

Data Path : Z:\HPCHEM1\BNA M\DATA\BM012818\  
 Data File : BM013938.D  
 Acq On : 29 Jan 2018 00:38  
 Operator : SJ/JU  
 Sample : J1233-16  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 F6B20

Manual Integrations  
 APPROVED

Sohil  
 1/29/2018 6:08:12 PM

Quant Time: Feb 08 08:21:09 2018  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM011018.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Jan 29 04:03:39 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.57  | 152  | 139256   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.35 | 136  | 552316   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.23 | 164  | 318554   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 16.99 | 188  | 649879   | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.19 | 240  | 683346   | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.37 | 264  | 721069   | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |         |       |       |      |
|--------------------------------|-------|-----|---------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.14  | 96  | 12281   | 3.49  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.76  | 99  | 273064  | 25.54 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 6.92  | 67  | 171000  | 26.40 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.11  | 132 | 235624  | 27.05 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.29  | 113 | 221271  | 26.92 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.73  | 128 | 116504  | 27.18 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.45  | 143 | 131821  | 29.11 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 9.99  | 165 | 246793  | 28.21 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.50 | 131 | 178308  | 23.49 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.65 | 166 | 744812  | 28.37 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 13.92 | 160 | 922204  | 27.54 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.47 | 143 | 77127   | 18.08 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.23 | 176 | 633381  | 27.43 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.38 | 200 | 90825   | 23.22 | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.09 | 188 | 941481  | 29.74 | ng/ul | 0.00 |
| 76) Pyrene-d10                 | 19.39 | 212 | 1044347 | 32.82 | ng/ul | 0.00 |
| 87) Benzo(a)pyrene-d12         | 23.23 | 264 | 1015874 | 30.65 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |         | Ovalue |     |
|----------------------------|-------|-----|---------|---------|--------|-----|
| 6) Phenol                  | 6.79  | 94  | 39692   | 3.702   | ng/ul  | 94  |
| 28) Naphthalene            | 10.40 | 128 | 3872920 | 140.948 | ng/ul  | 100 |
| 34) 2-Methylnaphthalene    | 12.03 | 142 | 2581684 | 126.020 | ng/ul  | 96  |
| 40) 1,1'-Biphenyl          | 13.05 | 154 | 556642  | 20.992  | ng/ul  | 98  |
| 44) Dimethylphthalate      | 13.70 | 163 | 231417  | 8.965   | ng/ul  | 98  |
| 49) Acenaphthene           | 14.30 | 153 | 1267683 | 59.753  | ng/ul  | 98  |
| 53) Dibenzofuran           | 14.63 | 168 | 2052325 | 64.304  | ng/ul  | 97  |
| 58) Fluorene               | 15.29 | 166 | 1533221 | 58.645  | ng/ul  | 99  |
| 64) N-Nitrosodiphenylamine | 15.50 | 169 | 28262   | 1.479   | ng/ul  | 96  |
| 68) Pentachlorophenol      | 16.64 | 266 | 97387   | 22.181  | ng/ul  | 99  |
| 69) Phenanthrene           | 17.04 | 178 | 8923498 | 247.023 | ng/ul  | 99  |
| 71) Anthracene             | 17.12 | 178 | 1330977 | 35.721  | ng/ul  | 99  |
| 72) Carbazole              | 17.40 | 167 | 182637  | 5.938   | ng/ul  | 99  |
| 74) Fluoranthene           | 19.06 | 202 | 5287860 | 122.629 | ng/ul# | 95  |
| 77) Pyrene                 | 19.42 | 202 | 3281056 | 78.980  | ng/ul# | 97  |
| 80) Benzo(a)anthracene     | 21.17 | 228 | 802969  | 19.446  | ng/ul  | 97  |
| 82) Chrysene               | 21.22 | 228 | 633874  | 16.734  | ng/ul  | 96  |
| 85) Benzo(b)fluoranthene   | 22.72 | 252 | 412627  | 9.318   | ng/ul# | 97  |
| 86) Benzo(k)fluoranthene   | 22.76 | 252 | 161214m | 3.766   | ng/ul  |     |
| 88) Benzo(a)pyrene         | 23.28 | 252 | 235395  | 5.627   | ng/ul  | 99  |
| 89) Indeno(1,2,3-cd)pyrene | 25.56 | 276 | 79290   | 1.606   | ng/ul# | 93  |
| 91) Benzo(a,h,i)perylene   | 26.23 | 276 | 62901   | 1.548   | ng/ul  | 93  |

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Sample : J1233-16  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
F6B20

Manual Integrations  
APPROVED

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1/29/2018 6:08:12 PM

Quant Time: Feb 08 08:21:09 2018  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM011018.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Jan 29 04:03:39 2018  
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|--------------------|------|------|----------|------|-------|----------|
|--------------------|------|------|----------|------|-------|----------|

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

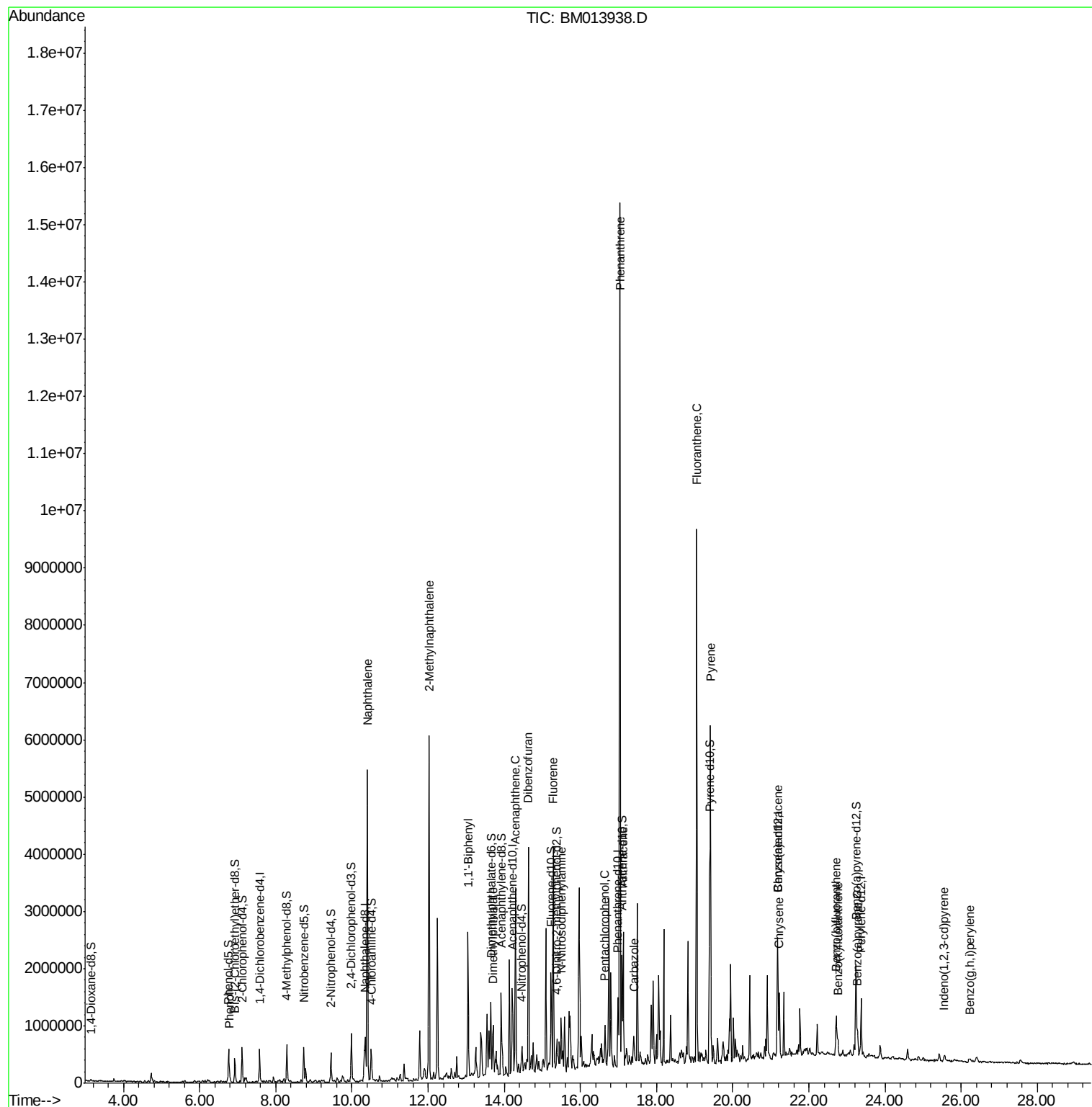
Data Path : Z:\HPCHEM1\BNA M\DATA\BM012818\  
Data File : BM013938.D  
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Misc :  
ALS Vial : 20 Sample Multiplier: 1

