

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081920\  
 Data File : BG046383.D  
 Acq On : 20 Aug 2020 17:55  
 Operator : CG/JU  
 Sample : L3634-10  
 Misc :  
 ALS Vial : 47 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BFMF8

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 8/21/2020 12:47:31 PM

Quant Time: Aug 21 00:49:53 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\SOM-EPA-BG081320PAH.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Aug 21 00:37:00 2020  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.94  | 152  | 87060    | 20.00  | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.73 | 136  | 361778   | 20.00  | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.57 | 164  | 247472   | 20.00  | ng/ul  | 0.00     |
| 12) Phenanthrene-d10        | 17.31 | 188  | 554444   | 20.00  | ng/ul  | 0.00     |
| 18) Chrysene-d12            | 21.56 | 240  | 550376   | 20.00  | ng/ul  | 0.00     |
| 23) Perylene-d12            | 24.67 | 264  | 588196   | 20.00  | ng/ul  | 0.01     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 3) 2,4-Dichlorophenol-d3    | 10.36 | 165  | 155216   | 24.92  | ng/ul  | 0.00     |
| 7) Acenaphthylene-d8        | 14.26 | 160  | 586034   | 25.73  | ng/ul  | 0.00     |
| 10) Fluorene-d10            | 15.56 | 176  | 447007   | 25.61  | ng/ul  | 0.00     |
| 15) Anthracene-d10          | 17.41 | 188  | 646590   | 25.16  | ng/ul  | 0.00     |
| 19) Pyrene-d10              | 19.69 | 212  | 753772   | 26.61  | ng/ul  | 0.00     |
| 26) Benzo(a)pyrene-d12      | 24.45 | 264  | 831126   | 25.89  | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Qvalue |        |          |
| 4) Naphthalene              | 10.78 | 128  | 29150    | 1.549  | ng/ul# | 97       |
| 5) 2-Methylnaphthalene      | 12.39 | 142  | 18406    | 1.283  | ng/ul  | 87       |
| 8) Acenaphthylene           | 14.29 | 152  | 30560m   | 1.320  | ng/ul  |          |
| 9) Acenaphthene             | 14.63 | 153  | 48473    | 2.932  | ng/ul  | 98       |
| 11) Fluorene                | 15.61 | 166  | 57195    | 2.958  | ng/ul  | 97       |
| 14) Phenanthrene            | 17.35 | 178  | 945539   | 30.999 | ng/ul  | 98       |
| 16) Anthracene              | 17.44 | 178  | 199629   | 6.486  | ng/ul  | 98       |
| 17) Fluoranthene            | 19.37 | 202  | 1347926  | 39.632 | ng/ul  | 100      |
| 20) Pyrene                  | 19.72 | 202  | 1183151  | 32.750 | ng/ul  | 99       |
| 21) Benzo(a)anthracene      | 21.54 | 228  | 686279   | 19.165 | ng/ul  | 97       |
| 22) Chrysene                | 21.60 | 228  | 714172   | 20.631 | ng/ul  | 97       |
| 24) Benzo(b)fluoranthene    | 23.69 | 252  | 908397   | 23.354 | ng/ul  | 98       |
| 25) Benzo(k)fluoranthene    | 23.74 | 252  | 300421m  | 7.786  | ng/ul  |          |
| 27) Benzo(a)pyrene          | 24.52 | 252  | 600245   | 16.809 | ng/ul  | 99       |
| 28) Indeno(1,2,3-cd)pyrene  | 28.18 | 276  | 392871   | 8.787  | ng/ul  | 98       |
| 29) Dibenzo(a,h)anthracene  | 28.22 | 278  | 111596   | 3.078  | ng/ul  | 97       |
| 30) Benzo(a,h,i)perylene    | 29.27 | 276  | 187672   | 5.015  | ng/ul  | 98       |

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

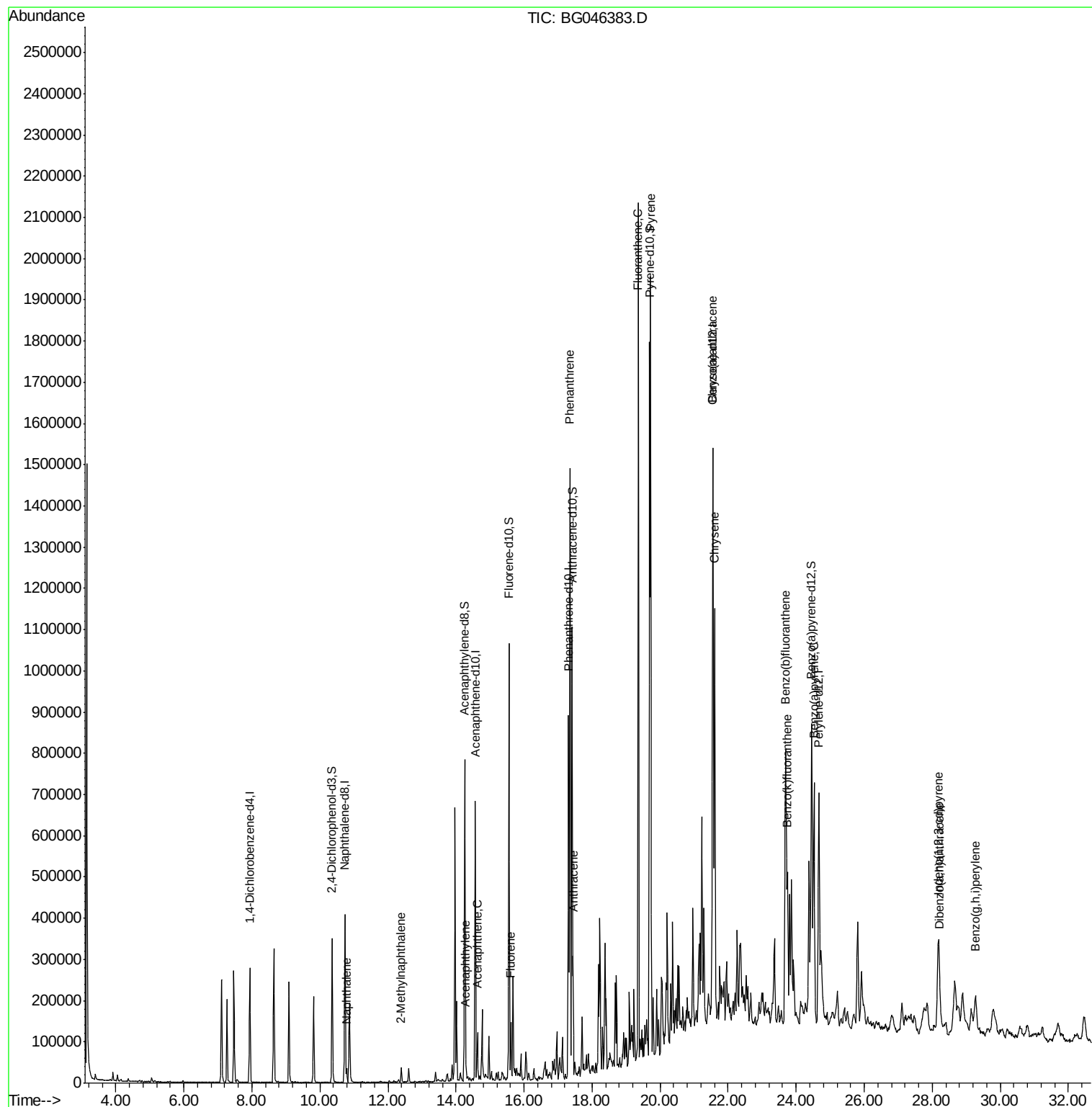
Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081920\  
Data File : BG046383.D  
Acq On : 20 Aug 2020 17:55  
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Sample : L3634-10  
Misc :  
ALS Vial : 47 Sample Multiplier: 1

