

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF081019\  
 Data File : BF116157.D  
 Acq On : 10 Aug 2019 19:01  
 Operator : HP/JU  
 Sample : K4294-10  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Aug 12 00:57:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF073019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Aug 07 11:13:18 2019  
 Response via : Initial Calibration

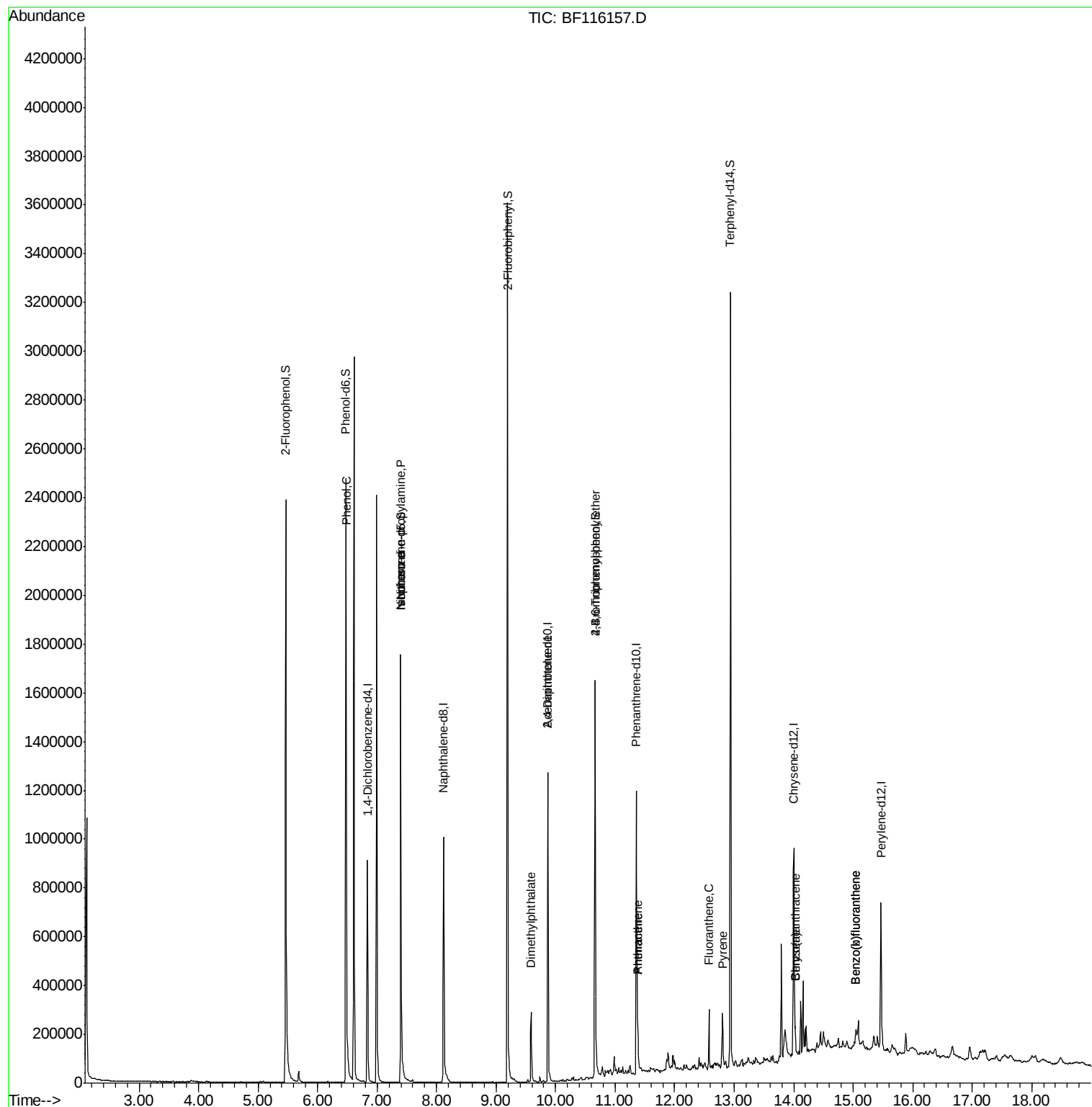
| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4      | 6.84  | 152  | 138856   | 20.00  | ng    | 0.00     |
| 21) Naphthalene-d8             | 8.12  | 136  | 545893   | 20.00  | ng    | -0.01    |
| 39) Acenaphthene-d10           | 9.87  | 164  | 275375   | 20.00  | ng    | -0.02    |
| 64) Phenanthrene-d10           | 11.36 | 188  | 435350   | 20.00  | ng    | -0.01    |
| 76) Chrysene-d12               | 14.00 | 240  | 291554   | 20.00  | ng    | 0.00     |
| 87) Perylene-d12               | 15.47 | 264  | 296883   | 20.00  | ng    | 0.00     |
| System Monitoring Compounds    |       |      |          |        |       |          |
| 5) 2-Fluorophenol              | 5.46  | 112  | 799944   | 96.44  | ng    | 0.00     |
| 7) Phenol-d6                   | 6.47  | 99   | 1042597  | 99.63  | ng    | -0.01    |
| 23) Nitrobenzene-d5            | 7.40  | 82   | 670219   | 70.87  | ng    | -0.02    |
| 42) 2,4,6-Tribromophenol       | 10.66 | 330  | 229136   | 85.82  | ng    | -0.01    |
| 45) 2-Fluorobiphenyl           | 9.19  | 172  | 1183693  | 80.51  | ng    | -0.01    |
| 79) Terphenyl-d14              | 12.94 | 244  | 1055439  | 76.28  | ng    | -0.01    |
| Target Compounds               |       |      |          |        |       |          |
| 10) Phenol                     | 6.49  | 94   | 32128    | 2.607  | ng    | 92       |
| 19) n-Nitroso-di-n-propylamine | 7.40  | 70   | 85925    | 13.250 | ng    | # 80     |
| 25) Isophorone                 | 7.40  | 82   | 670216   | 37.062 | ng    | # 65     |
| 50) Dimethylphthalate          | 9.59  | 163  | 144064   | 7.683  | ng    | 100      |
| 57) 2,4-Dinitrotoluene         | 9.87  | 165  | 35862    | 6.610  | ng    | # 20     |
| 67) 4-Bromophenyl-phenylether  | 10.66 | 248  | 14140    | 3.034  | ng    | # 1      |
| 71) Phenanthrene               | 11.38 | 178  | 65890    | 2.961  | ng    | 99       |
| 72) Anthracene                 | 11.38 | 178  | 65890    | 2.925  | ng    | 99       |
| 75) Fluoranthene               | 12.57 | 202  | 91501    | 3.927  | ng    | 99       |
| 78) Pyrene                     | 12.80 | 202  | 89931    | 4.092  | ng    | 97       |
| 81) Benzo(a)anthracene         | 14.03 | 228  | 44256    | 2.375  | ng    | 96       |
| 83) Chrysene                   | 14.03 | 228  | 44256    | 2.446  | ng    | 98       |
| 88) Benzo(b)fluoranthene       | 15.04 | 252  | 50799    | 2.959  | ng    | # 94     |
| 89) Benzo(k)fluoranthene       | 15.04 | 252  | 50799    | 3.038  | ng    | # 93     |

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

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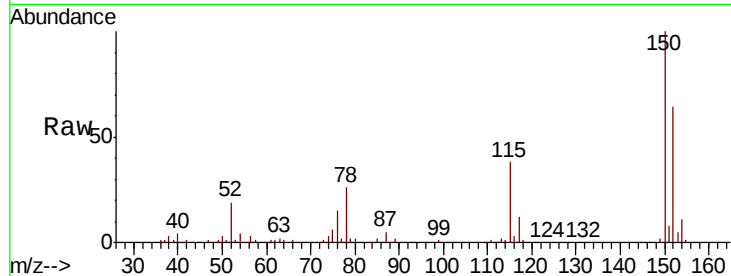


#1

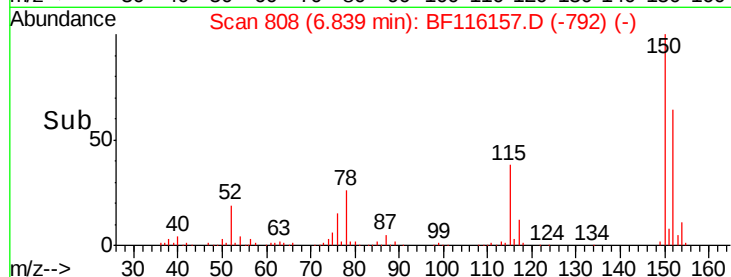
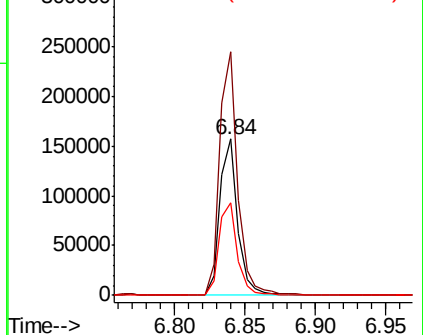
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.84 min Scan# 808  
Delta R.T. -0.01 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

Instrument :  
BNA\_F  
ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 150     | 156.0 | 126.2 | 189.2 |
| 115     | 59.2  | 49.9  | 74.9  |



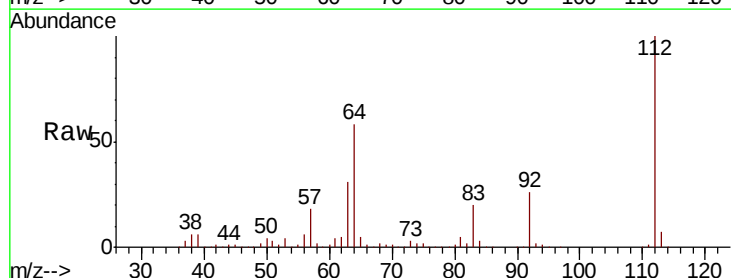
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



