

Data Path : Z:\HPCHEM1\BNA F\DATA\BF080217\  
 Data File : BF097289.D  
 Acq On : 2 Aug 2017 22:34  
 Operator : SJ/JU  
 Sample : I4540-17 5X  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Aug 02 23:12:29 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 25 14:11:51 2017  
 Response via : Initial Calibration

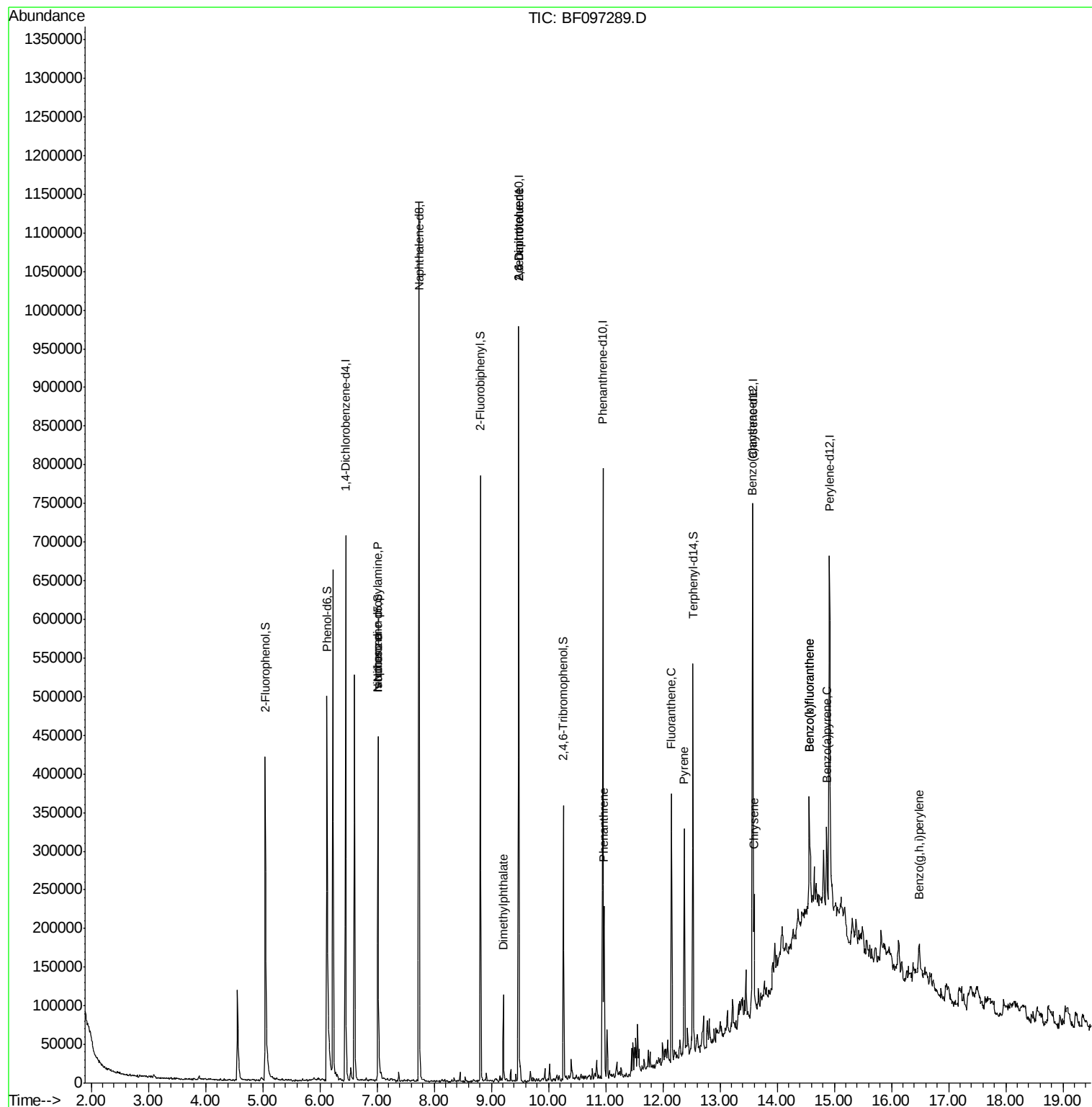
| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.45  | 152  | 117565   | 20.00 | ng    | -0.05    |
| 21) Naphthalene-d8             | 7.73  | 136  | 484346   | 20.00 | ng    | -0.05    |
| 38) Acenaphthene-d10           | 9.47  | 164  | 188910   | 20.00 | ng    | -0.06    |
| 63) Phenanthrene-d10           | 10.95 | 188  | 285700   | 20.00 | ng    | -0.05    |
| 75) Chrysene-d12               | 13.57 | 240  | 206486   | 20.00 | ng    | -0.05    |
| 86) Perylene-d12               | 14.92 | 264  | 186226   | 20.00 | ng    | -0.06    |
| System Monitoring Compounds    |       |      |          |       |       |          |
| 5) 2-Fluorophenol              | 5.05  | 112  | 158354   | 20.31 | ng    | -0.05    |
| 7) Phenol-d6                   | 6.12  | 99   | 252281   | 28.34 | ng    | -0.05    |
| 23) Nitrobenzene-d5            | 7.02  | 82   | 131919   | 15.98 | ng    | -0.06    |
| 41) 2,4,6-Tribromophenol       | 10.26 | 330  | 36402    | 24.39 | ng    | -0.06    |
| 44) 2-Fluorobiphenyl           | 8.81  | 172  | 224968   | 20.21 | ng    | -0.06    |
| 78) Terphenyl-d14              | 12.53 | 244  | 135228   | 13.35 | ng    | -0.06    |
| Target Compounds               |       |      |          |       |       | Qvalue   |
| 19) n-Nitroso-di-n-propylamine | 7.02  | 70   | 17940    | 3.06  | ng    | # 84     |
| 25) Isophorone                 | 7.02  | 82   | 127665   | 7.90  | ng    | # 67     |
| 49) Dimethylphthalate          | 9.21  | 163  | 41724    | 2.91  | ng    | 98       |
| 50) 2,6-Dinitrotoluene         | 9.47  | 165  | 24137    | 7.93  | ng    | # 32     |
| 56) 2,4-Dinitrotoluene         | 9.47  | 165  | 24137    | 6.90  | ng    | # 32     |
| 70) Phenanthrene               | 10.97 | 178  | 83528    | 5.46  | ng    | 96       |
| 74) Fluoranthene               | 12.15 | 202  | 127894   | 8.53  | ng    | 98       |
| 77) Pyrene                     | 12.37 | 202  | 112069   | 6.63  | ng    | 98       |
| 80) Benzo(a)anthracene         | 13.56 | 228  | 51158    | 3.83  | ng    | 98       |
| 82) Chrysene                   | 13.60 | 228  | 47733    | 3.66  | ng    | 98       |
| 87) Benzo(b)fluoranthene       | 14.56 | 252  | 84467    | 7.55  | ng    | # 96     |
| 88) Benzo(k)fluoranthene       | 14.56 | 252  | 84467    | 7.92  | ng    | 99       |
| 89) Benzo(a)pyrene             | 14.87 | 252  | 41477    | 4.05  | ng    | # 95     |
| 91) Benzo(a,h,i)perylene       | 16.48 | 276  | 24223    | 2.75  | ng    | 95       |

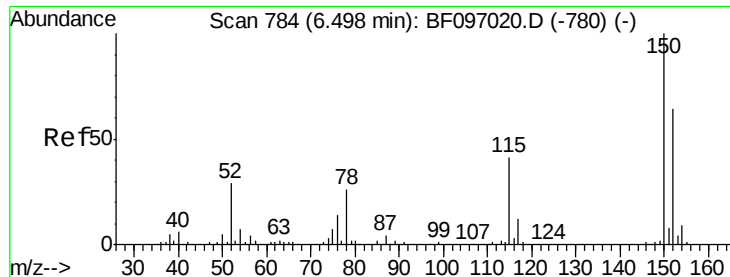
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\DATA\BF080217\  
Data File : BF097289.D  
Acq On : 2 Aug 2017 22:34  
Operator : SJ/JU  
Sample : I4540-17 5X  
Misc :  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Aug 02 23:12:29 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Jul 25 14:11:51 2017  
Response via : Initial Calibration



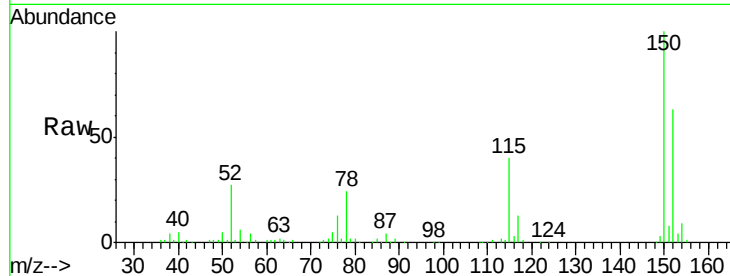


#1

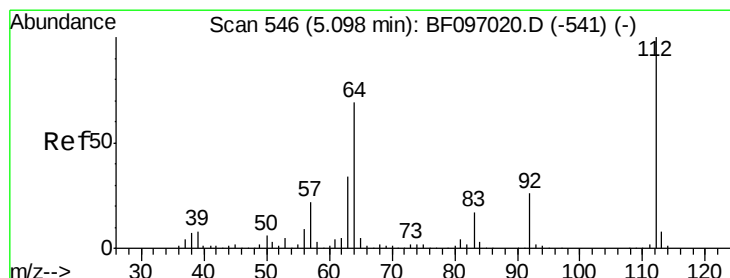
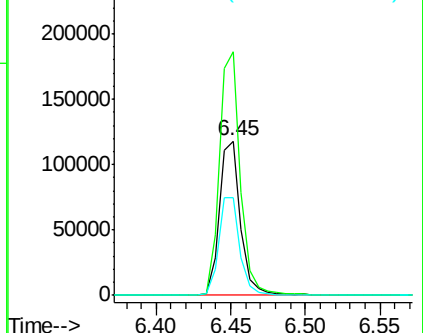
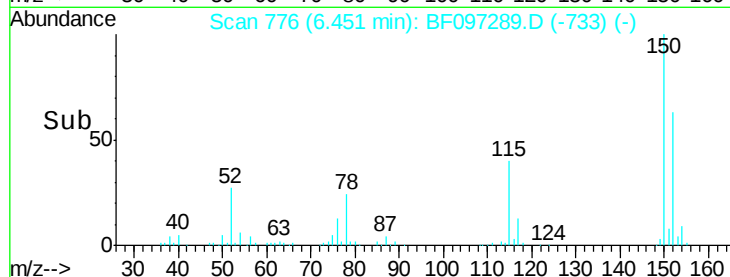
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.45 min Scan# 776  
Delta R.T. -0.05 min  
Lab File: BF097289.D  
Acq: 2 Aug 2017 22:34

