

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF121815\  
 Data File : BF083890.D  
 Acq On : 18 Dec 2015 2:00  
 Operator : UM/SJ  
 Sample : PB87315BL  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB87315BL

Quant Time: Dec 18 05:44:40 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF121815.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 18 01:01:02 2015  
 Response via : Initial Calibration

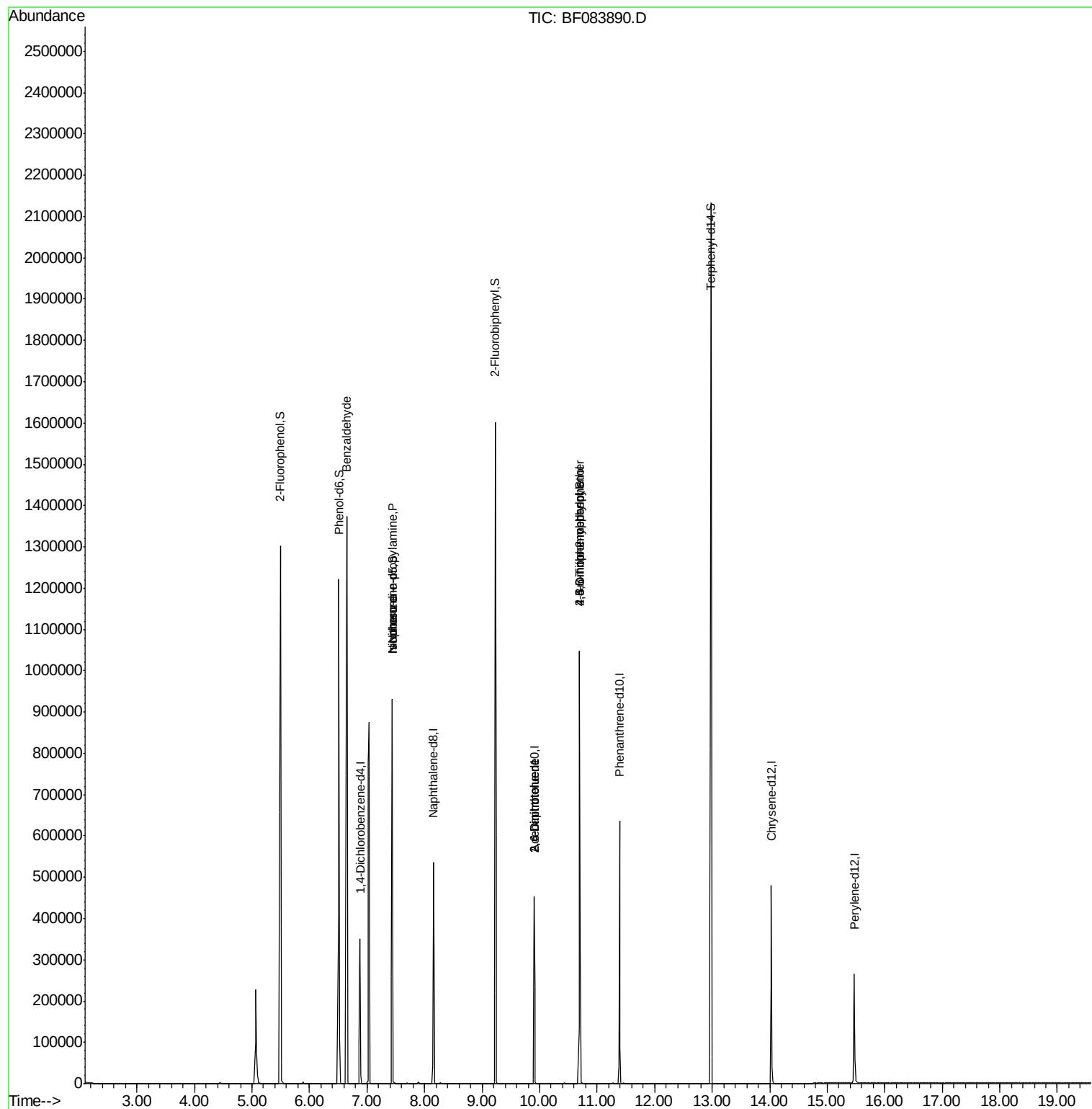
| Internal Standards             | R.T.  | QIon | Response | Conc      | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-----------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.88  | 152  | 56140    | 20.00     | ng    | 0.00     |
| 21) Naphthalene-d8             | 8.16  | 136  | 229887   | 20.00     | ng    | 0.00     |
| 38) Acenaphthene-d10           | 9.90  | 164  | 104180   | 20.00     | ng    | -0.01    |
| 63) Phenanthrene-d10           | 11.39 | 188  | 215361   | 20.00     | ng    | 0.00     |
| 75) Chrysene-d12               | 14.03 | 240  | 198919   | 20.00     | ng    | 0.00     |
| 86) Perylene-d12               | 15.47 | 264  | 155502   | 20.00     | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |           |       |          |
| 5) 2-Fluorophenol              | 5.49  | 112  | 412903   | 115.10    | ng    | 0.01     |
| 7) Phenol-d6                   | 6.51  | 99   | 437406   | 99.61     | ng    | 0.00     |
| 23) Nitrobenzene-d5            | 7.44  | 82   | 303414   | 75.33     | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol       | 10.69 | 330  | 130011   | 113.28    | ng    | -0.01    |
| 44) 2-Fluorobiphenyl           | 9.23  | 172  | 569485   | 75.40     | ng    | -0.01    |
| 78) Terphenyl-d14              | 12.98 | 244  | 674893   | 78.87     | ng    | 0.00     |
| Target Compounds               |       |      |          |           |       | Qvalue   |
| 9) Benzaldehyde                | 6.65  | 77   | 10575    | 4.00      | ng    | 89       |
| 19) n-Nitroso-di-n-propylamine | 7.44  | 70   | 42129    | 16.46     | ng    | # 78     |
| 25) Isophorone                 | 7.44  | 82   | 239645   | 31.62     | ng    | # 66     |
| 31) Naphthalene                | 8.28  | 128  | 208      | Below Cal | #     | 1        |
| 45) 1,1'-Biphenyl              | 9.23  | 154  | 986      | Below Cal | #     | 1        |
| 50) 2,6-Dinitrotoluene         | 9.90  | 165  | 12830    | 6.73      | ng    | # 35     |
| 56) 2,4-Dinitrotoluene         | 9.90  | 165  | 12831    | 5.25      | ng    | # 20     |
| 57) Fluorene                   | 10.69 | 166  | 5278     | Below Cal | #     | 92       |
| 64) 4,6-Dinitro-2-methylphenol | 10.69 | 198  | 246      | 4.10      | ng    | # 1      |
| 66) 4-Bromophenyl-phenylether  | 10.69 | 248  | 8681     | 3.30      | ng    | # 1      |
| 77) Pyrene                     | 12.98 | 202  | 2442     | Below Cal | #     | 59       |

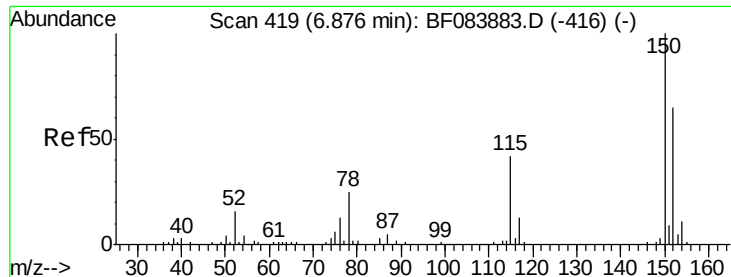
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF121815\  
Data File : BF083890.D  
Acq On : 18 Dec 2015 2:00  
Operator : UM/SJ  
Sample : PB87315BL  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
PB87315BL

Quant Time: Dec 18 05:44:40 2015  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF121815.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Dec 18 01:01:02 2015  
Response via : Initial Calibration



