

Data Path : Z:\HPCHEM1\BNA G\DATA\BG052516\  
 Data File : BG022067.D  
 Acq On : 25 May 2016 20:43  
 Operator : UM/SJ  
 Sample : H3203-17  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 D9XJ1

Manual Integrations  
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 5/26/2016 6:42:46 PM

Quant Time: May 26 03:35:47 2016  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG051816.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu May 26 03:11:46 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.15  | 152  | 38541    | 20.00 | ng/ul | 0.00     |
| 7) Naphthalene-d8         | 10.97 | 136  | 209494   | 20.00 | ng/ul | 0.00     |
| 15) Acenaphthene-d10      | 14.78 | 164  | 119461   | 20.00 | ng/ul | 0.00     |
| 23) Phenanthrene-d10      | 17.53 | 188  | 233665   | 20.00 | ng/ul | 0.00     |
| 29) Chrysene-d12          | 21.81 | 240  | 191930   | 20.00 | ng/ul | 0.00     |
| 34) Perylene-d12          | 25.15 | 264  | 186024   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 2) 1,4-Dioxane-d8              | 3.53  | 96  | 1051   | 1.25  | ng/uL | 0.00 |
| 3) Phenol-d5                   | 7.31  | 99  | 67757  | 19.91 | ng/ul | 0.00 |
| 4) Bis-(2-Chloroethyl)ether-d  | 7.47  | 67  | 40916  | 22.57 | ng/ul | 0.00 |
| 5) 2-Chlorophenol-d4           | 7.69  | 132 | 63041  | 22.56 | ng/ul | 0.00 |
| 6) 4-Methylphenol-d8           | 8.87  | 113 | 64476  | 21.27 | ng/ul | 0.00 |
| 8) Nitrobenzene-d5             | 9.33  | 128 | 35639  | 24.25 | ng/ul | 0.00 |
| 9) 2-Nitrophenol-d4            | 10.05 | 143 | 33265  | 21.21 | ng/ul | 0.00 |
| 10) 2,4-Dichlorophenol-d3      | 10.60 | 165 | 63391  | 22.87 | ng/ul | 0.00 |
| 12) 4-Chloroaniline-d4         | 11.12 | 131 | 46966  | 21.51 | ng/ul | 0.00 |
| 16) Dimethylphthalate-d6       | 14.18 | 166 | 216313 | 23.48 | ng/ul | 0.00 |
| 17) Acenaphthylene-d8          | 14.48 | 160 | 298411 | 25.15 | ng/ul | 0.00 |
| 20) 4-Nitrophenol-d4           | 15.00 | 143 | 6586m  | 4.06  | ng/ul | 0.00 |
| 21) Fluorene-d10               | 15.77 | 176 | 198211 | 23.91 | ng/ul | 0.00 |
| 24) 4,6-Dinitro-2-methylphenol | 15.89 | 200 | 14929  | 12.87 | ng/ul | 0.00 |
| 26) Anthracene-d10             | 17.63 | 188 | 275267 | 25.57 | ng/ul | 0.00 |
| 30) Pyrene-d10                 | 19.91 | 212 | 257525 | 25.43 | ng/ul | 0.00 |
| 37) Benzo(a)pyrene-d12         | 24.92 | 264 | 209808 | 25.40 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |       |        | Ovalue |
|----------------------------|-------|-----|---------|-------|--------|--------|
| 11) Naphthalene            | 11.03 | 128 | 11804   | 1.16  | ng/ul  | 98     |
| 13) 2-Methylnaphthalene    | 12.63 | 142 | 8807    | 1.19  | ng/ul  | 97     |
| 25) Phenanthrene           | 17.57 | 178 | 175939  | 14.09 | ng/ul  | 96     |
| 27) Anthracene             | 17.66 | 178 | 21353   | 1.70  | ng/ul  | 98     |
| 28) Fluoranthene           | 19.57 | 202 | 468455m | 36.09 | ng/ul  |        |
| 31) Pyrene                 | 19.93 | 202 | 368603m | 27.89 | ng/ul  |        |
| 32) Benzo(a)anthracene     | 21.79 | 228 | 184637  | 17.34 | ng/ul  | 98     |
| 33) Chrysene               | 21.86 | 228 | 197392  | 19.06 | ng/ul  | 97     |
| 35) Benzo(b)fluoranthene   | 24.08 | 252 | 322606  | 30.17 | ng/ul# | 94     |
| 36) Benzo(k)fluoranthene   | 24.14 | 252 | 87261m  | 8.30  | ng/ul  |        |
| 38) Benzo(a)pyrene         | 24.99 | 252 | 182772  | 17.87 | ng/ul# | 92     |
| 39) Indeno(1,2,3-cd)pyrene | 28.97 | 276 | 136096m | 11.71 | ng/ul  |        |
| 40) Dibenzo(a,h)anthracene | 29.01 | 278 | 35420m  | 3.68  | ng/ul  |        |
| 41) Benzo(g,h,i)perylene   | 30.16 | 276 | 97633m  | 9.93  | ng/ul  |        |

