

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF122818\  
 Data File : BF111787.D  
 Acq On : 28 Dec 2018 14:36  
 Operator : JU/SJ  
 Sample : J6579-01  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TN-122618-C

Quant Time: Dec 29 01:09:13 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF121918.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 19 17:39:39 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.90  | 152  | 155090   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.19  | 136  | 581473   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.94  | 164  | 299825   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.43 | 188  | 579913   | 20.00 | ng    | 0.01     |
| 76) Chrysene-d12          | 14.06 | 240  | 415522   | 20.00 | ng    | 0.01     |
| 87) Perylene-d12          | 15.55 | 264  | 332579   | 20.00 | ng    | 0.04     |

## System Monitoring Compounds

|                          |       |     |         |        |    |      |
|--------------------------|-------|-----|---------|--------|----|------|
| 5) 2-Fluorophenol        | 5.55  | 112 | 807752  | 88.78  | ng | 0.03 |
| 7) Phenol-d6             | 6.55  | 99  | 1065035 | 91.98  | ng | 0.02 |
| 23) Nitrobenzene-d5      | 7.46  | 82  | 692508  | 69.32  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol | 10.73 | 330 | 358544  | 101.21 | ng | 0.01 |
| 45) 2-Fluorobiphenyl     | 9.26  | 172 | 1337609 | 65.03  | ng | 0.00 |
| 79) Terphenyl-d14        | 13.01 | 244 | 1435343 | 65.51  | ng | 0.01 |

## Target Compounds

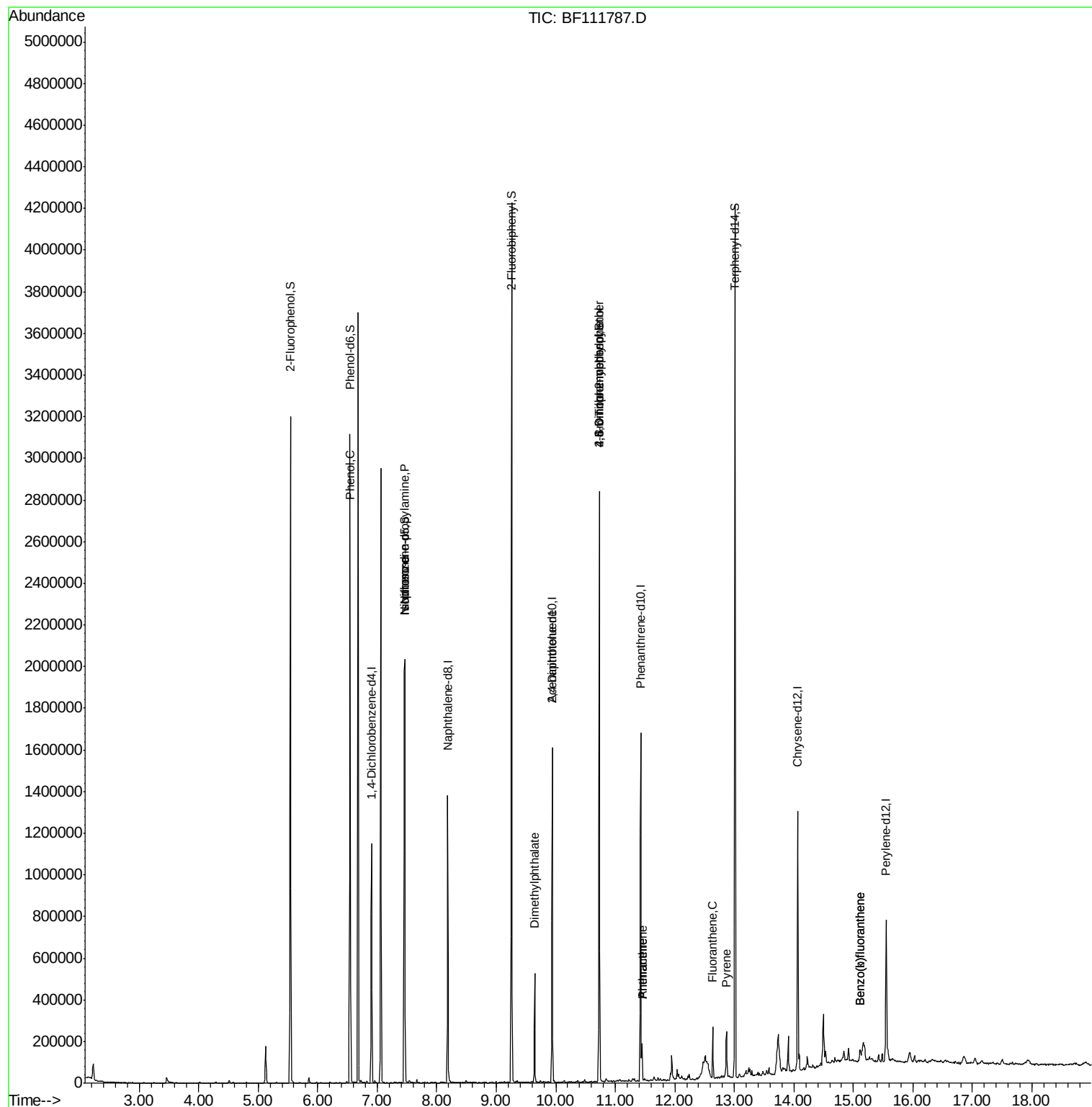
|                                |       |     |        |        |    | Qvalue |
|--------------------------------|-------|-----|--------|--------|----|--------|
| 10) Phenol                     | 6.56  | 94  | 50220  | 3.844  | ng | 100    |
| 19) n-Nitroso-di-n-propylamine | 7.46  | 70  | 94102  | 12.237 | ng | # 77   |
| 25) Isophorone                 | 7.46  | 82  | 689259 | 38.866 | ng | # 64   |
| 50) Dimethylphthalate          | 9.65  | 163 | 185746 | 8.472  | ng | 98     |
| 57) 2,4-Dinitrotoluene         | 9.94  | 165 | 38568  | 7.340  | ng | # 25   |
| 65) 4,6-Dinitro-2-methylphenol | 10.73 | 198 | 756    | 6.964  | ng | # 1    |
| 67) 4-Bromophenyl-phenylether  | 10.73 | 248 | 21544  | 2.995  | ng | # 1    |
| 71) Phenanthrene               | 11.45 | 178 | 65031  | 2.114  | ng | 92     |
| 72) Anthracene                 | 11.45 | 178 | 65031  | 2.107  | ng | 94     |
| 75) Fluoranthene               | 12.64 | 202 | 88882  | 2.854  | ng | 93     |
| 78) Pyrene                     | 12.87 | 202 | 87649  | 2.987  | ng | 93     |
| 88) Benzo(b)fluoranthene       | 15.12 | 252 | 39115  | 2.012  | ng | # 97   |
| 89) Benzo(k)fluoranthene       | 15.12 | 252 | 39115  | 2.114  | ng | 98     |

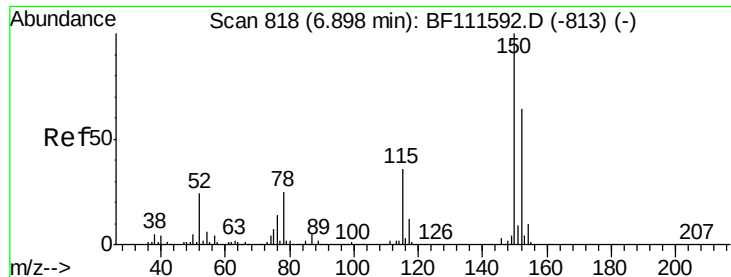
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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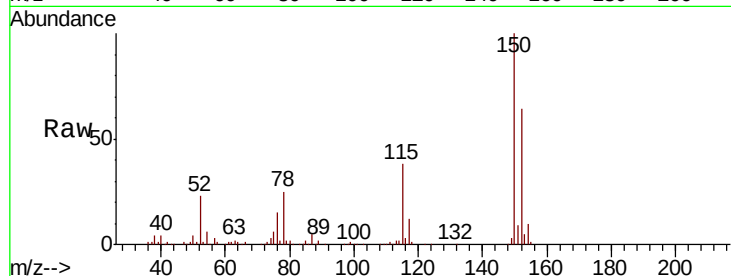


#1

1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.90 min Scan# 819  
Delta R.T. 0.01 min  
Lab File: BF111787.D  
Acq: 28 Dec 2018 14:36

Instrument :  
BNA\_F  
ClientSampleId :  
TN-122618-C

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.7 | 126.6 | 189.8 |
| 115     | 59.7  | 50.7  | 76.1  |

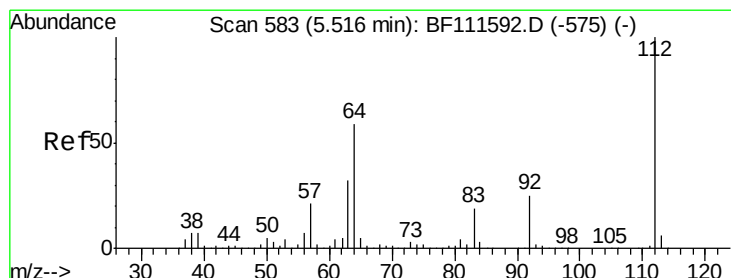
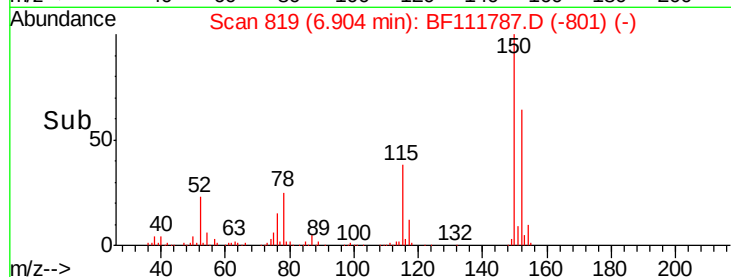
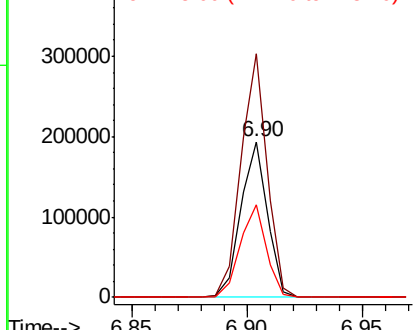