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:152 Resp: 117565  
Ion Ratio Lower Upper  
152 100  
150 158.0 126.2 189.2  
115 63.5 52.2 78.2



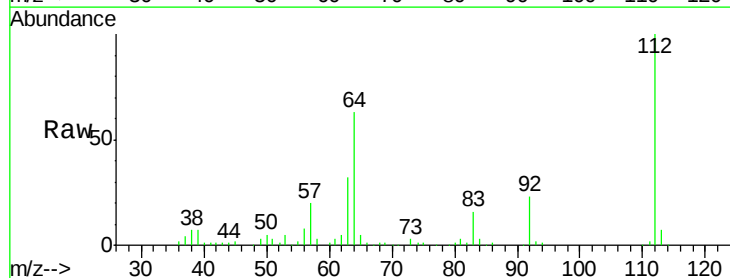
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



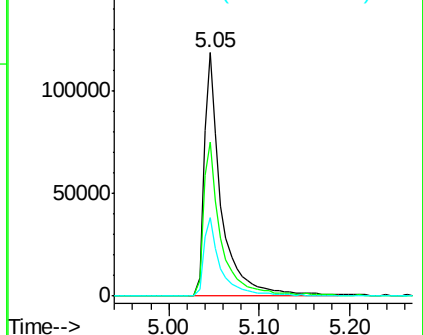
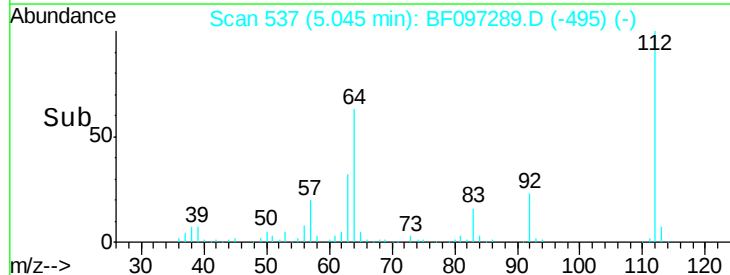
#5

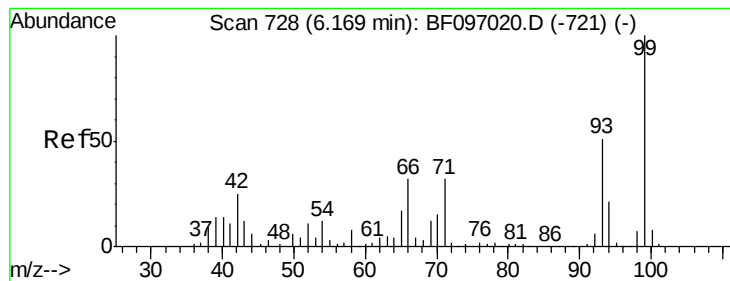
2-Fluorophenol  
Concen: 20.31 ng  
RT: 5.05 min Scan# 537  
Delta R.T. -0.05 min  
Lab File: BF097289.D  
Acq: 2 Aug 2017 22:34

Tgt Ion:112 Resp: 158354  
Ion Ratio Lower Upper  
112 100  
64 63.4 46.0 69.0  
63 32.1 23.4 35.0



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF0  
Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 28.34 ng

RT: 6.12 min Scan# 720

Delta R.T. -0.05 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

Instrument :

BNA\_F

ClientSampleId :

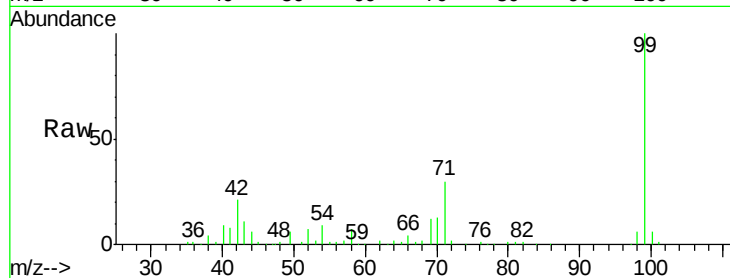
Tot Ion: 99 Resp: 252281

Ion Ratio Lower Upper

99 100

42 21.2 13.5 20.3#

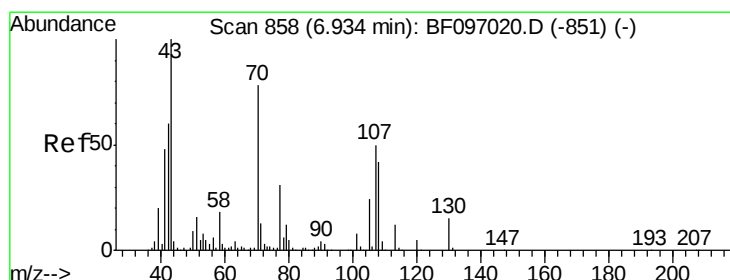
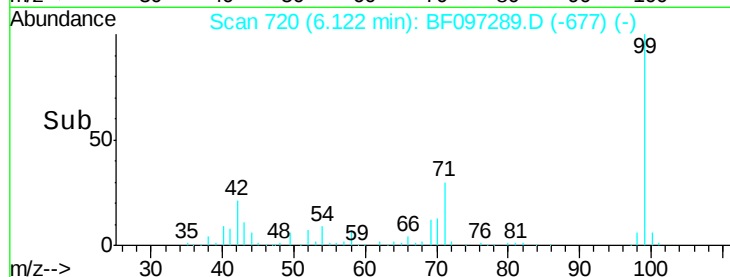
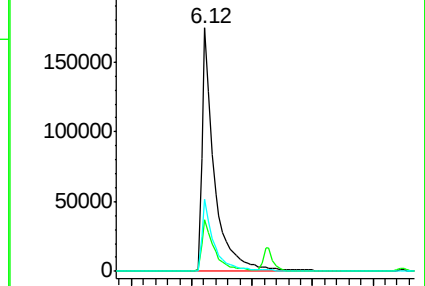
71 29.8 24.5 36.7



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: 3.06 ng

RT: 7.02 min Scan# 872

Delta R.T. 0.08 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

Tgt Ion: 70 Resp: 17940

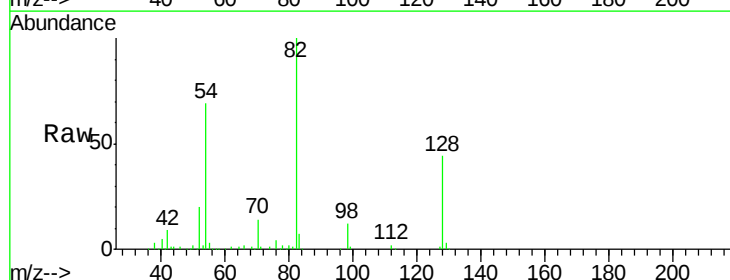
Ion Ratio Lower Upper

70 100

42 64.2 47.2 70.8

101 0.0 7.2 10.8#

130 2.5 15.9 23.9#

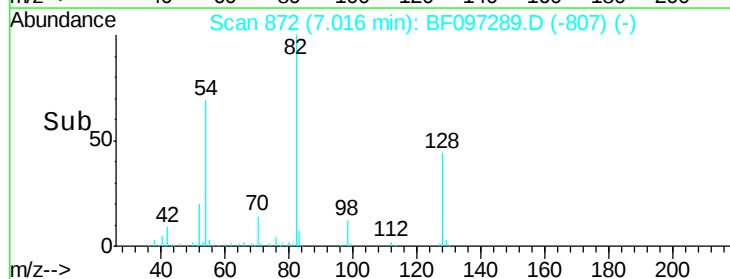
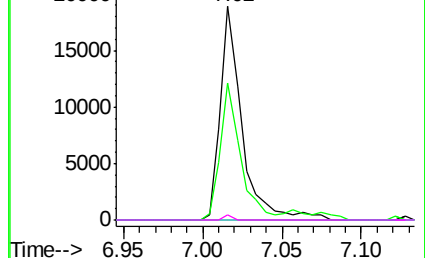


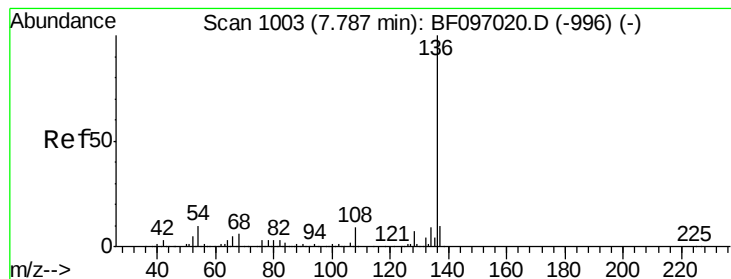
Abundance Ion 70.00 (69.70 to 70.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 101.00 (100.70 to 101.70): BF0

Ion 130.00 (129.70 to 130.70): BF0





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.73 min Scan# 994

Delta R.T. -0.05 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:136 Resp: 484346

