

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM110817\  
 Data File : BM012841.D  
 Acq On : 09 Nov 2017 03:41  
 Operator : SJ/JU  
 Sample : I5955-09  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 B-14(0-1)-101717

Manual Integrations  
 APPROVED

Sohil  
 11/9/2017 3:49:01 PM

Quant Time: Nov 09 06:07:42 2017  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM110417MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Nov 09 05:48:58 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.80  | 152  | 173614   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.59 | 136  | 683143   | 20.00 | ng/ul | 0.00     |
| 35) Acenaphthene-d10      | 14.44 | 164  | 364043   | 20.00 | ng/ul | 0.00     |
| 61) Phenanthrene-d10      | 17.19 | 188  | 694490m  | 20.00 | ng/ul | 0.00     |
| 77) Chrysene-d12          | 21.37 | 240  | 720233   | 20.00 | ng/ul | 0.00     |
| 85) Perylene-d12          | 23.66 | 264  | 825768   | 20.00 | ng/ul | 0.01     |

## System Monitoring Compounds

|                                |       |     |        |       |       |      |
|--------------------------------|-------|-----|--------|-------|-------|------|
| 3) 1,4-Dioxane-d8              | 3.29  | 96  | 7752   | 2.41  | ng/uL | 0.00 |
| 5) Phenol-d5                   | 6.97  | 99  | 252921 | 19.58 | ng/ul | 0.00 |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.13  | 67  | 141771 | 20.25 | ng/ul | 0.00 |
| 9) 2-Chlorophenol-d4           | 7.33  | 132 | 225583 | 20.96 | ng/ul | 0.00 |
| 13) 4-Methylphenol-d8          | 8.51  | 113 | 205538 | 18.43 | ng/ul | 0.00 |
| 19) Nitrobenzene-d5            | 8.96  | 128 | 108187 | 21.44 | ng/ul | 0.00 |
| 22) 2-Nitrophenol-d4           | 9.68  | 143 | 114536 | 19.83 | ng/ul | 0.00 |
| 26) 2,4-Dichlorophenol-d3      | 10.22 | 165 | 236153 | 19.95 | ng/ul | 0.00 |
| 29) 4-Chloroaniline-d4         | 10.73 | 131 | 46686  | 4.09  | ng/ul | 0.00 |
| 43) Dimethylphthalate-d6       | 13.84 | 166 | 672602 | 22.33 | ng/ul | 0.00 |
| 46) Acenaphthylene-d8          | 14.13 | 160 | 826837 | 22.19 | ng/ul | 0.00 |
| 51) 4-Nitrophenol-d4           | 14.66 | 143 | 56951  | 11.80 | ng/ul | 0.00 |
| 57) Fluorene-d10               | 15.43 | 176 | 556978 | 21.59 | ng/ul | 0.00 |
| 62) 4,6-Dinitro-2-methylphenol | 15.57 | 200 | 12024  | 2.62  | ng/ul | 0.00 |
| 70) Anthracene-d10             | 17.29 | 188 | 772107 | 23.01 | ng/ul | 0.00 |
| 78) Pyrene-d10                 | 19.58 | 212 | 781294 | 23.38 | ng/ul | 0.00 |
| 89) Benzo(a)pyrene-d12         | 23.51 | 264 | 932664 | 23.89 | ng/ul | 0.01 |

## Target Compounds

|                                |       |     |          |        | Qvalue |    |
|--------------------------------|-------|-----|----------|--------|--------|----|
| 6) Phenol                      | 7.00  | 94  | 23881    | 1.801  | ng/ul  | 96 |
| 28) Naphthalene                | 10.64 | 128 | 49227    | 1.441  | ng/ul  | 97 |
| 44) Dimethylphthalate          | 13.89 | 163 | 137907   | 4.613  | ng/ul# | 99 |
| 47) Acenaphthylene             | 14.16 | 152 | 56913    | 1.576  | ng/ul  | 98 |
| 49) Acenaphthene               | 14.50 | 153 | 68479    | 2.783  | ng/ul  | 93 |
| 53) Dibenzofuran               | 14.84 | 168 | 61244    | 1.707  | ng/ul  | 92 |
| 58) Fluorene                   | 15.49 | 166 | 85419    | 2.865  | ng/ul  | 99 |
| 69) Phenanthrene               | 17.23 | 178 | 1078883m | 28.422 | ng/ul  |    |
| 71) Anthracene                 | 17.32 | 178 | 293777   | 7.464  | ng/ul  | 98 |
| 74) Carbazole                  | 17.59 | 167 | 109488   | 3.335  | ng/ul  | 98 |
| 76) Fluoranthene               | 19.24 | 202 | 1708283m | 37.450 | ng/ul  |    |
| 79) Pyrene                     | 19.61 | 202 | 1448044  | 33.698 | ng/ul# | 92 |
| 82) Benzo(a)anthracene         | 21.36 | 228 | 885094   | 20.308 | ng/ul  | 99 |
| 83) Bis(2-ethylhexyl)phthalate | 21.27 | 149 | 25049    | 1.097  | ng/ul# | 80 |
| 84) Chrysene                   | 21.40 | 228 | 827455   | 20.949 | ng/ul  | 96 |
| 87) Benzo(b)fluoranthene       | 22.97 | 252 | 1256946  | 24.908 | ng/ul  | 94 |
| 88) Benzo(k)fluoranthene       | 23.01 | 252 | 387347m  | 8.075  | ng/ul  |    |
| 90) Benzo(a)pyrene             | 23.56 | 252 | 879497   | 18.316 | ng/ul  | 96 |
| 91) Indeno(1,2,3-cd)pyrene     | 25.99 | 276 | 643078   | 11.112 | ng/ul# | 86 |
| 92) Dibenzo(a,h)anthracene     | 25.99 | 278 | 180749   | 3.689  | ng/ul# | 82 |
| 93) Benzo(g,h,i)perylene       | 26.71 | 276 | 578785   | 12.137 | ng/ul# | 90 |

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Data File : BM012841.D  
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Operator : SJ/JU  
Sample : I5955-09  
Misc :  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
B-14(0-1)-101717

Manual Integrations  
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11/9/2017 3:49:01 PM

Quant Time: Nov 09 06:07:42 2017  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM110417MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Nov 09 05:48:58 2017  
Response via : Initial Calibration

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

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

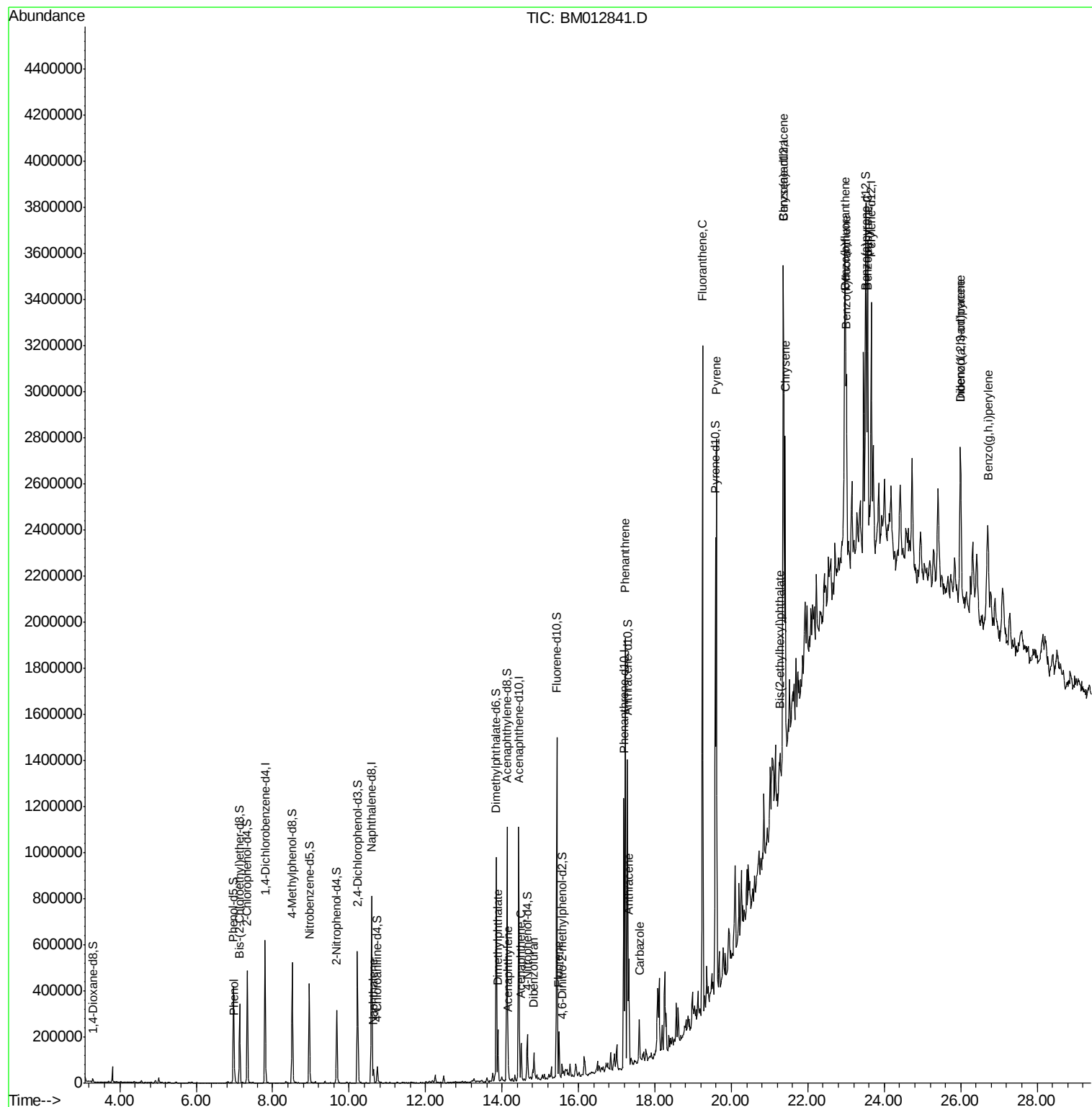
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM110817\  
Data File : BM012841.D  
Acq On : 09 Nov 2017 03:41  
Operator : SJ/JU  
Sample : I5955-09  
Misc :  
ALS Vial : 27 Sample Multiplier: 1

