

Data Path : Z:\HPCHEM1\BNA F\DATA\BF072117\  
 Data File : BF096981.D  
 Acq On : 22 Jul 2017 10:09  
 Operator : SJ/JU  
 Sample : I4305-05 10X  
 Misc :  
 ALS Vial : 44 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-M5-WSW

Quant Time: Jul 24 04:15:35 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF071317.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 18 13:33:22 2017  
 Response via : Initial Calibration

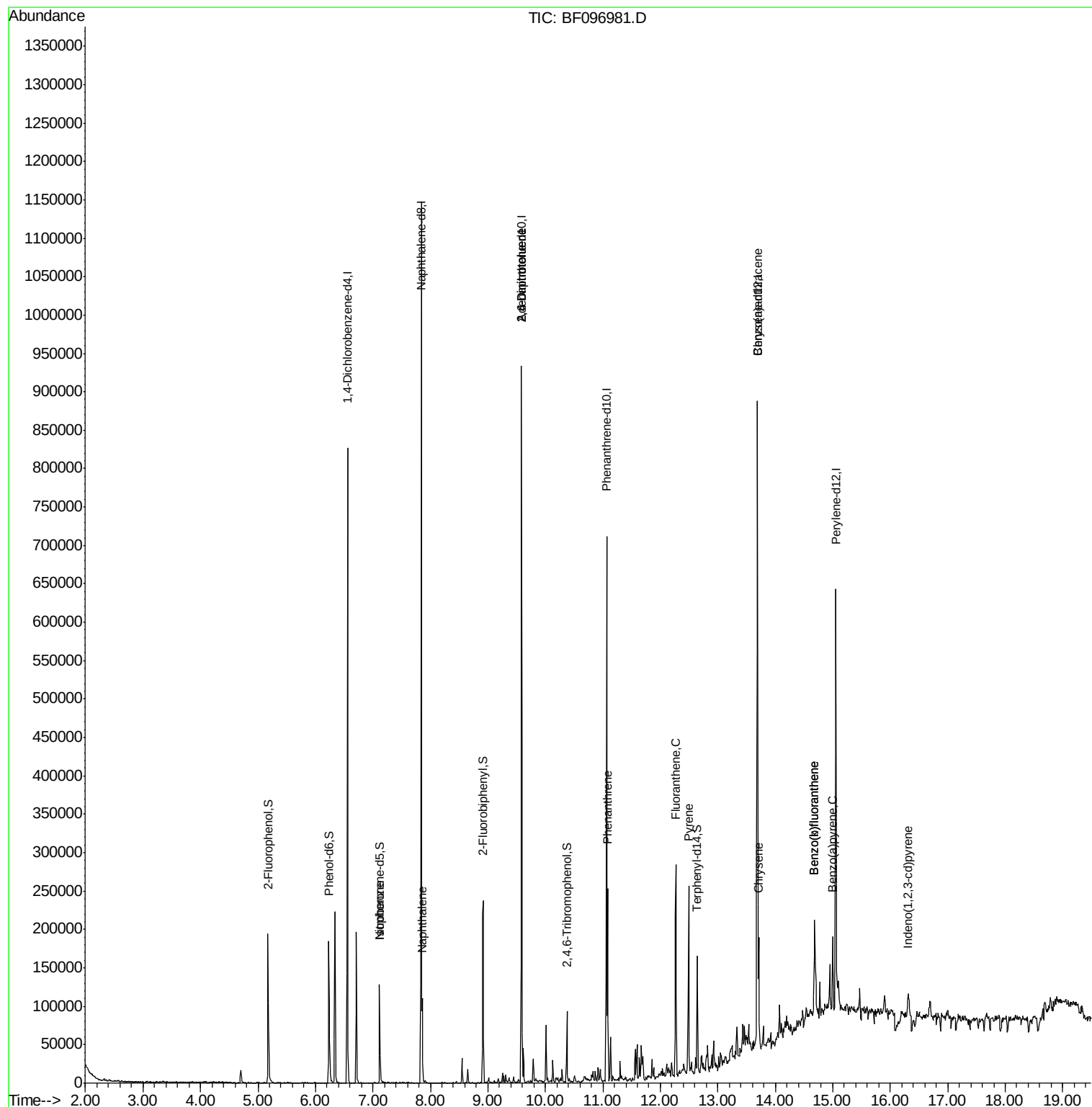
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.56  | 152  | 114959   | 20.00 | ng    | -0.04    |
| 21) Naphthalene-d8          | 7.84  | 136  | 459383   | 20.00 | ng    | -0.05    |
| 38) Acenaphthene-d10        | 9.59  | 164  | 170588   | 20.00 | ng    | -0.05    |
| 63) Phenanthrene-d10        | 11.06 | 188  | 234114   | 20.00 | ng    | -0.04    |
| 75) Chrysene-d12            | 13.69 | 240  | 252769   | 20.00 | ng    | -0.05    |
| 86) Perylene-d12            | 15.05 | 264  | 206489   | 20.00 | ng    | -0.05    |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.17  | 112  | 61682    | 8.07  | ng    | -0.02    |
| 7) Phenol-d6                | 6.23  | 99   | 72651    | 7.92  | ng    | -0.02    |
| 23) Nitrobenzene-d5         | 7.12  | 82   | 38717    | 5.22  | ng    | -0.05    |
| 41) 2,4,6-Tribromophenol    | 10.37 | 330  | 7950     | 5.46  | ng    | -0.05    |
| 44) 2-Fluorobiphenyl        | 8.92  | 172  | 72879    | 6.75  | ng    | -0.05    |
| 78) Terphenyl-d14           | 12.64 | 244  | 41814    | 2.87  | ng    | -0.05    |
| Target Compounds            |       |      |          |       |       |          |
| 25) Isophorone              | 7.12  | 82   | 38469    | 2.79  | ng    | # 67     |
| 31) Naphthalene             | 7.86  | 128  | 44964    | 2.07  | ng    | 99       |
| 50) 2,6-Dinitrotoluene      | 9.59  | 165  | 21098    | 7.58  | ng    | # 34     |
| 56) 2,4-Dinitrotoluene      | 9.59  | 165  | 21098    | 5.90  | ng    | # 33     |
| 70) Phenanthrene            | 11.09 | 178  | 94431    | 7.42  | ng    | 97       |
| 74) Fluoranthene            | 12.27 | 202  | 101470   | 8.33  | ng    | 98       |
| 77) Pyrene                  | 12.49 | 202  | 91652    | 4.00  | ng    | 99       |
| 80) Benzo(a)anthracene      | 13.68 | 228  | 56352    | 3.58  | ng    | 99       |
| 82) Chrysene                | 13.71 | 228  | 51380    | 3.31  | ng    | 96       |
| 85) Indeno(1,2,3-cd)pyrene  | 16.32 | 276  | 16978    | 4.47  | ng    | 95       |
| 87) Benzo(b)fluoranthene    | 14.68 | 252  | 72754    | 5.84  | ng    | # 96     |
| 88) Benzo(k)fluoranthene    | 14.68 | 252  | 72754    | 6.17  | ng    | 99       |
| 89) Benzo(a)pyrene          | 15.00 | 252  | 37785    | 3.31  | ng    | # 95     |

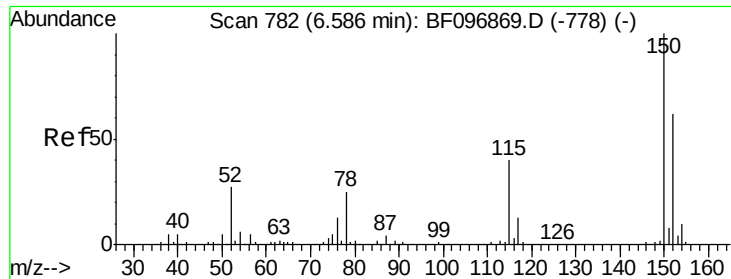
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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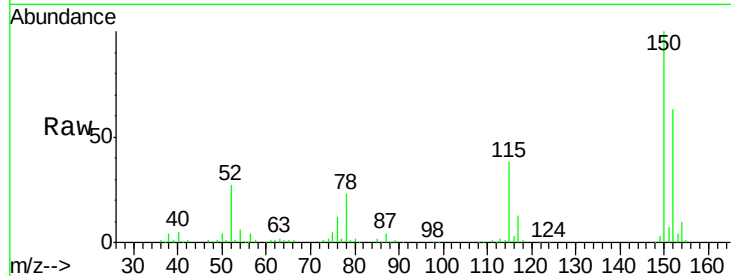


#1

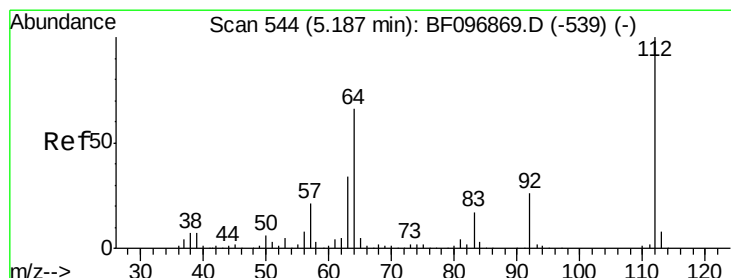
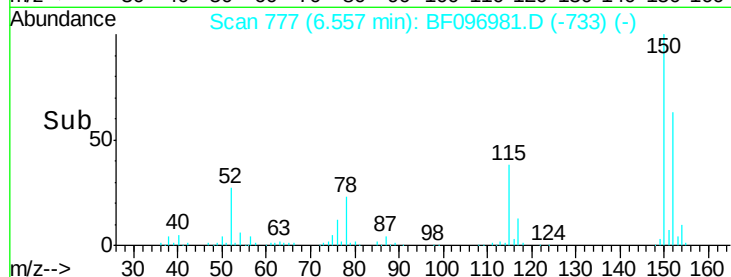
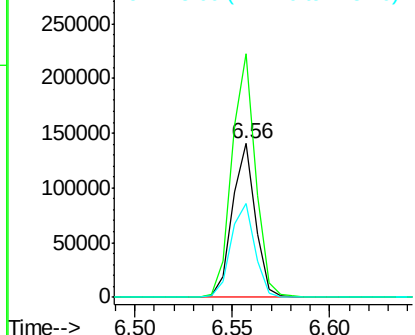
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.56 min Scan# 777  
Delta R.T. -0.04 min  
Lab File: BF096981.D  
Acq: 22 Jul 2017 10:09

