

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051515\  
 Data File : BF079305.D  
 Acq On : 16 May 2015 10:34  
 Operator : TP/IZ  
 Sample : G2250-07 2X  
 Misc :  
 ALS Vial : 38 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 WC-04-D1

Manual Integrations  
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 5/18/2015 3:42:42 PM

Quant Time: May 18 01:46:44 2015  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF043015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon May 18 00:56:30 2015  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.18  | 152  | 71457    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.75  | 136  | 300538   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 10.92 | 164  | 142092   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 12.77 | 188  | 264865   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 16.07 | 240  | 274945   | 20.00 | ng    | 0.01     |
| 86) Perylene-d12            | 17.85 | 264  | 283383   | 20.00 | ng    | 0.09     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.47  | 112  | 161015m  | 38.79 | ng    | 0.01     |
| 7) Phenol-d6                | 6.74  | 99   | 210219   | 38.31 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.87  | 82   | 120506   | 23.04 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 11.91 | 330  | 59107    | 38.45 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 10.10 | 172  | 261641   | 25.65 | ng    | 0.00     |
| 78) Terphenyl-d14           | 14.77 | 244  | 284698   | 24.79 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 70) Phenanthrene            | 12.80 | 178  | 124308   | 8.39  | ng    | 96       |
| 71) Anthracene              | 12.86 | 178  | 31121    | 2.14  | ng    | 98       |
| 74) Fluoranthene            | 14.27 | 202  | 179358   | 11.62 | ng    | 95       |
| 77) Pyrene                  | 14.55 | 202  | 169527   | 10.70 | ng    | 98       |
| 80) Benzo(a)anthracene      | 16.06 | 228  | 90960    | 6.04  | ng    | 95       |
| 82) Chrysene                | 16.09 | 228  | 80538    | 5.56  | ng    | 98       |
| 85) Indeno(1,2,3-cd)pyrene  | 19.26 | 276  | 54114    | 2.93  | ng    | 95       |
| 87) Benzo(b)fluoranthene    | 17.38 | 252  | 111649m  | 7.20  | ng    |          |
| 88) Benzo(k)fluoranthene    | 17.42 | 252  | 39405m   | 2.62  | ng    |          |
| 89) Benzo(a)pyrene          | 17.78 | 252  | 81903    | 5.73  | ng    | 98       |
| 91) Benzo(g,h,i)perylene    | 19.67 | 276  | 52683    | 3.46  | ng    | # 92     |

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

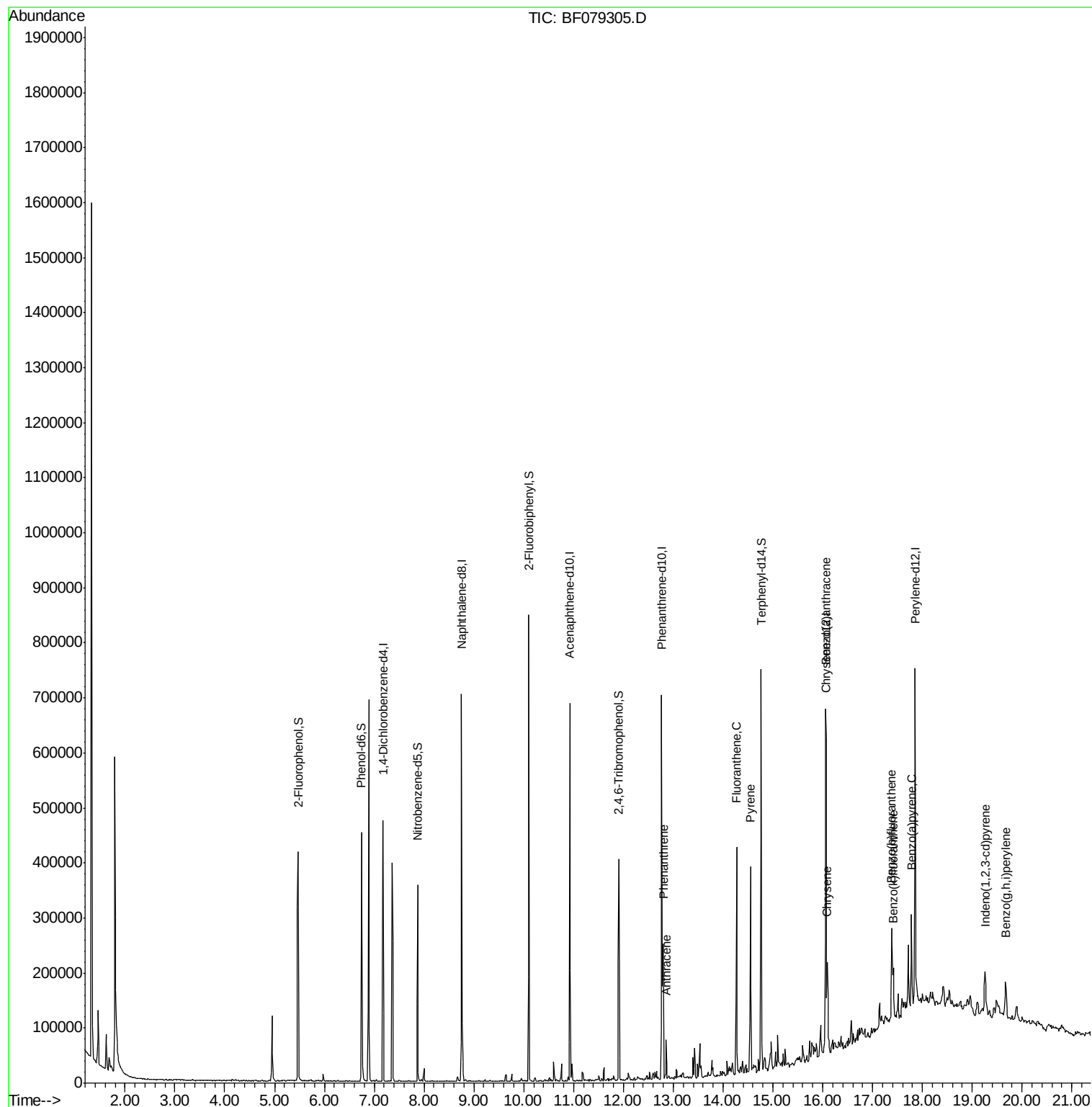
Data Path : Z:\HPCHEM1\BNA F\DATA\BF051515\  
Data File : BF079305.D  
Acq On : 16 May 2015 10:34  
Operator : TP/IZ  
Sample : G2250-07 2X  
Misc :  
ALS Vial : 38 Sample Multiplier: 1

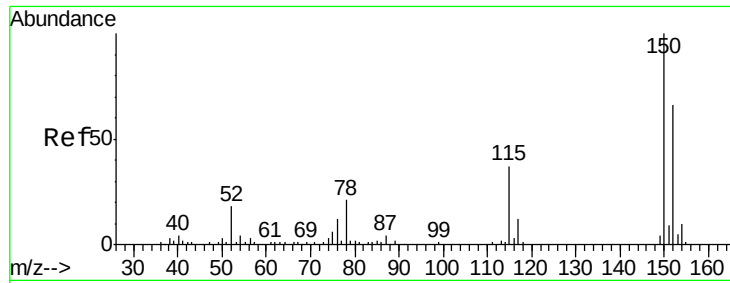
Instrument :  
BNA\_F  
ClientSampleID :  
WC-04-D1

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5/18/2015 3:42:42 PM

Quant Time: May 18 01:46:44 2015  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF043015.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon May 18 00:56:30 2015  
Response via : Initial Calibration





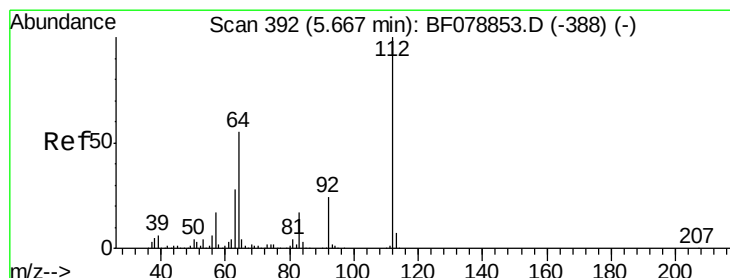
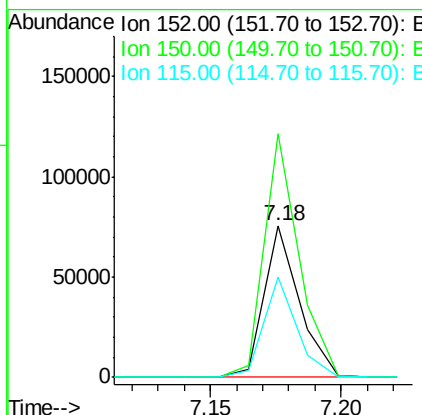
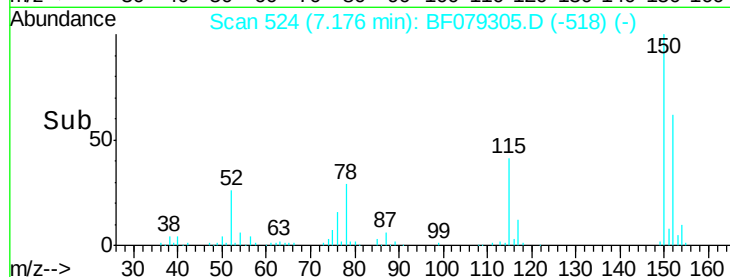
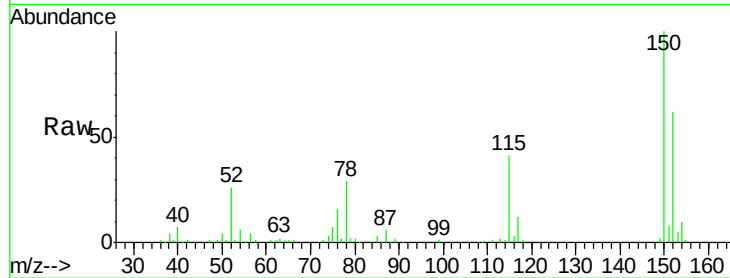
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 7.18 min Scan# 524  
 Delta R.T. 0.00 min  
 Lab File: BF079305.D  
 Acq: 16 May 2015 10:34

