

Data Path : Z:\HPCHEM1\BNA\_F\Data\BF062117\  
 Data File : BF096084.D  
 Acq On : 21 Jun 2017 14:59  
 Operator : SJ/MA  
 Sample : I3782-07  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TK4-5-20170619

Quant Time: Jun 21 16:24:27 2017  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF060517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jun 20 16:05:47 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.29  | 152  | 81773    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 9.32  | 136  | 336361   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 12.14 | 164  | 153965   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 14.53 | 188  | 239197   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 18.27 | 240  | 161187   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 19.94 | 264  | 161055   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.17  | 112  | 568228   | 110.73 | ng    | 0.00     |
| 7) Phenol-d6                | 6.86  | 99   | 700102   | 113.96 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 8.21  | 82   | 372343   | 68.75  | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 13.44 | 330  | 122242   | 89.74  | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 11.10 | 172  | 664538   | 60.06  | ng    | 0.00     |
| 78) Terphenyl-d14           | 16.92 | 244  | 421808   | 64.94  | ng    | -0.01    |

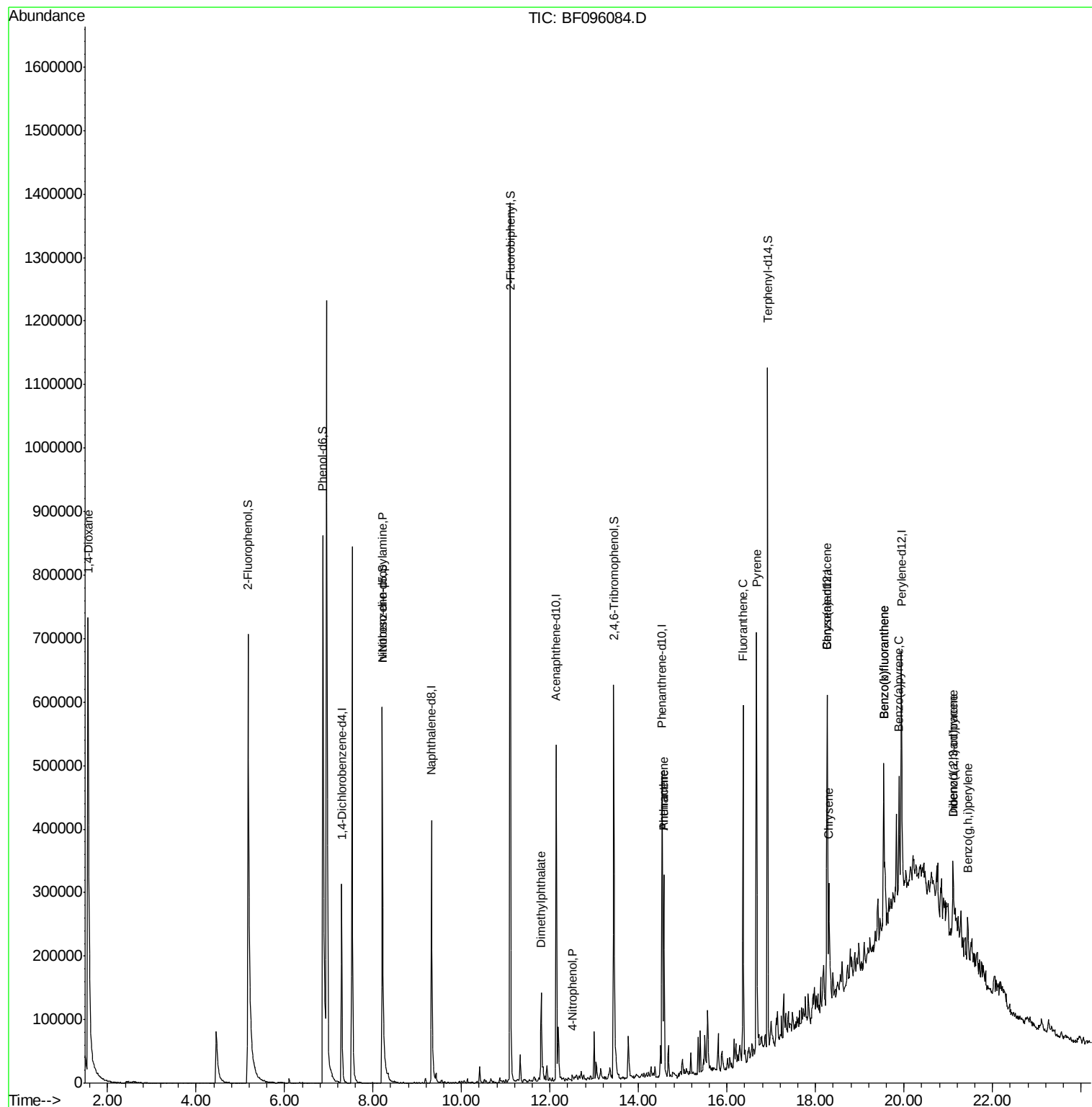
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 2) 1,4-Dioxane                 | 1.56  | 88   | 40853    | 16.734 | ng    | # 21   |
| 19) n-Nitroso-di-n-propylamine | 8.21  | 70   | 44937    | 11.542 | ng    | # 74   |
| 49) Dimethylphthalate          | 11.80 | 163  | 99922    | 8.548  | ng    | 99     |
| 55) 4-Nitrophenol              | 12.51 | 139  | 2700     | 6.094  | ng    | # 25   |
| 70) Phenanthrene               | 14.57 | 178  | 198342   | 14.371 | ng    | 98     |
| 71) Anthracene                 | 14.57 | 178  | 198342   | 13.766 | ng    | 99     |
| 74) Fluoranthene               | 16.36 | 202  | 287057   | 21.014 | ng    | 99     |
| 77) Pyrene                     | 16.66 | 202  | 254197   | 21.135 | ng    | # 95   |
| 80) Benzo(a)anthracene         | 18.26 | 228  | 96246    | 10.270 | ng    | 97     |
| 82) Chrysene                   | 18.30 | 228  | 101716   | 10.861 | ng    | 99     |
| 85) Indeno(1,2,3-cd)pyrene     | 21.11 | 276  | 54213    | 6.766  | ng    | 93     |
| 87) Benzo(b)fluoranthene       | 19.54 | 252  | 164561   | 16.318 | ng    | # 95   |
| 88) Benzo(k)fluoranthene       | 19.54 | 252  | 164561   | 17.072 | ng    | 98     |
| 89) Benzo(a)pyrene             | 19.89 | 252  | 91758    | 9.899  | ng    | # 92   |
| 90) Dibenzo(a,h)anthracene     | 21.10 | 278  | 16073    | 2.044  | ng    | # 71   |
| 91) Benzo(g,h,i)perylene       | 21.44 | 276  | 48557    | 6.058  | ng    | 97     |

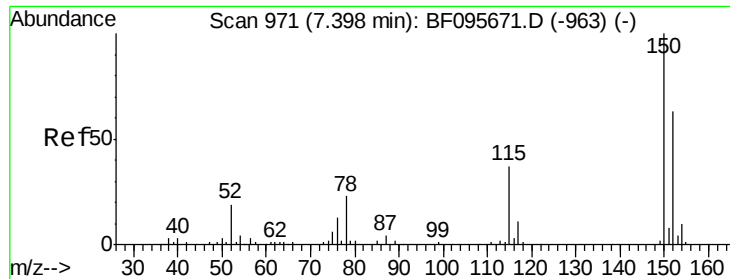
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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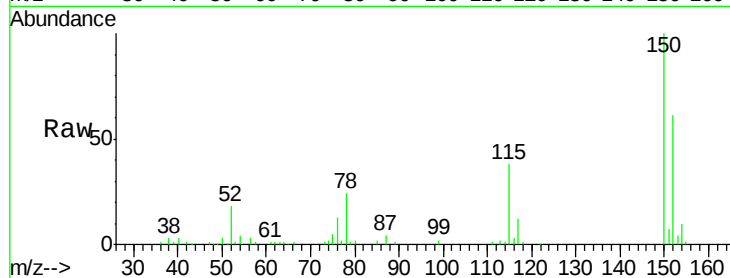


#1

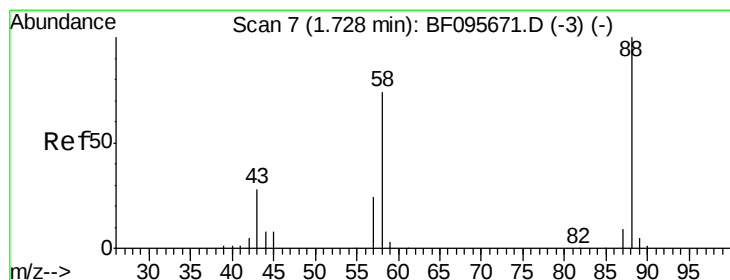
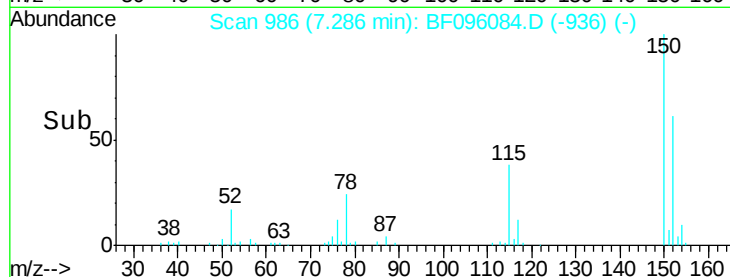
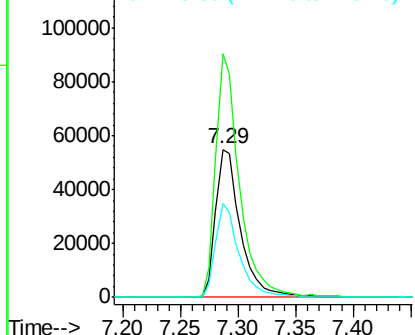
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 7.29 min Scan# 986  
Delta R.T. -0.01 min  
Lab File: BF096084.D  
Acq: 21 Jun 2017 14:59

Instrument :  
BNA\_F  
ClientSampleId :  
TK4-5-20170619

Tgt Ion:152 Resp: 81773  
Ion Ratio Lower Upper  
152 100  
150 164.6 126.2 189.2  
115 63.2 52.2 78.2



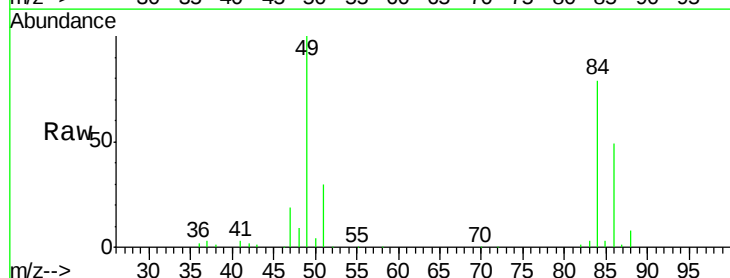
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



