

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF012819\  
 Data File : BF112285.D  
 Acq On : 28 Jan 2019 20:06  
 Operator : JU/SJ  
 Sample : K1011-11 5X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OR-01-012519-B

Quant Time: Jan 29 00:07:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF012519.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Jan 28 10:38:18 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.84  | 152  | 234086   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.12  | 136  | 883562   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.87  | 164  | 395866   | 20.00 | ng    | -0.01    |
| 64) Phenanthrene-d10      | 11.36 | 188  | 660601   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.00 | 240  | 479420   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.47 | 264  | 459120   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 5) 2-Fluorophenol           | 5.47  | 112  | 285658   | 25.92 | ng    | -0.01    |
| 7) Phenol-d6                | 6.48  | 99   | 364779   | 23.82 | ng    | -0.01    |
| 23) Nitrobenzene-d5         | 7.40  | 82   | 220207   | 14.36 | ng    | -0.01    |
| 42) 2,4,6-Tribromophenol    | 10.67 | 330  | 82740    | 17.96 | ng    | -0.01    |
| 45) 2-Fluorobiphenyl        | 9.19  | 172  | 424851   | 15.18 | ng    | -0.01    |
| 79) Terphenyl-d14           | 12.94 | 244  | 319061   | 12.53 | ng    | -0.01    |

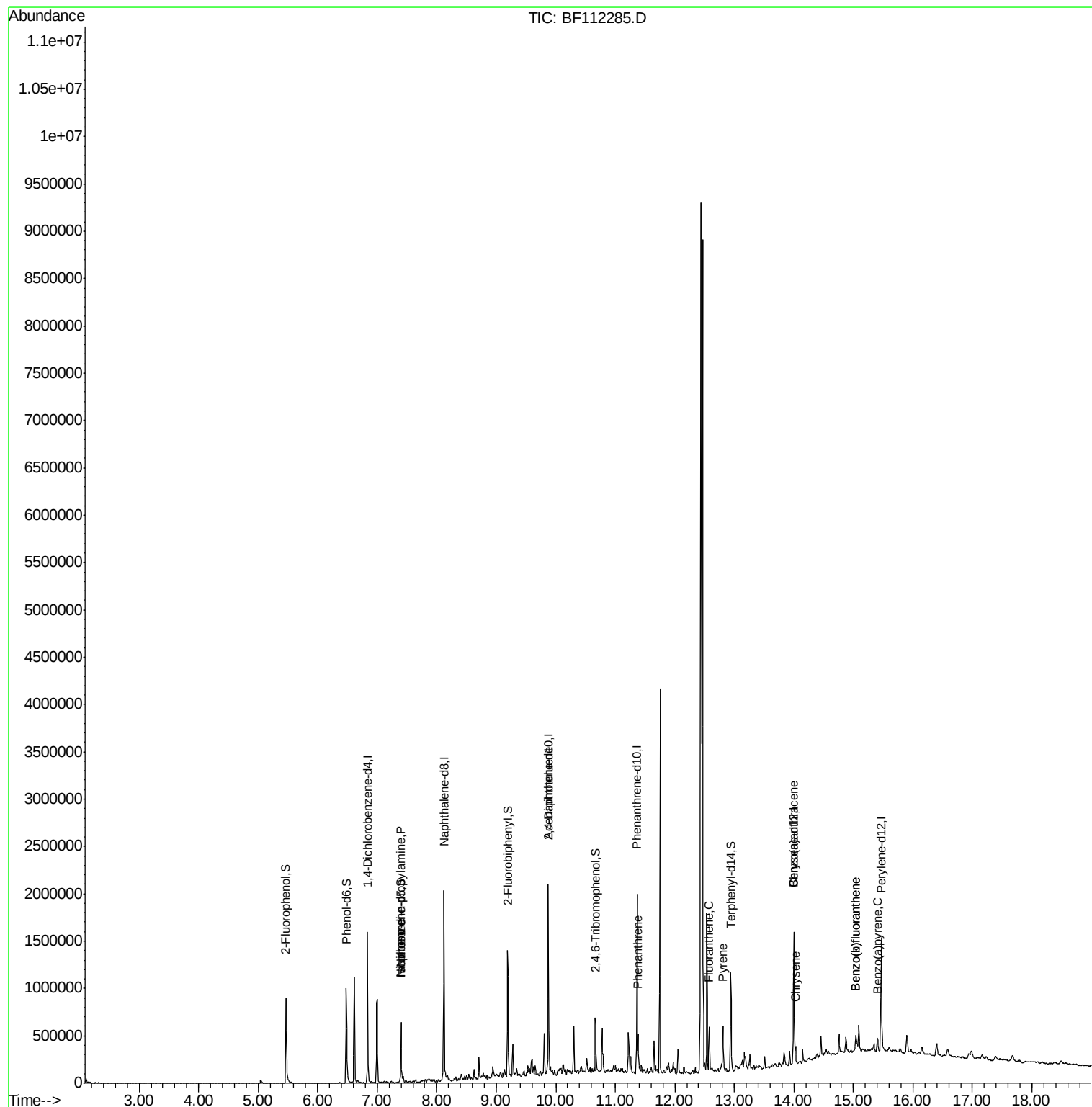
| Target Compounds               | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|--------------------------------|-------|------|----------|-------|-------|--------|
| 19) n-Nitroso-di-n-propylamine | 7.40  | 70   | 27554    | 2.609 | ng    | # 80   |
| 25) Isophorone                 | 7.40  | 82   | 219906   | 9.141 | ng    | # 64   |
| 57) 2,4-Dinitrotoluene         | 9.87  | 165  | 54402    | 6.204 | ng    | # 32   |
| 71) Phenanthrene               | 11.39 | 178  | 140788   | 4.099 | ng    | 97     |
| 75) Fluoranthene               | 12.57 | 202  | 181049   | 4.915 | ng    | 98     |
| 78) Pyrene                     | 12.80 | 202  | 173884   | 5.239 | ng    | 96     |
| 81) Benzo(a)anthracene         | 13.99 | 228  | 75055    | 2.663 | ng    | 97     |
| 83) Chrysene                   | 14.03 | 228  | 71570    | 2.660 | ng    | 97     |
| 88) Benzo(b)fluoranthene       | 15.04 | 252  | 113025   | 4.116 | ng    | # 96   |
| 89) Benzo(k)fluoranthene       | 15.04 | 252  | 113025   | 4.297 | ng    | 96     |
| 90) Benzo(a)pyrene             | 15.40 | 252  | 65056    | 2.633 | ng    | # 95   |

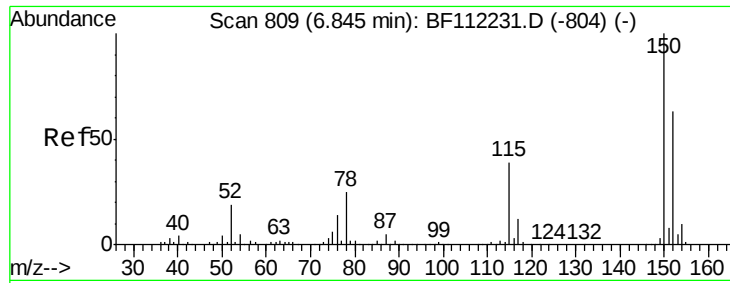
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :  
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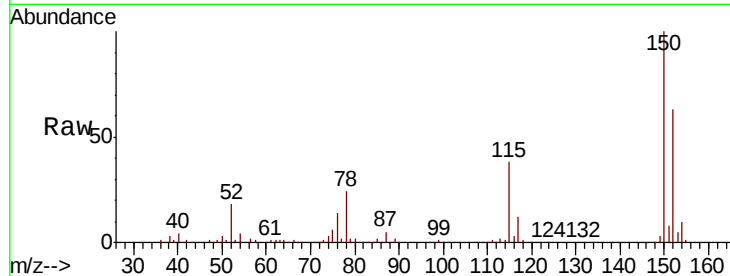


#1

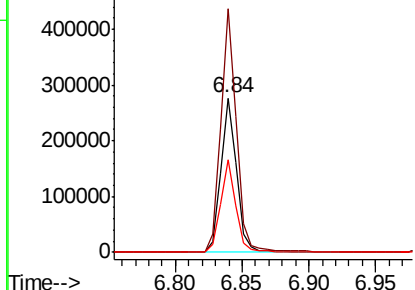
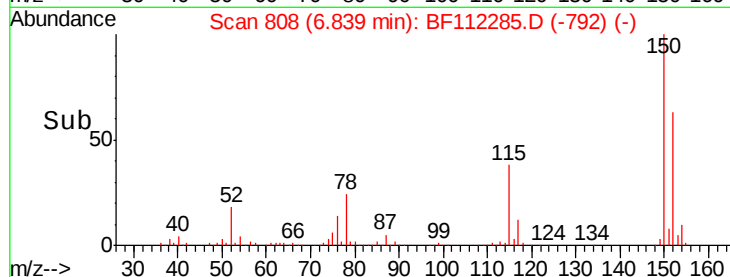
1,4-Dichlorobenzene-d4  
Concen: 20.000 ng  
RT: 6.84 min Scan# 808  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

