

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG041719\  
 Data File : BG040538.D  
 Acq On : 17 Apr 2019 20:29  
 Operator : JU/SJ  
 Sample : K2196-06  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: Apr 18 01:24:10 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG032719.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Apr 13 00:33:11 2019  
 Response via : Initial Calibration

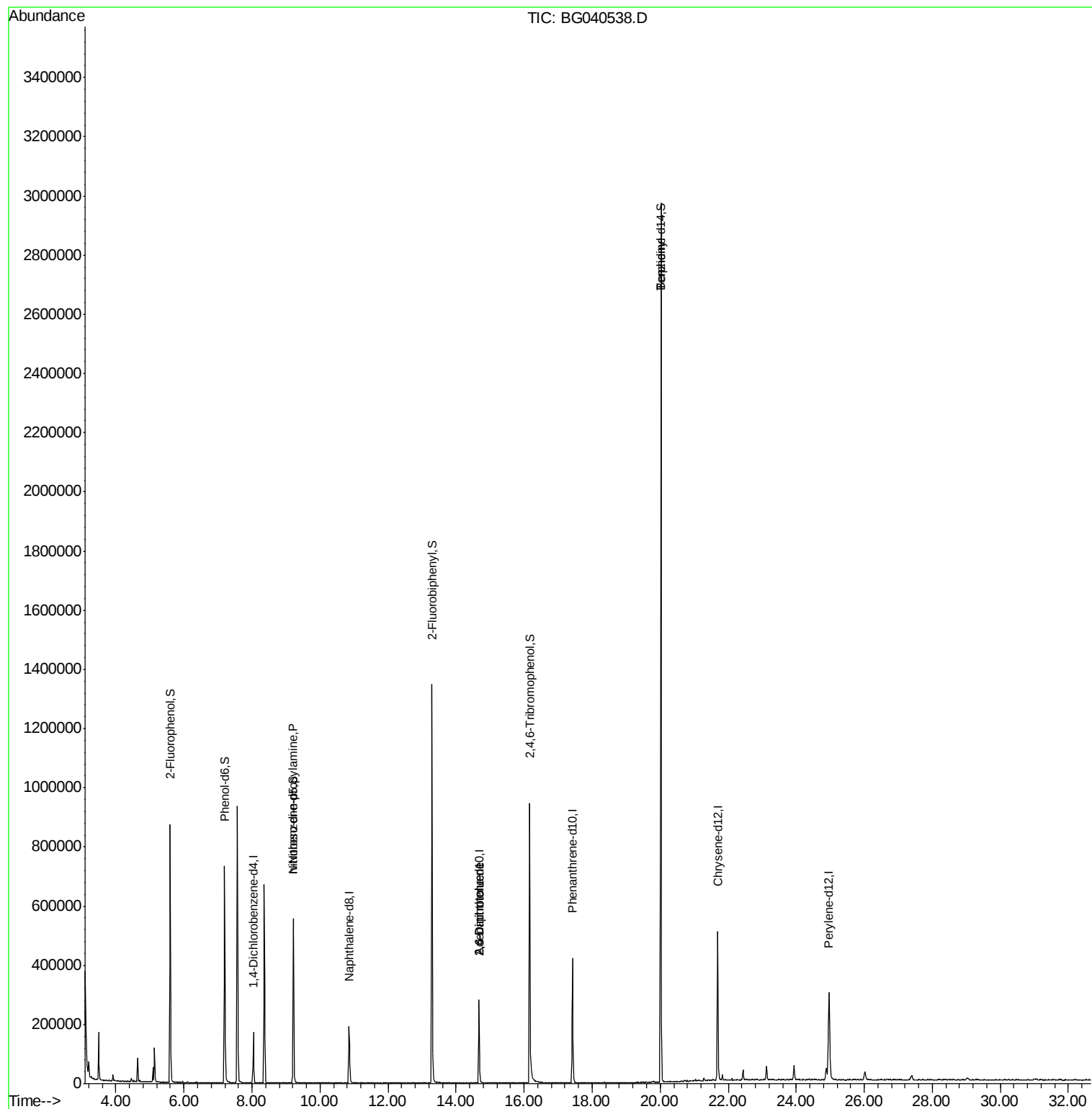
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 8.04  | 152  | 47639    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8             | 10.86 | 136  | 180119   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10           | 14.67 | 164  | 108533   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10           | 17.42 | 188  | 299501   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12               | 21.69 | 240  | 309318   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12               | 24.96 | 264  | 327939   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.60  | 112  | 370039   | 129.13 | ng    | 0.00     |
| 7) Phenol-d6                   | 7.20  | 99   | 451437   | 113.99 | ng    | 0.00     |
| 23) Nitrobenzene-d5            | 9.22  | 82   | 348608   | 102.87 | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol       | 16.17 | 330  | 192930   | 164.48 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl           | 13.29 | 172  | 732993   | 100.07 | ng    | 0.00     |
| 79) Terphenyl-d14              | 20.02 | 244  | 1384821  | 100.72 | ng    | 0.00     |
| Target Compounds               |       |      |          |        |       |          |
| 19) n-Nitroso-di-n-propylamine | 9.22  | 70   | 44465    | 15.659 | ng    | # 75     |
| 51) 2,6-Dinitrotoluene         | 14.67 | 165  | 13671    | 7.168  | ng    | # 26     |
| 57) 2,4-Dinitrotoluene         | 14.67 | 165  | 13671    | 5.159  | ng    | # 27     |
| 77) Benzidine                  | 20.02 | 184  | 23494    | 2.103  | ng    | # 96     |

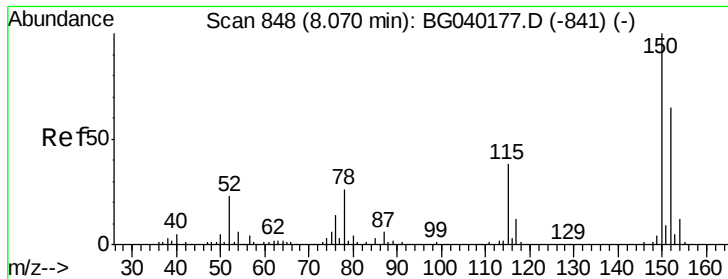
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_G  
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Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG032719.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Apr 13 00:33:11 2019  
Response via : Initial Calibration



