

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF052016\  
 Data File : BF087259.D  
 Acq On : 21 May 2016 8:39  
 Operator : UM/SJ  
 Sample : H3167-05  
 Misc :  
 ALS Vial : 30 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RAV-RMW-1

Quant Time: May 23 00:57:07 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF051716.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue May 17 16:55:01 2016  
 Response via : Initial Calibration

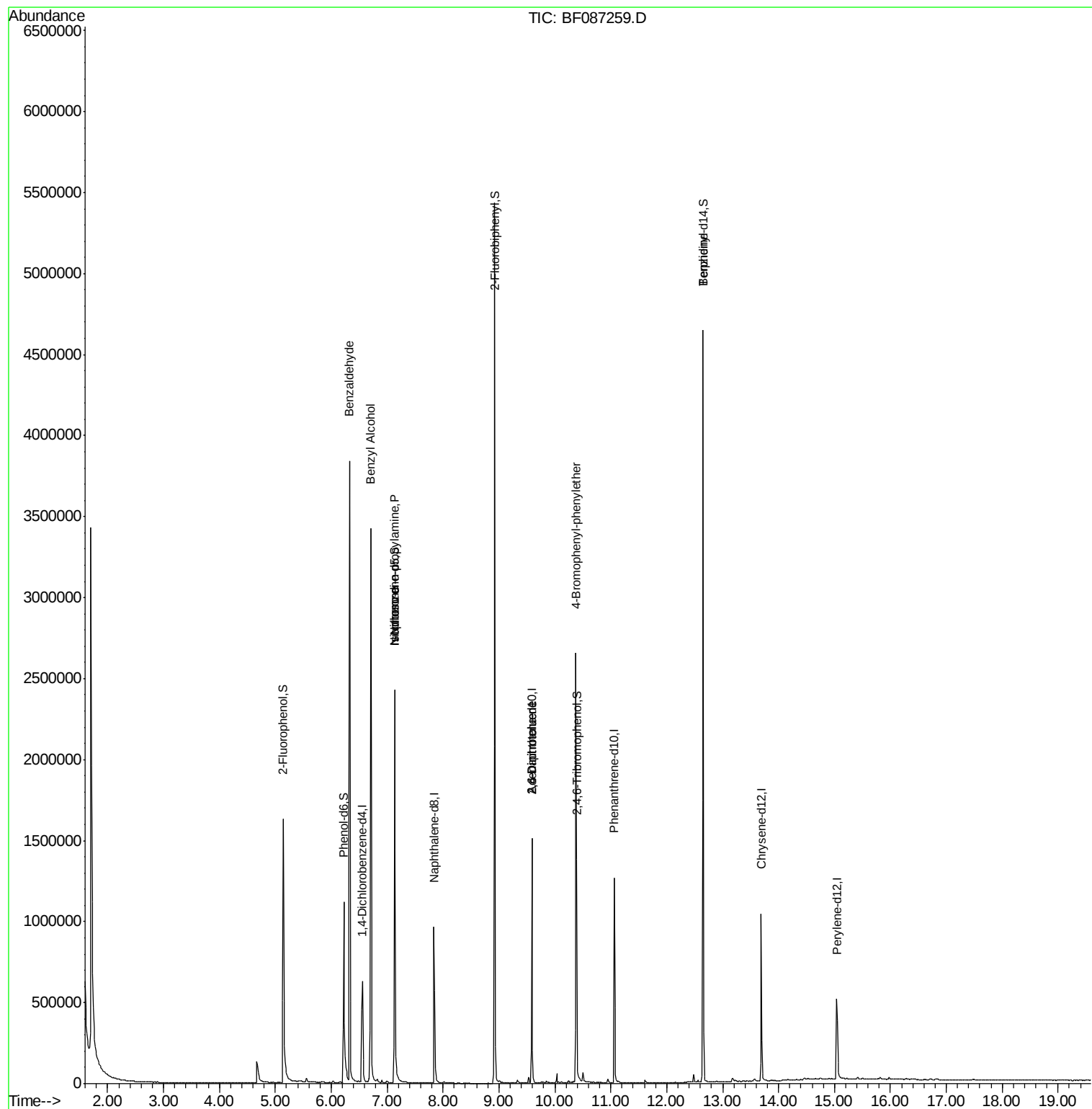
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.56  | 152  | 122963   | 20.00  | ng    | -0.05    |
| 21) Naphthalene-d8             | 7.84  | 136  | 543119   | 20.00  | ng    | -0.06    |
| 38) Acenaphthene-d10           | 9.59  | 164  | 274360   | 20.00  | ng    | -0.06    |
| 63) Phenanthrene-d10           | 11.06 | 188  | 474697   | 20.00  | ng    | -0.06    |
| 75) Chrysene-d12               | 13.69 | 240  | 359329   | 20.00  | ng    | -0.07    |
| 86) Perylene-d12               | 15.04 | 264  | 252521   | 20.00  | ng    | -0.07    |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.14  | 112  | 562930   | 76.95  | ng    | -0.06    |
| 7) Phenol-d6                   | 6.23  | 99   | 481663   | 49.09  | ng    | -0.06    |
| 23) Nitrobenzene-d5            | 7.13  | 82   | 975084   | 89.48  | ng    | -0.06    |
| 41) 2,4,6-Tribromophenol       | 10.39 | 330  | 384408   | 126.79 | ng    | -0.06    |
| 44) 2-Fluorobiphenyl           | 8.92  | 172  | 1667729  | 100.67 | ng    | -0.06    |
| 78) Terphenyl-d14              | 12.65 | 244  | 1431622  | 90.13  | ng    | -0.06    |
| Target Compounds               |       |      |          |        |       |          |
| 9) Benzaldehyde                | 6.33  | 77   | 28184    | 4.01   | ng    | # 79     |
| 15) Benzyl Alcohol             | 6.71  | 79   | 16472    | 2.26   | ng    | # 41     |
| 19) n-Nitroso-di-n-propylamine | 7.13  | 70   | 135724   | 18.20  | ng    | # 72     |
| 25) Isophorone                 | 7.13  | 82   | 928923   | 46.56  | ng    | # 68     |
| 50) 2,6-Dinitrotoluene         | 9.59  | 165  | 34735    | 7.64   | ng    | # 20     |
| 56) 2,4-Dinitrotoluene         | 9.59  | 165  | 34735    | 5.97   | ng    | # 16     |
| 66) 4-Bromophenyl-phenylether  | 10.38 | 248  | 23499    | 4.81   | ng    | # 1      |
| 76) Benzydine                  | 12.65 | 184  | 22661    | 2.63   | ng    | # 95     |

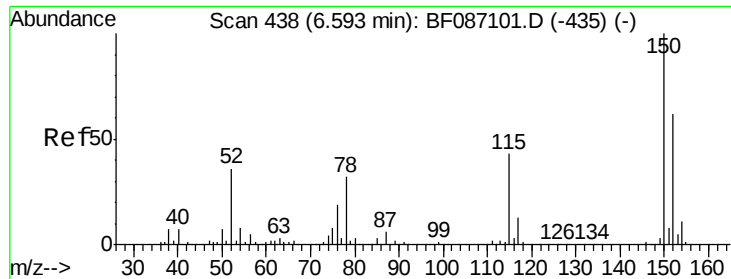
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.56 min Scan# 435

Delta R.T. -0.05 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

Instrument :

BNA\_F

ClientSampleId :

