

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF022415\  
 Data File : BF077413.D  
 Acq On : 24 Feb 2015 13:10  
 Operator : IZ / TP  
 Sample : G1332-08DL2 25X  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 HF-3DL2

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Quant Time: Feb 24 15:43:05 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF021915.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Feb 19 16:57:32 2015  
 Response via : Initial Calibration

| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.30  | 152  | 50897    | 20.00 | ng    | -0.03    |
| 21) Naphthalene-d8          | 8.88  | 136  | 212793   | 20.00 | ng    | -0.03    |
| 38) Acenaphthene-d10        | 11.05 | 164  | 106660   | 20.00 | ng    | -0.05    |
| 63) Phenanthrene-d10        | 12.90 | 188  | 212274   | 20.00 | ng    | -0.03    |
| 75) Chrysene-d12            | 16.19 | 240  | 227733   | 20.00 | ng    | -0.03    |
| 86) Perylene-d12            | 17.94 | 264  | 219757   | 20.00 | ng    | -0.01    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.58  | 112  | 11794    | 3.87  | ng    | -0.03    |
| 7) Phenol-d6                | 6.85  | 99   | 14879    | 3.80  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.98  | 82   | 8432     | 2.46  | ng    | -0.05    |
| 41) 2,4,6-Tribromophenol    | 12.03 | 330  | 3314     | 3.23  | ng    | -0.03    |
| 44) 2-Fluorobiphenyl        | 10.22 | 172  | 16758    | 2.45  | ng    | -0.03    |
| 78) Terphenyl-d14           | 14.89 | 244  | 18511    | 1.90  | ng    | -0.05    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 31) Naphthalene             | 8.90  | 128  | 234926   | 22.08 | ng    | 100      |
| 37) 2-Methylnaphthalene     | 9.77  | 142  | 120172   | 15.90 | ng    | 99       |
| 51) Acenaphthene            | 11.09 | 154  | 133551   | 22.31 | ng    | 98       |
| 54) Dibenzofuran            | 11.31 | 168  | 164279   | 17.77 | ng    | 95       |
| 57) Fluorene                | 11.73 | 166  | 173096   | 23.42 | ng    | 97       |
| 70) Phenanthrene            | 12.92 | 178  | 677832   | 55.09 | ng    | 99       |
| 71) Anthracene              | 12.99 | 178  | 77065    | 6.31  | ng    | 98       |
| 74) Fluoranthene            | 14.41 | 202  | 328764   | 24.46 | ng    | 95       |
| 77) Pyrene                  | 14.68 | 202  | 223625   | 16.05 | ng    | 98       |
| 80) Benzo(a)anthracene      | 16.18 | 228  | 53116    | 3.98  | ng    | 99       |
| 82) Chrysene                | 16.21 | 228  | 44803m   | 3.57  | ng    |          |

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

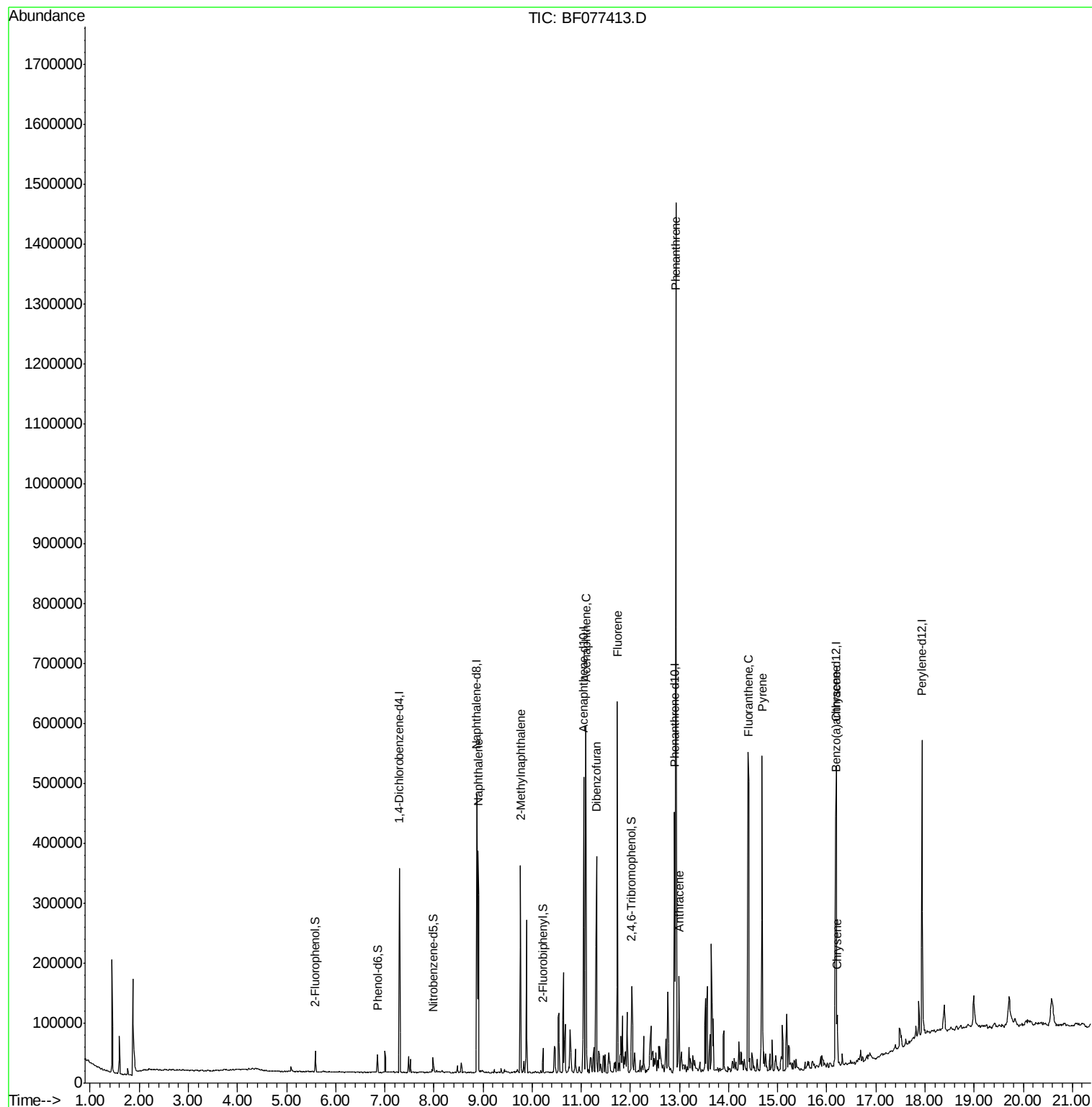
Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF022415\  
Data File : BF077413.D  
Acq On : 24 Feb 2015 13:10  
Operator : IZ / TP  
Sample : G1332-08DL2 25X  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

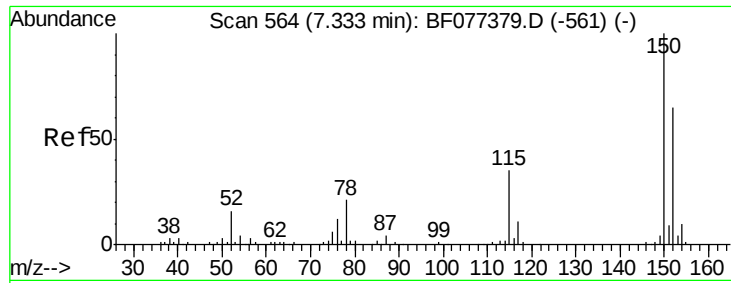
Instrument :  
BNA\_F  
ClientSampleId :  
HF-3DL2

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Quant Time: Feb 24 15:43:05 2015  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF021915.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Feb 19 16:57:32 2015  
Response via : Initial Calibration





#1

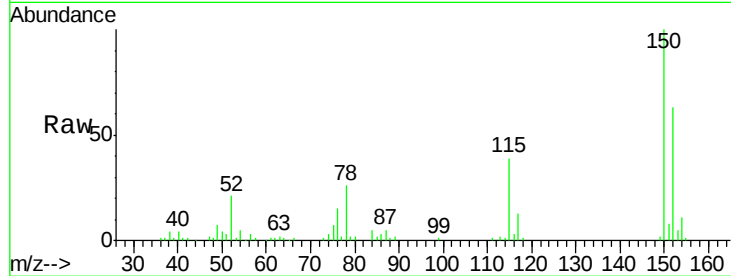
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 7.30 min Scan# 561  
Delta R.T. -0.03 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

