

Data Path : Z:\HPCHEM1\BNA F\Data\BF032717\  
 Data File : BF093989.D  
 Acq On : 28 Mar 2017 12:59  
 Operator : SJ/MA  
 Sample : I2413-01DL 5X  
 Misc :  
 ALS Vial : 49 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Mar 28 14:06:28 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF032217.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 27 16:10:49 2017  
 Response via : Initial Calibration

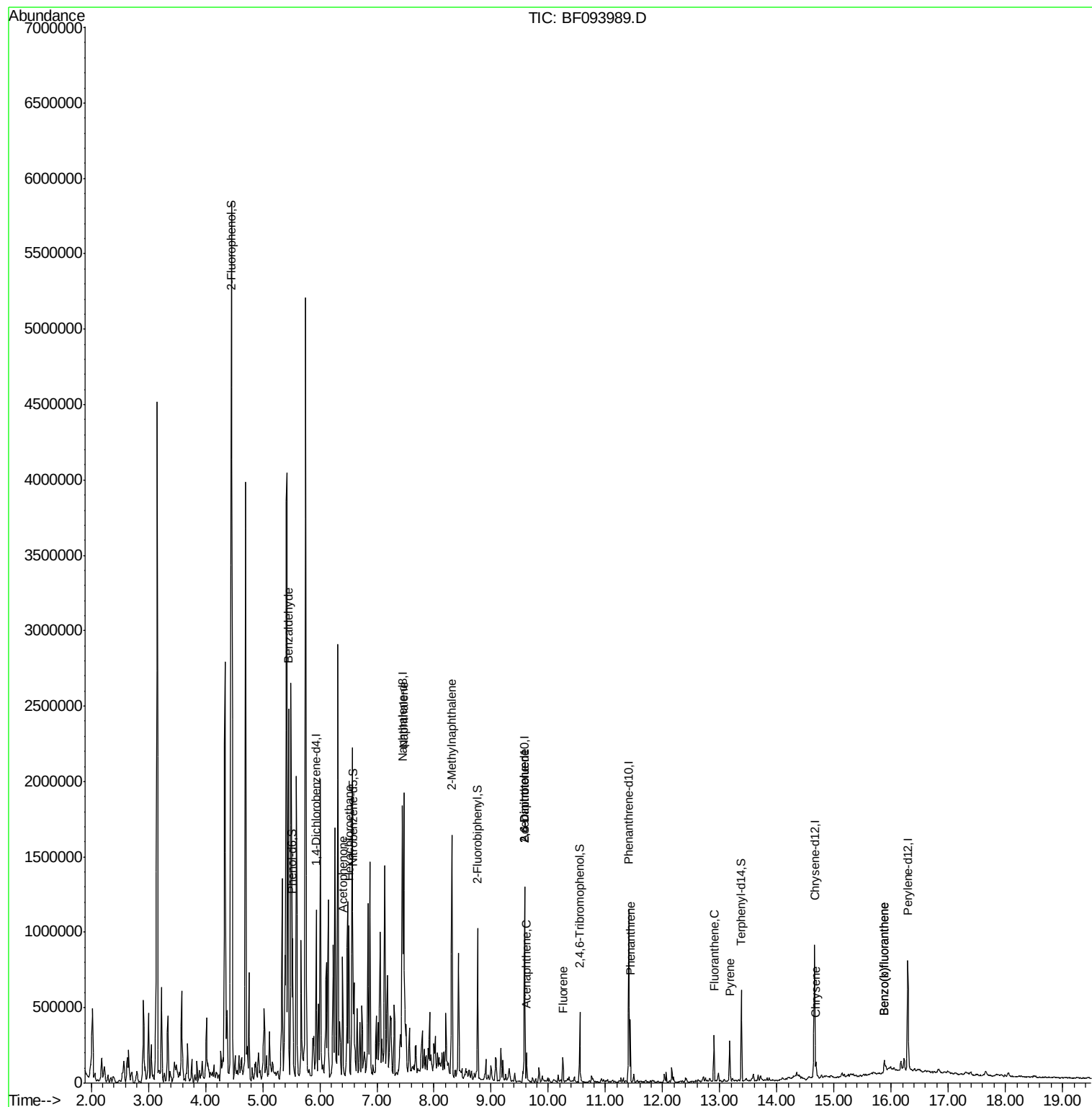
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 5.94  | 152  | 167391   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8          | 7.45  | 136  | 651496   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10        | 9.59  | 164  | 286242   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10        | 11.41 | 188  | 463795   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12            | 14.66 | 240  | 314717   | 20.00 | ng    | -0.02    |
| 86) Perylene-d12            | 16.29 | 264  | 286855   | 20.00 | ng    | -0.02    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 4.46  | 112  | 168022   | 16.95 | ng    | -0.02    |
| 7) Phenol-d6                | 5.52  | 99   | 286521   | 23.37 | ng    | -0.03    |
| 23) Nitrobenzene-d5         | 6.58  | 82   | 161465   | 14.14 | ng    | -0.02    |
| 41) 2,4,6-Tribromophenol    | 10.55 | 330  | 49227    | 21.76 | ng    | -0.02    |
| 44) 2-Fluorobiphenyl        | 8.76  | 172  | 303545   | 16.17 | ng    | -0.02    |
| 78) Terphenyl-d14           | 13.38 | 244  | 188801   | 13.45 | ng    | -0.02    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 9) Benzaldehyde             | 5.45  | 77   | 91663    | 11.07 | ng    | # 1      |
| 18) Hexachloroethane        | 6.51  | 117  | 31095    | 7.15  | ng    | # 1      |
| 22) Acetophenone            | 6.40  | 105  | 270299   | 18.62 | ng    | # 50     |
| 31) Naphthalene             | 7.47  | 128  | 739701   | 23.61 | ng    | 100      |
| 37) 2-Methylnaphthalene     | 8.31  | 142  | 476605   | 22.82 | ng    | 99       |
| 50) 2,6-Dinitrotoluene      | 9.58  | 165  | 38531    | 8.26  | ng    | # 34     |
| 51) Acenaphthene            | 9.62  | 154  | 39744    | 2.27  | ng    | 100      |
| 56) 2,4-Dinitrotoluene      | 9.58  | 165  | 38531    | 6.58  | ng    | # 33     |
| 57) Fluorene                | 10.26 | 166  | 45518    | 2.30  | ng    | 99       |
| 70) Phenanthrene            | 11.43 | 178  | 159277   | 6.17  | ng    | 98       |
| 74) Fluoranthene            | 12.90 | 202  | 125489   | 4.75  | ng    | 99       |
| 77) Pyrene                  | 13.17 | 202  | 109418   | 4.79  | ng    | 98       |
| 82) Chrysene                | 14.69 | 228  | 39373    | 2.31  | ng    | 95       |
| 87) Benzo(b)fluoranthene    | 15.88 | 252  | 57998    | 3.30  | ng    | # 90     |
| 88) Benzo(k)fluoranthene    | 15.88 | 252  | 57998    | 3.37  | ng    | # 94     |

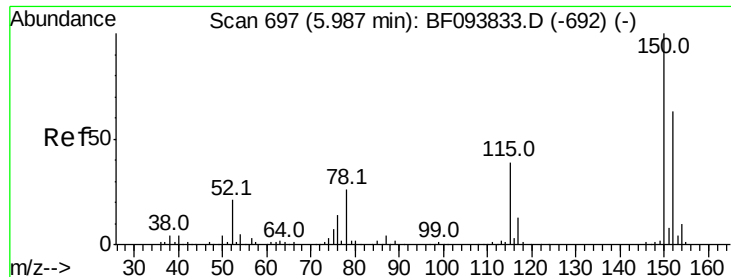
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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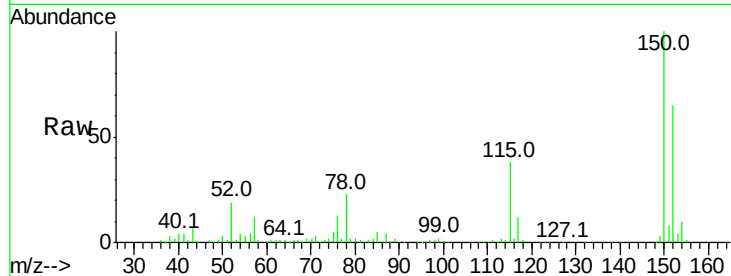


#1

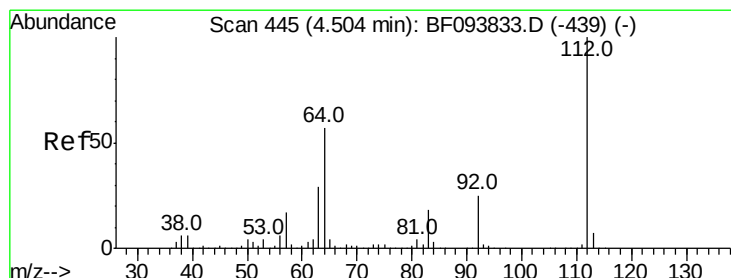
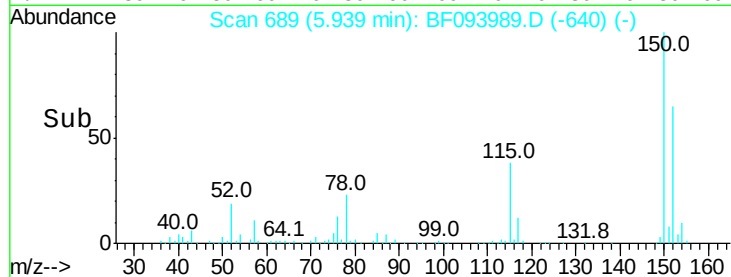
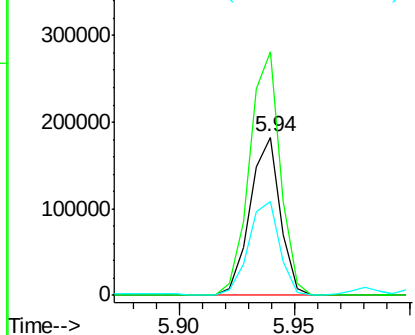
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 5.94 min Scan# 689  
Delta R.T. -0.01 min  
Lab File: BF093989.D  
Acq: 28 Mar 2017 12:59

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:152 Resp: 167391  
Ion Ratio Lower Upper  
152 100  
150 154.1 126.2 189.2  
115 59.3 52.2 78.2



