

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_M\DATA\BM080319\  
 Data File : BM021843.D  
 Acq On : 05 Aug 2019 15:01  
 Operator : HP/JU  
 Sample : K3850-15DL 5X  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BENS2DL

Manual Integrations  
 APPROVED

mohammad  
 8/5/2019 10:17:23 PM

Quant Time: Aug 05 15:37:18 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-SIM-BM080319.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 05 08:19:16 2019  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|--------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.63  | 152  | 884      | 0.40   | ng/ul  | -0.01    |
| 2) Naphthalene-d8           | 10.42 | 136  | 3592     | 0.40   | ng/ul  | -0.02    |
| 6) Acenaphthene-d10         | 14.29 | 164  | 2038     | 0.40   | ng/ul  | 0.00     |
| 10) Phenanthrene-d10        | 17.04 | 188  | 4708     | 0.40   | ng/ul  | -0.02    |
| 16) Chrysene-d12            | 21.24 | 240  | 4906     | 0.40   | ng/ul  | 0.00     |
| 20) Perylene-d12            | 23.46 | 264  | 6015     | 0.40   | ng/ul  | -0.01    |
| System Monitoring Compounds |       |      |          |        |        |          |
| 4) 2-Methylnaphthalene-d10  | 12.02 | 152  | 183      | 0.03   | ng/ul  | -0.02    |
| 14) Fluoranthene-d10        | 19.07 | 212  | 555      | 0.03   | ng/ul  | -0.02    |
| Target Compounds            |       |      |          | Qvalue |        |          |
| 3) Naphthalene              | 10.47 | 128  | 621      | 0.061  | ng/ul# | 77       |
| 5) 2-Methylnaphthalene      | 12.10 | 142  | 529      | 0.078  | ng/ul  | 91       |
| 7) Acenaphthylene           | 14.01 | 152  | 3438     | 0.362  | ng/ul  | 97       |
| 8) Acenaphthene             | 14.35 | 153  | 434      | 0.056  | ng/ul  | 92       |
| 9) Fluorene                 | 15.34 | 166  | 661      | 0.077  | ng/ul# | 96       |
| 12) Phenanthrene            | 17.08 | 178  | 17335    | 1.265  | ng/ul  | 97       |
| 13) Anthracene              | 17.18 | 178  | 4689     | 0.401  | ng/ul  | 100      |
| 15) Fluoranthene            | 19.11 | 202  | 47832    | 2.607  | ng/ul  | 95       |
| 17) Pyrene                  | 19.47 | 202  | 40572    | 2.012  | ng/ul  | 98       |
| 18) Benzo(a)anthracene      | 21.22 | 228  | 25126    | 1.432  | ng/ul  | 99       |
| 19) Chrysene                | 21.28 | 228  | 27219    | 1.206  | ng/ul  | 98       |
| 21) Benzo(b)fluoranthene    | 22.79 | 252  | 41220m   | 2.032  | ng/ul  |          |
| 22) Benzo(k)fluoranthene    | 22.83 | 252  | 15572m   | 0.678  | ng/ul  |          |
| 23) Benzo(a)pyrene          | 23.36 | 252  | 25785    | 1.250  | ng/ul# | 81       |
| 24) Indeno(1,2,3-cd)pyrene  | 25.67 | 276  | 22116    | 0.898  | ng/ul# | 92       |
| 25) Dibenzo(a,h)anthracene  | 25.67 | 278  | 5665     | 0.285  | ng/ul# | 85       |
| 26) Benzo(g,h,i)perylene    | 26.35 | 276  | 23298    | 1.051  | ng/ul  | 97       |

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

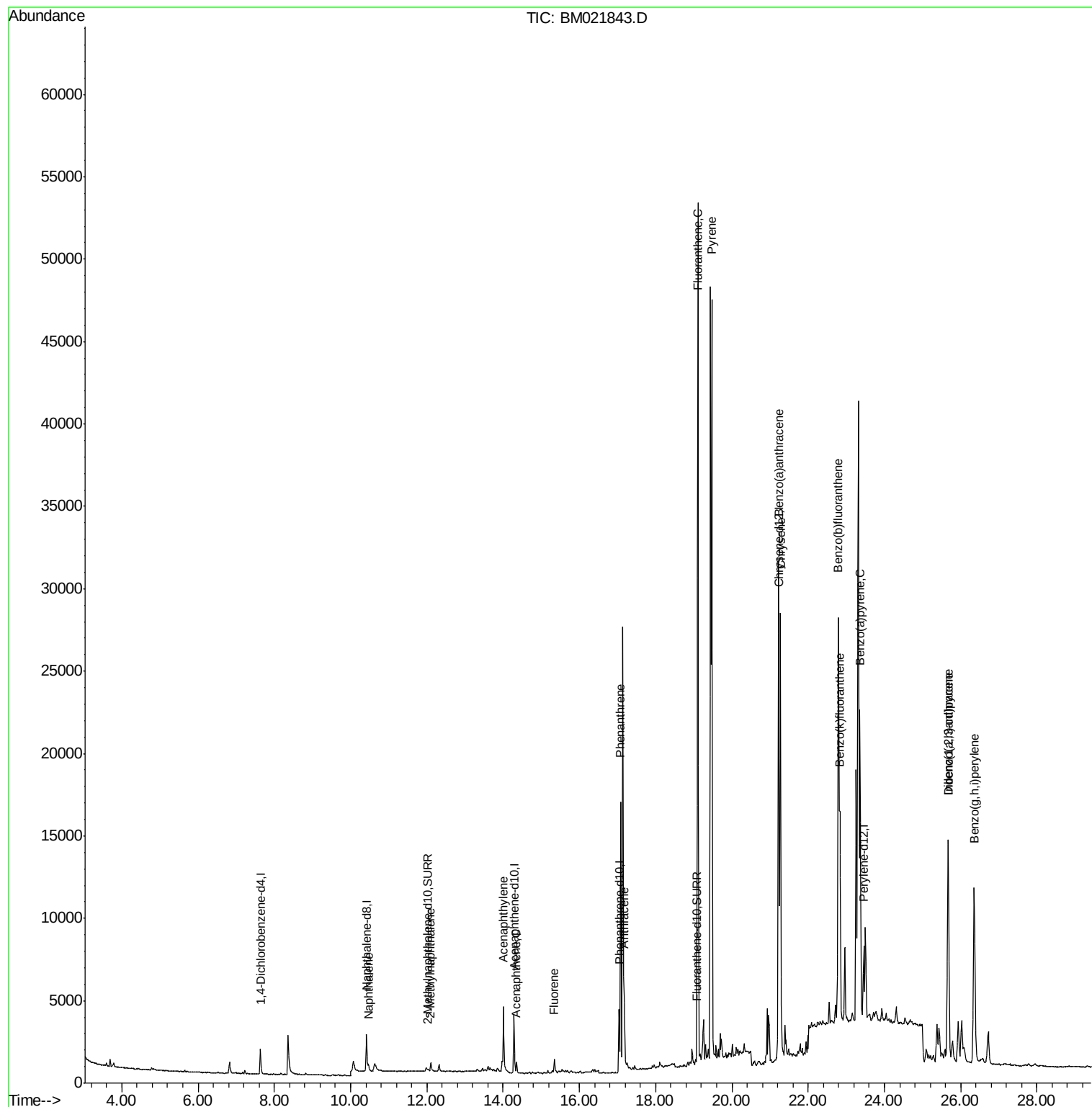
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_M\DATA\BM080319\  
Data File : BM021843.D  
Acq On : 05 Aug 2019 15:01  
Operator : HP/JU  
Sample : K3850-15DL 5X  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