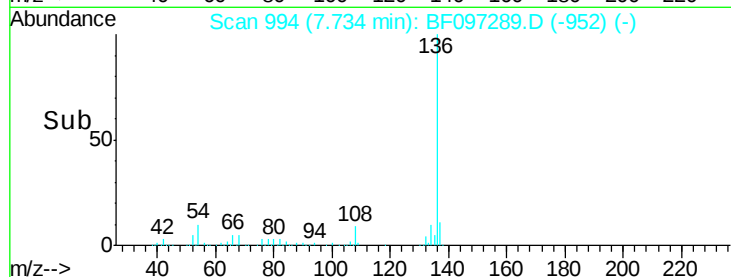
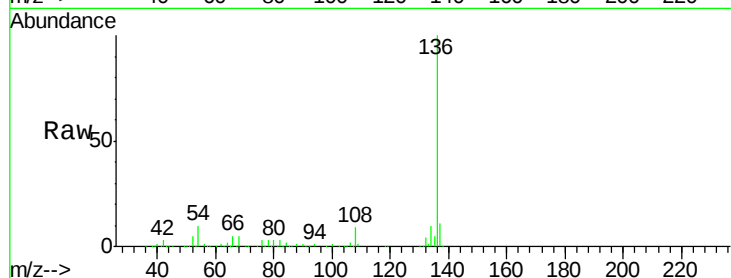
Ion Ratio Lower Upper

136 100

137 10.8 8.5 12.7

54 9.9 4.9 7.3#

68 5.4 4.1 6.1

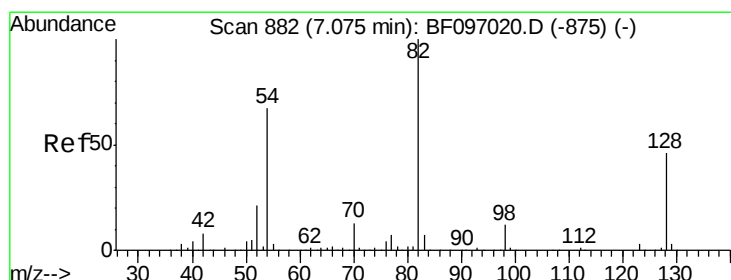
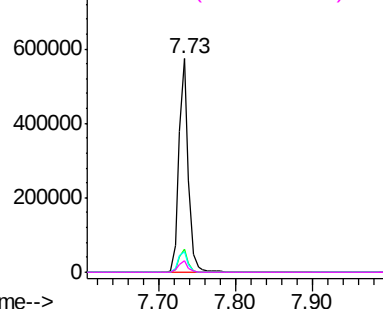


Abundance Ion 136.00 (135.70 to 136.70): E

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: 15.98 ng

RT: 7.02 min Scan# 872

Delta R.T. -0.06 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

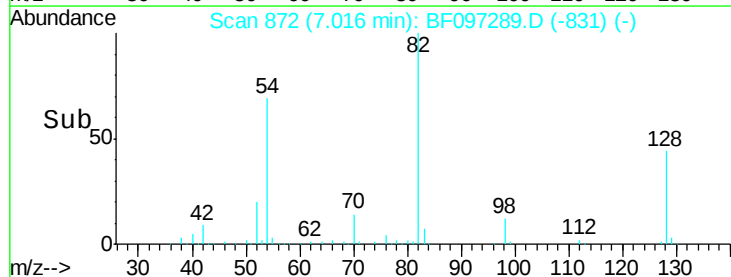
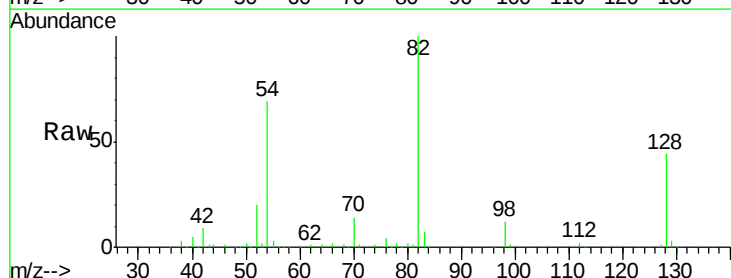
Tgt Ion: 82 Resp: 131919

Ion Ratio Lower Upper

82 100

128 44.1 34.0 51.0

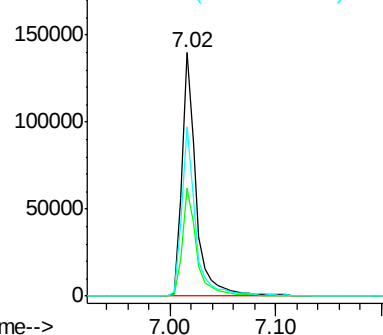
54 69.4 42.2 63.2#

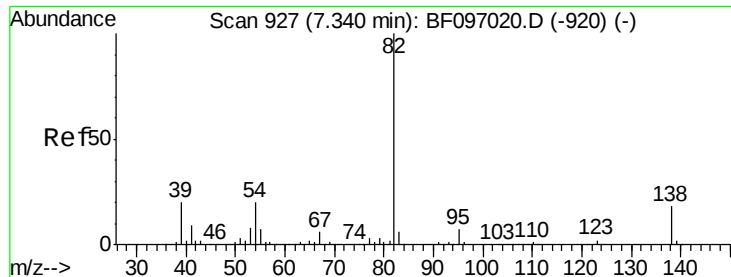


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0





#25

Isophorone

Concen: 7.90 ng

RT: 7.02 min Scan# 872

Delta R.T. -0.32 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

Instrument :

BNA\_F

ClientSampleId :

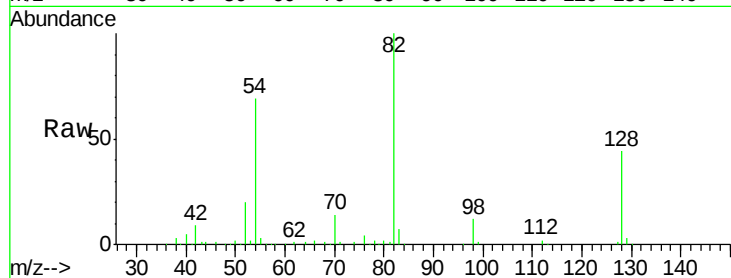
Tot Ion: 82 Resp: 127665

Ion Ratio Lower Upper

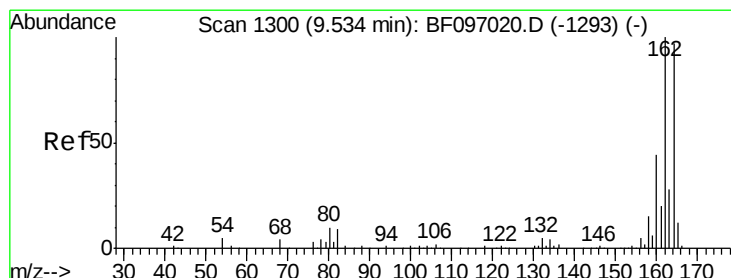
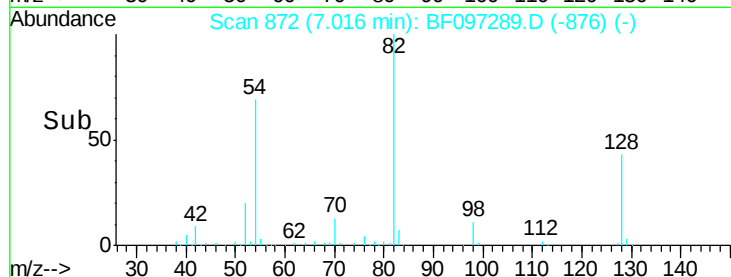
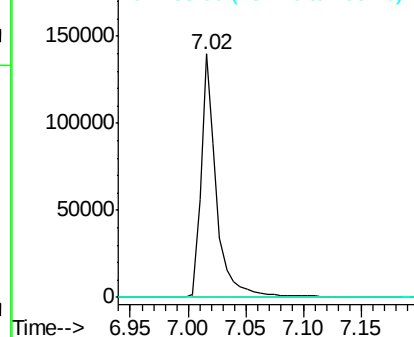
82 100

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): E



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.47 min Scan# 1290

Delta R.T. -0.06 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

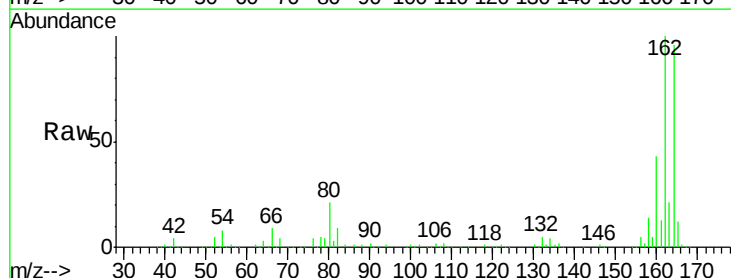
Tgt Ion:164 Resp: 188910

Ion Ratio Lower Upper

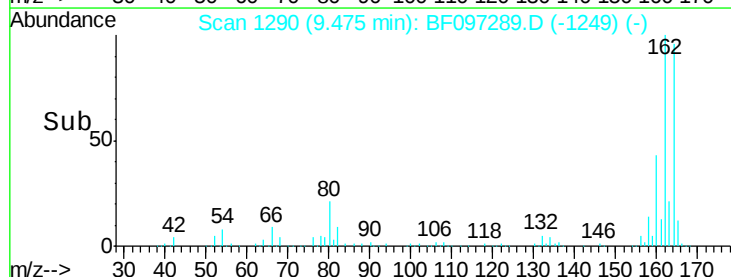
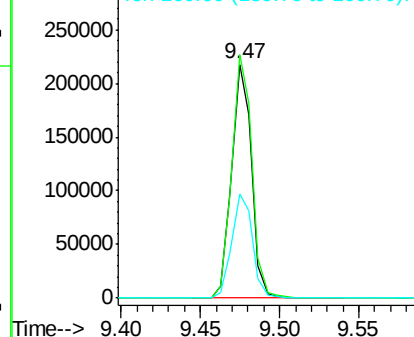
164 100

