

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF070516\  
 Data File : BF088727.D  
 Acq On : 6 Jul 2016 3:02  
 Operator : UM/SJ  
 Sample : H3881-13  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 Q6-B6-0-5-C

Quant Time: Jul 06 06:37:55 2016  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF063016.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 06 01:47:10 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.78  | 152  | 107785   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.06  | 136  | 388869   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10      | 9.80  | 164  | 168505   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 11.28 | 188  | 281773   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 13.91 | 240  | 206894   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 15.30 | 264  | 196098   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.37  | 112  | 605917   | 84.25 | ng    | 0.00     |
| 7) Phenol-d6                | 6.41  | 99   | 852022   | 91.69 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.34  | 82   | 516284   | 69.58 | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 10.59 | 330  | 154530   | 98.76 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.14  | 172  | 920698   | 86.31 | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.87 | 244  | 561151   | 60.41 | ng    | 0.00     |

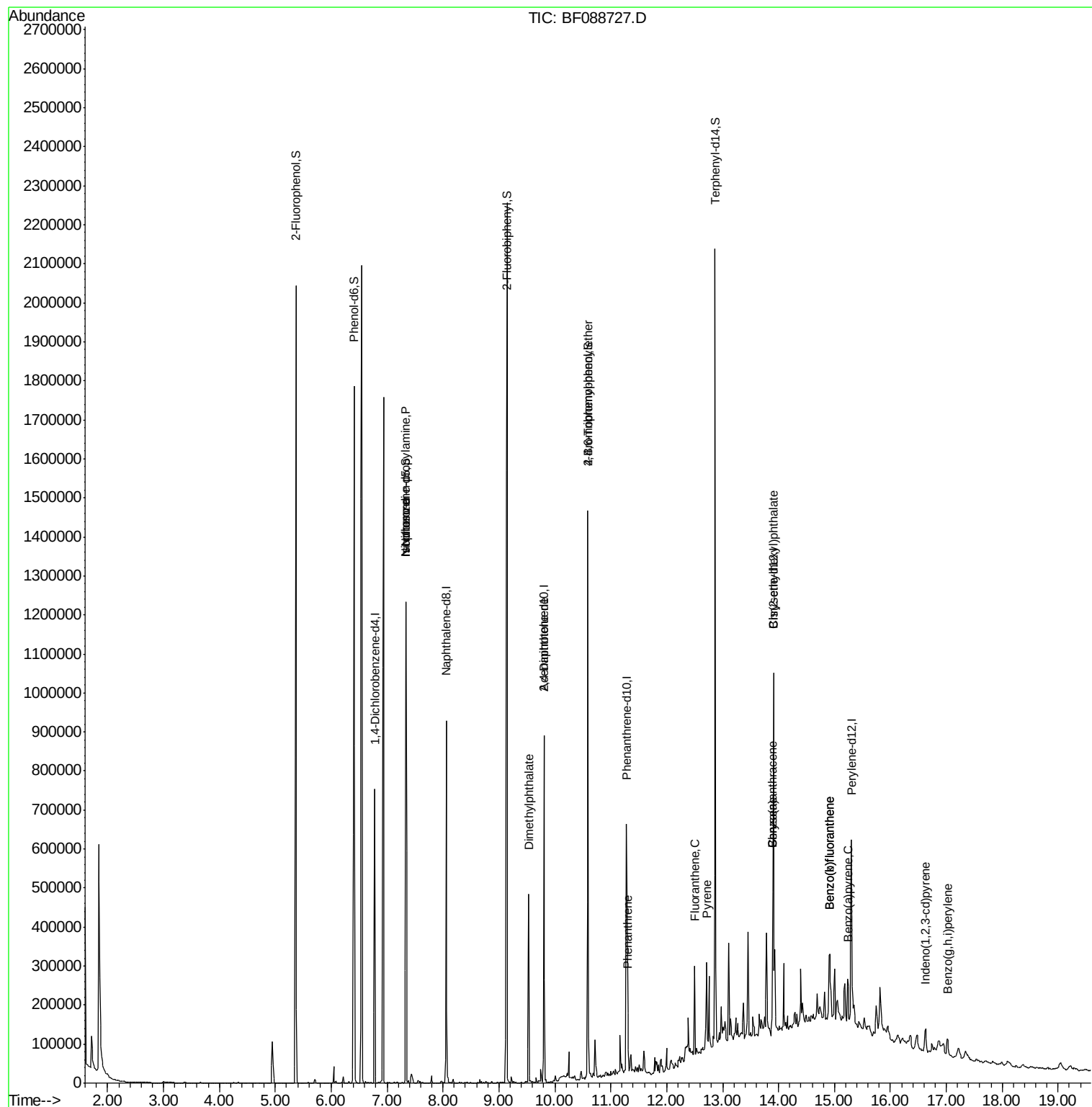
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 19) n-Nitroso-di-n-propylamine | 7.34  | 70   | 68491    | 10.97 | ng    | # 73   |
| 25) Isophorone                 | 7.34  | 82   | 443892   | 32.29 | ng    | # 65   |
| 49) Dimethylphthalate          | 9.53  | 163  | 182285   | 15.18 | ng    | 99     |
| 56) 2,4-Dinitrotoluene         | 9.80  | 165  | 22211    | 6.38  | ng    | # 38   |
| 66) 4-Bromophenyl-phenylether  | 10.59 | 248  | 11253    | 3.96  | ng    | # 1    |
| 70) Phenanthrene               | 11.30 | 178  | 58325    | 3.79  | ng    | 99     |
| 74) Fluoranthene               | 12.50 | 202  | 126571   | 8.11  | ng    | 93     |
| 77) Pyrene                     | 12.72 | 202  | 122113   | 6.96  | ng    | 97     |
| 80) Benzo(a)anthracene         | 13.90 | 228  | 84469    | 6.34  | ng    | 98     |
| 82) Chrysene                   | 13.90 | 228  | 84469    | 6.41  | ng    | 97     |
| 83) Bis(2-ethylhexyl)phthalate | 13.91 | 149  | 54428    | 6.09  | ng    | 99     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.63 | 276  | 35804    | 3.53  | ng    | # 100  |
| 87) Benzo(b)fluoranthene       | 14.91 | 252  | 127703   | 10.38 | ng    | # 93   |
| 88) Benzo(k)fluoranthene       | 14.91 | 252  | 127703   | 11.92 | ng    | 98     |
| 89) Benzo(a)pyrene             | 15.25 | 252  | 56879    | 5.46  | ng    | 97     |
| 91) Benzo(g,h,i)perylene       | 17.02 | 276  | 36588    | 4.07  | ng    | 99     |

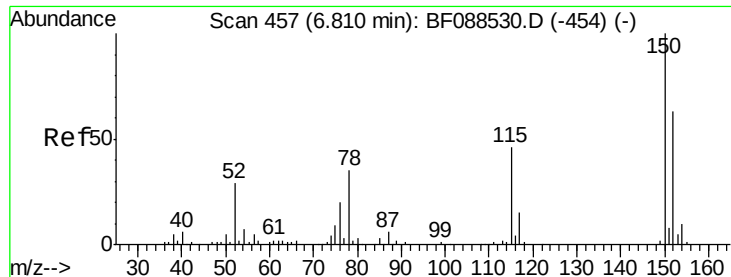
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Jul 06 01:47:10 2016  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.78 min Scan# 454

Delta R.T. 0.00 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Instrument :

BNA\_F

ClientSampleId :

Q6-B6-0-5-C

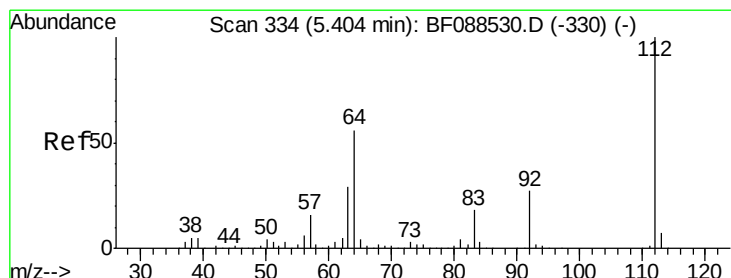
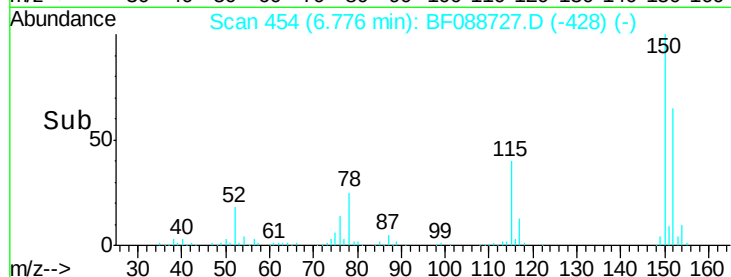
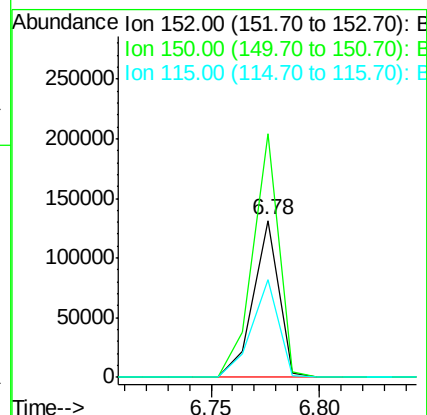
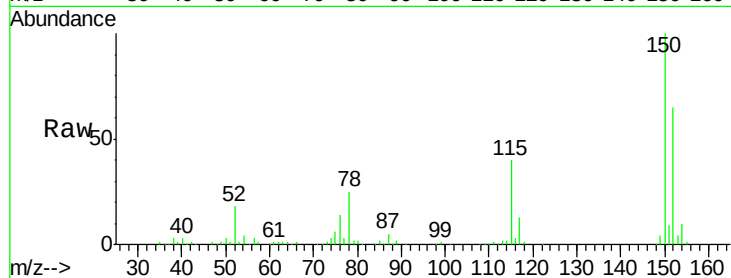
Tgt Ion:152 Resp: 107785

