

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081720\  
 Data File : BG046310.D  
 Acq On : 18 Aug 2020 00:37  
 Operator : CG/JU  
 Sample : L3632-04  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BFM82

Manual Integrations  
 APPROVED

mohammad  
 8/19/2020 2:16:11 PM

Quant Time: Aug 18 02:24:07 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\SOM-EPA-BG081320PAH.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Aug 13 13:50:19 2020  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.94  | 152  | 69178    | 20.00  | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.74 | 136  | 292239   | 20.00  | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.57 | 164  | 205500   | 20.00  | ng/ul  | 0.00     |
| 12) Phenanthrene-d10        | 17.31 | 188  | 481299   | 20.00  | ng/ul  | 0.00     |
| 18) Chrysene-d12            | 21.56 | 240  | 463685   | 20.00  | ng/ul  | 0.00     |
| 23) Perylene-d12            | 24.67 | 264  | 504352   | 20.00  | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |        |        |          |
| 3) 2,4-Dichlorophenol-d3    | 10.36 | 165  | 248093   | 49.30  | ng/ul  | 0.00     |
| 7) Acenaphthylene-d8        | 14.26 | 160  | 939131   | 49.66  | ng/ul  | 0.00     |
| 10) Fluorene-d10            | 15.56 | 176  | 697358   | 48.12  | ng/ul  | 0.00     |
| 15) Anthracene-d10          | 17.41 | 188  | 1031159  | 46.22  | ng/ul  | 0.00     |
| 19) Pyrene-d10              | 19.70 | 212  | 1154848  | 48.39  | ng/ul  | 0.00     |
| 26) Benzo(a)pyrene-d12      | 24.46 | 264  | 1327370  | 48.23  | ng/ul  | 0.00     |
| Target Compounds            |       |      |          | Qvalue |        |          |
| 4) Naphthalene              | 10.78 | 128  | 35381    | 2.328  | ng/ul# | 95       |
| 5) 2-Methylnaphthalene      | 12.39 | 142  | 15909    | 1.373  | ng/ul  | 98       |
| 8) Acenaphthylene           | 14.29 | 152  | 45069    | 2.344  | ng/ul  | 99       |
| 9) Acenaphthene             | 14.63 | 153  | 35167    | 2.561  | ng/ul  | 96       |
| 11) Fluorene                | 15.61 | 166  | 45798    | 2.853  | ng/ul  | 98       |
| 14) Phenanthrene            | 17.35 | 178  | 1032624  | 38.999 | ng/ul  | 97       |
| 16) Anthracene              | 17.44 | 178  | 194984   | 7.298  | ng/ul  | 99       |
| 17) Fluoranthene            | 19.36 | 202  | 1632849  | 55.305 | ng/ul  | 97       |
| 20) Pyrene                  | 19.73 | 202  | 1496709  | 49.175 | ng/ul  | 98       |
| 21) Benzo(a)anthracene      | 21.54 | 228  | 1056119  | 35.007 | ng/ul  | 96       |
| 22) Chrysene                | 21.60 | 228  | 1062635  | 36.436 | ng/ul  | 96       |
| 24) Benzo(b)fluoranthene    | 23.69 | 252  | 1627394  | 48.795 | ng/ul  | 95       |
| 25) Benzo(k)fluoranthene    | 23.75 | 252  | 542835m  | 16.408 | ng/ul  |          |
| 27) Benzo(a)pyrene          | 24.53 | 252  | 1205897  | 39.383 | ng/ul  | 96       |
| 28) Indeno(1,2,3-cd)pyrene  | 28.19 | 276  | 920612   | 24.012 | ng/ul  | 98       |
| 29) Dibenzo(a,h)anthracene  | 28.23 | 278  | 279305   | 8.985  | ng/ul# | 89       |
| 30) Benzo(g,h,i)perylene    | 29.29 | 276  | 733263   | 22.853 | ng/ul  | 98       |

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

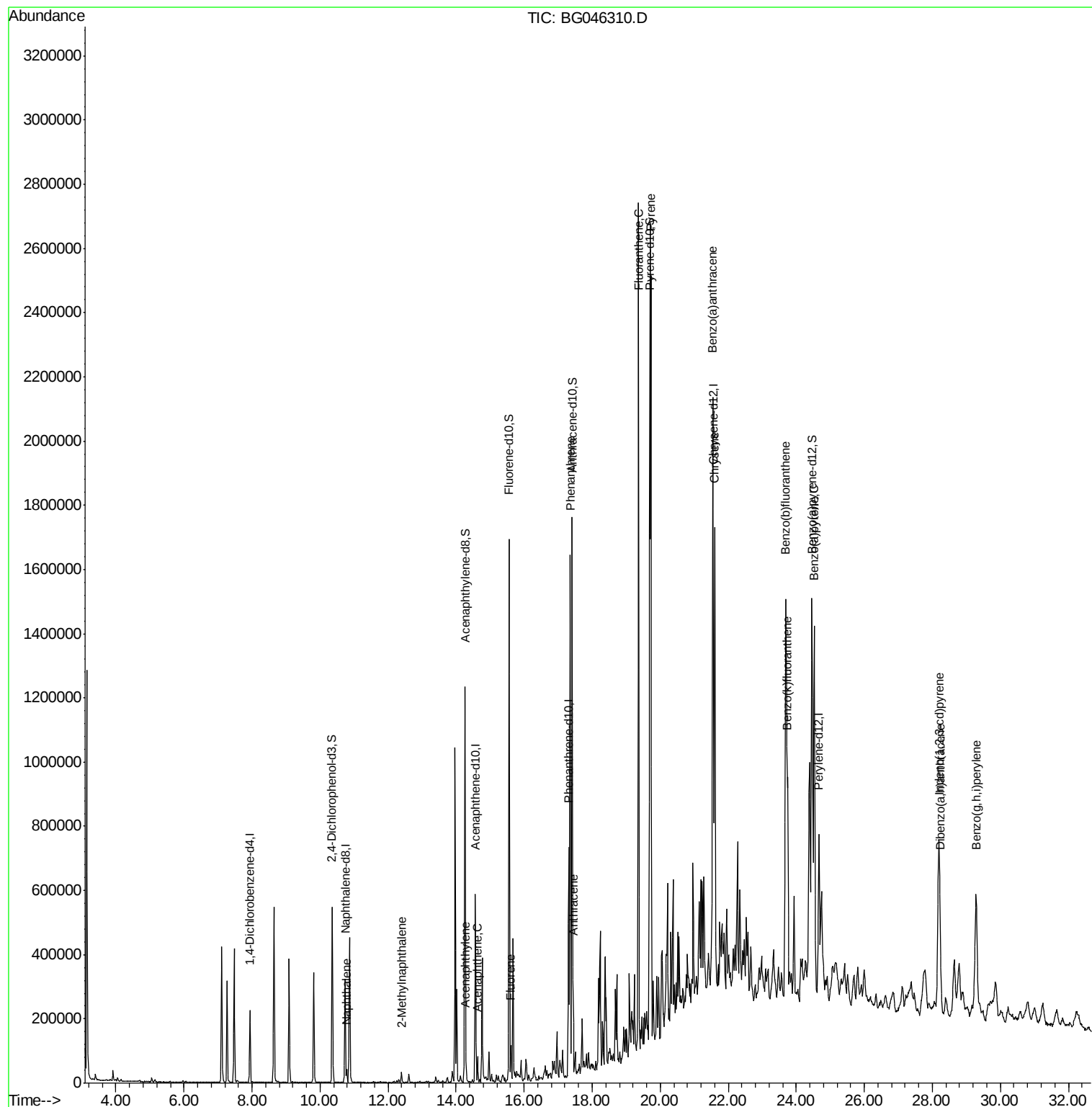
Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG081720\  
Data File : BG046310.D  
Acq On : 18 Aug 2020 00:37  
Operator : CG/JU  
Sample : L3632-04  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