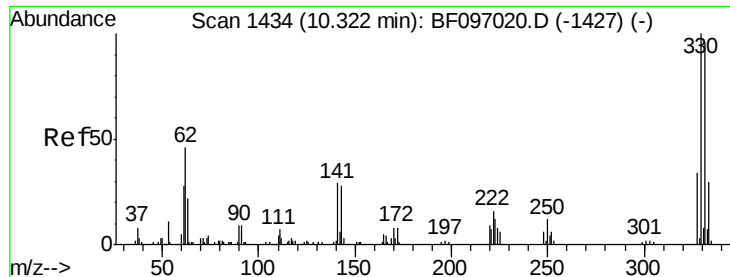
162 104.1 82.6 123.8

160 44.8 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

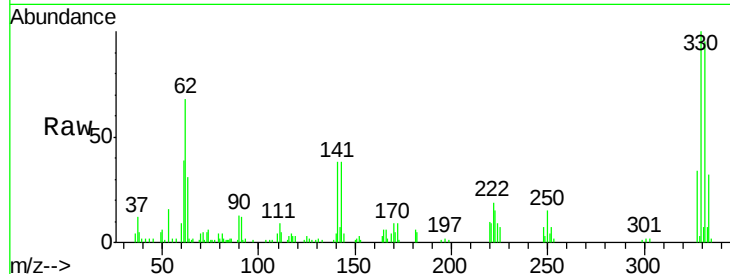




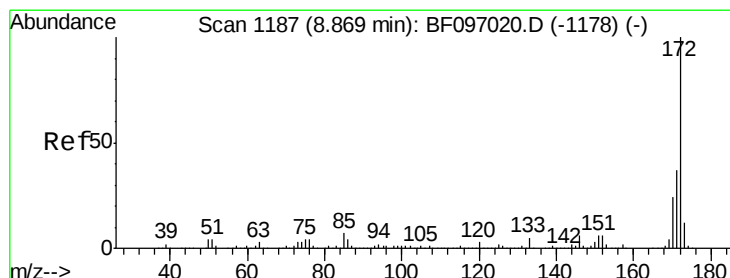
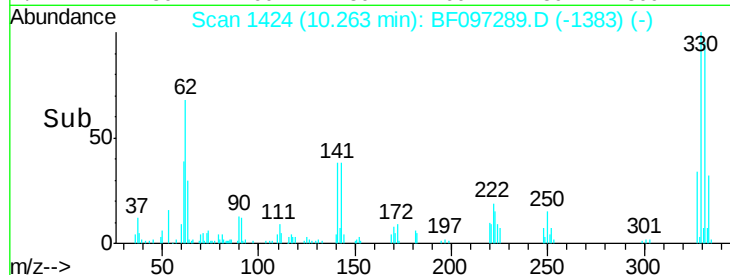
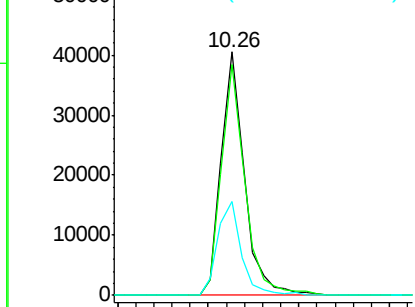
#41  
 2,4,6-Tribromophenol  
 Concen: 24.39 ng  
 RT: 10.26 min Scan# 1424  
 Delta R.T. -0.06 min  
 Lab File: BF097289.D  
 Acq: 2 Aug 2017 22:34

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:330 Resp: 36402  
 Ion Ratio Lower Upper  
 330 100  
 332 95.9 76.6 115.0  
 141 39.7 31.4 47.2

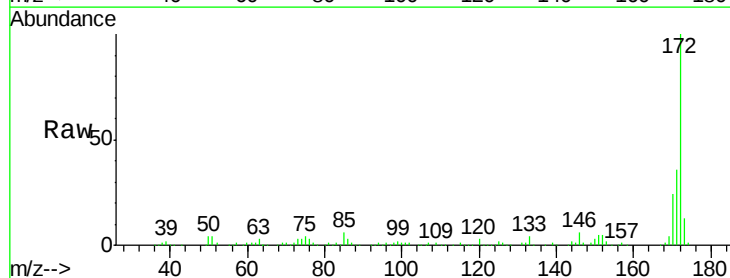


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

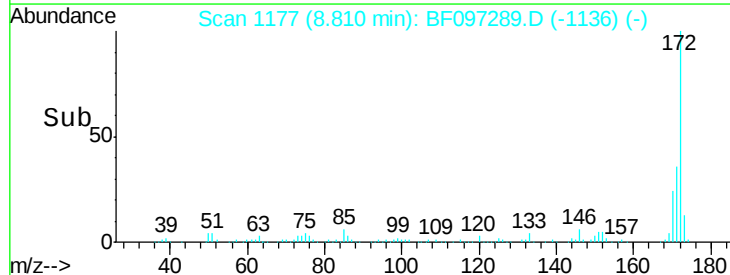
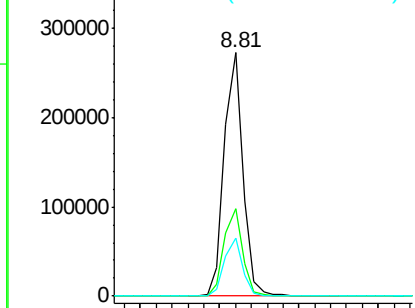


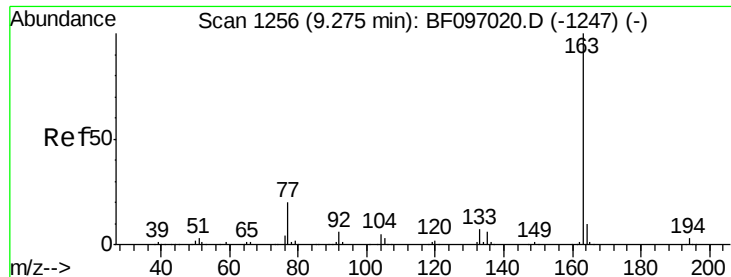
#44  
 2-Fluorobiphenyl  
 Concen: 20.21 ng  
 RT: 8.81 min Scan# 1177  
 Delta R.T. -0.06 min  
 Lab File: BF097289.D  
 Acq: 2 Aug 2017 22:34

Tgt Ion:172 Resp: 224968  
 Ion Ratio Lower Upper  
 172 100  
 171 35.9 29.6 44.4  
 170 23.9 19.8 29.8



Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E

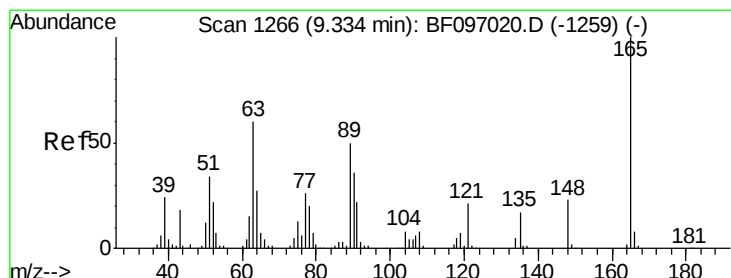
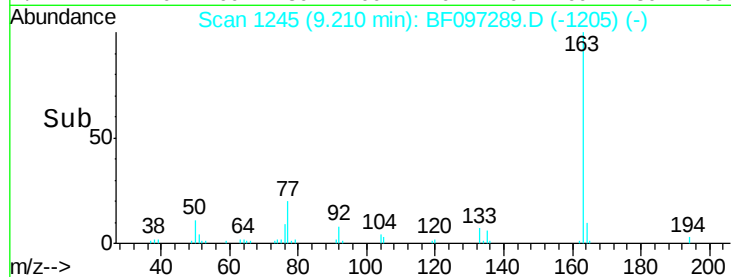
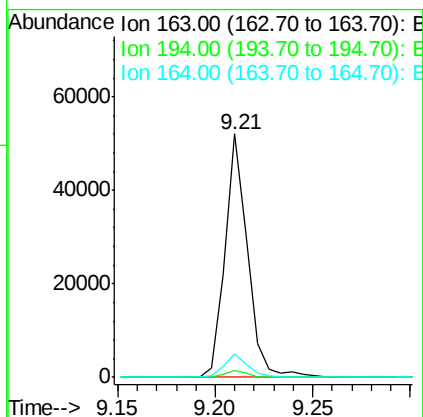
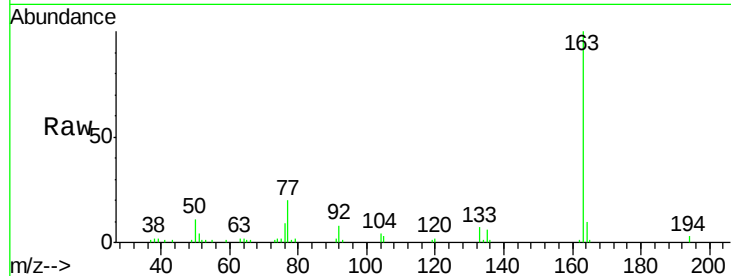




#49  
Dimethylphthalate  
Concen: 2.91 ng  
RT: 9.21 min Scan# 1245  
Delta R.T. -0.06 min  
Lab File: BF097289.D  
Acq: 2 Aug 2017 22:34

