

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG111119\  
 Data File : BG043601.D  
 Acq On : 12 Nov 2019 2:26  
 Operator : JU  
 Sample : K5782-06  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: Nov 12 07:48:26 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG102119.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Nov 04 15:22:15 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.00  | 152  | 30528    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.81 | 136  | 121216   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.63 | 164  | 96730    | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.38 | 188  | 238258   | 20.00 | ng    | -0.01    |
| 76) Chrysene-d12          | 21.64 | 240  | 196696   | 20.00 | ng    | -0.01    |
| 87) Perylene-d12          | 24.83 | 264  | 234492   | 20.00 | ng    | -0.03    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.60  | 112  | 163616   | 98.21  | ng    | 0.00     |
| 7) Phenol-d6                | 7.20  | 99   | 157750   | 65.81  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.16  | 82   | 232975   | 99.09  | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 16.13 | 330  | 276242   | 150.07 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 13.25 | 172  | 664848   | 94.97  | ng    | -0.01    |
| 79) Terphenyl-d14           | 19.99 | 244  | 1296559  | 123.66 | ng    | 0.00     |

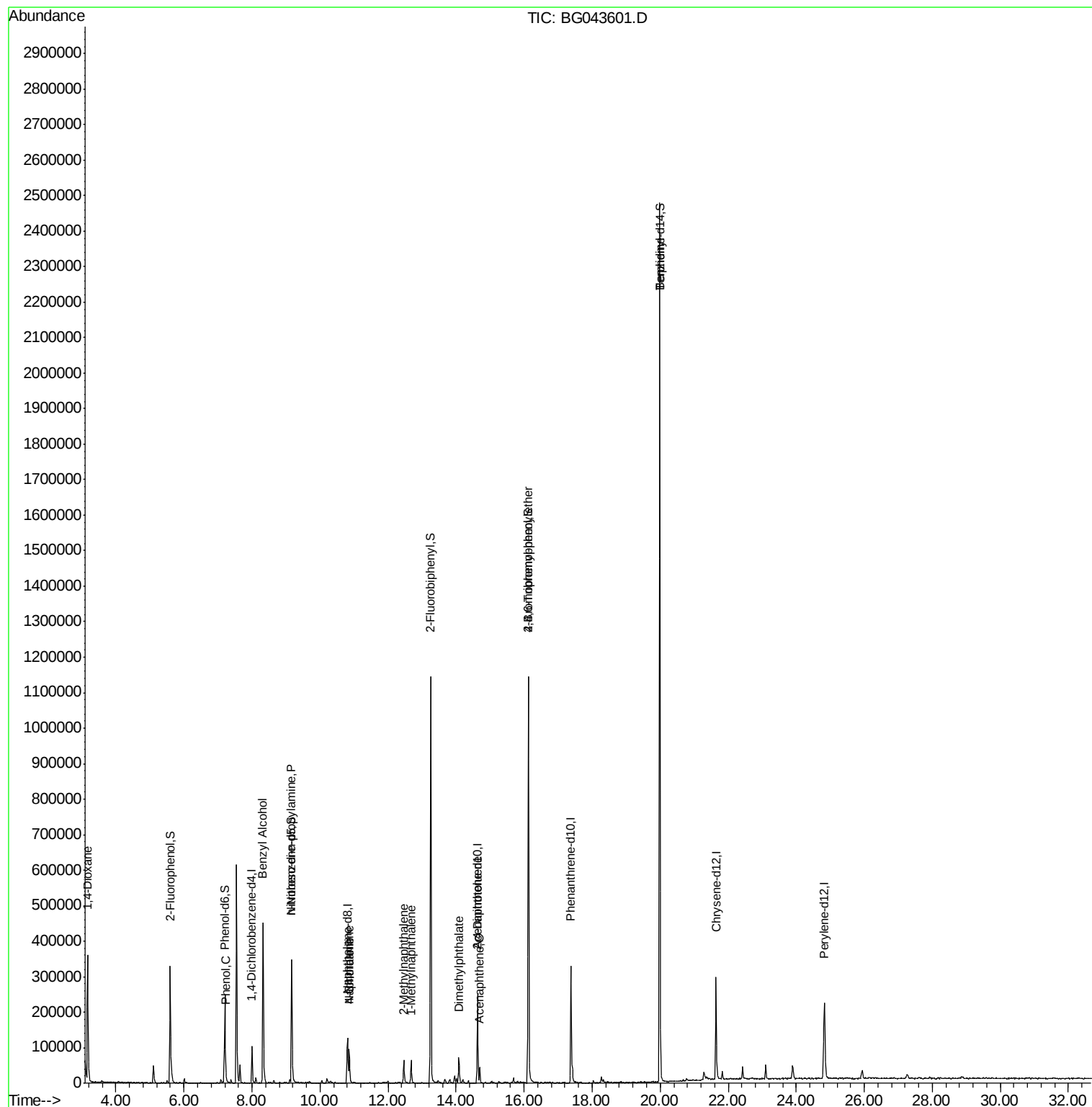
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 2) 1,4-Dioxane                 | 3.16  | 88   | 4580     | 7.055  | ng    | # 1    |
| 10) Phenol                     | 7.22  | 94   | 6901     | 3.151  | ng    | # 61   |
| 15) Benzyl Alcohol             | 8.32  | 79   | 4005     | 2.379  | ng    | # 55   |
| 19) n-Nitroso-di-n-propylamine | 9.16  | 70   | 33798    | 21.821 | ng    | # 78   |
| 31) Naphthalene                | 10.86 | 128  | 88321    | 14.354 | ng    | # 96   |
| 33) 4-Chloroaniline            | 10.85 | 127  | 10880    | 4.314  | ng    | # 42   |
| 37) 2-Methylnaphthalene        | 12.46 | 142  | 41959    | 8.888  | ng    | # 96   |
| 38) 1-Methylnaphthalene        | 12.68 | 142  | 34090    | 7.589  | ng    | # 99   |
| 50) Dimethylphthalate          | 14.08 | 163  | 59243    | 7.907  | ng    | # 97   |
| 52) Acenaphthene               | 14.70 | 154  | 18022    | 3.391  | ng    | # 91   |
| 57) 2,4-Dinitrotoluene         | 14.63 | 165  | 12817    | 5.510  | ng    | # 28   |
| 67) 4-Bromophenyl-phenylether  | 16.13 | 248  | 17946    | 5.597  | ng    | # 1    |
| 77) Benzidine                  | 19.99 | 184  | 19574    | 4.945  | ng    | # 92   |

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

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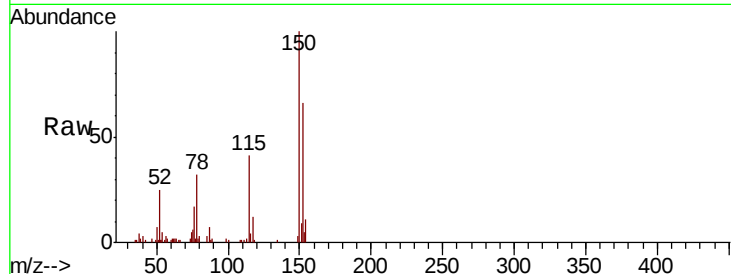


#1

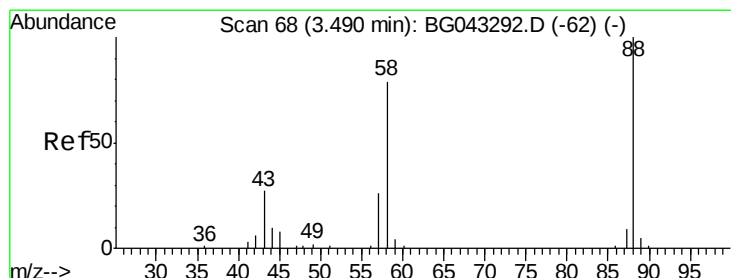
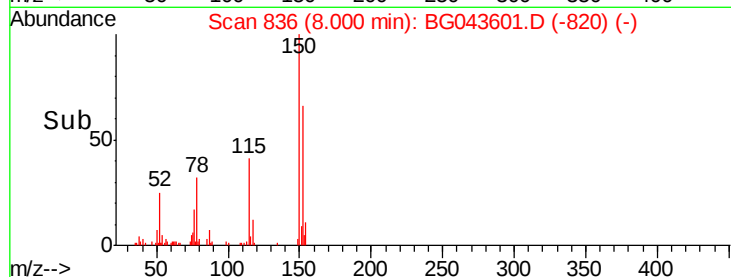
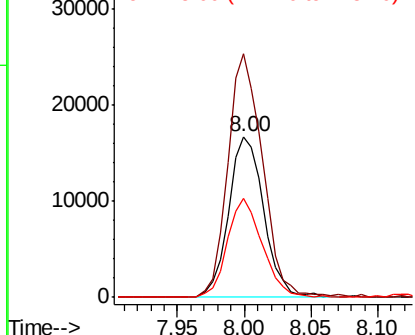
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.00 min Scan# 836  
Delta R.T. -0.01 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

Instrument :  
BNA\_G  
ClientSampleId :

Tot Ion:152 Resp: 30528  
Ion Ratio Lower Upper  
152 100  
150 151.4 129.4 194.0  
115 61.7 48.8 73.2



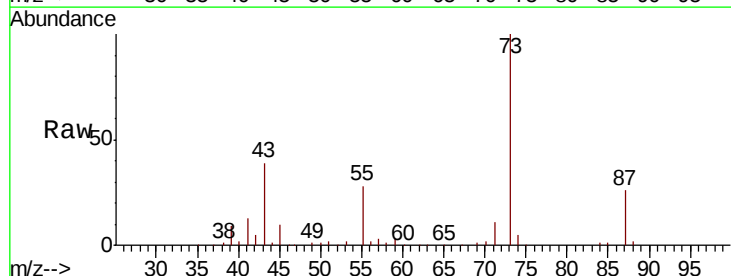
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



