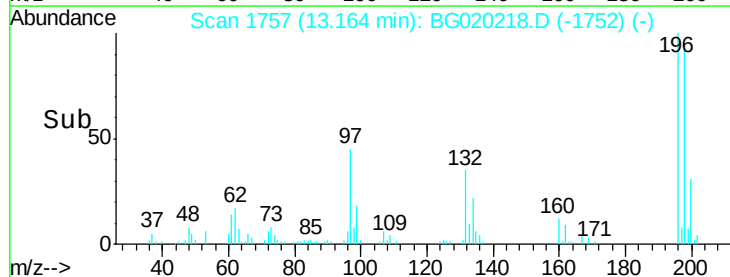
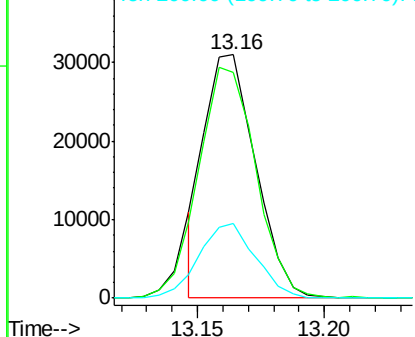


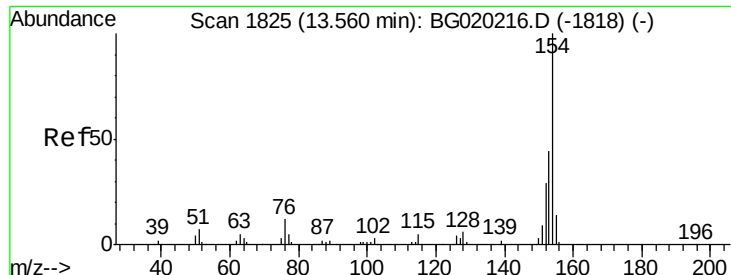
#40  
 2,4,5-Trichlorophenol  
 Concen: 24.59 ng/ul  
 RT: 13.16 min Scan# 1757  
 Delta R.T. -0.07 min  
 Lab File: BG020218.D  
 Acq: 16 Dec 2015 10:08

Tgt Ion:196 Resp: 43483  
 Ion Ratio Lower Upper  
 196 100  
 198 93.0 74.4 111.6  
 200 30.9 23.8 35.8



Abundance Ion 196.00 (195.70 to 196.70): E  
 Ion 198.00 (197.70 to 198.70): E  
 Ion 200.00 (199.70 to 200.70): E

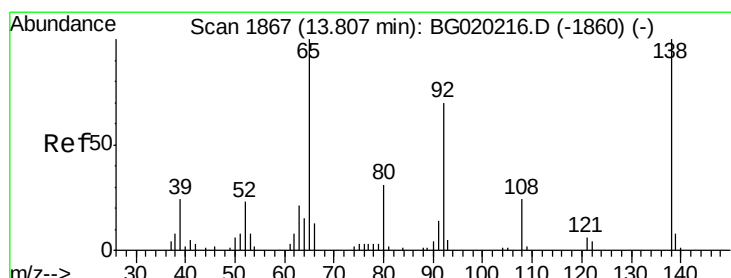
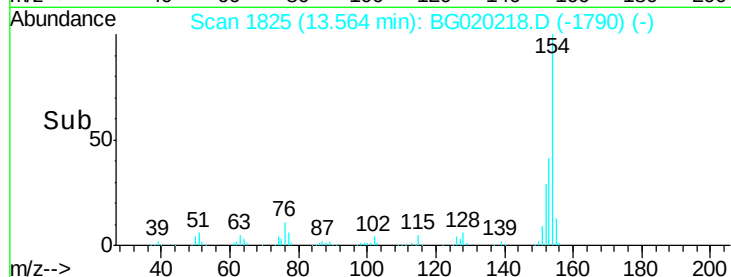
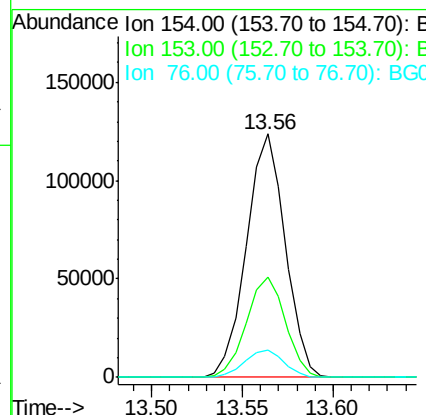
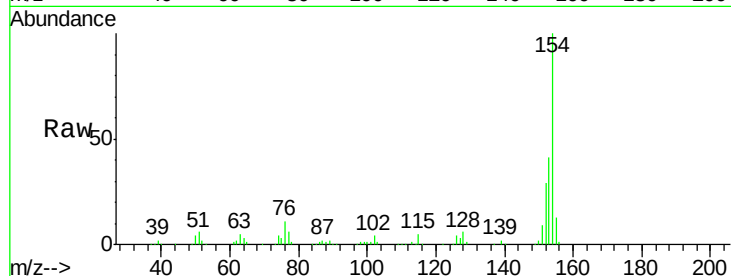