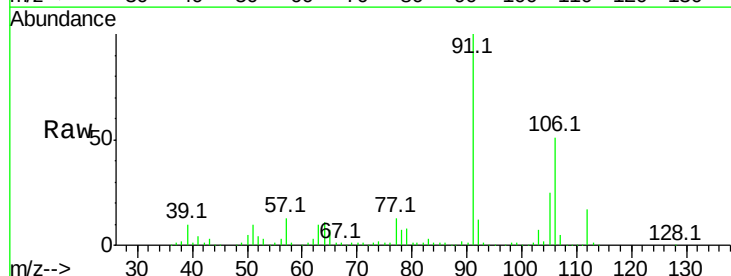
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



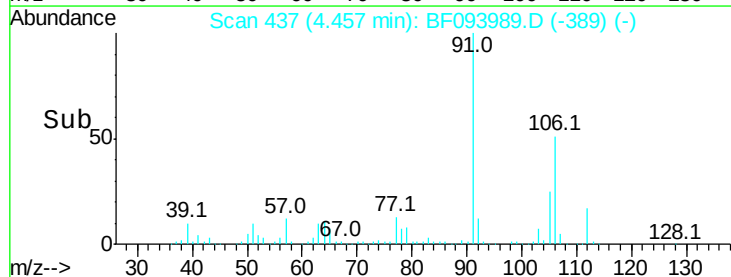
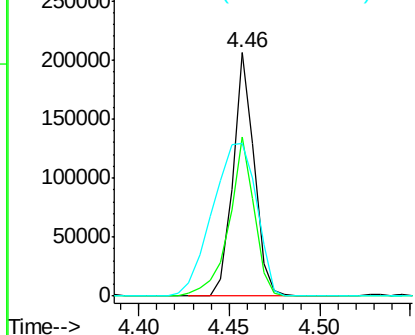
#5

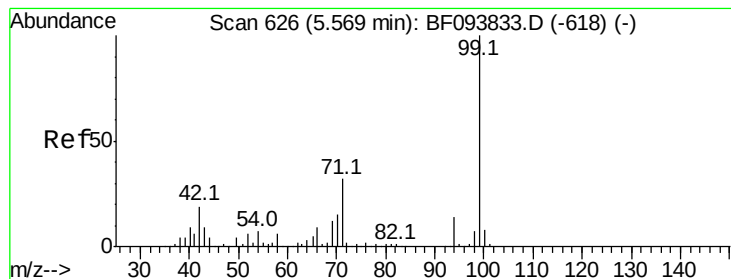
2-Fluorophenol  
Concen: 16.95 ng  
RT: 4.46 min Scan# 437  
Delta R.T. -0.02 min  
Lab File: BF093989.D  
Acq: 28 Mar 2017 12:59

Tgt Ion:112 Resp: 168022  
Ion Ratio Lower Upper  
112 100  
64 65.5 46.0 69.0  
63 62.8 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: 23.37 ng

RT: 5.52 min Scan# 618

Delta R.T. -0.03 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

Instrument :

BNA\_F

ClientSampleId :

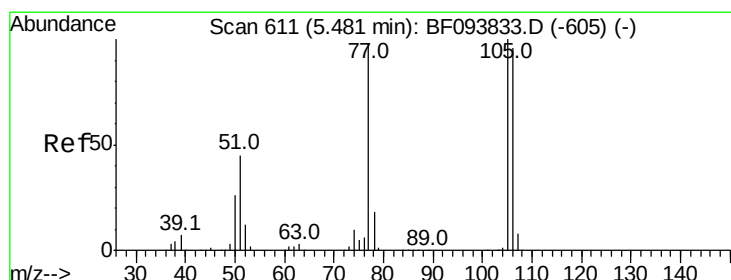
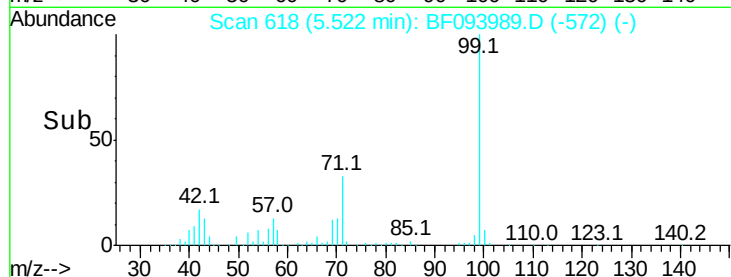
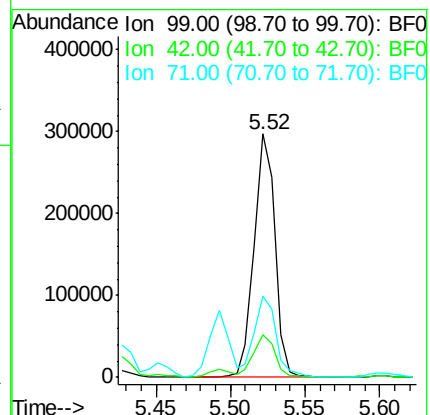
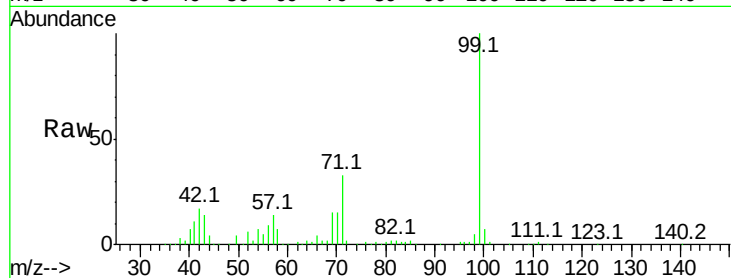
Tot Ion: 99 Resp: 286521

Ion Ratio Lower Upper

99 100

42 17.3 13.5 20.3

71 33.3 24.5 36.7



#9

Benzaldehyde

Concen: 11.07 ng

RT: 5.45 min Scan# 606

Delta R.T. 0.01 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

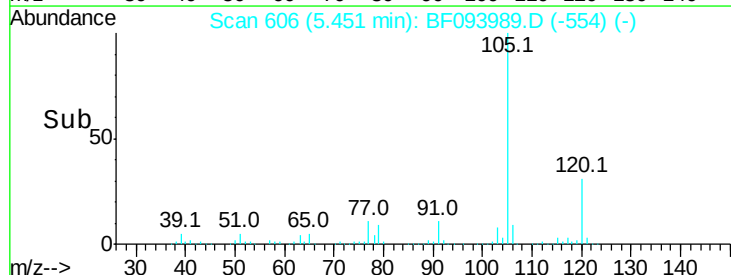
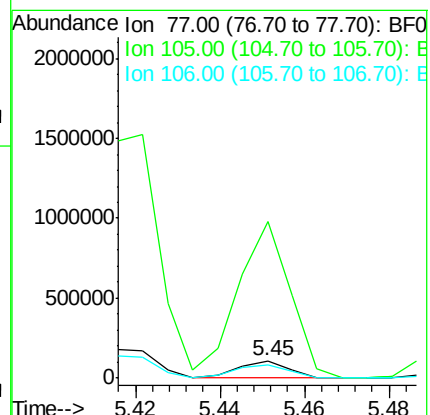
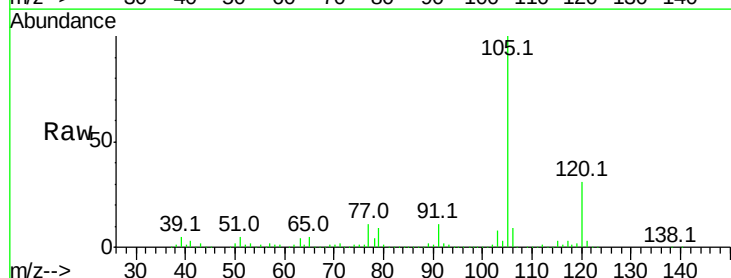
Tgt Ion: 77 Resp: 91663

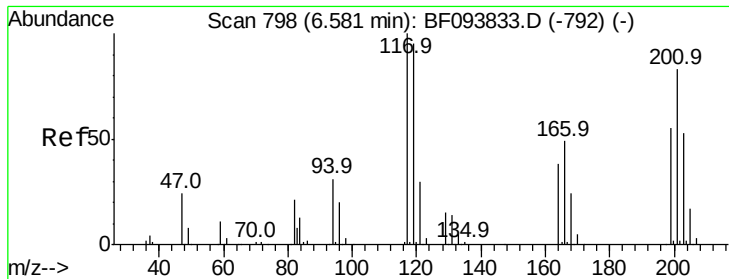
Ion Ratio Lower Upper

77 100

105 917.2 83.8 123.8#

106 80.8 79.1 119.1

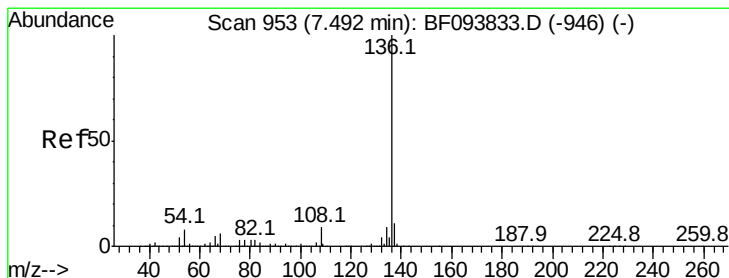
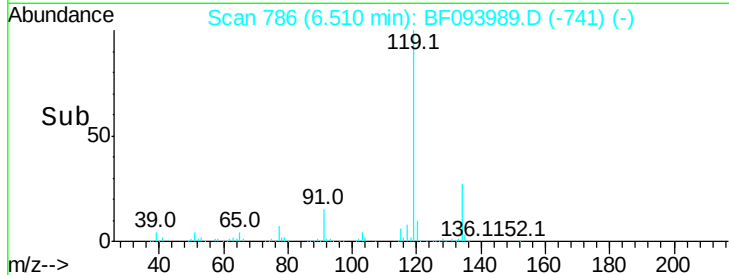
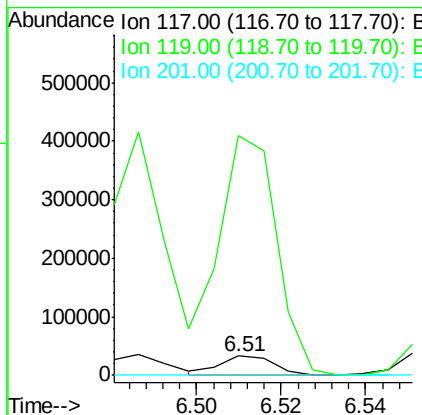
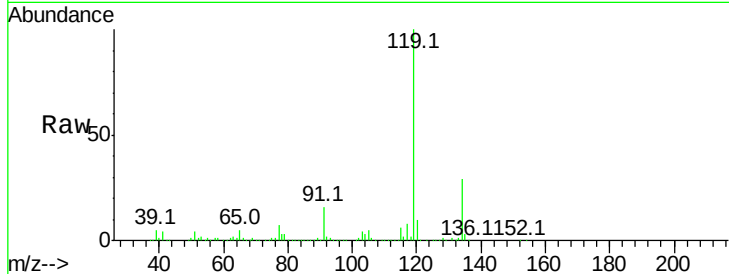