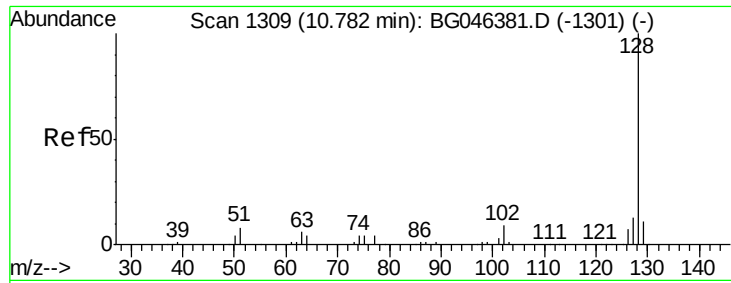
Instrument :  
BNA\_G  
ClientSampleId :  
BFMF8

Quant Time: Aug 21 00:49:53 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\SOM-EPA-BG081320PAH.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Aug 21 00:37:00 2020  
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#4

Naphthalene

Concen: 1.549 ng/ul

RT: 10.78 min Scan# 1309

Delta R.T. -0.00 min

Lab File: BG046383.D

Acq: 20 Aug 2020 17:55

Instrument :

BNA\_G

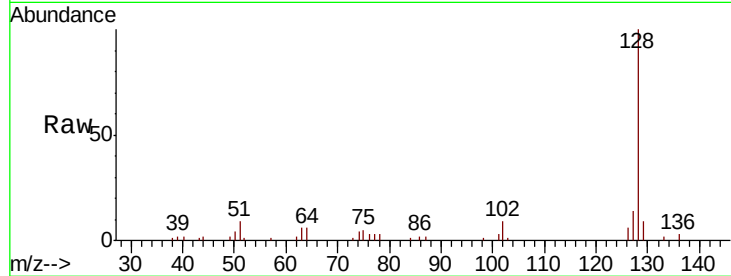
ClientSampleId :

BFMF8

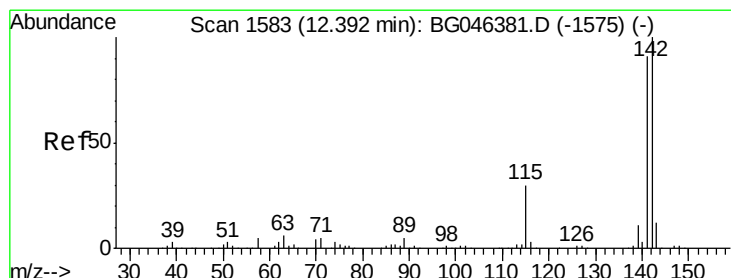
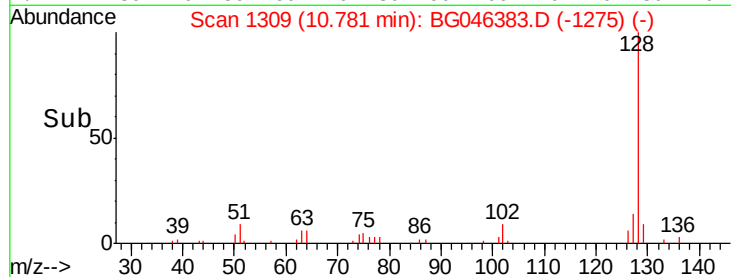
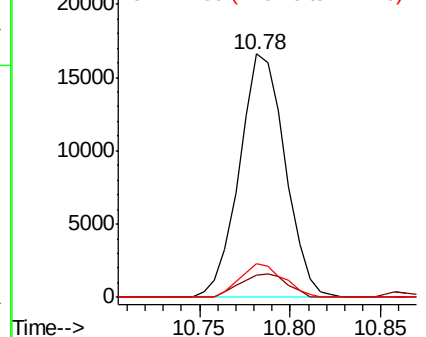
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 128   | Resp: | 29150 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 8.9   | 9.0   | 13.6# |
| 127       | 13.8  | 10.9  | 16.3  |

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



#5

2-Methylnaphthalene

Concen: 1.283 ng/ul

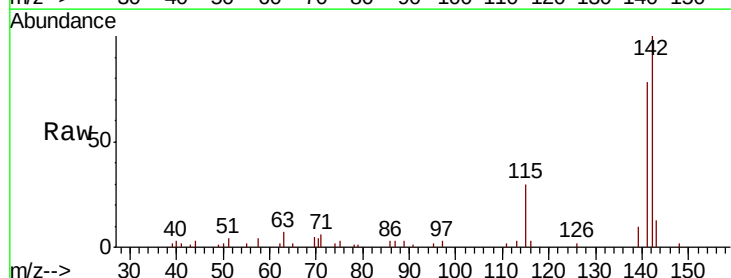
RT: 12.39 min Scan# 1583

Delta R.T. -0.00 min

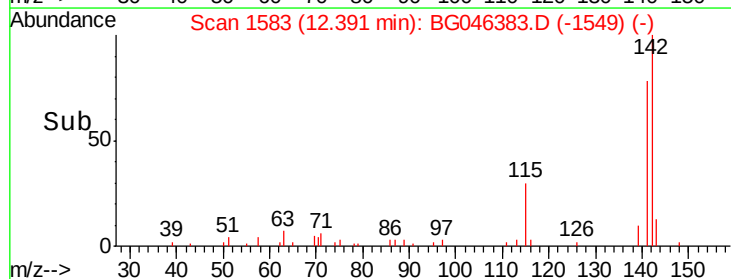
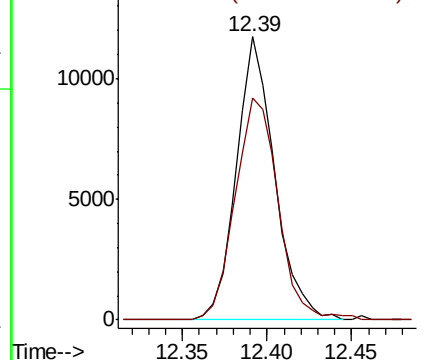
Lab File: BG046383.D

