

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM101519\  
 Data File : BM023189.D  
 Acq On : 16 Oct 2019 11:57  
 Operator : JU  
 Sample : K5199-05  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 BEP72

Manual Integrations  
 APPROVED

mohammad  
 10/17/2019 7:58:21 AM

Quant Time: Oct 16 14:29:54 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM101419MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Wed Oct 16 08:27:24 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.69  | 152  | 426353   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.47 | 136  | 1861405  | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.33 | 164  | 1178392  | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.07 | 188  | 2336504  | 20.00 | ng/ul | -0.01    |
| 78) Chrysene-d12          | 21.26 | 240  | 1671184  | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 23.48 | 264  | 1763576  | 20.00 | ng/ul | -0.01    |

## System Monitoring Compounds

|                                |       |     |         |       |       |       |
|--------------------------------|-------|-----|---------|-------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.20  | 96  | 40189   | 4.15  | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.85  | 99  | 812307  | 21.88 | ng/ul | 0.00  |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.02  | 67  | 530430  | 25.25 | ng/ul | 0.00  |
| 9) 2-Chlorophenol-d4           | 7.22  | 132 | 689528  | 24.26 | ng/ul | 0.00  |
| 13) 4-Methylphenol-d8          | 8.39  | 113 | 666465  | 22.34 | ng/ul | 0.00  |
| 19) Nitrobenzene-d5            | 8.83  | 128 | 336770  | 26.74 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.55  | 143 | 340780  | 28.42 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 10.09 | 165 | 747138  | 24.50 | ng/ul | 0.00  |
| 29) 4-Chloroaniline-d4         | 10.60 | 131 | 520827  | 14.04 | ng/ul | 0.00  |
| 44) Dimethylphthalate-d6       | 13.75 | 166 | 2412368 | 26.71 | ng/ul | 0.00  |
| 47) Acenaphthylene-d8          | 14.02 | 160 | 2864134 | 27.04 | ng/ul | -0.01 |
| 52) 4-Nitrophenol-d4           | 14.51 | 143 | 178025  | 12.18 | ng/ul | -0.01 |
| 58) Fluorene-d10               | 15.32 | 176 | 2104850 | 27.36 | ng/ul | -0.01 |
| 63) 4,6-Dinitro-2-methylphenol | 15.43 | 200 | 182953  | 19.75 | ng/ul | -0.01 |
| 71) Anthracene-d10             | 17.17 | 188 | 3147287 | 27.93 | ng/ul | -0.01 |
| 79) Pyrene-d10                 | 19.47 | 212 | 2993833 | 36.99 | ng/ul | 0.00  |
| 90) Benzo(a)pyrene-d12         | 23.34 | 264 | 2583204 | 28.90 | ng/ul | -0.01 |

## Target Compounds

|                                |       |     |          |         | Ovalue    |
|--------------------------------|-------|-----|----------|---------|-----------|
| 6) Phenol                      | 6.88  | 94  | 74810    | 1.954   | ng/ul 98  |
| 45) Dimethylphthalate          | 13.79 | 163 | 970482   | 10.737  | ng/ul 99  |
| 48) Acenaphthylene             | 14.05 | 152 | 111408   | 1.029   | ng/ul 98  |
| 50) Acenaphthene               | 14.39 | 153 | 118950   | 1.577   | ng/ul 98  |
| 59) Fluorene                   | 15.37 | 166 | 122936   | 1.400   | ng/ul# 95 |
| 70) Phenanthrene               | 17.11 | 178 | 2591163  | 19.761  | ng/ul 99  |
| 72) Anthracene                 | 17.20 | 178 | 541814   | 3.999   | ng/ul 99  |
| 75) Carbazole                  | 17.47 | 167 | 197363   | 1.630   | ng/ul 99  |
| 76) Di-n-butylphthalate        | 18.06 | 149 | 575958   | 3.998   | ng/ul 97  |
| 77) Fluoranthene               | 19.13 | 202 | 5207972  | 33.396  | ng/ul 100 |
| 80) Pyrene                     | 19.50 | 202 | 5411036  | 51.685  | ng/ul 100 |
| 83) Benzo(a)anthracene         | 21.24 | 228 | 2651697  | 23.418  | ng/ul 97  |
| 84) Bis(2-ethylhexyl)phthalate | 21.21 | 149 | 5831337  | 100.715 | ng/ul 98  |
| 85) Chrysene                   | 21.30 | 228 | 2634857  | 25.060  | ng/ul 97  |
| 88) Benzo(b)fluoranthene       | 22.82 | 252 | 2902859  | 27.148  | ng/ul# 98 |
| 89) Benzo(k)fluoranthene       | 22.86 | 252 | 1133477m | 11.040  | ng/ul     |
| 91) Benzo(a)pyrene             | 23.39 | 252 | 2293129  | 22.353  | ng/ul 99  |
| 92) Indeno(1,2,3-cd)pyrene     | 25.70 | 276 | 1503342  | 12.318  | ng/ul 99  |
| 93) Dibenzo(a,h)anthracene     | 25.71 | 278 | 412766   | 4.045   | ng/ul# 91 |
| 94) Benzo(g,h,i)perylene       | 26.38 | 276 | 1475095  | 14.680  | ng/ul 99  |

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

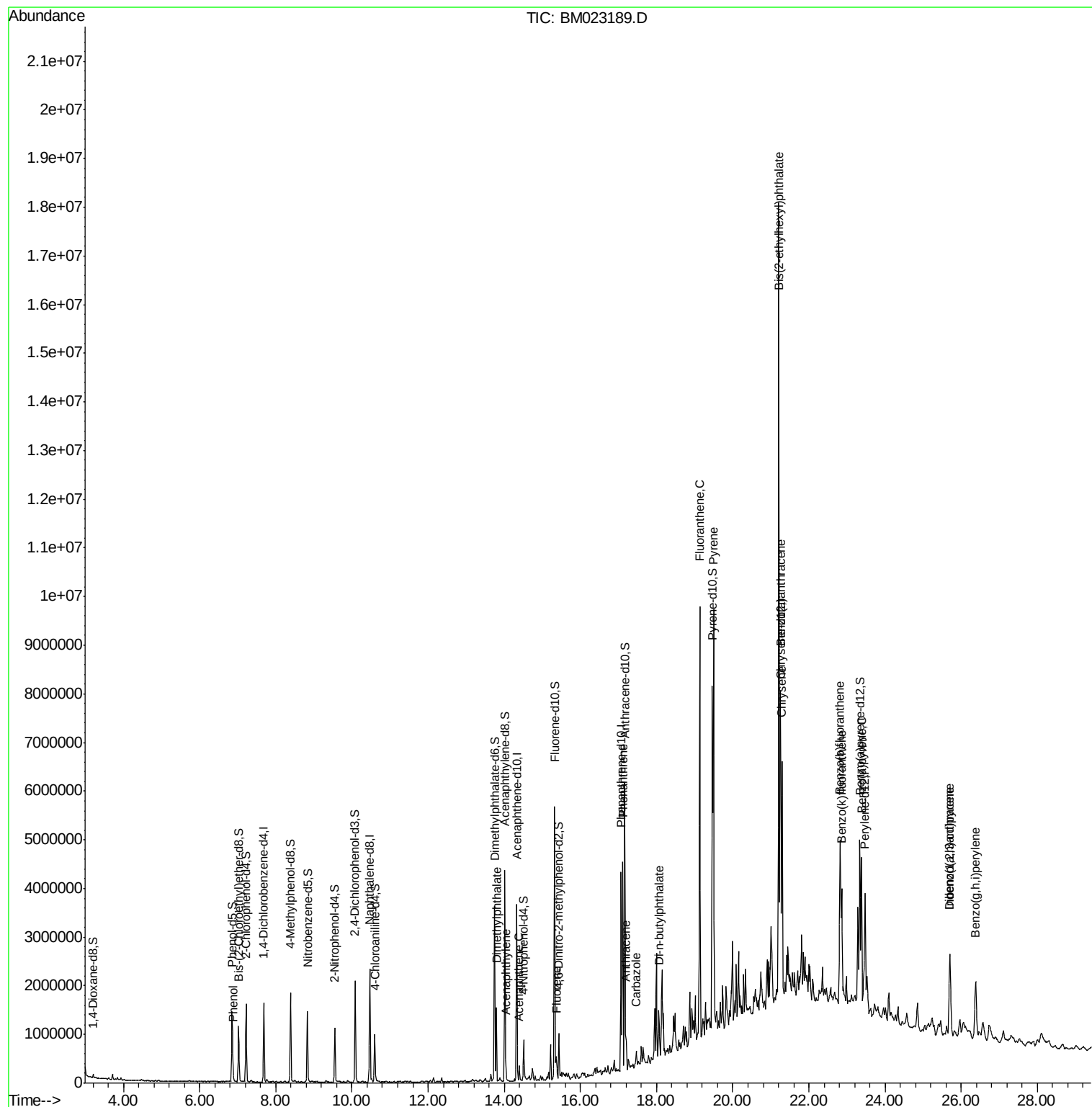
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM101519\  
Data File : BM023189.D  
Acq On : 16 Oct 2019 11:57  
Operator : JU  
Sample : K5199-05  
Misc :  
ALS Vial : 34 Sample Multiplier: 1

