

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG073018\  
 Data File : BG035989.D  
 Acq On : 31 Jul 2018 00:45  
 Operator : JU/SJ  
 Sample : J4187-01  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: Jul 31 05:23:03 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG071218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 25 11:04:14 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.02  | 152  | 30322    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.82 | 136  | 123036   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 14.64 | 164  | 95332    | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 17.39 | 188  | 257163   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 21.65 | 240  | 266637   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 24.85 | 264  | 260416   | 20.00 | ng    | -0.01    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.60  | 112  | 129847   | 71.10  | ng    | 0.00     |
| 7) Phenol-d6                | 7.19  | 99   | 121384   | 44.55  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.19  | 82   | 281100   | 95.44  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 16.13 | 330  | 217624   | 173.19 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 13.27 | 172  | 694695   | 97.63  | ng    | 0.00     |
| 78) Terphenyl-d14           | 20.00 | 244  | 1284834  | 106.22 | ng    | 0.00     |

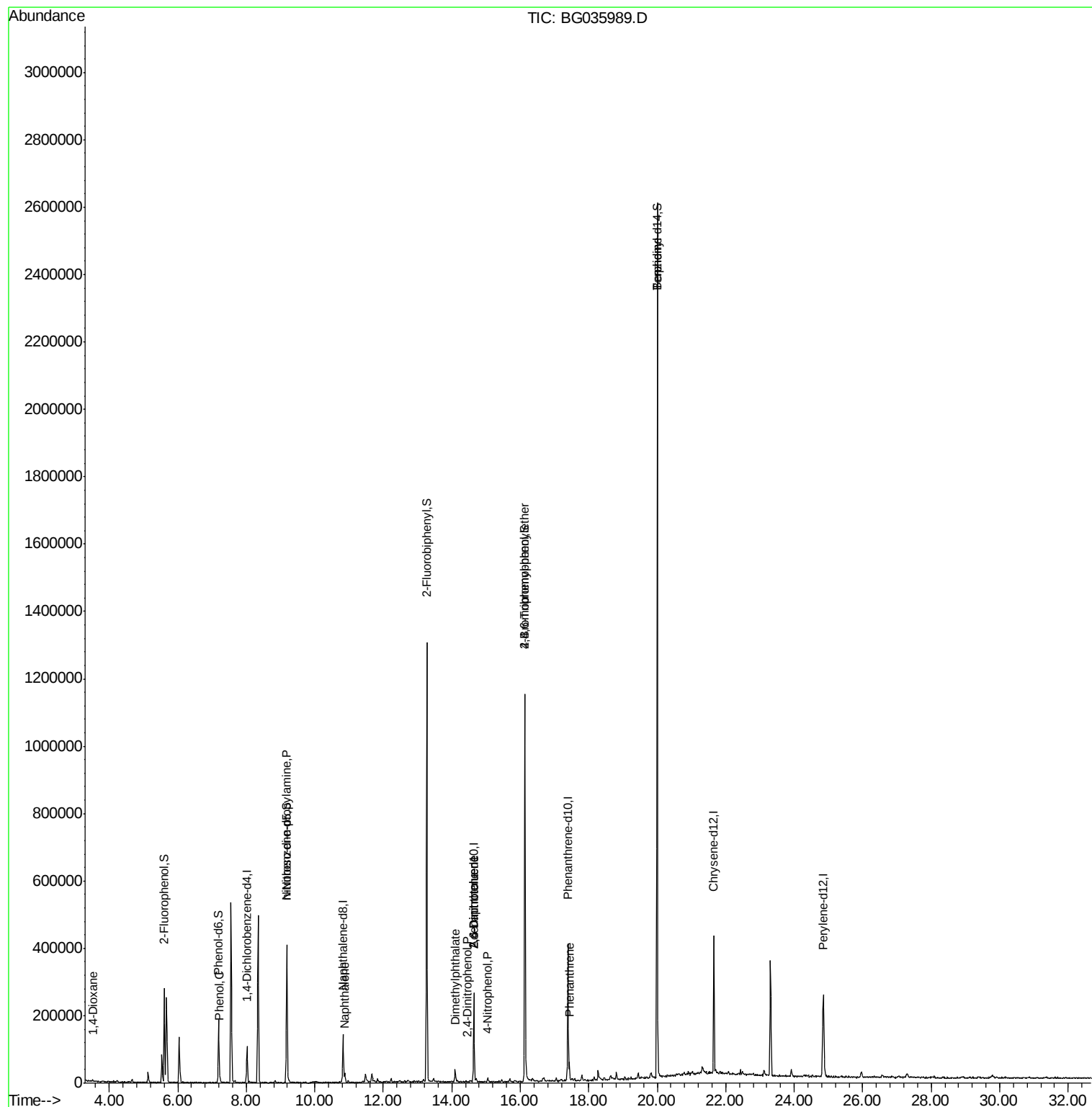
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 2) 1,4-Dioxane                 | 3.52  | 88   | 4156     | 4.471  | ng    | # 60   |
| 10) Phenol                     | 7.22  | 94   | 9719     | 3.530  | ng    | # 78   |
| 19) n-Nitroso-di-n-propylamine | 9.19  | 70   | 37351    | 16.278 | ng    | # 69   |
| 31) Naphthalene                | 10.88 | 128  | 22262    | 3.474  | ng    | # 94   |
| 49) Dimethylphthalate          | 14.10 | 163  | 26054    | 3.119  | ng    | # 97   |
| 50) 2,6-Dinitrotoluene         | 14.64 | 165  | 13200    | 7.761  | ng    | # 18   |
| 53) 2,4-Dinitrophenol          | 14.45 | 184  | 57       | 6.642  | ng    | # 1    |
| 55) 4-Nitrophenol              | 15.05 | 139  | 2886     | 2.331  | ng    | # 1    |
| 56) 2,4-Dinitrotoluene         | 14.64 | 165  | 13200    | 5.410  | ng    | # 16   |
| 66) 4-Bromophenyl-phenylether  | 16.13 | 248  | 18184    | 6.095  | ng    | # 1    |
| 70) Phenanthrene               | 17.43 | 178  | 34407    | 2.681  | ng    | # 92   |
| 76) Benzidine                  | 20.00 | 184  | 24623    | 3.513  | ng    | # 90   |

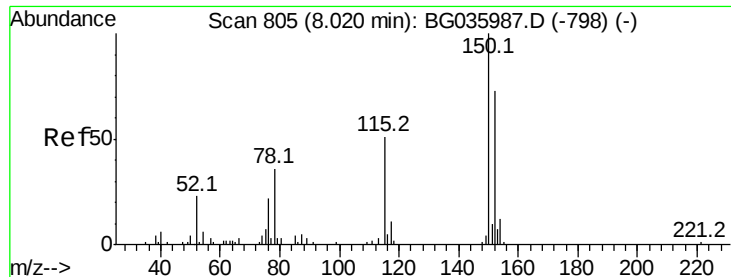
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ALS Vial : 21 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :

Quant Time: Jul 31 05:23:03 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG071218.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Jul 25 11:04:14 2018  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.000 ng

RT: 8.02 min Scan# 806

Delta R.T. -0.00 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

Instrument :

BNA\_G

ClientSampleId :

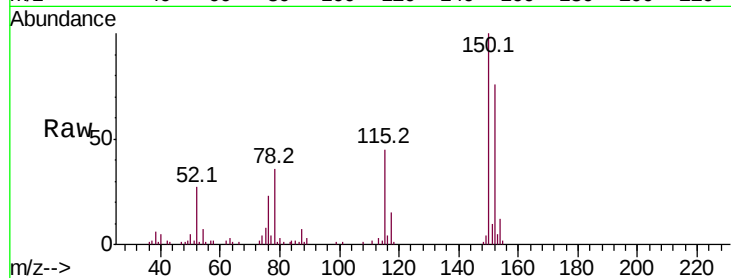
Tot Ion:152 Resp: 30322

Ion Ratio Lower Upper

152 100

150 132.3 126.6 189.8

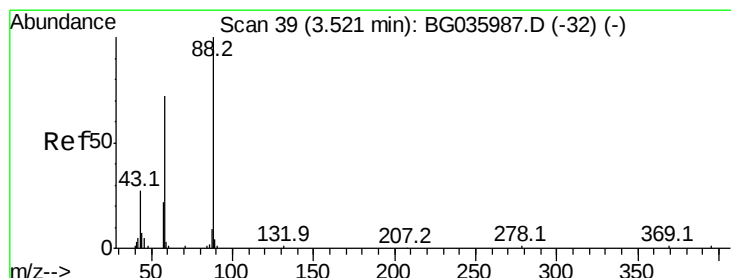
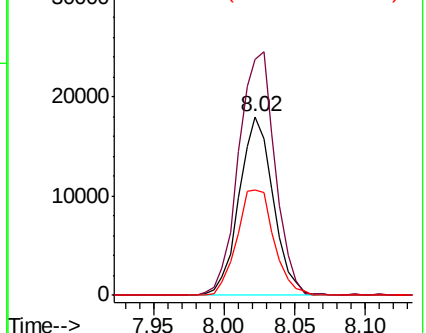
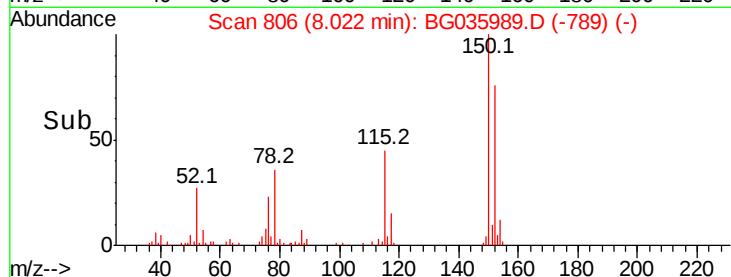
115 59.2 53.0 79.4



