

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG053019\  
 Data File : BG040971.D  
 Acq On : 31 May 2019 4:25  
 Operator : HP/JU  
 Sample : K3041-12  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :

Quant Time: May 31 06:32:32 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG052919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 29 18:39:57 2019  
 Response via : Initial Calibration

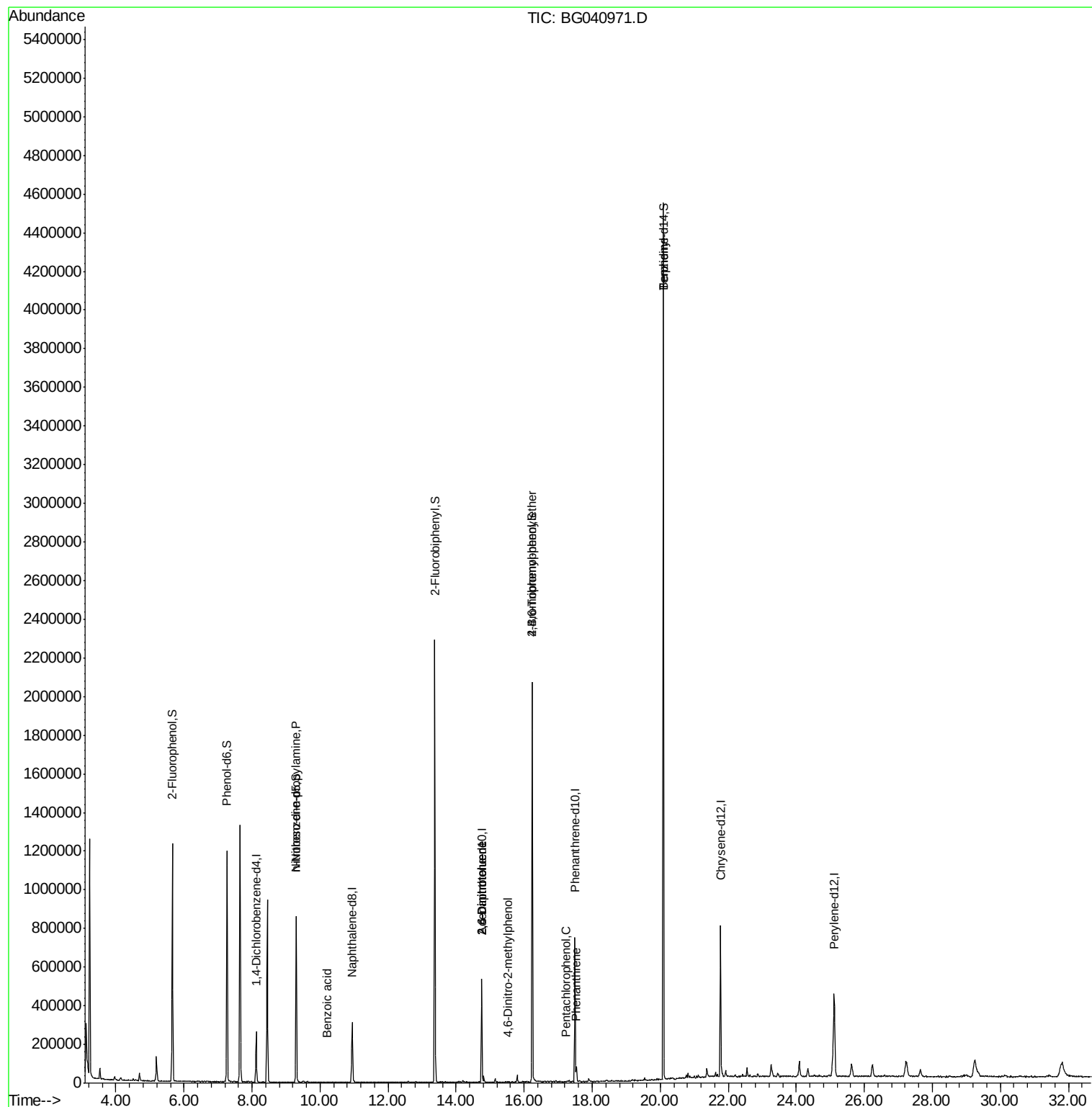
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 8.12  | 152  | 66319    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8             | 10.94 | 136  | 255766   | 20.00  | ng    | 0.00     |
| 39) Acenaphthene-d10           | 14.75 | 164  | 181088   | 20.00  | ng    | 0.00     |
| 64) Phenanthrene-d10           | 17.49 | 188  | 477729   | 20.00  | ng    | 0.00     |
| 76) Chrysene-d12               | 21.78 | 240  | 474438   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12               | 25.11 | 264  | 506848   | 20.00  | ng    | -0.01    |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.66  | 112  | 470014   | 127.80 | ng    | 0.00     |
| 7) Phenol-d6                   | 7.26  | 99   | 620197   | 109.19 | ng    | 0.00     |
| 23) Nitrobenzene-d5            | 9.30  | 82   | 518926   | 90.07  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol       | 16.24 | 330  | 382782   | 142.38 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl           | 13.37 | 172  | 1115557  | 88.71  | ng    | 0.00     |
| 79) Terphenyl-d14              | 20.09 | 244  | 2009834  | 89.91  | ng    | 0.00     |
| Target Compounds               |       |      |          |        |       |          |
| 19) n-Nitroso-di-n-propylamine | 9.30  | 70   | 75371    | 17.243 | ng    | # 78     |
| 32) Benzoic acid               | 10.21 | 122  | 65       | 8.147  | ng    | # 1      |
| 51) 2,6-Dinitrotoluene         | 14.76 | 165  | 22590    | 6.835  | ng    | # 20     |
| 57) 2,4-Dinitrotoluene         | 14.76 | 165  | 22590    | 4.839  | ng    | # 23     |
| 65) 4,6-Dinitro-2-methylphenol | 15.51 | 198  | 74       | 8.613  | ng    | # 39     |
| 67) 4-Bromophenyl-phenylether  | 16.24 | 248  | 28705    | 4.452  | ng    | # 1      |
| 70) Pentachlorophenol          | 17.22 | 266  | 55       | 4.270  | ng    | # 18     |
| 71) Phenanthrene               | 17.53 | 178  | 50816    | 2.042  | ng    | # 96     |
| 77) Benzidine                  | 20.09 | 184  | 36798    | 3.251  | ng    | # 91     |

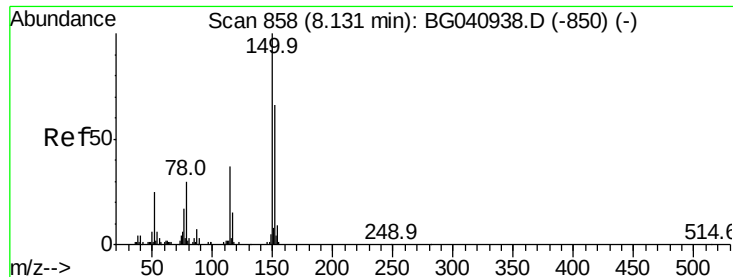
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG053019\  
Data File : BG040971.D  
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Operator : HP/JU  
Sample : K3041-12  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_G  
ClientSampleId :

Quant Time: May 31 06:32:32 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG052919.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed May 29 18:39:57 2019  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.000 ng

RT: 8.12 min Scan# 857

Delta R.T. -0.01 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

Instrument :

BNA\_G

ClientSampleId :

