

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM061217\  
 Data File : BM010555.D  
 Acq On : 13 Jun 2017 03:08  
 Operator : SJ/MA  
 Sample : I3558-09DL 10X  
 Misc :  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleID :  
 F5C63DL

Manual Integrations  
 APPROVED

mohammad  
 6/13/2017 3:55:02 PM

Quant Time: Jun 13 05:18:47 2017  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM052717.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Jun 13 03:33:28 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.88  | 152  | 119957   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.69 | 136  | 429967   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.52 | 164  | 314972   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.27 | 188  | 861791   | 20.00 | ng/ul | 0.00     |
| 75) Chrysene-d12          | 21.44 | 240  | 1330127  | 20.00 | ng/ul | 0.00     |
| 83) Perylene-d12          | 23.77 | 264  | 1301657  | 20.00 | ng/ul | 0.00     |

## System Monitoring Compounds

|                                |       |     |        |      |       |      |
|--------------------------------|-------|-----|--------|------|-------|------|
| 3) 1,4-Dioxane-d8              | 0.00  | 96  | 0d     | 0.00 | ng/uL |      |
| 5) Phenol-d5                   | 7.07  | 99  | 13843  | 1.52 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.23  | 67  | 8306m  | 1.63 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.42  | 132 | 12371  | 1.71 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.61  | 113 | 11705  | 1.60 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 9.07  | 128 | 6412   | 2.04 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.79  | 143 | 7100   | 1.95 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.32 | 165 | 15302  | 2.04 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.86 | 131 | 15243  | 2.11 | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.94 | 166 | 61619  | 2.35 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.22 | 160 | 58408  | 1.91 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.79 | 143 | 4810   | 1.23 | ng/ul | 0.02 |
| 57) Fluorene-d10               | 15.52 | 176 | 56584  | 2.46 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.64 | 200 | 8142   | 1.33 | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.37 | 188 | 95861  | 2.29 | ng/ul | 0.00 |
| 76) Pyrene-d10                 | 19.66 | 212 | 127121 | 2.31 | ng/ul | 0.00 |
| 87) Benzo(a)pyrene-d12         | 23.62 | 264 | 130894 | 2.16 | ng/ul | 0.00 |

## Target Compounds

|                            |       |     |         |         | Qvalue |     |
|----------------------------|-------|-----|---------|---------|--------|-----|
| 28) Naphthalene            | 10.74 | 128 | 2538364 | 117.702 | ng/ul  | 99  |
| 34) 2-Methylnaphthalene    | 12.34 | 142 | 800638  | 48.966  | ng/ul  | 97  |
| 40) 1,1'-Biphenyl          | 13.35 | 154 | 251812  | 9.855   | ng/ul  | 95  |
| 47) Acenaphthylene         | 14.25 | 152 | 42428   | 1.422   | ng/ul# | 91  |
| 49) Acenaphthene           | 14.59 | 153 | 984724  | 47.064  | ng/ul  | 99  |
| 53) Dibenzofuran           | 14.92 | 168 | 1168510 | 37.769  | ng/ul  | 100 |
| 58) Fluorene               | 15.57 | 166 | 1220965 | 48.110  | ng/ul  | 97  |
| 69) Phenanthrene           | 17.32 | 178 | 7793062 | 169.389 | ng/ul  | 99  |
| 71) Anthracene             | 17.40 | 178 | 1188901 | 24.754  | ng/ul  | 99  |
| 72) Carbazole              | 17.69 | 167 | 289970  | 7.133   | ng/ul  | 96  |
| 74) Fluoranthene           | 19.33 | 202 | 4931580 | 87.168  | ng/ul# | 95  |
| 77) Pyrene                 | 19.69 | 202 | 3193405 | 46.590  | ng/ul# | 93  |
| 80) Benzo(a)anthracene     | 21.42 | 228 | 1221479 | 16.285  | ng/ul  | 96  |
| 82) Chrysene               | 21.47 | 228 | 951565  | 14.034  | ng/ul  | 97  |
| 85) Benzo(b)fluoranthene   | 23.06 | 252 | 915051  | 12.081  | ng/ul# | 98  |
| 86) Benzo(k)fluoranthene   | 23.10 | 252 | 273424  | 3.779   | ng/ul# | 94  |
| 88) Benzo(a)pyrene         | 23.67 | 252 | 592706m | 7.895   | ng/ul  |     |
| 89) Indeno(1,2,3-cd)pyrene | 26.14 | 276 | 259499  | 2.736   | ng/ul# | 97  |
| 91) Benzo(g,h,i)perylene   | 26.88 | 276 | 201395  | 2.577   | ng/ul# | 93  |

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

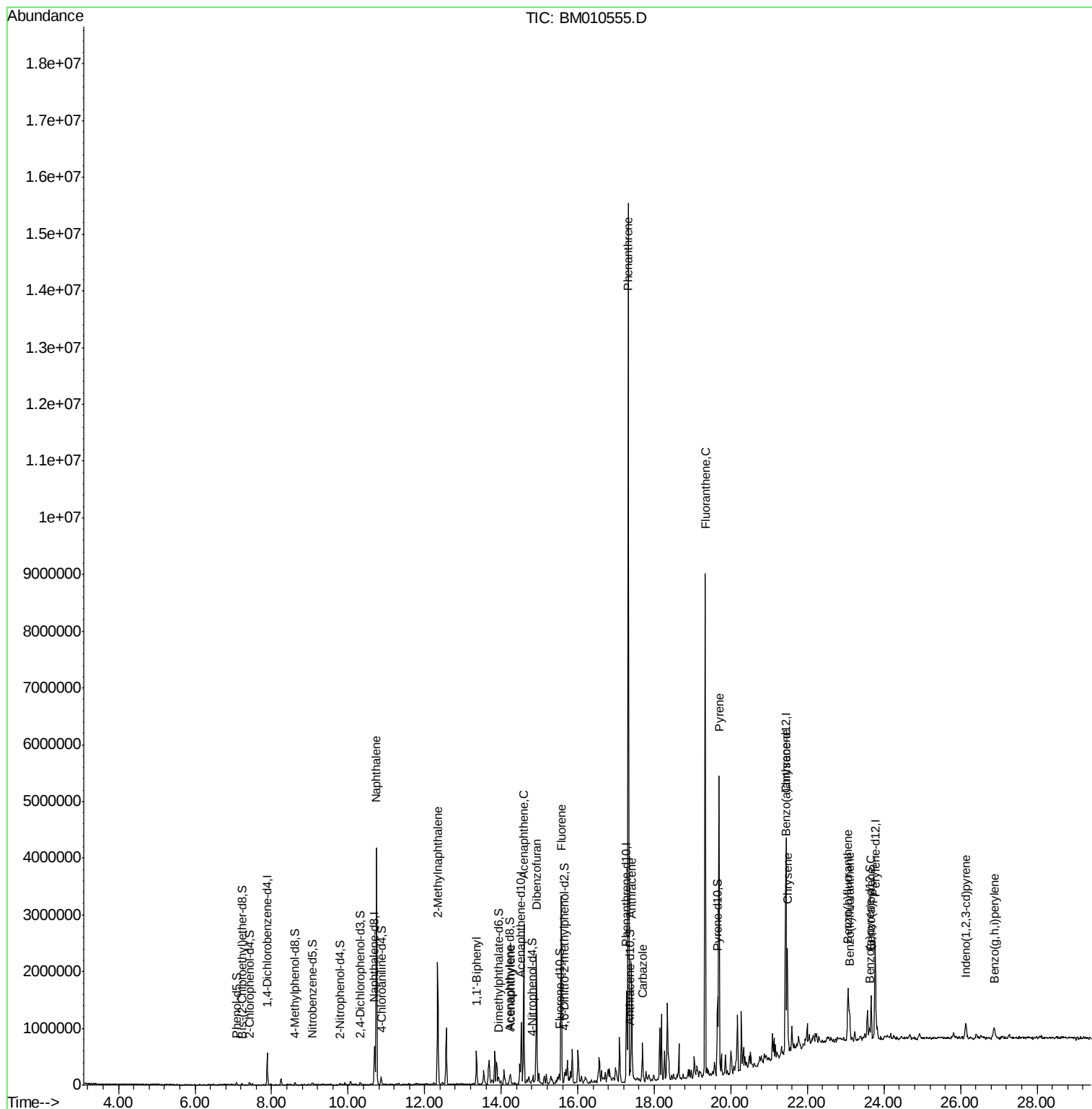
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM061217\  
Data File : BM010555.D  
Acq On : 13 Jun 2017 03:08  
Operator : SJ/MA  
Sample : I3558-09DL 10X  
Misc :  
ALS Vial : 29 Sample Multiplier: 1