Instrument :  
BNA\_F  
ClientSampleId :  
HF-3DL2

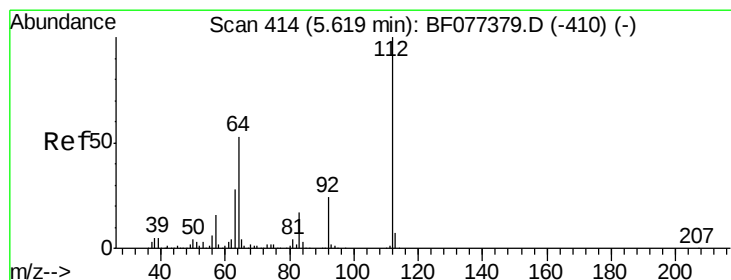
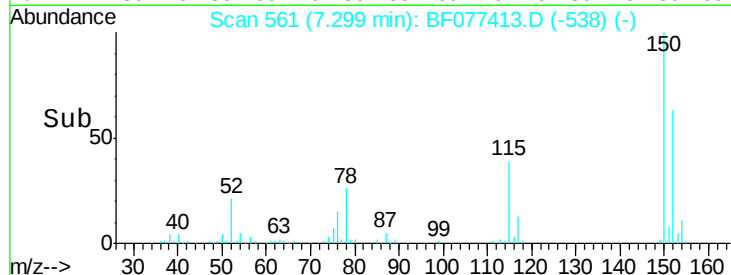
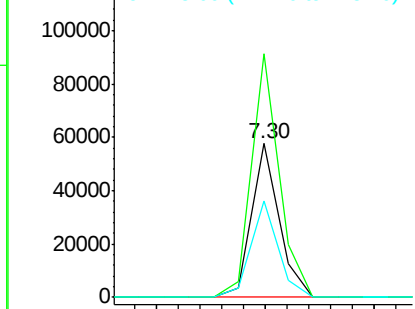
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 158.3 | 124.0 | 186.0 |
| 115     | 62.4  | 49.4  | 74.2  |

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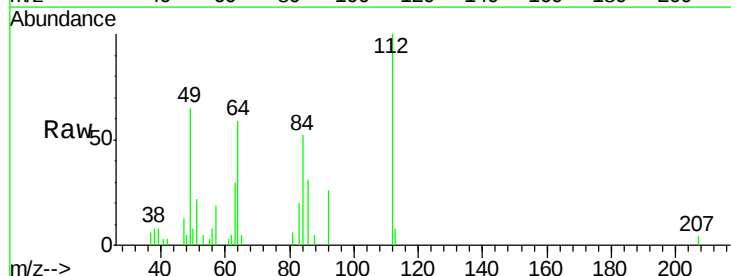
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



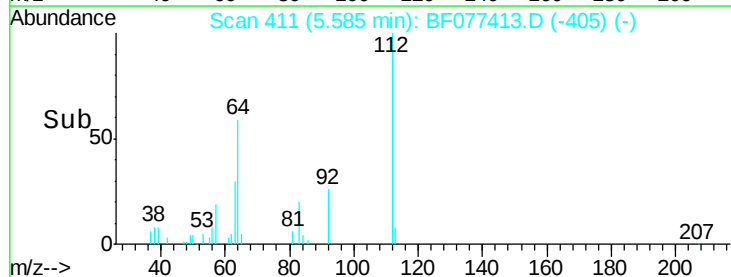
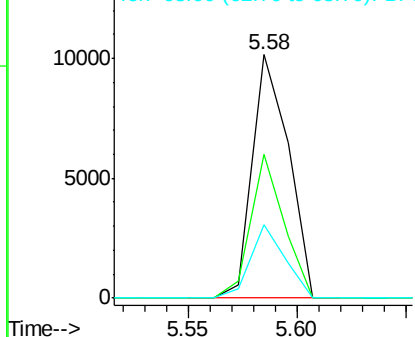
#5

2-Fluorophenol  
Concen: 3.87 ng  
RT: 5.58 min Scan# 411  
Delta R.T. -0.03 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 58.9  | 48.5  | 72.7  |
| 63      | 30.1  | 25.0  | 37.4  |



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF0  
Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 3.80 ng

RT: 6.85 min Scan# 522

Delta R.T. -0.02 min

Lab File: BF077413.D

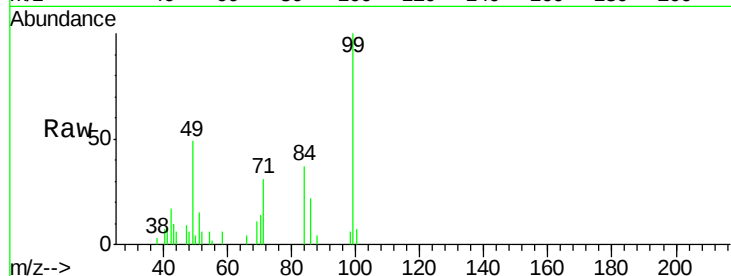
Acq: 24 Feb 2015 13:10

Instrument :

BNA\_F

ClientSampleId :

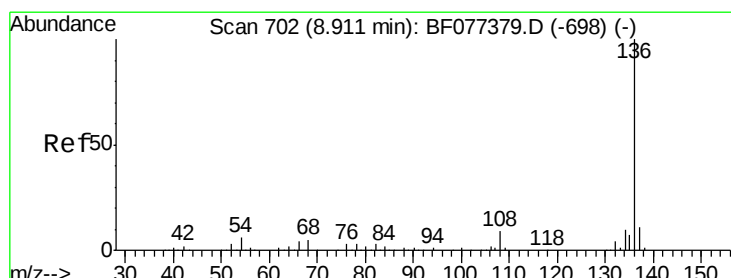
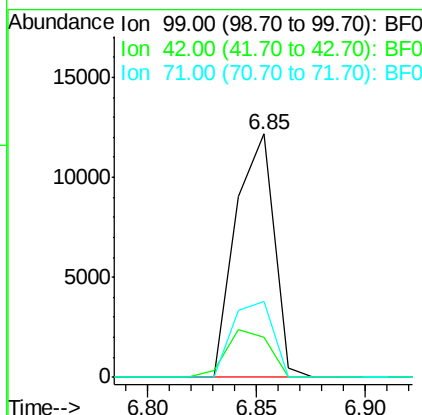
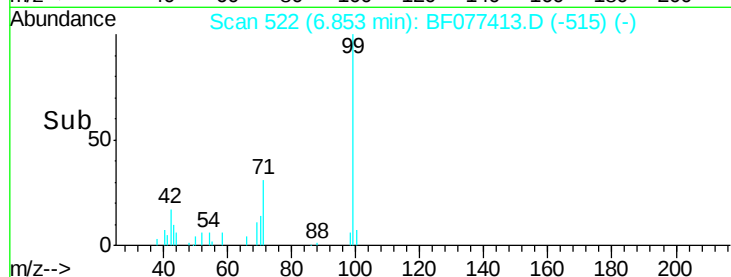
HF-3DL2



|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 99    | Resp: | 14879 |
| Ion Ratio | Lower | Upper |       |
| 99        | 100   |       |       |
| 42        | 16.7  | 16.2  | 24.4  |
| 71        | 30.9  | 26.7  | 40.1  |

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#21

Naphthalene-d8

Concen: 20.00 ng

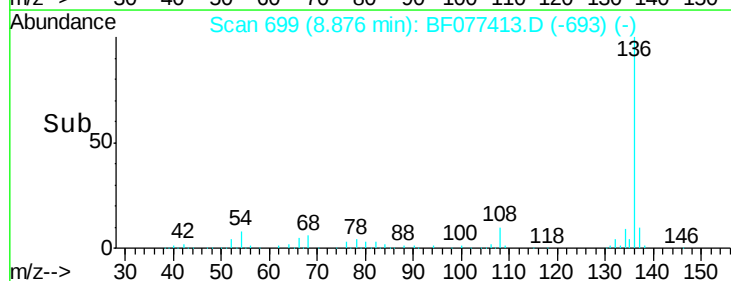
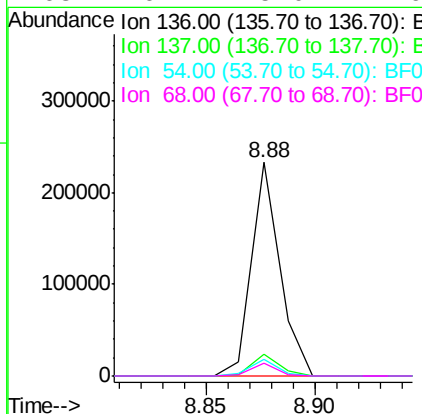
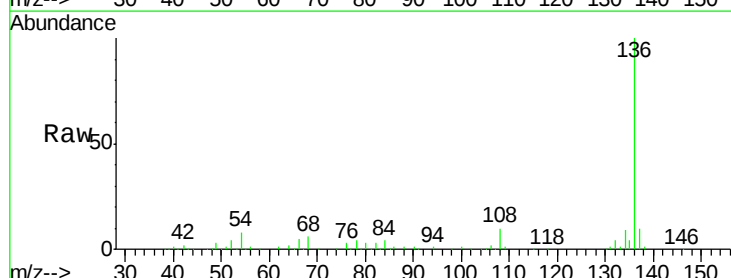
RT: 8.88 min Scan# 699

