

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM112119\  
 Data File : BM023829.D  
 Acq On : 21 Nov 2019 15:07  
 Operator : JU  
 Sample : K5851-04  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 C0AA2

Manual Integrations  
 APPROVED

mohammad  
 11/22/2019 1:22:31 PM

Quant Time: Nov 21 16:18:13 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM111119MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Nov 21 16:09:32 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.51  | 152  | 311941   | 20.00 | ng/ul | -0.01    |
| 18) Naphthalene-d8        | 10.28 | 136  | 1282621  | 20.00 | ng/ul | -0.01    |
| 36) Acenaphthene-d10      | 14.17 | 164  | 786256   | 20.00 | ng/ul | -0.01    |
| 62) Phenanthrene-d10      | 16.92 | 188  | 1701095  | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 21.13 | 240  | 1683768  | 20.00 | ng/ul | 0.00     |
| 86) Perylene-d12          | 23.28 | 264  | 2023894  | 20.00 | ng/ul | -0.01    |

## System Monitoring Compounds

|                                |       |     |         |       |       |       |
|--------------------------------|-------|-----|---------|-------|-------|-------|
| 3) 1,4-Dioxane-d8              | 3.06  | 96  | 25754   | 3.40  | ng/uL | 0.00  |
| 5) Phenol-d5                   | 6.70  | 99  | 526938  | 18.53 | ng/ul | -0.01 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.86  | 67  | 293093  | 17.94 | ng/ul | -0.01 |
| 9) 2-Chlorophenol-d4           | 7.05  | 132 | 415151  | 20.15 | ng/ul | -0.01 |
| 13) 4-Methylphenol-d8          | 8.23  | 113 | 390732  | 17.23 | ng/ul | -0.01 |
| 19) Nitrobenzene-d5            | 8.66  | 128 | 191225  | 20.83 | ng/ul | 0.00  |
| 22) 2-Nitrophenol-d4           | 9.38  | 143 | 216477  | 22.43 | ng/ul | 0.00  |
| 26) 2,4-Dichlorophenol-d3      | 9.92  | 165 | 429706  | 19.53 | ng/ul | -0.01 |
| 29) 4-Chloroaniline-d4         | 10.43 | 131 | 395513  | 16.37 | ng/ul | -0.01 |
| 44) Dimethylphthalate-d6       | 13.59 | 166 | 1276804 | 20.82 | ng/ul | -0.01 |
| 47) Acenaphthylene-d8          | 13.86 | 160 | 1516541 | 21.67 | ng/ul | 0.00  |
| 52) 4-Nitrophenol-d4           | 14.40 | 143 | 121492  | 11.61 | ng/ul | 0.00  |
| 58) Fluorene-d10               | 15.17 | 176 | 1166420 | 21.54 | ng/ul | 0.00  |
| 63) 4,6-Dinitro-2-methylphenol | 15.30 | 200 | 119111  | 12.10 | ng/ul | -0.01 |
| 71) Anthracene-d10             | 17.02 | 188 | 1836174 | 22.75 | ng/ul | 0.00  |
| 79) Pyrene-d10                 | 19.33 | 212 | 2061855 | 23.49 | ng/ul | 0.00  |
| 90) Benzo(a)pyrene-d12         | 23.14 | 264 | 2469691 | 23.19 | ng/ul | -0.01 |

## Target Compounds

|                            |       |     |         |        | Ovalue    |
|----------------------------|-------|-----|---------|--------|-----------|
| 45) Dimethylphthalate      | 13.64 | 163 | 533909  | 8.886  | ng/ul 99  |
| 48) Acenaphthylene         | 13.89 | 152 | 95006   | 1.349  | ng/ul 98  |
| 50) Acenaphthene           | 14.23 | 153 | 96568   | 1.932  | ng/ul 98  |
| 54) Dibenzofuran           | 14.57 | 168 | 95165   | 1.286  | ng/ul 99  |
| 59) Fluorene               | 15.23 | 166 | 121327  | 2.021  | ng/ul 97  |
| 70) Phenanthrene           | 16.96 | 178 | 2920023 | 31.164 | ng/ul 100 |
| 72) Anthracene             | 17.05 | 178 | 413566  | 4.390  | ng/ul 99  |
| 75) Carbazole              | 17.33 | 167 | 287401  | 3.659  | ng/ul 98  |
| 77) Fluoranthene           | 18.99 | 202 | 4549768 | 45.322 | ng/ul 96  |
| 80) Pyrene                 | 19.36 | 202 | 3614788 | 33.213 | ng/ul 99  |
| 83) Benzo(a)anthracene     | 21.11 | 228 | 1693037 | 15.244 | ng/ul 98  |
| 85) Chrysene               | 21.16 | 228 | 1752898 | 16.765 | ng/ul 97  |
| 88) Benzo(b)fluoranthene   | 22.64 | 252 | 2351129 | 18.223 | ng/ul# 98 |
| 89) Benzo(k)fluoranthene   | 22.68 | 252 | 857374m | 6.898  | ng/ul     |
| 91) Benzo(a)pyrene         | 23.19 | 252 | 1578223 | 13.362 | ng/ul 96  |
| 92) Indeno(1,2,3-cd)pyrene | 25.41 | 276 | 1194298 | 9.456  | ng/ul 99  |
| 93) Dibenzo(a,h)anthracene | 25.42 | 278 | 301922  | 2.833  | ng/ul# 85 |
| 94) Benzo(g,h,i)perylene   | 26.06 | 276 | 1176740 | 11.498 | ng/ul 97  |

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

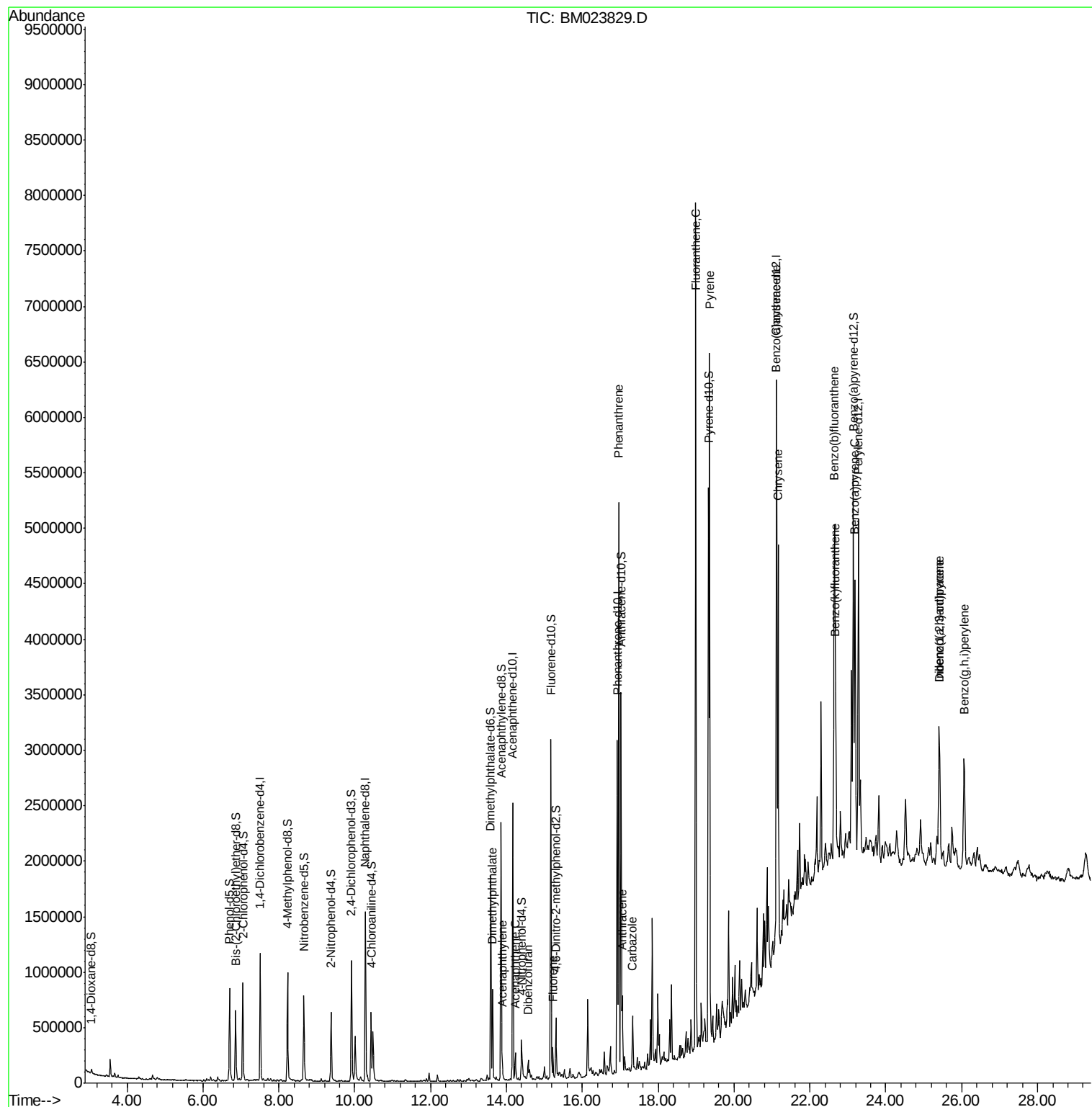
Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM112119\  
Data File : BM023829.D  
Acq On : 21 Nov 2019 15:07  
Operator : JU  
Sample : K5851-04  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