Instrument :  
BNA\_F  
ClientSampleId :  
OR-01-012519-B

Tgt Ion:152 Resp: 234086  
Ion Ratio Lower Upper  
152 100  
150 157.8 127.4 191.0  
115 60.1 45.5 68.3



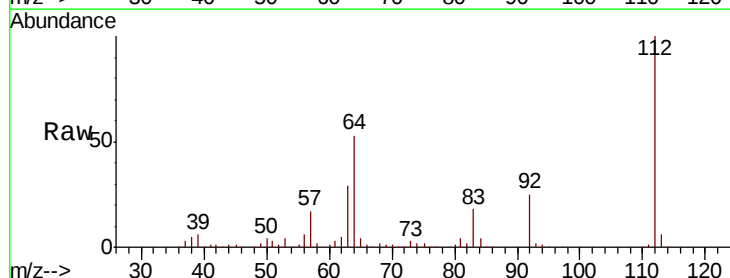
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



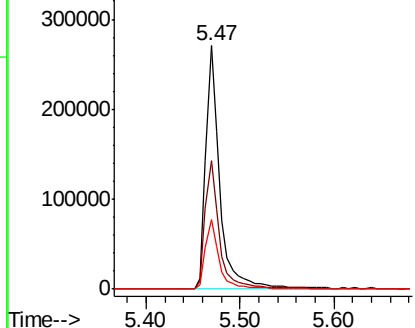
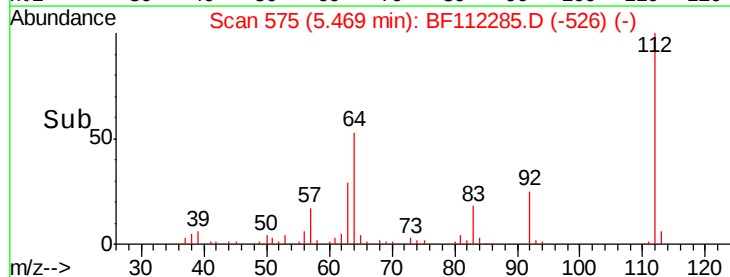
#5

2-Fluorophenol  
Concen: 25.920 ng  
RT: 5.47 min Scan# 575  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

Tgt Ion:112 Resp: 285658  
Ion Ratio Lower Upper  
112 100  
64 53.0 45.7 68.5  
63 28.8 23.6 35.4



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: 23.820 ng

RT: 6.48 min Scan# 747

Delta R.T. -0.01 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

Instrument :

BNA\_F

ClientSampleId :

OR-01-012519-B

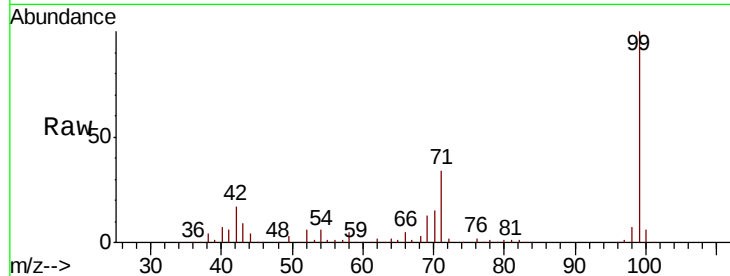
Tgt Ion: 99 Resp: 364779

Ion Ratio Lower Upper

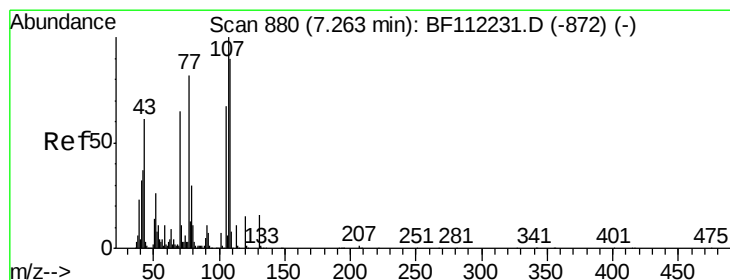
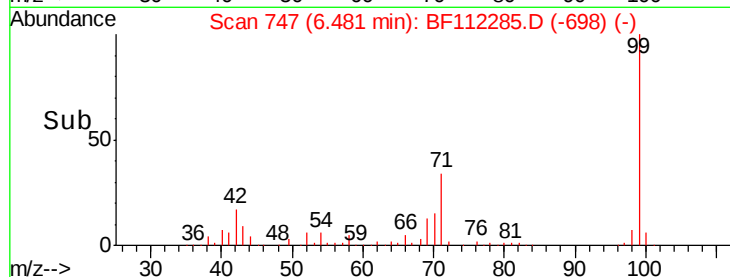
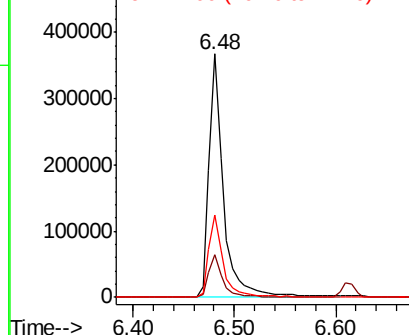
99 100

42 17.5 15.1 22.7

71 34.1 26.9 40.3



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



#19

n-Nitroso-di-n-propylamine

Concen: 2.609 ng

RT: 7.40 min Scan# 903

Delta R.T. 0.14 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

Tgt Ion: 70 Resp: 27554

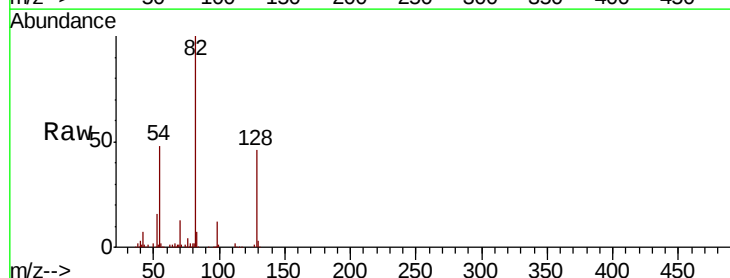
Ion Ratio Lower Upper

70 100

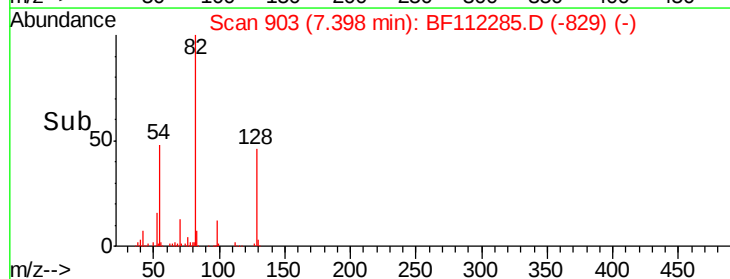
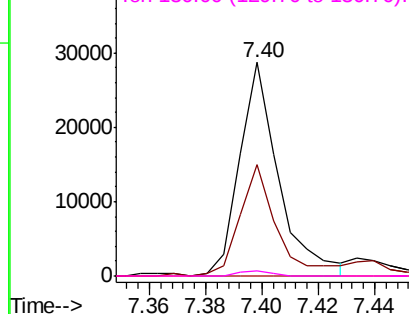
42 51.9 47.6 71.4

101 0.0 7.9 11.9#

130 2.4 18.4 27.6#



Abundance Ion 70.00 (69.70 to 70.70): BF1  
Ion 42.00 (41.70 to 42.70): BF1  
Ion 101.00 (100.70 to 101.70): BF1  
Ion 130.00 (129.70 to 130.70): BF1

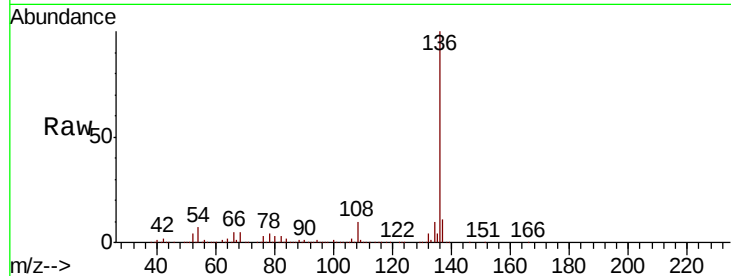




#21  
Naphthalene-d8  
Concen: 20.000 ng  
RT: 8.12 min Scan# 1026  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