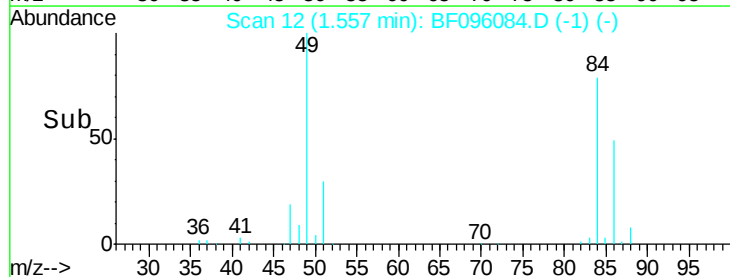
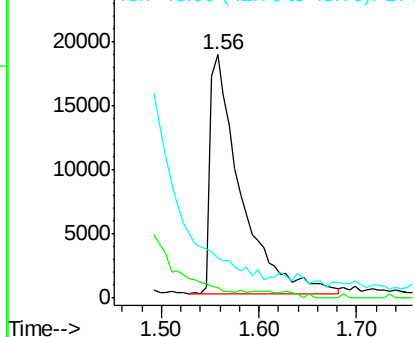
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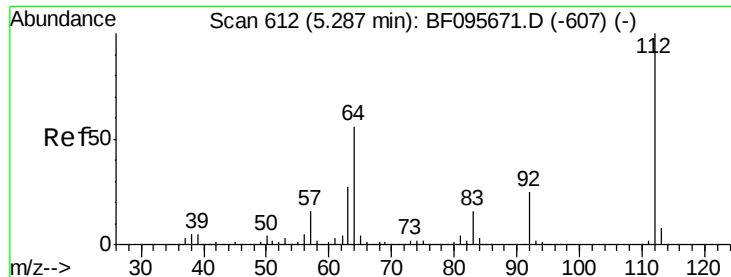
1,4-Dioxane  
Concen: 16.734 ng  
RT: 1.56 min Scan# 12  
Delta R.T. -0.05 min  
Lab File: BF096084.D  
Acq: 21 Jun 2017 14:59

Tgt Ion: 88 Resp: 40853  
Ion Ratio Lower Upper  
88 100  
58 0.0 61.4 92.0#  
43 0.0 23.4 35.0#



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: 110.727 ng

RT: 5.17 min Scan# 627

Delta R.T. -0.01 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

Instrument :

BNA\_F

ClientSampleId :

TK4-5-20170619

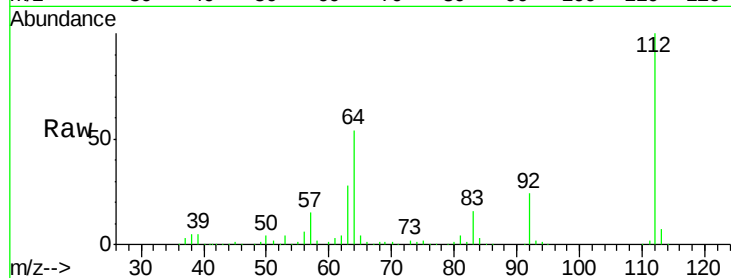
Tgt Ion: 112 Resp: 568228

Ion Ratio Lower Upper

112 100

64 54.3 46.0 69.0

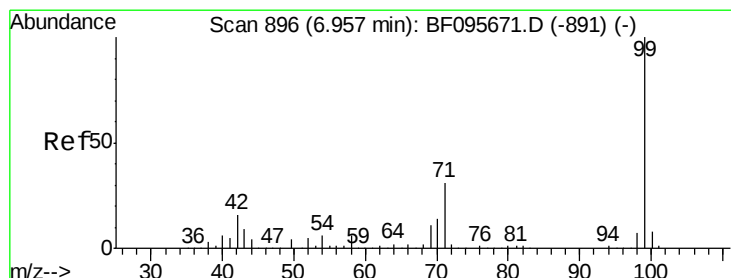
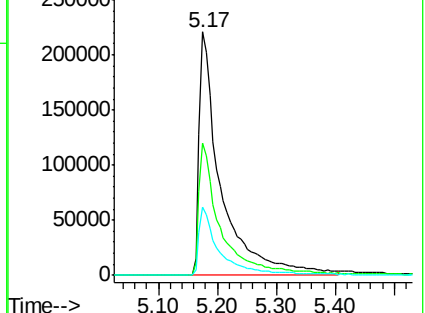
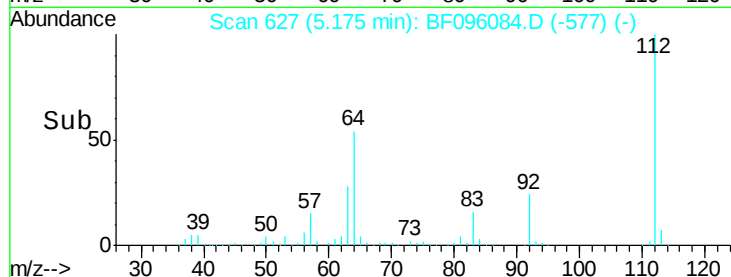
63 28.1 23.4 35.0



Abundance Ion 112.00 (111.70 to 112.70): B

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0



#7

Phenol-d6

Concen: 113.955 ng

RT: 6.86 min Scan# 914

Delta R.T. -0.01 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

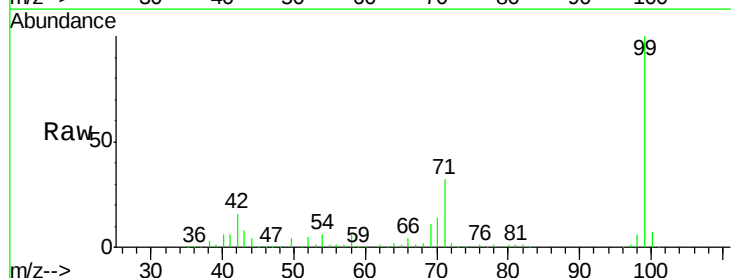
Tgt Ion: 99 Resp: 700102

Ion Ratio Lower Upper

99 100

42 16.2 13.5 20.3

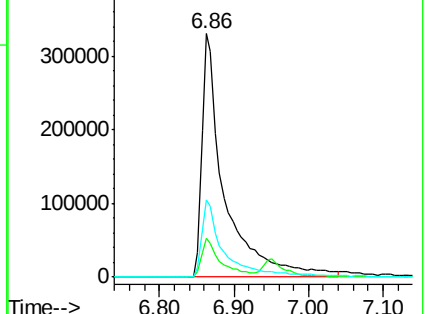
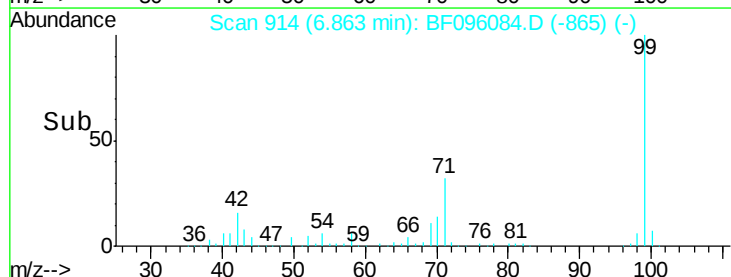
71 31.9 24.5 36.7

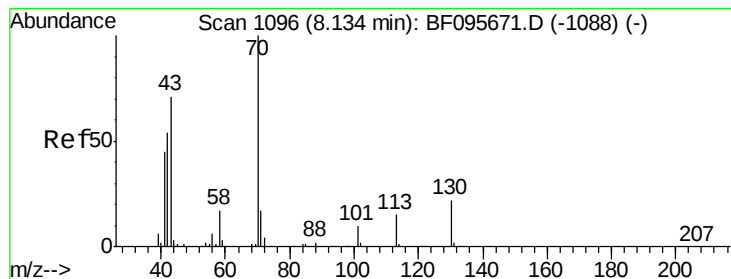


Abundance Ion 99.00 (98.70 to 99.70): BF0

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: 11.542 ng

RT: 8.21 min Scan# 1143

Delta R.T. 0.18 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

Instrument :

BNA\_F

ClientSampleId :

TK4-5-20170619

Tgt Ion: 70 Resp: 44937

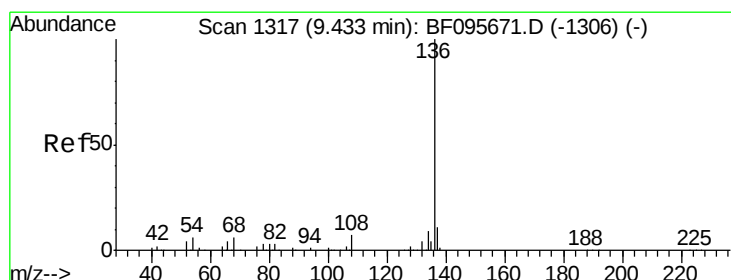
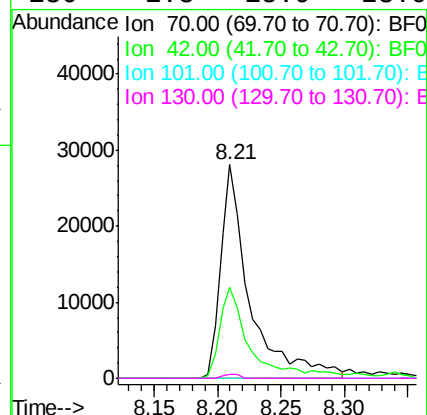
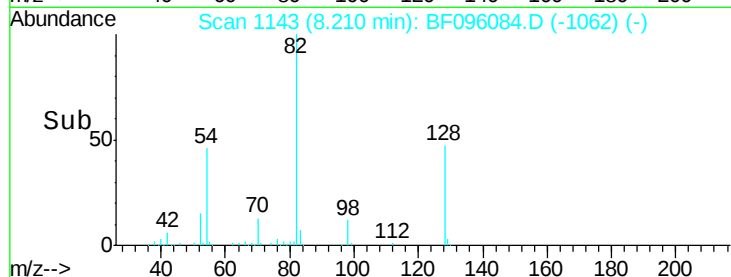
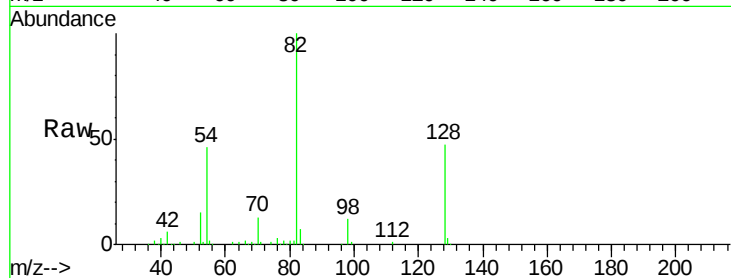
Ion Ratio Lower Upper

