

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA G\DATA\BG032018\  
 Data File : BG033288.D  
 Acq On : 21 Mar 2018 5:12  
 Operator : SJ/JU  
 Sample : PB107504TB  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: Mar 21 06:37:51 2018  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\8270-BG031918.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 19 16:48:53 2018  
 Response via : Initial Calibration

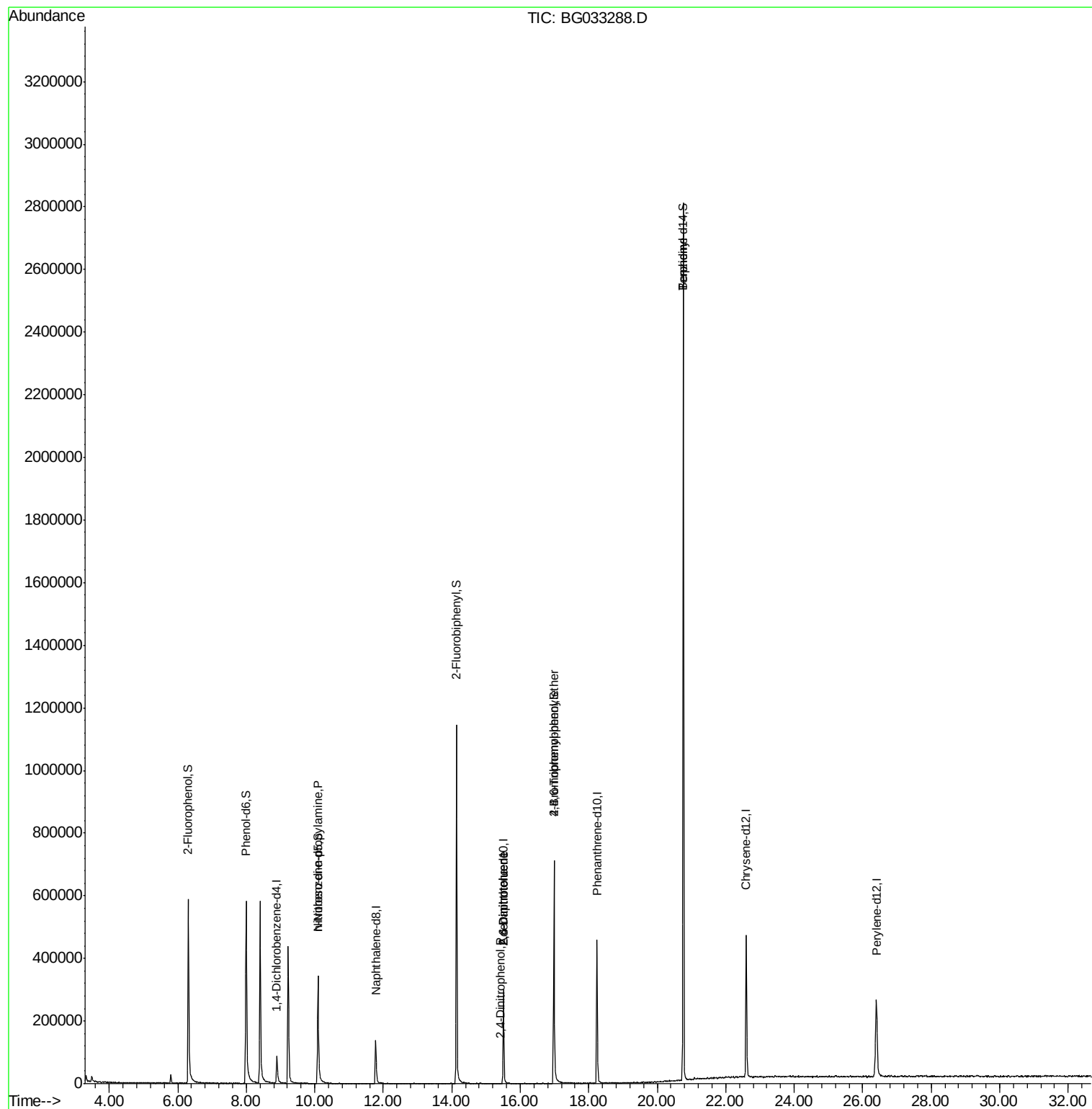
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 8.90  | 152  | 34637    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8             | 11.78 | 136  | 151274   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10           | 15.51 | 164  | 115088   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10           | 18.24 | 188  | 322907   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12               | 22.60 | 240  | 336343   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12               | 26.40 | 264  | 347724   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 6.31  | 112  | 303327   | 164.21 | ng    | 0.00     |
| 7) Phenol-d6                   | 7.99  | 99   | 436039   | 137.38 | ng    | 0.00     |
| 23) Nitrobenzene-d5            | 10.09 | 82   | 282796   | 85.89  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol       | 16.98 | 330  | 164663   | 95.66  | ng    | 0.00     |
| 44) 2-Fluorobiphenyl           | 14.13 | 172  | 708787   | 88.91  | ng    | 0.00     |
| 78) Terphenyl-d14              | 20.76 | 244  | 1386570  | 88.16  | ng    | 0.00     |
| Target Compounds               |       |      |          |        |       |          |
| 19) n-Nitroso-di-n-propylamine | 10.09 | 70   | 37573    | 16.156 | ng    | # 73     |
| 50) 2,6-Dinitrotoluene         | 15.51 | 165  | 13831    | 6.754  | ng    | # 20     |
| 53) 2,4-Dinitrophenol          | 15.43 | 184  | 82       | 7.713  | ng    | # 1      |
| 56) 2,4-Dinitrotoluene         | 15.51 | 165  | 13831    | 4.587  | ng    | # 18     |
| 66) 4-Bromophenyl-phenylether  | 16.98 | 248  | 12250    | 3.230  | ng    | # 1      |
| 76) Benzidine                  | 20.76 | 184  | 22710    | 2.490  | ng    | # 93     |

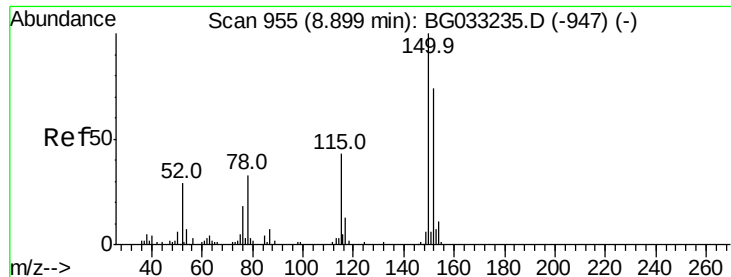
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA G\DATA\BG032018\  
Data File : BG033288.D  
Acq On : 21 Mar 2018 5:12  
Operator : SJ/JU  
Sample : PB107504TB  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :

Quant Time: Mar 21 06:37:51 2018  
Quant Method : Z:\HPCHEM1\BNA G\METHODS\8270-BG031918.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 19 16:48:53 2018  
Response via : Initial Calibration