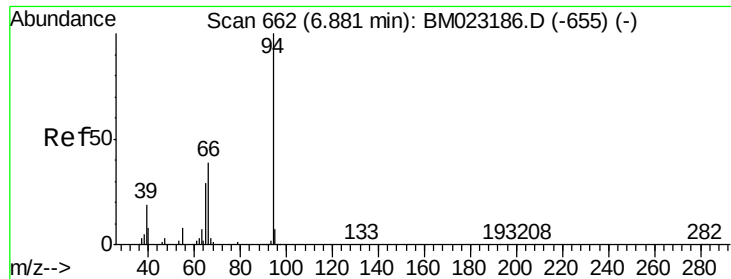
Instrument :  
BNA\_M  
ClientSampleId :  
BEP72

Quant Time: Oct 16 14:29:54 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM101419MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Wed Oct 16 08:27:24 2019  
Response via : Initial Calibration

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#6

Phenol

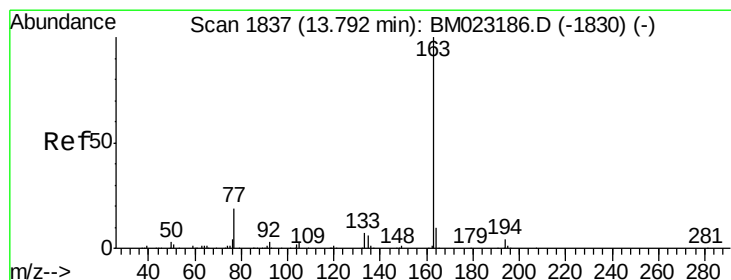
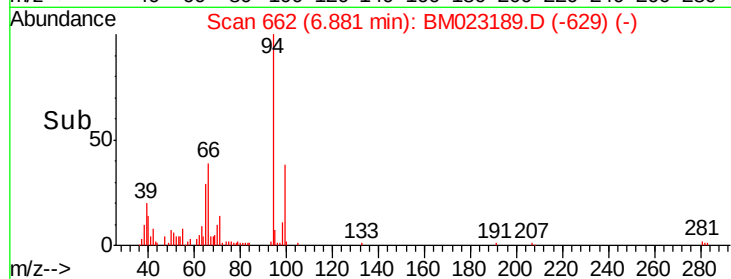
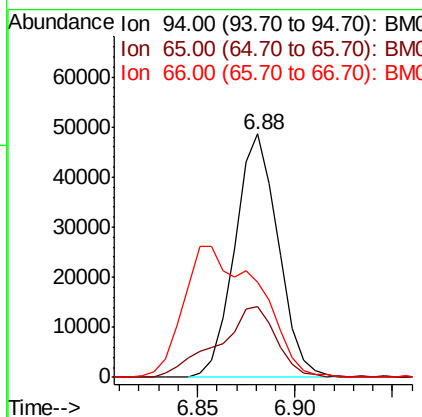
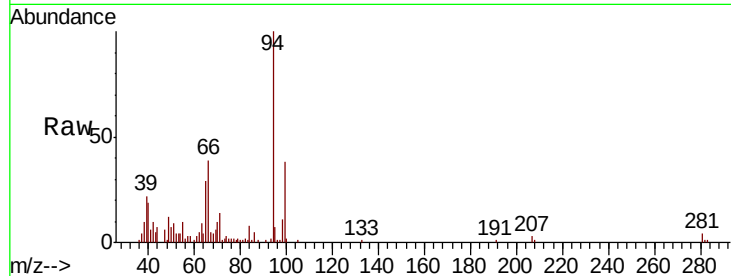
Concen: 1.954 ng/ul  
 RT: 6.88 min Scan# 662  
 Delta R.T. -0.01 min  
 Lab File: BM023189.D  
 Acq: 16 Oct 2019 11:57

Instrument :  
 BNA\_M  
 ClientSampled :  
 BEP72

| Tot Ion | Ion  | Ratio | Lower | Upper |
|---------|------|-------|-------|-------|
| 94      | 100  |       |       |       |
| 65      | 29.2 | 23.7  | 35.5  |       |
| 66      | 39.0 | 32.9  | 49.3  |       |

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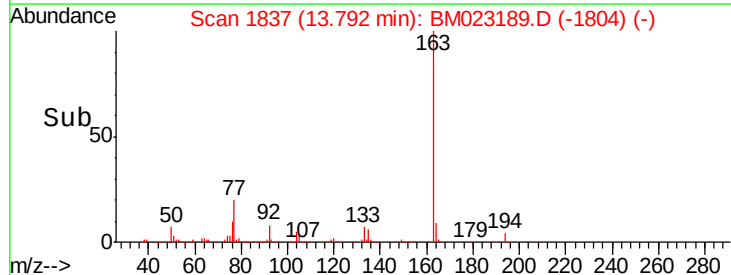
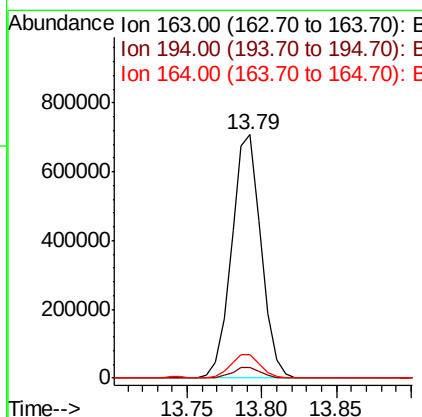
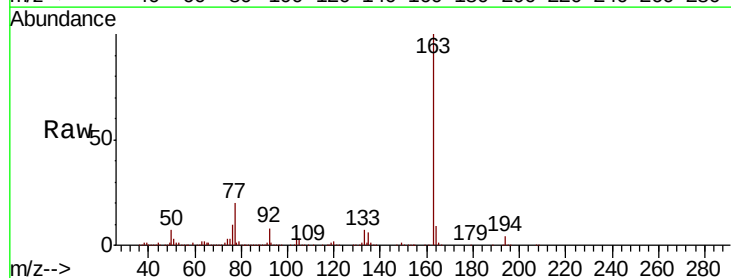


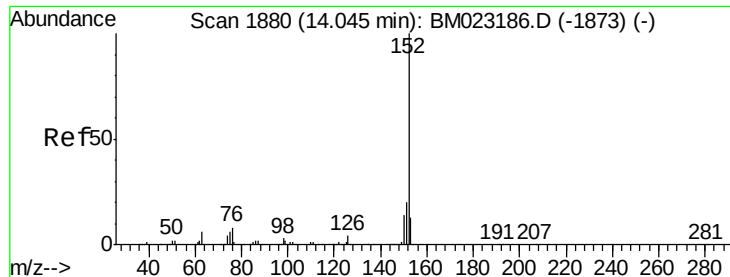
#45

Dimethylphthalate

Concen: 10.737 ng/ul  
 RT: 13.79 min Scan# 1837  
 Delta R.T. -0.01 min  
 Lab File: BM023189.D  
 Acq: 16 Oct 2019 11:57

| Tgt Ion | Ion | Ratio | Lower | Upper |
|---------|-----|-------|-------|-------|
| 163     | 100 |       |       |       |
| 194     | 4.2 | 3.5   | 5.3   |       |
| 164     | 9.4 | 8.0   | 12.0  |       |





#48

Acenaphthylene

Concen: 1.029 ng/ul

RT: 14.05 min Scan# 1880

Delta R.T. -0.01 min

Lab File: BM023189.D

Acq: 16 Oct 2019 11:57

Instrument :

