

Data Path : Z:\HPCHEM1\BNA G\DATA\BG042815\  
 Data File : BG016767.D  
 Acq On : 28 Apr 2015 16:40  
 Operator : TP/IZ  
 Sample : G2024-10 5X  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SB-05-0-2.0

Quant Time: Apr 29 15:28:34 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\8270-BG042315.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Apr 29 00:55:31 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.56  | 152  | 65267    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.35 | 136  | 285824   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 14.22 | 164  | 161368   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 16.97 | 188  | 302087   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 21.16 | 240  | 256542   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 23.36 | 264  | 245404   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.16  | 112  | 73265    | 18.22 | ng    | 0.00     |
| 7) Phenol-d6                | 6.77  | 99   | 100583   | 17.83 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 8.72  | 82   | 49294    | 10.90 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 15.72 | 330  | 18626    | 15.56 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 12.84 | 172  | 125819   | 12.53 | ng    | 0.00     |
| 78) Terphenyl-d14           | 19.60 | 244  | 128443   | 11.53 | ng    | -0.01    |

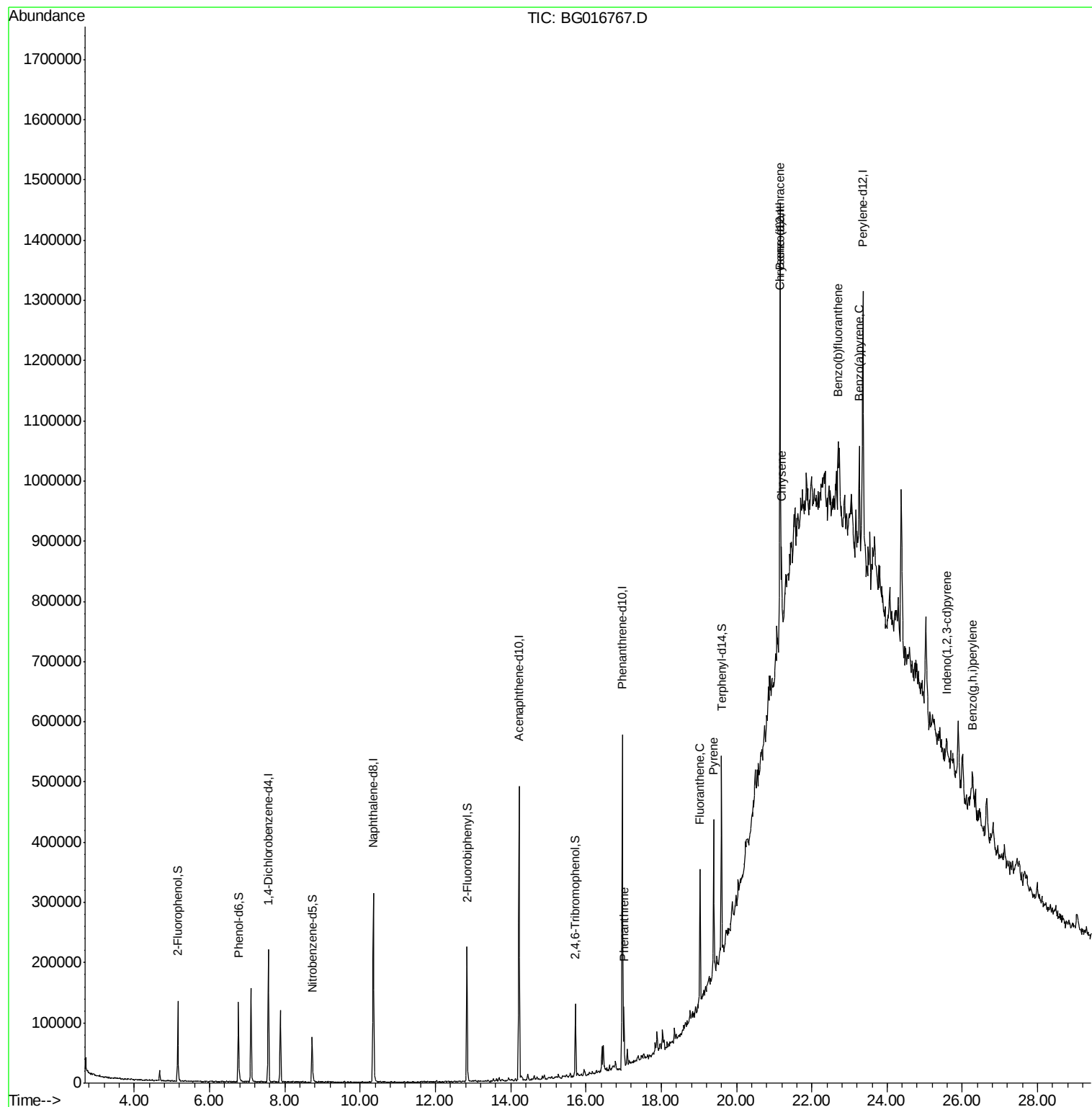
| Target Compounds           | R.T.  | QIon | Response | Conc | Units | Qvalue |
|----------------------------|-------|------|----------|------|-------|--------|
| 70) Phenanthrene           | 17.01 | 178  | 56898    | 3.28 | ng    | 99     |
| 74) Fluoranthene           | 19.03 | 202  | 124768   | 6.78 | ng    | 96     |
| 77) Pyrene                 | 19.39 | 202  | 142151   | 7.89 | ng    | 97     |
| 80) Benzo(a)anthracene     | 21.15 | 228  | 62435    | 4.01 | ng    | 99     |
| 82) Chrysene               | 21.20 | 228  | 60844m   | 4.08 | ng    |        |
| 85) Indeno(1,2,3-cd)pyrene | 25.58 | 276  | 33066    | 2.03 | ng    | 95     |
| 87) Benzo(b)fluoranthene   | 22.70 | 252  | 68962m   | 4.63 | ng    |        |
| 89) Benzo(a)pyrene         | 23.26 | 252  | 53297m   | 3.79 | ng    |        |
| 91) Benzo(g,h,i)perylene   | 26.27 | 276  | 36986    | 2.66 | ng    | # 87   |

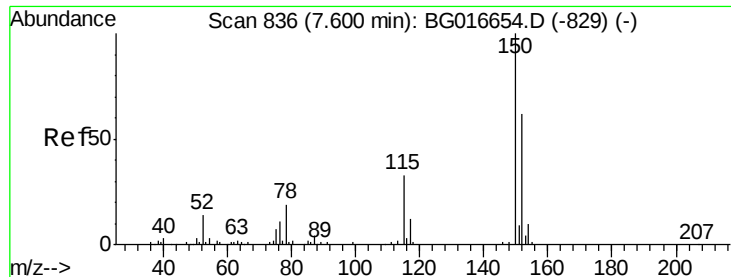
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\HPCHEM1\BNA G\METHODS\8270-BG042315.M  
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QLast Update : Wed Apr 29 00:55:31 2015  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 7.56 min Scan# 829

Delta R.T. -0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

Instrument :

BNA\_G

ClientSampleId :

SB-05-0-2.0

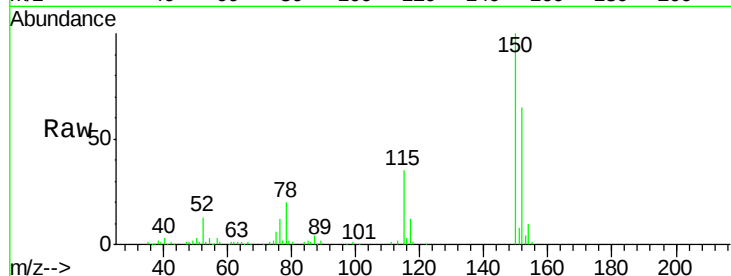
Tot Ion:152 Resp: 65267

Ion Ratio Lower Upper

152 100

150 154.5 129.6 194.4

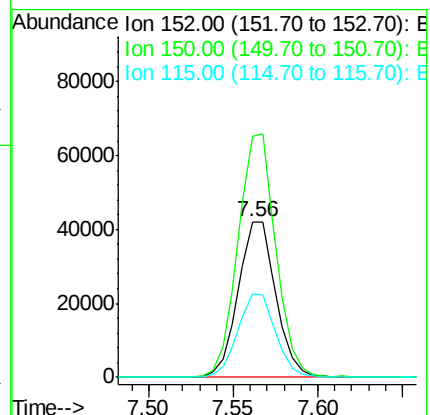
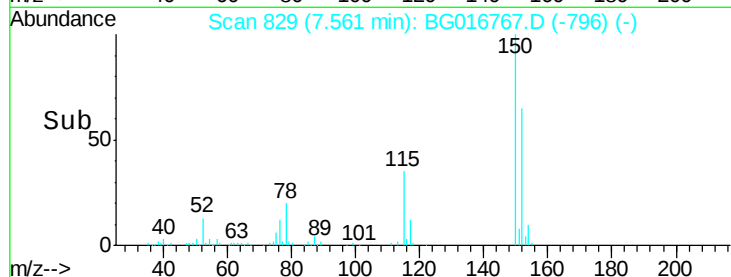
115 54.0 43.0 64.6