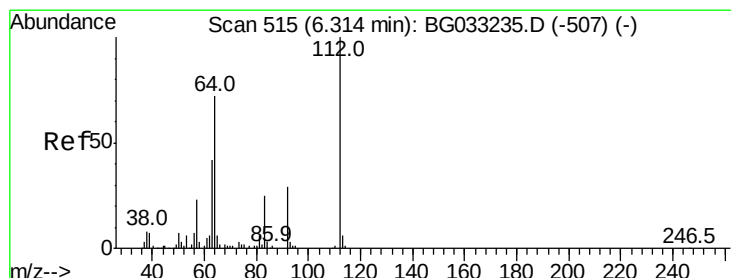
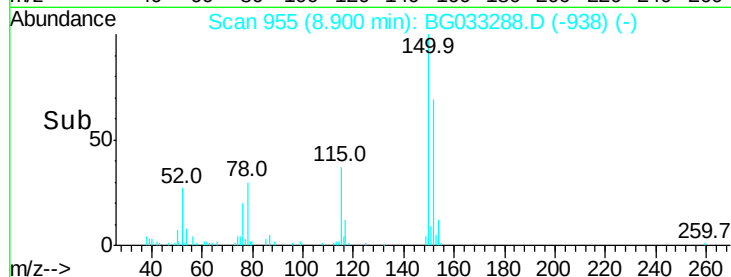
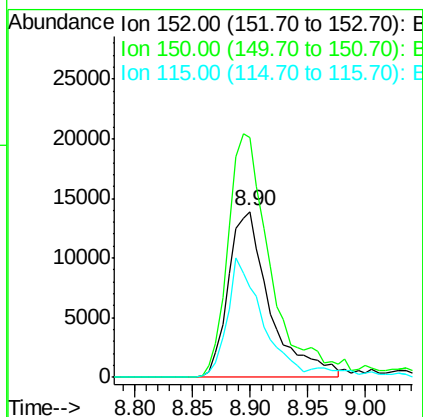
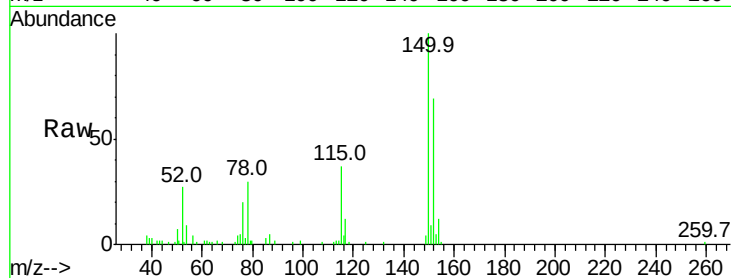


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.90 min Scan# 955  
Delta R.T. 0.00 min  
Lab File: BG033288.D  
Acq: 21 Mar 2018 5:12

Instrument :  
BNA\_G  
ClientSampleId :

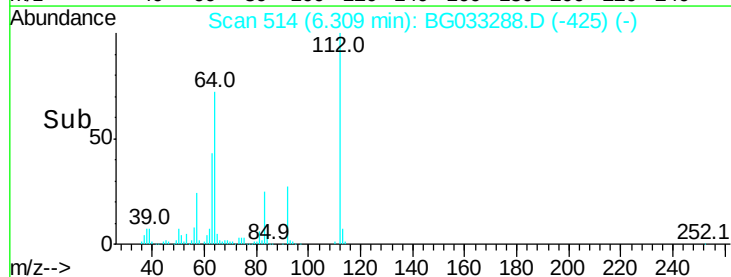
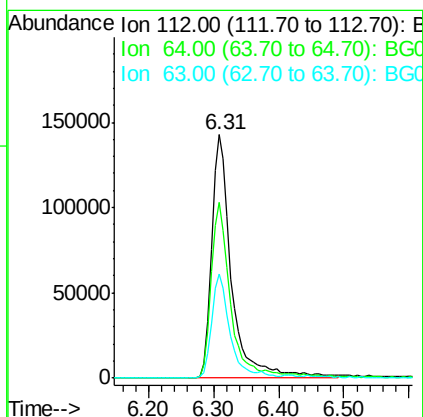
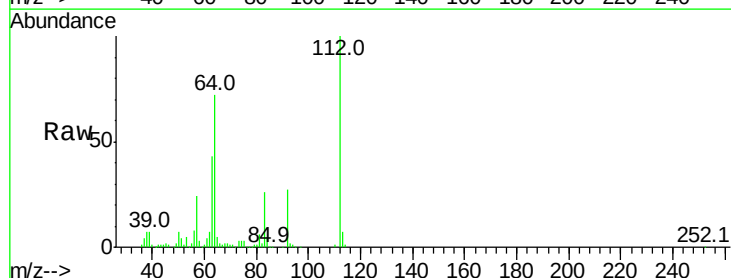
Tot Ion:152 Resp: 34637  
Ion Ratio Lower Upper  
152 100  
150 144.8 126.6 189.8  
115 54.0 53.0 79.4

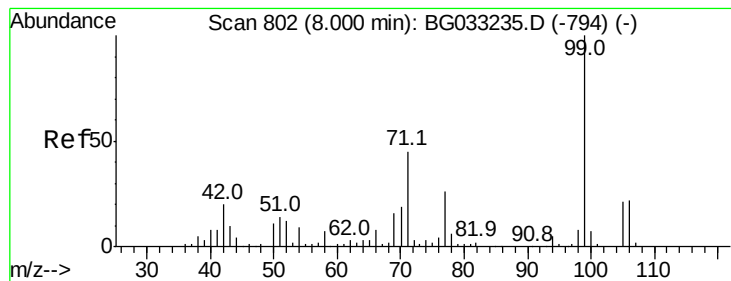


#5

2-Fluorophenol  
Concen: 164.210 ng  
RT: 6.31 min Scan# 514  
Delta R.T. -0.00 min  
Lab File: BG033288.D  
Acq: 21 Mar 2018 5:12

Tgt Ion:112 Resp: 303327  
Ion Ratio Lower Upper  
112 100  
64 72.2 56.3 84.5  
63 42.8 30.1 45.1





#7

Phenol-d6

Concen: 137.385 ng

RT: 7.99 min Scan# 801

Delta R.T. -0.00 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

Instrument :

BNA\_G

ClientSampled :

