

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF121418\  
 Data File : BF111441.D  
 Acq On : 15 Dec 2018 1:35  
 Operator : JU/SJ  
 Sample : J6322-21  
 Misc :  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SUP-6-C-2-120718

Quant Time: Dec 15 02:54:52 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF121418.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 14 13:26:17 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.80  | 152  | 207131   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.07  | 136  | 757625   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.83  | 164  | 290395   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.32 | 188  | 474151   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.95 | 240  | 368696   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.39 | 264  | 256568   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.43  | 112  | 1155335  | 92.82  | ng    | 0.01     |
| 7) Phenol-d6                | 6.44  | 99   | 1548374  | 93.52  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.36  | 82   | 1065010  | 83.71  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.62 | 330  | 276604   | 106.33 | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.16  | 172  | 1570340  | 83.53  | ng    | 0.00     |
| 79) Terphenyl-d14           | 12.90 | 244  | 1259824  | 80.24  | ng    | 0.00     |

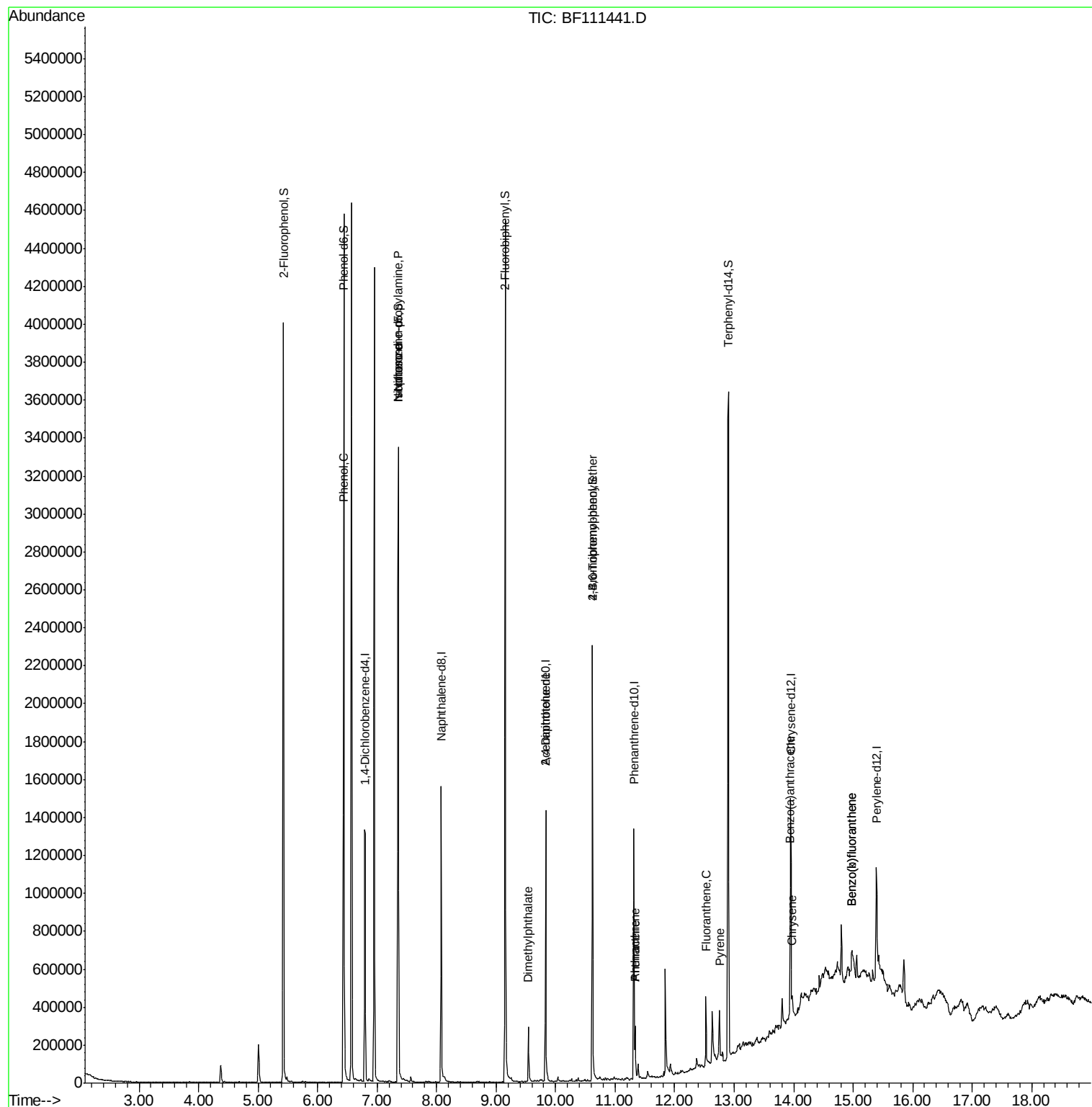
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 10) Phenol                     | 6.45  | 94   | 82434    | 4.469  | ng    | 94     |
| 19) n-Nitroso-di-n-propylamine | 7.36  | 70   | 135513   | 12.406 | ng    | # 74   |
| 25) Isophorone                 | 7.36  | 82   | 1064994  | 49.472 | ng    | # 64   |
| 50) Dimethylphthalate          | 9.55  | 163  | 120558   | 5.765  | ng    | # 96   |
| 57) 2,4-Dinitrotoluene         | 9.83  | 165  | 37078    | 6.001  | ng    | # 24   |
| 67) 4-Bromophenyl-phenylether  | 10.62 | 248  | 18345    | 3.590  | ng    | # 1    |
| 71) Phenanthrene               | 11.34 | 178  | 89484    | 3.663  | ng    | 94     |
| 72) Anthracene                 | 11.34 | 178  | 89484    | 3.581  | ng    | 95     |
| 75) Fluoranthene               | 12.53 | 202  | 139823   | 5.850  | ng    | 96     |
| 78) Pyrene                     | 12.76 | 202  | 118779   | 4.569  | ng    | 95     |
| 81) Benzo(a)anthracene         | 13.94 | 228  | 48596    | 2.424  | ng    | 99     |
| 83) Chrysene                   | 13.98 | 228  | 48552    | 2.299  | ng    | 95     |
| 88) Benzo(b)fluoranthene       | 14.98 | 252  | 55749    | 3.727  | ng    | # 82   |
| 89) Benzo(k)fluoranthene       | 14.98 | 252  | 55749    | 3.900  | ng    | # 81   |

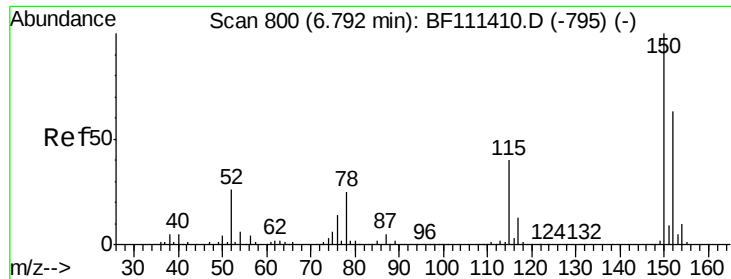
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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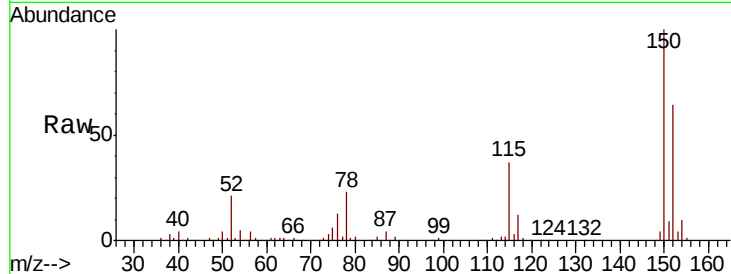


#1

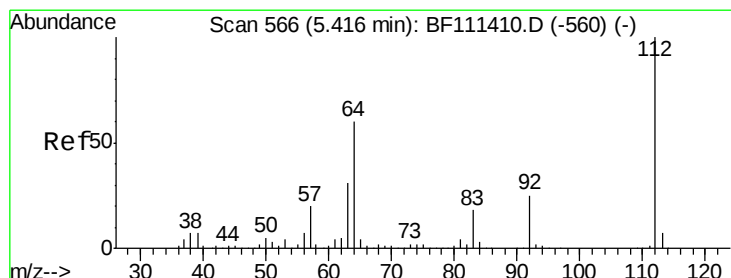
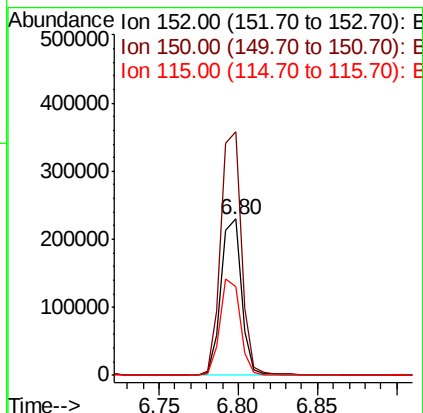
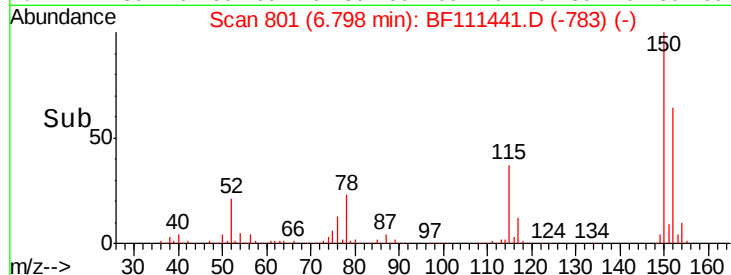
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.80 min Scan# 801  
Delta R.T. 0.01 min  
Lab File: BF111441.D  
Acq: 15 Dec 2018 1:35