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: 18.22 ng

RT: 5.16 min Scan# 420

Delta R.T. 0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

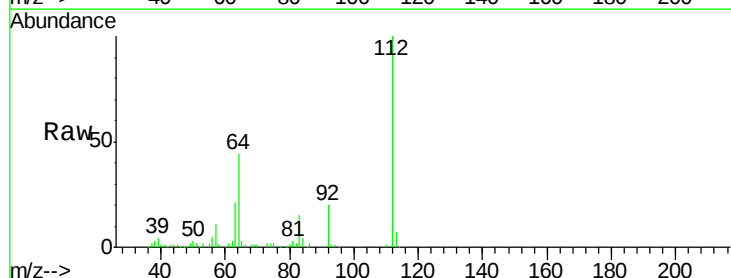
Tgt Ion:112 Resp: 73265

Ion Ratio Lower Upper

112 100

64 43.7 38.3 57.5

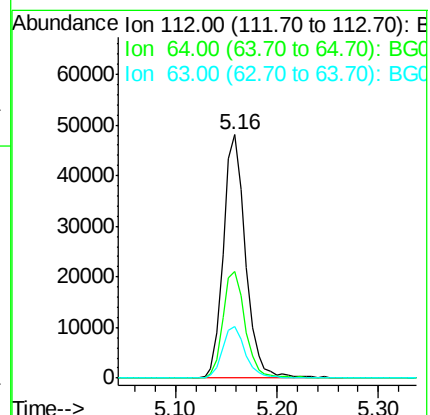
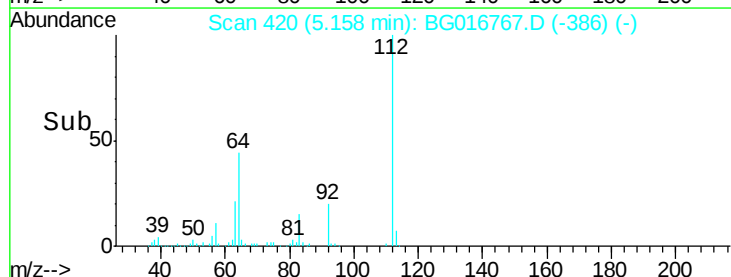
63 21.0 18.9 28.3



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: 17.83 ng

RT: 6.77 min Scan# 694

Delta R.T. -0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

Instrument :

BNA\_G

ClientSampleId :

SB-05-0-2.0

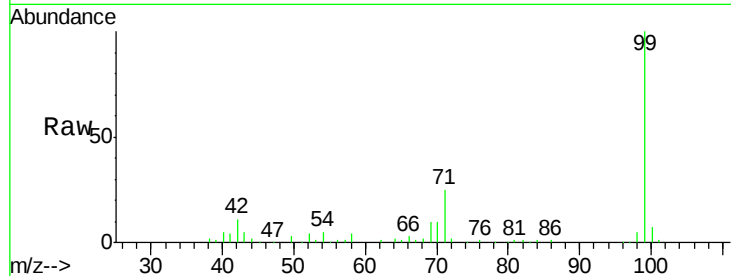
Tot Ion: 99 Resp: 100583

Ion Ratio Lower Upper

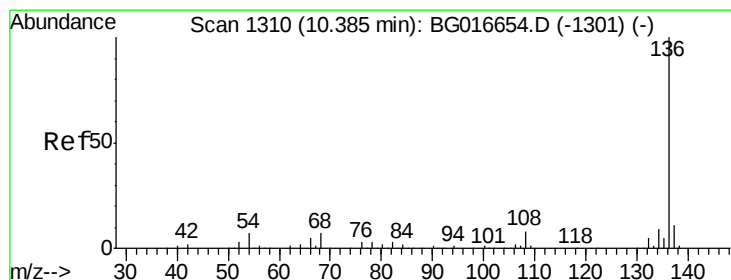
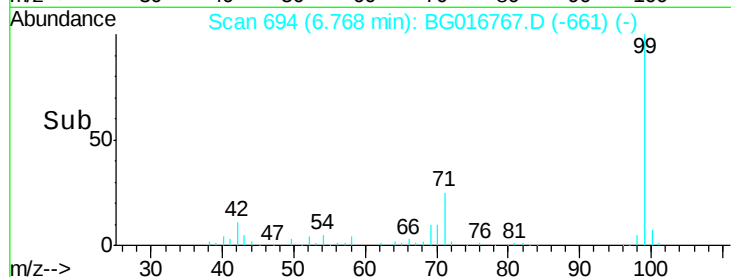
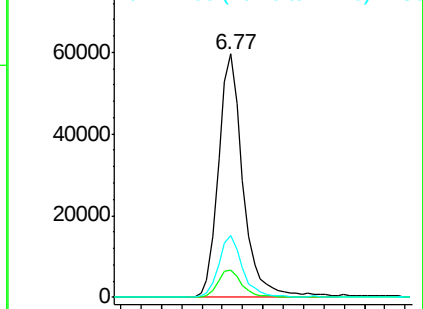
99 100

42 11.0 8.8 13.2

71 25.4 19.9 29.9



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



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 10.35 min Scan# 1304

Delta R.T. 0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

Tgt Ion: 136 Resp: 285824

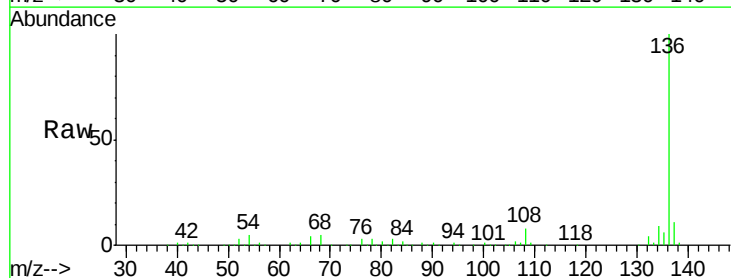
Ion Ratio Lower Upper

136 100

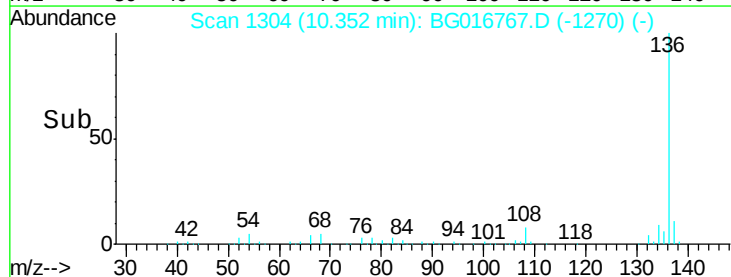
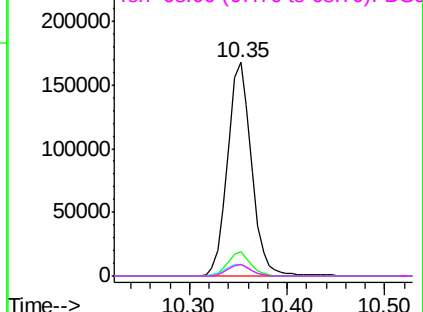
137 11.1 8.5 12.7