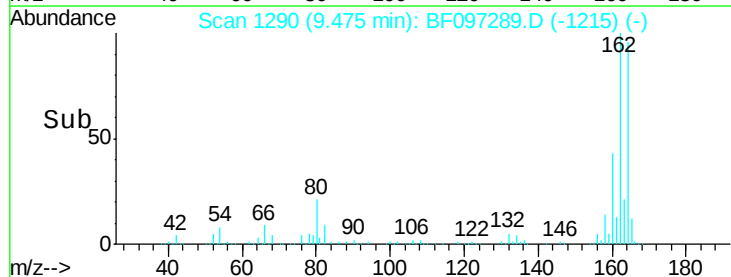
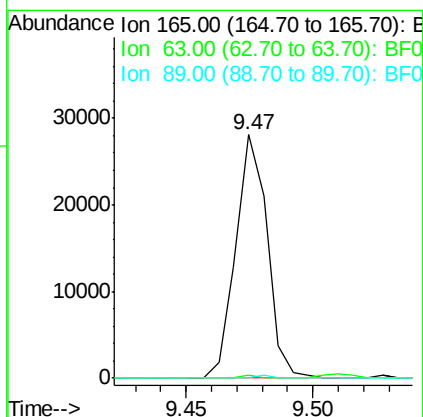
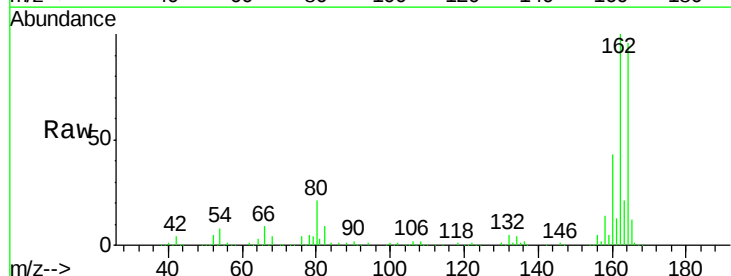
Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:163 Resp: 41724  
Ion Ratio Lower Upper  
163 100  
194 3.0 2.6 4.0  
164 9.8 8.4 12.6



#50  
2,6-Dinitrotoluene  
Concen: 7.93 ng  
RT: 9.47 min Scan# 1290  
Delta R.T. 0.14 min  
Lab File: BF097289.D  
Acq: 2 Aug 2017 22:34

Tgt Ion:165 Resp: 24137  
Ion Ratio Lower Upper  
165 100  
63 1.3 34.3 51.5#  
89 0.0 37.1 55.7#

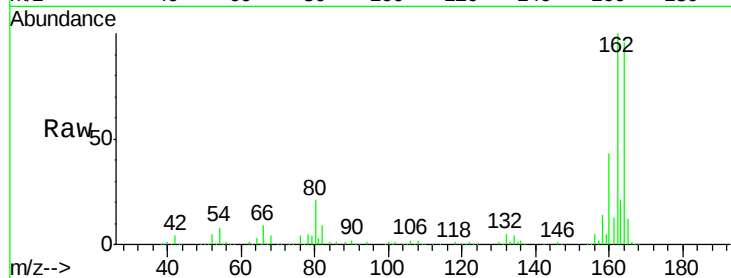




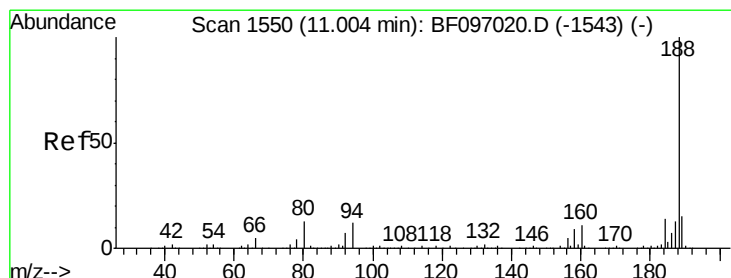
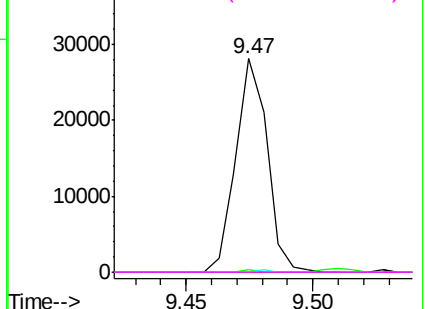
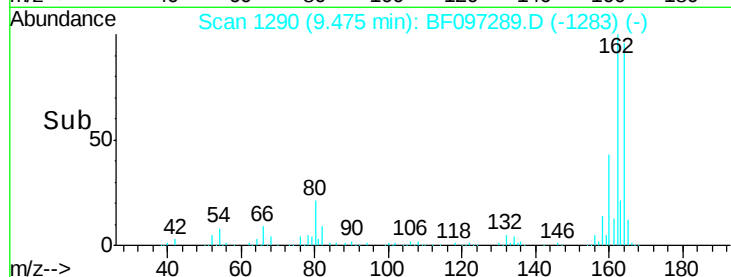
#56  
 2,4-Dinitrotoluene  
 Concen: 6.90 ng  
 RT: 9.47 min Scan# 1290  
 Delta R.T. -0.26 min  
 Lab File: BF097289.D  
 Acq: 2 Aug 2017 22:34

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:165 Resp: 24137  
 Ion Ratio Lower Upper  
 165 100  
 63 1.3 25.4 38.0#  
 89 0.0 46.4 69.6#  
 182 0.0 1.8 2.6#

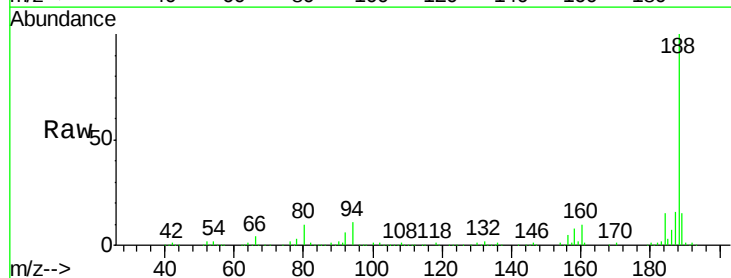


Abundance Ion 165.00 (164.70 to 165.70): E  
 Ion 63.00 (62.70 to 63.70): BF0  
 Ion 89.00 (88.70 to 89.70): BF0  
 Ion 182.00 (181.70 to 182.70): E

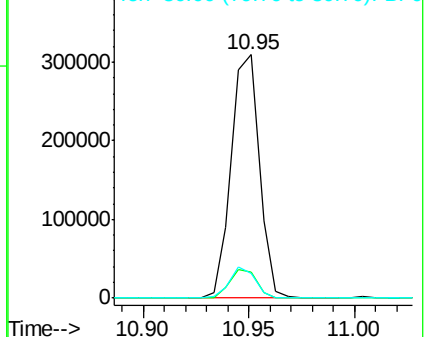
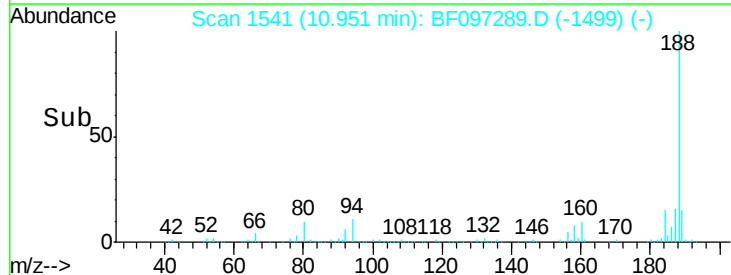


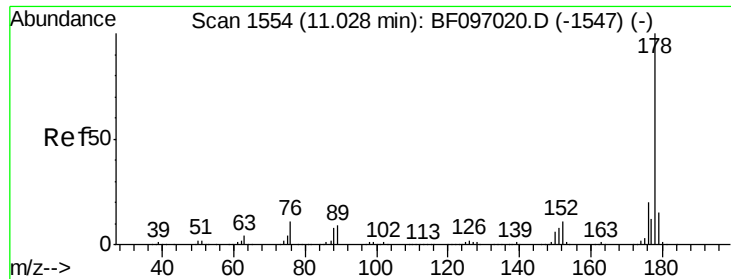
#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 10.95 min Scan# 1541  
 Delta R.T. -0.05 min  
 Lab File: BF097289.D  
 Acq: 2 Aug 2017 22:34

Tgt Ion:188 Resp: 285700  
 Ion Ratio Lower Upper  
 188 100  
 94 10.6 9.4 14.2  
 80 10.4 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





#70

Phenanthrene

Concen: 5.46 ng

RT: 10.97 min Scan# 1544

Delta R.T. -0.06 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

Instrument :

BNA\_F

ClientSampleId :

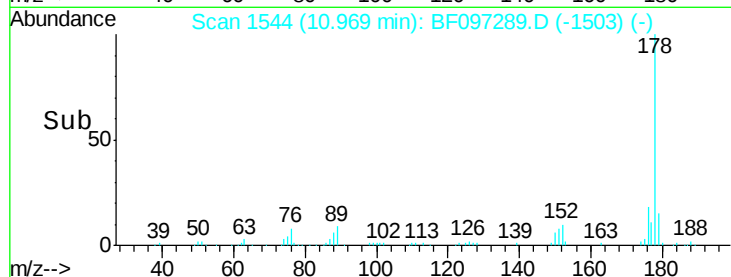
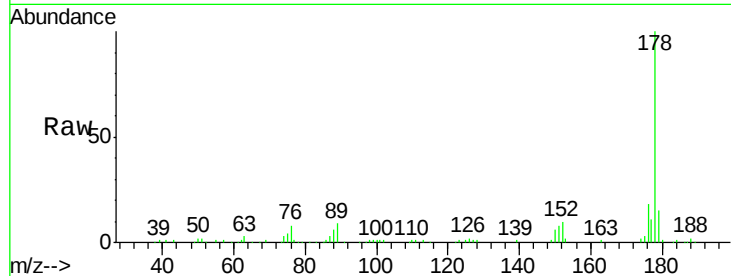
Tot Ion:178 Resp: 83528

Ion Ratio Lower Upper

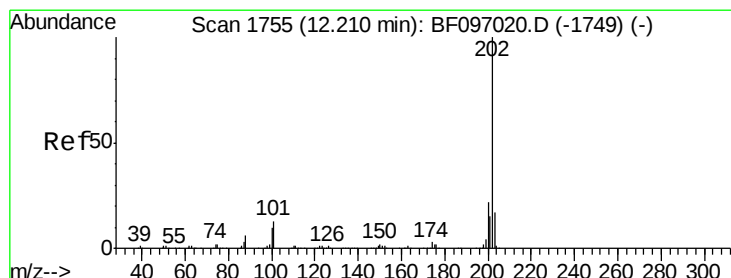
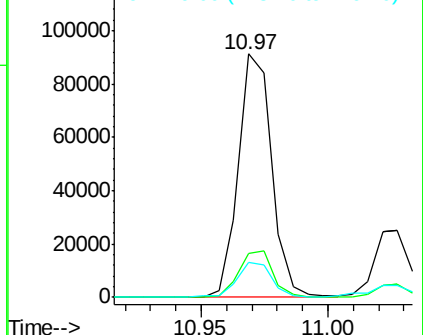
178 100