BNA\_M

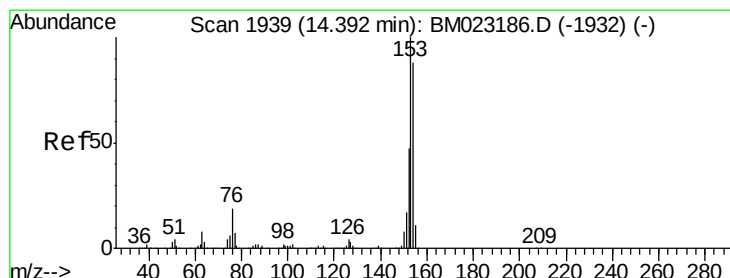
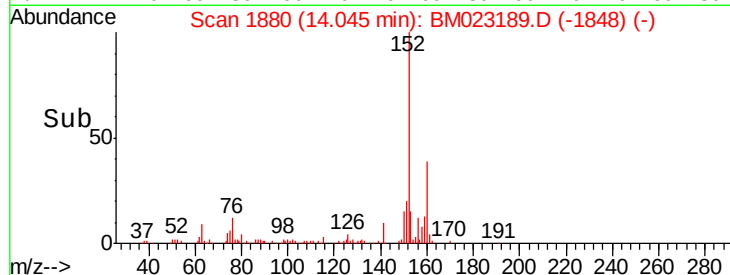
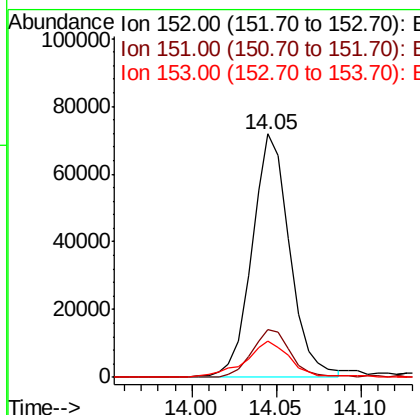
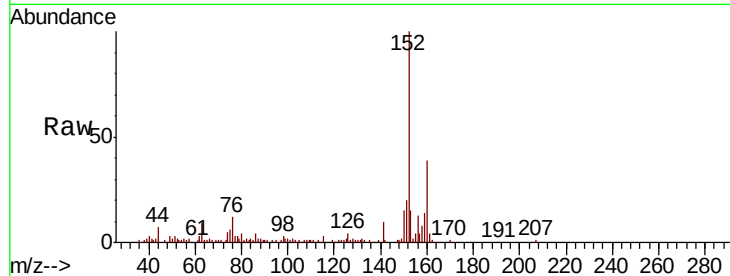
ClientSampleId :

BEP72

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 152   | Resp: | 111408 |
| Ion Ratio | Lower | Upper |        |
| 152       | 100   |       |        |
| 151       | 19.7  | 15.8  | 23.6   |
| 153       | 14.8  | 10.3  | 15.5   |

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#50

Acenaphthene

Concen: 1.577 ng/ul

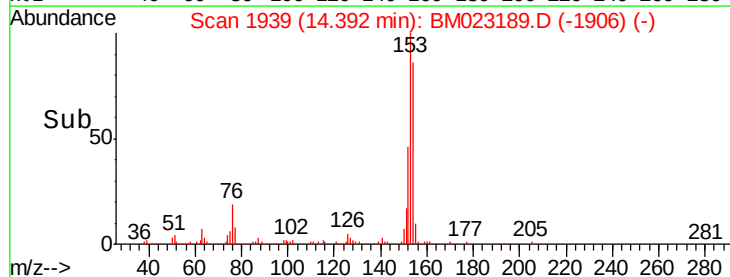
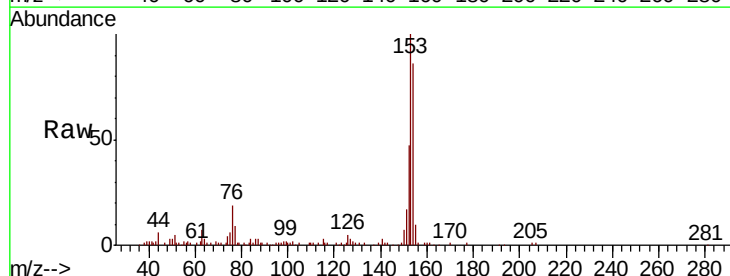
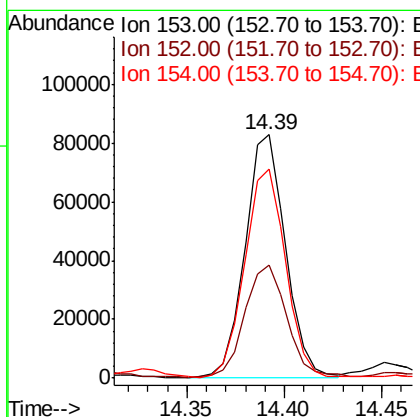
RT: 14.39 min Scan# 1939

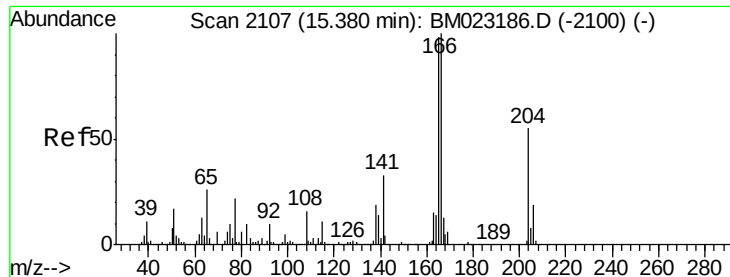
Delta R.T. -0.01 min

Lab File: BM023189.D

Acq: 16 Oct 2019 11:57

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 153   | Resp: | 118950 |
| Ion Ratio | Lower | Upper |        |
| 153       | 100   |       |        |
| 152       | 46.5  | 38.0  | 57.0   |
| 154       | 86.1  | 70.4  | 105.6  |





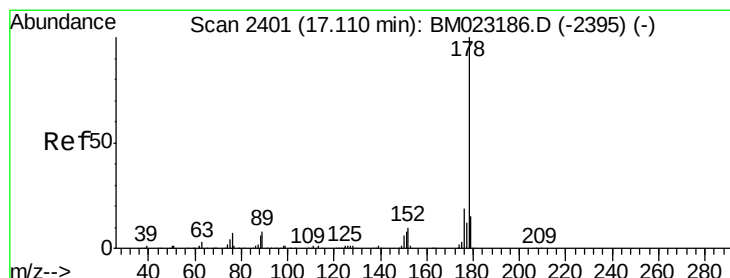
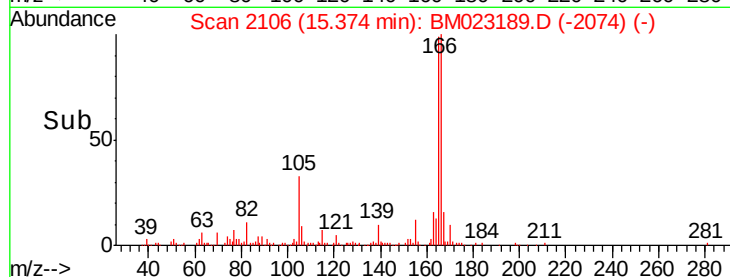
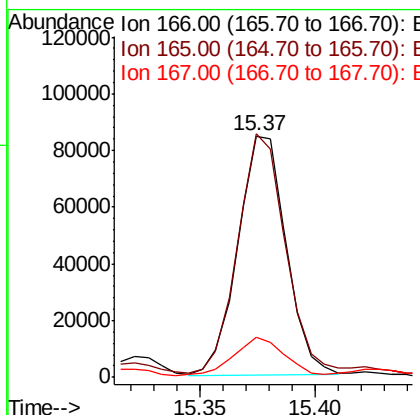
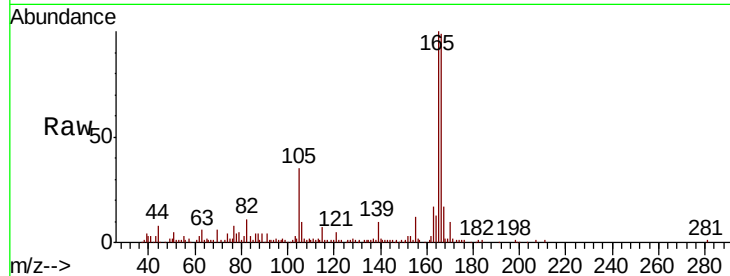
#59  
Fluorene  
Concen: 1.400 ng/ul  
RT: 15.37 min Scan# 2106  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