70 100

42 42.7 47.2 70.8#

101 0.0 7.2 10.8#

130 1.8 15.9 23.9#



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 9.32 min Scan# 1332

Delta R.T. -0.01 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

Tgt Ion: 136 Resp: 336361

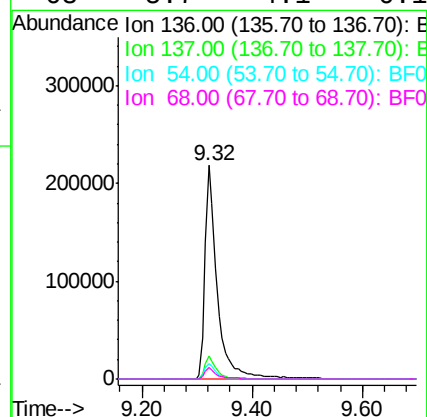
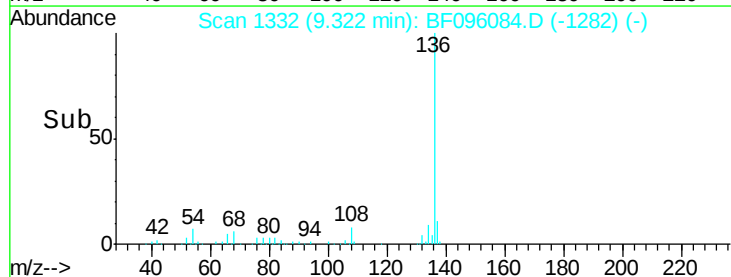
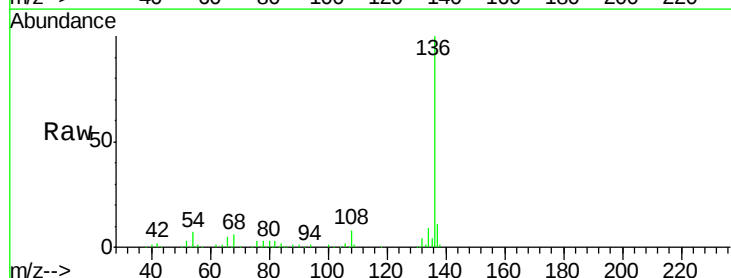
Ion Ratio Lower Upper

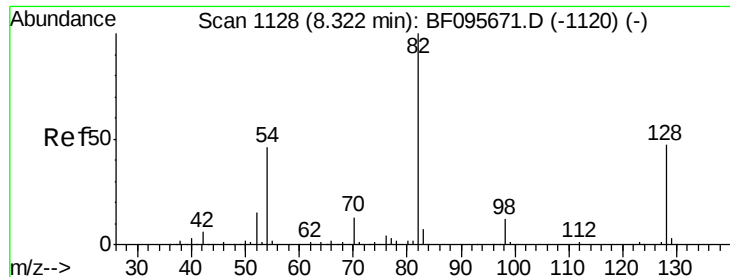
136 100

137 10.7 8.5 12.7

54 7.4 4.9 7.3#

68 5.7 4.1 6.1

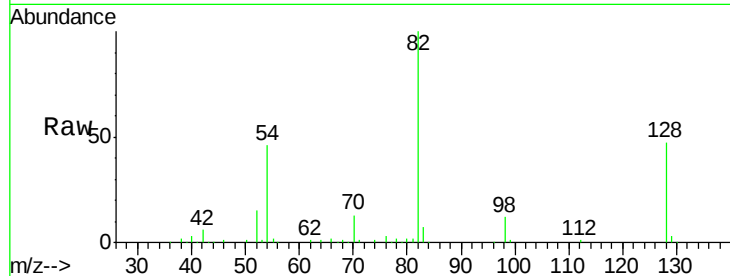




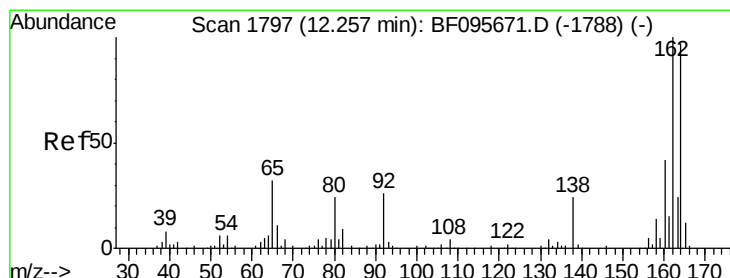
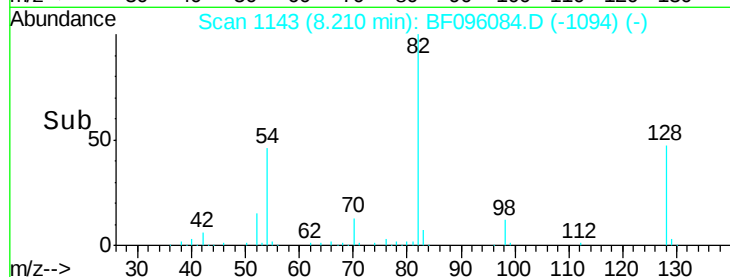
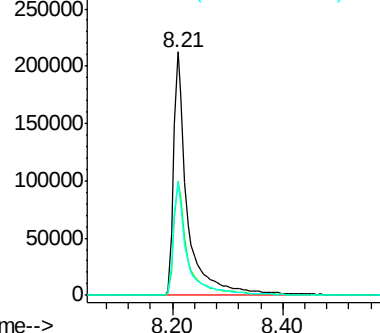
#23  
 Nitrobenzene-d5  
 Concen: 68.748 ng  
 RT: 8.21 min Scan# 1143  
 Delta R.T. -0.01 min  
 Lab File: BF096084.D  
 Acq: 21 Jun 2017 14:59

Instrument :  
 BNA\_F  
 ClientSampleId :  
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Tgt Ion: 82 Resp: 372343  
 Ion Ratio Lower Upper  
 82 100  
 128 47.1 34.0 51.0  
 54 46.3 42.2 63.2

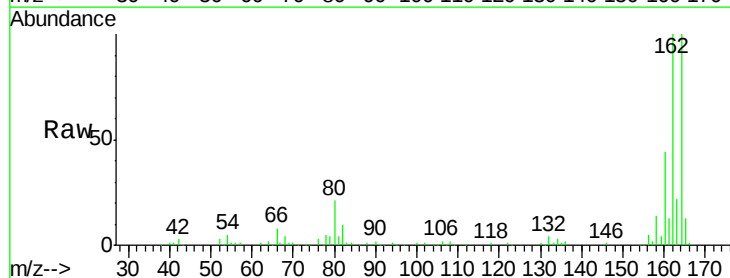


Abundance Ion 82.00 (81.70 to 82.70): BF0  
 Ion 128.00 (127.70 to 128.70): B  
 Ion 54.00 (53.70 to 54.70): BF0

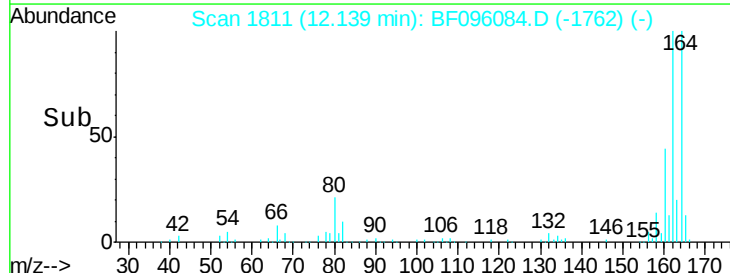
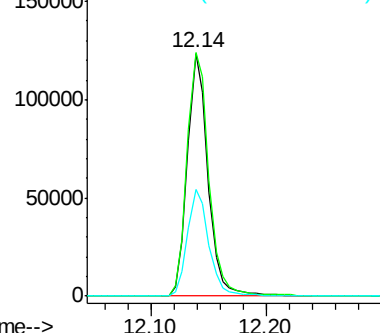


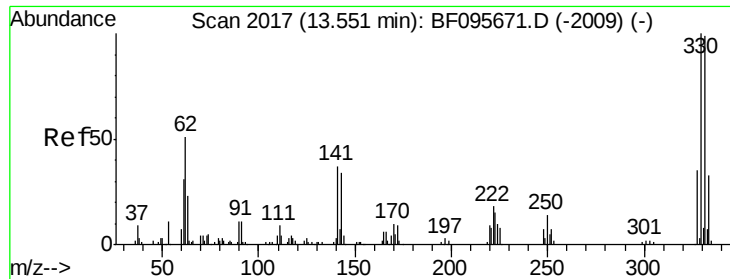
#38  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 12.14 min Scan# 1811  
 Delta R.T. -0.01 min  
 Lab File: BF096084.D  
 Acq: 21 Jun 2017 14:59

Tgt Ion: 164 Resp: 153965  
 Ion Ratio Lower Upper  
 164 100  
 162 100.3 82.6 123.8  
 160 44.1 36.2 54.2



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

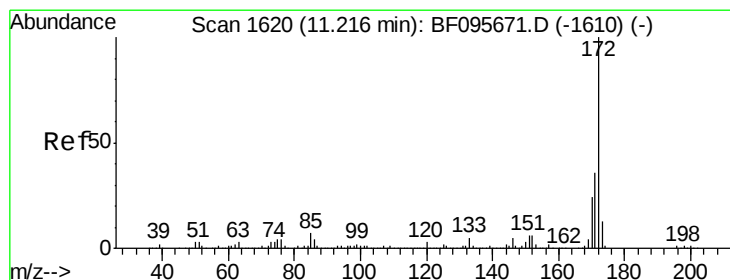
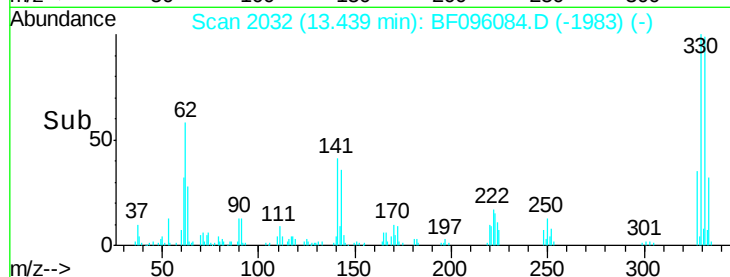
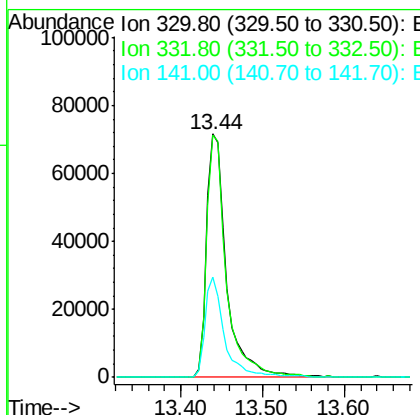
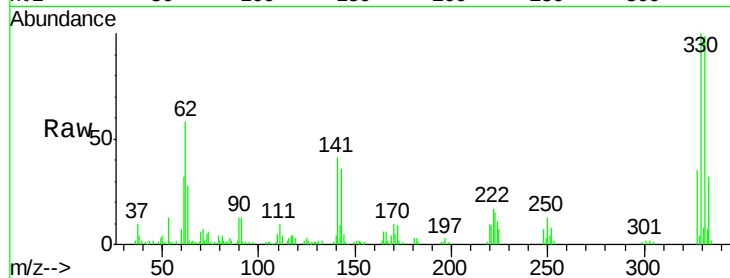




