

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE060817\  
 Data File : BE093079.D  
 Acq On : 8 Jun 2017 14:02  
 Operator : SJ/MA  
 Sample : MDL-W-4  
 Misc : 0.07 PPM  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 MDL-W-4

Manual Integrations  
 APPROVED

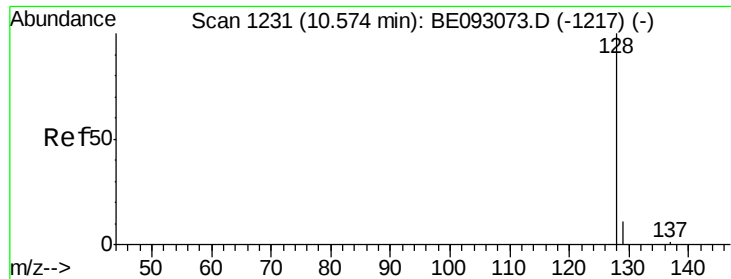
mohammad  
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Quant Time: Jun 08 14:34:42 2017  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SOM-EPA-SIM-BE060717.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jun 08 13:24:15 2017  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.74  | 152  | 4270     | 0.40  | ng/ul  | 0.00     |
| 2) Naphthalene-d8           | 10.52 | 136  | 19986    | 0.40  | ng/ul  | 0.00     |
| 6) Acenaphthene-d10         | 14.37 | 164  | 10133    | 0.40  | ng/ul  | 0.00     |
| 10) Phenanthrene-d10        | 17.10 | 188  | 25366    | 0.40  | ng/ul  | 0.00     |
| 16) Chrysene-d12            | 21.26 | 240  | 30815    | 0.40  | ng/ul  | 0.00     |
| 20) Perylene-d12            | 23.67 | 264  | 28494    | 0.40  | ng/ul  | 0.00     |
| System Monitoring Compounds |       |      |          |       |        |          |
| 4) 2-Methylnaphthalene-d10  | 12.11 | 152  | 9792     | 0.33  | ng/ul  | 0.00     |
| 14) Fluoranthene-d10        | 19.13 | 212  | 24545    | 0.36  | ng/ul  | 0.00     |
| Target Compounds            |       |      |          |       | Qvalue |          |
| 3) Naphthalene              | 10.57 | 128  | 2514     | 0.051 | ng/ul# | 94       |
| 5) 2-Methylnaphthalene      | 12.19 | 142  | 1569     | 0.046 | ng/ul  | 99       |
| 7) Acenaphthylene           | 14.08 | 152  | 1843     | 0.042 | ng/ul  | 98       |
| 8) Acenaphthene             | 14.43 | 153  | 1659     | 0.047 | ng/ul  | 93       |
| 9) Fluorene                 | 15.42 | 166  | 1846     | 0.045 | ng/ul  | 93       |
| 11) Pentachlorophenol       | 16.76 | 266  | 132      | 0.035 | ng/ul# | 86       |
| 12) Phenanthrene            | 17.14 | 178  | 3458m    | 0.050 | ng/ul  |          |
| 13) Anthracene              | 17.24 | 178  | 2725     | 0.045 | ng/ul  | 98       |
| 15) Fluoranthene            | 19.16 | 202  | 4243     | 0.050 | ng/ul  | 83       |
| 17) Pyrene                  | 19.52 | 202  | 4294     | 0.047 | ng/ul# | 88       |
| 18) Benzo(a)anthracene      | 21.25 | 228  | 3748     | 0.046 | ng/ul# | 88       |
| 19) Chrysene                | 21.30 | 228  | 4254     | 0.050 | ng/ul  | 95       |
| 21) Benzo(b)fluoranthene    | 22.93 | 252  | 3530     | 0.041 | ng/ul  | 96       |
| 22) Benzo(k)fluoranthene    | 22.98 | 252  | 4049     | 0.044 | ng/ul# | 92       |
| 23) Benzo(a)pyrene          | 23.56 | 252  | 3383     | 0.041 | ng/ul  | 93       |
| 24) Indeno(1,2,3-cd)pyrene  | 26.19 | 276  | 4057     | 0.043 | ng/ul# | 92       |
| 25) Dibenzo(a,h)anthracene  | 26.21 | 278  | 3393     | 0.043 | ng/ul# | 87       |
| 26) Benzo(g,h,i)perylene    | 26.96 | 276  | 3564     | 0.044 | ng/ul# | 91       |

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





#3

Naphthalene

Concen: 0.051 ng/ul

RT: 10.57 min Scan# 1230

Delta R.T. -0.01 min

Lab File: BE093079.D

Acq: 8 Jun 2017 14:02

Instrument :

BNA\_E

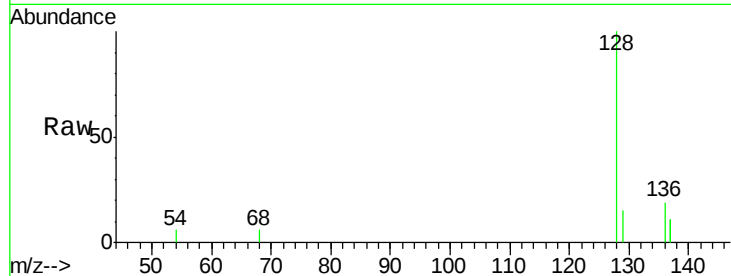
ClientSampleId :

MDL-W-4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 15.2  | 11.3  | 16.9  |
| 127     | 0.0   | 4.0   | 6.0   |

Manual Integrations  
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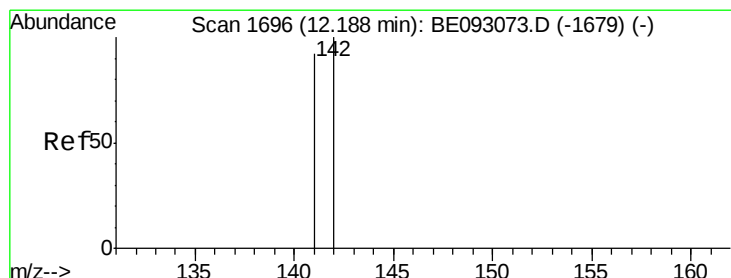
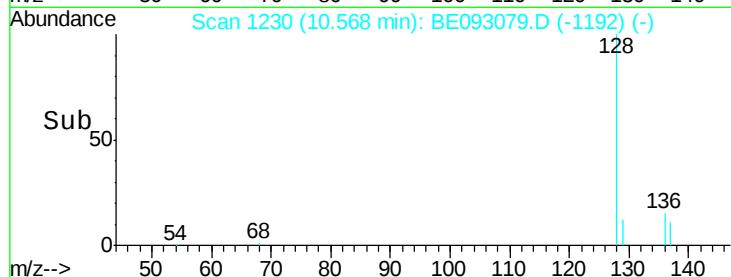
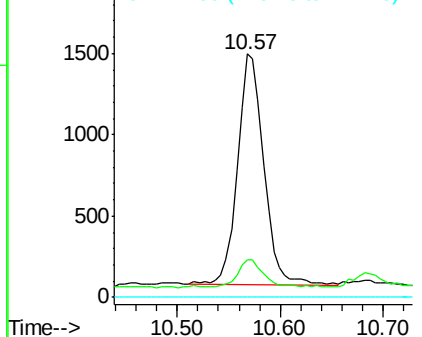
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Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#5

