

Data Path : Z:\HPCHEM1\BNA G\DATA\BG111617\  
 Data File : BG031067.D  
 Acq On : 17 Nov 2017 5:23  
 Operator : SJ/JU  
 Sample : I6350-05  
 Misc :  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 B0F91

Manual Integrations  
 APPROVED

SOHIL  
 11/17/2017 5:12:53 PM

Quant Time: Nov 17 07:01:52 2017  
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM-EPA-BG111617-PAH.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Nov 17 04:52:45 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 8.14  | 152  | 33450    | 20.00  | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.95 | 136  | 150973   | 20.00  | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.76 | 164  | 117392   | 20.00  | ng/ul  | 0.00     |
| 12) Phenanthrene-d10        | 17.49 | 188  | 351505   | 20.00  | ng/ul  | 0.00     |
| 18) Chrysene-d12            | 21.77 | 240  | 457626   | 20.00  | ng/ul  | 0.00     |
| 23) Perylene-d12            | 25.07 | 264  | 469374   | 20.00  | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 3) 2,4-Dichlorophenol-d3    | 10.58 | 165  | 61168    | 21.47  | ng/uL  | 0.00     |
| 7) Acenaphthylene-d8        | 14.45 | 160  | 279977   | 22.93  | ng/ul  | 0.00     |
| 10) Fluorene-d10            | 15.74 | 176  | 238634   | 24.34  | ng/ul  | 0.00     |
| 15) Anthracene-d10          | 17.59 | 188  | 415068   | 23.59  | ng/ul  | 0.00     |
| 19) Pyrene-d10              | 19.87 | 212  | 553691   | 26.49  | ng/ul  | 0.00     |
| 26) Benzo(a)pyrene-d12      | 24.85 | 264  | 568013   | 24.46  | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Qvalue |        |          |
| 8) Acenaphthylene           | 14.48 | 152  | 18027    | 1.686  | ng/ul  | 94       |
| 9) Acenaphthene             | 14.82 | 153  | 39555    | 5.127  | ng/ul  | 93       |
| 11) Fluorene                | 15.80 | 166  | 54159    | 5.542  | ng/ul# | 94       |
| 14) Phenanthrene            | 17.54 | 178  | 832470   | 44.129 | ng/ul  | 98       |
| 16) Anthracene              | 17.63 | 178  | 205659   | 10.737 | ng/ul  | 98       |
| 17) Fluoranthene            | 19.54 | 202  | 1068170m | 40.690 | ng/ul  |          |
| 20) Pyrene                  | 19.90 | 202  | 848846m  | 34.949 | ng/ul  |          |
| 21) Benzo(a)anthracene      | 21.75 | 228  | 574307   | 20.598 | ng/ul  | 99       |
| 22) Chrysene                | 21.81 | 228  | 476185   | 17.957 | ng/ul  | 97       |
| 24) Benzo(b)fluoranthene    | 24.02 | 252  | 495896   | 17.486 | ng/ul# | 92       |
| 25) Benzo(k)fluoranthene    | 24.08 | 252  | 181420m  | 6.494  | ng/ul  |          |
| 27) Benzo(a)pyrene          | 24.91 | 252  | 348546   | 12.823 | ng/ul# | 90       |
| 28) Indeno(1,2,3-cd)pyrene  | 28.83 | 276  | 179914   | 5.807  | ng/ul# | 87       |
| 29) Dibenzo(a,h)anthracene  | 28.89 | 278  | 63202m   | 2.464  | ng/ul  |          |
| 30) Benzo(a,h,i)perylene    | 30.02 | 276  | 125128   | 4.850  | ng/ul# | 85       |

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

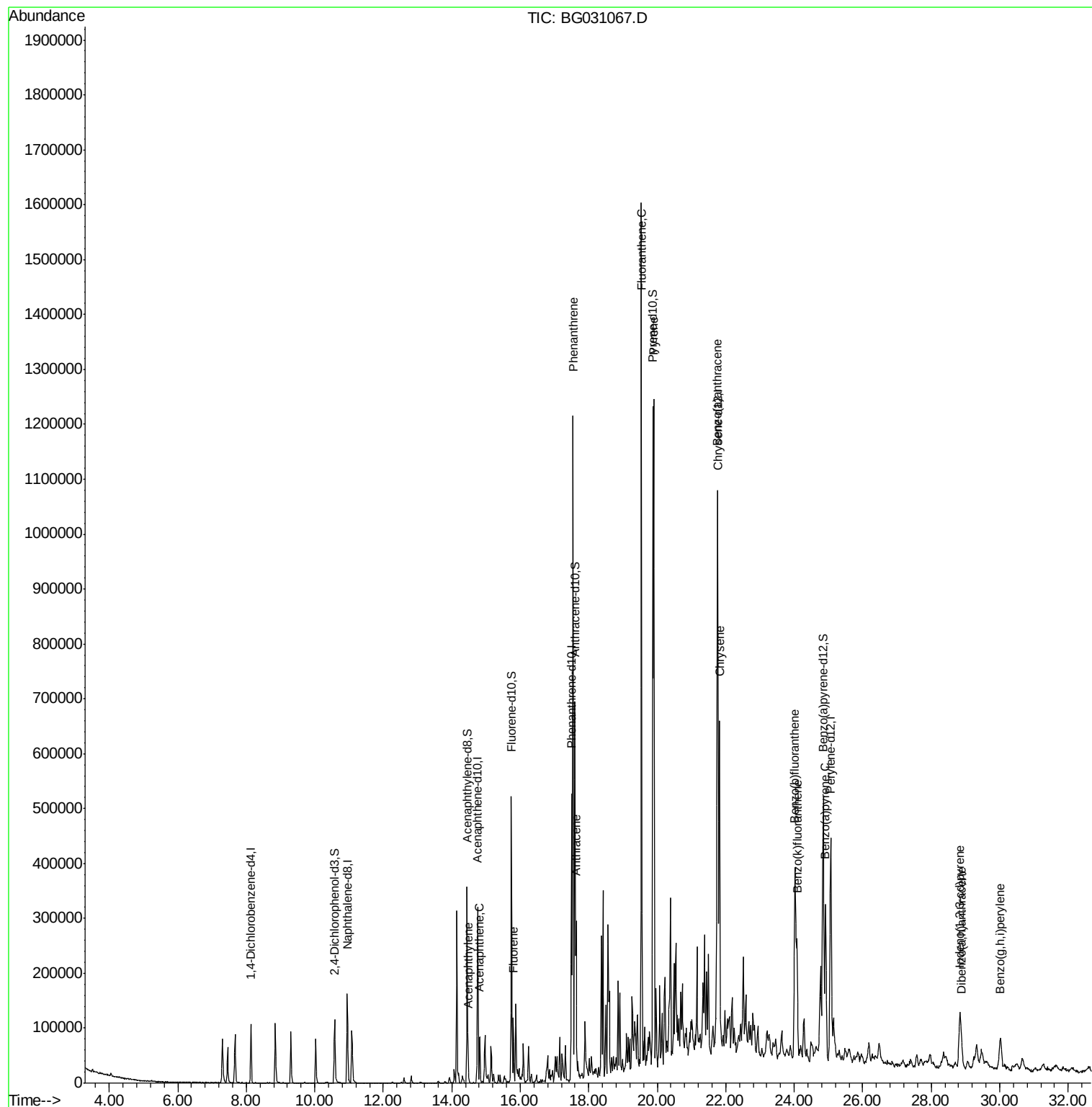
Data Path : Z:\HPCHEM1\BNA G\DATA\BG111617\  
Data File : BG031067.D  
Acq On : 17 Nov 2017 5:23  
Operator : SJ/JU  
Sample : I6350-05  
Misc :  
ALS Vial : 25 Sample Multiplier: 1