#18  
 Hexachloroethane  
 Concen: 7.15 ng  
 RT: 6.51 min Scan# 786  
 Delta R.T. -0.04 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

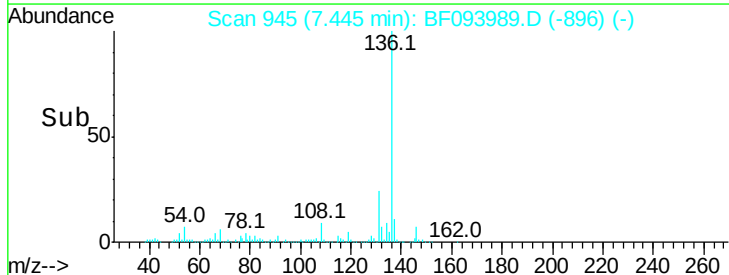
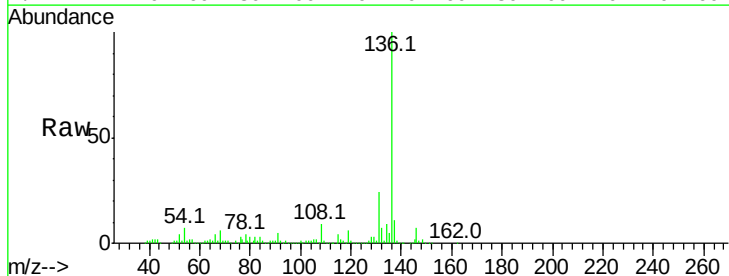
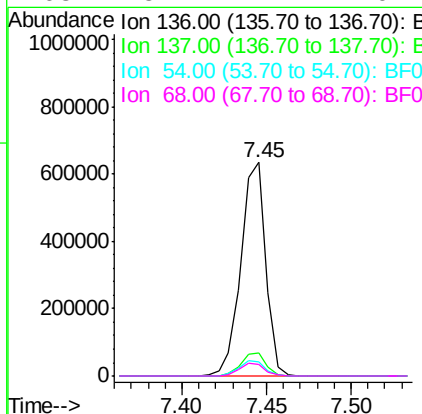
Instrument :  
 BNA\_F  
 ClientSampleId :

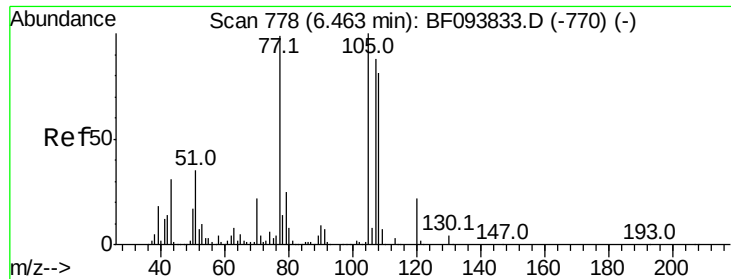
Tot Ion:117 Resp: 31095  
 Ion Ratio Lower Upper  
 117 100  
 119 1254.7 77.4 116.0#  
 201 0.0 94.6 141.8#



#21  
 Naphthalene-d8  
 Concen: 20.00 ng  
 RT: 7.45 min Scan# 945  
 Delta R.T. -0.01 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

Tgt Ion:136 Resp: 651496  
 Ion Ratio Lower Upper  
 136 100  
 137 10.7 8.5 12.7  
 54 6.7 4.9 7.3  
 68 5.7 4.1 6.1





#22

Acetophenone

Concen: 18.62 ng

RT: 6.40 min Scan# 767

Delta R.T. -0.03 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:105 Resp: 270299

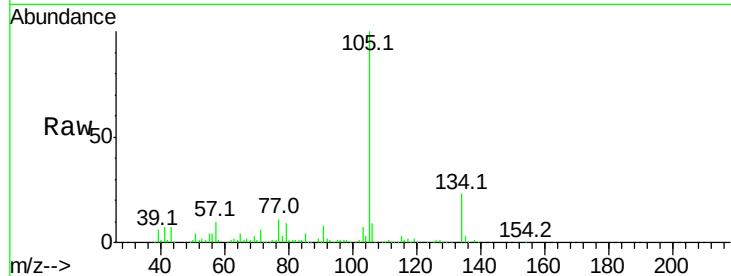
Ion Ratio Lower Upper

105 100

71 5.6 2.8 4.2#

51 4.0 30.7 46.1#

120 0.5 17.4 26.0#

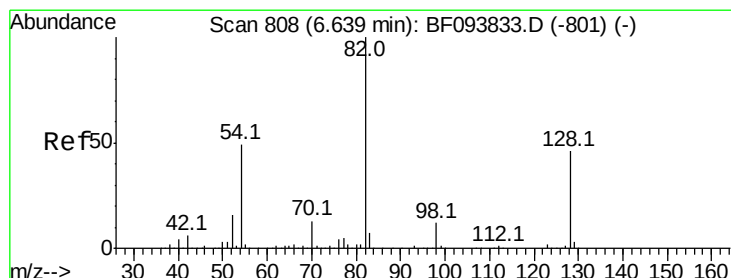
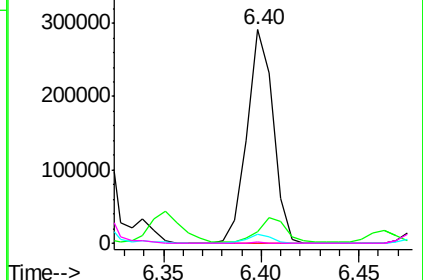
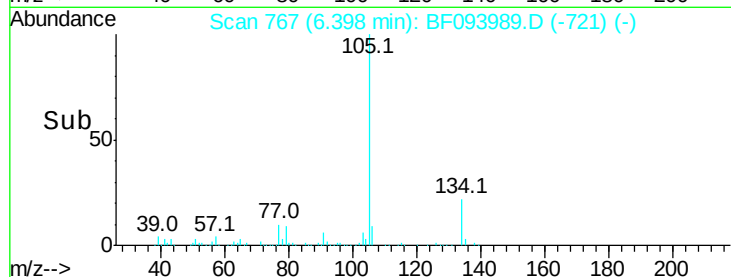


Abundance Ion 105.00 (104.70 to 105.70): E

Ion 71.00 (70.70 to 71.70): BF0

Ion 51.00 (50.70 to 51.70): BF0

Ion 120.00 (119.70 to 120.70): E



#23

Nitrobenzene-d5

Concen: 14.14 ng

RT: 6.58 min Scan# 798

Delta R.T. -0.02 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

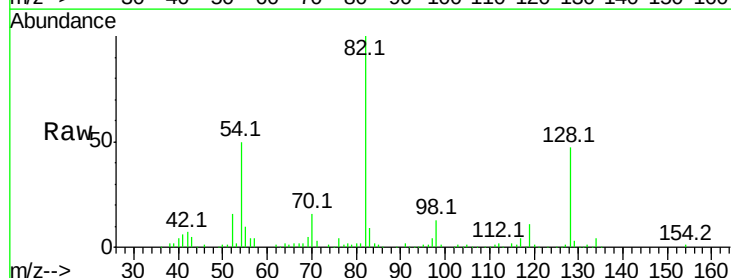
Tgt Ion: 82 Resp: 161465

Ion Ratio Lower Upper

82 100

128 46.8 34.0 51.0

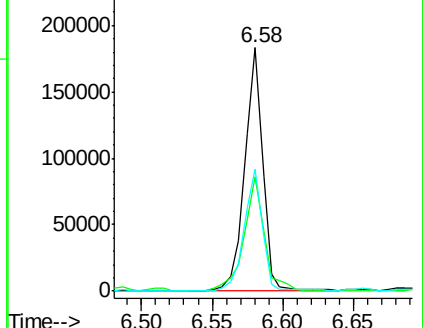
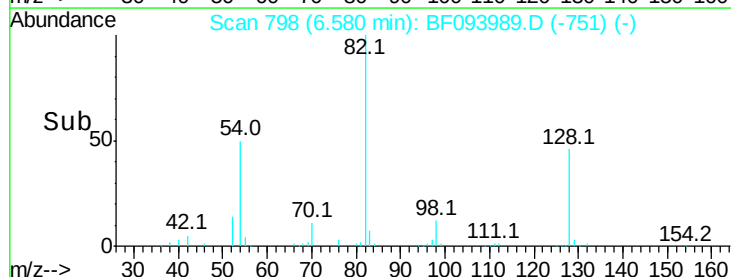
54 50.2 42.2 63.2

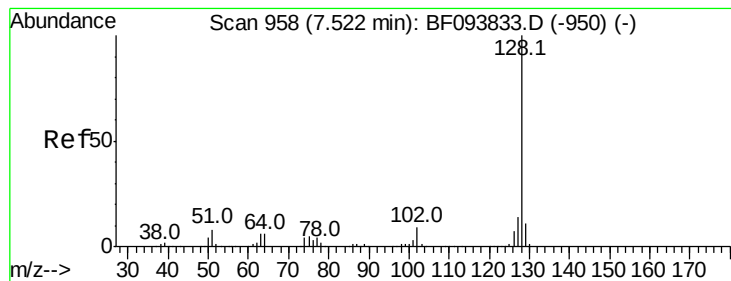


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0





#31

Naphthalene

Concen: 23.61 ng

RT: 7.47 min Scan# 949

Delta R.T. -0.02 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

Instrument :

BNA\_F

ClientSampled :

