

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM101719\  
 Data File : BM023243.D  
 Acq On : 18 Oct 2019 05:53  
 Operator : JU  
 Sample : K5235-14  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BEPB4

Manual Integrations  
 APPROVED

mohammad  
 10/20/2019 8:06:50 PM

Quant Time: Oct 18 08:30:52 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM101419MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Fri Oct 18 07:48:41 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.66  | 152  | 343725   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.44 | 136  | 1345376  | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.31 | 164  | 835350   | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.05 | 188  | 1709261  | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.24 | 240  | 1763664  | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 23.46 | 264  | 2180896  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.18  | 96  | 35963   | 4.60  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.83  | 99  | 607681  | 20.30 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.00  | 67  | 369077  | 21.79 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.20  | 132 | 515875  | 22.52 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.37  | 113 | 405640  | 16.87 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.80  | 128 | 252521  | 27.74 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.53  | 143 | 280217  | 32.33 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.07 | 165 | 537026  | 24.36 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.57 | 131 | 453630  | 16.92 | ng/ul | 0.00 |
| 44) Dimethylphthalate-d6       | 13.72 | 166 | 1670871 | 26.10 | ng/ul | 0.00 |
| 47) Acenaphthylene-d8          | 14.00 | 160 | 1957403 | 26.07 | ng/ul | 0.00 |
| 52) 4-Nitrophenol-d4           | 14.50 | 143 | 155944  | 15.05 | ng/ul | 0.00 |
| 58) Fluorene-d10               | 15.30 | 176 | 1454899 | 26.68 | ng/ul | 0.00 |
| 63) 4,6-Dinitro-2-methylphenol | 15.42 | 200 | 147350  | 21.74 | ng/ul | 0.00 |
| 71) Anthracene-d10             | 17.15 | 188 | 2258759 | 27.41 | ng/ul | 0.00 |
| 79) Pyrene-d10                 | 19.45 | 212 | 2536508 | 29.70 | ng/ul | 0.00 |
| 90) Benzo(a)pyrene-d12         | 23.32 | 264 | 3124794 | 28.27 | ng/ul | 0.01 |

## Target Compounds

|                                |       |     |         |        | Ovalue |     |
|--------------------------------|-------|-----|---------|--------|--------|-----|
| 6) Phenol                      | 6.86  | 94  | 102337  | 3.315  | ng/ul  | 97  |
| 45) Dimethylphthalate          | 13.77 | 163 | 662799  | 10.344 | ng/ul  | 100 |
| 48) Acenaphthylene             | 14.03 | 152 | 103883  | 1.353  | ng/ul  | 98  |
| 70) Phenanthrene               | 17.09 | 178 | 1075063 | 11.207 | ng/ul  | 100 |
| 72) Anthracene                 | 17.19 | 178 | 279615  | 2.821  | ng/ul  | 97  |
| 75) Carbazole                  | 17.45 | 167 | 101006  | 1.141  | ng/ul  | 98  |
| 76) Di-n-butylphthalate        | 18.04 | 149 | 203173  | 1.928  | ng/ul# | 95  |
| 77) Fluoranthene               | 19.12 | 202 | 2893633 | 25.364 | ng/ul  | 99  |
| 80) Pyrene                     | 19.48 | 202 | 3229192 | 29.227 | ng/ul  | 97  |
| 83) Benzo(a)anthracene         | 21.23 | 228 | 1966939 | 16.460 | ng/ul  | 96  |
| 84) Bis(2-ethylhexyl)phthalate | 21.19 | 149 | 3313332 | 54.225 | ng/ul# | 98  |
| 85) Chrysene                   | 21.28 | 228 | 2058318 | 18.550 | ng/ul  | 97  |
| 88) Benzo(b)fluoranthene       | 22.80 | 252 | 2602513 | 19.682 | ng/ul  | 98  |
| 89) Benzo(k)fluoranthene       | 22.84 | 252 | 883135m | 6.956  | ng/ul  |     |
| 91) Benzo(a)pyrene             | 23.36 | 252 | 2095541 | 16.518 | ng/ul  | 98  |
| 92) Indeno(1,2,3-cd)pyrene     | 25.67 | 276 | 1376140 | 9.118  | ng/ul  | 97  |
| 93) Dibenzo(a,h)anthracene     | 25.69 | 278 | 395432  | 3.134  | ng/ul# | 91  |
| 94) Benzo(g,h,i)perylene       | 26.35 | 276 | 1359978 | 10.945 | ng/ul  | 98  |

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

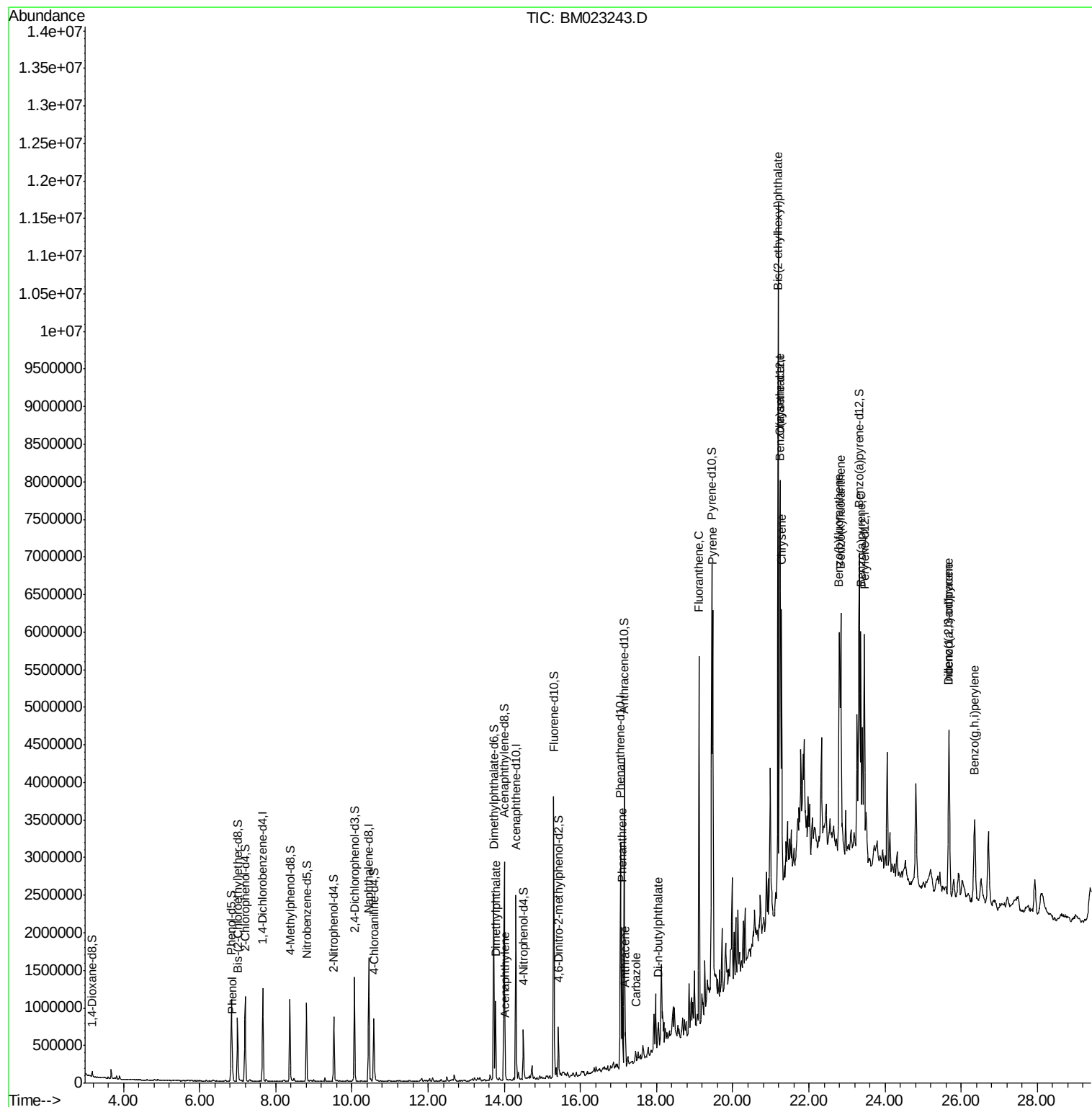
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM101719\  
Data File : BM023243.D  
Acq On : 18 Oct 2019 05:53  
Operator : JU  
Sample : K5235-14  
Misc :  
ALS Vial : 22 Sample Multiplier: 1