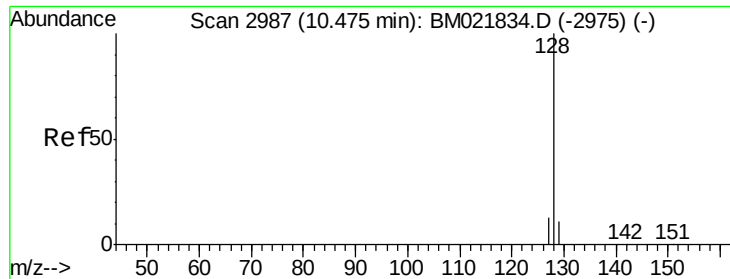
Instrument :  
BNA\_M  
ClientSampleId :  
BENS2DL

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Quant Time: Aug 05 15:37:18 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-SIM-BM080319.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 05 08:19:16 2019  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.061 ng/ul

RT: 10.47 min Scan# 2985

Delta R.T. -0.02 min

Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

Instrument :

BNA\_M

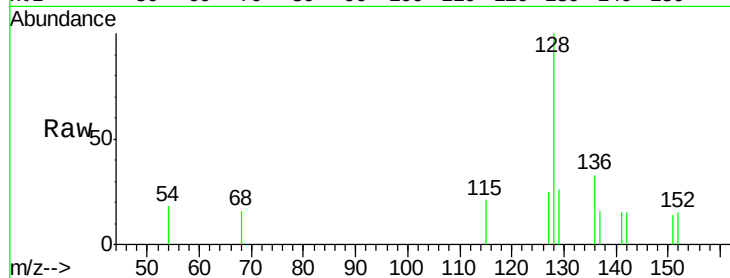
ClientSampleId :

BENS2DL

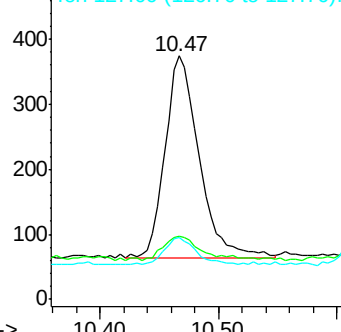
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 621   |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 26.2  | 12.3  | 18.5# |
| 127       | 25.4  | 13.0  | 19.6# |

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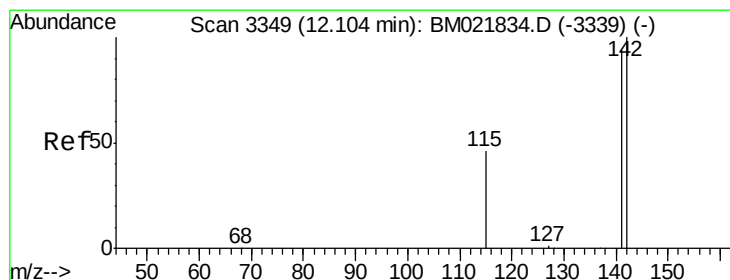
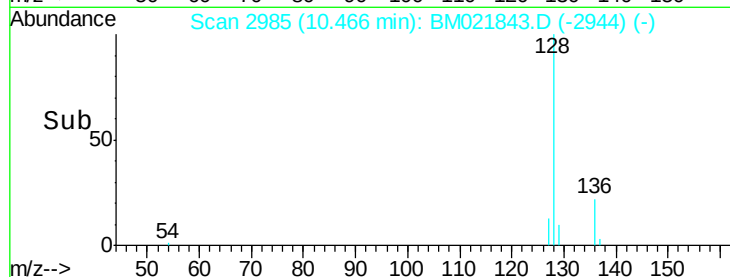
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Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E



Time-->



#5

2-Methylnaphthalene

Concen: 0.078 ng/ul

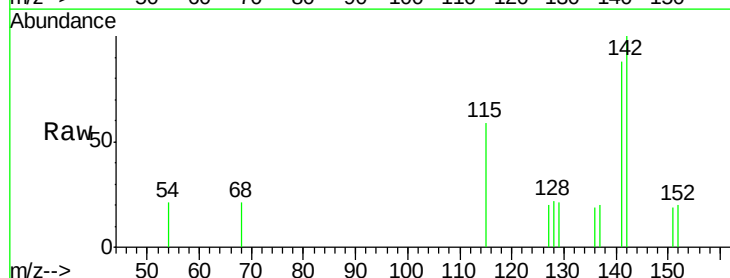
RT: 12.10 min Scan# 3349

Delta R.T. -0.01 min

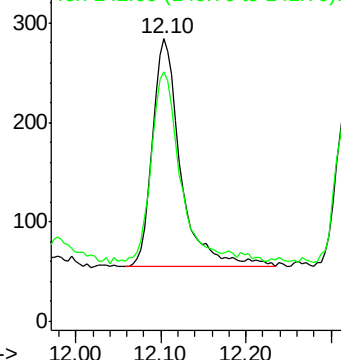
Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

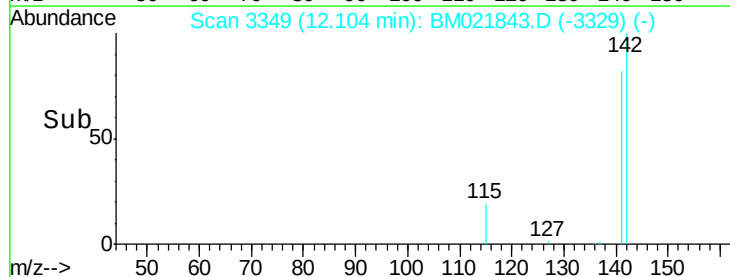
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 529   |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 84.5  | 74.3  | 111.5 |

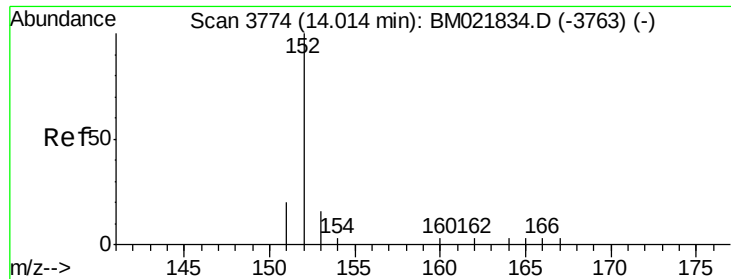


Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E



Time-->





#7

Acenaphthylene

Concen: 0.362 ng/ul

RT: 14.01 min Scan# 3773

Delta R.T. -0.01 min

Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

Instrument :