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

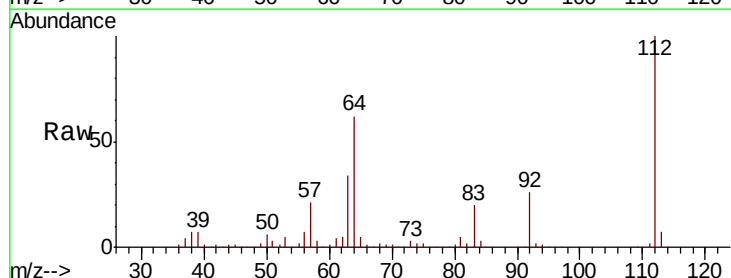
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol  
Concen: 88.777 ng  
RT: 5.55 min Scan# 588  
Delta R.T. 0.03 min  
Lab File: BF111787.D  
Acq: 28 Dec 2018 14:36

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 62.2  | 51.8  | 77.6  |
| 63      | 34.5  | 26.8  | 40.2  |

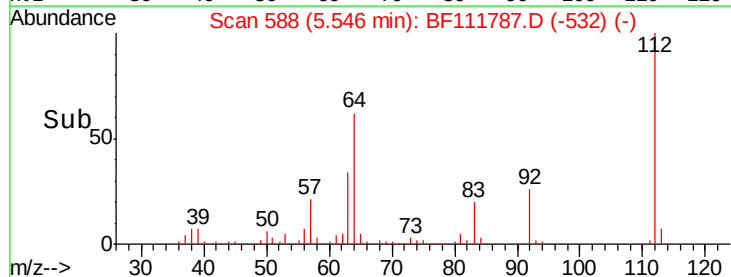
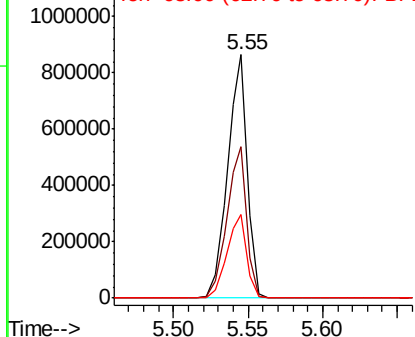


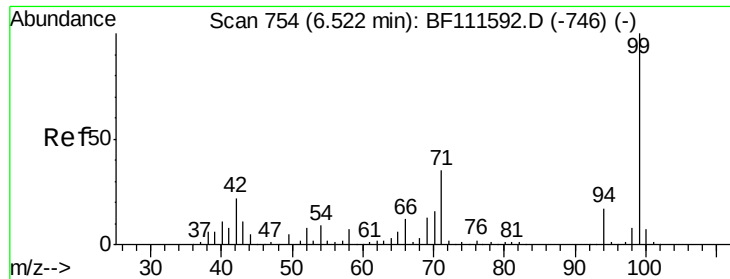
Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 91.976 ng

RT: 6.55 min Scan# 758

Delta R.T. 0.02 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

Instrument :

BNA\_F

ClientSampleId :

TN-122618-C

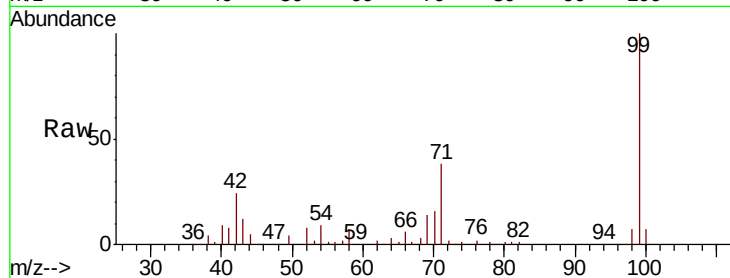
Tgt Ion: 99 Resp: 1065035

Ion Ratio Lower Upper

99 100

42 23.5 17.4 26.0

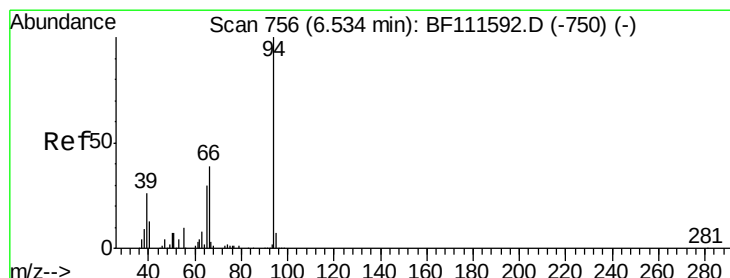
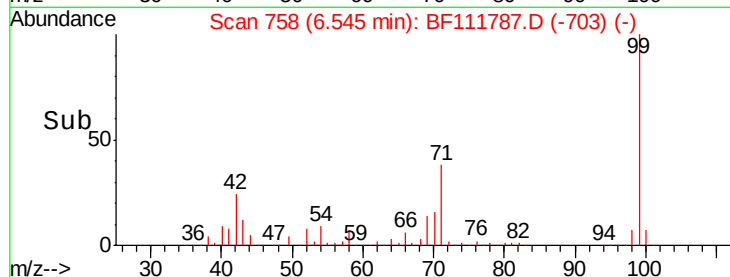
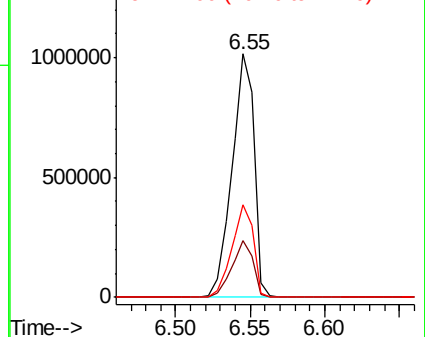
71 37.8 26.1 39.1



Abundance Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



#10

Phenol

Concen: 3.844 ng

RT: 6.56 min Scan# 760

Delta R.T. 0.02 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

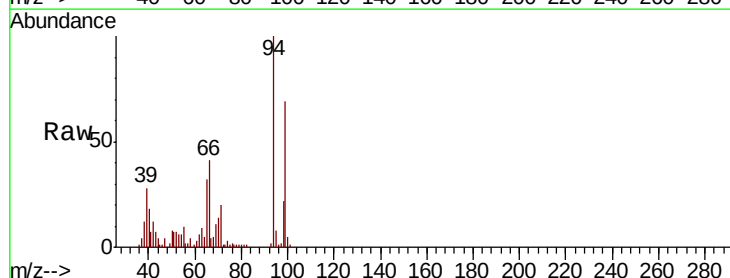
Tgt Ion: 94 Resp: 50220

Ion Ratio Lower Upper

94 100

65 31.5 11.7 51.7

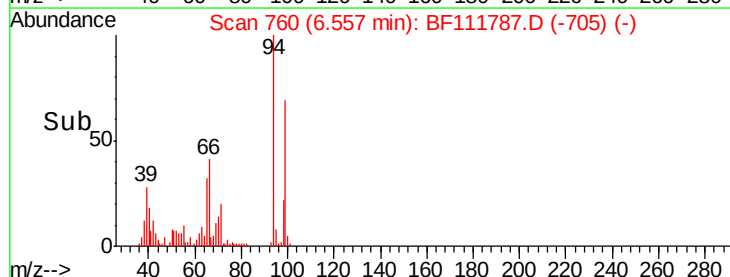
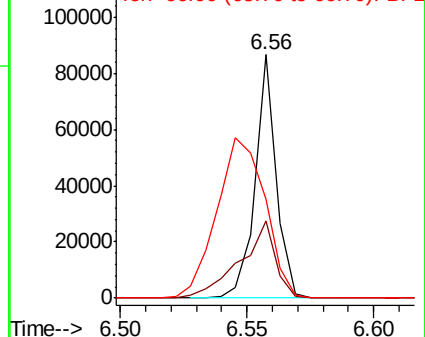
66 40.9 21.0 61.0

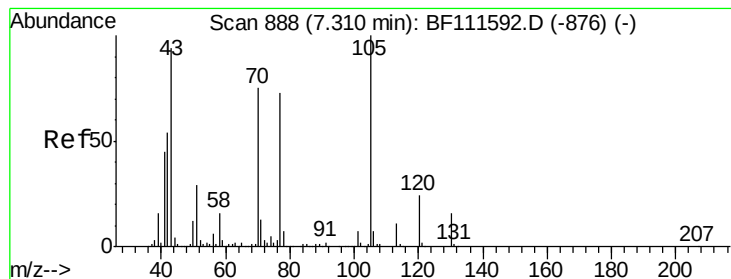


Abundance Ion 94.00 (93.70 to 94.70): BF1

Ion 65.00 (64.70 to 65.70): BF1

Ion 66.00 (65.70 to 66.70): BF1





#19

n-Nitroso-di-n-propylamine

Concen: 12.237 ng

RT: 7.46 min Scan# 913

Delta R.T. 0.15 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

Instrument :

BNA\_F

ClientSampleId :