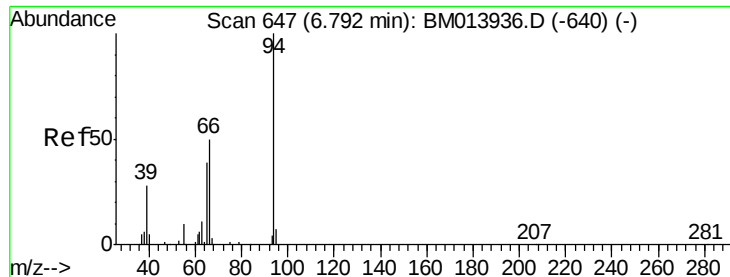
Instrument :  
BNA\_M  
ClientSampleId :  
F6B20

Manual Integrations  
APPROVED

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Quant Time: Feb 08 08:21:09 2018  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM011018.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Jan 29 04:03:39 2018  
Response via : Initial Calibration





#6

Phenol

Concen: 3.702 ng/ul

RT: 6.79 min Scan# 647

Delta R.T. 0.00 min

Lab File: BM013938.D

Acq: 29 Jan 2018 00:38

Instrument :

BNA\_M

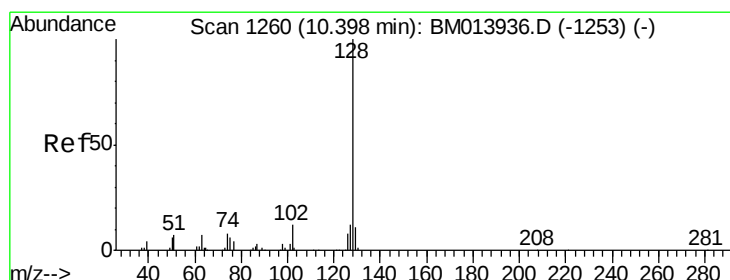
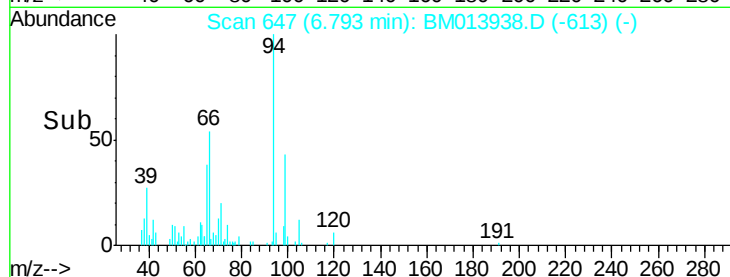
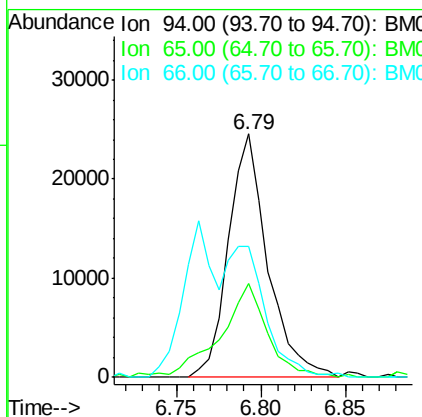
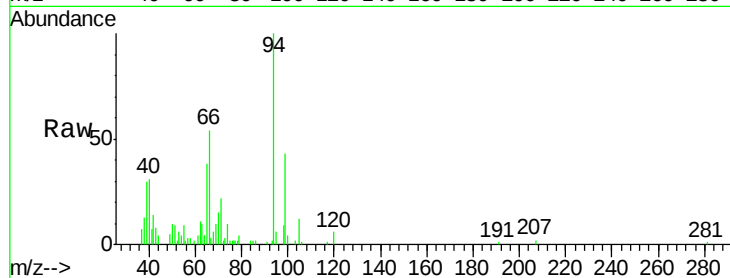
ClientSampled :

F6B20

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 94    | Resp: | 39692 |
| Ion      | Ratio | Lower | Upper |
| 94       | 100   |       |       |
| 65       | 38.3  | 28.2  | 42.4  |
| 66       | 53.9  | 47.2  | 70.8  |

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#28

Naphthalene

Concen: 140.948 ng/ul

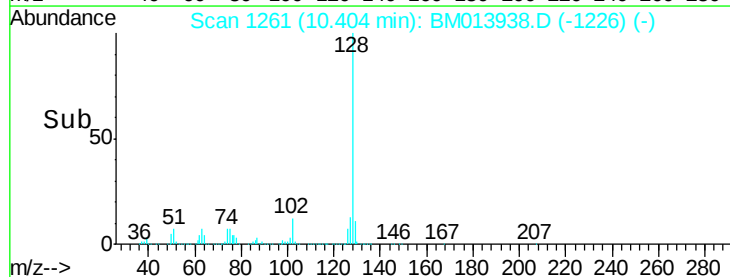
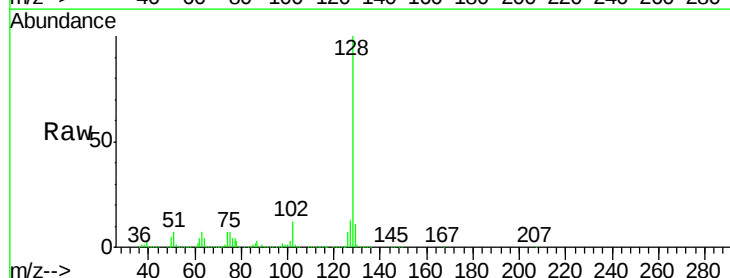
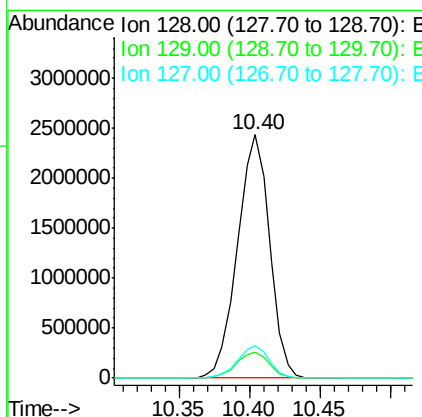
RT: 10.40 min Scan# 1261

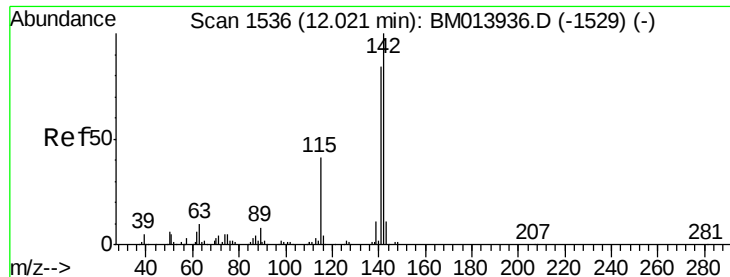
Delta R.T. 0.01 min

Lab File: BM013938.D

Acq: 29 Jan 2018 00:38

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 128   | Resp: | 3872920 |
| Ion      | Ratio | Lower | Upper   |
| 128      | 100   |       |         |
| 129      | 10.8  | 8.8   | 13.2    |
| 127      | 13.4  | 10.6  | 16.0    |





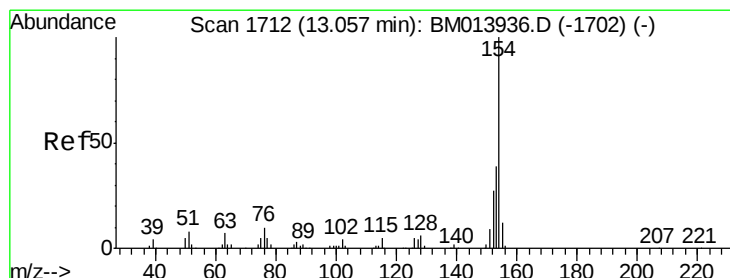
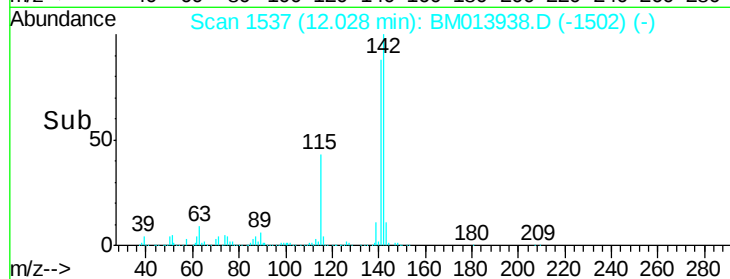
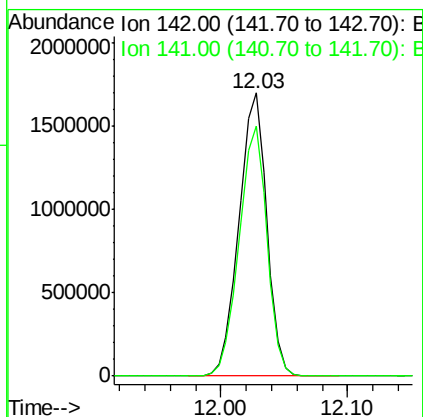
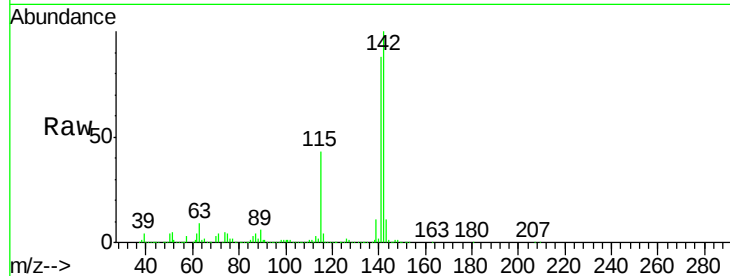
#34  
2-Methylnaphthalene  
Concen: 126.020 ng/ul  
RT: 12.03 min Scan# 1537  
Delta R.T. 0.01 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Instrument :  
BNA\_M  
ClientSampleId :  
F6B20