BNA\_M

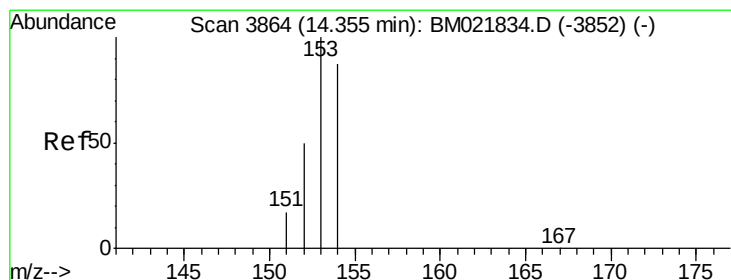
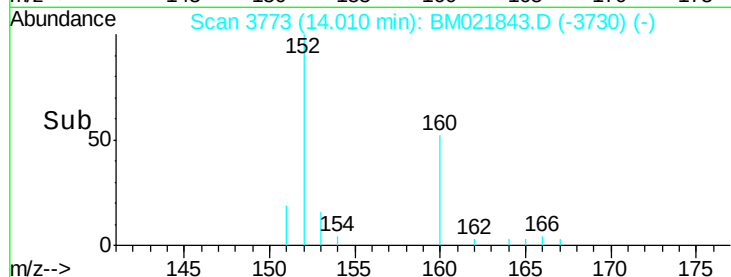
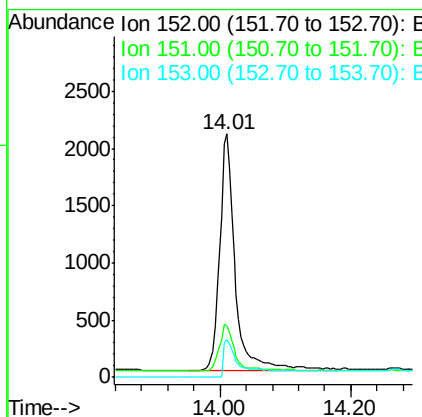
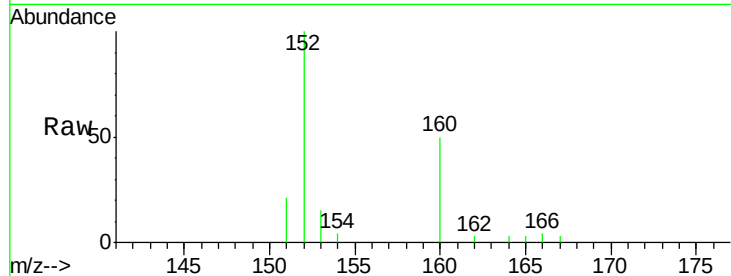
ClientSampleId :

BENS2DL

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 152   | Resp: | 3438 |
| Ion Ratio | Lower | Upper |      |
| 152       | 100   |       |      |
| 151       | 21.1  | 18.3  | 27.5 |
| 153       | 15.3  | 12.8  | 19.2 |

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#8

Acenaphthene

Concen: 0.056 ng/ul

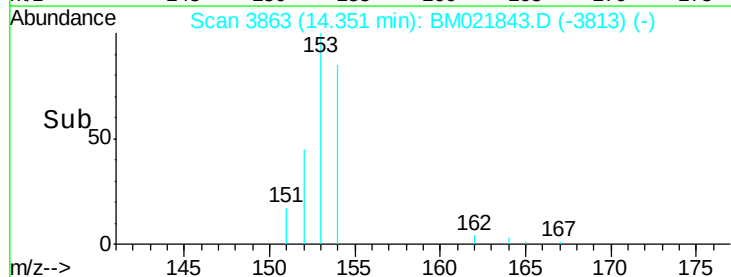
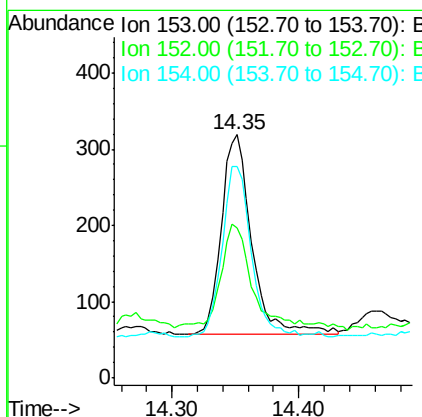
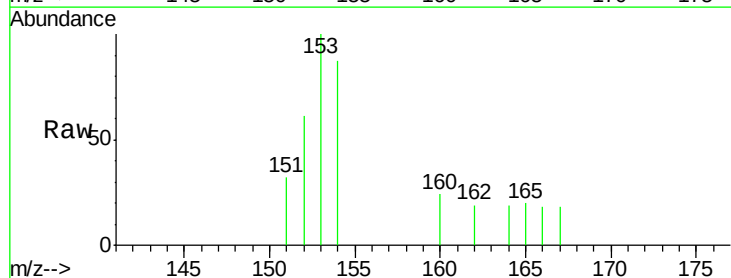
RT: 14.35 min Scan# 3863

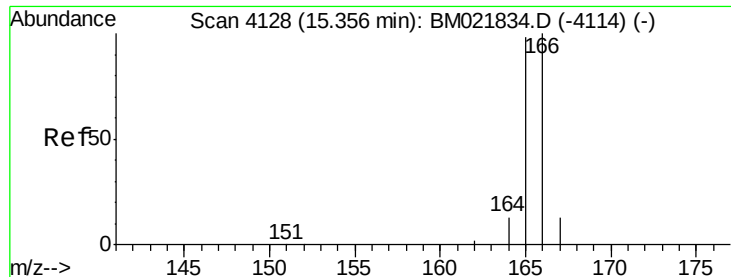
Delta R.T. -0.01 min

Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 434   |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 61.4  | 41.3  | 61.9  |
| 154       | 86.8  | 72.3  | 108.5 |





#9

Fluorene

Concen: 0.077 ng/ul

RT: 15.34 min Scan# 4125

Delta R.T. -0.02 min

Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

Instrument :

