

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF042315\  
 Data File : BF078750.D  
 Acq On : 23 Apr 2015 15:57  
 Operator : TP/IZ  
 Sample : G1938-17 5X  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Apr 24 08:34:52 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF040115.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 24 04:11:59 2015  
 Response via : Initial Calibration

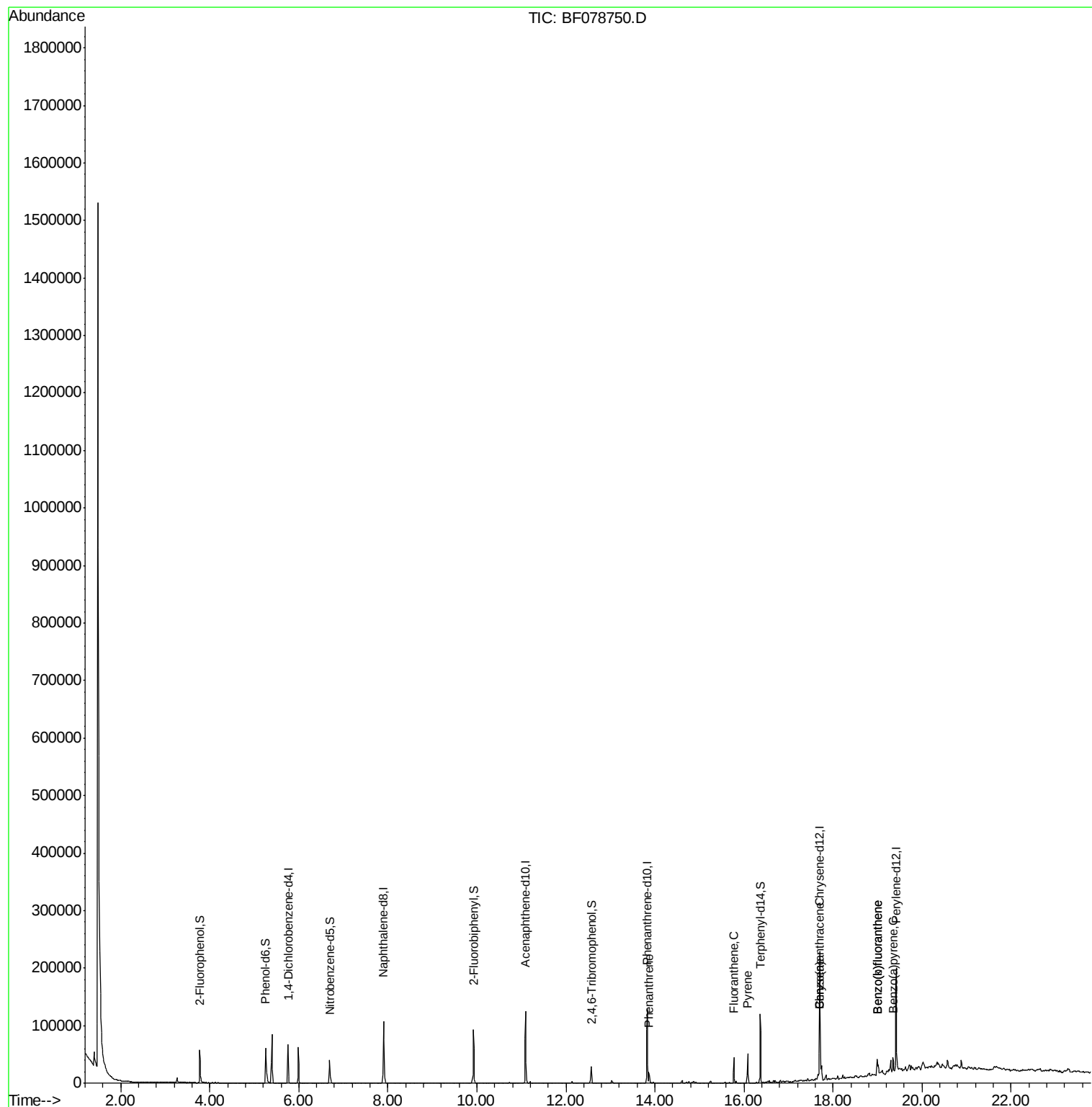
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 5.76  | 152  | 19012    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 7.91  | 136  | 77663    | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10        | 11.10 | 164  | 38460    | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 13.83 | 188  | 80148    | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 17.70 | 240  | 92018    | 20.00 | ng    | -0.01    |
| 86) Perylene-d12            | 19.42 | 264  | 96175    | 20.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 3.77  | 112  | 27331    | 23.70 | ng    | 0.00     |
| 7) Phenol-d6                | 5.26  | 99   | 39731    | 27.49 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 6.70  | 82   | 22218    | 17.34 | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 12.57 | 330  | 6809     | 21.35 | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.92  | 172  | 48262    | 17.94 | ng    | -0.01    |
| 78) Terphenyl-d14           | 16.37 | 244  | 60403    | 14.83 | ng    | -0.01    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 70) Phenanthrene            | 13.86 | 178  | 9994     | 2.16  | ng    | 98       |
| 74) Fluoranthene            | 15.77 | 202  | 25218    | 5.16  | ng    | 92       |
| 77) Pyrene                  | 16.08 | 202  | 24388    | 4.22  | ng    | 95       |
| 80) Benzo(a)anthracene      | 17.69 | 228  | 14800    | 2.70  | ng    | 92       |
| 82) Chrysene                | 17.69 | 228  | 14804    | 2.88  | ng    | 97       |
| 87) Benzo(b)fluoranthene    | 18.99 | 252  | 24447    | 4.11  | ng    | # 89     |
| 88) Benzo(k)fluoranthene    | 18.99 | 252  | 24447    | 4.63  | ng    | 95       |
| 89) Benzo(a)pyrene          | 19.35 | 252  | 14460    | 2.79  | ng    | # 88     |

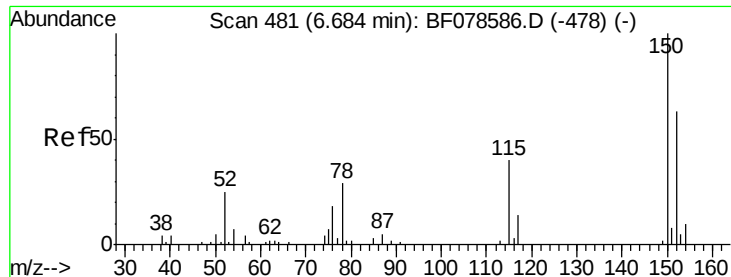
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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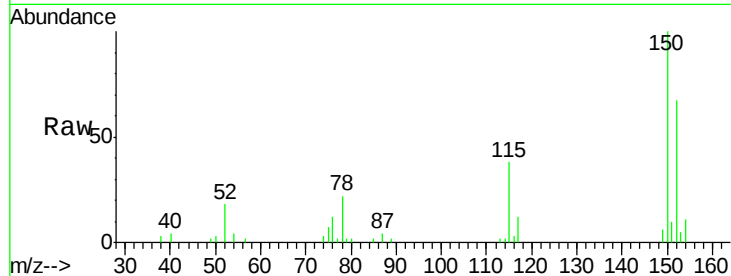




