

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080116\  
 Data File : BF089531.D  
 Acq On : 2 Aug 2016 1:26  
 Operator : UM/SJ  
 Sample : H4287-01  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-58-0.5-1.5

Quant Time: Aug 02 01:53:47 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072716.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jul 28 16:02:32 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.48  | 152  | 31476    | 20.00 | ng    | -0.07    |
| 21) Naphthalene-d8        | 7.77  | 136  | 113853   | 20.00 | ng    | -0.06    |
| 38) Acenaphthene-d10      | 9.51  | 164  | 50596    | 20.00 | ng    | -0.07    |
| 63) Phenanthrene-d10      | 10.98 | 188  | 88453    | 20.00 | ng    | -0.07    |
| 75) Chrysene-d12          | 13.60 | 240  | 89268    | 20.00 | ng    | -0.07    |
| 86) Perylene-d12          | 14.93 | 264  | 80676    | 20.00 | ng    | -0.08    |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.04  | 112  | 130875   | 66.39 | ng    | -0.07    |
| 7) Phenol-d6                | 6.14  | 99   | 167069   | 64.13 | ng    | -0.07    |
| 23) Nitrobenzene-d5         | 7.05  | 82   | 99550    | 51.61 | ng    | -0.07    |
| 41) 2,4,6-Tribromophenol    | 10.30 | 330  | 26571    | 63.41 | ng    | -0.07    |
| 44) 2-Fluorobiphenyl        | 8.84  | 172  | 152242   | 44.16 | ng    | -0.07    |
| 78) Terphenyl-d14           | 12.56 | 244  | 228811   | 59.99 | ng    | -0.07    |

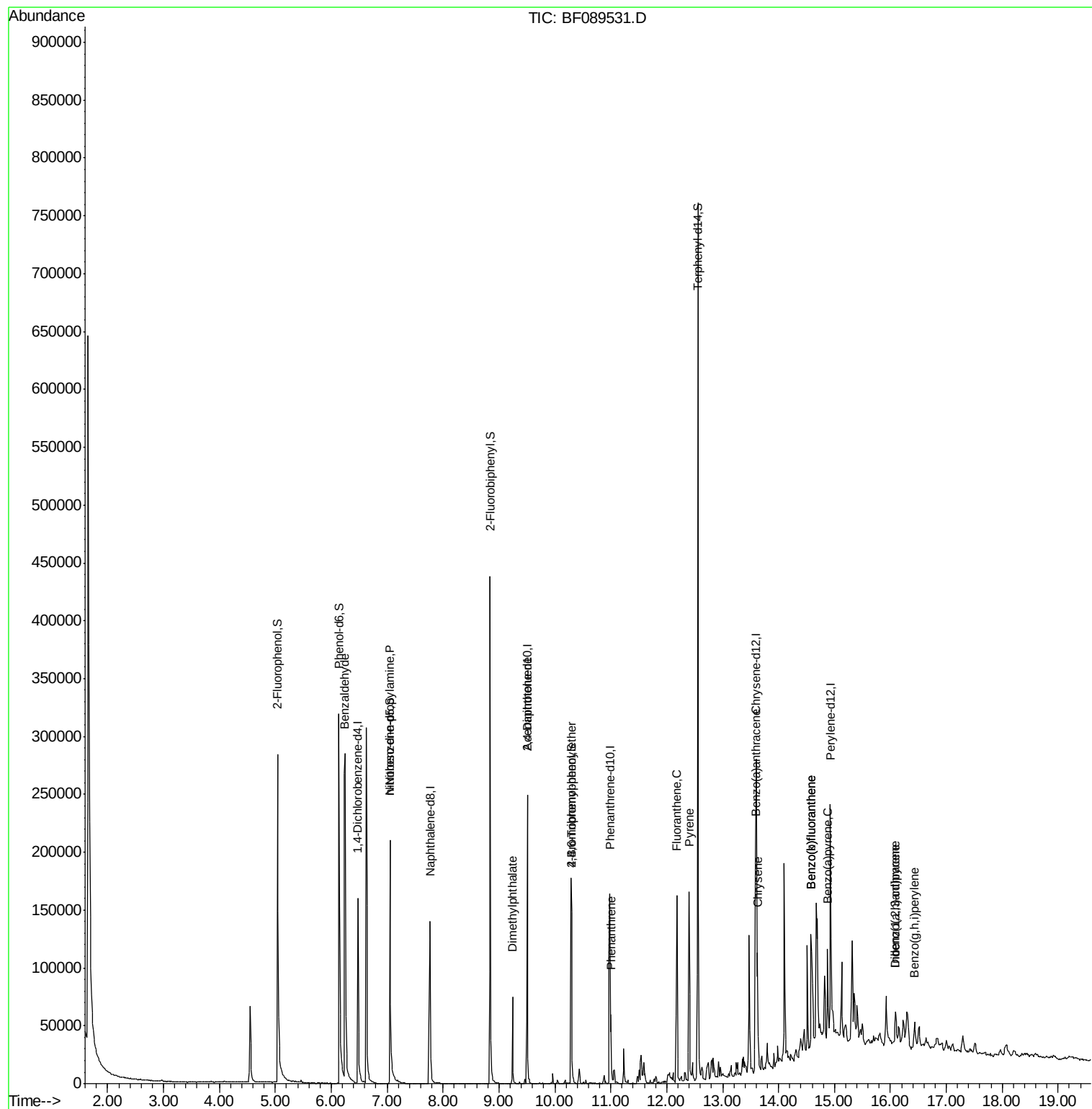
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units | Qvalue |
|--------------------------------|-------|------|----------|-----------|-------|--------|
| 2) 1,4-Dioxane                 | 2.03  | 88   | 651      | Below Cal | #     | 34     |
| 9) Benzaldehyde                | 6.24  | 77   | 2956     | 2.32      | ng    | 71     |
| 19) n-Nitroso-di-n-propylamine | 7.05  | 70   | 12040    | 7.66      | ng    | 79     |
| 49) Dimethylphthalate          | 9.24  | 163  | 30939    | 8.03      | ng    | 99     |
| 56) 2,4-Dinitrotoluene         | 9.51  | 165  | 6279     | 6.03      | ng    | 7      |
| 66) 4-Bromophenyl-phenylether  | 10.30 | 248  | 1886     | 2.23      | ng    | 1      |
| 70) Phenanthrene               | 11.01 | 178  | 27774    | 6.09      | ng    | 99     |
| 74) Fluoranthene               | 12.18 | 202  | 77368    | 16.12     | ng    | 100    |
| 77) Pyrene                     | 12.40 | 202  | 76216    | 11.27     | ng    | 98     |
| 80) Benzo(a)anthracene         | 13.59 | 228  | 44991    | 8.93      | ng    | 97     |
| 82) Chrysene                   | 13.62 | 228  | 34000    | 6.34      | ng    | 99     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.09 | 276  | 20147    | 5.28      | ng    | 95     |
| 87) Benzo(b)fluoranthene       | 14.58 | 252  | 67354    | 13.44     | ng    | # 95   |
| 88) Benzo(k)fluoranthene       | 14.58 | 252  | 67354    | 14.62     | ng    | 98     |
| 89) Benzo(a)pyrene             | 14.88 | 252  | 34175    | 7.60      | ng    | 97     |
| 90) Dibenzo(a,h)anthracene     | 16.09 | 278  | 7992     | 2.26      | ng    | # 77   |
| 91) Benzo(g,h,i)perylene       | 16.43 | 276  | 19090    | 5.49      | ng    | 94     |

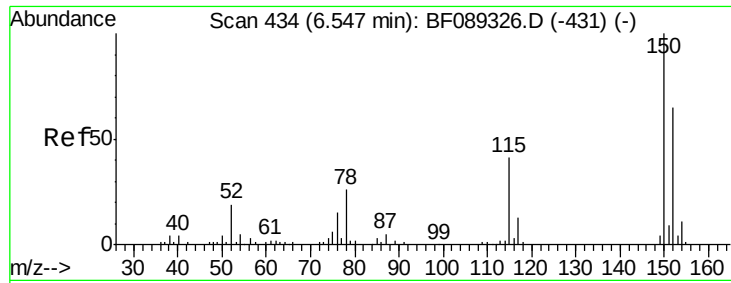
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF080116\  
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Quant Time: Aug 02 01:53:47 2016  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF072716.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jul 28 16:02:32 2016  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.48 min Scan# 428

Delta R.T. -0.07 min

Lab File: BF089531.D

Acq: 2 Aug 2016 1:26

Instrument :

BNA\_F

ClientSampleId :

