

Data Path : Z:\HPCHEM1\BNA G\DATA\BG092116\  
 Data File : BG024063.D  
 Acq On : 21 Sep 2016 20:15  
 Operator : UM/SJ  
 Sample : H4819-04  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 YORK-SB2-02

Quant Time: Sep 22 07:38:32 2016  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\8270-BG083116.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Sep 20 19:01:00 2016  
 Response via : Initial Calibration

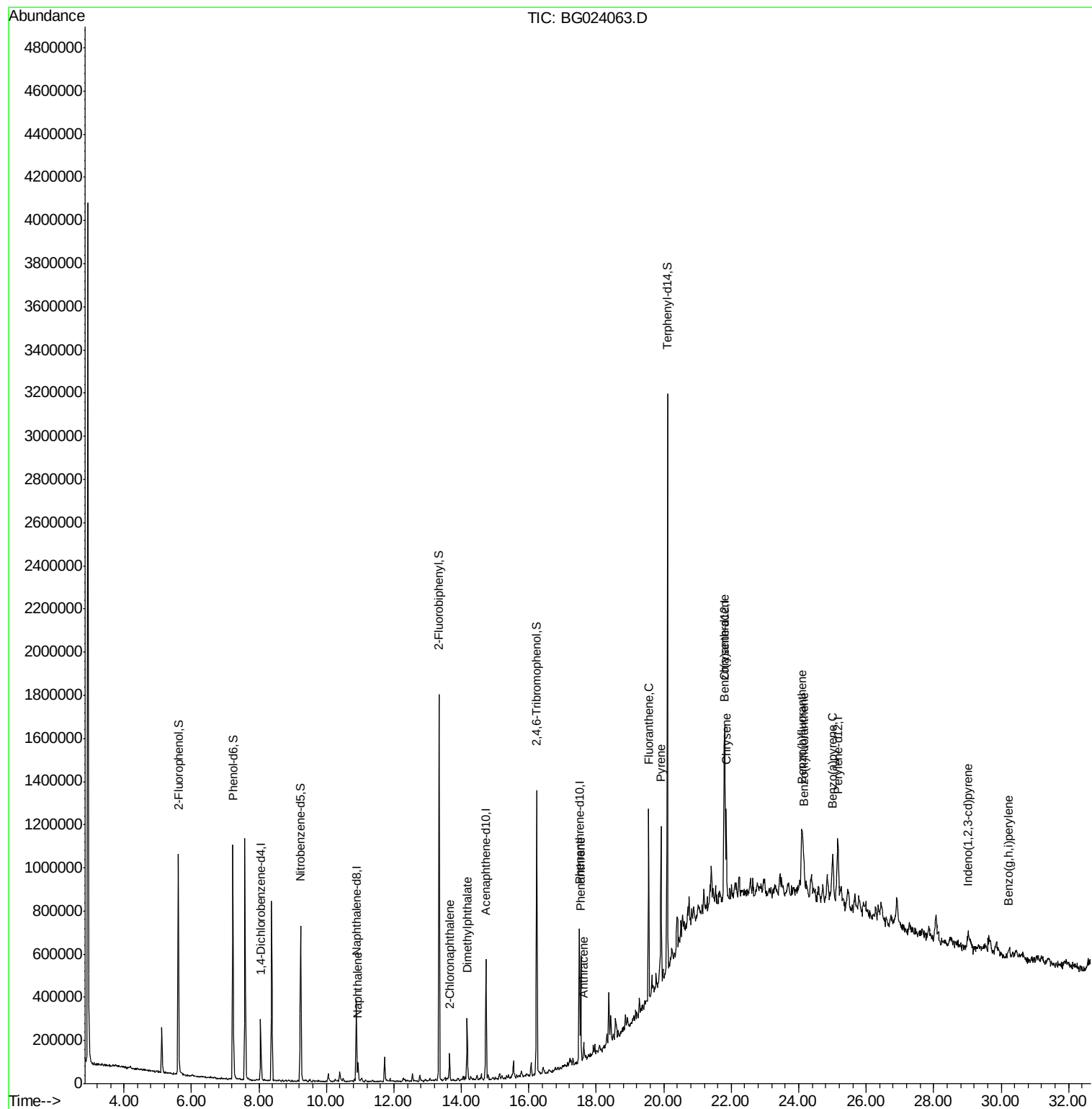
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 8.05  | 152  | 69683    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 10.89 | 136  | 284183   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 14.73 | 164  | 199120   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 17.49 | 188  | 362543   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 21.80 | 240  | 392900   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 25.17 | 264  | 350668   | 20.00  | ng    | 0.01     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.61  | 112  | 401286   | 101.10 | ng    | 0.00     |
| 7) Phenol-d6                | 7.23  | 99   | 602777   | 98.66  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.24  | 82   | 469240   | 73.72  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 16.23 | 330  | 238289   | 66.42  | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 13.34 | 172  | 842613   | 60.67  | ng    | 0.00     |
| 78) Terphenyl-d14           | 20.11 | 244  | 1053394  | 61.06  | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       | Qvalue   |
| 31) Naphthalene             | 10.94 | 128  | 62495    | 4.27   | ng    | # 90     |
| 46) 2-Chloronaphthalene     | 13.65 | 162  | 61264    | 5.21   | ng    | 93       |
| 49) Dimethylphthalate       | 14.17 | 163  | 167247   | 9.80   | ng    | 99       |
| 70) Phenanthrene            | 17.54 | 178  | 290856   | 15.42  | ng    | 96       |
| 71) Anthracene              | 17.63 | 178  | 53204    | 2.77   | ng    | 97       |
| 74) Fluoranthene            | 19.55 | 202  | 536839   | 23.64  | ng    | 94       |
| 77) Pyrene                  | 19.92 | 202  | 446697   | 18.49  | ng    | 95       |
| 80) Benzo(a)anthracene      | 21.79 | 228  | 303264   | 13.79  | ng    | 94       |
| 82) Chrysene                | 21.85 | 228  | 310626   | 14.84  | ng    | 98       |
| 85) Indeno(1,2,3-cd)pyrene  | 29.02 | 276  | 103200   | 4.45   | ng    | # 100    |
| 87) Benzo(b)fluoranthene    | 24.09 | 252  | 352999   | 17.72  | ng    | # 91     |
| 88) Benzo(k)fluoranthene    | 24.15 | 252  | 133951m  | 6.78   | ng    |          |
| 89) Benzo(a)pyrene          | 25.01 | 252  | 216418   | 11.44  | ng    | # 96     |
| 91) Benzo(a,h,i)perylene    | 30.22 | 276  | 77667    | 4.34   | ng    | # 94     |

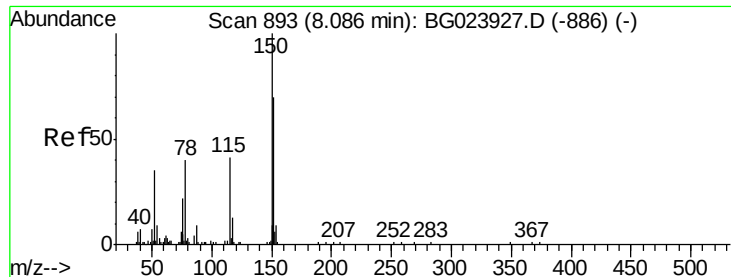
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 8.05 min Scan# 887

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

Instrument :

BNA\_G

ClientSampleId :

YORK-SB2-02

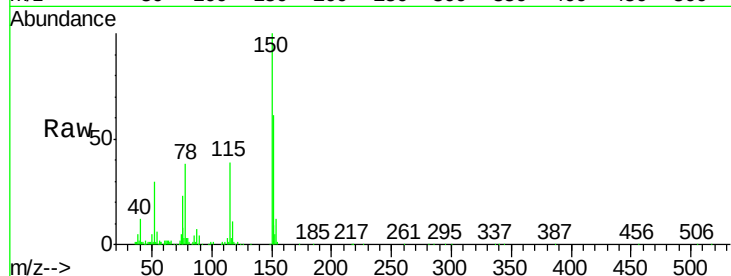
Tot Ion:152 Resp: 69683

Ion Ratio Lower Upper

152 100

150 163.0 144.7 217.1

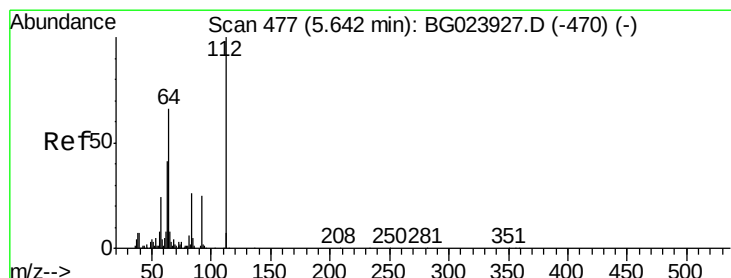
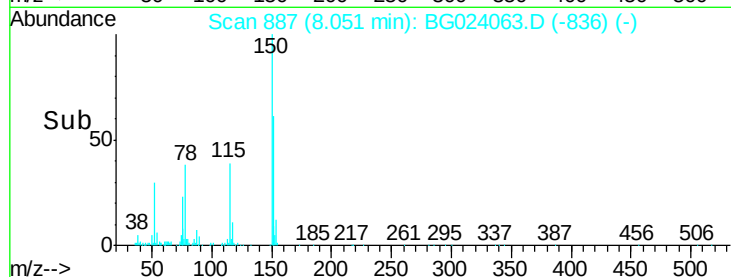
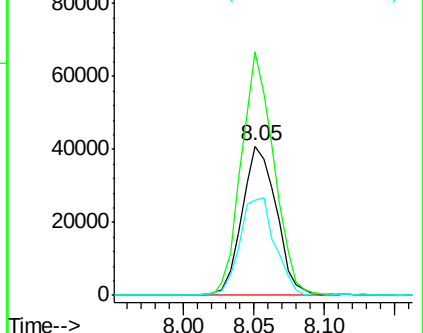
115 64.0 64.0 96.0



