

Data Path : Z:\HPCHEM1\BNA F\DATA\BF071317\  
 Data File : BF096755.D  
 Acq On : 14 Jul 2017 4:09  
 Operator : SJ/JU  
 Sample : I4172-02  
 Misc :  
 ALS Vial : 35 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-P5-BASE

Quant Time: Jul 14 04:51:38 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF071317.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jul 13 14:49:34 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.64  | 152  | 120668   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.92  | 136  | 439780   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.67  | 164  | 159756   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.14 | 188  | 254417   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.78 | 240  | 216391   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.16 | 264  | 155581   | 20.00 | ng    | 0.00     |

|                             |       |     |        |       |    |      |
|-----------------------------|-------|-----|--------|-------|----|------|
| System Monitoring Compounds |       |     |        |       |    |      |
| 5) 2-Fluorophenol           | 5.25  | 112 | 726556 | 90.53 | ng | 0.02 |
| 7) Phenol-d6                | 6.28  | 99  | 865960 | 89.92 | ng | 0.00 |
| 23) Nitrobenzene-d5         | 7.20  | 82  | 467419 | 65.83 | ng | 0.00 |
| 41) 2,4,6-Tribromophenol    | 10.46 | 330 | 118377 | 86.81 | ng | 0.00 |
| 44) 2-Fluorobiphenyl        | 9.00  | 172 | 652351 | 64.51 | ng | 0.00 |
| 78) Terphenyl-d14           | 12.73 | 244 | 464128 | 37.20 | ng | 0.00 |

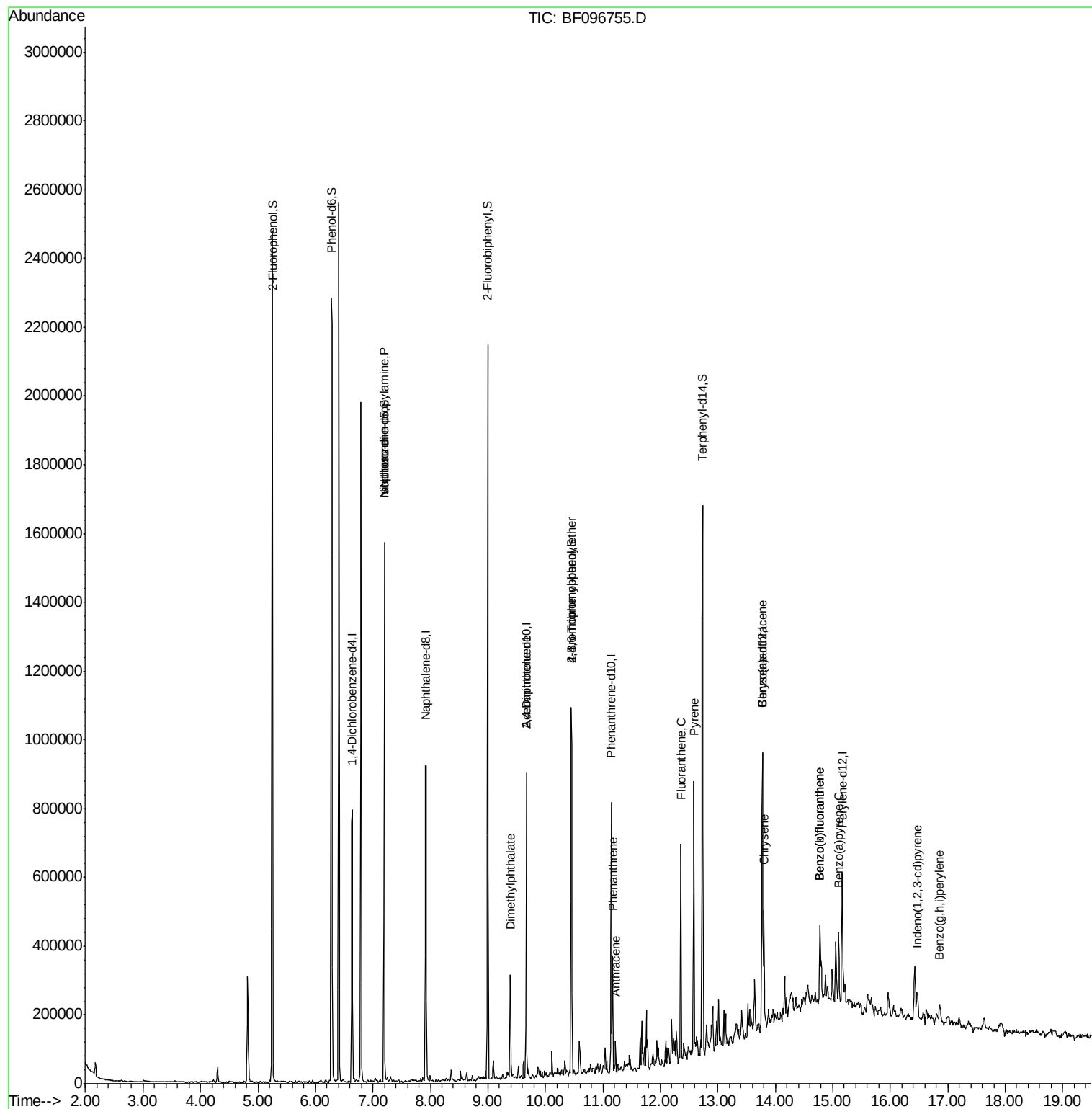
|                                |       |     |        |       |    |        |
|--------------------------------|-------|-----|--------|-------|----|--------|
| Target Compounds               |       |     |        |       |    | Qvalue |
| 19) n-Nitroso-di-n-propylamine | 7.20  | 70  | 62433  | 10.76 | ng | # 87   |
| 25) Isophorone                 | 7.20  | 82  | 453523 | 34.34 | ng | # 67   |
| 49) Dimethylphthalate          | 9.39  | 163 | 112700 | 9.37  | ng | 99     |
| 56) 2,4-Dinitrotoluene         | 9.67  | 165 | 20620  | 6.16  | ng | # 34   |
| 66) 4-Bromophenyl-phenylether  | 10.45 | 248 | 7552   | 2.91  | ng | # 1    |
| 70) Phenanthrene               | 11.17 | 178 | 109645 | 7.93  | ng | 99     |
| 71) Anthracene                 | 11.22 | 178 | 29309  | 2.10  | ng | 98     |
| 74) Fluoranthene               | 12.36 | 202 | 243694 | 18.40 | ng | 98     |
| 77) Pyrene                     | 12.58 | 202 | 309448 | 15.76 | ng | 99     |
| 80) Benzo(a)anthracene         | 13.77 | 228 | 134850 | 10.00 | ng | 96     |
| 82) Chrysene                   | 13.80 | 228 | 138778 | 10.46 | ng | 98     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.47 | 276 | 40533  | 6.49  | ng | 96     |
| 87) Benzo(b)fluoranthene       | 14.78 | 252 | 149166 | 15.90 | ng | # 97   |
| 88) Benzo(k)fluoranthene       | 14.78 | 252 | 149166 | 16.79 | ng | 99     |
| 89) Benzo(a)pyrene             | 15.10 | 252 | 80988  | 9.41  | ng | 98     |
| 91) Benzo(g,h,i)perylene       | 16.86 | 276 | 40052  | 4.72  | ng | 98     |

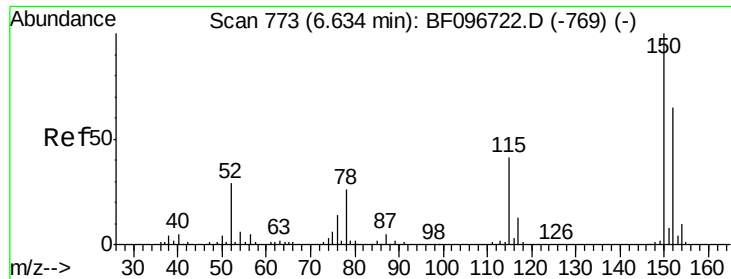
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\DATA\BF071317\  
Data File : BF096755.D  
Acq On : 14 Jul 2017 4:09  
Operator : SJ/JU  
Sample : I4172-02  
Misc :  
ALS Vial : 35 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :  
E2-P5-BASE

Quant Time: Jul 14 04:51:38 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF071317.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jul 13 14:49:34 2017  
Response via : Initial Calibration



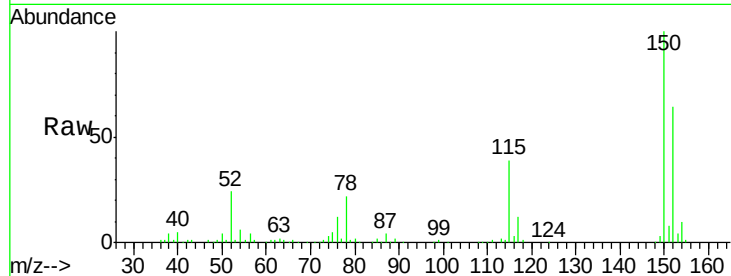


#1

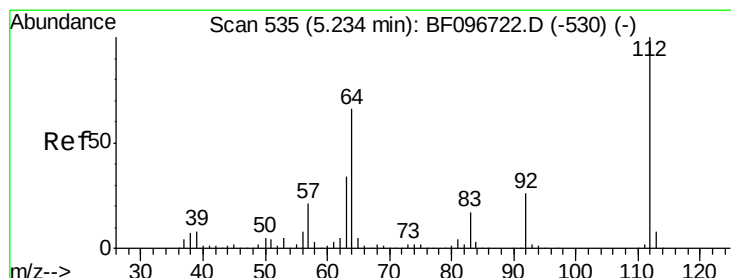
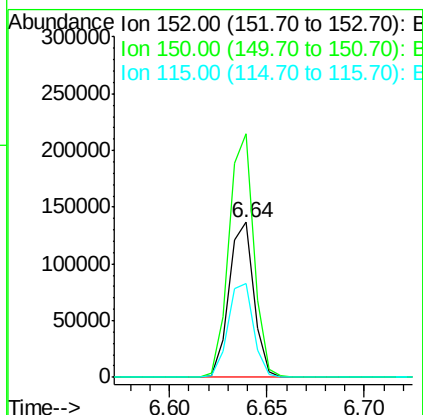
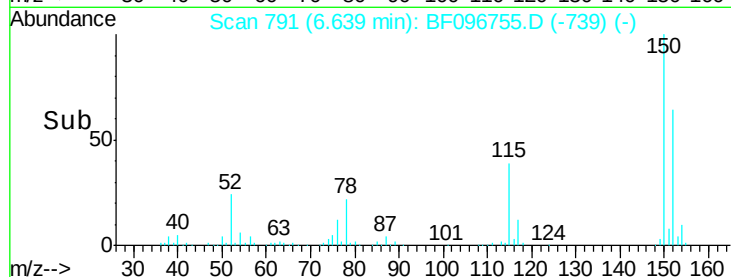
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.64 min Scan# 791  
Delta R.T. 0.01 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

