

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG091418\  
 Data File : BG036738.D  
 Acq On : 15 Sep 2018 13:01  
 Operator : JU/SJ  
 Sample : J4898-04  
 Misc :  
 ALS Vial : 28 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 ROLLOFF02-COMP-FILL

Quant Time: Sep 17 04:18:20 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG082318.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 31 13:03:20 2018  
 Response via : Initial Calibration

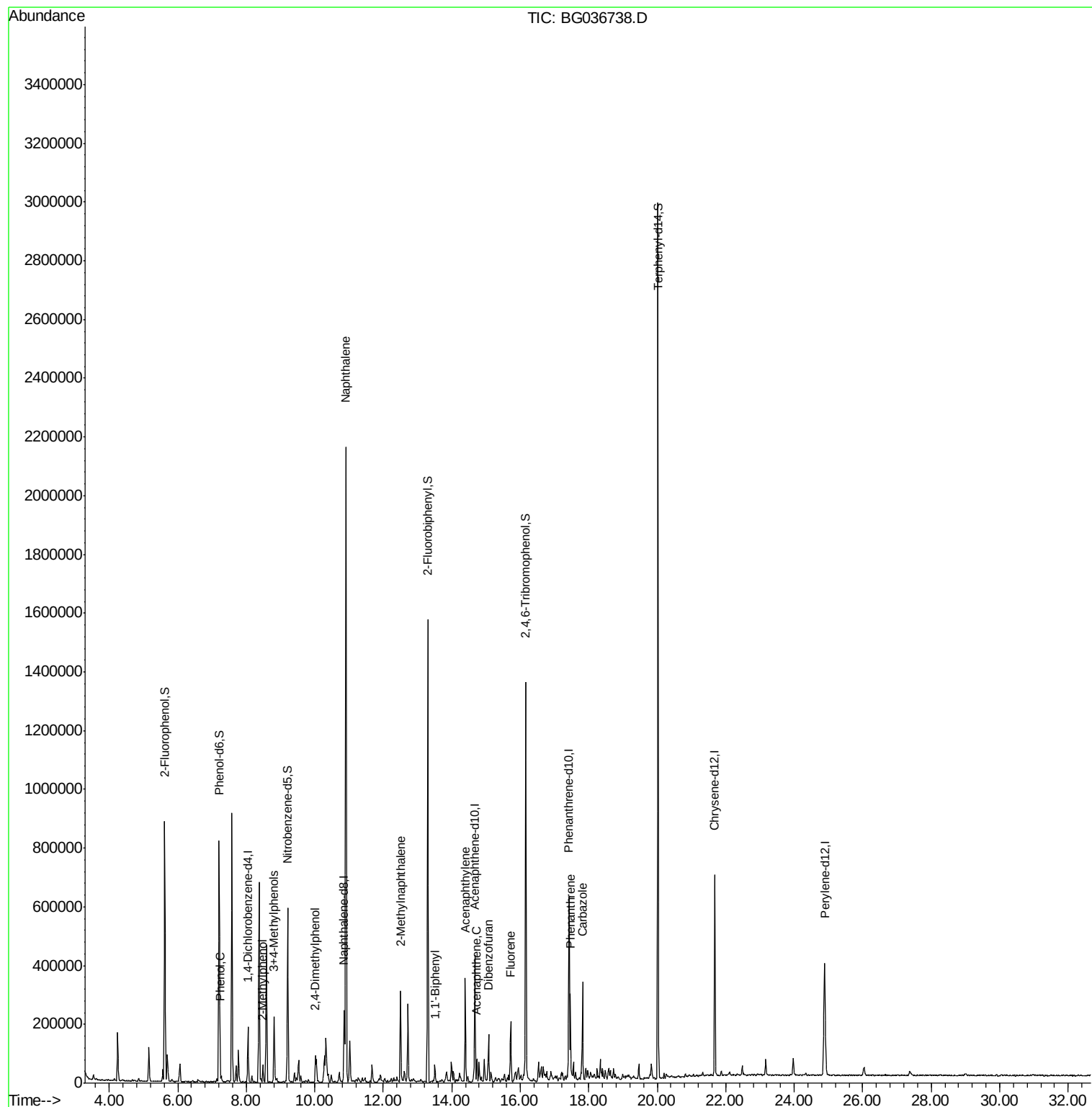
| Internal Standards          | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|-----------------------------|-------|------|----------|---------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 8.05  | 152  | 55132    | 20.00   | ng    | -0.02    |
| 21) Naphthalene-d8          | 10.85 | 136  | 213975   | 20.00   | ng    | -0.01    |
| 38) Acenaphthene-d10        | 14.67 | 164  | 143982   | 20.00   | ng    | -0.01    |
| 63) Phenanthrene-d10        | 17.42 | 188  | 380925   | 20.00   | ng    | -0.01    |
| 75) Chrysene-d12            | 21.68 | 240  | 412691   | 20.00   | ng    | -0.02    |
| 86) Perylene-d12            | 24.88 | 264  | 420347   | 20.00   | ng    | -0.02    |
| System Monitoring Compounds |       |      |          |         |       |          |
| 5) 2-Fluorophenol           | 5.62  | 112  | 367290   | 105.68  | ng    | 0.00     |
| 7) Phenol-d6                | 7.21  | 99   | 471812   | 94.82   | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 9.21  | 82   | 354866   | 89.98   | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 16.16 | 330  | 250454   | 145.78  | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 13.30 | 172  | 830950   | 82.40   | ng    | -0.01    |
| 78) Terphenyl-d14           | 20.02 | 244  | 1444799  | 81.83   | ng    | -0.01    |
| Target Compounds            |       |      |          |         |       | Qvalue   |
| 10) Phenol                  | 7.24  | 94   | 17306    | 3.323   | ng    | 95       |
| 17) 2-Methylphenol          | 8.48  | 107  | 18300    | 5.292   | ng    | 90       |
| 20) 3+4-Methylphenols       | 8.81  | 107  | 98465    | 20.397  | ng    | 95       |
| 27) 2,4-Dimethylphenol      | 10.02 | 122  | 31734    | 10.171  | ng    | 95       |
| 31) Naphthalene             | 10.91 | 128  | 1734628  | 162.169 | ng    | 95       |
| 37) 2-Methylnaphthalene     | 12.51 | 142  | 144918   | 18.516  | ng    | 97       |
| 45) 1,1'-Biphenyl           | 13.50 | 154  | 32094    | 2.685   | ng    | 94       |
| 48) Acenaphthylene          | 14.40 | 152  | 253076   | 17.748  | ng    | 99       |
| 51) Acenaphthene            | 14.73 | 154  | 27282    | 2.987   | ng    | 93       |
| 54) Dibenzofuran            | 15.07 | 168  | 94143    | 6.580   | ng    | 95       |
| 57) Fluorene                | 15.72 | 166  | 94461    | 8.832   | ng    | 98       |
| 70) Phenanthrene            | 17.46 | 178  | 176035   | 9.095   | ng    | 96       |
| 72) Carbazole               | 17.82 | 167  | 220750   | 11.456  | ng    | 96       |

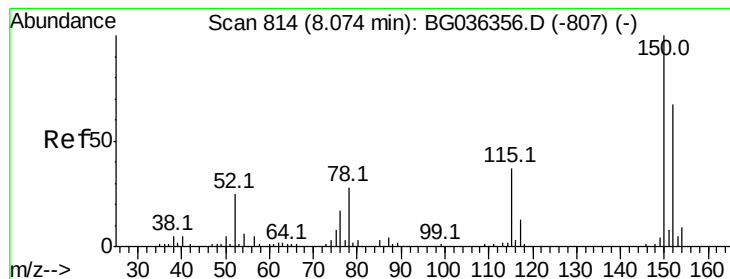
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG091418\  
Data File : BG036738.D  
Acq On : 15 Sep 2018 13:01  
Operator : JU/SJ  
Sample : J4898-04  
Misc :  
ALS Vial : 28 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :  
ROLLOFF02-COMP-FILL

Quant Time: Sep 17 04:18:20 2018  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG082318.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Aug 31 13:03:20 2018  
Response via : Initial Calibration



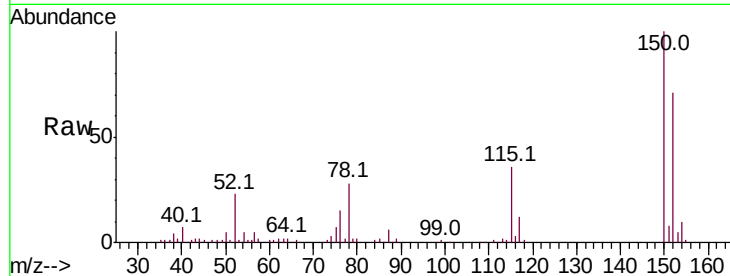


#1

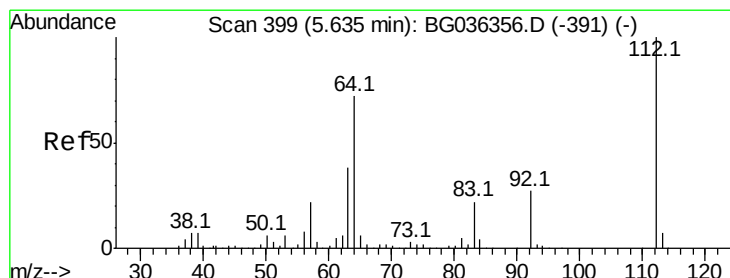
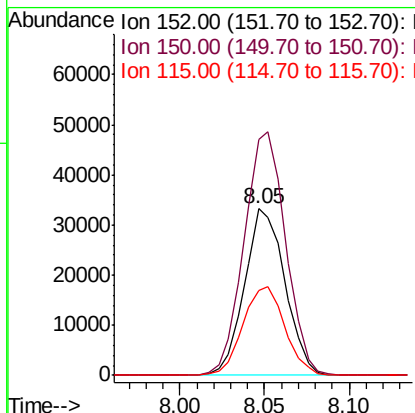
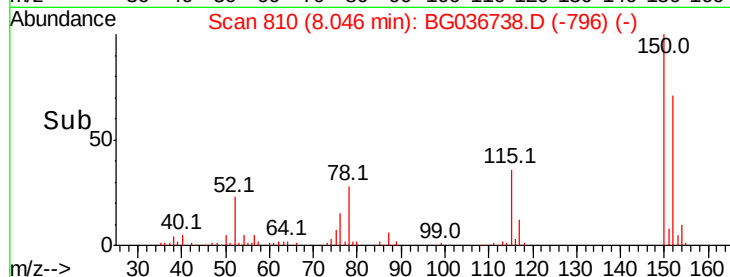
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.05 min Scan# 810  
Delta R.T. -0.02 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