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: 101.10 ng

RT: 5.61 min Scan# 471

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

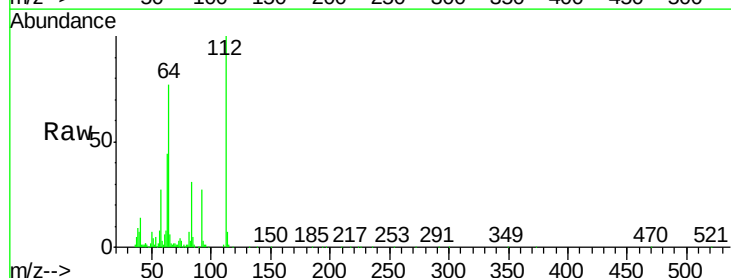
Tgt Ion:112 Resp: 401286

Ion Ratio Lower Upper

112 100

64 76.8 59.0 88.4

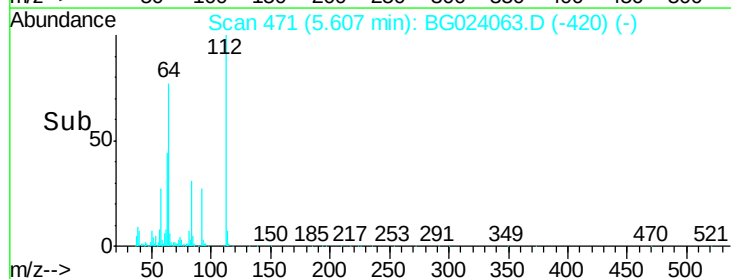
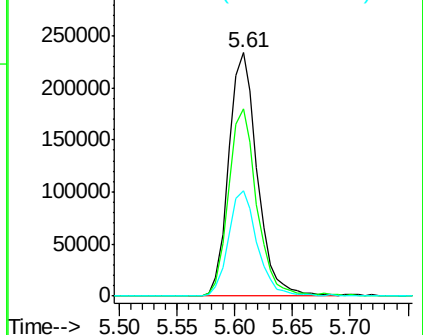
63 43.5 37.8 56.8

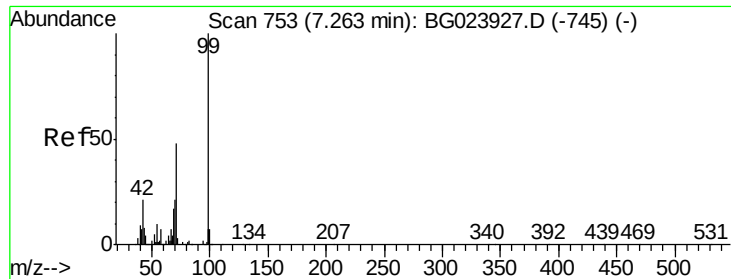


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BGC

Ion 63.00 (62.70 to 63.70): BGC





#7

Phenol-d6

Concen: 98.66 ng

RT: 7.23 min Scan# 747

Delta R.T. 0.01 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

Instrument :

BNA\_G

ClientSampleId :

YORK-SB2-02

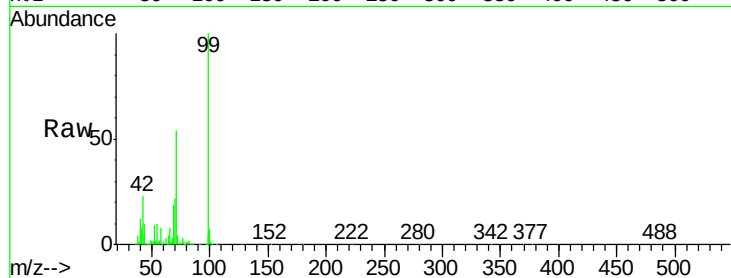
Tot Ion: 99 Resp: 602777

Ion Ratio Lower Upper

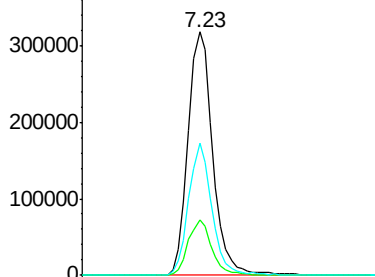
99 100

42 22.7 17.8 26.6

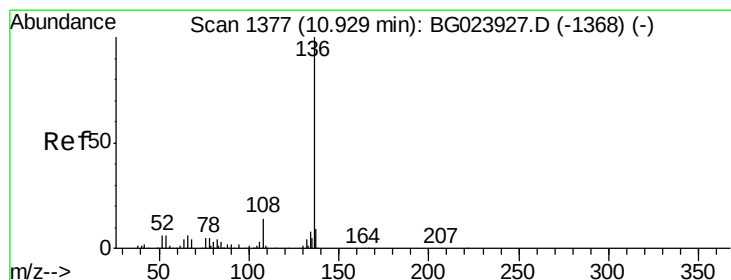
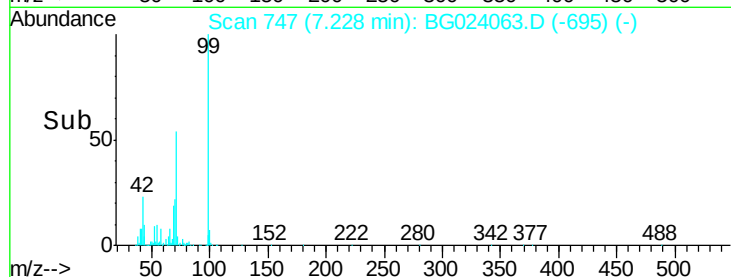
71 54.1 41.5 62.3



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



Time--> 7.10 7.20 7.30 7.40



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 10.89 min Scan# 1370

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

Tgt Ion: 136 Resp: 284183

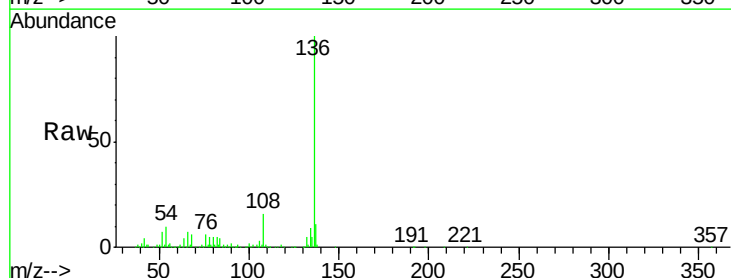
Ion Ratio Lower Upper

136 100

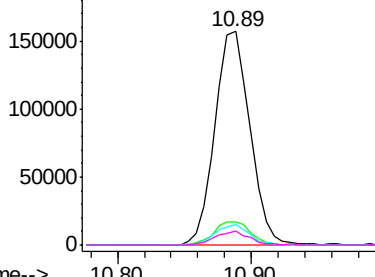
137 10.7 9.6 14.4

54 9.8 7.3 10.9

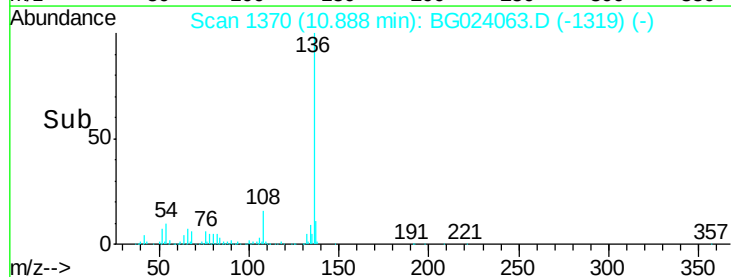
68 6.3 5.3 7.9

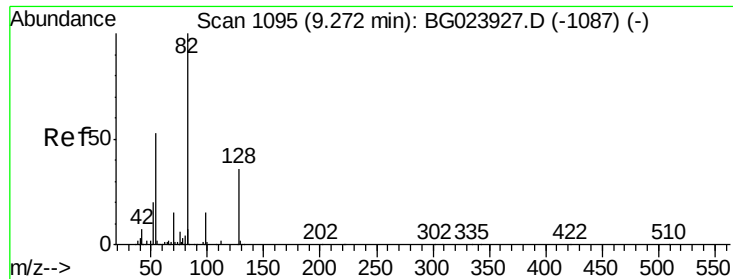


Abundance Ion 136.00 (135.70 to 136.70): BGC  
Ion 137.00 (136.70 to 137.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC  
Ion 68.00 (67.70 to 68.70): BGC



Time--> 10.80 10.90

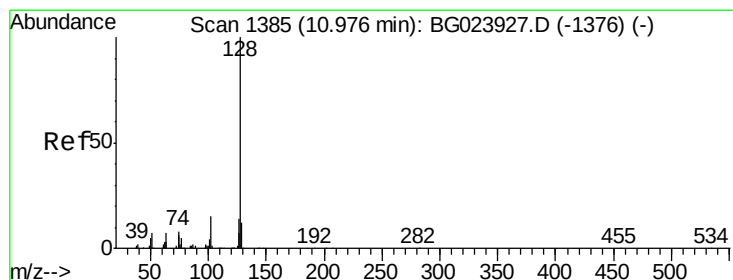
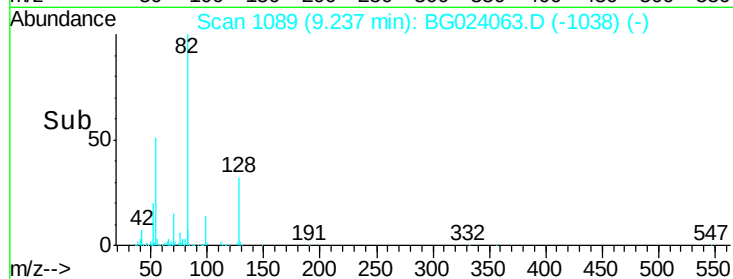
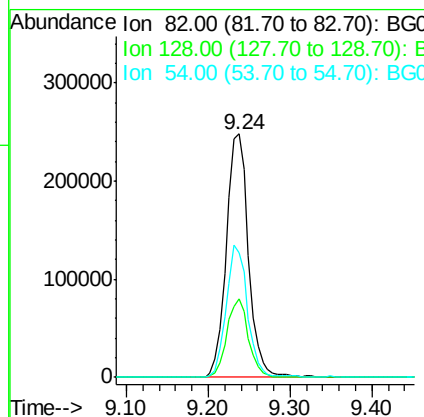
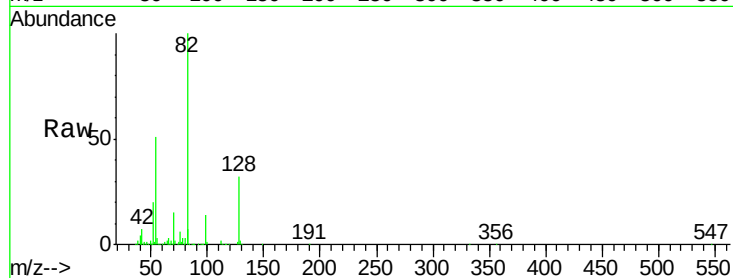




