

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG070715\  
 Data File : BG017796.D  
 Acq On : 7 Jul 2015 14:57  
 Operator : TP/UM  
 Sample : G2860-15DL 20X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleID :  
 G93K0DL

Manual Integrations  
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apatel  
 7/9/2015 8:31:11 AM

Quant Time: Jul 08 04:48:36 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG070615.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Jul 08 03:36:17 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.61  | 152  | 76005    | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.38 | 136  | 354975   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.26 | 164  | 218720   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.01 | 188  | 440255   | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.21 | 240  | 467343   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.44 | 264  | 467524   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |       |      |       |       |
|--------------------------------|-------|-----|-------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.14  | 96  | 521   | 0.27 | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.78  | 99  | 4965  | 0.77 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.95  | 67  | 3712  | 0.97 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.14  | 132 | 4514  | 0.82 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.31  | 113 | 4235  | 0.81 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.75  | 128 | 2187  | 0.82 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.47  | 143 | 2031  | 0.77 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 10.01 | 165 | 3862  | 0.76 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 10.53 | 131 | 3874  | 0.56 | ng/ul | 0.00  |
| 43) Dimethylphthalate-d6       | 13.68 | 166 | 12800 | 0.88 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 13.95 | 160 | 14178 | 0.73 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.46 | 143 | 656   | 0.23 | ng/ul | -0.01 |
| 57) Fluorene-d10               | 15.25 | 176 | 11493 | 0.78 | ng/ul | 0.00  |
| 62) 4,6-Dinitro-2-methylphenol | 15.38 | 200 | 314   | 0.15 | ng/ul | 0.00  |
| 70) Anthracene-d10             | 17.11 | 188 | 15728 | 0.78 | ng/ul | 0.00  |
| 78) Pyrene-d10                 | 19.42 | 212 | 15336 | 0.69 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.30 | 264 | 12442 | 0.60 | ng/ul | 0.00  |

## Target Compounds

|                            |       |     |         |             | Qvalue |
|----------------------------|-------|-----|---------|-------------|--------|
| 28) Naphthalene            | 10.43 | 128 | 437513  | 23.82 ng/ul | 98     |
| 34) 2-Methylnaphthalene    | 12.06 | 142 | 116909  | 8.97 ng/ul  | 95     |
| 40) 1,1'-Biphenyl          | 13.09 | 154 | 28503   | 1.76 ng/ul  | 96     |
| 47) Acenaphthylene         | 13.97 | 152 | 65037   | 3.05 ng/ul# | 95     |
| 49) Acenaphthene           | 14.32 | 153 | 104201  | 7.25 ng/ul  | 95     |
| 53) Dibenzofuran           | 14.66 | 168 | 191314  | 9.88 ng/ul  | 98     |
| 58) Fluorene               | 15.31 | 166 | 266826  | 15.50 ng/ul | 98     |
| 69) Phenanthrene           | 17.06 | 178 | 1579494 | 65.64 ng/ul | 96     |
| 71) Anthracene             | 17.15 | 178 | 503706  | 20.35 ng/ul | 99     |
| 74) Carbazole              | 17.42 | 167 | 191627  | 9.30 ng/ul  | 98     |
| 76) Fluoranthene           | 19.08 | 202 | 1210132 | 52.20 ng/ul | 99     |
| 79) Pyrene                 | 19.44 | 202 | 1133488 | 39.74 ng/ul | 96     |
| 82) Benzo(a)anthracene     | 21.20 | 228 | 634595  | 24.64 ng/ul | 98     |
| 84) Chrysene               | 21.25 | 228 | 543172m | 22.27 ng/ul |        |
| 87) Benzo(b)fluoranthene   | 22.77 | 252 | 571516  | 21.39 ng/ul | 95     |
| 88) Benzo(k)fluoranthene   | 22.81 | 252 | 138537m | 5.50 ng/ul  |        |
| 90) Benzo(a)pyrene         | 23.34 | 252 | 420032  | 16.54 ng/ul | 99     |
| 91) Indeno(1,2,3-cd)pyrene | 25.70 | 276 | 174390  | 6.29 ng/ul# | 92     |
| 92) Dibenzo(a,h)anthracene | 25.70 | 278 | 61646m  | 2.63 ng/ul  |        |
| 93) Benzo(g,h,i)perylene   | 26.39 | 276 | 154884  | 6.68 ng/ul  | 96     |

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

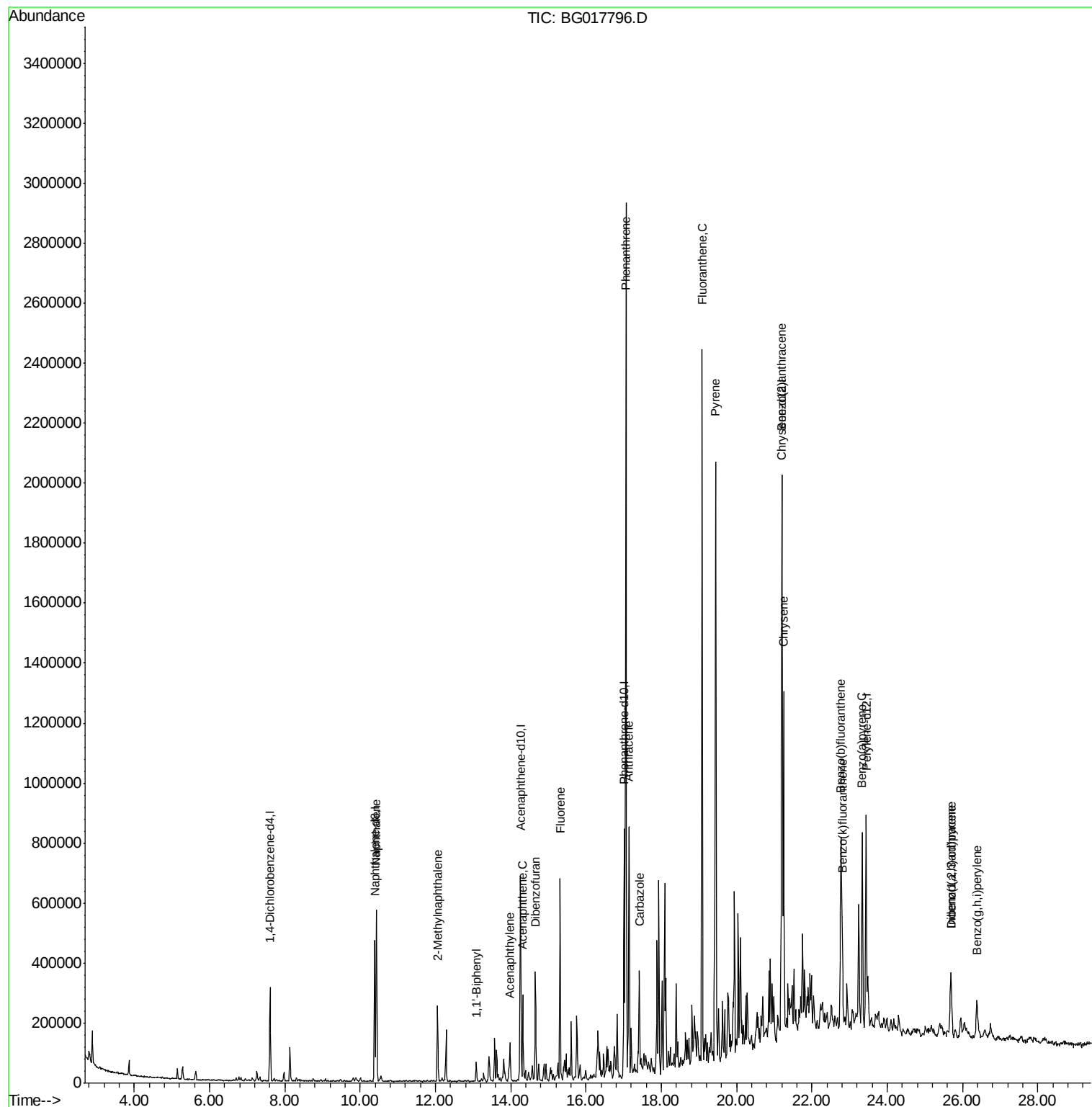
Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG070715\  
Data File : BG017796.D  
Acq On : 7 Jul 2015 14:57  
Operator : TP/UM  
Sample : G2860-15DL 20X  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