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



#2

1,4-Dioxane

Concen: 4.471 ng

RT: 3.52 min Scan# 40

Delta R.T. -0.00 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

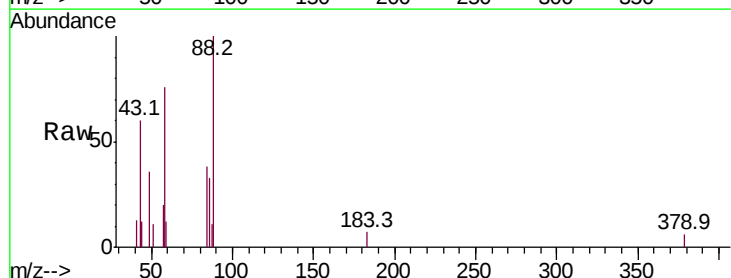
Tgt Ion: 88 Resp: 4156

Ion Ratio Lower Upper

88 100

58 54.8 79.6 119.4#

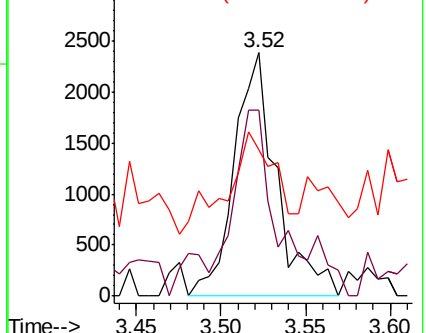
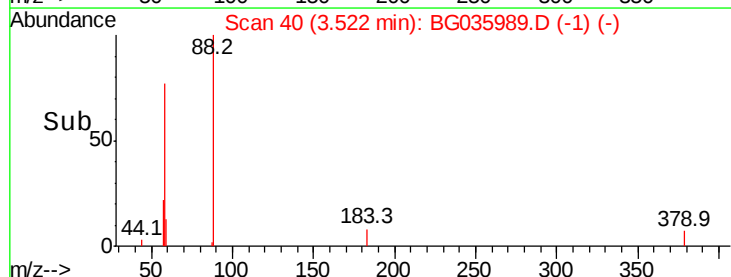
43 48.6 27.4 41.0#

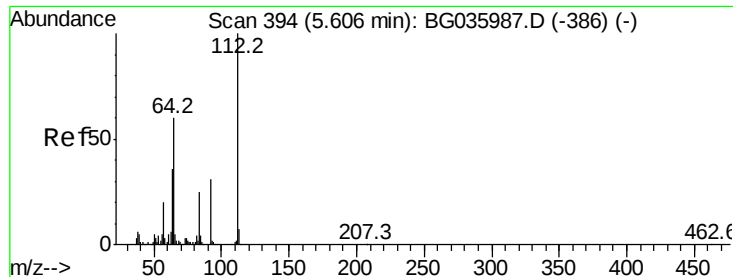


Abundance Ion 88.00 (87.70 to 88.70): BGC

Ion 58.00 (57.70 to 58.70): BGC

Ion 43.00 (42.70 to 43.70): BGC





#5

2-Fluorophenol

Concen: 71.096 ng

RT: 5.60 min Scan# 394

Delta R.T. -0.00 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

Instrument :

BNA\_G

ClientSampleId :

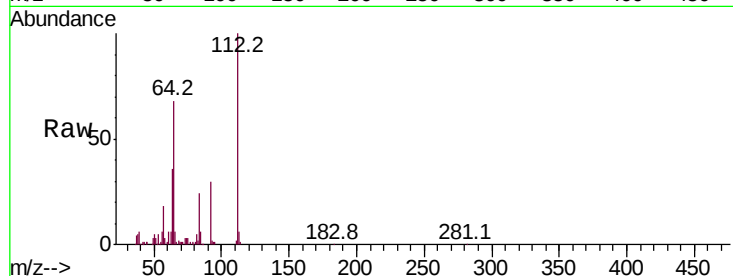
Tot Ion:112 Resp: 129847

Ion Ratio Lower Upper

112 100

64 67.8 56.3 84.5

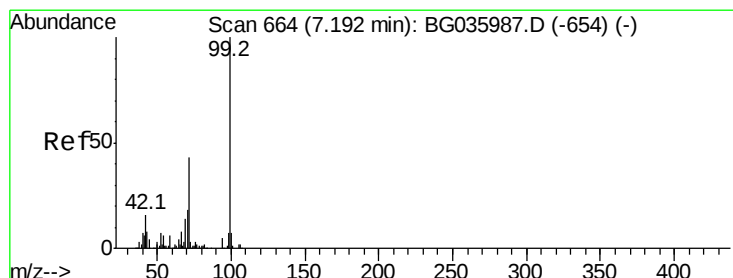
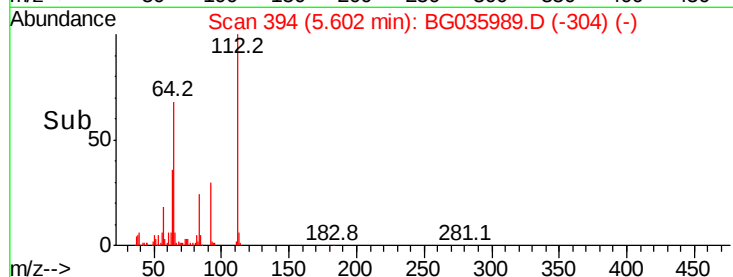
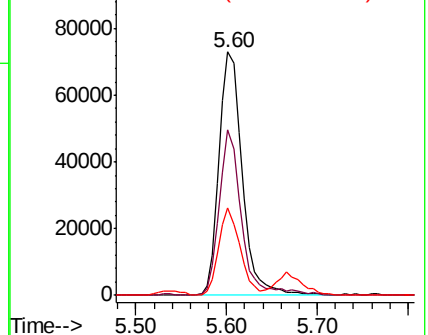
63 36.0 30.1 45.1



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: 44.546 ng

RT: 7.19 min Scan# 664

Delta R.T. -0.01 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

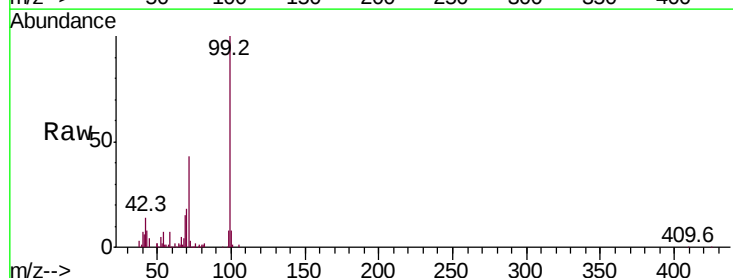
Tgt Ion: 99 Resp: 121384

Ion Ratio Lower Upper

99 100

42 14.5 14.1 21.1

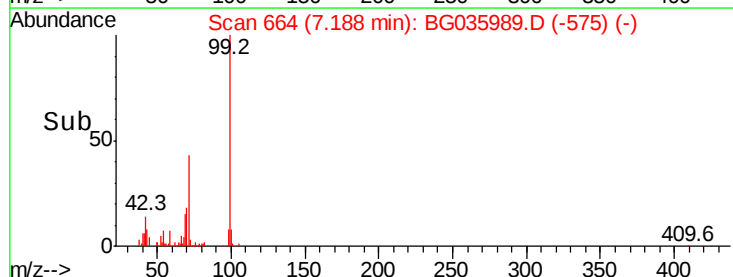
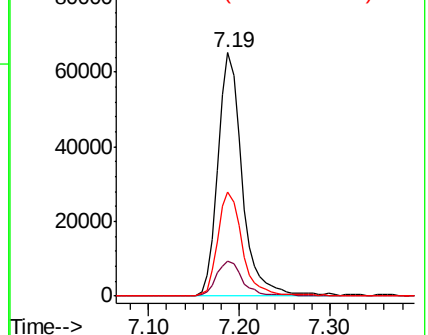
71 42.6 26.1 39.1#

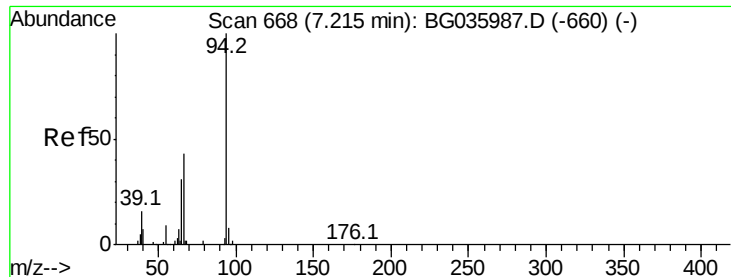


Abundance Ion 99.00 (98.70 to 99.70): BGC

Ion 42.00 (41.70 to 42.70): BGC

Ion 71.00 (70.70 to 71.70): BGC





#10

Phenol

Concen: 3.530 ng

RT: 7.22 min Scan# 669

Delta R.T. -0.00 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

Instrument :

BNA\_G

ClientSampleId :