#41  
 2,4,6-Tribromophenol  
 Concen: 89.737 ng  
 RT: 13.44 min Scan# 2032  
 Delta R.T. -0.01 min  
 Lab File: BF096084.D  
 Acq: 21 Jun 2017 14:59

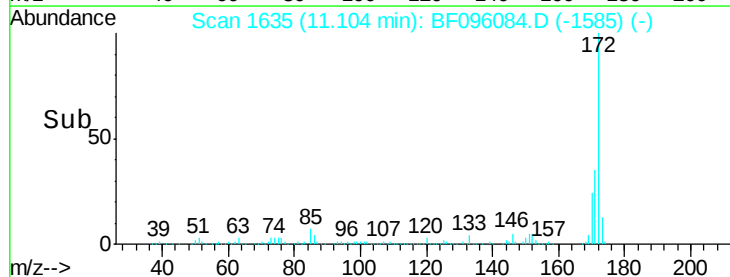
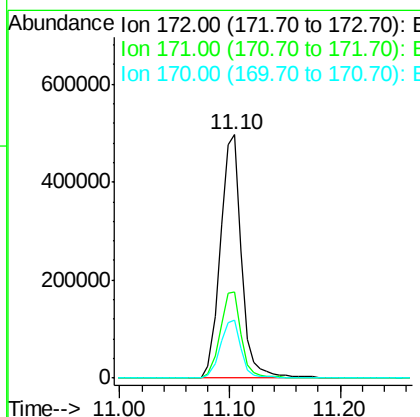
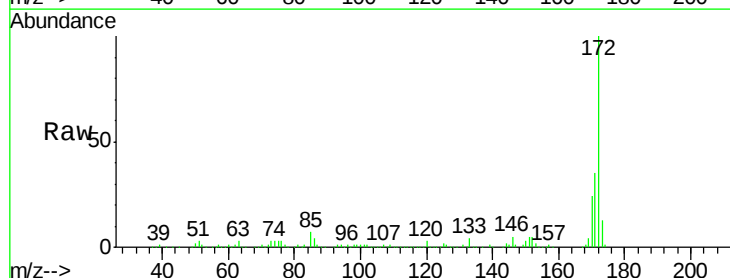
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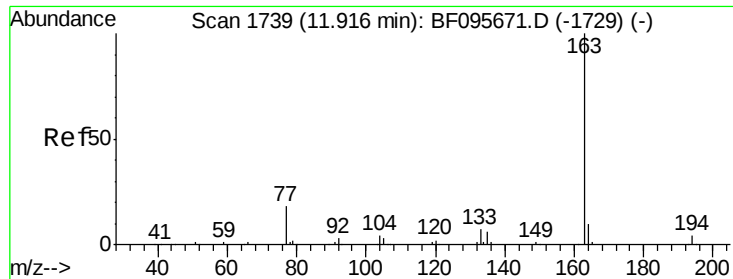
Tgt Ion:330 Resp: 122242  
 Ion Ratio Lower Upper  
 330 100  
 332 97.6 76.6 115.0  
 141 39.9 31.4 47.2



#44  
 2-Fluorobiphenyl  
 Concen: 60.063 ng  
 RT: 11.10 min Scan# 1635  
 Delta R.T. -0.01 min  
 Lab File: BF096084.D  
 Acq: 21 Jun 2017 14:59

Tgt Ion:172 Resp: 664538  
 Ion Ratio Lower Upper  
 172 100  
 171 35.2 29.6 44.4  
 170 23.6 19.8 29.8





#49

Dimethylphthalate

Concen: 8.548 ng

RT: 11.80 min Scan# 1754

Delta R.T. -0.02 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

Instrument :

BNA\_F

ClientSampleId :

TK4-5-20170619

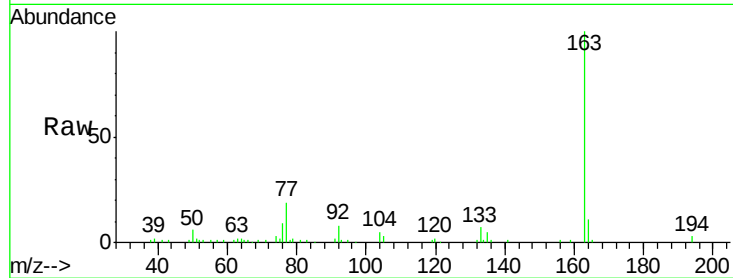
Tgt Ion:163 Resp: 99922

Ion Ratio Lower Upper

163 100

194 2.7 2.6 4.0

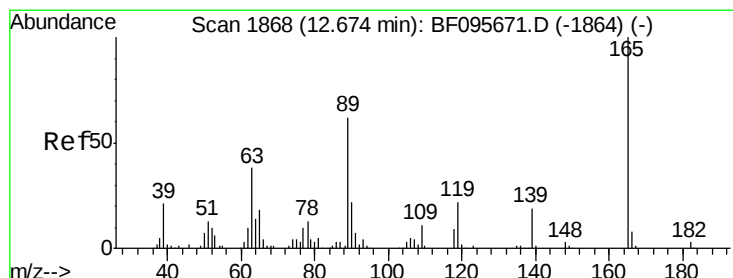
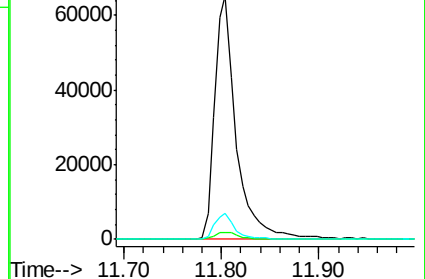
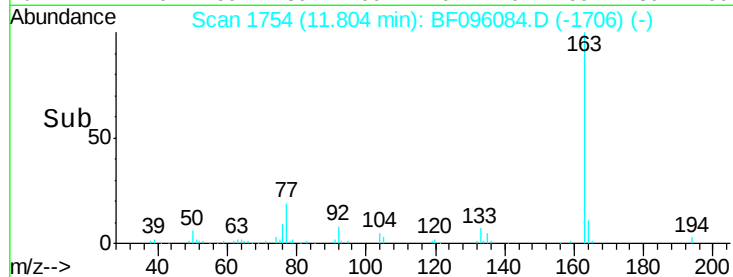
164 10.7 8.4 12.6



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



#55

4-Nitrophenol

Concen: 6.094 ng

RT: 12.51 min Scan# 1874

Delta R.T. -0.12 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

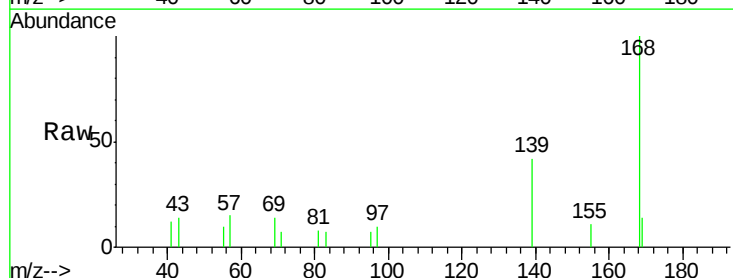
Tgt Ion:139 Resp: 2700

Ion Ratio Lower Upper

139 100

109 0.0 34.1 74.1#

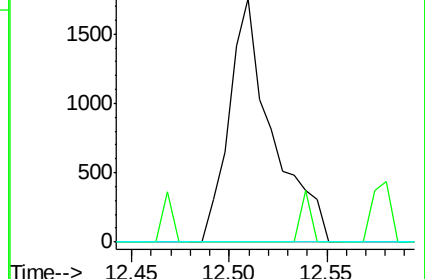
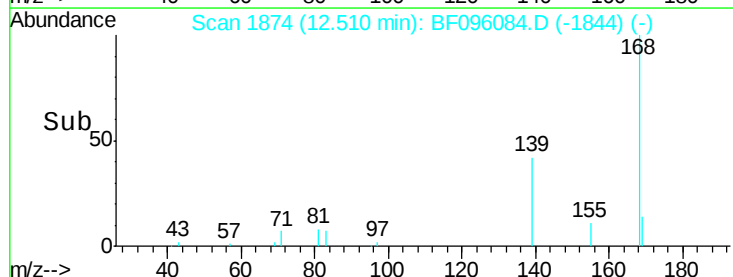
65 0.0 31.4 71.4#

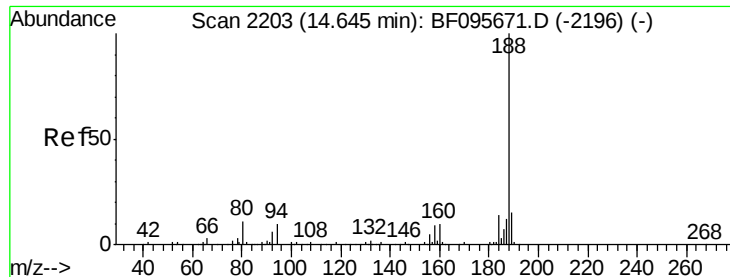


Abundance Ion 139.00 (138.70 to 139.70): E

Ion 109.00 (108.70 to 109.70): E

Ion 65.00 (64.70 to 65.70): BF0

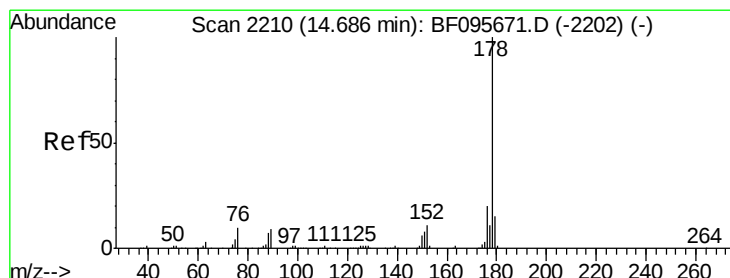
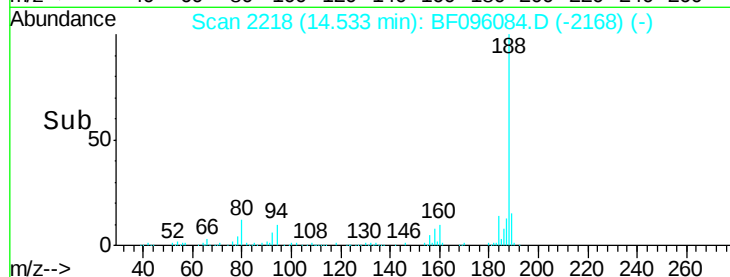
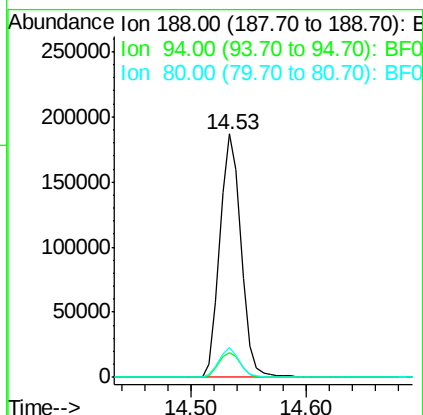
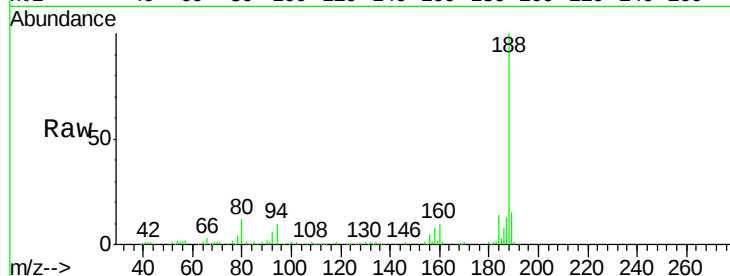