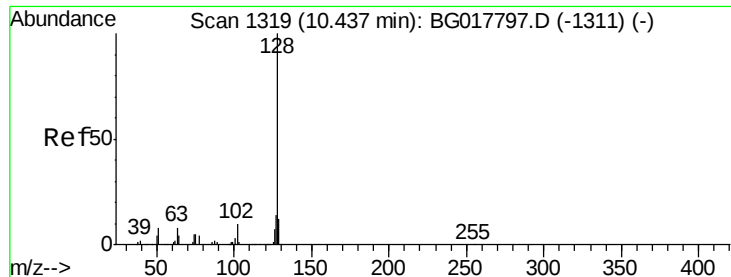
Instrument :  
BNA\_G  
ClientSampleId :  
G93K0DL

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Quant Time: Jul 08 04:48:36 2015  
Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\SOM02.2-EPA-BG070615.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Jul 08 03:36:17 2015  
Response via : Initial Calibration





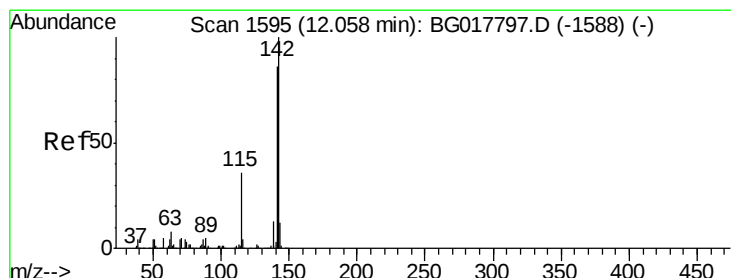
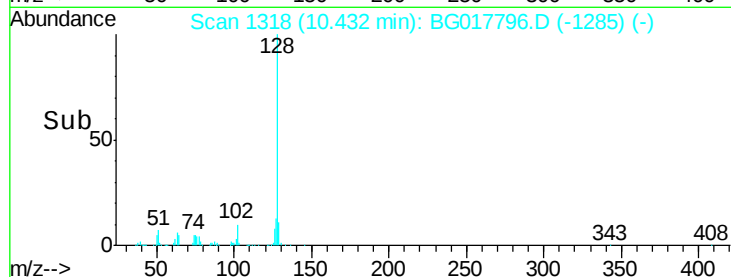
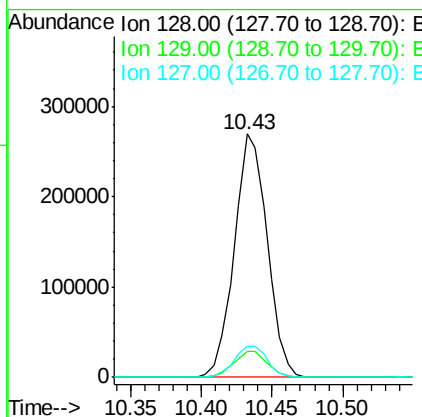
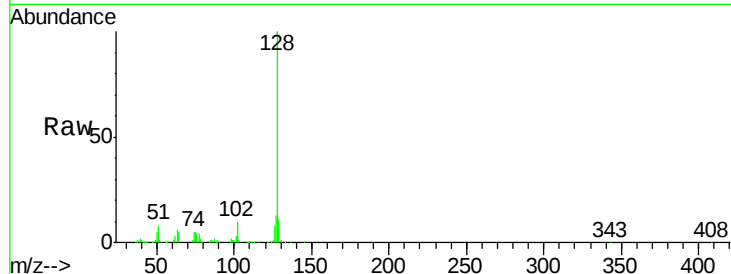
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Naphthalene  
Concen: 23.82 ng/ul  
RT: 10.43 min Scan# 1318  
Delta R.T. -0.01 min  
Lab File: BG017796.D  
Acq: 7 Jul 2015 14:57

Instrument :  
BNA\_G  
ClientSampleId :  
G93K0DL

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 128     | 100   | 437513 |       |       |
| 129     | 10.8  | 8.7    | 13.1  |       |
| 127     | 12.8  | 11.0   | 16.6  |       |

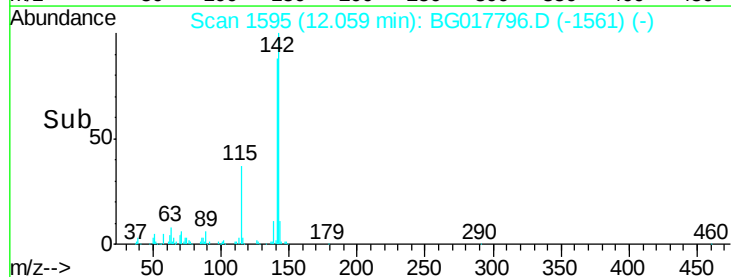
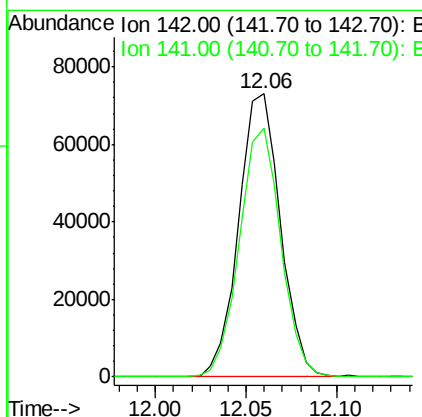
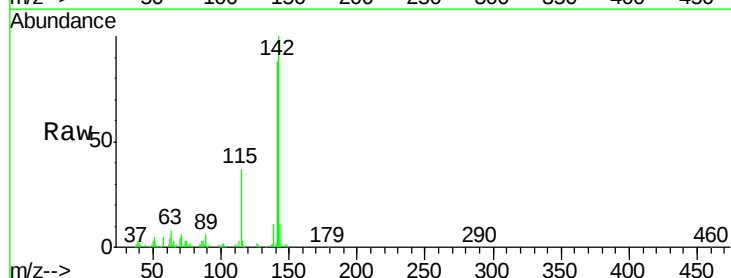
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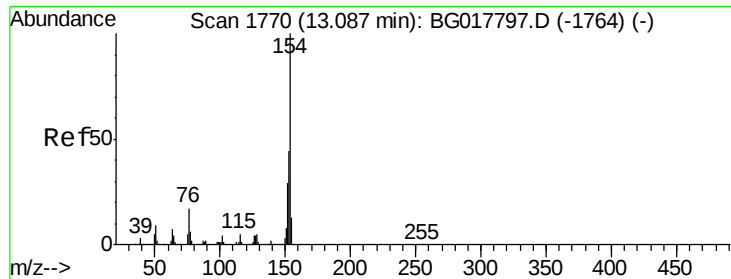
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#34  
2-Methylnaphthalene  
Concen: 8.97 ng/ul  
RT: 12.06 min Scan# 1595  
Delta R.T. 0.00 min  
Lab File: BG017796.D  
Acq: 7 Jul 2015 14:57

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 142     | 100   | 116909 |       |       |
| 141     | 88.1  | 66.6   | 100.0 |       |





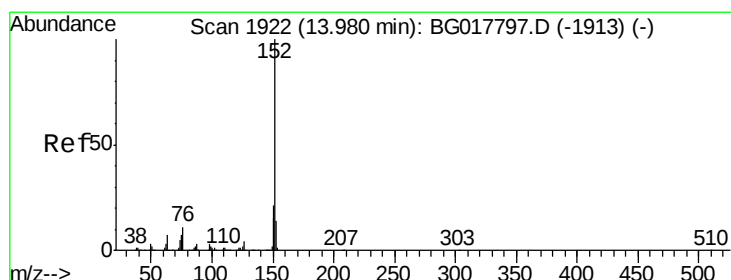
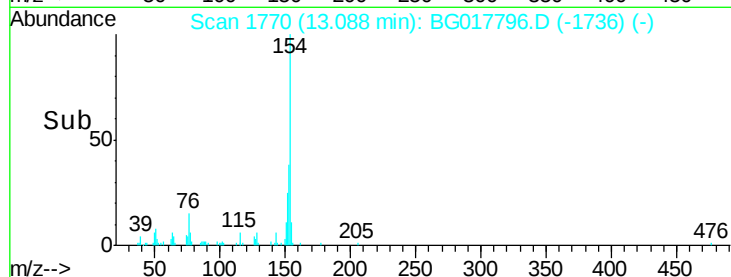
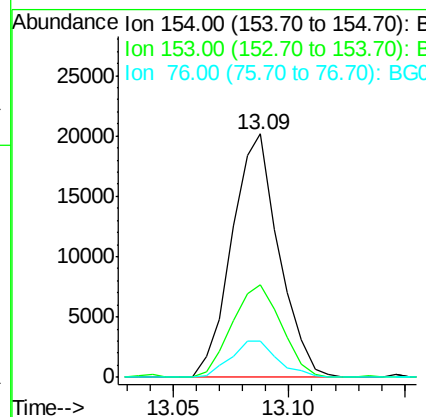
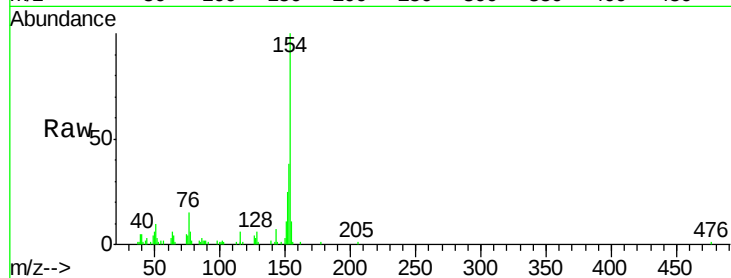
#40  
 1,1'-Biphenyl  
 Concen: 1.76 ng/ul  
 RT: 13.09 min Scan# 1770  
 Delta R.T. 0.00 min  
 Lab File: BG017796.D  
 Acq: 7 Jul 2015 14:57

