

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE072215\  
 Data File : BE090215.D  
 Acq On : 22 Jul 2015 00:44  
 Operator : TP/IZ  
 Sample : MDL-06-S  
 Misc : MDL-SIM-SOIL-0.07PPM  
 ALS Vial : 14 Sample Multiplier: 1

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

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Quant Time: Jul 22 05:30:43 2015  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SOM02.2-EPA-SIM-BE072215.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 22 04:13:39 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.60  | 152  | 646      | 0.40 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 10.37 | 136  | 3202     | 0.40 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 14.21 | 164  | 1919     | 0.40 | ng/ul | 0.00     |
| 10) Phenanthrene-d10      | 16.95 | 188  | 5125     | 0.40 | ng/ul | 0.01     |
| 16) Chrysene-d12          | 21.12 | 240  | 2399     | 0.40 | ng/ul | 0.00     |
| 20) Perylene-d12          | 23.42 | 264  | 1228     | 0.40 | ng/ul | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 4) 2-Methylnaphthalene-d10  | 11.96 | 152  | 1745     | 0.35 | ng/ul | 0.00     |
| 14) Fluoranthene-d10        | 18.98 | 212  | 5072     | 0.35 | ng/ul | 0.00     |

| Target Compounds           | R.T.  | QIon | Response | Conc | Units  | Qvalue |
|----------------------------|-------|------|----------|------|--------|--------|
| 3) Naphthalene             | 10.42 | 128  | 456      | 0.05 | ng/ul# | 65     |
| 5) 2-Methylnaphthalene     | 12.03 | 142  | 294      | 0.05 | ng/ul  | 92     |
| 7) Acenaphthylene          | 13.93 | 152  | 2045     | 0.05 | ng/ul# | 75     |
| 8) Acenaphthene            | 14.27 | 153  | 1513     | 0.05 | ng/ul  | 95     |
| 9) Fluorene                | 15.27 | 166  | 447      | 0.05 | ng/ul# | 93     |
| 12) Phenanthrene           | 16.99 | 178  | 2979     | 0.05 | ng/ul# | 81     |
| 13) Anthracene             | 17.07 | 178  | 2925     | 0.05 | ng/ul# | 76     |
| 15) Fluoranthene           | 19.00 | 202  | 3303     | 0.05 | ng/ul  | 80     |
| 17) Pyrene                 | 19.37 | 202  | 3407     | 0.09 | ng/ul# | 81     |
| 18) Benzo(a)anthracene     | 21.10 | 228  | 178      | 0.05 | ng/ul# | 52     |
| 19) Chrysene               | 21.15 | 228  | 487m     | 0.05 | ng/ul  |        |
| 21) Benzo(b)fluoranthene   | 22.73 | 252  | 102      | 0.06 | ng/ul# | 13     |
| 22) Benzo(k)fluoranthene   | 22.77 | 252  | 146m     | 0.03 | ng/ul  |        |
| 23) Benzo(a)pyrene         | 23.32 | 252  | 121      | 0.05 | ng/ul# | 6      |
| 24) Indeno(1,2,3-cd)pyrene | 25.82 | 276  | 352      | 0.05 | ng/ul# | 86     |
| 25) Dibenzo(a,h)anthracene | 25.84 | 278  | 59       | 0.05 | ng/ul# | 26     |
| 26) Benzo(g,h,i)perylene   | 26.55 | 276  | 458      | 0.05 | ng/ul# | 20     |

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

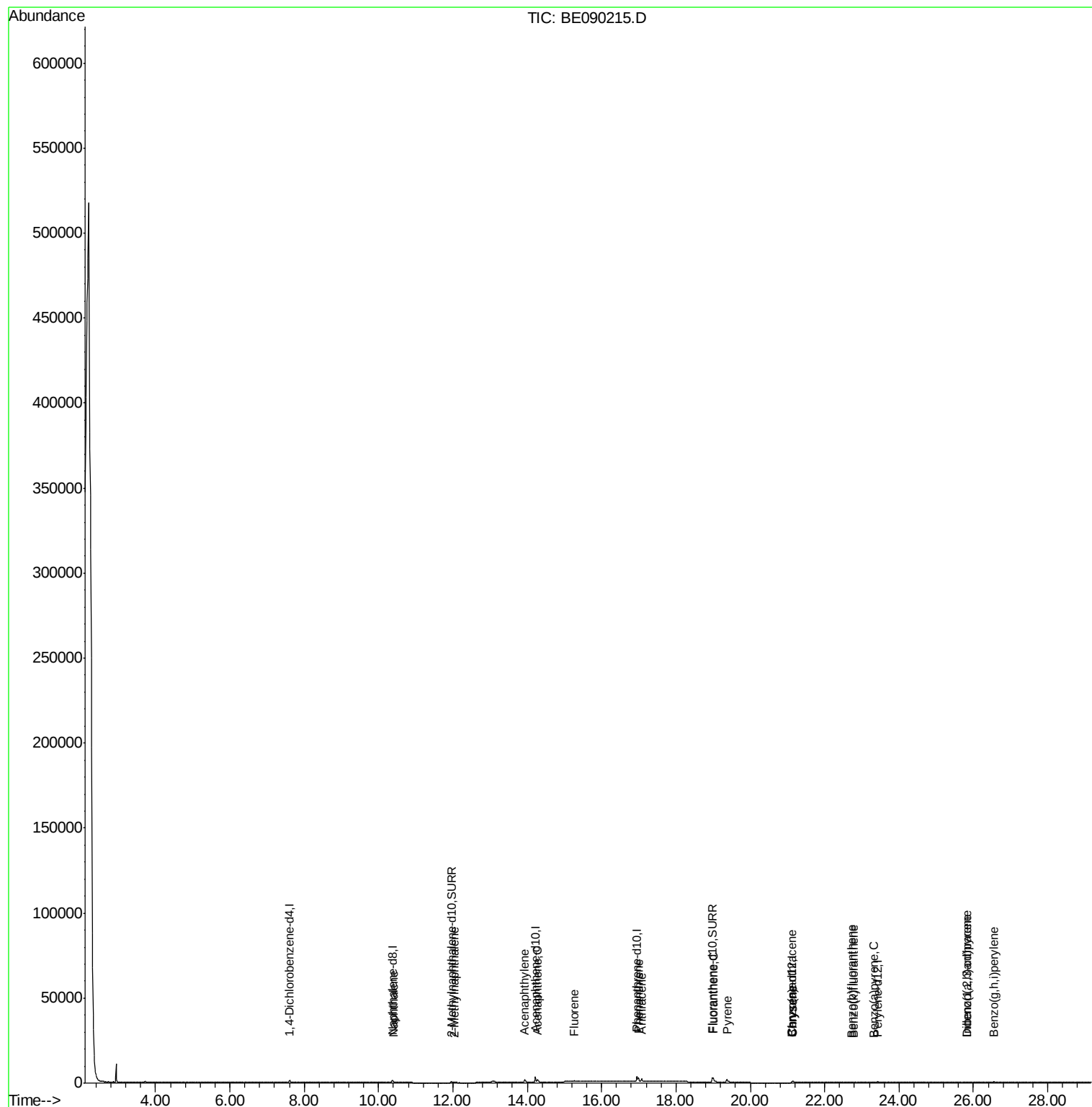
Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE072215\  
Data File : BE090215.D  
Acq On : 22 Jul 2015 00:44  
Operator : TP/IZ  
Sample : MDL-06-S  
Misc : MDL-SIM-SOIL-0.07PPM  
ALS Vial : 14 Sample Multiplier: 1

