

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG043019\  
 Data File : BG040685.D  
 Acq On : 30 Apr 2019 23:31  
 Operator : JU/SJ  
 Sample : K2597-02  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: May 01 02:20:07 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG042319.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Apr 24 05:35:33 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.15  | 152  | 38319    | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 10.97 | 136  | 165234   | 20.00 | ng    | -0.01    |
| 39) Acenaphthene-d10      | 14.77 | 164  | 122366   | 20.00 | ng    | -0.02    |
| 64) Phenanthrene-d10      | 17.52 | 188  | 317153   | 20.00 | ng    | -0.02    |
| 76) Chrysene-d12          | 21.80 | 240  | 320258   | 20.00 | ng    | -0.02    |
| 87) Perylene-d12          | 25.16 | 264  | 339690   | 20.00 | ng    | -0.05    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.68  | 112  | 110241   | 50.71  | ng    | 0.00     |
| 7) Phenol-d6                | 7.28  | 99   | 103425   | 30.90  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 9.32  | 82   | 359493   | 100.53 | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol    | 16.26 | 330  | 151918   | 90.32  | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 13.40 | 172  | 770507   | 90.94  | ng    | -0.02    |
| 79) Terphenyl-d14           | 20.11 | 244  | 1343511  | 92.94  | ng    | -0.02    |

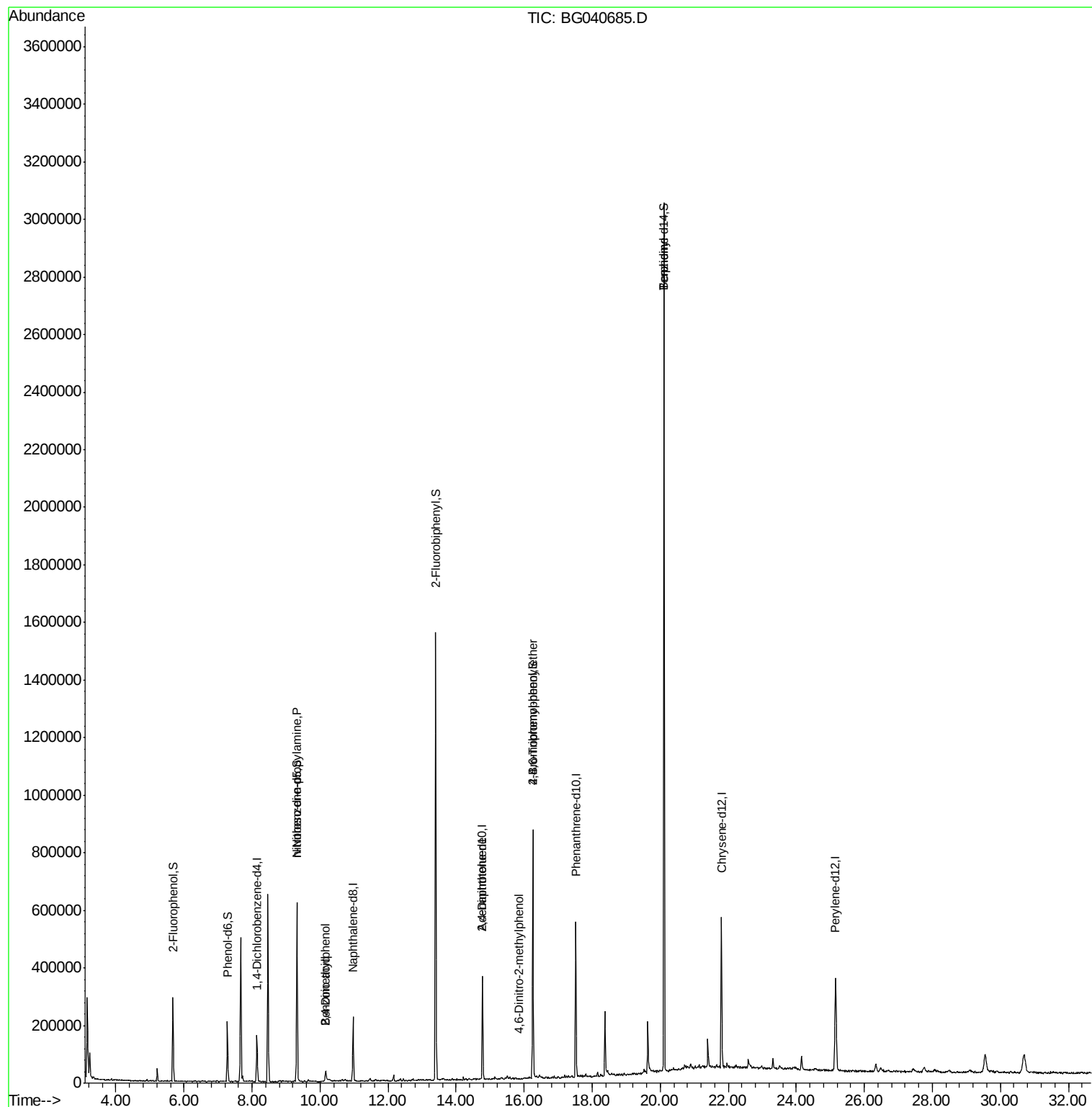
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 9) Benzaldehyde                | 7.29  | 77   | 1151     | Below Cal | #     | 51     |
| 19) n-Nitroso-di-n-propylamine | 9.33  | 70   | 53289    | 17.687    | ng    | # 74   |
| 27) 2,4-Dimethylphenol         | 10.17 | 122  | 13929    | 5.428     | ng    | # 1    |
| 32) Benzoic acid               | 10.17 | 122  | 13929    | 7.929     | ng    | # 97   |
| 57) 2,4-Dinitrotoluene         | 14.77 | 165  | 15444    | 5.688     | ng    | # 18   |
| 65) 4,6-Dinitro-2-methylphenol | 15.84 | 198  | 77       | 7.143     | ng    | # 36   |
| 67) 4-Bromophenyl-phenylether  | 16.26 | 248  | 11228    | 2.842     | ng    | # 1    |
| 77) Benzidine                  | 20.11 | 184  | 25404    | 2.897     | ng    | # 91   |

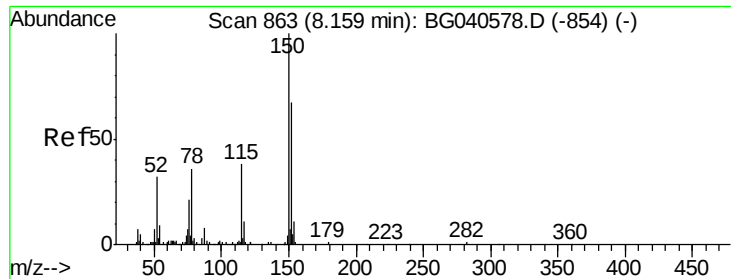
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG043019\  
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Misc :  
ALS Vial : 15 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :

Quant Time: May 01 02:20:07 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG042319.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Apr 24 05:35:33 2019  
Response via : Initial Calibration