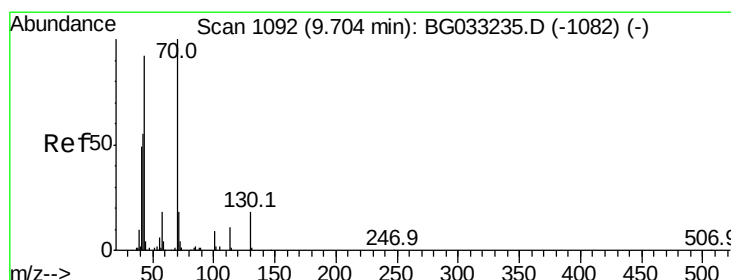
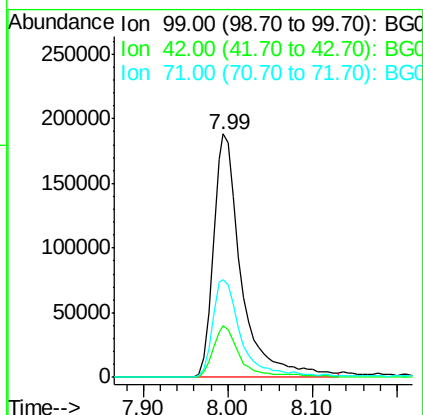
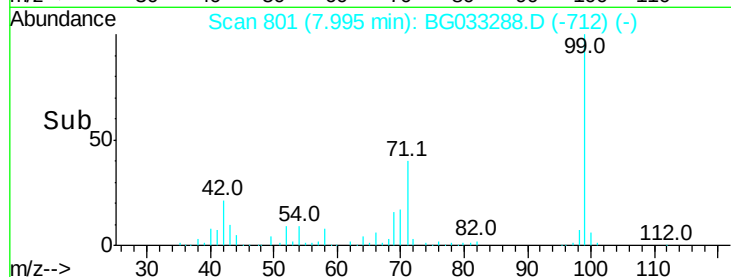
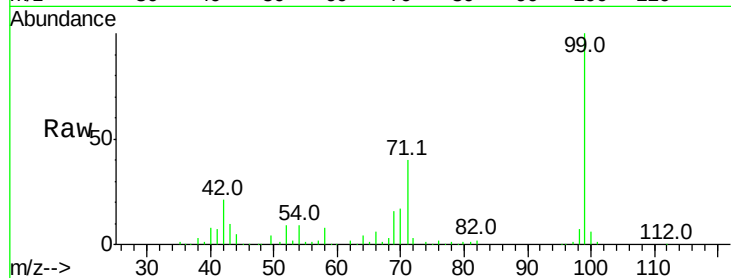
Tot Ion: 99 Resp: 436039

Ion Ratio Lower Upper

99 100

42 21.1 14.1 21.1

71 40.2 26.1 39.1#



#19

n-Nitroso-di-n-propylamine

Concen: 16.156 ng

RT: 10.09 min Scan# 1158

Delta R.T. 0.39 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

Tgt Ion: 70 Resp: 37573

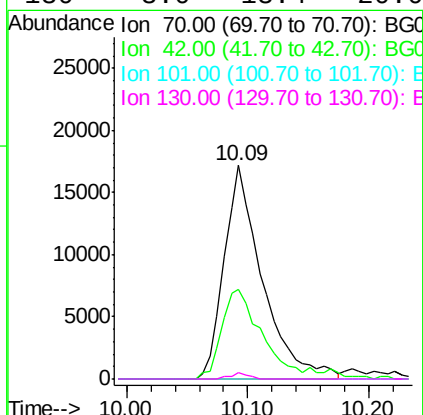
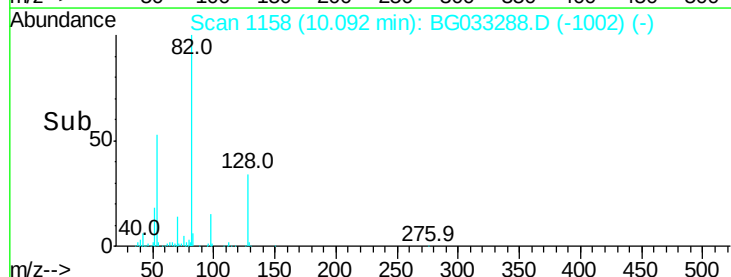
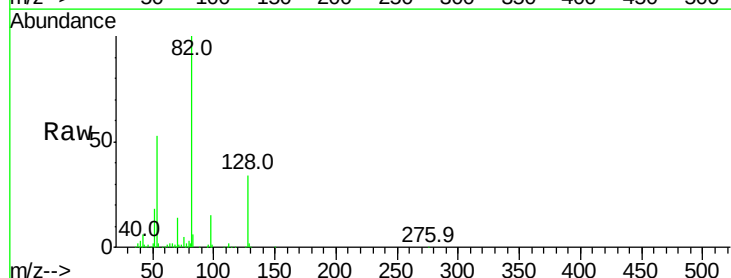
Ion Ratio Lower Upper

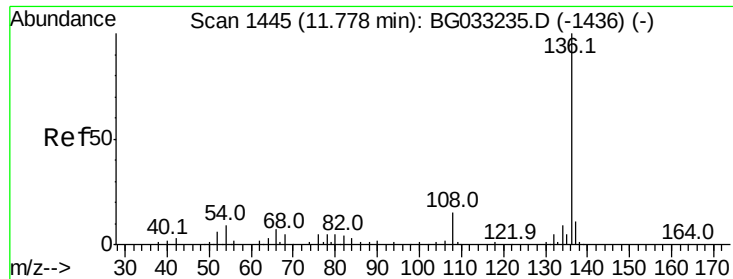
70 100

42 41.9 49.1 73.7#

101 0.0 8.5 12.7#

130 3.0 13.4 20.0#

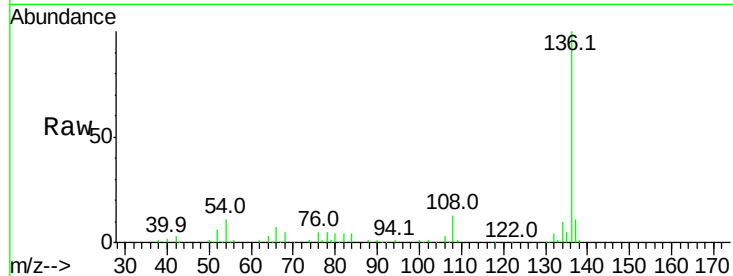




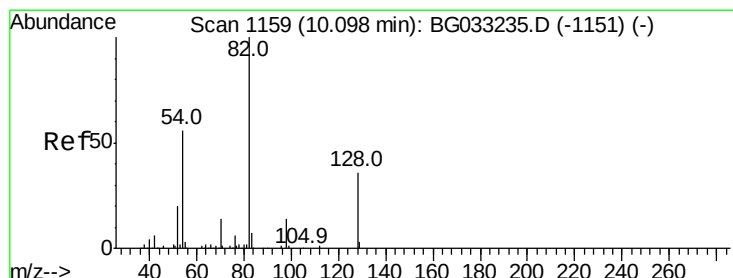
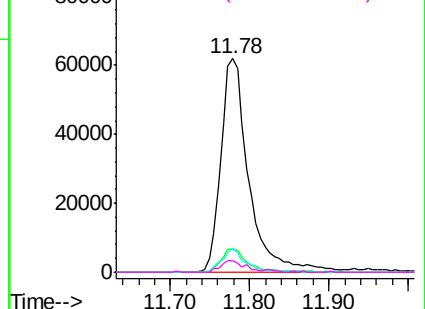
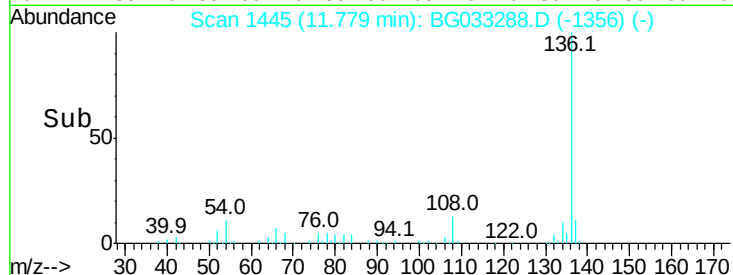
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 11.78 min Scan# 1445  
Delta R.T. -0.00 min  
Lab File: BG033288.D  
Acq: 21 Mar 2018 5:12

Instrument :  
BNA\_G  
ClientSampleId :

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 136   | Resp: | 151274 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 10.7  | 9.2   | 13.8   |
| 54       | 11.3  | 10.3  | 15.5   |
| 68       | 5.3   | 4.5   | 6.7    |