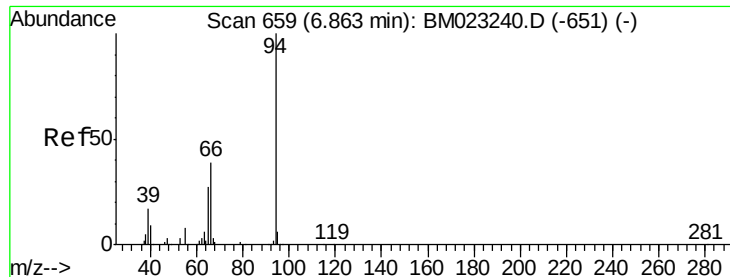
Instrument :  
BNA\_M  
ClientSampleId :  
BEPB4

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Quant Time: Oct 18 08:30:52 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM101419MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Fri Oct 18 07:48:41 2019  
Response via : Initial Calibration





#6

Phenol

Concen: 3.315 ng/ul

RT: 6.86 min Scan# 659

Delta R.T. -0.00 min

Lab File: BM023243.D

Acq: 18 Oct 2019 05:53

Instrument :

BNA\_M

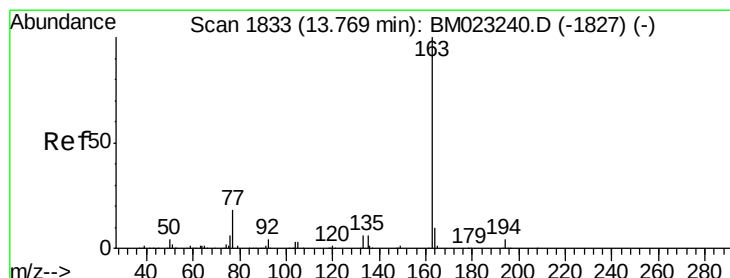
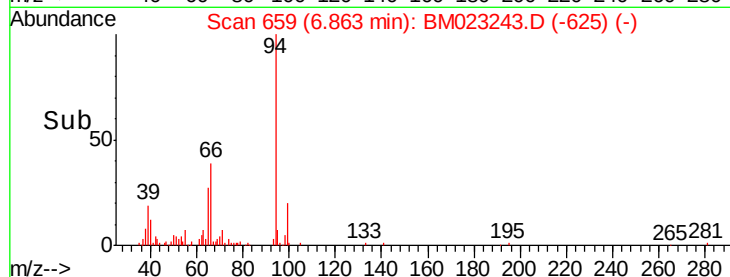
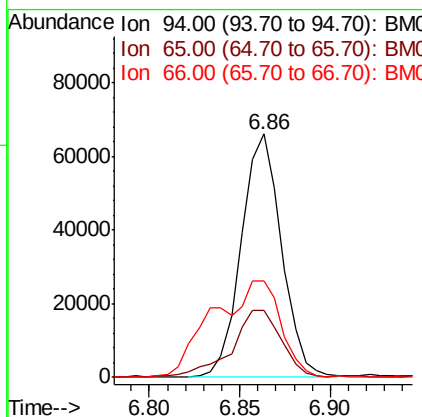
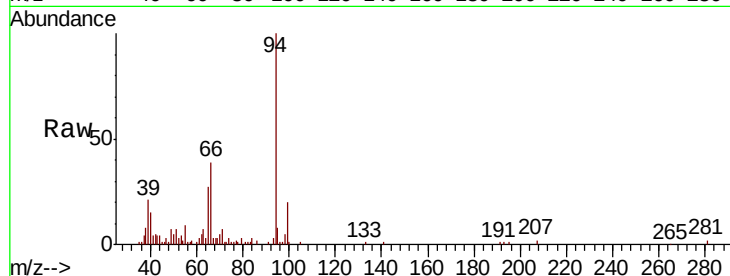
ClientSampleId :

BEPB4

|           |      |       |        |
|-----------|------|-------|--------|
| Tot Ion:  | 94   | Resp: | 102337 |
| Ion Ratio |      | Lower | Upper  |
| 94        | 100  |       |        |
| 65        | 27.3 | 23.7  | 35.5   |
| 66        | 39.4 | 32.9  | 49.3   |

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#45

Dimethylphthalate

Concen: 10.344 ng/ul

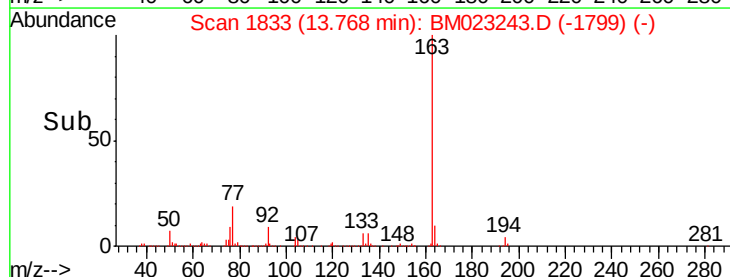
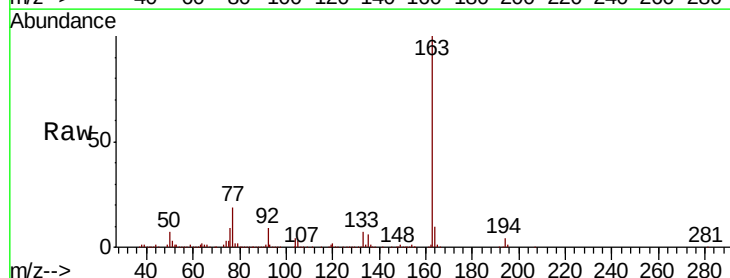
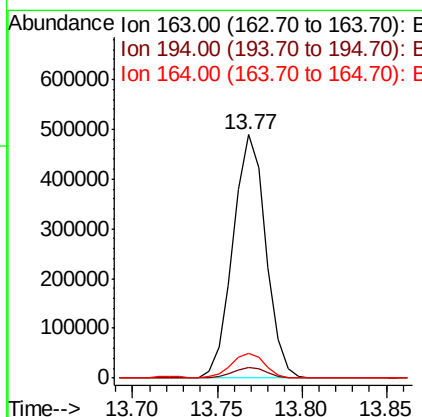
RT: 13.77 min Scan# 1833