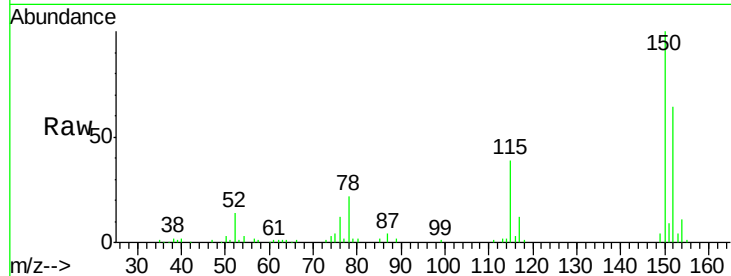


#1

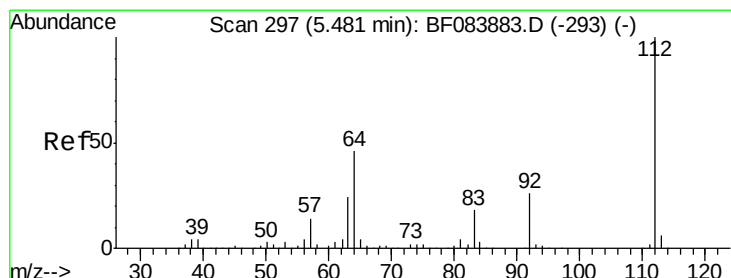
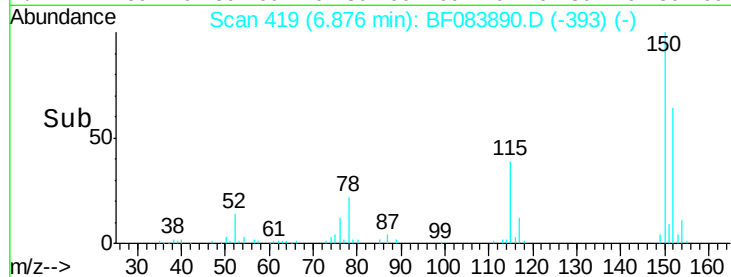
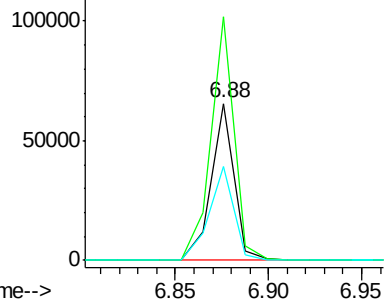
1,4-Dichlorobenzene-d4  
 Concen: 20.00 ng  
 RT: 6.88 min Scan# 419  
 Delta R.T. 0.00 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB87315BL

Tgt Ion:152 Resp: 56140  
 Ion Ratio Lower Upper  
 152 100  
 150 155.3 123.0 184.4  
 115 60.2 51.4 77.2



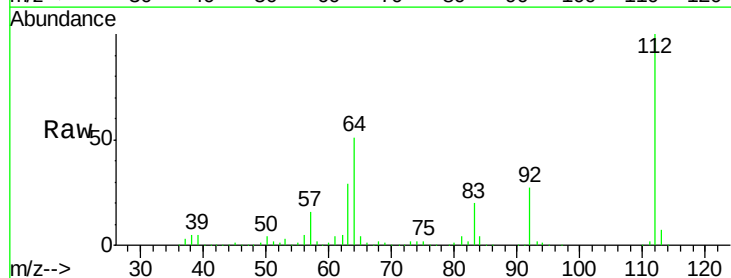
Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E



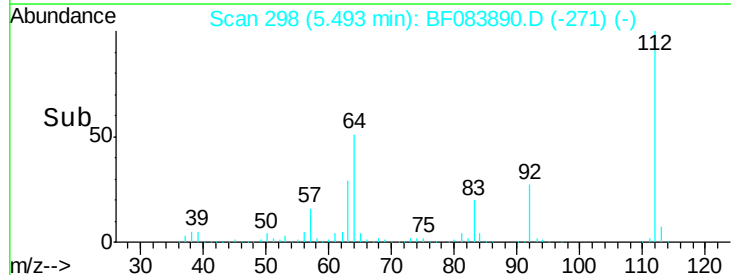
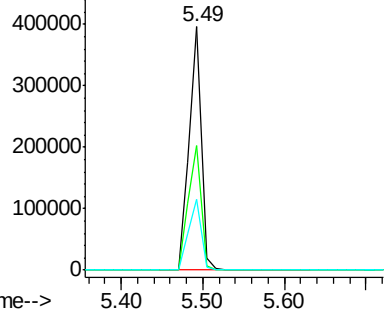
#5

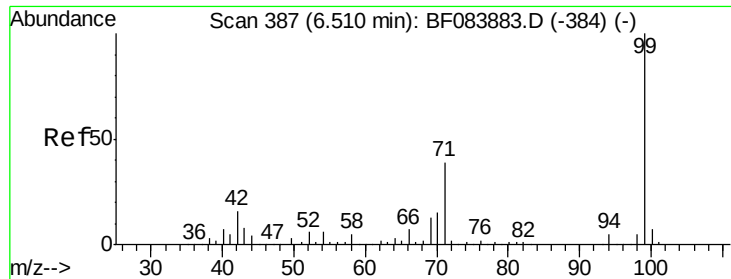
2-Fluorophenol  
 Concen: 115.10 ng  
 RT: 5.49 min Scan# 298  
 Delta R.T. 0.01 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

Tgt Ion:112 Resp: 412903  
 Ion Ratio Lower Upper  
 112 100  
 64 50.9 36.6 55.0  
 63 29.0 19.4 29.0



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: 99.61 ng

RT: 6.51 min Scan# 387

Delta R.T. 0.00 min

Lab File: BF083890.D

Acq: 18 Dec 2015 2:00

Instrument :

BNA\_F

ClientSampleId :

PB87315BL

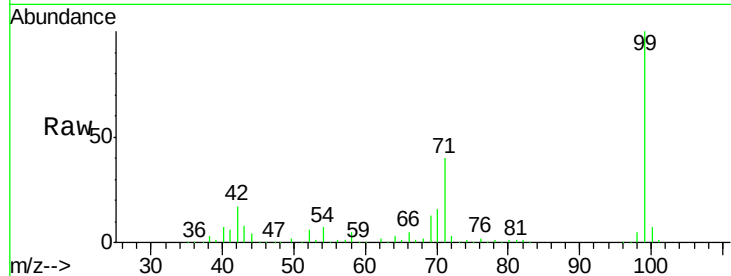
Tgt Ion: 99 Resp: 437406

Ion Ratio Lower Upper

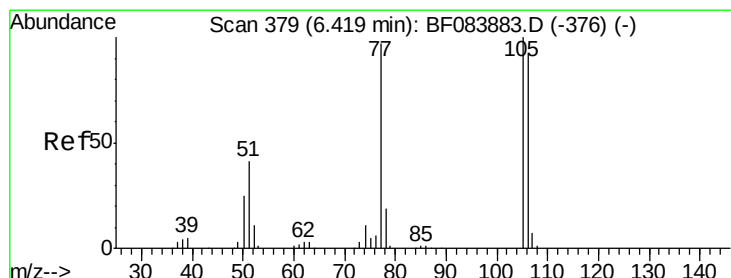
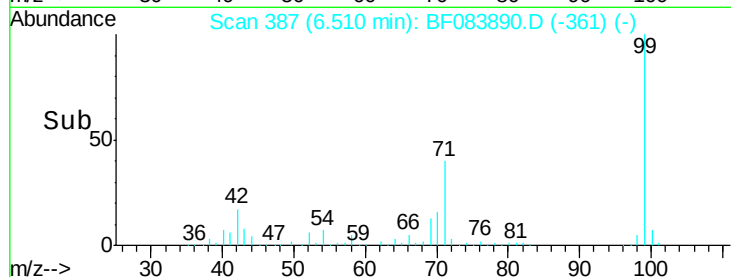
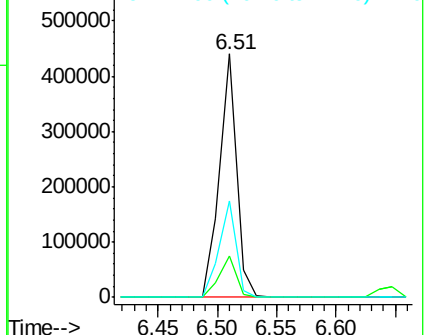
99 100