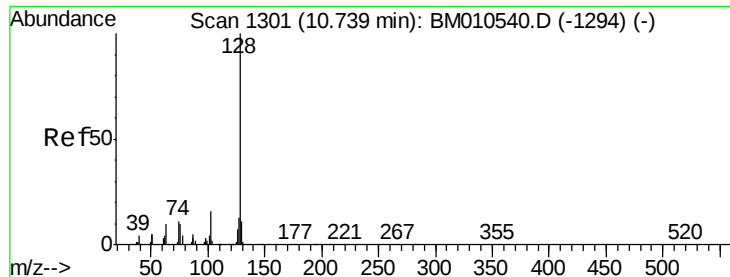
Instrument :  
BNA\_M  
ClientSampleId :  
F5C63DL

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Quant Time: Jun 13 05:18:47 2017  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM052717.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Tue Jun 13 03:33:28 2017  
Response via : Initial Calibration





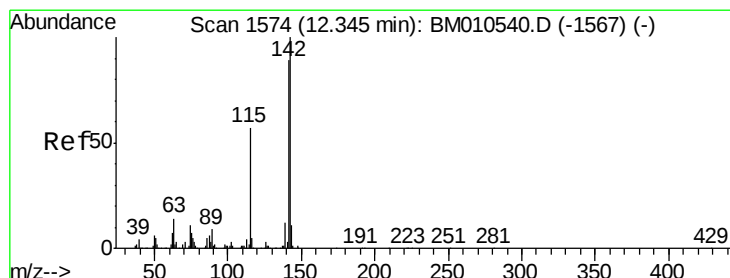
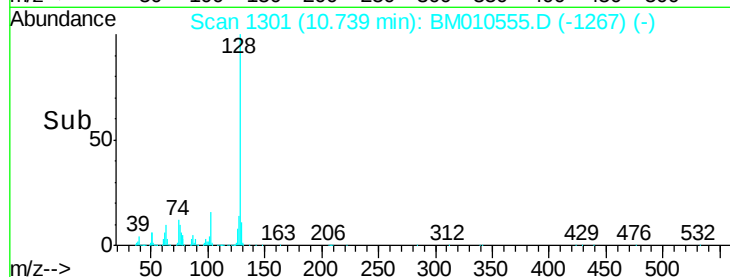
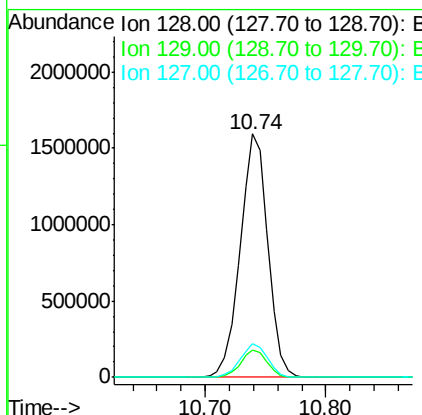
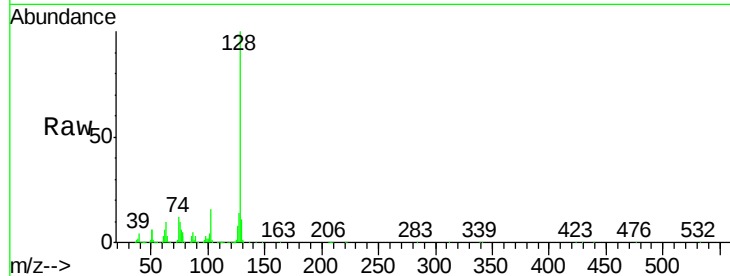
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Naphthalene  
Concen: 117.702 ng/ul  
RT: 10.74 min Scan# 1301  
Delta R.T. 0.00 min  
Lab File: BM010555.D  
Acq: 13 Jun 2017 03:08

Instrument :  
BNA\_M  
ClientSampleId :  
F5C63DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.4  | 8.8   | 13.2  |
| 127     | 14.0  | 10.6  | 16.0  |

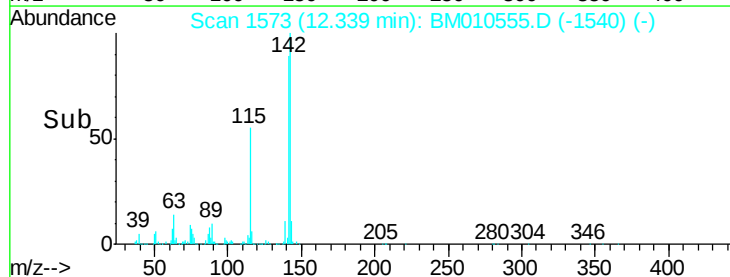
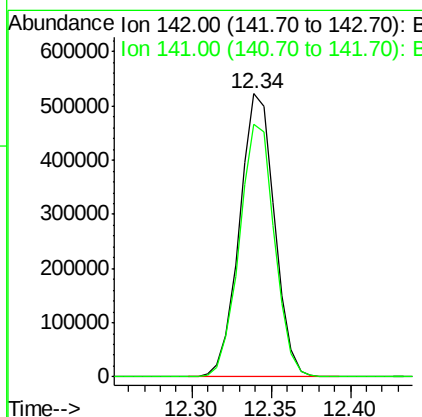
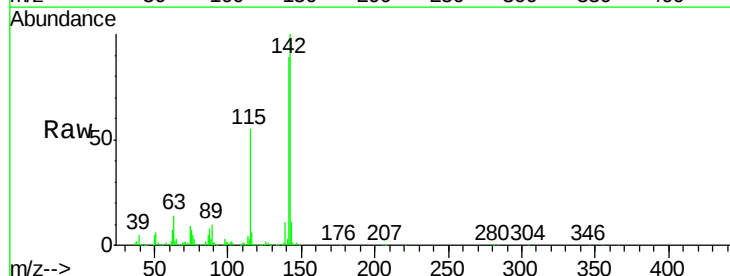
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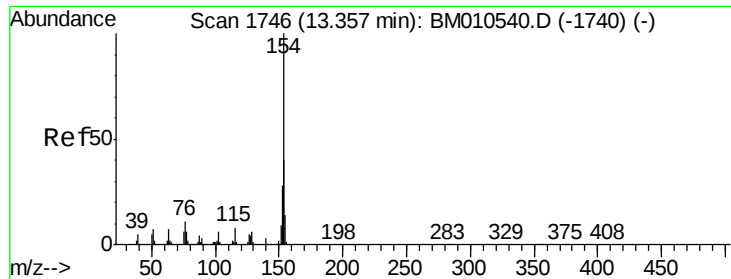
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#34  
2-Methylnaphthalene  
Concen: 48.966 ng/ul  
RT: 12.34 min Scan# 1573  
Delta R.T. -0.01 min  
Lab File: BM010555.D  
Acq: 13 Jun 2017 03:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 89.3  | 74.1  | 111.1 |