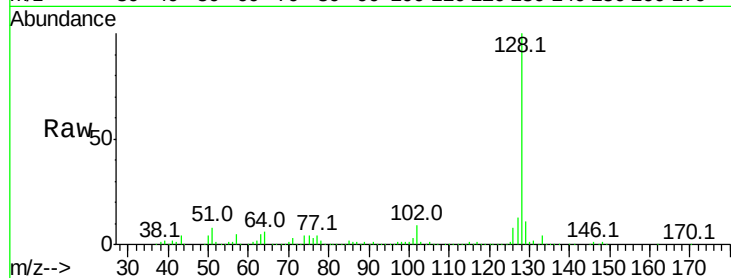
Tot Ion:128 Resp: 739701

Ion Ratio Lower Upper

128 100

129 11.3 9.0 13.6

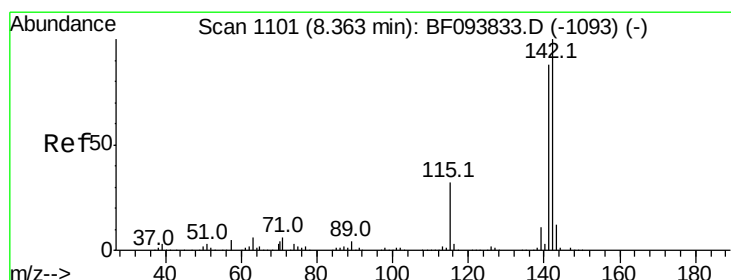
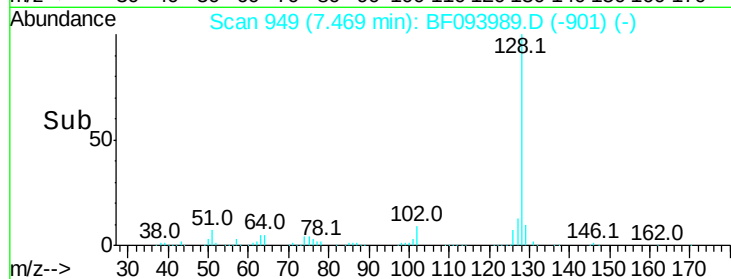
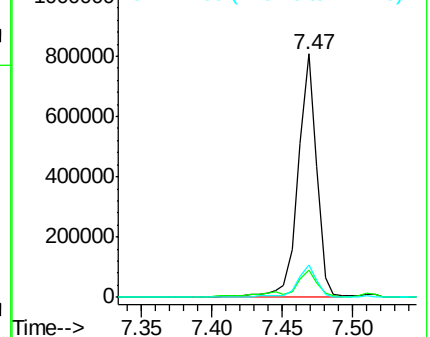
127 13.3 10.8 16.2



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#37

2-Methylnaphthalene

Concen: 22.82 ng

RT: 8.31 min Scan# 1092

Delta R.T. -0.02 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

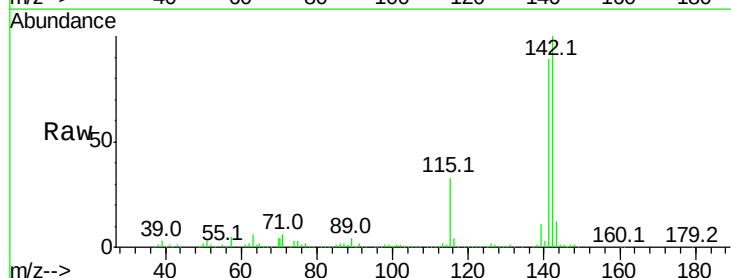
Tgt Ion:142 Resp: 476605

Ion Ratio Lower Upper

142 100

141 89.2 71.3 106.9

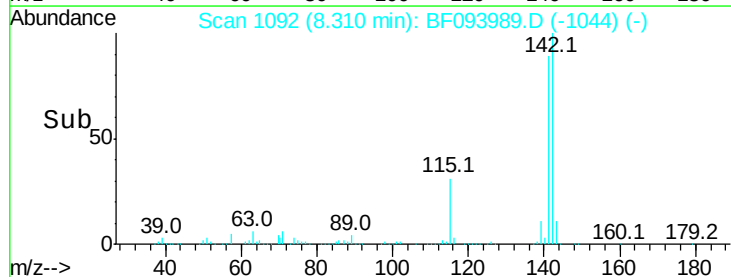
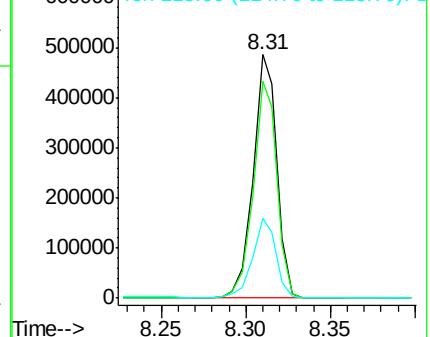
115 32.5 27.1 40.7

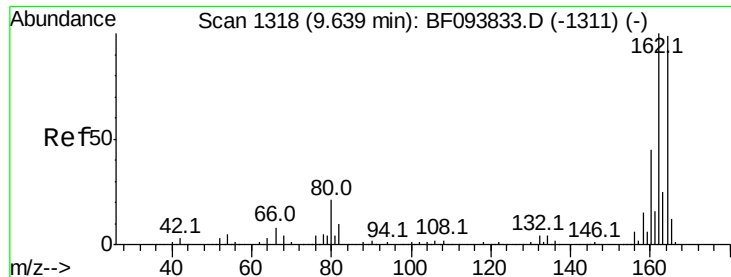


Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E

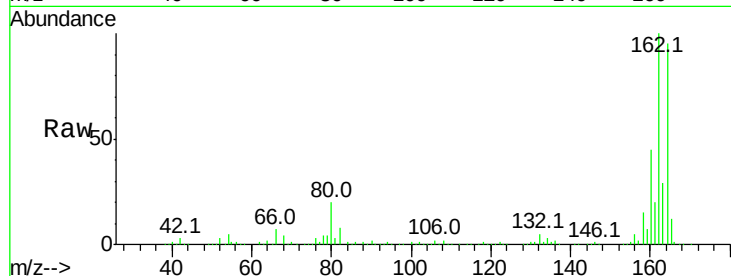




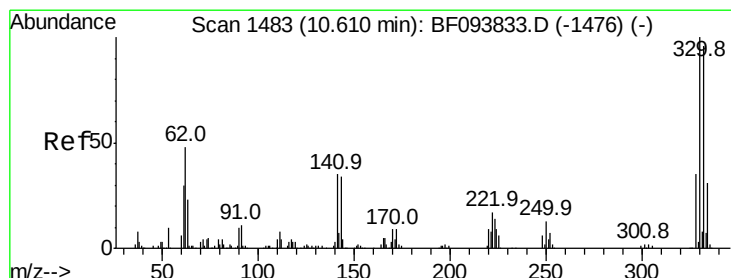
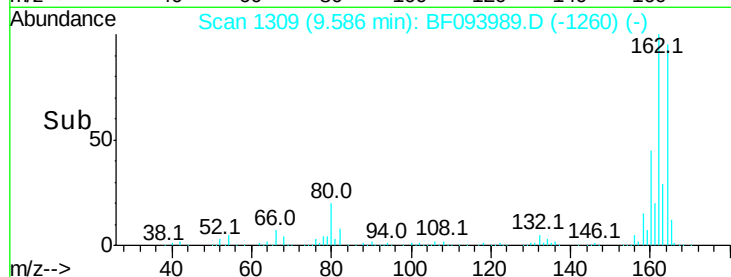
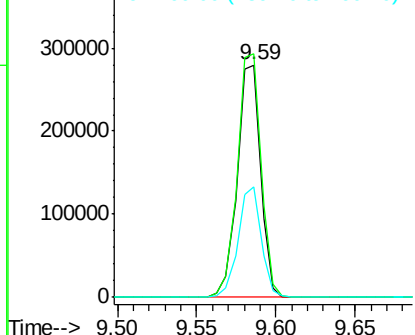
#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.59 min Scan# 1309  
 Delta R.T. -0.01 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:164 Resp: 286242  
 Ion Ratio Lower Upper  
 164 100  
 162 104.9 82.6 123.8  
 160 47.5 36.2 54.2

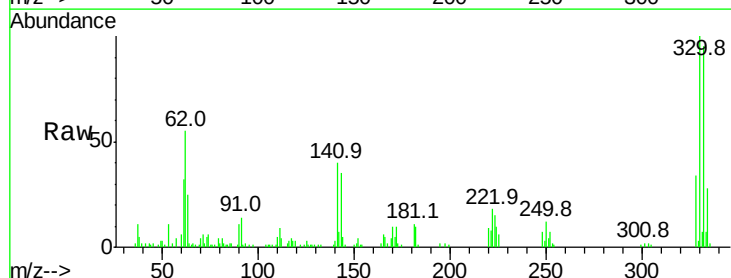


Abundance Ion 164.00 (163.70 to 164.70): E  
 Ion 162.00 (161.70 to 162.70): E  
 Ion 160.00 (159.70 to 160.70): E

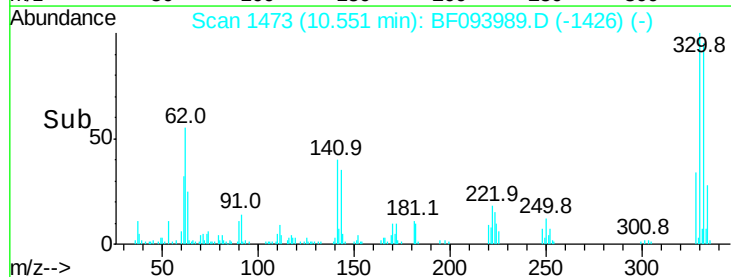
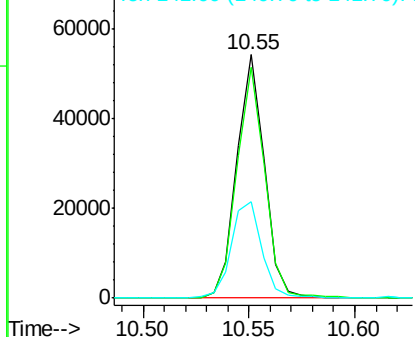


#41  
 2,4,6-Tribromophenol  
 Concen: 21.76 ng  
 RT: 10.55 min Scan# 1473  
 Delta R.T. -0.02 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

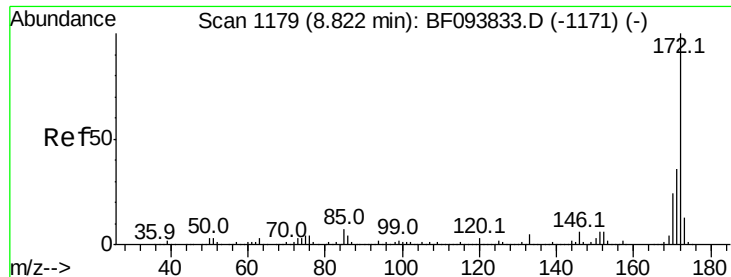
Tgt Ion:330 Resp: 49227  
 Ion Ratio Lower Upper  
 330 100  
 332 95.7 76.6 115.0  
 141 43.6 31.4 47.2