176 18.1 16.2 24.4

179 14.6 12.6 19.0



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: 8.53 ng

RT: 12.15 min Scan# 1745

Delta R.T. -0.06 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

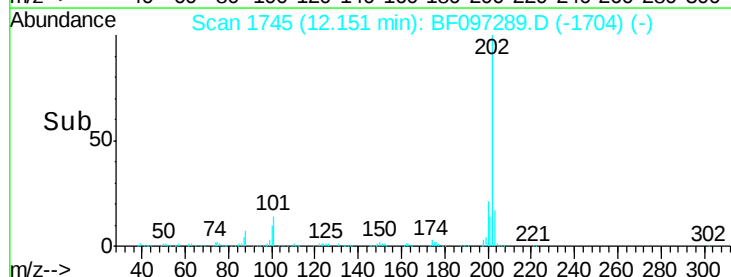
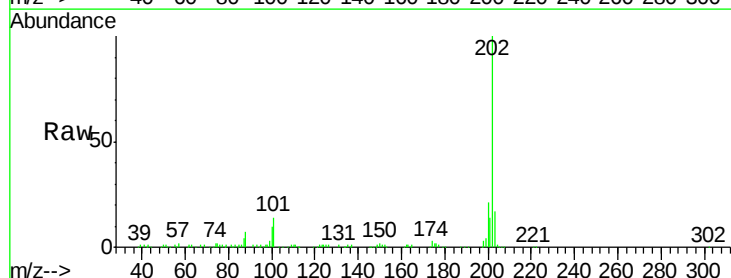
Tgt Ion:202 Resp: 127894

Ion Ratio Lower Upper

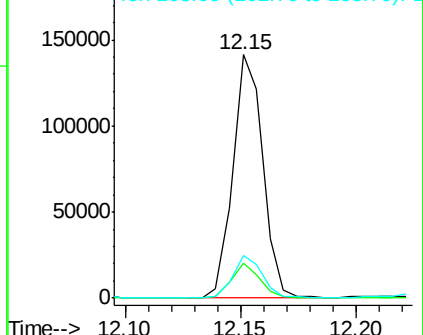
202 100

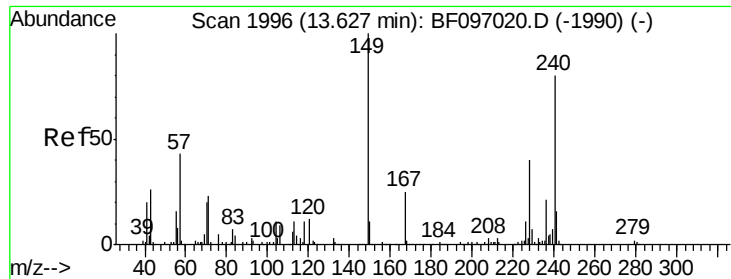
101 14.3 0.0 33.2

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: 20.00 ng

RT: 13.57 min Scan# 1987

Delta R.T. -0.05 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

Instrument :

BNA\_F

ClientSampleId :

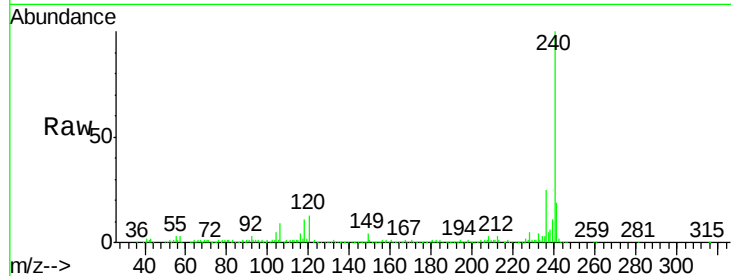
Tot Ion:240 Resp: 206486

Ion Ratio Lower Upper

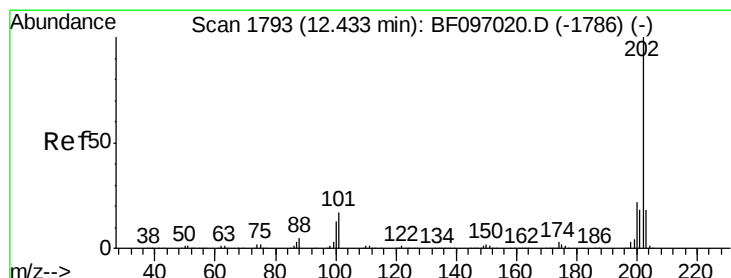
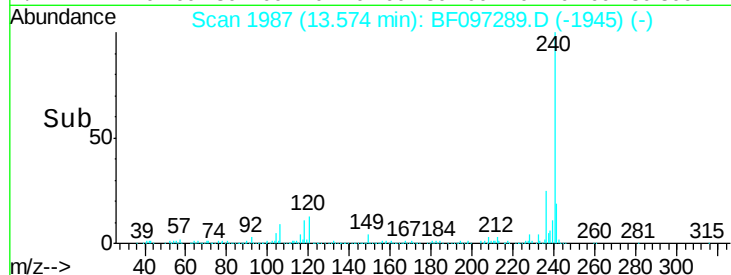
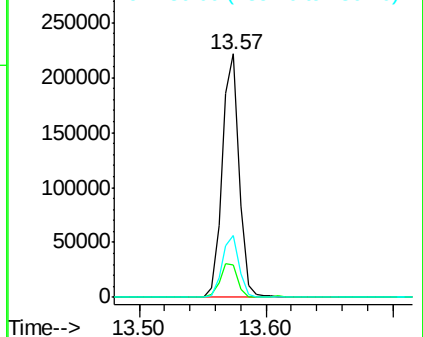
240 100

120 13.2 5.8 8.8#

236 25.3 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: 6.63 ng

RT: 12.37 min Scan# 1783

Delta R.T. -0.06 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

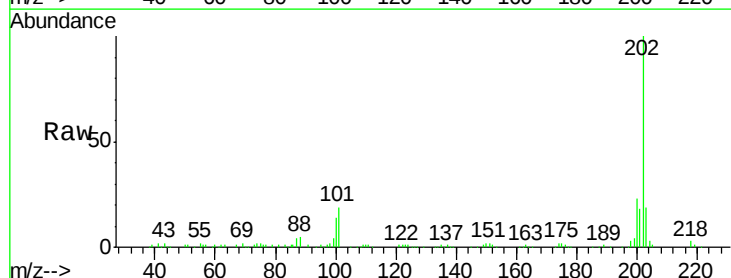
Tgt Ion:202 Resp: 112069

Ion Ratio Lower Upper

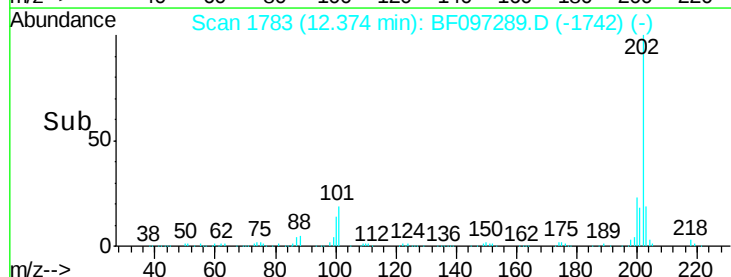
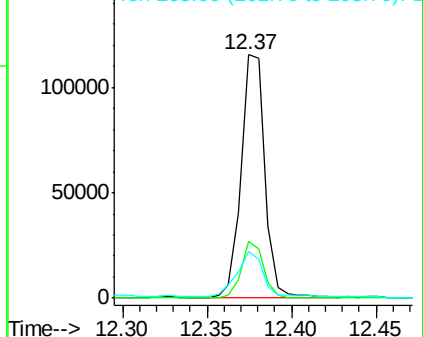
202 100

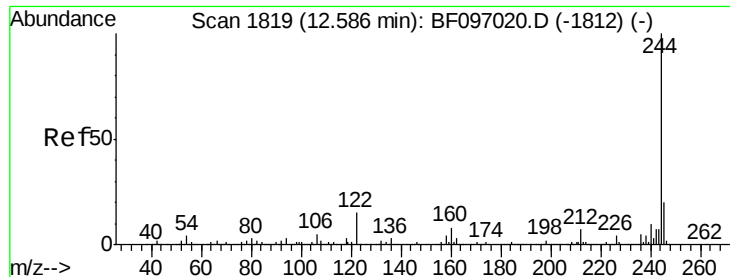
200 23.1 17.6 26.4

203 19.1 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: 13.35 ng

RT: 12.53 min Scan# 1809

Delta R.T. -0.06 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

Instrument :

BNA\_F

ClientSampleId :

