

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM082619\  
 Data File : BM022373.D  
 Acq On : 27 Aug 2019 19:00  
 Operator : HP/JU  
 Sample : K4242-02 5X  
 Misc :  
 ALS Vial : 51 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 C0AG7

Manual Integrations  
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 8/28/2019 11:32:46 PM

Quant Time: Aug 28 04:51:44 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM082219MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Aug 27 17:04:34 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.54  | 152  | 25878    | 20.00 | ng/ul | -0.01    |
| 18) Naphthalene-d8        | 10.31 | 136  | 110717   | 20.00 | ng/ul | -0.02    |
| 35) Acenaphthene-d10      | 14.20 | 164  | 77115    | 20.00 | ng/ul | -0.01    |
| 61) Phenanthrene-d10      | 16.96 | 188  | 175274   | 20.00 | ng/ul | -0.01    |
| 77) Chrysene-d12          | 21.18 | 240  | 205983   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.37 | 264  | 178877   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

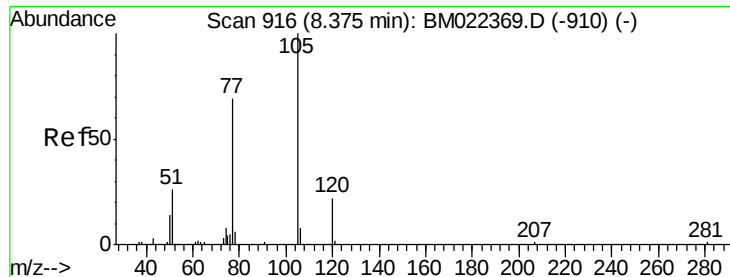
|                                |       |     |       |      |       |       |
|--------------------------------|-------|-----|-------|------|-------|-------|
| 3) 1,4-Dioxane-d8              | 0.00  | 96  | 0     | 0.00 | ng/uL |       |
| 5) Phenol-d5                   | 6.76  | 99  | 5699  | 2.55 | ng/ul | 0.01  |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.91  | 67  | 3485  | 2.68 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.09  | 132 | 5315  | 2.95 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.28  | 113 | 5405m | 2.79 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.72  | 128 | 2238  | 2.71 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.43  | 143 | 2416m | 2.51 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.99  | 165 | 5860m | 3.00 | ng/ul | 0.03  |
| 29) 4-Chloroaniline-d4         | 10.52 | 131 | 4914m | 2.07 | ng/ul | 0.03  |
| 43) Dimethylphthalate-d6       | 13.63 | 166 | 24600 | 3.62 | ng/ul | 0.00  |
| 46) Acenaphthylene-d8          | 13.89 | 160 | 24577 | 3.36 | ng/ul | 0.00  |
| 51) 4-Nitrophenol-d4           | 14.56 | 143 | 615m  | 0.61 | ng/ul | 0.09  |
| 57) Fluorene-d10               | 15.20 | 176 | 21379 | 3.80 | ng/ul | -0.01 |
| 62) 4,6-Dinitro-2-methylphenol | 15.40 | 200 | 1039  | 0.77 | ng/ul | 0.02  |
| 70) Anthracene-d10             | 17.06 | 188 | 36891 | 3.97 | ng/ul | -0.01 |
| 78) Pyrene-d10                 | 19.37 | 212 | 50380 | 4.71 | ng/ul | 0.00  |
| 89) Benzo(a)pyrene-d12         | 23.23 | 264 | 37282 | 3.79 | ng/ul | 0.00  |

## Target Compounds

|                            |       |     |          |         | Ovalue |     |
|----------------------------|-------|-----|----------|---------|--------|-----|
| 14) Acetophenone           | 8.40  | 105 | 4536     | 1.356   | ng/ul# | 76  |
| 28) Naphthalene            | 10.36 | 128 | 48184    | 7.886   | ng/ul  | 98  |
| 34) 2-Methylnaphthalene    | 12.00 | 142 | 13983    | 2.970   | ng/ul  | 99  |
| 49) Acenaphthene           | 14.26 | 153 | 129707   | 24.086  | ng/ul  | 100 |
| 53) Dibenzofuran           | 14.60 | 168 | 91695    | 11.432  | ng/ul  | 99  |
| 58) Fluorene               | 15.26 | 166 | 141321   | 20.919  | ng/ul  | 99  |
| 69) Phenanthrene           | 17.02 | 178 | 4548703  | 433.801 | ng/ul  | 99  |
| 71) Anthracene             | 17.10 | 178 | 724549   | 66.402  | ng/ul  | 100 |
| 74) Carbazole              | 17.39 | 167 | 263118   | 26.697  | ng/ul  | 99  |
| 76) Fluoranthene           | 19.05 | 202 | 7262164  | 459.591 | ng/ul# | 94  |
| 79) Pyrene                 | 19.42 | 202 | 5452001  | 408.925 | ng/ul# | 91  |
| 82) Benzo(a)anthracene     | 21.17 | 228 | 2061581  | 132.978 | ng/ul  | 98  |
| 84) Chrysene               | 21.22 | 228 | 1661194  | 114.600 | ng/ul  | 97  |
| 87) Benzo(b)fluoranthene   | 22.73 | 252 | 1908565  | 153.382 | ng/ul# | 97  |
| 88) Benzo(k)fluoranthene   | 22.76 | 252 | 565973   | 46.903  | ng/ul  | 99  |
| 90) Benzo(a)pyrene         | 23.28 | 252 | 1431876m | 120.726 | ng/ul  |     |
| 91) Indeno(1,2,3-cd)pyrene | 25.56 | 276 | 785049   | 57.001  | ng/ul# | 95  |
| 92) Dibenzo(a,h)anthracene | 25.56 | 278 | 204695m  | 17.507  | ng/ul  |     |
| 93) Benzo(g,h,i)perylene   | 26.23 | 276 | 696529   | 66.293  | ng/ul  | 95  |

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





#14

Acetophenone

Concen: 1.356 ng/ul

RT: 8.40 min Scan# 920

Delta R.T. 0.01 min

Lab File: BM022373.D

Acq: 27 Aug 2019 19:00

Instrument :

BNA\_M

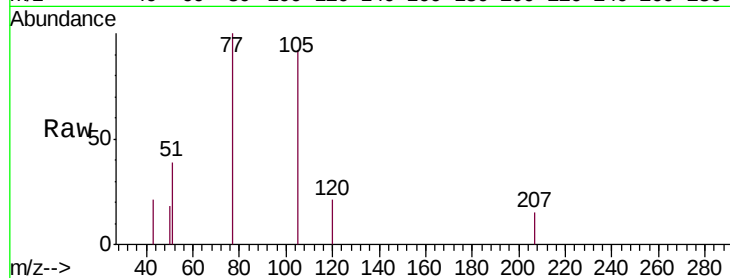
ClientSampleId :