#41  
 1,1'-Biphenyl  
 Concen: 36.94 ng/ul  
 RT: 13.56 min Scan# 1825  
 Delta R.T. 0.00 min  
 Lab File: BG020218.D  
 Acq: 16 Dec 2015 10:08

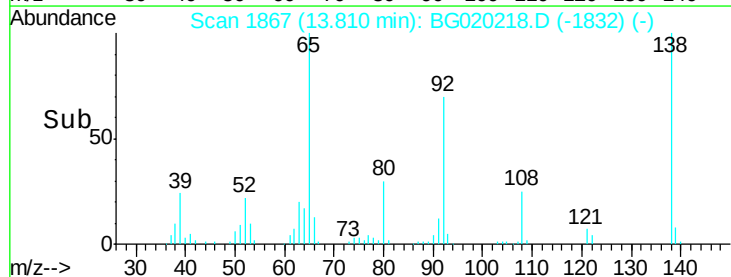
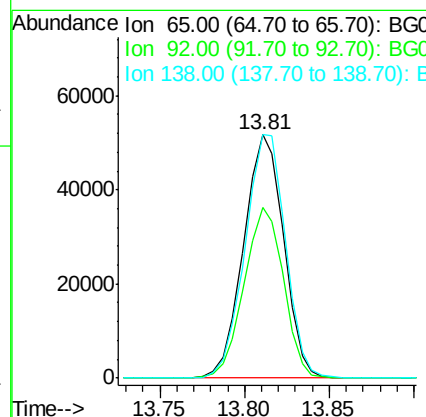
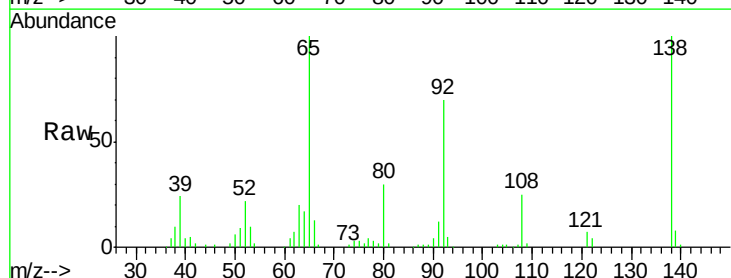
Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9BQ7

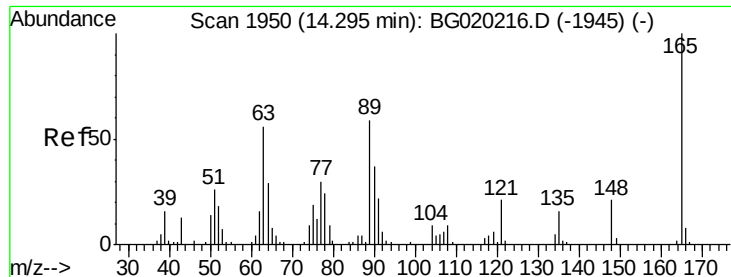
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 41.0  | 35.5  | 53.3  |
| 76      | 11.4  | 10.4  | 15.6  |