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



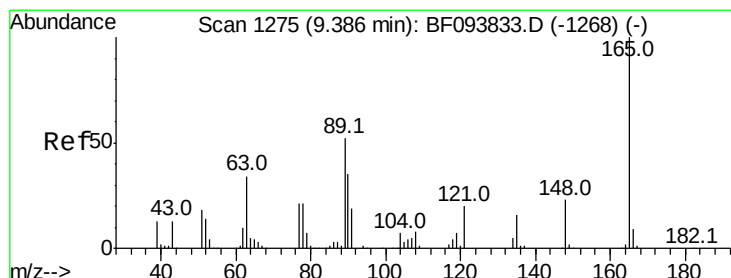
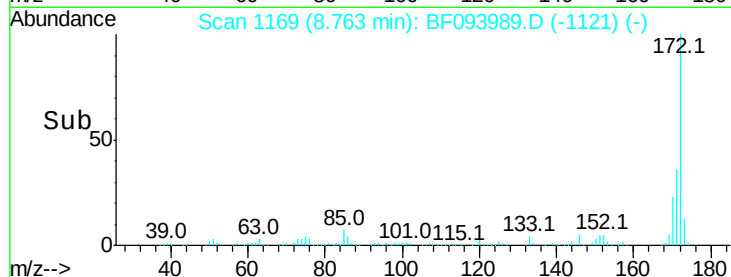
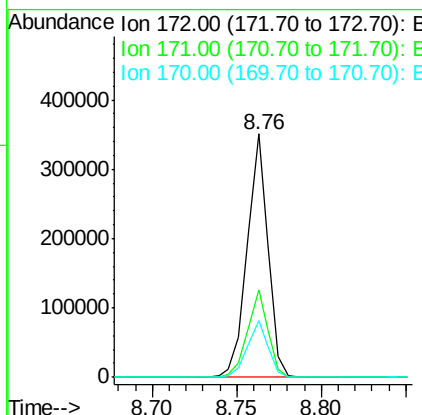
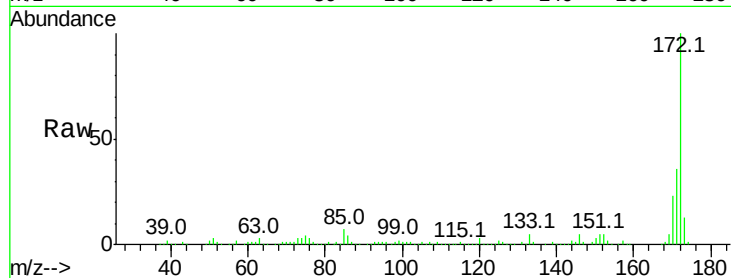




#44  
 2-Fluorobiphenyl  
 Concen: 16.17 ng  
 RT: 8.76 min Scan# 1169  
 Delta R.T. -0.02 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

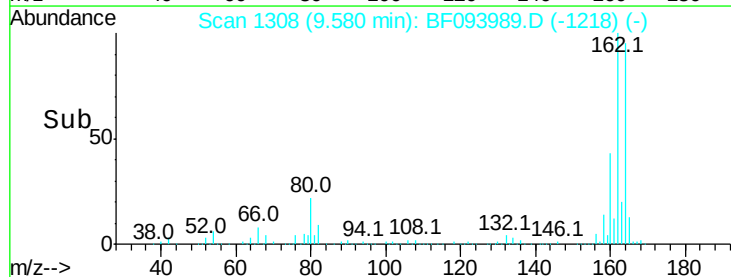
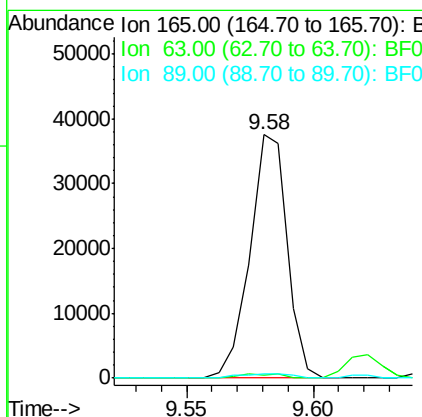
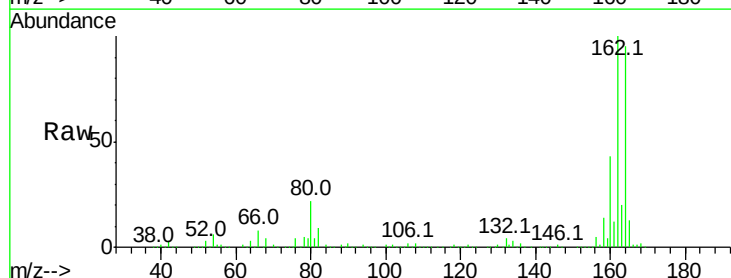
Instrument :  
 BNA\_F  
 ClientSampleId :

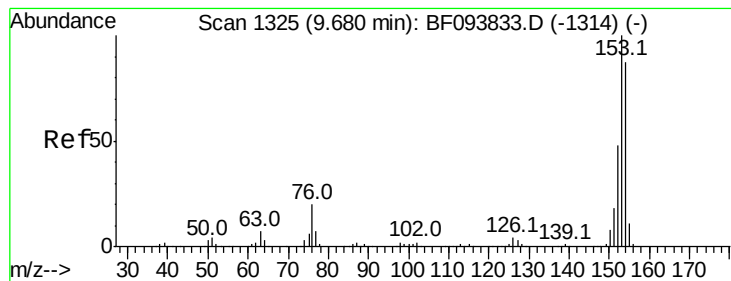
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 36.2  | 29.6  | 44.4  |
| 170     | 23.3  | 19.8  | 29.8  |



#50  
 2,6-Dinitrotoluene  
 Concen: 8.26 ng  
 RT: 9.58 min Scan# 1308  
 Delta R.T. 0.23 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.3   | 34.3  | 51.5# |
| 89      | 1.6   | 37.1  | 55.7# |





#51

Acenaphthene

Concen: 2.27 ng

RT: 9.62 min Scan# 1315

Delta R.T. -0.02 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

Instrument :

BNA\_F

ClientSampleId :

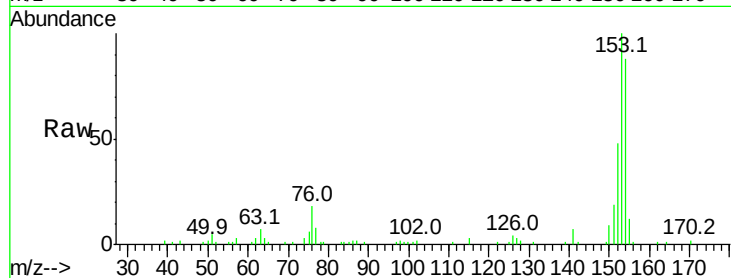
Tot Ion:154 Resp: 39744

Ion Ratio Lower Upper

154 100

153 113.3 90.5 135.7

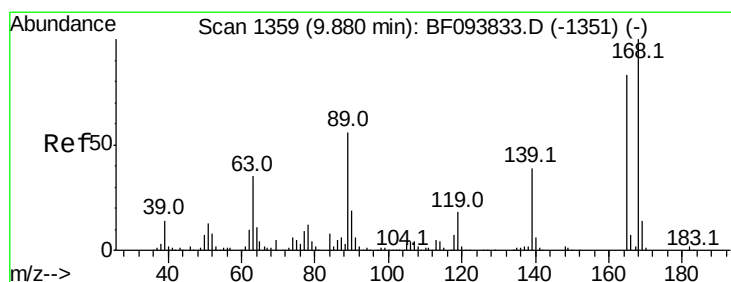
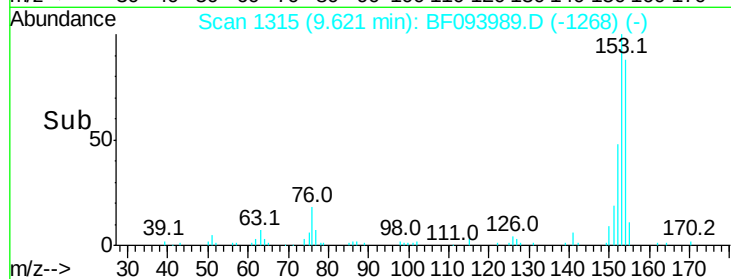
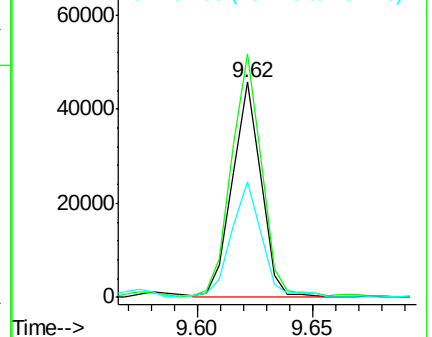
152 53.9 43.6 65.4



Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E



#56

2,4-Dinitrotoluene

Concen: 6.58 ng

RT: 9.58 min Scan# 1308

Delta R.T. -0.26 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

Tgt Ion:165 Resp: 38531

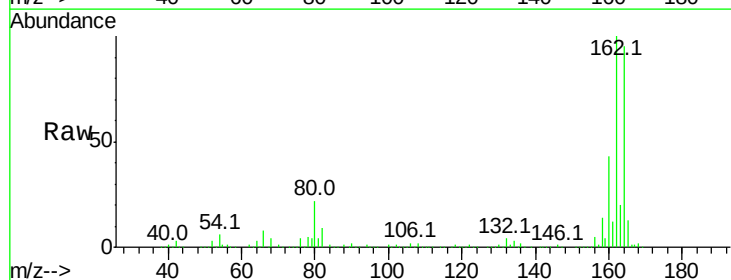
Ion Ratio Lower Upper

165 100

63 1.3 25.4 38.0#

89 1.6 46.4 69.6#

182 0.0 1.8 2.6#

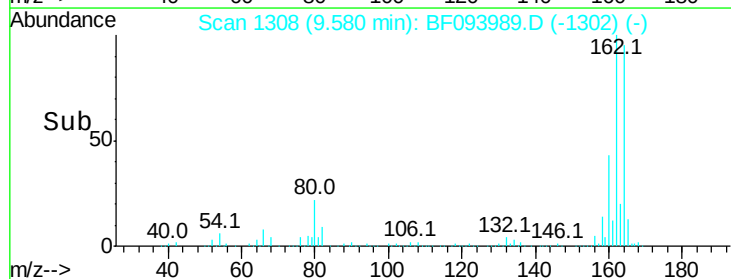
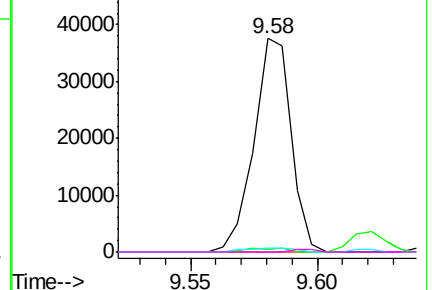