Instrument :  
BNA\_F  
ClientSampleId :  
E2-M5-WSW

Tot Ion:152 Resp: 114959  
Ion Ratio Lower Upper  
152 100  
150 158.4 126.2 189.2  
115 60.6 52.2 78.2



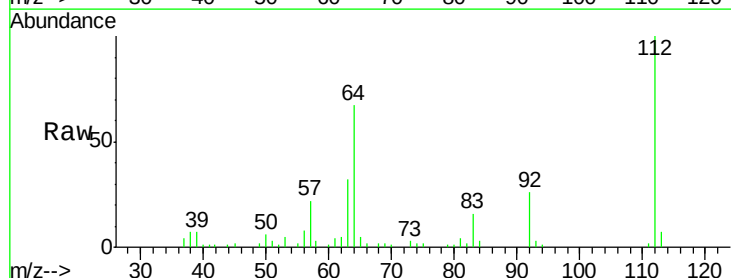
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



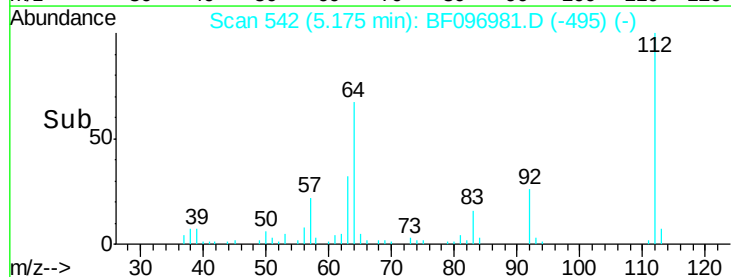
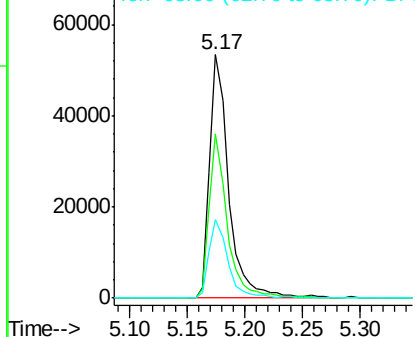
#5

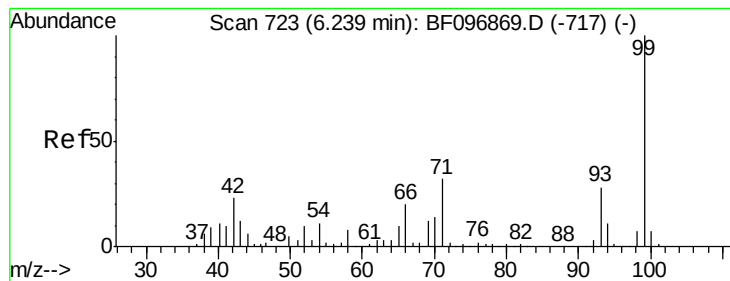
2-Fluorophenol  
Concen: 8.07 ng  
RT: 5.17 min Scan# 542  
Delta R.T. -0.02 min  
Lab File: BF096981.D  
Acq: 22 Jul 2017 10:09

Tgt Ion:112 Resp: 61682  
Ion Ratio Lower Upper  
112 100  
64 67.3 46.0 69.0  
63 32.4 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: 7.92 ng

RT: 6.23 min Scan# 722

Delta R.T. -0.02 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

Instrument :

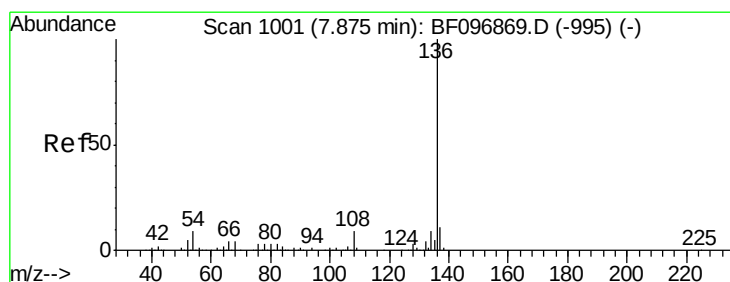
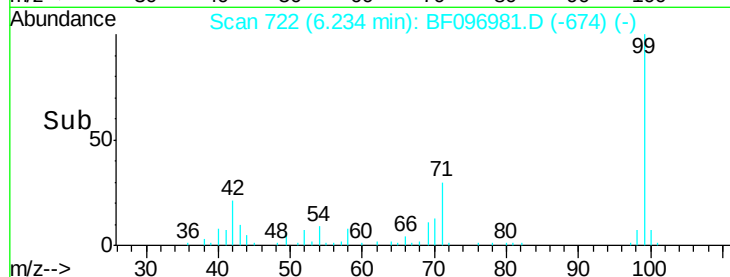
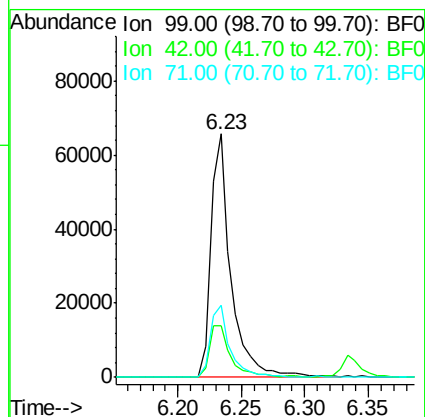
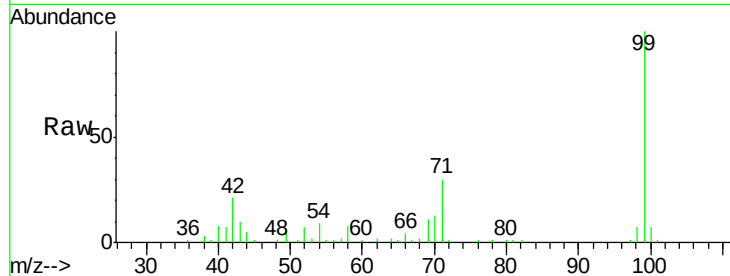
BNA\_F

ClientSampleId :

E2-M5-WSW

Tot Ion: 99 Resp: 72651

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 99  | 100   |       |       |
| 42  | 21.5  | 13.5  | 20.3# |
| 71  | 29.7  | 24.5  | 36.7  |



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.84 min Scan# 995

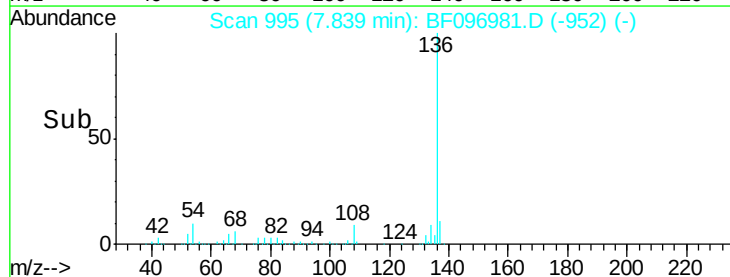
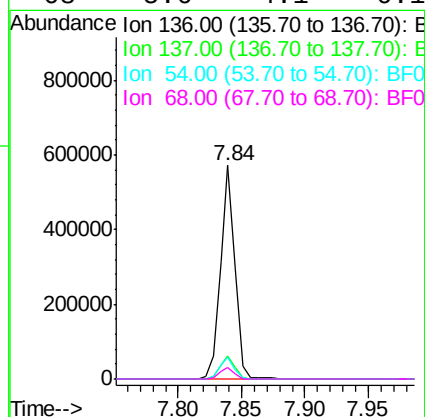
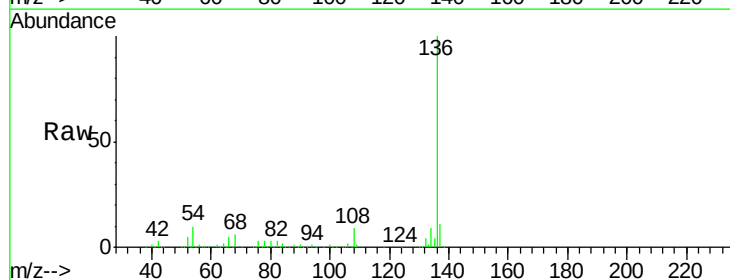
Delta R.T. -0.05 min

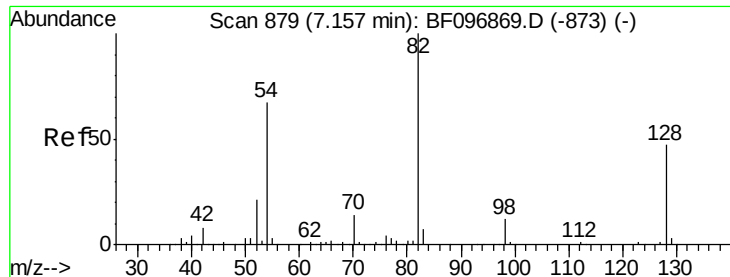
Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

Tgt Ion: 136 Resp: 459383

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 136 | 100   |       |       |
| 137 | 10.7  | 8.5   | 12.7  |
| 54  | 10.4  | 4.9   | 7.3#  |
| 68  | 5.6   | 4.1   | 6.1   |