2-Methylnaphthalene

Concen: 0.046 ng/ul

RT: 12.19 min Scan# 1696

Delta R.T. -0.00 min

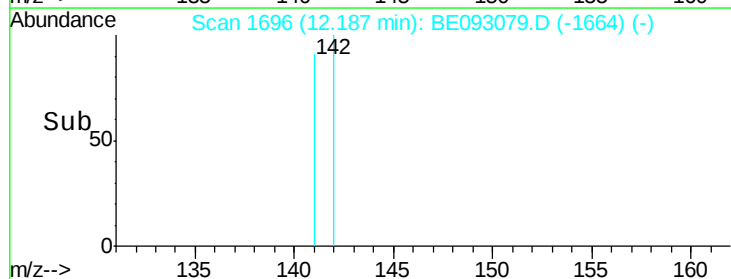
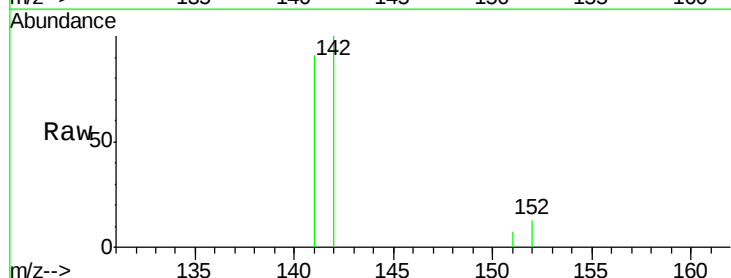
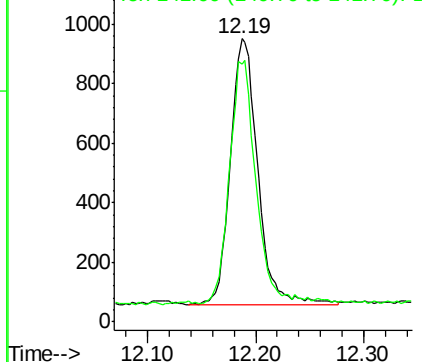
Lab File: BE093079.D

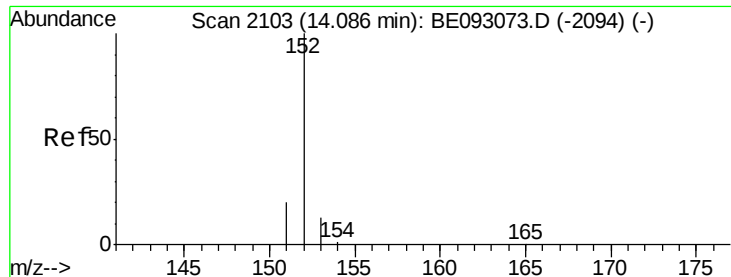
Acq: 8 Jun 2017 14:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 141     | 90.1  | 72.6  | 108.8 |

Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E





#7

Acenaphthylene

Concen: 0.042 ng/ul

RT: 14.08 min Scan# 2103

Delta R.T. -0.00 min

Lab File: BE093079.D

Acq: 8 Jun 2017 14:02

Instrument :

BNA\_E

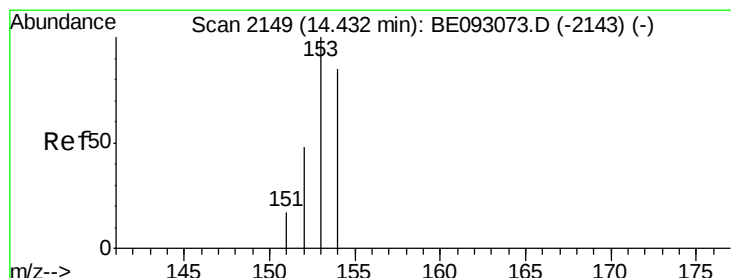
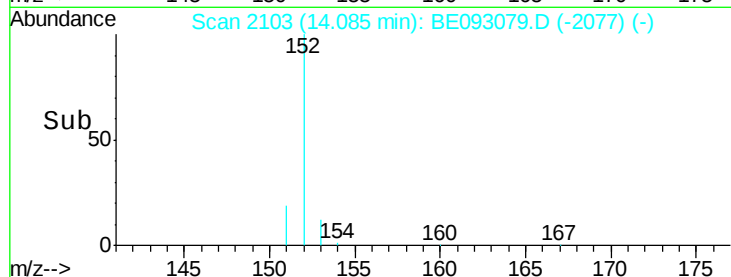
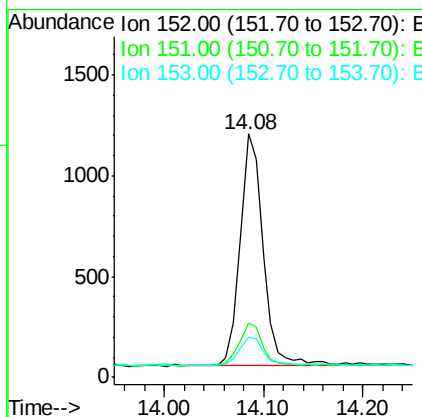
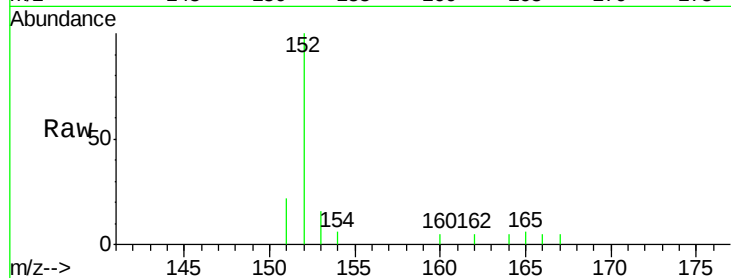
ClientSampleId :

MDL-W-4

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 152   | Resp: | 1843 |
| Ion Ratio | Lower | Upper |      |
| 152       | 100   |       |      |
| 151       | 22.4  | 17.1  | 25.7 |
| 153       | 16.3  | 12.8  | 19.2 |