Instrument :  
BNA\_G  
ClientSampleId :  
SUP-6-C-2-120718

Tgt Ion:152 Resp: 207131  
Ion Ratio Lower Upper  
152 100  
150 156.1 126.6 189.8  
115 57.2 50.7 76.1



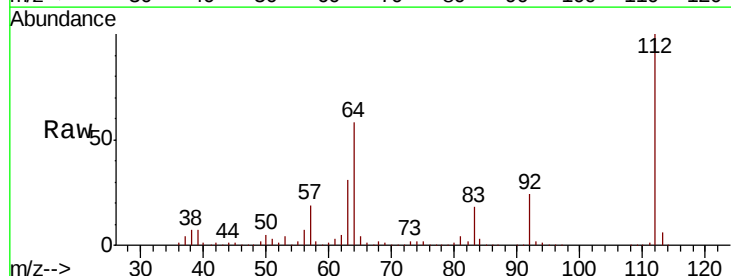
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



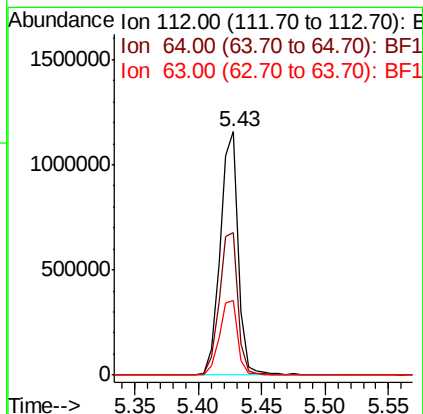
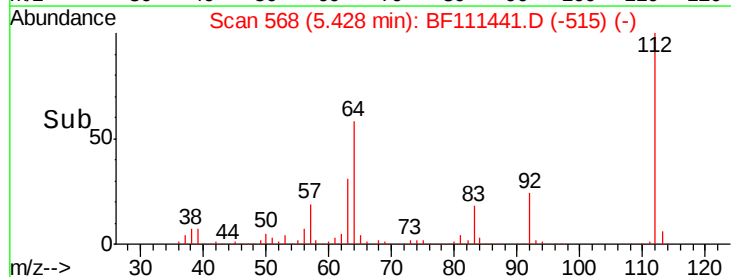
#5

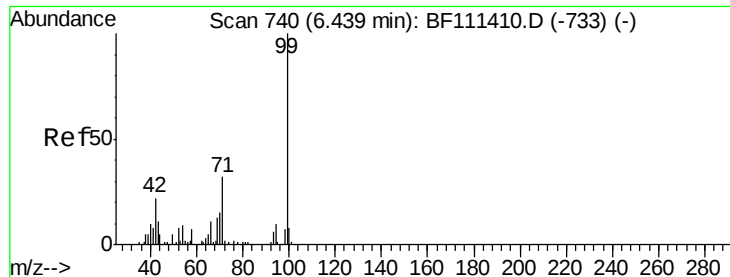
2-Fluorophenol  
Concen: 92.818 ng  
RT: 5.43 min Scan# 568  
Delta R.T. 0.01 min  
Lab File: BF111441.D  
Acq: 15 Dec 2018 1:35

Tgt Ion:112 Resp: 1155335  
Ion Ratio Lower Upper  
112 100  
64 58.3 51.8 77.6  
63 30.6 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: 93.517 ng

RT: 6.44 min Scan# 740

Delta R.T. -0.00 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

Instrument :

BNA\_G

ClientSampleId :

SUP-6-C-2-120718

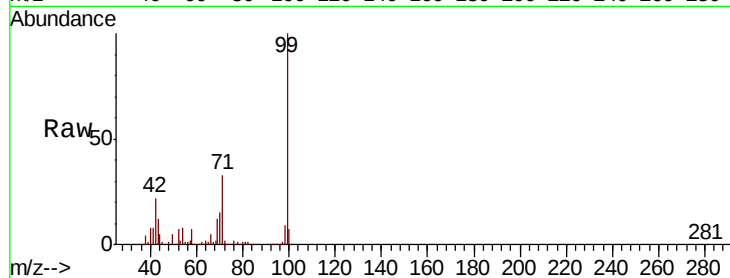
Tgt Ion: 99 Resp: 1548374

Ion Ratio Lower Upper

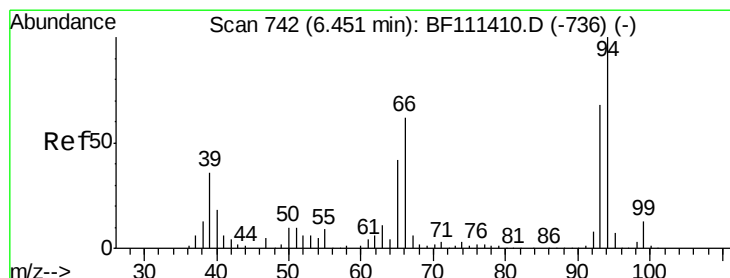
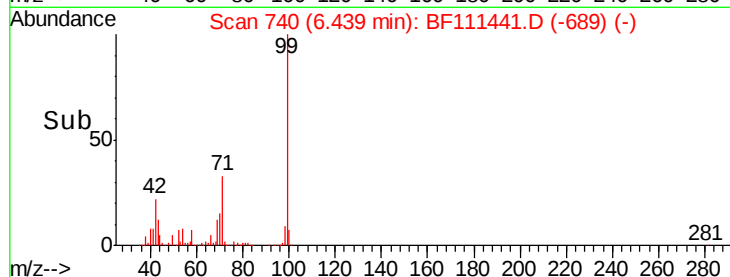
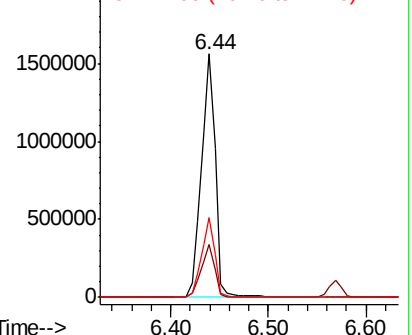
99 100

42 21.7 17.4 26.0

71 32.6 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: 4.469 ng

RT: 6.45 min Scan# 742

Delta R.T. -0.00 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

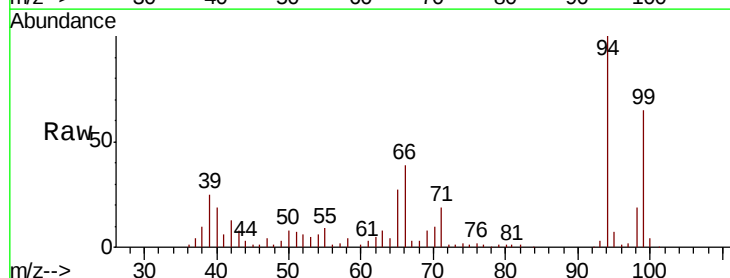
Tgt Ion: 94 Resp: 82434

Ion Ratio Lower Upper

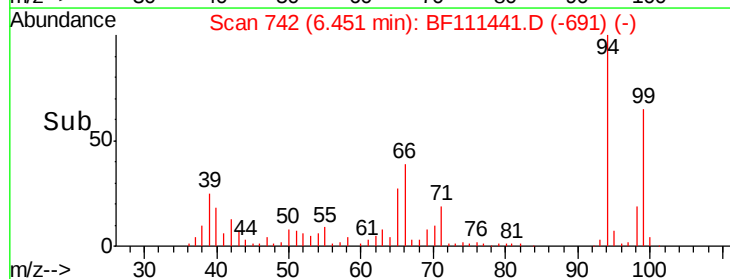
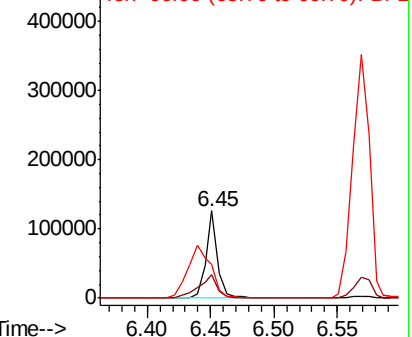
94 100

65 27.0 11.7 51.7

66 38.5 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

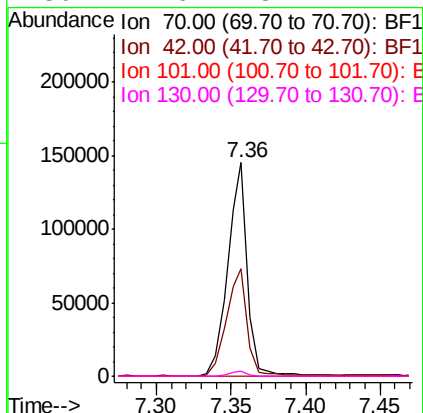
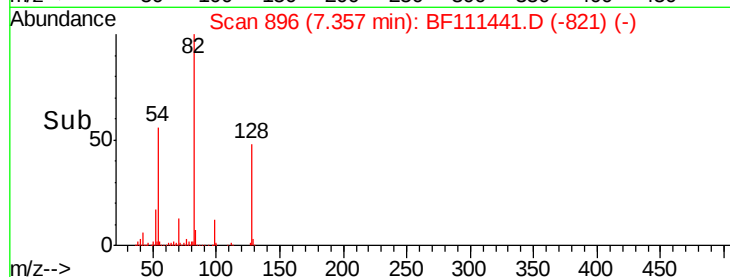
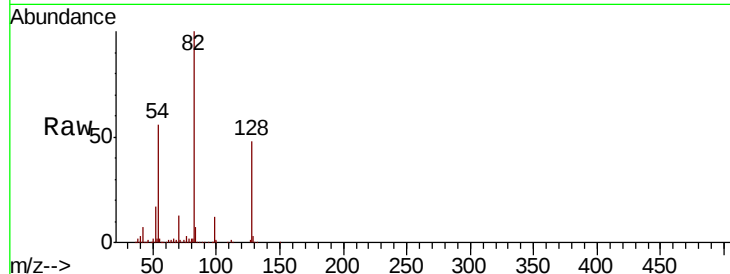