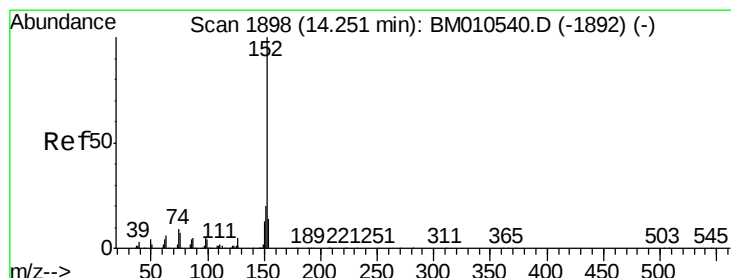
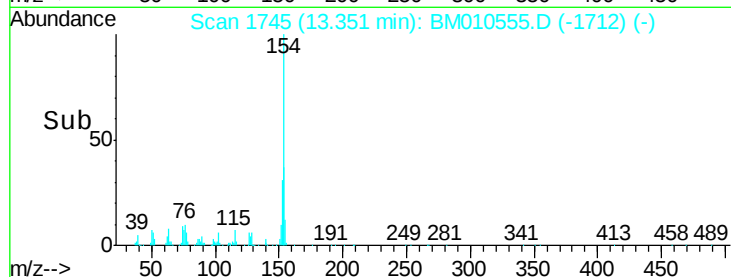
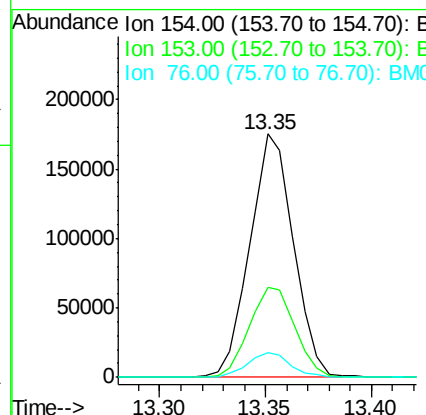
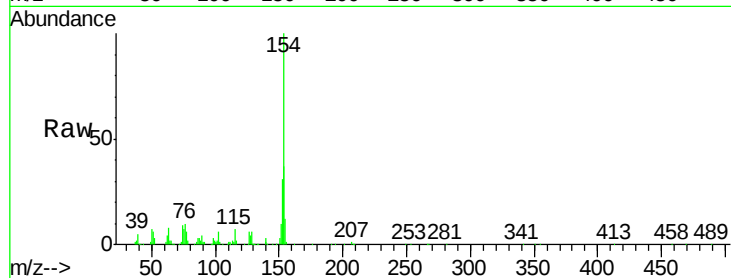
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 1,1'-Biphenyl  
 Concen: 9.855 ng/ul  
 RT: 13.35 min Scan# 1745  
 Delta R.T. -0.01 min  
 Lab File: BM010555.D  
 Acq: 13 Jun 2017 03:08

Instrument :  
 BNA\_M  
 ClientSampleId :  
 F5C63DL

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 154     | 100   | 251812 |       |       |
| 153     | 37.0  | 32.6   | 48.8  |       |
| 76      | 10.0  | 8.5    | 12.7  |       |

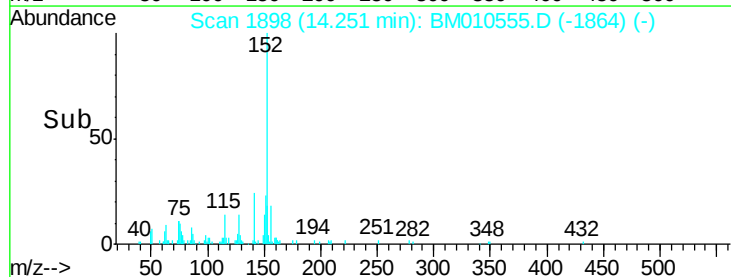
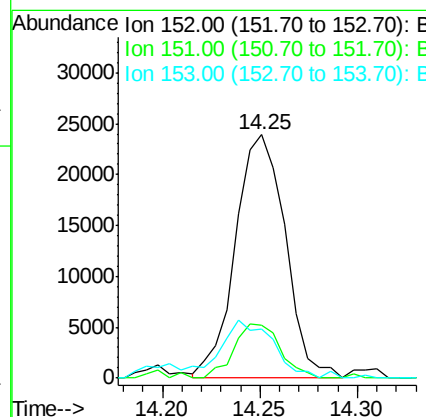
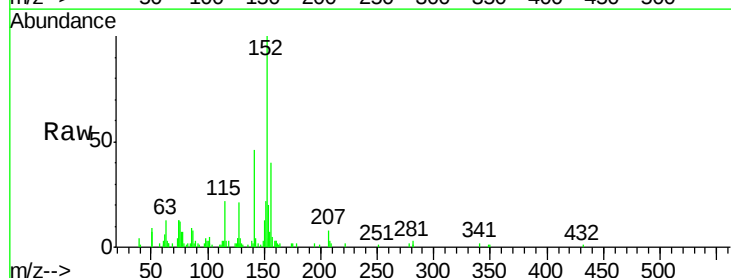
Manual Integrations  
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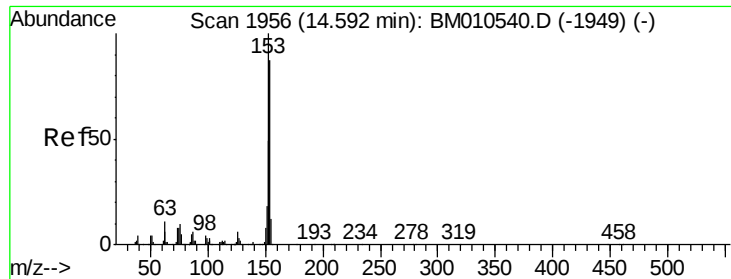
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#47  
 Acenaphthylene  
 Concen: 1.422 ng/ul  
 RT: 14.25 min Scan# 1898  
 Delta R.T. 0.00 min  
 Lab File: BM010555.D  
 Acq: 13 Jun 2017 03:08

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 152     | 100   | 42428 |       |       |
| 151     | 21.9  | 16.3  | 24.5  |       |
| 153     | 19.9  | 10.2  | 15.4  |       |





#49

Acenaphthene

Concen: 47.064 ng/ul

RT: 14.59 min Scan# 1955

Delta R.T. -0.01 min

Lab File: BM010555.D

Acq: 13 Jun 2017 03:08

Instrument :

BNA\_M

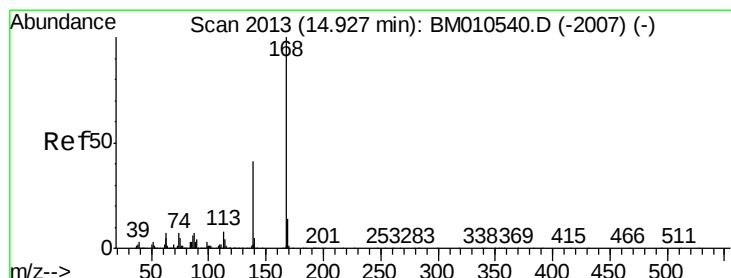
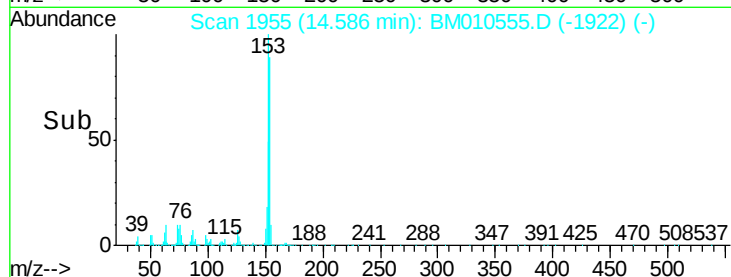
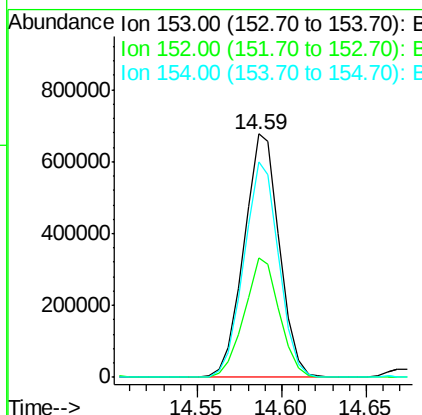
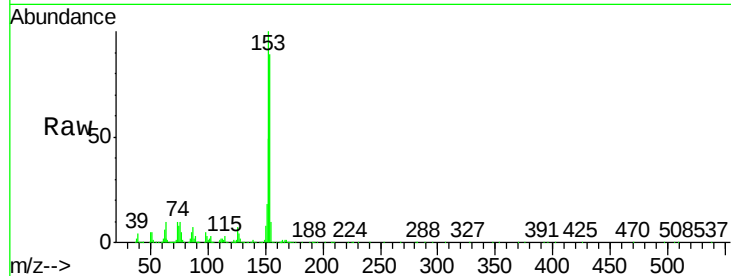
ClientSampleId :

