

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080416\  
 Data File : BF089602.D  
 Acq On : 4 Aug 2016 23:04  
 Operator : UM/SJ  
 Sample : PB90673BL  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB92673BL

Quant Time: Aug 05 01:52:52 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF080416.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 05 01:39:23 2016  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 7.45  | 152  | 42529    | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8             | 9.46  | 136  | 177273   | 20.00  | ng    | -0.01    |
| 38) Acenaphthene-d10           | 12.28 | 164  | 89442    | 20.00  | ng    | -0.01    |
| 63) Phenanthrene-d10           | 14.69 | 188  | 181382   | 20.00  | ng    | -0.01    |
| 75) Chrysene-d12               | 18.38 | 240  | 126680   | 20.00  | ng    | -0.01    |
| 86) Perylene-d12               | 20.05 | 264  | 92632    | 20.00  | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.34  | 112  | 276934   | 109.14 | ng    | 0.02     |
| 7) Phenol-d6                   | 6.97  | 99   | 373462   | 108.49 | ng    | -0.01    |
| 23) Nitrobenzene-d5            | 8.34  | 82   | 220830   | 68.90  | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol       | 13.58 | 330  | 78044    | 105.73 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl           | 11.24 | 172  | 446925   | 64.94  | ng    | -0.01    |
| 78) Terphenyl-d14              | 17.05 | 244  | 422829   | 65.89  | ng    | 0.00     |
| Target Compounds               |       |      |          |        |       | Qvalue   |
| 6) Aniline                     | 7.08  | 93   | 256      | 0.06   | ng    | # 1      |
| 9) Benzaldehyde                | 6.97  | 77   | 268      | 0.21   | ng    | # 1      |