Instrument :  
BNA\_G  
ClientSampleId :  
ROLLOFF02-COMP-FILL

Tot Ion:152 Resp: 55132  
Ion Ratio Lower Upper  
152 100  
150 141.6 119.5 179.3  
115 51.3 44.5 66.7



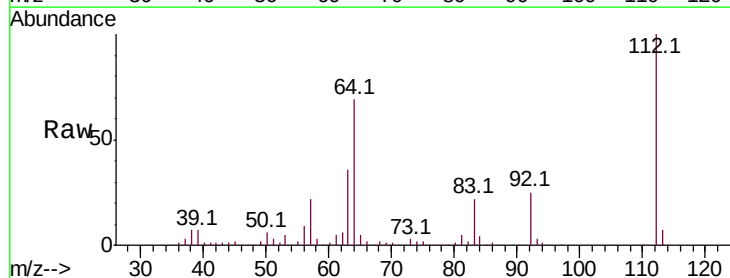
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



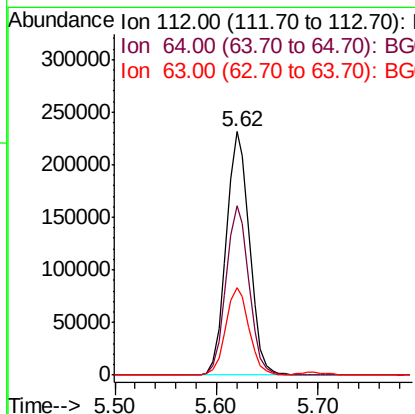
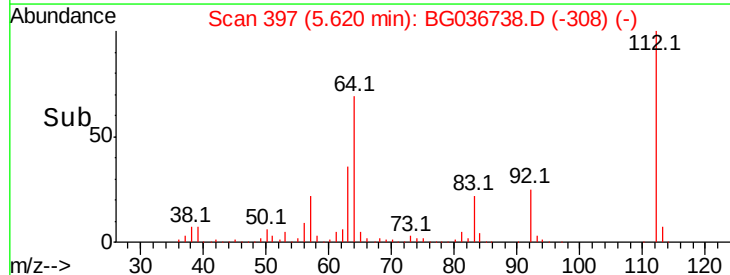
#5

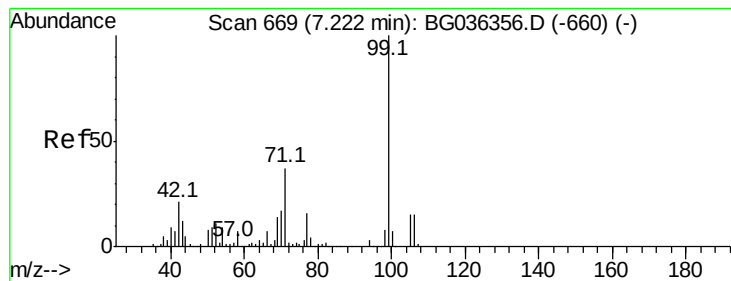
2-Fluorophenol  
Concen: 105.679 ng  
RT: 5.62 min Scan# 397  
Delta R.T. -0.01 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

Tgt Ion:112 Resp: 367290  
Ion Ratio Lower Upper  
112 100  
64 69.5 57.2 85.8  
63 36.1 30.8 46.2



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





#7

Phenol-d6

Concen: 94.816 ng

RT: 7.21 min Scan# 667

Delta R.T. -0.01 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

Instrument :

BNA\_G

ClientSampleId :

ROLLOFF02-COMP-FILL

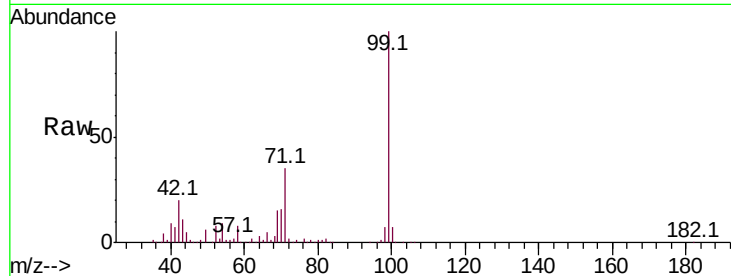
Tot Ion: 99 Resp: 471812

Ion Ratio Lower Upper

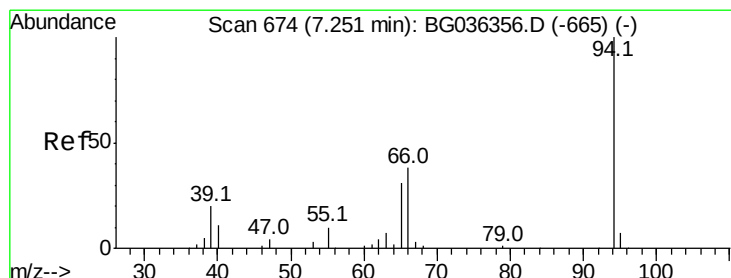
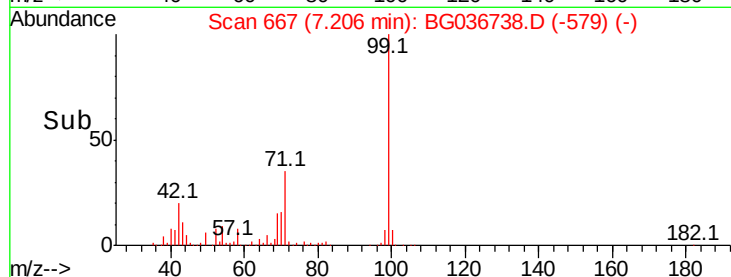
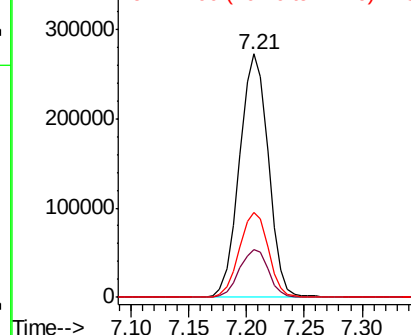
99 100

42 19.7 16.5 24.7

71 34.9 29.4 44.2



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: 3.323 ng

RT: 7.24 min Scan# 672

Delta R.T. -0.01 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

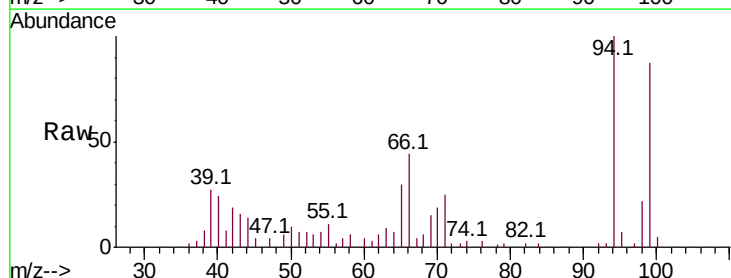
Tgt Ion: 94 Resp: 17306

Ion Ratio Lower Upper

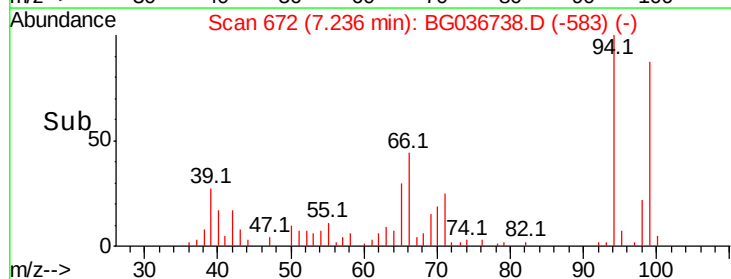
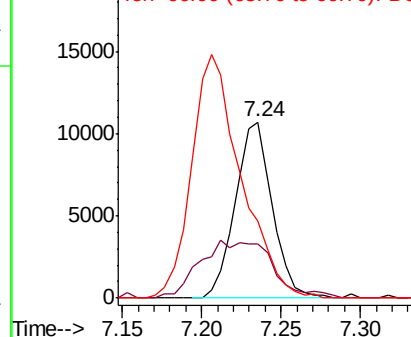
94 100