TN-122618-C

Tgt Ion: 70 Resp: 94102

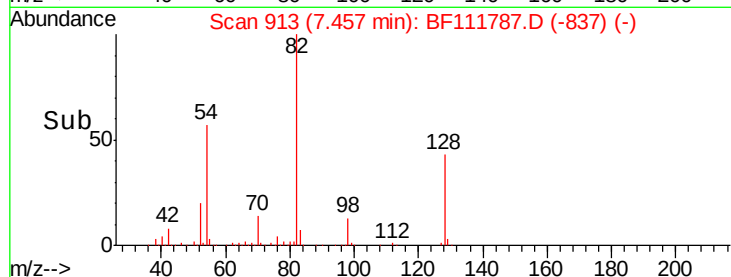
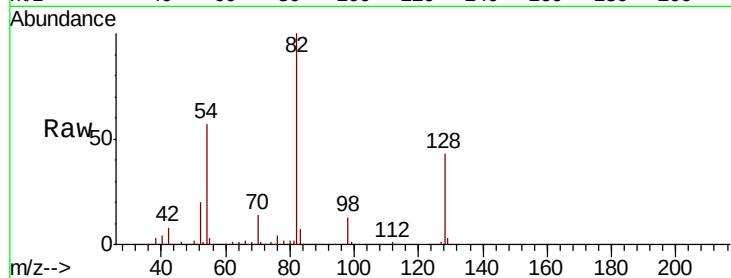
Ion Ratio Lower Upper

70 100

42 54.3 53.2 79.8

101 0.0 8.2 12.4#

130 2.0 18.1 27.1#

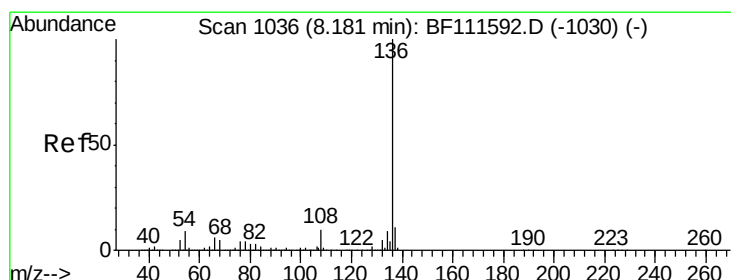
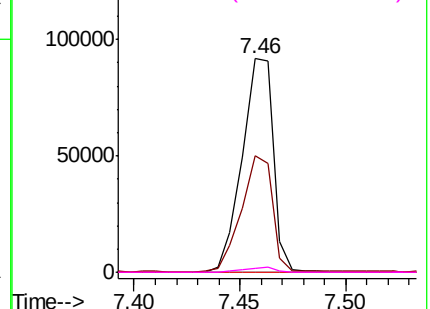


Abundance Ion 70.00 (69.70 to 70.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 101.00 (100.70 to 101.70): E

Ion 130.00 (129.70 to 130.70): E



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.19 min Scan# 1037

Delta R.T. 0.01 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

Tgt Ion: 136 Resp: 581473

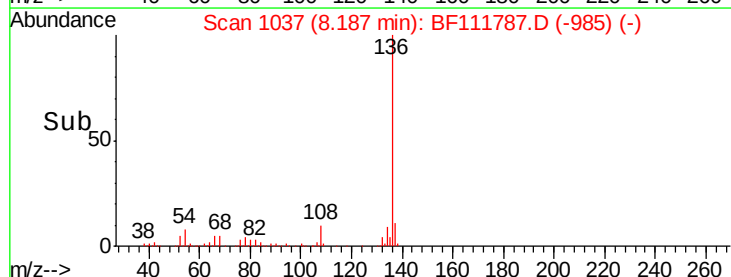
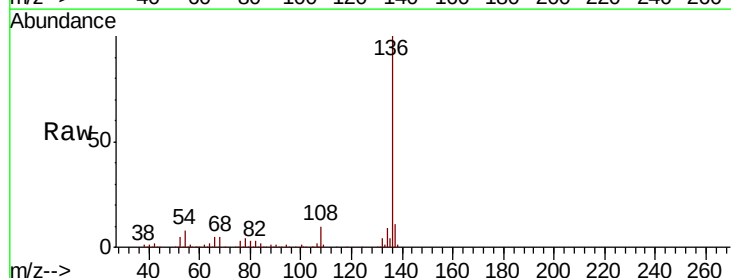
Ion Ratio Lower Upper

136 100

137 11.0 9.1 13.7

54 8.2 7.7 11.5

68 4.7 4.9 7.3#

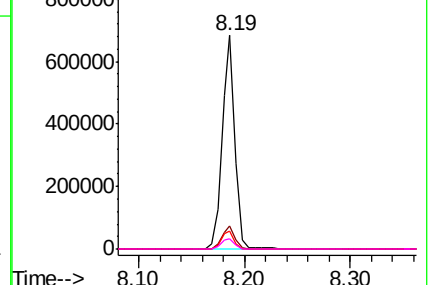


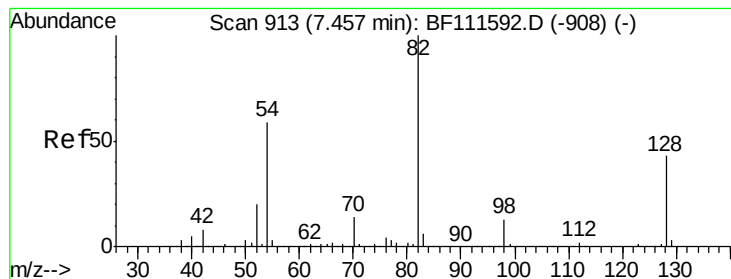
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1





#23

Nitrobenzene-d5

Concen: 69.323 ng

RT: 7.46 min Scan# 914

Delta R.T. 0.01 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

Instrument :

BNA\_F

ClientSampleId :

TN-122618-C

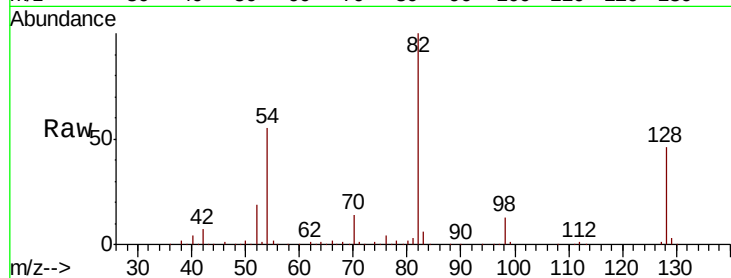
Tgt Ion: 82 Resp: 692508

Ion Ratio Lower Upper

82 100

128 46.4 37.4 56.2

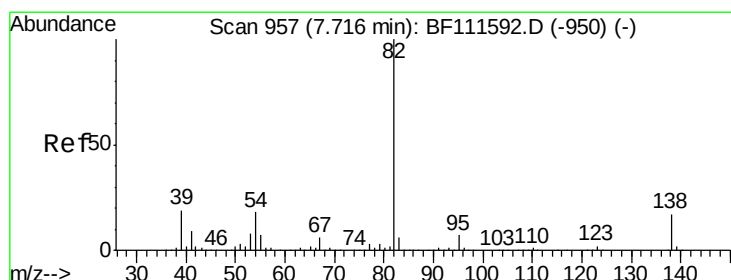
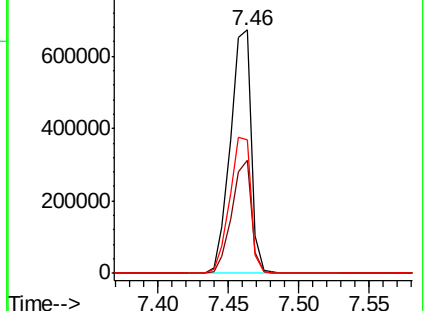
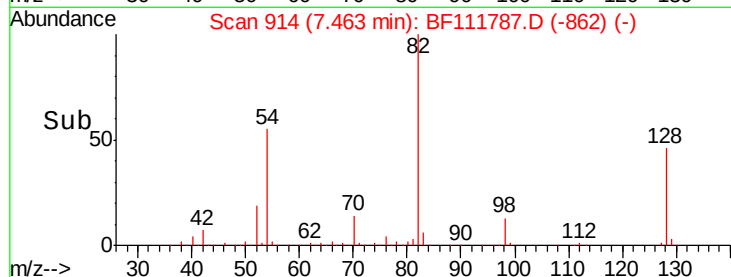
54 54.6 47.6 71.4



Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): BF1

Ion 54.00 (53.70 to 54.70): BF1



#25

Isophorone

Concen: 38.866 ng

RT: 7.46 min Scan# 914

Delta R.T. -0.25 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

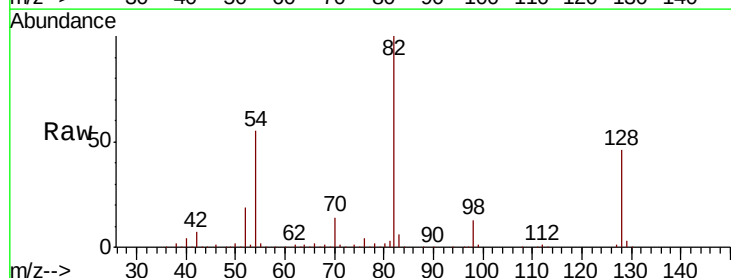
Tgt Ion: 82 Resp: 689259

Ion Ratio Lower Upper

82 100

95 0.0 5.4 8.2#

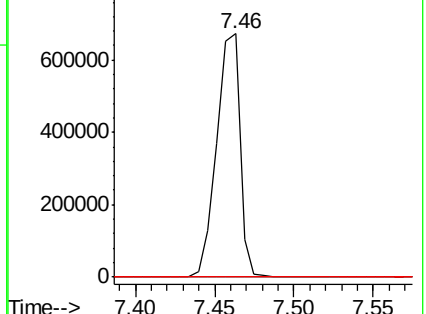
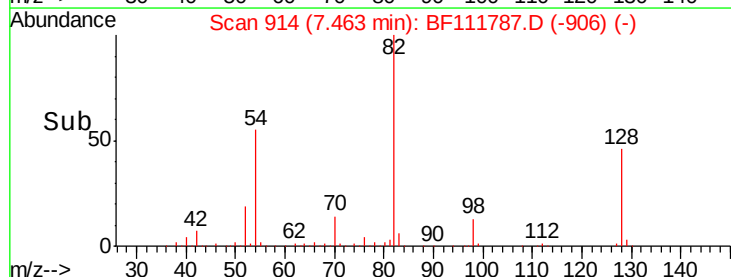
138 0.0 15.1 22.7#

