

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG041416\  
 Data File : BG021685.D  
 Acq On : 15 Apr 2016 13:20  
 Operator : UM/SJ  
 Sample : H2412-07 2X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SP-7W(0-2)B

Manual Integrations  
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Quant Time: Apr 15 16:26:29 2016  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\8270-BG041316.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Apr 13 15:48:13 2016  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 8.22  | 152  | 43637    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 11.03 | 136  | 194461   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 14.82 | 164  | 108412   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 17.56 | 188  | 218162   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 21.83 | 240  | 246746   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12            | 25.18 | 264  | 223527   | 20.00 | ng    | 0.02     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.77  | 112  | 208027   | 79.39 | ng    | 0.01     |
| 7) Phenol-d6                | 7.37  | 99   | 304688   | 77.84 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 9.39  | 82   | 193625   | 51.18 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 16.30 | 330  | 91189    | 78.05 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 13.45 | 172  | 396917   | 53.64 | ng    | 0.00     |
| 78) Terphenyl-d14           | 20.15 | 244  | 473186   | 47.85 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 49) Dimethylphthalate       | 14.27 | 163  | 51111    | 5.45  | ng    | 99       |
| 70) Phenanthrene            | 17.60 | 178  | 178419   | 14.84 | ng    | 98       |
| 71) Anthracene              | 17.69 | 178  | 41306    | 3.38  | ng    | 98       |
| 74) Fluoranthene            | 19.59 | 202  | 341752   | 23.80 | ng    | 98       |
| 77) Pyrene                  | 19.96 | 202  | 349138   | 24.54 | ng    | 99       |
| 80) Benzo(a)anthracene      | 21.82 | 228  | 190266   | 13.40 | ng    | 95       |
| 82) Chrysene                | 21.88 | 228  | 183363   | 13.44 | ng    | 96       |
| 85) Indeno(1,2,3-cd)pyrene  | 28.98 | 276  | 79452    | 4.90  | ng    | 96       |
| 87) Benzo(b)fluoranthene    | 24.11 | 252  | 246578   | 19.01 | ng    | # 92     |
| 88) Benzo(k)fluoranthene    | 24.18 | 252  | 93905m   | 7.40  | ng    |          |
| 89) Benzo(a)pyrene          | 25.02 | 252  | 188212   | 14.98 | ng    | 95       |
| 91) Benzo(g,h,i)perylene    | 30.19 | 276  | 60822    | 4.92  | ng    | # 91     |

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

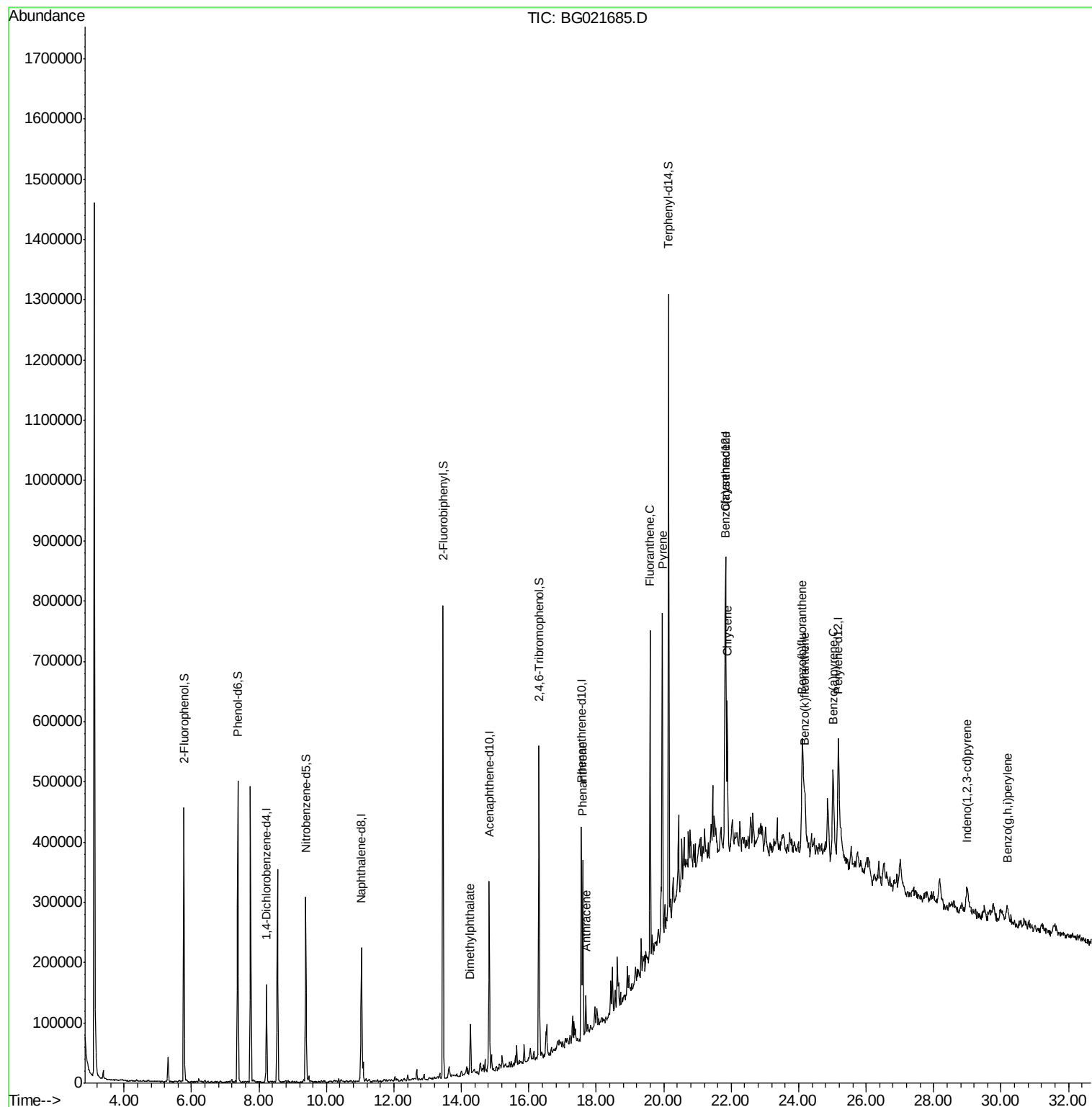
Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG041416\  
Data File : BG021685.D  
Acq On : 15 Apr 2016 13:20  
Operator : UM/SJ  
Sample : H2412-07 2X  
Misc :  
ALS Vial : 24 Sample Multiplier: 1

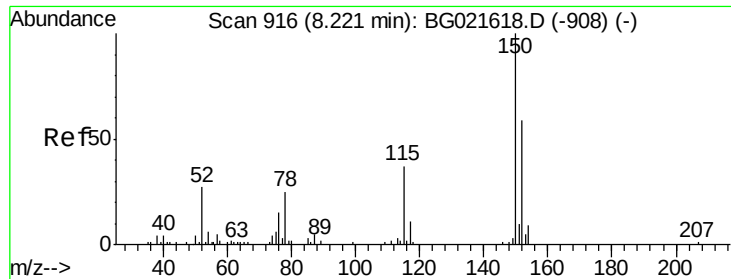
Instrument :  
BNA\_G  
ClientSampleID :  
SP-7W(0-2)B

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Quant Time: Apr 15 16:26:29 2016  
Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\8270-BG041316.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Apr 13 15:48:13 2016  
Response via : Initial Calibration





#1

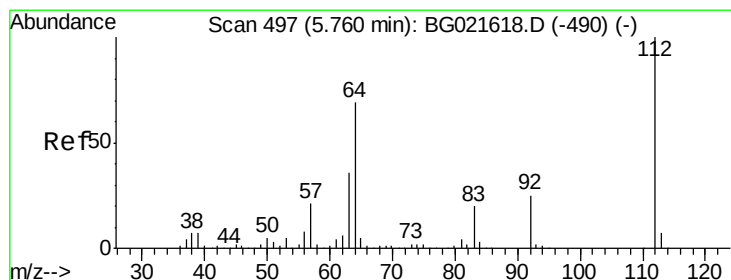
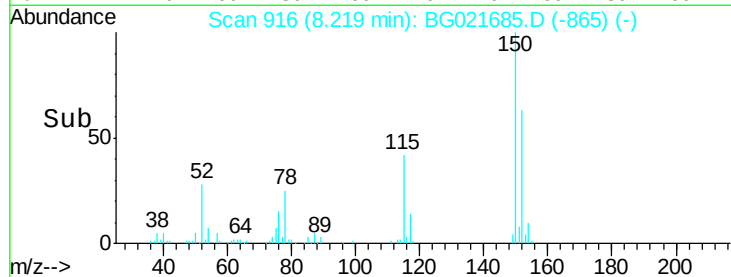
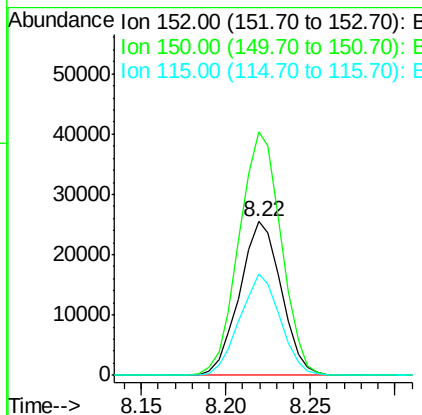
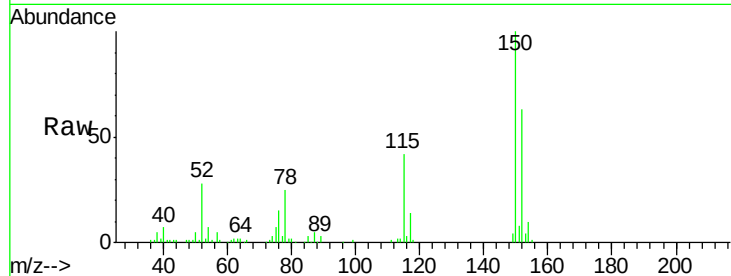
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 8.22 min Scan# 916  
Delta R.T. -0.00 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