SB-58-0.5-1.5

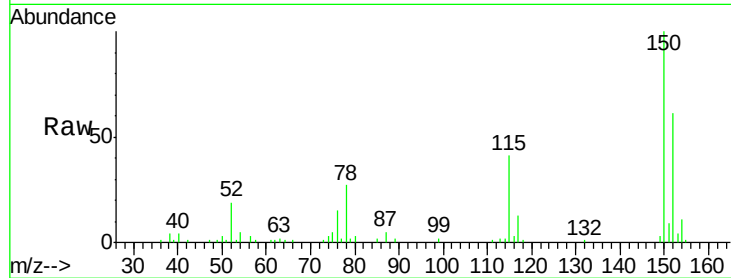
Tgt Ion:152 Resp: 31476

Ion Ratio Lower Upper

152 100

150 163.8 129.5 194.3

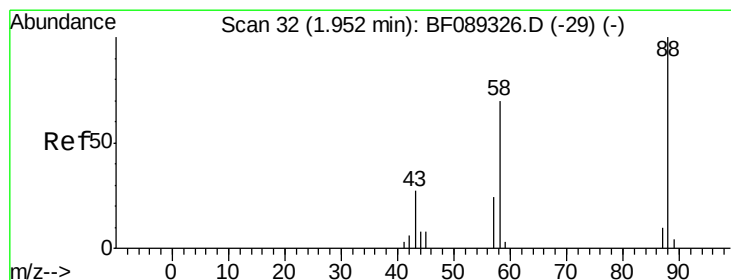
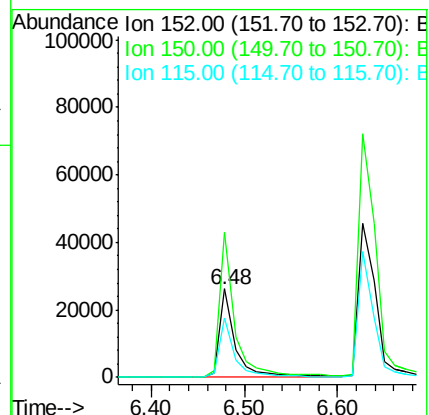
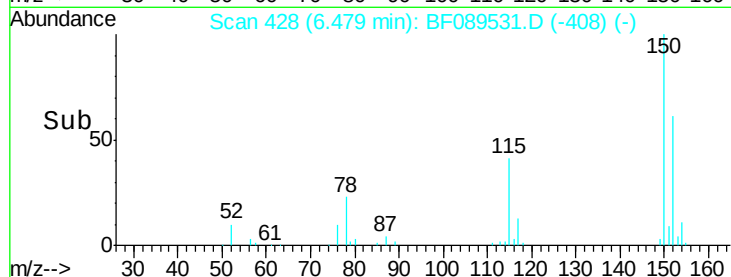
115 66.8 51.4 77.2



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



#2

1,4-Dioxane

Concen: Below Cal

RT: 2.03 min Scan# 39

Delta R.T. 0.08 min

Lab File: BF089531.D

Acq: 2 Aug 2016 1:26

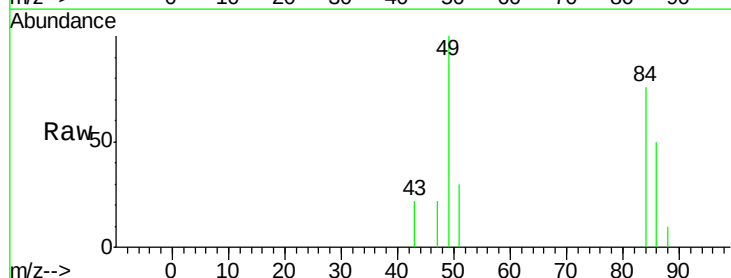
Tgt Ion: 88 Resp: 651

Ion Ratio Lower Upper

88 100

58 0.0 53.2 79.8#

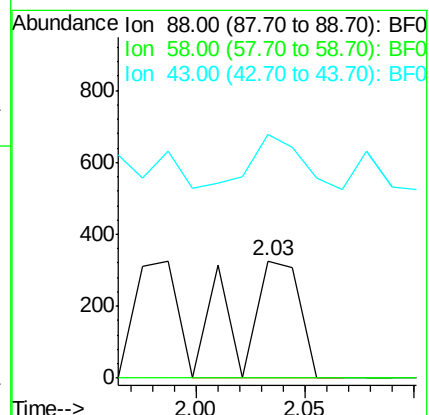
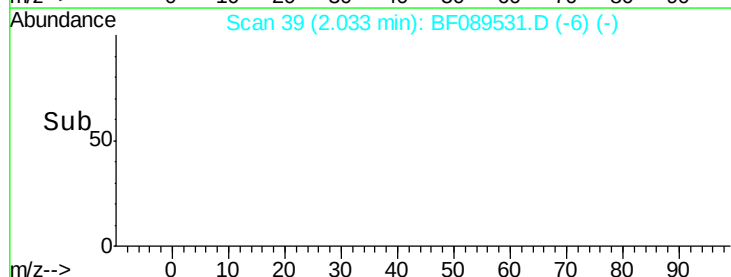
43 36.1 20.6 31.0#

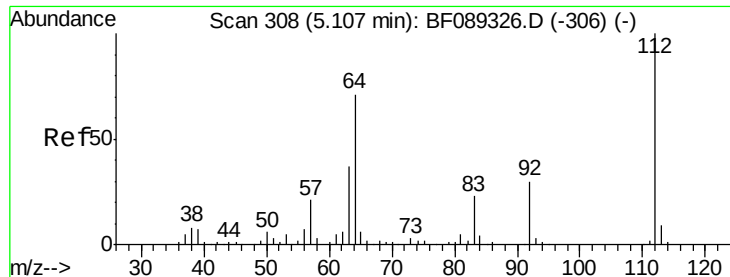


Abundance Ion 88.00 (87.70 to 88.70): BF0

Ion 58.00 (57.70 to 58.70): BF0

Ion 43.00 (42.70 to 43.70): BF0





#5

2-Fluorophenol

Concen: 66.39 ng

RT: 5.04 min Scan# 302

Delta R.T. -0.07 min

Lab File: BF089531.D

Acq: 2 Aug 2016 1:26

Instrument :

BNA\_F

ClientSampleId :

SB-58-0.5-1.5

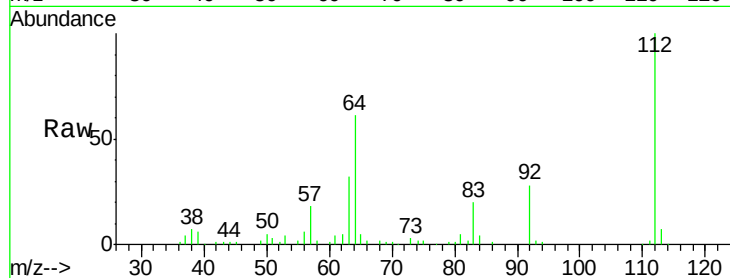
Tgt Ion: 112 Resp: 130875

Ion Ratio Lower Upper

112 100

64 61.1 55.0 82.6

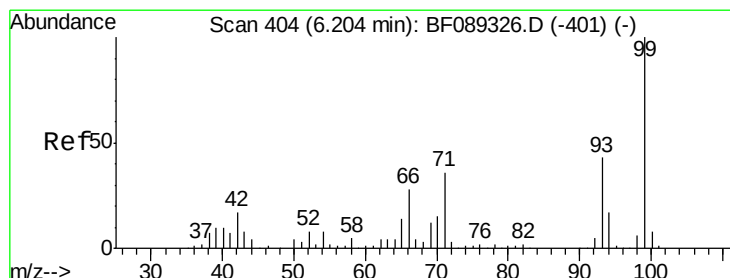
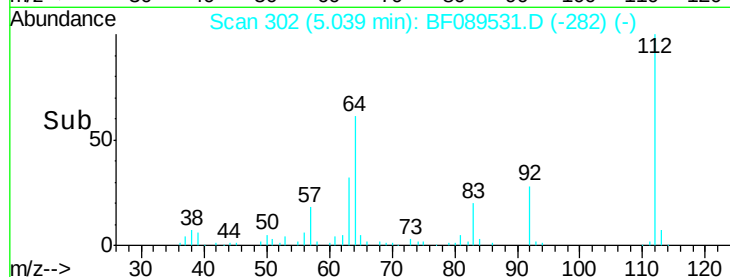
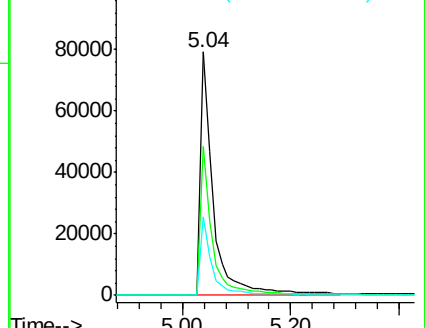
63 32.2 29.4 44.2



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: 64.13 ng

RT: 6.14 min Scan# 398

Delta R.T. -0.07 min

Lab File: BF089531.D

Acq: 2 Aug 2016 1:26

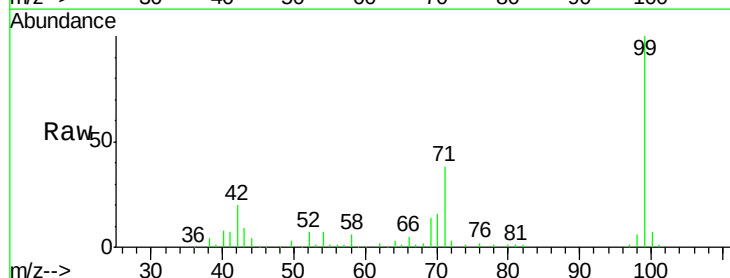
Tgt Ion: 99 Resp: 167069

Ion Ratio Lower Upper

99 100

42 19.8 13.6 20.4

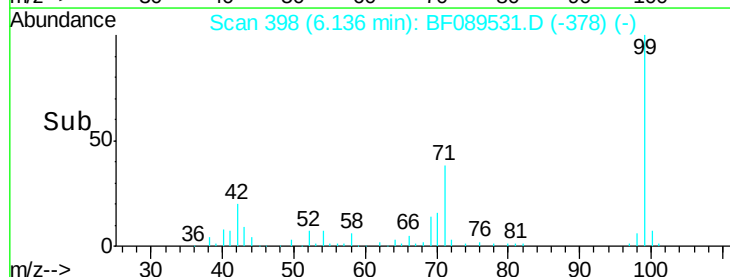
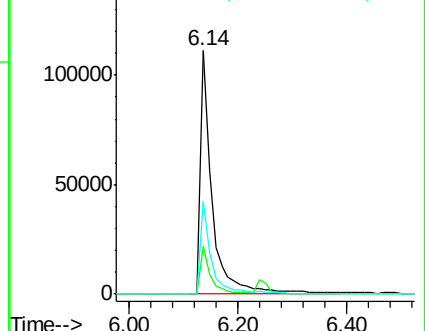
71 38.2 29.4 44.2