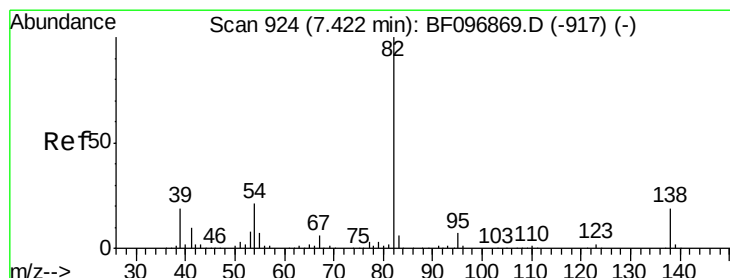
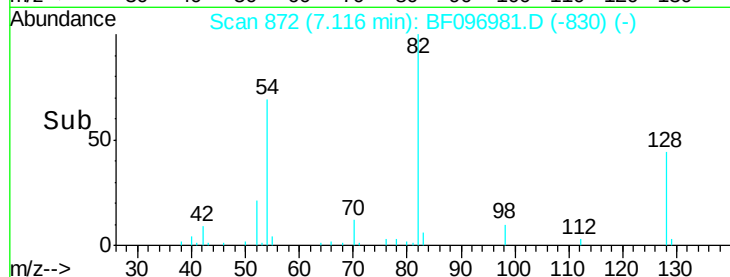
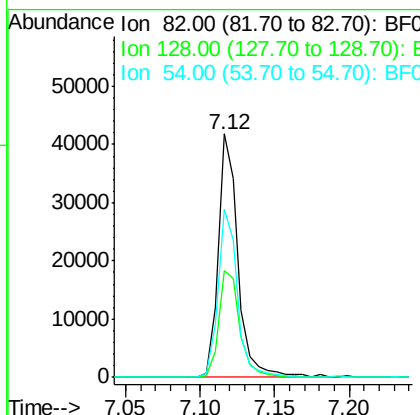
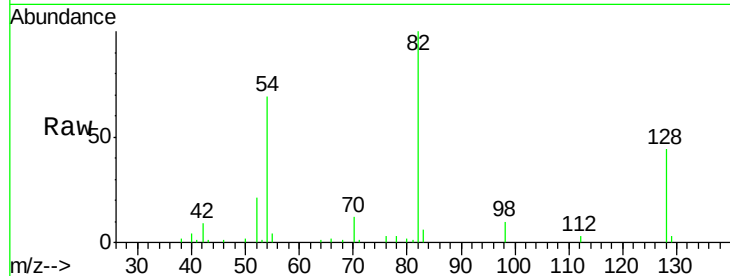




#23  
Nitrobenzene-d5  
Concen: 5.22 ng  
RT: 7.12 min Scan# 872  
Delta R.T. -0.05 min  
Lab File: BF096981.D  
Acq: 22 Jul 2017 10:09

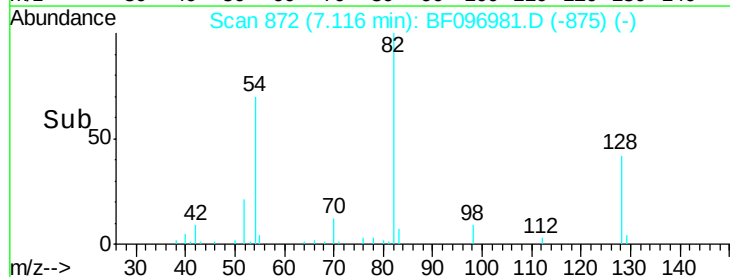
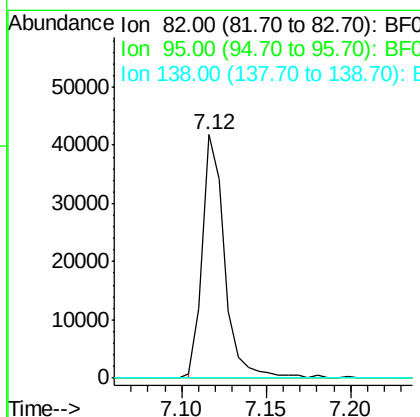
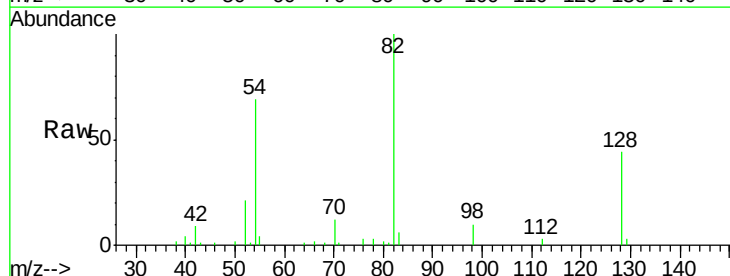
Instrument :  
BNA\_F  
ClientSampleId :  
E2-M5-WSW

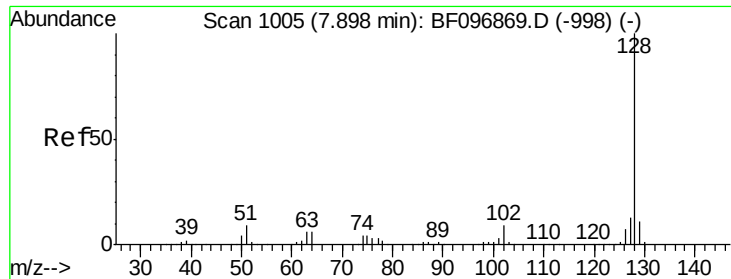
Tot Ion: 82 Resp: 38717  
Ion Ratio Lower Upper  
82 100  
128 44.0 34.0 51.0  
54 68.9 42.2 63.2#



#25  
Isophorone  
Concen: 2.79 ng  
RT: 7.12 min Scan# 872  
Delta R.T. -0.32 min  
Lab File: BF096981.D  
Acq: 22 Jul 2017 10:09

Tgt Ion: 82 Resp: 38469  
Ion Ratio Lower Upper  
82 100  
95 0.0 5.3 7.9#  
138 0.0 13.1 19.7#





#31

Naphthalene

Concen: 2.07 ng

RT: 7.86 min Scan# 998

Delta R.T. -0.05 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

Instrument :

BNA\_F

ClientSampleId :

E2-M5-WSW

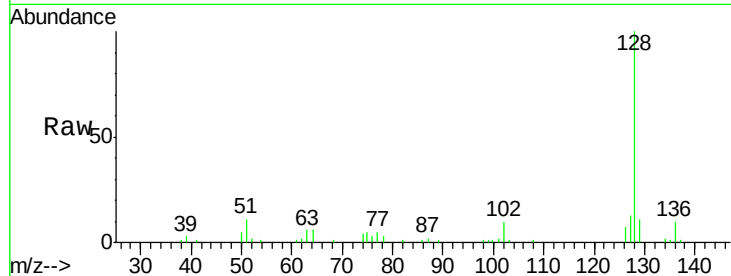
Tot Ion:128 Resp: 44964

Ion Ratio Lower Upper

128 100

129 11.3 9.0 13.6

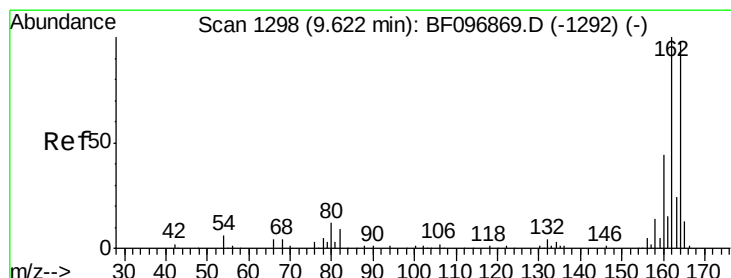
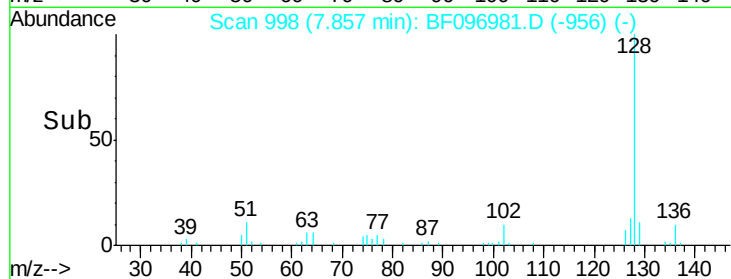
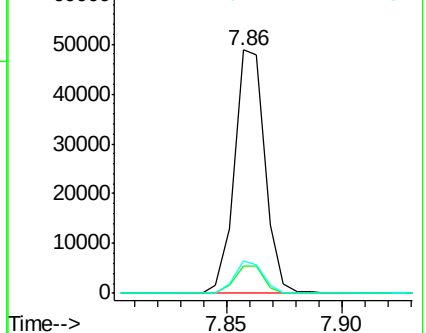
127 13.1 10.8 16.2



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



#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.59 min Scan# 1292

Delta R.T. -0.05 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

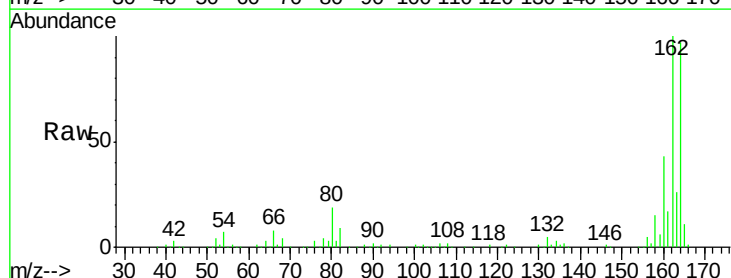
Tgt Ion:164 Resp: 170588

Ion Ratio Lower Upper

164 100

162 103.1 82.6 123.8

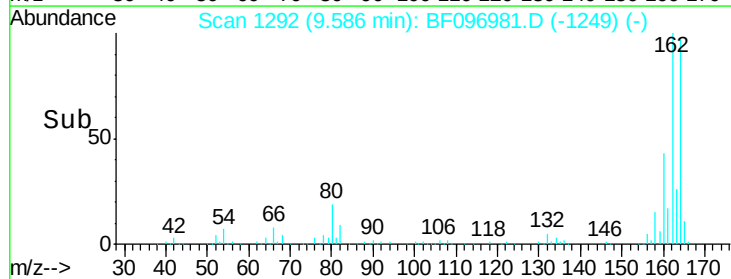
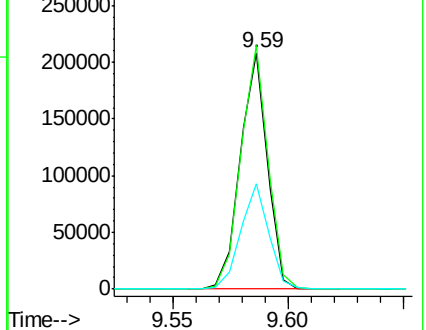
160 44.4 36.2 54.2