RAV-RMW-1

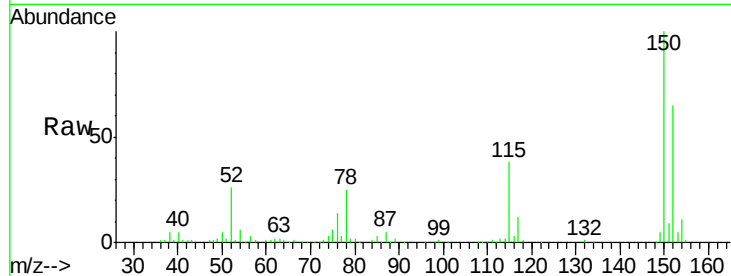
Tgt Ion:152 Resp: 122963

Ion Ratio Lower Upper

152 100

150 153.4 125.8 188.6

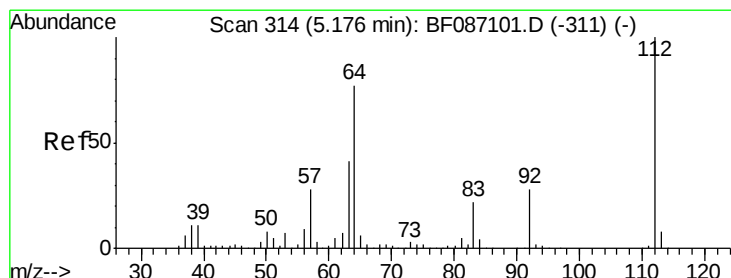
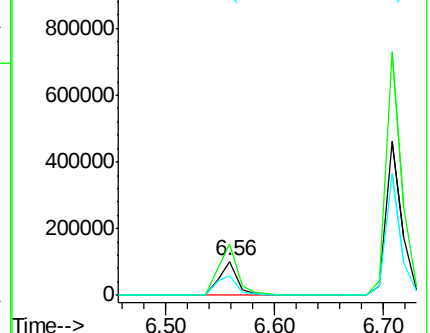
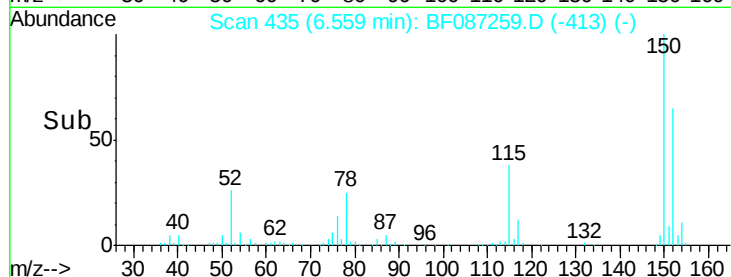
115 58.2 51.5 77.3



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: 76.95 ng

RT: 5.14 min Scan# 311

Delta R.T. -0.06 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

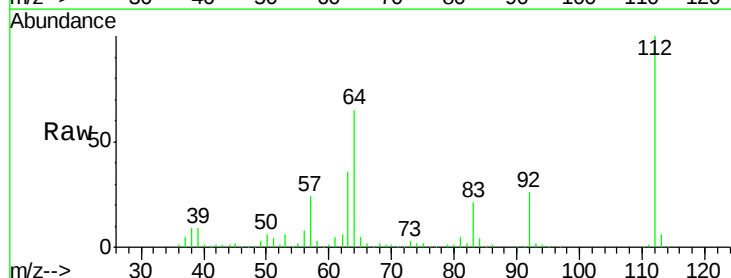
Tgt Ion:112 Resp: 562930

Ion Ratio Lower Upper

112 100

64 65.4 52.1 78.1

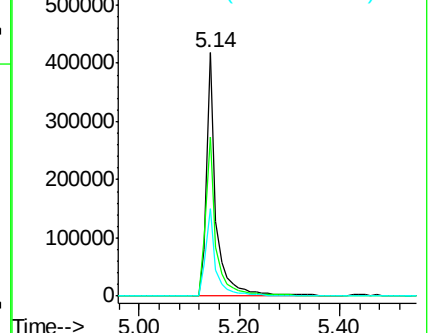
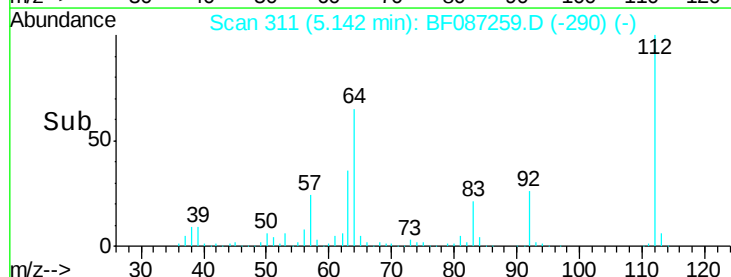
63 35.7 25.7 38.5

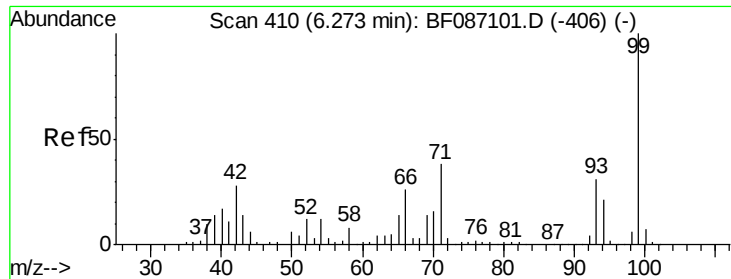


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 49.09 ng

RT: 6.23 min Scan# 406

Delta R.T. -0.06 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

Instrument :

BNA\_F

ClientSampleId :

RAV-RMW-1

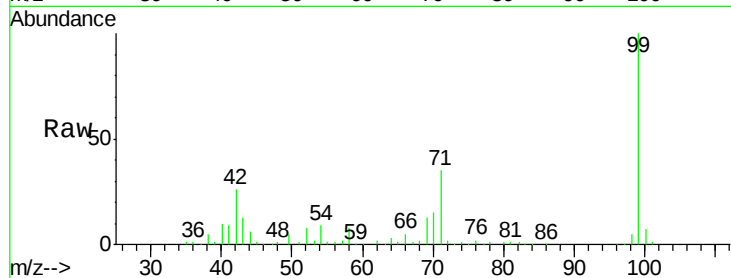
Tgt Ion: 99 Resp: 481663

Ion Ratio Lower Upper

99 100

42 25.6 13.6 20.4#

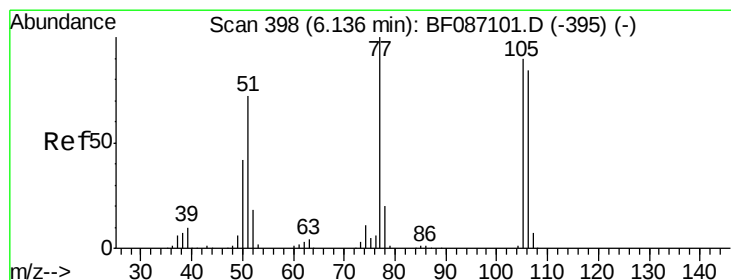
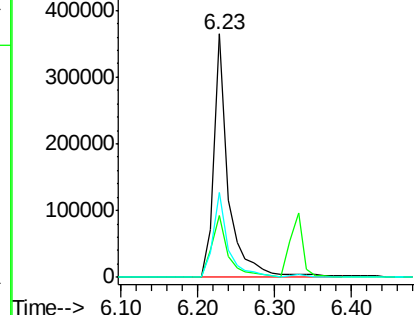
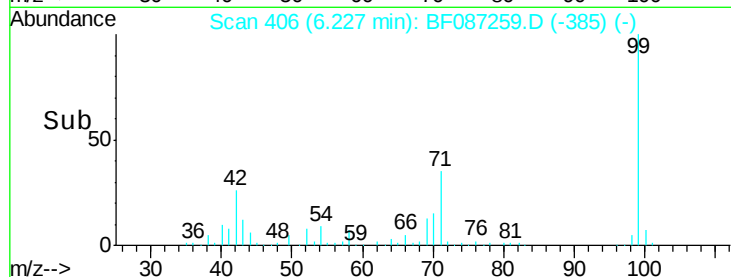
71 35.1 24.6 36.8



