

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122115\  
 Data File : BG020405.D  
 Acq On : 22 Dec 2015 9:25  
 Operator : UM/SJ  
 Sample : G4848-15DL 25X  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N61DL

Quant Time: Dec 22 14:01:42 2015  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Dec 22 05:02:37 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.09  | 152  | 16464    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.91 | 136  | 72337    | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.72 | 164  | 53128    | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.46 | 188  | 132530   | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.74 | 240  | 160534   | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 25.01 | 264  | 134685   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |      |       |       |
|--------------------------------|-------|-----|-------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 0.00  | 96  | 0     | 0.00 | ng/uL |       |
| 5) Phenol-d5                   | 7.25  | 99  | 988   | 0.68 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.41  | 67  | 620   | 0.72 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.62  | 132 | 843   | 0.80 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.80  | 113 | 765   | 0.62 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 9.26  | 128 | 406   | 0.72 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.98  | 143 | 337   | 0.54 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 10.53 | 165 | 994   | 0.78 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 11.04 | 131 | 1247  | 0.87 | ng/ul | 0.00  |
| 44) Dimethylphthalate-d6       | 14.12 | 166 | 4243  | 0.99 | ng/ul | 0.00  |
| 47) Acenaphthylene-d8          | 14.42 | 160 | 5047  | 1.01 | ng/ul | 0.00  |
| 52) 4-Nitrophenol-d4           | 0.00  | 143 | 0     | 0.00 | ng/ul |       |
| 58) Fluorene-d10               | 15.71 | 176 | 4230  | 1.09 | ng/ul | 0.00  |
| 63) 4,6-Dinitro-2-methylphenol | 0.00  | 200 | 0     | 0.00 | ng/ul |       |
| 71) Anthracene-d10             | 17.57 | 188 | 7427m | 1.22 | ng/ul | 0.00  |
| 79) Pyrene-d10                 | 19.84 | 212 | 7934  | 1.06 | ng/ul | 0.00  |
| 90) Benzo(a)pyrene-d12         | 24.78 | 264 | 6521  | 0.97 | ng/ul | -0.02 |

## Target Compounds

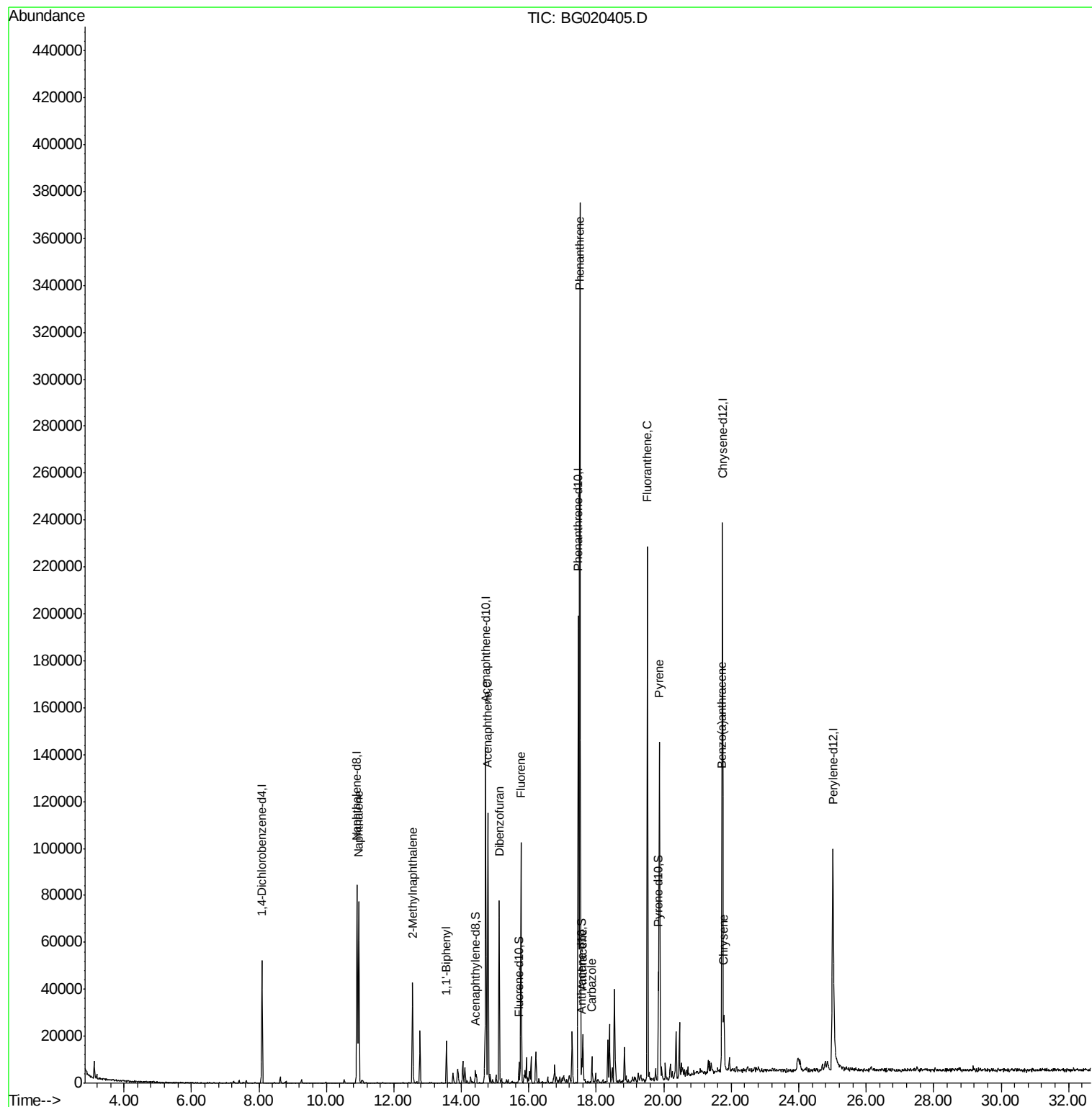
|                         |       |     |        |       |       | Ovalue |
|-------------------------|-------|-----|--------|-------|-------|--------|
| 28) Naphthalene         | 10.95 | 128 | 70284  | 18.61 | ng/ul | 99     |
| 34) 2-Methylnaphthalene | 12.56 | 142 | 22826  | 7.91  | ng/ul | 96     |
| 41) 1,1'-Biphenyl       | 13.56 | 154 | 10306  | 2.57  | ng/ul | 96     |
| 50) Acenaphthene        | 14.79 | 153 | 50508  | 14.13 | ng/ul | 97     |
| 54) Dibenzofuran        | 15.12 | 168 | 53037  | 9.98  | ng/ul | 99     |
| 59) Fluorene            | 15.77 | 166 | 48236  | 11.30 | ng/ul | 98     |
| 70) Phenanthrene        | 17.51 | 178 | 251053 | 34.63 | ng/ul | 99     |
| 72) Anthracene          | 17.60 | 178 | 15997  | 2.18  | ng/ul | 98     |
| 75) Carbazole           | 17.87 | 167 | 8841   | 1.43  | ng/ul | 100    |
| 77) Fluoranthene        | 19.52 | 202 | 154100 | 18.19 | ng/ul | 98     |
| 80) Pyrene              | 19.87 | 202 | 102990 | 10.60 | ng/ul | 98     |
| 83) Benzo(a)anthracene  | 21.72 | 228 | 23165  | 2.47  | ng/ul | 97     |
| 85) Chrysene            | 21.79 | 228 | 18449  | 2.09  | ng/ul | 96     |

