

Data Path : Z:\HPCHEM1\BNA G\DATA\BG101015\  
 Data File : BG019121.D  
 Acq On : 10 Oct 2015 17:27  
 Operator : UM/NP  
 Sample : PB86017BL  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: Oct 12 06:35:15 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\8270-BG101015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Oct 12 06:30:50 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.03  | 152  | 14335    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.83 | 136  | 63594    | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 14.66 | 164  | 44036    | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 17.40 | 188  | 122047   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 21.67 | 240  | 154642   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 24.90 | 264  | 135765   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.61  | 112  | 104391   | 148.27 | ng    | 0.00     |
| 7) Phenol-d6                | 7.20  | 99   | 155264   | 143.55 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.19  | 82   | 103347   | 89.79  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 16.15 | 330  | 79939    | 133.21 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 13.28 | 172  | 257274   | 89.83  | ng    | 0.00     |
| 78) Terphenyl-d14           | 20.02 | 244  | 542090   | 92.60  | ng    | 0.00     |

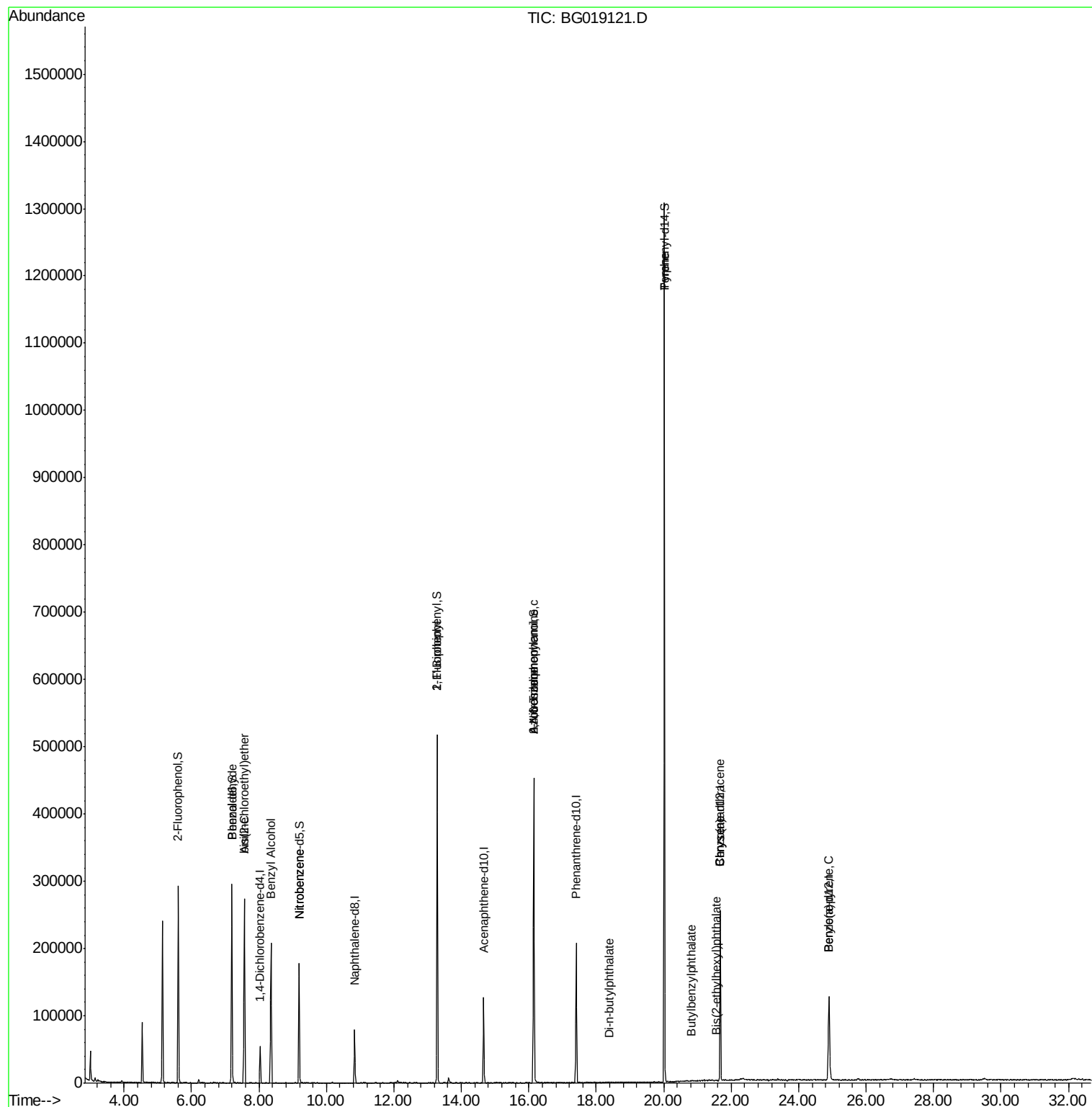
| Target Compounds               | R.T.  | QIon | Response | Conc | Units | Qvalue |
|--------------------------------|-------|------|----------|------|-------|--------|
| 6) Aniline                     | 7.57  | 93   | 182      | 0.12 | ng    | # 1    |
| 9) Benzaldehyde                | 7.19  | 77   | 233      | 0.34 | ng    | # 3    |
| 11) bis(2-Chloroethyl)ether    | 7.57  | 93   | 182      | 0.21 | ng    | # 1    |
| 15) Benzyl Alcohol             | 8.36  | 79   | 1577     | 1.63 | ng    | # 47   |
| 24) Nitrobenzene               | 9.18  | 77   | 377      | 0.31 | ng    | # 43   |
| 45) 1,1'-Biphenyl              | 13.28 | 154  | 390      | 0.12 | ng    | # 1    |
| 62) Azobenzene                 | 16.15 | 77   | 386      | 0.12 | ng    | # 59   |
| 65) n-Nitrosodiphenylamine     | 16.15 | 169  | 2594     | 0.77 | ng    | # 53   |
| 73) Di-n-butylphthalate        | 18.37 | 149  | 272      | 0.04 | ng    | # 77   |
| 77) Pyrene                     | 20.02 | 202  | 2035     | 0.23 | ng    | # 58   |
| 79) Butylbenzylphthalate       | 20.81 | 149  | 56       | 0.02 | ng    | # 22   |
| 80) Benzo(a)anthracene         | 21.67 | 228  | 531      | 0.06 | ng    | # 51   |
| 82) Chrysene                   | 21.67 | 228  | 531      | 0.07 | ng    | # 48   |
| 83) Bis(2-ethylhexyl)phthalate | 21.57 | 149  | 59       | 0.01 | ng    | # 52   |
| 89) Benzo(a)pyrene             | 24.90 | 252  | 152      | 0.02 | ng    | # 61   |

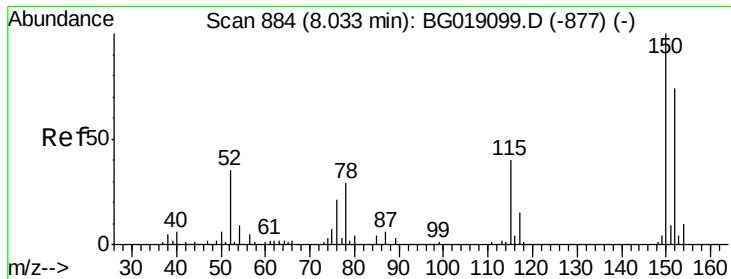
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA G\DATA\BG101015\  
Data File : BG019121.D  
Acq On : 10 Oct 2015 17:27  
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Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :

Quant Time: Oct 12 06:35:15 2015  
Quant Method : Z:\HPCHEM1\BNA G\METHODS\8270-BG101015.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Oct 12 06:30:50 2015  
Response via : Initial Calibration



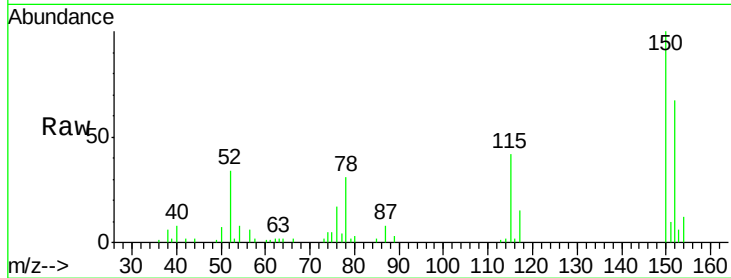


#1

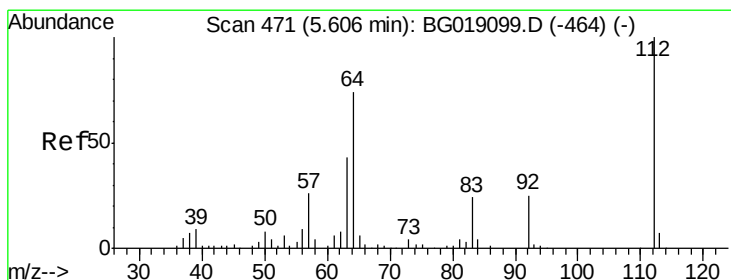
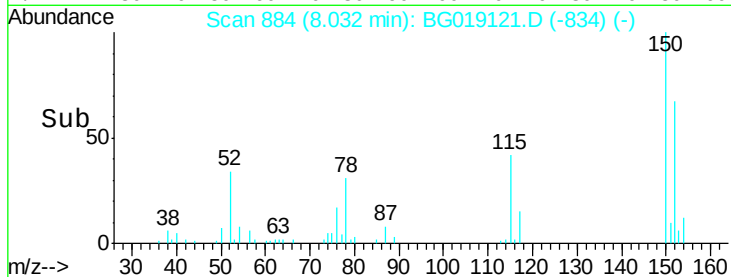
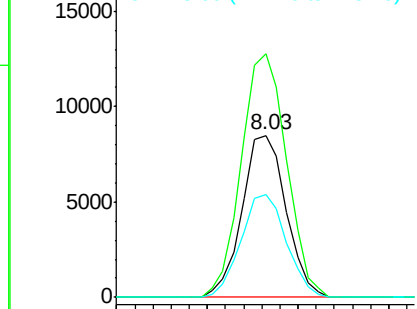
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 8.03 min Scan# 884  
Delta R.T. -0.00 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

Instrument :  
BNA\_G  
ClientSampleId :

Tot Ion:152 Resp: 14335  
Ion Ratio Lower Upper  
152 100  
150 150.3 108.2 162.2  
115 63.5 43.2 64.8



