

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG022819\  
 Data File : BG039687.D  
 Acq On : 1 Mar 2019 9:28  
 Operator : JU/SJ  
 Sample : K1654-03  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: Mar 01 10:07:49 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG012919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Mar 01 06:15:02 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.16  | 152  | 53766    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.98 | 136  | 221882   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.78 | 164  | 144611   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.53 | 188  | 350005   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.82 | 240  | 375023   | 20.00 | ng    | -0.01    |
| 87) Perylene-d12          | 25.19 | 264  | 361602   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.71  | 112  | 450927   | 143.54 | ng    | 0.00     |
| 7) Phenol-d6                | 7.31  | 99   | 580237   | 125.48 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.34  | 82   | 421114   | 118.57 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 16.28 | 330  | 205227   | 131.79 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.41 | 172  | 911475   | 90.42  | ng    | 0.00     |
| 79) Terphenyl-d14           | 20.12 | 244  | 1561543  | 88.14  | ng    | 0.00     |

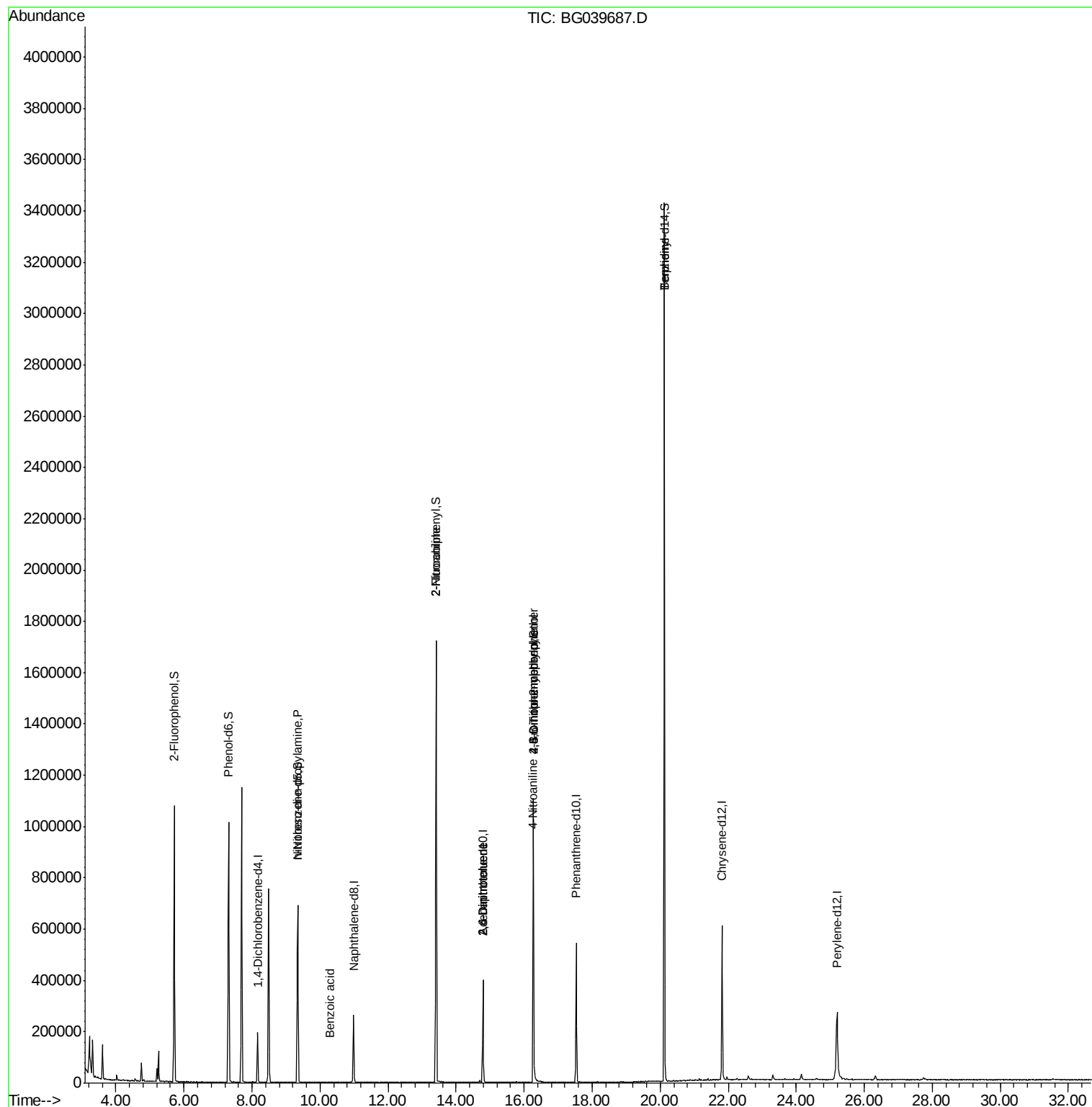
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde                | 7.31  | 77   | 862      | Below Cal |       | # 4    |
| 19) n-Nitroso-di-n-propylamine | 9.34  | 70   | 56045    | 17.076    | ng    | # 69   |
| 32) Benzoic acid               | 10.29 | 122  | 456      | 9.199     | ng    | # 86   |
| 48) 2-Nitroaniline             | 13.41 | 65   | 1490     | 8.770     | ng    | # 1    |
| 51) 2,6-Dinitrotoluene         | 14.78 | 165  | 18956    | 14.057    | ng    | # 25   |
| 57) 2,4-Dinitrotoluene         | 14.78 | 165  | 18956    | 13.500    | ng    | # 20   |
| 62) 4-Nitroaniline             | 16.26 | 138  | 58       | 4.224     | ng    | # 1    |
| 65) 4,6-Dinitro-2-methylphenol | 16.28 | 198  | 773      | 4.883     | ng    | # 1    |
| 67) 4-Bromophenyl-phenylether  | 16.28 | 248  | 16299    | 4.198     | ng    | # 1    |
| 77) Benzidine                  | 20.12 | 184  | 27986    | 2.276     | ng    | # 95   |

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

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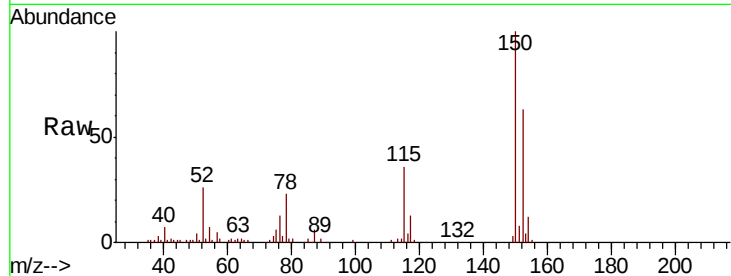


#1

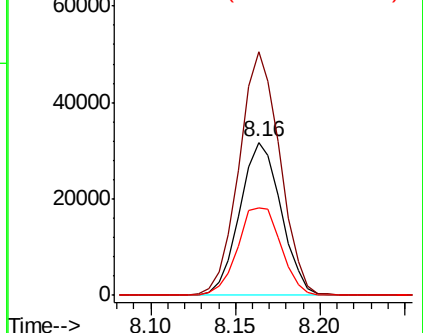
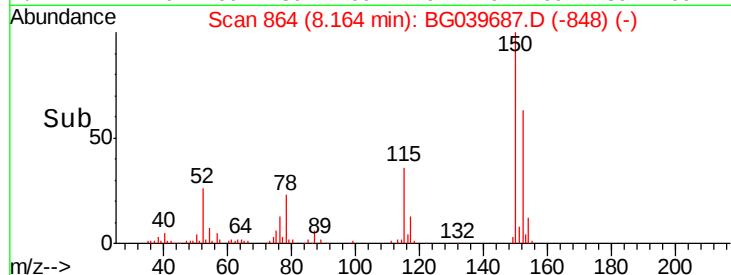
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.16 min Scan# 864  
Delta R.T. -0.01 min  
Lab File: BG039687.D  
Acq: 1 Mar 2019 9:28

