

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG020719\  
 Data File : BG039402.D  
 Acq On : 8 Feb 2019 4:49  
 Operator : JU/SJ  
 Sample : K1389-04  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 M-4

Quant Time: Feb 08 09:17:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG012919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jan 29 15:41:51 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.18  | 152  | 51492    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 11.00 | 136  | 221694   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.80 | 164  | 149336   | 20.00 | ng    | -0.01    |
| 64) Phenanthrene-d10      | 17.55 | 188  | 358971   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.83 | 240  | 381834   | 20.00 | ng    | -0.01    |
| 87) Perylene-d12          | 25.22 | 264  | 370235   | 20.00 | ng    | -0.03    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.71  | 112  | 449454   | 149.39 | ng    | 0.00     |
| 7) Phenol-d6                | 7.31  | 99   | 597565   | 134.94 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.36  | 82   | 417227   | 117.57 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 16.28 | 330  | 234775   | 146.00 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.43 | 172  | 986215   | 94.74  | ng    | 0.00     |
| 79) Terphenyl-d14           | 20.14 | 244  | 1648851  | 91.40  | ng    | -0.01    |

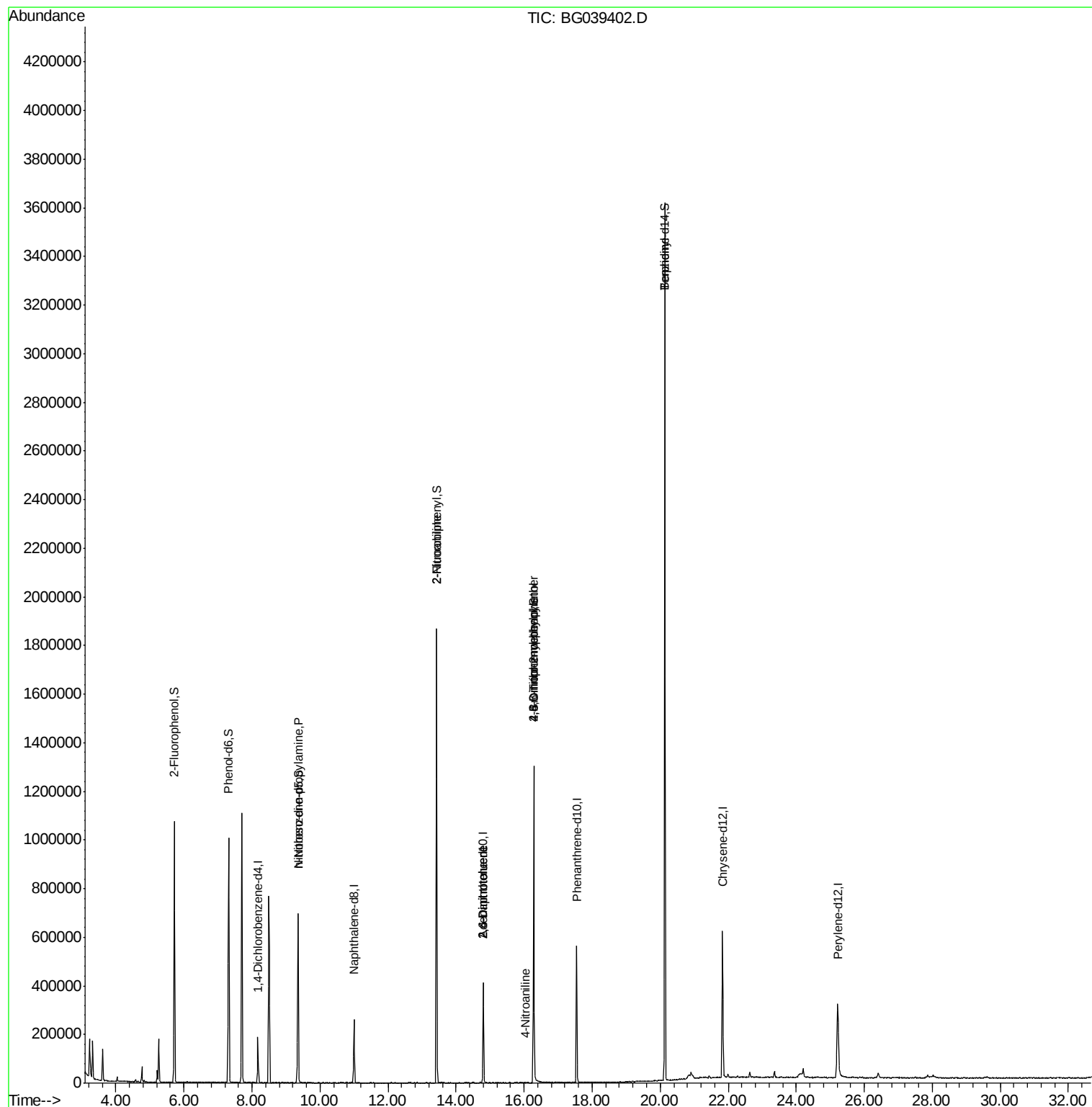
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde                | 7.32  | 77   | 1072     | Below Cal | #     | 4      |
| 19) n-Nitroso-di-n-propylamine | 9.36  | 70   | 54581    | 17.36     | ng    | 73     |
| 48) 2-Nitroaniline             | 13.42 | 65   | 1892     | 8.88      | ng    | 9      |
| 51) 2,6-Dinitrotoluene         | 14.80 | 165  | 19391    | 13.99     | ng    | 22     |
| 57) 2,4-Dinitrotoluene         | 14.80 | 165  | 19391    | 13.45     | ng    | 17     |
| 62) 4-Nitroaniline             | 16.04 | 138  | 61       | 4.22      | ng    | 10     |
| 65) 4,6-Dinitro-2-methylphenol | 16.28 | 198  | 830      | 4.92      | ng    | 1      |
| 67) 4-Bromophenyl-phenylether  | 16.28 | 248  | 18248    | 4.58      | ng    | 1      |
| 77) Benzidine                  | 20.14 | 184  | 28672    | 2.29      | ng    | 92     |

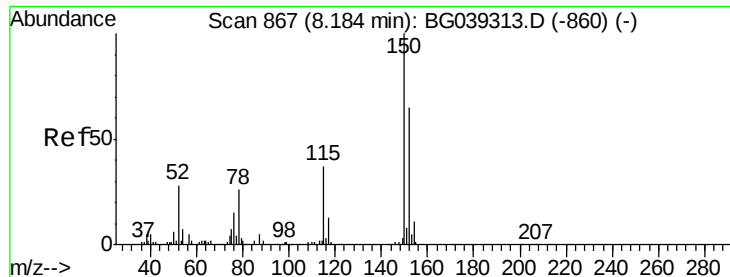
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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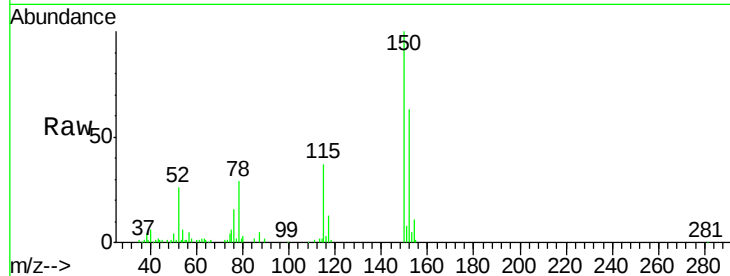