| 10) Phenol                     | 7.08  | 94   | 287      | 0.08   | ng    | # 1      |
| 11) bis(2-Chloroethyl)ether    | 7.08  | 93   | 256      | 0.08   | ng    | # 1      |
| 15) Benzyl Alcohol             | 7.68  | 79   | 3481     | 1.54   | ng    | # 45     |
| 19) n-Nitroso-di-n-propylamine | 8.34  | 70   | 26006    | 10.46  | ng    | # 81     |
| 24) Nitrobenzene               | 8.34  | 77   | 218      | 0.07   | ng    | # 42     |
| 25) Isophorone                 | 9.02  | 82   | 211      | 0.03   | ng    | # 68     |
| 45) 1,1'-Biphenyl              | 11.24 | 154  | 678      | 0.08   | ng    | # 1      |
| 62) Azobenzene                 | 13.58 | 77   | 274      | 0.04   | ng    | # 1      |
| 65) n-Nitrosodiphenylamine     | 13.58 | 169  | 2907     | 0.47   | ng    | # 44     |

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

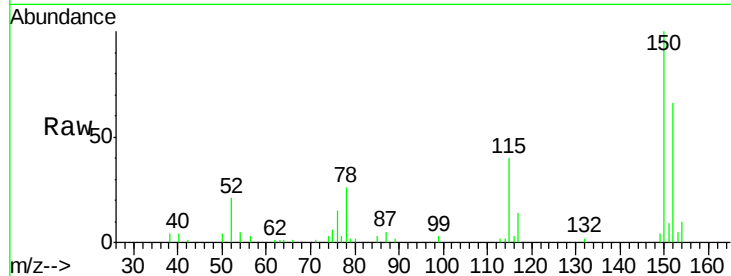
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Data Path : Z:\HPCHEM1\BNA_F\DATA\BF080416\  
Data File : BF089602.D  
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Sample    : PB90673BL  
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ALS Vial  : 13 Sample Multiplier: 1
```



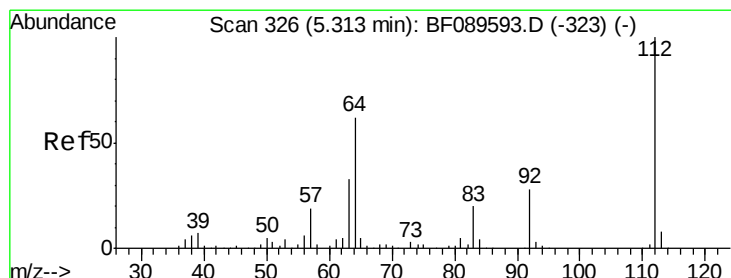
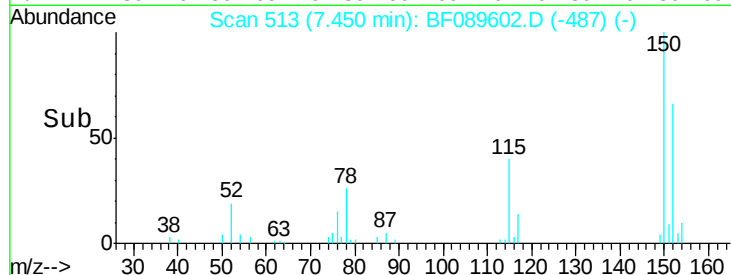
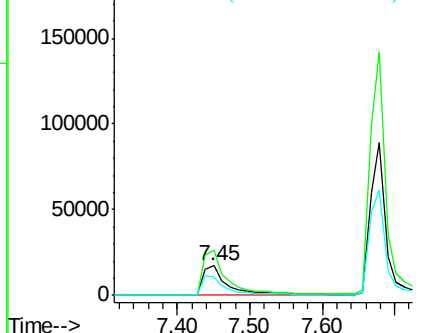
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 7.45 min Scan# 513  
 Delta R.T. 0.00 min  
 Lab File: BF089602.D  
 Acq: 4 Aug 2016 23:04

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB92673BL

Tgt Ion:152 Resp: 42529  
 Ion Ratio Lower Upper  
 152 100  
 150 151.7 125.5 188.3  
 115 60.7 52.0 78.0

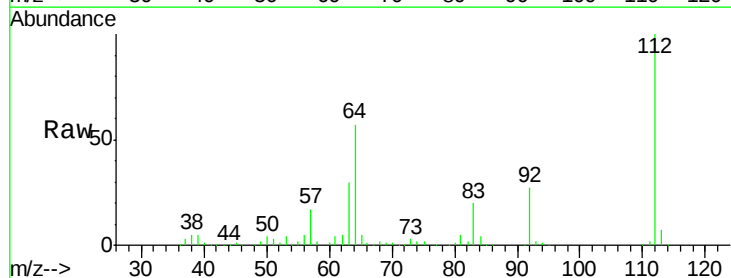


Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E

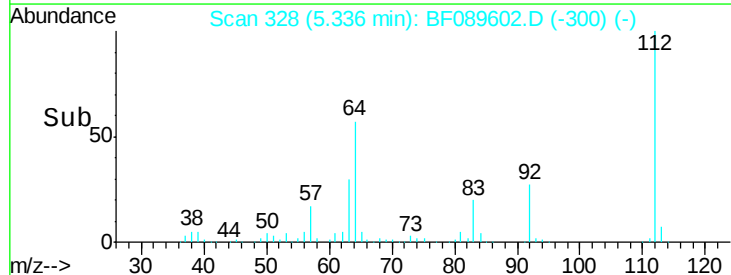
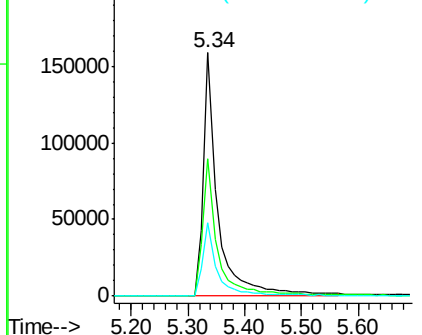