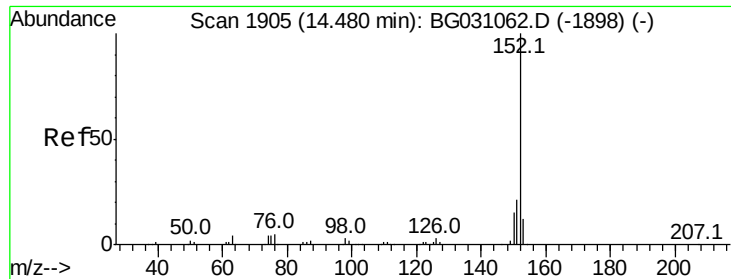
Instrument :  
BNA\_G  
ClientSampleId :  
B0F91

Manual Integrations  
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11/17/2017 5:12:53 PM

Quant Time: Nov 17 07:01:52 2017  
Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM-EPA-BG111617-PAH.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Nov 17 04:52:45 2017  
Response via : Initial Calibration





#8

Acenaphthylene

Concen: 1.686 ng/ul

RT: 14.48 min Scan# 1905

Delta R.T. 0.00 min

Lab File: BG031067.D

Acq: 17 Nov 2017 5:23

Instrument :

BNA\_G

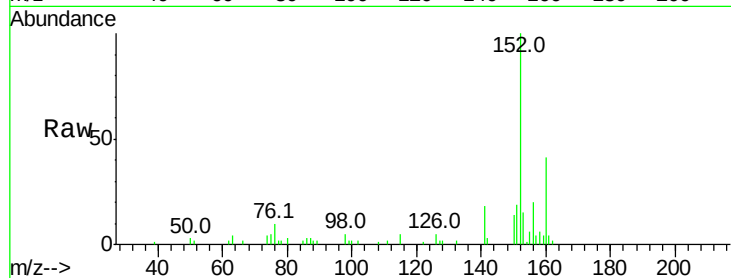
ClientSampled :

B0F91

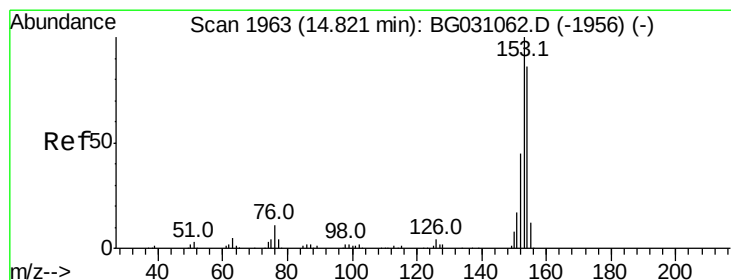
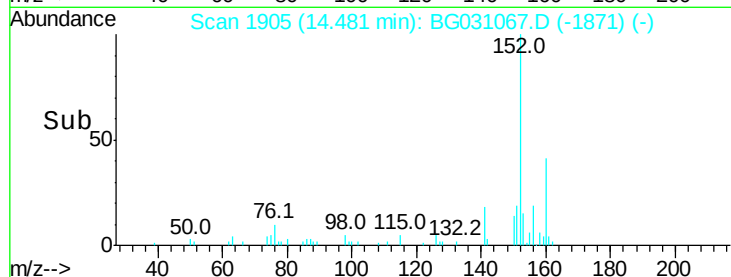
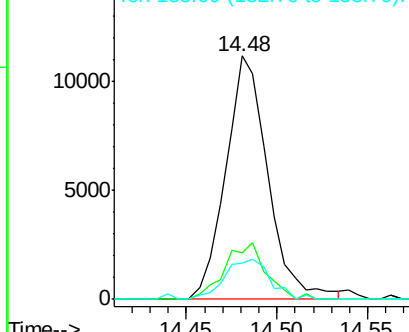
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 18027 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 18.9  | 17.5  | 26.3  |
| 153       | 15.1  | 10.6  | 16.0  |

Manual Integrations  
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Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E



#9

Acenaphthene

Concen: 5.127 ng/ul

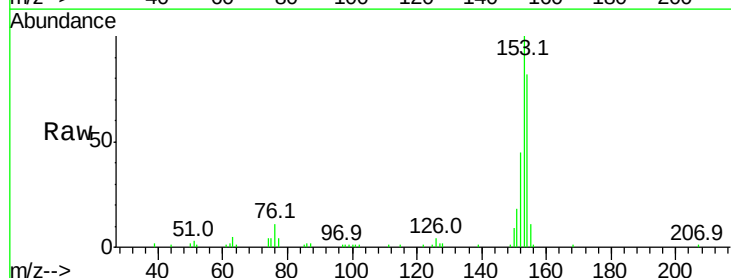
RT: 14.82 min Scan# 1962

Delta R.T. -0.01 min

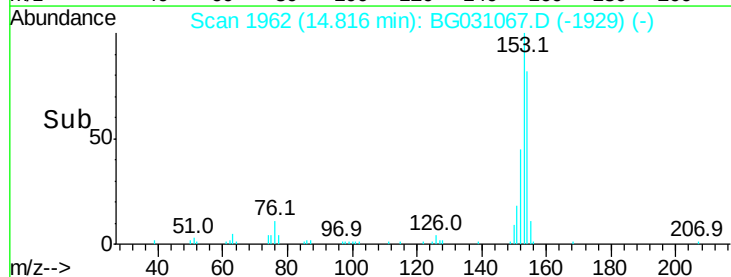
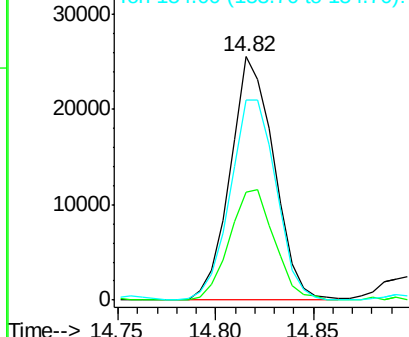
Lab File: BG031067.D

