

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF081717\  
 Data File : BF097830.D  
 Acq On : 18 Aug 2017 12:35  
 Operator : SJ/JU  
 Sample : I4820-07  
 Misc :  
 ALS Vial : 44 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-H8-BASE

Quant Time: Aug 18 13:52:34 2017  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF081517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Aug 15 13:25:08 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.77  | 152  | 123387   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 8.06  | 136  | 451522   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10      | 9.81  | 164  | 166060   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 11.30 | 188  | 283685   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.93 | 240  | 253551   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 15.36 | 264  | 171961   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.39  | 112  | 944165   | 116.39 | ng    | 0.00     |
| 7) Phenol-d6                | 6.41  | 99   | 1255445  | 113.91 | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.34  | 82   | 736817   | 88.65  | ng    | -0.01    |
| 41) 2,4,6-Tribromophenol    | 10.60 | 330  | 158044   | 109.69 | ng    | -0.01    |
| 44) 2-Fluorobiphenyl        | 9.14  | 172  | 975126   | 86.27  | ng    | 0.00     |
| 78) Terphenyl-d14           | 12.89 | 244  | 725135   | 59.64  | ng    | 0.00     |

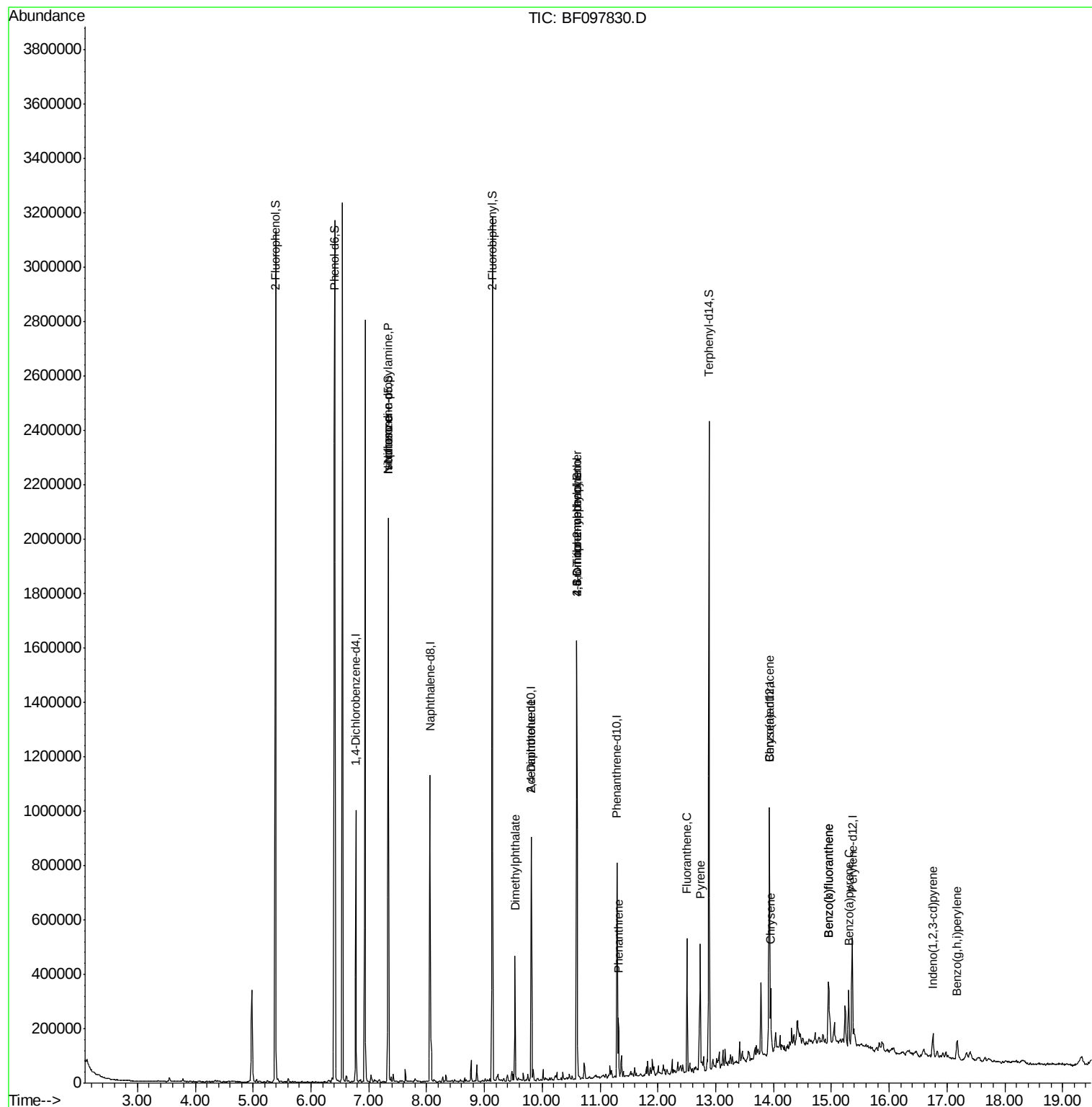
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 19) n-Nitroso-di-n-propylamine | 7.34  | 70   | 100999   | 13.386 | ng    | # 73   |
| 25) Isophorone                 | 7.34  | 82   | 734632   | 42.507 | ng    | # 67   |
| 49) Dimethylphthalate          | 9.53  | 163  | 152148   | 12.534 | ng    | 99     |
| 56) 2,4-Dinitrotoluene         | 9.81  | 165  | 21981    | 7.229  | ng    | # 33   |
| 64) 4,6-Dinitro-2-methylphenol | 10.60 | 198  | 495      | 8.627  | ng    | # 1    |
| 66) 4-Bromophenyl-phenylether  | 10.60 | 248  | 10705    | 3.634  | ng    | # 1    |
| 70) Phenanthrene               | 11.32 | 178  | 69207    | 4.578  | ng    | 98     |
| 74) Fluoranthene               | 12.50 | 202  | 167681   | 10.627 | ng    | 98     |
| 77) Pyrene                     | 12.73 | 202  | 167156   | 8.061  | ng    | 97     |
| 80) Benzo(a)anthracene         | 13.92 | 228  | 98248    | 6.465  | ng    | 96     |
| 82) Chrysene                   | 13.96 | 228  | 91502    | 6.053  | ng    | 97     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.76 | 276  | 55754    | 5.014  | ng    | # 91   |
| 87) Benzo(b)fluoranthene       | 14.95 | 252  | 158519   | 14.625 | ng    | 98     |
| 88) Benzo(k)fluoranthene       | 14.95 | 252  | 158519   | 15.566 | ng    | 97     |
| 89) Benzo(a)pyrene             | 15.30 | 252  | 88958    | 9.271  | ng    | 99     |
| 91) Benzo(g,h,i)perylene       | 17.18 | 276  | 57110    | 7.006  | ng    | 95     |

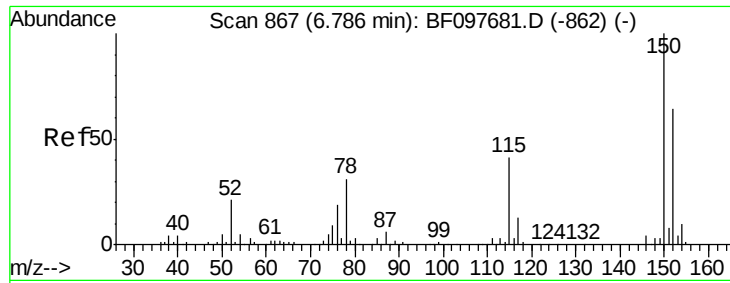
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF081517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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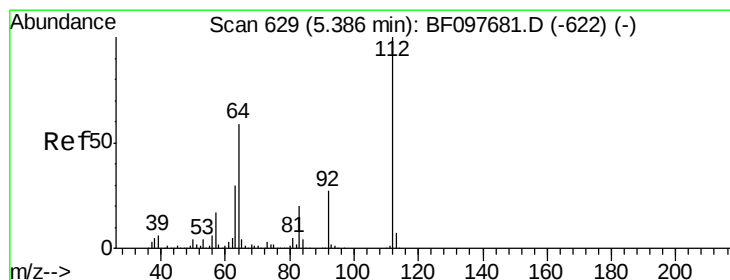
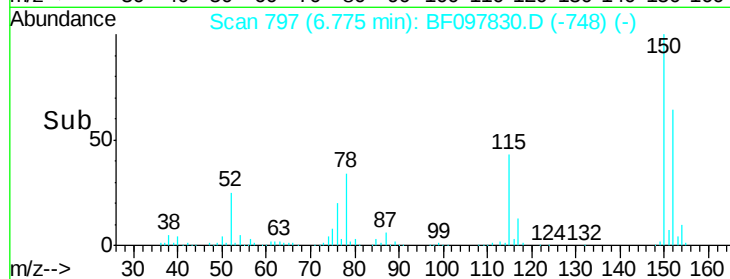
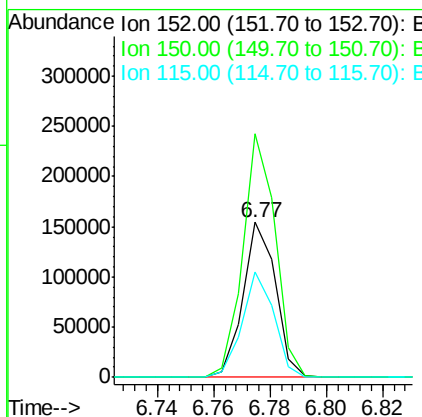
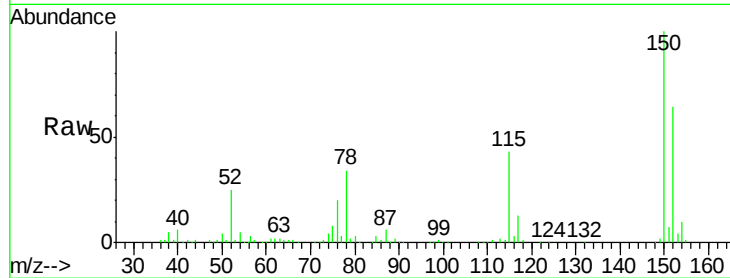




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 20.000 ng  
 RT: 6.77 min Scan# 797  
 Delta R.T. -0.01 min  
 Lab File: BF097830.D  
 Acq: 18 Aug 2017 12:35