Instrument :  
BNA\_G  
ClientSampleId :

Tot Ion:152 Resp: 53766  
Ion Ratio Lower Upper  
152 100  
150 159.1 123.7 185.5  
115 57.2 45.9 68.9



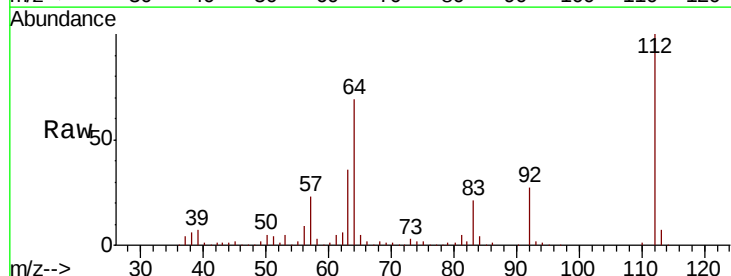
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



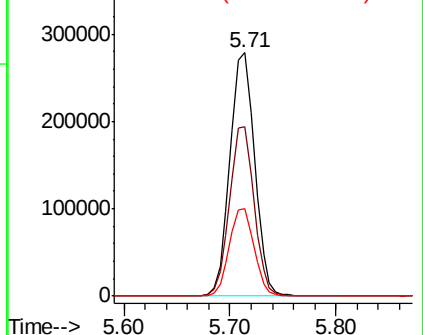
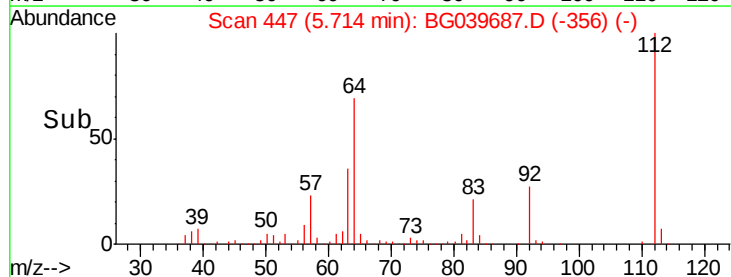
#5

2-Fluorophenol  
Concen: 143.542 ng  
RT: 5.71 min Scan# 447  
Delta R.T. 0.01 min  
Lab File: BG039687.D  
Acq: 1 Mar 2019 9:28

Tgt Ion:112 Resp: 450927  
Ion Ratio Lower Upper  
112 100  
64 69.5 57.8 86.8  
63 36.0 29.8 44.6



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BG  
Ion 63.00 (62.70 to 63.70): BG





#7

Phenol-d6

Concen: 125.481 ng

RT: 7.31 min Scan# 719

Delta R.T. -0.00 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

Instrument :

BNA\_G

ClientSampled :

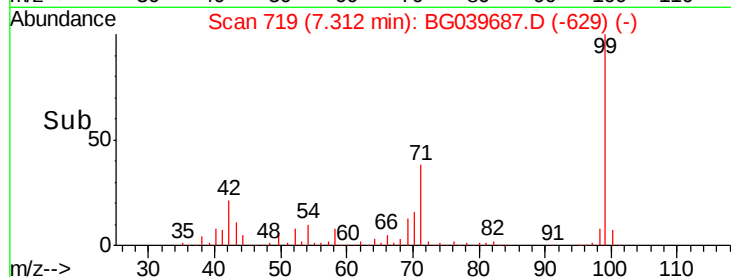
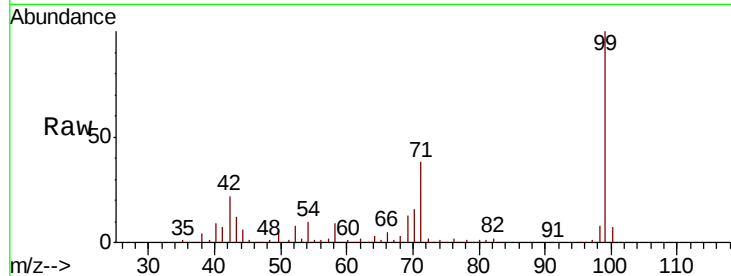
Tot Ion: 99 Resp: 580237

Ion Ratio Lower Upper

99 100

42 21.5 18.2 27.2

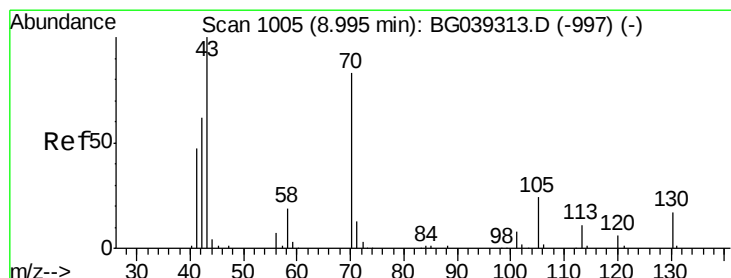
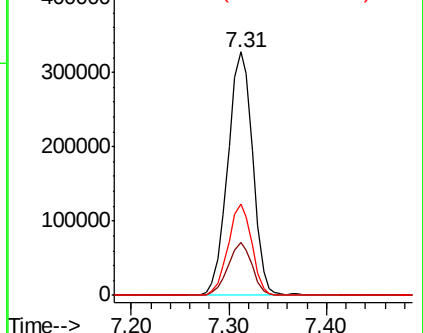
71 37.7 28.0 42.0



Abundance Ion 99.00 (98.70 to 99.70): BGC

Ion 42.00 (41.70 to 42.70): BGC

Ion 71.00 (70.70 to 71.70): BGC



#19

n-Nitroso-di-n-propylamine

Concen: 17.076 ng

RT: 9.34 min Scan# 1065

Delta R.T. 0.38 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

Tgt Ion: 70 Resp: 56045

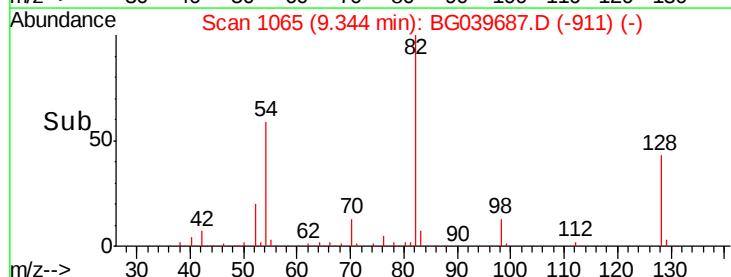
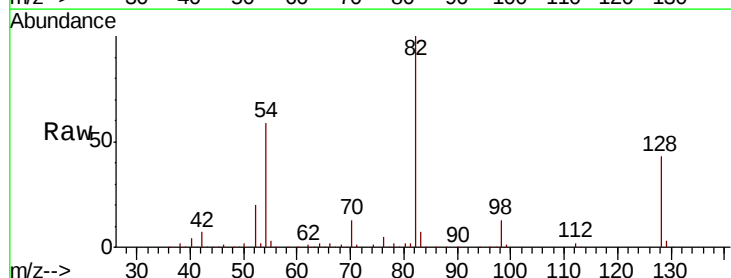
Ion Ratio Lower Upper