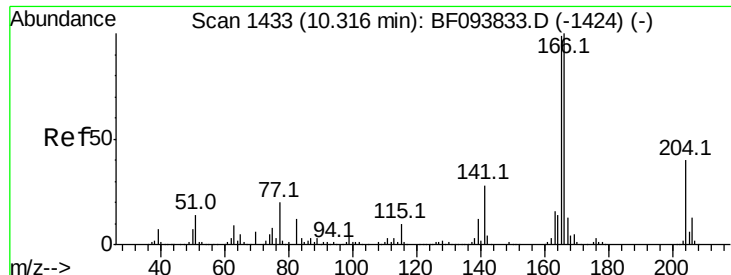
Abundance Ion 165.00 (164.70 to 165.70): E

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

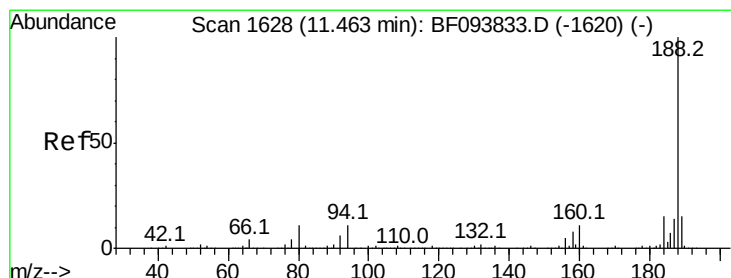
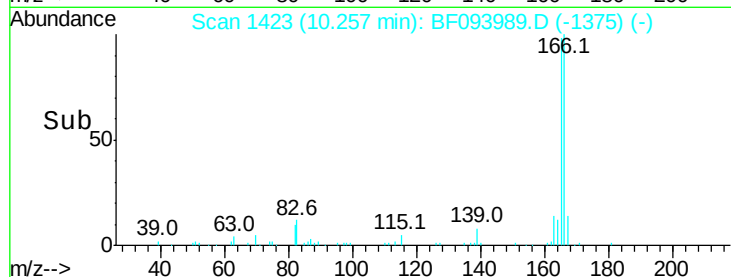
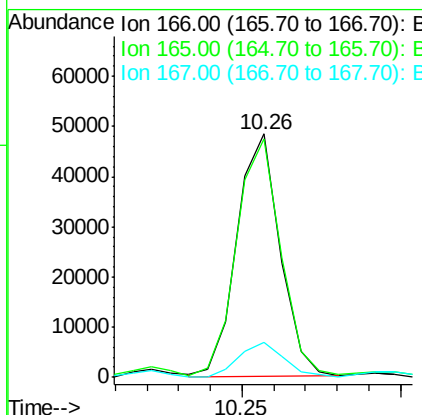
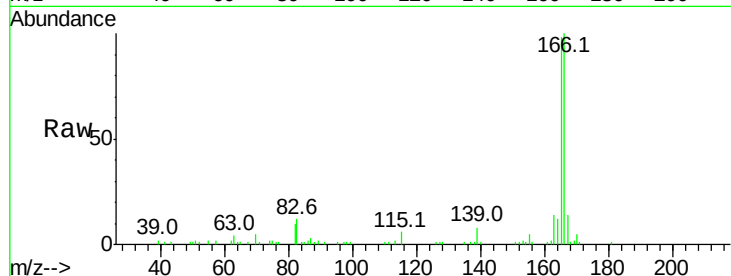




#57  
**Fluorene**  
 Concen: 2.30 ng  
 RT: 10.26 min Scan# 1423  
 Delta R.T. -0.02 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

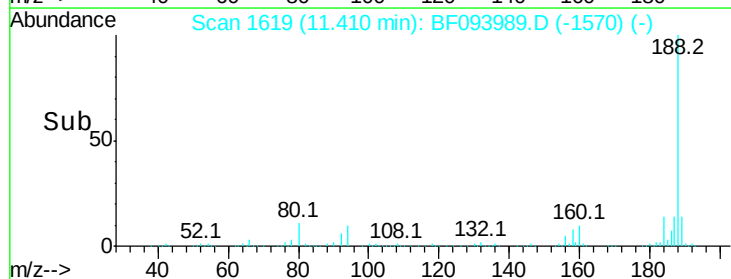
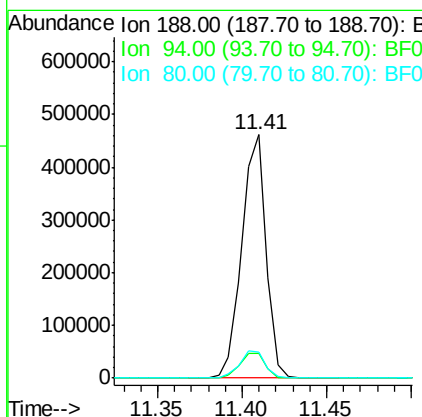
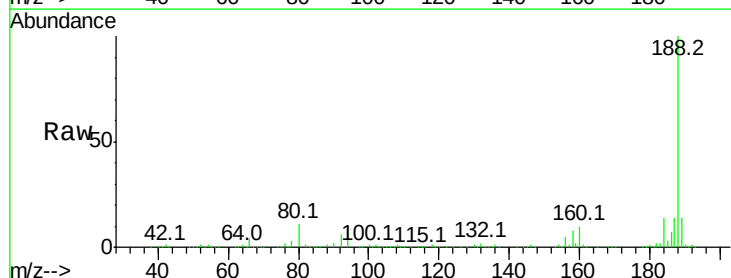
Instrument :  
 BNA\_F  
 ClientSampleId :

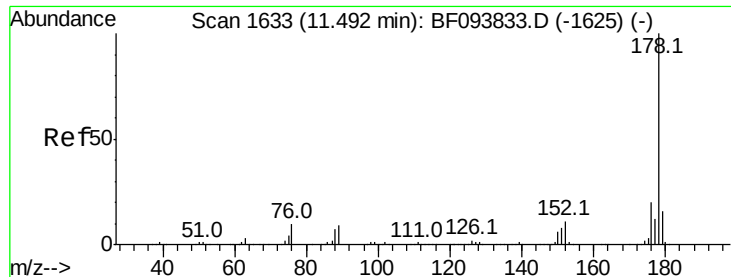
Tot Ion:166 Resp: 45518  
 Ion Ratio Lower Upper  
 166 100  
 165 97.7 78.8 118.2  
 167 14.3 10.6 16.0



#63  
**Phenanthrene-d10**  
 Concen: 20.00 ng  
 RT: 11.41 min Scan# 1619  
 Delta R.T. -0.01 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

Tgt Ion:188 Resp: 463795  
 Ion Ratio Lower Upper  
 188 100  
 94 10.3 9.4 14.2  
 80 10.8 10.2 15.2

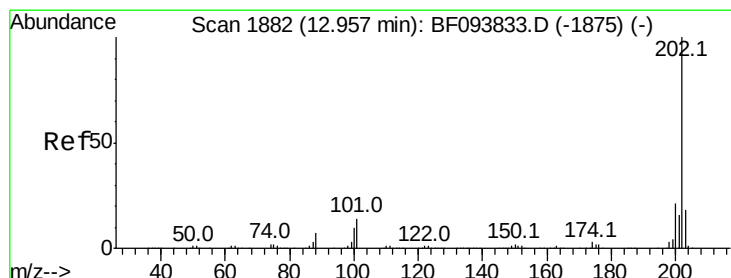
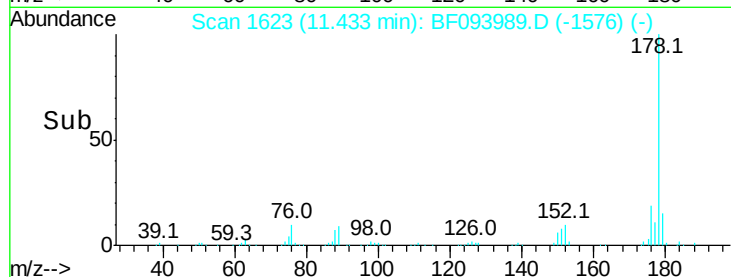
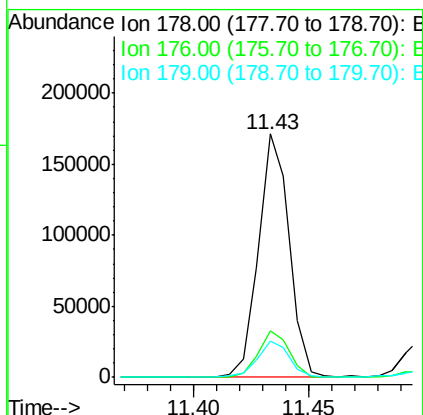
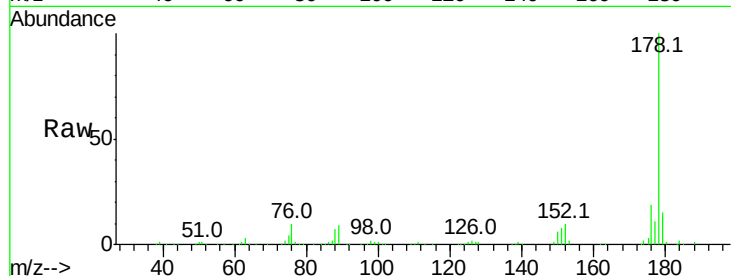




#70  
Phenanthrene  
Concen: 6.17 ng  
RT: 11.43 min Scan# 1623  
Delta R.T. -0.02 min  
Lab File: BF093989.D  
Acq: 28 Mar 2017 12:59