Instrument :  
 BNA\_G  
 ClientSampleId :  
 G93K0DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 154     | 100   |       |       |
| 153     | 38.0  | 33.3  | 49.9  |
| 76      | 15.1  | 12.4  | 18.6  |

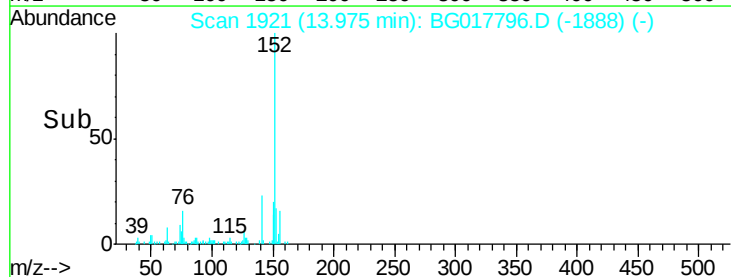
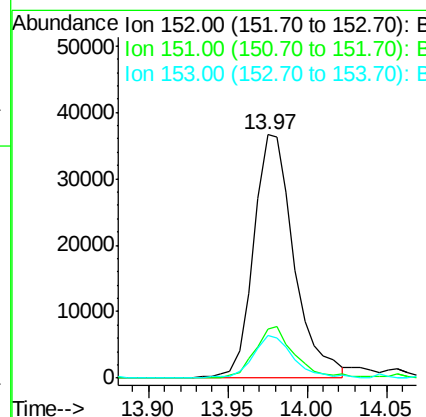
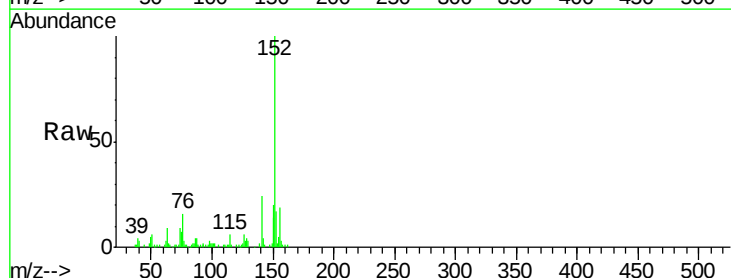
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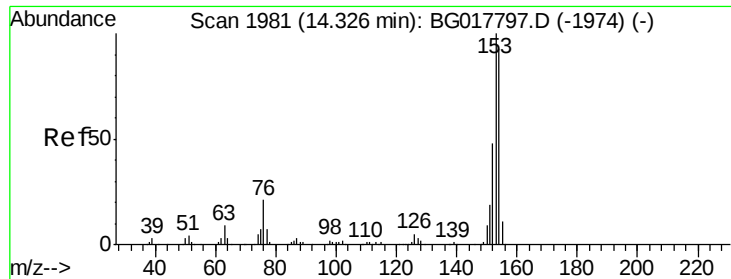
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#47  
 Acenaphthylene  
 Concen: 3.05 ng/ul  
 RT: 13.97 min Scan# 1921  
 Delta R.T. -0.01 min  
 Lab File: BG017796.D  
 Acq: 7 Jul 2015 14:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 20.2  | 17.0  | 25.6  |
| 153     | 17.3  | 11.2  | 16.8# |





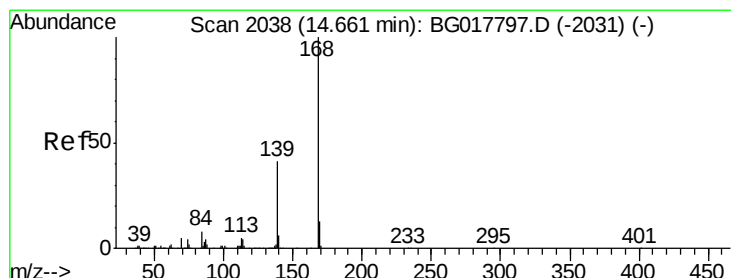
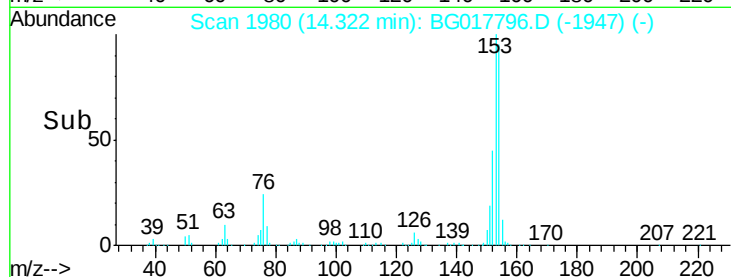
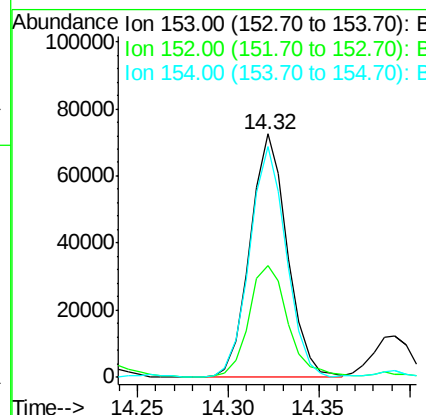
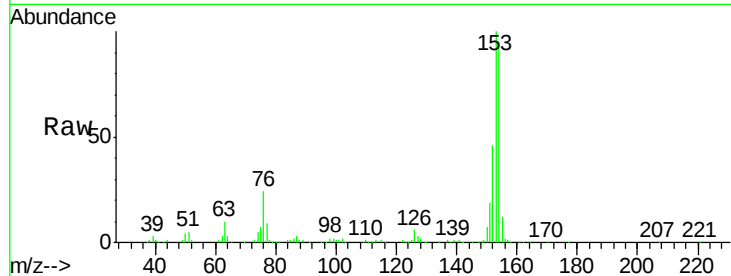
#49  
Acenaphthene  
Concen: 7.25 ng/u1  
RT: 14.32 min Scan# 1980  
Delta R.T. -0.01 min  
Lab File: BG017796.D  
Acq: 7 Jul 2015 14:57

Instrument :  
BNA\_G  
ClientSampleId :  
G93K0DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 153     | 100   |       |       |
| 152     | 45.7  | 37.8  | 56.6  |
| 154     | 94.8  | 71.2  | 106.8 |

