

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF101716\  
 Data File : BF090618.D  
 Acq On : 17 Oct 2016 20:07  
 Operator : UM/SJ  
 Sample : H5227-04 2X  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 4

Quant Time: Oct 18 01:15:14 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF101316.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Oct 17 19:19:58 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.91  | 152  | 304770   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.19  | 136  | 1179388  | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10      | 9.95  | 164  | 555892   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 11.43 | 188  | 736056   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 14.08 | 240  | 635987   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 15.54 | 264  | 652303   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.51  | 112  | 1067157  | 64.19 | ng    | 0.00     |
| 7) Phenol-d6                | 6.54  | 99   | 1403542  | 56.82 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.47  | 82   | 848190   | 39.95 | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 10.74 | 330  | 192842   | 38.91 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.27  | 172  | 1186753  | 35.18 | ng    | 0.00     |
| 78) Terphenyl-d14           | 13.02 | 244  | 790402   | 28.94 | ng    | -0.01    |

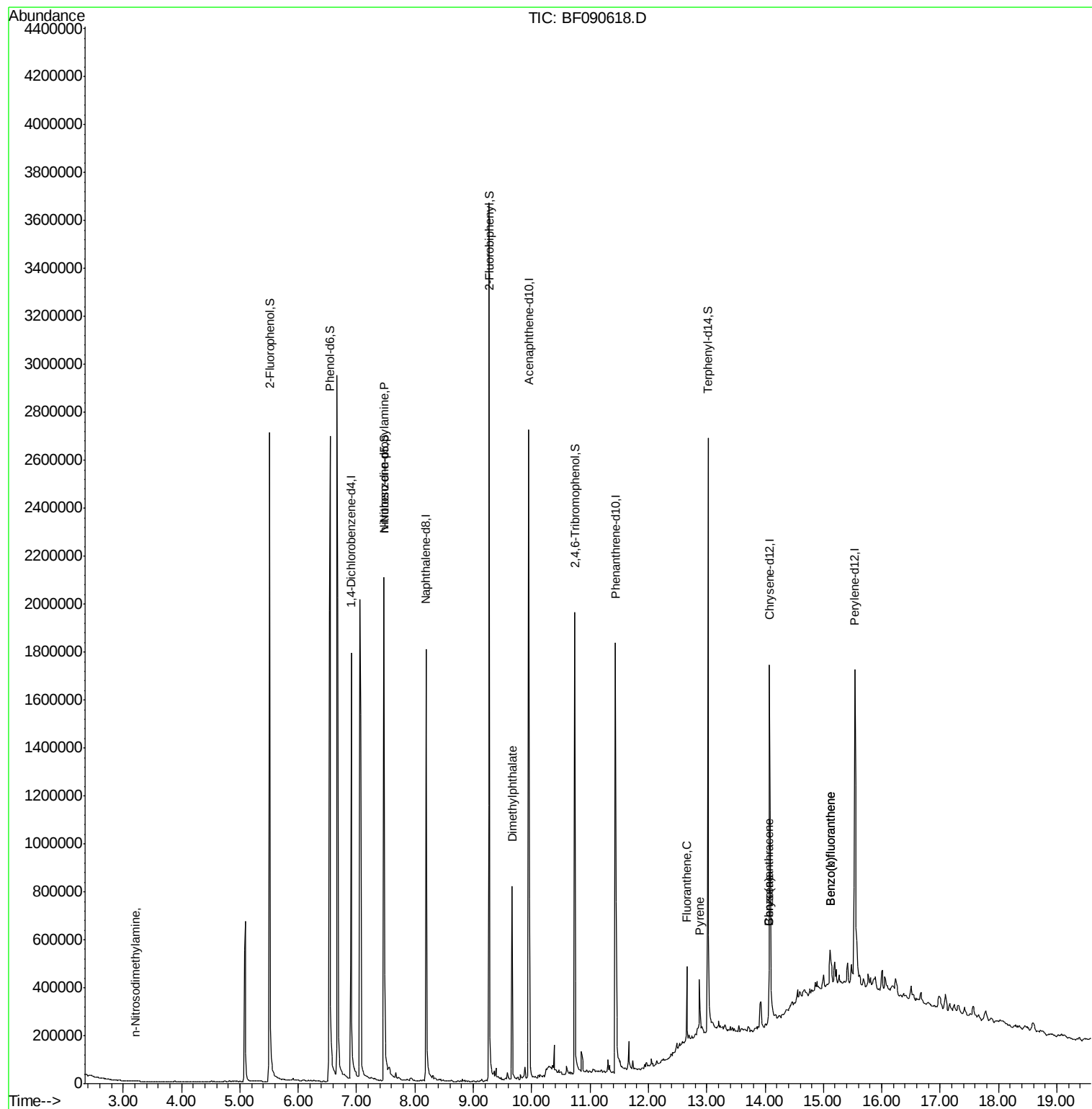
| Target Compounds               | R.T.  | QIon | Response | Conc | Units | Qvalue |
|--------------------------------|-------|------|----------|------|-------|--------|
| 4) n-Nitrosodimethylamine      | 3.21  | 42   | 1099     | 7.29 | ng    | # 1    |
| 19) n-Nitroso-di-n-propylamine | 7.47  | 70   | 98264    | 5.80 | ng    | # 79   |
| 49) Dimethylphthalate          | 9.66  | 163  | 284475   | 7.89 | ng    | 99     |
| 74) Fluoranthene               | 12.66 | 202  | 109277   | 2.77 | ng    | 94     |
| 77) Pyrene                     | 12.88 | 202  | 94298    | 2.24 | ng    | 98     |
| 80) Benzo(a)anthracene         | 14.06 | 228  | 104774   | 2.89 | ng    | 95     |
| 82) Chrysene                   | 14.06 | 228  | 104774   | 3.00 | ng    | 95     |
| 87) Benzo(b)fluoranthene       | 15.12 | 252  | 102016   | 2.39 | ng    | # 88   |
| 88) Benzo(k)fluoranthene       | 15.12 | 252  | 102016   | 2.22 | ng    | # 86   |

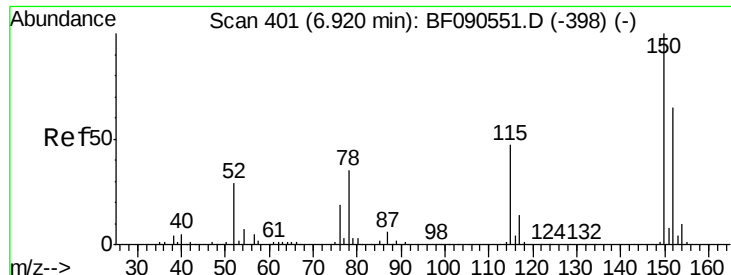
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF101716\  
Data File : BF090618.D  
Acq On : 17 Oct 2016 20:07  
Operator : UM/SJ  
Sample : H5227-04 2X  
Misc :  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
4

Quant Time: Oct 18 01:15:14 2016  
Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF101316.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Oct 17 19:19:58 2016  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.91 min Scan# 400

Delta R.T. -0.00 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

Instrument :

BNA\_F

ClientSampled :