F5C63DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 153   | Resp: | 984724 |
| Ion Ratio | Lower | Upper |        |
| 153       | 100   |       |        |
| 152       | 49.0  | 37.6  | 56.4   |
| 154       | 88.6  | 70.4  | 105.6  |

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#53

Dibenzofuran

Concen: 37.769 ng/ul

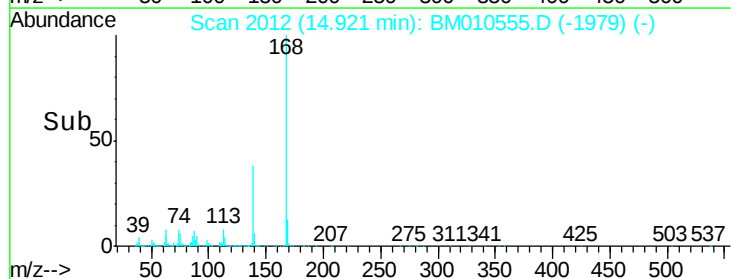
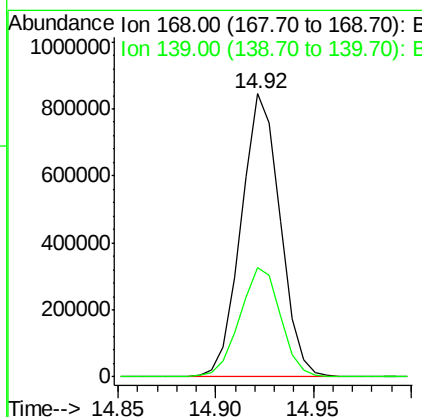
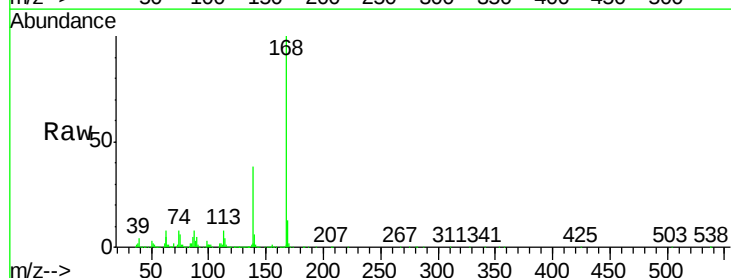
RT: 14.92 min Scan# 2012

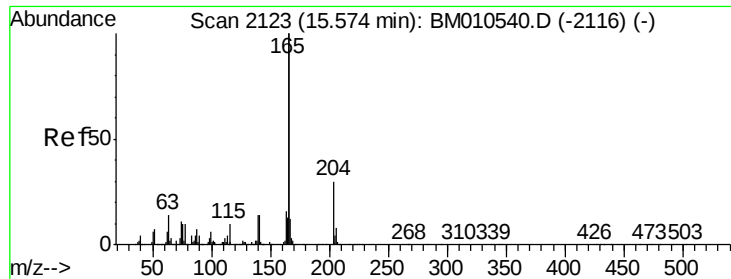
Delta R.T. -0.01 min

Lab File: BM010555.D

Acq: 13 Jun 2017 03:08

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 168   | Resp: | 1168510 |
| Ion Ratio | Lower | Upper |         |
| 168       | 100   |       |         |
| 139       | 38.4  | 30.8  | 46.2    |





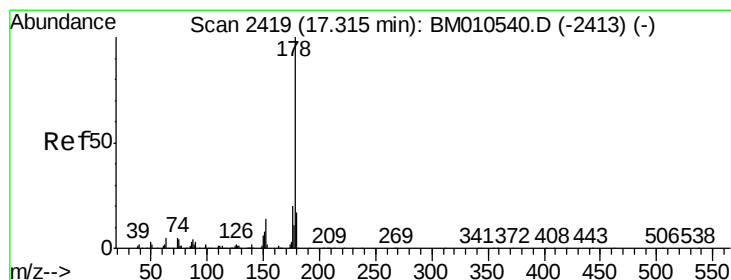
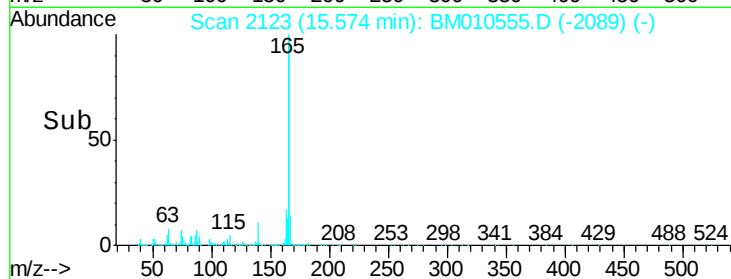
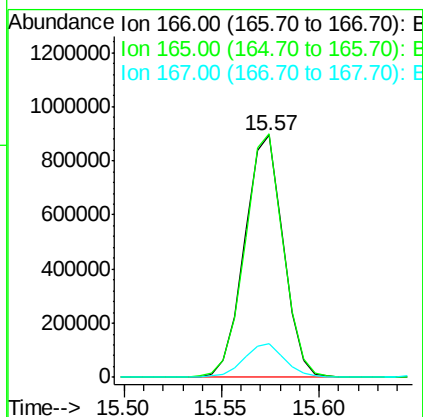
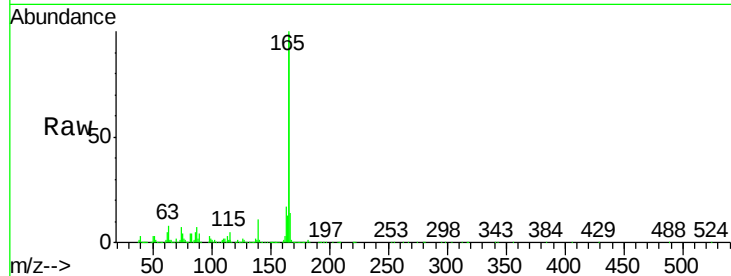
#58  
**Fluorene**  
 Concen: 48.110 ng/ul  
 RT: 15.57 min Scan# 2123  
 Delta R.T. 0.00 min  
 Lab File: BM010555.D  
 Acq: 13 Jun 2017 03:08

Instrument :  
 BNA\_M  
 ClientSampleId :  
 F5C63DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 100.5 | 77.9  | 116.9 |
| 167     | 13.9  | 10.6  | 16.0  |