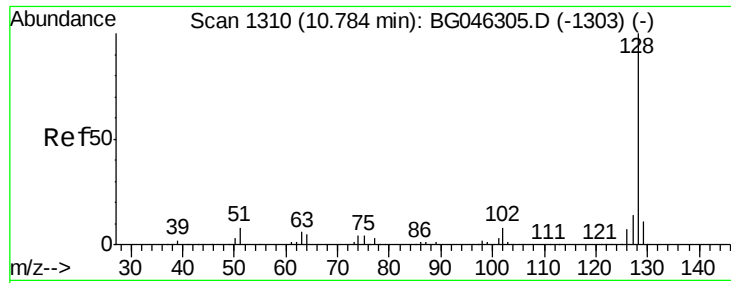
Instrument :  
BNA\_G  
ClientSampleId :  
BFM82

Quant Time: Aug 18 02:24:07 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\SOM-EPA-BG081320PAH.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Aug 13 13:50:19 2020  
Response via : Initial Calibration

Manual Integrations  
APPROVED

mohammad  
8/19/2020 2:16:11 PM





#4

Naphthalene

Concen: 2.328 ng/ul

RT: 10.78 min Scan# 1310

Delta R.T. -0.01 min

Lab File: BG046310.D

Acq: 18 Aug 2020 00:37

Instrument :

BNA\_G

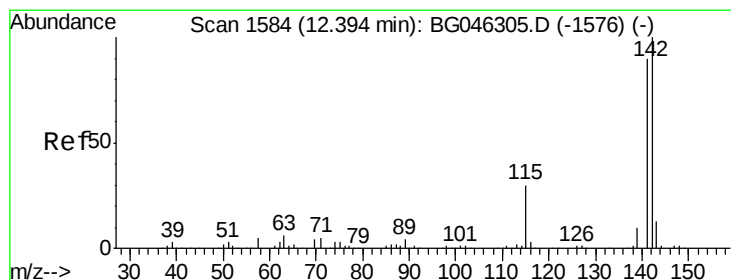
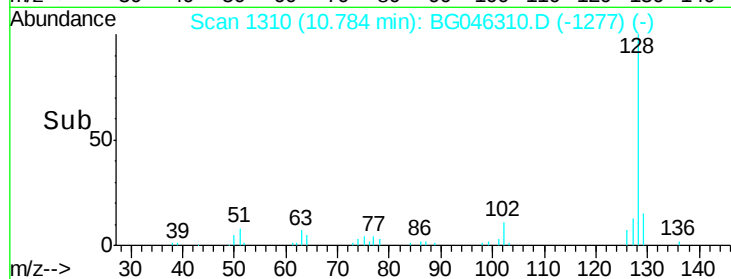
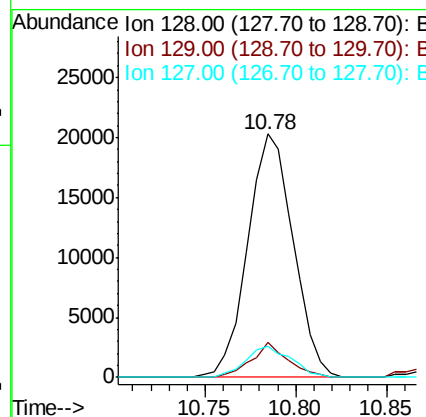
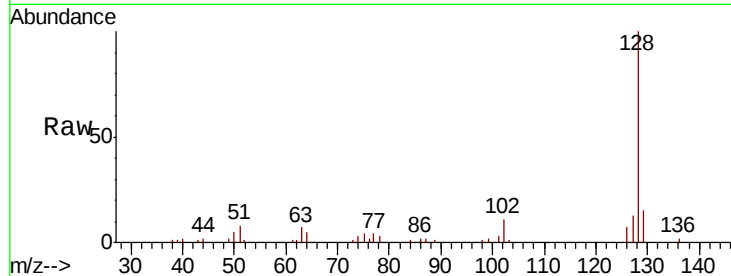
ClientSampled :

BFM82

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 128   | Resp: | 35381 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 14.5  | 9.0   | 13.6# |
| 127       | 12.6  | 10.9  | 16.3  |

Manual Integrations  
APPROVED

mohammad  
8/19/2020 2:16:11 PM



#5

2-Methylnaphthalene

Concen: 1.373 ng/ul

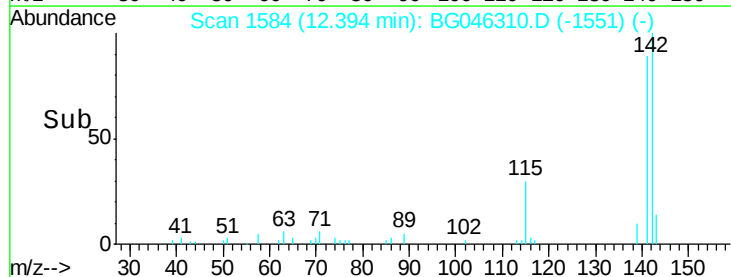
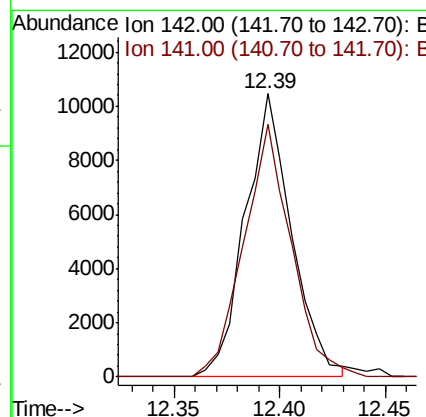
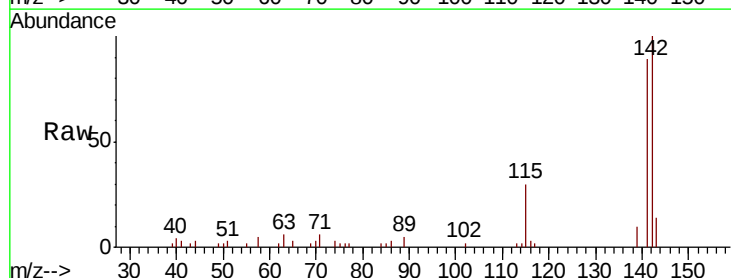
RT: 12.39 min Scan# 1584

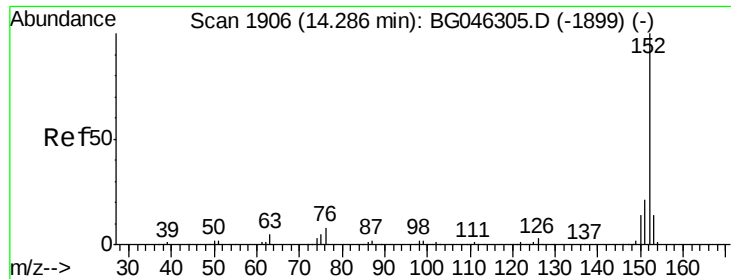
Delta R.T. -0.01 min

Lab File: BG046310.D

Acq: 18 Aug 2020 00:37

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 15909 |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 89.1  | 72.5  | 108.7 |