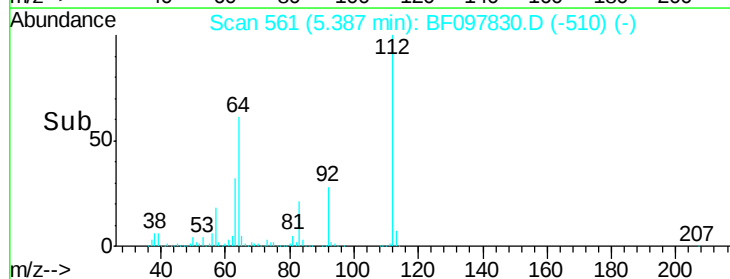
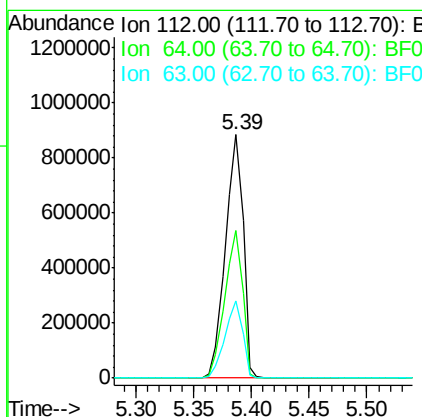
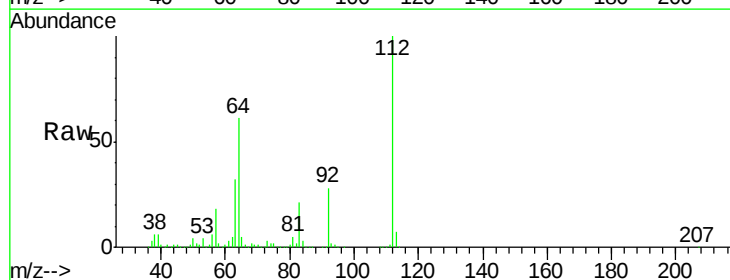
Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-H8-BASE

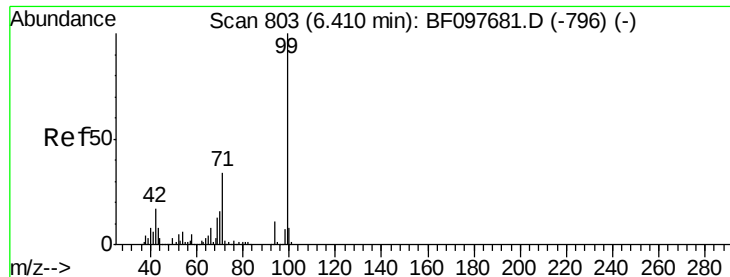
Tgt Ion:152 Resp: 123387  
 Ion Ratio Lower Upper  
 152 100  
 150 157.0 126.2 189.2  
 115 68.1 52.2 78.2



#5  
 2-Fluorophenol  
 Concen: 116.394 ng  
 RT: 5.39 min Scan# 561  
 Delta R.T. 0.00 min  
 Lab File: BF097830.D  
 Acq: 18 Aug 2017 12:35

Tgt Ion:112 Resp: 944165  
 Ion Ratio Lower Upper  
 112 100  
 64 60.6 46.0 69.0  
 63 31.6 23.4 35.0





#7

Phenol-d6

Concen: 113.907 ng

RT: 6.41 min Scan# 735

Delta R.T. 0.00 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :

BNA\_F

ClientSampleId :

E2-H8-BASE

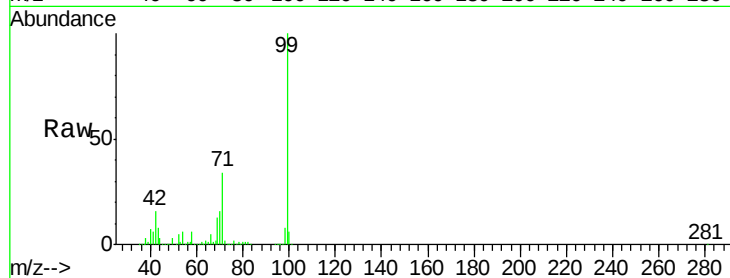
Tgt Ion: 99 Resp: 1255445

Ion Ratio Lower Upper

99 100

42 15.9 13.5 20.3

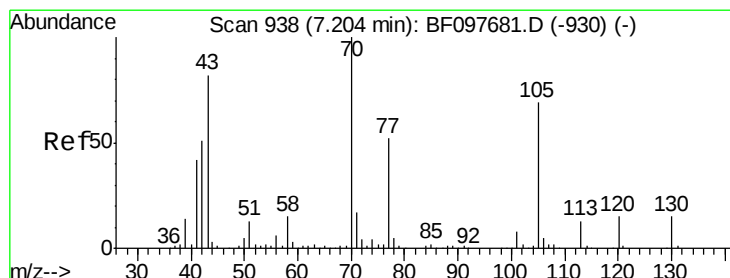
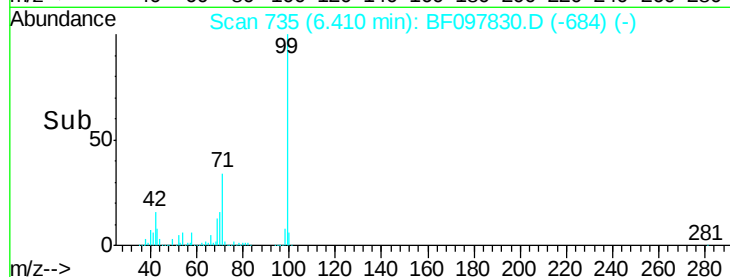
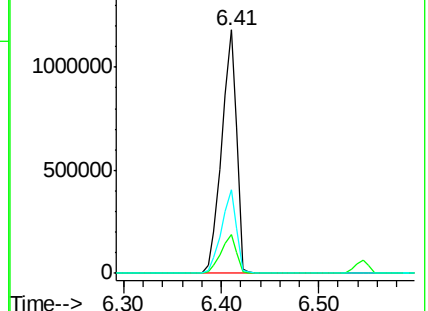
71 34.1 24.5 36.7



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: 13.386 ng

RT: 7.34 min Scan# 893

Delta R.T. 0.14 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Tgt Ion: 70 Resp: 100999

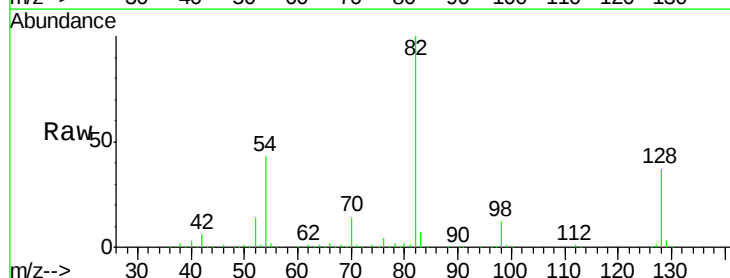
Ion Ratio Lower Upper

70 100

42 41.5 47.2 70.8#

101 0.0 7.2 10.8#

130 1.8 15.9 23.9#

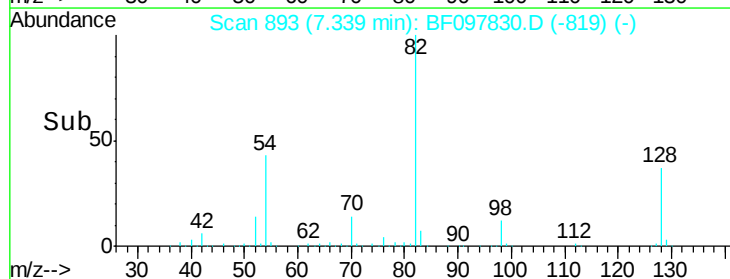
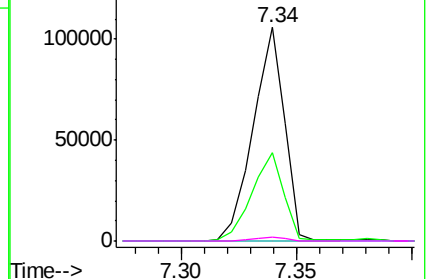


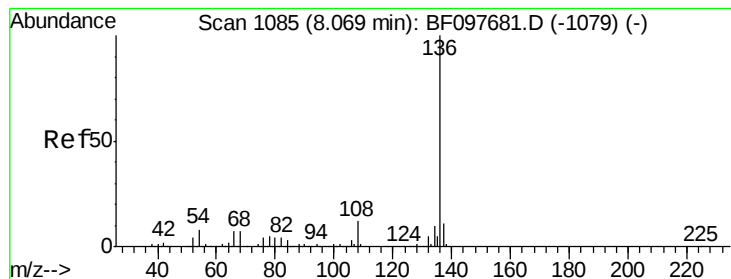
Abundance Ion 70.00 (69.70 to 70.70): BF0

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: 20.000 ng

RT: 8.06 min Scan# 1015

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :

BNA\_F

ClientSampleId :

E2-H8-BASE

Tgt Ion: 136 Resp: 451522

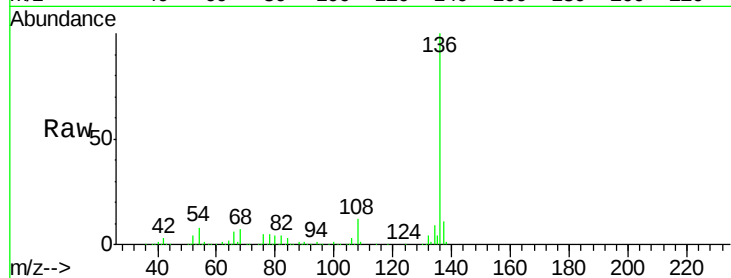
Ion Ratio Lower Upper

136 100

137 11.0 8.5 12.7

54 8.0 4.9 7.3#

68 7.3 4.1 6.1#

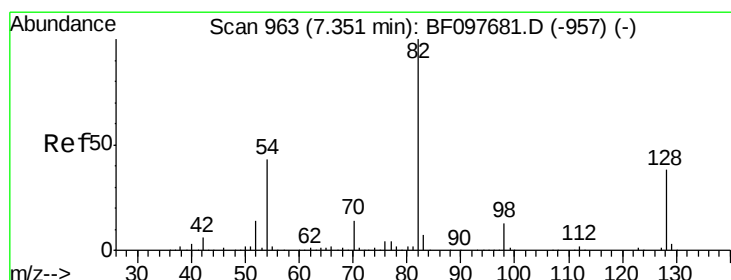
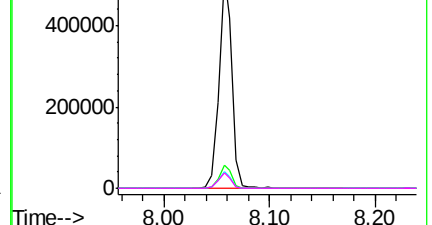
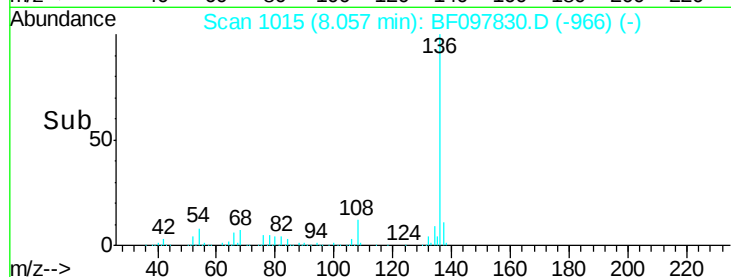