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

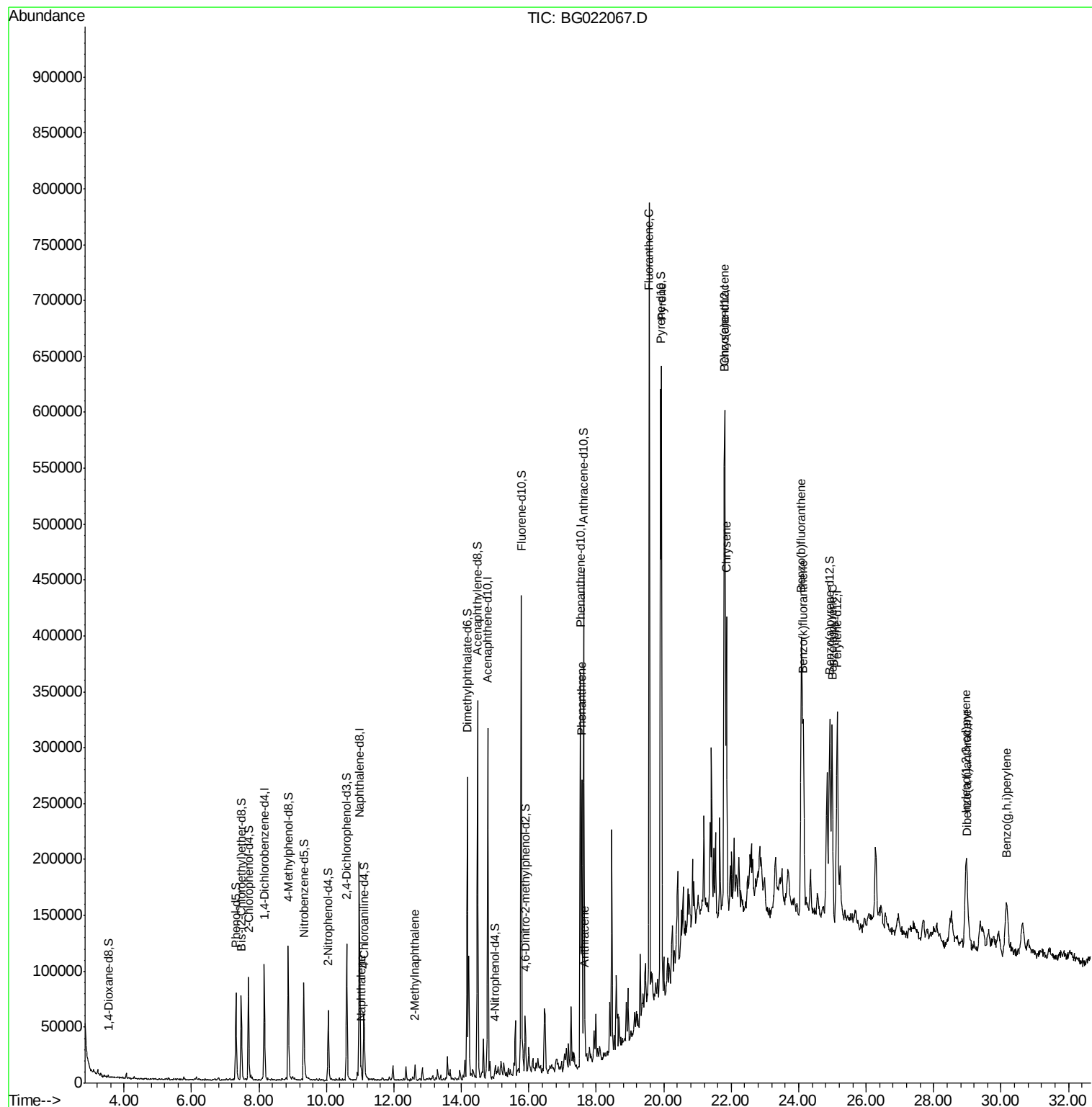
Data Path : Z:\HPCHEM1\BNA G\DATA\BG052516\  
Data File : BG022067.D  
Acq On : 25 May 2016 20:43  
Operator : UM/SJ  
Sample : H3203-17  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

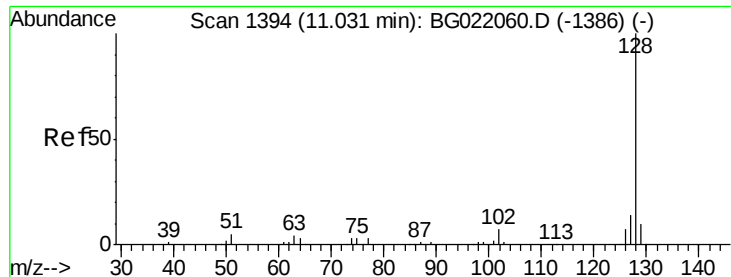
Instrument :  
BNA\_G  
ClientSampled :  
D9XJ1

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Quant Time: May 26 03:35:47 2016  
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG051816.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu May 26 03:11:46 2016  
Response via : Initial Calibration





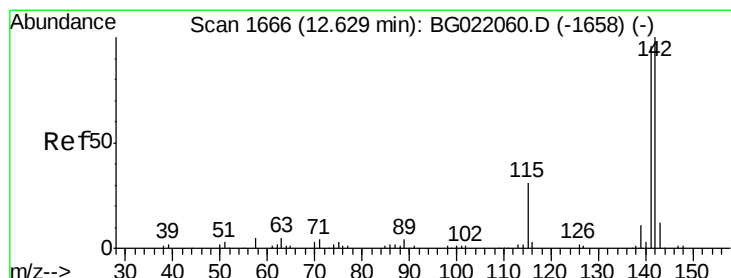
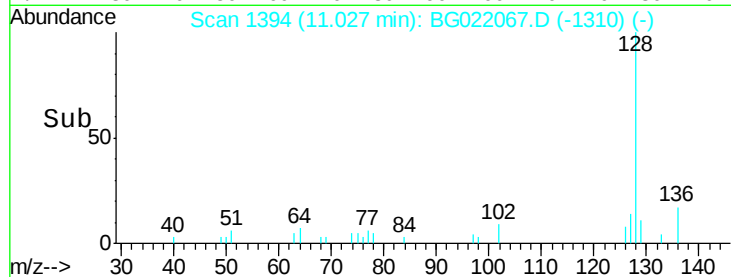
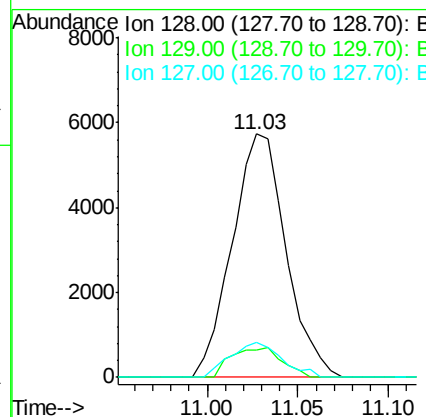
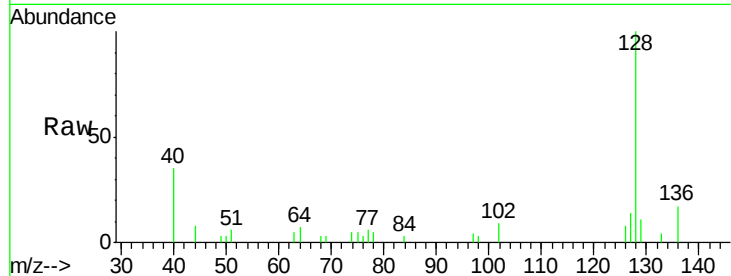
#11  
Naphthalene  
Concen: 1.16 ng/ul  
RT: 11.03 min Scan# 1394  
Delta R.T. -0.00 min  
Lab File: BG022067.D  
Acq: 25 May 2016 20:43

