

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF122618\  
 Data File : BF111722.D  
 Acq On : 26 Dec 2018 19:14  
 Operator : JU/SJ  
 Sample : J6499-01  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 72-11989

Quant Time: Dec 27 02:14:55 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  | 247004   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.18  | 136  | 941016   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.93  | 164  | 482774   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.42 | 188  | 804414   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.06 | 240  | 541003   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.54 | 264  | 536730   | 20.00 | ng    | 0.02     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|-----------------------------|-------|------|----------|--------|-------|----------|
| 5) 2-Fluorophenol           | 5.54  | 112  | 1431706  | 98.80  | ng    | 0.02     |
| 7) Phenol-d6                | 6.54  | 99   | 1921831  | 104.21 | ng    | 0.02     |
| 23) Nitrobenzene-d5         | 7.46  | 82   | 1256382  | 77.72  | ng    | 0.00     |
| 42) 2,4,6-Tribromophenol    | 10.73 | 330  | 554470   | 97.20  | ng    | 0.00     |
| 45) 2-Fluorobiphenyl        | 9.26  | 172  | 2059031  | 62.17  | ng    | 0.00     |
| 79) Terphenyl-d14           | 13.00 | 244  | 1681817  | 58.95  | ng    | 0.00     |

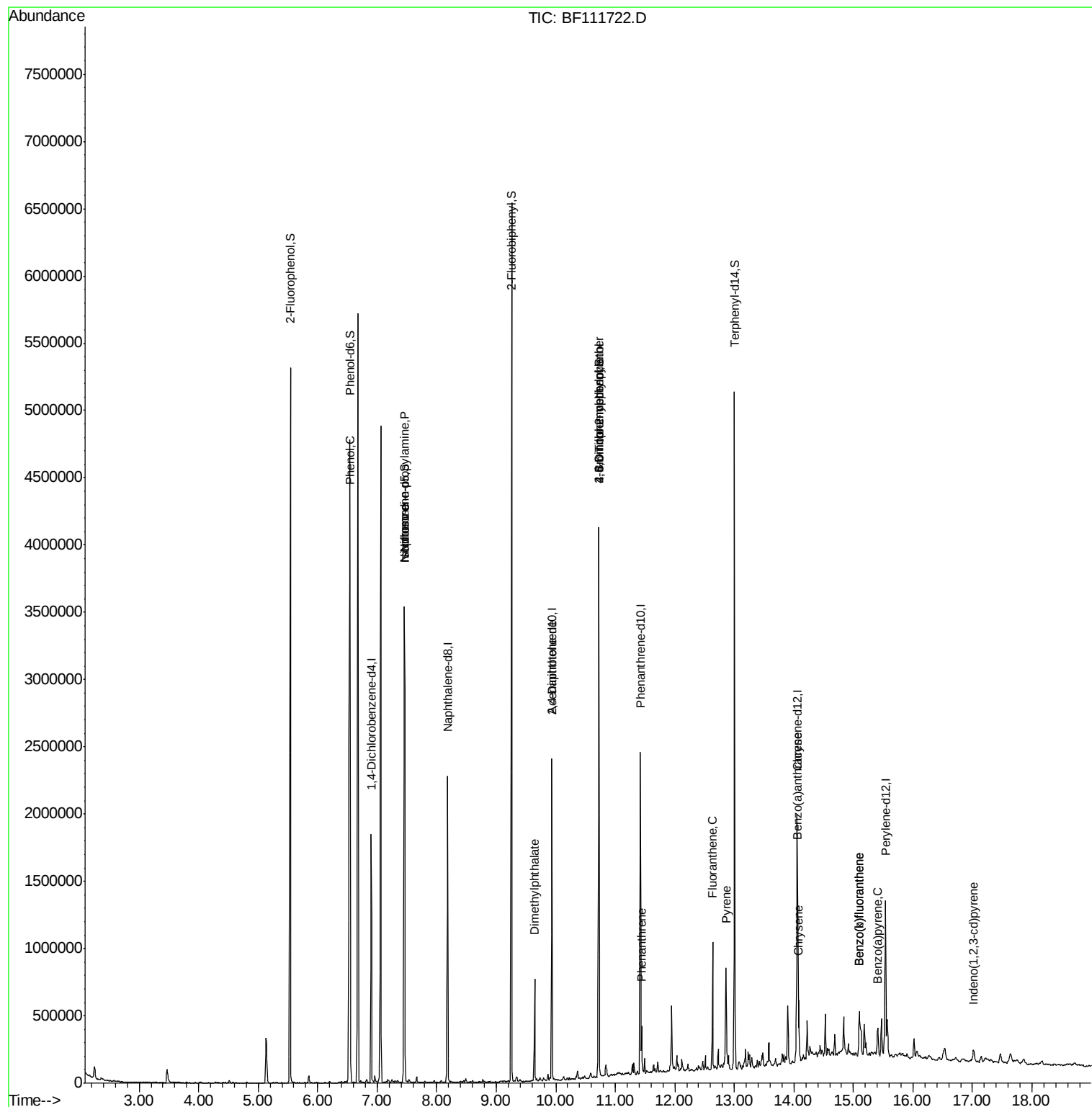
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units | Qvalue |
|--------------------------------|-------|------|----------|--------|-------|--------|
| 10) Phenol                     | 6.55  | 94   | 162342   | 7.802  | ng    | 99     |
| 19) n-Nitroso-di-n-propylamine | 7.46  | 70   | 175284   | 14.312 | ng    | # 78   |
| 25) Isophorone                 | 7.46  | 82   | 1253843  | 43.688 | ng    | # 64   |
| 50) Dimethylphthalate          | 9.65  | 163  | 312509   | 8.852  | ng    | 97     |
| 57) 2,4-Dinitrotoluene         | 9.93  | 165  | 62392    | 7.374  | ng    | # 25   |
| 65) 4,6-Dinitro-2-methylphenol | 10.73 | 198  | 1065     | 6.969  | ng    | # 1    |
| 67) 4-Bromophenyl-phenylether  | 10.73 | 248  | 34670    | 3.475  | ng    | # 1    |
| 71) Phenanthrene               | 11.45 | 178  | 128269   | 3.007  | ng    | 93     |
| 75) Fluoranthene               | 12.63 | 202  | 362722   | 8.396  | ng    | 94     |
| 78) Pyrene                     | 12.86 | 202  | 322568   | 8.443  | ng    | 96     |
| 81) Benzo(a)anthracene         | 14.04 | 228  | 190807   | 6.180  | ng    | 99     |
| 83) Chrysene                   | 14.08 | 228  | 166609   | 5.490  | ng    | 98     |
| 86) Indeno(1,2,3-cd)pyrene     | 17.02 | 276  | 62918    | 2.439  | ng    | # 85   |
| 88) Benzo(b)fluoranthene       | 15.10 | 252  | 269921   | 8.605  | ng    | # 97   |
| 89) Benzo(k)fluoranthene       | 15.10 | 252  | 269921   | 9.038  | ng    | 98     |
| 90) Benzo(a)pyrene             | 15.41 | 252  | 92144    | 3.233  | ng    | 97     |

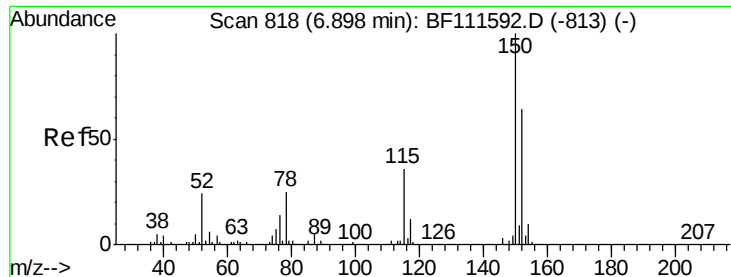
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF122618\  
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Misc :  
ALS Vial : 4 Sample Multiplier: 1

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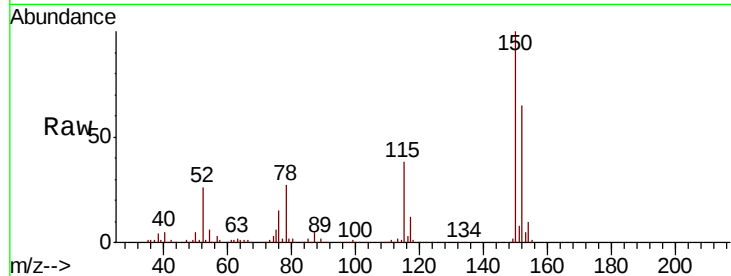


#1

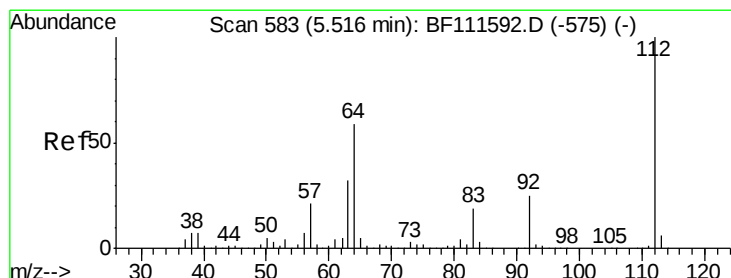
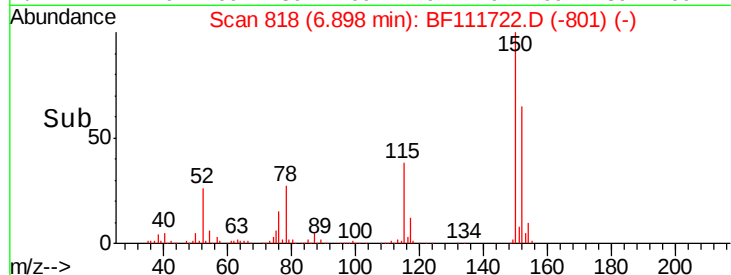
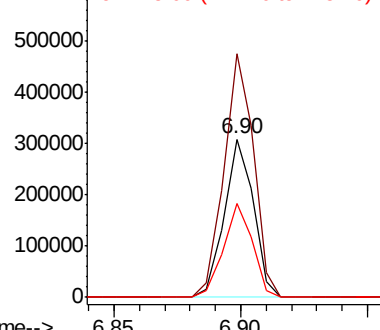
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.90 min Scan# 818  
Delta R.T. -0.00 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Instrument :  
BNA\_F  
ClientSampleId :  
72-11989

Tot Ion:152 Resp: 247004  
Ion Ratio Lower Upper  
152 100  
150 154.0 126.6 189.8  
115 59.1 50.7 76.1



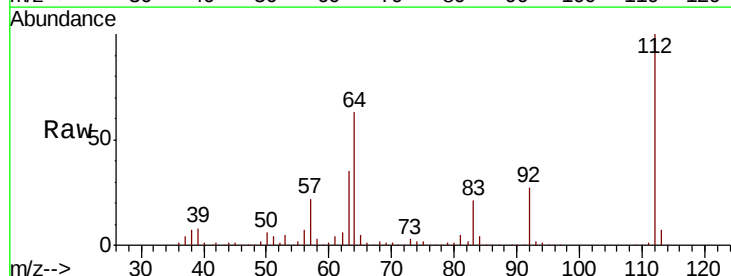
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