42 16.8 12.8 19.2

71 39.8 30.9 46.3



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: 4.00 ng

RT: 6.65 min Scan# 399

Delta R.T. 0.23 min

Lab File: BF083890.D

Acq: 18 Dec 2015 2:00

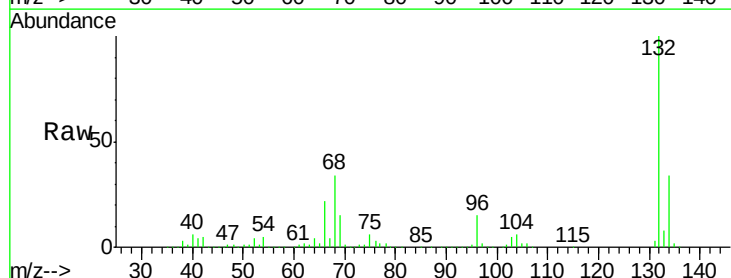
Tgt Ion: 77 Resp: 10575

Ion Ratio Lower Upper

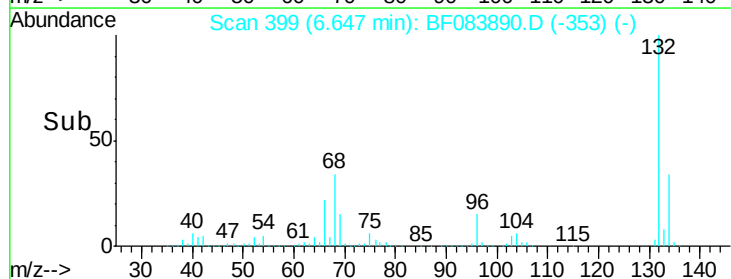
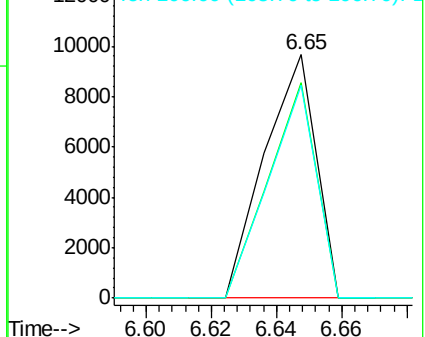
77 100

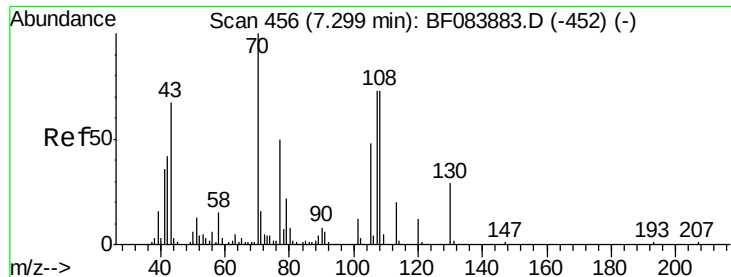
105 88.6 83.0 123.0

106 87.4 74.6 114.6



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

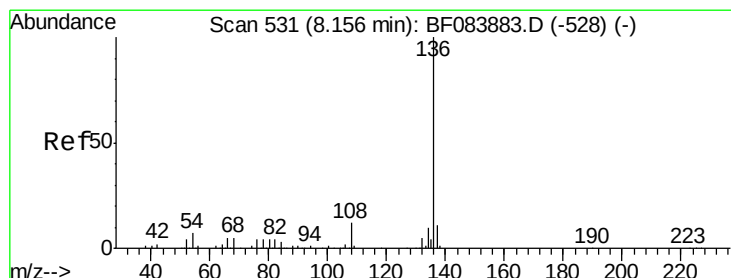
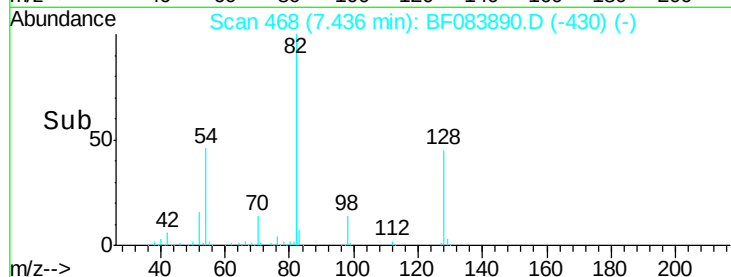
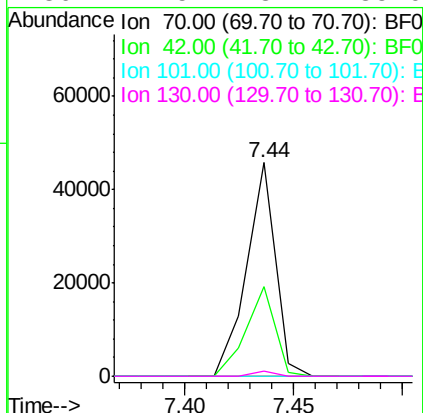
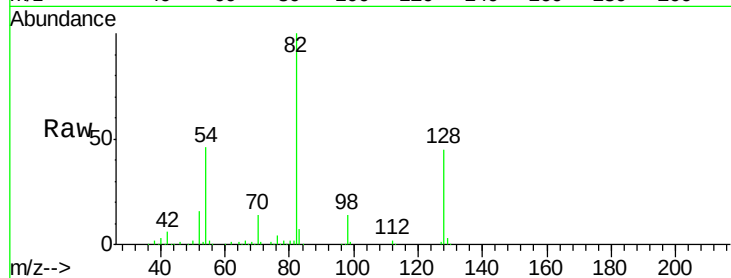




#19  
n-Nitroso-di-n-propylamine  
Concen: 16.46 ng  
RT: 7.44 min Scan# 468  
Delta R.T. 0.14 min  
Lab File: BF083890.D  
Acq: 18 Dec 2015 2:00

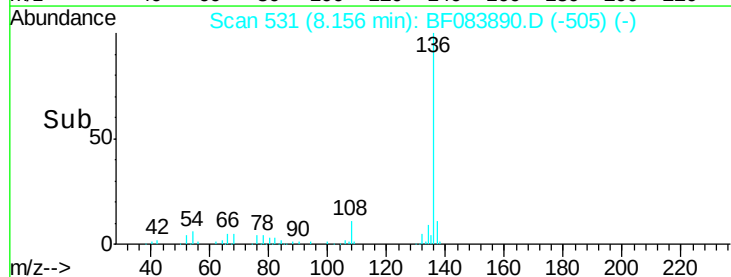
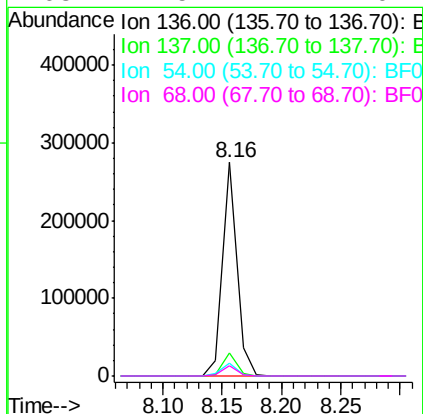
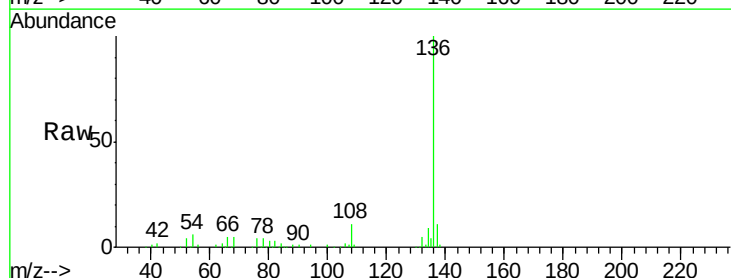
Instrument :  
BNA\_F  
ClientSampleId :  
PB87315BL

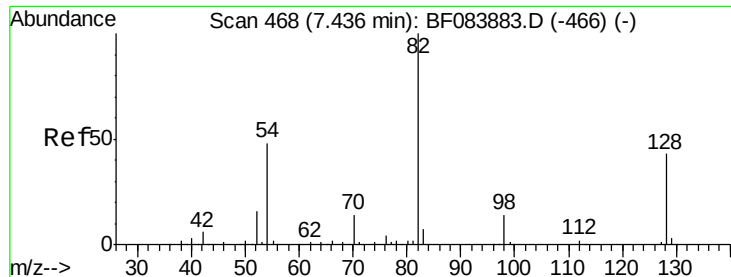
Tgt Ion: 70 Resp: 42129  
Ion Ratio Lower Upper  
70 100  
42 42.0 33.3 49.9  
101 0.0 9.3 13.9#  
130 2.5 23.4 35.0#