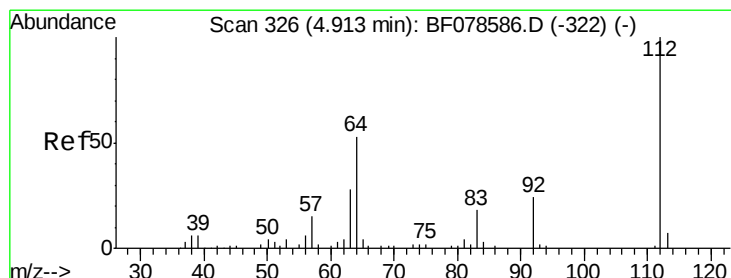
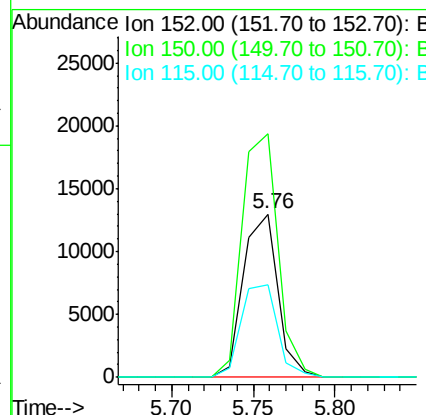
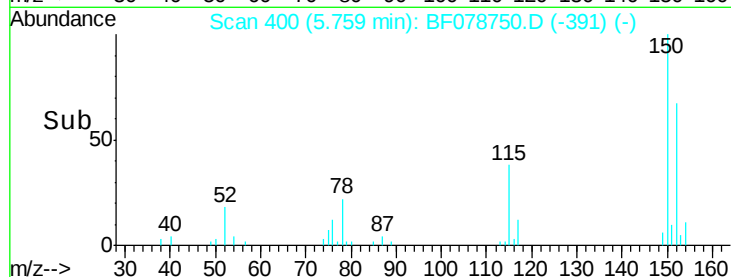
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 5.76 min Scan# 400  
 Delta R.T. -0.00 min  
 Lab File: BF078750.D  
 Acq: 23 Apr 2015 15:57

Instrument :  
 BNA\_F  
 ClientSampleId :

Tgt Ion:152 Resp: 19012  
 Ion Ratio Lower Upper  
 152 100  
 150 148.9 125.9 188.9  
 115 56.3 52.7 79.1

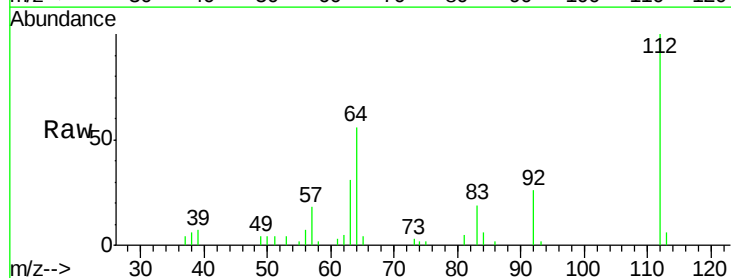


Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E

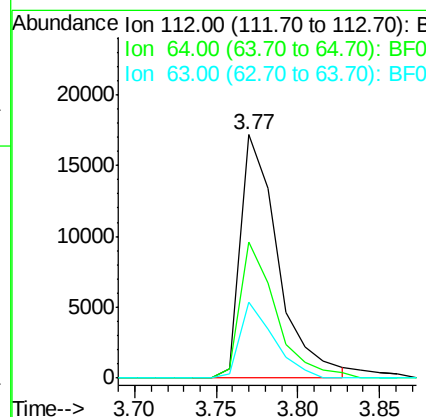
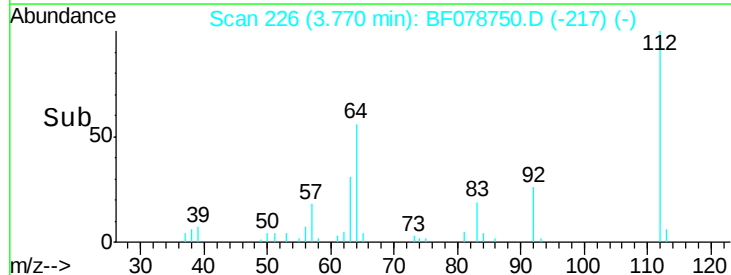


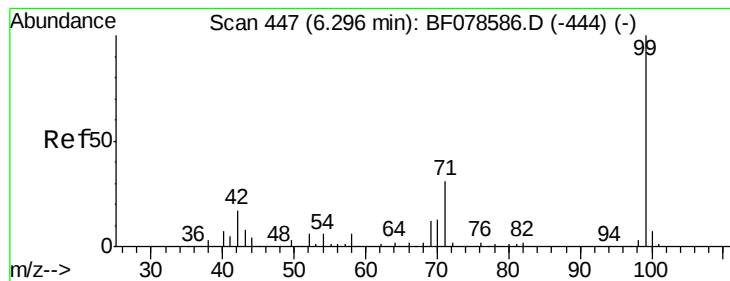
#5  
 2-Fluorophenol  
 Concen: 23.70 ng  
 RT: 3.77 min Scan# 226  
 Delta R.T. -0.00 min  
 Lab File: BF078750.D  
 Acq: 23 Apr 2015 15:57

Tgt Ion:112 Resp: 27331  
 Ion Ratio Lower Upper  
 112 100  
 64 56.1 39.9 59.9  
 63 31.0 20.2 30.4#



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: 27.49 ng

RT: 5.26 min Scan# 356

Delta R.T. -0.01 min

Lab File: BF078750.D

Acq: 23 Apr 2015 15:57

Instrument :

BNA\_F

ClientSampleId :

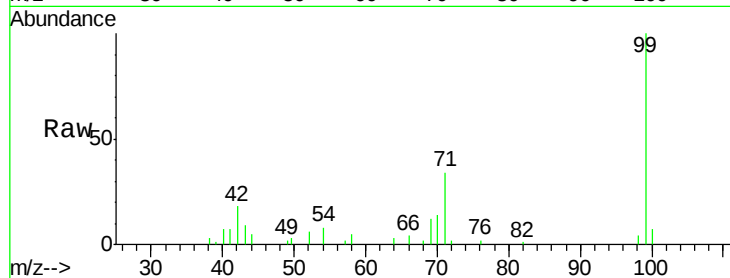
Tgt Ion: 99 Resp: 39731

Ion Ratio Lower Upper

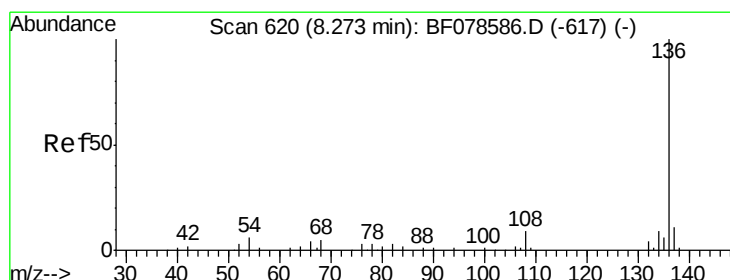
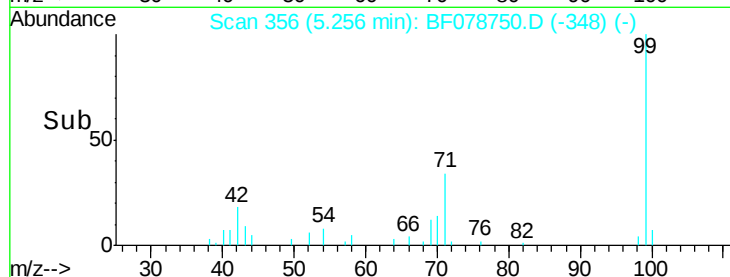
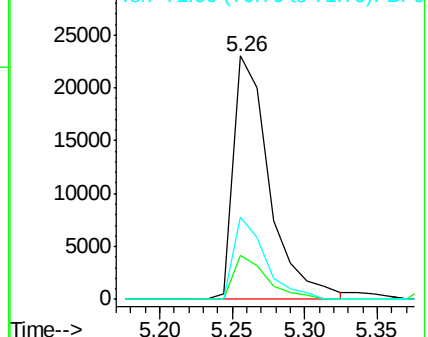
99 100