70 100

42 50.4 60.4 90.6#

101 0.0 7.5 11.3#

130 1.8 16.9 25.3#

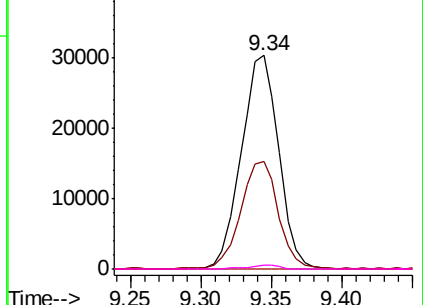


Abundance Ion 70.00 (69.70 to 70.70): BGC

Ion 42.00 (41.70 to 42.70): BGC

Ion 101.00 (100.70 to 101.70): BGC

Ion 130.00 (129.70 to 130.70): BGC

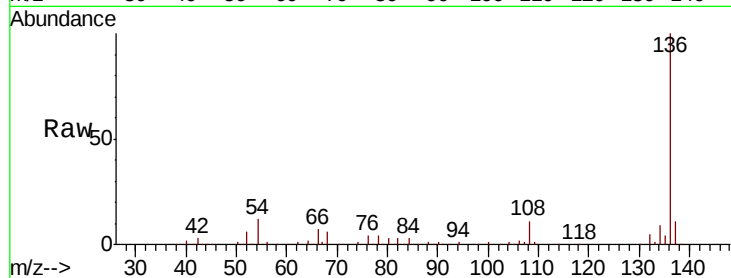




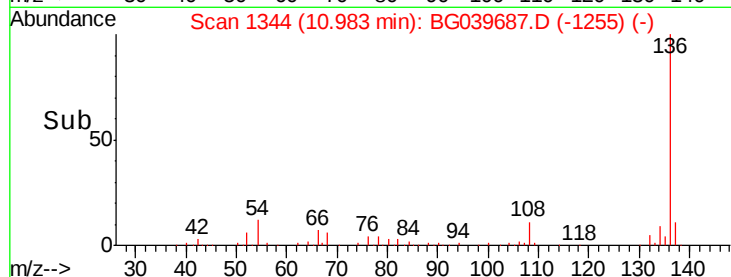
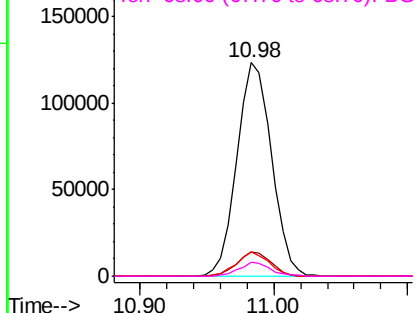
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.98 min Scan# 1344  
Delta R.T. -0.01 min  
Lab File: BG039687.D  
Acq: 1 Mar 2019 9:28

Instrument :  
BNA\_G  
ClientSampleId :

|             |       |          |
|-------------|-------|----------|
| Tot Ion:136 | Resp: | 221882   |
| Ion Ratio   | Lower | Upper    |
| 136         | 100   |          |
| 137         | 11.3  | 9.1 13.7 |
| 54          | 11.7  | 9.4 14.2 |
| 68          | 6.4   | 4.2 6.4# |

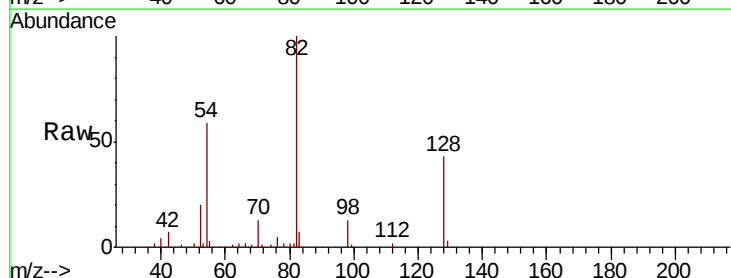


Abundance Ion 136.00 (135.70 to 136.70): BGC  
Ion 137.00 (136.70 to 137.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC  
Ion 68.00 (67.70 to 68.70): BGC

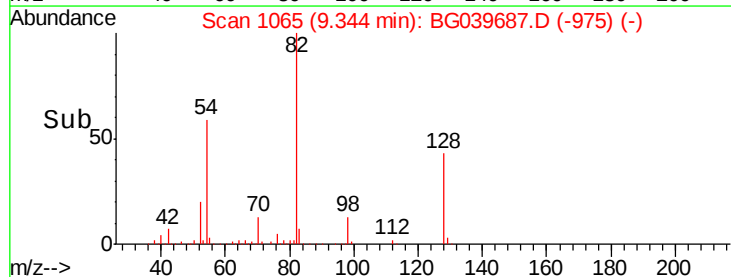
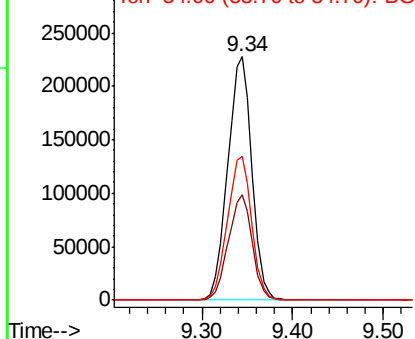


#23  
Nitrobenzene-d5  
Concen: 118.566 ng  
RT: 9.34 min Scan# 1065  
Delta R.T. -0.00 min  
Lab File: BG039687.D  
Acq: 1 Mar 2019 9:28

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 82 | Resp: | 421114    |
| Ion Ratio   | Lower | Upper     |
| 82          | 100   |           |
| 128         | 43.3  | 31.3 46.9 |
| 54          | 59.1  | 50.9 76.3 |



Abundance Ion 82.00 (81.70 to 82.70): BGC  
Ion 128.00 (127.70 to 128.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC





#32

Benzoic acid

Concen: 9.199 ng

RT: 10.29 min Scan# 1226

Delta R.T. 0.03 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

Instrument :

BNA\_G

ClientSampleId :

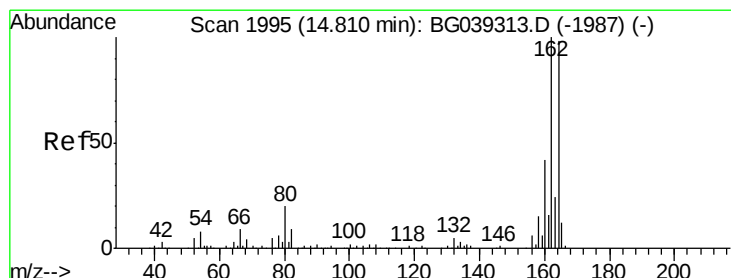
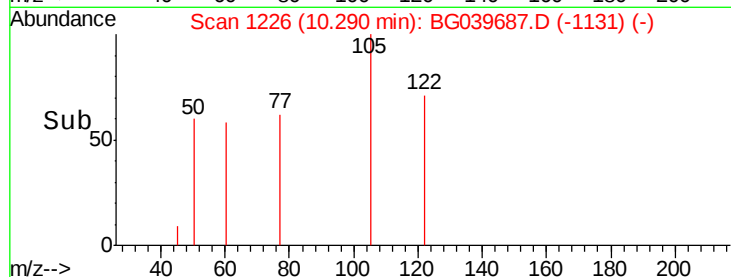
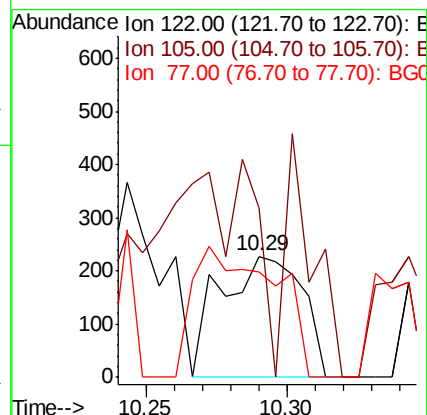
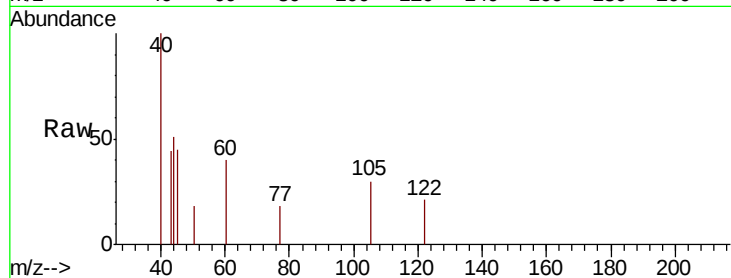
Tot Ion:122 Resp: 456