#1

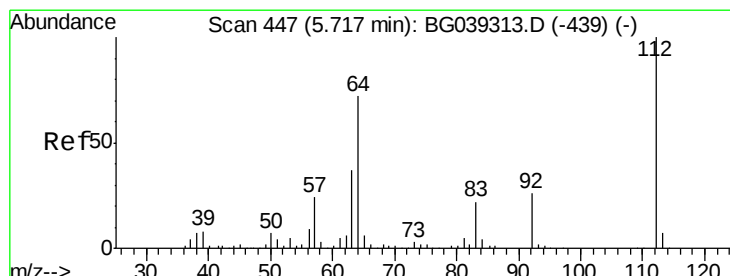
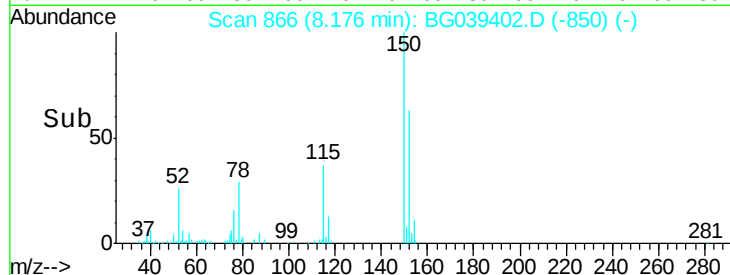
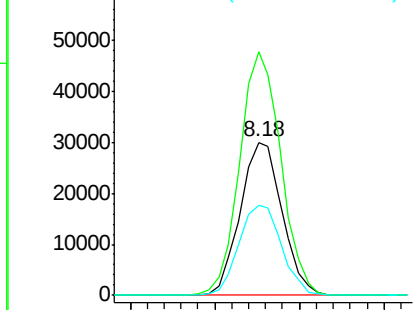
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 8.18 min Scan# 866  
Delta R.T. -0.01 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

Instrument :  
BNA\_G  
ClientSampled :  
M-4

Tot Ion:152 Resp: 51492  
Ion Ratio Lower Upper  
152 100  
150 159.1 123.7 185.5  
115 58.7 45.9 68.9



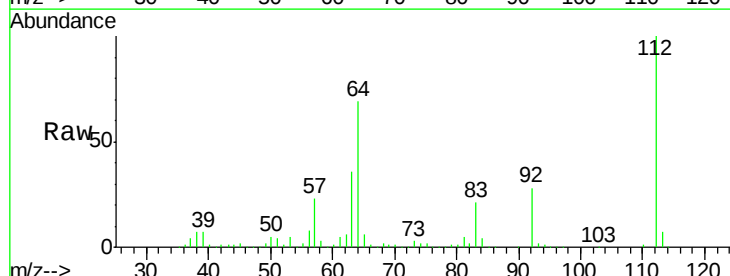
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



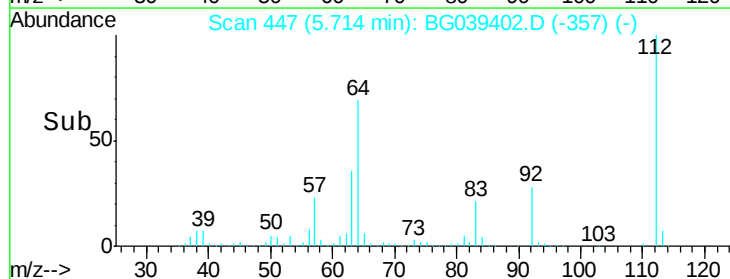
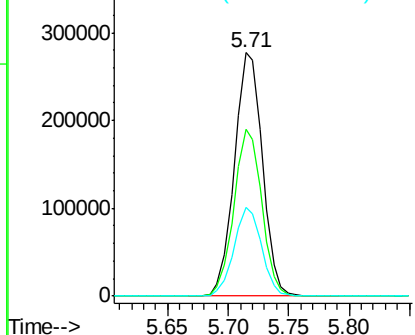
#5

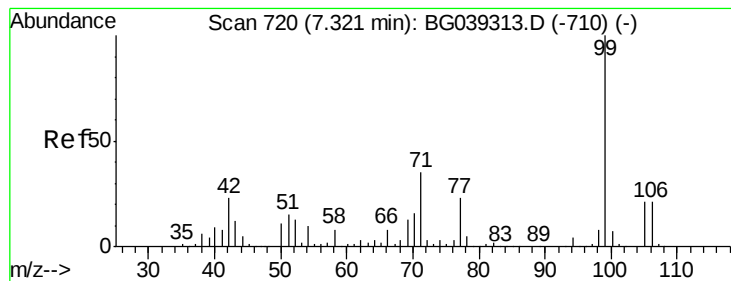
2-Fluorophenol  
Concen: 149.39 ng  
RT: 5.71 min Scan# 447  
Delta R.T. -0.00 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

Tgt Ion:112 Resp: 449454  
Ion Ratio Lower Upper  
112 100  
64 68.7 57.8 86.8  
63 36.4 29.8 44.6



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





#7

Phenol-d6

Concen: 134.94 ng

RT: 7.31 min Scan# 719

Delta R.T. -0.01 min

Lab File: BG039402.D

Acq: 8 Feb 2019 4:49

Instrument :

BNA\_G

ClientSampled :

M-4

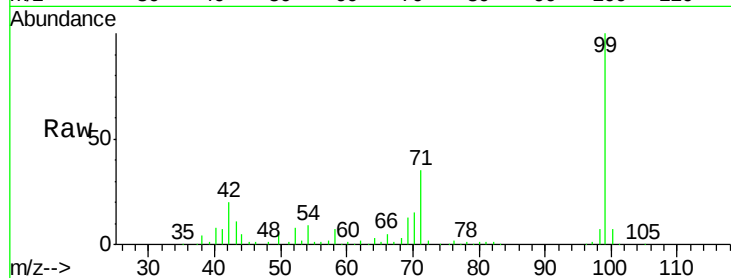
Tot Ion: 99 Resp: 597565

Ion Ratio Lower Upper

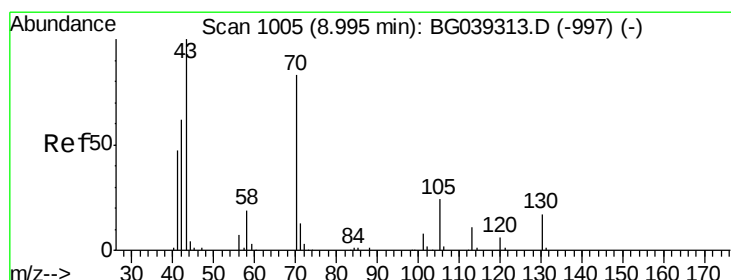
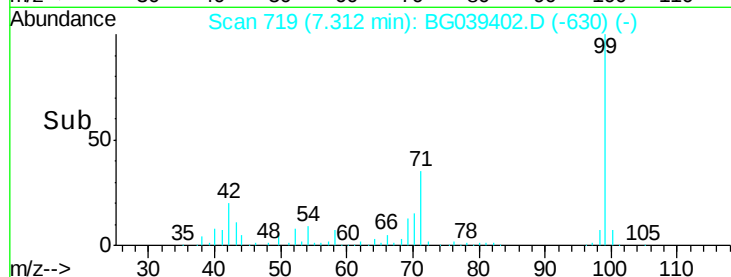
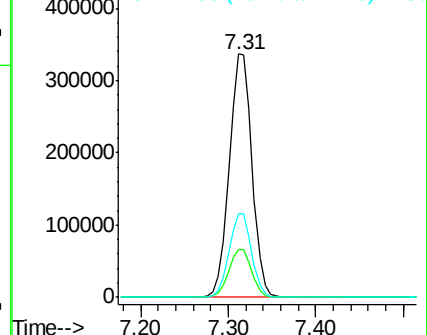
99 100