#19  
n-Nitroso-di-n-propylamine  
Concen: 12.406 ng  
RT: 7.36 min Scan# 896  
Delta R.T. 0.14 min  
Lab File: BF111441.D  
Acq: 15 Dec 2018 1:35

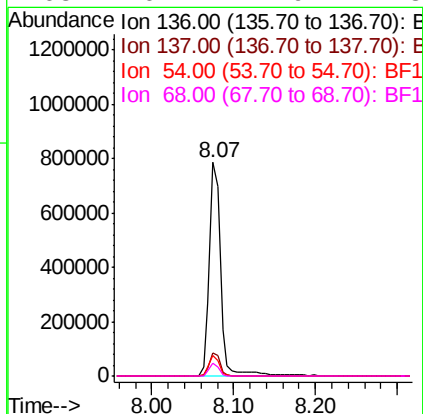
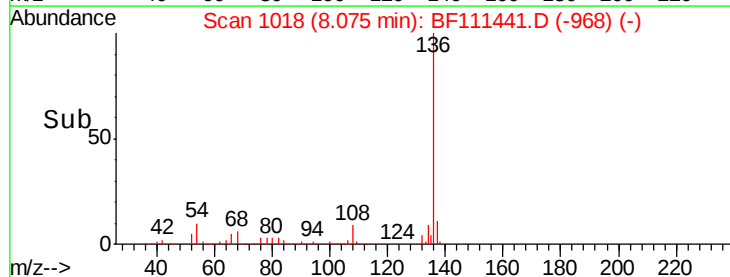
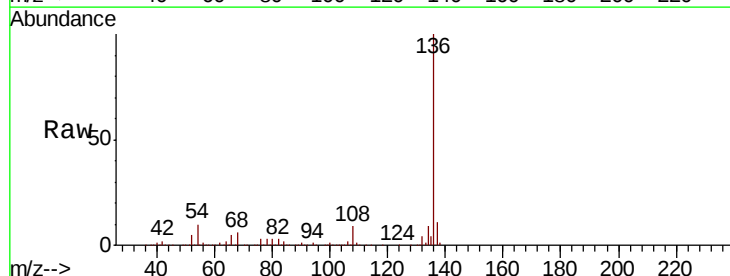
Instrument :  
BNA\_G  
ClientSampleId :  
SUP-6-C-2-120718

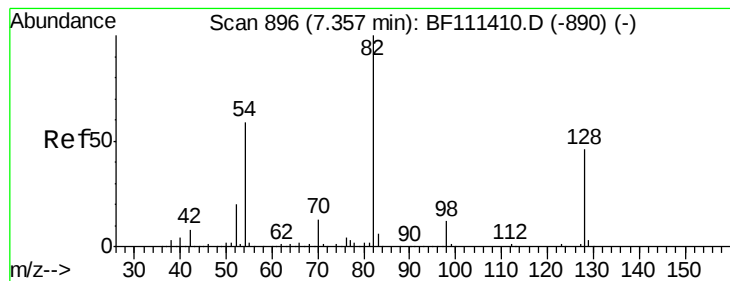
Tgt Ion: 70 Resp: 135513  
Ion Ratio Lower Upper  
70 100  
42 50.6 53.2 79.8#  
101 0.0 8.2 12.4#  
130 2.6 18.1 27.1#



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.07 min Scan# 1018  
Delta R.T. -0.01 min  
Lab File: BF111441.D  
Acq: 15 Dec 2018 1:35

Tgt Ion: 136 Resp: 757625  
Ion Ratio Lower Upper  
136 100  
137 10.7 9.1 13.7  
54 9.9 7.7 11.5  
68 6.1 4.9 7.3





#23

Nitrobenzene-d5

Concen: 83.709 ng

RT: 7.36 min Scan# 896

Delta R.T. -0.00 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

Instrument :

BNA\_G

ClientSampleId :

SUP-6-C-2-120718

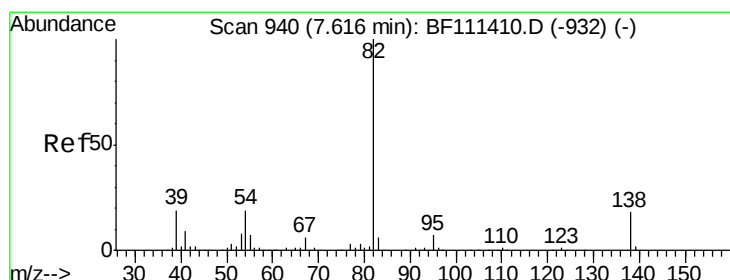
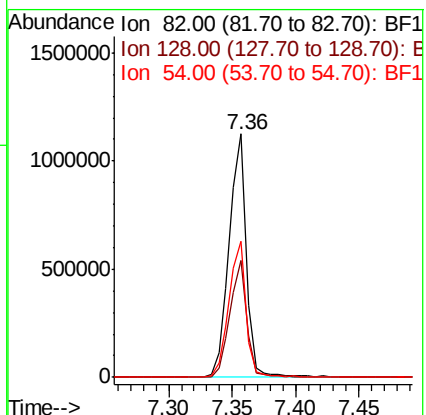
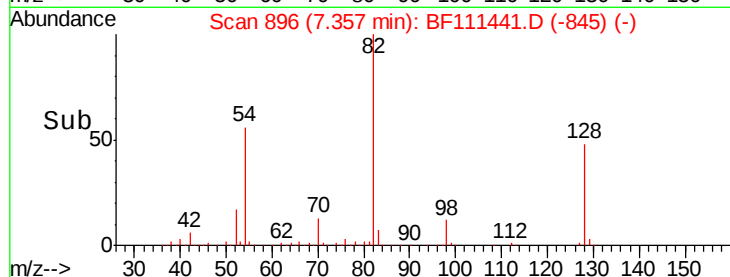
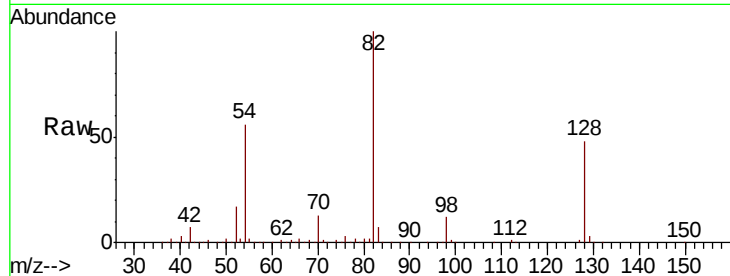
Tgt Ion: 82 Resp: 1065010

Ion Ratio Lower Upper

82 100

128 48.0 37.4 56.2

54 55.9 47.6 71.4



#25

Isophorone

Concen: 49.472 ng

RT: 7.36 min Scan# 896

Delta R.T. -0.26 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

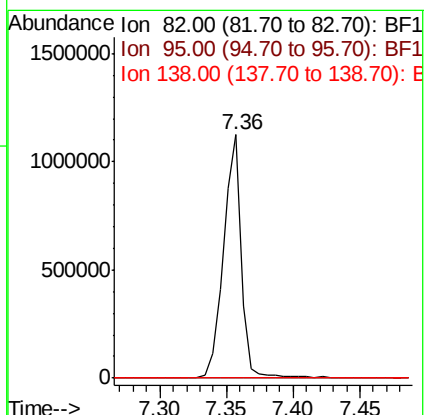
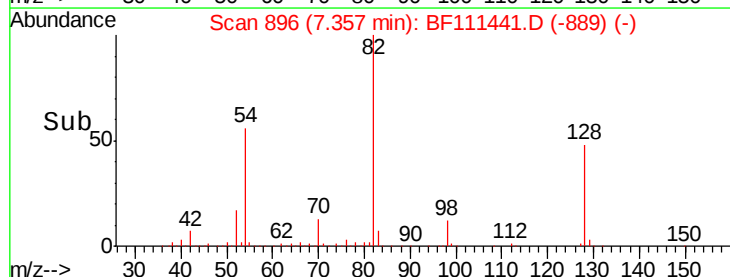
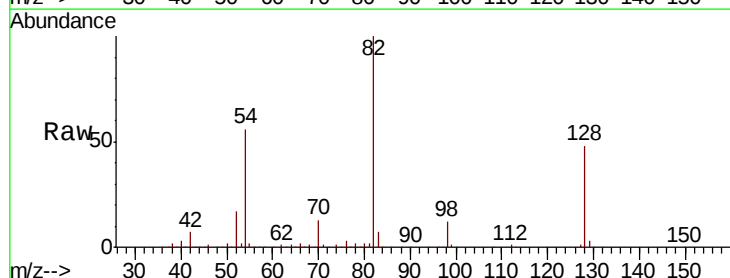
Tgt Ion: 82 Resp: 1064994

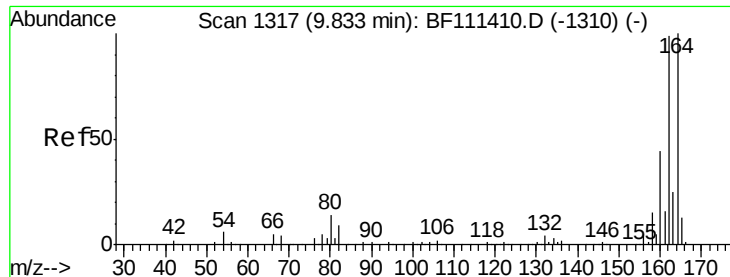
Ion Ratio Lower Upper

82 100

95 0.0 5.4 8.2#

138 0.0 15.1 22.7#





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.83 min Scan# 1317

Delta R.T. -0.00 min

Lab File: BF111441.D

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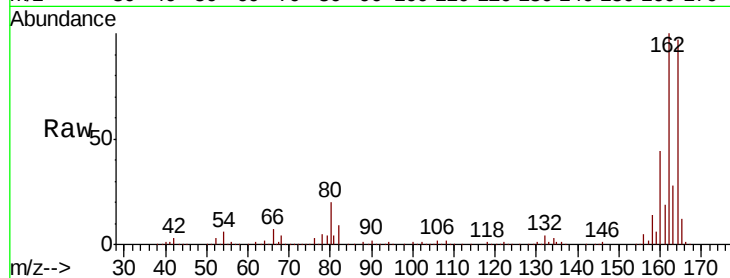
Tgt Ion:164 Resp: 290395