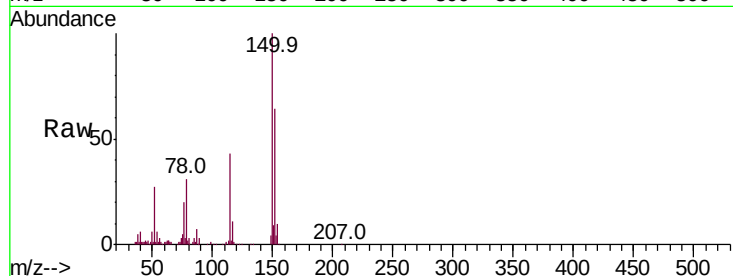
Tot Ion:152 Resp: 66319

Ion Ratio Lower Upper

152 100

150 155.6 120.6 180.8

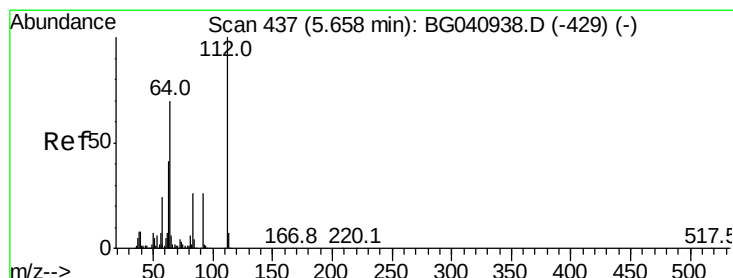
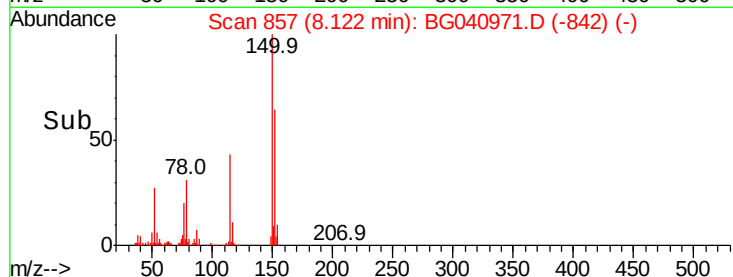
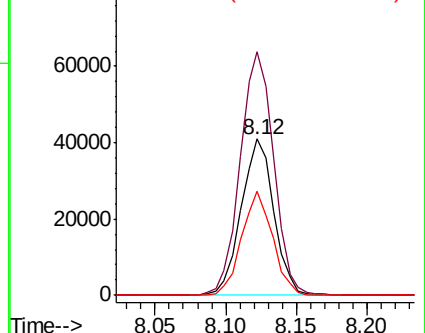
115 66.4 45.1 67.7



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: 127.797 ng

RT: 5.66 min Scan# 438

Delta R.T. 0.00 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

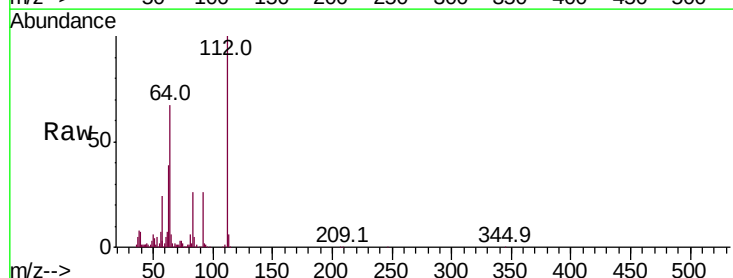
Tgt Ion:112 Resp: 470014

Ion Ratio Lower Upper

112 100

64 67.4 56.2 84.2

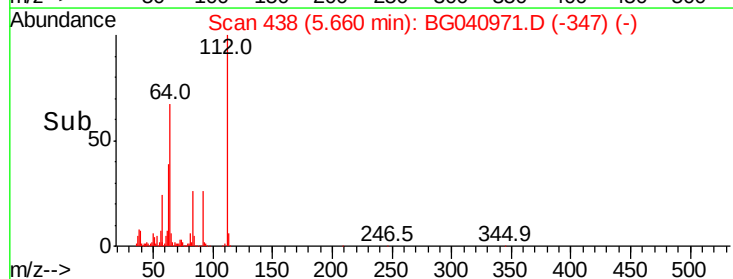
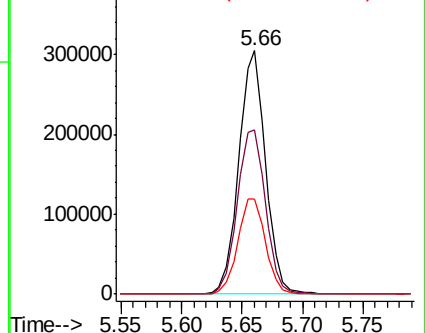
63 38.9 32.8 49.2

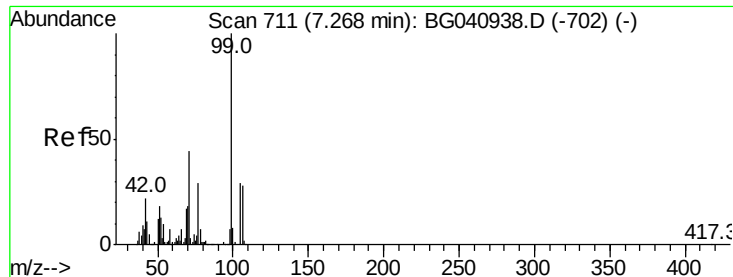


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BG0

Ion 63.00 (62.70 to 63.70): BG0





#7

Phenol-d6

Concen: 109.189 ng

RT: 7.26 min Scan# 711

Delta R.T. -0.00 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

Instrument :

BNA\_G

ClientSampled :

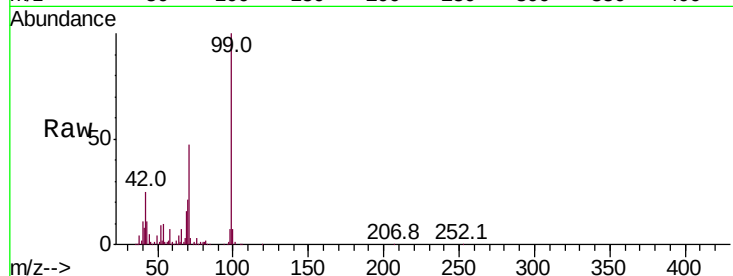
Tot Ion: 99 Resp: 620197

Ion Ratio Lower Upper

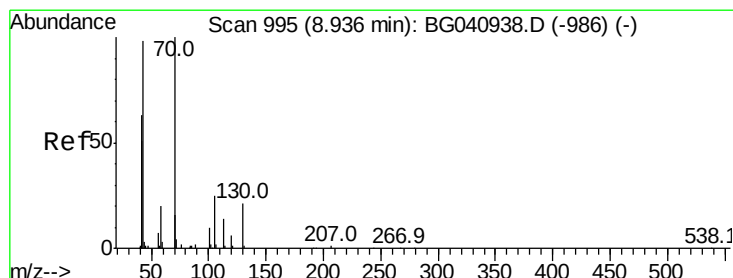
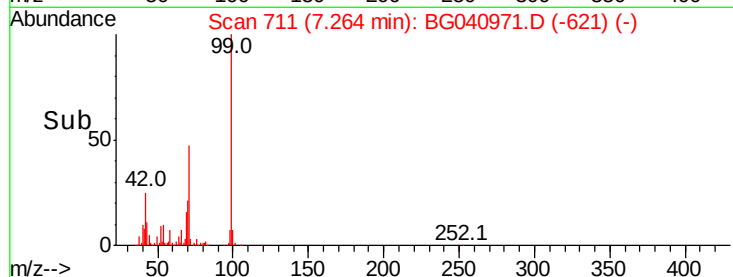
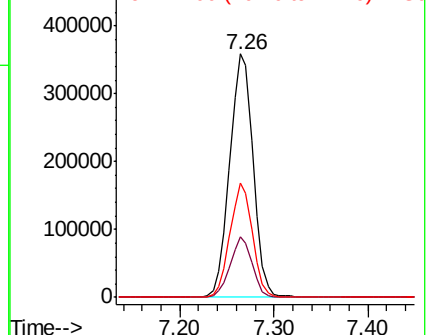
99 100