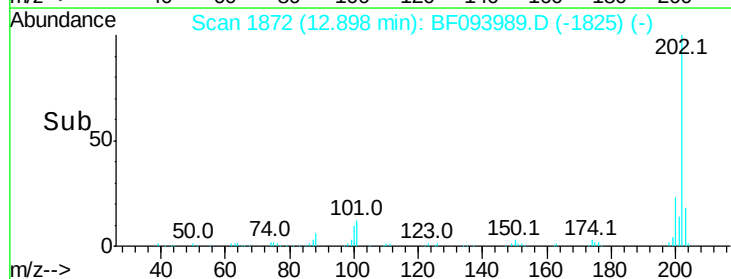
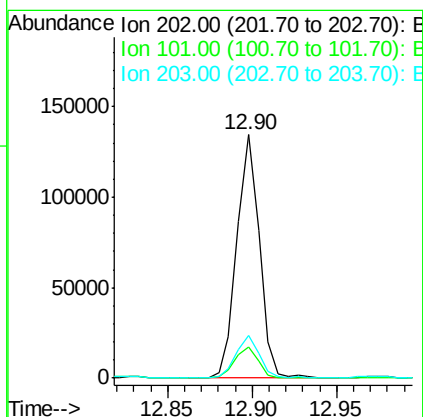
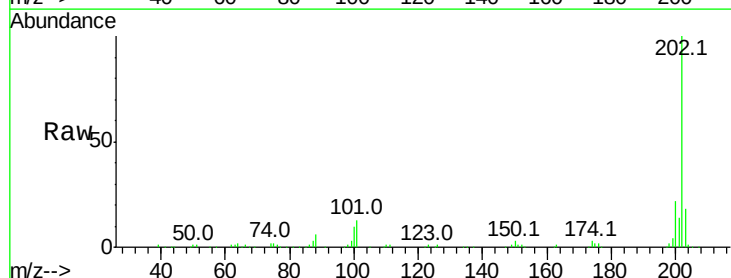
Instrument :  
BNA\_F  
ClientSampleId :

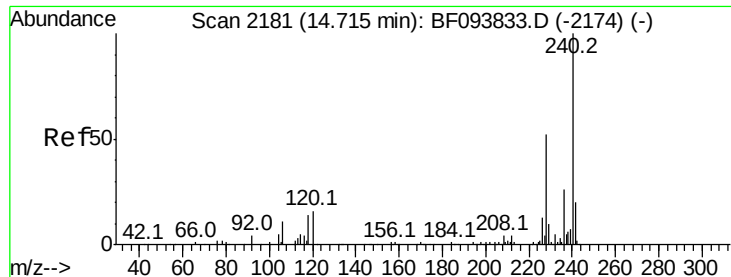
Tot Ion:178 Resp: 159277  
Ion Ratio Lower Upper  
178 100  
176 19.4 16.2 24.4  
179 15.1 12.6 19.0



#74  
Fluoranthene  
Concen: 4.75 ng  
RT: 12.90 min Scan# 1872  
Delta R.T. -0.02 min  
Lab File: BF093989.D  
Acq: 28 Mar 2017 12:59

Tgt Ion:202 Resp: 125489  
Ion Ratio Lower Upper  
202 100  
101 12.7 0.0 33.2  
203 17.5 0.0 38.1





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.66 min Scan# 2171

Delta R.T. -0.02 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

Instrument :

BNA\_F

ClientSampleId :

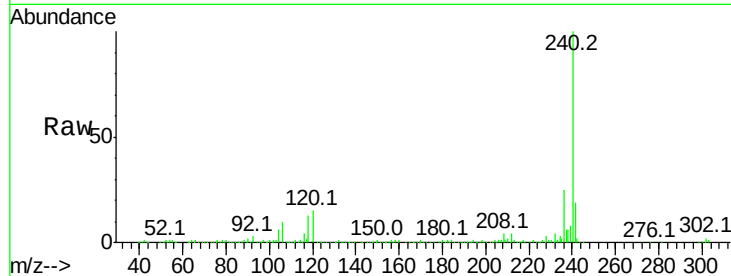
Tot Ion:240 Resp: 314717

Ion Ratio Lower Upper

240 100

120 15.1 5.8 8.8#

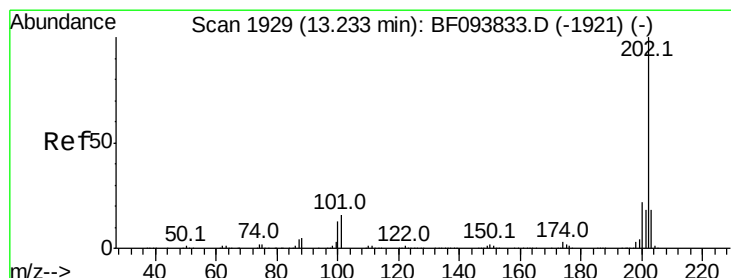
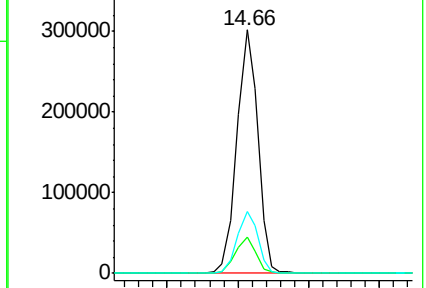
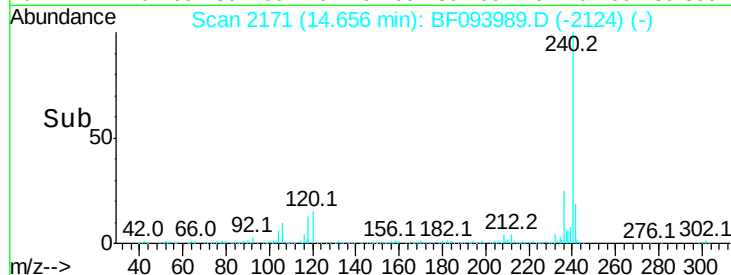
236 25.4 20.5 30.7



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: 4.79 ng

RT: 13.17 min Scan# 1919

Delta R.T. -0.02 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

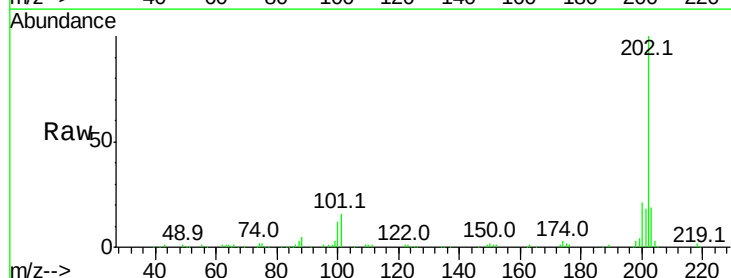
Tgt Ion:202 Resp: 109418

Ion Ratio Lower Upper

202 100

200 21.1 17.6 26.4

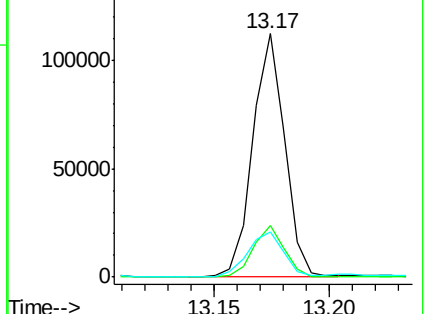
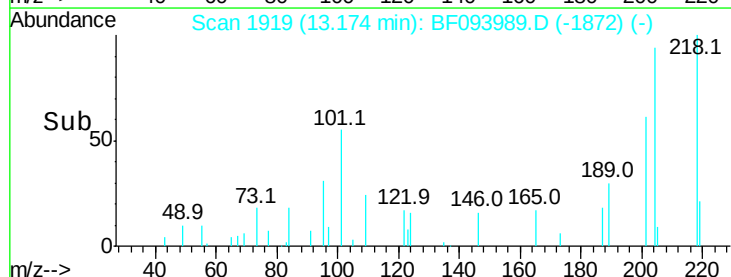
203 18.8 14.4 21.6

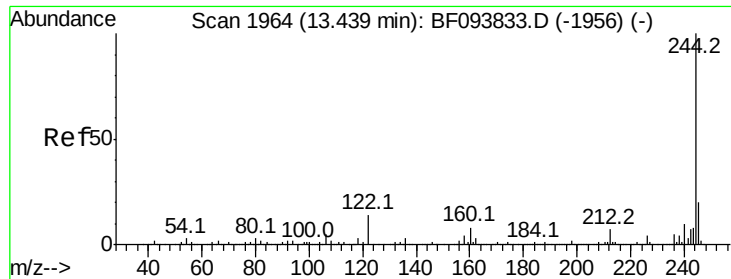


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

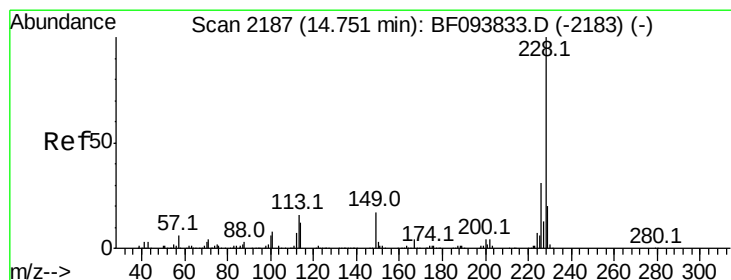
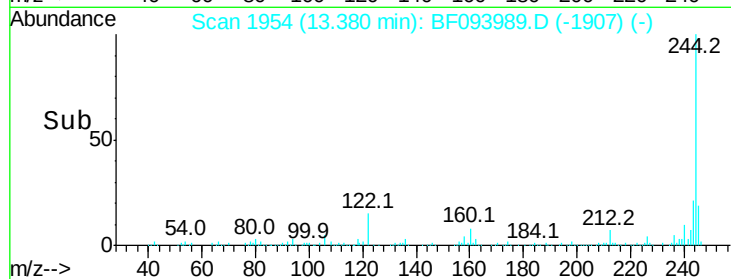
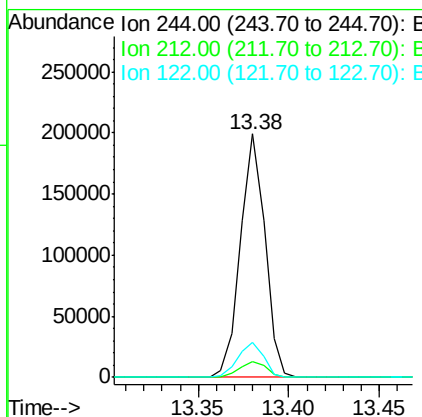
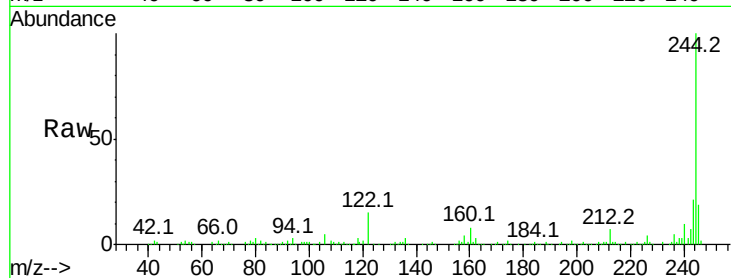