Ion Ratio Lower Upper

164 100

162 102.7 81.4 122.0

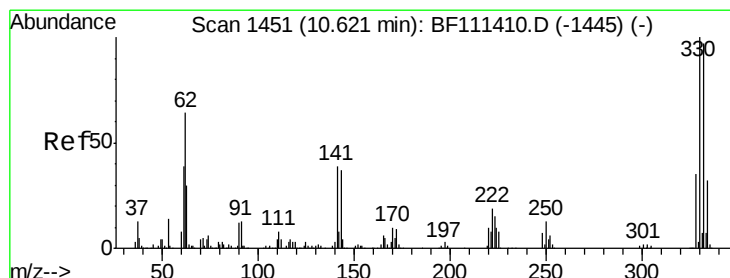
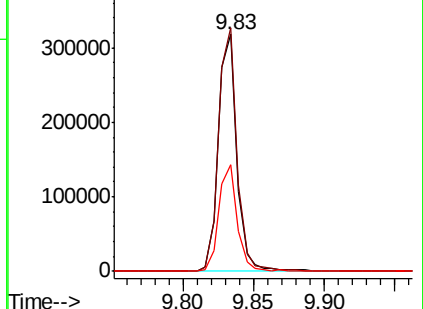
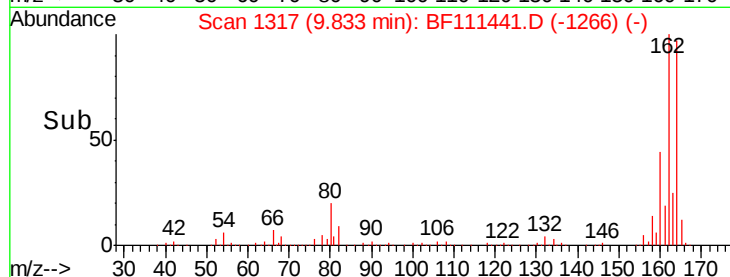
160 45.1 35.7 53.5



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: 106.332 ng

RT: 10.62 min Scan# 1451

Delta R.T. -0.00 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

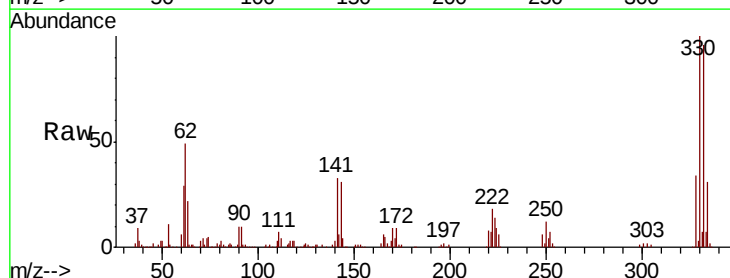
Tgt Ion:330 Resp: 276604

Ion Ratio Lower Upper

330 100

332 94.9 76.0 114.0

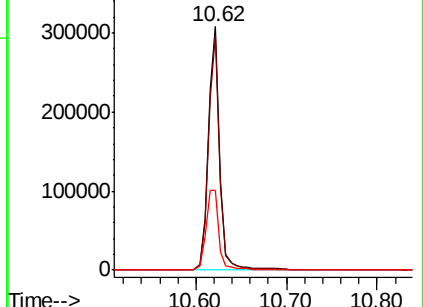
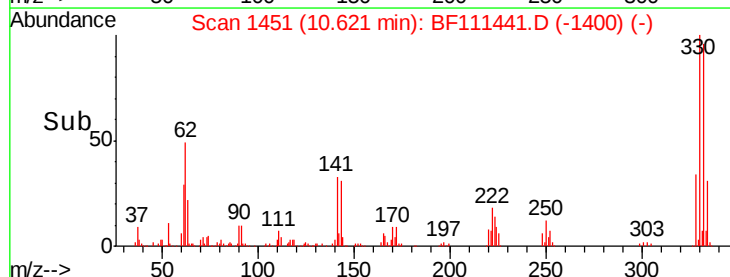
141 37.8 31.0 46.6

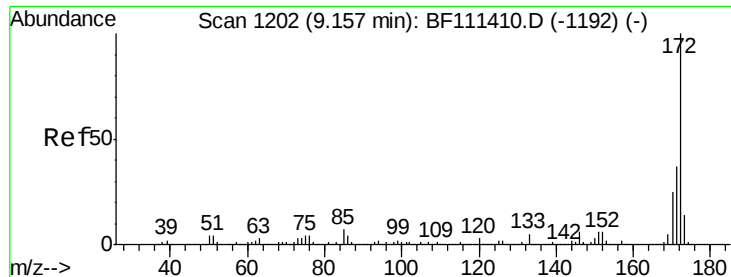


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

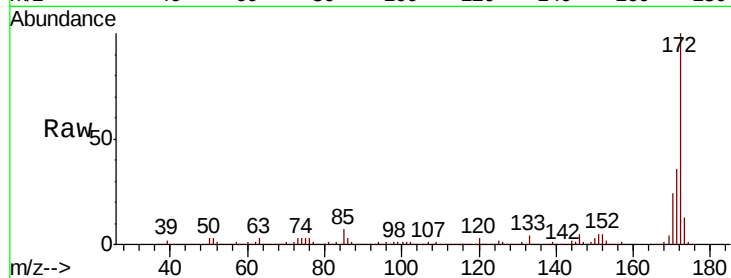




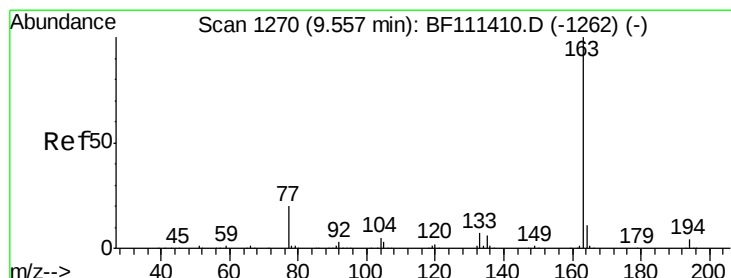
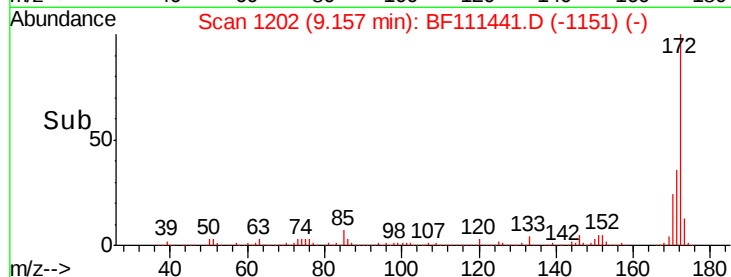
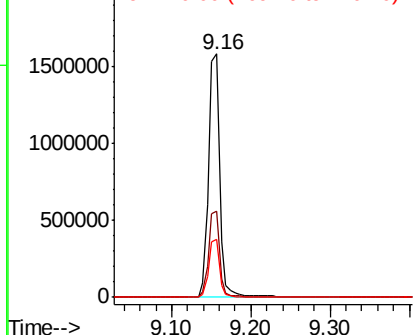
#45  
 2-Fluorobiphenyl  
 Concen: 83.528 ng  
 RT: 9.16 min Scan# 1202  
 Delta R.T. -0.00 min  
 Lab File: BF111441.D  
 Acq: 15 Dec 2018 1:35

Instrument :  
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Tgt Ion:172 Resp: 1570340  
 Ion Ratio Lower Upper  
 172 100  
 171 35.6 33.0 49.4  
 170 23.6 22.3 33.5

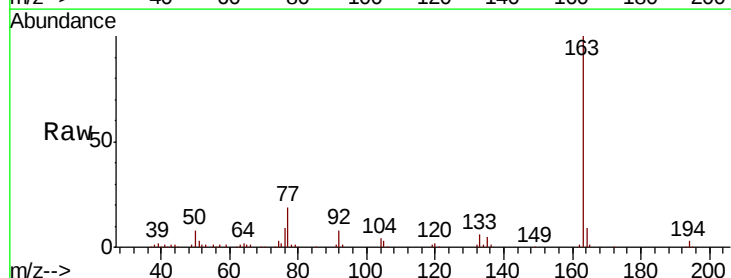


Abundance Ion 172.00 (171.70 to 172.70): E  
 Ion 171.00 (170.70 to 171.70): E  
 Ion 170.00 (169.70 to 170.70): E

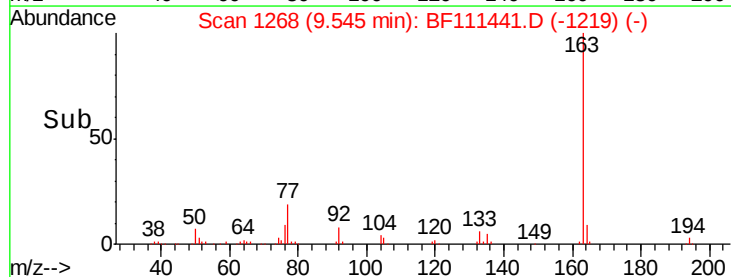
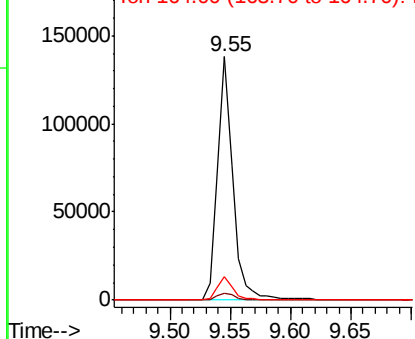