Tot Ion:142 Resp: 2581684  
Ion Ratio Lower Upper  
142 100  
141 88.5 74.1 111.1

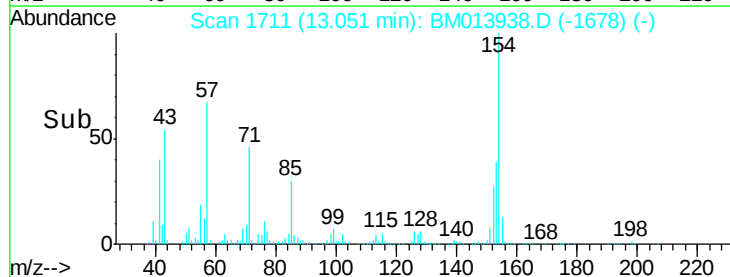
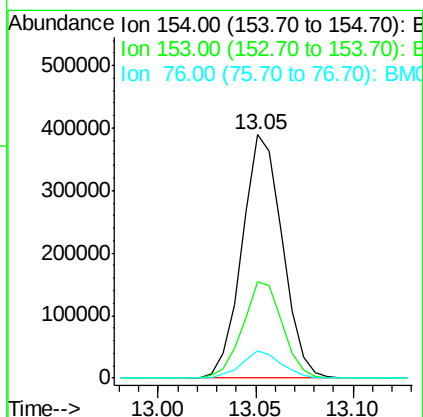
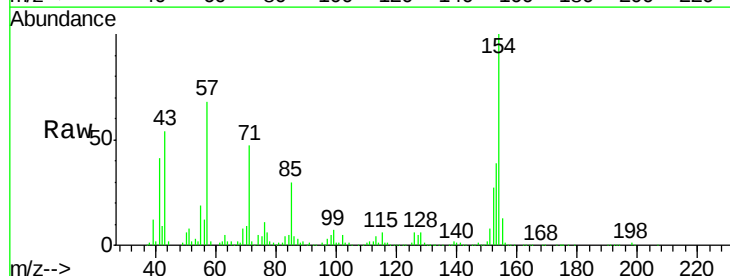
Manual Integrations  
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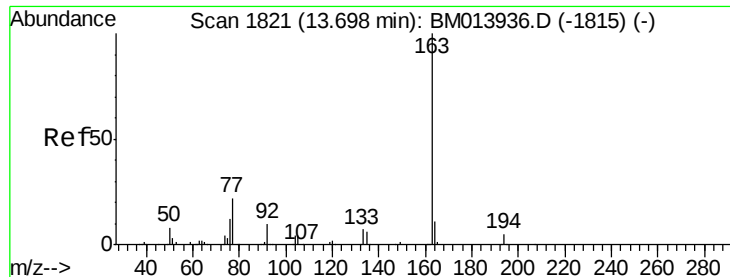
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#40  
1,1'-Biphenyl  
Concen: 20.992 ng/ul  
RT: 13.05 min Scan# 1711  
Delta R.T. -0.01 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Tgt Ion:154 Resp: 556642  
Ion Ratio Lower Upper  
154 100  
153 39.4 32.6 48.8  
76 11.4 8.5 12.7





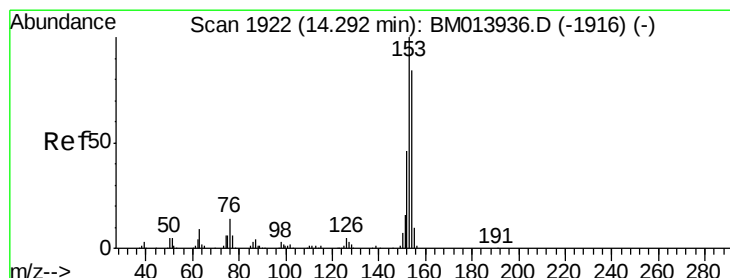
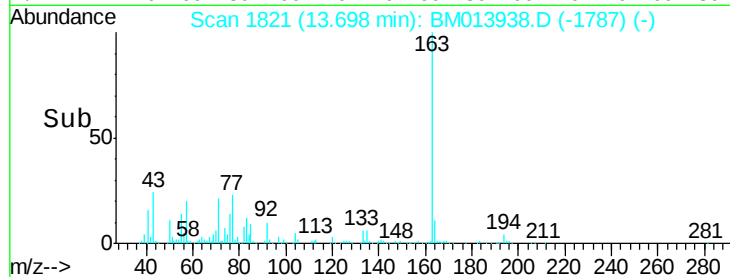
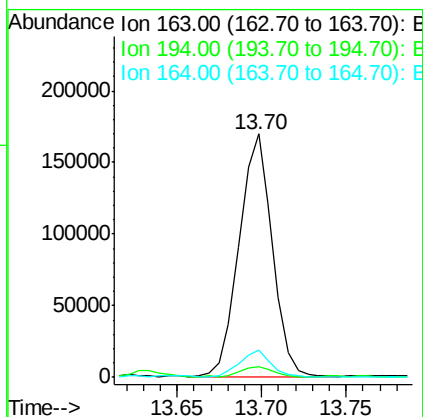
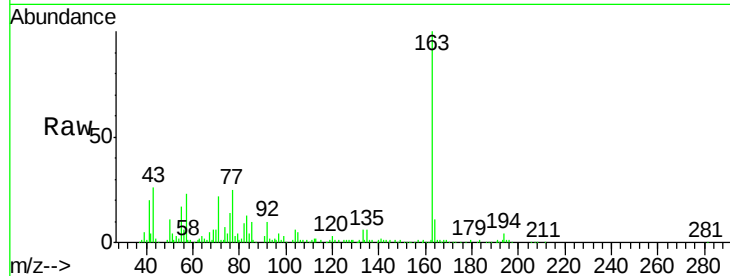
#44  
Dimethylphthalate  
Concen: 8.965 ng/ul  
RT: 13.70 min Scan# 1821  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Instrument :  
BNA\_M  
ClientSampleId :  
F6B20

| Tot Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 231417 |       |       |
| 194     | 4.4   | 3.5    | 5.3   |       |
| 164     | 11.4  | 8.2    | 12.4  |       |

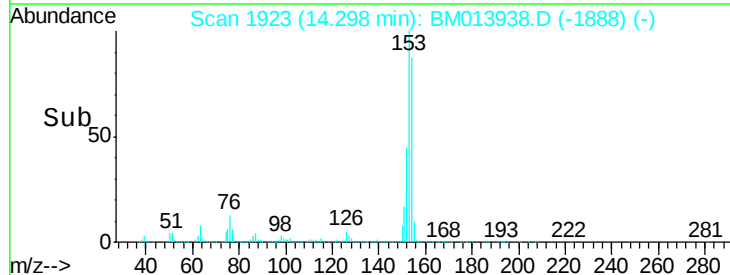
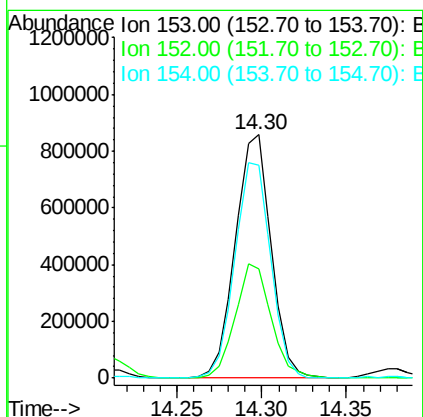
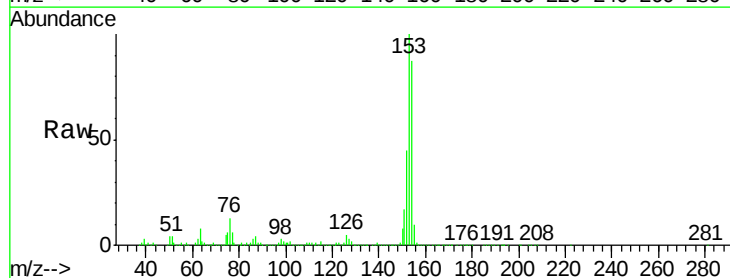
Manual Integrations  
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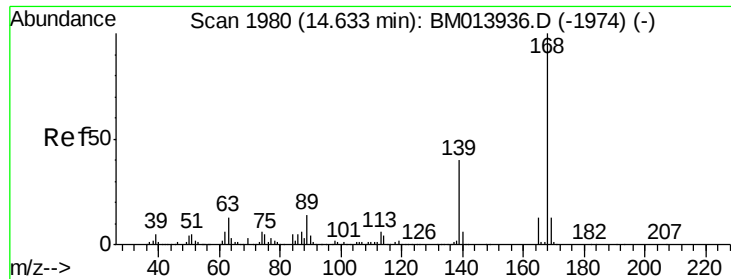
Sohil  
1/29/2018 6:08:12 PM