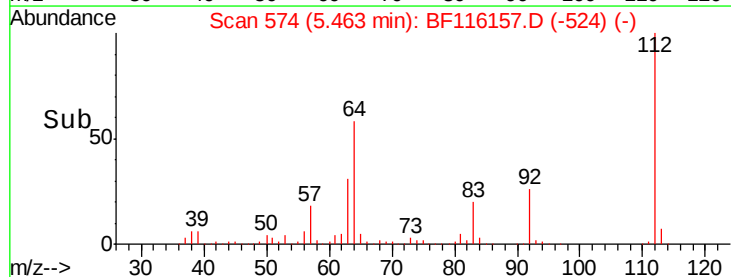
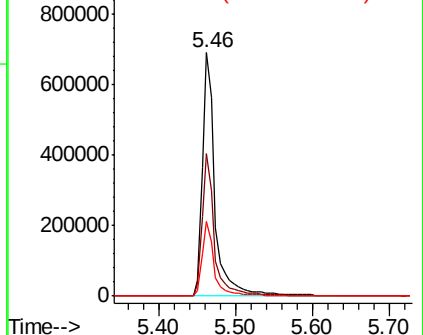
#5

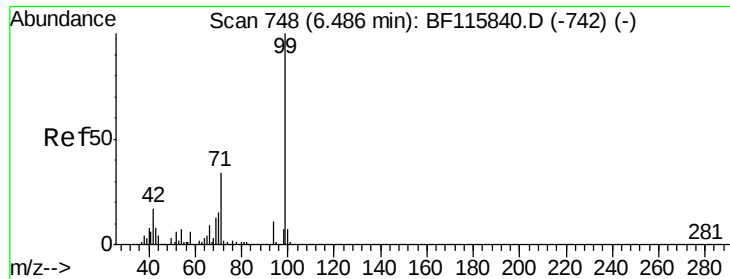
2-Fluorophenol  
Concen: 96.442 ng  
RT: 5.46 min Scan# 574  
Delta R.T. -0.01 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 64      | 58.4  | 45.4  | 68.2  |
| 63      | 30.7  | 23.7  | 35.5  |



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: 99.627 ng

RT: 6.47 min Scan# 746

Delta R.T. -0.01 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

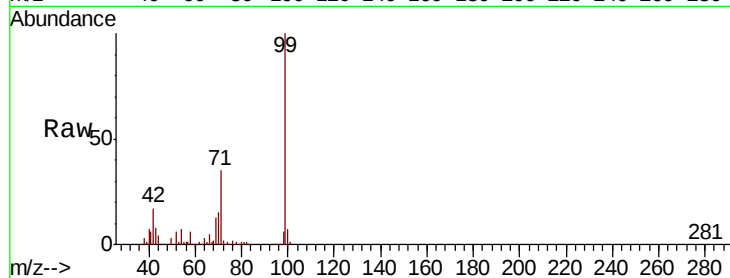
Instrument :

BNA\_F

ClientSampleId :

Tot Ion: 99 Resp: 1042597

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 99  | 100   |       |       |
| 42  | 17.2  | 13.8  | 20.8  |
| 71  | 34.6  | 27.3  | 40.9  |

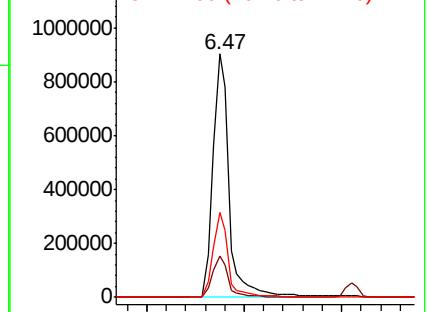
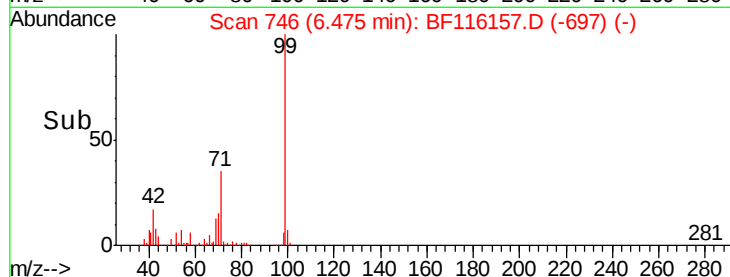


Abundance

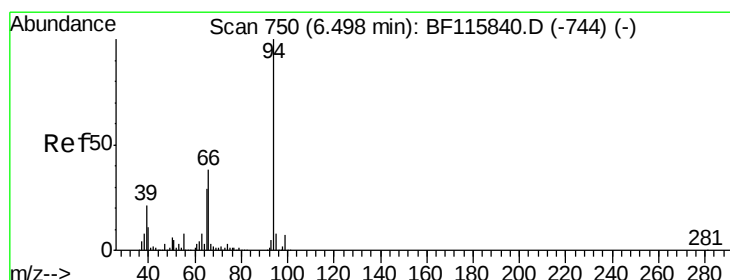
Ion 99.00 (98.70 to 99.70): BF1

Ion 42.00 (41.70 to 42.70): BF1

Ion 71.00 (70.70 to 71.70): BF1



Time-->



#10

Phenol

Concen: 2.607 ng

RT: 6.49 min Scan# 748

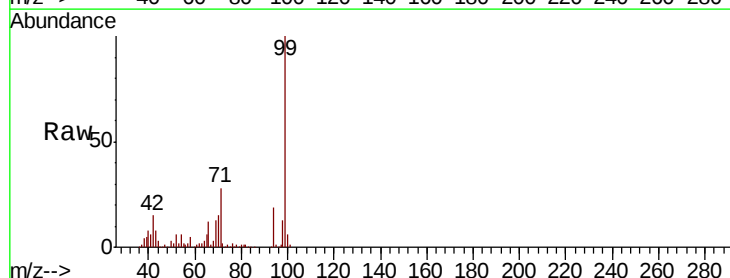
Delta R.T. -0.02 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

Tgt Ion: 94 Resp: 32128

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 94  | 100   |       |       |
| 65  | 32.2  | 16.8  | 56.8  |
| 66  | 59.7  | 34.2  | 74.2  |

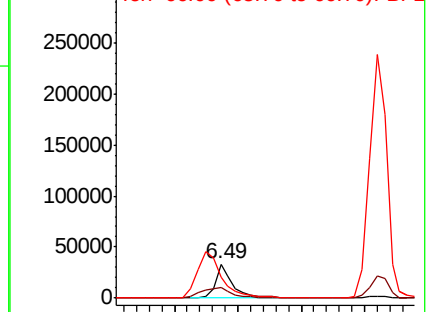
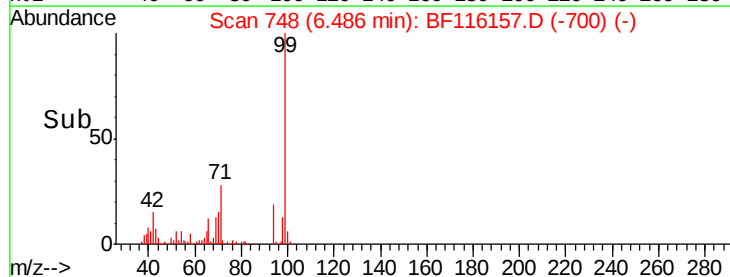


Abundance

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



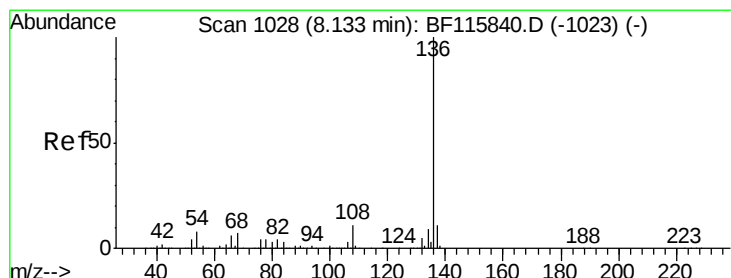
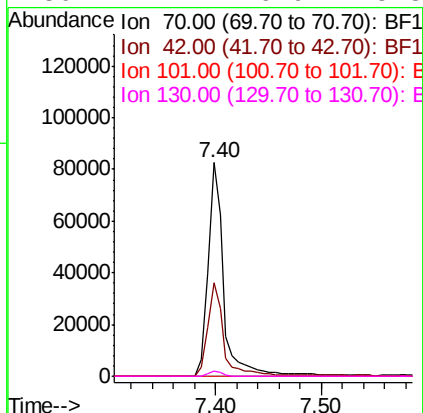
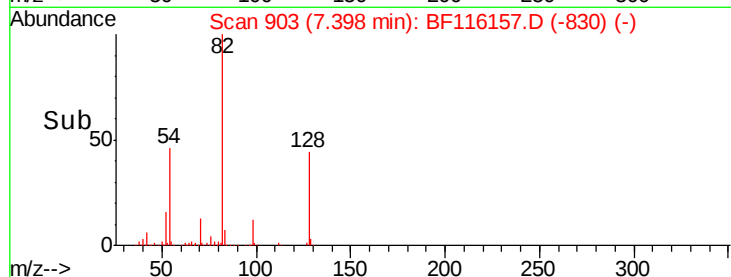
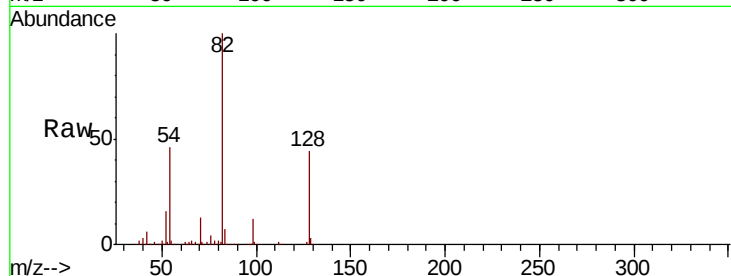
Time-->