Instrument :  
BNA\_F  
ClientSampleId :  
OR-01-012519-B

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 136   | Resp: | 883562 |
| Ion      | Ratio | Lower | Upper  |
| 136      | 100   |       |        |
| 137      | 11.2  | 9.1   | 13.7   |
| 54       | 6.8   | 5.9   | 8.9    |
| 68       | 5.0   | 5.1   | 7.7#   |



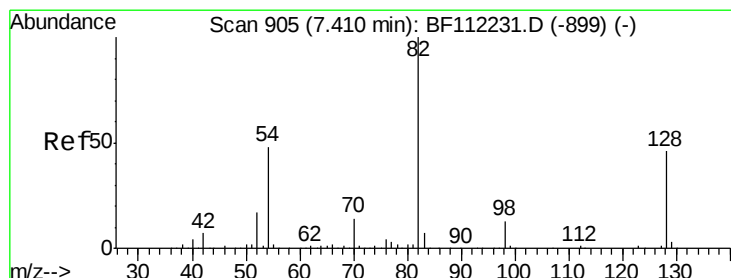
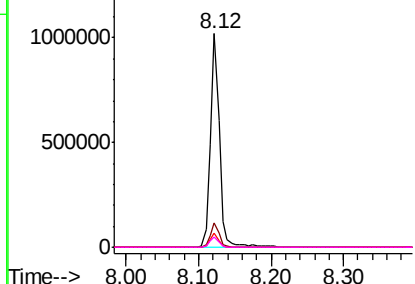
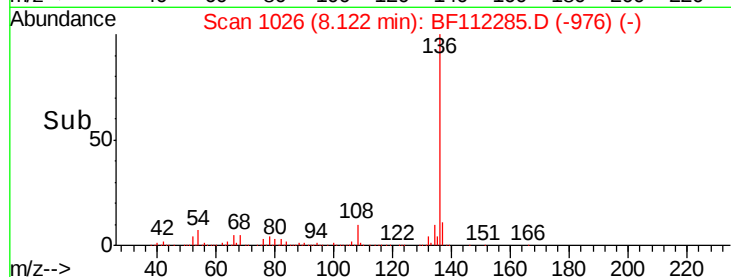
Abundance

Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

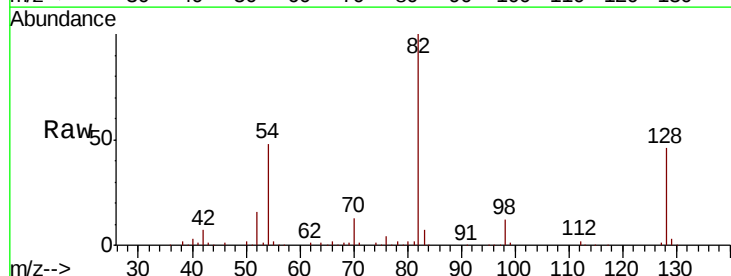
Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1



#23  
Nitrobenzene-d5  
Concen: 14.360 ng  
RT: 7.40 min Scan# 903  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 82    | Resp: | 220207 |
| Ion      | Ratio | Lower | Upper  |
| 82       | 100   |       |        |
| 128      | 46.1  | 37.8  | 56.8   |
| 54       | 47.8  | 39.7  | 59.5   |

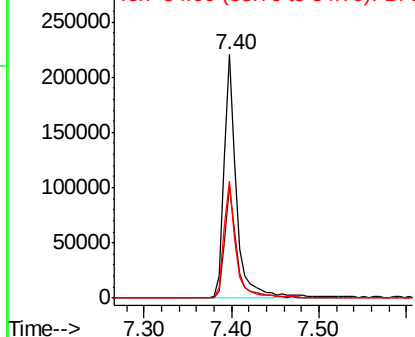
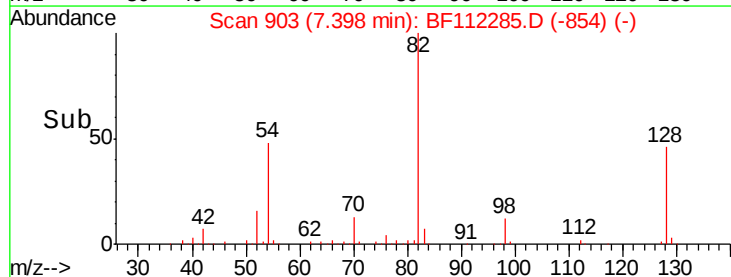


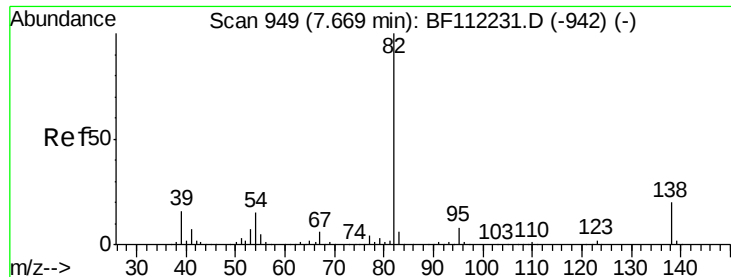
Abundance

Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF1





#25

Isophorone

Concen: 9.141 ng

RT: 7.40 min Scan# 903

Delta R.T. -0.27 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

Instrument :

BNA\_F

ClientSampleId :

OR-01-012519-B

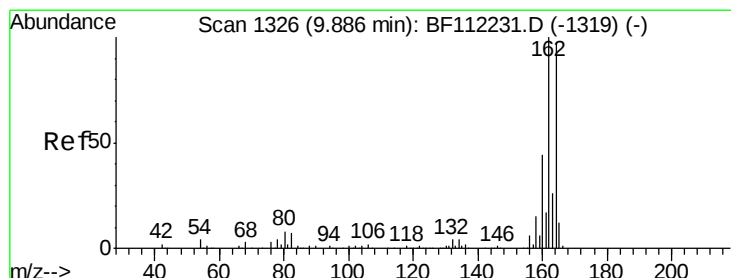
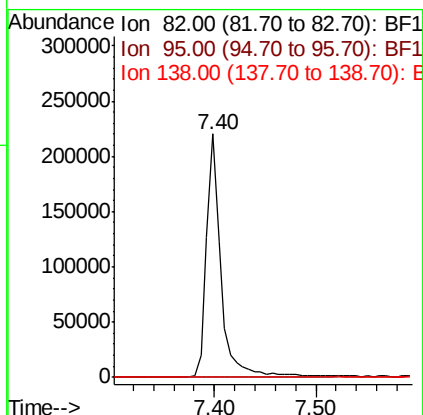
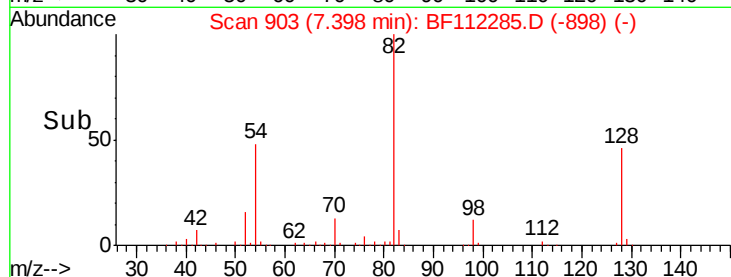
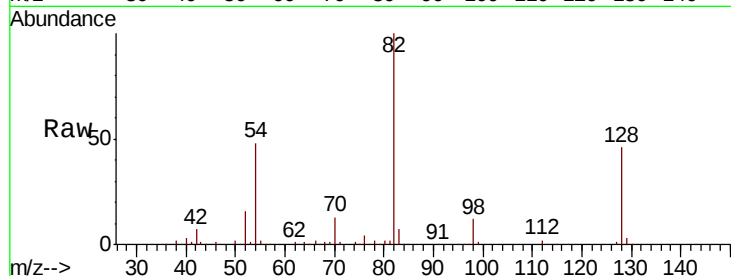
Tgt Ion: 82 Resp: 219906