42 19.9 18.2 27.2

71 34.5 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: 17.36 ng

RT: 9.36 min Scan# 1067

Delta R.T. 0.36 min

Lab File: BG039402.D

Acq: 8 Feb 2019 4:49

Tgt Ion: 70 Resp: 54581

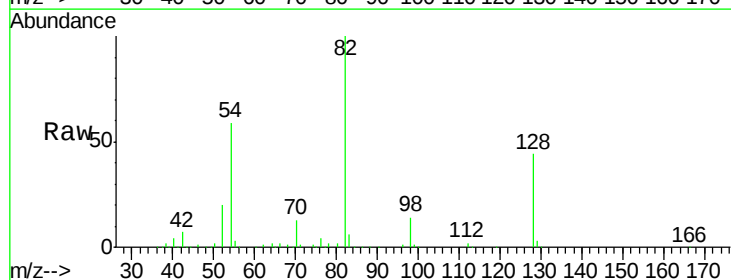
Ion Ratio Lower Upper

70 100

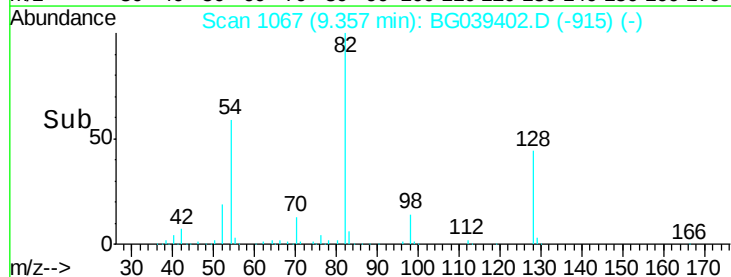
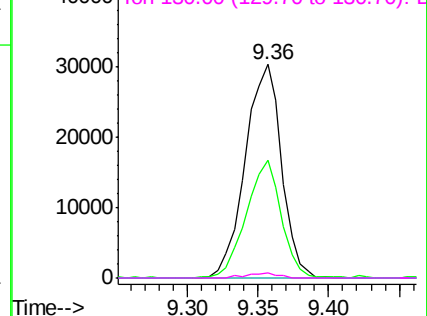
42 55.1 60.4 90.6#

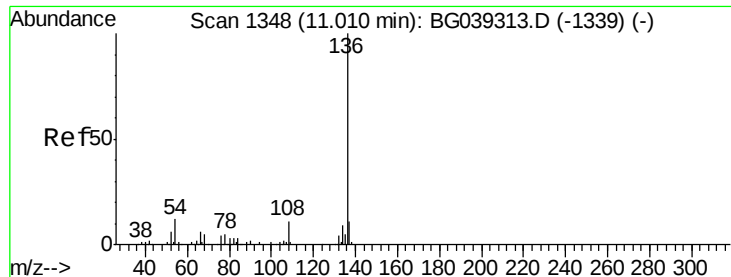
101 0.0 7.5 11.3#

130 2.6 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

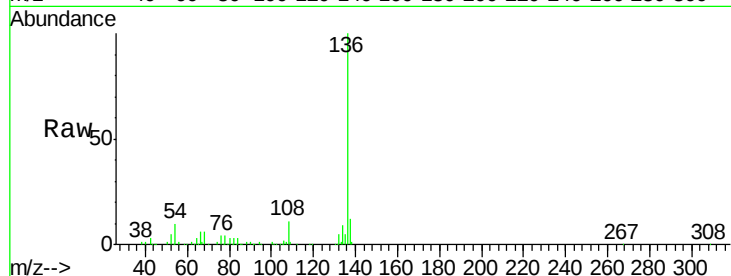




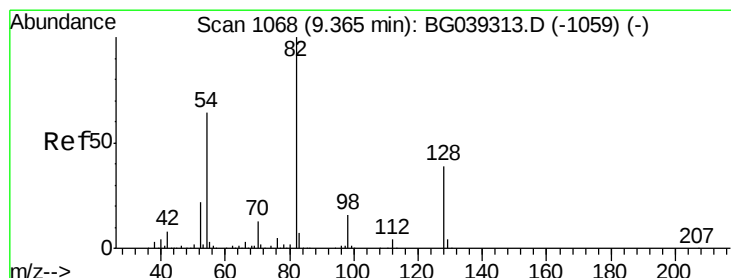
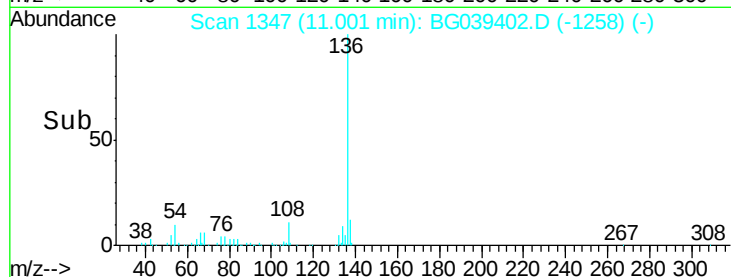
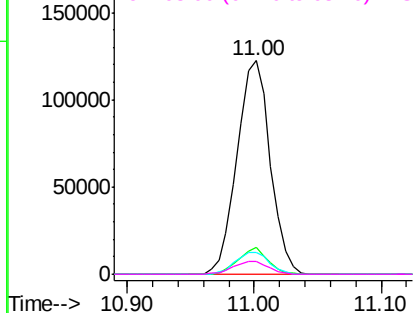
#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 11.00 min Scan# 1347  
Delta R.T. -0.01 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

Instrument :  
BNA\_G  
ClientSampled :  
M-4

|             |       |             |
|-------------|-------|-------------|
| Tot Ion:136 | Resp: | 221694      |
| Ion         | Ratio | Lower Upper |
| 136         | 100   |             |
| 137         | 12.4  | 9.1 13.7    |
| 54          | 10.4  | 9.4 14.2    |
| 68          | 6.1   | 4.2 6.4     |

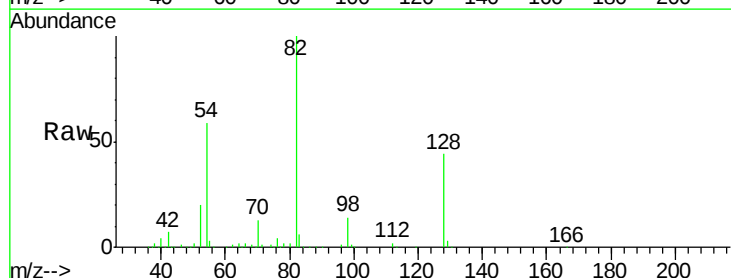


Abundance Ion 136.00 (135.70 to 136.70): BGC  
Ion 137.00 (136.70 to 137.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC  
Ion 68.00 (67.70 to 68.70): BGC

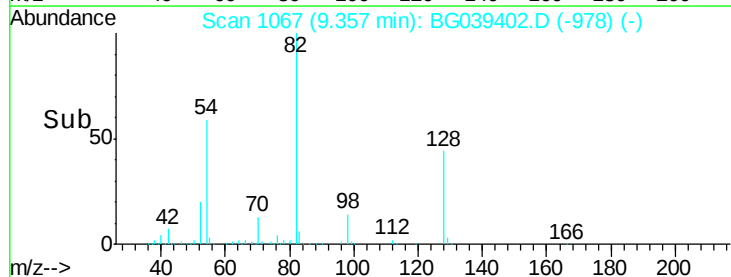
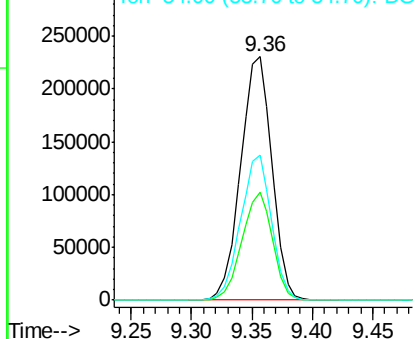


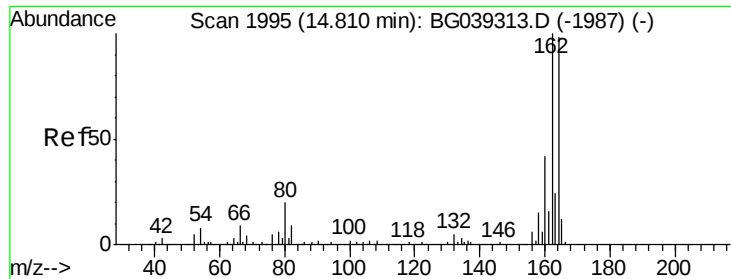
#23  
Nitrobenzene-d5  
Concen: 117.57 ng  
RT: 9.36 min Scan# 1067  
Delta R.T. -0.01 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion: 82 | Resp: | 417227      |
| Ion         | Ratio | Lower Upper |
| 82          | 100   |             |
| 128         | 44.2  | 31.3 46.9   |
| 54          | 59.4  | 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