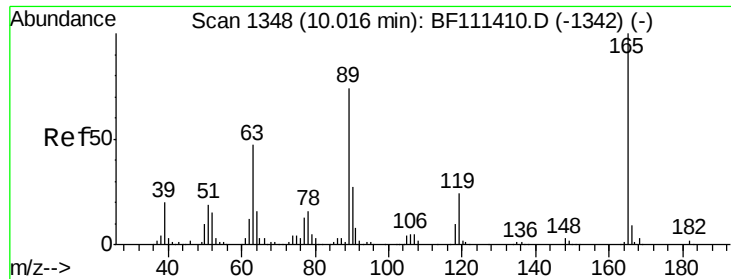
#50  
 Dimethylphthalate  
 Concen: 5.765 ng  
 RT: 9.55 min Scan# 1268  
 Delta R.T. -0.01 min  
 Lab File: BF111441.D  
 Acq: 15 Dec 2018 1:35

Tgt Ion:163 Resp: 120558  
 Ion Ratio Lower Upper  
 163 100  
 194 3.0 3.0 4.6#  
 164 9.4 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

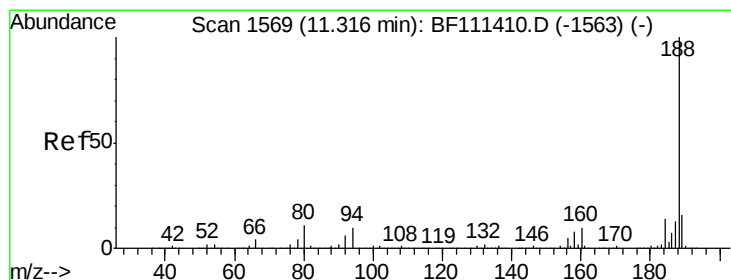
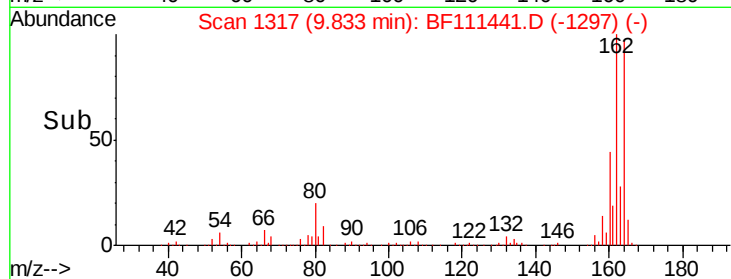
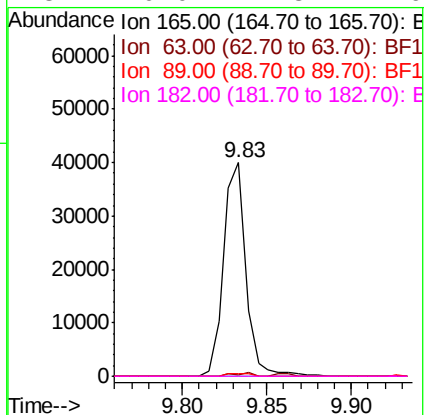
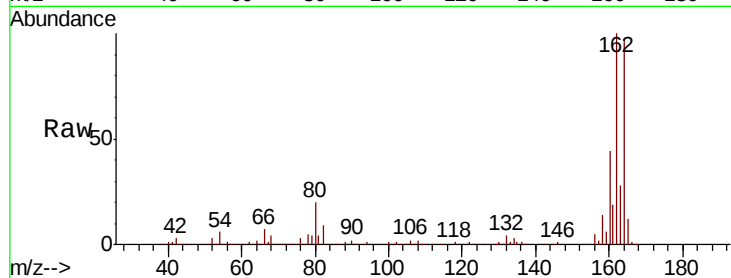




#57  
 2,4-Dinitrotoluene  
 Concen: 6.001 ng  
 RT: 9.83 min Scan# 1317  
 Delta R.T. -0.18 min  
 Lab File: BF111441.D  
 Acq: 15 Dec 2018 1:35

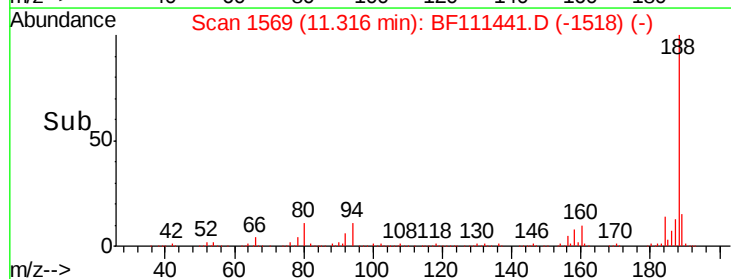
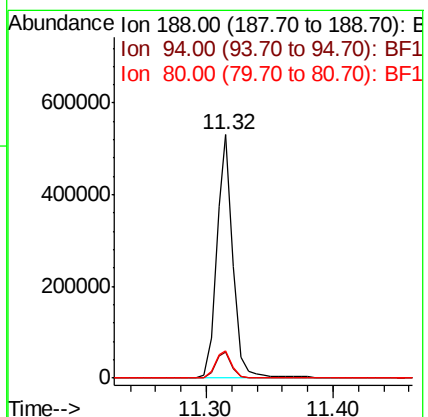
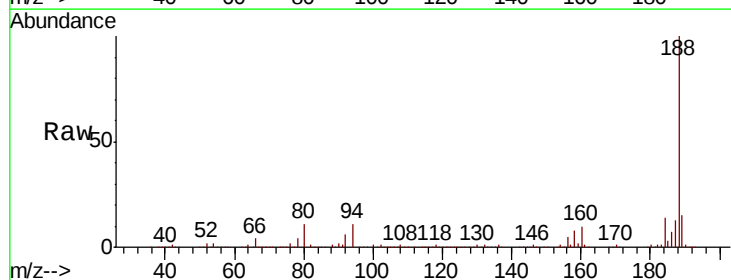
Instrument :  
 BNA\_G  
 ClientSampleId :  
 SUP-6-C-2-120718

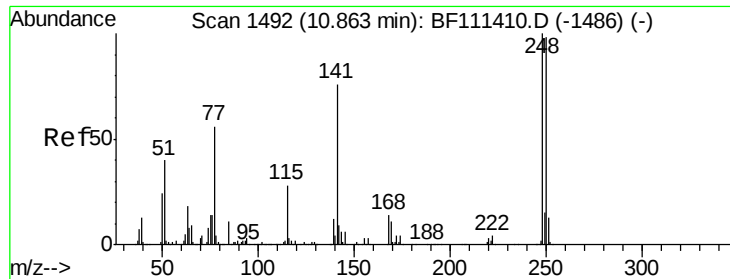
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 0.8   | 34.6  | 52.0# |
| 89      | 1.1   | 56.2  | 84.4# |
| 182     | 0.0   | 1.8   | 2.6#  |



#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.32 min Scan# 1569  
 Delta R.T. -0.00 min  
 Lab File: BF111441.D  
 Acq: 15 Dec 2018 1:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 10.9  | 9.6   | 14.4  |
| 80      | 11.3  | 9.8   | 14.6  |

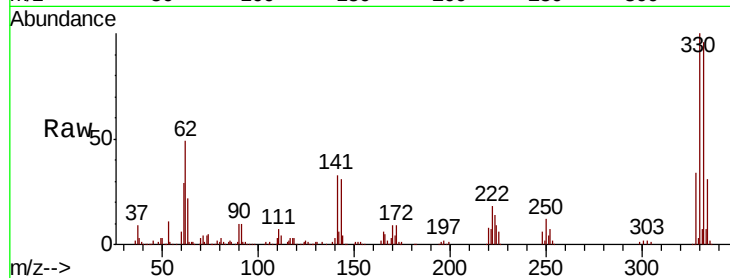




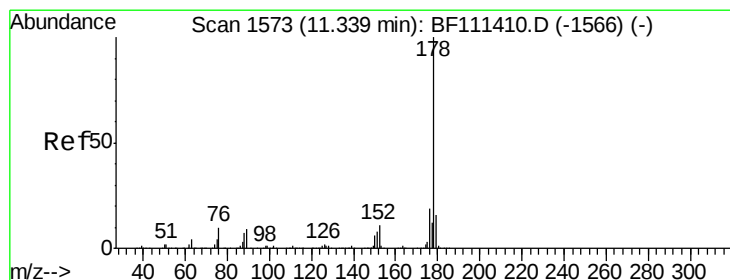
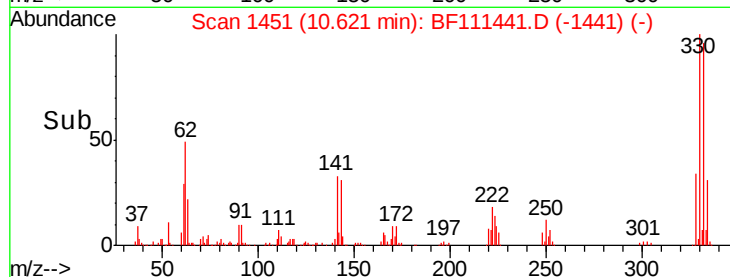
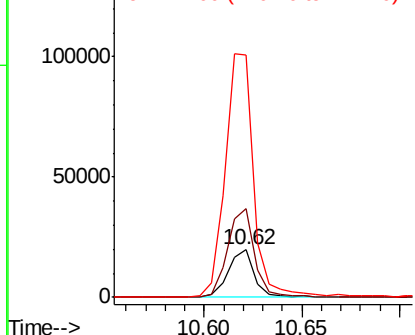
#67  
 4-Bromophenyl-phenylether  
 Concen: 3.590 ng  
 RT: 10.62 min Scan# 1451  
 Delta R.T. -0.24 min  
 Lab File: BF111441.D  
 Acq: 15 Dec 2018 1:35