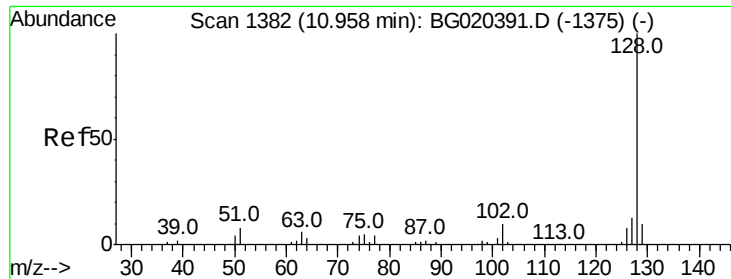
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA G\DATA\BG122115\  
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Sample : G4848-15DL 25X  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

Instrument :  
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ClientSampleId :  
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Quant Title : SVOA CALIBRATION  
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Response via : Initial Calibration

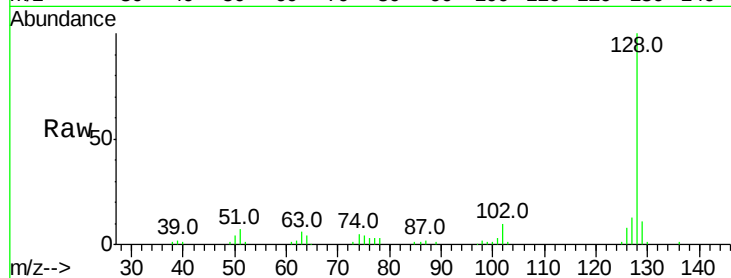




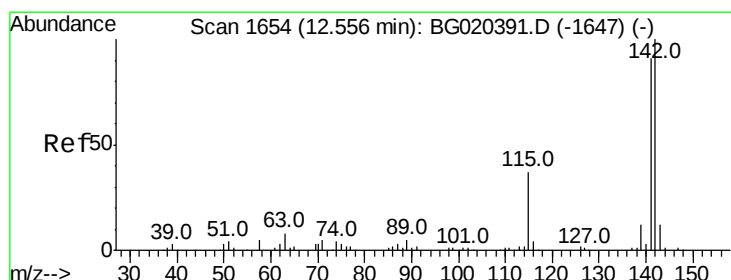
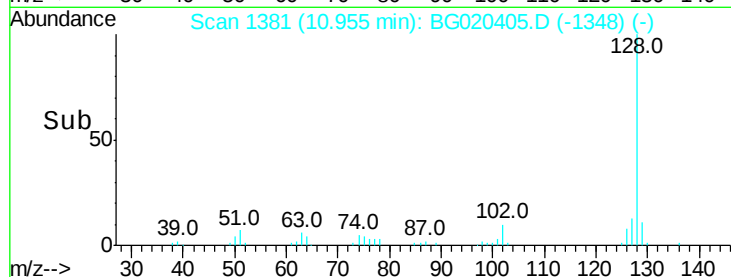
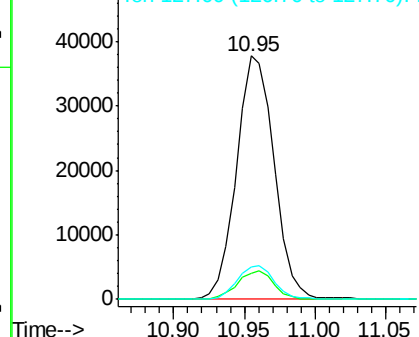
#28  
Naphthalene  
Concen: 18.61 ng/ul  
RT: 10.95 min Scan# 1381  
Delta R.T. -0.00 min  
Lab File: BG020405.D  
Acq: 22 Dec 2015 9:25