Ion Ratio Lower Upper

152 100

150 155.0 123.8 185.6

115 62.6 39.6 59.4#



#5

2-Fluorophenol

Concen: 84.25 ng

RT: 5.37 min Scan# 331

Delta R.T. 0.00 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

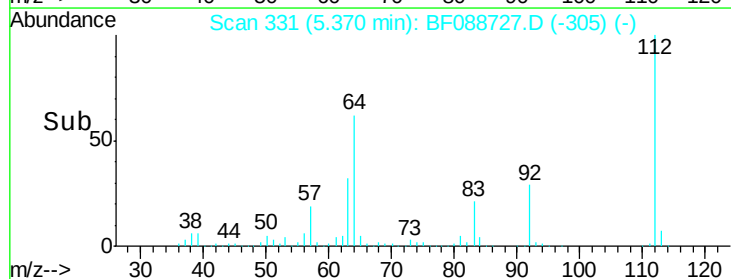
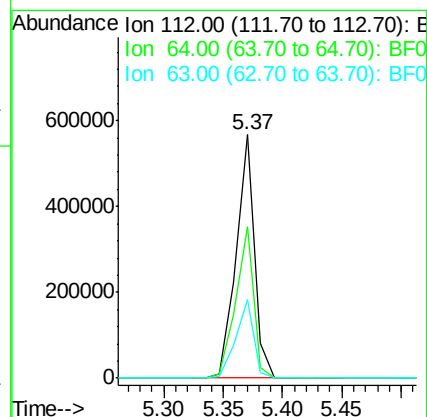
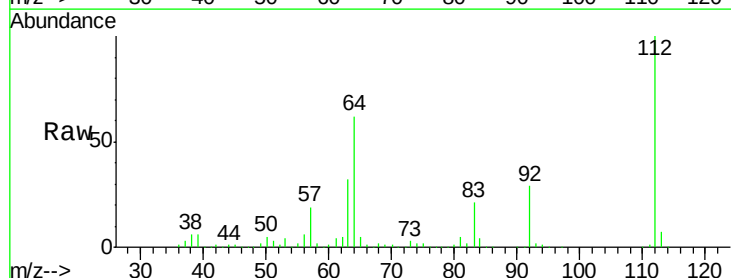
Tgt Ion:112 Resp: 605917

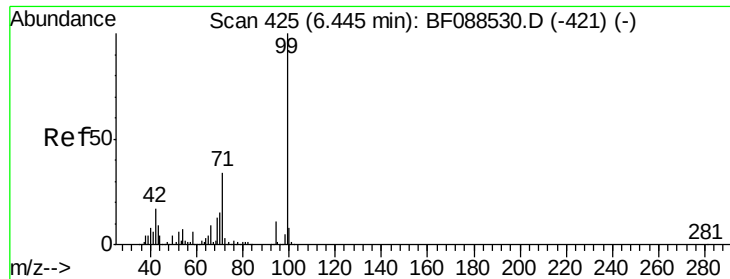
Ion Ratio Lower Upper

112 100

64 62.0 42.2 63.2

63 32.4 21.8 32.8





#7

Phenol-d6

Concen: 91.69 ng

RT: 6.41 min Scan# 422

Delta R.T. 0.00 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Instrument :

BNA\_F

ClientSampleId :

Q6-B6-0-5-C

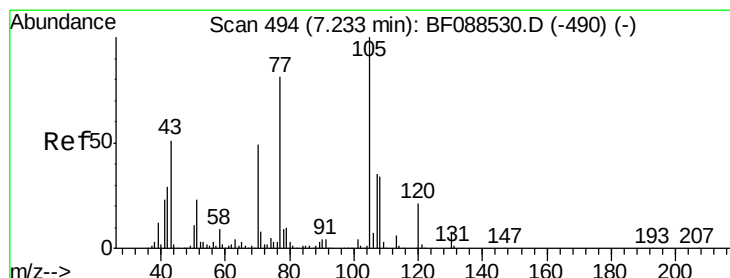
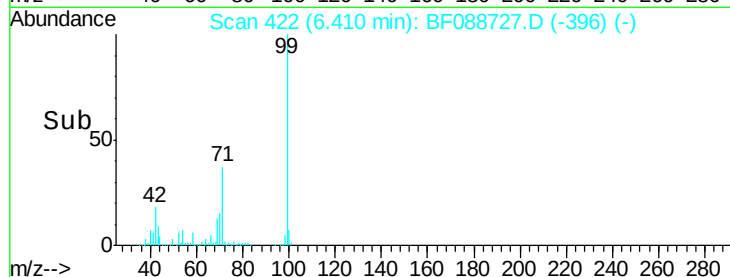
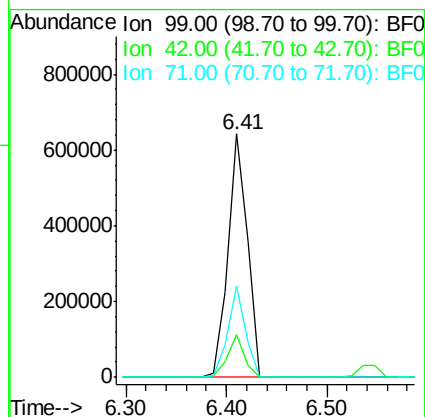
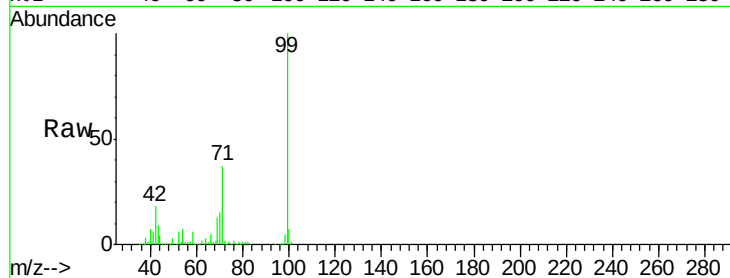
Tgt Ion: 99 Resp: 852022

Ion Ratio Lower Upper

99 100

42 17.7 12.2 18.2

71 37.4 23.4 35.0#



#19

n-Nitroso-di-n-propylamine

Concen: 10.97 ng

RT: 7.34 min Scan# 503

Delta R.T. 0.14 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Tgt Ion: 70 Resp: 68491

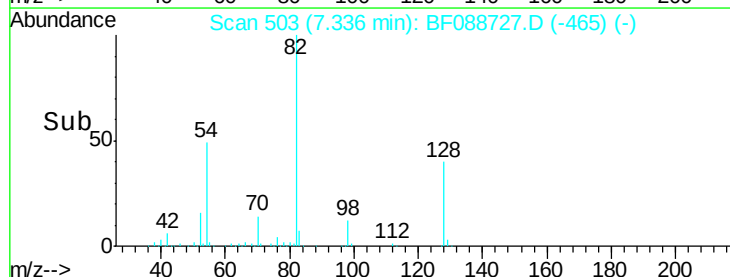
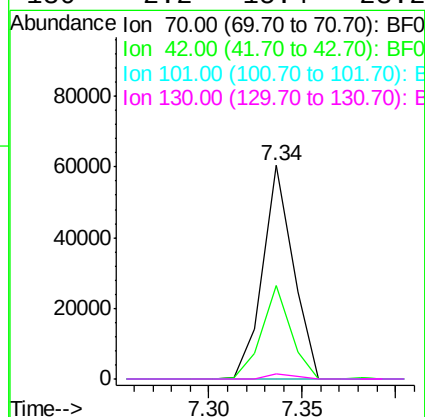
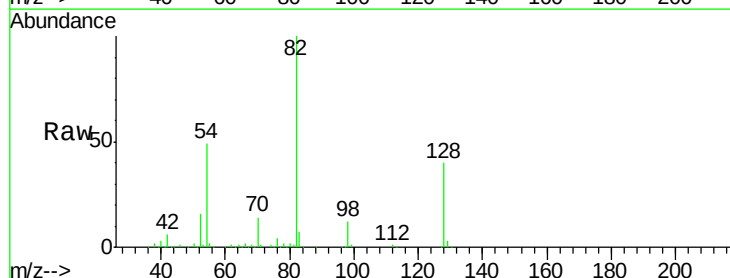
Ion Ratio Lower Upper

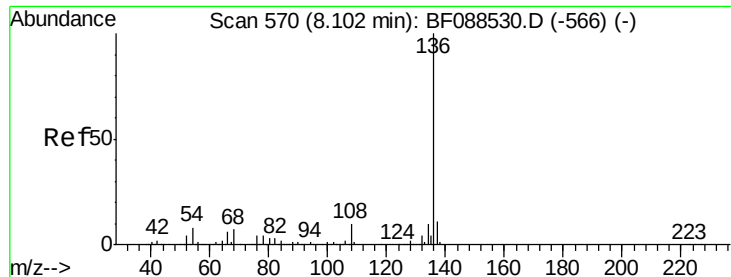
70 100

42 43.9 49.6 74.4#

101 0.0 7.1 10.7#

130 2.2 15.4 23.2#





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.06 min Scan# 566

Delta R.T. -0.01 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Instrument :

BNA\_F

ClientSampleId :

Q6-B6-0-5-C

Tgt Ion:136 Resp: 388869

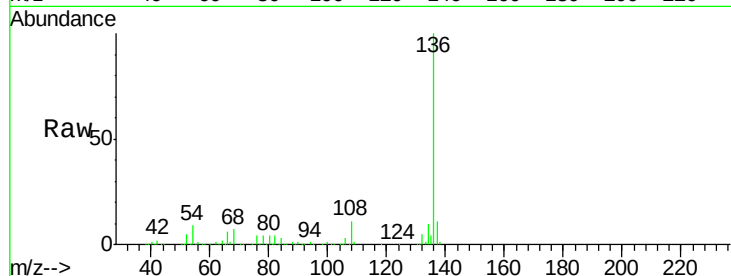
Ion Ratio Lower Upper

136 100

137 11.2 9.1 13.7

54 8.9 6.6 10.0

68 6.9 5.1 7.7

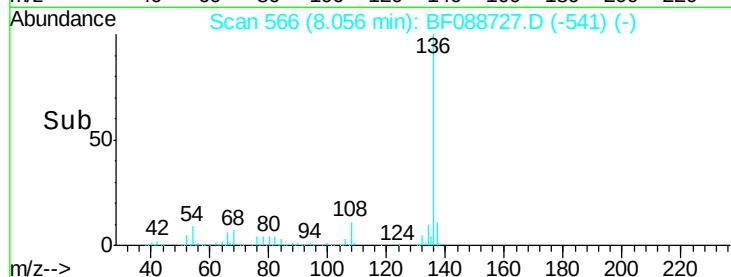


Abundance Ion 136.00 (135.70 to 136.70): E

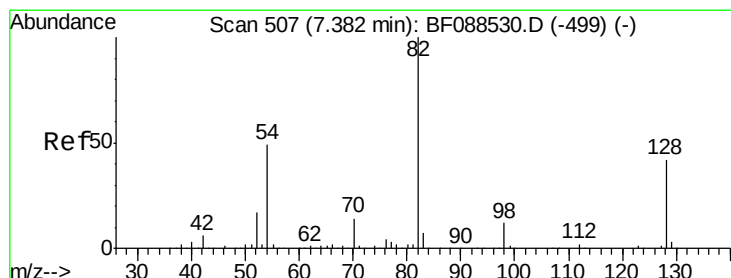
Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF0