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SUP-6-C-2-120718

Tgt Ion:248 Resp: 18345  
 Ion Ratio Lower Upper  
 248 100  
 250 186.8 77.0 115.4#  
 141 512.4 63.0 94.6#

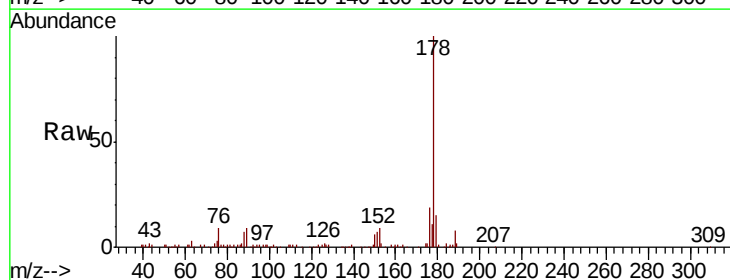


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

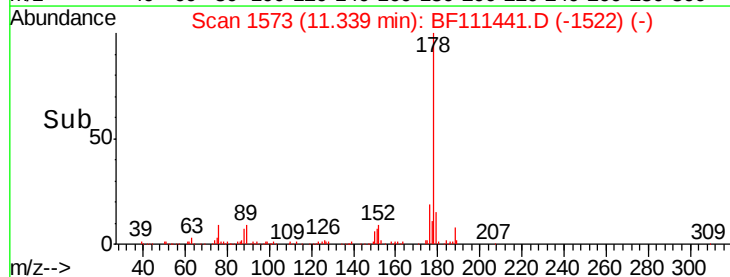
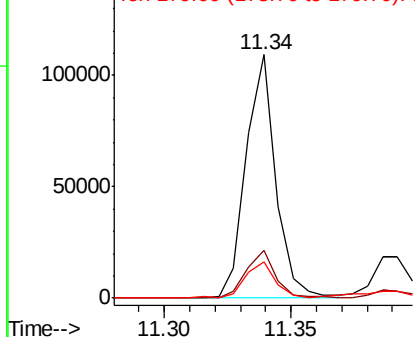


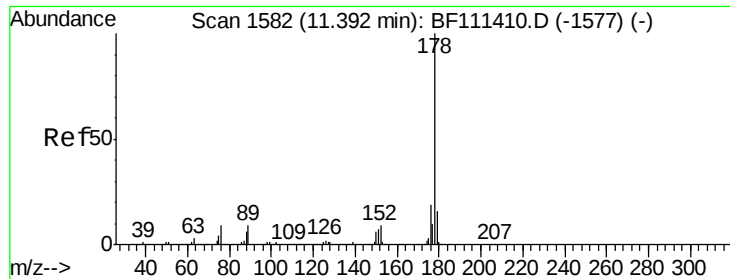
#71  
 Phenanthrene  
 Concen: 3.663 ng  
 RT: 11.34 min Scan# 1573  
 Delta R.T. -0.00 min  
 Lab File: BF111441.D  
 Acq: 15 Dec 2018 1:35

Tgt Ion:178 Resp: 89484  
 Ion Ratio Lower Upper  
 178 100  
 176 19.4 18.1 27.1  
 179 15.0 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

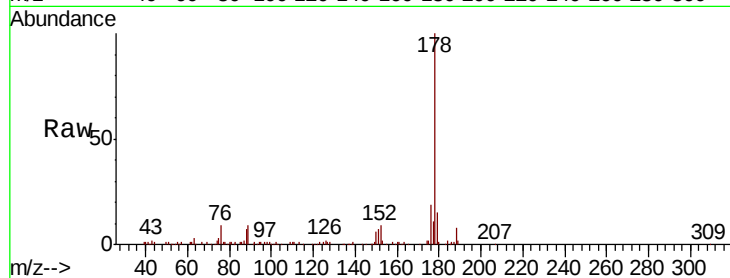




#72  
 Anthracene  
 Concen: 3.581 ng  
 RT: 11.34 min Scan# 1573  
 Delta R.T. -0.05 min  
 Lab File: BF111441.D  
 Acq: 15 Dec 2018 1:35

Instrument :  
 BNA\_G  
 ClientSampleId :  
 SUP-6-C-2-120718

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.4  | 17.2  | 25.8  |
| 179     | 15.0  | 13.8  | 20.8  |

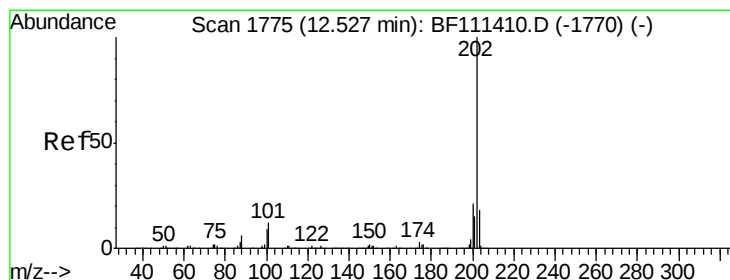
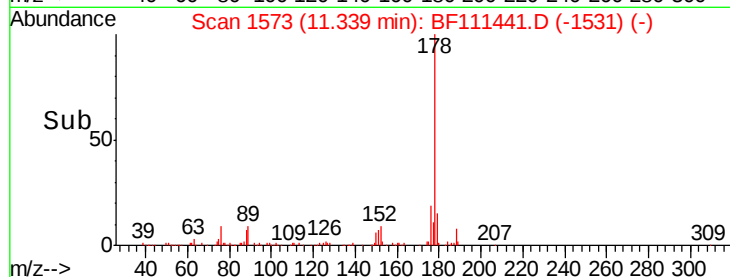
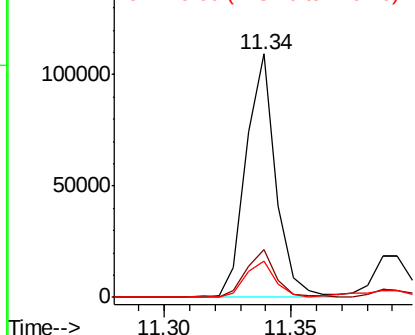


Abundance

Ion 178.00 (177.70 to 178.70): E

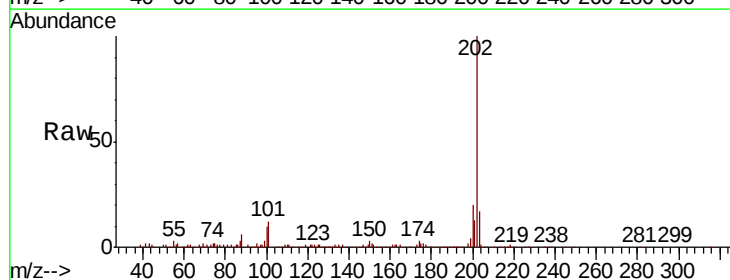
Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#75  
 Fluoranthene  
 Concen: 5.850 ng  
 RT: 12.53 min Scan# 1775  
 Delta R.T. 0.00 min  
 Lab File: BF111441.D  
 Acq: 15 Dec 2018 1:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 101     | 12.0  | 0.0   | 33.8  |
| 203     | 16.6  | 0.0   | 38.6  |

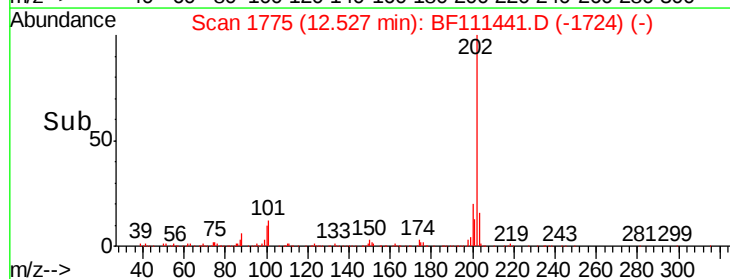
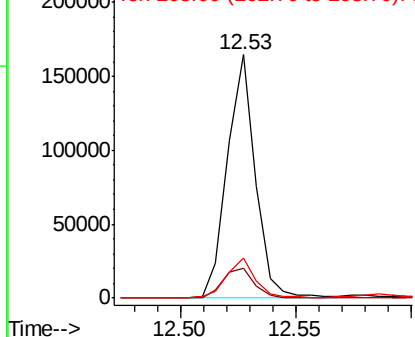


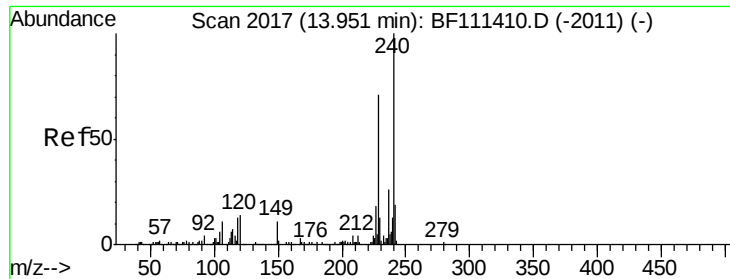
Abundance

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: 13.95 min Scan# 2017

Delta R.T. -0.00 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

Instrument :

BNA\_G

ClientSampleId :