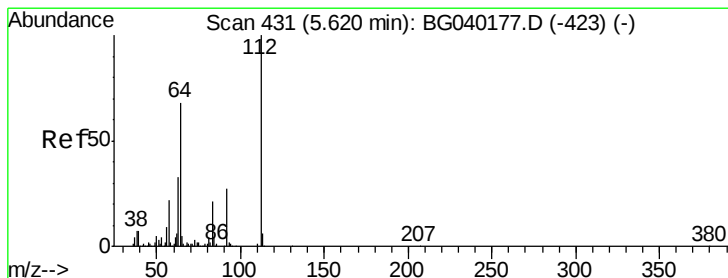
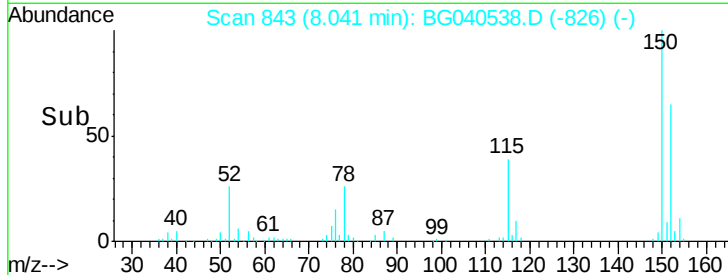
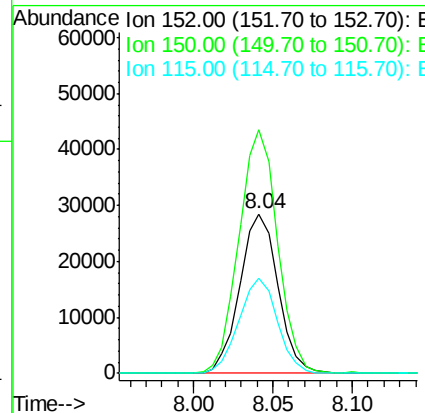
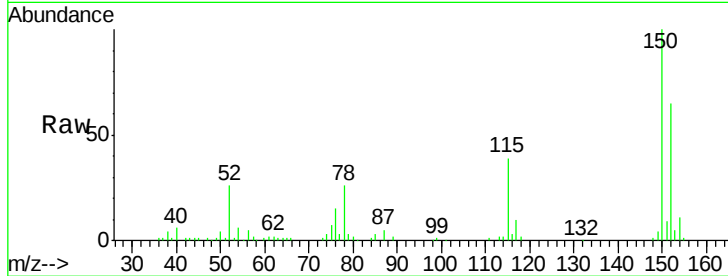


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 8.04 min Scan# 843  
Delta R.T. -0.00 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

Instrument :  
BNA\_G  
ClientSampleId :

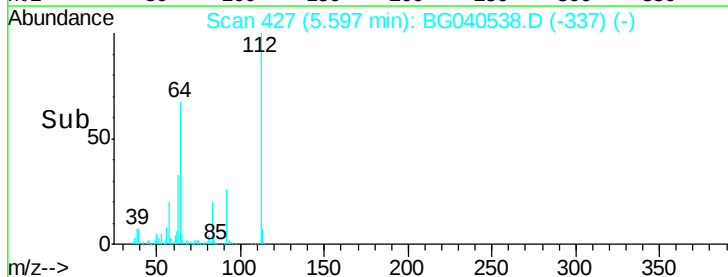
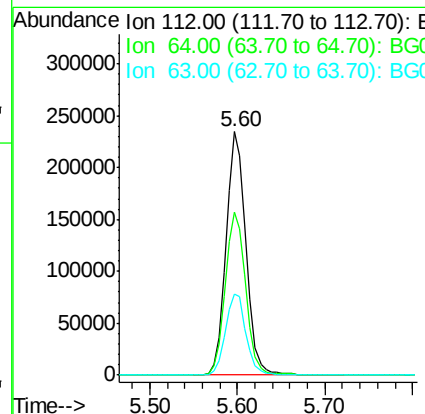
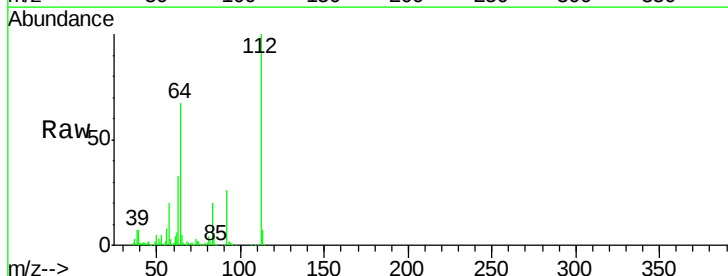
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 152.9 | 123.7 | 185.5 |
| 115     | 60.1  | 46.9  | 70.3  |



#5

2-Fluorophenol  
Concen: 129.129 ng  
RT: 5.60 min Scan# 427  
Delta R.T. -0.00 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 67.0  | 54.2  | 81.2  |
| 63      | 33.4  | 26.4  | 39.6  |





#7

Phenol-d6

Concen: 113.988 ng

RT: 7.20 min Scan# 700

Delta R.T. 0.00 min

Lab File: BG040538.D

Acq: 17 Apr 2019 20:29

Instrument :

BNA\_G

ClientSampleId :