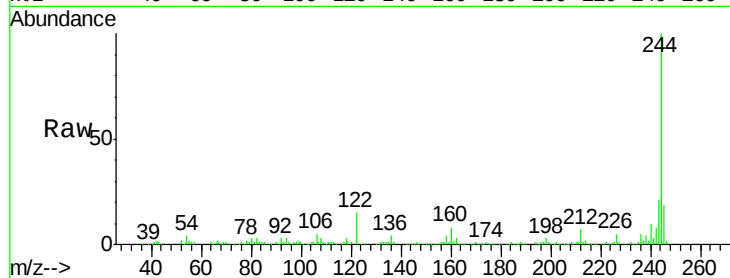
Tot Ion:244 Resp: 135228

Ion Ratio Lower Upper

244 100

212 6.6 6.0 9.0

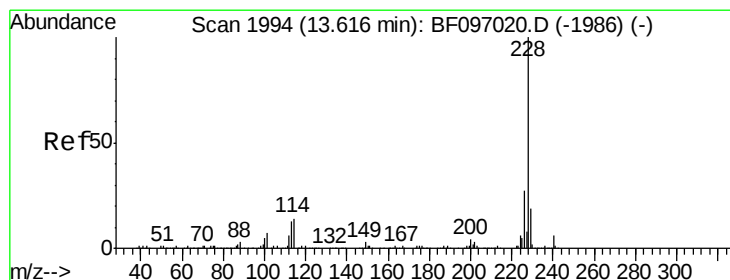
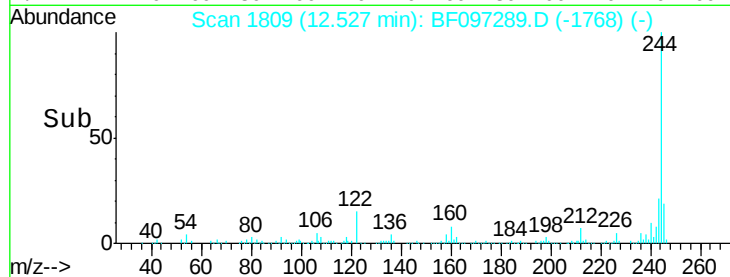
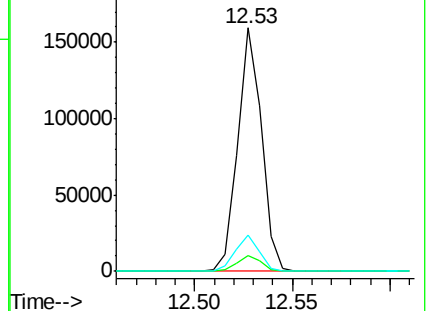
122 14.8 10.3 15.5



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: 3.83 ng

RT: 13.56 min Scan# 1985

Delta R.T. -0.05 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

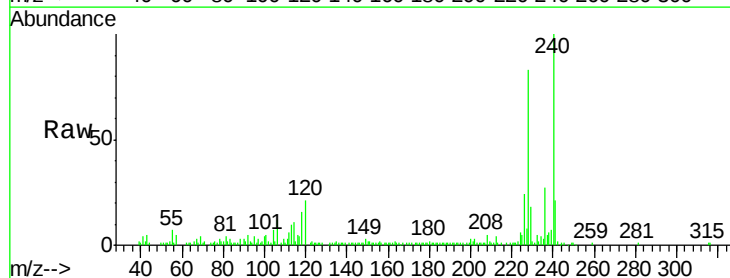
Tgt Ion:228 Resp: 51158

Ion Ratio Lower Upper

228 100

226 29.0 22.6 33.8

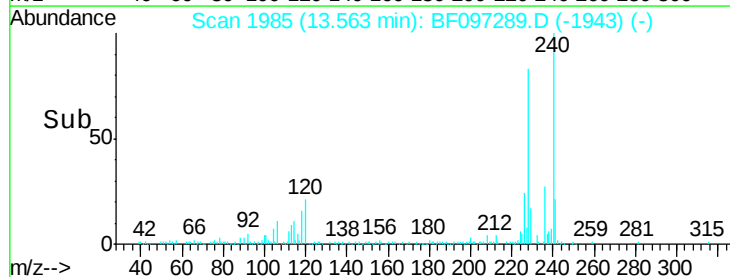
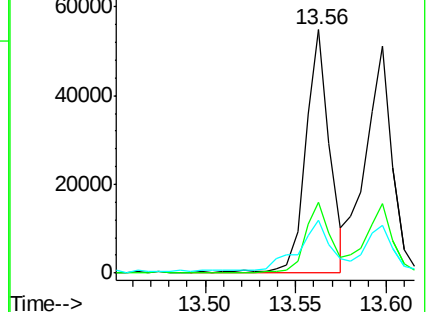
229 21.7 16.3 24.5

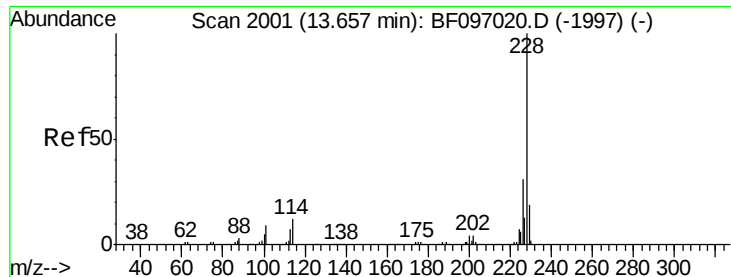


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#82

Chrysene

Concen: 3.66 ng

RT: 13.60 min Scan# 1991

Delta R.T. -0.06 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

Instrument :

BNA\_F

ClientSampleId :

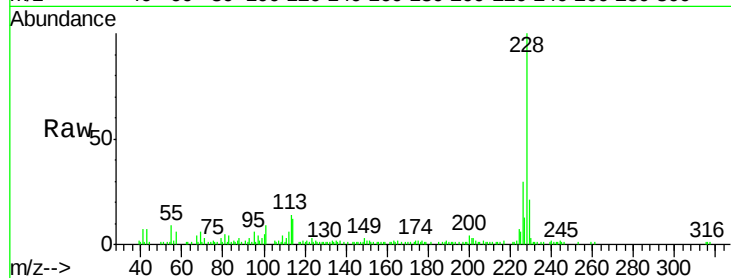
Tot Ion:228 Resp: 47733

Ion Ratio Lower Upper

228 100

226 30.3 24.9 37.3

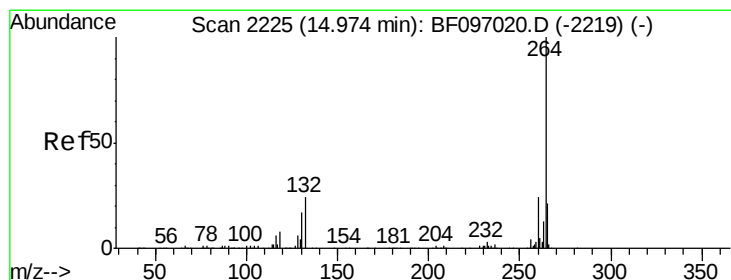
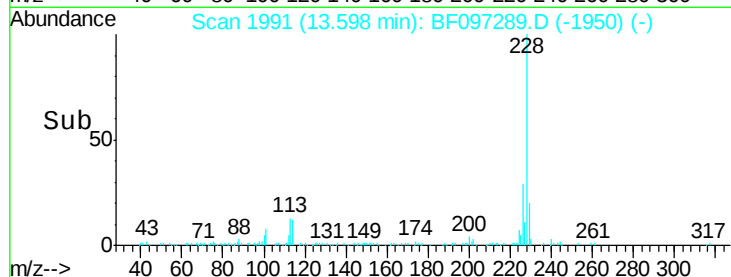
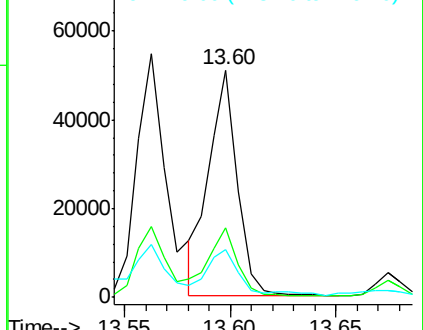
229 20.8 15.8 23.6



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



#86

Perylene-d12

Concen: 20.00 ng

RT: 14.92 min Scan# 2215

Delta R.T. -0.06 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

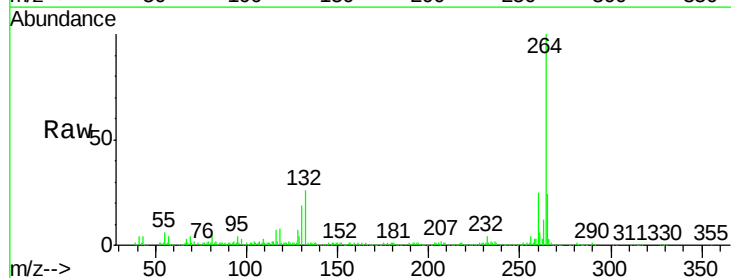
Tgt Ion:264 Resp: 186226

Ion Ratio Lower Upper

264 100

260 24.6 19.5 29.3

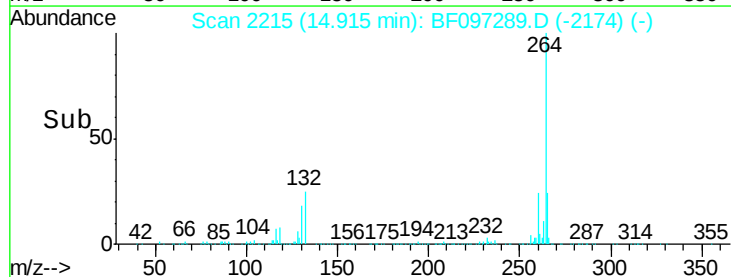
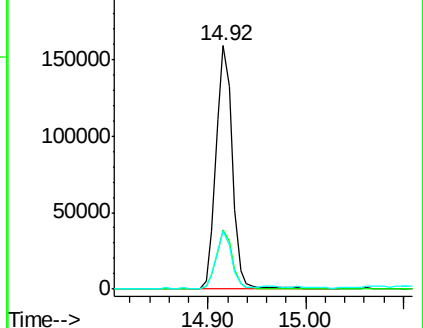
265 23.8 17.2 25.8