#63  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 14.53 min Scan# 2218  
Delta R.T. -0.01 min  
Lab File: BF096084.D  
Acq: 21 Jun 2017 14:59

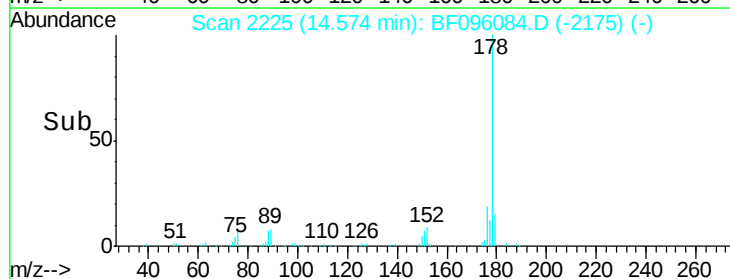
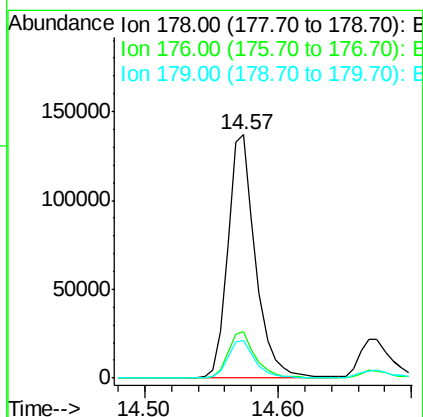
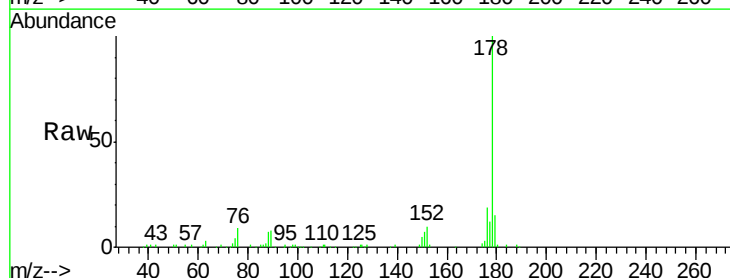
Instrument :  
BNA\_F  
ClientSampleId :  
TK4-5-20170619

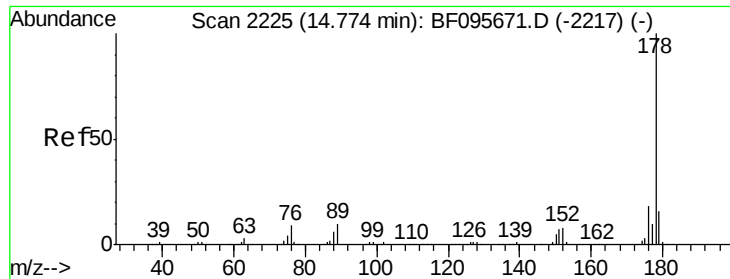
Tgt Ion:188 Resp: 239197  
Ion Ratio Lower Upper  
188 100  
94 10.4 9.4 14.2  
80 12.2 10.2 15.2



#70  
Phenanthrene  
Concen: 14.371 ng  
RT: 14.57 min Scan# 2225  
Delta R.T. -0.01 min  
Lab File: BF096084.D  
Acq: 21 Jun 2017 14:59

Tgt Ion:178 Resp: 198342  
Ion Ratio Lower Upper  
178 100  
176 19.3 16.2 24.4  
179 15.4 12.6 19.0

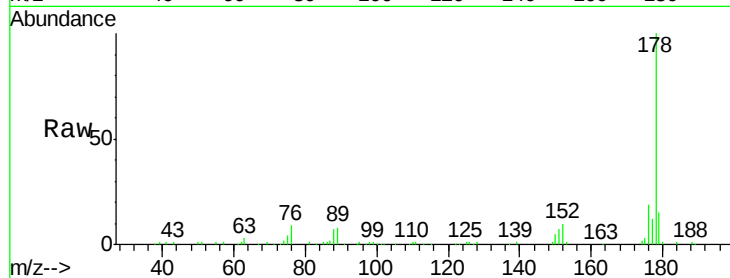




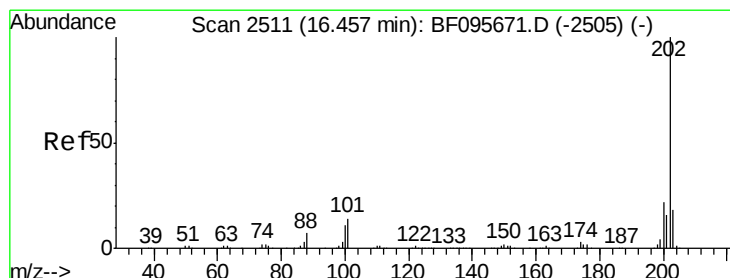
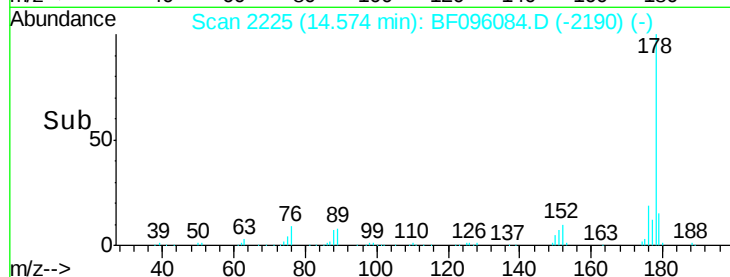
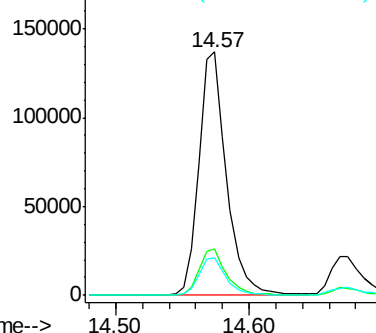
#71  
 Anthracene  
 Concen: 13.766 ng  
 RT: 14.57 min Scan# 2225  
 Delta R.T. -0.09 min  
 Lab File: BF096084.D  
 Acq: 21 Jun 2017 14:59

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TK4-5-20170619

Tgt Ion:178 Resp: 198342  
 Ion Ratio Lower Upper  
 178 100  
 176 19.3 15.8 23.8  
 179 15.4 12.7 19.1

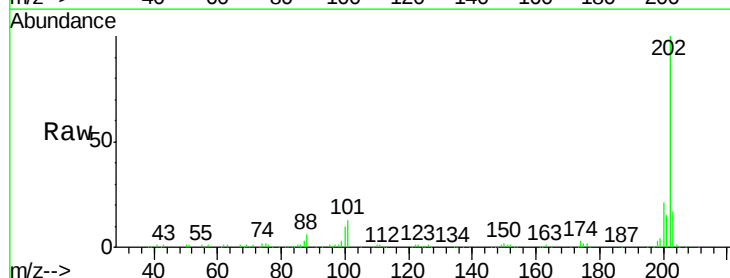


Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

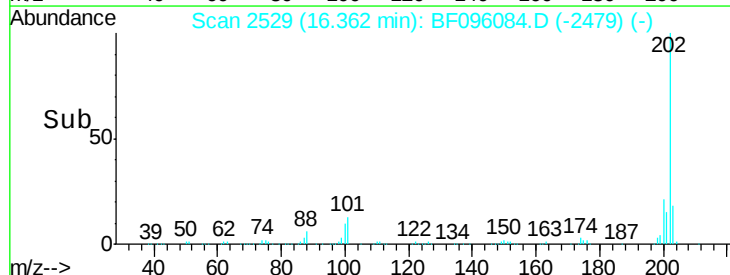
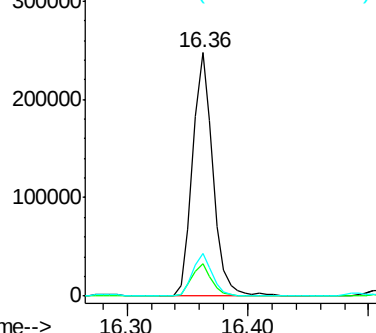


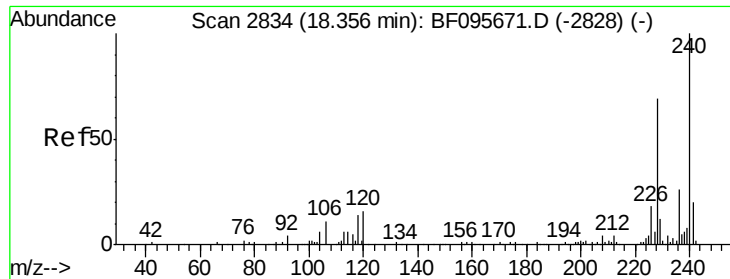
#74  
 Fluoranthene  
 Concen: 21.014 ng  
 RT: 16.36 min Scan# 2529  
 Delta R.T. -0.01 min  
 Lab File: BF096084.D  
 Acq: 21 Jun 2017 14:59

Tgt Ion:202 Resp: 287057  
 Ion Ratio Lower Upper  
 202 100  
 101 13.1 0.0 33.2  
 203 17.5 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