SUP-6-C-2-120718

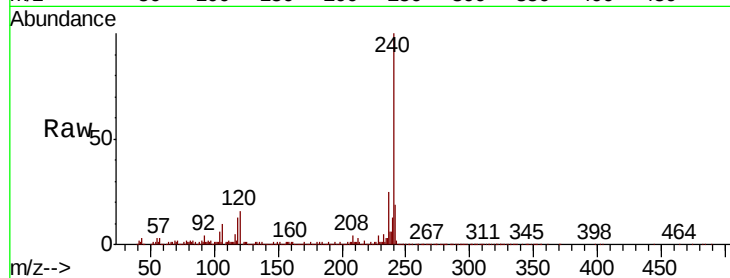
Tgt Ion:240 Resp: 368696

Ion Ratio Lower Upper

240 100

120 15.9 12.2 18.2

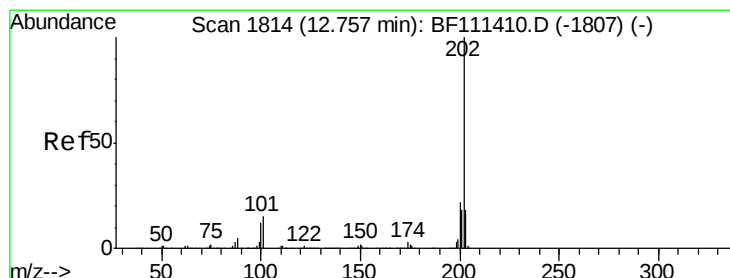
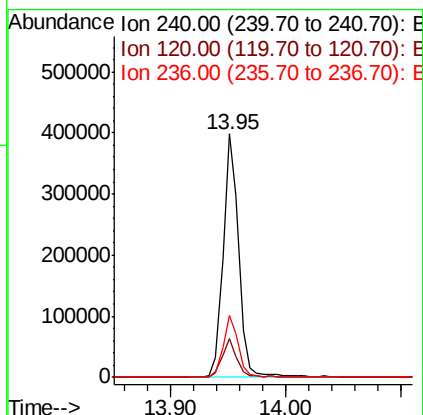
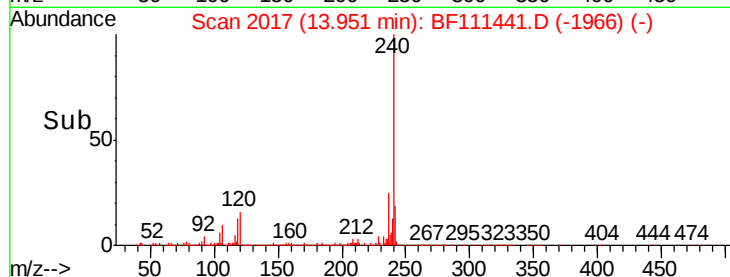
236 25.3 20.2 30.2



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: 4.569 ng

RT: 12.76 min Scan# 1814

Delta R.T. -0.00 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

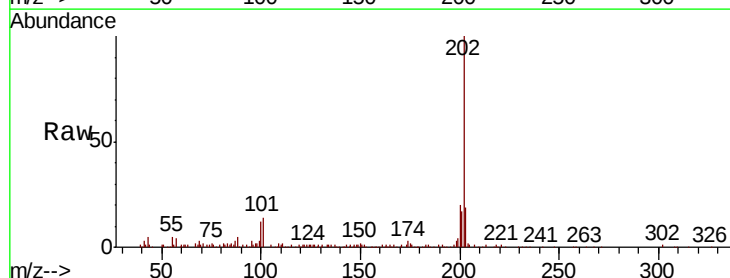
Tgt Ion:202 Resp: 118779

Ion Ratio Lower Upper

202 100

200 19.8 19.0 28.4

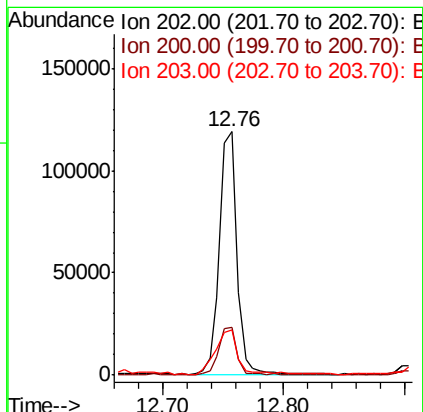
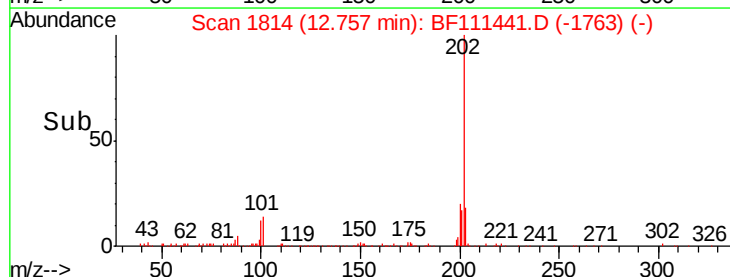
203 18.5 15.2 22.8

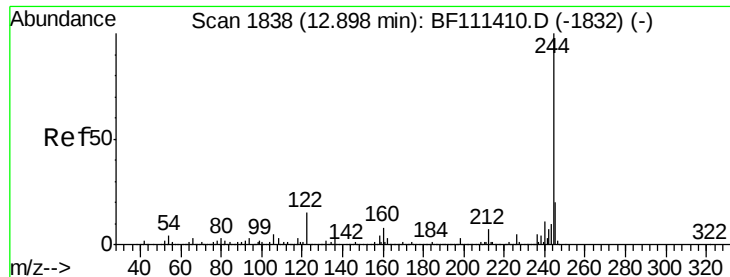


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#79

Terphenyl-d14

Concen: 80.239 ng

RT: 12.90 min Scan# 1839

Delta R.T. 0.01 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

Instrument :

BNA\_G

ClientSampleId :

SUP-6-C-2-120718

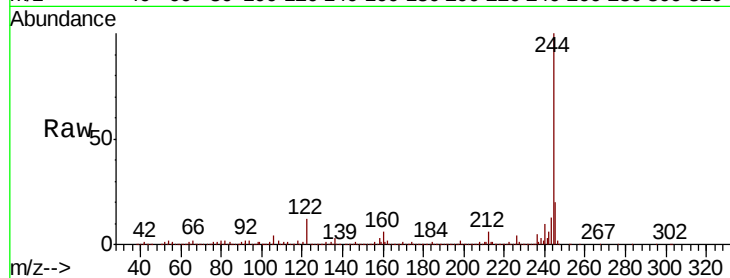
Tgt Ion:244 Resp: 1259824

Ion Ratio Lower Upper

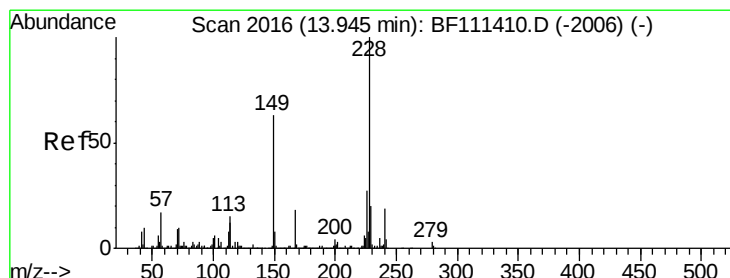
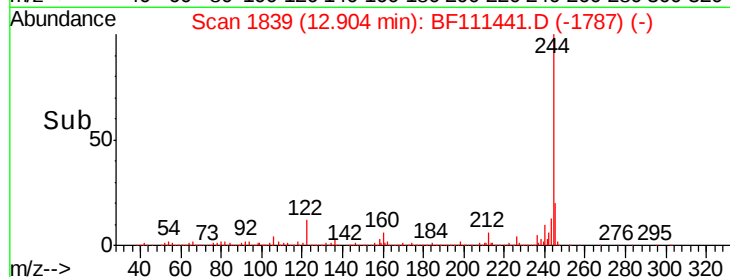
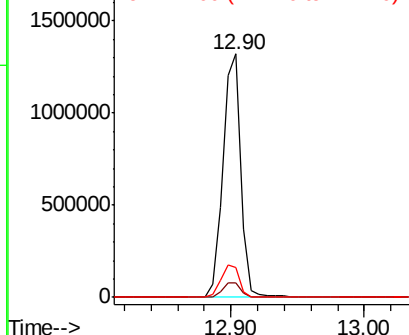
244 100

212 6.2 5.7 8.5

122 12.2 13.1 19.7#



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



#81

Benzo(a)anthracene

Concen: 2.424 ng

RT: 13.94 min Scan# 2015

Delta R.T. -0.01 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

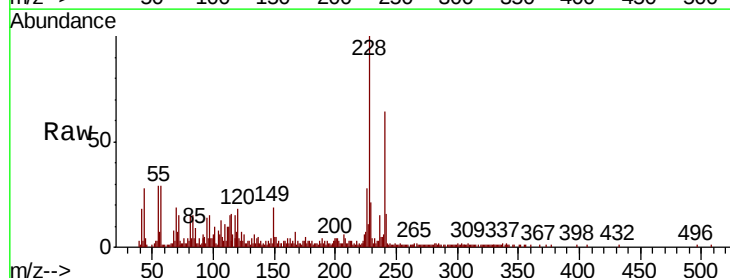
Tgt Ion:228 Resp: 48596

Ion Ratio Lower Upper

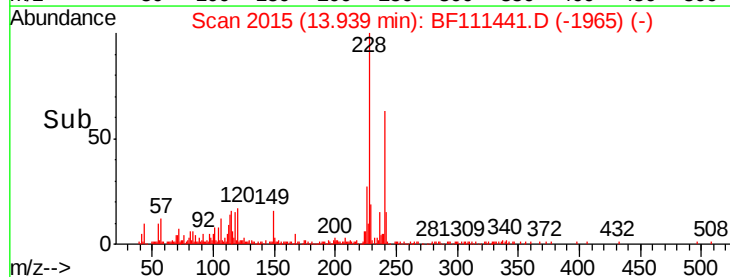
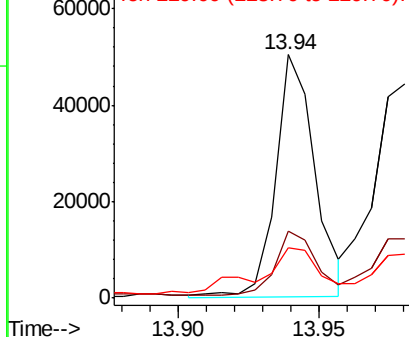
228 100