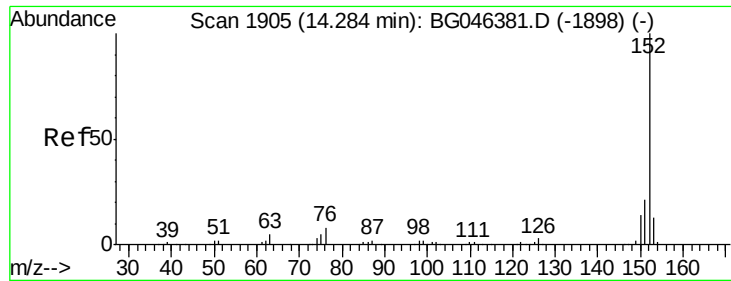
Acq: 20 Aug 2020 17:55

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 18406 |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 78.5  | 72.5  | 108.7 |



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





#8

Acenaphthylene

Concen: 1.320 ng/ul m

RT: 14.29 min Scan# 1906

Delta R.T. 0.00 min

Lab File: BG046383.D

Acq: 20 Aug 2020 17:55

Instrument :

BNA\_G

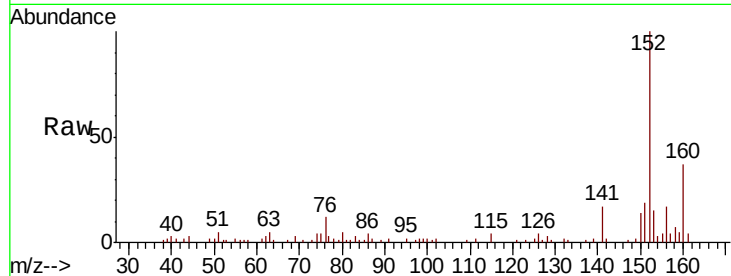
ClientSampleId :

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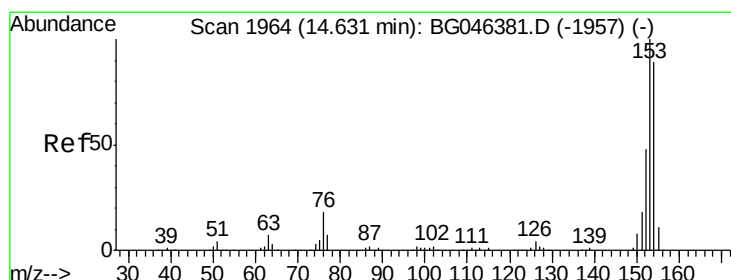
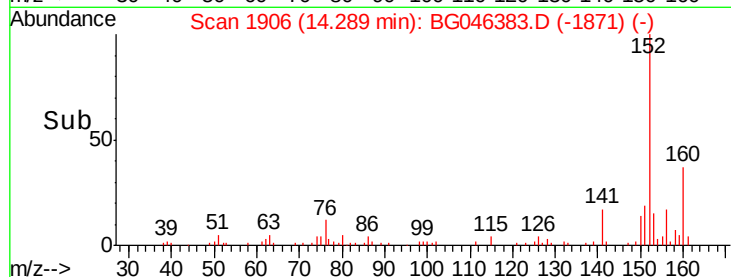
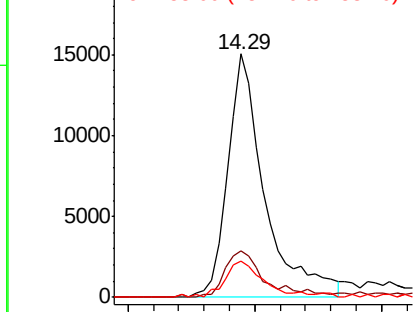
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 30560 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 19.0  | 16.5  | 24.7  |
| 153       | 14.7  | 11.0  | 16.6  |

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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: 2.932 ng/ul

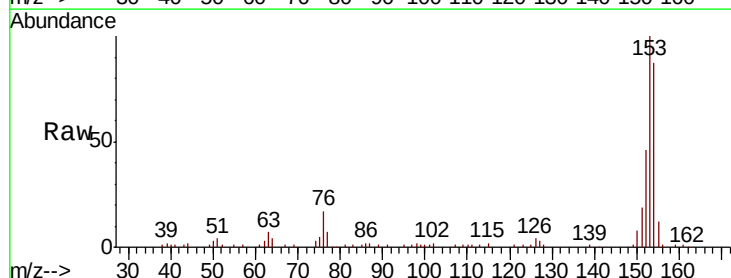
RT: 14.63 min Scan# 1964

Delta R.T. -0.00 min

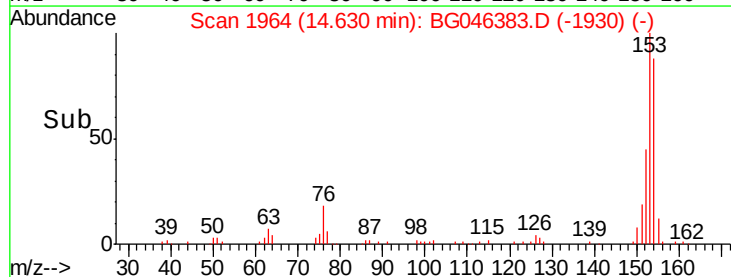
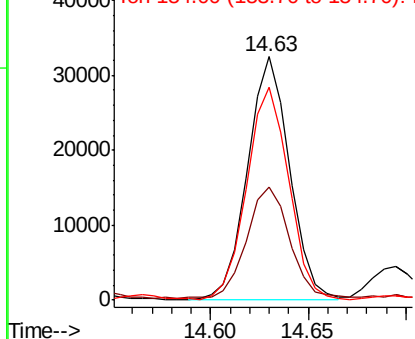
Lab File: BG046383.D

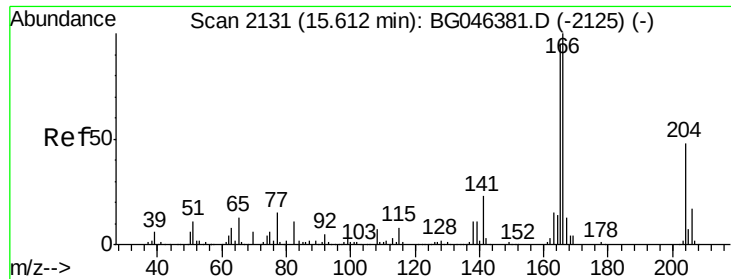
Acq: 20 Aug 2020 17:55

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 48473 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 46.2  | 37.2  | 55.8  |
| 154       | 87.3  | 67.8  | 101.6 |