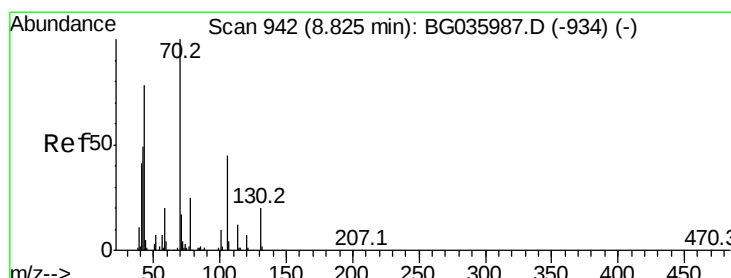
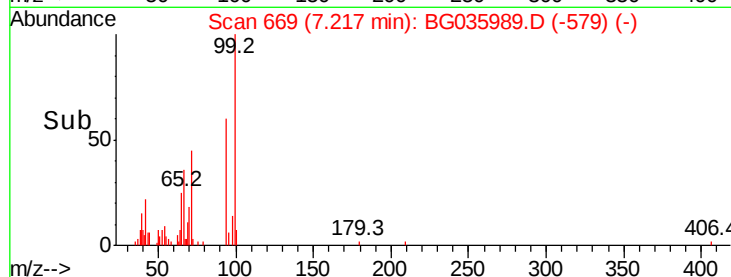
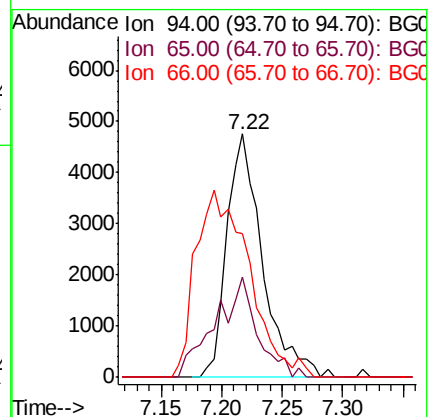
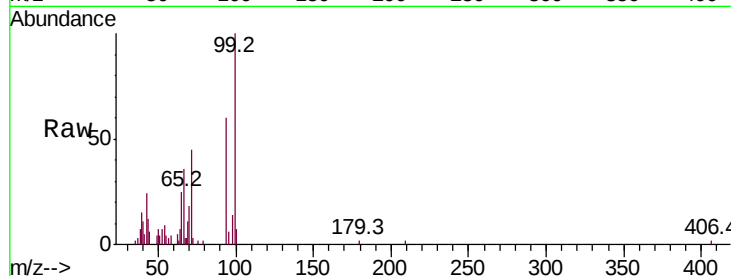
Tot Ion: 94 Resp: 9719

Ion Ratio Lower Upper

94 100

65 41.1 11.9 51.9

66 59.0 22.2 62.2



#19

n-Nitroso-di-n-propylamine

Concen: 16.278 ng

RT: 9.19 min Scan# 1004

Delta R.T. 0.36 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

Tgt Ion: 70 Resp: 37351

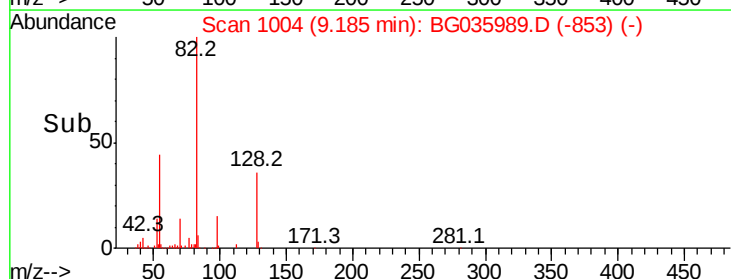
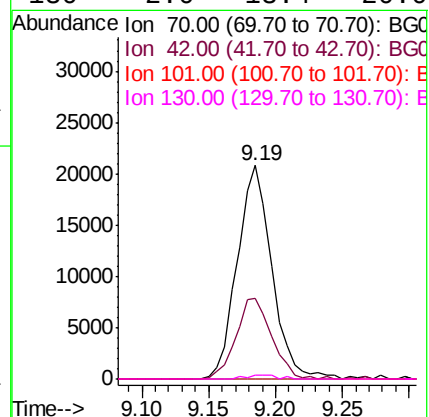
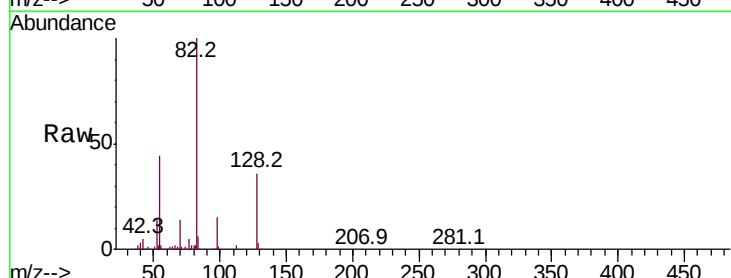
Ion Ratio Lower Upper

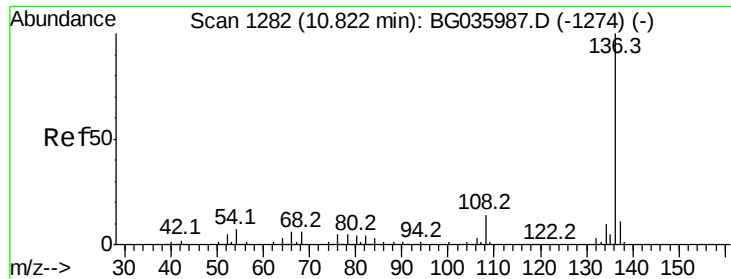
70 100

42 37.8 49.1 73.7#

101 0.0 8.5 12.7#

130 2.0 13.4 20.0#

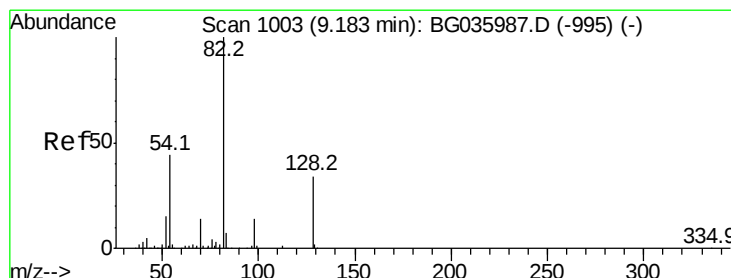
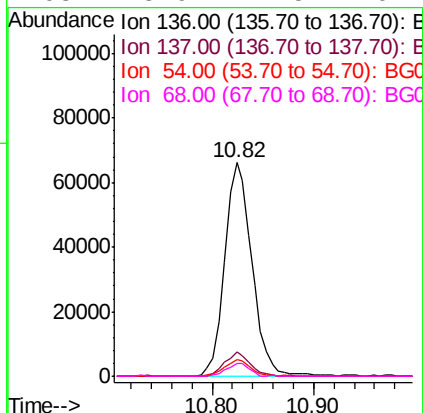
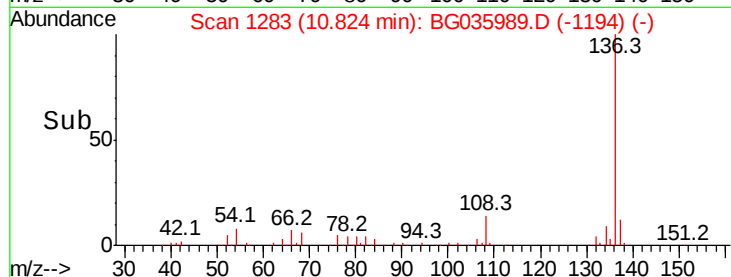
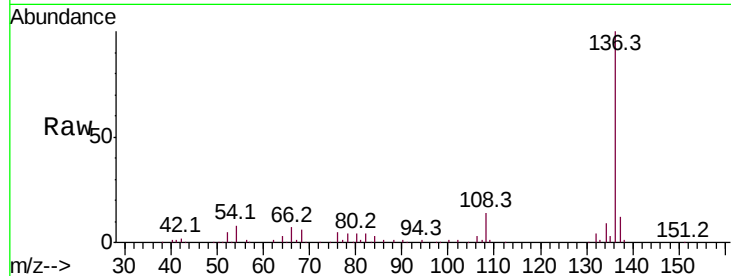




#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.82 min Scan# 1283  
Delta R.T. -0.01 min  
Lab File: BG035989.D  
Acq: 31 Jul 2018 00:45