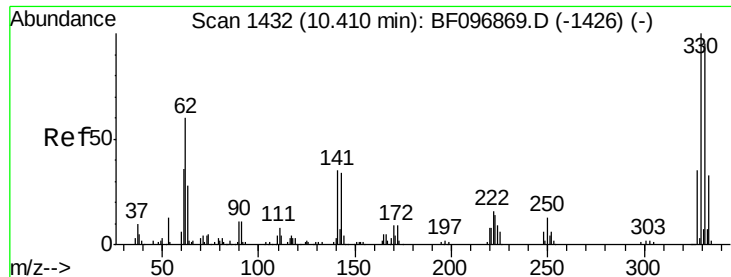


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E

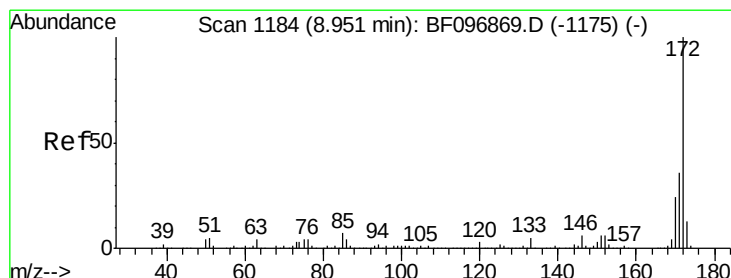
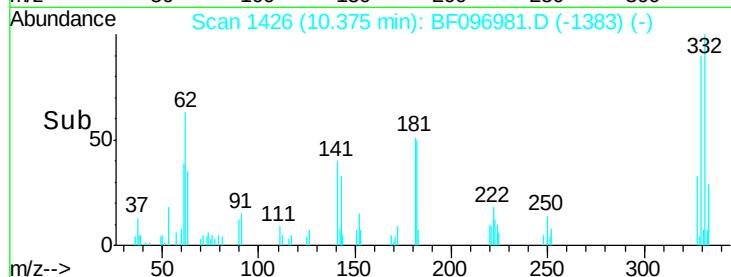
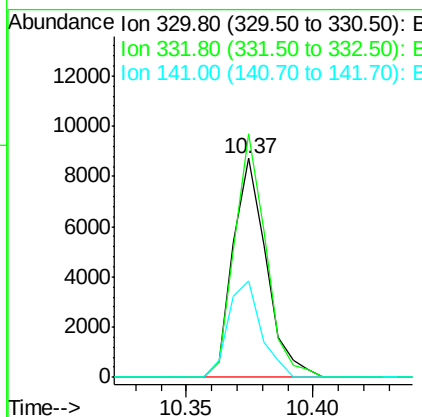
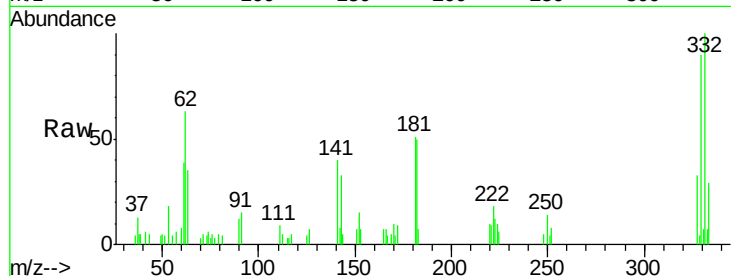




#41  
 2,4,6-Tribromophenol  
 Concen: 5.46 ng  
 RT: 10.37 min Scan# 1426  
 Delta R.T. -0.05 min  
 Lab File: BF096981.D  
 Acq: 22 Jul 2017 10:09

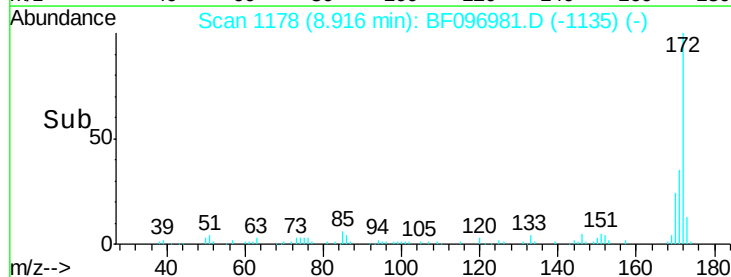
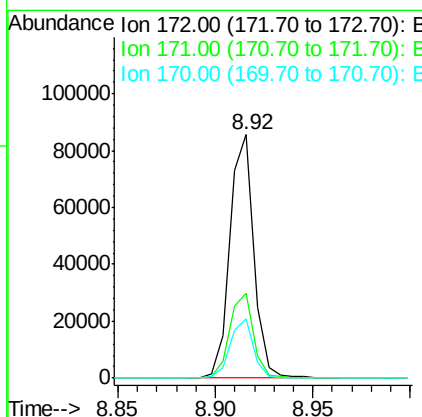
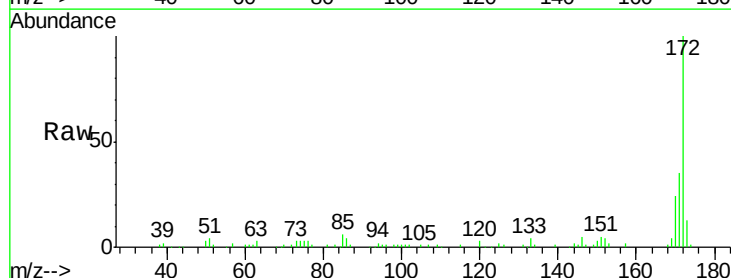
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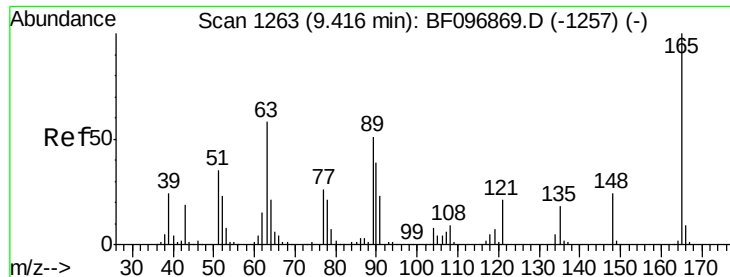
Tot Ion:330 Resp: 7950  
 Ion Ratio Lower Upper  
 330 100  
 332 104.6 76.6 115.0  
 141 43.3 31.4 47.2



#44  
 2-Fluorobiphenyl  
 Concen: 6.75 ng  
 RT: 8.92 min Scan# 1178  
 Delta R.T. -0.05 min  
 Lab File: BF096981.D  
 Acq: 22 Jul 2017 10:09

Tgt Ion:172 Resp: 72879  
 Ion Ratio Lower Upper  
 172 100  
 171 34.8 29.6 44.4  
 170 24.2 19.8 29.8

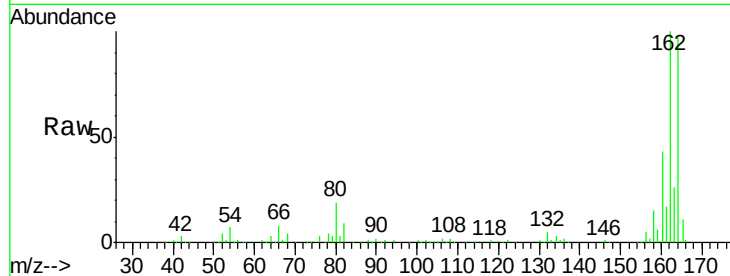




#50  
 2,6-Dinitrotoluene  
 Concen: 7.58 ng  
 RT: 9.59 min Scan# 1292  
 Delta R.T. 0.16 min  
 Lab File: BF096981.D  
 Acq: 22 Jul 2017 10:09

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-M5-WSW

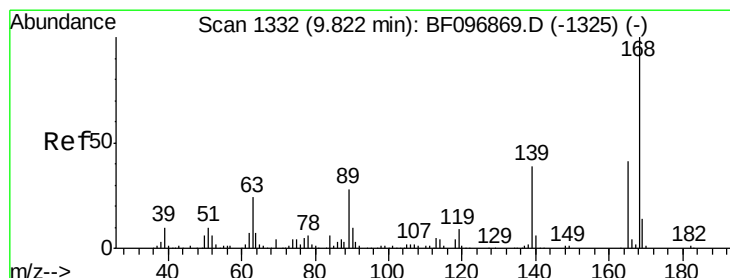
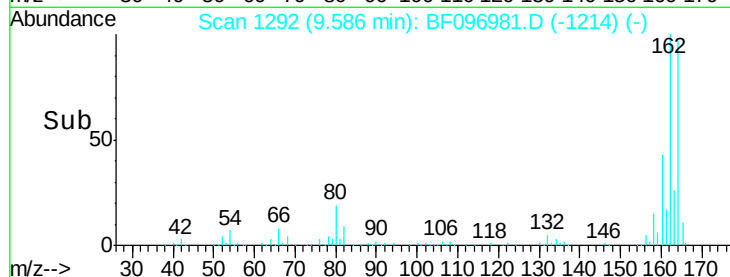
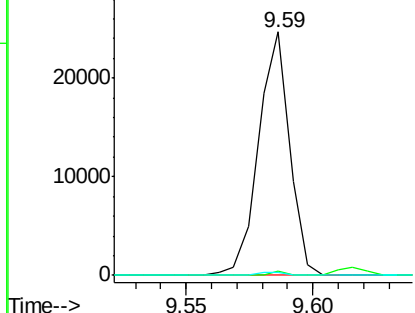
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 2.0   | 34.3  | 51.5# |
| 89      | 1.5   | 37.1  | 55.7# |