Instrument :  
 BNA\_F  
 ClientSampleId :  
 WC-04-D1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 152   | Resp: | 71457 |
| Ion Ratio | Lower | Upper |       |
| 152       | 100   |       |       |
| 150       | 160.7 | 123.8 | 185.8 |
| 115       | 65.9  | 49.4  | 74.0  |

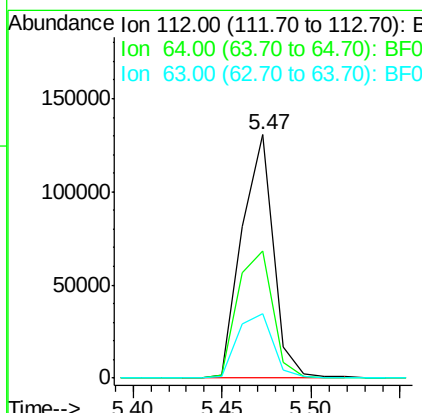
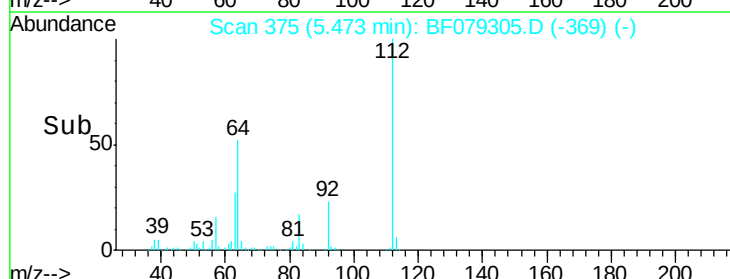
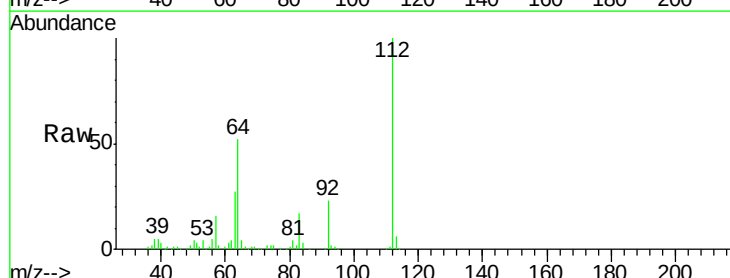
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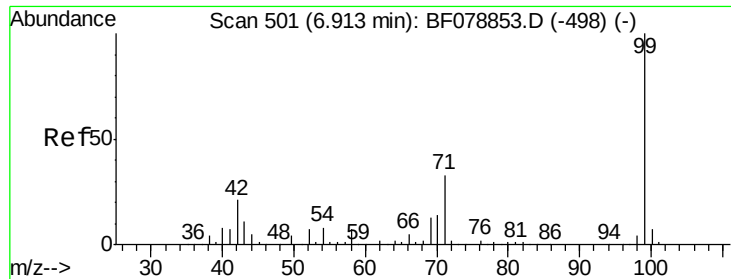
apatel  
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#5  
 2-Fluorophenol  
 Concen: 38.79 ng m  
 RT: 5.47 min Scan# 375  
 Delta R.T. 0.01 min  
 Lab File: BF079305.D  
 Acq: 16 May 2015 10:34

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 112   | Resp: | 161015 |
| Ion Ratio | Lower | Upper |        |
| 112       | 100   |       |        |
| 64        | 52.5  | 44.2  | 66.2   |
| 63        | 26.7  | 22.7  | 34.1   |





#7

Phenol-d6

Concen: 38.31 ng

RT: 6.74 min Scan# 486

Delta R.T. 0.00 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

Instrument :

BNA\_F

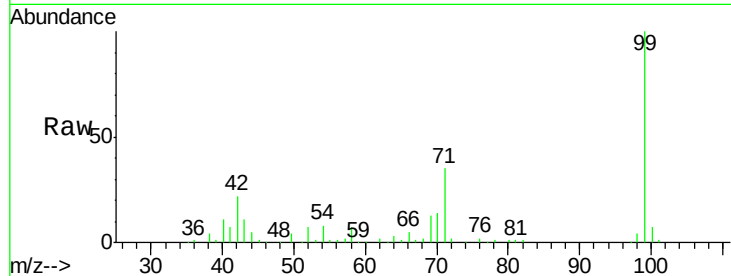
ClientSampleId :

WC-04-D1

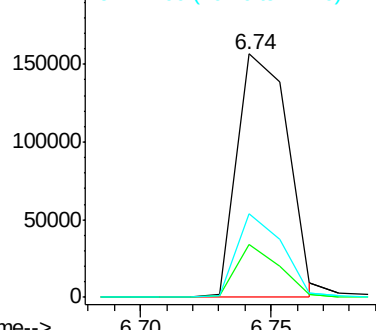
|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 99    | Resp: | 210219 |
| Ion Ratio | Lower | Upper |        |
| 99        | 100   |       |        |
| 42        | 22.0  | 17.1  | 25.7   |
| 71        | 34.6  | 26.3  | 39.5   |

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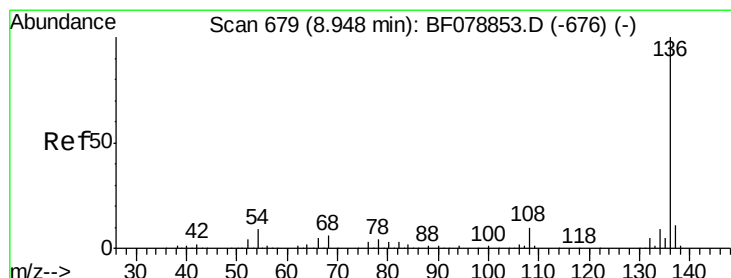
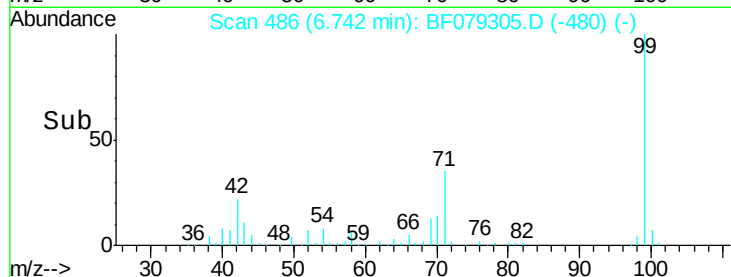
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Abundance Ion 99.00 (98.70 to 99.70): BF0  
Ion 42.00 (41.70 to 42.70): BF0  
Ion 71.00 (70.70 to 71.70): BF0



Time-->



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.75 min Scan# 662

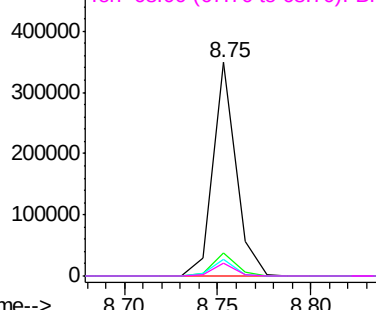
Delta R.T. 0.00 min

Lab File: BF079305.D

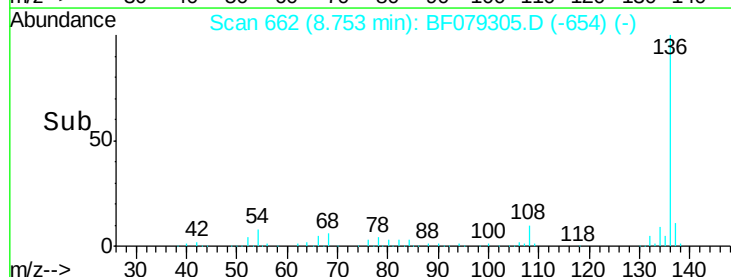
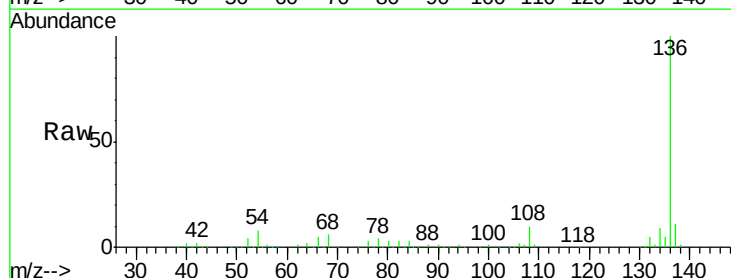
Acq: 16 May 2015 10:34