Instrument :  
BNA\_F  
ClientSampleId :  
E2-P5-BASE

Tot Ion:152 Resp: 120668  
Ion Ratio Lower Upper  
152 100  
150 157.2 126.2 189.2  
115 60.7 52.2 78.2



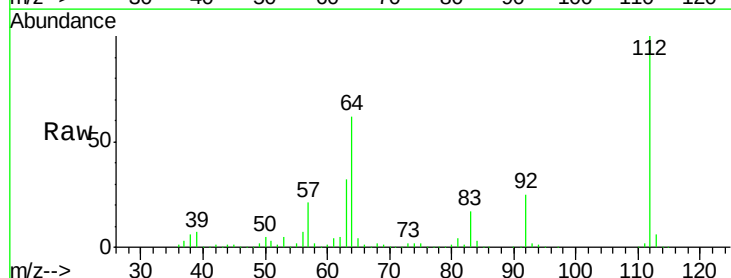
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



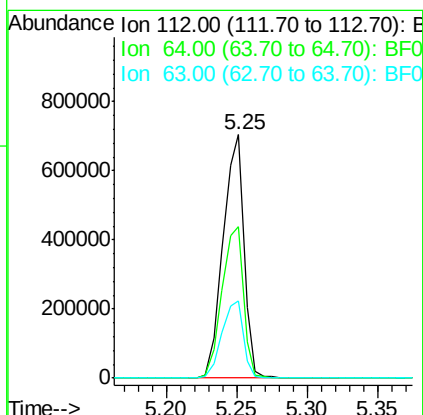
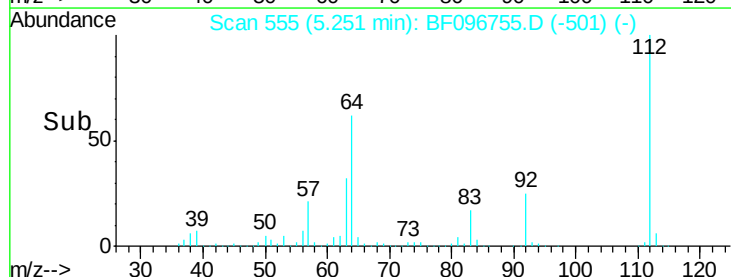
#5

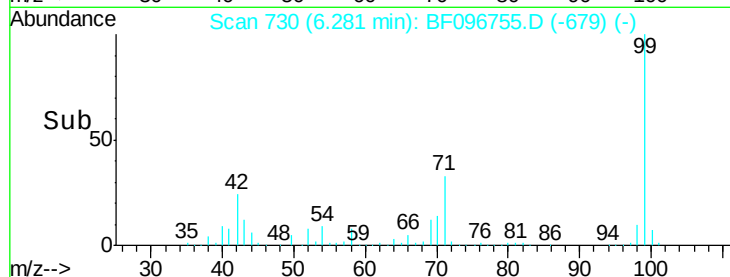
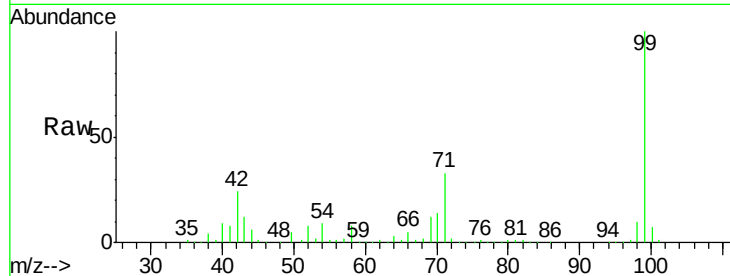
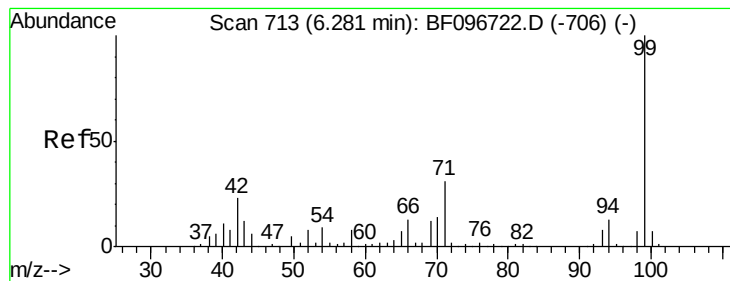
2-Fluorophenol  
Concen: 90.53 ng  
RT: 5.25 min Scan# 555  
Delta R.T. 0.02 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

Tgt Ion:112 Resp: 726556  
Ion Ratio Lower Upper  
112 100  
64 62.3 46.0 69.0  
63 31.8 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: 89.92 ng

RT: 6.28 min Scan# 730

Delta R.T. -0.00 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Instrument :

BNA\_F

ClientSampleId :

E2-P5-BASE

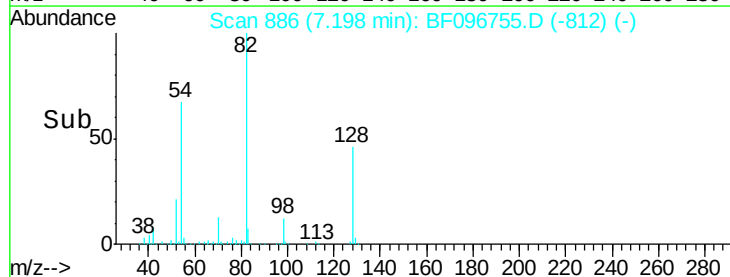
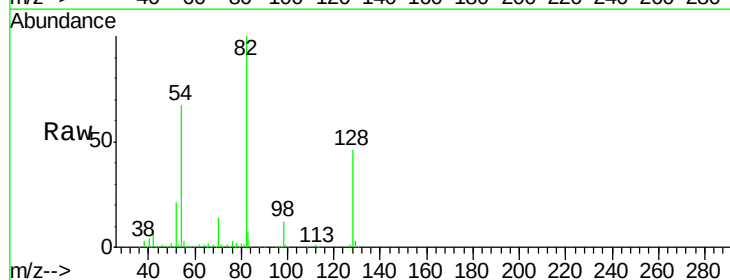
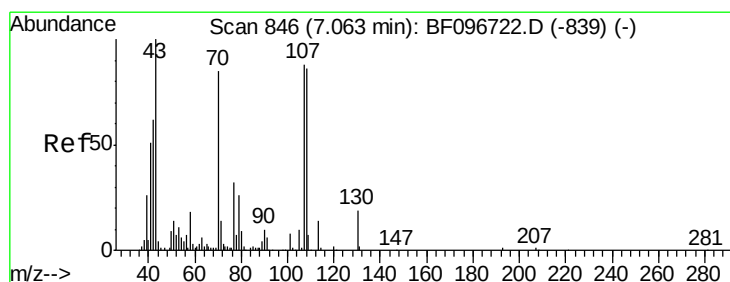
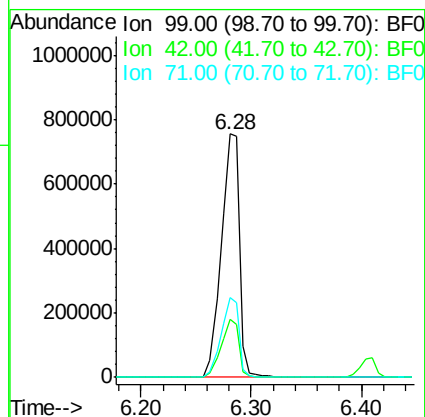
Tot Ion: 99 Resp: 865960

Ion Ratio Lower Upper

99 100

42 23.7 13.5 20.3#

71 33.0 24.5 36.7



#19

n-Nitroso-di-n-propylamine

Concen: 10.76 ng

RT: 7.20 min Scan# 886

Delta R.T. 0.14 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Tgt Ion: 70 Resp: 62433

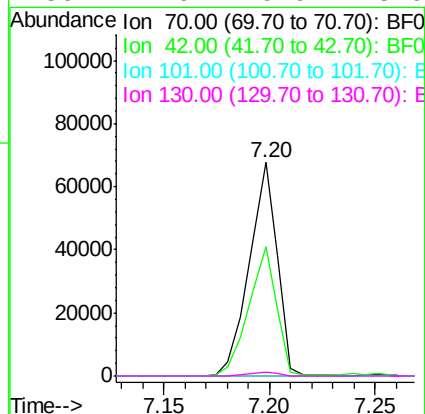
Ion Ratio Lower Upper

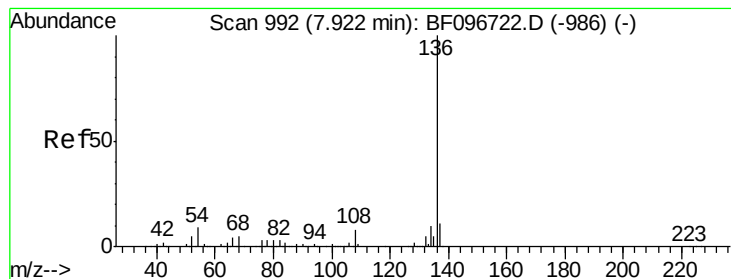
70 100

42 60.4 47.2 70.8

101 0.0 7.2 10.8#

130 1.9 15.9 23.9#





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.92 min Scan# 1009

Delta R.T. -0.00 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Instrument :

BNA\_F

ClientSampleId :

E2-P5-BASE

Tot Ion:136 Resp: 439780

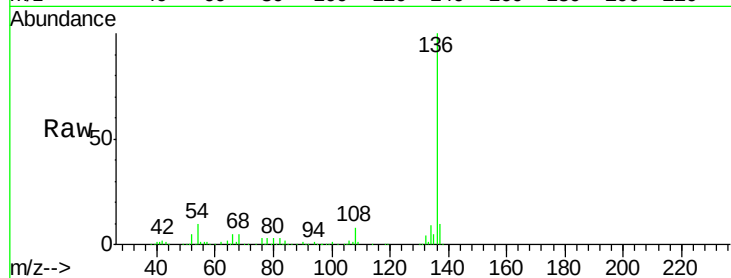
Ion Ratio Lower Upper

136 100

137 10.2 8.5 12.7

54 9.7 4.9 7.3#

68 4.8 4.1 6.1

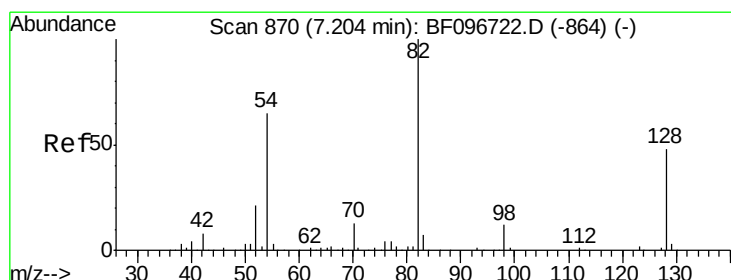
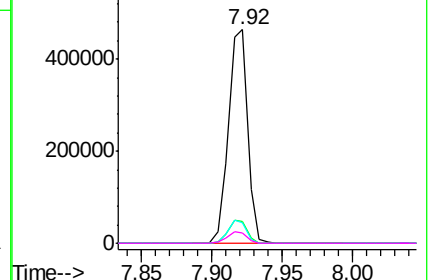
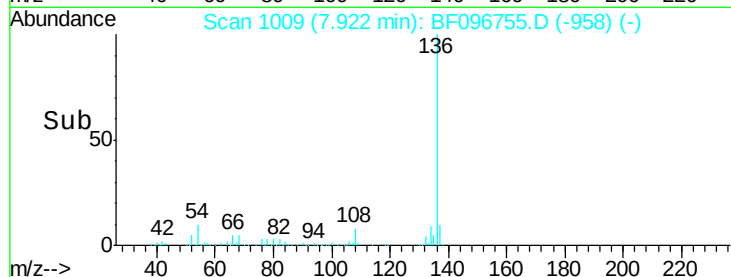