Ion Ratio Lower Upper

82 100

95 0.1 5.7 8.5#

138 0.0 15.4 23.0#



#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 9.87 min Scan# 1324

Delta R.T. -0.01 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

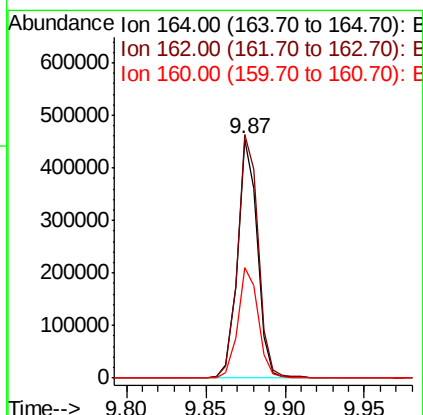
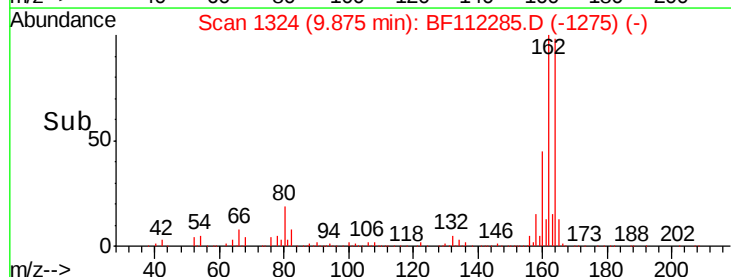
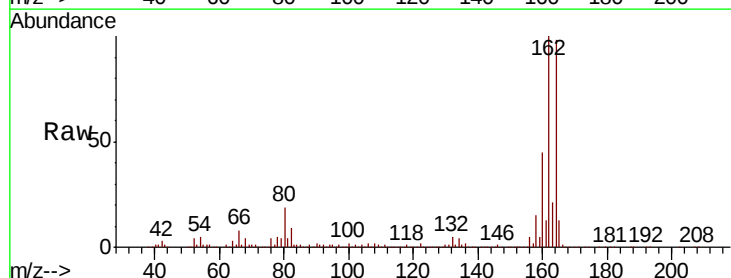
Tgt Ion: 164 Resp: 395866

Ion Ratio Lower Upper

164 100

162 101.9 82.2 123.4

160 46.2 36.2 54.4

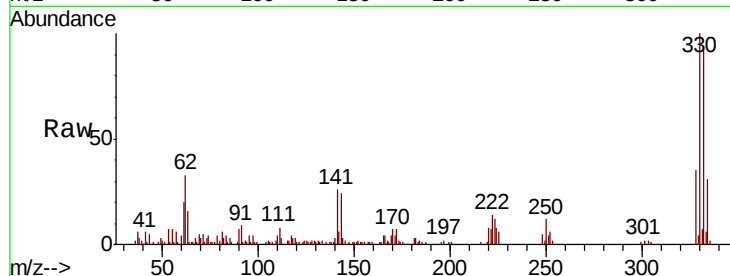




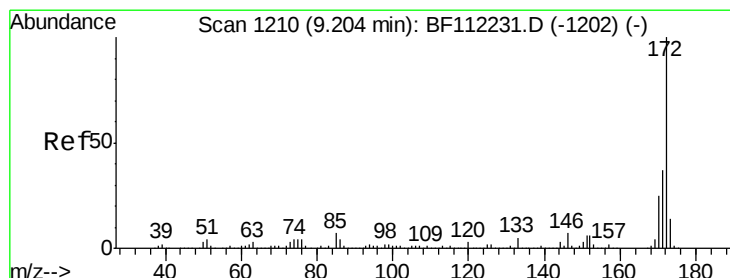
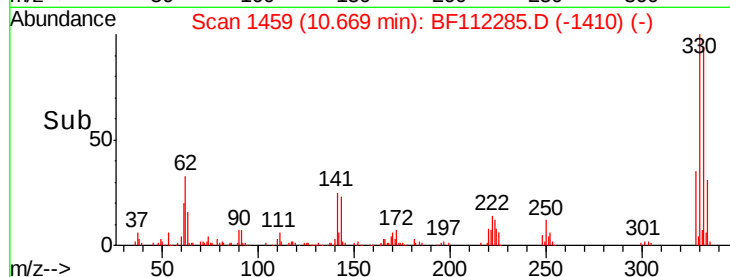
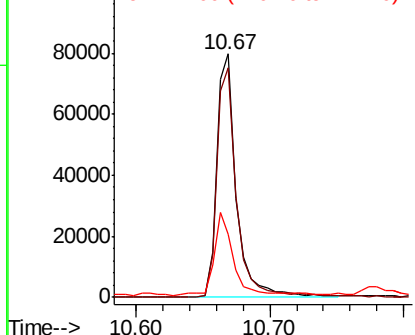
#42  
 2,4,6-Tribromophenol  
 Concen: 17.957 ng  
 RT: 10.67 min Scan# 1459  
 Delta R.T. -0.01 min  
 Lab File: BF112285.D  
 Acq: 28 Jan 2019 20:06

Instrument :  
 BNA\_F  
 ClientSampleId :  
 OR-01-012519-B

Tgt Ion:330 Resp: 82740  
 Ion Ratio Lower Upper  
 330 100  
 332 96.7 76.6 114.8  
 141 33.7 24.3 36.5

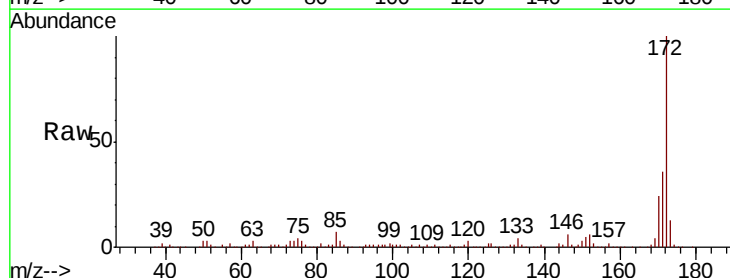


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

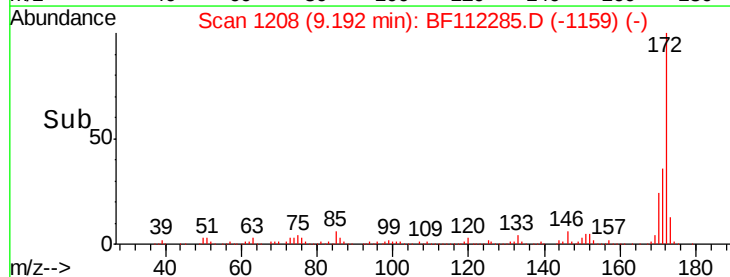
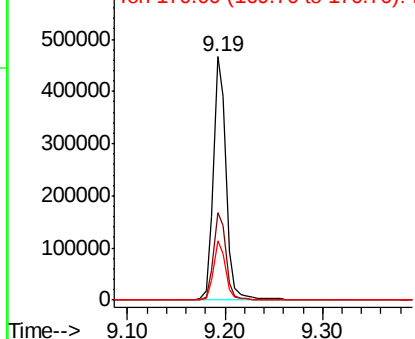


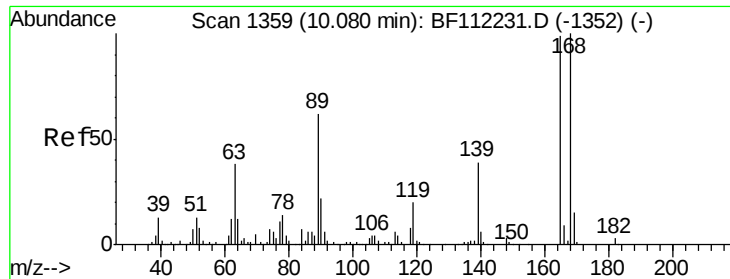
#45  
 2-Fluorobiphenyl  
 Concen: 15.179 ng  
 RT: 9.19 min Scan# 1208  
 Delta R.T. -0.01 min  
 Lab File: BF112285.D  
 Acq: 28 Jan 2019 20:06

Tgt Ion:172 Resp: 424851  
 Ion Ratio Lower Upper  
 172 100  
 171 35.8 30.5 45.7  
 170 24.2 20.2 30.4