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#8

Acenaphthene

Concen: 0.047 ng/ul

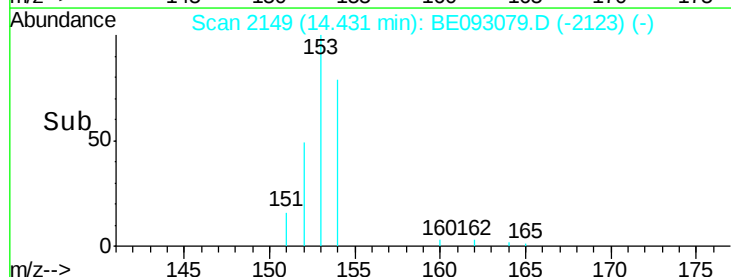
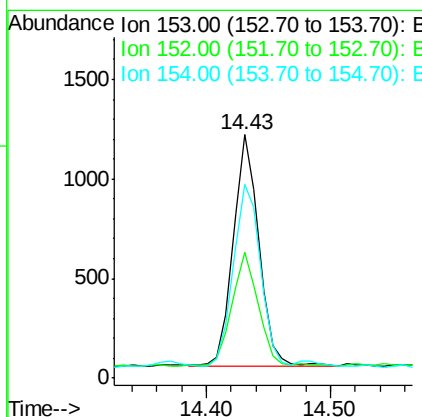
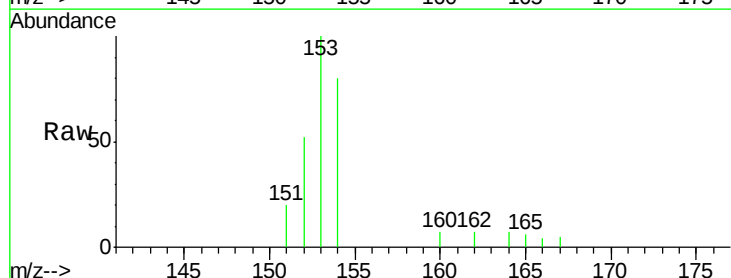
RT: 14.43 min Scan# 2149

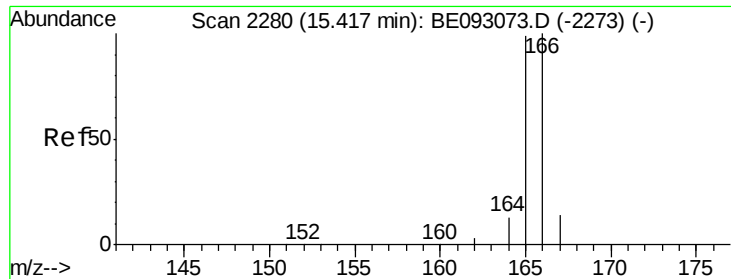
Delta R.T. -0.00 min

Lab File: BE093079.D

Acq: 8 Jun 2017 14:02

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 153   | Resp: | 1659  |
| Ion Ratio | Lower | Upper |       |
| 153       | 100   |       |       |
| 152       | 51.8  | 40.3  | 60.5  |
| 154       | 79.7  | 71.4  | 107.2 |





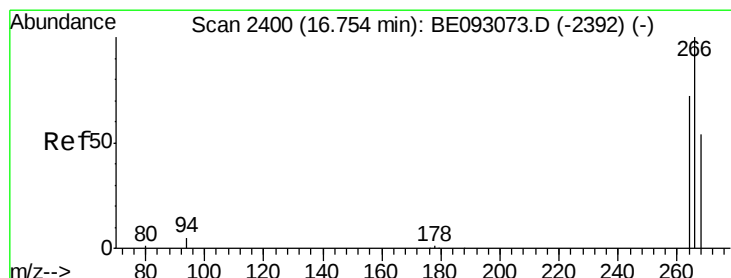
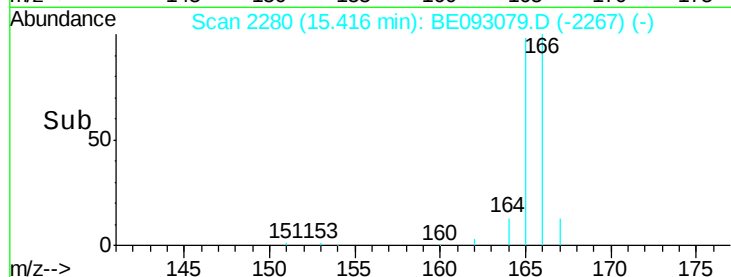
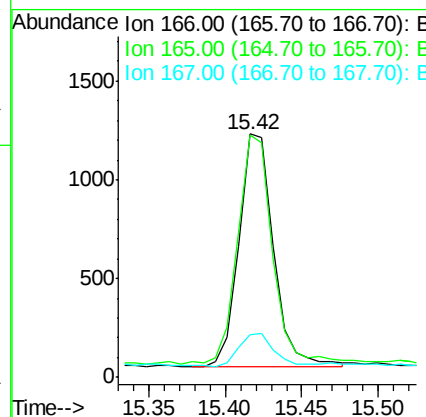
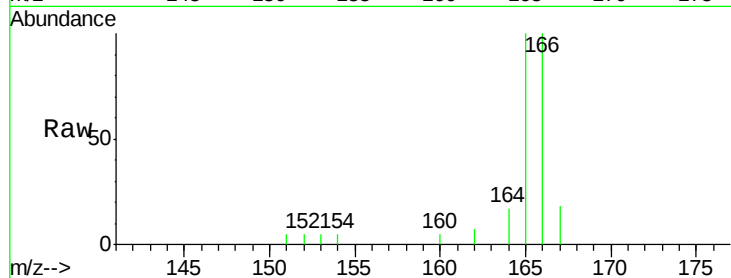
#9  
**Fluorene**  
 Concen: 0.045 ng/ul  
 RT: 15.42 min Scan# 2280  
 Delta R.T. -0.00 min  
 Lab File: BE093079.D  
 Acq: 8 Jun 2017 14:02

Instrument :  
 BNA\_E  
 ClientSampleId :  
 MDL-W-4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 166     | 100   |       |       |
| 165     | 99.6  | 73.4  | 110.2 |
| 167     | 17.5  | 14.6  | 22.0  |