C0AG7

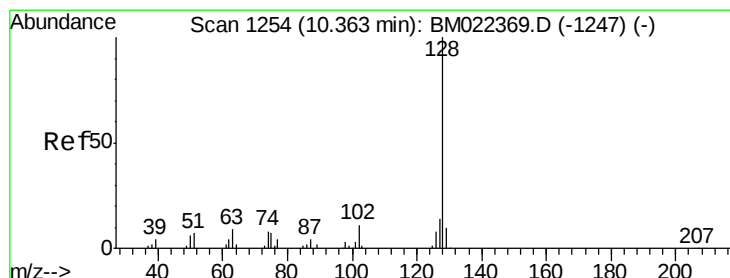
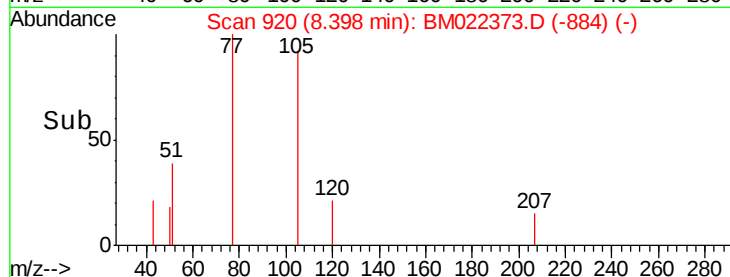
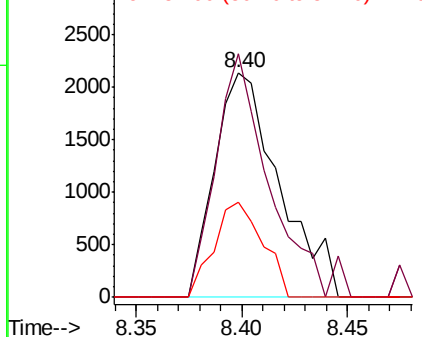
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 105   | Resp: | 4536   |
| Ion Ratio | Lower | Upper |        |
| 105       | 100   |       |        |
| 77        | 108.3 | 68.4  | 102.6# |
| 51        | 42.5  | 25.0  | 37.4#  |

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Abundance Ion 105.00 (104.70 to 105.70): E  
Ion 77.00 (76.70 to 77.70): BM  
Ion 51.00 (50.70 to 51.70): BM



#28

Naphthalene

Concen: 7.886 ng/ul

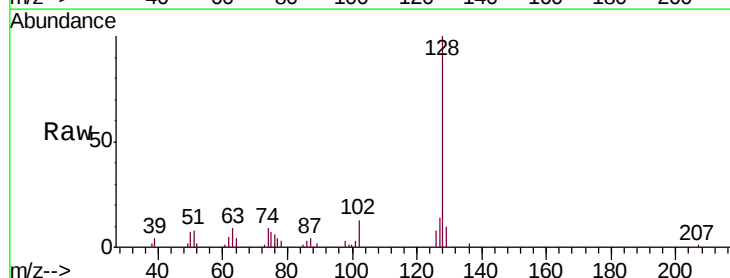
RT: 10.36 min Scan# 1254

Delta R.T. -0.01 min

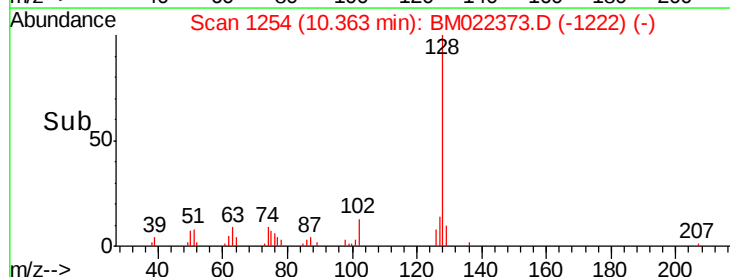
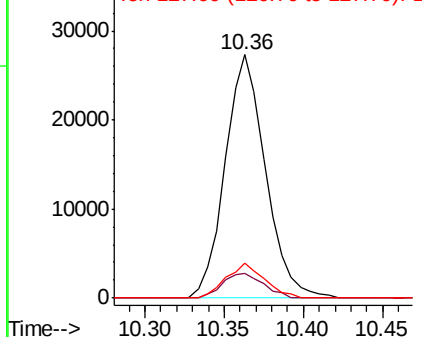
Lab File: BM022373.D

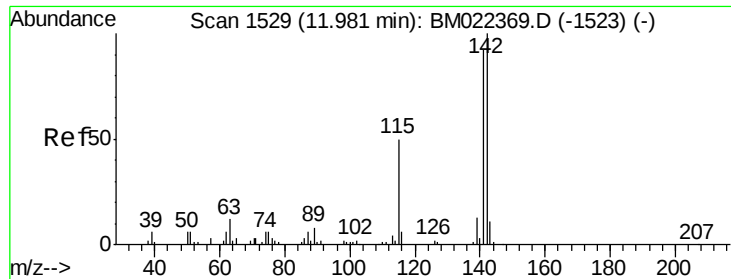
Acq: 27 Aug 2019 19:00

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 48184 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 10.2  | 8.6   | 13.0  |
| 127       | 14.2  | 10.4  | 15.6  |



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





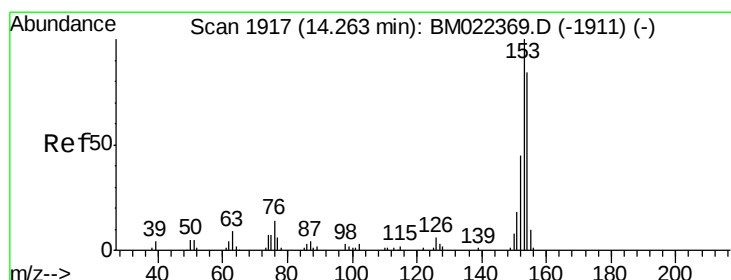
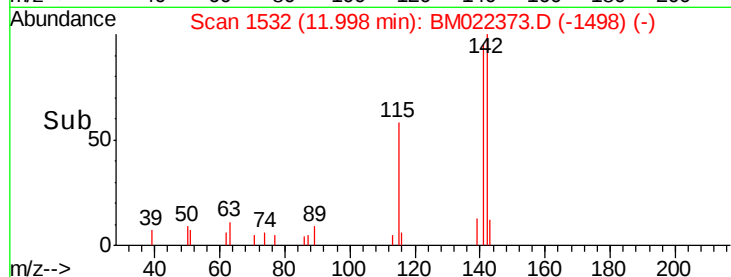
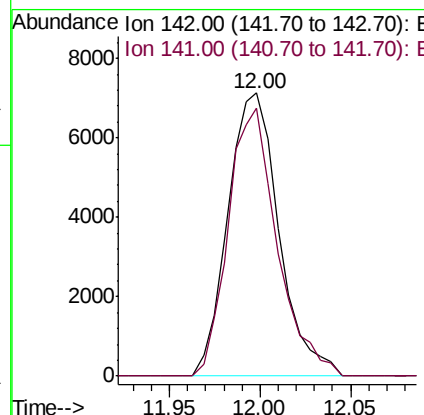
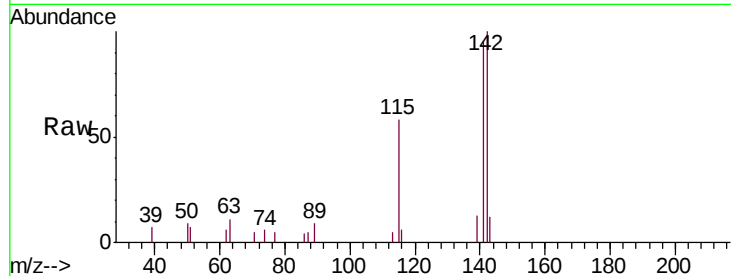
#34  
2-Methylnaphthalene  
Concen: 2.970 ng/ul  
RT: 12.00 min Scan# 1532  
Delta R.T. 0.00 min  
Lab File: BM022373.D  
Acq: 27 Aug 2019 19:00

Instrument :  
BNA\_M  
ClientSampleId :  
C0AG7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 94.9  | 75.1  | 112.7 |