42 25.0 17.9 26.9

71 46.7 35.4 53.0



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



#19

n-Nitroso-di-n-propylamine

Concen: 17.243 ng

RT: 9.30 min Scan# 1057

Delta R.T. 0.36 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

Tgt Ion: 70 Resp: 75371

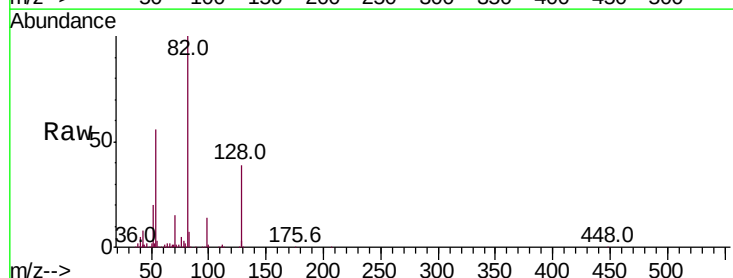
Ion Ratio Lower Upper

70 100

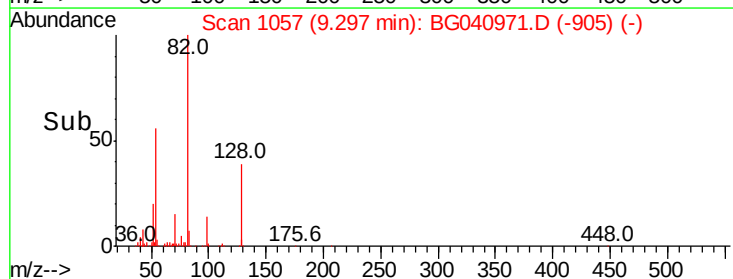
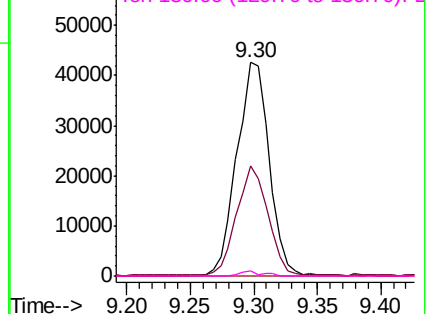
42 51.7 51.5 77.3

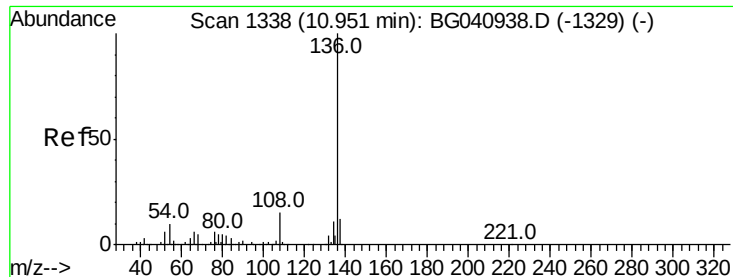
101 0.0 8.1 12.1#

130 2.4 16.6 24.8#



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: 10.94 min Scan# 1337

Delta R.T. -0.01 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

Instrument :

BNA\_G

ClientSampleId :

Tot Ion:136 Resp: 255766

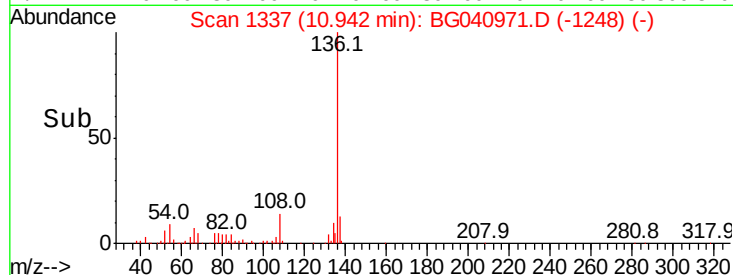
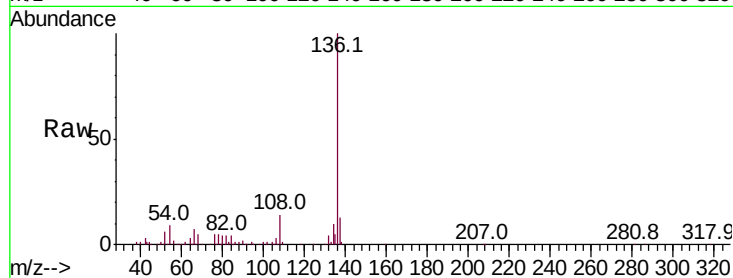
Ion Ratio Lower Upper

136 100

137 12.6 9.5 14.3

54 9.4 7.6 11.4

68 5.3 3.9 5.9

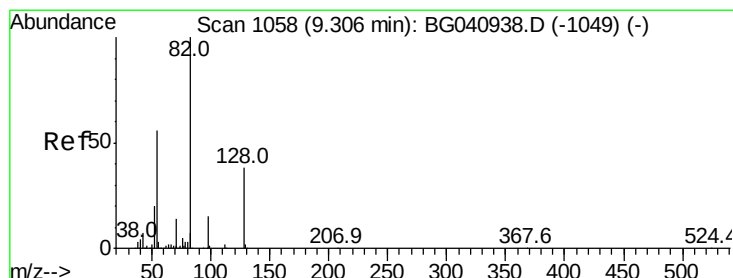
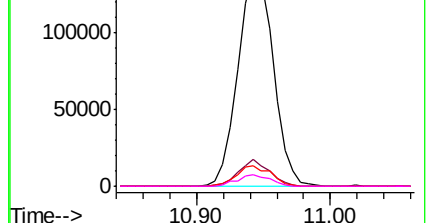


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BGC

Ion 68.00 (67.70 to 68.70): BGC



#23

Nitrobenzene-d5

Concen: 90.071 ng

RT: 9.30 min Scan# 1057

Delta R.T. -0.01 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

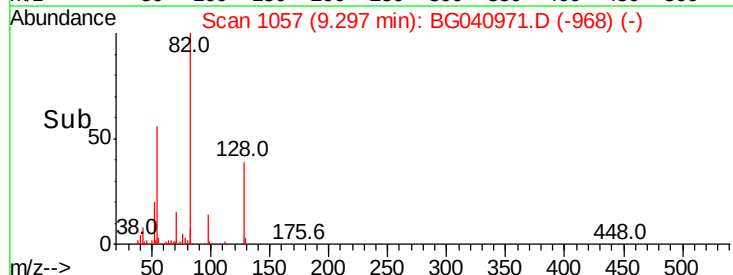
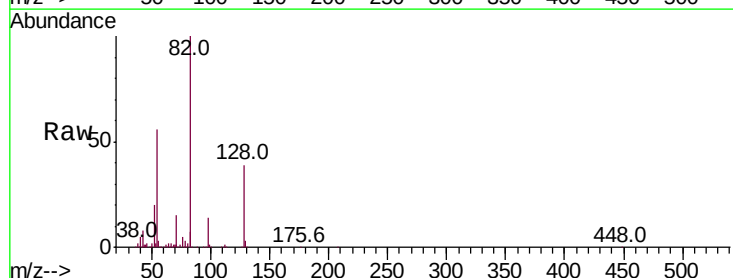
Tgt Ion: 82 Resp: 518926