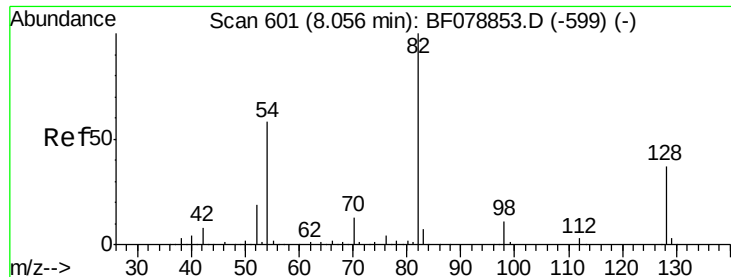
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 300538 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.9  | 8.8   | 13.2   |
| 54        | 8.1   | 6.9   | 10.3   |
| 68        | 5.9   | 4.9   | 7.3    |

Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF0  
Ion 68.00 (67.70 to 68.70): BF0



Time-->





#23

Nitrobenzene-d5

Concen: 23.04 ng

RT: 7.87 min Scan# 585

Delta R.T. 0.00 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

Instrument :

BNA\_F

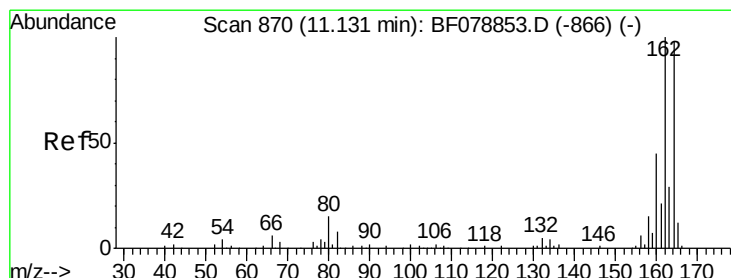
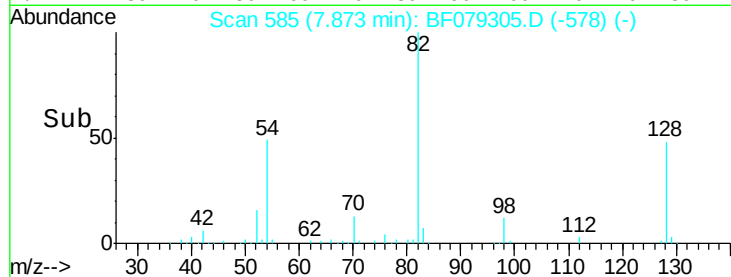
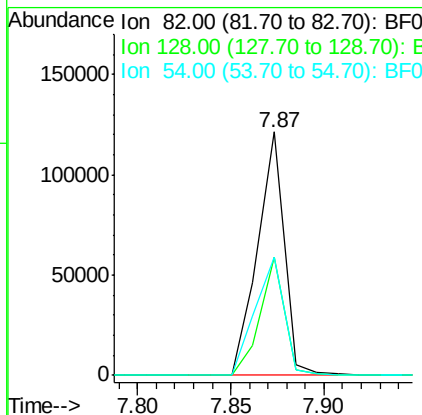
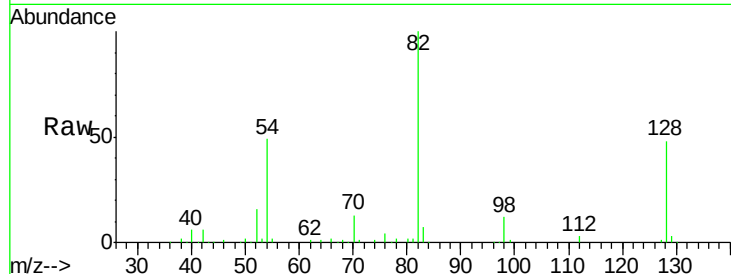
ClientSampleId :

WC-04-D1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 82    | Resp: | 120506 |
| Ion Ratio | Lower | Upper |        |
| 82        | 100   |       |        |
| 128       | 48.5  | 29.7  | 44.5#  |
| 54        | 48.7  | 46.2  | 69.4   |

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#38

Acenaphthene-d10

Concen: 20.00 ng

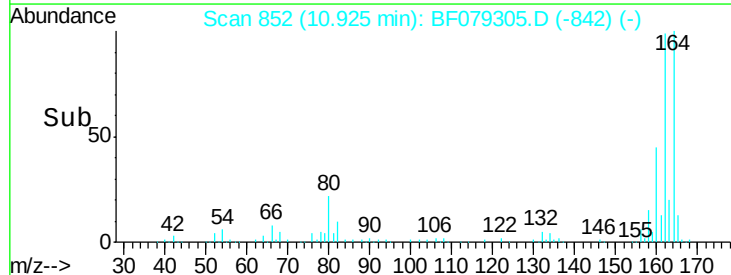
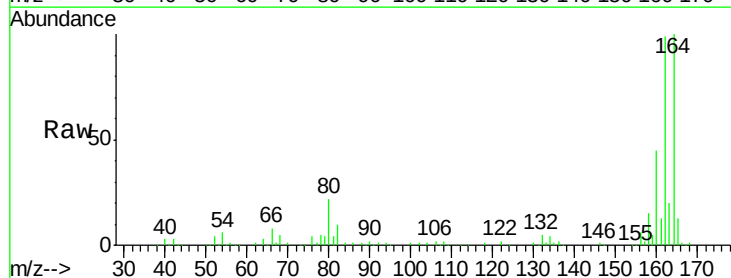
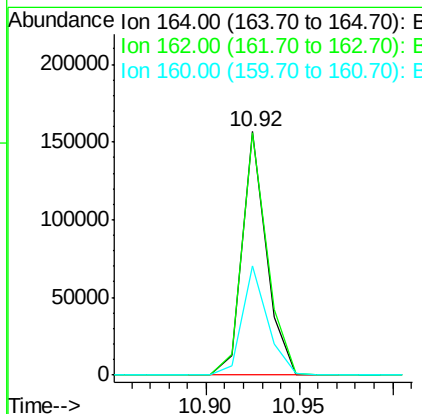
RT: 10.92 min Scan# 852

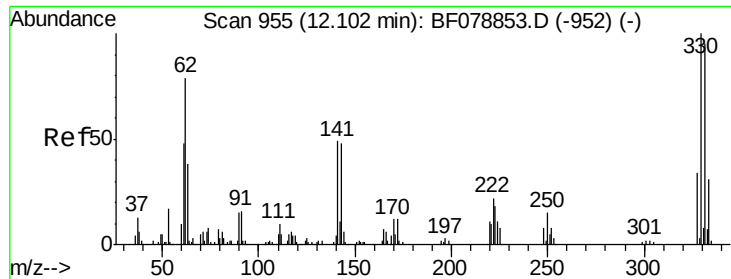
Delta R.T. 0.00 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 164   | Resp: | 142092 |
| Ion Ratio | Lower | Upper |        |
| 164       | 100   |       |        |
| 162       | 99.5  | 81.4  | 122.0  |
| 160       | 44.7  | 36.6  | 54.8   |





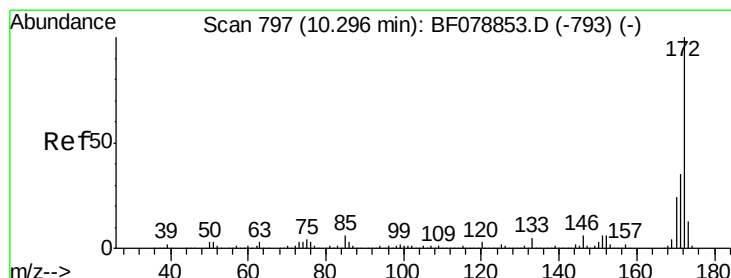
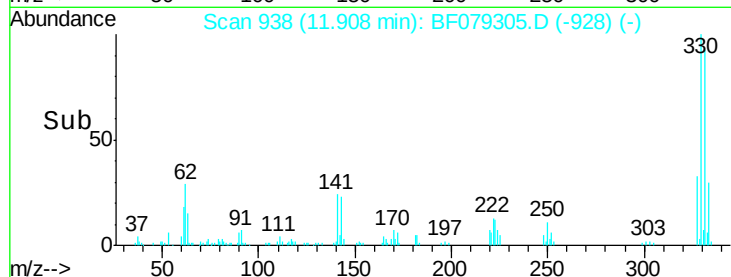
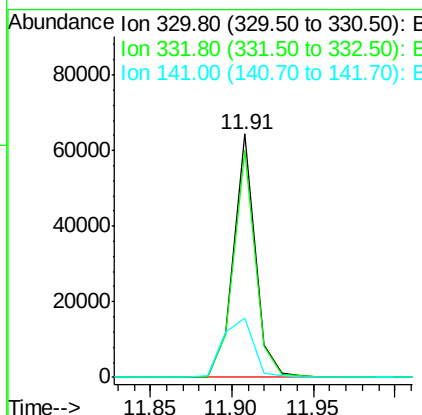
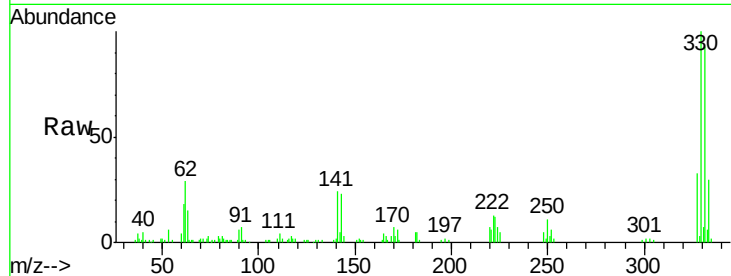
#41  
 2,4,6-Tribromophenol  
 Concen: 38.45 ng  
 RT: 11.91 min Scan# 938  
 Delta R.T. 0.00 min  
 Lab File: BF079305.D  
 Acq: 16 May 2015 10:34

