

Data Path : Z:\HPCHEM1\BNA F\DATA\BF080117\  
 Data File : BF097269.D  
 Acq On : 2 Aug 2017 12:04  
 Operator : SJ/JU  
 Sample : I4527-04 10X  
 Misc :  
 ALS Vial : 45 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Aug 02 13:25:46 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Aug 02 11:39:11 2017  
 Response via : Initial Calibration

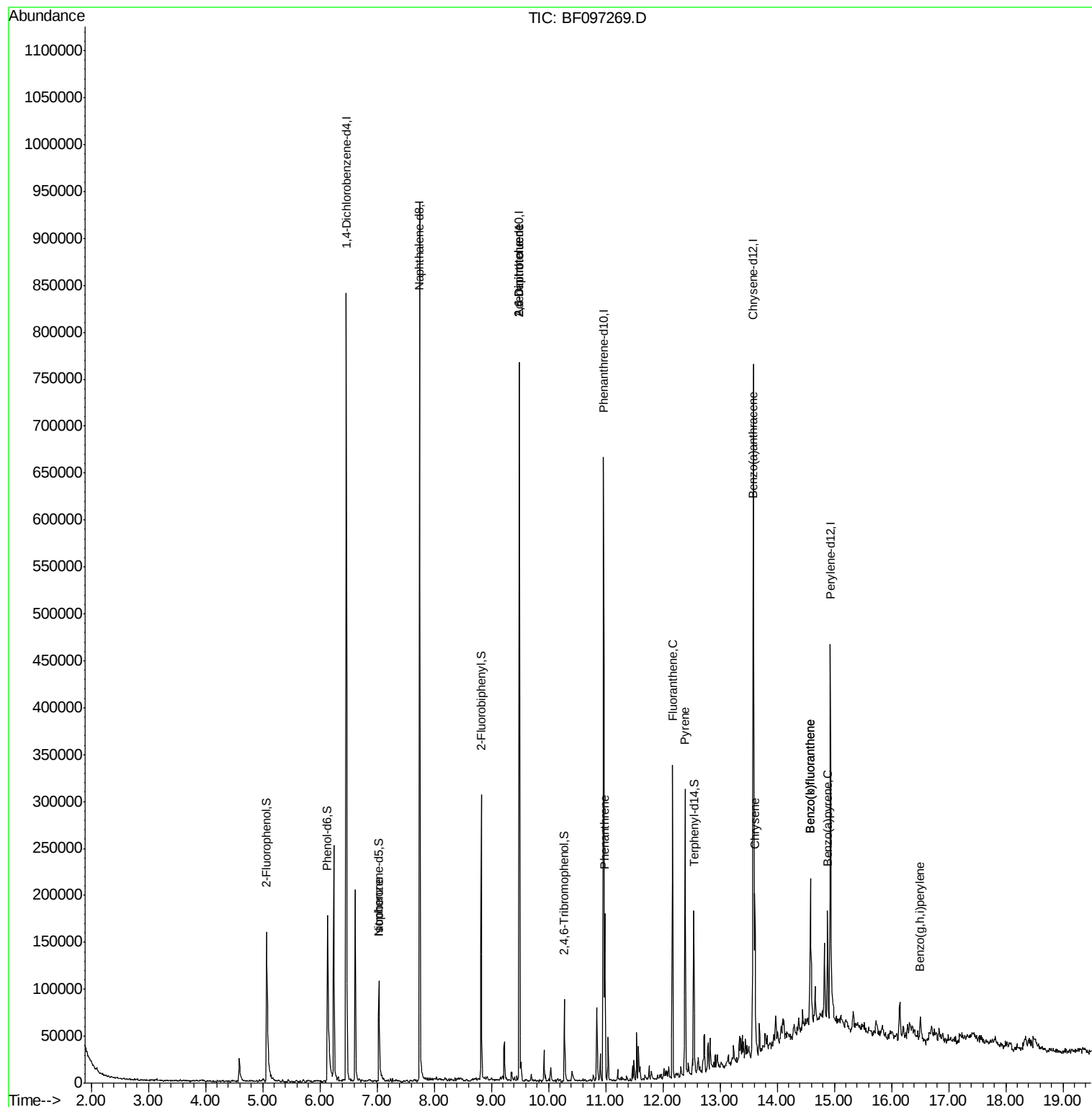
| Internal Standards          | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.46  | 152  | 121354   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8          | 7.75  | 136  | 402639   | 20.00  | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.49  | 164  | 153314   | 20.00  | ng    | 0.00     |
| 63) Phenanthrene-d10        | 10.96 | 188  | 218684   | 20.00  | ng    | 0.00     |
| 75) Chrysene-d12            | 13.59 | 240  | 213222   | 20.00  | ng    | 0.00     |
| 86) Perylene-d12            | 14.93 | 264  | 148030   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |        |       |          |
| 5) 2-Fluorophenol           | 5.07  | 112  | 72345    | 8.99   | ng    | 0.00     |
| 7) Phenol-d6                | 6.13  | 99   | 92063    | 10.02  | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.03  | 82   | 39713    | 5.79   | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.28 | 330  | 10072    | 8.31   | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 8.82  | 172  | 87401    | 9.67   | ng    | -0.01    |
| 78) Terphenyl-d14           | 12.55 | 244  | 50775    | 4.86   | ng    | 0.00     |
| Target Compounds            |       |      |          |        |       |          |
| 25) Isophorone              | 7.03  | 82   | 39712    | 2.954  | ng    | # 67     |
| 50) 2,6-Dinitrotoluene      | 9.49  | 165  | 19575    | 7.927  | ng    | # 33     |
| 56) 2,4-Dinitrotoluene      | 9.49  | 165  | 19575    | 6.896  | ng    | # 32     |
| 70) Phenanthrene            | 10.99 | 178  | 60750    | 5.185  | ng    | 97       |
| 74) Fluoranthene            | 12.17 | 202  | 125137   | 10.902 | ng    | 96       |
| 77) Pyrene                  | 12.39 | 202  | 113170   | 6.483  | ng    | 98       |
| 80) Benzo(a)anthracene      | 13.57 | 228  | 66776    | 4.840  | ng    | 99       |
| 82) Chrysene                | 13.61 | 228  | 58867    | 4.370  | ng    | 96       |
| 87) Benzo(b)fluoranthene    | 14.58 | 252  | 89060    | 10.009 | ng    | # 96     |
| 88) Benzo(k)fluoranthene    | 14.58 | 252  | 89060    | 10.503 | ng    | 98       |
| 89) Benzo(a)pyrene          | 14.88 | 252  | 41520    | 5.098  | ng    | 97       |
| 91) Benzo(a,h,i)perylene    | 16.50 | 276  | 18523    | 2.645  | ng    | 95       |

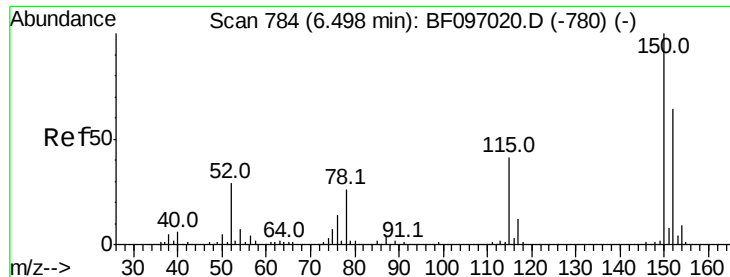
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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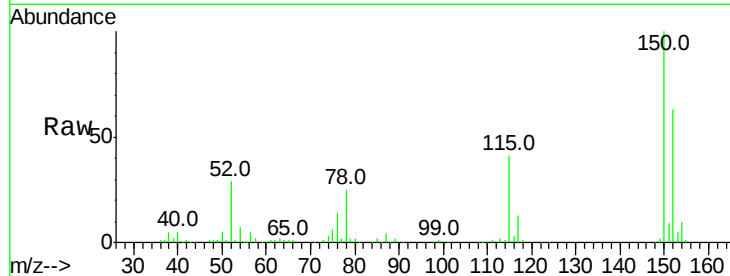


#1

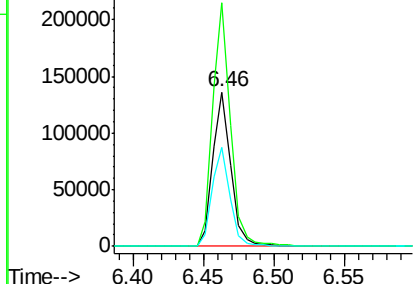
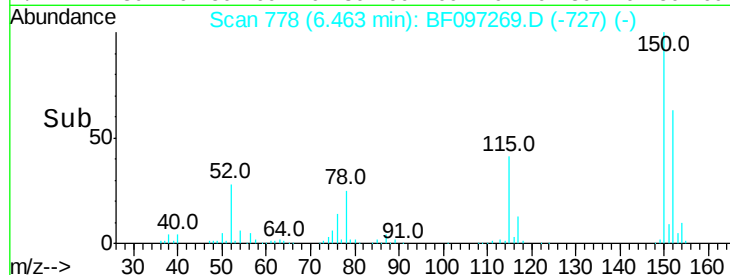
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.46 min Scan# 778  
Delta R.T. 0.00 min  
Lab File: BF097269.D  
Acq: 2 Aug 2017 12:04