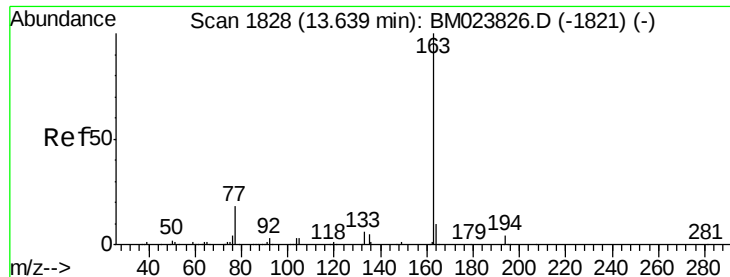
Instrument :  
BNA\_M  
ClientSampleId :  
C0AA2

Manual Integrations  
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Quant Time: Nov 21 16:18:13 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM11119MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Nov 21 16:09:32 2019  
Response via : Initial Calibration





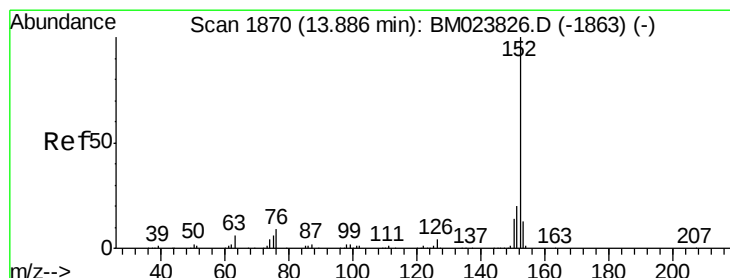
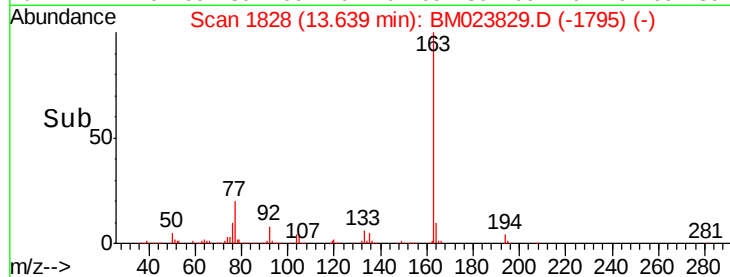
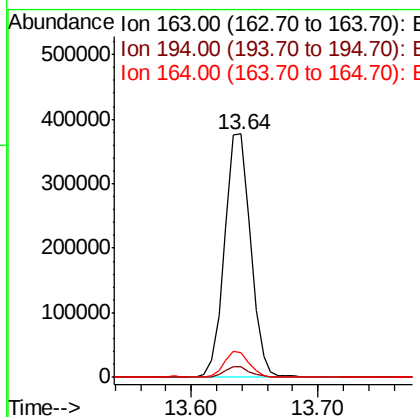
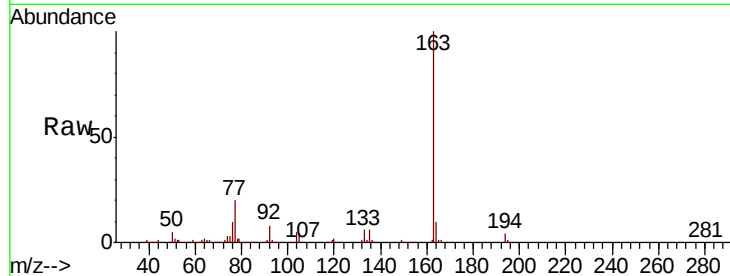
#45  
Dimethylphthalate  
Concen: 8.886 ng/ul  
RT: 13.64 min Scan# 1828  
Delta R.T. -0.01 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

Instrument :  
BNA\_M  
ClientSampled :  
C0AA2

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 533909 |       |       |
| 194     | 4.5   |        | 3.4   | 5.2   |
| 164     | 10.2  |        | 8.0   | 12.0  |

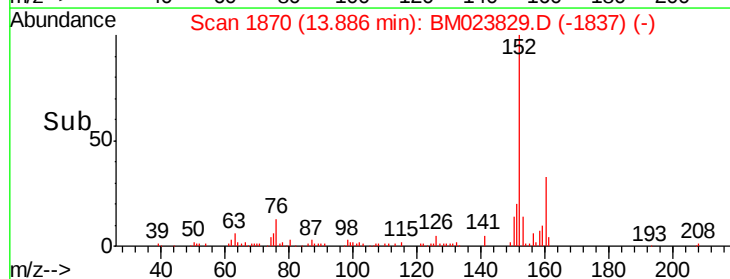
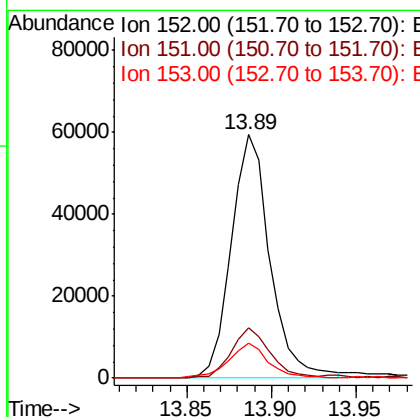
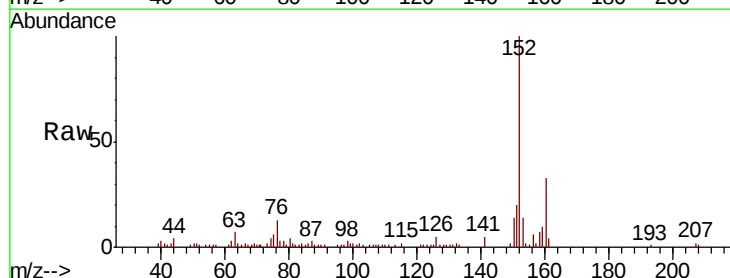
Manual Integrations  
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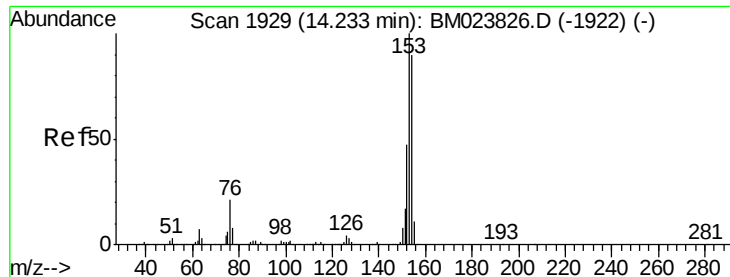
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#48  
Acenaphthylene  
Concen: 1.349 ng/ul  
RT: 13.89 min Scan# 1870  
Delta R.T. -0.01 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 152     | 100   | 95006 |       |       |
| 151     | 20.5  |       | 16.1  | 24.1  |
| 153     | 14.2  |       | 10.4  | 15.6  |