#19  
n-Nitroso-di-n-propylamine  
Concen: 13.250 ng  
RT: 7.40 min Scan# 903  
Delta R.T. 0.13 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

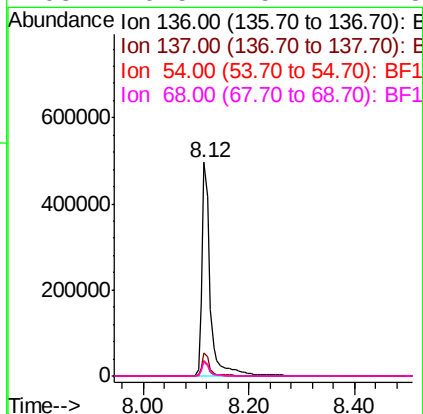
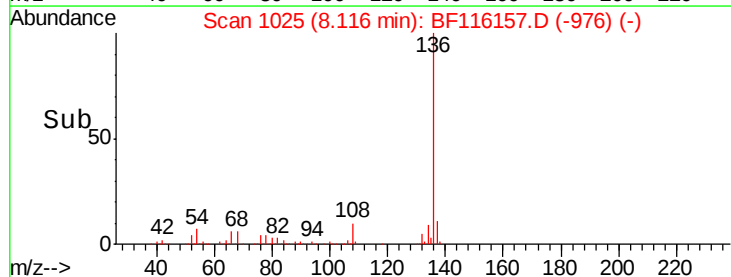
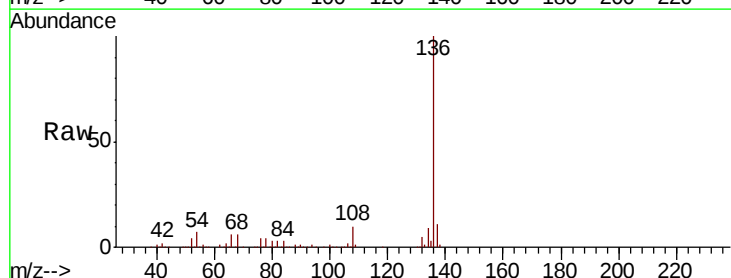
Instrument :  
BNA\_F  
ClientSampleId :

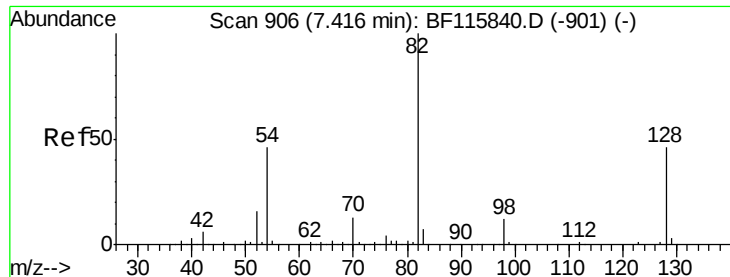
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 70      | 100   |       |       |
| 42      | 44.0  | 40.9  | 61.3  |
| 101     | 0.0   | 7.9   | 11.9# |
| 130     | 2.4   | 16.9  | 25.3# |



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.12 min Scan# 1025  
Delta R.T. -0.01 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 136     | 100   |       |       |
| 137     | 11.1  | 9.0   | 13.4  |
| 54      | 7.4   | 5.8   | 8.6   |
| 68      | 6.5   | 5.2   | 7.8   |

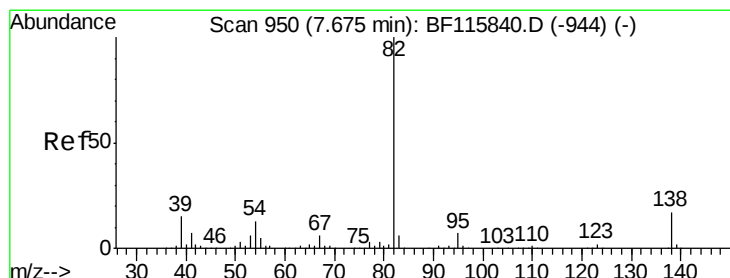
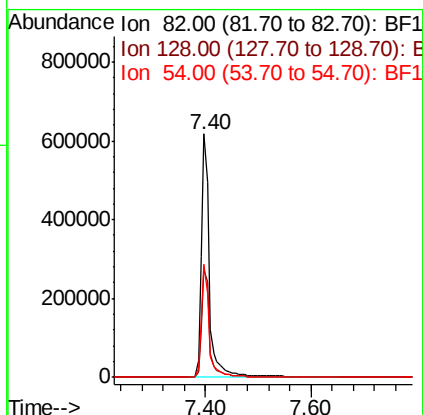
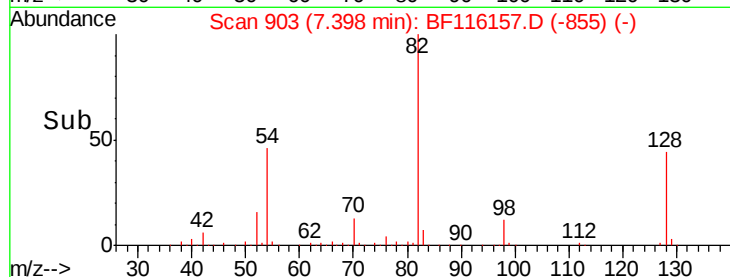
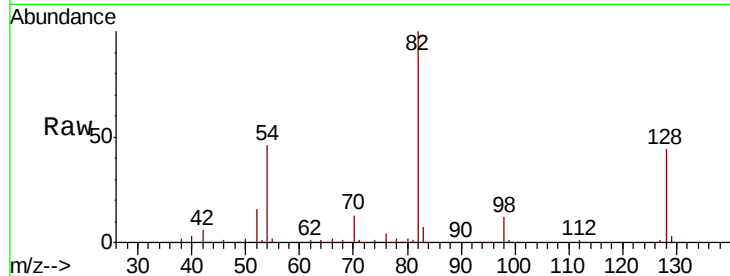




#23  
Nitrobenzene-d5  
Concen: 70.869 ng  
RT: 7.40 min Scan# 903  
Delta R.T. -0.02 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

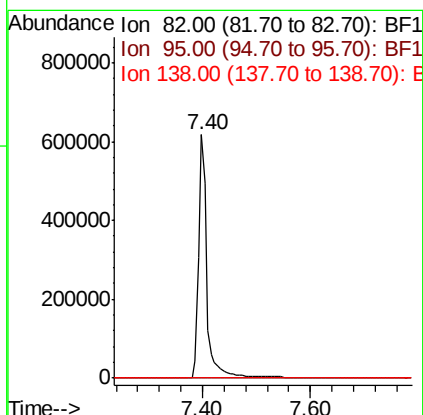
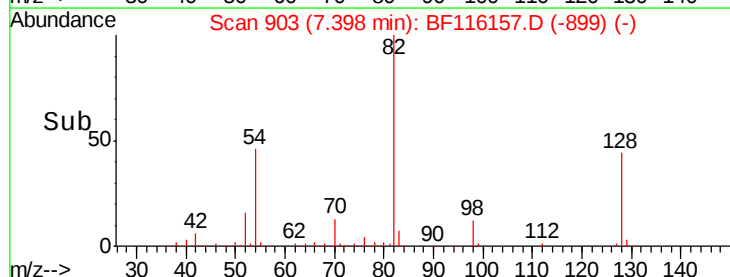
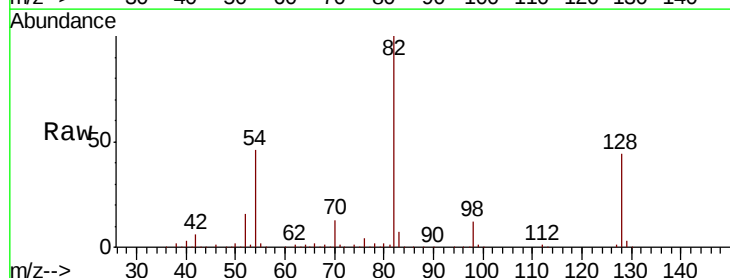
Instrument :  
BNA\_F  
ClientSampleId :

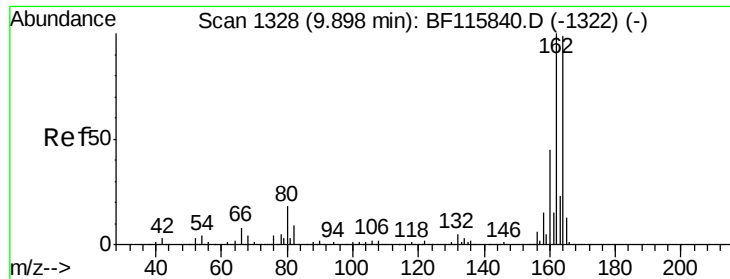
Tot Ion: 82 Resp: 670219  
Ion Ratio Lower Upper  
82 100  
128 44.3 36.5 54.7  
54 46.2 36.0 54.0



#25  
Isophorone  
Concen: 37.062 ng  
RT: 7.40 min Scan# 903  
Delta R.T. -0.28 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

Tgt Ion: 82 Resp: 670216  
Ion Ratio Lower Upper  
82 100  
95 0.0 5.4 8.0#  
138 0.0 14.5 21.7#