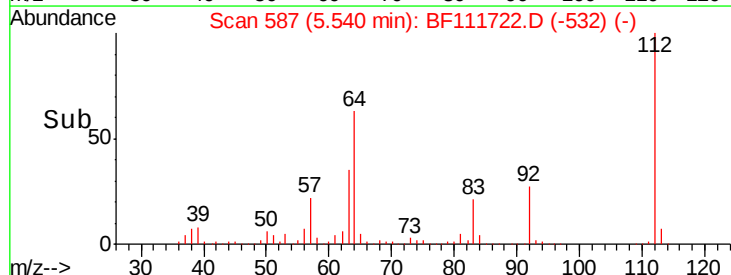
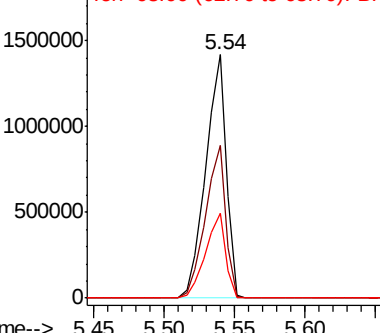
#5

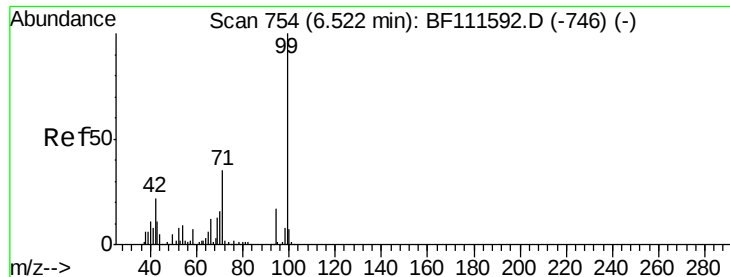
2-Fluorophenol  
Concen: 98.800 ng  
RT: 5.54 min Scan# 587  
Delta R.T. 0.02 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Tgt Ion:112 Resp: 1431706  
Ion Ratio Lower Upper  
112 100  
64 63.0 51.8 77.6  
63 34.8 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: 104.210 ng

RT: 6.54 min Scan# 757

Delta R.T. 0.02 min

Lab File: BF111722.D

Acq: 26 Dec 2018 19:14

Instrument :

BNA\_F

ClientSampleId :

72-11989

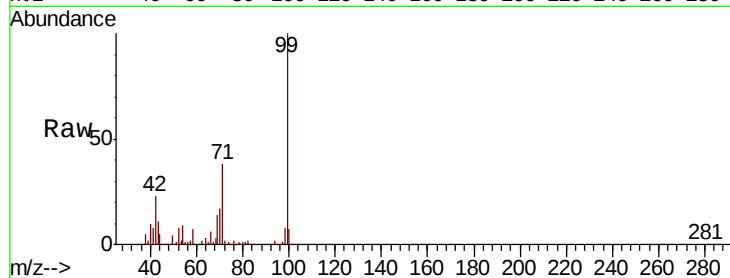
Tot Ion: 99 Resp: 1921831

Ion Ratio Lower Upper

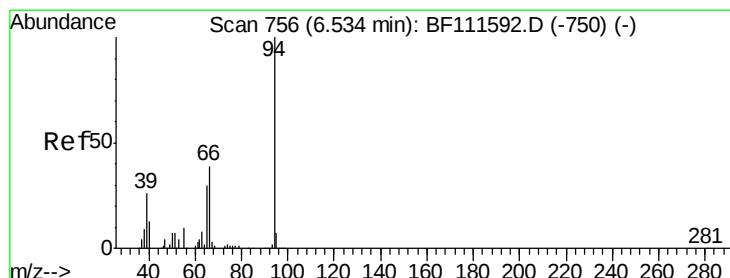
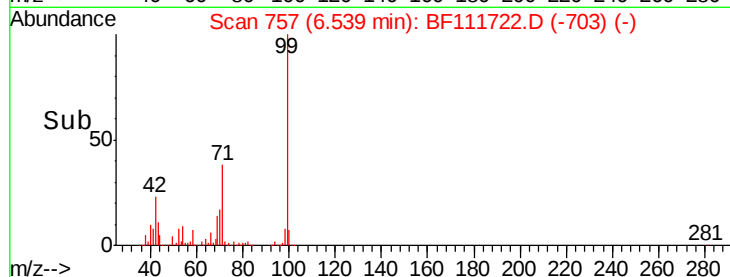
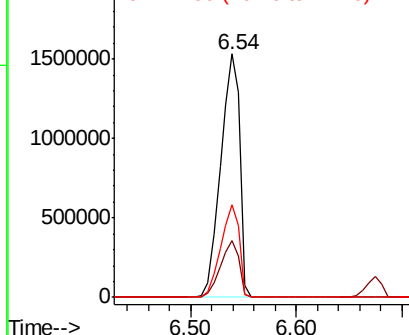
99 100

42 23.2 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: 7.802 ng

RT: 6.55 min Scan# 759

Delta R.T. 0.02 min

Lab File: BF111722.D

Acq: 26 Dec 2018 19:14

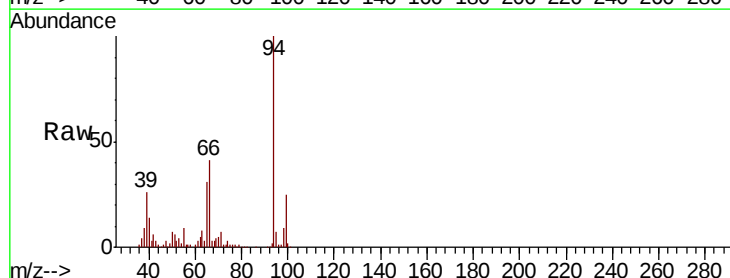
Tgt Ion: 94 Resp: 162342

Ion Ratio Lower Upper

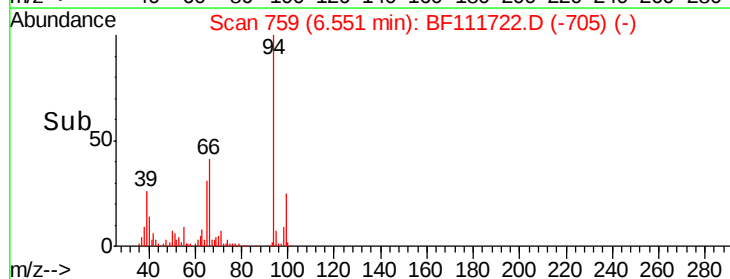
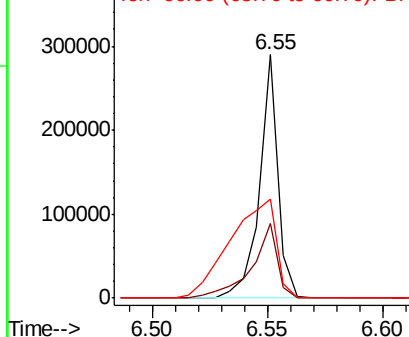
94 100

65 30.9 11.7 51.7

66 40.6 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

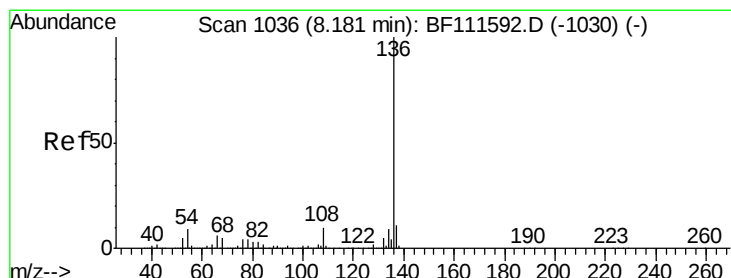
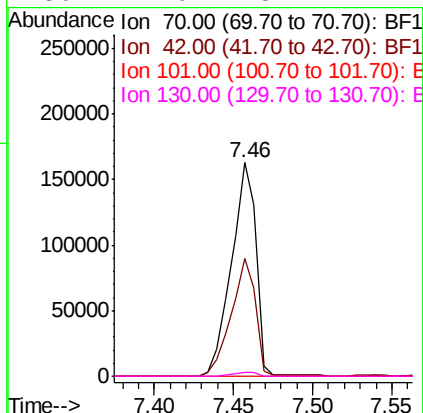
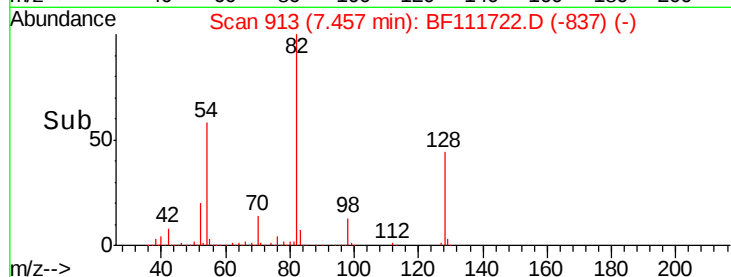
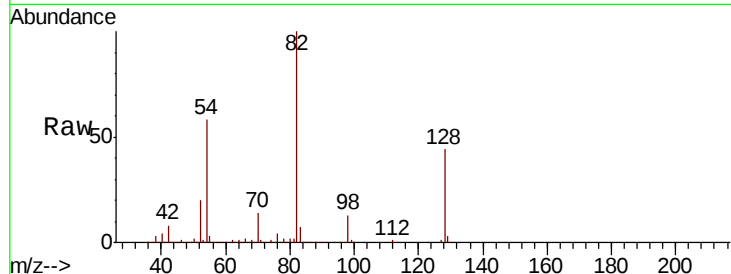




#19  
n-Nitroso-di-n-propylamine  
Concen: 14.312 ng  
RT: 7.46 min Scan# 913  
Delta R.T. 0.15 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

