

Data Path : Z:\HPCHEM1\BNA\_M\Data\BM010715\  
 Data File : BM000141.D  
 Acq On : 07 Jan 2015 23:32  
 Operator : TP/IZ  
 Sample : MDL-06-S  
 Misc : MDL-SOIL-0.07PPM-SIM  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 MDL-06-S

Quant Time: Jan 08 04:08:30 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-SIM-BM010715.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 08 02:20:43 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.84  | 152  | 2976     | 0.40 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 10.64 | 136  | 9618     | 0.40 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 14.47 | 164  | 5388     | 0.40 | ng/ul | 0.00     |
| 10) Phenanthrene-d10      | 17.23 | 188  | 10891    | 0.40 | ng/ul | 0.02     |
| 16) Chrysene-d12          | 21.41 | 240  | 9170     | 0.40 | ng/ul | 0.00     |
| 20) Perylene-d12          | 23.70 | 264  | 8260     | 0.40 | ng/ul | 0.00     |

|                             |       |     |      |      |       |      |
|-----------------------------|-------|-----|------|------|-------|------|
| System Monitoring Compounds |       |     |      |      |       |      |
| 4) 2-Methylnaphthalene-d10  | 12.22 | 152 | 4797 | 0.38 | ng/ul | 0.00 |
| 14) Fluoranthene-d10        | 19.25 | 212 | 8647 | 0.37 | ng/ul | 0.00 |

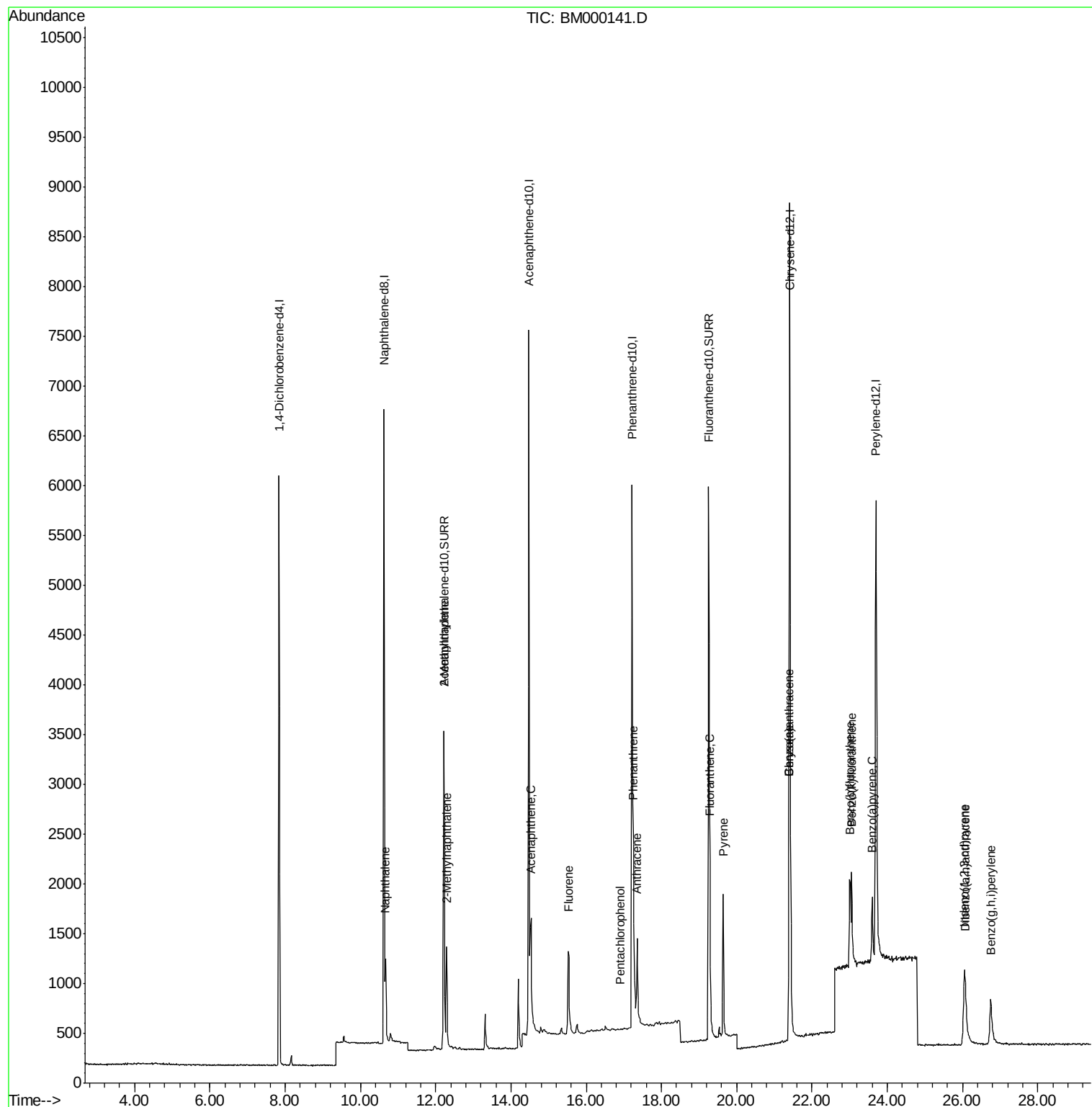
|                            |       |     |      |        |        |     |
|----------------------------|-------|-----|------|--------|--------|-----|
| Target Compounds           |       |     |      | Qvalue |        |     |
| 3) Naphthalene             | 10.67 | 128 | 1257 | 0.05   | ng/ul# | 85  |
| 5) 2-Methylnaphthalene     | 12.29 | 142 | 825  | 0.05   | ng/ul  | 100 |
| 7) Acenaphthylene          | 12.22 | 152 | 4797 | 0.40   | ng/ul  | 99  |
| 8) Acenaphthene            | 14.54 | 153 | 843  | 0.05   | ng/ul  | 94  |
| 9) Fluorene                | 15.54 | 166 | 954  | 0.05   | ng/ul# | 94  |
| 11) Pentachlorophenol      | 16.92 | 266 | 6    | 0.00   | ng/ul# | 1   |
| 12) Phenanthrene           | 17.26 | 178 | 1554 | 0.05   | ng/ul# | 83  |
| 13) Anthracene             | 17.35 | 178 | 1510 | 0.05   | ng/ul# | 82  |
| 15) Fluoranthene           | 19.28 | 202 | 1912 | 0.05   | ng/ul  | 88  |
| 17) Pyrene                 | 19.65 | 202 | 1952 | 0.05   | ng/ul# | 91  |
| 18) Benzo(a)anthracene     | 21.39 | 228 | 1503 | 0.05   | ng/ul  | 93  |
| 19) Chrysene               | 21.39 | 228 | 1503 | 0.05   | ng/ul  | 97  |
| 21) Benzo(b)fluoranthene   | 23.00 | 252 | 1577 | 0.05   | ng/ul# | 62  |
| 22) Benzo(k)fluoranthene   | 23.05 | 252 | 1499 | 0.05   | ng/ul# | 63  |
| 23) Benzo(a)pyrene         | 23.60 | 252 | 1359 | 0.05   | ng/ul# | 48  |
| 24) Indeno(1,2,3-cd)pyrene | 26.05 | 276 | 1636 | 0.05   | ng/ul  | 99  |
| 25) Dibenzo(a,h)anthracene | 26.07 | 278 | 1279 | 0.05   | ng/ul# | 49  |
| 26) Benzo(g,h,i)perylene   | 26.74 | 276 | 1490 | 0.05   | ng/ul# | 72  |