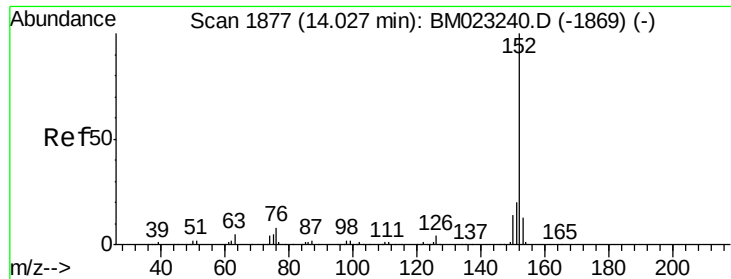
Delta R.T. -0.00 min

Lab File: BM023243.D

Acq: 18 Oct 2019 05:53

|           |     |       |        |
|-----------|-----|-------|--------|
| Tgt Ion:  | 163 | Resp: | 662799 |
| Ion Ratio |     | Lower | Upper  |
| 163       | 100 |       |        |
| 194       | 4.3 | 3.5   | 5.3    |
| 164       | 9.9 | 8.0   | 12.0   |





#48

Acenaphthylene

Concen: 1.353 ng/ul

RT: 14.03 min Scan# 1877

Delta R.T. -0.00 min

Lab File: BM023243.D

Acq: 18 Oct 2019 05:53

Instrument :

BNA\_M

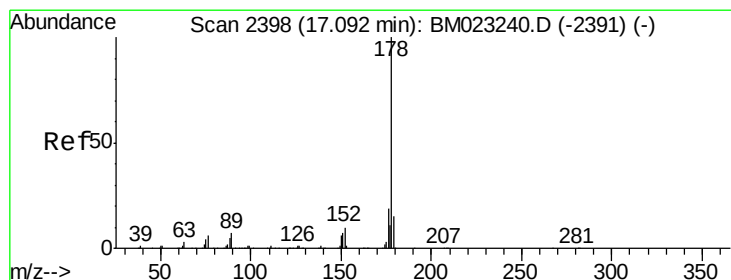
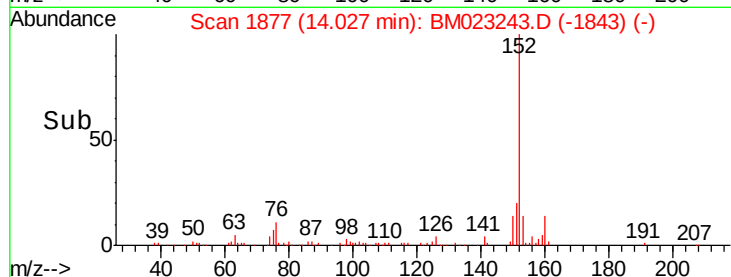
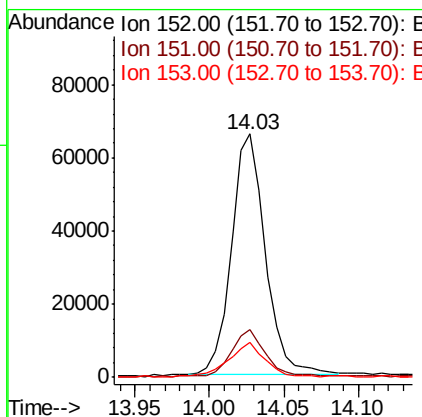
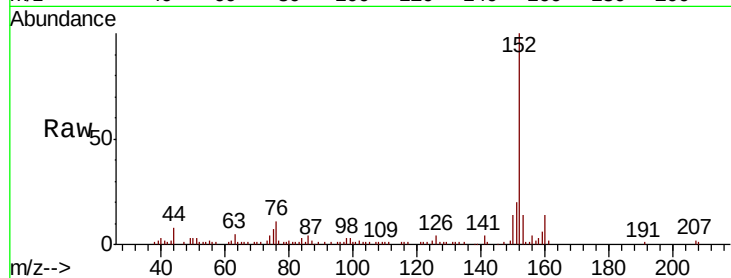
ClientSampleId :

BEPB4

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 152   | Resp: | 103883 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 151       | 19.7  | 15.8  | 23.6   |
| 153       | 14.4  | 10.3  | 15.5   |

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#70

Phenanthrene

Concen: 11.207 ng/ul

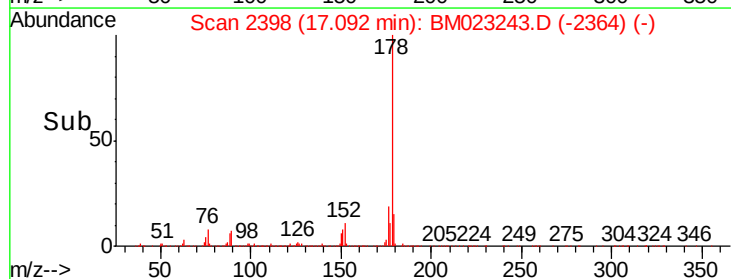
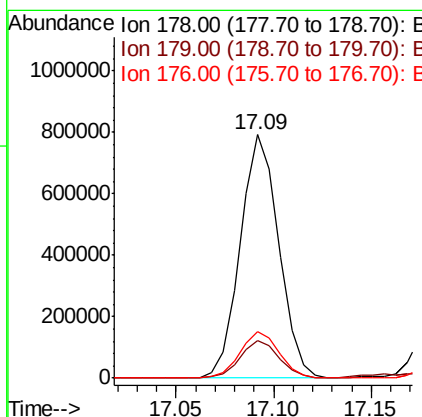
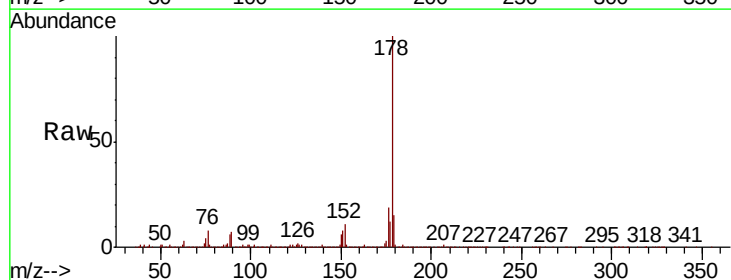
RT: 17.09 min Scan# 2398

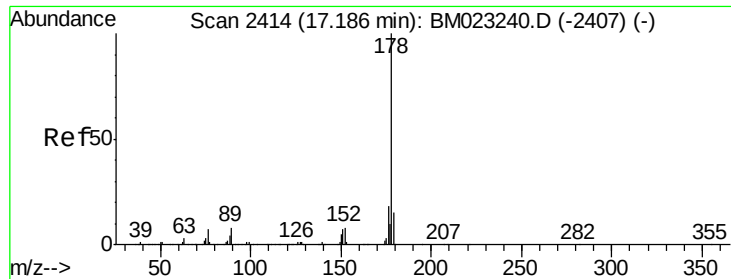
Delta R.T. -0.00 min

Lab File: BM023243.D

Acq: 18 Oct 2019 05:53

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 178   | Resp: | 1075063 |
| Ion Ratio | Lower | Upper |         |
| 178       | 100   |       |         |
| 179       | 15.3  | 12.3  | 18.5    |
| 176       | 19.3  | 15.5  | 23.3    |





#72

Anthracene

Concen: 2.821 ng/ul

RT: 17.19 min Scan# 2414

Delta R.T. -0.00 min

Lab File: BM023243.D

Acq: 18 Oct 2019 05:53

Instrument :