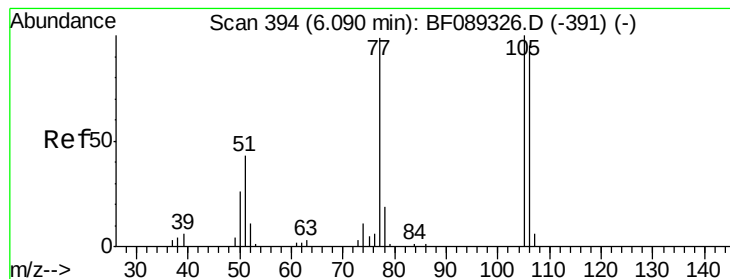


Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0





#9

Benzaldehyde

Concen: 2.32 ng

RT: 6.24 min Scan# 407

Delta R.T. 0.15 min

Lab File: BF089531.D

Acq: 2 Aug 2016 1:26

Instrument :

BNA\_F

ClientSampleId :

SB-58-0.5-1.5

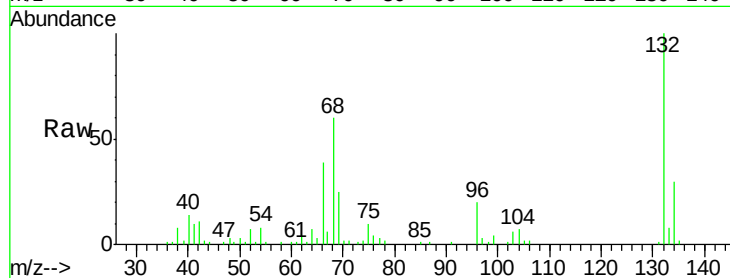
Tgt Ion: 77 Resp: 2956

Ion Ratio Lower Upper

77 100

105 78.2 82.9 122.9#

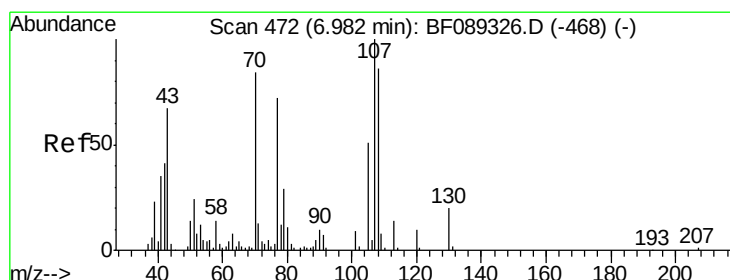
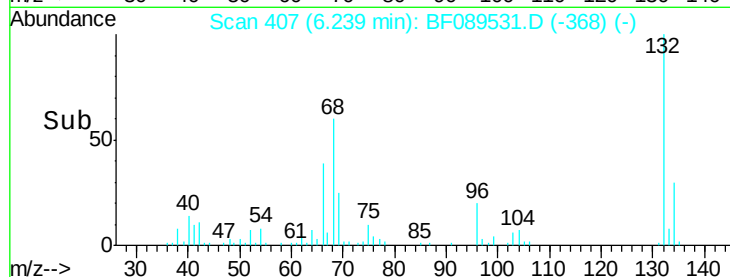
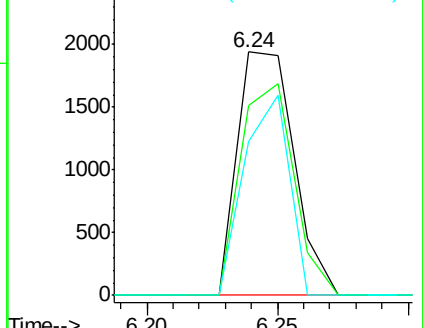
106 63.2 75.9 115.9#



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: 7.66 ng

RT: 7.05 min Scan# 478

Delta R.T. 0.07 min

Lab File: BF089531.D

Acq: 2 Aug 2016 1:26

Tgt Ion: 70 Resp: 12040

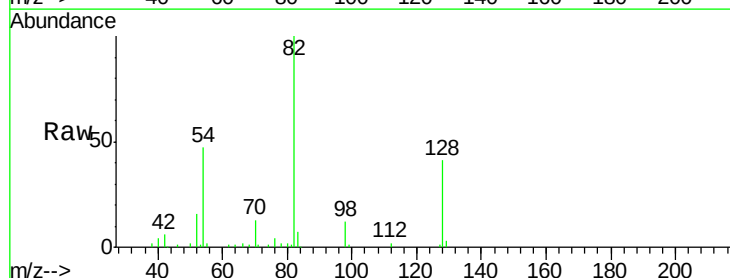
Ion Ratio Lower Upper

70 100

42 43.8 38.6 57.8

101 0.0 8.3 12.5#

130 0.0 19.0 28.4#

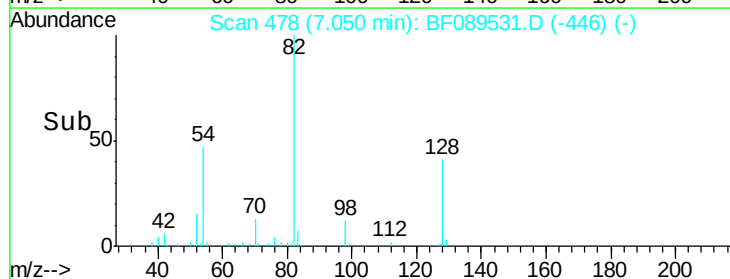
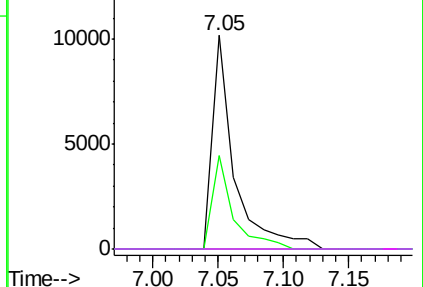


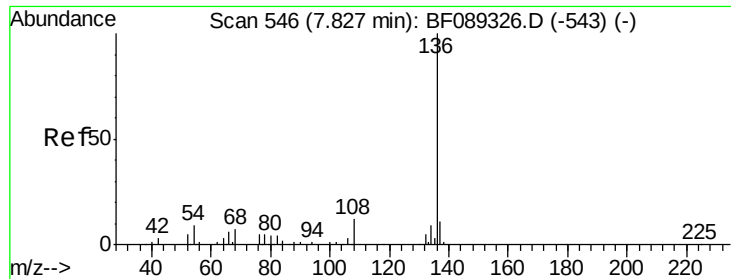
Abundance Ion 70.00 (69.70 to 70.70): BF0

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

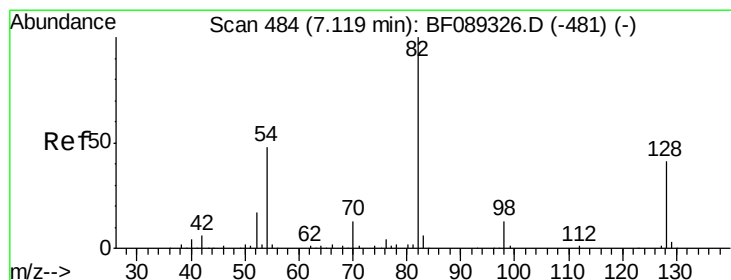
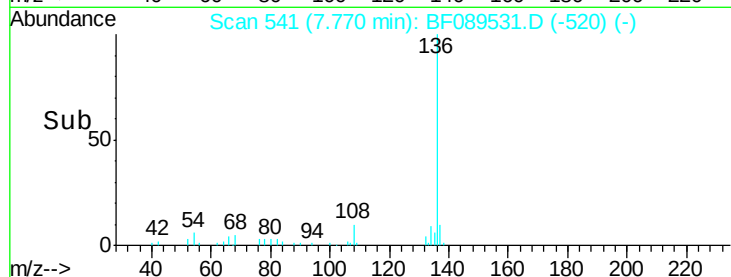
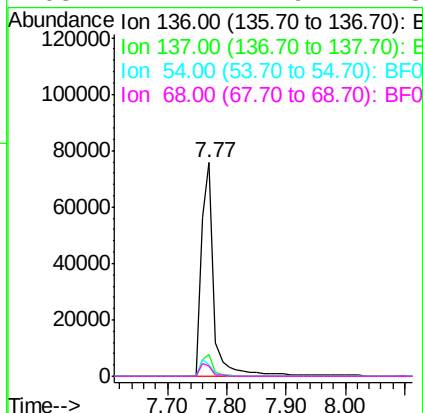
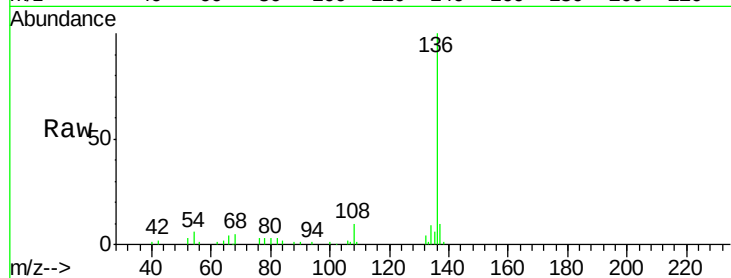




#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 7.77 min Scan# 541  
Delta R.T. -0.06 min  
Lab File: BF089531.D  
Acq: 2 Aug 2016 1:26