4

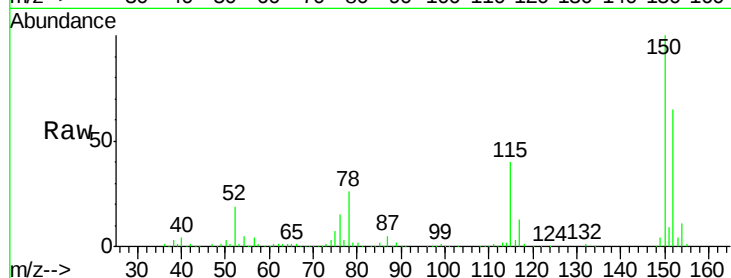
Tgt Ion:152 Resp: 304770

Ion Ratio Lower Upper

152 100

150 153.8 127.2 190.8

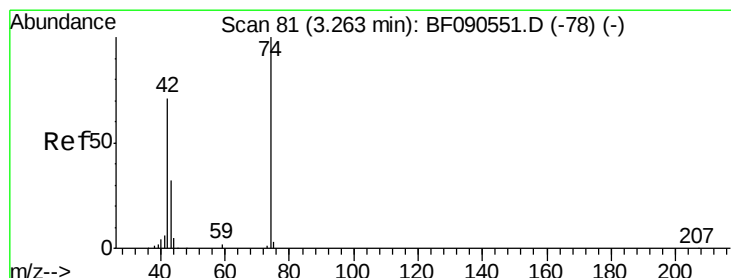
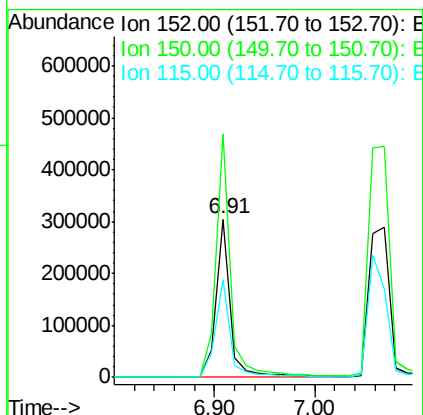
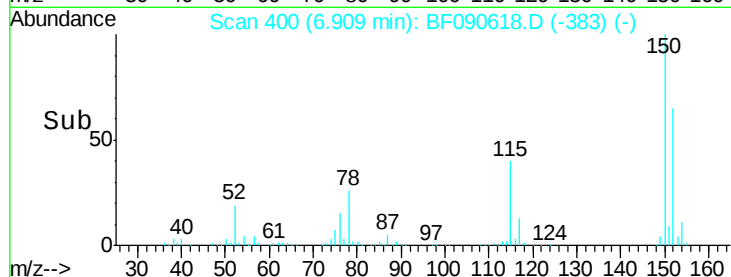
115 61.9 58.6 88.0



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



#4

n-Nitrosodimethylamine

Concen: 7.29 ng

RT: 3.21 min Scan# 76

Delta R.T. -0.02 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

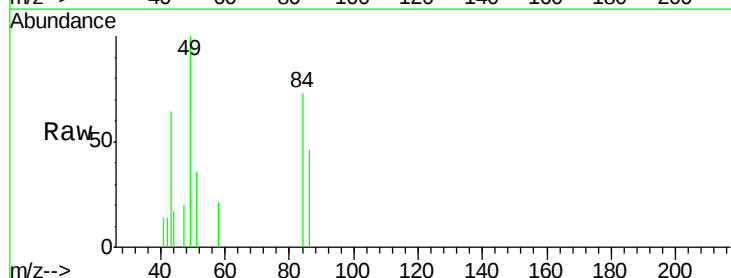
Tgt Ion: 42 Resp: 1099

Ion Ratio Lower Upper

42 100

74 0.0 113.3 169.9#

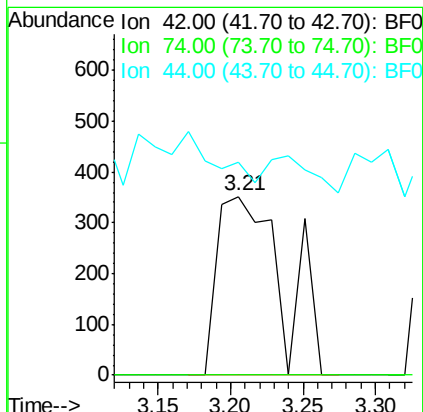
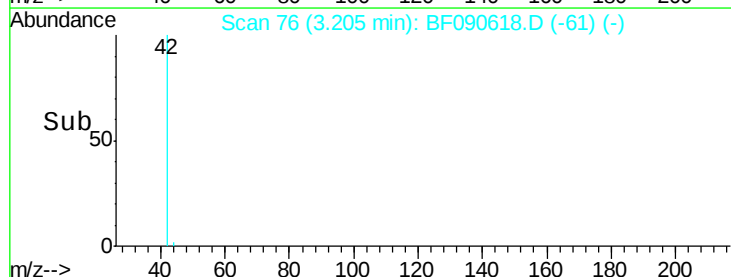
44 119.0 6.0 9.0#

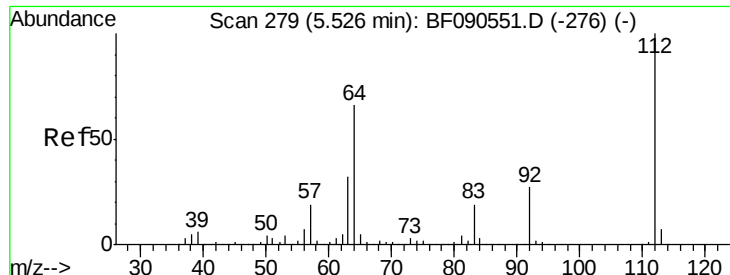


Abundance Ion 42.00 (41.70 to 42.70): BF0

Ion 74.00 (73.70 to 74.70): BF0

Ion 44.00 (43.70 to 44.70): BF0





#5

2-Fluorophenol

Concen: 64.19 ng

RT: 5.51 min Scan# 278

Delta R.T. -0.00 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

Instrument :

BNA\_F

ClientSampleId :

4

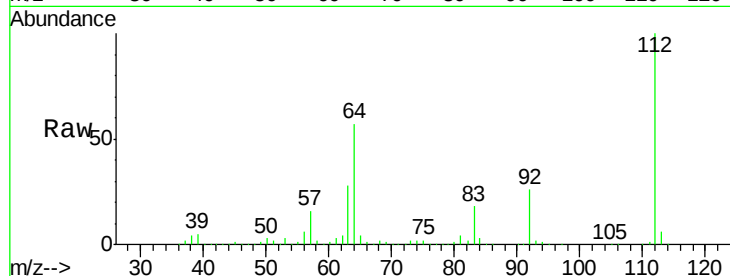
Tgt Ion: 112 Resp: 1067157

Ion Ratio Lower Upper

112 100

64 57.3 52.6 78.8

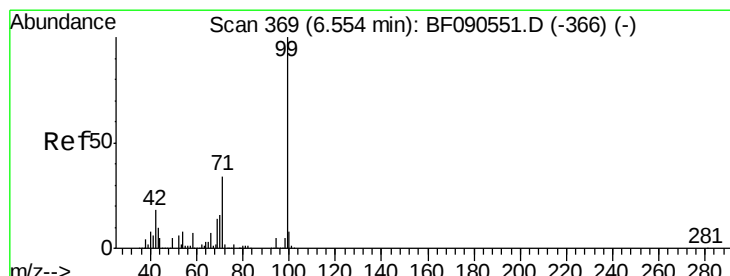
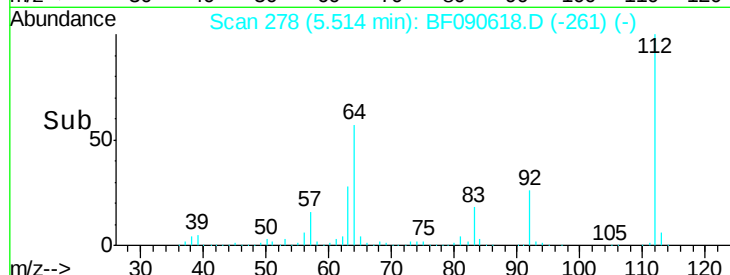
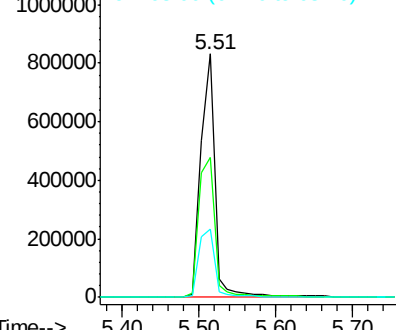
63 28.2 26.0 39.0