Instrument :  
BNA\_G  
ClientSampleId :  
D9N61DL

Tot Ion:128 Resp: 70284  
Ion Ratio Lower Upper  
128 100  
129 10.8 8.6 12.8  
127 13.3 10.1 15.1

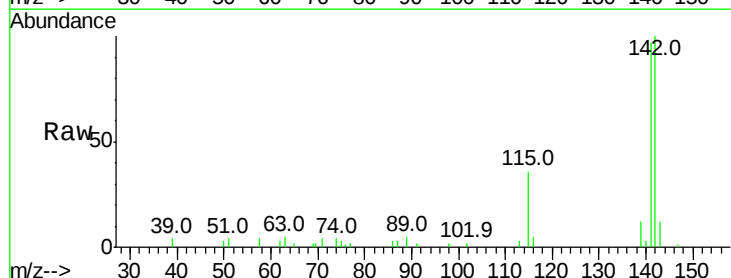


Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E

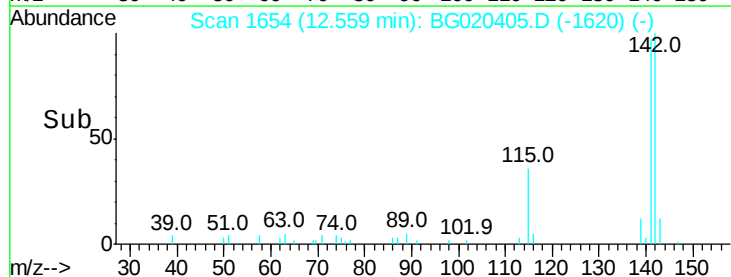
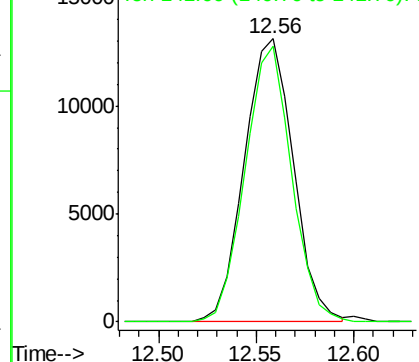


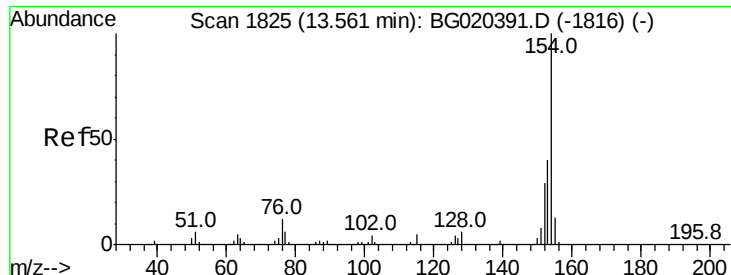
#34  
2-Methylnaphthalene  
Concen: 7.91 ng/ul  
RT: 12.56 min Scan# 1654  
Delta R.T. 0.00 min  
Lab File: BG020405.D  
Acq: 22 Dec 2015 9:25

Tgt Ion:142 Resp: 22826  
Ion Ratio Lower Upper  
142 100  
141 97.4 74.9 112.3



Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E

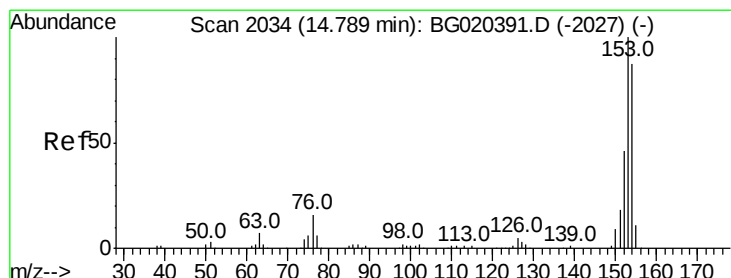
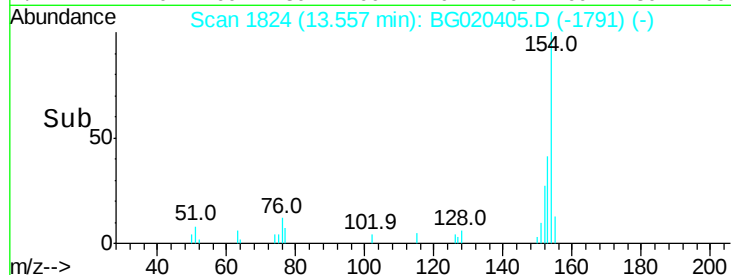
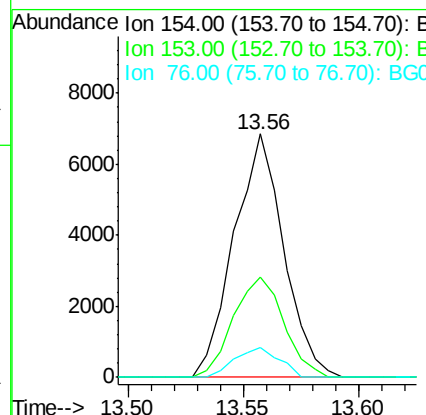
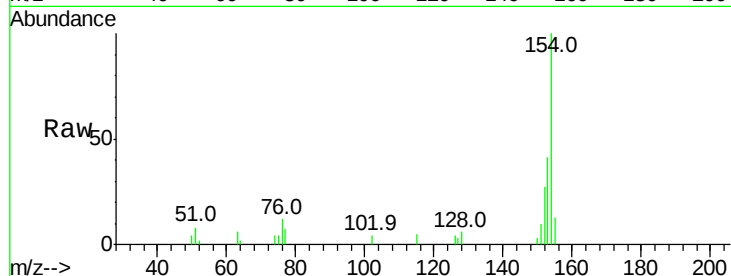