#23  
 Nitrobenzene-d5  
 Concen: 73.72 ng  
 RT: 9.24 min Scan# 1089  
 Delta R.T. 0.00 min  
 Lab File: BG024063.D  
 Acq: 21 Sep 2016 20:15

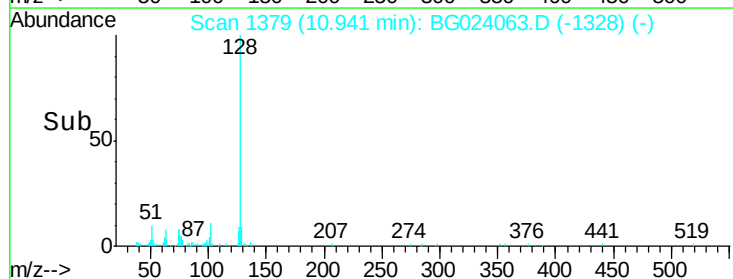
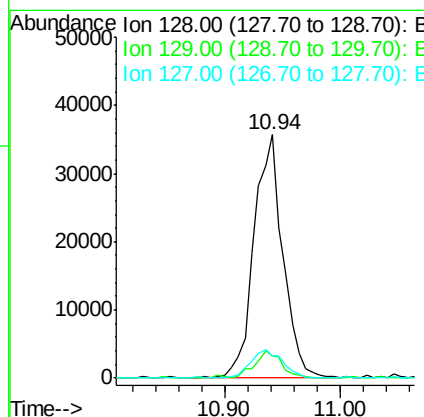
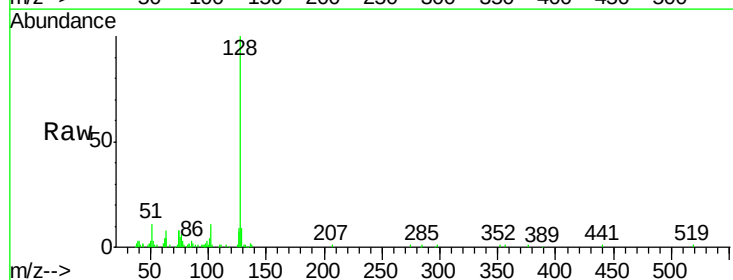
Instrument :  
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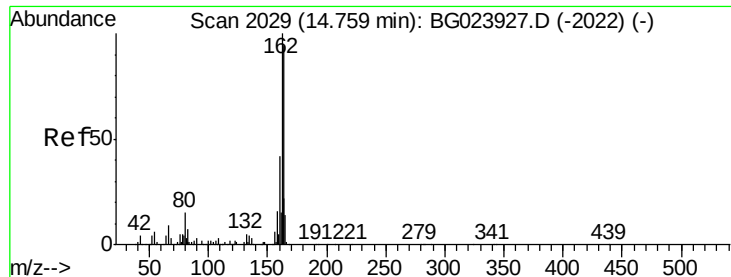
| Tot Ion   | 82    | Resp  | 469240 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 32.2  | 24.4  | 36.6   |
| 54        | 51.1  | 41.4  | 62.0   |



#31  
 Naphthalene  
 Concen: 4.27 ng  
 RT: 10.94 min Scan# 1379  
 Delta R.T. 0.00 min  
 Lab File: BG024063.D  
 Acq: 21 Sep 2016 20:15

| Tgt Ion   | 128   | Resp  | 62495 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 9.0   | 9.4   | 14.0# |
| 127       | 9.4   | 11.3  | 16.9# |





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 14.73 min Scan# 2024

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

Instrument :

BNA\_G

ClientSampleId :

YORK-SB2-02

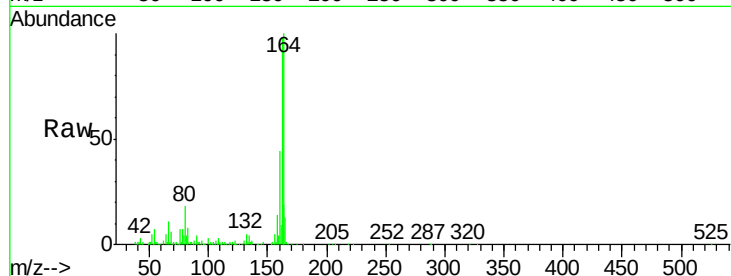
Tot Ion:164 Resp: 199120

Ion Ratio Lower Upper

164 100

162 97.8 87.7 131.5

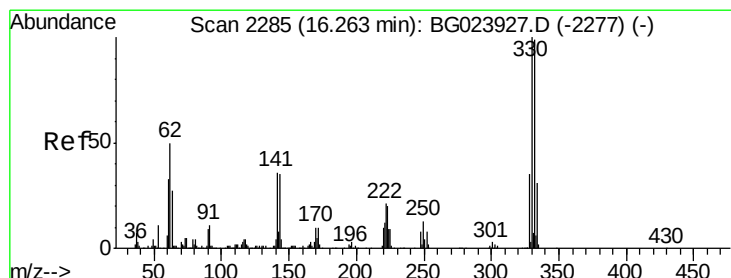
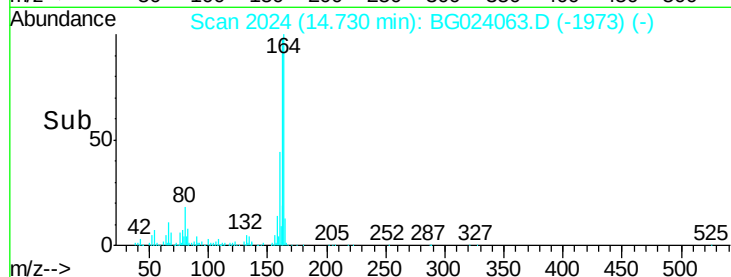
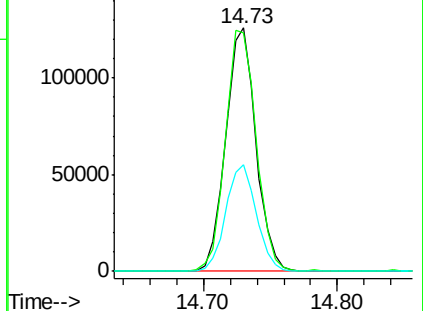
160 43.9 37.2 55.8



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: 66.42 ng

RT: 16.23 min Scan# 2280

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

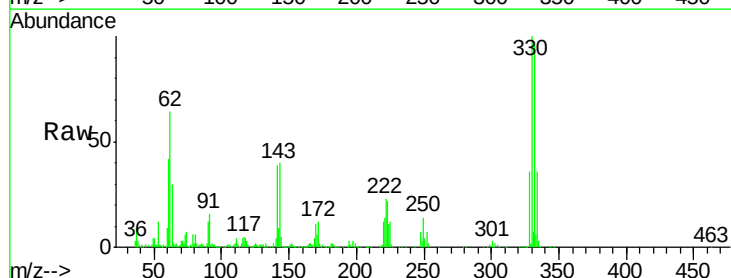
Tgt Ion:330 Resp: 238289

Ion Ratio Lower Upper

330 100

332 96.4 77.4 116.2

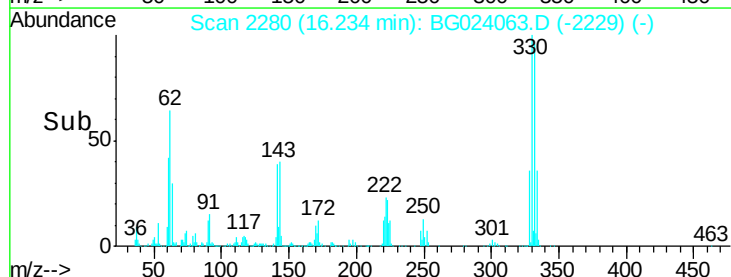
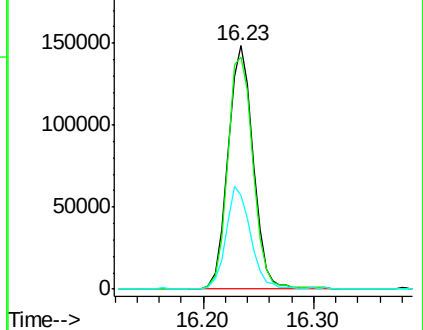
141 41.0 31.7 47.5