Instrument :  
 BNA\_F  
 ClientSampleId :  
 WC-04-D1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 93.7  | 76.9  | 115.3 |
| 141     | 34.1  | 27.8  | 41.8  |

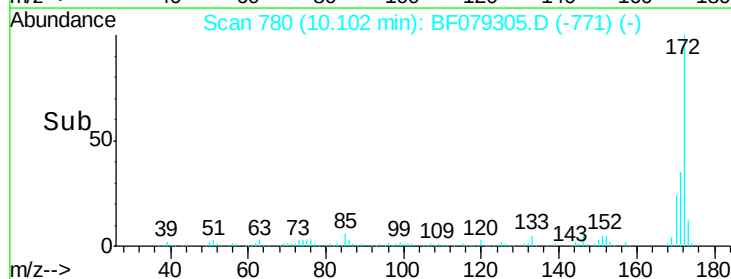
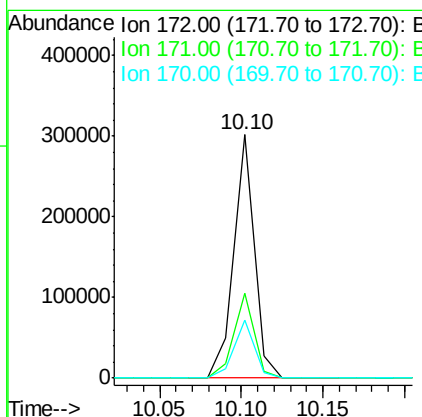
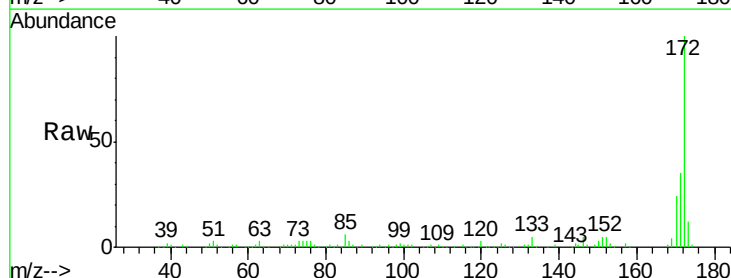
Manual Integrations  
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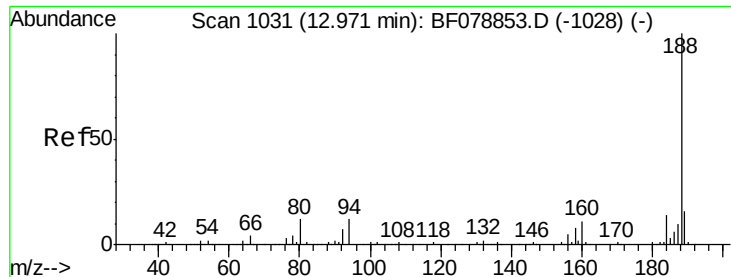
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#44  
 2-Fluorobiphenyl  
 Concen: 25.65 ng  
 RT: 10.10 min Scan# 780  
 Delta R.T. 0.00 min  
 Lab File: BF079305.D  
 Acq: 16 May 2015 10:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.8  | 28.3  | 42.5  |
| 170     | 23.7  | 19.4  | 29.2  |





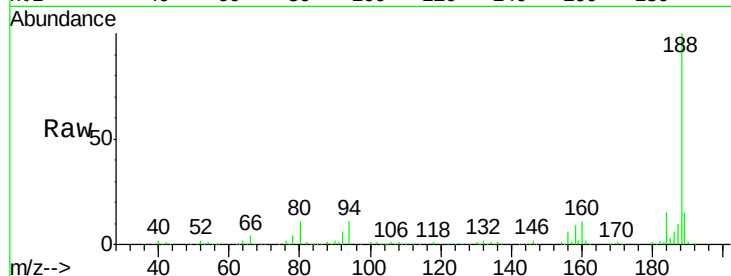
#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 12.77 min Scan# 1013  
 Delta R.T. 0.00 min  
 Lab File: BF079305.D  
 Acq: 16 May 2015 10:34

Instrument :  
 BNA\_F  
 ClientSampled :  
 WC-04-D1

| Tot Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 188     | 100   |            |       |
| 94      | 10.8  | 9.4        | 14.0  |
| 80      | 11.3  | 9.8        | 14.6  |

Manual Integrations  
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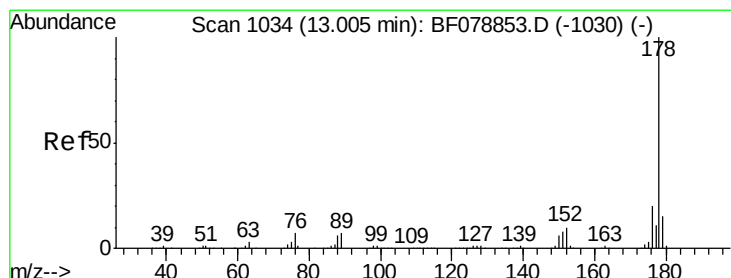
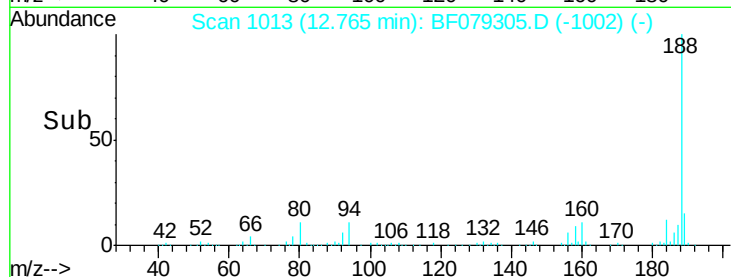
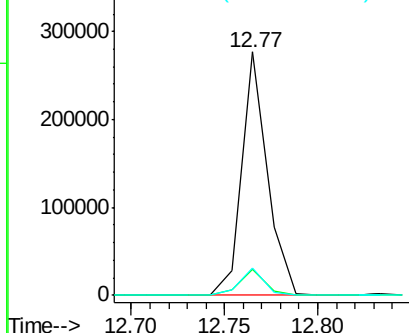
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Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0



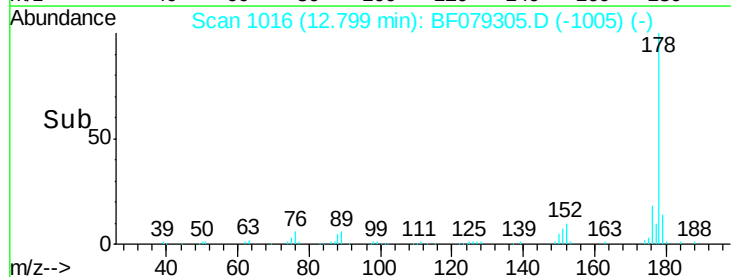
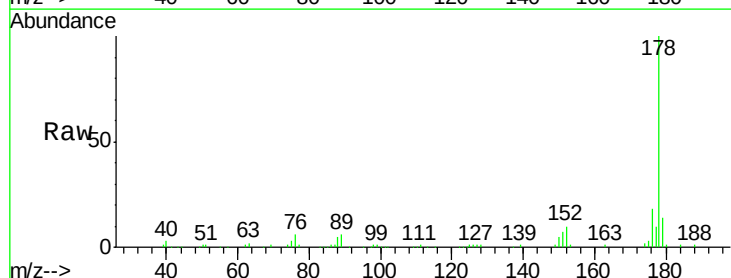
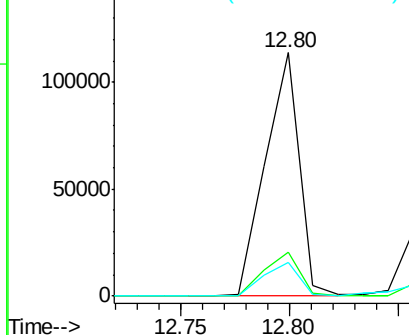
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 Phenanthrene  
 Concen: 8.39 ng  
 RT: 12.80 min Scan# 1016  
 Delta R.T. 0.00 min  
 Lab File: BF079305.D  
 Acq: 16 May 2015 10:34

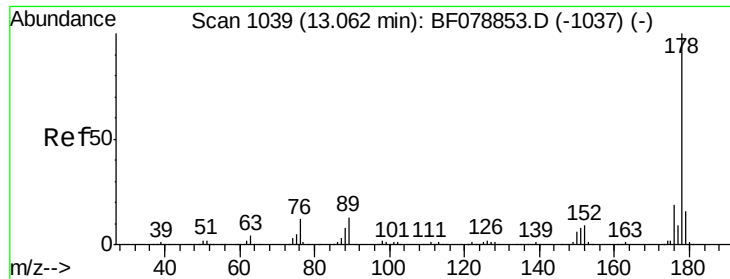
| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 178     | 100   |            |       |
| 176     | 18.1  | 15.9       | 23.9  |
| 179     | 14.1  | 12.2       | 18.4  |