#41  
 1,1'-Biphenyl  
 Concen: 2.57 ng/ul  
 RT: 13.56 min Scan# 1824  
 Delta R.T. -0.00 min  
 Lab File: BG020405.D  
 Acq: 22 Dec 2015 9:25

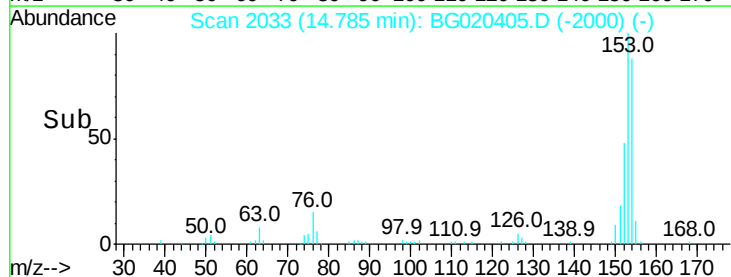
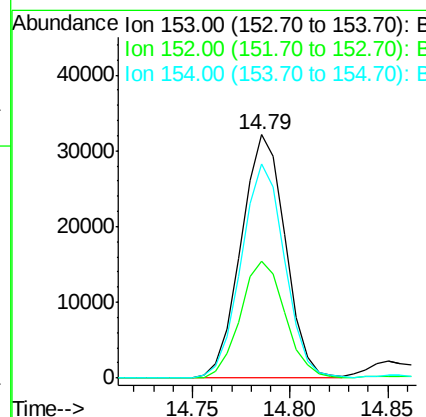
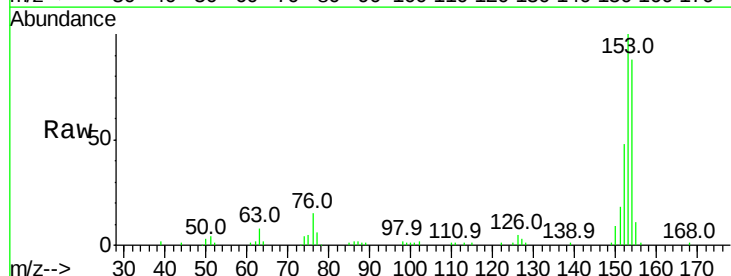
Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N61DL

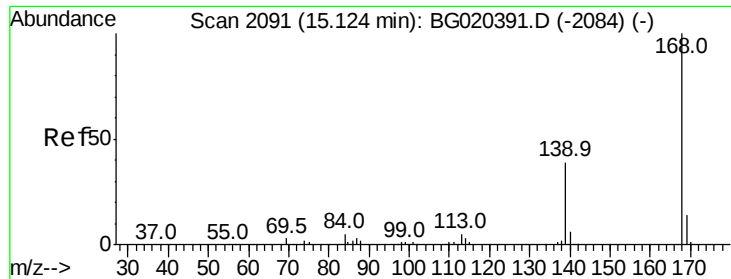
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 41.2  | 35.5  | 53.3  |
| 76      | 12.1  | 10.4  | 15.6  |



#50  
 Acenaphthene  
 Concen: 14.13 ng/ul  
 RT: 14.79 min Scan# 2033  
 Delta R.T. -0.00 min  
 Lab File: BG020405.D  
 Acq: 22 Dec 2015 9:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 153     | 100   |       |       |
| 152     | 47.8  | 37.6  | 56.4  |
| 154     | 88.1  | 67.9  | 101.9 |





#54

Dibenzenofuran

Concen: 9.98 ng/ul

RT: 15.12 min Scan# 2090

Delta R.T. -0.00 min

Lab File: BG020405.D

Acq: 22 Dec 2015 9:25

Instrument :

BNA\_G

ClientSampleId :