#49  
Acenaphthene  
Concen: 59.753 ng/ul  
RT: 14.30 min Scan# 1923  
Delta R.T. 0.01 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

| Tgt Ion | Ratio | Resp    | Lower | Upper |
|---------|-------|---------|-------|-------|
| 153     | 100   | 1267683 |       |       |
| 152     | 44.8  | 37.6    | 56.4  |       |
| 154     | 87.2  | 70.4    | 105.6 |       |





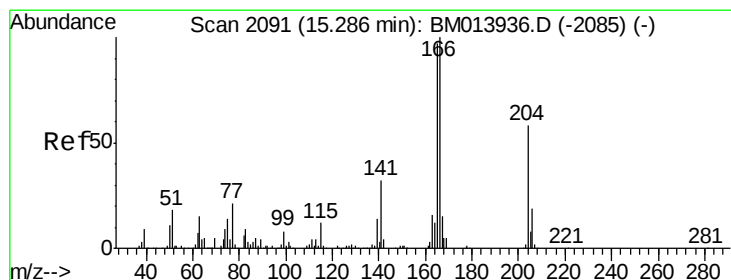
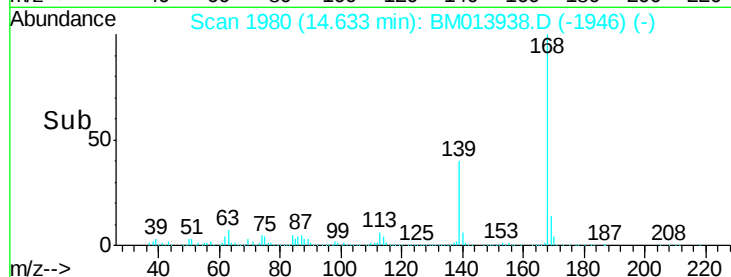
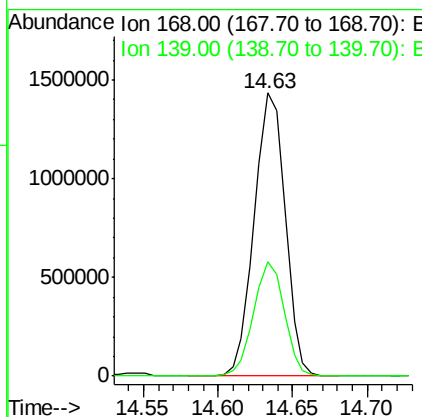
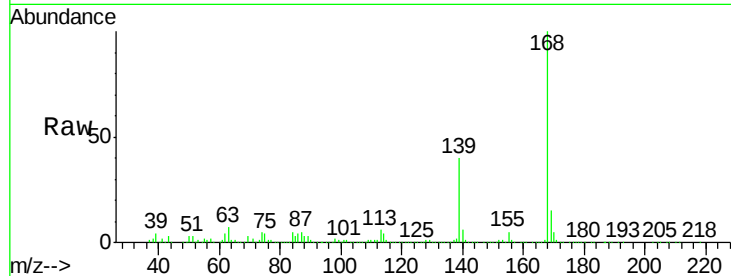
#53  
Dibenzenofuran  
Concen: 64.304 ng/ul  
RT: 14.63 min Scan# 1980  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Instrument :  
BNA\_M  
ClientSampleId :  
F6B20

Tot Ion:168 Resp: 2052325  
Ion Ratio Lower Upper  
168 100  
139 40.3 30.8 46.2

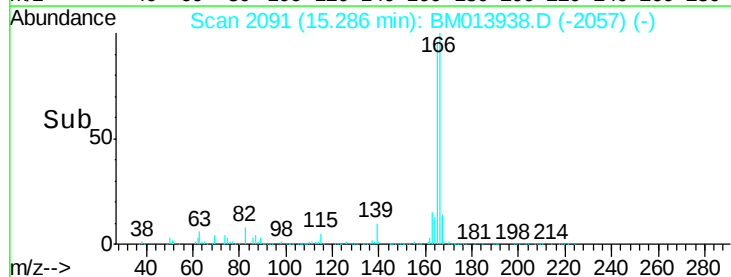
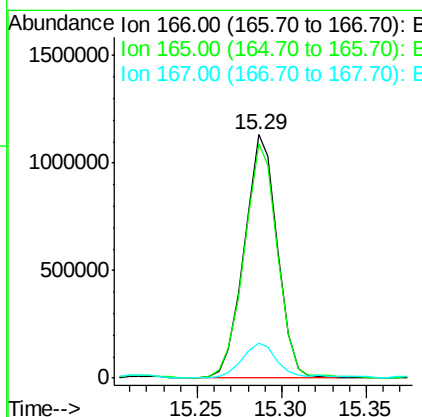
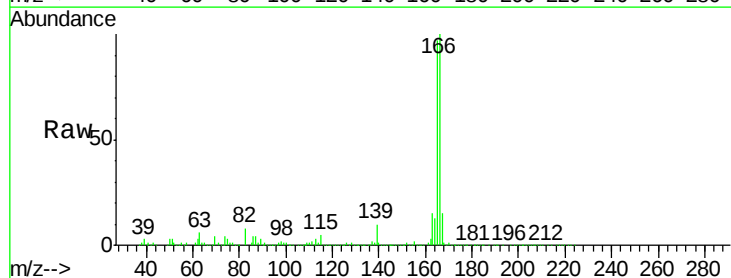
Manual Integrations  
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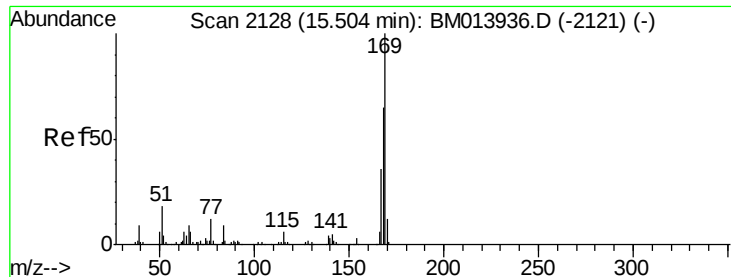
Sohil  
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#58  
Fluorene  
Concen: 58.645 ng/ul  
RT: 15.29 min Scan# 2091  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Tgt Ion:166 Resp: 1533221  
Ion Ratio Lower Upper  
166 100  
165 96.6 77.9 116.9  
167 14.6 10.6 16.0





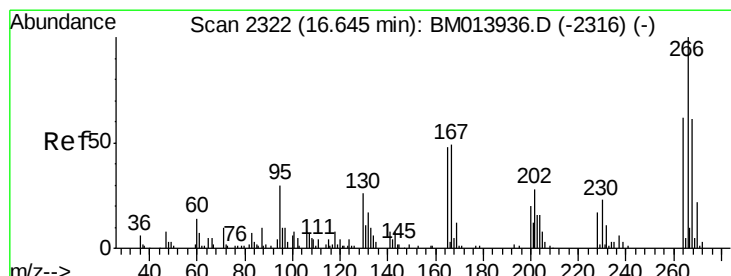
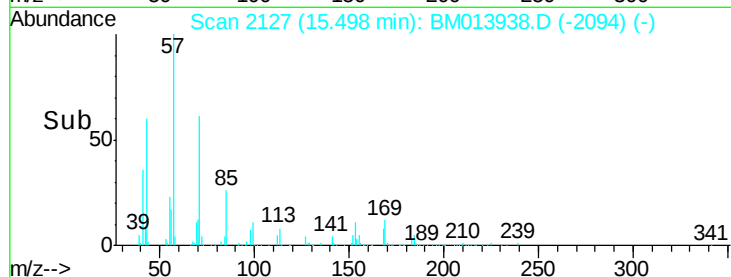
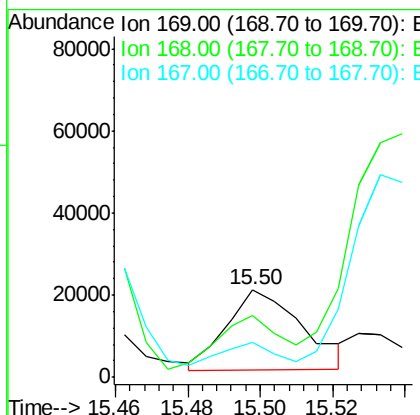
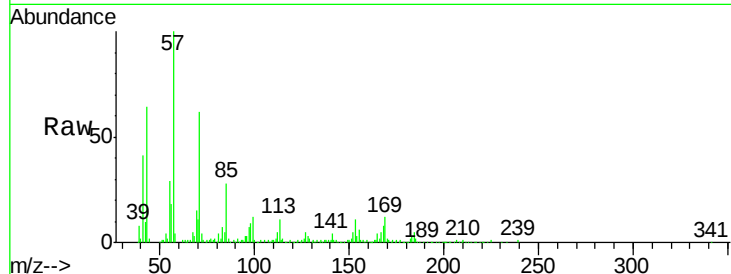
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N-Nitrosodiphenylamine  
Concen: 1.479 ng/ul  
RT: 15.50 min Scan# 2127  
Delta R.T. -0.01 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Instrument :  
BNA\_M  
ClientSampleId :  
F6B20