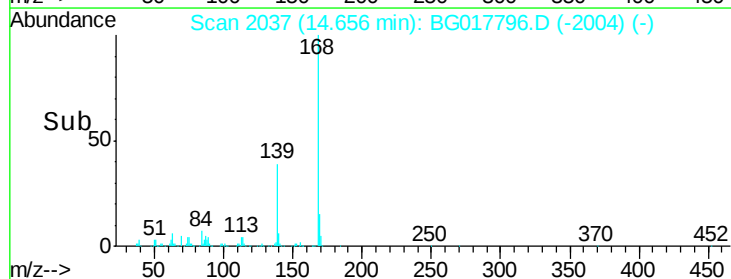
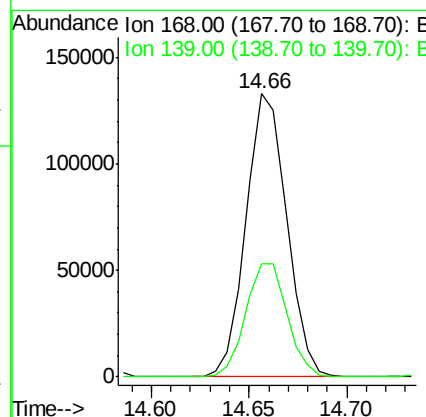
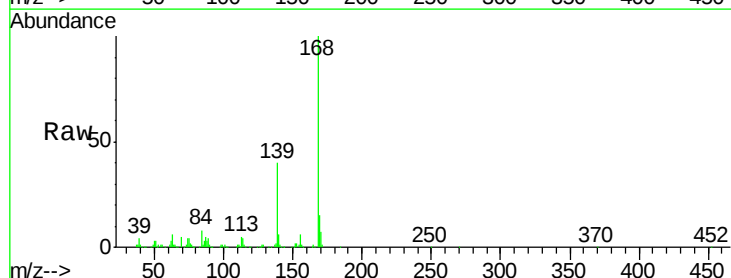
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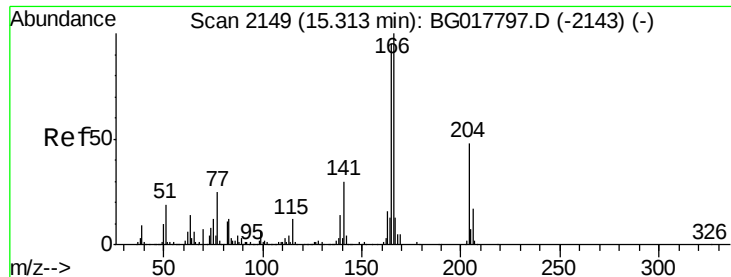
apatel  
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#53  
Dibenzofuran  
Concen: 9.88 ng/u1  
RT: 14.66 min Scan# 2037  
Delta R.T. -0.01 min  
Lab File: BG017796.D  
Acq: 7 Jul 2015 14:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 39.8  | 32.7  | 49.1  |





#58

Fluorene

Concen: 15.50 ng/ul

RT: 15.31 min Scan# 2149

Delta R.T. 0.00 min

Lab File: BG017796.D

Acq: 7 Jul 2015 14:57

Instrument :

BNA\_G

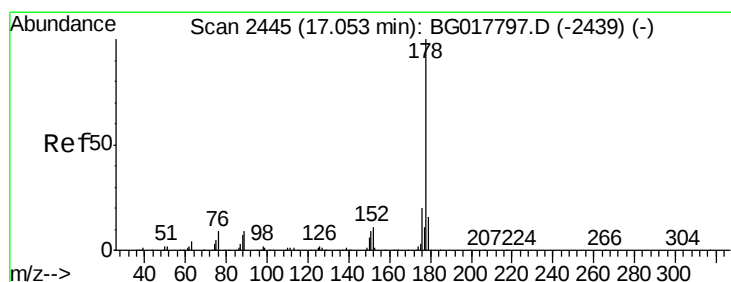
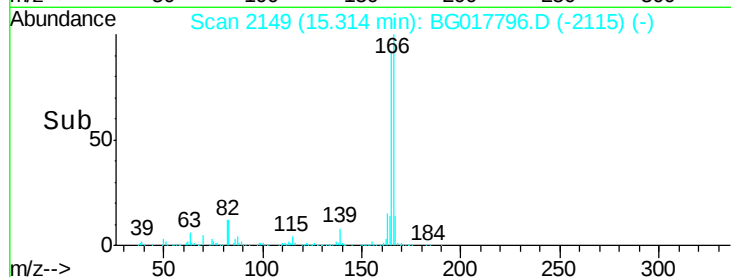
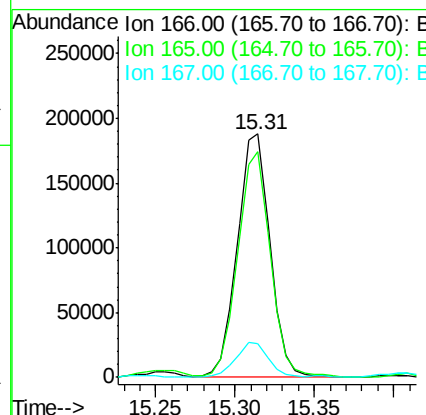
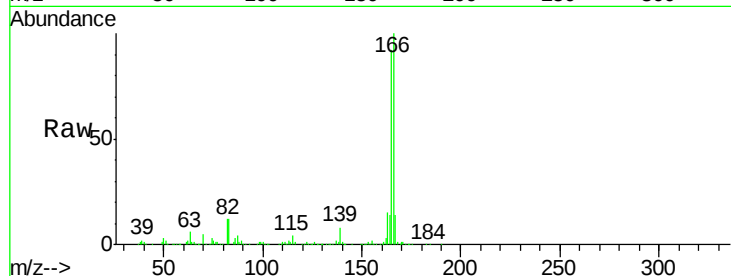
ClientSampleId :

G93K0DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 166   | Resp: | 266826 |
| Ion Ratio | Lower | Upper |        |
| 166       | 100   |       |        |
| 165       | 92.4  | 75.7  | 113.5  |
| 167       | 14.0  | 10.1  | 15.1   |

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#69

Phenanthrene

Concen: 65.64 ng/ul

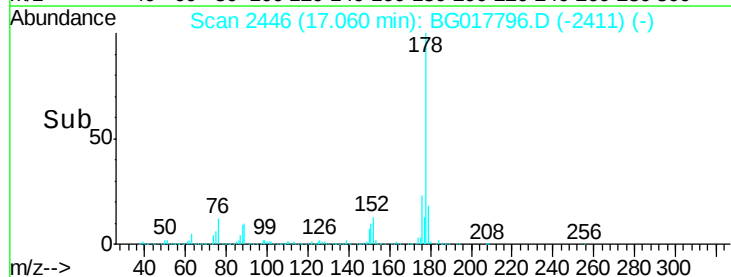
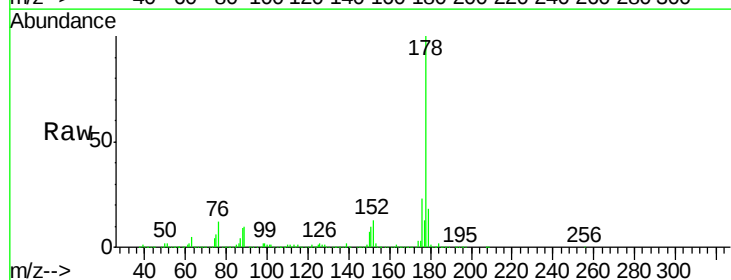
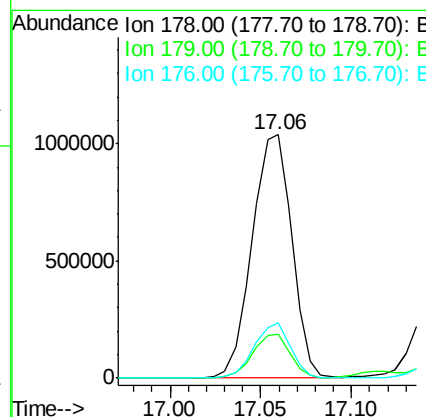
RT: 17.06 min Scan# 2446

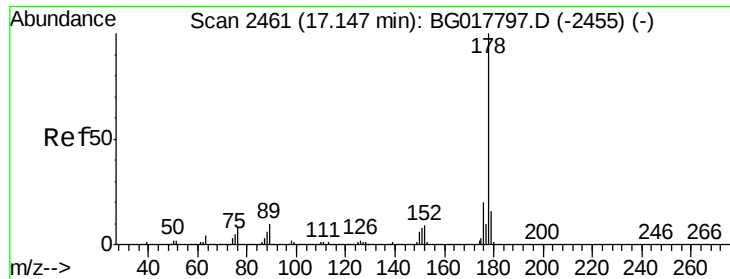
Delta R.T. 0.01 min

Lab File: BG017796.D

Acq: 7 Jul 2015 14:57

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 178   | Resp: | 1579494 |
| Ion Ratio | Lower | Upper |         |
| 178       | 100   |       |         |
| 179       | 18.2  | 13.0  | 19.4    |
| 176       | 22.5  | 17.0  | 25.4    |