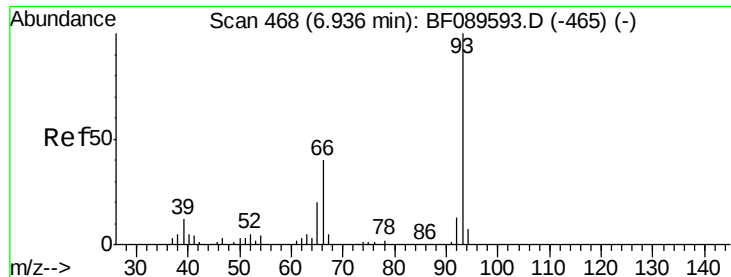
#5  
 2-Fluorophenol  
 Concen: 109.14 ng  
 RT: 5.34 min Scan# 328  
 Delta R.T. 0.02 min  
 Lab File: BF089602.D  
 Acq: 4 Aug 2016 23:04

Tgt Ion:112 Resp: 276934  
 Ion Ratio Lower Upper  
 112 100  
 64 56.7 49.9 74.9  
 63 30.0 26.1 39.1



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





#6

Aniline

Concen: 0.06 ng

RT: 7.08 min Scan# 481

Delta R.T. 0.15 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

Instrument :

BNA\_F

ClientSampleId :

PB92673BL

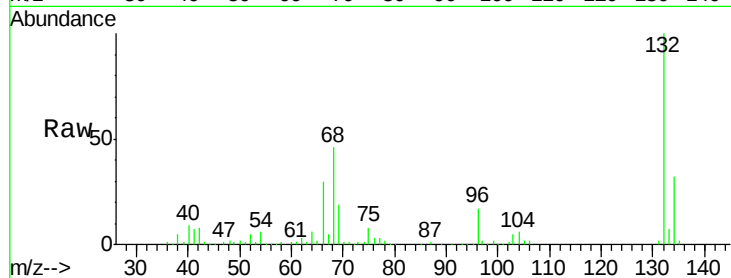
Tgt Ion: 93 Resp: 256

Ion Ratio Lower Upper

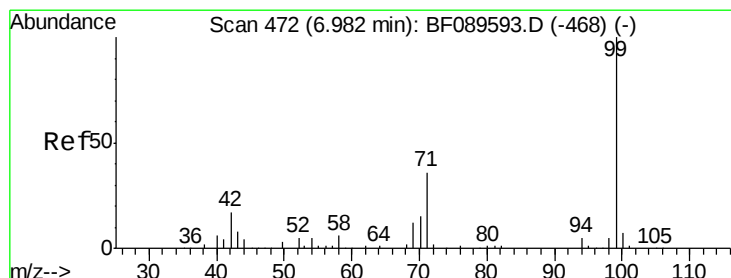
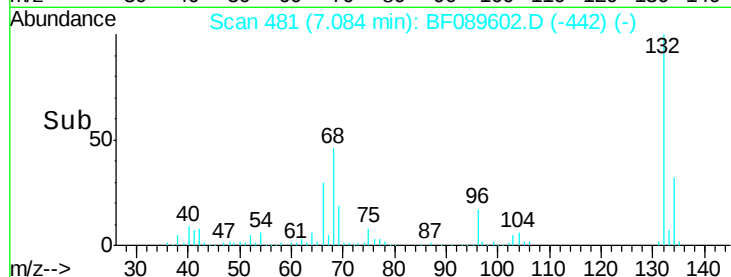
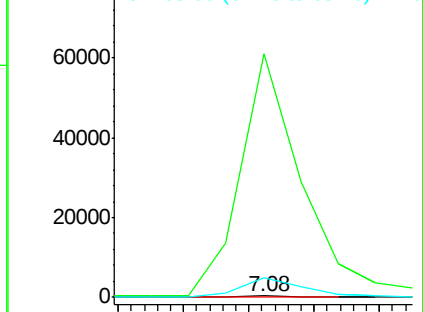
93 100

66 16362.5 32.2 48.2#

65 1311.3 15.8 23.8#



Abundance Ion 93.00 (92.70 to 93.70): BF0  
Ion 66.00 (65.70 to 66.70): BF0  
Ion 65.00 (64.70 to 65.70): BF0



#7

Phenol-d6

Concen: 108.49 ng

RT: 6.97 min Scan# 471

Delta R.T. -0.01 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

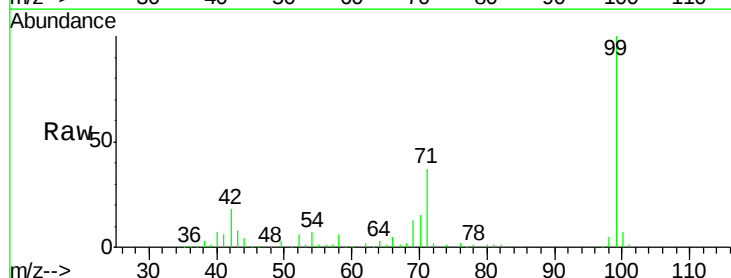
Tgt Ion: 99 Resp: 373462

Ion Ratio Lower Upper

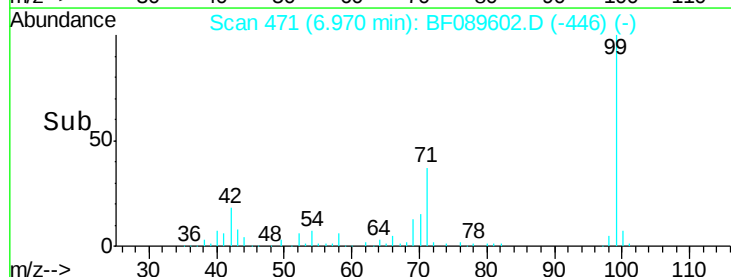
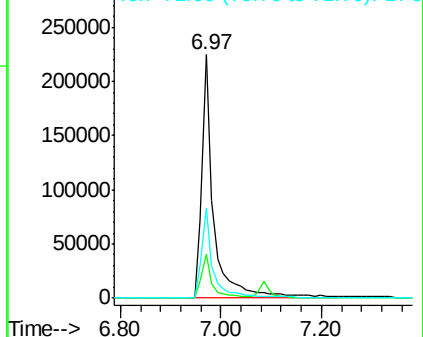
99 100

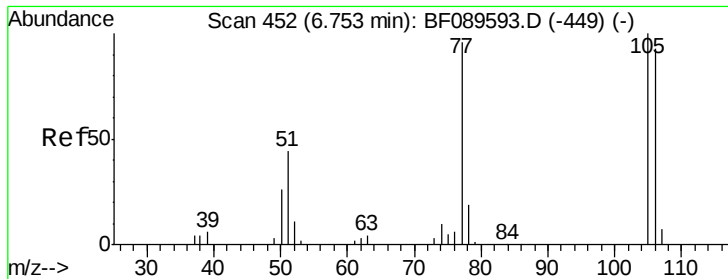
42 18.0 13.7 20.5

71 37.1 29.0 43.4



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





#9

Benzaldehyde

Concen: 0.21 ng

RT: 6.97 min Scan# 471

Delta R.T. 0.22 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

Instrument :

BNA\_F

ClientSampled :

PB92673BL

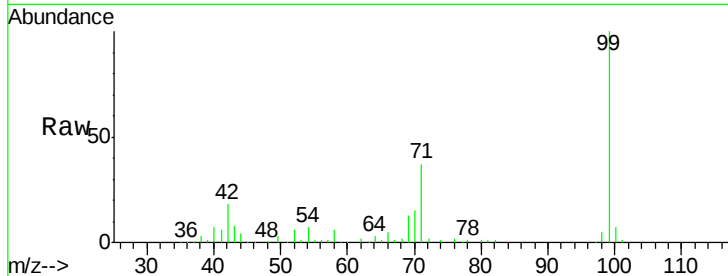
Tgt Ion: 77 Resp: 268

Ion Ratio Lower Upper

77 100

105 0.0 84.7 124.7#

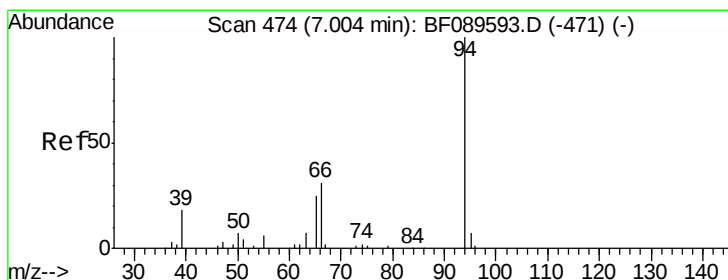
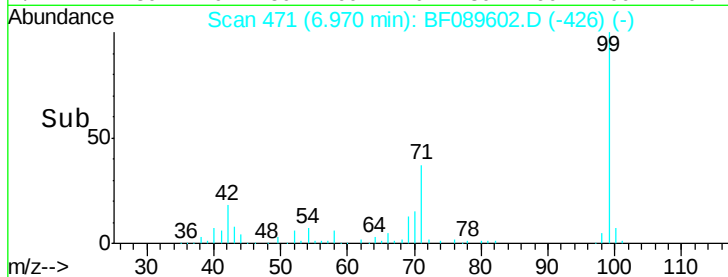
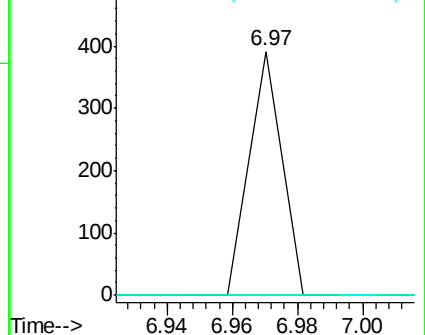
106 0.0 77.1 117.1#