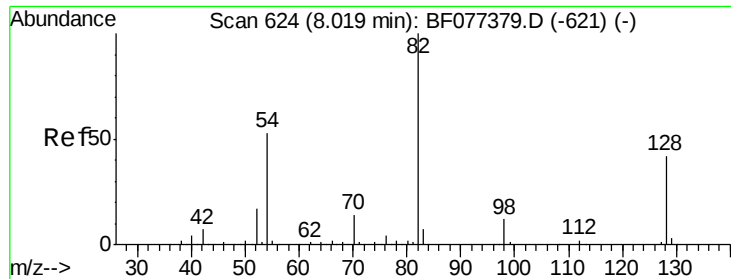
Delta R.T. -0.03 min

Lab File: BF077413.D

Acq: 24 Feb 2015 13:10

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 212793 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.5  | 8.6   | 13.0   |
| 54        | 7.9   | 6.2   | 9.4    |
| 68        | 6.2   | 5.0   | 7.6    |





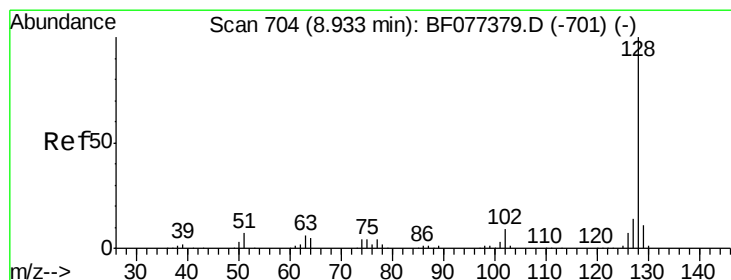
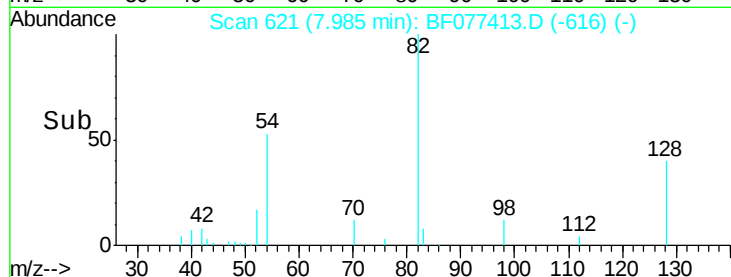
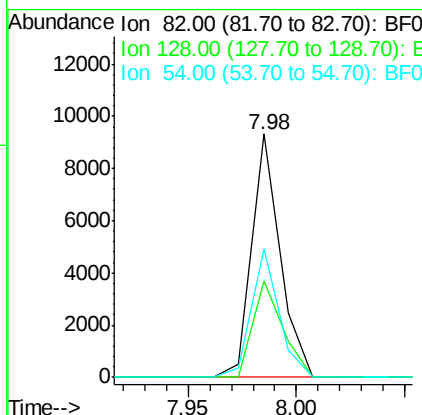
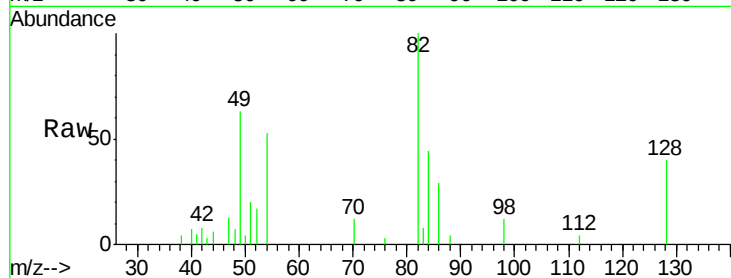
#23  
 Nitrobenzene-d5  
 Concen: 2.46 ng  
 RT: 7.98 min Scan# 621  
 Delta R.T. -0.05 min  
 Lab File: BF077413.D  
 Acq: 24 Feb 2015 13:10

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| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 39.7  | 43.8  | 65.8# |
| 54      | 52.7  | 36.7  | 55.1  |

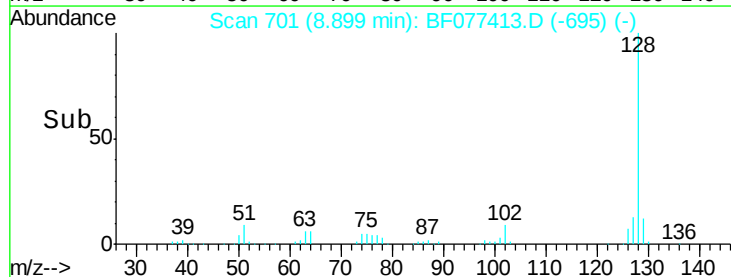
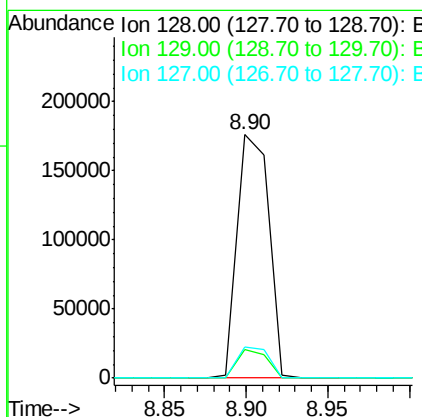
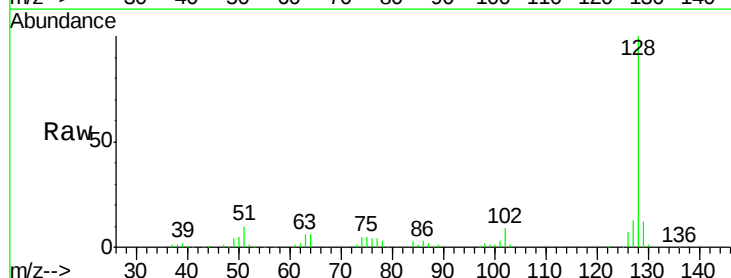
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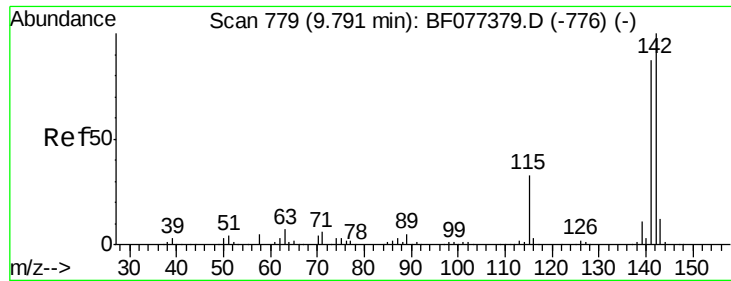
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#31  
 Naphthalene  
 Concen: 22.08 ng  
 RT: 8.90 min Scan# 701  
 Delta R.T. -0.03 min  
 Lab File: BF077413.D  
 Acq: 24 Feb 2015 13:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 129     | 11.7  | 9.4   | 14.0  |
| 127     | 12.9  | 10.6  | 15.8  |





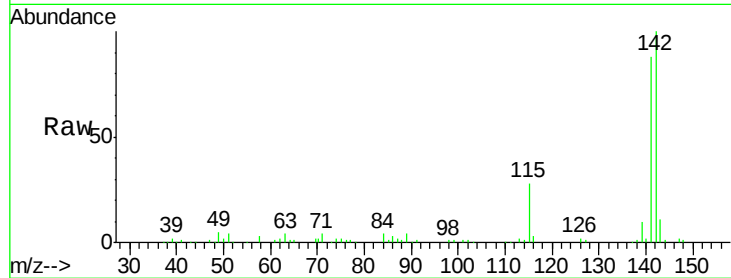
#37  
2-Methylnaphthalene  
Concen: 15.90 ng  
RT: 9.77 min Scan# 777  
Delta R.T. -0.03 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

Instrument :  
BNA\_F  
ClientSampleId :  
HF-3DL2

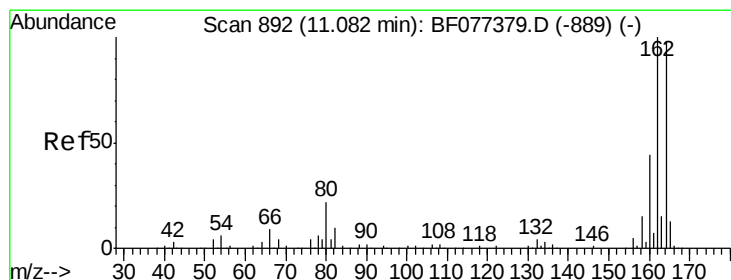
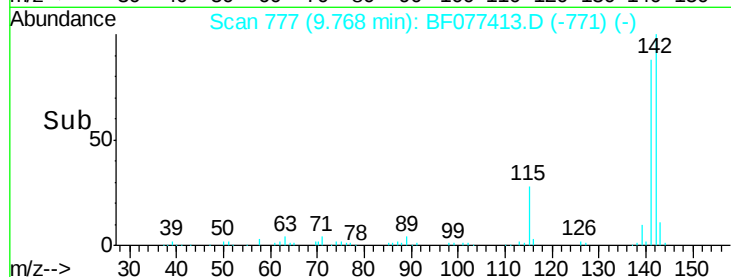
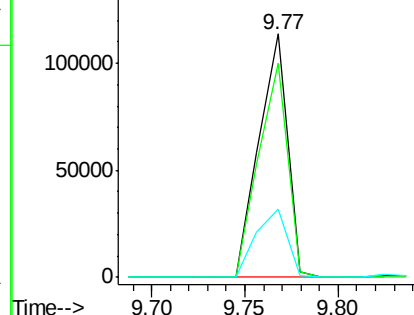
| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 142     | 100   | 120172 |       |       |
| 141     | 88.1  | 70.7   | 106.1 |       |
| 115     | 27.9  | 24.2   | 36.4  |       |