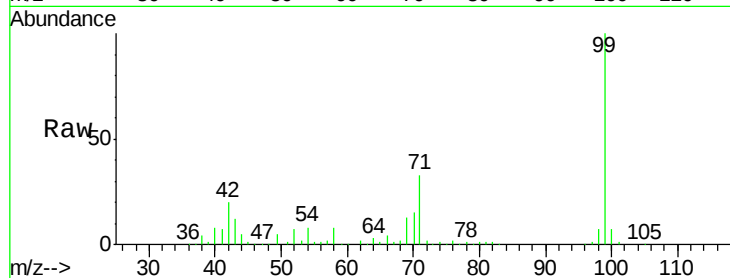
Tot Ion: 99 Resp: 451437

Ion Ratio Lower Upper

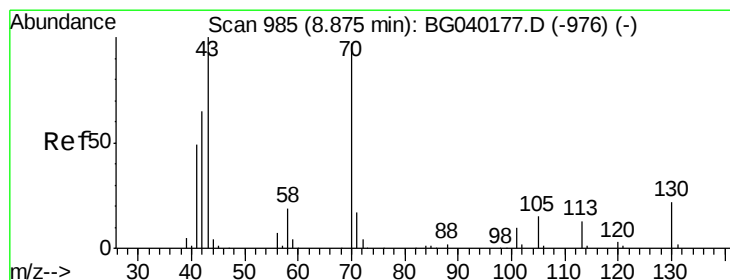
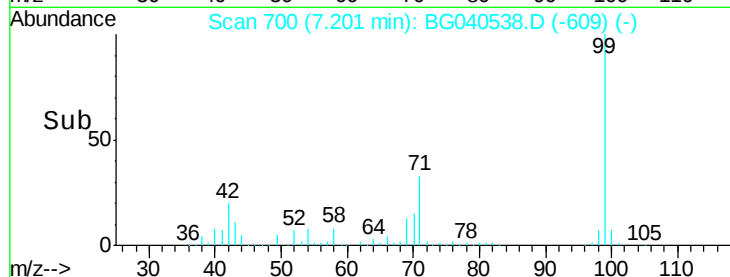
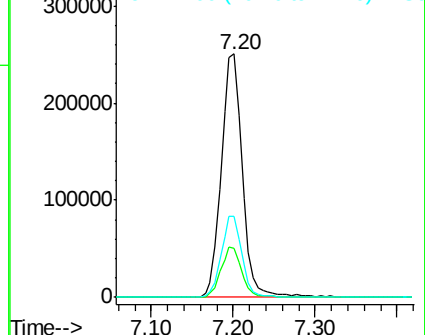
99 100

42 20.0 16.2 24.2

71 33.2 26.8 40.2



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



#19

n-Nitroso-di-n-propylamine

Concen: 15.659 ng

RT: 9.22 min Scan# 1043

Delta R.T. 0.37 min

Lab File: BG040538.D

Acq: 17 Apr 2019 20:29

Tgt Ion: 70 Resp: 44465

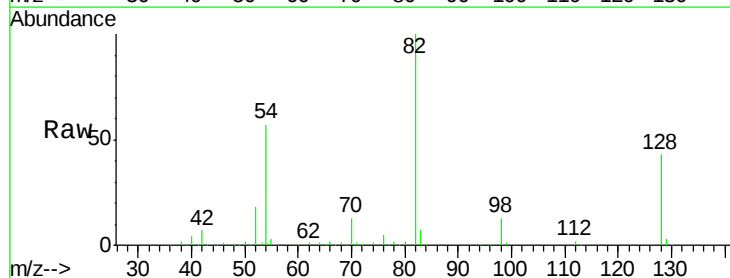
Ion Ratio Lower Upper

70 100

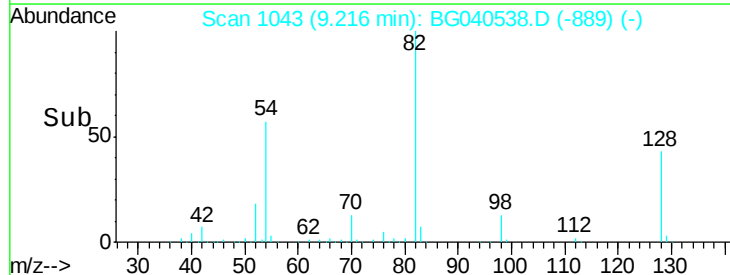
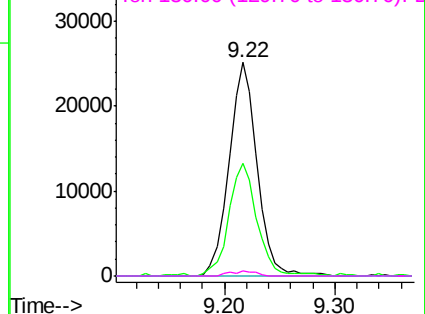
42 52.9 54.0 81.0#

101 0.0 8.6 13.0#

130 2.2 18.2 27.2#



Abundance Ion 70.00 (69.70 to 70.70): BGC  
Ion 42.00 (41.70 to 42.70): BGC  
Ion 101.00 (100.70 to 101.70): BGC  
Ion 130.00 (129.70 to 130.70): BGC

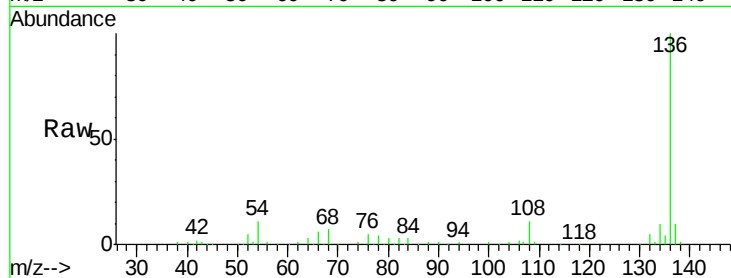




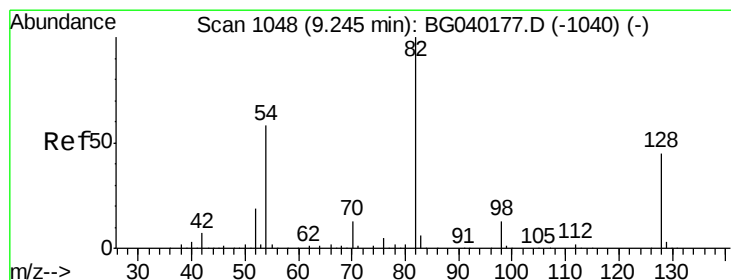
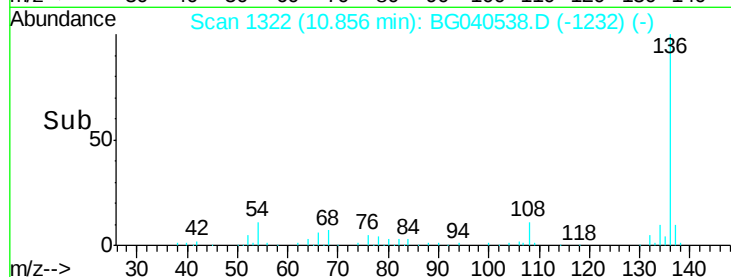
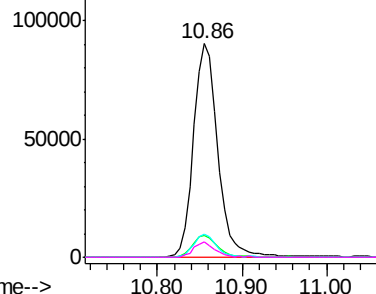
#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 10.86 min Scan# 1322  
Delta R.T. -0.00 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