Abundance Ion 136.00 (135.70 to 136.70): E

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



#23

Nitrobenzene-d5

Concen: 88.650 ng

RT: 7.34 min Scan# 893

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

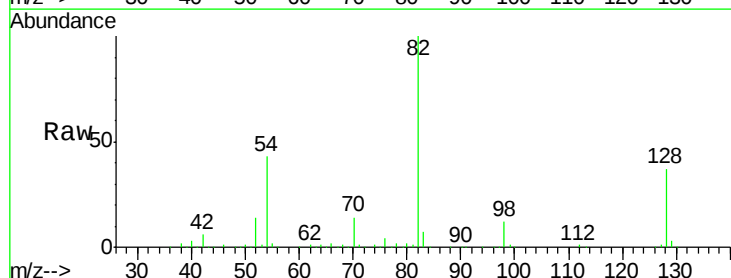
Tgt Ion: 82 Resp: 736817

Ion Ratio Lower Upper

82 100

128 37.3 34.0 51.0

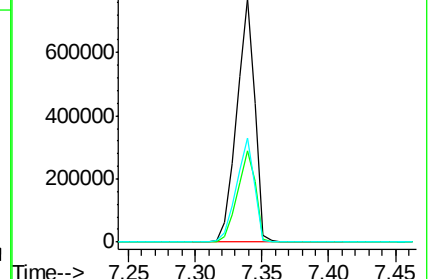
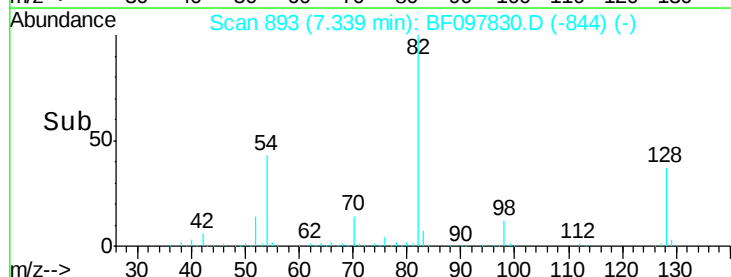
54 42.9 42.2 63.2

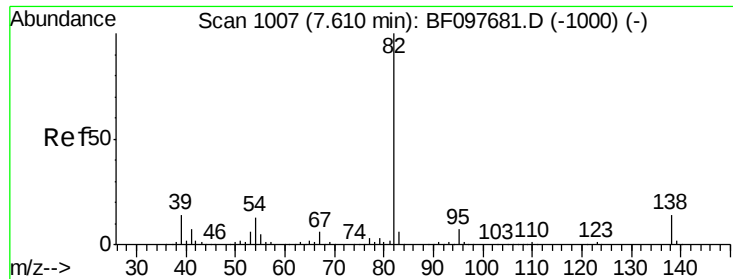


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0





#25

Isophorone

Concen: 42.507 ng

RT: 7.34 min Scan# 893

Delta R.T. -0.27 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :

BNA\_F

ClientSampleId :

E2-H8-BASE

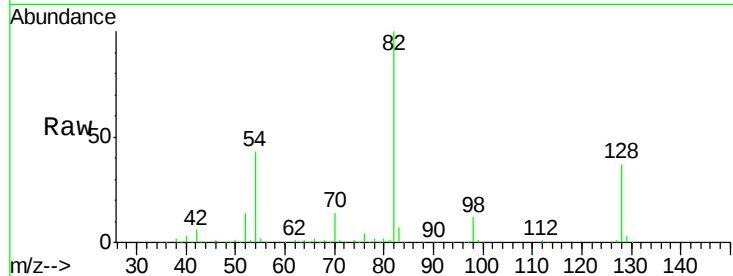
Tgt Ion: 82 Resp: 734632

Ion Ratio Lower Upper

82 100

95 0.0 5.3 7.9#

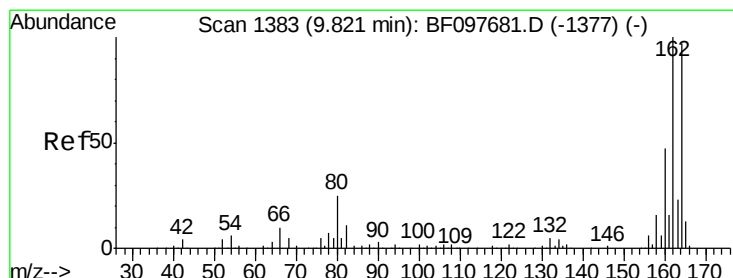
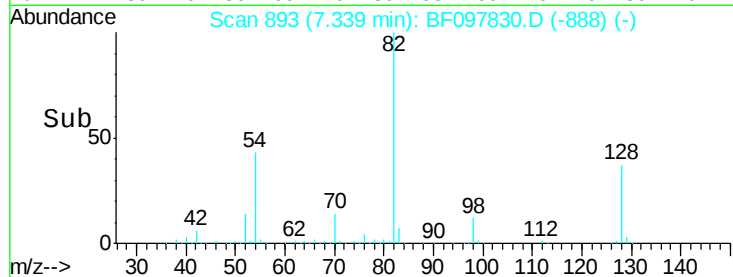
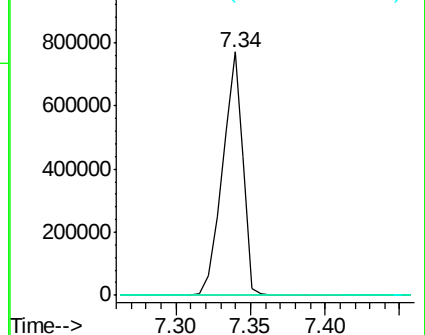
138 0.0 13.1 19.7#



Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 95.00 (94.70 to 95.70): BF0

Ion 138.00 (137.70 to 138.70): BF0



#38

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.81 min Scan# 1313

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

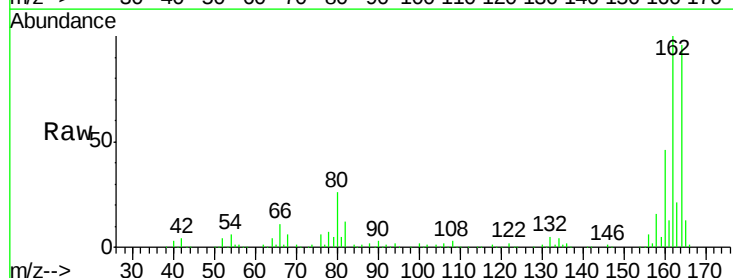
Tgt Ion: 164 Resp: 166060

Ion Ratio Lower Upper

164 100

162 103.7 82.6 123.8

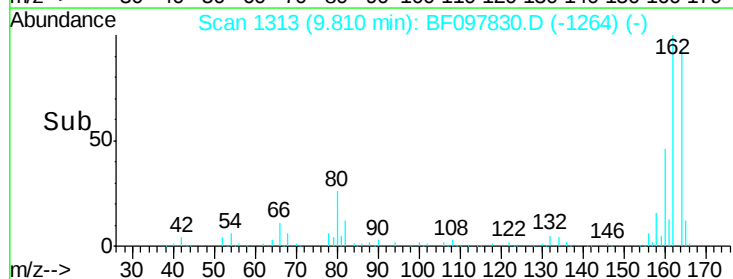
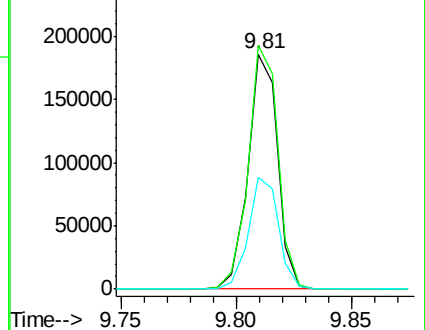
160 47.6 36.2 54.2

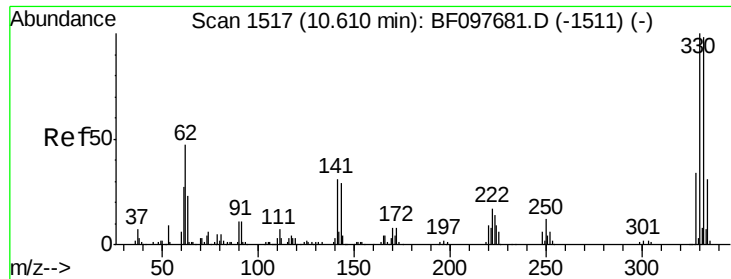


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

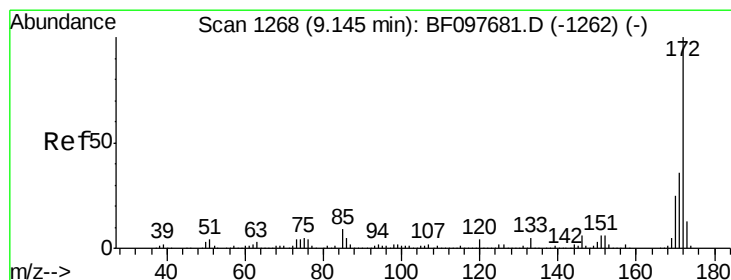
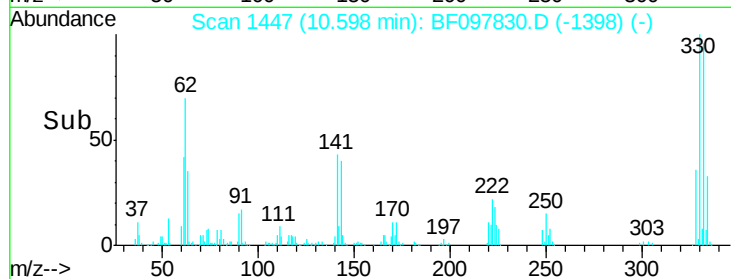
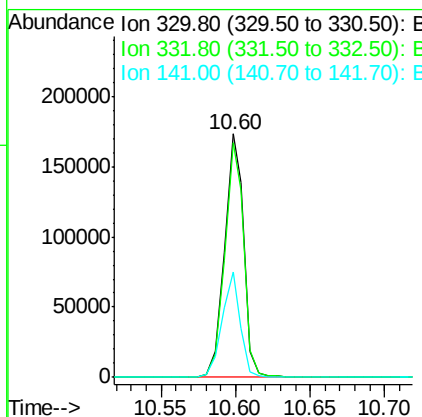
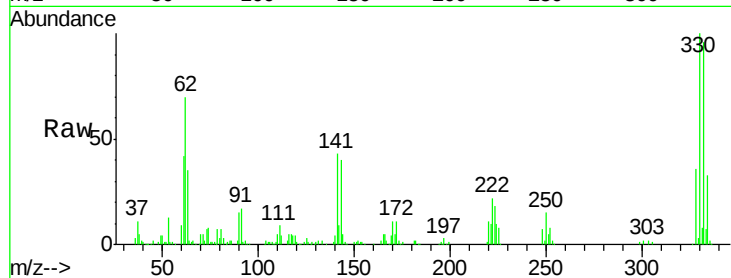