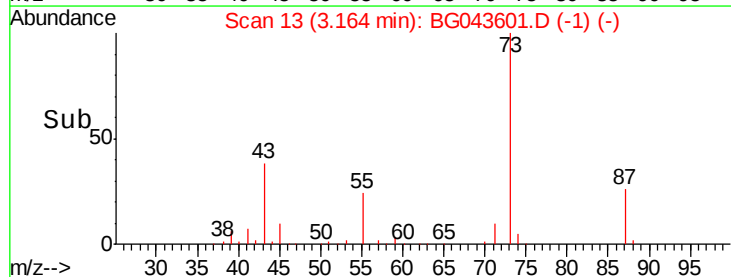
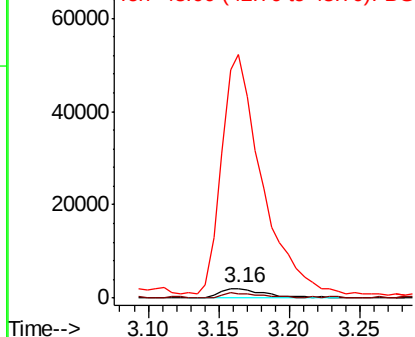
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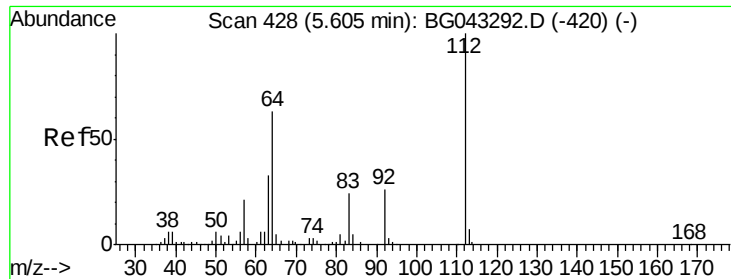
1,4-Dioxane  
Concen: 7.055 ng  
RT: 3.16 min Scan# 13  
Delta R.T. -0.31 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

Tgt Ion: 88 Resp: 4580  
Ion Ratio Lower Upper  
88 100  
58 51.4 62.7 94.1#  
43 2289.9 23.7 35.5#



Abundance Ion 88.00 (87.70 to 88.70): BGC  
Ion 58.00 (57.70 to 58.70): BGC  
Ion 43.00 (42.70 to 43.70): BGC





#5

2-Fluorophenol

Concen: 98.211 ng

RT: 5.60 min Scan# 427

Delta R.T. 0.00 min

Lab File: BG043601.D

Acq: 12 Nov 2019 2:26

Instrument :

BNA\_G

ClientSampled :

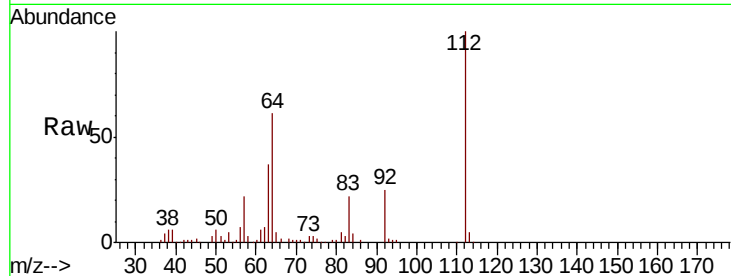
Tot Ion:112 Resp: 163616

Ion Ratio Lower Upper

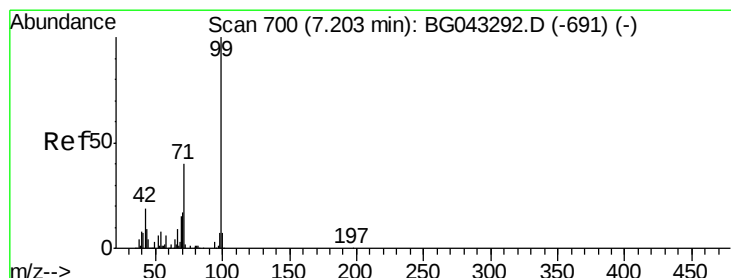
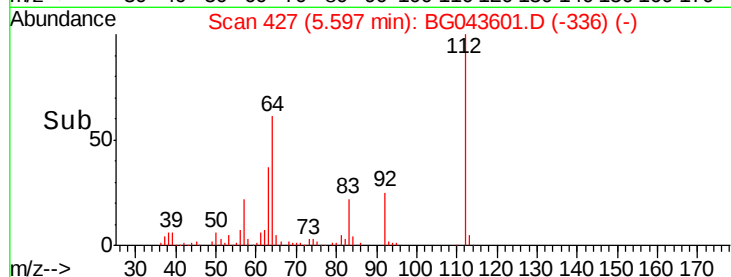
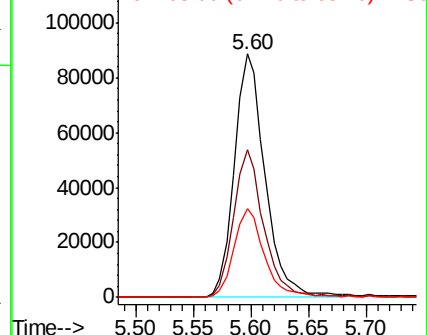
112 100

64 60.8 50.0 75.0

63 36.5 26.6 40.0



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



#7

Phenol-d6

Concen: 65.813 ng

RT: 7.20 min Scan# 700

Delta R.T. 0.00 min

Lab File: BG043601.D

Acq: 12 Nov 2019 2:26

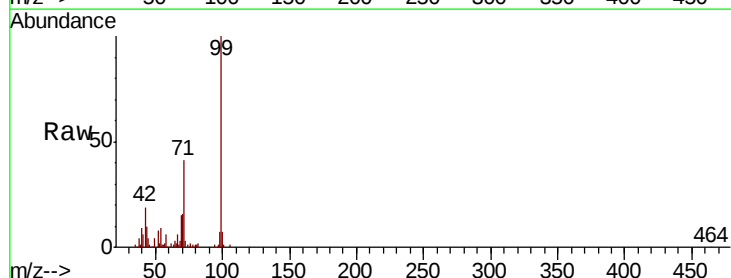
Tgt Ion: 99 Resp: 157750

Ion Ratio Lower Upper

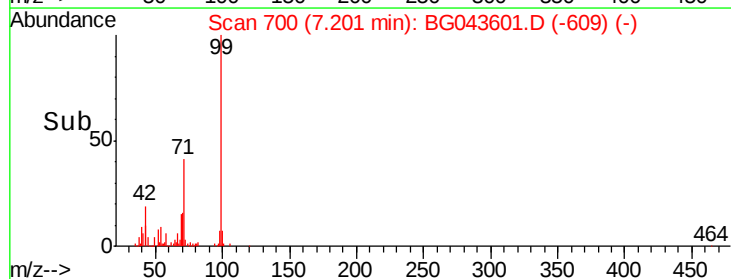
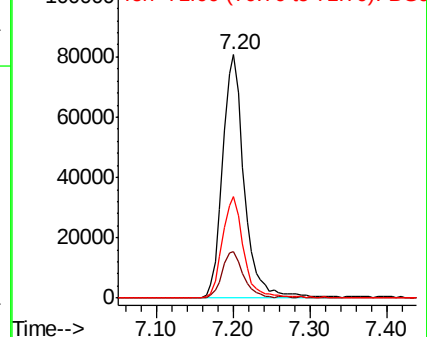
99 100

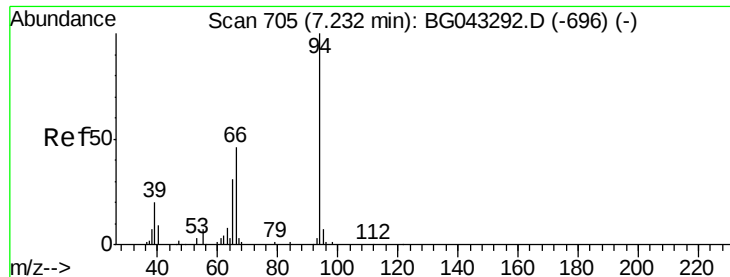
42 19.1 14.6 21.8

71 41.5 32.5 48.7



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

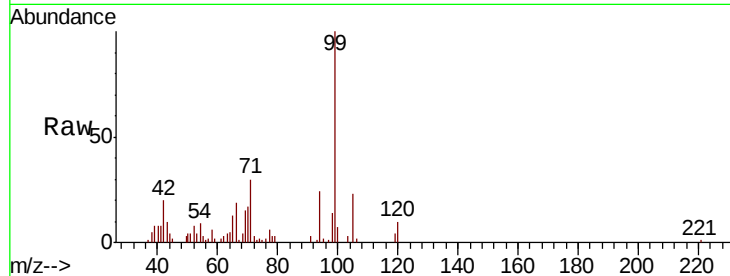




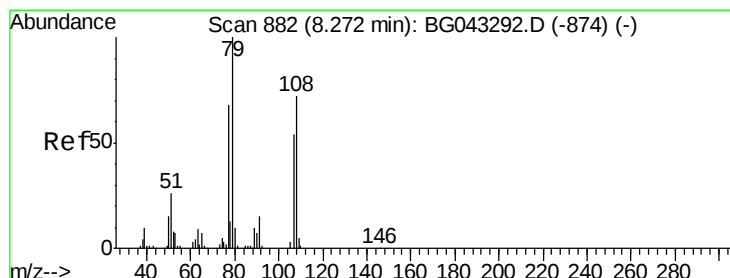
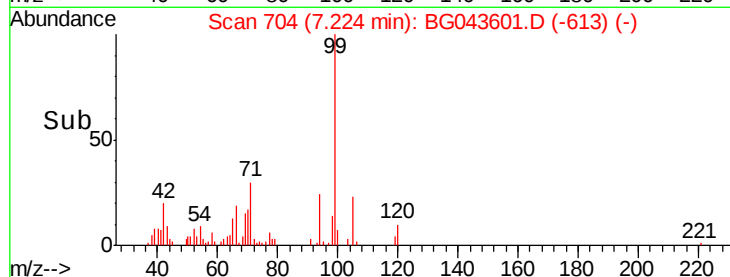
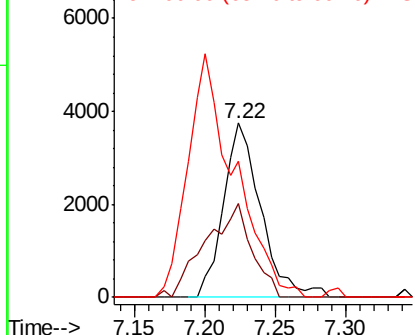
#10  
Phenol  
Concen: 3.151 ng  
RT: 7.22 min Scan# 704  
Delta R.T. 0.00 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