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



#9

Benzaldehyde

Concen: 4.01 ng

RT: 6.33 min Scan# 415

Delta R.T. 0.18 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

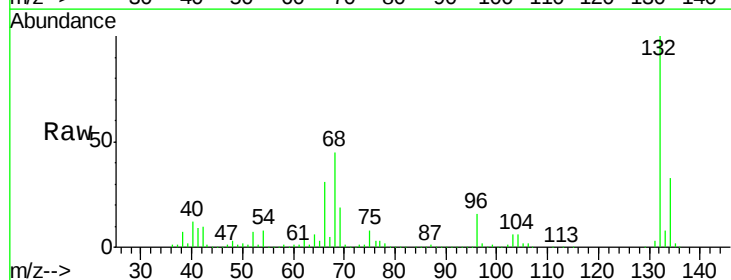
Tgt Ion: 77 Resp: 28184

Ion Ratio Lower Upper

77 100

105 75.3 72.7 112.7

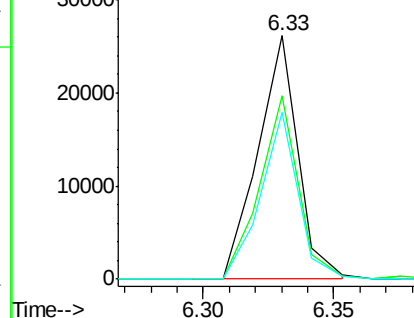
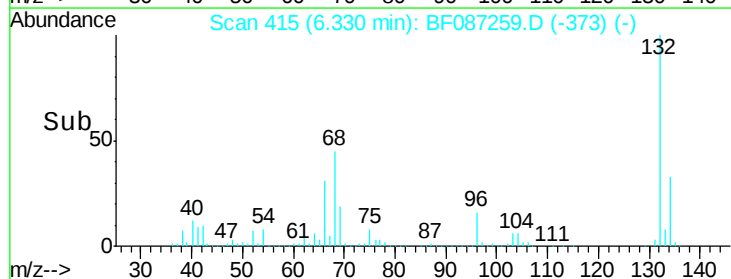
106 68.3 70.8 110.8#

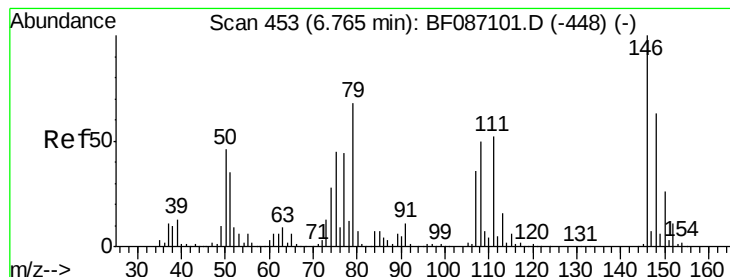


Abundance Ion 77.00 (76.70 to 77.70): BF0

Ion 105.00 (104.70 to 105.70): E

Ion 106.00 (105.70 to 106.70): E





#15

Benzyl Alcohol

Concen: 2.26 ng

RT: 6.71 min Scan# 448

Delta R.T. -0.07 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

Instrument :

BNA\_F

ClientSampled :

RAV-RMW-1

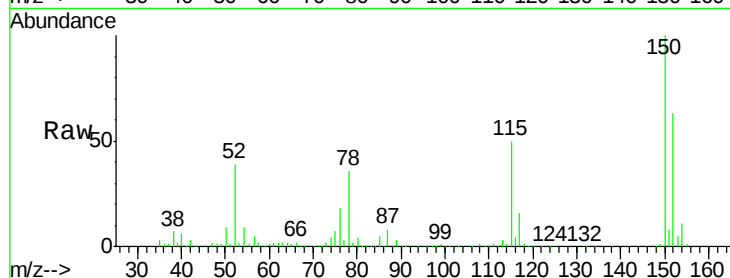
Tgt Ion: 79 Resp: 16472

Ion Ratio Lower Upper

79 100

108 29.1 68.4 102.6#

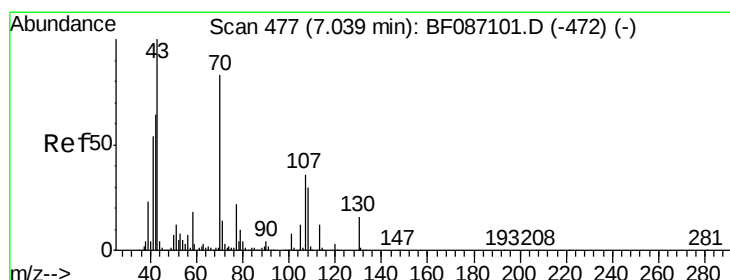
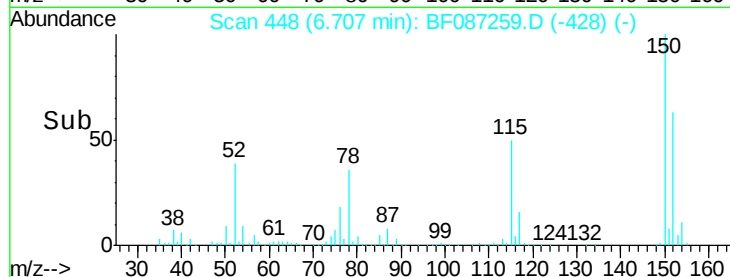
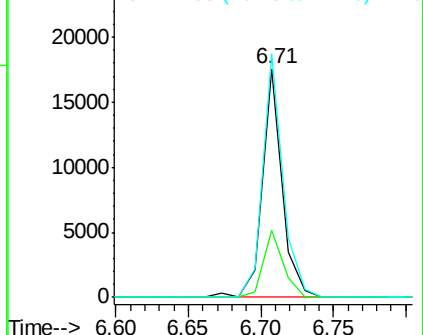
77 106.4 50.6 76.0#



Abundance Ion 79.00 (78.70 to 79.70): BF0

Ion 108.00 (107.70 to 108.70): BF0

Ion 77.00 (76.70 to 77.70): BF0



#19

n-Nitroso-di-n-propylamine

Concen: 18.20 ng

RT: 7.13 min Scan# 485

Delta R.T. 0.08 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

Tgt Ion: 70 Resp: 135724

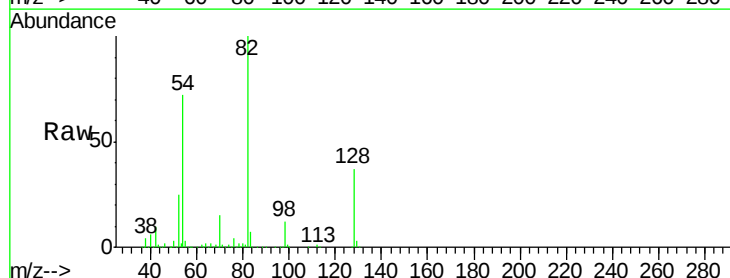
Ion Ratio Lower Upper

70 100

42 68.5 43.1 64.7#

101 0.0 8.1 12.1#

130 1.6 18.6 28.0#

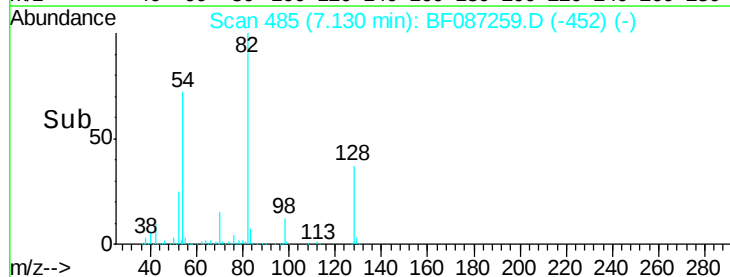
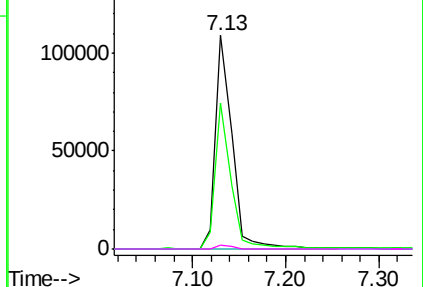