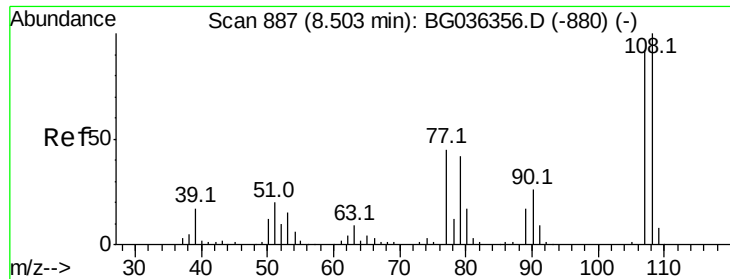
65 30.4 11.5 51.5

66 43.8 19.5 59.5



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

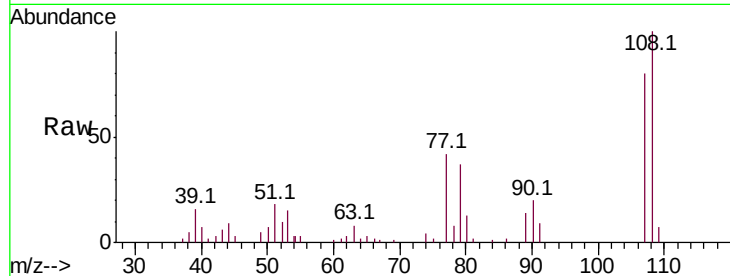




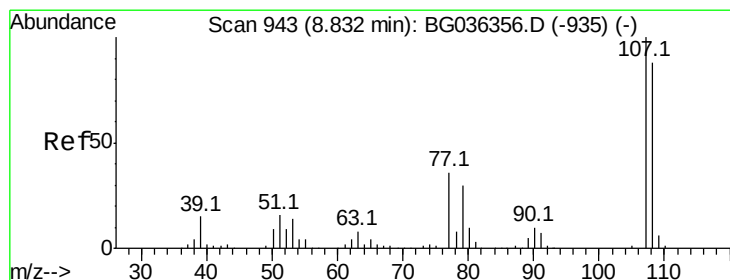
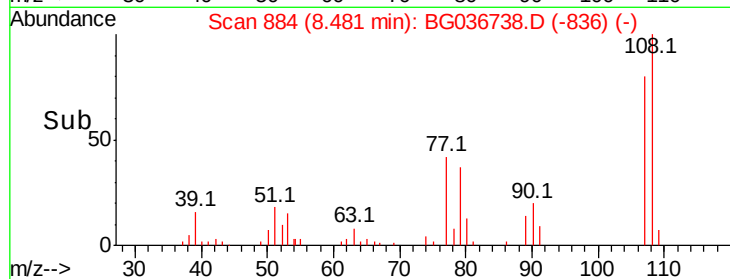
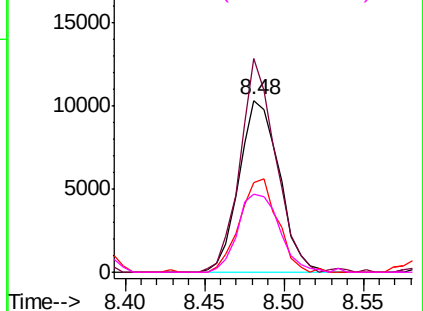
#17  
2-Methylphenol  
Concen: 5.292 ng  
RT: 8.48 min Scan# 884  
Delta R.T. -0.02 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

Instrument :  
BNA\_G  
ClientSampleId :  
ROLLOFF02-COMP-FILL

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 107   | Resp: | 18300 |
| Ion      | Ratio | Lower | Upper |
| 107      | 100   |       |       |
| 108      | 124.5 | 86.7  | 130.1 |
| 77       | 52.5  | 39.0  | 58.4  |
| 79       | 45.7  | 36.6  | 54.8  |

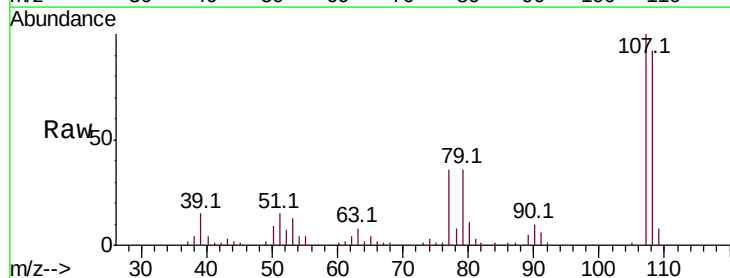


Abundance Ion 107.00 (106.70 to 107.70): E  
20000  
Ion 108.00 (107.70 to 108.70): E  
Ion 77.00 (76.70 to 77.70): BGC  
Ion 79.00 (78.70 to 79.70): BGC

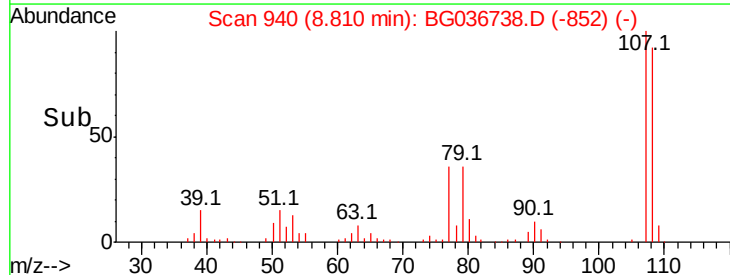
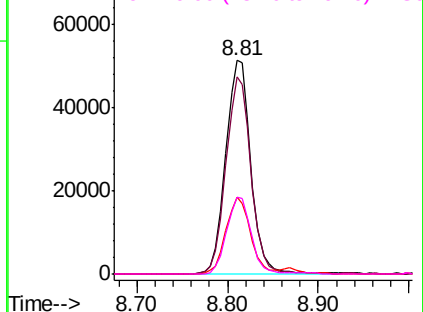


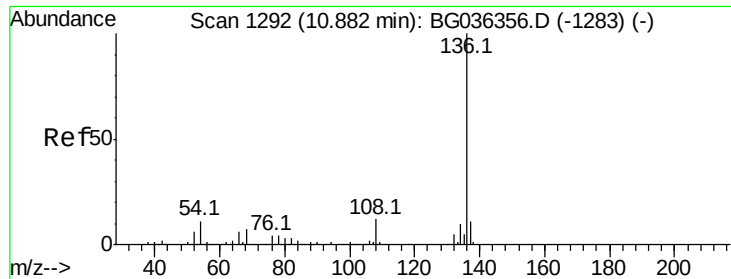
#20  
3+4-Methylphenols  
Concen: 20.397 ng  
RT: 8.81 min Scan# 940  
Delta R.T. -0.01 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 107   | Resp: | 98465 |
| Ion      | Ratio | Lower | Upper |
| 107      | 100   |       |       |
| 108      | 92.4  | 68.0  | 108.0 |
| 77       | 36.2  | 15.6  | 55.6  |
| 79       | 35.9  | 9.9   | 49.9  |



Abundance Ion 107.00 (106.70 to 107.70): E  
80000  
Ion 108.00 (107.70 to 108.70): E  
Ion 77.00 (76.70 to 77.70): BGC  
Ion 79.00 (78.70 to 79.70): BGC

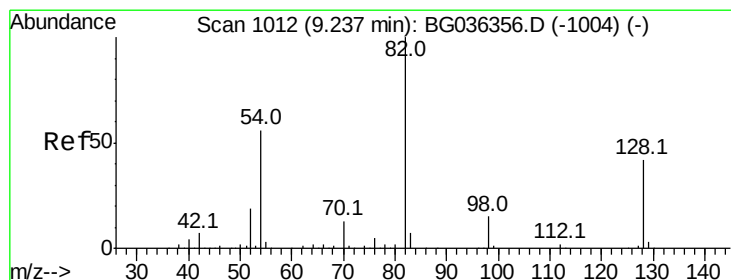
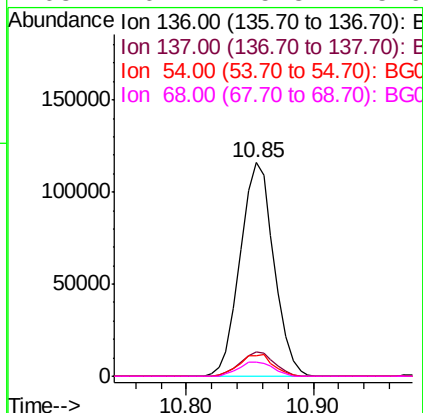
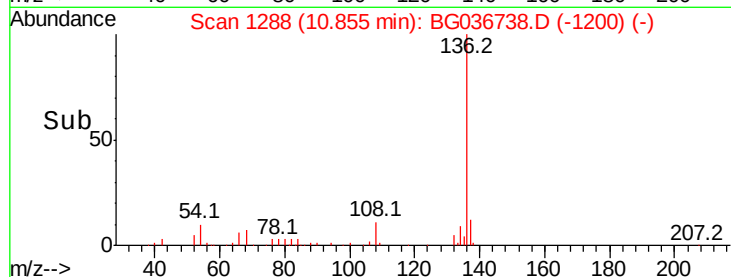
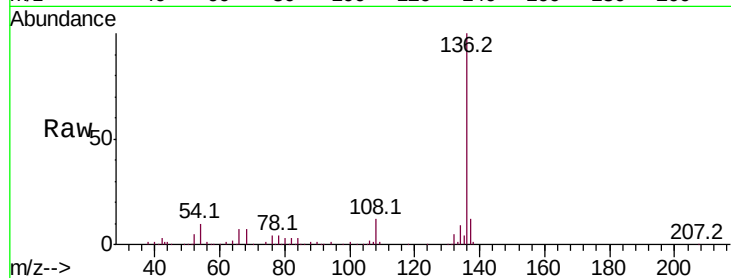




#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.85 min Scan# 1288  
Delta R.T. -0.01 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