Instrument :  
BNA\_G  
ClientSampleId :

Tot Ion: 94 Resp: 6901  
Ion Ratio Lower Upper  
94 100  
65 54.1 12.6 52.6#  
66 78.3 30.7 70.7#

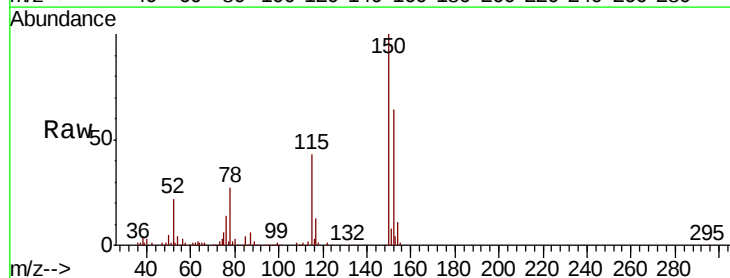


Abundance Ion 94.00 (93.70 to 94.70): BGC  
Ion 65.00 (64.70 to 65.70): BGC  
Ion 66.00 (65.70 to 66.70): BGC

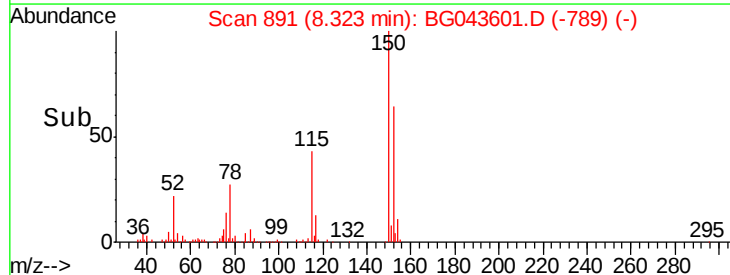
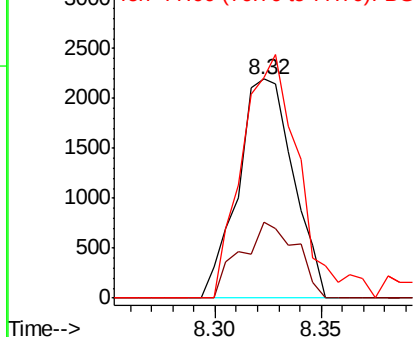


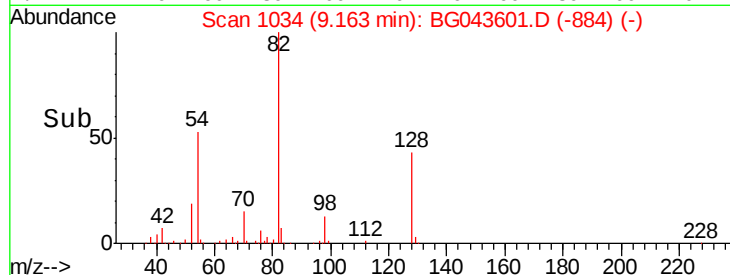
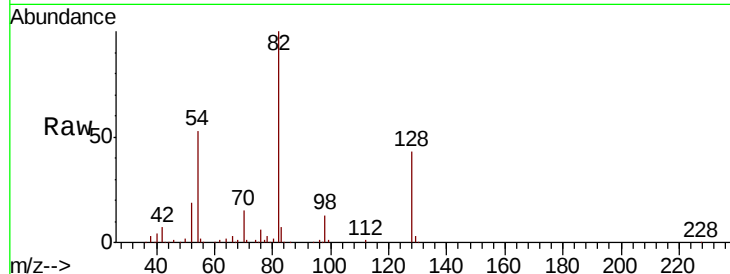
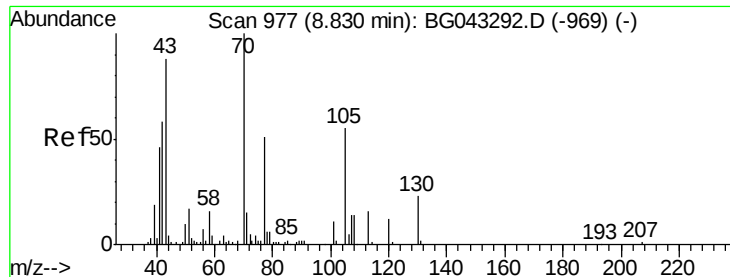
#15  
Benzyl Alcohol  
Concen: 2.379 ng  
RT: 8.32 min Scan# 891  
Delta R.T. 0.07 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

Tgt Ion: 79 Resp: 4005  
Ion Ratio Lower Upper  
79 100  
108 34.7 53.6 80.4#  
77 101.1 49.6 74.4#



Abundance Ion 79.00 (78.70 to 79.70): BGC  
Ion 108.00 (107.70 to 108.70): BGC  
Ion 77.00 (76.70 to 77.70): BGC

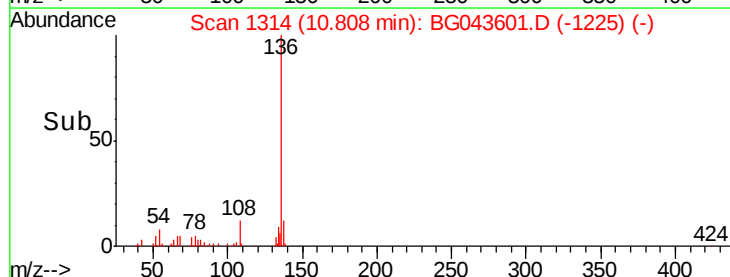
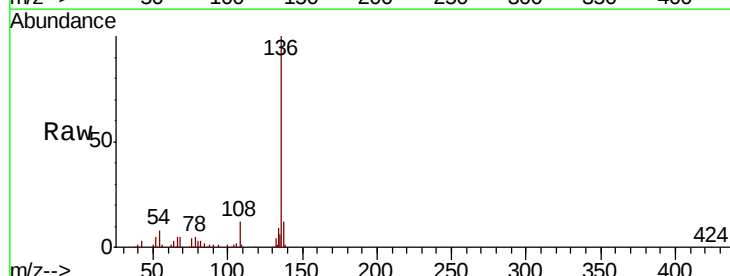
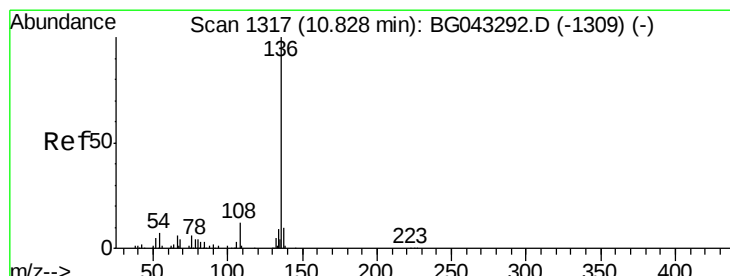
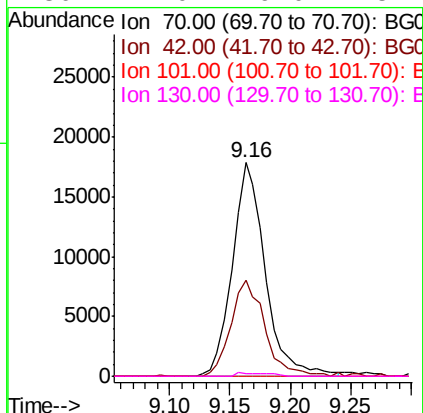




#19  
n-Nitroso-di-n-propylamine  
Concen: 21.821 ng  
RT: 9.16 min Scan# 1034  
Delta R.T. 0.35 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

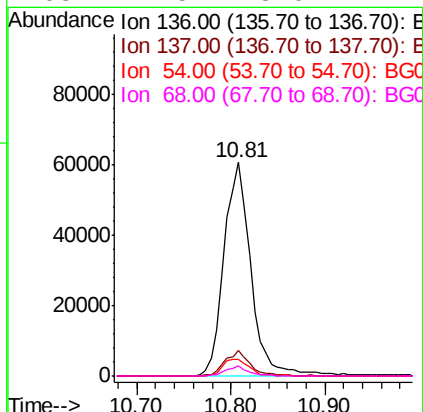
Instrument :  
BNA\_G  
ClientSampled :