Abundance Ion 136.00 (135.70 to 136.70): E

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: 65.83 ng

RT: 7.20 min Scan# 886

Delta R.T. -0.01 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

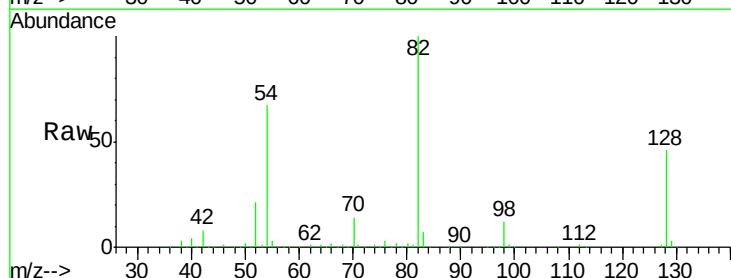
Tgt Ion: 82 Resp: 467419

Ion Ratio Lower Upper

82 100

128 45.7 34.0 51.0

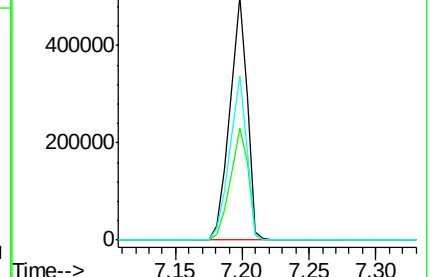
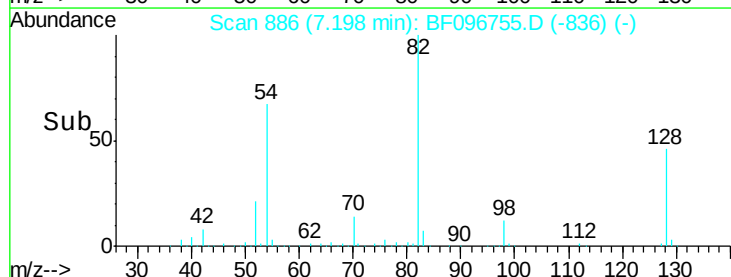
54 67.4 42.2 63.2#

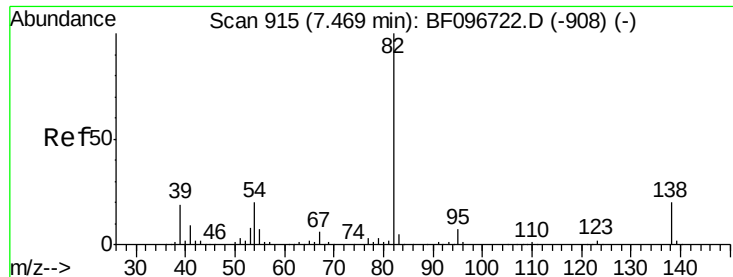


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0





#25

Isophorone

Concen: 34.34 ng

RT: 7.20 min Scan# 886

Delta R.T. -0.27 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Instrument :

BNA\_F

ClientSampleId :

E2-P5-BASE

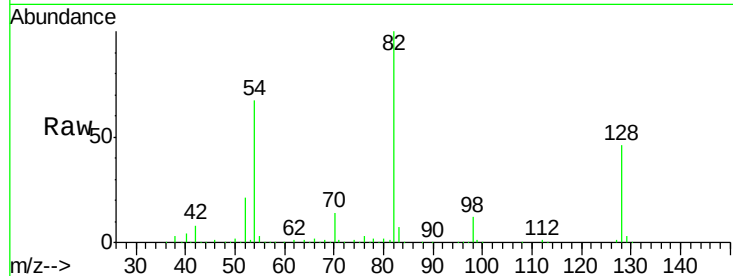
Tot Ion: 82 Resp: 453523

Ion Ratio Lower Upper

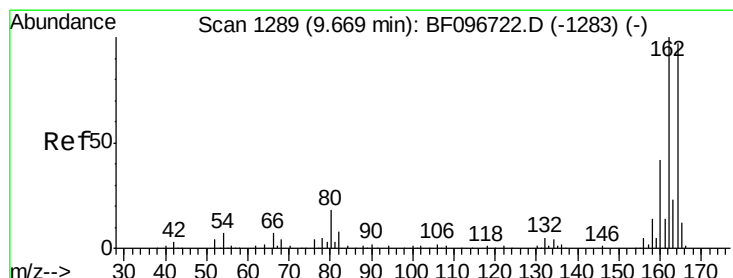
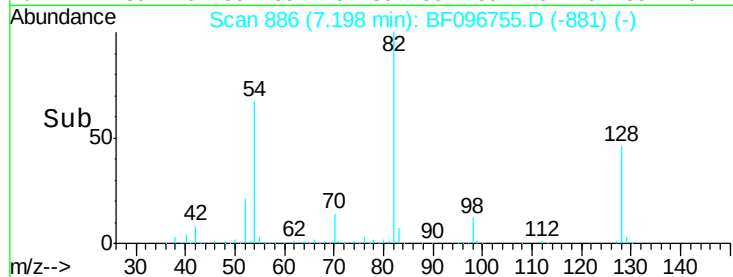
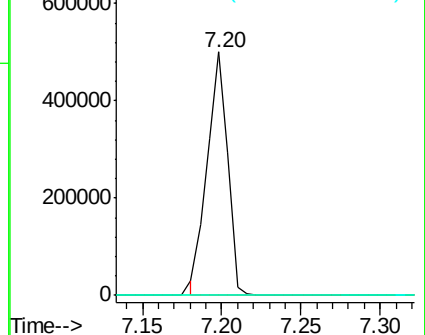
82 100

95 0.1 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: 9.67 min Scan# 1306

Delta R.T. -0.00 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

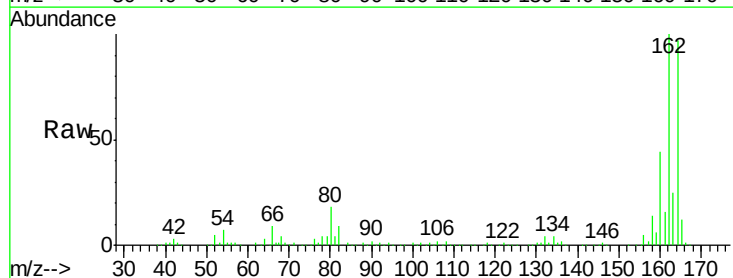
Tgt Ion:164 Resp: 159756

Ion Ratio Lower Upper

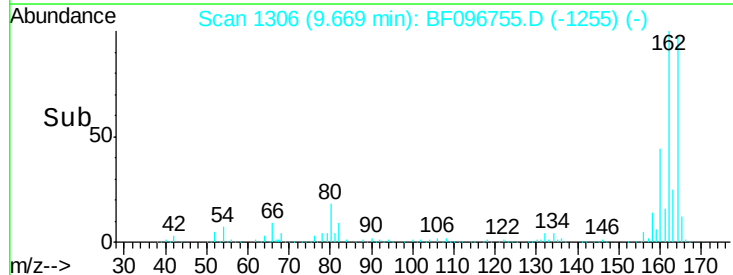
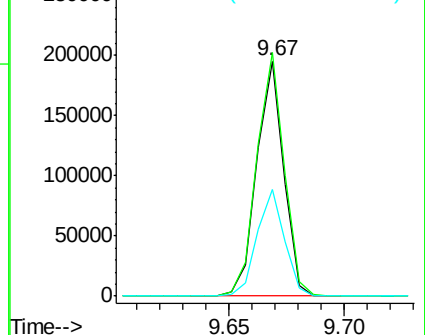
164 100

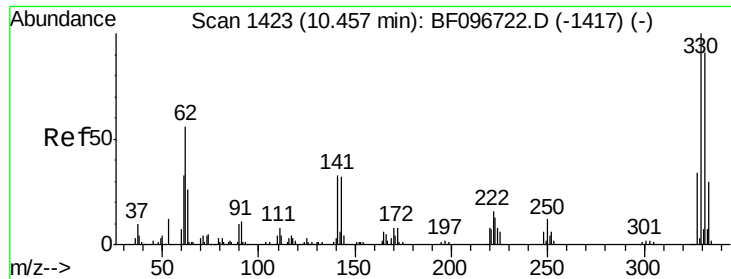
162 103.6 82.6 123.8

160 45.4 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: 86.81 ng

RT: 10.46 min Scan# 1440

Delta R.T. -0.00 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Instrument :

BNA\_F

ClientSampleId :