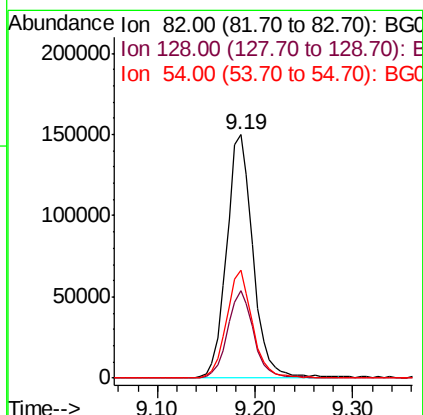
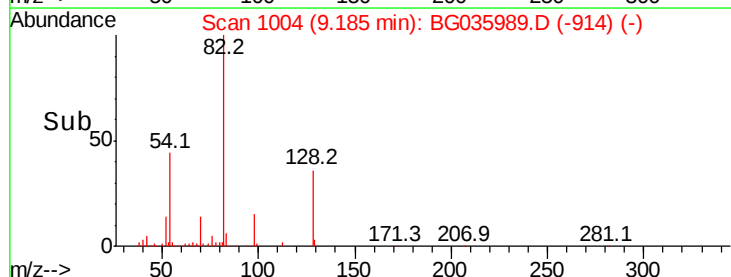
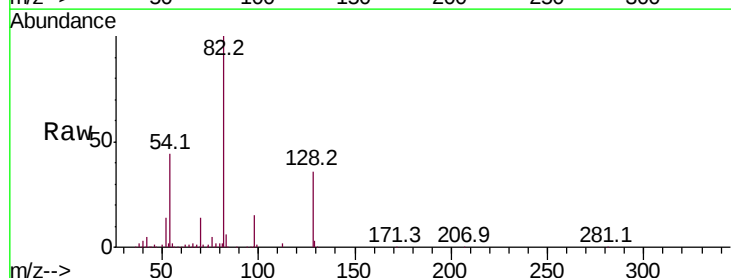
Instrument :  
BNA\_G  
ClientSampleId :

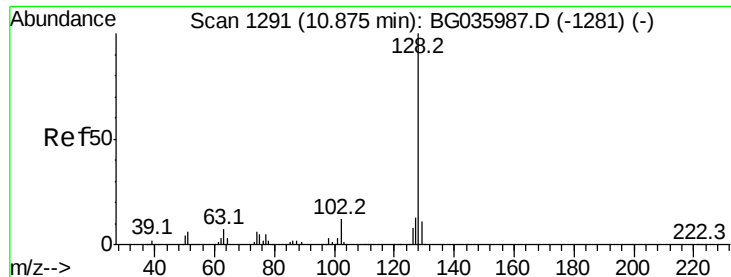
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 136   | Resp: | 123036 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 11.5  | 9.2   | 13.8   |
| 54       | 7.7   | 10.3  | 15.5#  |
| 68       | 5.9   | 4.5   | 6.7    |



#23  
Nitrobenzene-d5  
Concen: 95.443 ng  
RT: 9.19 min Scan# 1004  
Delta R.T. -0.00 min  
Lab File: BG035989.D  
Acq: 31 Jul 2018 00:45

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 281100 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 35.7  | 29.7  | 44.5   |
| 54       | 44.4  | 43.1  | 64.7   |

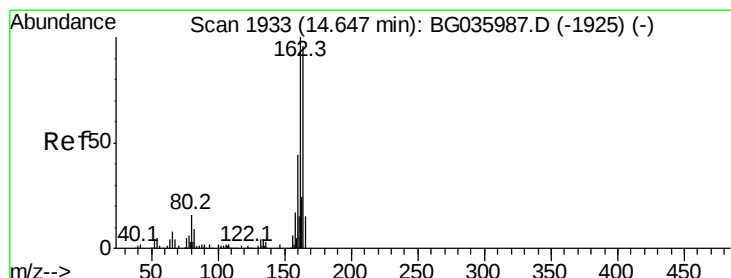
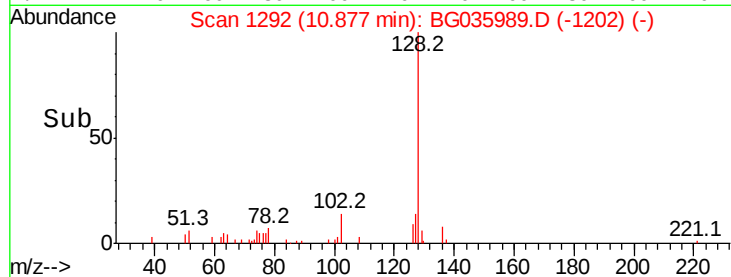
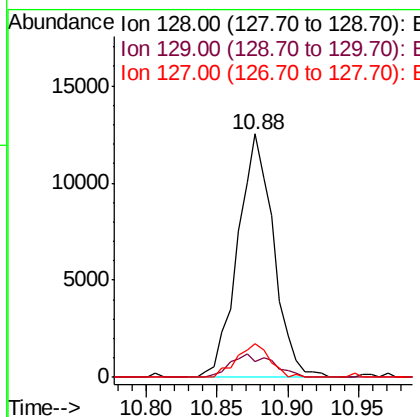
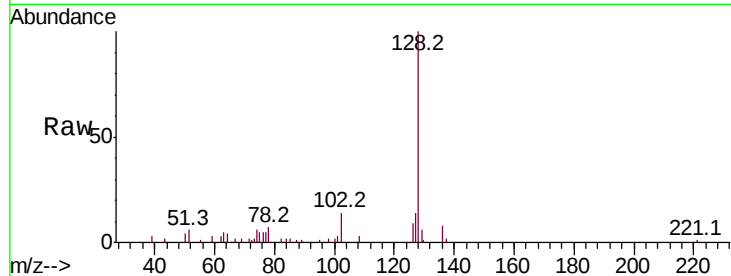




#31  
Naphthalene  
Concen: 3.474 ng  
RT: 10.88 min Scan# 1292  
Delta R.T. -0.00 min  
Lab File: BG035989.D  
Acq: 31 Jul 2018 00:45

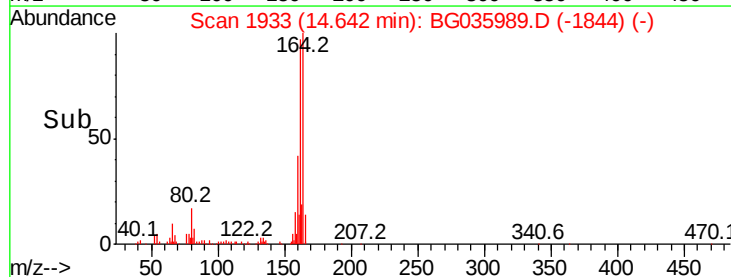
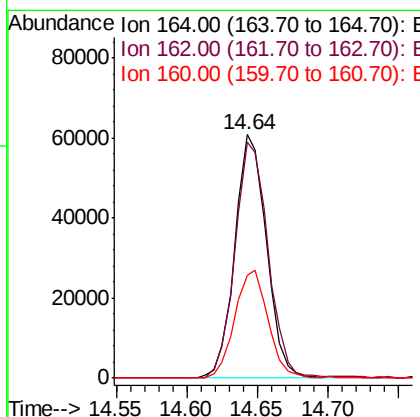
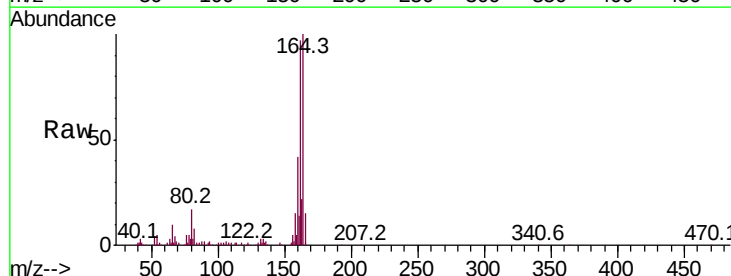
Instrument :  
BNA\_G  
ClientSampleId :

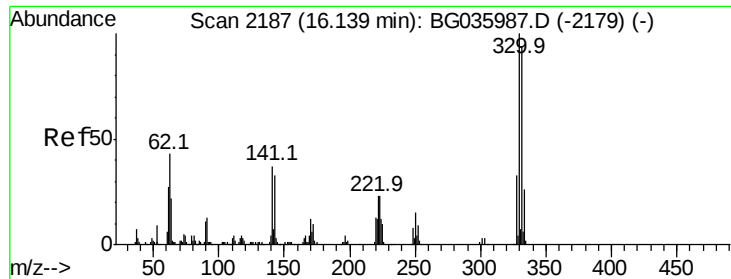
Tot Ion:128 Resp: 22262  
Ion Ratio Lower Upper  
128 100  
129 6.4 8.6 12.8#  
127 13.7 11.6 17.4



#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.64 min Scan# 1933  
Delta R.T. -0.01 min  
Lab File: BG035989.D  
Acq: 31 Jul 2018 00:45

Tgt Ion:164 Resp: 95332  
Ion Ratio Lower Upper  
164 100  
162 96.7 78.8 118.2  
160 42.2 35.4 53.0