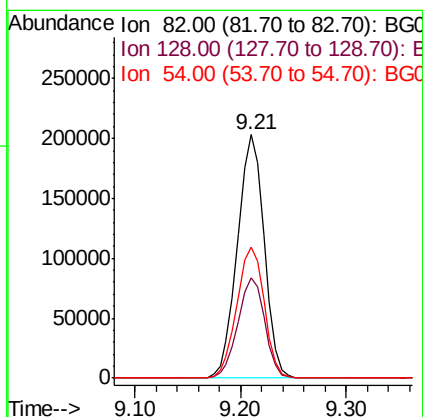
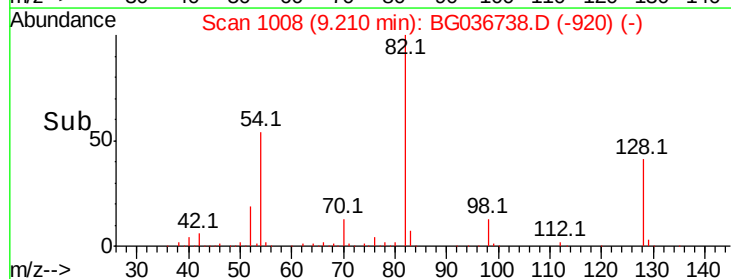
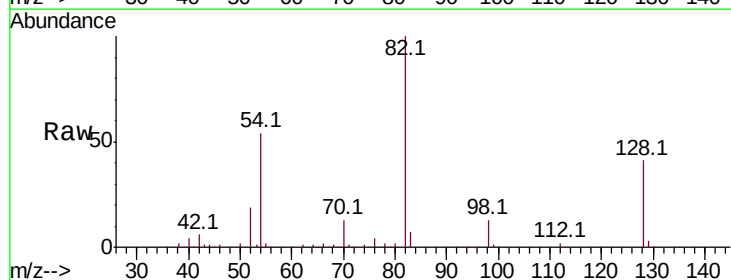
Instrument :  
BNA\_G  
ClientSampleId :  
ROLLOFF02-COMP-FILL

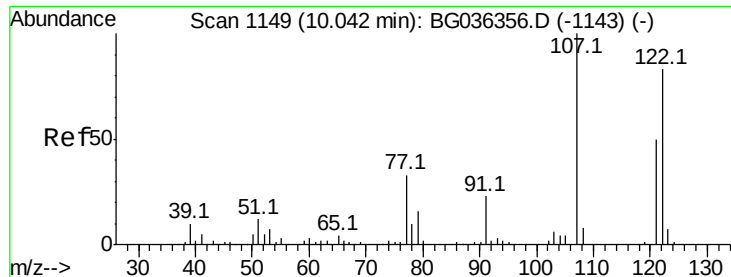
|             |       |          |
|-------------|-------|----------|
| Tot Ion:136 | Resp: | 213975   |
| Ion Ratio   | Lower | Upper    |
| 136         | 100   |          |
| 137         | 11.6  | 8.8 13.2 |
| 54          | 9.8   | 9.2 13.8 |
| 68          | 6.7   | 5.8 8.6  |



#23  
Nitrobenzene-d5  
Concen: 89.982 ng  
RT: 9.21 min Scan# 1008  
Delta R.T. -0.01 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 82 | Resp: | 354866    |
| Ion Ratio   | Lower | Upper     |
| 82          | 100   |           |
| 128         | 41.1  | 33.3 49.9 |
| 54          | 54.0  | 45.1 67.7 |

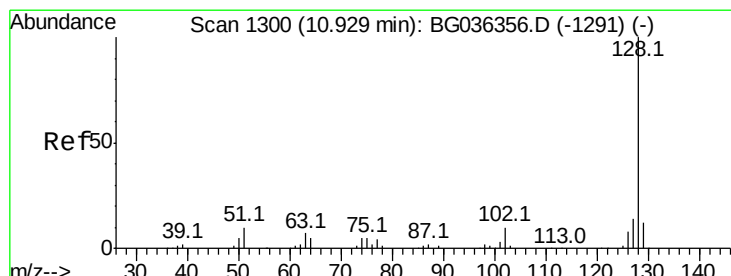
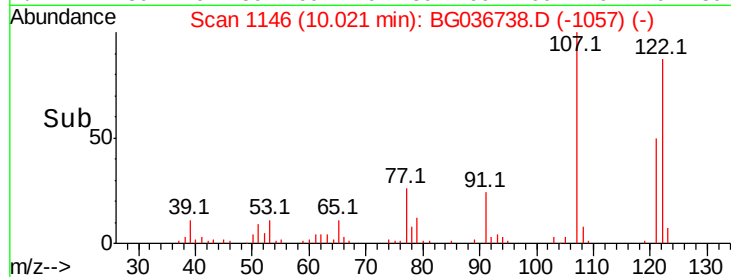
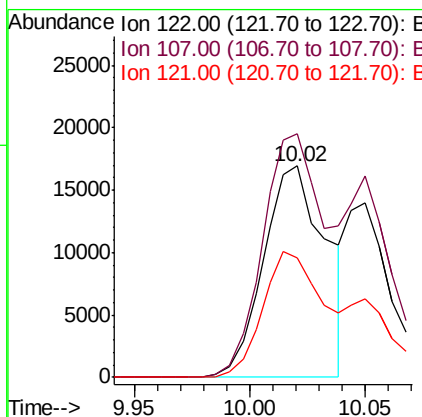
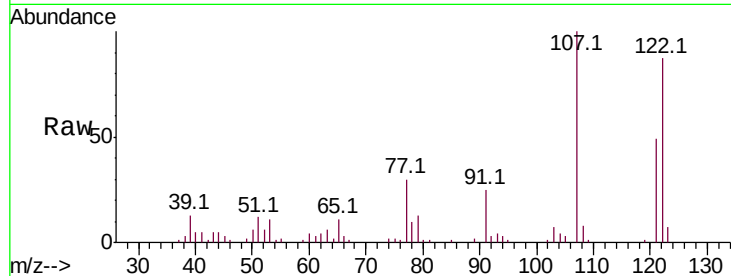




#27  
2,4-Dimethylphenol  
Concen: 10.171 ng  
RT: 10.02 min Scan# 1146  
Delta R.T. -0.01 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

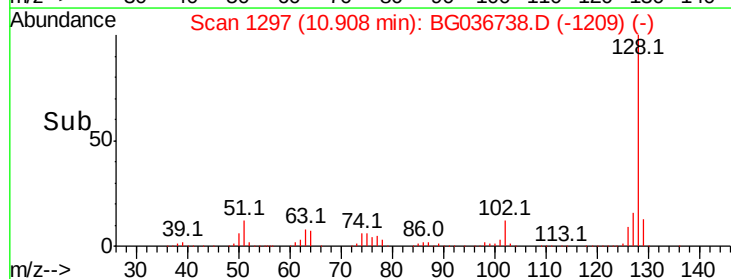
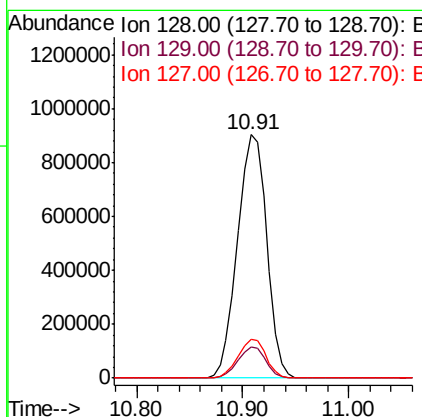
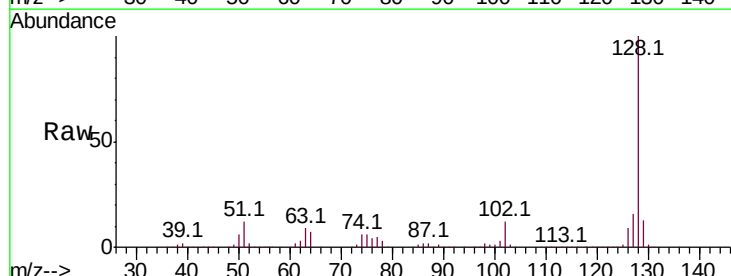
Instrument :  
BNA\_G  
ClientSampleId :  
ROLLOFF02-COMP-FILL

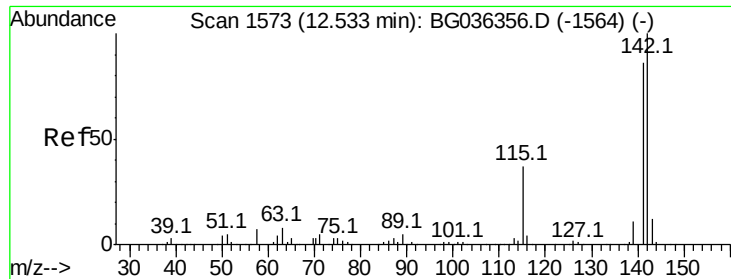
Tot Ion:122 Resp: 31734  
Ion Ratio Lower Upper  
122 100  
107 115.2 96.0 144.0  
121 56.4 48.2 72.4



#31  
Naphthalene  
Concen: 162.169 ng  
RT: 10.91 min Scan# 1297  
Delta R.T. -0.01 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

Tgt Ion:128 Resp: 1734628  
Ion Ratio Lower Upper  
128 100  
129 12.9 9.4 14.2  
127 16.1 11.0 16.4