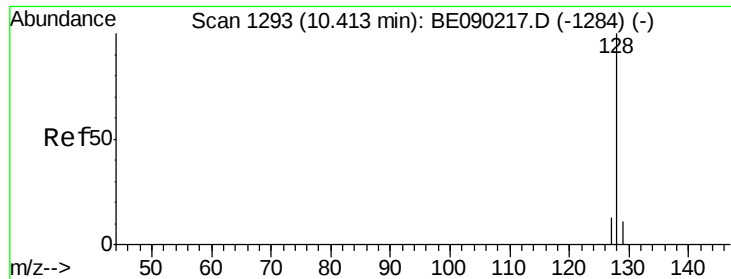
Instrument :  
BNA\_E  
ClientSampleId :  
MDL-06-S

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Quant Time: Jul 22 05:30:43 2015  
Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SOM02.2-EPA-SIM-BE072215.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Wed Jul 22 04:13:39 2015  
Response via : Initial Calibration





#3

Naphthalene

Concen: 0.05 ng/ul

RT: 10.42 min Scan# 1294

Delta R.T. 0.01 min

Lab File: BE090215.D

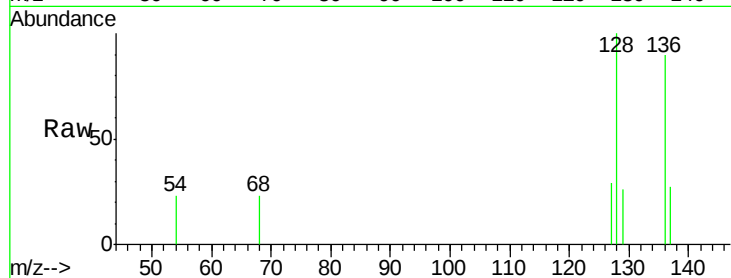
Acq: 22 Jul 2015 00:44

Instrument :

BNA\_E

ClientSampleId :

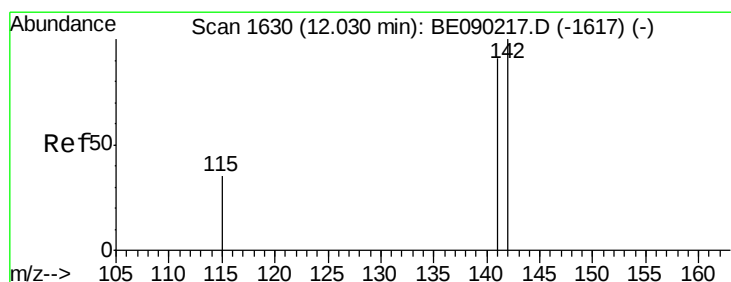
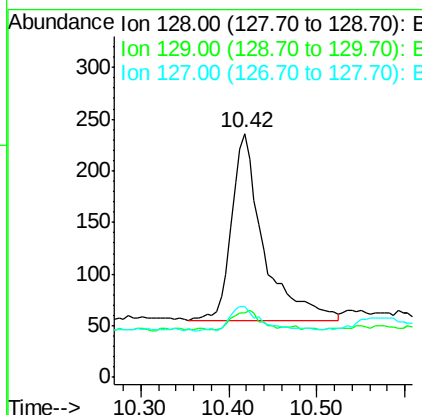
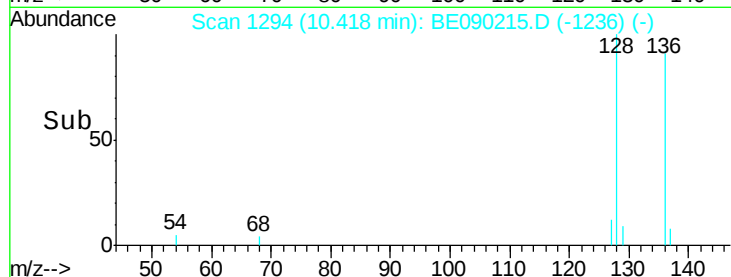
MDL-06-S



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 128   | Resp: | 456   |
| Ion Ratio | Lower | Upper |       |
| 128       | 100   |       |       |
| 129       | 26.3  | 10.2  | 15.2# |
| 127       | 29.2  | 11.8  | 17.6# |

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#5

2-Methylnaphthalene

Concen: 0.05 ng/ul

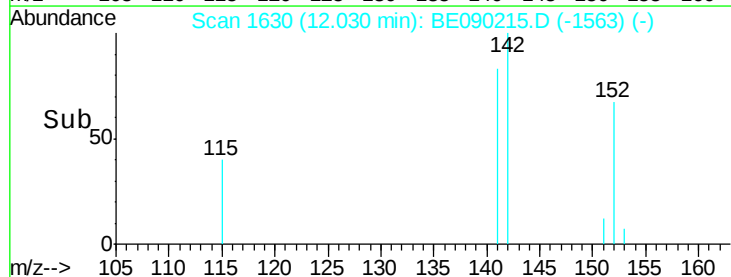
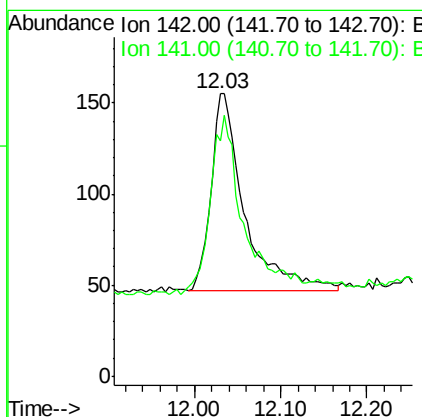
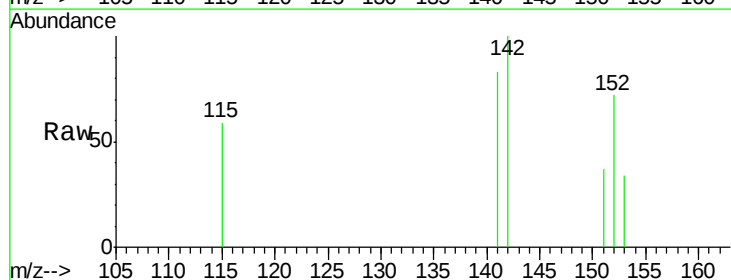
RT: 12.03 min Scan# 1630

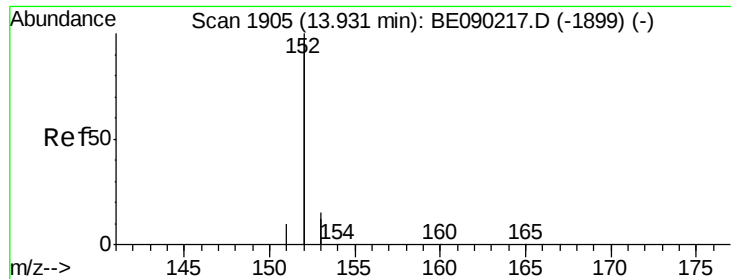
Delta R.T. 0.00 min

Lab File: BE090215.D

Acq: 22 Jul 2015 00:44

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 142   | Resp: | 294   |
| Ion Ratio | Lower | Upper |       |
| 142       | 100   |       |       |
| 141       | 84.0  | 73.0  | 109.6 |