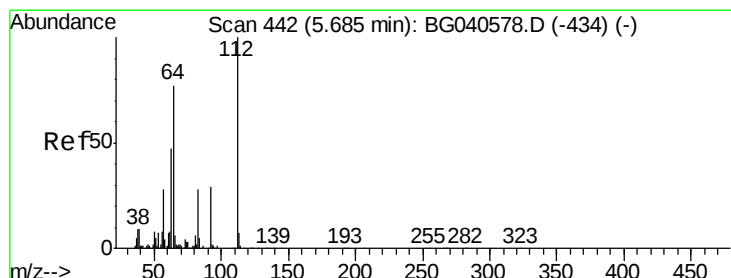
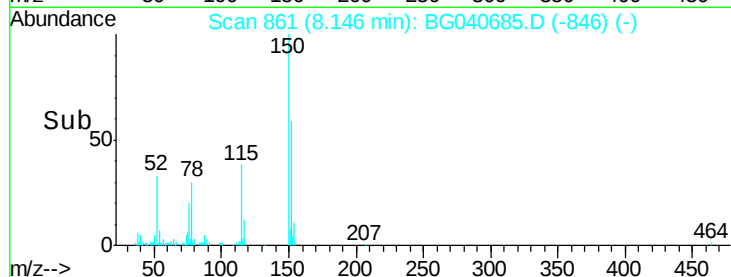
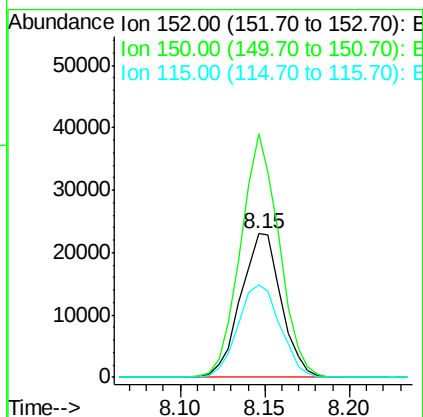
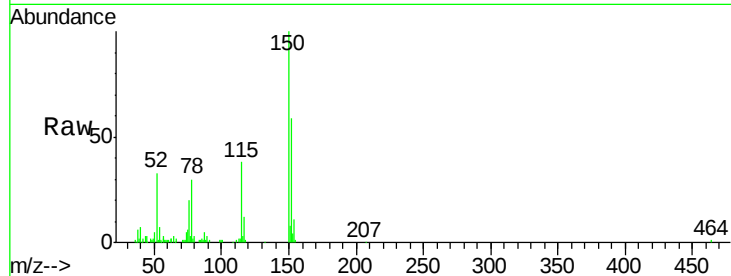


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.15 min Scan# 861  
Delta R.T. -0.01 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

Instrument :  
BNA\_G  
ClientSampled :

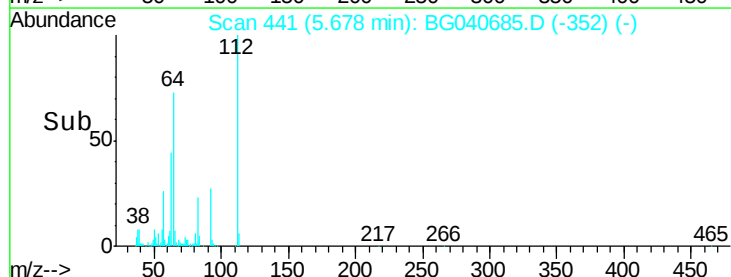
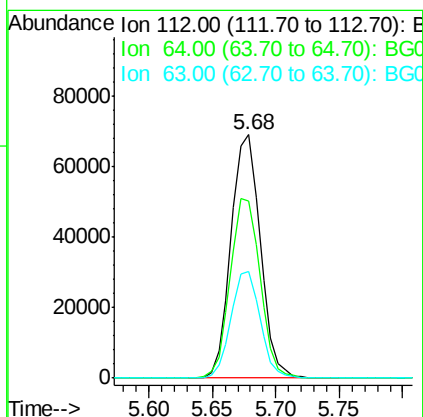
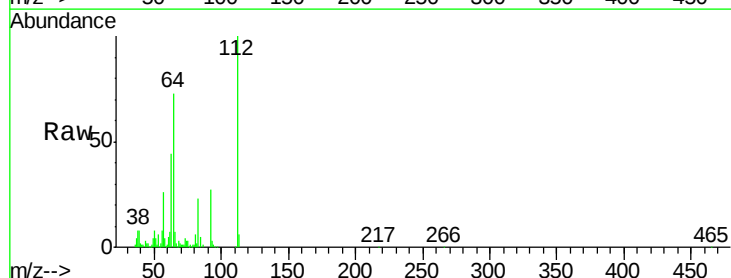
Tot Ion:152 Resp: 38319  
Ion Ratio Lower Upper  
152 100  
150 170.0 120.2 180.2  
115 65.0 46.2 69.2

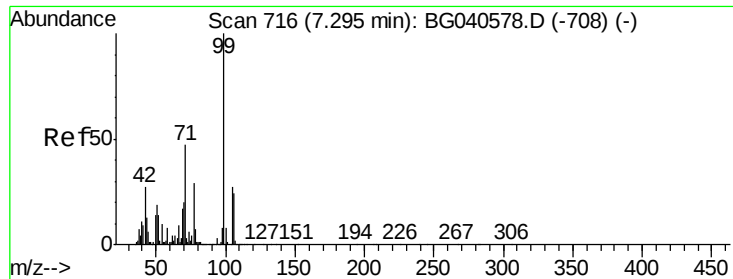


#5

2-Fluorophenol  
Concen: 50.713 ng  
RT: 5.68 min Scan# 441  
Delta R.T. -0.01 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

Tgt Ion:112 Resp: 110241  
Ion Ratio Lower Upper  
112 100  
64 72.9 61.4 92.0  
63 43.7 37.8 56.6





#7

Phenol-d6

Concen: 30.900 ng

RT: 7.28 min Scan# 713

Delta R.T. -0.02 min

Lab File: BG040685.D

Acq: 30 Apr 2019 23:31

Instrument :

BNA\_G

ClientSampleId :

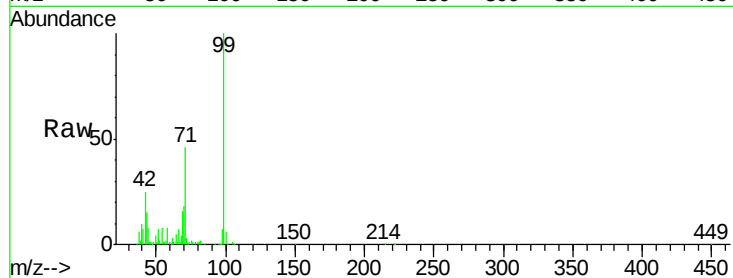
Tot Ion: 99 Resp: 103425

Ion Ratio Lower Upper

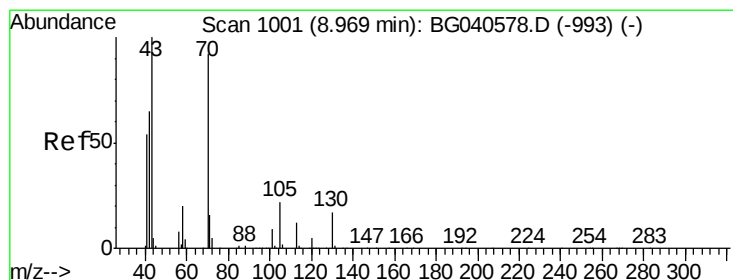
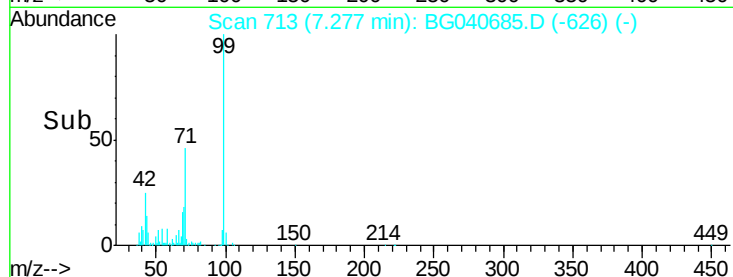
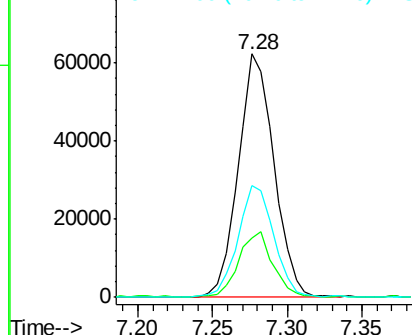
99 100