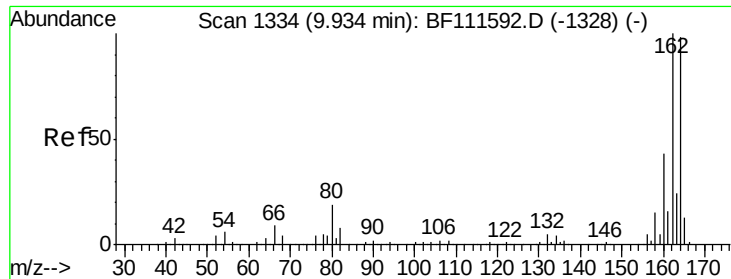


Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 95.00 (94.70 to 95.70): BF1

Ion 138.00 (137.70 to 138.70): BF1





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.94 min Scan# 1335

Delta R.T. 0.01 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

Instrument :

BNA\_F

ClientSampleId :

TN-122618-C

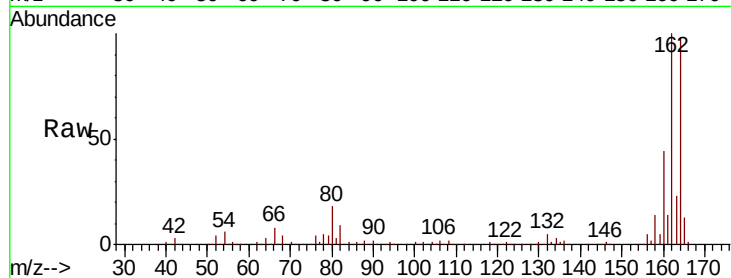
Tgt Ion:164 Resp: 299825

Ion Ratio Lower Upper

164 100

162 102.4 81.4 122.0

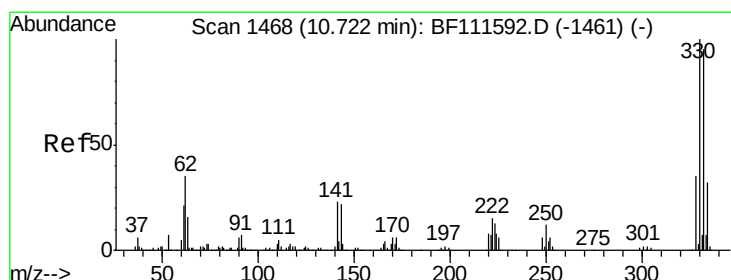
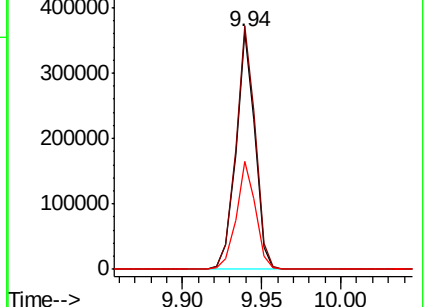
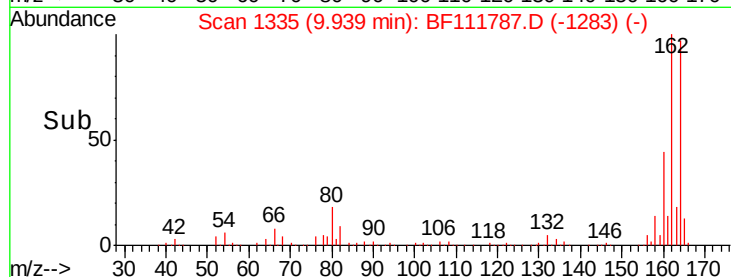
160 45.4 35.7 53.5



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



#42

2,4,6-Tribromophenol

Concen: 101.208 ng

RT: 10.73 min Scan# 1470

Delta R.T. 0.01 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

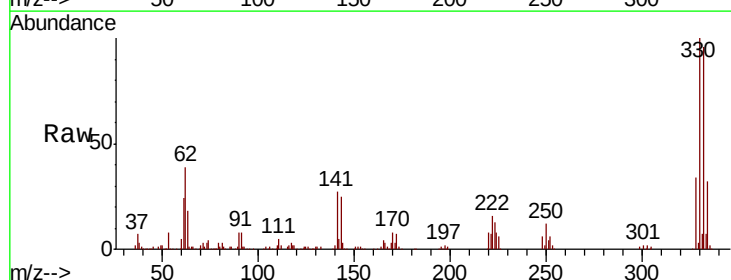
Tgt Ion:330 Resp: 358544

Ion Ratio Lower Upper

330 100

332 95.8 76.0 114.0

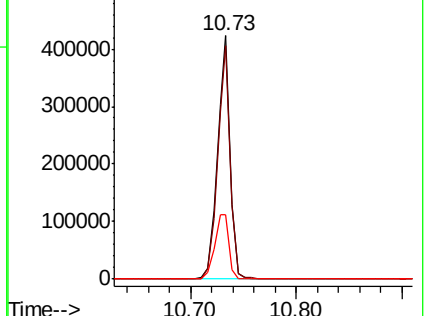
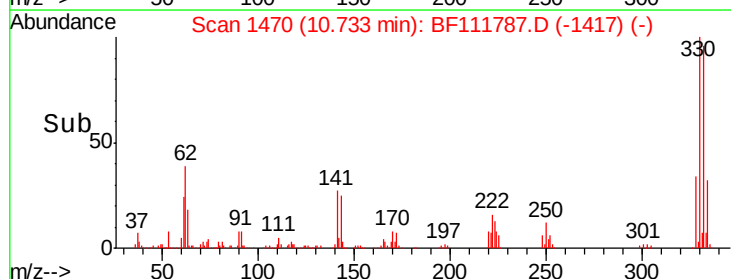
141 30.5 31.0 46.6#

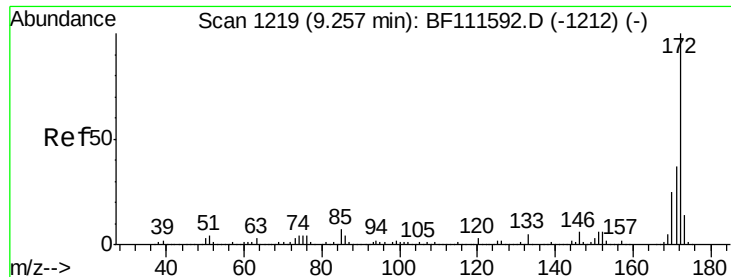


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E



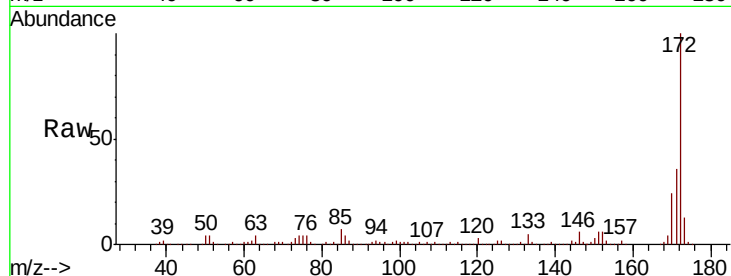


#45  
2-Fluorobiphenyl  
Concen: 65.027 ng  
RT: 9.26 min Scan# 1219  
Delta R.T. -0.00 min  
Lab File: BF111787.D  
Acq: 28 Dec 2018 14:36

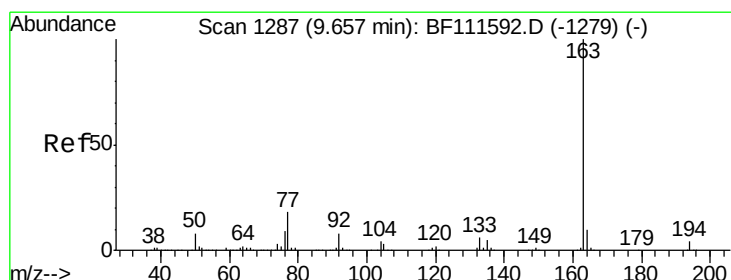
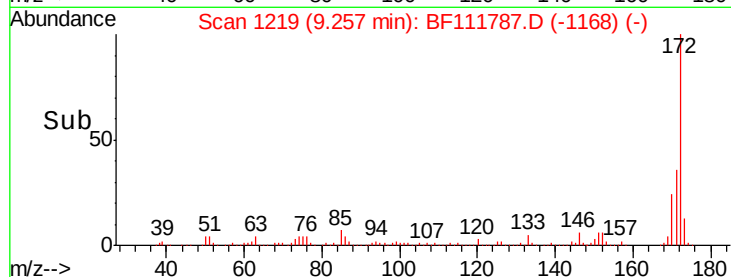
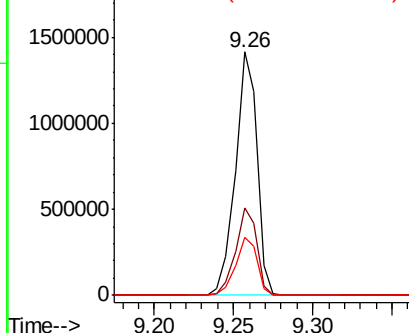
Instrument :  
BNA\_F  
ClientSampleId :  
TN-122618-C

Tgt Ion:172 Resp: 1337609

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 172 | 100   |       |       |
| 171 | 35.7  | 33.0  | 49.4  |
| 170 | 23.9  | 22.3  | 33.5  |