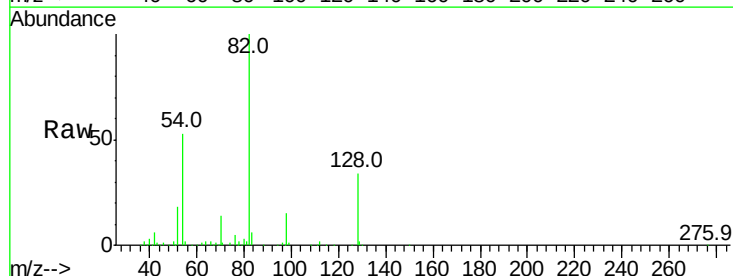


Abundance Ion 136.00 (135.70 to 136.70): B  
Ion 137.00 (136.70 to 137.70): B  
Ion 54.00 (53.70 to 54.70): B  
Ion 68.00 (67.70 to 68.70): B

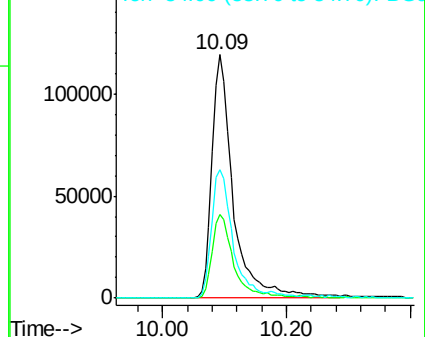
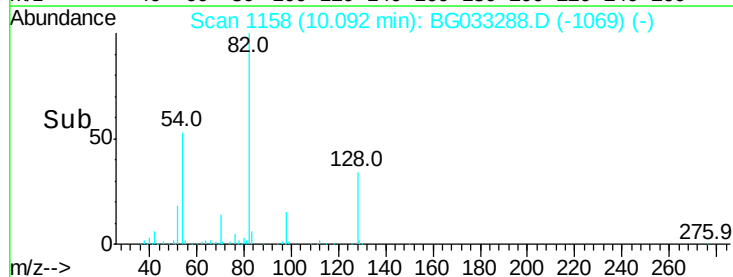


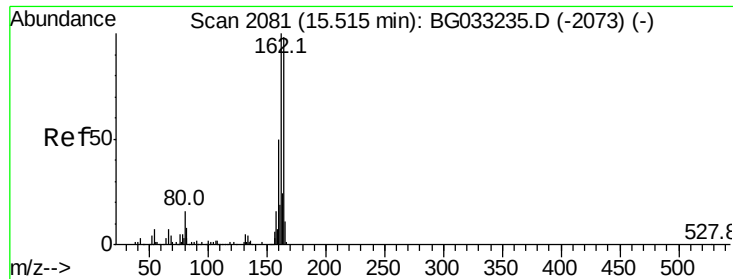
#23  
Nitrobenzene-d5  
Concen: 85.889 ng  
RT: 10.09 min Scan# 1158  
Delta R.T. -0.00 min  
Lab File: BG033288.D  
Acq: 21 Mar 2018 5:12

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 282796 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 34.3  | 29.7  | 44.5   |
| 54       | 52.7  | 43.1  | 64.7   |



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





#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 15.51 min Scan# 2080

Delta R.T. -0.00 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

Instrument :

BNA\_G

ClientSampled :

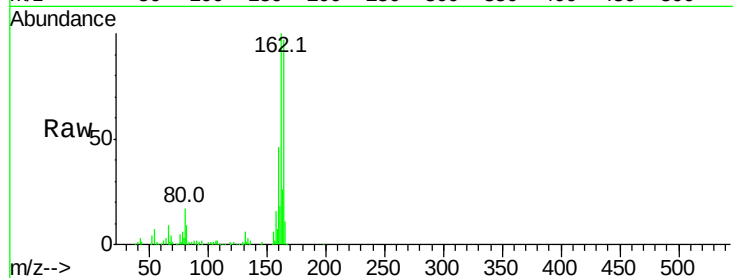
Tot Ion:164 Resp: 115088

Ion Ratio Lower Upper

164 100

162 102.9 78.8 118.2

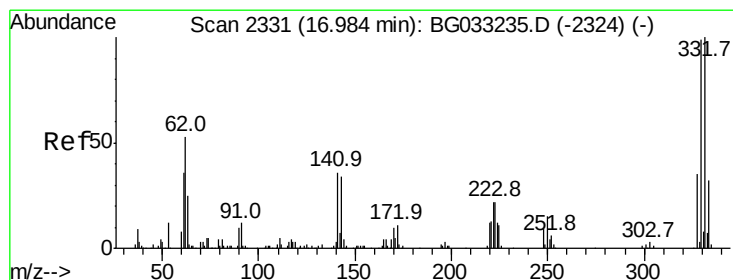
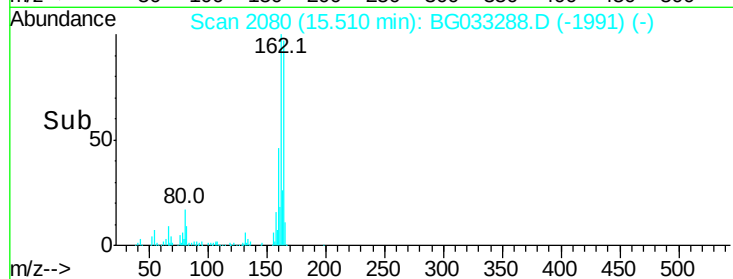
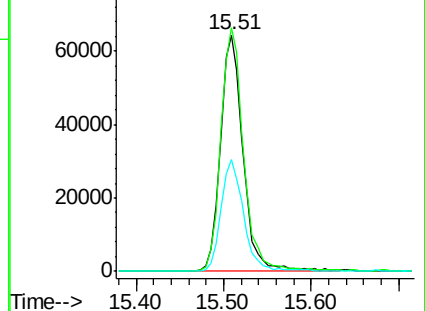
160 47.1 35.4 53.0



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: 95.663 ng

RT: 16.98 min Scan# 2331

Delta R.T. 0.00 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

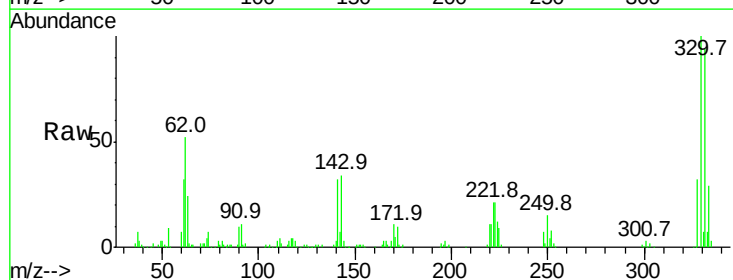
Tgt Ion:330 Resp: 164663

Ion Ratio Lower Upper

330 100

332 96.2 77.0 115.6

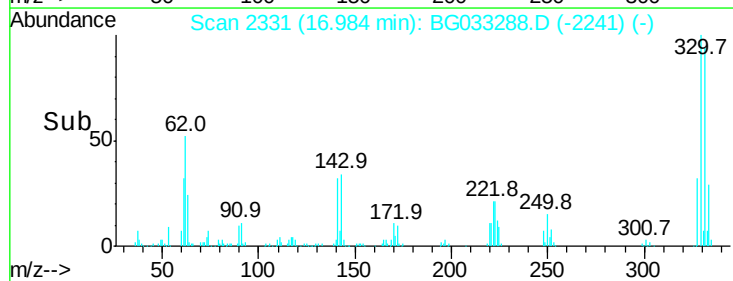
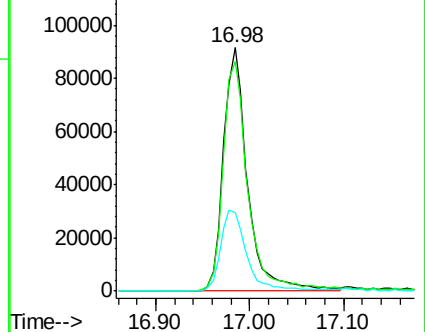
141 35.2 25.2 37.8