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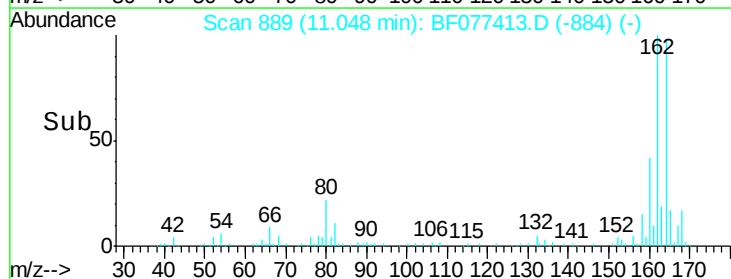
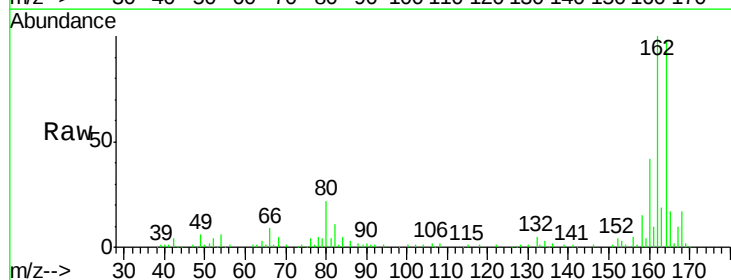
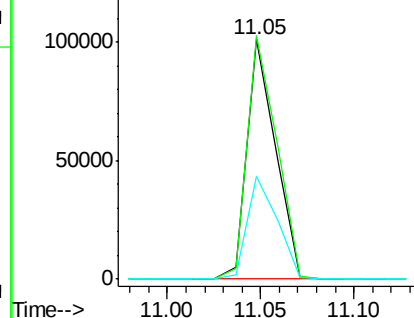
Abundance Ion 142.00 (141.70 to 142.70): E  
Ion 141.00 (140.70 to 141.70): E  
Ion 115.00 (114.70 to 115.70): E



#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 11.05 min Scan# 889  
Delta R.T. -0.05 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 164     | 100   | 106660 |       |       |
| 162     | 101.8 | 83.2   | 124.8 |       |
| 160     | 42.9  | 34.6   | 52.0  |       |

Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E





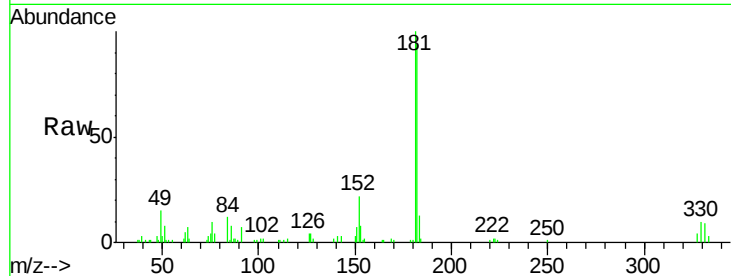
#41  
 2,4,6-Tribromophenol  
 Concen: 3.23 ng  
 RT: 12.03 min Scan# 975  
 Delta R.T. -0.03 min  
 Lab File: BF077413.D  
 Acq: 24 Feb 2015 13:10

Instrument :  
 BNA\_F  
 ClientSampleId :  
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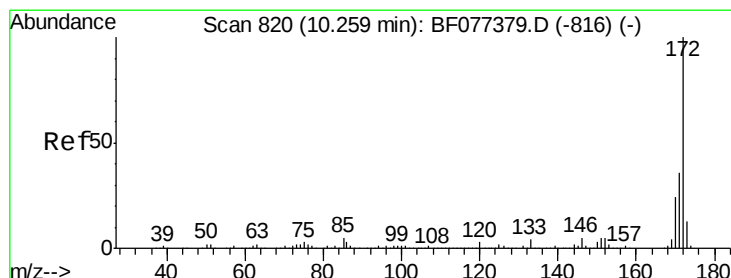
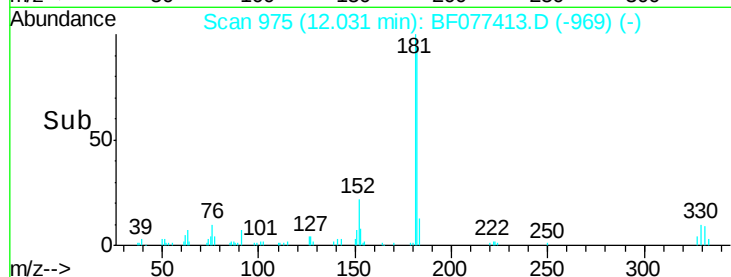
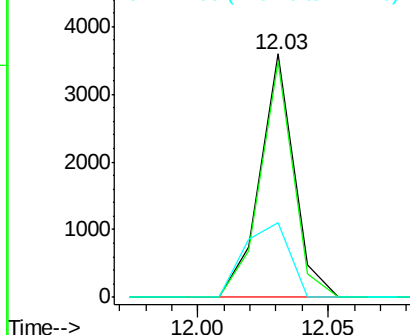
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 93.7  | 77.4  | 116.2 |
| 141     | 40.5  | 28.8  | 43.2  |

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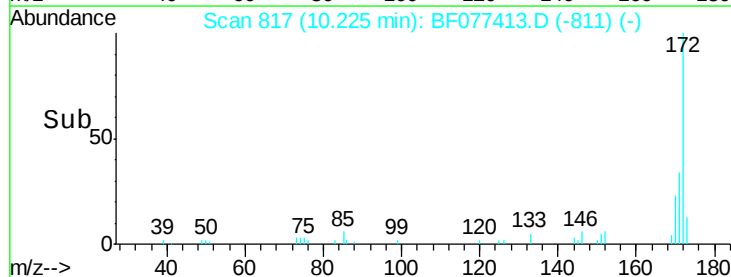
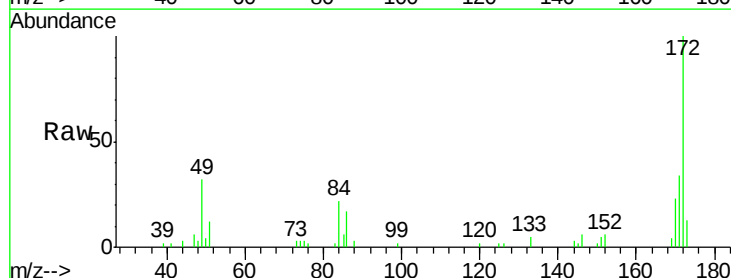
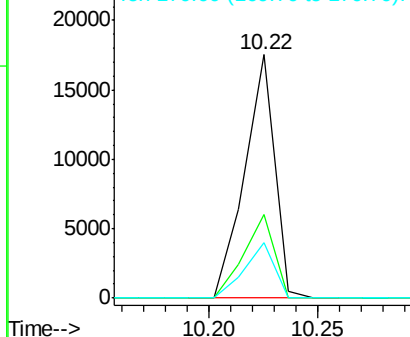
Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

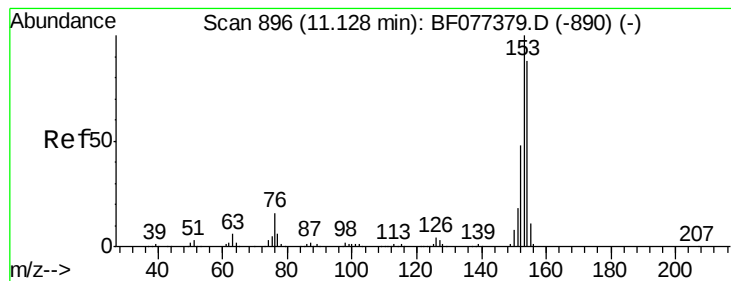


#44  
 2-Fluorobiphenyl  
 Concen: 2.45 ng  
 RT: 10.22 min Scan# 817  
 Delta R.T. -0.03 min  
 Lab File: BF077413.D  
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| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 34.1  | 28.9  | 43.3  |
| 170     | 22.9  | 19.4  | 29.2  |

Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E





#51

Acenaphthene

Concen: 22.31 ng

RT: 11.09 min Scan# 893

Delta R.T. -0.03 min

Lab File: BF077413.D

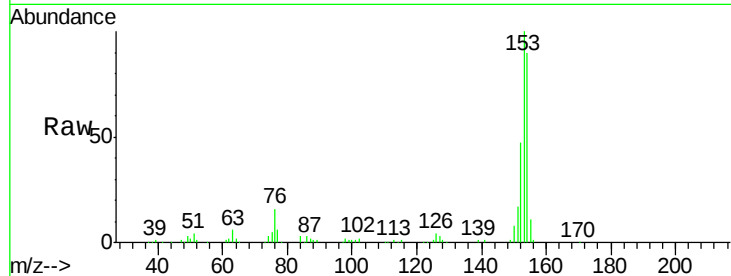
Acq: 24 Feb 2015 13:10

Instrument :