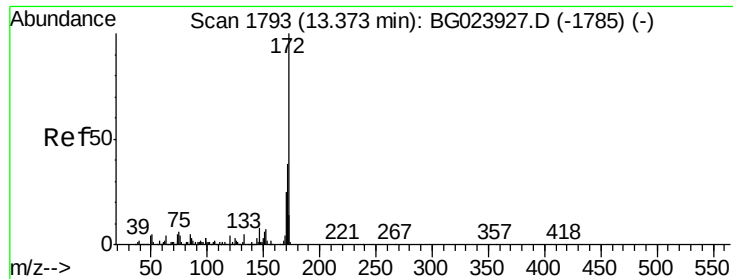


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



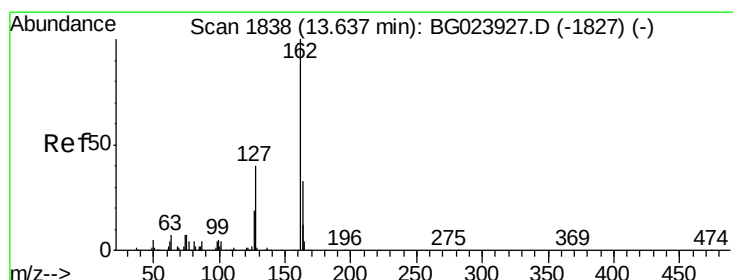
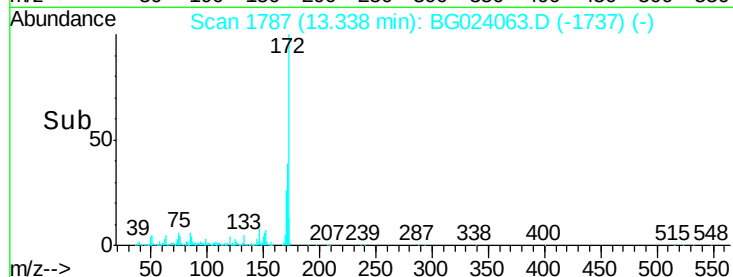
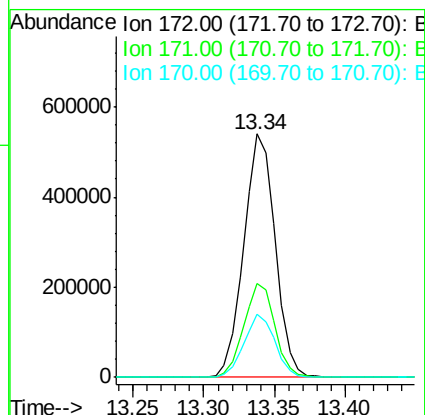
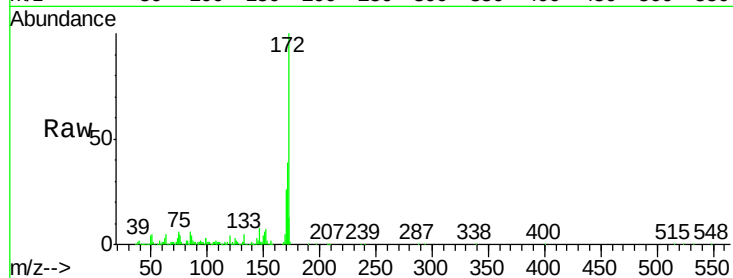


#44  
 2-Fluorobiphenyl  
 Concen: 60.67 ng  
 RT: 13.34 min Scan# 1787  
 Delta R.T. -0.00 min  
 Lab File: BG024063.D  
 Acq: 21 Sep 2016 20:15

Instrument :  
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Tot Ion:172 Resp: 842613  

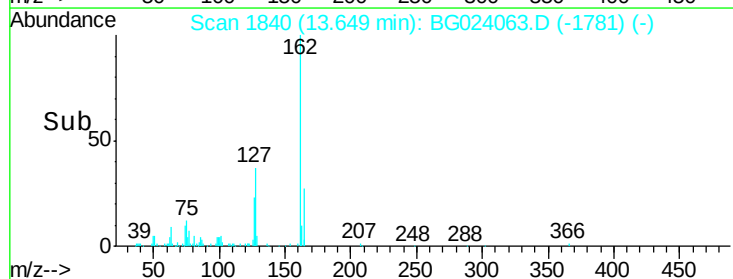
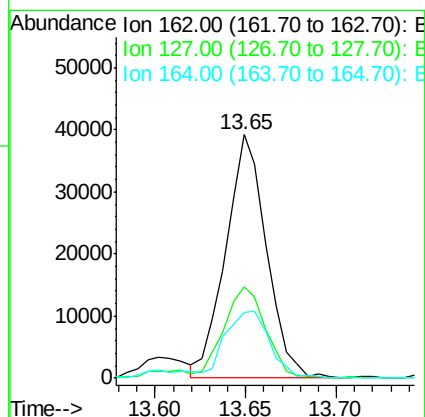
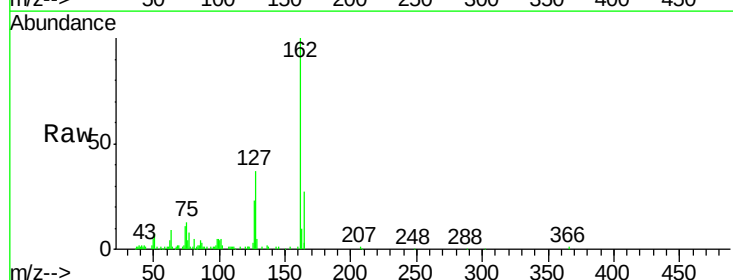
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 172 | 100   |       |       |
| 171 | 38.6  | 31.6  | 47.4  |
| 170 | 26.1  | 21.3  | 31.9  |

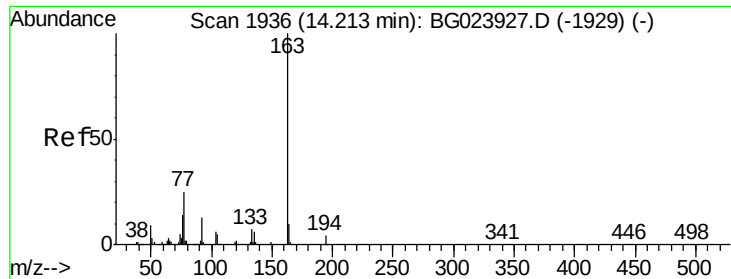


#46  
 2-Chloronaphthalene  
 Concen: 5.21 ng  
 RT: 13.65 min Scan# 1840  
 Delta R.T. 0.05 min  
 Lab File: BG024063.D  
 Acq: 21 Sep 2016 20:15

Tgt Ion:162 Resp: 61264  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 162 | 100   |       |       |
| 127 | 37.3  | 32.4  | 48.6  |
| 164 | 26.9  | 25.2  | 37.8  |





#49

Dimethylphthalate

Concen: 9.80 ng

RT: 14.17 min Scan# 1929

Delta R.T. -0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

Instrument :

BNA\_G

ClientSampleId :

YORK-SB2-02

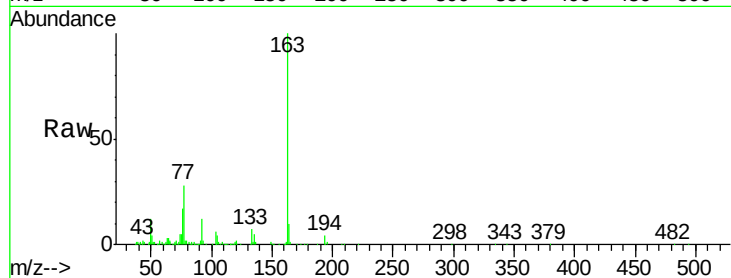
Tot Ion:163 Resp: 167247

Ion Ratio Lower Upper

163 100

194 3.8 3.6 5.4

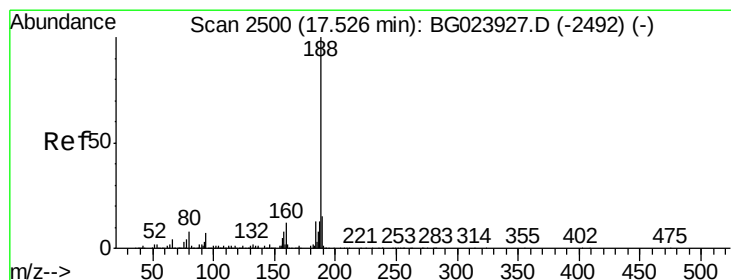
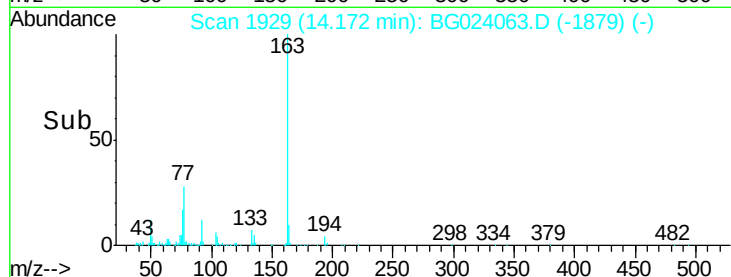
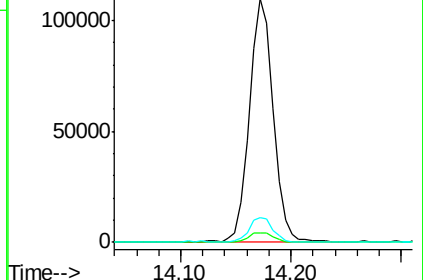
164 10.0 8.1 12.1



Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 17.49 min Scan# 2494

Delta R.T. -0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

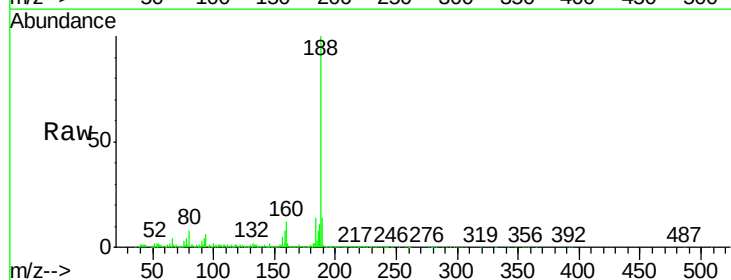
Tgt Ion:188 Resp: 362543

Ion Ratio Lower Upper

188 100

94 6.2 5.2 7.8

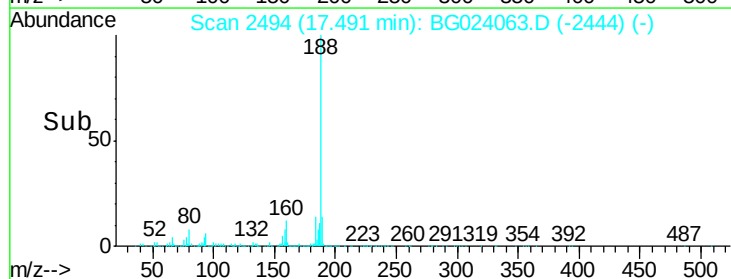
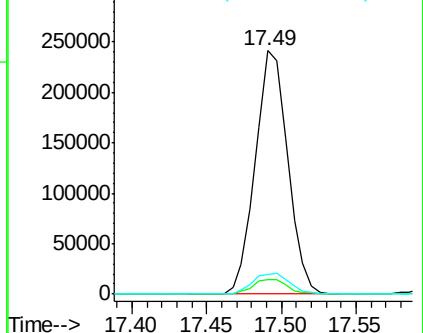
80 7.8 7.2 10.8