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: 56.82 ng

RT: 6.54 min Scan# 368

Delta R.T. -0.00 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

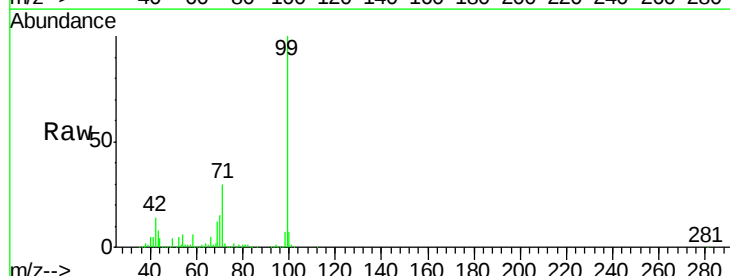
Tgt Ion: 99 Resp: 1403542

Ion Ratio Lower Upper

99 100

42 14.4 14.7 22.1#

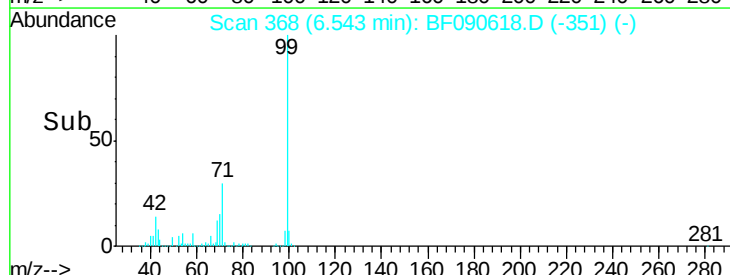
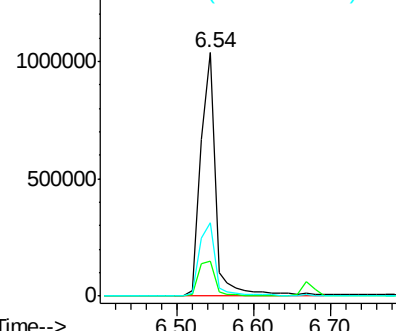
71 30.4 27.6 41.4

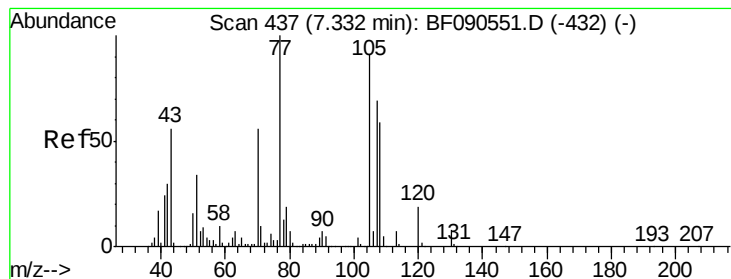


Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0





#19

n-Nitroso-di-n-propylamine

Concen: 5.80 ng

RT: 7.47 min Scan# 449

Delta R.T. 0.14 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

Instrument :

BNA\_F

ClientSampleId :

4

Tgt Ion: 70 Resp: 98264

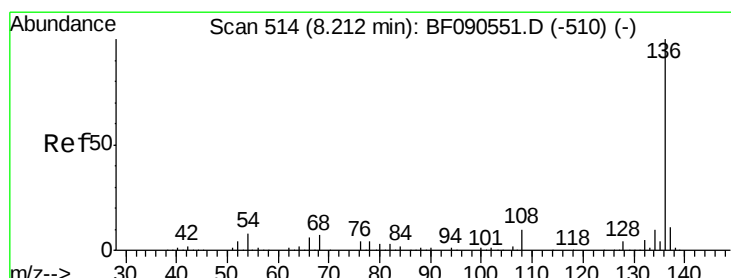
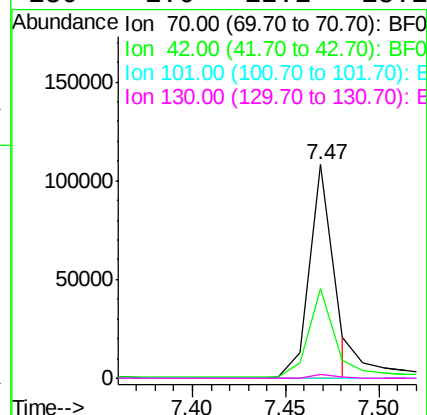
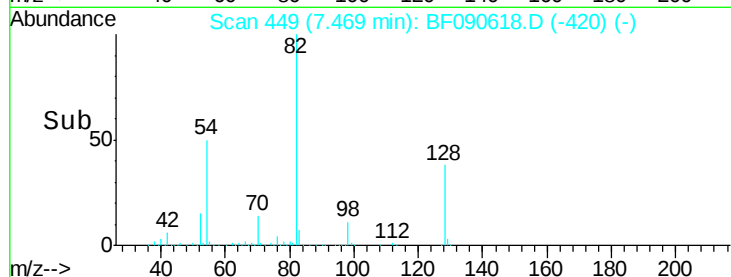
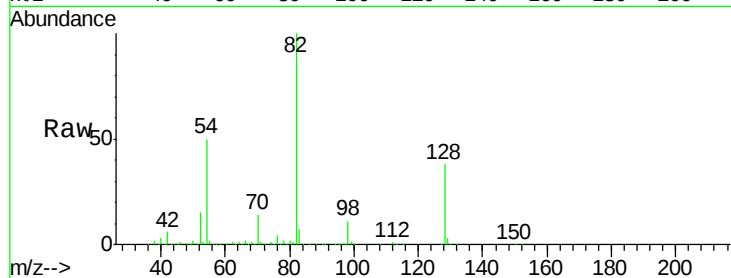
Ion Ratio Lower Upper

70 100

42 41.8 43.4 65.0#

101 0.0 6.4 9.6#

130 1.6 12.1 18.1#



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.19 min Scan# 512

Delta R.T. -0.01 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

Tgt Ion: 136 Resp: 1179388

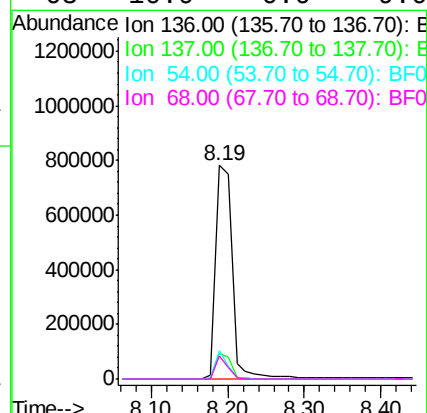
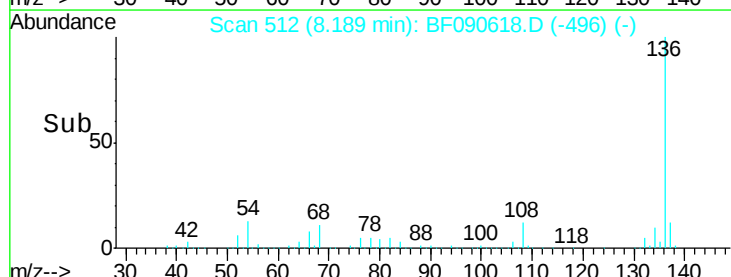
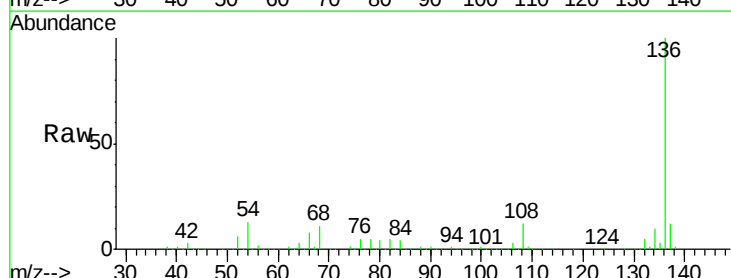
Ion Ratio Lower Upper