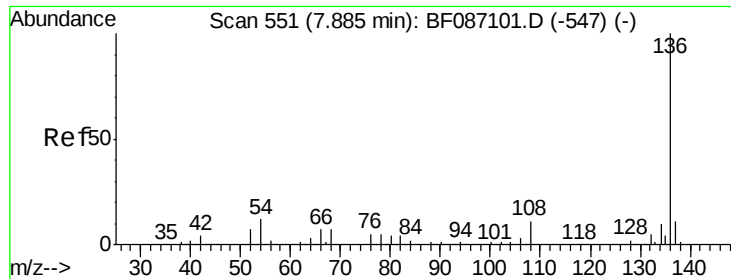
Abundance Ion 70.00 (69.70 to 70.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 101.00 (100.70 to 101.70): BF0

Ion 130.00 (129.70 to 130.70): BF0

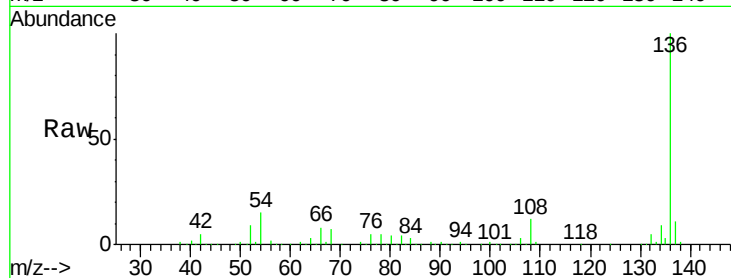




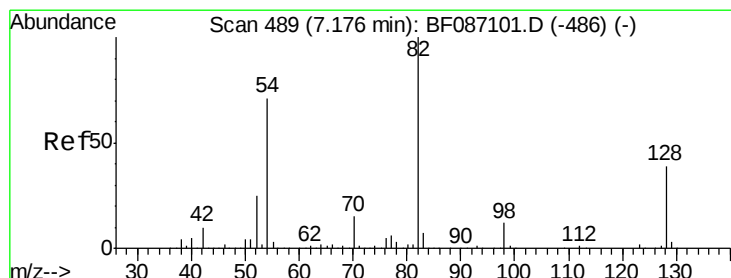
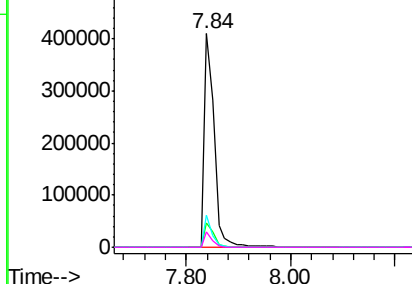
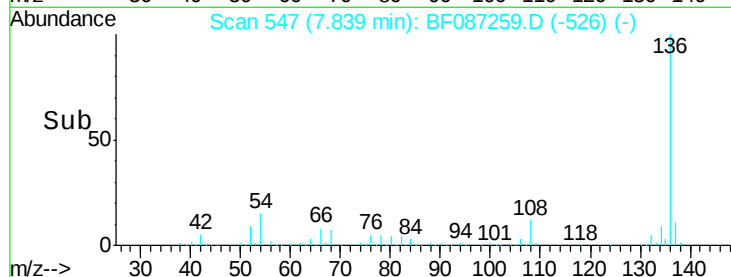
#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 7.84 min Scan# 547  
Delta R.T. -0.06 min  
Lab File: BF087259.D  
Acq: 21 May 2016 8:39

Instrument :  
BNA\_F  
ClientSampleId :  
RAV-RMW-1

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 543119 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 11.3  | 8.8   | 13.2   |
| 54       | 14.9  | 5.0   | 7.4#   |
| 68       | 7.4   | 4.4   | 6.6#   |

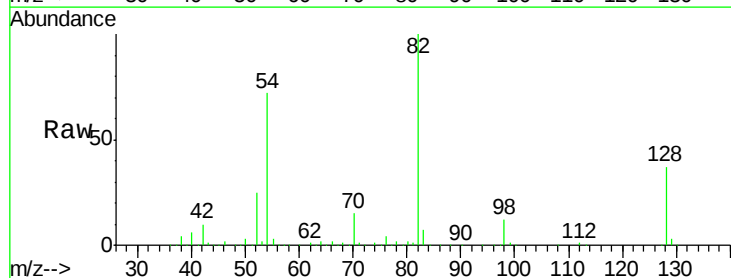


Abundance Ion 136.00 (135.70 to 136.70): E  
Ion 137.00 (136.70 to 137.70): E  
Ion 54.00 (53.70 to 54.70): BF0  
Ion 68.00 (67.70 to 68.70): BF0

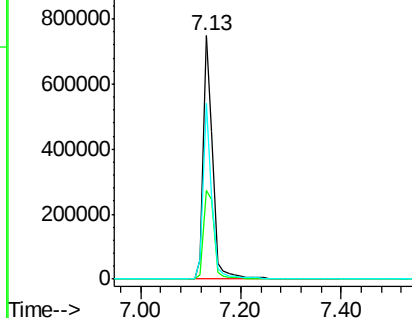
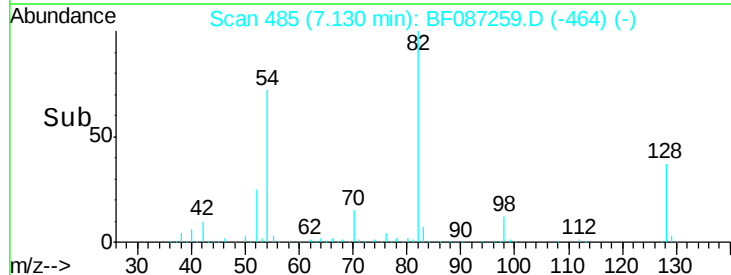


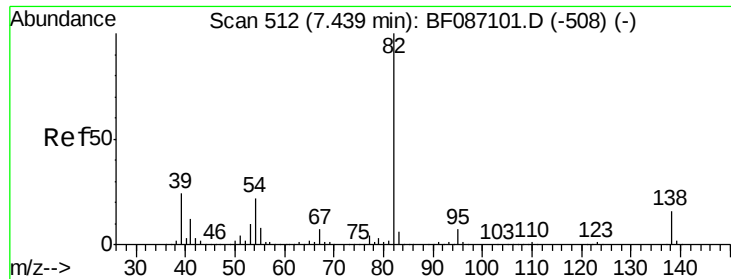
#23  
Nitrobenzene-d5  
Concen: 89.48 ng  
RT: 7.13 min Scan# 485  
Delta R.T. -0.06 min  
Lab File: BF087259.D  
Acq: 21 May 2016 8:39

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 975084 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 36.6  | 40.6  | 61.0#  |
| 54       | 72.0  | 38.1  | 57.1#  |



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





#25

Isophorone

Concen: 46.56 ng

RT: 7.13 min Scan# 485

Delta R.T. -0.32 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

Instrument :

BNA\_F

ClientSampleId :

RAV-RMW-1

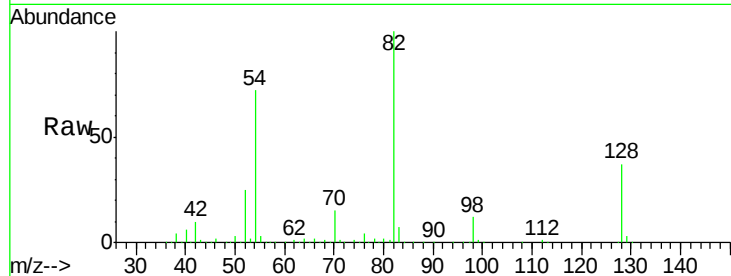
Tgt Ion: 82 Resp: 928923

Ion Ratio Lower Upper

82 100

95 0.0 5.1 7.7#

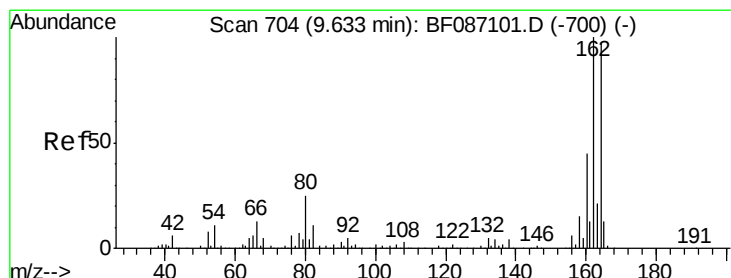
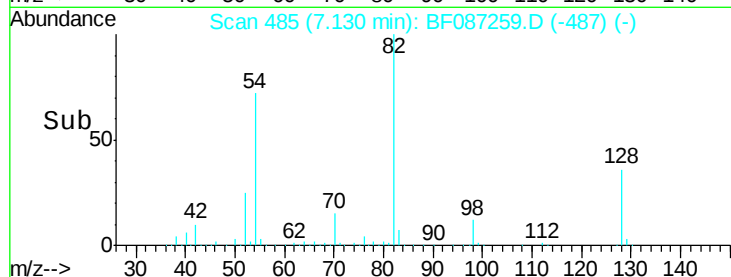
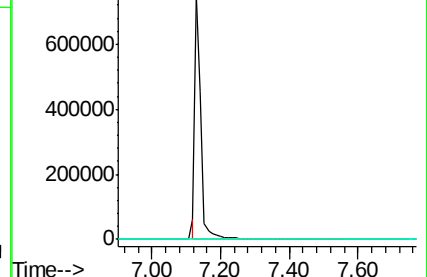
138 0.0 12.4 18.6#