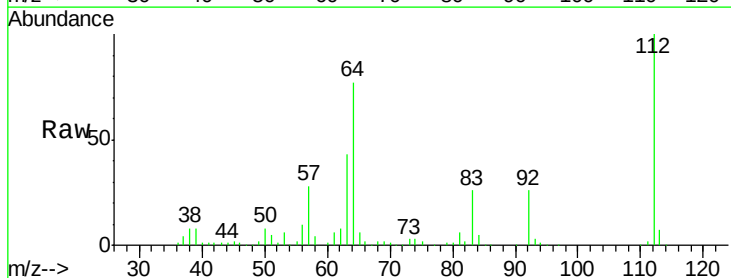
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



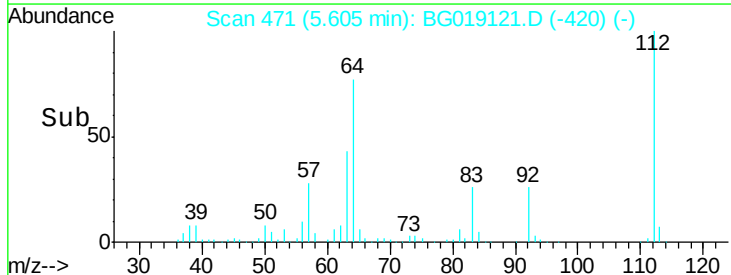
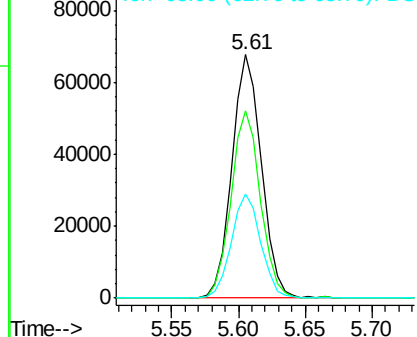
#5

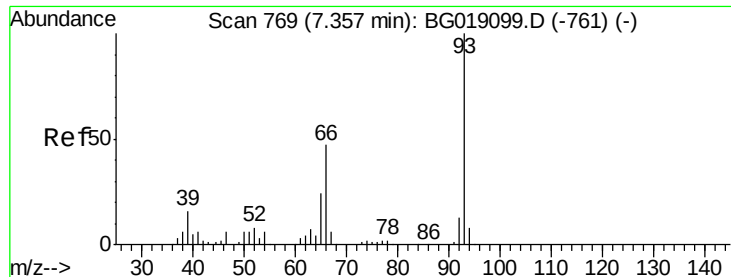
2-Fluorophenol  
Concen: 148.27 ng  
RT: 5.61 min Scan# 471  
Delta R.T. 0.00 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

Tgt Ion:112 Resp: 104391  
Ion Ratio Lower Upper  
112 100  
64 76.8 59.0 88.4  
63 43.0 34.7 52.1



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





#6

Aniline

Concen: 0.12 ng

RT: 7.57 min Scan# 805

Delta R.T. 0.21 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

Instrument :

BNA\_G

ClientSampled :

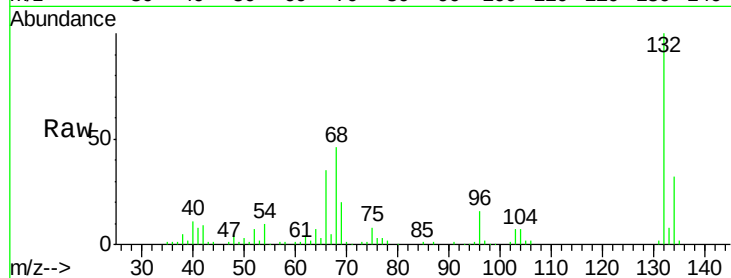
Tot Ion: 93 Resp: 182

Ion Ratio Lower Upper

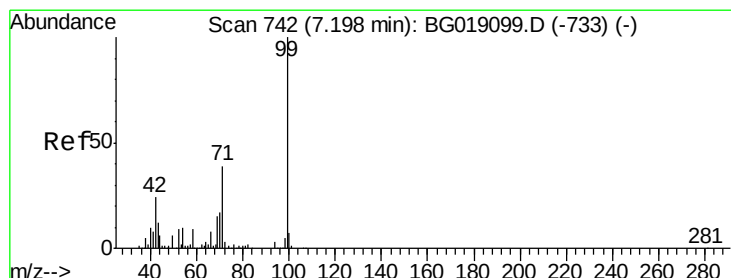
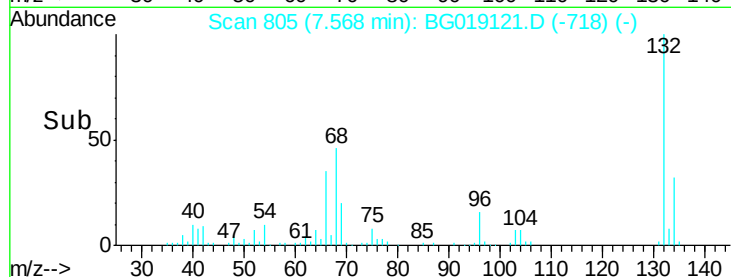
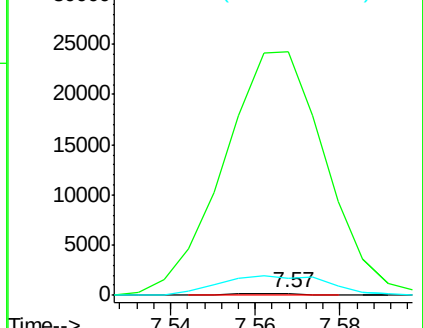
93 100

66 12124.0 37.4 56.2#

65 871.0 19.6 29.4#



Abundance Ion 93.00 (92.70 to 93.70): BGC  
Ion 66.00 (65.70 to 66.70): BGC  
Ion 65.00 (64.70 to 65.70): BGC



#7

Phenol-d6

Concen: 143.55 ng

RT: 7.20 min Scan# 742

Delta R.T. 0.00 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

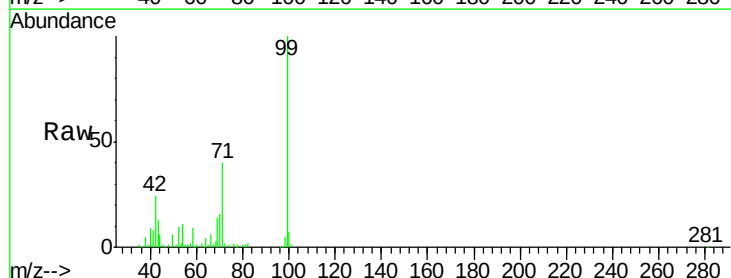
Tgt Ion: 99 Resp: 155264

Ion Ratio Lower Upper

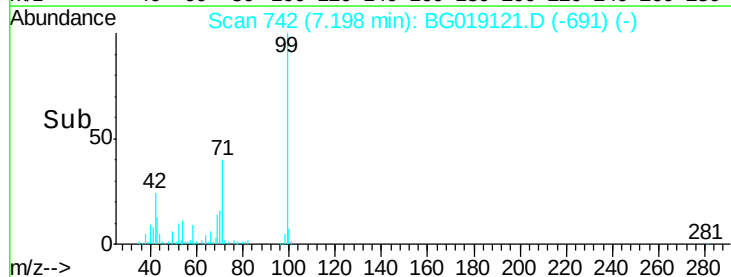
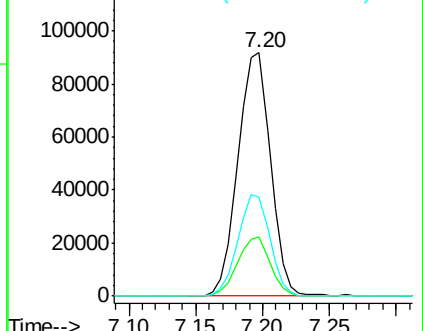
99 100

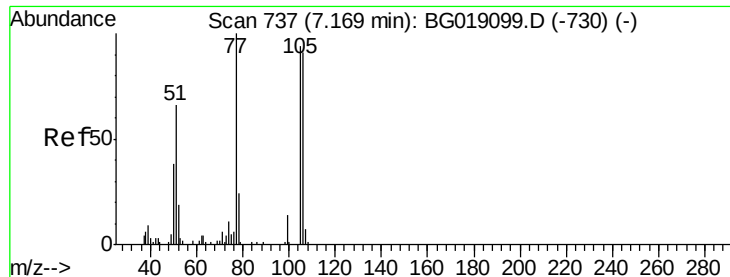
42 24.3 19.5 29.3

71 40.5 31.4 47.0



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





#9

Benzaldehyde

Concen: 0.34 ng

RT: 7.19 min Scan# 741

Delta R.T. 0.02 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

Instrument :

BNA\_G

ClientSampleId :

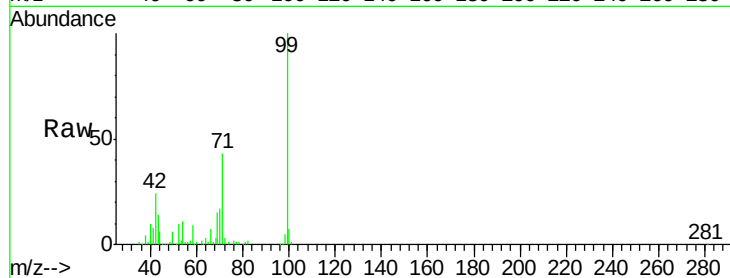
Tot Ion: 77 Resp: 233

Ion Ratio Lower Upper

77 100

105 0.0 73.7 113.7#

106 0.0 71.0 111.0#



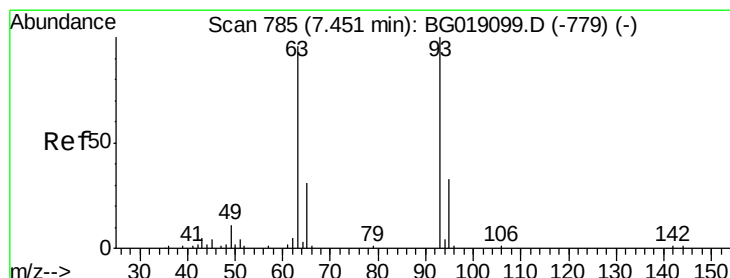
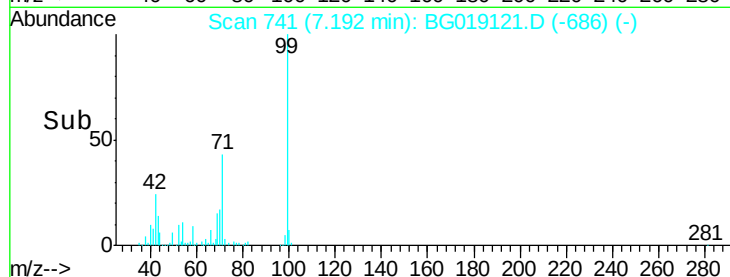
Abundance Ion 77.00 (76.70 to 77.70): BGC