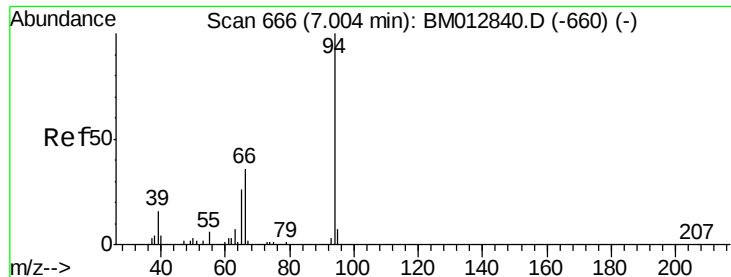
Instrument :  
BNA\_M  
ClientSampleId :  
B-14(0-1)-101717

Quant Time: Nov 09 06:07:42 2017  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM-EPA-BM110417MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Nov 09 05:48:58 2017  
Response via : Initial Calibration

Manual Integrations  
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#6

Phenol

Concen: 1.801 ng/ul

RT: 7.00 min Scan# 666

Delta R.T. 0.00 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

Instrument :

BNA\_M

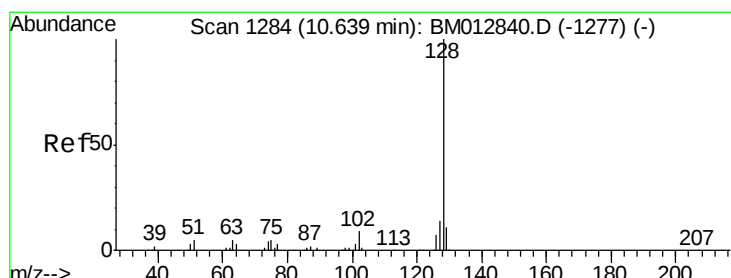
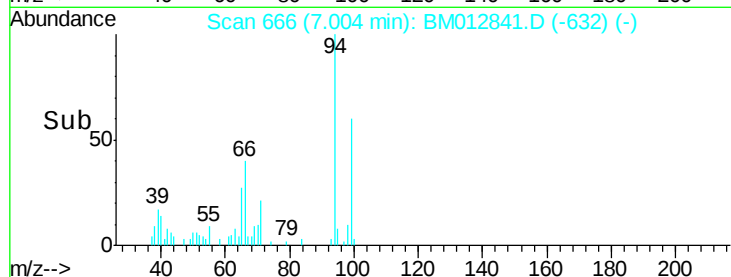
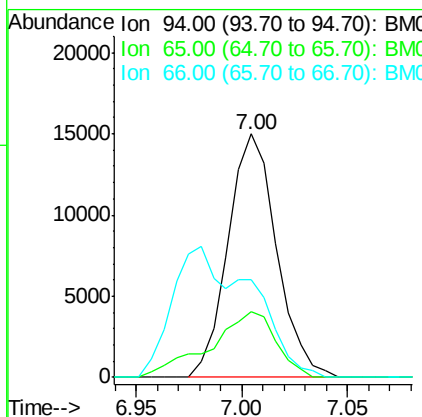
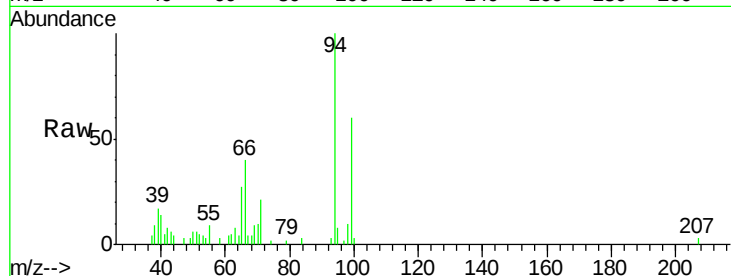
ClientSampleId :

B-14(0-1)-101717

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 94    | Resp: | 23881 |
| Ion Ratio | Lower | Upper |       |
| 94        | 100   |       |       |
| 65        | 26.7  | 21.0  | 31.6  |
| 66        | 40.4  | 29.3  | 43.9  |

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#28

Naphthalene

Concen: 1.441 ng/ul

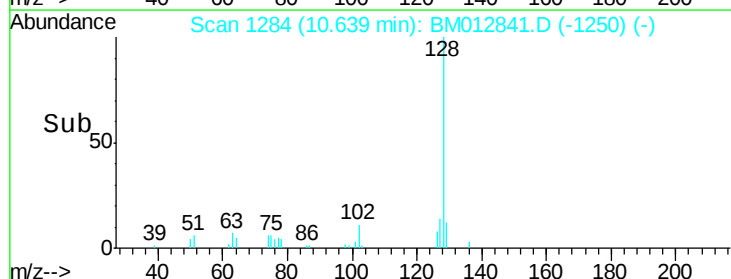
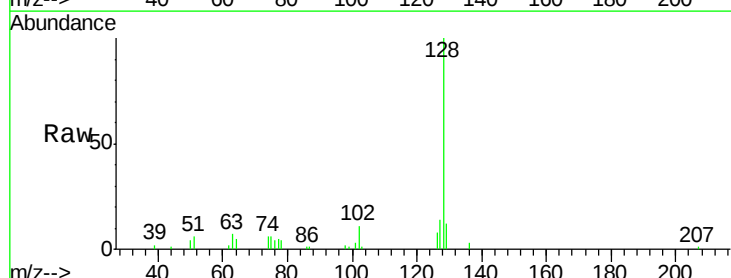
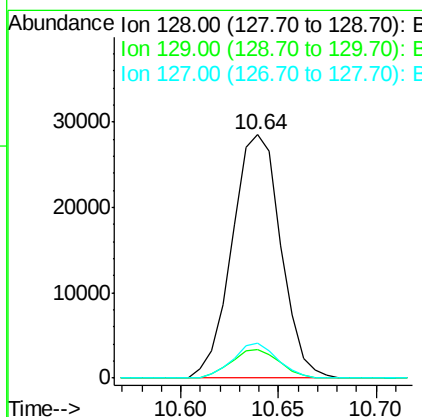
RT: 10.64 min Scan# 1284

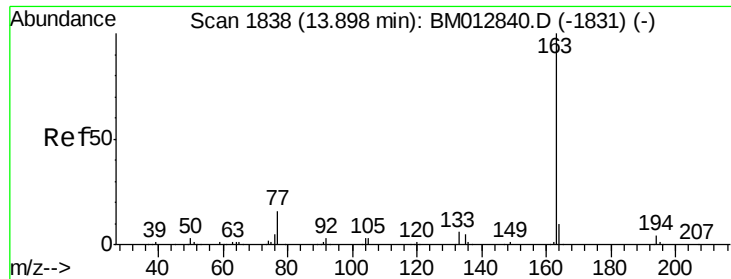
Delta R.T. 0.00 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 49227 |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 11.7  | 8.8   | 13.2  |
| 127       | 14.5  | 10.5  | 15.7  |





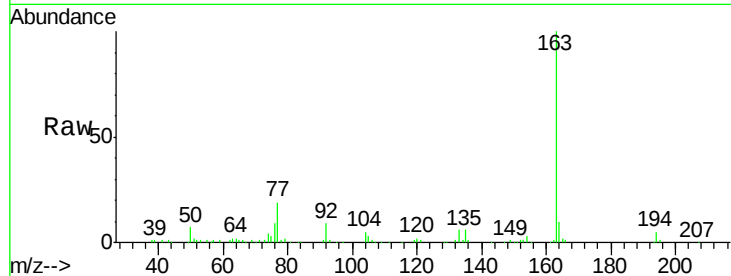
#44  
Dimethylphthalate  
Concen: 4.613 ng/ul  
RT: 13.89 min Scan# 1837  
Delta R.T. -0.01 min  
Lab File: BM012841.D  
Acq: 09 Nov 2017 03:41