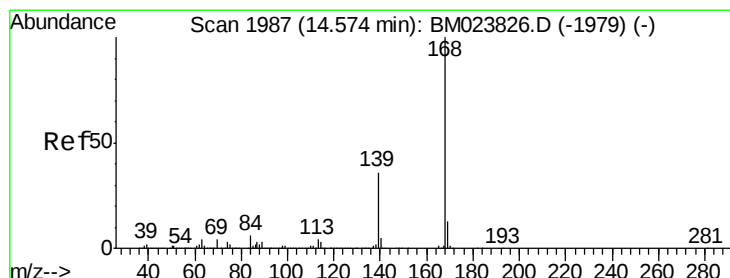
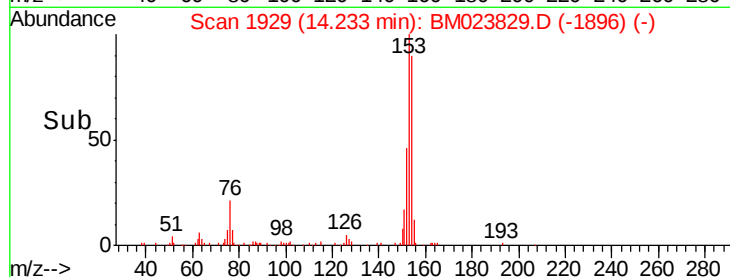
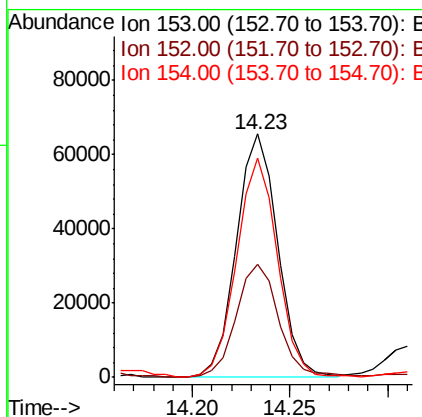
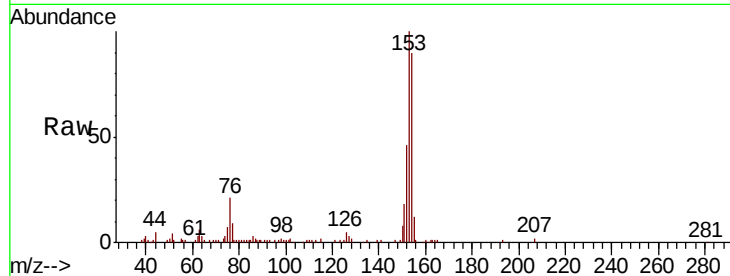
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Acenaphthene  
Concen: 1.932 ng/ul  
RT: 14.23 min Scan# 1929  
Delta R.T. -0.01 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

Instrument :  
BNA\_M  
ClientSampleId :  
C0AA2

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 153   | Resp: | 96568 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 46.3  | 37.7  | 56.5  |
| 154       | 90.0  | 70.6  | 106.0 |

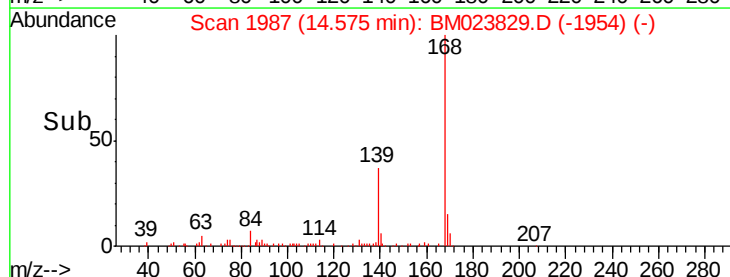
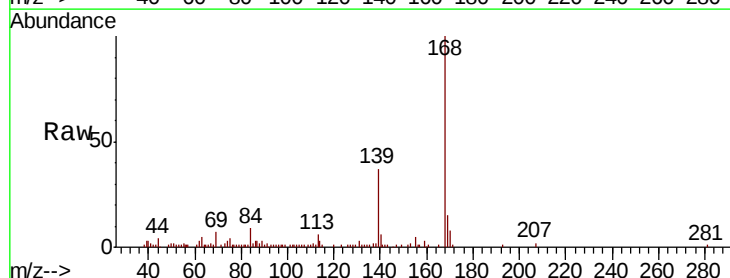
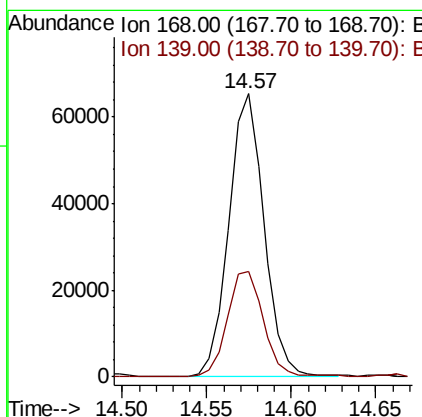
Manual Integrations  
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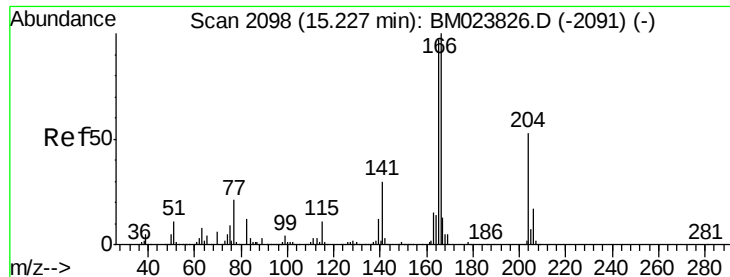
mohammad  
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#54  
Dibenzofuran  
Concen: 1.286 ng/ul  
RT: 14.57 min Scan# 1987  
Delta R.T. -0.01 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 168   | Resp: | 95165 |
| Ion Ratio | Lower | Upper |       |
| 168       | 100   |       |       |
| 139       | 37.2  | 29.3  | 43.9  |