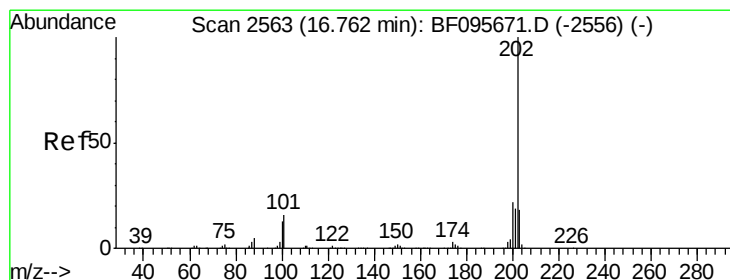
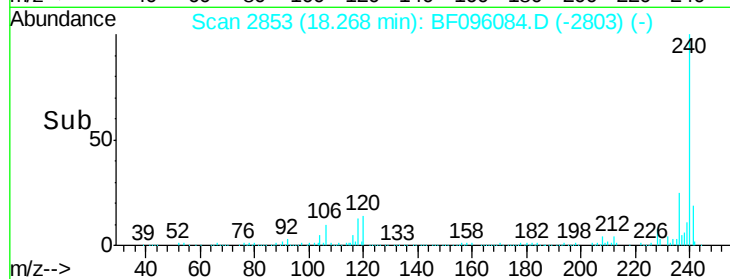
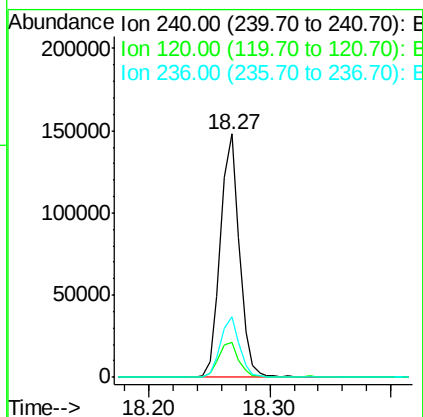
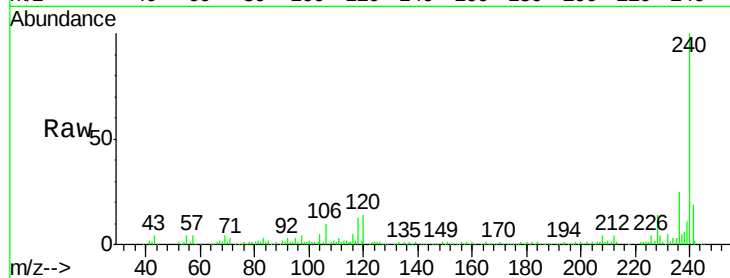




#75  
Chrysene-d12  
Concen: 20.000 ng  
RT: 18.27 min Scan# 2853  
Delta R.T. -0.01 min  
Lab File: BF096084.D  
Acq: 21 Jun 2017 14:59

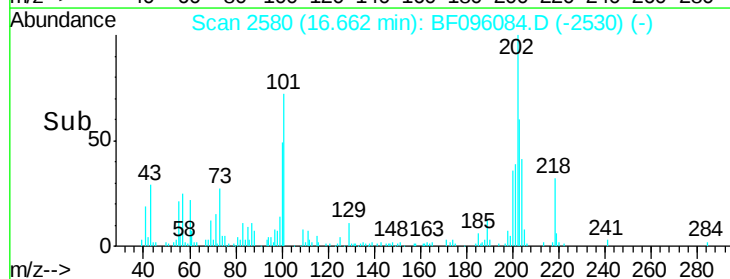
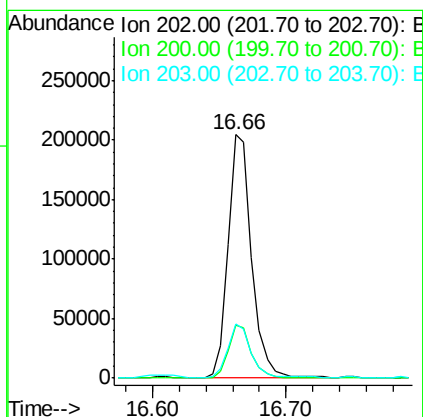
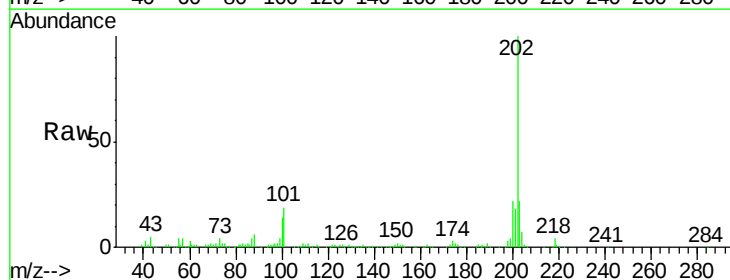
Instrument :  
BNA\_F  
ClientSampleId :  
TK4-5-20170619

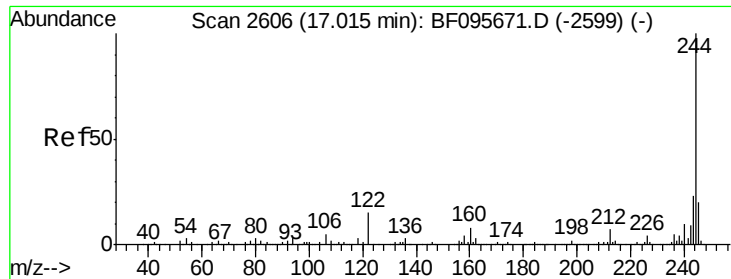
Tgt Ion:240 Resp: 161187  
Ion Ratio Lower Upper  
240 100  
120 14.3 5.8 8.8#  
236 24.9 20.5 30.7



#77  
Pyrene  
Concen: 21.135 ng  
RT: 16.66 min Scan# 2580  
Delta R.T. -0.01 min  
Lab File: BF096084.D  
Acq: 21 Jun 2017 14:59

Tgt Ion:202 Resp: 254197  
Ion Ratio Lower Upper  
202 100  
200 21.8 17.6 26.4  
203 22.3 14.4 21.6#

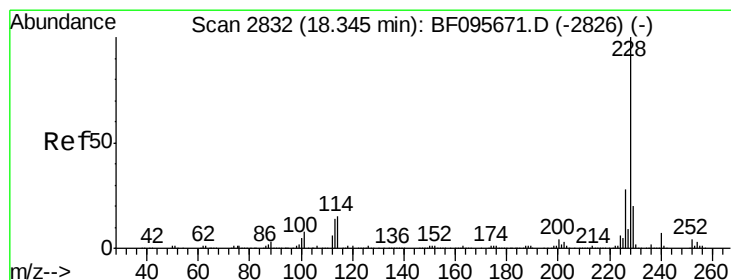
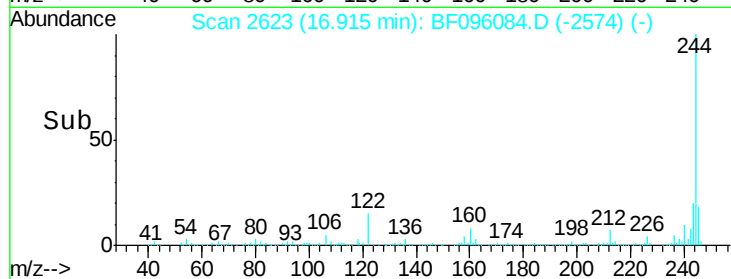
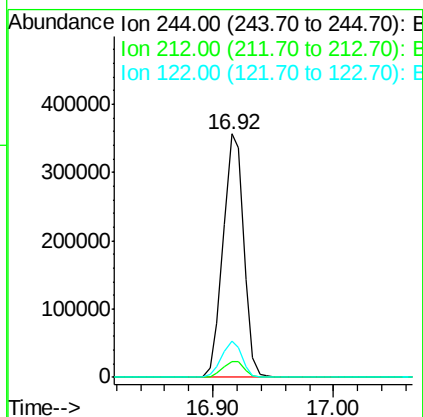
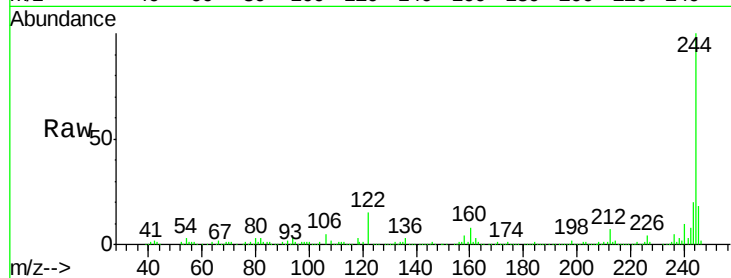




#78  
 Terphenyl-d14  
 Concen: 64.944 ng  
 RT: 16.92 min Scan# 2623  
 Delta R.T. -0.01 min  
 Lab File: BF096084.D  
 Acq: 21 Jun 2017 14:59

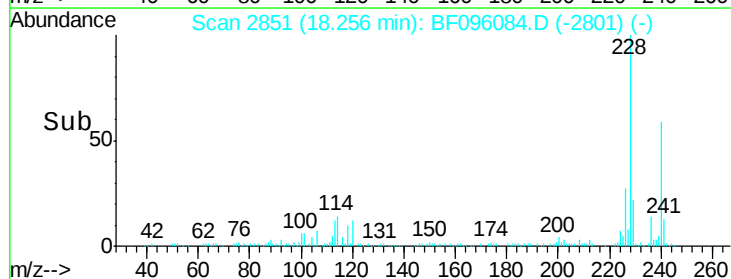
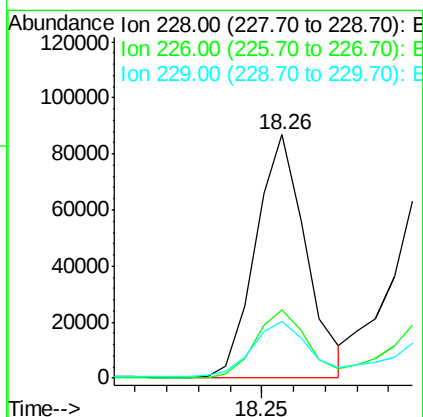
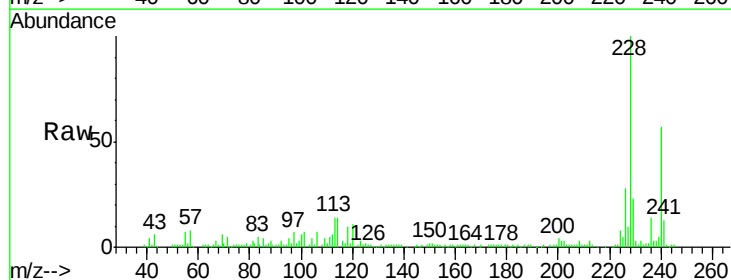
Instrument :  
 BNA\_F  
 ClientSampleId :  
 TK4-5-20170619

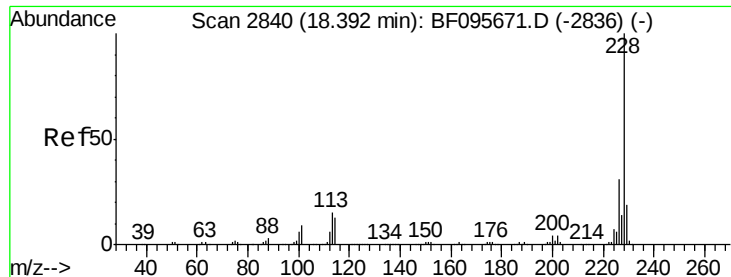
Tgt Ion:244 Resp: 421808  
 Ion Ratio Lower Upper  
 244 100  
 212 6.7 6.0 9.0  
 122 14.6 10.3 15.5