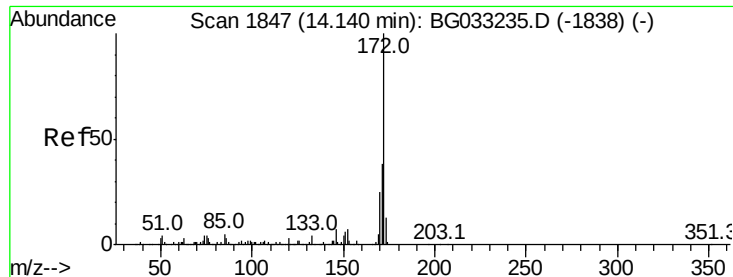


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E





#44

2-Fluorobiphenyl

Concen: 88.908 ng

RT: 14.13 min Scan# 1846

Delta R.T. -0.00 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

Instrument :

BNA\_G

ClientSampleId :

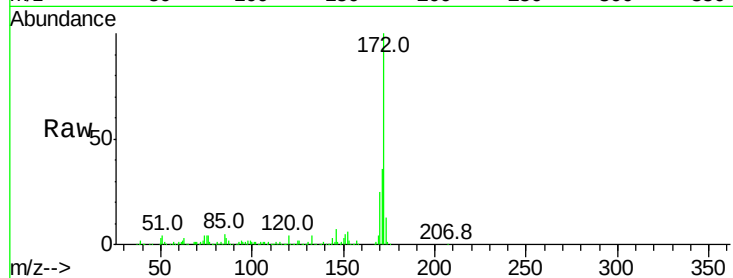
Tot Ion:172 Resp: 708787

Ion Ratio Lower Upper

172 100

171 36.1 30.0 45.0

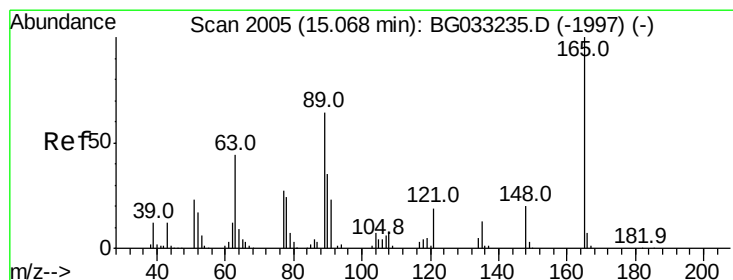
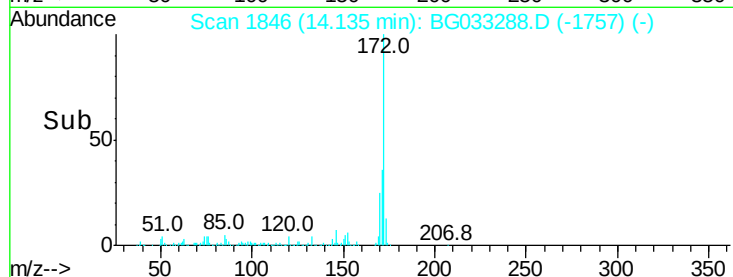
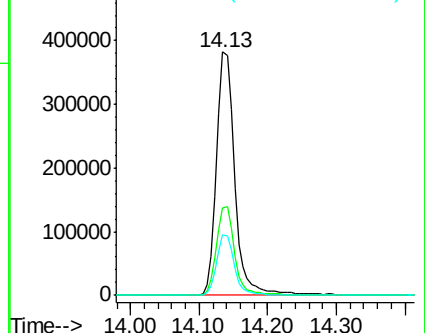
170 24.8 19.5 29.3



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



#50

2,6-Dinitrotoluene

Concen: 6.754 ng

RT: 15.51 min Scan# 2080

Delta R.T. 0.44 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

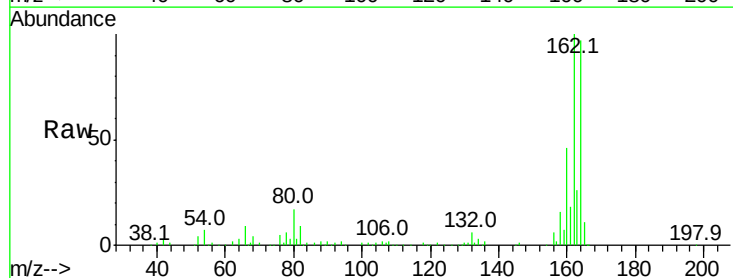
Tgt Ion:165 Resp: 13831

Ion Ratio Lower Upper

165 100

63 0.0 52.7 79.1#

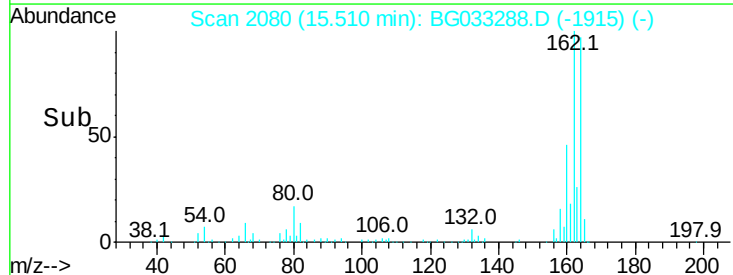
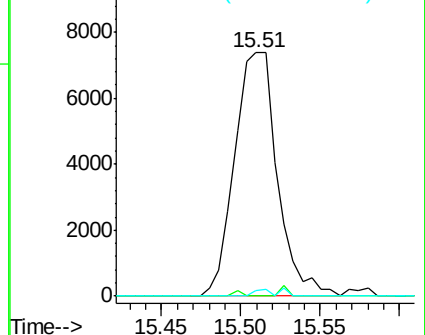
89 2.4 49.2 73.8#