Ion 68.00 (67.70 to 68.70): BF0



Time-->



#23

Nitrobenzene-d5

Concen: 69.58 ng

RT: 7.34 min Scan# 503

Delta R.T. -0.01 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

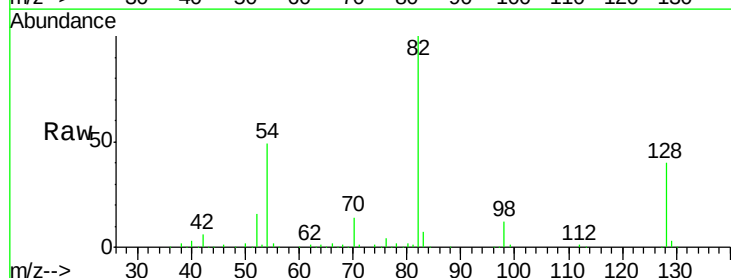
Tgt Ion: 82 Resp: 516284

Ion Ratio Lower Upper

82 100

128 40.4 35.9 53.9

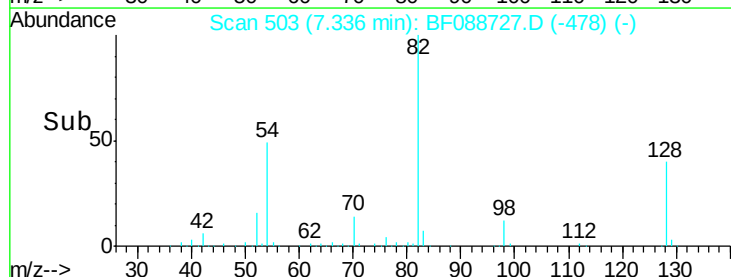
54 48.9 40.9 61.3



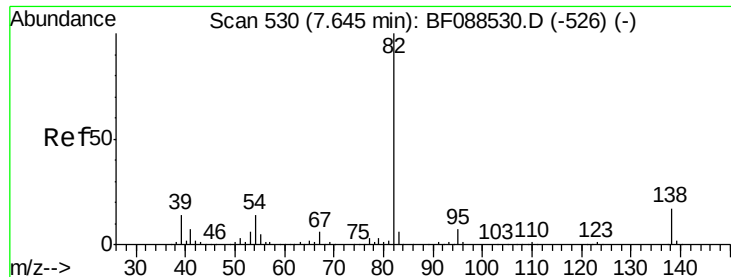
Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0



Time-->



#25

Isophorone

Concen: 32.29 ng

RT: 7.34 min Scan# 503

Delta R.T. -0.27 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Instrument :

BNA\_F

ClientSampleId :

Q6-B6-0-5-C

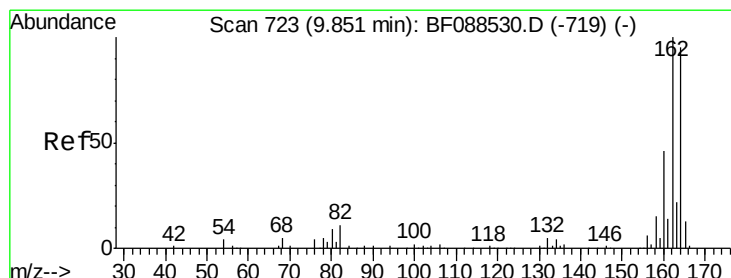
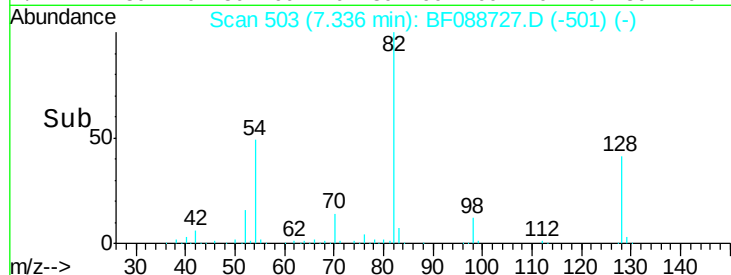
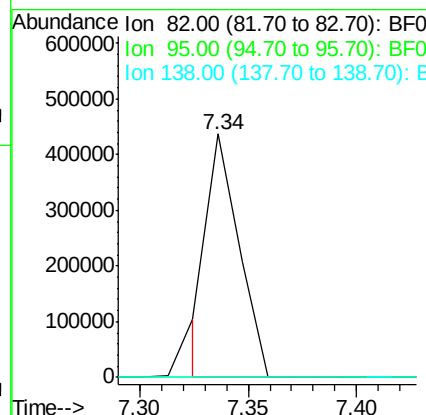
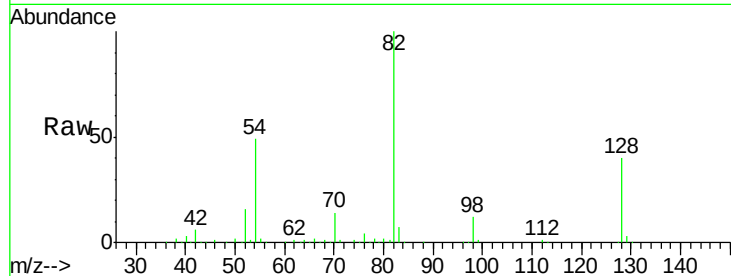
Tgt Ion: 82 Resp: 443892

Ion Ratio Lower Upper

82 100

95 0.0 5.4 8.2#

138 0.0 14.6 21.8#



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.80 min Scan# 719

Delta R.T. -0.01 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

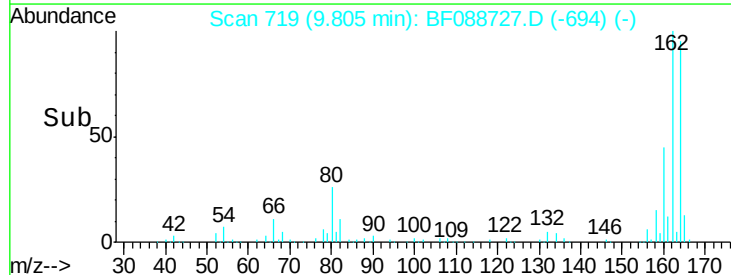
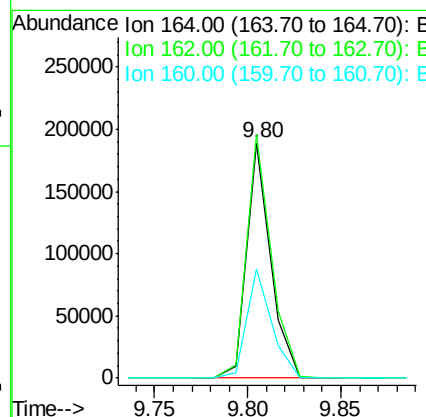
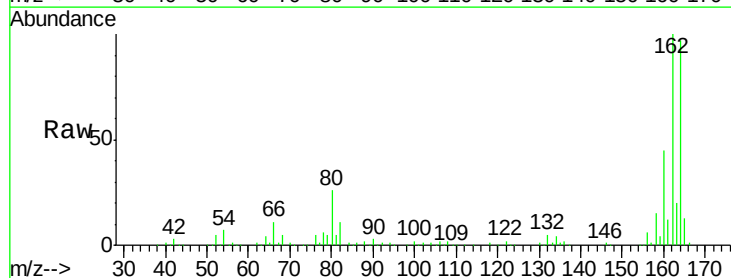
Tgt Ion: 164 Resp: 168505

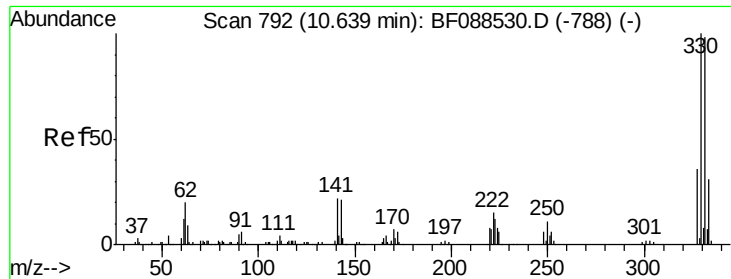
Ion Ratio Lower Upper

164 100

162 103.5 85.4 128.2

160 46.7 39.5 59.3

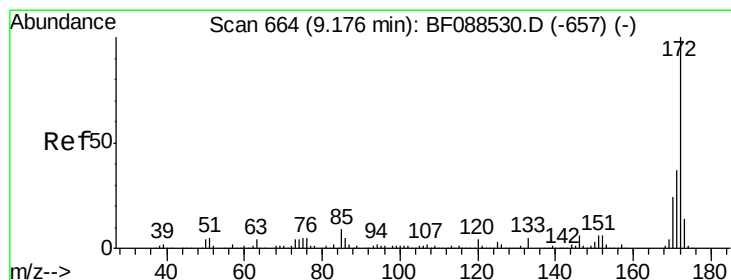
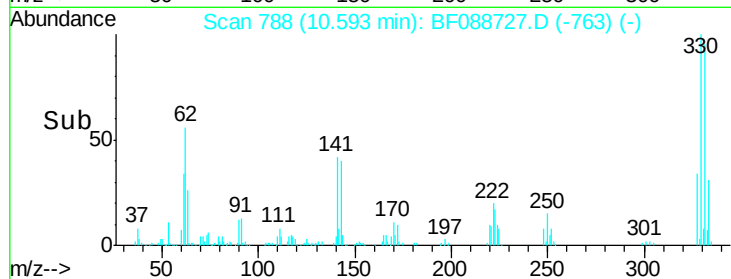
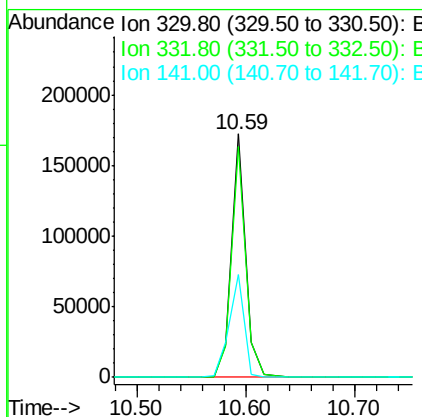
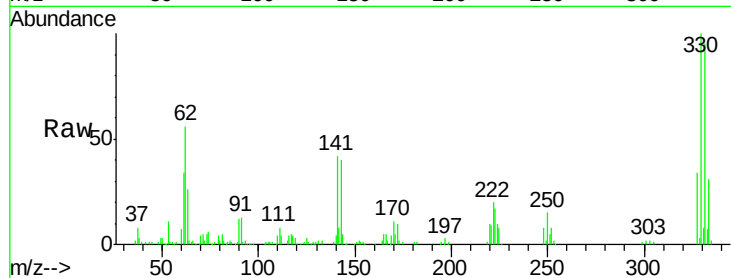