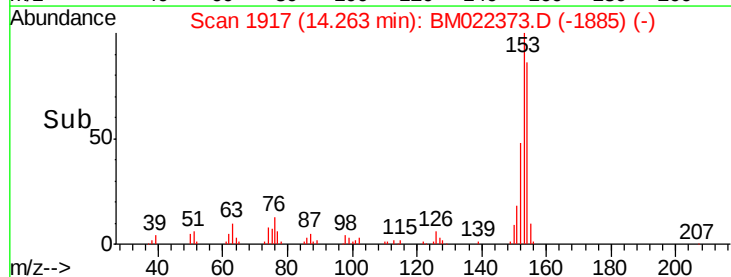
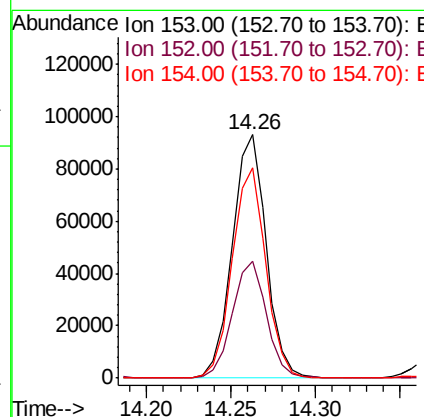
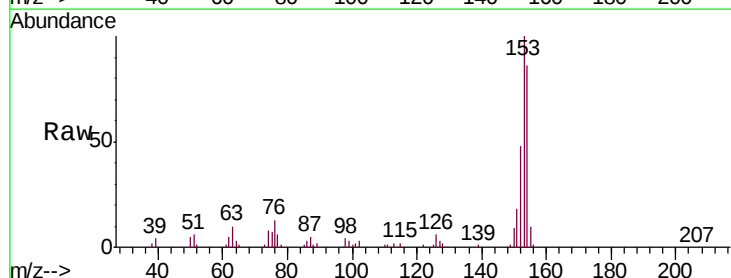
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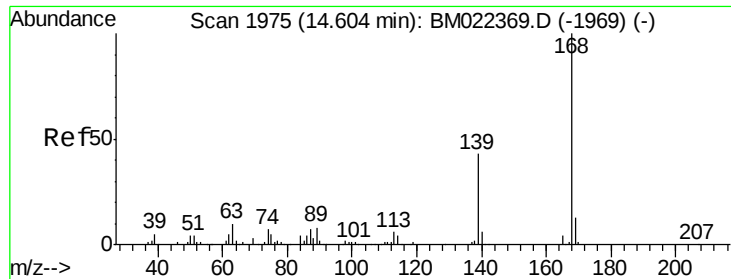
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#49  
Acenaphthene  
Concen: 24.086 ng/ul  
RT: 14.26 min Scan# 1917  
Delta R.T. -0.01 min  
Lab File: BM022373.D  
Acq: 27 Aug 2019 19:00

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 153     | 100   |       |       |
| 152     | 48.2  | 38.6  | 58.0  |
| 154     | 86.4  | 68.9  | 103.3 |





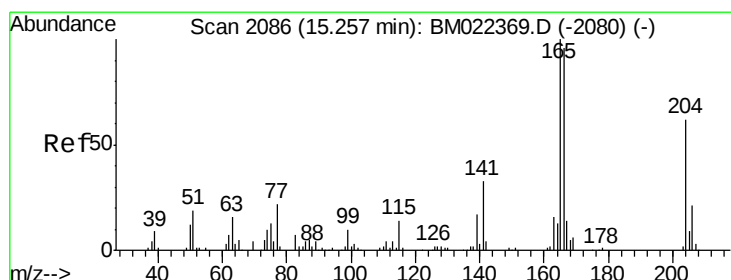
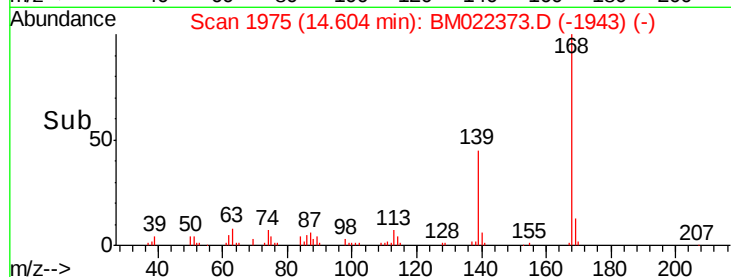
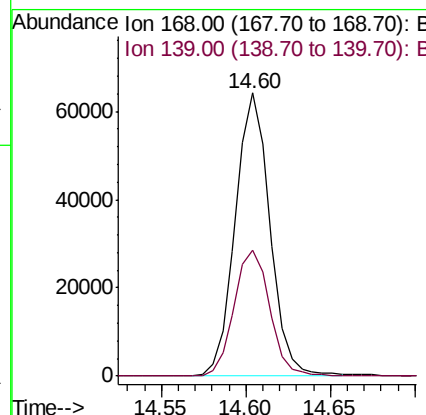
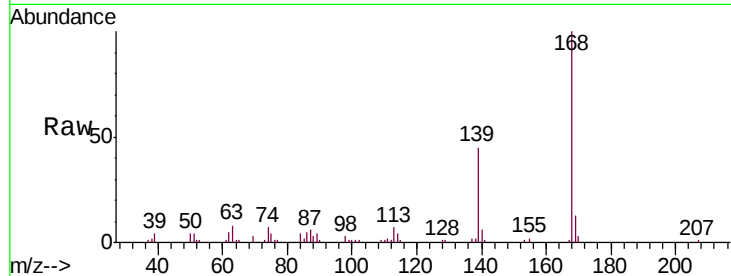
#53  
Dibenzenofuran  
Concen: 11.432 ng/ul  
RT: 14.60 min Scan# 1975  
Delta R.T. -0.01 min  
Lab File: BM022373.D  
Acq: 27 Aug 2019 19:00

Instrument :  
BNA\_M  
ClientSampleId :  
C0AG7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 168     | 100   |       |       |
| 139     | 44.7  | 36.2  | 54.4  |

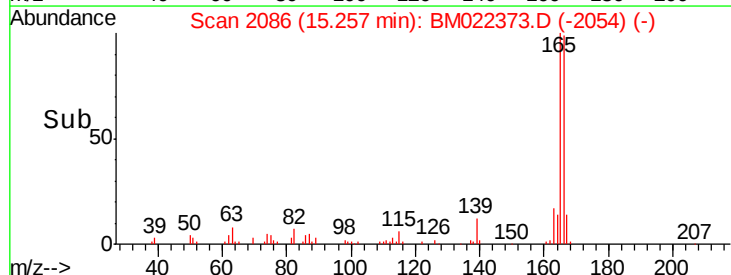
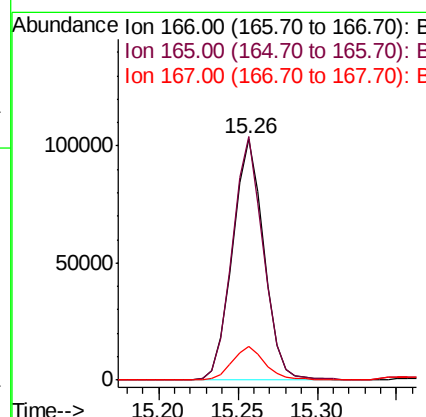
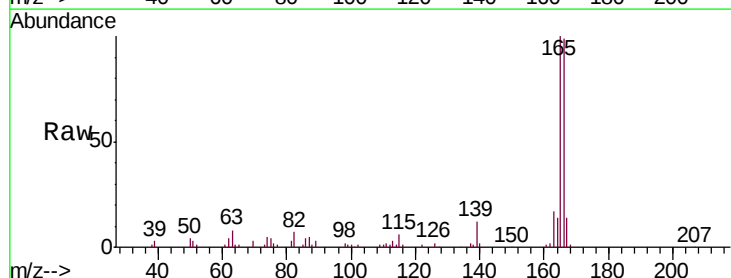
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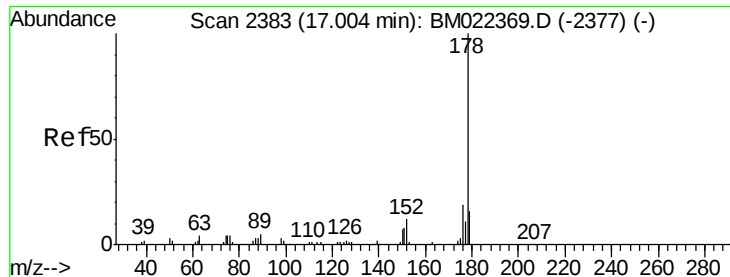
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#58  
Fluorene  
Concen: 20.919 ng/ul  
RT: 15.26 min Scan# 2086  
Delta R.T. -0.01 min  
Lab File: BM022373.D  
Acq: 27 Aug 2019 19:00