Instrument :  
BNA\_G  
ClientSampleId :  
SP-7W(0-2)B

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.2 | 130.1 | 195.1 |
| 115     | 66.4  | 62.2  | 93.2  |

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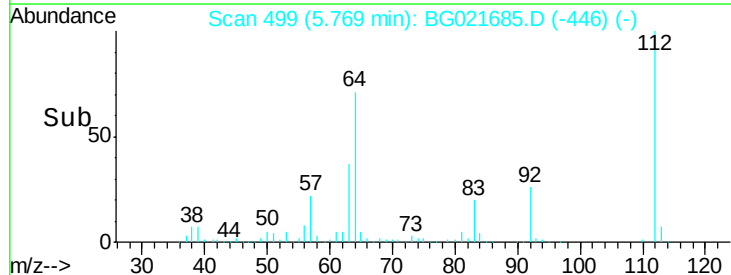
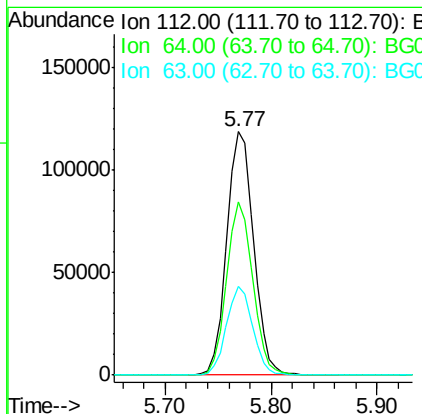
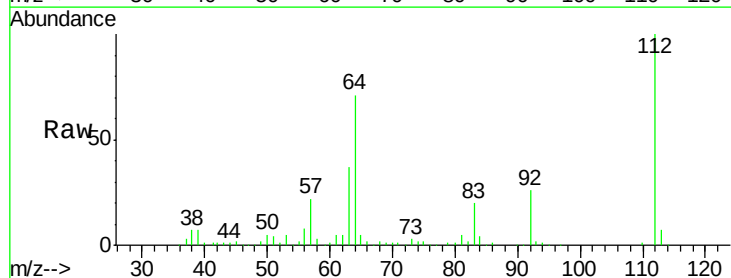
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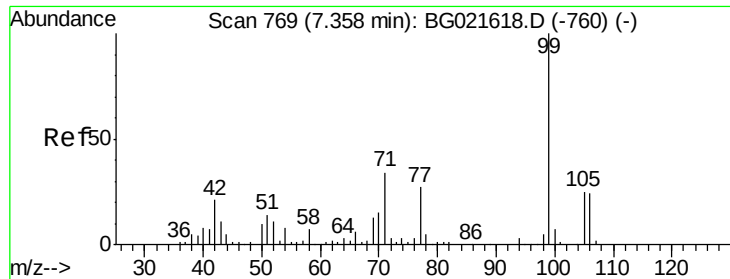


#5

2-Fluorophenol  
Concen: 79.39 ng  
RT: 5.77 min Scan# 499  
Delta R.T. 0.01 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 71.1  | 51.1  | 76.7  |
| 63      | 36.5  | 24.6  | 37.0  |





#7

Phenol-d6

Concen: 77.84 ng

RT: 7.37 min Scan# 771

Delta R.T. 0.01 min

Lab File: BG021685.D

Acq: 15 Apr 2016 13:20

Instrument :

BNA\_G

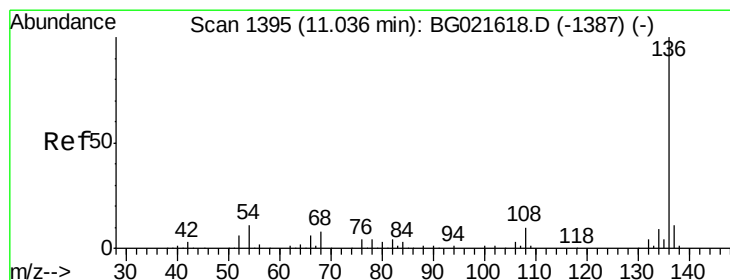
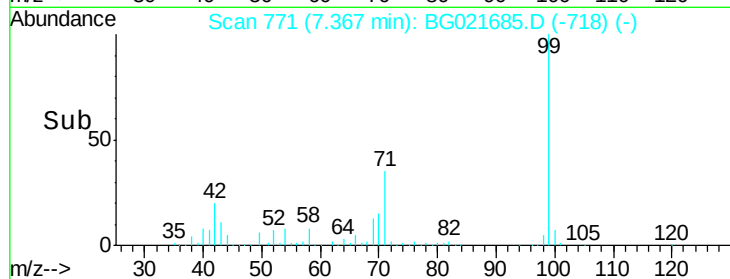
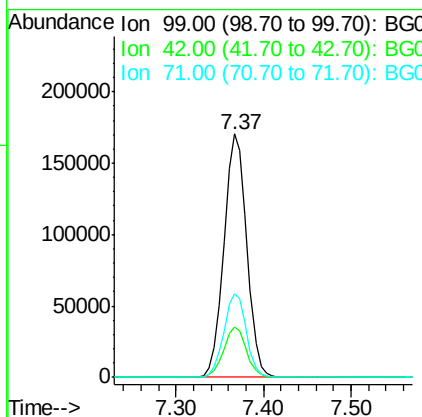
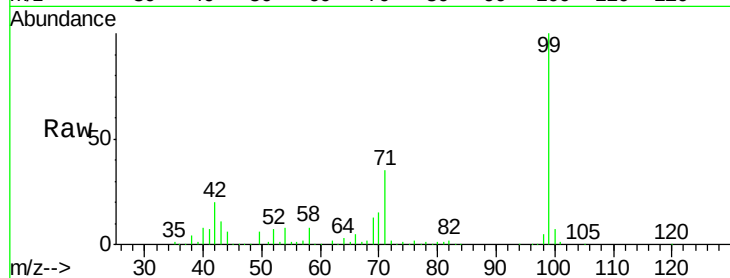
ClientSampleId :

SP-7W(0-2)B

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 99    | Resp: | 304688 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 20.4  | 16.4  | 24.6   |
| 71        | 34.5  | 25.0  | 37.4   |

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#21

Naphthalene-d8

Concen: 20.00 ng

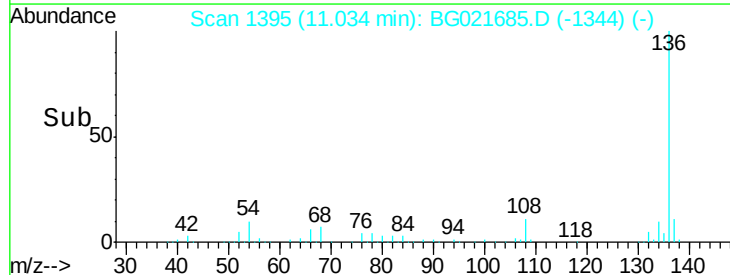
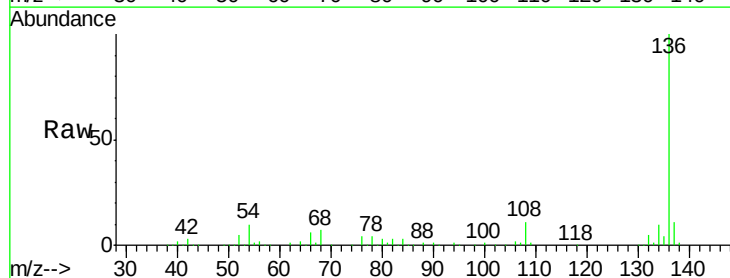
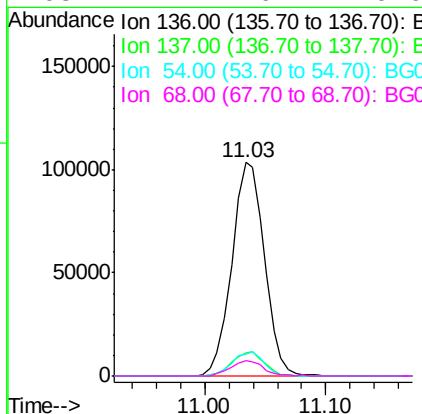
RT: 11.03 min Scan# 1395

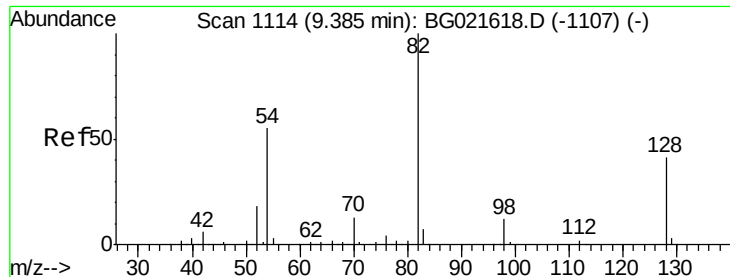
Delta R.T. -0.00 min

Lab File: BG021685.D

Acq: 15 Apr 2016 13:20

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 194461 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 11.0  | 9.0   | 13.4   |
| 54        | 10.5  | 9.6   | 14.4   |
| 68        | 7.4   | 6.4   | 9.6    |