Instrument :  
BNA\_G  
ClientSampleId :  
D9XJ1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.2  | 8.3   | 12.5  |
| 127     | 14.2  | 10.8  | 16.2  |

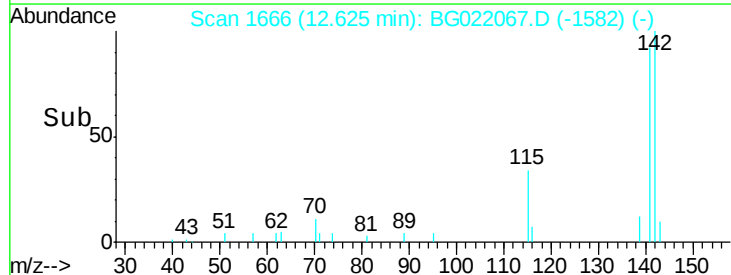
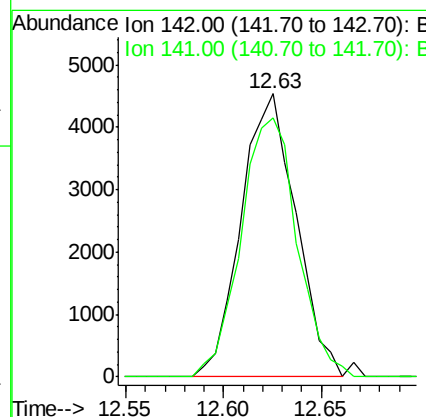
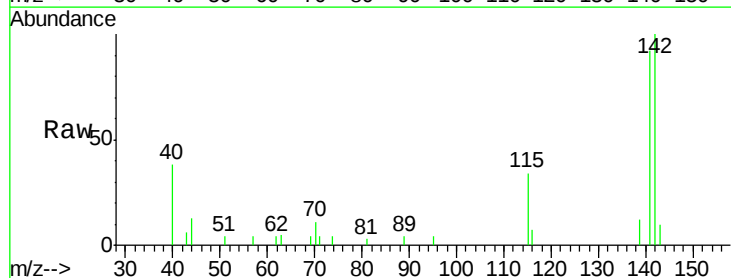
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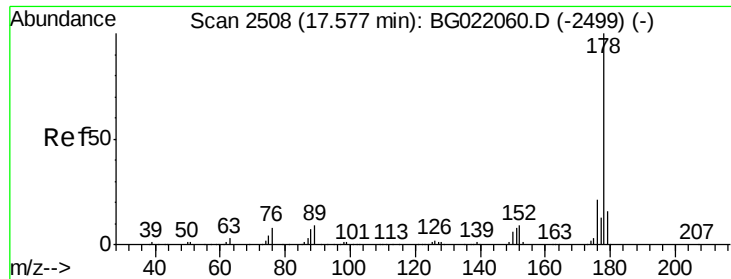
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#13  
2-Methylnaphthalene  
Concen: 1.19 ng/ul  
RT: 12.63 min Scan# 1666  
Delta R.T. -0.00 min  
Lab File: BG022067.D  
Acq: 25 May 2016 20:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 91.6  | 71.3  | 106.9 |





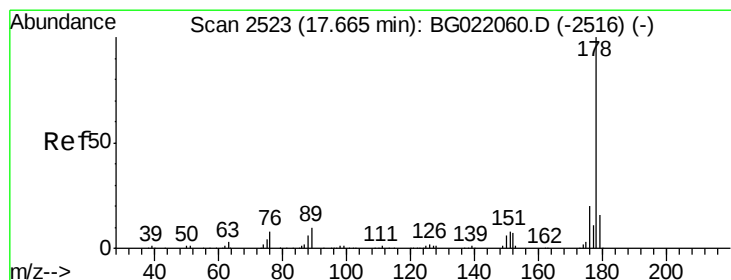
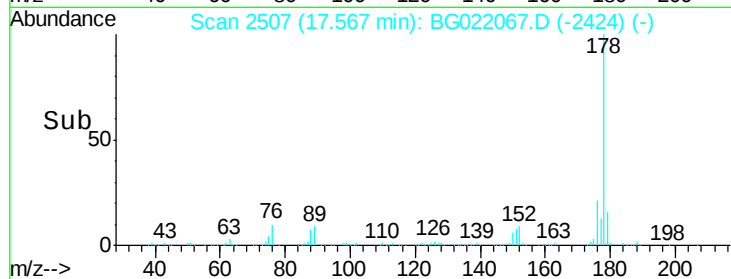
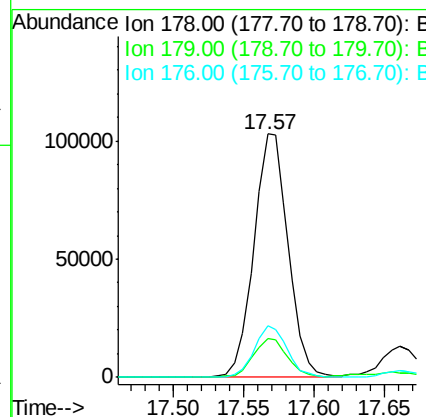
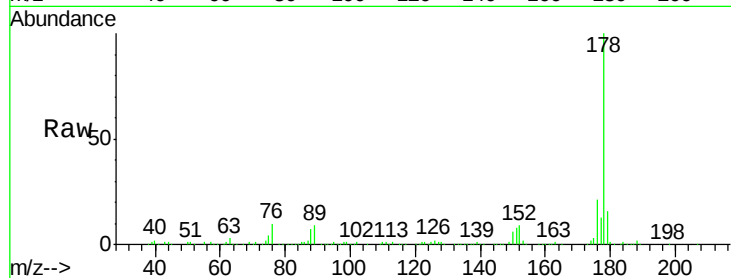
#25  
Phenanthrene  
Concen: 14.09 ng/ul  
RT: 17.57 min Scan# 2507  
Delta R.T. -0.01 min  
Lab File: BG022067.D  
Acq: 25 May 2016 20:43