#41  
 2,4,6-Tribromophenol  
 Concen: 98.76 ng  
 RT: 10.59 min Scan# 788  
 Delta R.T. -0.01 min  
 Lab File: BF088727.D  
 Acq: 6 Jul 2016 3:02

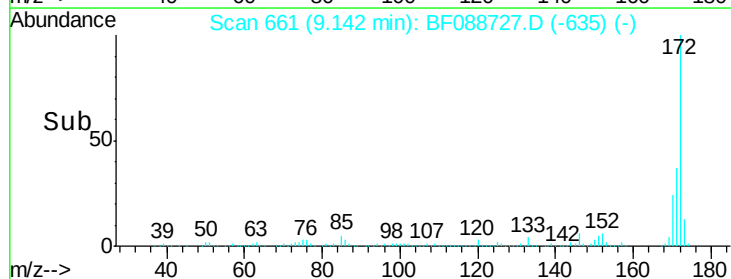
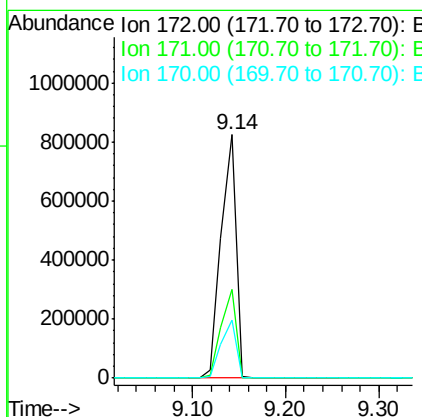
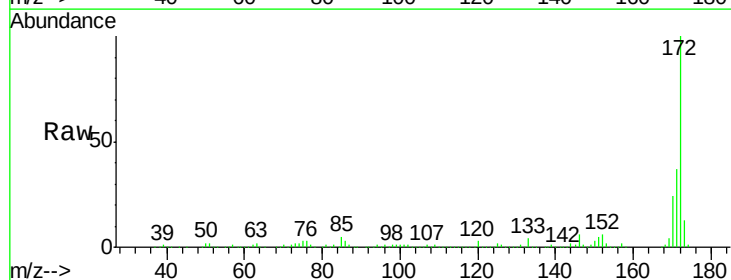
Instrument :  
 BNA\_F  
 ClientSampleId :  
 Q6-B6-0-5-C

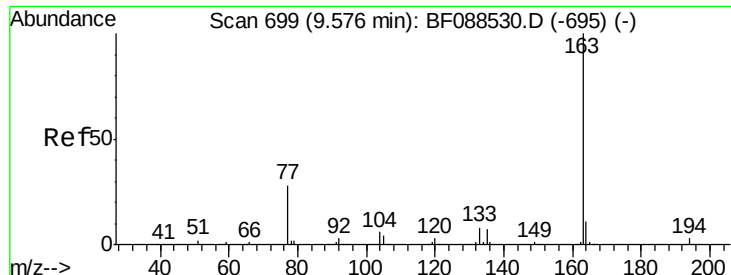
| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 330     | 100   | 154530 |       |       |
| 332     | 95.4  | 0.0    | 0.0   | 0.0   |
| 141     | 44.9  | 0.0    | 0.0   | 0.0   |



#44  
 2-Fluorobiphenyl  
 Concen: 86.31 ng  
 RT: 9.14 min Scan# 661  
 Delta R.T. 0.00 min  
 Lab File: BF088727.D  
 Acq: 6 Jul 2016 3:02

| Tgt Ion | Ratio | Resp   | Lower | Upper |
|---------|-------|--------|-------|-------|
| 172     | 100   | 920698 |       |       |
| 171     | 36.6  | 28.6   | 43.0  |       |
| 170     | 24.1  | 19.2   | 28.8  |       |





#49

Dimethylphthalate

Concen: 15.18 ng

RT: 9.53 min Scan# 695

Delta R.T. -0.01 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Instrument :

BNA\_F

ClientSampleId :

Q6-B6-0-5-C

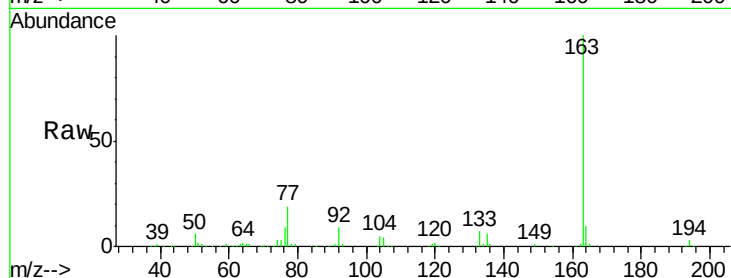
Tgt Ion:163 Resp: 182285

Ion Ratio Lower Upper

163 100

194 3.3 2.8 4.2

164 9.9 8.3 12.5

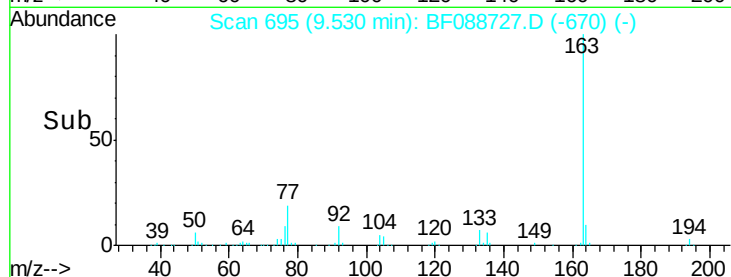


Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

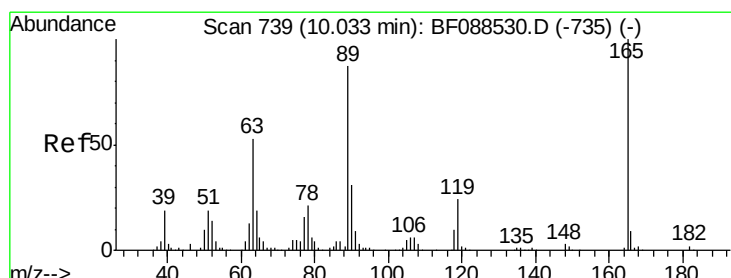
Ion 164.00 (163.70 to 164.70): E

Time-->



Abundance

Time-->



#56

2,4-Dinitrotoluene

Concen: 6.38 ng

RT: 9.80 min Scan# 719

Delta R.T. -0.19 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Tgt Ion:165 Resp: 22211

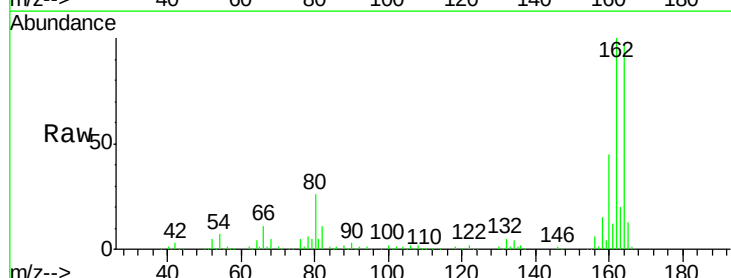
Ion Ratio Lower Upper

165 100

63 1.9 22.0 33.0#

89 1.6 41.1 61.7#

182 0.0 2.0 3.0#



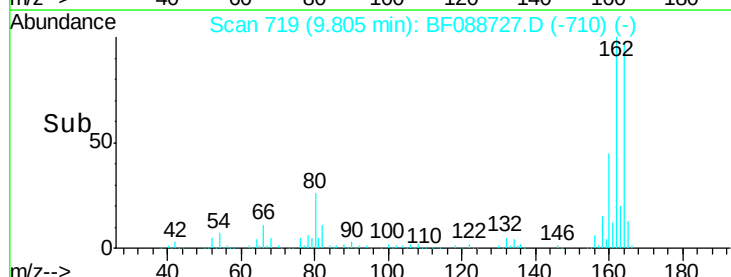
Abundance Ion 165.00 (164.70 to 165.70): E

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

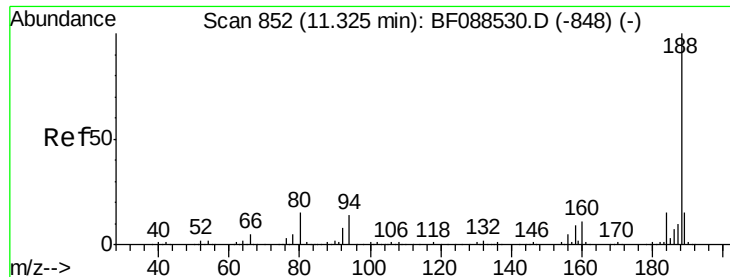
Time-->



Abundance

Time-->

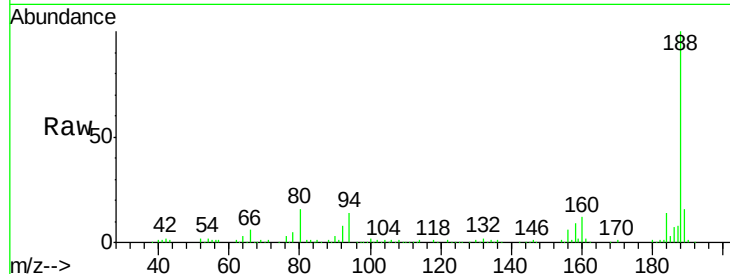




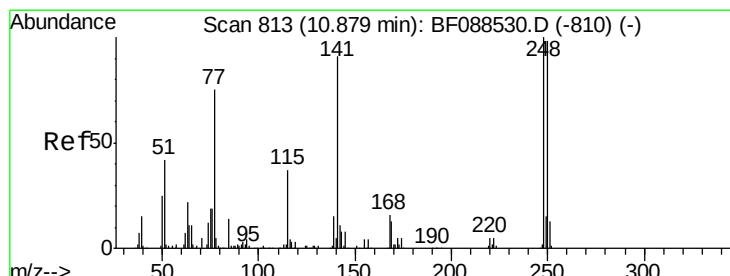
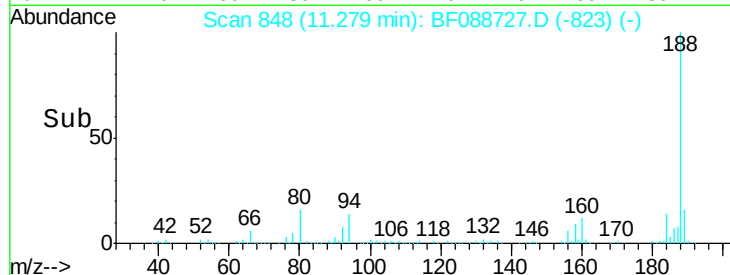
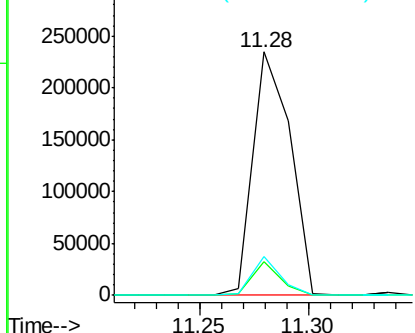
#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 11.28 min Scan# 848  
 Delta R.T. -0.01 min  
 Lab File: BF088727.D  
 Acq: 6 Jul 2016 3:02