BNA\_M

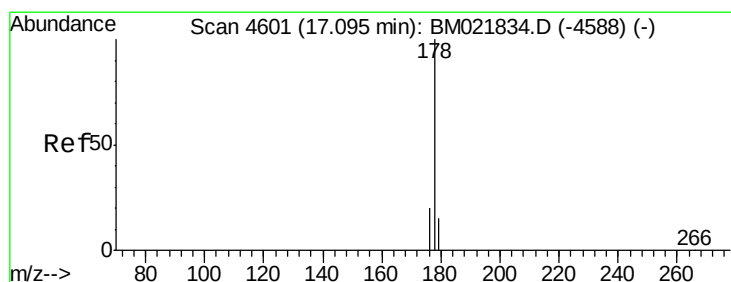
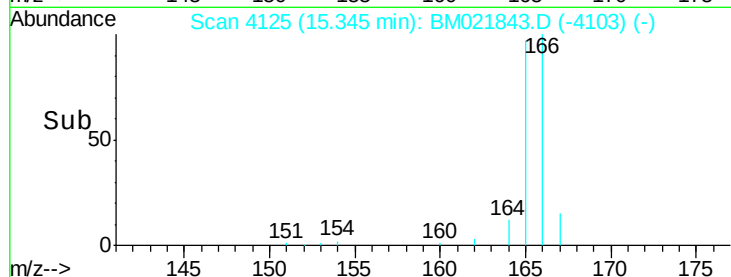
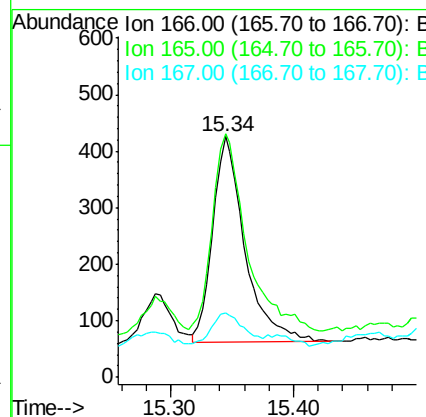
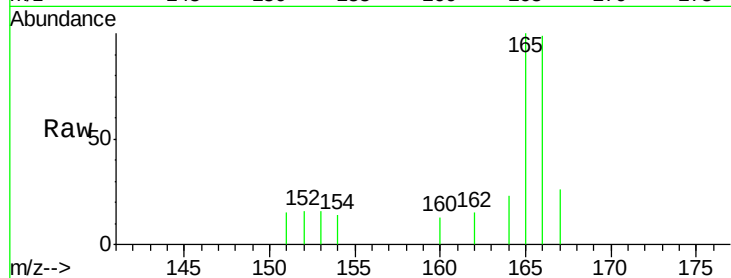
ClientSampleId :

BENS2DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 166   | Resp: | 661   |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 101.2 | 81.4  | 122.0 |
| 167       | 26.8  | 13.7  | 20.5  |

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#12

Phenanthrene

Concen: 1.265 ng/ul

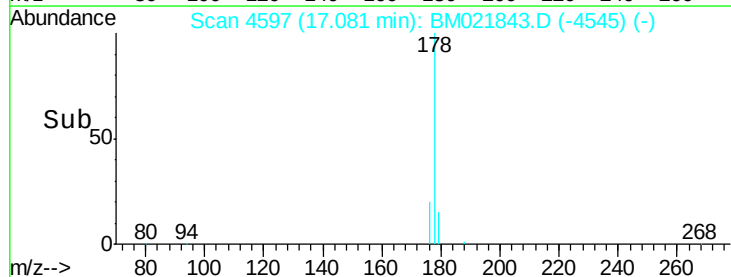
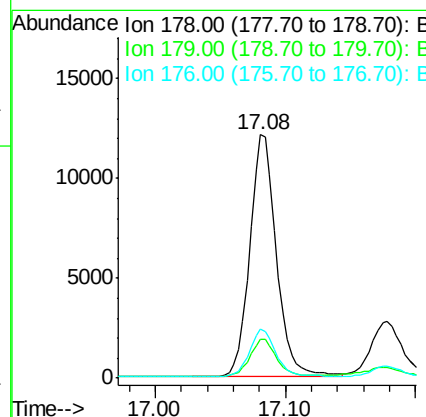
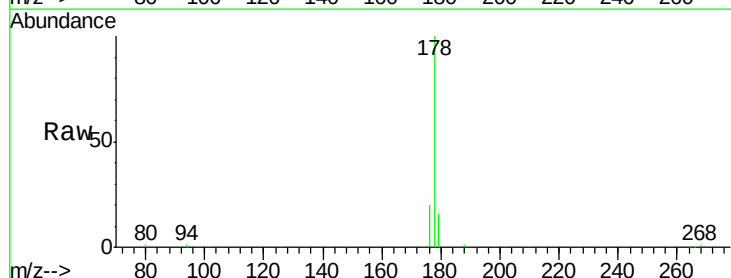
RT: 17.08 min Scan# 4597

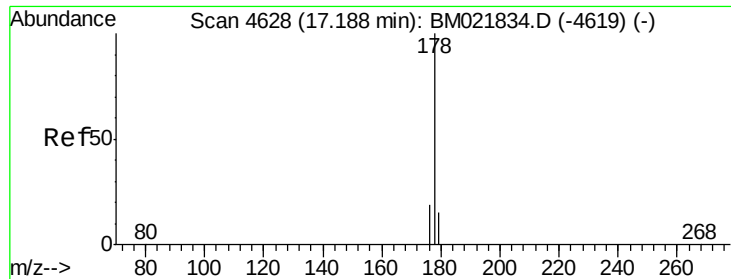
Delta R.T. -0.02 min

Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 17335 |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 15.9  | 14.2  | 21.2  |
| 176       | 20.0  | 16.8  | 25.2  |





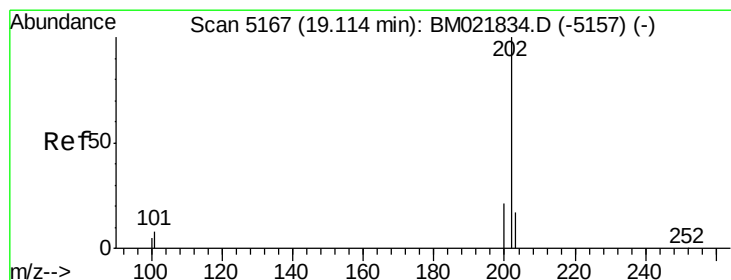
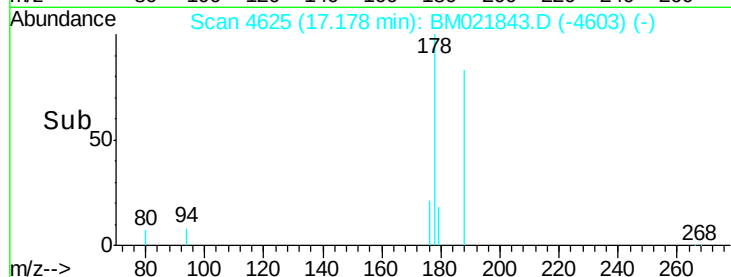
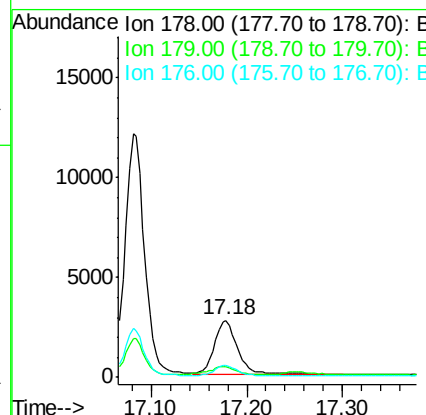
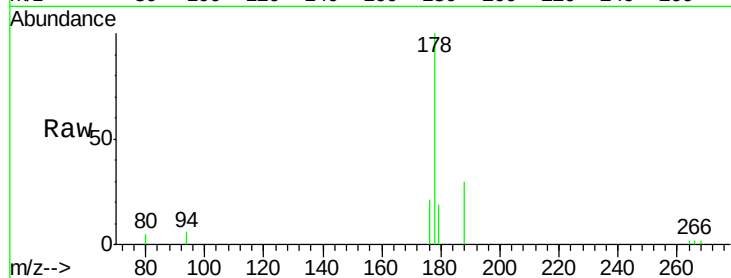
#13  
 Anthracene  
 Concen: 0.401 ng/ul  
 RT: 17.18 min Scan# 4625  
 Delta R.T. -0.02 min  
 Lab File: BM021843.D  
 Acq: 05 Aug 2019 15:01