Instrument :  
BNA\_M  
ClientSampled :  
B-14(0-1)-101717

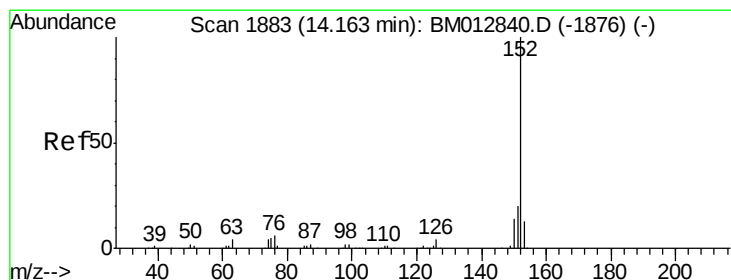
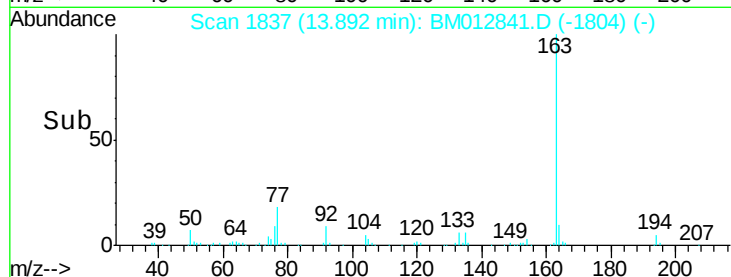
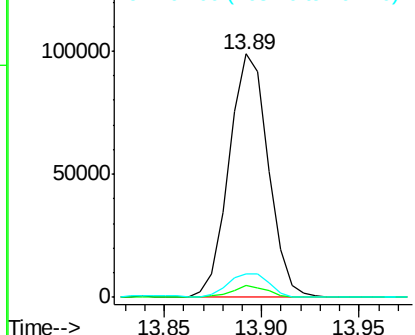
| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 163     | 100   | 137907 |       |       |
| 194     | 5.0   | 3.2    | 4.8#  |       |
| 164     | 9.6   | 7.8    | 11.8  |       |

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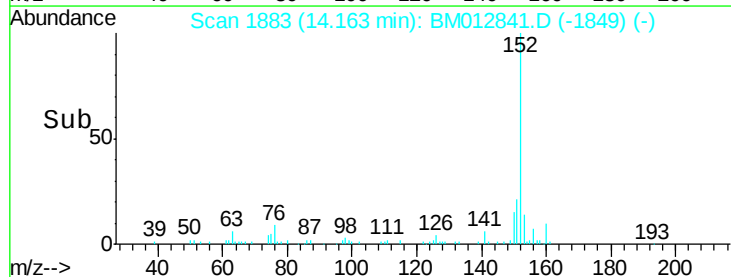
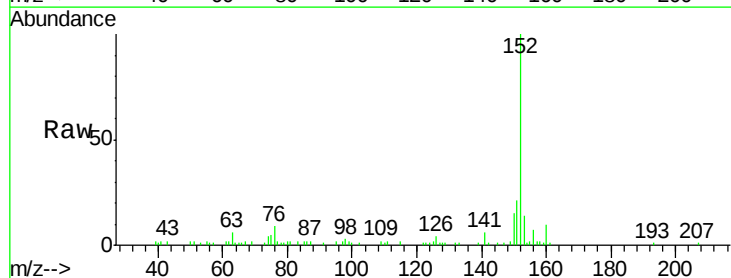
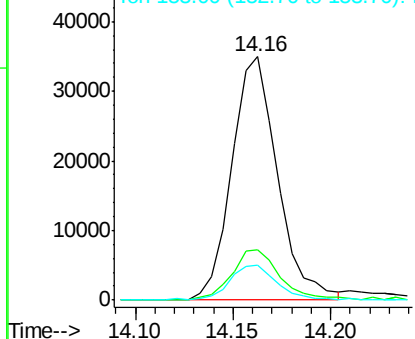
Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

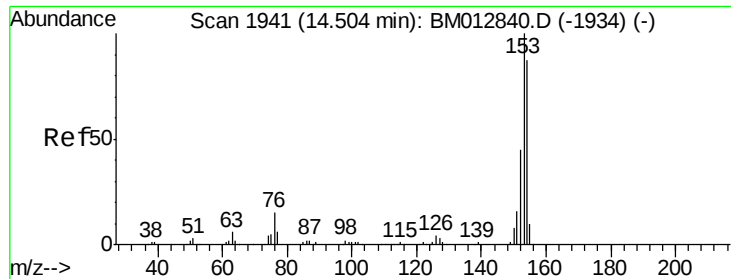


#47  
Acenaphthylene  
Concen: 1.576 ng/ul  
RT: 14.16 min Scan# 1883  
Delta R.T. 0.00 min  
Lab File: BM012841.D  
Acq: 09 Nov 2017 03:41

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 152     | 100   | 56913 |       |       |
| 151     | 20.6  | 15.7  | 23.5  |       |
| 153     | 14.2  | 10.5  | 15.7  |       |

Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 151.00 (150.70 to 151.70): E  
Ion 153.00 (152.70 to 153.70): E





#49

Acenaphthene

Concen: 2.783 ng/ul

RT: 14.50 min Scan# 1940

Delta R.T. -0.01 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

Instrument :

BNA\_M

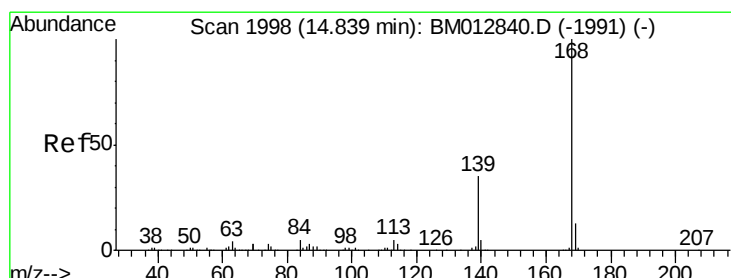
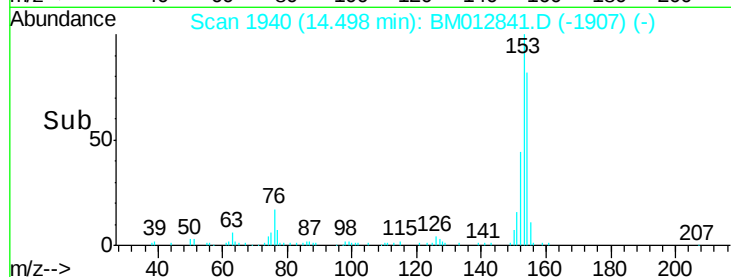
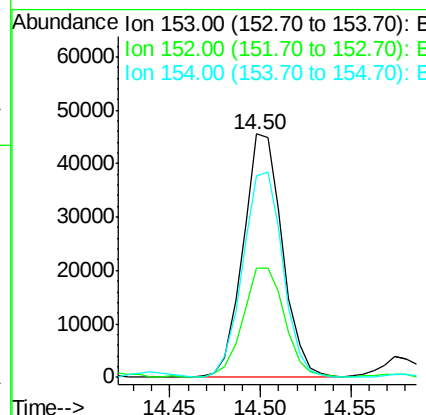
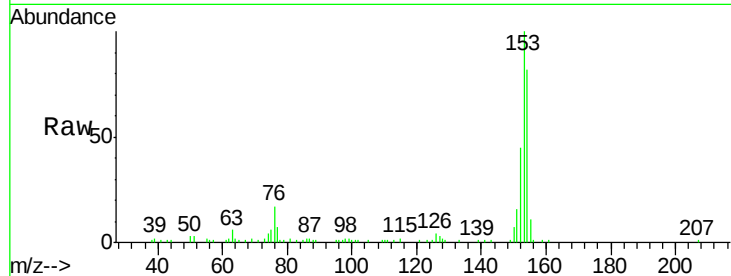
ClientSampleId :

B-14(0-1)-101717

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 68479 |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 44.7  | 38.3  | 57.5  |
| 154       | 82.5  | 71.8  | 107.8 |

Manual Integrations  
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#53

Dibenzofuran

Concen: 1.707 ng/ul

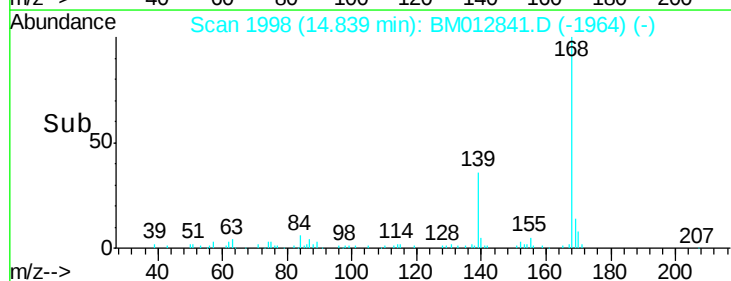
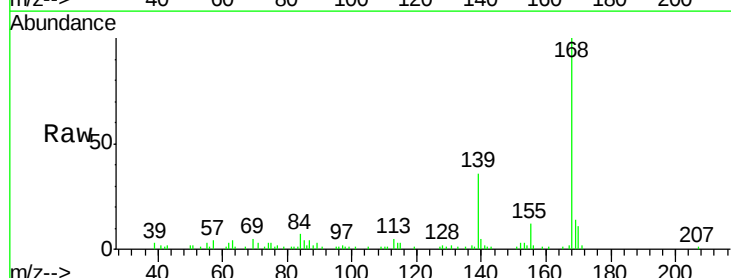
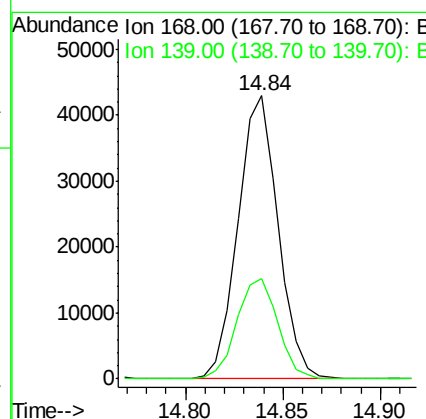
RT: 14.84 min Scan# 1998