E2-P5-BASE

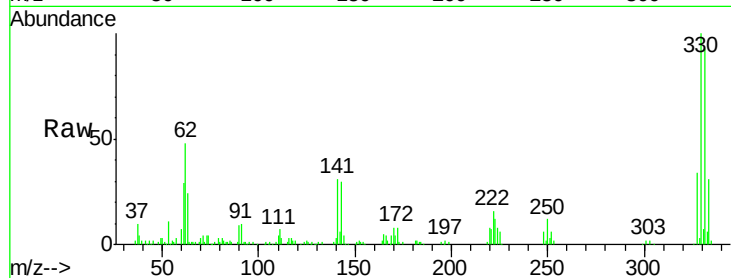
Tot Ion:330 Resp: 118377

Ion Ratio Lower Upper

330 100

332 96.2 76.6 115.0

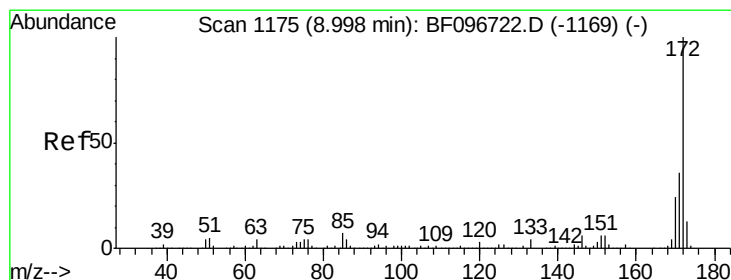
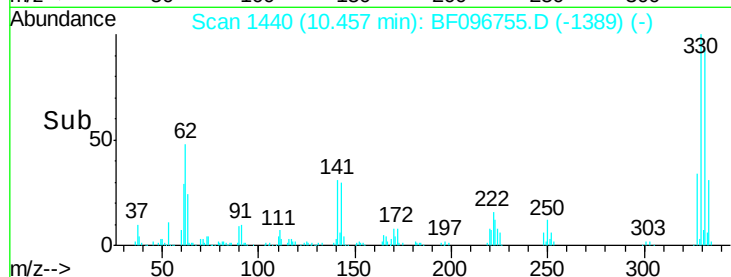
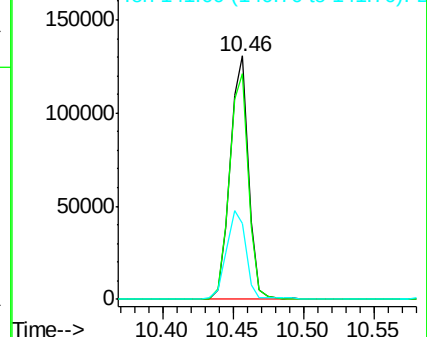
141 40.1 31.4 47.2



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: 64.51 ng

RT: 9.00 min Scan# 1192

Delta R.T. -0.00 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

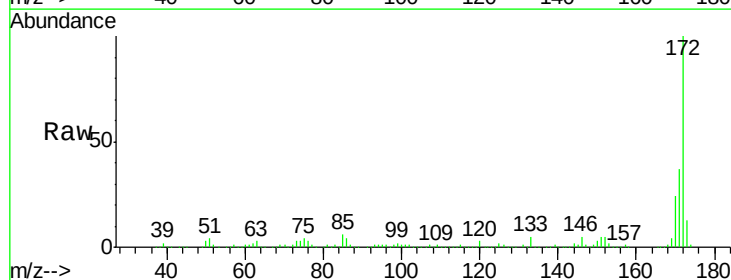
Tgt Ion:172 Resp: 652351

Ion Ratio Lower Upper

172 100

171 36.5 29.6 44.4

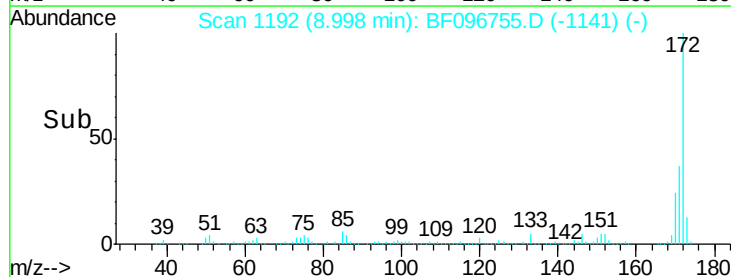
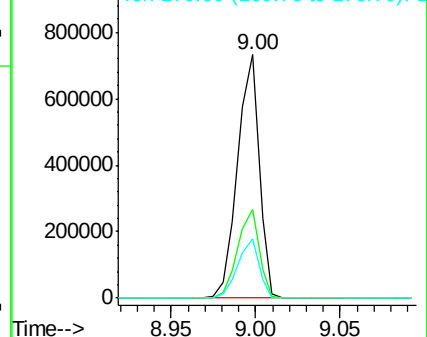
170 24.2 19.8 29.8

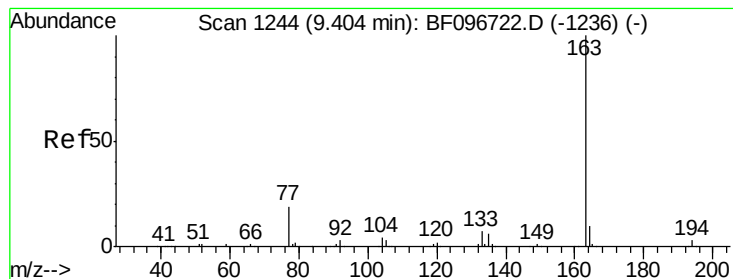


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





#49

Dimethylphthalate

Concen: 9.37 ng

RT: 9.39 min Scan# 1259

Delta R.T. -0.01 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Instrument :

BNA\_F

ClientSampleId :

E2-P5-BASE

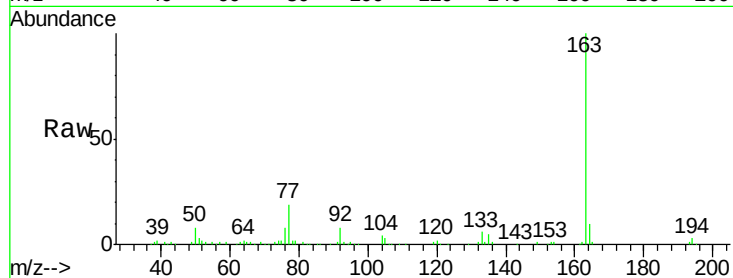
Tot Ion:163 Resp: 112700

Ion Ratio Lower Upper

163 100

194 3.5 2.6 4.0

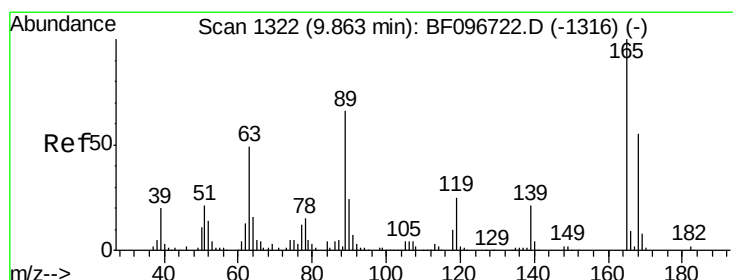
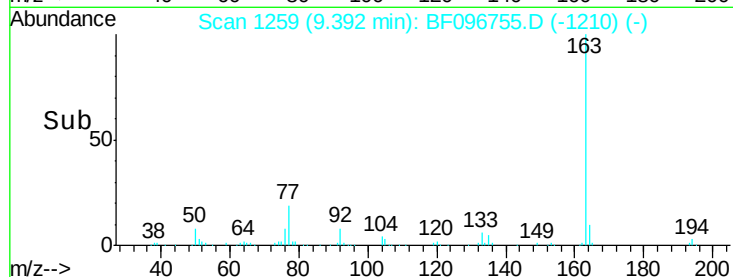
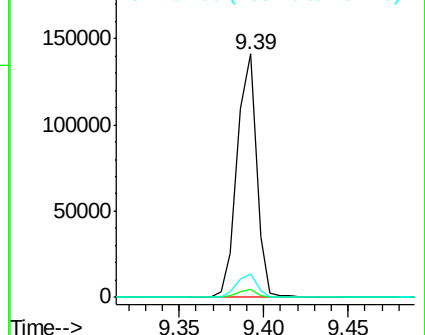
164 9.9 8.4 12.6



Abundance Ion 163.00 (162.70 to 163.70): E

Ion 194.00 (193.70 to 194.70): E

Ion 164.00 (163.70 to 164.70): E



#56

2,4-Dinitrotoluene

Concen: 6.16 ng

RT: 9.67 min Scan# 1306

Delta R.T. -0.19 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Tgt Ion:165 Resp: 20620

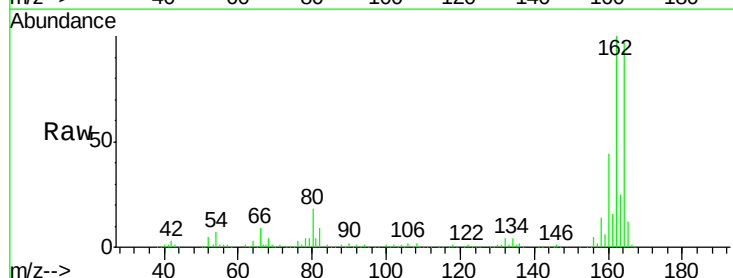
Ion Ratio Lower Upper

165 100

63 2.0 25.4 38.0#

89 2.0 46.4 69.6#

182 0.0 1.8 2.6#

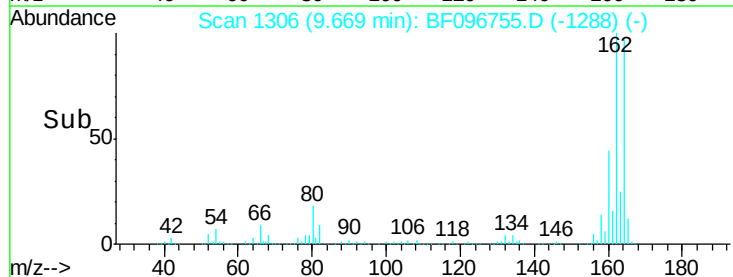
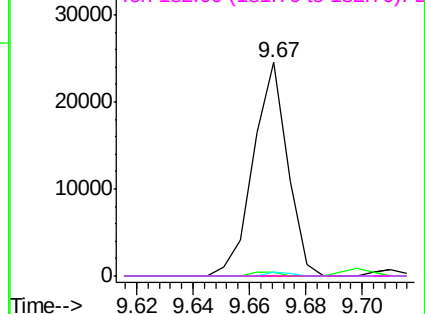


Abundance Ion 165.00 (164.70 to 165.70): E

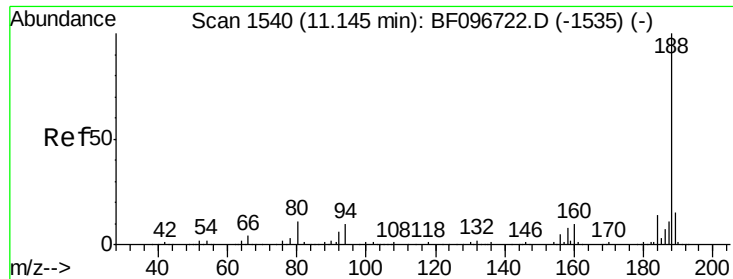
Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0