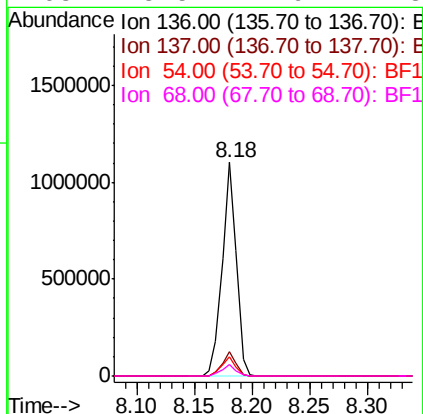
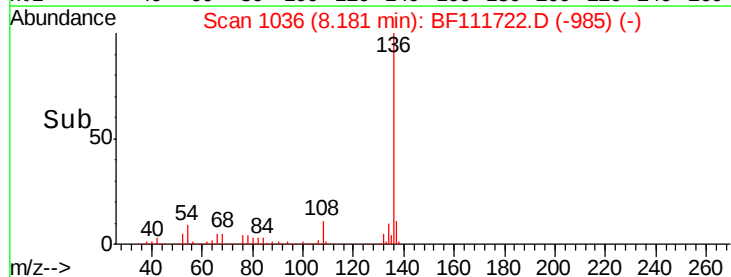
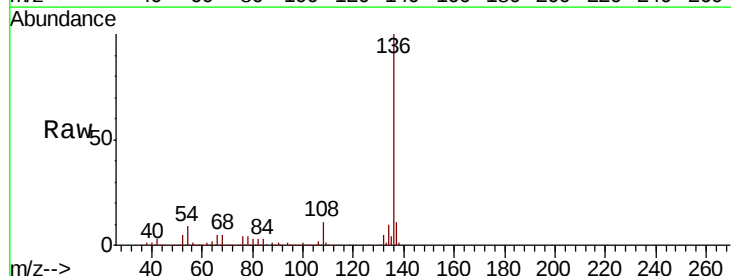
Instrument :  
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ClientSampleId :  
72-11989

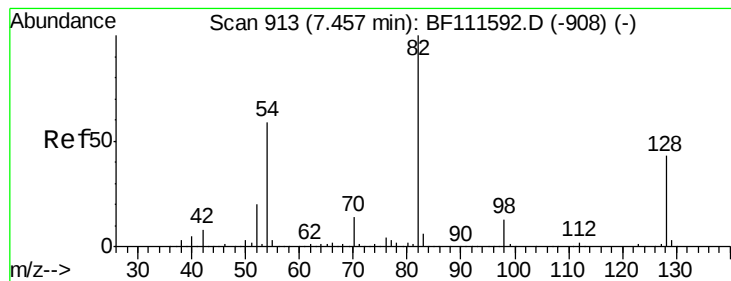
Tot Ion: 70 Resp: 175284  
Ion Ratio Lower Upper  
70 100  
42 55.1 53.2 79.8  
101 0.0 8.2 12.4#  
130 2.0 18.1 27.1#



#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.18 min Scan# 1036  
Delta R.T. -0.00 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Tgt Ion:136 Resp: 941016  
Ion Ratio Lower Upper  
136 100  
137 11.1 9.1 13.7  
54 8.9 7.7 11.5  
68 5.5 4.9 7.3





#23

Nitrobenzene-d5

Concen: 77.715 ng

RT: 7.46 min Scan# 913

Delta R.T. -0.00 min

Lab File: BF111722.D

Acq: 26 Dec 2018 19:14

Instrument :

BNA\_F

ClientSampleId :

72-11989

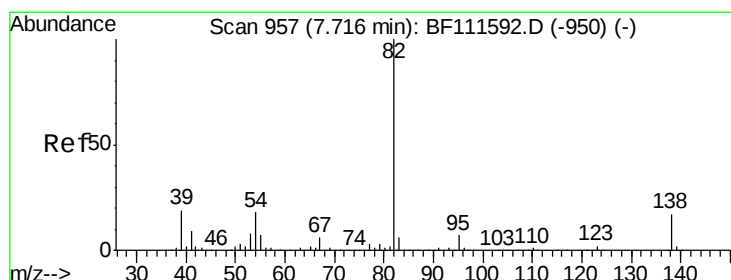
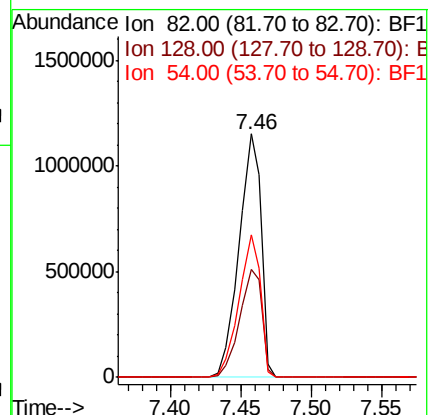
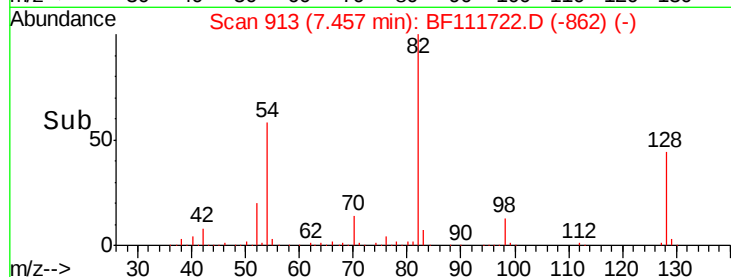
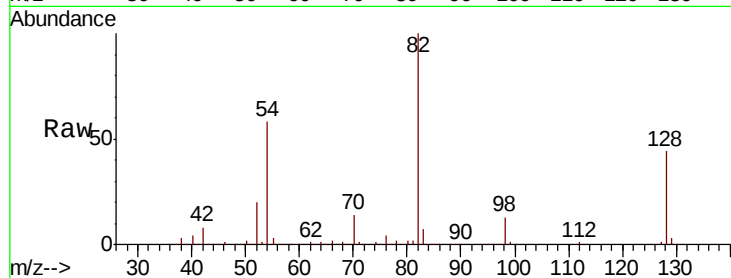
Tot Ion: 82 Resp: 1256382

Ion Ratio Lower Upper

82 100

128 44.4 37.4 56.2

54 58.3 47.6 71.4



#25

Isophorone

Concen: 43.688 ng

RT: 7.46 min Scan# 913

Delta R.T. -0.26 min

Lab File: BF111722.D

Acq: 26 Dec 2018 19:14

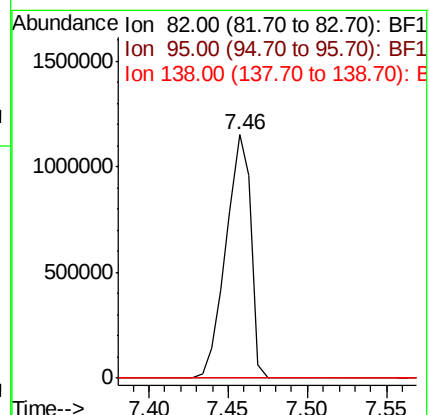
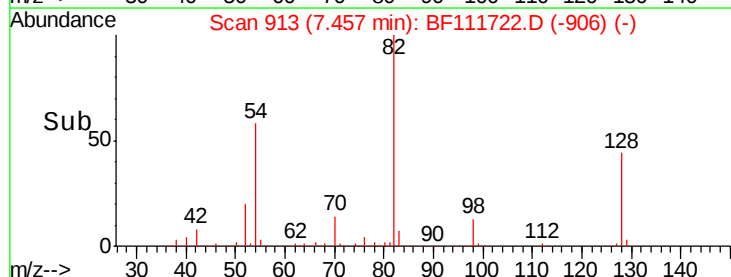
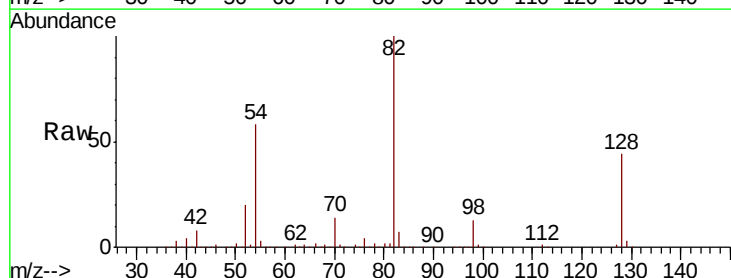
Tgt Ion: 82 Resp: 1253843

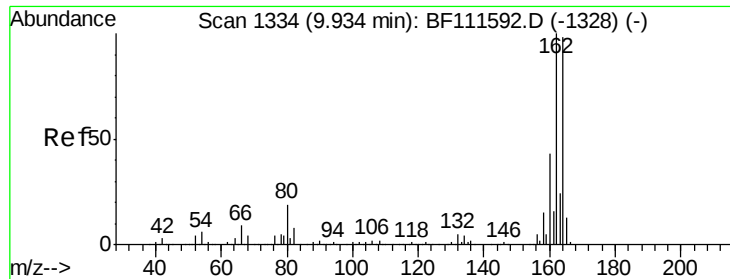
Ion Ratio Lower Upper

82 100

95 0.0 5.4 8.2#

138 0.0 15.1 22.7#

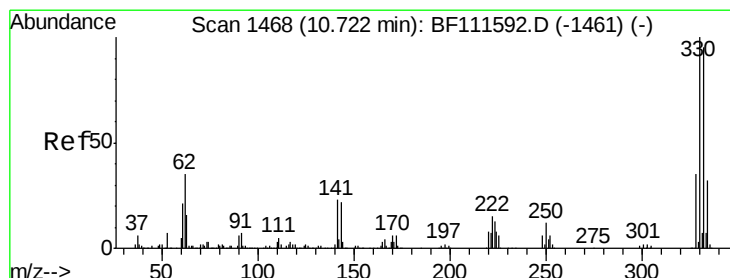
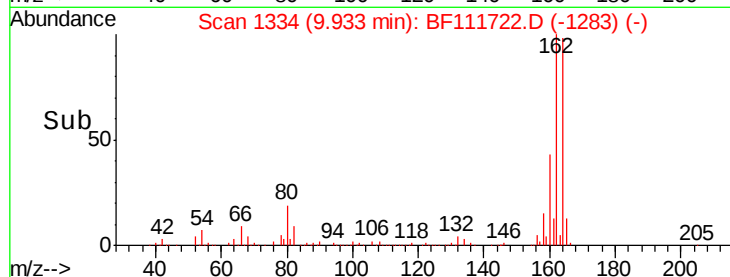
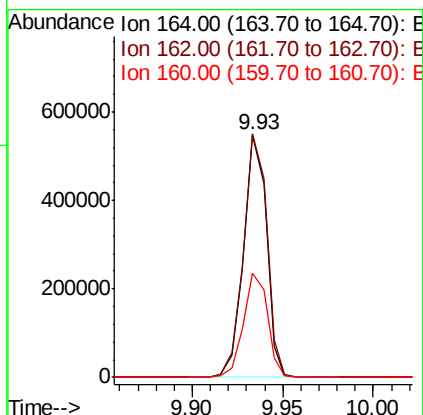
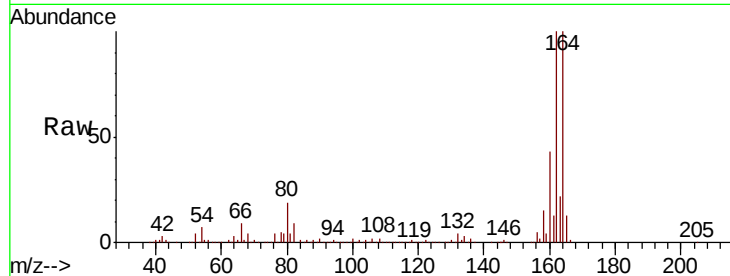