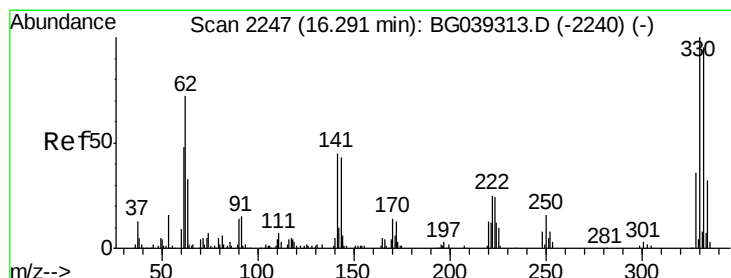
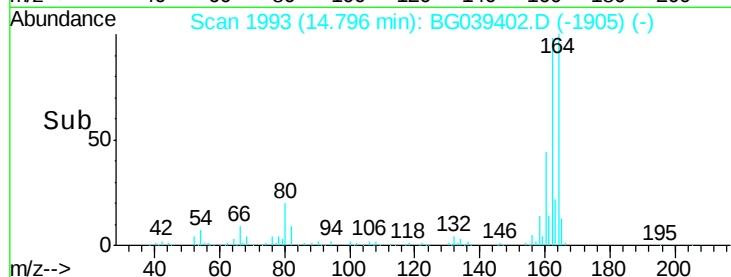
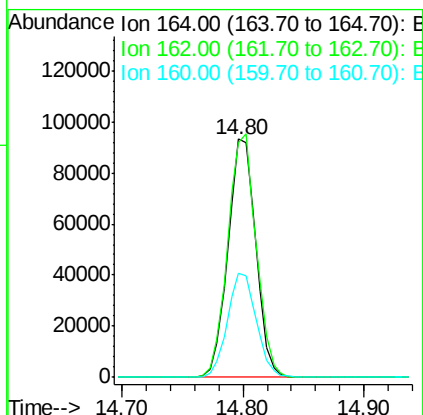
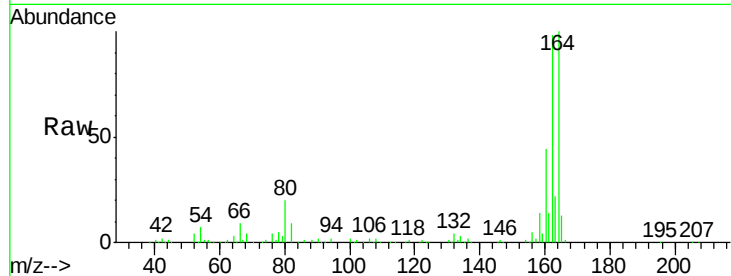




#39  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 14.80 min Scan# 1993  
Delta R.T. -0.01 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

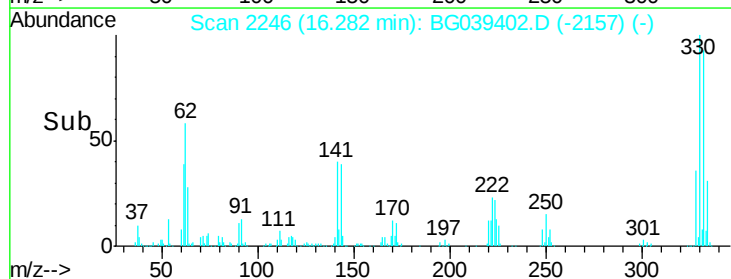
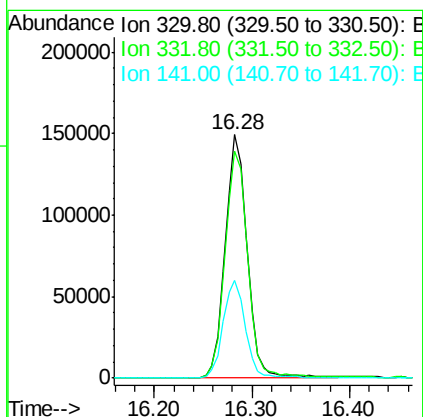
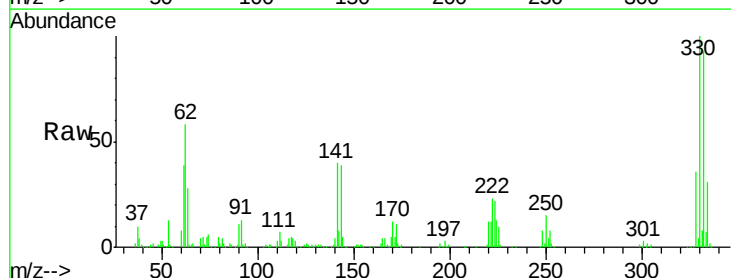
Instrument :  
BNA\_G  
ClientSampleId :  
M-4

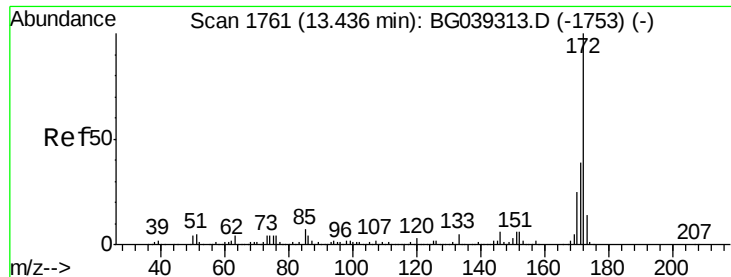
Tot Ion:164 Resp: 149336  
Ion Ratio Lower Upper  
164 100  
162 98.4 81.6 122.4  
160 43.7 34.2 51.2



#42  
2,4,6-Tribromophenol  
Concen: 146.00 ng  
RT: 16.28 min Scan# 2246  
Delta R.T. -0.01 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

Tgt Ion:330 Resp: 234775  
Ion Ratio Lower Upper  
330 100  
332 96.8 75.7 113.5  
141 40.0 35.6 53.4

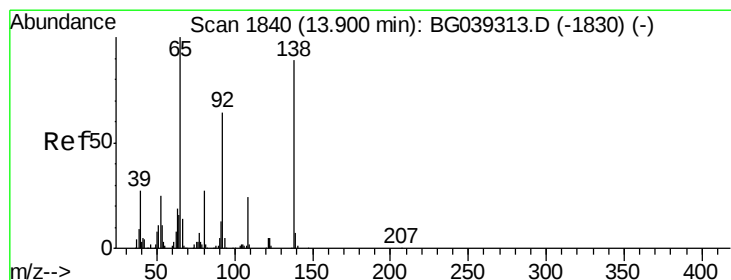
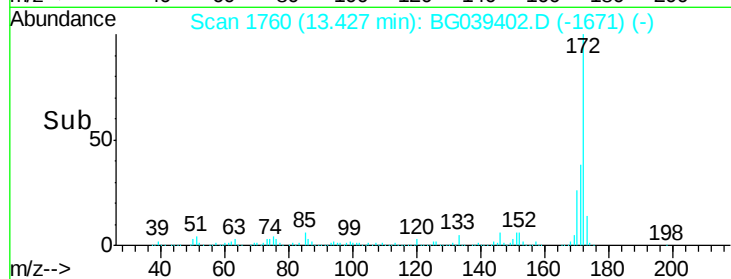
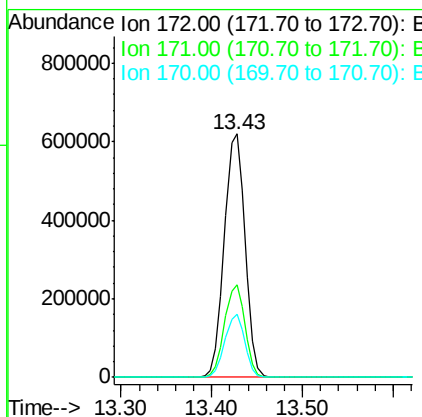
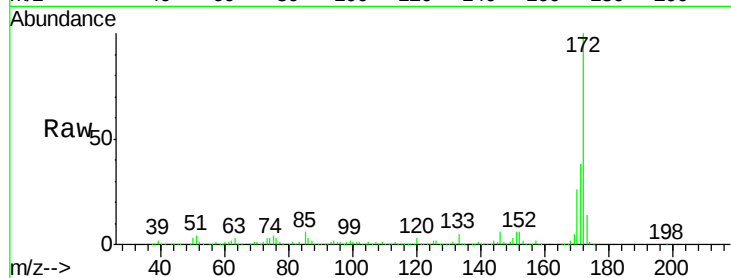