42 18.2 14.8 22.2

71 33.7 26.6 39.8



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



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.91 min Scan# 588

Delta R.T. -0.01 min

Lab File: BF078750.D

Acq: 23 Apr 2015 15:57

Tgt Ion: 136 Resp: 77663

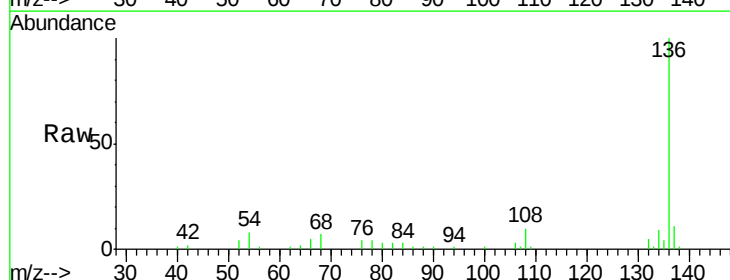
Ion Ratio Lower Upper

136 100

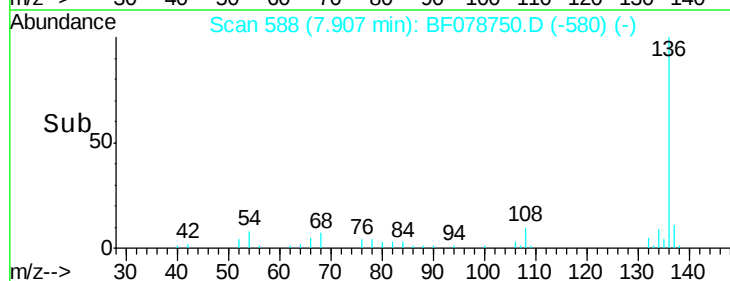
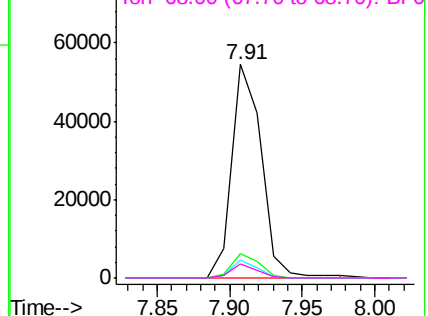
137 11.2 9.0 13.4

54 8.3 7.0 10.6

68 6.7 5.4 8.2



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

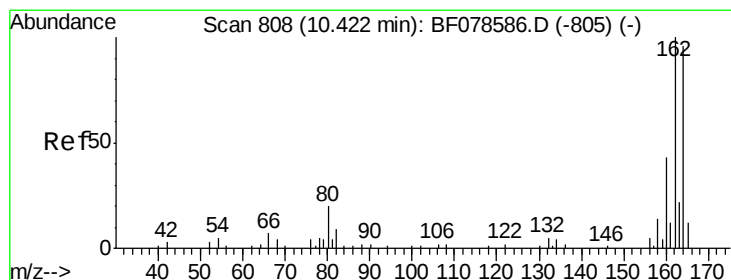
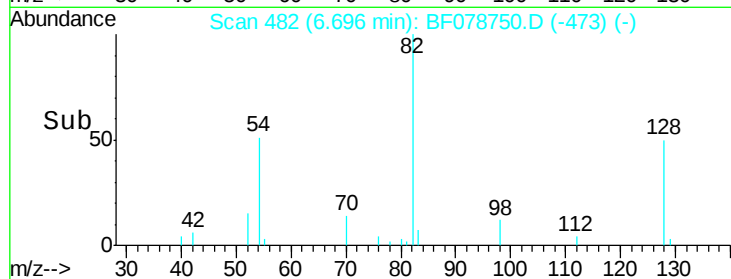
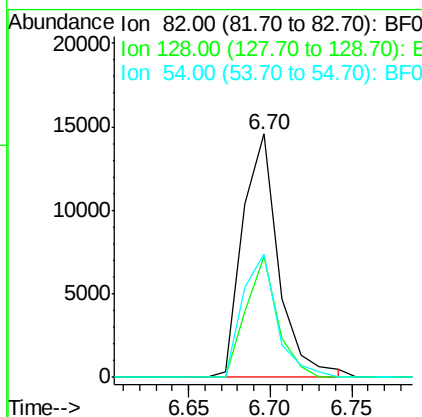
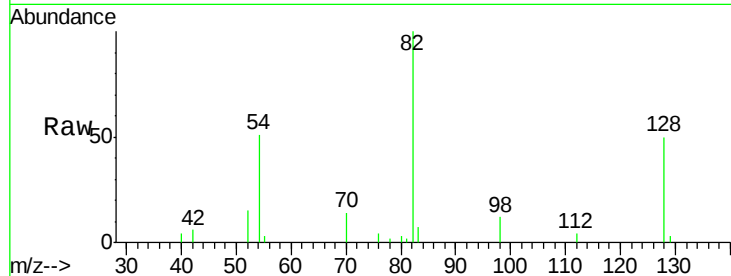




#23  
 Nitrobenzene-d5  
 Concen: 17.34 ng  
 RT: 6.70 min Scan# 482  
 Delta R.T. -0.00 min  
 Lab File: BF078750.D  
 Acq: 23 Apr 2015 15:57

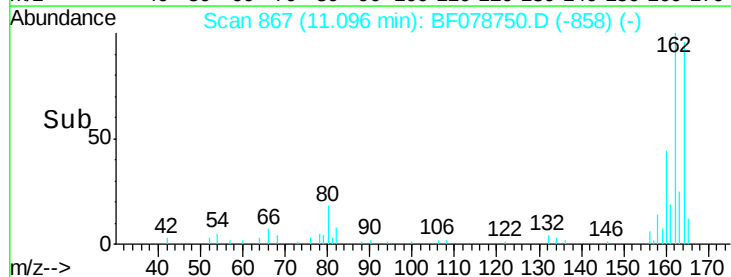
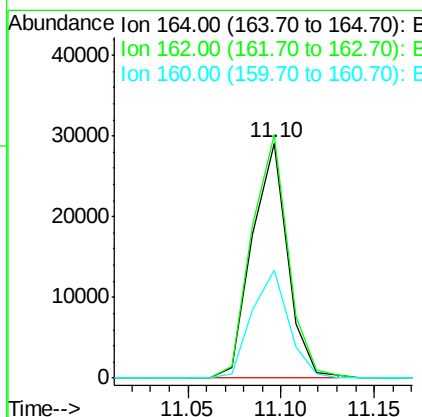
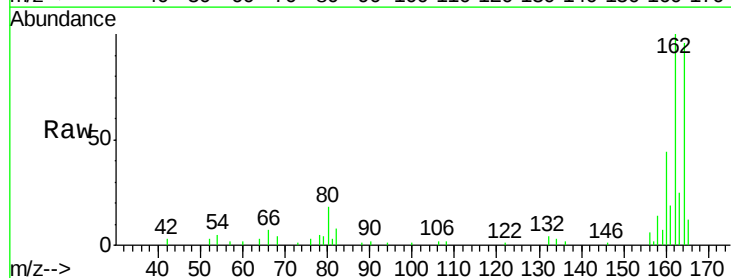
Instrument :  
 BNA\_F  
 ClientSampled :

Tgt Ion: 82 Resp: 22218  
 Ion Ratio Lower Upper  
 82 100  
 128 49.6 31.8 47.8#  
 54 50.8 41.5 62.3



#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 11.10 min Scan# 867  
 Delta R.T. -0.00 min  
 Lab File: BF078750.D  
 Acq: 23 Apr 2015 15:57

Tgt Ion: 164 Resp: 38460  
 Ion Ratio Lower Upper  
 164 100  
 162 103.7 82.2 123.2  
 160 45.8 34.7 52.1