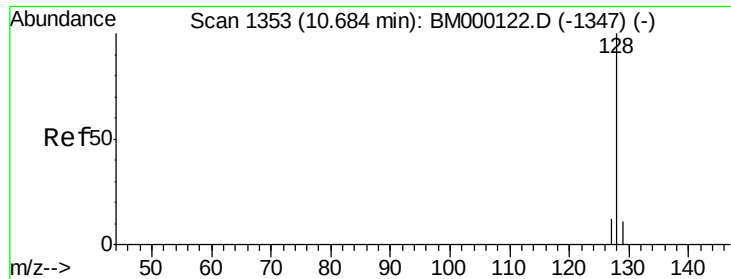
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Thu Jan 08 02:20:43 2015  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.05 ng/ul

RT: 10.67 min Scan# 1352

Delta R.T. -0.01 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

Instrument :

BNA\_M

ClientSampleId :

MDL-06-S

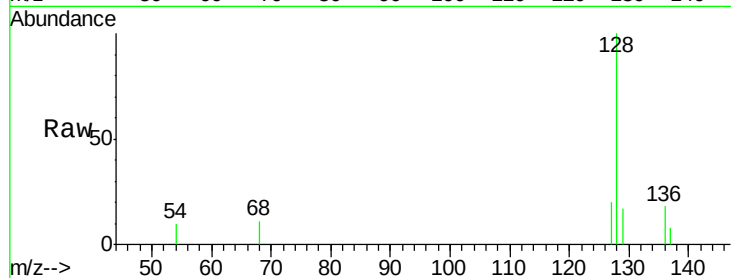
Tgt Ion:128 Resp: 1257

Ion Ratio Lower Upper

128 100

129 16.5 9.5 14.3#

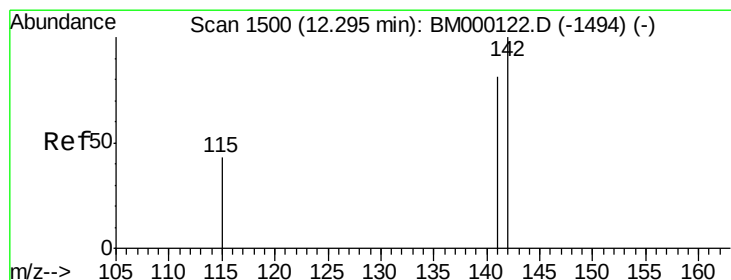
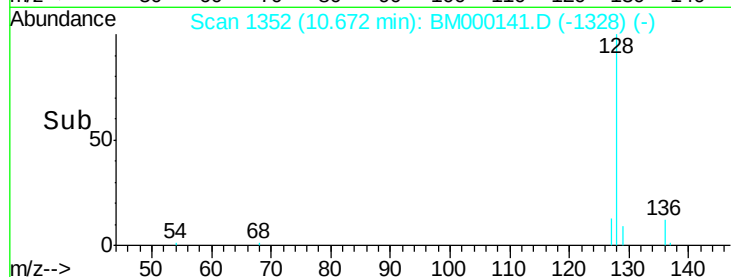
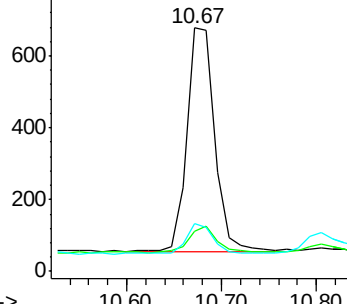
127 19.8 10.4 15.6#



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#5

2-Methylnaphthalene

Concen: 0.05 ng/ul

RT: 12.29 min Scan# 1500

Delta R.T. -0.00 min

Lab File: BM000141.D

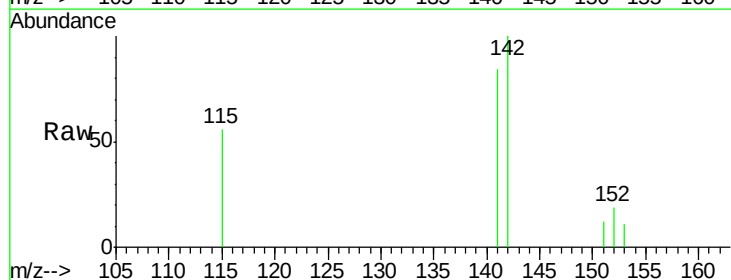
Acq: 07 Jan 2015 23:32

Tgt Ion:142 Resp: 825

Ion Ratio Lower Upper

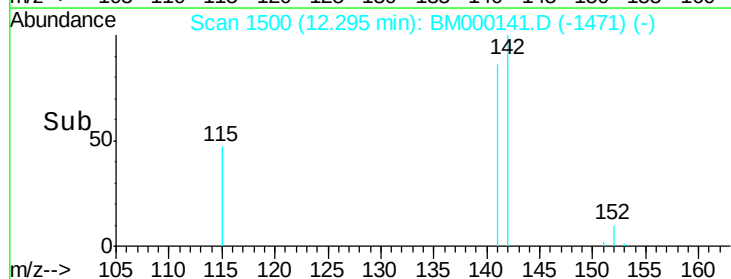
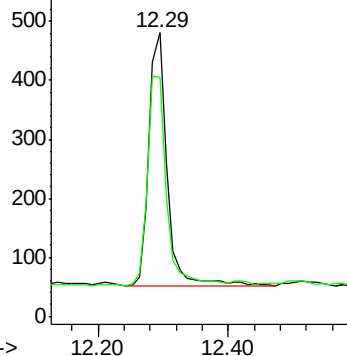
142 100

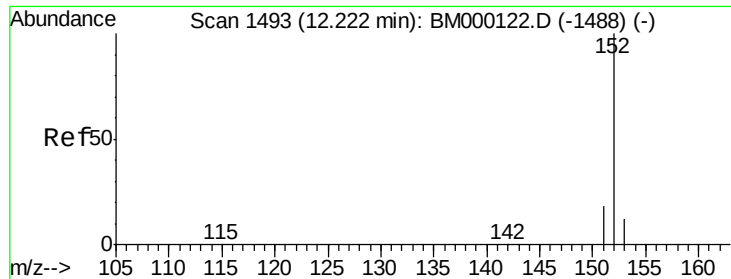
141 86.5 68.9 103.3



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#7

Acenaphthylene

Concen: 0.40 ng/ul

RT: 12.22 min Scan# 1493

Delta R.T. -0.00 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

Instrument :

BNA\_M

ClientSampleId :