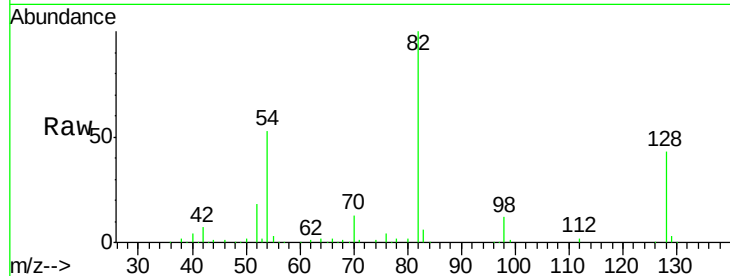
#23  
 Nitrobenzene-d5  
 Concen: 51.18 ng  
 RT: 9.39 min Scan# 1115  
 Delta R.T. 0.00 min  
 Lab File: BG021685.D  
 Acq: 15 Apr 2016 13:20

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SP-7W(0-2)B

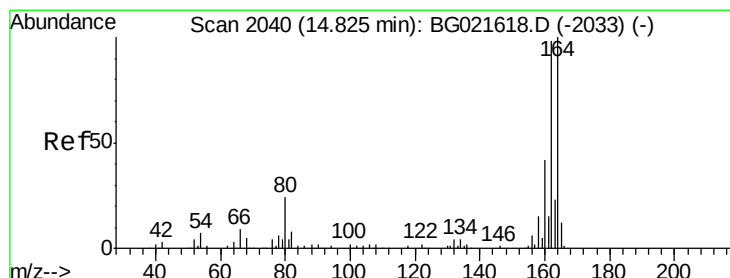
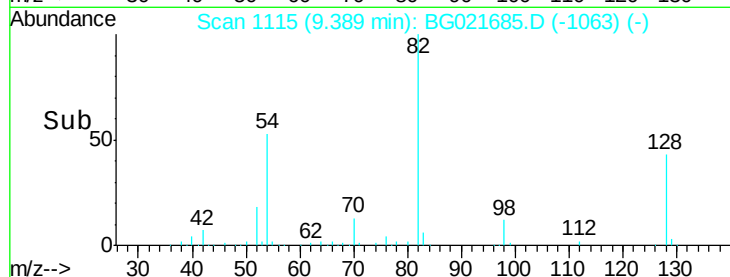
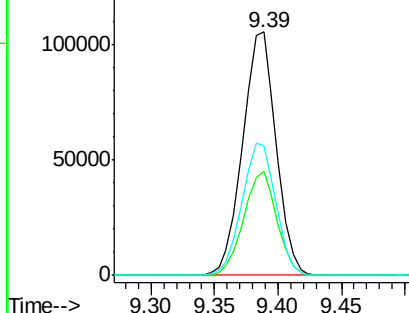
| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 82      | 100   | 193625 |       |       |
| 128     | 42.5  | 33.4   | 50.0  |       |
| 54      | 53.5  | 46.1   | 69.1  |       |

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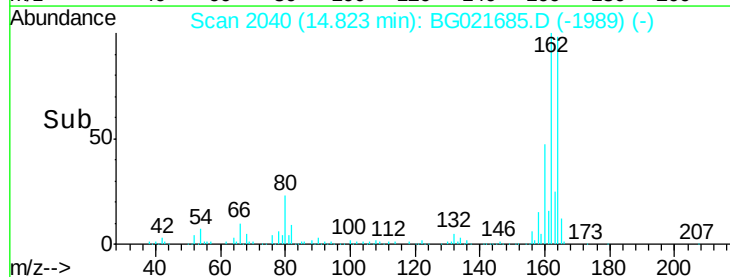
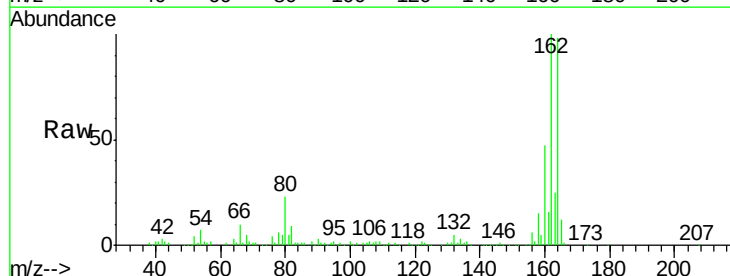
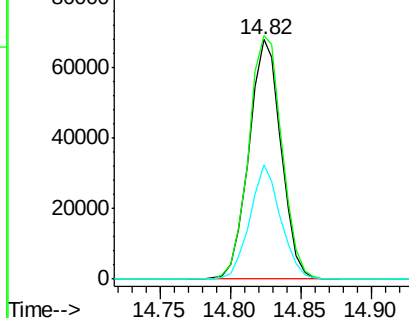
Abundance Ion 82.00 (81.70 to 82.70): BGC  
 Ion 128.00 (127.70 to 128.70): BGC  
 Ion 54.00 (53.70 to 54.70): BGC

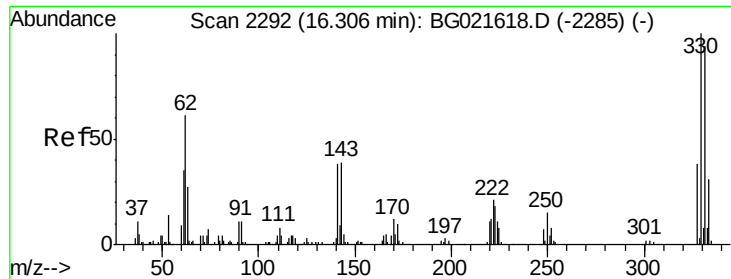


#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 14.82 min Scan# 2040  
 Delta R.T. -0.00 min  
 Lab File: BG021685.D  
 Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 164     | 100   | 108412 |       |       |
| 162     | 101.6 | 78.0   | 117.0 |       |
| 160     | 47.9  | 32.9   | 49.3  |       |

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





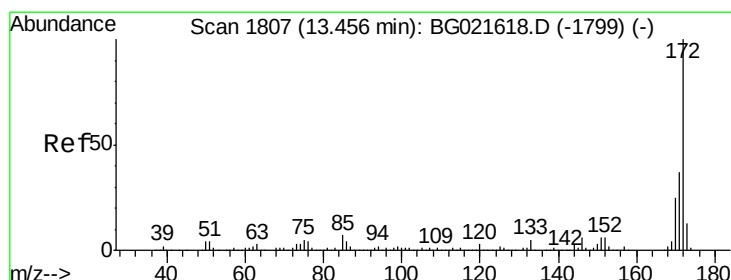
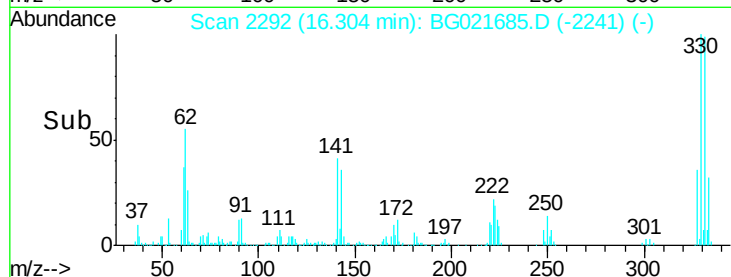
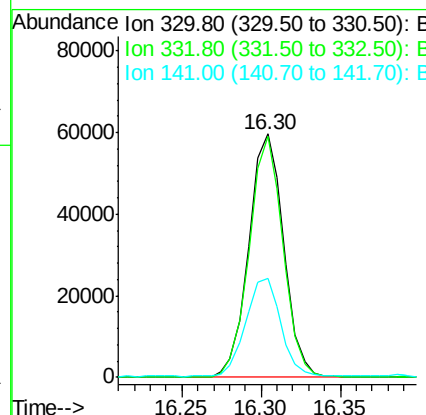
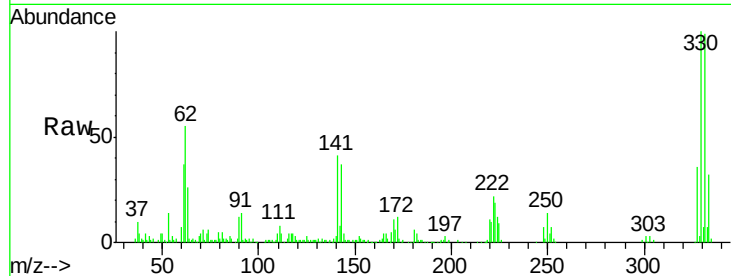
#41  
 2,4,6-Tribromophenol  
 Concen: 78.05 ng  
 RT: 16.30 min Scan# 2292  
 Delta R.T. -0.00 min  
 Lab File: BG021685.D  
 Acq: 15 Apr 2016 13:20

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SP-7W(0-2)B

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 330     | 100   | 91189 |       |       |
| 332     | 95.8  | 78.0  | 117.0 |       |
| 141     | 40.7  | 33.8  | 50.8  |       |