Instrument :  
BNA\_M  
ClientSampled :  
BEP72

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 100.9 | 77.4  | 116.0 |
| 167     | 16.7  | 10.8  | 16.2  |

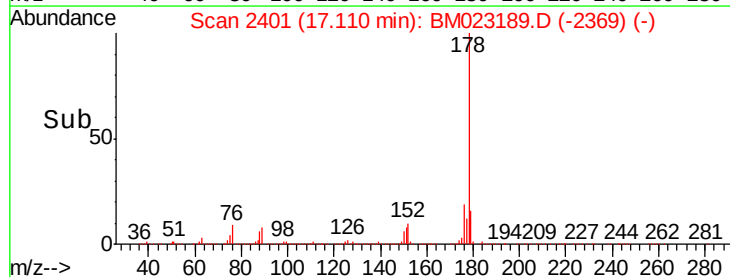
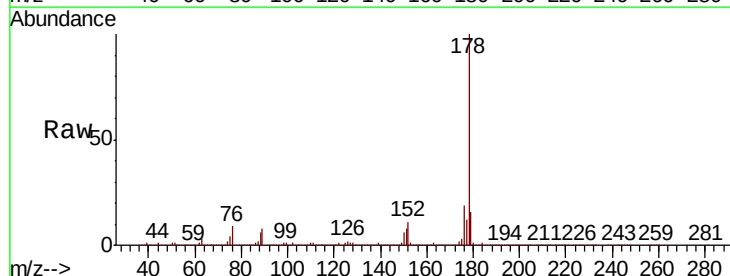
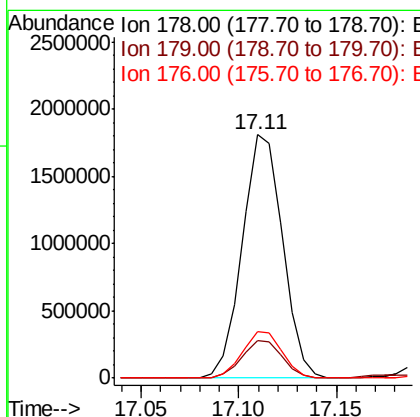
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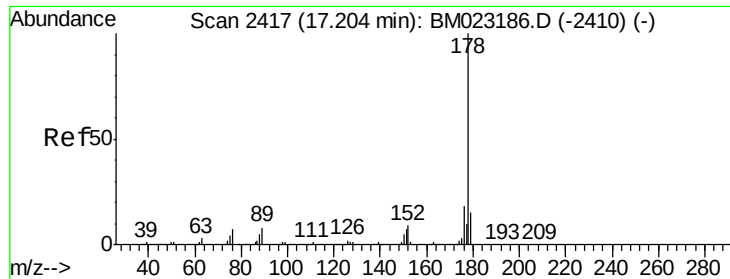
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#70  
Phenanthrene  
Concen: 19.761 ng/ul  
RT: 17.11 min Scan# 2401  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.7  | 12.3  | 18.5  |
| 176     | 19.1  | 15.5  | 23.3  |





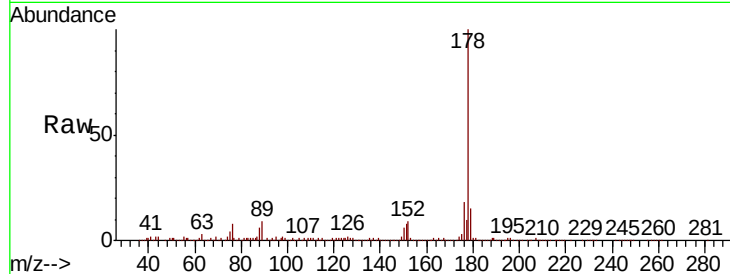
#72  
 Anthracene  
 Concen: 3.999 ng/ul  
 RT: 17.20 min Scan# 2417  
 Delta R.T. -0.01 min  
 Lab File: BM023189.D  
 Acq: 16 Oct 2019 11:57

Instrument :  
 BNA\_M  
 ClientSampled :  
 BEP72

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.2  | 12.3  | 18.5  |
| 176     | 18.2  | 15.0  | 22.4  |

Manual Integrations  
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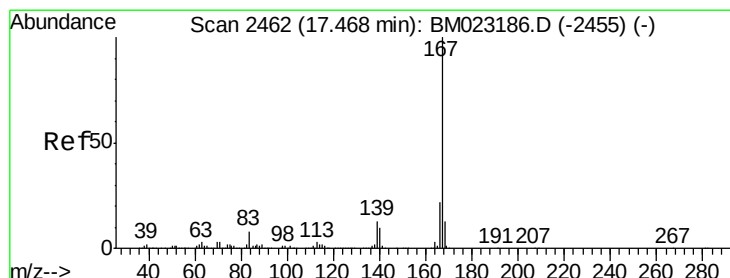
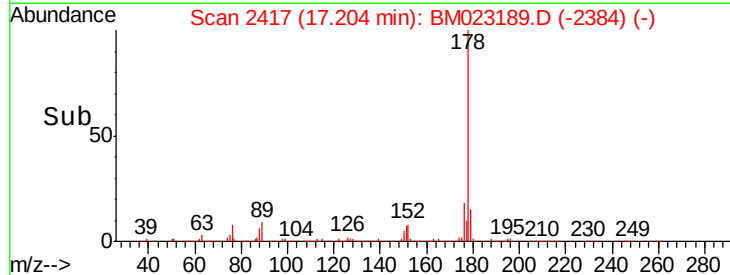
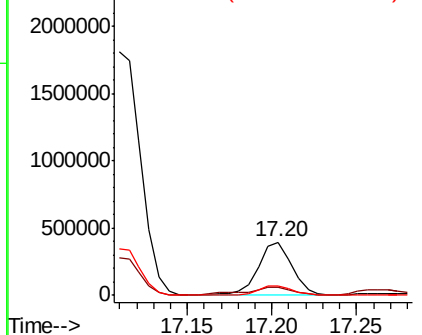


Abundance

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



#75  
 Carbazole  
 Concen: 1.630 ng/ul  
 RT: 17.47 min Scan# 2462  
 Delta R.T. -0.01 min  
 Lab File: BM023189.D  
 Acq: 16 Oct 2019 11:57

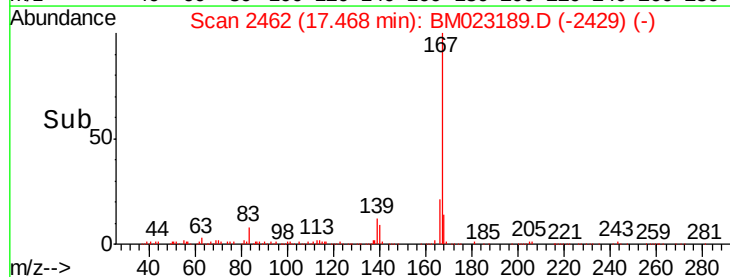
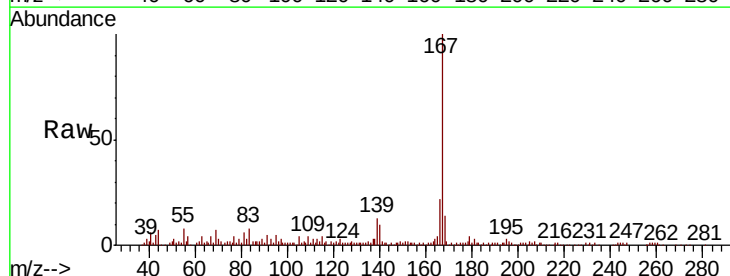
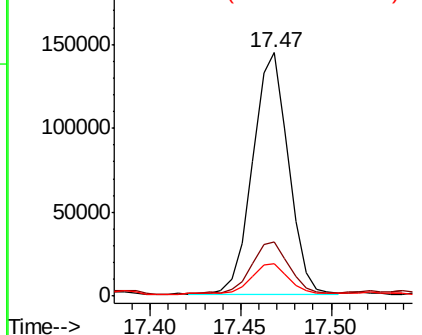
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 22.4  | 17.4  | 26.0  |
| 139     | 13.2  | 10.2  | 15.2  |