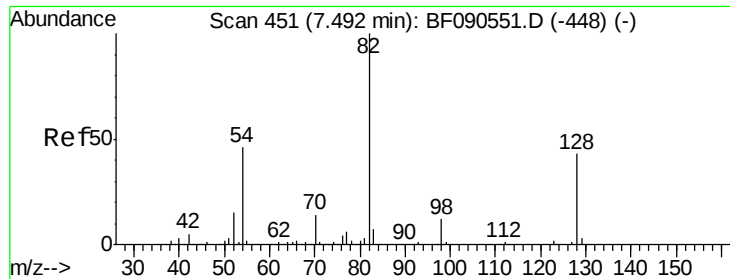
136 100

137 11.7 8.8 13.2

54 13.3 6.8 10.2#

68 10.9 6.0 9.0#

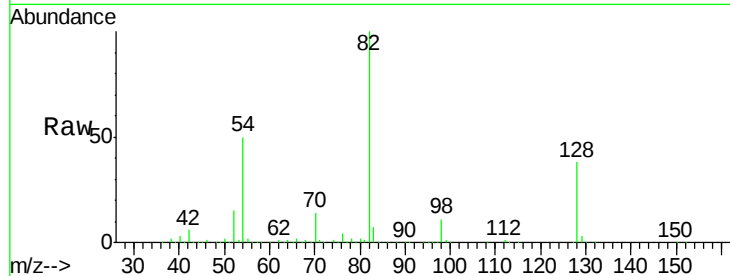




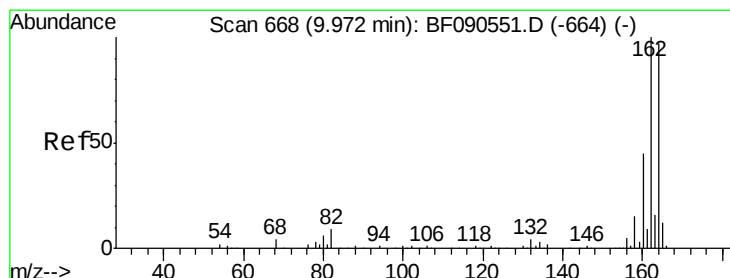
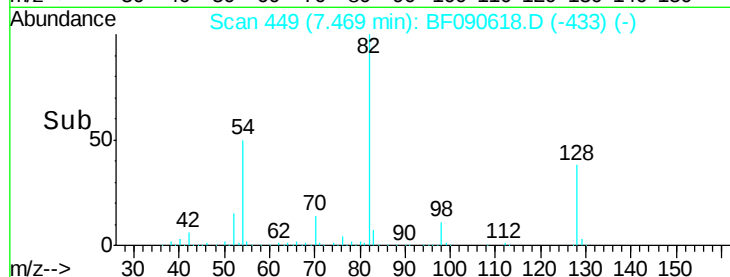
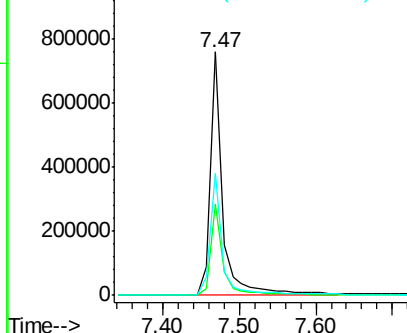
#23  
 Nitrobenzene-d5  
 Concen: 39.95 ng  
 RT: 7.47 min Scan# 449  
 Delta R.T. -0.01 min  
 Lab File: BF090618.D  
 Acq: 17 Oct 2016 20:07

Instrument :  
 BNA\_F  
 ClientSampleId :  
 4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 82      | 100   |       |       |
| 128     | 37.8  | 34.3  | 51.5  |
| 54      | 50.0  | 37.0  | 55.6  |

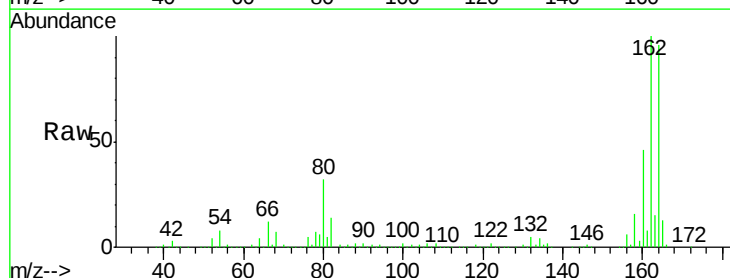


Abundance Ion 82.00 (81.70 to 82.70): BF0  
 Ion 128.00 (127.70 to 128.70): E  
 Ion 54.00 (53.70 to 54.70): BF0

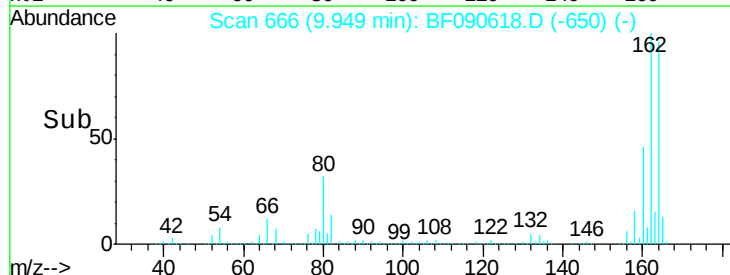
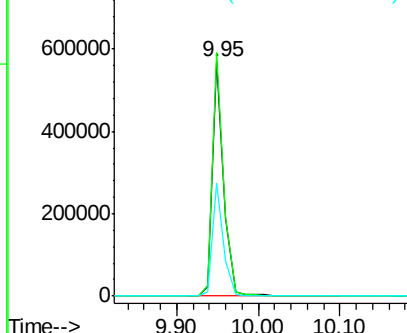


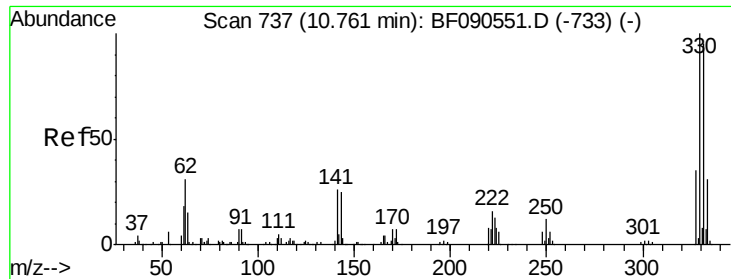
#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.95 min Scan# 666  
 Delta R.T. -0.01 min  
 Lab File: BF090618.D  
 Acq: 17 Oct 2016 20:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 104.0 | 82.2  | 123.4 |
| 160     | 48.2  | 36.6  | 55.0  |



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

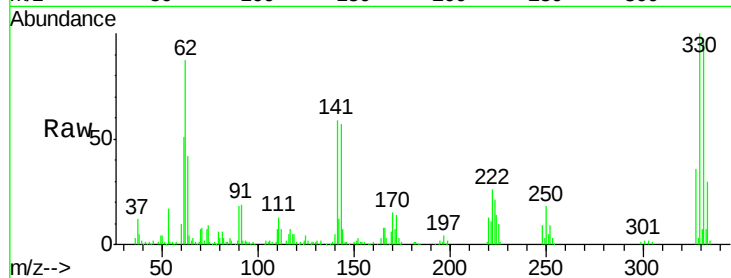




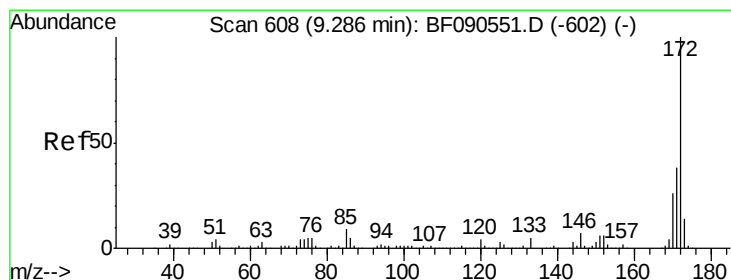
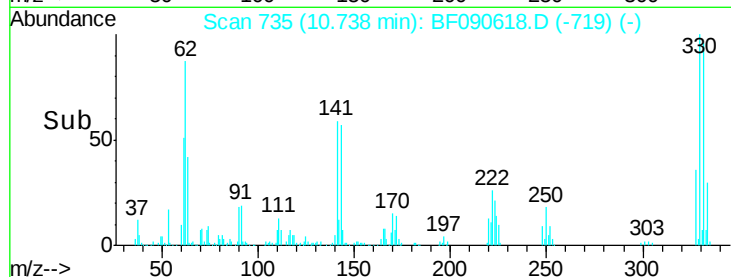
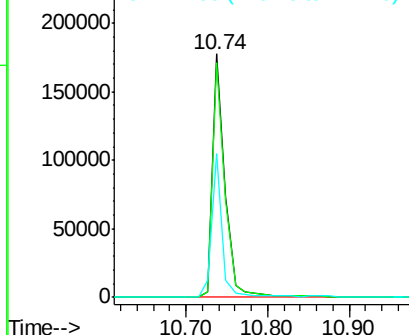
#41  
 2,4,6-Tribromophenol  
 Concen: 38.91 ng  
 RT: 10.74 min Scan# 735  
 Delta R.T. -0.01 min  
 Lab File: BF090618.D  
 Acq: 17 Oct 2016 20:07