Ion Ratio Lower Upper

122 100

105 140.5 101.8 141.8

77 86.8 76.3 116.3



#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 14.78 min Scan# 1991

Delta R.T. -0.01 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

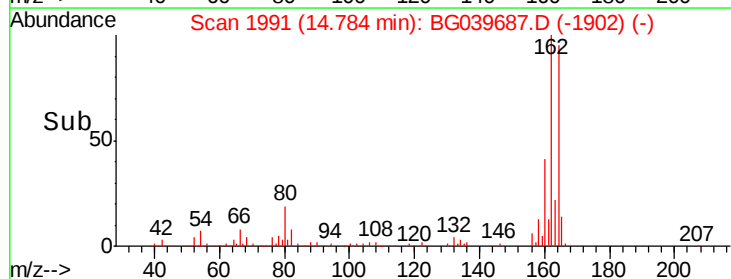
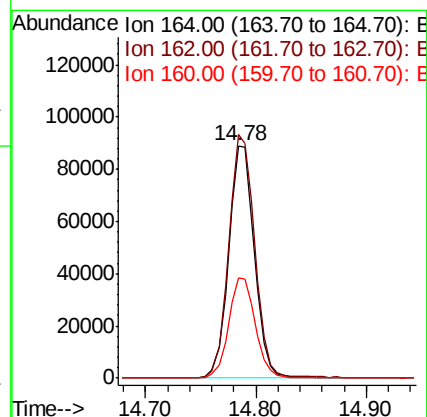
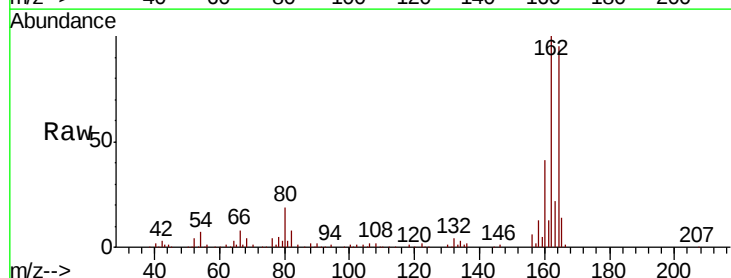
Tgt Ion:164 Resp: 144611

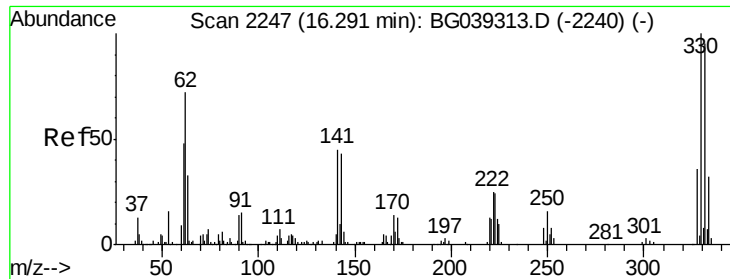
Ion Ratio Lower Upper

164 100

162 104.9 81.6 122.4

160 43.3 34.2 51.2

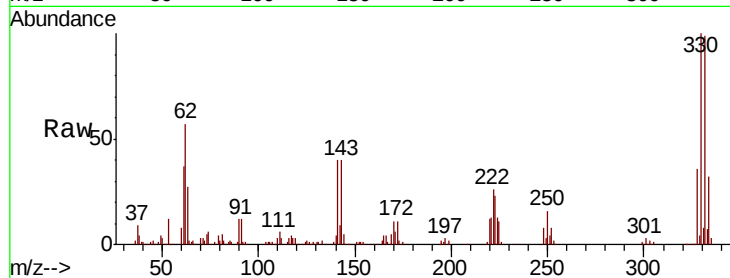




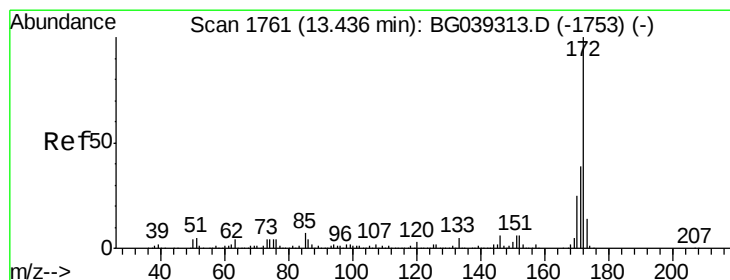
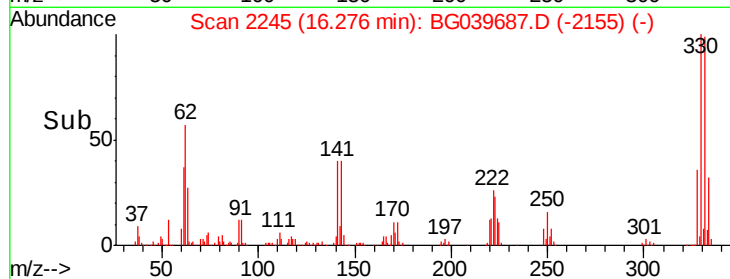
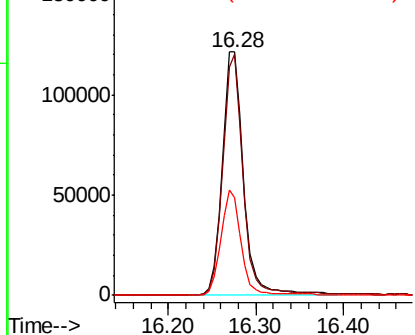
#42  
 2,4,6-Tribromophenol  
 Concen: 131.791 ng  
 RT: 16.28 min Scan# 2245  
 Delta R.T. -0.00 min  
 Lab File: BG039687.D  
 Acq: 1 Mar 2019 9:28

Instrument :  
 BNA\_G  
 ClientSampleId :

Tot Ion:330 Resp: 205227  
 Ion Ratio Lower Upper  
 330 100  
 332 96.2 75.7 113.5  
 141 42.0 35.6 53.4

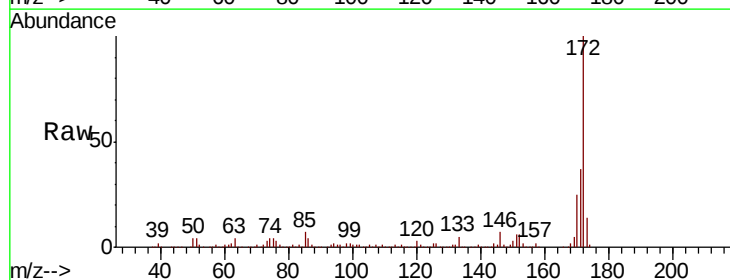


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

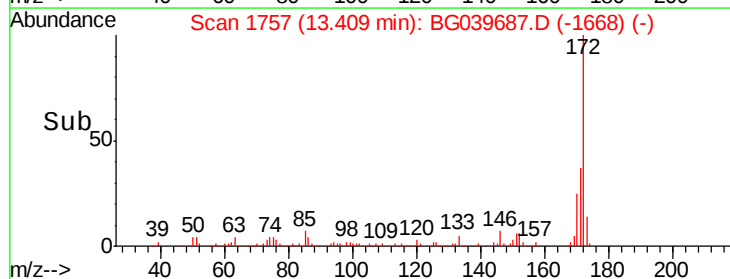
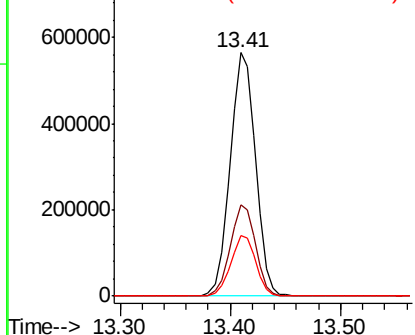