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 169     | 100   |       |       |
| 168     | 70.3  | 54.0  | 81.0  |
| 167     | 40.2  | 29.1  | 43.7  |

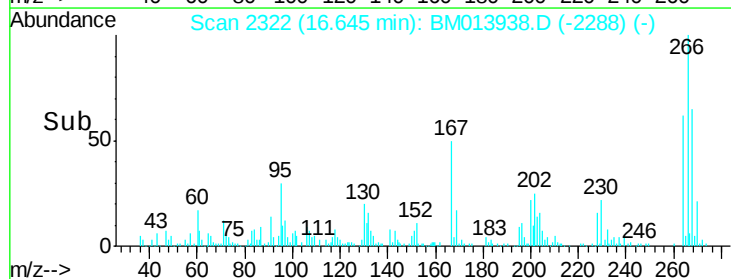
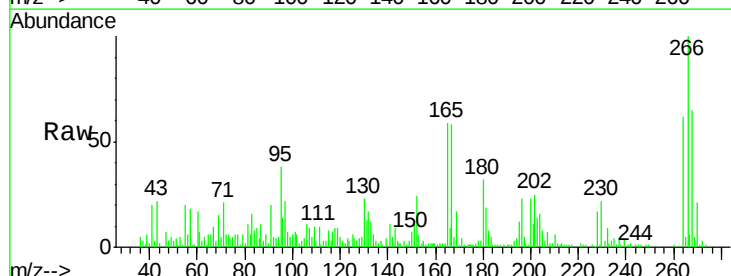
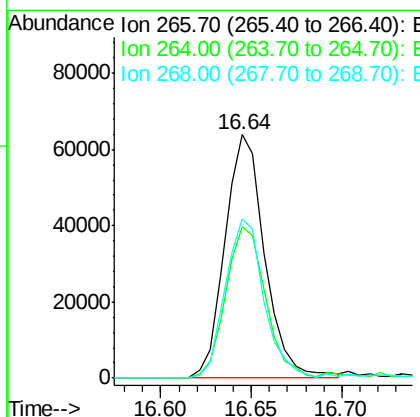
Manual Integrations  
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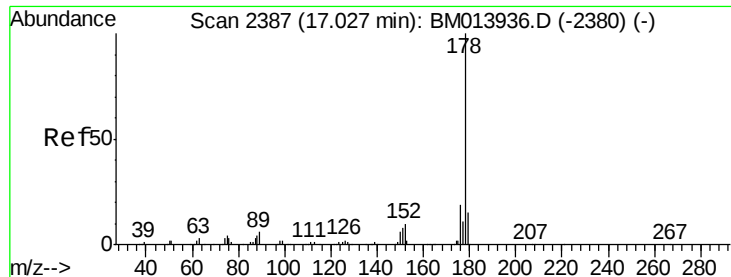
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#68  
Pentachlorophenol  
Concen: 22.181 ng/ul  
RT: 16.64 min Scan# 2322  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 264     | 62.1  | 49.3  | 73.9  |
| 268     | 65.1  | 52.6  | 78.8  |





#69

Phenanthrene

Concen: 247.023 ng/ul

RT: 17.04 min Scan# 2389

Delta R.T. 0.01 min

Lab File: BM013938.D

Acq: 29 Jan 2018 00:38

Instrument :

BNA\_M

ClientSampleId :

F6B20

Tot Ion:178 Resp: 8923498

Ion Ratio Lower Upper

178 100

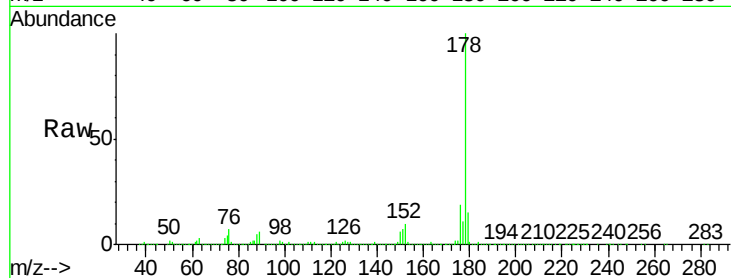
179 15.3 12.6 19.0

176 18.9 14.9 22.3

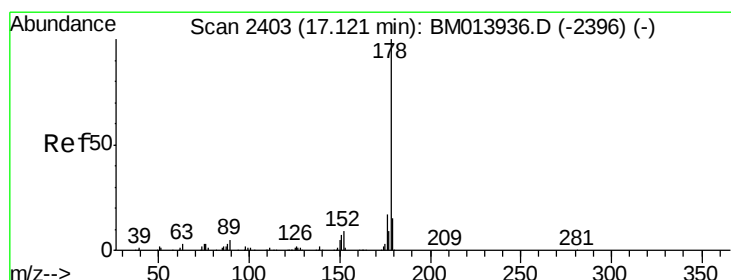
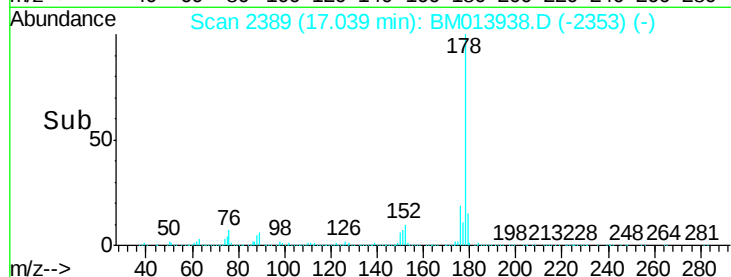
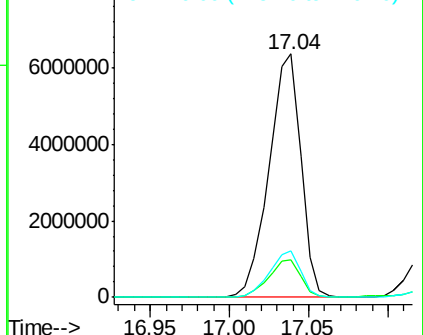
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Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 179.00 (178.70 to 179.70): E  
Ion 176.00 (175.70 to 176.70): E



#71

Anthracene

Concen: 35.721 ng/ul

RT: 17.12 min Scan# 2403

Delta R.T. 0.00 min

Lab File: BM013938.D

Acq: 29 Jan 2018 00:38

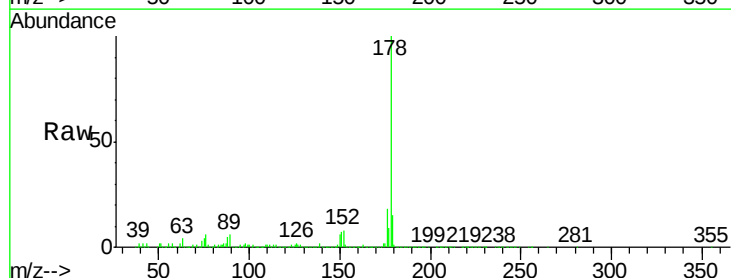
Tgt Ion:178 Resp: 1330977

Ion Ratio Lower Upper

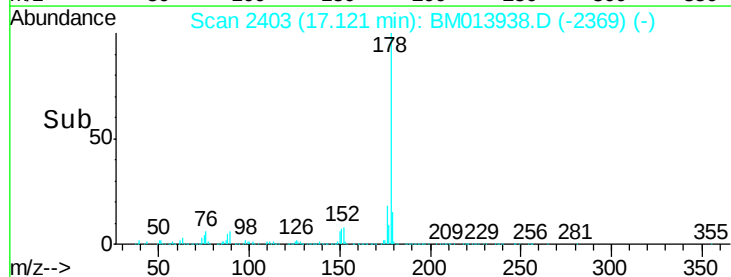
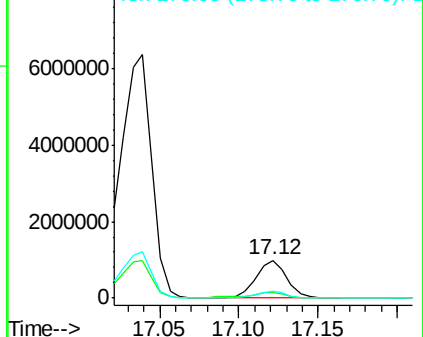
178 100