42 24.6 21.8 32.8

71 45.9 38.6 57.8



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: 17.687 ng

RT: 9.33 min Scan# 1062

Delta R.T. 0.36 min

Lab File: BG040685.D

Acq: 30 Apr 2019 23:31

Tgt Ion: 70 Resp: 53289

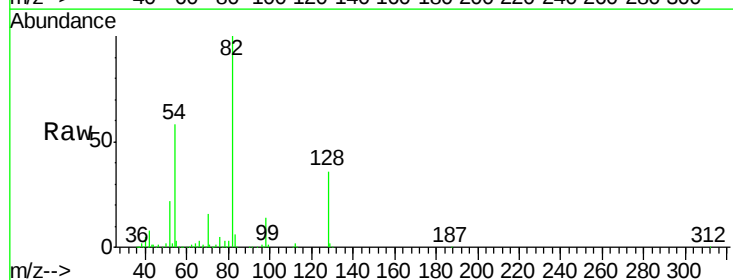
Ion Ratio Lower Upper

70 100

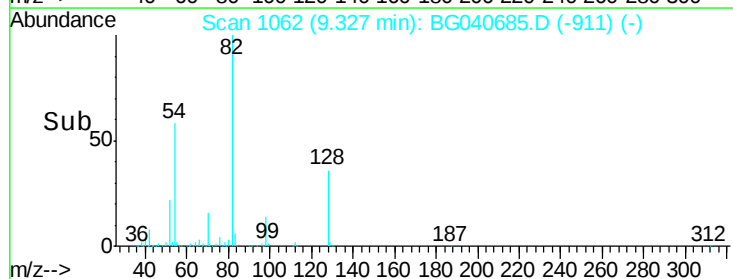
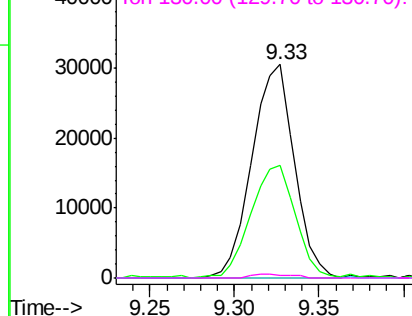
42 52.7 57.1 85.7#

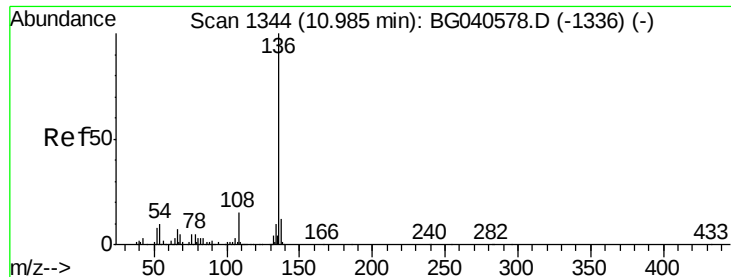
101 0.0 7.8 11.8#

130 1.0 14.6 21.8#



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

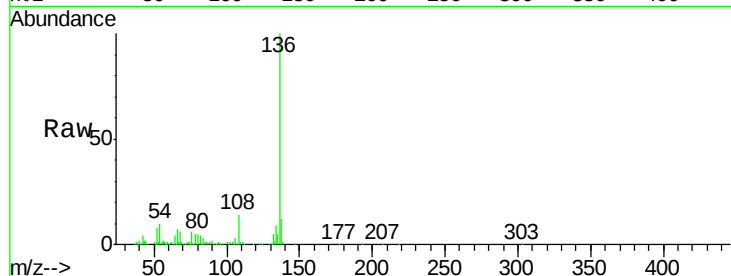




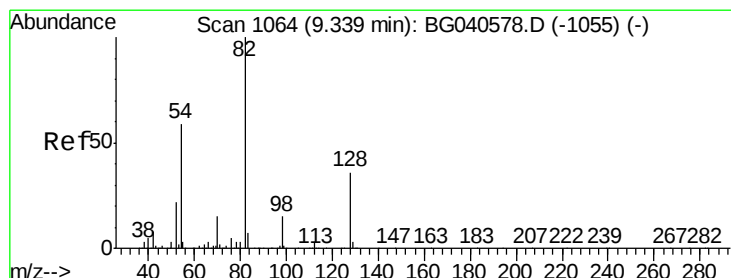
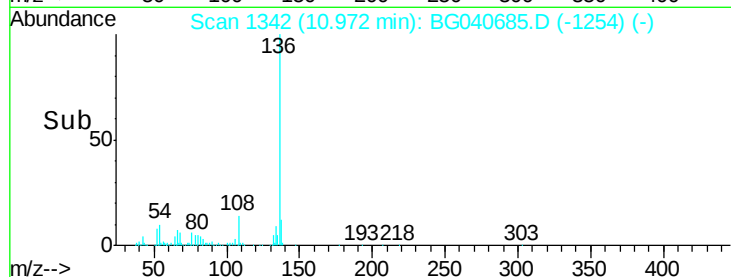
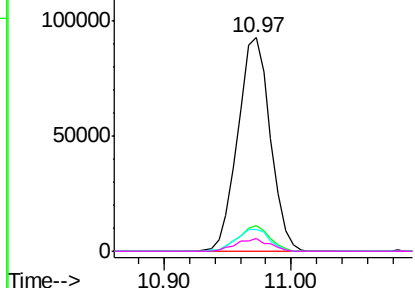
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.97 min Scan# 1342  
Delta R.T. -0.01 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

Instrument :  
BNA\_G  
ClientSampled :

|             |       |             |
|-------------|-------|-------------|
| Tot Ion:136 | Resp: | 165234      |
| Ion         | Ratio | Lower Upper |
| 136         | 100   |             |
| 137         | 12.3  | 9.7 14.5    |
| 54          | 10.0  | 8.6 12.8    |
| 68          | 5.9   | 4.8 7.2     |

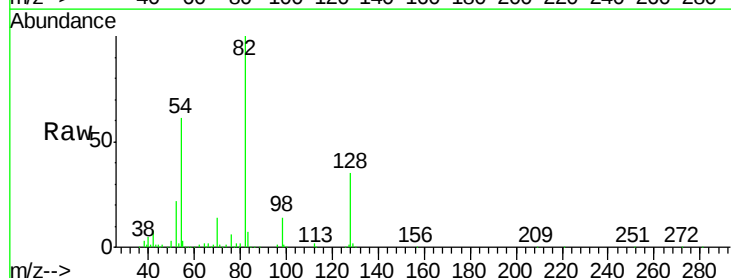


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BGC  
Ion 68.00 (67.70 to 68.70): BGC