#8

Acenaphthylene

Concen: 2.344 ng/ul

RT: 14.29 min Scan# 1907

Delta R.T. -0.00 min

Lab File: BG046310.D

Acq: 18 Aug 2020 00:37

Instrument :

BNA\_G

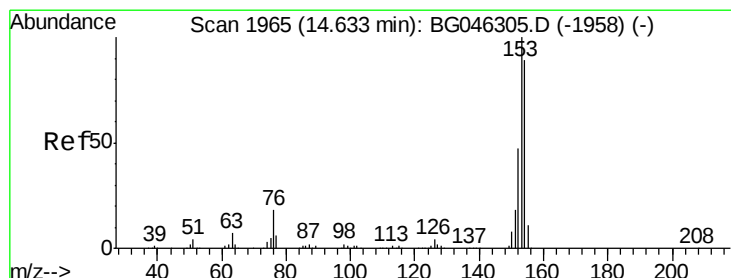
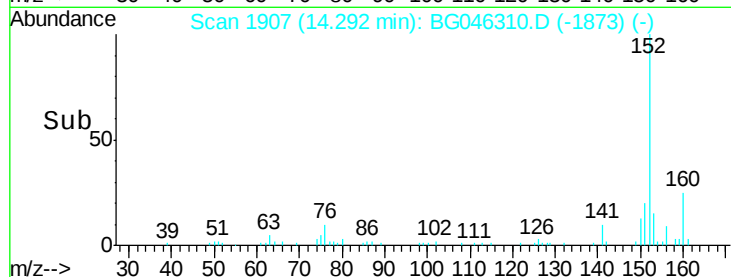
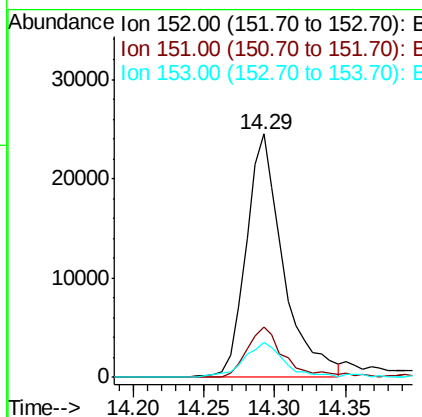
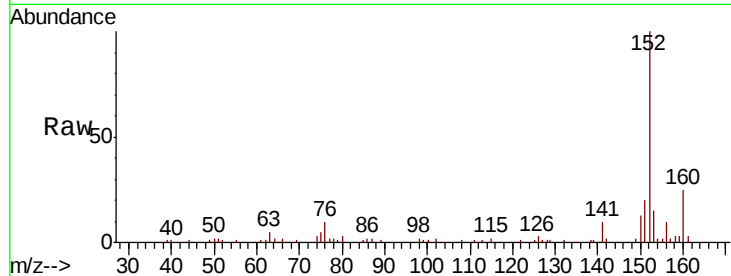
ClientSampleId :

BFM82

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 45069 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 20.5  | 16.5  | 24.7  |
| 153       | 14.6  | 11.0  | 16.6  |

Manual Integrations  
APPROVED

mohammad  
8/19/2020 2:16:11 PM



#9

Acenaphthene

Concen: 2.561 ng/ul

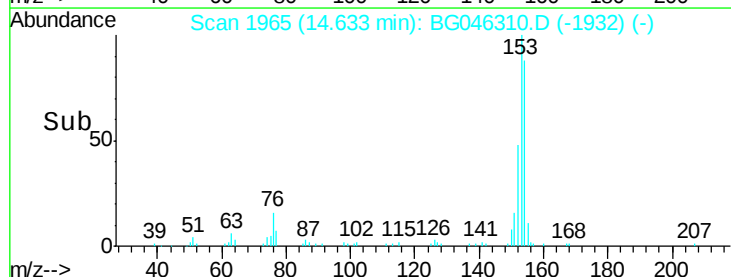
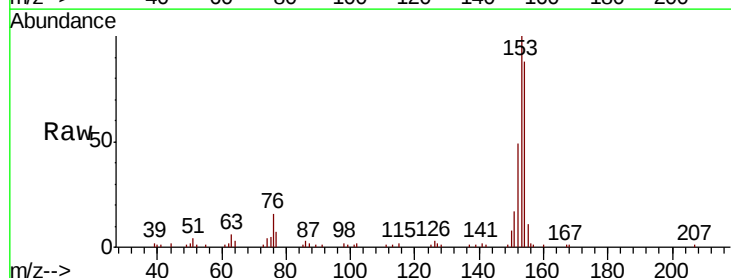
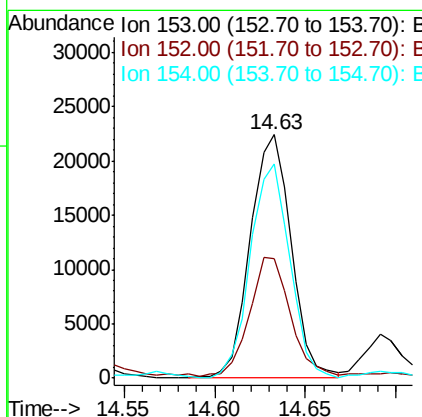
RT: 14.63 min Scan# 1965

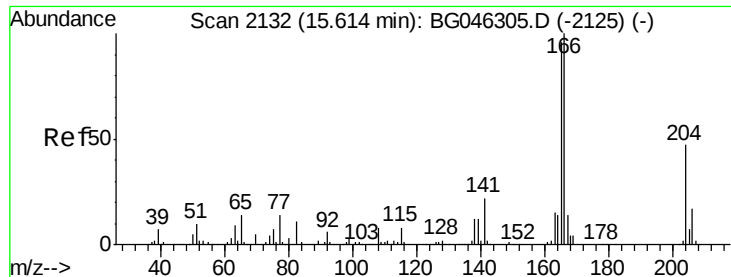
Delta R.T. -0.01 min

Lab File: BG046310.D

Acq: 18 Aug 2020 00:37

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 35167 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 49.0  | 37.2  | 55.8  |
| 154       | 87.9  | 67.8  | 101.6 |