Instrument :  
 BNA\_F  
 ClientSampleId :  
 4

Tgt Ion:330 Resp: 192842  
 Ion Ratio Lower Upper  
 330 100  
 332 96.3 76.2 114.2  
 141 50.8 31.4 47.2#

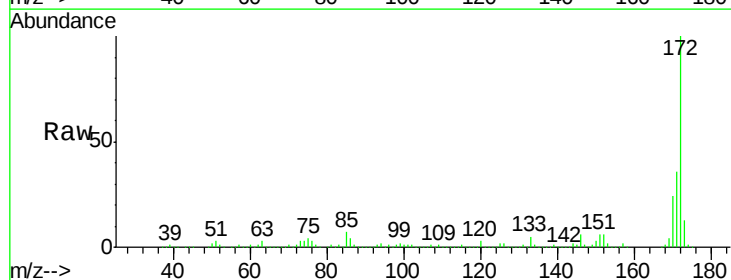


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

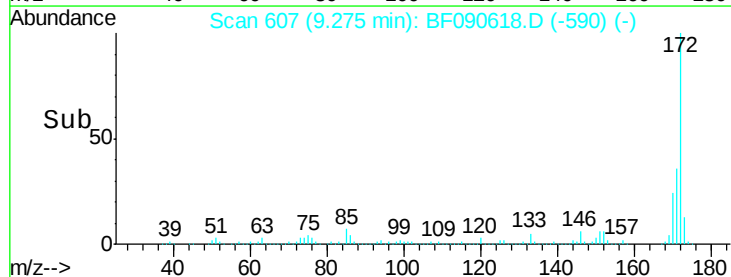
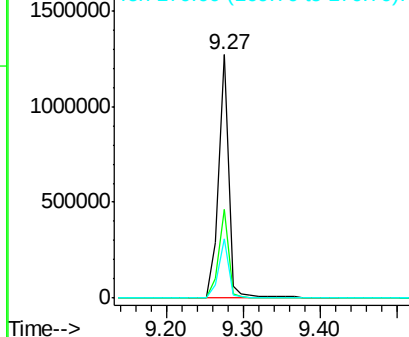


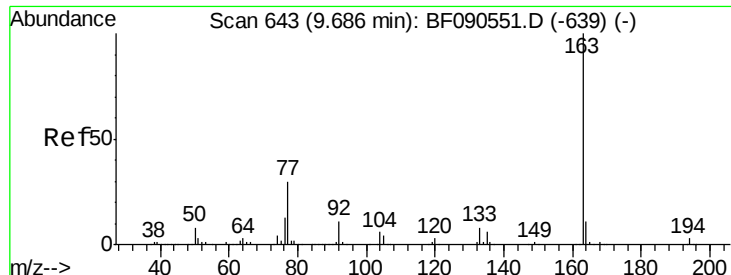
#44  
 2-Fluorobiphenyl  
 Concen: 35.18 ng  
 RT: 9.27 min Scan# 607  
 Delta R.T. -0.00 min  
 Lab File: BF090618.D  
 Acq: 17 Oct 2016 20:07

Tgt Ion:172 Resp: 1186753  
 Ion Ratio Lower Upper  
 172 100  
 171 36.5 30.1 45.1  
 170 24.4 20.6 30.8



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





#49

Dimethylphthalate

Concen: 7.89 ng

RT: 9.66 min Scan# 641

Delta R.T. -0.01 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

Instrument :

BNA\_F

ClientSampleId :

4

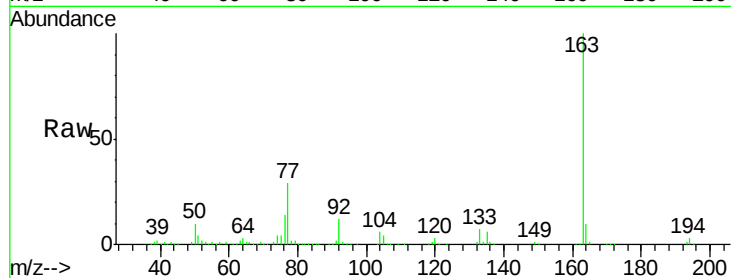
Tgt Ion:163 Resp: 284475

Ion Ratio Lower Upper

163 100

194 2.8 2.3 3.5

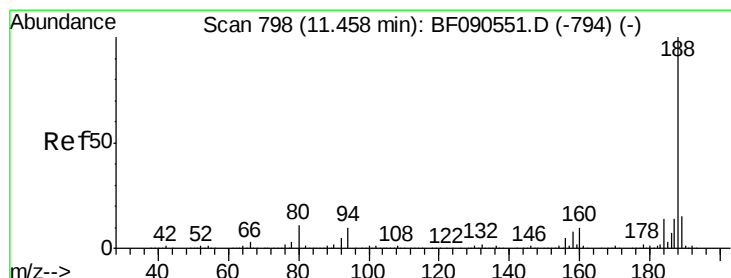
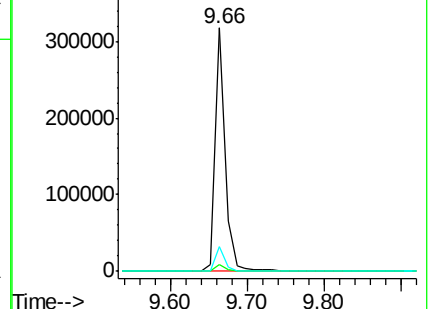
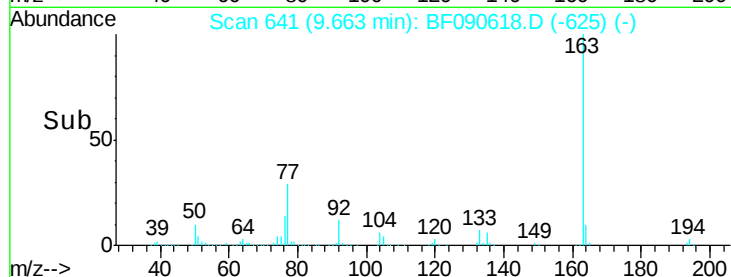
164 10.2 8.6 13.0



Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.43 min Scan# 796

Delta R.T. -0.01 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

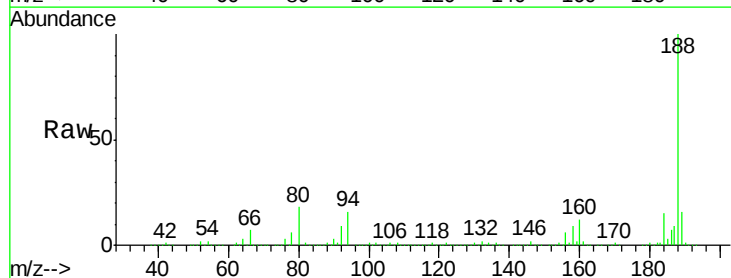
Tgt Ion:188 Resp: 736056

Ion Ratio Lower Upper

188 100

94 15.6 7.7 11.5#

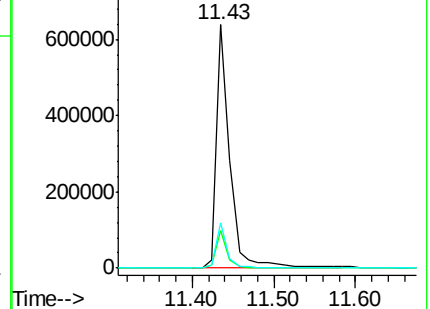
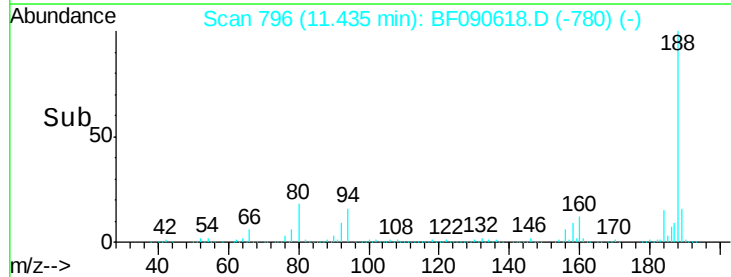
80 18.4 8.6 12.8#