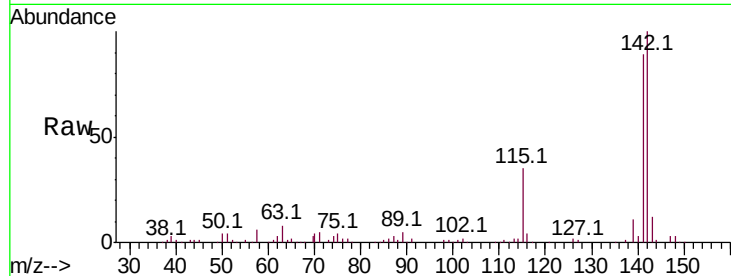




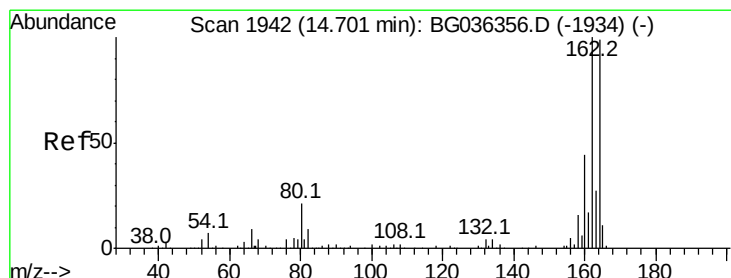
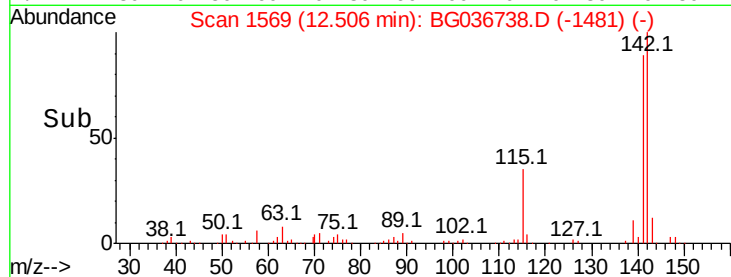
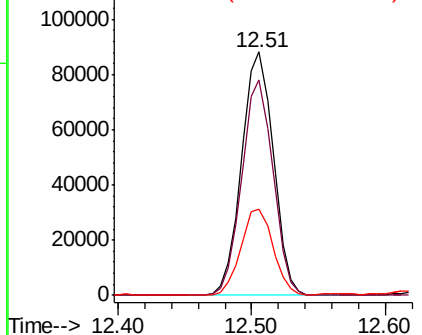
#37  
2-Methylnaphthalene  
Concen: 18.516 ng  
RT: 12.51 min Scan# 1569  
Delta R.T. -0.01 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

Instrument :  
BNA\_G  
ClientSampleId :  
ROLLOFF02-COMP-FILL

Tot Ion:142 Resp: 144918  
Ion Ratio Lower Upper  
142 100  
141 88.6 68.5 102.7  
115 35.2 29.8 44.8

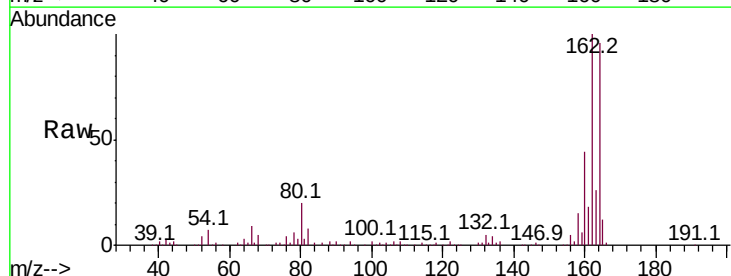


Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E  
Ion 115.00 (114.70 to 115.70): E

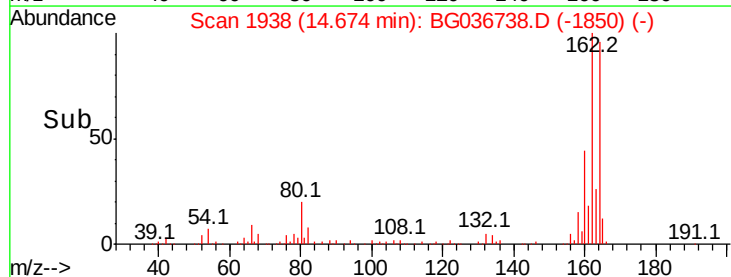
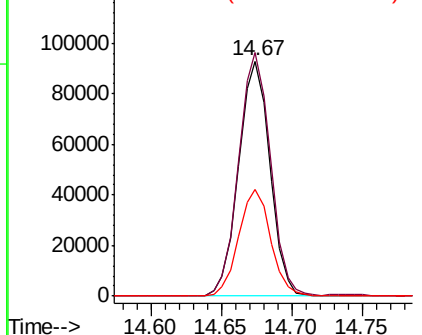


#38  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.67 min Scan# 1938  
Delta R.T. -0.01 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

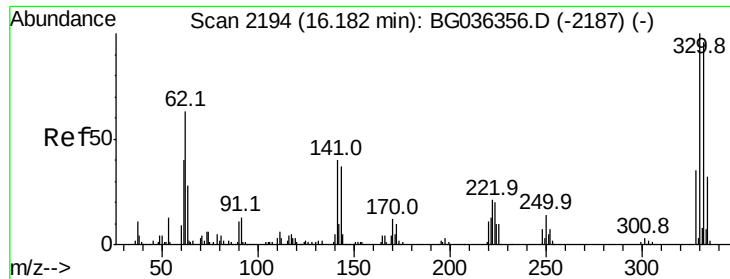
Tgt Ion:164 Resp: 143982  
Ion Ratio Lower Upper  
164 100  
162 103.7 80.7 121.1  
160 45.3 35.3 52.9



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



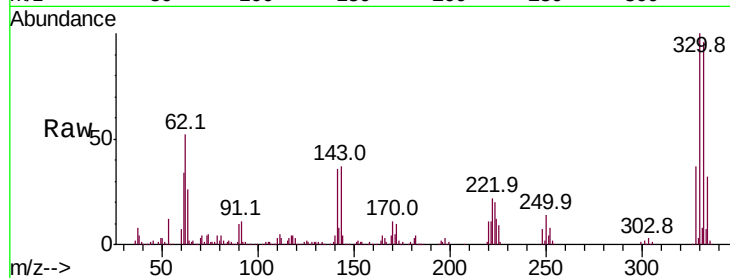




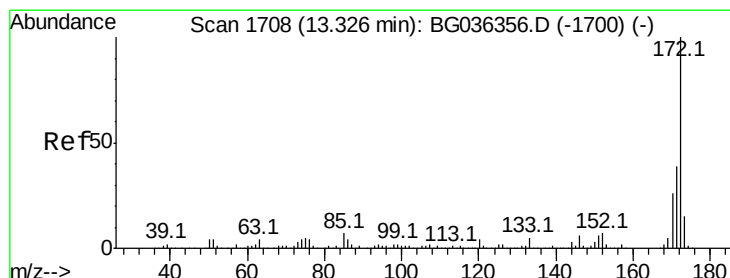
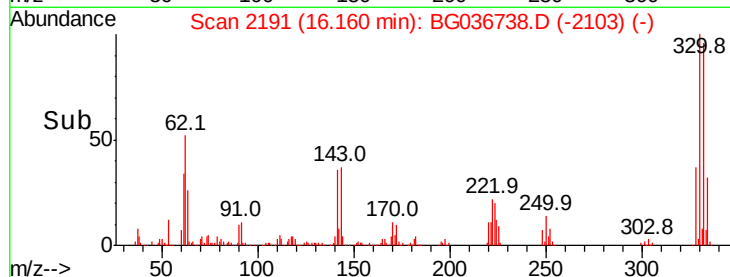
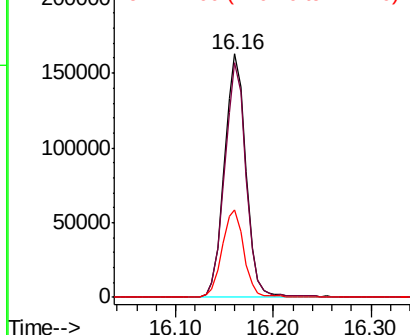
#41  
 2,4,6-Tribromophenol  
 Concen: 145.780 ng  
 RT: 16.16 min Scan# 2191  
 Delta R.T. -0.01 min  
 Lab File: BG036738.D  
 Acq: 15 Sep 2018 13:01

Instrument :  
 BNA\_G  
 ClientSampleId :  
 ROLLOFF02-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 95.2  | 75.4  | 113.2 |
| 141     | 36.3  | 30.7  | 46.1  |

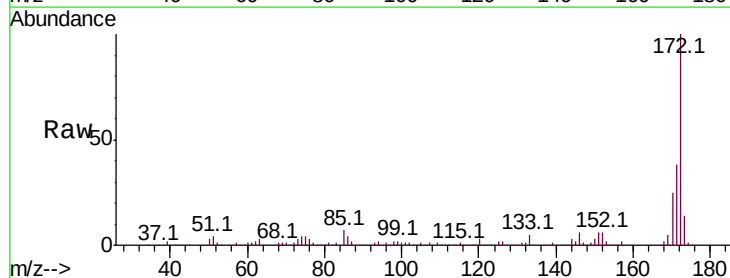


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

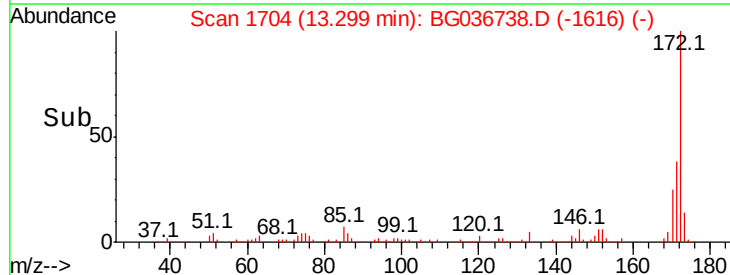
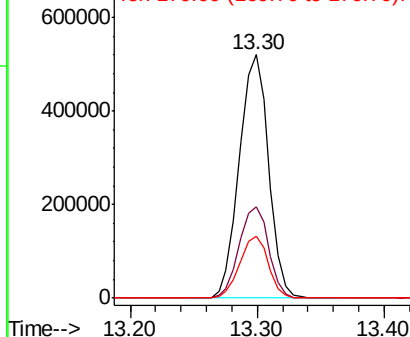