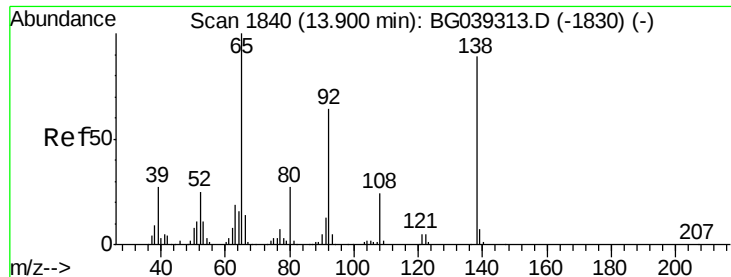
#45  
 2-Fluorobiphenyl  
 Concen: 90.419 ng  
 RT: 13.41 min Scan# 1757  
 Delta R.T. -0.01 min  
 Lab File: BG039687.D  
 Acq: 1 Mar 2019 9:28

Tgt Ion:172 Resp: 911475  
 Ion Ratio Lower Upper  
 172 100  
 171 37.3 30.8 46.2  
 170 25.0 20.2 30.4



Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E





#48

2-Nitroaniline

Concen: 8.770 ng

RT: 13.41 min Scan# 1757

Delta R.T. -0.47 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

Instrument :

BNA\_G

ClientSampleId :

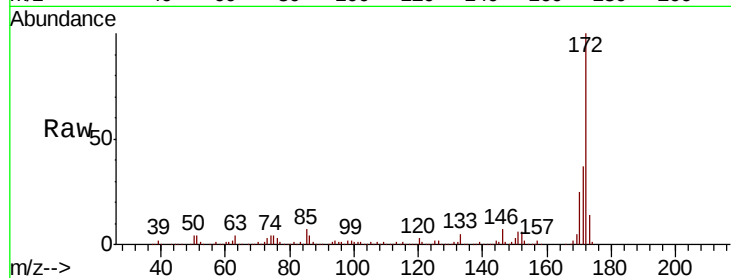
Tot Ion: 65 Resp: 1490

Ion Ratio Lower Upper

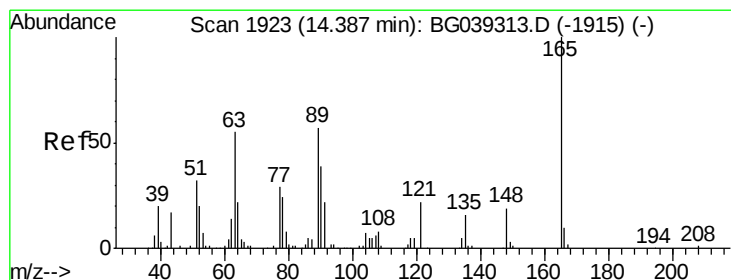
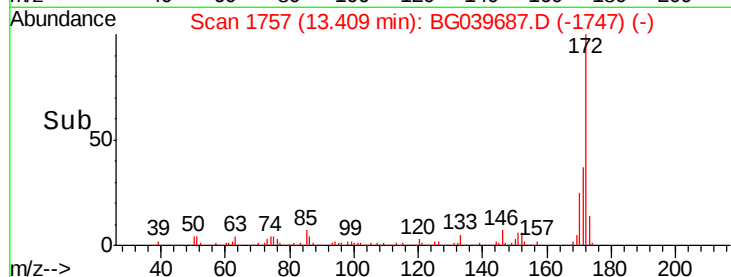
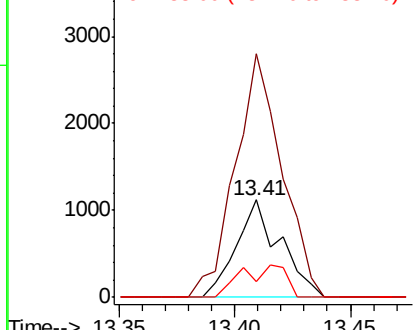
65 100

92 249.8 51.4 77.2#

138 16.4 71.4 107.2#



Abundance Ion 65.00 (64.70 to 65.70): BGC  
Ion 92.00 (91.70 to 92.70): BGC  
Ion 138.00 (137.70 to 138.70): BGC



#51

2,6-Dinitrotoluene

Concen: 14.057 ng

RT: 14.78 min Scan# 1991

Delta R.T. 0.42 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

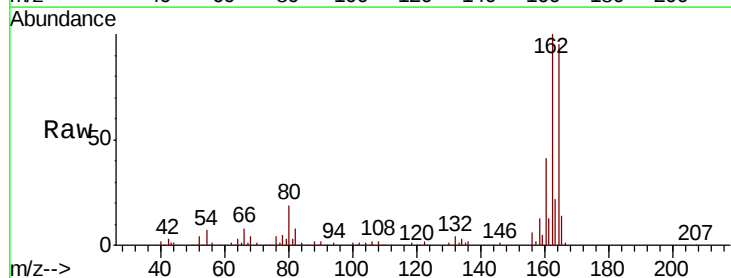
Tgt Ion: 165 Resp: 18956

Ion Ratio Lower Upper

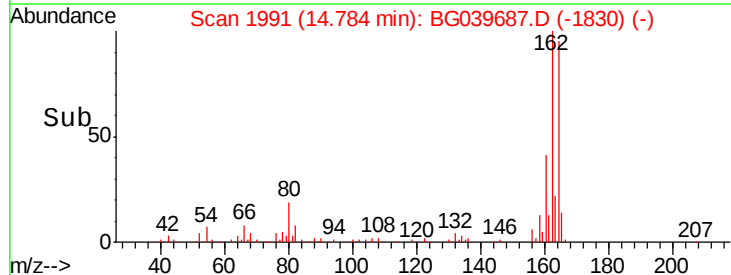
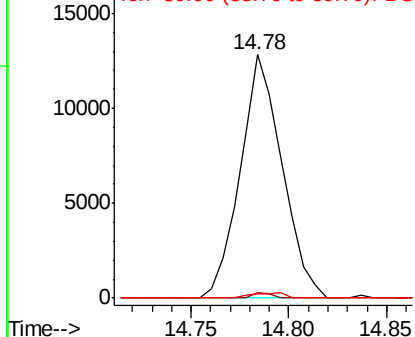
165 100

63 2.3 47.0 70.6#

89 1.6 45.8 68.8#



Abundance Ion 165.00 (164.70 to 165.70): BGC  
Ion 63.00 (62.70 to 63.70): BGC  
Ion 89.00 (88.70 to 89.70): BGC