MDL-06-S

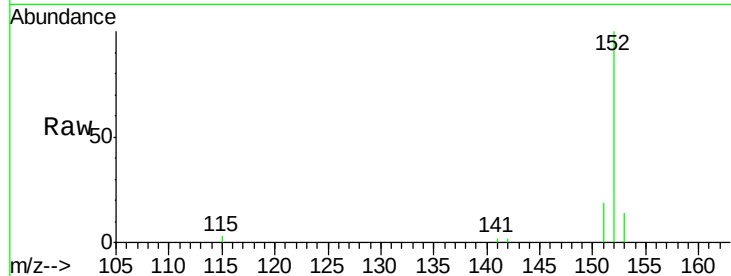
Tgt Ion:152 Resp: 4797

Ion Ratio Lower Upper

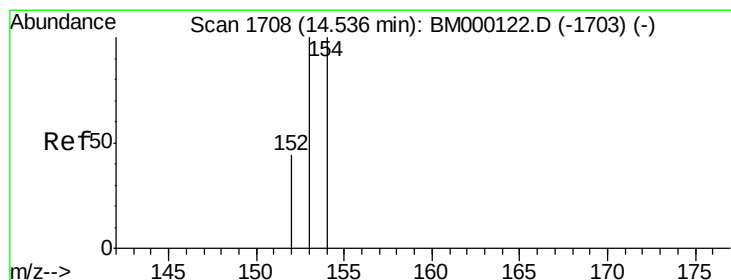
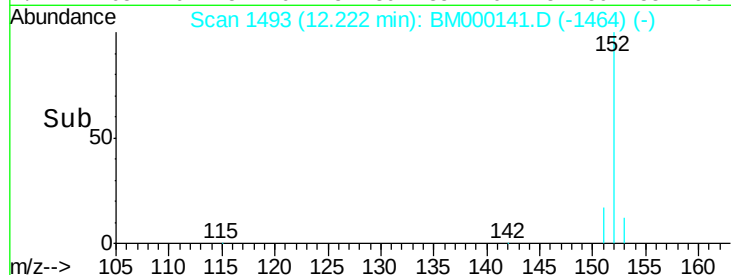
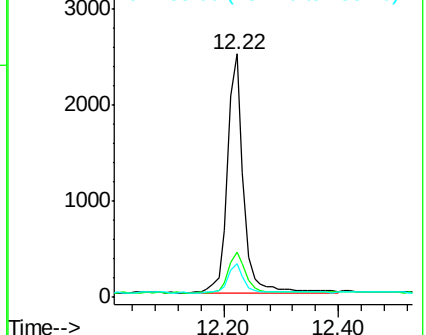
152 100

151 18.6 15.4 23.2

153 13.8 11.0 16.4



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



#8

Acenaphthene

Concen: 0.05 ng/ul

RT: 14.54 min Scan# 1708

Delta R.T. -0.00 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

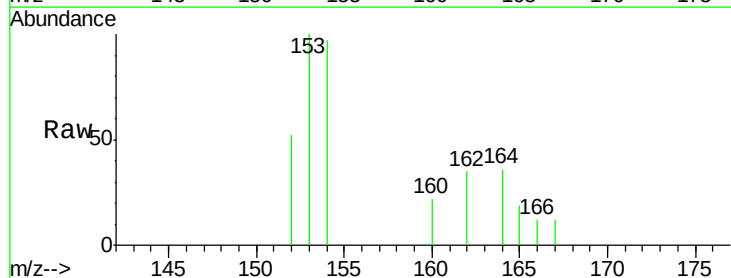
Tgt Ion:153 Resp: 843

Ion Ratio Lower Upper

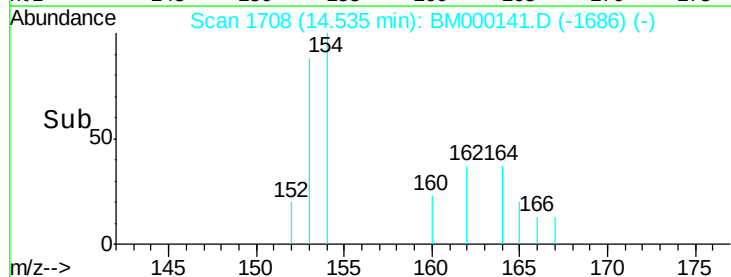
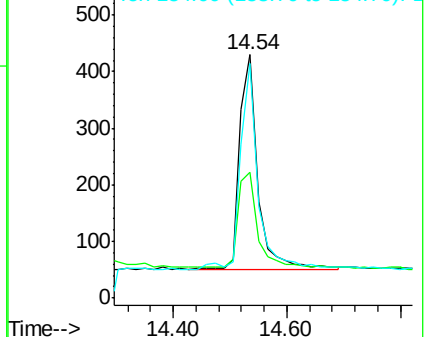
153 100

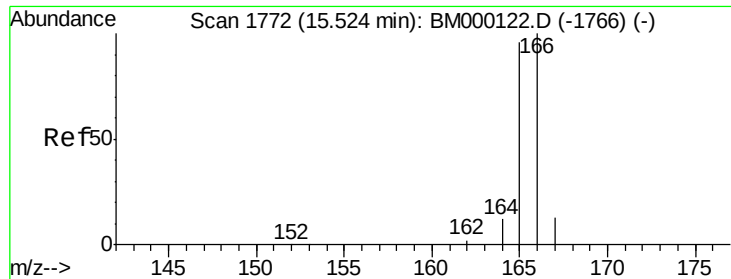
152 51.6 35.8 53.6

154 96.5 79.9 119.9



Abundance Ion 153.00 (152.70 to 153.70): E  
Ion 152.00 (151.70 to 152.70): E  
Ion 154.00 (153.70 to 154.70): E

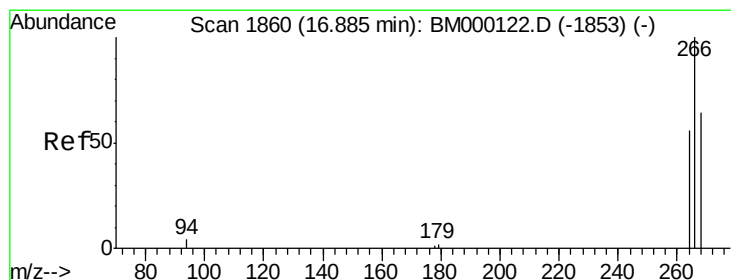
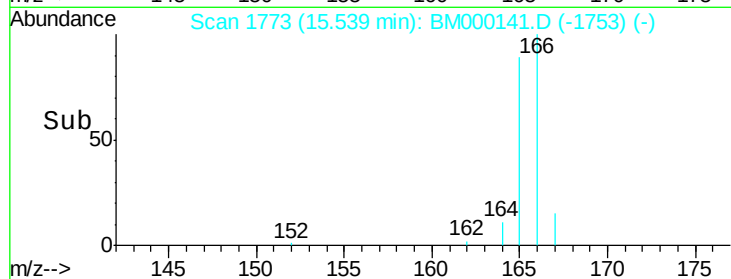
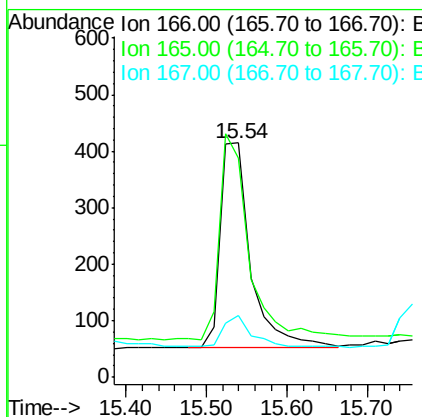
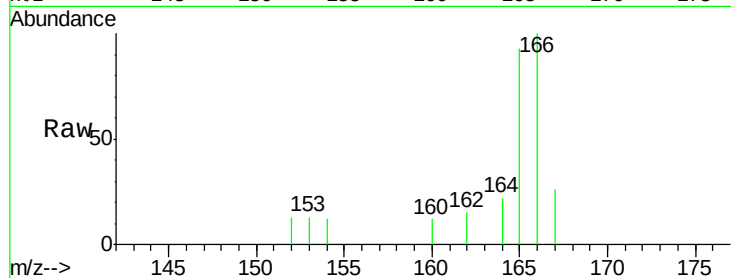