Abundance Ion 82.00 (81.70 to 82.70): BF087259.D (-485) (-)

Ion 95.00 (94.70 to 95.70): BF087259.D (-485) (-)

Ion 138.00 (137.70 to 138.70): BF087259.D (-485) (-)



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.59 min Scan# 700

Delta R.T. -0.06 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

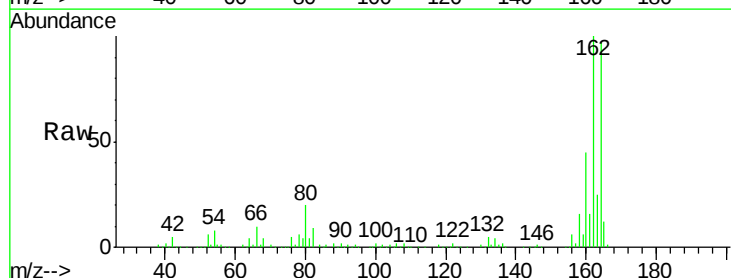
Tgt Ion: 164 Resp: 274360

Ion Ratio Lower Upper

164 100

162 103.0 82.8 124.2

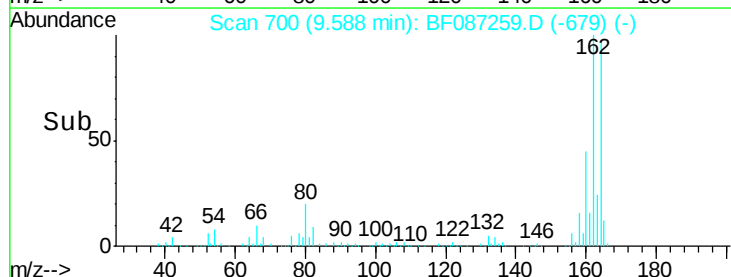
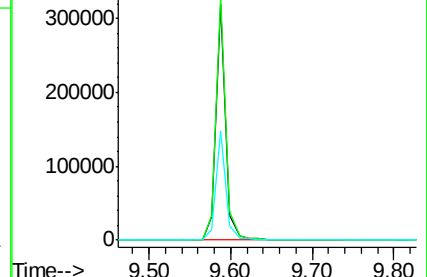
160 46.4 36.9 55.3

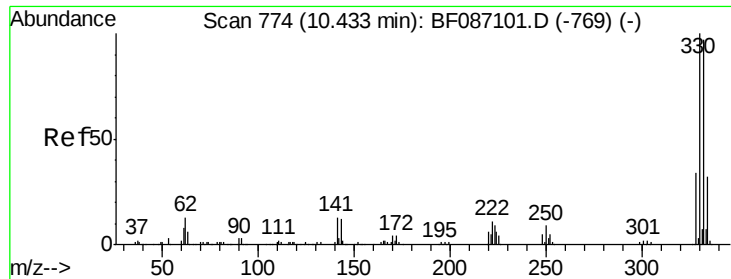


Abundance Ion 164.00 (163.70 to 164.70): BF087259.D (-699) (-)

Ion 162.00 (161.70 to 162.70): BF087259.D (-699) (-)

Ion 160.00 (159.70 to 160.70): BF087259.D (-699) (-)

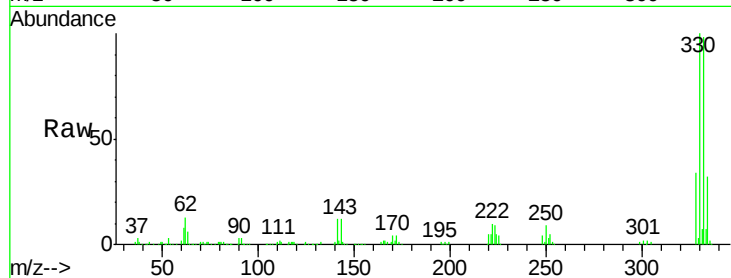




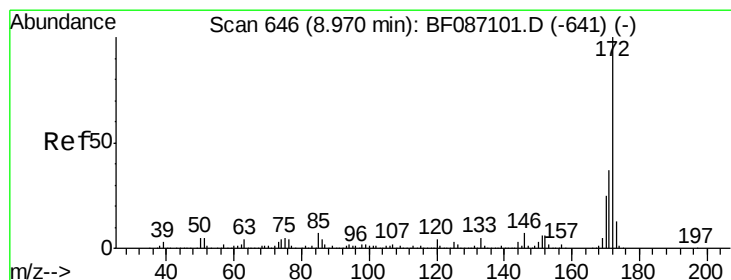
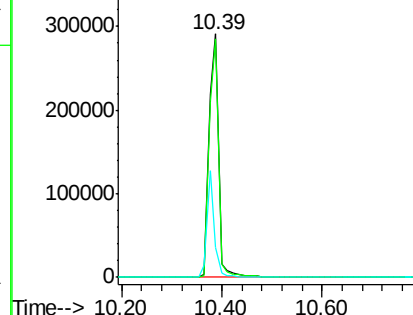
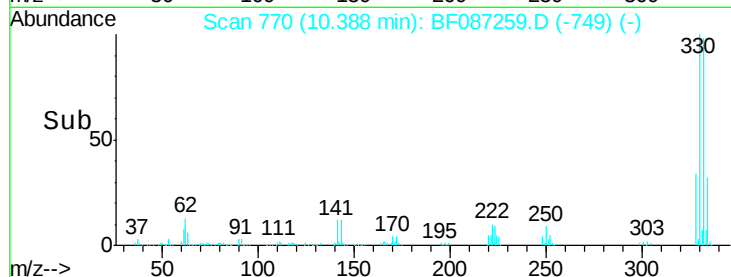
#41  
 2,4,6-Tribromophenol  
 Concen: 126.79 ng  
 RT: 10.39 min Scan# 770  
 Delta R.T. -0.06 min  
 Lab File: BF087259.D  
 Acq: 21 May 2016 8:39

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RAV-RMW-1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 97.0  | 79.0  | 118.4 |
| 141     | 34.5  | 31.2  | 46.8  |

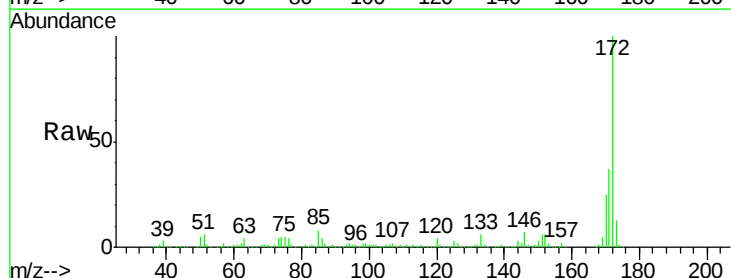


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

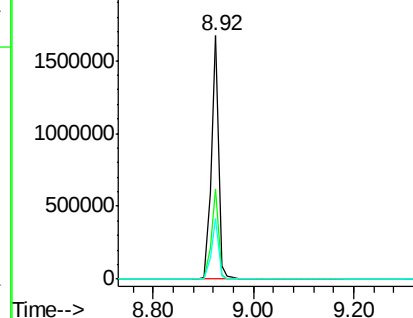
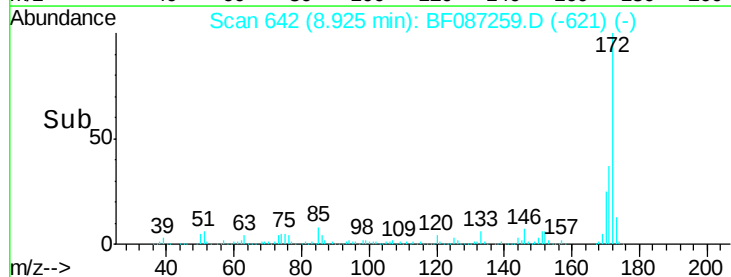