Instrument :  
BNA\_G  
ClientSampleId :

|             |       |             |
|-------------|-------|-------------|
| Tot Ion:136 | Resp: | 180119      |
| Ion         | Ratio | Lower Upper |
| 136         | 100   |             |
| 137         | 10.4  | 8.9 13.3    |
| 54          | 11.1  | 9.6 14.4    |
| 68          | 7.0   | 5.1 7.7     |

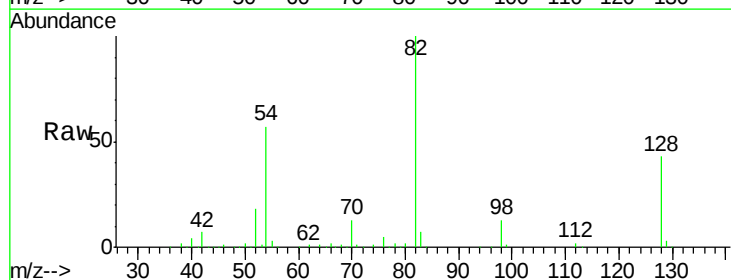


Abundance Ion 136.00 (135.70 to 136.70): BGC  
Ion 137.00 (136.70 to 137.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC  
Ion 68.00 (67.70 to 68.70): BGC

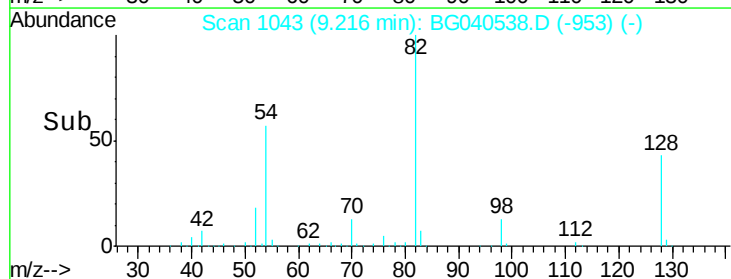
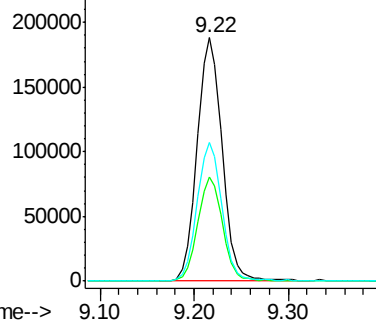


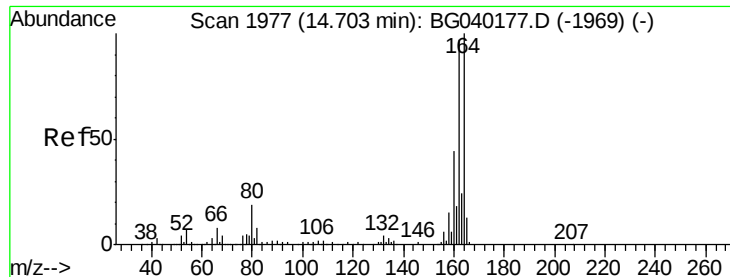
#23  
Nitrobenzene-d5  
Concen: 102.875 ng  
RT: 9.22 min Scan# 1043  
Delta R.T. -0.00 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion: 82 | Resp: | 348608      |
| Ion         | Ratio | Lower Upper |
| 82          | 100   |             |
| 128         | 42.6  | 35.8 53.8   |
| 54          | 57.0  | 46.2 69.2   |



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

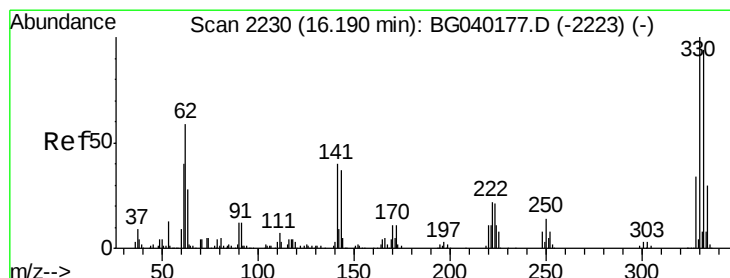
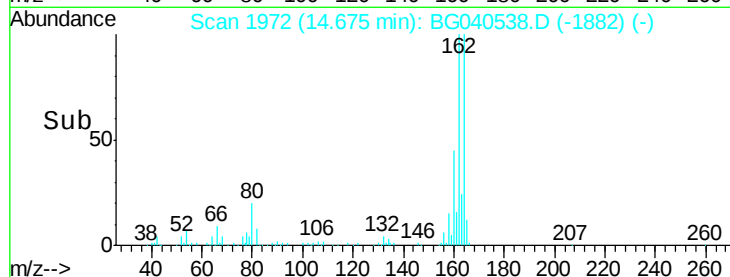
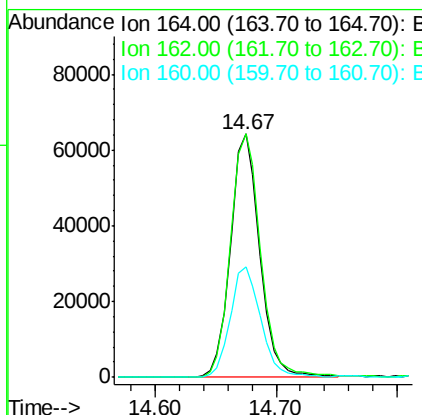
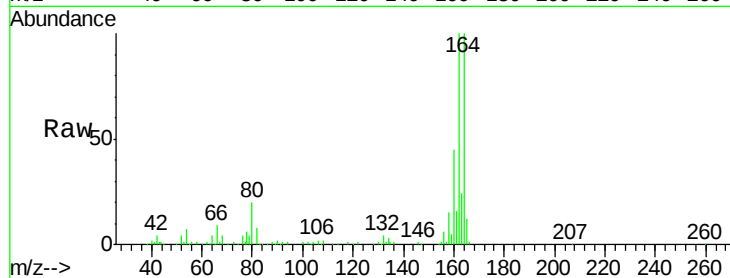