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





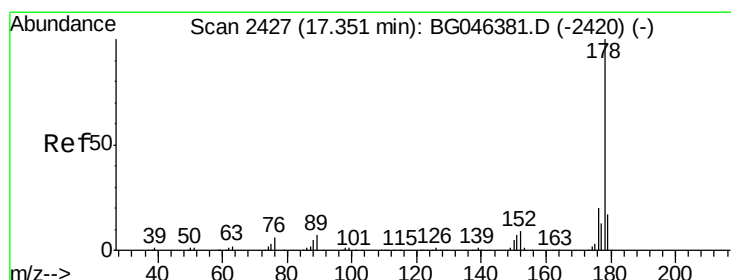
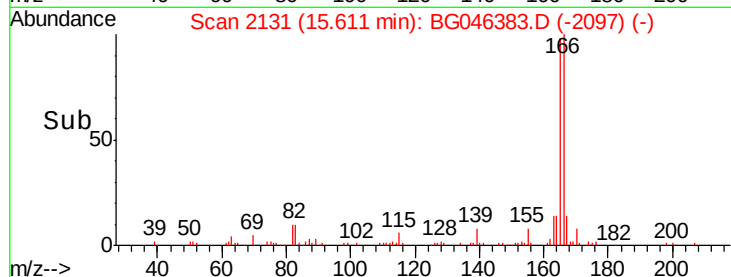
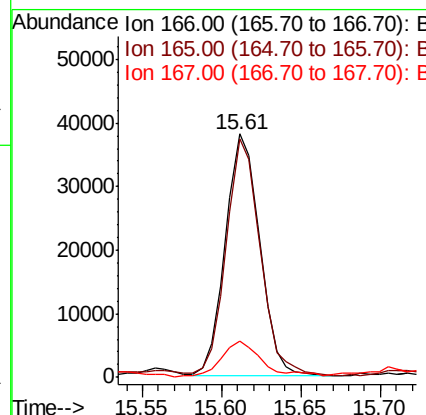
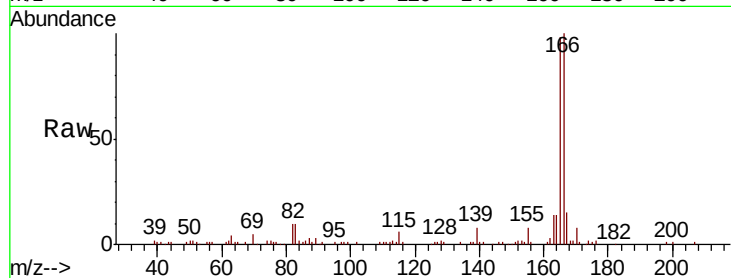
#11  
Fluorene  
Concen: 2.958 ng/ul  
RT: 15.61 min Scan# 2131  
Delta R.T. -0.00 min  
Lab File: BG046383.D  
Acq: 20 Aug 2020 17:55

Instrument :  
BNA\_G  
ClientSampled :  
BFMF8

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 98.2  | 75.9  | 113.9 |
| 167     | 14.8  | 10.7  | 16.1  |

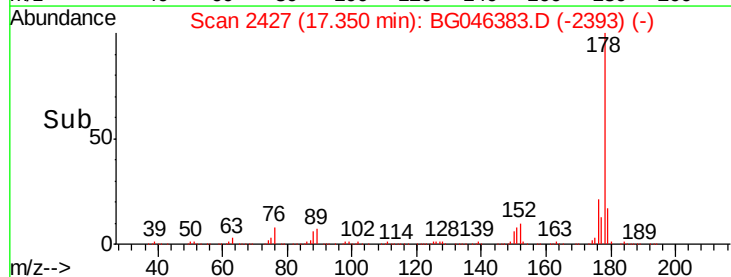
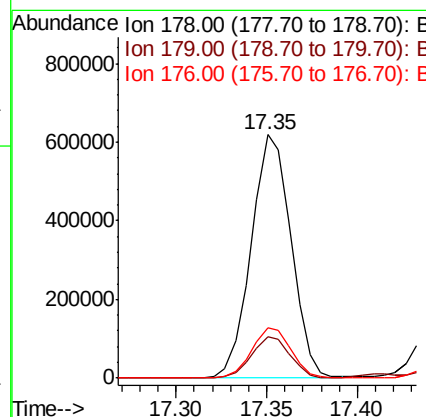
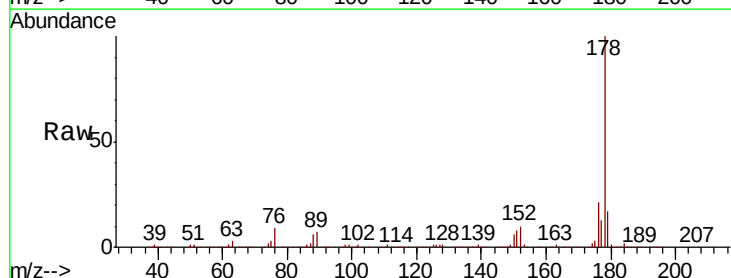
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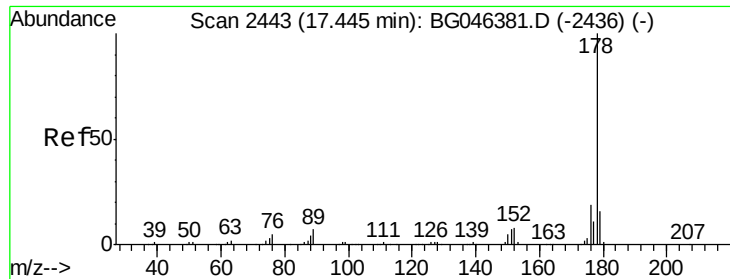
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#14  
Phenanthrene  
Concen: 30.999 ng/ul  
RT: 17.35 min Scan# 2427  
Delta R.T. -0.00 min  
Lab File: BG046383.D  
Acq: 20 Aug 2020 17:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 17.0  | 12.8  | 19.2  |
| 176     | 20.5  | 15.8  | 23.8  |





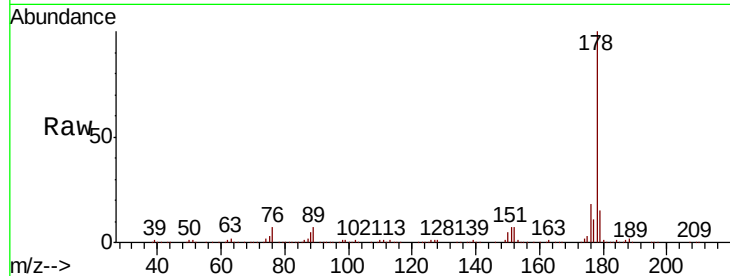
#16  
 Anthracene  
 Concen: 6.486 ng/ul  
 RT: 17.44 min Scan# 2443  
 Delta R.T. -0.00 min  
 Lab File: BG046383.D  
 Acq: 20 Aug 2020 17:55

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BFMF8

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.4  | 13.2  | 19.8  |
| 176     | 18.4  | 15.2  | 22.8  |

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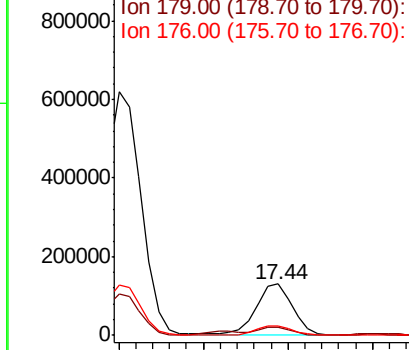