#7

Acenaphthylene

Concen: 0.05 ng/ul

RT: 13.93 min Scan# 1905

Delta R.T. 0.00 min

Lab File: BE090215.D

Acq: 22 Jul 2015 00:44

Instrument :

BNA\_E

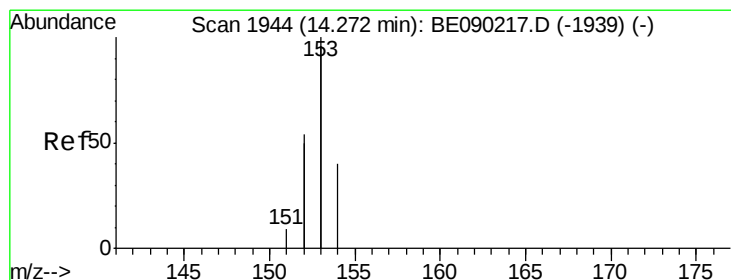
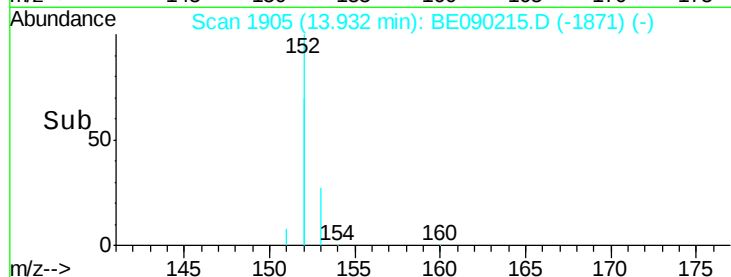
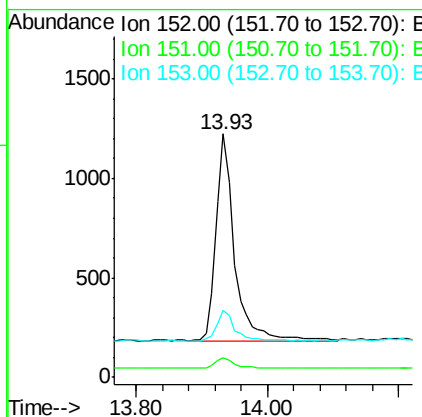
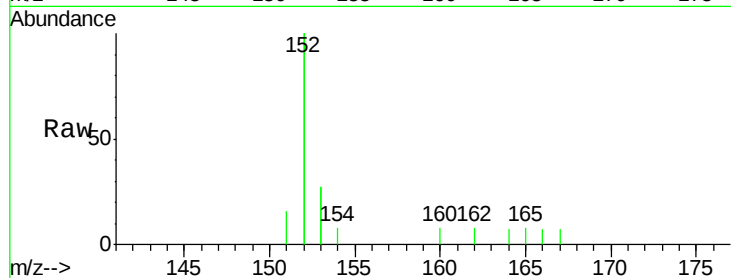
ClientSampleId :

MDL-06-S

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 152   | Resp: | 2045  |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 151       | 7.9   | 4.2   | 6.4#  |
| 153       | 27.5  | 11.5  | 17.3# |

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#8

Acenaphthene

Concen: 0.05 ng/ul

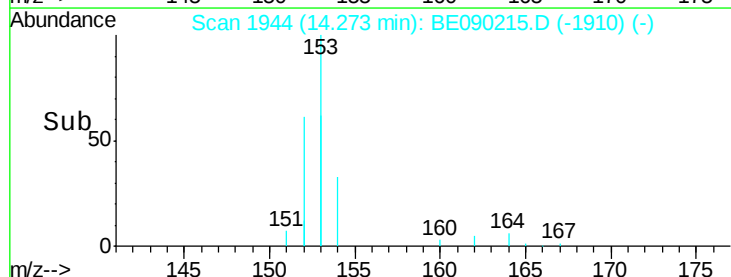
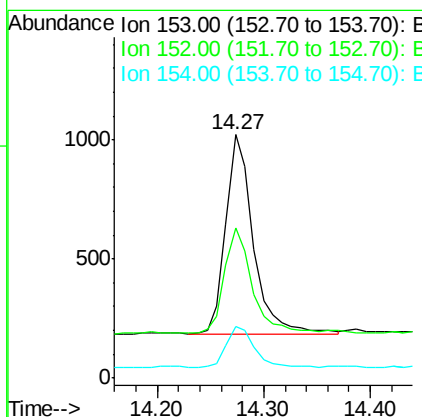
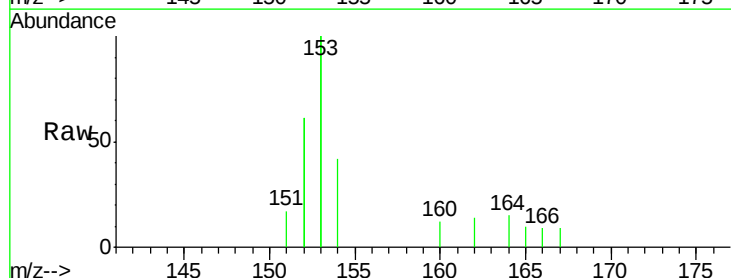
RT: 14.27 min Scan# 1944

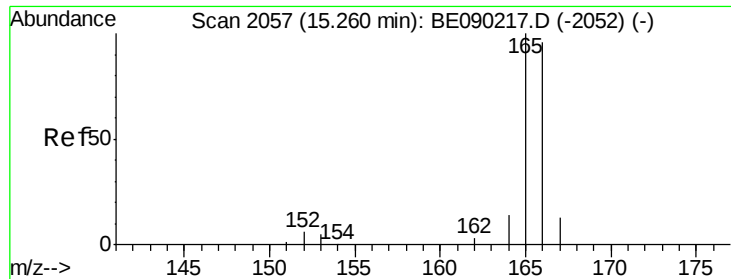
Delta R.T. 0.00 min

Lab File: BE090215.D

Acq: 22 Jul 2015 00:44

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 153   | Resp: | 1513 |
| Ion Ratio | Lower | Upper |      |
| 153       | 100   |       |      |
| 152       | 61.4  | 45.0  | 67.4 |
| 154       | 20.9  | 16.8  | 25.2 |





#9

Fluorene

Concen: 0.05 ng/ul

RT: 15.27 min Scan# 2058

Delta R.T. 0.01 min

Lab File: BE090215.D

Acq: 22 Jul 2015 00:44

Instrument :