BNA\_M

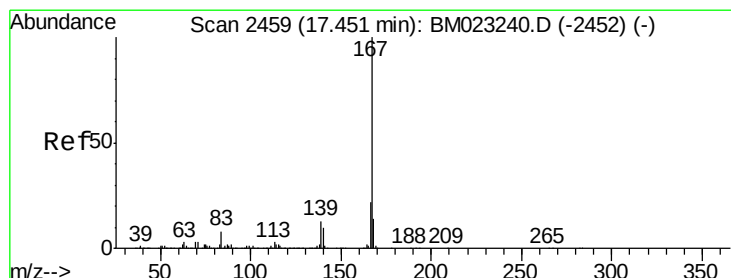
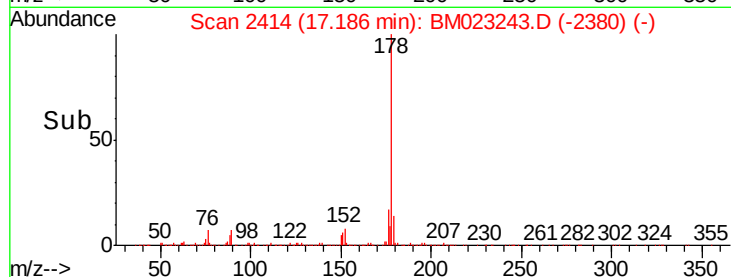
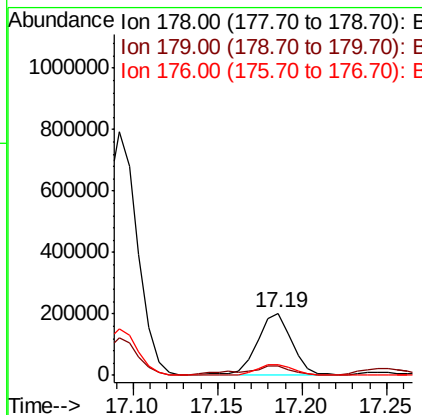
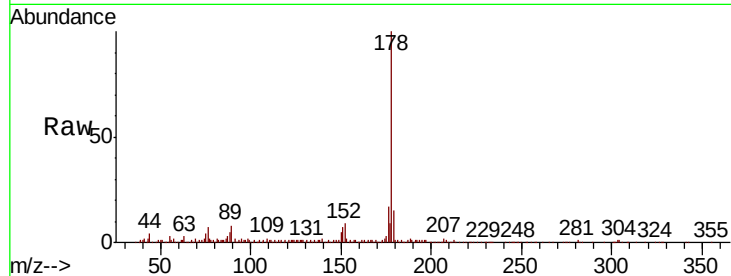
ClientSampleId :

BEPB4

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 178   | Resp: | 279615 |
| Ion Ratio | Lower | Upper |        |
| 178       | 100   |       |        |
| 179       | 14.8  | 12.3  | 18.5   |
| 176       | 16.9  | 15.0  | 22.4   |

Manual Integrations  
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#75

Carbazole

Concen: 1.141 ng/ul

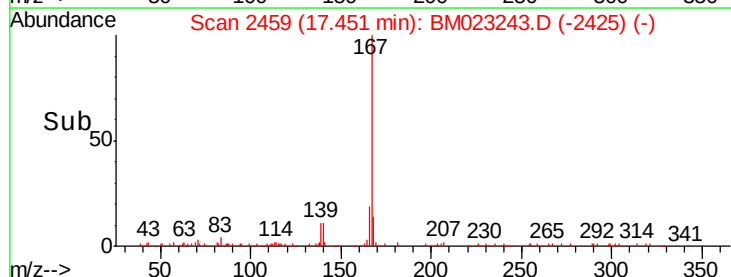
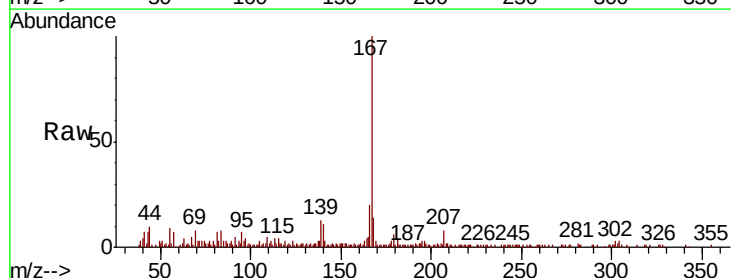
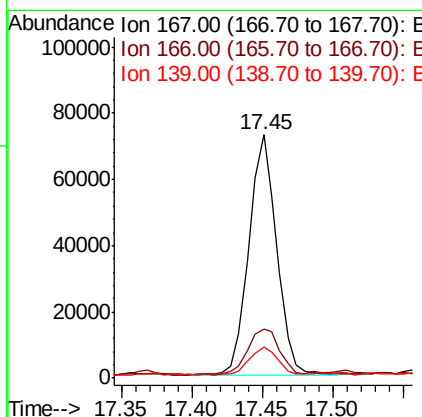
RT: 17.45 min Scan# 2459

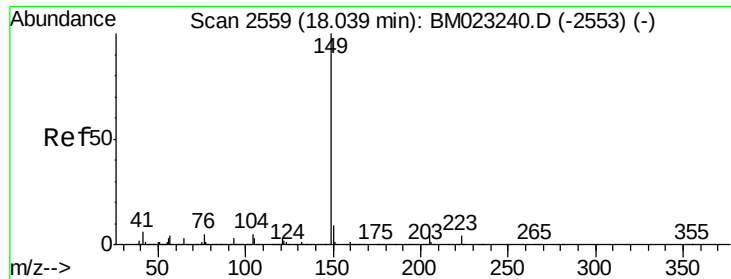
Delta R.T. -0.00 min

Lab File: BM023243.D

Acq: 18 Oct 2019 05:53

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 167   | Resp: | 101006 |
| Ion Ratio | Lower | Upper |        |
| 167       | 100   |       |        |
| 166       | 20.3  | 17.4  | 26.0   |
| 139       | 13.0  | 10.2  | 15.2   |





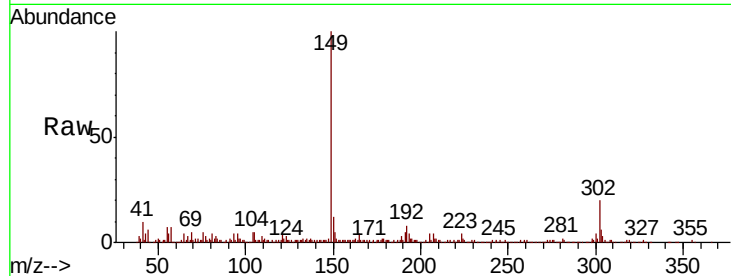
#76  
Di-n-butylphthalate  
Concen: 1.928 ng/ul  
RT: 18.04 min Scan# 2559  
Delta R.T. -0.00 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

Instrument :  
BNA\_M  
ClientSampleId :  
BEPB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 150     | 11.7  | 7.0   | 10.4  |
| 104     | 5.0   | 4.0   | 6.0   |

Manual Integrations  
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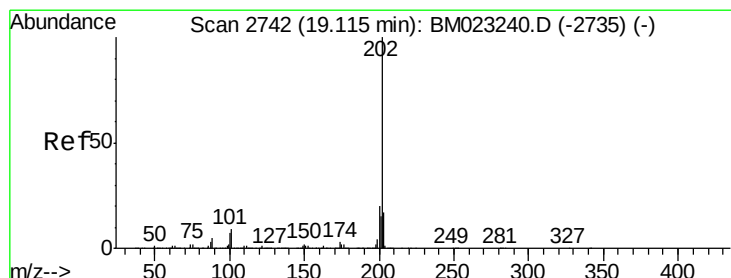
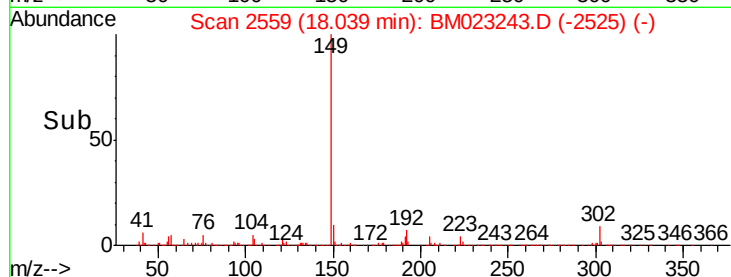
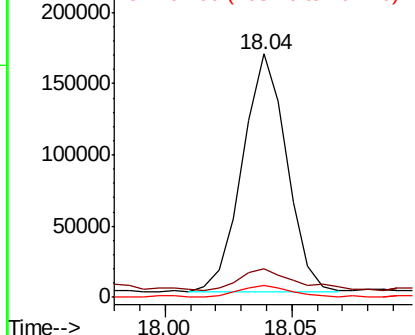