Instrument :  
 BNA\_F  
 ClientSampleId :  
 Q6-B6-0-5-C

Tgt Ion:188 Resp: 281773  
 Ion Ratio Lower Upper  
 188 100  
 94 13.8 9.0 13.6#  
 80 16.2 10.0 15.0#

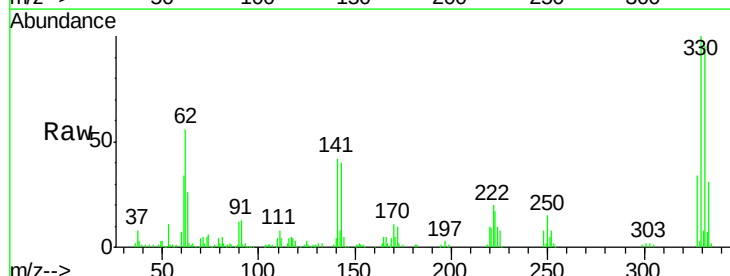


Abundance Ion 188.00 (187.70 to 188.70): E  
 Ion 94.00 (93.70 to 94.70): BF0  
 Ion 80.00 (79.70 to 80.70): BF0

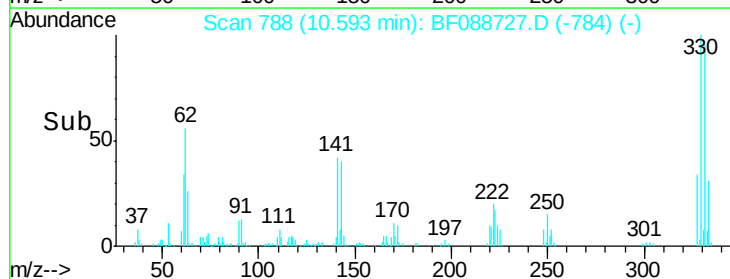
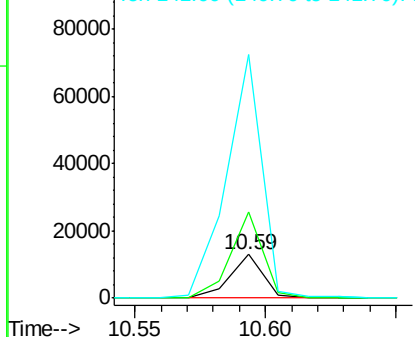


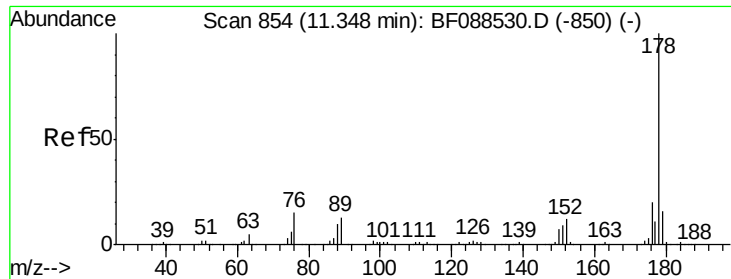
#66  
 4-Bromophenyl-phenylether  
 Concen: 3.96 ng  
 RT: 10.59 min Scan# 788  
 Delta R.T. -0.25 min  
 Lab File: BF088727.D  
 Acq: 6 Jul 2016 3:02

Tgt Ion:248 Resp: 11253  
 Ion Ratio Lower Upper  
 248 100  
 250 196.7 77.1 115.7#  
 141 557.4 50.6 76.0#



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

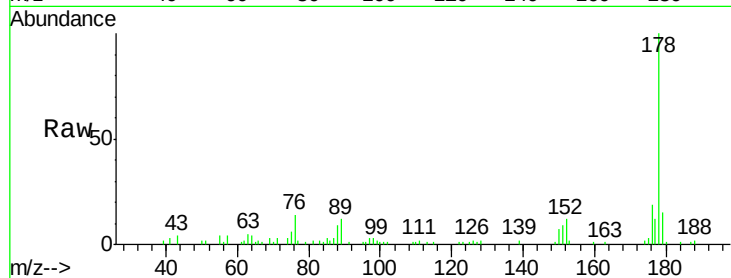




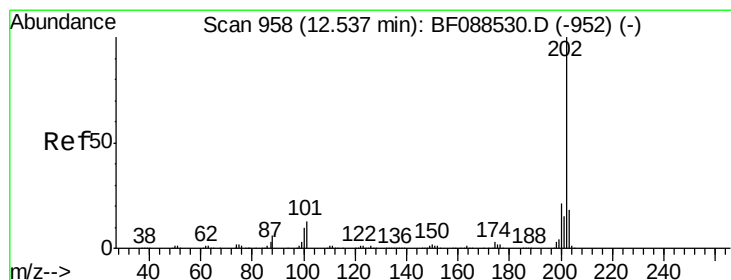
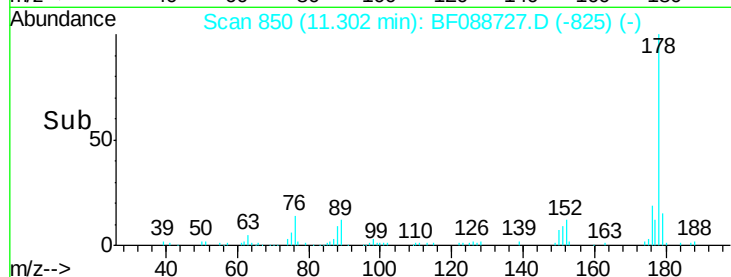
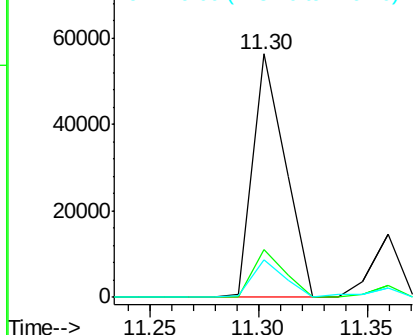
#70  
Phenanthrene  
Concen: 3.79 ng  
RT: 11.30 min Scan# 850  
Delta R.T. -0.01 min  
Lab File: BF088727.D  
Acq: 6 Jul 2016 3:02

Instrument :  
BNA\_F  
ClientSampleId :  
Q6-B6-0-5-C

Tgt Ion:178 Resp: 58325  
Ion Ratio Lower Upper  
178 100  
176 19.4 15.8 23.6  
179 15.2 13.0 19.4

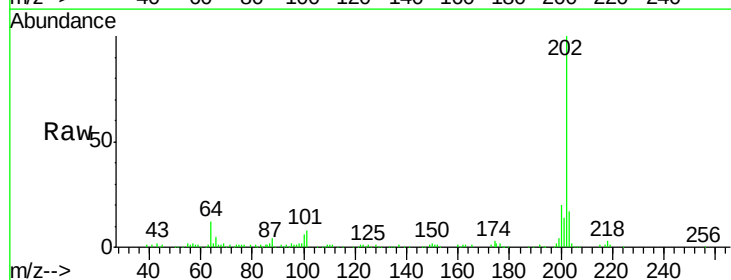


Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E

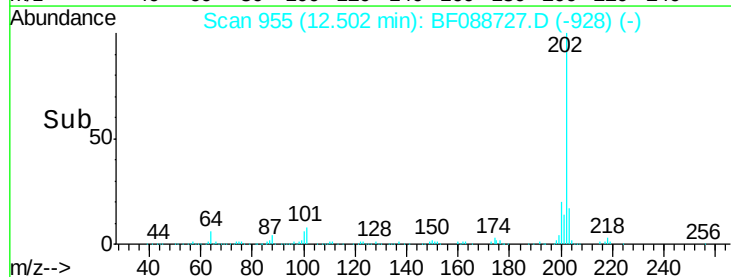
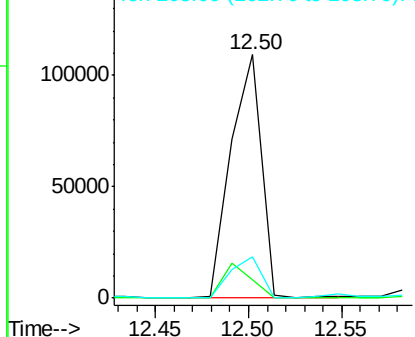


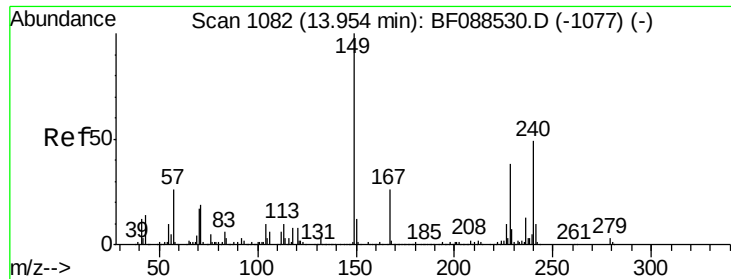
#74  
Fluoranthene  
Concen: 8.11 ng  
RT: 12.50 min Scan# 955  
Delta R.T. 0.01 min  
Lab File: BF088727.D  
Acq: 6 Jul 2016 3:02

Tgt Ion:202 Resp: 126571  
Ion Ratio Lower Upper  
202 100  
101 7.7 0.0 33.1  
203 17.1 0.0 38.1