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:152 Resp: 121354  
Ion Ratio Lower Upper  
152 100  
150 157.6 126.2 189.2  
115 64.2 52.2 78.2



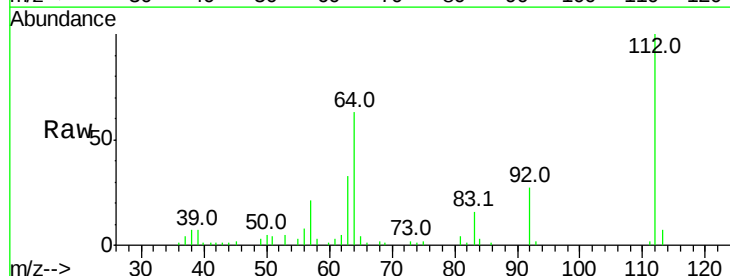
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



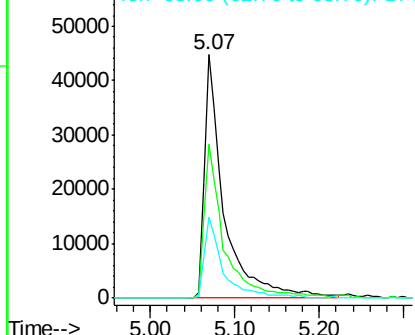
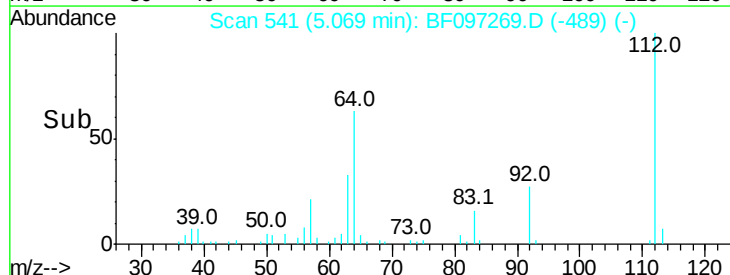
#5

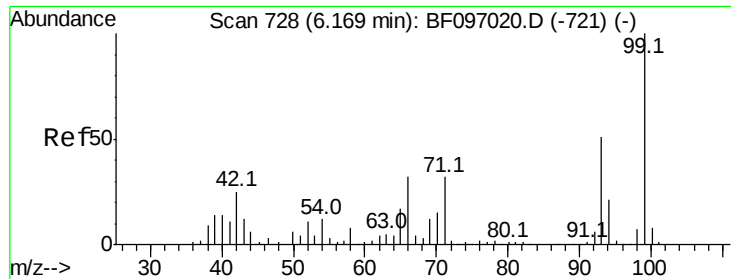
2-Fluorophenol  
Concen: 8.987 ng  
RT: 5.07 min Scan# 541  
Delta R.T. 0.01 min  
Lab File: BF097269.D  
Acq: 2 Aug 2017 12:04

Tgt Ion:112 Resp: 72345  
Ion Ratio Lower Upper  
112 100  
64 63.4 46.0 69.0  
63 33.5 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: 10.018 ng

RT: 6.13 min Scan# 722

Delta R.T. -0.01 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

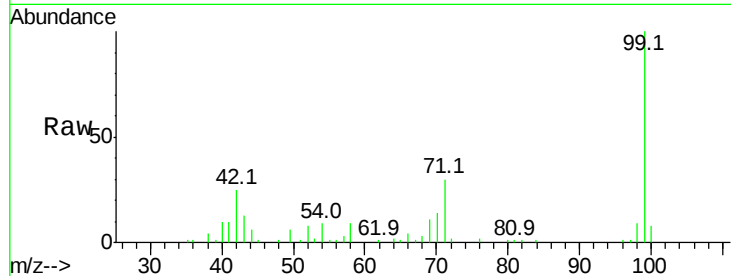
Instrument :

BNA\_F

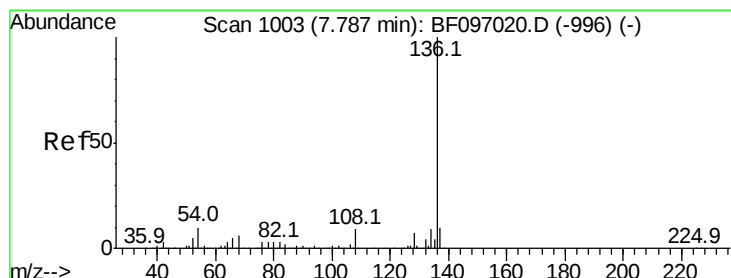
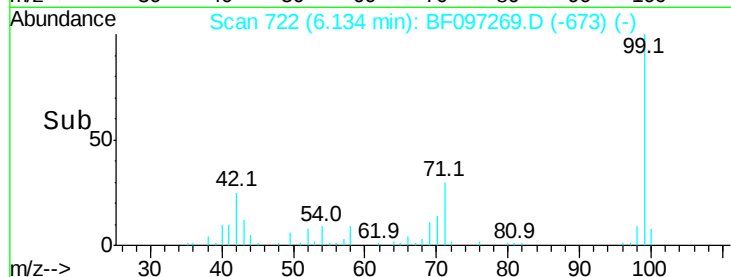
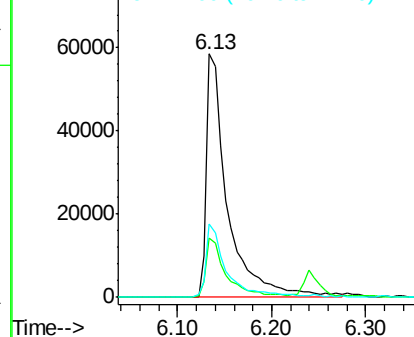
ClientSampled :

Tot Ion: 99 Resp: 92063

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 99  | 100   |       |       |
| 42  | 24.5  | 13.5  | 20.3# |
| 71  | 29.9  | 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



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 7.75 min Scan# 996

Delta R.T. -0.01 min

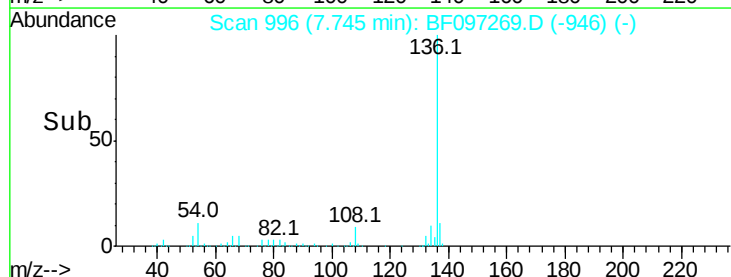
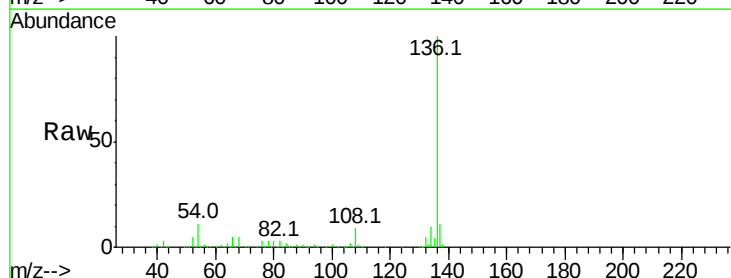
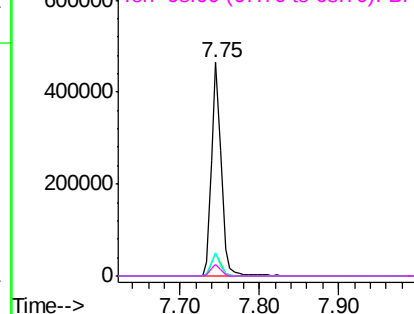
Lab File: BF097269.D

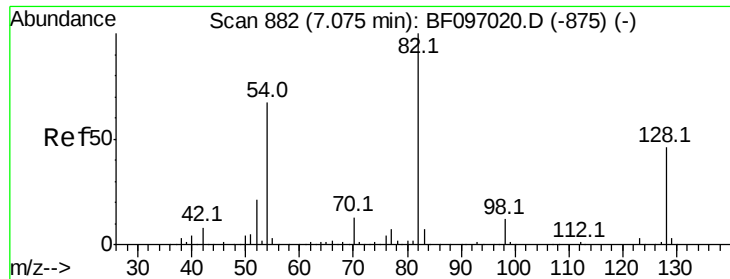
Acq: 2 Aug 2017 12:04

Tgt Ion: 136 Resp: 402639

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 11.0  | 8.5   | 12.7  |
| 54  | 10.7  | 4.9   | 7.3#  |
| 68  | 5.3   | 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: 5.786 ng

RT: 7.03 min Scan# 875

Delta R.T. -0.01 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

Instrument :

BNA\_F

ClientSampled :