#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 8.16 min Scan# 531  
Delta R.T. 0.00 min  
Lab File: BF083890.D  
Acq: 18 Dec 2015 2:00

Tgt Ion: 136 Resp: 229887  
Ion Ratio Lower Upper  
136 100  
137 11.0 8.7 13.1  
54 6.1 5.8 8.8  
68 4.5 4.2 6.2

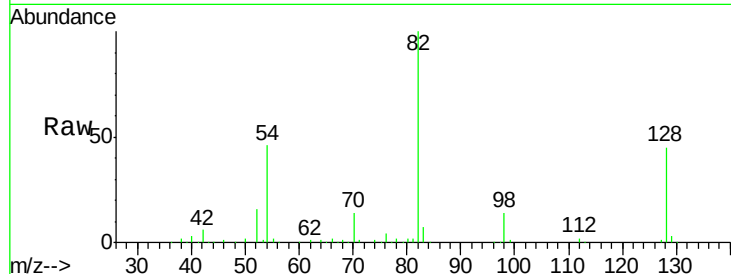




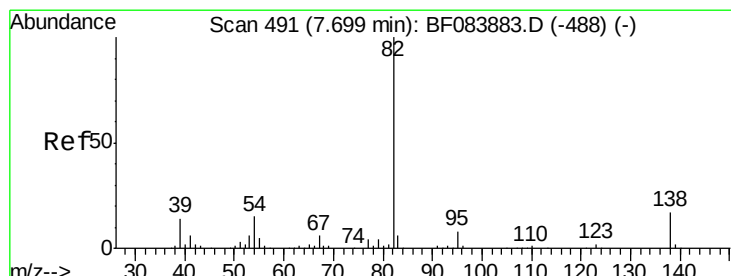
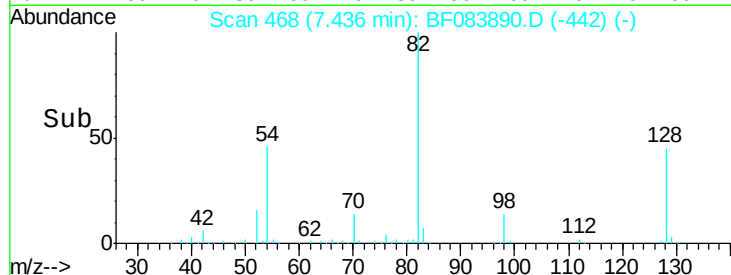
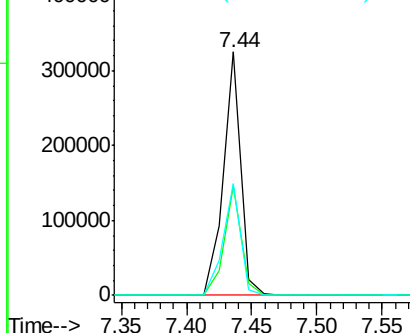
#23  
 Nitrobenzene-d5  
 Concen: 75.33 ng  
 RT: 7.44 min Scan# 468  
 Delta R.T. 0.00 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB87315BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 44.6  | 34.6  | 51.8  |
| 54      | 45.9  | 38.4  | 57.6  |

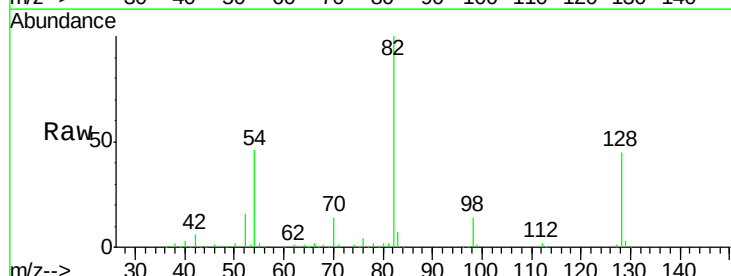


Abundance Ion 82.00 (81.70 to 82.70): BF0  
 Ion 128.00 (127.70 to 128.70): BF0  
 Ion 54.00 (53.70 to 54.70): BF0

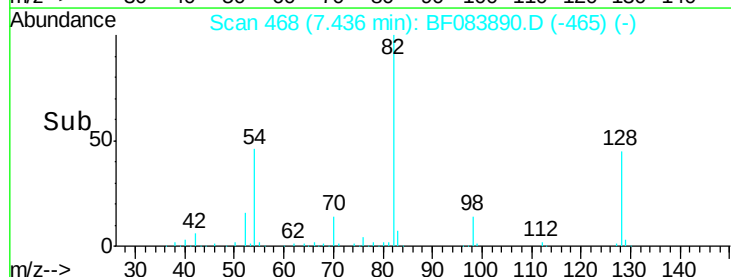
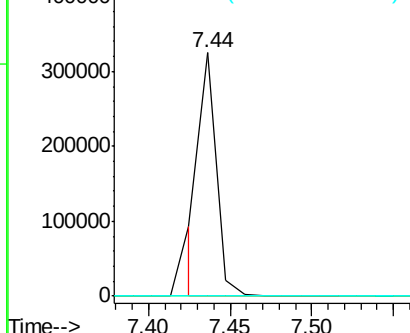


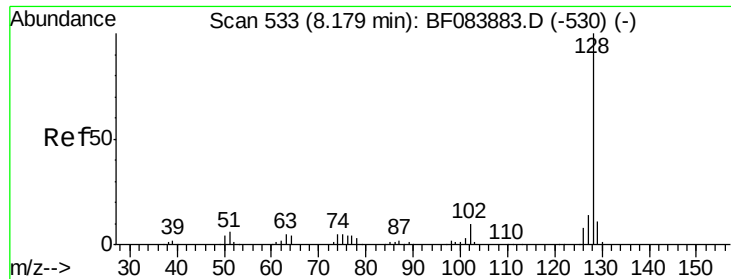
#25  
 Isophorone  
 Concen: 31.62 ng  
 RT: 7.44 min Scan# 468  
 Delta R.T. -0.26 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 95      | 0.0   | 6.6   | 10.0# |
| 138     | 0.0   | 13.6  | 20.4# |



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

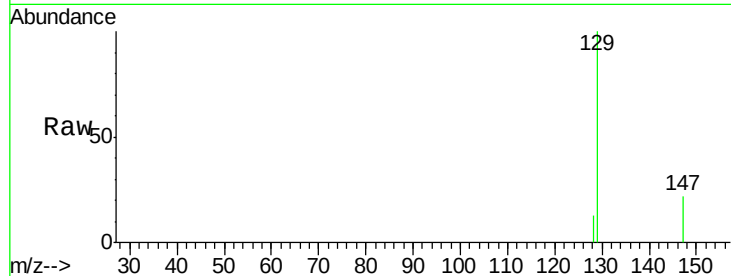




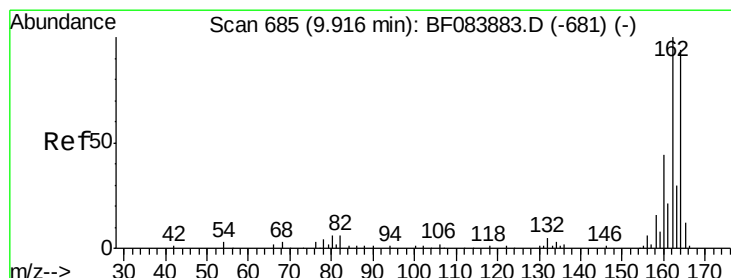
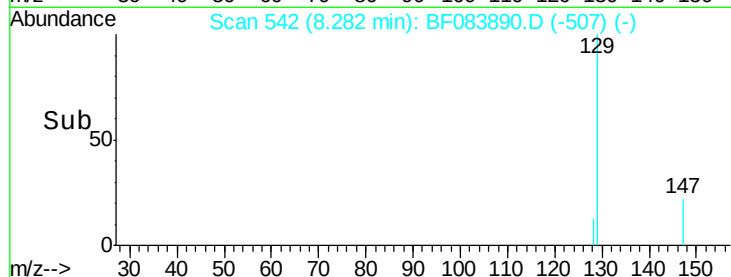
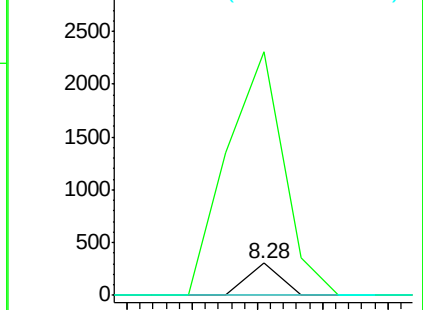
#31  
Naphthalene  
Concen: Below Cal  
RT: 8.28 min Scan# 542  
Delta R.T. 0.10 min  
Lab File: BF083890.D  
Acq: 18 Dec 2015 2:00