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BENS2DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 19.2  | 15.5  | 23.3  |
| 176     | 20.9  | 16.6  | 25.0  |

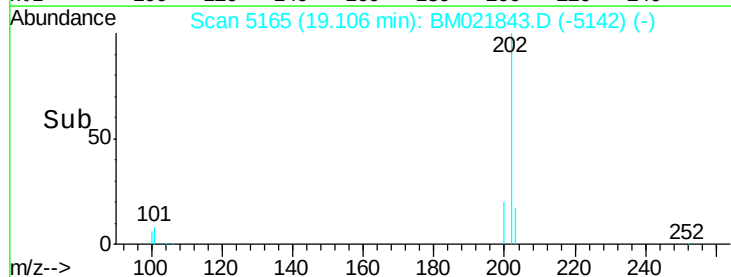
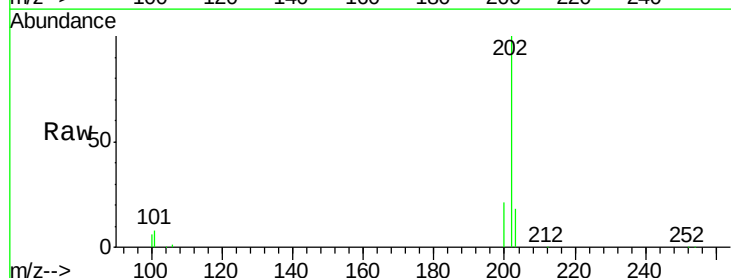
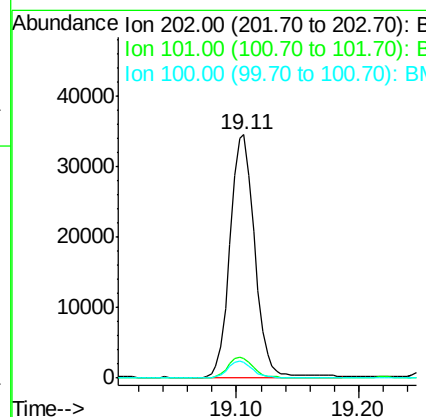
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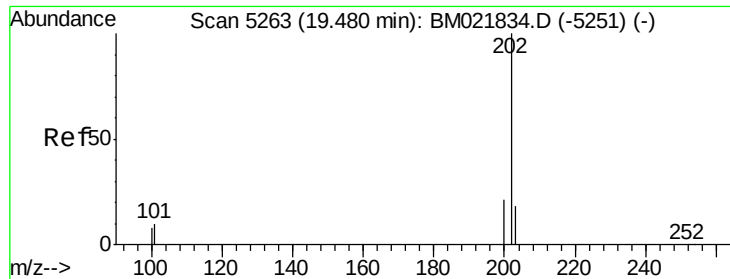
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#15  
 Fluoranthene  
 Concen: 2.607 ng/ul  
 RT: 19.11 min Scan# 5165  
 Delta R.T. -0.01 min  
 Lab File: BM021843.D  
 Acq: 05 Aug 2019 15:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 8.3   | 0.0   | 30.2  |
| 100     | 6.4   | 0.0   | 28.1  |





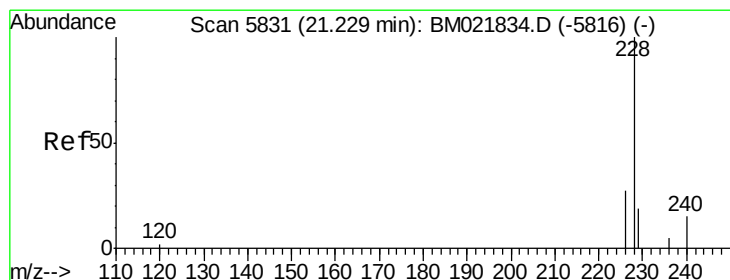
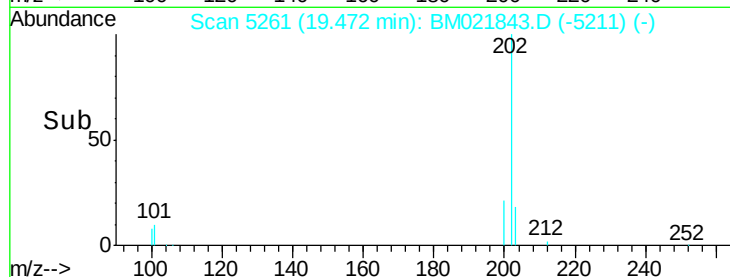
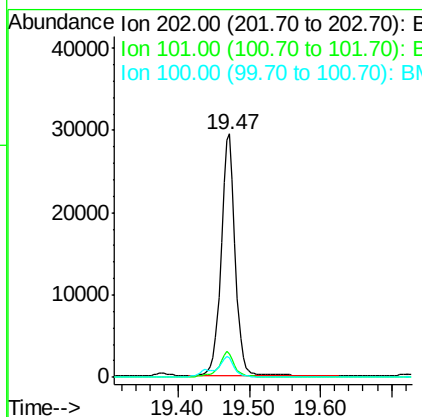
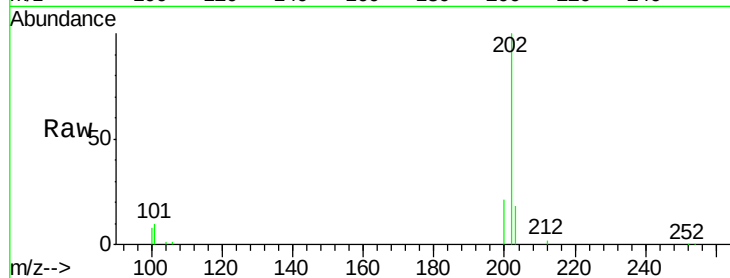
#17  
Pyrene  
Concen: 2.012 ng/ul  
RT: 19.47 min Scan# 5261  
Delta R.T. -0.01 min  
Lab File: BM021843.D  
Acq: 05 Aug 2019 15:01

Instrument :  
BNA\_M  
ClientSampleId :  
BENS2DL

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 202     | 100   |            |            |
| 101     | 9.8   | 8.3        | 12.5       |
| 100     | 7.9   | 7.2        | 10.8       |