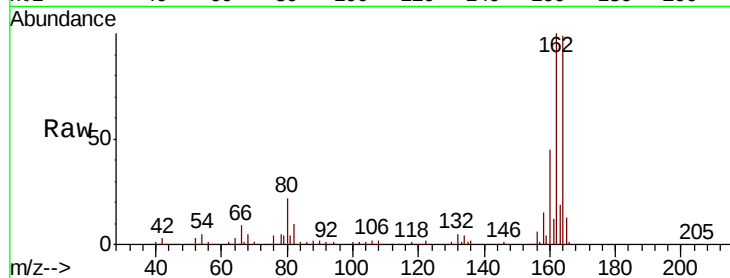




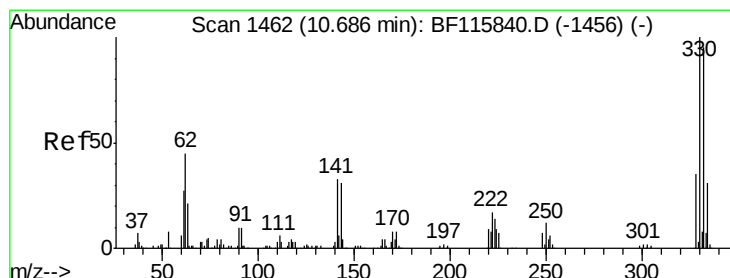
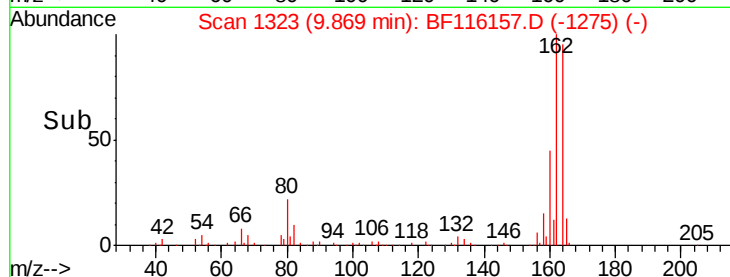
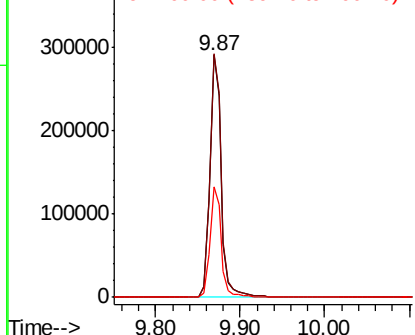
#39  
Acenaphthene-d10  
Concen: 20.000 ng  
RT: 9.87 min Scan# 1323  
Delta R.T. -0.02 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:164 Resp: 275375  
Ion Ratio Lower Upper  
164 100  
162 100.7 82.6 124.0  
160 45.5 37.6 56.4

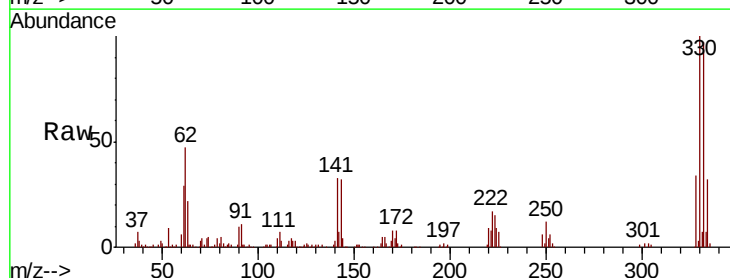


Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E

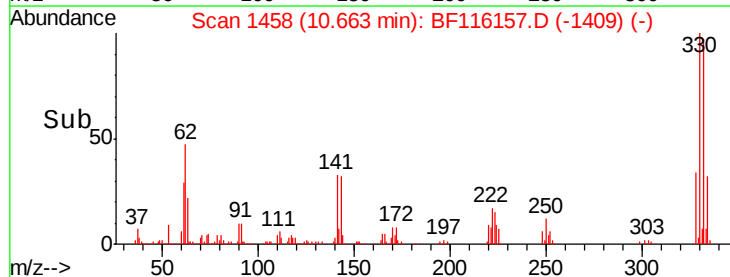
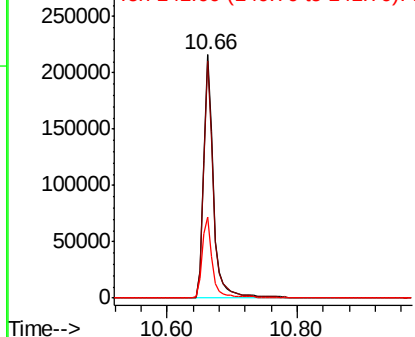


#42  
2,4,6-Tribromophenol  
Concen: 85.824 ng  
RT: 10.66 min Scan# 1458  
Delta R.T. -0.01 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

Tgt Ion:330 Resp: 229136  
Ion Ratio Lower Upper  
330 100  
332 96.7 76.8 115.2  
141 34.7 26.3 39.5



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

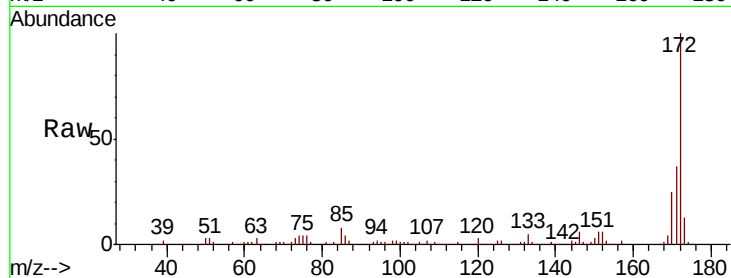




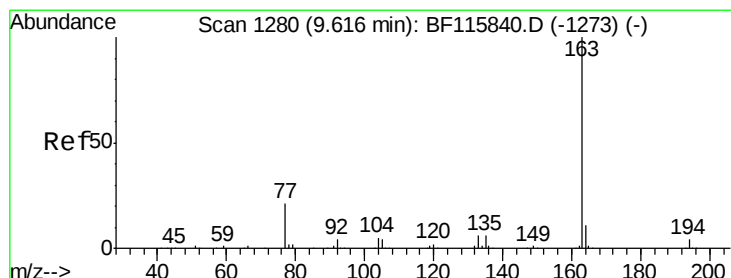
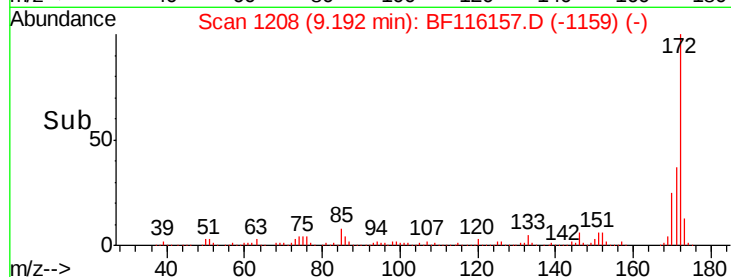
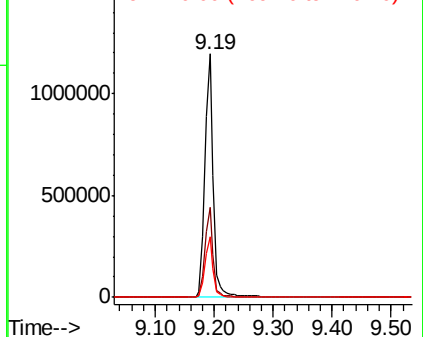
#45  
2-Fluorobiphenyl  
Concen: 80.514 ng  
RT: 9.19 min Scan# 1208  
Delta R.T. -0.01 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:172 Resp: 1183693  
Ion Ratio Lower Upper  
172 100  
171 36.8 29.6 44.4  
170 24.8 20.1 30.1

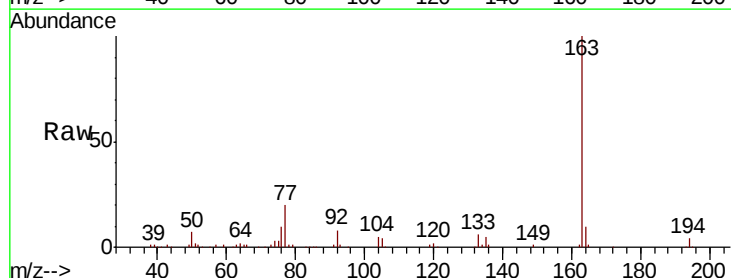


Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E

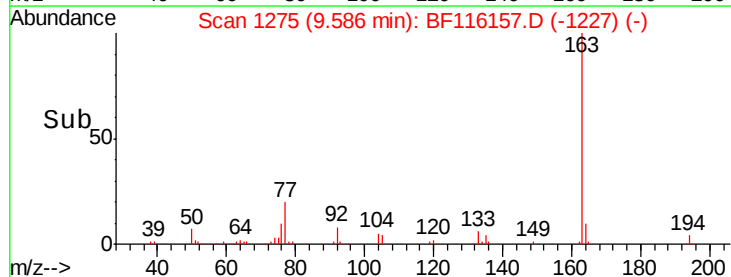
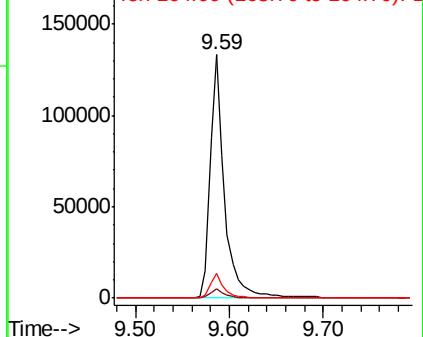