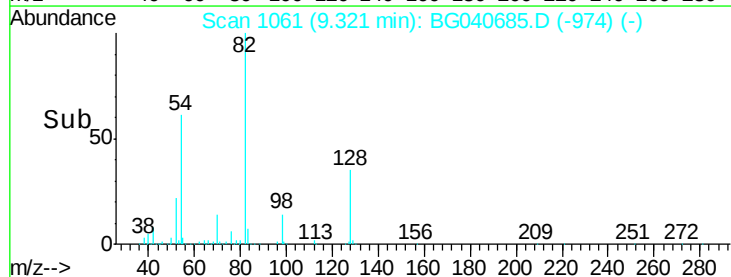
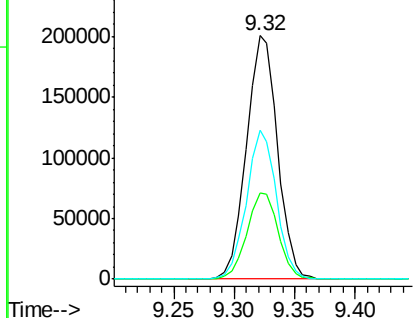


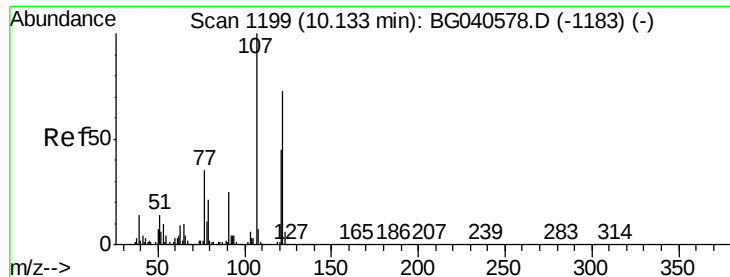
#23  
Nitrobenzene-d5  
Concen: 100.529 ng  
RT: 9.32 min Scan# 1061  
Delta R.T. -0.02 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion: 82 | Resp: | 359493      |
| Ion         | Ratio | Lower Upper |
| 82          | 100   |             |
| 128         | 35.3  | 28.9 43.3   |
| 54          | 61.2  | 47.2 70.8   |



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

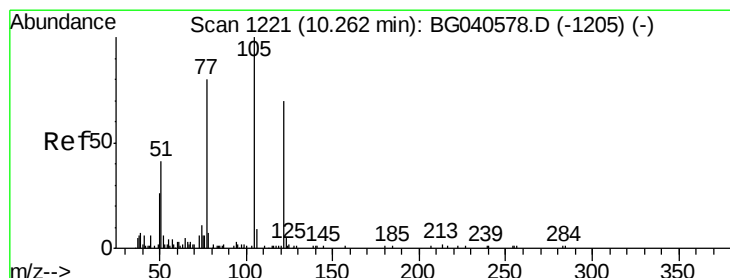
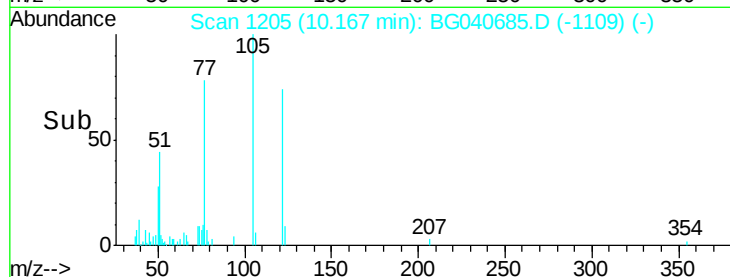
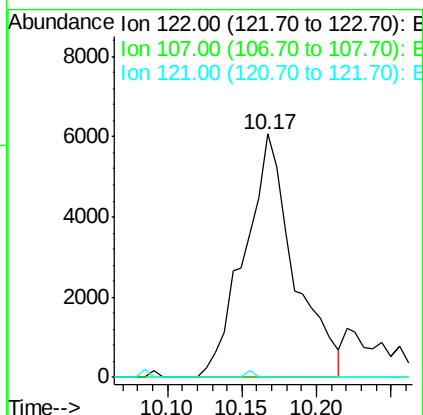
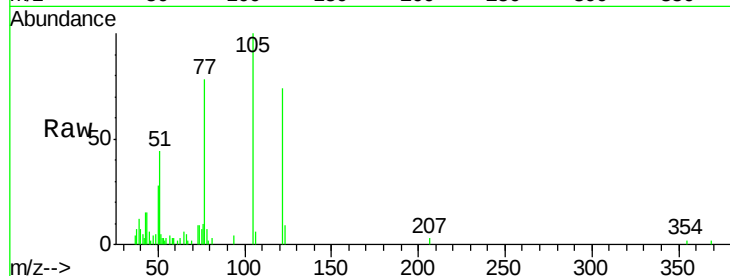




#27  
2,4-Dimethylphenol  
Concen: 5.428 ng  
RT: 10.17 min Scan# 1205  
Delta R.T. 0.03 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

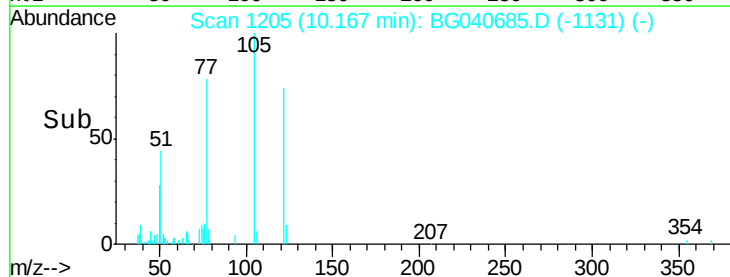
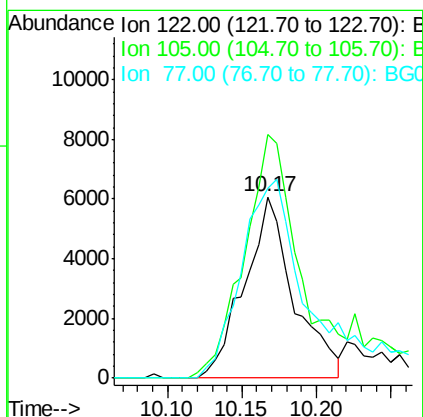
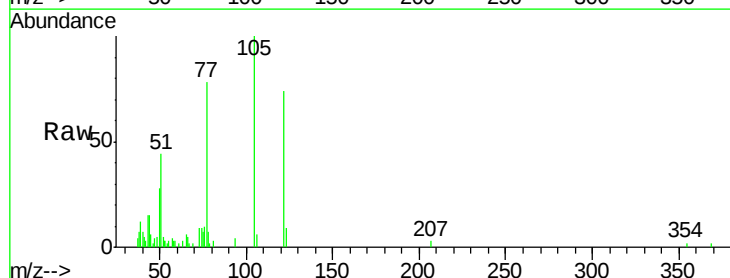
Instrument :  
BNA\_G  
ClientSampleId :

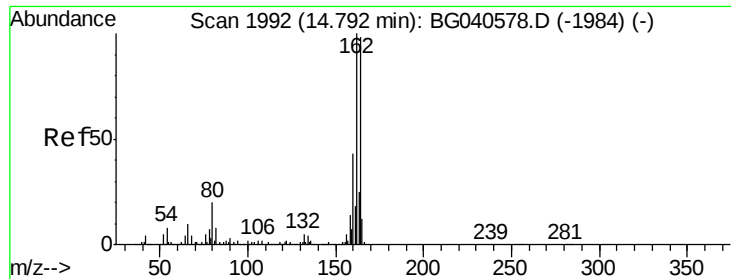
Tot Ion:122 Resp: 13929  
Ion Ratio Lower Upper  
122 100  
107 0.0 110.1 165.1#  
121 0.0 49.4 74.0#



#32  
Benzoic acid  
Concen: 7.929 ng  
RT: 10.17 min Scan# 1205  
Delta R.T. -0.09 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

Tgt Ion:122 Resp: 13929  
Ion Ratio Lower Upper  
122 100  
105 134.3 110.9 150.9  
77 105.0 87.6 127.6