BNA\_F

ClientSampleId :

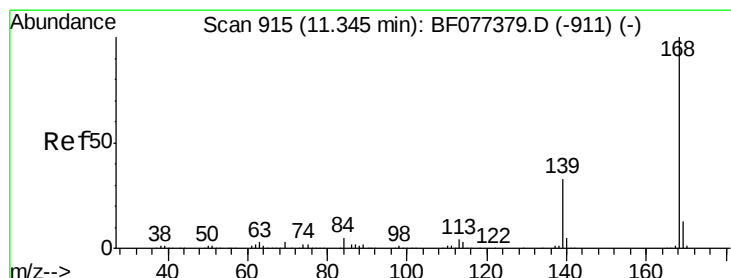
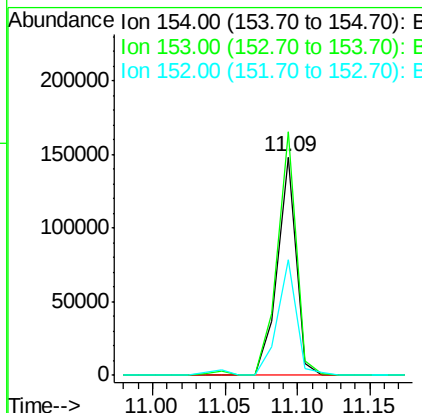
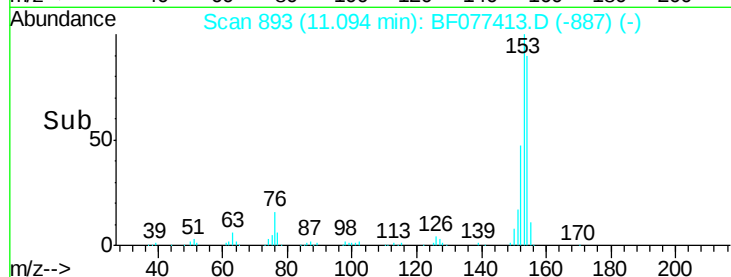
HF-3DL2



| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 154     | 100   |      |       |       |
| 153     | 111.6 | 90.5 | 135.7 |       |
| 152     | 52.9  | 43.5 | 65.3  |       |

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#54

Dibenzofuran

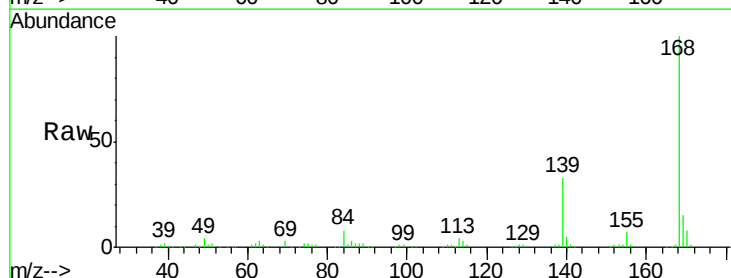
Concen: 17.77 ng

RT: 11.31 min Scan# 912

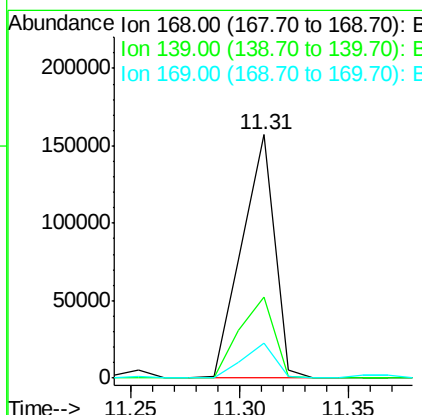
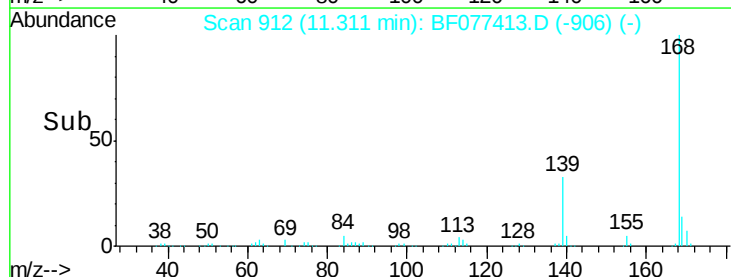
Delta R.T. -0.03 min

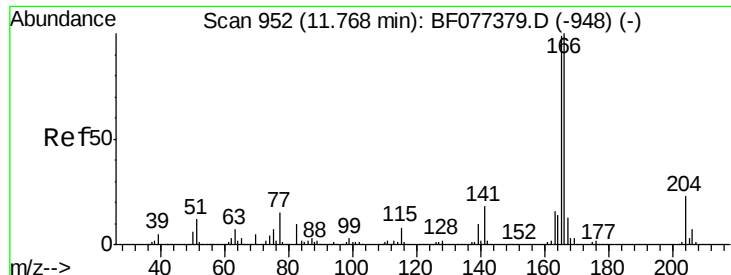
Lab File: BF077413.D

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| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 168     | 100   |      |       |       |
| 139     | 33.1  | 29.3 | 43.9  |       |
| 169     | 14.5  | 10.9 | 16.3  |       |





#57

Fluorene

Concen: 23.42 ng

RT: 11.73 min Scan# 949

Delta R.T. -0.03 min

Lab File: BF077413.D

Acq: 24 Feb 2015 13:10

Instrument :

BNA\_F

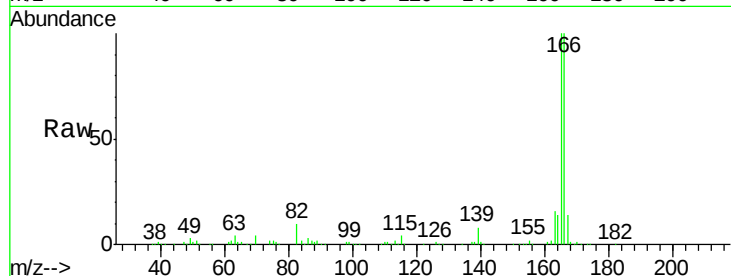
ClientSampled :

HF-3DL2

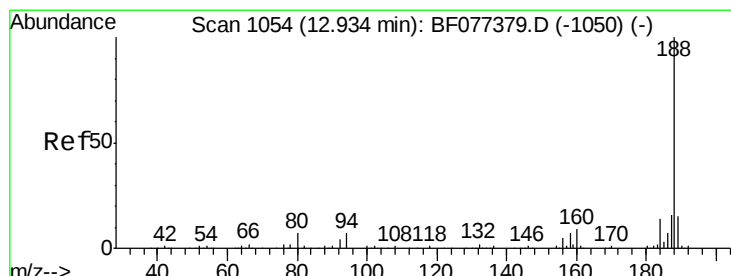
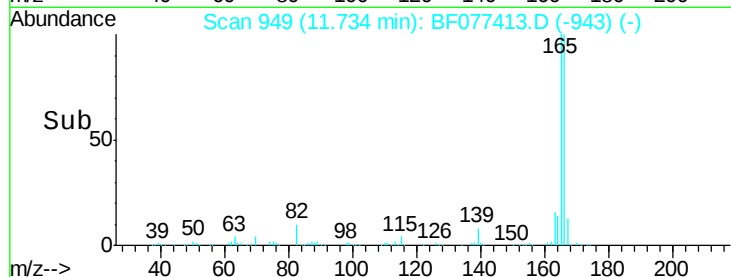
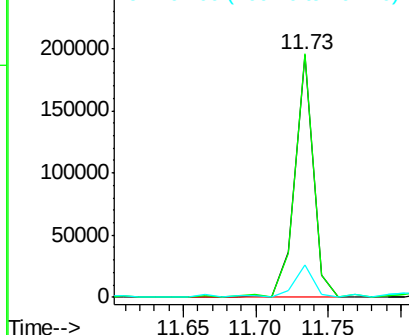
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 166   | Resp: | 173096 |
| Ion Ratio | Lower | Upper |        |
| 166       | 100   |       |        |
| 165       | 100.4 | 77.6  | 116.4  |
| 167       | 13.6  | 10.6  | 16.0   |

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Abundance Ion 166.00 (165.70 to 166.70): E  
Ion 165.00 (164.70 to 165.70): E  
Ion 167.00 (166.70 to 167.70): E