Ion 105.00 (104.70 to 105.70): BGC

Ion 106.00 (105.70 to 106.70): BGC

7.19

Time-->



#11

bis(2-Chloroethyl)ether

Concen: 0.21 ng

RT: 7.57 min Scan# 805

Delta R.T. 0.12 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

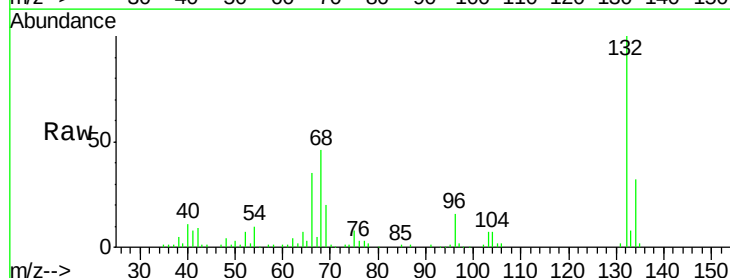
Tgt Ion: 93 Resp: 182

Ion Ratio Lower Upper

93 100

63 532.0 75.3 115.3#

95 239.5 12.9 52.9#



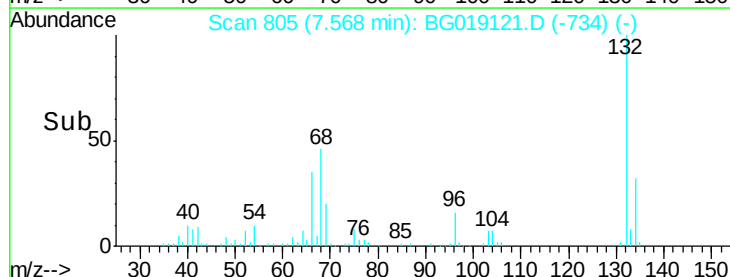
Abundance Ion 93.00 (92.70 to 93.70): BGC

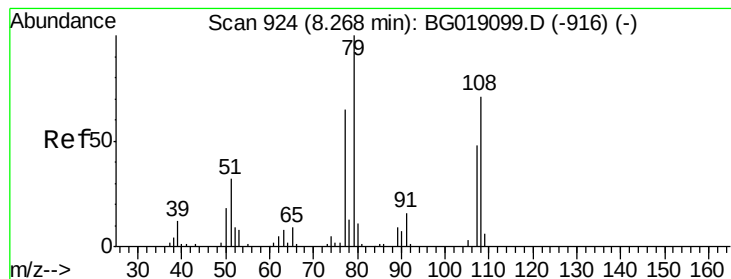
Ion 63.00 (62.70 to 63.70): BGC

Ion 95.00 (94.70 to 95.70): BGC

7.57

Time-->





#15

Benzyl Alcohol

Concen: 1.63 ng

RT: 8.36 min Scan# 939

Delta R.T. 0.09 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

Instrument :

BNA\_G

ClientSampleId :

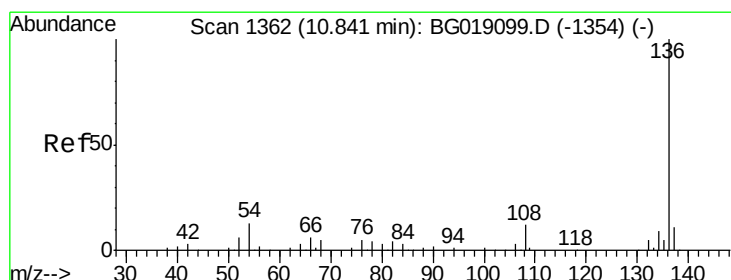
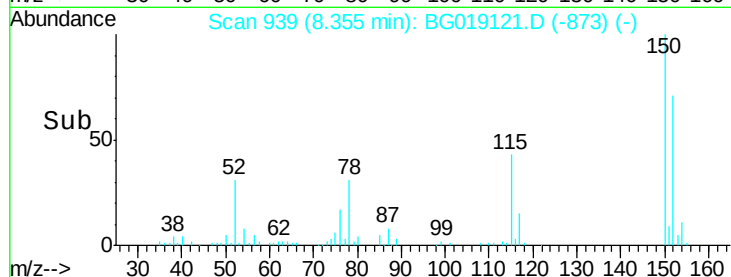
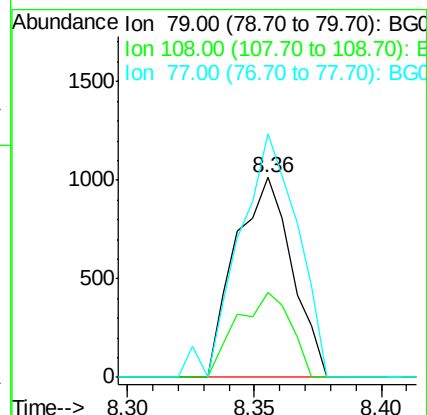
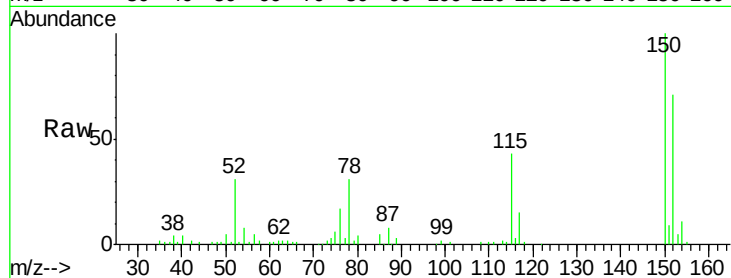
Tot Ion: 79 Resp: 1577

Ion Ratio Lower Upper

79 100

108 42.8 56.6 84.8#

77 122.0 51.6 77.4#



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 10.83 min Scan# 1361

Delta R.T. -0.00 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

Tgt Ion: 136 Resp: 63594

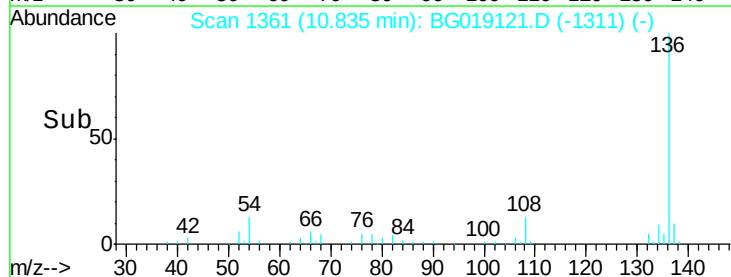
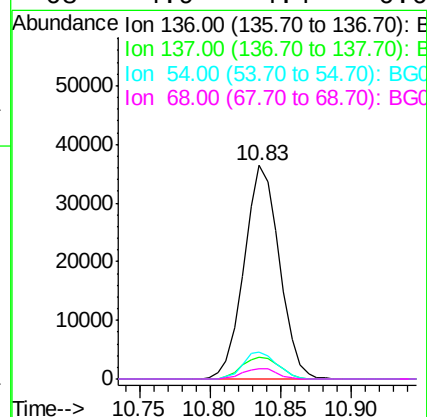
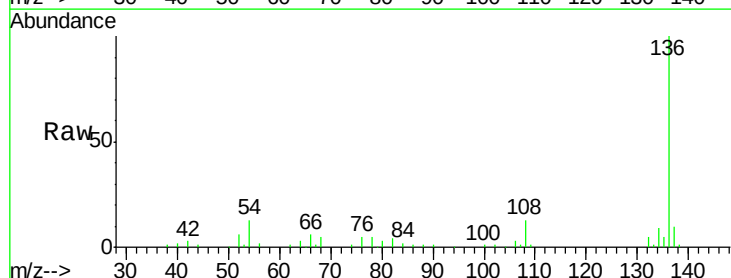
Ion Ratio Lower Upper

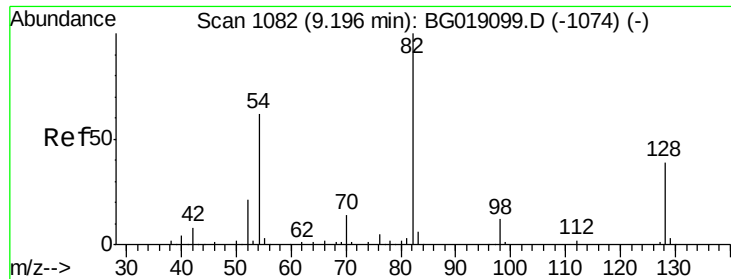
136 100

137 10.2 9.0 13.4

54 12.6 10.1 15.1

68 4.9 4.4 6.6

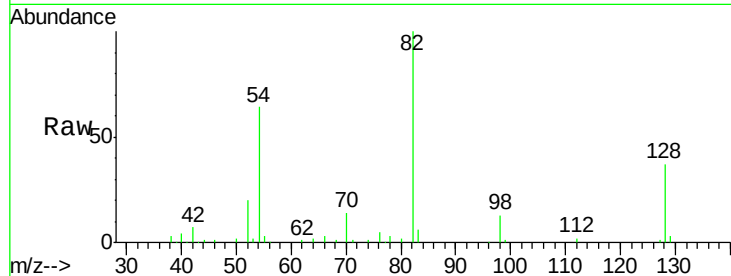




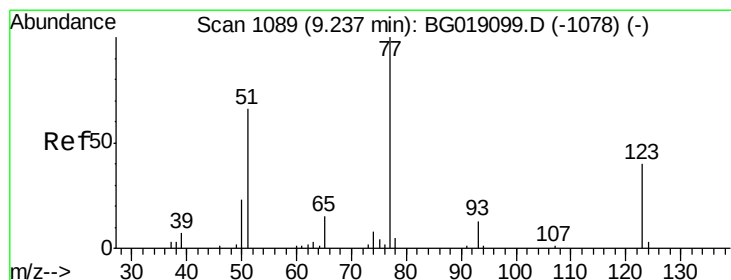
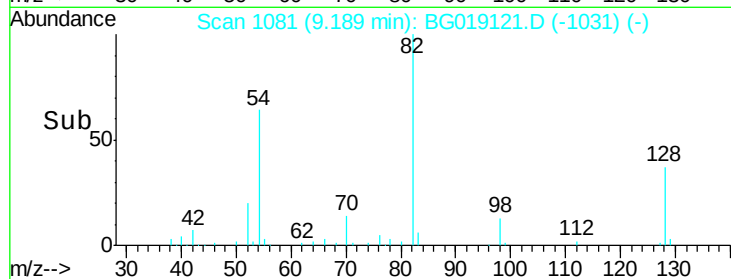
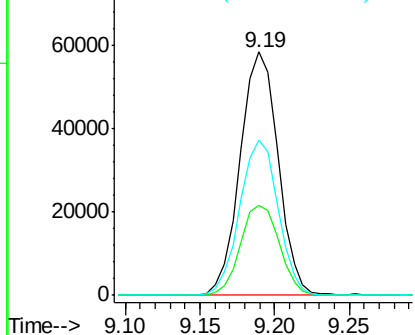
#23  
Nitrobenzene-d5  
Concen: 89.79 ng  
RT: 9.19 min Scan# 1081  
Delta R.T. -0.00 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