Instrument :  
BNA\_F  
ClientSampleId :  
PB87315BL

Tgt Ion:128 Resp: 208  
Ion Ratio Lower Upper  
128 100  
129 758.9 9.1 13.7#  
127 0.0 11.1 16.7#

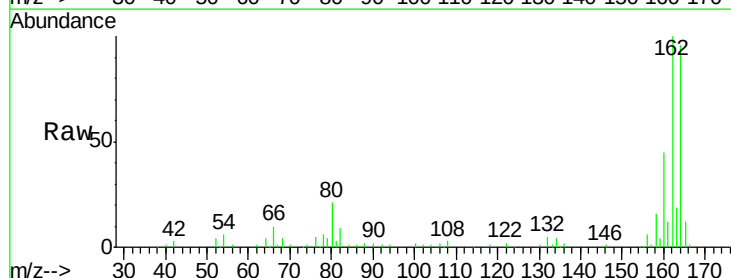


Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E

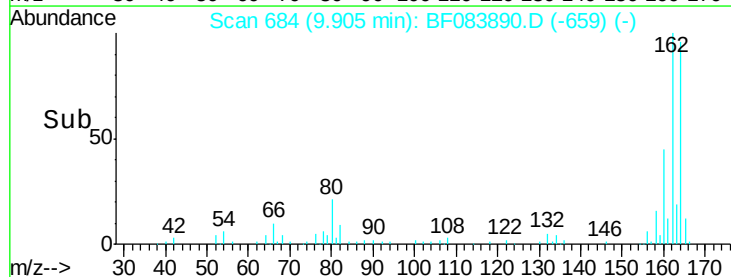
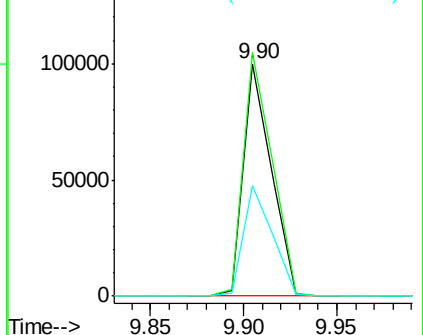


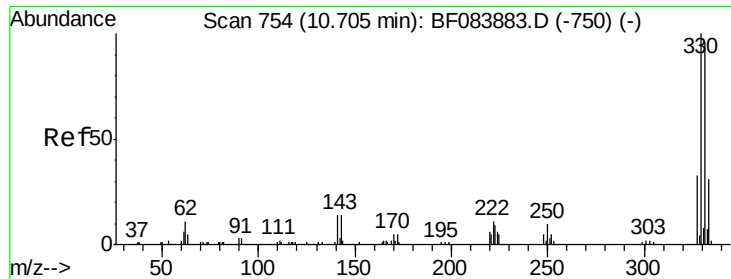
#38  
Acenaphthene-d10  
Concen: 20.00 ng  
RT: 9.90 min Scan# 684  
Delta R.T. -0.01 min  
Lab File: BF083890.D  
Acq: 18 Dec 2015 2:00

Tgt Ion:164 Resp: 104180  
Ion Ratio Lower Upper  
164 100  
162 104.6 85.1 127.7  
160 47.2 37.5 56.3



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

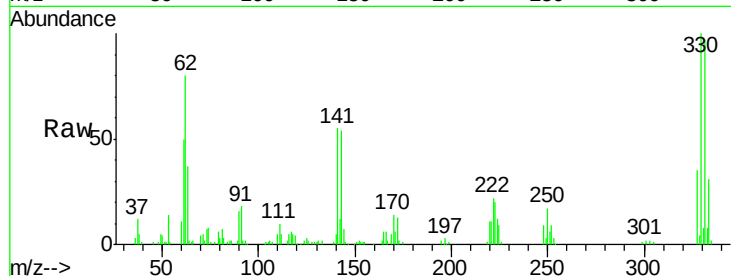




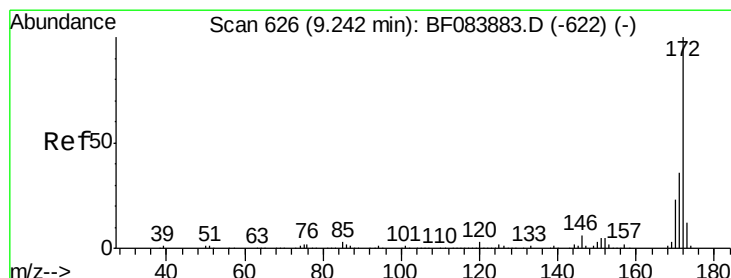
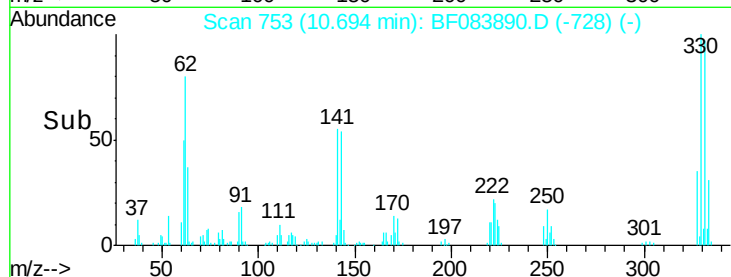
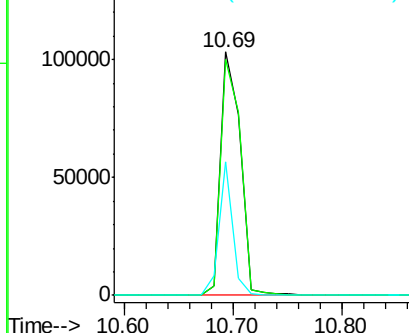
#41  
 2,4,6-Tribromophenol  
 Concen: 113.28 ng  
 RT: 10.69 min Scan# 753  
 Delta R.T. -0.01 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB87315BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 98.2  | 76.6  | 114.8 |
| 141     | 38.7  | 27.8  | 41.6  |

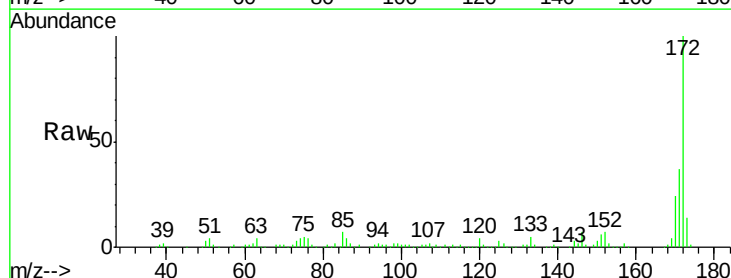


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

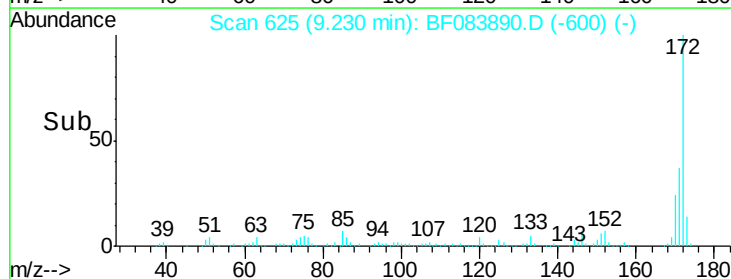
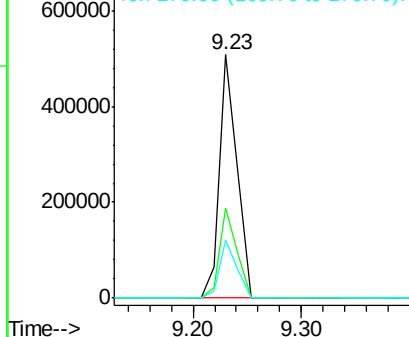


#44  
 2-Fluorobiphenyl  
 Concen: 75.40 ng  
 RT: 9.23 min Scan# 625  
 Delta R.T. -0.01 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