BNA\_E

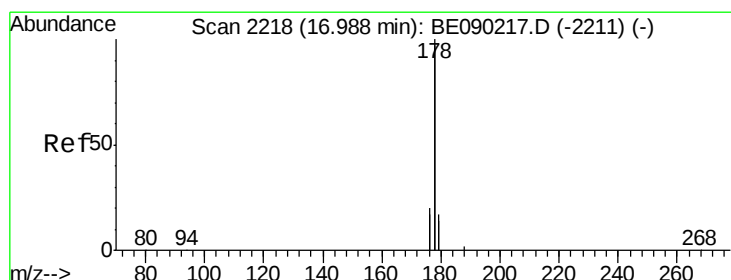
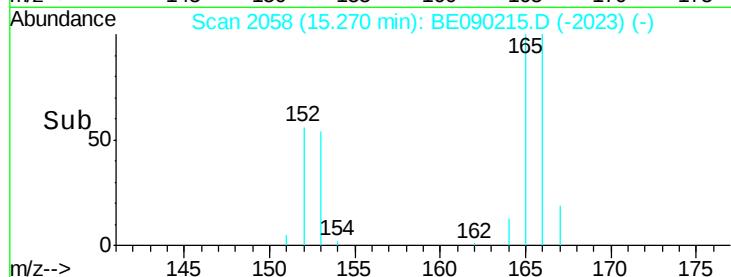
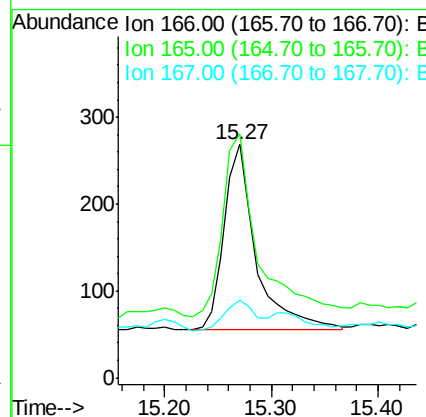
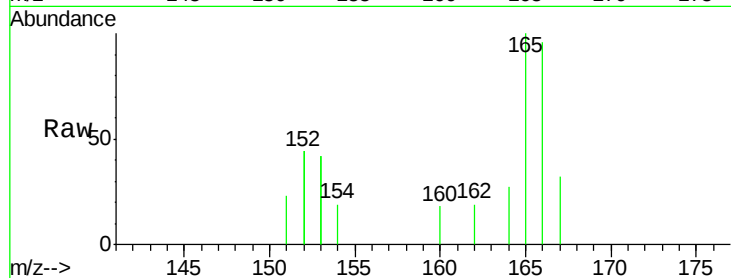
ClientSampleId :

MDL-06-S

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 166   | Resp: | 447   |
| Ion Ratio | Lower | Upper |       |
| 166       | 100   |       |       |
| 165       | 104.5 | 81.9  | 122.9 |
| 167       | 33.5  | 12.2  | 18.2  |

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#12

Phenanthrene

Concen: 0.05 ng/ul

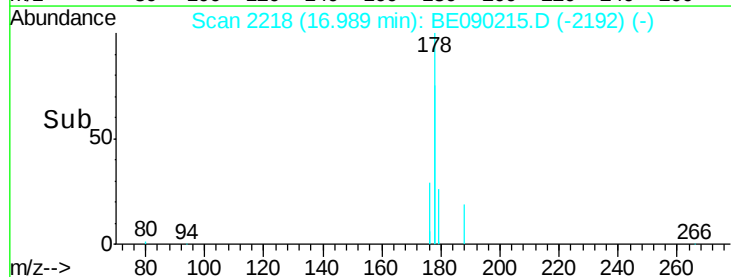
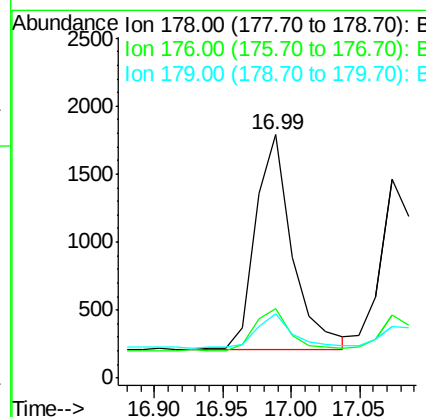
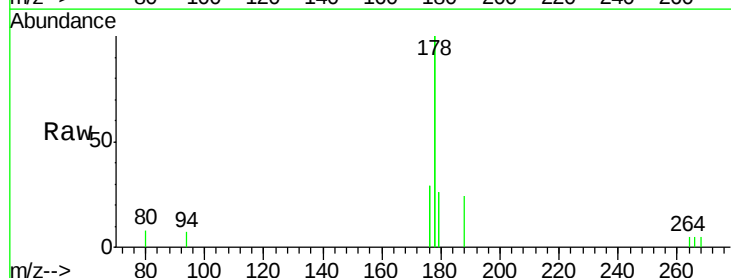
RT: 16.99 min Scan# 2218

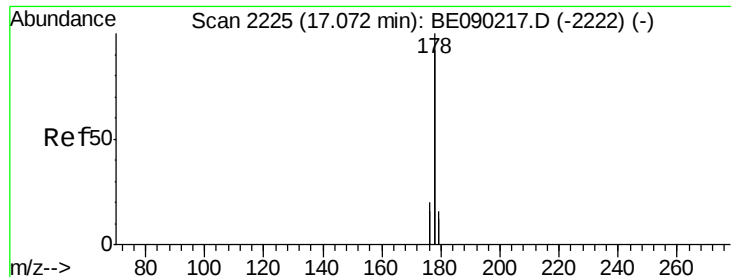
Delta R.T. 0.01 min

Lab File: BE090215.D

Acq: 22 Jul 2015 00:44

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 178   | Resp: | 2979 |
| Ion Ratio | Lower | Upper |      |
| 178       | 100   |       |      |
| 176       | 28.7  | 17.6  | 26.4 |
| 179       | 26.4  | 12.2  | 18.4 |





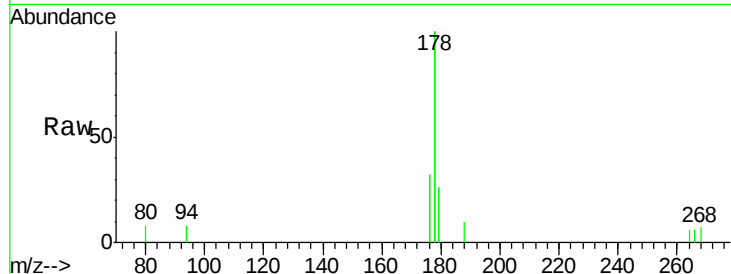
#13  
 Anthracene  
 Concen: 0.05 ng/ul  
 RT: 17.07 min Scan# 2225  
 Delta R.T. -0.00 min  
 Lab File: BE090215.D  
 Acq: 22 Jul 2015 00:44

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

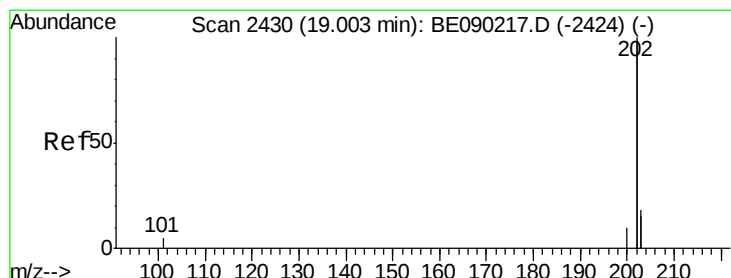
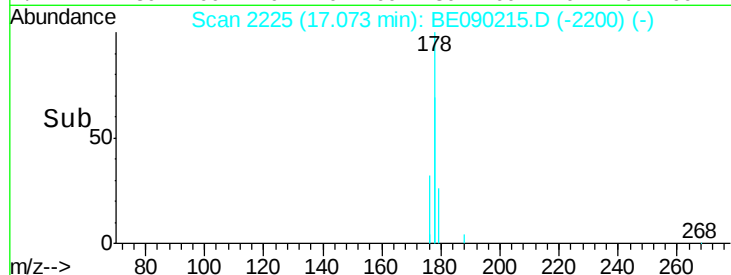
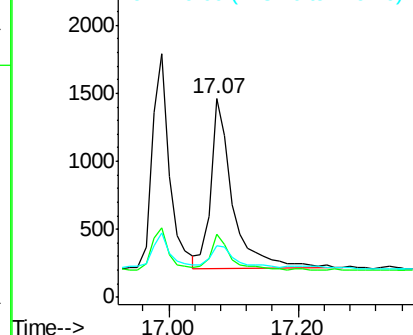
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 31.7  | 15.9  | 23.9# |
| 179     | 25.8  | 13.3  | 19.9# |