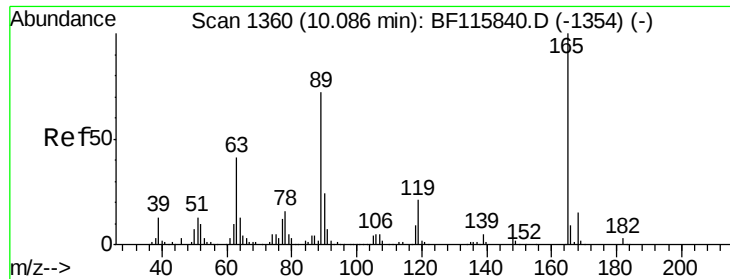
#50  
Dimethylphthalate  
Concen: 7.683 ng  
RT: 9.59 min Scan# 1275  
Delta R.T. -0.02 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

Tgt Ion:163 Resp: 144064  
Ion Ratio Lower Upper  
163 100  
194 3.7 3.0 4.6  
164 10.3 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





#57

2,4-Dinitrotoluene

Concen: 6.610 ng

RT: 9.87 min Scan# 1323

Delta R.T. -0.21 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

Instrument :

BNA\_F

ClientSampleId :

Tot Ion:165 Resp: 35862

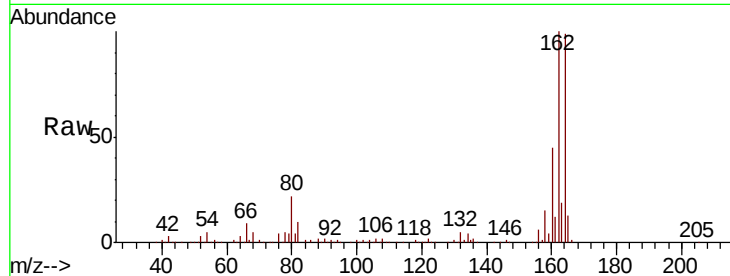
Ion Ratio Lower Upper

165 100

63 1.0 39.6 59.4#

89 1.2 62.2 93.2#

182 0.0 2.1 3.1#

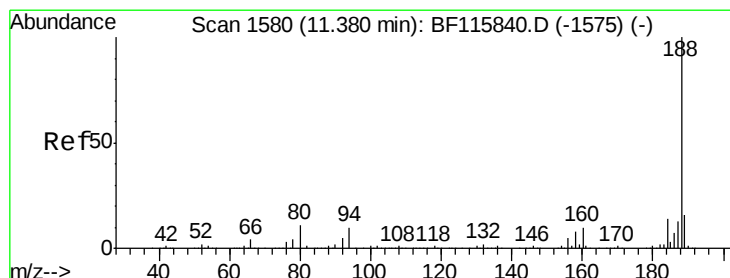
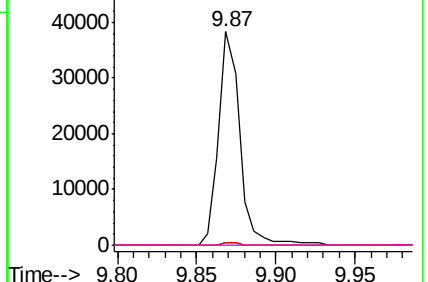
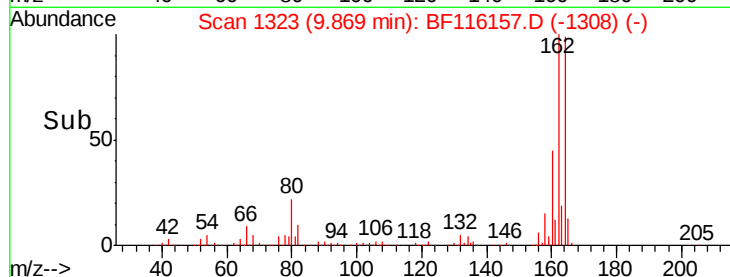


Abundance Ion 165.00 (164.70 to 165.70): E

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: 11.36 min Scan# 1576

Delta R.T. -0.01 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

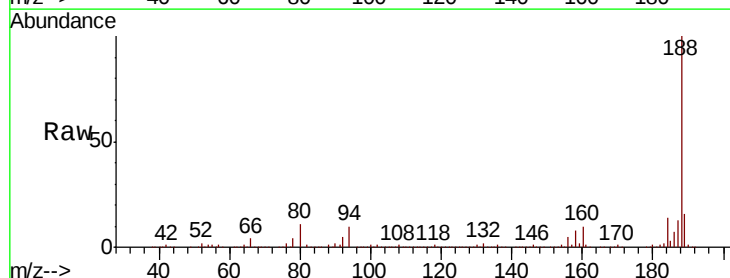
Tgt Ion:188 Resp: 435350

Ion Ratio Lower Upper

188 100

94 10.3 8.1 12.1

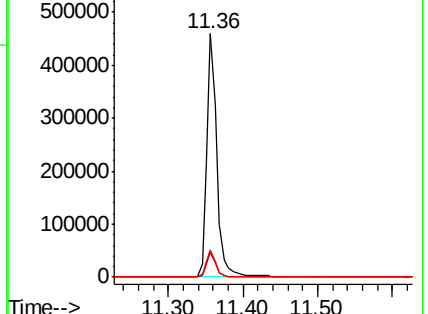
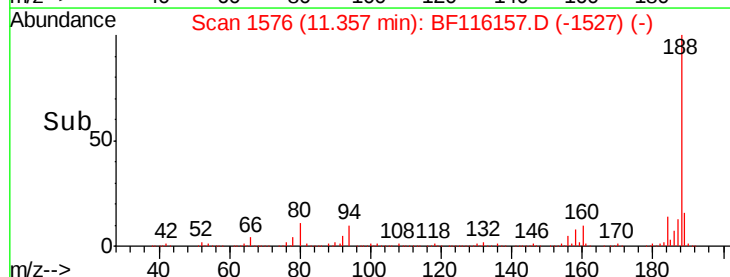
80 11.0 8.7 13.1

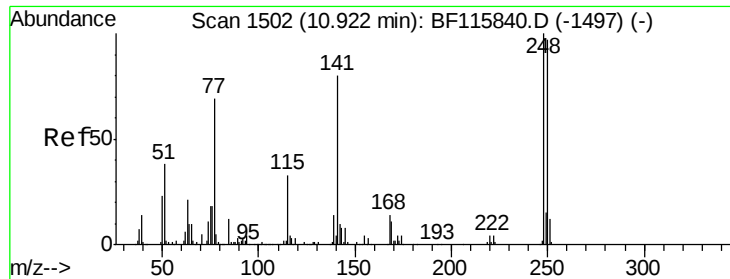


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1

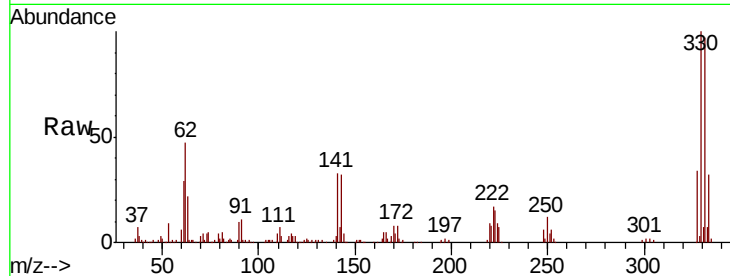




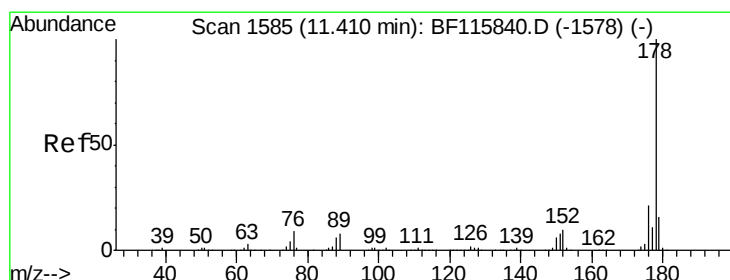
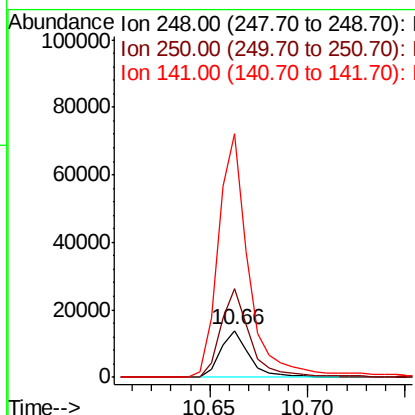
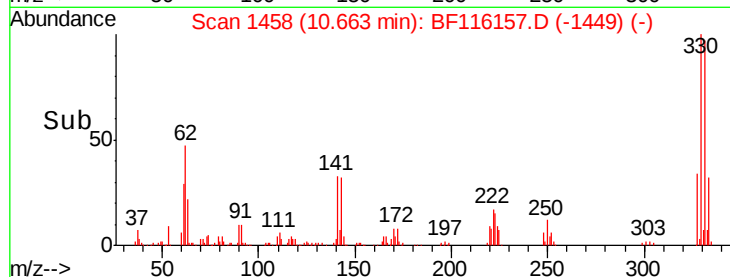
#67  
 4-Bromophenyl-phenylether  
 Concen: 3.034 ng  
 RT: 10.66 min Scan# 1458  
 Delta R.T. -0.25 min  
 Lab File: BF116157.D  
 Acq: 10 Aug 2019 19:01

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:248 Resp: 14140  
 Ion Ratio Lower Upper  
 248 100  
 250 189.4 77.4 116.2#  
 141 516.6 56.8 85.2#

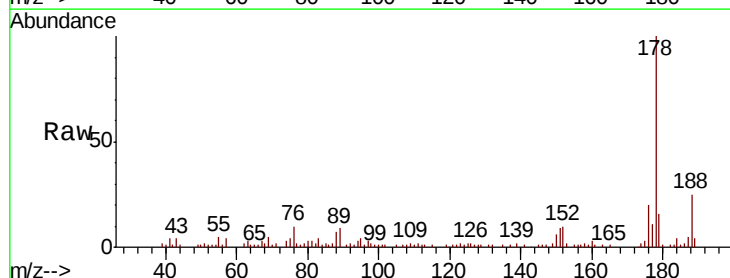


Abundance Ion 248.00 (247.70 to 248.70): E  
 Ion 250.00 (249.70 to 250.70): E  
 Ion 141.00 (140.70 to 141.70): E