#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.67 min Scan# 1972  
Delta R.T. -0.00 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

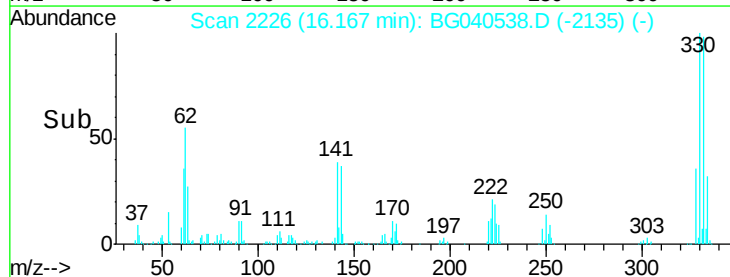
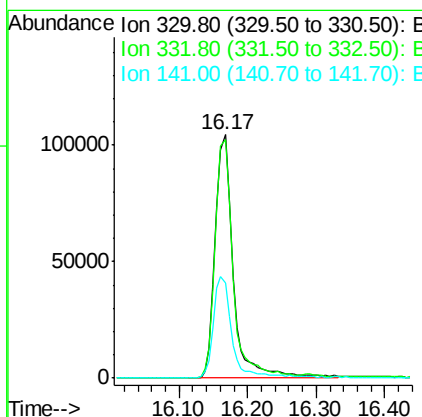
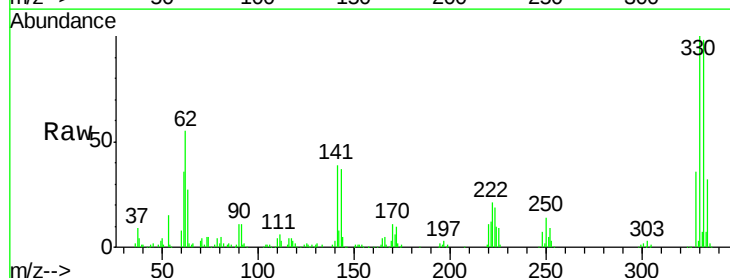
Instrument :  
BNA\_G  
ClientSampleId :

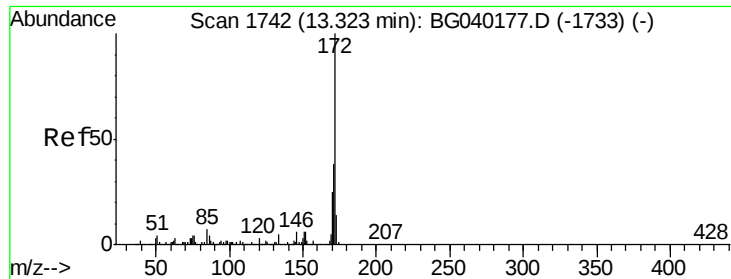
Tot Ion:164 Resp: 108533  
Ion Ratio Lower Upper  
164 100  
162 99.9 77.4 116.2  
160 45.3 35.3 52.9



#42  
2,4,6-Tribromophenol  
Concen: 164.481 ng  
RT: 16.17 min Scan# 2226  
Delta R.T. 0.00 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

Tgt Ion:330 Resp: 192930  
Ion Ratio Lower Upper  
330 100  
332 97.2 76.6 115.0  
141 42.3 32.6 48.8

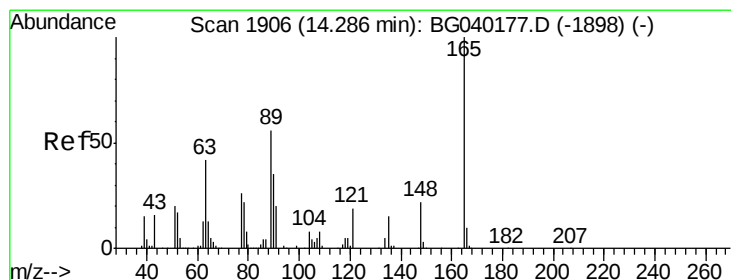
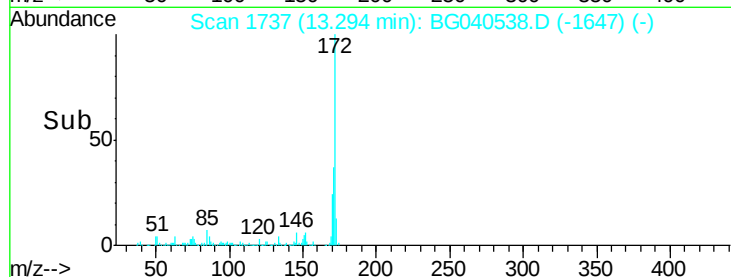
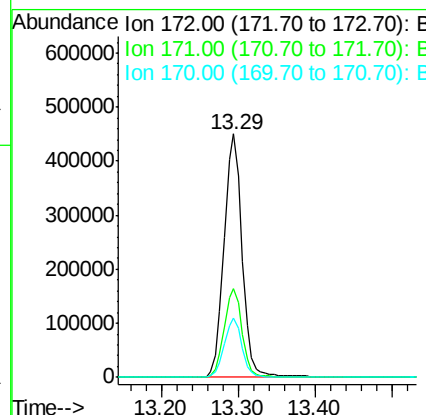
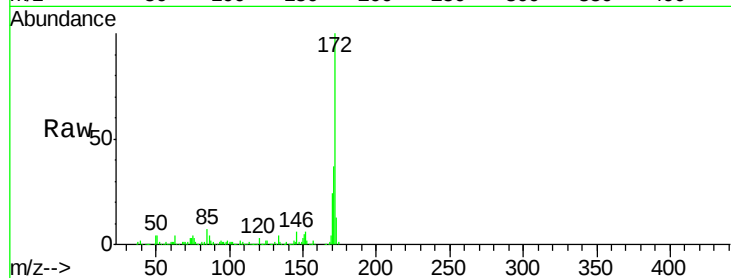