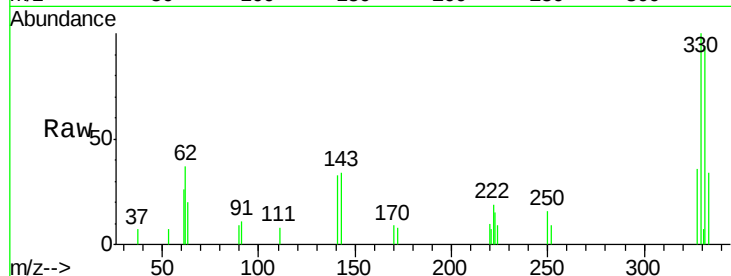




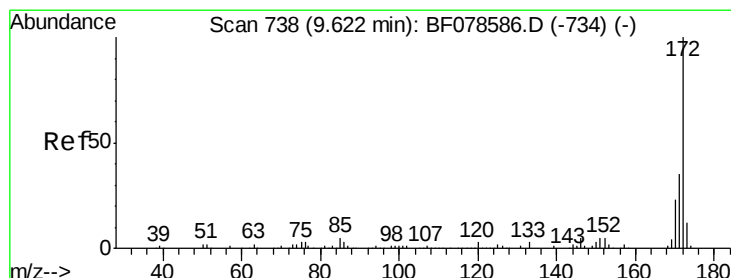
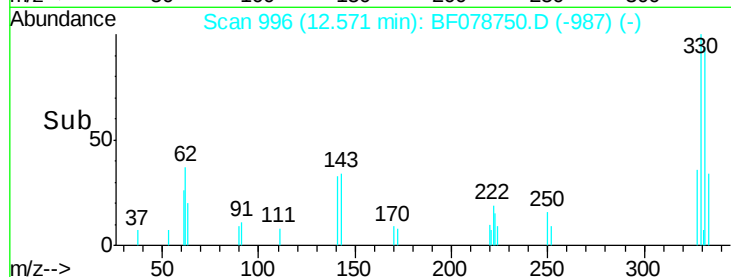
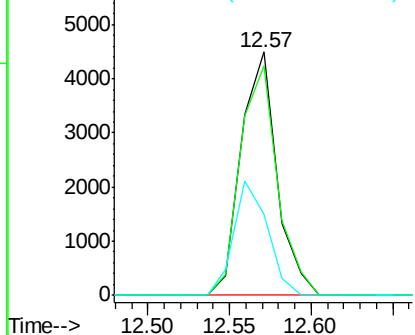
#41  
 2,4,6-Tribromophenol  
 Concen: 21.35 ng  
 RT: 12.57 min Scan# 996  
 Delta R.T. -0.00 min  
 Lab File: BF078750.D  
 Acq: 23 Apr 2015 15:57

Instrument :  
 BNA\_F  
 ClientSampleId :

Tgt Ion: 330 Resp: 6809  
 Ion Ratio Lower Upper  
 330 100  
 332 98.4 78.6 117.8  
 141 44.4 31.2 46.8

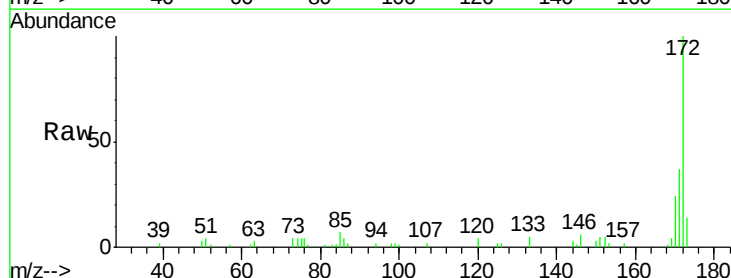


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

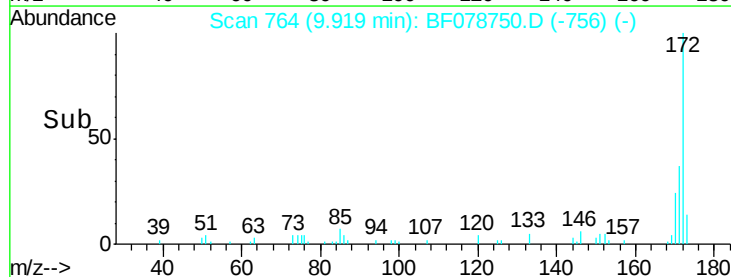
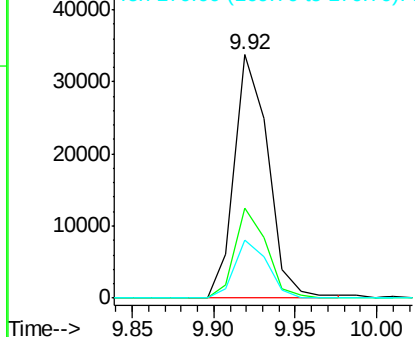


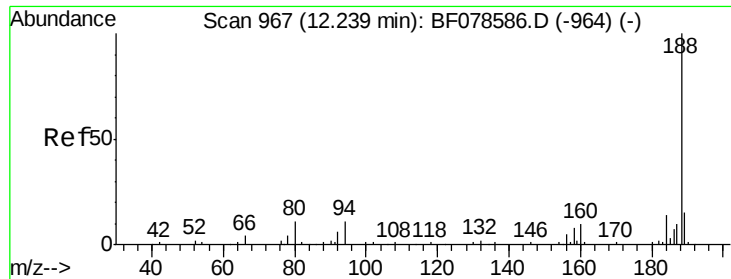
#44  
 2-Fluorobiphenyl  
 Concen: 17.94 ng  
 RT: 9.92 min Scan# 764  
 Delta R.T. -0.01 min  
 Lab File: BF078750.D  
 Acq: 23 Apr 2015 15:57

Tgt Ion: 172 Resp: 48262  
 Ion Ratio Lower Upper  
 172 100  
 171 36.9 28.6 42.8  
 170 23.8 18.5 27.7



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

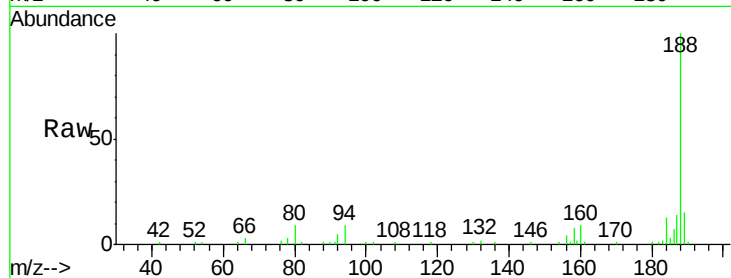




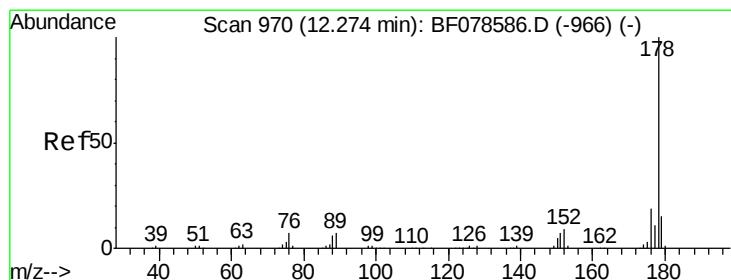
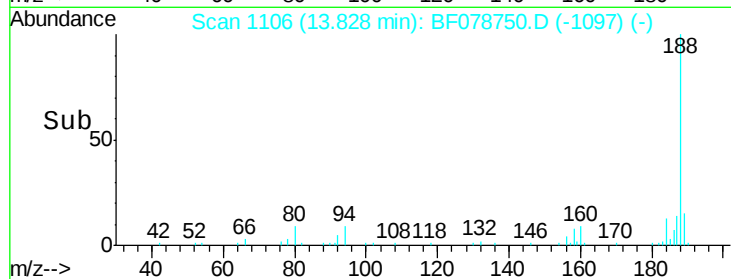
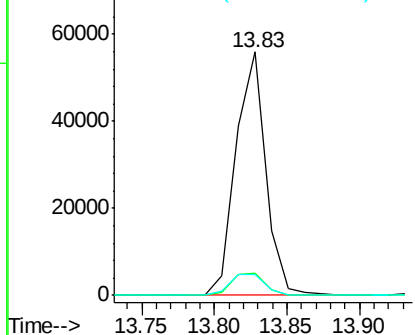
#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 13.83 min Scan# 1106  
 Delta R.T. -0.00 min  
 Lab File: BF078750.D  
 Acq: 23 Apr 2015 15:57