#80  
 Benzo(a)anthracene  
 Concen: 10.270 ng  
 RT: 18.26 min Scan# 2851  
 Delta R.T. -0.01 min  
 Lab File: BF096084.D  
 Acq: 21 Jun 2017 14:59

Tgt Ion:228 Resp: 96246  
 Ion Ratio Lower Upper  
 228 100  
 226 27.8 22.6 33.8  
 229 23.1 16.3 24.5





#82

Chrysene

Concen: 10.861 ng

RT: 18.30 min Scan# 2859

Delta R.T. -0.01 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

Instrument :

BNA\_F

ClientSampleId :

TK4-5-20170619

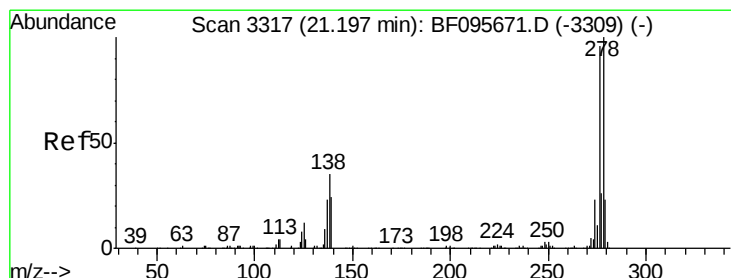
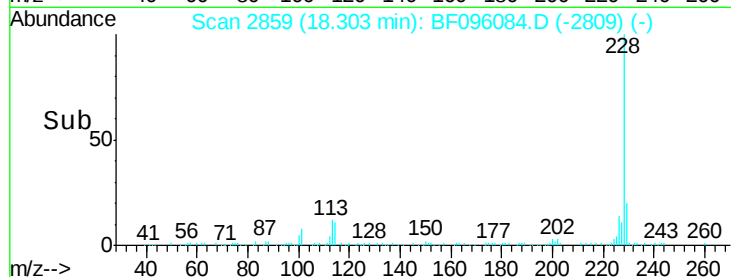
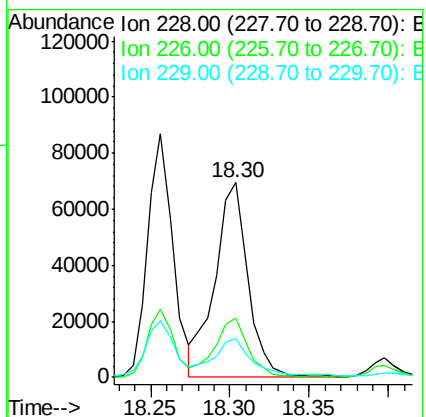
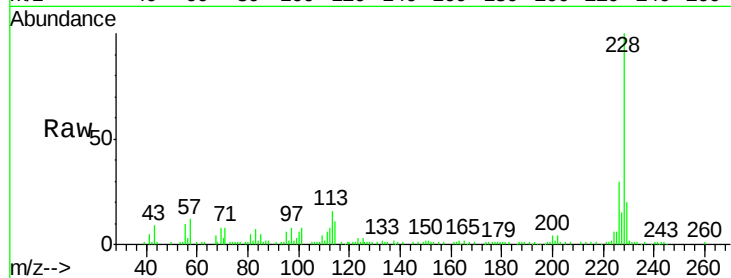
Tgt Ion:228 Resp: 101716

Ion Ratio Lower Upper

228 100

226 30.3 24.9 37.3

229 19.9 15.8 23.6



#85

Indeno(1,2,3-cd)pyrene

Concen: 6.766 ng

RT: 21.11 min Scan# 3336

Delta R.T. 0.01 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

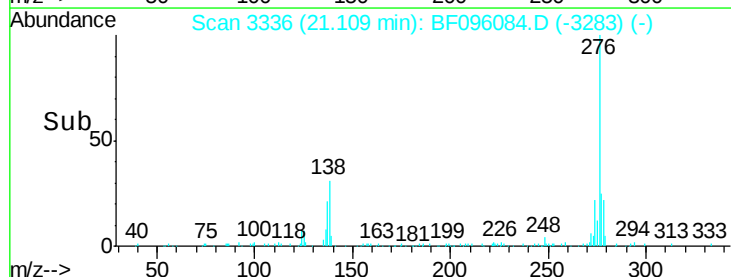
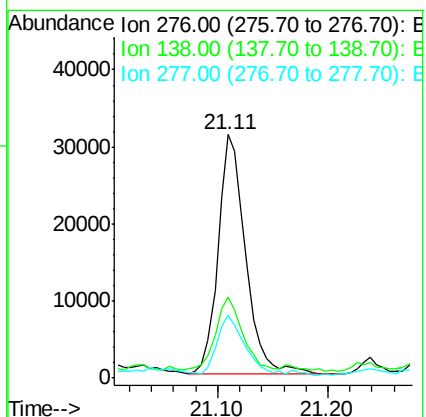
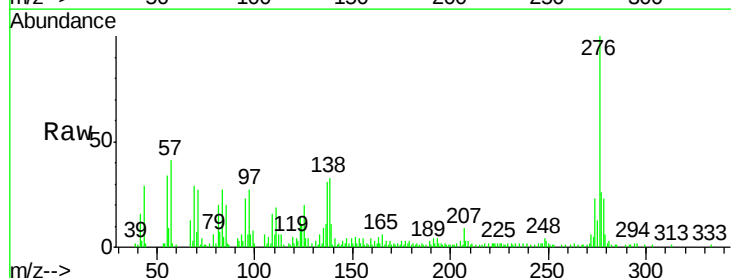
Tgt Ion:276 Resp: 54213

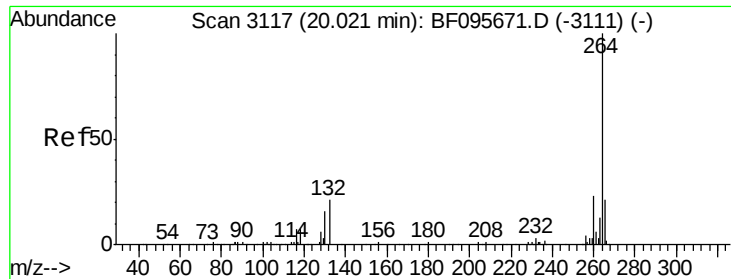
Ion Ratio Lower Upper

276 100

138 30.2 27.8 41.6

277 22.7 20.2 30.4





#86

Perylene-d12

Concen: 20.000 ng

RT: 19.94 min Scan# 3137

Delta R.T. 0.00 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

Instrument :

BNA\_F

ClientSampleId :

TK4-5-20170619

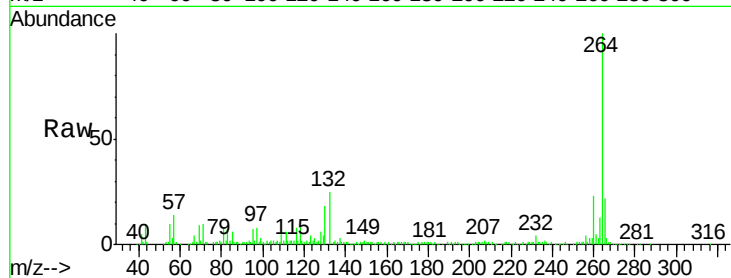
Tgt Ion:264 Resp: 161055

Ion Ratio Lower Upper

264 100

260 23.1 19.5 29.3

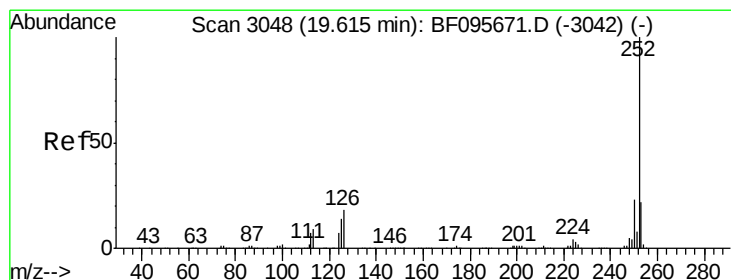
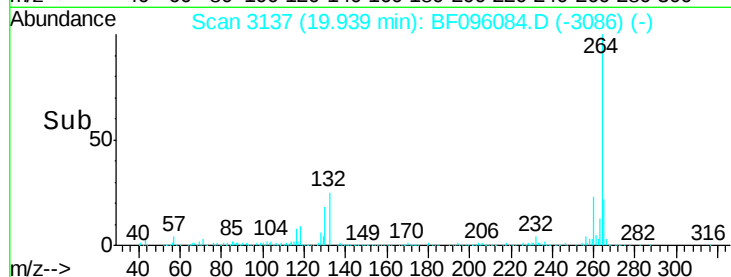
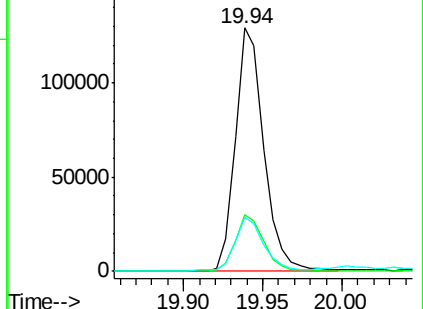
265 22.3 17.2 25.8



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



#87

Benzo(b)fluoranthene

Concen: 16.318 ng

RT: 19.54 min Scan# 3069

Delta R.T. 0.00 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

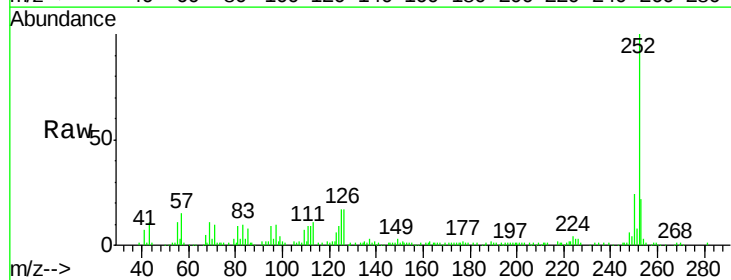
Tgt Ion:252 Resp: 164561

Ion Ratio Lower Upper

252 100

253 22.2 18.1 27.1

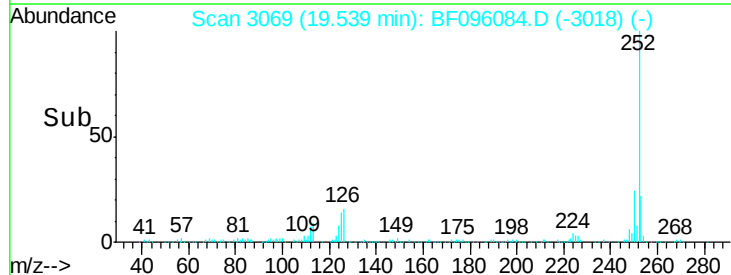
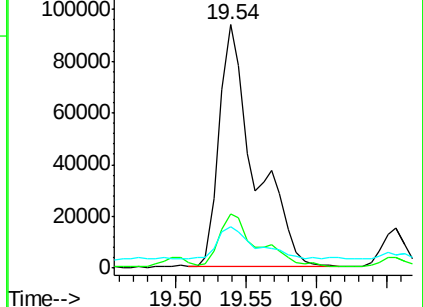
125 17.2 9.8 14.8#