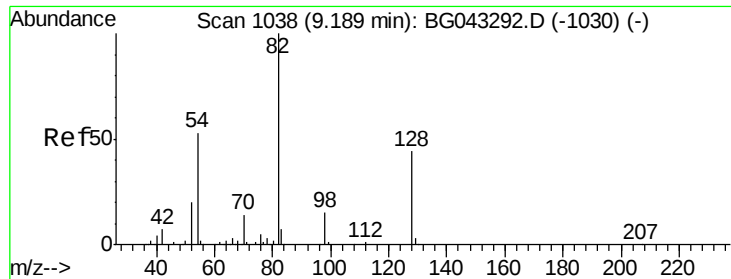
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 70      | 100   |       |       |
| 42      | 45.2  | 41.4  | 62.2  |
| 101     | 0.0   | 7.9   | 11.9# |
| 130     | 1.0   | 19.0  | 28.4# |



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.81 min Scan# 1314  
Delta R.T. -0.01 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 136     | 100   |       |       |
| 137     | 12.2  | 8.7   | 13.1  |
| 54      | 8.1   | 5.4   | 8.2   |
| 68      | 4.5   | 3.0   | 4.4#  |

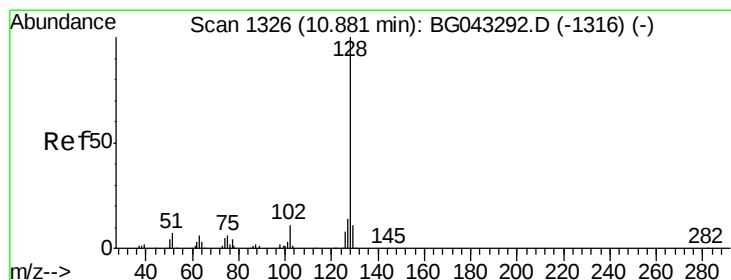
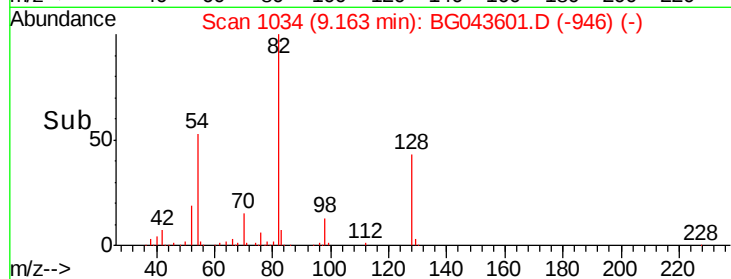
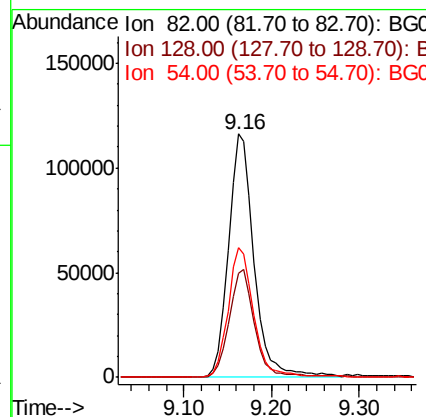
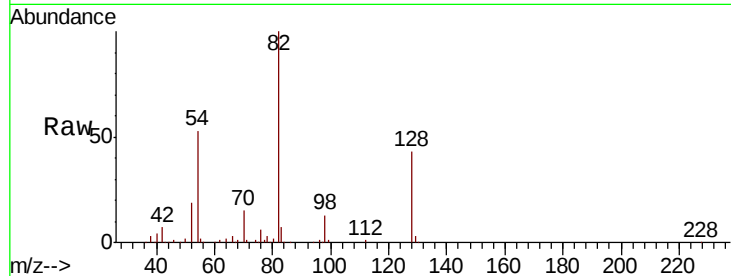




#23  
 Nitrobenzene-d5  
 Concen: 99.087 ng  
 RT: 9.16 min Scan# 1034  
 Delta R.T. -0.01 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

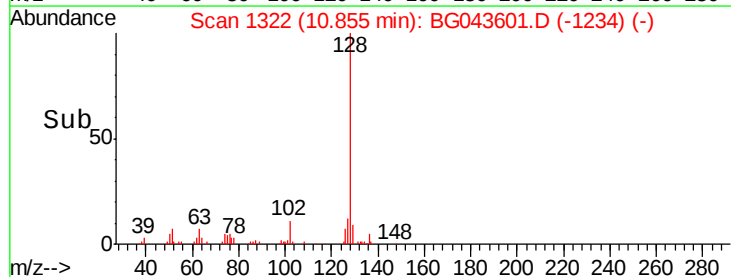
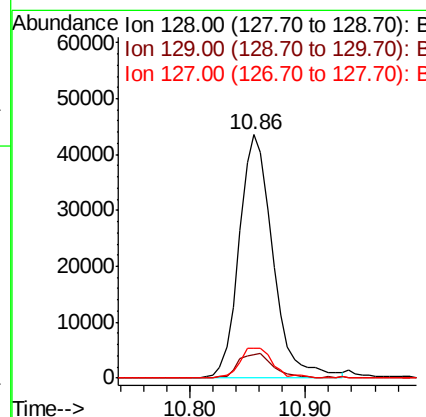
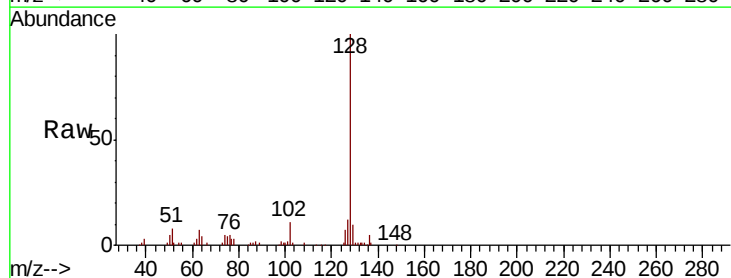
Instrument :  
 BNA\_G  
 ClientSampleId :

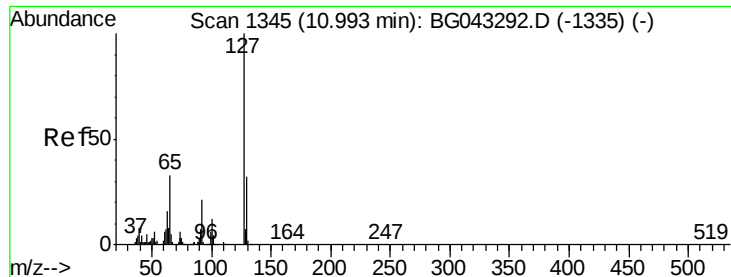
| Tot Ion   | 82    | Resp  | 232975 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 42.6  | 35.0  | 52.6   |
| 54        | 53.3  | 40.2  | 60.2   |



#31  
 Naphthalene  
 Concen: 14.354 ng  
 RT: 10.86 min Scan# 1322  
 Delta R.T. -0.01 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

| Tgt Ion   | 128   | Resp  | 88321 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 9.9   | 9.4   | 14.0  |
| 127       | 12.4  | 11.1  | 16.7  |

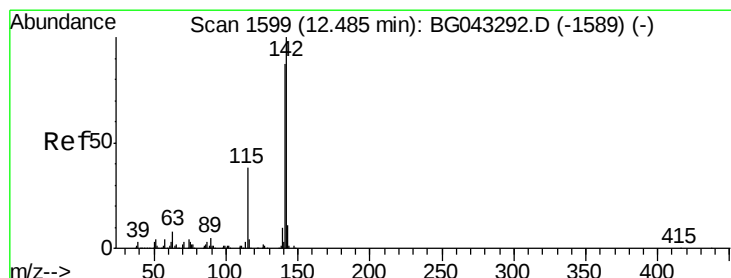
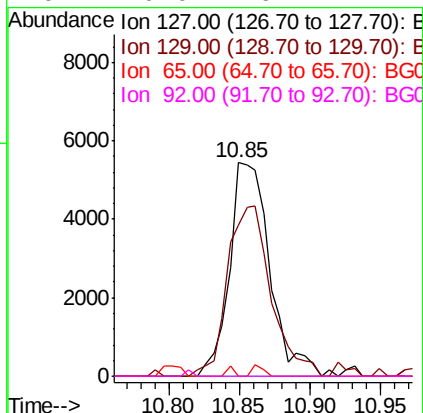
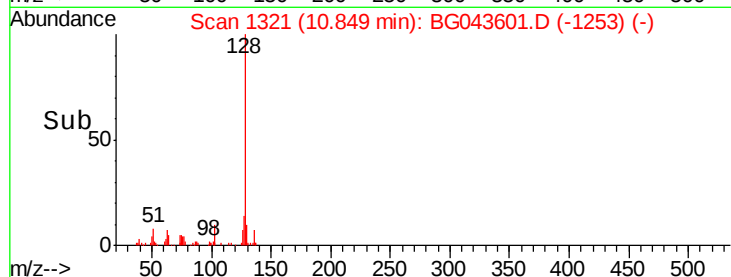
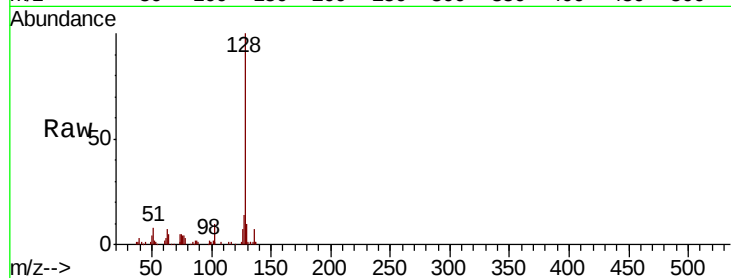