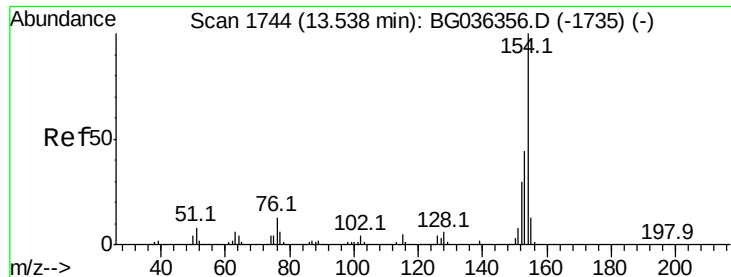
#44  
 2-Fluorobiphenyl  
 Concen: 82.402 ng  
 RT: 13.30 min Scan# 1704  
 Delta R.T. -0.01 min  
 Lab File: BG036738.D  
 Acq: 15 Sep 2018 13:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 37.7  | 31.3  | 46.9  |
| 170     | 25.3  | 21.0  | 31.6  |



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





#45

1,1'-Biphenyl

Concen: 2.685 ng

RT: 13.50 min Scan# 1739

Delta R.T. -0.02 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

Instrument:

BNA\_G

ClientSampleId:

ROLLOFF02-COMP-FILL

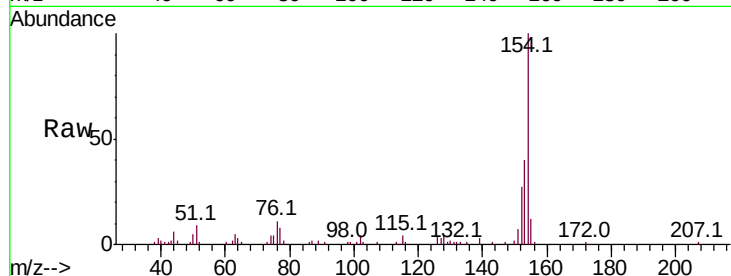
Tot Ion:154 Resp: 32094

Ion Ratio Lower Upper

154 100

153 39.7 24.0 64.0

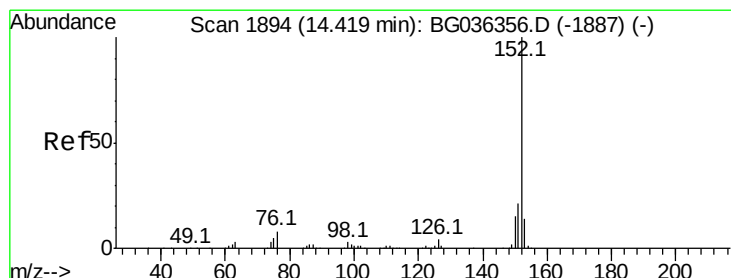
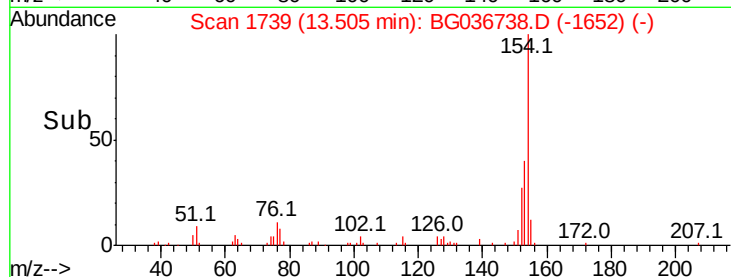
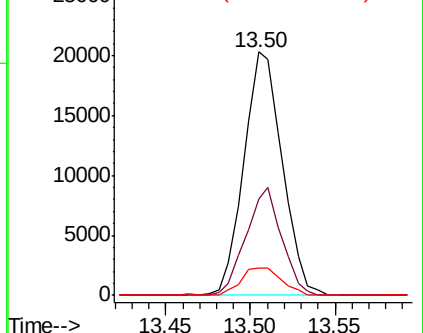
76 11.1 0.0 32.9



Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 76.00 (75.70 to 76.70): BGC



#48

Acenaphthylene

Concen: 17.748 ng

RT: 14.40 min Scan# 1891

Delta R.T. -0.01 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

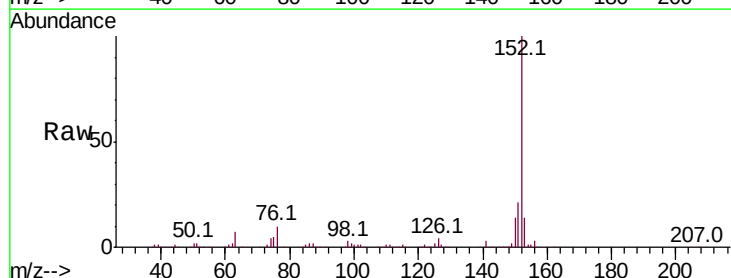
Tgt Ion:152 Resp: 253076

Ion Ratio Lower Upper

152 100

151 20.6 16.9 25.3

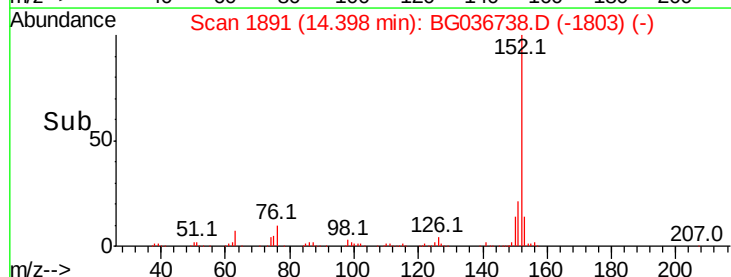
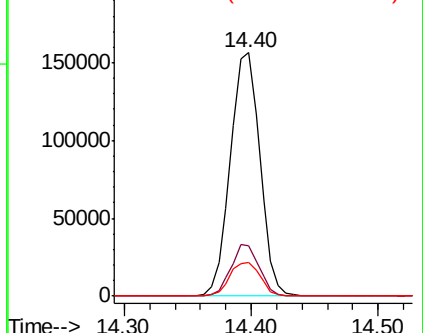
153 13.8 11.2 16.8

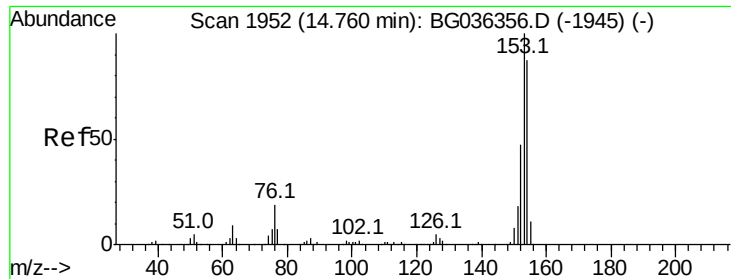


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#51

Acenaphthene

Concen: 2.987 ng

RT: 14.73 min Scan# 1948

Delta R.T. -0.02 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

Instrument :

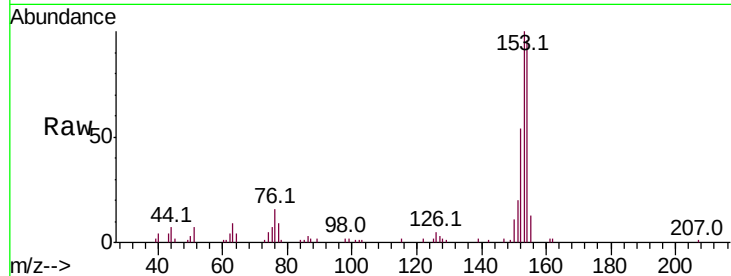
BNA\_G

ClientSampleId :

ROLLOFF02-COMP-FILL

Tot Ion:154 Resp: 27282

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 154 | 100   |       |       |
| 153 | 104.6 | 91.8  | 137.6 |
| 152 | 56.7  | 43.5  | 65.3  |



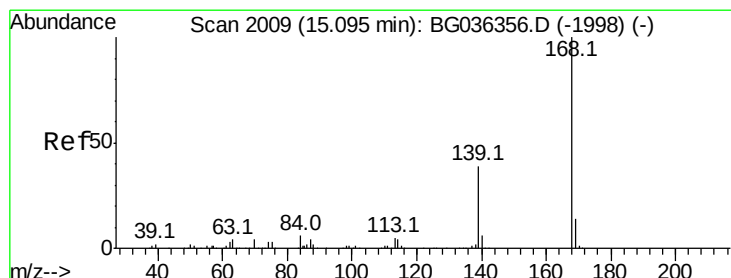
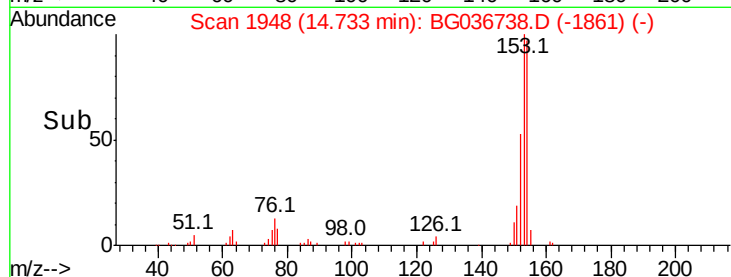
Abundance

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

Time-->



#54

Dibenzofuran

Concen: 6.580 ng

RT: 15.07 min Scan# 2006

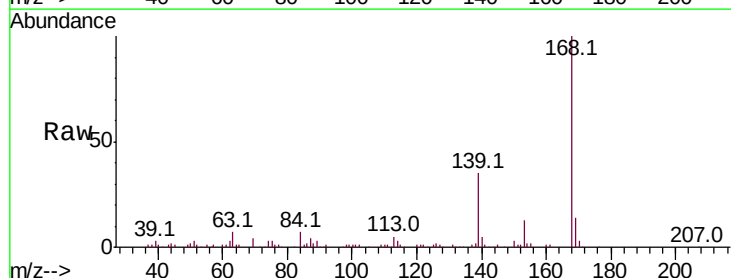
Delta R.T. -0.01 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