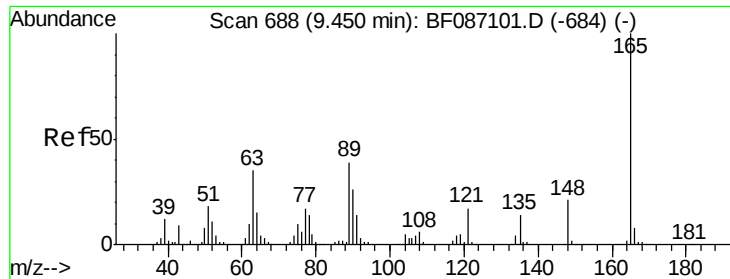
#44  
 2-Fluorobiphenyl  
 Concen: 100.67 ng  
 RT: 8.92 min Scan# 642  
 Delta R.T. -0.06 min  
 Lab File: BF087259.D  
 Acq: 21 May 2016 8:39

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 37.1  | 29.0  | 43.6  |
| 170     | 25.0  | 19.8  | 29.8  |



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

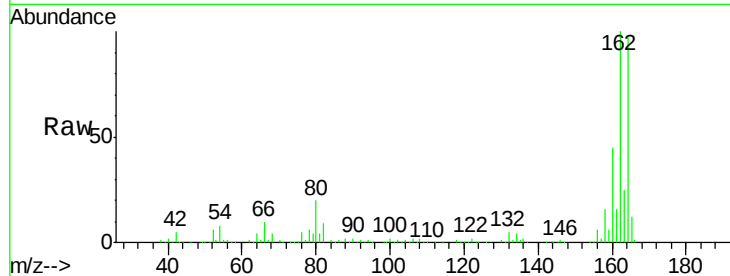




#50  
 2,6-Dinitrotoluene  
 Concen: 7.64 ng  
 RT: 9.59 min Scan# 700  
 Delta R.T. 0.13 min  
 Lab File: BF087259.D  
 Acq: 21 May 2016 8:39

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RAV-RMW-1

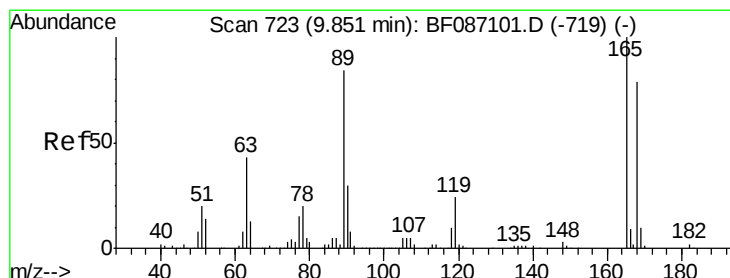
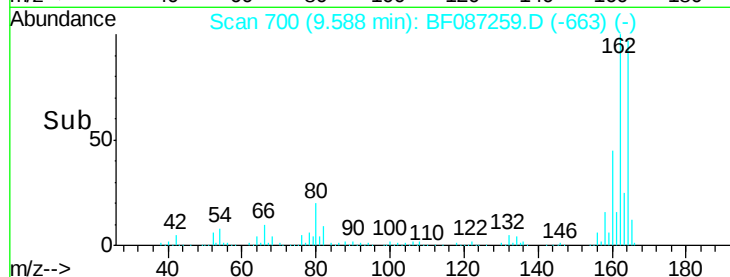
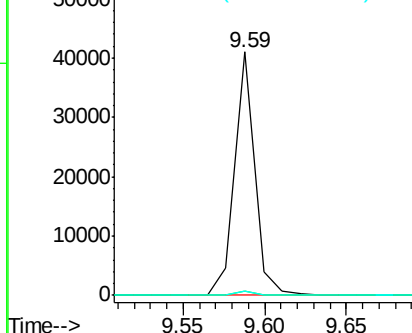
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.7   | 51.8  | 77.8# |
| 89      | 1.8   | 50.7  | 76.1# |



Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0



#56  
 2,4-Dinitrotoluene  
 Concen: 5.97 ng  
 RT: 9.59 min Scan# 700  
 Delta R.T. -0.27 min  
 Lab File: BF087259.D  
 Acq: 21 May 2016 8:39

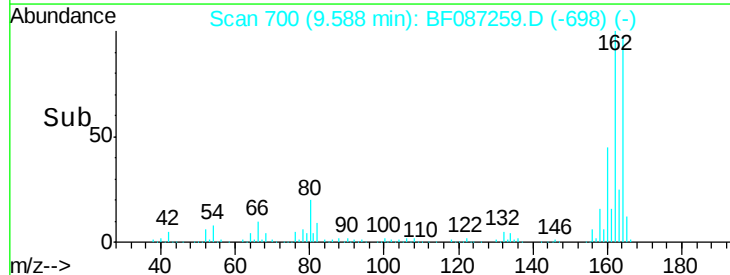
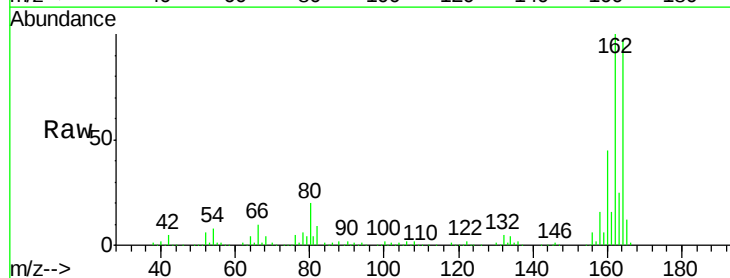
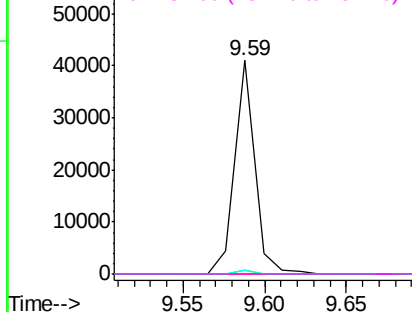
| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 165     | 100   |       |        |
| 63      | 1.7   | 44.3  | 66.5#  |
| 89      | 1.8   | 70.0  | 105.0# |
| 182     | 0.0   | 1.8   | 2.6#   |

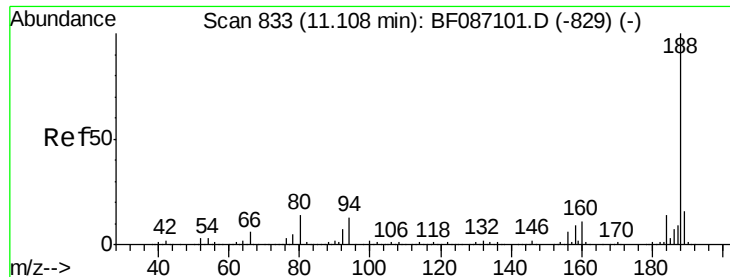
Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0