Ion Ratio Lower Upper

82 100

128 38.9 30.5 45.7

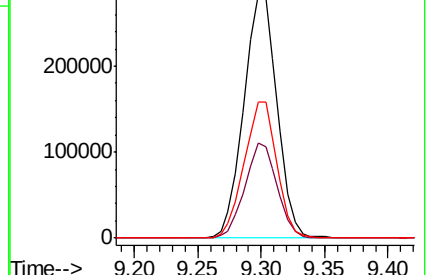
54 55.8 44.6 66.8

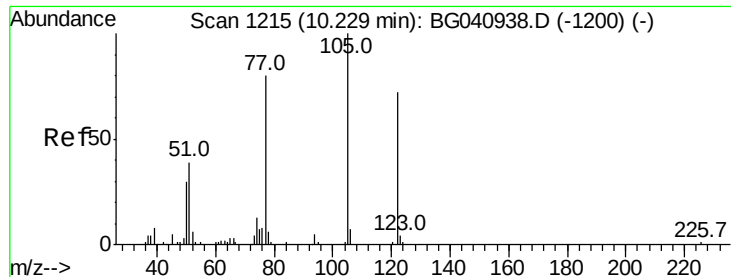


Abundance Ion 82.00 (81.70 to 82.70): BGC

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BGC

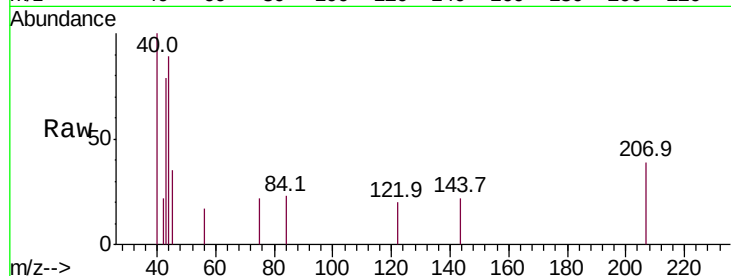




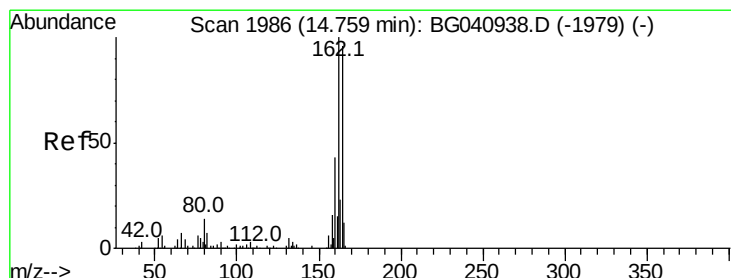
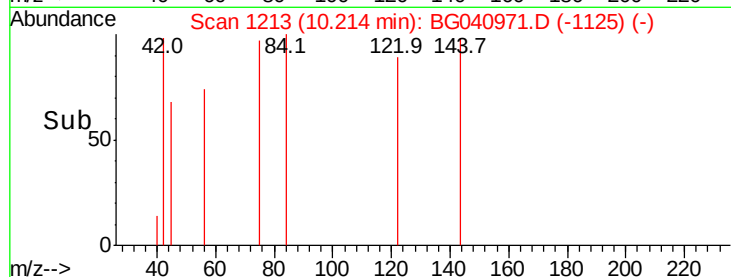
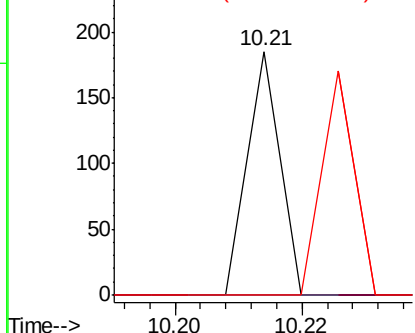
#32  
Benzoic acid  
Concen: 8.147 ng  
RT: 10.21 min Scan# 1213  
Delta R.T. -0.01 min  
Lab File: BG040971.D  
Acq: 31 May 2019 4:25

Instrument :  
BNA\_G  
ClientSampled :

| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 122     | 100   |       |        |
| 105     | 0.0   | 114.8 | 154.8# |
| 77      | 0.0   | 89.9  | 129.9# |

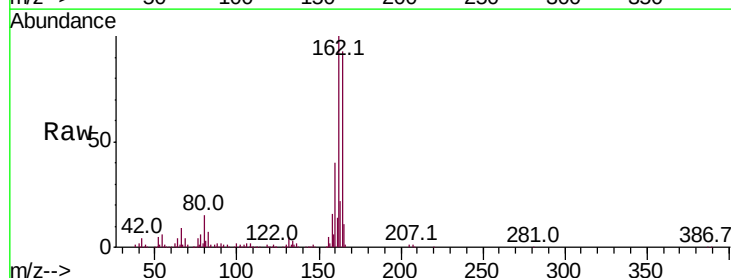


Abundance Ion 122.00 (121.70 to 122.70): E  
Ion 105.00 (104.70 to 105.70): E  
Ion 77.00 (76.70 to 77.70): B

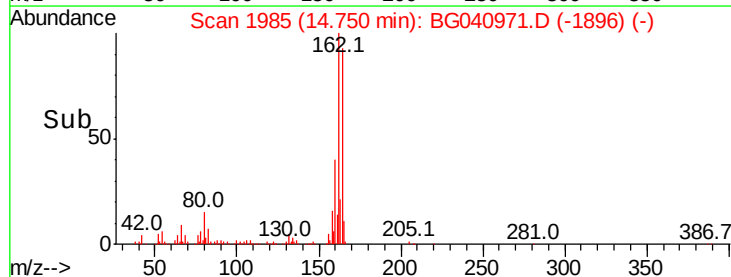
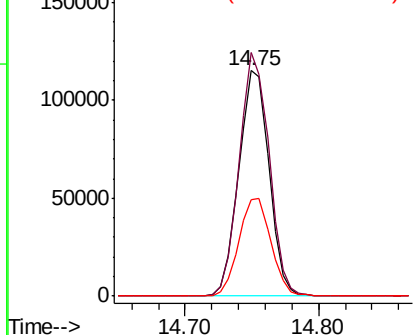


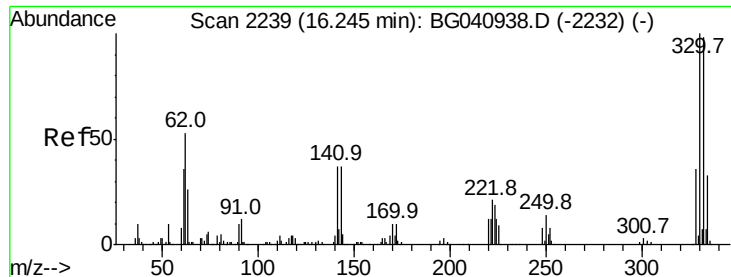
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 14.75 min Scan# 1985  
Delta R.T. -0.01 min  
Lab File: BG040971.D  
Acq: 31 May 2019 4:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 107.9 | 83.0  | 124.4 |
| 160     | 42.8  | 35.6  | 53.4  |



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

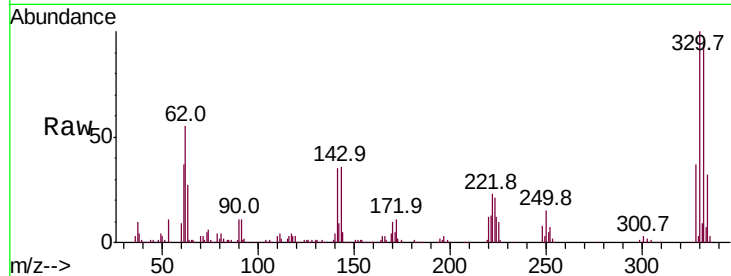




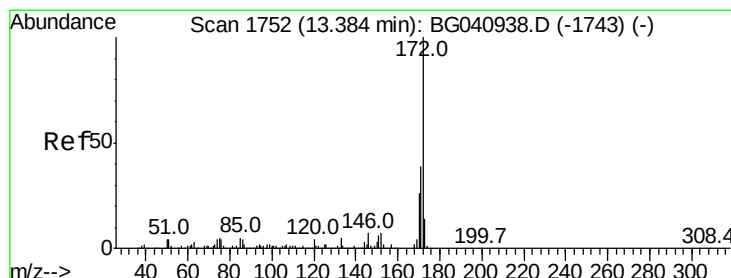
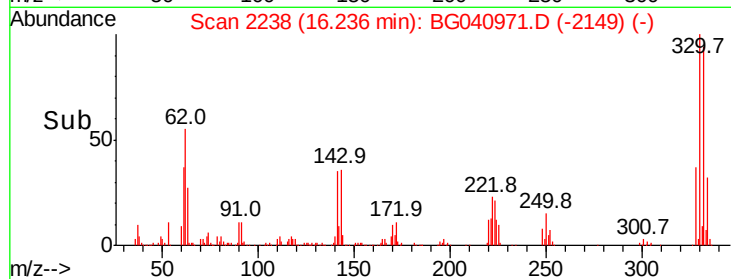
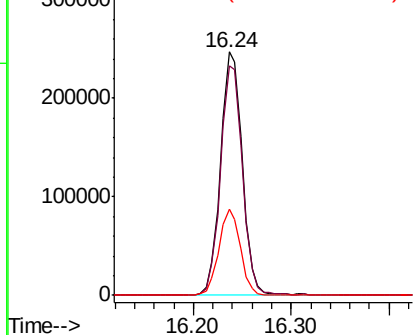
#42  
 2,4,6-Tribromophenol  
 Concen: 142.384 ng  
 RT: 16.24 min Scan# 2238  
 Delta R.T. -0.01 min  
 Lab File: BG040971.D  
 Acq: 31 May 2019 4:25

Instrument :  
 BNA\_G  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 94.7  | 78.5  | 117.7 |
| 141     | 34.8  | 28.7  | 43.1  |