Abundance Ion 165.00 (164.70 to 165.70): E

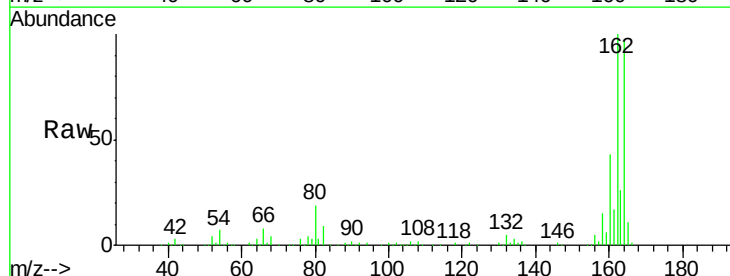
Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0



#56  
 2,4-Dinitrotoluene  
 Concen: 5.90 ng  
 RT: 9.59 min Scan# 1292  
 Delta R.T. -0.24 min  
 Lab File: BF096981.D  
 Acq: 22 Jul 2017 10:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 2.0   | 25.4  | 38.0# |
| 89      | 1.5   | 46.4  | 69.6# |
| 182     | 0.0   | 1.8   | 2.6#  |

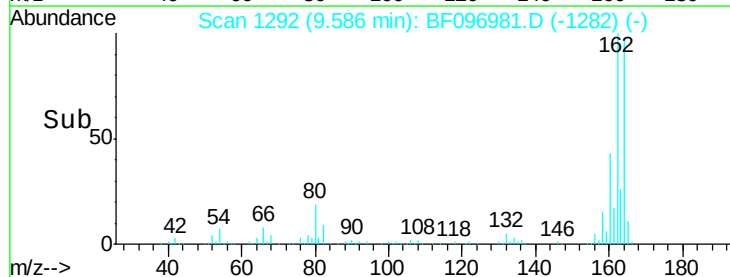
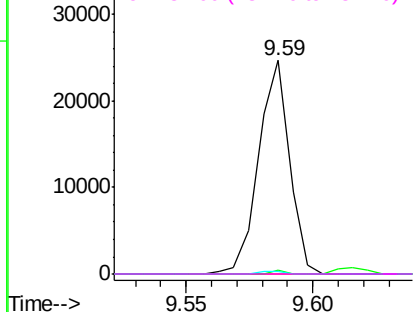


Abundance Ion 165.00 (164.70 to 165.70): E

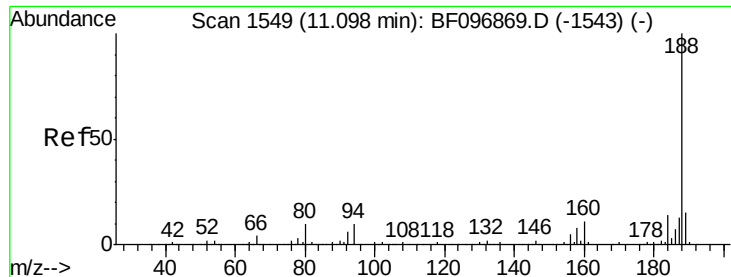
Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0

Ion 182.00 (181.70 to 182.70): E



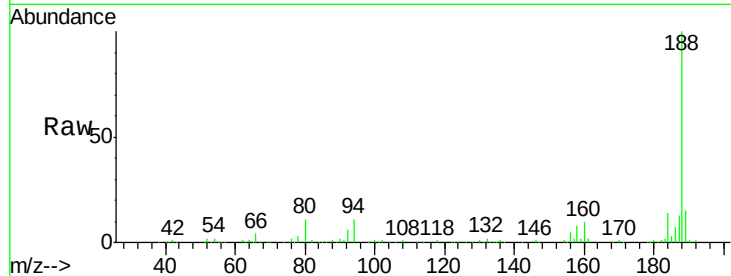




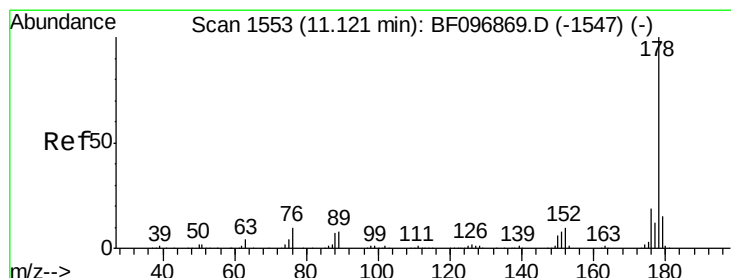
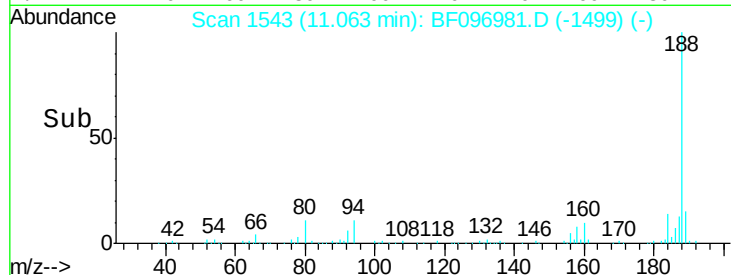
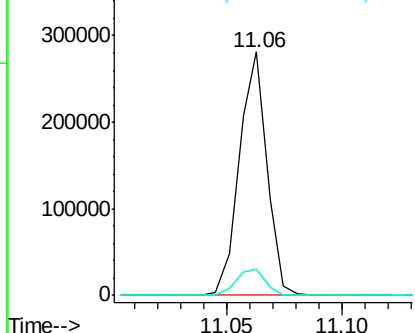
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.06 min Scan# 1543  
Delta R.T. -0.04 min  
Lab File: BF096981.D  
Acq: 22 Jul 2017 10:09

Instrument :  
BNA\_F  
ClientSampleId :  
E2-M5-WSW

Tot Ion:188 Resp: 234114  
Ion Ratio Lower Upper  
188 100  
94 10.7 9.4 14.2  
80 10.6 10.2 15.2

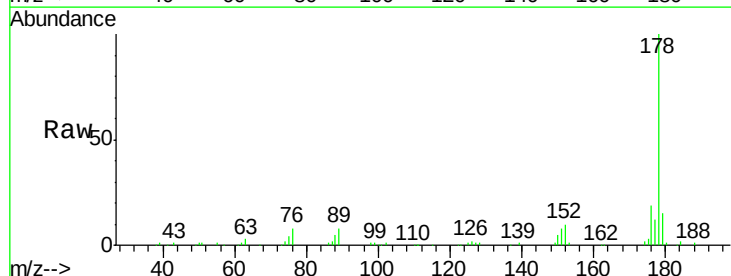


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0

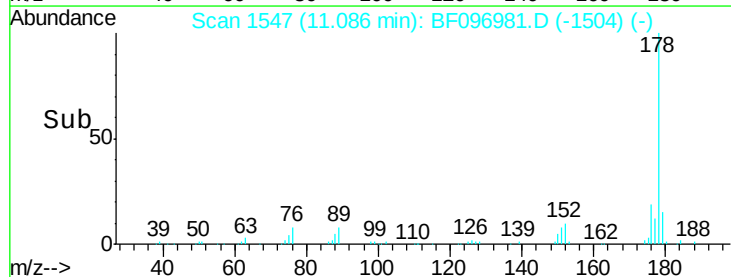
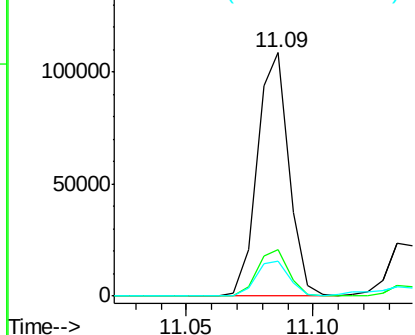


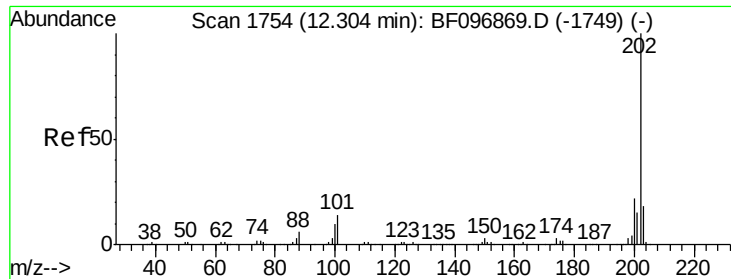
#70  
Phenanthrene  
Concen: 7.42 ng  
RT: 11.09 min Scan# 1547  
Delta R.T. -0.05 min  
Lab File: BF096981.D  
Acq: 22 Jul 2017 10:09

Tgt Ion:178 Resp: 94431  
Ion Ratio Lower Upper  
178 100  
176 19.2 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: 8.33 ng