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

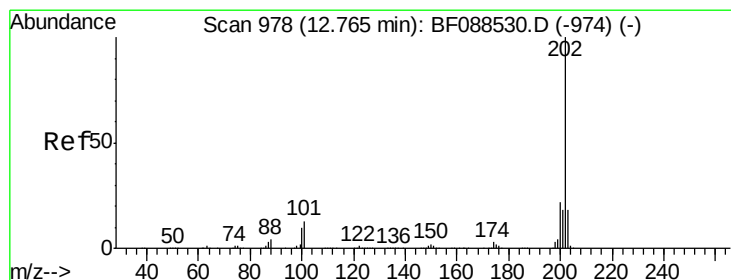
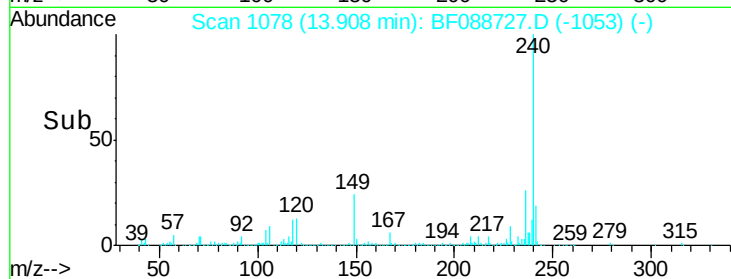
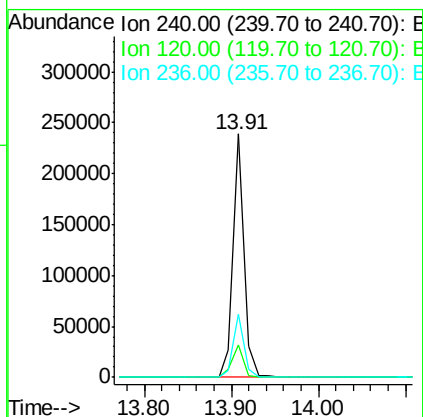
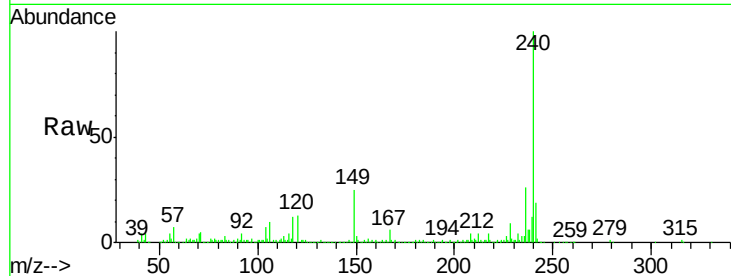




#75  
Chrysene-d12  
Concen: 20.00 ng  
RT: 13.91 min Scan# 1078  
Delta R.T. -0.01 min  
Lab File: BF088727.D  
Acq: 6 Jul 2016 3:02

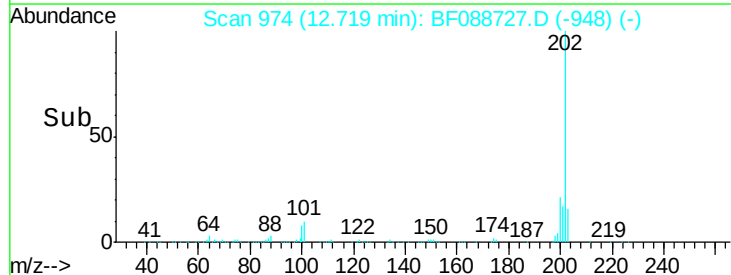
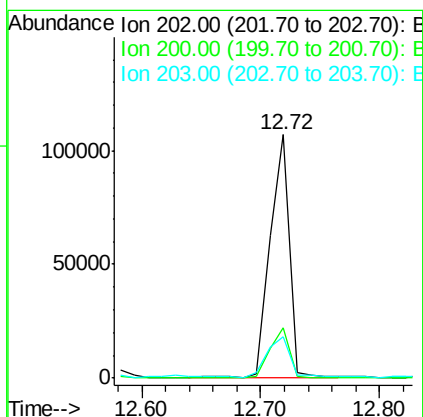
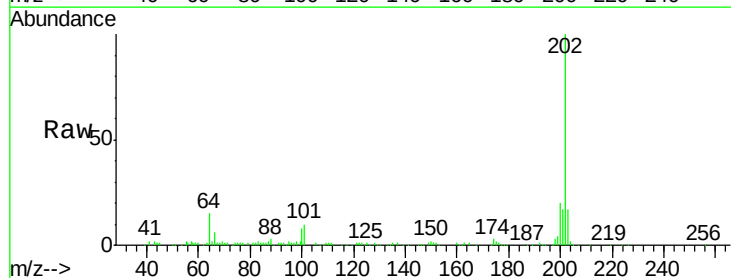
Instrument :  
BNA\_F  
ClientSampleId :  
Q6-B6-0-5-C

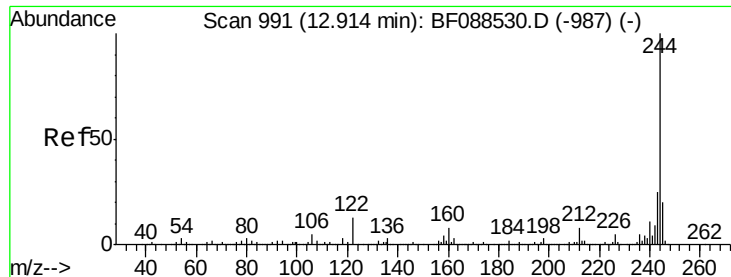
Tgt Ion:240 Resp: 206894  
Ion Ratio Lower Upper  
240 100  
120 13.4 6.8 10.2#  
236 25.9 20.2 30.2



#77  
Pyrene  
Concen: 6.96 ng  
RT: 12.72 min Scan# 974  
Delta R.T. 0.00 min  
Lab File: BF088727.D  
Acq: 6 Jul 2016 3:02

Tgt Ion:202 Resp: 122113  
Ion Ratio Lower Upper  
202 100  
200 20.5 17.4 26.2  
203 16.8 14.5 21.7





#78

Terphenyl-d14

Concen: 60.41 ng

RT: 12.87 min Scan# 987

Delta R.T. 0.00 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Instrument :

BNA\_F

ClientSampleId :

Q6-B6-0-5-C

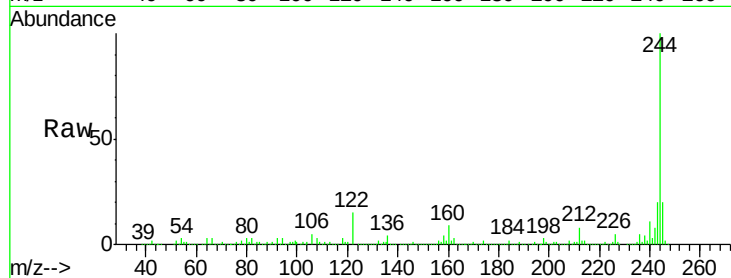
Tgt Ion:244 Resp: 561151

Ion Ratio Lower Upper

244 100

212 7.8 6.0 9.0

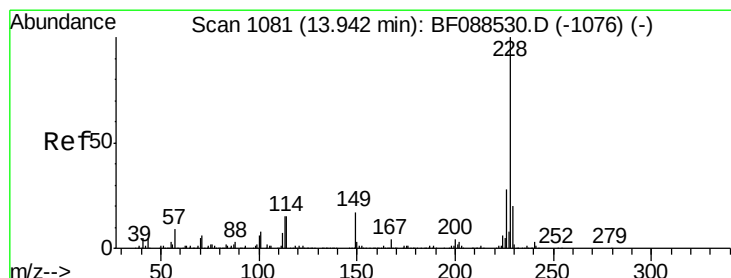
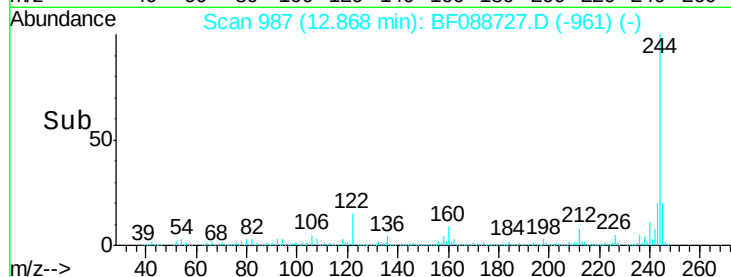
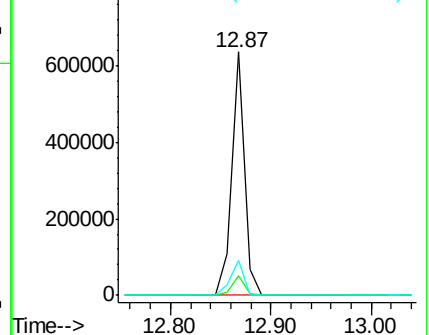
122 14.5 11.2 16.8



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: 6.34 ng

RT: 13.90 min Scan# 1077

Delta R.T. -0.01 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

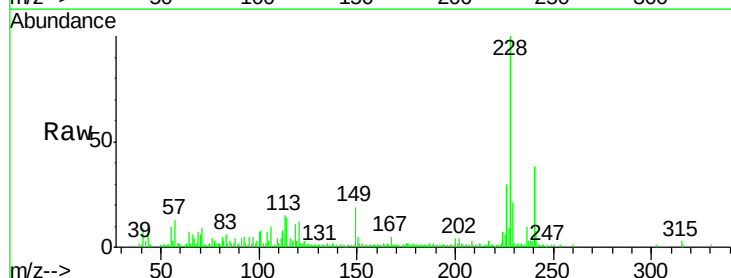
Tgt Ion:228 Resp: 84469

Ion Ratio Lower Upper

228 100

226 29.6 22.3 33.5

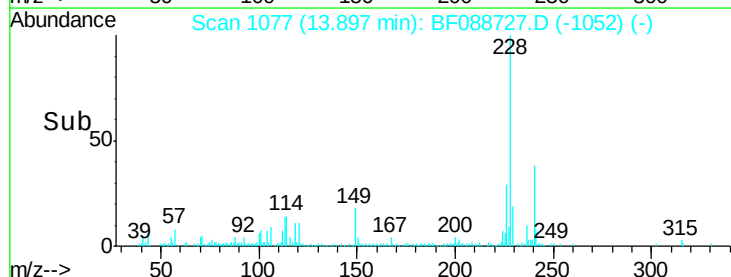
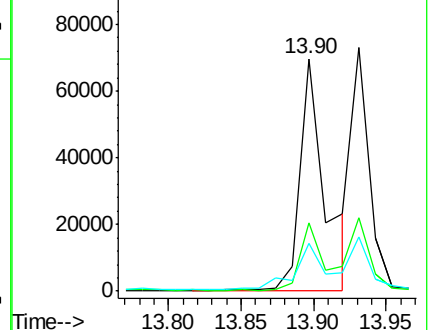
229 20.6 16.0 24.0

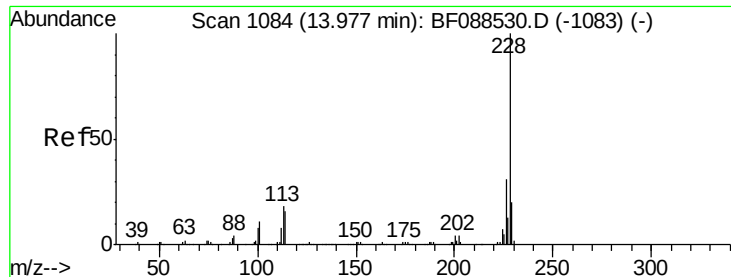


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#82

Chrysene

Concen: 6.41 ng

RT: 13.90 min Scan# 1077

Delta R.T. -0.05 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Instrument :