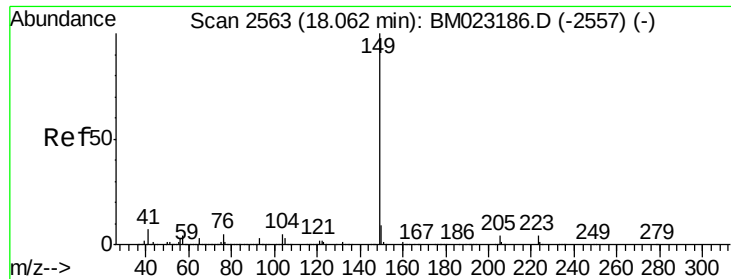
Abundance

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





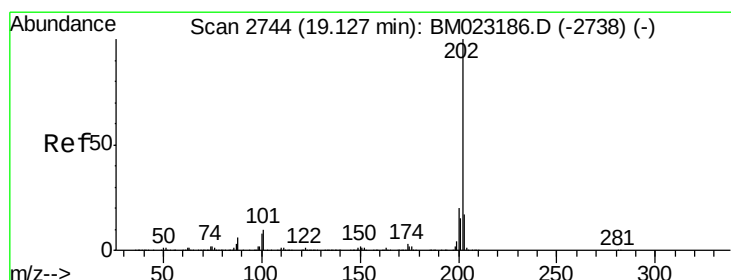
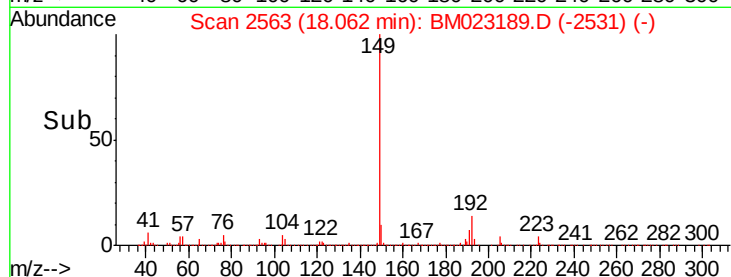
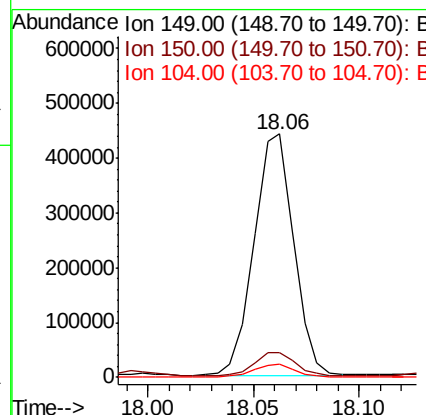
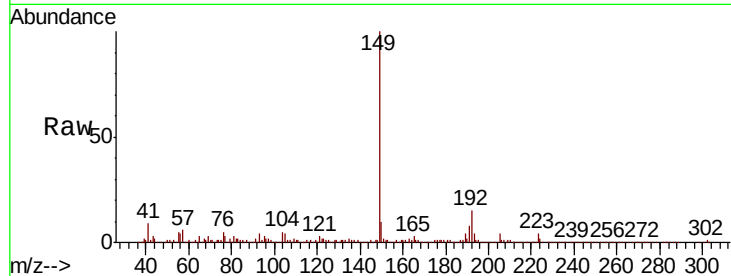
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Di-n-butylphthalate  
Concen: 3.998 ng/ul  
RT: 18.06 min Scan# 2563  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

Instrument :  
BNA\_M  
ClientSampleId :  
BEP72

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 150     | 10.1  | 7.0   | 10.4  |
| 104     | 5.2   | 4.0   | 6.0   |

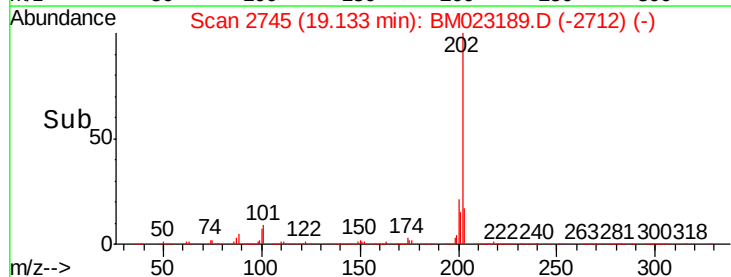
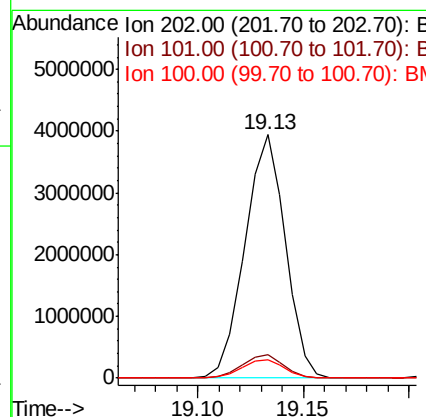
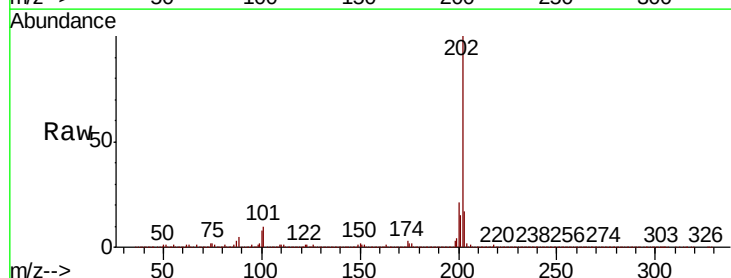
Manual Integrations  
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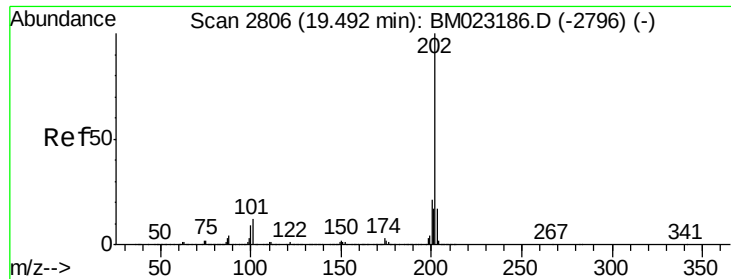
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#77  
Fluoranthene  
Concen: 33.396 ng/ul  
RT: 19.13 min Scan# 2745  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.8   | 7.8   | 11.8  |
| 100     | 7.5   | 6.1   | 9.1   |





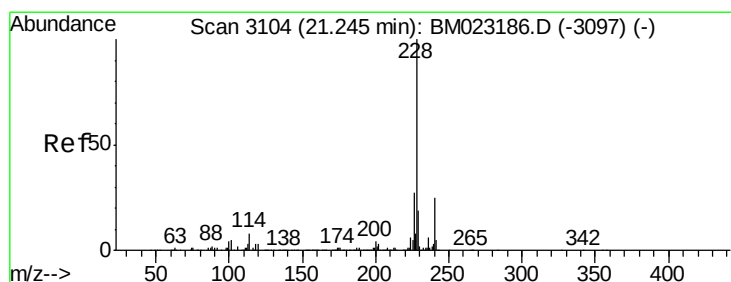
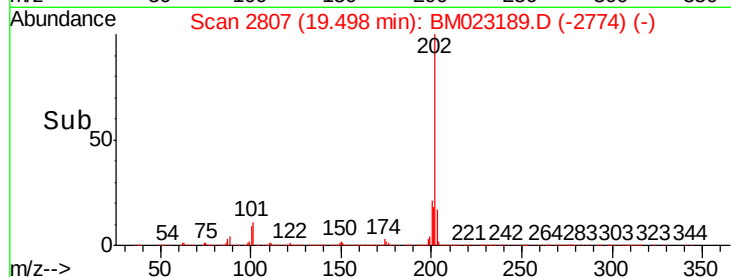
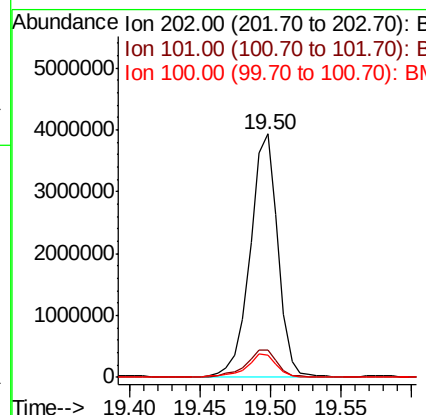
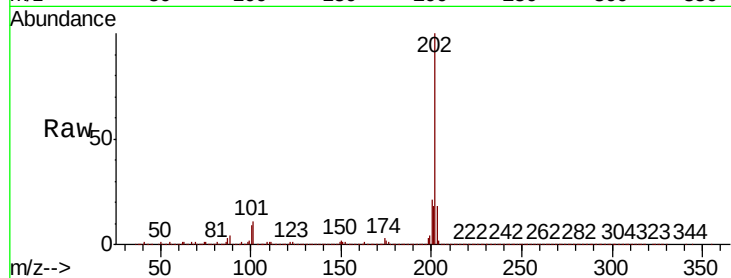
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Pvrene  
Concen: 51.685 ng/ul  
RT: 19.50 min Scan# 2807  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