#71

Anthracene

Concen: 20.35 ng/ul

RT: 17.15 min Scan# 2461

Delta R.T. 0.00 min

Lab File: BG017796.D

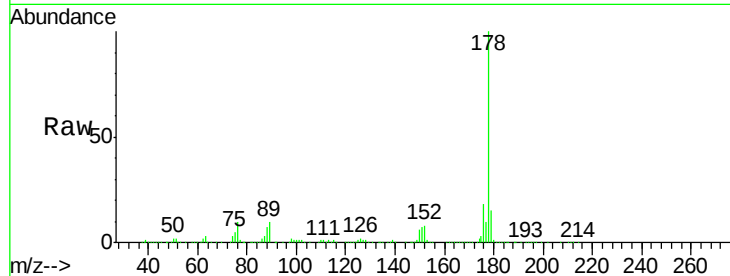
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Instrument :

BNA\_G

ClientSampleId :

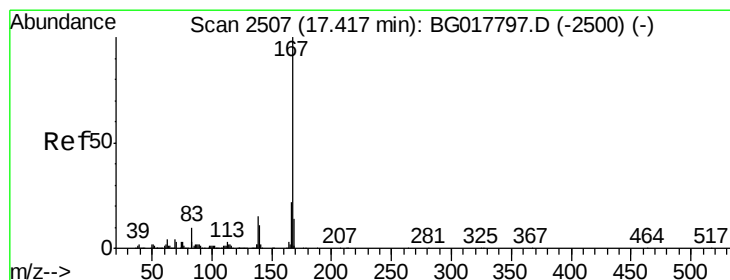
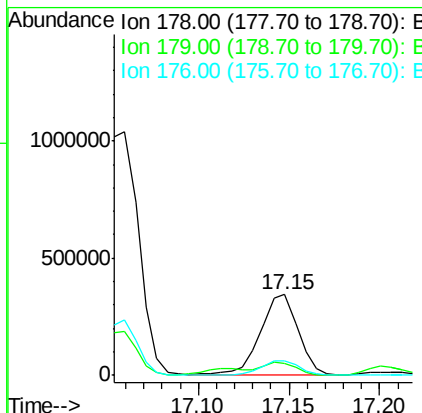
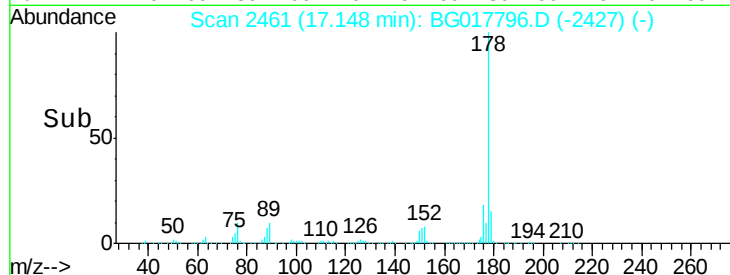
G93K0DL



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.4  | 12.4  | 18.6  |
| 176     | 18.1  | 15.3  | 22.9  |

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#74

Carbazole

Concen: 9.30 ng/ul

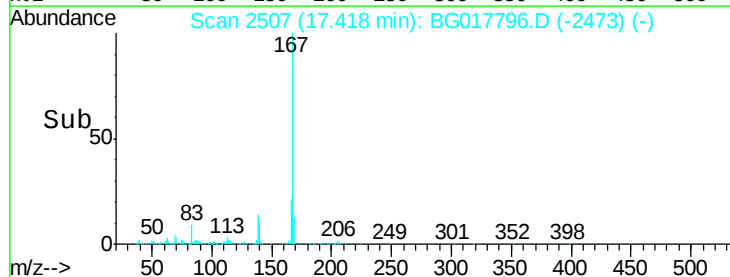
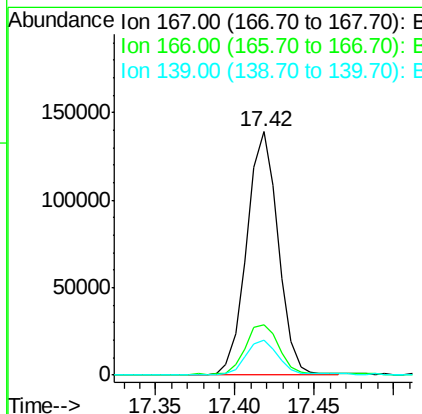
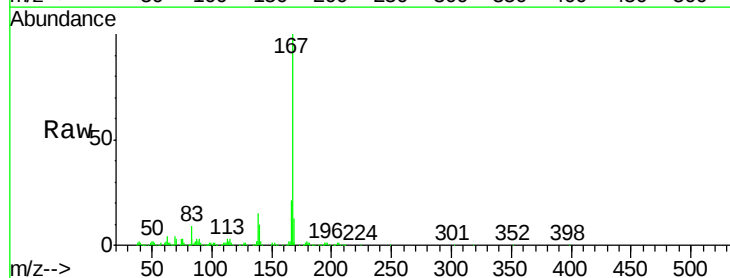
RT: 17.42 min Scan# 2507

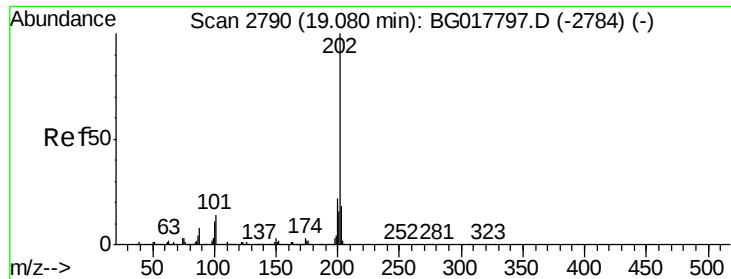
Delta R.T. 0.00 min

Lab File: BG017796.D

Acq: 7 Jul 2015 14:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 20.9  | 18.0  | 27.0  |
| 139     | 14.6  | 11.4  | 17.0  |





#76

Fluoranthene

Concen: 52.20 ng/ul

RT: 19.08 min Scan# 2790

Delta R.T. 0.00 min

Lab File: BG017796.D

Acq: 7 Jul 2015 14:57

Instrument :

BNA\_G

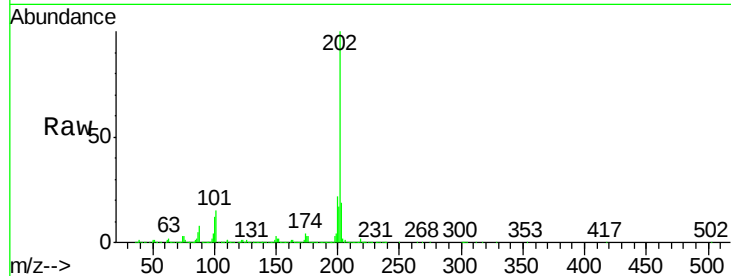
ClientSampleId :

G93K0DL

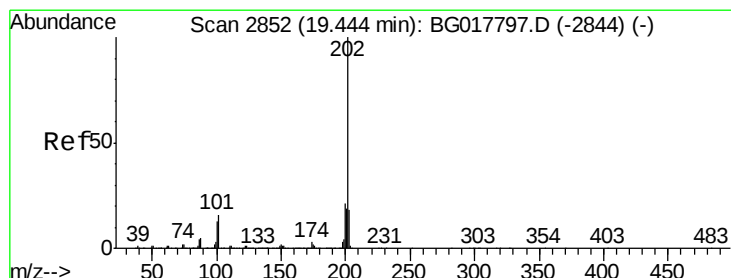
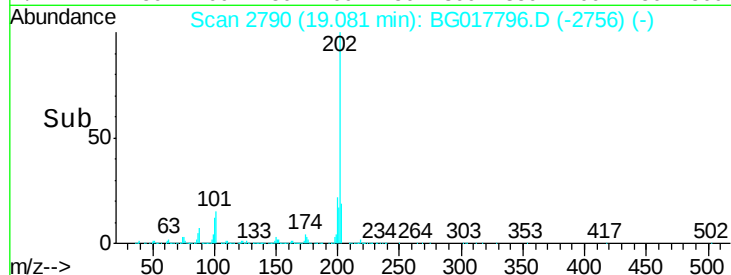
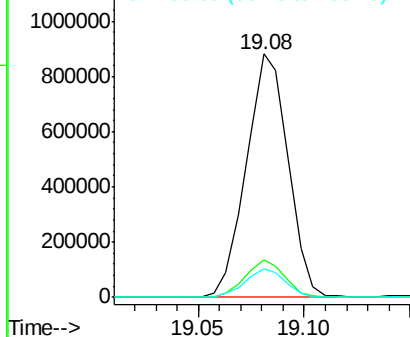
| Tgt | Ion  | Ratio | Lower | Upper |
|-----|------|-------|-------|-------|
| 202 | 100  |       |       |       |
| 101 | 15.4 | 12.6  | 18.8  |       |
| 100 | 11.8 | 9.1   | 13.7  |       |