Abundance

Ion 149.00 (148.70 to 149.70): E

Ion 150.00 (149.70 to 150.70): E

Ion 104.00 (103.70 to 104.70): E



#77  
Fluoranthene  
Concen: 25.364 ng/ul  
RT: 19.12 min Scan# 2742  
Delta R.T. -0.00 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

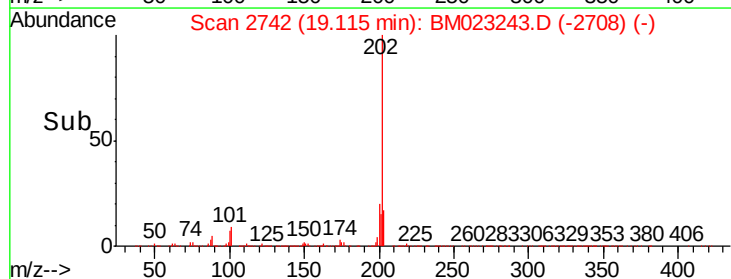
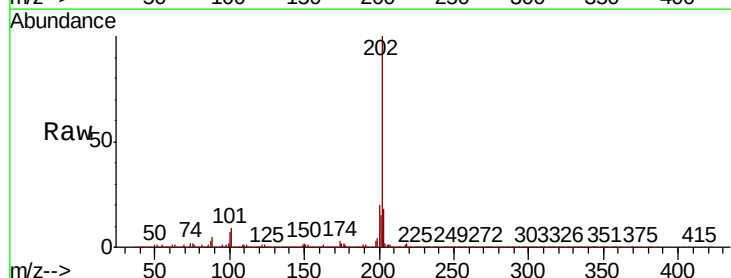
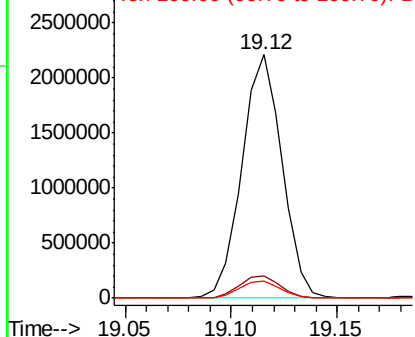
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.3   | 7.8   | 11.8  |
| 100     | 7.0   | 6.1   | 9.1   |

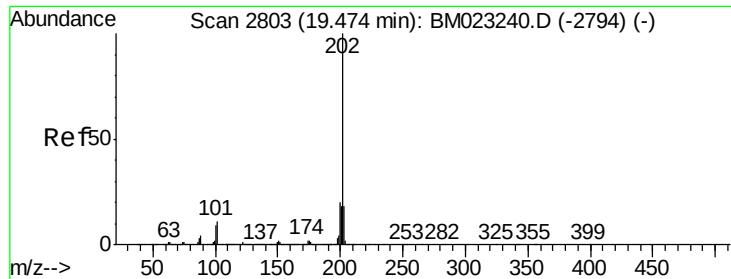
Abundance

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





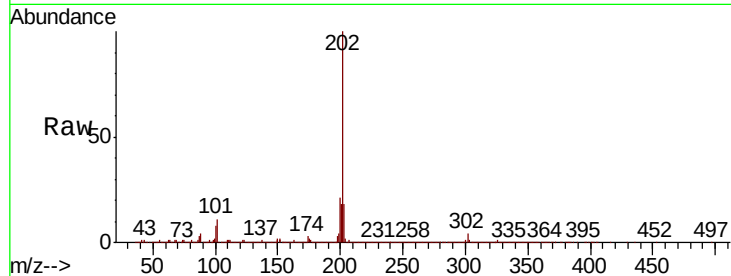
#80  
Pvrene  
Concen: 29.227 ng/ul  
RT: 19.48 min Scan# 2804  
Delta R.T. 0.01 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

Instrument :  
BNA\_M  
ClientSampleId :  
BEPB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.5  | 9.1   | 13.7  |
| 100     | 8.3   | 7.5   | 11.3  |

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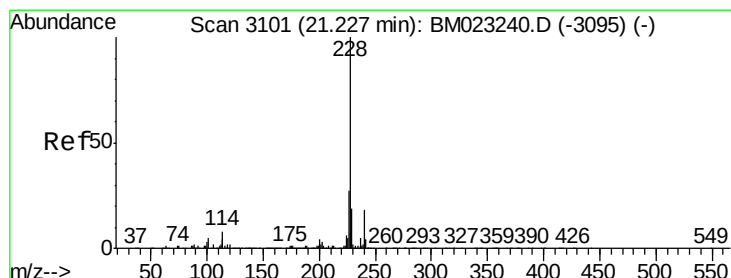
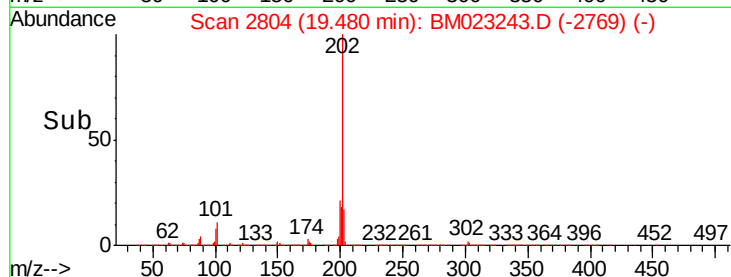
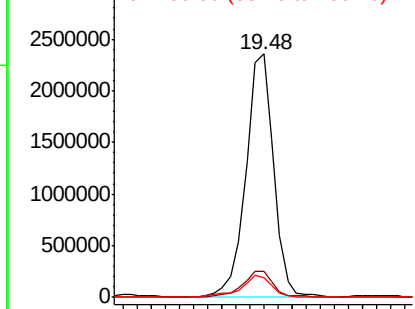


Abundance

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): E



#83  
Benzo(a)anthracene  
Concen: 16.460 ng/ul  
RT: 21.23 min Scan# 3101  
Delta R.T. -0.00 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

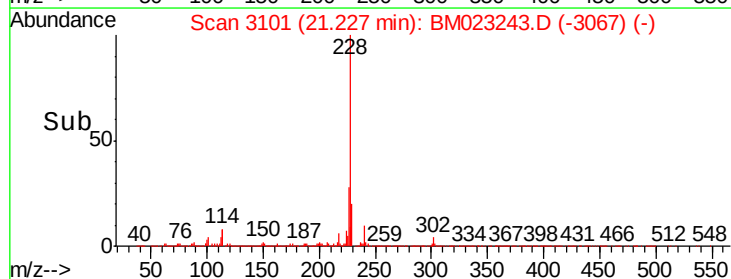
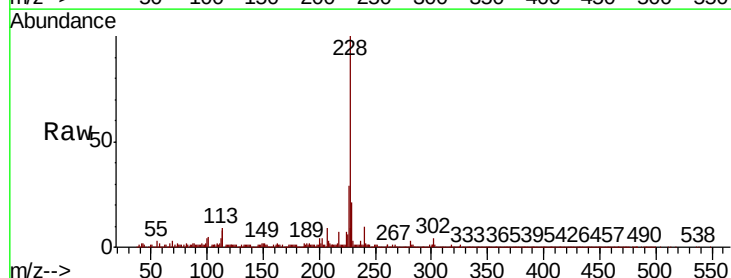
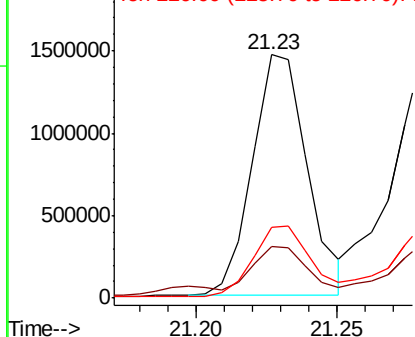
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 21.4  | 15.7  | 23.5  |
| 226     | 28.8  | 21.6  | 32.4  |