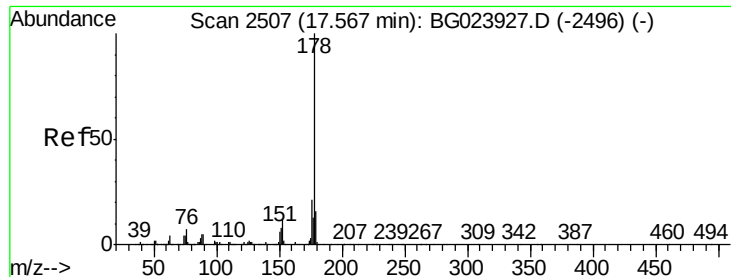
Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BGC

Ion 80.00 (79.70 to 80.70): BGC







#70

Phenanthrene

Concen: 15.42 ng

RT: 17.54 min Scan# 2502

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

Instrument :

BNA\_G

ClientSampleId :

YORK-SB2-02

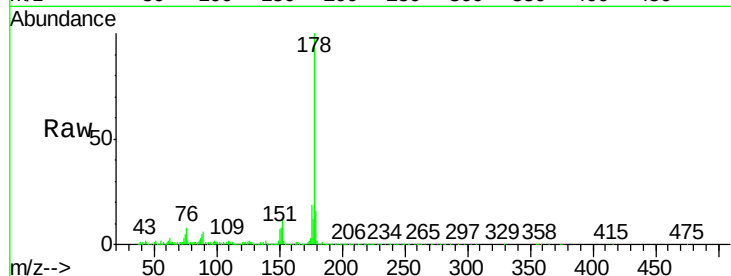
Tot Ion:178 Resp: 290856

Ion Ratio Lower Upper

178 100

176 19.0 16.8 25.2

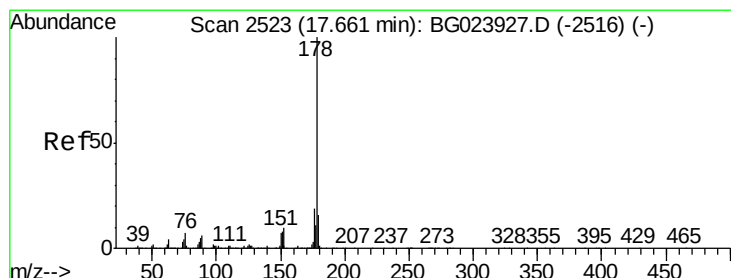
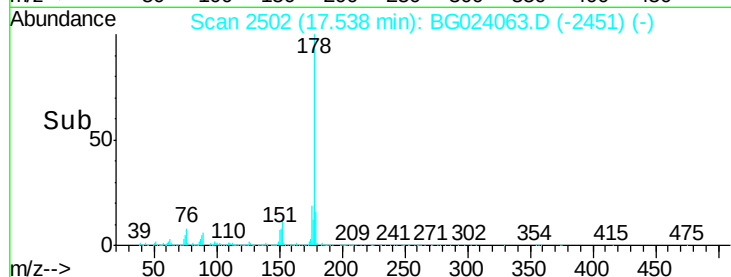
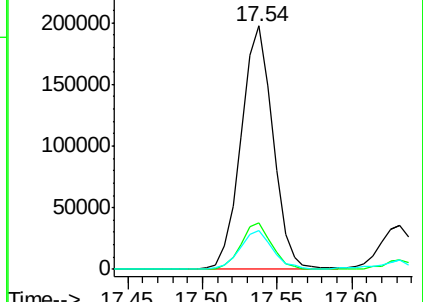
179 16.0 14.3 21.5



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#71

Anthracene

Concen: 2.77 ng

RT: 17.63 min Scan# 2518

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

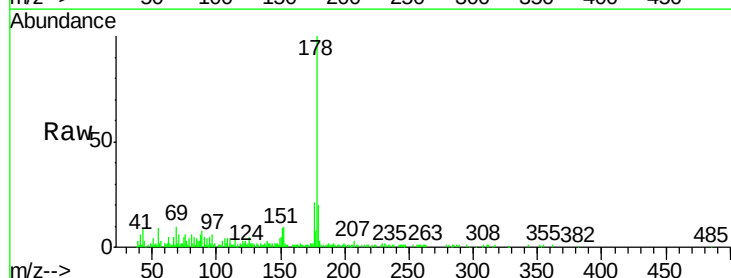
Tgt Ion:178 Resp: 53204

Ion Ratio Lower Upper

178 100

176 20.9 17.3 25.9

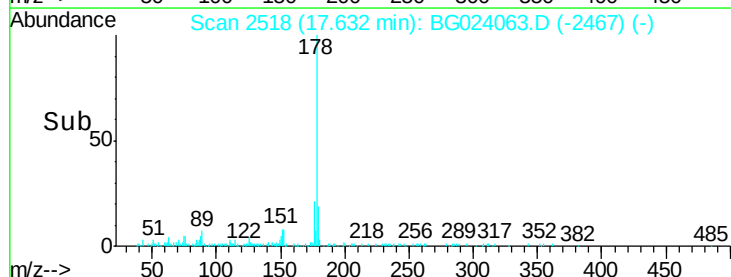
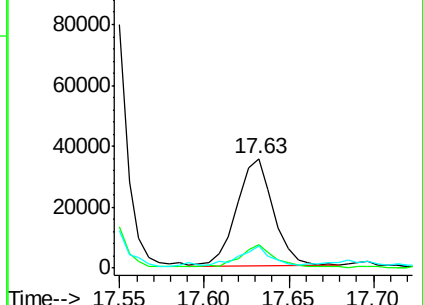
179 20.0 14.0 21.0

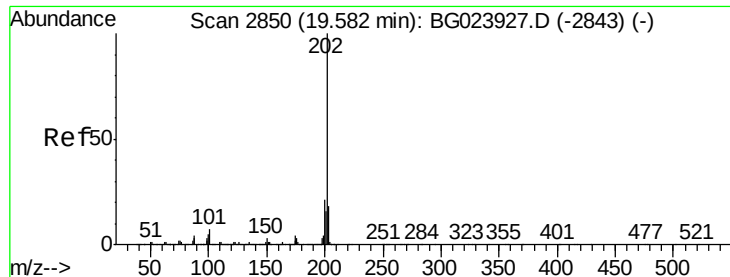


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#74

Fluoranthene

Concen: 23.64 ng

RT: 19.55 min Scan# 2845

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

Instrument :

BNA\_G

ClientSampleId :

YORK-SB2-02

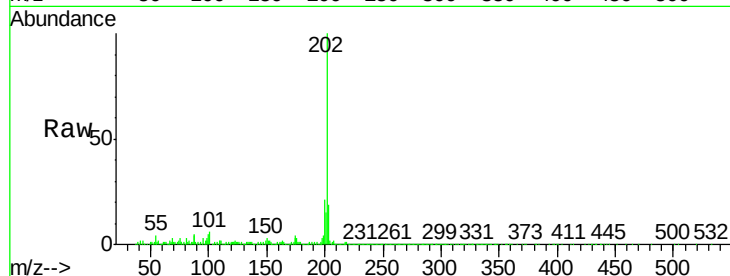
Tot Ion:202 Resp: 536839

Ion Ratio Lower Upper

202 100

101 6.2 0.0 27.4

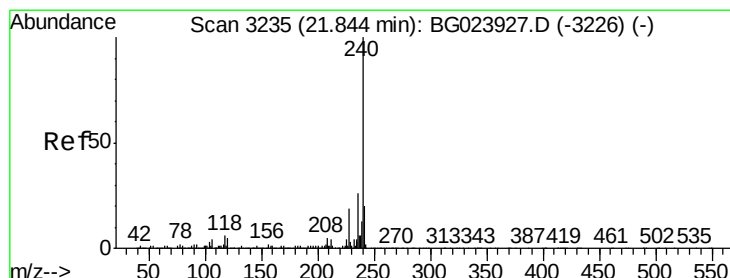
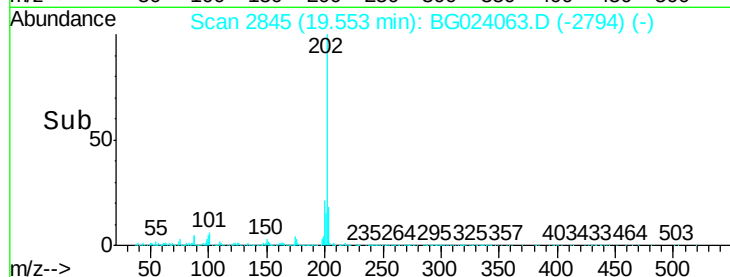
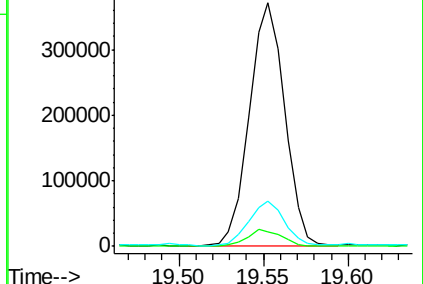
203 18.7 1.7 41.7