#33  
4-Chloroaniline  
Concen: 4.314 ng  
RT: 10.85 min Scan# 1321  
Delta R.T. -0.13 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

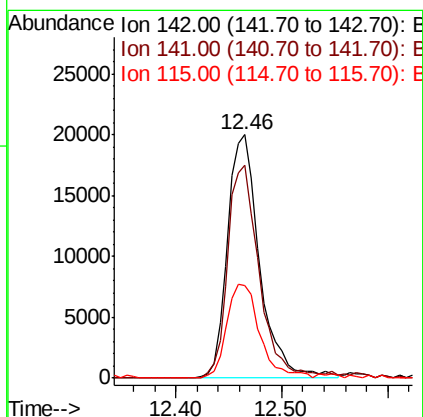
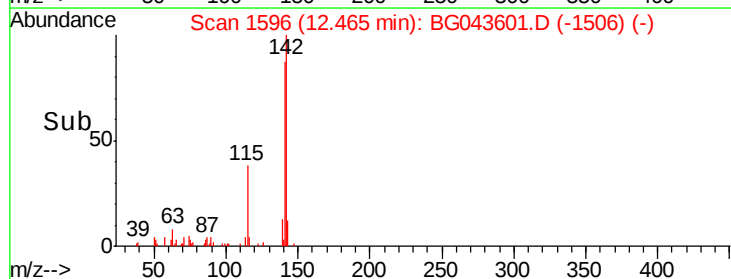
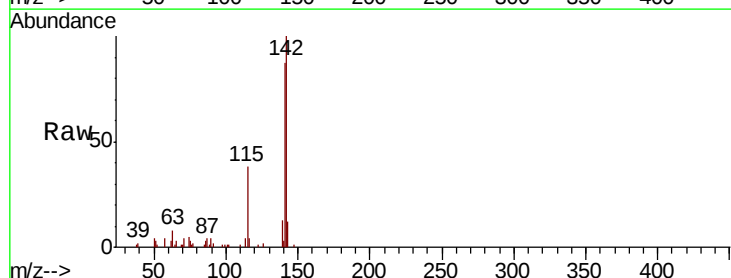
Instrument :  
BNA\_G  
ClientSampleId :

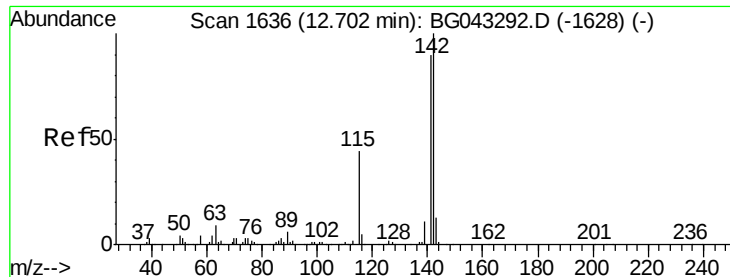
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 127   | Resp: | 10880 |
| Ion      | Ratio | Lower | Upper |
| 127      | 100   |       |       |
| 129      | 70.9  | 26.5  | 39.7# |
| 65       | 0.0   | 26.4  | 39.6# |
| 92       | 0.0   | 16.2  | 24.2# |



#37  
2-Methylnaphthalene  
Concen: 8.888 ng  
RT: 12.46 min Scan# 1596  
Delta R.T. -0.00 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 142   | Resp: | 41959 |
| Ion      | Ratio | Lower | Upper |
| 142      | 100   |       |       |
| 141      | 87.3  | 72.2  | 108.2 |
| 115      | 38.1  | 33.2  | 49.8  |

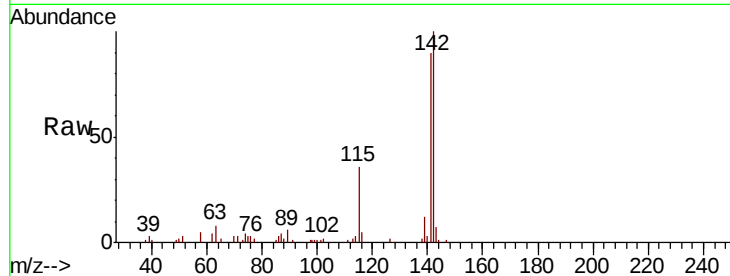




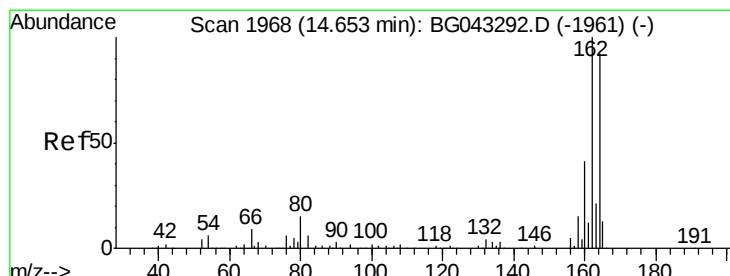
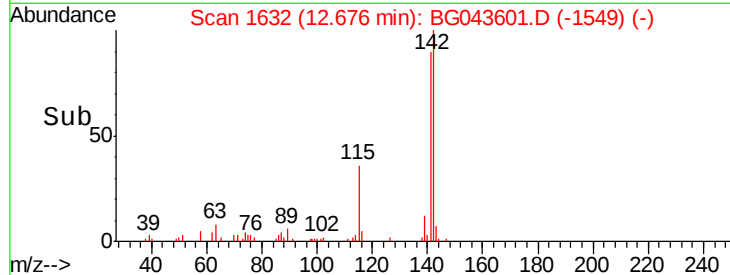
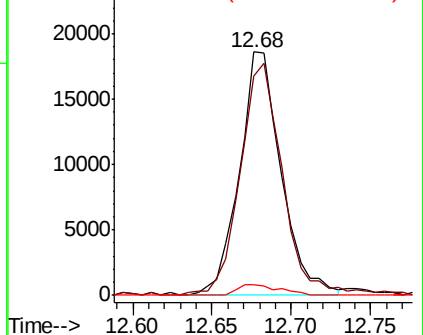
#38  
 1-Methylnaphthalene  
 Concen: 7.589 ng  
 RT: 12.68 min Scan# 1632  
 Delta R.T. -0.01 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

Instrument :  
 BNA\_G  
 ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 90.3  | 73.2  | 109.8 |
| 116     | 4.5   | 3.6   | 5.4   |

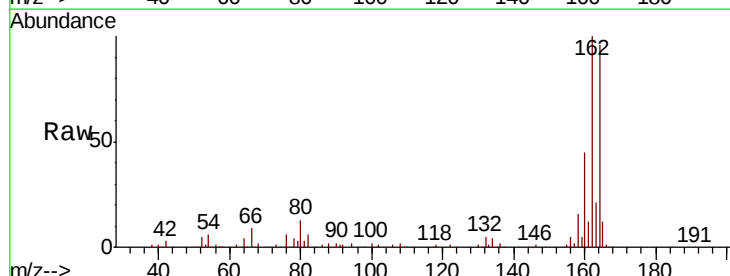


Abundance Ion 142.00 (141.70 to 142.70): E  
 Ion 141.00 (140.70 to 141.70): E  
 Ion 116.00 (115.70 to 116.70): E

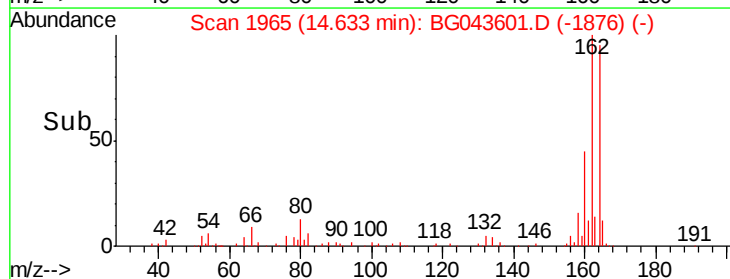
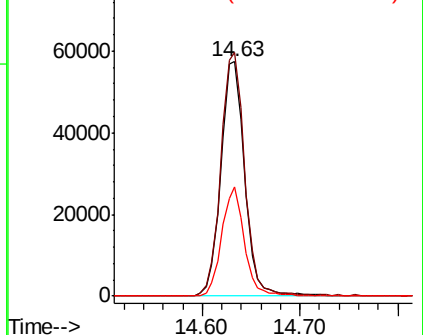


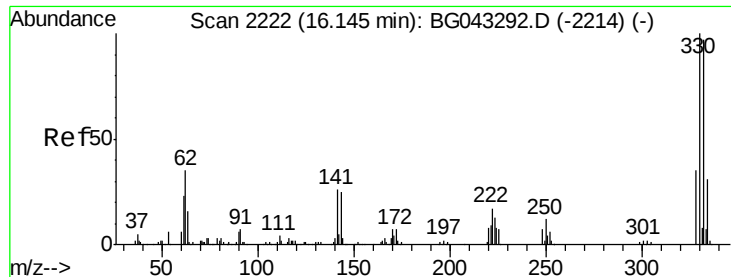
#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 14.63 min Scan# 1965  
 Delta R.T. -0.01 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 104.0 | 83.5  | 125.3 |
| 160     | 46.5  | 36.5  | 54.7  |