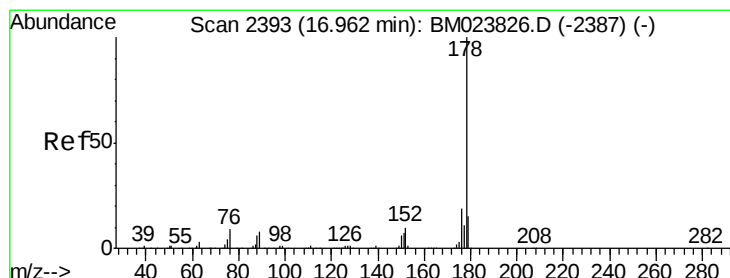
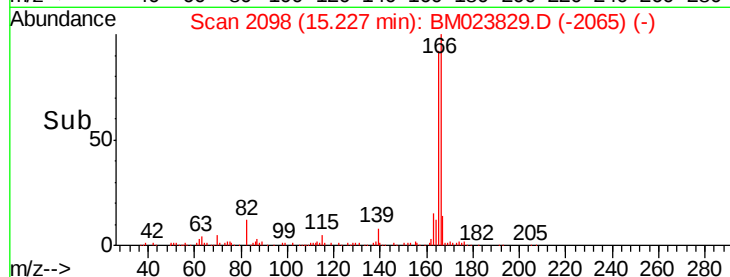
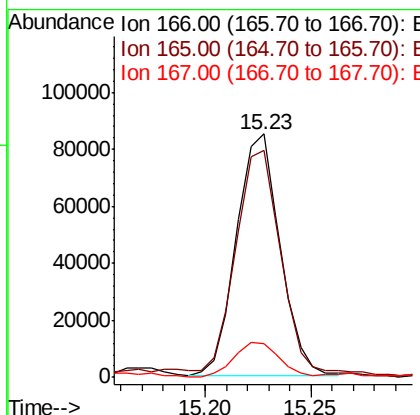
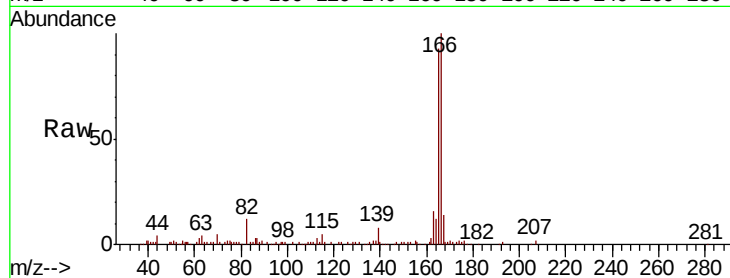
#59  
**Fluorene**  
 Concen: 2.021 ng/ul  
 RT: 15.23 min Scan# 2098  
 Delta R.T. -0.01 min  
 Lab File: BM023829.D  
 Acq: 21 Nov 2019 15:07

Instrument :  
 BNA\_M  
 ClientSampleID :  
 C0AA2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 93.1  | 77.2  | 115.8 |
| 167     | 14.1  | 10.9  | 16.3  |

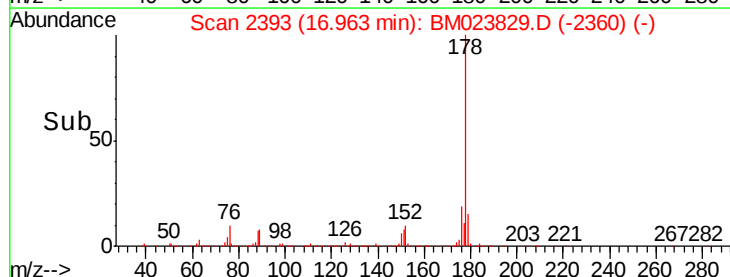
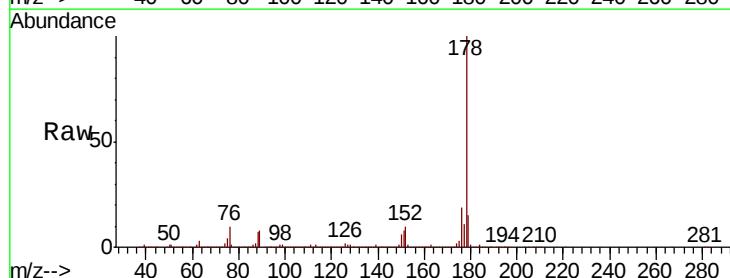
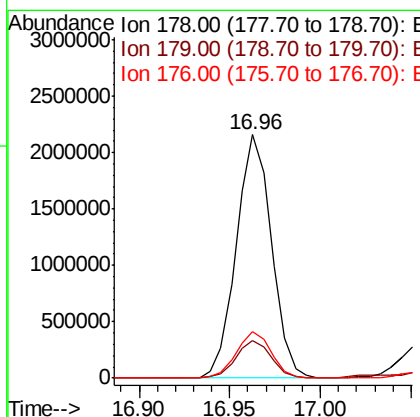
Manual Integrations  
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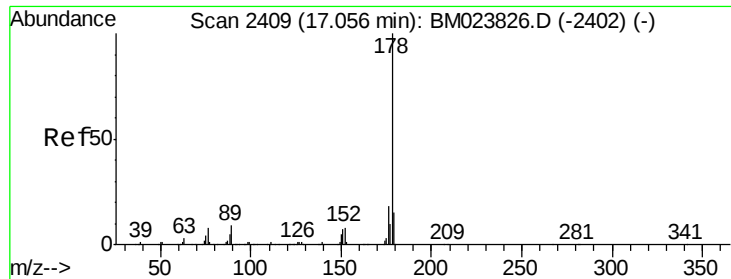
mohammad  
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#70  
**Phenanthrene**  
 Concen: 31.164 ng/ul  
 RT: 16.96 min Scan# 2393  
 Delta R.T. -0.01 min  
 Lab File: BM023829.D  
 Acq: 21 Nov 2019 15:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.5  | 12.3  | 18.5  |
| 176     | 19.1  | 15.0  | 22.6  |





#72

Anthracene

Concen: 4.390 ng/ul

RT: 17.05 min Scan# 2408

Delta R.T. -0.01 min

Lab File: BM023829.D

Acq: 21 Nov 2019 15:07

Instrument :

BNA\_M

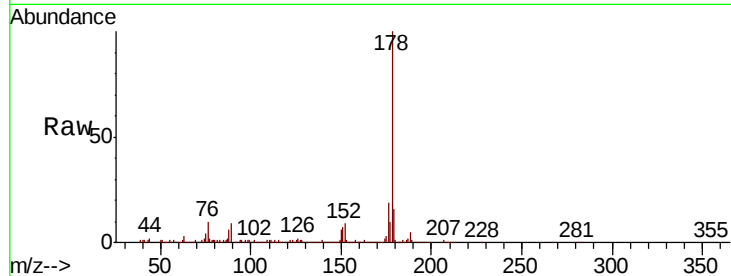
ClientSampleId :

C0AA2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.7  | 12.3  | 18.5  |
| 176     | 19.1  | 14.7  | 22.1  |

Manual Integrations  
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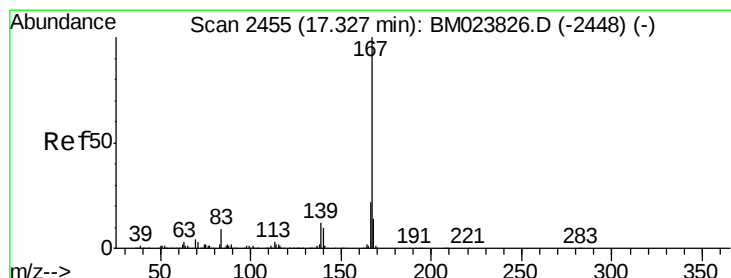
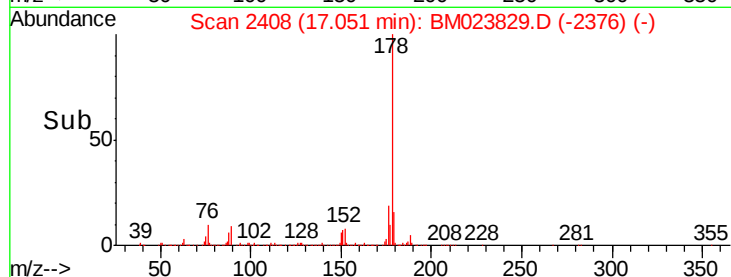
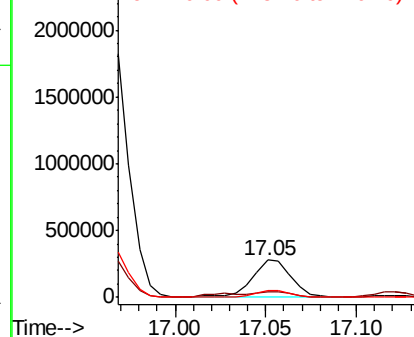