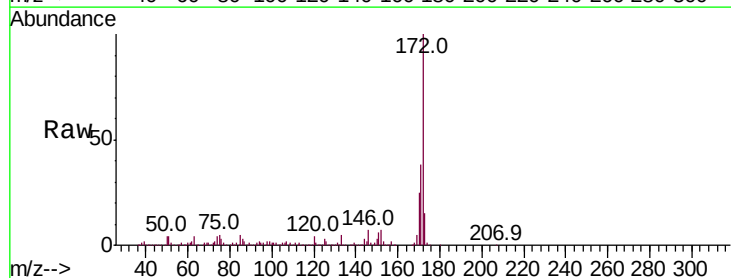


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

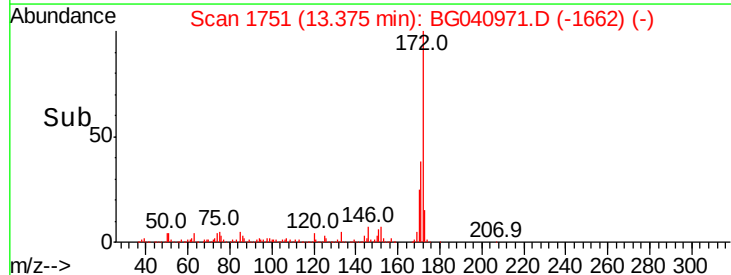
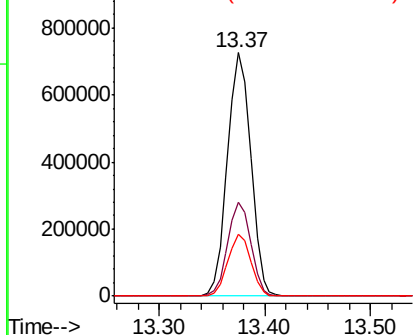


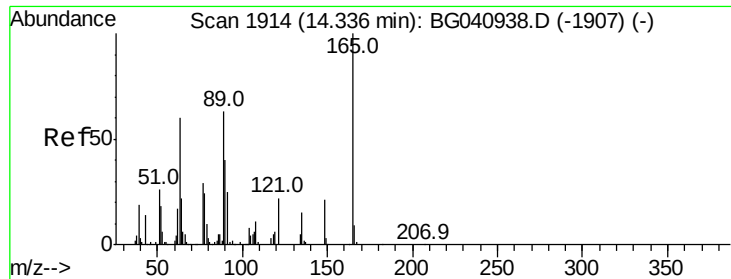
#45  
 2-Fluorobiphenyl  
 Concen: 88.715 ng  
 RT: 13.37 min Scan# 1751  
 Delta R.T. -0.01 min  
 Lab File: BG040971.D  
 Acq: 31 May 2019 4:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 38.4  | 31.1  | 46.7  |
| 170     | 25.3  | 20.5  | 30.7  |



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





#51

2,6-Dinitrotoluene

Concen: 6.835 ng

RT: 14.76 min Scan# 1986

Delta R.T. 0.42 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

Instrument :

BNA\_G

ClientSampleId :

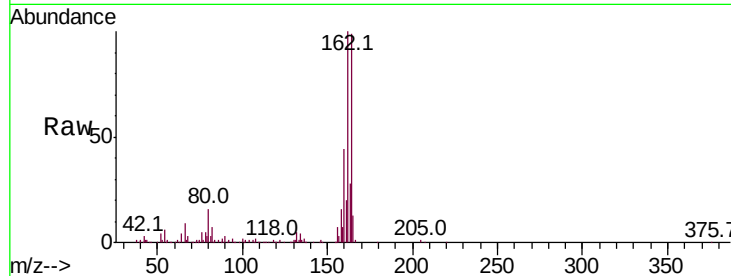
Tot Ion:165 Resp: 22590

Ion Ratio Lower Upper

165 100

63 2.4 53.6 80.4#

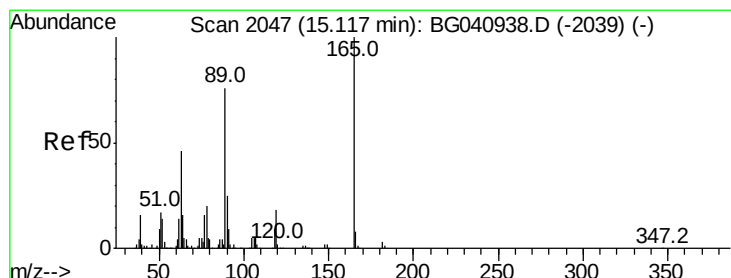
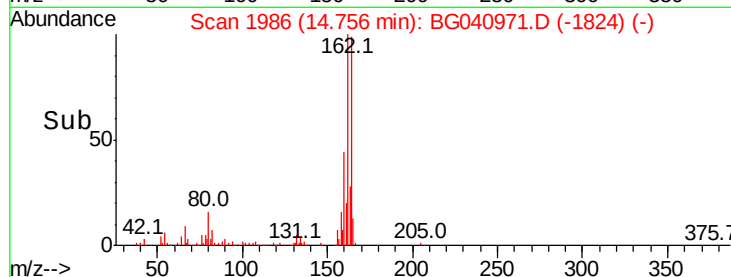
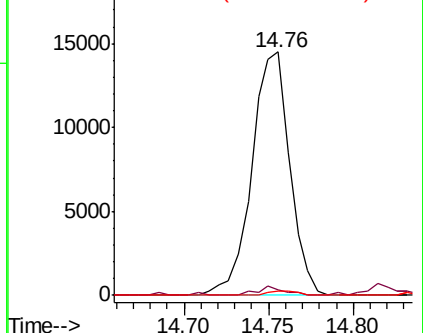
89 1.9 50.4 75.6#



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



#57

2,4-Dinitrotoluene

Concen: 4.839 ng

RT: 14.76 min Scan# 1986

Delta R.T. -0.36 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

Tgt Ion:165 Resp: 22590

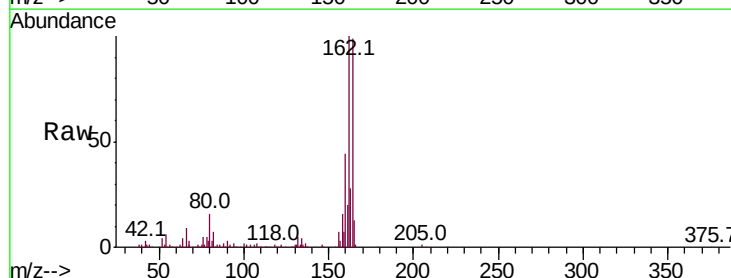
Ion Ratio Lower Upper

165 100

63 2.4 37.3 55.9#

89 1.9 61.0 91.6#

182 0.0 2.2 3.2#

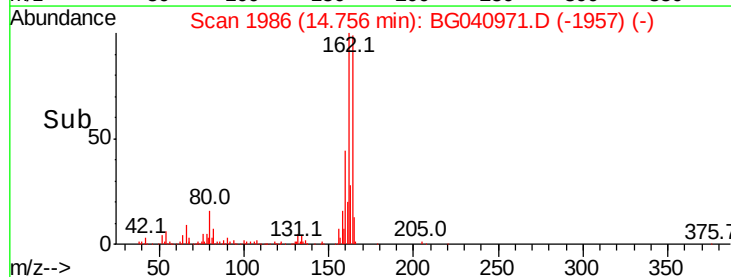
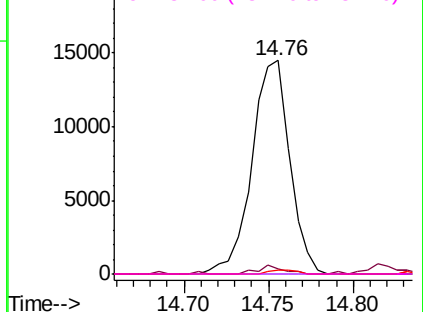