#39  
 Acenaphthene-d10  
 Concen: 20.000 ng  
 RT: 9.93 min Scan# 1334  
 Delta R.T. -0.00 min  
 Lab File: BF111722.D  
 Acq: 26 Dec 2018 19:14

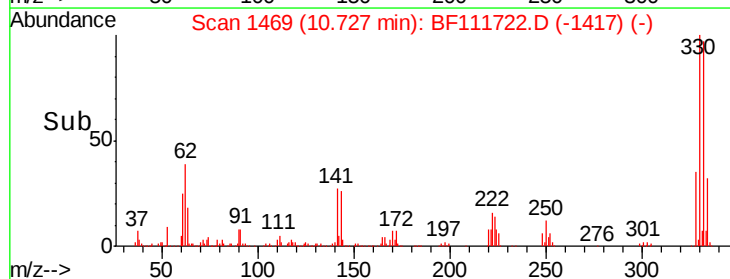
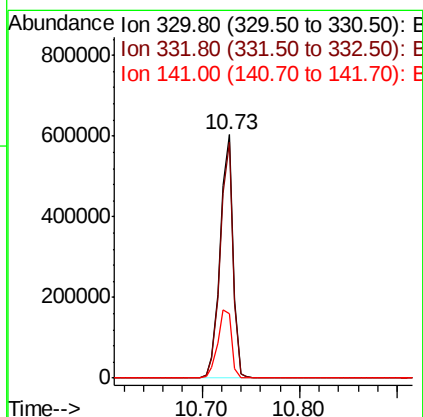
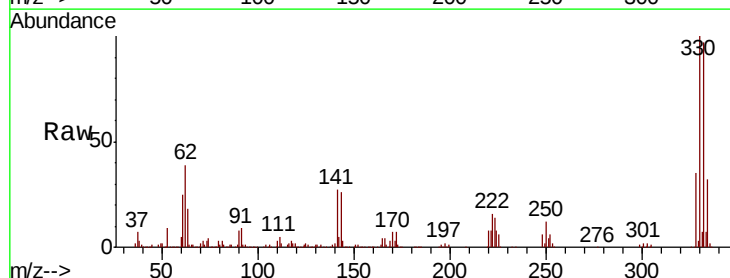
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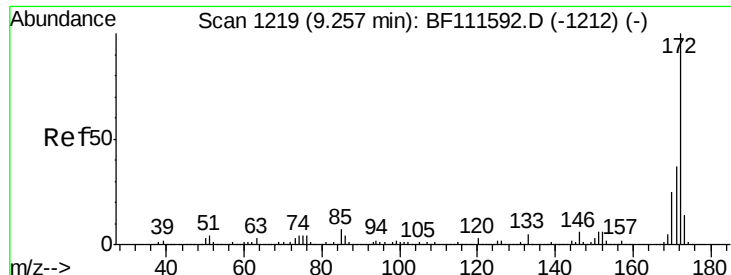
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 162     | 100.4 | 81.4  | 122.0 |
| 160     | 43.0  | 35.7  | 53.5  |



#42  
 2,4,6-Tribromophenol  
 Concen: 97.201 ng  
 RT: 10.73 min Scan# 1469  
 Delta R.T. 0.01 min  
 Lab File: BF111722.D  
 Acq: 26 Dec 2018 19:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 330     | 100   |       |       |
| 332     | 96.1  | 76.0  | 114.0 |
| 141     | 30.5  | 31.0  | 46.6# |

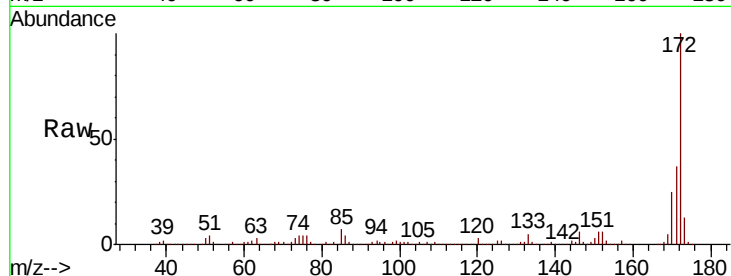




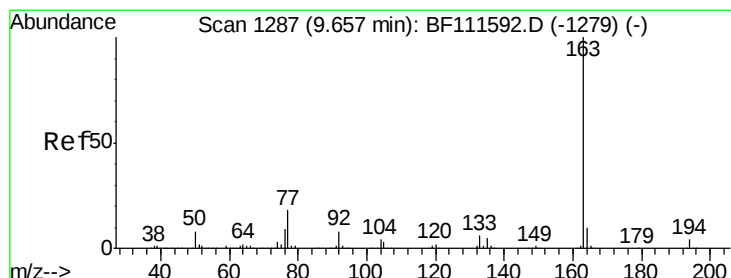
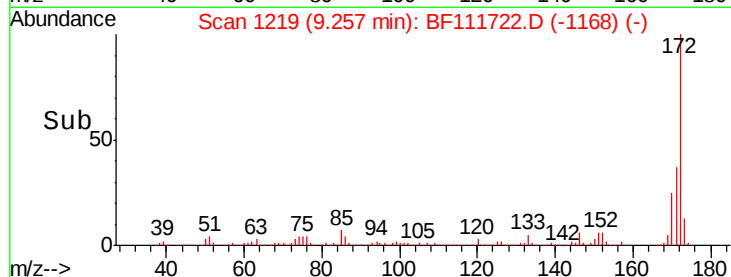
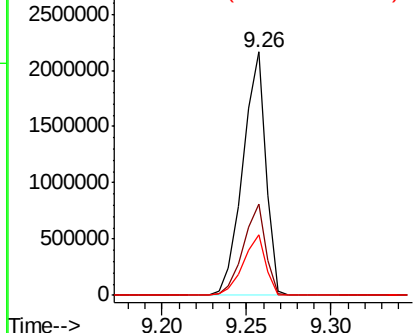
#45  
2-Fluorobiphenyl  
Concen: 62.166 ng  
RT: 9.26 min Scan# 1219  
Delta R.T. -0.00 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Instrument :  
BNA\_F  
ClientSampleId :  
72-11989

Tot Ion:172 Resp: 2059031  
Ion Ratio Lower Upper  
172 100  
171 37.4 33.0 49.4  
170 25.1 22.3 33.5

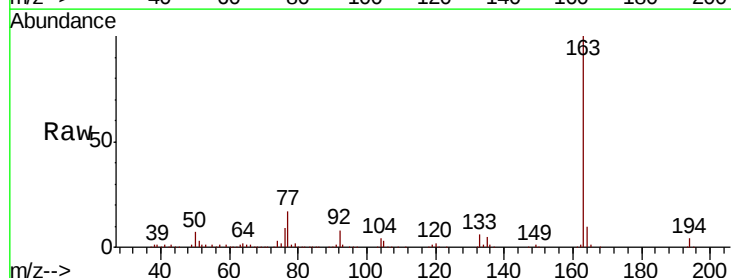


Abundance Ion 172.00 (171.70 to 172.70): E  
Ion 171.00 (170.70 to 171.70): E  
Ion 170.00 (169.70 to 170.70): E

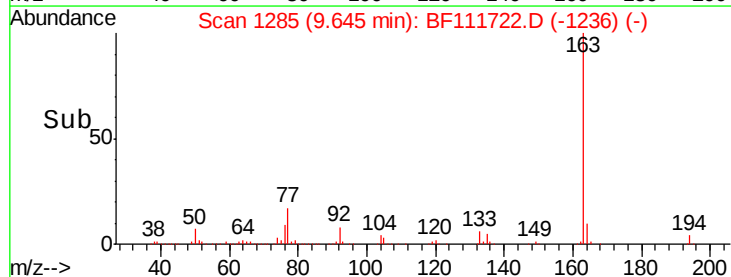
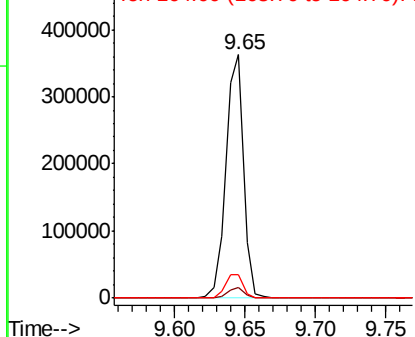


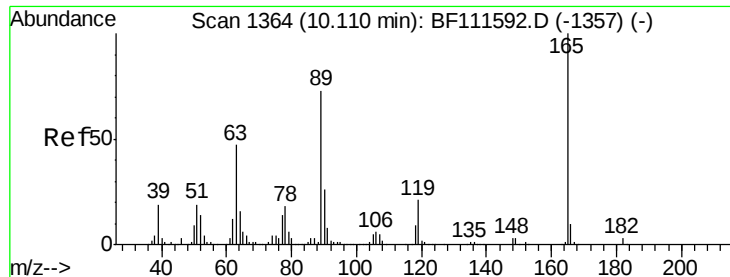
#50  
Dimethylphthalate  
Concen: 8.852 ng  
RT: 9.65 min Scan# 1285  
Delta R.T. -0.01 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Tgt Ion:163 Resp: 312509  
Ion Ratio Lower Upper  
163 100  
194 4.1 3.0 4.6  
164 9.8 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

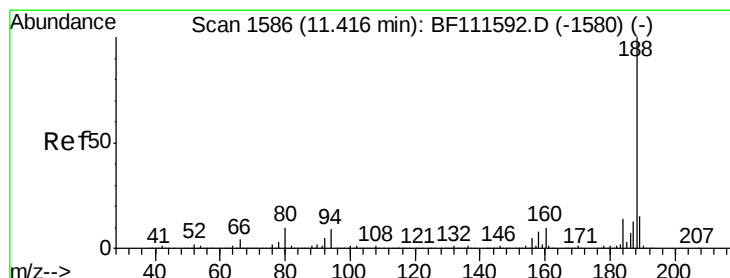
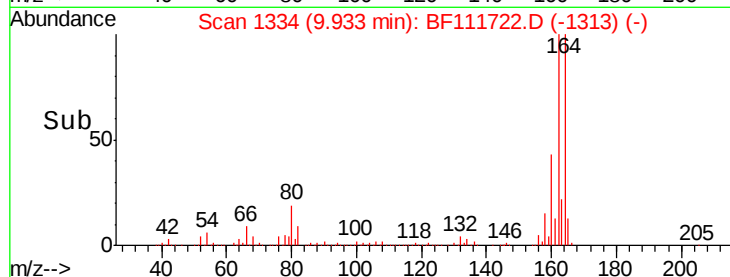
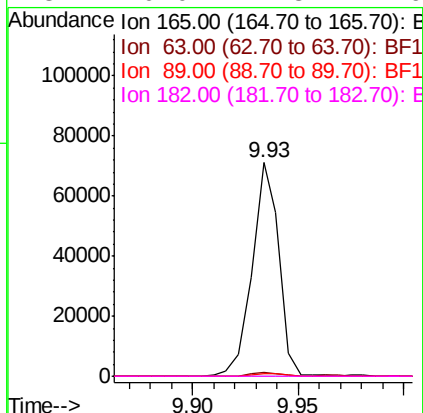
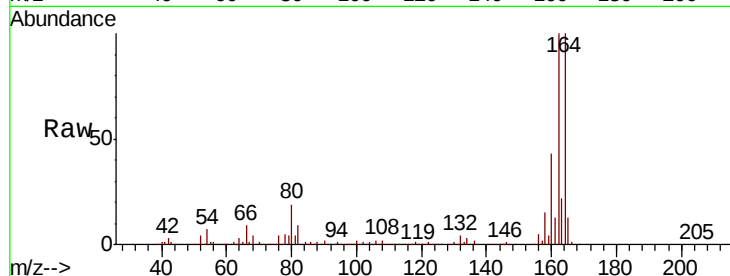