RT: 12.27 min Scan# 1748

Delta R.T. -0.05 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

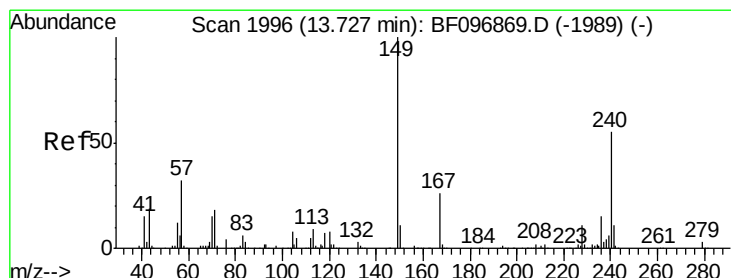
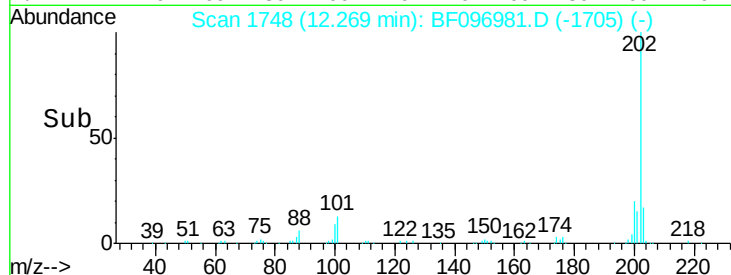
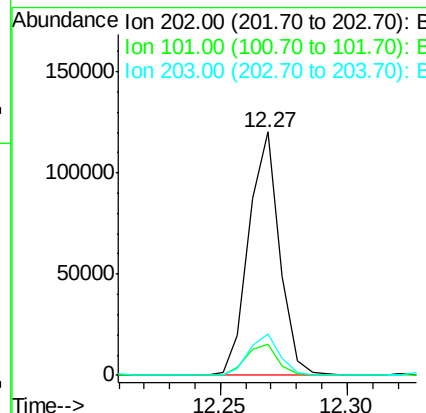
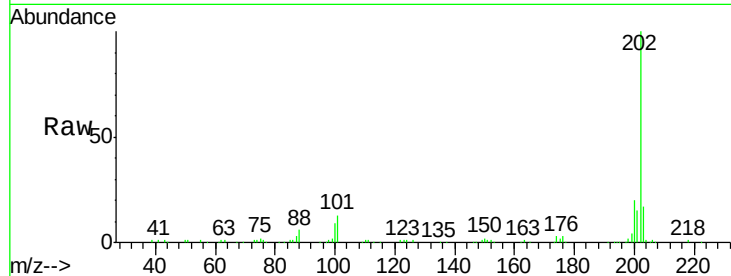
Instrument :

BNA\_F

ClientSampleId :

E2-M5-WSW

|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 202   | Resp: | 101470 |
| Ion      | Ratio | Lower | Upper  |
| 202      | 100   |       |        |
| 101      | 12.9  | 0.0   | 33.2   |
| 203      | 16.9  | 0.0   | 38.1   |



#75

Chrysene-d12

Concen: 20.00 ng

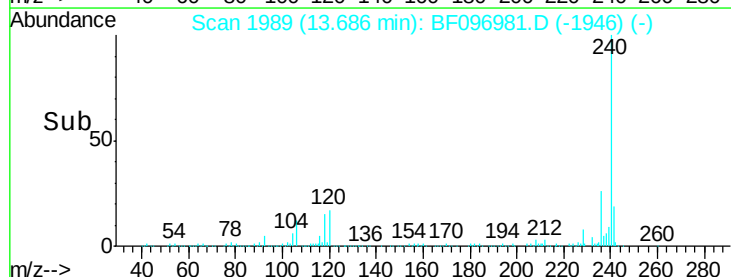
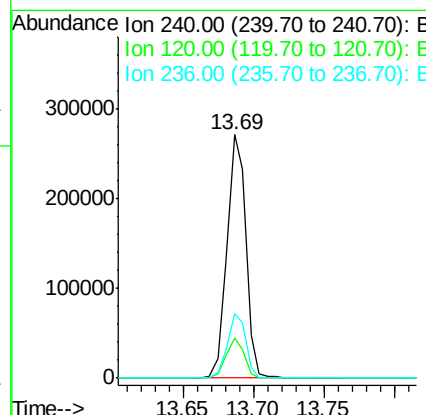
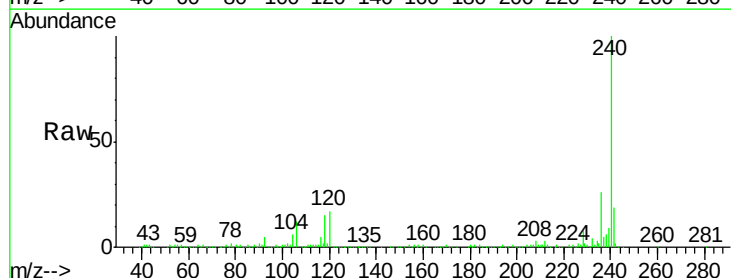
RT: 13.69 min Scan# 1989

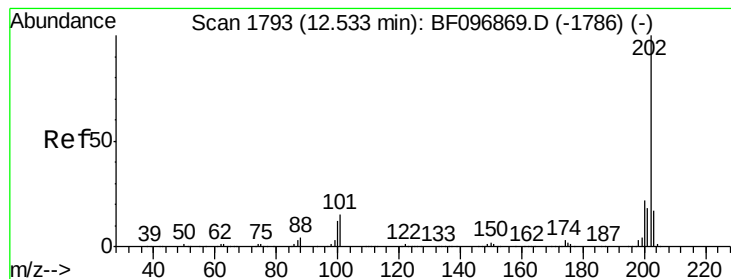
Delta R.T. -0.05 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 240   | Resp: | 252769 |
| Ion      | Ratio | Lower | Upper  |
| 240      | 100   |       |        |
| 120      | 16.5  | 5.8   | 8.8#   |
| 236      | 26.4  | 20.5  | 30.7   |





#77

Pvrene

Concen: 4.00 ng

RT: 12.49 min Scan# 1786

Delta R.T. -0.05 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

Instrument :

BNA\_F

ClientSampleId :

E2-M5-WSW

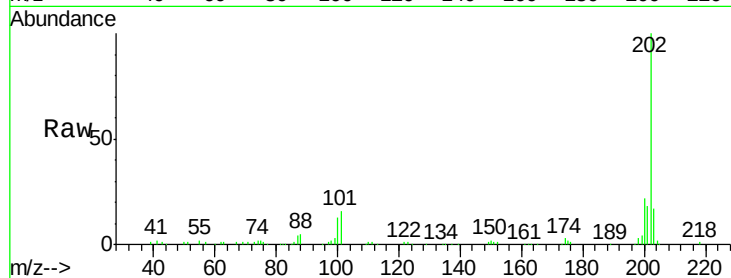
Tot Ion:202 Resp: 91652

Ion Ratio Lower Upper

202 100

200 21.7 17.6 26.4

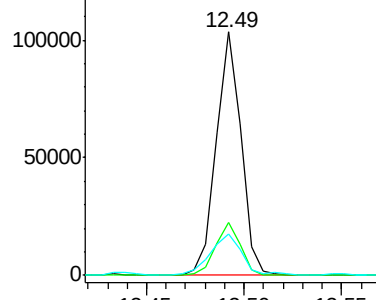
203 17.1 14.4 21.6



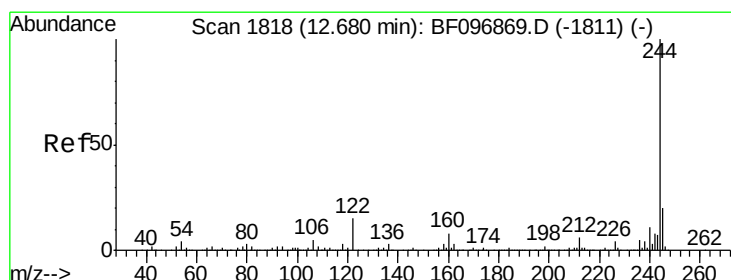
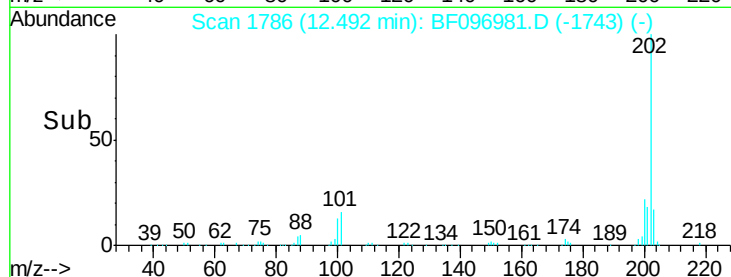
Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



Time-->



#78

Terphenyl-d14

Concen: 2.87 ng

RT: 12.64 min Scan# 1811

Delta R.T. -0.05 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

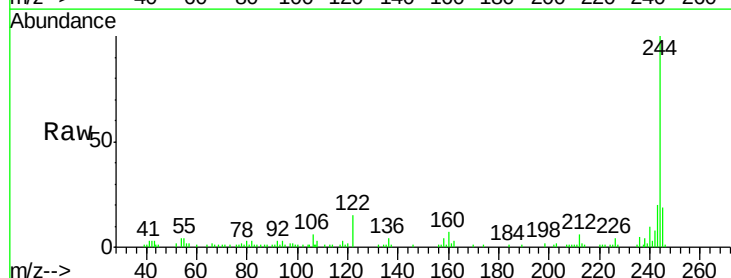
Tgt Ion:244 Resp: 41814

Ion Ratio Lower Upper

244 100

212 6.3 6.0 9.0

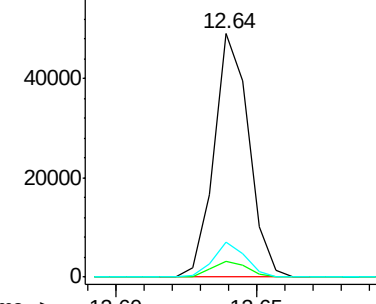
122 14.6 10.3 15.5



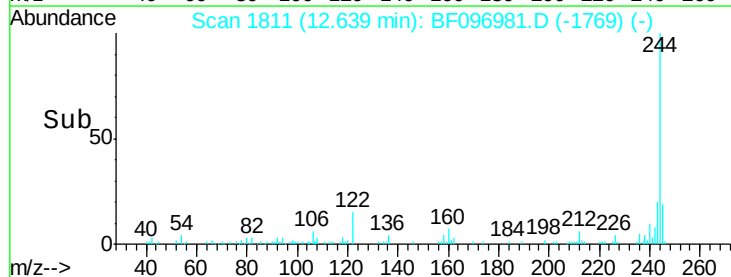
Abundance Ion 244.00 (243.70 to 244.70): E