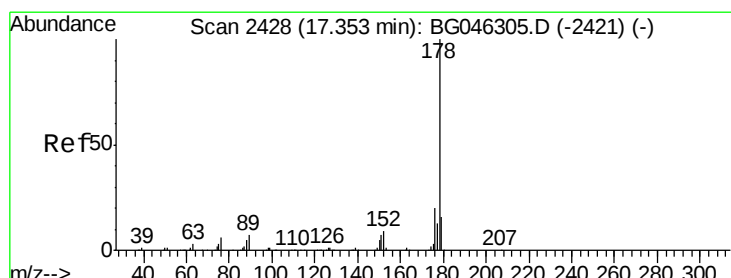
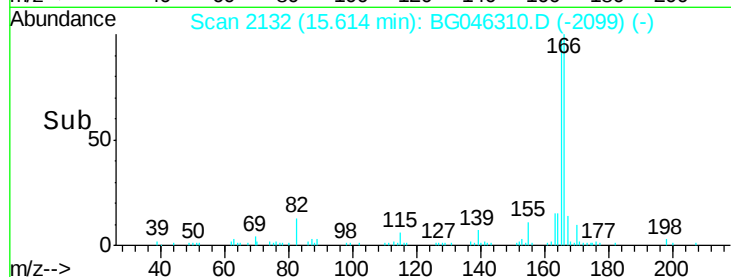
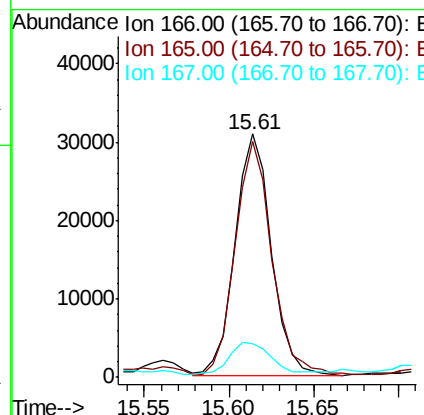
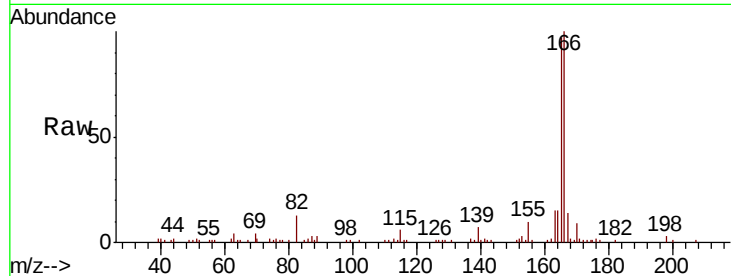
#11  
**Fluorene**  
 Concen: 2.853 ng/ul  
 RT: 15.61 min Scan# 2132  
 Delta R.T. -0.01 min  
 Lab File: BG046310.D  
 Acq: 18 Aug 2020 00:37

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BFM82

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 97.1  | 75.9  | 113.9 |
| 167     | 13.9  | 10.7  | 16.1  |

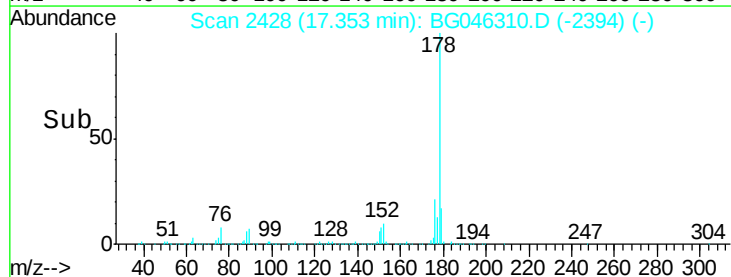
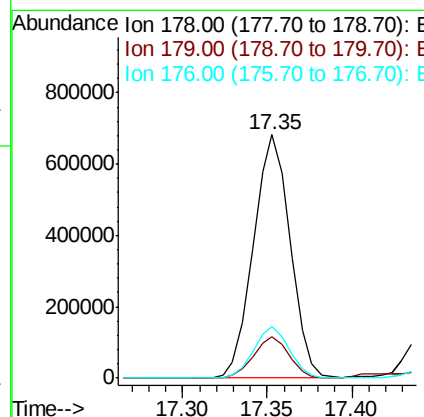
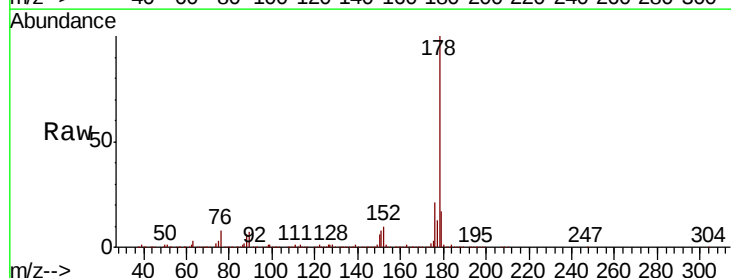
Manual Integrations  
 APPROVED

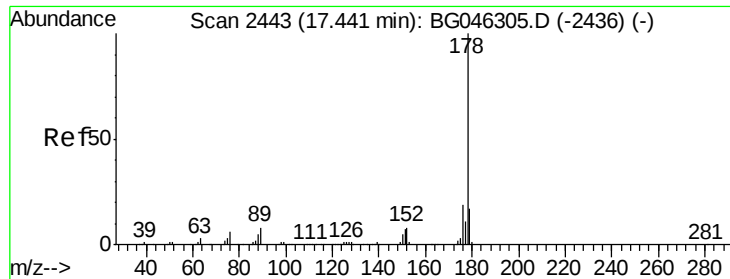
mohammad  
 8/19/2020 2:16:11 PM



#14  
**Phenanthrene**  
 Concen: 38.999 ng/ul  
 RT: 17.35 min Scan# 2428  
 Delta R.T. -0.00 min  
 Lab File: BG046310.D  
 Acq: 18 Aug 2020 00:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 17.1  | 12.8  | 19.2  |
| 176     | 21.0  | 15.8  | 23.8  |





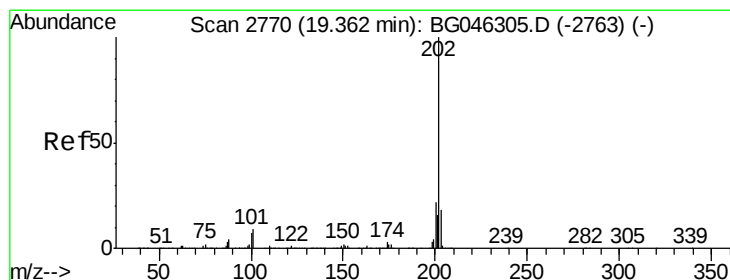
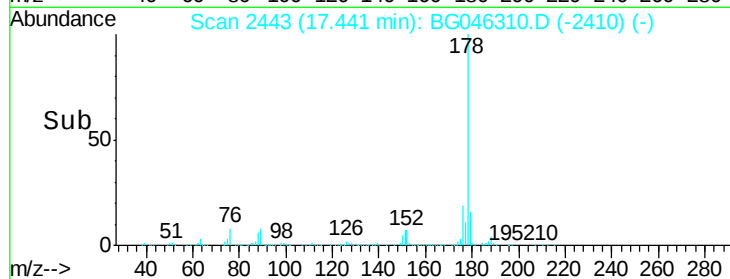
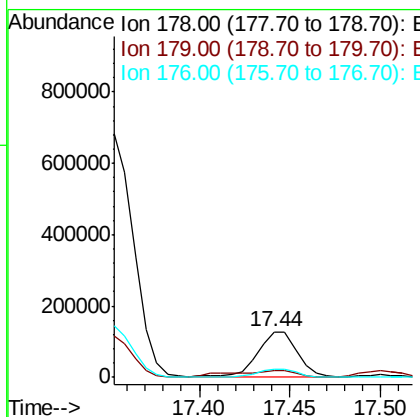
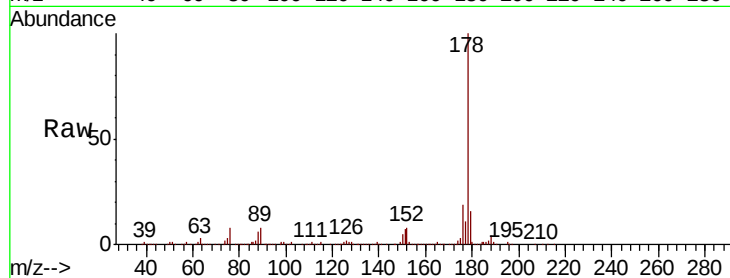
#16  
 Anthracene  
 Concen: 7.298 ng/ul  
 RT: 17.44 min Scan# 2443  
 Delta R.T. -0.01 min  
 Lab File: BG046310.D  
 Acq: 18 Aug 2020 00:37