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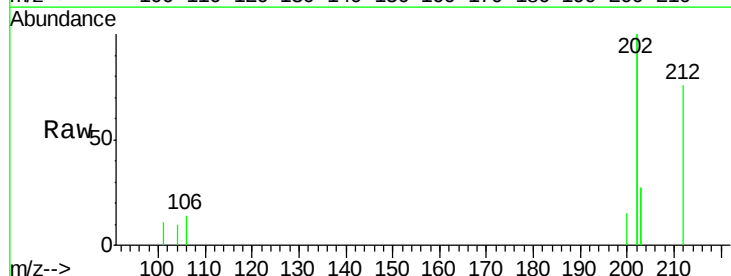


Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

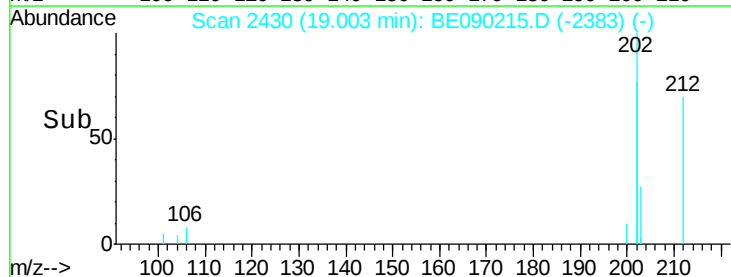
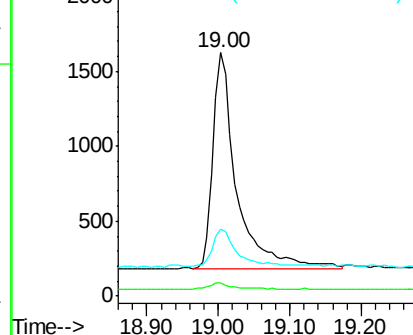


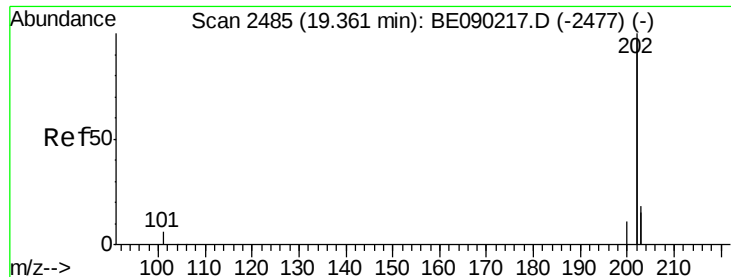
#15  
 Fluoranthene  
 Concen: 0.05 ng/ul  
 RT: 19.00 min Scan# 2430  
 Delta R.T. 0.01 min  
 Lab File: BE090215.D  
 Acq: 22 Jul 2015 00:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 5.3   | 0.0   | 23.0  |
| 203     | 27.4  | 0.0   | 37.8  |



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





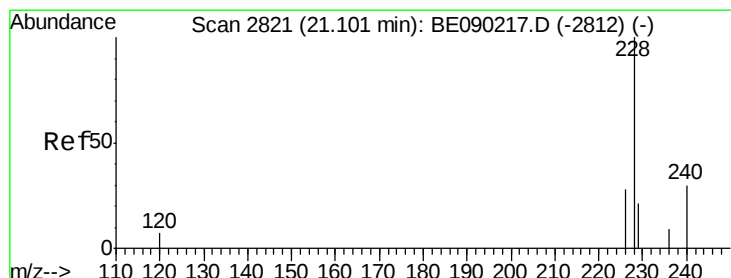
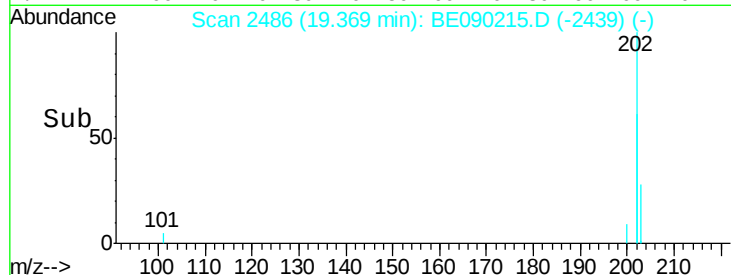
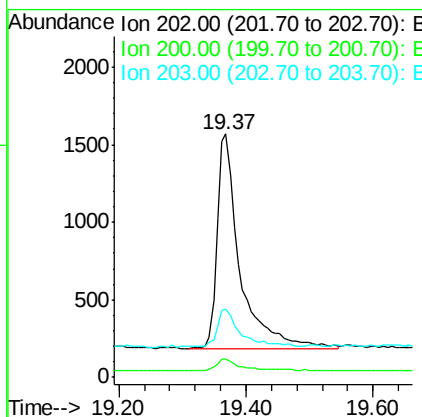
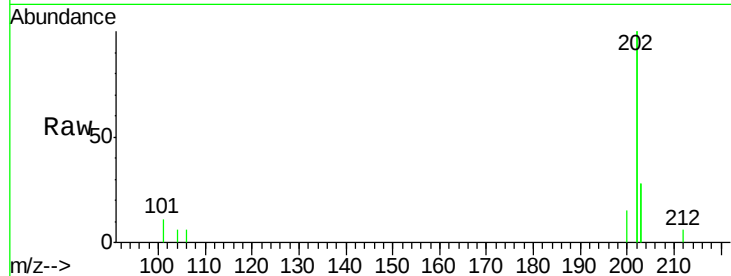
#17  
Pyrene  
Concen: 0.09 ng/u1  
RT: 19.37 min Scan# 2486  
Delta R.T. 0.01 min  
Lab File: BE090215.D  
Acq: 22 Jul 2015 00:44

Instrument :  
BNA\_E  
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MDL-06-S

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 202     | 100   | 3407 |       |       |
| 200     | 7.6   | 4.4  | 6.6#  |       |
| 203     | 28.2  | 14.6 | 22.0# |       |