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Abundance Ion 202.00 (201.70 to 202.70): E  
1200000  
Ion 101.00 (100.70 to 101.70): E  
1000000  
Ion 100.00 (99.70 to 100.70): B



#79

Pyrene

Concen: 39.74 ng/ul

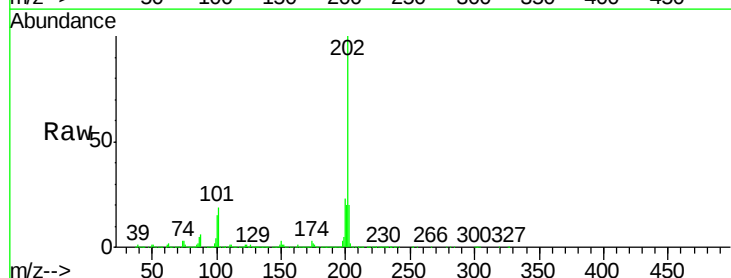
RT: 19.44 min Scan# 2852

Delta R.T. 0.00 min

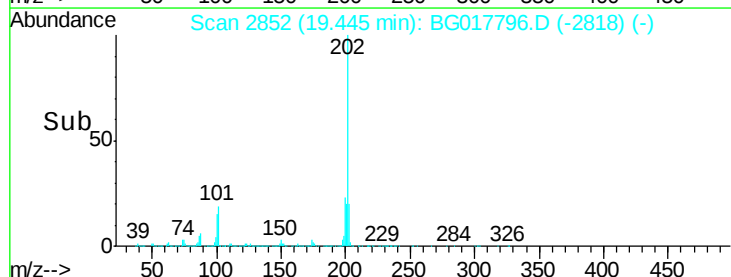
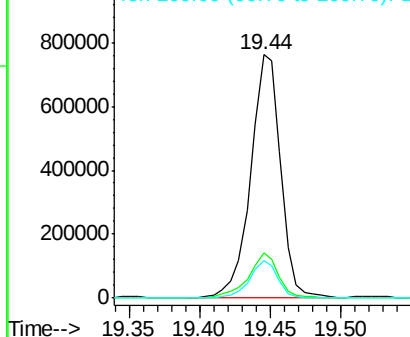
Lab File: BG017796.D

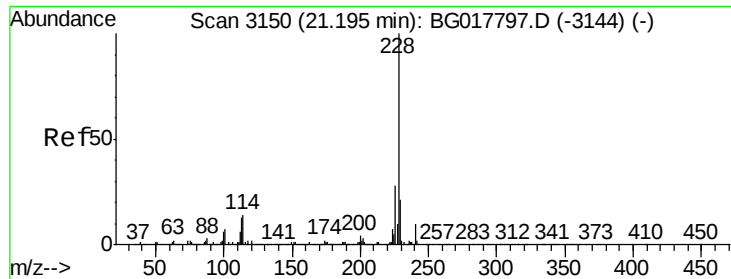
Acq: 7 Jul 2015 14:57

| Tgt | Ion  | Ratio | Lower | Upper |
|-----|------|-------|-------|-------|
| 202 | 100  |       |       |       |
| 101 | 18.7 | 13.1  | 19.7  |       |
| 100 | 15.4 | 11.3  | 16.9  |       |



Abundance Ion 202.00 (201.70 to 202.70): E  
1000000  
Ion 101.00 (100.70 to 101.70): E  
800000  
Ion 100.00 (99.70 to 100.70): B





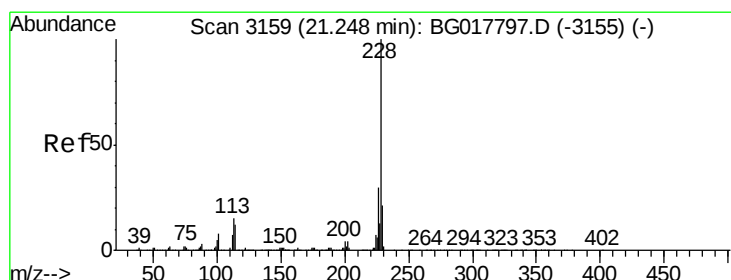
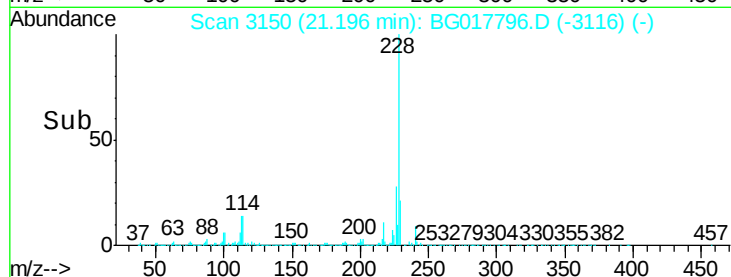
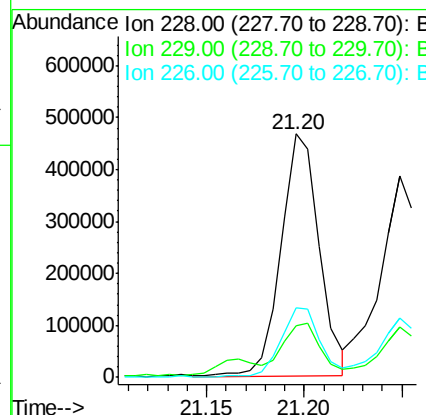
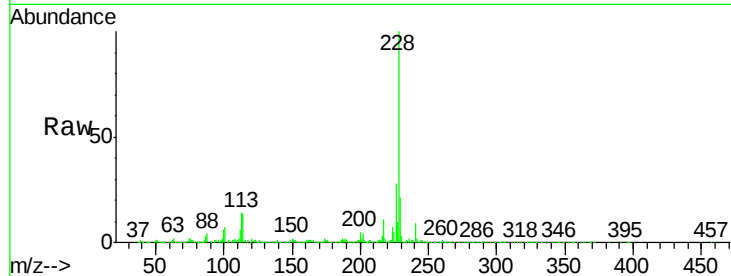
#82  
Benzo(a)anthracene  
Concen: 24.64 ng/ul  
RT: 21.20 min Scan# 3150  
Delta R.T. 0.00 min  
Lab File: BG017796.D  
Acq: 7 Jul 2015 14:57

Instrument :  
BNA\_G  
ClientSampleId :  
G93K0DL

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 228     | 100   |            |            |
| 229     | 21.2  | 15.8       | 23.8       |
| 226     | 28.4  | 22.2       | 33.2       |

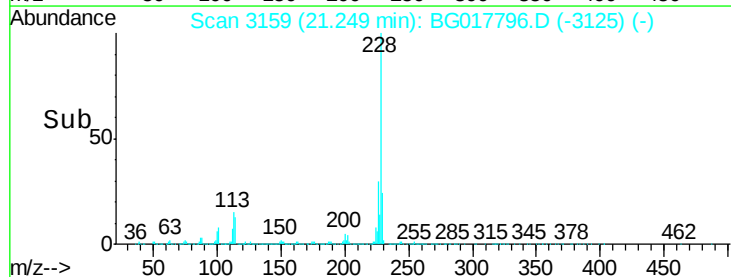
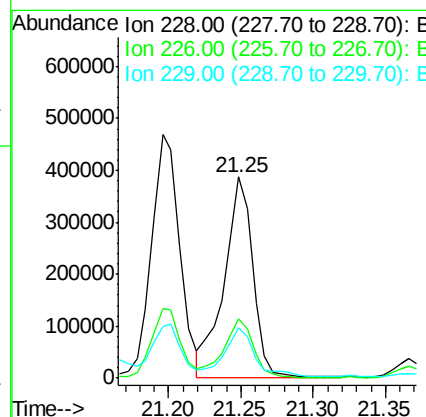
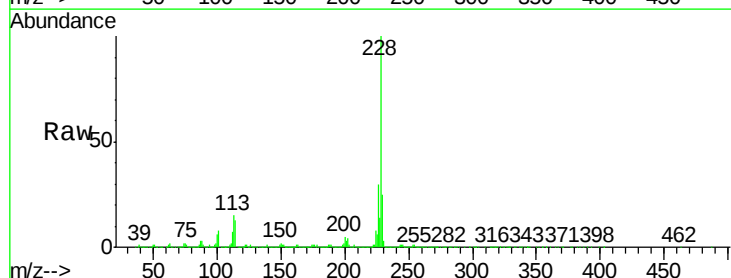
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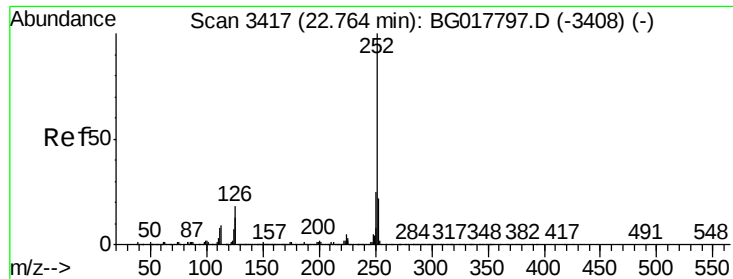
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7/9/2015 8:31:11 AM