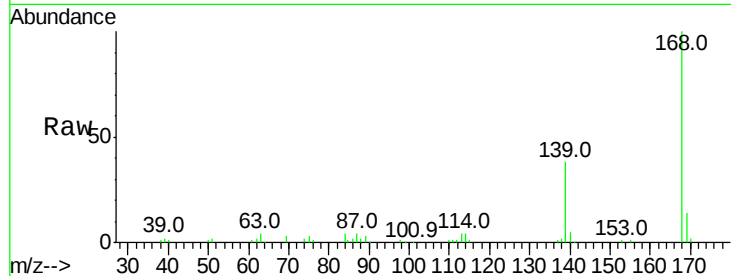
D9N61DL

Tot Ion:168 Resp: 53037

Ion Ratio Lower Upper

168 100

139 38.5 30.5 45.7



Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

15.12

40000

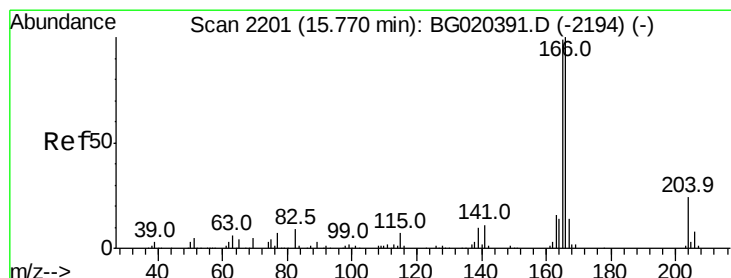
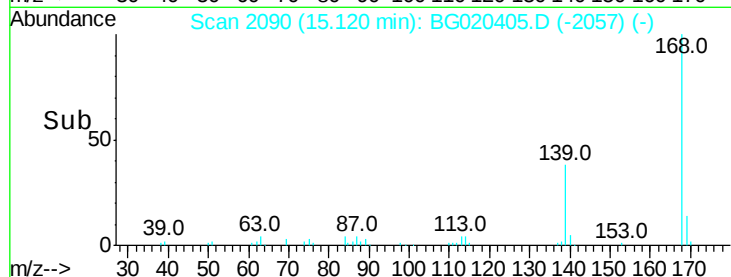
30000

20000

10000

0

Time--> 15.05 15.10 15.15



#59

Fluorene

Concen: 11.30 ng/ul

RT: 15.77 min Scan# 2200

Delta R.T. -0.00 min

Lab File: BG020405.D

Acq: 22 Dec 2015 9:25

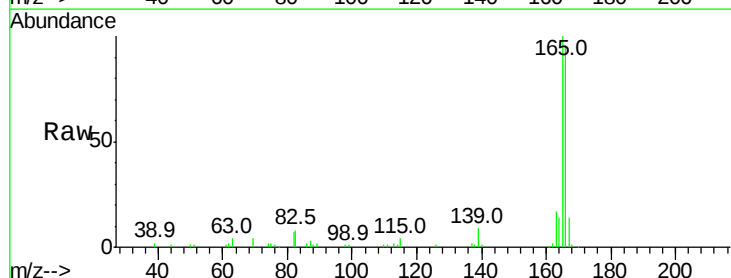
Tgt Ion:166 Resp: 48236

Ion Ratio Lower Upper

166 100

165 103.9 81.4 122.0

167 14.9 11.2 16.8



Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

15.77

40000

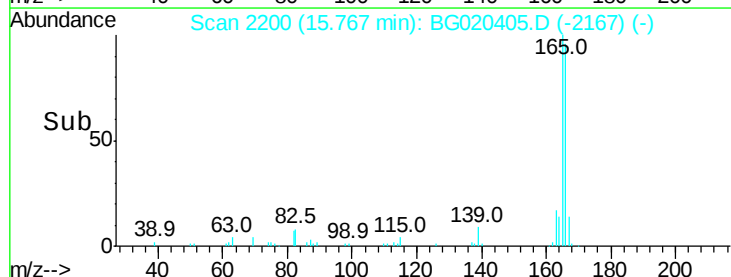
30000

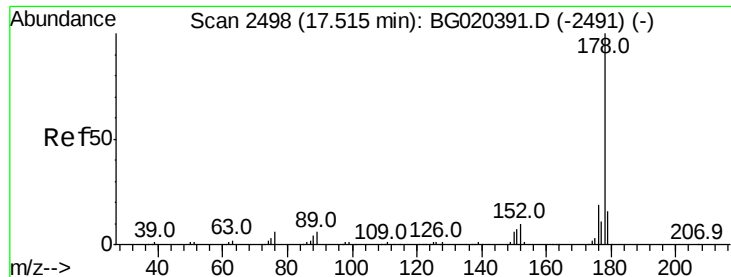
20000

10000

0

Time--> 15.70 15.75 15.80





#70

Phenanthrene

Concen: 34.63 ng/ul

RT: 17.51 min Scan# 2497

Delta R.T. -0.00 min

Lab File: BG020405.D

Acq: 22 Dec 2015 9:25

Instrument :

BNA\_G

ClientSampleId :