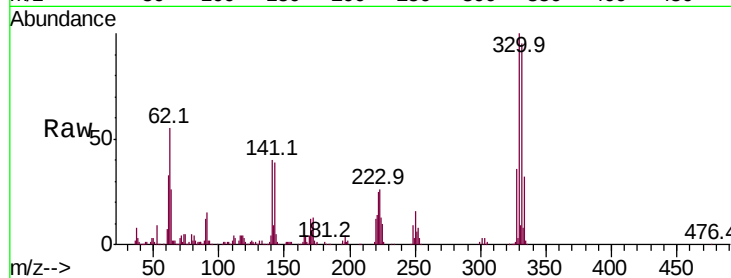




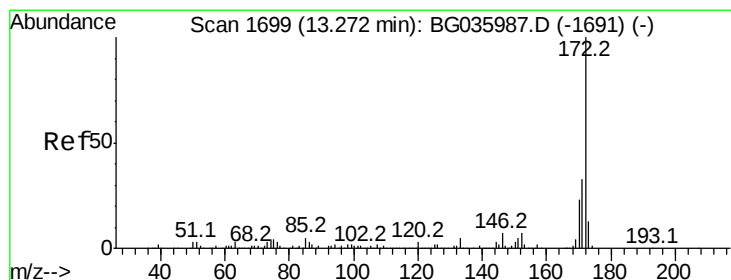
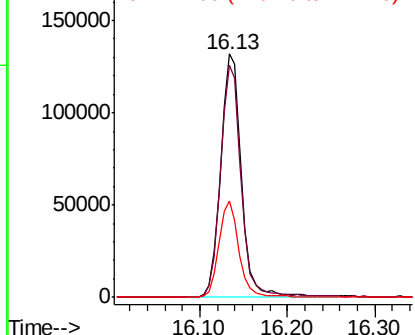
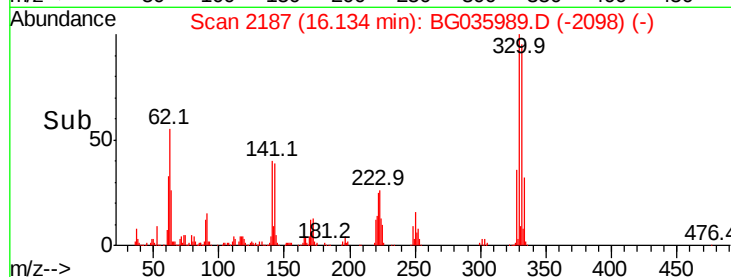
#41  
 2,4,6-Tribromophenol  
 Concen: 173.193 ng  
 RT: 16.13 min Scan# 2187  
 Delta R.T. -0.01 min  
 Lab File: BG035989.D  
 Acq: 31 Jul 2018 00:45

Instrument :  
 BNA\_G  
 ClientSampleId :

Tot Ion:330 Resp: 217624  
 Ion Ratio Lower Upper  
 330 100  
 332 94.5 77.0 115.6  
 141 38.4 25.2 37.8#

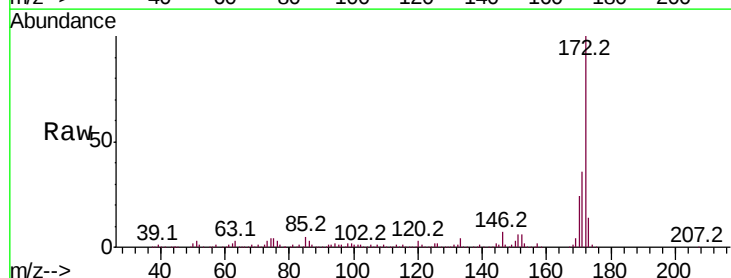


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

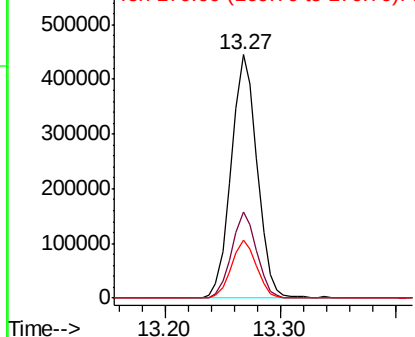
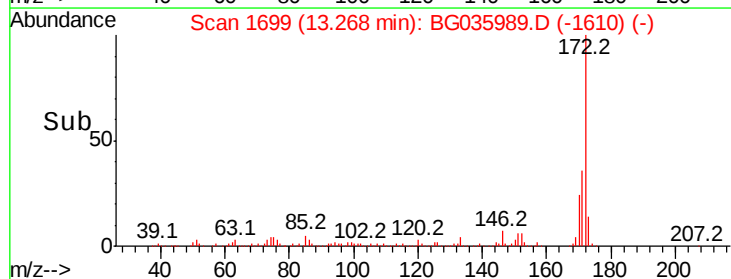


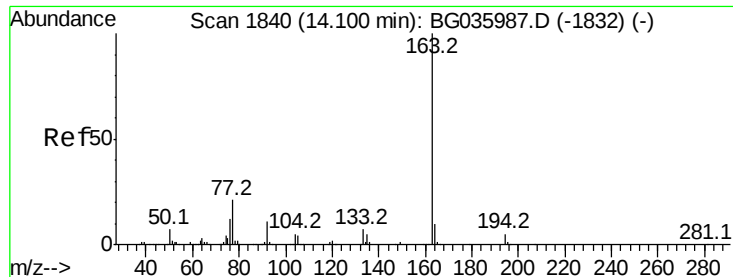
#44  
 2-Fluorobiphenyl  
 Concen: 97.628 ng  
 RT: 13.27 min Scan# 1699  
 Delta R.T. -0.01 min  
 Lab File: BG035989.D  
 Acq: 31 Jul 2018 00:45

Tgt Ion:172 Resp: 694695  
 Ion Ratio Lower Upper  
 172 100  
 171 35.6 30.0 45.0  
 170 23.8 19.5 29.3



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

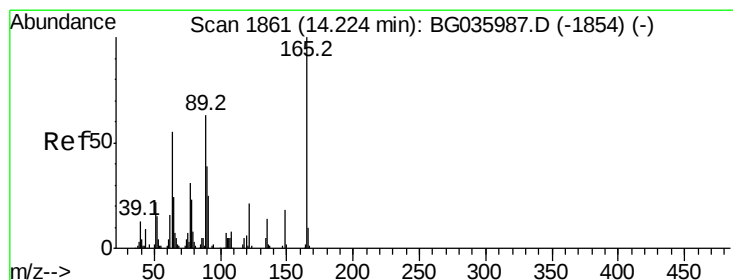
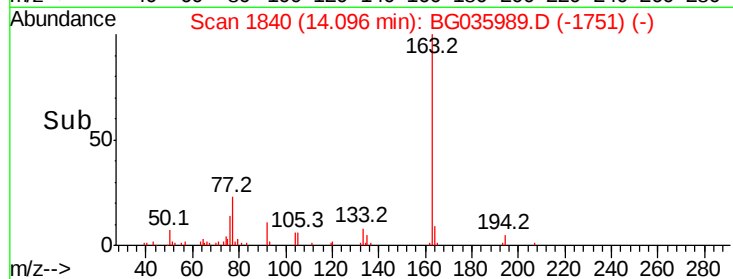
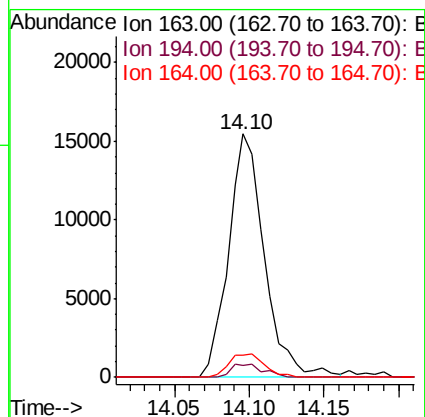
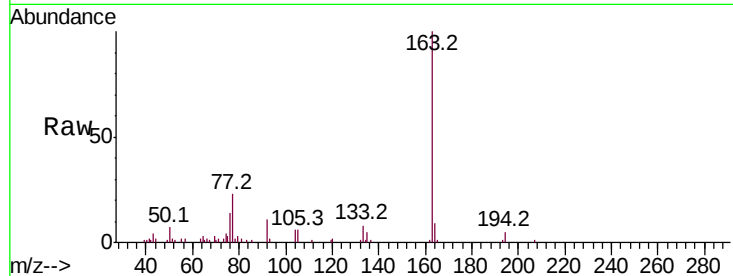




#49  
Dimethylphthalate  
Concen: 3.119 ng  
RT: 14.10 min Scan# 1840  
Delta R.T. -0.01 min  
Lab File: BG035989.D  
Acq: 31 Jul 2018 00:45

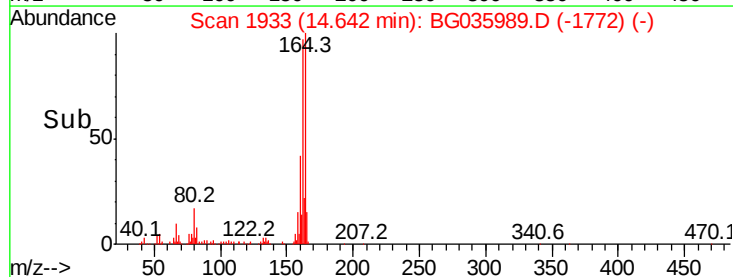
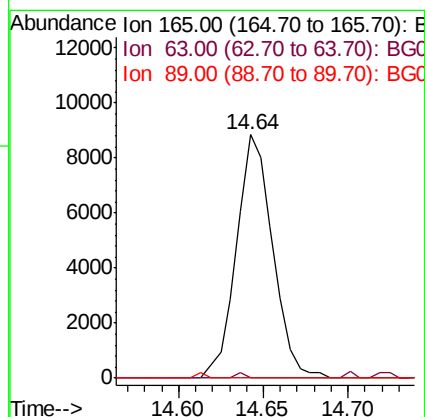
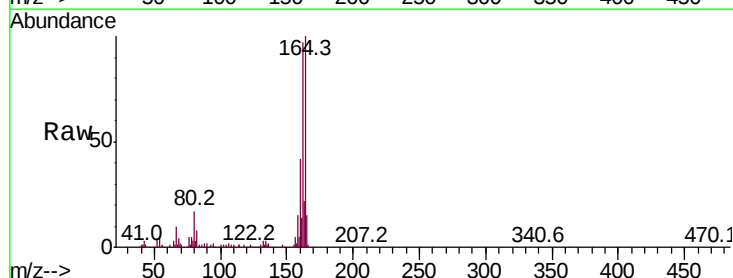
Instrument :  
BNA\_G  
ClientSampleId :