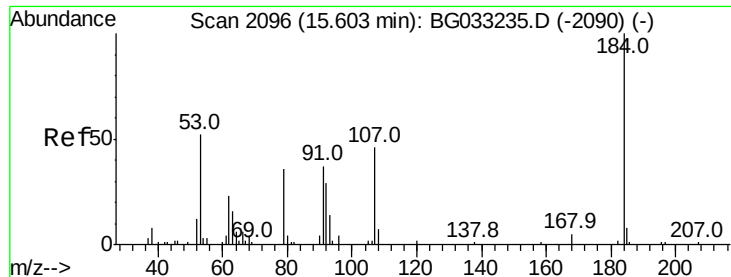


Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BGC

Ion 89.00 (88.70 to 89.70): BGC

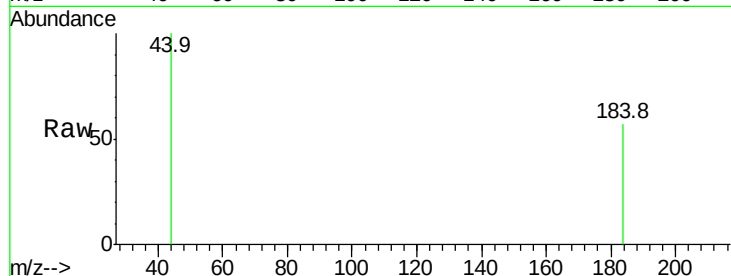




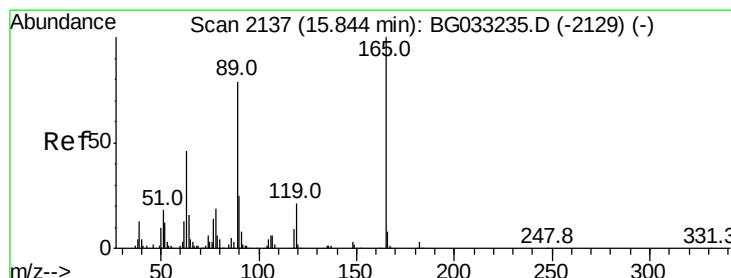
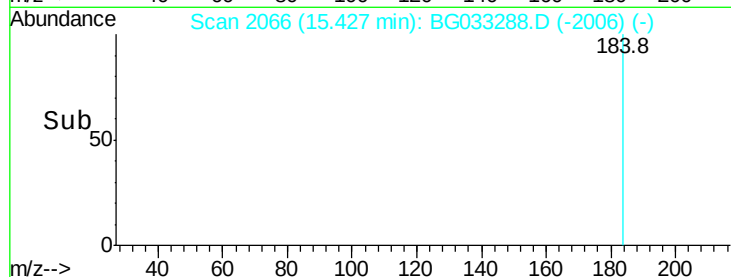
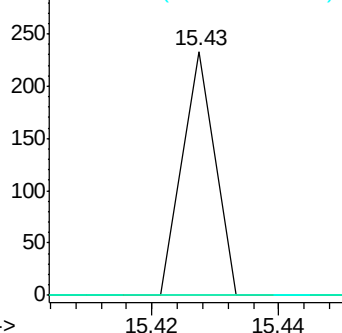
#53  
 2,4-Dinitrophenol  
 Concen: 7.713 ng  
 RT: 15.43 min Scan# 2066  
 Delta R.T. -0.17 min  
 Lab File: BG033288.D  
 Acq: 21 Mar 2018 5:12

Instrument :  
 BNA\_G  
 ClientSampleId :

Tot Ion:184 Resp: 82  
 Ion Ratio Lower Upper  
 184 100  
 63 0.0 59.8 89.8#  
 154 0.0 101.8 152.8#

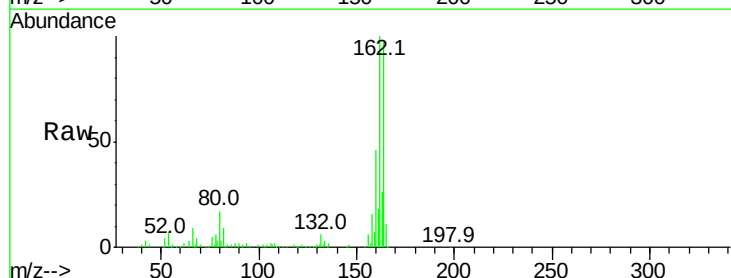


Abundance Ion 184.00 (183.70 to 184.70): E  
 Ion 63.00 (62.70 to 63.70): BGC  
 Ion 154.00 (153.70 to 154.70): E

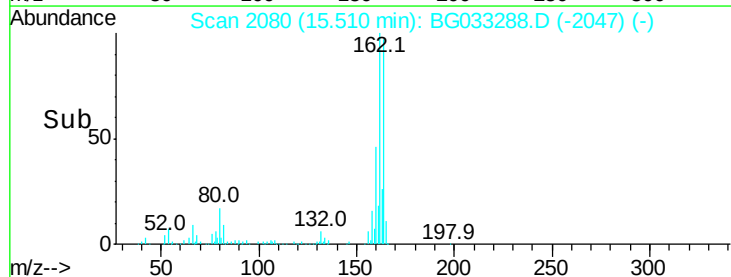
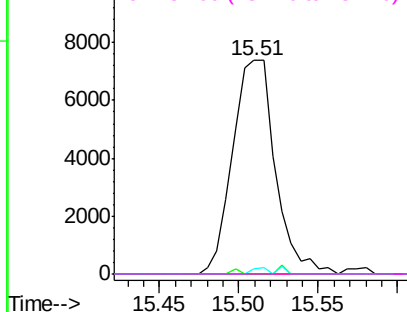


#56  
 2,4-Dinitrotoluene  
 Concen: 4.587 ng  
 RT: 15.51 min Scan# 2080  
 Delta R.T. -0.33 min  
 Lab File: BG033288.D  
 Acq: 21 Mar 2018 5:12

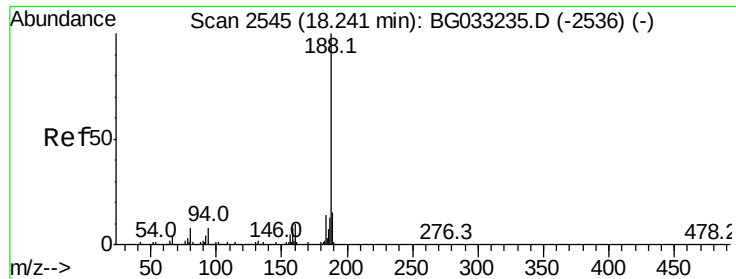
Tgt Ion:165 Resp: 13831  
 Ion Ratio Lower Upper  
 165 100  
 63 0.0 42.0 63.0#  
 89 2.4 66.9 100.3#  
 182 0.0 2.6 3.8#