Ion 182.00 (181.70 to 182.70): E



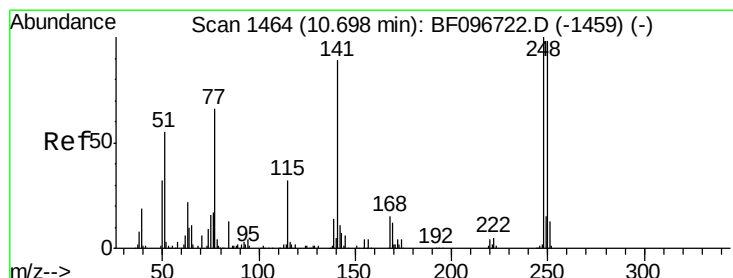
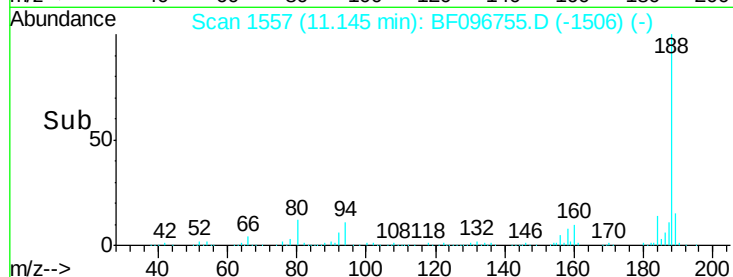
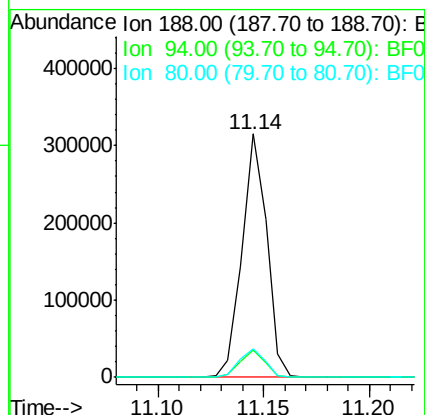
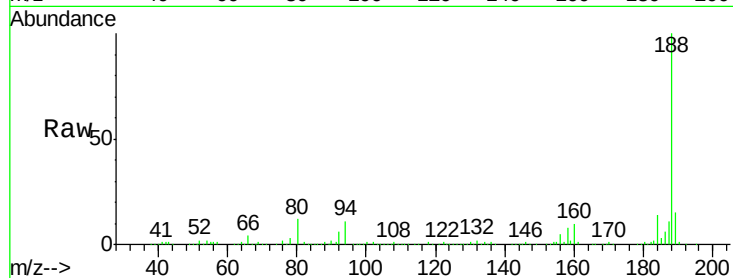




#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.14 min Scan# 1557  
Delta R.T. -0.00 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

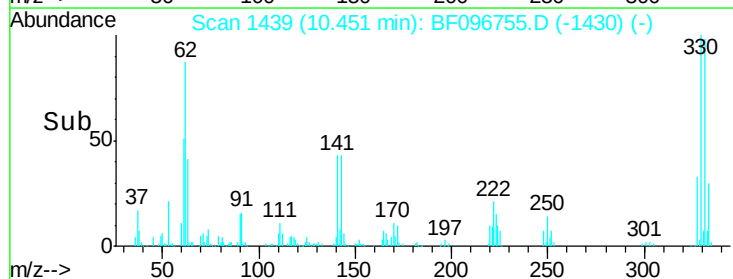
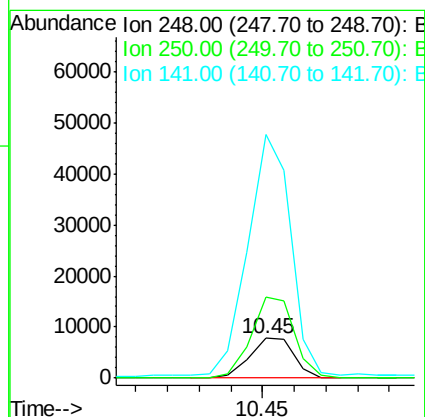
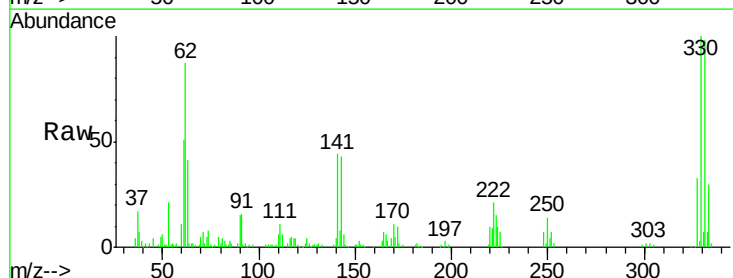
Instrument :  
BNA\_F  
ClientSampleId :  
E2-P5-BASE

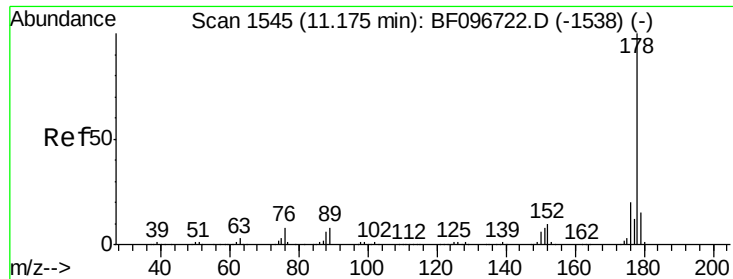
Tot Ion:188 Resp: 254417  
Ion Ratio Lower Upper  
188 100  
94 11.4 9.4 14.2  
80 12.0 10.2 15.2



#66  
4-Bromophenyl-phenylether  
Concen: 2.91 ng  
RT: 10.45 min Scan# 1439  
Delta R.T. -0.25 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

Tgt Ion:248 Resp: 7552  
Ion Ratio Lower Upper  
248 100  
250 202.3 76.8 115.2#  
141 608.8 68.6 103.0#

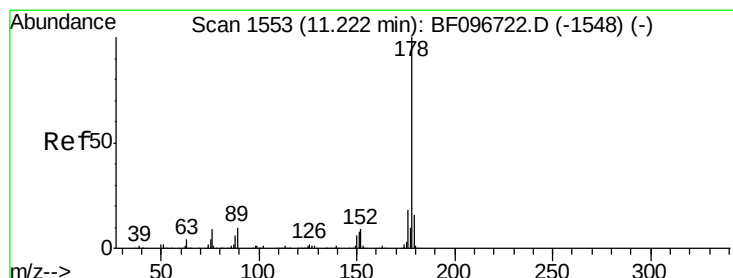
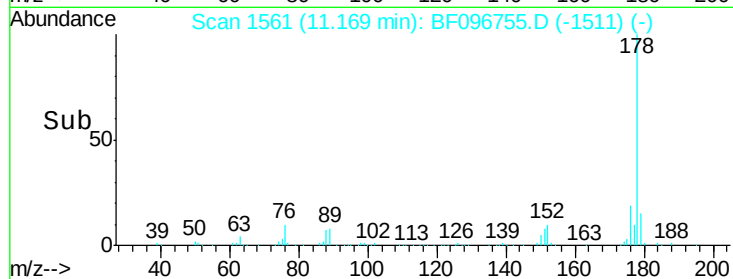
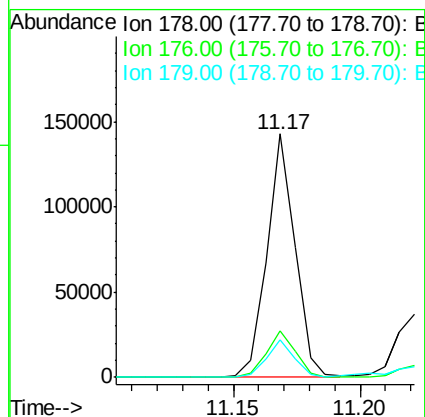
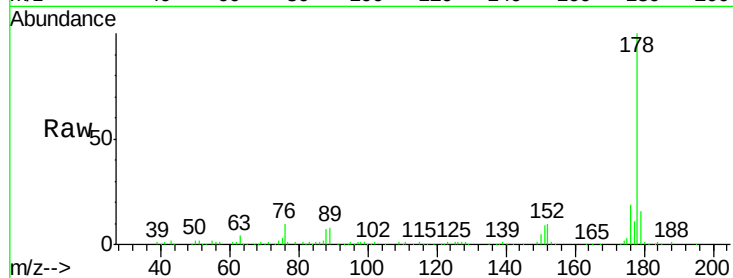




#70  
Phenanthrene  
Concen: 7.93 ng  
RT: 11.17 min Scan# 1561  
Delta R.T. -0.01 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

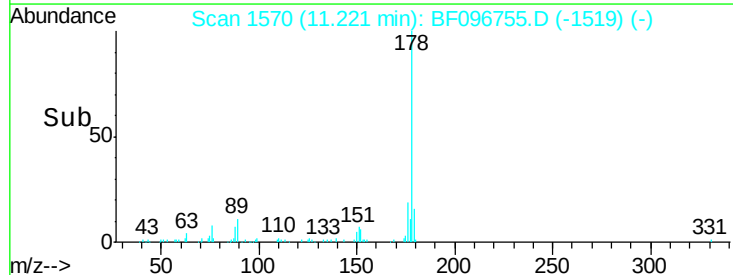
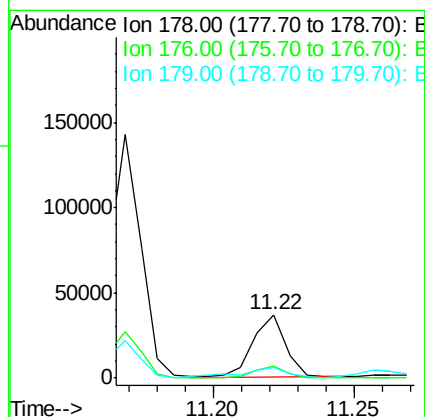
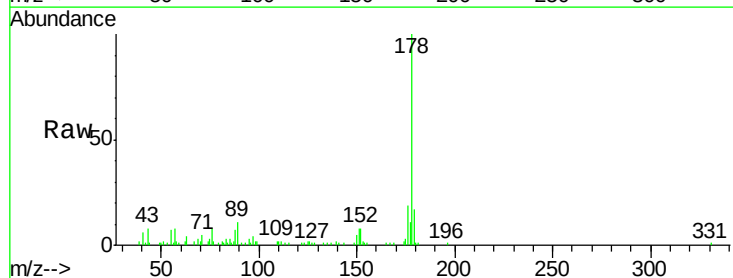
Instrument :  
BNA\_F  
ClientSampleId :  
E2-P5-BASE

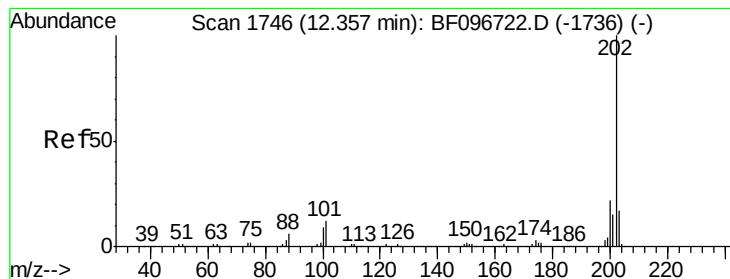
Tot Ion:178 Resp: 109645  
Ion Ratio Lower Upper  
178 100  
176 19.3 16.2 24.4  
179 15.7 12.6 19.0