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 100.9 | 80.2  | 120.2 |
| 167     | 13.8  | 11.4  | 17.0  |





#69

Phenanthrene

Concen: 433.801 ng/ul

RT: 17.02 min Scan# 2385

Delta R.T. 0.00 min

Lab File: BM022373.D

Acq: 27 Aug 2019 19:00

Instrument :

BNA\_M

ClientSampleId :

C0AG7

Tot Ion:178 Resp: 4548703

Ion Ratio Lower Upper

178 100

179 15.7 12.4 18.6

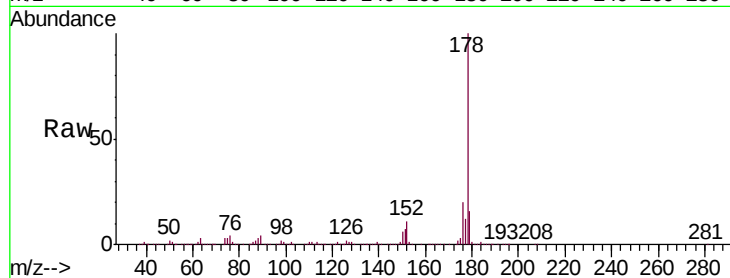
176 19.8 15.4 23.0

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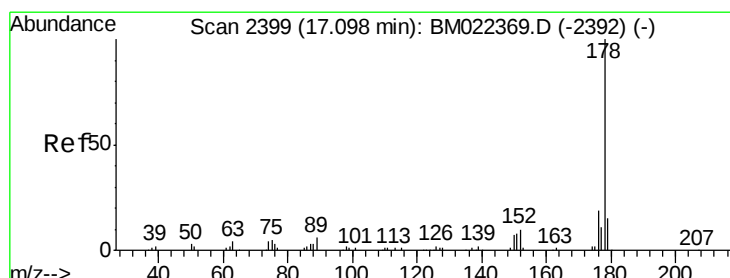
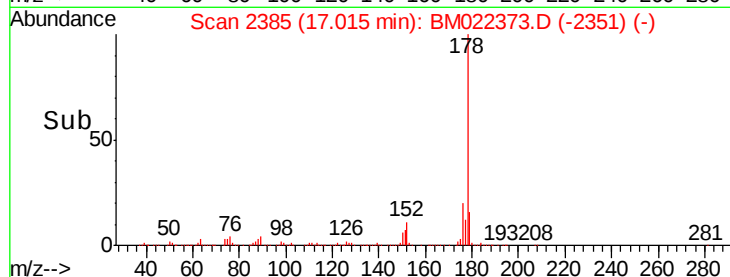
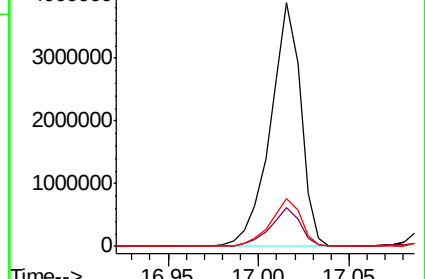
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Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#71

Anthracene

Concen: 66.402 ng/ul

RT: 17.10 min Scan# 2399

Delta R.T. -0.01 min

Lab File: BM022373.D

Acq: 27 Aug 2019 19:00

Tgt Ion:178 Resp: 724549

Ion Ratio Lower Upper

178 100

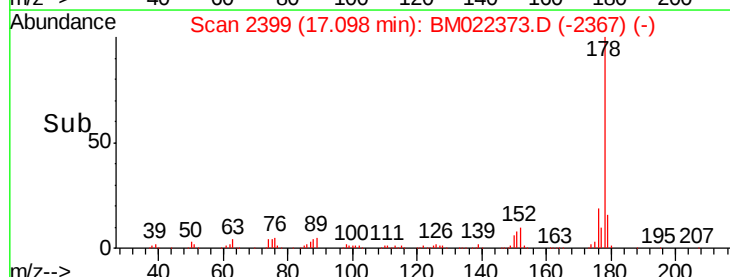
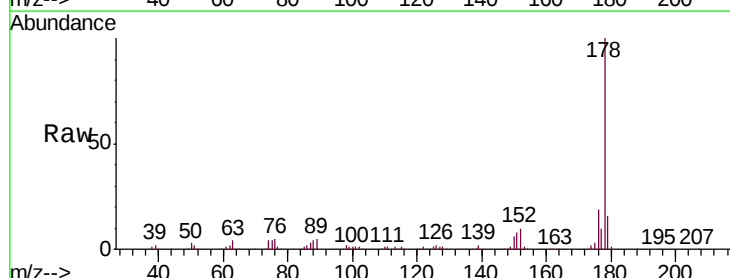
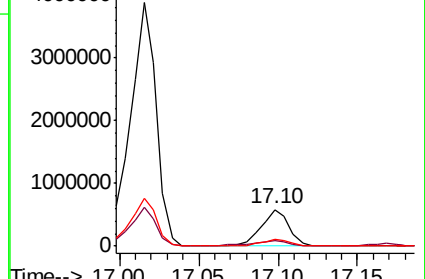
179 15.6 12.3 18.5

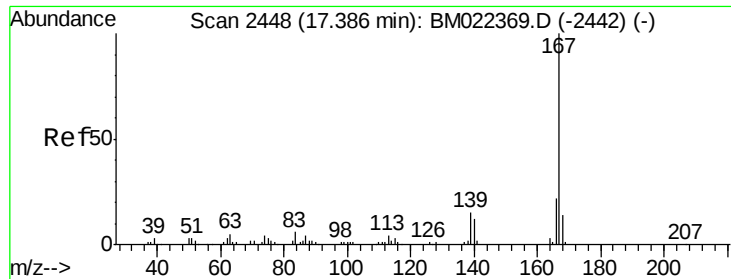
176 19.4 15.5 23.3

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





#74

Carbazole

Concen: 26.697 ng/ul

RT: 17.39 min Scan# 2448

Delta R.T. -0.01 min

Lab File: BM022373.D

Acq: 27 Aug 2019 19:00

Instrument :