Abundance

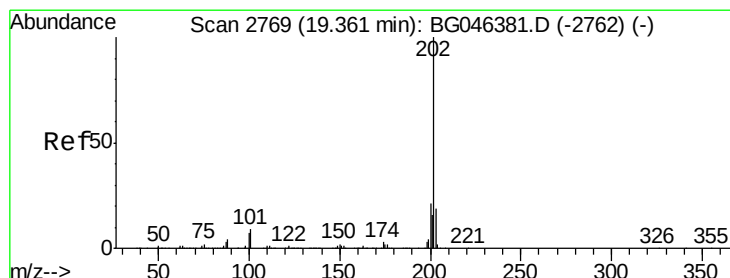
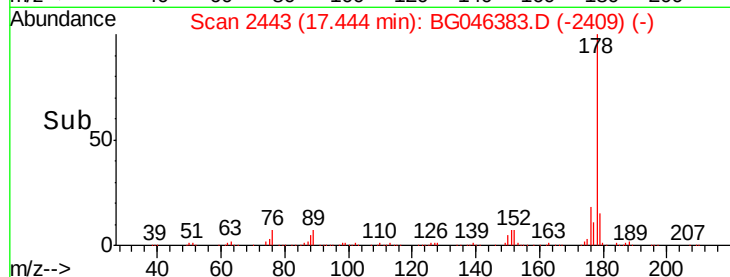
Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



Time--> 17.35 17.40 17.45 17.50



#17  
 Fluoranthene  
 Concen: 39.632 ng/ul  
 RT: 19.37 min Scan# 2770  
 Delta R.T. 0.00 min  
 Lab File: BG046383.D  
 Acq: 20 Aug 2020 17:55

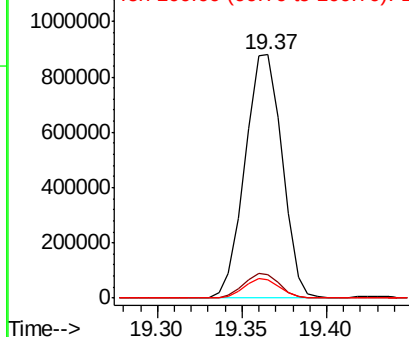
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.9   | 7.8   | 11.6  |
| 100     | 7.4   | 5.9   | 8.9   |

Abundance

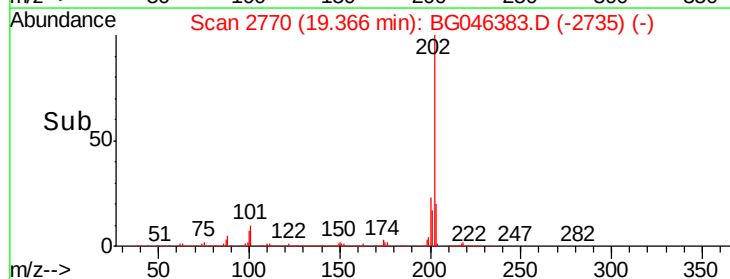
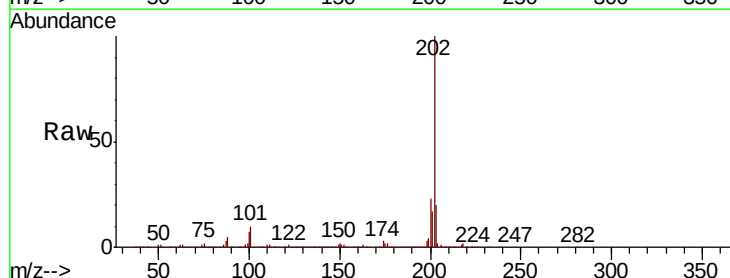
Ion 202.00 (201.70 to 202.70): E

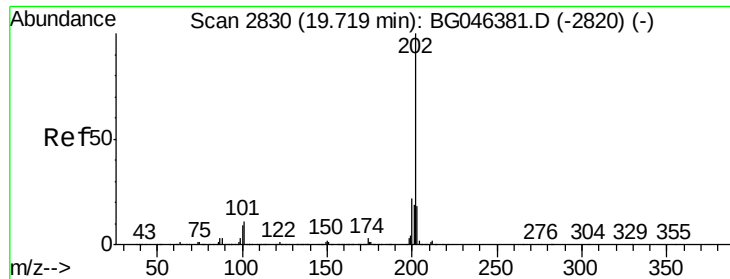
Ion 101.00 (100.70 to 101.70): E

Ion 100.00 (99.70 to 100.70): B



Time--> 19.30 19.35 19.40





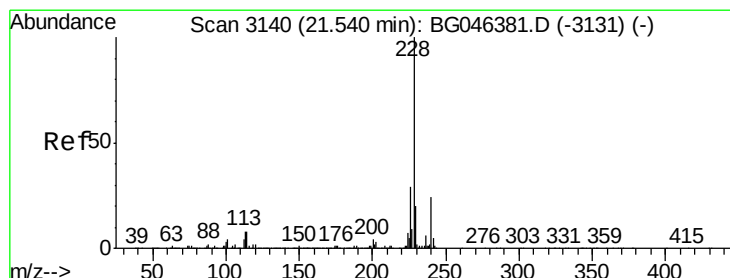
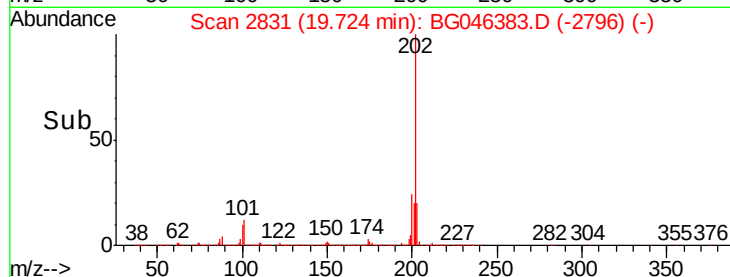
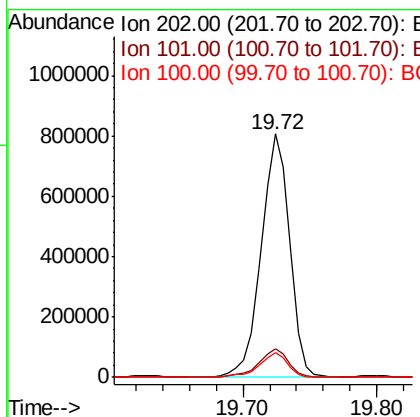
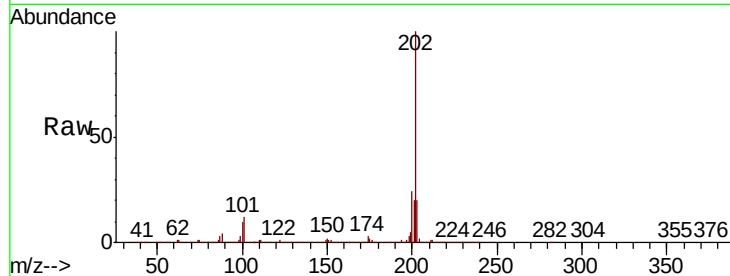
#20  
Pvrene  
Concen: 32.750 ng/ul  
RT: 19.72 min Scan# 2831  
Delta R.T. 0.00 min  
Lab File: BG046383.D  
Acq: 20 Aug 2020 17:55

Instrument :  
BNA\_G  
ClientSampleId :  
BFMF8

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.8  | 8.9   | 13.3  |
| 100     | 9.9   | 7.9   | 11.9  |