54 5.3 5.4 8.2#

68 5.4 5.2 7.8



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

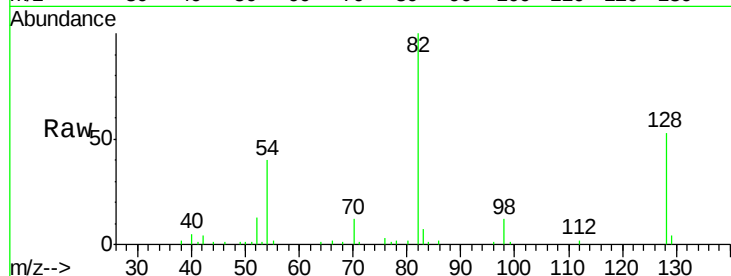




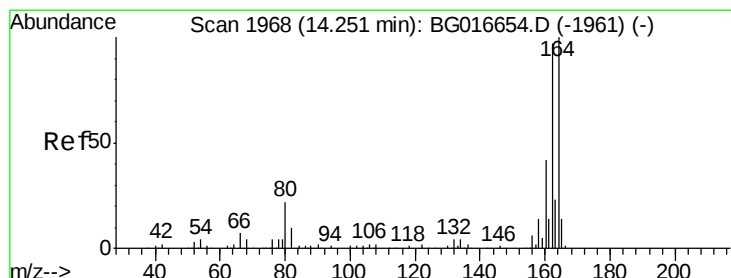
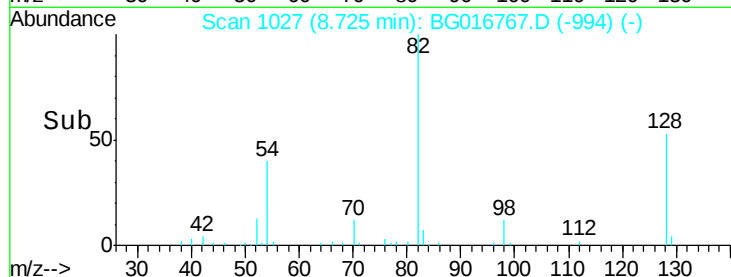
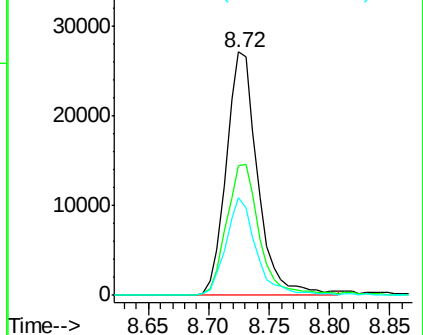
#23  
Nitrobenzene-d5  
Concen: 10.90 ng  
RT: 8.72 min Scan# 1027  
Delta R.T. -0.00 min  
Lab File: BG016767.D  
Acq: 28 Apr 2015 16:40

Instrument :  
BNA\_G  
ClientSampleId :  
SB-05-0-2.0

Tot Ion: 82 Resp: 49294  
Ion Ratio Lower Upper  
82 100  
128 53.4 44.7 67.1  
54 39.9 30.9 46.3

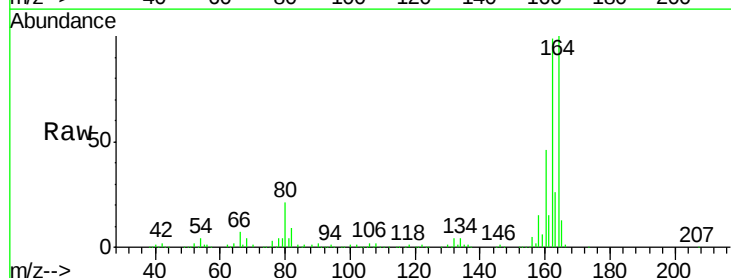


Abundance Ion 82.00 (81.70 to 82.70): BGC  
Ion 128.00 (127.70 to 128.70): BGC  
Ion 54.00 (53.70 to 54.70): BGC

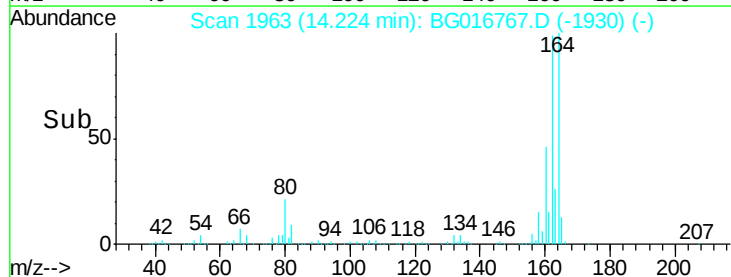
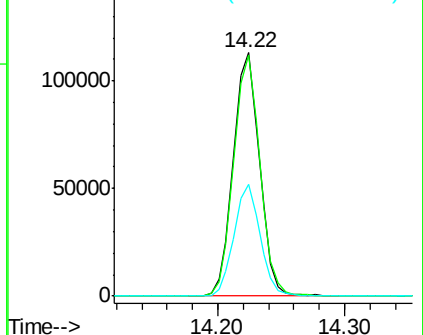


#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 14.22 min Scan# 1963  
Delta R.T. -0.00 min  
Lab File: BG016767.D  
Acq: 28 Apr 2015 16:40

Tgt Ion:164 Resp: 161368  
Ion Ratio Lower Upper  
164 100  
162 98.8 77.3 115.9  
160 45.7 33.7 50.5



Abundance Ion 164.00 (163.70 to 164.70): BGC  
Ion 162.00 (161.70 to 162.70): BGC  
Ion 160.00 (159.70 to 160.70): BGC

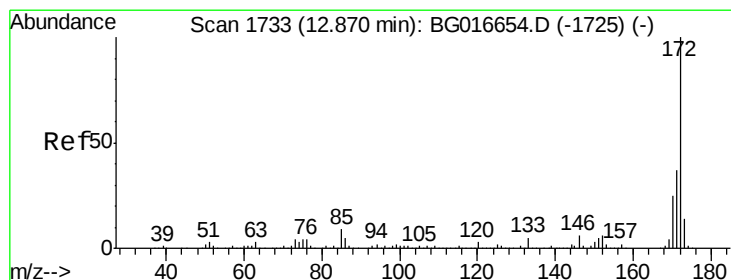
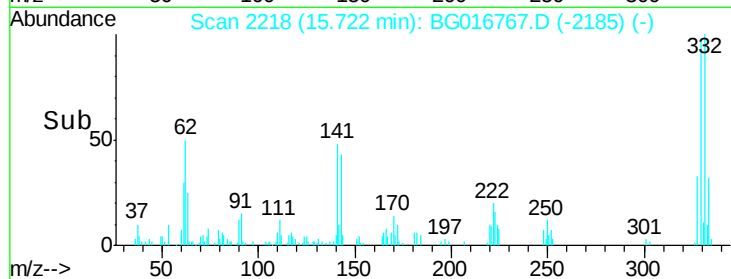
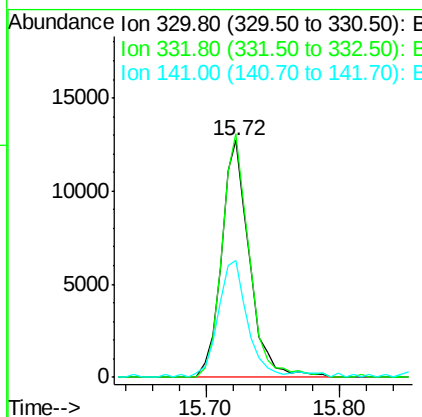
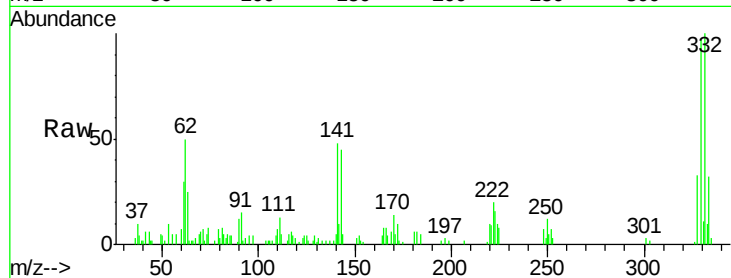