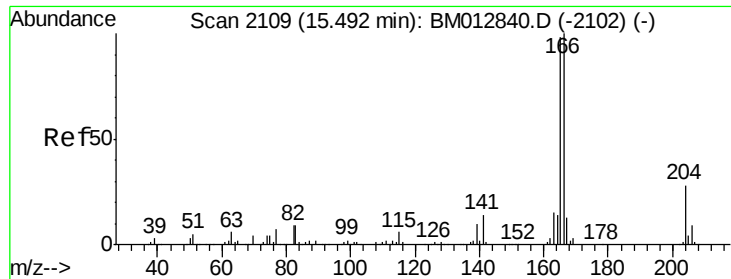
Delta R.T. 0.00 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 168   | Resp: | 61244 |
| Ion Ratio | Lower | Upper |       |
| 168       | 100   |       |       |
| 139       | 35.5  | 32.2  | 48.2  |





#58

Fluorene

Concen: 2.865 ng/ul

RT: 15.49 min Scan# 2108

Delta R.T. -0.01 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

Instrument :

BNA\_M

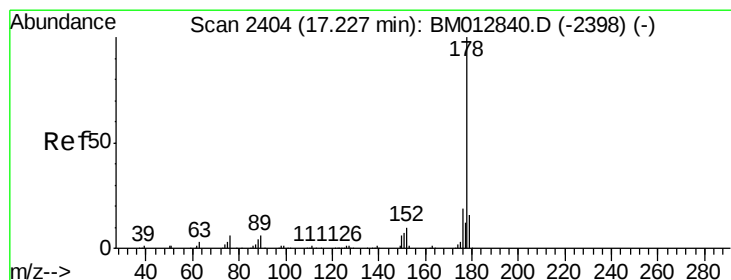
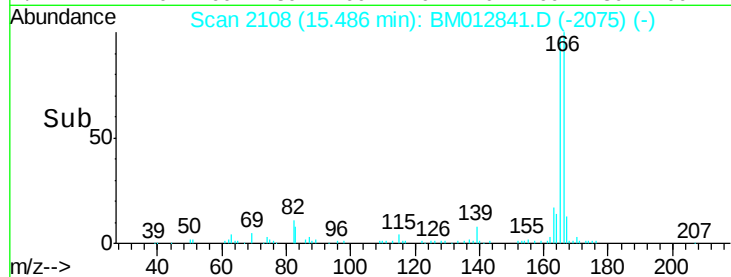
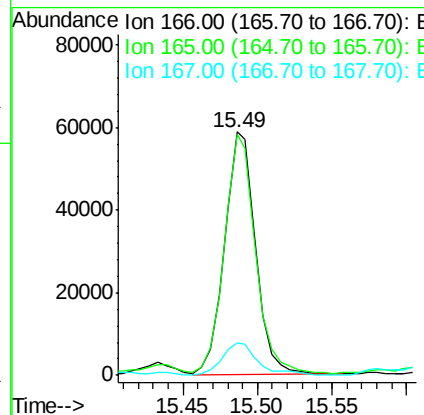
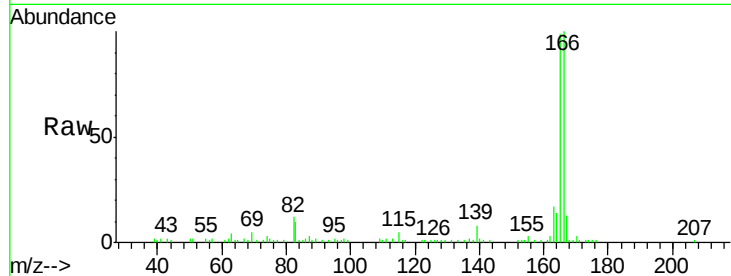
ClientSampleId :

B-14(0-1)-101717

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 166   | Resp: | 85419 |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 98.9  | 78.5  | 117.7 |
| 167       | 13.4  | 10.7  | 16.1  |

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#69

Phenanthrene

Concen: 28.422 ng/ul m

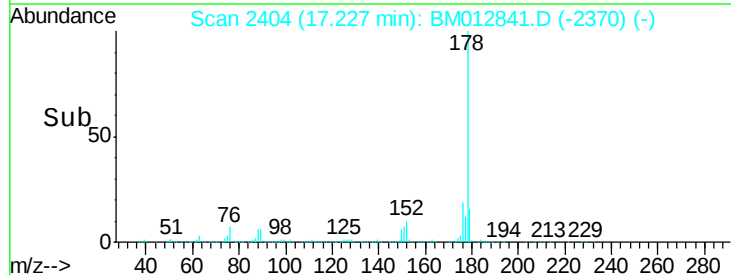
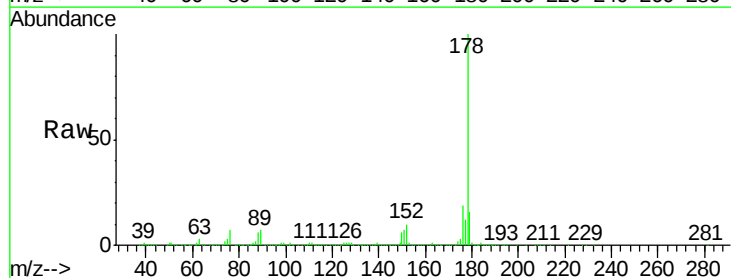
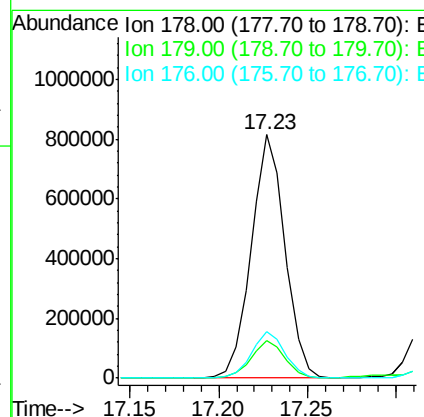
RT: 17.23 min Scan# 2404

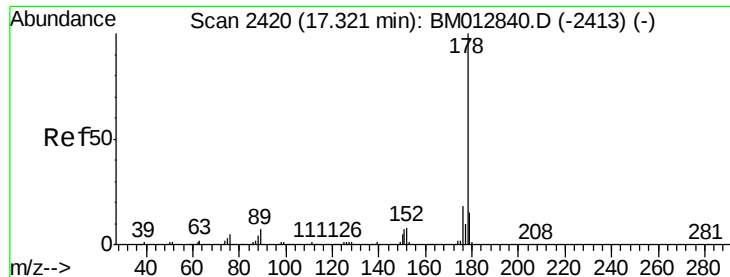
Delta R.T. 0.00 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 178   | Resp: | 1078883 |
| Ion Ratio | Lower | Upper |         |
| 178       | 100   |       |         |
| 179       | 15.6  | 12.2  | 18.4    |
| 176       | 19.1  | 15.6  | 23.4    |