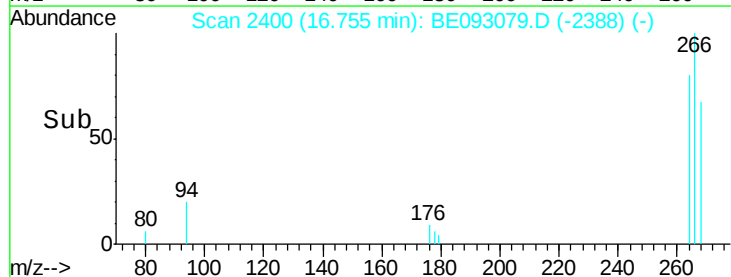
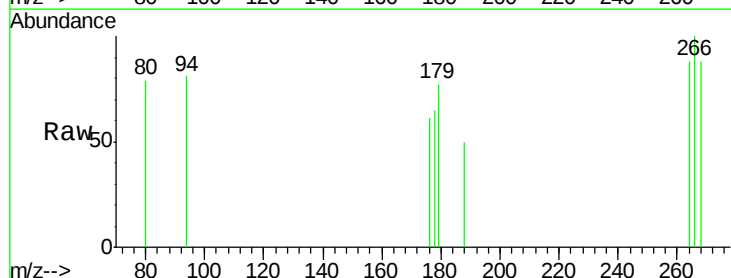
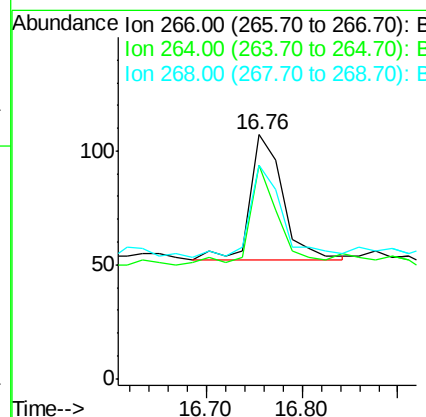
Manual Integrations  
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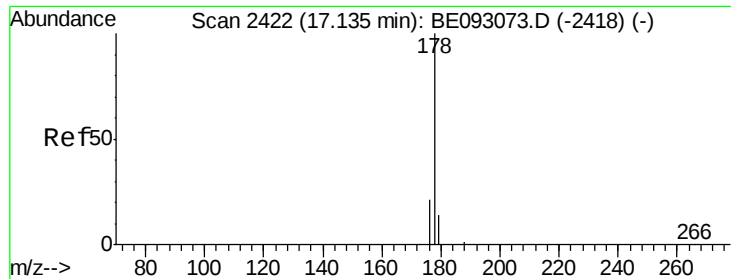
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#11  
**Pentachlorophenol**  
 Concen: 0.035 ng/ul  
 RT: 16.76 min Scan# 2400  
 Delta R.T. 0.00 min  
 Lab File: BE093079.D  
 Acq: 8 Jun 2017 14:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 264     | 68.2  | 47.9  | 71.9  |
| 268     | 75.0  | 49.8  | 74.8  |





#12

Phenanthrene

Concen: 0.050 ng/ul m

RT: 17.14 min Scan# 2422

Delta R.T. 0.00 min

Lab File: BE093079.D

Acq: 8 Jun 2017 14:02

Instrument :

BNA\_E

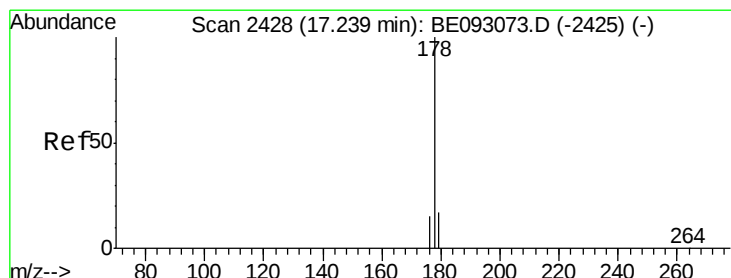
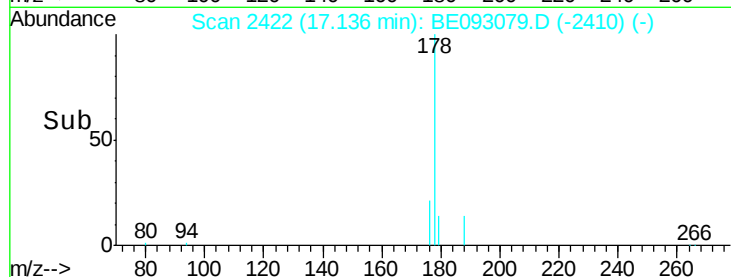
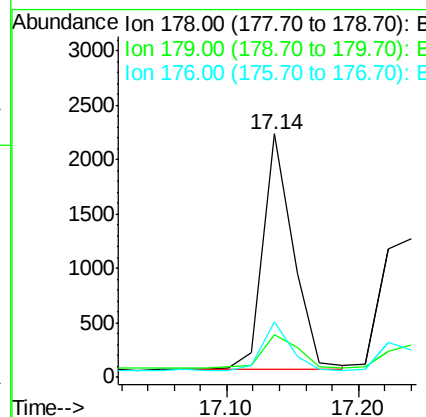
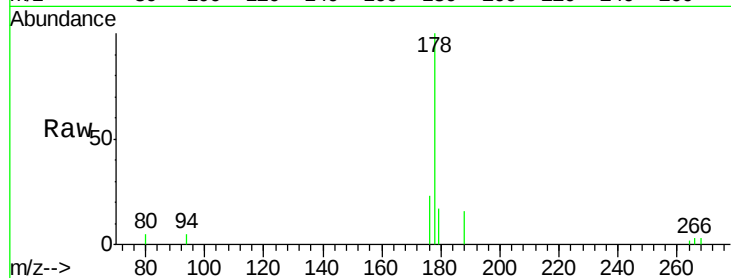
ClientSampleId :

MDL-W-4

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 178   | Resp: | 3458  |
| Ion Ratio | Lower | Upper |       |
| 178       | 100   |       |       |
| 179       | 17.4  | 18.4  | 27.6# |
| 176       | 23.0  | 13.6  | 20.4# |

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#13

Anthracene

Concen: 0.045 ng/ul

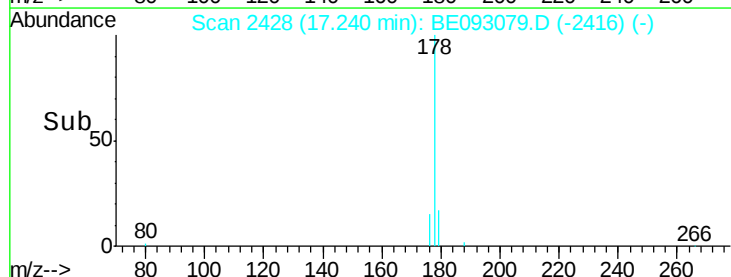
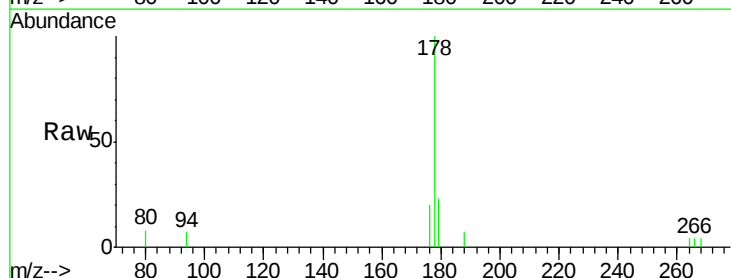
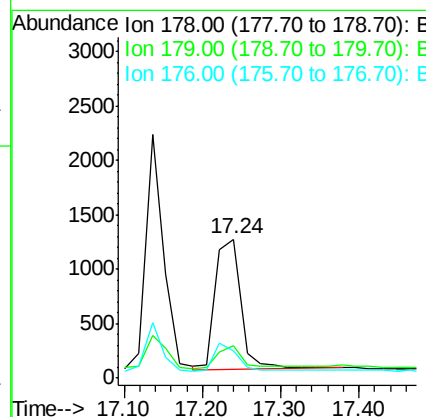
RT: 17.24 min Scan# 2428