#41  
 2,4,6-Tribromophenol  
 Concen: 109.689 ng  
 RT: 10.60 min Scan# 1447  
 Delta R.T. -0.01 min  
 Lab File: BF097830.D  
 Acq: 18 Aug 2017 12:35

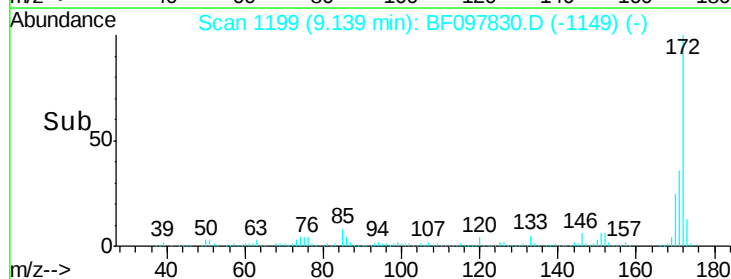
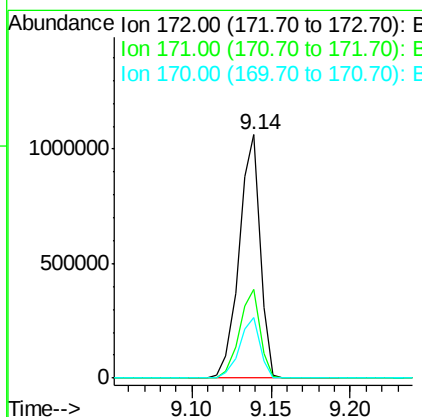
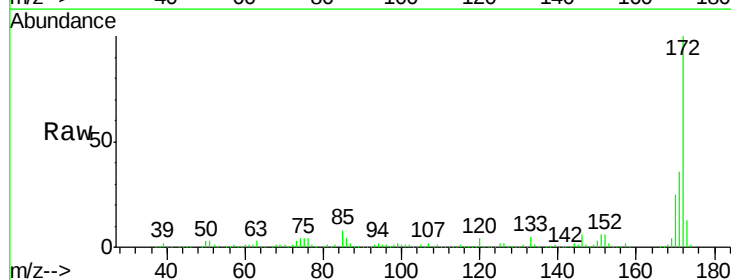
Instrument :  
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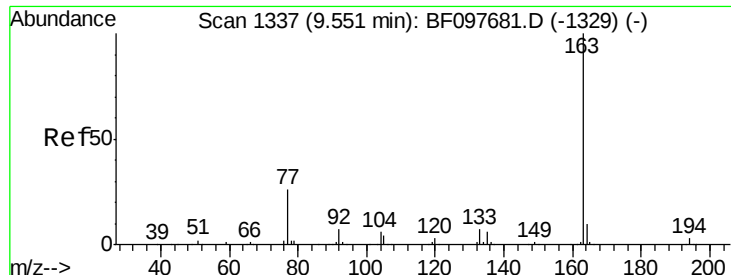
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 95.5  | 76.6  | 115.0 |
| 141     | 41.2  | 31.4  | 47.2  |



#44  
 2-Fluorobiphenyl  
 Concen: 86.274 ng  
 RT: 9.14 min Scan# 1199  
 Delta R.T. -0.01 min  
 Lab File: BF097830.D  
 Acq: 18 Aug 2017 12:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.2  | 29.6  | 44.4  |
| 170     | 24.7  | 19.8  | 29.8  |

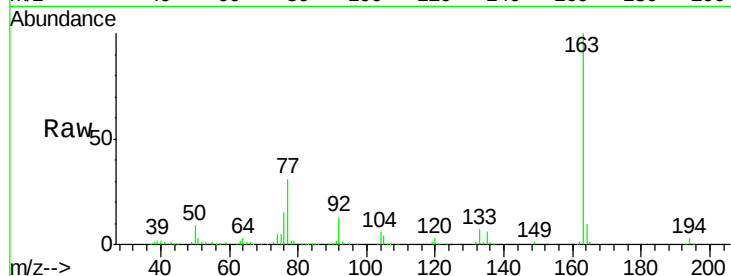




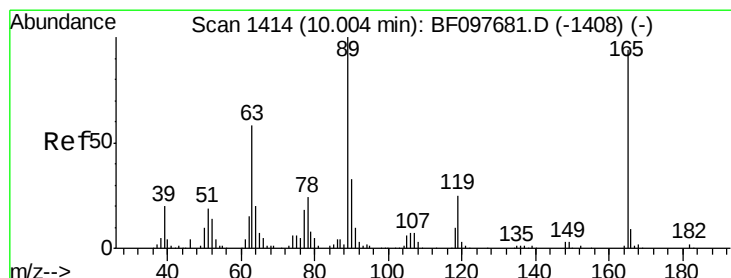
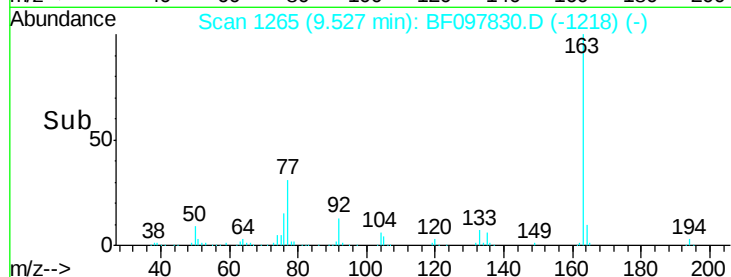
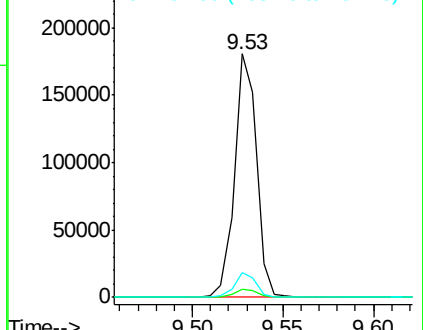
#49  
Dimethylphthalate  
Concen: 12.534 ng  
RT: 9.53 min Scan# 1265  
Delta R.T. -0.02 min  
Lab File: BF097830.D  
Acq: 18 Aug 2017 12:35

Instrument :  
BNA\_F  
ClientSampleId :  
E2-H8-BASE

Tgt Ion:163 Resp: 152148  
Ion Ratio Lower Upper  
163 100  
194 3.4 2.6 4.0  
164 10.0 8.4 12.6

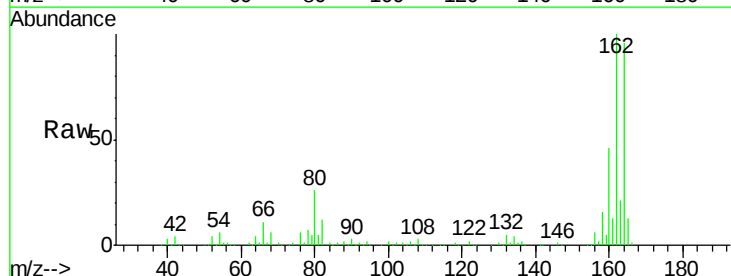


Abundance Ion 163.00 (162.70 to 163.70): E  
Ion 194.00 (193.70 to 194.70): E  
Ion 164.00 (163.70 to 164.70): E

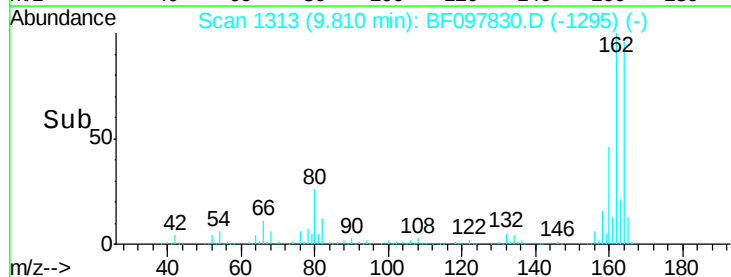
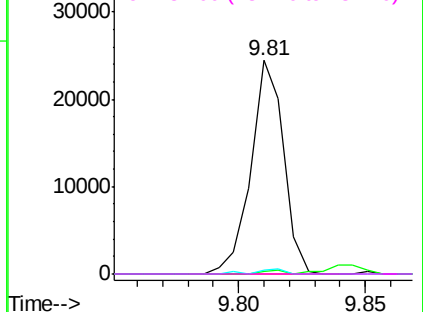


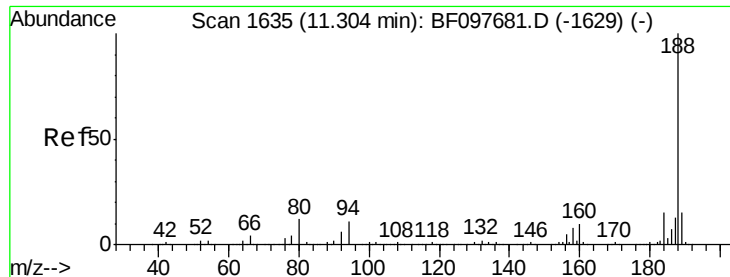
#56  
2,4-Dinitrotoluene  
Concen: 7.229 ng  
RT: 9.81 min Scan# 1313  
Delta R.T. -0.19 min  
Lab File: BF097830.D  
Acq: 18 Aug 2017 12:35

Tgt Ion:165 Resp: 21981  
Ion Ratio Lower Upper  
165 100  
63 1.4 25.4 38.0#  
89 2.1 46.4 69.6#  
182 0.0 1.8 2.6#



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





#63

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.30 min Scan# 1566

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :

BNA\_F

ClientSampleId :