Abundance

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: 3.659 ng/ul

RT: 17.33 min Scan# 2455

Delta R.T. -0.01 min

Lab File: BM023829.D

Acq: 21 Nov 2019 15:07

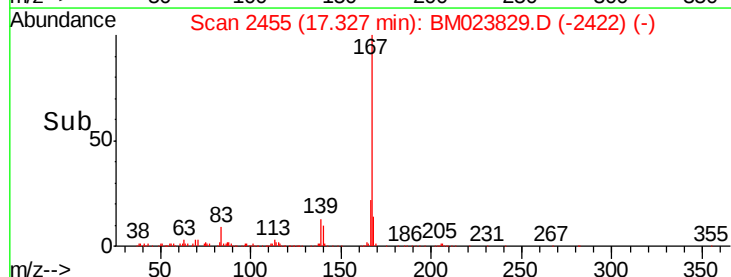
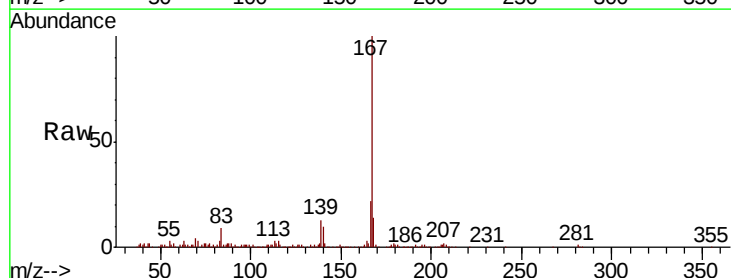
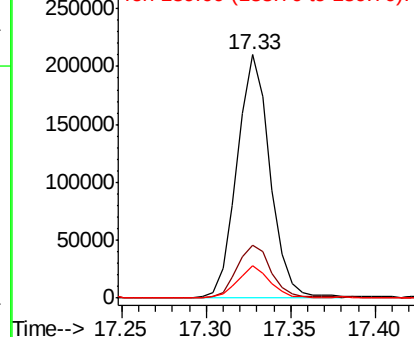
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 21.9  | 17.1  | 25.7  |
| 139     | 13.3  | 9.8   | 14.6  |

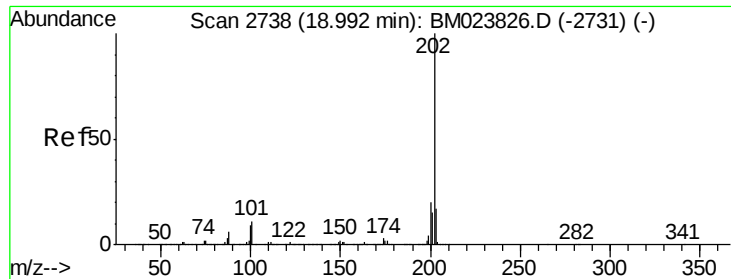
Abundance

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





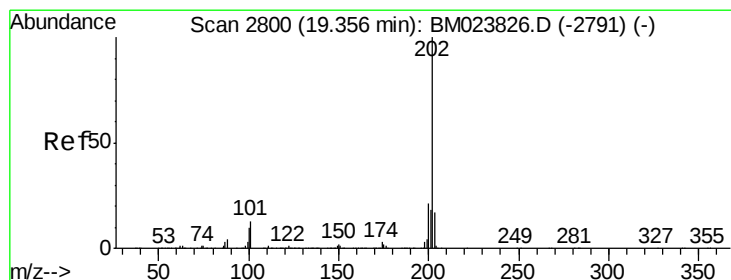
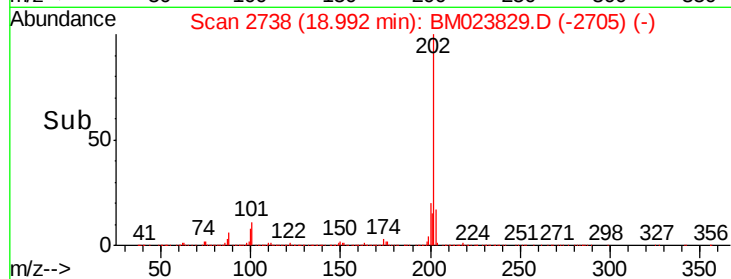
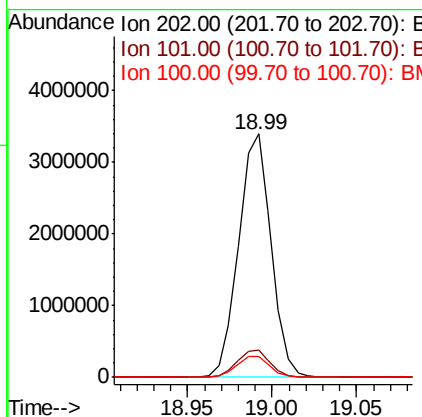
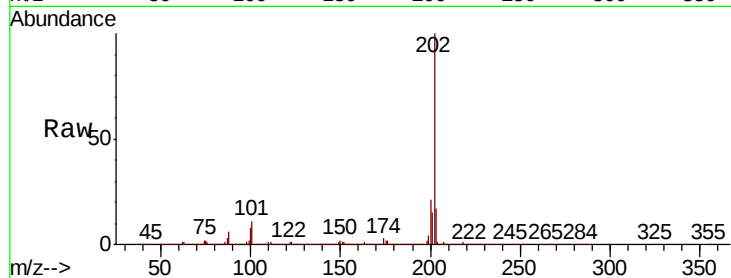
#77  
**Fluoranthene**  
 Concen: 45.322 ng/ul  
 RT: 18.99 min Scan# 2738  
 Delta R.T. -0.01 min  
 Lab File: BM023829.D  
 Acq: 21 Nov 2019 15:07

Instrument :  
 BNA\_M  
 ClientSampled :  
 C0AA2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 11.2  | 7.7   | 11.5  |
| 100     | 8.4   | 6.0   | 9.0   |