Instrument :  
BNA\_G  
ClientSampleId :  
D9XJ1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 16.0  | 11.8  | 17.8  |
| 176     | 20.9  | 14.8  | 22.2  |

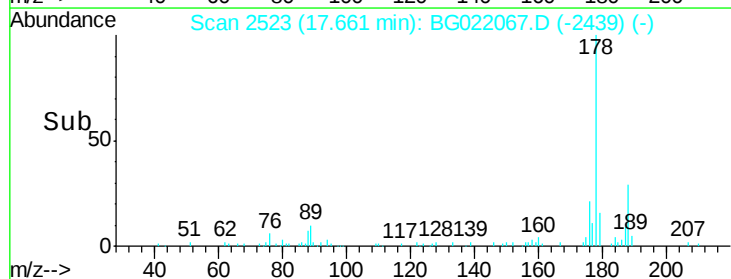
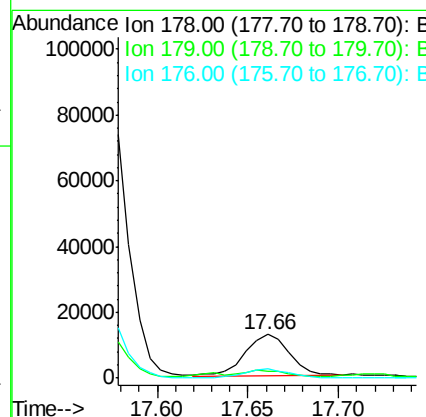
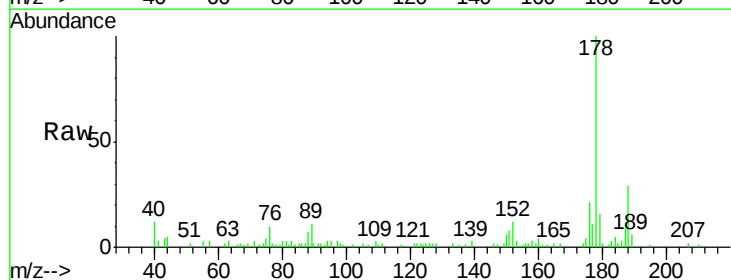
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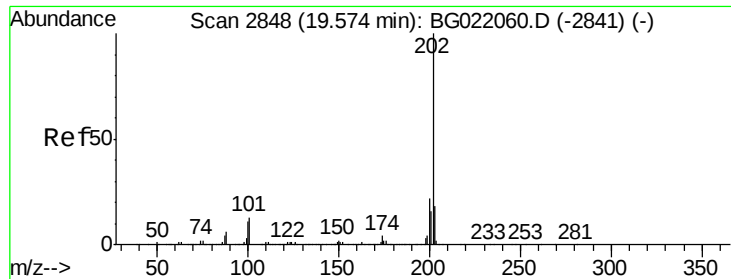
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#27  
Anthracene  
Concen: 1.70 ng/ul  
RT: 17.66 min Scan# 2523  
Delta R.T. -0.00 min  
Lab File: BG022067.D  
Acq: 25 May 2016 20:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.6  | 12.9  | 19.3  |
| 176     | 21.1  | 15.6  | 23.4  |





#28

Fluoranthene

Concen: 36.09 ng/ul m

RT: 19.57 min Scan# 2848

Delta R.T. -0.00 min

Lab File: BG022067.D

Acq: 25 May 2016 20:43

Instrument :

BNA\_G

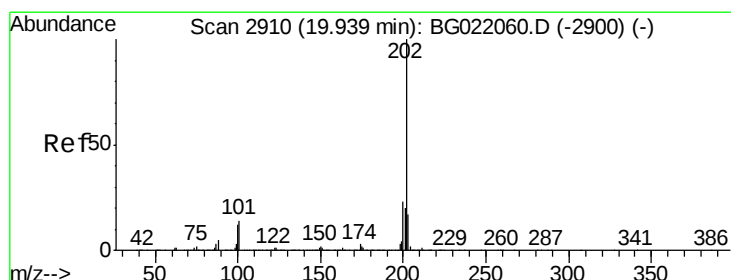
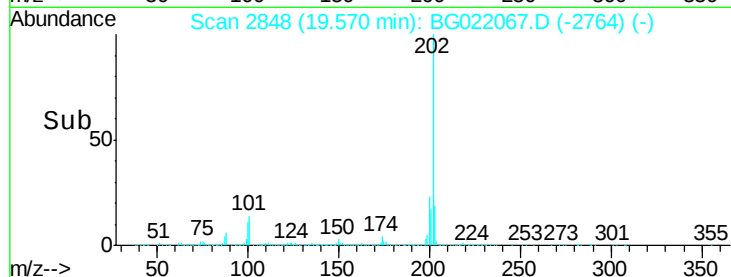
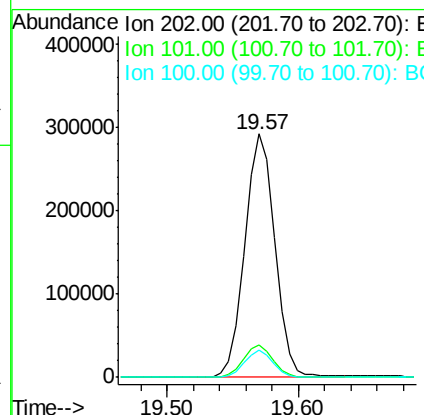
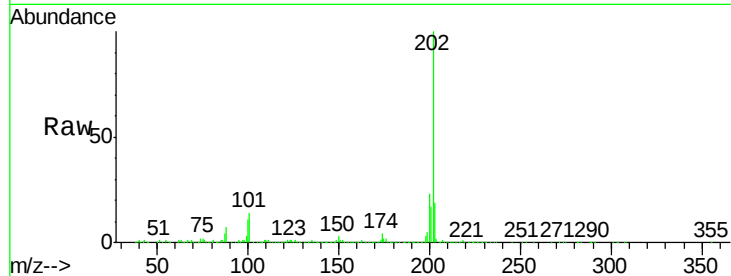
ClientSampleId :