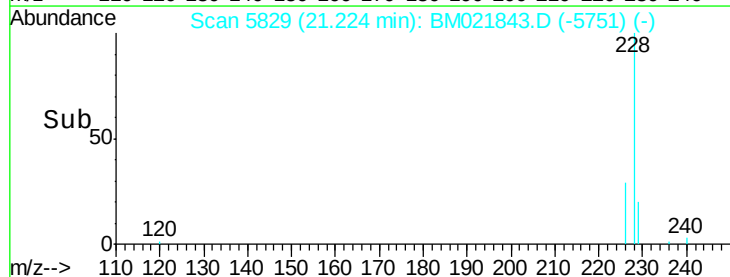
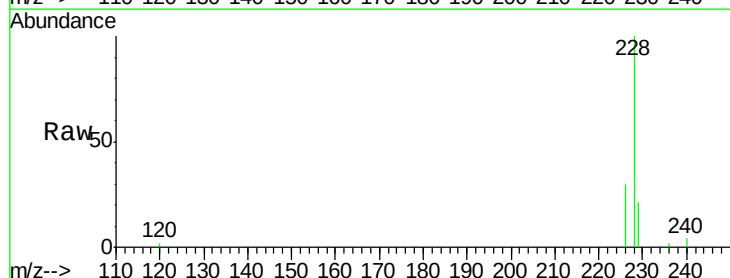
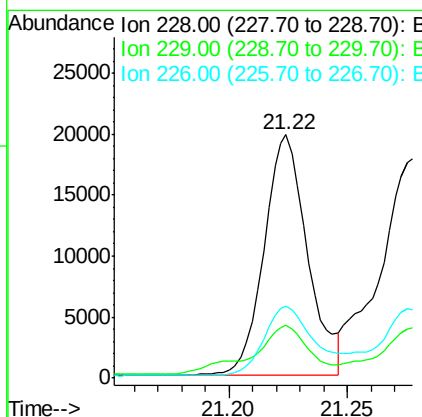
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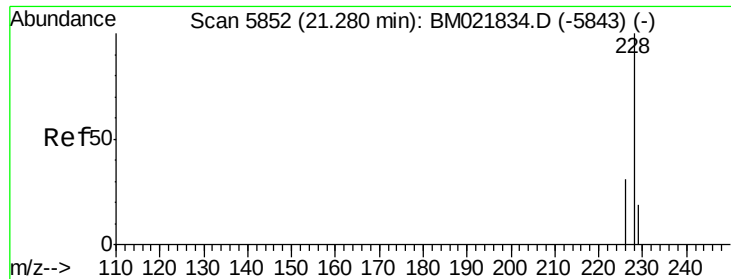
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#18  
Benzo(a)anthracene  
Concen: 1.432 ng/ul  
RT: 21.22 min Scan# 5829  
Delta R.T. -0.01 min  
Lab File: BM021843.D  
Acq: 05 Aug 2019 15:01

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 228     | 100   |            |            |
| 229     | 21.5  | 17.2       | 25.8       |
| 226     | 29.6  | 22.6       | 34.0       |





#19

Chrysene

Concen: 1.206 ng/ul

RT: 21.28 min Scan# 5851

Delta R.T. -0.01 min

Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

Instrument :

BNA\_M

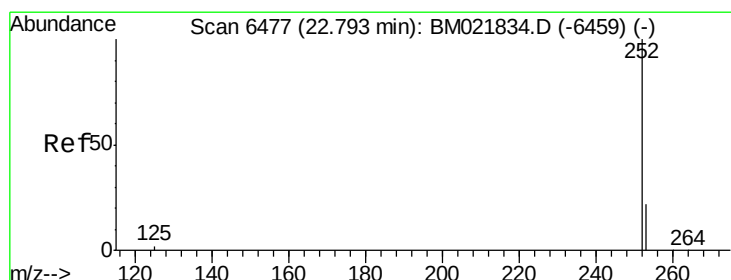
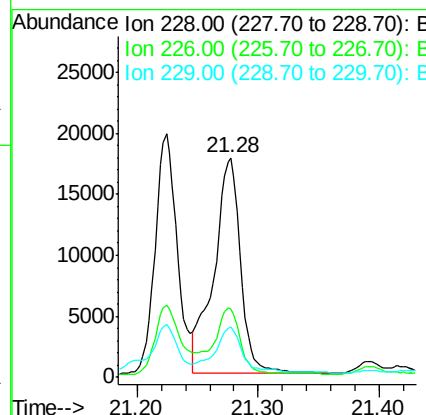
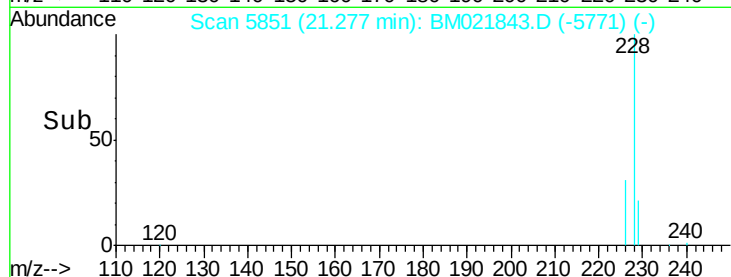
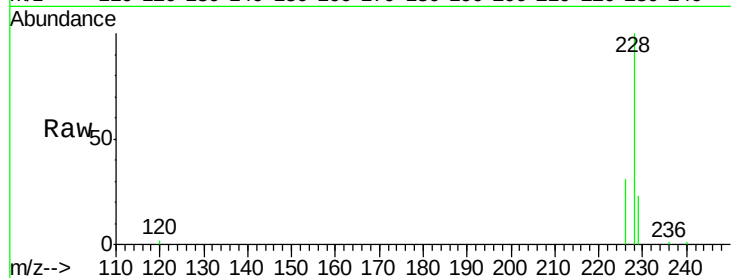
ClientSampleId :

BENS2DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 27219 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 31.2  | 24.9  | 37.3  |
| 229       | 22.8  | 16.6  | 25.0  |

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#21

Benzo(b)fluoranthene

Concen: 2.032 ng/ul m

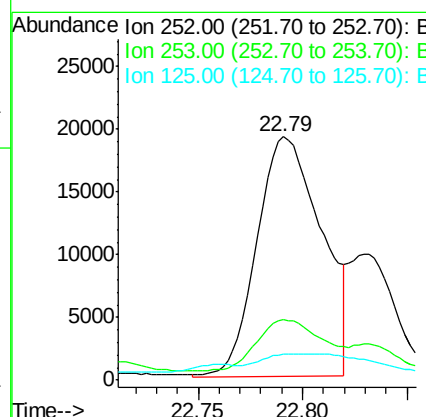
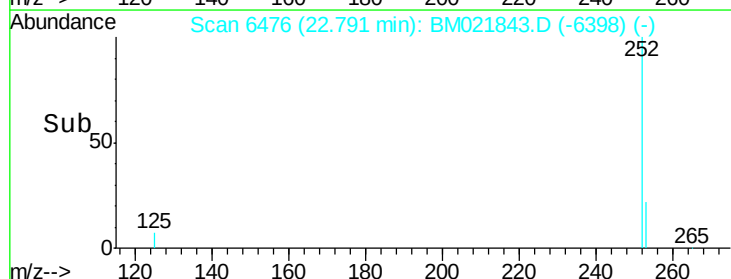
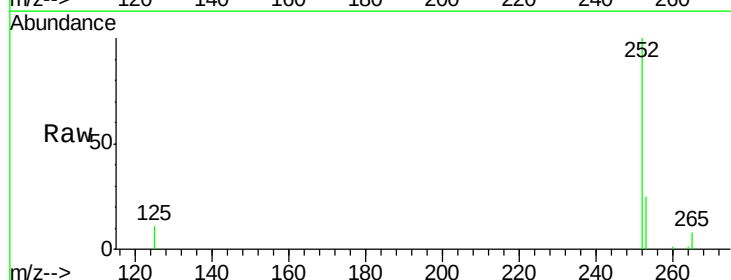
RT: 22.79 min Scan# 6476