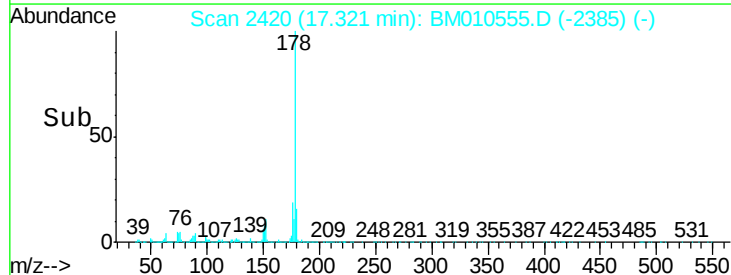
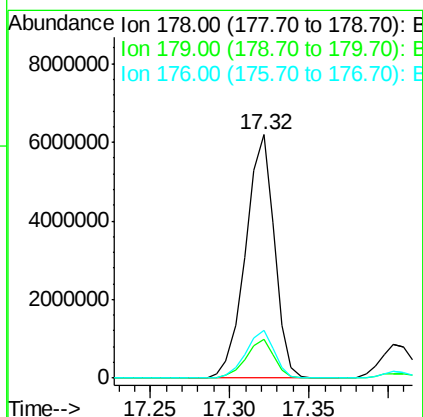
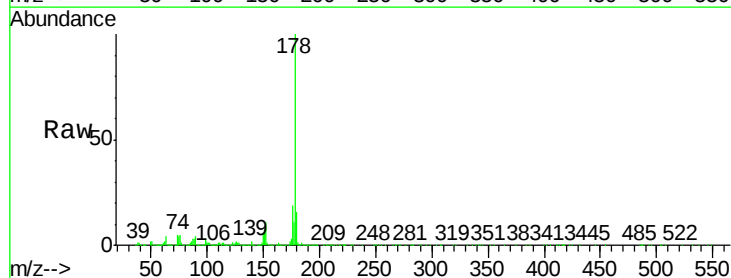
Manual Integrations  
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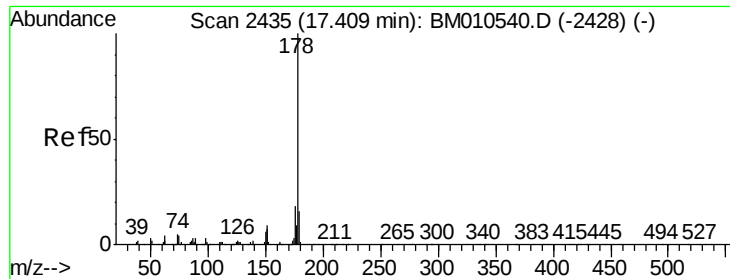
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#69  
**Phenanthrene**  
 Concen: 169.389 ng/ul  
 RT: 17.32 min Scan# 2420  
 Delta R.T. 0.01 min  
 Lab File: BM010555.D  
 Acq: 13 Jun 2017 03:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 16.0  | 12.6  | 19.0  |
| 176     | 19.4  | 14.9  | 22.3  |





#71

Anthracene

Concen: 24.754 ng/ul

RT: 17.40 min Scan# 2434

Delta R.T. -0.01 min

Lab File: BM010555.D

Acq: 13 Jun 2017 03:08

Instrument :

BNA\_M

ClientSampleId :

F5C63DL

Tgt Ion:178 Resp: 1188901

Ion Ratio Lower Upper

178 100

179 14.0 11.7 17.5

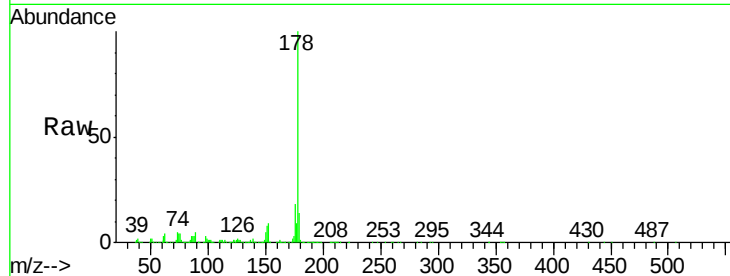
176 18.5 14.6 21.8

Manual Integrations

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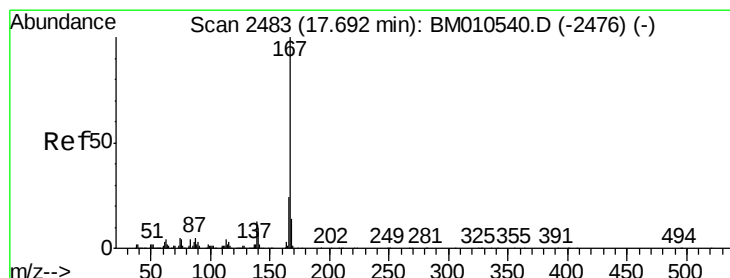
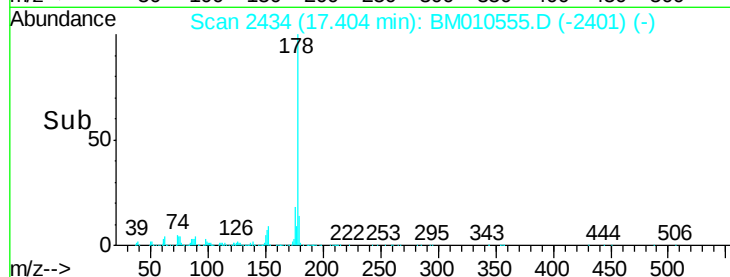
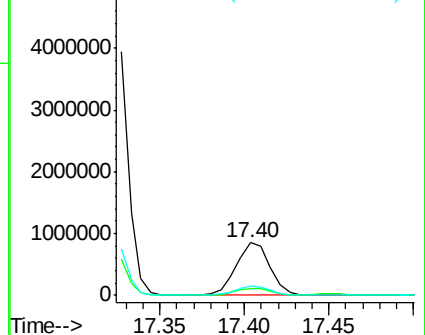
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Abundance Ion 178.00 (177.70 to 178.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 176.00 (175.70 to 176.70): E



#72

Carbazole

Concen: 7.133 ng/ul

RT: 17.69 min Scan# 2483

Delta R.T. 0.00 min

Lab File: BM010555.D

Acq: 13 Jun 2017 03:08

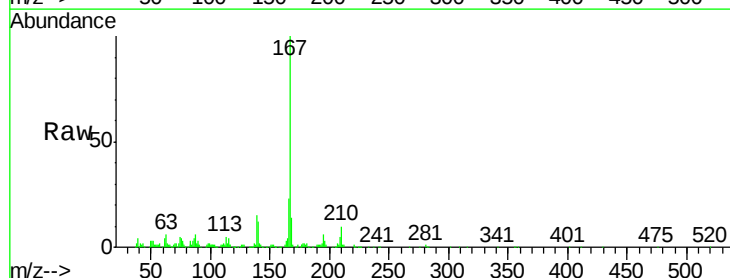
Tgt Ion:167 Resp: 289970

Ion Ratio Lower Upper

167 100

166 23.0 17.1 25.7

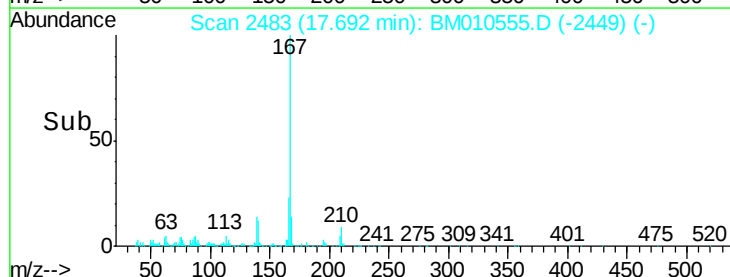
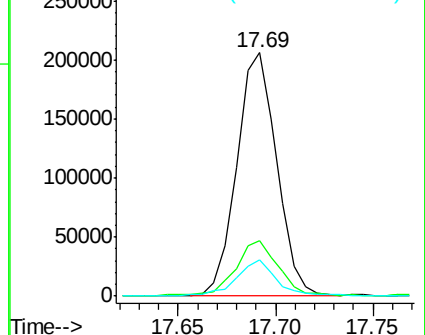
139 14.8 10.0 15.0