Instrument :  
BNA\_G  
ClientSampleId :

| Tot Ion   | 82   | Resp  | 103347 |
|-----------|------|-------|--------|
| Ion Ratio | 100  | Lower | Upper  |
| 128       | 37.2 | 31.4  | 47.2   |
| 54        | 63.8 | 50.0  | 75.0   |

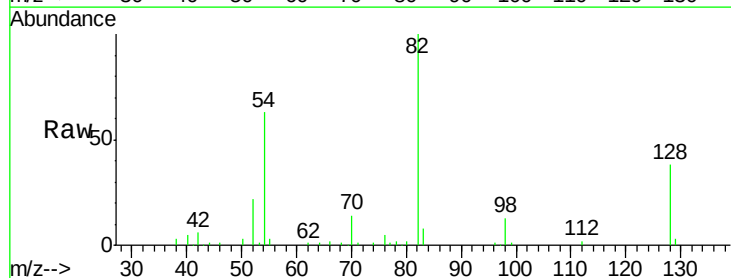


Abundance Ion 82.00 (81.70 to 82.70): BGC  
Ion 128.00 (127.70 to 128.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC

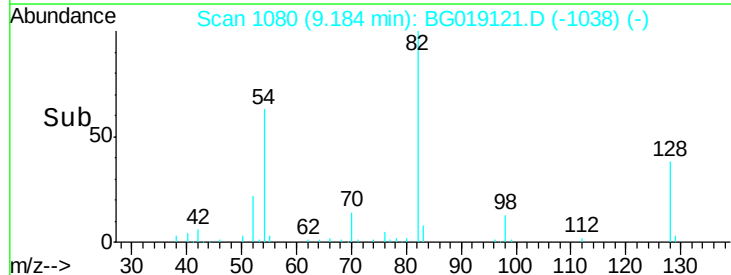
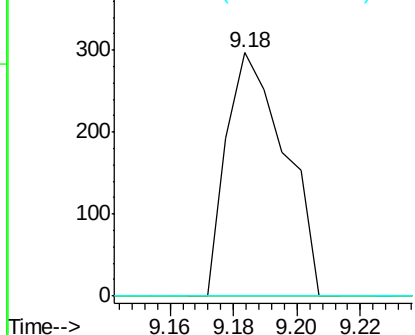


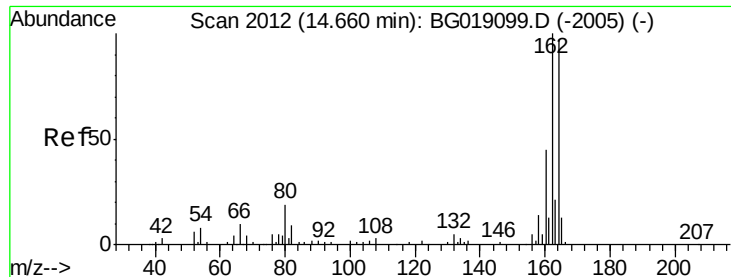
#24  
Nitrobenzene  
Concen: 0.31 ng  
RT: 9.18 min Scan# 1080  
Delta R.T. -0.05 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

| Tgt Ion   | 77  | Resp  | 377   |
|-----------|-----|-------|-------|
| Ion Ratio | 100 | Lower | Upper |
| 123       | 0.0 | 31.8  | 47.6# |
| 65        | 0.0 | 11.8  | 17.6# |



Abundance Ion 77.00 (76.70 to 77.70): BGC  
Ion 123.00 (122.70 to 123.70): BGC  
Ion 65.00 (64.70 to 65.70): BGC





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 14.66 min Scan# 2012

Delta R.T. 0.00 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

Instrument :

BNA\_G

ClientSampleId :

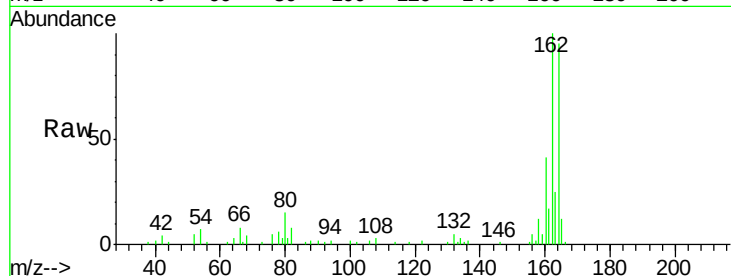
Tot Ion:164 Resp: 44036

Ion Ratio Lower Upper

164 100

162 104.9 82.6 124.0

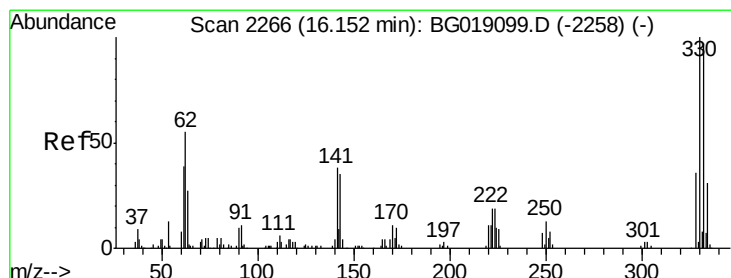
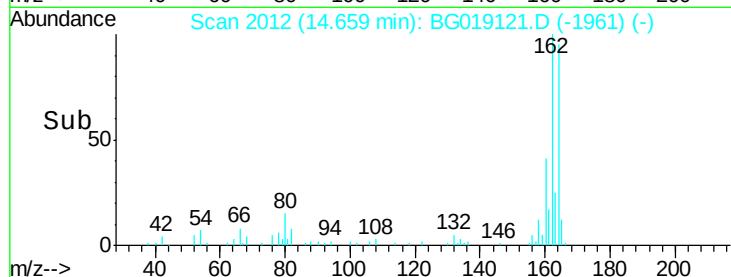
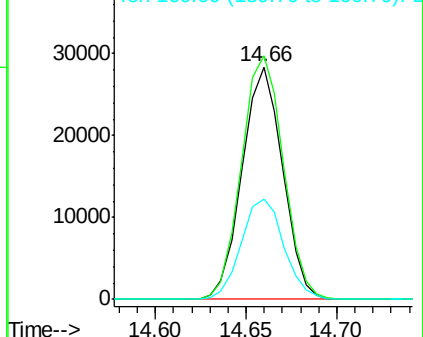
160 43.4 36.9 55.3



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: 133.21 ng

RT: 16.15 min Scan# 2265

Delta R.T. -0.00 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

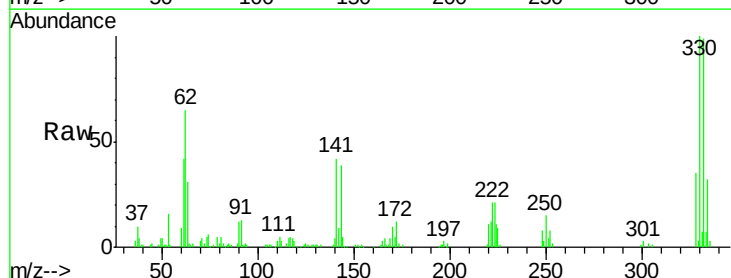
Tgt Ion:330 Resp: 79939

Ion Ratio Lower Upper

330 100

332 95.7 77.3 115.9

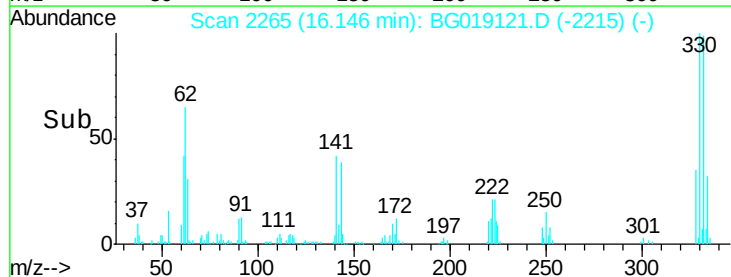
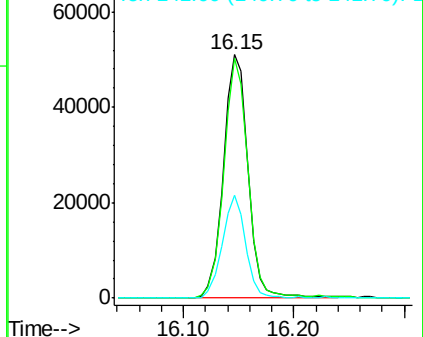
141 39.6 30.7 46.1



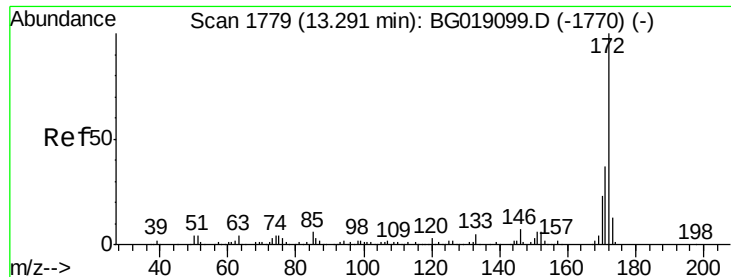
Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