D9XJ1

| Tot Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 202     | 100  |       | 468455 |       |       |
| 101     | 13.5 | 8.9   | 13.3#  |       |       |
| 100     | 11.3 | 7.0   | 10.4#  |       |       |

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#31

Pyrene

Concen: 27.89 ng/ul m

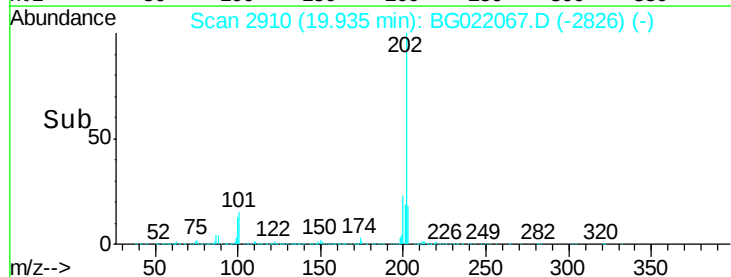
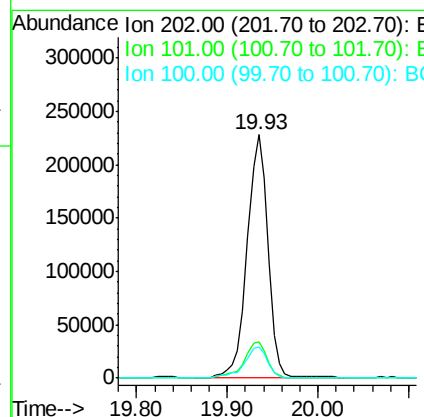
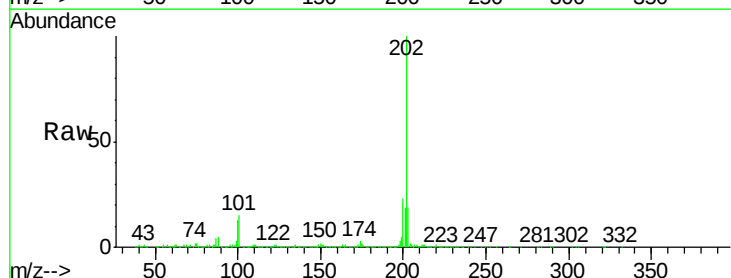
RT: 19.93 min Scan# 2910

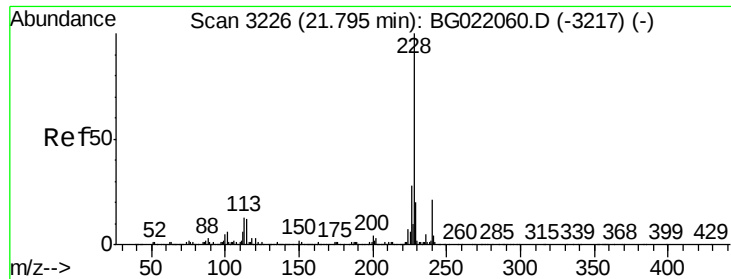
Delta R.T. -0.00 min

Lab File: BG022067.D

Acq: 25 May 2016 20:43

| Tgt Ion | Ion  | Ratio | Resp   | Lower | Upper |
|---------|------|-------|--------|-------|-------|
| 202     | 100  |       | 368603 |       |       |
| 101     | 15.1 | 9.8   | 14.8#  |       |       |
| 100     | 13.0 | 9.3   | 13.9   |       |       |





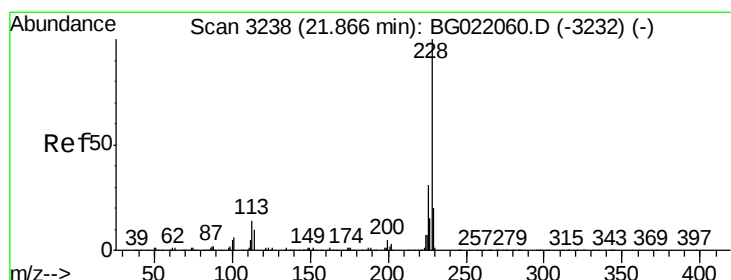
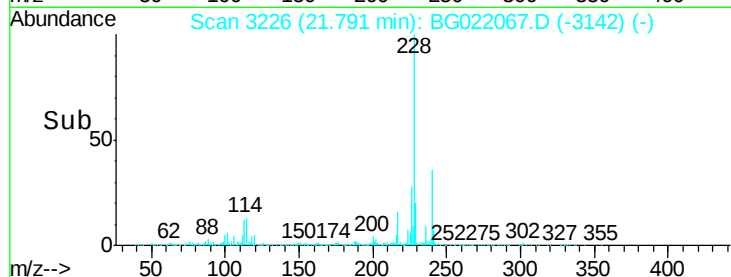
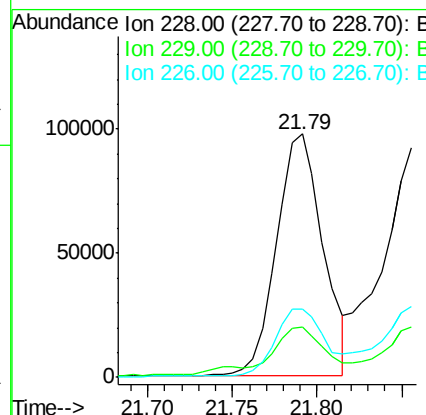
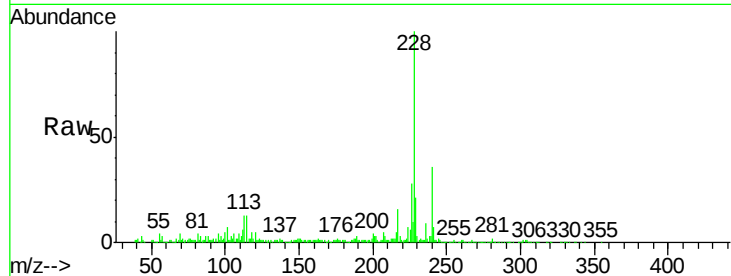
#32  
Benzo(a)anthracene  
Concen: 17.34 ng/ul  
RT: 21.79 min Scan# 3226  
Delta R.T. -0.00 min  
Lab File: BG022067.D  
Acq: 25 May 2016 20:43