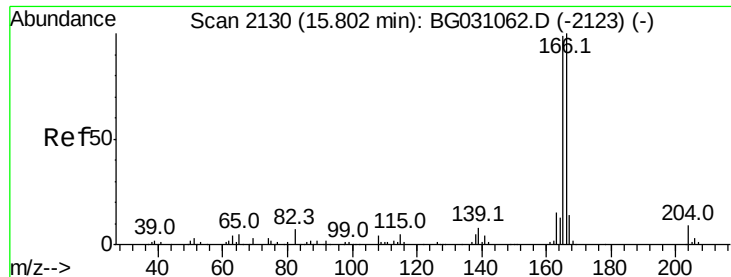
Acq: 17 Nov 2017 5:23

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 39555 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 44.6  | 37.9  | 56.9  |
| 154       | 82.2  | 71.6  | 107.4 |



Abundance Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E  
Ion 154.00 (153.70 to 154.70): E





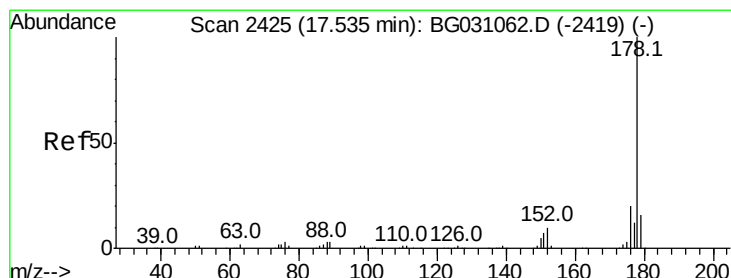
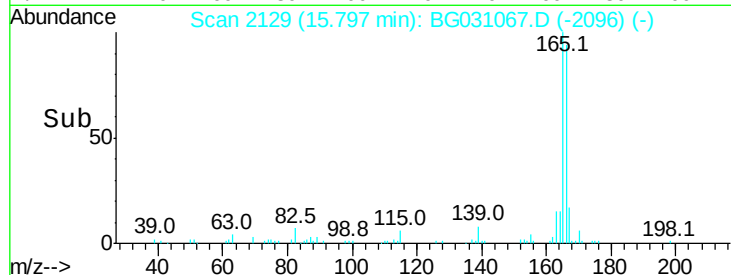
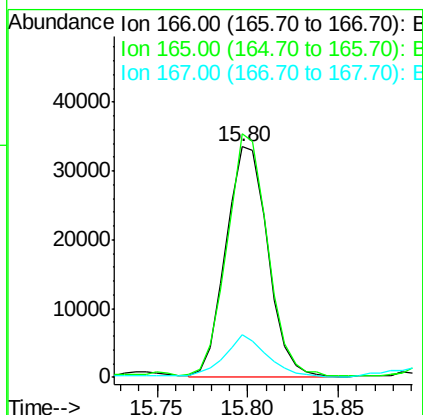
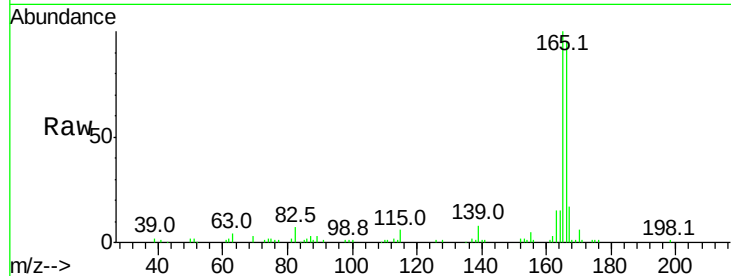
#11  
**Fluorene**  
 Concen: 5.542 ng/ul  
 RT: 15.80 min Scan# 2129  
 Delta R.T. -0.01 min  
 Lab File: BG031067.D  
 Acq: 17 Nov 2017 5:23

Instrument :  
 BNA\_G  
 ClientSampleId :  
 B0F91

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 105.6 | 80.0  | 120.0 |
| 167     | 18.3  | 11.6  | 17.4  |

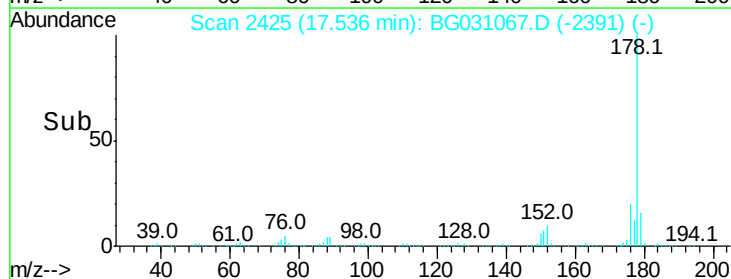
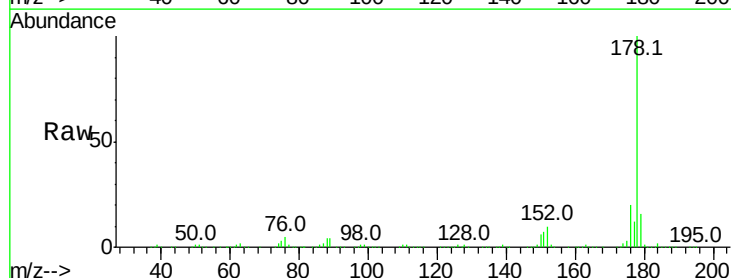
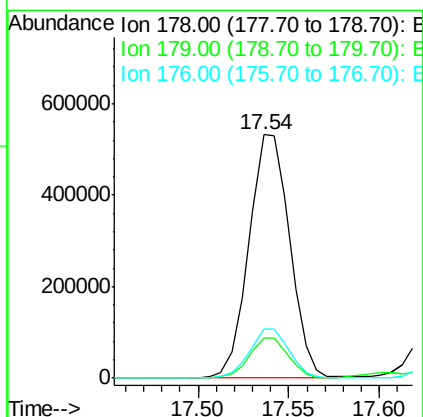
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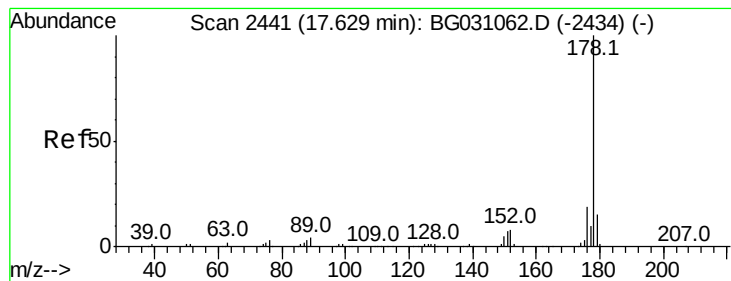
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#14  
**Phenanthrene**  
 Concen: 44.129 ng/ul  
 RT: 17.54 min Scan# 2425  
 Delta R.T. 0.00 min  
 Lab File: BG031067.D  
 Acq: 17 Nov 2017 5:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 16.5  | 12.2  | 18.4  |
| 176     | 20.1  | 16.4  | 24.6  |