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BFM82

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.8  | 13.2  | 19.8  |
| 176     | 18.8  | 15.2  | 22.8  |

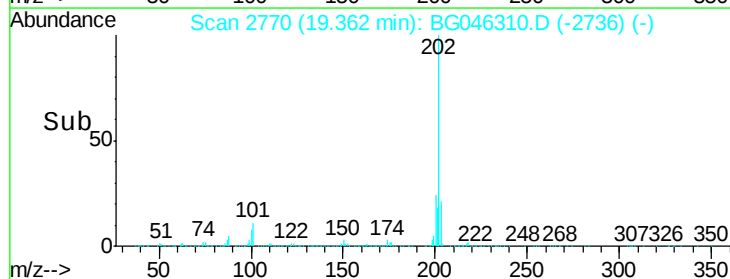
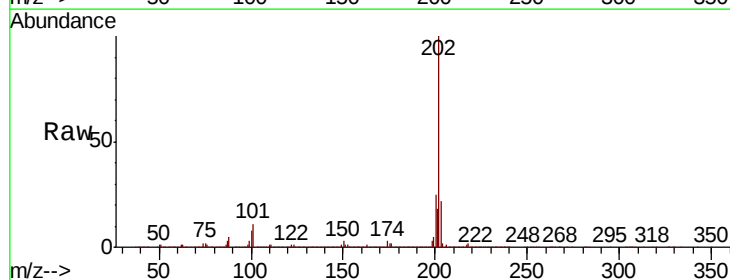
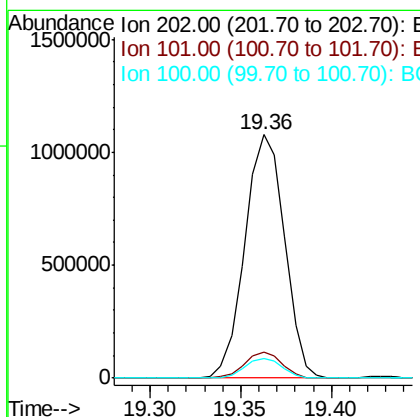
Manual Integrations  
 APPROVED

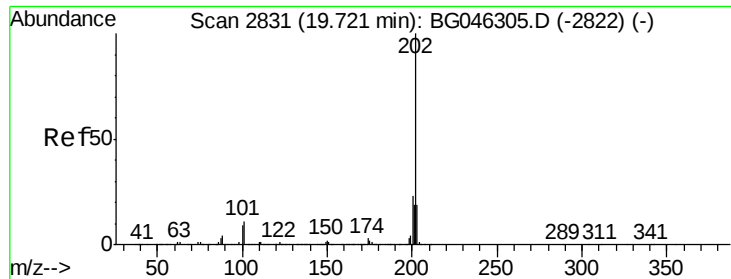
mohammad  
 8/19/2020 2:16:11 PM



#17  
 Fluoranthene  
 Concen: 55.305 ng/ul  
 RT: 19.36 min Scan# 2770  
 Delta R.T. -0.00 min  
 Lab File: BG046310.D  
 Acq: 18 Aug 2020 00:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.9  | 7.8   | 11.6  |
| 100     | 8.3   | 5.9   | 8.9   |





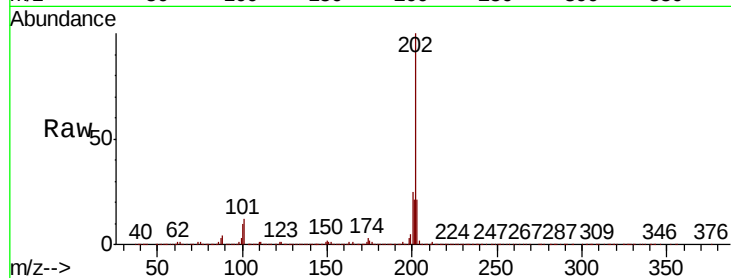
#20  
Pvrene  
Concen: 49.175 ng/ul  
RT: 19.73 min Scan# 2832  
Delta R.T. 0.00 min  
Lab File: BG046310.D  
Acq: 18 Aug 2020 00:37

Instrument :  
BNA\_G  
ClientSampleId :  
BFM82

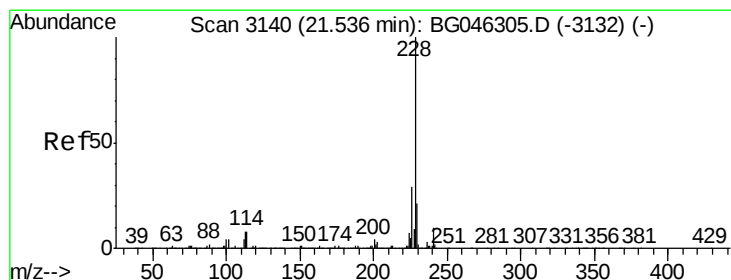
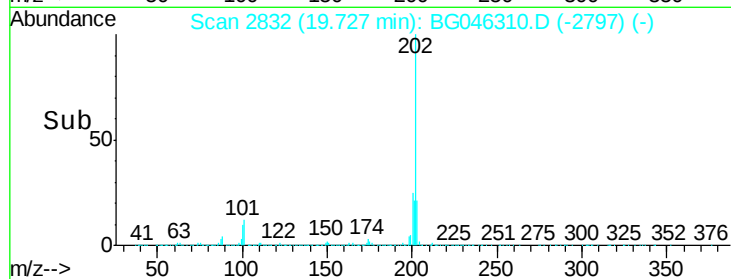
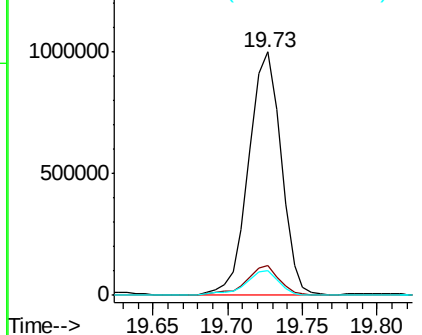
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.2  | 8.9   | 13.3  |
| 100     | 9.9   | 7.9   | 11.9  |