Instrument :  
BNA\_G  
ClientSampleId :  
D9XJ1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 20.8  | 16.6  | 25.0  |
| 226     | 28.0  | 21.0  | 31.4  |

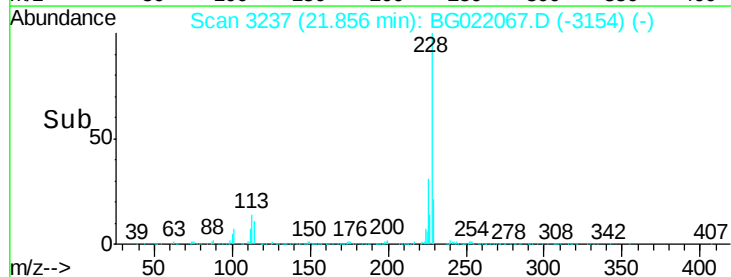
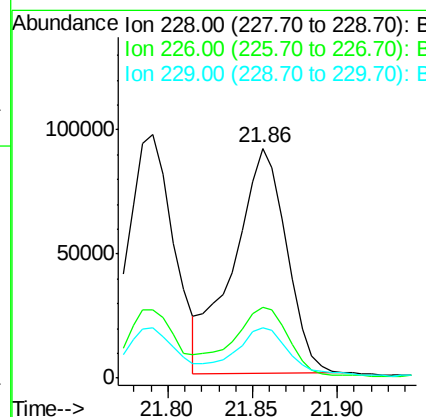
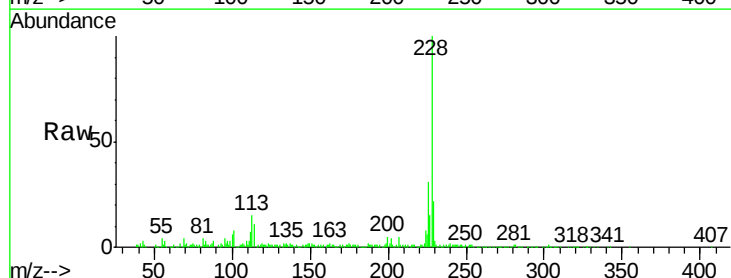
Manual Integrations  
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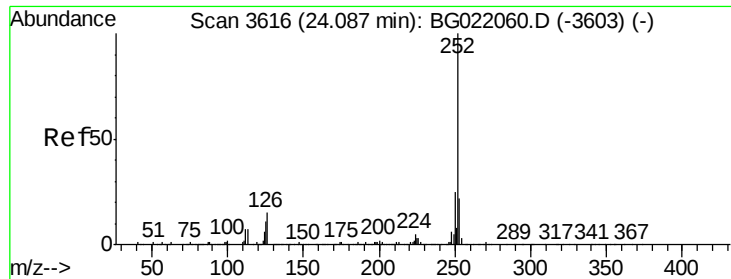
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#33  
Chrysene  
Concen: 19.06 ng/ul  
RT: 21.86 min Scan# 3237  
Delta R.T. -0.01 min  
Lab File: BG022067.D  
Acq: 25 May 2016 20:43

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.9  | 23.4  | 35.2  |
| 229     | 22.0  | 16.2  | 24.2  |





#35

Benzo(b)fluoranthene

Concen: 30.17 ng/ul

RT: 24.08 min Scan# 3616

Delta R.T. -0.00 min

Lab File: BG022067.D

Acq: 25 May 2016 20:43

Instrument :

BNA\_G

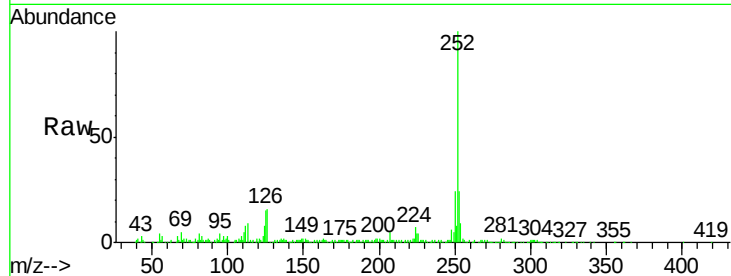
ClientSampleId :

D9XJ1

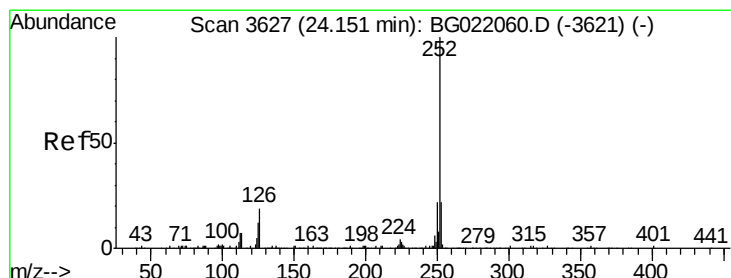
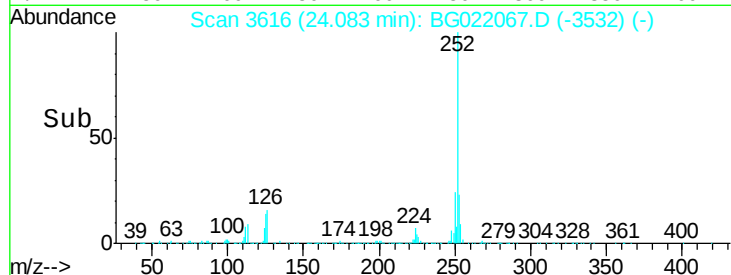
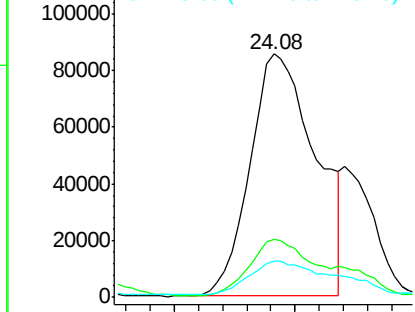
| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 322606 |       |       |
| 253     | 23.8  | 18.1   | 27.1  |       |
| 125     | 15.1  | 7.6    | 11.4  |       |

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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