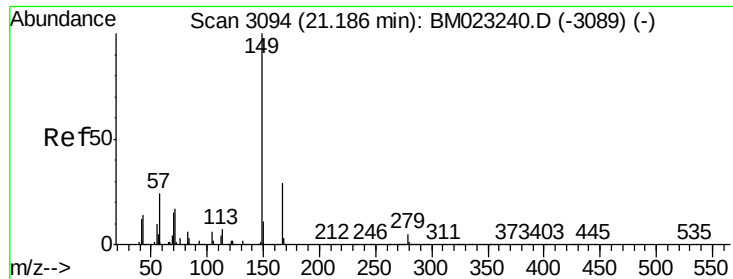
Abundance

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

Bis(2-ethylhexyl)phthalate

Concen: 54.225 ng/ul

RT: 21.19 min Scan# 3095

Delta R.T. 0.01 min

Lab File: BM023243.D

Acq: 18 Oct 2019 05:53

Instrument :

BNA\_M

ClientSampleId :

BEPB4

Tot Ion:149 Resp: 3313332

Ion Ratio Lower Upper

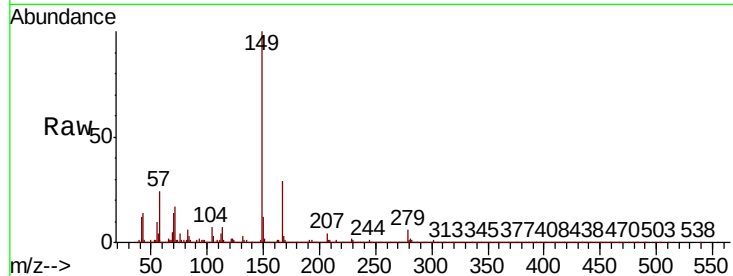
149 100

167 29.2 22.5 33.7

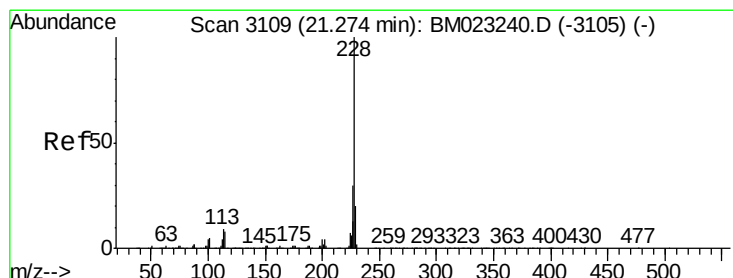
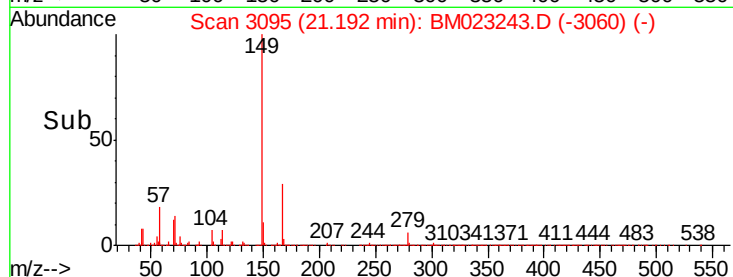
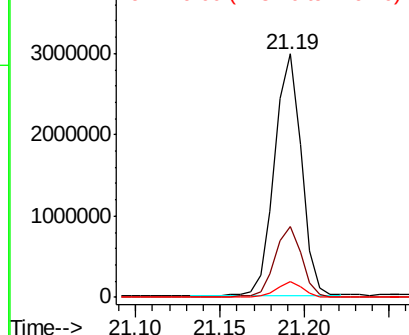
279 6.3 4.0 6.0#

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Abundance Ion 149.00 (148.70 to 149.70): E  
4000000 Ion 167.00 (166.70 to 167.70): E  
Ion 279.00 (278.70 to 279.70): E



#85

Chrysene

Concen: 18.550 ng/ul

RT: 21.28 min Scan# 3110

Delta R.T. 0.01 min

Lab File: BM023243.D

Acq: 18 Oct 2019 05:53

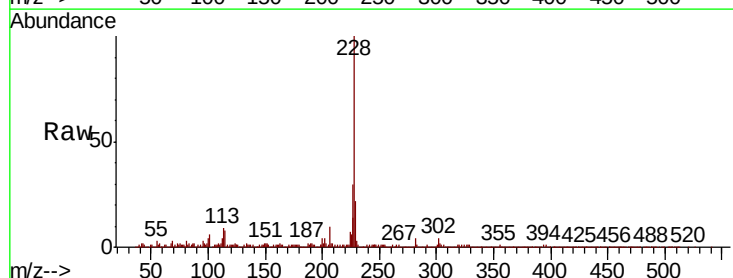
Tgt Ion:228 Resp: 2058318

Ion Ratio Lower Upper

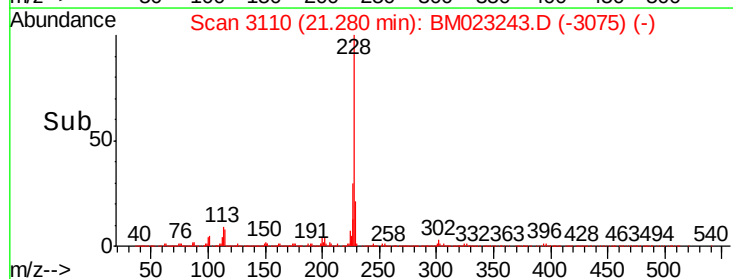
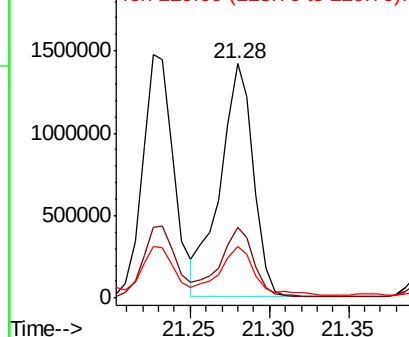
228 100

226 30.1 23.8 35.6

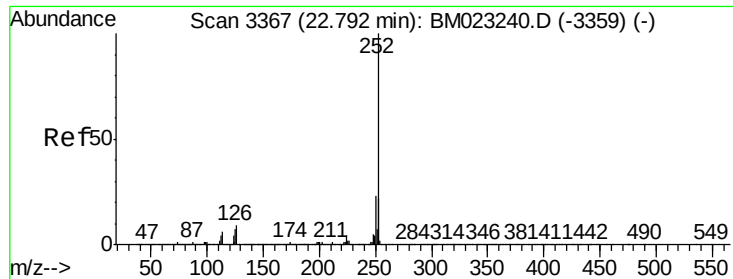
229 22.0 15.5 23.3



Abundance Ion 228.00 (227.70 to 228.70): E  
2000000 Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E