Instrument :  
BNA\_M  
ClientSampled :  
BEP72

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.2  | 9.1   | 13.7  |
| 100     | 9.3   | 7.5   | 11.3  |

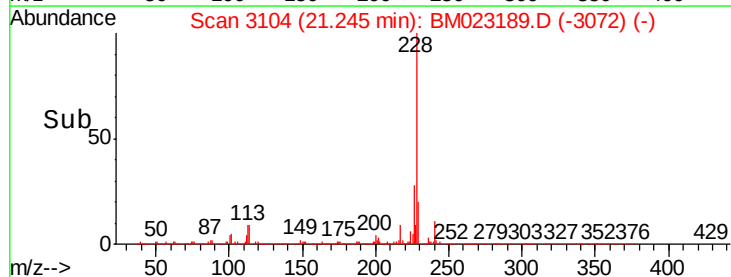
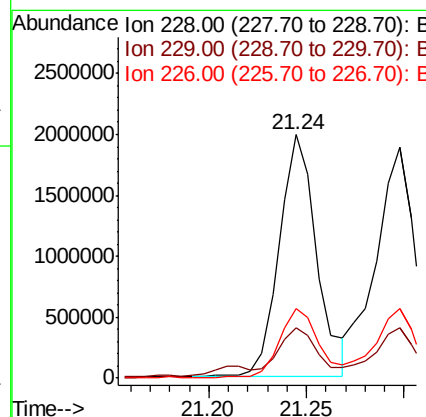
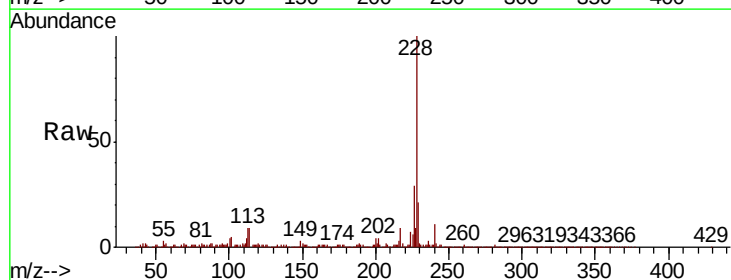
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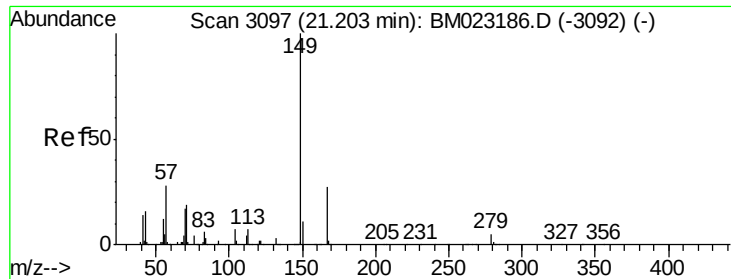


#83  
Benzo(a)anthracene  
Concen: 23.418 ng/ul  
RT: 21.24 min Scan# 3104  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 20.8  | 15.7  | 23.5  |
| 226     | 28.6  | 21.6  | 32.4  |







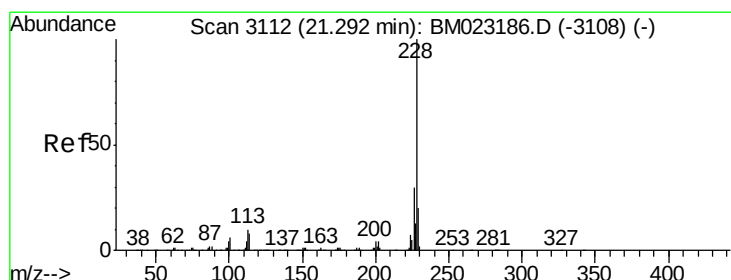
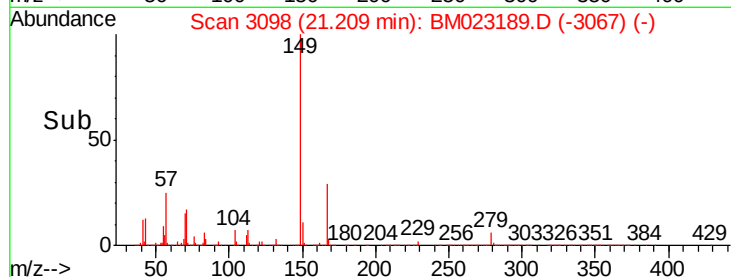
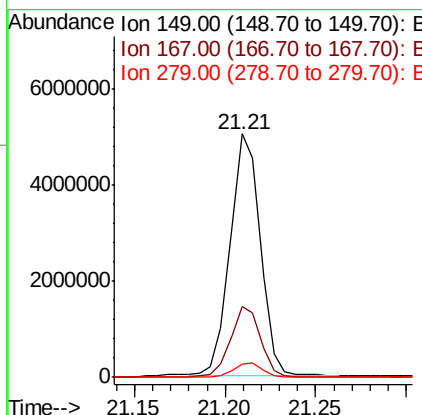
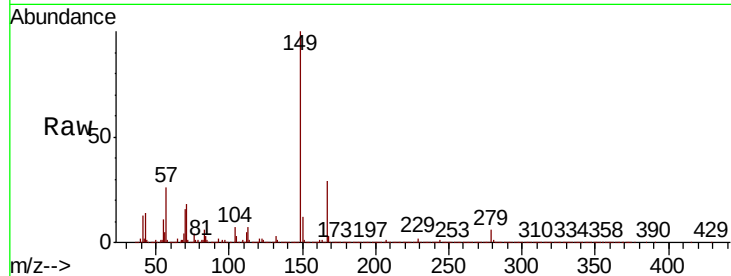
#84  
Bis(2-ethylhexyl)phthalate  
Concen: 100.715 ng/ul  
RT: 21.21 min Scan# 3098  
Delta R.T. -0.02 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

Instrument :  
BNA\_M  
ClientSampleId :  
BEP72

Tot Ion:149 Resp: 5831337  
Ion Ratio Lower Upper  
149 100  
167 29.1 22.5 33.7  
279 5.6 4.0 6.0

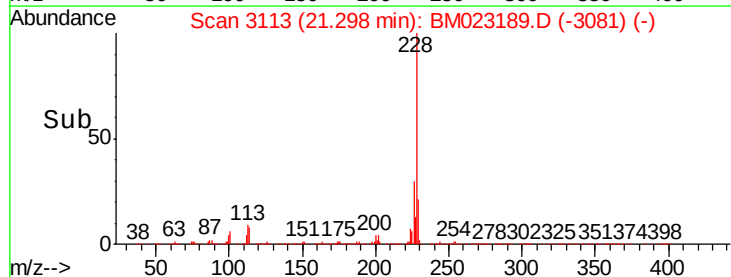
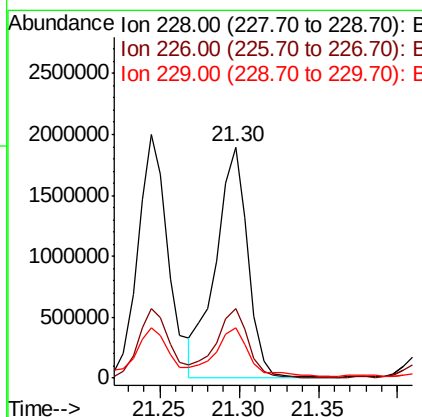
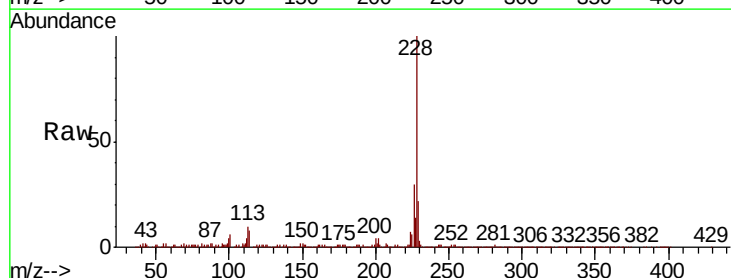
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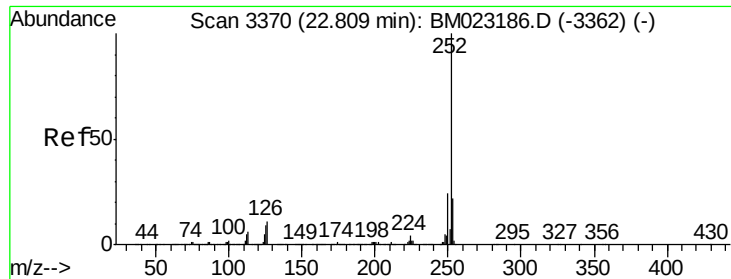
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#85  
Chrysene  
Concen: 25.060 ng/ul  
RT: 21.30 min Scan# 3113  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