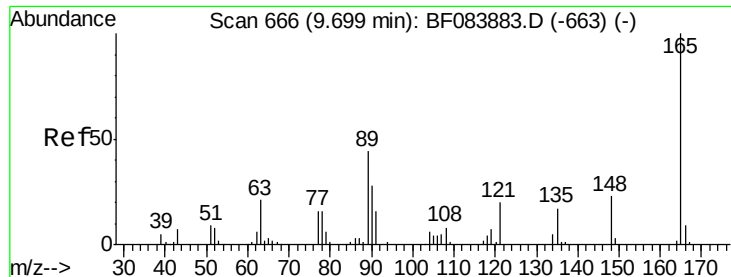
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.8  | 28.9  | 43.3  |
| 170     | 24.0  | 18.6  | 27.8  |



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



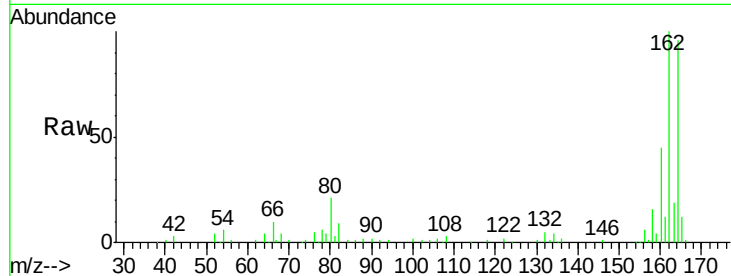




#50  
 2,6-Dinitrotoluene  
 Concen: 6.73 ng  
 RT: 9.90 min Scan# 684  
 Delta R.T. 0.21 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB87315BL

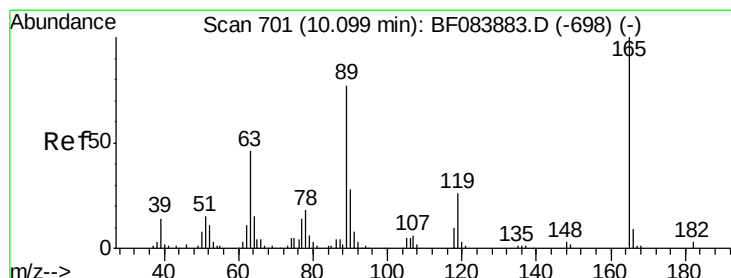
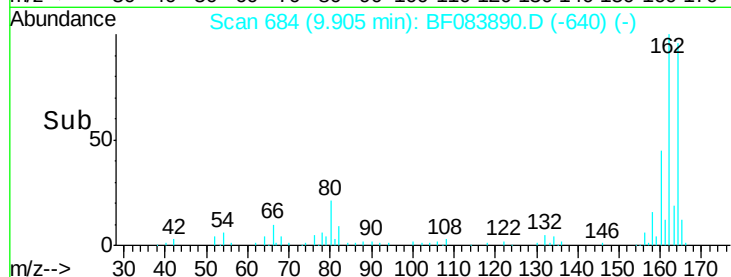
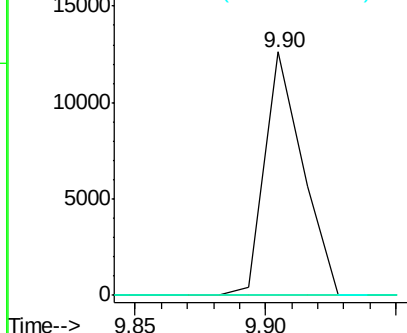
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.0   | 28.8  | 43.2# |
| 89      | 0.0   | 35.1  | 52.7# |



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: 5.25 ng  
 RT: 9.90 min Scan# 684  
 Delta R.T. -0.19 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

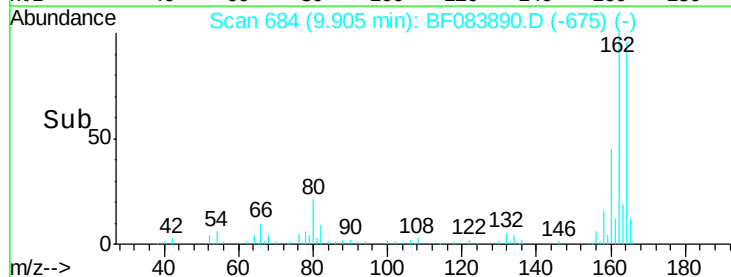
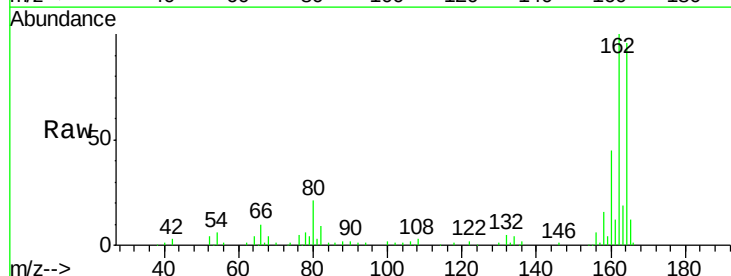
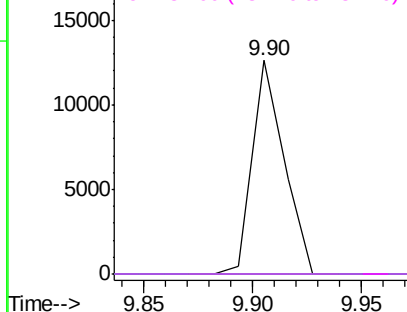
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.0   | 36.7  | 55.1# |
| 89      | 0.0   | 61.9  | 92.9# |
| 182     | 0.0   | 2.0   | 3.0#  |

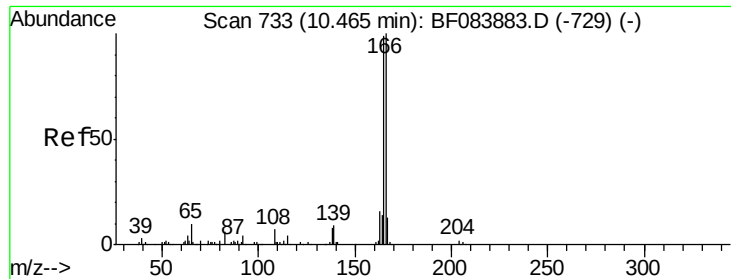
Abundance Ion 165.00 (164.70 to 165.70): E

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

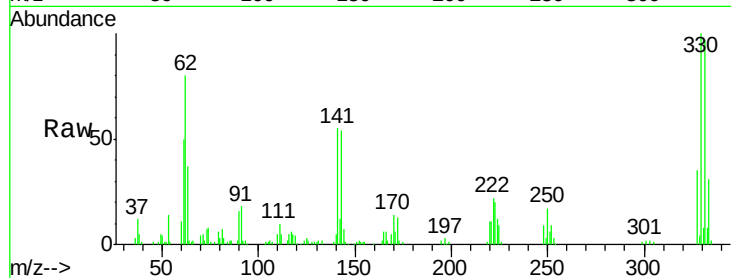




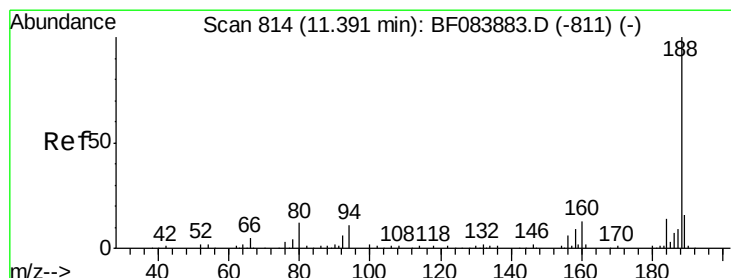
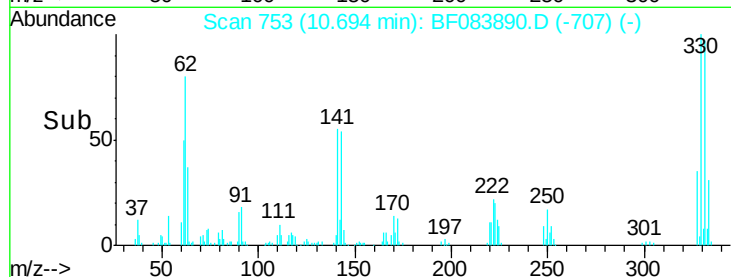
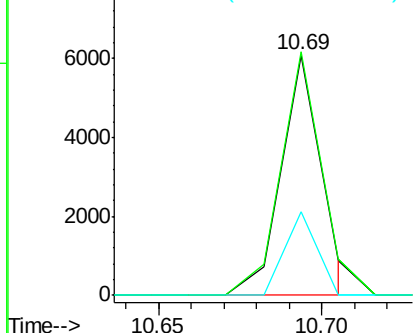
#57  
 Fluorene  
 Concen: Below Cal  
 RT: 10.69 min Scan# 753  
 Delta R.T. 0.23 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB87315BL