#16

Anthracene

Concen: 10.737 ng/ul

RT: 17.63 min Scan# 2441

Delta R.T. 0.00 min

Lab File: BG031067.D

Acq: 17 Nov 2017 5:23

Instrument :

BNA\_G

ClientSampleId :

B0F91

Tot Ion:178 Resp: 205659

Ion Ratio Lower Upper

178 100

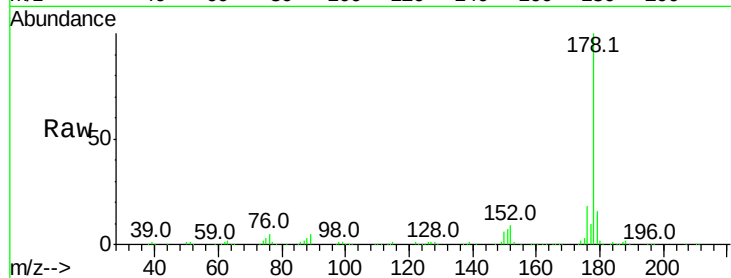
179 16.4 12.7 19.1

176 18.3 15.8 23.8

Manual Integrations  
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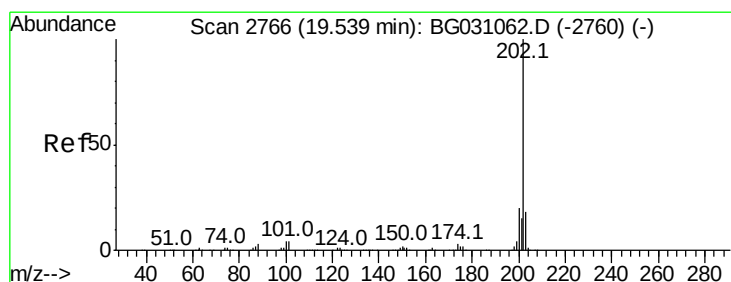
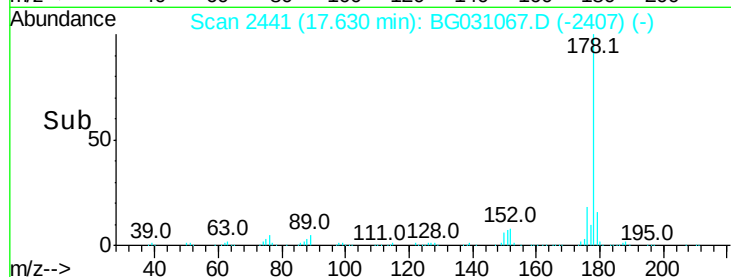
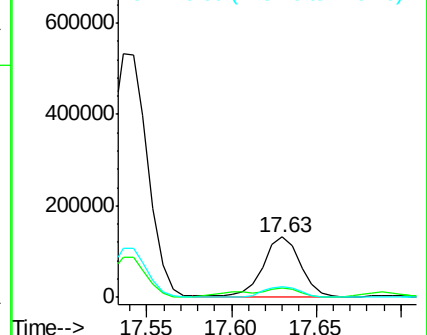
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Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#17

Fluoranthene

Concen: 40.690 ng/ul m

RT: 19.54 min Scan# 2766

Delta R.T. 0.00 min

Lab File: BG031067.D

Acq: 17 Nov 2017 5:23

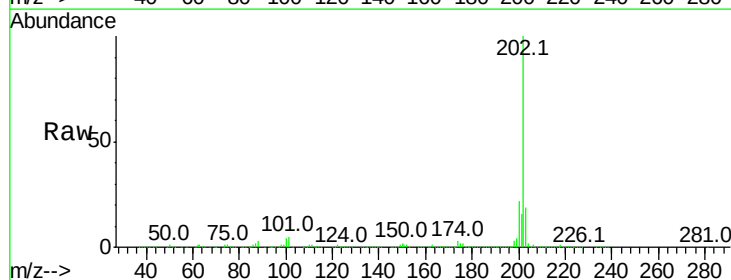
Tgt Ion:202 Resp: 1068170

Ion Ratio Lower Upper

202 100

101 5.4 9.8 14.8#

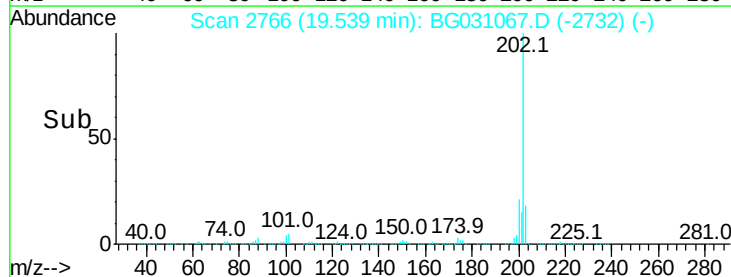
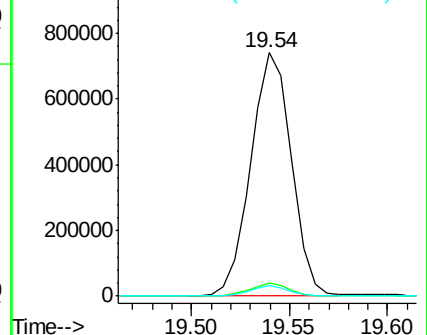
100 4.3 7.5 11.3#