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





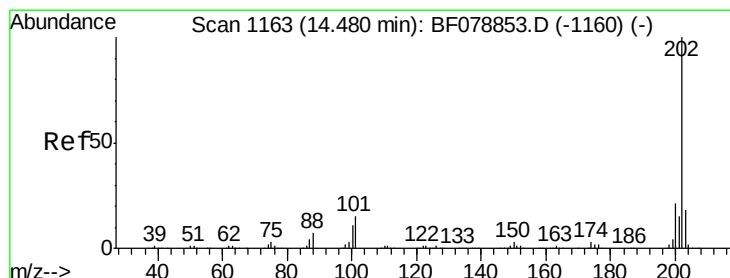
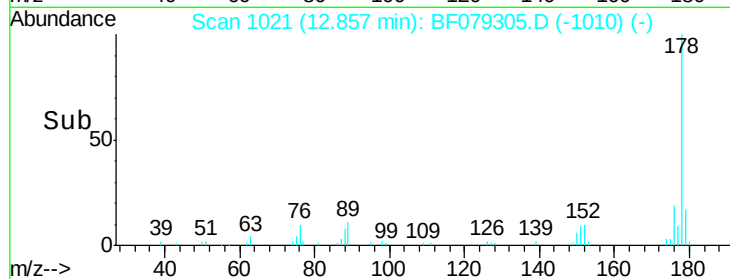
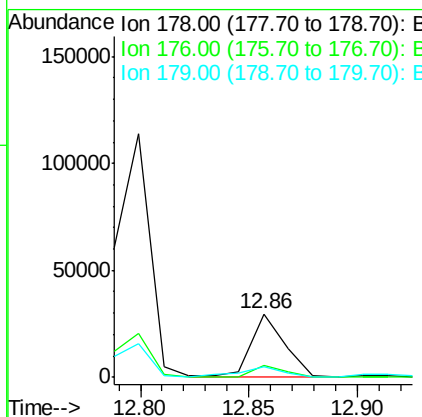
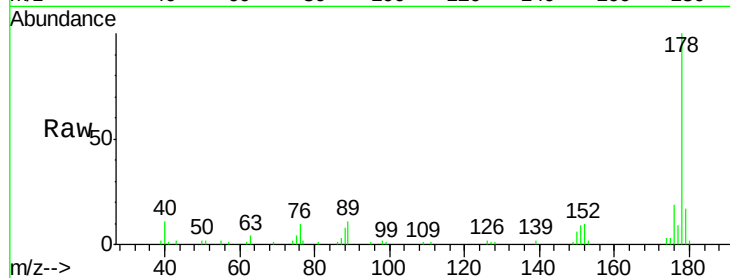
#71  
 Anthracene  
 Concen: 2.14 ng  
 RT: 12.86 min Scan# 1021  
 Delta R.T. 0.00 min  
 Lab File: BF079305.D  
 Acq: 16 May 2015 10:34

Instrument :  
 BNA\_F  
 ClientSampleId :  
 WC-04-D1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.1  | 15.3  | 22.9  |
| 179     | 17.3  | 12.6  | 19.0  |

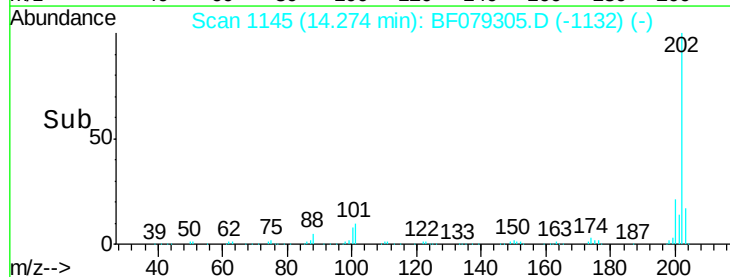
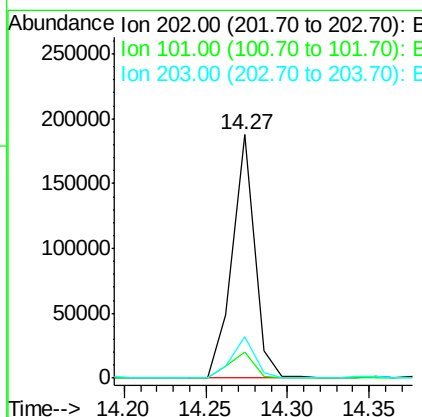
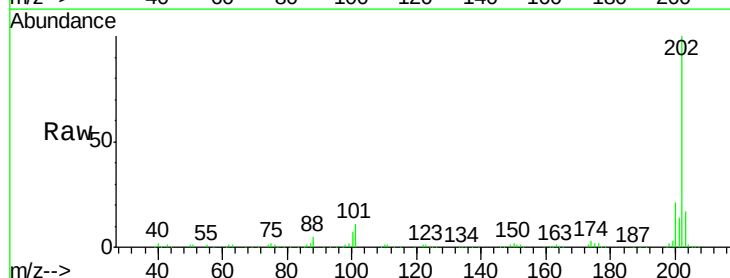
Manual Integrations  
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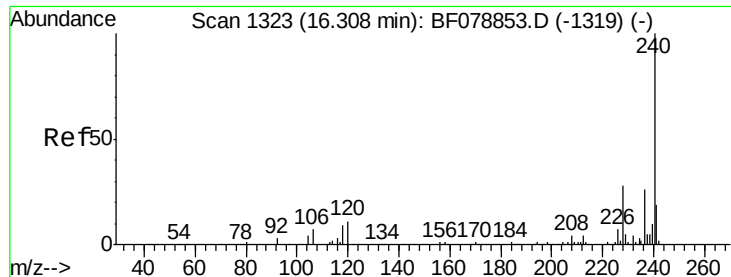


#74  
 Fluoranthene  
 Concen: 11.62 ng  
 RT: 14.27 min Scan# 1145  
 Delta R.T. 0.00 min  
 Lab File: BF079305.D  
 Acq: 16 May 2015 10:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 10.6  | 0.0   | 34.7  |
| 203     | 17.1  | 0.0   | 37.9  |







#75

Chrysene-d12

Concen: 20.00 ng

RT: 16.07 min Scan# 1302

Delta R.T. 0.01 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

Instrument :

BNA\_F

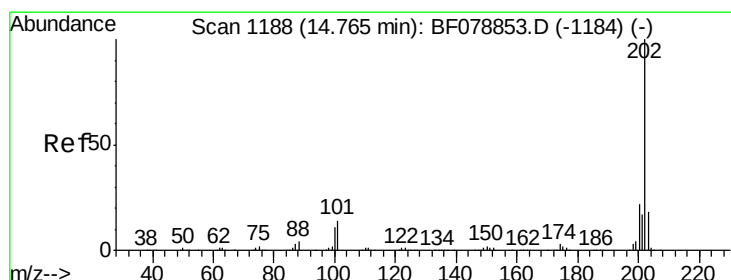
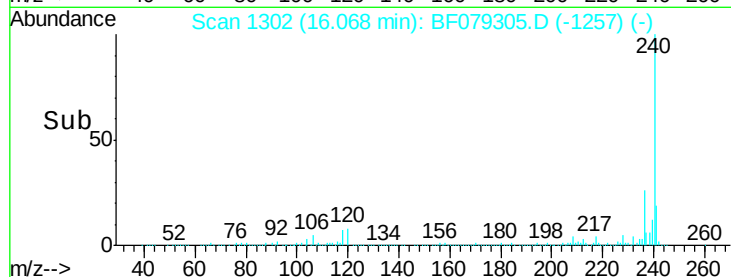
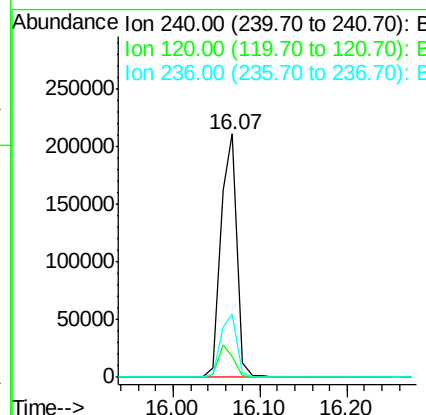
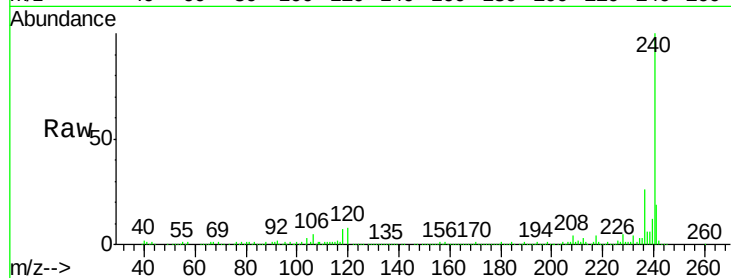
ClientSampled :

WC-04-D1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 240   | Resp: | 274945 |
| Ion Ratio | Lower | Upper |        |
| 240       | 100   |       |        |
| 120       | 8.4   | 8.6   | 12.8#  |
| 236       | 25.9  | 21.0  | 31.6   |