#41  
 2,4,6-Tribromophenol  
 Concen: 15.56 ng  
 RT: 15.72 min Scan# 2218  
 Delta R.T. -0.00 min  
 Lab File: BG016767.D  
 Acq: 28 Apr 2015 16:40

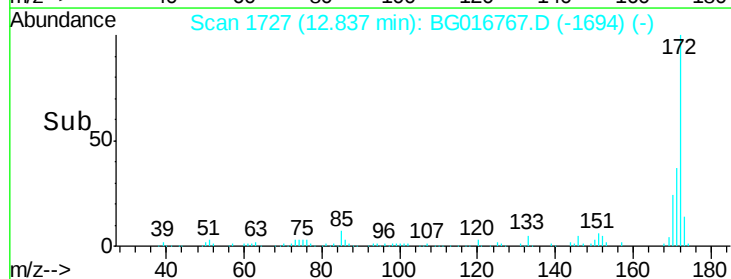
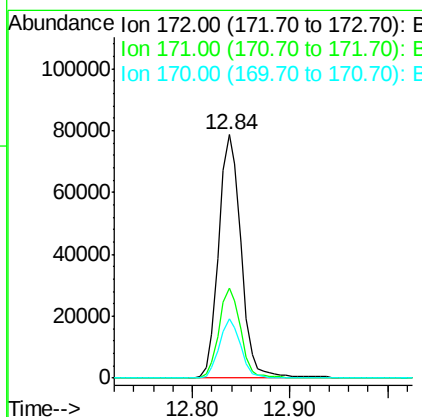
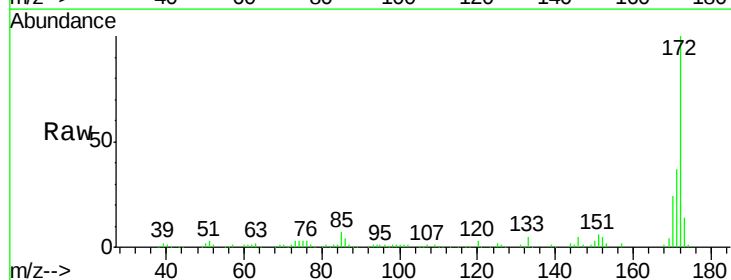
Instrument :  
 BNA\_G  
 ClientSampleId :  
 SB-05-0-2.0

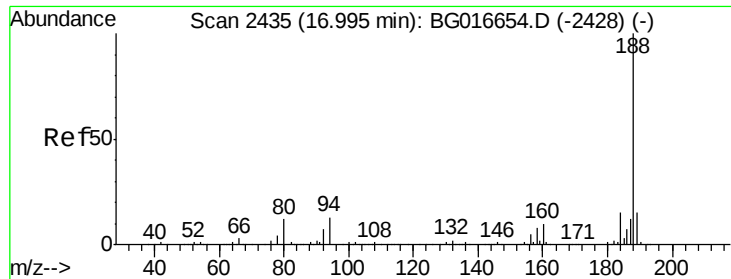
Tot Ion:330 Resp: 18626  
 Ion Ratio Lower Upper  
 330 100  
 332 100.9 76.2 114.4  
 141 51.6 43.0 64.6



#44  
 2-Fluorobiphenyl  
 Concen: 12.53 ng  
 RT: 12.84 min Scan# 1727  
 Delta R.T. -0.00 min  
 Lab File: BG016767.D  
 Acq: 28 Apr 2015 16:40

Tgt Ion:172 Resp: 125819  
 Ion Ratio Lower Upper  
 172 100  
 171 37.0 29.9 44.9  
 170 24.5 19.8 29.8

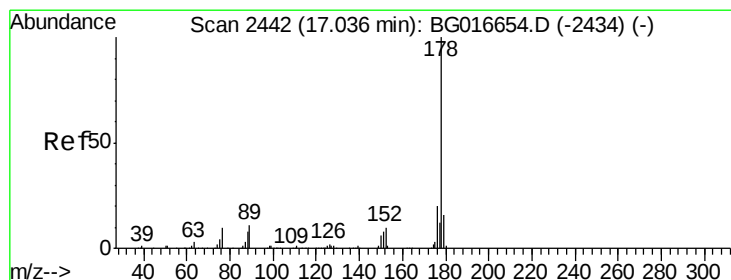
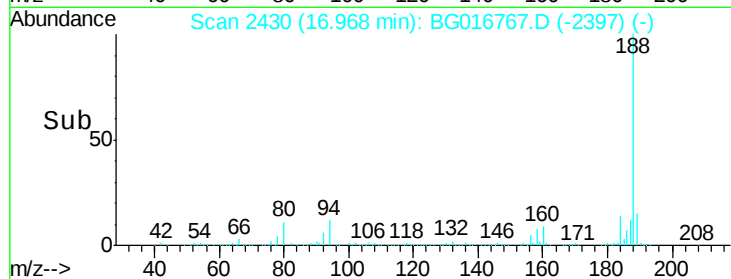
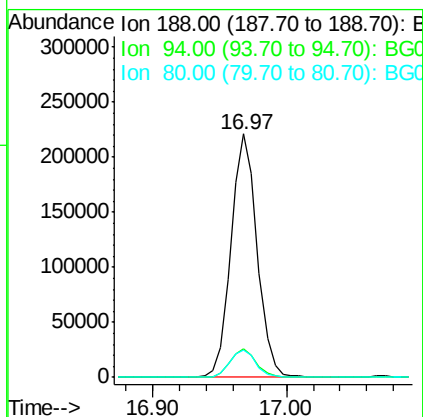
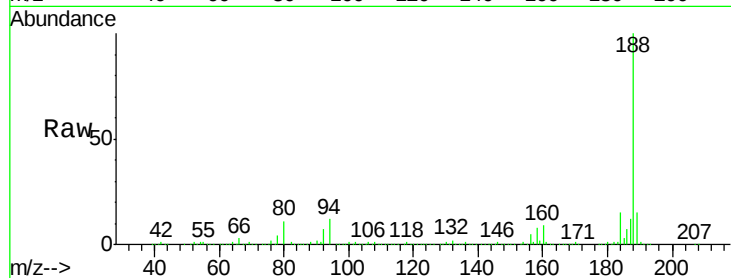




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 16.97 min Scan# 2430  
Delta R.T. -0.00 min  
Lab File: BG016767.D  
Acq: 28 Apr 2015 16:40

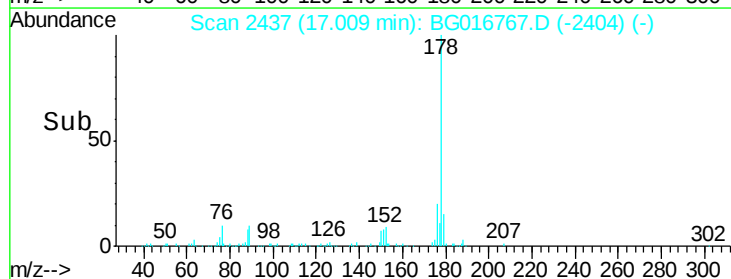
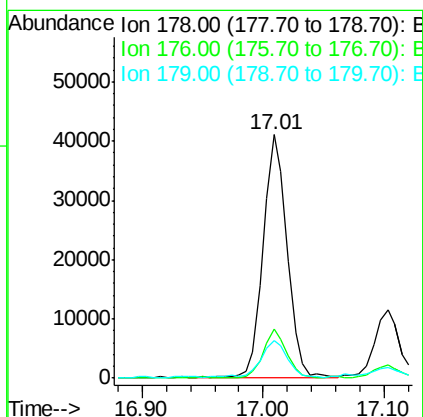
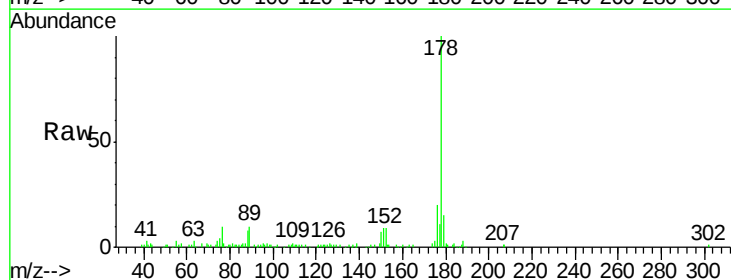
Instrument :  
BNA\_G  
ClientSampleId :  
SB-05-0-2.0