#45  
2-Fluorobiphenyl  
Concen: 100.073 ng  
RT: 13.29 min Scan# 1737  
Delta R.T. -0.00 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

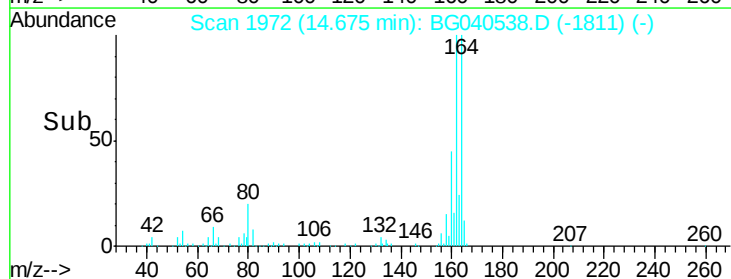
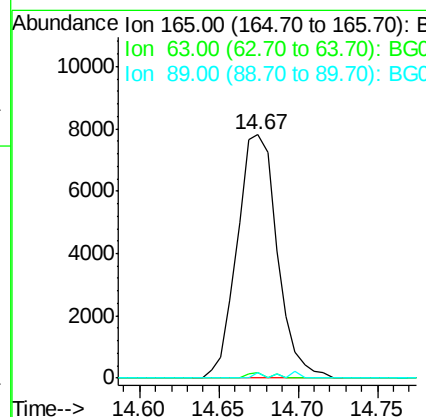
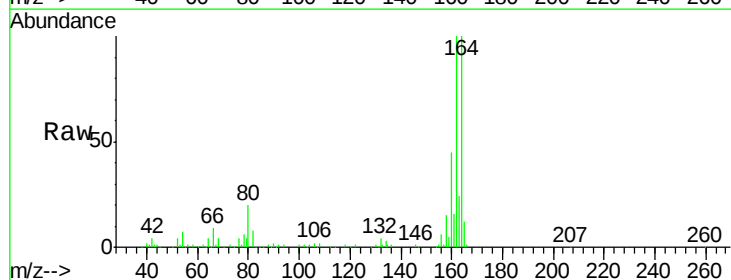
Instrument :  
BNA\_G  
ClientSampleId :

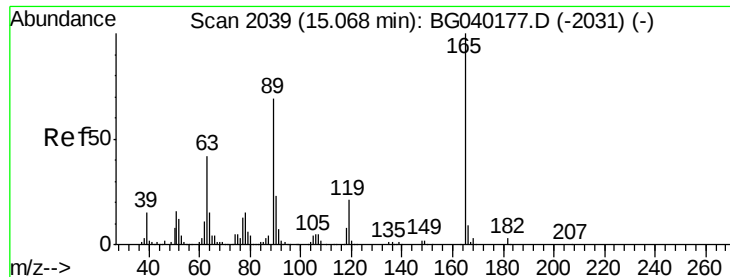
Tot Ion:172 Resp: 732993  
Ion Ratio Lower Upper  
172 100  
171 36.7 30.5 45.7  
170 24.1 20.1 30.1



#51  
2,6-Dinitrotoluene  
Concen: 7.168 ng  
RT: 14.67 min Scan# 1972  
Delta R.T. 0.41 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

Tgt Ion:165 Resp: 13671  
Ion Ratio Lower Upper  
165 100  
63 2.1 44.1 66.1#  
89 2.1 44.9 67.3#





#57

2,4-Dinitrotoluene

Concen: 5.159 ng

RT: 14.67 min Scan# 1972

Delta R.T. -0.37 min

Lab File: BG040538.D

Acq: 17 Apr 2019 20:29

Instrument :

BNA\_G

ClientSampleId :

Tot Ion:165 Resp: 13671

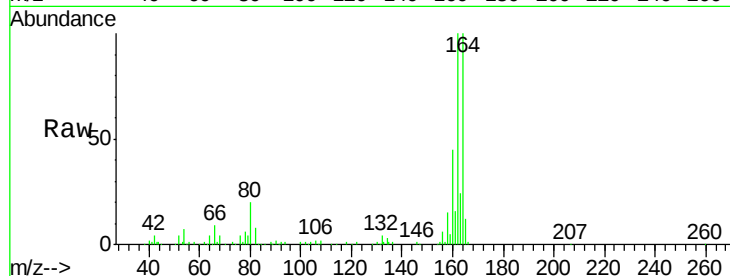
Ion Ratio Lower Upper

165 100

63 2.1 33.8 50.6#

89 2.1 55.4 83.2#

182 0.0 2.2 3.4#

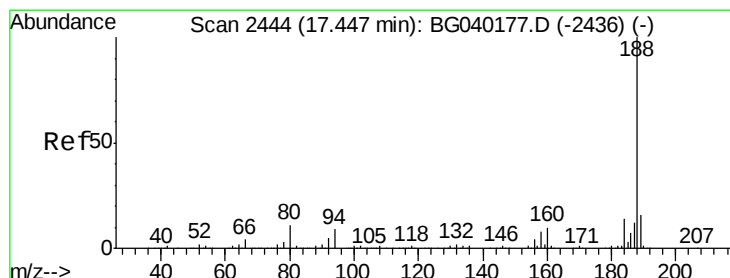
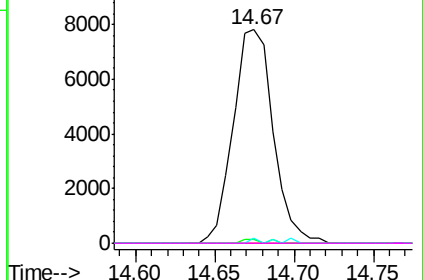
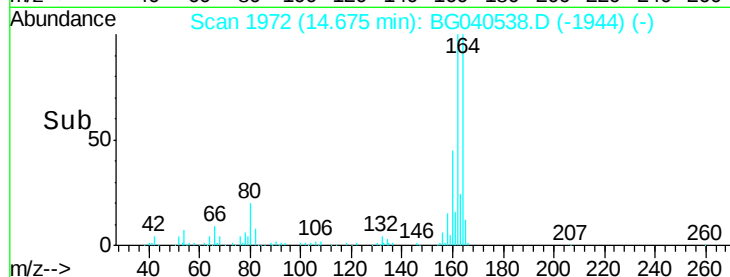