Tgt Ion:228 Resp: 2634857  
Ion Ratio Lower Upper  
228 100  
226 30.4 23.8 35.6  
229 21.7 15.5 23.3





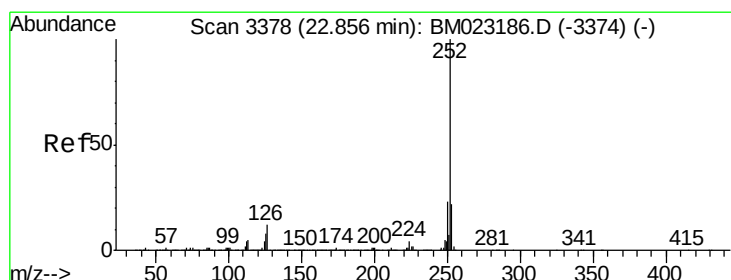
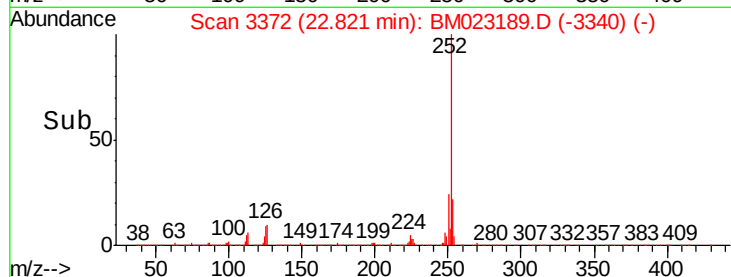
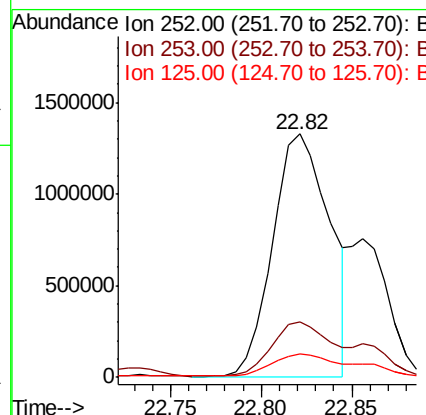
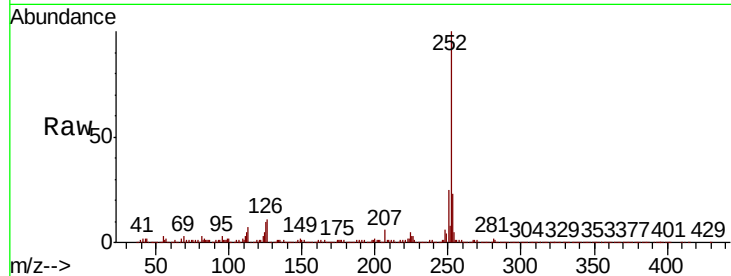
#88  
Benzo(b)fluoranthene  
Concen: 27.148 ng/ul  
RT: 22.82 min Scan# 3372  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

Instrument :  
BNA\_M  
ClientSampled :  
BEP72

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.6  | 17.6  | 26.4  |
| 125     | 9.7   | 6.4   | 9.6#  |

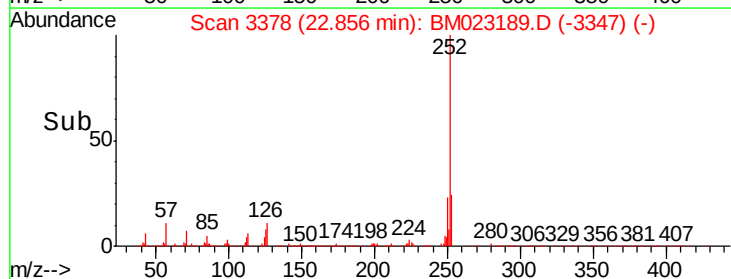
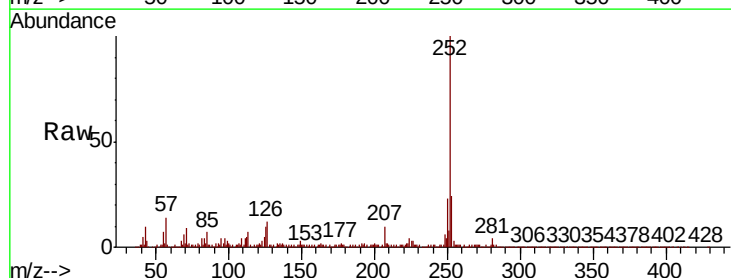
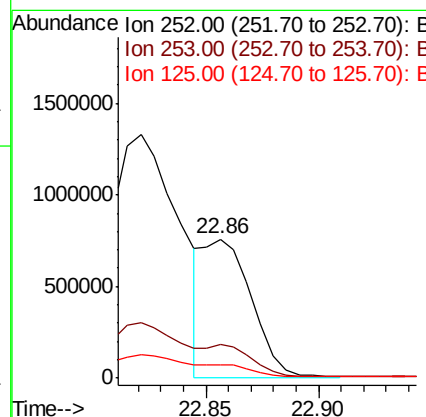
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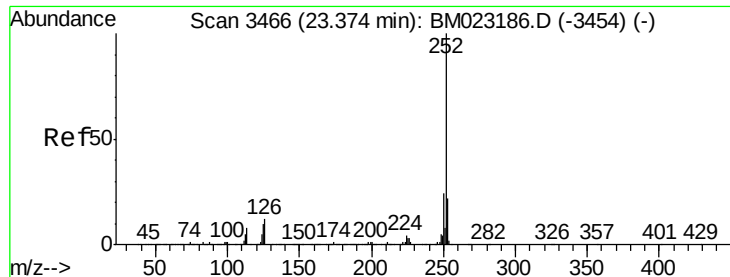
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#89  
Benzo(k)fluoranthene  
Concen: 11.040 ng/ul m  
RT: 22.86 min Scan# 3378  
Delta R.T. -0.02 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.3  | 17.4  | 26.0  |
| 125     | 9.8   | 6.5   | 9.7#  |





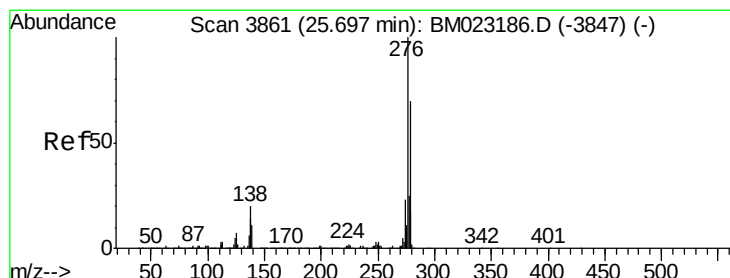
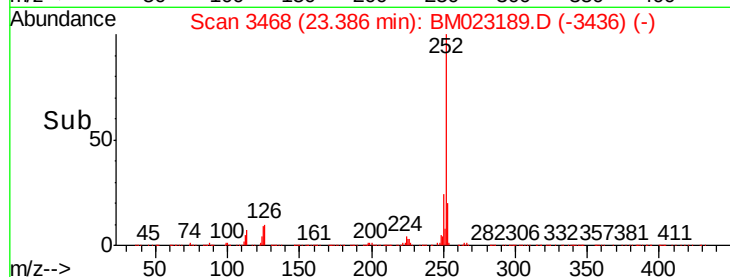
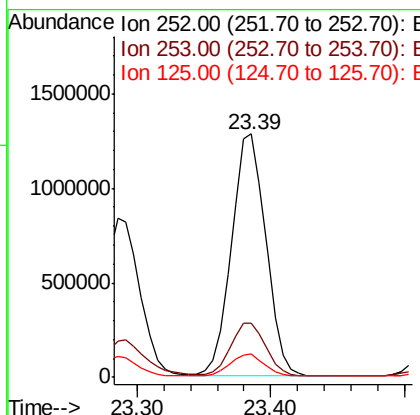
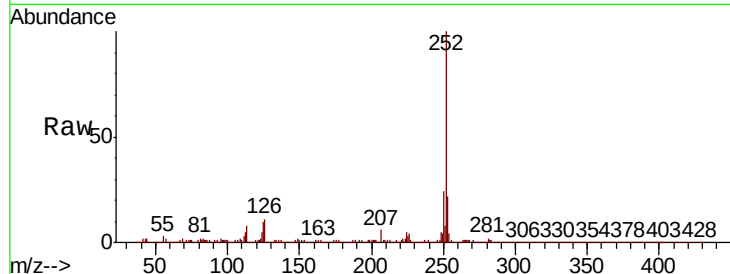
#91  
Benzo(a)pyrene  
Concen: 22.353 ng/ul  
RT: 23.39 min Scan# 3468  
Delta R.T. -0.01 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