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

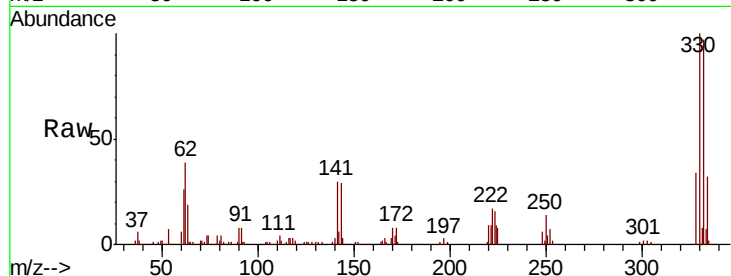




#42  
 2,4,6-Tribromophenol  
 Concen: 150.068 ng  
 RT: 16.13 min Scan# 2219  
 Delta R.T. -0.01 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

Instrument :  
 BNA\_G  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.0  | 77.4  | 116.0 |
| 141     | 28.8  | 22.8  | 34.2  |

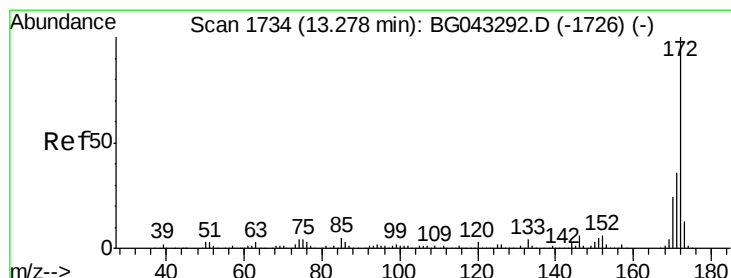
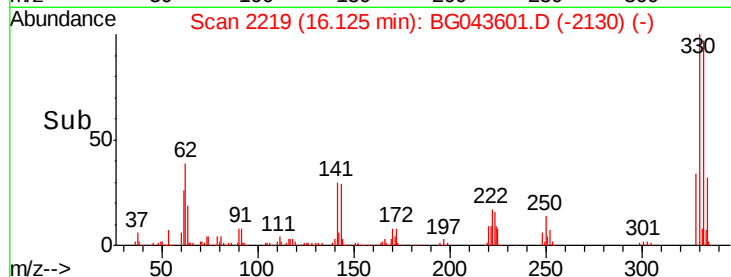
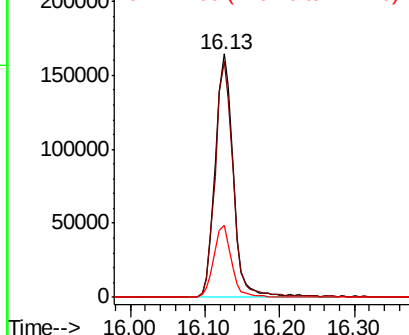


Abundance

Ion 329.80 (329.50 to 330.50): E

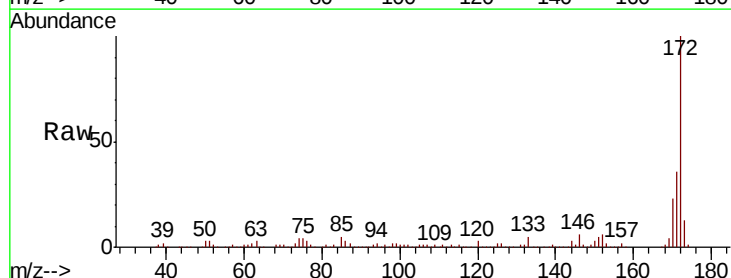
Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



#45  
 2-Fluorobiphenyl  
 Concen: 94.975 ng  
 RT: 13.25 min Scan# 1730  
 Delta R.T. -0.01 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 35.8  | 28.9  | 43.3  |
| 170     | 23.3  | 18.5  | 27.7  |

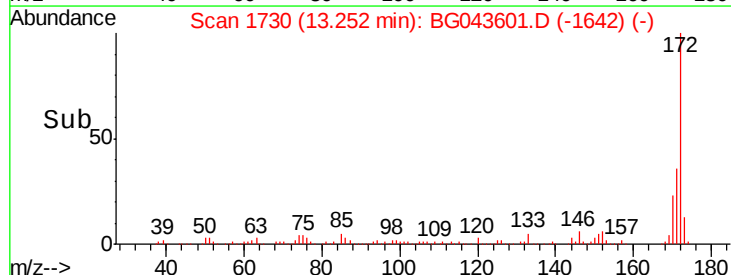
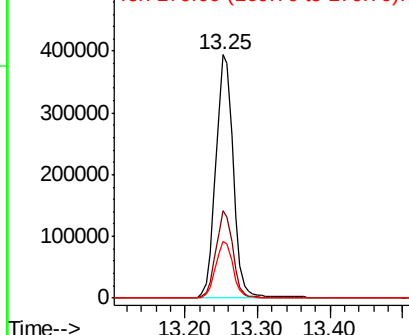


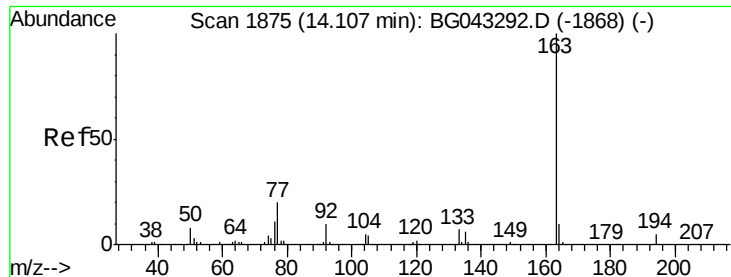
Abundance

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

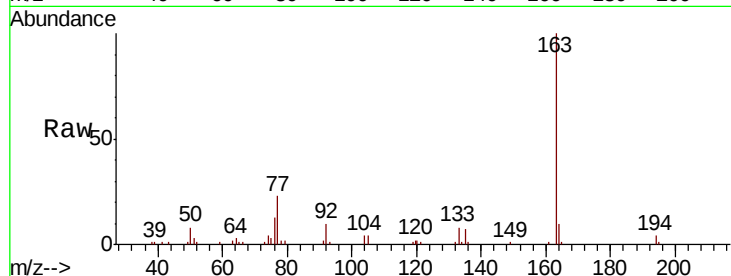




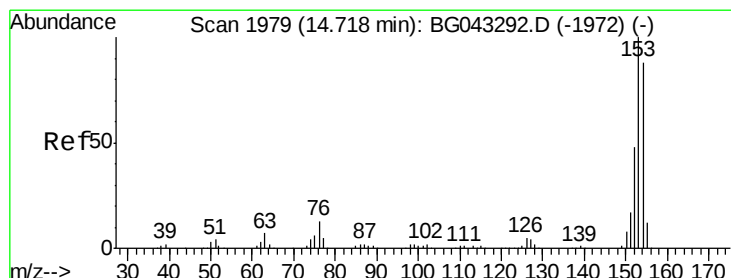
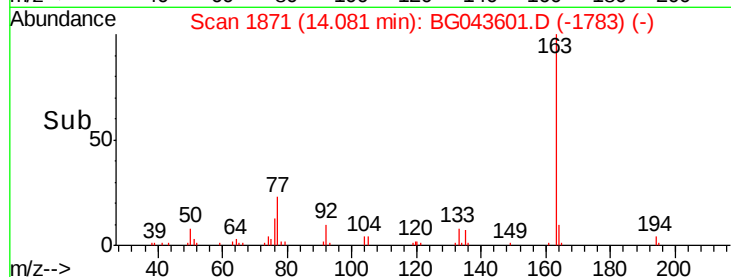
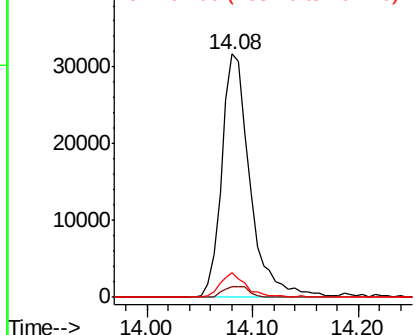
#50  
Dimethylphthalate  
Concen: 7.907 ng  
RT: 14.08 min Scan# 1871  
Delta R.T. -0.01 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

Instrument :  
BNA\_G  
ClientSampleId :

Tot Ion:163 Resp: 59243  
Ion Ratio Lower Upper  
163 100  
194 4.1 3.8 5.6  
164 9.9 8.9 13.3

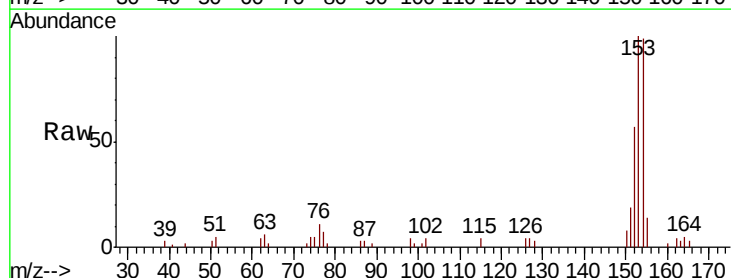


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

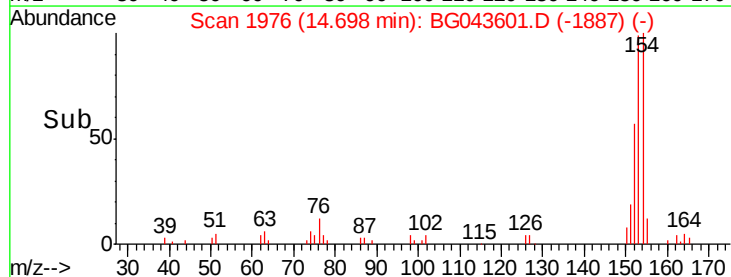
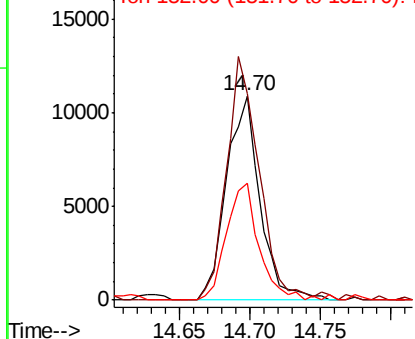