Abundance Ion 77.00 (76.70 to 77.70): BF0

Ion 105.00 (104.70 to 105.70): E

Ion 106.00 (105.70 to 106.70): E



#10

Phenol

Concen: 0.08 ng

RT: 7.08 min Scan# 481

Delta R.T. 0.08 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

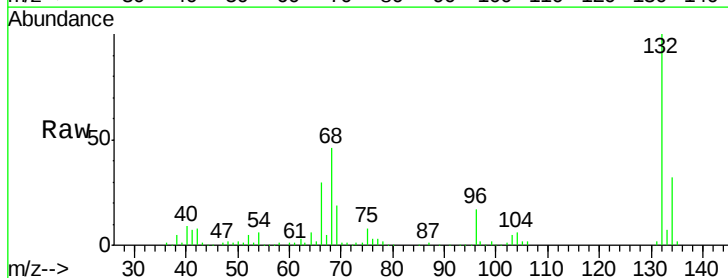
Tgt Ion: 94 Resp: 287

Ion Ratio Lower Upper

94 100

65 1170.1 11.0 51.0#

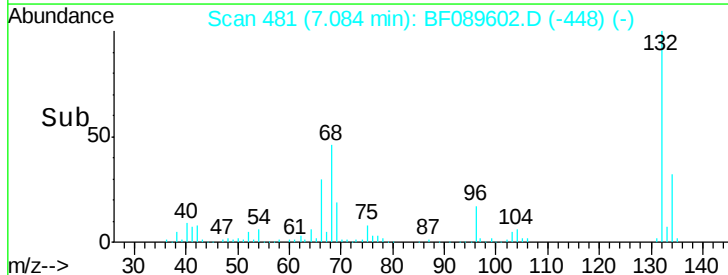
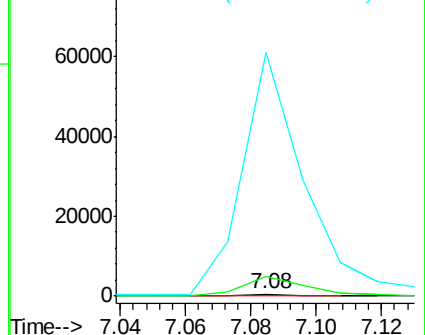
66 14601.0 27.4 67.4#

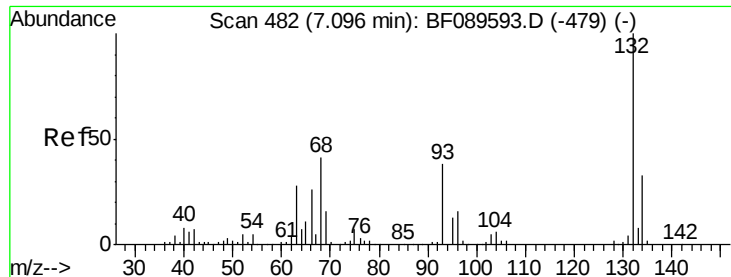


Abundance Ion 94.00 (93.70 to 94.70): BF0

Ion 65.00 (64.70 to 65.70): BF0

Ion 66.00 (65.70 to 66.70): BF0

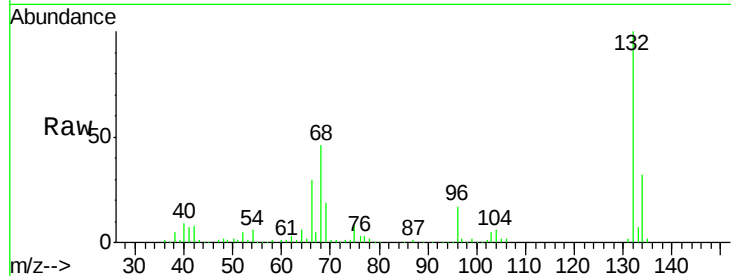




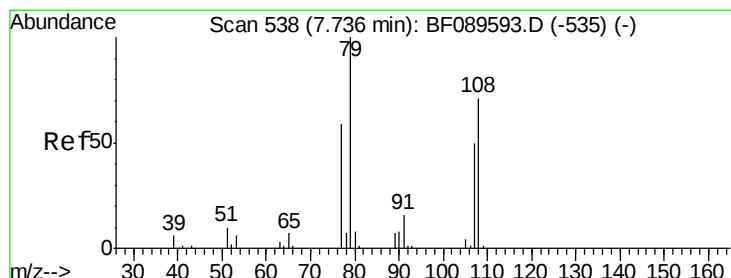
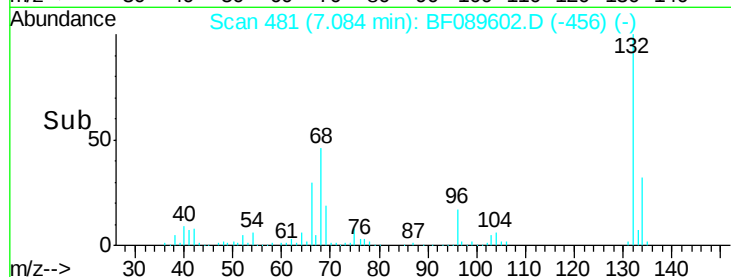
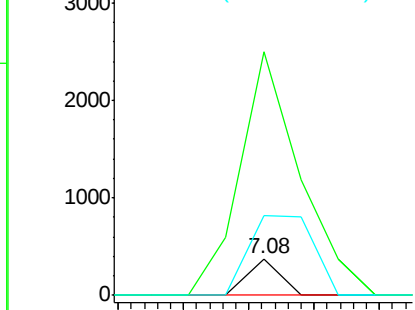
#11  
bis(2-Chloroethyl)ether  
Concen: 0.08 ng  
RT: 7.08 min Scan# 481  
Delta R.T. -0.01 min  
Lab File: BF089602.D  
Acq: 4 Aug 2016 23:04

Instrument :  
BNA\_F  
ClientSampleId :  
PB92673BL

Tgt Ion: 93 Resp: 256  
Ion Ratio Lower Upper  
93 100  
63 669.7 52.2 92.2#  
95 218.0 13.1 53.1#

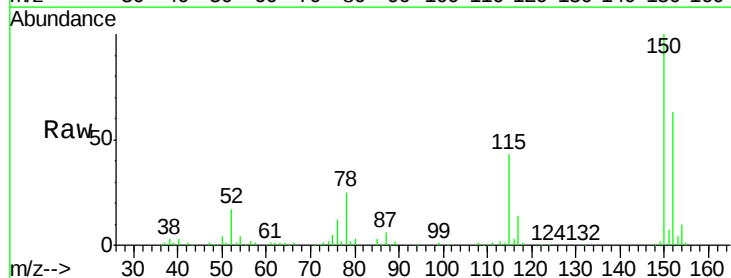


Abundance Ion 93.00 (92.70 to 93.70): BF0  
Ion 63.00 (62.70 to 63.70): BF0  
Ion 95.00 (94.70 to 95.70): BF0

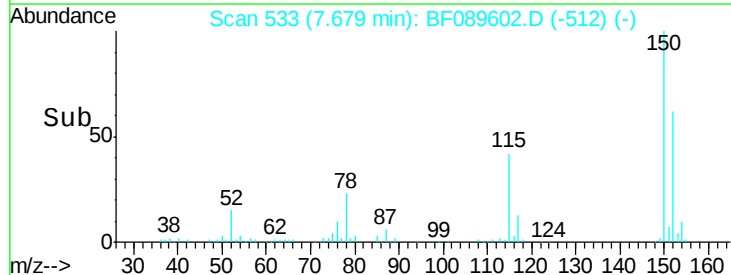
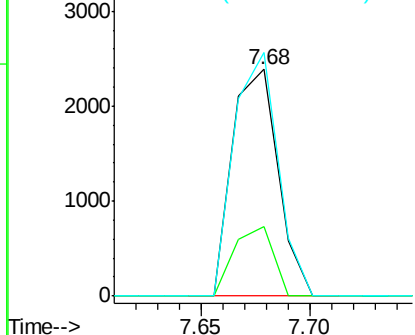


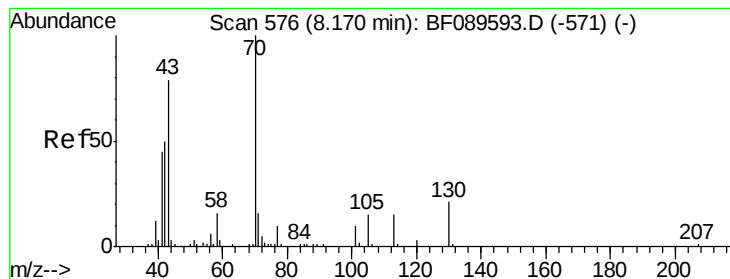
#15  
Benzyl Alcohol  
Concen: 1.54 ng  
RT: 7.68 min Scan# 533  
Delta R.T. -0.06 min  
Lab File: BF089602.D  
Acq: 4 Aug 2016 23:04

Tgt Ion: 79 Resp: 3481  
Ion Ratio Lower Upper  
79 100  
108 30.6 58.3 87.5#  
77 107.4 48.7 73.1#



Abundance Ion 79.00 (78.70 to 79.70): BF0  
Ion 108.00 (107.70 to 108.70): E  
Ion 77.00 (76.70 to 77.70): BF0





#19

n-Nitroso-di-n-propylamine

Concen: 10.46 ng

RT: 8.34 min Scan# 591