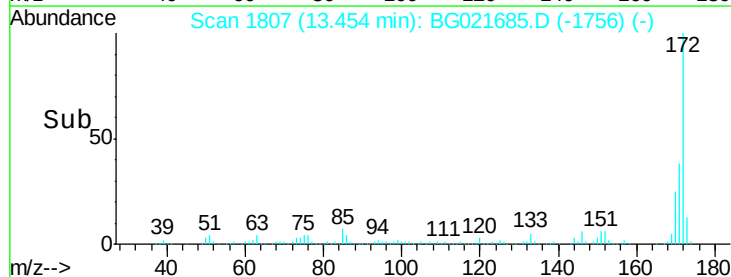
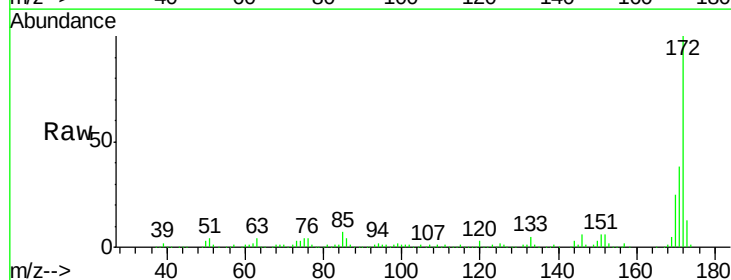
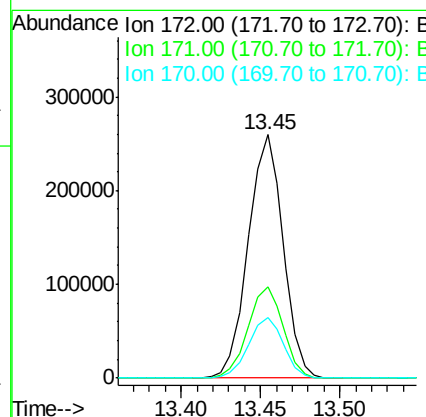
Manual Integrations  
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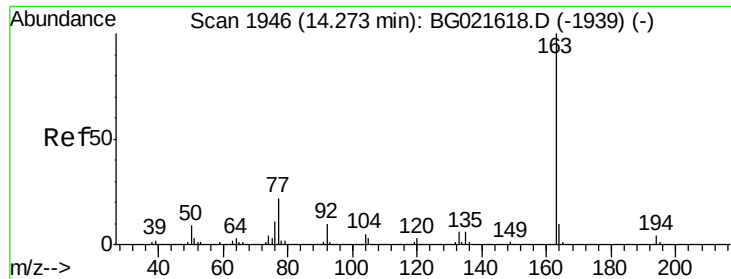
Sohil  
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#44  
 2-Fluorobiphenyl  
 Concen: 53.64 ng  
 RT: 13.45 min Scan# 1807  
 Delta R.T. -0.00 min  
 Lab File: BG021685.D  
 Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 396917 |       |       |
| 171     | 37.6  | 27.8   | 41.6  |       |
| 170     | 24.9  | 19.6   | 29.4  |       |





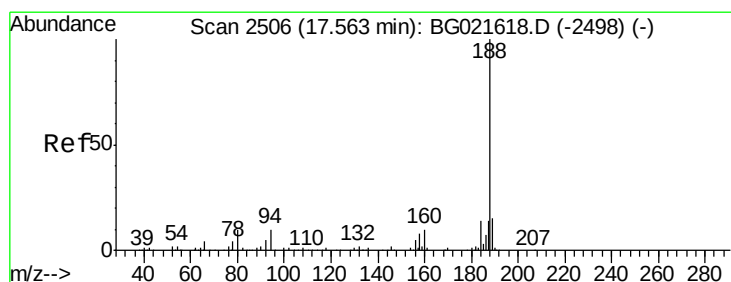
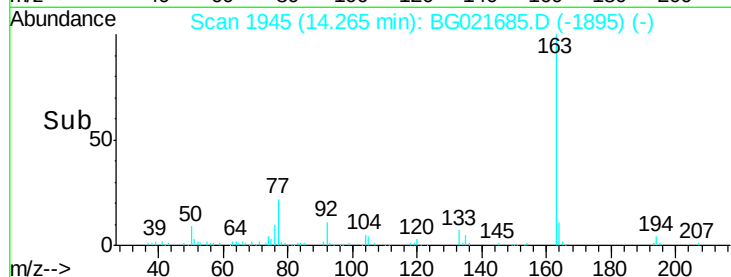
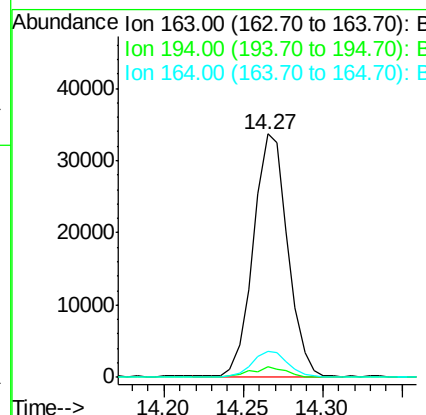
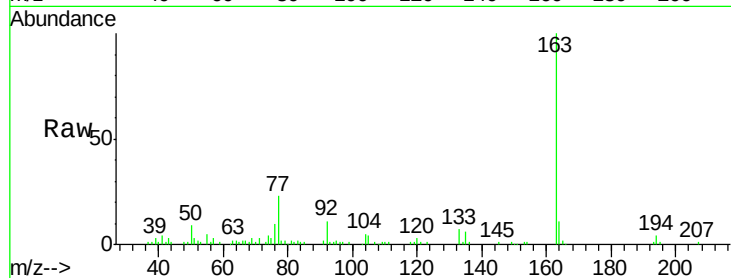
#49  
Dimethylphthalate  
Concen: 5.45 ng  
RT: 14.27 min Scan# 1945  
Delta R.T. -0.01 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

Instrument :  
BNA\_G  
ClientSampleId :  
SP-7W(0-2)B

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 163     | 100   | 51111 |       |       |
| 194     | 4.4   | 3.0   | 4.6   |       |
| 164     | 10.5  | 8.1   | 12.1  |       |

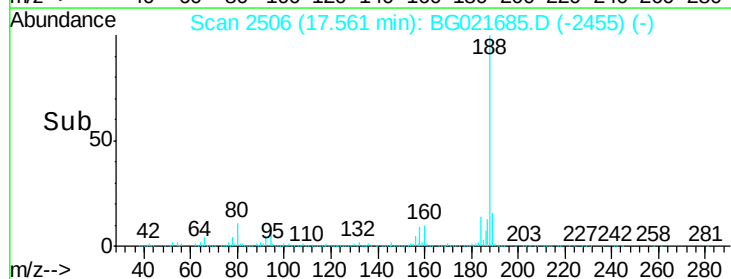
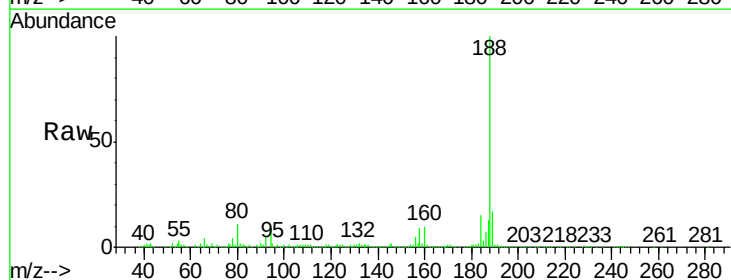
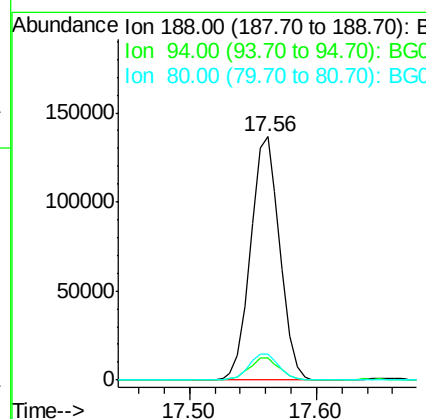
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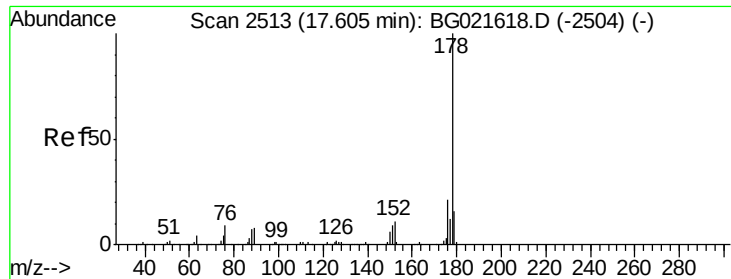
Sohil  
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#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 17.56 min Scan# 2506  
Delta R.T. -0.00 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 188     | 100   | 218162 |       |       |
| 94      | 8.9   | 7.5    | 11.3  |       |
| 80      | 10.8  | 8.6    | 13.0  |       |





#70

Phenanthrene

Concen: 14.84 ng

RT: 17.60 min Scan# 2513

Delta R.T. -0.00 min

Lab File: BG021685.D

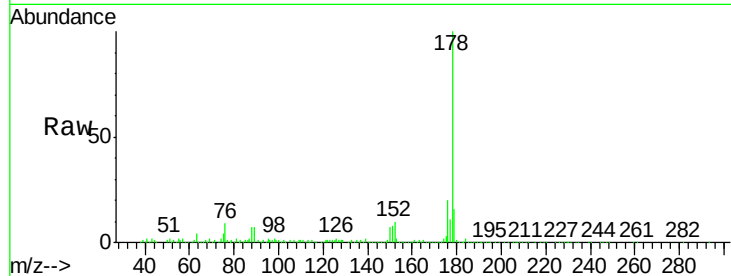
Acq: 15 Apr 2016 13:20

Instrument :

BNA\_G

ClientSampleId :