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#75

Chrysene-d12

Concen: 20.00 ng

RT: 21.80 min Scan# 3228

Delta R.T. -0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

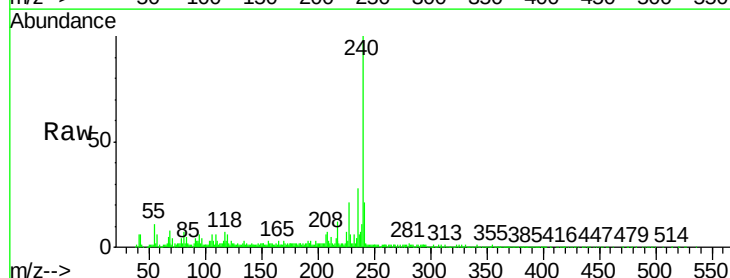
Tgt Ion:240 Resp: 392900

Ion Ratio Lower Upper

240 100

120 5.6 4.1 6.1

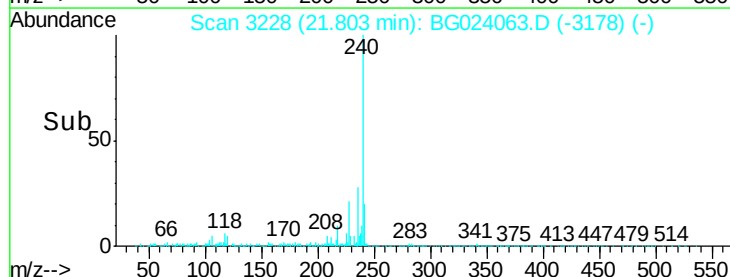
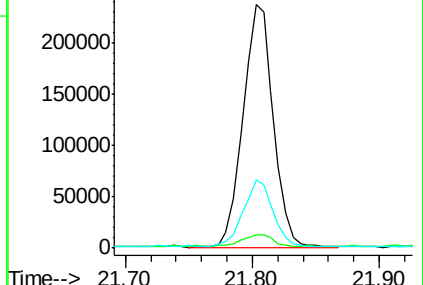
236 28.3 21.1 31.7

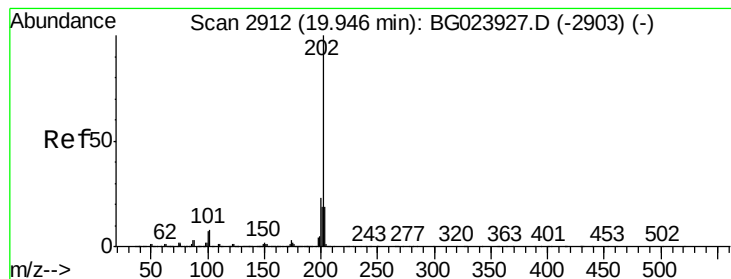


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Pvrene

Concen: 18.49 ng

RT: 19.92 min Scan# 2907

Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

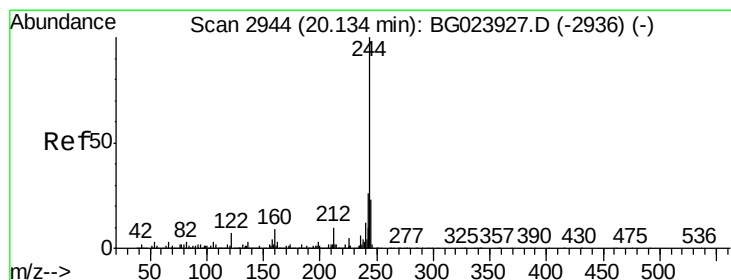
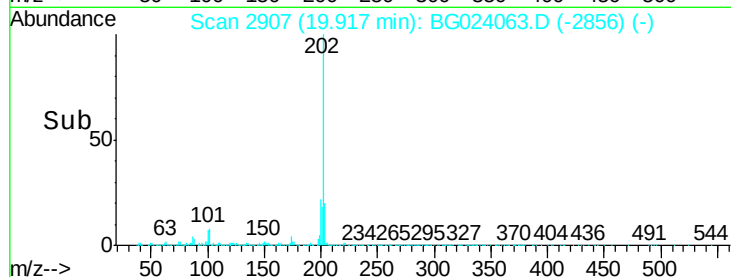
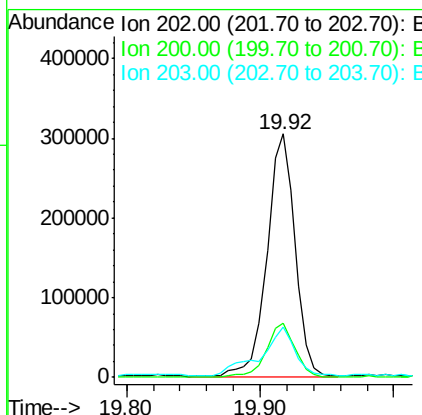
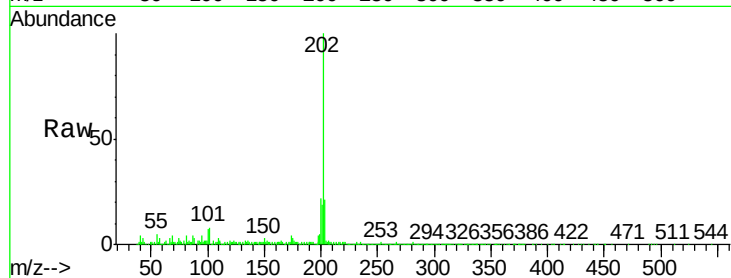
Instrument :

BNA\_G

ClientSampleId :

YORK-SB2-02

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 202   | Resp: | 446697 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 200      | 22.3  | 21.2  | 31.8   |
| 203      | 20.7  | 16.8  | 25.2   |



#78

Terphenyl-d14

Concen: 61.06 ng

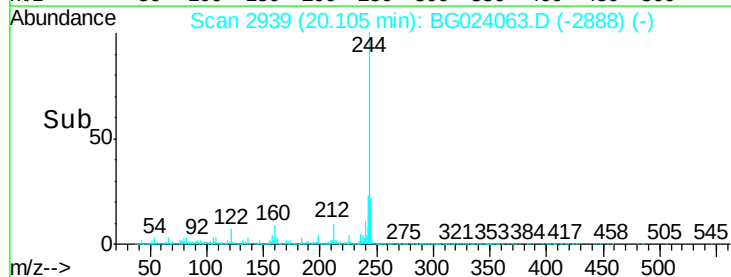
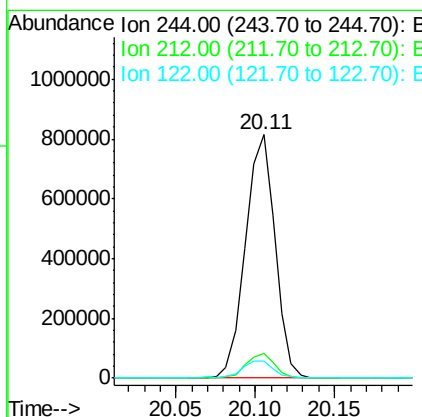
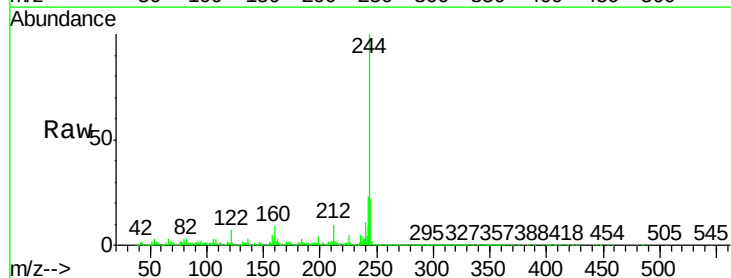
RT: 20.11 min Scan# 2939

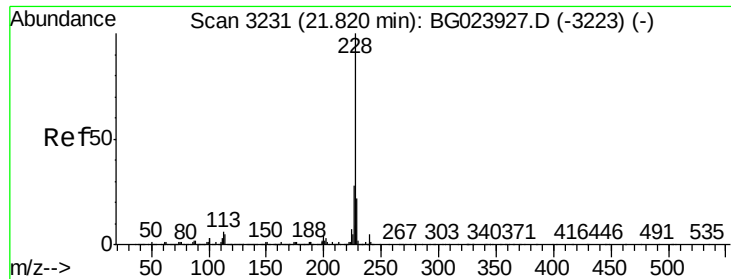
Delta R.T. 0.00 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 244   | Resp: | 1053394 |
| Ion      | Ratio | Lower | Upper   |
| 244      | 100   |       |         |
| 212      | 9.9   | 10.8  | 16.2#   |
| 122      | 6.9   | 8.0   | 12.0#   |

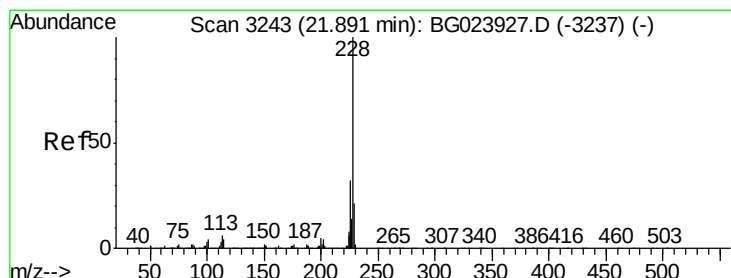
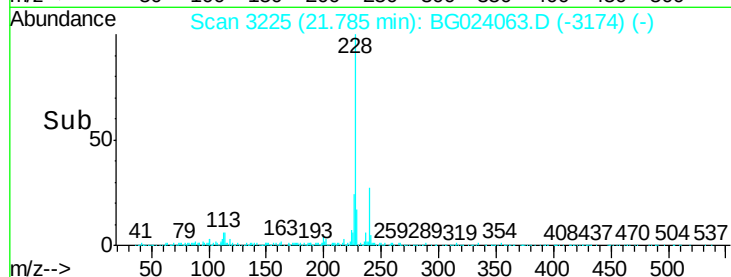
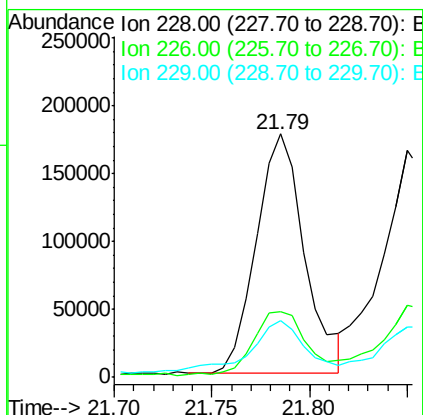
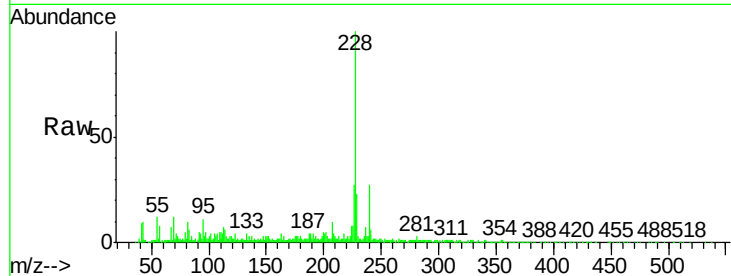