#45  
2-Fluorobiphenyl  
Concen: 94.74 ng  
RT: 13.43 min Scan# 1760  
Delta R.T. -0.01 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

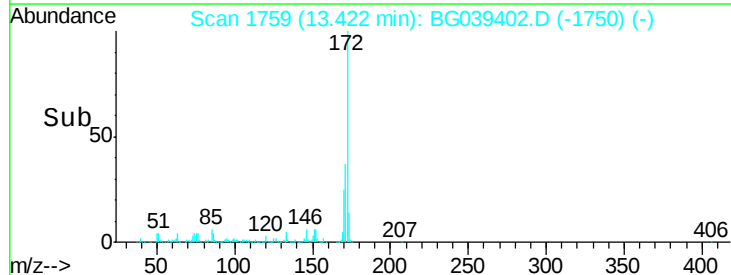
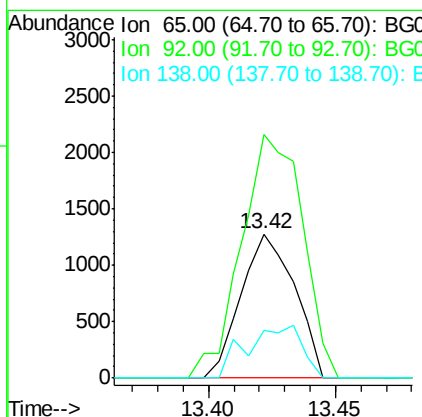
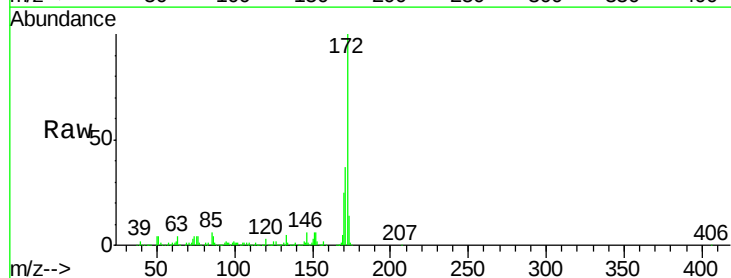
Instrument :  
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M-4

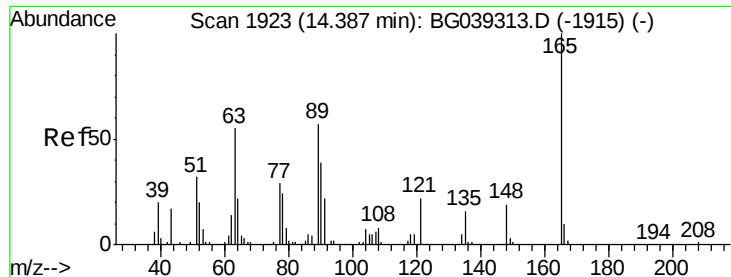
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 38.2  | 30.8  | 46.2  |
| 170     | 25.9  | 20.2  | 30.4  |



#48  
2-Nitroaniline  
Concen: 8.88 ng  
RT: 13.42 min Scan# 1759  
Delta R.T. -0.48 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 65      | 100   |       |        |
| 92      | 169.3 | 51.4  | 77.2#  |
| 138     | 32.9  | 71.4  | 107.2# |

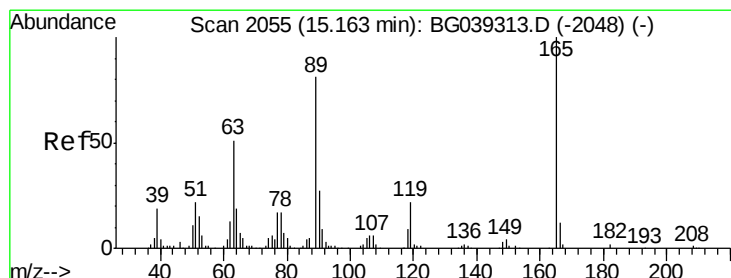
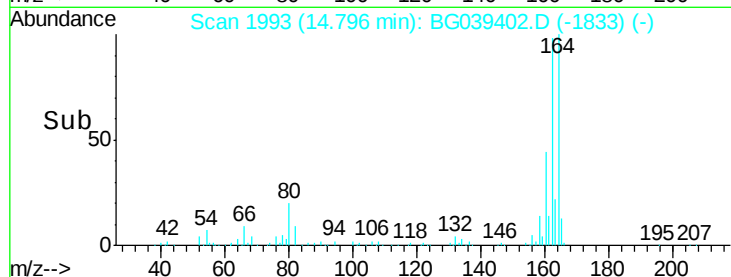
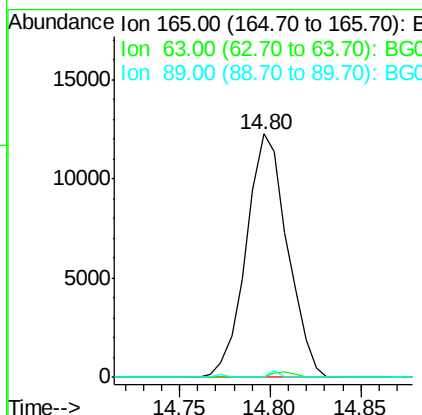
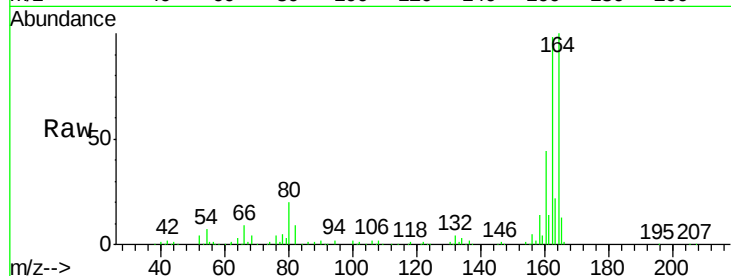




#51  
 2,6-Dinitrotoluene  
 Concen: 13.99 ng  
 RT: 14.80 min Scan# 1993  
 Delta R.T. 0.41 min  
 Lab File: BG039402.D  
 Acq: 8 Feb 2019 4:49