Tgt Ion:168 Resp: 94143

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 168 | 100   |       |       |
| 139 | 34.6  | 31.0  | 46.6  |
| 169 | 13.5  | 11.1  | 16.7  |



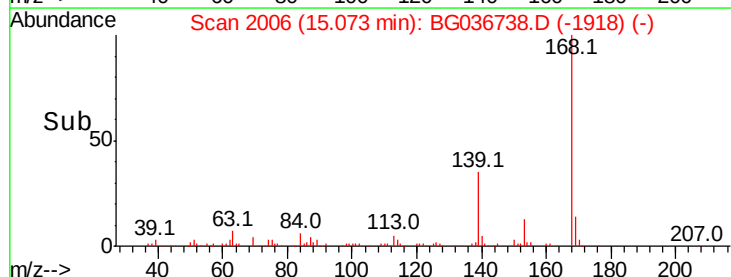
Abundance

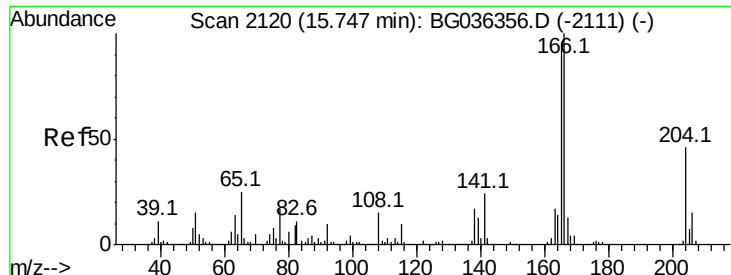
Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 169.00 (168.70 to 169.70): E

Time-->

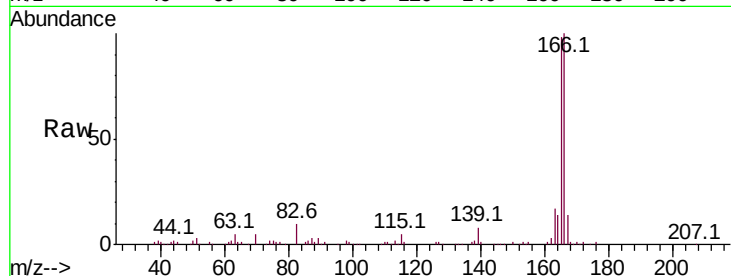




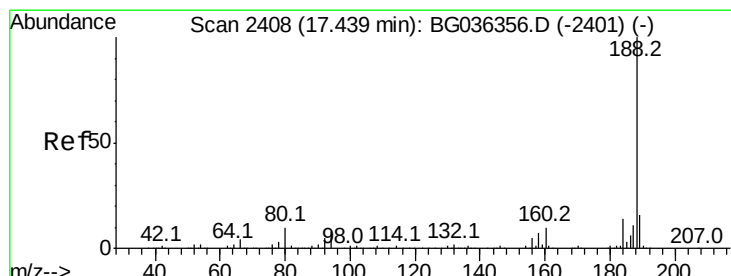
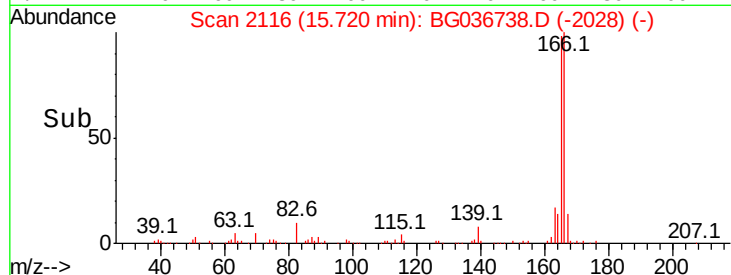
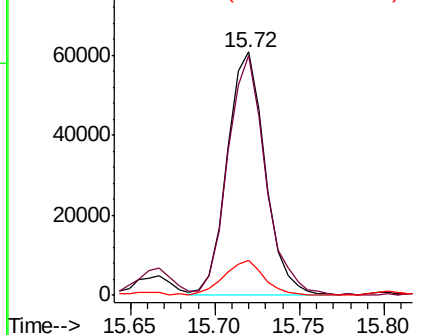
#57  
**Fluorene**  
 Concen: 8.832 ng  
 RT: 15.72 min Scan# 2116  
 Delta R.T. -0.01 min  
 Lab File: BG036738.D  
 Acq: 15 Sep 2018 13:01

Instrument :  
 BNA\_G  
 ClientSampleId :  
 ROLLOFF02-COMP-FILL

Tot Ion:166 Resp: 94461  
 Ion Ratio Lower Upper  
 166 100  
 165 98.3 77.0 115.4  
 167 14.1 10.6 16.0

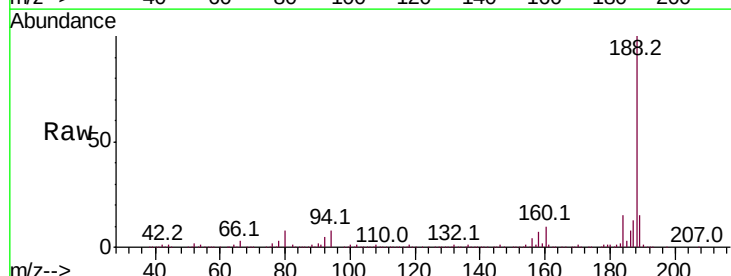


Abundance Ion 166.00 (165.70 to 166.70): E  
 Ion 165.00 (164.70 to 165.70): E  
 Ion 167.00 (166.70 to 167.70): E

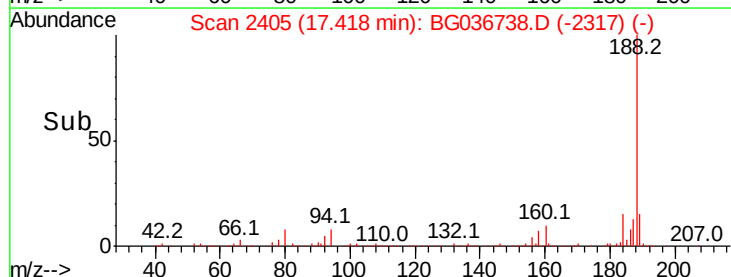
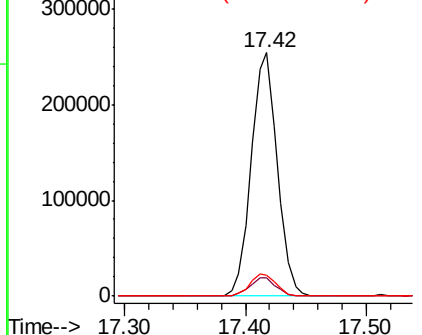


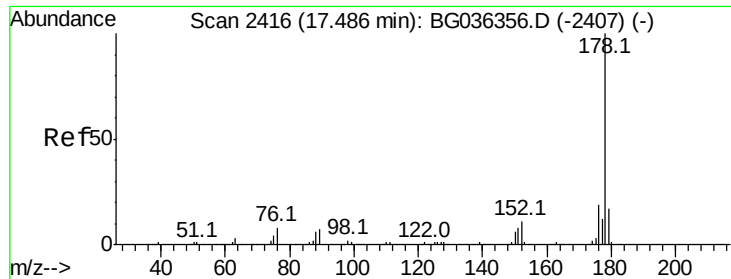
#63  
**Phenanthrene-d10**  
 Concen: 20.000 ng  
 RT: 17.42 min Scan# 2405  
 Delta R.T. -0.01 min  
 Lab File: BG036738.D  
 Acq: 15 Sep 2018 13:01

Tgt Ion:188 Resp: 380925  
 Ion Ratio Lower Upper  
 188 100  
 94 7.5 6.7 10.1  
 80 8.4 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





#70

Phenanthrene

Concen: 9.095 ng

RT: 17.46 min Scan# 2412

Delta R.T. -0.01 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

Instrument :

BNA\_G

ClientSampleId :

ROLLOFF02-COMP-FILL

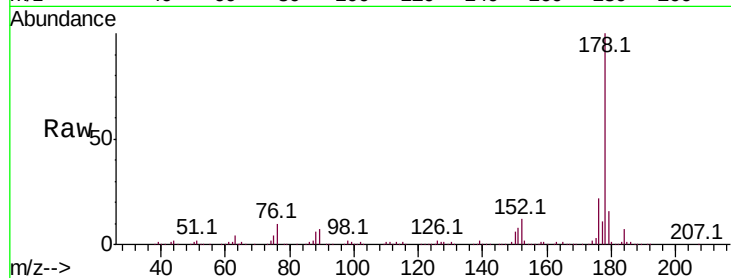
Tot Ion:178 Resp: 176035

Ion Ratio Lower Upper

178 100

176 21.7 15.4 23.2

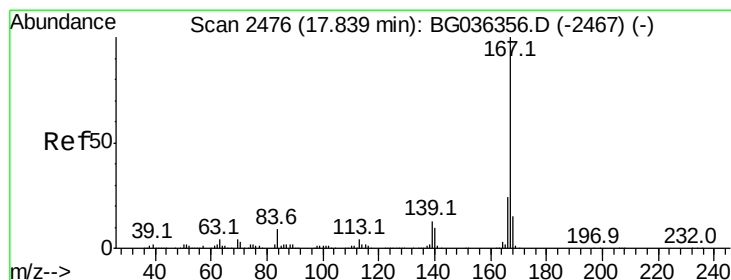
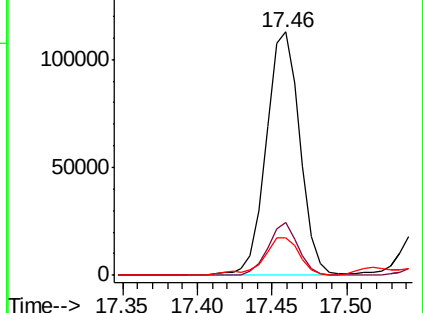
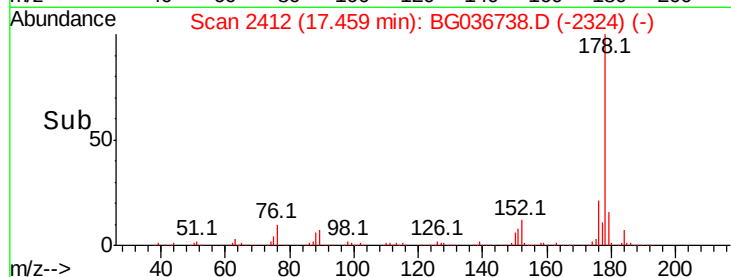
179 15.6 13.4 20.2