E2-H8-BASE

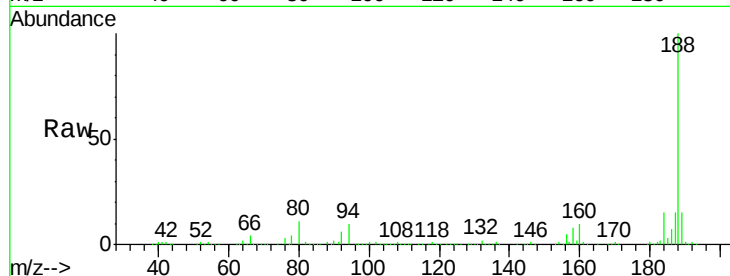
Tgt Ion:188 Resp: 283685

Ion Ratio Lower Upper

188 100

94 9.9 9.4 14.2

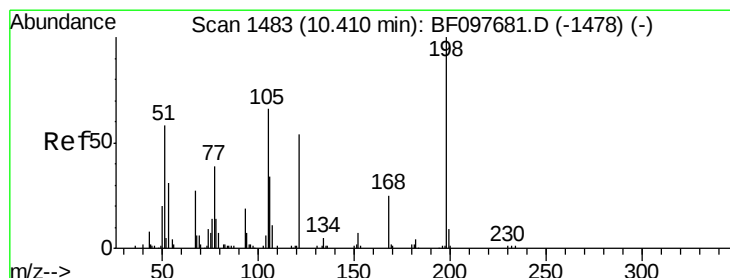
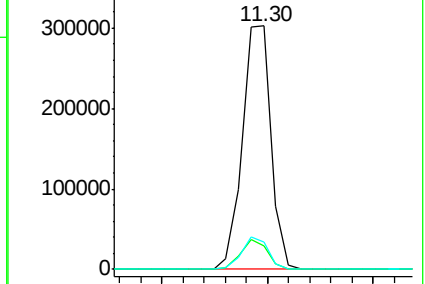
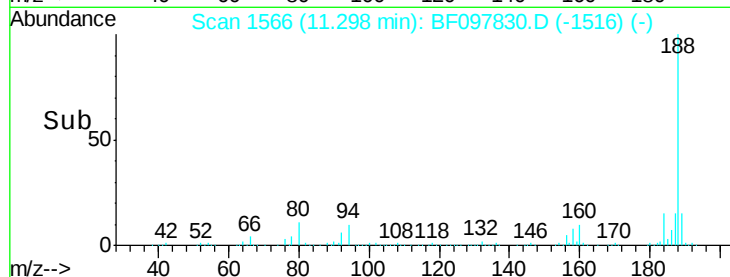
80 11.1 10.2 15.2



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0



#64

4,6-Dinitro-2-methylphenol

Concen: 8.627 ng

RT: 10.60 min Scan# 1447

Delta R.T. 0.19 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

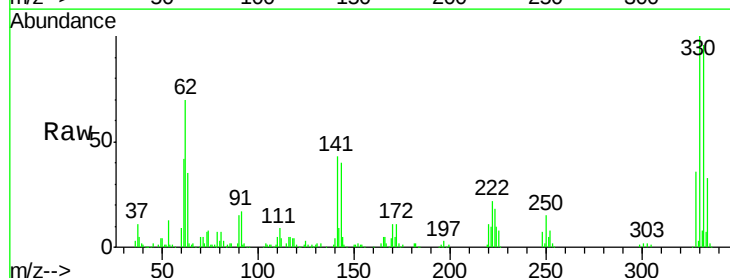
Tgt Ion:198 Resp: 495

Ion Ratio Lower Upper

198 100

51 166.9 53.2 93.2#

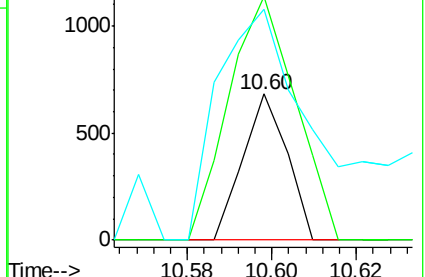
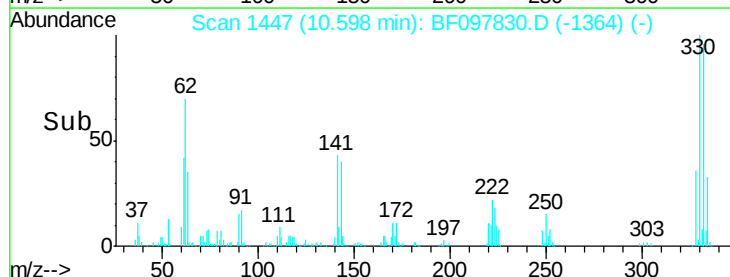
105 157.9 45.8 85.8#

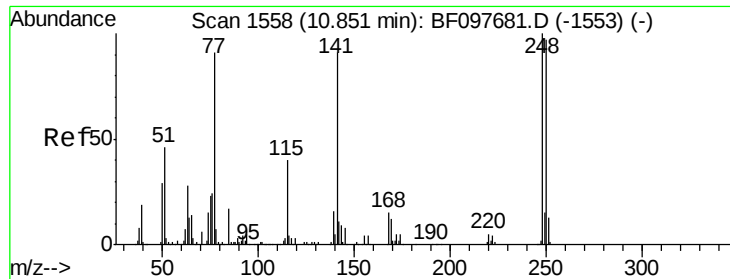


Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BF0

Ion 105.00 (104.70 to 105.70): E

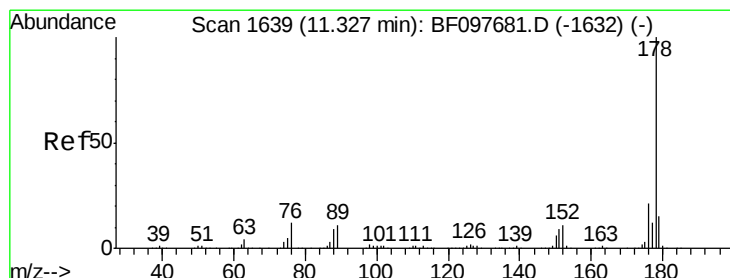
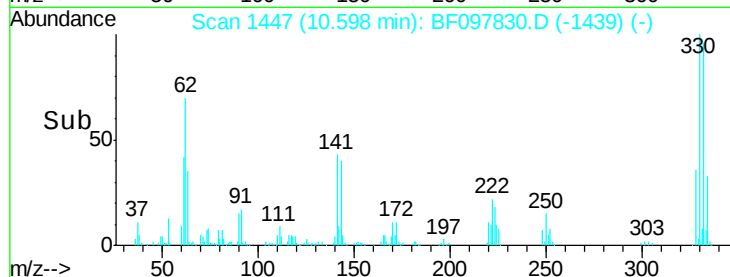
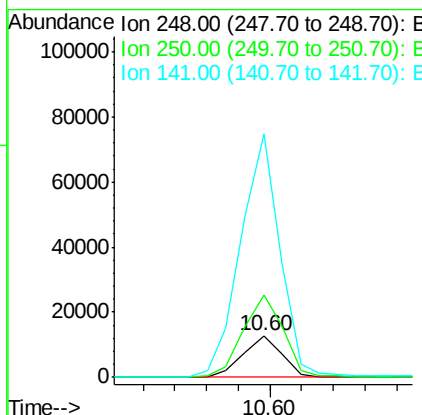
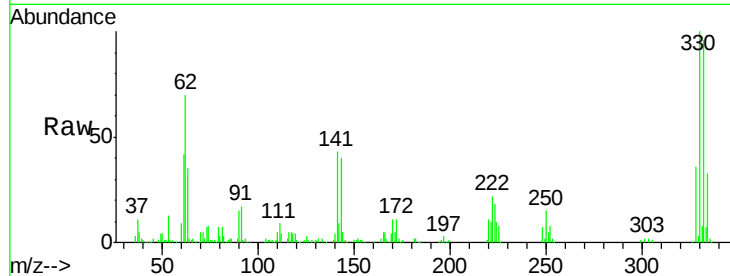




#66  
 4-Bromophenyl-phenylether  
 Concen: 3.634 ng  
 RT: 10.60 min Scan# 1447  
 Delta R.T. -0.25 min  
 Lab File: BF097830.D  
 Acq: 18 Aug 2017 12:35

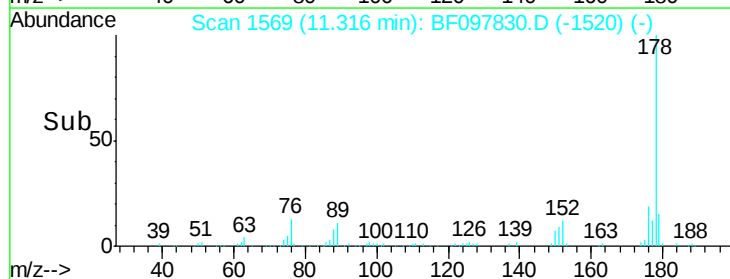
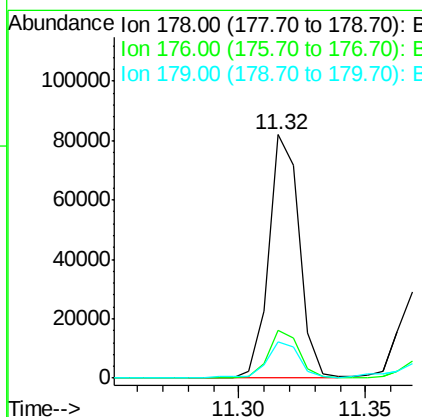
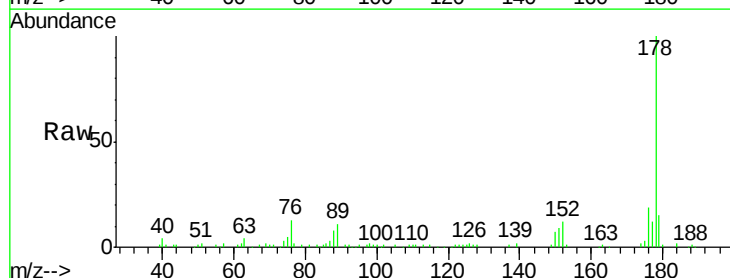
Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-H8-BASE

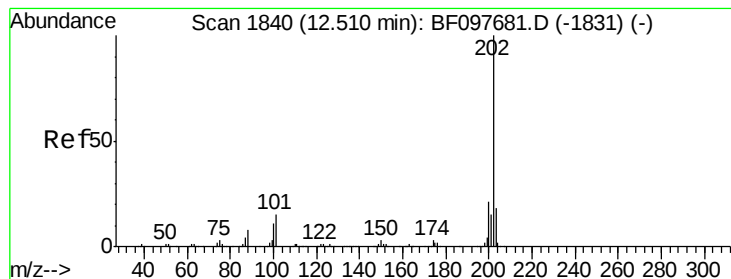
Tgt Ion:248 Resp: 10705  
 Ion Ratio Lower Upper  
 248 100  
 250 196.8 76.8 115.2#  
 141 584.1 68.6 103.0#



#70  
 Phenanthrene  
 Concen: 4.578 ng  
 RT: 11.32 min Scan# 1569  
 Delta R.T. -0.01 min  
 Lab File: BF097830.D  
 Acq: 18 Aug 2017 12:35

Tgt Ion:178 Resp: 69207  
 Ion Ratio Lower Upper  
 178 100  
 176 19.4 16.2 24.4  
 179 14.9 12.6 19.0





#74

Fluoranthene

Concen: 10.627 ng

RT: 12.50 min Scan# 1771

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :

BNA\_F

ClientSampleId :

E2-H8-BASE

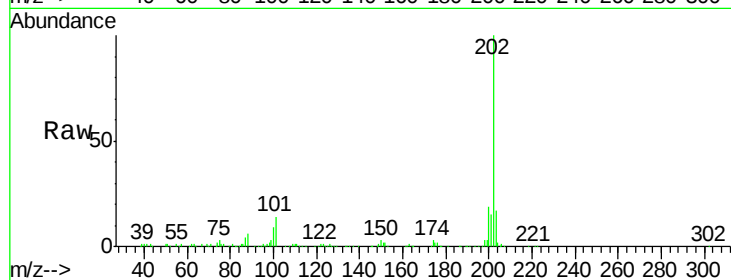
Tgt Ion:202 Resp: 167681

Ion Ratio Lower Upper

202 100

101 13.7 0.0 33.2

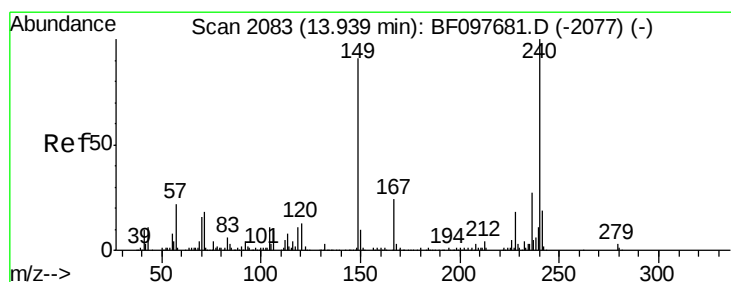
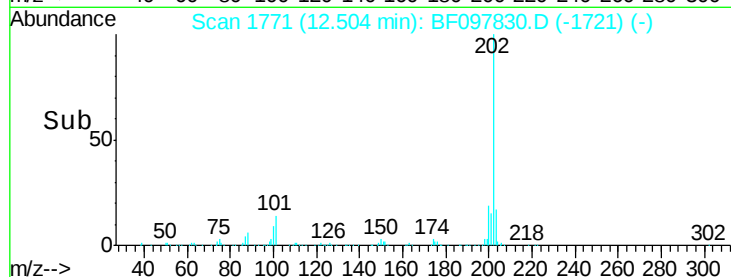
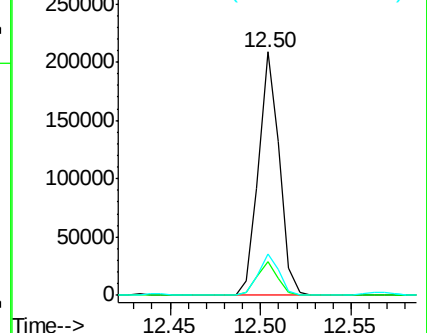
203 17.2 0.0 38.1



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: 13.93 min Scan# 2013

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

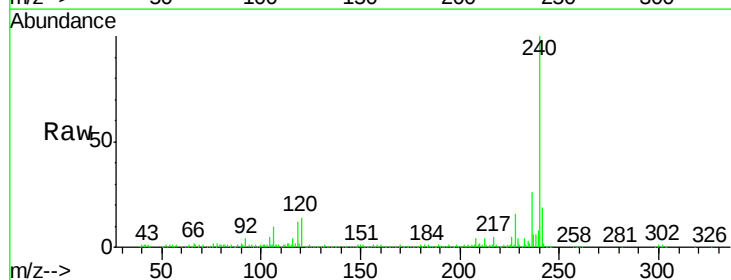
Tgt Ion:240 Resp: 253551

Ion Ratio Lower Upper

240 100

120 14.4 5.8 8.8#

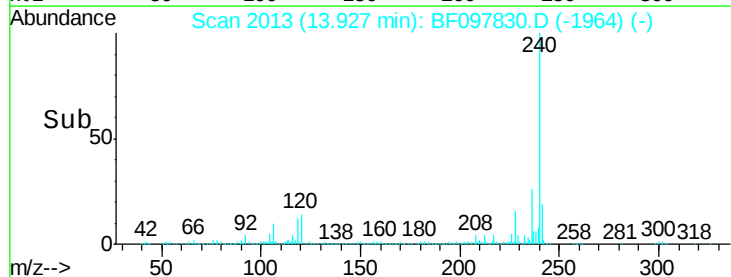
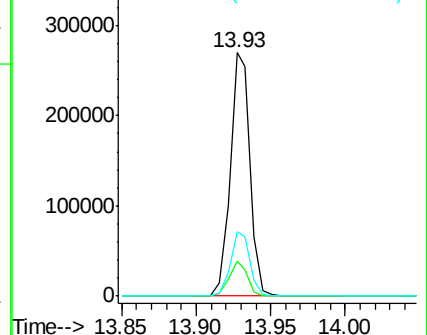
236 26.3 20.5 30.7

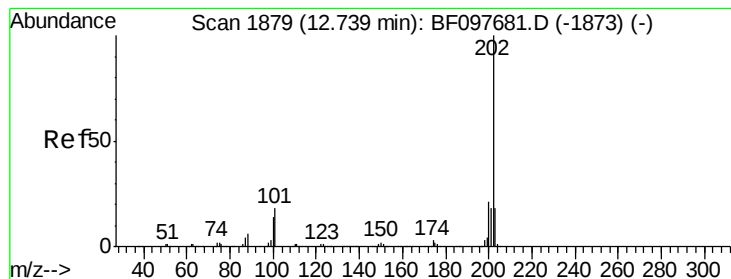


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Pyrene

Concen: 8.061 ng

RT: 12.73 min Scan# 1810

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :

BNA\_F

ClientSampleId :

E2-H8-BASE

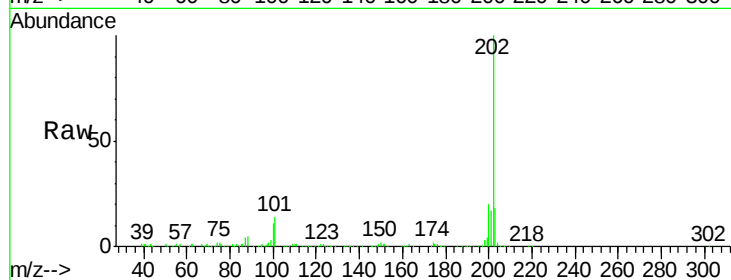
Tgt Ion:202 Resp: 167156

Ion Ratio Lower Upper

202 100

200 20.1 17.6 26.4

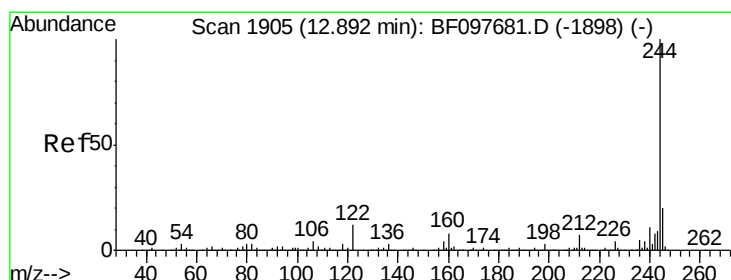
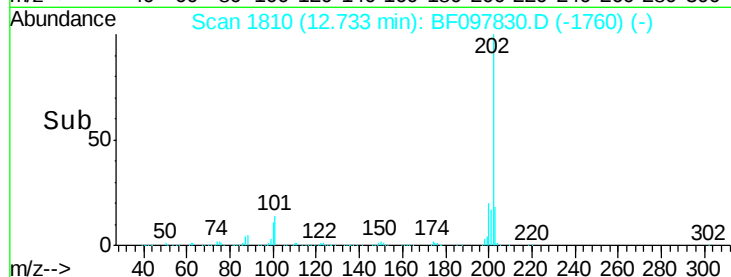
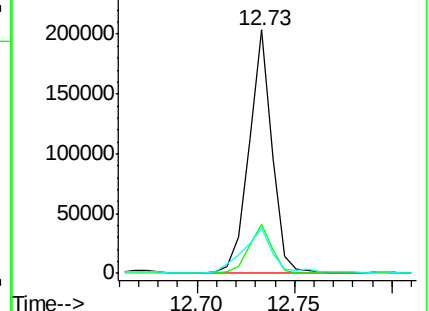
203 18.3 14.4 21.6



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: 59.639 ng

RT: 12.89 min Scan# 1836

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

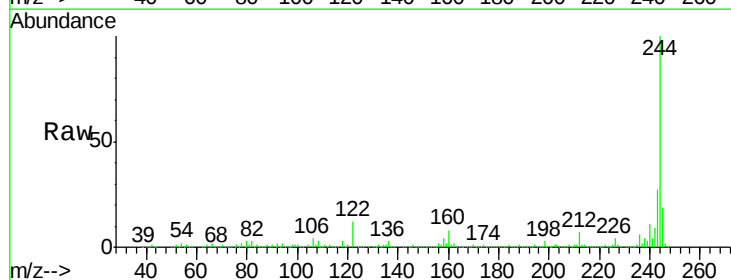
Tgt Ion:244 Resp: 725135

Ion Ratio Lower Upper

244 100

212 7.5 6.0 9.0

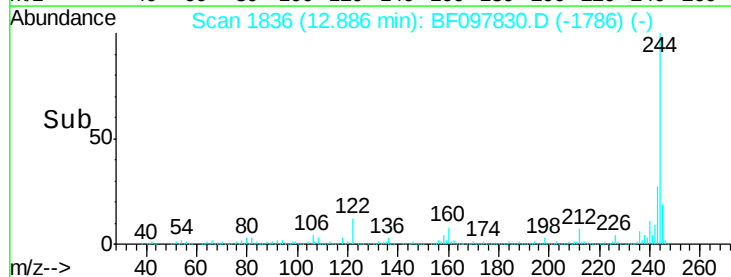
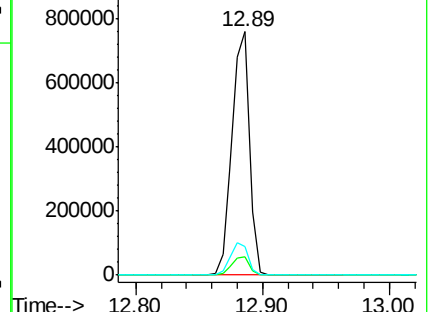
122 11.7 10.3 15.5

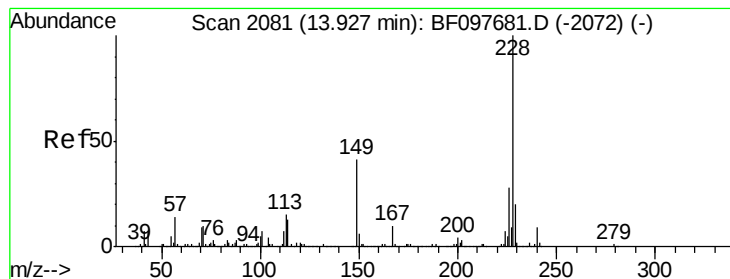


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#80

Benzo(a)anthracene

Concen: 6.465 ng

RT: 13.92 min Scan# 2012

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :

BNA\_F

ClientSampled :

E2-H8-BASE

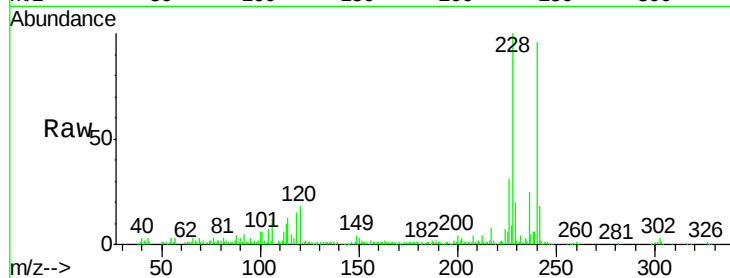
Tgt Ion:228 Resp: 98248

Ion Ratio Lower Upper

228 100

226 31.3 22.6 33.8

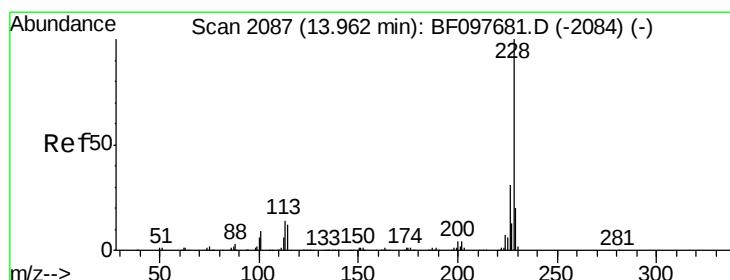
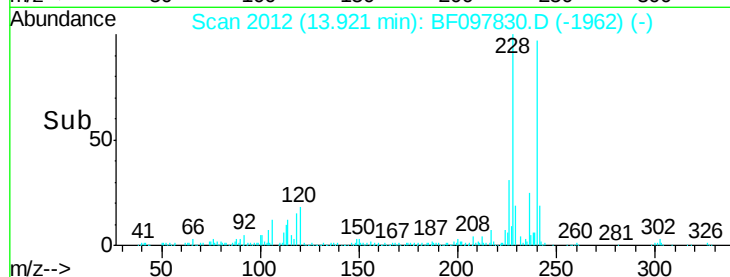
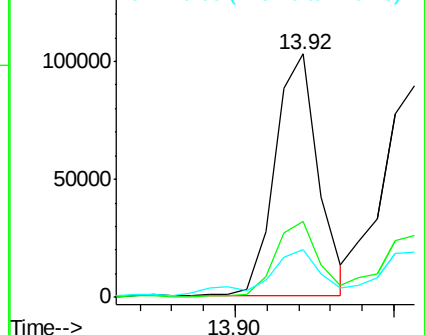
229 19.7 16.3 24.5



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



#82

Chrysene

Concen: 6.053 ng

RT: 13.96 min Scan# 2018

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

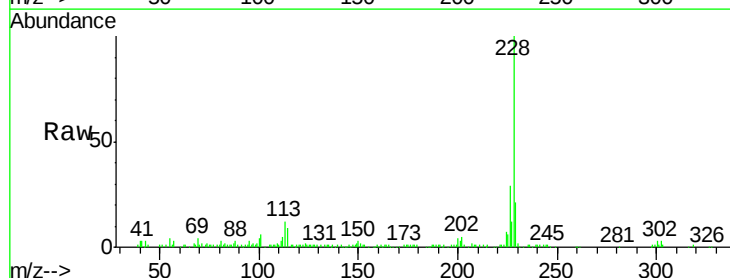
Tgt Ion:228 Resp: 91502

Ion Ratio Lower Upper

228 100

226 29.5 24.9 37.3

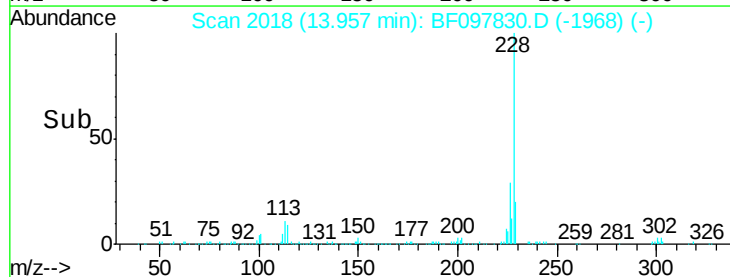
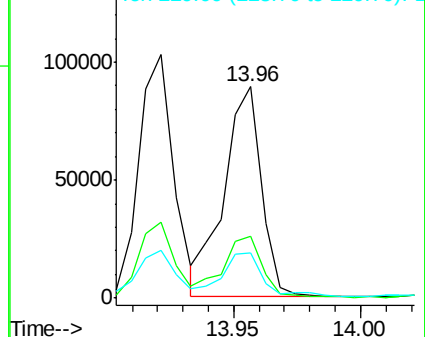
229 21.4 15.8 23.6

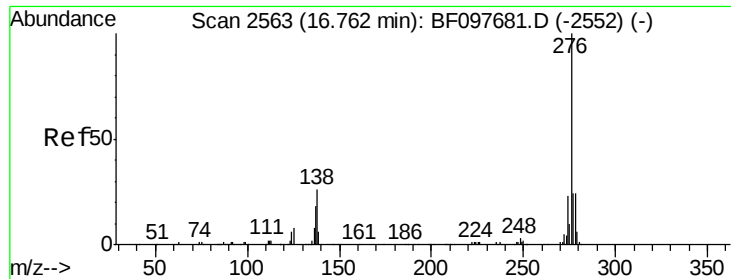


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

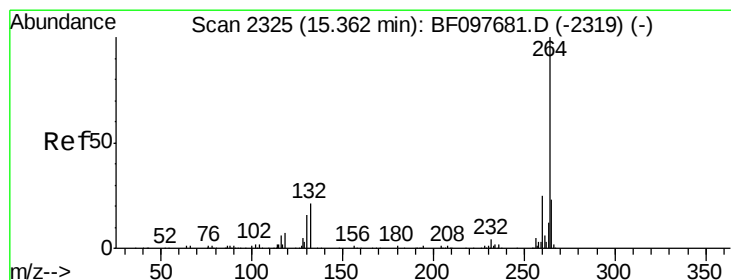
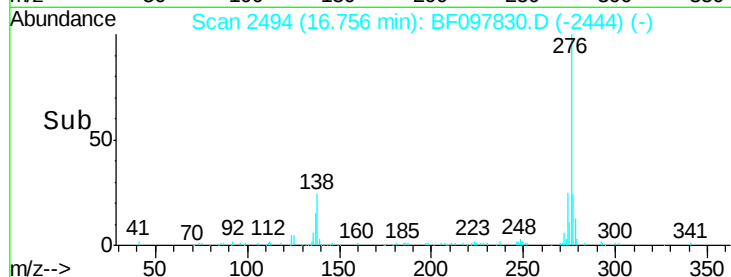
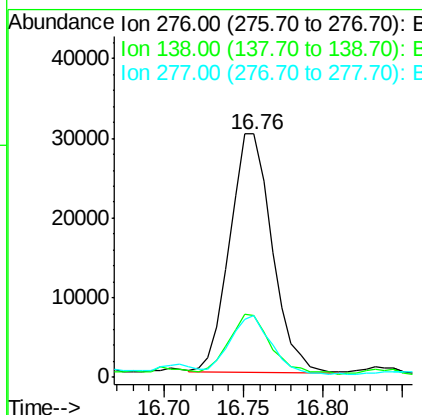
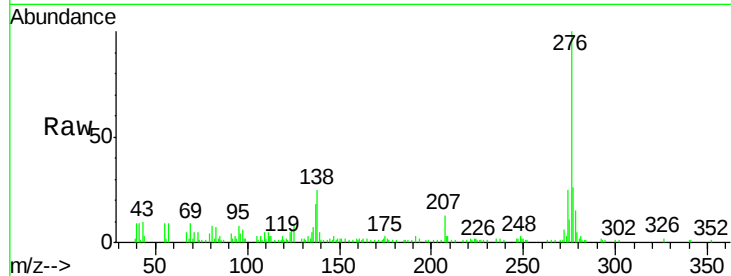




#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 5.014 ng  
 RT: 16.76 min Scan# 2494  
 Delta R.T. -0.01 min  
 Lab File: BF097830.D  
 Acq: 18 Aug 2017 12:35

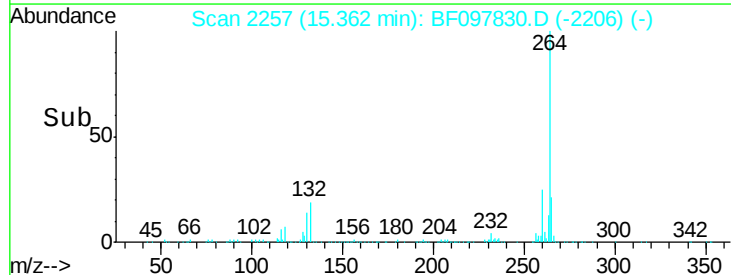
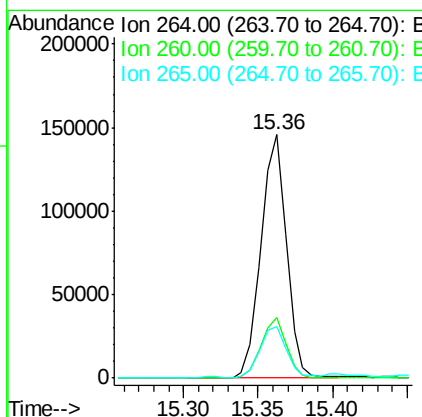
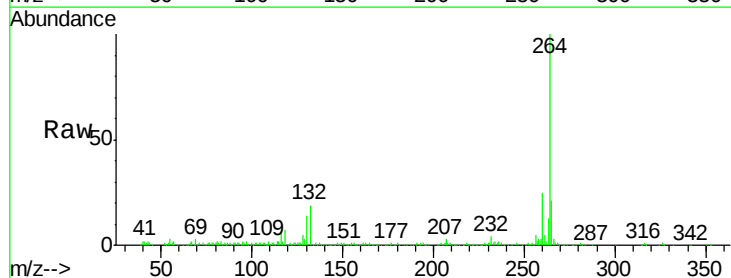
Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-H8-BASE