#57  
 2,4-Dinitrotoluene  
 Concen: 7.374 ng  
 RT: 9.93 min Scan# 1334  
 Delta R.T. -0.18 min  
 Lab File: BF111722.D  
 Acq: 26 Dec 2018 19:14

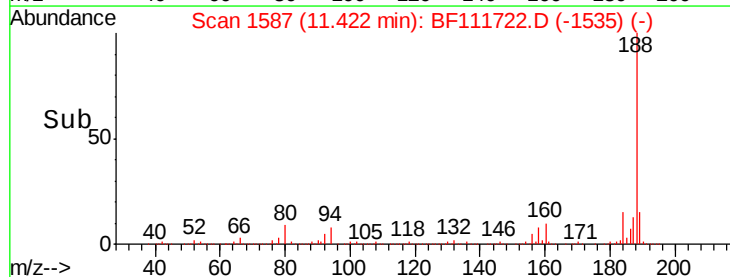
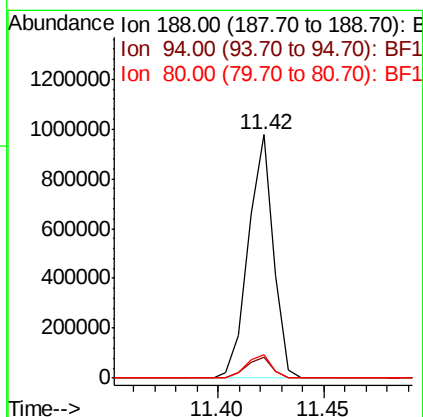
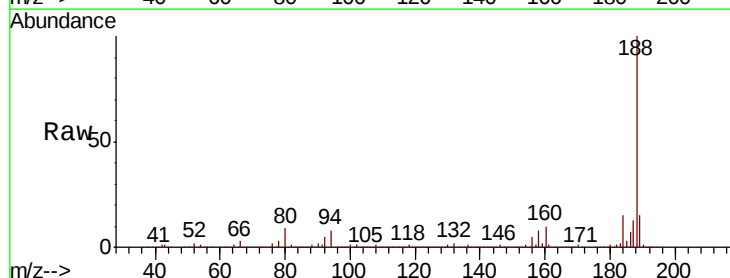
Instrument :  
 BNA\_F  
 ClientSampleId :  
 72-11989

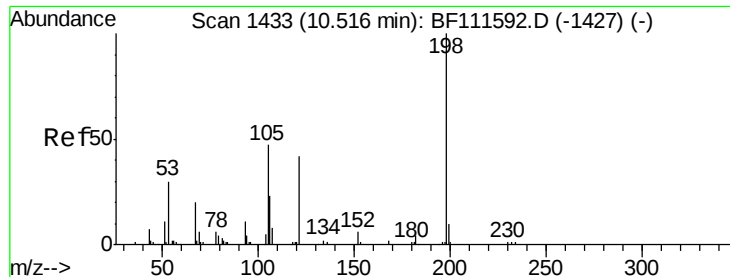
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.6   | 34.6  | 52.0# |
| 89      | 1.1   | 56.2  | 84.4# |
| 182     | 0.0   | 1.8   | 2.6#  |



#64  
 Phenanthrene-d10  
 Concen: 20.000 ng  
 RT: 11.42 min Scan# 1587  
 Delta R.T. 0.01 min  
 Lab File: BF111722.D  
 Acq: 26 Dec 2018 19:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 8.4   | 9.6   | 14.4# |
| 80      | 9.4   | 9.8   | 14.6# |

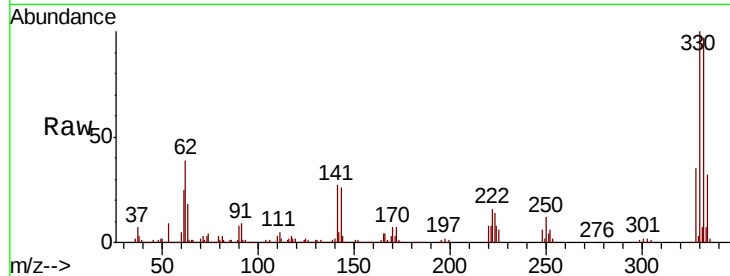




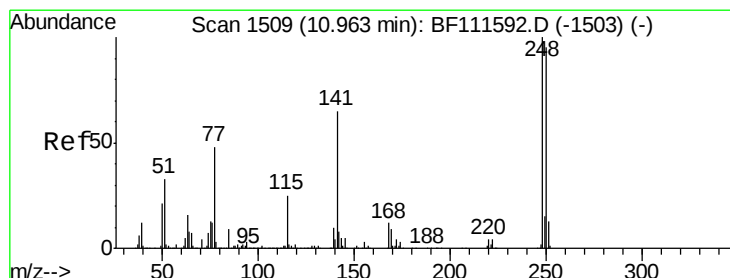
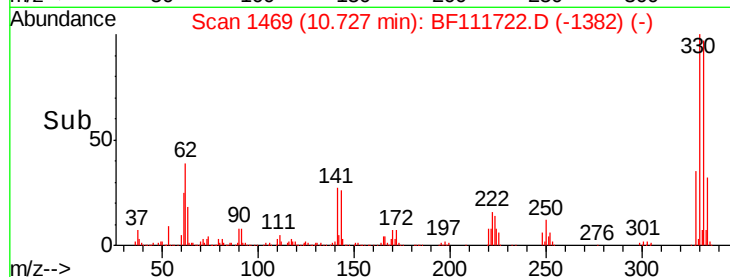
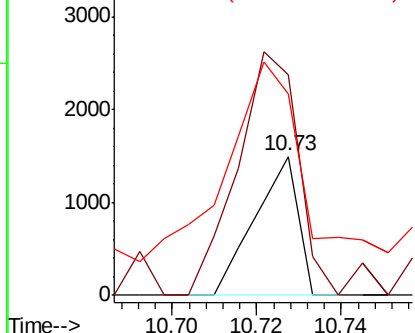
#65  
 4,6-Dinitro-2-methylphenol  
 Concen: 6.969 ng  
 RT: 10.73 min Scan# 1469  
 Delta R.T. 0.21 min  
 Lab File: BF111722.D  
 Acq: 26 Dec 2018 19:14

Instrument :  
 BNA\_F  
 ClientSampleId :  
 72-11989

Tot Ion:198 Resp: 1065  
 Ion Ratio Lower Upper  
 198 100  
 51 158.1 48.0 88.0#  
 105 145.2 34.0 74.0#

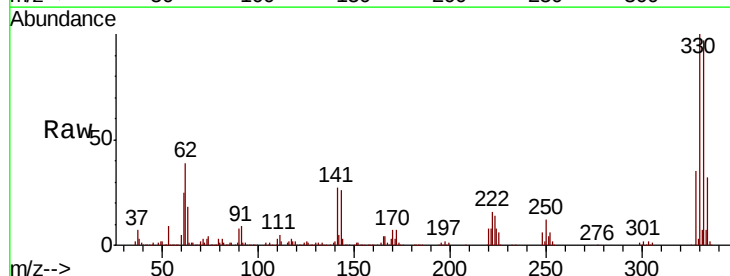


Abundance Ion 198.00 (197.70 to 198.70): E  
 Ion 51.00 (50.70 to 51.70): BF1  
 Ion 105.00 (104.70 to 105.70): E

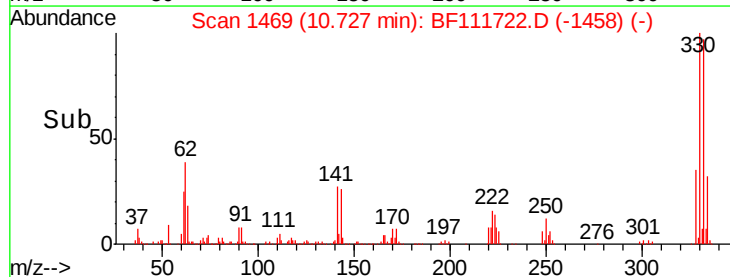
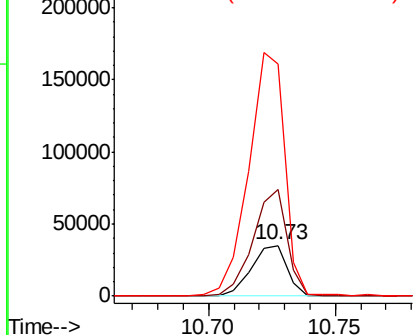


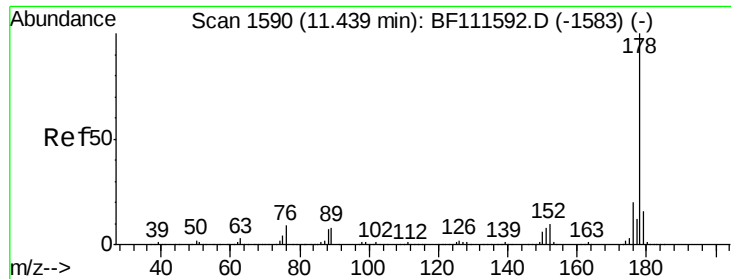
#67  
 4-Bromophenyl-phenylether  
 Concen: 3.475 ng  
 RT: 10.73 min Scan# 1469  
 Delta R.T. -0.24 min  
 Lab File: BF111722.D  
 Acq: 26 Dec 2018 19:14

Tgt Ion:248 Resp: 34670  
 Ion Ratio Lower Upper  
 248 100  
 250 211.5 77.0 115.4#  
 141 458.2 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