BNA\_F

ClientSampleId :

Q6-B6-0-5-C

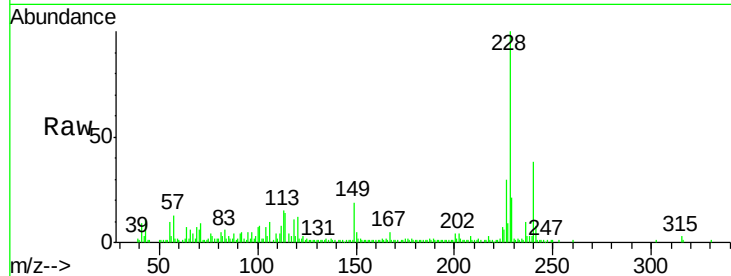
Tgt Ion:228 Resp: 84469

Ion Ratio Lower Upper

228 100

226 29.6 25.4 38.2

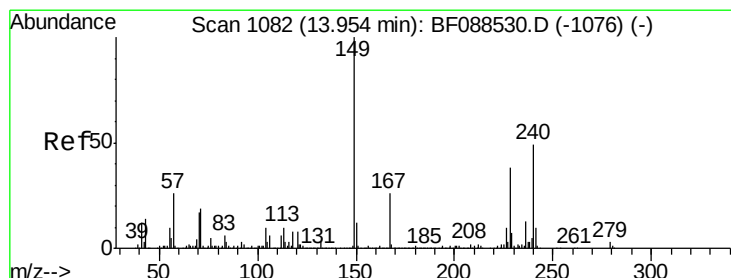
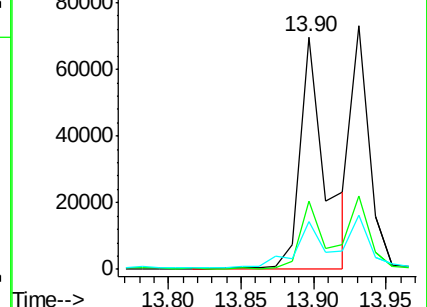
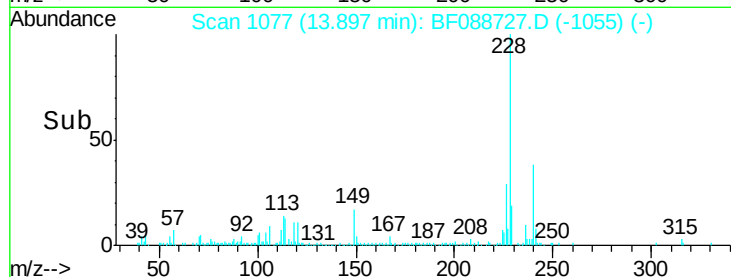
229 20.6 16.3 24.5



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



#83

Bis(2-ethylhexyl)phthalate

Concen: 6.09 ng

RT: 13.91 min Scan# 1078

Delta R.T. 0.00 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

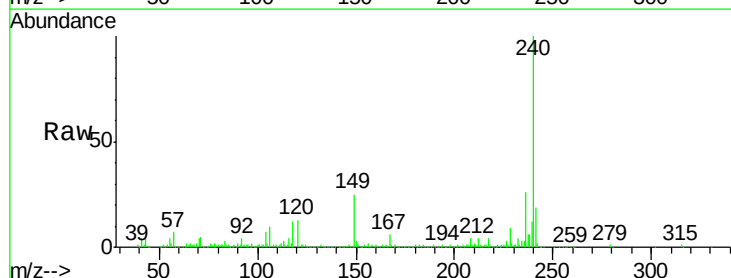
Tgt Ion:149 Resp: 54428

Ion Ratio Lower Upper

149 100

167 26.0 20.5 30.7

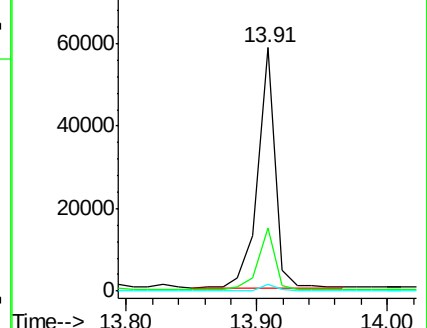
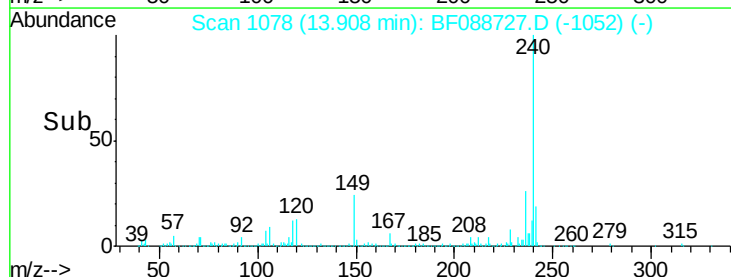
279 2.8 2.0 3.0

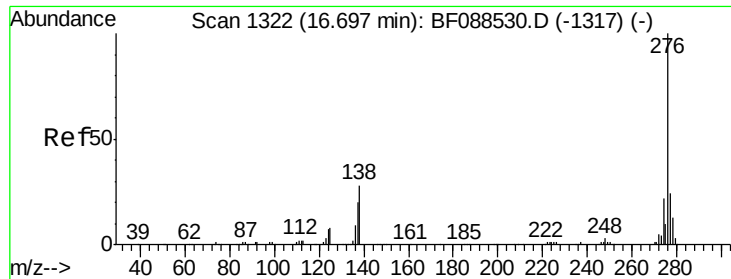


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E

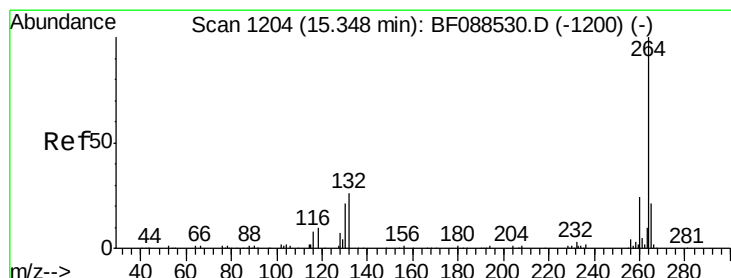
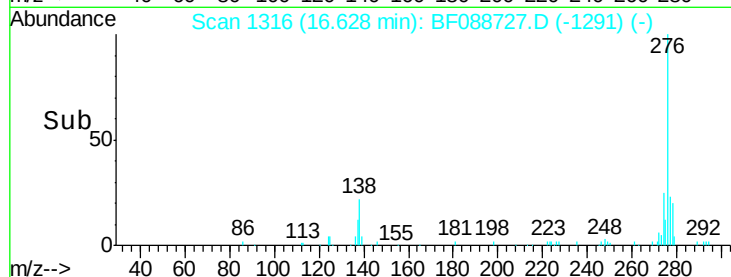
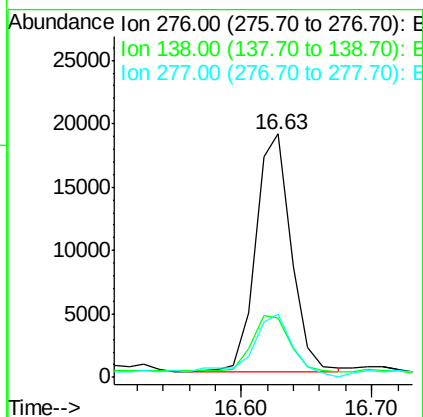
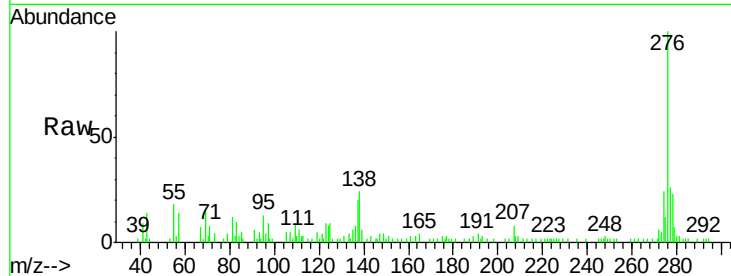




#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 3.53 ng  
 RT: 16.63 min Scan# 1316  
 Delta R.T. -0.01 min  
 Lab File: BF088727.D  
 Acq: 6 Jul 2016 3:02

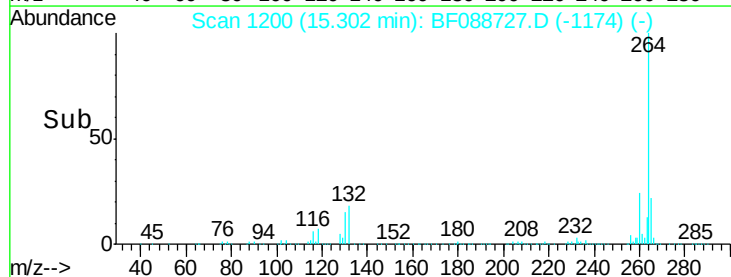
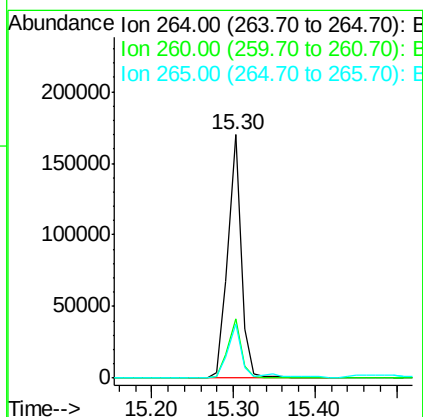
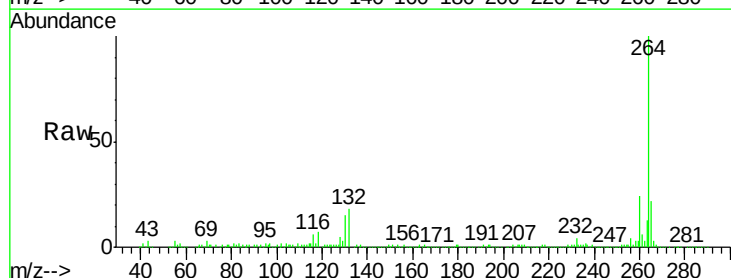
Instrument :  
 BNA\_F  
 ClientSampleId :  
 Q6-B6-0-5-C

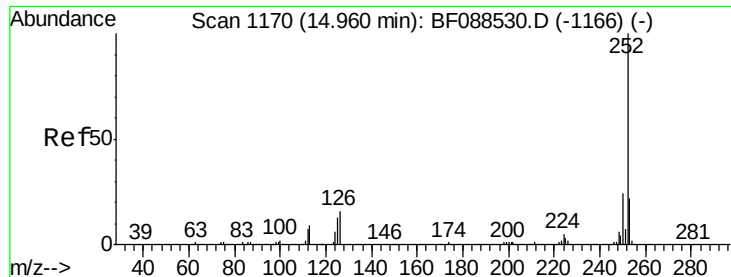
Tgt Ion: 276 Resp: 35804  
 Ion Ratio Lower Upper  
 276 100  
 138 25.5 0.0 0.0#  
 277 32.1 0.0 0.0#