Manual Integrations  
APPROVED

mohammad  
8/19/2020 2:16:11 PM



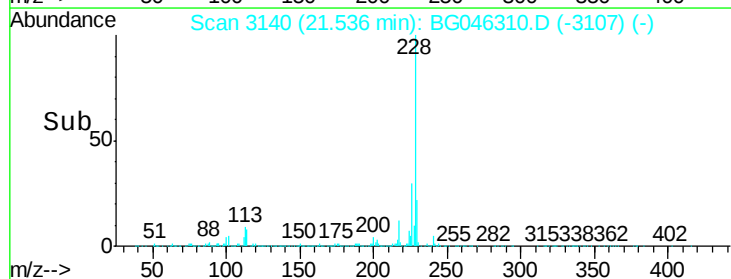
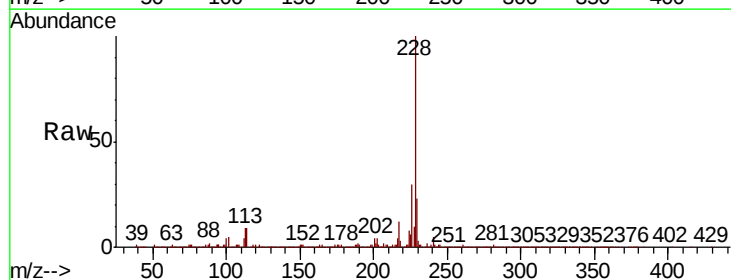
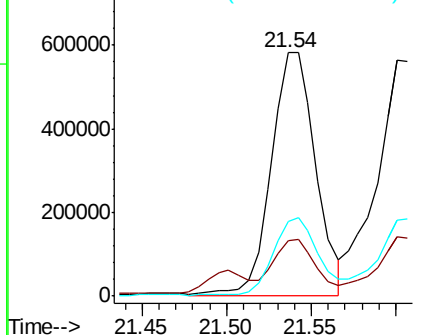
Abundance Ion 202.00 (201.70 to 202.70): E  
Ion 101.00 (100.70 to 101.70): E  
Ion 100.00 (99.70 to 100.70): B

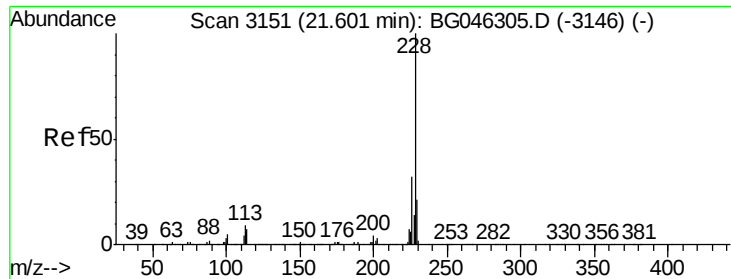


#21  
Benzo(a)anthracene  
Concen: 35.007 ng/ul  
RT: 21.54 min Scan# 3140  
Delta R.T. -0.01 min  
Lab File: BG046310.D  
Acq: 18 Aug 2020 00:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 23.0  | 16.6  | 25.0  |
| 226     | 30.4  | 22.6  | 33.8  |

Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 229.00 (228.70 to 229.70): E  
Ion 226.00 (225.70 to 226.70): E





#22

Chrysene

Concen: 36.436 ng/ul

RT: 21.60 min Scan# 3151

Delta R.T. -0.00 min

Lab File: BG046310.D

Acq: 18 Aug 2020 00:37

Instrument :

BNA\_G

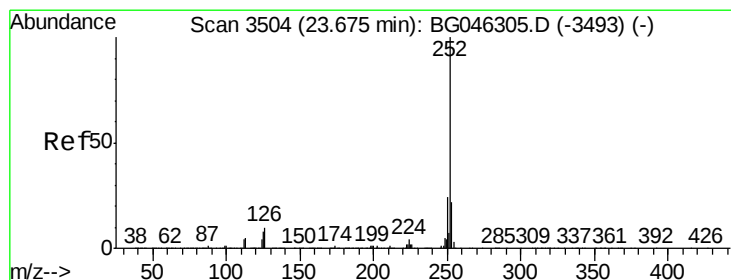
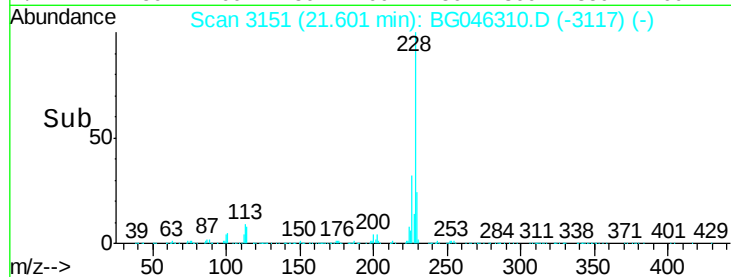
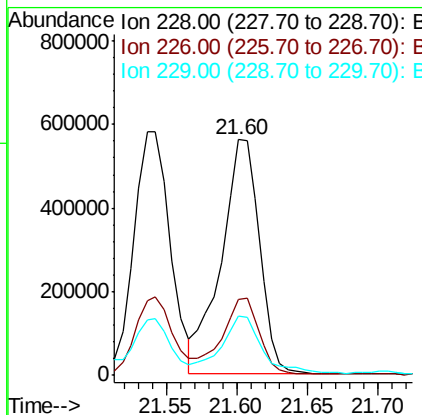
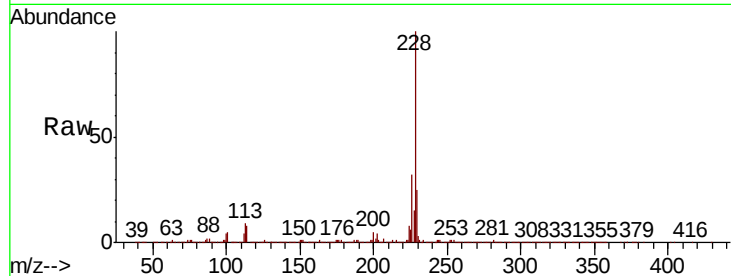
ClientSampleId :

BFM82

|          |       |       |         |
|----------|-------|-------|---------|
| Tot Ion: | 228   | Resp: | 1062635 |
| Ion      | Ratio | Lower | Upper   |
| 228      | 100   |       |         |
| 226      | 32.3  | 25.5  | 38.3    |
| 229      | 25.1  | 17.0  | 25.4    |

Manual Integrations  
APPROVED

mohammad  
8/19/2020 2:16:11 PM



#24

Benzo(b)fluoranthene

Concen: 48.795 ng/ul

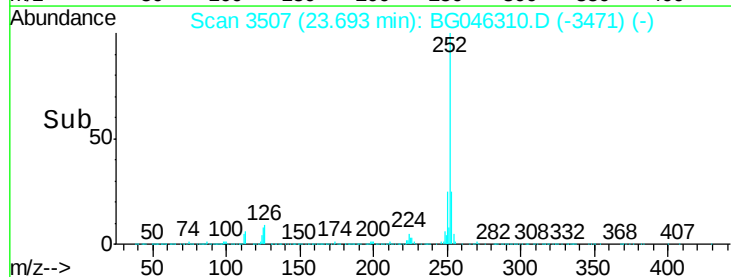
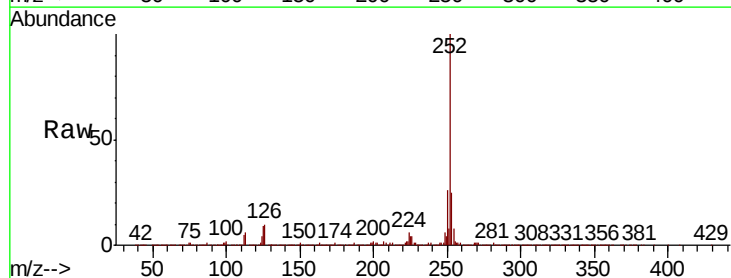
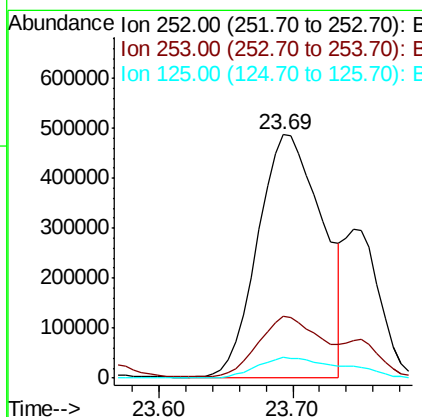
RT: 23.69 min Scan# 3507