#9  
**Fluorene**  
 Concen: 0.05 ng/ul  
 RT: 15.54 min Scan# 1773  
 Delta R.T. 0.02 min  
 Lab File: BM000141.D  
 Acq: 07 Jan 2015 23:32

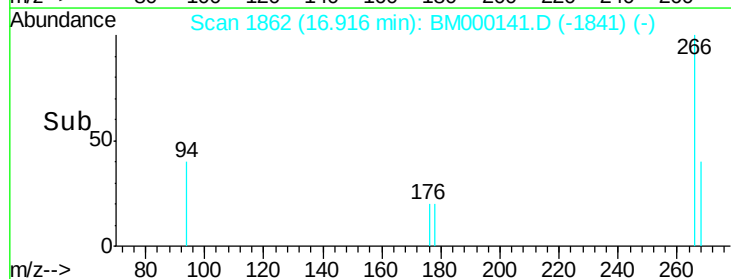
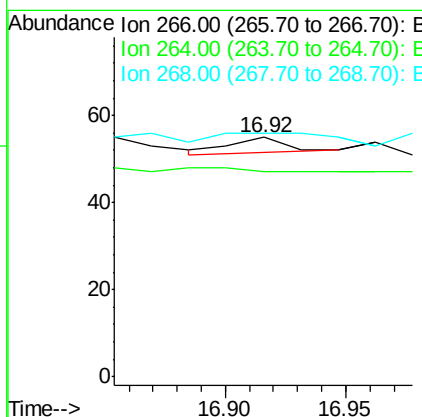
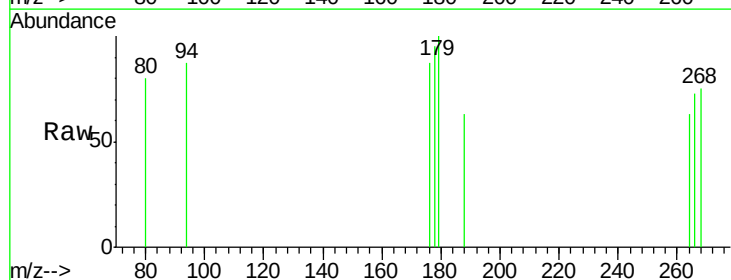
Instrument :  
 BNA\_M  
 ClientSampleId :  
 MDL-06-S

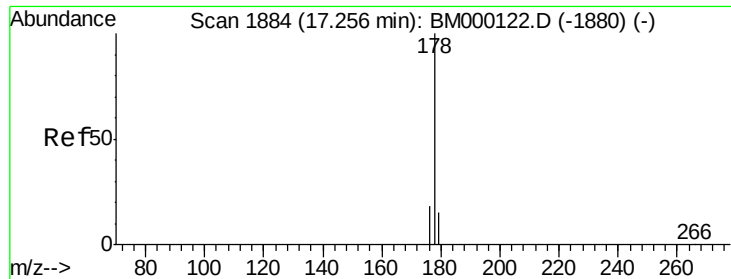
Tgt Ion:166 Resp: 954  
 Ion Ratio Lower Upper  
 166 100  
 165 93.5 77.0 115.4  
 167 26.3 11.0 16.6#



#11  
**Pentachlorophenol**  
 Concen: 0.00 ng/ul  
 RT: 16.92 min Scan# 1862  
 Delta R.T. 0.03 min  
 Lab File: BM000141.D  
 Acq: 07 Jan 2015 23:32

Tgt Ion:266 Resp: 6  
 Ion Ratio Lower Upper  
 266 100  
 264 0.0 53.9 80.9#  
 268 166.7 49.2 73.8#





#12

Phenanthrene

Concen: 0.05 ng/ul

RT: 17.26 min Scan# 1884

Delta R.T. -0.00 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

Instrument :

BNA\_M

ClientSampleId :

MDL-06-S

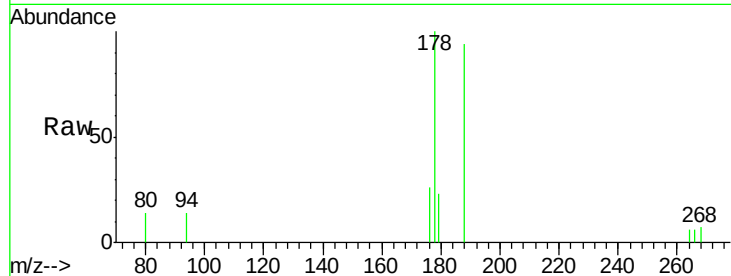
Tgt Ion:178 Resp: 1554

Ion Ratio Lower Upper

178 100

176 26.3 15.1 22.7#

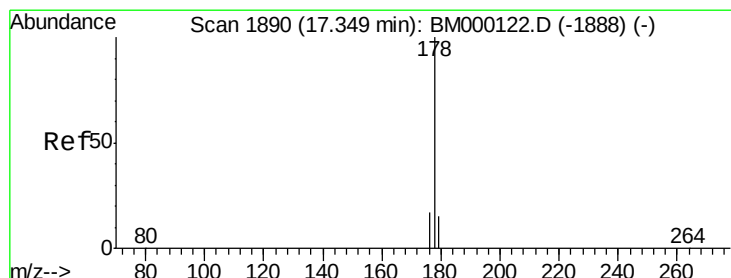
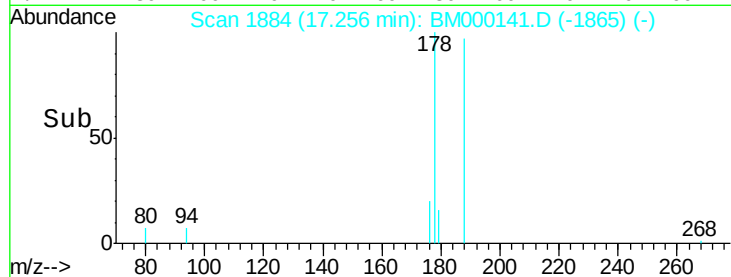
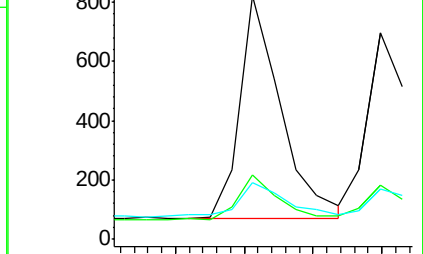
179 23.4 13.0 19.4#