Delta R.T. 0.17 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

Instrument :

BNA\_F

ClientSampleId :

PB92673BL

Tgt Ion: 70 Resp: 26006

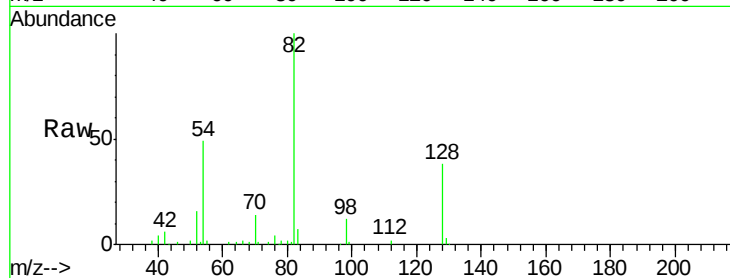
Ion Ratio Lower Upper

70 100

42 43.6 40.2 60.2

101 0.0 7.8 11.6#

130 2.1 16.4 24.6#

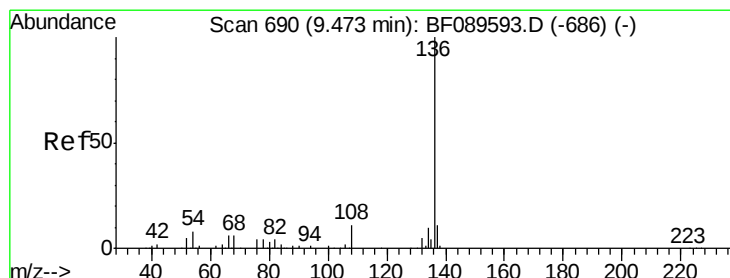
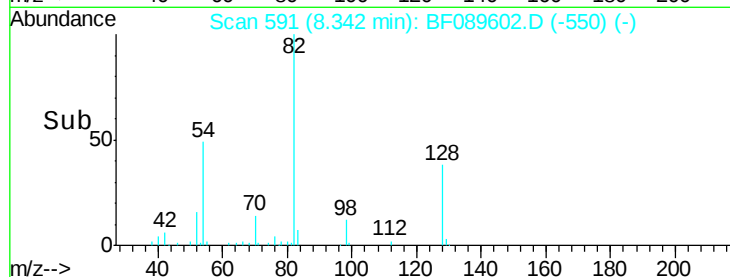
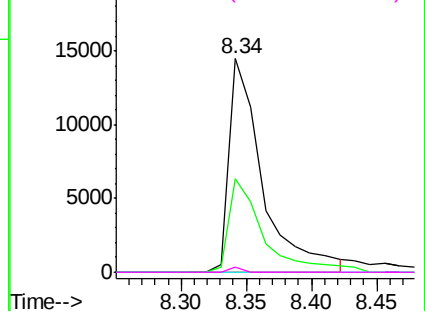


Abundance Ion 70.00 (69.70 to 70.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 101.00 (100.70 to 101.70): E

Ion 130.00 (129.70 to 130.70): E



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 9.46 min Scan# 689

Delta R.T. -0.01 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

Tgt Ion: 136 Resp: 177273

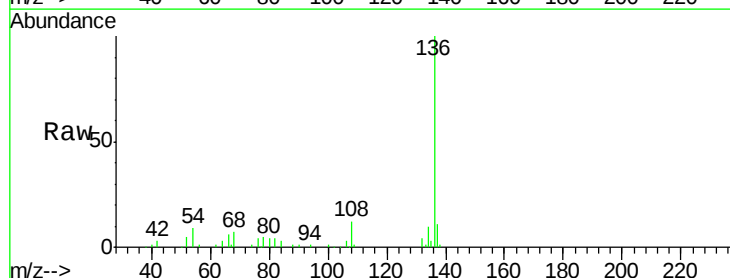
Ion Ratio Lower Upper

136 100

137 11.4 8.6 12.8

54 8.8 6.0 9.0

68 6.5 4.6 6.8

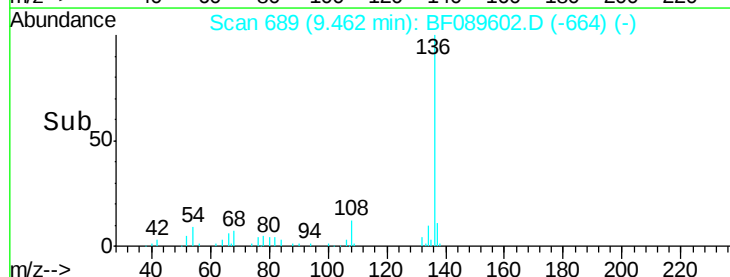
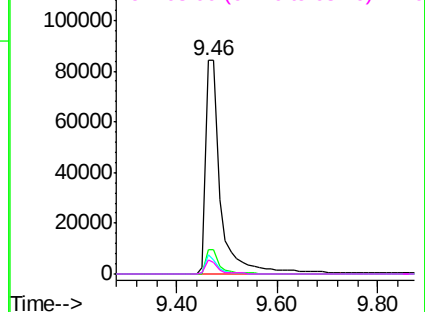


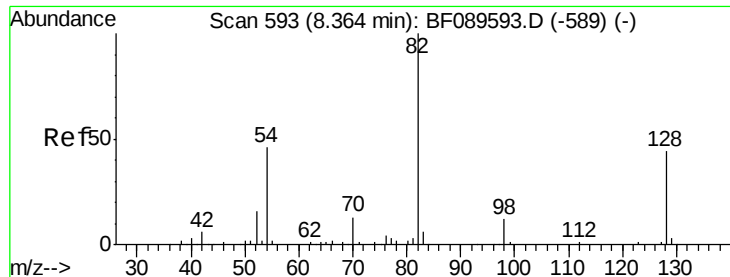
Abundance Ion 136.00 (135.70 to 136.70): E

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

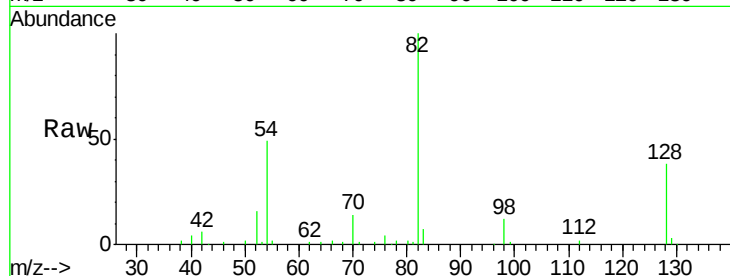




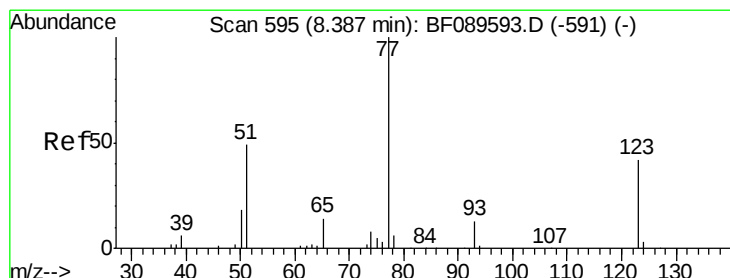
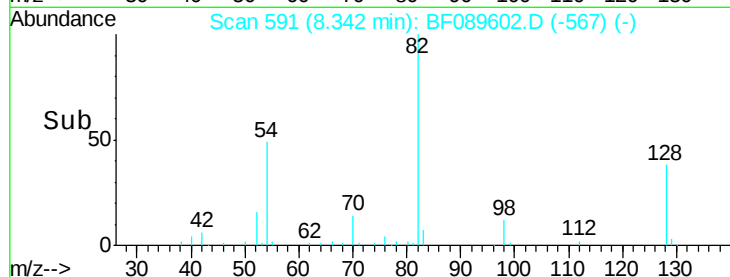
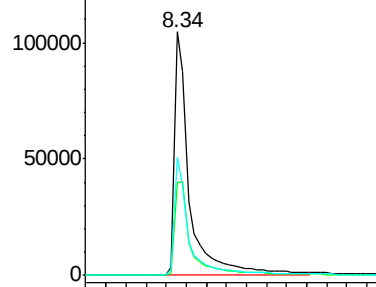
#23  
 Nitrobenzene-d5  
 Concen: 68.90 ng  
 RT: 8.34 min Scan# 591  
 Delta R.T. -0.02 min  
 Lab File: BF089602.D  
 Acq: 4 Aug 2016 23:04

Instrument :  
 BNA\_F  
 ClientSampled :  
 PB92673BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 38.2  | 35.4  | 53.0  |
| 54      | 48.6  | 36.4  | 54.6  |

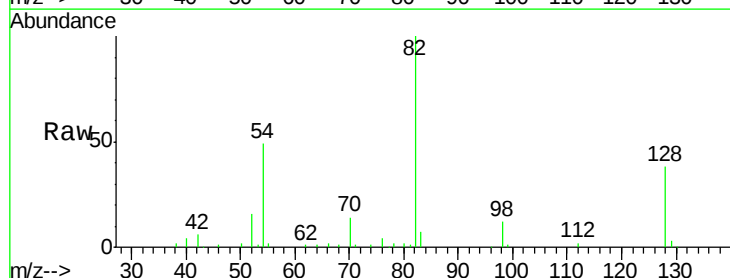


Abundance Ion 82.00 (81.70 to 82.70): BF0  
 Ion 128.00 (127.70 to 128.70): BF0  
 Ion 54.00 (53.70 to 54.70): BF0

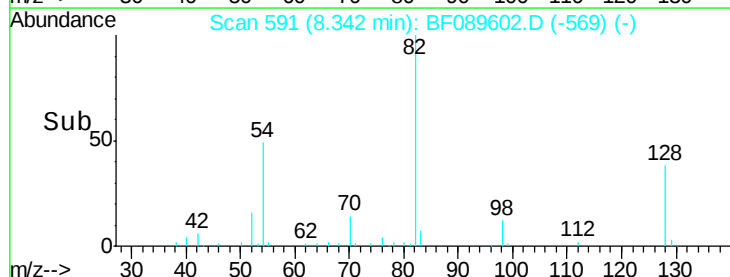
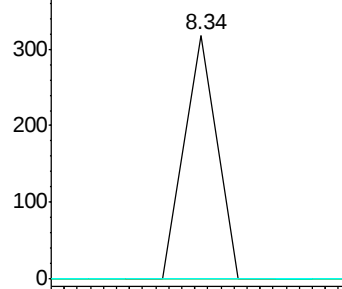