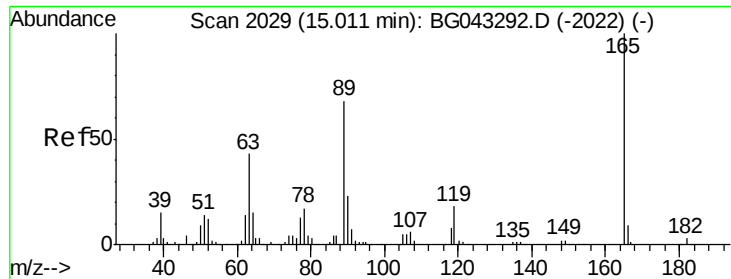
#52  
Acenaphthene  
Concen: 3.391 ng  
RT: 14.70 min Scan# 1976  
Delta R.T. -0.01 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

Tgt Ion:154 Resp: 18022  
Ion Ratio Lower Upper  
154 100  
153 100.9 88.2 132.2  
152 57.3 40.0 60.0



Abundance Ion 154.00 (153.70 to 154.70): E  
Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E

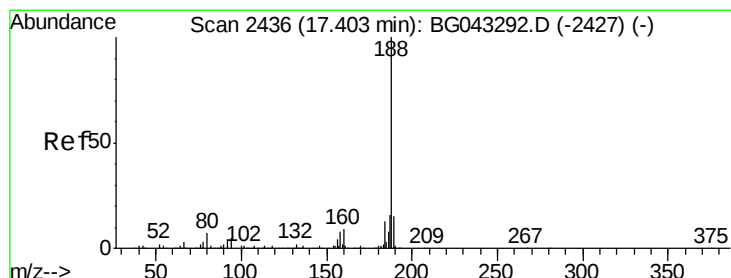
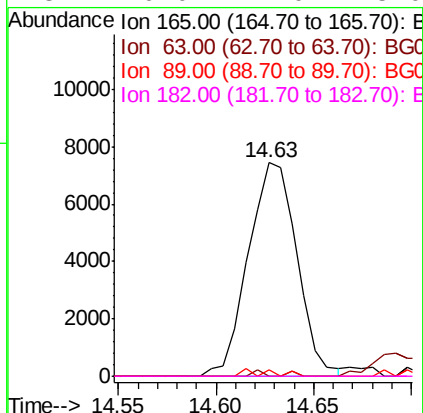
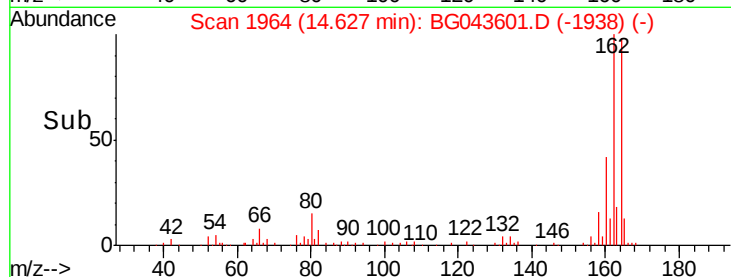
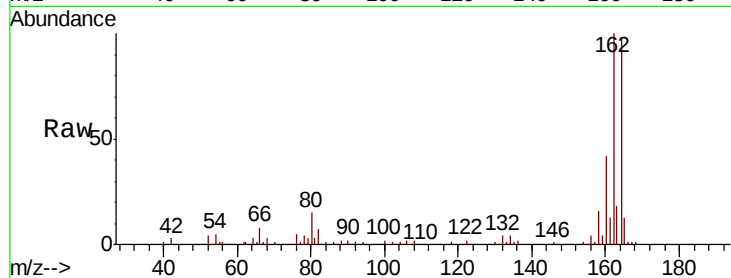




#57  
 2,4-Dinitrotoluene  
 Concen: 5.510 ng  
 RT: 14.63 min Scan# 1964  
 Delta R.T. -0.38 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

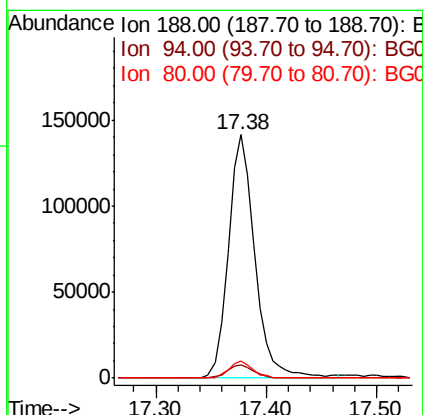
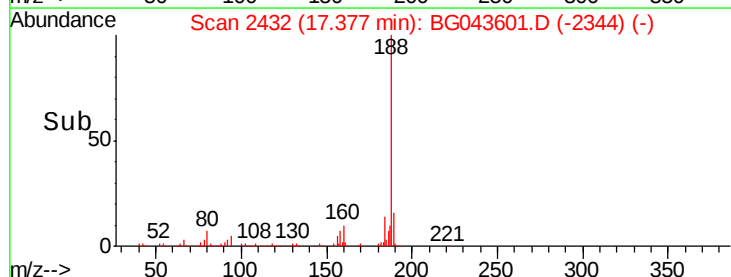
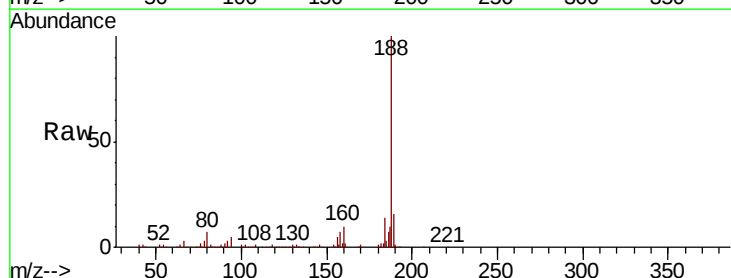
Instrument :  
 BNA\_G  
 ClientSampled :

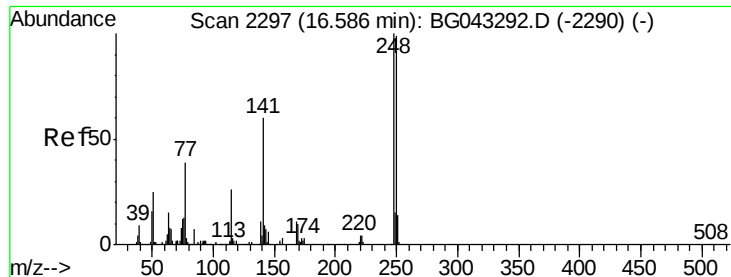
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 165   | Resp: | 12817 |
| Ion      | Ratio | Lower | Upper |
| 165      | 100   |       |       |
| 63       | 0.0   | 33.2  | 49.8# |
| 89       | 2.8   | 52.2  | 78.4# |
| 182      | 0.0   | 2.0   | 3.0#  |



#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 17.38 min Scan# 2432  
 Delta R.T. -0.01 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 188   | Resp: | 238258 |
| Ion      | Ratio | Lower | Upper  |
| 188      | 100   |       |        |
| 94       | 5.4   | 4.2   | 6.4    |
| 80       | 7.2   | 4.5   | 6.7#   |

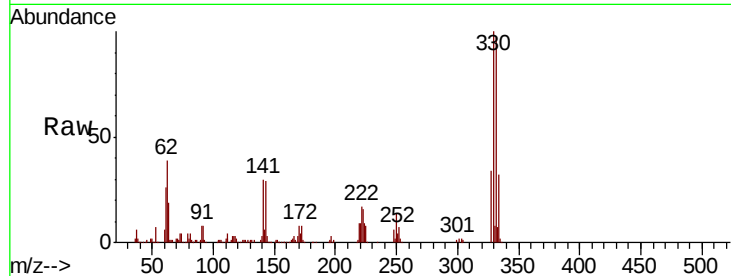




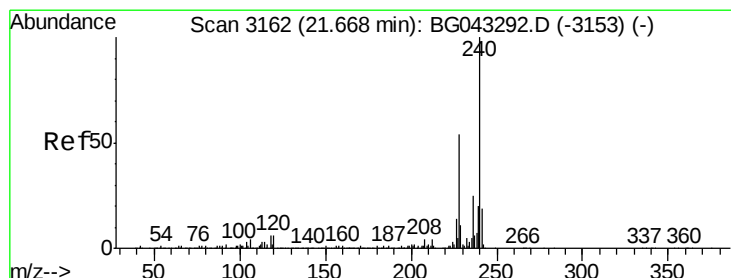
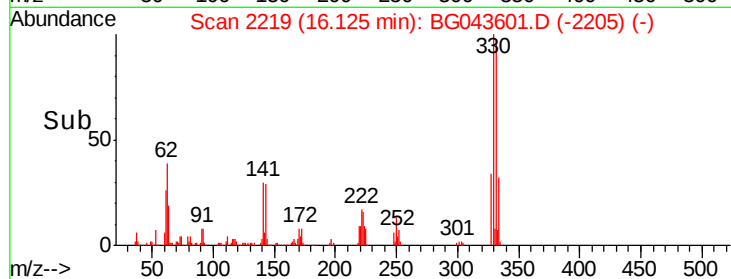
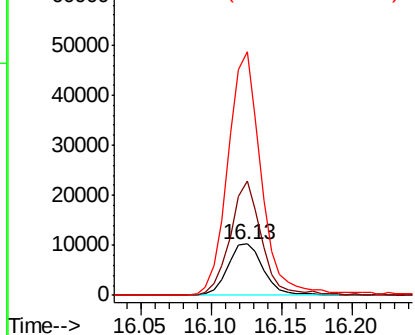
#67  
 4-Bromophenyl-phenylether  
 Concen: 5.597 ng  
 RT: 16.13 min Scan# 2219  
 Delta R.T. -0.45 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