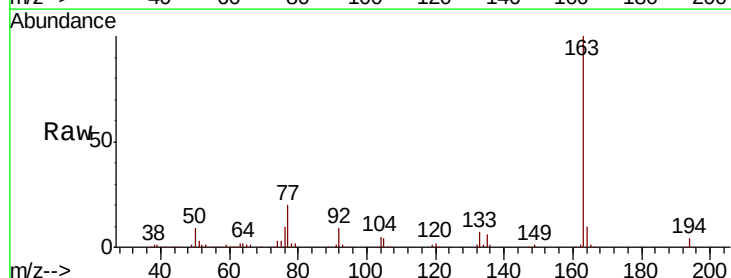
Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E



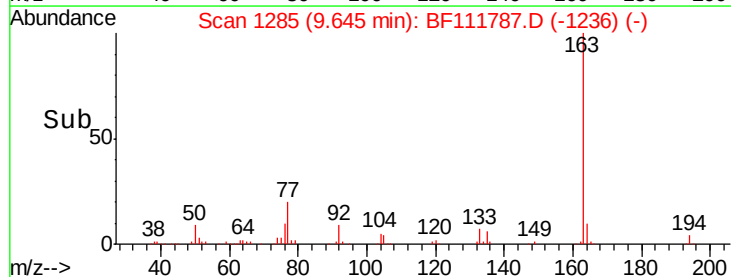
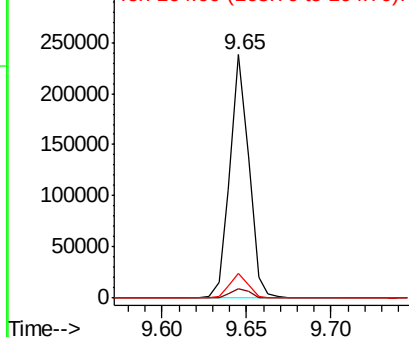
#50  
Dimethylphthalate  
Concen: 8.472 ng  
RT: 9.65 min Scan# 1285  
Delta R.T. -0.01 min  
Lab File: BF111787.D  
Acq: 28 Dec 2018 14:36

Tgt Ion:163 Resp: 185746

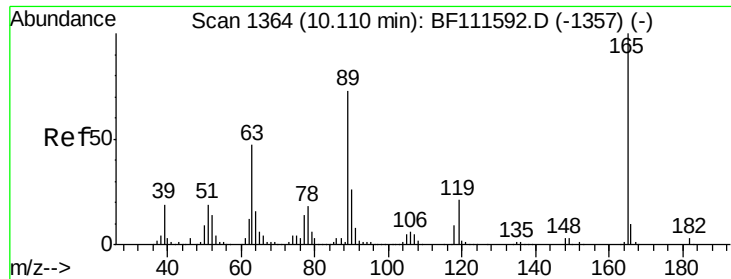
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 163 | 100   |       |       |
| 194 | 3.8   | 3.0   | 4.6   |
| 164 | 10.2  | 8.9   | 13.3  |



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







#57

2,4-Dinitrotoluene

Concen: 7.340 ng

RT: 9.94 min Scan# 1335

Delta R.T. -0.17 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

Instrument :

BNA\_F

ClientSampleId :

TN-122618-C

Tgt Ion:165 Resp: 38568

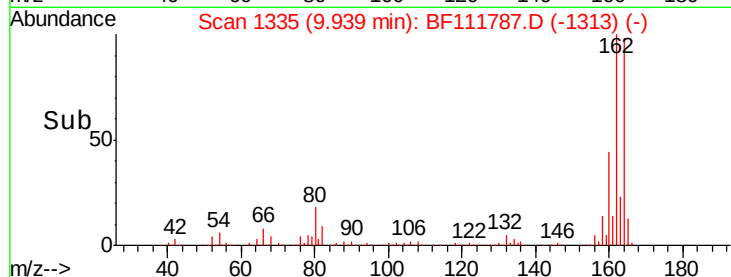
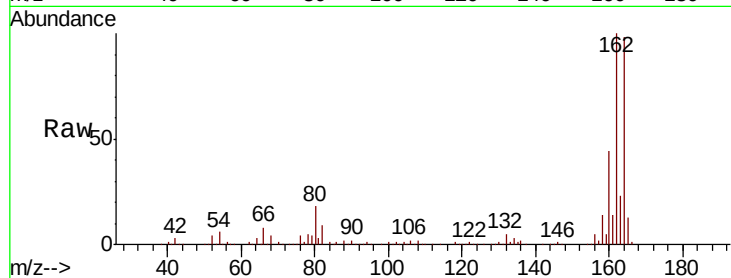
Ion Ratio Lower Upper

165 100

63 1.3 34.6 52.0#

89 1.4 56.2 84.4#

182 0.0 1.8 2.6#

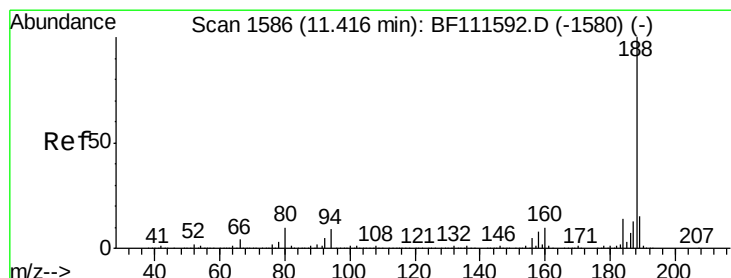
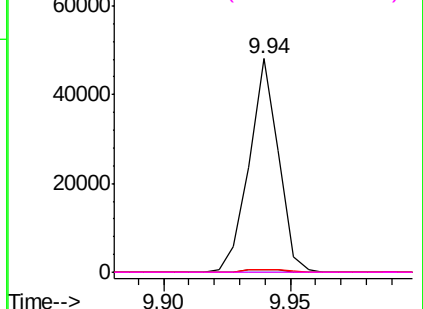


Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1

Ion 182.00 (181.70 to 182.70): E



#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.43 min Scan# 1588

Delta R.T. 0.01 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

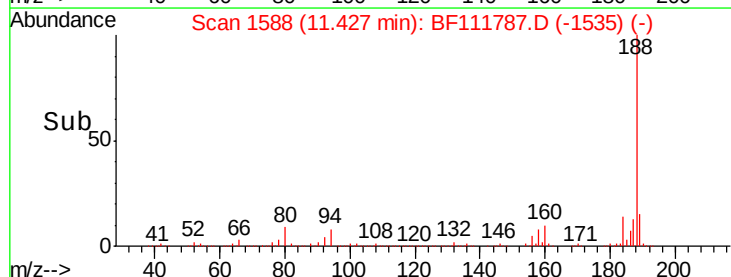
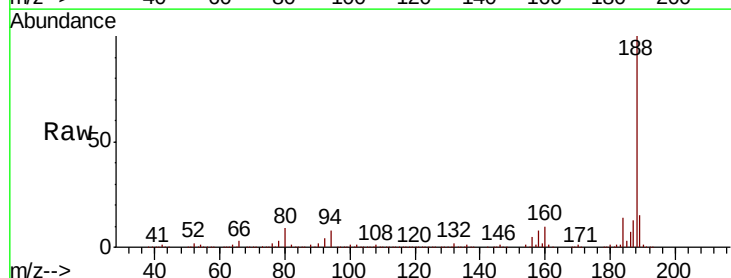
Tgt Ion:188 Resp: 579913

Ion Ratio Lower Upper

188 100

94 8.3 9.6 14.4#

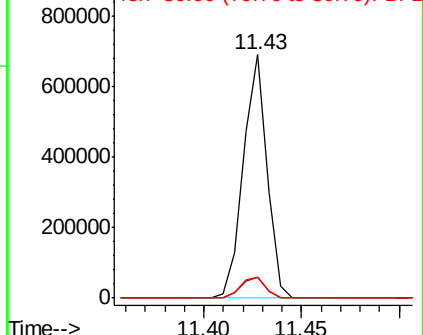
80 8.6 9.8 14.6#

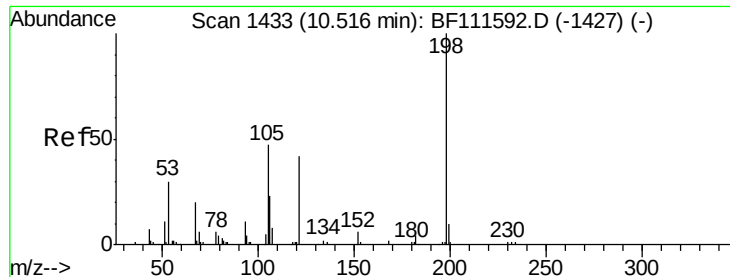


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1

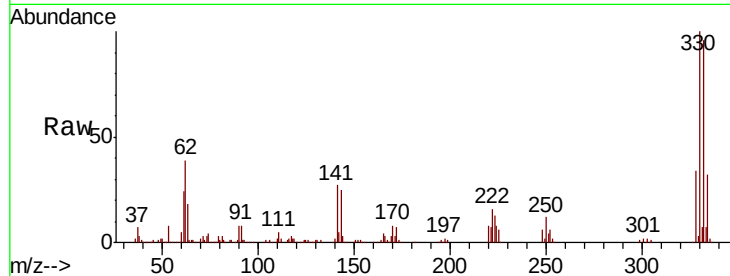




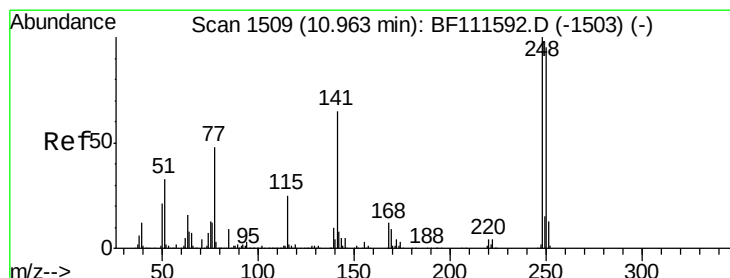
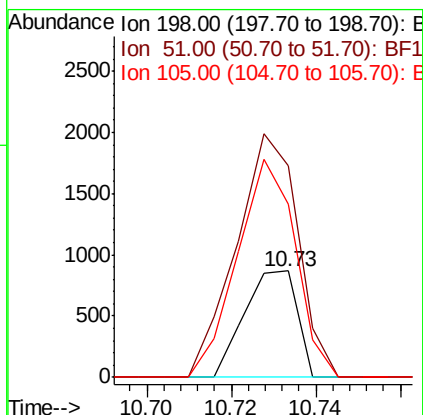
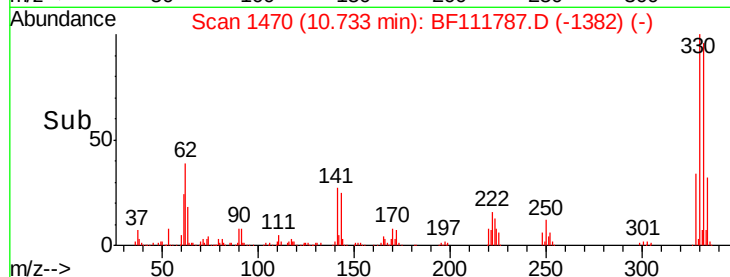
#65  
 4,6-Dinitro-2-methylphenol  
 Concen: 6.964 ng  
 RT: 10.73 min Scan# 1470  
 Delta R.T. 0.22 min  
 Lab File: BF111787.D  
 Acq: 28 Dec 2018 14:36