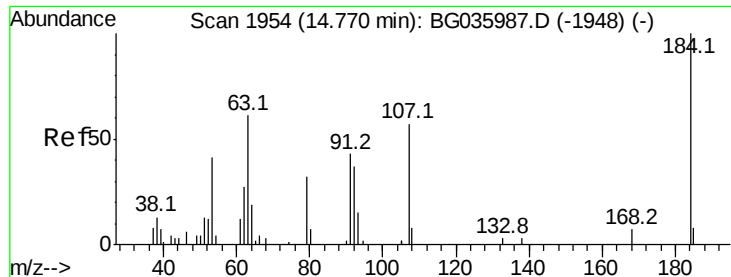
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 163     | 100   |       |       |
| 194     | 4.8   | 3.4   | 5.2   |
| 164     | 8.9   | 8.2   | 12.4  |



#50  
2,6-Dinitrotoluene  
Concen: 7.761 ng  
RT: 14.64 min Scan# 1933  
Delta R.T. 0.41 min  
Lab File: BG035989.D  
Acq: 31 Jul 2018 00:45

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.0   | 52.7  | 79.1# |
| 89      | 0.0   | 49.2  | 73.8# |





#53

2,4-Dinitrophenol

Concen: 6.642 ng

RT: 14.45 min Scan# 1900

Delta R.T. -0.31 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

Instrument :

BNA\_G

ClientSampled :

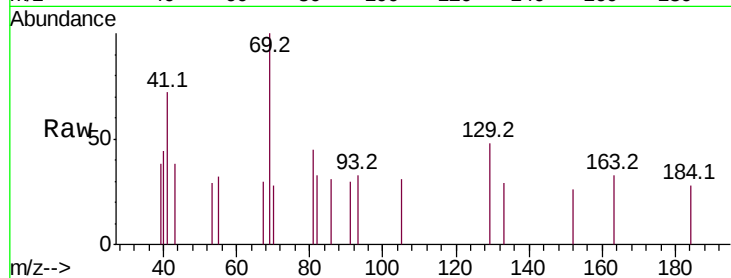
Tot Ion:184 Resp: 57

Ion Ratio Lower Upper

184 100

63 0.0 59.8 89.8#

154 0.0 101.8 152.8#



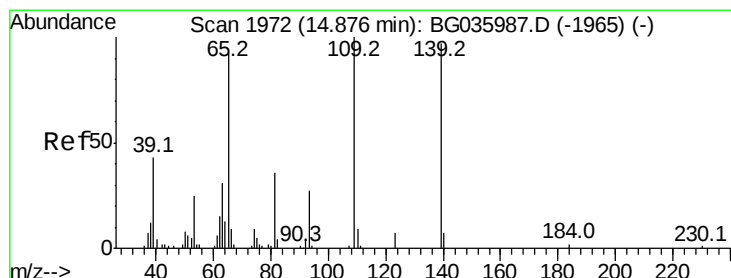
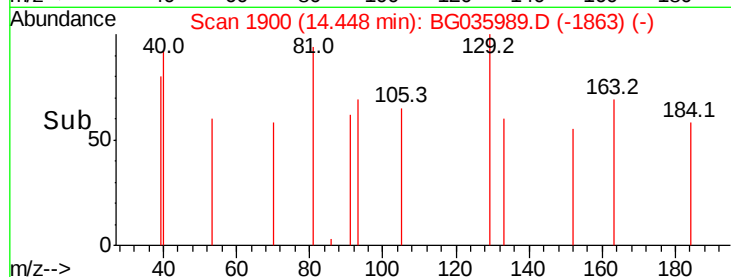
Abundance Ion 184.00 (183.70 to 184.70): E

Ion 63.00 (62.70 to 63.70): BG

Ion 154.00 (153.70 to 154.70): E

14.45

14.44 14.46



#55

4-Nitrophenol

Concen: 2.331 ng

RT: 15.05 min Scan# 2003

Delta R.T. 0.18 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

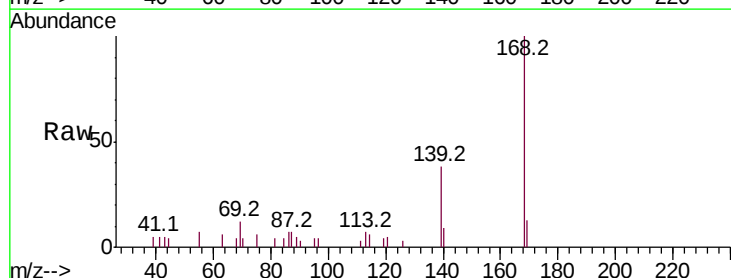
Tgt Ion:139 Resp: 2886

Ion Ratio Lower Upper

139 100

109 0.0 62.2 102.2#

65 0.0 97.2 137.2#



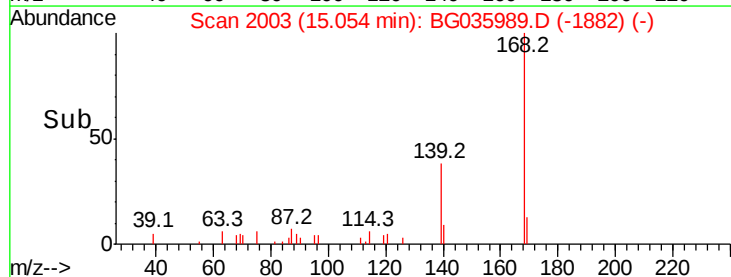
Abundance Ion 139.00 (138.70 to 139.70): E

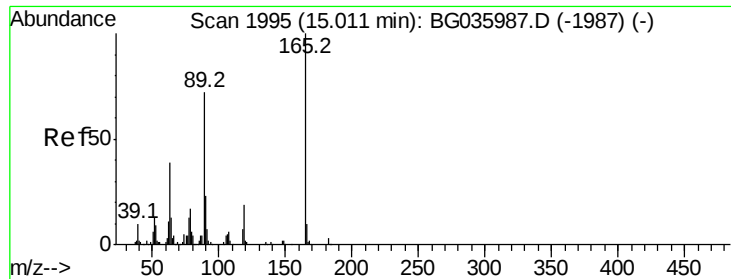
Ion 109.00 (108.70 to 109.70): E

Ion 65.00 (64.70 to 65.70): BG

15.05

15.00 15.05 15.10





#56

2,4-Dinitrotoluene

Concen: 5.410 ng

RT: 14.64 min Scan# 1933

Delta R.T. -0.37 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

Instrument :

BNA\_G

ClientSampleId :

Tot Ion:165 Resp: 13200

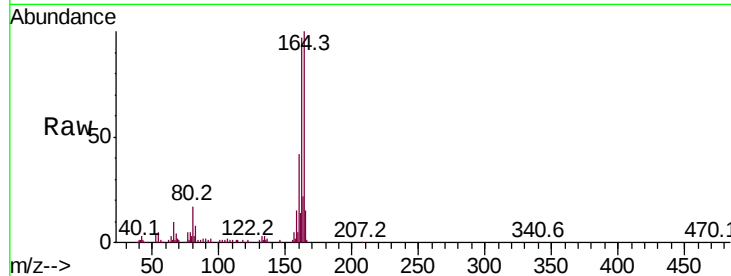
Ion Ratio Lower Upper

165 100

63 0.0 42.0 63.0#

89 0.0 66.9 100.3#

182 0.0 2.6 3.8#

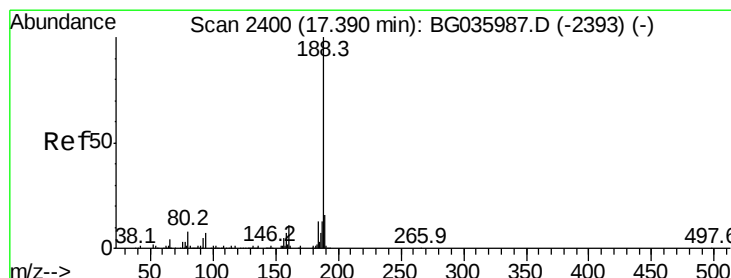
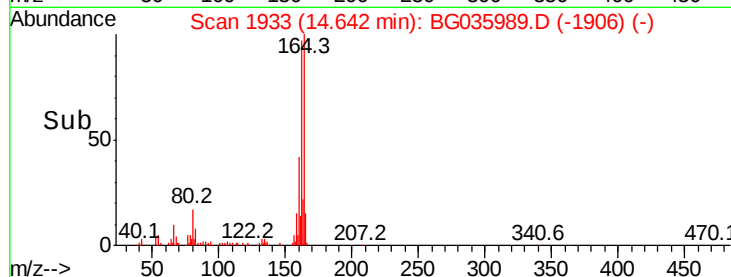
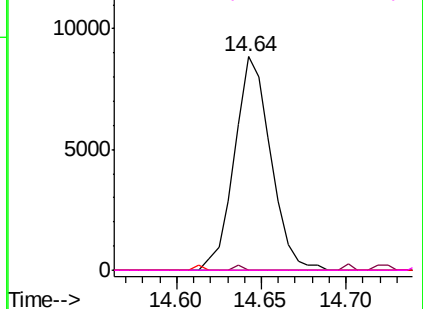


Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BGC

Ion 89.00 (88.70 to 89.70): BGC

Ion 182.00 (181.70 to 182.70): E



#63

Phenanthrene-d10

Concen: 20.000 ng

RT: 17.39 min Scan# 2401

Delta R.T. -0.00 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

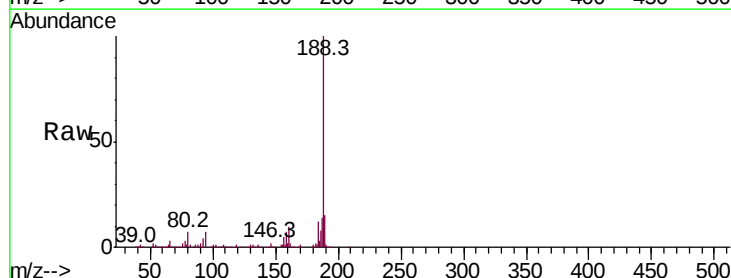
Tgt Ion:188 Resp: 257163

Ion Ratio Lower Upper

188 100

94 6.6 6.9 10.3#

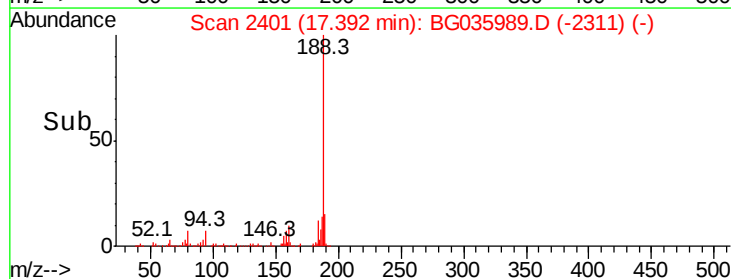
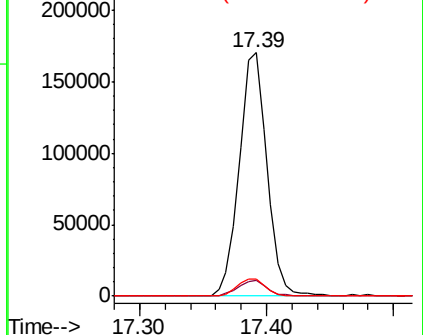
80 6.9 7.7 11.5#

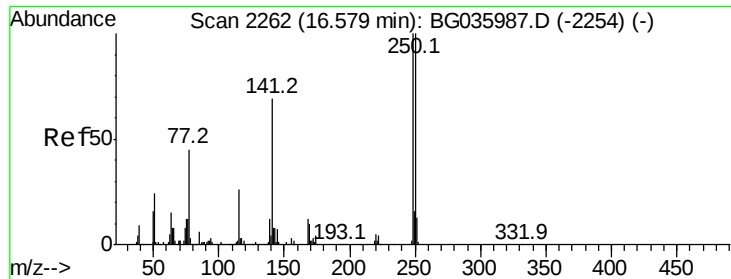


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BGC

Ion 80.00 (79.70 to 80.70): BGC

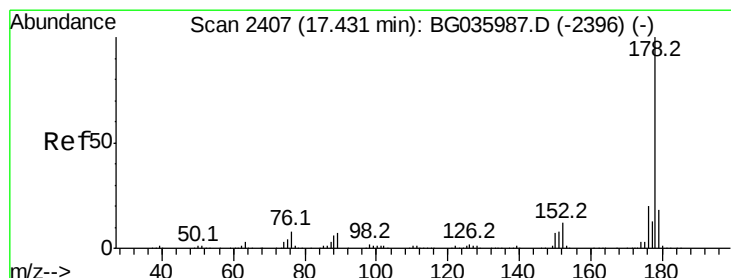
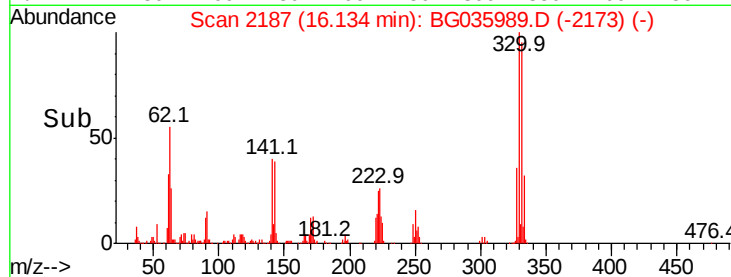
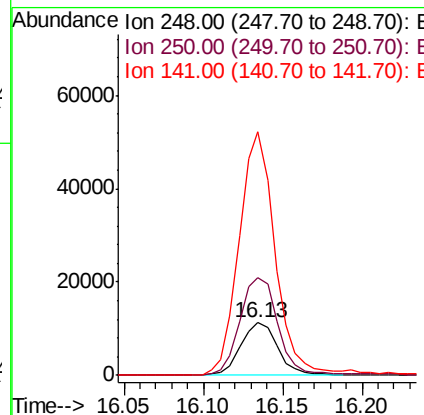
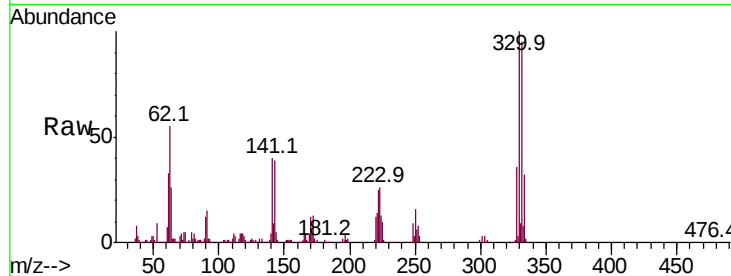




#66  
 4-Bromophenyl-phenylether  
 Concen: 6.095 ng  
 RT: 16.13 min Scan# 2187  
 Delta R.T. -0.45 min  
 Lab File: BG035989.D  
 Acq: 31 Jul 2018 00:45

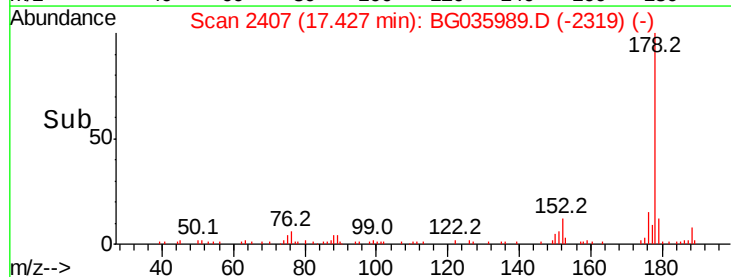
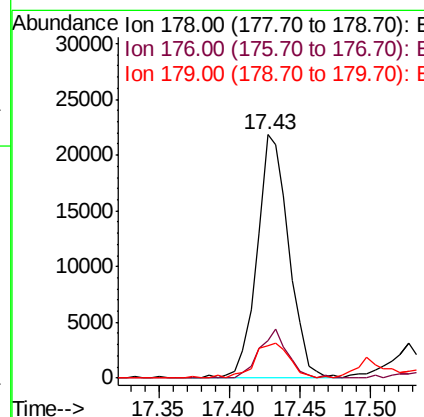
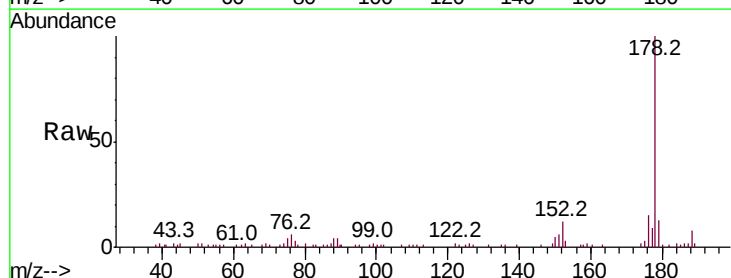
Instrument :  
 BNA\_G  
 ClientSampleId :

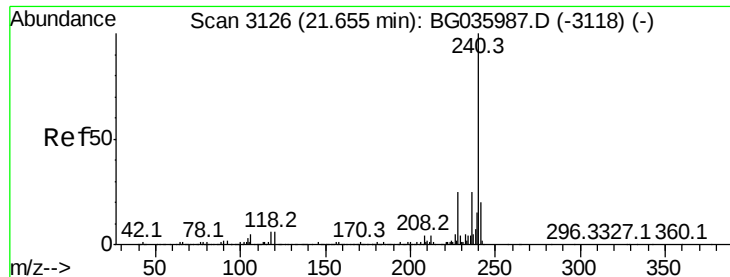
Tot Ion:248 Resp: 18184  
 Ion Ratio Lower Upper  
 248 100  
 250 186.0 77.1 115.7#  
 141 463.3 50.8 76.2#



#70  
 Phenanthrene  
 Concen: 2.681 ng  
 RT: 17.43 min Scan# 2407  
 Delta R.T. -0.01 min  
 Lab File: BG035989.D  
 Acq: 31 Jul 2018 00:45

Tgt Ion:178 Resp: 34407  
 Ion Ratio Lower Upper  
 178 100  
 176 15.4 15.7 23.5#  
 179 13.2 12.5 18.7





#75

Chrysene-d12

Concen: 20.000 ng

RT: 21.65 min Scan# 3126

Delta R.T. -0.01 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

Instrument :

BNA\_G

ClientSampleId :