Abundance Ion 165.00 (164.70 to 165.70): E

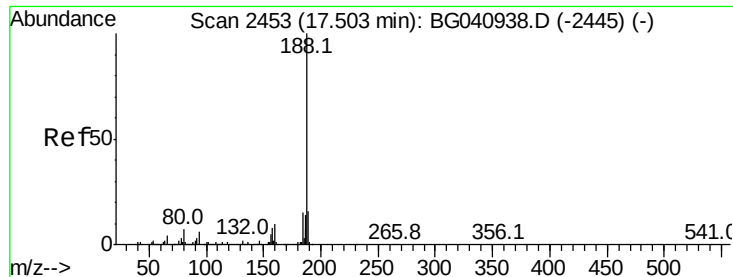
Ion 63.00 (62.70 to 63.70): BGC

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: 17.49 min Scan# 2452

Delta R.T. -0.01 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

Instrument :

BNA\_G

ClientSampleId :

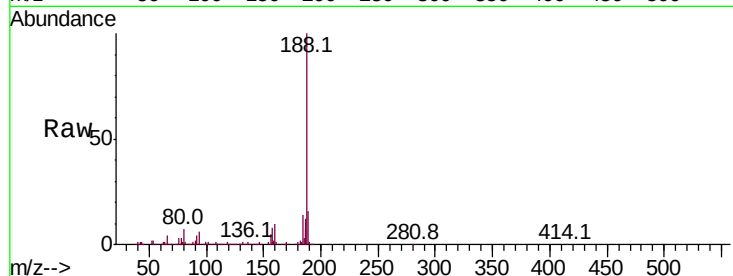
Tot Ion:188 Resp: 477729

Ion Ratio Lower Upper

188 100

94 5.6 4.7 7.1

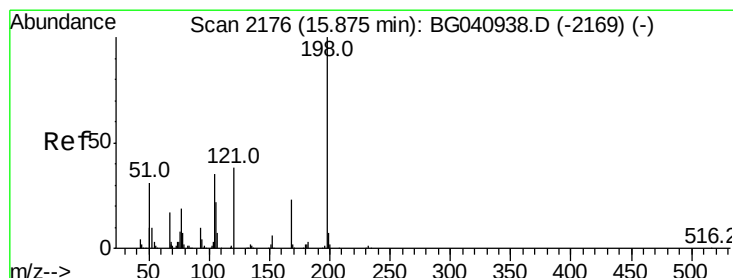
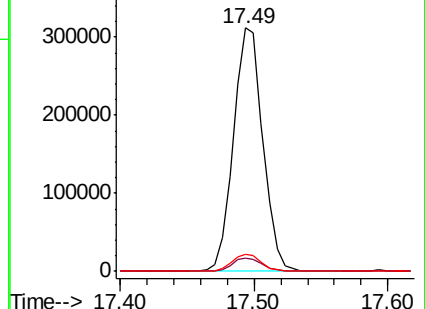
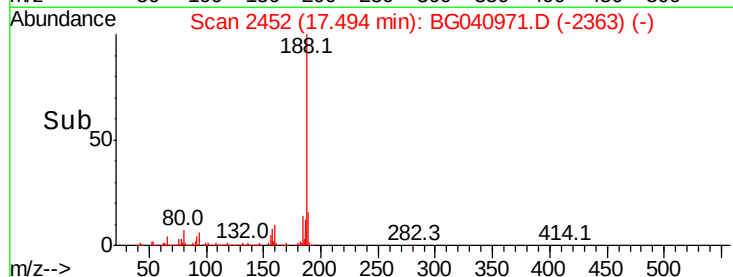
80 6.7 5.8 8.8



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BG0

Ion 80.00 (79.70 to 80.70): BG0



#65

4,6-Dinitro-2-methylphenol

Concen: 8.613 ng

RT: 15.51 min Scan# 2115

Delta R.T. -0.36 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

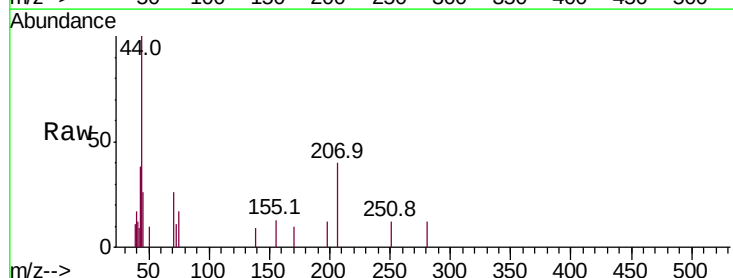
Tgt Ion:198 Resp: 74

Ion Ratio Lower Upper

198 100

51 79.4 21.6 61.6#

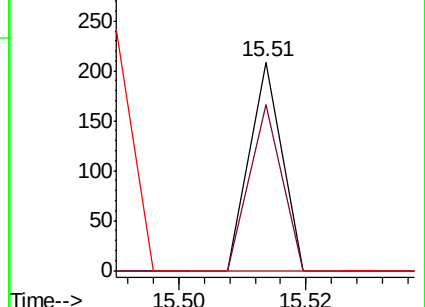
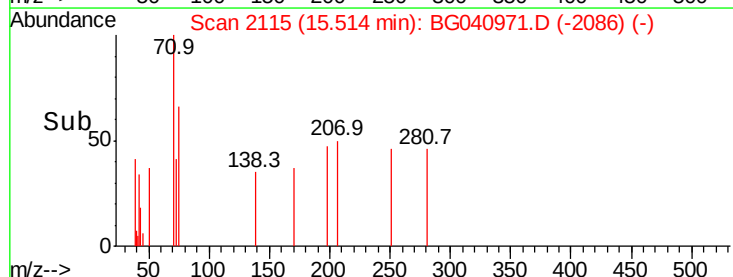
105 0.0 17.5 57.5#

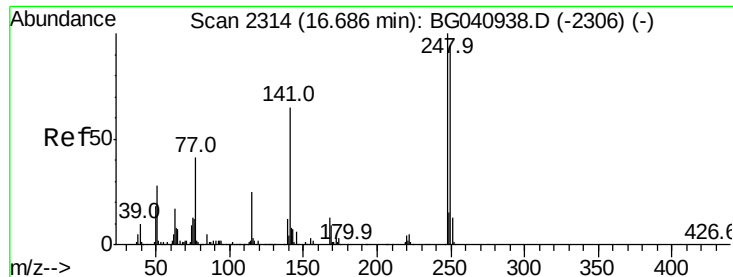


Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BG0

Ion 105.00 (104.70 to 105.70): E

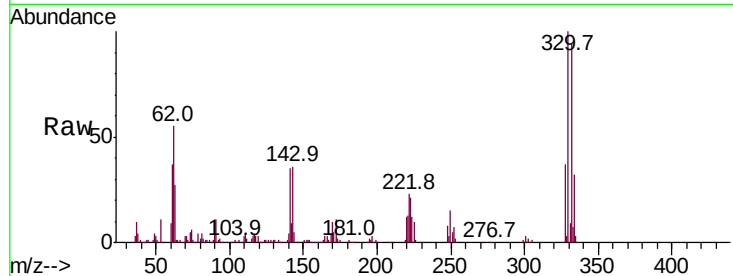




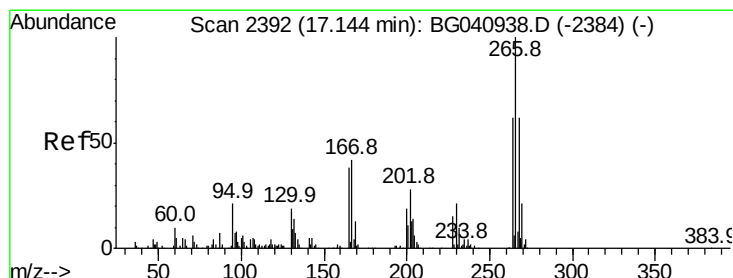
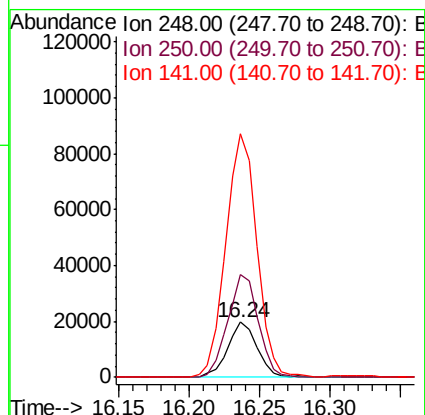
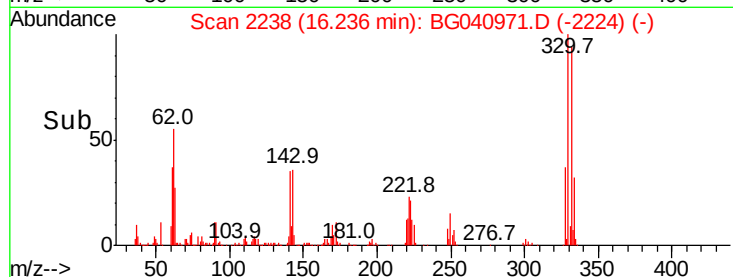
#67  
 4-Bromophenyl-phenylether  
 Concen: 4.452 ng  
 RT: 16.24 min Scan# 2238  
 Delta R.T. -0.45 min  
 Lab File: BG040971.D  
 Acq: 31 May 2019 4:25