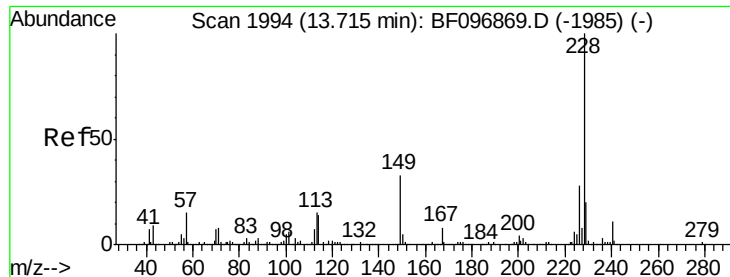
Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



Time-->





#80

Benzo(a)anthracene

Concen: 3.58 ng

RT: 13.68 min Scan# 1988

Delta R.T. -0.04 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

Instrument :

BNA\_F

ClientSampleId :

E2-M5-WSW

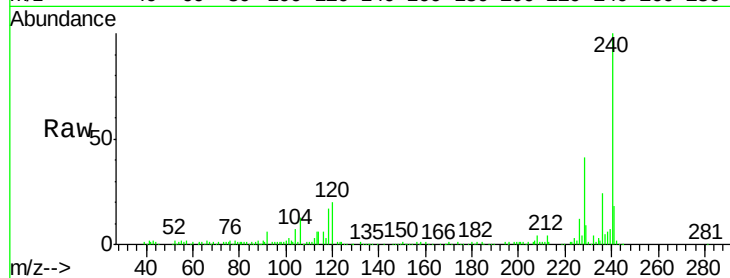
Tot Ion:228 Resp: 56352

Ion Ratio Lower Upper

228 100

226 27.8 22.6 33.8

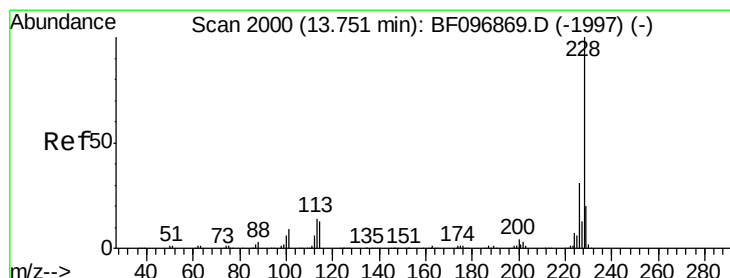
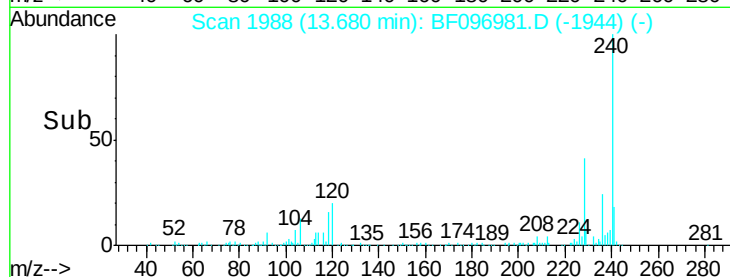
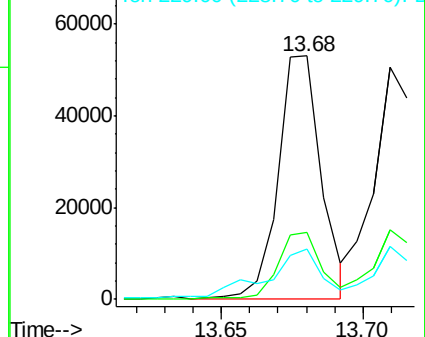
229 20.7 16.3 24.5



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: 3.31 ng

RT: 13.71 min Scan# 1993

Delta R.T. -0.05 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

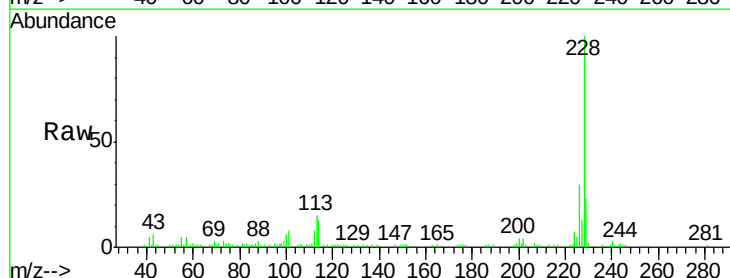
Tgt Ion:228 Resp: 51380

Ion Ratio Lower Upper

228 100

226 29.8 24.9 37.3

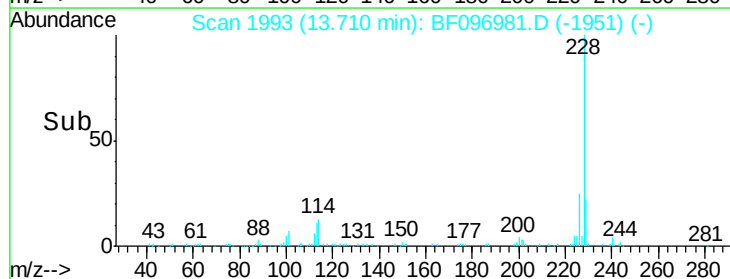
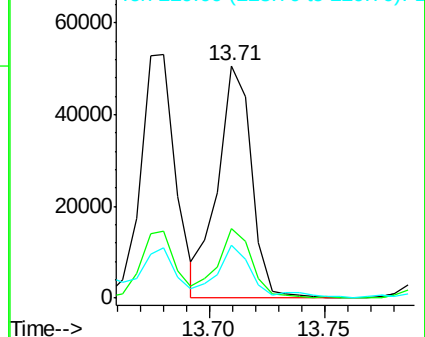
229 22.6 15.8 23.6

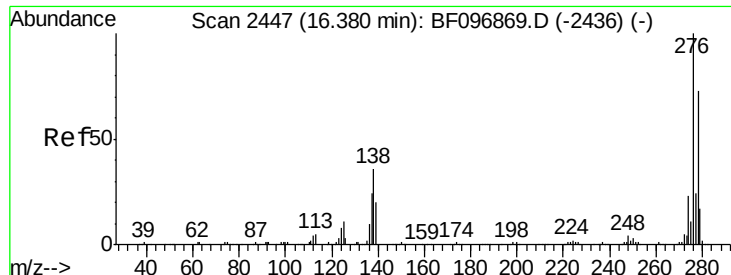


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E

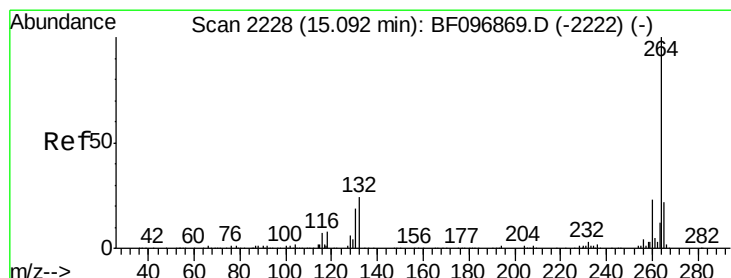
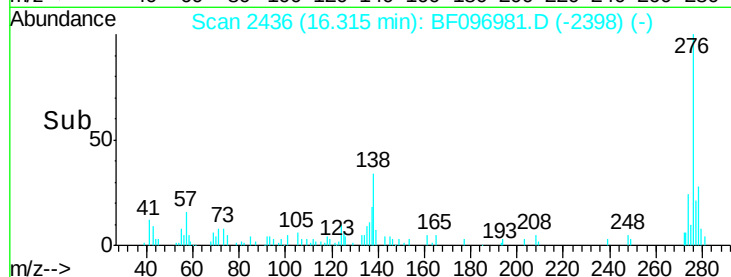
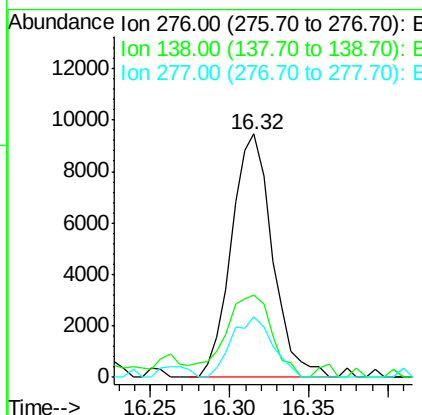
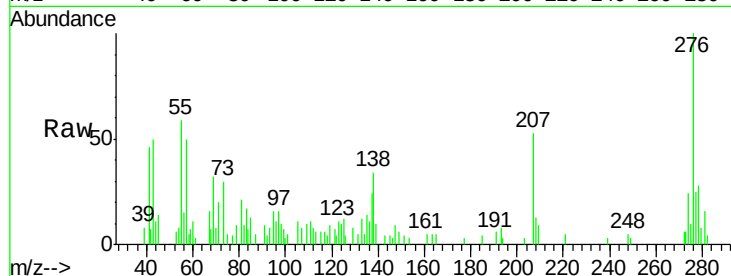




#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 4.47 ng  
 RT: 16.32 min Scan# 2436  
 Delta R.T. -0.08 min  
 Lab File: BF096981.D  
 Acq: 22 Jul 2017 10:09