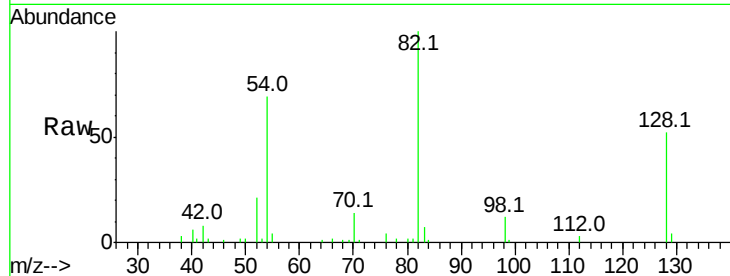
Tot Ion: 82 Resp: 39713

Ion Ratio Lower Upper

82 100

128 51.9 34.0 51.0#

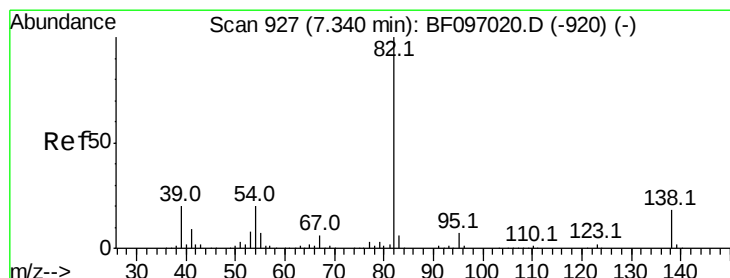
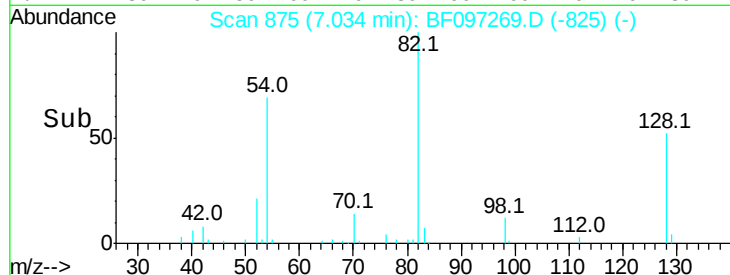
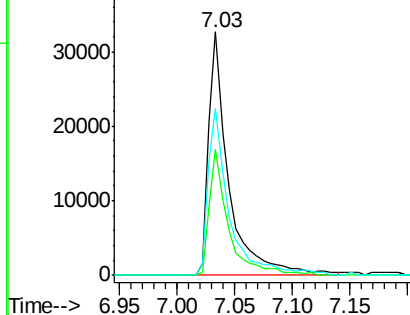
54 68.7 42.2 63.2#



Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): BF0

Ion 54.00 (53.70 to 54.70): BF0



#25

Isophorone

Concen: 2.954 ng

RT: 7.03 min Scan# 875

Delta R.T. -0.27 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

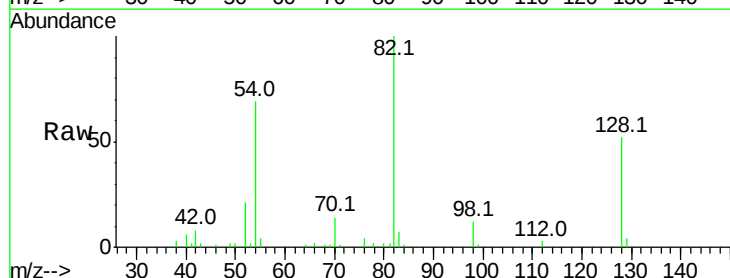
Tgt Ion: 82 Resp: 39712

Ion Ratio Lower Upper

82 100

95 0.0 5.3 7.9#

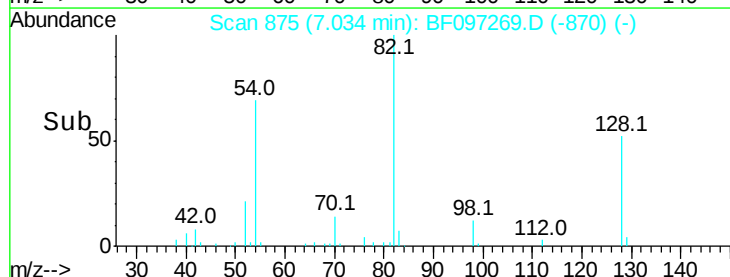
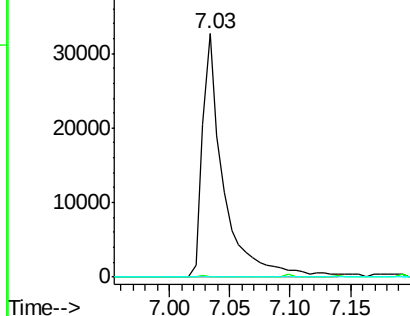
138 0.0 13.1 19.7#

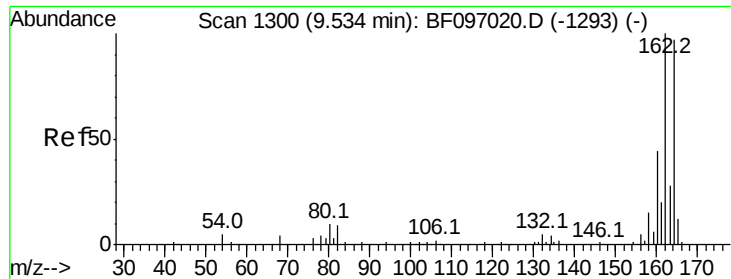


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 95.00 (94.70 to 95.70): BF0

Ion 138.00 (137.70 to 138.70): BF0

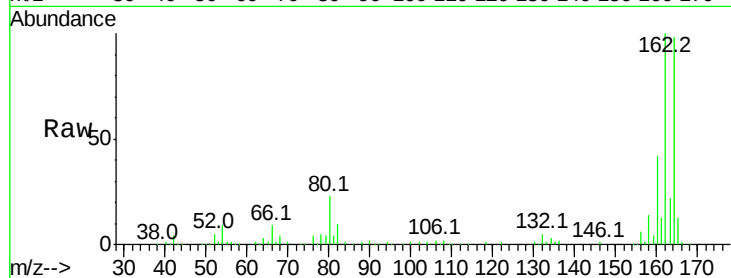




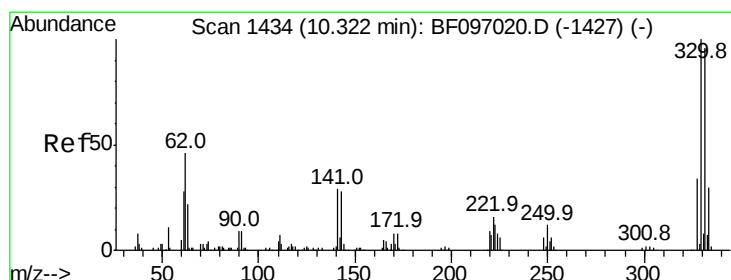
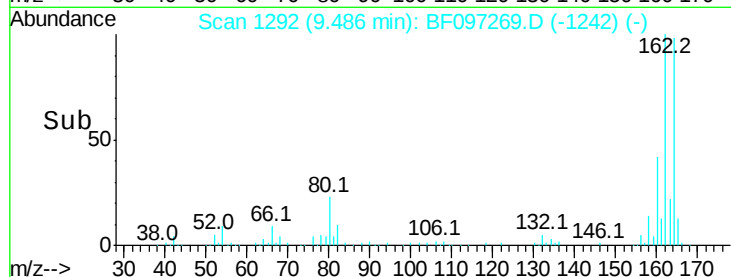
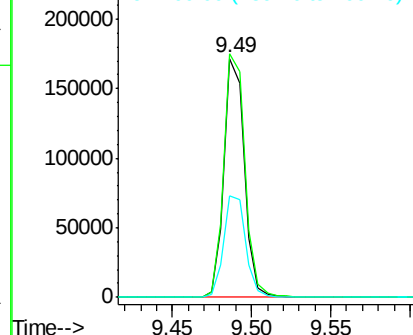
#38  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.49 min Scan# 1292  
 Delta R.T. -0.01 min  
 Lab File: BF097269.D  
 Acq: 2 Aug 2017 12:04

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:164 Resp: 153314  
 Ion Ratio Lower Upper  
 164 100  
 162 101.9 82.6 123.8  
 160 42.6 36.2 54.2

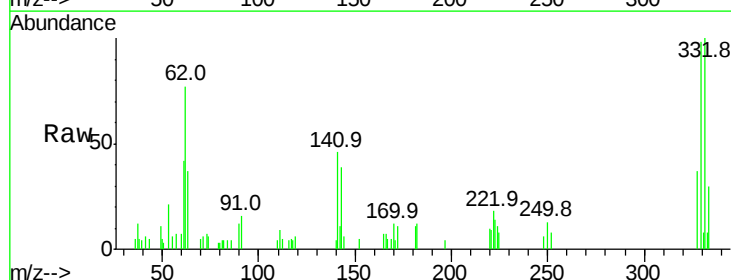


Abundance Ion 164.00 (163.70 to 164.70): E  
 Ion 162.00 (161.70 to 162.70): E  
 Ion 160.00 (159.70 to 160.70): E