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TN-122618-C

Tgt Ion:198 Resp: 756  
 Ion Ratio Lower Upper  
 198 100  
 51 199.0 48.0 88.0#  
 105 163.0 34.0 74.0#

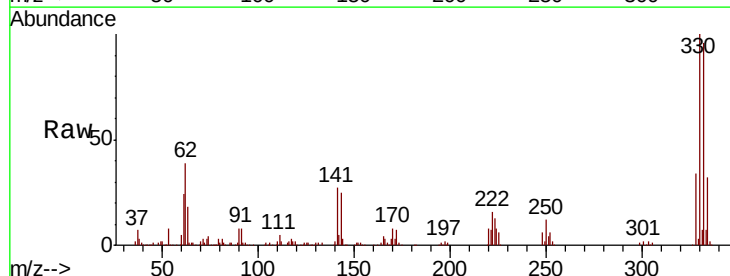


Abundance Ion 198.00 (197.70 to 198.70): E  
 Ion 51.00 (50.70 to 51.70): BF1  
 Ion 105.00 (104.70 to 105.70): E

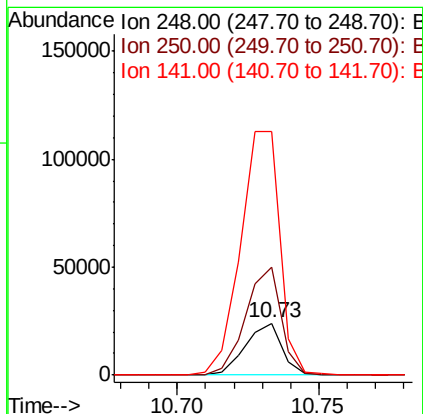
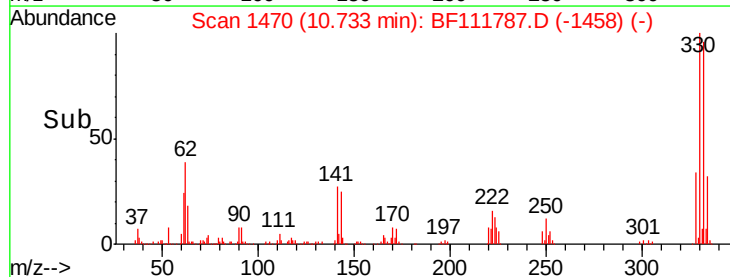


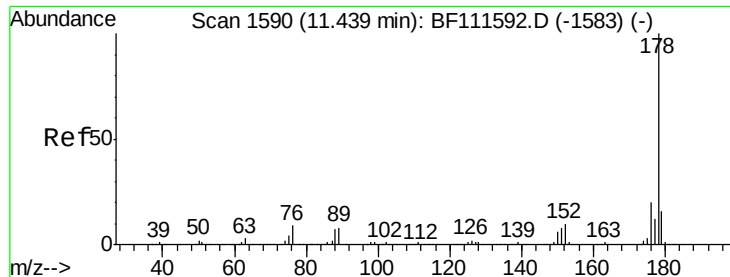
#67  
 4-Bromophenyl-phenylether  
 Concen: 2.995 ng  
 RT: 10.73 min Scan# 1470  
 Delta R.T. -0.23 min  
 Lab File: BF111787.D  
 Acq: 28 Dec 2018 14:36

Tgt Ion:248 Resp: 21544  
 Ion Ratio Lower Upper  
 248 100  
 250 207.6 77.0 115.4#  
 141 466.1 63.0 94.6#



Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

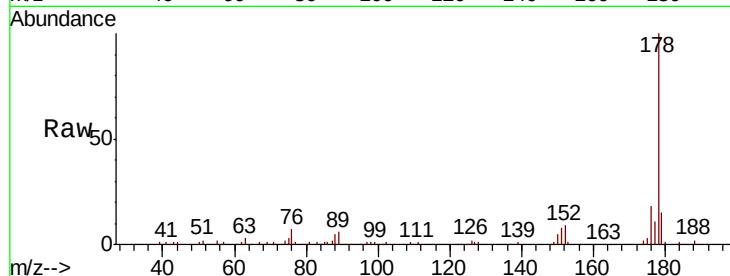




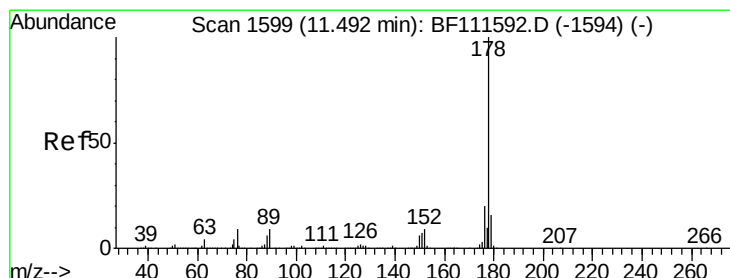
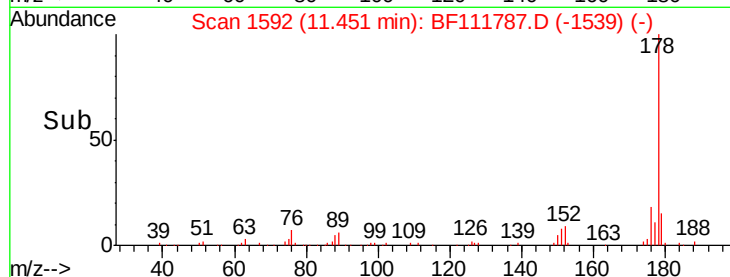
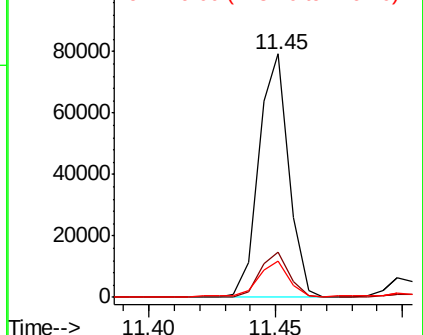
#71  
Phenanthrene  
Concen: 2.114 ng  
RT: 11.45 min Scan# 1592  
Delta R.T. 0.01 min  
Lab File: BF111787.D  
Acq: 28 Dec 2018 14:36

Instrument :  
BNA\_F  
ClientSampleId :  
TN-122618-C

Tgt Ion:178 Resp: 65031  
Ion Ratio Lower Upper  
178 100  
176 18.4 18.1 27.1  
179 14.7 14.0 21.0

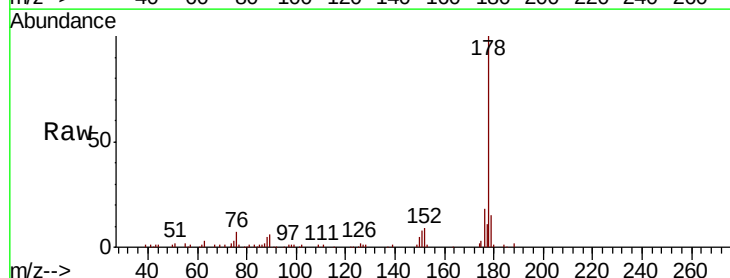


Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E

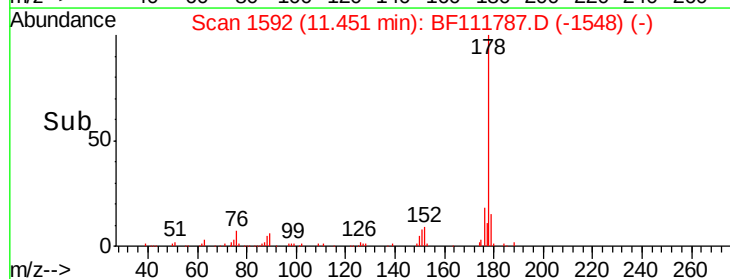
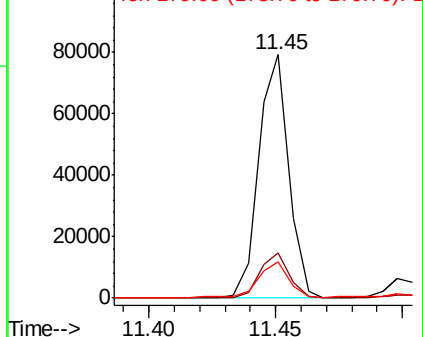