#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 15.30 min Scan# 1200  
 Delta R.T. 0.00 min  
 Lab File: BF088727.D  
 Acq: 6 Jul 2016 3:02

Tgt Ion: 264 Resp: 196098  
 Ion Ratio Lower Upper  
 264 100  
 260 24.4 19.2 28.8  
 265 22.2 16.9 25.3

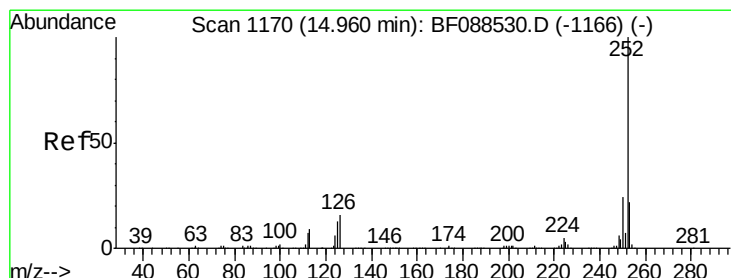
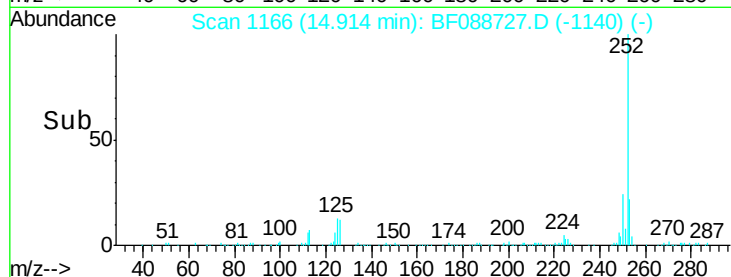
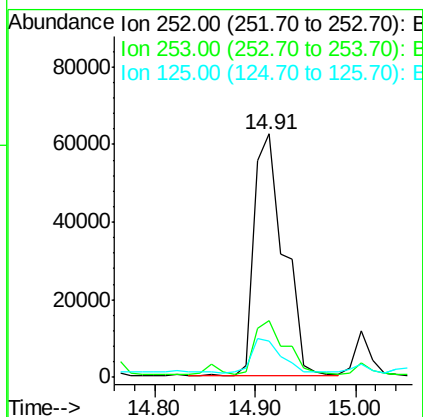
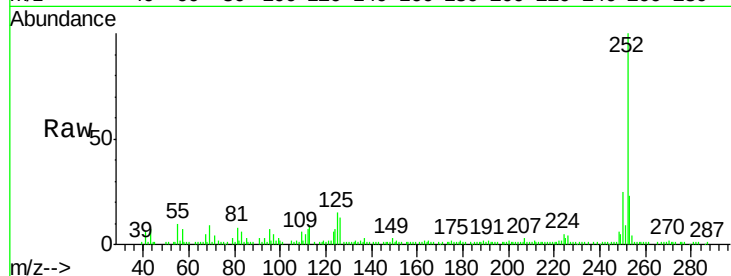




#87  
Benzo(b)fluoranthene  
Concen: 10.38 ng  
RT: 14.91 min Scan# 1166  
Delta R.T. 0.00 min  
Lab File: BF088727.D  
Acq: 6 Jul 2016 3:02

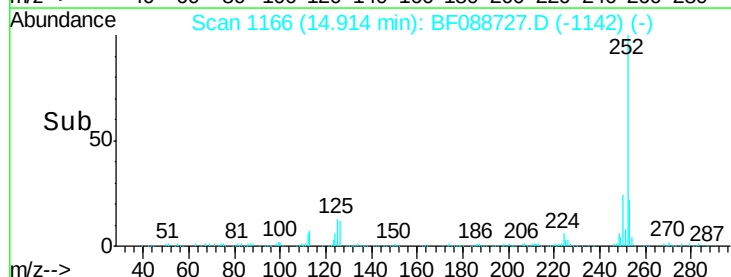
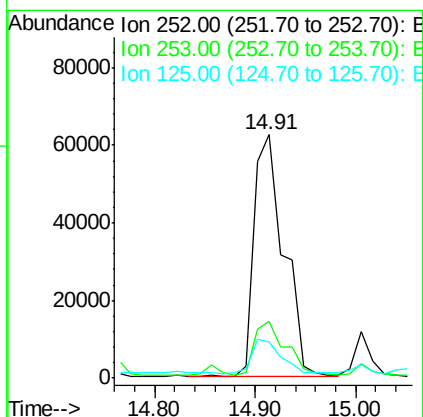
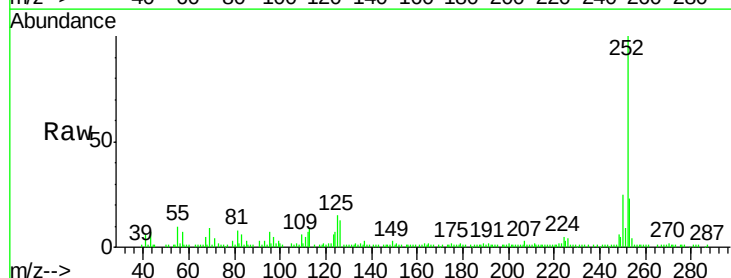
Instrument :  
BNA\_F  
ClientSampleId :  
Q6-B6-0-5-C

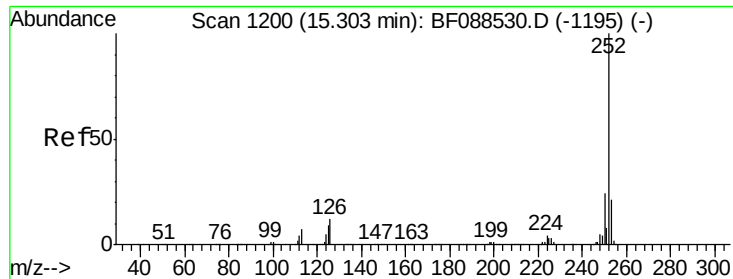
Tgt Ion:252 Resp: 127703  
Ion Ratio Lower Upper  
252 100  
253 23.2 17.4 26.2  
125 14.8 7.1 10.7#



#88  
Benzo(k)fluoranthene  
Concen: 11.92 ng  
RT: 14.91 min Scan# 1166  
Delta R.T. -0.02 min  
Lab File: BF088727.D  
Acq: 6 Jul 2016 3:02

Tgt Ion:252 Resp: 127703  
Ion Ratio Lower Upper  
252 100  
253 23.2 18.0 27.0  
125 14.8 11.2 16.8





#89

Benzo(a)pyrene

Concen: 5.46 ng

RT: 15.25 min Scan# 1195

Delta R.T. 0.00 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

Instrument :

BNA\_F

ClientSampleId :

Q6-B6-0-5-C

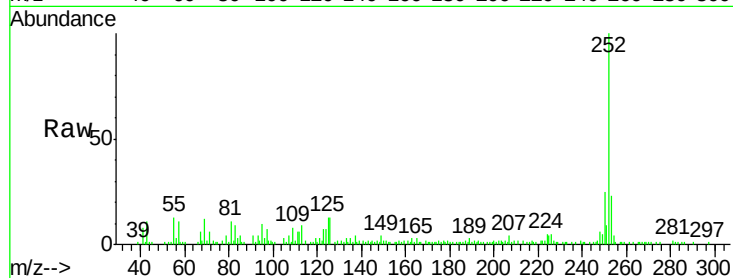
Tgt Ion:252 Resp: 56879

Ion Ratio Lower Upper

252 100

253 22.9 17.9 26.9

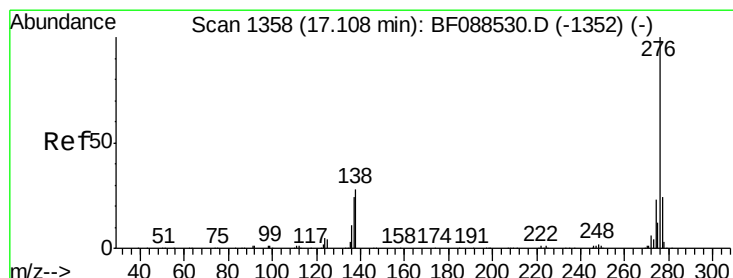
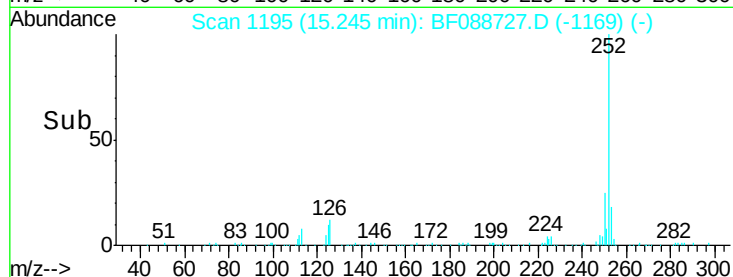
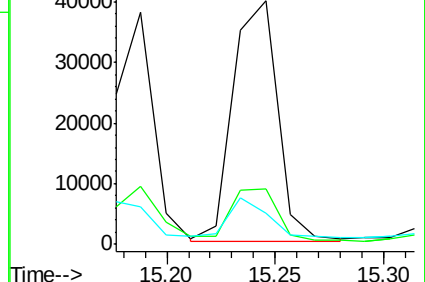
125 12.9 12.5 18.7



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#91

Benzo(g,h,i)perylene

Concen: 4.07 ng

RT: 17.02 min Scan# 1350

Delta R.T. -0.02 min

Lab File: BF088727.D

Acq: 6 Jul 2016 3:02

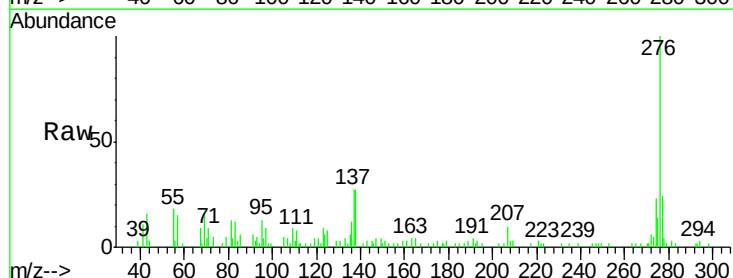
Tgt Ion:276 Resp: 36588

Ion Ratio Lower Upper

276 100

277 24.5 18.9 28.3

138 26.8 21.4 32.2



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