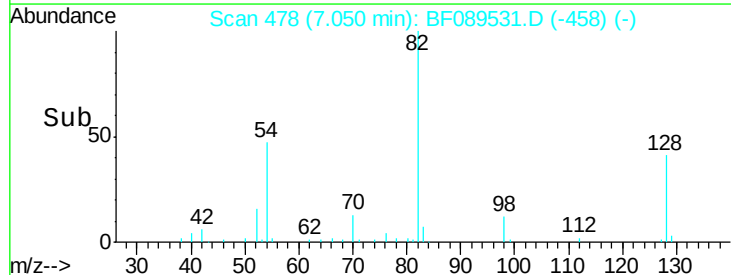
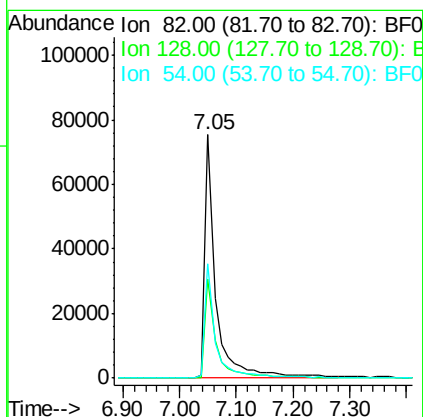
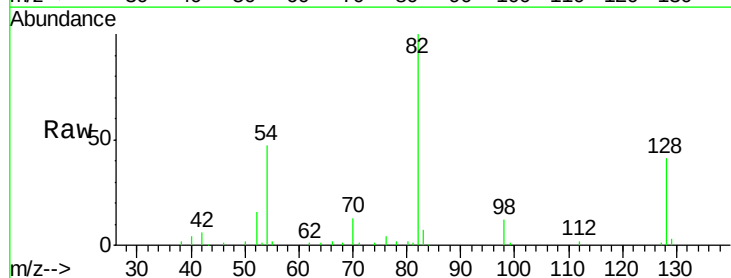
Instrument :  
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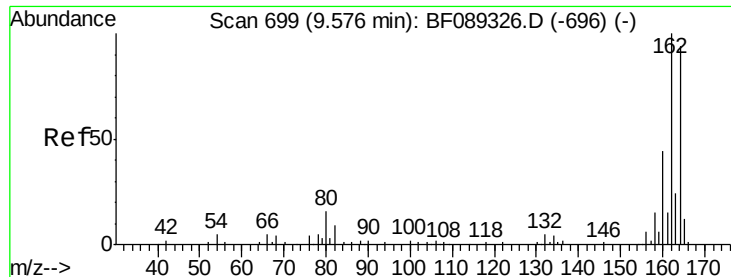
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 136   | Resp: | 113853 |
| Ion Ratio | Lower | Upper |        |
| 136       | 100   |       |        |
| 137       | 10.3  | 8.6   | 13.0   |
| 54        | 5.6   | 7.0   | 10.4#  |
| 68        | 4.7   | 4.9   | 7.3#   |



#23  
Nitrobenzene-d5  
Concen: 51.61 ng  
RT: 7.05 min Scan# 478  
Delta R.T. -0.07 min  
Lab File: BF089531.D  
Acq: 2 Aug 2016 1:26

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 82    | Resp: | 99550 |
| Ion Ratio | Lower | Upper |       |
| 82        | 100   |       |       |
| 128       | 40.6  | 32.5  | 48.7  |
| 54        | 47.1  | 38.8  | 58.2  |

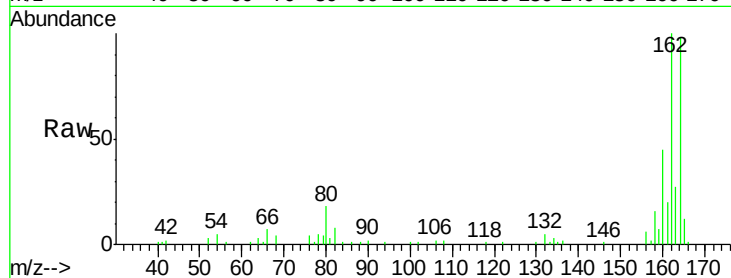




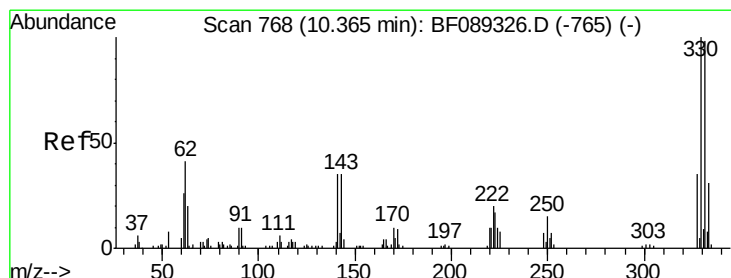
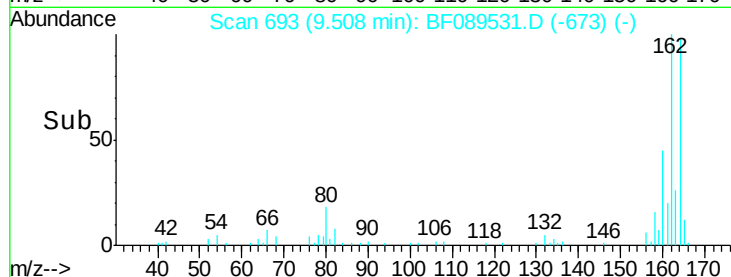
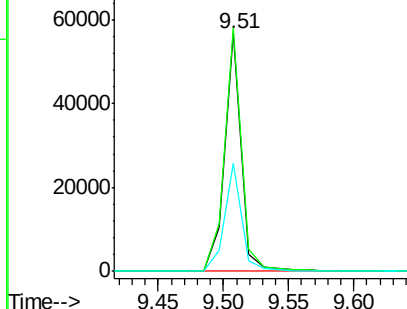
#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.51 min Scan# 693  
 Delta R.T. -0.07 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-58-0.5-1.5

Tgt Ion:164 Resp: 50596  
 Ion Ratio Lower Upper  
 164 100  
 162 102.3 83.7 125.5  
 160 45.6 37.8 56.6

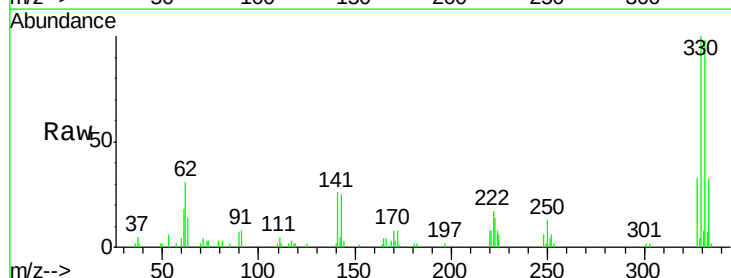


Abundance Ion 164.00 (163.70 to 164.70): E  
 Ion 162.00 (161.70 to 162.70): E  
 Ion 160.00 (159.70 to 160.70): E

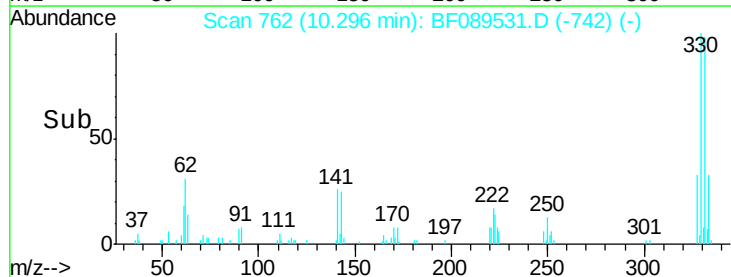
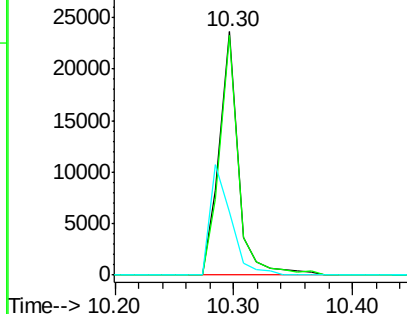


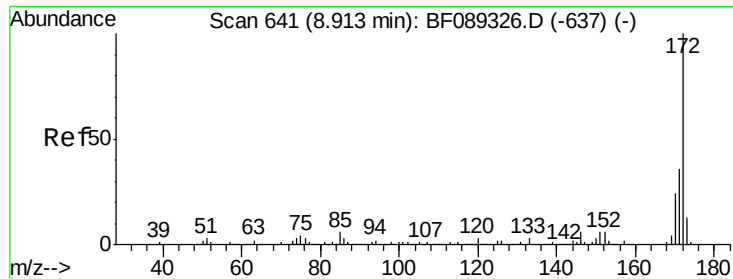
#41  
 2,4,6-Tribromophenol  
 Concen: 63.41 ng  
 RT: 10.30 min Scan# 762  
 Delta R.T. -0.07 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

Tgt Ion:330 Resp: 26571  
 Ion Ratio Lower Upper  
 330 100  
 332 96.4 76.8 115.2  
 141 49.1 37.3 55.9