#78  
 Terphenyl-d14  
 Concen: 13.45 ng  
 RT: 13.38 min Scan# 1954  
 Delta R.T. -0.02 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

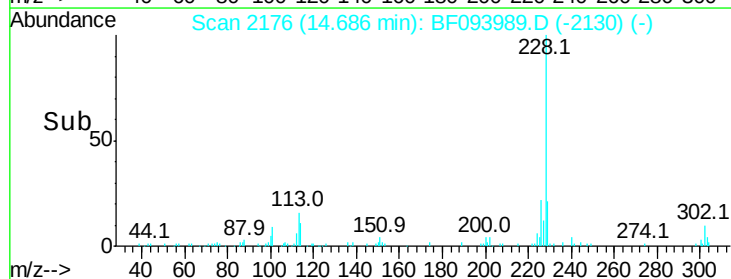
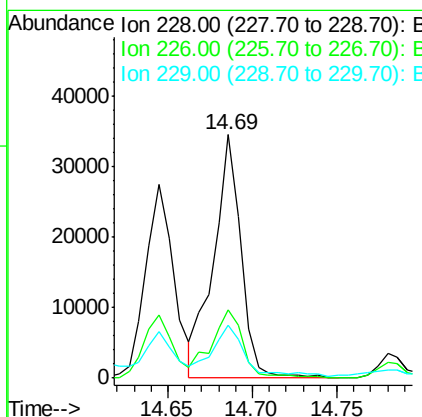
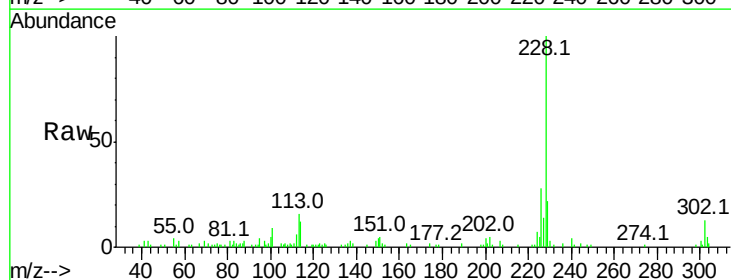
Instrument :  
 BNA\_F  
 ClientSampleId :

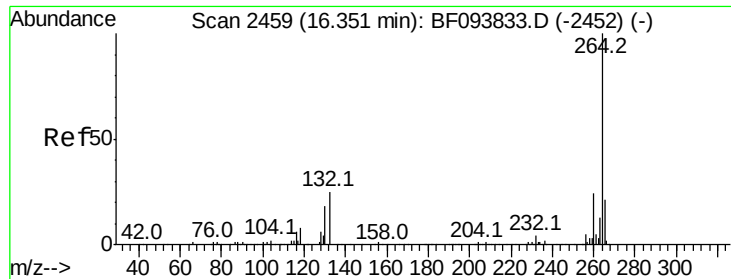
Tot Ion:244 Resp: 188801  
 Ion Ratio Lower Upper  
 244 100  
 212 6.6 6.0 9.0  
 122 14.5 10.3 15.5



#82  
 Chrysene  
 Concen: 2.31 ng  
 RT: 14.69 min Scan# 2176  
 Delta R.T. -0.03 min  
 Lab File: BF093989.D  
 Acq: 28 Mar 2017 12:59

Tgt Ion:228 Resp: 39373  
 Ion Ratio Lower Upper  
 228 100  
 226 27.8 24.9 37.3  
 229 21.5 15.8 23.6

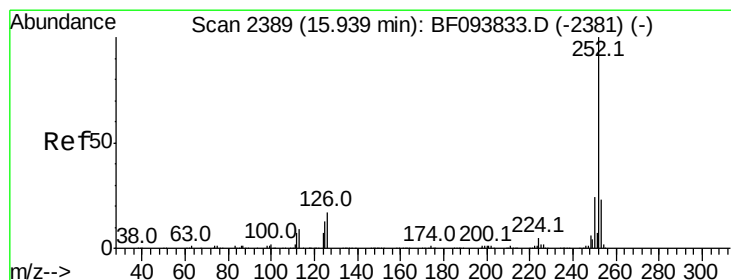
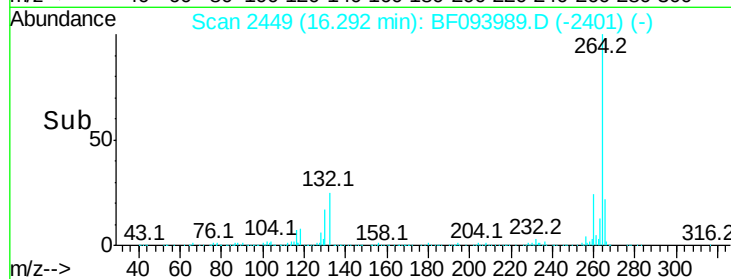
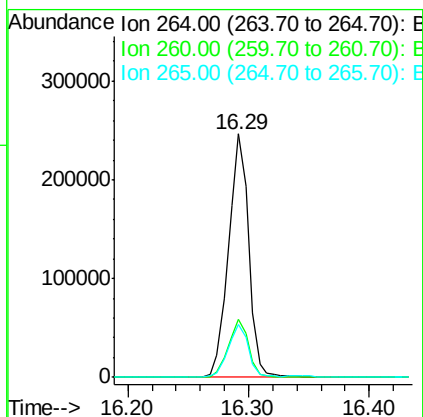
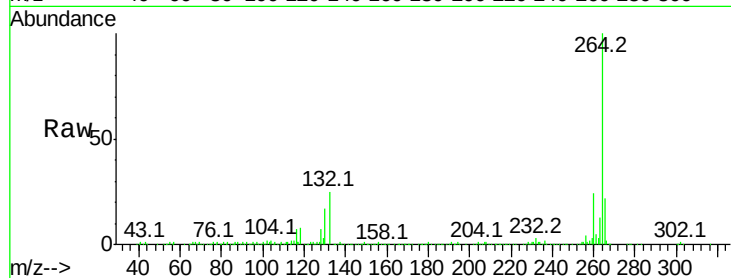




#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 16.29 min Scan# 2449  
Delta R.T. -0.02 min  
Lab File: BF093989.D  
Acq: 28 Mar 2017 12:59

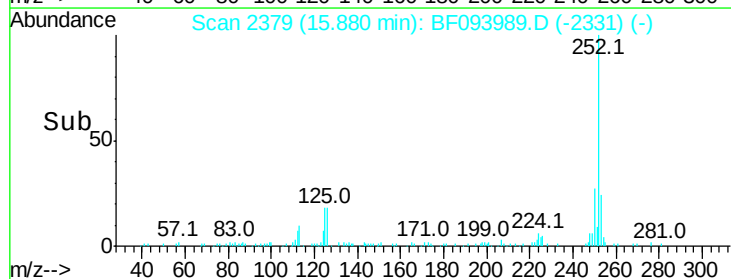
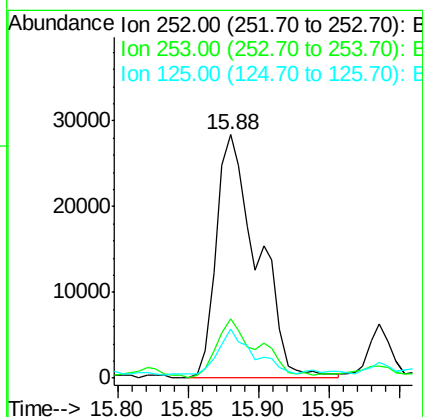
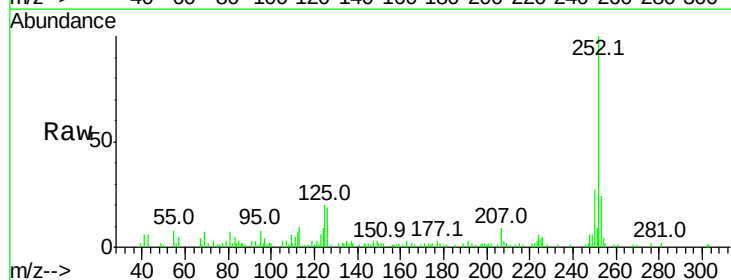
Instrument :  
BNA\_F  
ClientSampleId :

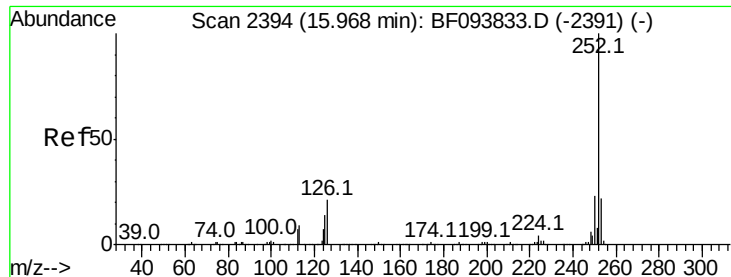
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 24.1  | 19.5  | 29.3  |
| 265     | 21.9  | 17.2  | 25.8  |



#87  
Benzo(b)fluoranthene  
Concen: 3.30 ng  
RT: 15.88 min Scan# 2379  
Delta R.T. -0.02 min  
Lab File: BF093989.D  
Acq: 28 Mar 2017 12:59

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.4  | 18.1  | 27.1  |
| 125     | 20.3  | 9.8   | 14.8# |





#88

Benzo(k)fluoranthene

Concen: 3.37 ng

RT: 15.88 min Scan# 2379

Delta R.T. -0.05 min

Lab File: BF093989.D

Acq: 28 Mar 2017 12:59

Instrument :

BNA\_F

ClientSampleId :

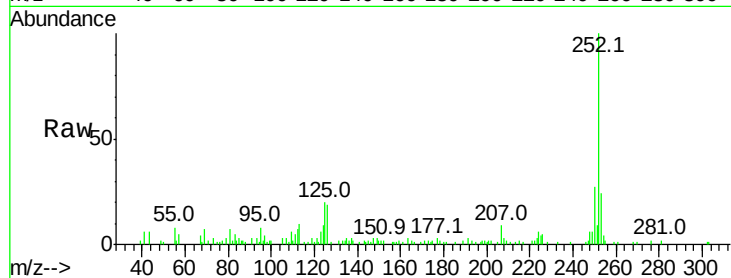
Tot Ion:252 Resp: 57998

Ion Ratio Lower Upper

252 100

253 24.4 18.4 27.6

125 20.3 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