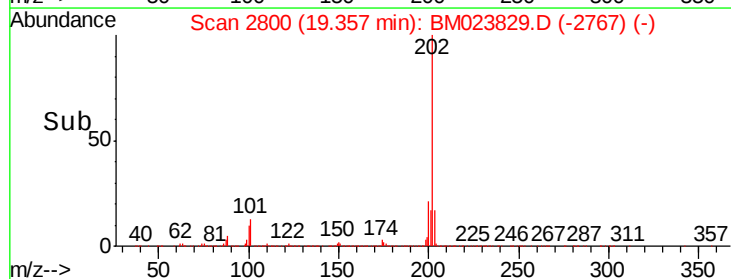
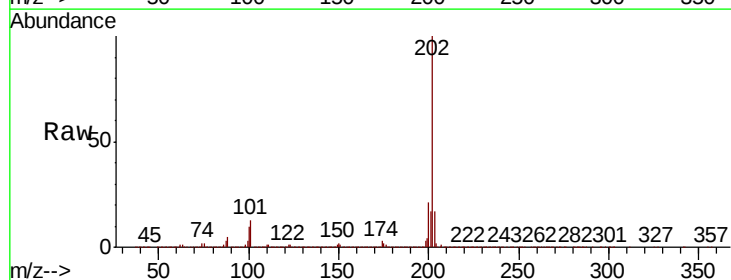
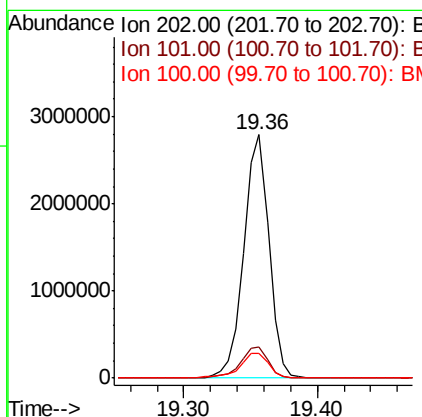
Manual Integrations  
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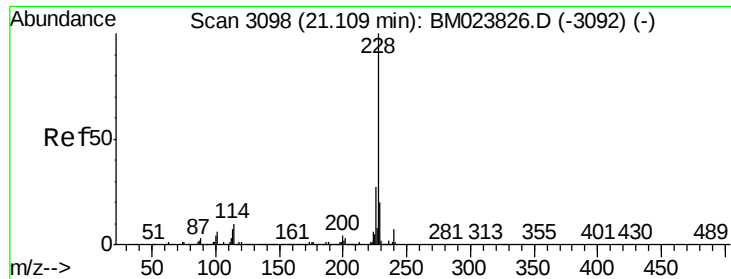
mohammad  
 11/22/2019 1:22:31 PM



#80  
**Pyrene**  
 Concen: 33.213 ng/ul  
 RT: 19.36 min Scan# 2800  
 Delta R.T. -0.01 min  
 Lab File: BM023829.D  
 Acq: 21 Nov 2019 15:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
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| 101     | 12.7  | 9.8   | 14.6  |
| 100     | 10.4  | 8.1   | 12.1  |





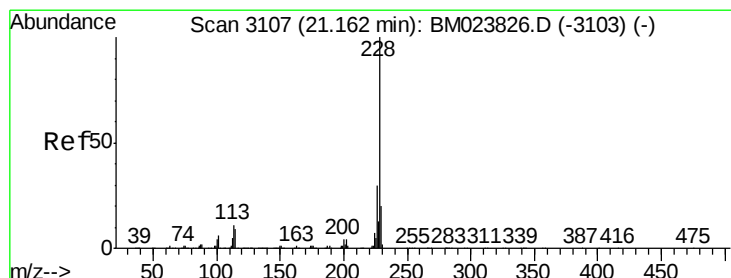
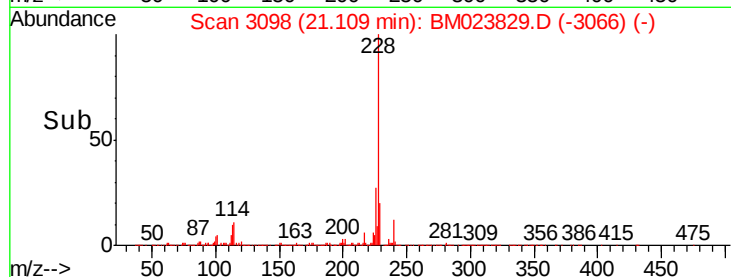
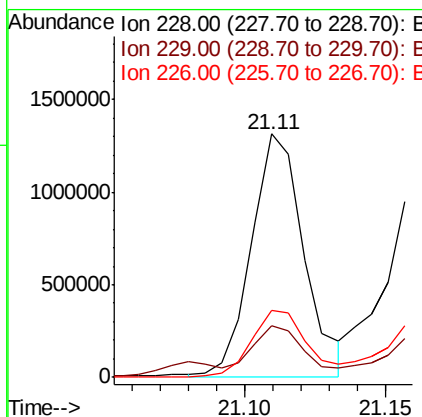
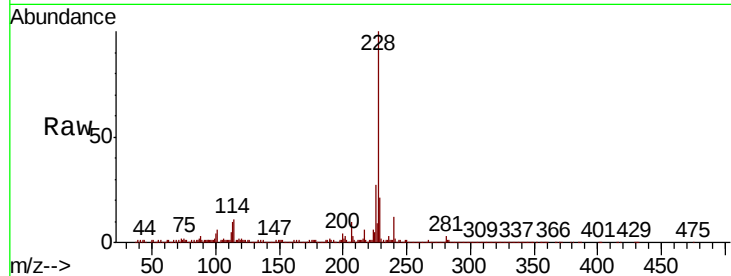
#83  
Benzo(a)anthracene  
Concen: 15.244 ng/ul  
RT: 21.11 min Scan# 3098  
Delta R.T. -0.01 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

Instrument :  
BNA\_M  
ClientSampleId :  
C0AA2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 21.1  | 15.6  | 23.4  |
| 226     | 27.4  | 21.4  | 32.2  |

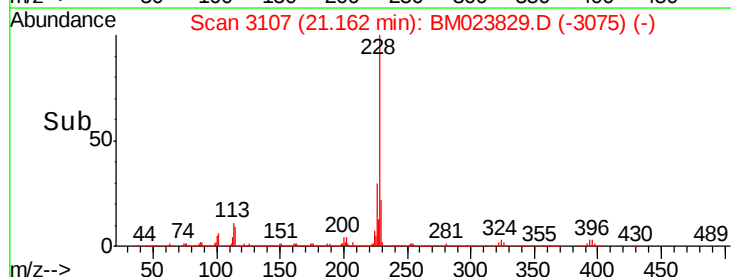
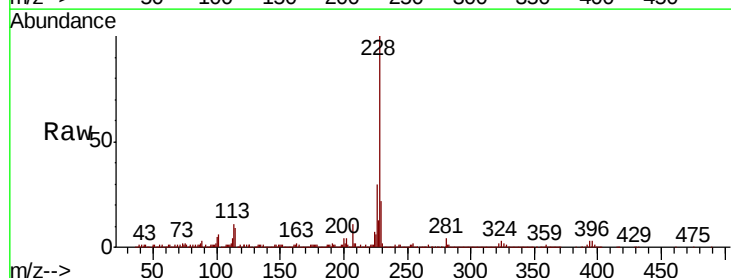
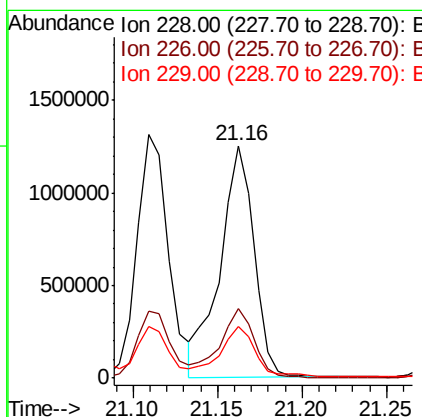
Manual Integrations  
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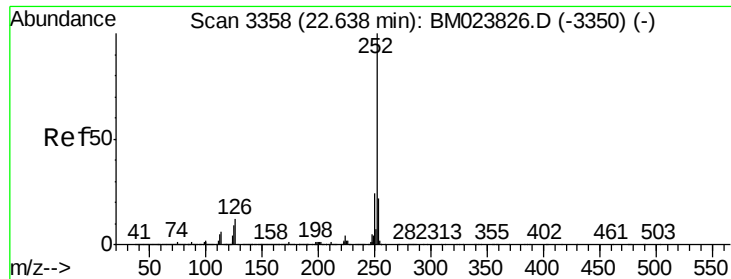
mohammad  
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#85  
Chrysene  
Concen: 16.765 ng/ul  
RT: 21.16 min Scan# 3107  
Delta R.T. -0.01 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.2  | 23.8  | 35.8  |
| 229     | 22.3  | 15.8  | 23.6  |