Instrument :  
 BNA\_F  
 ClientSampleId :

Tgt Ion:188 Resp: 80148  
 Ion Ratio Lower Upper  
 188 100  
 94 8.9 9.0 13.4#  
 80 8.8 9.5 14.3#

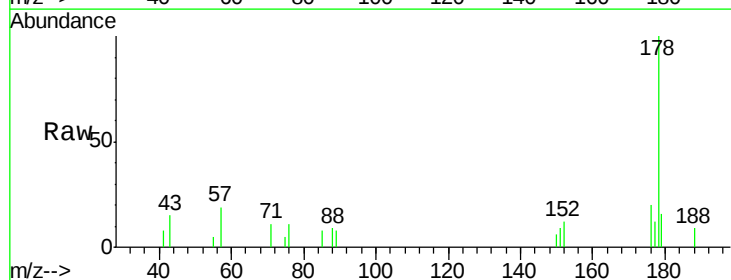


Abundance Ion 188.00 (187.70 to 188.70): E  
 Ion 94.00 (93.70 to 94.70): BF0  
 Ion 80.00 (79.70 to 80.70): BF0

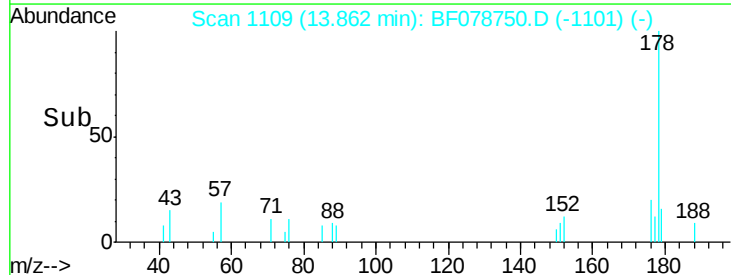
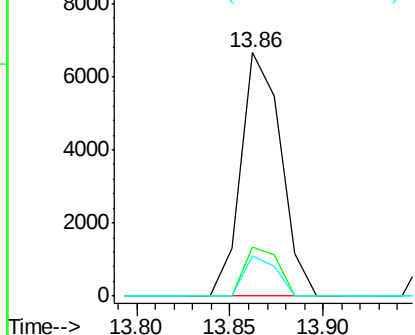


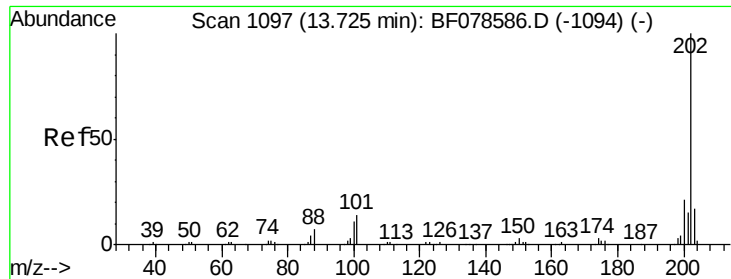
#70  
 Phenanthrene  
 Concen: 2.16 ng  
 RT: 13.86 min Scan# 1109  
 Delta R.T. -0.01 min  
 Lab File: BF078750.D  
 Acq: 23 Apr 2015 15:57

Tgt Ion:178 Resp: 9994  
 Ion Ratio Lower Upper  
 178 100  
 176 20.0 15.4 23.0  
 179 16.2 12.2 18.2



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





#74

Fluoranthene

Concen: 5.16 ng

RT: 15.77 min Scan# 1276

Delta R.T. -0.00 min

Lab File: BF078750.D

Acq: 23 Apr 2015 15:57

Instrument :

BNA\_F

ClientSampleId :

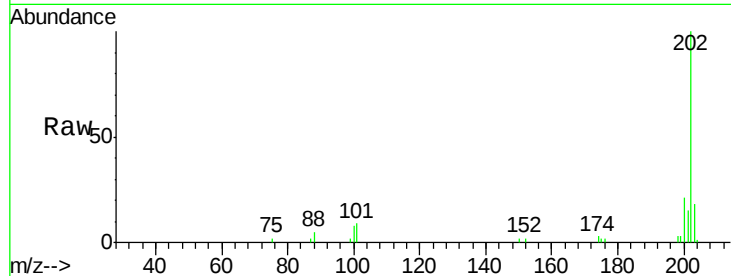
Tgt Ion: 202 Resp: 25218

Ion Ratio Lower Upper

202 100

101 8.8 0.0 35.2

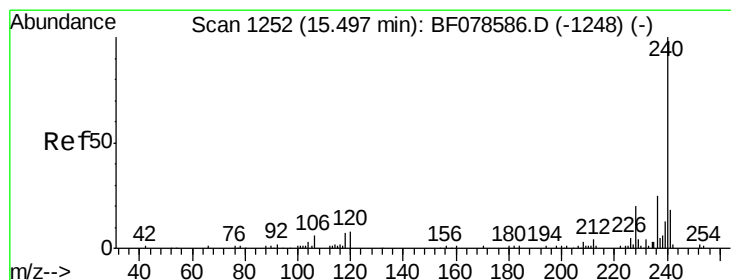
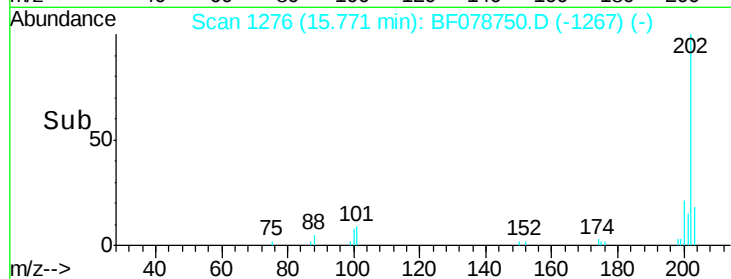
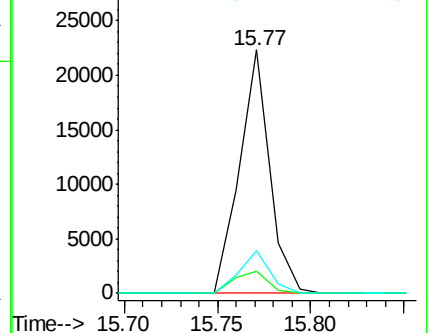
203 17.6 0.0 38.5



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



#75

Chrysene-d12

Concen: 20.00 ng

RT: 17.70 min Scan# 1445

Delta R.T. -0.01 min

Lab File: BF078750.D

Acq: 23 Apr 2015 15:57

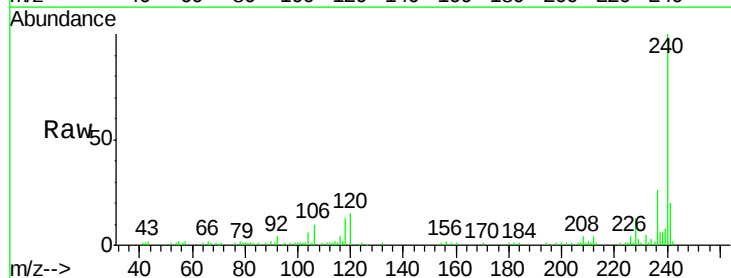
Tgt Ion: 240 Resp: 92018

Ion Ratio Lower Upper

240 100

120 15.3 7.1 10.7#

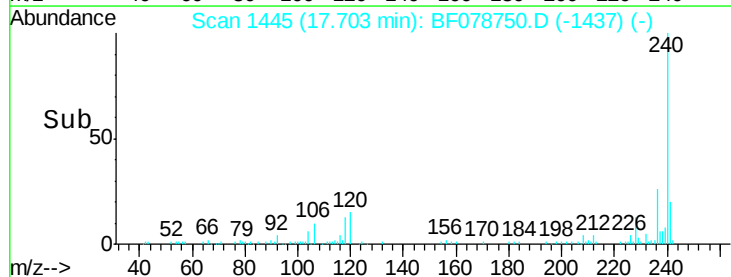
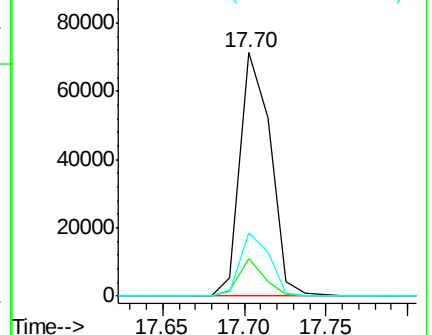
236 25.7 21.4 32.2