#36

Benzo(k)fluoranthene

Concen: 8.30 ng/ul m

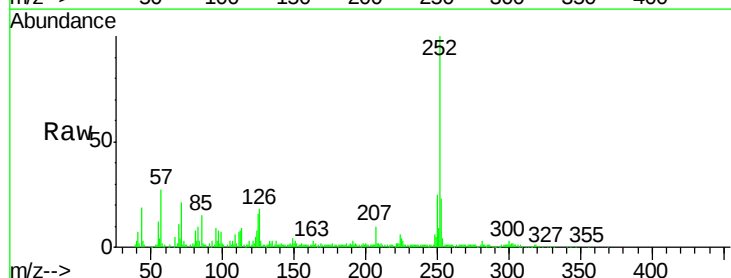
RT: 24.14 min Scan# 3626

Delta R.T. -0.01 min

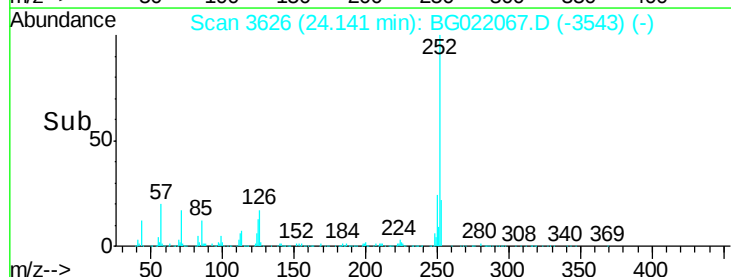
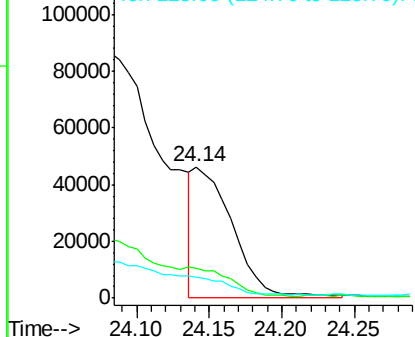
Lab File: BG022067.D

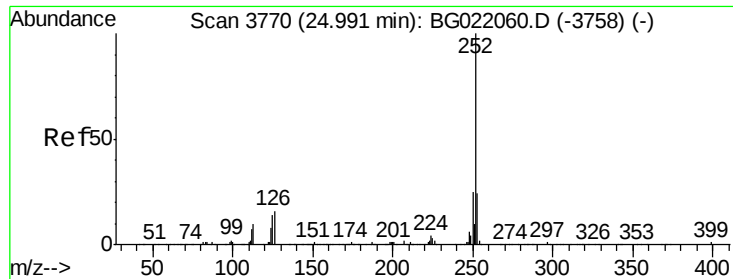
Acq: 25 May 2016 20:43

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 252     | 100   | 87261 |       |       |
| 253     | 23.0  | 17.8  | 26.8  |       |
| 125     | 16.0  | 7.7   | 11.5  |       |



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





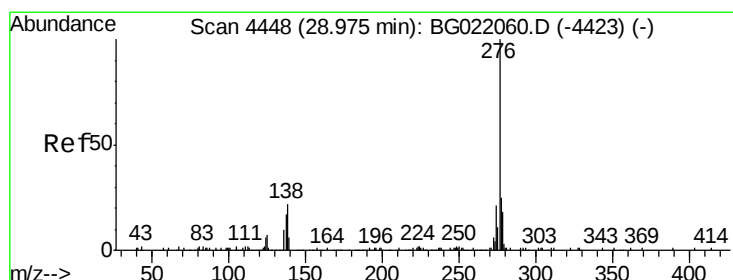
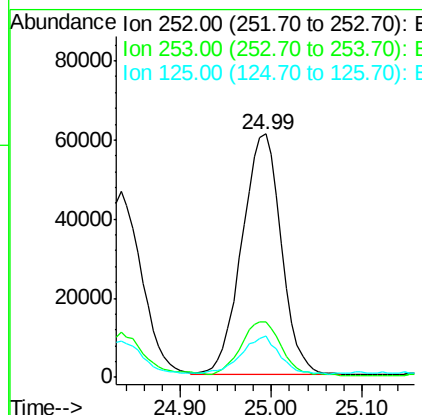
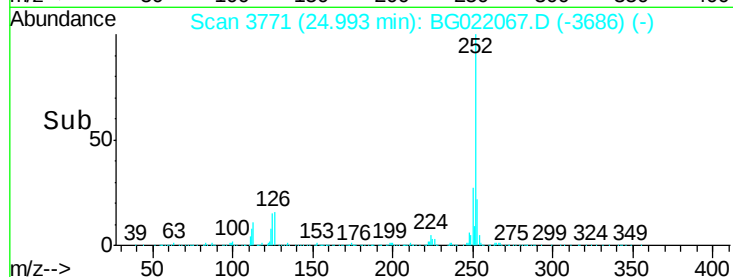
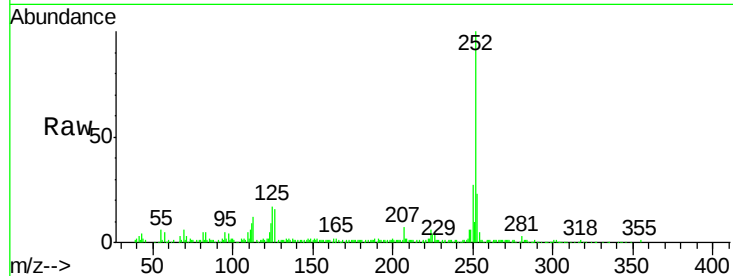
#38  
Benzo(a)pyrene  
Concen: 17.87 ng/ul  
RT: 24.99 min Scan# 3771  
Delta R.T. 0.00 min  
Lab File: BG022067.D  
Acq: 25 May 2016 20:43

Instrument :  
BNA\_G  
ClientSampleId :  
D9XJ1

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 252     | 100   |            |       |
| 253     | 23.0  | 17.4       | 26.0  |
| 125     | 16.9  | 8.2        | 12.2  |