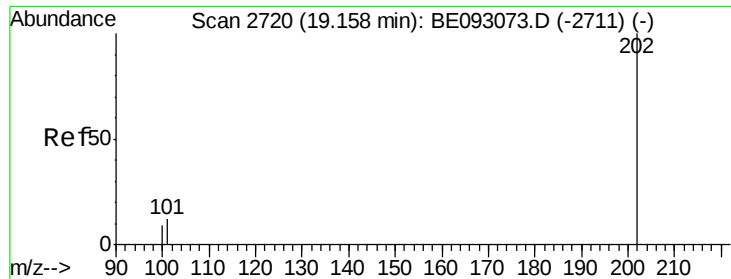
Delta R.T. 0.00 min

Lab File: BE093079.D

Acq: 8 Jun 2017 14:02

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 178   | Resp: | 2725 |
| Ion Ratio | Lower | Upper |      |
| 178       | 100   |       |      |
| 179       | 22.9  | 18.1  | 27.1 |
| 176       | 19.5  | 14.7  | 22.1 |





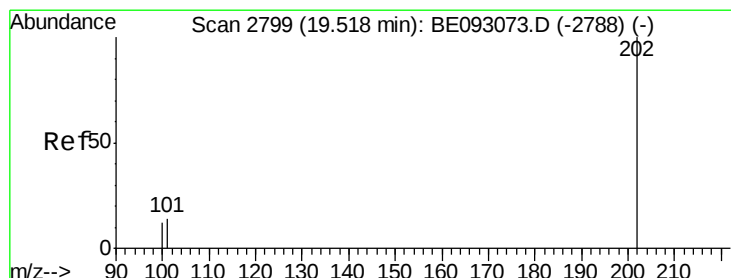
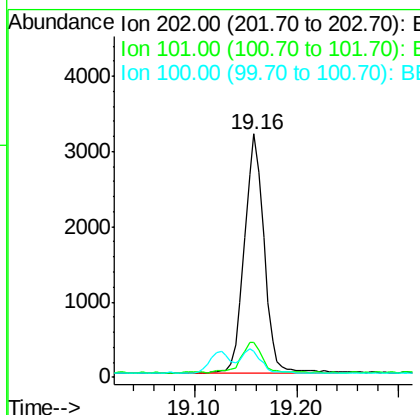
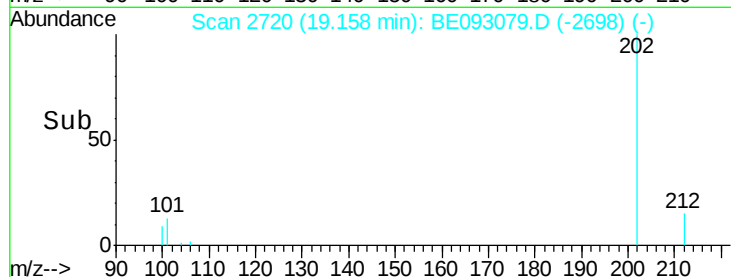
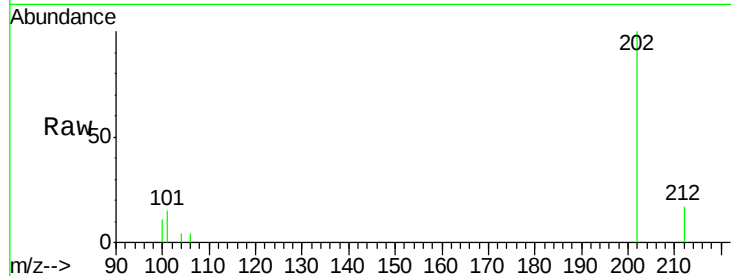
#15  
Fluoranthene  
Concen: 0.050 ng/ul  
RT: 19.16 min Scan# 2720  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

Instrument :  
BNA\_E  
ClientSampleId :  
MDL-W-4

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 202     | 100   | 4243 |       |       |
| 101     | 14.6  | 0.0  | 30.3  |       |
| 100     | 10.6  | 0.0  | 39.5  |       |

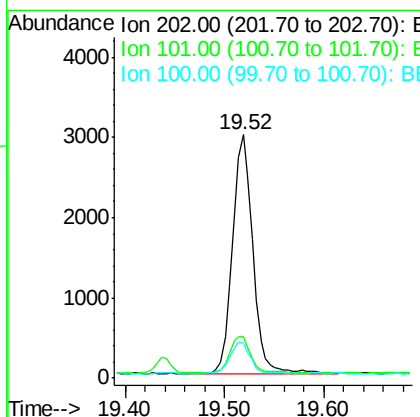
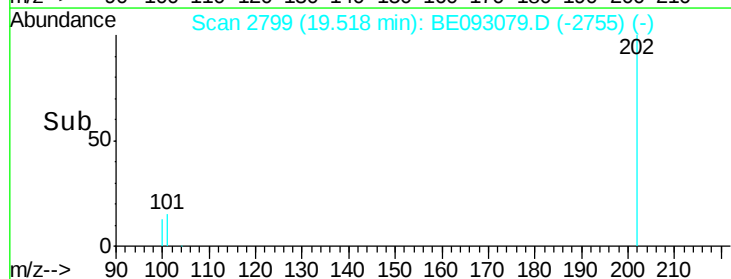
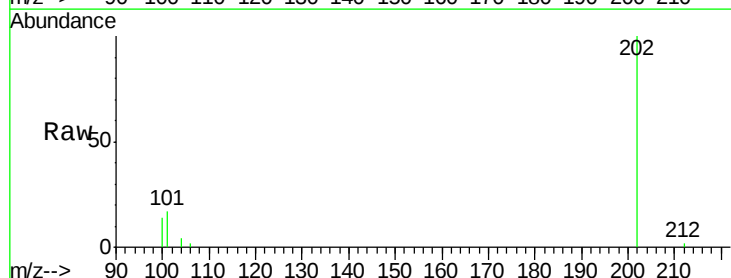
Manual Integrations  
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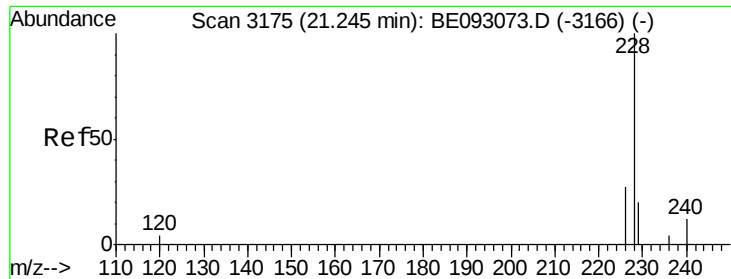
mohammad  
6/9/2017 1:36:05 PM



#17  
Pyrene  
Concen: 0.047 ng/ul  
RT: 19.52 min Scan# 2799  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