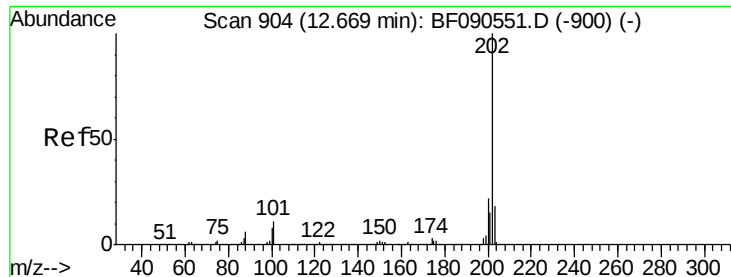


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0





#74

Fluoranthene

Concen: 2.77 ng

RT: 12.66 min Scan# 903

Delta R.T. -0.00 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

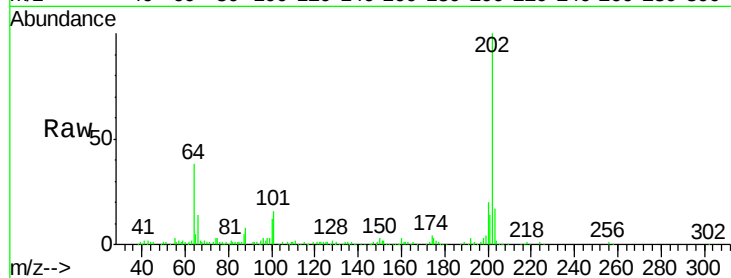
Instrument :

BNA\_F

ClientSampleId :

4

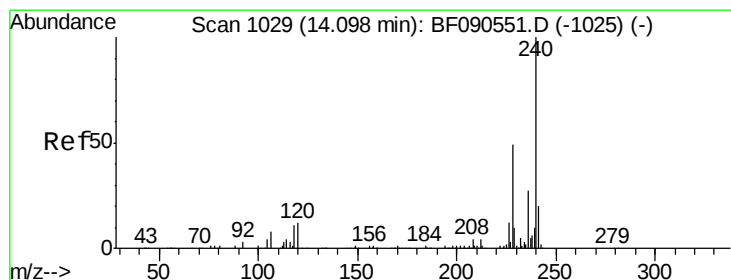
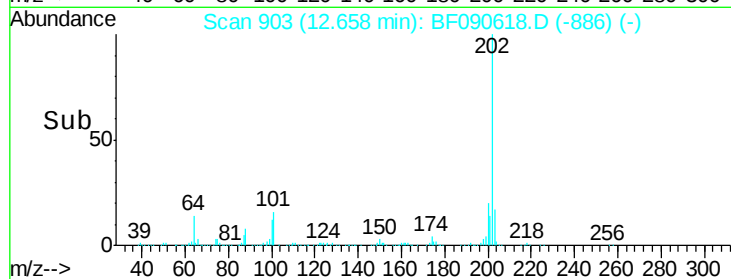
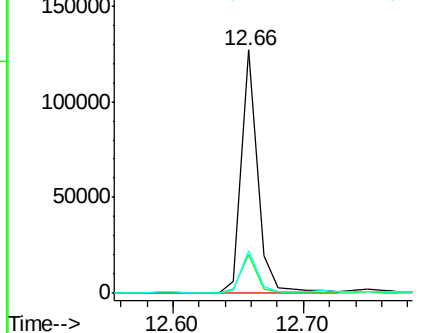
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 202   | Resp: | 109277 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 15.9  | 0.0   | 31.1   |
| 203      | 17.5  | 0.0   | 38.0   |



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

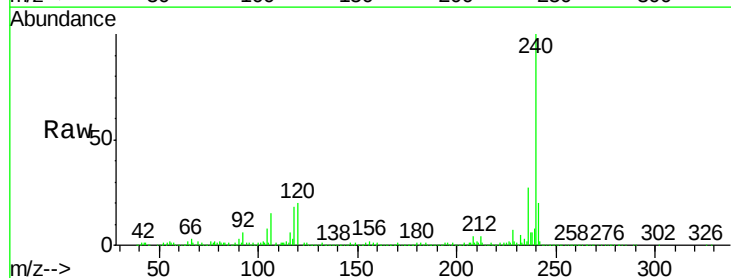
RT: 14.08 min Scan# 1027

Delta R.T. -0.01 min

Lab File: BF090618.D

Acq: 17 Oct 2016 20:07

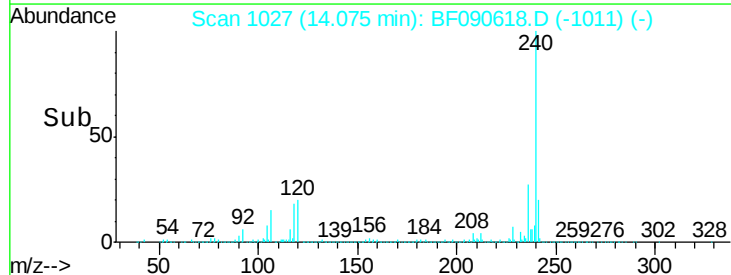
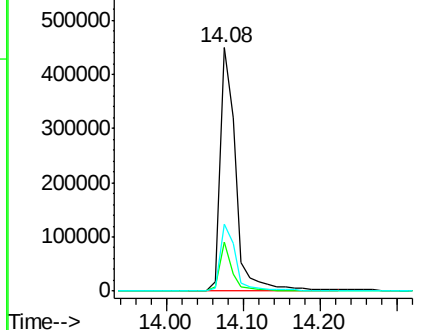
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 240   | Resp: | 635987 |
| Ion      | Ratio | Lower | Upper  |
| 240      | 100   |       |        |
| 120      | 20.3  | 9.8   | 14.8#  |
| 236      | 27.4  | 21.7  | 32.5   |

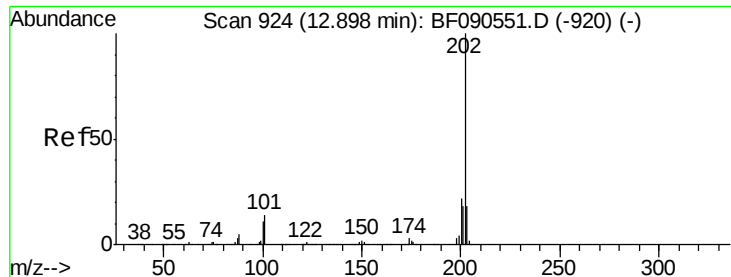


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

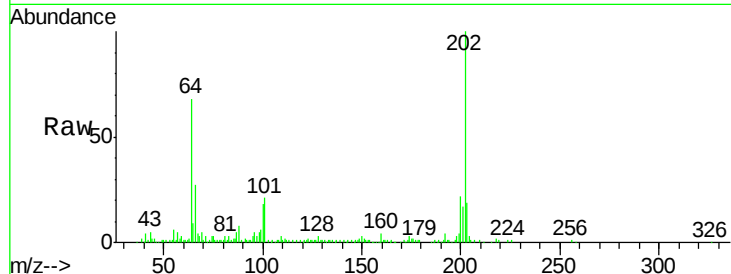




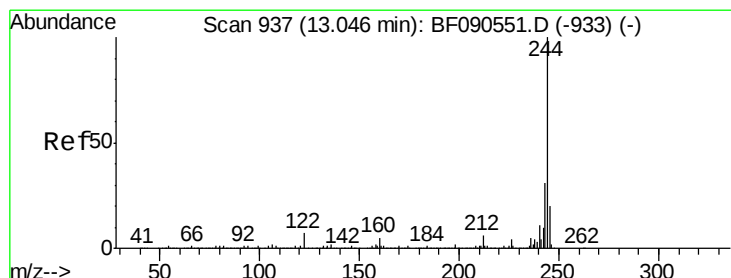
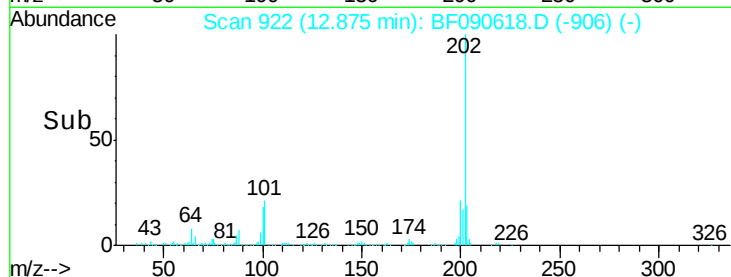
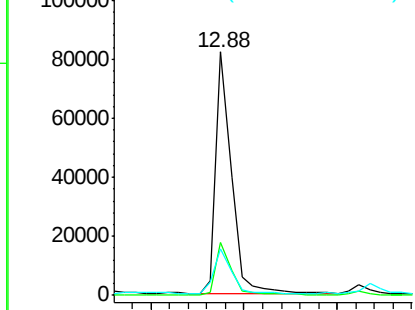
#77  
 Pyrene  
 Concen: 2.24 ng  
 RT: 12.88 min Scan# 922  
 Delta R.T. -0.01 min  
 Lab File: BF090618.D  
 Acq: 17 Oct 2016 20:07