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

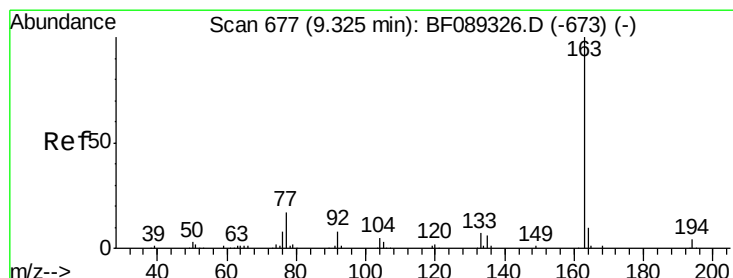
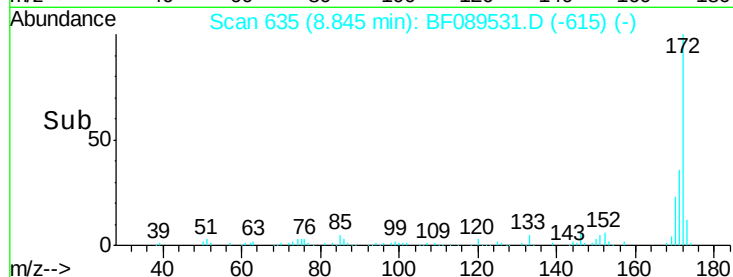
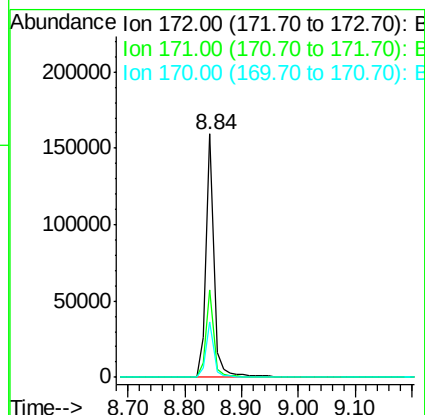
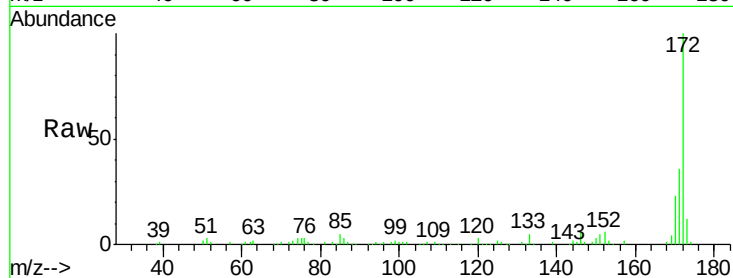




#44  
2-Fluorobiphenyl  
Concen: 44.16 ng  
RT: 8.84 min Scan# 635  
Delta R.T. -0.07 min  
Lab File: BF089531.D  
Acq: 2 Aug 2016 1:26

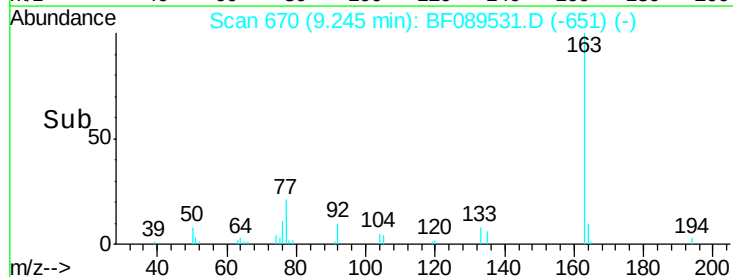
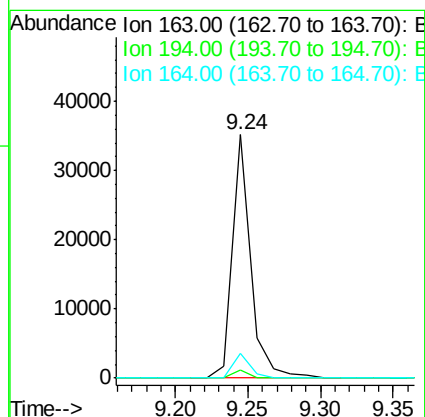
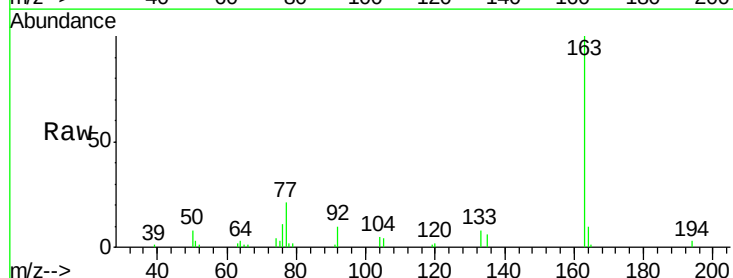
Instrument :  
BNA\_F  
ClientSampleId :  
SB-58-0.5-1.5

Tgt Ion:172 Resp: 152242  
Ion Ratio Lower Upper  
172 100  
171 35.7 29.2 43.8  
170 22.8 19.2 28.8

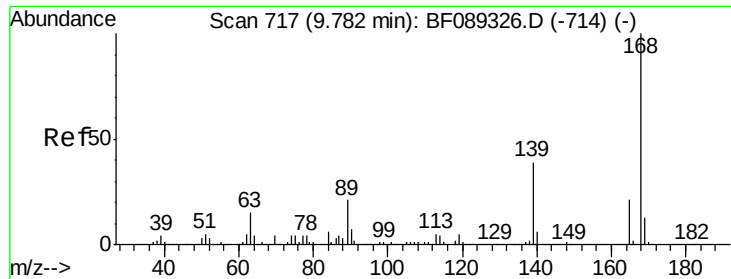


#49  
Dimethylphthalate  
Concen: 8.03 ng  
RT: 9.24 min Scan# 670  
Delta R.T. -0.08 min  
Lab File: BF089531.D  
Acq: 2 Aug 2016 1:26

Tgt Ion:163 Resp: 30939  
Ion Ratio Lower Upper  
163 100  
194 3.3 2.8 4.2  
164 10.3 7.8 11.8



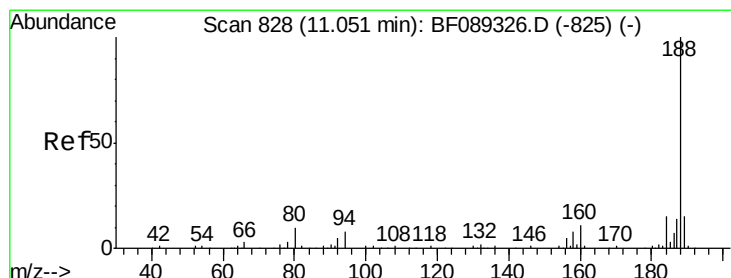
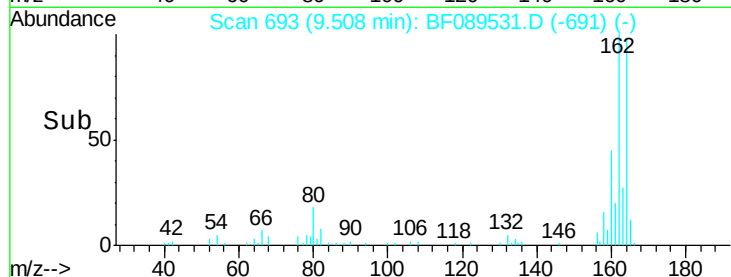
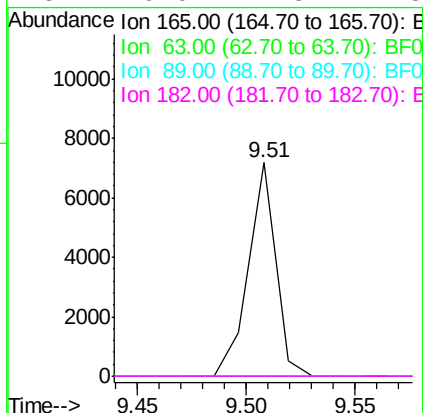
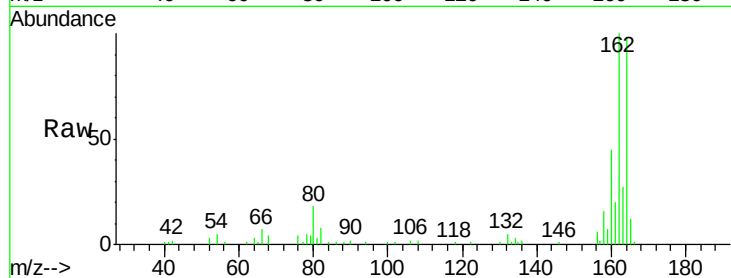




#56  
 2,4-Dinitrotoluene  
 Concen: 6.03 ng  
 RT: 9.51 min Scan# 693  
 Delta R.T. -0.27 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

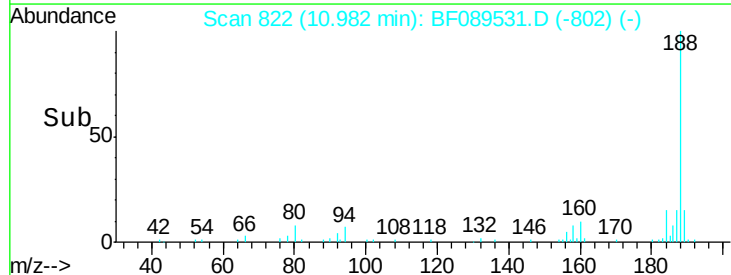
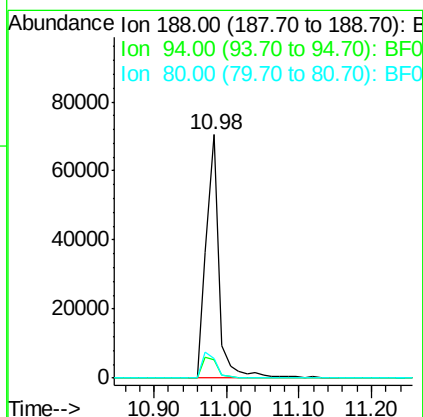
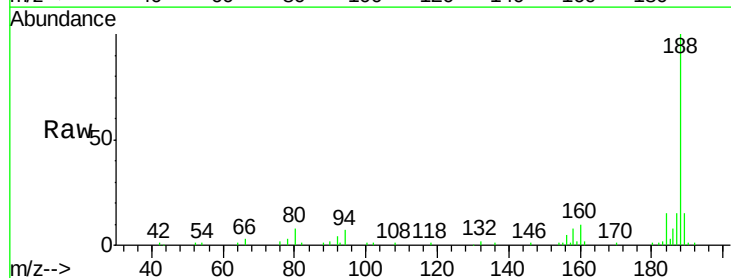
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-58-0.5-1.5