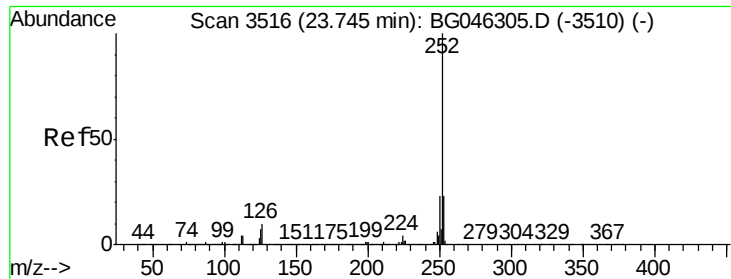
Delta R.T. 0.01 min

Lab File: BG046310.D

Acq: 18 Aug 2020 00:37

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 252   | Resp: | 1627394 |
| Ion      | Ratio | Lower | Upper   |
| 252      | 100   |       |         |
| 253      | 25.3  | 17.8  | 26.6    |
| 125      | 8.7   | 6.4   | 9.6     |





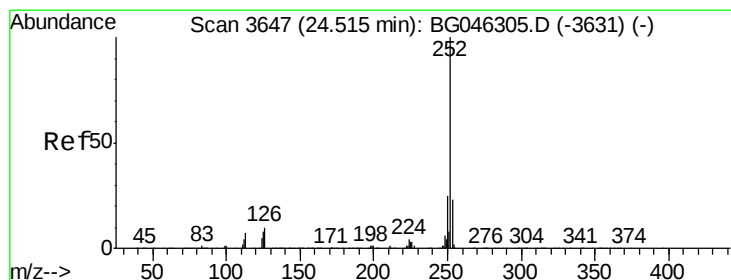
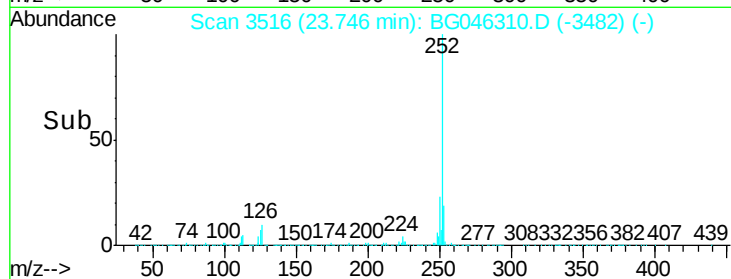
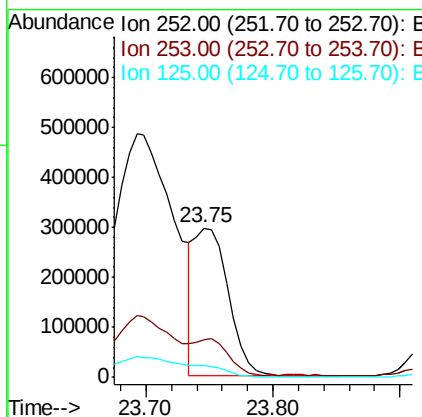
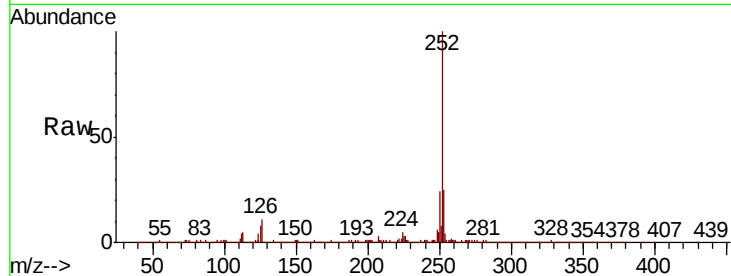
#25  
Benzo(k)fluoranthene  
Concen: 16.408 ng/ul m  
RT: 23.75 min Scan# 3516  
Delta R.T. -0.00 min  
Lab File: BG046310.D  
Acq: 18 Aug 2020 00:37

Instrument :  
BNA\_G  
ClientSampleId :  
BFM82

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.5  | 18.5  | 27.7  |
| 125     | 7.6   | 6.2   | 9.2   |

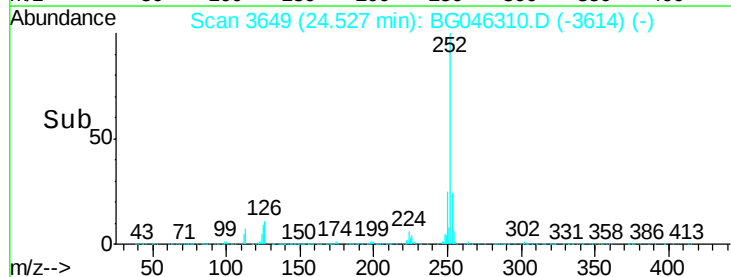
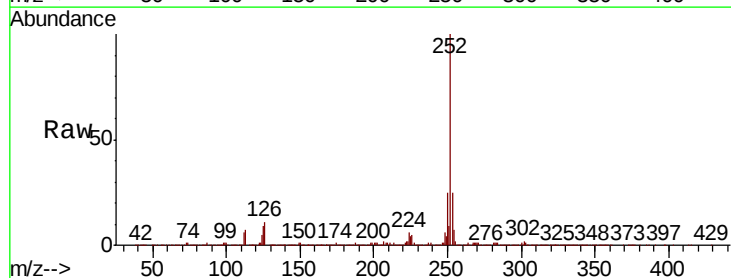
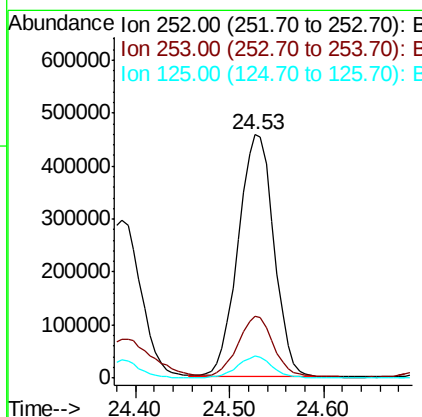
Manual Integrations  
APPROVED

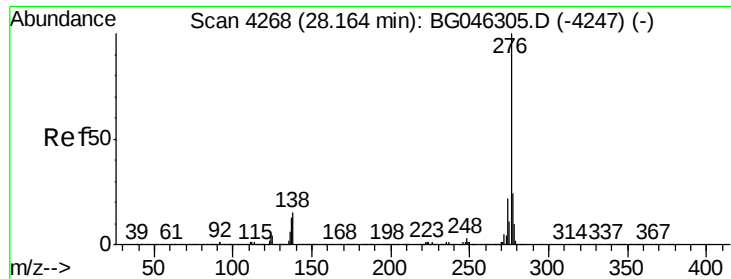
mohammad  
8/19/2020 2:16:11 PM



#27  
Benzo(a)pyrene  
Concen: 39.383 ng/ul  
RT: 24.53 min Scan# 3649  
Delta R.T. 0.00 min  
Lab File: BG046310.D  
Acq: 18 Aug 2020 00:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.2  | 17.8  | 26.8  |
| 125     | 8.9   | 7.1   | 10.7  |