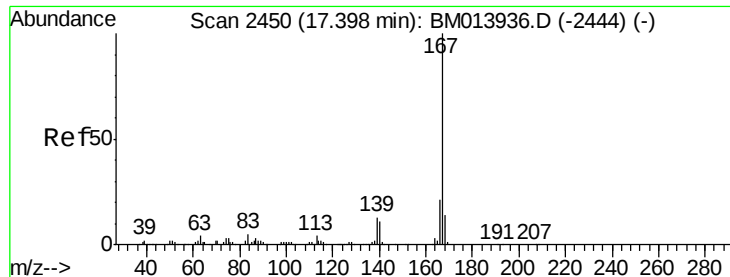
179 15.3 11.7 17.5

176 18.1 14.6 21.8



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





#72

Carbazole

Concen: 5.938 ng/ul

RT: 17.40 min Scan# 2450

Delta R.T. 0.00 min

Lab File: BM013938.D

Acq: 29 Jan 2018 00:38

Instrument :

BNA\_M

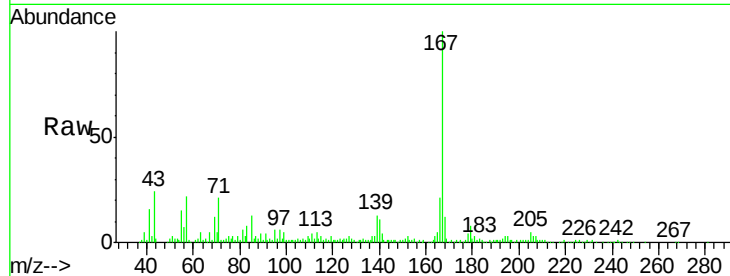
ClientSampleId :

F6B20

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 167   | Resp: | 182637 |
| Ion Ratio | Lower | Upper |        |
| 167       | 100   |       |        |
| 166       | 21.0  | 17.1  | 25.7   |
| 139       | 12.7  | 10.0  | 15.0   |

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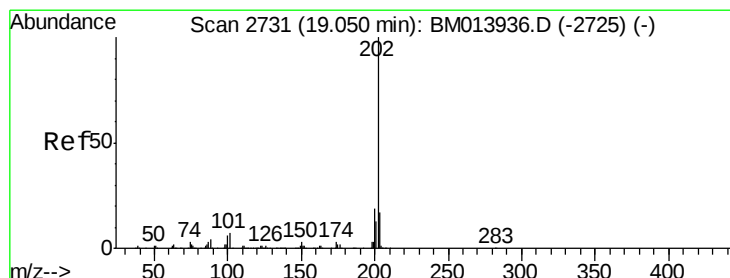
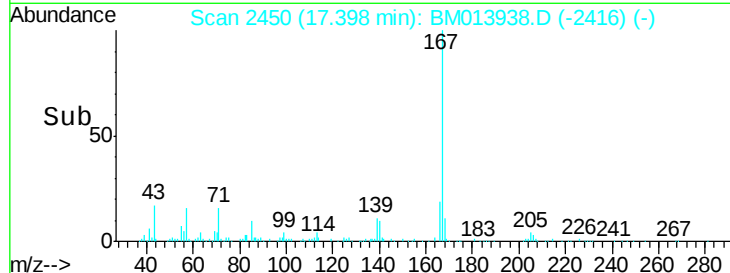
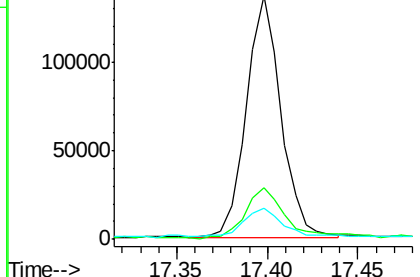
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Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E



#74

Fluoranthene

Concen: 122.629 ng/ul

RT: 19.06 min Scan# 2732

Delta R.T. 0.01 min

Lab File: BM013938.D

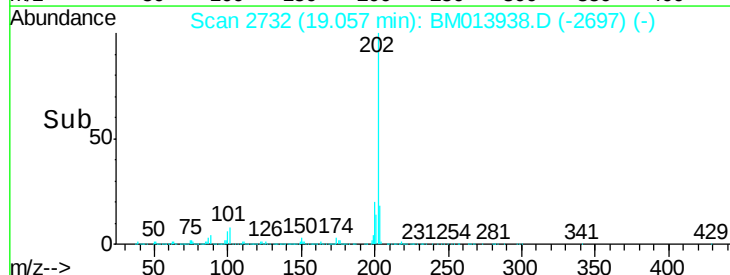
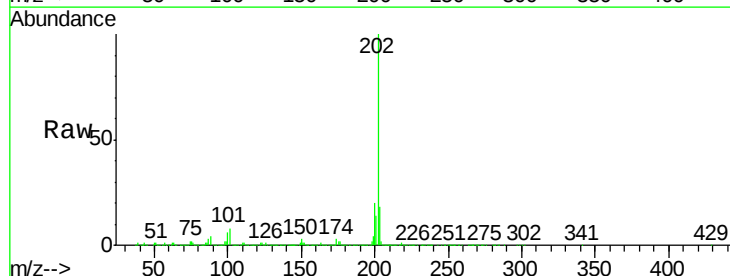
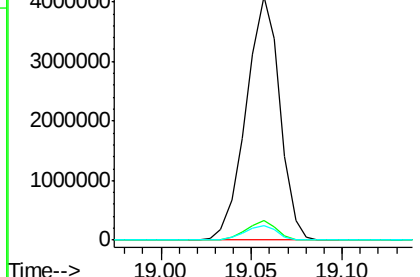
Acq: 29 Jan 2018 00:38

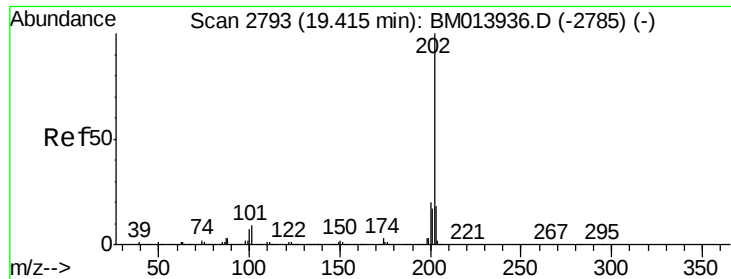
|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 5287860 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 7.8   | 4.6   | 7.0#    |
| 100       | 5.8   | 3.4   | 5.2#    |

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





#77

Pvrene

Concen: 78.980 ng/ul

RT: 19.42 min Scan# 2794

Delta R.T. 0.01 min

Lab File: BM013938.D

Acq: 29 Jan 2018 00:38

Instrument :

BNA\_M

ClientSampleId :

F6B20

Tot Ion:202 Resp: 3281056

Ion Ratio Lower Upper

202 100

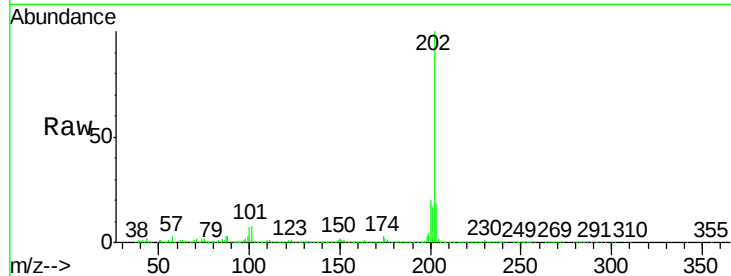
101 8.0 5.1 7.7#

100 6.9 4.9 7.3

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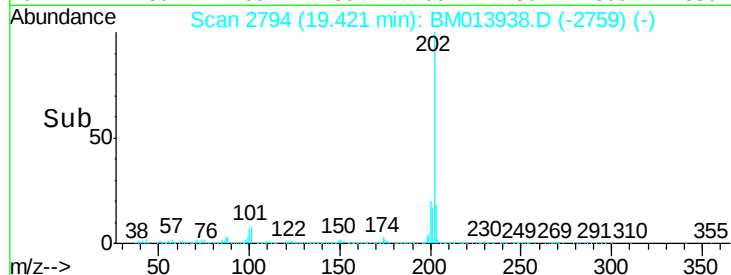


