

Data Path : Z:\HPCHEM1\BNA F\DATA\BF100917\  
 Data File : BF099278.D  
 Acq On : 9 Oct 2017 22:38  
 Operator : SJ/JU  
 Sample : I5715-04 50X  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Oct 10 01:14:38 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092317.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Oct 05 17:20:48 2017  
 Response via : Initial Calibration

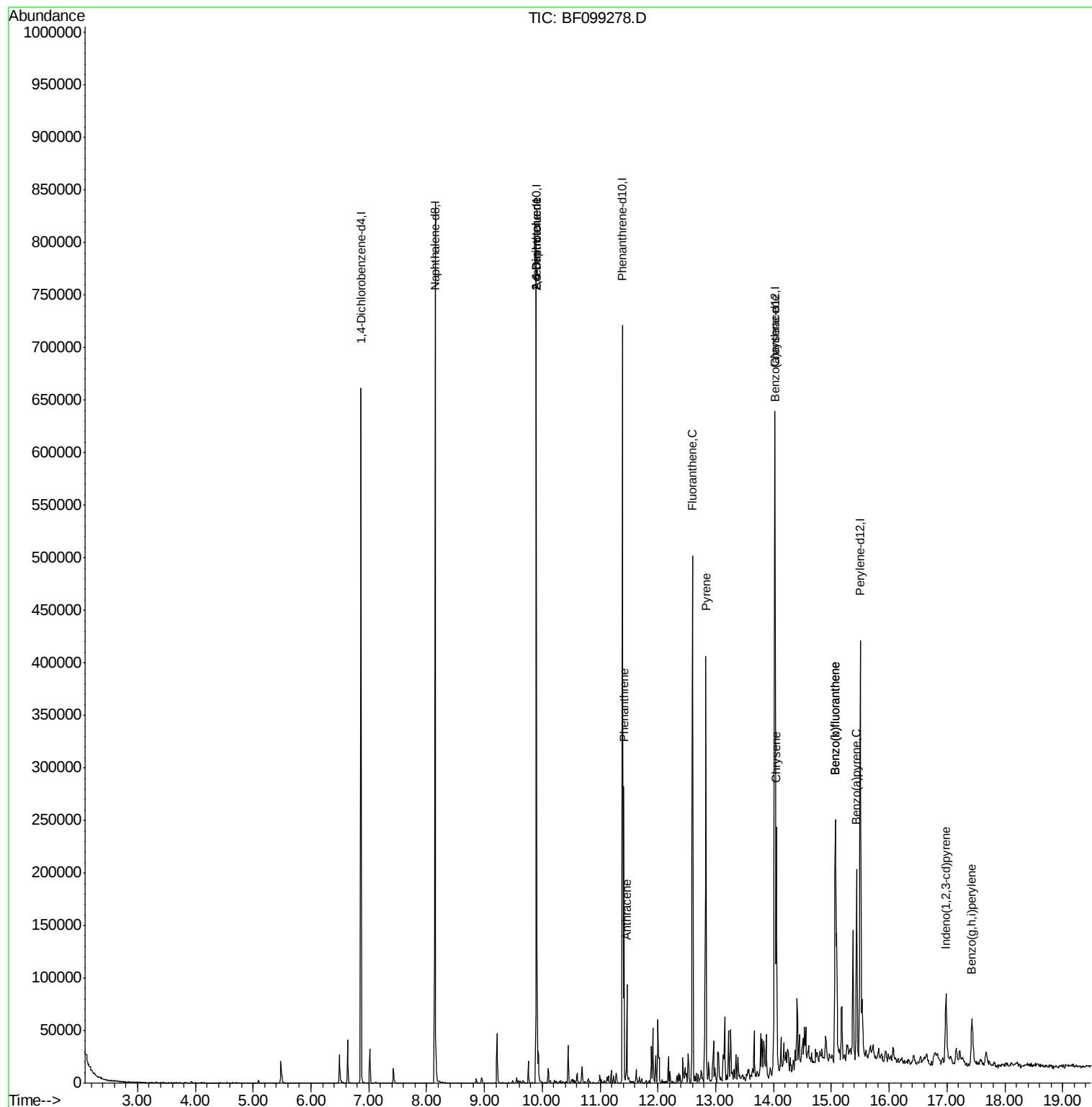
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.86  | 152  | 92511    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8          | 8.15  | 136  | 373304   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10        | 9.90  | 164  | 158392   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10        | 11.39 | 188  | 242433   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12            | 14.03 | 240  | 174099   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12            | 15.50 | 264  | 178466   | 20.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 5) 2-Fluorophenol           | 5.48  | 112  | 10191    | 1.75  | ng    | 0.00     |
| 7) Phenol-d6                | 6.49  | 99   | 13026    | 1.82  | ng    | 0.00     |
| 23) Nitrobenzene-d5         | 7.43  | 82   | 7020     | 1.21  | ng    | 0.00     |
| 41) 2,4,6-Tribromophenol    | 10.69 | 330  | 1438     | 1.11  | ng    | 0.00     |