D9N61DL

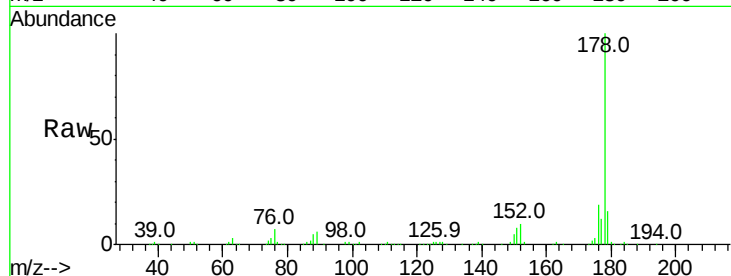
Tot Ion:178 Resp: 251053

Ion Ratio Lower Upper

178 100

179 15.6 12.9 19.3

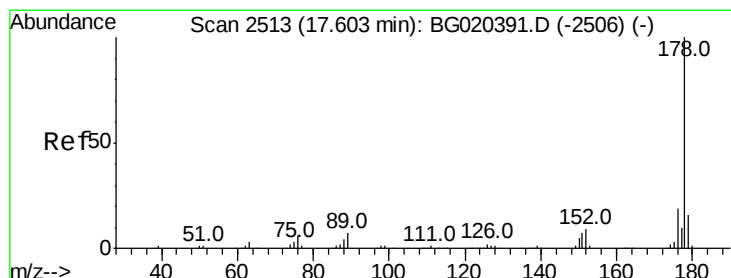
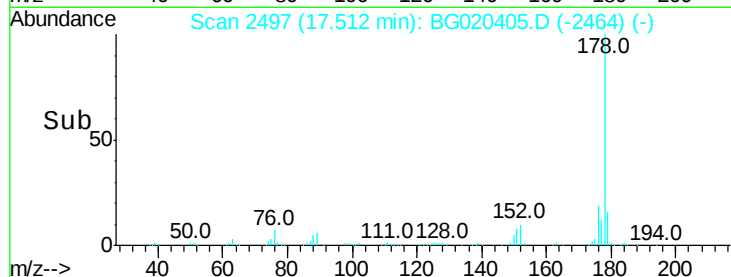
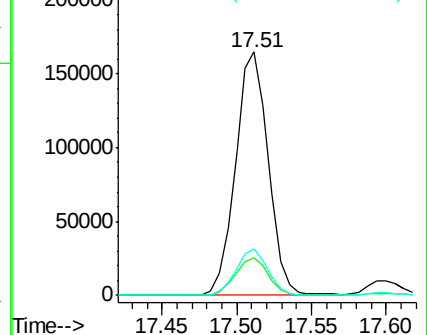
176 19.0 15.3 22.9



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#72

Anthracene

Concen: 2.18 ng/ul

RT: 17.60 min Scan# 2512

Delta R.T. -0.00 min

Lab File: BG020405.D

Acq: 22 Dec 2015 9:25

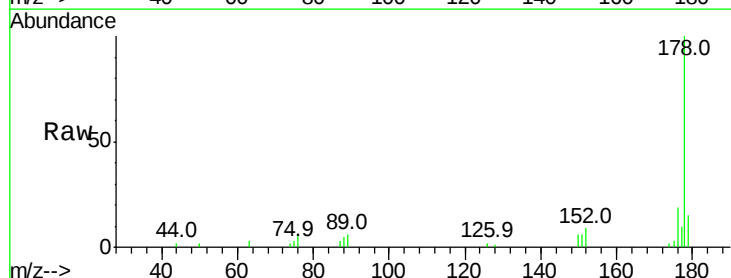
Tgt Ion:178 Resp: 15997

Ion Ratio Lower Upper

178 100

179 14.6 12.3 18.5

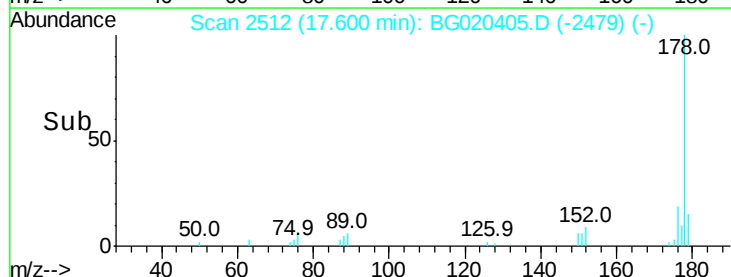
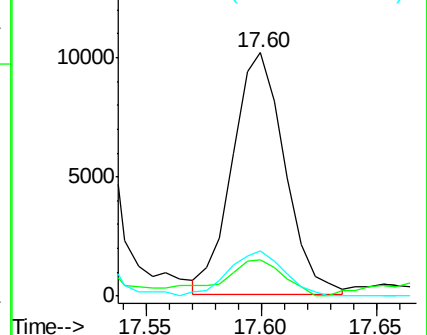
176 18.6 14.3 21.5

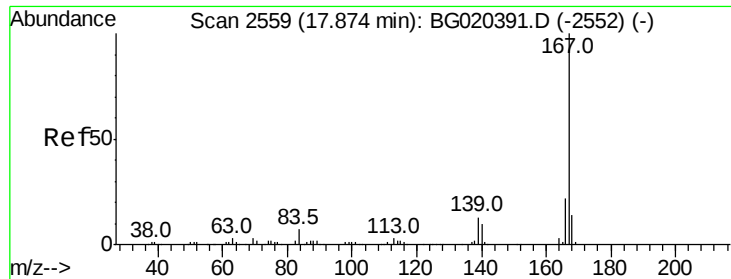


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E





#75

Carbazole

Concen: 1.43 ng/ul

RT: 17.87 min Scan# 2558

Delta R.T. -0.00 min

Lab File: BG020405.D

Acq: 22 Dec 2015 9:25

Instrument :

BNA\_G

ClientSampleId :