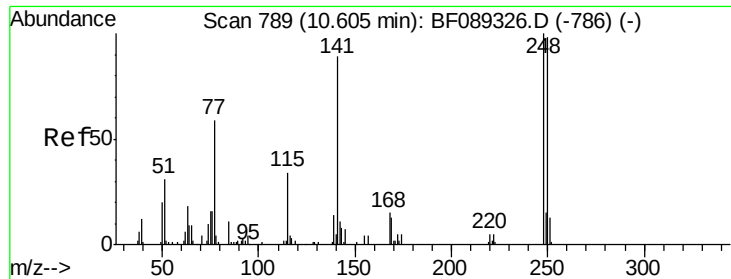
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 165   | Resp: | 6279   |
| Ion Ratio | Lower | Upper |        |
| 165       | 100   |       |        |
| 63        | 0.0   | 58.2  | 87.2#  |
| 89        | 0.0   | 79.1  | 118.7# |
| 182       | 0.0   | 1.8   | 2.8#   |



#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 10.98 min Scan# 822  
 Delta R.T. -0.07 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 188   | Resp: | 88453 |
| Ion Ratio | Lower | Upper |       |
| 188       | 100   |       |       |
| 94        | 7.3   | 6.5   | 9.7   |
| 80        | 8.0   | 7.2   | 10.8  |

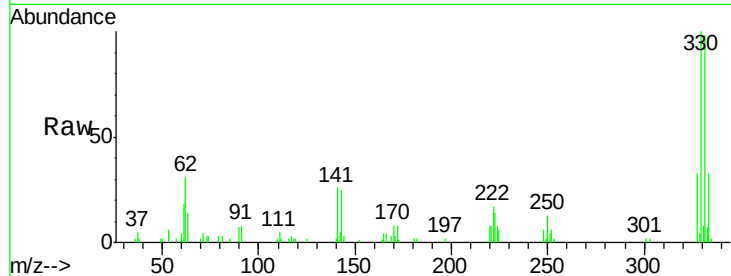




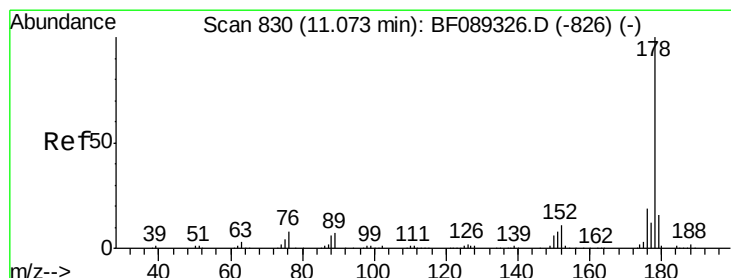
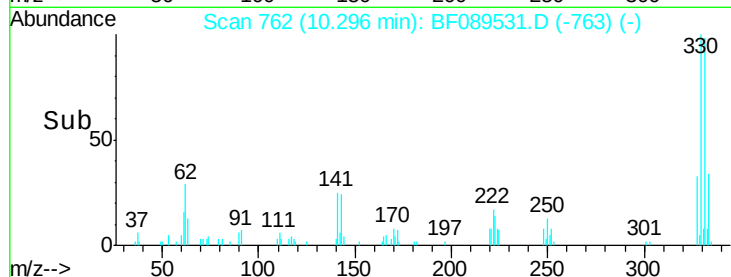
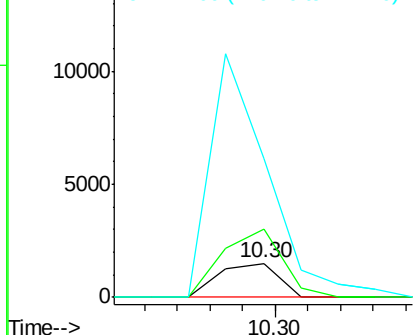
#66  
 4-Bromophenyl-phenylether  
 Concen: 2.23 ng  
 RT: 10.30 min Scan# 762  
 Delta R.T. -0.31 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-58-0.5-1.5

Tgt Ion:248 Resp: 1886  
 Ion Ratio Lower Upper  
 248 100  
 250 199.1 78.2 117.2#  
 141 407.8 62.0 93.0#

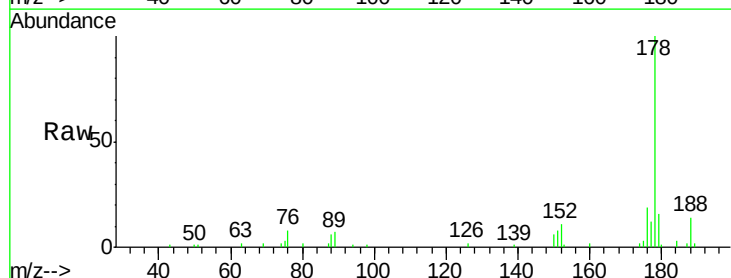


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

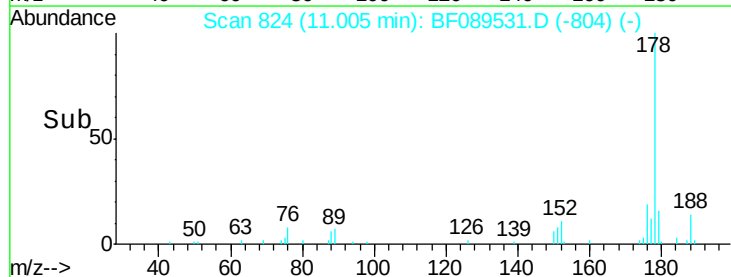
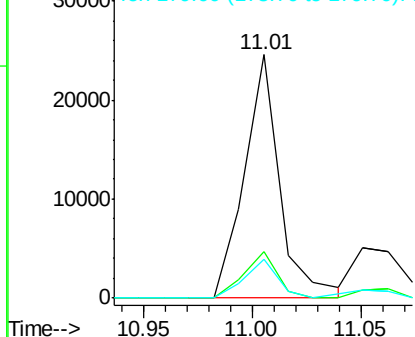


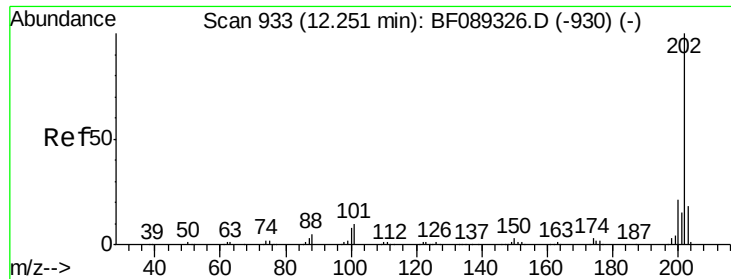
#70  
 Phenanthrene  
 Concen: 6.09 ng  
 RT: 11.01 min Scan# 824  
 Delta R.T. -0.07 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

Tgt Ion:178 Resp: 27774  
 Ion Ratio Lower Upper  
 178 100  
 176 18.9 15.5 23.3  
 179 15.9 12.3 18.5



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

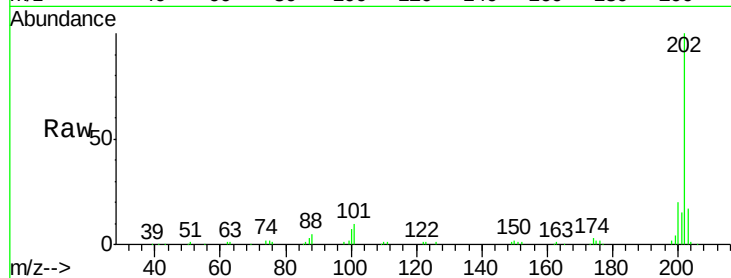




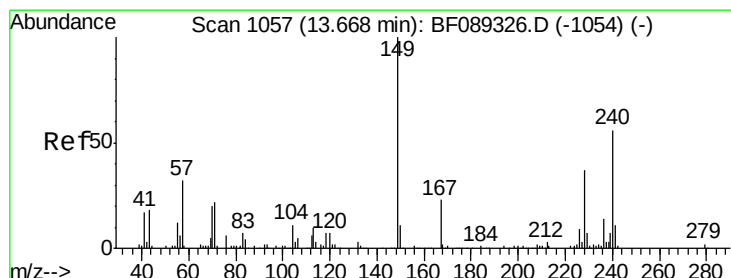
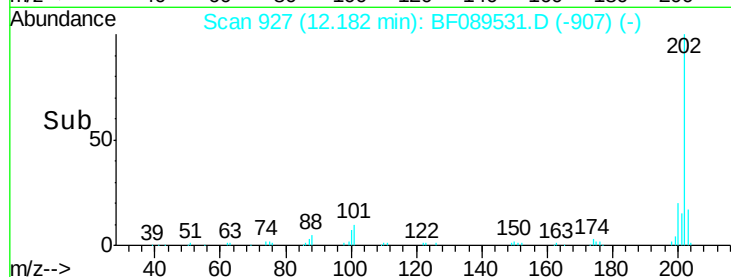
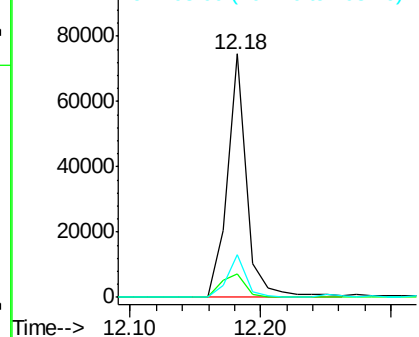
#74  
 Fluoranthene  
 Concen: 16.12 ng  
 RT: 12.18 min Scan# 927  
 Delta R.T. -0.07 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-58-0.5-1.5