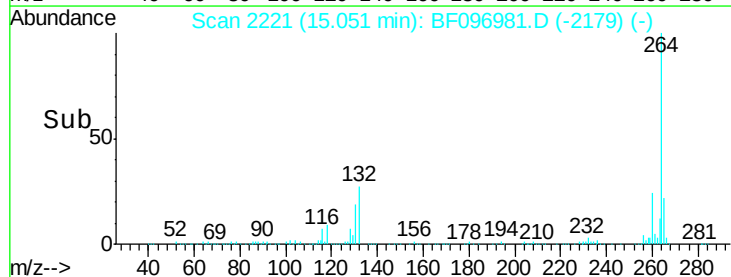
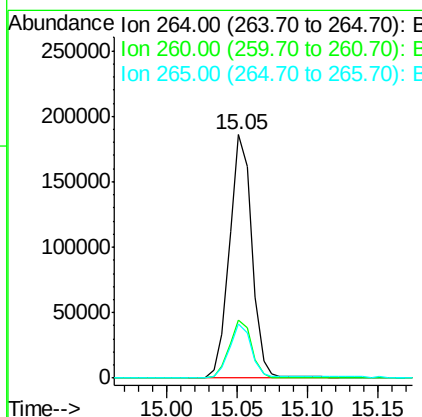
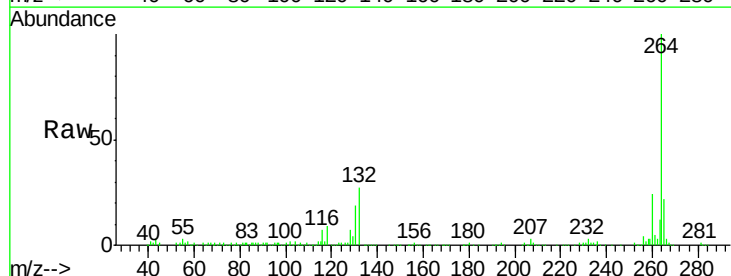
Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-M5-WSW

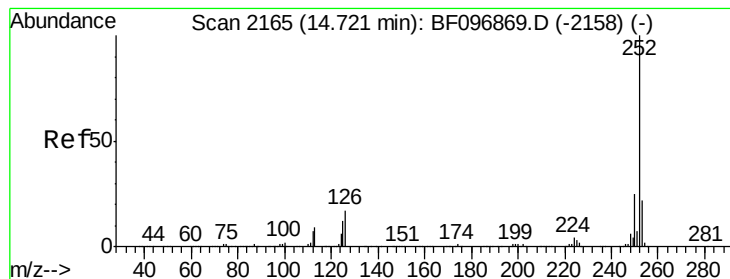
Tot Ion:276 Resp: 16978  
 Ion Ratio Lower Upper  
 276 100  
 138 38.9 27.8 41.6  
 277 24.7 20.2 30.4



#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 15.05 min Scan# 2221  
 Delta R.T. -0.05 min  
 Lab File: BF096981.D  
 Acq: 22 Jul 2017 10:09

Tgt Ion:264 Resp: 206489  
 Ion Ratio Lower Upper  
 264 100  
 260 23.7 19.5 29.3  
 265 22.2 17.2 25.8





#87

Benzo(b)fluoranthene

Concen: 5.84 ng

RT: 14.68 min Scan# 2158

Delta R.T. -0.05 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

Instrument :

BNA\_F

ClientSampleId :

E2-M5-WSW

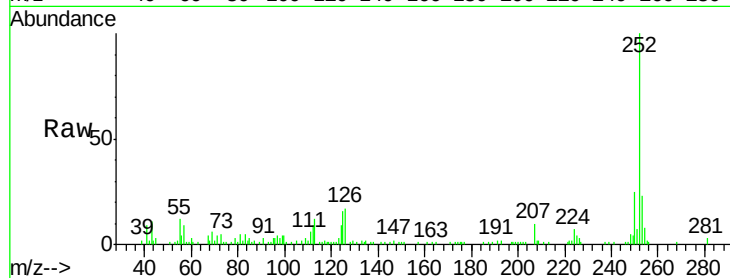
Tot Ion:252 Resp: 72754

Ion Ratio Lower Upper

252 100

253 22.9 18.1 27.1

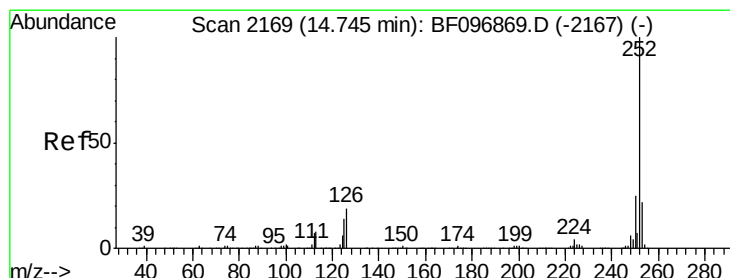
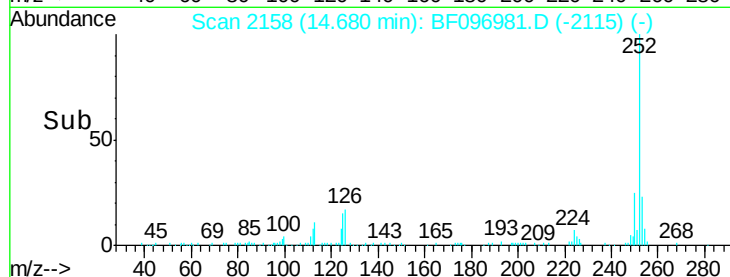
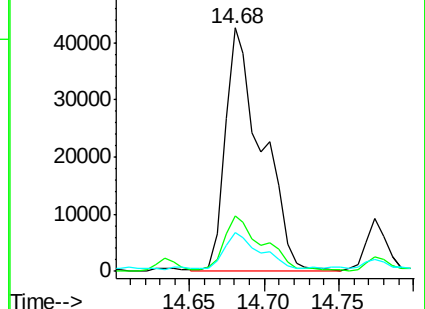
125 15.8 9.8 14.8#



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: 6.17 ng

RT: 14.68 min Scan# 2158

Delta R.T. -0.08 min

Lab File: BF096981.D

Acq: 22 Jul 2017 10:09

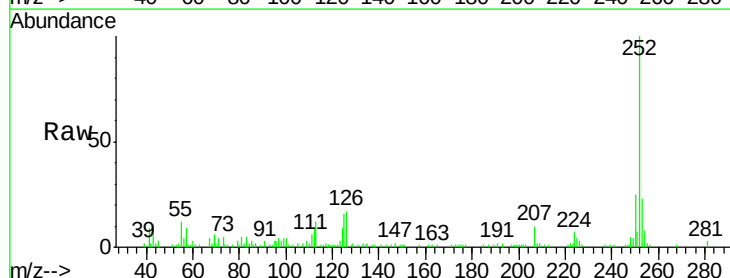
Tgt Ion:252 Resp: 72754

Ion Ratio Lower Upper

252 100

253 22.9 18.4 27.6

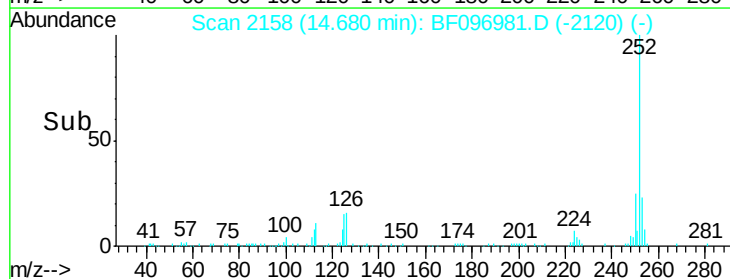
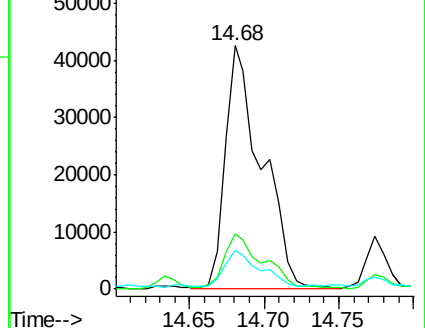
125 15.8 13.1 19.7

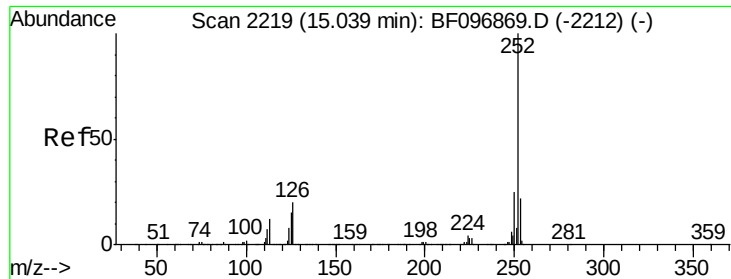


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#89

Benzo(a)pyrene

Concen: 3.31 ng

RT: 15.00 min Scan# 2212

Delta R.T. -0.05 min

Lab File: BF096981.D

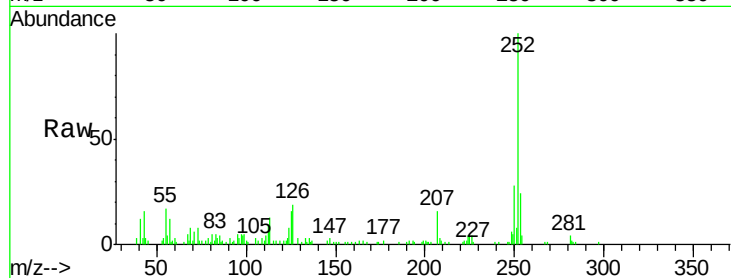
Acq: 22 Jul 2017 10:09

Instrument :

BNA\_F

ClientSampleId :

E2-M5-WSW



|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 252   | Resp: | 37785 |
| Ion      | Ratio | Lower | Upper |
| 252      | 100   |       |       |
| 253      | 23.8  | 17.5  | 26.3  |
| 125      | 16.5  | 11.0  | 16.4# |