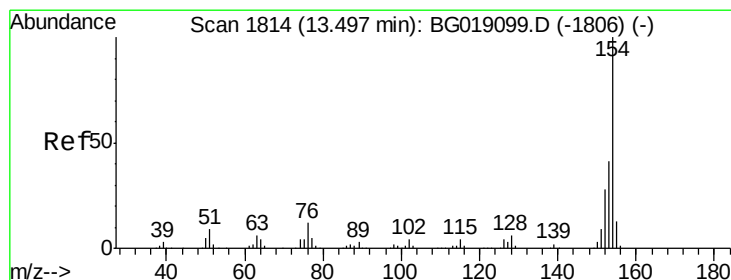
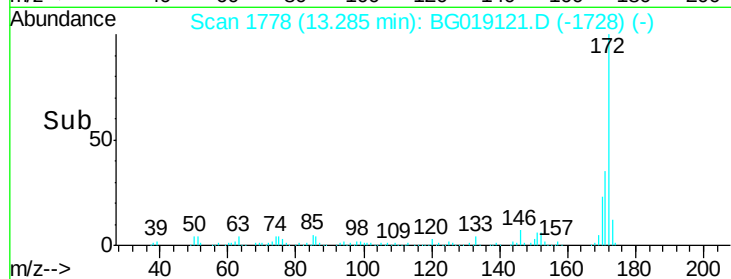
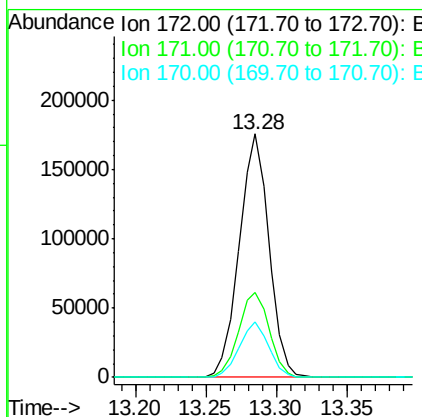
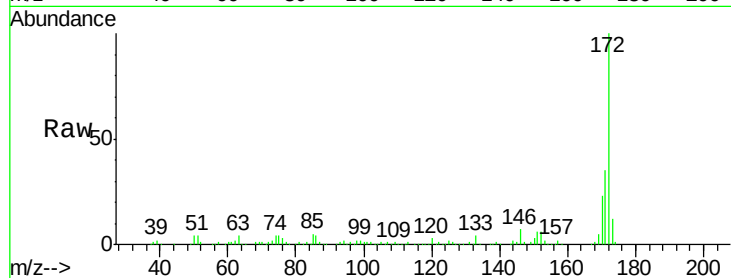




#44  
2-Fluorobiphenyl  
Concen: 89.83 ng  
RT: 13.28 min Scan# 1778  
Delta R.T. -0.00 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

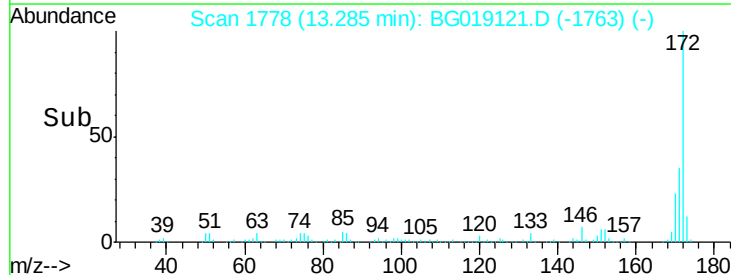
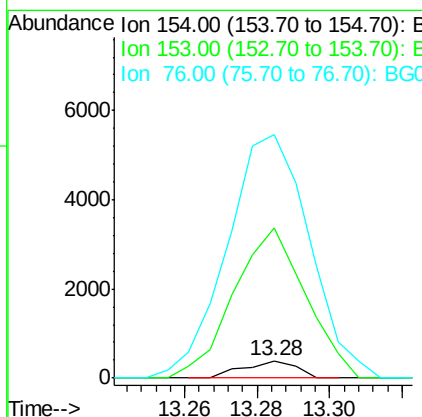
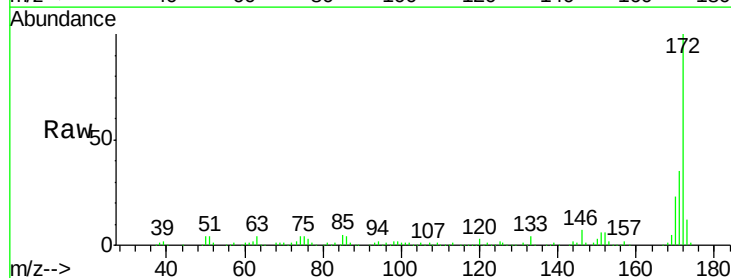
Instrument :  
BNA\_G  
ClientSampleId :

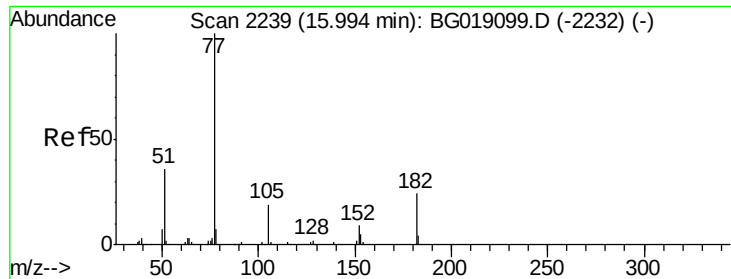
Tot Ion:172 Resp: 257274  
Ion Ratio Lower Upper  
172 100  
171 35.1 29.9 44.9  
170 22.9 18.6 27.8



#45  
1,1'-Biphenyl  
Concen: 0.12 ng  
RT: 13.28 min Scan# 1778  
Delta R.T. -0.21 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

Tgt Ion:154 Resp: 390  
Ion Ratio Lower Upper  
154 100  
153 866.8 20.6 60.6#  
76 1407.5 0.0 32.2#

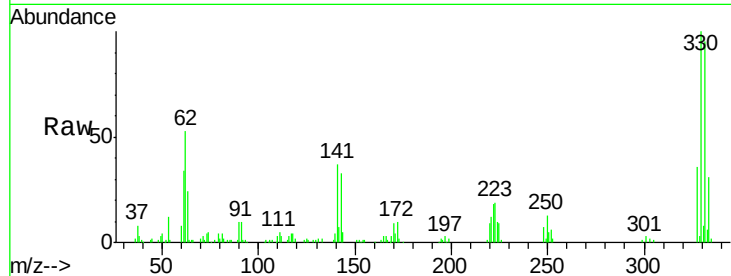




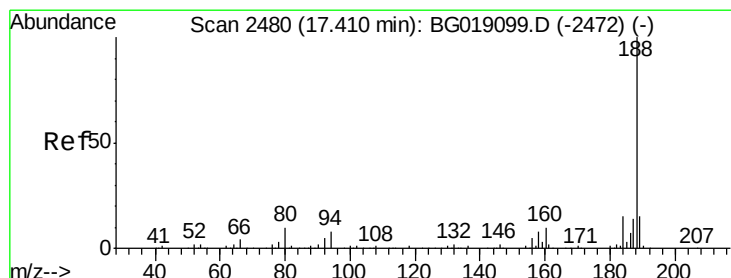
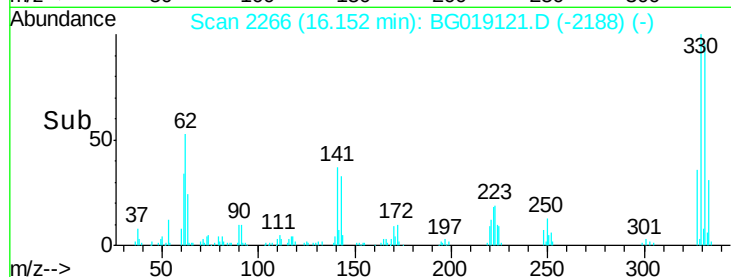
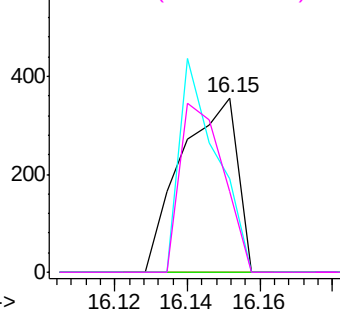
#62  
Azobenzene  
Concen: 0.12 ng  
RT: 16.15 min Scan# 2266  
Delta R.T. 0.16 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

Instrument :  
BNA\_G  
ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 77    | Resp: | 386   |
| Ion      | Ratio | Lower | Upper |
| 77       | 100   |       |       |
| 182      | 0.0   | 4.4   | 44.4# |
| 105      | 53.4  | 0.0   | 39.1# |
| 51       | 46.1  | 15.9  | 55.9  |

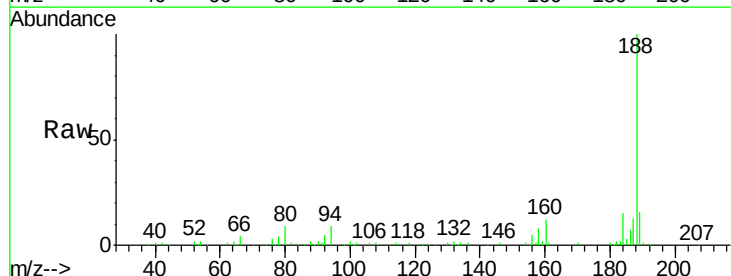


Abundance Ion 77.00 (76.70 to 77.70): BGC  
Ion 182.00 (181.70 to 182.70): BGC  
Ion 105.00 (104.70 to 105.70): BGC  
Ion 51.00 (50.70 to 51.70): BGC

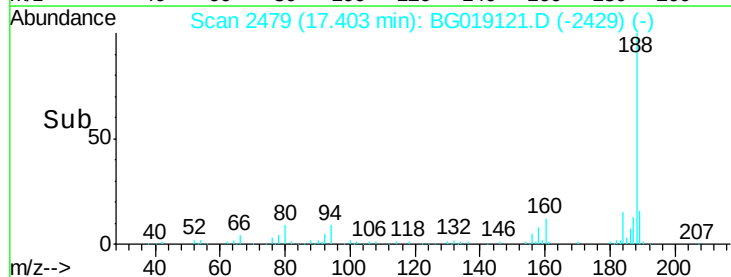
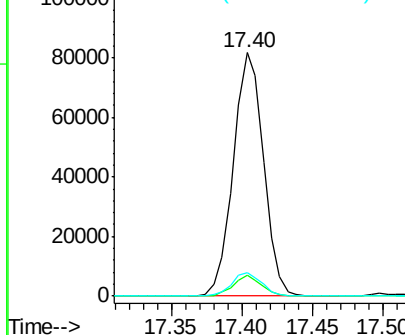


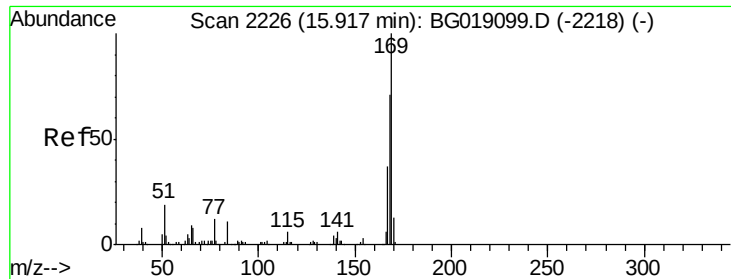
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 17.40 min Scan# 2479  
Delta R.T. -0.00 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 188   | Resp: | 122047 |
| Ion      | Ratio | Lower | Upper  |
| 188      | 100   |       |        |
| 94       | 8.5   | 6.4   | 9.6    |
| 80       | 9.4   | 7.6   | 11.4   |