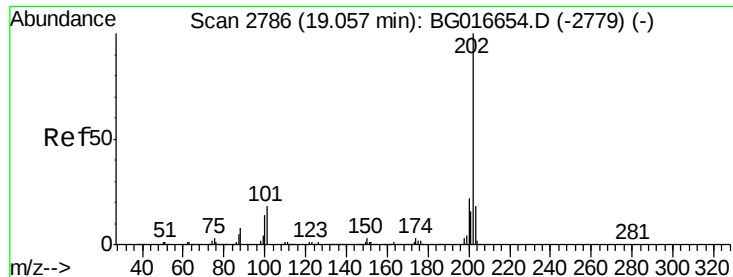
Tot Ion:188 Resp: 302087  
Ion Ratio Lower Upper  
188 100  
94 12.0 10.7 16.1  
80 11.3 9.9 14.9



#70  
Phenanthrene  
Concen: 3.28 ng  
RT: 17.01 min Scan# 2437  
Delta R.T. -0.00 min  
Lab File: BG016767.D  
Acq: 28 Apr 2015 16:40

Tgt Ion:178 Resp: 56898  
Ion Ratio Lower Upper  
178 100  
176 20.2 15.8 23.6  
179 15.5 12.8 19.2





#74

Fluoranthene

Concen: 6.78 ng

RT: 19.03 min Scan# 2781

Delta R.T. -0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

Instrument :

BNA\_G

ClientSampleId :

SB-05-0-2.0

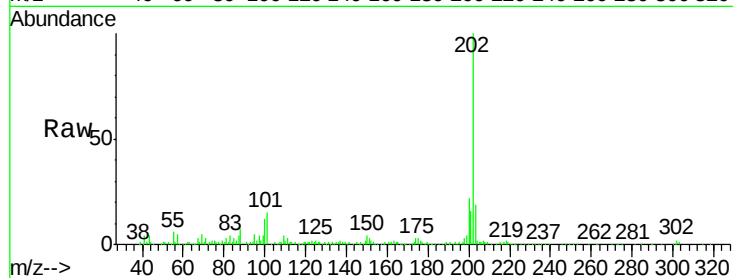
Tot Ion:202 Resp: 124768

Ion Ratio Lower Upper

202 100

101 14.6 0.0 38.1

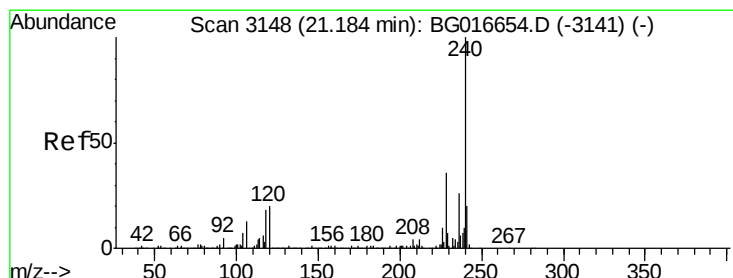
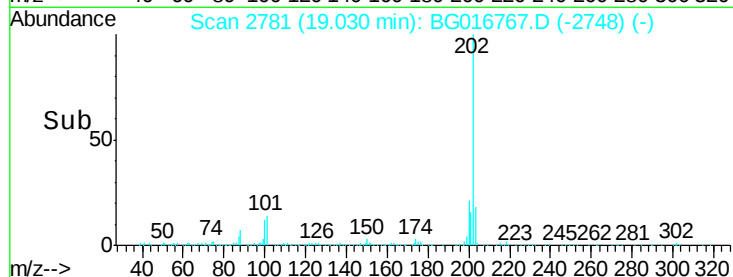
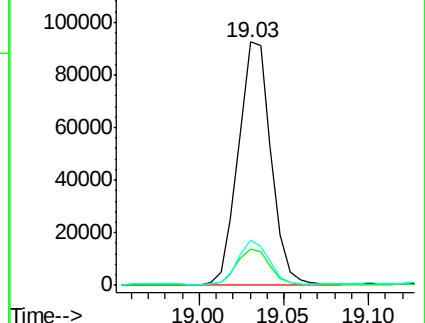
203 18.7 0.0 38.4



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: 21.16 min Scan# 3143

Delta R.T. -0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

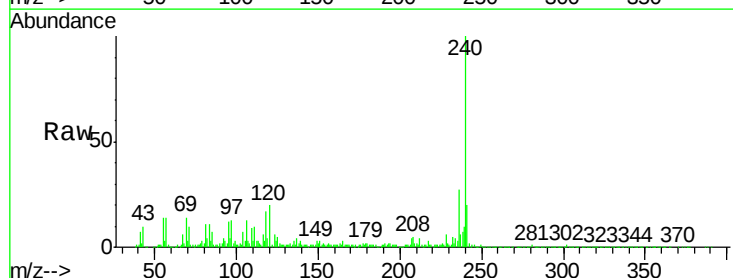
Tgt Ion:240 Resp: 256542

Ion Ratio Lower Upper

240 100

120 20.2 16.3 24.5

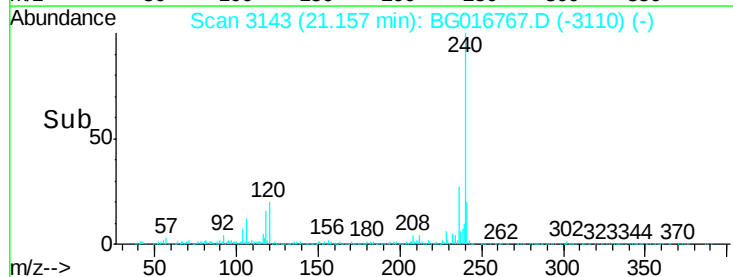
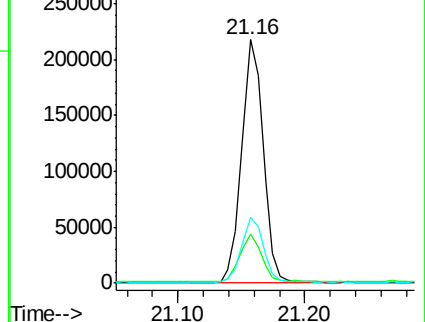
236 27.2 21.1 31.7

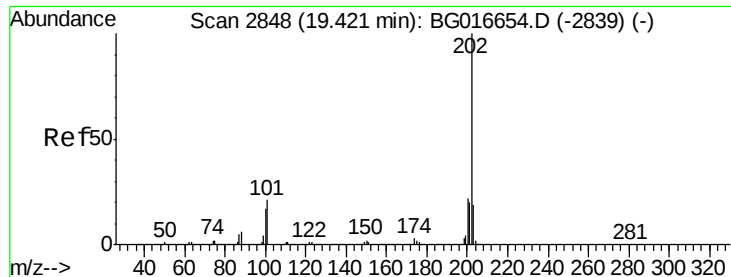


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Pvrene

Concen: 7.89 ng

RT: 19.39 min Scan# 2843

Delta R.T. -0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

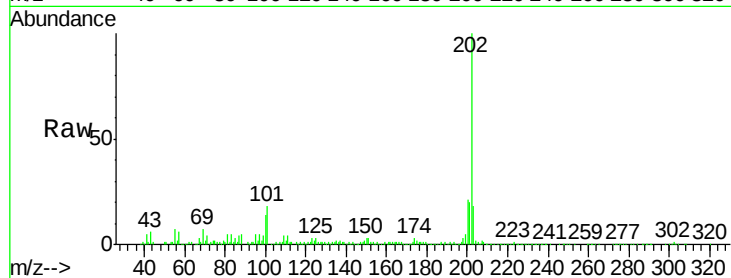
Instrument :

BNA\_G

ClientSampleId :