Instrument :  
 BNA\_F  
 ClientSampled :  
 4

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.5  | 17.8  | 26.6  |
| 203     | 19.3  | 14.6  | 21.8  |

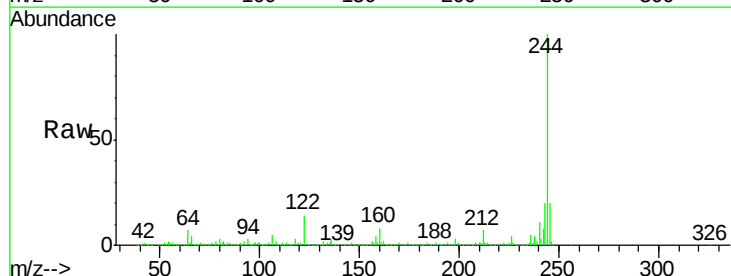


Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 200.00 (199.70 to 200.70): E  
 Ion 203.00 (202.70 to 203.70): E

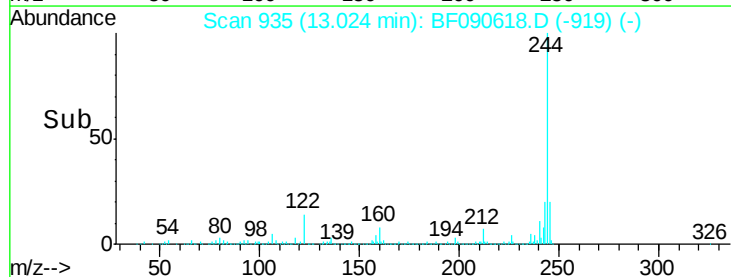
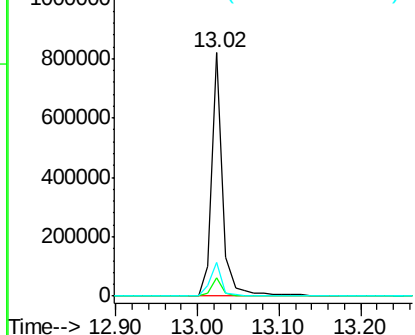


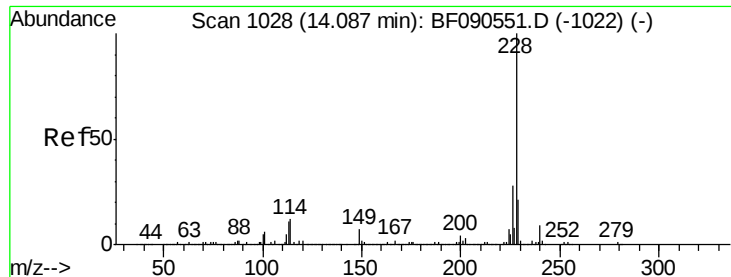
#78  
 Terphenyl-d14  
 Concen: 28.94 ng  
 RT: 13.02 min Scan# 935  
 Delta R.T. -0.01 min  
 Lab File: BF090618.D  
 Acq: 17 Oct 2016 20:07

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.5   | 5.0   | 7.4#  |
| 122     | 13.9  | 5.6   | 8.4#  |



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

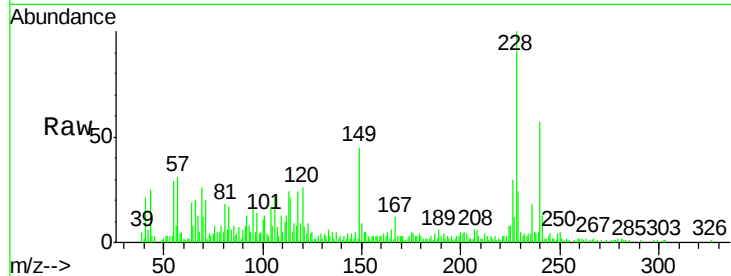




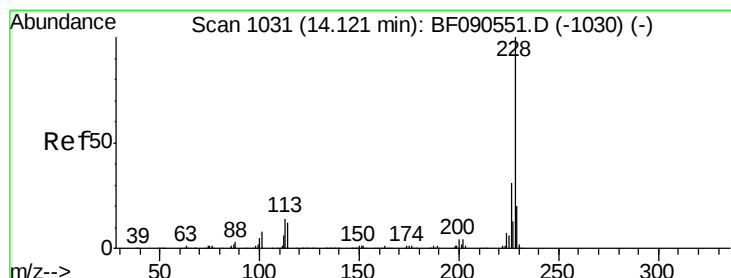
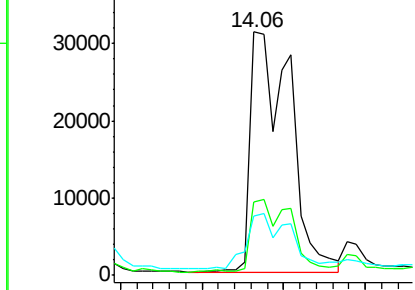
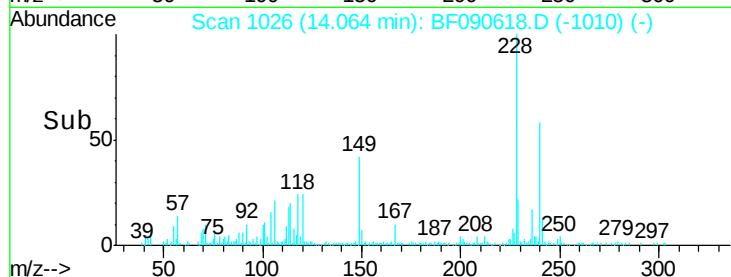
#80  
Benzo(a)anthracene  
Concen: 2.89 ng  
RT: 14.06 min Scan# 1026  
Delta R.T. -0.01 min  
Lab File: BF090618.D  
Acq: 17 Oct 2016 20:07

Instrument :  
BNA\_F  
ClientSampleId :  
4

Tgt Ion:228 Resp: 104774  
Ion Ratio Lower Upper  
228 100  
226 30.0 22.8 34.2  
229 24.3 16.6 25.0

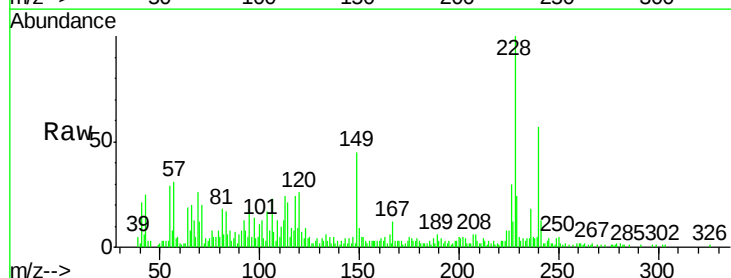


Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E

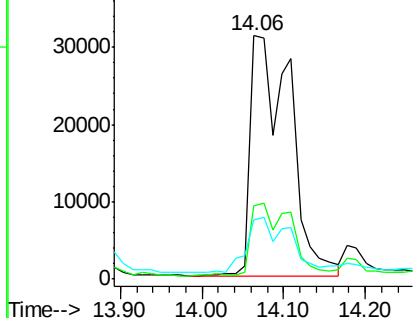
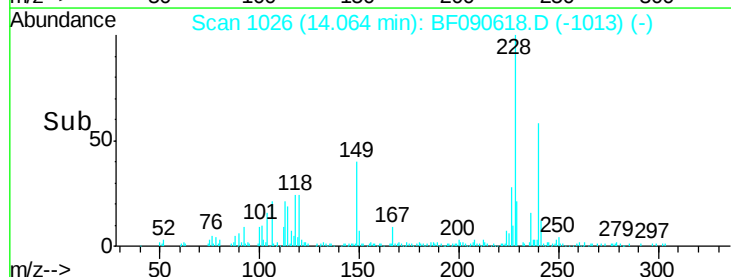