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

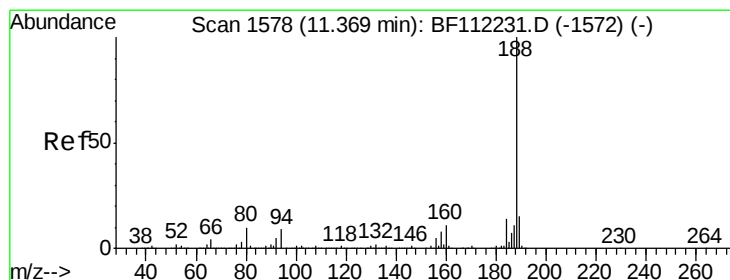
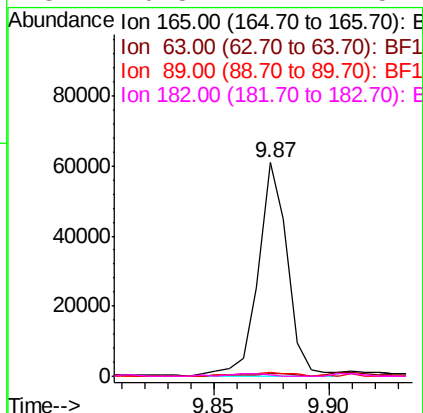
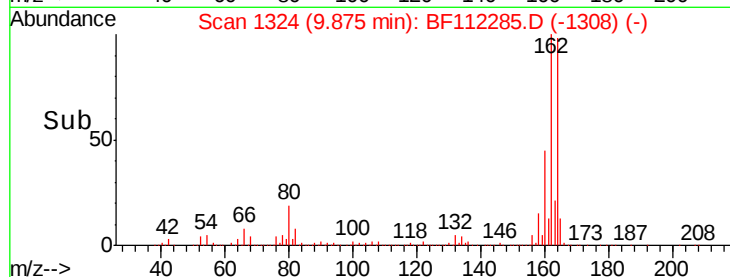
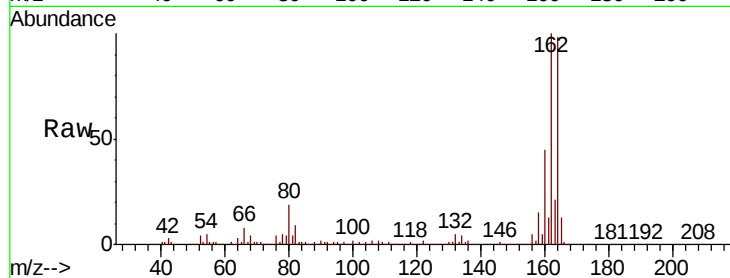




#57  
2,4-Dinitrotoluene  
Concen: 6.204 ng  
RT: 9.87 min Scan# 1324  
Delta R.T. -0.21 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

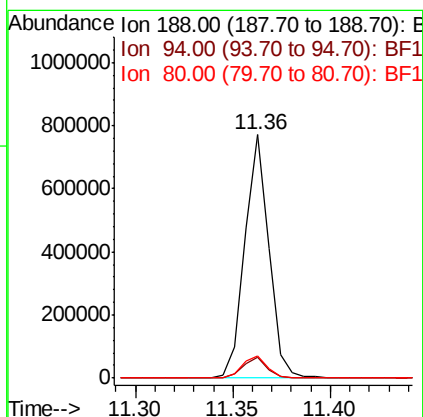
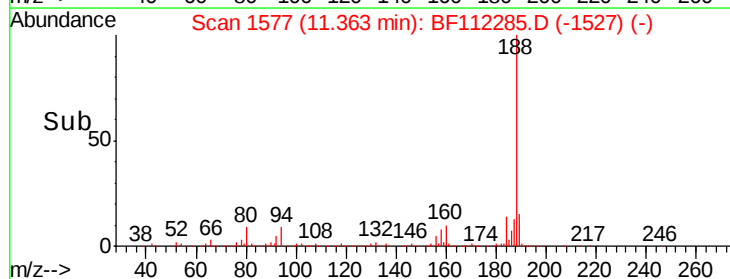
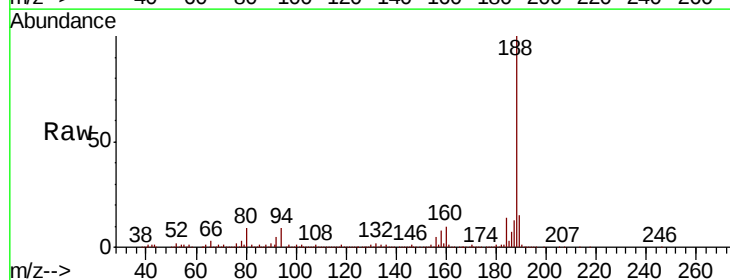
Instrument :  
BNA\_F  
ClientSampleId :  
OR-01-012519-B

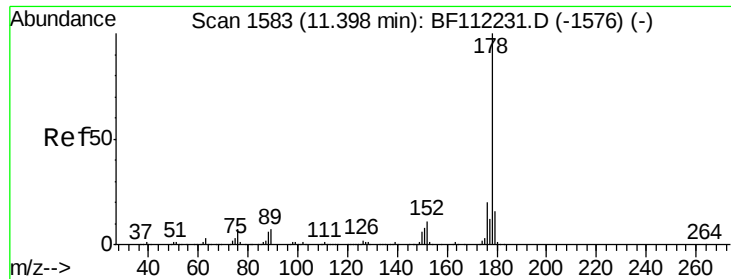
Tgt Ion:165 Resp: 54402  
Ion Ratio Lower Upper  
165 100  
63 1.2 27.9 41.9#  
89 1.8 47.9 71.9#  
182 0.8 2.2 3.4#



#64  
Phenanthrene-d10  
Concen: 20.000 ng  
RT: 11.36 min Scan# 1577  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

Tgt Ion:188 Resp: 660601  
Ion Ratio Lower Upper  
188 100  
94 8.7 8.2 12.2  
80 9.0 8.9 13.3

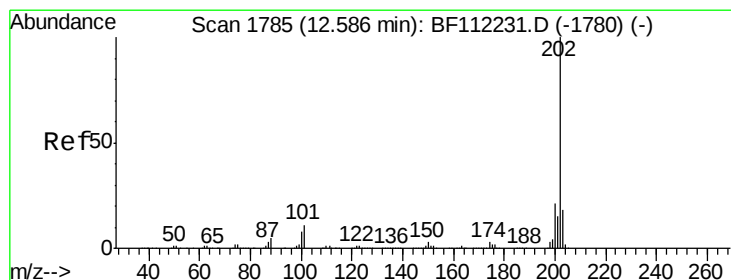
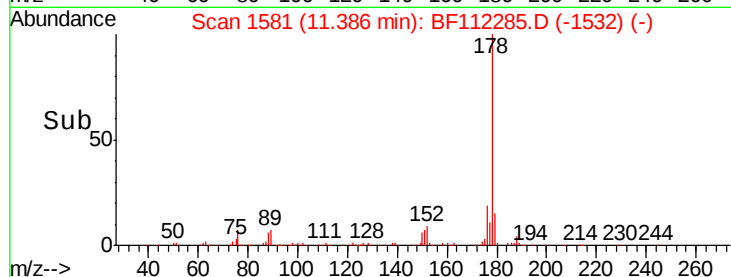
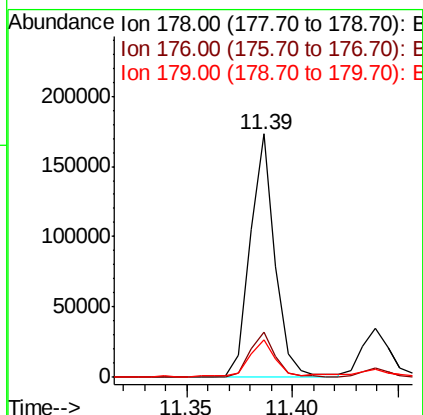
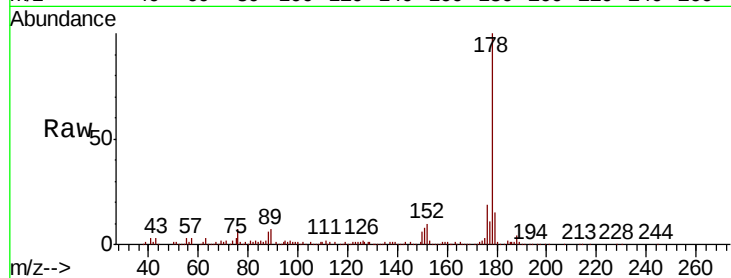




#71  
Phenanthrene  
Concen: 4.099 ng  
RT: 11.39 min Scan# 1581  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