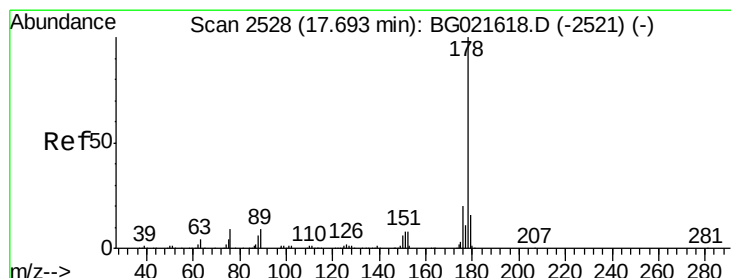
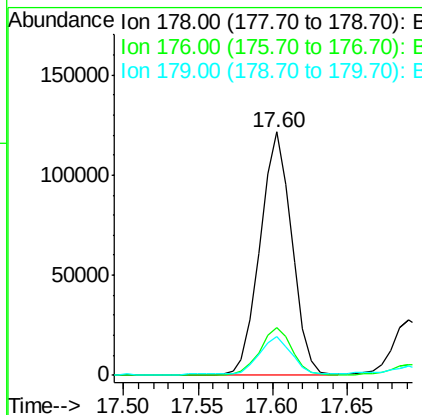
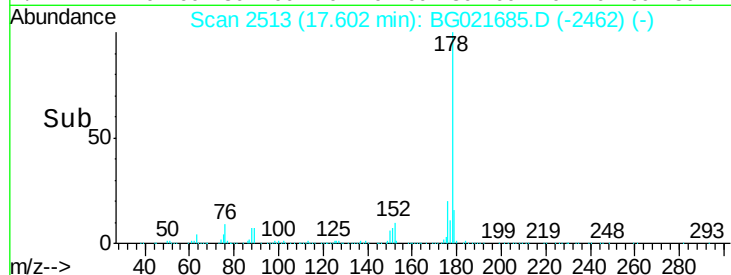
SP-7W(0-2)B



|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 178   | Resp: | 178419 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 176       | 19.6  | 16.2  | 24.4   |
| 179       | 15.9  | 12.0  | 18.0   |

Manual Integrations  
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#71

Anthracene

Concen: 3.38 ng

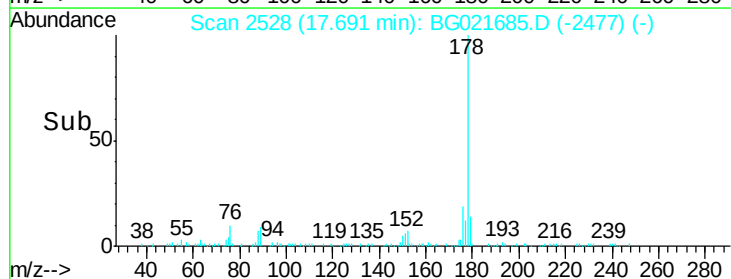
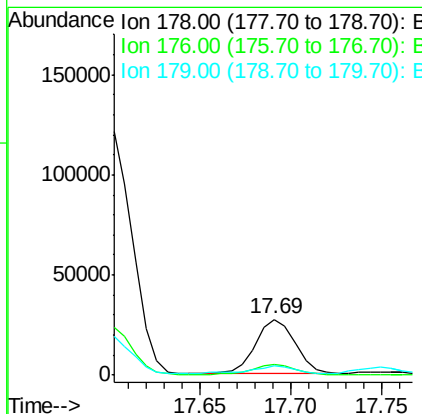
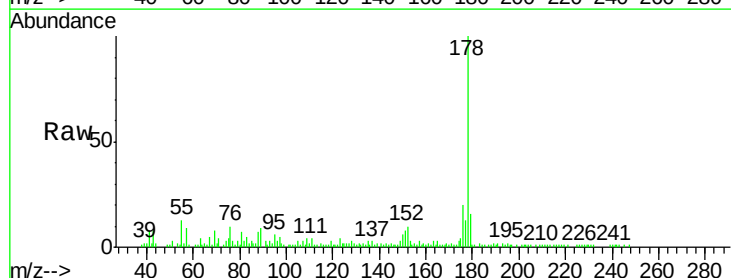
RT: 17.69 min Scan# 2528

Delta R.T. -0.00 min

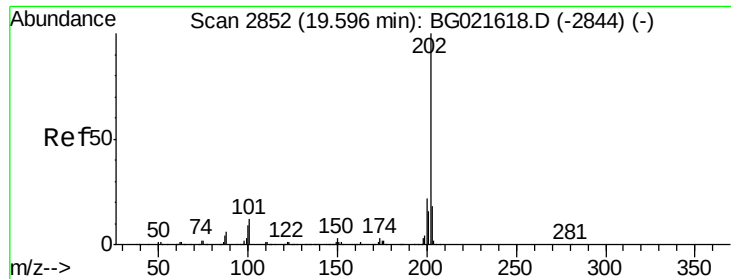
Lab File: BG021685.D

Acq: 15 Apr 2016 13:20

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 41306 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 176       | 19.7  | 15.0  | 22.4  |
| 179       | 15.8  | 12.2  | 18.4  |







#74

Fluoranthene

Concen: 23.80 ng

RT: 19.59 min Scan# 2852

Delta R.T. -0.00 min

Lab File: BG021685.D

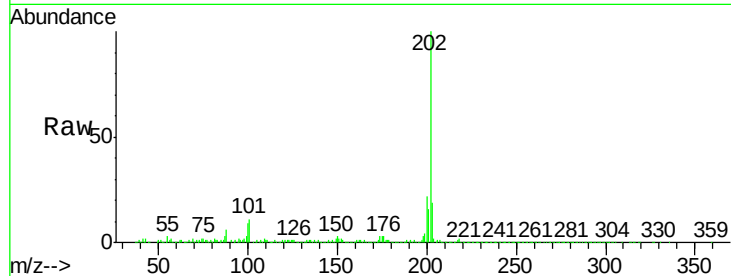
Acq: 15 Apr 2016 13:20

Instrument :

BNA\_G

ClientSampleId :

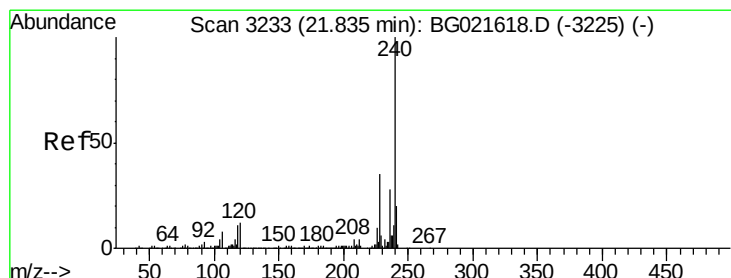
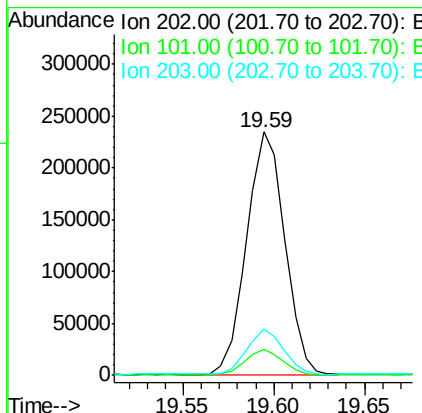
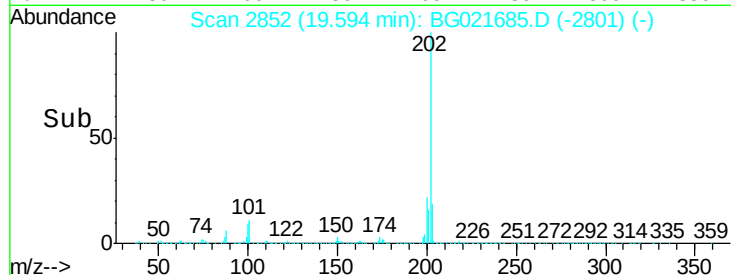
SP-7W(0-2)B



| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 341752 |       |       |
| 101     | 10.7  | 0.0    | 31.0  |       |
| 203     | 18.9  | 0.0    | 37.9  |       |

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#75

Chrysene-d12

Concen: 20.00 ng

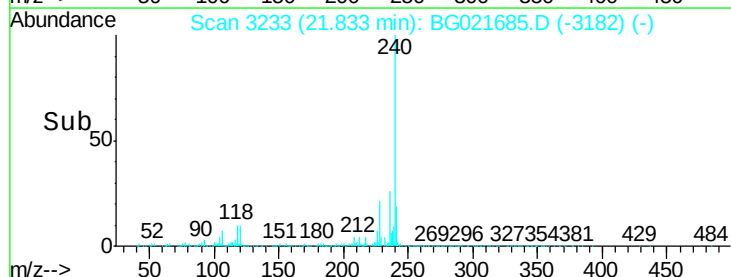
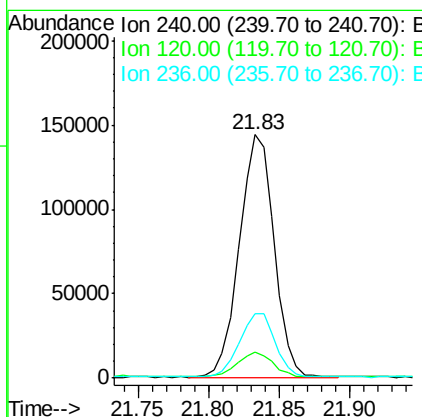
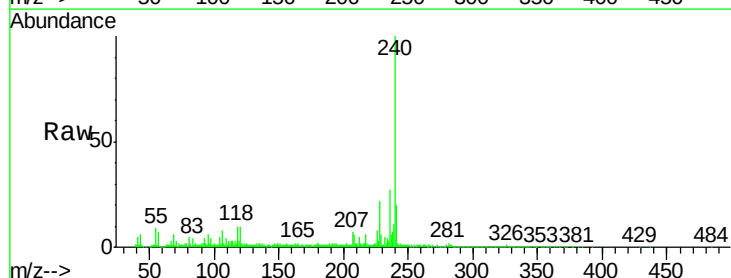
RT: 21.83 min Scan# 3233