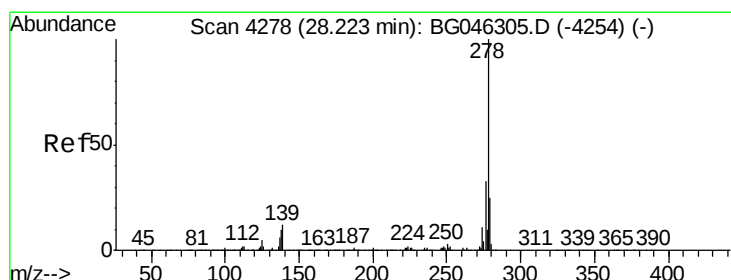
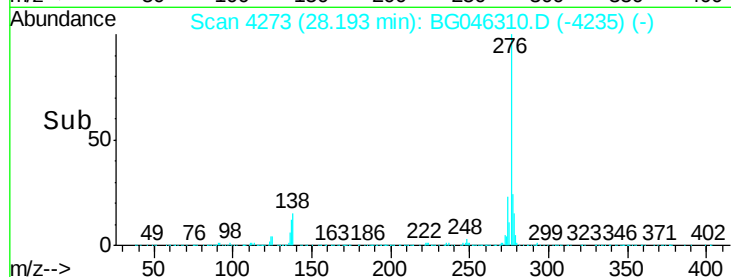
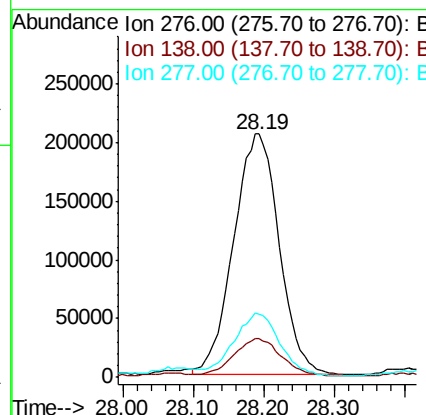
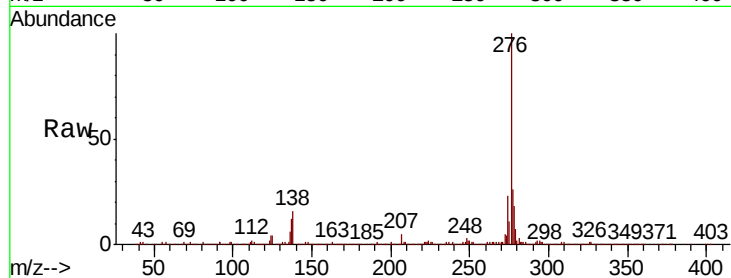
#28  
 Indeno(1,2,3-cd)pyrene  
 Concen: 24.012 ng/ul  
 RT: 28.19 min Scan# 4273  
 Delta R.T. 0.02 min  
 Lab File: BG046310.D  
 Acq: 18 Aug 2020 00:37

Instrument :  
 BNA\_G  
 ClientSampled :  
 BFM82

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 920612 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 15.8  | 13.2  | 19.8   |
| 277       | 25.9  | 19.9  | 29.9   |

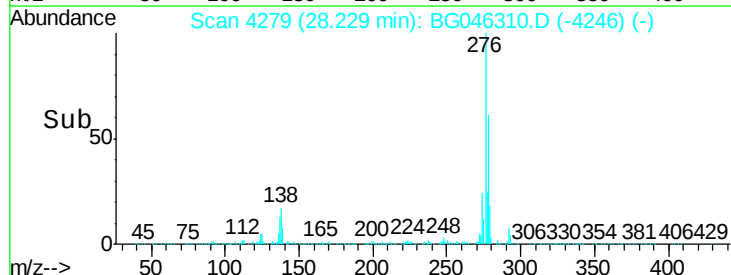
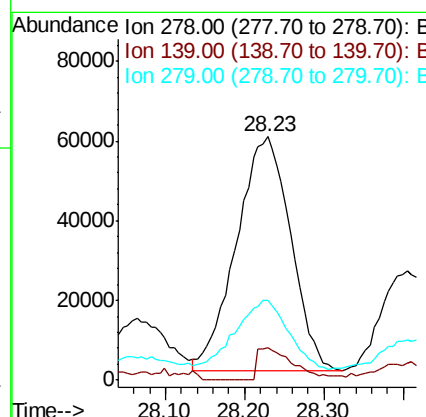
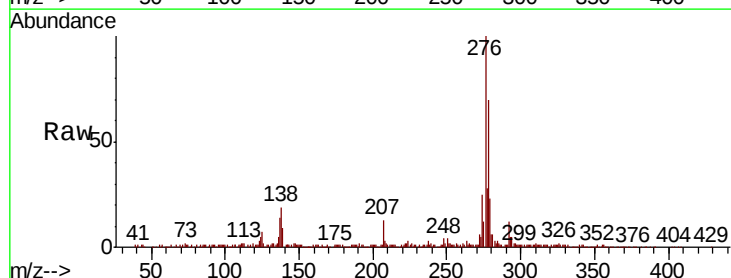
Manual Integrations  
 APPROVED

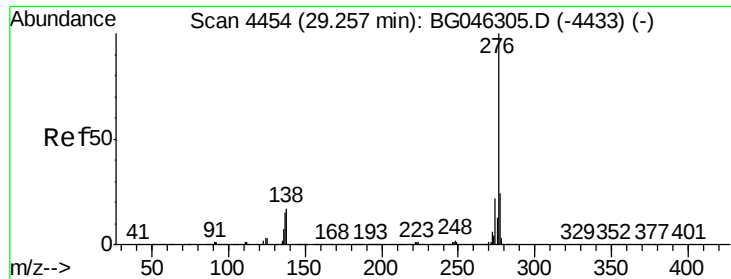
mohammad  
 8/19/2020 2:16:11 PM



#29  
 Dibenzo(a,h)anthracene  
 Concen: 8.985 ng/ul  
 RT: 28.23 min Scan# 4279  
 Delta R.T. -0.01 min  
 Lab File: BG046310.D  
 Acq: 18 Aug 2020 00:37

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 278   | Resp: | 279305 |
| Ion Ratio | Lower | Upper |        |
| 278       | 100   |       |        |
| 139       | 13.1  | 9.8   | 14.8   |
| 279       | 32.6  | 19.7  | 29.5#  |





#30  
 Benzo(a,h,i)perylene  
 Concen: 22.853 ng/ul  
 RT: 29.29 min Scan# 4459  
 Delta R.T. 0.02 min  
 Lab File: BG046310.D  
 Acq: 18 Aug 2020 00:37

Instrument :  
 BNA\_G  
 ClientSampleId :  
 BFM82

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 17.0  | 12.9  | 19.3  |
| 277     | 25.5  | 19.4  | 29.0  |

Manual Integrations  
 APPROVED

mohammad  
 8/19/2020 2:16:11 PM