#71  
Anthracene  
Concen: 2.10 ng  
RT: 11.22 min Scan# 1570  
Delta R.T. -0.00 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

Tgt Ion:178 Resp: 29309  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.8 23.8  
179 16.7 12.7 19.1





#74

Fluoranthene

Concen: 18.40 ng

RT: 12.36 min Scan# 1763

Delta R.T. -0.00 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Instrument :

BNA\_F

ClientSampleId :

E2-P5-BASE

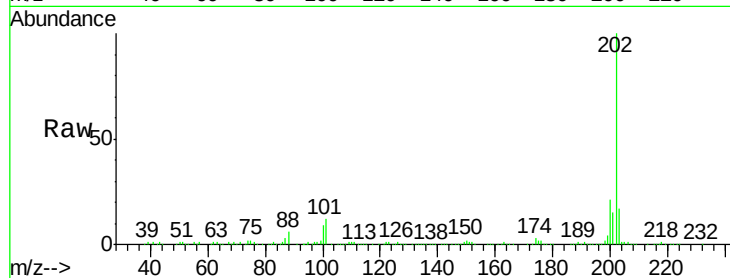
Tot Ion:202 Resp: 243694

Ion Ratio Lower Upper

202 100

101 12.5 0.0 33.2

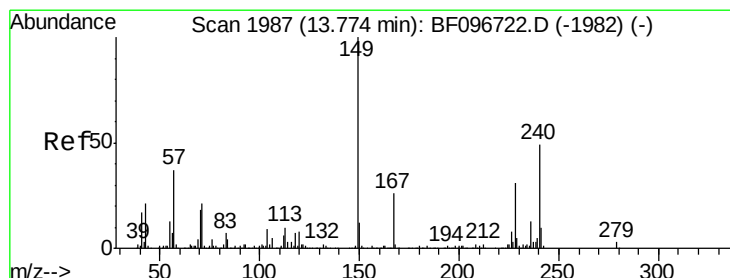
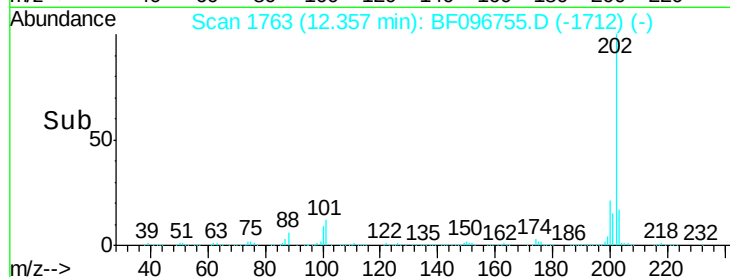
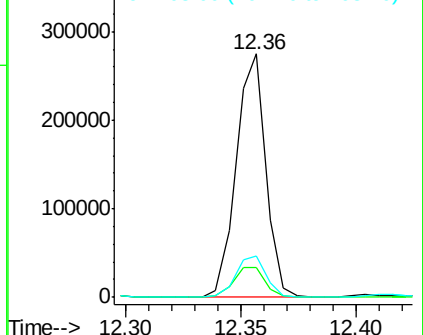
203 17.1 0.0 38.1



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: 13.78 min Scan# 2005

Delta R.T. 0.01 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

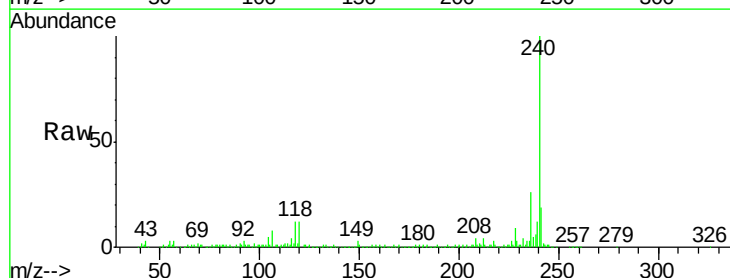
Tgt Ion:240 Resp: 216391

Ion Ratio Lower Upper

240 100

120 12.0 5.8 8.8#

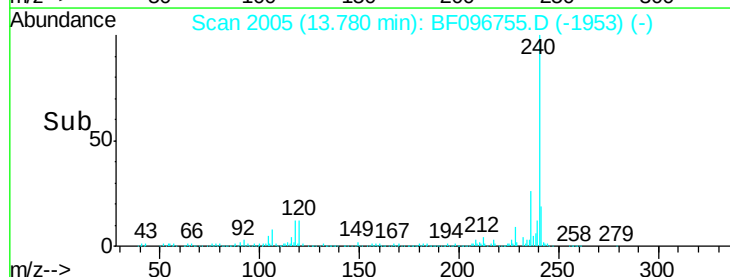
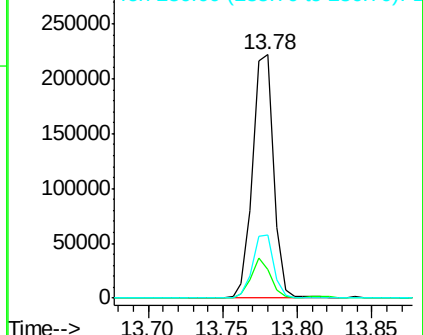
236 26.0 20.5 30.7

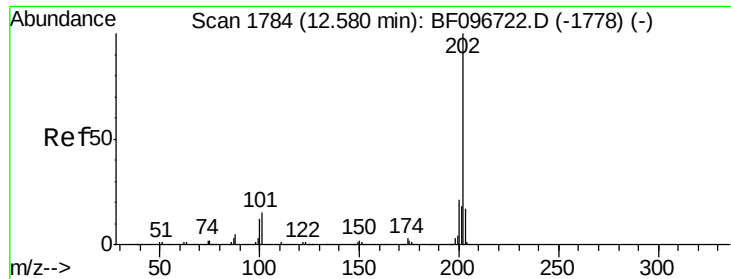


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

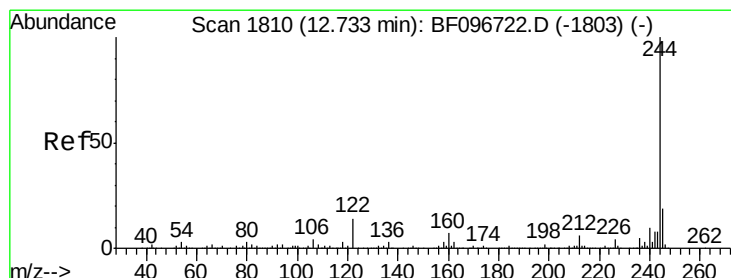
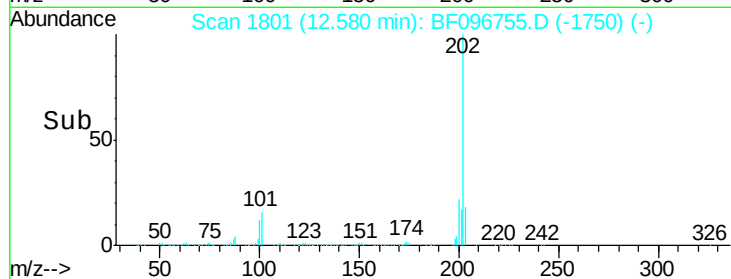
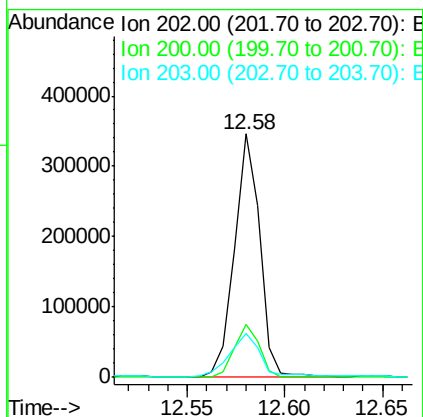
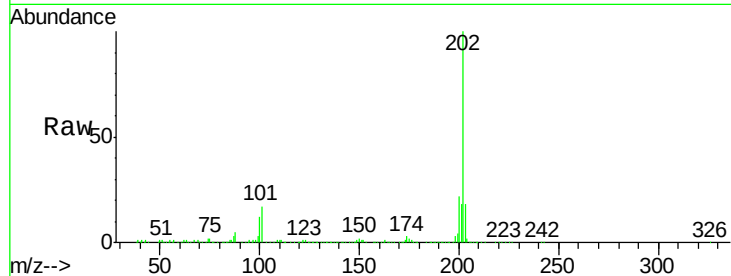




#77  
Pvrene  
Concen: 15.76 ng  
RT: 12.58 min Scan# 1801  
Delta R.T. -0.00 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

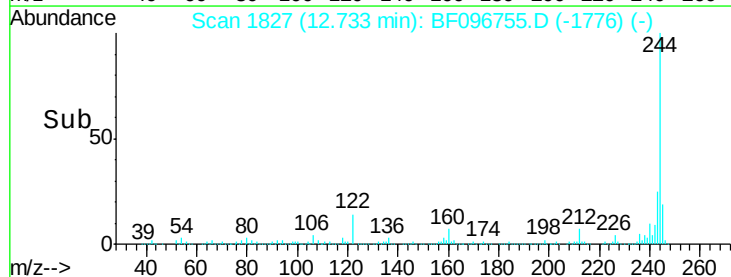
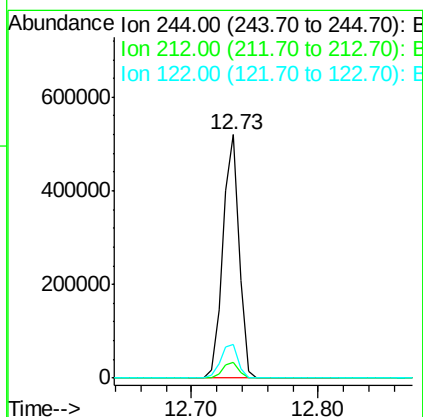
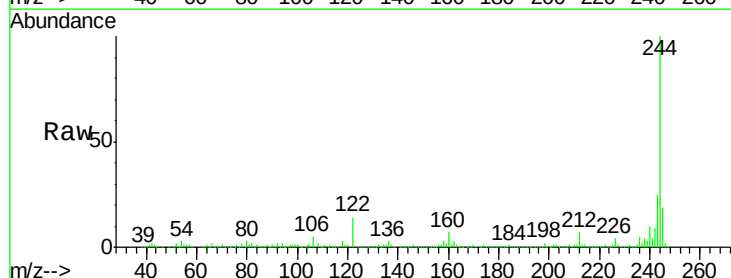
Instrument :  
BNA\_F  
ClientSampleId :  
E2-P5-BASE