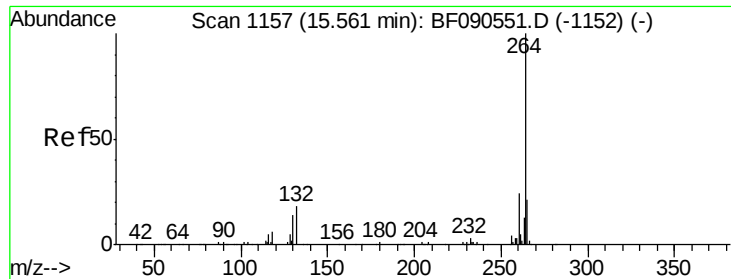
#82  
Chrysene  
Concen: 3.00 ng  
RT: 14.06 min Scan# 1026  
Delta R.T. -0.05 min  
Lab File: BF090618.D  
Acq: 17 Oct 2016 20:07

Tgt Ion:228 Resp: 104774  
Ion Ratio Lower Upper  
228 100  
226 30.0 24.8 37.2  
229 24.3 16.2 24.4



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

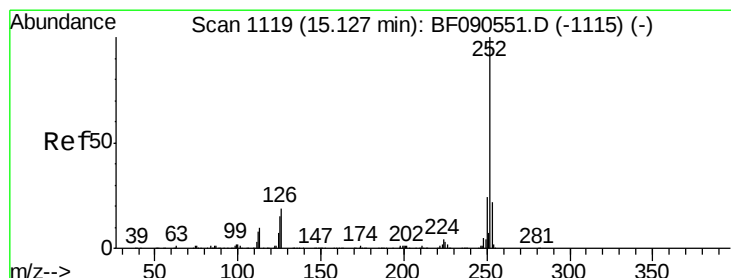
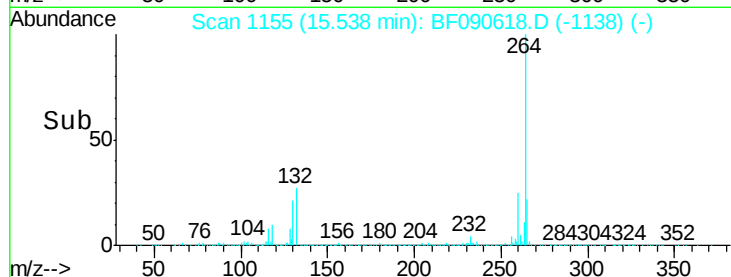
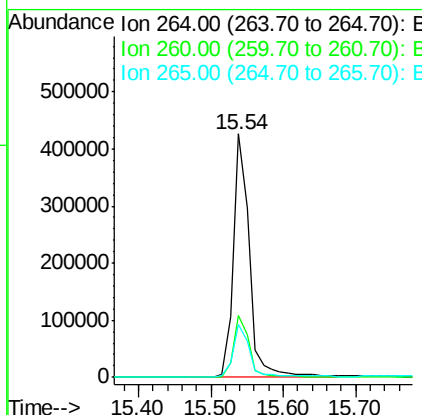
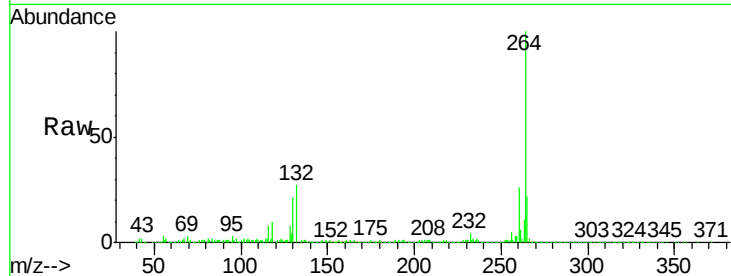




#86  
Perylene-d12  
Concen: 20.00 ng  
RT: 15.54 min Scan# 1155  
Delta R.T. -0.00 min  
Lab File: BF090618.D  
Acq: 17 Oct 2016 20:07

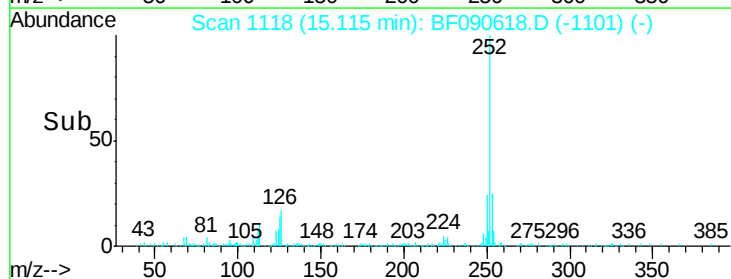
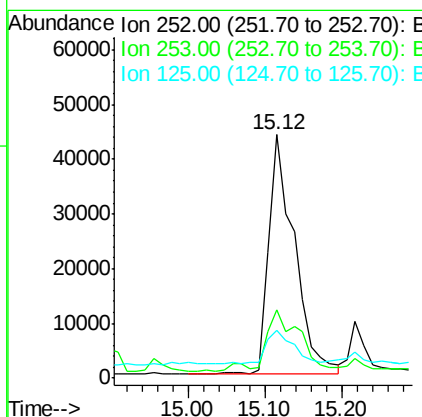
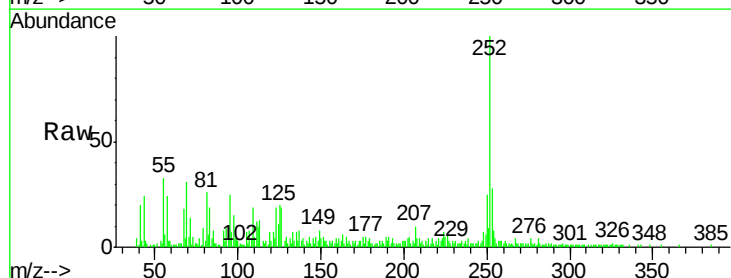
Instrument :  
BNA\_F  
ClientSampled :  
4

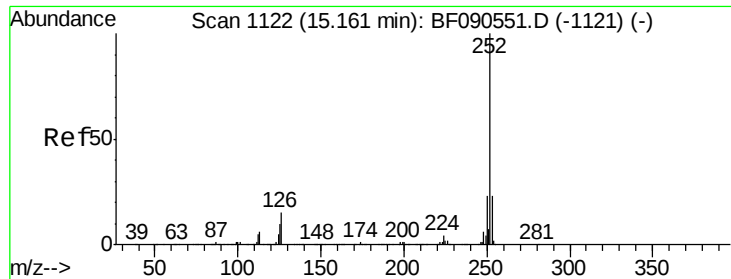
Tgt Ion:264 Resp: 652303  
Ion Ratio Lower Upper  
264 100  
260 25.5 19.3 28.9  
265 21.8 16.7 25.1



#87  
Benzo(b)fluoranthene  
Concen: 2.39 ng  
RT: 15.12 min Scan# 1118  
Delta R.T. -0.00 min  
Lab File: BF090618.D  
Acq: 17 Oct 2016 20:07

Tgt Ion:252 Resp: 102016  
Ion Ratio Lower Upper  
252 100  
253 28.0 17.8 26.8#  
125 19.8 12.0 18.0#





#88

Benzo(k)fluoranthene

Concen: 2.22 ng

RT: 15.12 min Scan# 1118

Delta R.T. -0.03 min

Lab File: BF090618.D

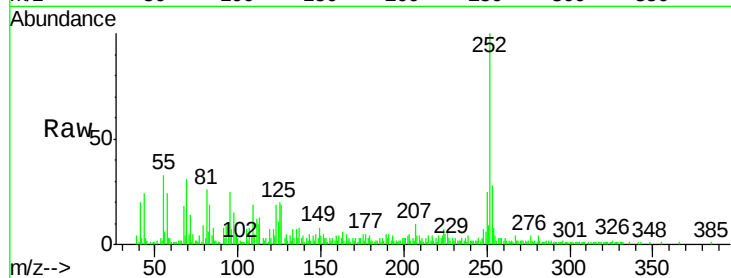
Acq: 17 Oct 2016 20:07

Instrument :

BNA\_F

ClientSampleId :

4



| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 28.0  | 18.0  | 27.0# |
| 125     | 19.8  | 10.0  | 15.0# |