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#13

Anthracene

Concen: 0.05 ng/ul

RT: 17.35 min Scan# 1890

Delta R.T. -0.00 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

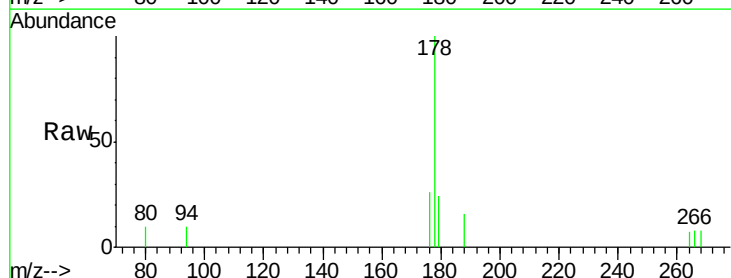
Tgt Ion:178 Resp: 1510

Ion Ratio Lower Upper

178 100

176 26.1 14.6 21.8#

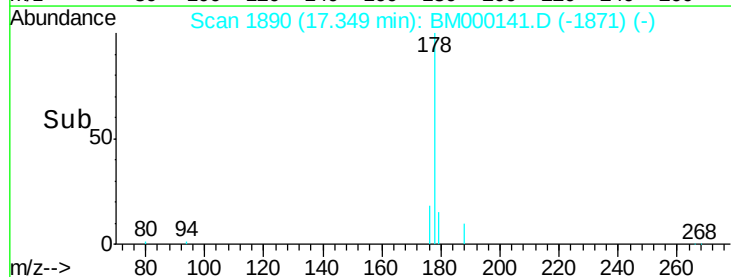
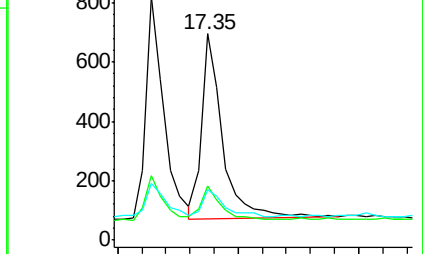
179 24.4 13.1 19.7#

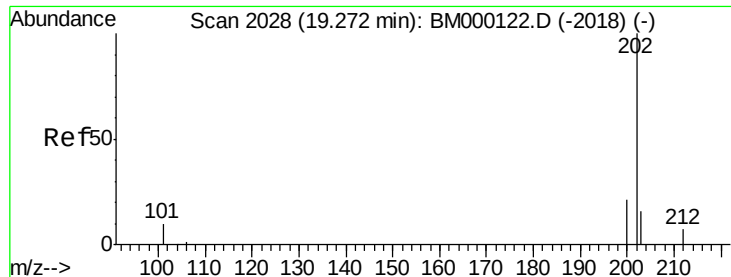


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#15

Fluoranthene

Concen: 0.05 ng/ul

RT: 19.28 min Scan# 2029

Delta R.T. 0.01 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

Instrument :

BNA\_M

ClientSampleId :

MDL-06-S

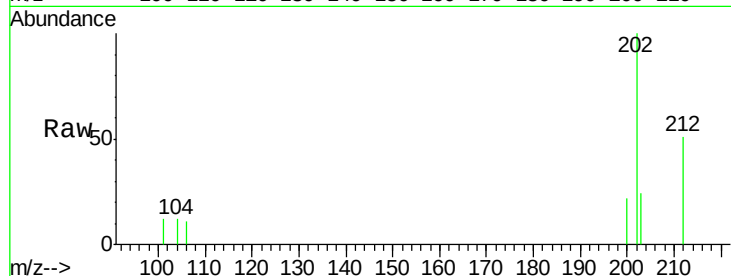
Tgt Ion:202 Resp: 1912

Ion Ratio Lower Upper

202 100

101 12.1 0.0 30.5

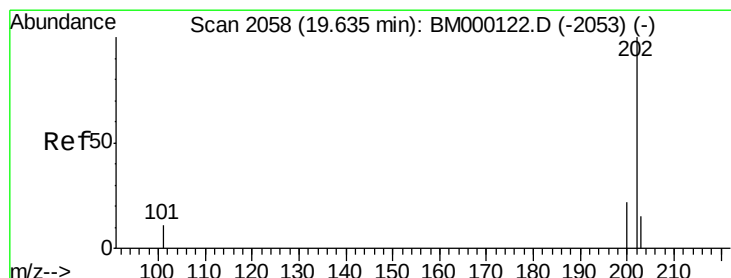
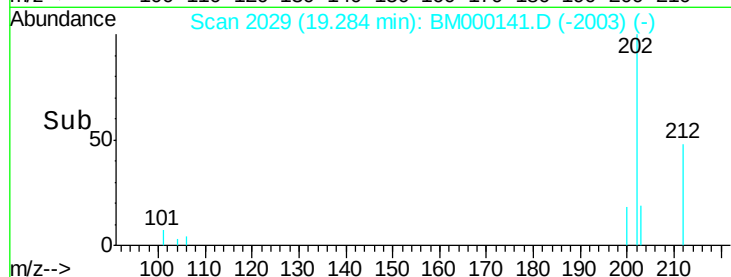
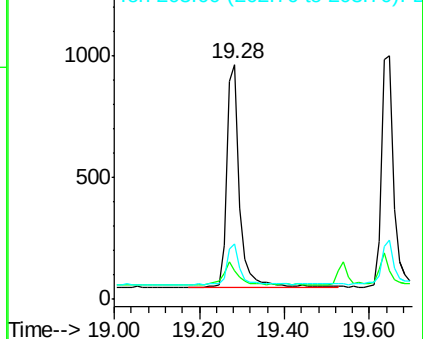
203 23.6 0.0 36.6



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#17

Pyrene

Concen: 0.05 ng/ul

RT: 19.65 min Scan# 2059

Delta R.T. 0.01 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

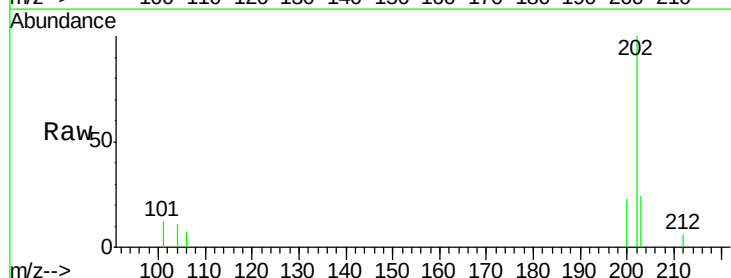
Tgt Ion:202 Resp: 1952

Ion Ratio Lower Upper

202 100

200 22.7 17.9 26.9

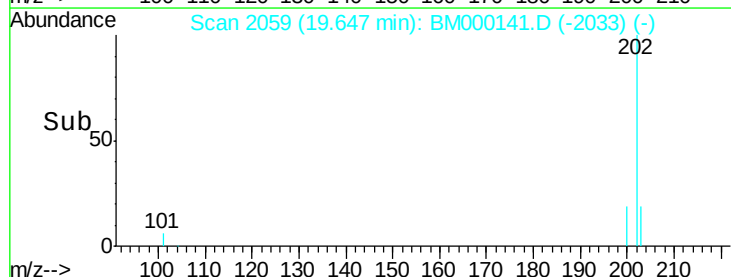
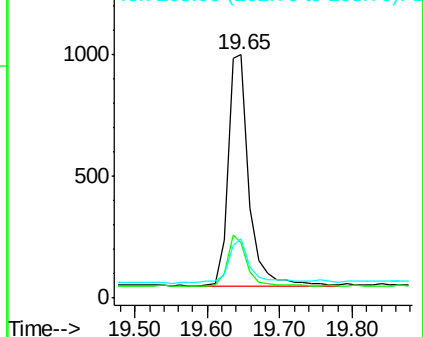
203 24.4 12.8 19.2#