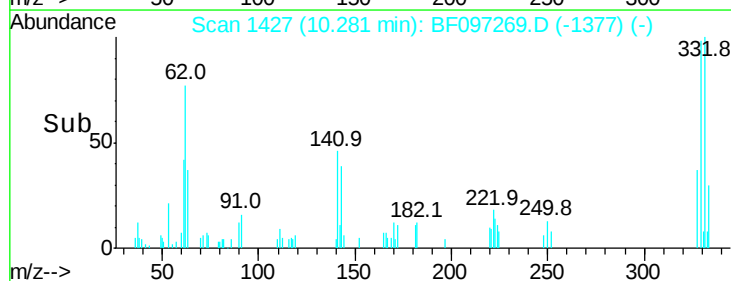
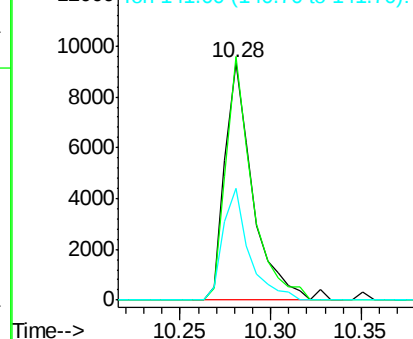


#41  
 2,4,6-Tribromophenol  
 Concen: 8.315 ng  
 RT: 10.28 min Scan# 1427  
 Delta R.T. -0.01 min  
 Lab File: BF097269.D  
 Acq: 2 Aug 2017 12:04

Tgt Ion:330 Resp: 10072  
 Ion Ratio Lower Upper  
 330 100  
 332 95.9 76.6 115.0  
 141 43.5 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

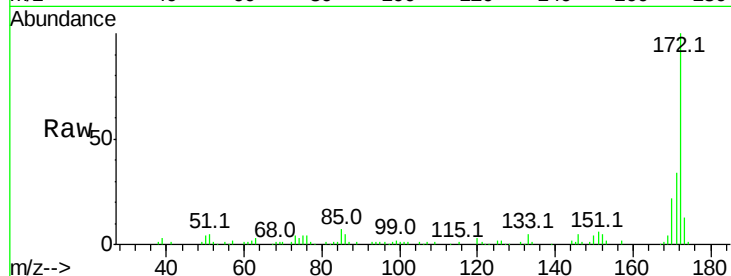




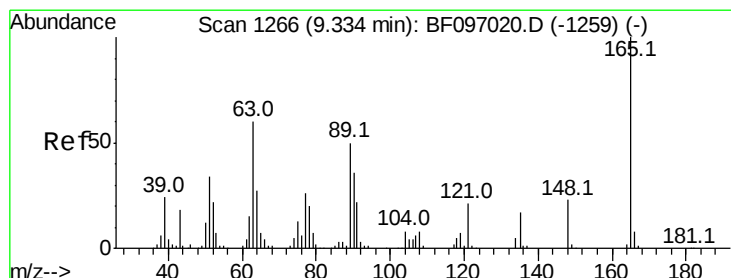
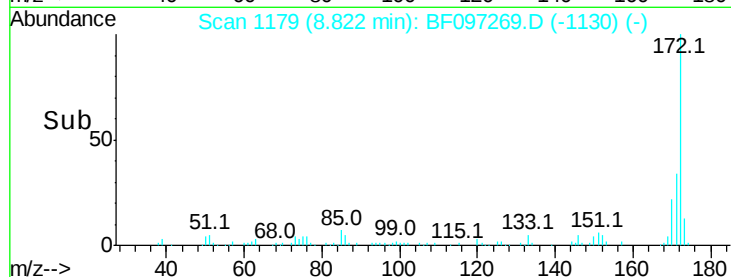
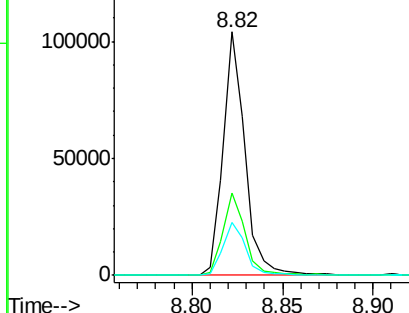
#44  
 2-Fluorobiphenyl  
 Concen: 9.675 ng  
 RT: 8.82 min Scan# 1179  
 Delta R.T. -0.01 min  
 Lab File: BF097269.D  
 Acq: 2 Aug 2017 12:04

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:172 Resp: 87401  
 Ion Ratio Lower Upper  
 172 100  
 171 34.0 29.6 44.4  
 170 22.0 19.8 29.8

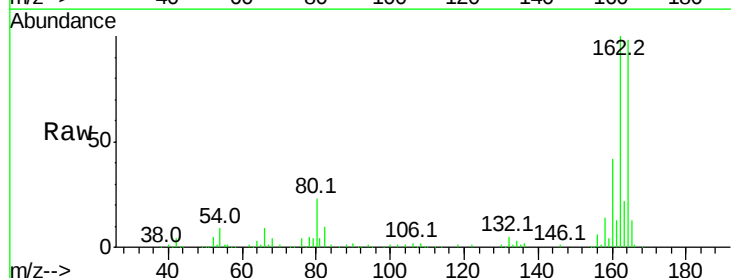


Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E

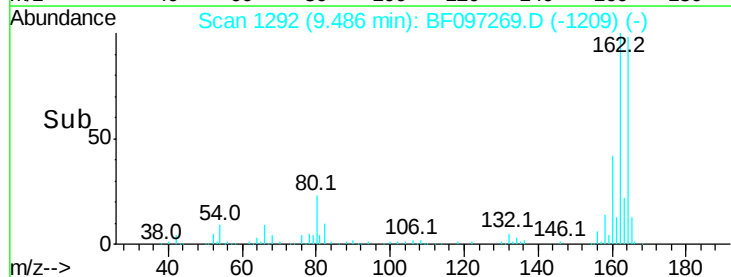
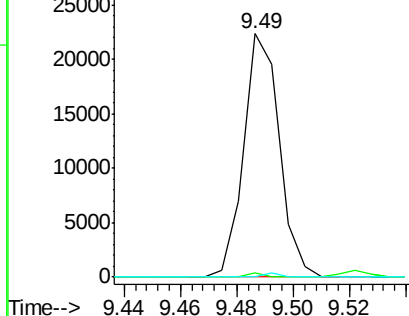


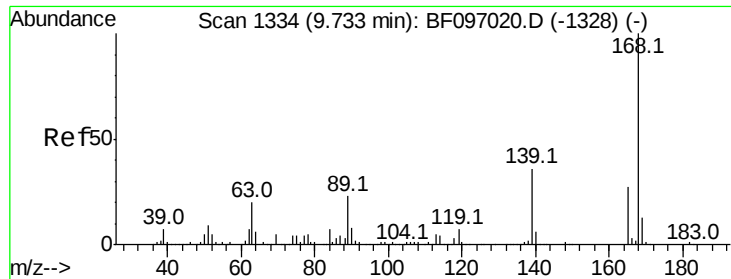
#50  
 2,6-Dinitrotoluene  
 Concen: 7.927 ng  
 RT: 9.49 min Scan# 1292  
 Delta R.T. 0.19 min  
 Lab File: BF097269.D  
 Acq: 2 Aug 2017 12:04

Tgt Ion:165 Resp: 19575  
 Ion Ratio Lower Upper  
 165 100  
 63 1.7 34.3 51.5#  
 89 0.0 37.1 55.7#



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

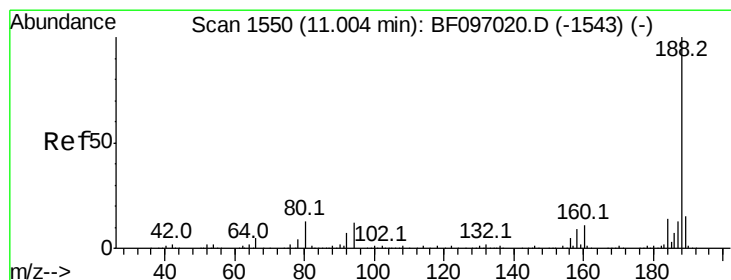
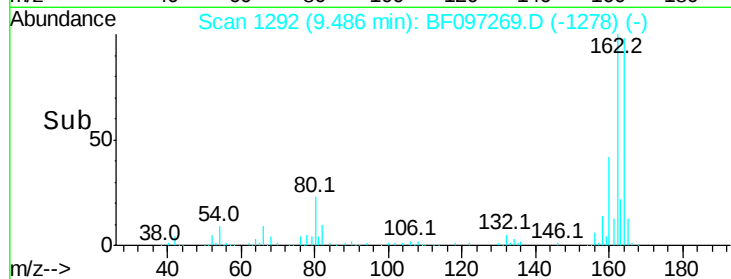
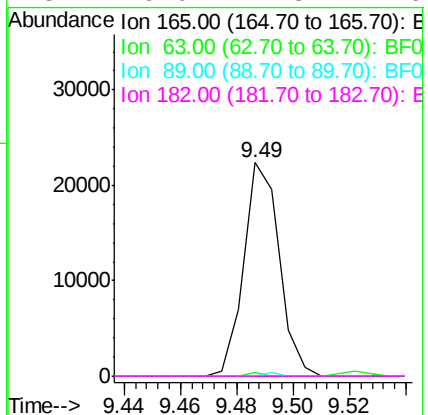
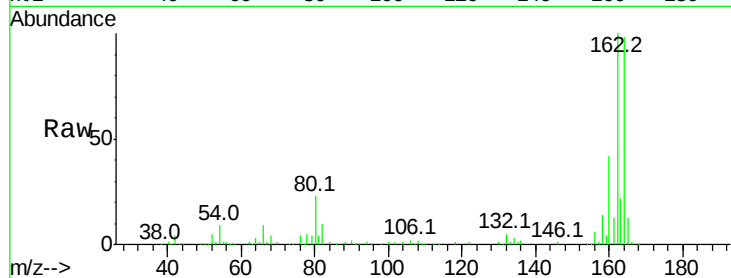