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#77

Pyrene

Concen: 10.70 ng

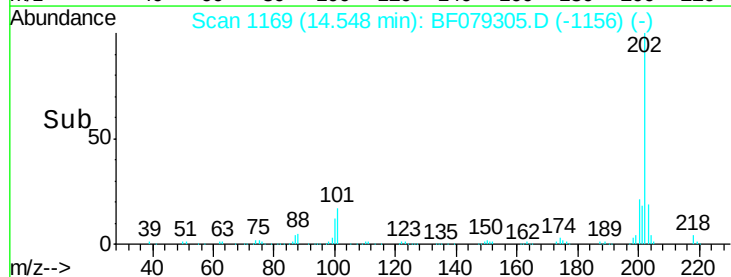
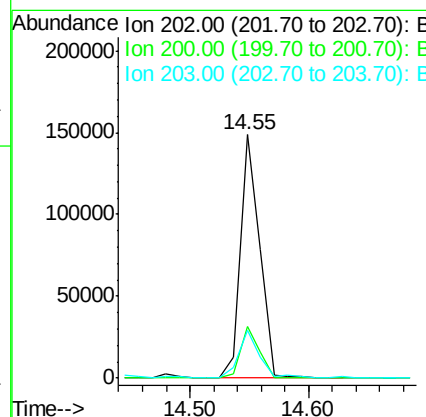
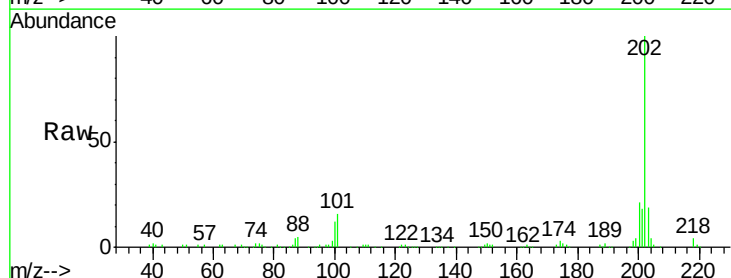
RT: 14.55 min Scan# 1169

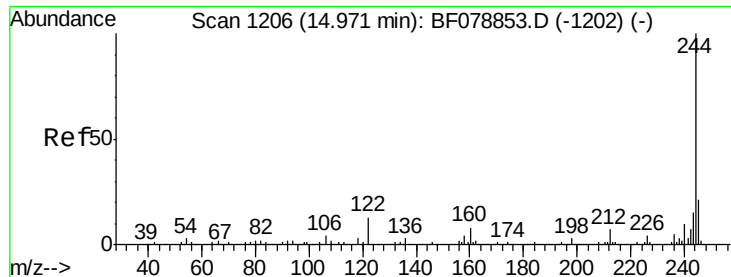
Delta R.T. 0.00 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 169527 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 21.3  | 17.5  | 26.3   |
| 203       | 19.5  | 14.7  | 22.1   |





#78

Terphenyl-d14

Concen: 24.79 ng

RT: 14.77 min Scan# 1188

Delta R.T. 0.00 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

Instrument :

BNA\_F

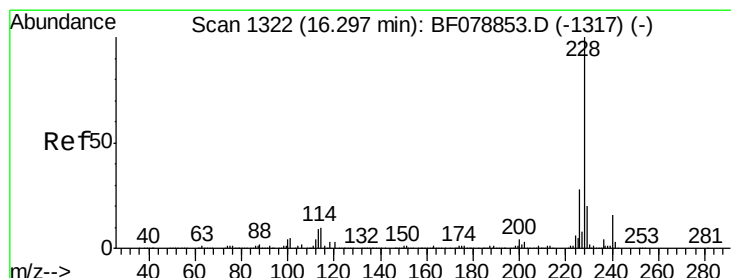
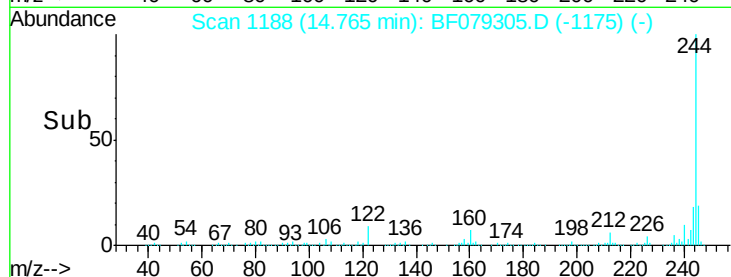
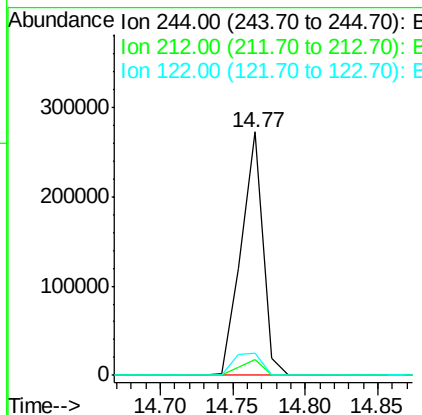
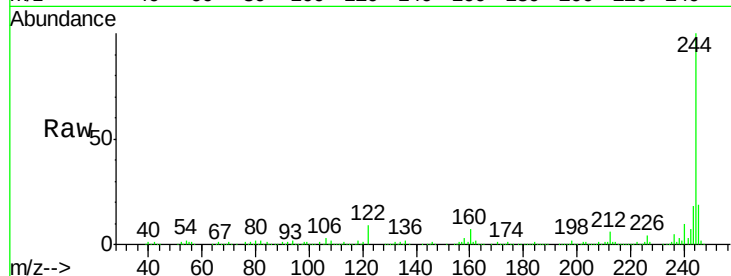
ClientSampleId :

WC-04-D1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 244   | Resp: | 284698 |
| Ion Ratio | Lower | Upper |        |
| 244       | 100   |       |        |
| 212       | 6.2   | 5.6   | 8.4    |
| 122       | 9.1   | 10.5  | 15.7   |

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#80

Benzo(a)anthracene

Concen: 6.04 ng

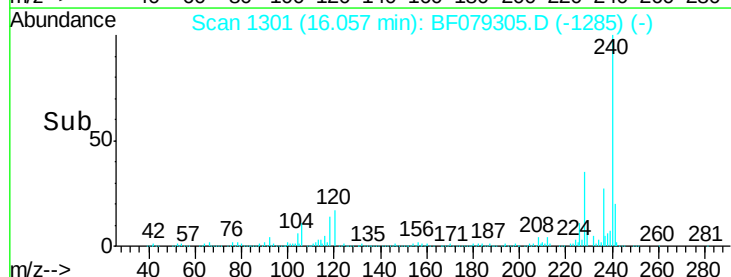
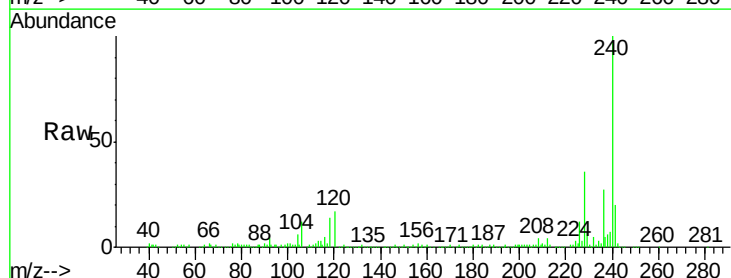
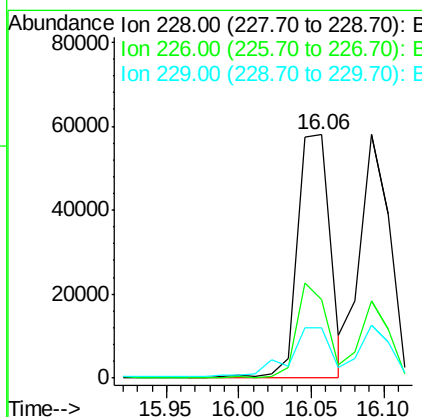
RT: 16.06 min Scan# 1301

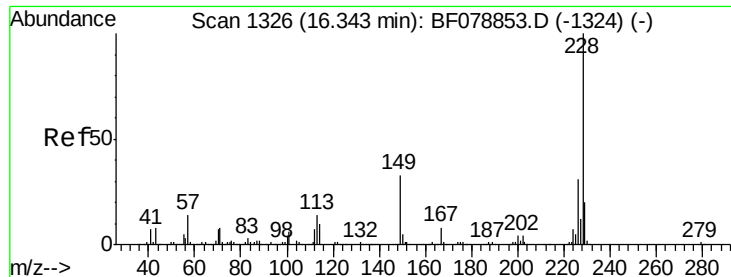
Delta R.T. 0.02 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 228   | Resp: | 90960 |
| Ion Ratio | Lower | Upper |       |
| 228       | 100   |       |       |
| 226       | 32.4  | 22.3  | 33.5  |
| 229       | 20.5  | 16.1  | 24.1  |





#82

Chrysene

Concen: 5.56 ng

RT: 16.09 min Scan# 1304

Delta R.T. 0.01 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

Instrument :