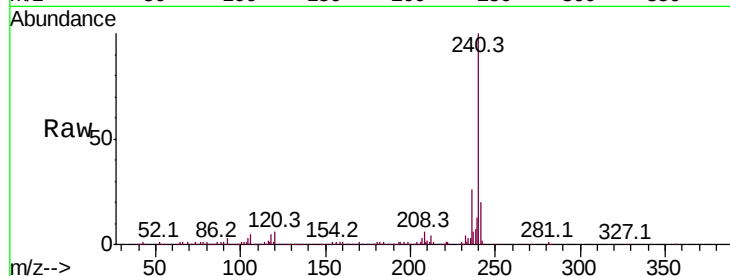
Tot Ion:240 Resp: 266637

Ion Ratio Lower Upper

240 100

120 5.8 6.8 10.2#

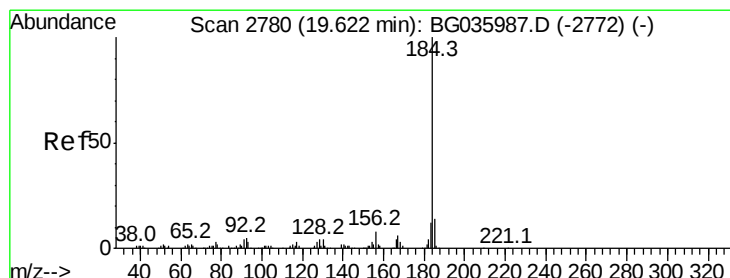
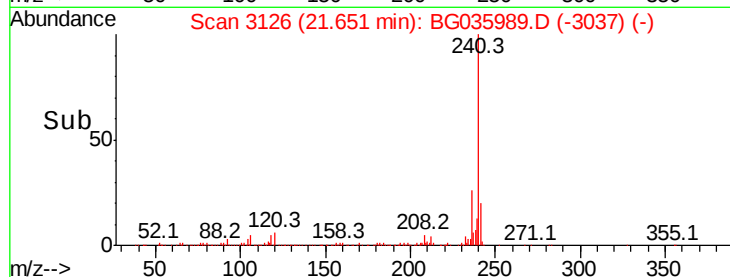
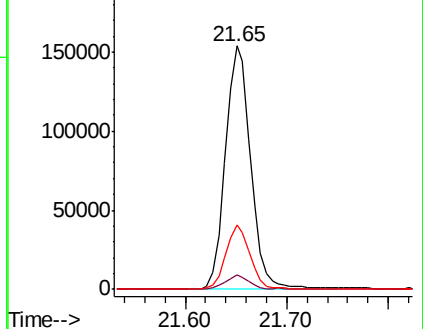
236 26.4 20.9 31.3



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



#76

Benzidine

Concen: 3.513 ng

RT: 20.00 min Scan# 2845

Delta R.T. 0.37 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

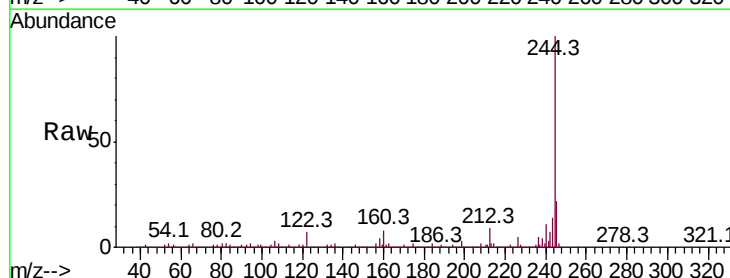
Tgt Ion:184 Resp: 24623

Ion Ratio Lower Upper

184 100

185 16.8 11.1 16.7#

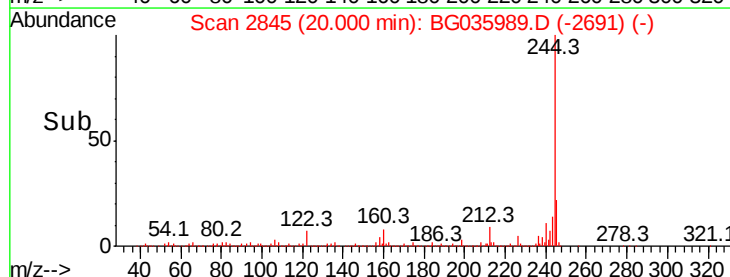
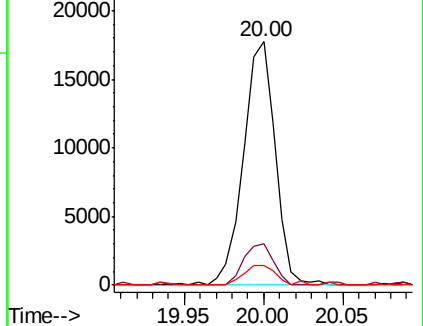
183 8.2 10.6 16.0#

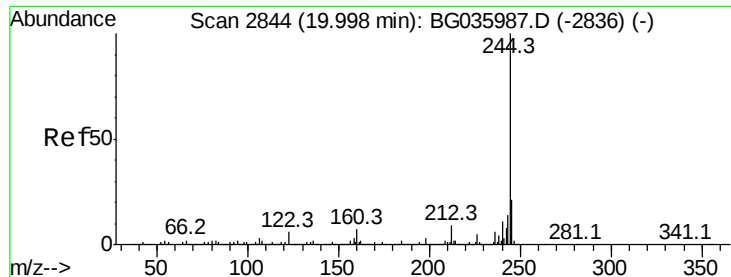


Abundance Ion 184.00 (183.70 to 184.70): E

Ion 185.00 (184.70 to 185.70): E

Ion 183.00 (182.70 to 183.70): E





#78

Terphenyl-d14

Concen: 106.218 ng

RT: 20.00 min Scan# 2845

Delta R.T. -0.00 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

Instrument :

BNA\_G

ClientSampleId :

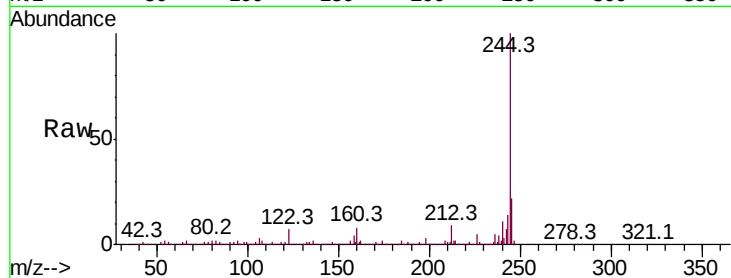
Tot Ion:244 Resp: 1284834

Ion Ratio Lower Upper

244 100

212 9.2 5.8 8.8#

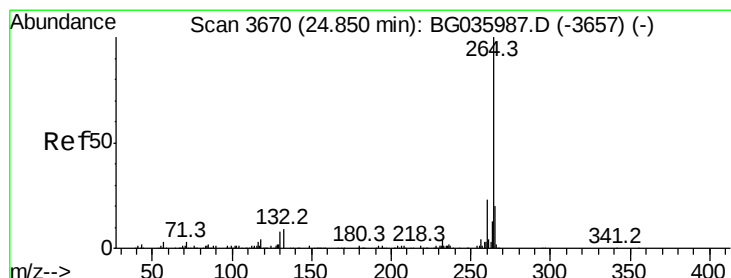
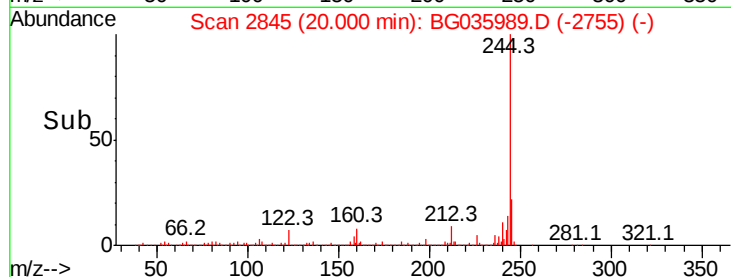
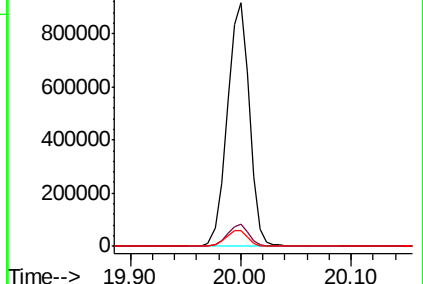
122 6.7 7.0 10.4#



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



#86

Perylene-d12

Concen: 20.000 ng

RT: 24.85 min Scan# 3670

Delta R.T. -0.01 min

Lab File: BG035989.D

Acq: 31 Jul 2018 00:45

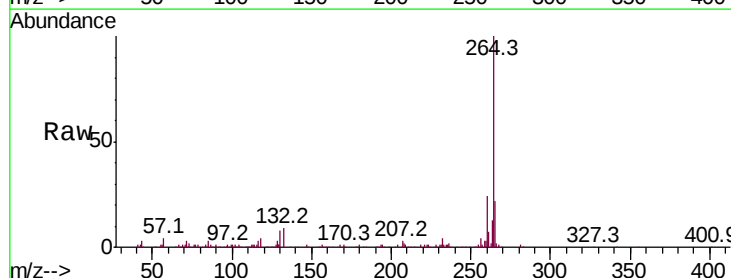
Tgt Ion:264 Resp: 260416

Ion Ratio Lower Upper

264 100

260 24.1 17.4 26.0

265 22.1 17.7 26.5



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