Abundance Ion 188.00 (187.70 to 188.70): BGC  
Ion 94.00 (93.70 to 94.70): BGC  
Ion 80.00 (79.70 to 80.70): BGC

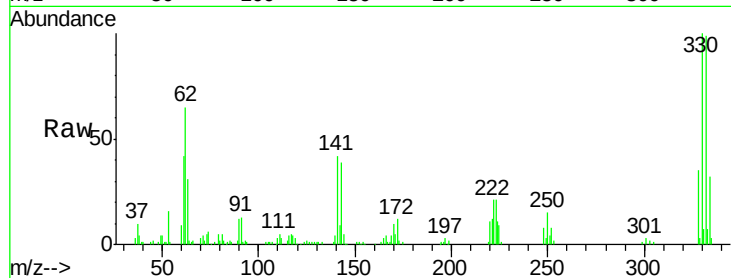




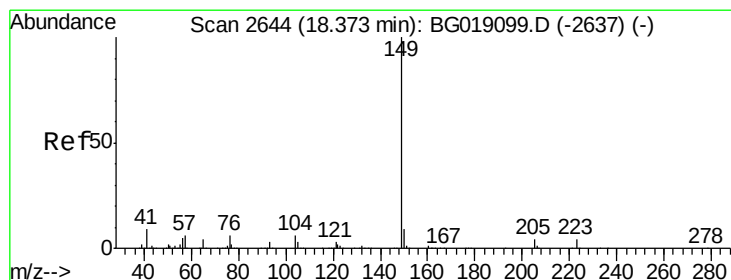
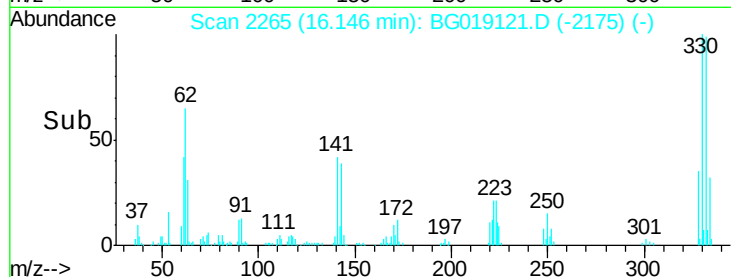
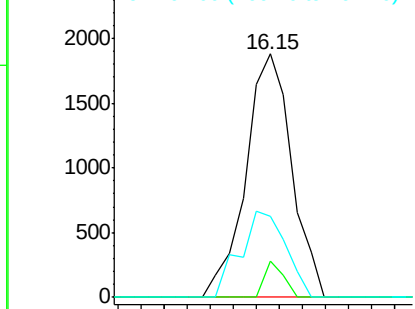
#65  
 n-Nitrosodiphenylamine  
 Concen: 0.77 ng  
 RT: 16.15 min Scan# 2265  
 Delta R.T. 0.23 min  
 Lab File: BG019121.D  
 Acq: 10 Oct 2015 17:27

Instrument :  
 BNA\_G  
 ClientSampleId :

Tot Ion:169 Resp: 2594  
 Ion Ratio Lower Upper  
 169 100  
 168 14.8 56.6 84.8#  
 167 33.4 30.0 45.0

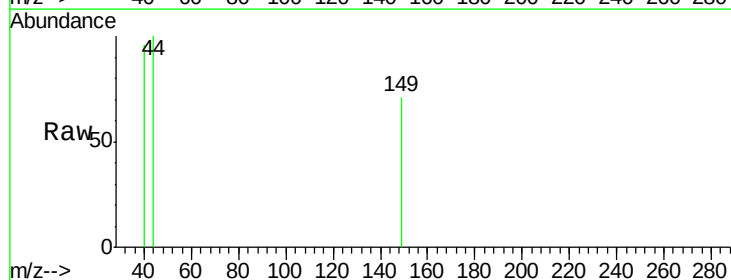


Abundance Ion 169.00 (168.70 to 169.70): E  
 Ion 168.00 (167.70 to 168.70): E  
 Ion 167.00 (166.70 to 167.70): E

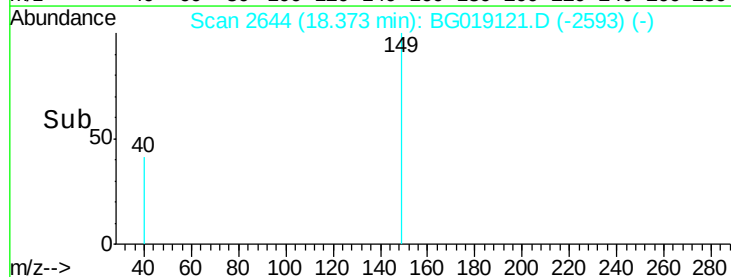
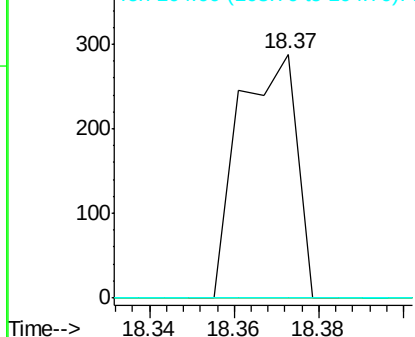


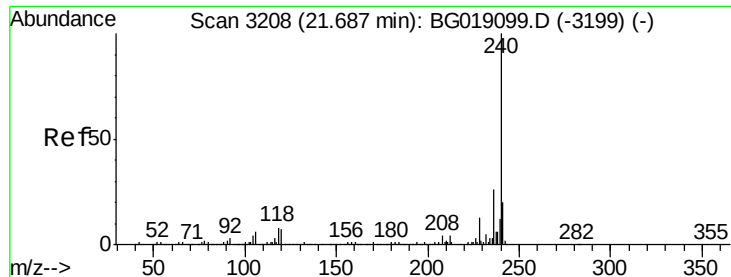
#73  
 Di-n-butylphthalate  
 Concen: 0.04 ng  
 RT: 18.37 min Scan# 2644  
 Delta R.T. 0.00 min  
 Lab File: BG019121.D  
 Acq: 10 Oct 2015 17:27

Tgt Ion:149 Resp: 272  
 Ion Ratio Lower Upper  
 149 100  
 150 0.0 7.5 11.3#  
 104 0.0 5.0 7.6#



Abundance Ion 149.00 (148.70 to 149.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 104.00 (103.70 to 104.70): E





#75

Chrysene-d12

Concen: 20.00 ng

RT: 21.67 min Scan# 3206

Delta R.T. -0.00 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

Instrument :

BNA\_G

ClientSampleId :

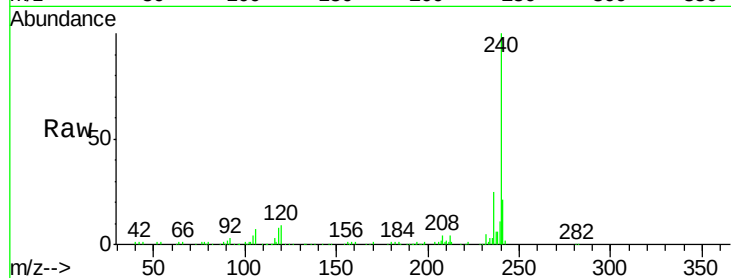
Tot Ion:240 Resp: 154642

Ion Ratio Lower Upper

240 100

120 8.5 5.8 8.6

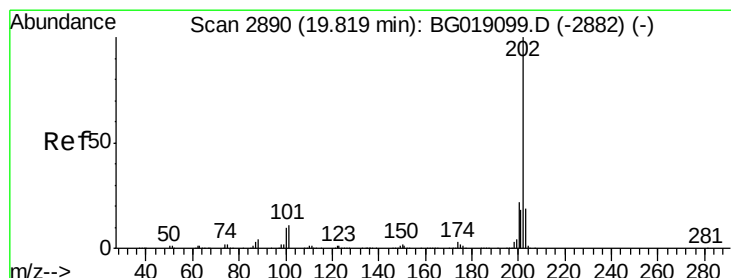
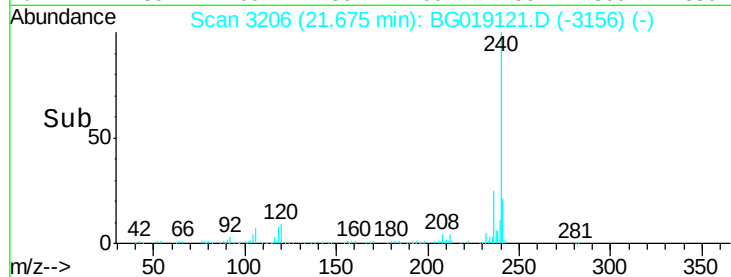
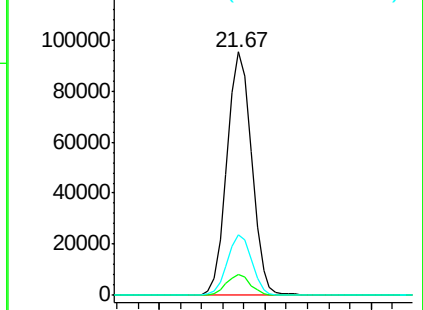
236 24.7 21.2 31.8



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



#77

Pyrene

Concen: 0.23 ng

RT: 20.02 min Scan# 2924

Delta R.T. 0.20 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

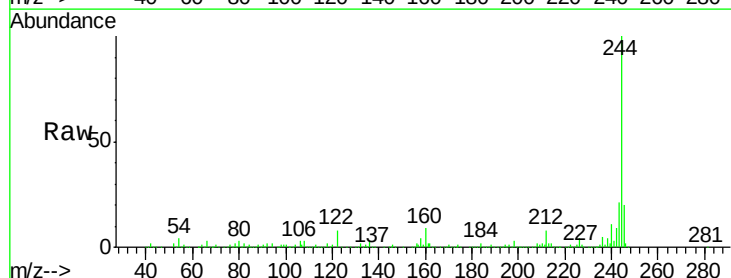
Tgt Ion:202 Resp: 2035

Ion Ratio Lower Upper

202 100

200 58.3 17.4 26.2#

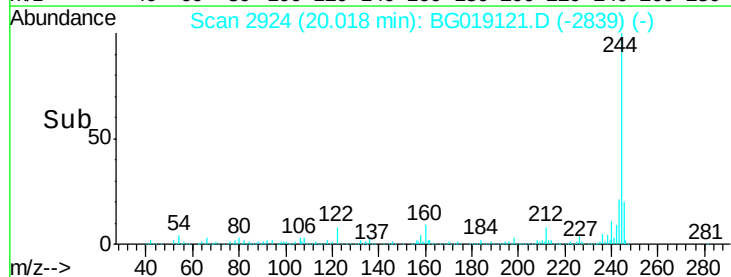
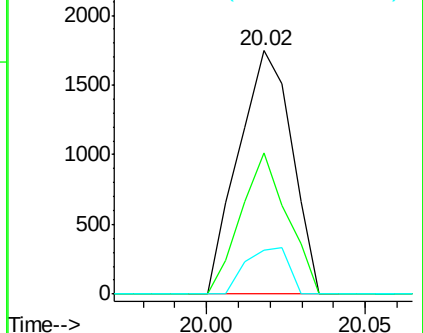
203 18.0 14.8 22.2