#56  
 2,4-Dinitrotoluene  
 Concen: 6.896 ng  
 RT: 9.49 min Scan# 1292  
 Delta R.T. -0.22 min  
 Lab File: BF097269.D  
 Acq: 2 Aug 2017 12:04

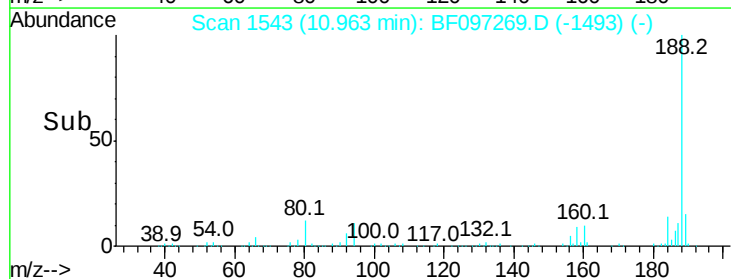
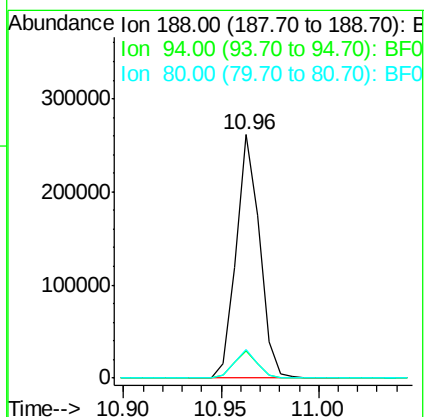
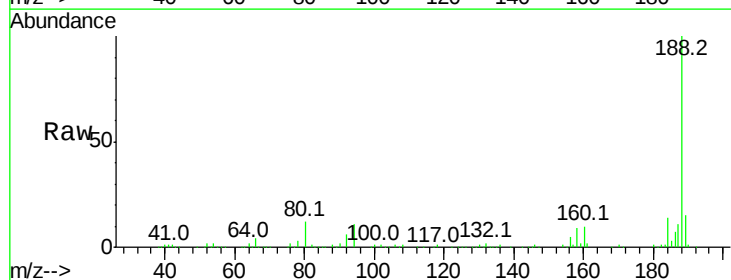
Instrument :  
 BNA\_F  
 ClientSampleId :

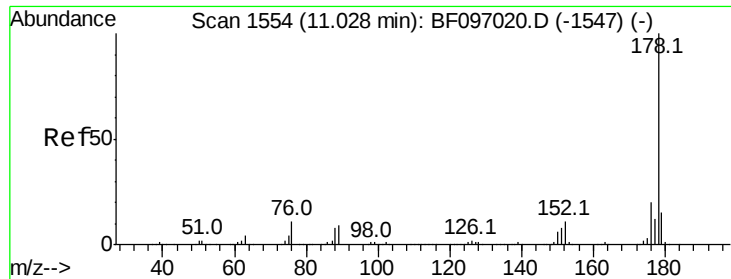
Tot Ion:165 Resp: 19575  
 Ion Ratio Lower Upper  
 165 100  
 63 1.7 25.4 38.0#  
 89 0.0 46.4 69.6#  
 182 0.0 1.8 2.6#



#63  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 10.96 min Scan# 1543  
 Delta R.T. -0.01 min  
 Lab File: BF097269.D  
 Acq: 2 Aug 2017 12:04

Tgt Ion:188 Resp: 218684  
 Ion Ratio Lower Upper  
 188 100  
 94 11.4 9.4 14.2  
 80 11.8 10.2 15.2

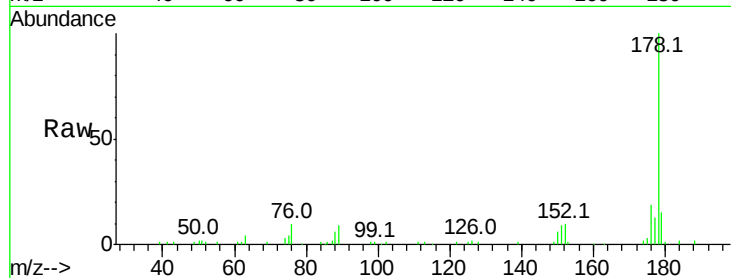




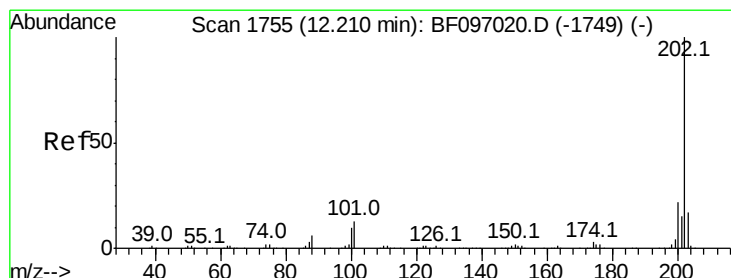
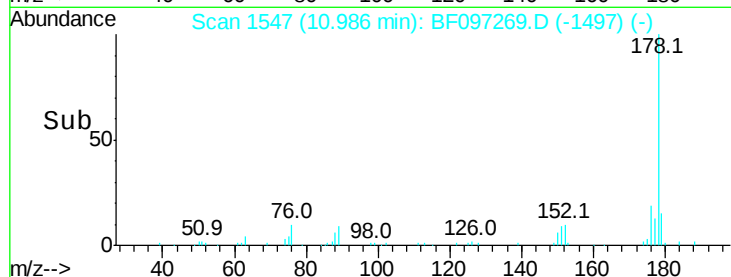
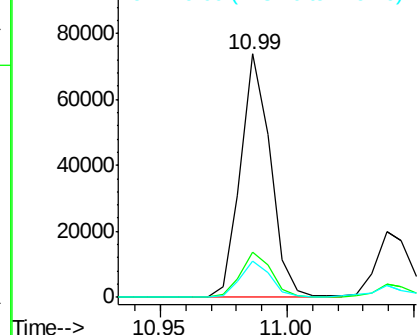
#70  
Phenanthrene  
Concen: 5.185 ng  
RT: 10.99 min Scan# 1547  
Delta R.T. -0.01 min  
Lab File: BF097269.D  
Acq: 2 Aug 2017 12:04

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:178 Resp: 60750  
Ion Ratio Lower Upper  
178 100  
176 18.6 16.2 24.4  
179 14.7 12.6 19.0

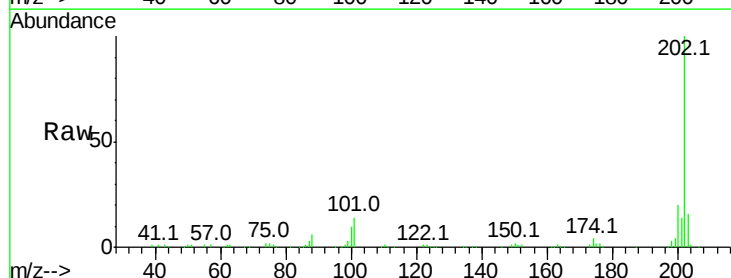


Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E

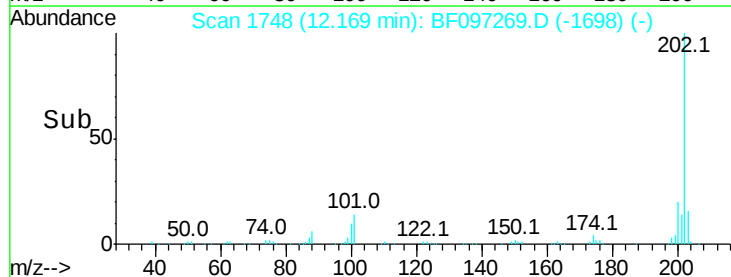
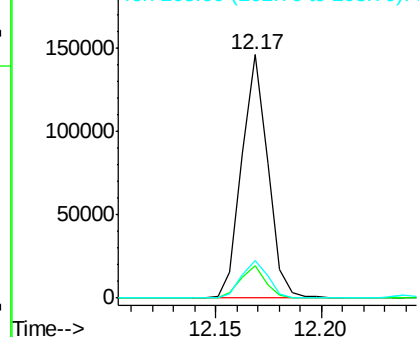