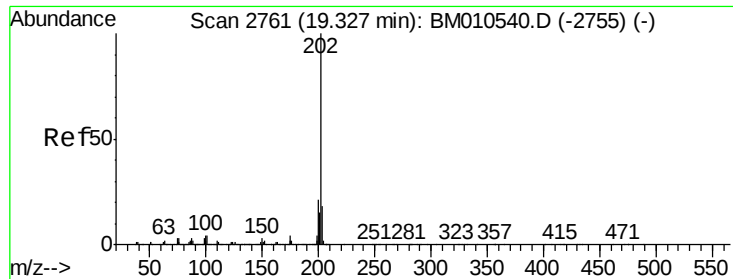


Abundance Ion 167.00 (166.70 to 167.70): E

Ion 166.00 (165.70 to 166.70): E

Ion 139.00 (138.70 to 139.70): E





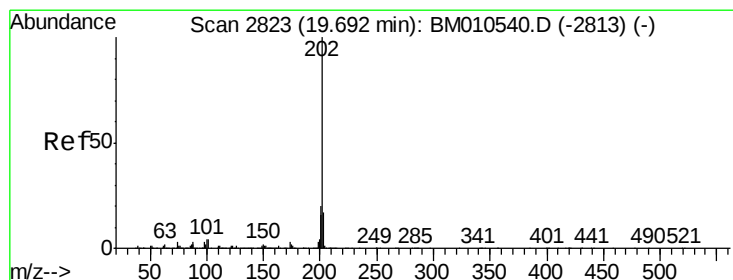
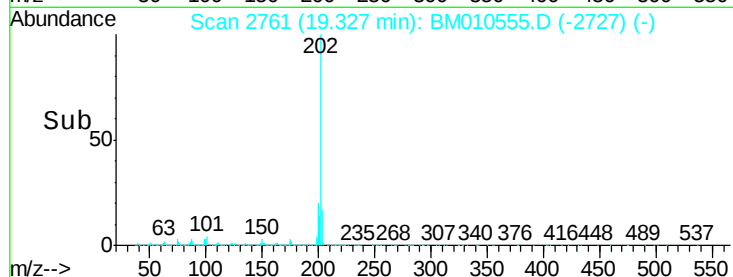
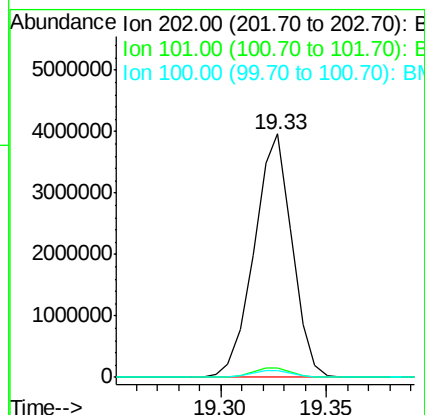
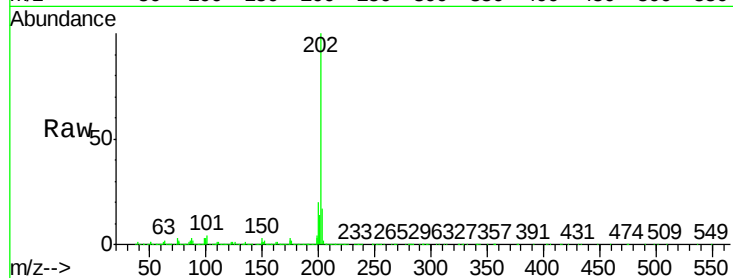
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 Fluoranthene  
 Concen: 87.168 ng/ul  
 RT: 19.33 min Scan# 2761  
 Delta R.T. 0.00 min  
 Lab File: BM010555.D  
 Acq: 13 Jun 2017 03:08

Instrument :  
 BNA\_M  
 ClientSampleId :  
 F5C63DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 3.7   | 4.6   | 7.0#  |
| 100     | 3.0   | 3.4   | 5.2#  |

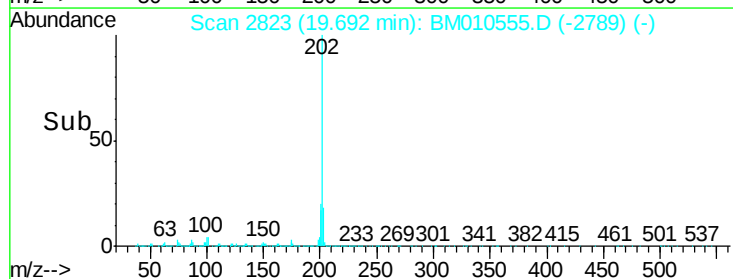
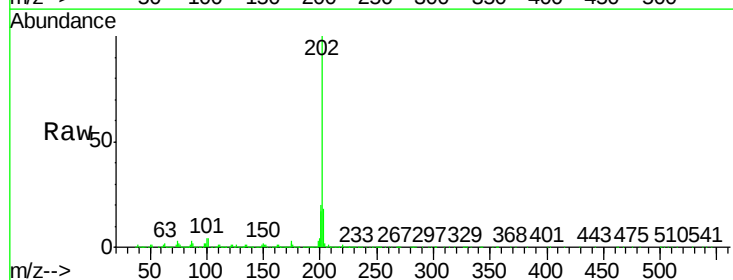
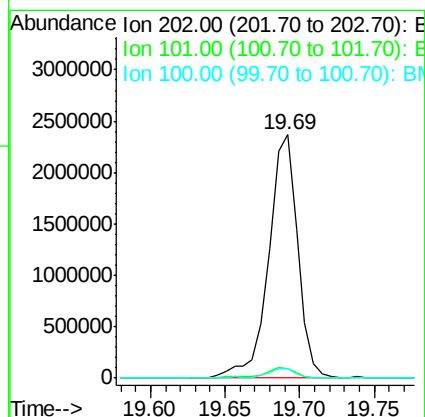
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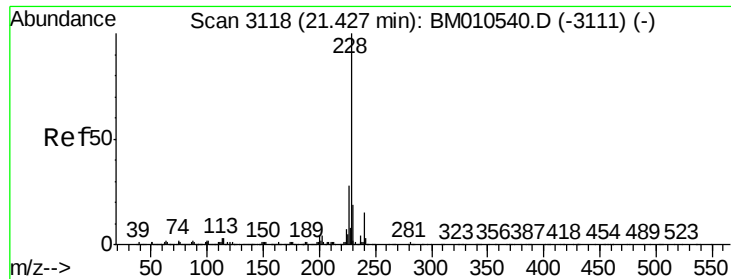
mohammad  
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#77  
 Pyrene  
 Concen: 46.590 ng/ul  
 RT: 19.69 min Scan# 2823  
 Delta R.T. 0.00 min  
 Lab File: BM010555.D  
 Acq: 13 Jun 2017 03:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 4.0   | 5.1   | 7.7#  |
| 100     | 3.7   | 4.9   | 7.3#  |





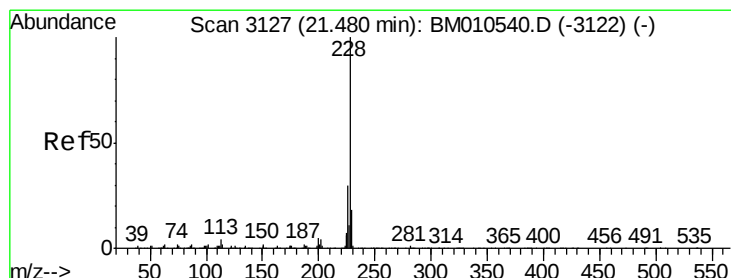
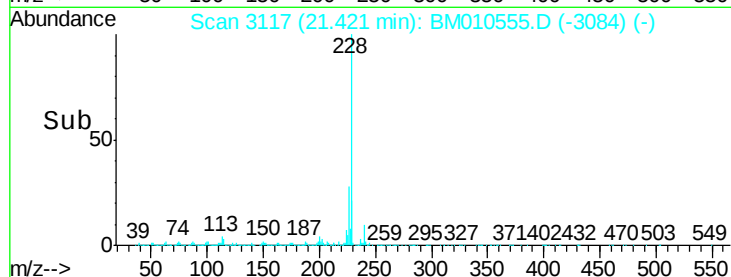
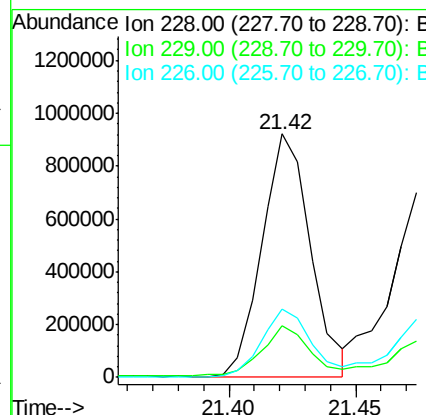
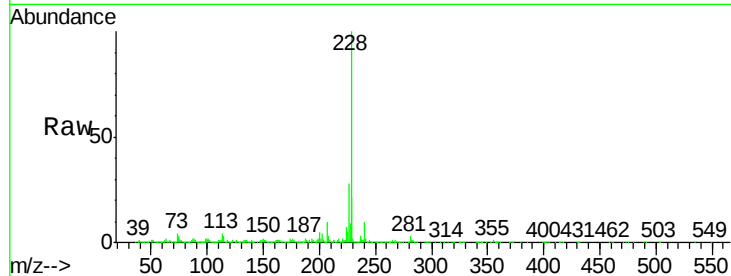
#80  
Benzo(a)anthracene  
Concen: 16.285 ng/ul  
RT: 21.42 min Scan# 3117  
Delta R.T. -0.01 min  
Lab File: BM010555.D  
Acq: 13 Jun 2017 03:08