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



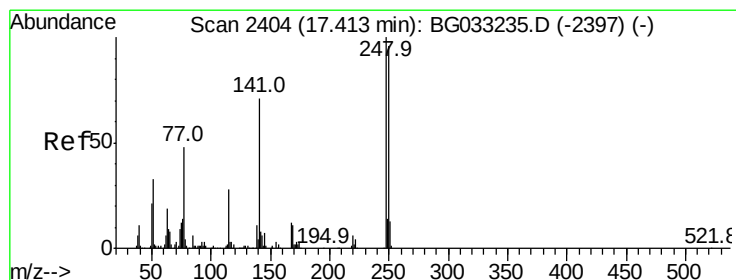
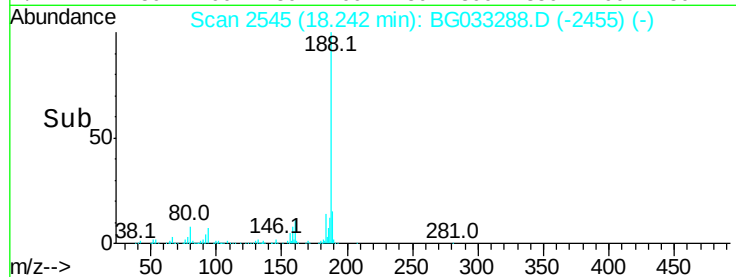
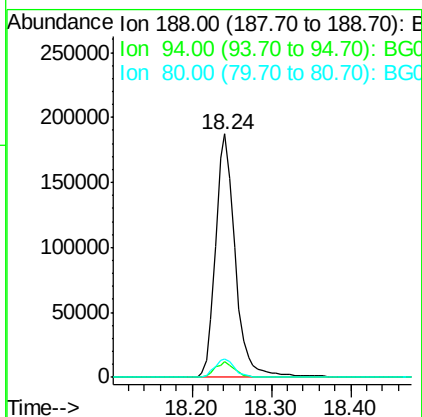
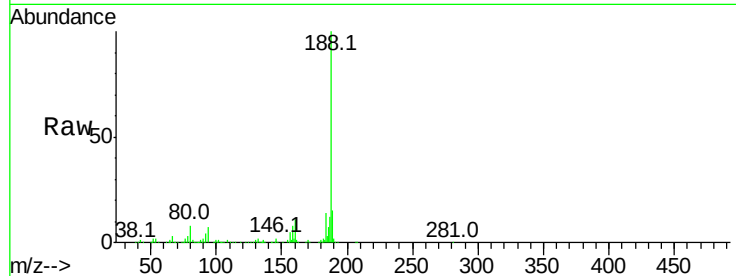




#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 18.24 min Scan# 2545  
Delta R.T. 0.00 min  
Lab File: BG033288.D  
Acq: 21 Mar 2018 5:12

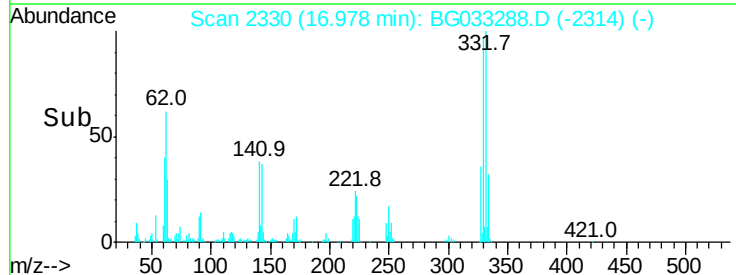
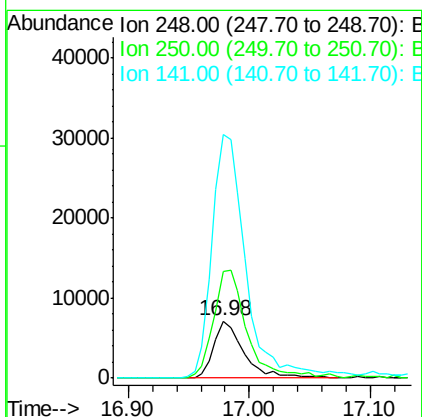
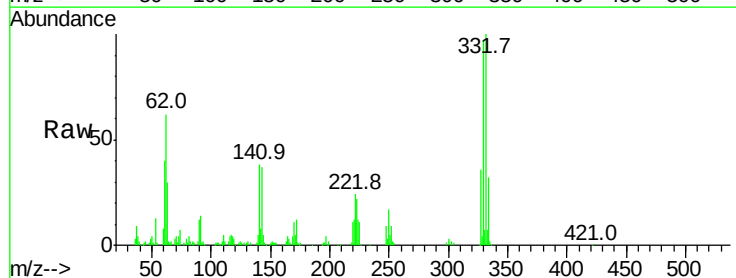
Instrument :  
BNA\_G  
ClientSampleId :

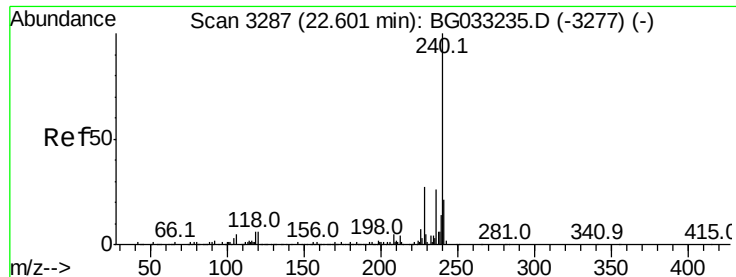
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 6.5   | 6.9   | 10.3# |
| 80      | 7.7   | 7.7   | 11.5  |



#66  
4-Bromophenyl-phenylether  
Concen: 3.230 ng  
RT: 16.98 min Scan# 2330  
Delta R.T. -0.43 min  
Lab File: BG033288.D  
Acq: 21 Mar 2018 5:12

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 248     | 100   |       |        |
| 250     | 187.1 | 77.1  | 115.7# |
| 141     | 426.5 | 50.8  | 76.2#  |





#75

Chrysene-d12

Concen: 20.000 ng

RT: 22.60 min Scan# 3286

Delta R.T. -0.00 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

Instrument :

BNA\_G

ClientSampleId :

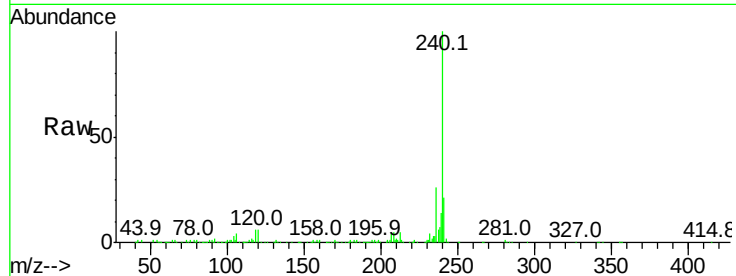
Tot Ion:240 Resp: 336343

Ion Ratio Lower Upper

240 100

120 6.2 6.8 10.2#

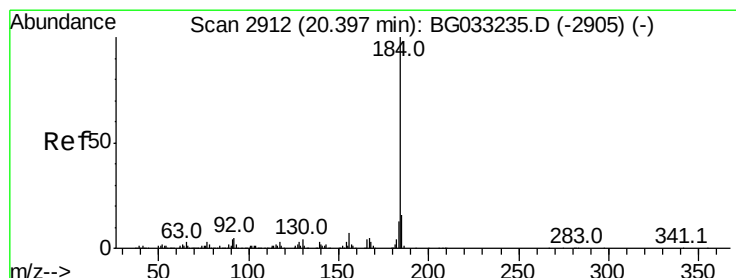
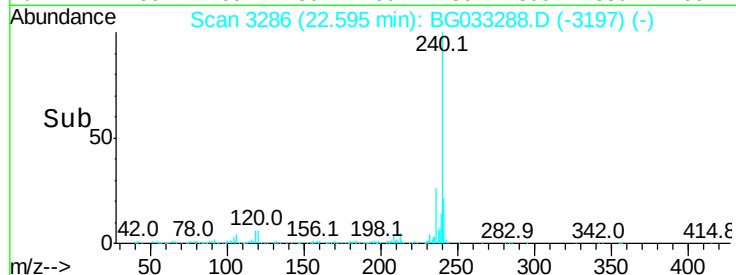
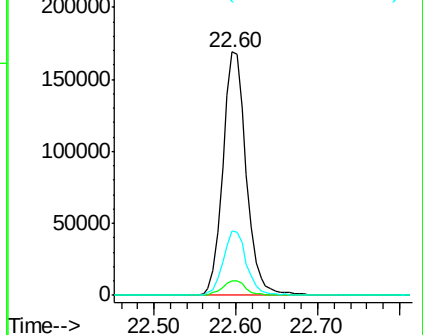
236 26.4 20.9 31.3