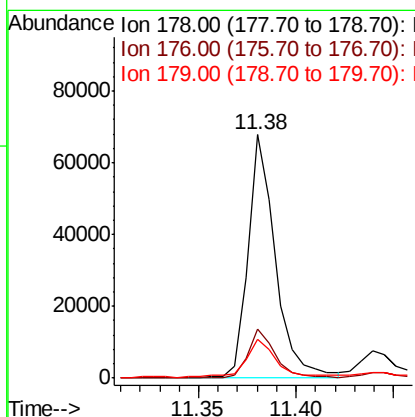
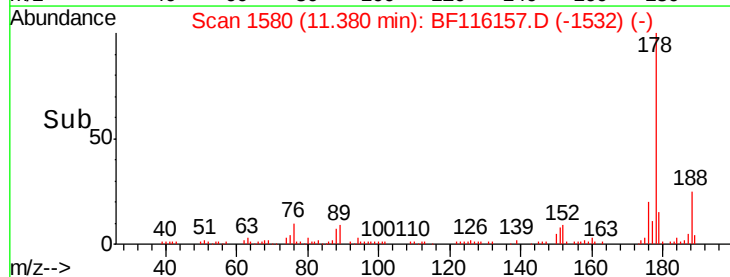


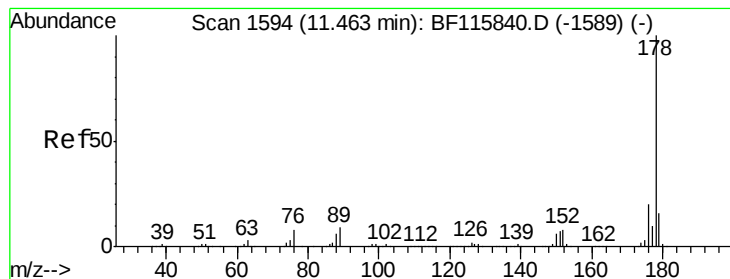
#71  
 Phenanthrene  
 Concen: 2.961 ng  
 RT: 11.38 min Scan# 1580  
 Delta R.T. -0.02 min  
 Lab File: BF116157.D  
 Acq: 10 Aug 2019 19:01

Tgt Ion:178 Resp: 65890  
 Ion Ratio Lower Upper  
 178 100  
 176 19.9 16.6 24.8  
 179 15.8 12.5 18.7



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: 2.925 ng

RT: 11.38 min Scan# 1580

Delta R.T. -0.06 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

Instrument :

BNA\_F

ClientSampleId :

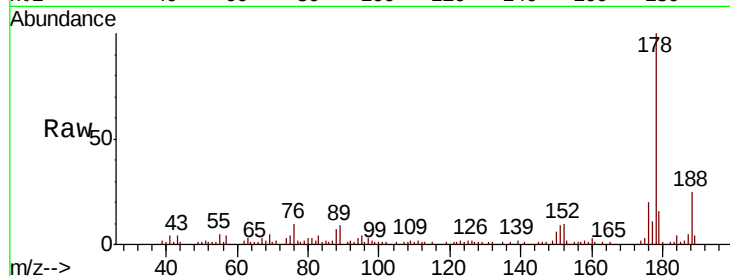
Tot Ion:178 Resp: 65890

Ion Ratio Lower Upper

178 100

176 19.9 15.7 23.5

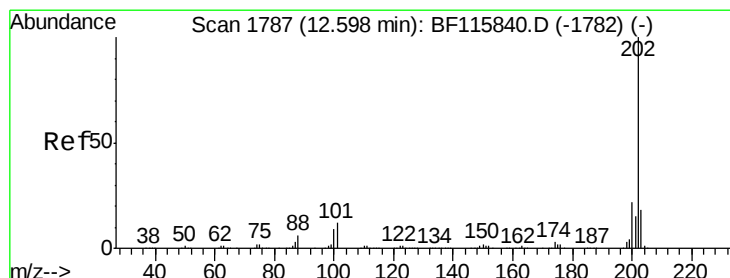
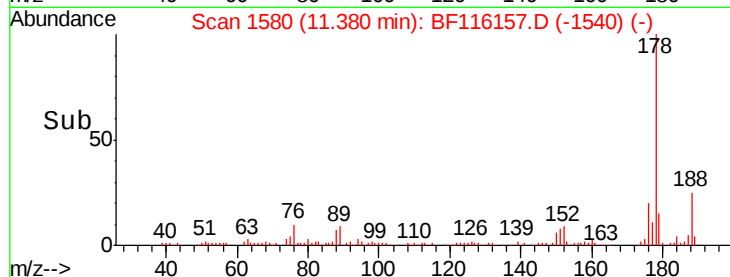
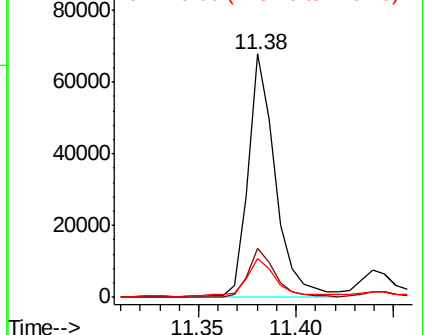
179 15.8 13.0 19.6



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: 3.927 ng

RT: 12.57 min Scan# 1783

Delta R.T. -0.01 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

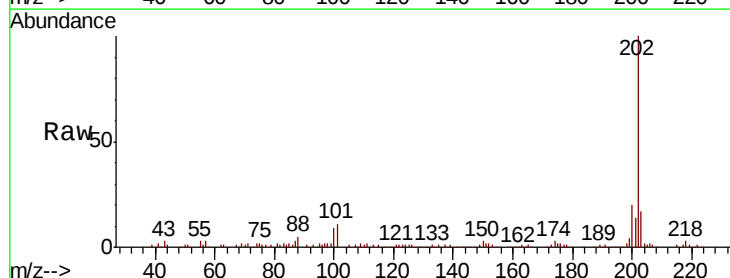
Tgt Ion:202 Resp: 91501

Ion Ratio Lower Upper

202 100

101 10.7 0.0 31.2

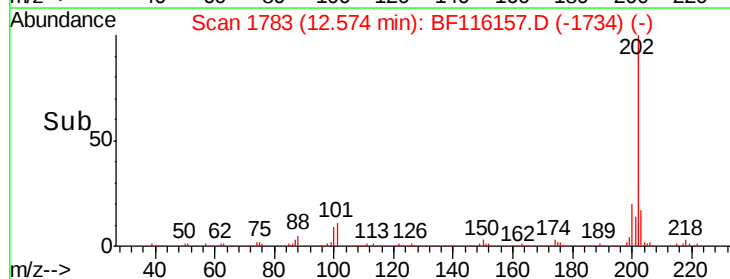
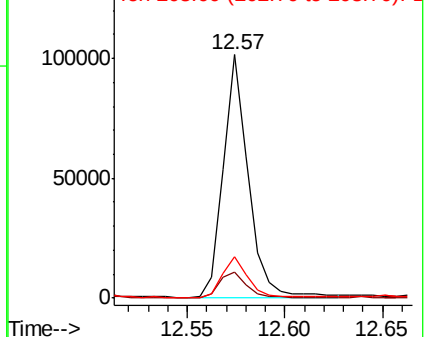
203 17.1 0.0 37.8

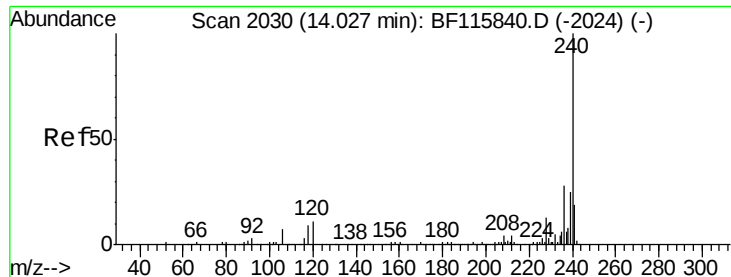


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E

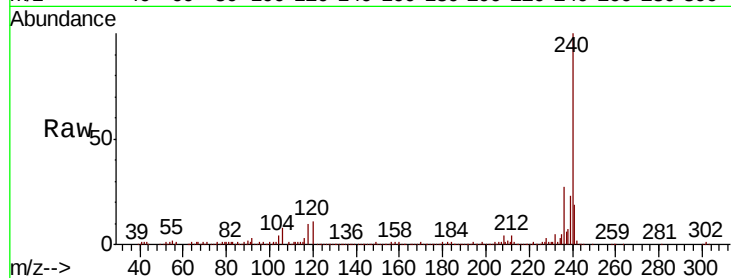




#76  
 Chrysene-d12  
 Concen: 20.000 ng  
 RT: 14.00 min Scan# 2026  
 Delta R.T. -0.01 min  
 Lab File: BF116157.D  
 Acq: 10 Aug 2019 19:01

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 240     | 100   |       |       |
| 120     | 11.0  | 10.7  | 16.1  |
| 236     | 26.6  | 22.2  | 33.2  |