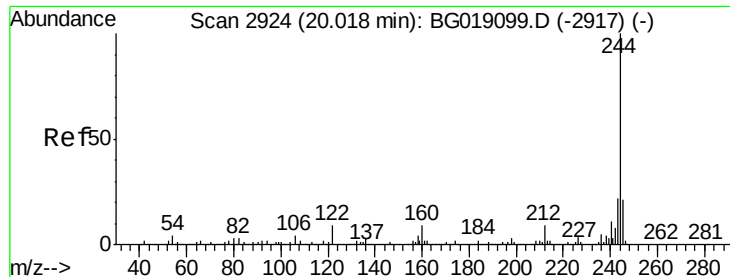


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 92.60 ng

RT: 20.02 min Scan# 2924

Delta R.T. 0.00 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

Instrument :

BNA\_G

ClientSampled :

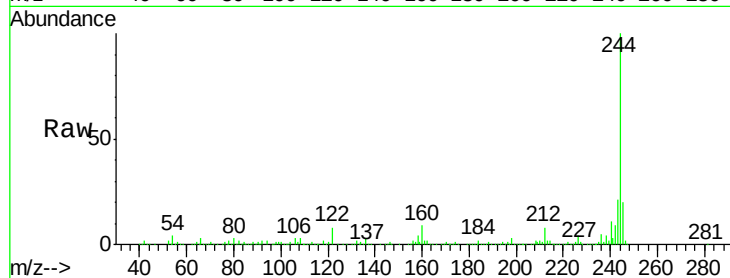
Tot Ion:244 Resp: 542090

Ion Ratio Lower Upper

244 100

212 8.4 6.8 10.2

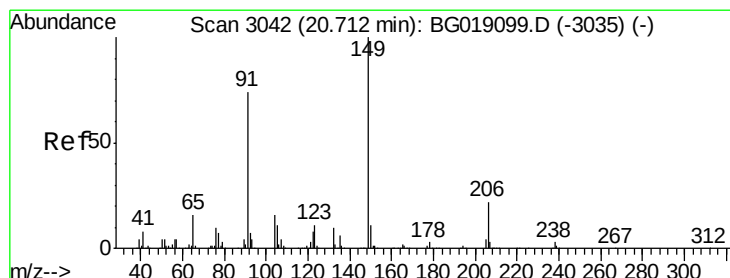
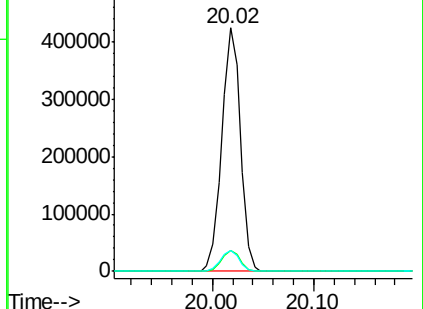
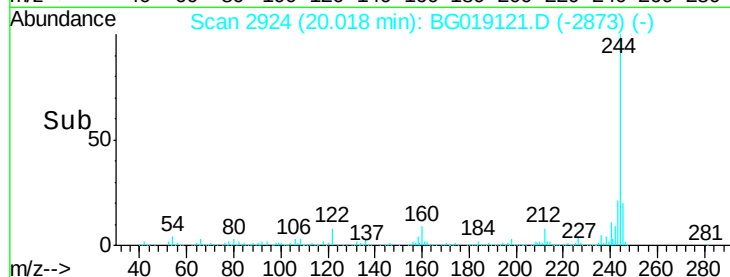
122 8.5 7.4 11.2



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



#79

Butylbenzylphthalate

Concen: 0.02 ng

RT: 20.81 min Scan# 3059

Delta R.T. 0.10 min

Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

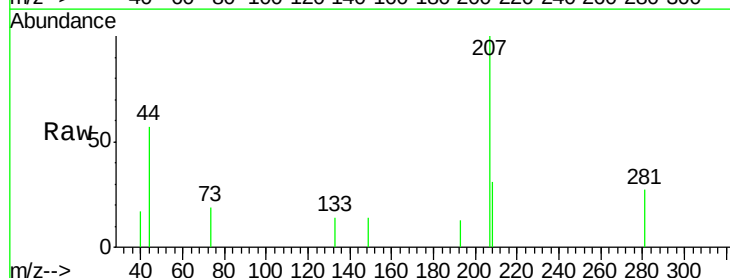
Tgt Ion:149 Resp: 56

Ion Ratio Lower Upper

149 100

91 0.0 59.2 88.8#

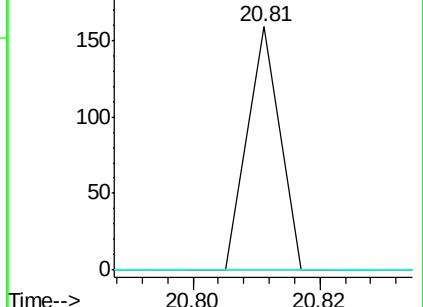
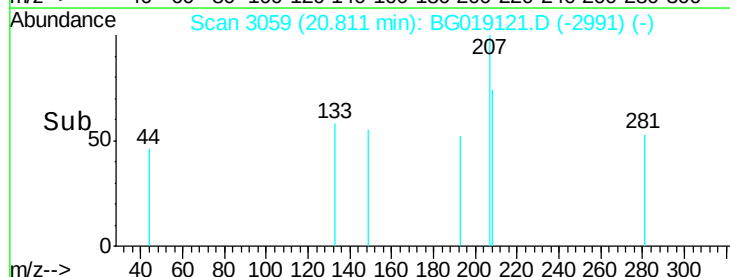
206 0.0 17.5 26.3#

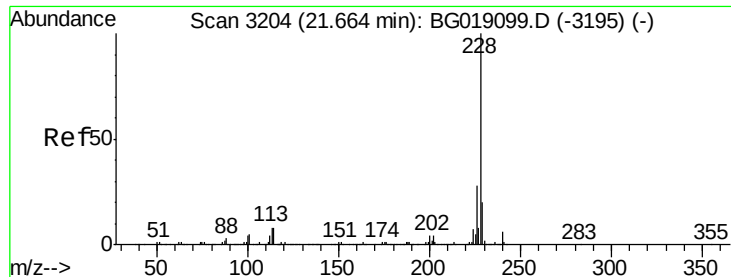


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 91.00 (90.70 to 91.70): BG

Ion 206.00 (205.70 to 206.70): E

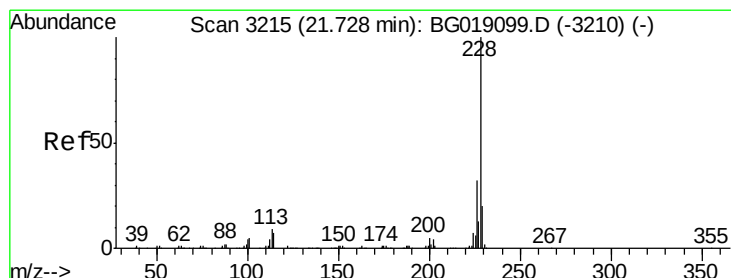
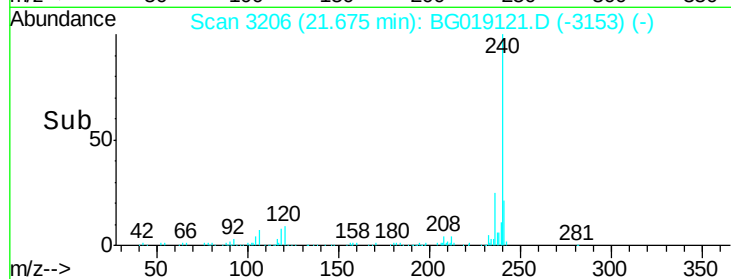
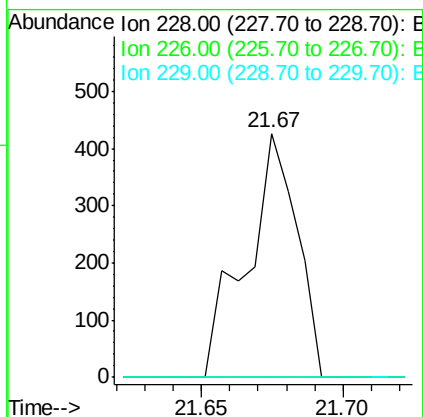
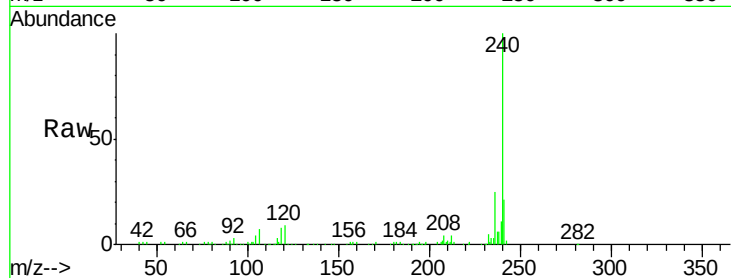




#80  
Benzo(a)anthracene  
Concen: 0.06 ng  
RT: 21.67 min Scan# 3206  
Delta R.T. 0.01 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