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: 2.490 ng

RT: 20.76 min Scan# 2974

Delta R.T. 0.37 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

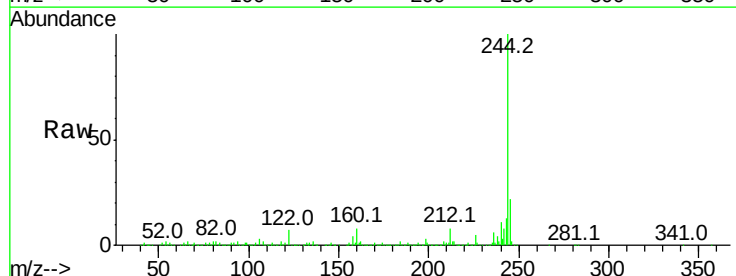
Tgt Ion:184 Resp: 22710

Ion Ratio Lower Upper

184 100

185 15.6 11.1 16.7

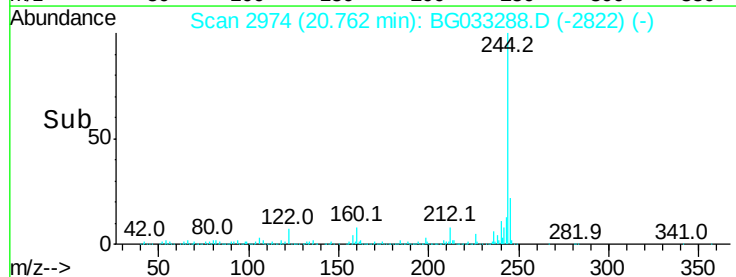
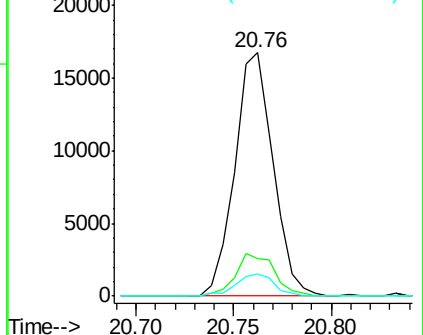
183 9.3 10.6 16.0#

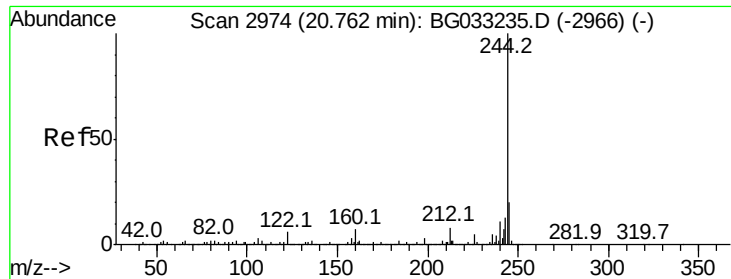


Abundance Ion 184.00 (183.70 to 184.70): E

Ion 185.00 (184.70 to 185.70): E

Ion 183.00 (182.70 to 183.70): E





#78

Terphenyl-d14

Concen: 88.164 ng

RT: 20.76 min Scan# 2974

Delta R.T. 0.00 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

Instrument :

BNA\_G

ClientSampleId :

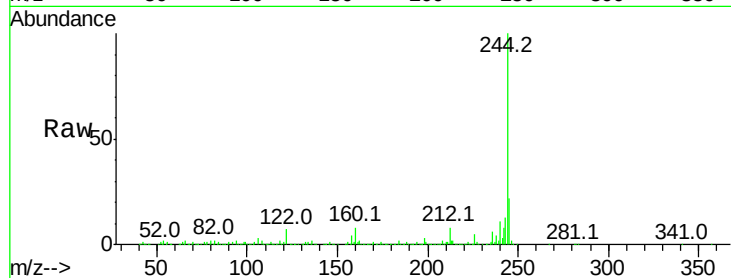
Tot Ion:244 Resp: 1386570

Ion Ratio Lower Upper

244 100

212 8.4 5.8 8.8

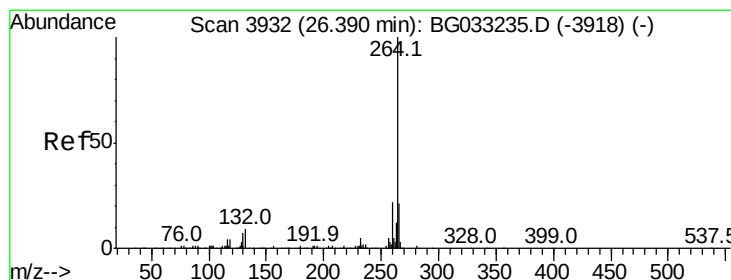
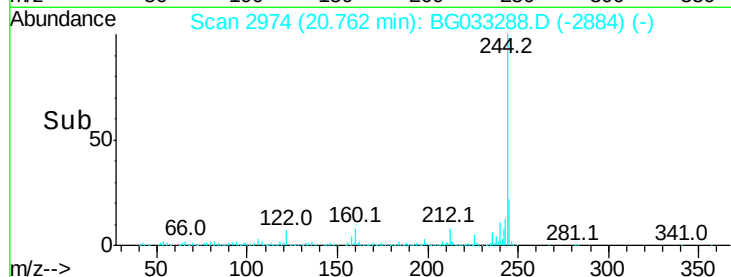
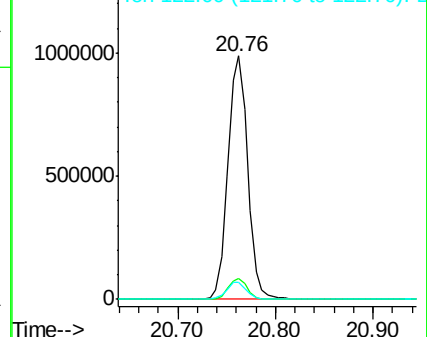
122 7.2 7.0 10.4



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: 26.40 min Scan# 3934

Delta R.T. 0.01 min

Lab File: BG033288.D

Acq: 21 Mar 2018 5:12

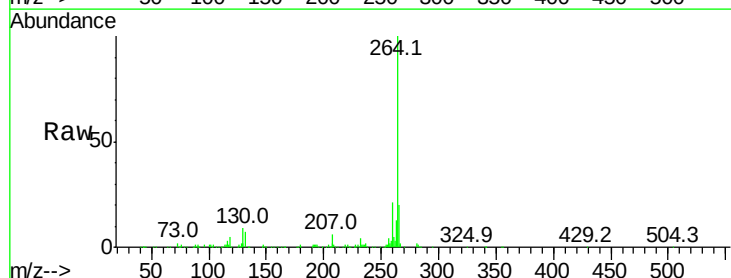
Tgt Ion:264 Resp: 347724

Ion Ratio Lower Upper

264 100

260 21.2 17.4 26.0

265 20.1 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