SB-05-0-2.0

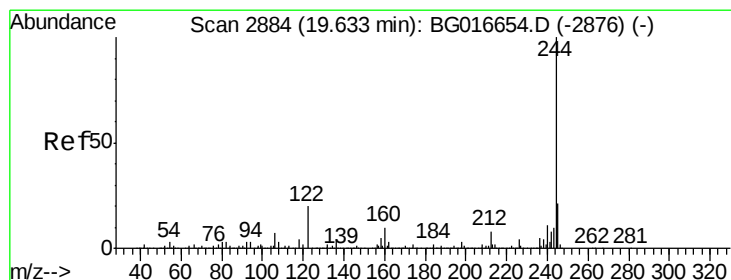
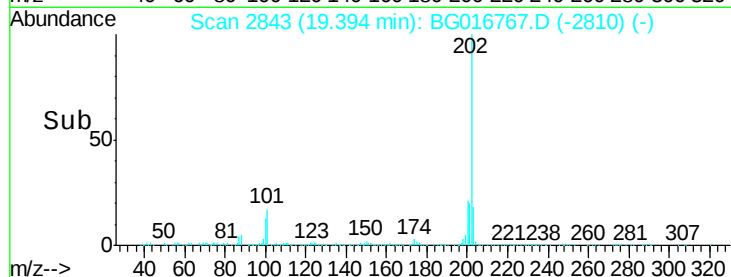
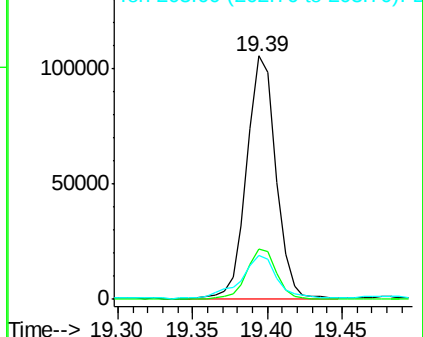
|             |       |           |
|-------------|-------|-----------|
| Tot Ion:202 | Resp: | 142151    |
| Ion Ratio   | Lower | Upper     |
| 202         | 100   |           |
| 200         | 20.6  | 18.0 27.0 |
| 203         | 18.0  | 14.9 22.3 |



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: 11.53 ng

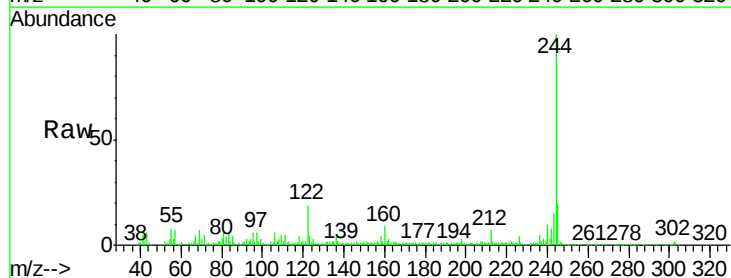
RT: 19.60 min Scan# 2878

Delta R.T. -0.01 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

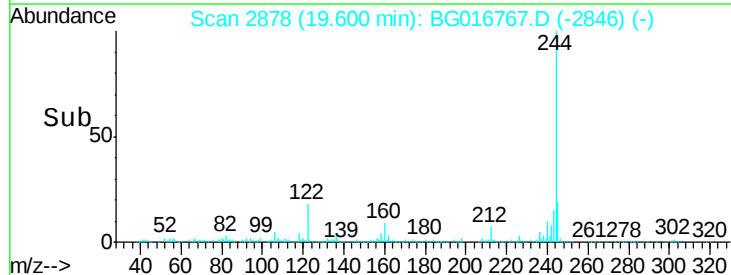
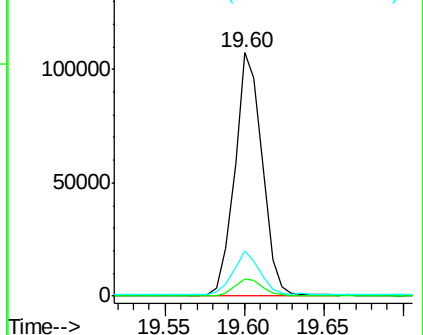
|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:244 | Resp: | 128443    |
| Ion Ratio   | Lower | Upper     |
| 244         | 100   |           |
| 212         | 6.9   | 6.4 9.6   |
| 122         | 18.6  | 15.9 23.9 |

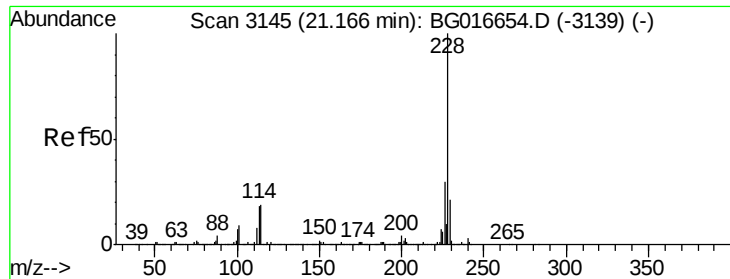


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

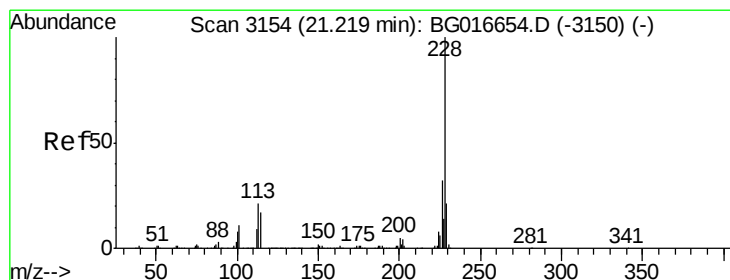
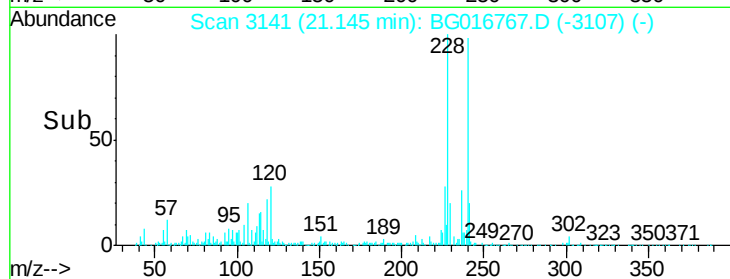
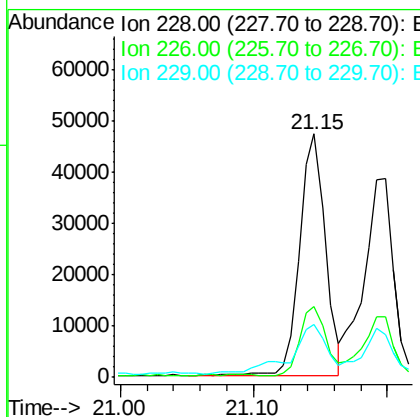
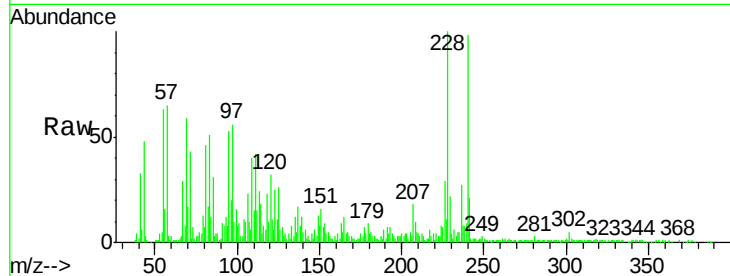




#80  
Benzo(a)anthracene  
Concen: 4.01 ng  
RT: 21.15 min Scan# 3141  
Delta R.T. 0.00 min  
Lab File: BG016767.D  
Acq: 28 Apr 2015 16:40