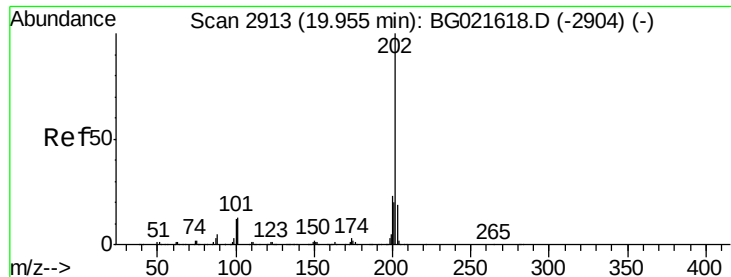
Delta R.T. -0.00 min

Lab File: BG021685.D

Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 246746 |       |       |
| 120     | 10.5  | 8.4    | 12.6  |       |
| 236     | 26.6  | 19.6   | 29.4  |       |





#77

Pyrene

Concen: 24.54 ng

RT: 19.96 min Scan# 2914

Delta R.T. 0.00 min

Lab File: BG021685.D

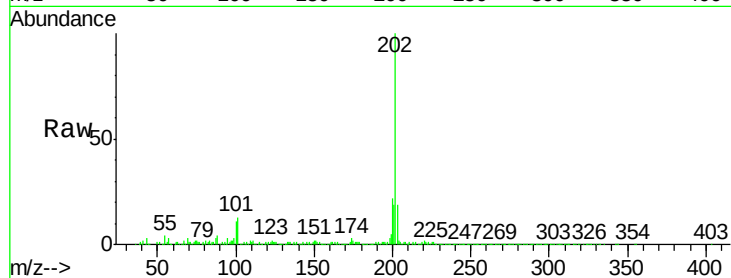
Acq: 15 Apr 2016 13:20

Instrument :

BNA\_G

ClientSampleId :

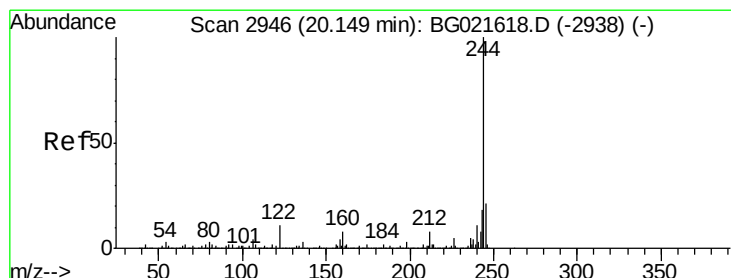
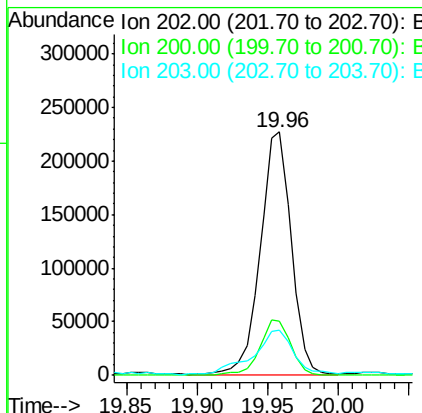
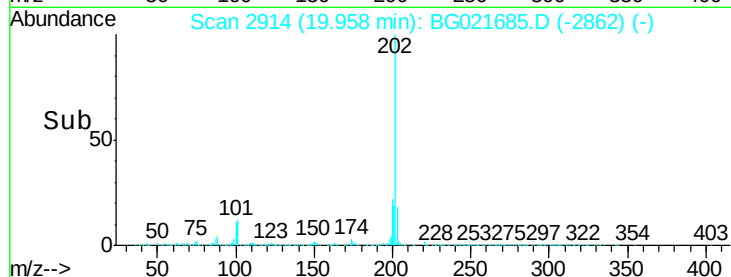
SP-7W(0-2)B



| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 202     | 100   |      |       |       |
| 200     | 22.0  | 18.2 | 27.2  |       |
| 203     | 18.6  | 15.0 | 22.4  |       |

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#78

Terphenyl-d14

Concen: 47.85 ng

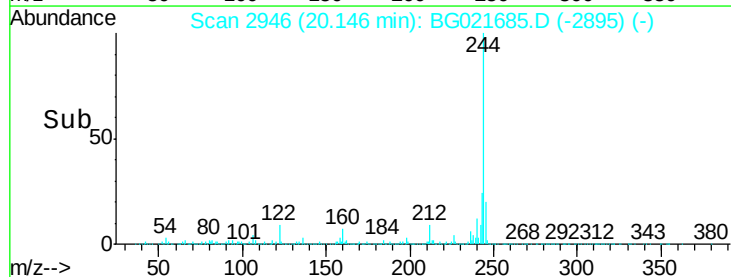
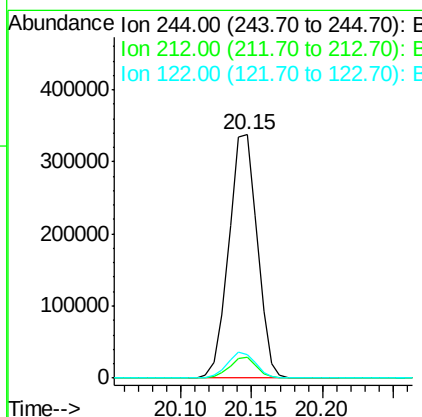
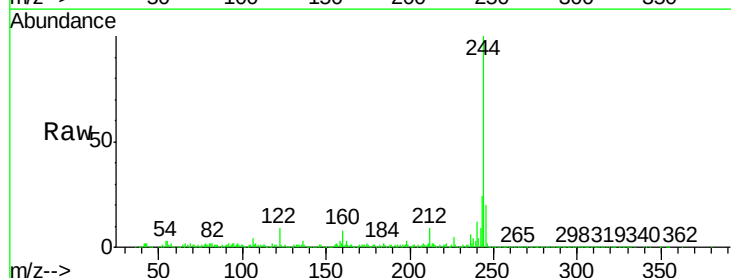
RT: 20.15 min Scan# 2946

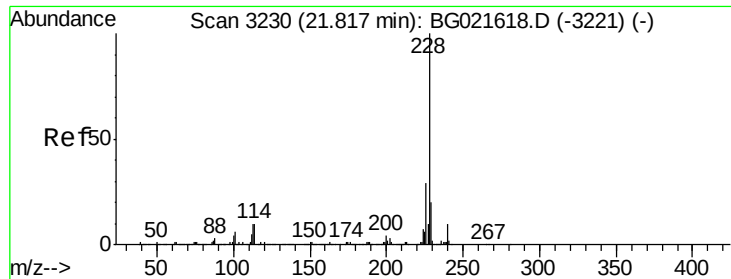
Delta R.T. -0.00 min

Lab File: BG021685.D

Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 244     | 100   |      |       |       |
| 212     | 8.7   | 6.5  | 9.7   |       |
| 122     | 9.5   | 8.6  | 12.8  |       |





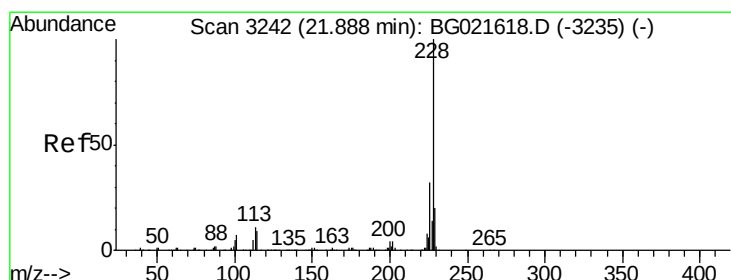
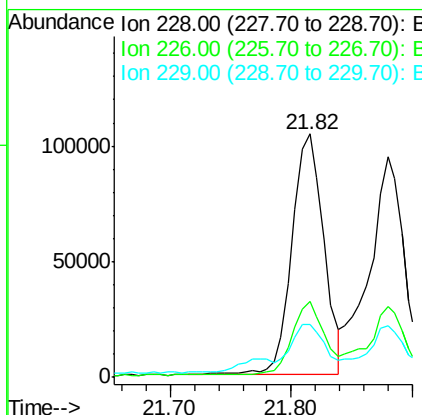
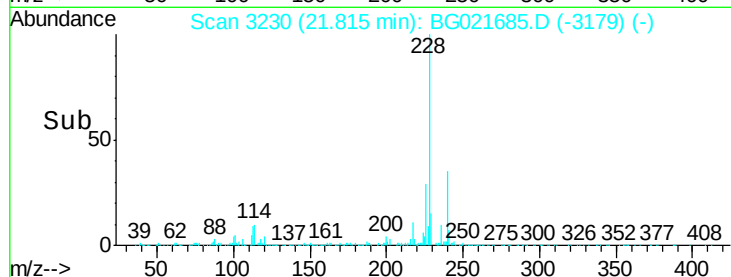
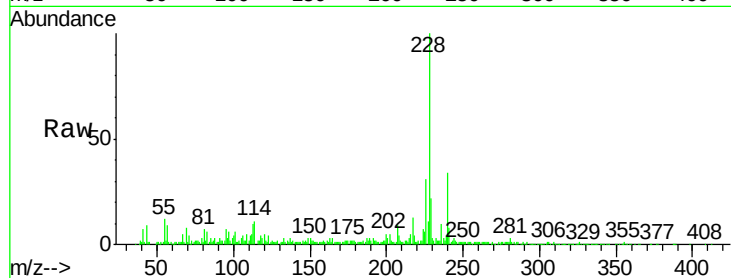
#80  
Benzo(a)anthracene  
Concen: 13.40 ng  
RT: 21.82 min Scan# 3230  
Delta R.T. -0.00 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