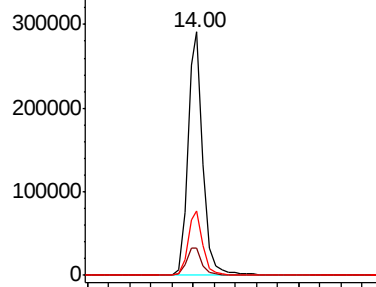


Abundance

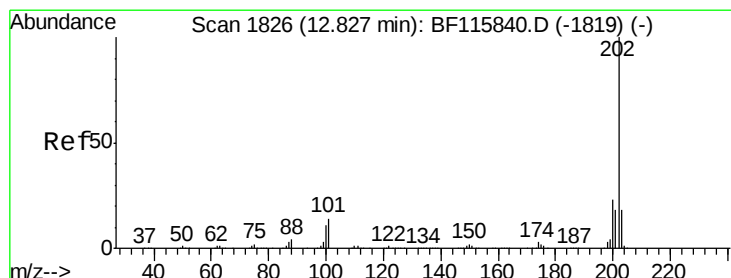
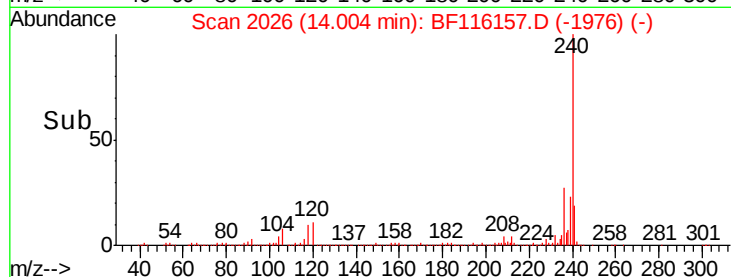
Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

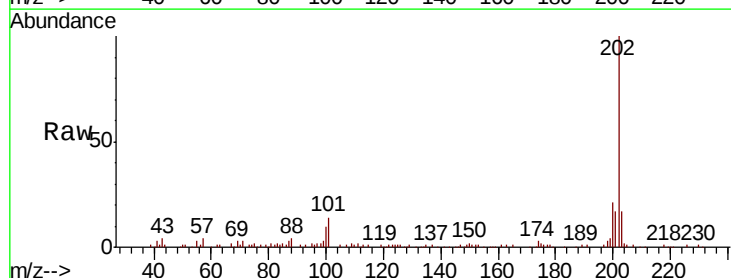


Time--> 13.90 14.00 14.10



#78  
 Pyrene  
 Concen: 4.092 ng  
 RT: 12.80 min Scan# 1822  
 Delta R.T. -0.01 min  
 Lab File: BF116157.D  
 Acq: 10 Aug 2019 19:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 202     | 100   |       |       |
| 200     | 21.0  | 18.0  | 27.0  |
| 203     | 16.9  | 14.1  | 21.1  |

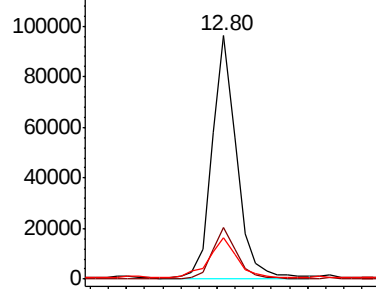


Abundance

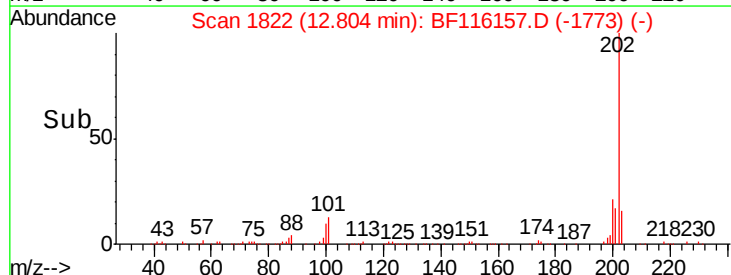
Ion 202.00 (201.70 to 202.70): E

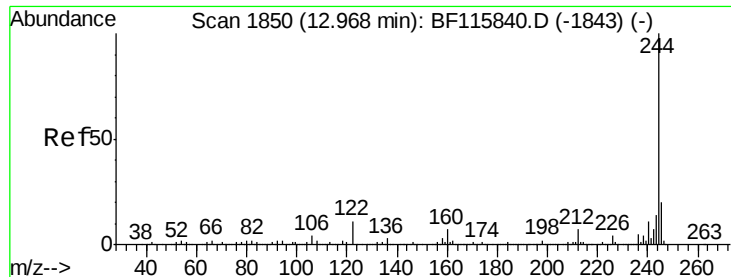
Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



Time--> 12.75 12.80 12.85





#79

Terphenyl-d14

Concen: 76.280 ng

RT: 12.94 min Scan# 1845

Delta R.T. -0.01 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

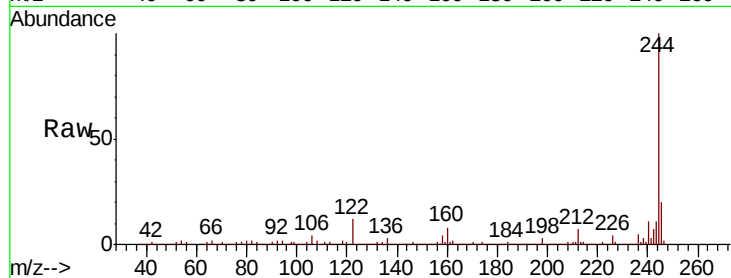
Instrument :

BNA\_F

ClientSampled :

Tot Ion:244 Resp: 1055439

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 244 | 100   |       |       |
| 212 | 7.1   | 5.8   | 8.8   |
| 122 | 12.1  | 9.0   | 13.4  |

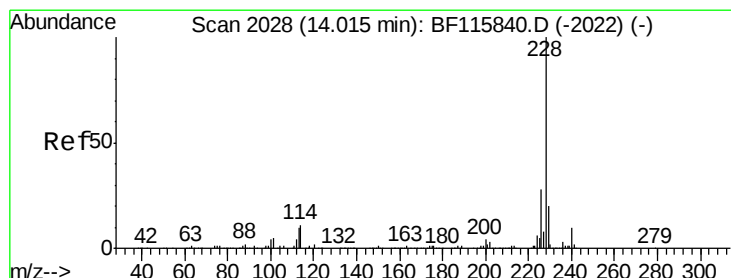
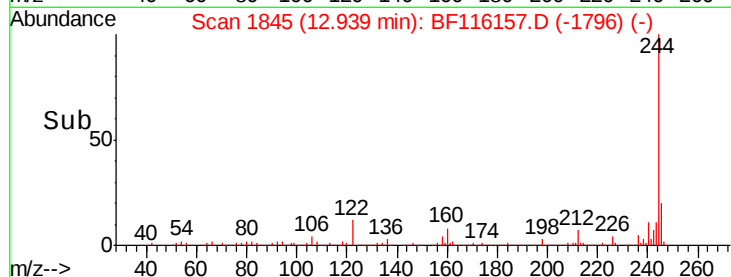
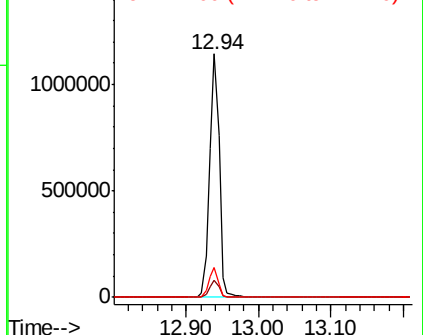


Abundance

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: 2.375 ng

RT: 14.03 min Scan# 2030

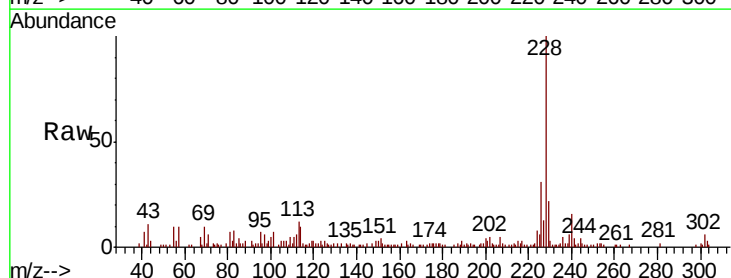
Delta R.T. 0.03 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

Tgt Ion:228 Resp: 44256

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 228 | 100   |       |       |
| 226 | 30.9  | 22.7  | 34.1  |
| 229 | 21.5  | 16.2  | 24.4  |

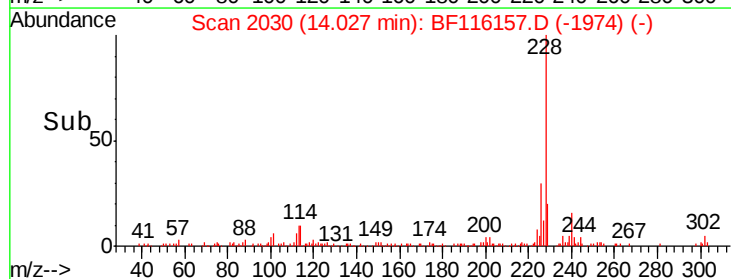
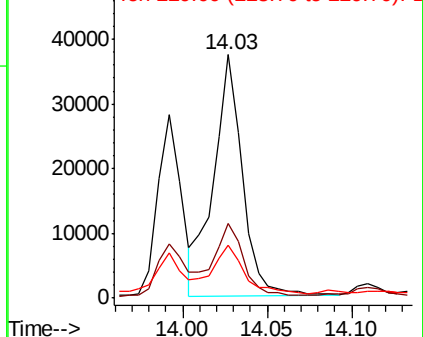