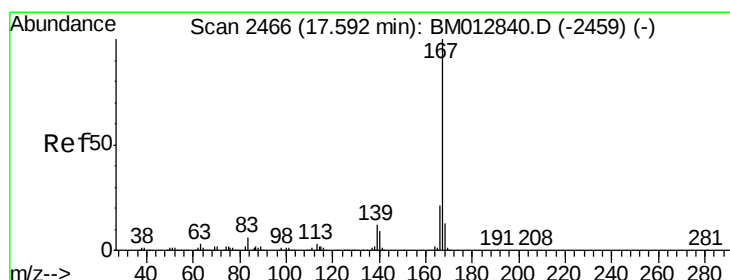
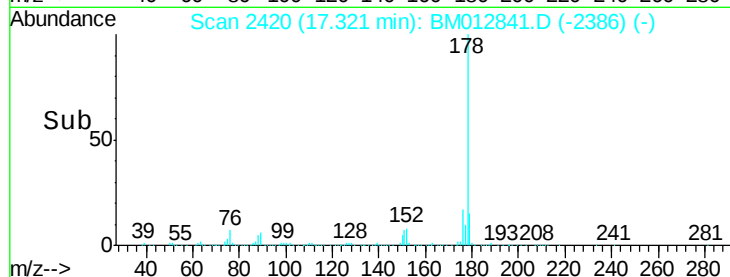
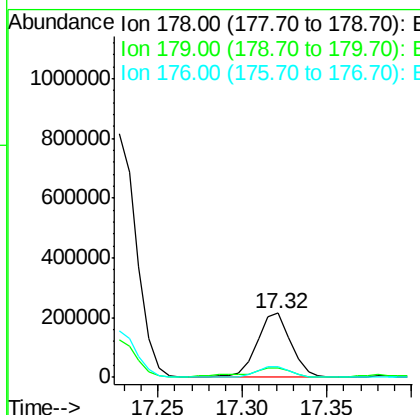
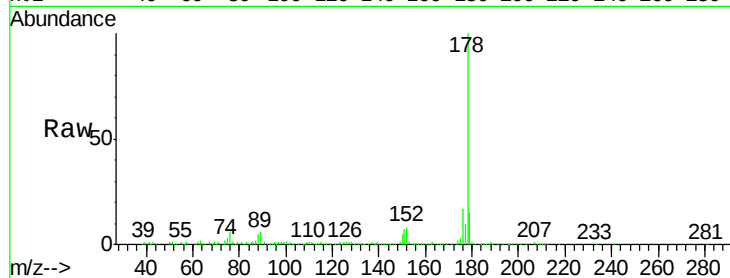
#71  
 Anthracene  
 Concen: 7.464 ng/ul  
 RT: 17.32 min Scan# 2420  
 Delta R.T. 0.00 min  
 Lab File: BM012841.D  
 Acq: 09 Nov 2017 03:41

Instrument :  
 BNA\_M  
 ClientSampleId :  
 B-14(0-1)-101717

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 179     | 15.4  | 12.1  | 18.1  |
| 176     | 17.4  | 14.8  | 22.2  |

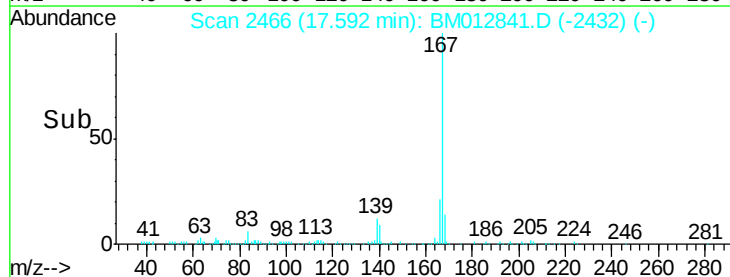
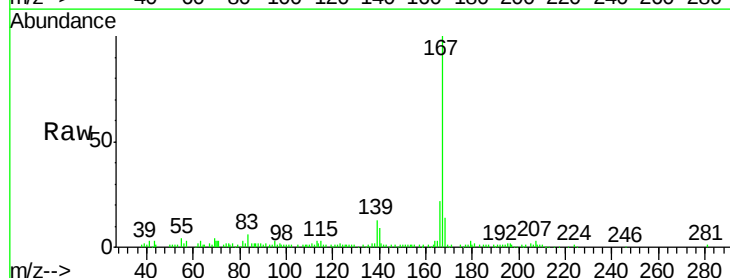
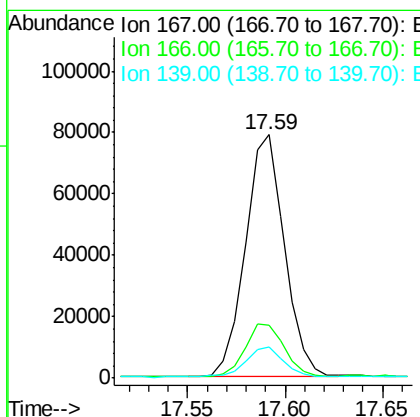
Manual Integrations  
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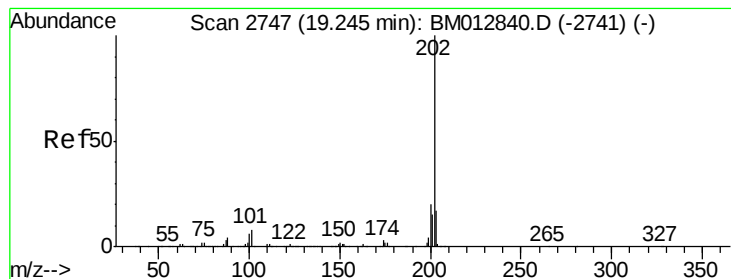
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#74  
 Carbazole  
 Concen: 3.335 ng/ul  
 RT: 17.59 min Scan# 2466  
 Delta R.T. 0.00 min  
 Lab File: BM012841.D  
 Acq: 09 Nov 2017 03:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 167     | 100   |       |       |
| 166     | 21.7  | 17.0  | 25.6  |
| 139     | 12.6  | 11.0  | 16.4  |





#76

Fluoranthene

Concen: 37.450 ng/ul m

RT: 19.24 min Scan# 2747

Delta R.T. 0.00 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

Instrument :

BNA\_M

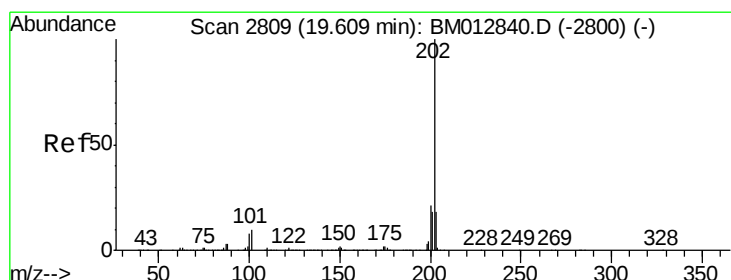
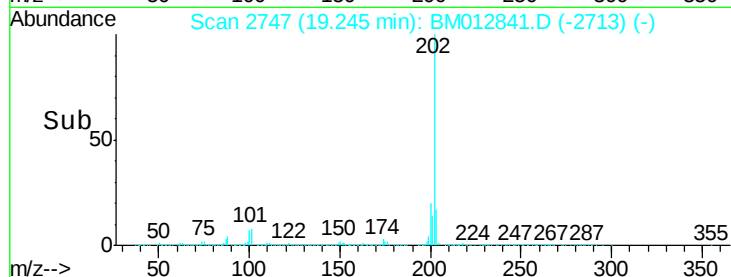
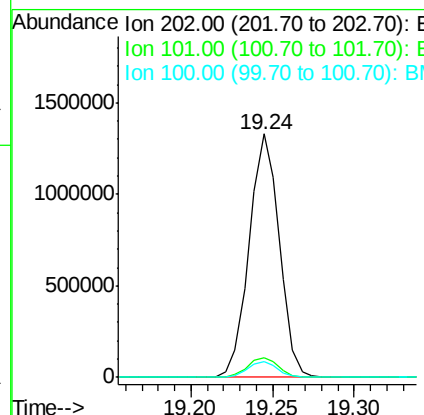
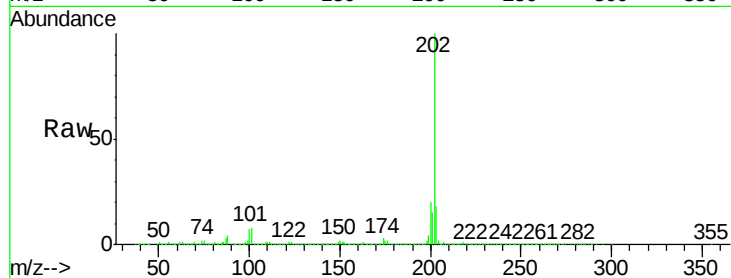
ClientSampleId :

B-14(0-1)-101717

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 1708283 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 8.3   | 8.8   | 13.2#   |
| 100       | 6.6   | 6.6   | 9.8     |

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#79

Pyrene

Concen: 33.698 ng/ul

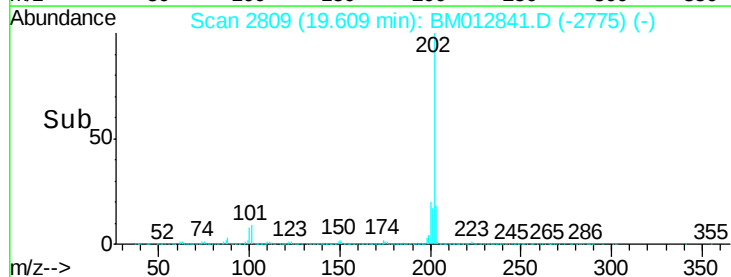
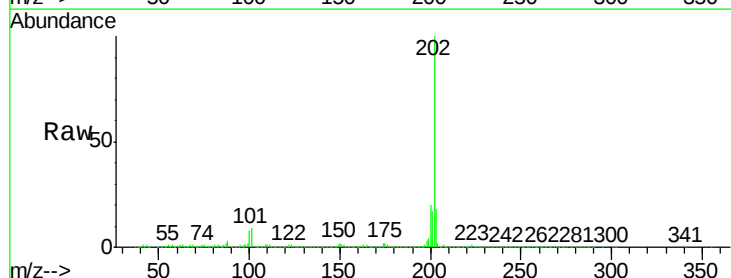
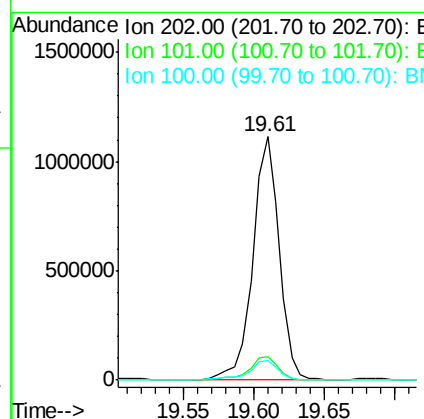
RT: 19.61 min Scan# 2809