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

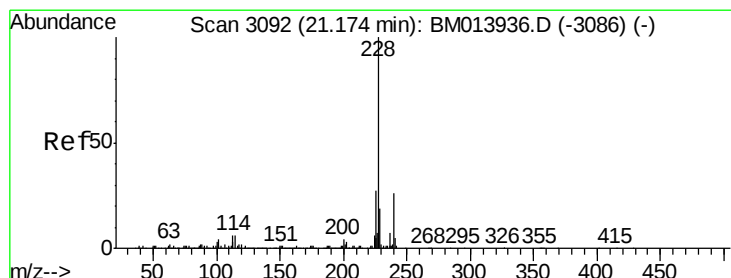
Ion 100.00 (99.70 to 100.70): E

Time-->



Abundance

Time-->



#80

Benzo(a)anthracene

Concen: 19.446 ng/ul

RT: 21.17 min Scan# 3092

Delta R.T. 0.00 min

Lab File: BM013938.D

Acq: 29 Jan 2018 00:38

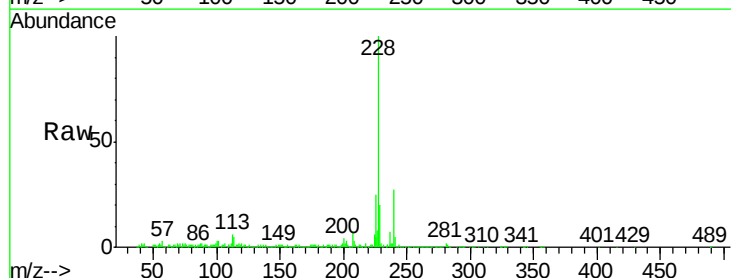
Tgt Ion:228 Resp: 802969

Ion Ratio Lower Upper

228 100

229 20.3 15.4 23.0

226 25.1 21.4 32.0

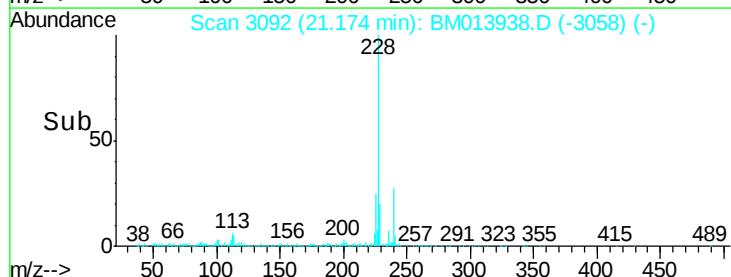


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 229.00 (228.70 to 229.70): E

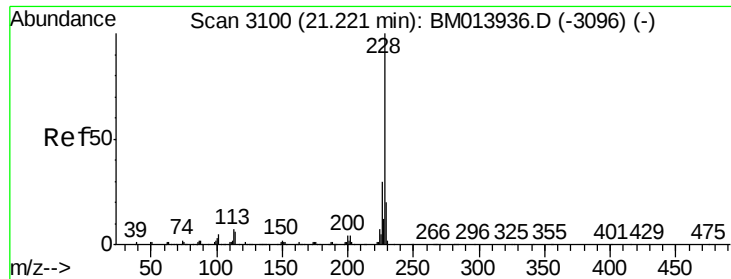
Ion 226.00 (225.70 to 226.70): E

Time-->



Abundance

Time-->



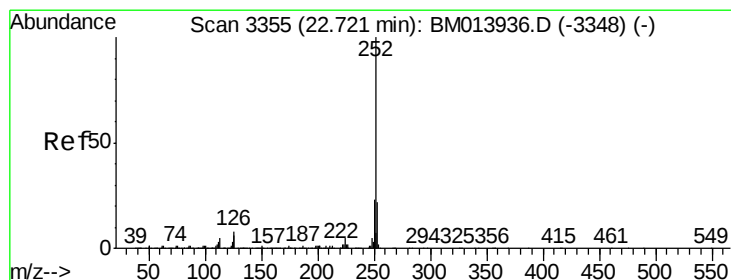
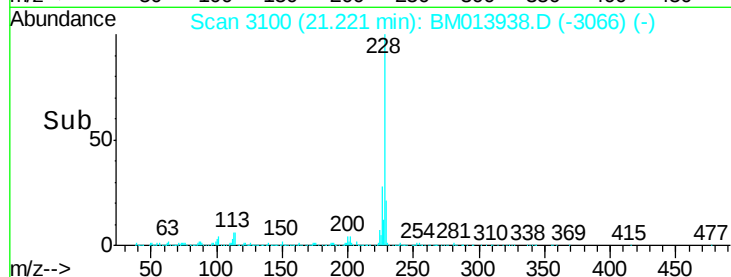
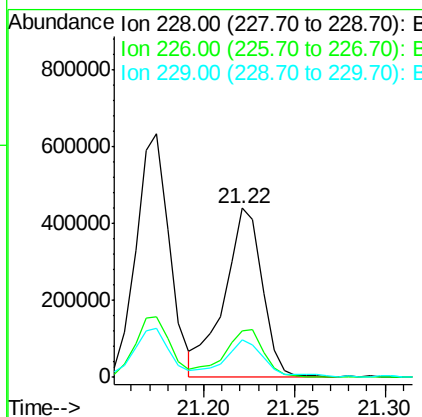
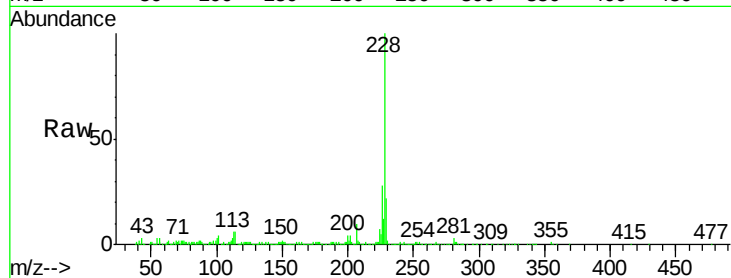
#82  
Chrysene  
Concen: 16.734 ng/ul  
RT: 21.22 min Scan# 3100  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Instrument :  
BNA\_M  
ClientSampleId :  
F6B20

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 27.7  | 23.4  | 35.2  |
| 229     | 22.0  | 15.5  | 23.3  |

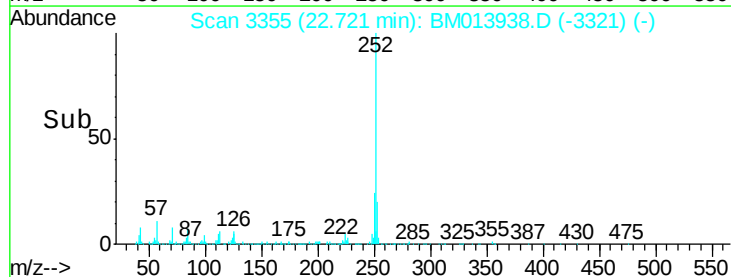
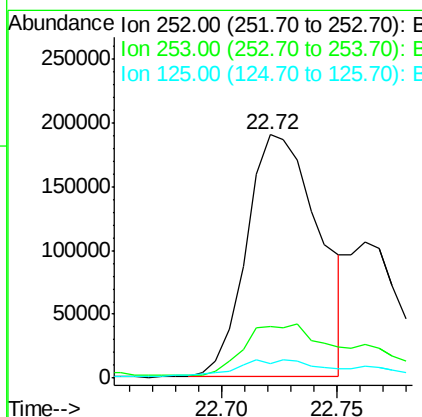
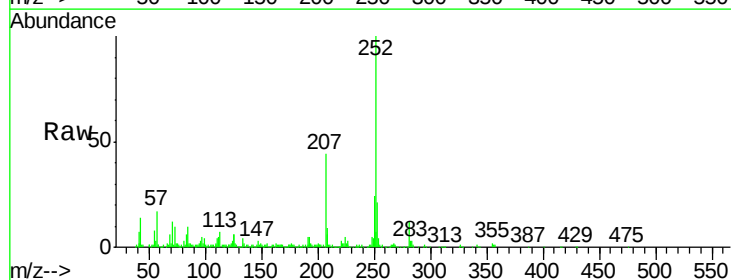
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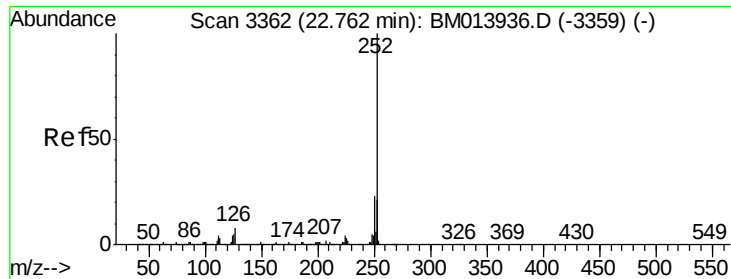
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#85  
Benzo(b)fluoranthene  
Concen: 9.318 ng/ul  
RT: 22.72 min Scan# 3355  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.1  | 17.9  | 26.9  |
| 125     | 6.0   | 3.6   | 5.4   |