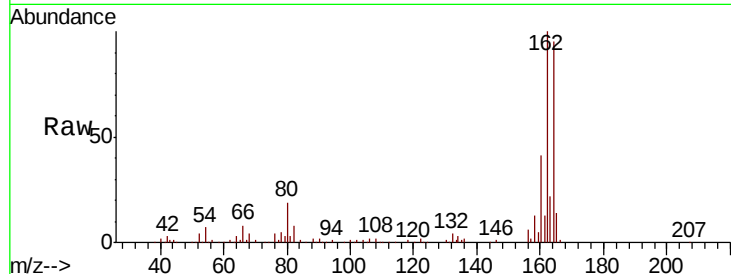




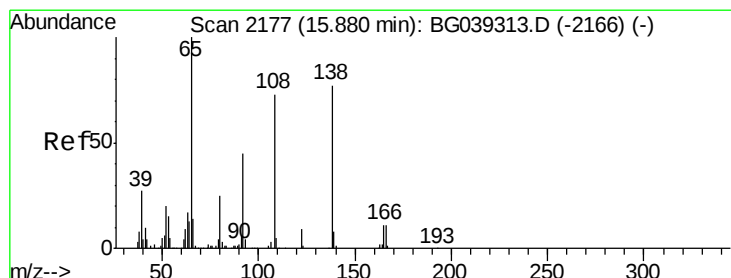
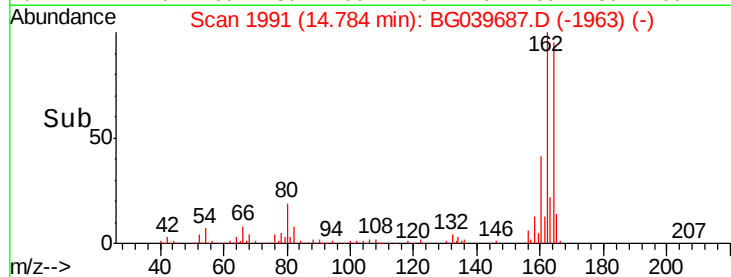
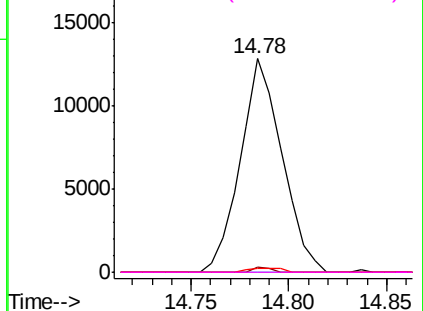
#57  
 2,4-Dinitrotoluene  
 Concen: 13.500 ng  
 RT: 14.78 min Scan# 1991  
 Delta R.T. -0.37 min  
 Lab File: BG039687.D  
 Acq: 1 Mar 2019 9:28

Instrument :  
 BNA\_G  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 2.3   | 41.0  | 61.6# |
| 89      | 1.6   | 64.6  | 96.8# |
| 182     | 0.0   | 2.0   | 3.0#  |

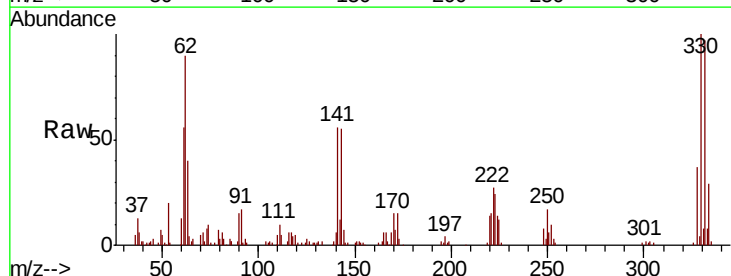


Abundance Ion 165.00 (164.70 to 165.70): E  
 Ion 63.00 (62.70 to 63.70): BG  
 Ion 89.00 (88.70 to 89.70): BG  
 Ion 182.00 (181.70 to 182.70): E

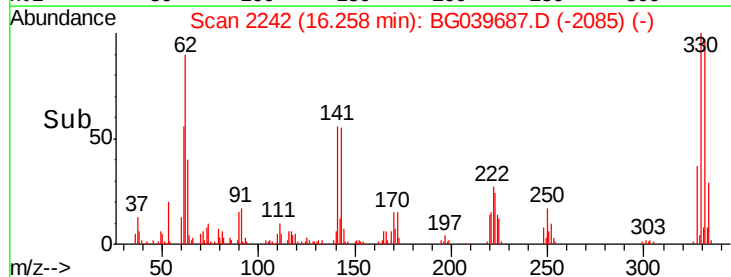
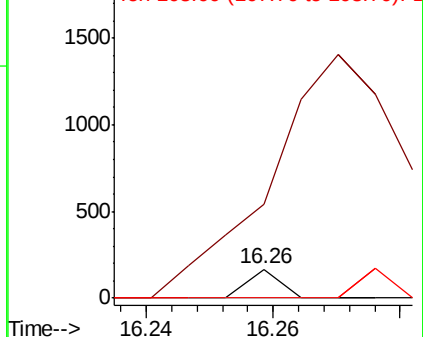


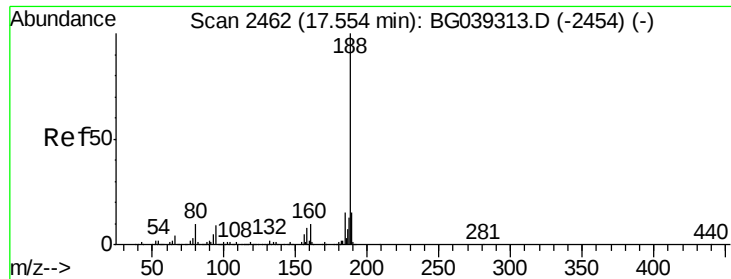
#62  
 4-Nitroaniline  
 Concen: 4.224 ng  
 RT: 16.26 min Scan# 2242  
 Delta R.T. 0.39 min  
 Lab File: BG039687.D  
 Acq: 1 Mar 2019 9:28

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 138     | 100   |       |        |
| 92      | 330.3 | 38.7  | 78.7#  |
| 108     | 0.0   | 74.6  | 114.6# |



Abundance Ion 138.00 (137.70 to 138.70): E  
 Ion 92.00 (91.70 to 92.70): BG  
 Ion 108.00 (107.70 to 108.70): E





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 17.53 min Scan# 2459

Delta R.T. -0.00 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

Instrument :

BNA\_G

ClientSampled :

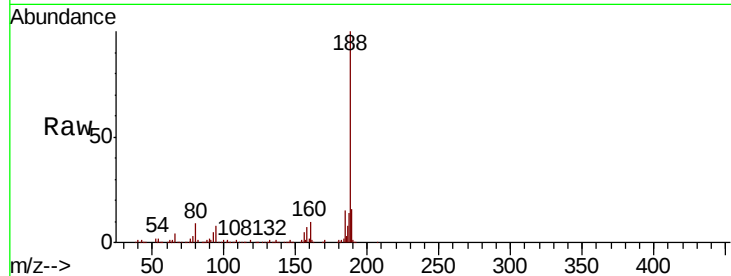
Tot Ion:188 Resp: 350005

Ion Ratio Lower Upper

188 100

94 7.6 6.9 10.3

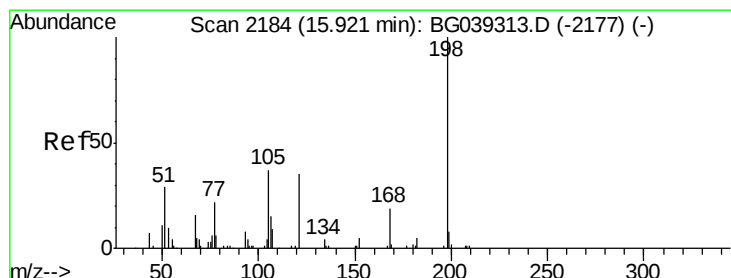
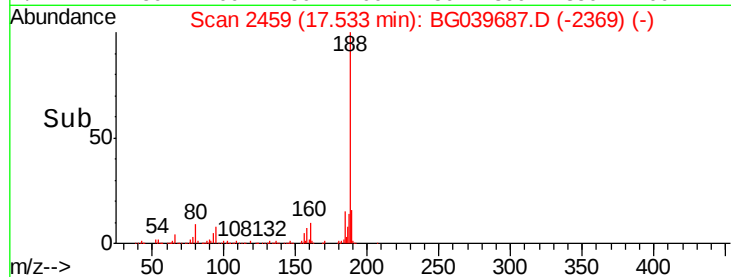
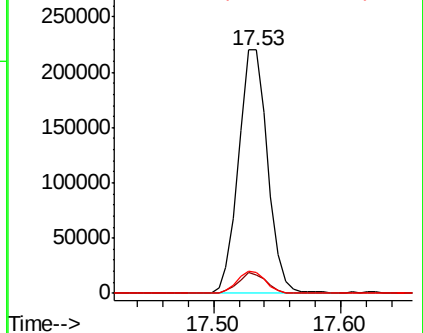
80 8.8 8.1 12.1