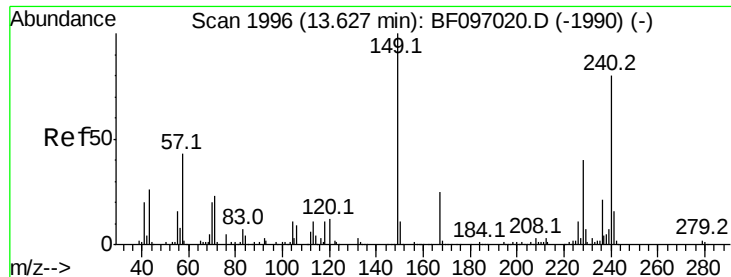
#74  
Fluoranthene  
Concen: 10.902 ng  
RT: 12.17 min Scan# 1748  
Delta R.T. -0.01 min  
Lab File: BF097269.D  
Acq: 2 Aug 2017 12:04

Tgt Ion:202 Resp: 125137  
Ion Ratio Lower Upper  
202 100  
101 13.6 0.0 33.2  
203 15.5 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: 13.59 min Scan# 1989

Delta R.T. -0.01 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

Instrument :

BNA\_F

ClientSampleId :

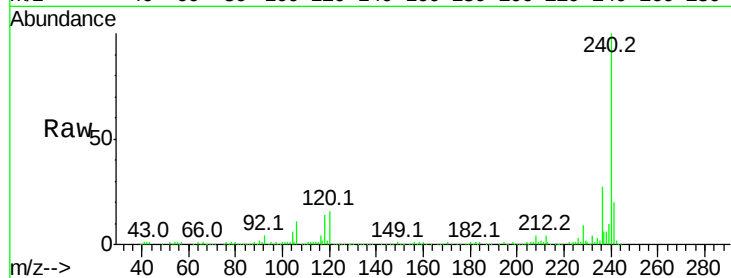
Tot Ion:240 Resp: 213222

Ion Ratio Lower Upper

240 100

120 15.6 5.8 8.8#

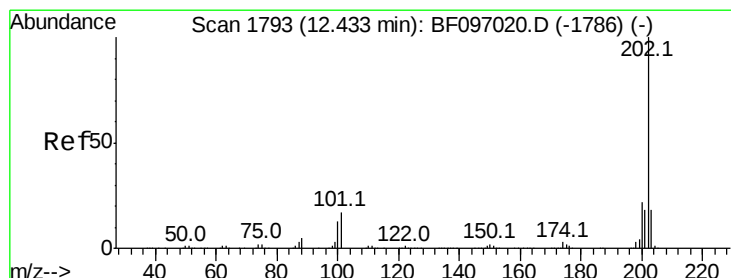
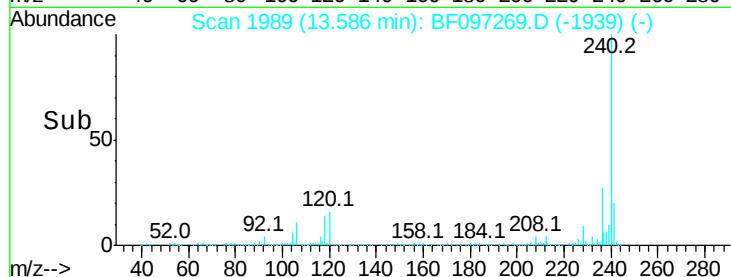
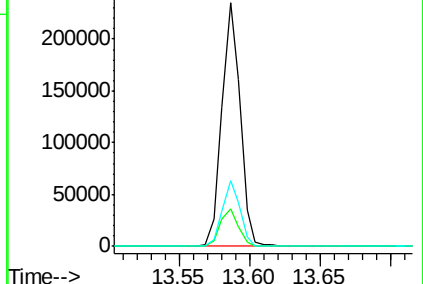
236 26.8 20.5 30.7



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: 6.483 ng

RT: 12.39 min Scan# 1786

Delta R.T. -0.01 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

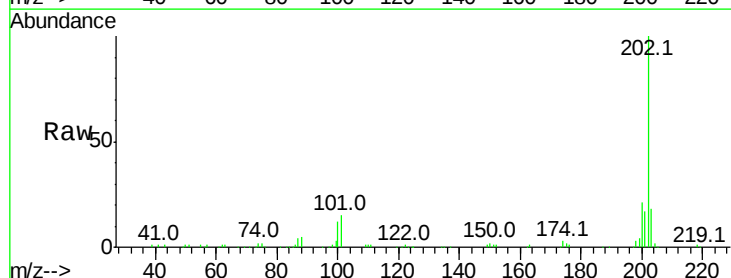
Tgt Ion:202 Resp: 113170

Ion Ratio Lower Upper

202 100

200 20.6 17.6 26.4

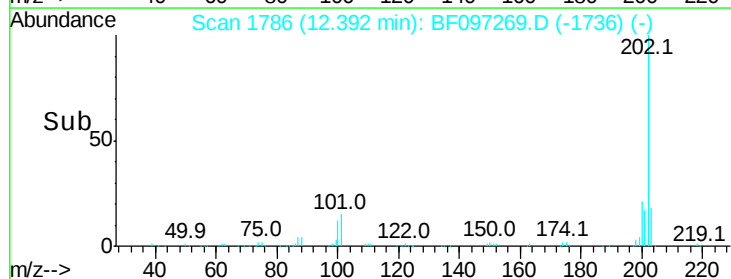
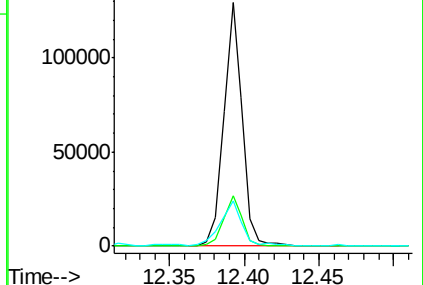
203 18.3 14.4 21.6

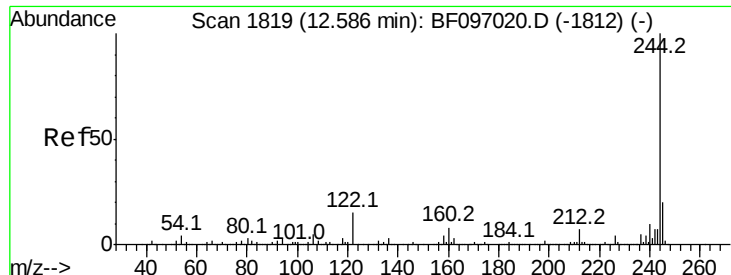


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#78

Terphenyl-d14

Concen: 4.855 ng

RT: 12.55 min Scan# 1812

Delta R.T. -0.01 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

Instrument :

BNA\_F

ClientSampleId :

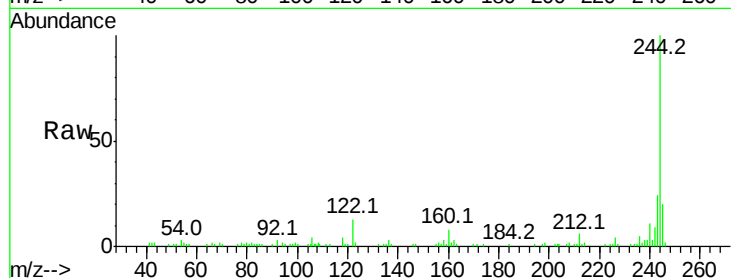
Tot Ion:244 Resp: 50775

Ion Ratio Lower Upper

244 100

212 6.0 6.0 9.0#

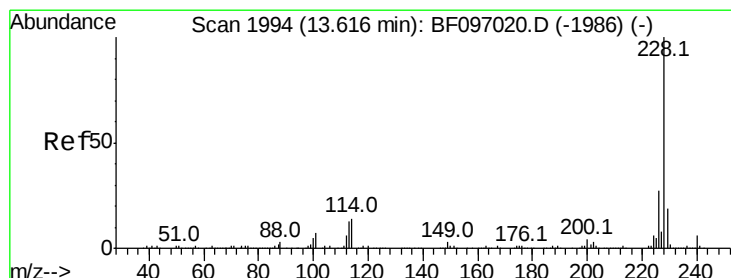
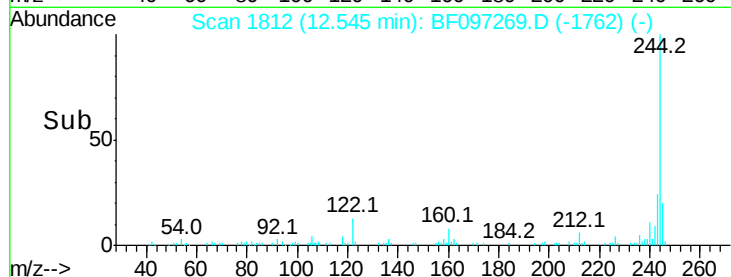
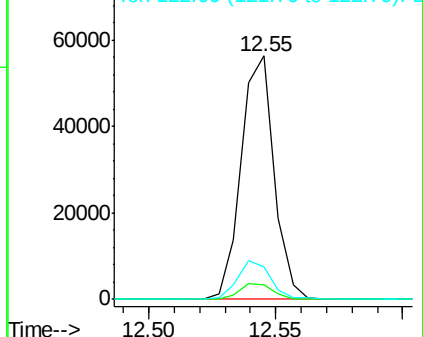
122 13.5 10.3 15.5