Abundance Ion 165.00 (164.70 to 165.70): E

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



#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 17.42 min Scan# 2439

Delta R.T. -0.00 min

Lab File: BG040538.D

Acq: 17 Apr 2019 20:29

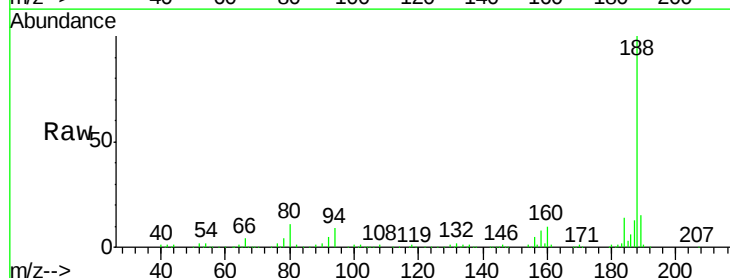
Tgt Ion:188 Resp: 299501

Ion Ratio Lower Upper

188 100

94 9.5 7.0 10.4

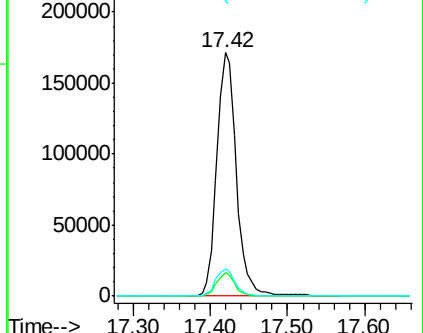
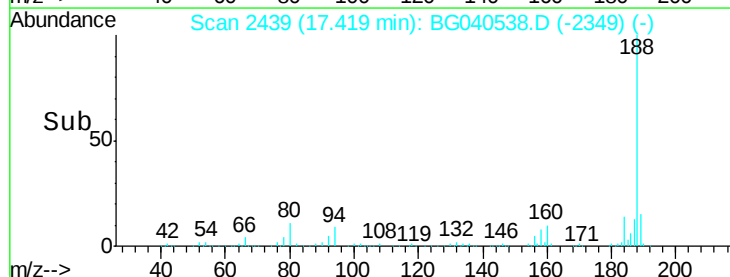
80 11.1 8.6 13.0

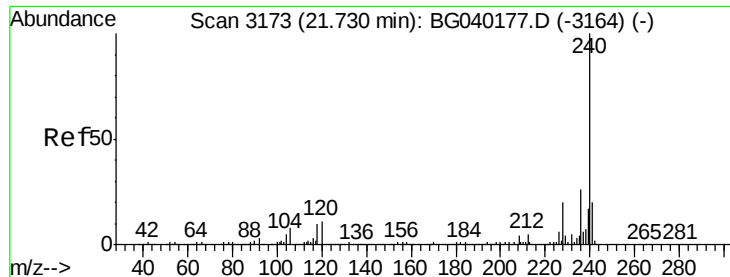


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BGC

Ion 80.00 (79.70 to 80.70): BGC

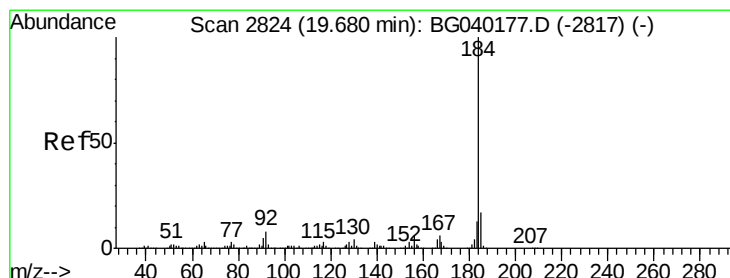
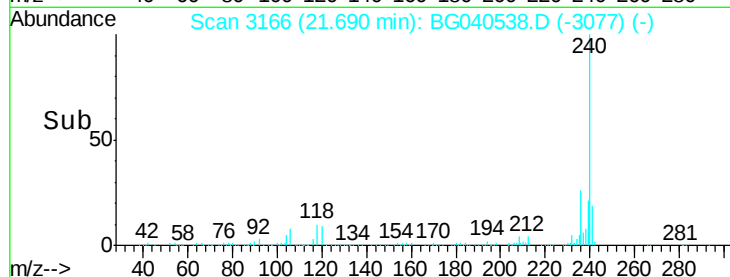
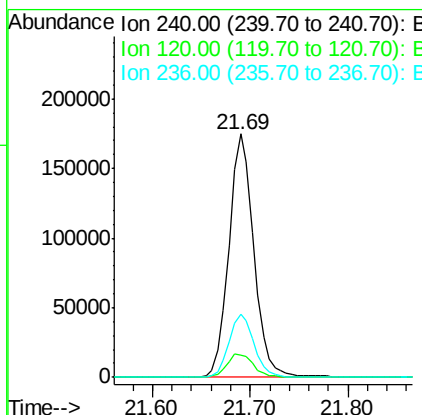
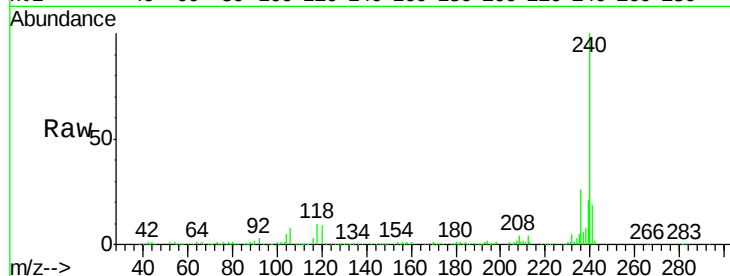




#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 21.69 min Scan# 3166  
Delta R.T. -0.01 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