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 14.77 min Scan# 1989

Delta R.T. -0.02 min

Lab File: BG040685.D

Acq: 30 Apr 2019 23:31

Instrument :

BNA\_G

ClientSampleId :

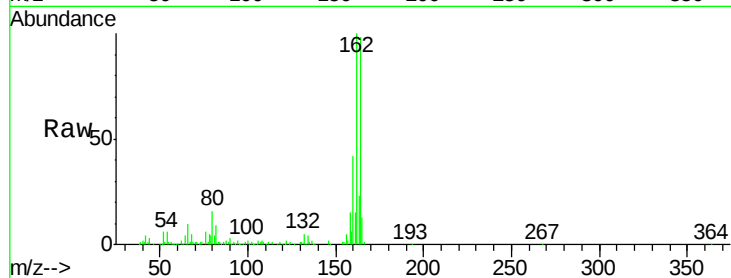
Tot Ion:164 Resp: 122366

Ion Ratio Lower Upper

164 100

162 101.6 81.9 122.9

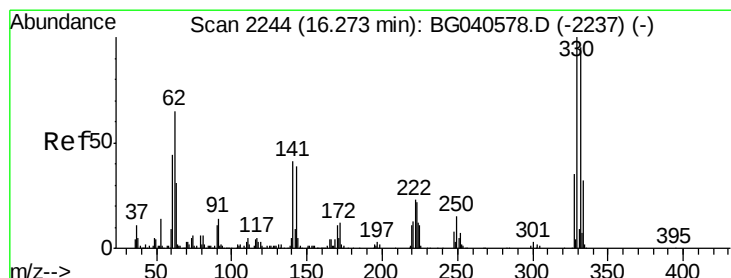
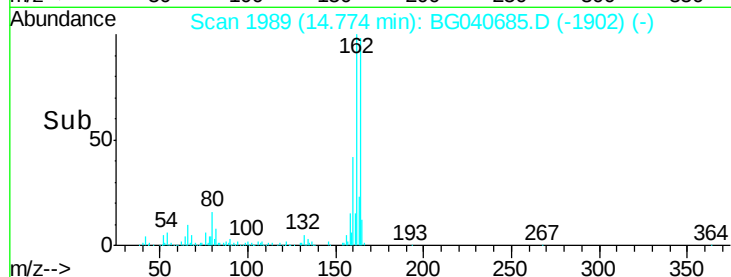
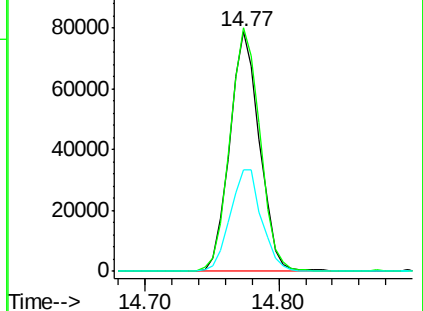
160 42.4 35.4 53.2



Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



#42

2,4,6-Tribromophenol

Concen: 90.323 ng

RT: 16.26 min Scan# 2242

Delta R.T. -0.01 min

Lab File: BG040685.D

Acq: 30 Apr 2019 23:31

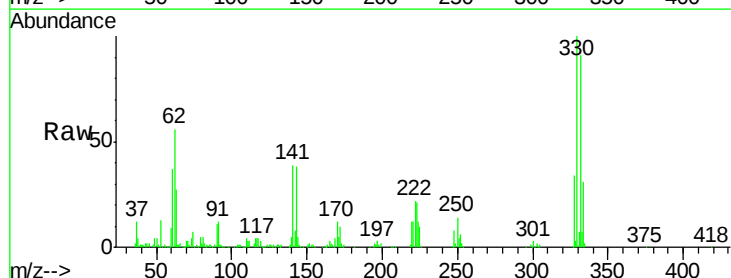
Tgt Ion:330 Resp: 151918

Ion Ratio Lower Upper

330 100

332 97.8 75.9 113.9

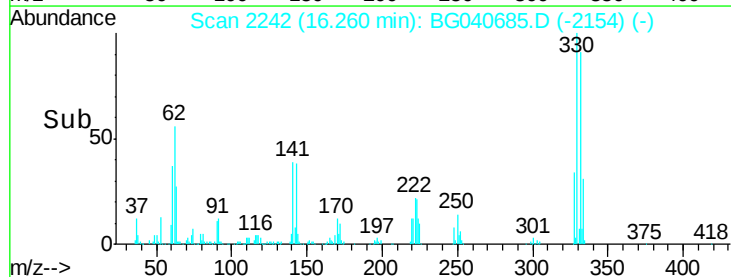
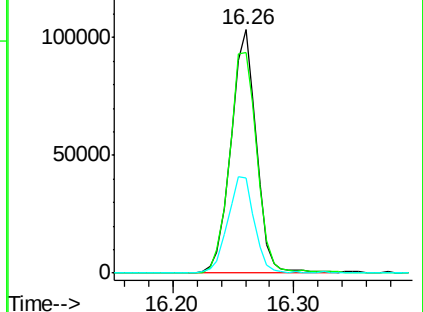
141 41.2 32.4 48.6

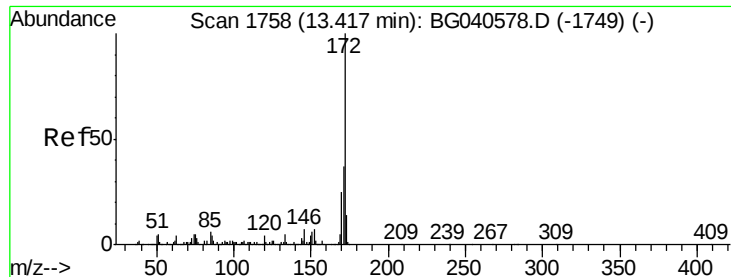


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

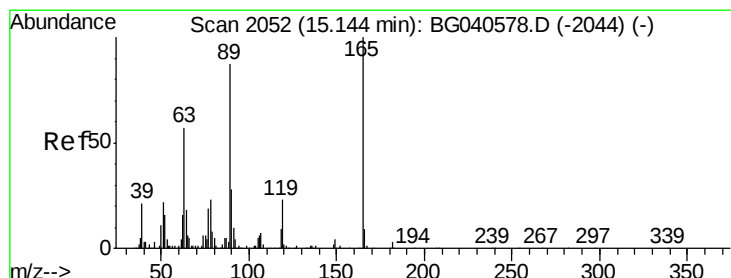
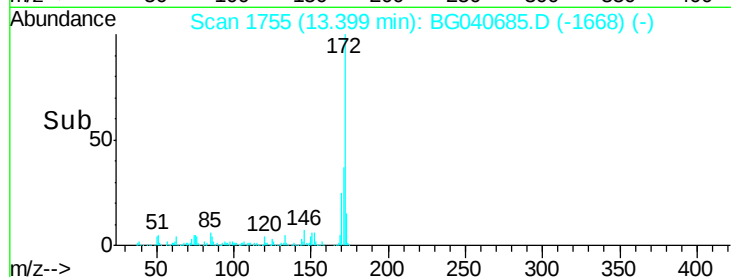
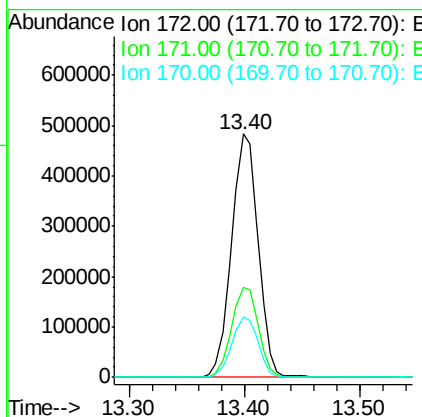
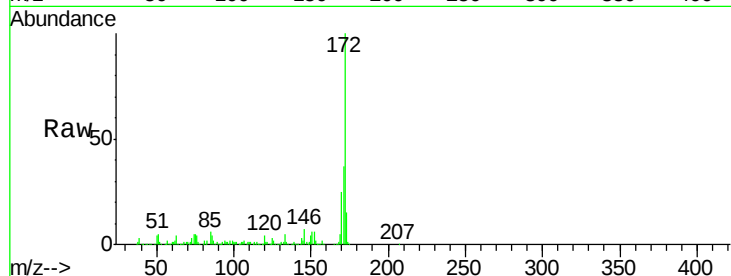