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: 4.840 ng

RT: 13.57 min Scan# 1987

Delta R.T. -0.01 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

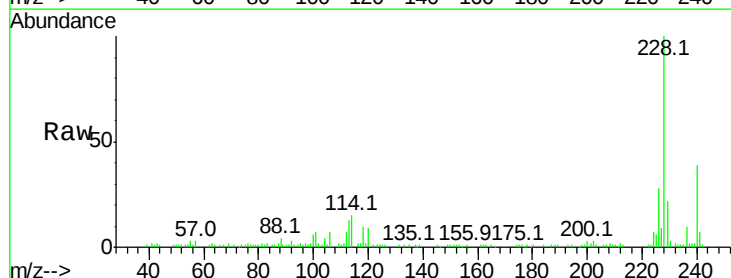
Tgt Ion:228 Resp: 66776

Ion Ratio Lower Upper

228 100

226 27.8 22.6 33.8

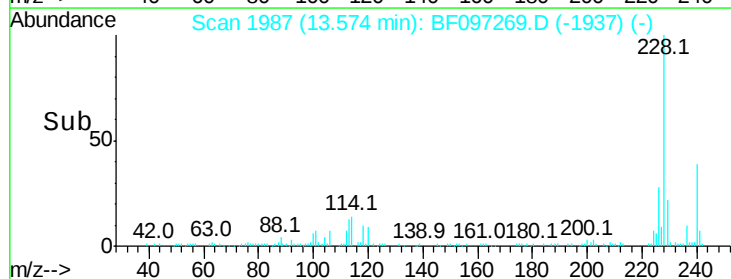
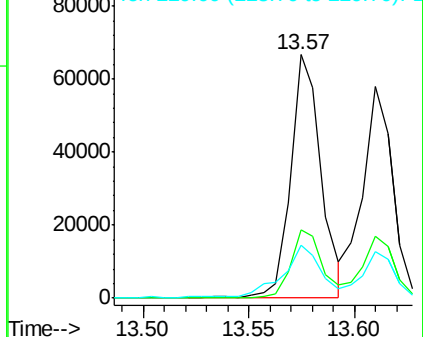
229 21.5 16.3 24.5

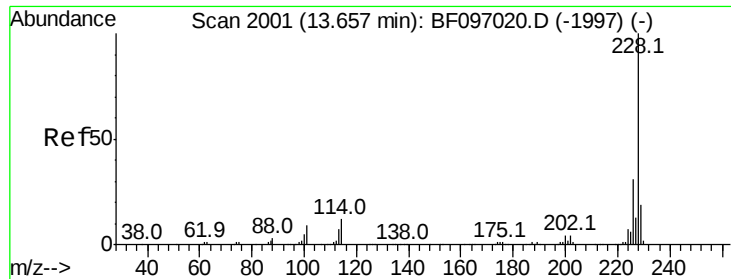


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

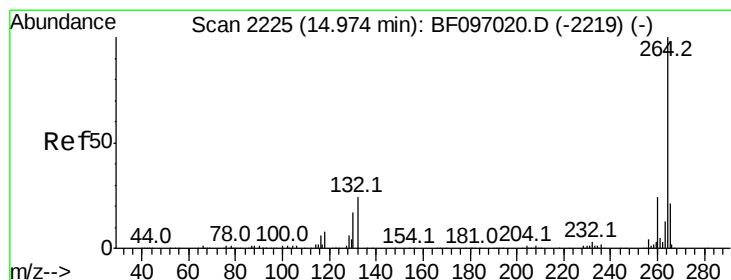
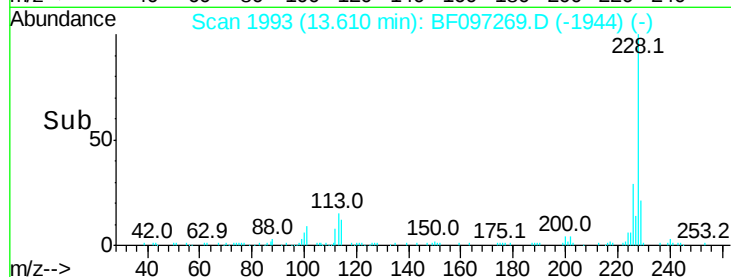
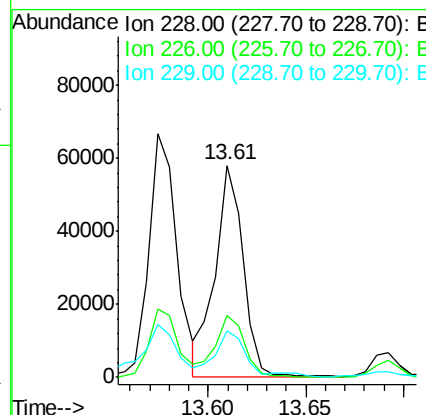
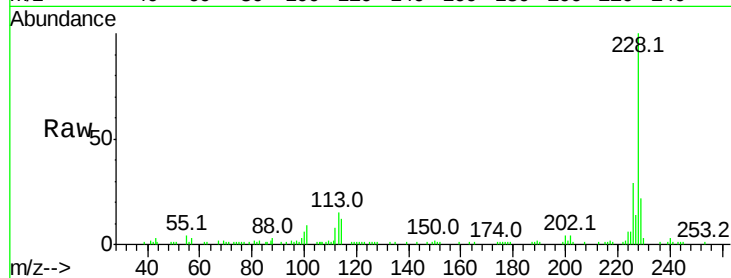




#82  
Chrysene  
Concen: 4.370 ng  
RT: 13.61 min Scan# 1993  
Delta R.T. -0.01 min  
Lab File: BF097269.D  
Acq: 2 Aug 2017 12:04

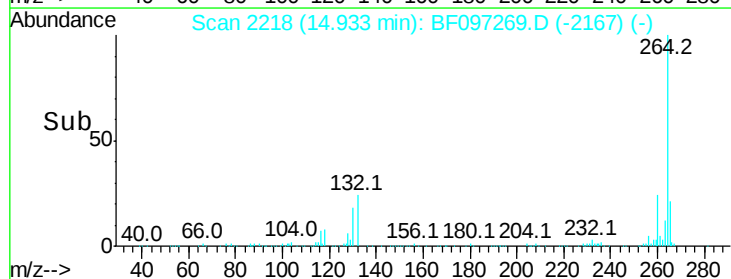
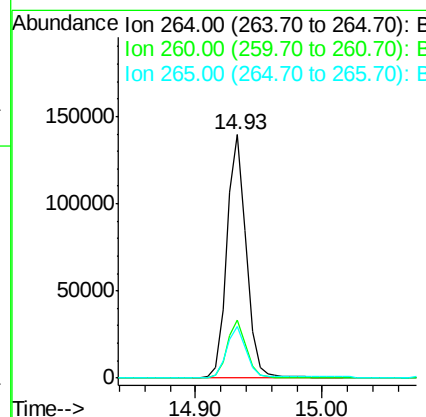
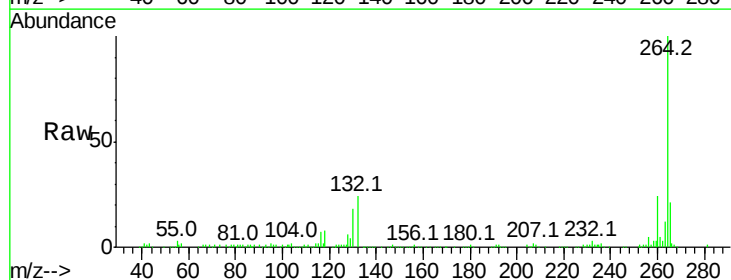
Instrument :  
BNA\_F  
ClientSampleId :

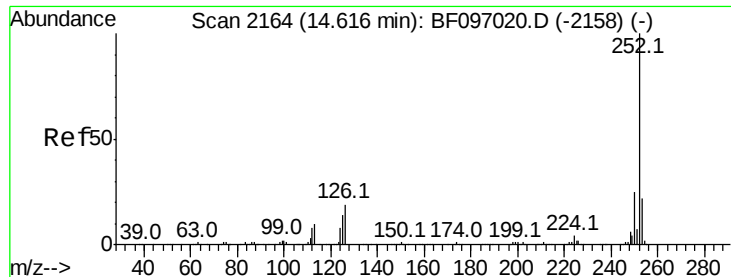
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 29.0  | 24.9  | 37.3  |
| 229     | 21.6  | 15.8  | 23.6  |



#86  
Perylene-d12  
Concen: 20.000 ng  
RT: 14.93 min Scan# 2218  
Delta R.T. 0.00 min  
Lab File: BF097269.D  
Acq: 2 Aug 2017 12:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.0  | 19.5  | 29.3  |
| 265     | 21.0  | 17.2  | 25.8  |