Ion 182.00 (181.70 to 182.70): E

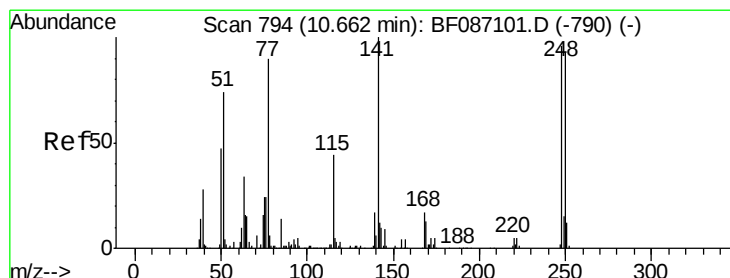
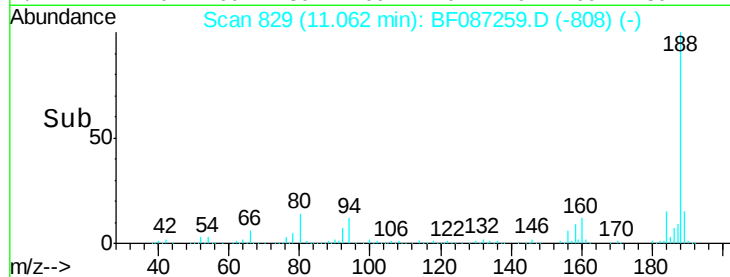
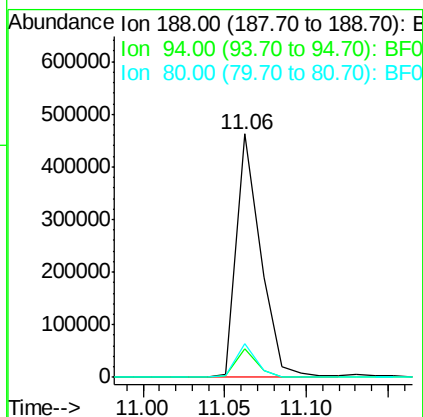
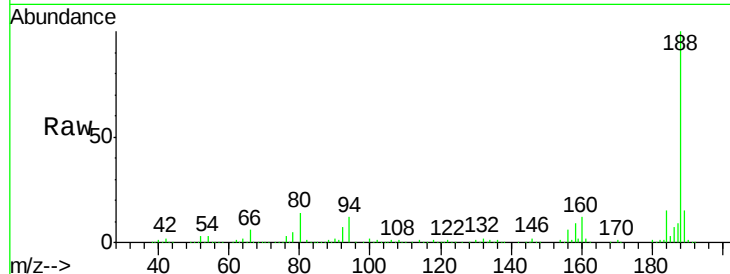




#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 11.06 min Scan# 829  
 Delta R.T. -0.06 min  
 Lab File: BF087259.D  
 Acq: 21 May 2016 8:39

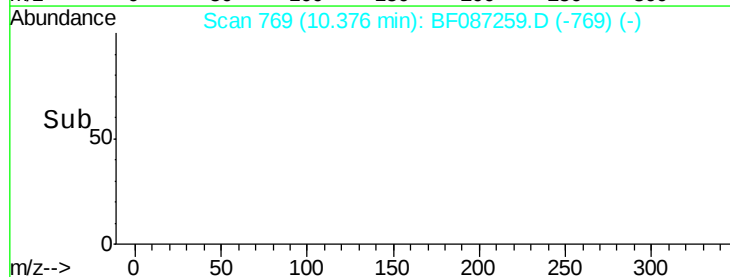
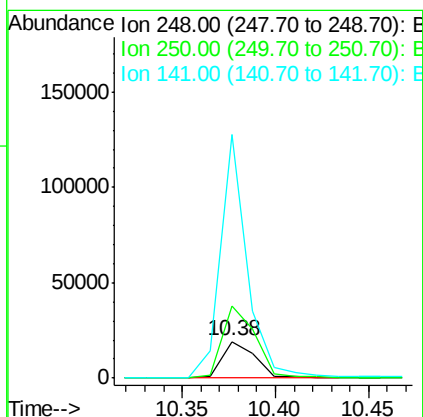
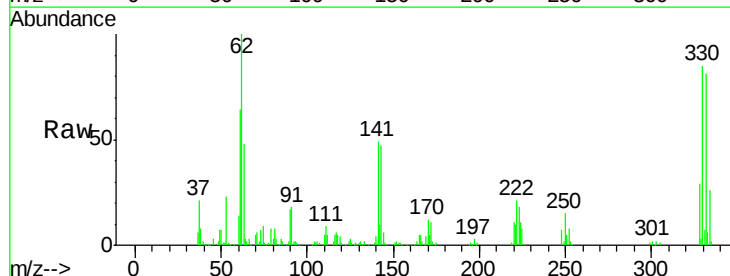
Instrument :  
 BNA\_F  
 ClientSampleId :  
 RAV-RMW-1

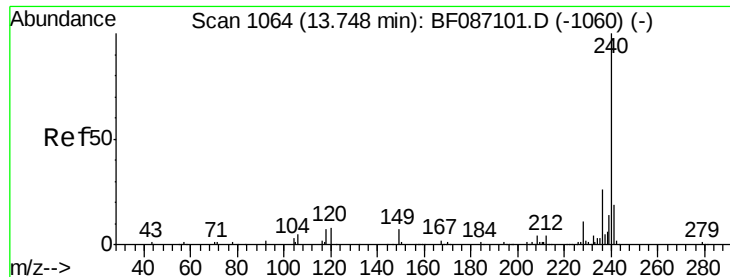
Tgt Ion:188 Resp: 474697  
 Ion Ratio Lower Upper  
 188 100  
 94 11.9 6.8 10.2#  
 80 13.7 7.1 10.7#



#66  
 4-Bromophenyl-phenylether  
 Concen: 4.81 ng  
 RT: 10.38 min Scan# 769  
 Delta R.T. -0.30 min  
 Lab File: BF087259.D  
 Acq: 21 May 2016 8:39

Tgt Ion:248 Resp: 23499  
 Ion Ratio Lower Upper  
 248 100  
 250 196.9 78.6 117.8#  
 141 664.6 76.0 114.0#





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.69 min Scan# 1059

Delta R.T. -0.07 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

Instrument :

BNA\_F

ClientSampleId :

RAV-RMW-1

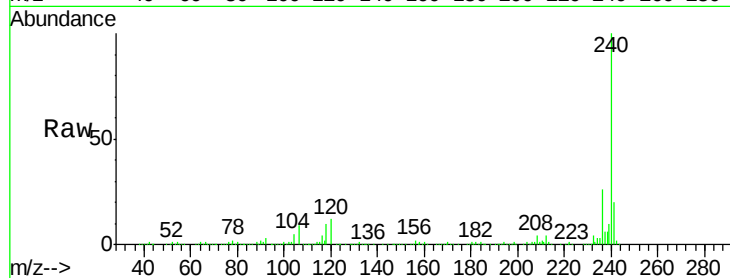
Tgt Ion:240 Resp: 359329

Ion Ratio Lower Upper

240 100

120 11.9 11.2 16.8

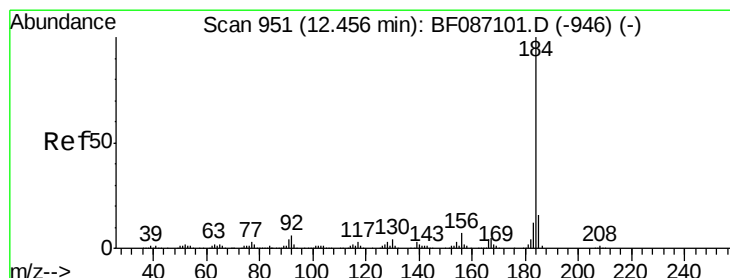
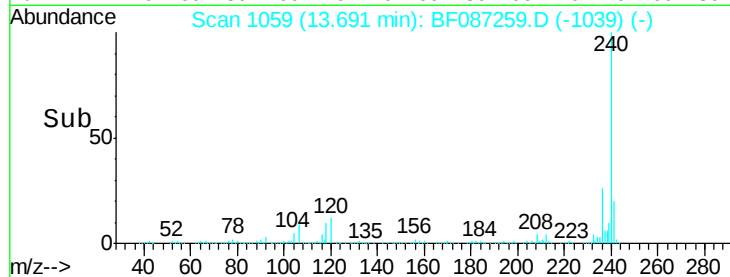
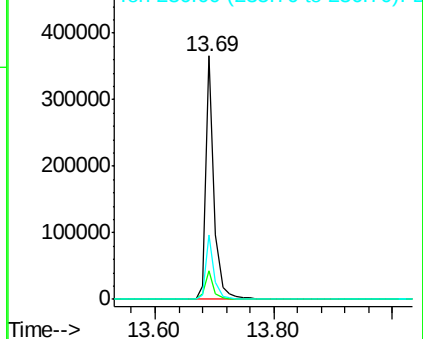
236 26.2 21.2 31.8