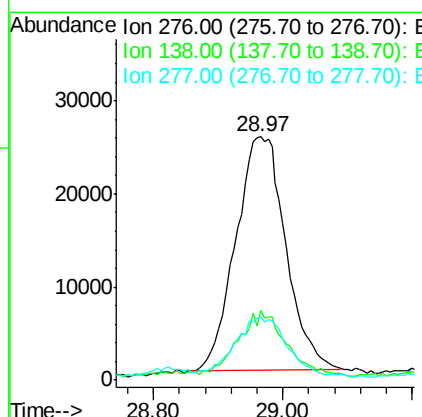
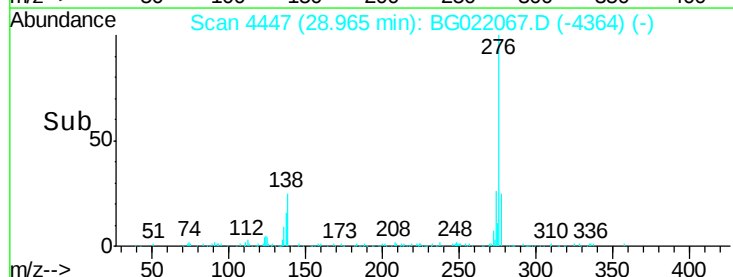
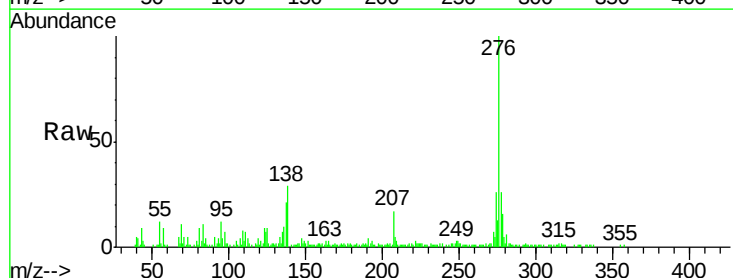
Manual Integrations  
APPROVED

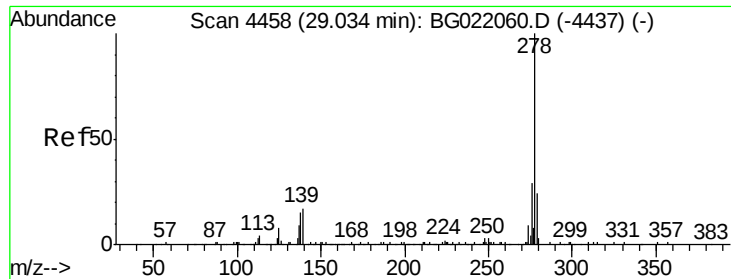
sohil  
5/26/2016 6:42:46 PM



#39  
Indeno(1,2,3-cd)pyrene  
Concen: 11.71 ng/ul m  
RT: 28.97 min Scan# 4447  
Delta R.T. -0.01 min  
Lab File: BG022067.D  
Acq: 25 May 2016 20:43

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 276     | 100   |            |       |
| 138     | 28.6  | 15.8       | 23.6  |
| 277     | 26.0  | 19.0       | 28.6  |





#40

Dibenzo(a,h)anthracene

Concen: 3.68 ng/ul m

RT: 29.01 min Scan# 4454

Delta R.T. -0.03 min

Lab File: BG022067.D

Acq: 25 May 2016 20:43

Instrument :

BNA\_G

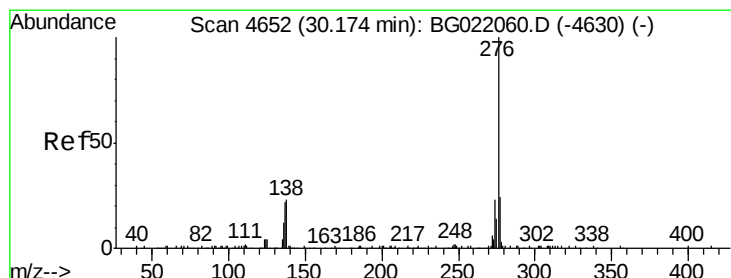
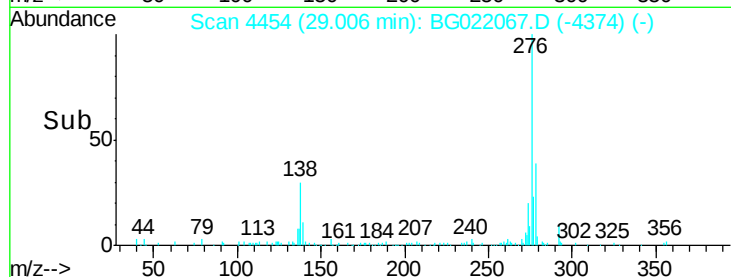
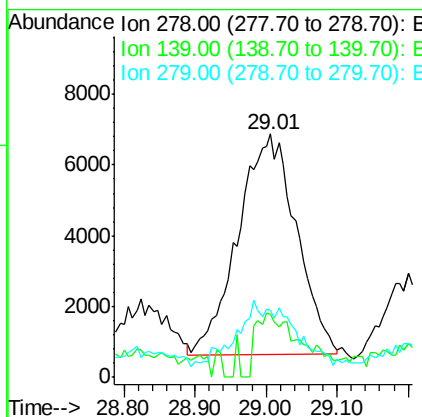
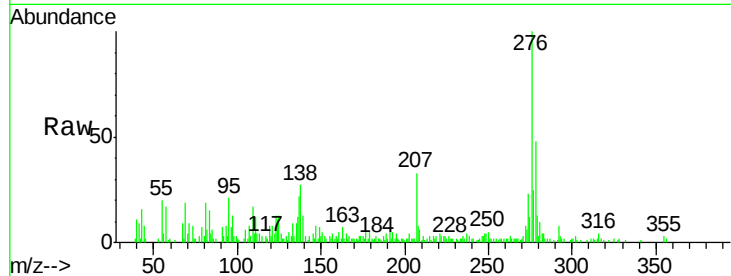
ClientSampleId :

D9XJ1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 278   | Resp: | 35420 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 26.0  | 12.1  | 18.1# |
| 279       | 27.3  | 19.8  | 29.8  |

Manual Integrations  
APPROVED

sohil  
5/26/2016 6:42:46 PM



#41

Benzo(g,h,i)perylene

Concen: 9.93 ng/ul m

RT: 30.16 min Scan# 4651

Delta R.T. -0.01 min

Lab File: BG022067.D

Acq: 25 May 2016 20:43

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 97633 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 24.9  | 13.9  | 20.9# |
| 277       | 23.4  | 19.8  | 29.6  |