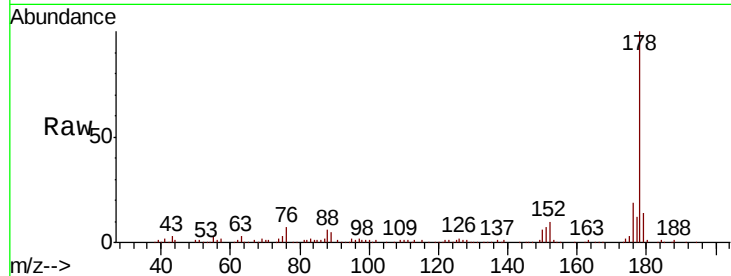




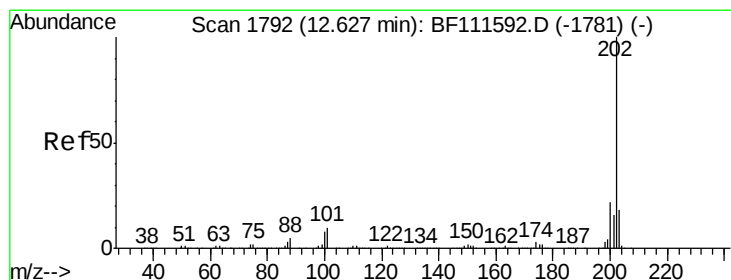
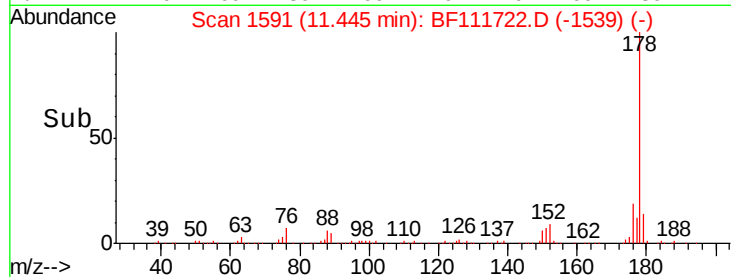
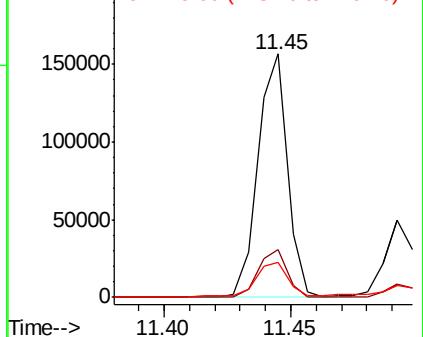
#71  
Phenanthrene  
Concen: 3.007 ng  
RT: 11.45 min Scan# 1591  
Delta R.T. 0.01 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Instrument :  
BNA\_F  
ClientSampleId :  
72-11989

Tot Ion:178 Resp: 128269  
Ion Ratio Lower Upper  
178 100  
176 19.4 18.1 27.1  
179 14.4 14.0 21.0

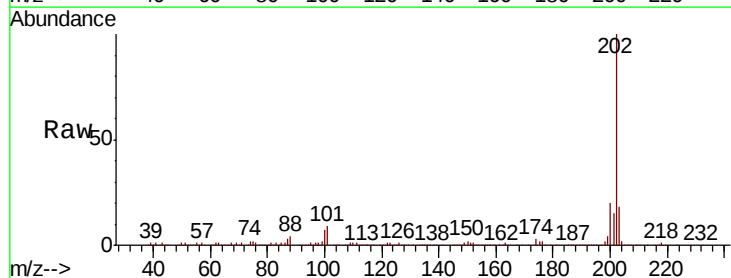


Abundance Ion 178.00 (177.70 to 178.70): E  
Ion 176.00 (175.70 to 176.70): E  
Ion 179.00 (178.70 to 179.70): E

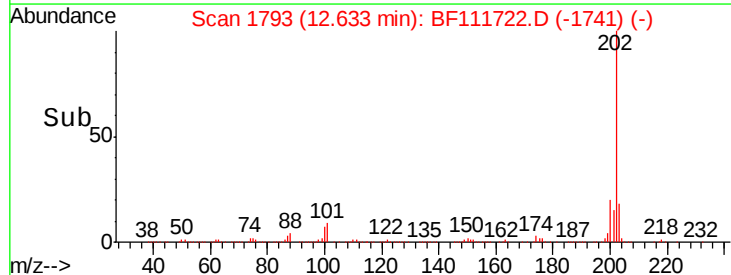
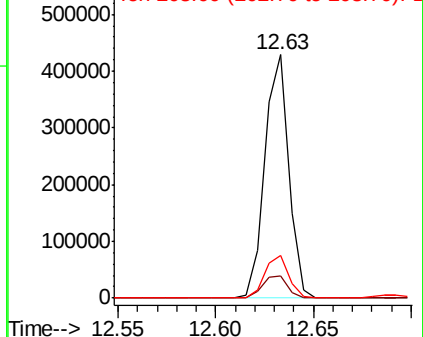


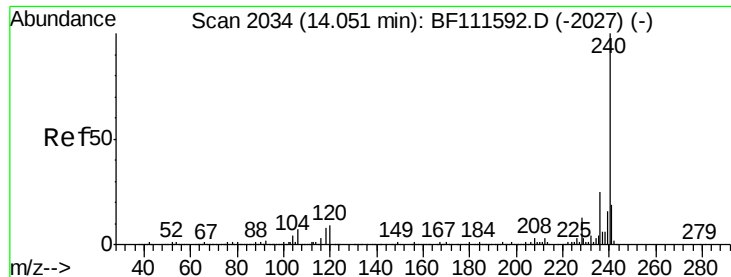
#75  
Fluoranthene  
Concen: 8.396 ng  
RT: 12.63 min Scan# 1793  
Delta R.T. 0.01 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Tgt Ion:202 Resp: 362722  
Ion Ratio Lower Upper  
202 100  
101 9.3 0.0 33.8  
203 17.8 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

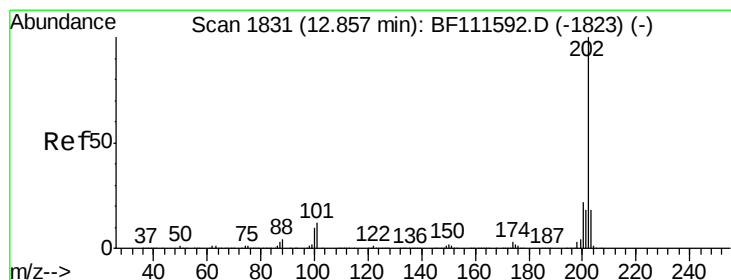
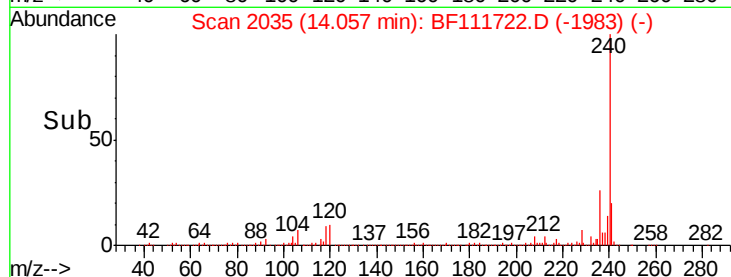
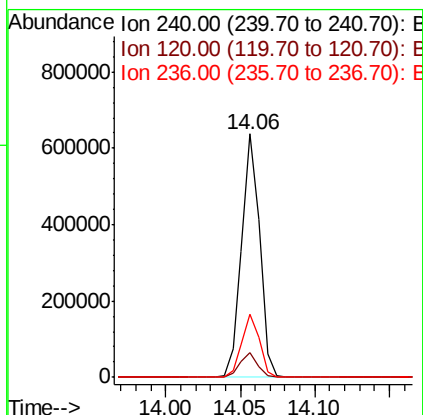
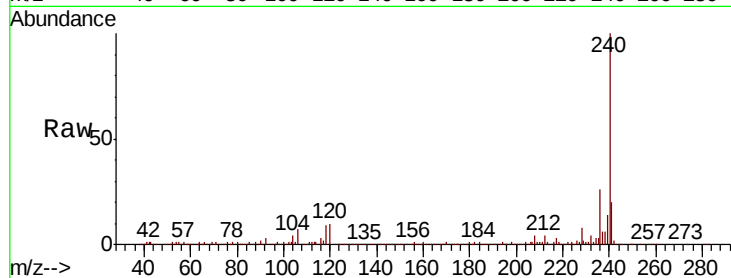




#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.06 min Scan# 2035  
Delta R.T. 0.01 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

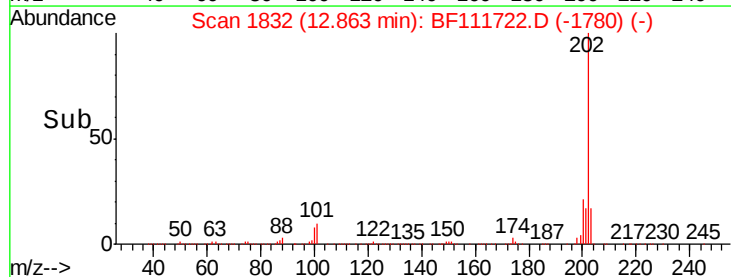
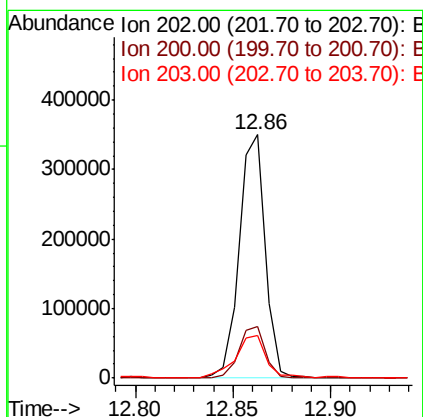
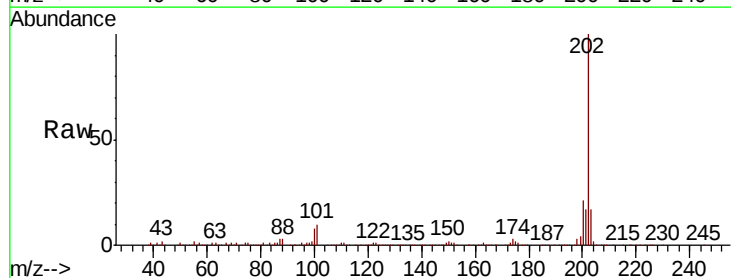
Instrument :  
BNA\_F  
ClientSampleId :  
72-11989

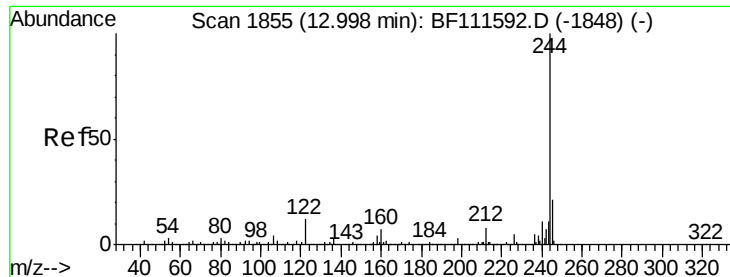
Tot Ion:240 Resp: 541003  
Ion Ratio Lower Upper  
240 100  
120 10.4 12.2 18.2#  
236 26.0 20.2 30.2