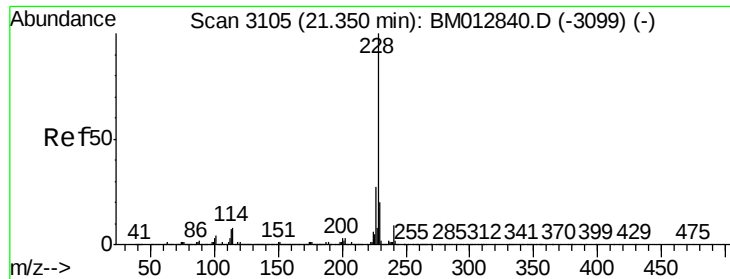
Delta R.T. 0.00 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 202   | Resp: | 1448044 |
| Ion Ratio | Lower | Upper |         |
| 202       | 100   |       |         |
| 101       | 9.4   | 10.2  | 15.2#   |
| 100       | 7.9   | 8.5   | 12.7#   |





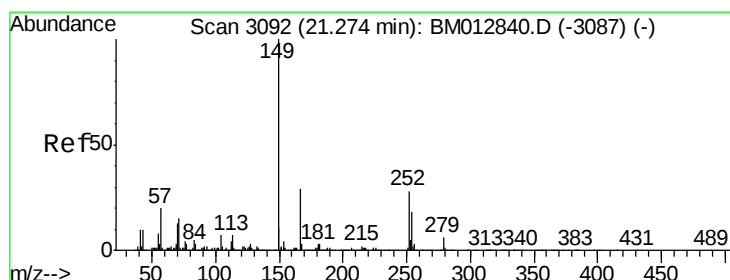
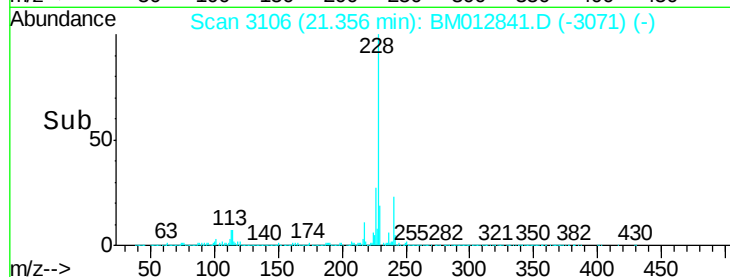
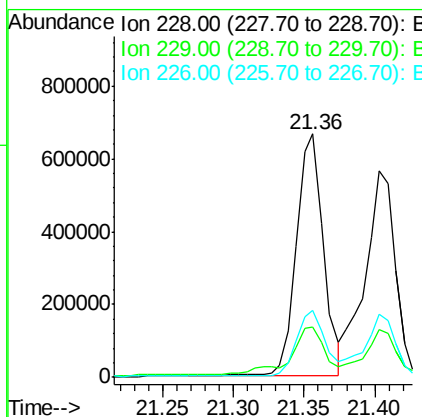
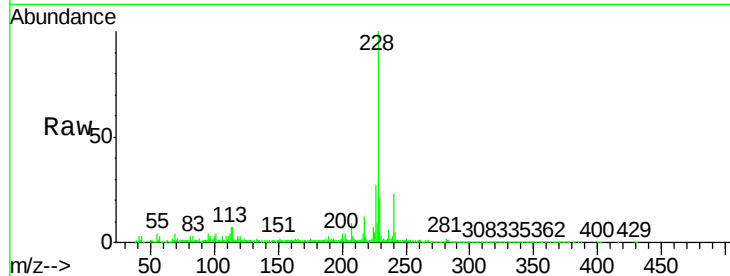
#82  
Benzo(a)anthracene  
Concen: 20.308 ng/ul  
RT: 21.36 min Scan# 3106  
Delta R.T. 0.01 min  
Lab File: BM012841.D  
Acq: 09 Nov 2017 03:41

Instrument :  
BNA\_M  
ClientSampleId :  
B-14(0-1)-101717

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 229     | 20.6  | 15.7  | 23.5  |
| 226     | 27.4  | 21.8  | 32.6  |

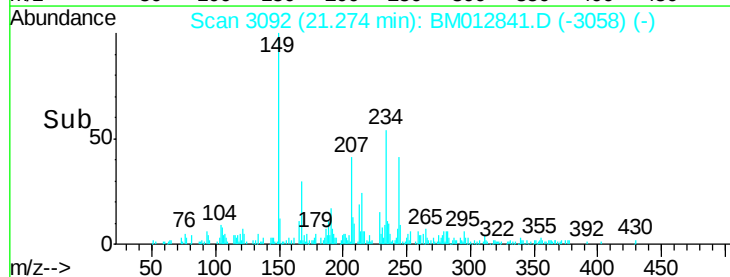
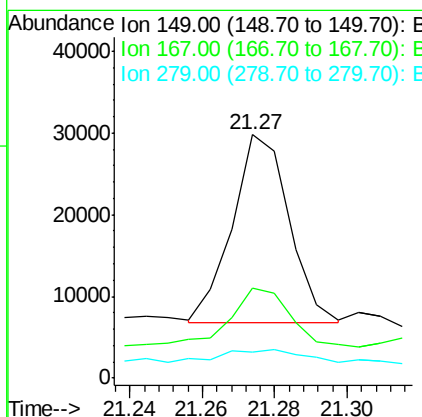
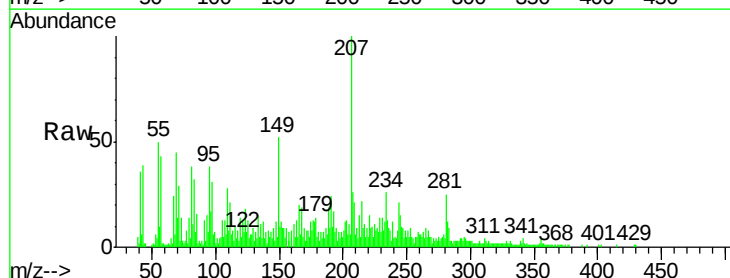
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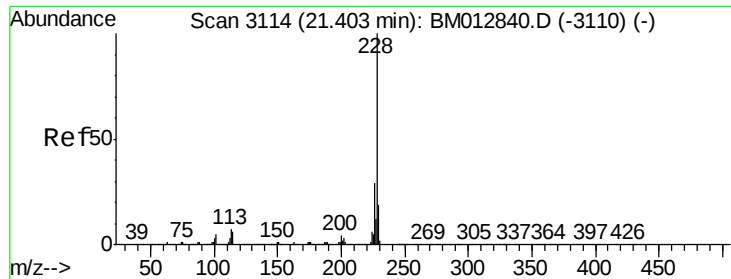
Sohil  
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#83  
Bis(2-ethylhexyl)phthalate  
Concen: 1.097 ng/ul  
RT: 21.27 min Scan# 3092  
Delta R.T. 0.00 min  
Lab File: BM012841.D  
Acq: 09 Nov 2017 03:41

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 149     | 100   |       |       |
| 167     | 37.0  | 21.6  | 32.4# |
| 279     | 10.6  | 3.0   | 4.4#  |





#84

Chrysene

Concen: 20.949 ng/ul

RT: 21.40 min Scan# 3114

Delta R.T. 0.00 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

Instrument :