BNA\_F

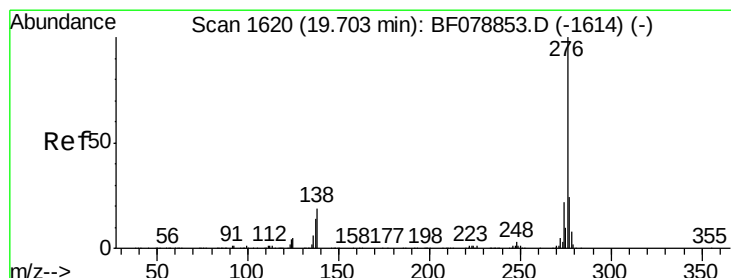
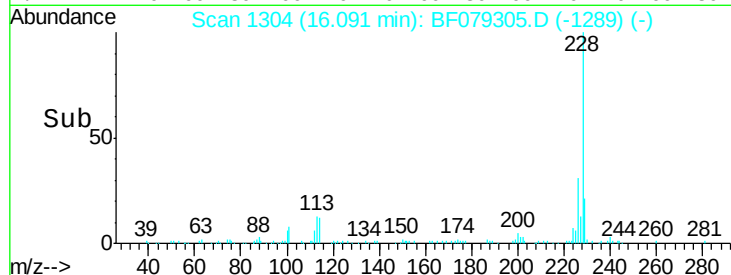
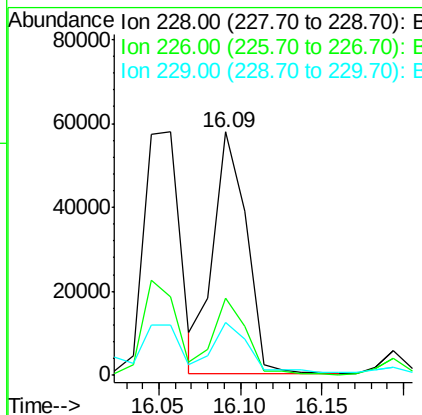
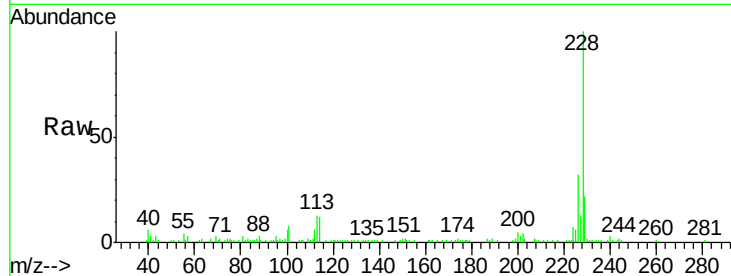
ClientSampled :

WC-04-D1

|           |      |       |       |
|-----------|------|-------|-------|
| Tot Ion:  | 228  | Resp: | 80538 |
| Ion Ratio |      | Lower | Upper |
| 228       | 100  |       |       |
| 226       | 31.6 | 24.8  | 37.2  |
| 229       | 21.9 | 16.1  | 24.1  |

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#85

Indeno(1,2,3-cd)pyrene

Concen: 2.93 ng

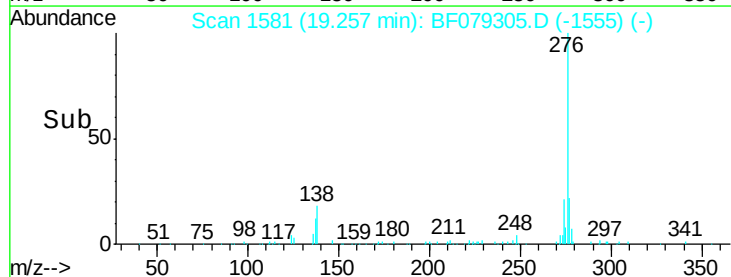
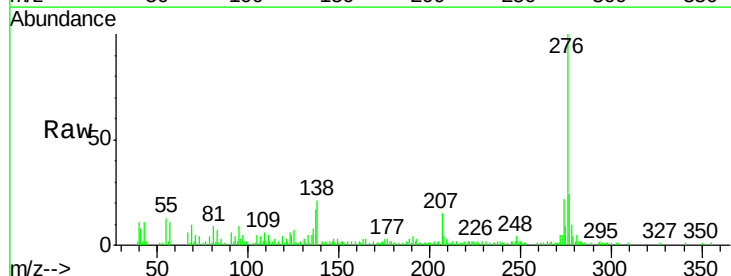
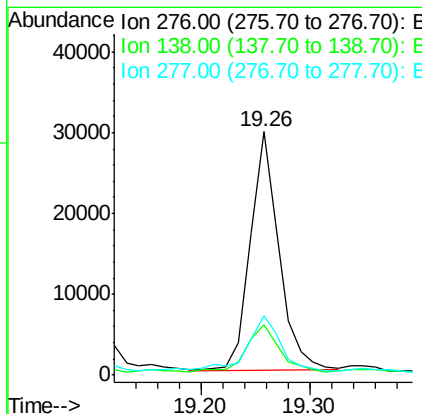
RT: 19.26 min Scan# 1581

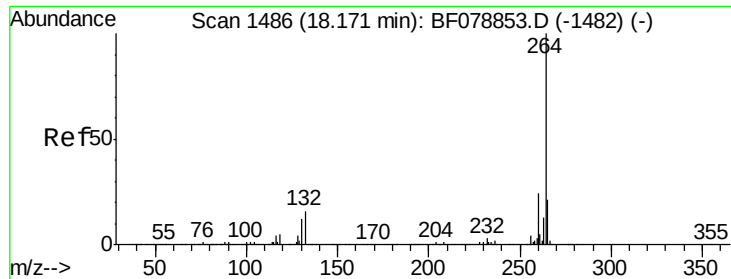
Delta R.T. 0.09 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 276  | Resp: | 54114 |
| Ion Ratio |      | Lower | Upper |
| 276       | 100  |       |       |
| 138       | 23.6 | 21.1  | 31.7  |
| 277       | 27.5 | 19.9  | 29.9  |





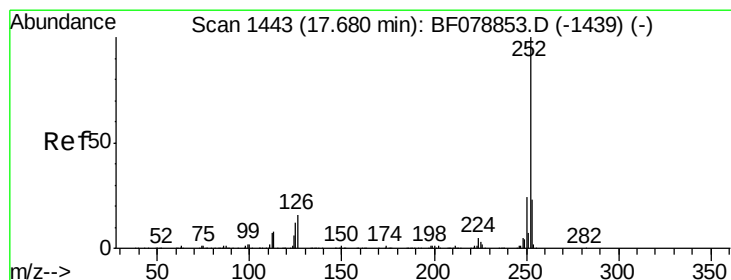
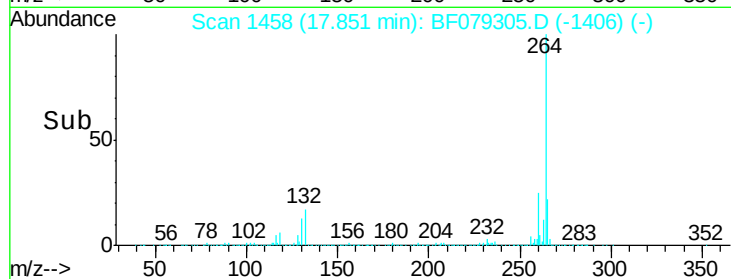
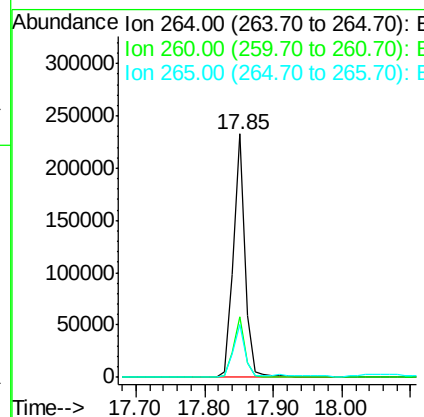
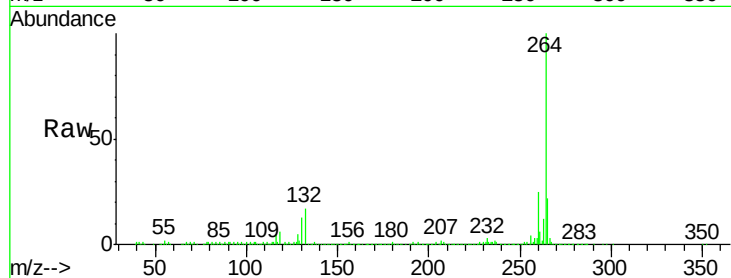
#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 17.85 min Scan# 1458  
Delta R.T. 0.09 min  
Lab File: BF079305.D  
Acq: 16 May 2015 10:34

Instrument :  
BNA\_F  
ClientSampleId :  
WC-04-D1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.8  | 19.2  | 28.8  |
| 265     | 21.8  | 17.2  | 25.8  |