#78  
Pyrene  
Concen: 8.443 ng  
RT: 12.86 min Scan# 1832  
Delta R.T. 0.01 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Tgt Ion:202 Resp: 322568  
Ion Ratio Lower Upper  
202 100  
200 21.1 19.0 28.4  
203 17.5 15.2 22.8





#79

Terphenyl-d14

Concen: 58.954 ng

RT: 13.00 min Scan# 1856

Delta R.T. 0.01 min

Lab File: BF111722.D

Acq: 26 Dec 2018 19:14

Instrument :

BNA\_F

ClientSampleId :

72-11989

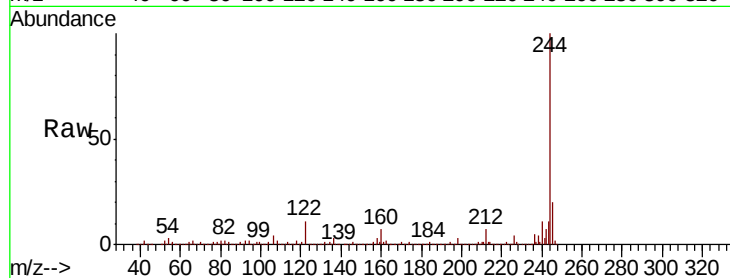
Tot Ion:244 Resp: 1681817

Ion Ratio Lower Upper

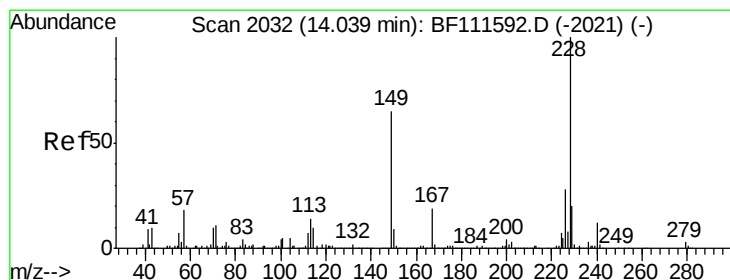
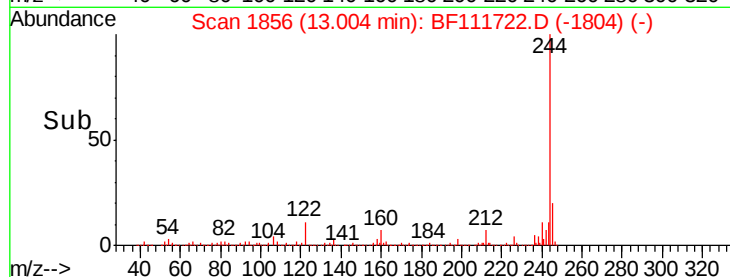
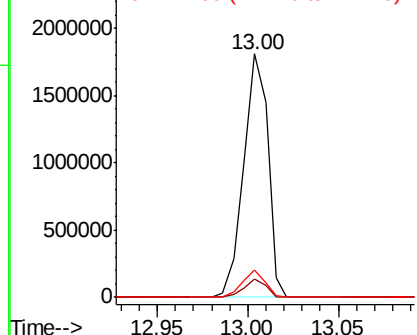
244 100

212 7.3 5.7 8.5

122 11.0 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: 6.180 ng

RT: 14.04 min Scan# 2033

Delta R.T. 0.01 min

Lab File: BF111722.D

Acq: 26 Dec 2018 19:14

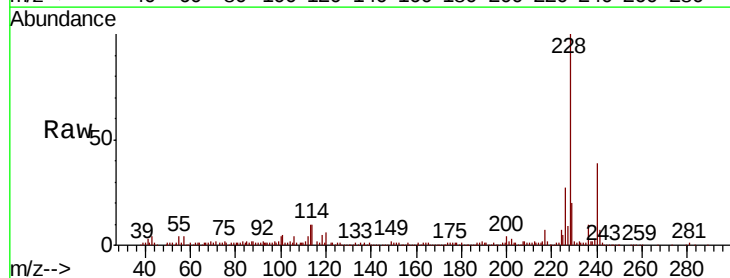
Tgt Ion:228 Resp: 190807

Ion Ratio Lower Upper

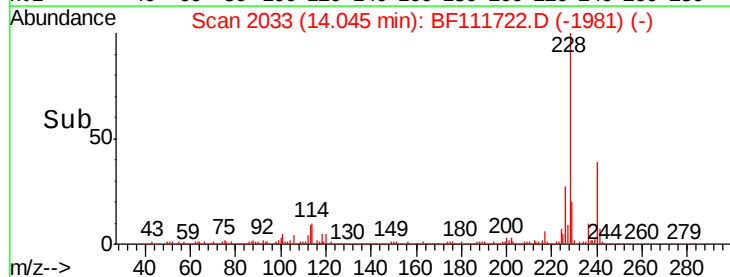
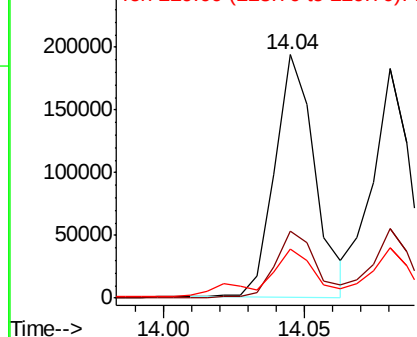
228 100

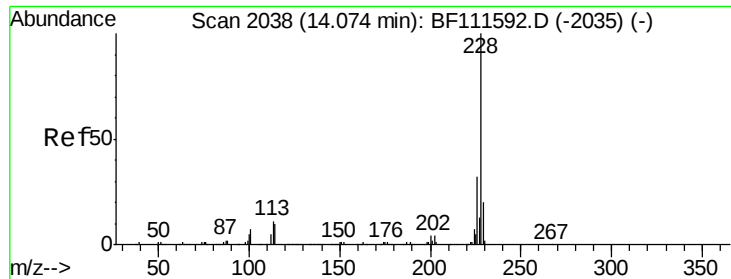
226 27.4 22.6 34.0

229 20.2 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

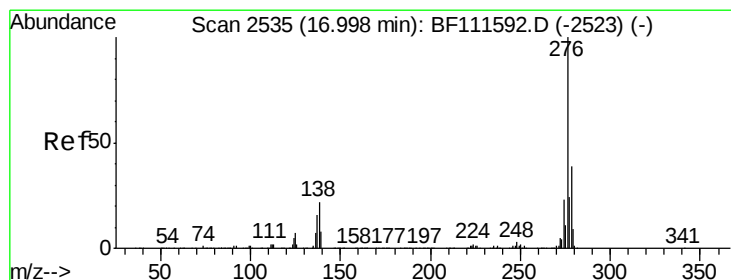
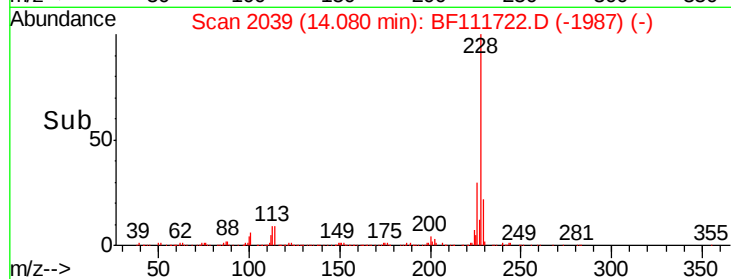
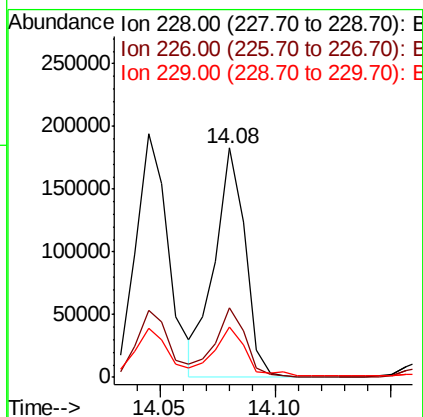
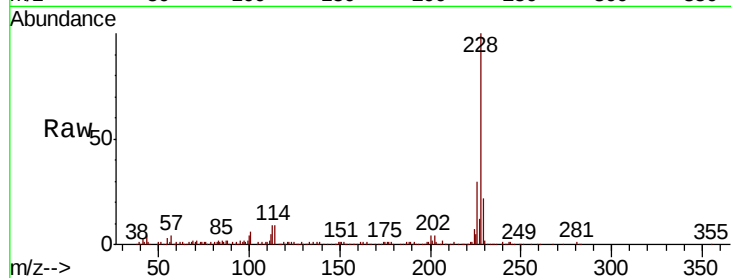




#83  
Chrysene  
Concen: 5.490 ng  
RT: 14.08 min Scan# 2039  
Delta R.T. 0.01 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

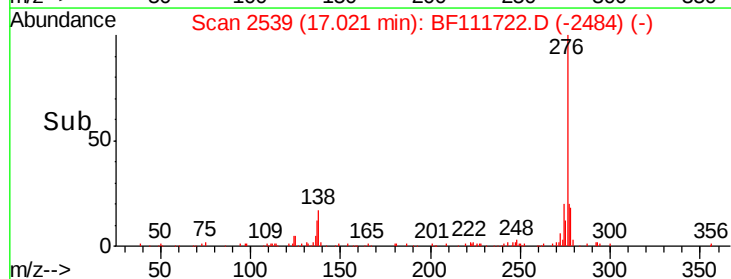
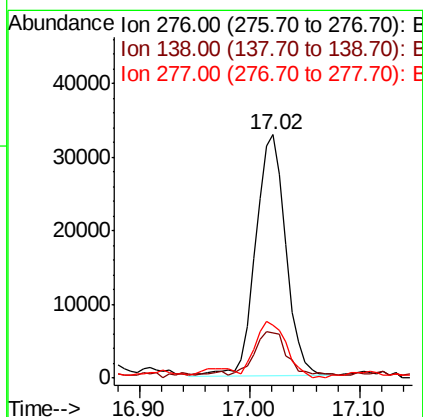
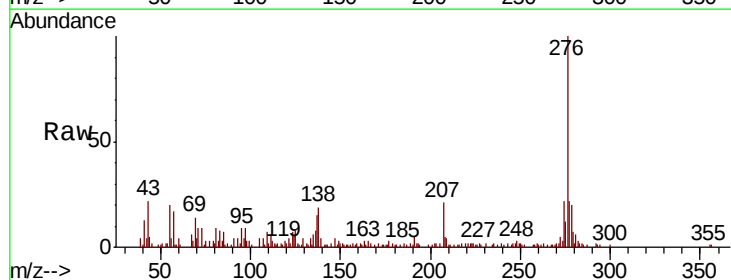
Instrument :  
BNA\_F  
ClientSampleId :  
72-11989