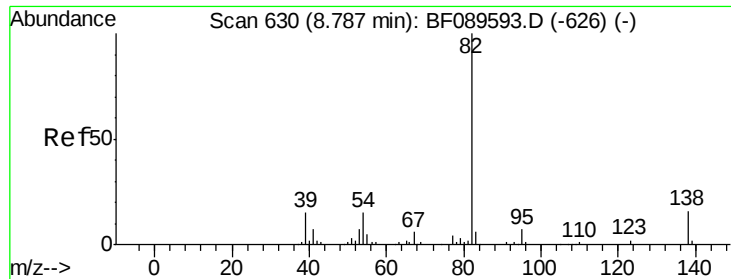
#24  
 Nitrobenzene  
 Concen: 0.07 ng  
 RT: 8.34 min Scan# 591  
 Delta R.T. -0.05 min  
 Lab File: BF089602.D  
 Acq: 4 Aug 2016 23:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 77      | 100   |       |       |
| 123     | 0.0   | 32.6  | 49.0# |
| 65      | 0.0   | 11.0  | 16.6# |



Abundance Ion 77.00 (76.70 to 77.70): BF0  
 Ion 123.00 (122.70 to 123.70): BF0  
 Ion 65.00 (64.70 to 65.70): BF0





#25

Isophorone

Concen: 0.03 ng

RT: 9.02 min Scan# 650

Delta R.T. 0.23 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

Instrument :

BNA\_F

ClientSampleId :

PB92673BL

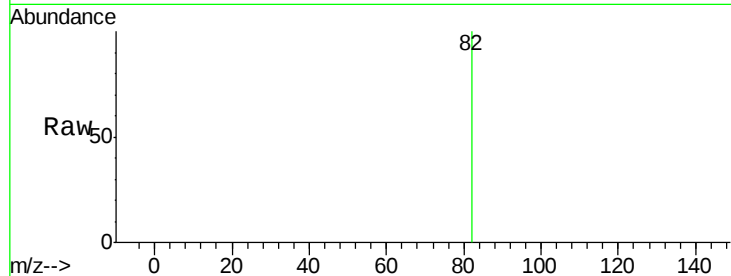
Tgt Ion: 82 Resp: 211

Ion Ratio Lower Upper

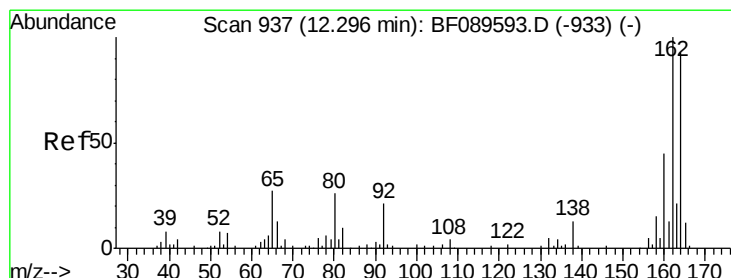
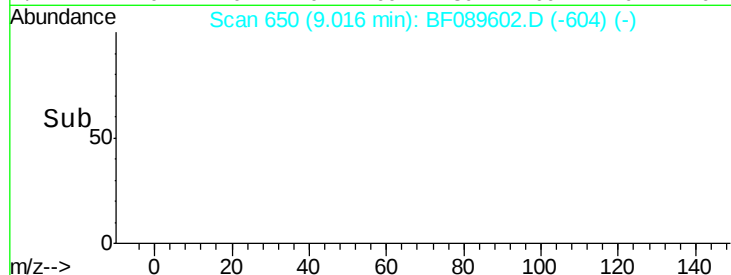
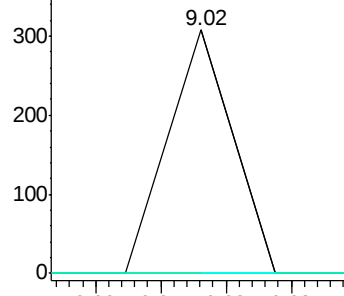
82 100

95 0.0 5.8 8.8#

138 0.0 12.6 18.8#



Abundance Ion 82.00 (81.70 to 82.70): BF0  
Ion 95.00 (94.70 to 95.70): BF0  
Ion 138.00 (137.70 to 138.70): BF0



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 12.28 min Scan# 936

Delta R.T. -0.01 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

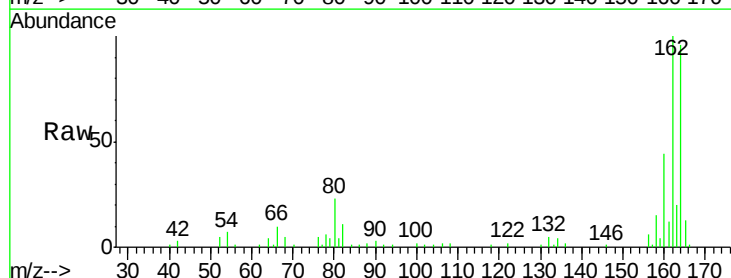
Tgt Ion: 164 Resp: 89442

Ion Ratio Lower Upper

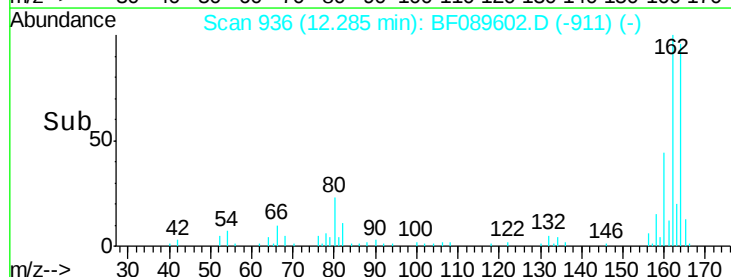
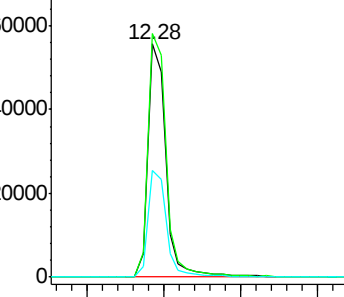
164 100

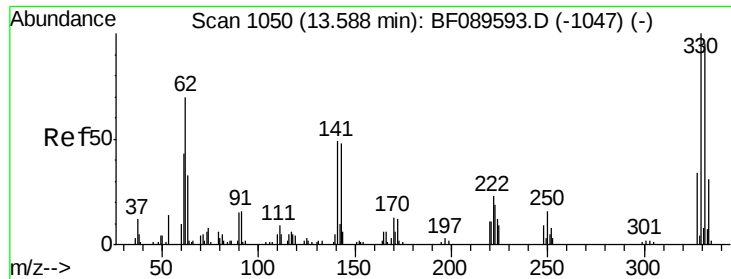
162 104.5 85.7 128.5

160 45.9 38.2 57.4



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

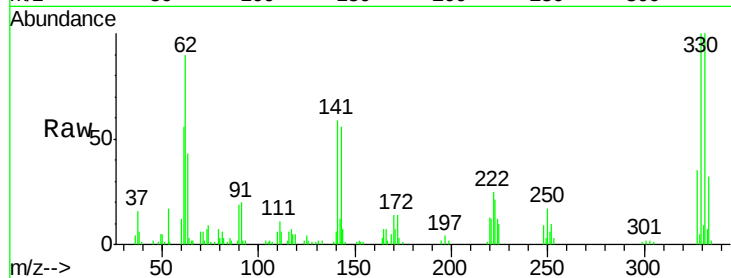




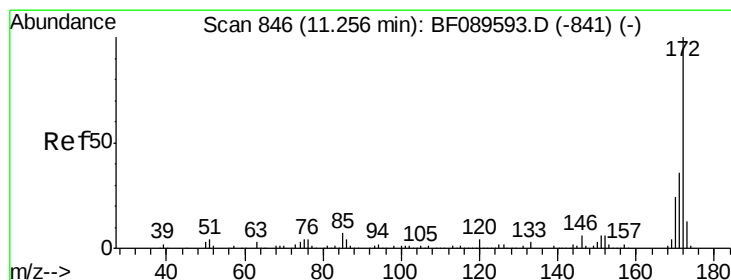
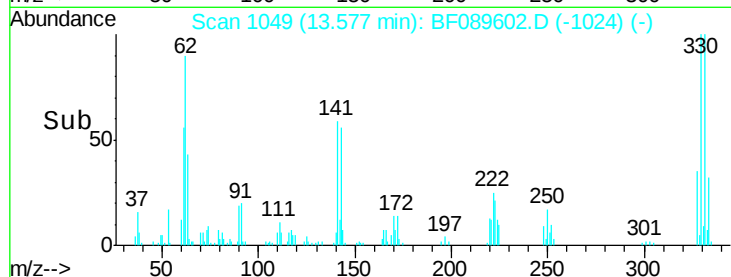
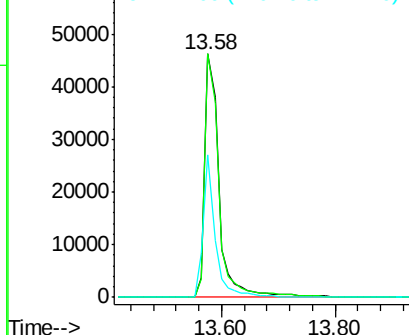
#41  
 2,4,6-Tribromophenol  
 Concen: 105.73 ng  
 RT: 13.58 min Scan# 1049  
 Delta R.T. -0.01 min  
 Lab File: BF089602.D  
 Acq: 4 Aug 2016 23:04