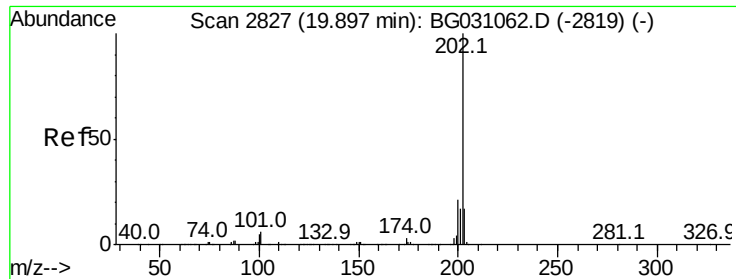


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B





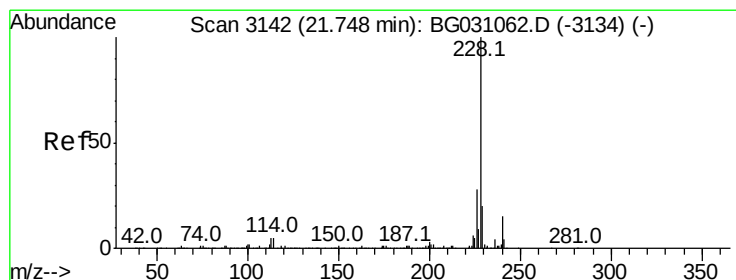
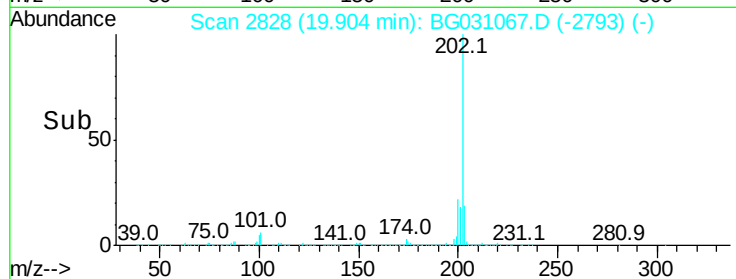
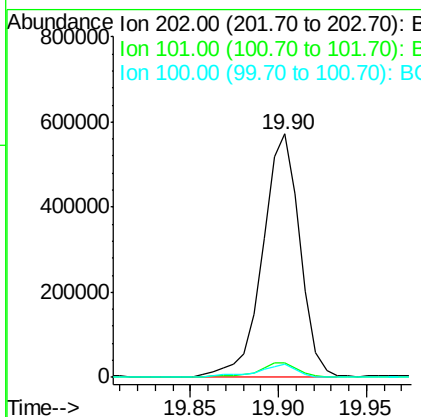
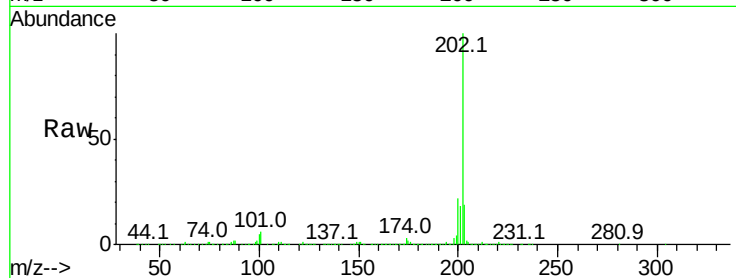
#20  
Pvrene  
Concen: 34.949 ng/ul m  
RT: 19.90 min Scan# 2828  
Delta R.T. 0.01 min  
Lab File: BG031067.D  
Acq: 17 Nov 2017 5:23

Instrument :  
BNA\_G  
ClientSampleId :  
B0F91

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 202     | 100   |            |       |
| 101     | 6.1   | 11.2       | 16.8# |
| 100     | 5.2   | 9.8        | 14.6# |

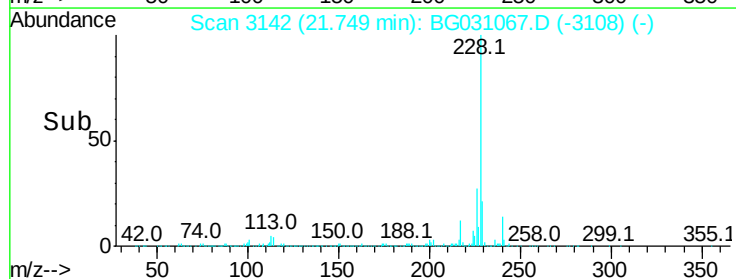
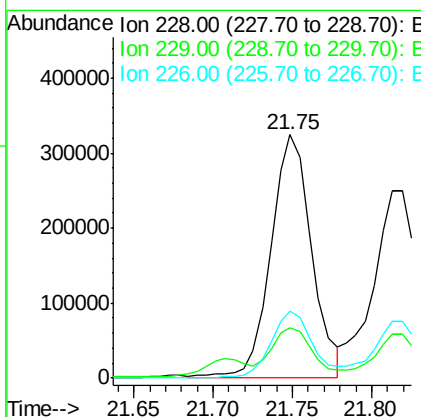
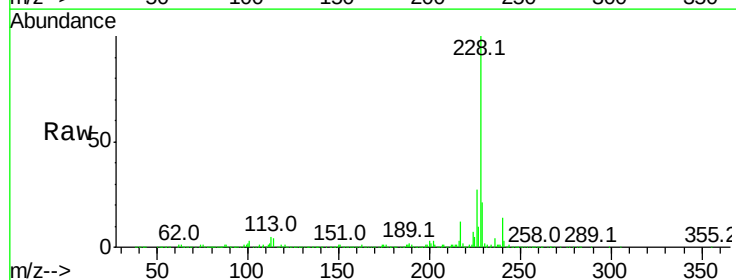
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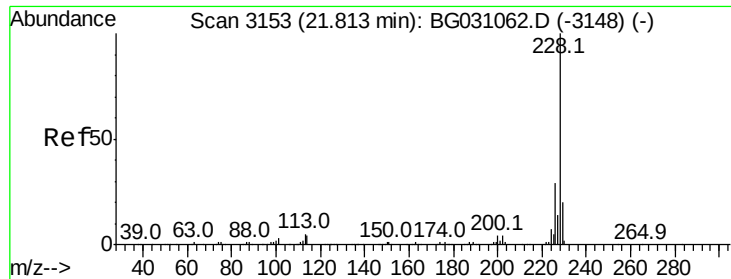
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11/17/2017 5:12:53 PM