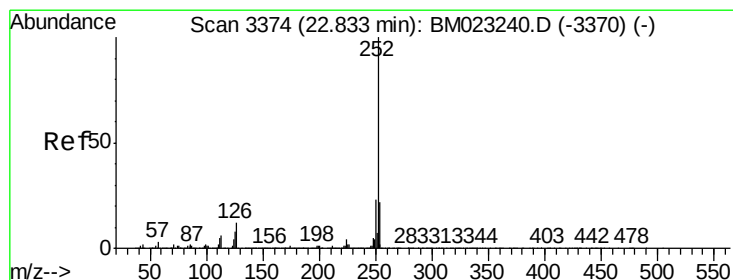
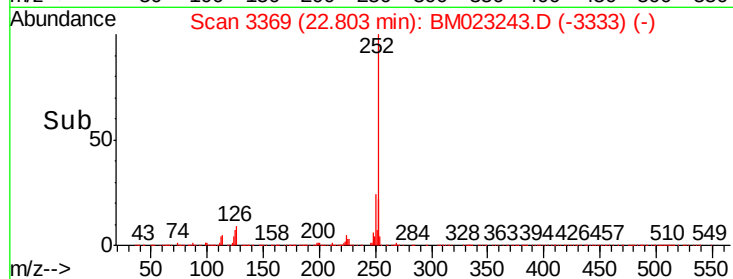
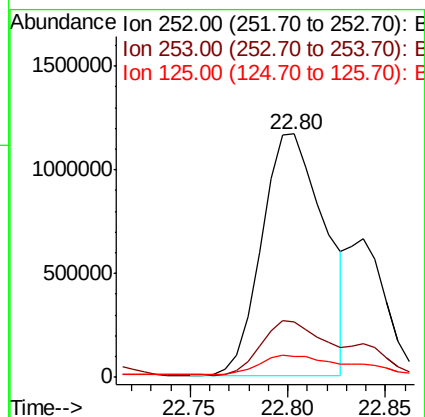
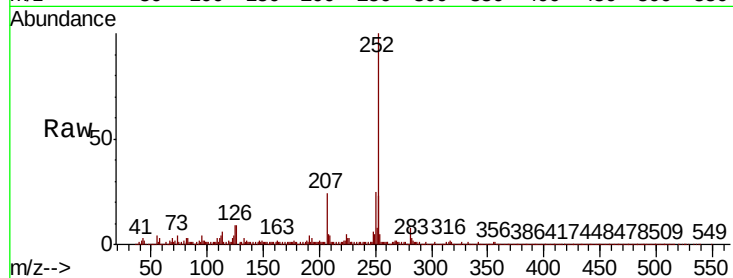
#88  
Benzo(b)fluoranthene  
Concen: 19.682 ng/ul  
RT: 22.80 min Scan# 3369  
Delta R.T. 0.01 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

Instrument :  
BNA\_M  
ClientSampleId :  
BEPB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 17.6  | 26.4  |
| 125     | 8.5   | 6.4   | 9.6   |

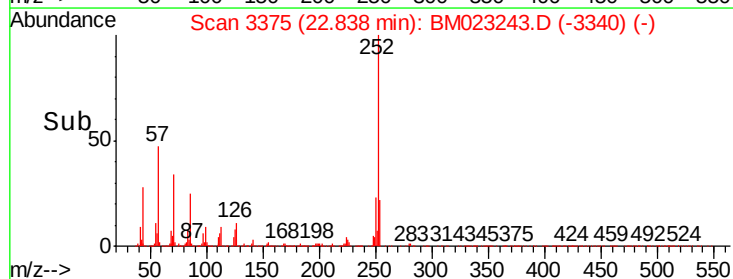
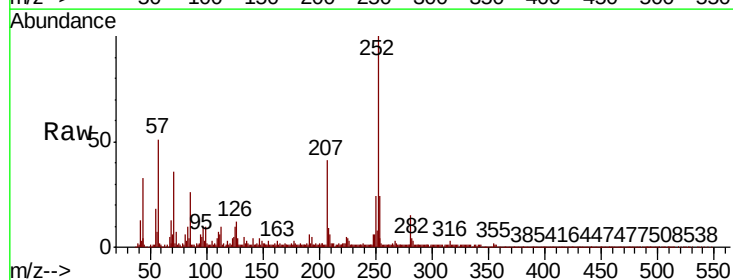
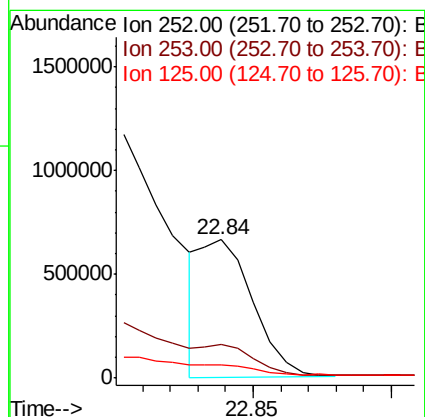
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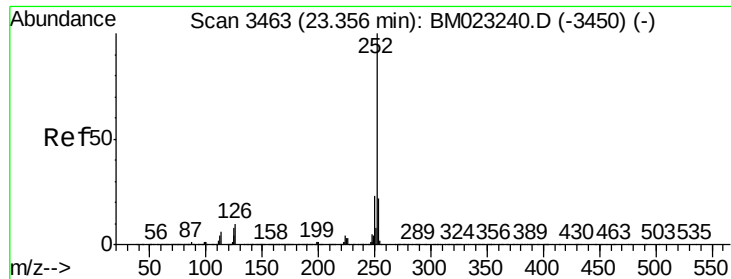
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#89  
Benzo(k)fluoranthene  
Concen: 6.956 ng/ul m  
RT: 22.84 min Scan# 3375  
Delta R.T. 0.01 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.9  | 17.4  | 26.0  |
| 125     | 9.8   | 6.5   | 9.7#  |





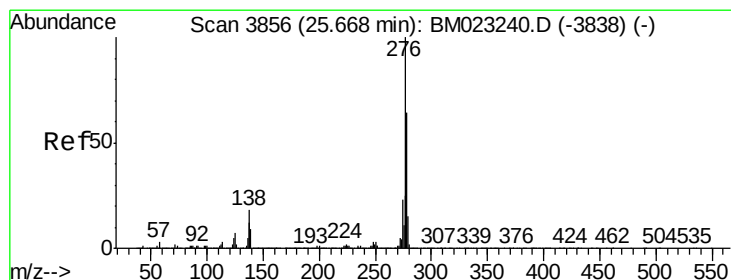
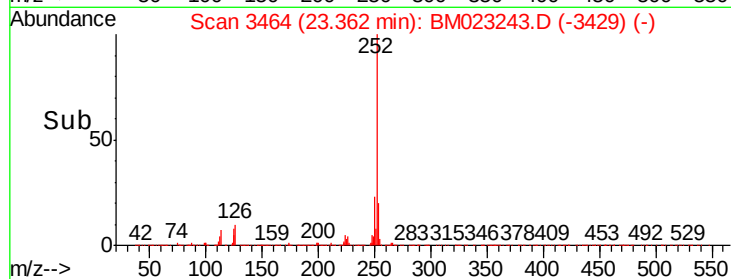
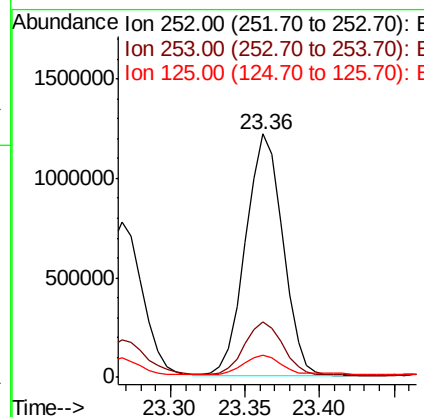
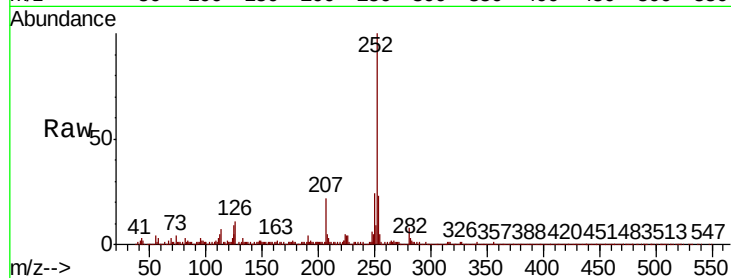
#91  
Benzo(a)pyrene  
Concen: 16.518 ng/ul  
RT: 23.36 min Scan# 3464  
Delta R.T. 0.01 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