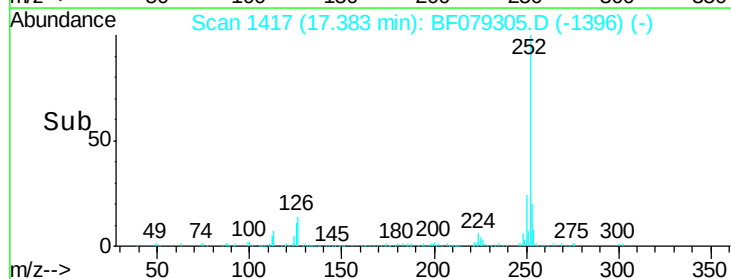
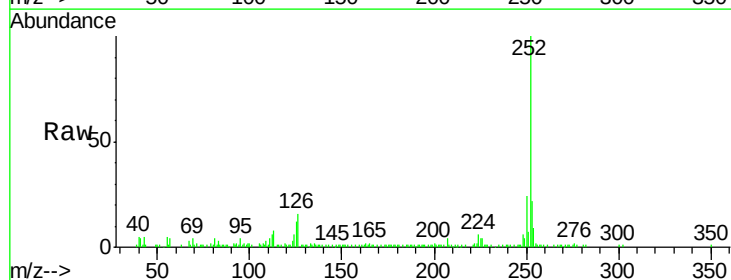
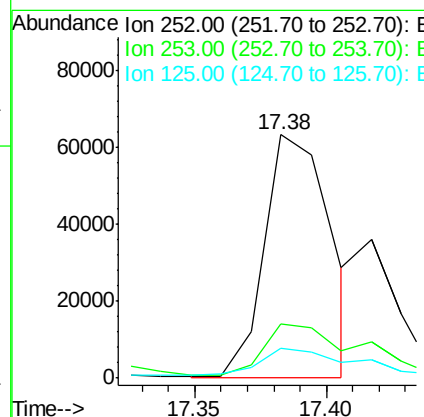
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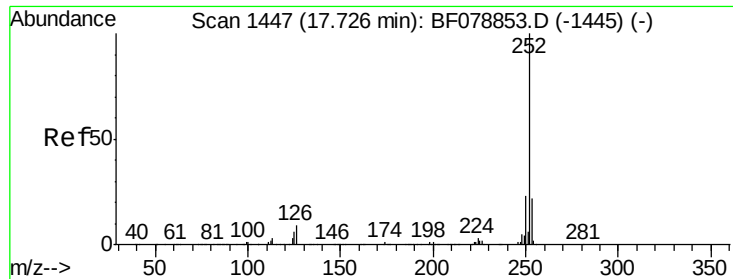
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#87  
Benzo(b)fluoranthene  
Concen: 7.20 ng m  
RT: 17.38 min Scan# 1417  
Delta R.T. 0.06 min  
Lab File: BF079305.D  
Acq: 16 May 2015 10:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.3  | 18.1  | 27.1  |
| 125     | 12.3  | 9.4   | 14.2  |





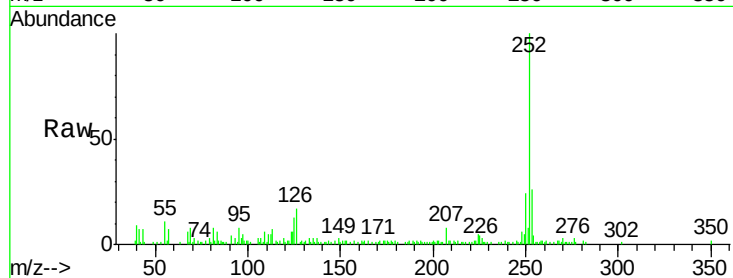
#88  
Benzo(k)fluoranthene  
Concen: 2.62 ng m  
RT: 17.42 min Scan# 1420  
Delta R.T. 0.06 min  
Lab File: BF079305.D  
Acq: 16 May 2015 10:34

Instrument :  
BNA\_F  
ClientSampleId :  
WC-04-D1

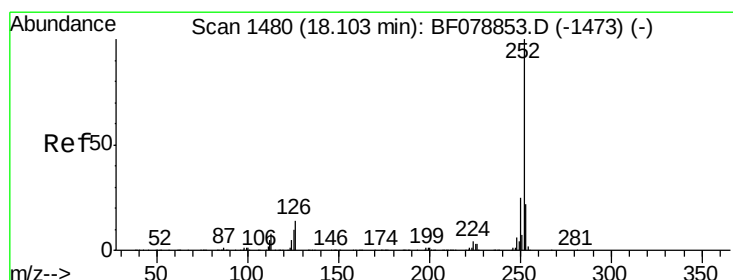
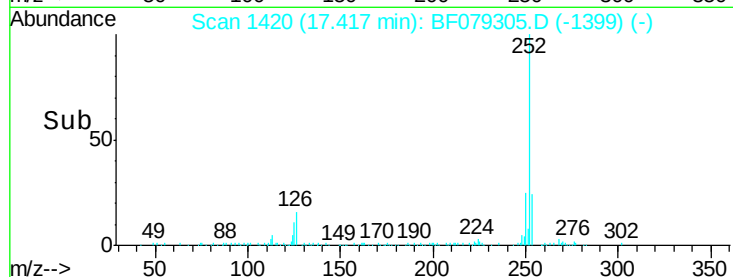
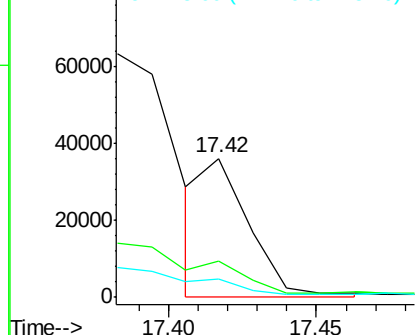
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 26.1  | 17.4  | 26.0# |
| 125     | 13.1  | 6.1   | 9.1#  |

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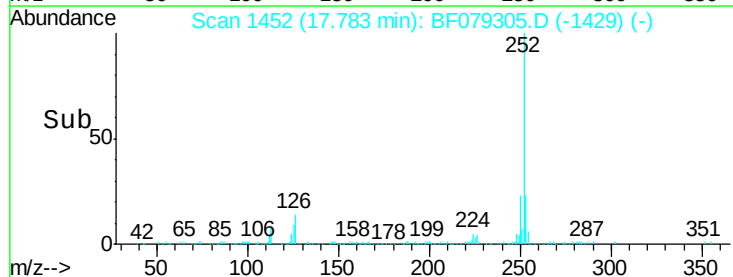
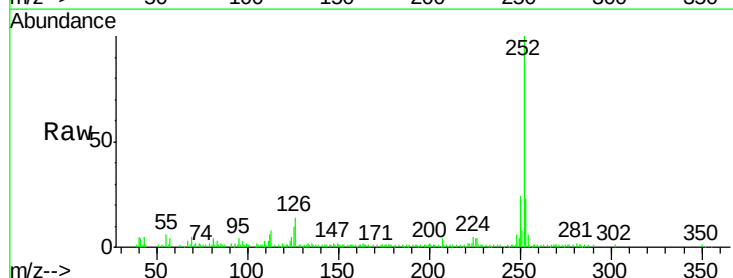
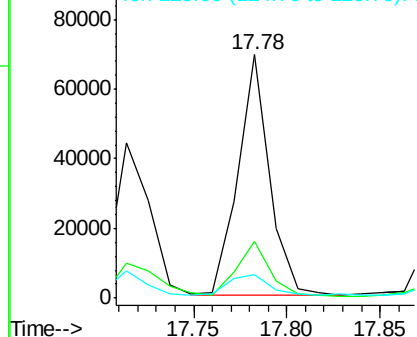
Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

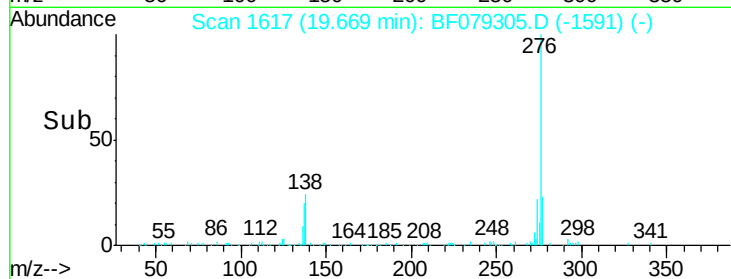
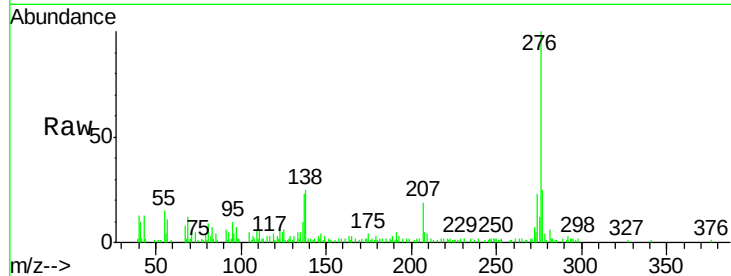
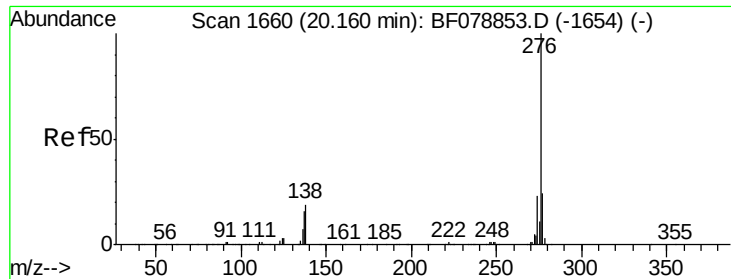


#89  
Benzo(a)pyrene  
Concen: 5.73 ng  
RT: 17.78 min Scan# 1452  
Delta R.T. 0.08 min  
Lab File: BF079305.D  
Acq: 16 May 2015 10:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.5  | 18.0  | 27.0  |
| 125     | 9.9   | 8.2   | 12.2  |

Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E





#91

Benzo(a,h,i)perylene

Concen: 3.46 ng

RT: 19.67 min Scan# 1617

Delta R.T. 0.09 min

Lab File: BF079305.D

Acq: 16 May 2015 10:34

Instrument :

BNA\_F

ClientSampleId :

WC-04-D1

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 276   | Resp: | 52683 |
| Ion Ratio | Lower | Upper |       |
| 276       | 100   |       |       |
| 277       | 25.3  | 18.8  | 28.2  |
| 138       | 25.4  | 15.2  | 22.8# |

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