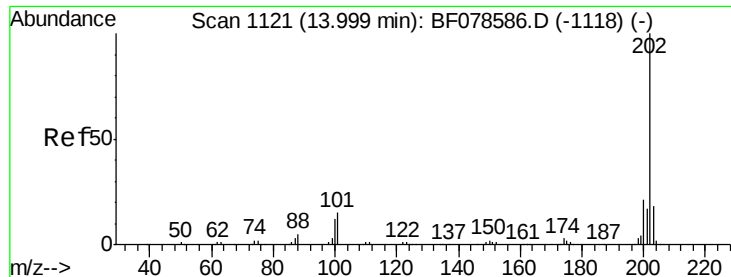


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Pyrene

Concen: 4.22 ng

RT: 16.08 min Scan# 1303

Delta R.T. -0.01 min

Lab File: BF078750.D

Acq: 23 Apr 2015 15:57

Instrument :

BNA\_F

ClientSampleId :

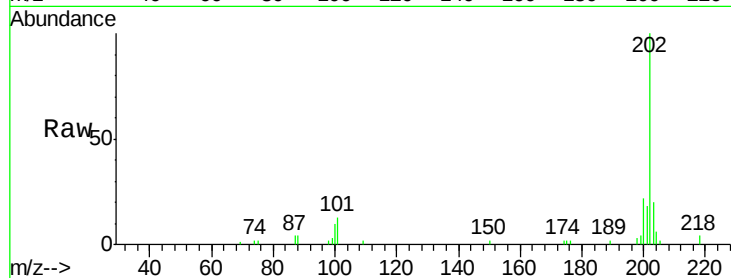
Tgt Ion:202 Resp: 24388

Ion Ratio Lower Upper

202 100

200 21.7 16.3 24.5

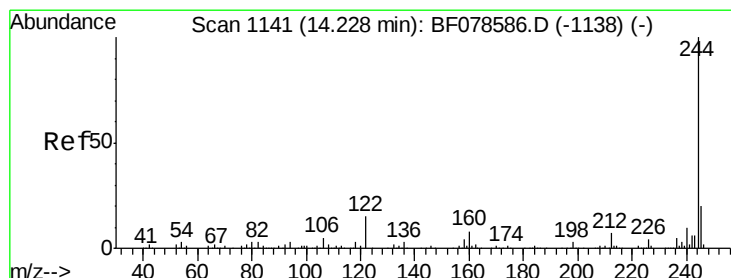
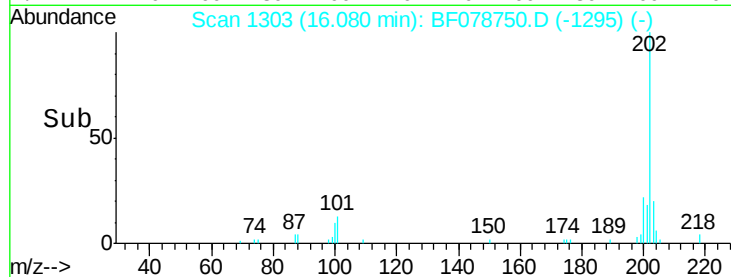
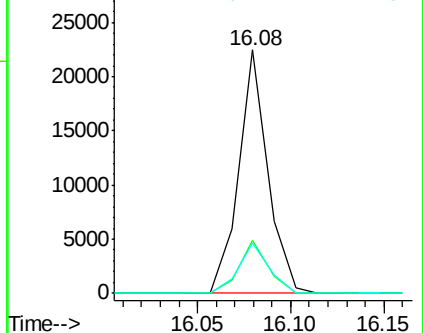
203 20.4 13.8 20.6



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: 14.83 ng

RT: 16.37 min Scan# 1328

Delta R.T. -0.01 min

Lab File: BF078750.D

Acq: 23 Apr 2015 15:57

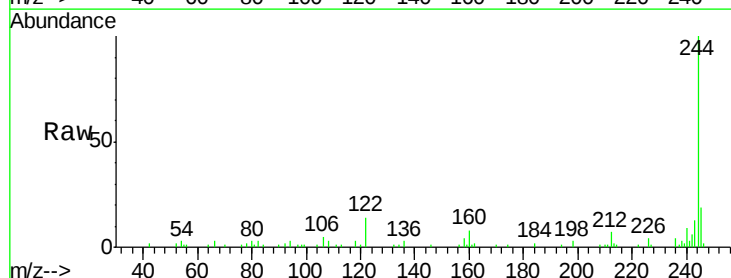
Tgt Ion:244 Resp: 60403

Ion Ratio Lower Upper

244 100

212 7.1 5.0 7.4

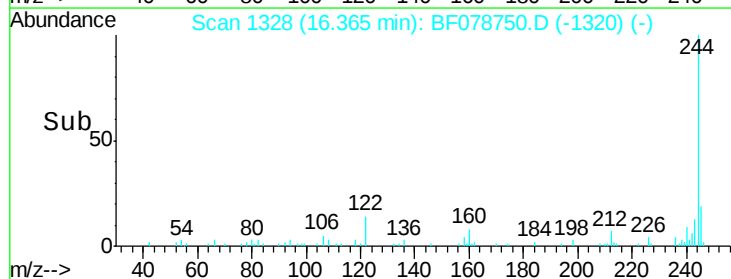
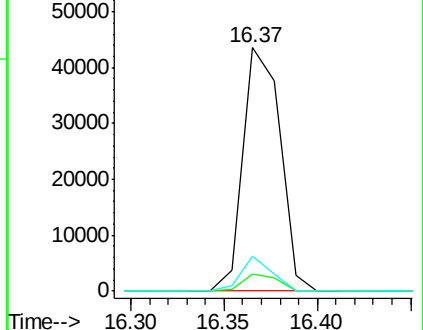
122 14.1 7.1 10.7#