#45  
2-Fluorobiphenyl  
Concen: 90.938 ng  
RT: 13.40 min Scan# 1755  
Delta R.T. -0.02 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

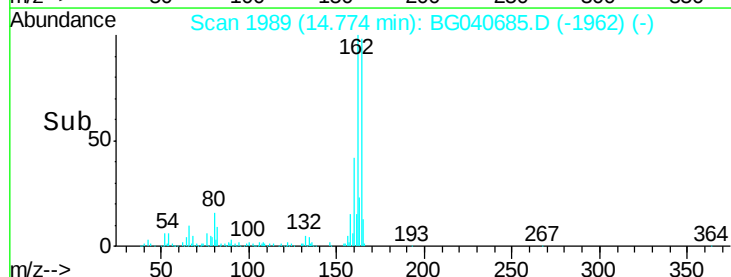
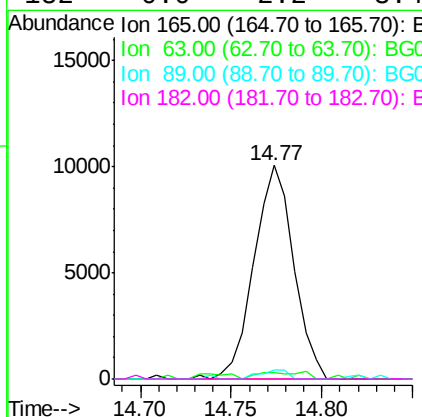
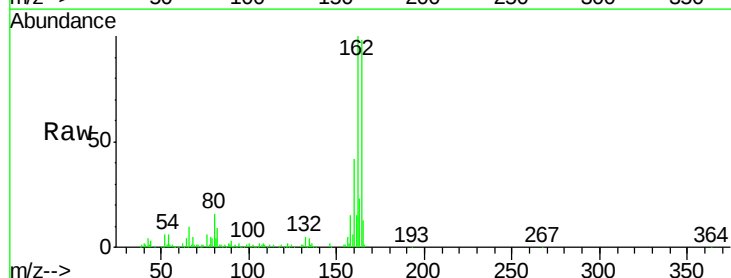
Instrument :  
BNA\_G  
ClientSampleId :

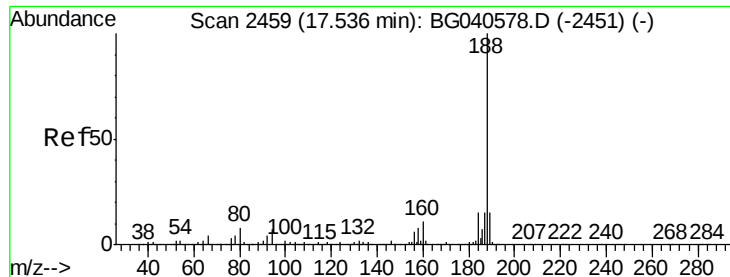
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 37.2  | 29.4  | 44.2  |
| 170     | 24.9  | 19.9  | 29.9  |



#57  
2,4-Dinitrotoluene  
Concen: 5.688 ng  
RT: 14.77 min Scan# 1989  
Delta R.T. -0.37 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 165     | 100   |       |        |
| 63      | 2.9   | 45.8  | 68.8#  |
| 89      | 4.5   | 69.4  | 104.2# |
| 182     | 0.0   | 2.2   | 3.4#   |

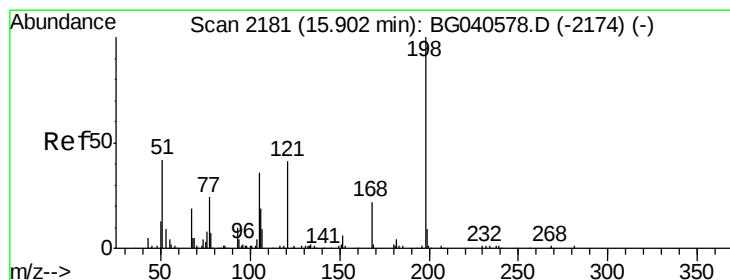
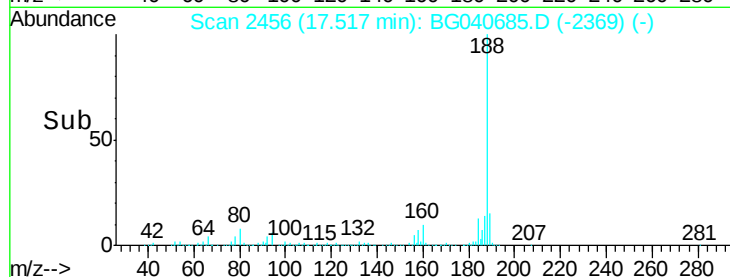
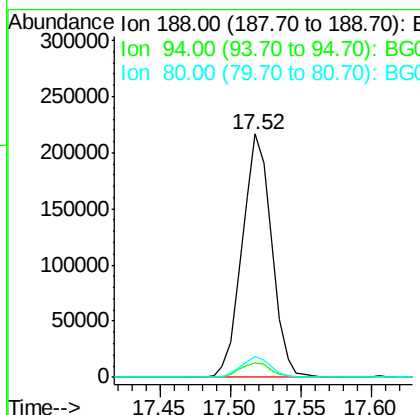
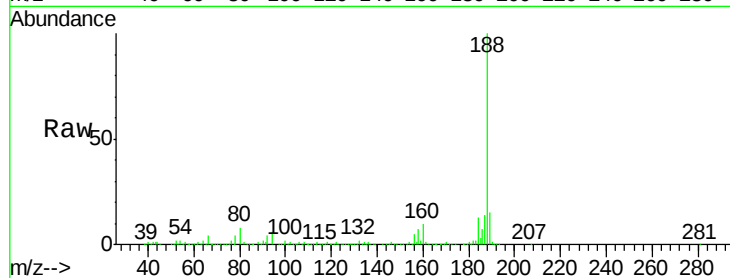




#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 17.52 min Scan# 2456  
 Delta R.T. -0.02 min  
 Lab File: BG040685.D  
 Acq: 30 Apr 2019 23:31