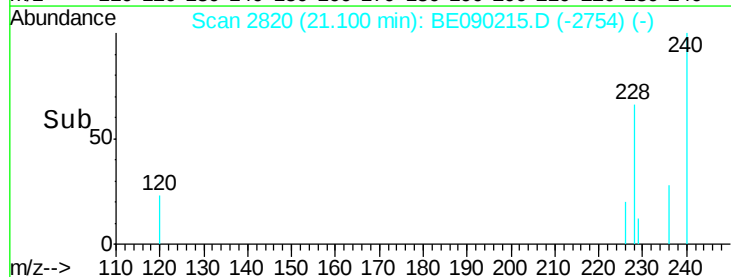
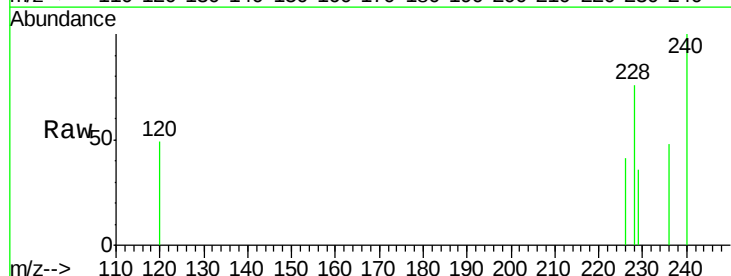
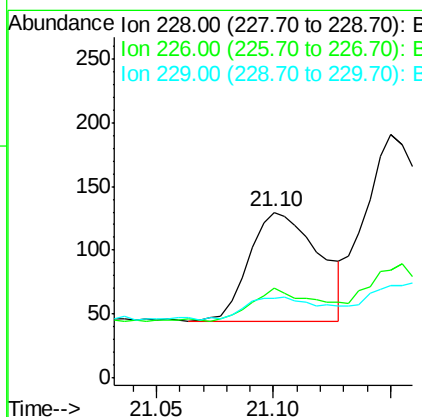
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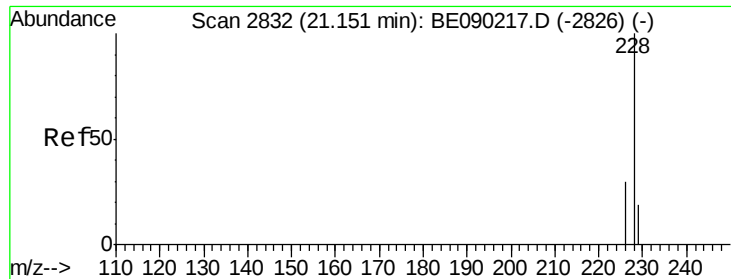
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#18  
Benzo(a)anthracene  
Concen: 0.05 ng/u1  
RT: 21.10 min Scan# 2820  
Delta R.T. -0.00 min  
Lab File: BE090215.D  
Acq: 22 Jul 2015 00:44

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 228     | 100   | 178  |       |       |
| 226     | 53.8  | 24.1 | 36.1# |       |
| 229     | 47.7  | 17.9 | 26.9# |       |





#19

Chrysene

Concen: 0.05 ng/ul m

RT: 21.15 min Scan# 2831

Delta R.T. -0.00 min

Lab File: BE090215.D

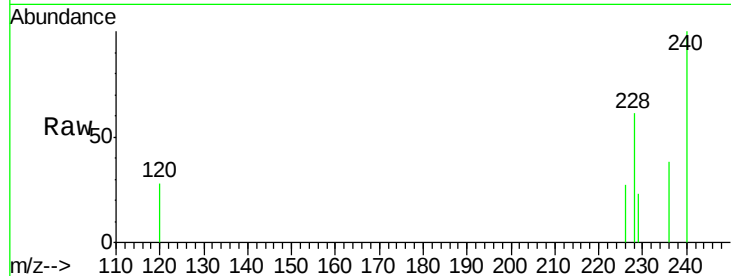
Acq: 22 Jul 2015 00:44

Instrument :

BNA\_E

ClientSampleId :

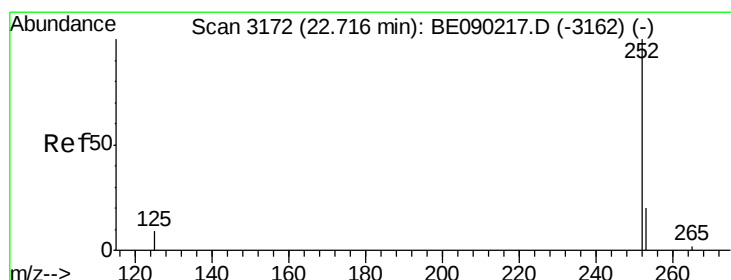
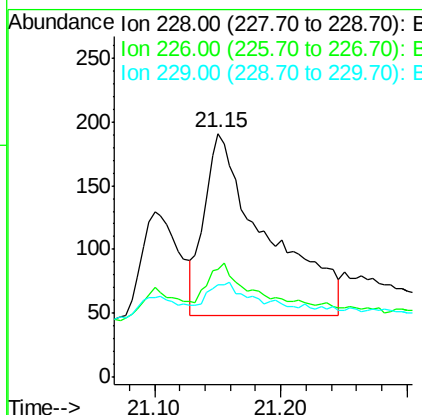
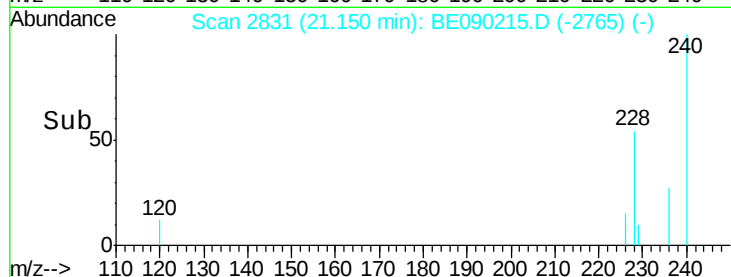
MDL-06-S



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 487   |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 44.0  | 24.6  | 36.8# |
| 229       | 37.7  | 17.4  | 26.2# |

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#21

Benzo(b)fluoranthene

Concen: 0.06 ng/ul

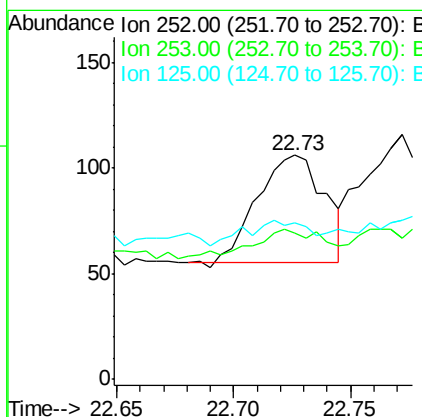
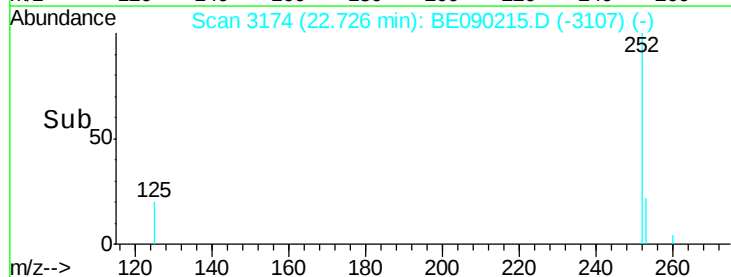
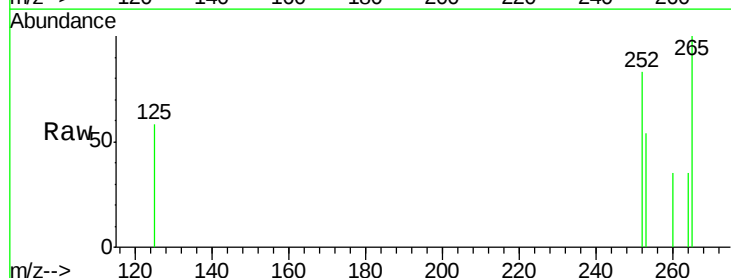
RT: 22.73 min Scan# 3174