Instrument :  
 BNA\_G  
 ClientSampleId :

Tot Ion:248 Resp: 17946  
 Ion Ratio Lower Upper  
 248 100  
 250 224.4 77.0 115.4#  
 141 476.7 47.5 71.3#

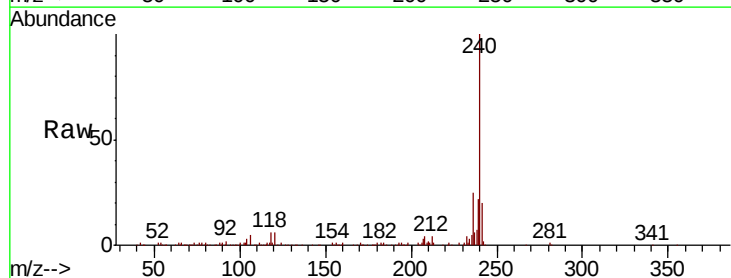


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

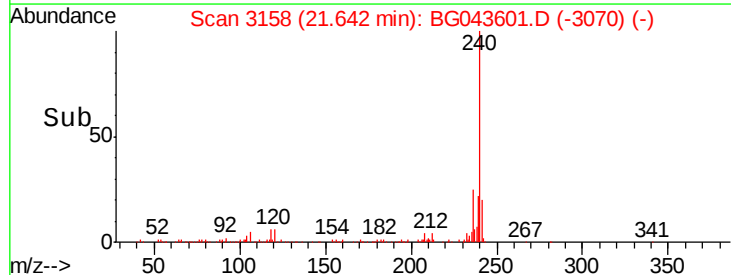
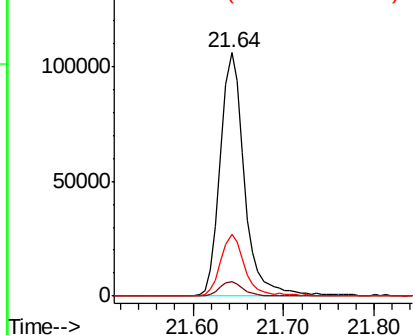


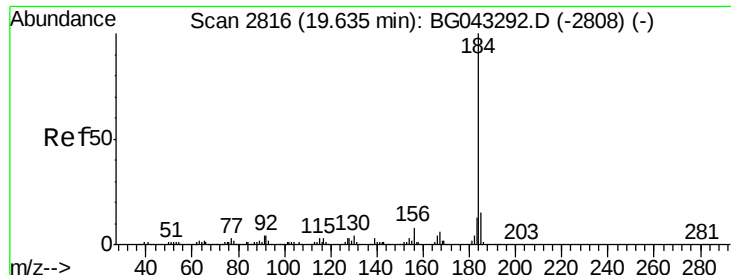
#76  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 21.64 min Scan# 3158  
 Delta R.T. -0.01 min  
 Lab File: BG043601.D  
 Acq: 12 Nov 2019 2:26

Tgt Ion:240 Resp: 196696  
 Ion Ratio Lower Upper  
 240 100  
 120 5.9 4.6 6.8  
 236 25.5 19.8 29.8



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: 4.945 ng

RT: 19.99 min Scan# 2876

Delta R.T. 0.36 min

Lab File: BG043601.D

Acq: 12 Nov 2019 2:26

Instrument :

BNA\_G

ClientSampleId :

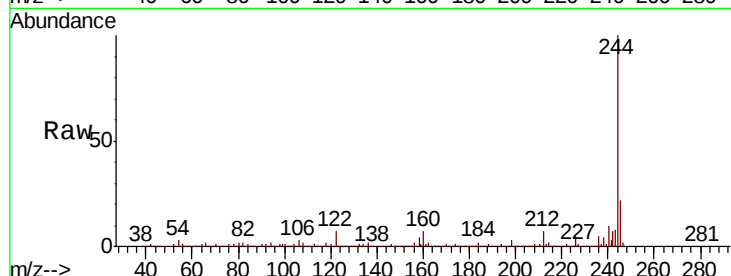
Tot Ion:184 Resp: 19574

Ion Ratio Lower Upper

184 100

185 15.0 11.0 16.4

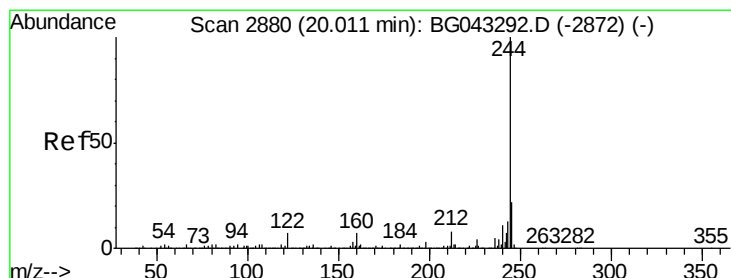
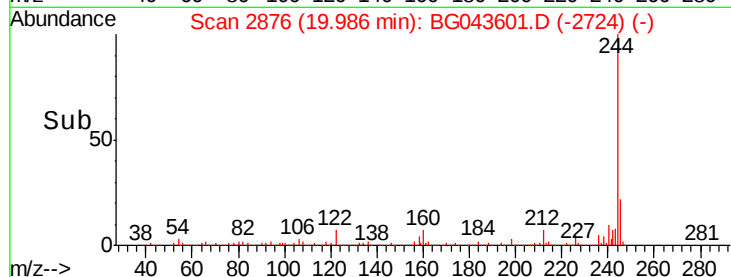
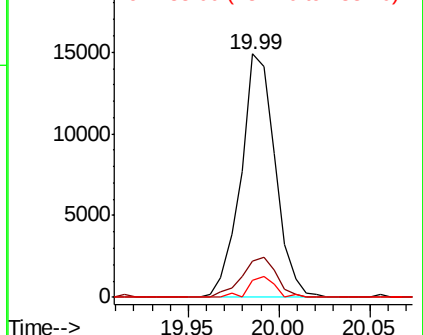
183 7.2 10.0 15.0#



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: 123.664 ng

RT: 19.99 min Scan# 2877

Delta R.T. -0.01 min

Lab File: BG043601.D

Acq: 12 Nov 2019 2:26

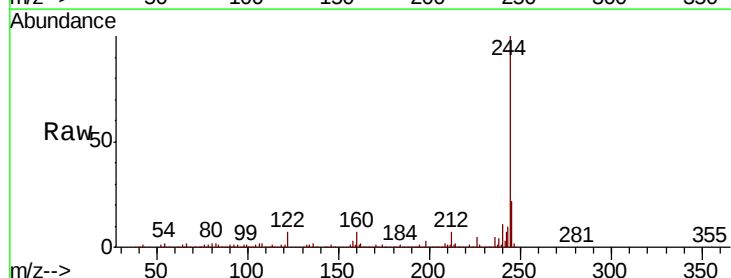
Tgt Ion:244 Resp: 1296559

Ion Ratio Lower Upper

244 100

212 7.5 5.8 8.6

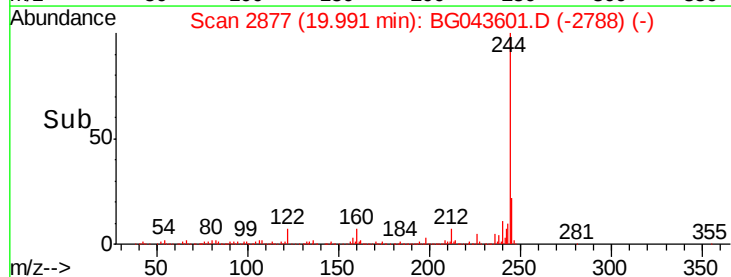
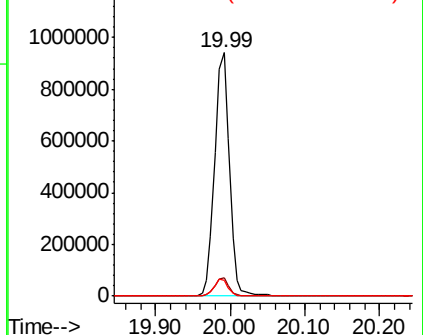
122 6.6 5.4 8.2

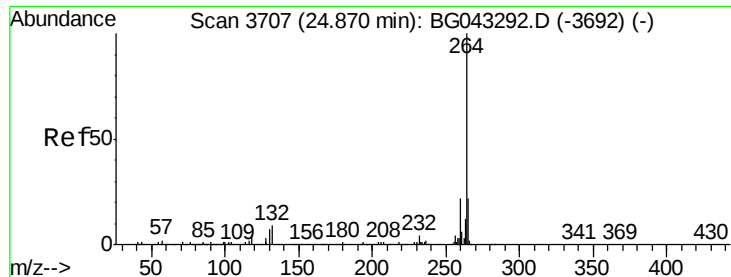


Abundance Ion 244.00 (243.70 to 244.70): E

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: 24.83 min Scan# 3700  
Delta R.T. -0.03 min  
Lab File: BG043601.D  
Acq: 12 Nov 2019 2:26

Instrument :  
BNA\_G  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 22.2  | 17.5  | 26.3  |
| 265     | 21.7  | 17.4  | 26.0  |