#87

Benzo(b)fluoranthene

Concen: 10.009 ng

RT: 14.58 min Scan# 2158

Delta R.T. 0.00 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

Instrument :

BNA\_F

ClientSampleId :

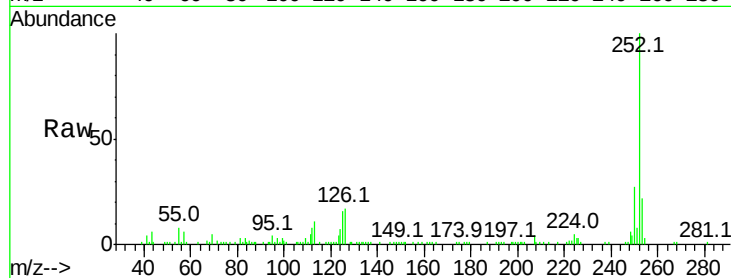
Tot Ion:252 Resp: 89060

Ion Ratio Lower Upper

252 100

253 21.9 18.1 27.1

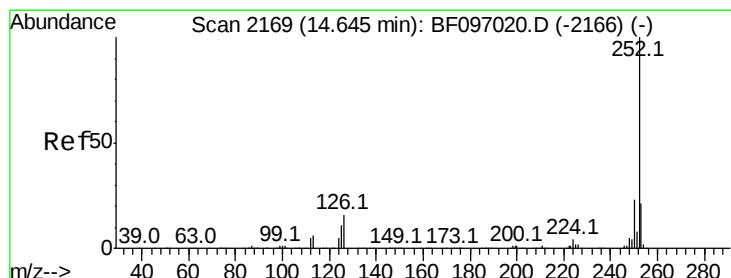
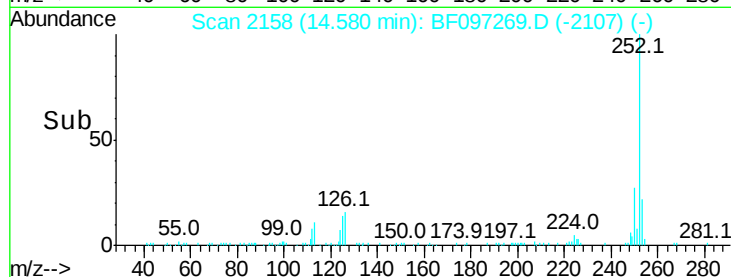
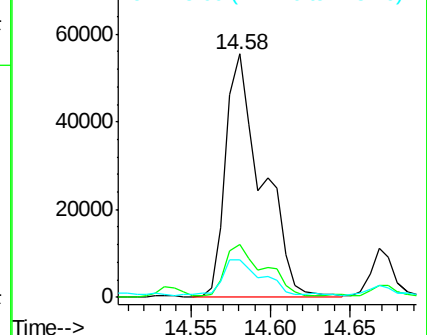
125 15.5 9.8 14.8#



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: 10.503 ng

RT: 14.58 min Scan# 2158

Delta R.T. -0.03 min

Lab File: BF097269.D

Acq: 2 Aug 2017 12:04

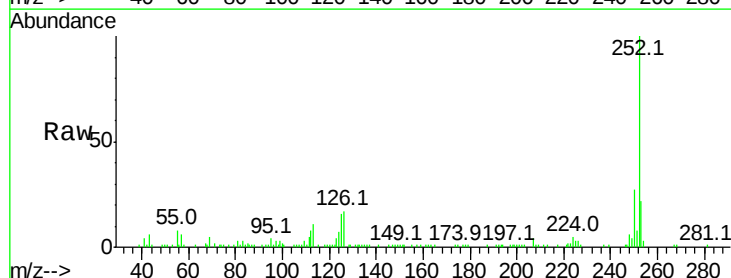
Tgt Ion:252 Resp: 89060

Ion Ratio Lower Upper

252 100

253 21.9 18.4 27.6

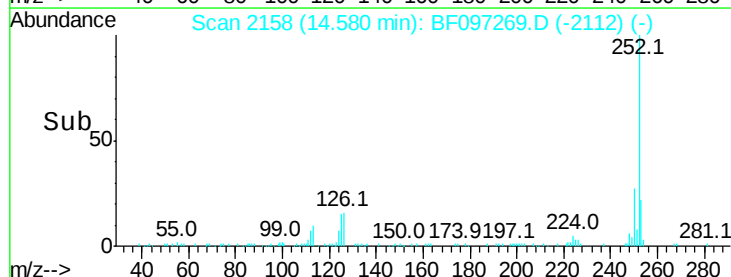
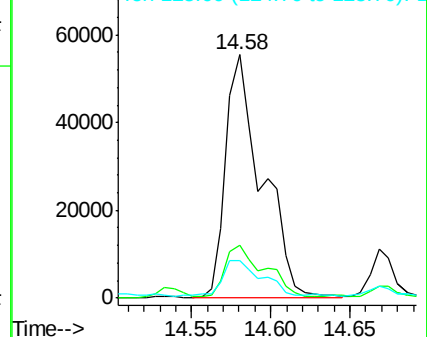
125 15.5 13.1 19.7

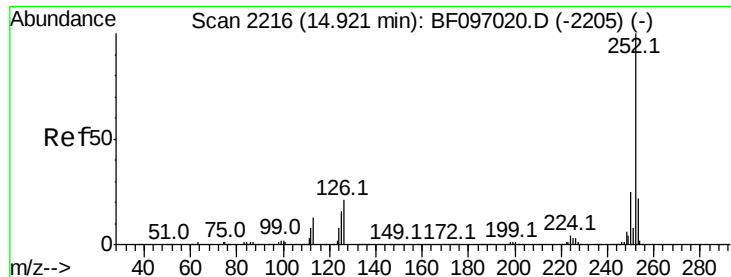


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

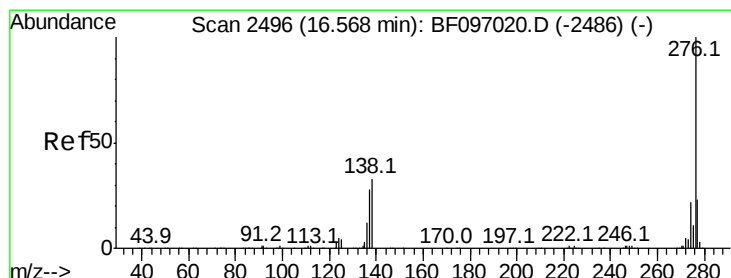
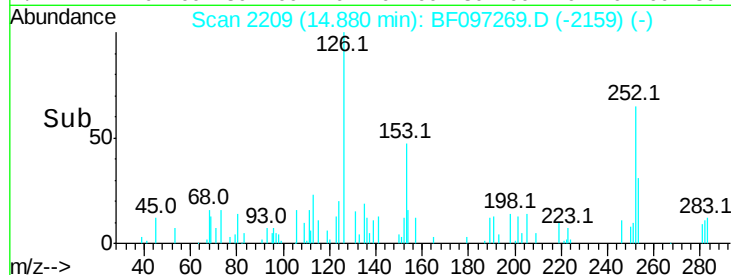
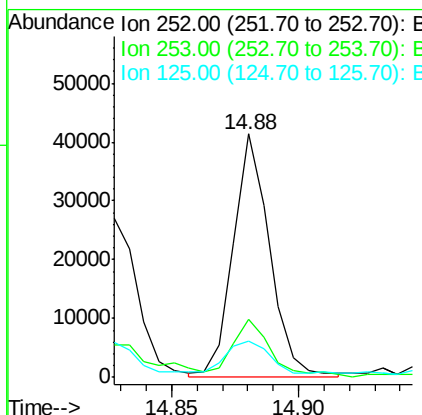
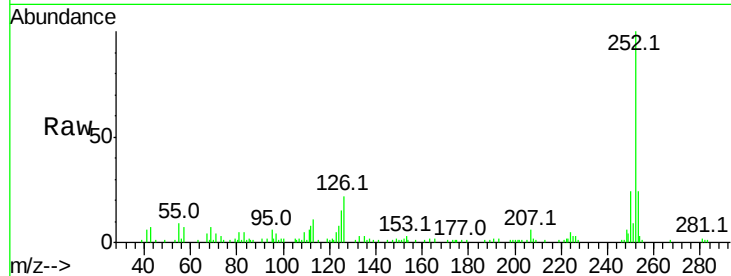




#89  
Benzo(a)pyrene  
Concen: 5.098 ng  
RT: 14.88 min Scan# 2209  
Delta R.T. -0.01 min  
Lab File: BF097269.D  
Acq: 2 Aug 2017 12:04

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:252 Resp: 41520  
Ion Ratio Lower Upper  
252 100  
253 23.8 17.5 26.3  
125 14.6 11.0 16.4



#91  
Benzo(g,h,i)perylene  
Concen: 2.645 ng  
RT: 16.50 min Scan# 2485  
Delta R.T. -0.01 min  
Lab File: BF097269.D  
Acq: 2 Aug 2017 12:04

Tgt Ion:276 Resp: 18523  
Ion Ratio Lower Upper  
276 100  
277 19.6 18.6 28.0  
138 30.2 25.4 38.0