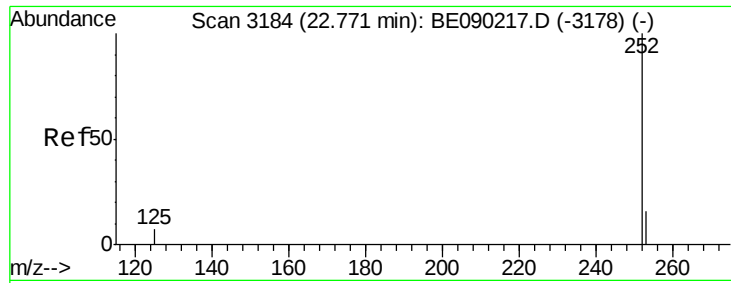
Delta R.T. 0.00 min

Lab File: BE090215.D

Acq: 22 Jul 2015 00:44

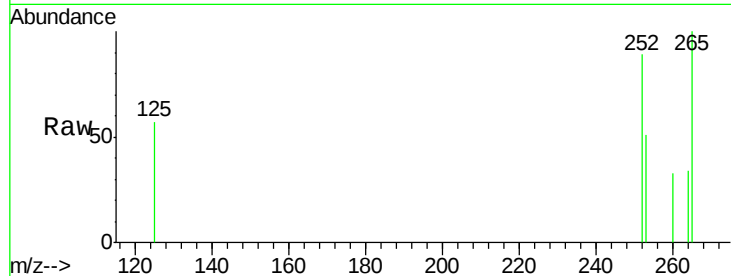
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 252   | Resp: | 102   |
| Ion Ratio | Lower | Upper |       |
| 252       | 100   |       |       |
| 253       | 65.1  | 0.0   | 56.8# |
| 125       | 69.8  | 0.0   | 37.0# |





#22  
Benzo(k)fluoranthene  
Concen: 0.03 ng/ul m  
RT: 22.77 min Scan# 3184  
Delta R.T. 0.01 min  
Lab File: BE090215.D  
Acq: 22 Jul 2015 00:44

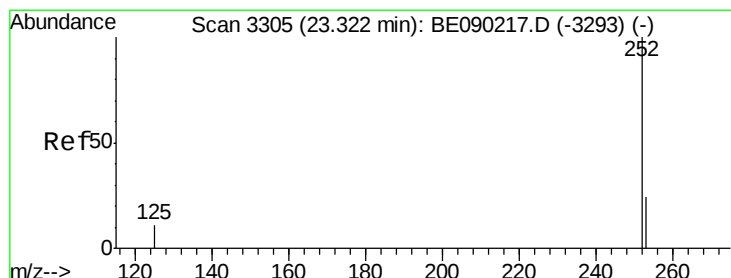
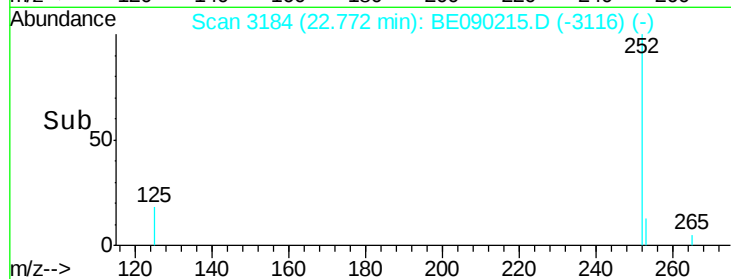
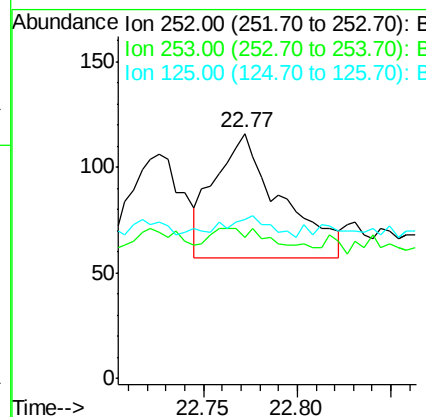
Instrument :  
BNA\_E  
ClientSampleId :  
MDL-06-S



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 57.8  | 19.5  | 29.3# |
| 125     | 64.7  | 11.9  | 17.9# |

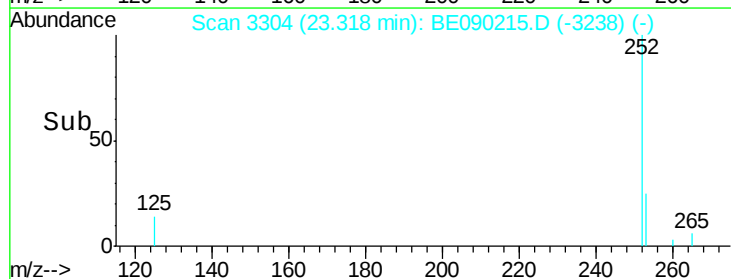
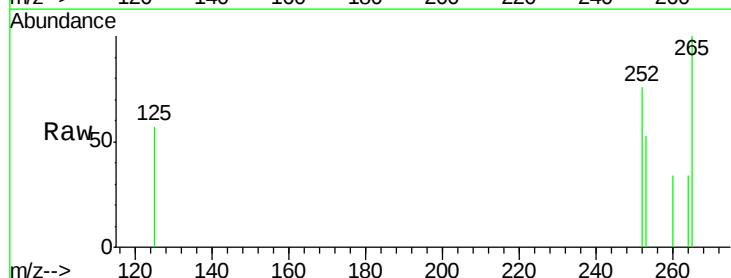
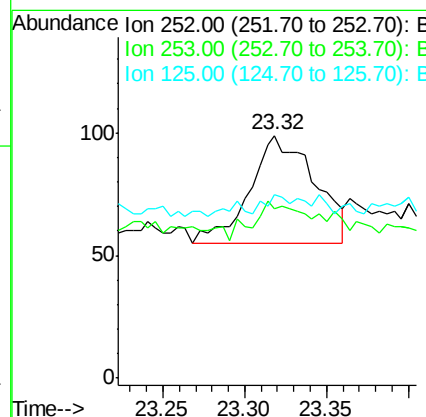
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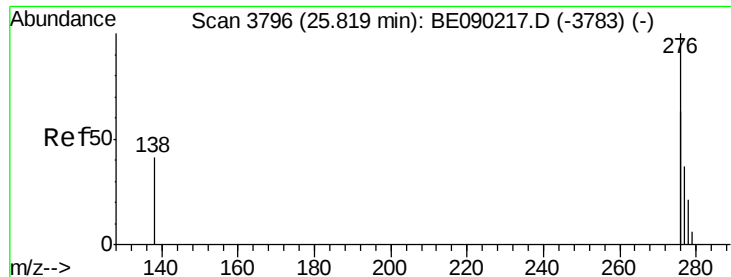
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#23  
Benzo(a)pyrene  
Concen: 0.05 ng/ul  
RT: 23.32 min Scan# 3304  
Delta R.T. -0.00 min  
Lab File: BE090215.D  
Acq: 22 Jul 2015 00:44