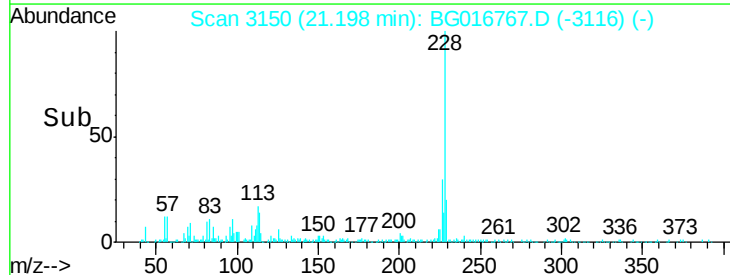
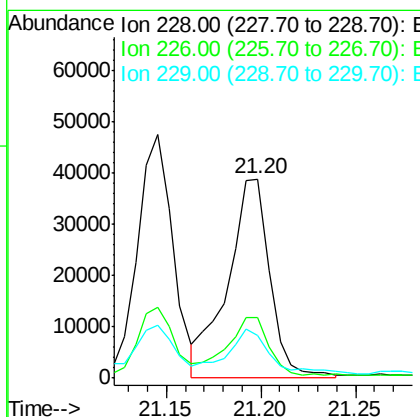
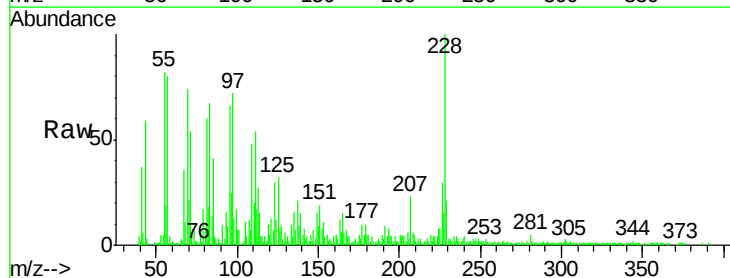
Instrument :  
BNA\_G  
ClientSampleId :  
SB-05-0-2.0

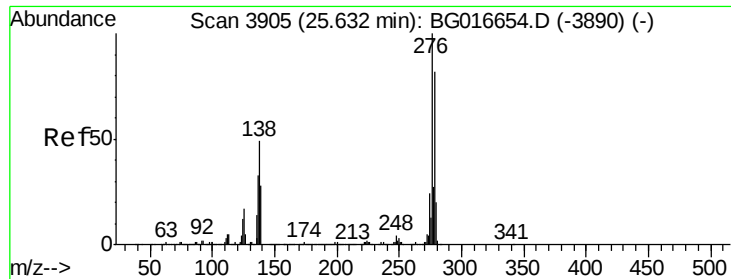
Tot Ion:228 Resp: 62435  
Ion Ratio Lower Upper  
228 100  
226 29.0 23.8 35.6  
229 22.0 17.0 25.4



#82  
Chrysene  
Concen: 4.08 ng m  
RT: 21.20 min Scan# 3150  
Delta R.T. 0.00 min  
Lab File: BG016767.D  
Acq: 28 Apr 2015 16:40

Tgt Ion:228 Resp: 60844  
Ion Ratio Lower Upper  
228 100  
226 30.3 25.4 38.0  
229 21.5 16.5 24.7

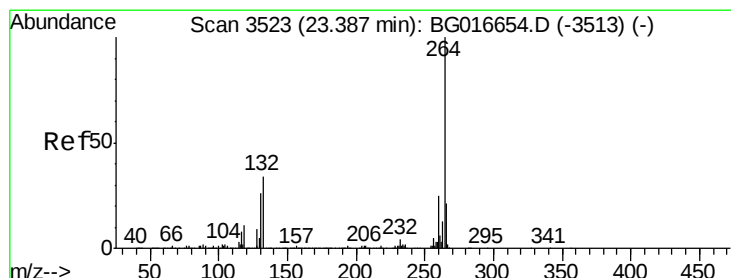
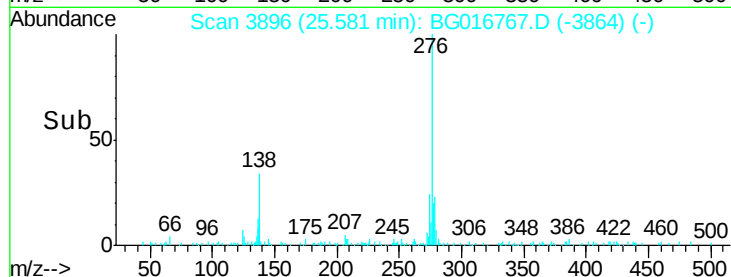
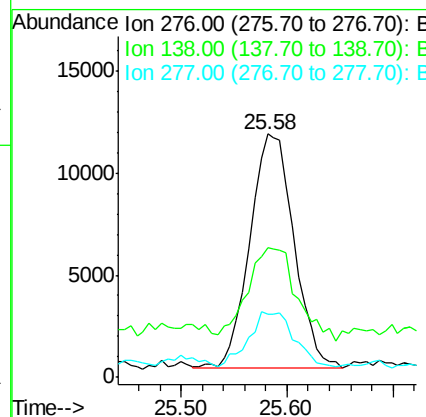
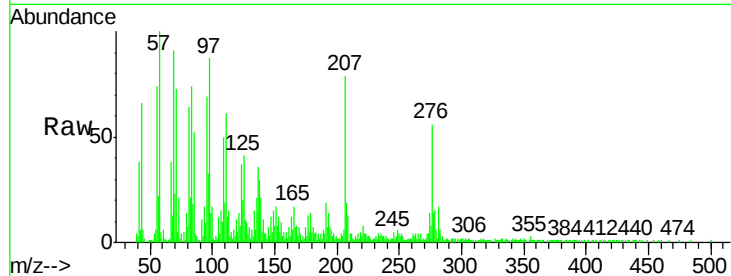




#85  
Indeno(1,2,3-cd)pyrene  
Concen: 2.03 ng  
RT: 25.58 min Scan# 3896  
Delta R.T. -0.01 min  
Lab File: BG016767.D  
Acq: 28 Apr 2015 16:40

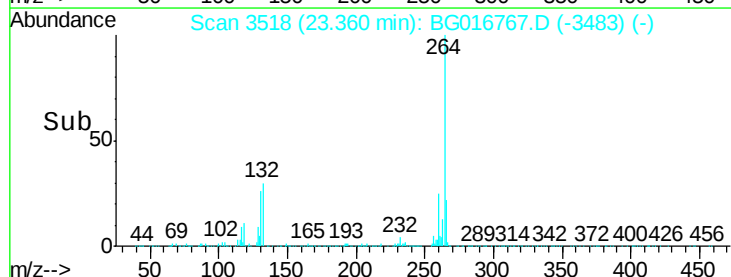
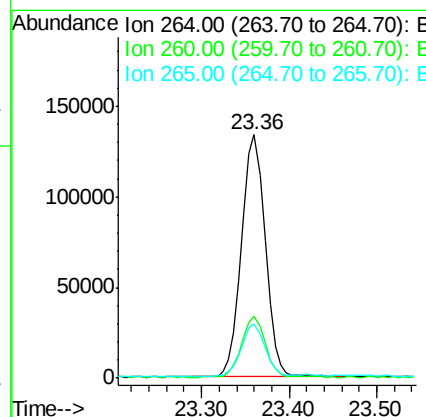
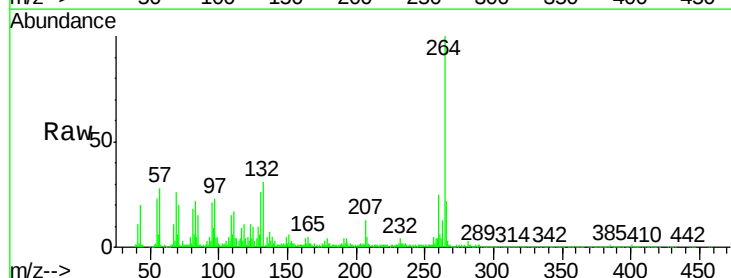
Instrument :  
BNA\_G  
ClientSampleId :  
SB-05-0-2.0