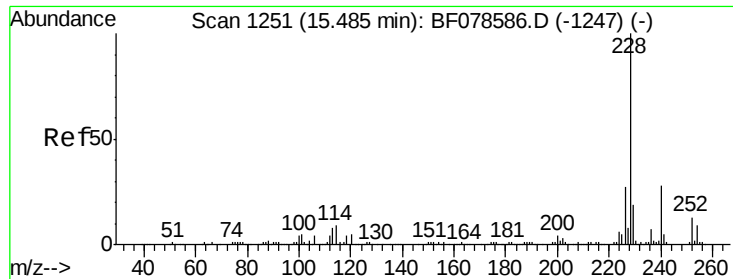


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

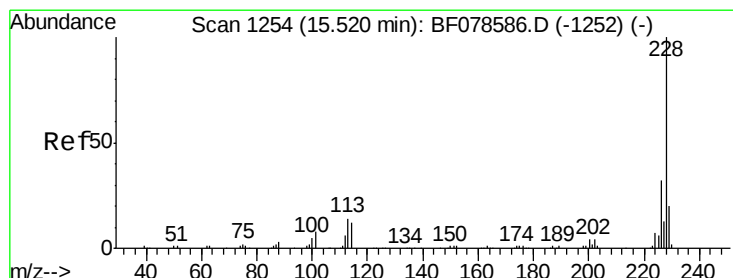
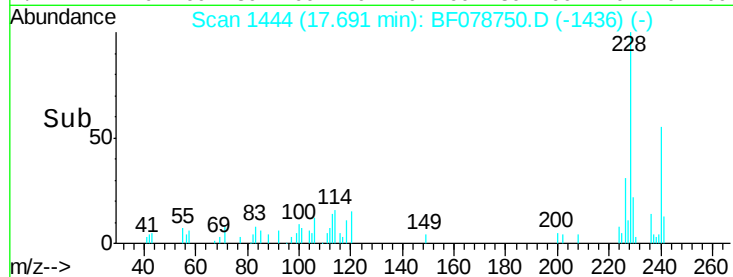
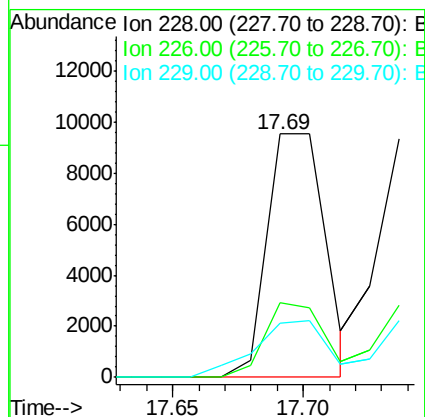
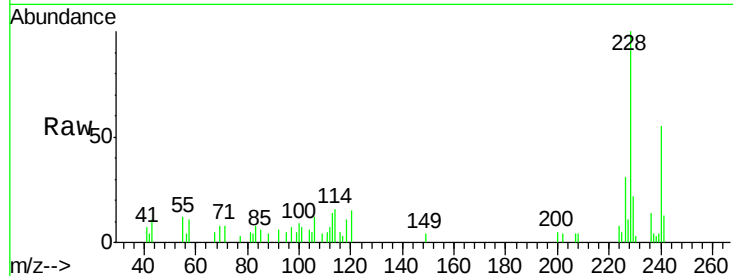




#80  
Benzo(a)anthracene  
Concen: 2.70 ng  
RT: 17.69 min Scan# 1444  
Delta R.T. -0.01 min  
Lab File: BF078750.D  
Acq: 23 Apr 2015 15:57

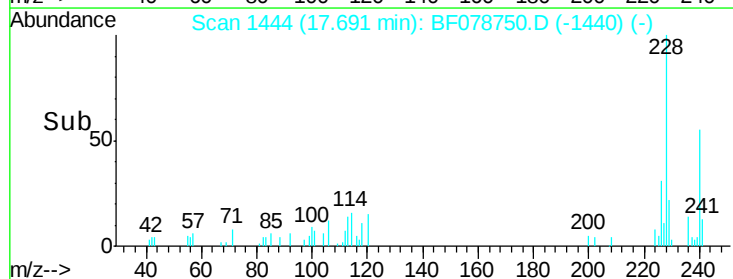
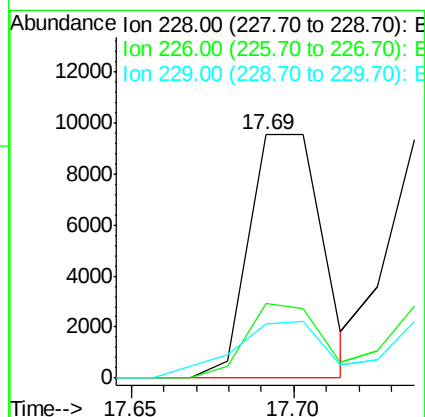
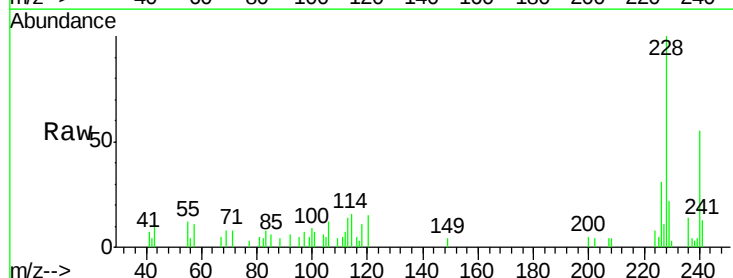
Instrument :  
BNA\_F  
ClientSampleId :

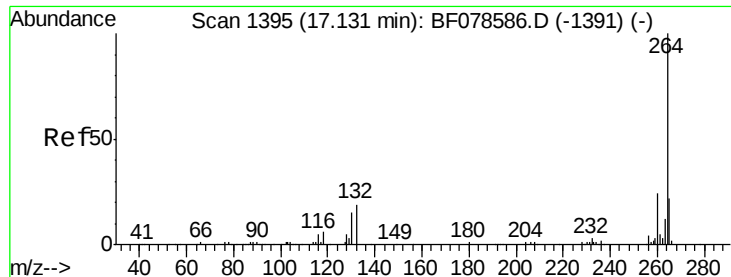
Tgt Ion: 228 Resp: 14800  
Ion Ratio Lower Upper  
228 100  
226 30.8 21.3 31.9  
229 22.3 15.4 23.2



#82  
Chrysene  
Concen: 2.88 ng  
RT: 17.69 min Scan# 1444  
Delta R.T. -0.06 min  
Lab File: BF078750.D  
Acq: 23 Apr 2015 15:57

Tgt Ion: 228 Resp: 14804  
Ion Ratio Lower Upper  
228 100  
226 30.8 24.2 36.4  
229 22.3 15.8 23.8

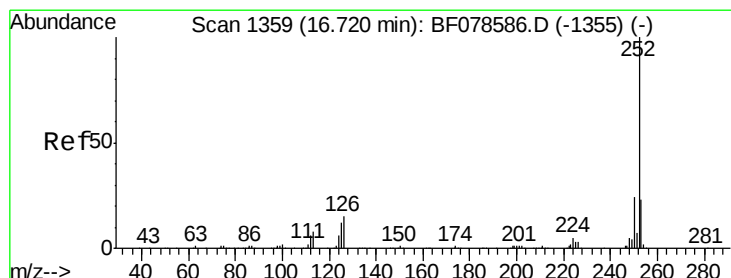
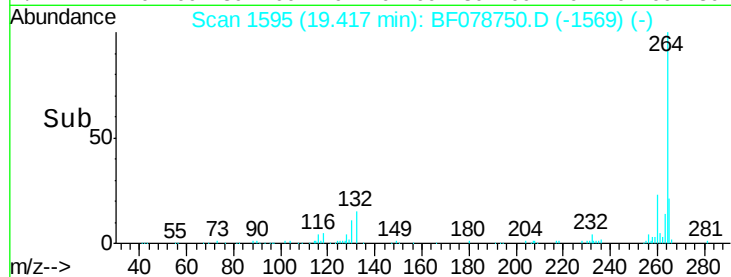
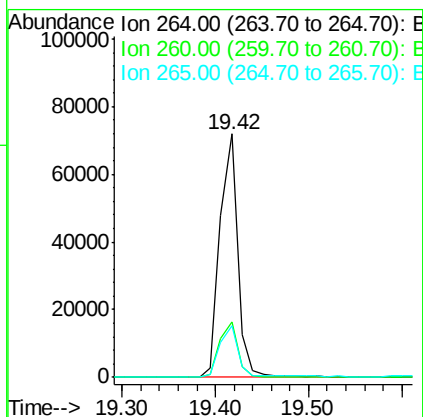
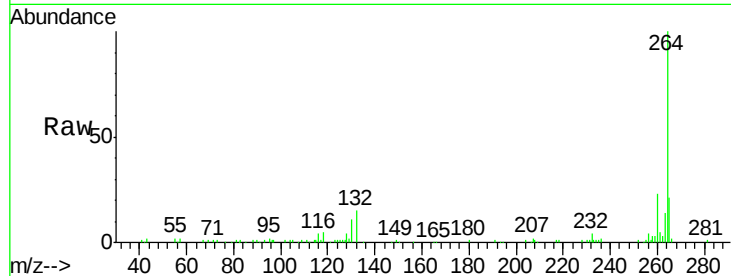