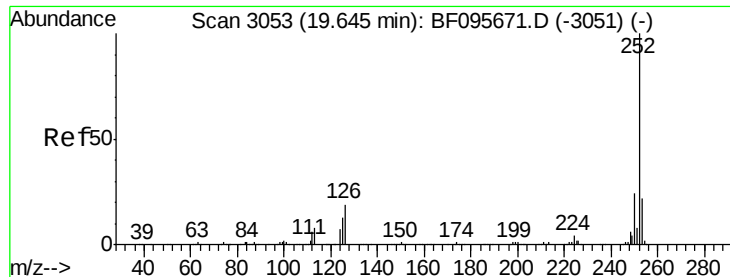


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

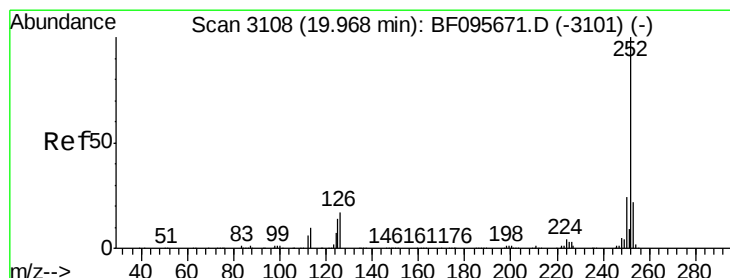
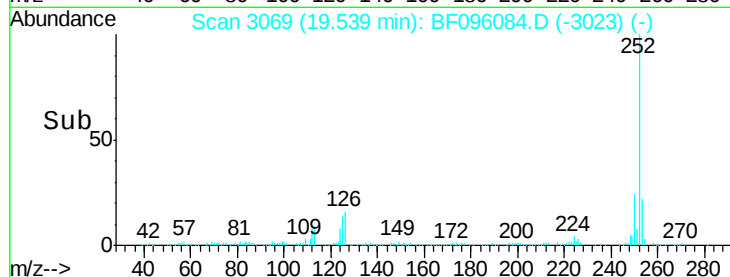
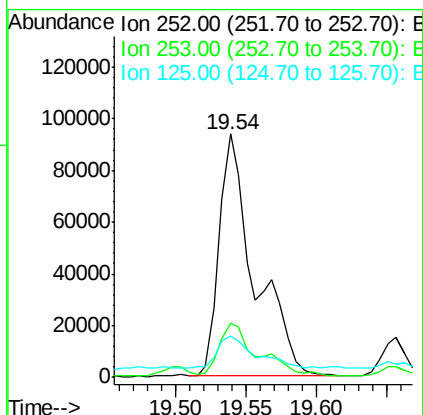
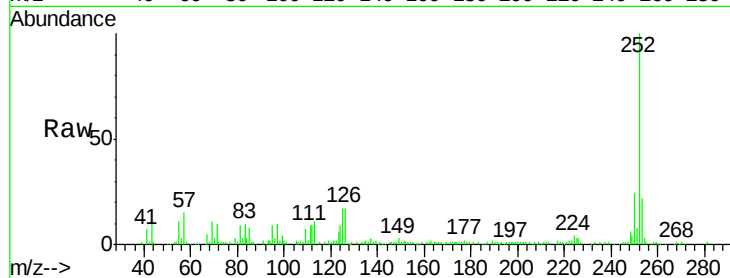




#88  
Benzo(k)fluoranthene  
Concen: 17.072 ng  
RT: 19.54 min Scan# 3069  
Delta R.T. -0.03 min  
Lab File: BF096084.D  
Acq: 21 Jun 2017 14:59

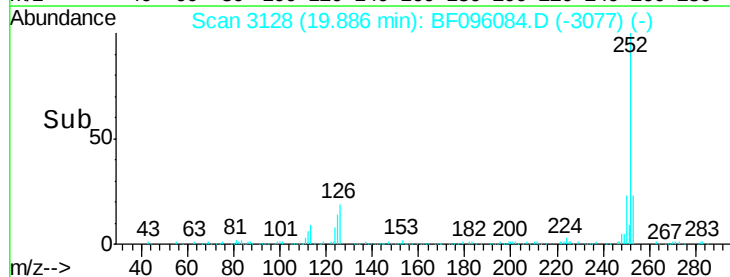
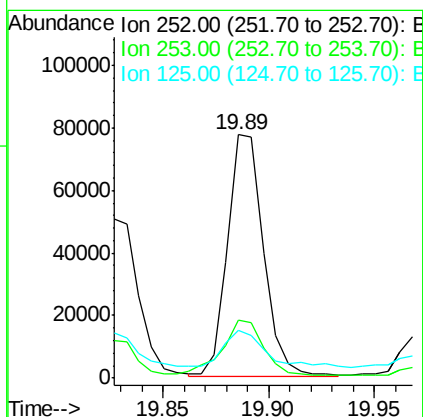
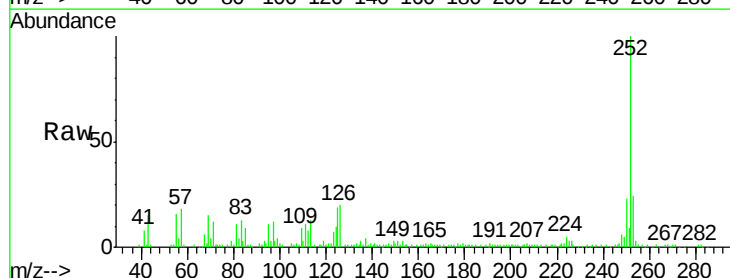
Instrument :  
BNA\_F  
ClientSampleId :  
TK4-5-20170619

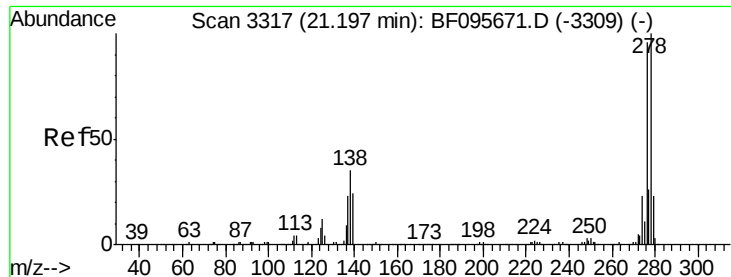
Tgt Ion:252 Resp: 164561  
Ion Ratio Lower Upper  
252 100  
253 22.2 18.4 27.6  
125 17.2 13.1 19.7



#89  
Benzo(a)pyrene  
Concen: 9.899 ng  
RT: 19.89 min Scan# 3128  
Delta R.T. 0.00 min  
Lab File: BF096084.D  
Acq: 21 Jun 2017 14:59

Tgt Ion:252 Resp: 91758  
Ion Ratio Lower Upper  
252 100  
253 23.8 17.5 26.3  
125 19.4 11.0 16.4#





#90

Dibenzo(a,h)anthracene

Concen: 2.044 ng

RT: 21.10 min Scan# 3335

Delta R.T. 0.01 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

Instrument :

BNA\_F

ClientSampleId :

TK4-5-20170619

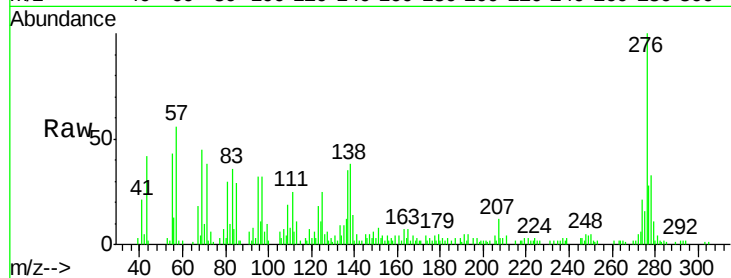
Tgt Ion:278 Resp: 16073

Ion Ratio Lower Upper

278 100

139 41.0 16.6 24.8#

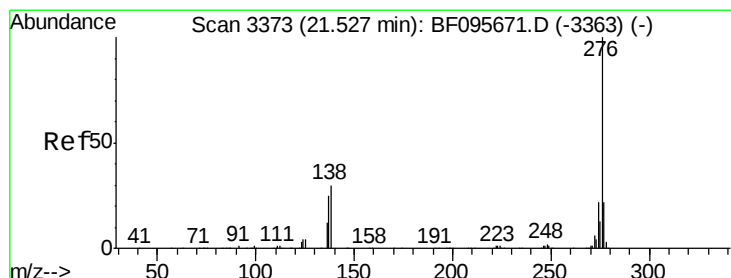
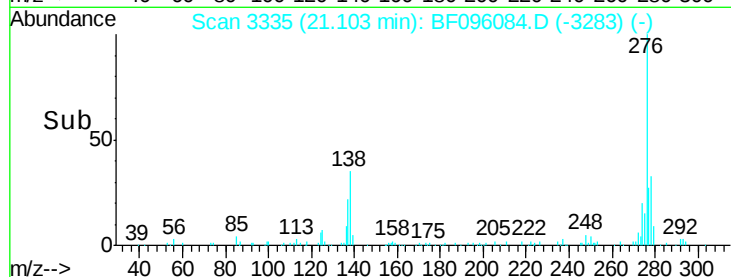
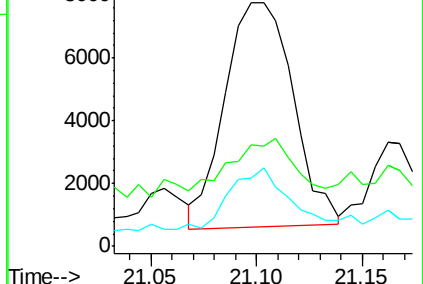
279 32.1 19.3 28.9#



Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#91

Benzo(g,h,i)perylene

Concen: 6.058 ng

RT: 21.44 min Scan# 3392

Delta R.T. 0.02 min

Lab File: BF096084.D

Acq: 21 Jun 2017 14:59

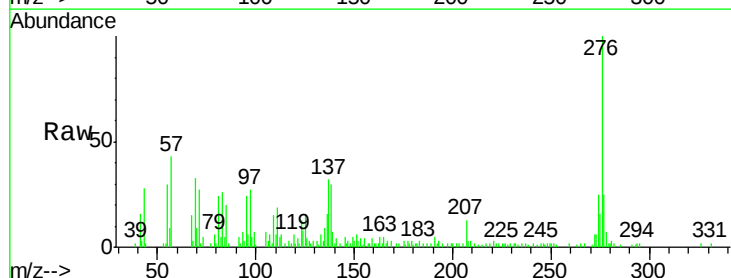
Tgt Ion:276 Resp: 48557

Ion Ratio Lower Upper

276 100

277 25.2 18.6 28.0

138 30.1 25.4 38.0



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