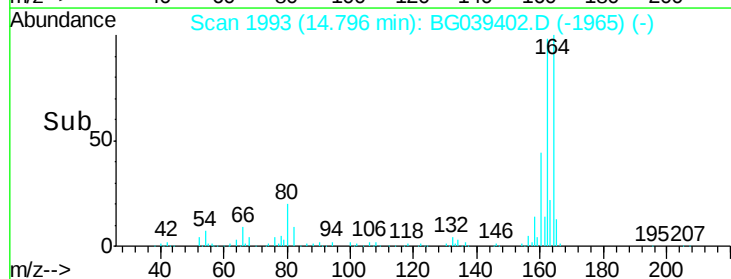
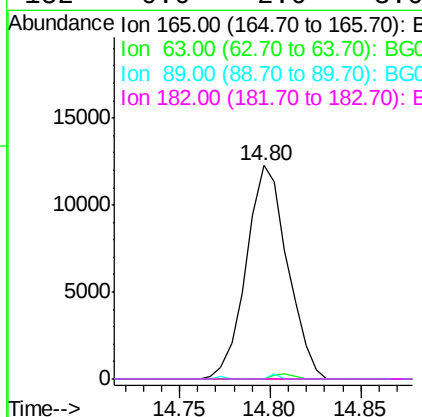
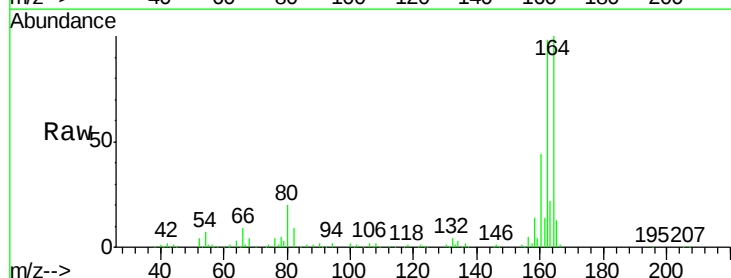
Instrument :  
 BNA\_G  
 ClientSampleId :  
 M-4

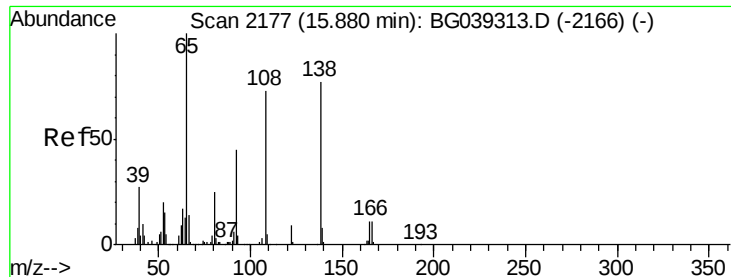
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.0   | 47.0  | 70.6# |
| 89      | 0.0   | 45.8  | 68.8# |



#57  
 2,4-Dinitrotoluene  
 Concen: 13.45 ng  
 RT: 14.80 min Scan# 1993  
 Delta R.T. -0.37 min  
 Lab File: BG039402.D  
 Acq: 8 Feb 2019 4:49

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

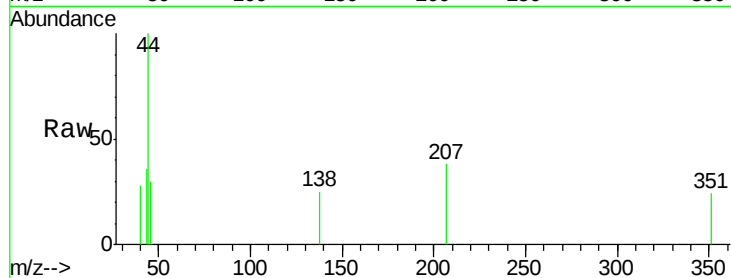




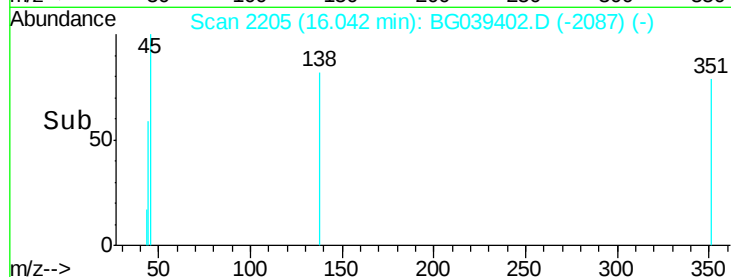
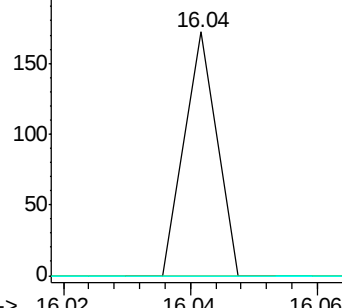
#62  
4-Nitroaniline  
Concen: 4.22 ng  
RT: 16.04 min Scan# 2205  
Delta R.T. 0.16 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

Instrument :  
BNA\_G  
ClientSampleId :  
M-4

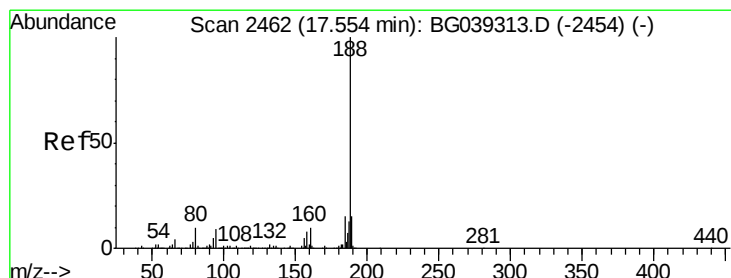
Tot Ion:138 Resp: 61  
Ion Ratio Lower Upper  
138 100  
92 0.0 38.7 78.7#  
108 0.0 74.6 114.6#



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

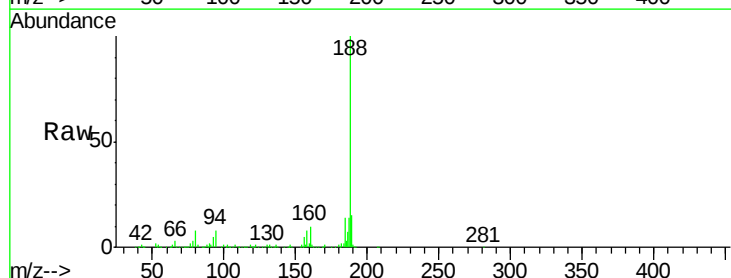


Time--> 16.02 16.04 16.06

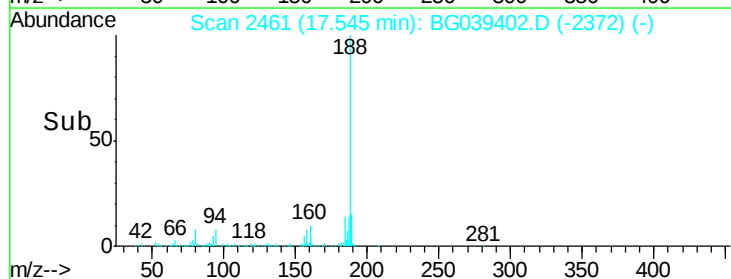
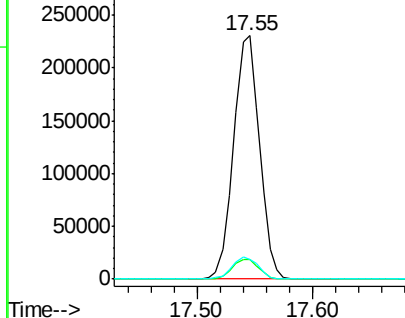


#64  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 17.55 min Scan# 2461  
Delta R.T. -0.01 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

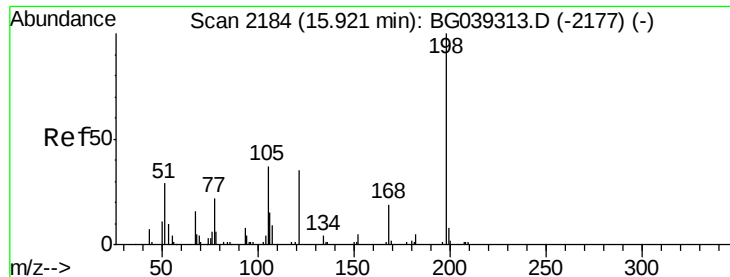
Tgt Ion:188 Resp: 358971  
Ion Ratio Lower Upper  
188 100  
94 8.1 6.9 10.3  
80 8.2 8.1 12.1



Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BG  
Ion 80.00 (79.70 to 80.70): BG



Time--> 17.50 17.60



#65

4,6-Dinitro-2-methylphenol

Concen: 4.92 ng

RT: 16.28 min Scan# 2246

Delta R.T. 0.36 min

Lab File: BG039402.D

Acq: 8 Feb 2019 4:49

Instrument :

BNA\_G

ClientSampleId :

M-4

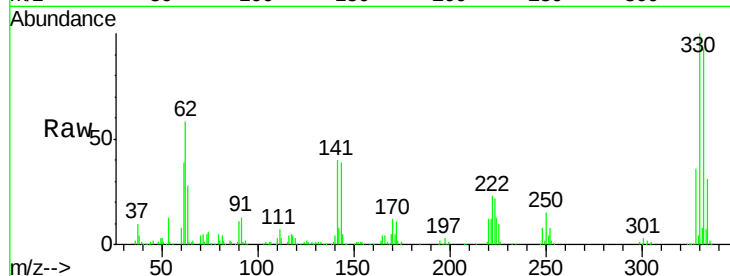
Tot Ion:198 Resp: 830

Ion Ratio Lower Upper

198 100

51 166.6 27.4 67.4#

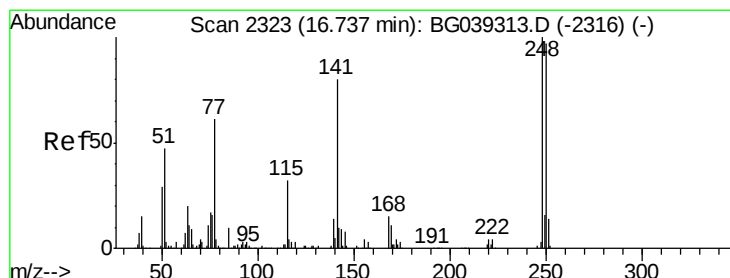
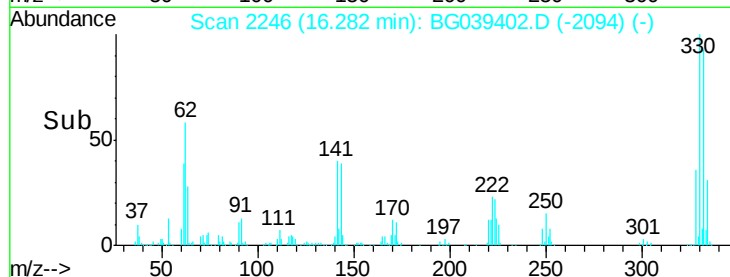
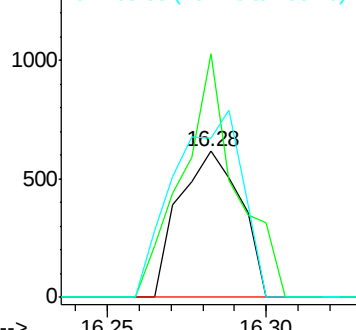
105 108.8 19.7 59.7#



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: 4.58 ng

RT: 16.28 min Scan# 2246

Delta R.T. -0.45 min

Lab File: BG039402.D

Acq: 8 Feb 2019 4:49

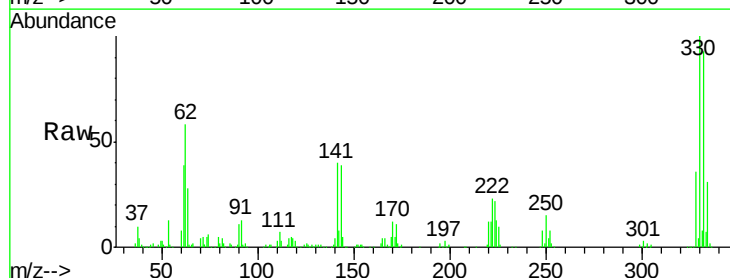
Tgt Ion:248 Resp: 18248

Ion Ratio Lower Upper

248 100

250 194.3 77.6 116.4#

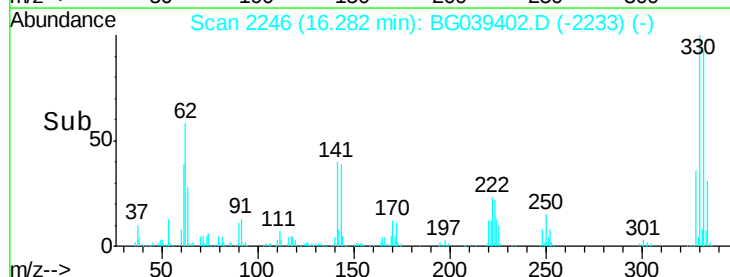
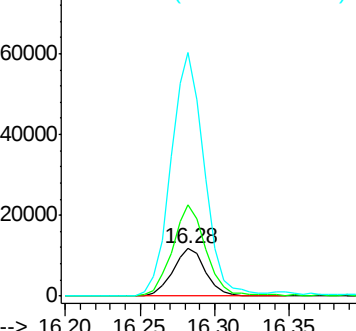
141 516.0 63.9 95.9#

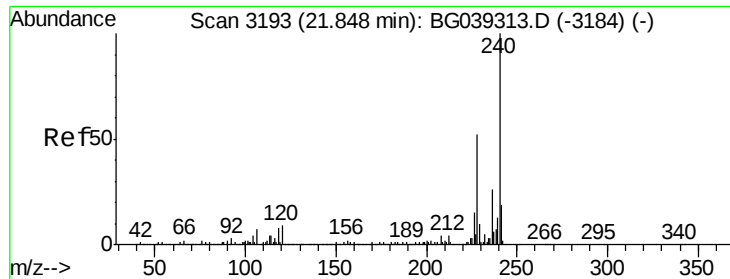


Abundance Ion 248.00 (247.70 to 248.70): E

Ion 250.00 (249.70 to 250.70): E

Ion 141.00 (140.70 to 141.70): E

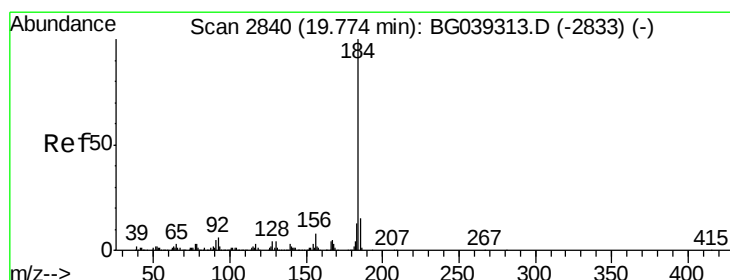
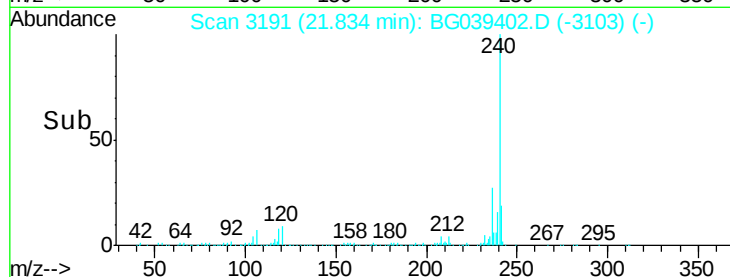
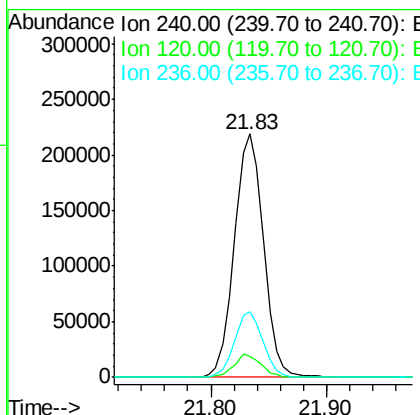
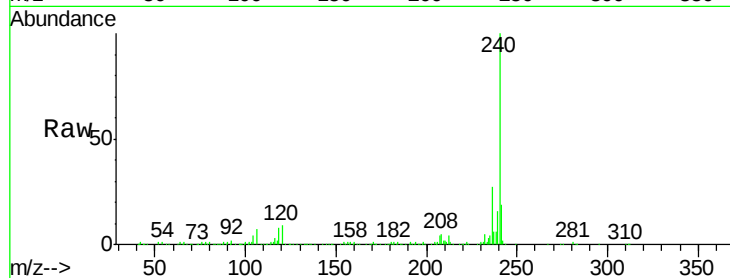