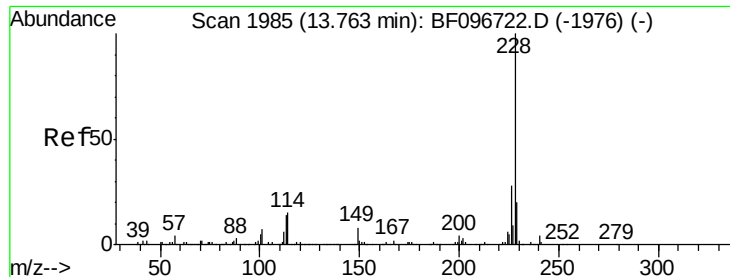
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.6  | 17.6  | 26.4  |
| 203     | 17.8  | 14.4  | 21.6  |



#78  
Terphenyl-d14  
Concen: 37.20 ng  
RT: 12.73 min Scan# 1827  
Delta R.T. -0.00 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 6.7   | 6.0   | 9.0   |
| 122     | 14.0  | 10.3  | 15.5  |

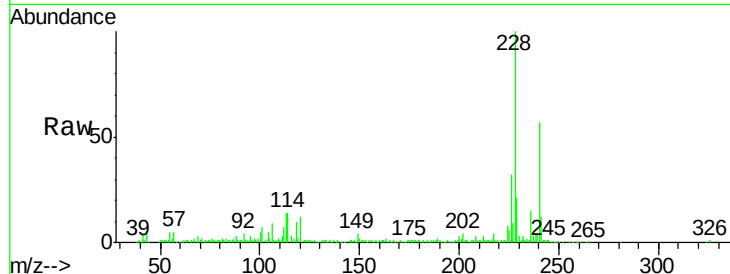




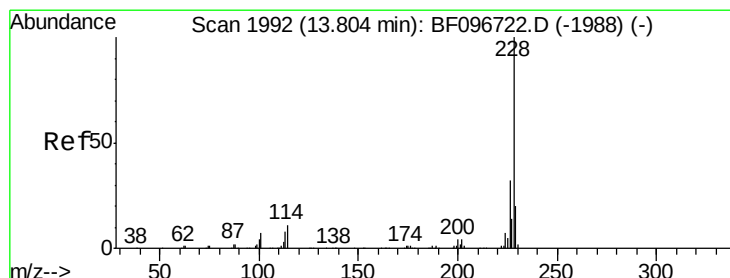
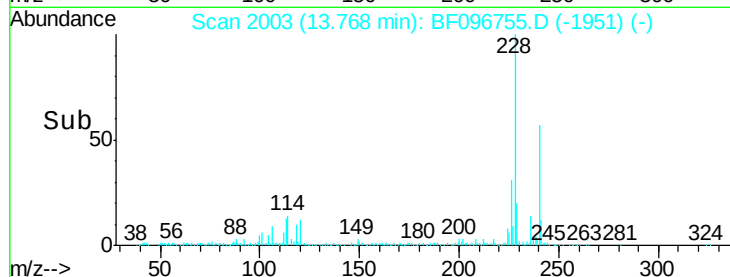
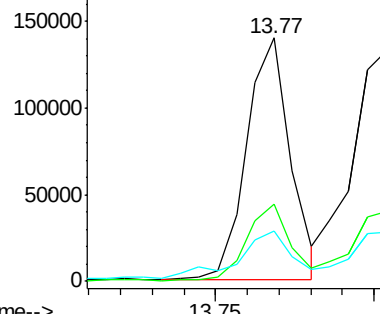
#80  
Benzo(a)anthracene  
Concen: 10.00 ng  
RT: 13.77 min Scan# 2003  
Delta R.T. 0.01 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

Instrument :  
BNA\_F  
ClientSampleId :  
E2-P5-BASE

Tot Ion:228 Resp: 134850  
Ion Ratio Lower Upper  
228 100  
226 31.6 22.6 33.8  
229 20.6 16.3 24.5

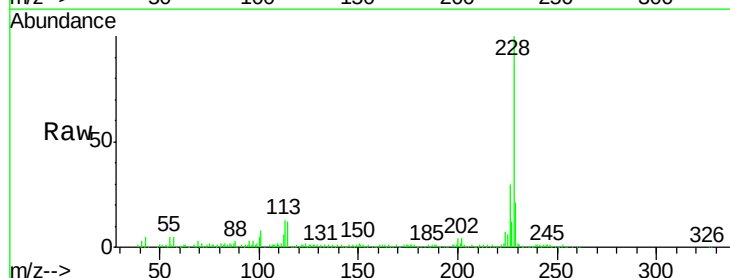


Abundance Ion 228.00 (227.70 to 228.70): E  
Ion 226.00 (225.70 to 226.70): E  
Ion 229.00 (228.70 to 229.70): E

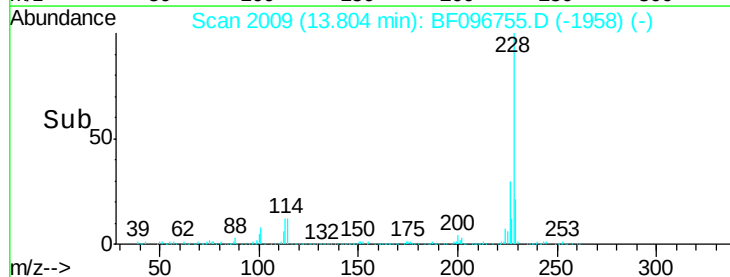
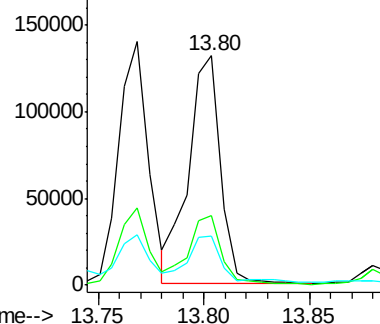


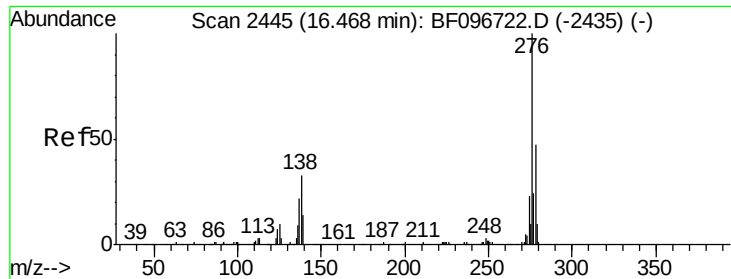
#82  
Chrysene  
Concen: 10.46 ng  
RT: 13.80 min Scan# 2009  
Delta R.T. -0.00 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

Tgt Ion:228 Resp: 138778  
Ion Ratio Lower Upper  
228 100  
226 30.3 24.9 37.3  
229 21.2 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

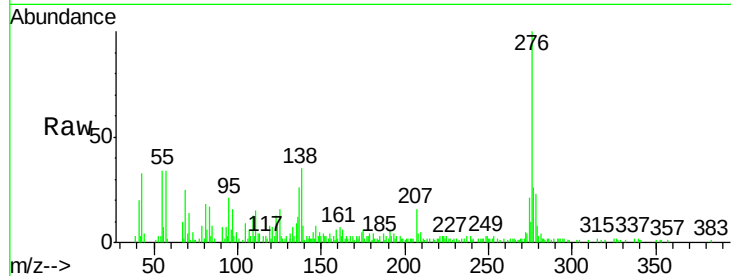




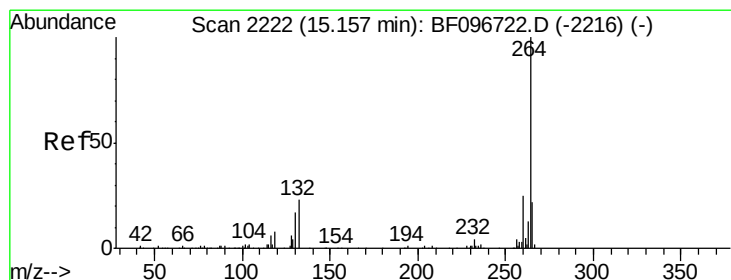
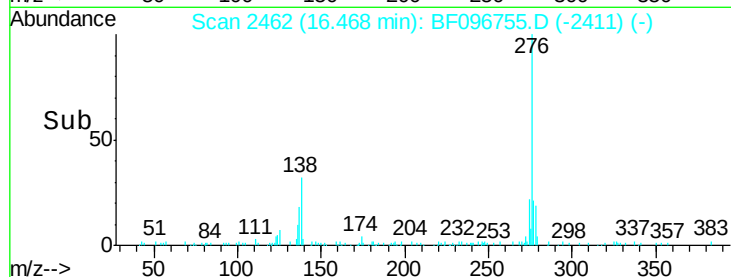
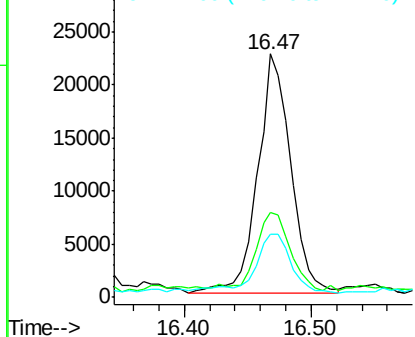
#85  
 Indeno(1,2,3-cd)pyrene  
 Concen: 6.49 ng  
 RT: 16.47 min Scan# 2462  
 Delta R.T. 0.00 min  
 Lab File: BF096755.D  
 Acq: 14 Jul 2017 4:09

Instrument :  
 BNA\_F  
 ClientSampleId :  
 E2-P5-BASE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 138     | 33.9  | 27.8  | 41.6  |
| 277     | 28.7  | 20.2  | 30.4  |

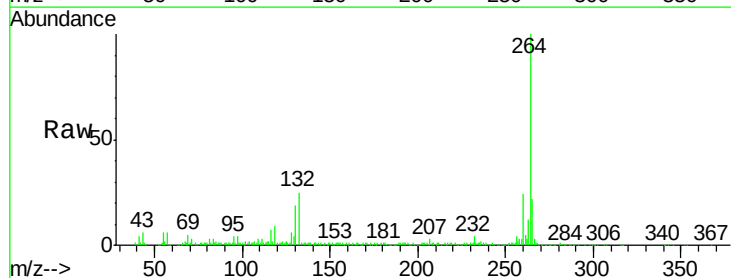


Abundance Ion 276.00 (275.70 to 276.70): E  
 Ion 138.00 (137.70 to 138.70): E  
 Ion 277.00 (276.70 to 277.70): E