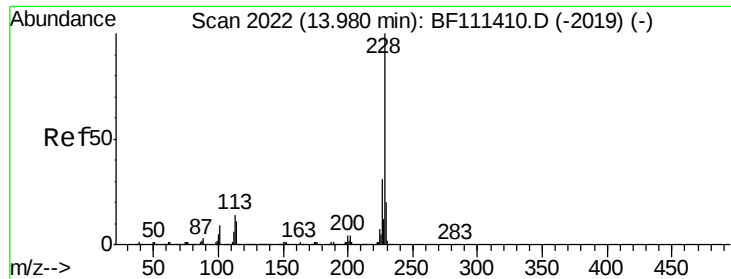
226 27.6 22.6 34.0

229 20.9 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





#83

Chrysene

Concen: 2.299 ng

RT: 13.98 min Scan# 2022

Delta R.T. -0.00 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

Instrument :

BNA\_G

ClientSampleId :

SUP-6-C-2-120718

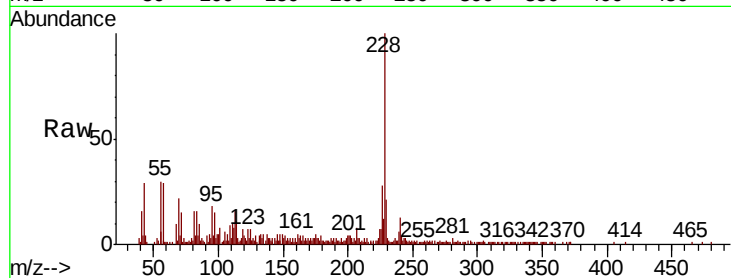
Tgt Ion:228 Resp: 48552

Ion Ratio Lower Upper

228 100

226 27.7 25.3 37.9

229 20.7 17.2 25.8

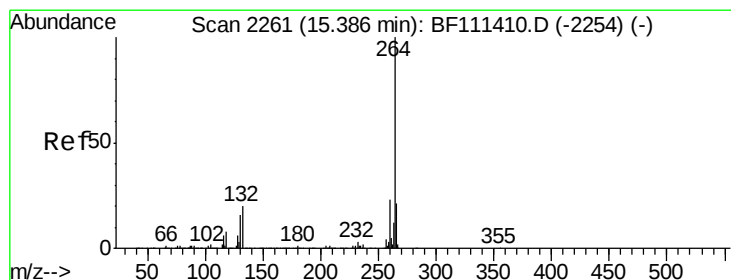
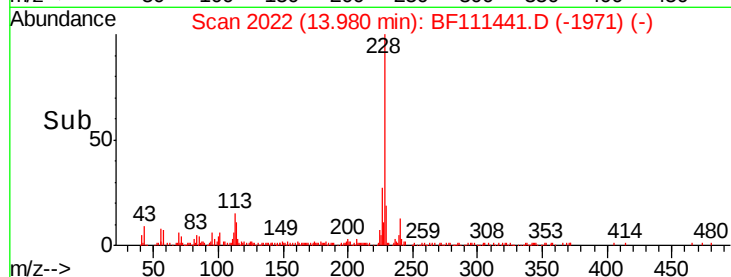
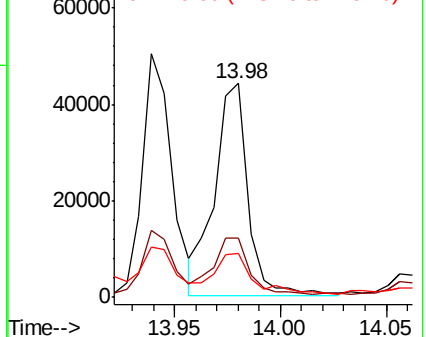


Abundance

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



#87

Perylene-d12

Concen: 20.000 ng

RT: 15.39 min Scan# 2262

Delta R.T. 0.01 min

Lab File: BF111441.D

Acq: 15 Dec 2018 1:35

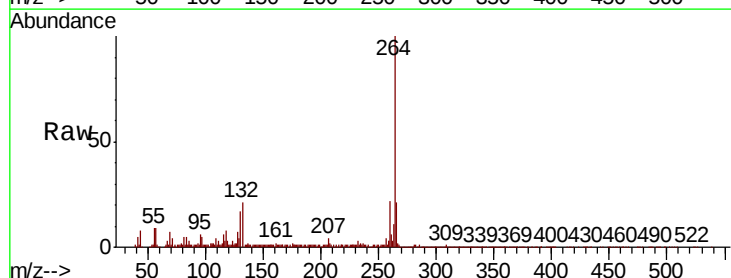
Tgt Ion:264 Resp: 256568

Ion Ratio Lower Upper

264 100

260 22.4 18.3 27.5

265 21.5 17.7 26.5

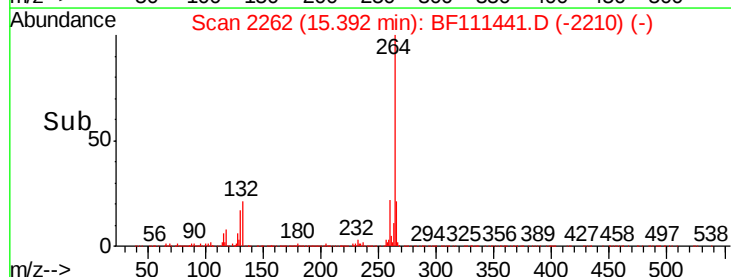
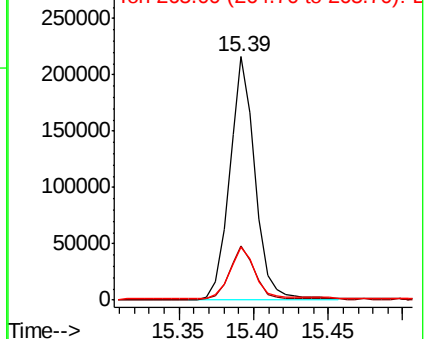


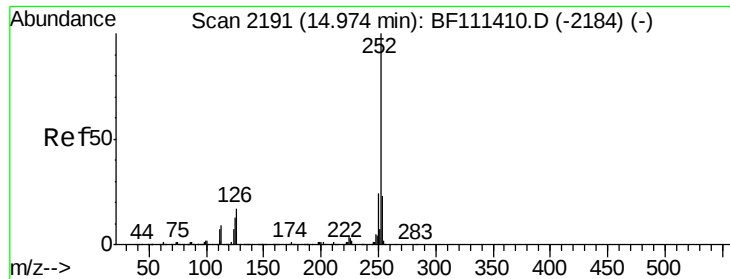
Abundance

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

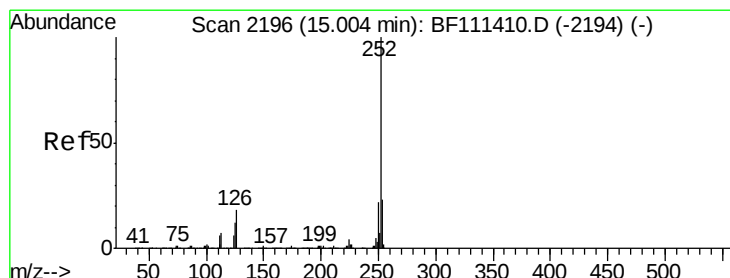
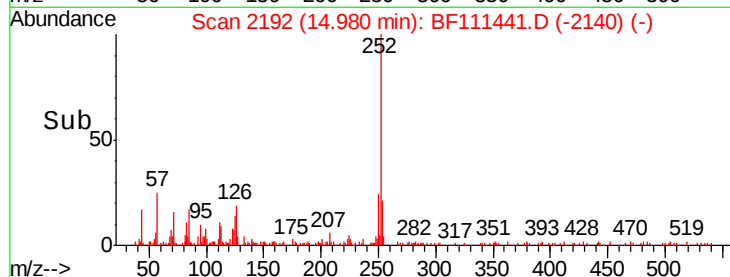
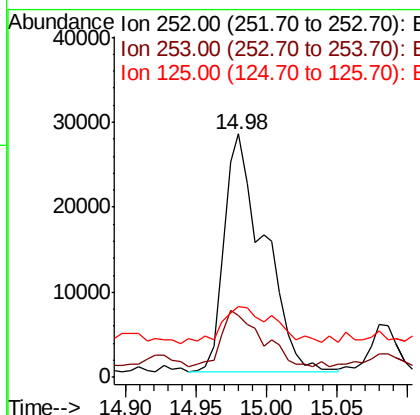
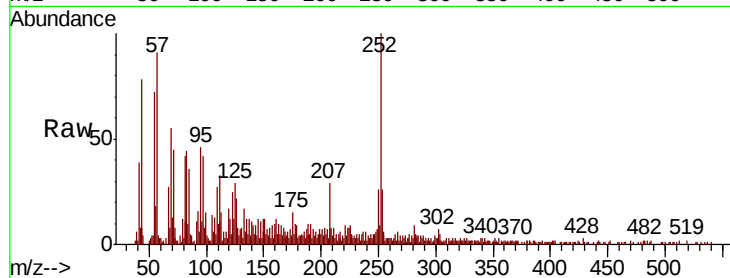




#88  
Benzo(b)fluoranthene  
Concen: 3.727 ng  
RT: 14.98 min Scan# 2192  
Delta R.T. 0.01 min  
Lab File: BF111441.D  
Acq: 15 Dec 2018 1:35

Instrument :  
BNA\_G  
ClientSampleId :  
SUP-6-C-2-120718

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.6  | 18.2  | 27.2  |
| 125     | 28.9  | 10.4  | 15.6# |



#89  
Benzo(k)fluoranthene  
Concen: 3.900 ng  
RT: 14.98 min Scan# 2192  
Delta R.T. -0.02 min  
Lab File: BF111441.D  
Acq: 15 Dec 2018 1:35

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 25.6  | 18.1  | 27.1  |
| 125     | 28.9  | 9.8   | 14.8# |