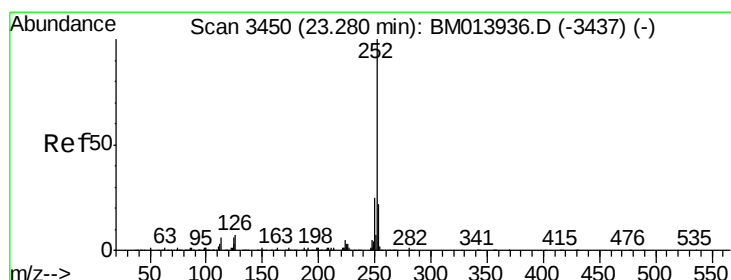
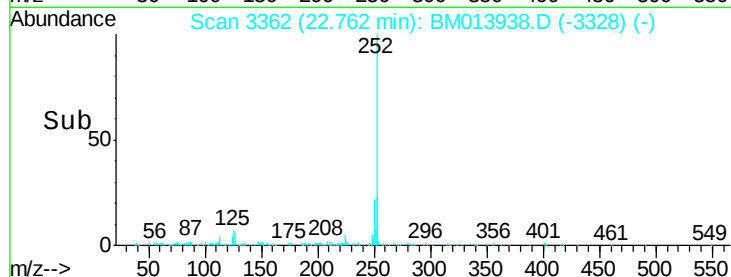
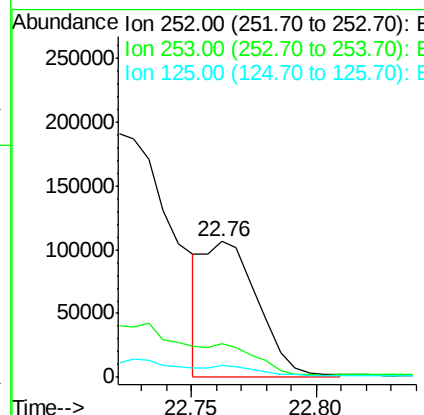
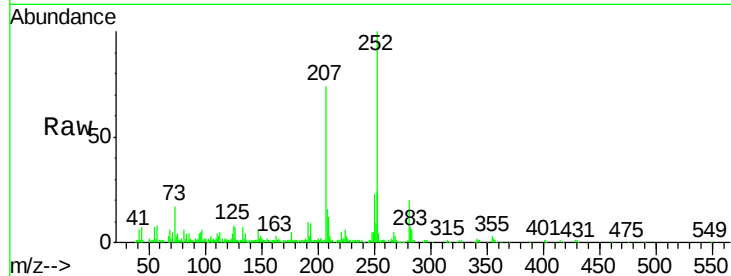
#86  
Benzo(k)fluoranthene  
Concen: 3.766 ng/ul m  
RT: 22.76 min Scan# 3362  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Instrument :  
BNA\_M  
ClientSampled :  
F6B20

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.4  | 17.1  | 25.7  |
| 125     | 8.4   | 3.4   | 5.2   |

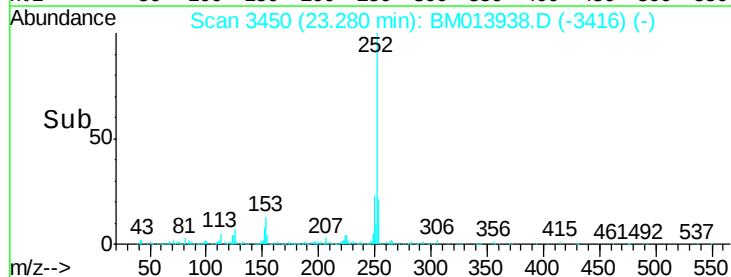
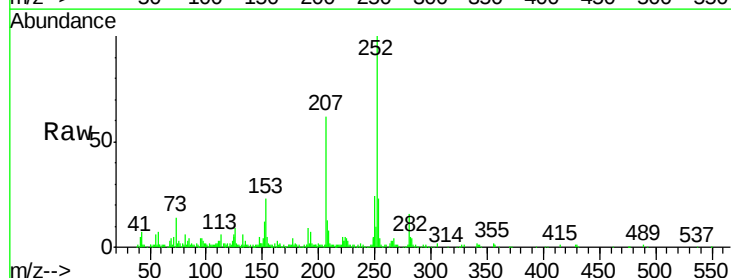
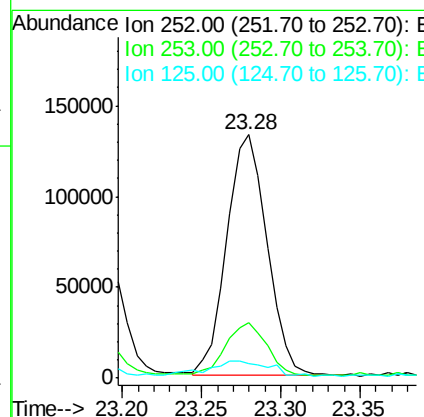
Manual Integrations  
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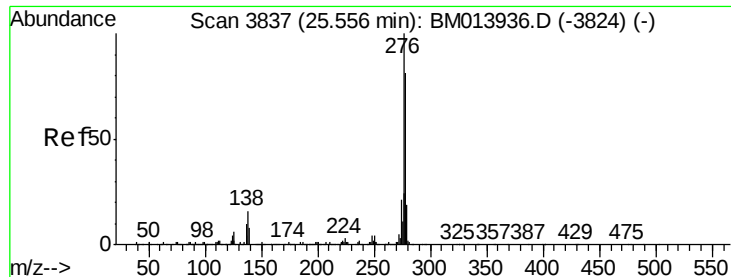
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#88  
Benzo(a)pyrene  
Concen: 5.627 ng/ul  
RT: 23.28 min Scan# 3450  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.0  | 18.2  | 27.2  |
| 125     | 5.9   | 4.0   | 6.0   |





#89

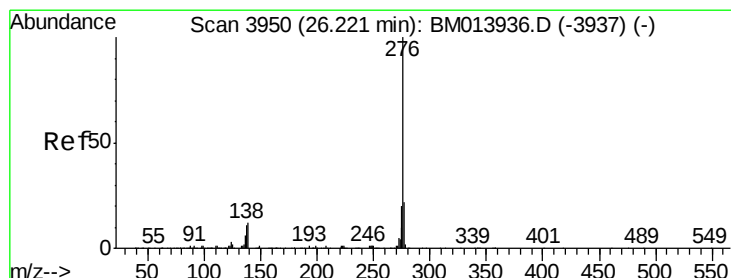
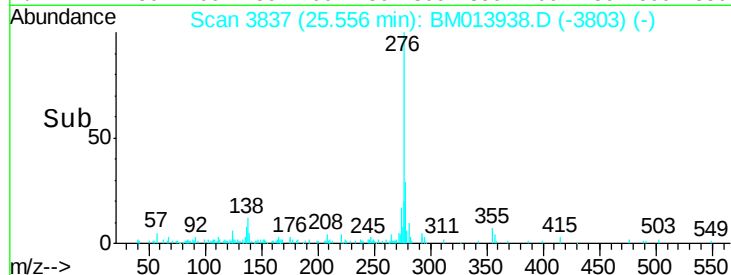
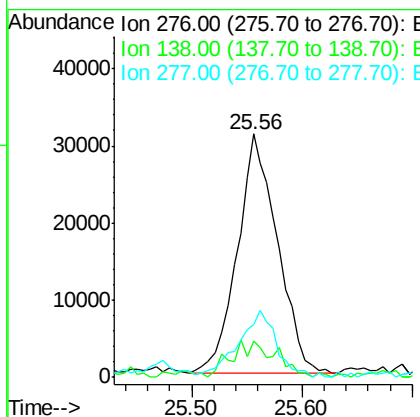
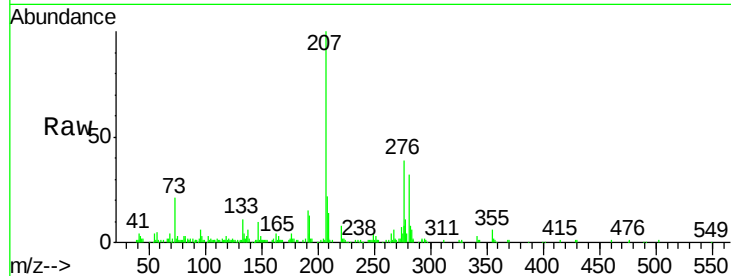
Indeno(1,2,3-cd)pyrene  
Concen: 1.606 ng/ul  
RT: 25.56 min Scan# 3837  
Delta R.T. 0.00 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

Instrument :  
BNA\_M  
ClientSampleId :  
F6B20

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 14.7  | 9.3   | 13.9# |
| 277     | 21.6  | 19.9  | 29.9  |

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#91

Benzo(g,h,i)perylene  
Concen: 1.548 ng/ul  
RT: 26.23 min Scan# 3951  
Delta R.T. 0.01 min  
Lab File: BM013938.D  
Acq: 29 Jan 2018 00:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 12.1  | 8.5   | 12.7  |
| 277     | 27.5  | 18.6  | 28.0  |