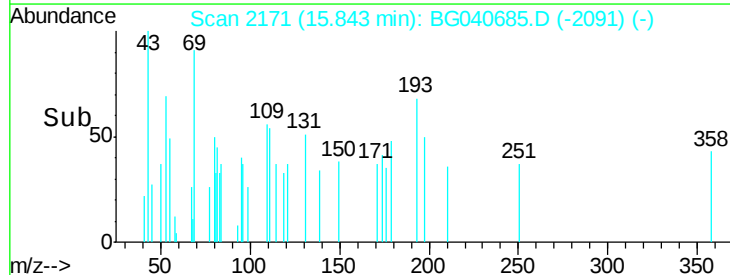
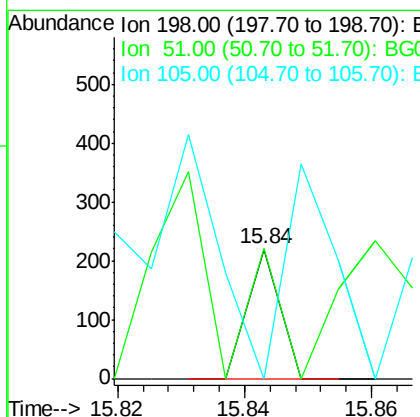
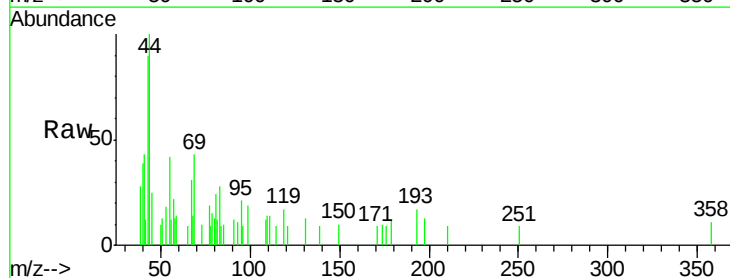
Instrument :  
 BNA\_G  
 ClientSampleId :

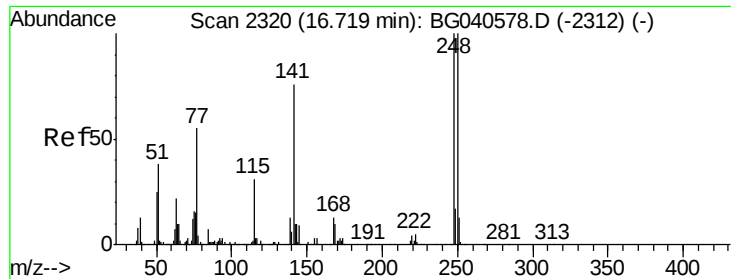
Tot Ion:188 Resp: 317153  
 Ion Ratio Lower Upper  
 188 100  
 94 6.2 5.6 8.4  
 80 8.5 6.4 9.6



#65  
 4,6-Dinitro-2-methylphenol  
 Concen: 7.143 ng  
 RT: 15.84 min Scan# 2171  
 Delta R.T. -0.06 min  
 Lab File: BG040685.D  
 Acq: 30 Apr 2019 23:31

Tgt Ion:198 Resp: 77  
 Ion Ratio Lower Upper  
 198 100  
 51 101.4 35.9 75.9#  
 105 0.0 21.2 61.2#

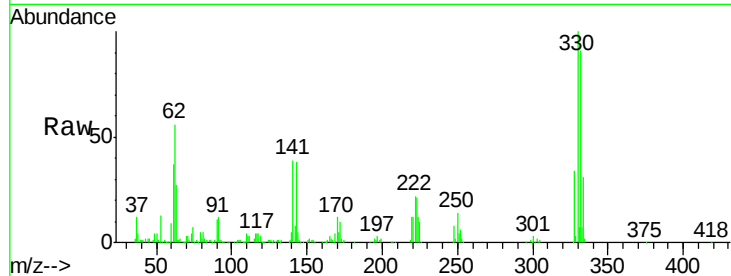




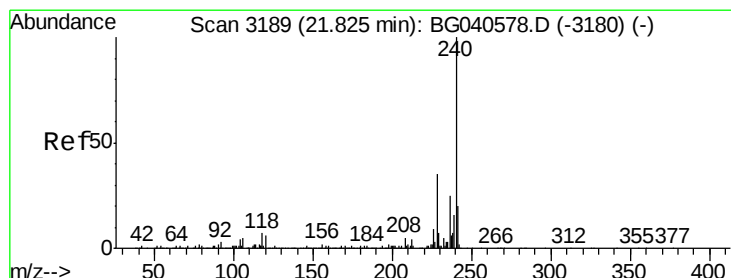
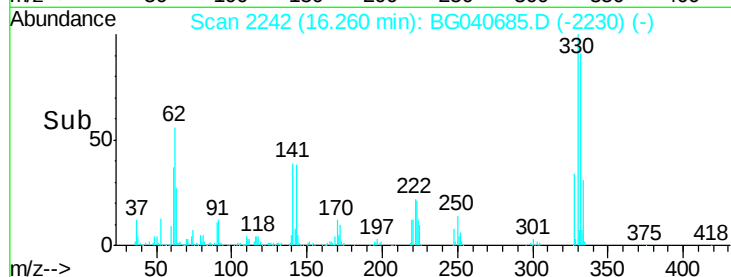
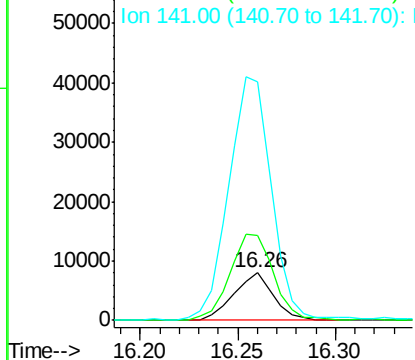
#67  
4-Bromophenyl-phenylether  
Concen: 2.842 ng  
RT: 16.26 min Scan# 2242  
Delta R.T. -0.46 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

Instrument :  
BNA\_G  
ClientSampleId :

Tot Ion:248 Resp: 11228  
Ion Ratio Lower Upper  
248 100  
250 137.1 79.8 119.6#  
141 384.0 60.8 91.2#

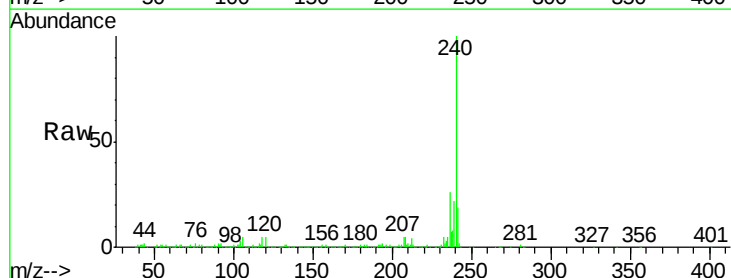


Abundance Ion 248.00 (247.70 to 248.70): E  
Ion 250.00 (249.70 to 250.70): E  
Ion 141.00 (140.70 to 141.70): E

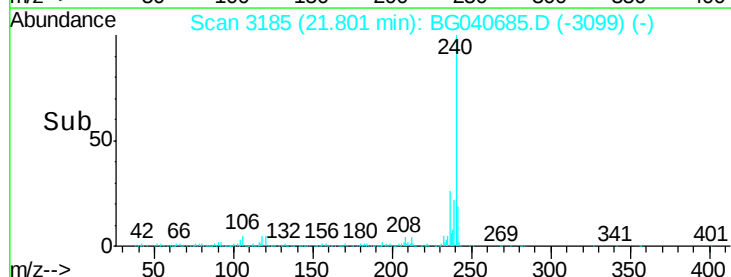
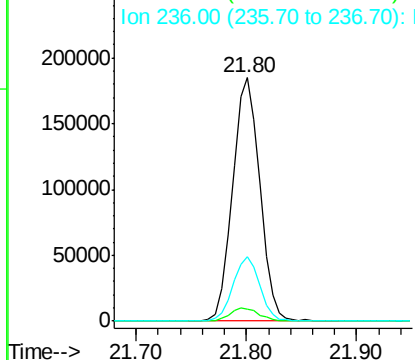