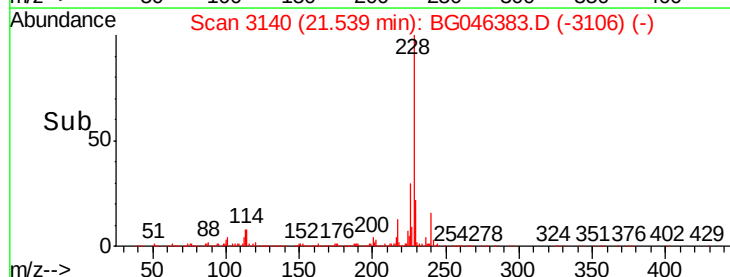
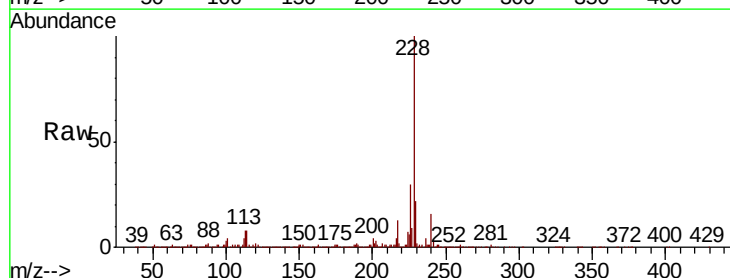
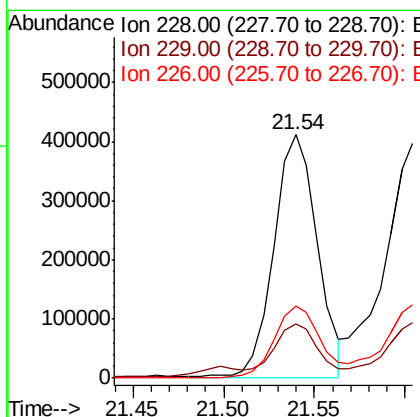
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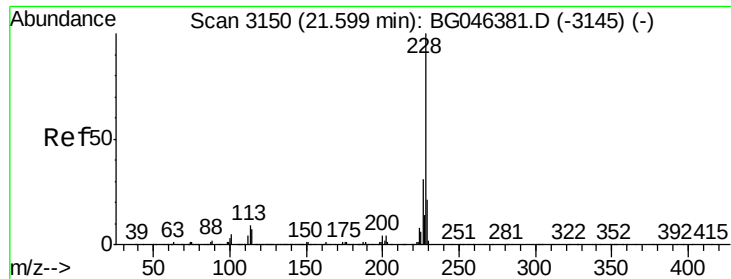
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#21  
Benzo(a)anthracene  
Concen: 19.165 ng/ul  
RT: 21.54 min Scan# 3140  
Delta R.T. -0.00 min  
Lab File: BG046383.D  
Acq: 20 Aug 2020 17:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 22.3  | 16.6  | 25.0  |
| 226     | 29.7  | 22.6  | 33.8  |





#22

Chrysene

Concen: 20.631 ng/ul

RT: 21.60 min Scan# 3151

Delta R.T. 0.00 min

Lab File: BG046383.D

Acq: 20 Aug 2020 17:55

Instrument :

BNA\_G

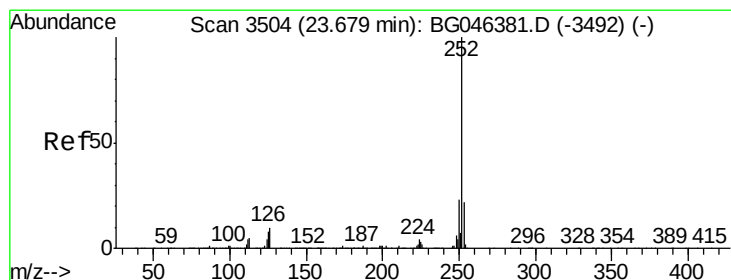
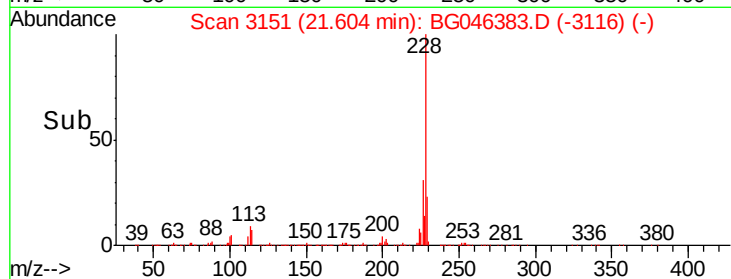
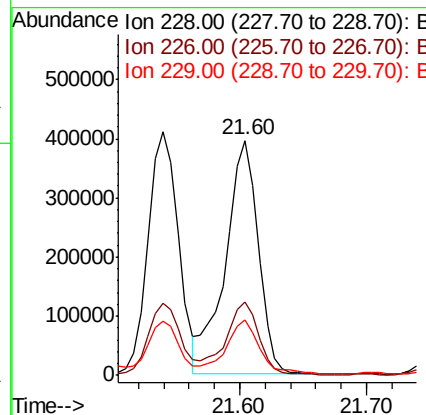
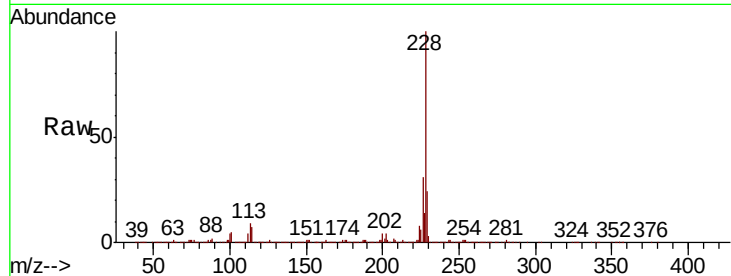
ClientSampleId :

BFMF8

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 228   | Resp: | 714172 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 31.4  | 25.5  | 38.3   |
| 229       | 23.7  | 17.0  | 25.4   |

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#24

Benzo(b)fluoranthene

Concen: 23.354 ng/ul

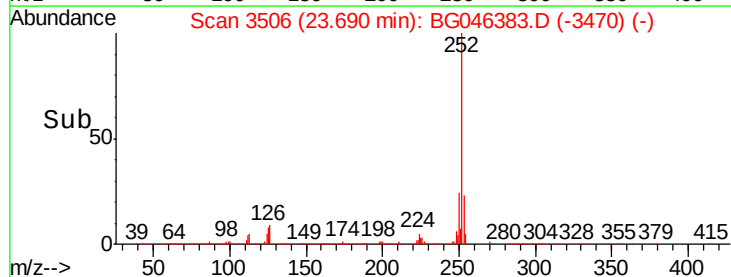
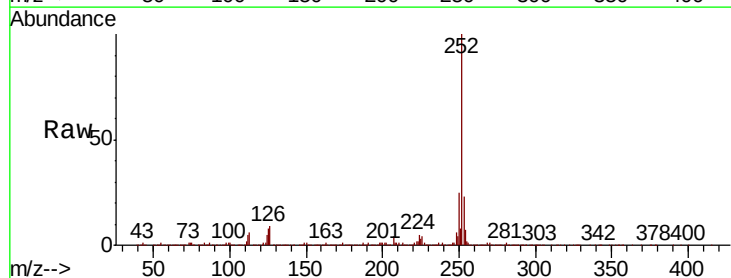
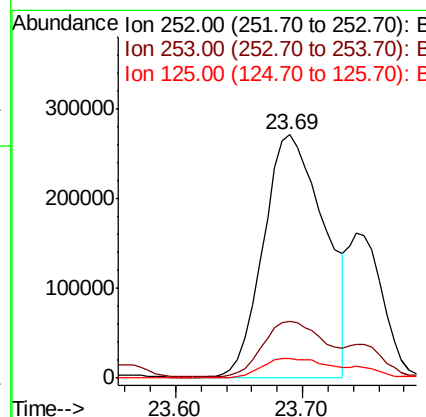
RT: 23.69 min Scan# 3506