BNA\_M

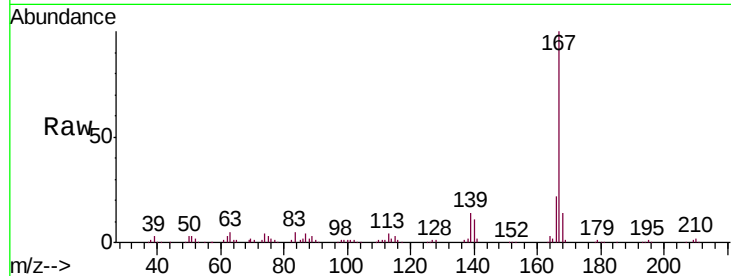
ClientSampleId :

C0AG7

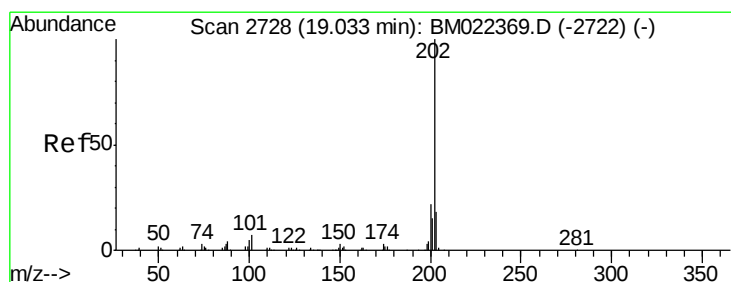
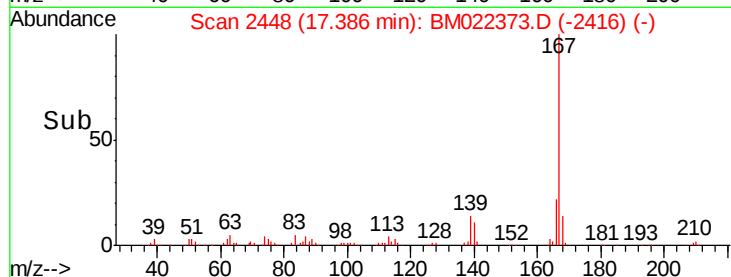
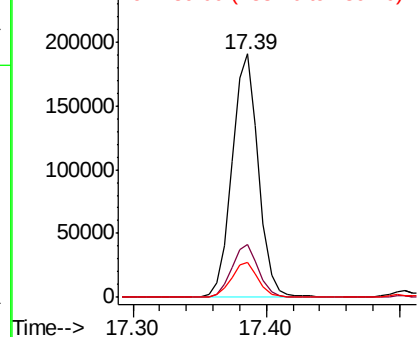
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 167   | Resp: | 263118 |
| Ion Ratio | Lower | Upper |        |
| 167       | 100   |       |        |
| 166       | 21.5  | 17.8  | 26.8   |
| 139       | 14.5  | 11.8  | 17.8   |

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Abundance Ion 167.00 (166.70 to 167.70): E  
Ion 166.00 (165.70 to 166.70): E  
Ion 139.00 (138.70 to 139.70): E



#76

Fluoranthene

Concen: 459.591 ng/ul

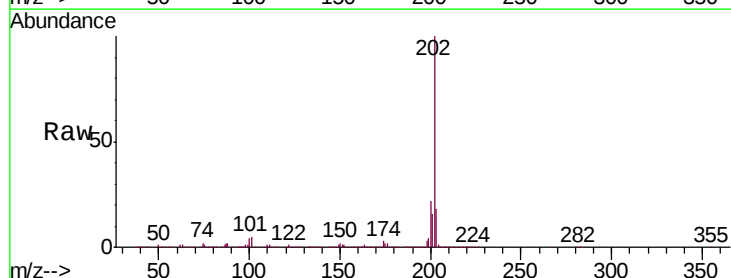
RT: 19.05 min Scan# 2731

Delta R.T. 0.01 min

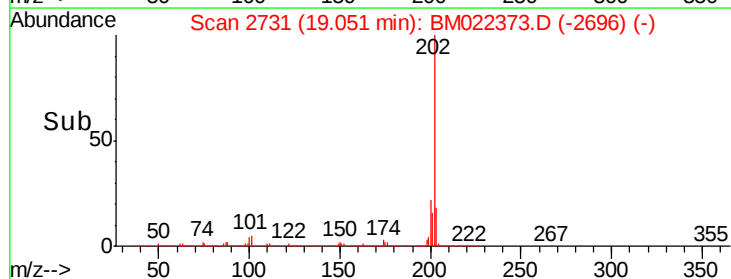
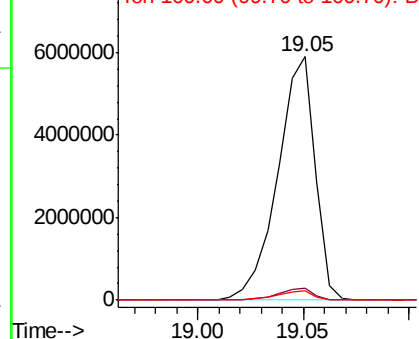
Lab File: BM022373.D

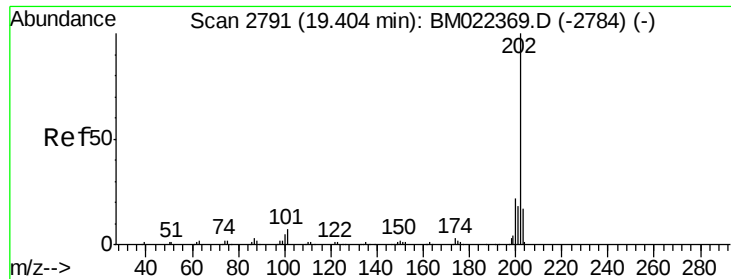
Acq: 27 Aug 2019 19:00

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 7262164 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 4.7   | 5.3   | 7.9#    |
| 100       | 3.6   | 4.6   | 6.8#    |



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): E





#79

Pvrene

Concen: 408.925 ng/ul

RT: 19.42 min Scan# 2793

Delta R.T. 0.01 min

Lab File: BM022373.D

Acq: 27 Aug 2019 19:00

Instrument :

BNA\_M

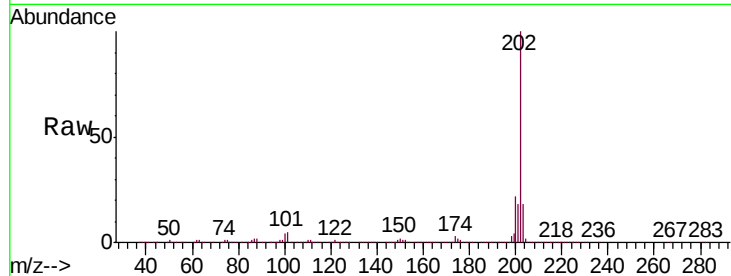
ClientSampleID :