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BG0

Ion 80.00 (79.70 to 80.70): BG0



#65

4,6-Dinitro-2-methylphenol

Concen: 4.883 ng

RT: 16.28 min Scan# 2245

Delta R.T. 0.37 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

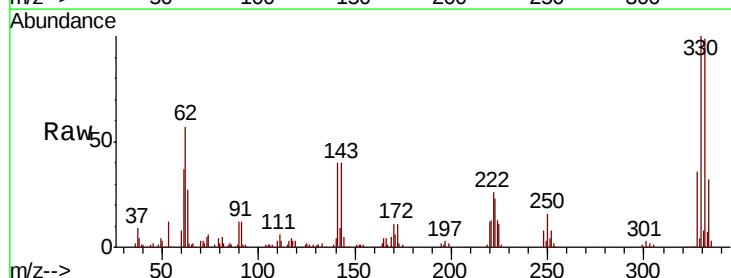
Tgt Ion:198 Resp: 773

Ion Ratio Lower Upper

198 100

51 103.2 27.4 67.4#

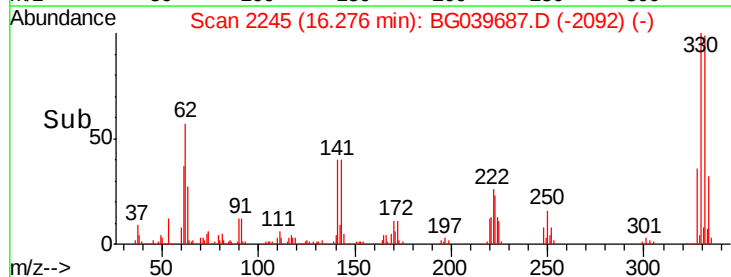
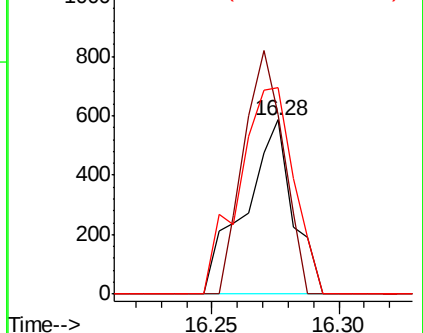
105 118.5 19.7 59.7#

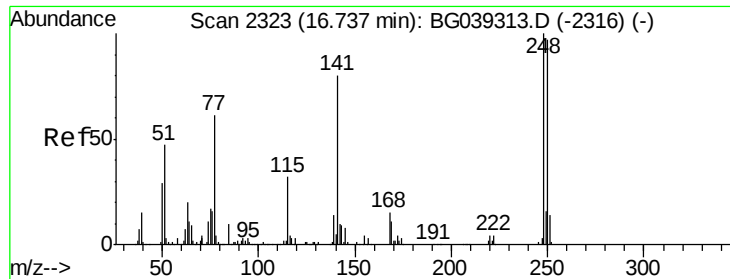


Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BG0

Ion 105.00 (104.70 to 105.70): E

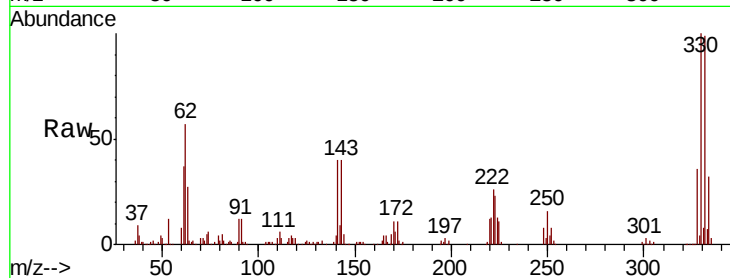




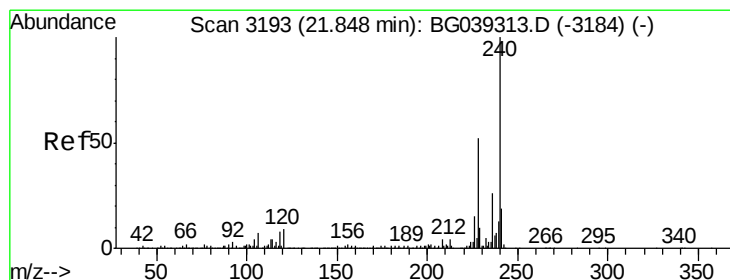
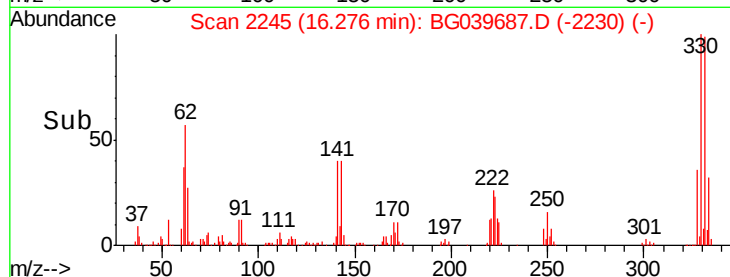
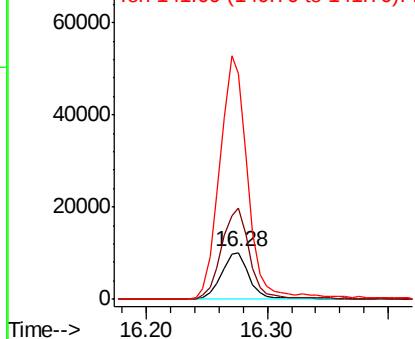
#67  
 4-Bromophenyl-phenylether  
 Concen: 4.198 ng  
 RT: 16.28 min Scan# 2245  
 Delta R.T. -0.44 min  
 Lab File: BG039687.D  
 Acq: 1 Mar 2019 9:28

Instrument :  
 BNA\_G  
 ClientSampleId :

Tot Ion:248 Resp: 16299  
 Ion Ratio Lower Upper  
 248 100  
 250 194.8 77.6 116.4#  
 141 479.1 63.9 95.9#

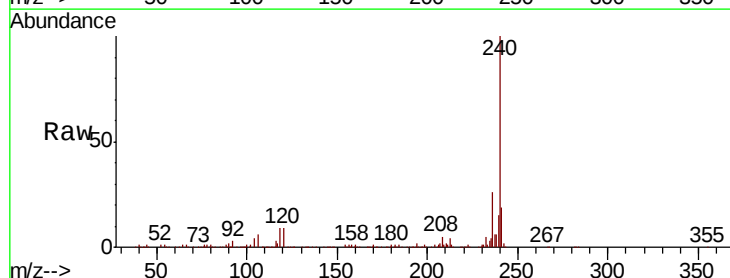


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

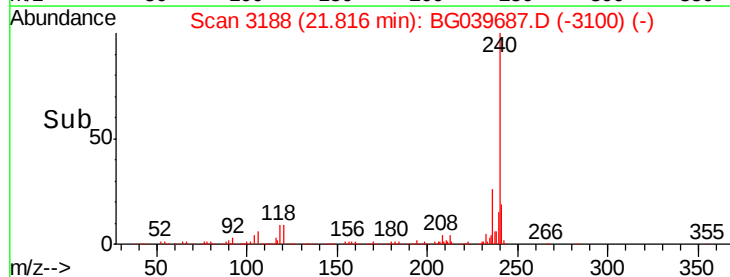
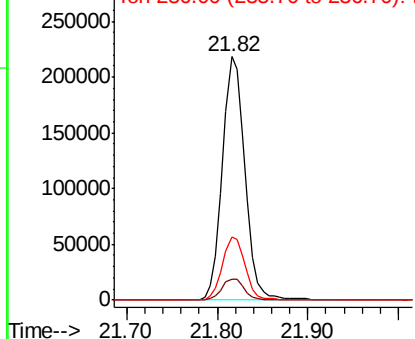