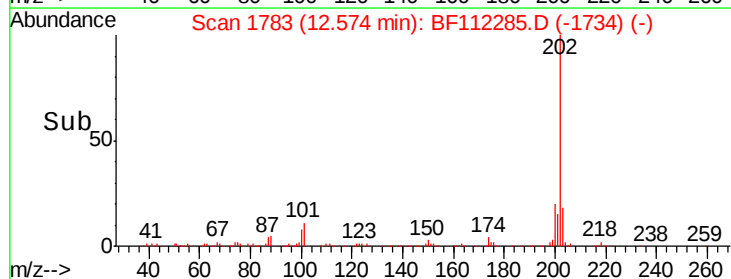
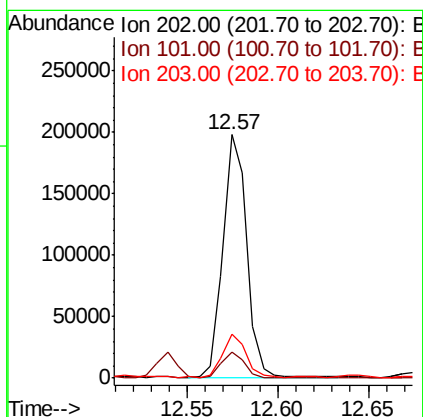
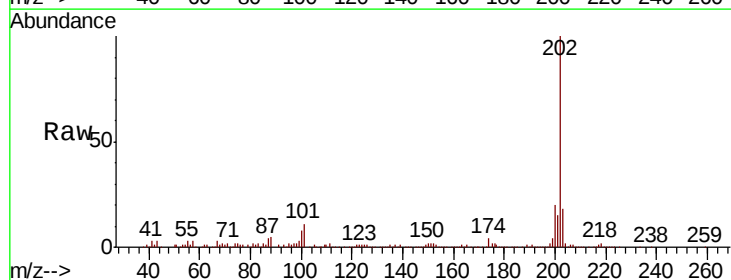
Instrument :  
BNA\_F  
ClientSampleId :  
OR-01-012519-B

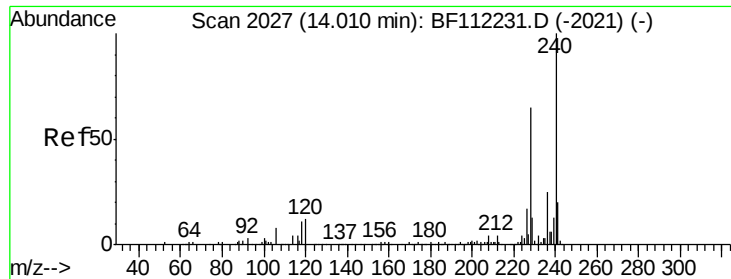
Tgt Ion:178 Resp: 140788  
Ion Ratio Lower Upper  
178 100  
176 18.7 16.3 24.5  
179 15.2 13.0 19.4



#75  
Fluoranthene  
Concen: 4.915 ng  
RT: 12.57 min Scan# 1783  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

Tgt Ion:202 Resp: 181049  
Ion Ratio Lower Upper  
202 100  
101 10.7 0.0 31.8  
203 17.9 0.0 38.4

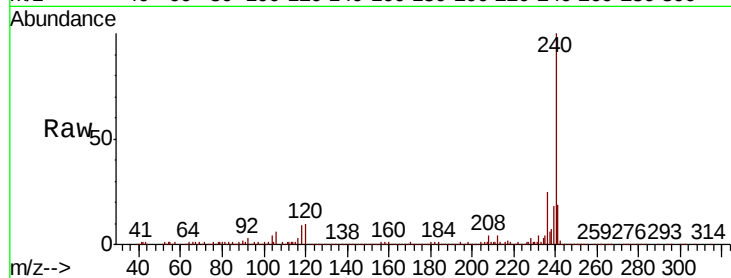




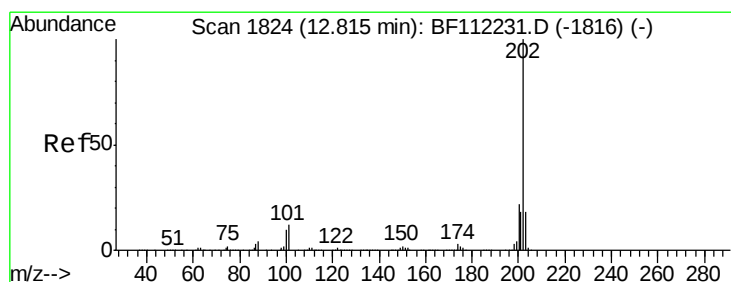
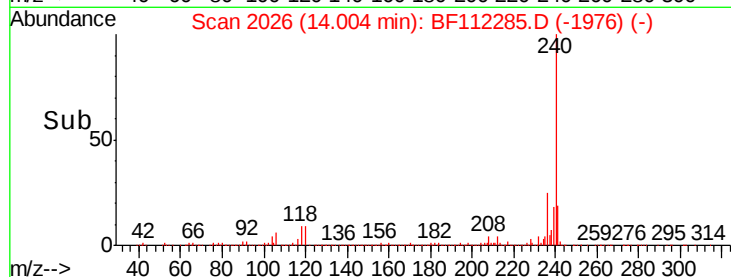
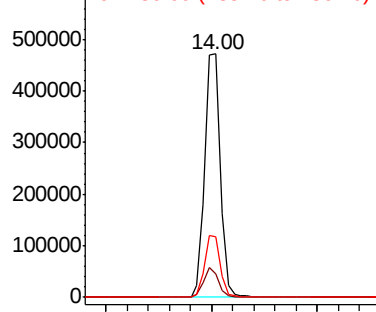
#76  
Chrysene-d12  
Concen: 20.000 ng  
RT: 14.00 min Scan# 2026  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

Instrument :  
BNA\_F  
ClientSampleId :  
OR-01-012519-B

Tgt Ion:240 Resp: 479420  
Ion Ratio Lower Upper  
240 100  
120 9.5 9.0 13.6  
236 24.8 20.7 31.1

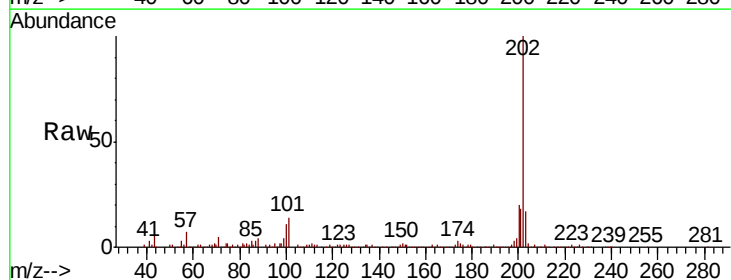


Abundance Ion 240.00 (239.70 to 240.70): E  
Ion 120.00 (119.70 to 120.70): E  
Ion 236.00 (235.70 to 236.70): E

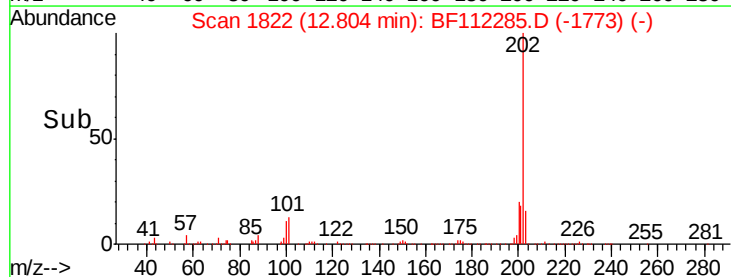
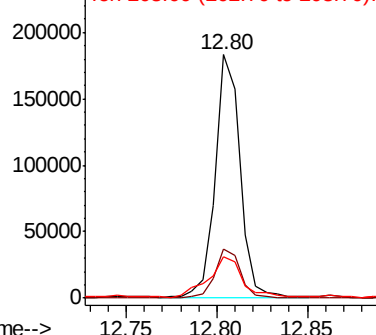


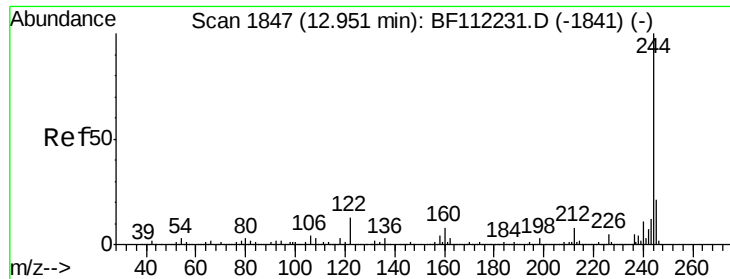
#78  
Pyrene  
Concen: 5.239 ng  
RT: 12.80 min Scan# 1822  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

Tgt Ion:202 Resp: 173884  
Ion Ratio Lower Upper  
202 100  
200 20.2 17.7 26.5  
203 17.1 14.6 22.0



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: 12.535 ng

RT: 12.94 min Scan# 1845

Delta R.T. -0.01 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

Instrument :

BNA\_F

ClientSampleId :