Instrument :  
 BNA\_G  
 ClientSampleId :

Tot Ion:248 Resp: 28705  
 Ion Ratio Lower Upper  
 248 100  
 250 186.0 75.0 112.4#  
 141 440.4 52.4 78.6#

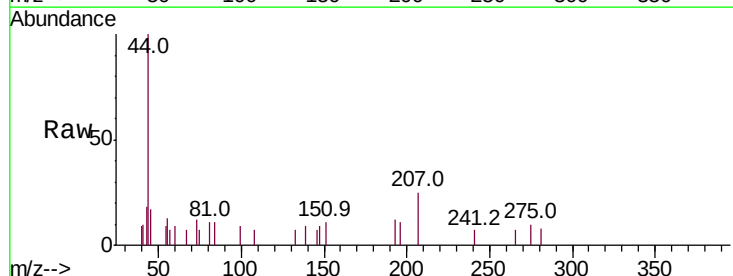


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

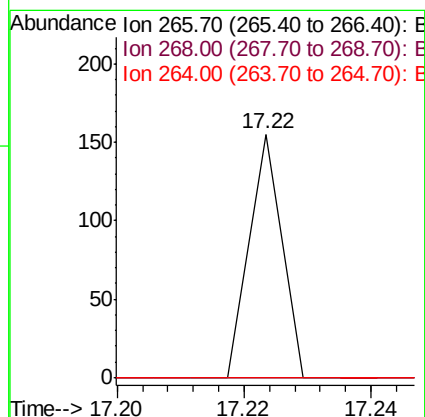
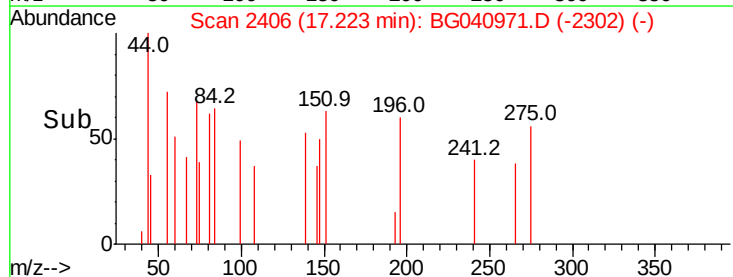


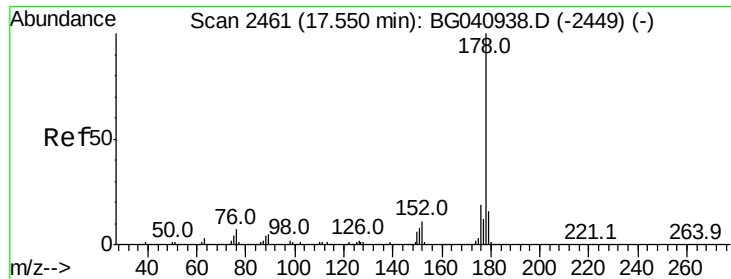
#70  
 Pentachlorophenol  
 Concen: 4.270 ng  
 RT: 17.22 min Scan# 2406  
 Delta R.T. 0.08 min  
 Lab File: BG040971.D  
 Acq: 31 May 2019 4:25

Tgt Ion:266 Resp: 55  
 Ion Ratio Lower Upper  
 266 100  
 268 0.0 53.1 79.7#  
 264 0.0 49.9 74.9#



Abundance Ion 265.70 (265.40 to 266.40): E  
 Ion 268.00 (267.70 to 268.70): E  
 Ion 264.00 (263.70 to 264.70): E

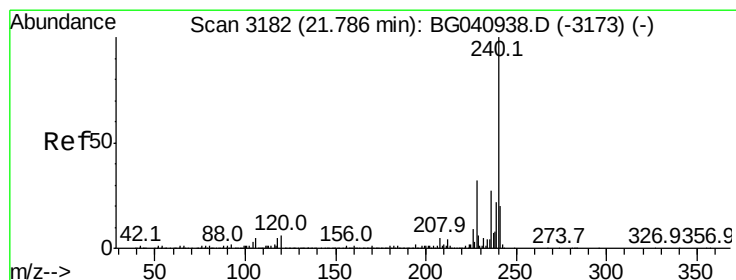
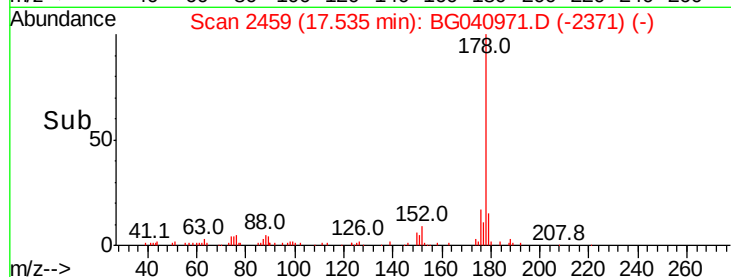
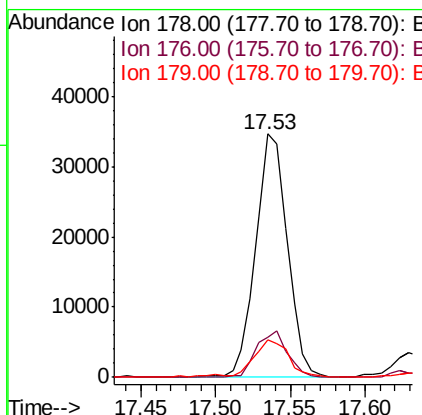
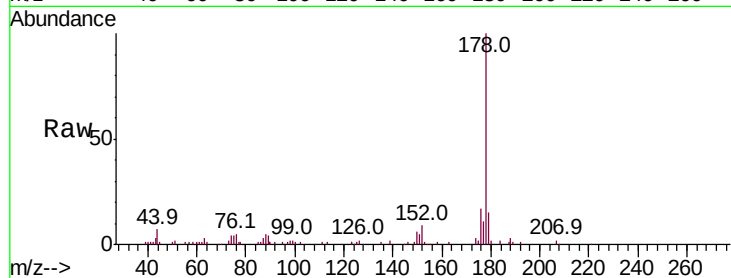




#71  
 Phenanthrene  
 Concen: 2.042 ng  
 RT: 17.53 min Scan# 2459  
 Delta R.T. -0.01 min  
 Lab File: BG040971.D  
 Acq: 31 May 2019 4:25

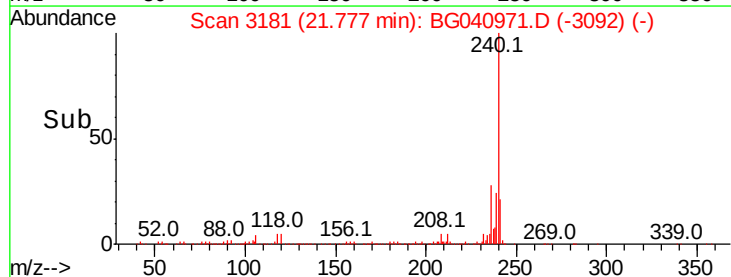
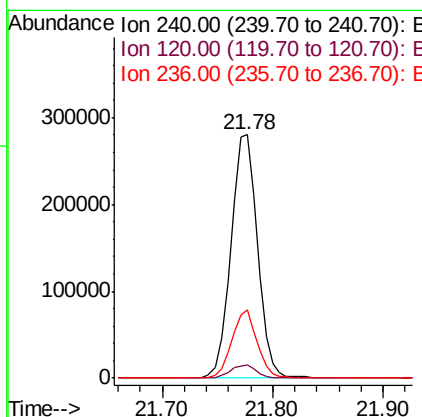
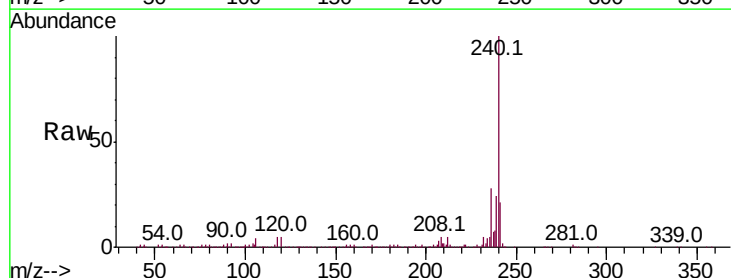
Instrument :  
 BNA\_G  
 ClientSampleId :