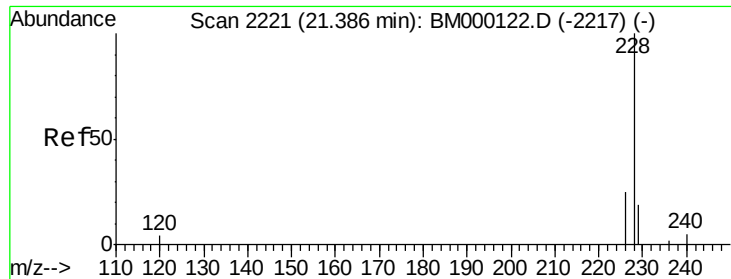


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#18

Benzo(a)anthracene

Concen: 0.05 ng/ul

RT: 21.39 min Scan# 2221

Delta R.T. -0.00 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

Instrument :

BNA\_M

ClientSampled :

MDL-06-S

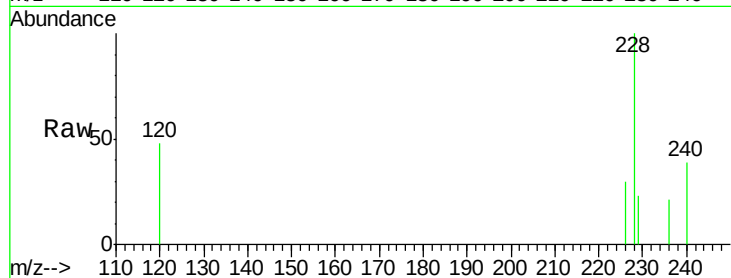
Tgt Ion:228 Resp: 1503

Ion Ratio Lower Upper

228 100

226 29.6 20.8 31.2

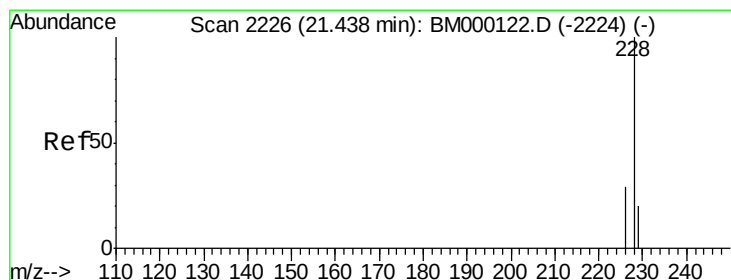
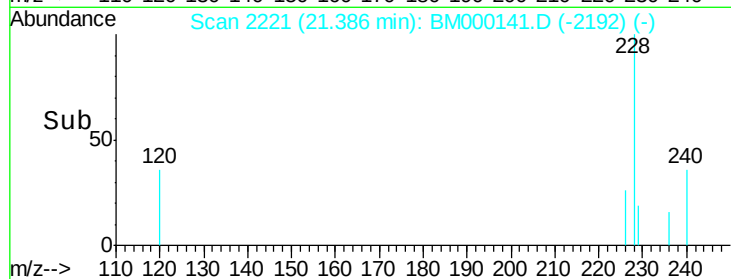
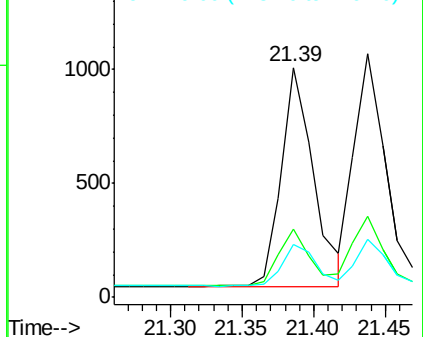
229 22.9 15.5 23.3



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#19

Chrysene

Concen: 0.05 ng/ul

RT: 21.39 min Scan# 2221

Delta R.T. -0.05 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

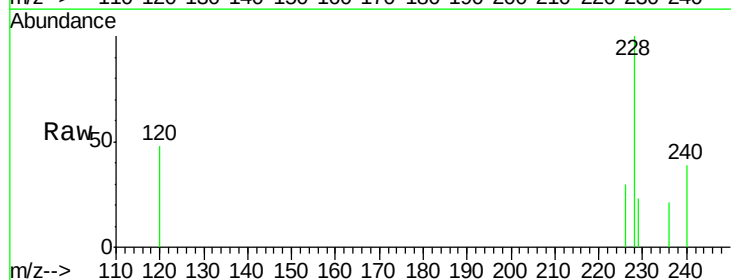
Tgt Ion:228 Resp: 1503

Ion Ratio Lower Upper

228 100

226 29.6 23.8 35.6

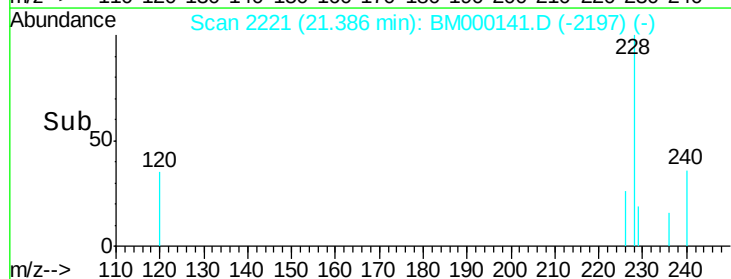
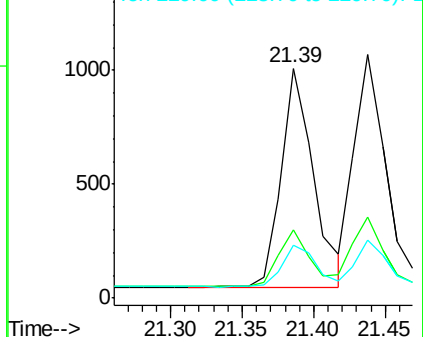
229 22.9 15.8 23.8



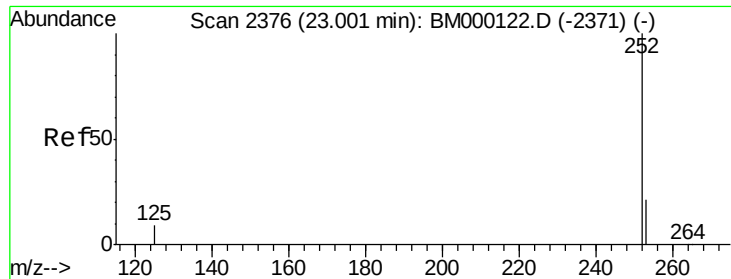
Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E







#21

Benzo(b)fluoranthene

Concen: 0.05 ng/ul

RT: 23.00 min Scan# 2376

Delta R.T. -0.00 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

Instrument :