D9N61DL

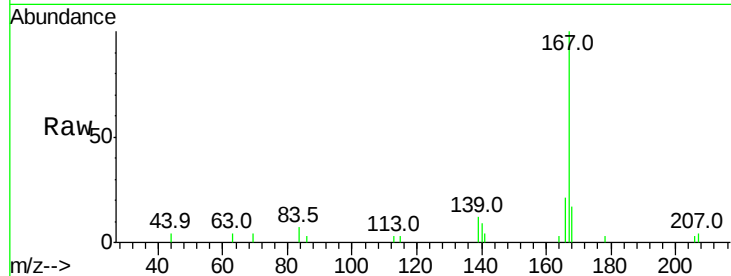
Tot Ion:167 Resp: 8841

Ion Ratio Lower Upper

167 100

166 21.4 17.0 25.6

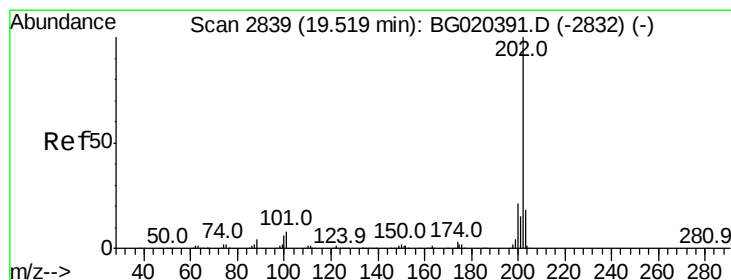
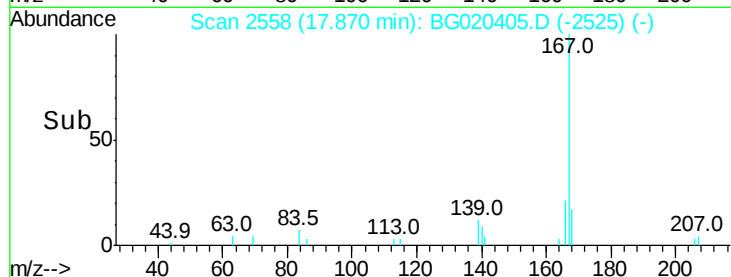
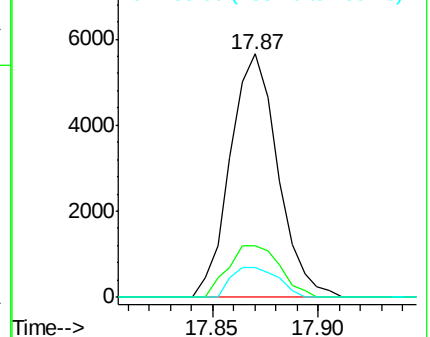
139 12.2 10.1 15.1



Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E



#77

Fluoranthene

Concen: 18.19 ng/ul

RT: 19.52 min Scan# 2838

Delta R.T. -0.00 min

Lab File: BG020405.D

Acq: 22 Dec 2015 9:25

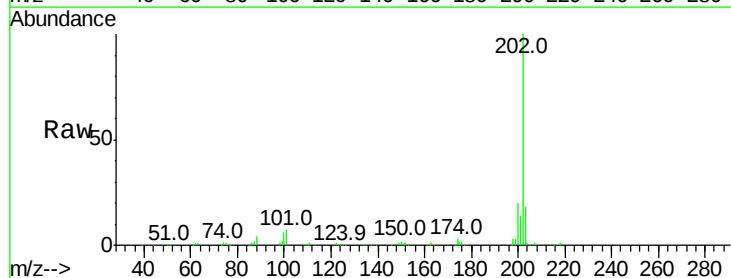
Tgt Ion:202 Resp: 154100

Ion Ratio Lower Upper

202 100

101 7.3 6.2 9.4

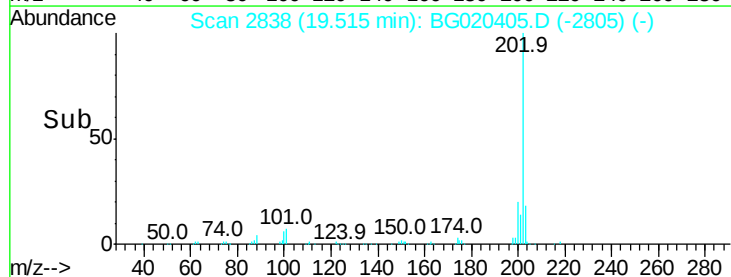
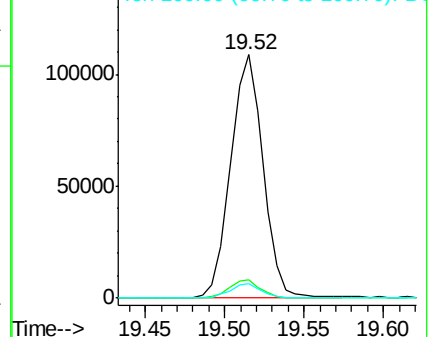
100 5.8 5.1 7.7