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 9.8   | 0.0   | 29.9  |
| 203     | 17.4  | 0.0   | 37.3  |

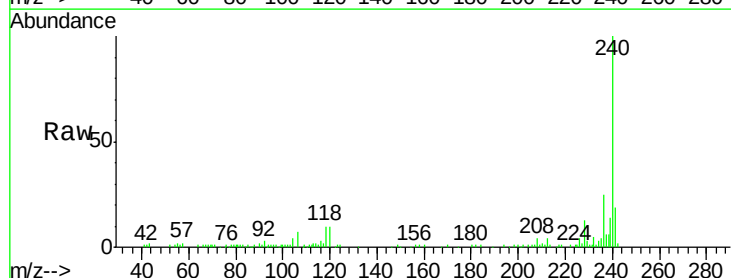


Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 203.00 (202.70 to 203.70): E

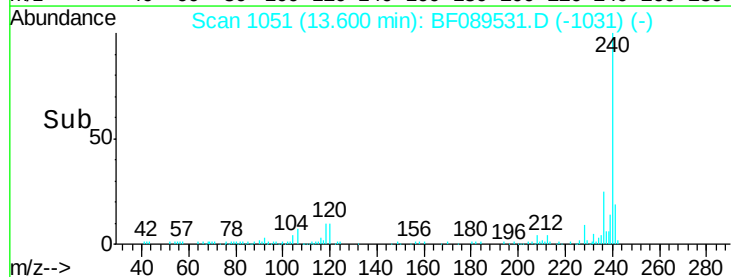
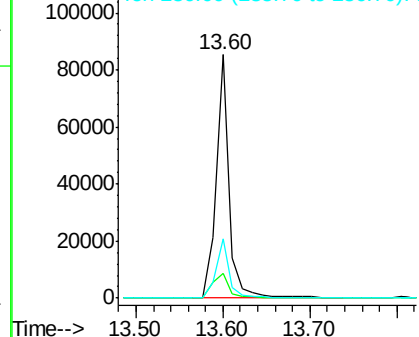


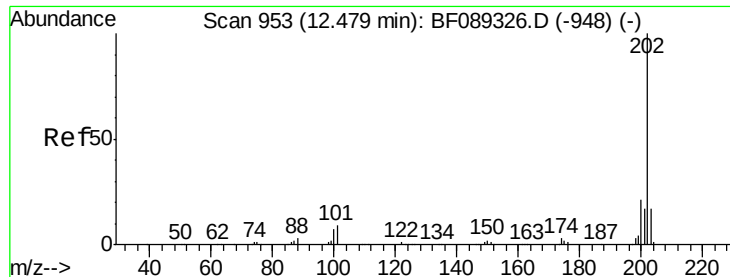
#75  
 Chrysene-d12  
 Concen: 20.00 ng  
 RT: 13.60 min Scan# 1051  
 Delta R.T. -0.07 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 10.0  | 9.1   | 13.7  |
| 236     | 24.6  | 20.6  | 30.8  |



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

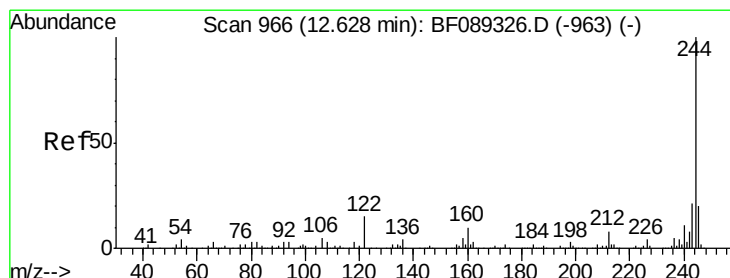
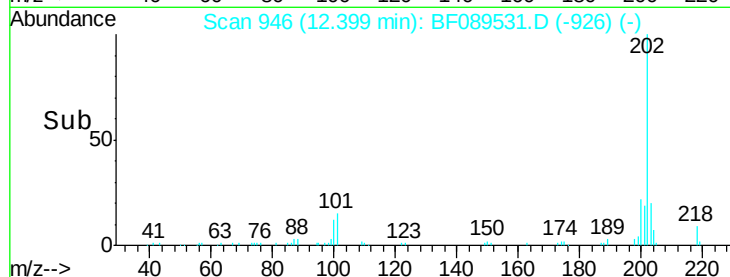
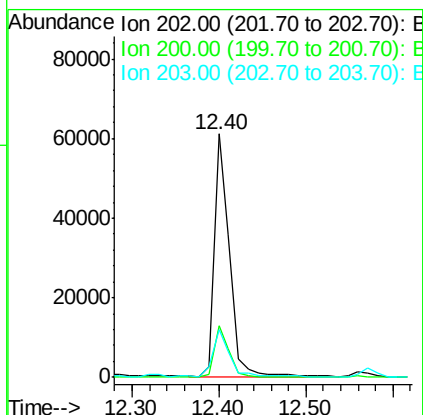
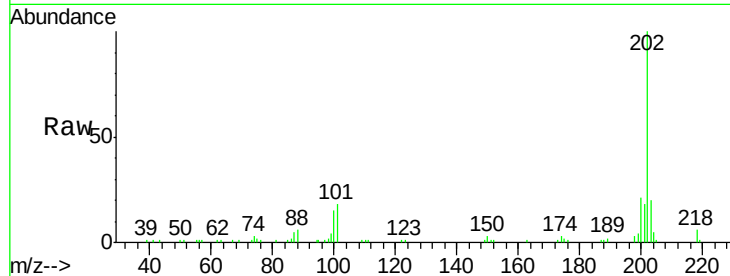




#77  
 Pyrene  
 Concen: 11.27 ng  
 RT: 12.40 min Scan# 946  
 Delta R.T. -0.07 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

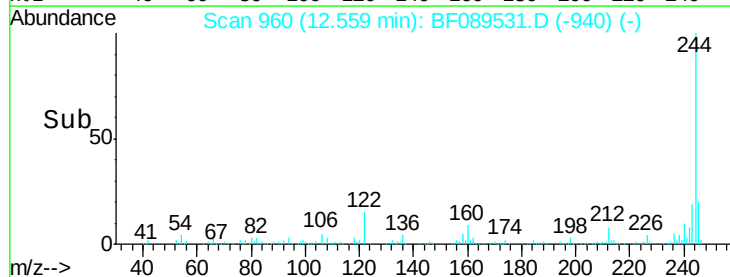
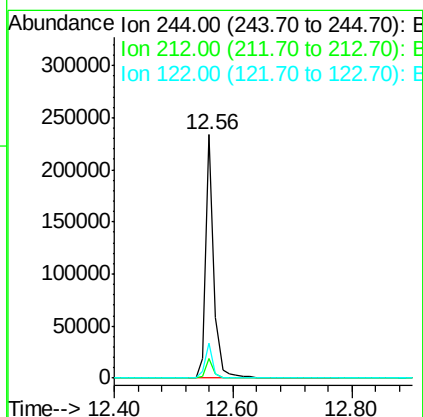
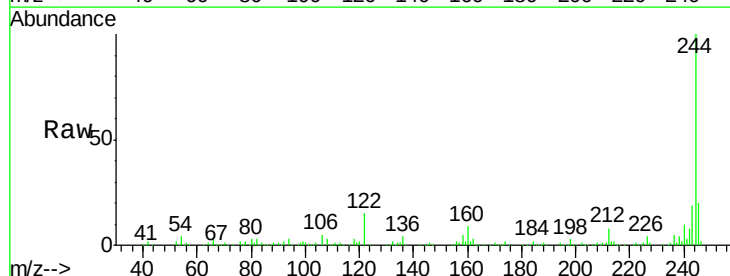
Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-58-0.5-1.5

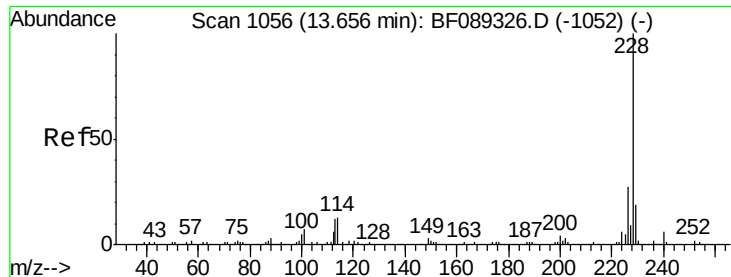
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.2  | 16.9  | 25.3  |
| 203     | 19.5  | 14.0  | 21.0  |



#78  
 Terphenyl-d14  
 Concen: 59.99 ng  
 RT: 12.56 min Scan# 960  
 Delta R.T. -0.07 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 8.1   | 6.5   | 9.7   |
| 122     | 14.5  | 11.4  | 17.0  |