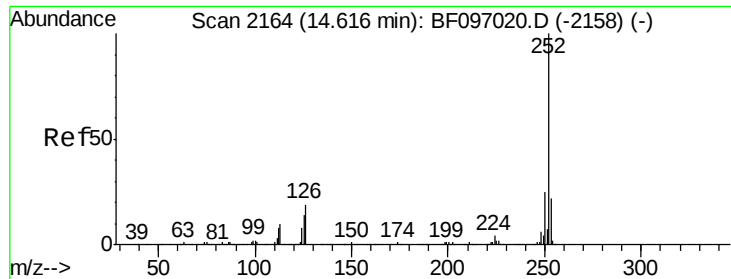


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#87

Benzo(b)fluoranthene

Concen: 7.55 ng

RT: 14.56 min Scan# 2155

Delta R.T. -0.05 min

Lab File: BF097289.D

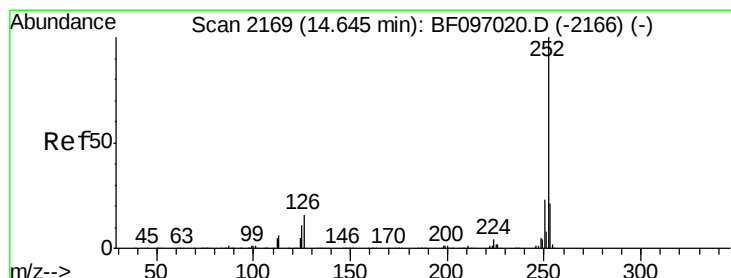
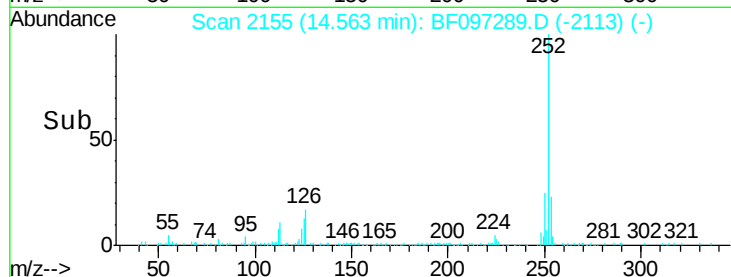
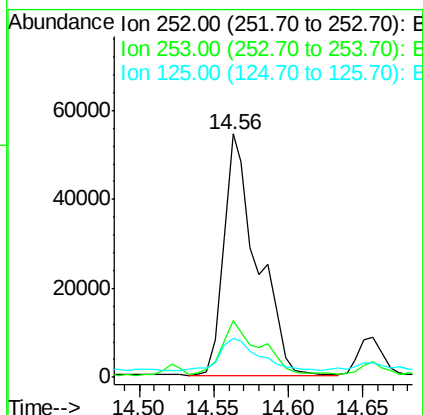
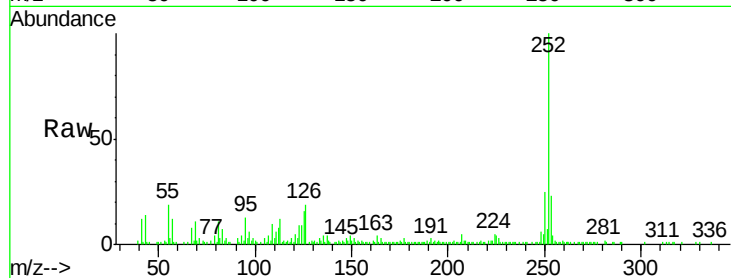
Acq: 2 Aug 2017 22:34

Instrument :

BNA\_F

ClientSampleId :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 252   | Resp: | 84467 |
| Ion      | Ratio | Lower | Upper |
| 252      | 100   |       |       |
| 253      | 23.4  | 18.1  | 27.1  |
| 125      | 15.7  | 9.8   | 14.8# |



#88

Benzo(k)fluoranthene

Concen: 7.92 ng

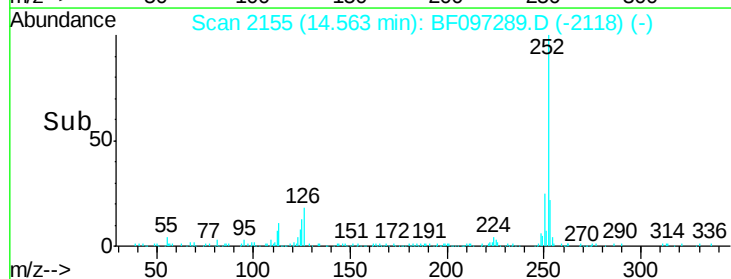
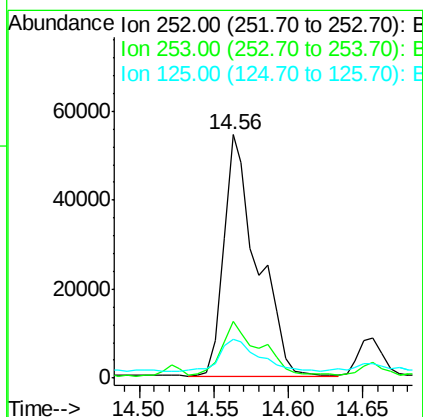
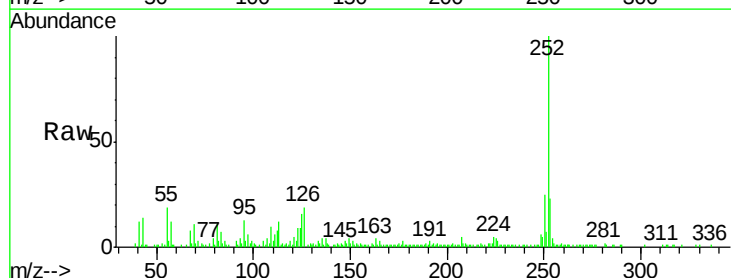
RT: 14.56 min Scan# 2155

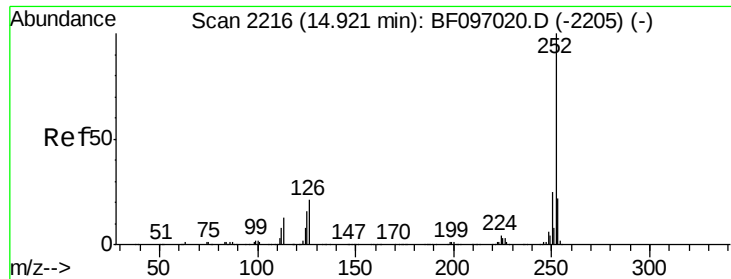
Delta R.T. -0.08 min

Lab File: BF097289.D

Acq: 2 Aug 2017 22:34

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 252   | Resp: | 84467 |
| Ion      | Ratio | Lower | Upper |
| 252      | 100   |       |       |
| 253      | 23.4  | 18.4  | 27.6  |
| 125      | 15.7  | 13.1  | 19.7  |

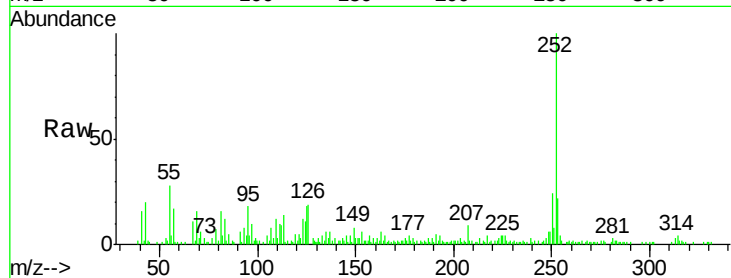




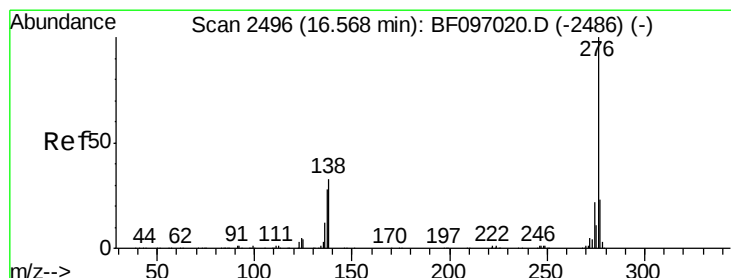
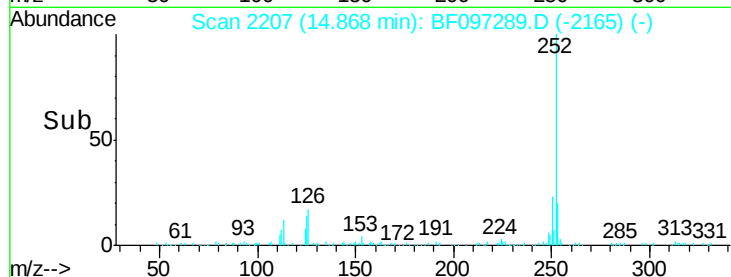
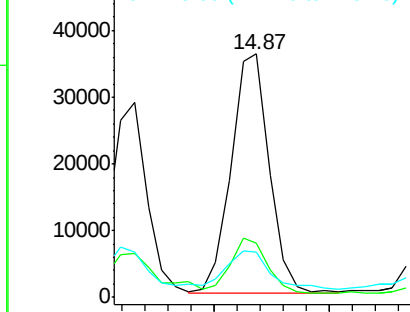
#89  
Benzo(a)pyrene  
Concen: 4.05 ng  
RT: 14.87 min Scan# 2207  
Delta R.T. -0.05 min  
Lab File: BF097289.D  
Acq: 2 Aug 2017 22:34

Instrument :  
BNA\_F  
ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.4  | 17.5  | 26.3  |
| 125     | 18.3  | 11.0  | 16.4  |

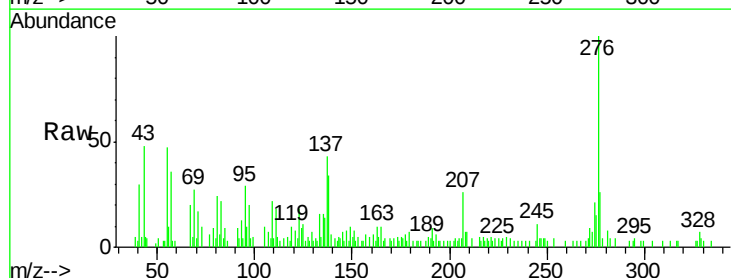


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#91  
Benzo(g,h,i)perylene  
Concen: 2.75 ng  
RT: 16.48 min Scan# 2481  
Delta R.T. -0.09 min  
Lab File: BF097289.D  
Acq: 2 Aug 2017 22:34

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 26.5  | 18.6  | 28.0  |
| 138     | 33.8  | 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