#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 19.42 min Scan# 1595  
Delta R.T. -0.00 min  
Lab File: BF078750.D  
Acq: 23 Apr 2015 15:57

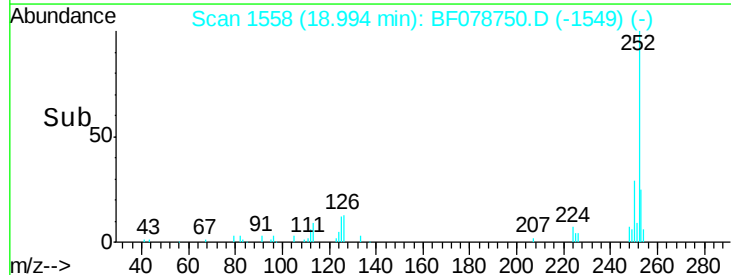
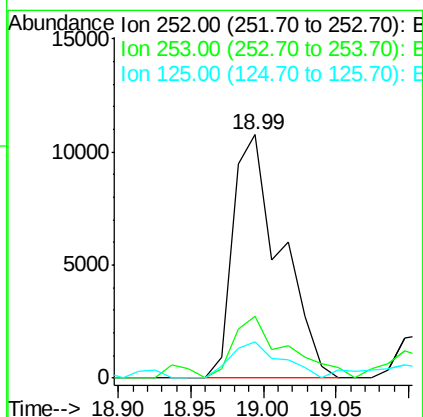
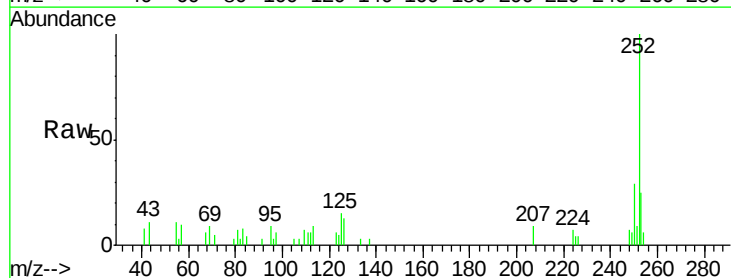
Instrument :  
BNA\_F  
ClientSampleId :

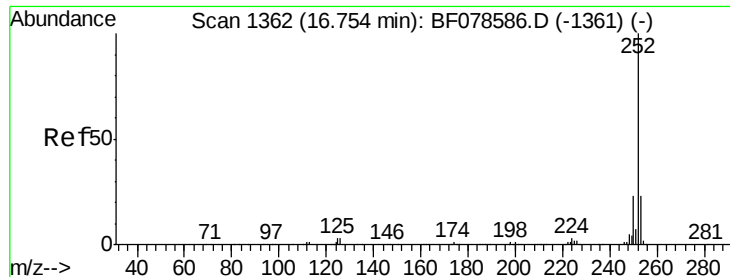
Tgt Ion: 264 Resp: 96175  
Ion Ratio Lower Upper  
264 100  
260 22.9 18.6 27.8  
265 21.2 17.0 25.6



#87  
Benzo(b)fluoranthene  
Concen: 4.11 ng  
RT: 18.99 min Scan# 1558  
Delta R.T. -0.00 min  
Lab File: BF078750.D  
Acq: 23 Apr 2015 15:57

Tgt Ion: 252 Resp: 24447  
Ion Ratio Lower Upper  
252 100  
253 25.4 17.2 25.8  
125 14.7 7.0 10.4#





#88

Benzo(k)fluoranthene

Concen: 4.63 ng

RT: 18.99 min Scan# 1558

Delta R.T. -0.03 min

Lab File: BF078750.D

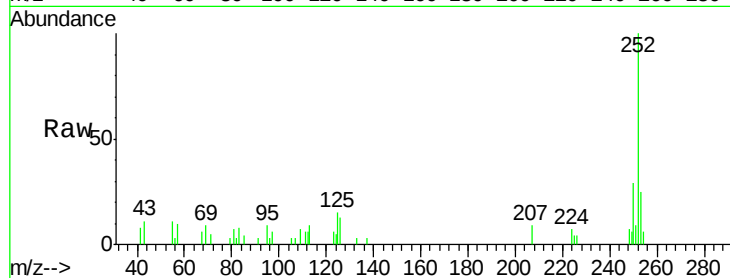
Acq: 23 Apr 2015 15:57

Instrument :

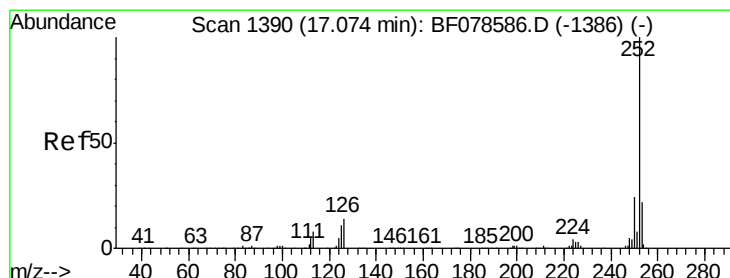
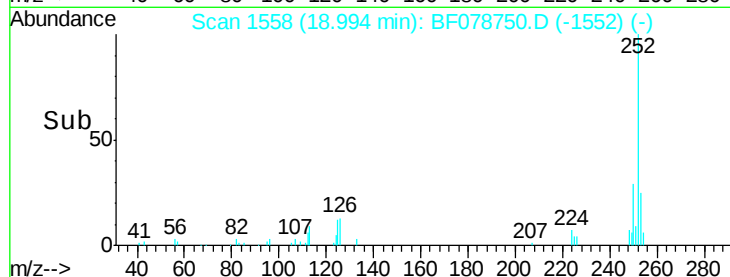
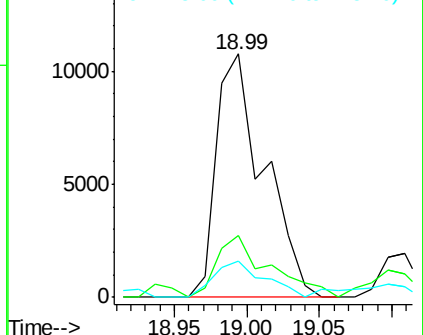
BNA\_F

ClientSampled :

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 252  | Resp: | 24447 |
| Ion Ratio |      | Lower | Upper |
| 252       | 100  |       |       |
| 253       | 25.4 | 17.5  | 26.3  |
| 125       | 14.7 | 11.6  | 17.4  |



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: 2.79 ng

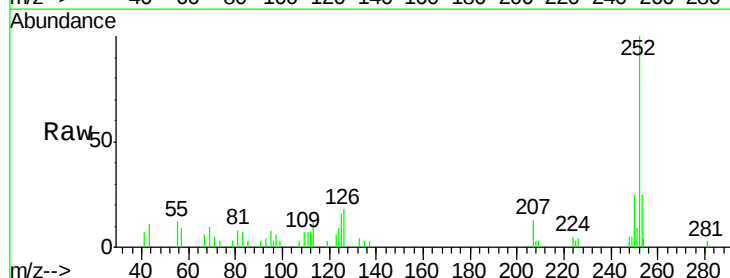
RT: 19.35 min Scan# 1589

Delta R.T. -0.00 min

Lab File: BF078750.D

Acq: 23 Apr 2015 15:57

|           |      |       |       |
|-----------|------|-------|-------|
| Tgt Ion:  | 252  | Resp: | 14460 |
| Ion Ratio |      | Lower | Upper |
| 252       | 100  |       |       |
| 253       | 25.1 | 16.8  | 25.2  |
| 125       | 16.3 | 7.4   | 11.0# |



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