Delta R.T. -0.01 min

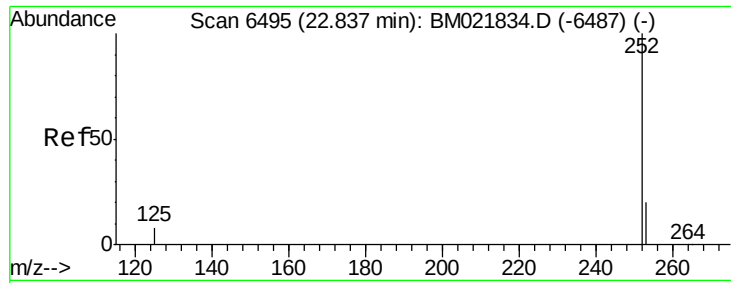
Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 41220 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 25.1  | 0.0   | 67.4  |
| 125       | 10.5  | 0.0   | 31.0  |







#22

Benzo(k)fluoranthene

Concen: 0.678 ng/ul m

RT: 22.83 min Scan# 6492

Delta R.T. -0.02 min

Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

Instrument :

BNA\_M

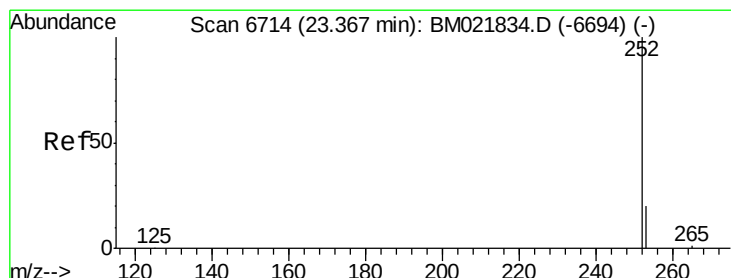
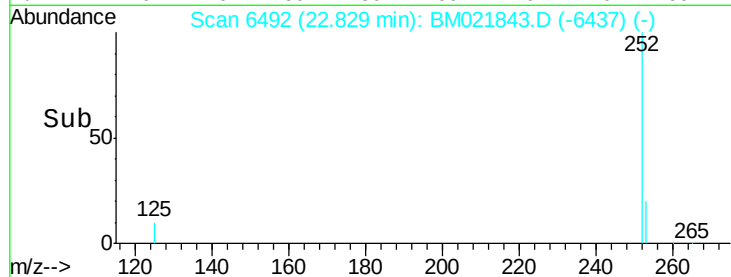
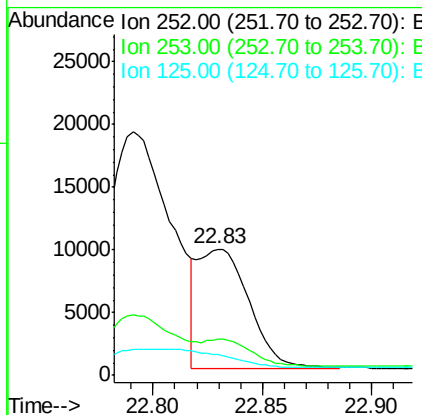
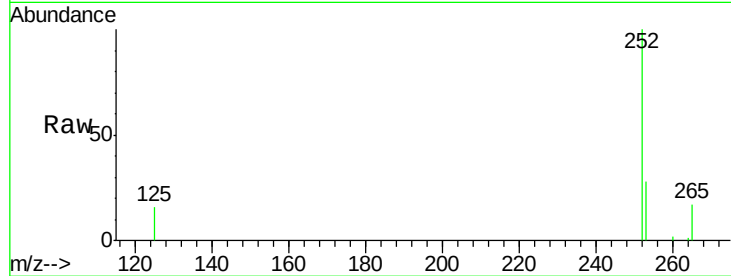
ClientSampleId :

BENS2DL

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 15572 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 28.3  | 27.0  | 40.4  |
| 125       | 16.2  | 12.2  | 18.2  |

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#23

Benzo(a)pyrene

Concen: 1.250 ng/ul

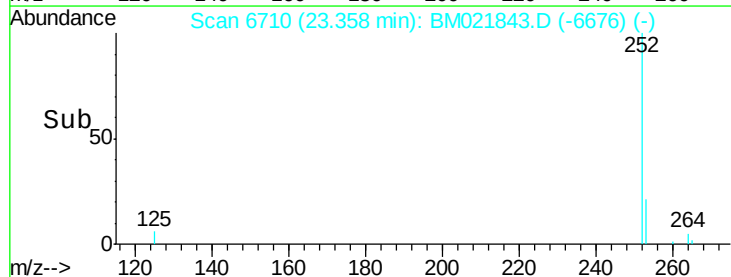
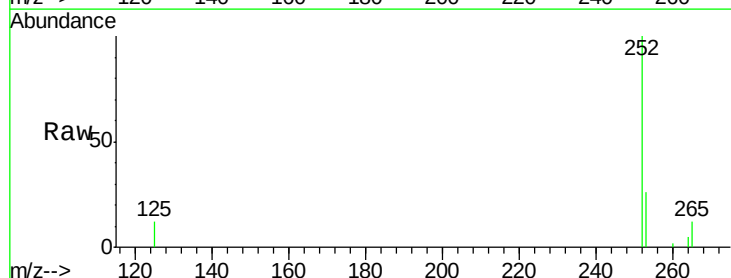
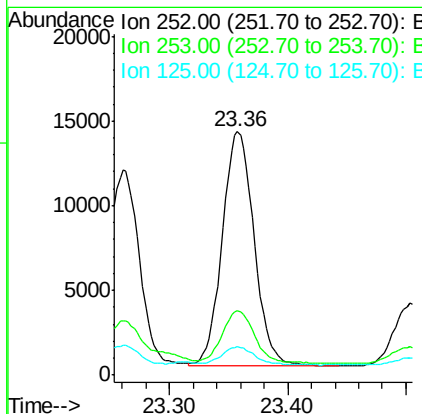
RT: 23.36 min Scan# 6710

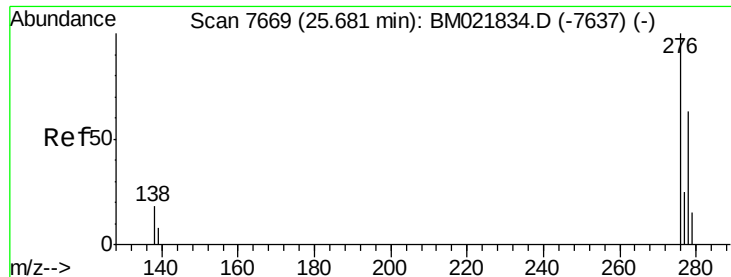
Delta R.T. -0.02 min

Lab File: BM021843.D

Acq: 05 Aug 2019 15:01

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 25785 |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 26.4  | 31.7  | 47.5# |
| 125       | 11.8  | 14.6  | 21.8# |