Instrument :  
BNA\_M  
ClientSampleId :  
BEP72

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.2  | 17.2  | 25.8  |
| 125     | 9.5   | 7.4   | 11.0  |

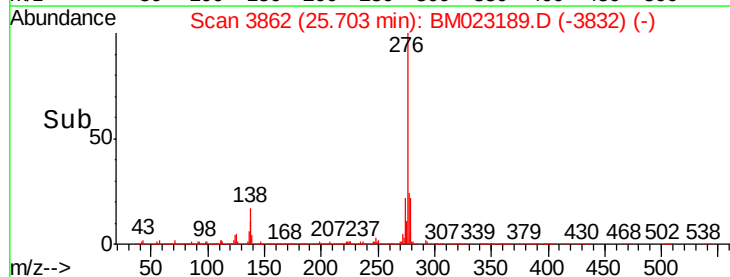
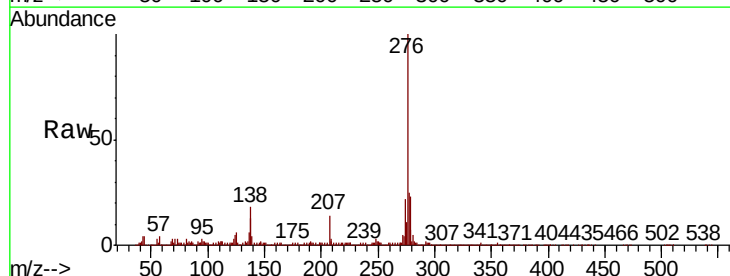
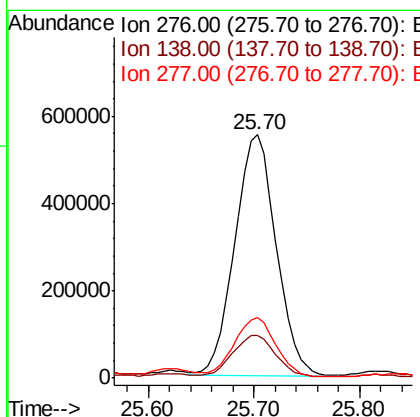
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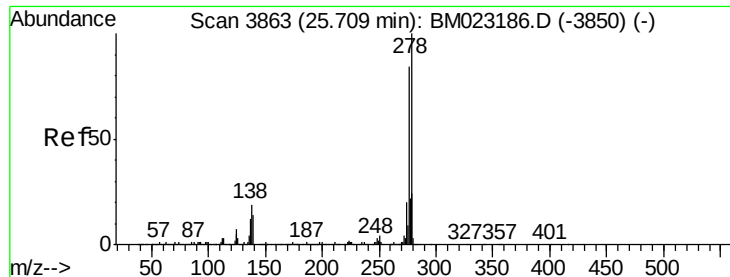
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#92  
Indeno(1,2,3-cd)pyrene  
Concen: 12.318 ng/ul  
RT: 25.70 min Scan# 3862  
Delta R.T. -0.02 min  
Lab File: BM023189.D  
Acq: 16 Oct 2019 11:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 17.7  | 14.9  | 22.3  |
| 277     | 24.7  | 19.8  | 29.8  |





#93

Dibenzo(a,h)anthracene

Concen: 4.045 ng/ul

RT: 25.71 min Scan# 3863

Delta R.T. -0.04 min

Lab File: BM023189.D

Acq: 16 Oct 2019 11:57

Instrument :

BNA\_M

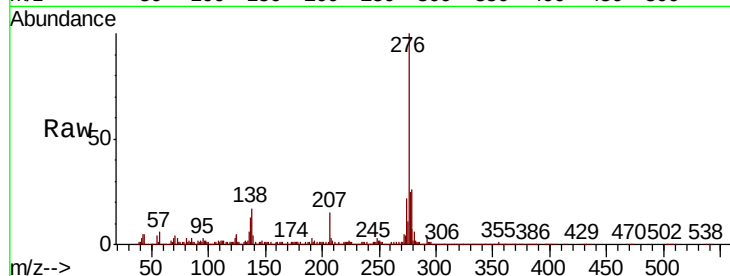
ClientSampleId :

BEP72

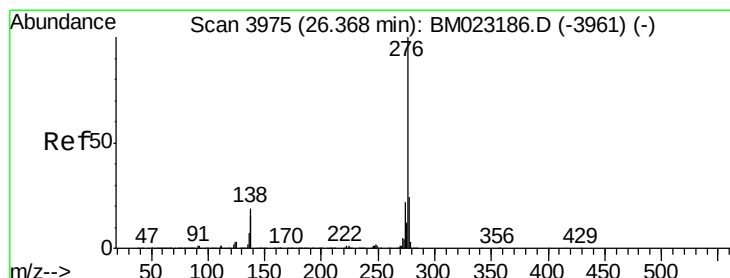
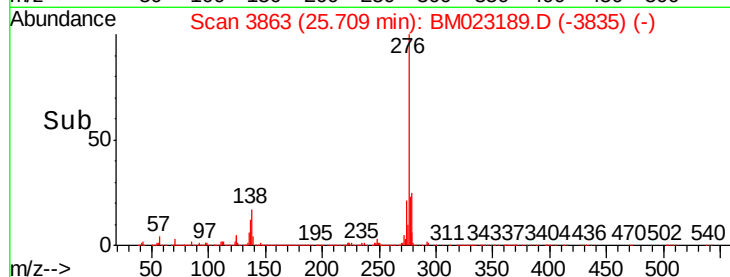
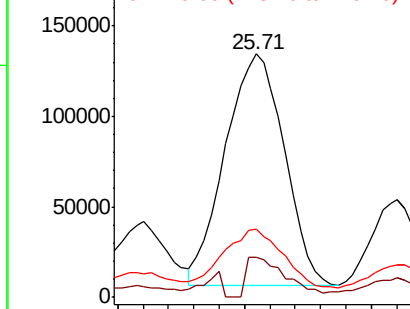
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 278   | Resp: | 412766 |
| Ion Ratio | Lower | Upper |        |
| 278       | 100   |       |        |
| 139       | 16.7  | 10.0  | 15.0#  |
| 279       | 28.3  | 19.4  | 29.0   |

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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



#94

Benzo(g,h,i)perylene

Concen: 14.680 ng/ul

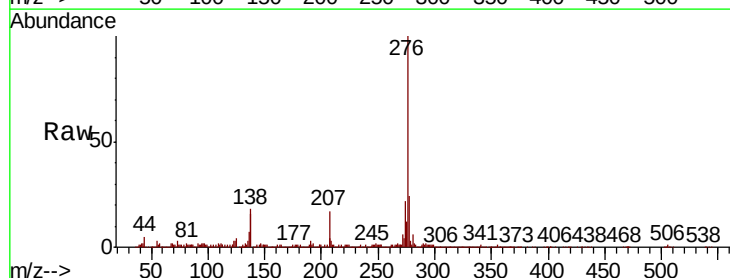
RT: 26.38 min Scan# 3977

Delta R.T. -0.02 min

Lab File: BM023189.D

Acq: 16 Oct 2019 11:57

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 276   | Resp: | 1475095 |
| Ion Ratio | Lower | Upper |         |
| 276       | 100   |       |         |
| 138       | 18.0  | 14.4  | 21.6    |
| 277       | 23.7  | 19.4  | 29.2    |



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