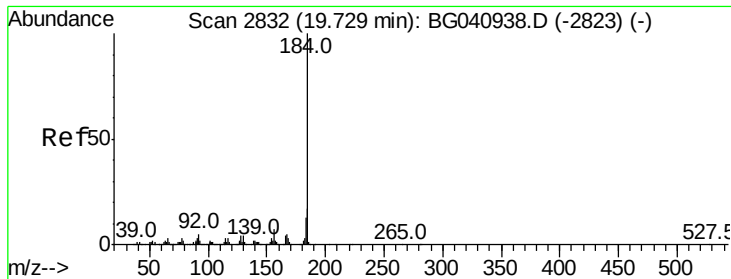
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 16.7  | 15.5  | 23.3  |
| 179     | 15.5  | 12.7  | 19.1  |



#76  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 21.78 min Scan# 3181  
 Delta R.T. -0.01 min  
 Lab File: BG040971.D  
 Acq: 31 May 2019 4:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 5.4   | 4.5   | 6.7   |
| 236     | 27.8  | 21.3  | 31.9  |





#77

Benzidine

Concen: 3.251 ng

RT: 20.09 min Scan# 2894

Delta R.T. 0.36 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

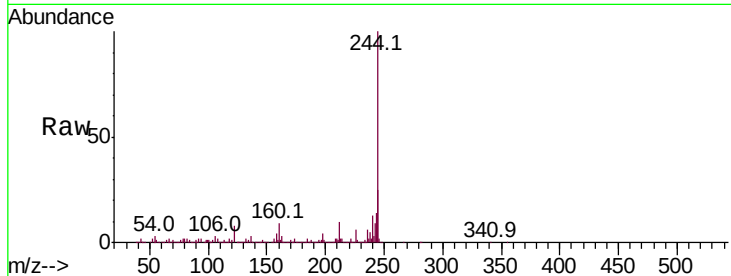
Instrument :

BNA\_G

ClientSampleId :

Tot Ion:184 Resp: 36798

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 184 | 100   |       |       |
| 185 | 14.1  | 13.3  | 19.9  |
| 183 | 8.1   | 10.7  | 16.1  |

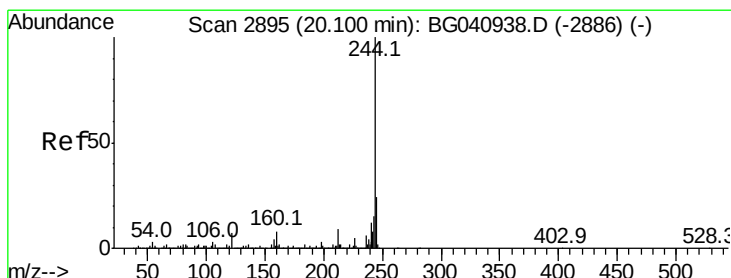
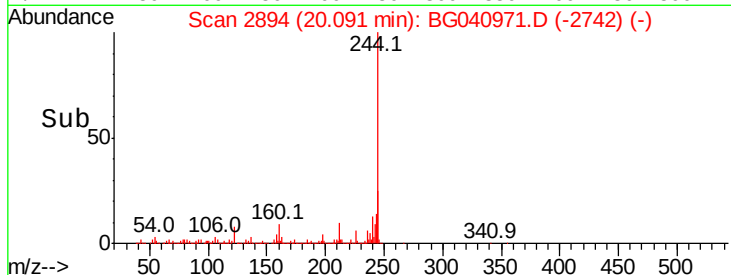
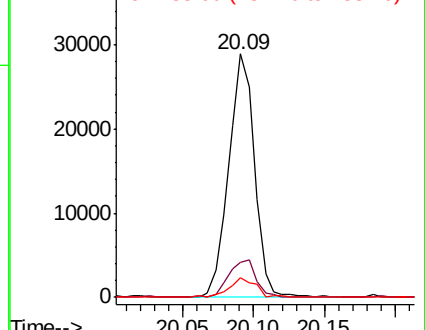


Abundance

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



#79

Terphenyl-d14

Concen: 89.908 ng

RT: 20.09 min Scan# 2894

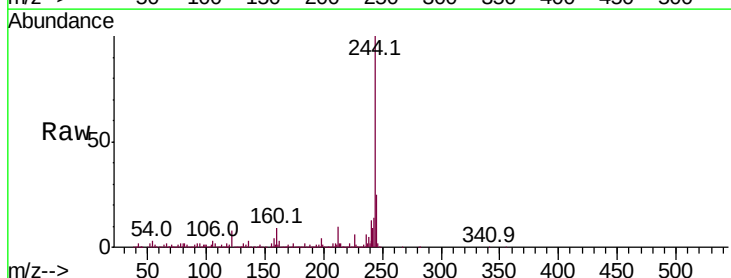
Delta R.T. -0.01 min

Lab File: BG040971.D

Acq: 31 May 2019 4:25

Tgt Ion:244 Resp: 2009834

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 244 | 100   |       |       |
| 212 | 10.0  | 7.0   | 10.4  |
| 122 | 8.1   | 5.4   | 8.0   |

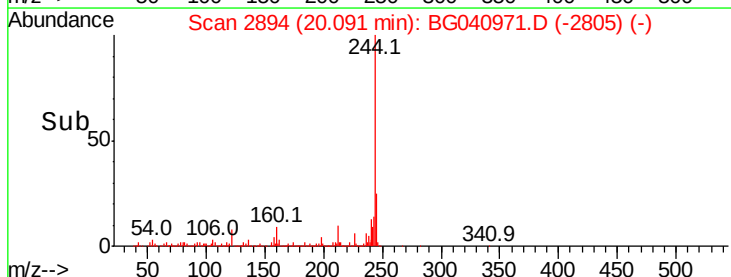
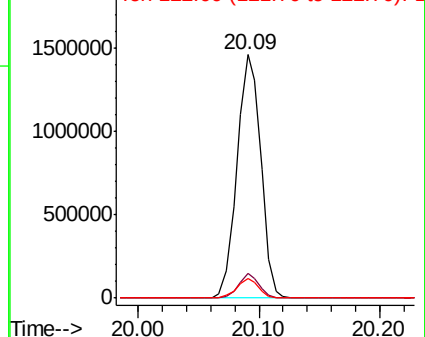


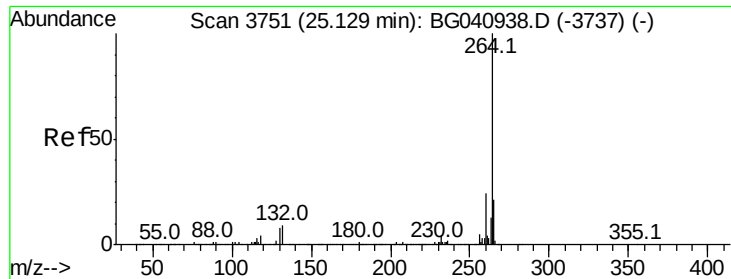
Abundance

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  
 Pervlene-d12  
 Concen: 20.000 ng  
 RT: 25.11 min Scan# 3749  
 Delta R.T. -0.01 min  
 Lab File: BG040971.D  
 Acq: 31 May 2019 4:25

Instrument :  
 BNA\_G  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 22.7  | 19.0  | 28.4  |
| 265     | 21.0  | 17.0  | 25.4  |