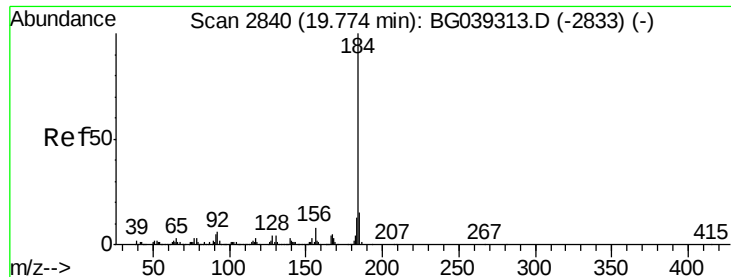
#76  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 21.82 min Scan# 3188  
 Delta R.T. -0.01 min  
 Lab File: BG039687.D  
 Acq: 1 Mar 2019 9:28

Tgt Ion:240 Resp: 375023  
 Ion Ratio Lower Upper  
 240 100  
 120 8.7 7.0 10.6  
 236 26.0 21.0 31.4



Abundance Ion 240.00 (239.70 to 240.70): E  
 Ion 120.00 (119.70 to 120.70): E  
 Ion 236.00 (235.70 to 236.70): E





#77

Benzidine

Concen: 2.276 ng

RT: 20.12 min Scan# 2900

Delta R.T. 0.37 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

Instrument :

BNA\_G

ClientSampleId :

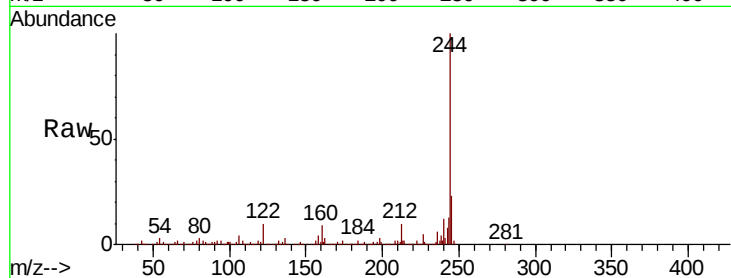
Tot Ion:184 Resp: 27986

Ion Ratio Lower Upper

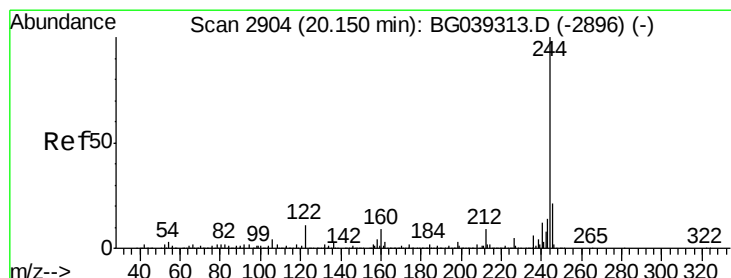
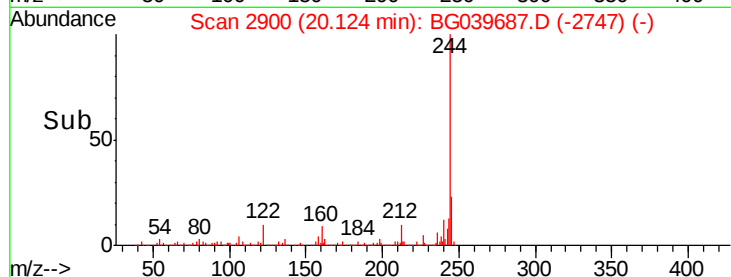
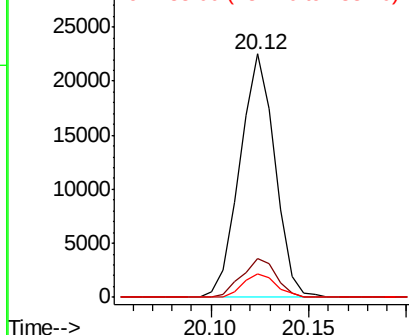
184 100

185 15.9 12.2 18.2

183 9.6 10.6 15.8#



Abundance Ion 184.00 (183.70 to 184.70): E  
Ion 185.00 (184.70 to 185.70): E  
Ion 183.00 (182.70 to 183.70): E



#79

Terphenyl-d14

Concen: 88.136 ng

RT: 20.12 min Scan# 2900

Delta R.T. -0.00 min

Lab File: BG039687.D

Acq: 1 Mar 2019 9:28

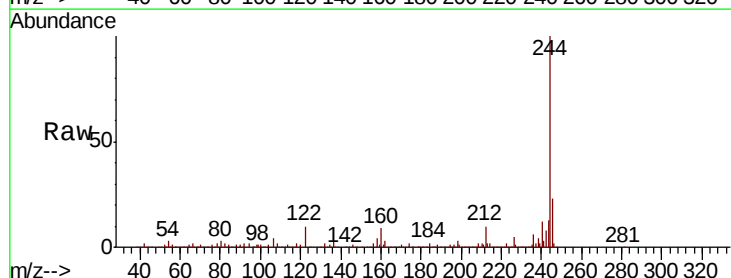
Tgt Ion:244 Resp: 1561543

Ion Ratio Lower Upper

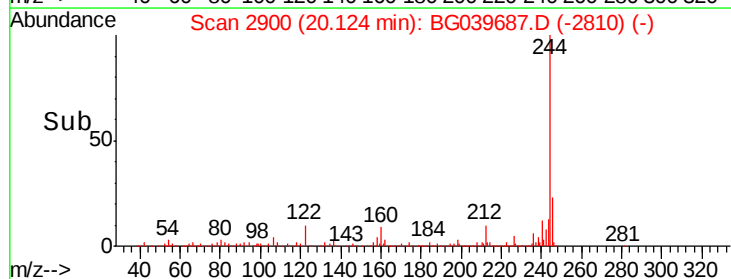
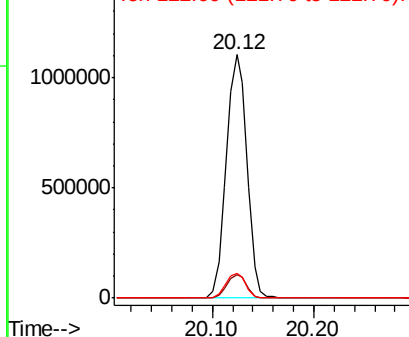
244 100

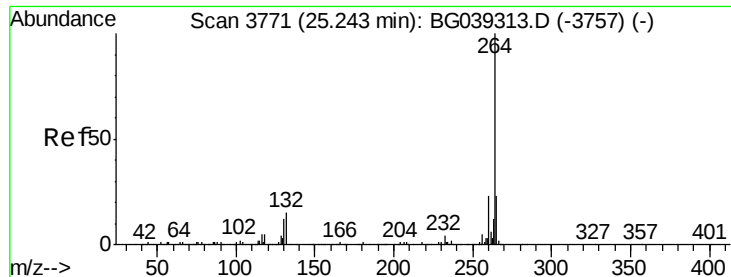
212 9.5 7.3 10.9

122 10.4 8.4 12.6



Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E





#87  
 Pervlene-d12  
 Concen: 20.000 ng  
 RT: 25.19 min Scan# 3763  
 Delta R.T. -0.01 min  
 Lab File: BG039687.D  
 Acq: 1 Mar 2019 9:28

Instrument :  
 BNA\_G  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.0  | 18.2  | 27.4  |
| 265     | 21.6  | 18.5  | 27.7  |