BNA\_M

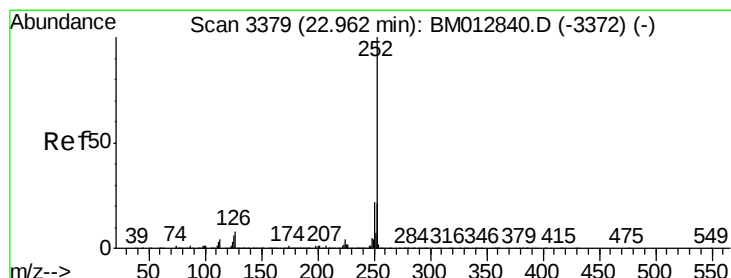
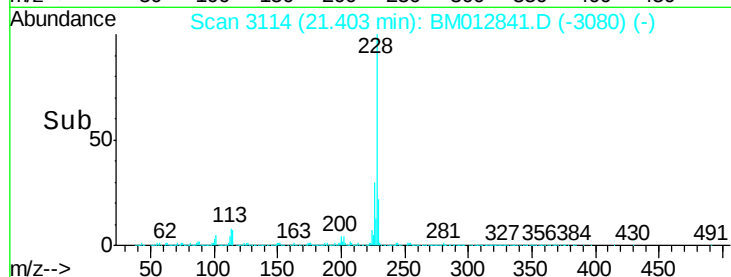
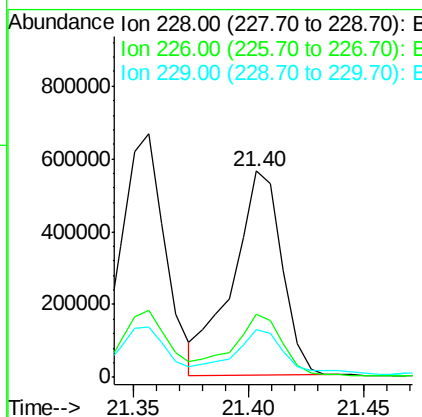
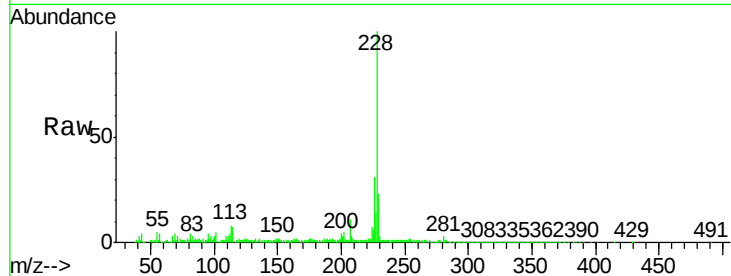
ClientSampleId :

B-14(0-1)-101717

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 228   | Resp: | 827455 |
| Ion Ratio | Lower | Upper |        |
| 228       | 100   |       |        |
| 226       | 30.6  | 24.0  | 36.0   |
| 229       | 23.1  | 15.6  | 23.4   |

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#87

Benzo(b)fluoranthene

Concen: 24.908 ng/ul

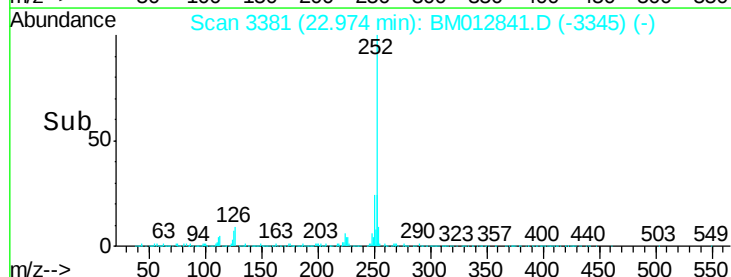
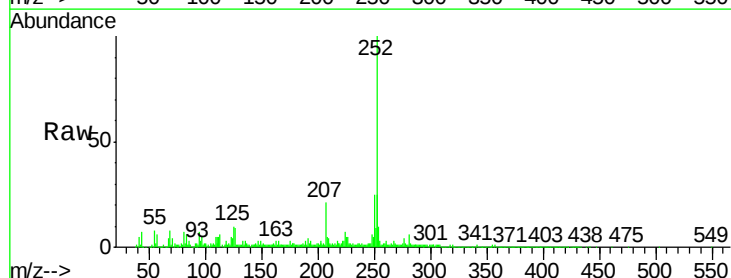
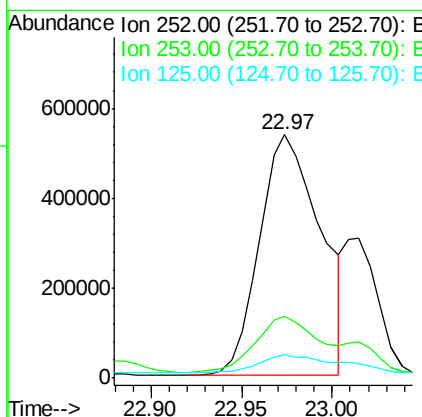
RT: 22.97 min Scan# 3381

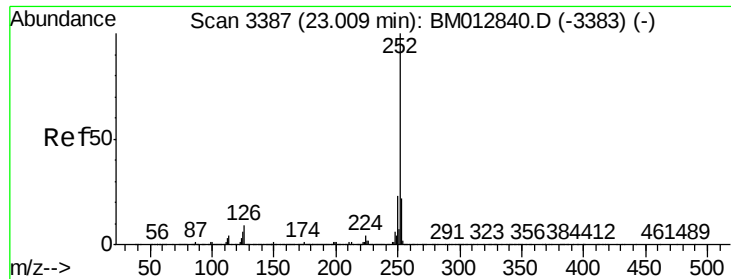
Delta R.T. 0.01 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

|           |       |       |         |
|-----------|-------|-------|---------|
| Tgt Ion:  | 252   | Resp: | 1256946 |
| Ion Ratio | Lower | Upper |         |
| 252       | 100   |       |         |
| 253       | 25.3  | 17.5  | 26.3    |
| 125       | 9.7   | 8.5   | 12.7    |





#88

Benzo(k)fluoranthene

Concen: 8.075 ng/ul m

RT: 23.01 min Scan# 3388

Delta R.T. 0.01 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

Instrument :

BNA\_M

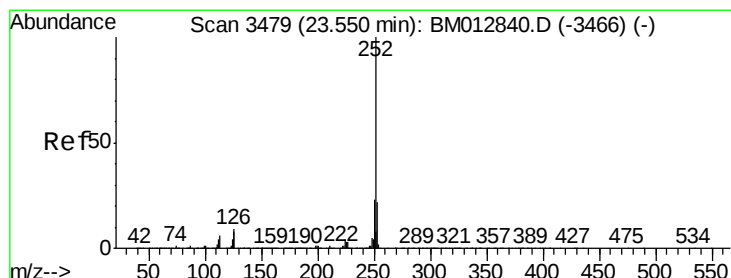
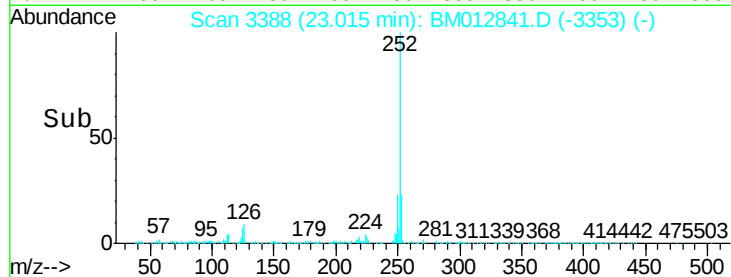
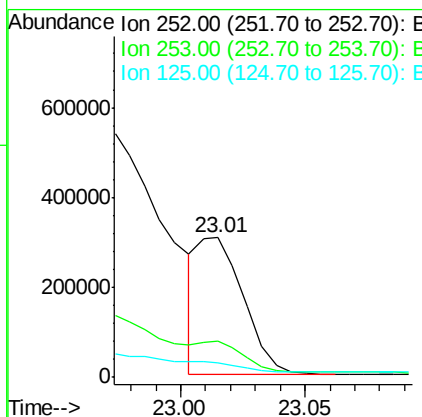
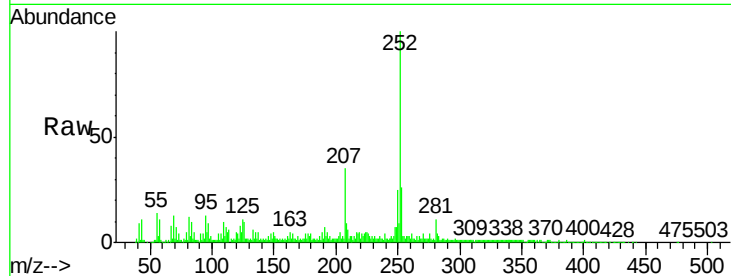
ClientSampleId :

B-14(0-1)-101717

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 387347 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 25.8  | 17.3  | 25.9   |
| 125       | 10.6  | 8.2   | 12.2   |

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#90

Benzo(a)pyrene

Concen: 18.316 ng/ul

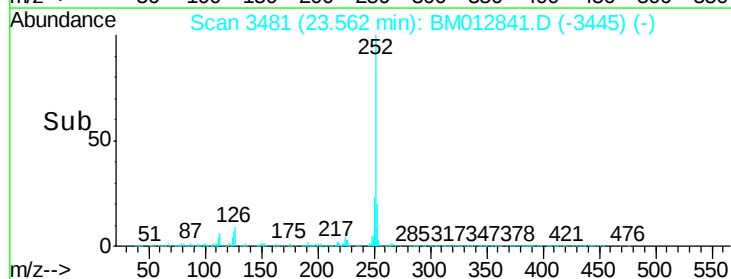
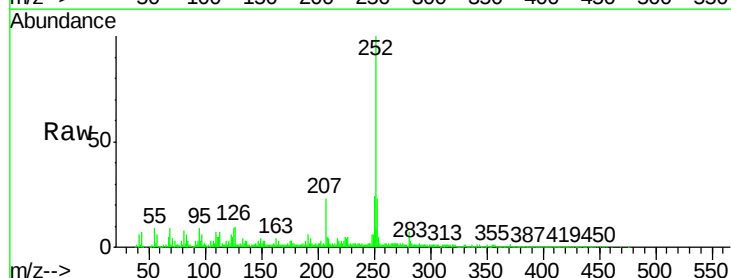
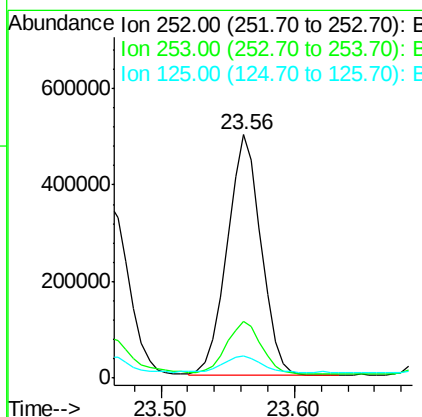
RT: 23.56 min Scan# 3481