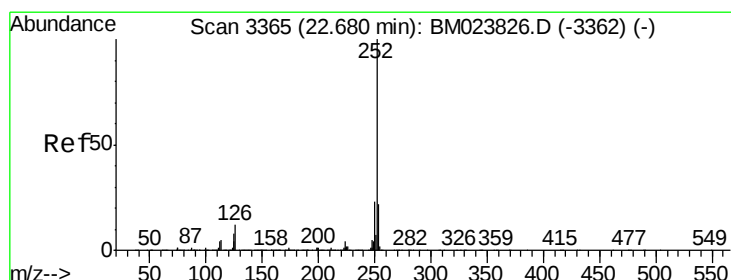
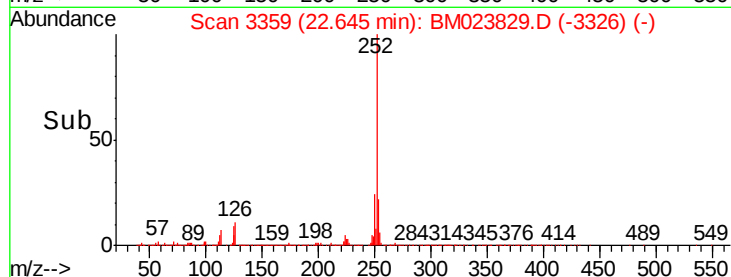
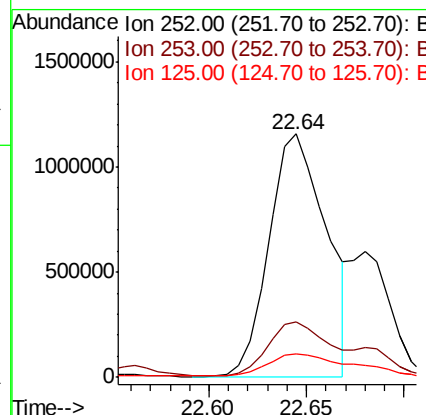
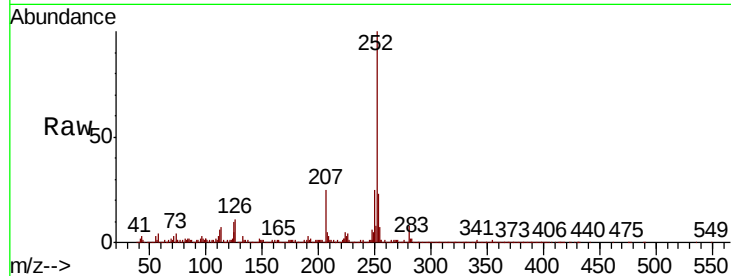
#88  
Benzo(b)fluoranthene  
Concen: 18.223 ng/ul  
RT: 22.64 min Scan# 3359  
Delta R.T. -0.01 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

Instrument :  
BNA\_M  
ClientSampleId :  
C0AA2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.8  | 17.8  | 26.8  |
| 125     | 9.8   | 6.5   | 9.7#  |

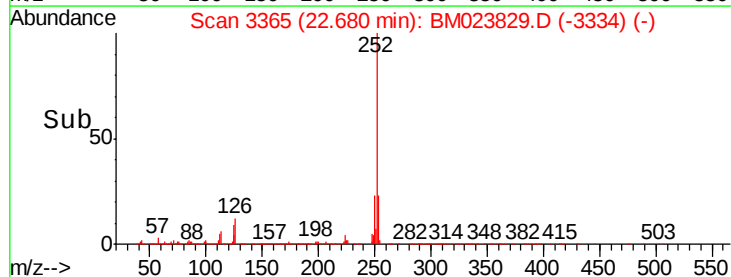
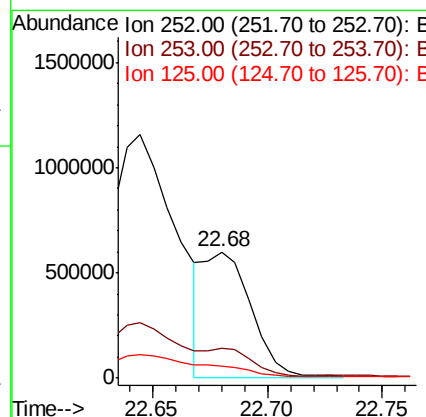
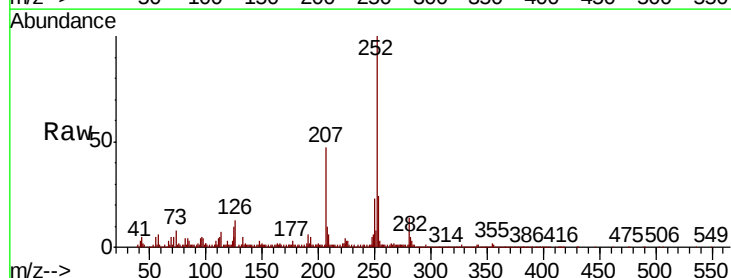
Manual Integrations  
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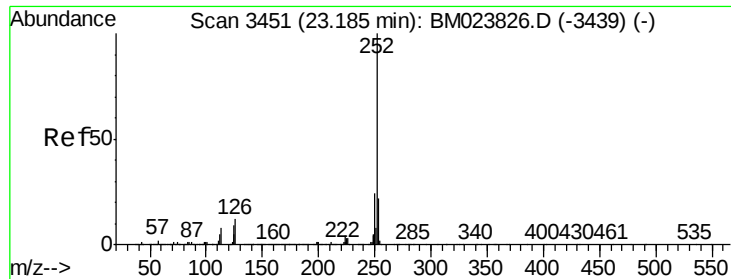
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#89  
Benzo(k)fluoranthene  
Concen: 6.898 ng/ul m  
RT: 22.68 min Scan# 3365  
Delta R.T. -0.02 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.6  | 17.2  | 25.8  |
| 125     | 9.7   | 5.9   | 8.9#  |