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 69.7  | 23.7  | 35.5# |
| 125     | 75.8  | 15.4  | 23.2# |





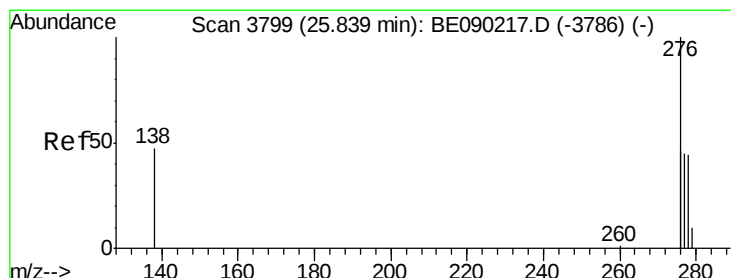
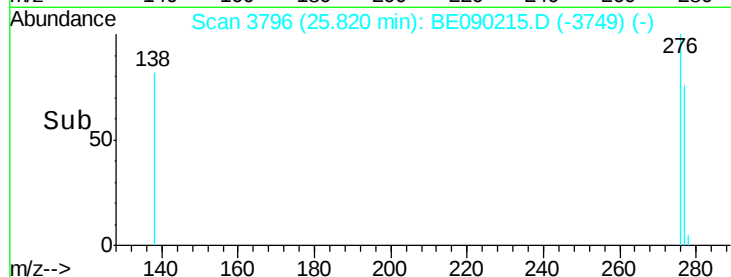
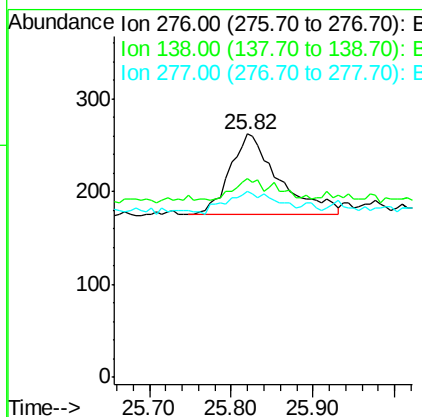
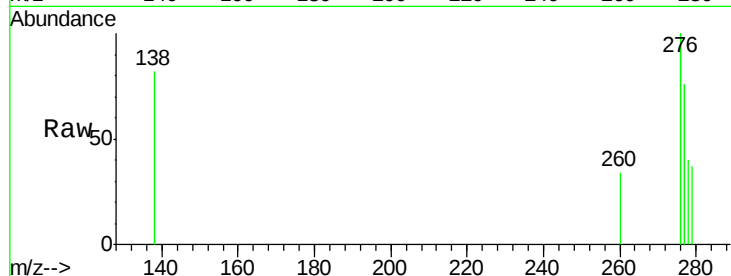
#24  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.05 ng/ul  
 RT: 25.82 min Scan# 3796  
 Delta R.T. 0.01 min  
 Lab File: BE090215.D  
 Acq: 22 Jul 2015 00:44

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

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 15.1  | 16.9  | 25.3# |
| 277     | 28.7  | 17.0  | 25.4# |

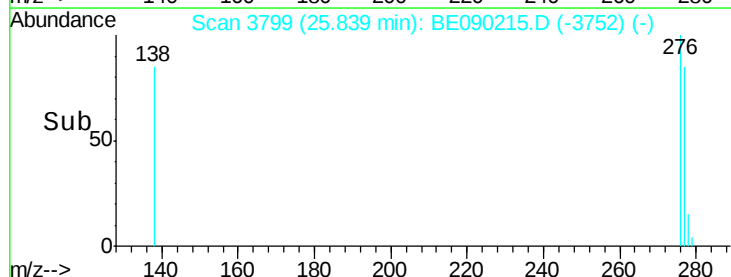
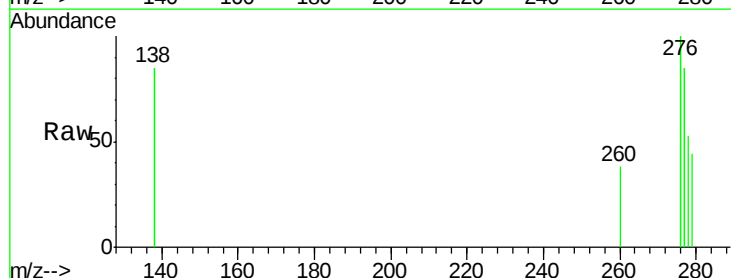
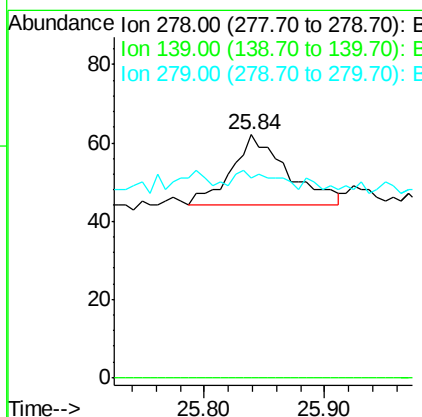
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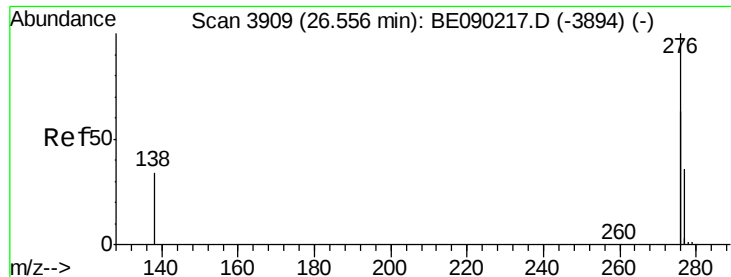
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#25  
 Dibenzo(a,h)anthracene  
 Concen: 0.05 ng/ul  
 RT: 25.84 min Scan# 3799  
 Delta R.T. 0.01 min  
 Lab File: BE090215.D  
 Acq: 22 Jul 2015 00:44

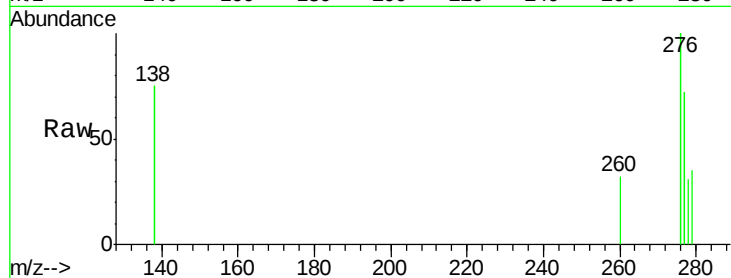
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 0.0   | 0.0   | 0.0   |
| 279     | 82.3  | 30.1  | 45.1# |





#26  
Benzo(g,h,i)perylene  
Concen: 0.05 ng/ul  
RT: 26.55 min Scan# 3908  
Delta R.T. -0.01 min  
Lab File: BE090215.D  
Acq: 22 Jul 2015 00:44

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



| Tgt | Ion  | Ratio | Lower | Upper | Resp |
|-----|------|-------|-------|-------|------|
| 276 | 100  |       |       |       | 458  |
| 277 | 71.8 | 24.6  | 36.8# |       |      |
| 138 | 75.4 | 23.5  | 35.3# |       |      |

Manual Integrations  
APPROVED

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