#84  
Chrysene  
Concen: 22.27 ng/ul m  
RT: 21.25 min Scan# 3159  
Delta R.T. 0.00 min  
Lab File: BG017796.D  
Acq: 7 Jul 2015 14:57

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 228     | 100   |            |            |
| 226     | 29.8  | 25.6       | 38.4       |
| 229     | 24.9  | 16.4       | 24.6#      |





#87

Benzo(b)fluoranthene

Concen: 21.39 ng/ul

RT: 22.77 min Scan# 3418

Delta R.T. 0.01 min

Lab File: BG017796.D

Acq: 7 Jul 2015 14:57

Instrument :

BNA\_G

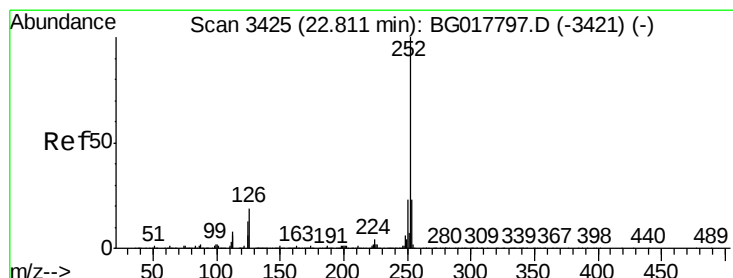
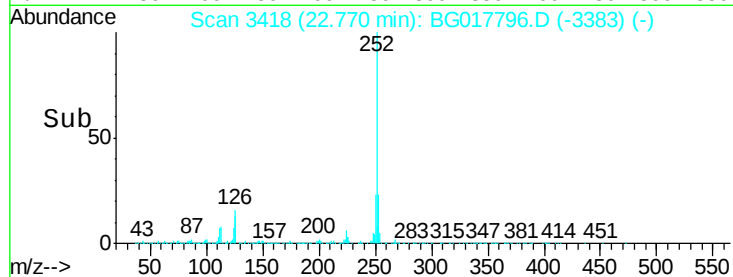
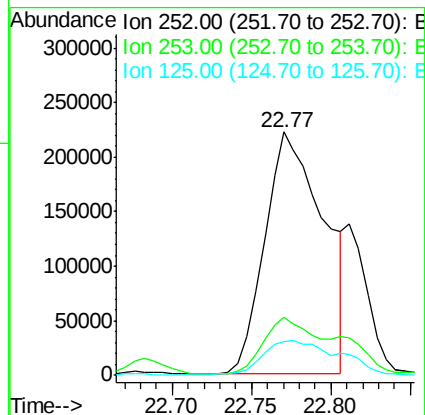
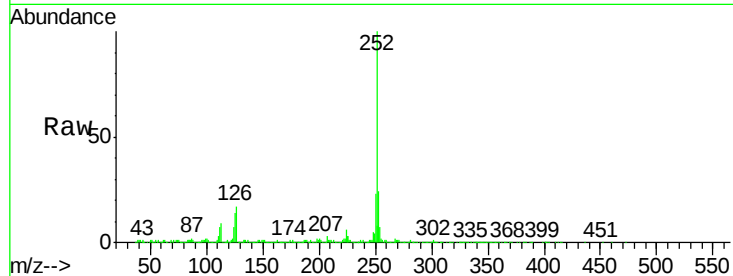
ClientSampleId :

G93K0DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 571516 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.9  | 16.8  | 25.2   |
| 125       | 13.7  | 10.4  | 15.6   |

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#88

Benzo(k)fluoranthene

Concen: 5.50 ng/ul m

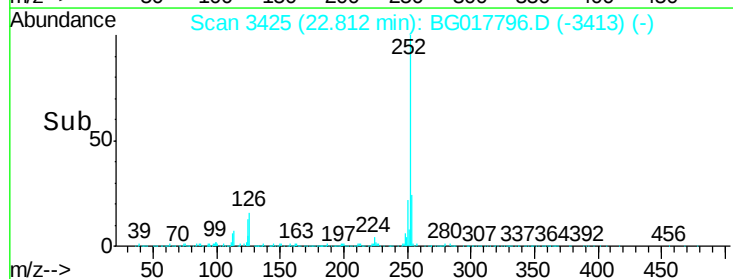
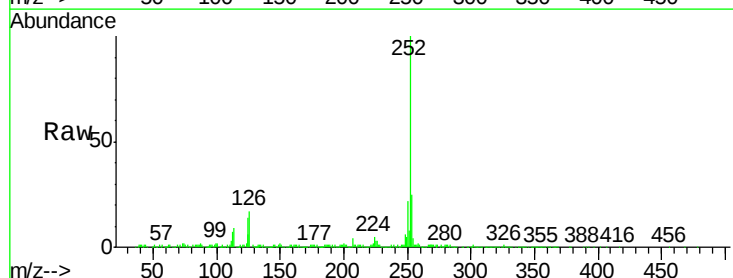
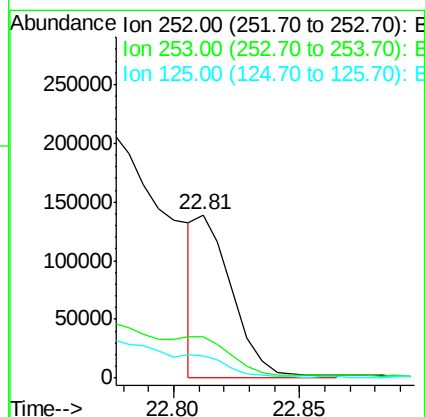
RT: 22.81 min Scan# 3425

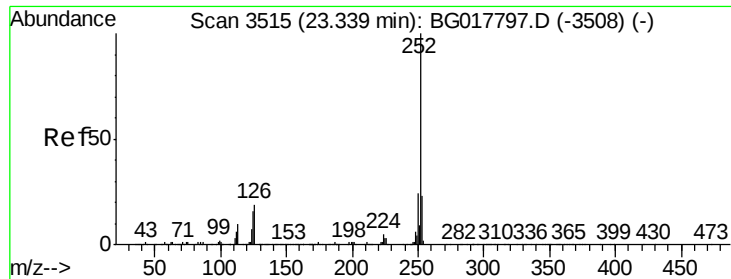
Delta R.T. 0.00 min

Lab File: BG017796.D

Acq: 7 Jul 2015 14:57

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 138537 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 25.2  | 17.6  | 26.4   |
| 125       | 14.0  | 11.6  | 17.4   |





#90

Benzo(a)pyrene

Concen: 16.54 ng/ul

RT: 23.34 min Scan# 3515

Delta R.T. 0.00 min

Lab File: BG017796.D

Acq: 7 Jul 2015 14:57

Instrument :