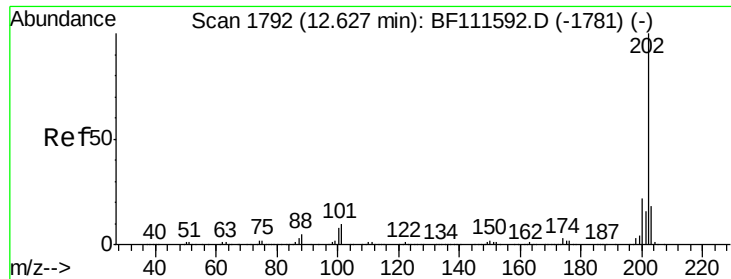
#72  
Anthracene  
Concen: 2.107 ng  
RT: 11.45 min Scan# 1592  
Delta R.T. -0.04 min  
Lab File: BF111787.D  
Acq: 28 Dec 2018 14:36

Tgt Ion:178 Resp: 65031  
Ion Ratio Lower Upper  
178 100  
176 18.4 17.2 25.8  
179 14.7 13.8 20.8



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





#75

Fluoranthene

Concen: 2.854 ng

RT: 12.64 min Scan# 1794

Delta R.T. 0.01 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

Instrument :

BNA\_F

ClientSampleId :

TN-122618-C

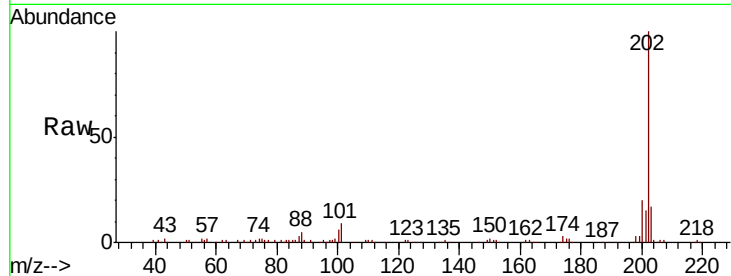
Tgt Ion:202 Resp: 88882

Ion Ratio Lower Upper

202 100

101 9.2 0.0 33.8

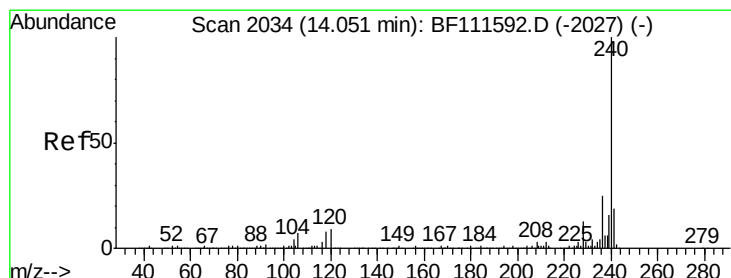
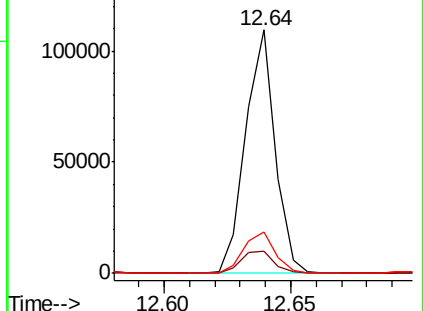
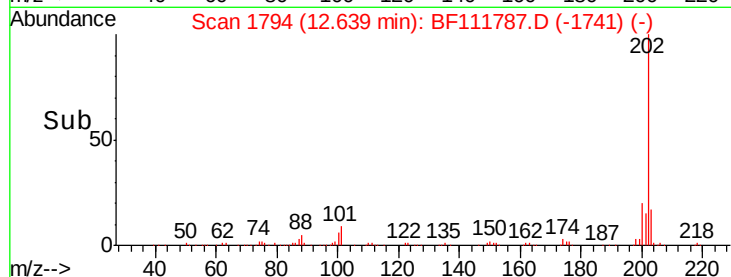
203 16.9 0.0 38.6



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



#76

Chrysene-d12

Concen: 20.000 ng

RT: 14.06 min Scan# 2036

Delta R.T. 0.01 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

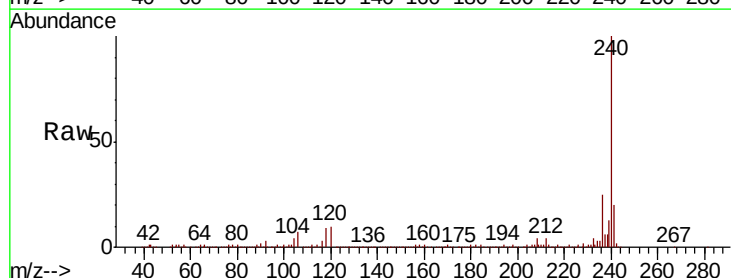
Tgt Ion:240 Resp: 415522

Ion Ratio Lower Upper

240 100

120 10.1 12.2 18.2#

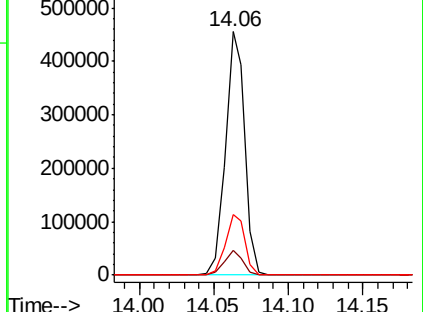
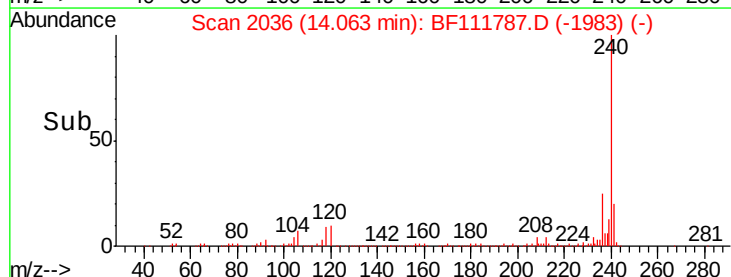
236 25.0 20.2 30.2

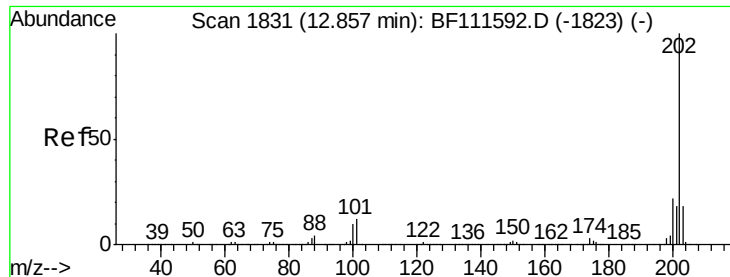


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

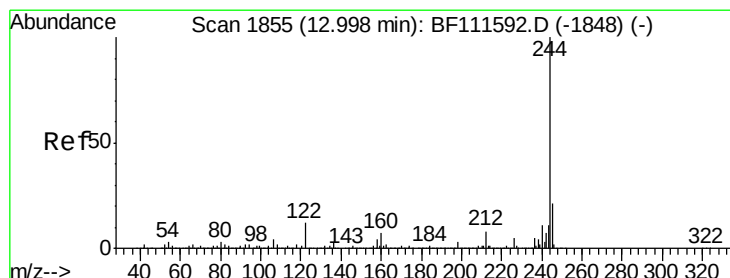
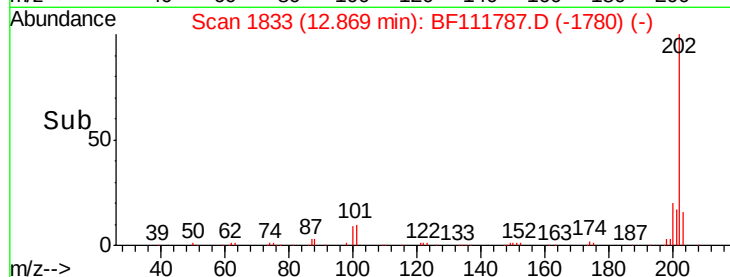
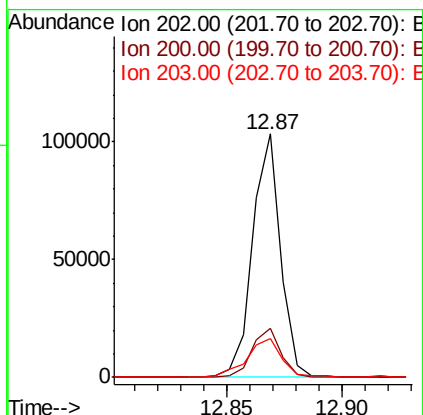
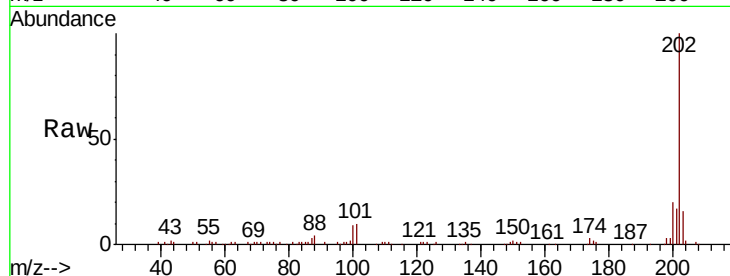




#78  
 Pyrene  
 Concen: 2.987 ng  
 RT: 12.87 min Scan# 1833  
 Delta R.T. 0.01 min  
 Lab File: BF111787.D  
 Acq: 28 Dec 2018 14:36