Delta R.T. 0.01 min

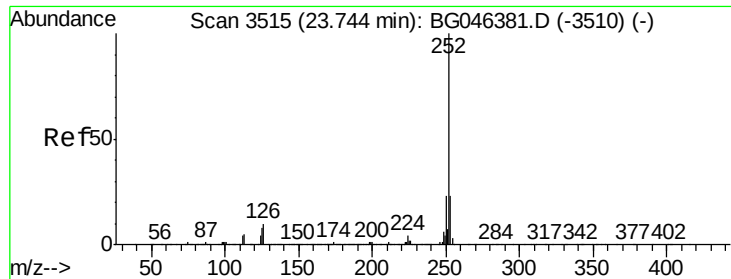
Lab File: BG046383.D

Acq: 20 Aug 2020 17:55

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 908397 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.4  | 17.8  | 26.6   |
| 125       | 8.2   | 6.4   | 9.6    |







#25

Benzo(k)fluoranthene

Concen: 7.786 ng/ul m

RT: 23.74 min Scan# 3515

Delta R.T. -0.00 min

Lab File: BG046383.D

Acq: 20 Aug 2020 17:55

Instrument :

BNA\_G

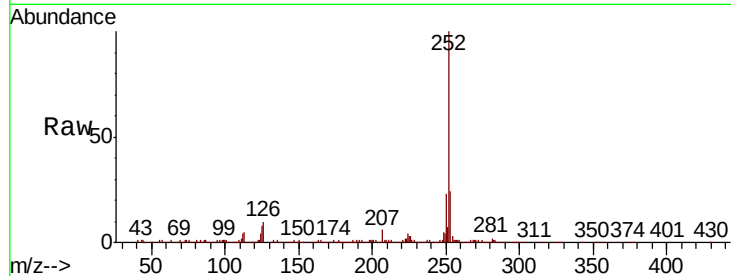
ClientSampleId :

BFMF8

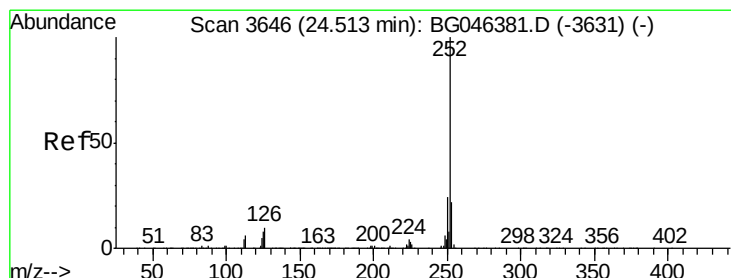
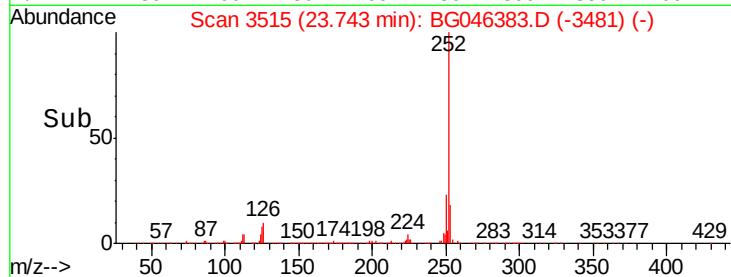
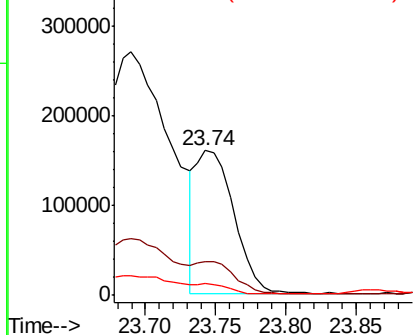
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 252   | Resp: | 300421 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.7  | 18.5  | 27.7   |
| 125       | 7.9   | 6.2   | 9.2    |

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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



#27

Benzo(a)pyrene

Concen: 16.809 ng/ul

RT: 24.52 min Scan# 3648

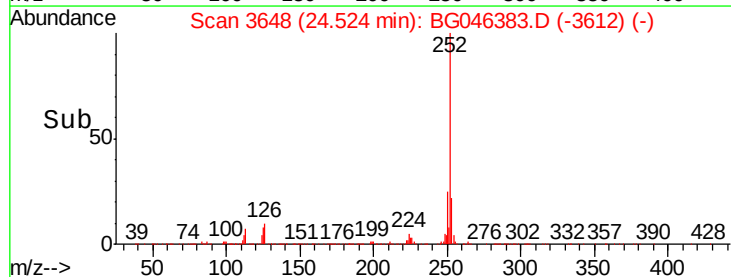
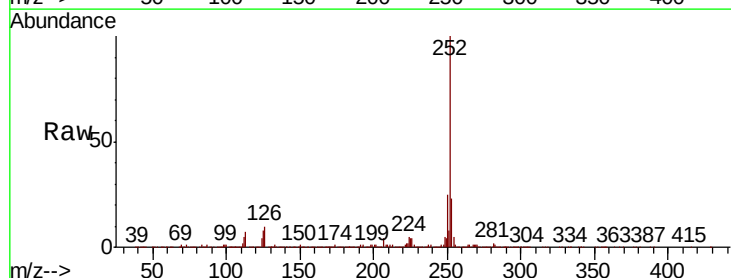
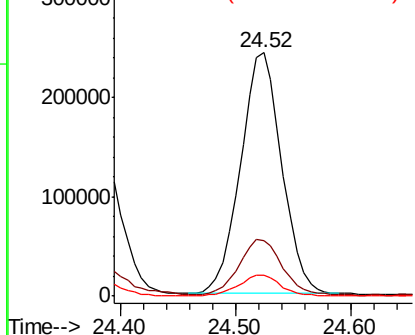
Delta R.T. 0.01 min