#80  
Benzo(a)anthracene  
Concen: 13.79 ng  
RT: 21.79 min Scan# 3225  
Delta R.T. 0.00 min  
Lab File: BG024063.D  
Acq: 21 Sep 2016 20:15

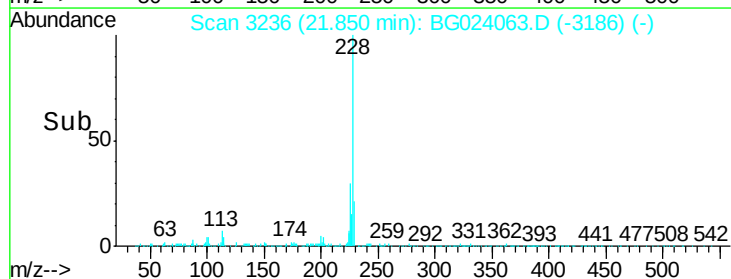
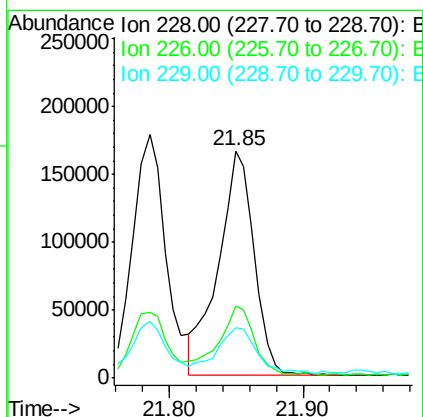
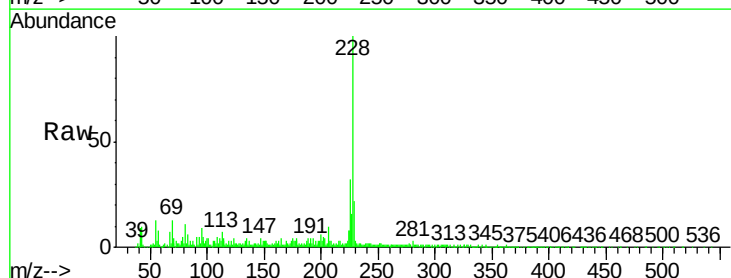
Instrument :  
BNA\_G  
ClientSampleId :  
YORK-SB2-02

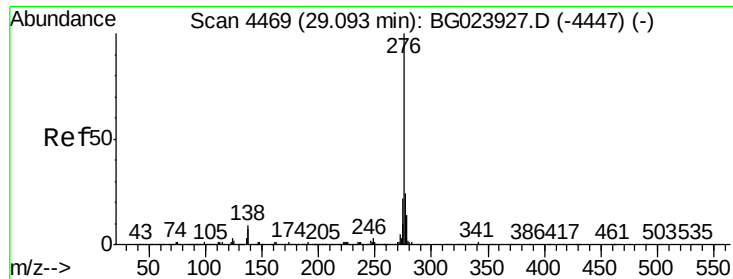
|     |         |       |        |
|-----|---------|-------|--------|
| Tot | Ion:228 | Resp: | 303264 |
| Ion | Ratio   | Lower | Upper  |
| 228 | 100     |       |        |
| 226 | 26.9    | 25.3  | 37.9   |
| 229 | 23.1    | 19.9  | 29.9   |



#82  
Chrysene  
Concen: 14.84 ng  
RT: 21.85 min Scan# 3236  
Delta R.T. -0.00 min  
Lab File: BG024063.D  
Acq: 21 Sep 2016 20:15

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:228 | Resp: | 310626 |
| Ion | Ratio   | Lower | Upper  |
| 228 | 100     |       |        |
| 226 | 31.7    | 26.7  | 40.1   |
| 229 | 22.3    | 17.4  | 26.2   |

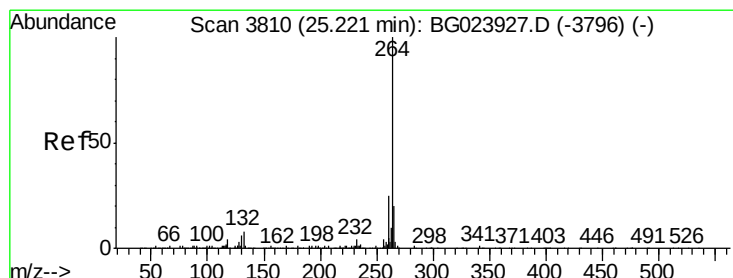
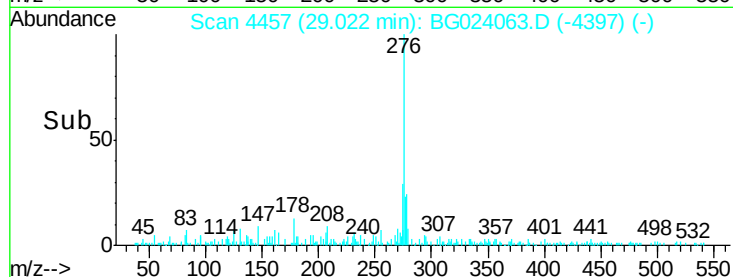
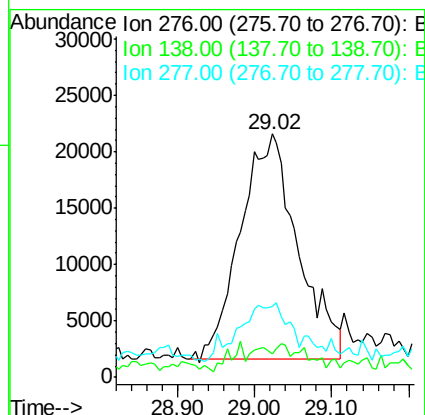
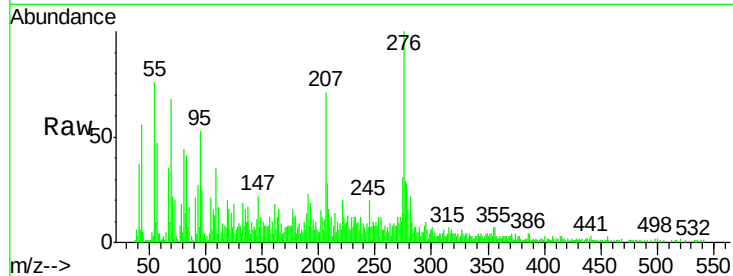




#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 4.45 ng  
 RT: 29.02 min Scan# 4457  
 Delta R.T. 0.06 min  
 Lab File: BG024063.D  
 Acq: 21 Sep 2016 20:15

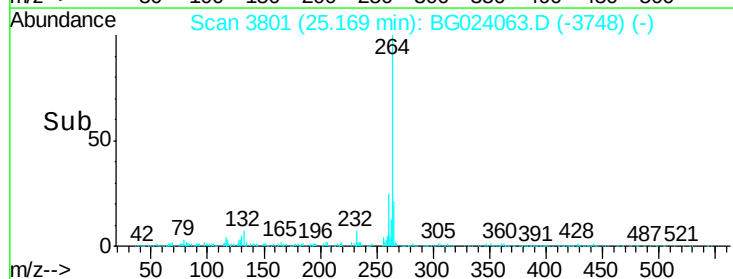
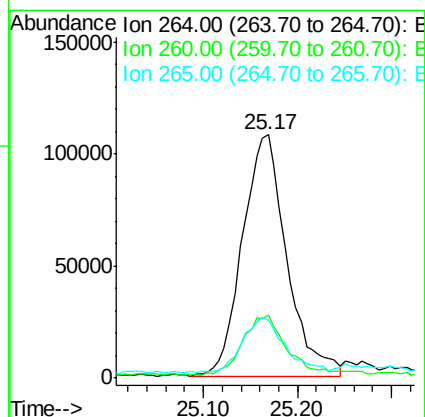
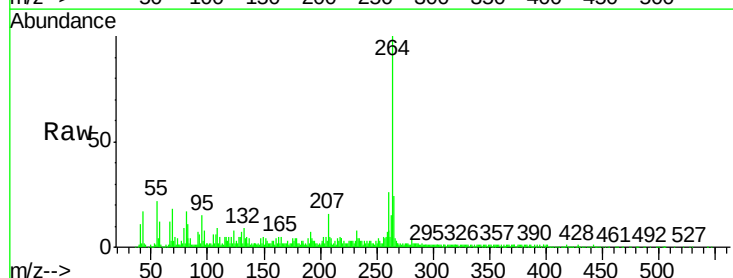
Instrument :  
 BNA\_G  
 ClientSampleId :  
 YORK-SB2-02

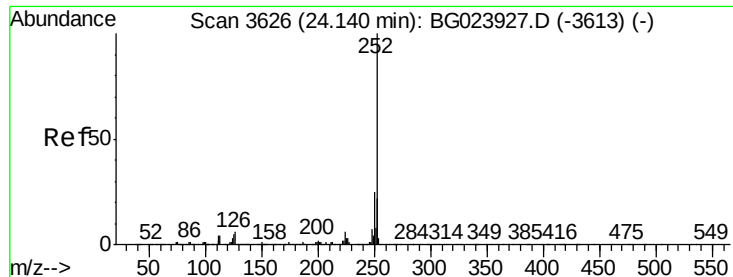
|             |       |          |
|-------------|-------|----------|
| Tot Ion:276 | Resp: | 103200   |
| Ion Ratio   | Lower | Upper    |
| 276         | 100   |          |
| 138         | 0.9   | 0.0 0.0# |
| 277         | 0.0   | 0.0 0.0  |



#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 25.17 min Scan# 3801  
 Delta R.T. 0.01 min  
 Lab File: BG024063.D  
 Acq: 21 Sep 2016 20:15