Instrument :  
BNA\_G  
ClientSampleId :  
SP-7W(0-2)B

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 228     | 100   | 190266 |       |       |
| 226     | 31.3  | 22.6   | 34.0  |       |
| 229     | 21.7  | 16.1   | 24.1  |       |

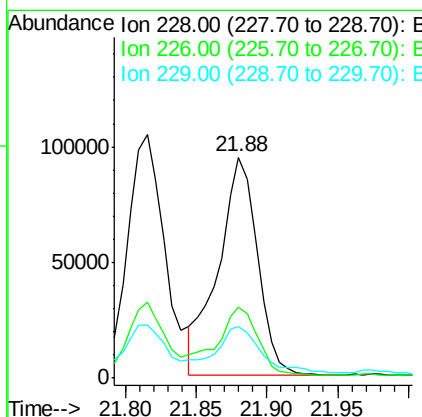
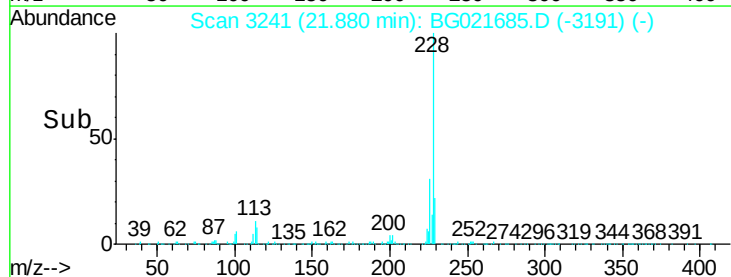
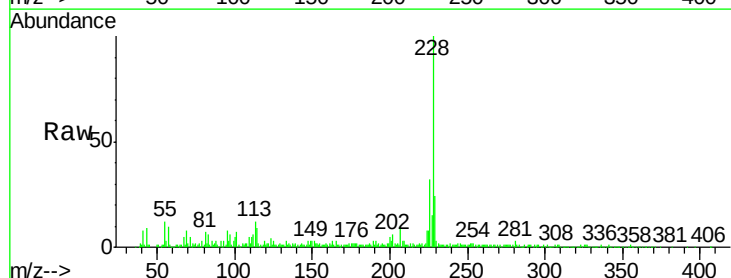
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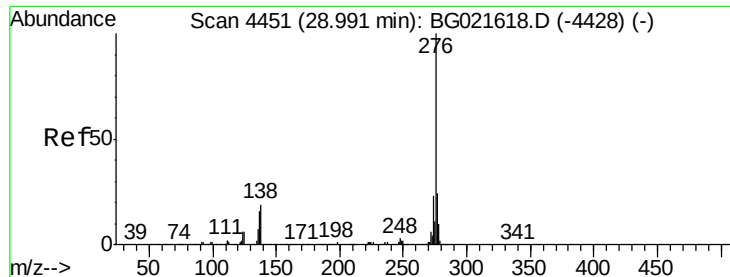
Sohil  
4/15/2016 4:44:57 PM



#82  
Chrysene  
Concen: 13.44 ng  
RT: 21.88 min Scan# 3241  
Delta R.T. -0.01 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 228     | 100   | 183363 |       |       |
| 226     | 32.3  | 25.4   | 38.0  |       |
| 229     | 23.5  | 15.9   | 23.9  |       |





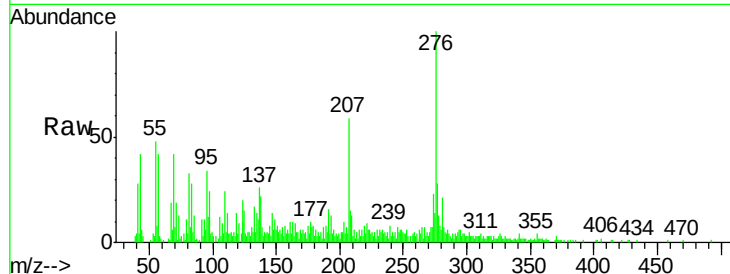
#85  
Indeno(1,2,3-cd)pyrene  
Concen: 4.90 ng  
RT: 28.98 min Scan# 4450  
Delta R.T. -0.01 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

Instrument :  
BNA\_G  
ClientSampleId :  
SP-7W(0-2)B

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 15.9  | 14.0  | 21.0  |
| 277     | 23.8  | 20.6  | 30.8  |

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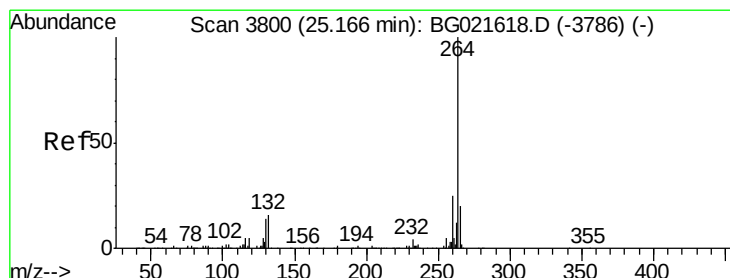
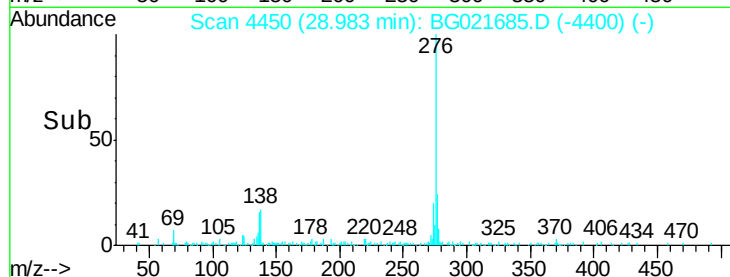
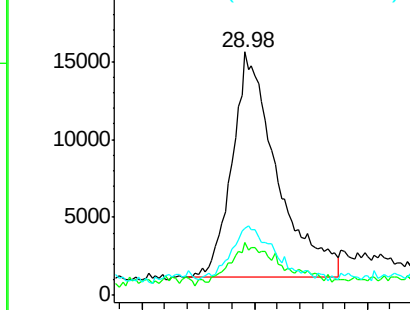


Abundance

Ion 276.00 (275.70 to 276.70): E

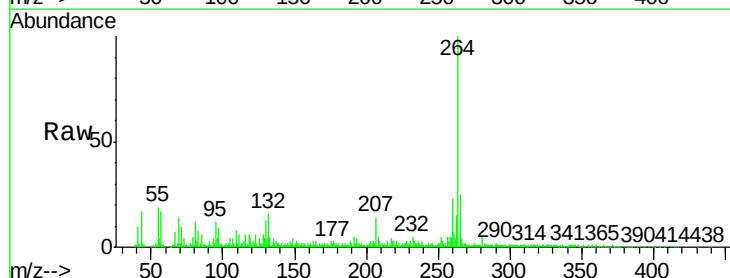
Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 25.18 min Scan# 3803  
Delta R.T. 0.02 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.3  | 20.2  | 30.4  |
| 265     | 24.8  | 17.8  | 26.8  |

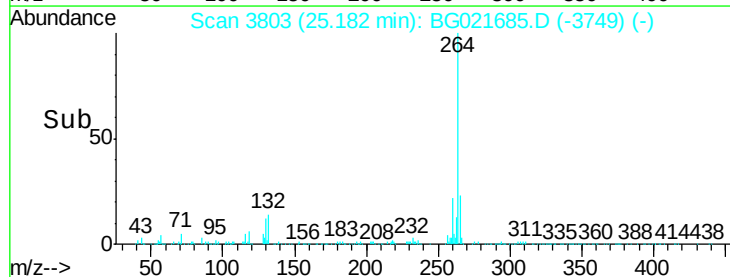
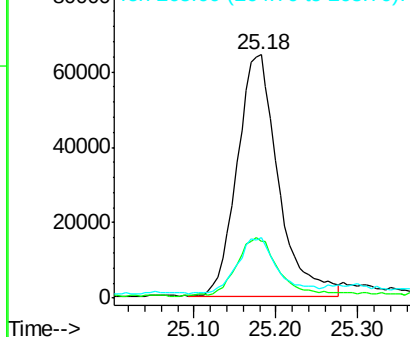


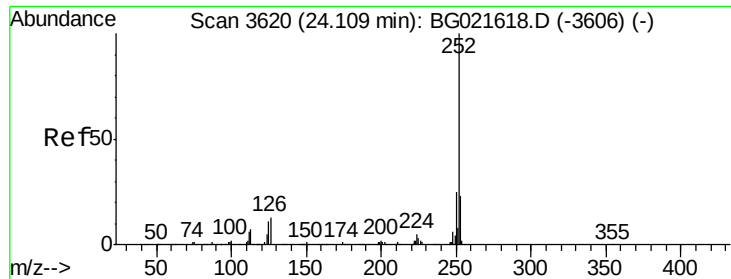
Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#87