Instrument :  
BNA\_M  
ClientSampleId :  
BEPB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.9  | 17.2  | 25.8  |
| 125     | 9.0   | 7.4   | 11.0  |

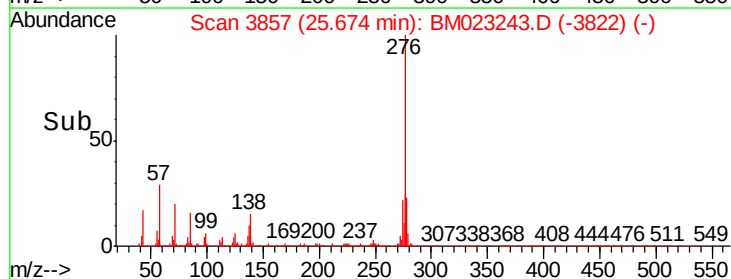
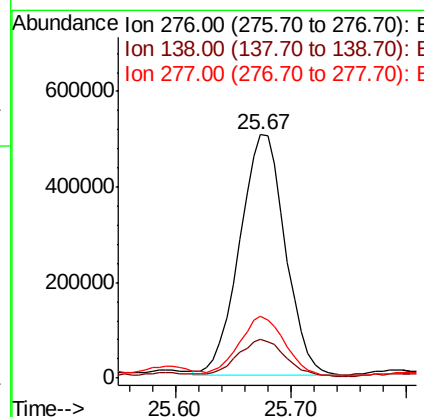
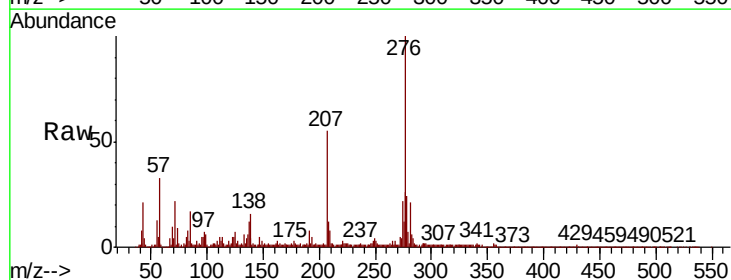
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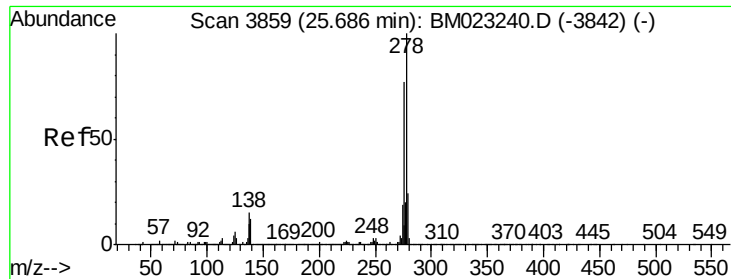
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#92  
Indeno(1,2,3-cd)pyrene  
Concen: 9.118 ng/ul  
RT: 25.67 min Scan# 3857  
Delta R.T. 0.01 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 15.9  | 14.9  | 22.3  |
| 277     | 25.5  | 19.8  | 29.8  |





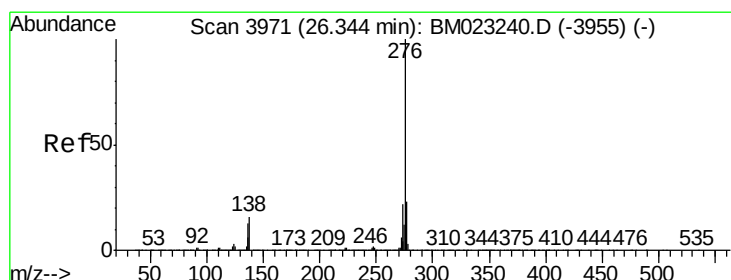
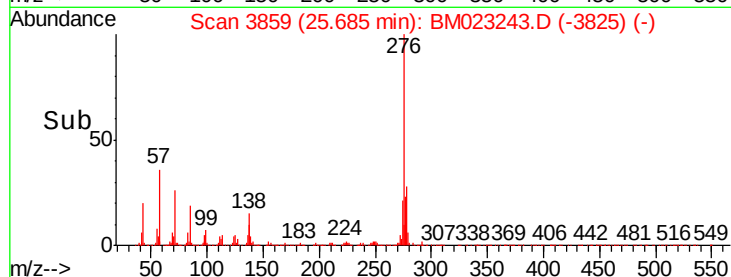
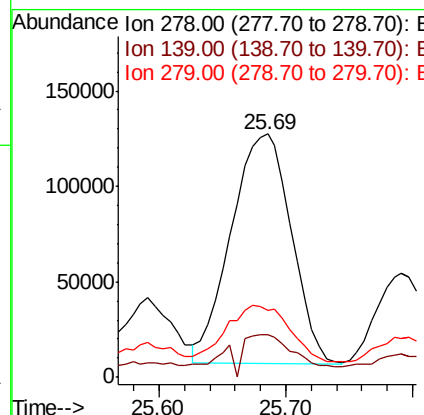
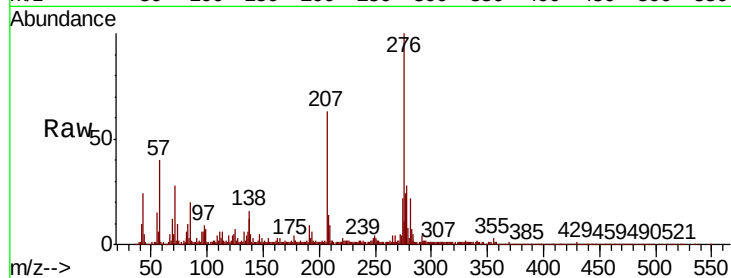
#93  
Dibenzo(a,h)anthracene  
Concen: 3.134 ng/ul  
RT: 25.69 min Scan# 3859  
Delta R.T. -0.00 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

Instrument :  
BNA\_M  
ClientSampleId :  
BEPB4

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 17.4  | 10.0  | 15.0# |
| 279     | 27.7  | 19.4  | 29.0  |

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#94  
Benzo(g,h,i)perylene  
Concen: 10.945 ng/ul  
RT: 26.35 min Scan# 3972  
Delta R.T. 0.01 min  
Lab File: BM023243.D  
Acq: 18 Oct 2019 05:53

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 16.9  | 14.4  | 21.6  |
| 277     | 24.8  | 19.4  | 29.2  |