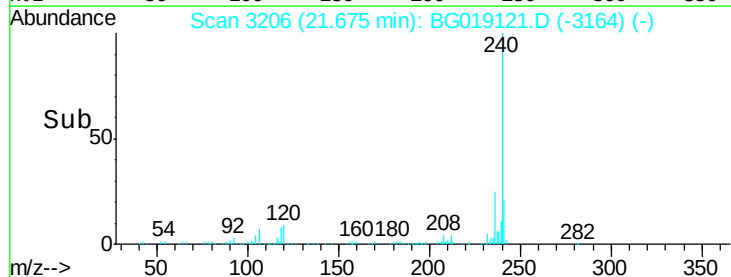
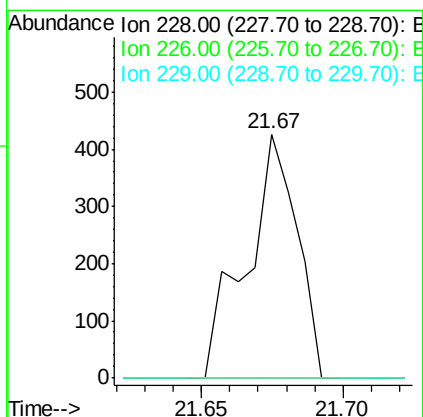
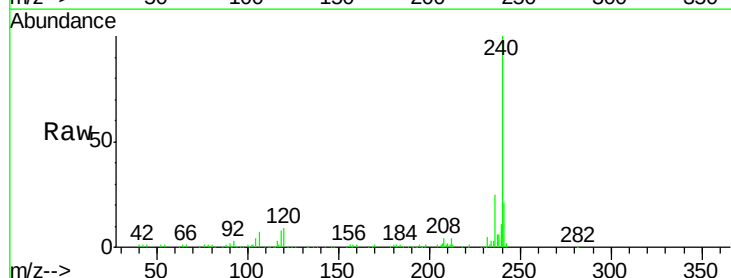
Instrument :  
BNA\_G  
ClientSampleId :

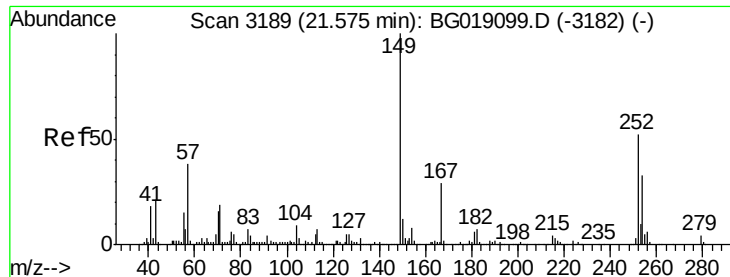
Tot Ion:228 Resp: 531  
Ion Ratio Lower Upper  
228 100  
226 0.0 22.4 33.6#  
229 0.0 16.2 24.2#



#82  
Chrysene  
Concen: 0.07 ng  
RT: 21.67 min Scan# 3206  
Delta R.T. -0.05 min  
Lab File: BG019121.D  
Acq: 10 Oct 2015 17:27

Tgt Ion:228 Resp: 531  
Ion Ratio Lower Upper  
228 100  
226 0.0 25.2 37.8#  
229 0.0 16.3 24.5#

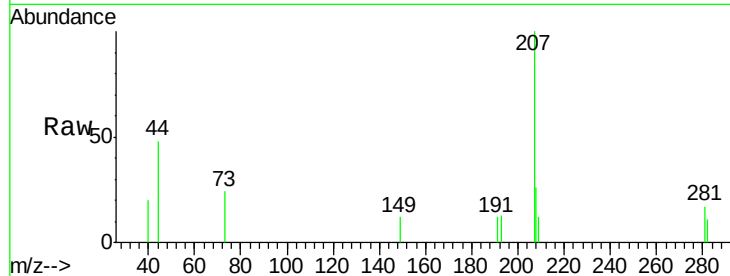




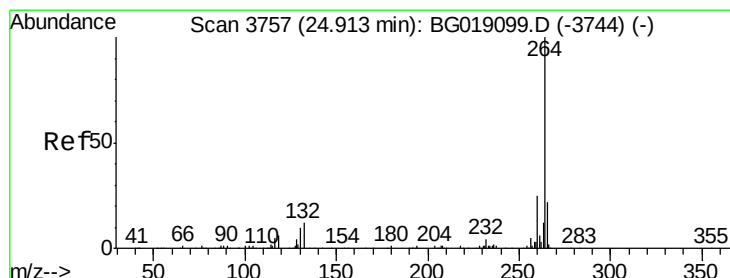
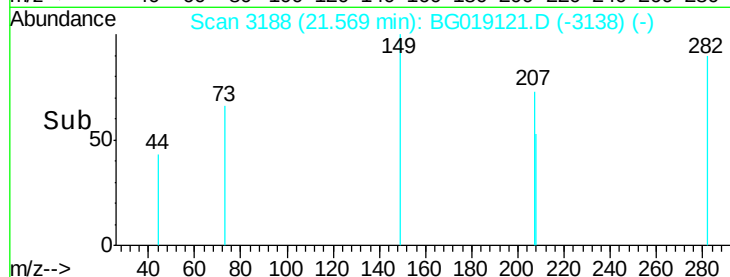
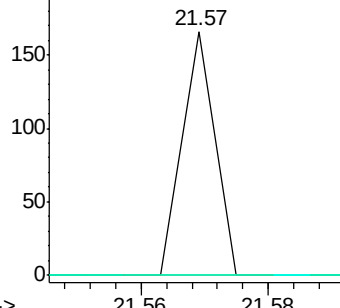
#83  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.01 ng  
 RT: 21.57 min Scan# 3188  
 Delta R.T. -0.00 min  
 Lab File: BG019121.D  
 Acq: 10 Oct 2015 17:27

Instrument :  
 BNA\_G  
 ClientSampleId :

Tot Ion:149 Resp: 59  
 Ion Ratio Lower Upper  
 149 100  
 167 0.0 22.8 34.2#  
 279 0.0 3.6 5.4#

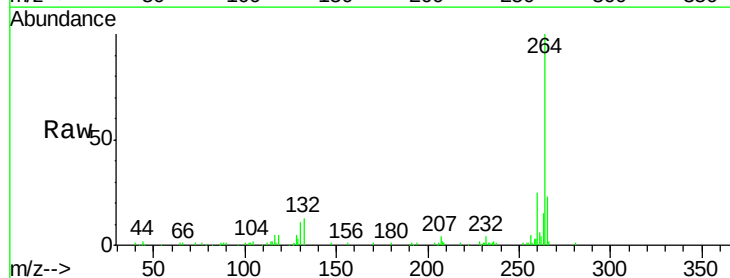


Abundance Ion 149.00 (148.70 to 149.70): E  
 Ion 167.00 (166.70 to 167.70): E  
 Ion 279.00 (278.70 to 279.70): E

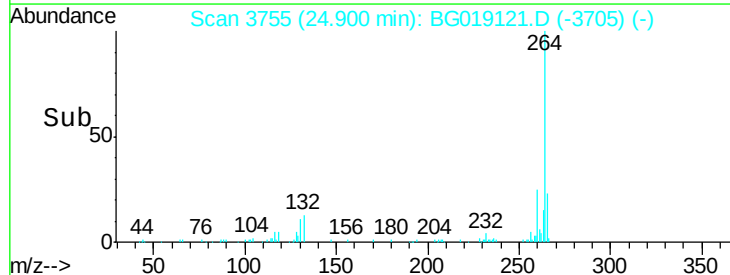
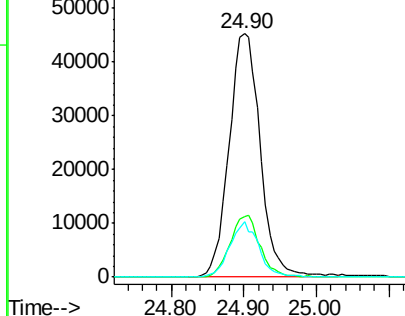


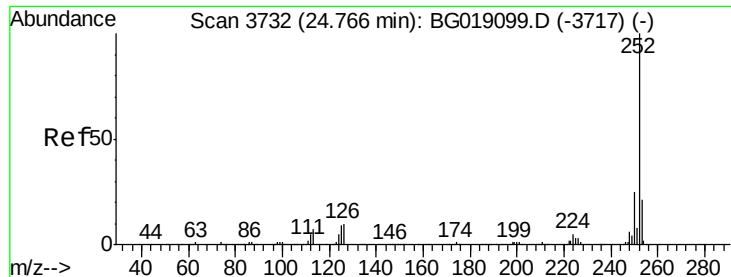
#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 24.90 min Scan# 3755  
 Delta R.T. -0.00 min  
 Lab File: BG019121.D  
 Acq: 10 Oct 2015 17:27

Tgt Ion:264 Resp: 135765  
 Ion Ratio Lower Upper  
 264 100  
 260 24.8 20.1 30.1  
 265 22.8 17.2 25.8



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





#89

Benzo(a)pyrene

Concen: 0.02 ng

RT: 24.90 min Scan# 3755

Delta R.T. 0.15 min

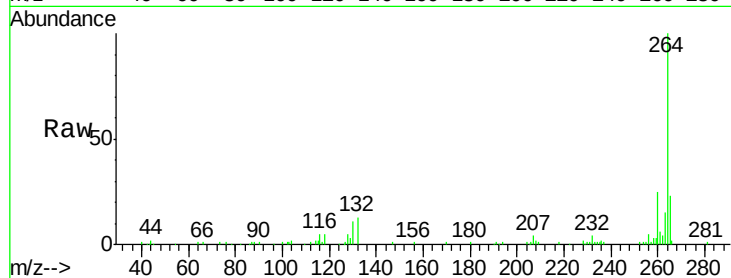
Lab File: BG019121.D

Acq: 10 Oct 2015 17:27

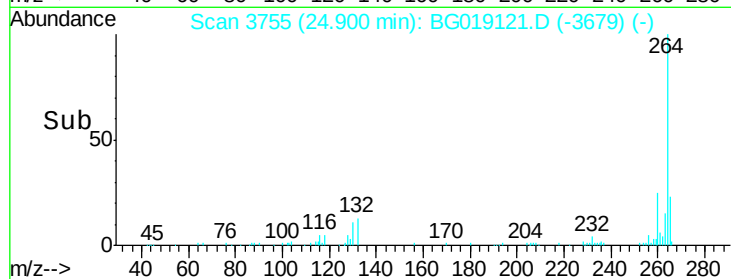
Instrument :

BNA\_G

ClientSampleId :



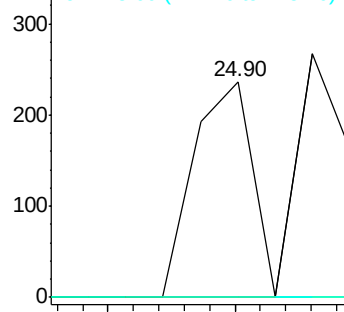
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 252   | Resp: | 152   |
| Ion      | Ratio | Lower | Upper |
| 252      | 100   |       |       |
| 253      | 0.0   | 17.0  | 25.4# |
| 125      | 0.0   | 7.2   | 10.8# |



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



Time-->