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB92673BL

Tgt Ion:330 Resp: 78044  
 Ion Ratio Lower Upper  
 330 100  
 332 98.7 77.0 115.6  
 141 48.9 38.6 57.8

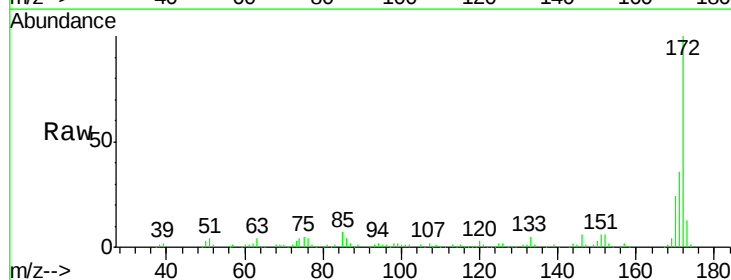


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

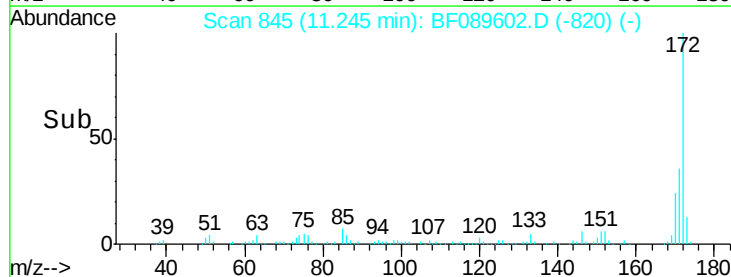
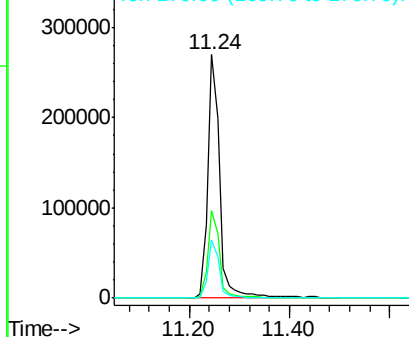


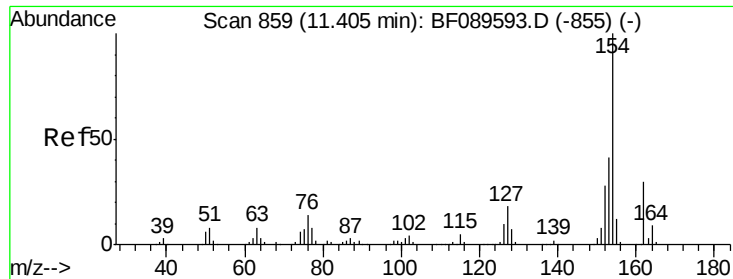
#44  
 2-Fluorobiphenyl  
 Concen: 64.94 ng  
 RT: 11.24 min Scan# 845  
 Delta R.T. -0.01 min  
 Lab File: BF089602.D  
 Acq: 4 Aug 2016 23:04

Tgt Ion:172 Resp: 446925  
 Ion Ratio Lower Upper  
 172 100  
 171 36.2 28.9 43.3  
 170 23.9 19.0 28.6



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

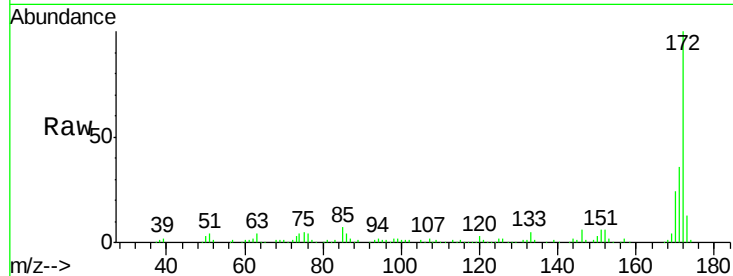




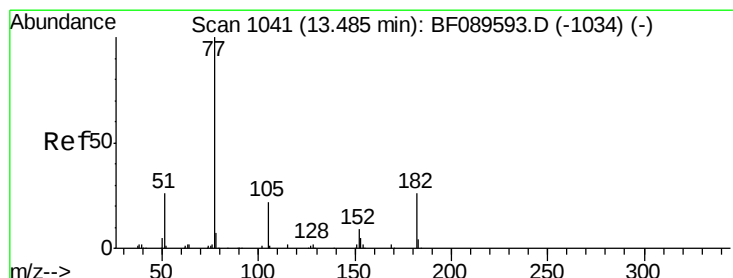
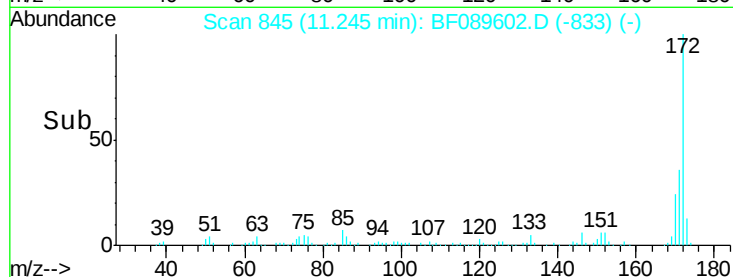
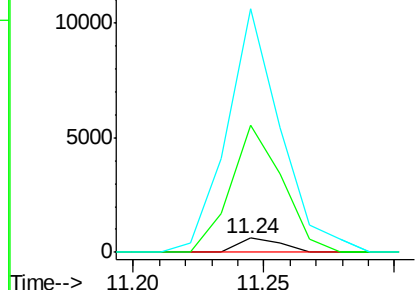
#45  
 1,1'-Biphenyl  
 Concen: 0.08 ng  
 RT: 11.24 min Scan# 845  
 Delta R.T. -0.16 min  
 Lab File: BF089602.D  
 Acq: 4 Aug 2016 23:04

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB92673BL

Tgt Ion: 154 Resp: 678  
 Ion Ratio Lower Upper  
 154 100  
 153 909.5 20.6 60.6#  
 76 1746.9 0.0 33.7#

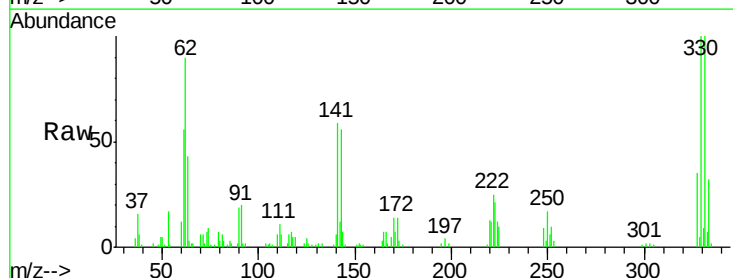


Abundance Ion 154.00 (153.70 to 154.70): E  
 Ion 153.00 (152.70 to 153.70): E  
 Ion 76.00 (75.70 to 76.70): BF0

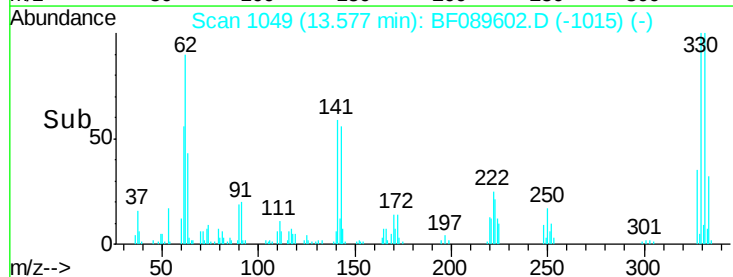
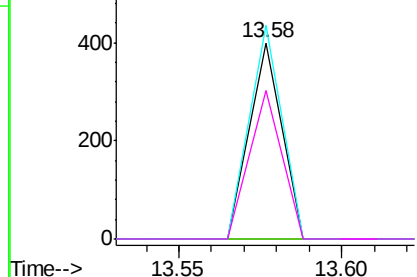


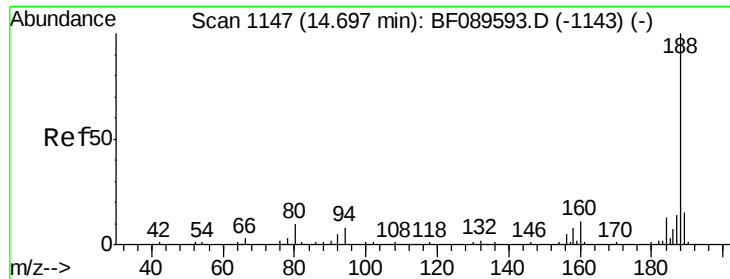
#62  
 Azobenzene  
 Concen: 0.04 ng  
 RT: 13.58 min Scan# 1049  
 Delta R.T. 0.09 min  
 Lab File: BF089602.D  
 Acq: 4 Aug 2016 23:04

Tgt Ion: 77 Resp: 274  
 Ion Ratio Lower Upper  
 77 100  
 182 0.0 5.8 45.8#  
 105 108.8 2.9 42.9#  
 51 75.5 7.2 47.2#



Abundance Ion 77.00 (76.70 to 77.70): BF0  
 Ion 182.00 (181.70 to 182.70): E  