| 44) 2-Fluorobiphenyl        | 9.22  | 172  | 17241    | 1.82  | ng    | -0.01    |
| 78) Terphenyl-d14           | 12.96 | 244  | 11810    | 1.54  | ng    | -0.01    |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 50) 2,6-Dinitrotoluene      | 9.90  | 165  | 20251    | 7.78  | ng    | # 25     |
| 56) 2,4-Dinitrotoluene      | 9.90  | 165  | 20251    | 6.00  | ng    | # 22     |
| 70) Phenanthrene            | 11.41 | 178  | 96220    | 7.41  | ng    | 97       |
| 71) Anthracene              | 11.46 | 178  | 39587    | 2.98  | ng    | 99       |
| 74) Fluoranthene            | 12.60 | 202  | 188832   | 14.37 | ng    | 99       |
| 77) Pyrene                  | 12.83 | 202  | 160045   | 12.06 | ng    | 99       |
| 80) Benzo(a)anthracene      | 14.02 | 228  | 102322   | 9.71  | ng    | 98       |
| 82) Chrysene                | 14.05 | 228  | 79767    | 7.95  | ng    | 96       |
| 85) Indeno(1,2,3-cd)pyrene  | 16.99 | 276  | 40421    | 5.03  | ng    | 98       |
| 87) Benzo(b)fluoranthene    | 15.07 | 252  | 159600   | 14.55 | ng    | # 95     |
| 88) Benzo(k)fluoranthene    | 15.07 | 252  | 159600   | 14.73 | ng    | 98       |
| 89) Benzo(a)pyrene          | 15.44 | 252  | 80372    | 7.98  | ng    | 97       |
| 91) Benzo(a,h,i)perylene    | 17.43 | 276  | 34614    | 4.34  | ng    | # 92     |