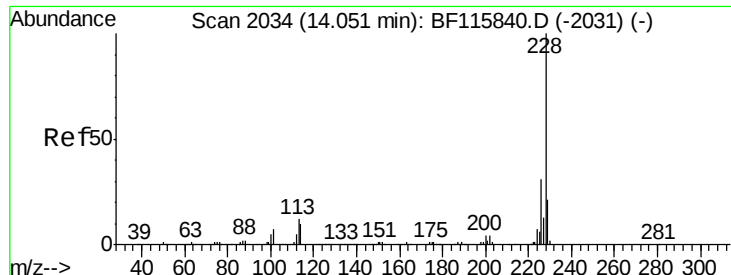
Abundance

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

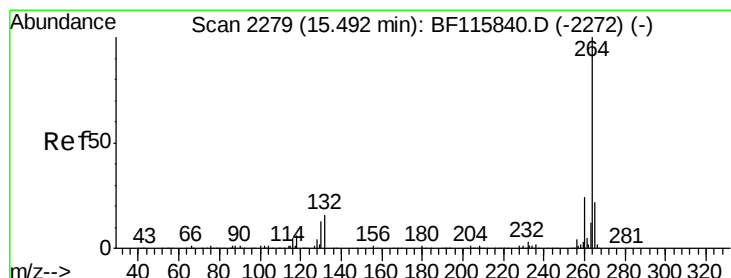
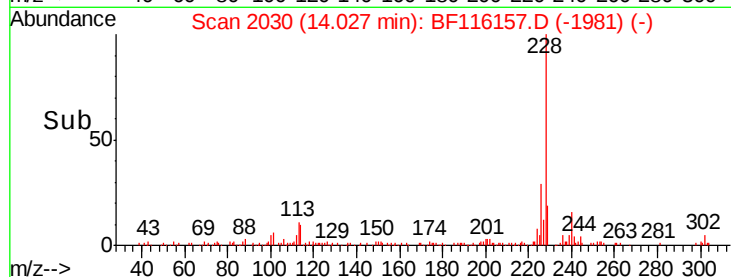
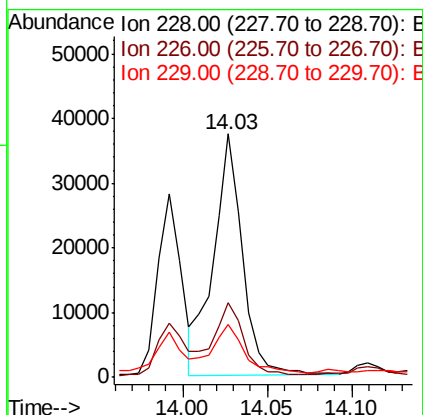
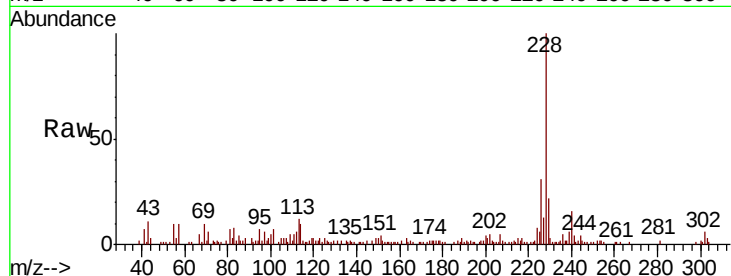




#83  
Chrysene  
Concen: 2.446 ng  
RT: 14.03 min Scan# 2030  
Delta R.T. -0.01 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

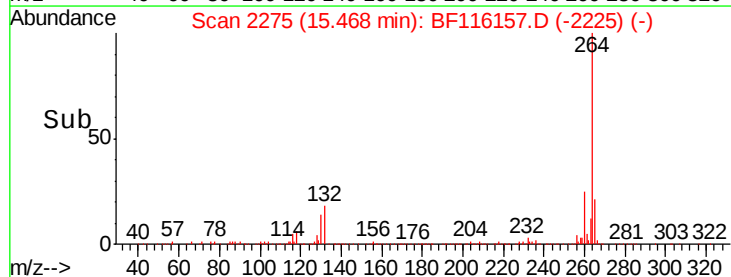
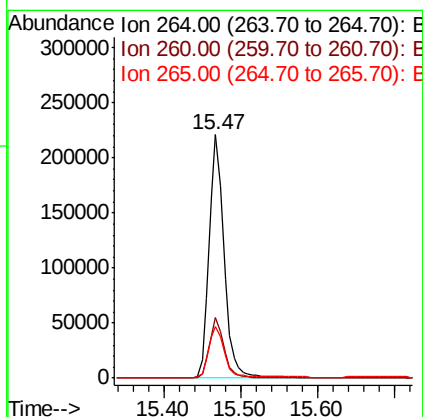
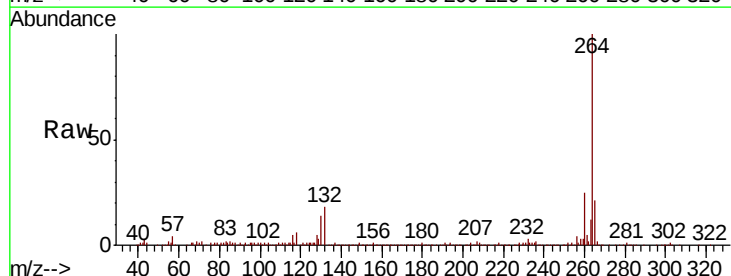
Instrument :  
BNA\_F  
ClientSampleId :

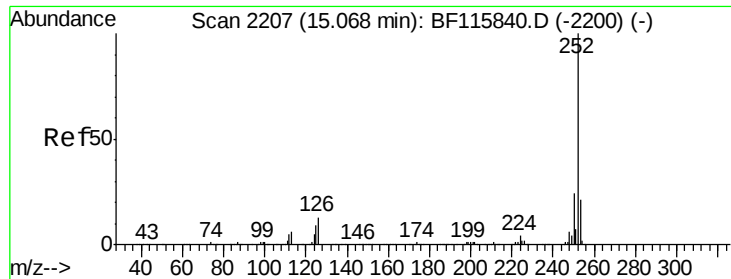
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 228     | 100   |       |       |
| 226     | 30.9  | 25.5  | 38.3  |
| 229     | 21.5  | 16.6  | 24.8  |



#87  
Perylene-d12  
Concen: 20.000 ng  
RT: 15.47 min Scan# 2275  
Delta R.T. -0.01 min  
Lab File: BF116157.D  
Acq: 10 Aug 2019 19:01

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 25.0  | 19.7  | 29.5  |
| 265     | 21.2  | 17.4  | 26.0  |





#88

Benzo(b)fluoranthene

Concen: 2.959 ng

RT: 15.04 min Scan# 2203

Delta R.T. -0.01 min

Lab File: BF116157.D

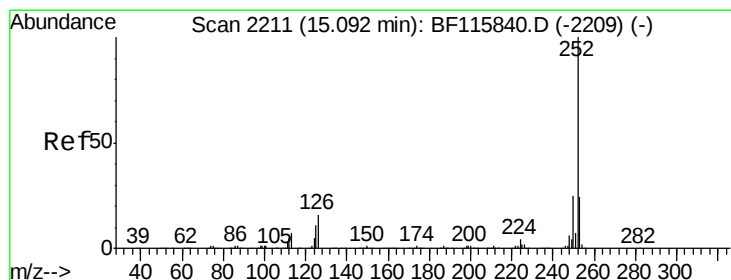
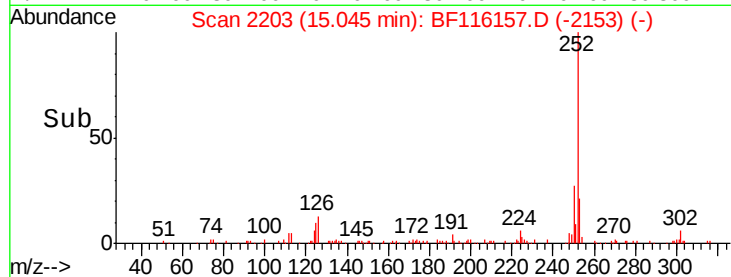
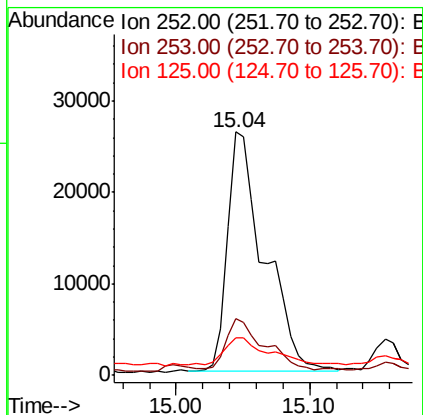
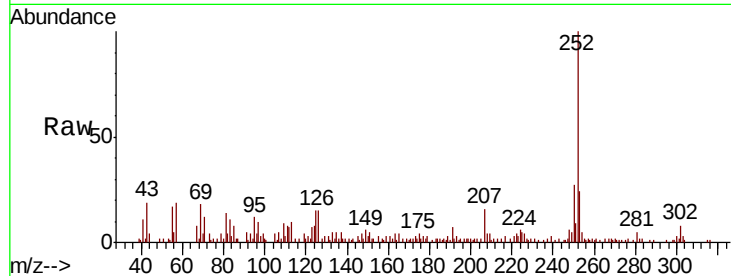
Acq: 10 Aug 2019 19:01

Instrument :

BNA\_F

ClientSampleId :

|             |       |           |
|-------------|-------|-----------|
| Tot Ion:252 | Resp: | 50799     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 23.6  | 17.8 26.8 |
| 125         | 15.3  | 8.4 12.6# |



#89

Benzo(k)fluoranthene

Concen: 3.038 ng

RT: 15.04 min Scan# 2203

Delta R.T. -0.04 min

Lab File: BF116157.D

Acq: 10 Aug 2019 19:01

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:252 | Resp: | 50799     |
| Ion Ratio   | Lower | Upper     |
| 252         | 100   |           |
| 253         | 23.6  | 17.8 26.8 |
| 125         | 15.3  | 7.7 11.5# |