BNA\_G

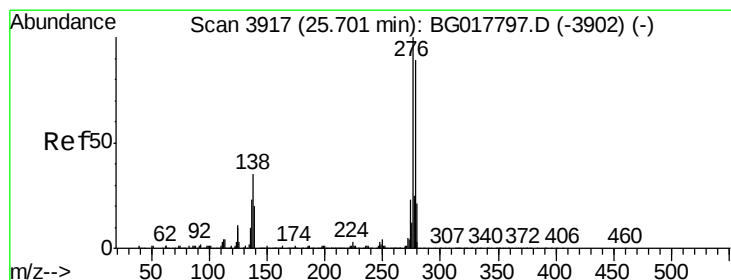
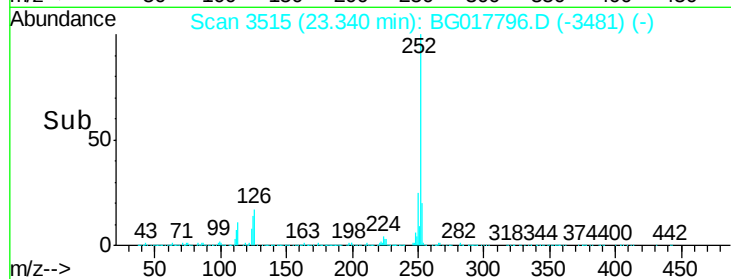
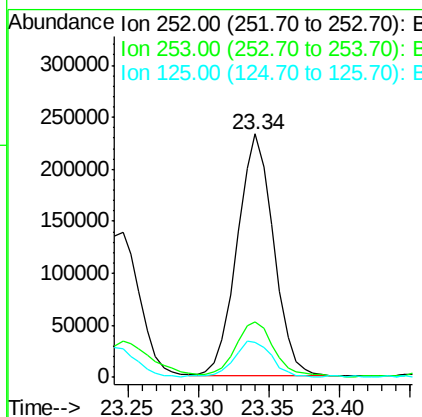
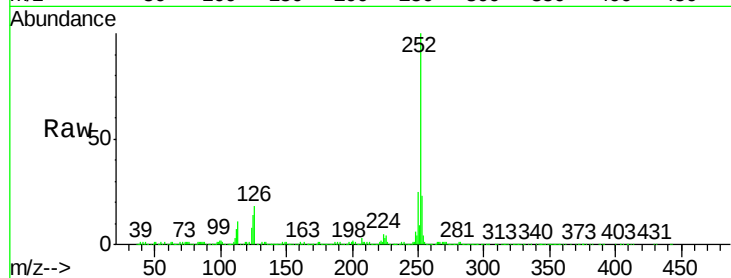
ClientSampleId :

G93K0DL

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 420032 |       |       |
| 253     | 22.8  | 18.3   | 27.5  |       |
| 125     | 14.2  | 12.1   | 18.1  |       |

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#91

Indeno(1,2,3-cd)pyrene

Concen: 6.29 ng/ul

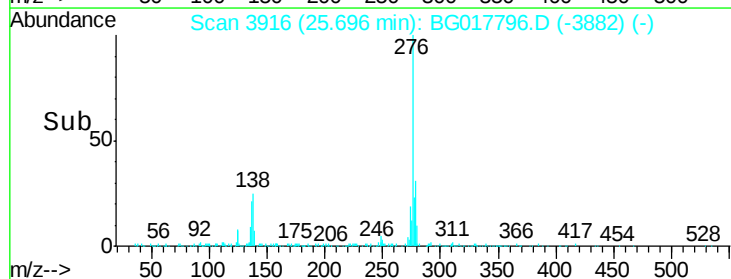
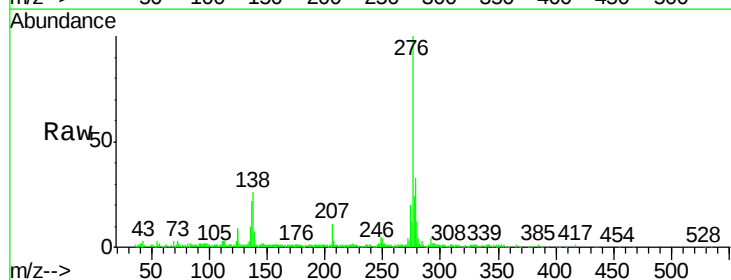
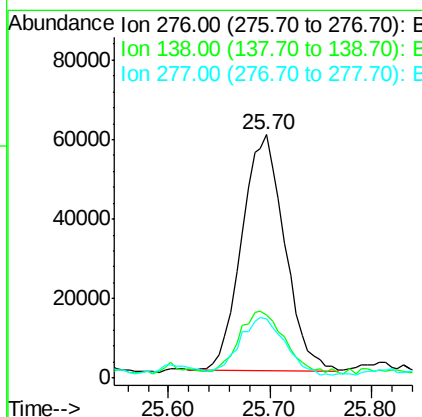
RT: 25.70 min Scan# 3916

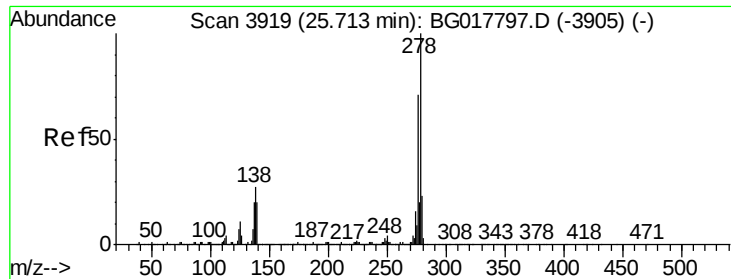
Delta R.T. 0.00 min

Lab File: BG017796.D

Acq: 7 Jul 2015 14:57

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 276     | 100   | 174390 |       |       |
| 138     | 25.8  | 26.1   | 39.1# |       |
| 277     | 24.4  | 20.9   | 31.3  |       |





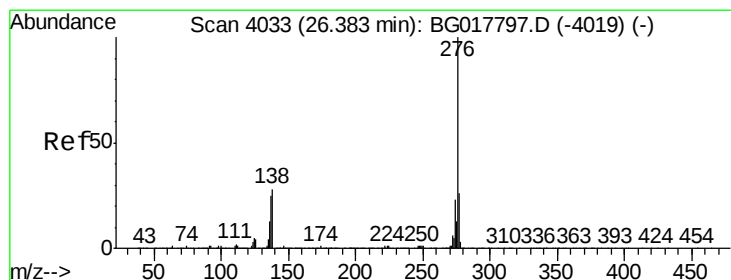
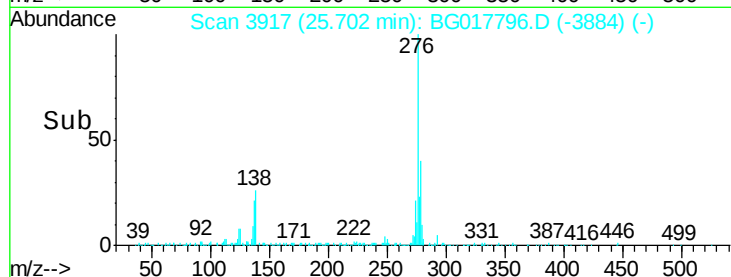
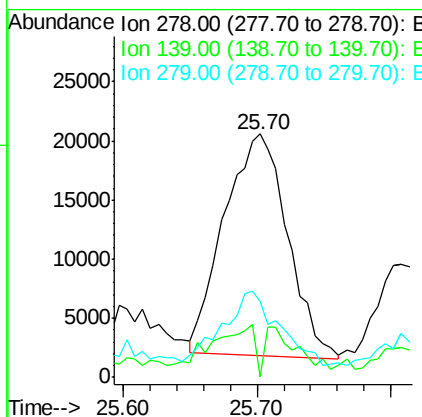
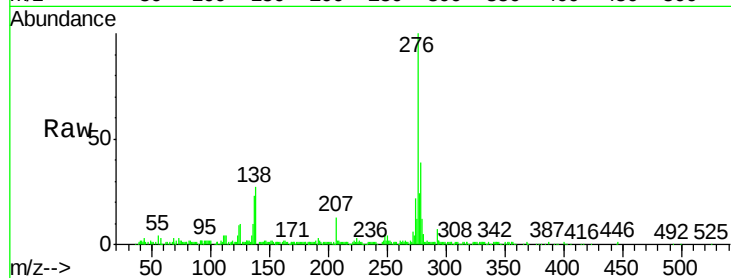
#92  
Dibenzo(a,h)anthracene  
Concen: 2.63 ng/ul m  
RT: 25.70 min Scan# 3917  
Delta R.T. -0.01 min  
Lab File: BG017796.D  
Acq: 7 Jul 2015 14:57

Instrument :  
BNA\_G  
ClientSampleId :  
G93K0DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 16.3  | 24.5# |
| 279     | 31.3  | 18.7  | 28.1# |

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#93  
Benzo(g,h,i)perylene  
Concen: 6.68 ng/ul  
RT: 26.39 min Scan# 4034  
Delta R.T. 0.01 min  
Lab File: BG017796.D  
Acq: 7 Jul 2015 14:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 28.6  | 25.1  | 37.7  |
| 277     | 22.1  | 18.7  | 28.1  |