OR-01-012519-B

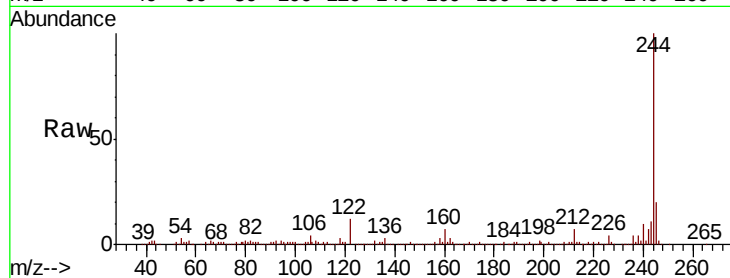
Tgt Ion:244 Resp: 319061

Ion Ratio Lower Upper

244 100

212 7.0 5.9 8.9

122 12.2 9.8 14.6



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

500000

400000

300000

200000

100000

0

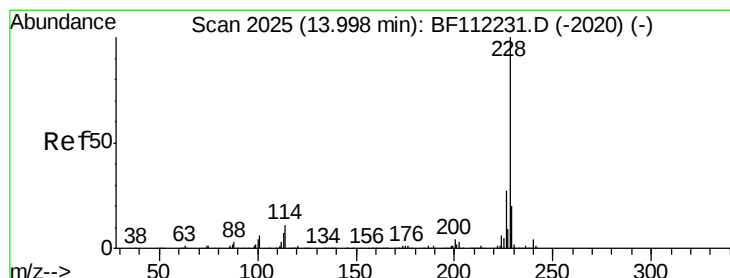
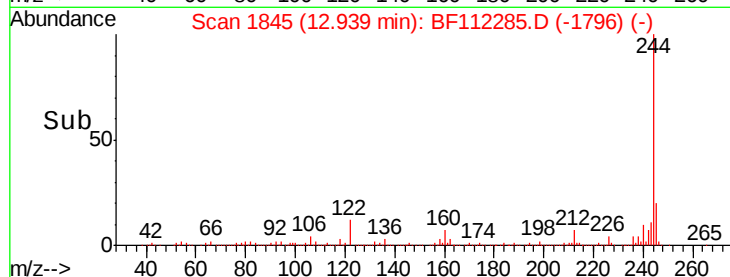
12.94

12.90

12.95

13.00

Time-->



#81

Benzo(a)anthracene

Concen: 2.663 ng

RT: 13.99 min Scan# 2024

Delta R.T. -0.01 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

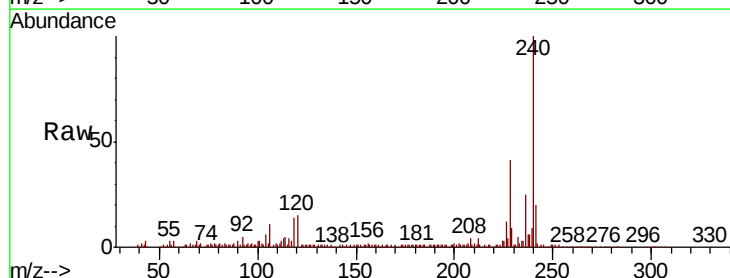
Tgt Ion:228 Resp: 75055

Ion Ratio Lower Upper

228 100

226 29.3 22.6 34.0

229 22.9 16.5 24.7



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

100000

80000

60000

40000

20000

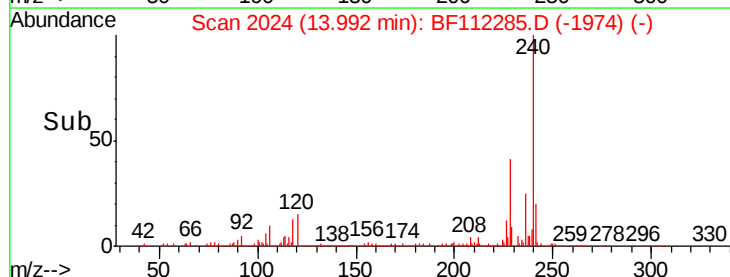
0

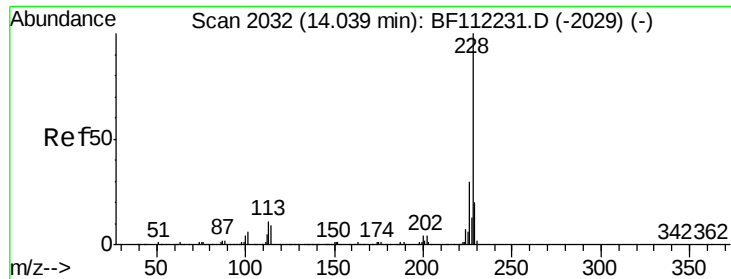
13.99

13.95

14.00

Time-->





#83

Chrysene

Concen: 2.660 ng

RT: 14.03 min Scan# 2030

Delta R.T. -0.01 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

Instrument :

BNA\_F

ClientSampleId :

OR-01-012519-B

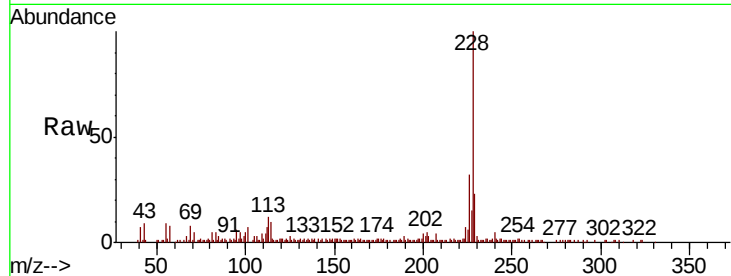
Tgt Ion:228 Resp: 71570

Ion Ratio Lower Upper

228 100

226 32.2 25.0 37.6

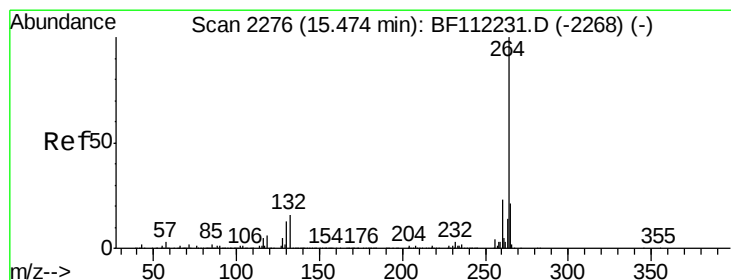
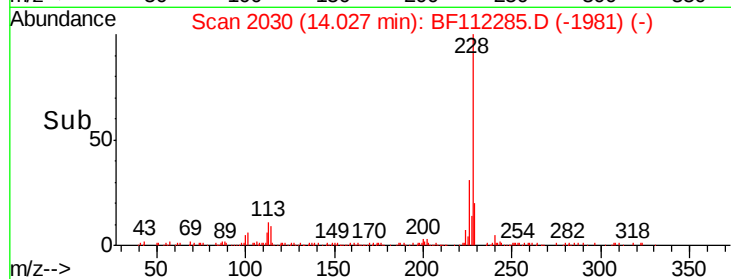
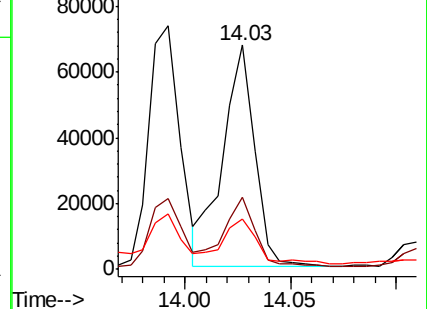
229 22.6 16.6 24.8