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#72

Carbazole

Concen: 11.456 ng

RT: 17.82 min Scan# 2473

Delta R.T. -0.01 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

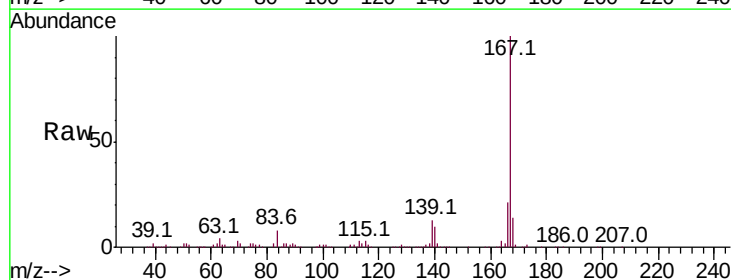
Tgt Ion:167 Resp: 220750

Ion Ratio Lower Upper

167 100

166 21.4 19.5 29.3

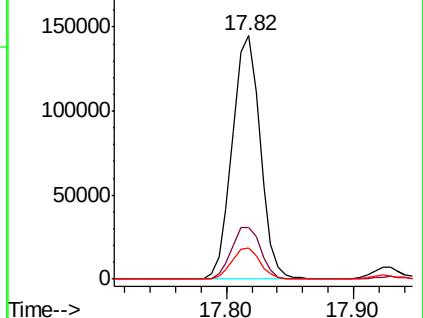
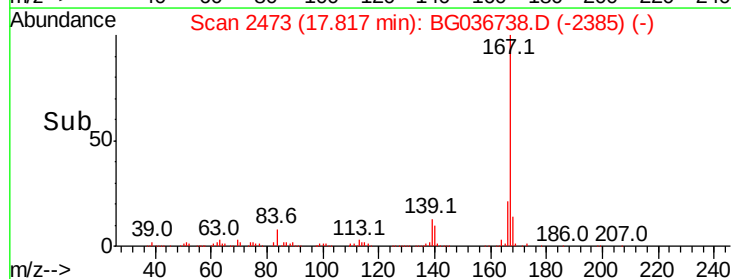
139 13.0 10.7 16.1

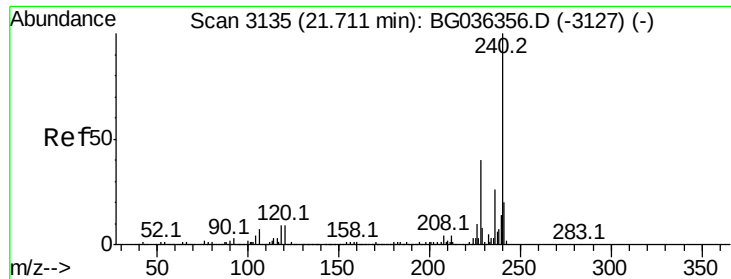


Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E





#75

Chrysene-d12

Concen: 20.000 ng

RT: 21.68 min Scan# 3130

Delta R.T. -0.02 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

Instrument :

BNA\_G

ClientSampleId :

ROLLOFF02-COMP-FILL

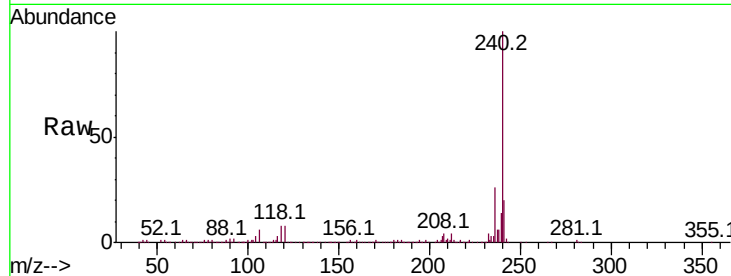
Tot Ion:240 Resp: 412691

Ion Ratio Lower Upper

240 100

120 7.6 6.9 10.3

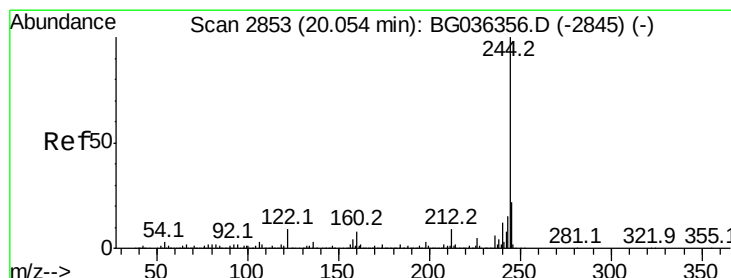
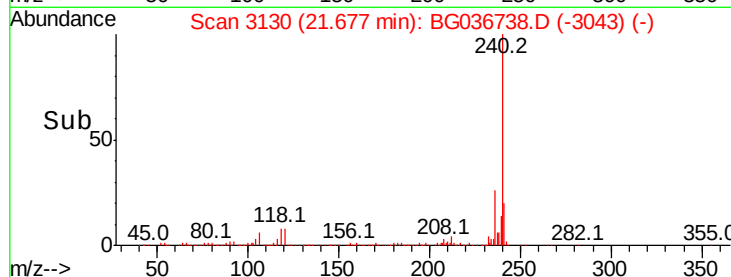
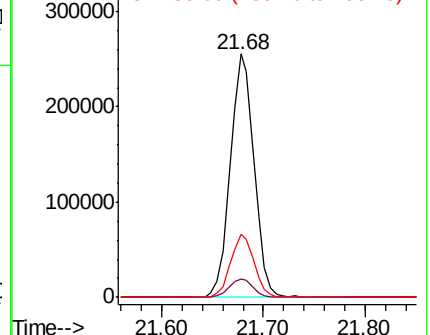
236 25.7 21.2 31.8



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



#78

Terphenyl-d14

Concen: 81.829 ng

RT: 20.02 min Scan# 2848

Delta R.T. -0.01 min

Lab File: BG036738.D

Acq: 15 Sep 2018 13:01

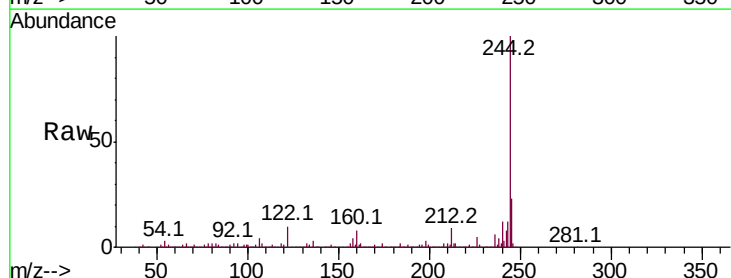
Tgt Ion:244 Resp: 1444799

Ion Ratio Lower Upper

244 100

212 8.9 7.0 10.6

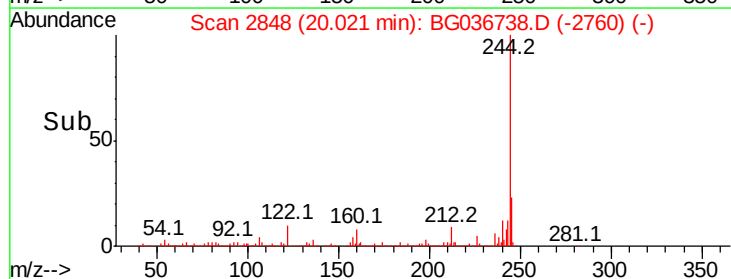
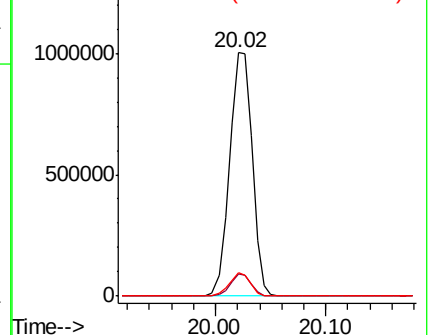
122 9.7 7.1 10.7

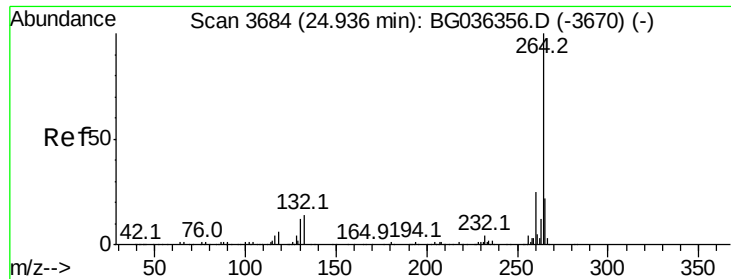


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#86  
Pervlene-d12  
Concen: 20.000 ng  
RT: 24.88 min Scan# 3675  
Delta R.T. -0.02 min  
Lab File: BG036738.D  
Acq: 15 Sep 2018 13:01

Instrument :  
BNA\_G  
ClientSampleId :  
ROLLOFF02-COMP-FILL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.1  | 19.6  | 29.4  |
| 265     | 20.5  | 17.4  | 26.0  |