Tgt Ion:166 Resp: 5278  
 Ion Ratio Lower Upper  
 166 100  
 165 101.3 79.1 118.7  
 167 34.5 10.4 15.6#

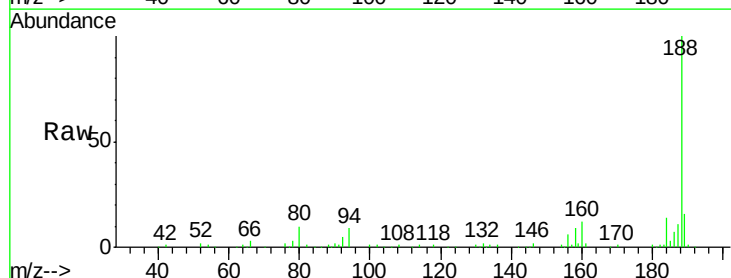


Abundance Ion 166.00 (165.70 to 166.70): E  
 Ion 165.00 (164.70 to 165.70): E  
 Ion 167.00 (166.70 to 167.70): E

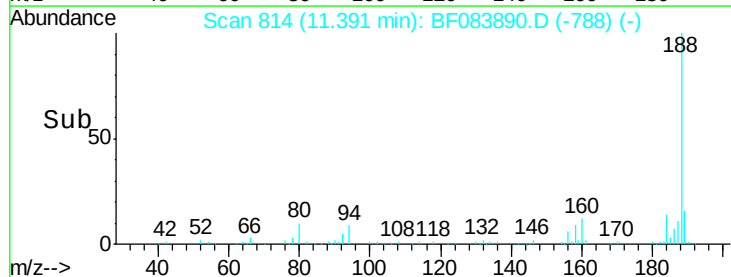
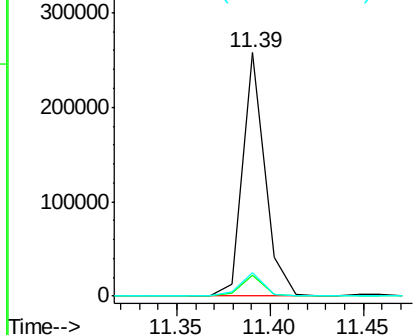


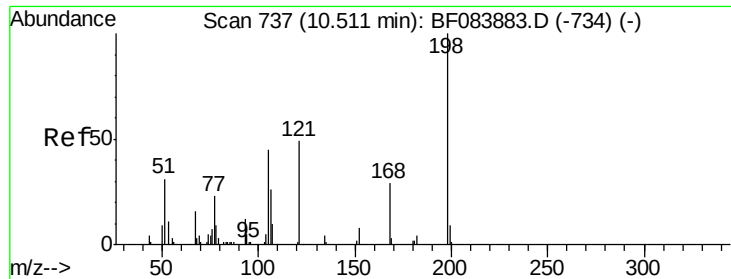
#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 11.39 min Scan# 814  
 Delta R.T. 0.00 min  
 Lab File: BF083890.D  
 Acq: 18 Dec 2015 2:00

Tgt Ion:188 Resp: 215361  
 Ion Ratio Lower Upper  
 188 100  
 94 8.8 9.0 13.4#  
 80 9.5 9.6 14.4#



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





#64

4,6-Dinitro-2-methylphenol

Concen: 4.10 ng

RT: 10.69 min Scan# 753

Delta R.T. 0.18 min

Lab File: BF083890.D

Acq: 18 Dec 2015 2:00

Instrument :

BNA\_F

ClientSampleId :

PB87315BL

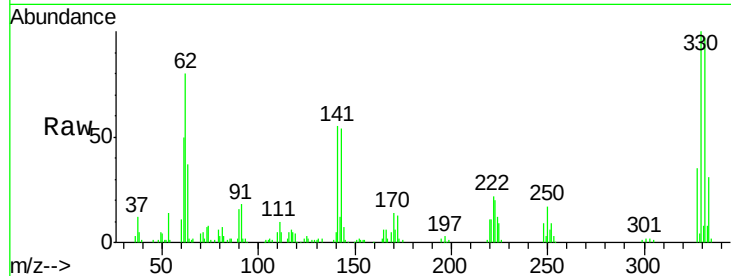
Tgt Ion:198 Resp: 246

Ion Ratio Lower Upper

198 100

51 175.5 18.9 58.9#

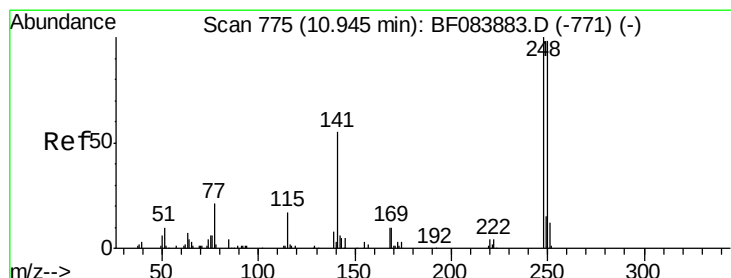
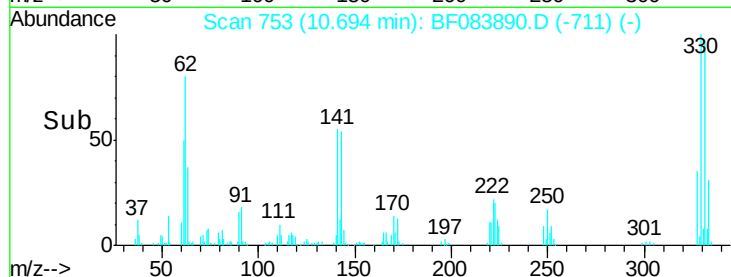
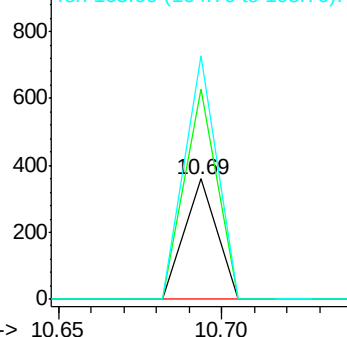
105 202.5 26.4 66.4#



Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BF0

Ion 105.00 (104.70 to 105.70): E



#66

4-Bromophenyl-phenylether

Concen: 3.30 ng

RT: 10.69 min Scan# 753

Delta R.T. -0.25 min

Lab File: BF083890.D

Acq: 18 Dec 2015 2:00

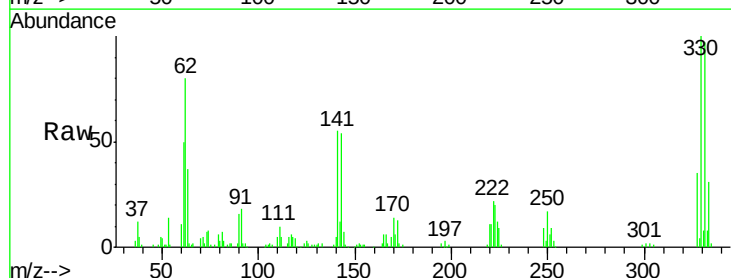
Tgt Ion:248 Resp: 8681

Ion Ratio Lower Upper

248 100

250 196.4 78.4 117.6#

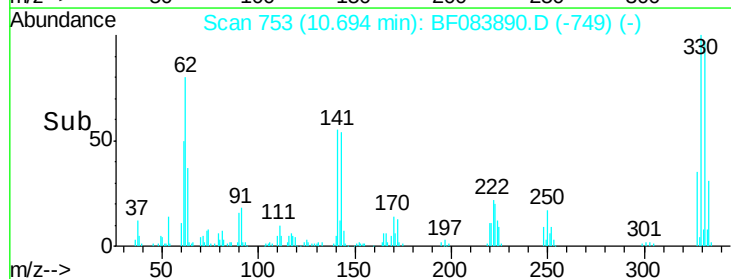
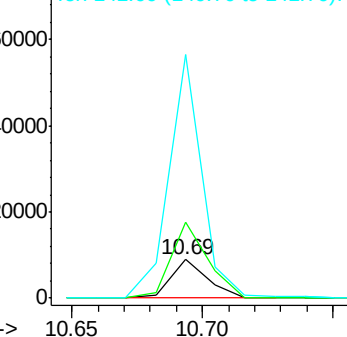
141 631.0 44.0 66.0#