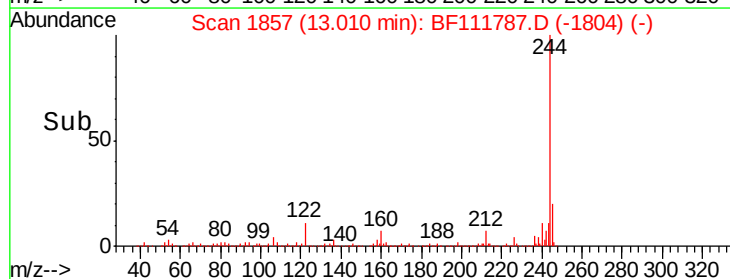
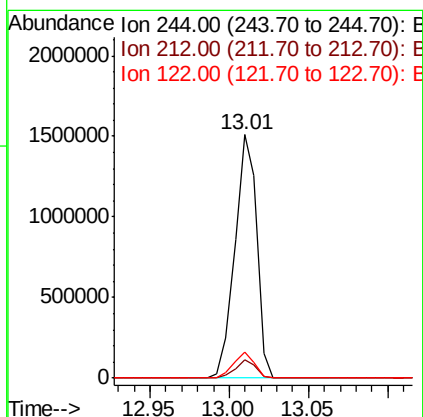
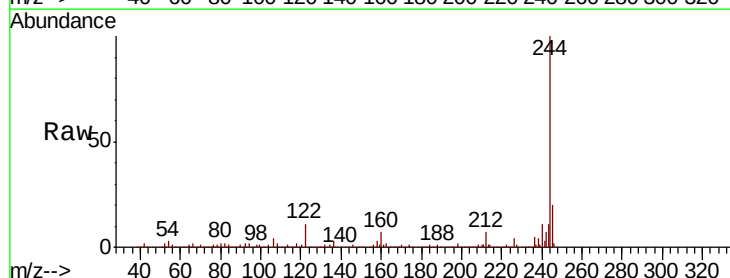
Instrument :  
 BNA\_F  
 ClientSampleId :  
 TN-122618-C

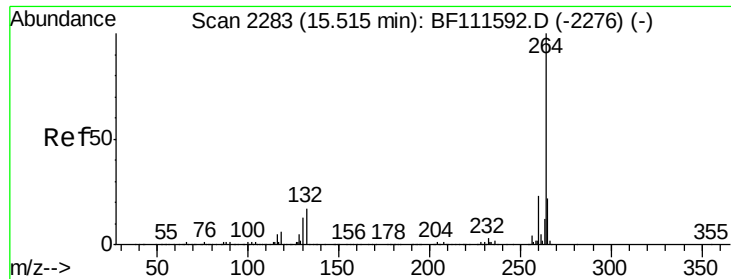
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 19.9  | 19.0  | 28.4  |
| 203     | 16.2  | 15.2  | 22.8  |



#79  
 Terphenyl-d14  
 Concen: 65.508 ng  
 RT: 13.01 min Scan# 1857  
 Delta R.T. 0.01 min  
 Lab File: BF111787.D  
 Acq: 28 Dec 2018 14:36

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 244     | 100   |       |       |
| 212     | 7.3   | 5.7   | 8.5   |
| 122     | 10.8  | 13.1  | 19.7  |

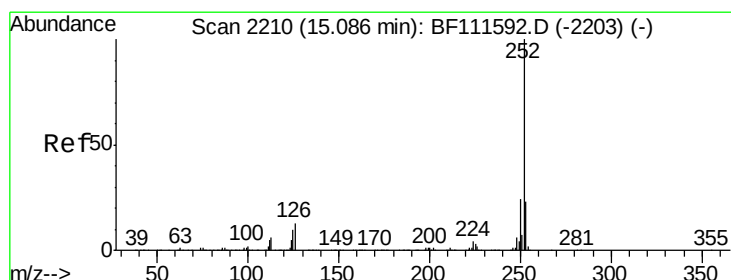
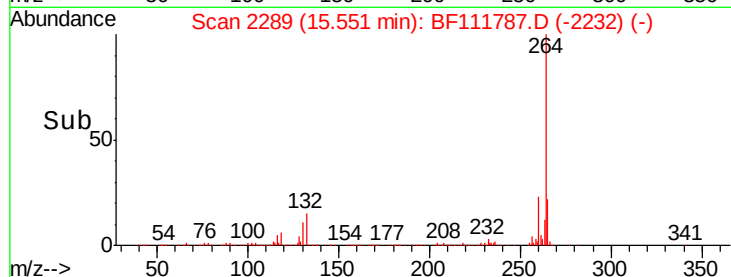
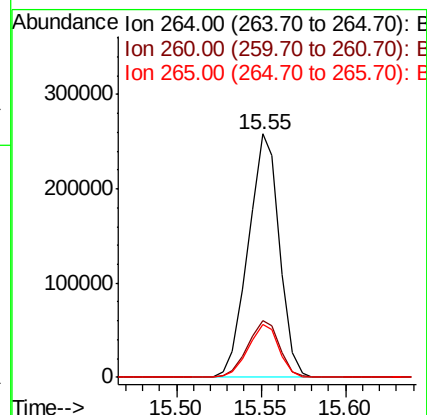
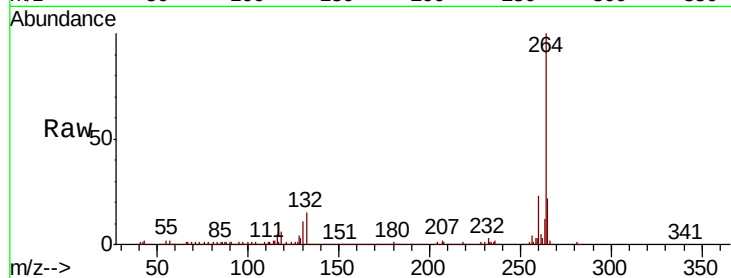




#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.55 min Scan# 2289  
Delta R.T. 0.04 min  
Lab File: BF111787.D  
Acq: 28 Dec 2018 14:36

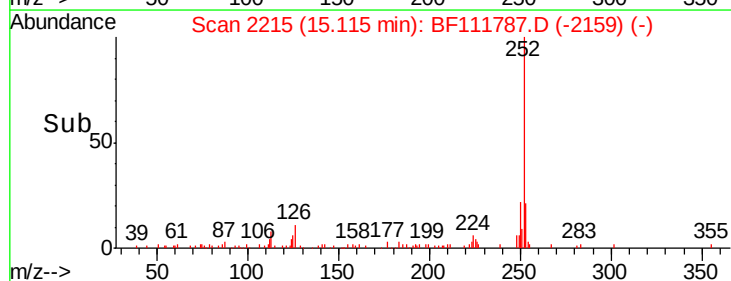
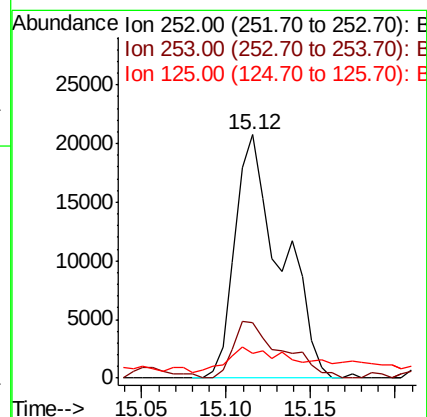
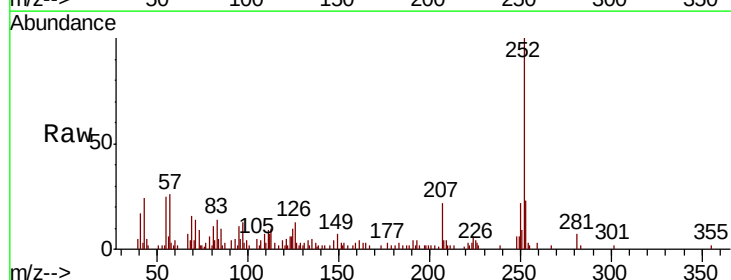
Instrument :  
BNA\_F  
ClientSampleId :  
TN-122618-C

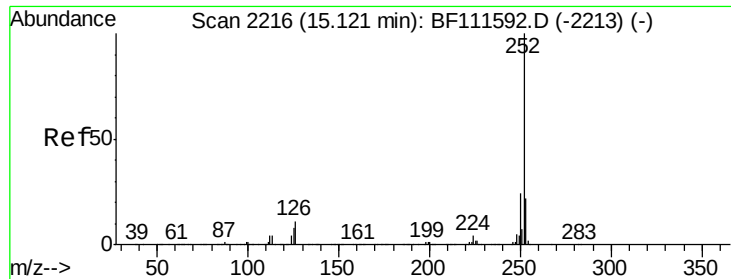
Tgt Ion:264 Resp: 332579  
Ion Ratio Lower Upper  
264 100  
260 23.2 18.3 27.5  
265 21.5 17.7 26.5



#88  
Benzo(b)fluoranthene  
Concen: 2.012 ng  
RT: 15.12 min Scan# 2215  
Delta R.T. 0.03 min  
Lab File: BF111787.D  
Acq: 28 Dec 2018 14:36

Tgt Ion:252 Resp: 39115  
Ion Ratio Lower Upper  
252 100  
253 23.0 18.2 27.2  
125 10.3 10.4 15.6#





#89

Benzo(k)fluoranthene

Concen: 2.114 ng

RT: 15.12 min Scan# 2215

Delta R.T. -0.01 min

Lab File: BF111787.D

Acq: 28 Dec 2018 14:36

Instrument :

BNA\_F

ClientSampleId :

TN-122618-C

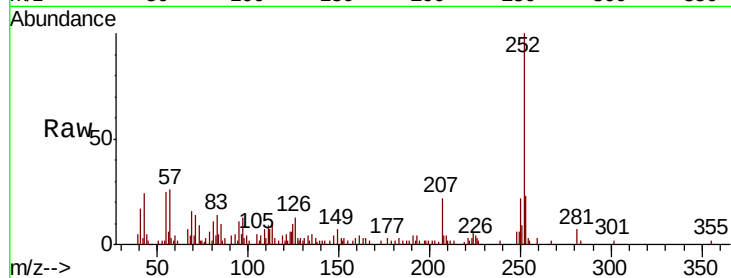
Tgt Ion:252 Resp: 39115

Ion Ratio Lower Upper

252 100

253 23.0 18.1 27.1

125 10.3 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