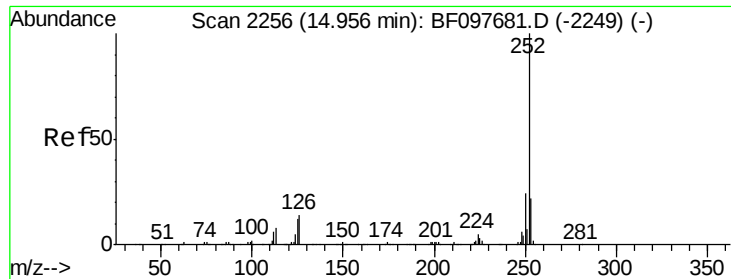
Tgt Ion:276 Resp: 55754  
 Ion Ratio Lower Upper  
 276 100  
 138 25.9 27.8 41.6#  
 277 25.1 20.2 30.4



#86  
 Perylene-d12  
 Concen: 20.000 ng  
 RT: 15.36 min Scan# 2257  
 Delta R.T. 0.00 min  
 Lab File: BF097830.D  
 Acq: 18 Aug 2017 12:35

Tgt Ion:264 Resp: 171961  
 Ion Ratio Lower Upper  
 264 100  
 260 25.0 19.5 29.3  
 265 21.2 17.2 25.8





#87

Benzo(b)fluoranthene

Concen: 14.625 ng

RT: 14.95 min Scan# 2187

Delta R.T. -0.01 min

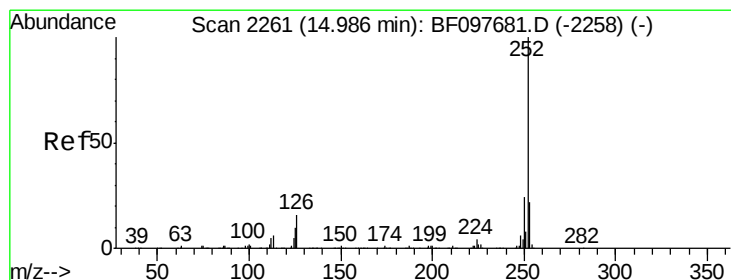
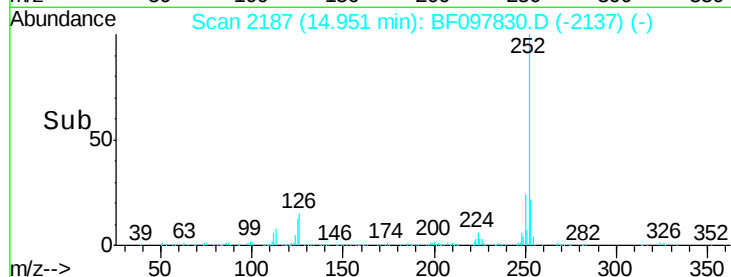
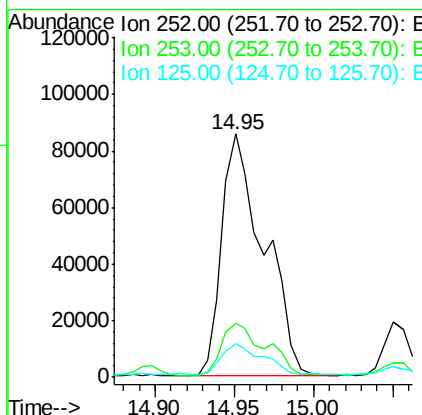
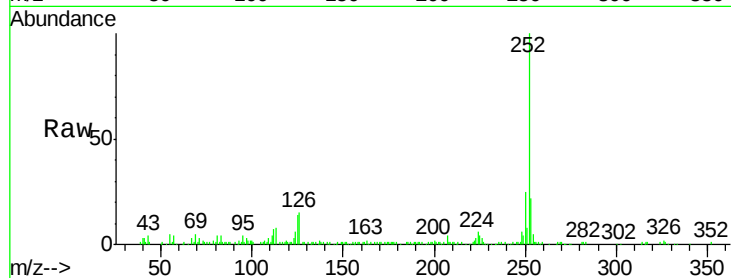
Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :  
BNA\_F  
ClientSampleId :  
E2-H8-BASE

Tgt Ion: 252 Resp: 158519

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.2  | 18.1  | 27.1  |
| 125 | 13.9  | 9.8   | 14.8  |



#88

Benzo(k)fluoranthene

Concen: 15.566 ng

RT: 14.95 min Scan# 2187

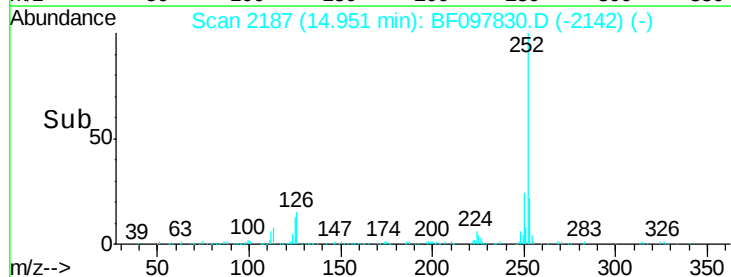
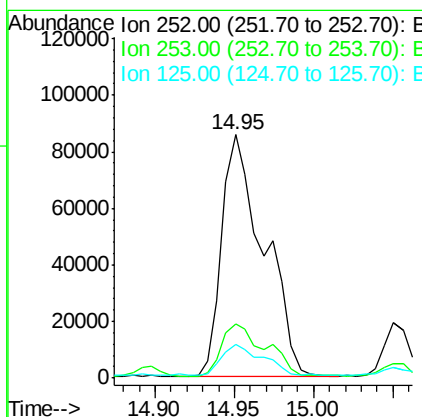
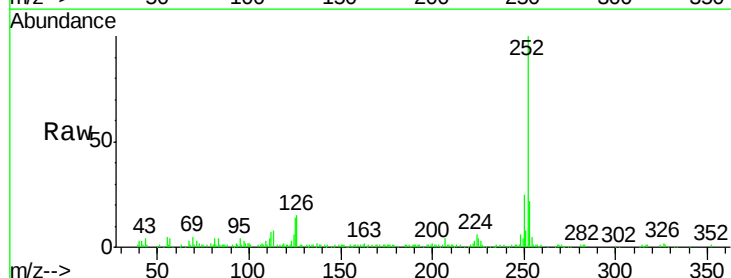
Delta R.T. -0.04 min

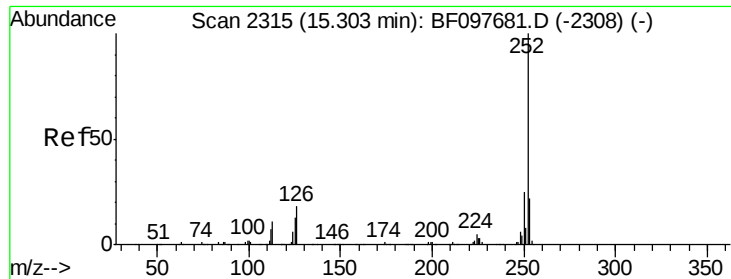
Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Tgt Ion: 252 Resp: 158519

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 252 | 100   |       |       |
| 253 | 22.2  | 18.4  | 27.6  |
| 125 | 13.9  | 13.1  | 19.7  |





#89

Benzo(a)pyrene

Concen: 9.271 ng

RT: 15.30 min Scan# 2246

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

Instrument :

BNA\_F

ClientSampleId :

E2-H8-BASE

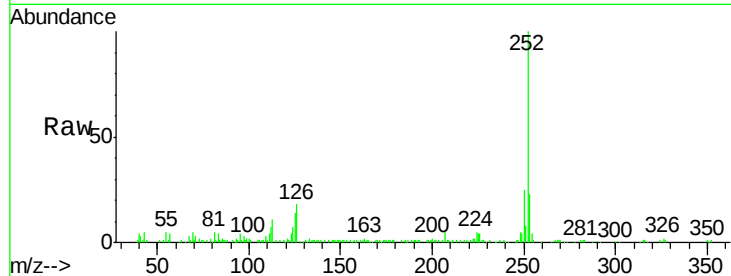
Tgt Ion:252 Resp: 88958

Ion Ratio Lower Upper

252 100

253 22.7 17.5 26.3

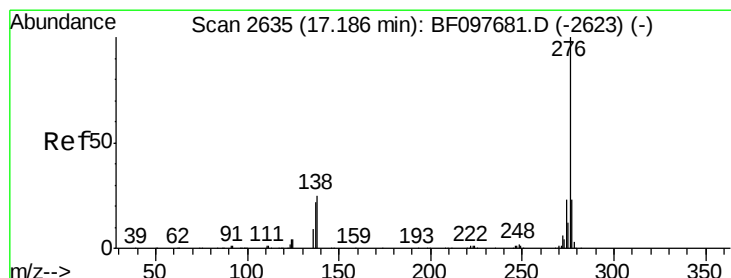
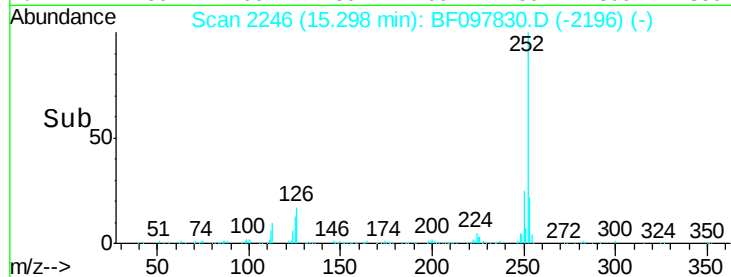
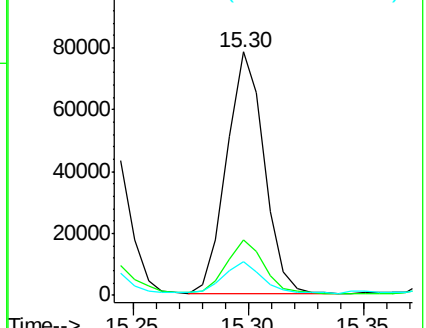
125 13.8 11.0 16.4



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: 7.006 ng

RT: 17.18 min Scan# 2566

Delta R.T. -0.01 min

Lab File: BF097830.D

Acq: 18 Aug 2017 12:35

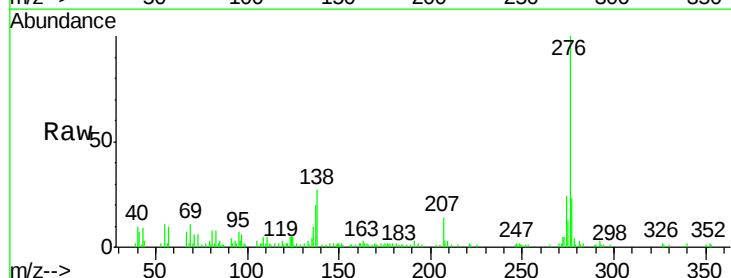
Tgt Ion:276 Resp: 57110

Ion Ratio Lower Upper

276 100

277 22.6 18.6 28.0

138 27.3 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