#63

Phenanthrene-d10

Concen: 20.00 ng

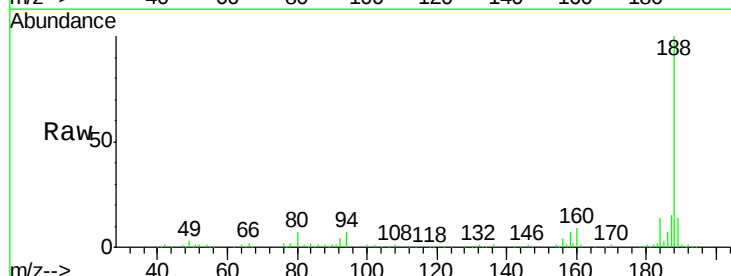
RT: 12.90 min Scan# 1051

Delta R.T. -0.03 min

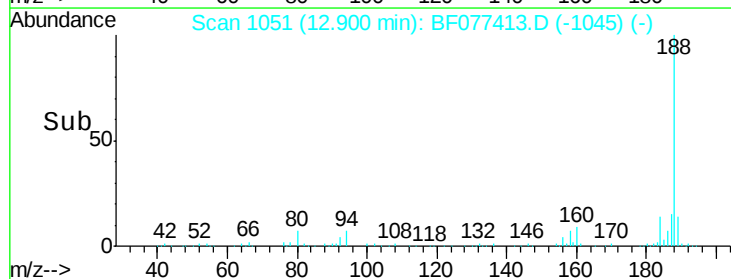
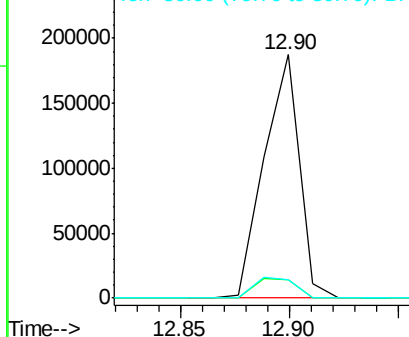
Lab File: BF077413.D

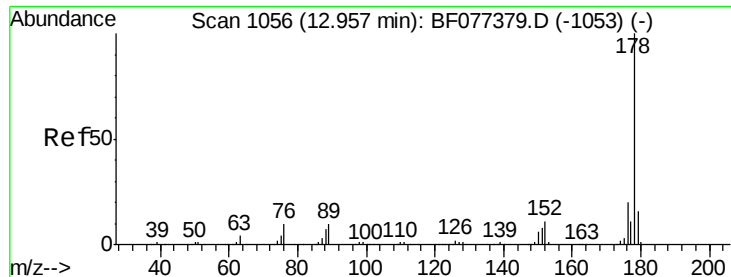
Acq: 24 Feb 2015 13:10

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 188   | Resp: | 212274 |
| Ion Ratio | Lower | Upper |        |
| 188       | 100   |       |        |
| 94        | 7.4   | 7.4   | 11.2#  |
| 80        | 7.4   | 8.0   | 12.0#  |



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





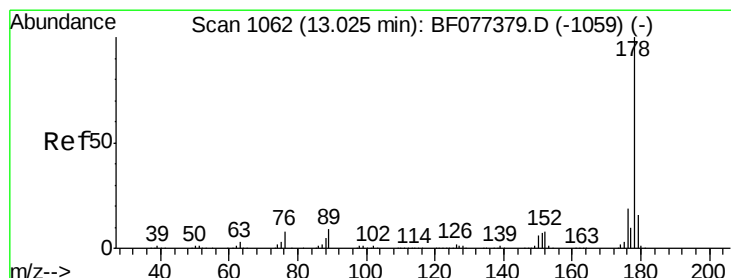
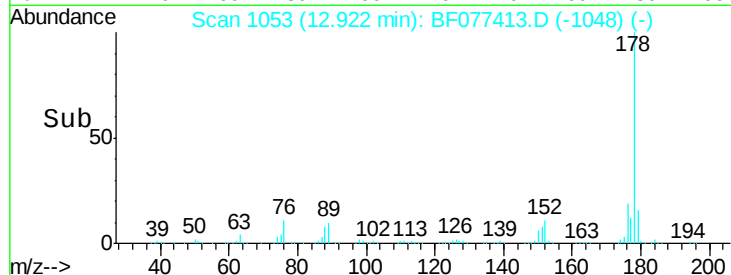
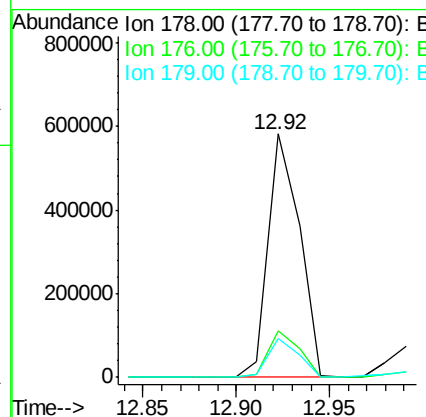
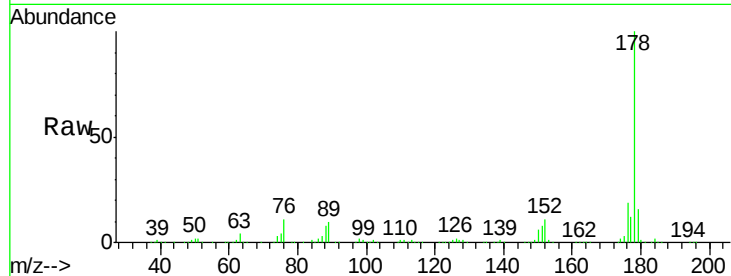
#70  
Phenanthrene  
Concen: 55.09 ng  
RT: 12.92 min Scan# 1053  
Delta R.T. -0.05 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

Instrument :  
BNA\_F  
ClientSampleId :  
HF-3DL2

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 178     | 100   | 677832 |       |       |
| 176     | 19.3  | 15.5   | 23.3  |       |
| 179     | 16.0  | 12.2   | 18.2  |       |

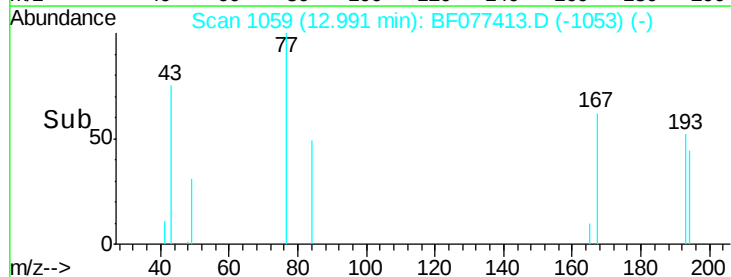
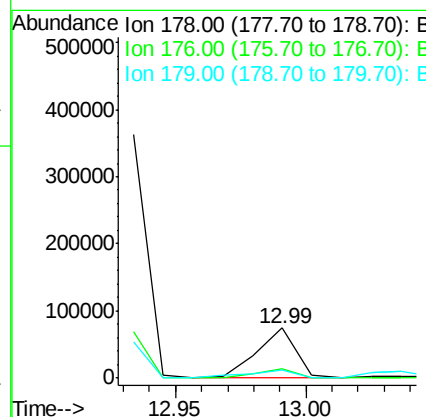
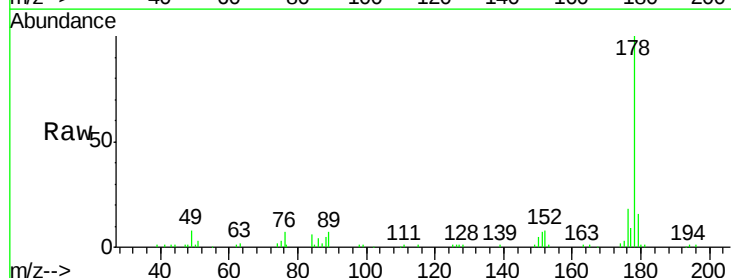
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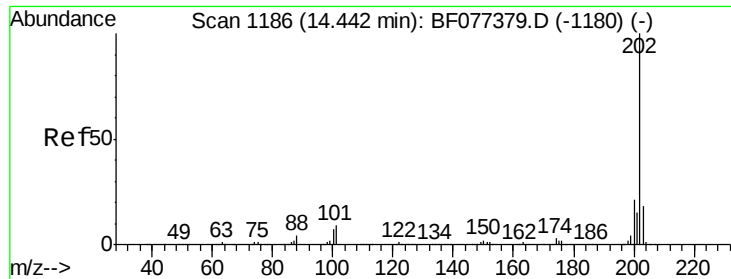
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#71  
Anthracene  
Concen: 6.31 ng  
RT: 12.99 min Scan# 1059  
Delta R.T. -0.03 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 178     | 100   | 77065 |       |       |
| 176     | 17.8  | 15.4  | 23.0  |       |
| 179     | 16.0  | 12.9  | 19.3  |       |





#74

Fluoranthene

Concen: 24.46 ng

RT: 14.41 min Scan# 1183

Delta R.T. -0.03 min

Lab File: BF077413.D

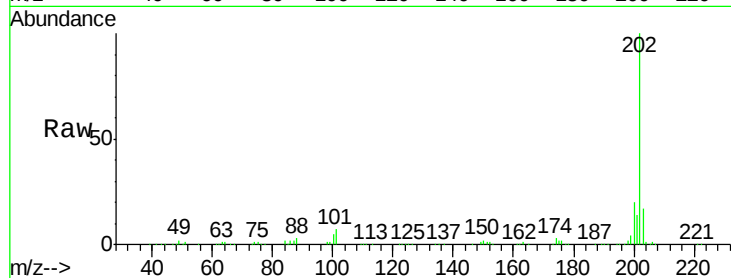
Acq: 24 Feb 2015 13:10

Instrument :