C0AG7

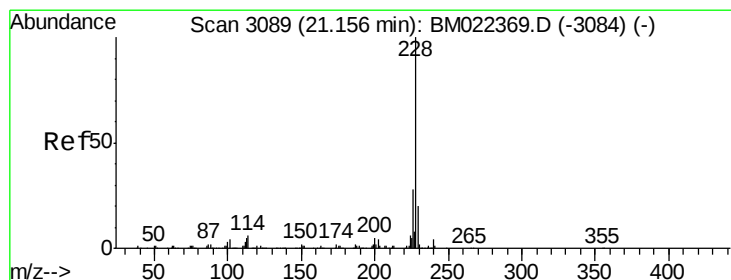
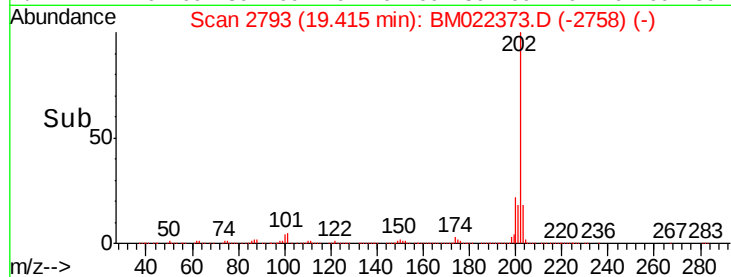
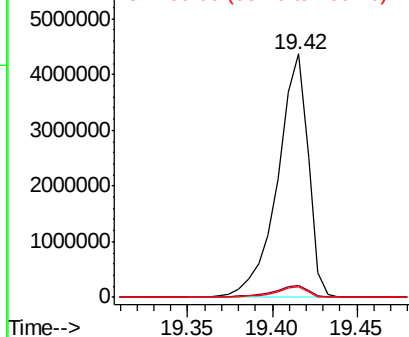
|           |       |       |         |
|-----------|-------|-------|---------|
| Tot Ion:  | 202   | Resp: | 5452001 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 5.1   | 7.0   | 10.4#   |
| 100       | 4.3   | 5.8   | 8.8#    |

Manual Integrations  
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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



#82

Benzo(a)anthracene

Concen: 132.978 ng/ul

RT: 21.17 min Scan# 3091

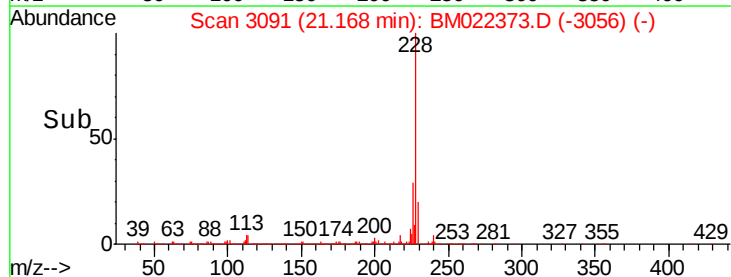
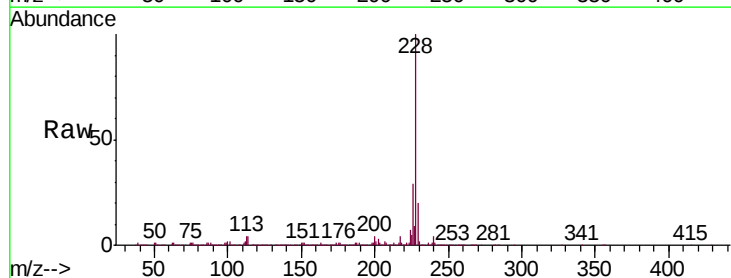
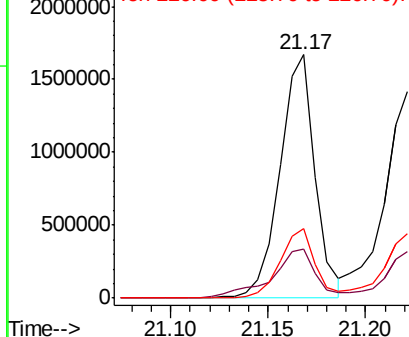
Delta R.T. 0.01 min

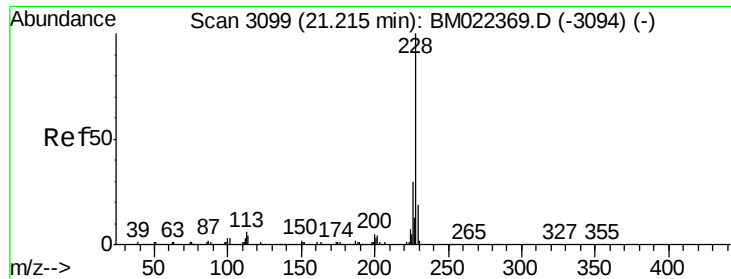
Lab File: BM022373.D

Acq: 27 Aug 2019 19:00

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 228   | Resp: | 2061581 |
| Ion Ratio | Lower | Upper |         |
| 228       | 100   |       |         |
| 229       | 20.2  | 15.2  | 22.8    |
| 226       | 28.6  | 22.3  | 33.5    |

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





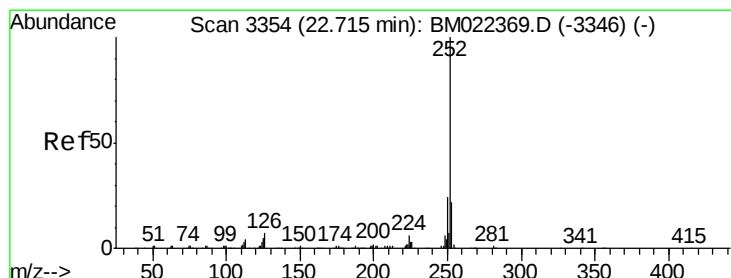
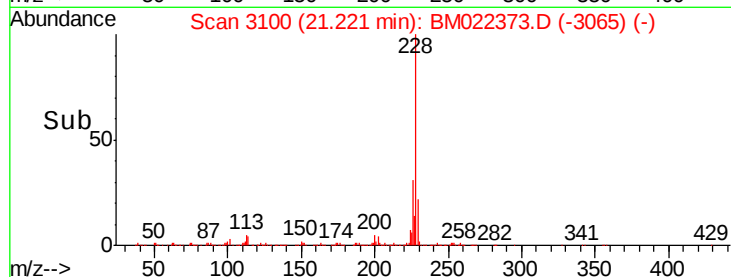
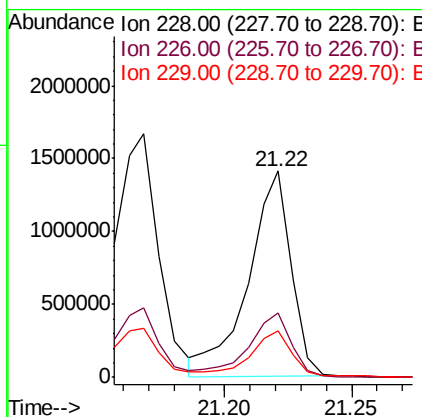
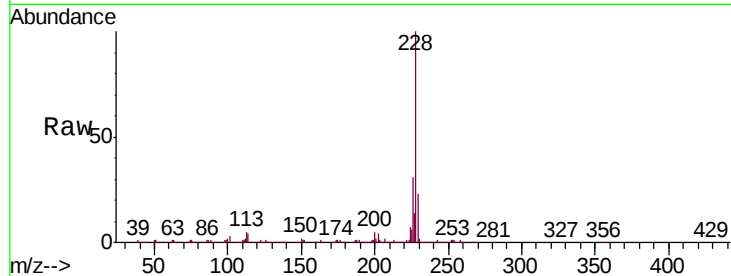
#84  
Chrysene  
Concen: 114.600 ng/ul  
RT: 21.22 min Scan# 3100  
Delta R.T. 0.01 min  
Lab File: BM022373.D  
Acq: 27 Aug 2019 19:00

Instrument :  
BNA\_M  
ClientSampleId :  
C0AG7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.1  | 24.7  | 37.1  |
| 229     | 22.5  | 15.7  | 23.5  |