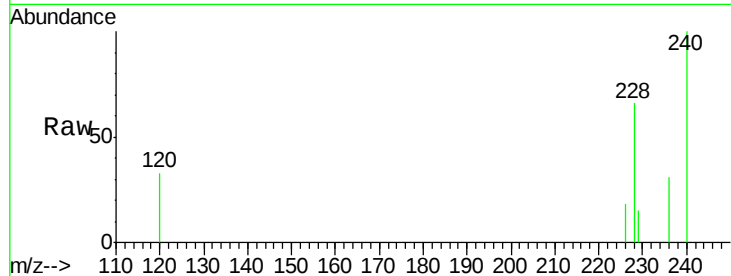
| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 202     | 100   | 4294 |       |       |
| 101     | 16.8  | 18.2 | 27.4# |       |
| 100     | 14.2  | 15.6 | 23.4# |       |





#18  
Benzo(a)anthracene  
Concen: 0.046 ng/ul  
RT: 21.25 min Scan# 3175  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

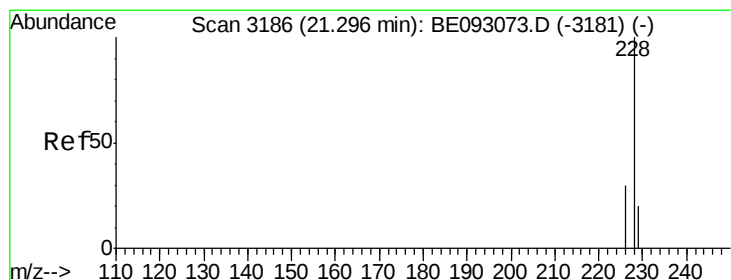
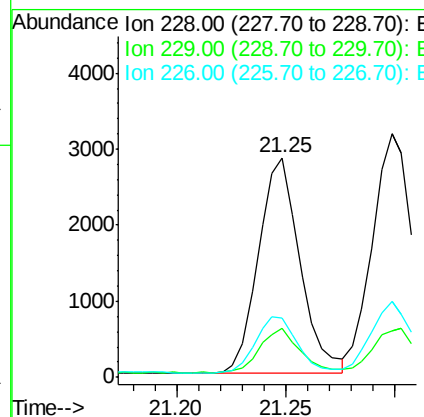
Instrument :  
BNA\_E  
ClientSampleId :  
MDL-W-4



Tgt Ion:228 Resp: 3748  
Ion Ratio Lower Upper  
228 100  
229 22.4 22.8 34.2#  
226 26.8 17.0 25.6#

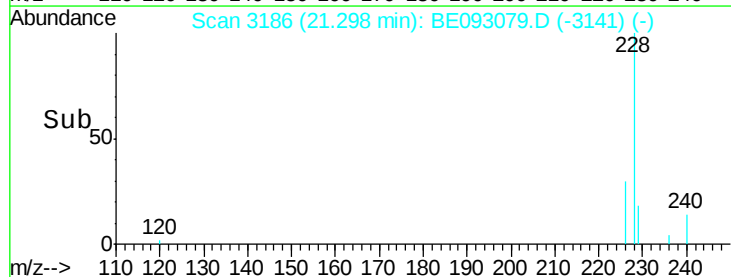
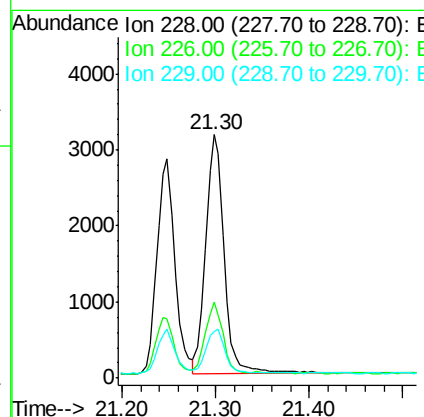
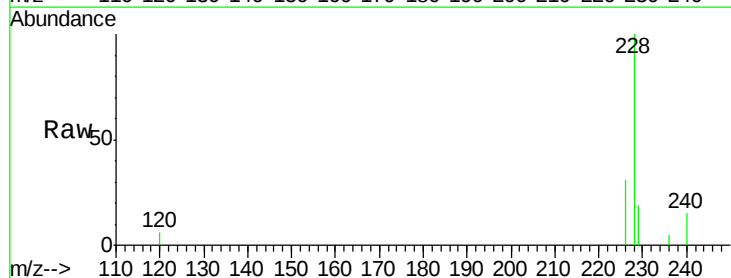
Manual Integrations  
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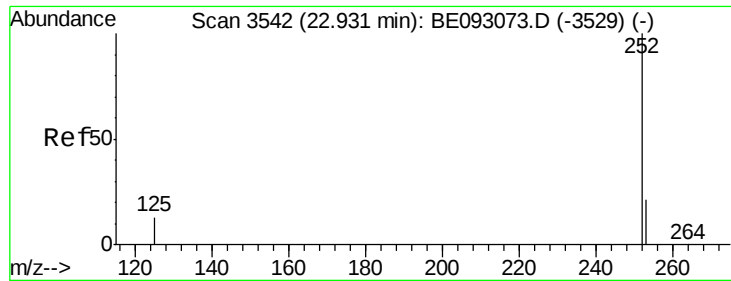
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#19  
Chrysene  
Concen: 0.050 ng/ul  
RT: 21.30 min Scan# 3186  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

Tgt Ion:228 Resp: 4254  
Ion Ratio Lower Upper  
228 100  
226 31.1 23.4 35.0  
229 19.2 17.7 26.5





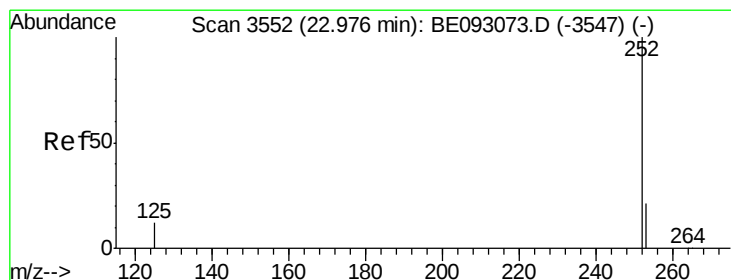
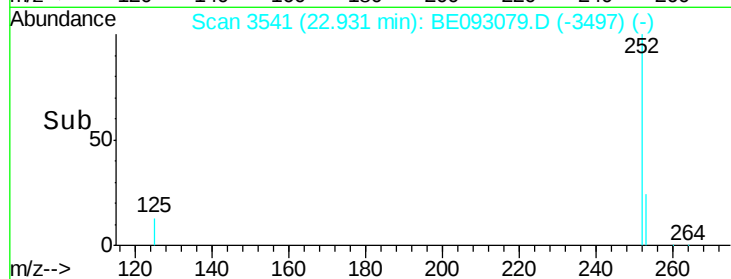
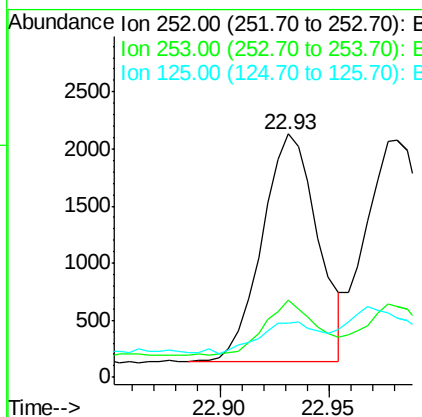
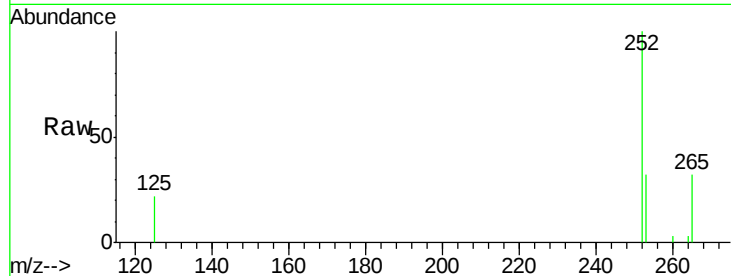
#21  
Benzo(b)fluoranthene  
Concen: 0.041 ng/u1  
RT: 22.93 min Scan# 3541  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