BNA\_F

ClientSampleId :

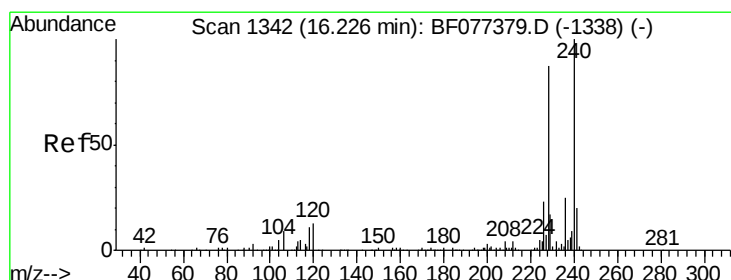
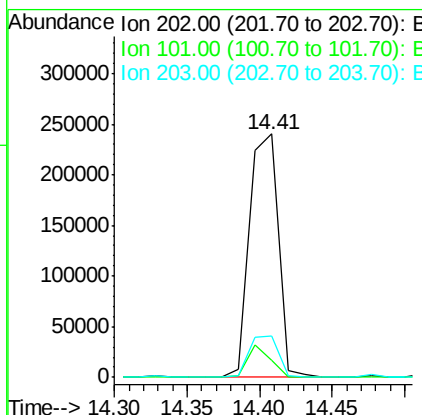
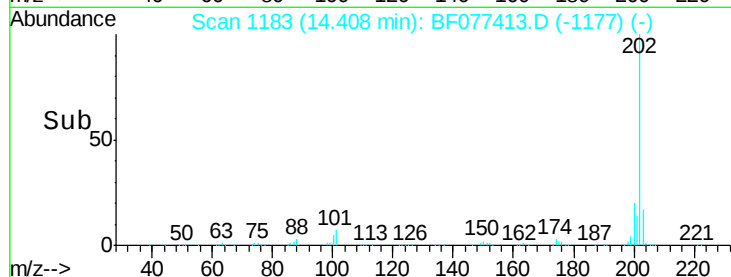
HF-3DL2



| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 202     | 100   | 328764 |       |       |
| 101     | 6.8   | 0.0    | 30.8  |       |
| 203     | 16.9  | 0.0    | 37.7  |       |

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#75

Chrysene-d12

Concen: 20.00 ng

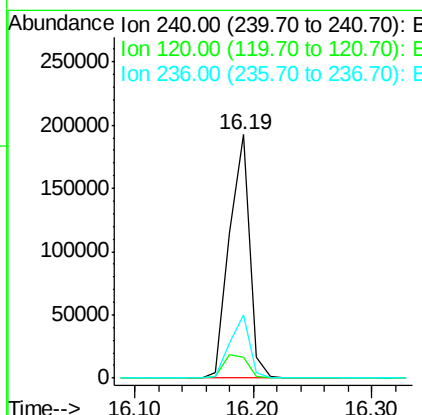
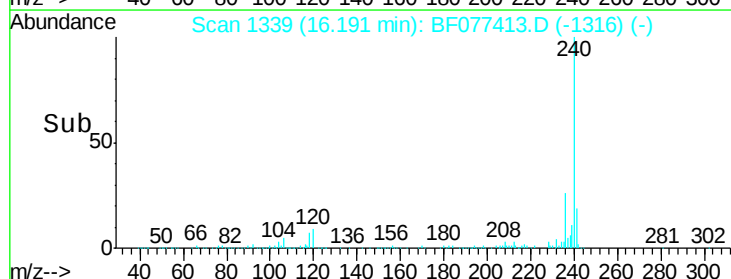
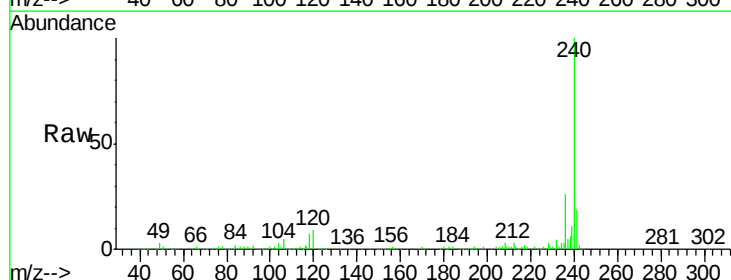
RT: 16.19 min Scan# 1339

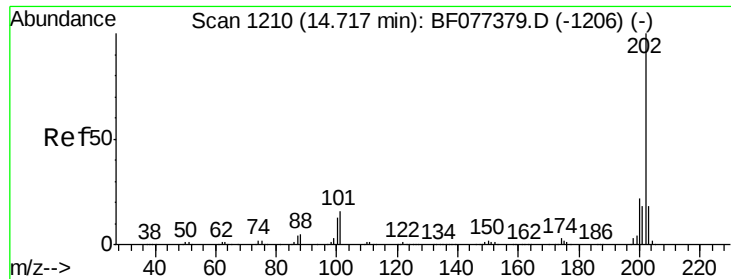
Delta R.T. -0.03 min

Lab File: BF077413.D

Acq: 24 Feb 2015 13:10

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 240     | 100   | 227733 |       |       |
| 120     | 8.6   | 8.8    | 13.2# |       |
| 236     | 25.8  | 20.7   | 31.1  |       |





#77

Pyrene

Concen: 16.05 ng

RT: 14.68 min Scan# 1207

Delta R.T. -0.05 min

Lab File: BF077413.D

Acq: 24 Feb 2015 13:10

Instrument :

BNA\_F

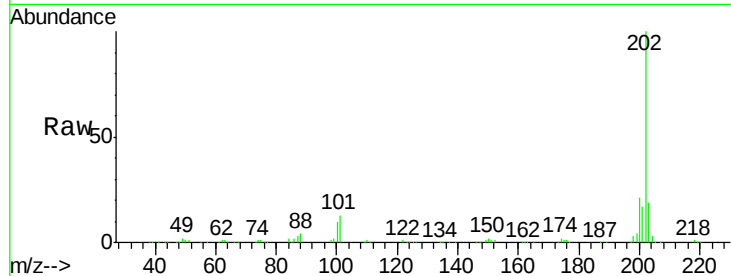
ClientSampleId :

HF-3DL2

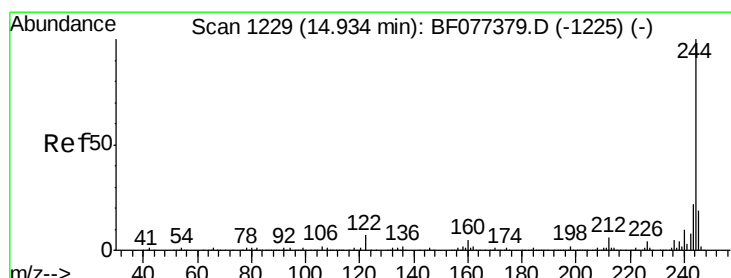
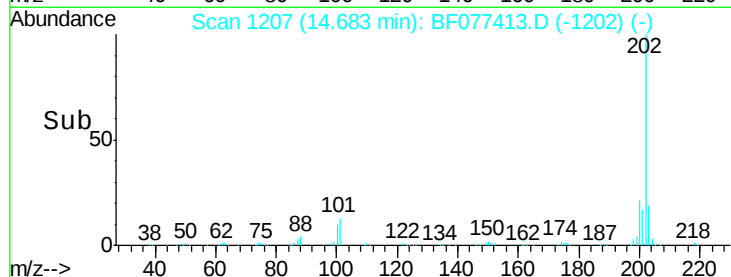
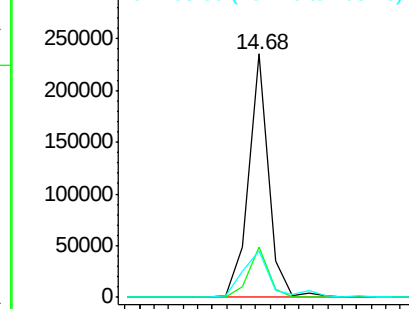
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 202   | Resp: | 223625 |
| Ion Ratio | Lower | Upper |        |
| 202       | 100   |       |        |
| 200       | 20.8  | 17.1  | 25.7   |
| 203       | 19.1  | 14.2  | 21.2   |

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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