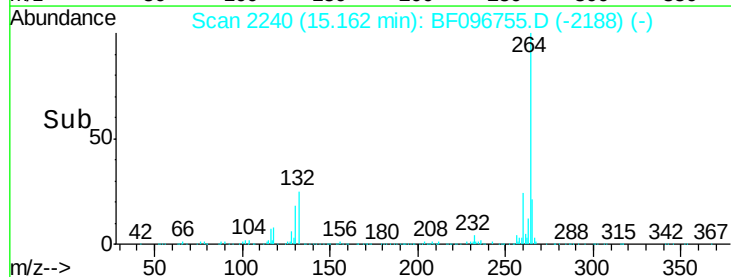
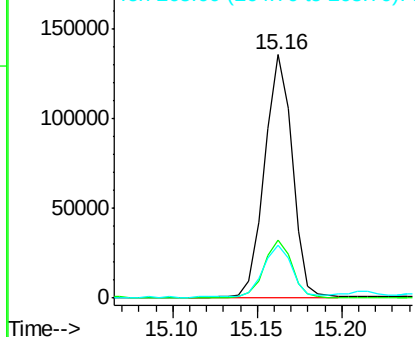


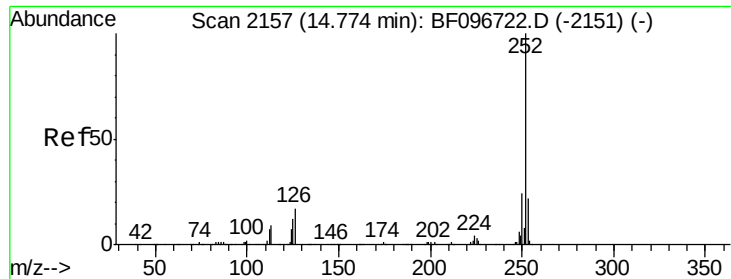
#86  
 Perylene-d12  
 Concen: 20.00 ng  
 RT: 15.16 min Scan# 2240  
 Delta R.T. 0.01 min  
 Lab File: BF096755.D  
 Acq: 14 Jul 2017 4:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.9  | 19.5  | 29.3  |
| 265     | 21.8  | 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: 15.90 ng

RT: 14.78 min Scan# 2175

Delta R.T. 0.01 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

Instrument :

BNA\_F

ClientSampleId :

E2-P5-BASE

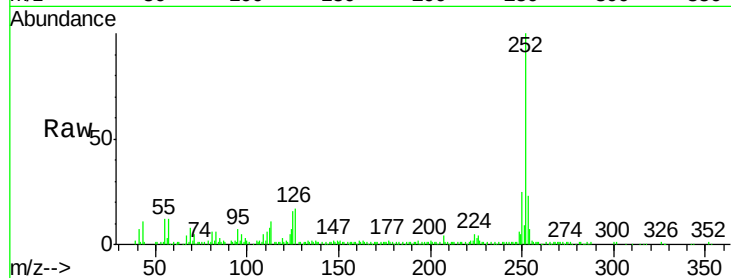
Tot Ion:252 Resp: 149166

Ion Ratio Lower Upper

252 100

253 22.5 18.1 27.1

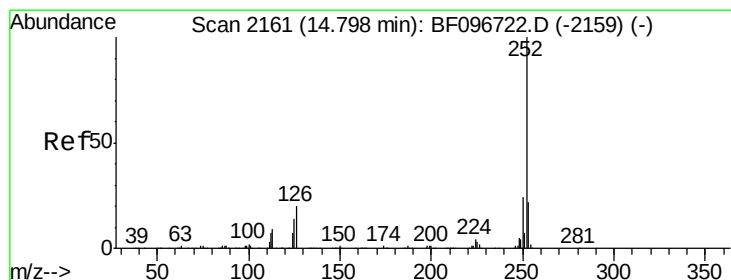
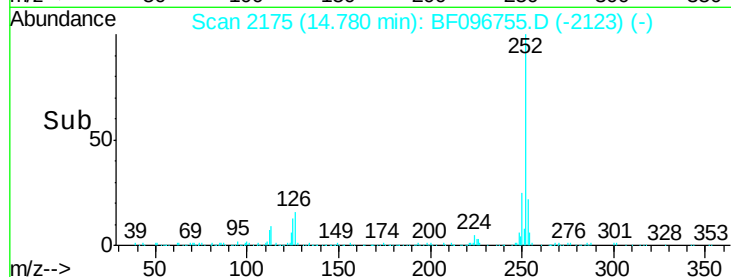
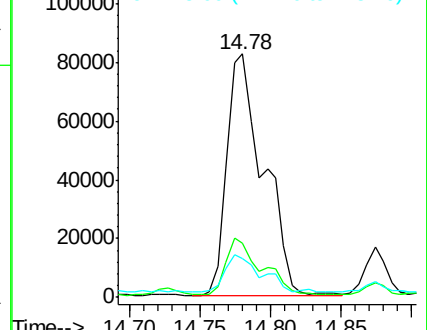
125 15.7 9.8 14.8#



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: 16.79 ng

RT: 14.78 min Scan# 2175

Delta R.T. -0.02 min

Lab File: BF096755.D

Acq: 14 Jul 2017 4:09

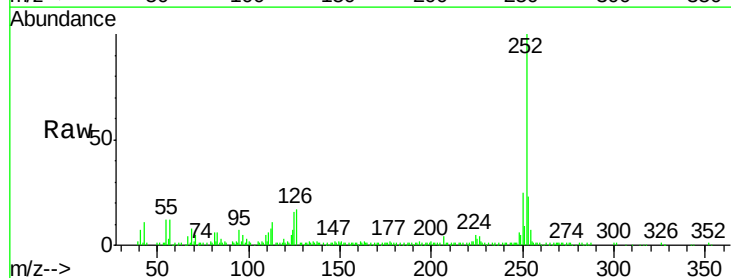
Tgt Ion:252 Resp: 149166

Ion Ratio Lower Upper

252 100

253 22.5 18.4 27.6

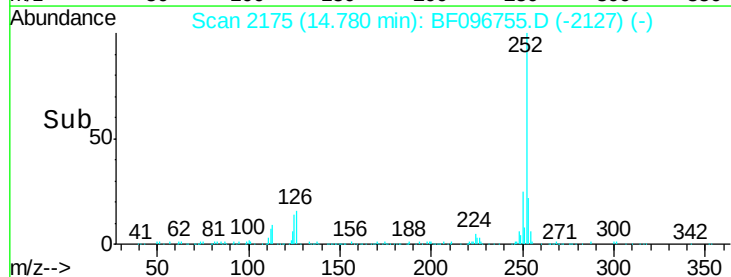
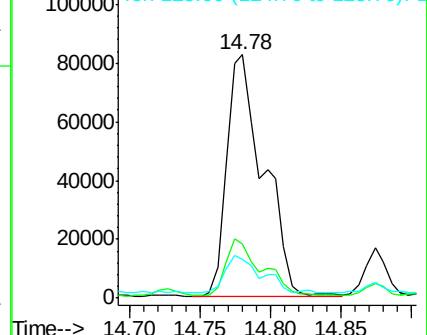
125 15.7 13.1 19.7

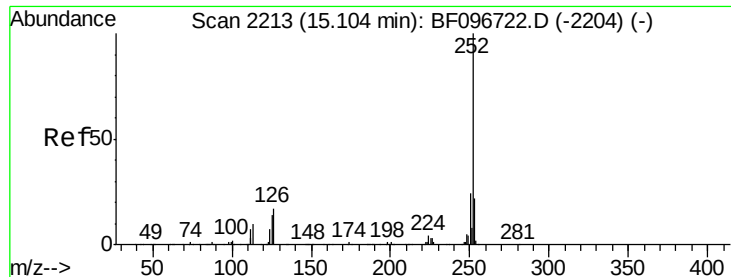


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

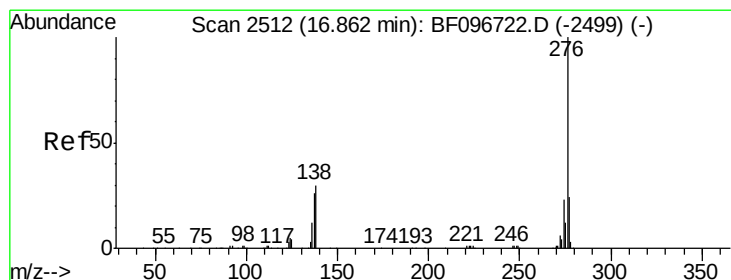
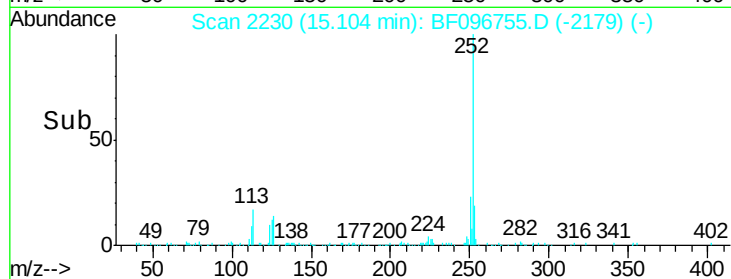
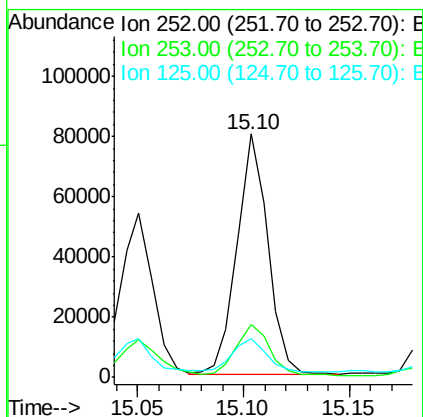
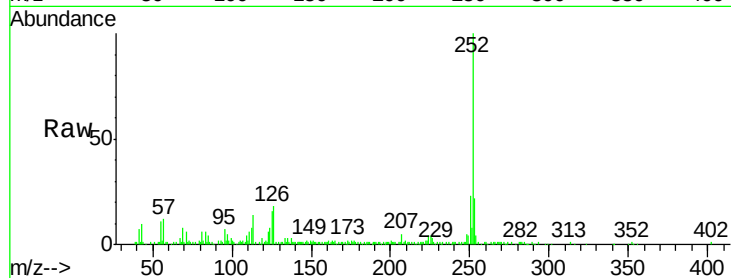




#89  
Benzo(a)pyrene  
Concen: 9.41 ng  
RT: 15.10 min Scan# 2230  
Delta R.T. -0.00 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

Instrument :  
BNA\_F  
ClientSampleId :  
E2-P5-BASE

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 21.6  | 17.5  | 26.3  |
| 125     | 15.7  | 11.0  | 16.4  |



#91  
Benzo(g,h,i)perylene  
Concen: 4.72 ng  
RT: 16.86 min Scan# 2529  
Delta R.T. -0.00 min  
Lab File: BF096755.D  
Acq: 14 Jul 2017 4:09

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 24.8  | 18.6  | 28.0  |
| 138     | 31.9  | 25.4  | 38.0  |