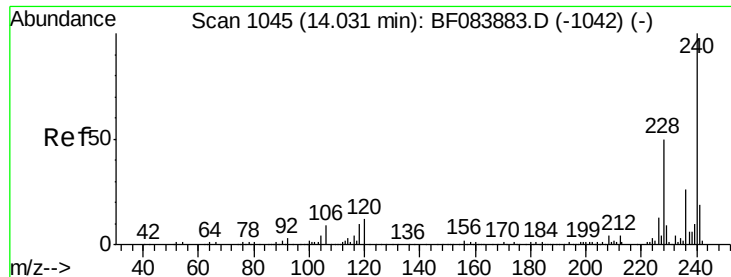


Abundance Ion 248.00 (247.70 to 248.70): E

Ion 250.00 (249.70 to 250.70): E

Ion 141.00 (140.70 to 141.70): E





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.03 min Scan# 1045

Delta R.T. 0.00 min

Lab File: BF083890.D

Acq: 18 Dec 2015 2:00

Instrument :

BNA\_F

ClientSampled :

PB87315BL

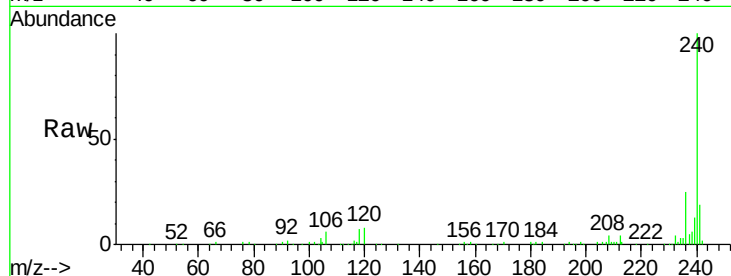
Tgt Ion:240 Resp: 198919

Ion Ratio Lower Upper

240 100

120 7.7 9.5 14.3#

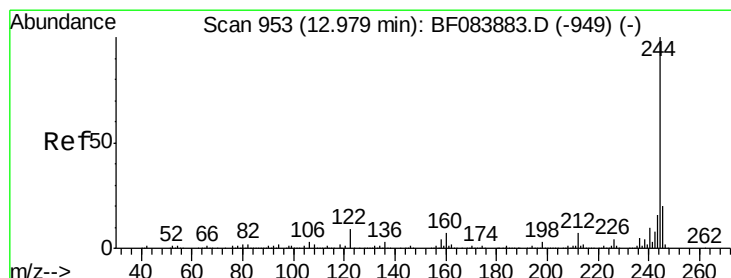
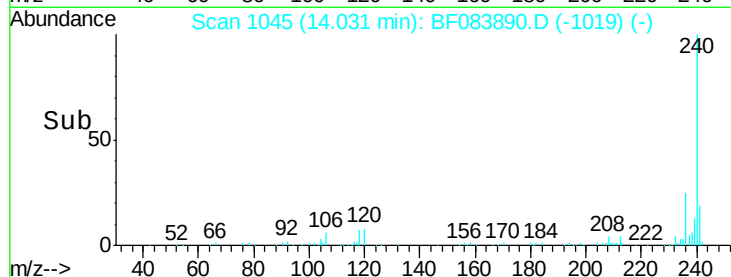
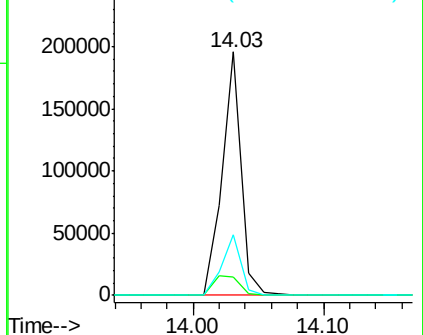
236 24.9 20.6 31.0



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



#78

Terphenyl-d14

Concen: 78.87 ng

RT: 12.98 min Scan# 953

Delta R.T. 0.00 min

Lab File: BF083890.D

Acq: 18 Dec 2015 2:00

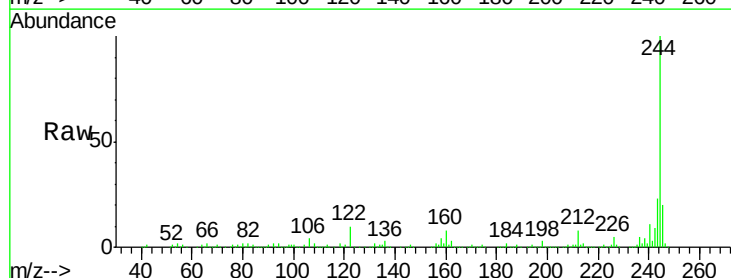
Tgt Ion:244 Resp: 674893

Ion Ratio Lower Upper

244 100

212 7.7 5.7 8.5

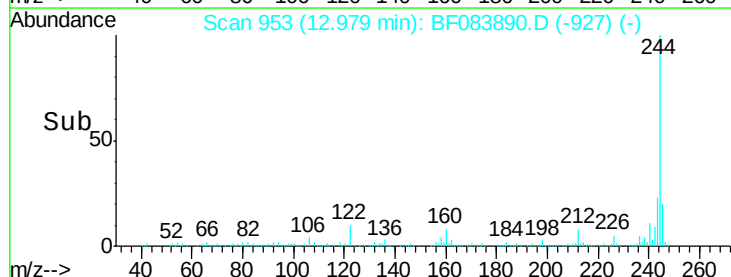
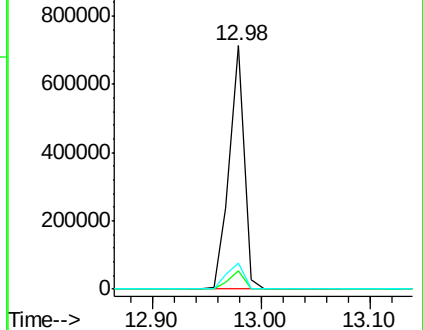
122 10.5 7.4 11.0

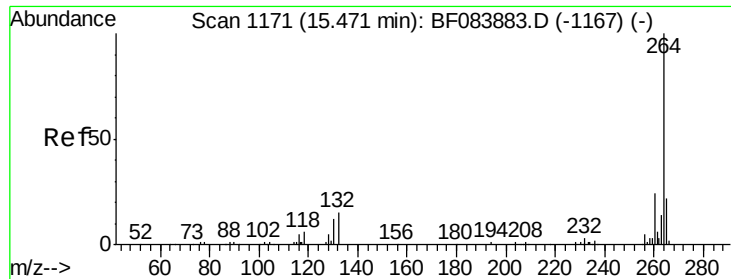


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

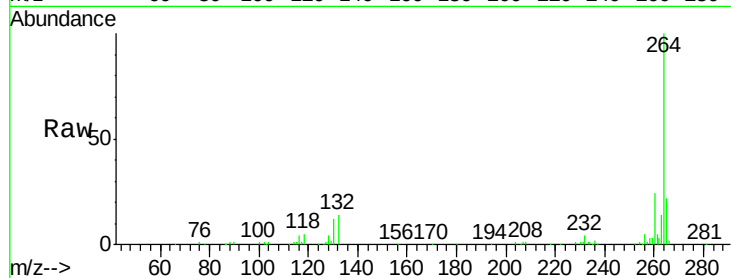




#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.47 min Scan# 1171  
Delta R.T. 0.00 min  
Lab File: BF083890.D  
Acq: 18 Dec 2015 2:00

Instrument :  
BNA\_F  
ClientSampleId :  
PB87315BL

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.5  | 19.4  | 29.2  |
| 265     | 21.8  | 17.8  | 26.6  |



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