Benzo(b)fluoranthene

Concen: 19.01 ng

RT: 24.11 min Scan# 3621

Delta R.T. 0.00 min

Lab File: BG021685.D

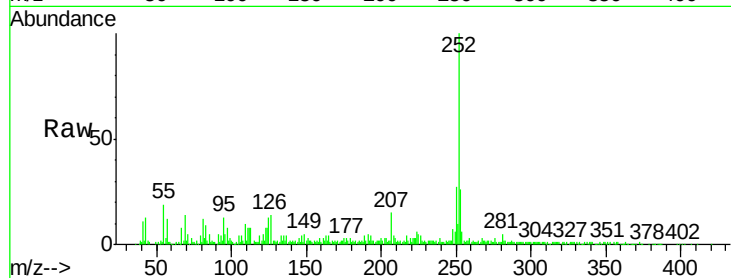
Acq: 15 Apr 2016 13:20

Instrument :

BNA\_G

ClientSampleId :

SP-7W(0-2)B



Tgt Ion:252 Resp: 246578

Ion Ratio Lower Upper

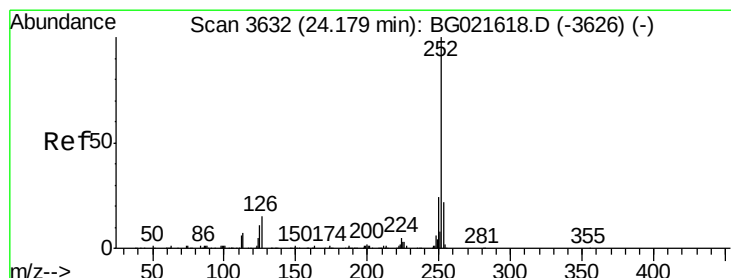
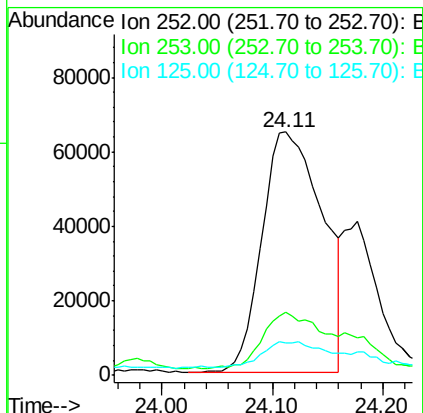
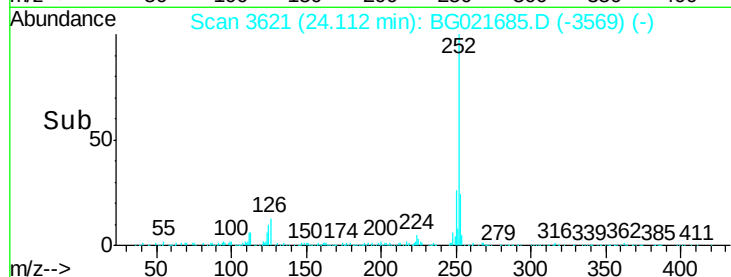
252 100

253 25.8 17.5 26.3

125 13.2 8.6 13.0#

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#88

Benzo(k)fluoranthene

Concen: 7.40 ng m

RT: 24.18 min Scan# 3632

Delta R.T. -0.00 min

Lab File: BG021685.D

Acq: 15 Apr 2016 13:20

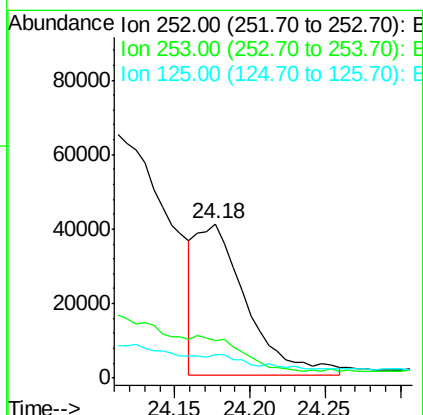
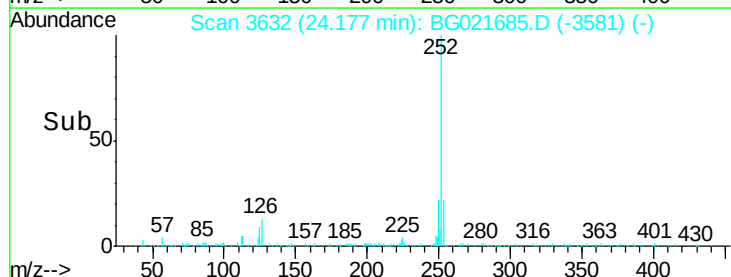
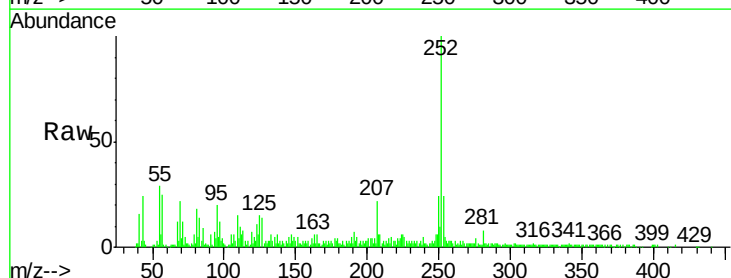
Tgt Ion:252 Resp: 93905

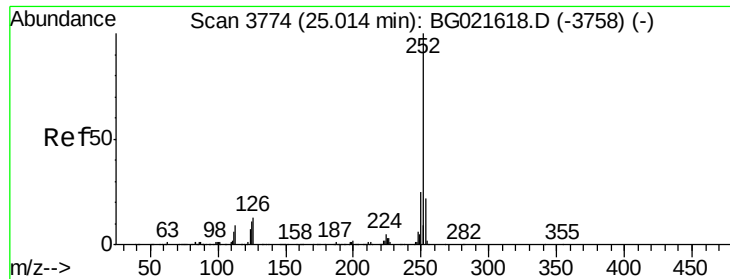
Ion Ratio Lower Upper

252 100

253 24.4 17.8 26.8

125 15.1 8.3 12.5#





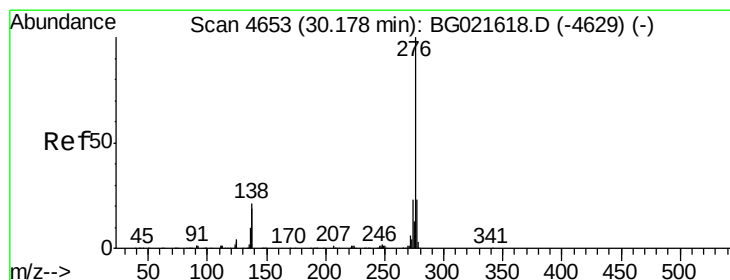
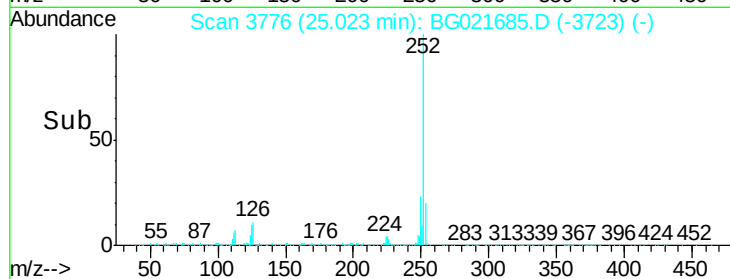
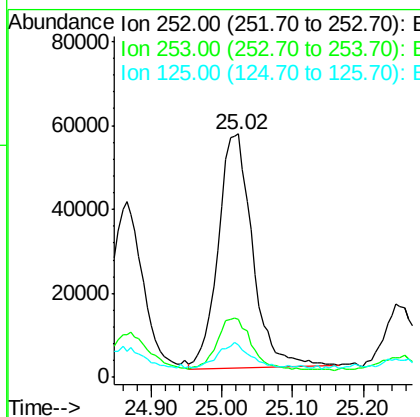
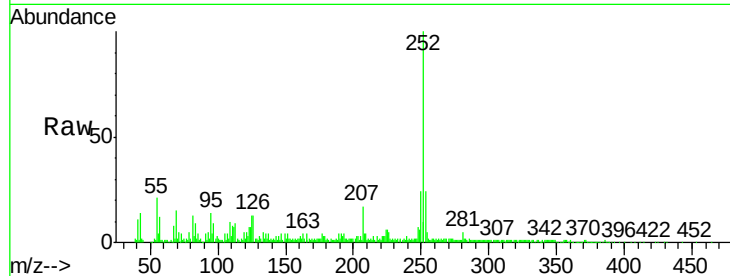
#89  
Benzo(a)pyrene  
Concen: 14.98 ng  
RT: 25.02 min Scan# 3776  
Delta R.T. 0.01 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

Instrument :  
BNA\_G  
ClientSampleId :  
SP-7W(0-2)B

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 252     | 100   |            |            |
| 253     | 23.9  | 17.1       | 25.7       |
| 125     | 13.3  | 9.6        | 14.4       |

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#91  
Benzo(g,h,i)perylene  
Concen: 4.92 ng  
RT: 30.19 min Scan# 4655  
Delta R.T. 0.01 min  
Lab File: BG021685.D  
Acq: 15 Apr 2016 13:20

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 276     | 100   |            |            |
| 277     | 31.3  | 19.4       | 29.2#      |
| 138     | 23.4  | 17.4       | 26.0       |