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: 15.47 min Scan# 2275

Delta R.T. -0.01 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

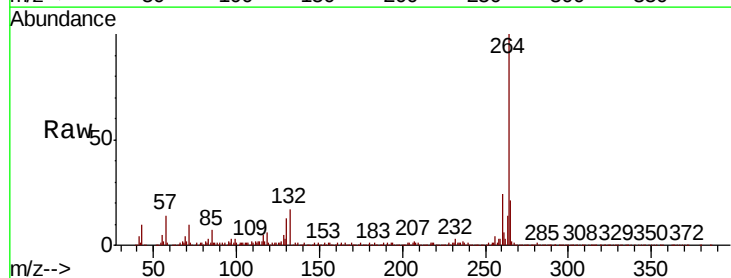
Tgt Ion:264 Resp: 459120

Ion Ratio Lower Upper

264 100

260 23.7 18.2 27.2

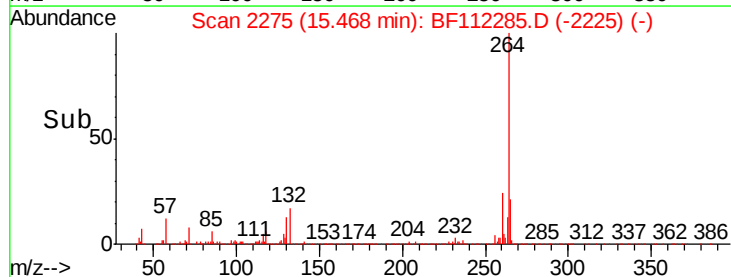
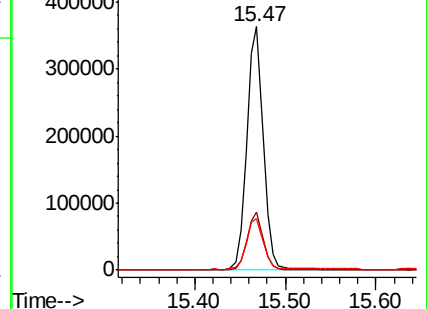
265 21.3 17.0 25.4

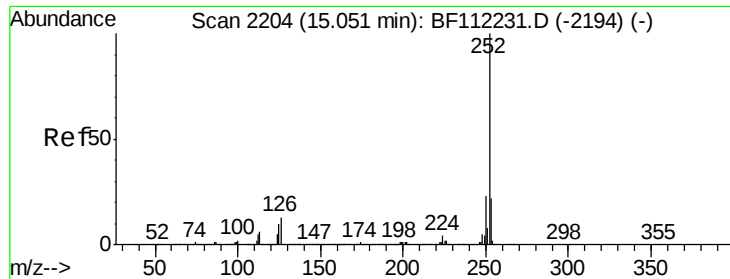


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

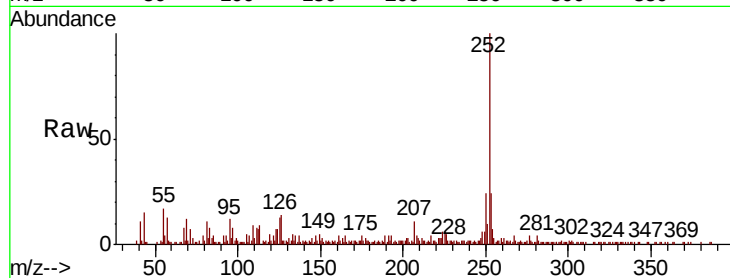




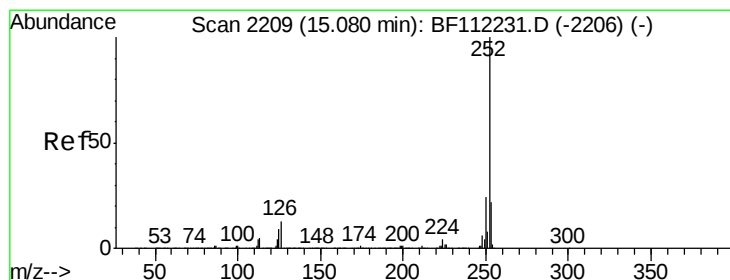
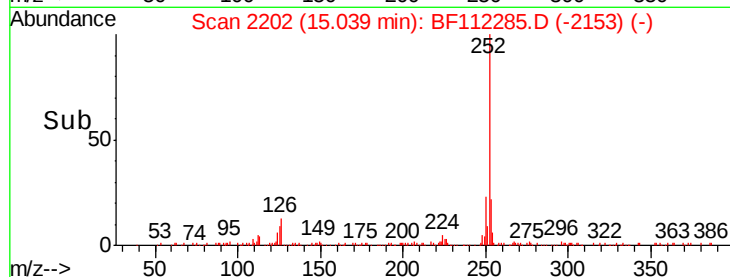
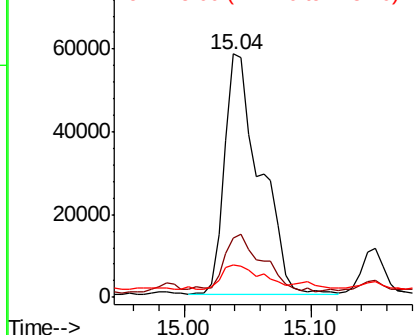
#88  
Benzo(b)fluoranthene  
Concen: 4.116 ng  
RT: 15.04 min Scan# 2202  
Delta R.T. -0.01 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

Instrument :  
BNA\_F  
ClientSampleId :  
OR-01-012519-B

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.2  | 18.0  | 27.0  |
| 125     | 13.4  | 8.7   | 13.1# |

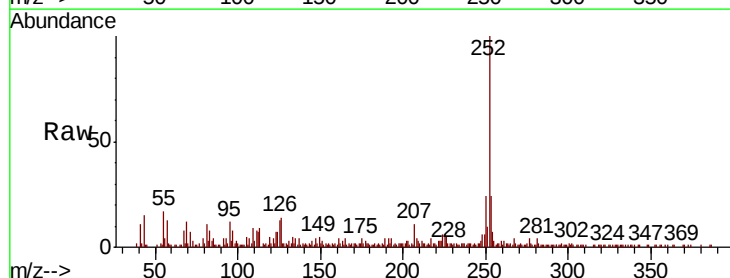


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E

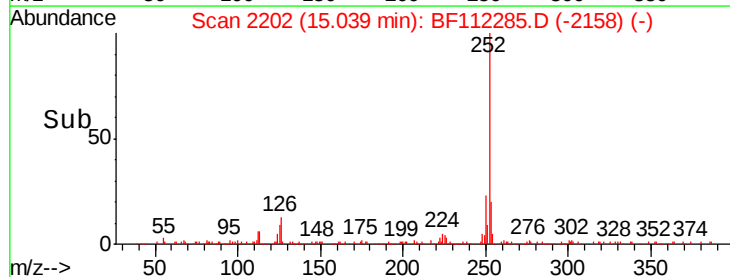
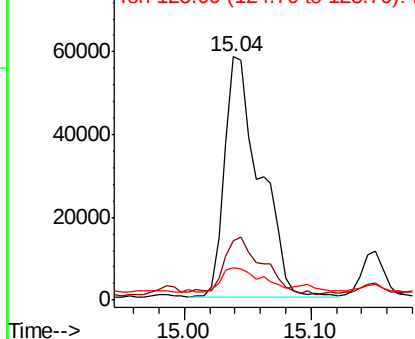


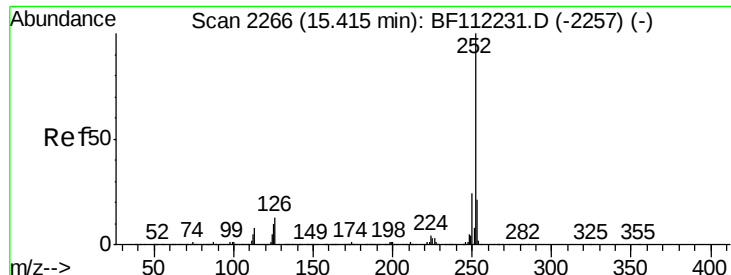
#89  
Benzo(k)fluoranthene  
Concen: 4.297 ng  
RT: 15.04 min Scan# 2202  
Delta R.T. -0.04 min  
Lab File: BF112285.D  
Acq: 28 Jan 2019 20:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 24.2  | 18.0  | 27.0  |
| 125     | 13.4  | 9.1   | 13.7  |



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





#90

Benzo(a)pyrene

Concen: 2.633 ng

RT: 15.40 min Scan# 2264

Delta R.T. -0.01 min

Lab File: BF112285.D

Acq: 28 Jan 2019 20:06

Instrument :

BNA\_F

ClientSampleId :

OR-01-012519-B

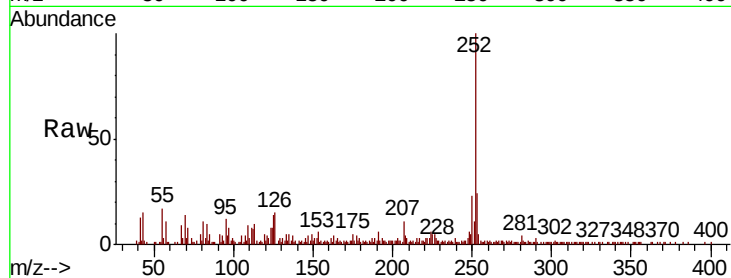
Tgt Ion: 252 Resp: 65056

Ion Ratio Lower Upper

252 100

253 24.3 17.5 26.3

125 13.7 9.0 13.4#



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