Instrument :  
BNA\_E  
ClientSampled :  
MDL-W-4

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 252     | 100   | 3530 |       |       |
| 253     | 31.5  | 0.0  | 64.2  |       |
| 125     | 22.1  | 0.0  | 35.0  |       |

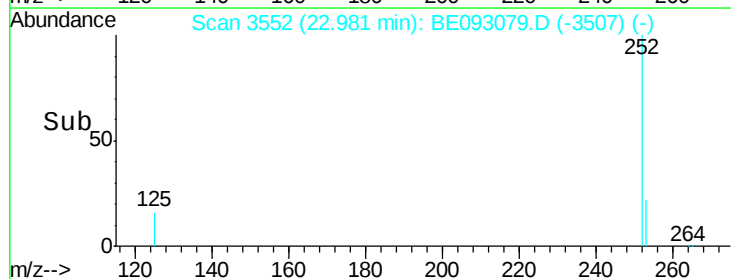
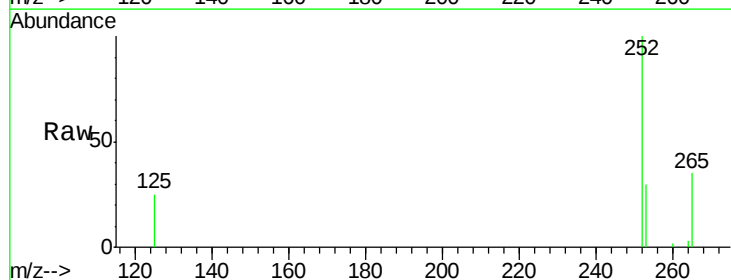
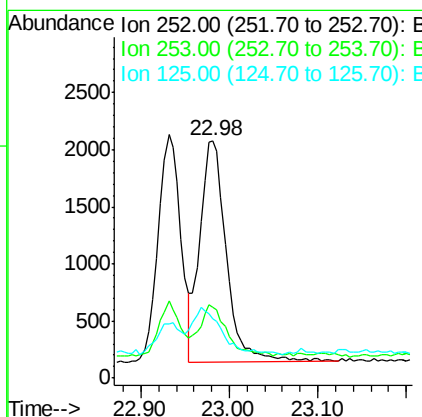
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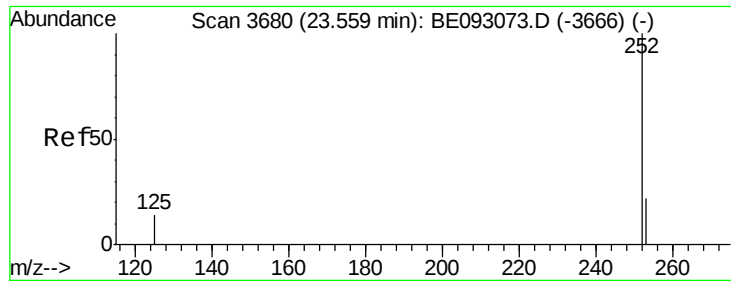
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#22  
Benzo(k)fluoranthene  
Concen: 0.044 ng/u1  
RT: 22.98 min Scan# 3552  
Delta R.T. 0.01 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 252     | 100   | 4049 |       |       |
| 253     | 29.8  | 24.5 | 36.7  |       |
| 125     | 25.1  | 13.7 | 20.5  |       |





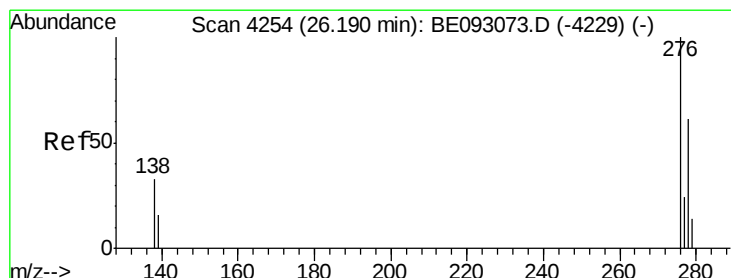
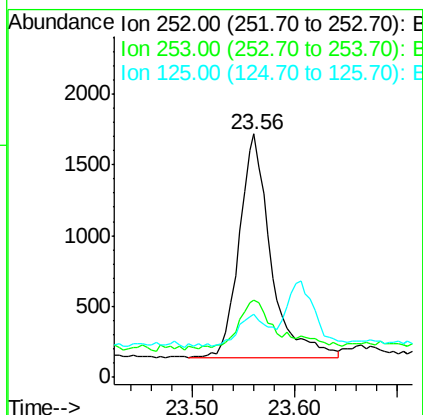
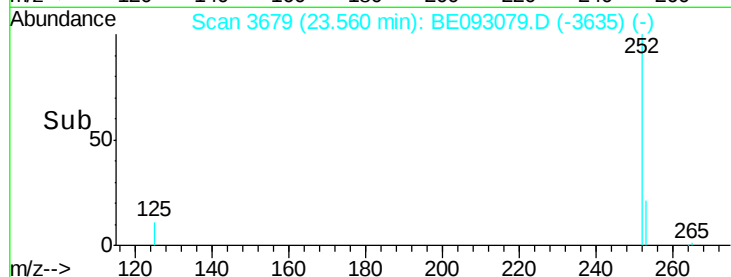
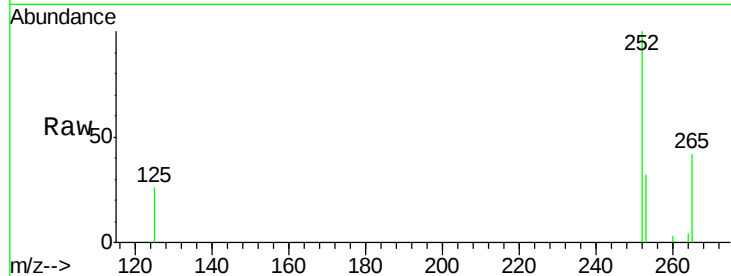
#23  
Benzo(a)pyrene  
Concen: 0.041 ng/u1  
RT: 23.56 min Scan# 3679  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