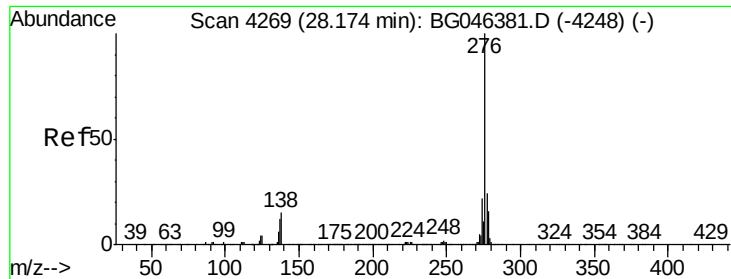
Lab File: BG046383.D

Acq: 20 Aug 2020 17:55

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 600245 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 22.7  | 17.8  | 26.8   |
| 125       | 8.5   | 7.1   | 10.7   |

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





#28

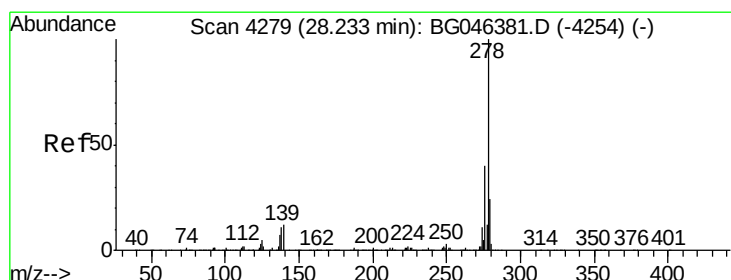
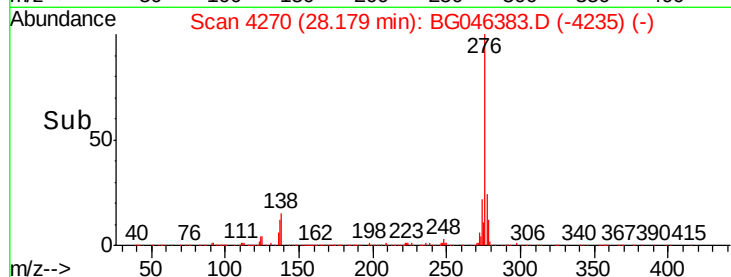
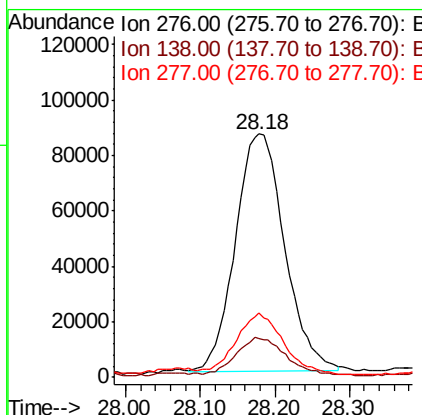
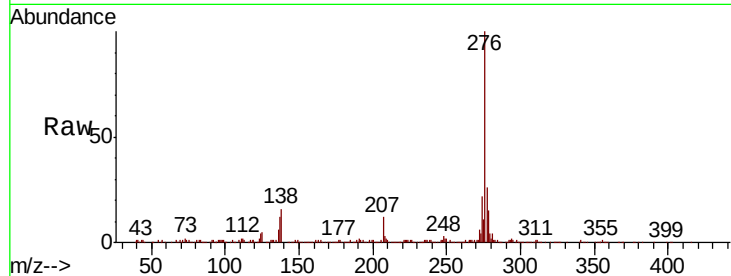
Indeno(1,2,3-cd)pyrene  
Concen: 8.787 ng/ul  
RT: 28.18 min Scan# 4270  
Delta R.T. 0.00 min  
Lab File: BG046383.D  
Acq: 20 Aug 2020 17:55

Instrument :  
BNA\_G  
ClientSampleId :  
BFMF8

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 15.8  | 13.2  | 19.8  |
| 277     | 26.3  | 19.9  | 29.9  |

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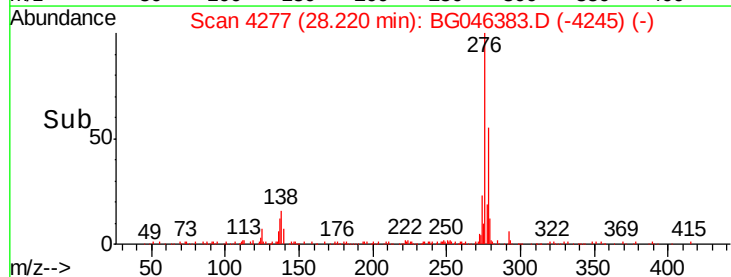
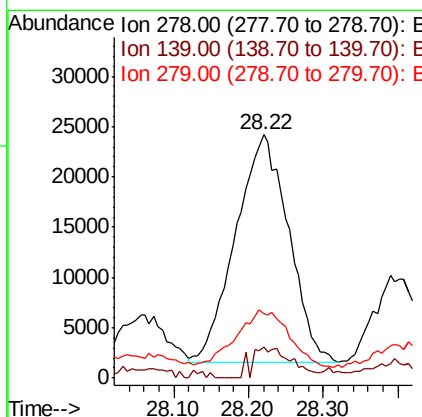
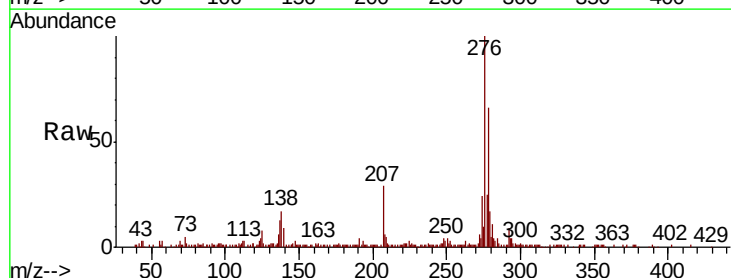
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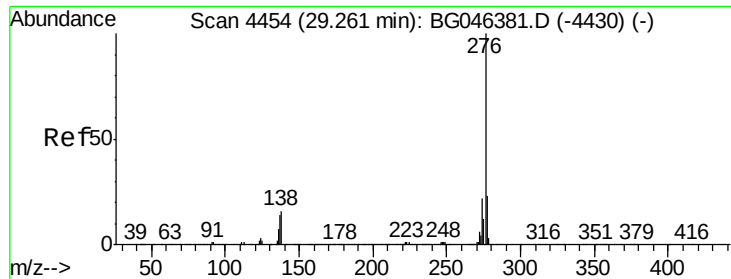


#29

Dibenzo(a,h)anthracene  
Concen: 3.078 ng/ul  
RT: 28.22 min Scan# 4277  
Delta R.T. -0.01 min  
Lab File: BG046383.D  
Acq: 20 Aug 2020 17:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 12.9  | 9.8   | 14.8  |
| 279     | 26.3  | 19.7  | 29.5  |





#30

Benzo(a,h,i)perylene

Concen: 5.015 ng/ul

RT: 29.27 min Scan# 4456

Delta R.T. 0.01 min

Lab File: BG046383.D

Acq: 20 Aug 2020 17:55

Instrument :

BNA\_G

ClientSampleId :

BFMF8

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 187672 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 16.9  | 12.9  | 19.3   |
| 277       | 23.2  | 19.4  | 29.0   |

Manual Integrations  
APPROVED

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