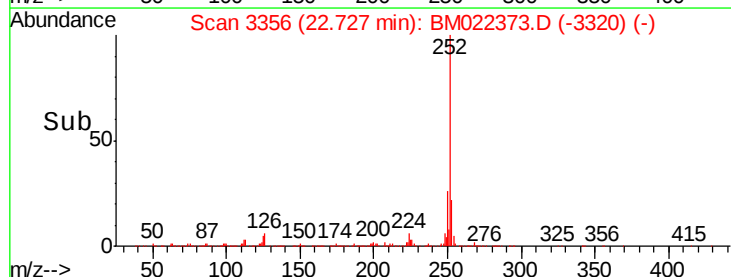
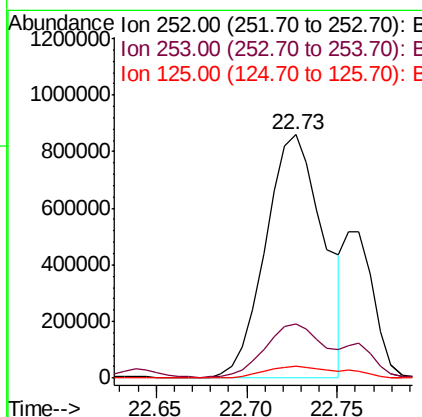
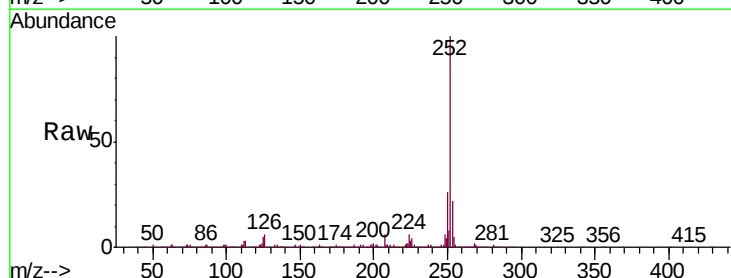
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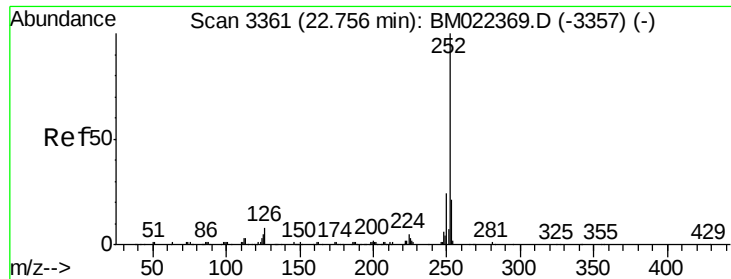
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#87  
Benzo(b)fluoranthene  
Concen: 153.382 ng/ul  
RT: 22.73 min Scan# 3356  
Delta R.T. 0.01 min  
Lab File: BM022373.D  
Acq: 27 Aug 2019 19:00

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.5  | 17.0  | 25.6  |
| 125     | 4.9   | 5.2   | 7.8   |





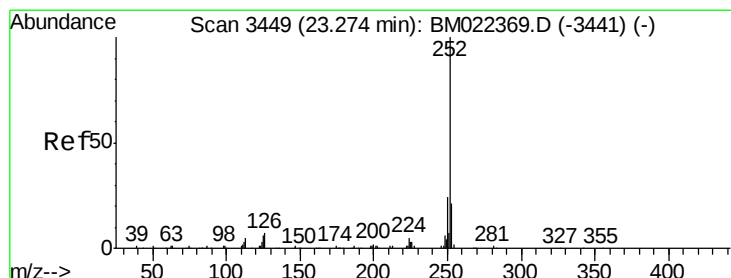
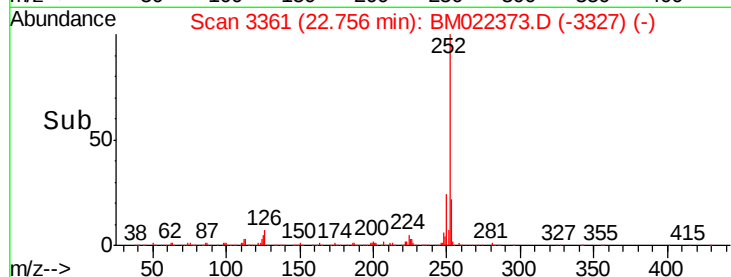
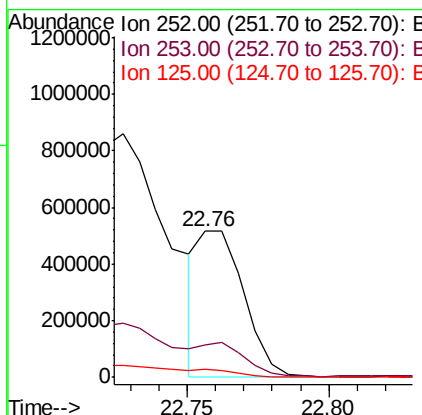
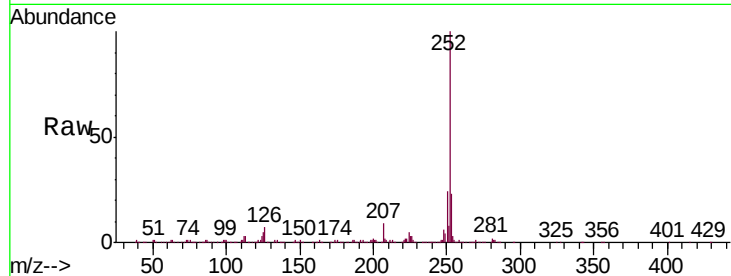
#88  
Benzo(k)fluoranthene  
Concen: 46.903 ng/ul  
RT: 22.76 min Scan# 3361  
Delta R.T. 0.00 min  
Lab File: BM022373.D  
Acq: 27 Aug 2019 19:00

Instrument :  
BNA\_M  
ClientSampled :  
C0AG7

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 565973 |       |       |
| 253     | 22.5  | 18.1   | 27.1  |       |
| 125     | 5.2   | 5.1    | 7.7   |       |

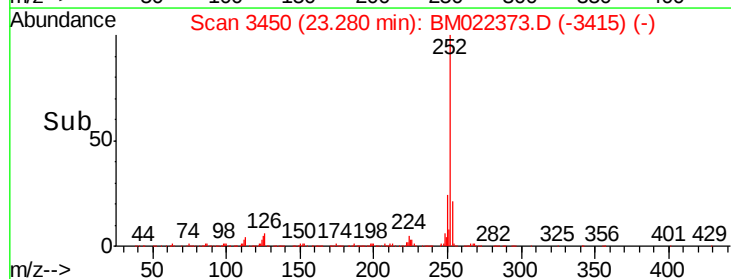
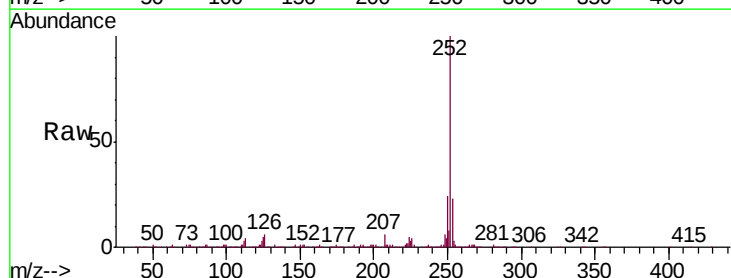
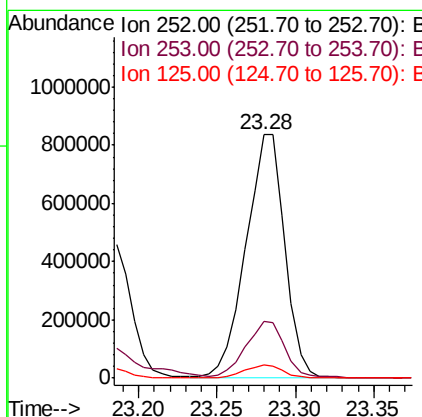
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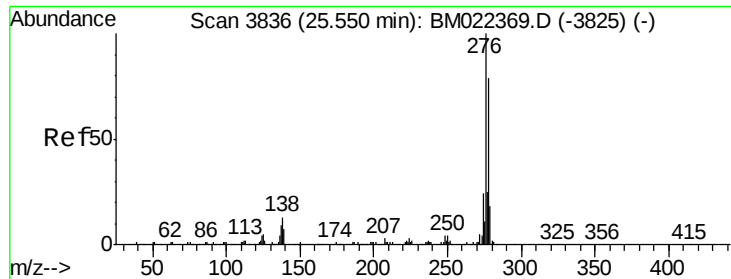
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#90  
Benzo(a)pyrene  
Concen: 120.726 ng/ul m  
RT: 23.28 min Scan# 3450  
Delta R.T. 0.01 min  
Lab File: BM022373.D  
Acq: 27 Aug 2019 19:00