Instrument :  
BNA\_E  
ClientSampleId :  
MDL-W-4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 31.9  | 28.5  | 42.7  |
| 125     | 26.1  | 18.1  | 27.1  |

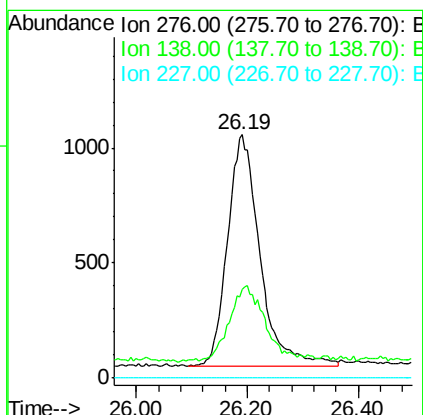
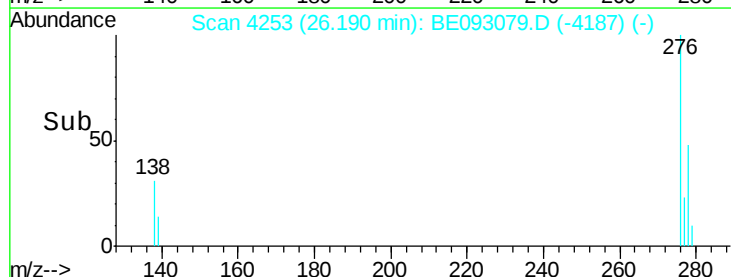
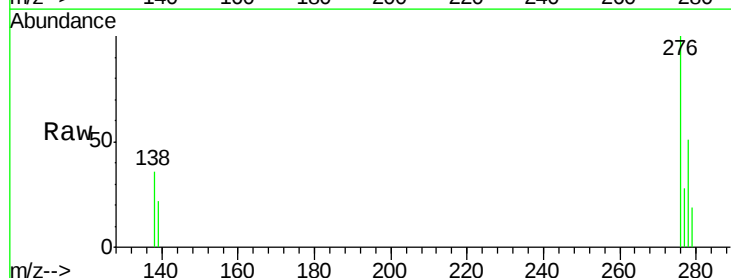
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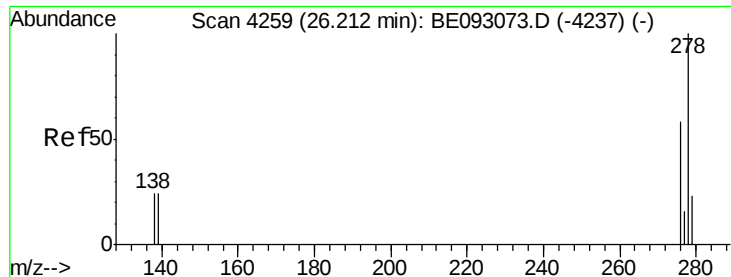
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#24  
Indeno(1,2,3-cd)pyrene  
Concen: 0.043 ng/u1  
RT: 26.19 min Scan# 4253  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 36.4  | 28.0  | 42.0  |
| 227     | 0.0   | 8.0   | 12.0# |





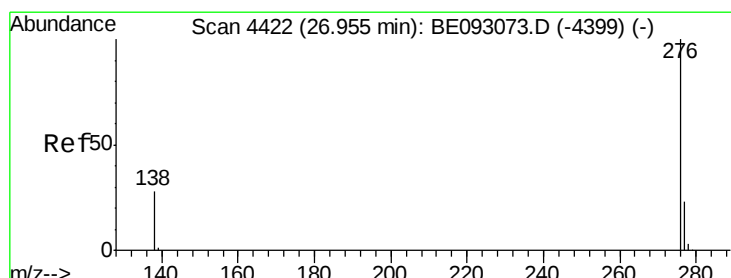
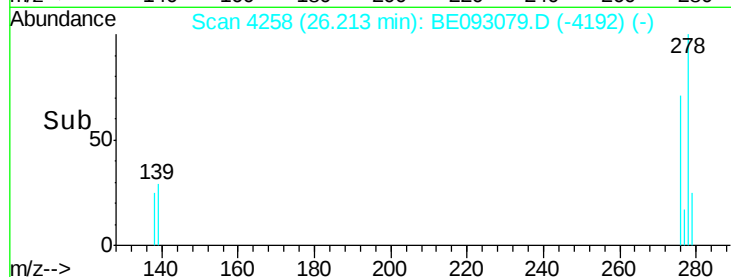
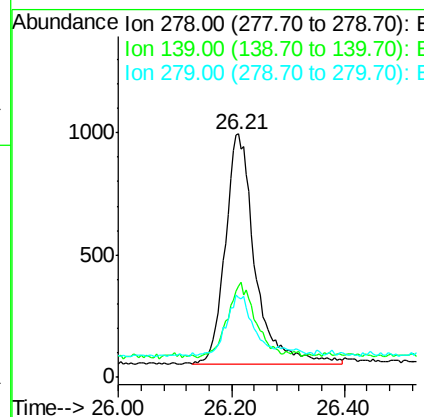
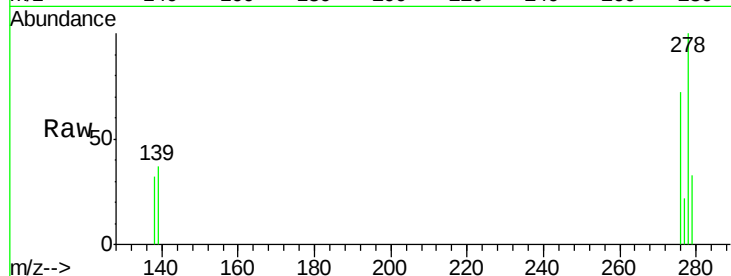
#25  
Dibenzo(a,h)anthracene  
Concen: 0.043 ng/ul  
RT: 26.21 min Scan# 4258  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

Instrument :  
BNA\_E  
ClientSampled :  
MDL-W-4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 278     | 100   |       |       |
| 139     | 37.2  | 17.4  | 26.0# |
| 279     | 32.6  | 25.9  | 38.9  |

Manual Integrations  
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#26  
Benzo(g,h,i)perylene  
Concen: 0.044 ng/ul  
RT: 26.96 min Scan# 4421  
Delta R.T. 0.00 min  
Lab File: BE093079.D  
Acq: 8 Jun 2017 14:02

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 34.1  | 21.8  | 32.8# |
| 277     | 27.4  | 20.5  | 30.7  |