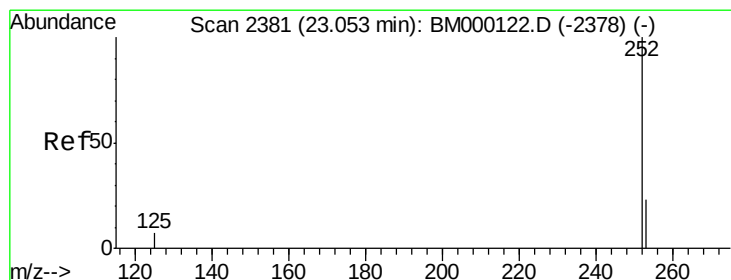
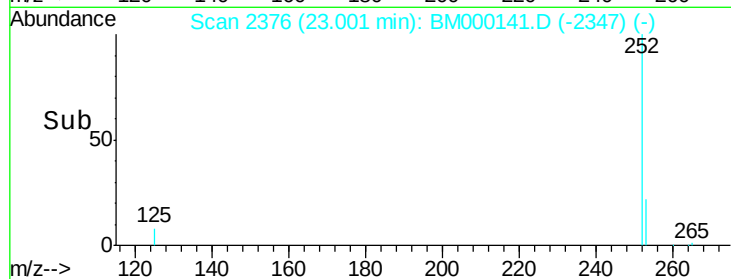
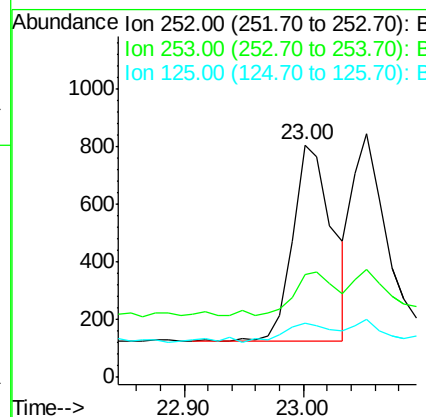
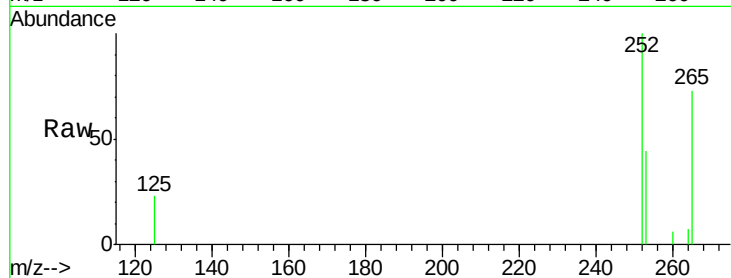
BNA\_M

ClientSampleId :

MDL-06-S

Tgt Ion:252 Resp: 1577

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 44.2  | 0.0   | 48.2  |
| 125 | 23.4  | 0.0   | 21.6# |



#22

Benzo(k)fluoranthene

Concen: 0.05 ng/ul

RT: 23.05 min Scan# 2381

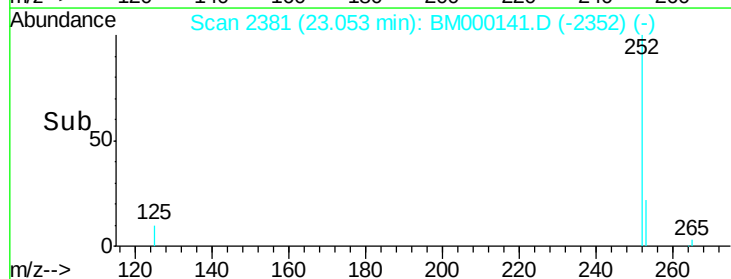
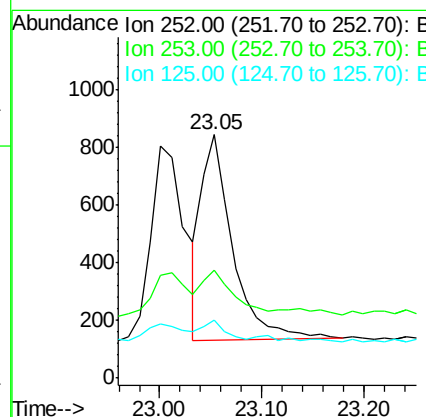
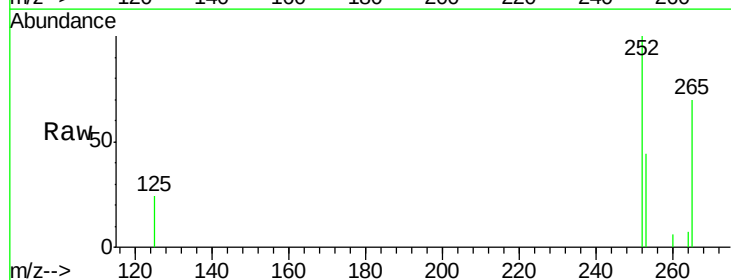
Delta R.T. -0.00 min

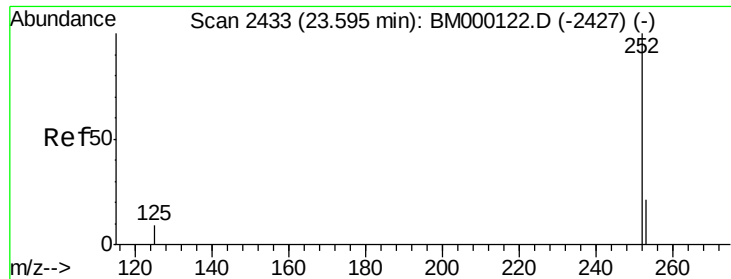
Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

Tgt Ion:252 Resp: 1499

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 44.4  | 20.5  | 30.7# |
| 125 | 23.8  | 7.8   | 11.8# |





#23

Benzo(a)pyrene

Concen: 0.05 ng/ul

RT: 23.60 min Scan# 2433

Delta R.T. -0.00 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

Instrument :

BNA\_M

ClientSampleId :

MDL-06-S

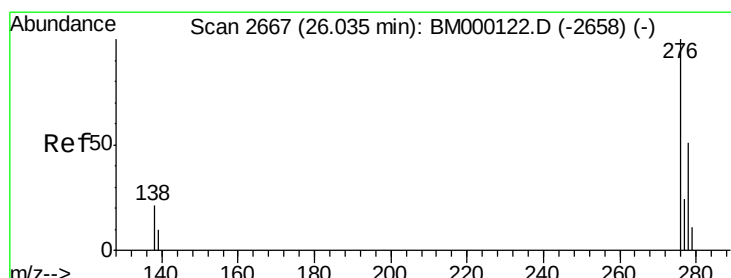
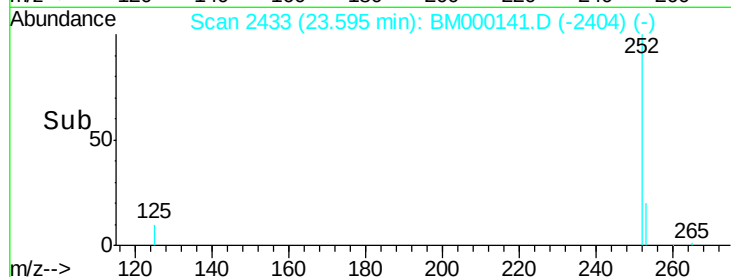
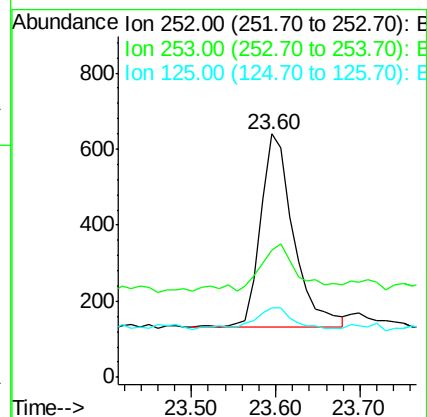
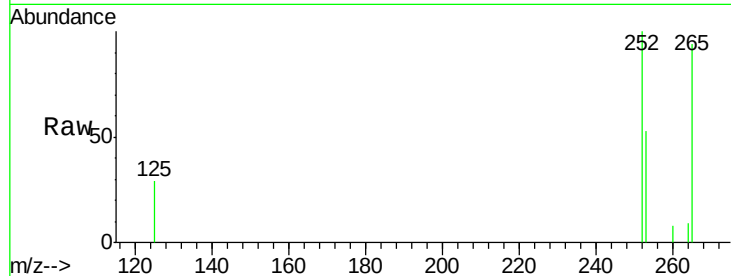
Tgt Ion:252 Resp: 1359