#76  
Chrysene-d12  
Concen: 20.00 ng  
RT: 21.83 min Scan# 3191  
Delta R.T. -0.01 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

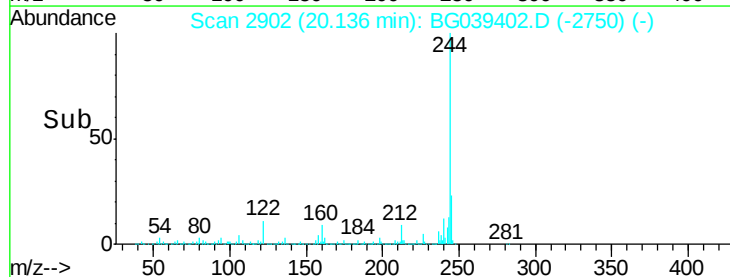
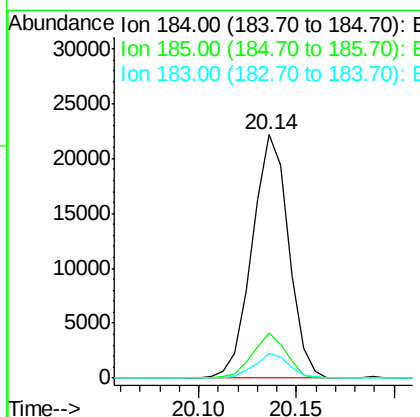
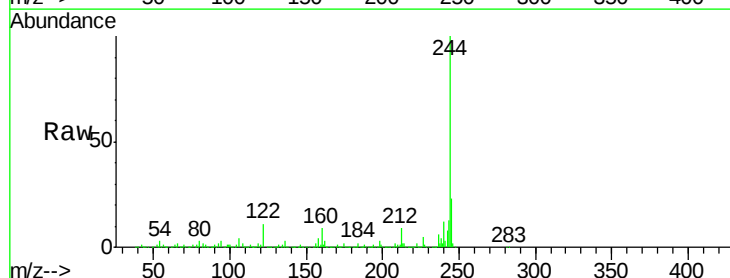
Instrument :  
BNA\_G  
ClientSampled :  
M-4

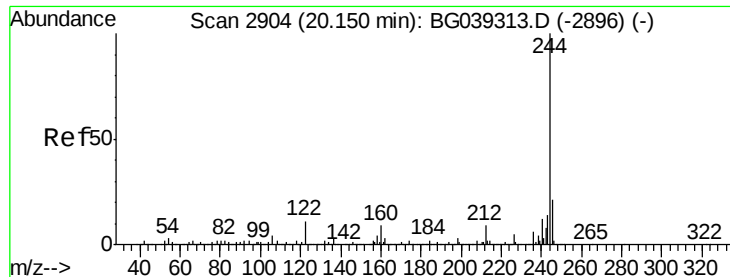
Tot Ion:240 Resp: 381834  
Ion Ratio Lower Upper  
240 100  
120 8.5 7.0 10.6  
236 27.0 21.0 31.4



#77  
Benzidine  
Concen: 2.29 ng  
RT: 20.14 min Scan# 2902  
Delta R.T. 0.36 min  
Lab File: BG039402.D  
Acq: 8 Feb 2019 4:49

Tgt Ion:184 Resp: 28672  
Ion Ratio Lower Upper  
184 100  
185 18.4 12.2 18.2#  
183 10.2 10.6 15.8#





#79

Terphenyl-d14

Concen: 91.40 ng

RT: 20.14 min Scan# 2902

Delta R.T. -0.01 min

Lab File: BG039402.D

Acq: 8 Feb 2019 4:49

Instrument :

BNA\_G

ClientSampled :

M-4

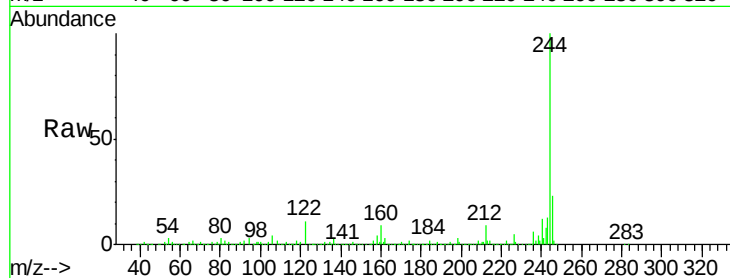
Tot Ion:244 Resp: 1648851

Ion Ratio Lower Upper

244 100

212 9.4 7.3 10.9

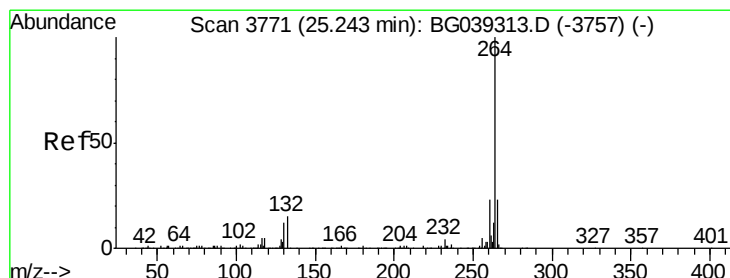
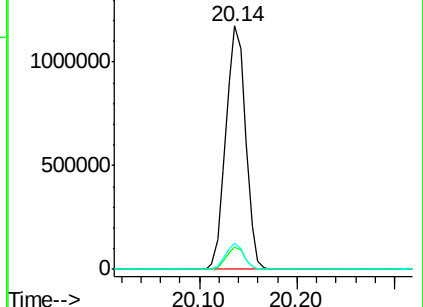
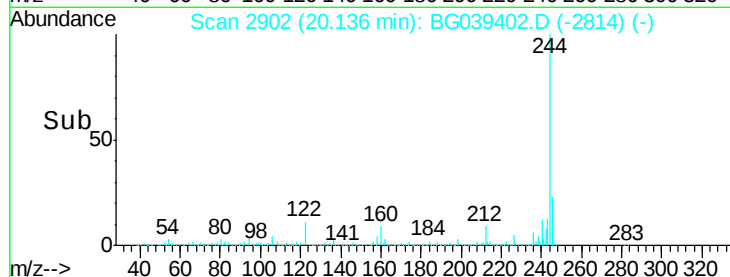
122 10.7 8.4 12.6



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

Perylene-d12

Concen: 20.00 ng

RT: 25.22 min Scan# 3767

Delta R.T. -0.03 min

Lab File: BG039402.D

Acq: 8 Feb 2019 4:49

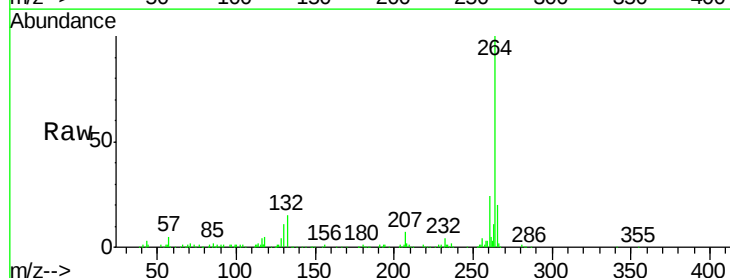
Tgt Ion:264 Resp: 370235

Ion Ratio Lower Upper

264 100

260 23.9 18.2 27.4

265 20.1 18.5 27.7



Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