#43  
 2-Nitroaniline  
 Concen: 62.77 ng/ul  
 RT: 13.81 min Scan# 1867  
 Delta R.T. 0.00 min  
 Lab File: BG020218.D  
 Acq: 16 Dec 2015 10:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 65      | 100   |       |       |
| 92      | 69.8  | 53.1  | 79.7  |
| 138     | 99.9  | 76.6  | 114.8 |

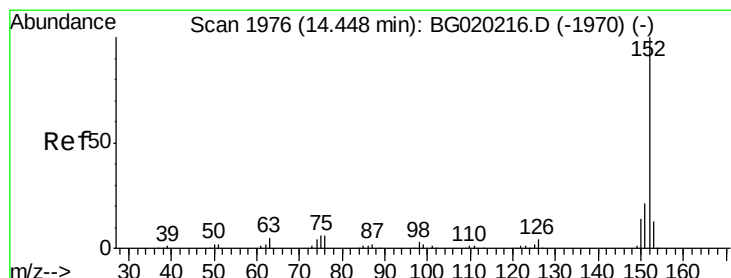
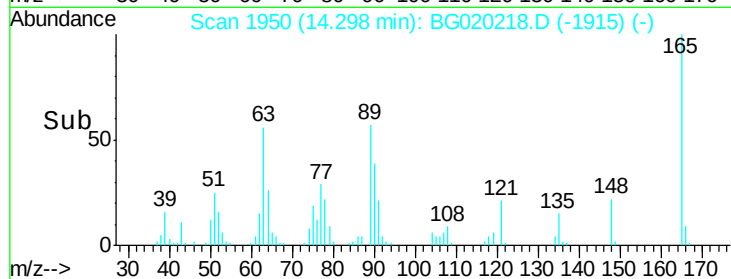
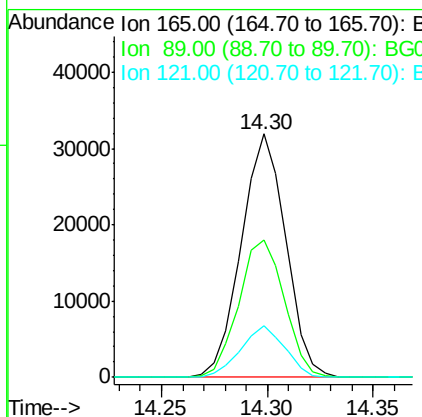
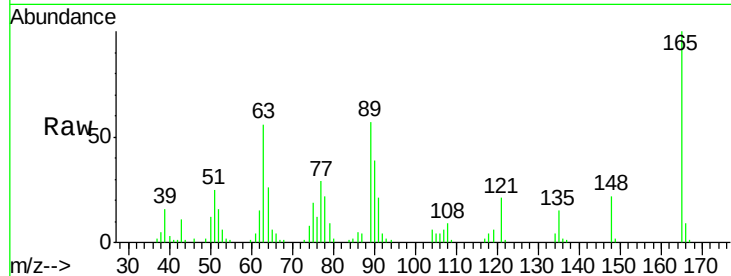




#46  
 2,6-Dinitrotoluene  
 Concen: 41.27 ng/ul  
 RT: 14.30 min Scan# 1950  
 Delta R.T. 0.00 min  
 Lab File: BG020218.D  
 Acq: 16 Dec 2015 10:08

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G9BQ7

Tgt Ion:165 Resp: 46607  
 Ion Ratio Lower Upper  
 165 100  
 89 56.6 47.0 70.4  
 121 20.9 17.0 25.6



#48  
 Acenaphthylene  
 Concen: 47.93 ng/ul  
 RT: 14.45 min Scan# 1976  
 Delta R.T. 0.00 min  
 Lab File: BG020218.D  
 Acq: 16 Dec 2015 10:08

Tgt Ion:152 Resp: 316671  
 Ion Ratio Lower Upper  
 152 100  
 151 20.4 16.4 24.6  
 153 13.1 10.4 15.6