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



#76

Benzidine

Concen: 2.63 ng

RT: 12.65 min Scan# 968

Delta R.T. 0.18 min

Lab File: BF087259.D

Acq: 21 May 2016 8:39

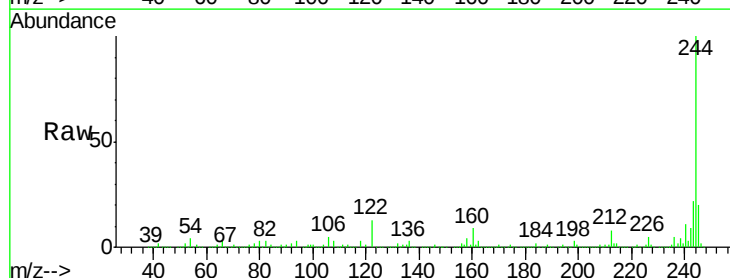
Tgt Ion:184 Resp: 22661

Ion Ratio Lower Upper

184 100

185 18.5 13.6 20.4

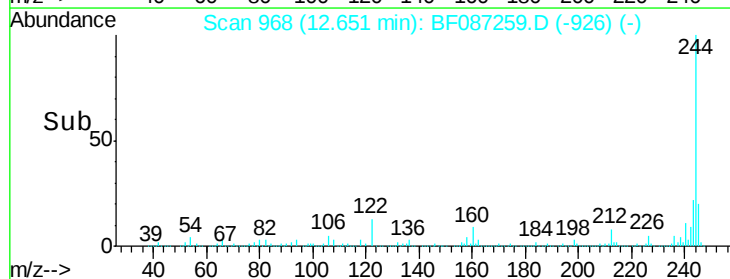
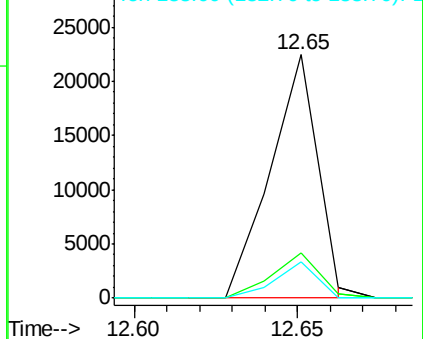
183 14.9 9.8 14.6#

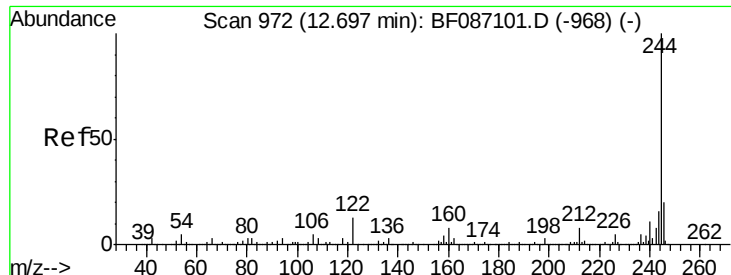


Abundance Ion 184.00 (183.70 to 184.70): E

Ion 185.00 (184.70 to 185.70): E

Ion 183.00 (182.70 to 183.70): E

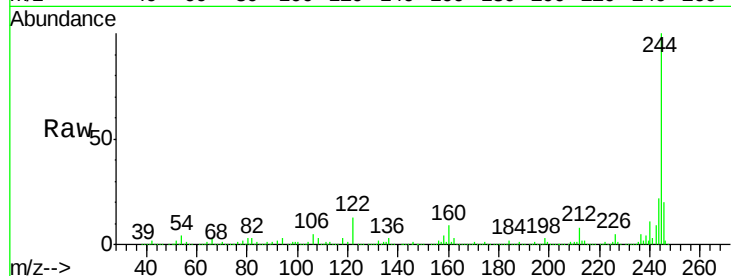




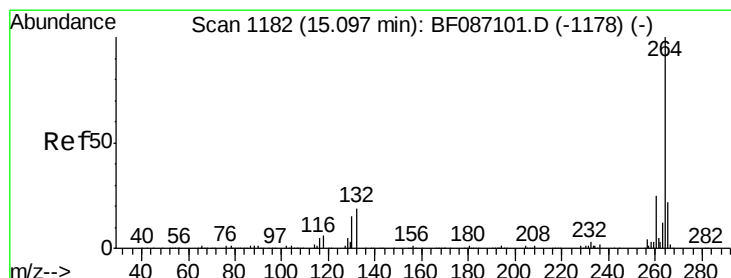
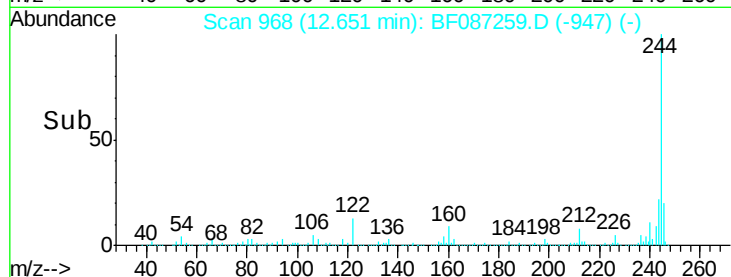
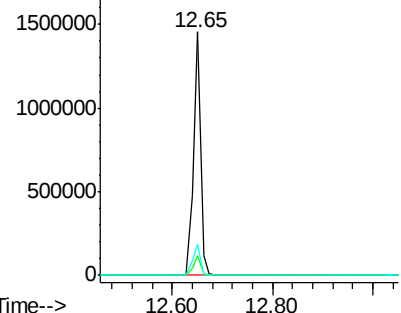
#78  
 Terphenyl-d14  
 Concen: 90.13 ng  
 RT: 12.65 min Scan# 968  
 Delta R.T. -0.06 min  
 Lab File: BF087259.D  
 Acq: 21 May 2016 8:39

Instrument :  
 BNA\_F  
 ClientSampleId :  
 RAV-RMW-1

Tgt Ion:244 Resp: 1431622  
 Ion Ratio Lower Upper  
 244 100  
 212 7.8 6.2 9.2  
 122 12.6 12.0 18.0

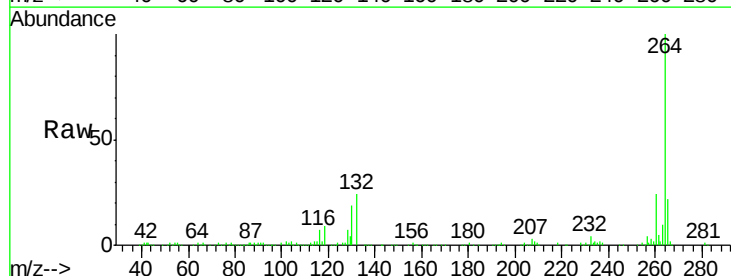


Abundance Ion 244.00 (243.70 to 244.70): E  
 Ion 212.00 (211.70 to 212.70): E  
 Ion 122.00 (121.70 to 122.70): E



#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 15.04 min Scan# 1177  
 Delta R.T. -0.07 min  
 Lab File: BF087259.D  
 Acq: 21 May 2016 8:39

Tgt Ion:264 Resp: 252521  
 Ion Ratio Lower Upper  
 264 100  
 260 24.4 19.5 29.3  
 265 21.6 17.3 25.9



Abundance Ion 264.00 (263.70 to 264.70): E  
 Ion 260.00 (259.70 to 260.70): E  
 Ion 265.00 (264.70 to 265.70): E