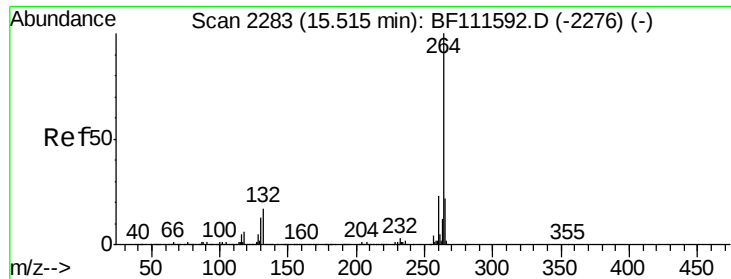
Tot Ion:228 Resp: 166609  
Ion Ratio Lower Upper  
228 100  
226 30.3 25.3 37.9  
229 22.0 17.2 25.8



#86  
Indeno(1,2,3-cd)pyrene  
Concen: 2.439 ng  
RT: 17.02 min Scan# 2539  
Delta R.T. 0.02 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Tgt Ion:276 Resp: 62918  
Ion Ratio Lower Upper  
276 100  
138 19.8 27.8 41.6#  
277 24.5 20.1 30.1

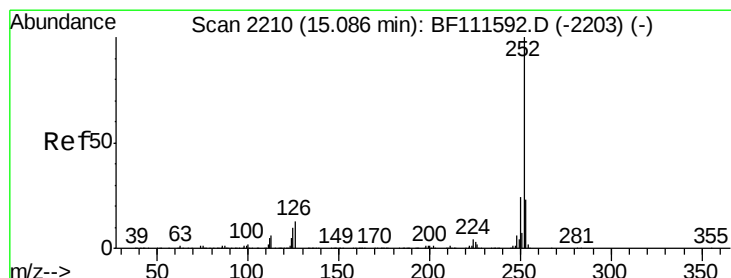
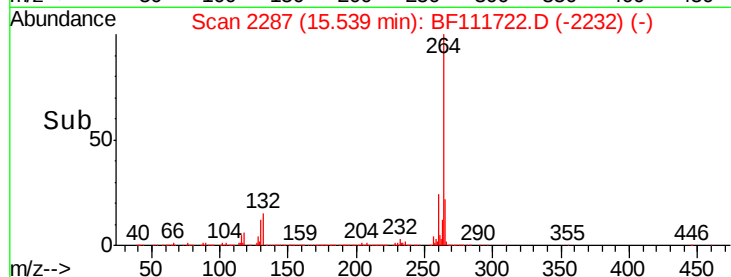
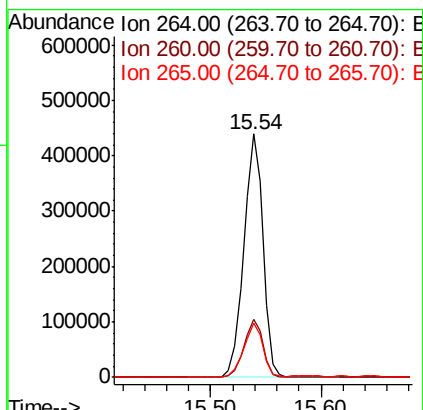
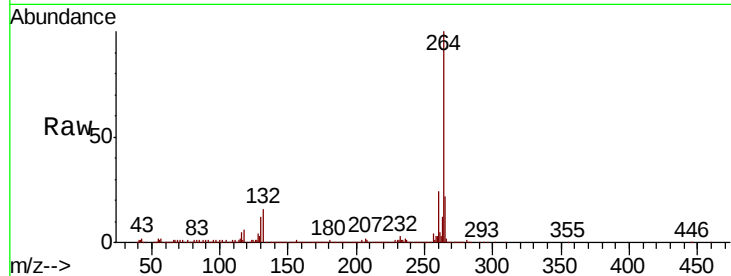




#87  
Pervlene-d12  
Concen: 20.000 ng  
RT: 15.54 min Scan# 2287  
Delta R.T. 0.02 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

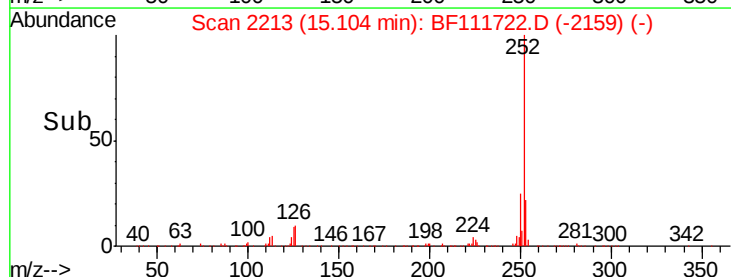
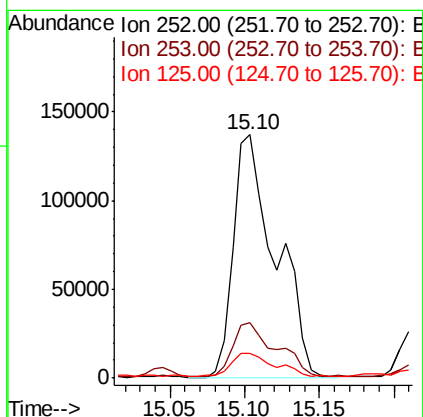
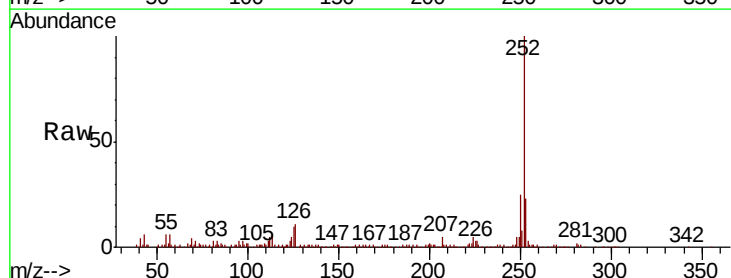
Instrument :  
BNA\_F  
ClientSampled :  
72-11989

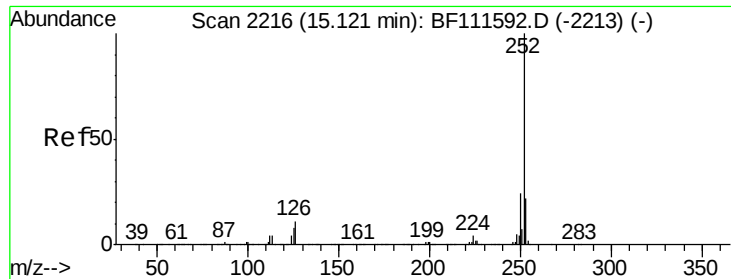
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.8  | 18.3  | 27.5  |
| 265     | 22.0  | 17.7  | 26.5  |



#88  
Benzo(b)fluoranthene  
Concen: 8.605 ng  
RT: 15.10 min Scan# 2213  
Delta R.T. 0.02 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 18.2  | 27.2  |
| 125     | 10.1  | 10.4  | 15.6# |

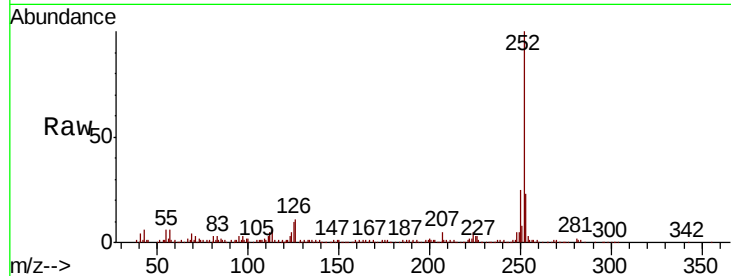




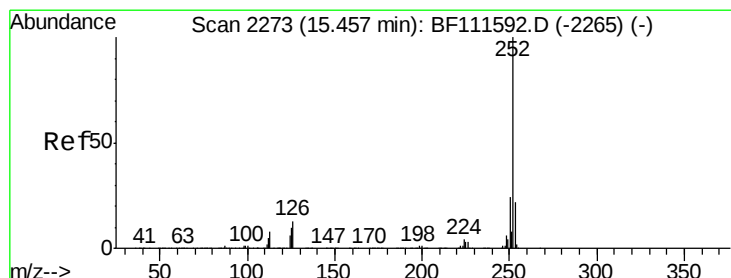
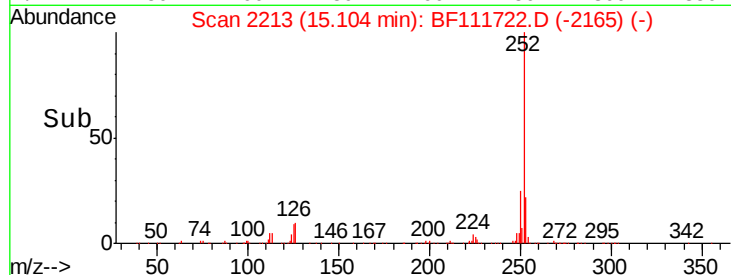
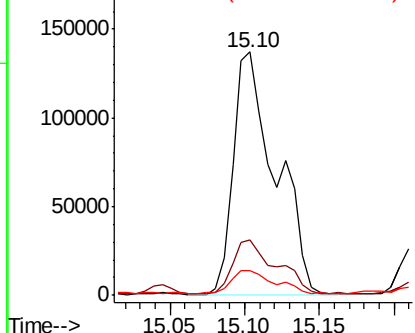
#89  
Benzo(k)fluoranthene  
Concen: 9.038 ng  
RT: 15.10 min Scan# 2213  
Delta R.T. -0.02 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

Instrument :  
BNA\_F  
ClientSampleId :  
72-11989

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 22.7  | 18.1  | 27.1  |
| 125     | 10.1  | 9.8   | 14.8  |

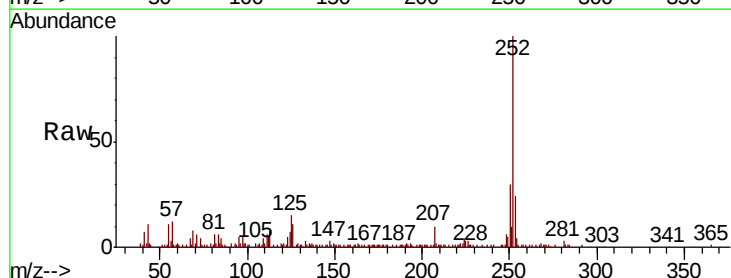


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



#90  
Benzo(a)pyrene  
Concen: 3.233 ng  
RT: 15.41 min Scan# 2265  
Delta R.T. -0.05 min  
Lab File: BF111722.D  
Acq: 26 Dec 2018 19:14

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.3  | 17.8  | 26.8  |
| 125     | 14.6  | 12.3  | 18.5  |



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