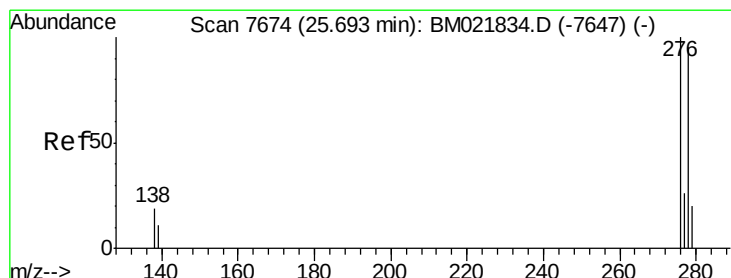
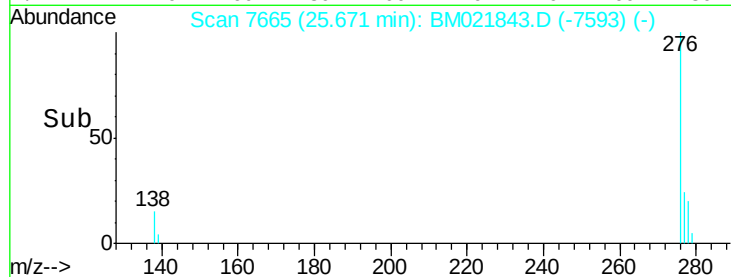
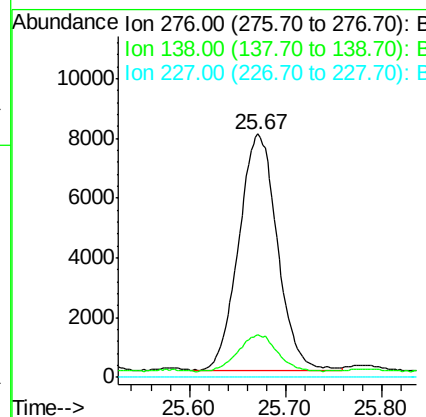
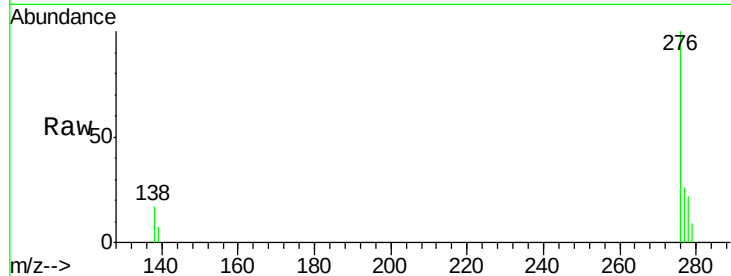
#24  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.898 ng/ul  
 RT: 25.67 min Scan# 7665  
 Delta R.T. -0.02 min  
 Lab File: BM021843.D  
 Acq: 05 Aug 2019 15:01

Instrument :  
 BNA\_M  
 ClientSampleID :  
 BENS2DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 15.5  | 15.1  | 22.7  |
| 227     | 0.0   | 0.0   | 0.0   |

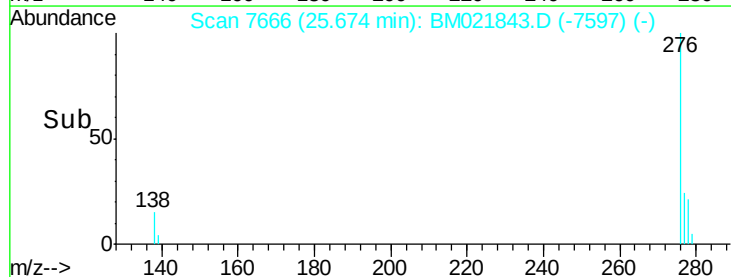
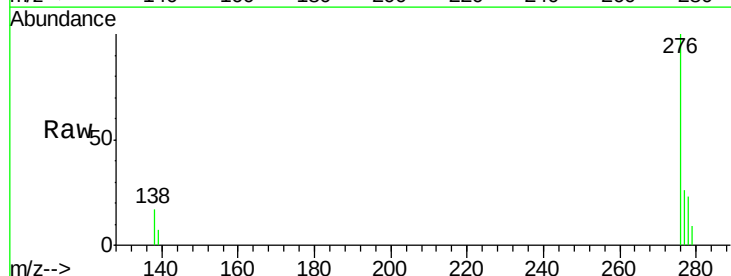
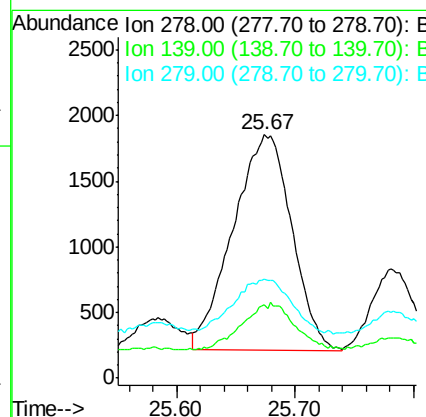
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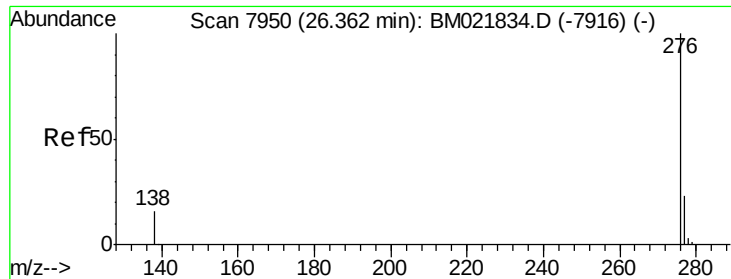
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#25  
 Dibenzo(a,h)anthracene  
 Concen: 0.285 ng/ul  
 RT: 25.67 min Scan# 7666  
 Delta R.T. -0.03 min  
 Lab File: BM021843.D  
 Acq: 05 Aug 2019 15:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 30.1  | 14.2  | 21.2# |
| 279     | 40.4  | 28.3  | 42.5  |





#26

Benzo(g,h,i)perylene

Concen: 1.051 ng/ul

RT: 26.35 min Scan# 7947

Delta R.T. -0.02 min

Lab File: BM021843.D

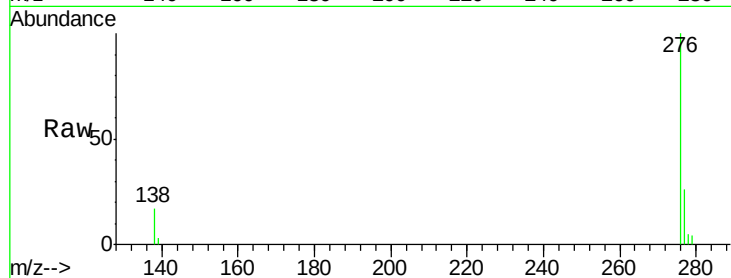
Acq: 05 Aug 2019 15:01

Instrument :

BNA\_M

ClientSampleId :

BENS2DL



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 276   | Resp: | 23298 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 138       | 17.3  | 15.5  | 23.3  |
| 277       | 25.9  | 21.4  | 32.2  |

Manual Integrations  
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