#80

Benzo(a)anthracene

Concen: 8.93 ng

RT: 13.59 min Scan# 1050

Delta R.T. -0.07 min

Lab File: BF089531.D

Acq: 2 Aug 2016 1:26

Instrument :

BNA\_F

ClientSampleId :

SB-58-0.5-1.5

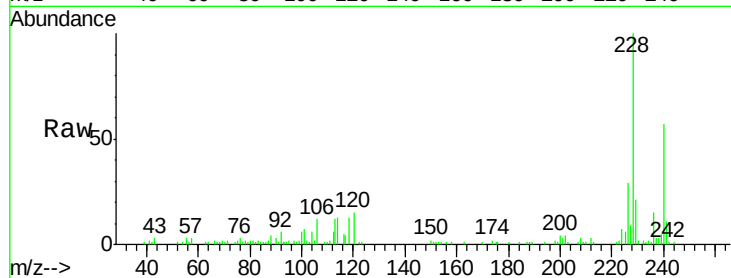
Tgt Ion:228 Resp: 44991

Ion Ratio Lower Upper

228 100

226 28.7 21.4 32.2

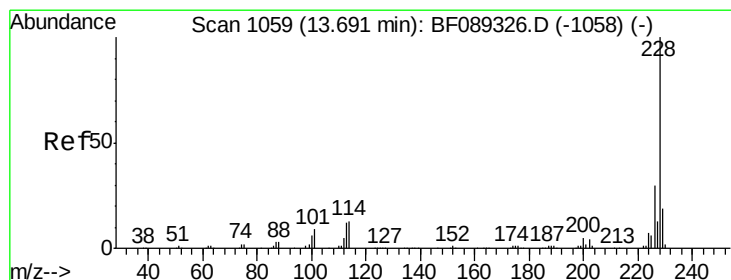
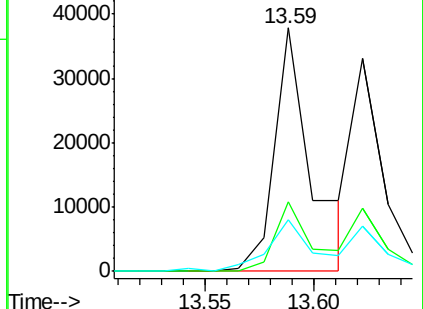
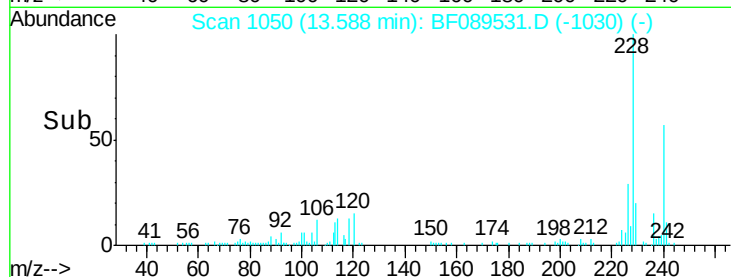
229 21.0 15.9 23.9



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#82

Chrysene

Concen: 6.34 ng

RT: 13.62 min Scan# 1053

Delta R.T. -0.07 min

Lab File: BF089531.D

Acq: 2 Aug 2016 1:26

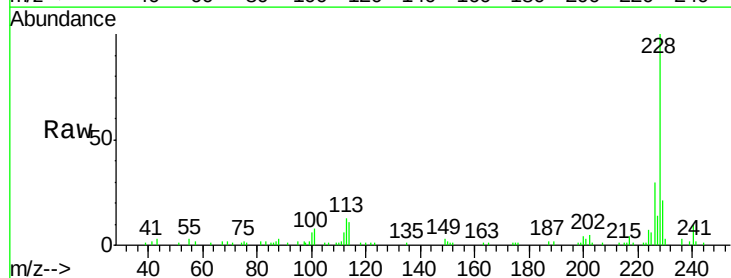
Tgt Ion:228 Resp: 34000

Ion Ratio Lower Upper

228 100

226 29.9 24.2 36.2

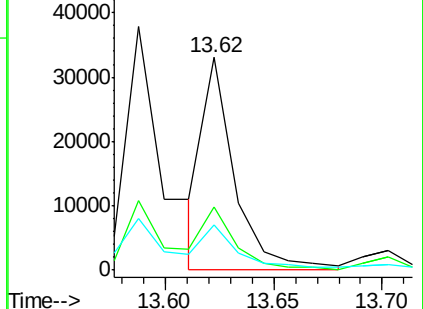
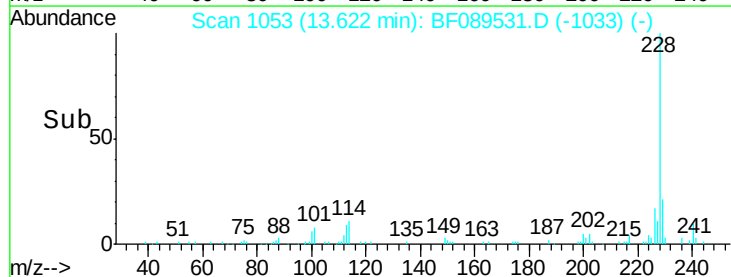
229 21.1 15.9 23.9

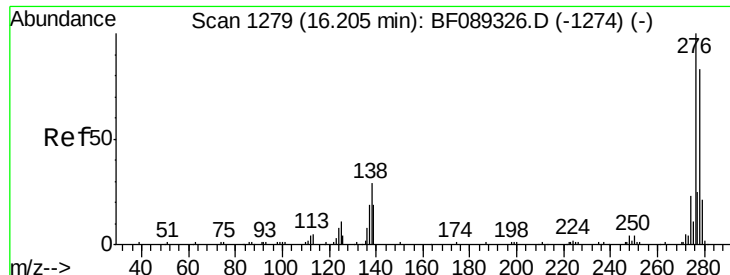


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

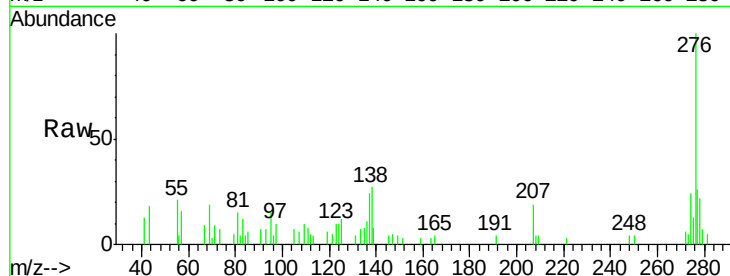




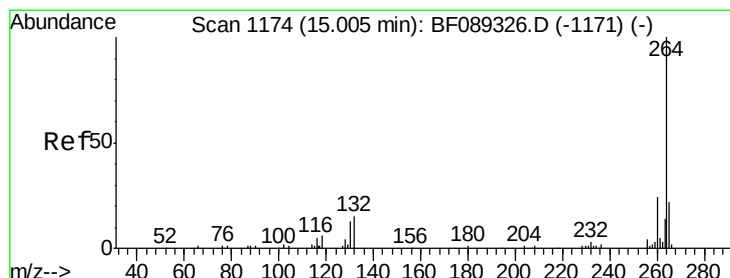
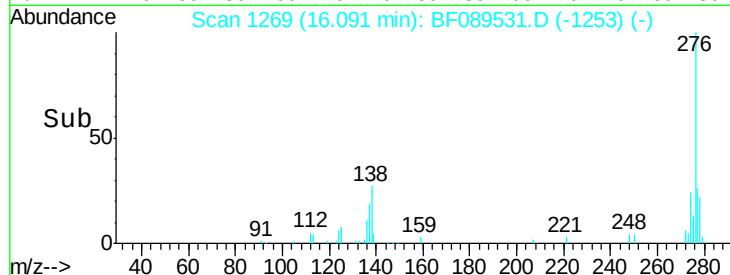
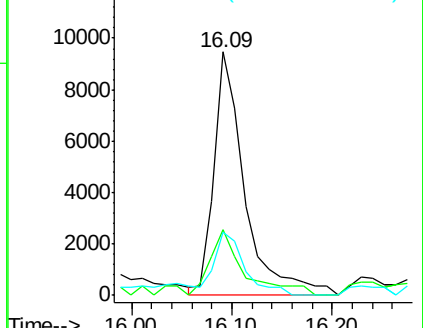
#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 5.28 ng  
 RT: 16.09 min Scan# 1269  
 Delta R.T. -0.11 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-58-0.5-1.5

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 33.8  | 23.0  | 34.4  |
| 277     | 25.4  | 20.2  | 30.4  |

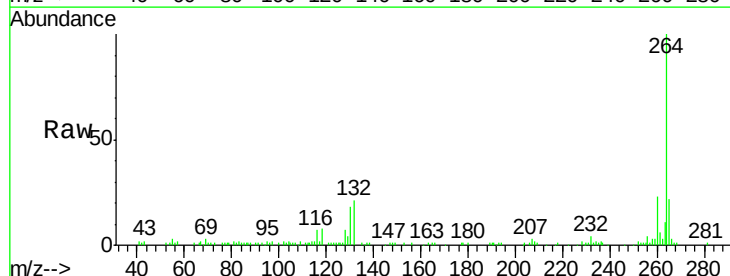


Abundance Ion 276.00 (275.70 to 276.70): E  
 Ion 138.00 (137.70 to 138.70): E  
 Ion 277.00 (276.70 to 277.70): E



#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 14.93 min Scan# 1167  
 Delta R.T. -0.08 min  
 Lab File: BF089531.D  
 Acq: 2 Aug 2016 1:26

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.4  | 19.0  | 28.4  |
| 265     | 21.7  | 17.5  | 26.3  |



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