Instrument :  
BNA\_M  
ClientSampleId :  
F5C63DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 21.3  | 15.4  | 23.0  |
| 226     | 28.1  | 21.4  | 32.0  |

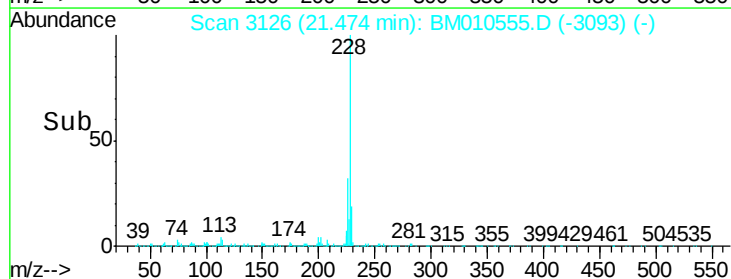
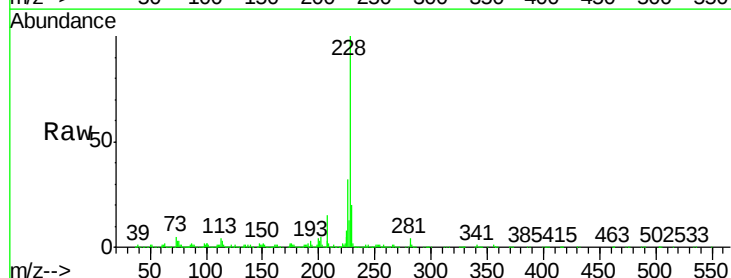
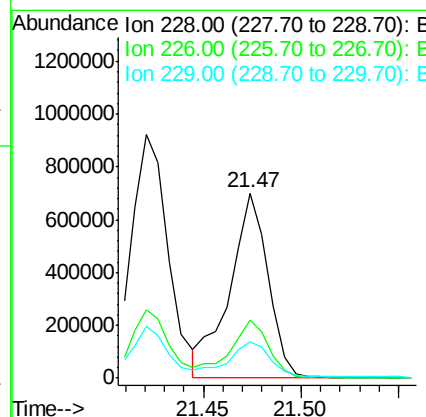
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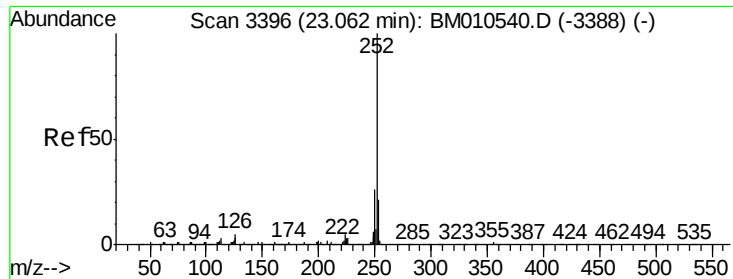
mohammad  
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#82  
Chrysene  
Concen: 14.034 ng/ul  
RT: 21.47 min Scan# 3126  
Delta R.T. -0.01 min  
Lab File: BM010555.D  
Acq: 13 Jun 2017 03:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.6  | 23.4  | 35.2  |
| 229     | 19.7  | 15.5  | 23.3  |





#85

Benzo(b)fluoranthene

Concen: 12.081 ng/u1

RT: 23.06 min Scan# 3396

Delta R.T. 0.00 min

Lab File: BM010555.D

Acq: 13 Jun 2017 03:08

Instrument :

BNA\_M

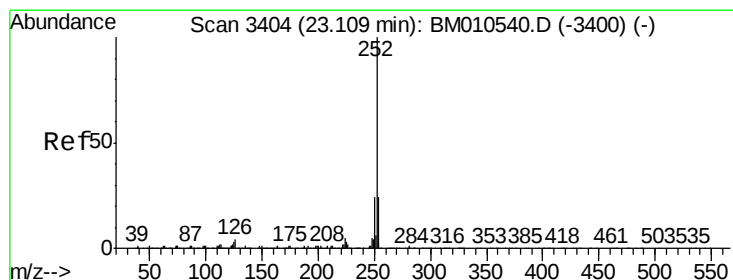
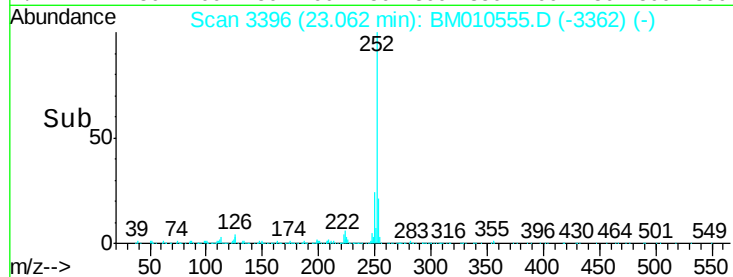
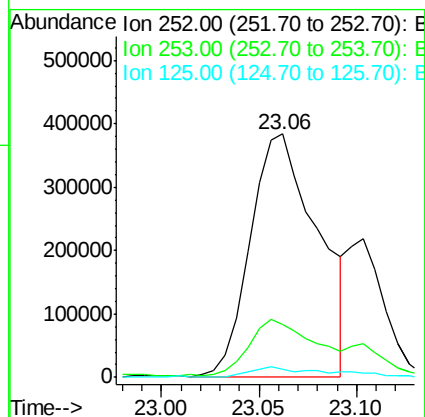
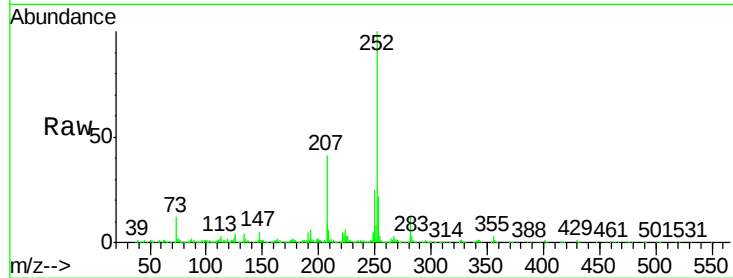
ClientSampled :

F5C63DL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.9  | 17.9  | 26.9  |
| 125     | 3.2   | 3.6   | 5.4#  |

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#86

Benzo(k)fluoranthene

Concen: 3.779 ng/u1

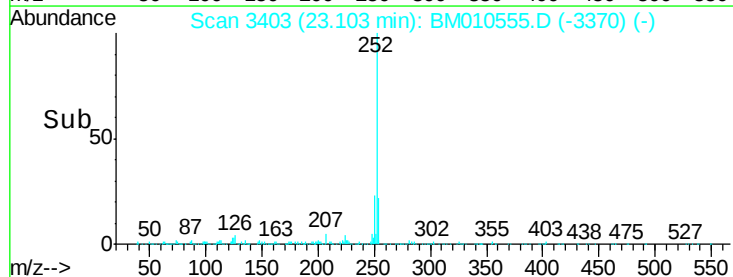
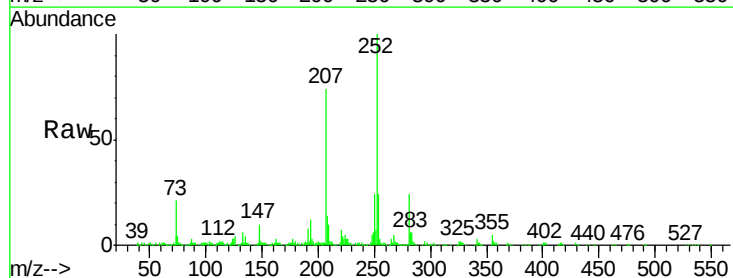
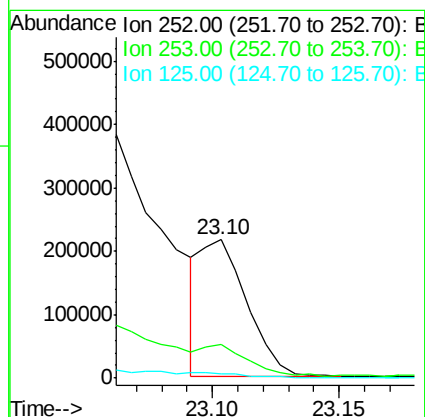
RT: 23.10 min Scan# 3403