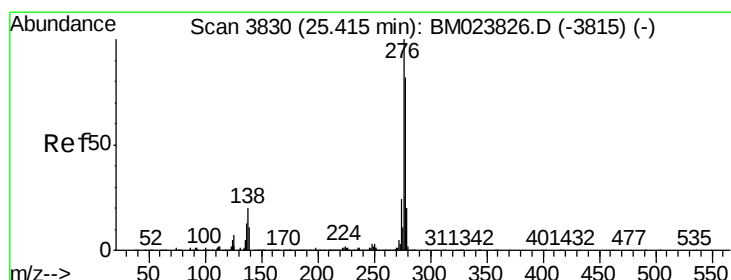
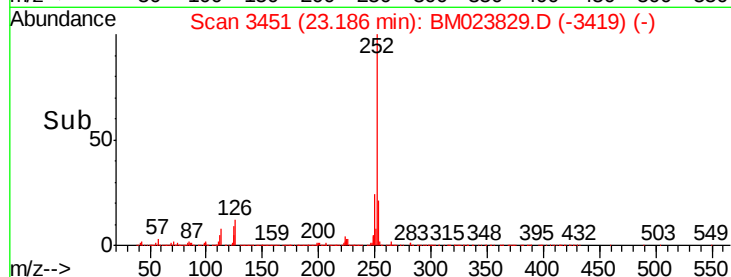
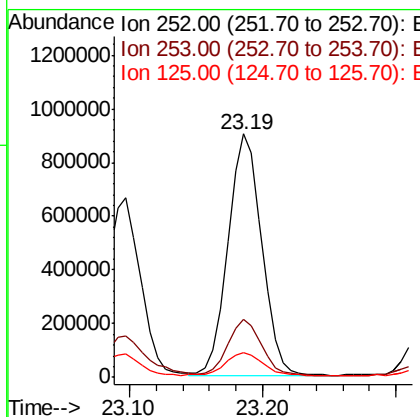
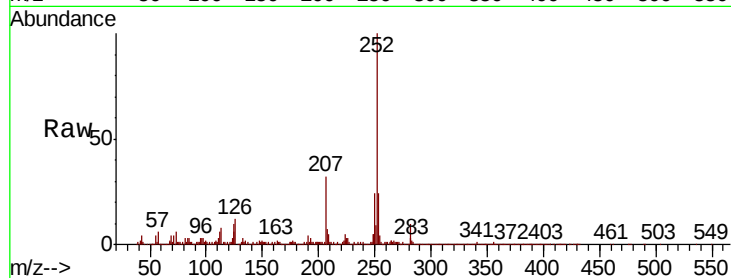
#91  
Benzo(a)pyrene  
Concen: 13.362 ng/ul  
RT: 23.19 min Scan# 3451  
Delta R.T. -0.01 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

Instrument :  
BNA\_M  
ClientSampleId :  
C0AA2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.6  | 17.3  | 25.9  |
| 125     | 10.3  | 6.9   | 10.3  |

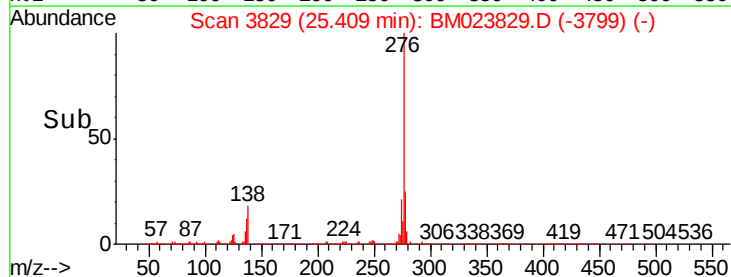
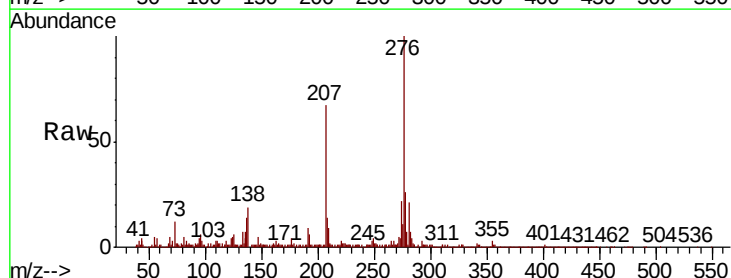
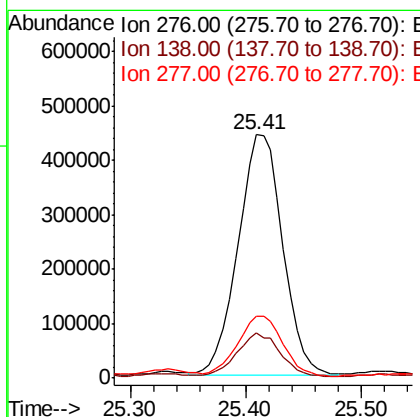
Manual Integrations  
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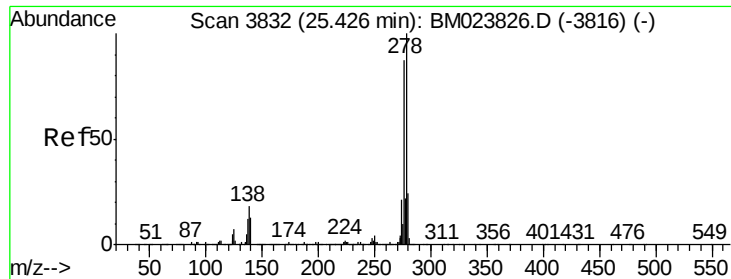
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#92  
Indeno(1,2,3-cd)pyrene  
Concen: 9.456 ng/ul  
RT: 25.41 min Scan# 3829  
Delta R.T. -0.02 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 18.5  | 15.0  | 22.4  |
| 277     | 25.6  | 20.0  | 30.0  |





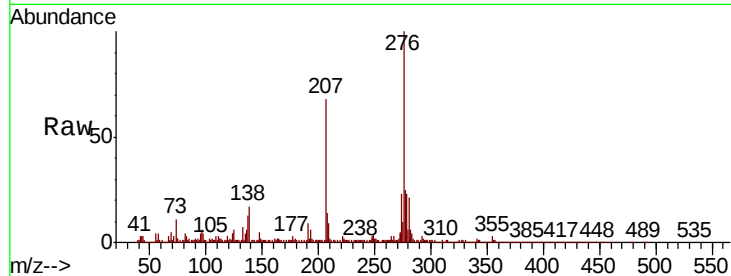
#93  
Dibenzo(a,h)anthracene  
Concen: 2.833 ng/ul  
RT: 25.42 min Scan# 3830  
Delta R.T. -0.03 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

Instrument :  
BNA\_M  
ClientSampled :  
C0AA2

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 10.0  | 15.0# |
| 279     | 26.5  | 19.0  | 28.6  |

Manual Integrations  
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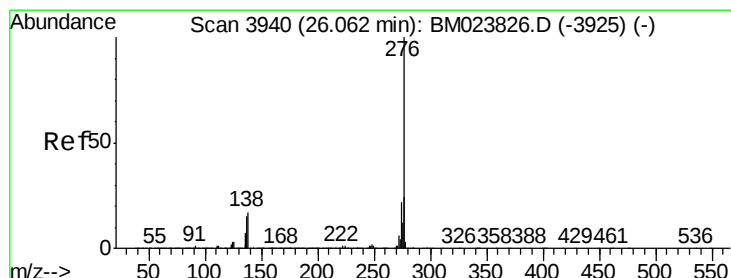
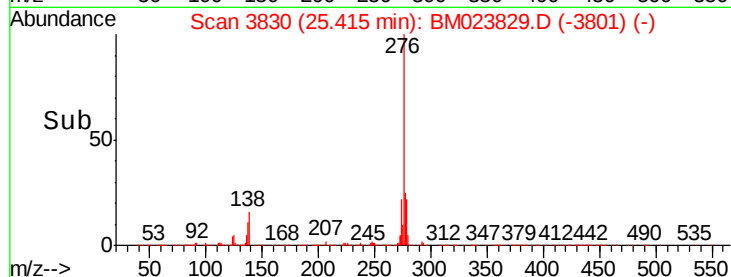
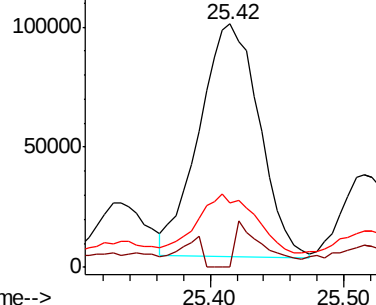


Abundance

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: 11.498 ng/ul  
RT: 26.06 min Scan# 3940  
Delta R.T. -0.02 min  
Lab File: BM023829.D  
Acq: 21 Nov 2019 15:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 18.1  | 13.2  | 19.8  |
| 277     | 24.4  | 18.6  | 28.0  |

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