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 252     | 100   | 1431876 |       |       |
| 253     | 23.4  | 16.9    | 25.3  |       |
| 125     | 5.3   | 5.5     | 8.3#  |       |





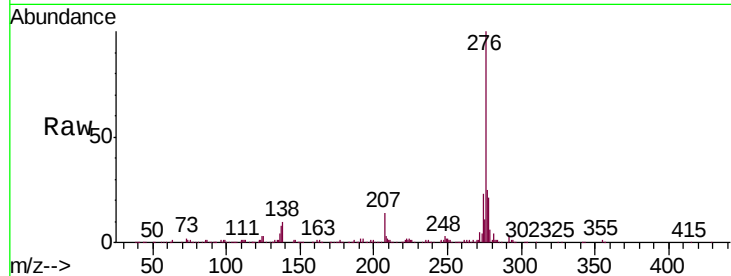
#91  
 Indeno(1,2,3-cd)pyrene  
 Concen: 57.001 ng/ul  
 RT: 25.56 min Scan# 3838  
 Delta R.T. 0.00 min  
 Lab File: BM022373.D  
 Acq: 27 Aug 2019 19:00

Instrument :  
 BNA\_M  
 ClientSampleId :  
 C0AG7

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 10.2  | 12.6  | 18.8# |
| 277     | 24.9  | 20.2  | 30.2  |

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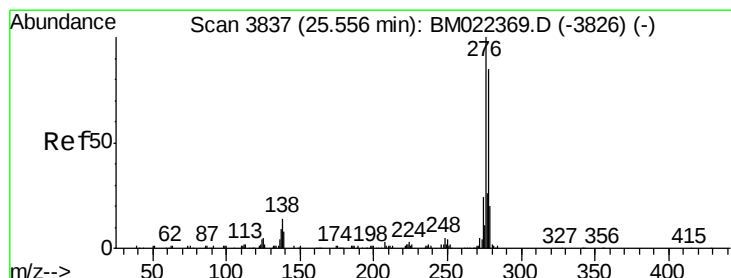
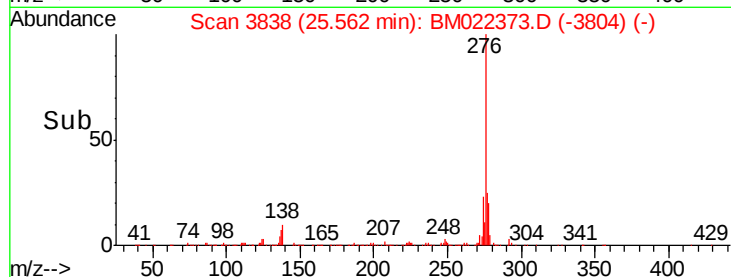
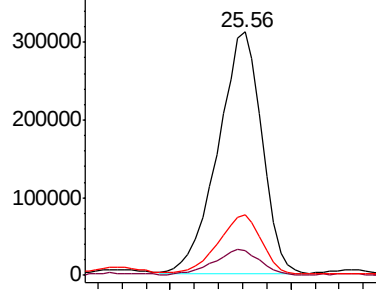


Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#92  
 Dibenzo(a,h)anthracene  
 Concen: 17.507 ng/ul m  
 RT: 25.56 min Scan# 3837  
 Delta R.T. -0.01 min  
 Lab File: BM022373.D  
 Acq: 27 Aug 2019 19:00

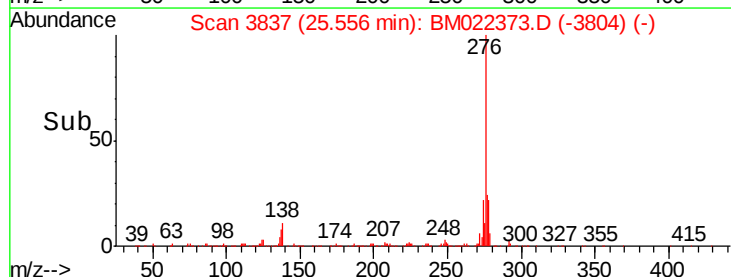
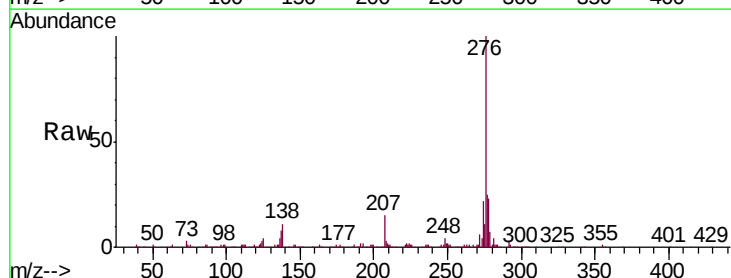
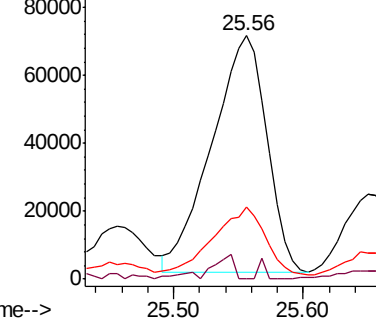
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 7.7   | 11.5# |
| 279     | 29.8  | 19.0  | 28.6# |

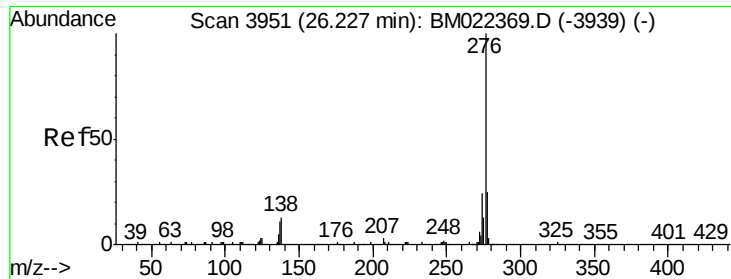
Abundance

Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E





#93  
 Benzo(a,h,i)perylene  
 Concen: 66.293 ng/ul  
 RT: 26.23 min Scan# 3952  
 Delta R.T. 0.00 min  
 Lab File: BM022373.D  
 Acq: 27 Aug 2019 19:00

Instrument :  
 BNA\_M  
 ClientSampleId :  
 C0AG7

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 276   | Resp: | 696529 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 11.3  | 10.2  | 15.4   |
| 277       | 25.6  | 18.2  | 27.4   |

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