#21  
Benzo(a)anthracene  
Concen: 20.598 ng/ul  
RT: 21.75 min Scan# 3142  
Delta R.T. 0.00 min  
Lab File: BG031067.D  
Acq: 17 Nov 2017 5:23

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 228     | 100   |            |       |
| 229     | 20.9  | 15.9       | 23.9  |
| 226     | 27.4  | 22.1       | 33.1  |





#22

Chrysene

Concen: 17.957 ng/ul

RT: 21.81 min Scan# 3153

Delta R.T. 0.00 min

Lab File: BG031067.D

Acq: 17 Nov 2017 5:23

Instrument :

BNA\_G

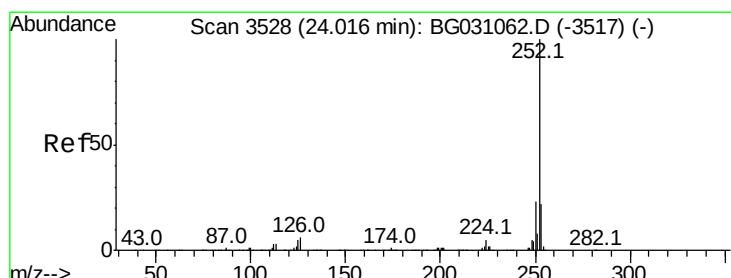
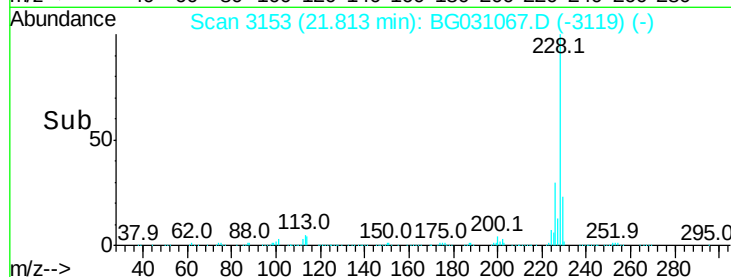
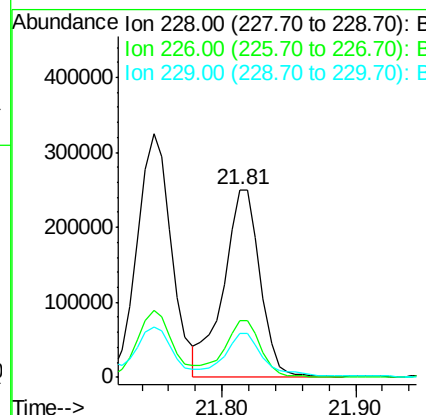
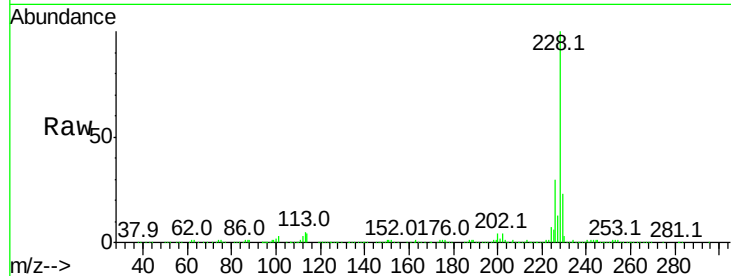
ClientSampleId :

B0F91

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 476185 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 30.2  | 25.0  | 37.6   |
| 229       | 23.1  | 16.6  | 25.0   |

Manual Integrations  
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#24

Benzo(b)fluoranthene

Concen: 17.486 ng/ul

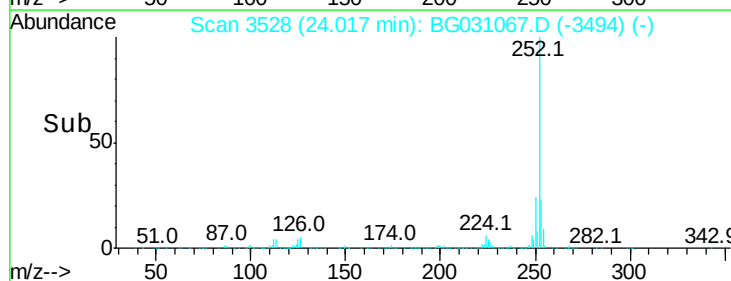
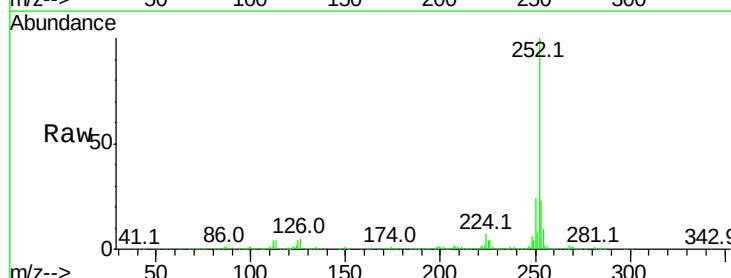
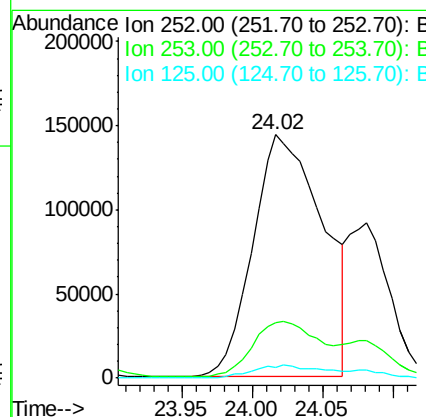
RT: 24.02 min Scan# 3528

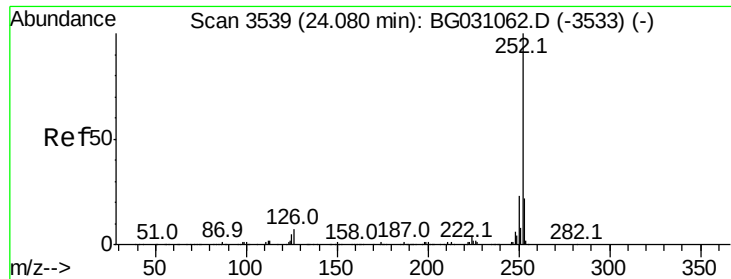
Delta R.T. 0.00 min

Lab File: BG031067.D

Acq: 17 Nov 2017 5:23

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 495896 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.9  | 17.8  | 26.6   |
| 125       | 4.3   | 9.4   | 14.0#  |