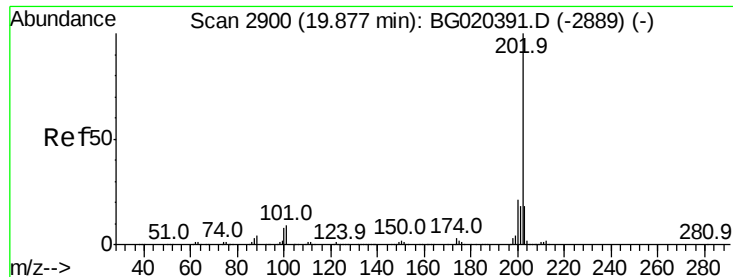


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): E

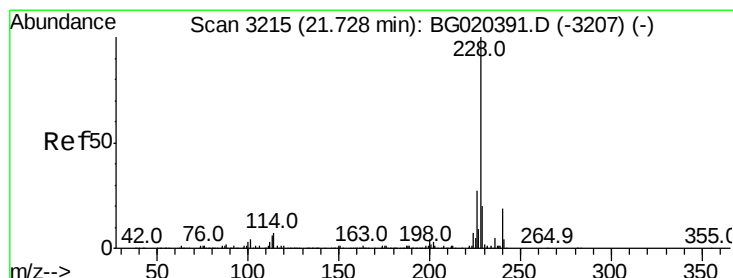
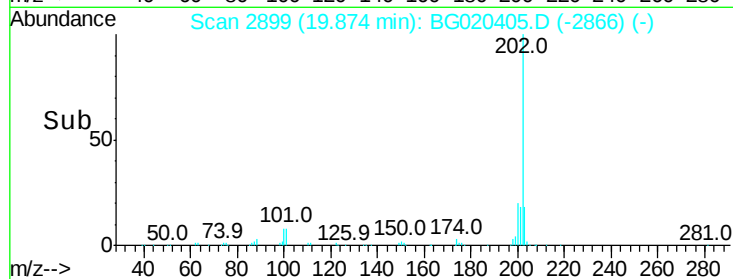
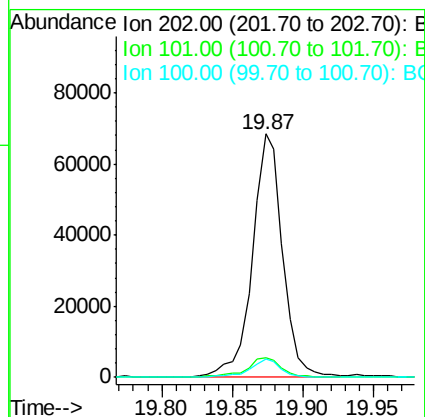
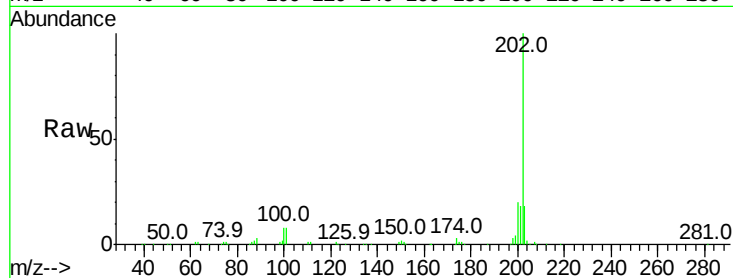




#80  
Pvrene  
Concen: 10.60 ng/ul  
RT: 19.87 min Scan# 2899  
Delta R.T. -0.00 min  
Lab File: BG020405.D  
Acq: 22 Dec 2015 9:25

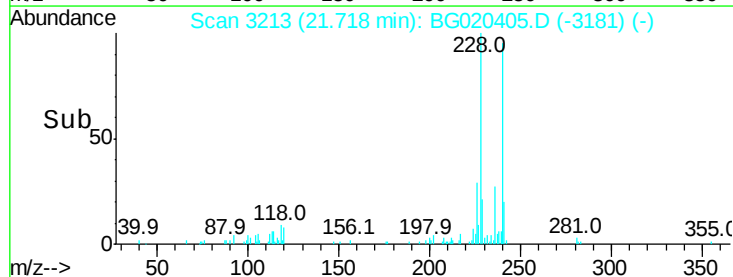
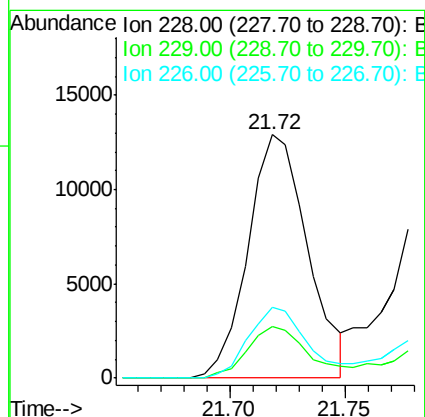
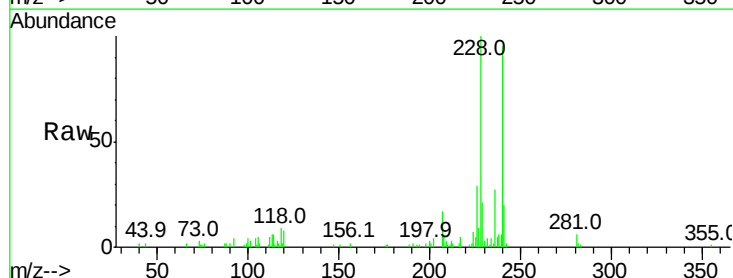
Instrument :  
BNA\_G  
ClientSampleId :  
D9N61DL

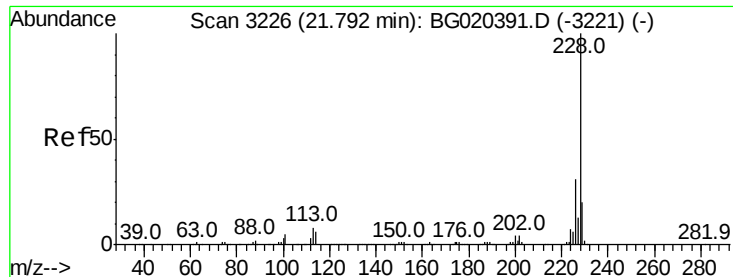
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 7.8   | 7.0   | 10.4  |
| 100     | 7.7   | 6.4   | 9.6   |



#83  
Benzo(a)anthracene  
Concen: 2.47 ng/ul  
RT: 21.72 min Scan# 3213  
Delta R.T. -0.01 min  
Lab File: BG020405.D  
Acq: 22 Dec 2015 9:25

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 21.2  | 15.8  | 23.8  |
| 226     | 29.0  | 21.8  | 32.6  |





#85  
 Chrvsene  
 Concen: 2.09 ng/ul  
 RT: 21.79 min Scan# 3225  
 Delta R.T. -0.00 min  
 Lab File: BG020405.D  
 Acq: 22 Dec 2015 9:25

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9N61DL

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 33.0  | 23.9  | 35.9  |
| 229     | 19.3  | 15.6  | 23.4  |