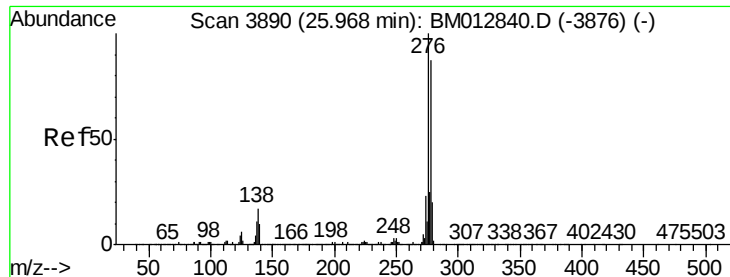
Delta R.T. 0.01 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 252   | Resp: | 879497 |
| Ion Ratio | Lower | Upper |        |
| 252       | 100   |       |        |
| 253       | 23.2  | 17.2  | 25.8   |
| 125       | 9.4   | 9.0   | 13.6   |





#91

Indeno(1,2,3-cd)pyrene

Concen: 11.112 ng/ul

RT: 25.99 min Scan# 3894

Delta R.T. 0.02 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

Instrument :

BNA\_M

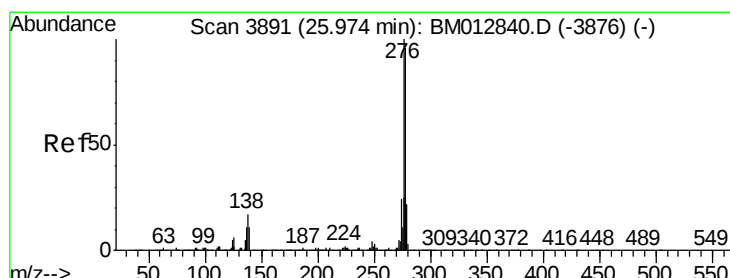
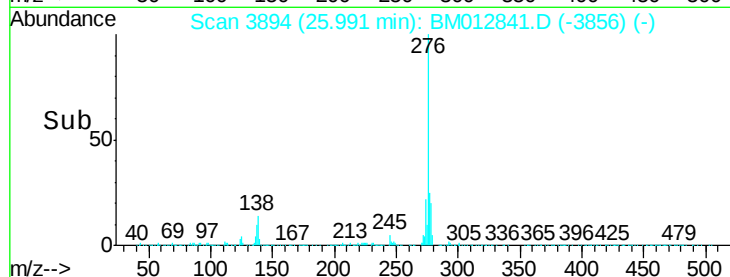
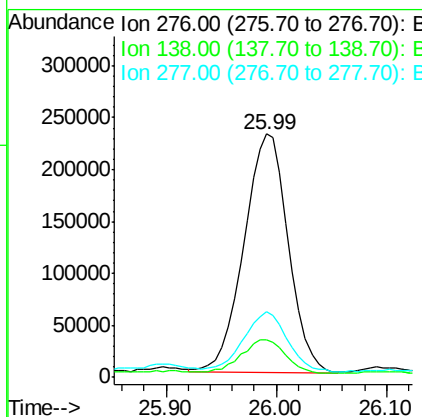
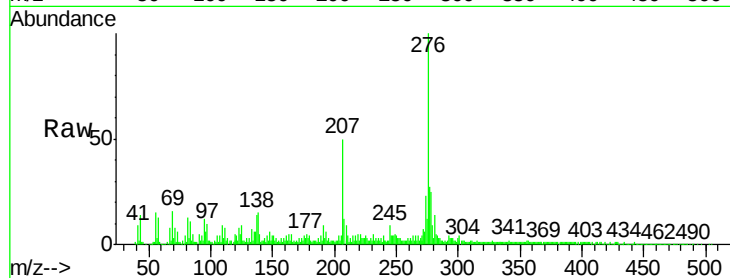
ClientSampleId :

B-14(0-1)-101717

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 276   | Resp: | 643078 |
| Ion Ratio | Lower | Upper |        |
| 276       | 100   |       |        |
| 138       | 15.3  | 22.3  | 33.5#  |
| 277       | 26.9  | 20.2  | 30.2   |

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#92

Dibenzo(a,h)anthracene

Concen: 3.689 ng/ul

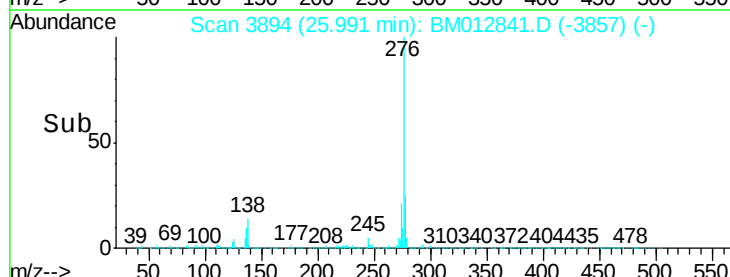
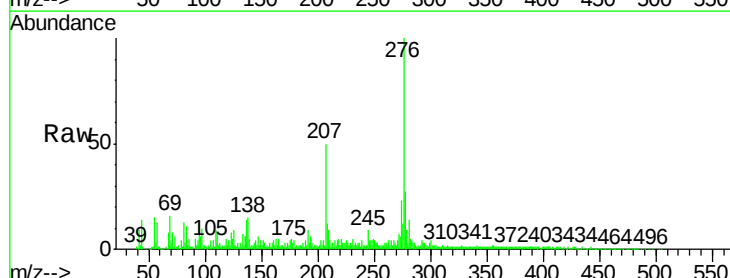
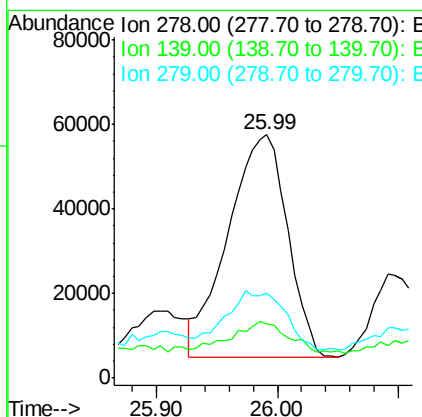
RT: 25.99 min Scan# 3894

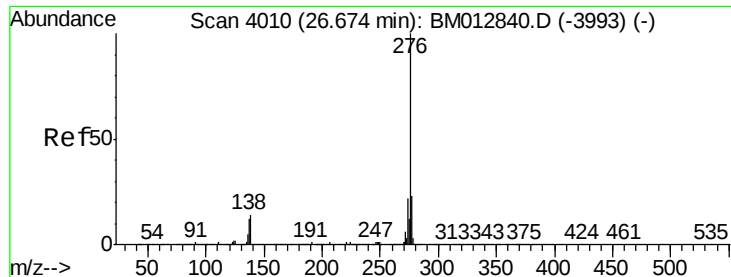
Delta R.T. 0.02 min

Lab File: BM012841.D

Acq: 09 Nov 2017 03:41

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 278   | Resp: | 180749 |
| Ion Ratio | Lower | Upper |        |
| 278       | 100   |       |        |
| 139       | 22.2  | 13.9  | 20.9#  |
| 279       | 35.1  | 19.0  | 28.4#  |





#93

Benzo(g,h,i)perylene

Concen: 12.137 ng/ul

RT: 26.71 min Scan# 4016

Delta R.T. 0.04 min

Lab File: BM012841.D

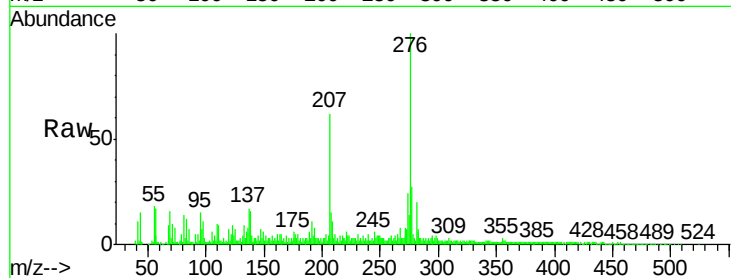
Acq: 09 Nov 2017 03:41

Instrument :

BNA\_M

ClientSampleId :

B-14(0-1)-101717



| Tgt | Ion  | Ratio | Resp   | Lower | Upper |
|-----|------|-------|--------|-------|-------|
| 276 | 100  |       | 578785 |       |       |
| 138 | 16.2 | 18.9  | 28.3#  |       |       |
| 277 | 26.9 | 19.2  | 28.8   |       |       |

Manual Integrations  
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