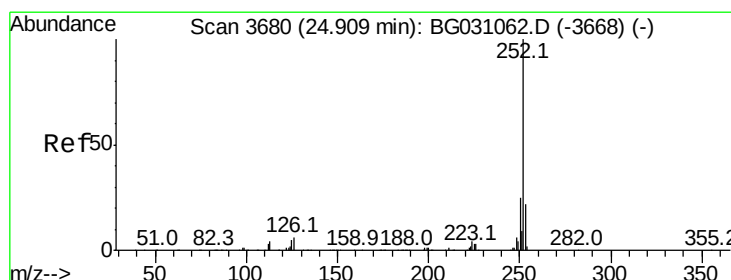
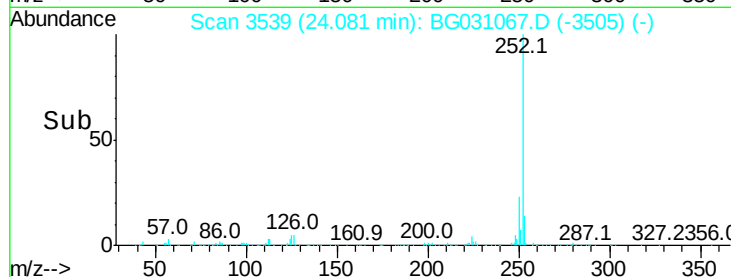
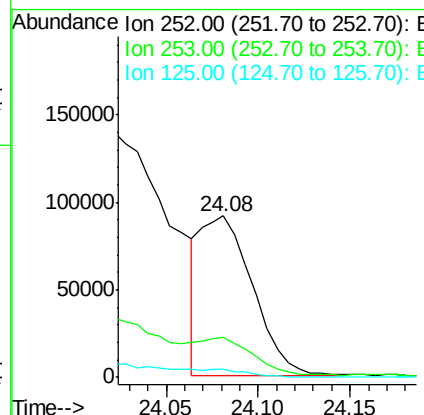
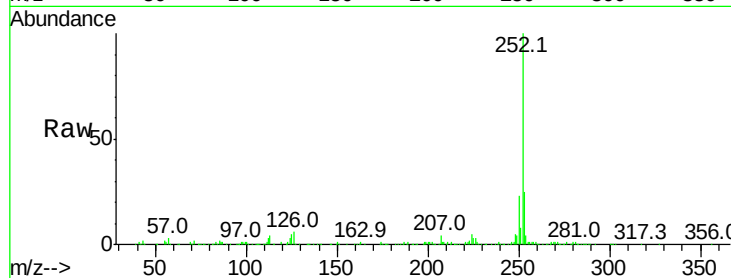
#25  
Benzo(k)fluoranthene  
Concen: 6.494 ng/ul m  
RT: 24.08 min Scan# 3539  
Delta R.T. 0.00 min  
Lab File: BG031067.D  
Acq: 17 Nov 2017 5:23

Instrument :  
BNA\_G  
ClientSampleId :  
B0F91

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.5  | 17.4  | 26.2  |
| 125     | 4.8   | 8.8   | 13.2  |

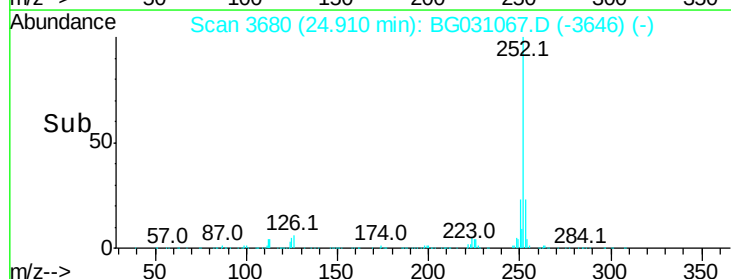
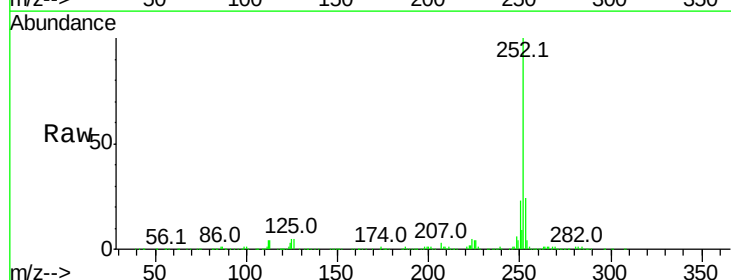
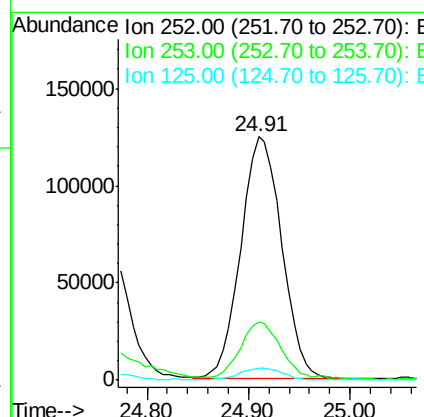
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11/17/2017 5:12:53 PM

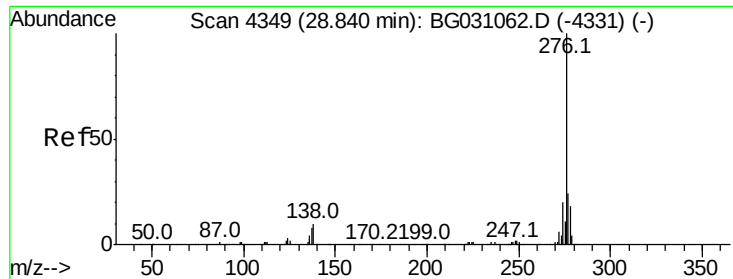


#27  
Benzo(a)pyrene  
Concen: 12.823 ng/ul  
RT: 24.91 min Scan# 3680  
Delta R.T. 0.00 min  
Lab File: BG031067.D  
Acq: 17 Nov 2017 5:23

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.8  | 17.1  | 25.7  |
| 125     | 4.7   | 9.4   | 14.2  |







#28

Indeno(1,2,3-cd)pyrene

Concen: 5.807 ng/ul

RT: 28.83 min Scan# 4348

Delta R.T. -0.01 min

Lab File: BG031067.D

Acq: 17 Nov 2017 5:23

Instrument :