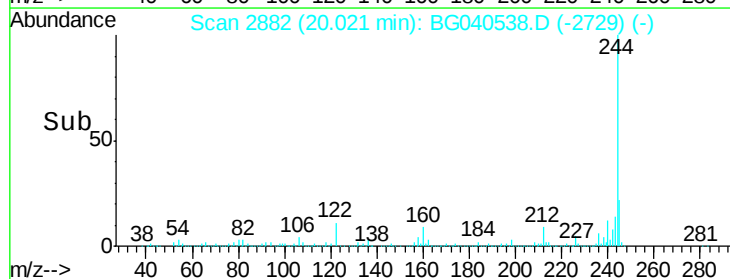
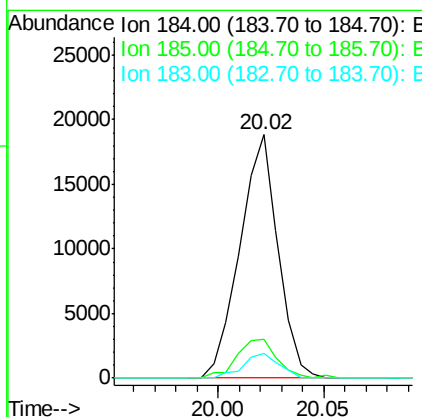
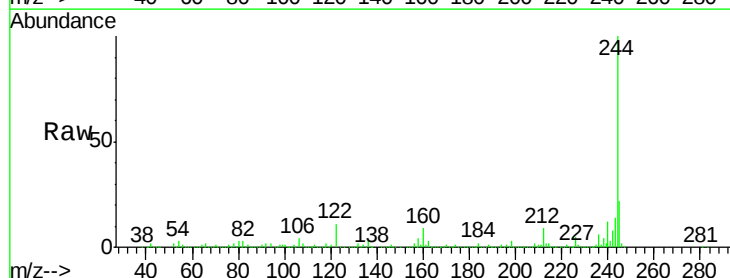
Instrument :  
BNA\_G  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 9.3   | 8.4   | 12.6  |
| 236     | 26.0  | 20.8  | 31.2  |



#77  
Benzidine  
Concen: 2.103 ng  
RT: 20.02 min Scan# 2882  
Delta R.T. 0.37 min  
Lab File: BG040538.D  
Acq: 17 Apr 2019 20:29

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 184     | 100   |       |       |
| 185     | 15.8  | 13.3  | 19.9  |
| 183     | 10.1  | 10.3  | 15.5# |





#79

Terphenyl-d14

Concen: 100.717 ng

RT: 20.02 min Scan# 2882

Delta R.T. -0.00 min

Lab File: BG040538.D

Acq: 17 Apr 2019 20:29

Instrument :

BNA\_G

ClientSampleId :

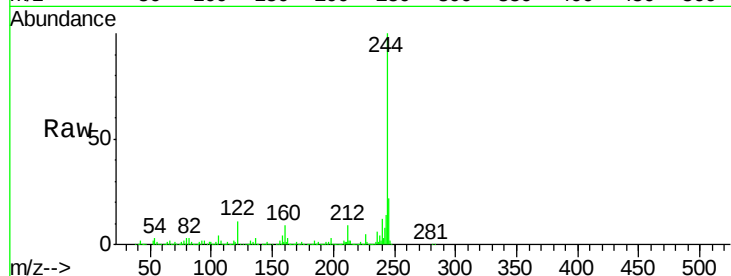
Tot Ion:244 Resp: 1384821

Ion Ratio Lower Upper

244 100

212 9.1 7.0 10.6

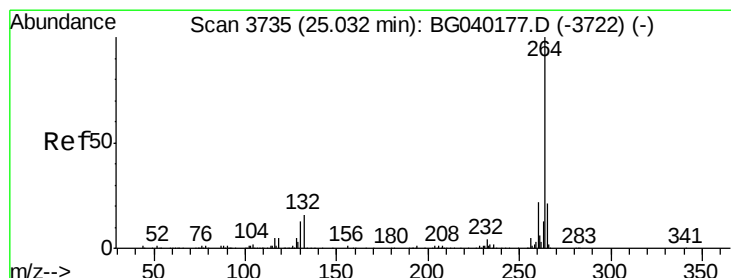
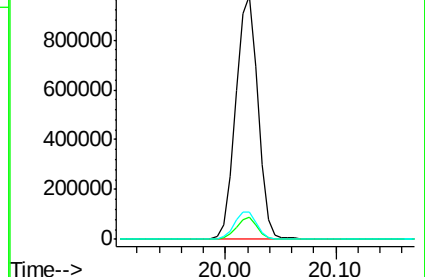
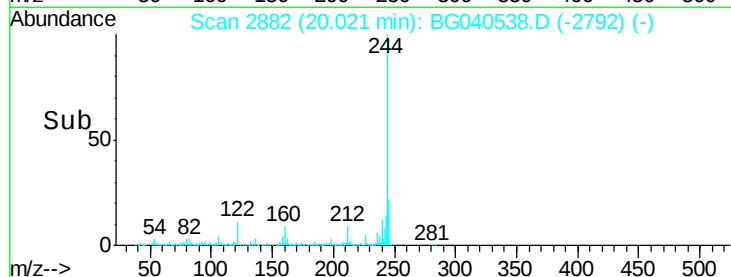
122 11.3 8.5 12.7



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



#87

Perylene-d12

Concen: 20.000 ng

RT: 24.96 min Scan# 3723

Delta R.T. -0.01 min

Lab File: BG040538.D

Acq: 17 Apr 2019 20:29

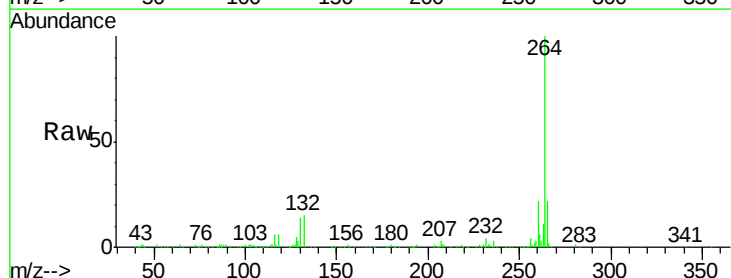
Tgt Ion:264 Resp: 327939

Ion Ratio Lower Upper

264 100

260 22.2 17.9 26.9

265 21.7 16.8 25.2



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