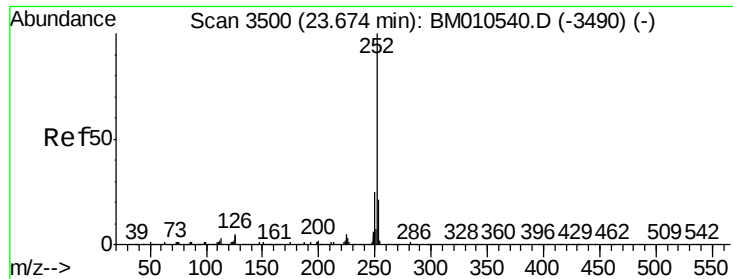
Delta R.T. -0.01 min

Lab File: BM010555.D

Acq: 13 Jun 2017 03:08

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.3  | 17.1  | 25.7  |
| 125     | 3.4   | 3.4   | 5.2#  |





#88

Benzo(a)pyrene

Concen: 7.895 ng/ul m

RT: 23.67 min Scan# 3499

Delta R.T. -0.01 min

Lab File: BM010555.D

Acq: 13 Jun 2017 03:08

Instrument :

BNA\_M

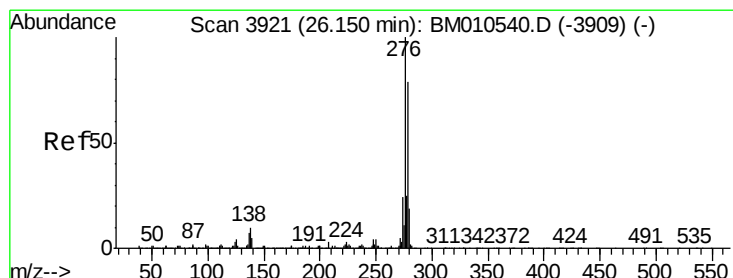
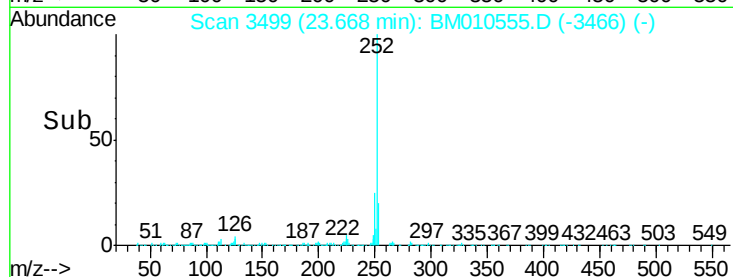
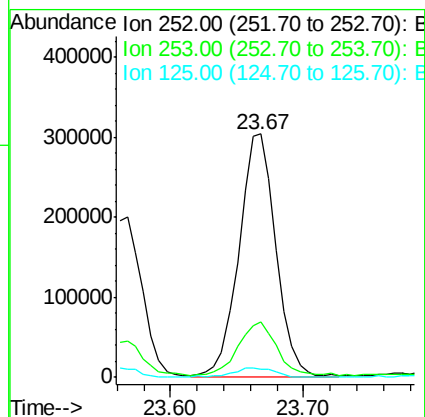
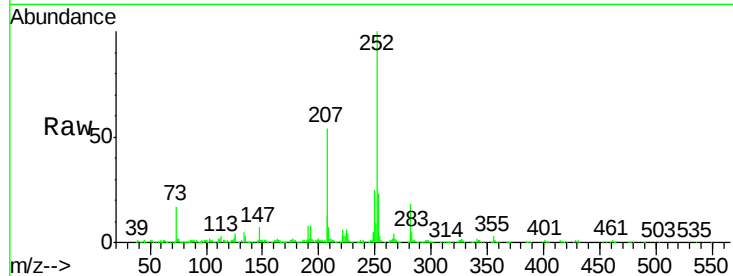
ClientSampleId :

F5C63DL

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 252     | 100   | 592706 |       |       |
| 253     | 22.5  | 18.2   | 27.2  |       |
| 125     | 3.4   | 4.0    | 6.0   |       |

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#89

Indeno(1,2,3-cd)pyrene

Concen: 2.736 ng/ul

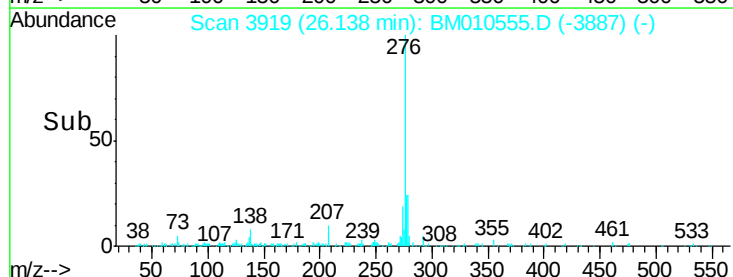
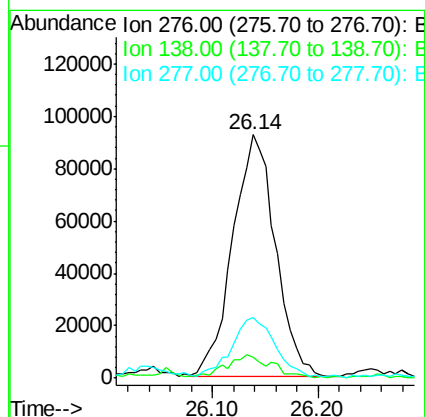
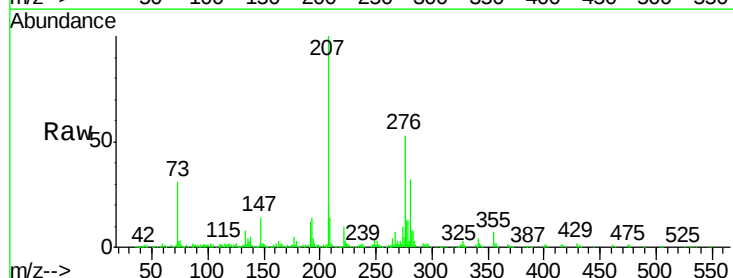
RT: 26.14 min Scan# 3919

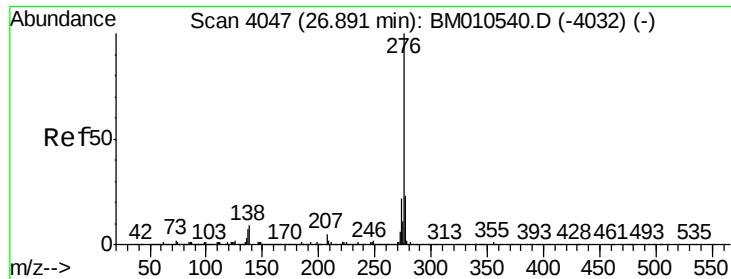
Delta R.T. -0.01 min

Lab File: BM010555.D

Acq: 13 Jun 2017 03:08

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 276     | 100   | 259499 |       |       |
| 138     | 8.8   | 9.3    | 13.9  |       |
| 277     | 24.7  | 19.9   | 29.9  |       |





#91  
 Benzo(g,h,i)perylene  
 Concen: 2.577 ng/ul  
 RT: 26.88 min Scan# 4045  
 Delta R.T. -0.01 min  
 Lab File: BM010555.D  
 Acq: 13 Jun 2017 03:08

Instrument :  
 BNA\_M  
 ClientSampleId :  
 F5C63DL

| Tgt Ion | Ratio | Resp Lower | Resp Upper |
|---------|-------|------------|------------|
| 276     | 100   |            |            |
| 138     | 10.9  | 8.5        | 12.7       |
| 277     | 28.1  | 18.6       | 28.0       |

Manual Integrations  
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