Ion Ratio Lower Upper

252 100

253 52.5 19.8 29.6#

125 28.6 9.2 13.8#



#24

Indeno(1,2,3-cd)pyrene

Concen: 0.05 ng/ul

RT: 26.05 min Scan# 2668

Delta R.T. 0.01 min

Lab File: BM000141.D

Acq: 07 Jan 2015 23:32

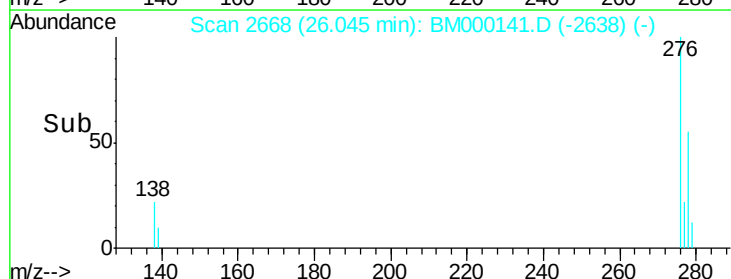
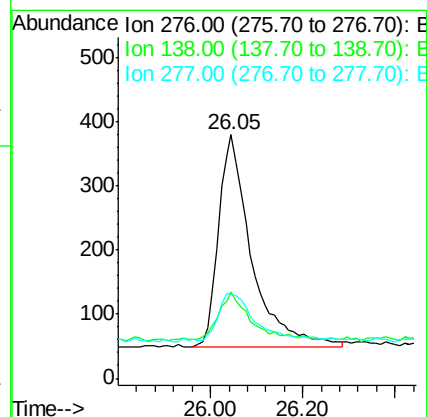
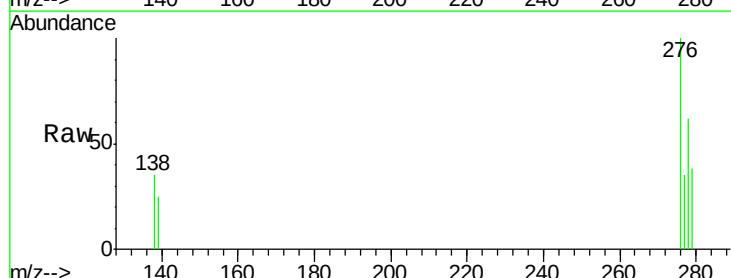
Tgt Ion:276 Resp: 1636

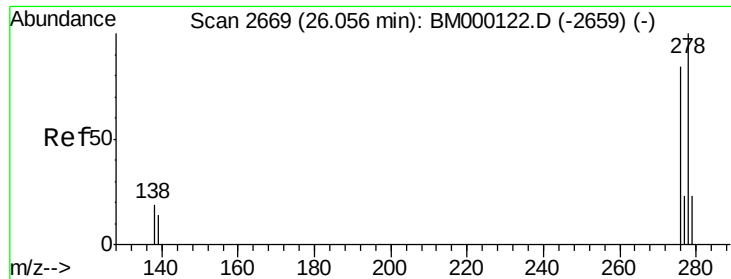
Ion Ratio Lower Upper

276 100

138 21.3 17.6 26.4

277 24.3 19.9 29.9



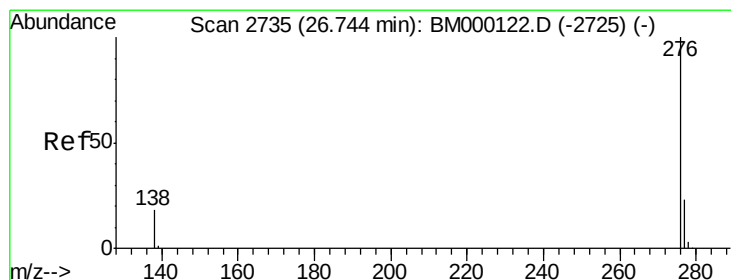
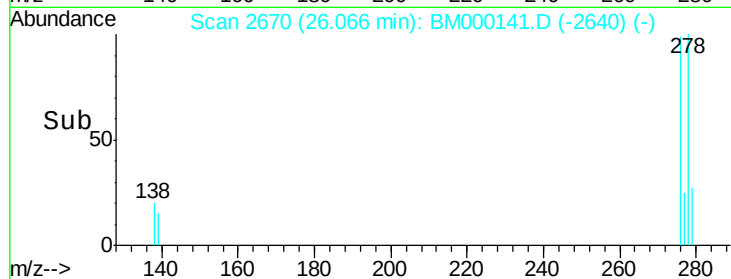
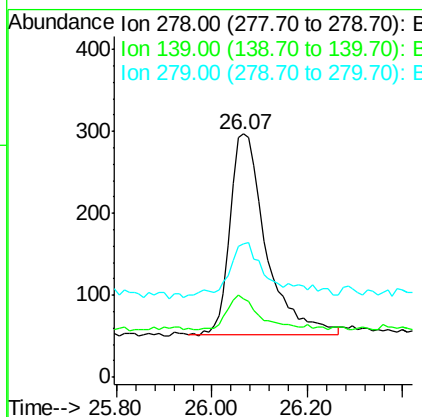
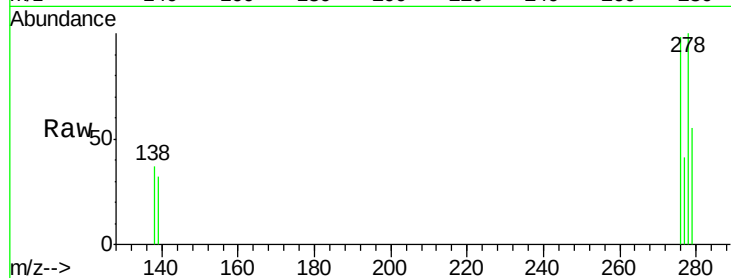


#25  
Dibenzo(a,h)anthracene  
Concen: 0.05 ng/ul  
RT: 26.07 min Scan# 2670  
Delta R.T. 0.01 min  
Lab File: BM000141.D  
Acq: 07 Jan 2015 23:32

Instrument :  
BNA\_M  
ClientSampleId :  
MDL-06-S

Tgt Ion: 278 Resp: 1279  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 278 | 100   |       |       |
| 139 | 32.3  | 12.6  | 18.8# |
| 279 | 54.9  | 20.6  | 30.8# |



#26  
Benzo(g,h,i)perylene  
Concen: 0.05 ng/ul  
RT: 26.74 min Scan# 2735  
Delta R.T. -0.00 min  
Lab File: BM000141.D  
Acq: 07 Jan 2015 23:32

Tgt Ion: 276 Resp: 1490  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 276 | 100   |       |       |
| 277 | 37.6  | 20.0  | 30.0# |
| 138 | 34.0  | 15.7  | 23.5# |