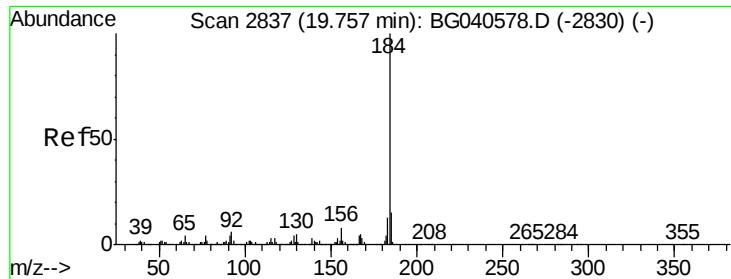
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.80 min Scan# 3185  
Delta R.T. -0.02 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

Tgt Ion:240 Resp: 320258  
Ion Ratio Lower Upper  
240 100  
120 5.1 5.0 7.6  
236 26.3 20.3 30.5



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: 2.897 ng

RT: 20.11 min Scan# 2898

Delta R.T. 0.36 min

Lab File: BG040685.D

Acq: 30 Apr 2019 23:31

Instrument :

BNA\_G

ClientSampled :

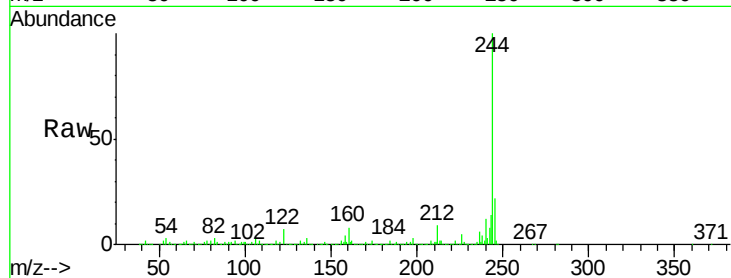
Tot Ion:184 Resp: 25404

Ion Ratio Lower Upper

184 100

185 18.3 11.8 17.8#

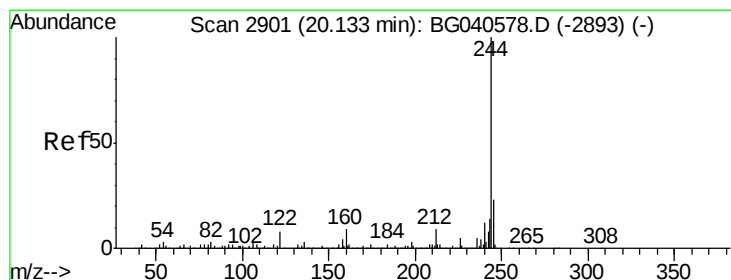
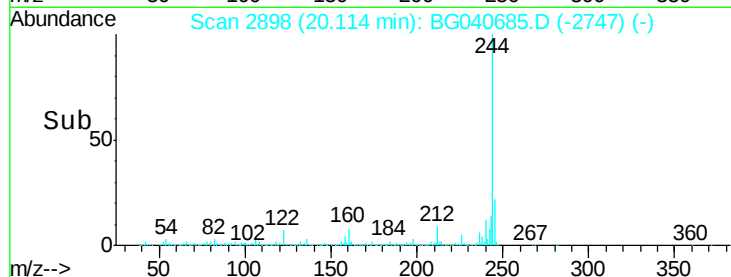
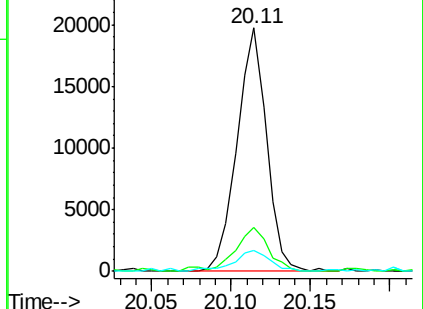
183 8.5 10.2 15.2#



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: 92.939 ng

RT: 20.11 min Scan# 2898

Delta R.T. -0.02 min

Lab File: BG040685.D

Acq: 30 Apr 2019 23:31

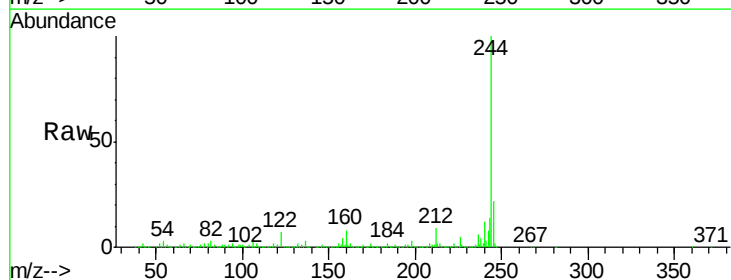
Tgt Ion:244 Resp: 1343511

Ion Ratio Lower Upper

244 100

212 8.9 7.2 10.8

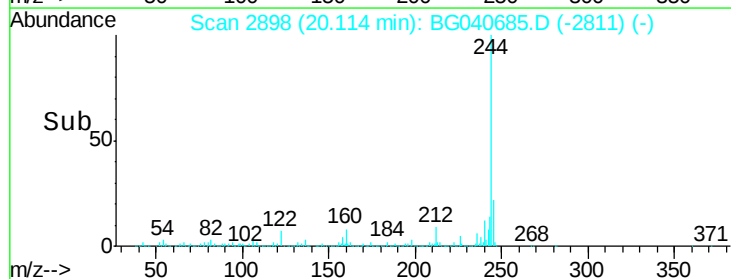
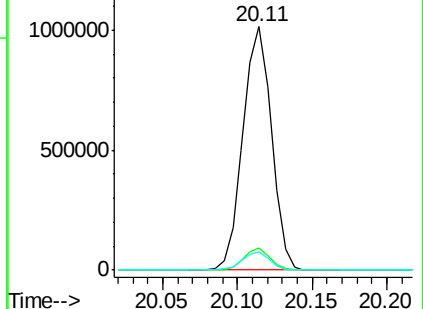
122 7.5 6.6 10.0

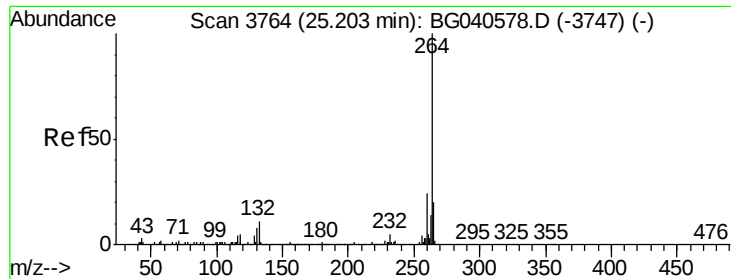


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

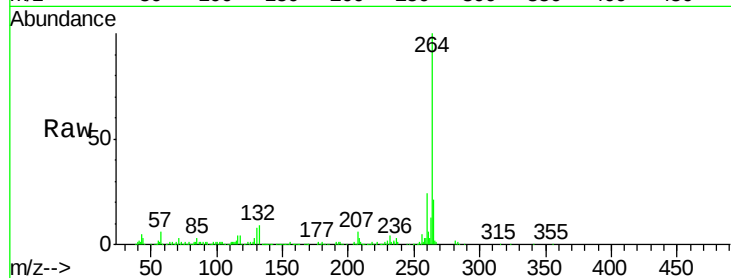




#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 25.16 min Scan# 3756  
Delta R.T. -0.05 min  
Lab File: BG040685.D  
Acq: 30 Apr 2019 23:31

Instrument :  
BNA\_G  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.6  | 19.2  | 28.8  |
| 265     | 21.0  | 16.6  | 25.0  |



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