#78

Terphenyl-d14

Concen: 1.90 ng

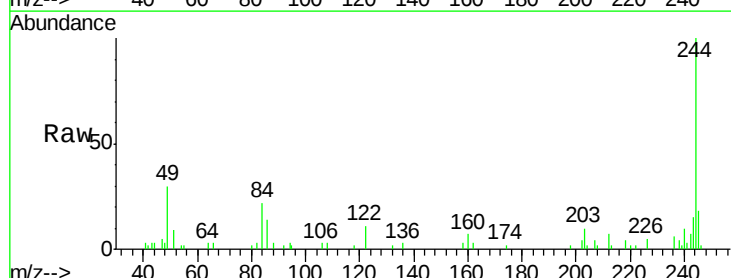
RT: 14.89 min Scan# 1225

Delta R.T. -0.05 min

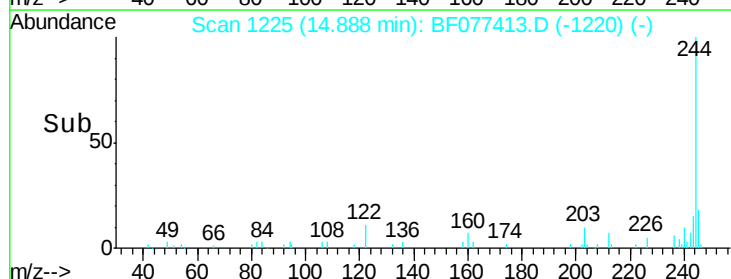
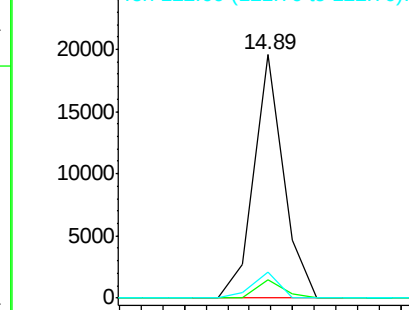
Lab File: BF077413.D

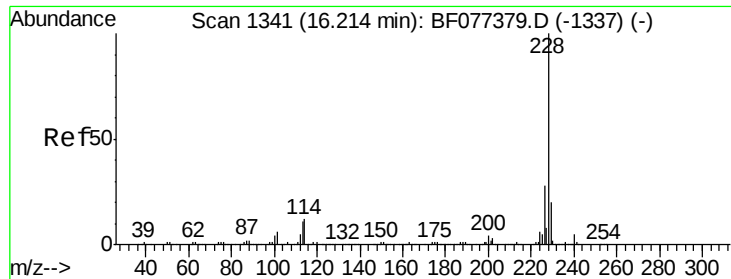
Acq: 24 Feb 2015 13:10

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 244   | Resp: | 18511 |
| Ion Ratio | Lower | Upper |       |
| 244       | 100   |       |       |
| 212       | 7.3   | 5.2   | 7.8   |
| 122       | 10.6  | 7.8   | 11.8  |



Abundance Ion 244.00 (243.70 to 244.70): E  
Ion 212.00 (211.70 to 212.70): E  
Ion 122.00 (121.70 to 122.70): E





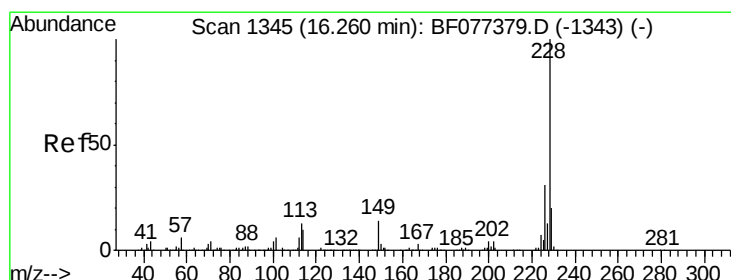
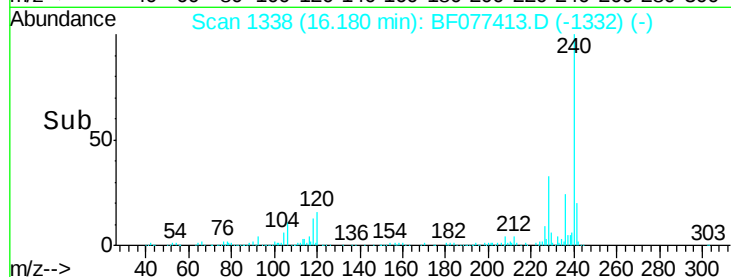
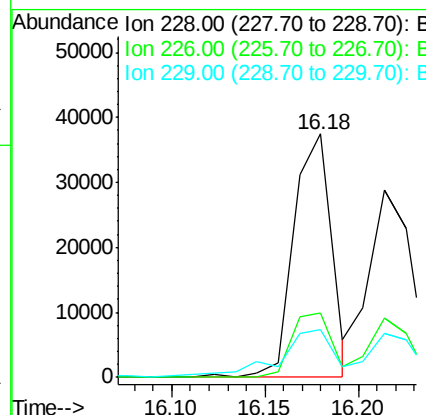
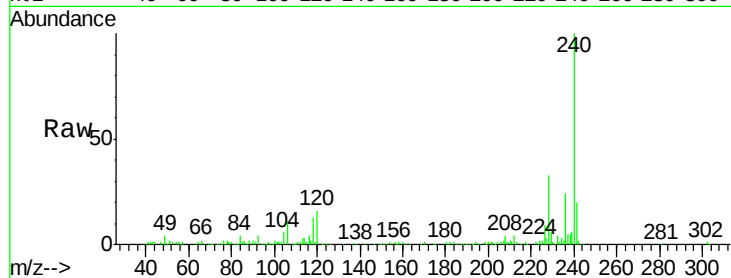
#80  
Benzo(a)anthracene  
Concen: 3.98 ng  
RT: 16.18 min Scan# 1338  
Delta R.T. -0.03 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

Instrument :  
BNA\_F  
ClientSampleId :  
HF-3DL2

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 26.4  | 22.0  | 33.0  |
| 229     | 19.8  | 15.8  | 23.8  |

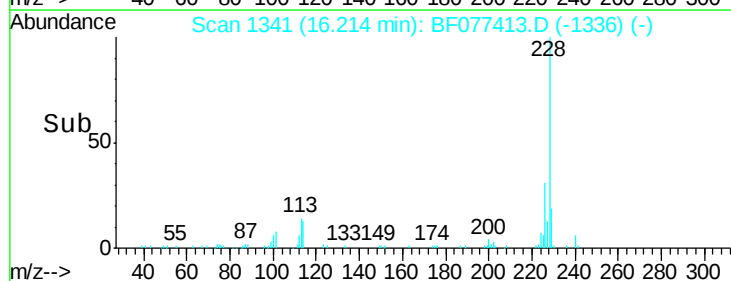
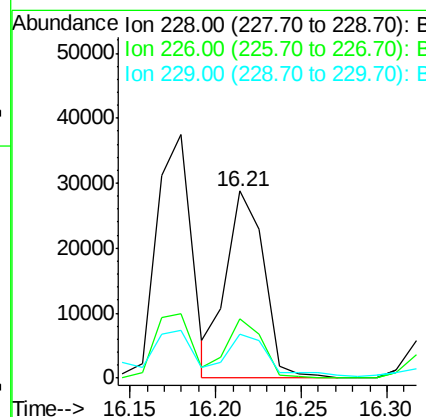
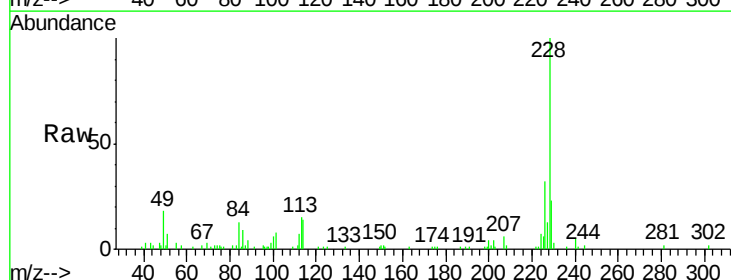
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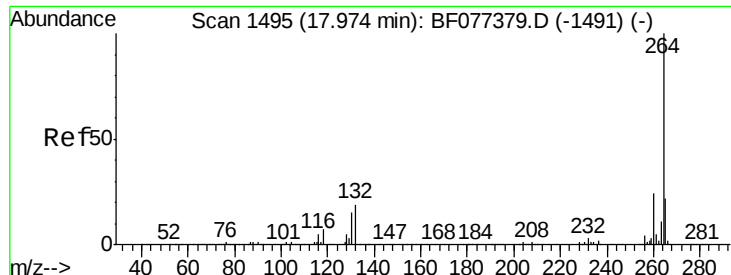
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#82  
Chrysene  
Concen: 3.57 ng m  
RT: 16.21 min Scan# 1341  
Delta R.T. -0.05 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 31.8  | 24.9  | 37.3  |
| 229     | 23.4  | 16.4  | 24.6  |





#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 17.94 min Scan# 1492  
Delta R.T. -0.01 min  
Lab File: BF077413.D  
Acq: 24 Feb 2015 13:10

Instrument :  
BNA\_F  
ClientSampleId :  
HF-3DL2

| Tgt Ion | Ratio | Resp Lower | Upper |
|---------|-------|------------|-------|
| 264     | 100   |            |       |
| 260     | 23.8  | 19.3       | 28.9  |
| 265     | 22.3  | 16.8       | 25.2  |

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