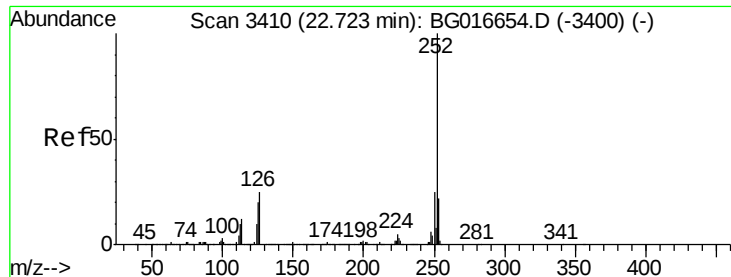
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 45.1  | 38.2  | 57.2  |
| 277     | 23.7  | 21.4  | 32.2  |



#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 23.36 min Scan# 3518  
Delta R.T. 0.01 min  
Lab File: BG016767.D  
Acq: 28 Apr 2015 16:40

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 25.2  | 20.0  | 30.0  |
| 265     | 22.3  | 16.8  | 25.2  |





#87

Benzo(b)fluoranthene

Concen: 4.63 ng m

RT: 22.70 min Scan# 3406

Delta R.T. 0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

Instrument :

BNA\_G

ClientSampleId :

SB-05-0-2.0

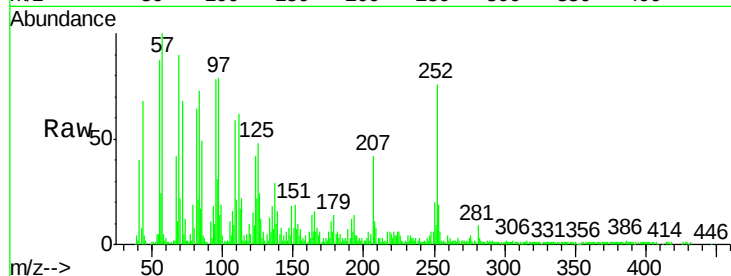
Tot Ion:252 Resp: 68962

Ion Ratio Lower Upper

252 100

253 24.8 17.9 26.9

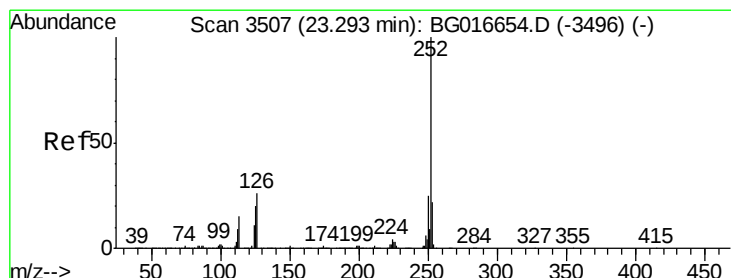
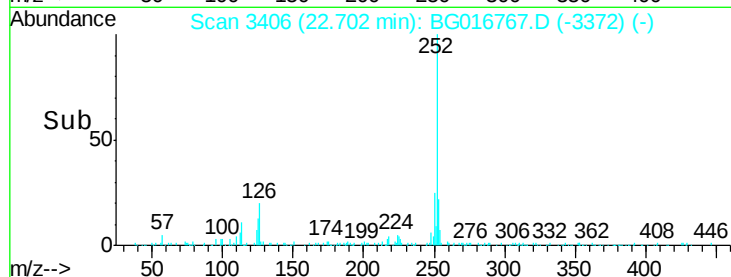
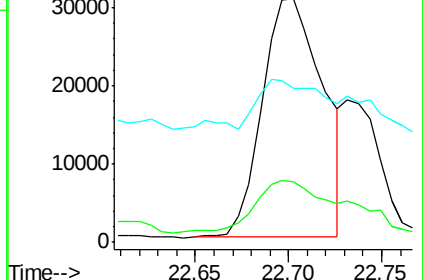
125 63.2 15.8 23.8#



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



#89

Benzo(a)pyrene

Concen: 3.79 ng m

RT: 23.26 min Scan# 3501

Delta R.T. -0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

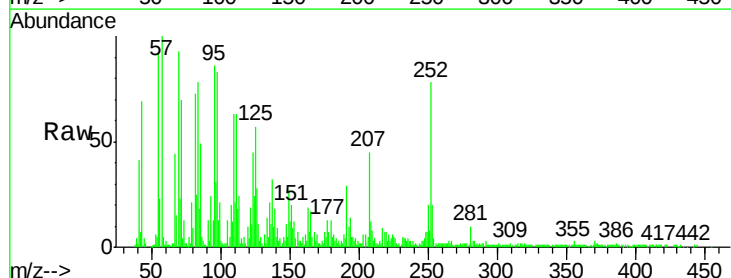
Tgt Ion:252 Resp: 53297

Ion Ratio Lower Upper

252 100

253 25.8 17.2 25.8

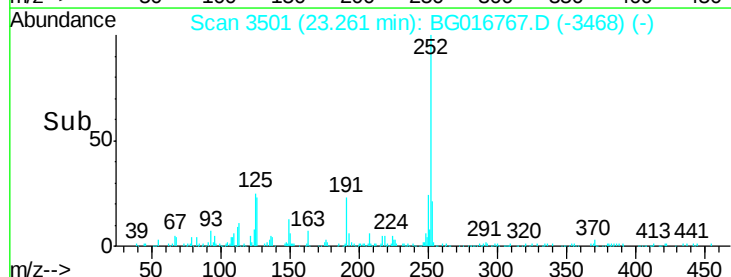
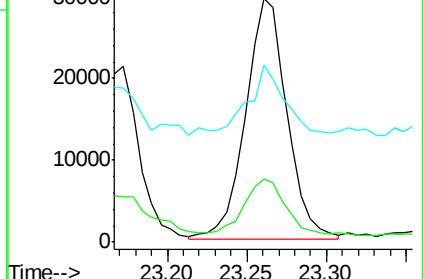
125 72.8 16.3 24.5#

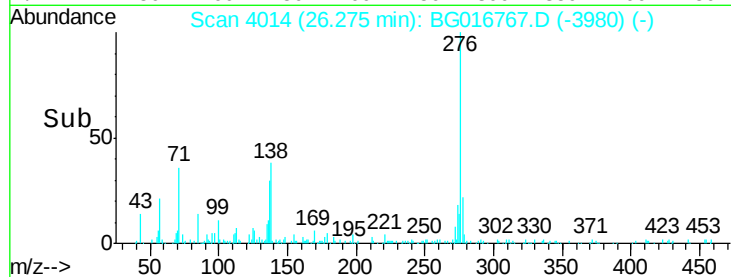
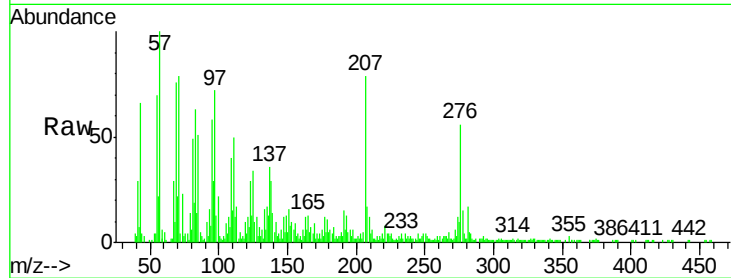
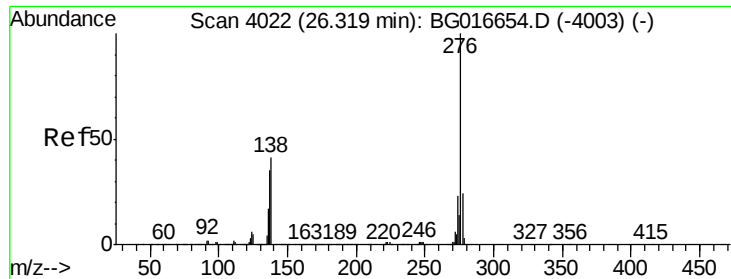


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#91

Benzo(a,h,i)perylene

Concen: 2.66 ng

RT: 26.27 min Scan# 4014

Delta R.T. 0.00 min

Lab File: BG016767.D

Acq: 28 Apr 2015 16:40

Instrument :

BNA\_G

ClientSampleId :

SB-05-0-2.0

Tot Ion:276 Resp: 36986

Ion Ratio Lower Upper

276 100

277 27.0 19.3 28.9

138 51.9 32.8 49.2#