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:264 | Resp: | 350668    |
| Ion Ratio   | Lower | Upper     |
| 264         | 100   |           |
| 260         | 25.9  | 18.4 27.6 |
| 265         | 23.8  | 18.9 28.3 |

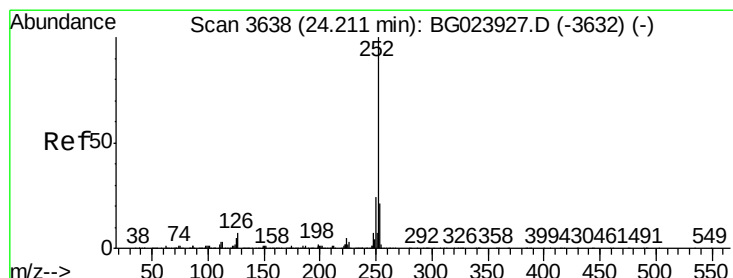
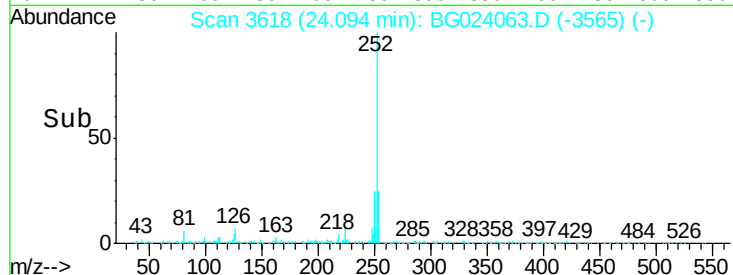
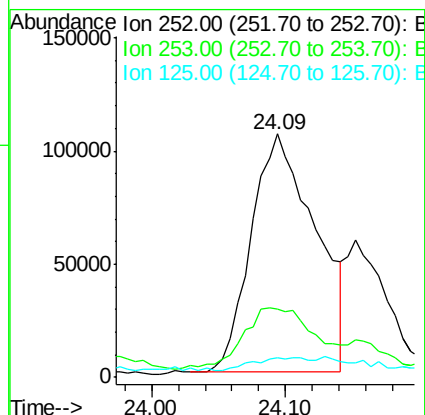
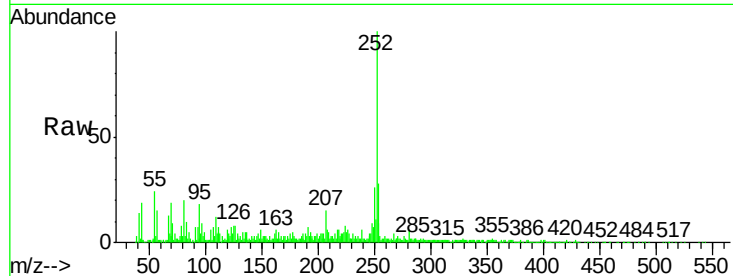




#87  
Benzo(b)fluoranthene  
Concen: 17.72 ng  
RT: 24.09 min Scan# 3618  
Delta R.T. 0.01 min  
Lab File: BG024063.D  
Acq: 21 Sep 2016 20:15

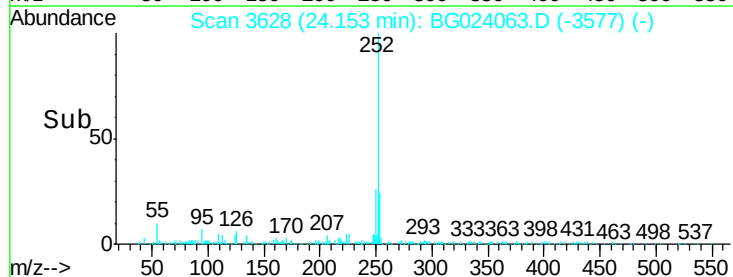
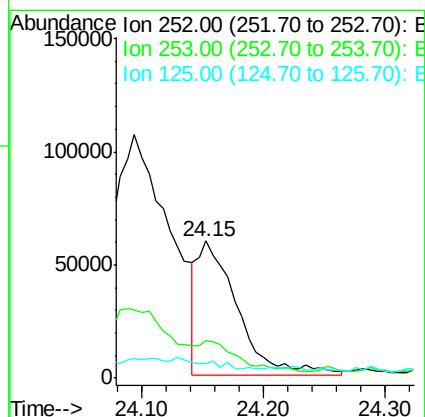
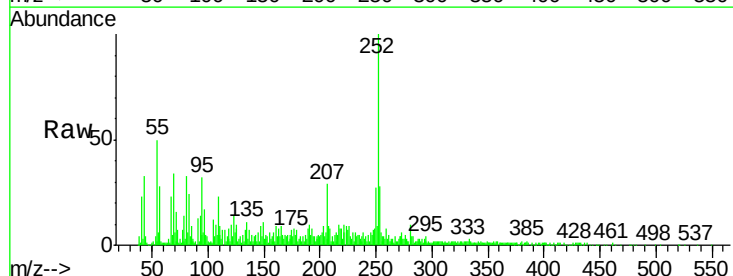
Instrument :  
BNA\_G  
ClientSampled :  
YORK-SB2-02

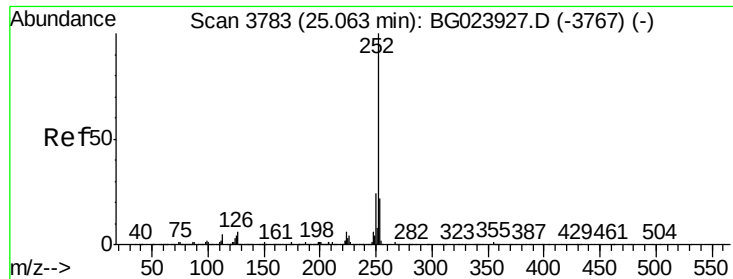
|     |         |       |        |
|-----|---------|-------|--------|
| Tot | Ion:252 | Resp: | 352999 |
| Ion | Ratio   | Lower | Upper  |
| 252 | 100     |       |        |
| 253 | 28.2    | 18.9  | 28.3   |
| 125 | 8.1     | 3.9   | 5.9#   |



#88  
Benzo(k)fluoranthene  
Concen: 6.78 ng m  
RT: 24.15 min Scan# 3628  
Delta R.T. 0.00 min  
Lab File: BG024063.D  
Acq: 21 Sep 2016 20:15

|     |         |       |        |
|-----|---------|-------|--------|
| Tgt | Ion:252 | Resp: | 133951 |
| Ion | Ratio   | Lower | Upper  |
| 252 | 100     |       |        |
| 253 | 27.8    | 18.8  | 28.2   |
| 125 | 10.2    | 3.2   | 4.8#   |





#89

Benzo(a)pyrene

Concen: 11.44 ng

RT: 25.01 min Scan# 3774

Delta R.T. 0.02 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

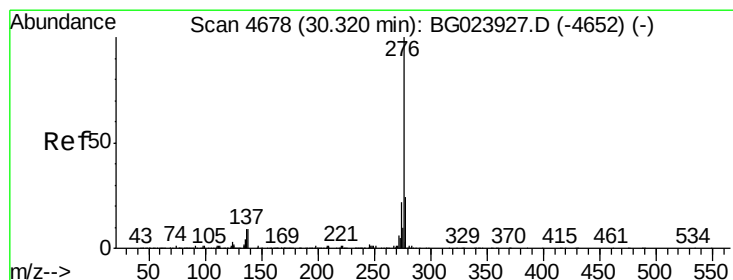
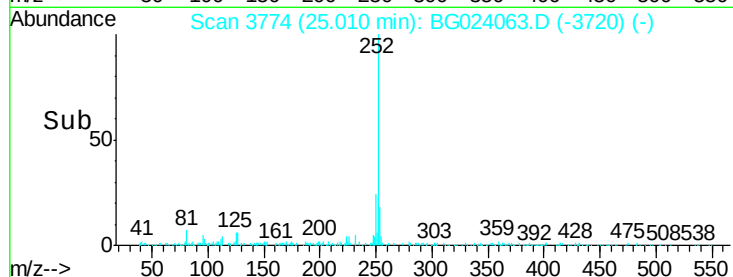
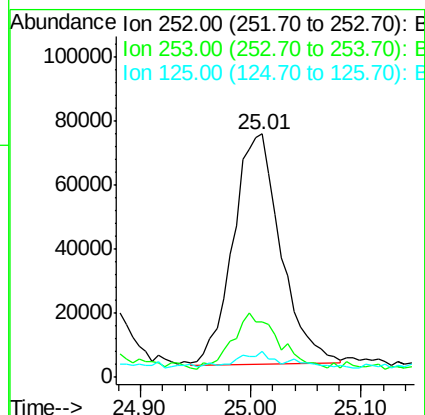
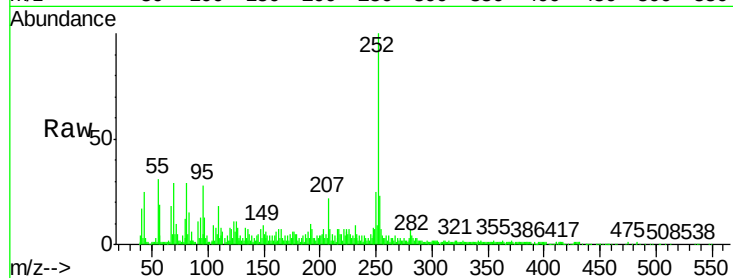
Instrument :

BNA\_G

ClientSampleId :

YORK-SB2-02

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:252 | Resp: | 216418    |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 22.9  | 18.7 28.1 |
| 125         | 10.8  | 3.9 5.9#  |



#91

Benzo(g,h,i)perylene

Concen: 4.34 ng

RT: 30.22 min Scan# 4661

Delta R.T. 0.06 min

Lab File: BG024063.D

Acq: 21 Sep 2016 20:15

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:276 | Resp: | 77667     |
| Ion Ratio   | Lower | Upper     |
| 276         | 100   |           |
| 277         | 25.9  | 18.6 27.8 |
| 138         | 11.0  | 6.8 10.2# |