BNA\_G

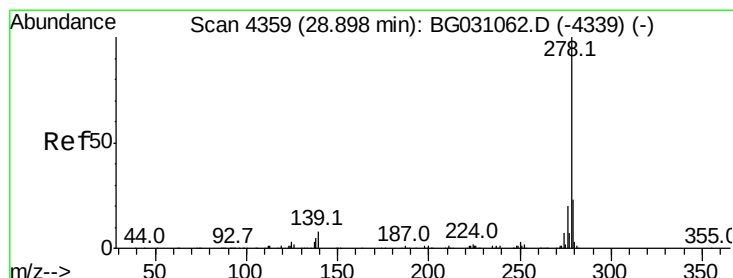
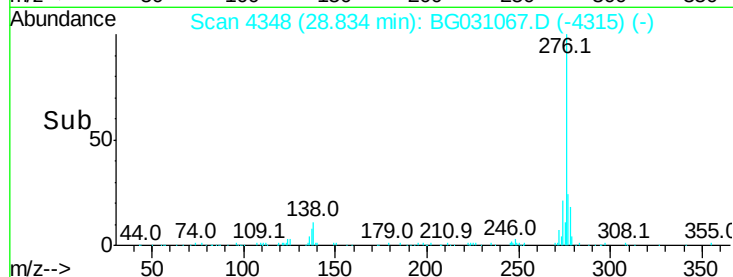
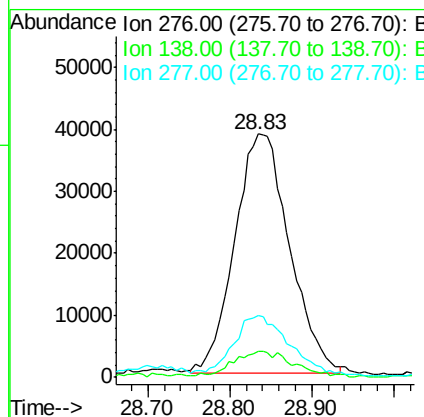
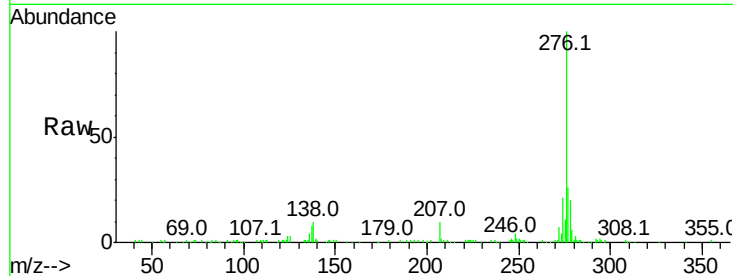
ClientSampled :

B0F91

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 179914 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 10.5  | 17.8  | 26.6#  |
| 277       | 25.5  | 19.4  | 29.0   |

Manual Integrations  
APPROVED

SOHIL  
11/17/2017 5:12:53 PM



#29

Dibenzo(a,h)anthracene

Concen: 2.464 ng/ul m

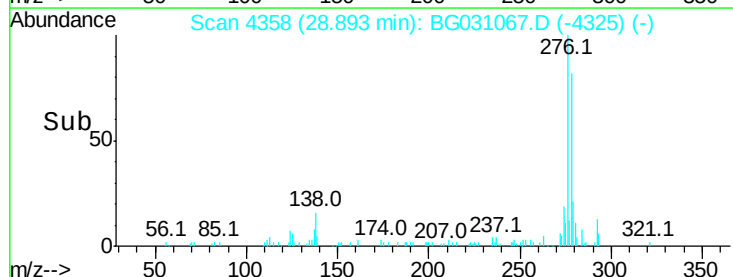
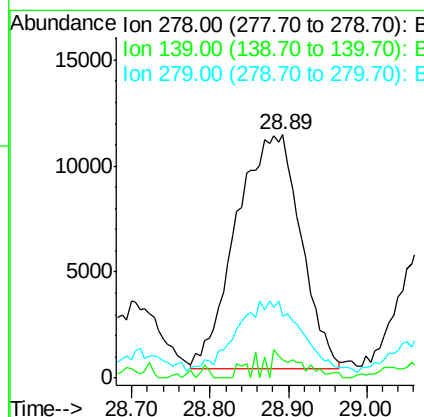
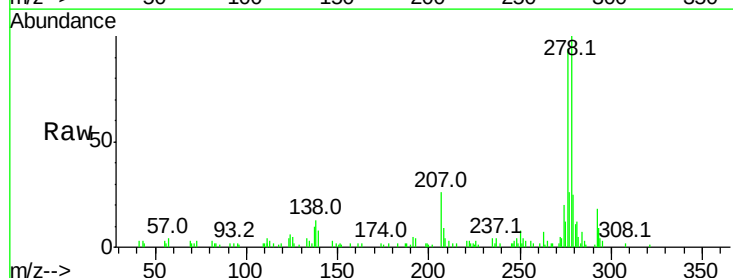
RT: 28.89 min Scan# 4358

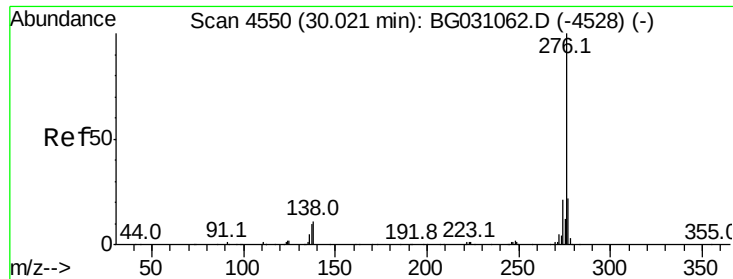
Delta R.T. -0.01 min

Lab File: BG031067.D

Acq: 17 Nov 2017 5:23

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 278   | Resp: | 63202 |
| Ion Ratio | Lower | Upper |       |
| 278       | 100   |       |       |
| 139       | 7.6   | 14.0  | 21.0# |
| 279       | 25.3  | 20.6  | 31.0  |





#30

Benzo(a,h,i)perylene

Concen: 4.850 ng/ul

RT: 30.02 min Scan# 4550

Delta R.T. 0.00 min

Lab File: BG031067.D

Acq: 17 Nov 2017 5:23

Instrument :

BNA\_G

ClientSampleId :

B0F91

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 276  | Resp: | 125128 |
| Ion Ratio |      | Lower | Upper  |
| 276       | 100  |       |        |
| 138       | 10.6 | 19.0  | 28.4#  |
| 277       | 22.7 | 19.7  | 29.5   |

Manual Integrations  
APPROVED

SOHIL  
11/17/2017 5:12:53 PM