 Ion 105.00 (104.70 to 105.70): E  
 Ion 51.00 (50.70 to 51.70): BF0





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 14.69 min Scan# 1146

Delta R.T. -0.01 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

Instrument :

BNA\_F

ClientSampleId :

PB92673BL

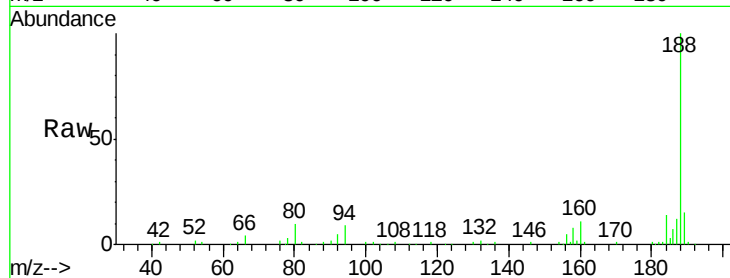
Tgt Ion:188 Resp: 181382

Ion Ratio Lower Upper

188 100

94 9.0 6.5 9.7

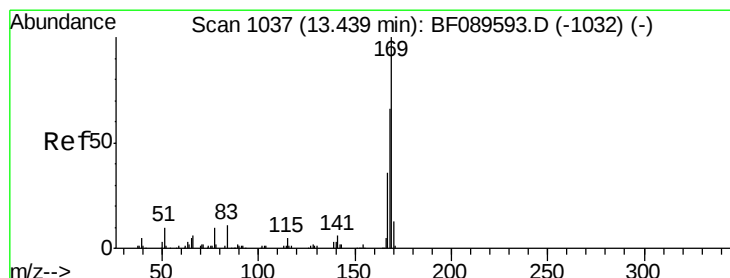
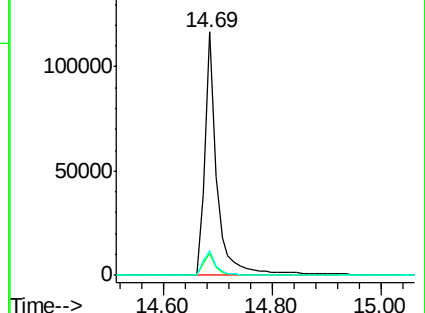
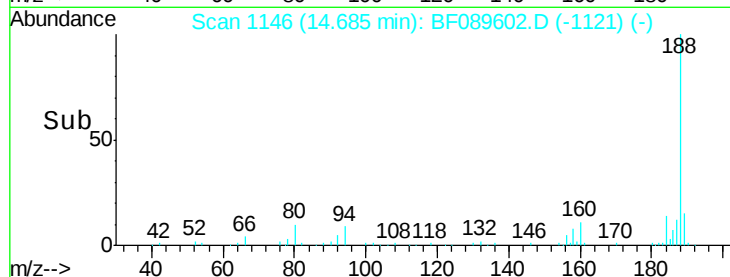
80 10.0 8.0 12.0



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



#65

n-Nitrosodiphenylamine

Concen: 0.47 ng

RT: 13.58 min Scan# 1049

Delta R.T. 0.14 min

Lab File: BF089602.D

Acq: 4 Aug 2016 23:04

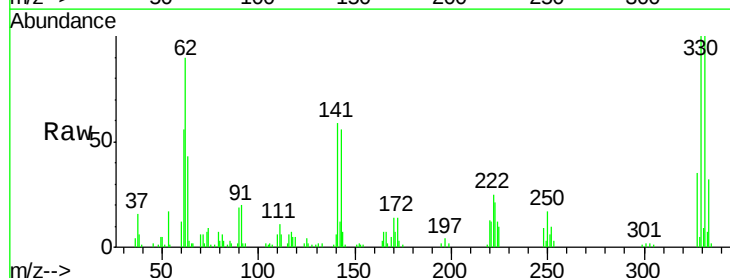
Tgt Ion:169 Resp: 2907

Ion Ratio Lower Upper

169 100

168 0.0 54.2 81.2#

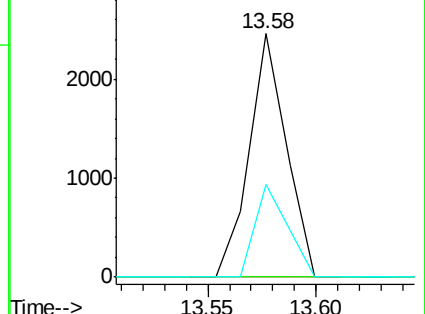
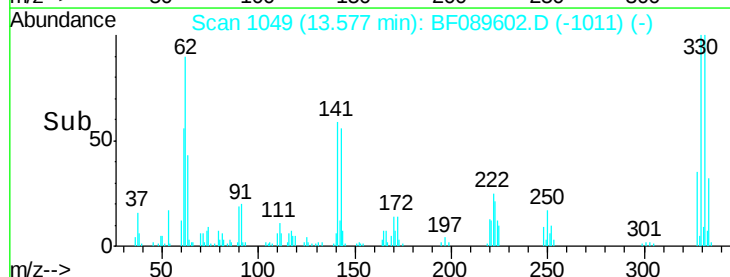
167 38.0 28.9 43.3

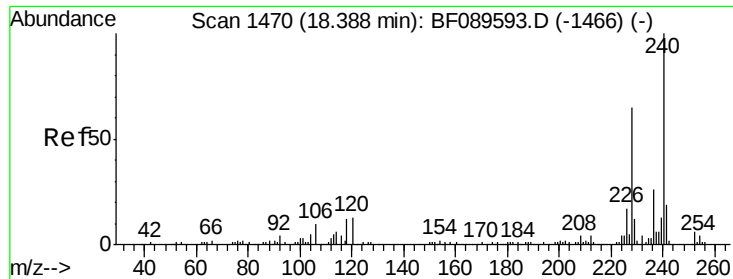


Abundance Ion 169.00 (168.70 to 169.70): E

Ion 168.00 (167.70 to 168.70): E

Ion 167.00 (166.70 to 167.70): E

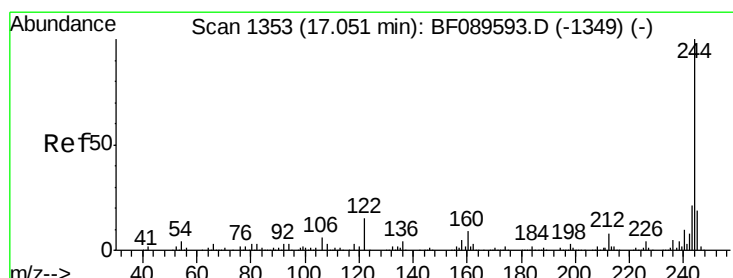
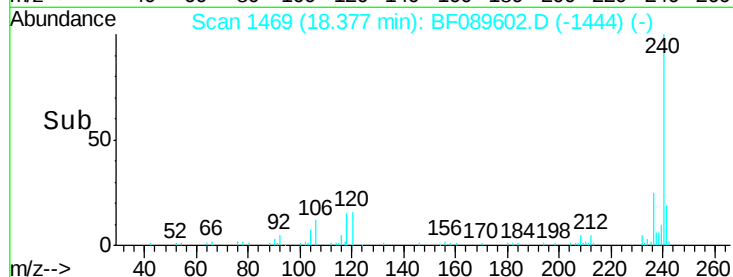
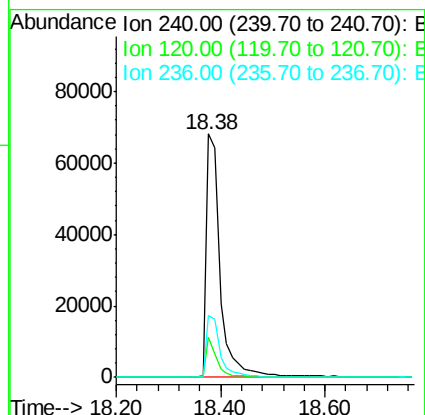
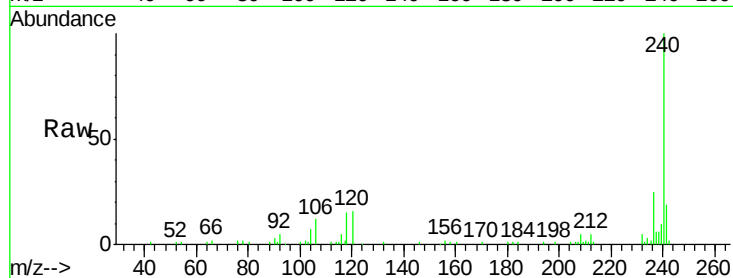




#75  
Chrysene-d12  
Concen: 20.00 ng  
RT: 18.38 min Scan# 1469  
Delta R.T. -0.01 min  
Lab File: BF089602.D  
Acq: 4 Aug 2016 23:04

Instrument :  
BNA\_F  
ClientSampleId :  
PB92673BL

Tgt Ion:240 Resp: 126680  
Ion Ratio Lower Upper  
240 100  
120 16.3 10.6 15.8#  
236 25.4 20.6 30.8



#78  
Terphenyl-d14  
Concen: 65.89 ng  
RT: 17.05 min Scan# 1353  
Delta R.T. 0.00 min  
Lab File: BF089602.D  
Acq: 4 Aug 2016 23:04

Tgt Ion:244 Resp: 422829  
Ion Ratio Lower Upper  
244 100  
212 7.9 6.4 9.6  
122 13.3 12.2 18.2