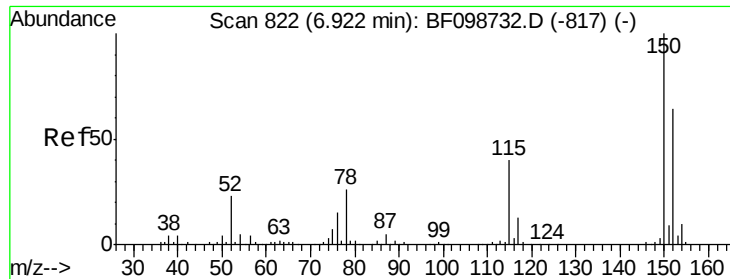
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\DATA\BF100917\  
Data File : BF099278.D  
Acq On : 9 Oct 2017 22:38  
Operator : SJ/JU  
Sample : I5715-04 50X  
Misc :  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampleId :

Quant Time: Oct 10 01:14:38 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF092317.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Oct 05 17:20:48 2017  
Response via : Initial Calibration



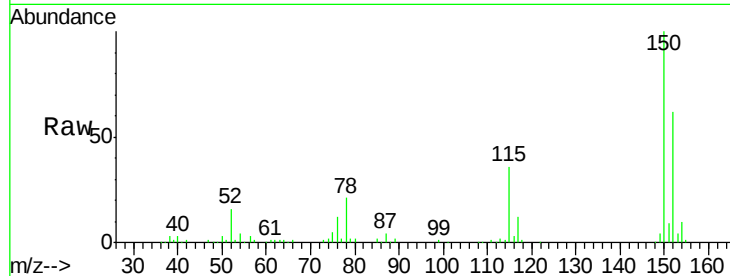


#1

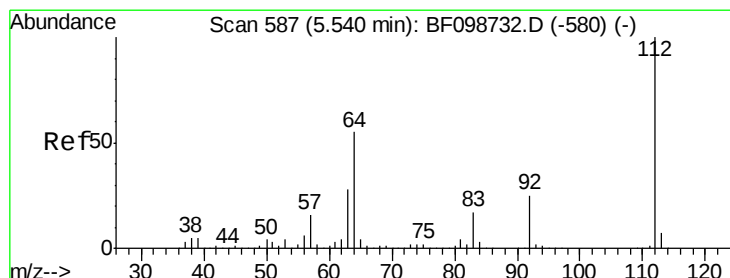
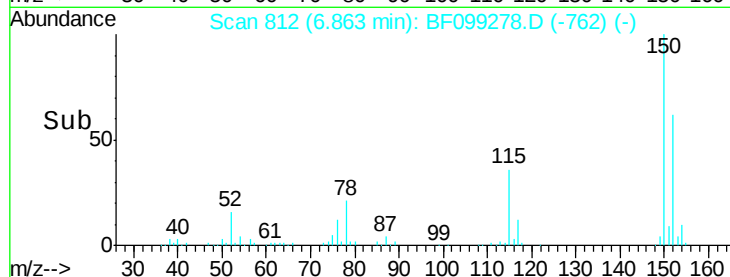
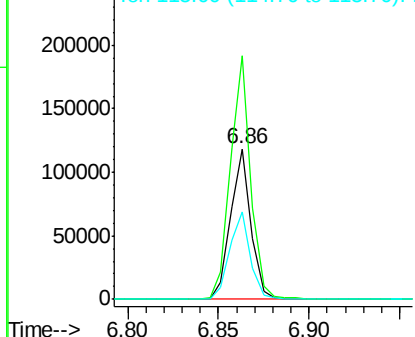
1,4-Dichlorobenzene-d4  
Concen: 20.00 ng  
RT: 6.86 min Scan# 812  
Delta R.T. -0.01 min  
Lab File: BF099278.D  
Acq: 9 Oct 2017 22:38

Instrument :  
BNA\_F  
ClientSampled :

Tot Ion:152 Resp: 92511  
Ion Ratio Lower Upper  
152 100  
150 161.5 124.6 186.8  
115 57.9 50.1 75.1



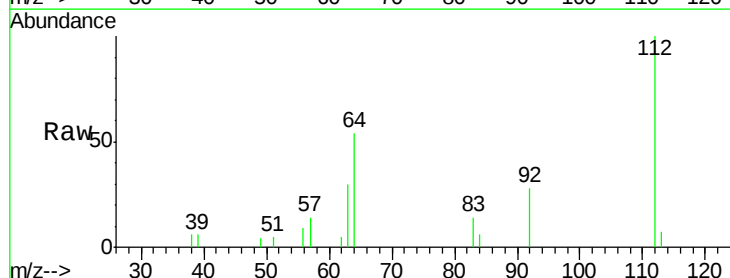
Abundance Ion 152.00 (151.70 to 152.70): E  
Ion 150.00 (149.70 to 150.70): E  
Ion 115.00 (114.70 to 115.70): E



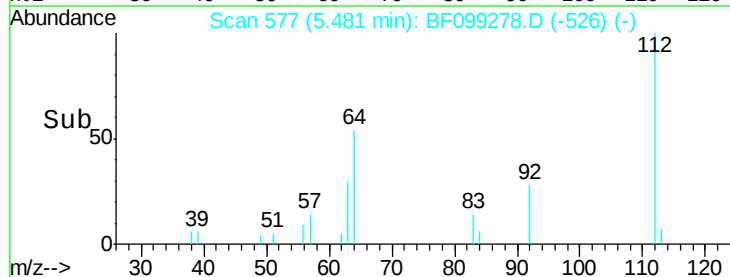
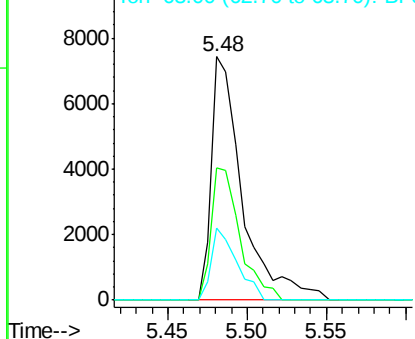
#5

2-Fluorophenol  
Concen: 1.75 ng  
RT: 5.48 min Scan# 577  
Delta R.T. 0.00 min  
Lab File: BF099278.D  
Acq: 9 Oct 2017 22:38

Tgt Ion:112 Resp: 10191  
Ion Ratio Lower Upper  
112 100  
64 54.2 47.9 71.9  
63 29.7 23.7 35.5



Abundance Ion 112.00 (111.70 to 112.70): E  
Ion 64.00 (63.70 to 64.70): BF0  
Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 1.82 ng

RT: 6.49 min Scan# 749

Delta R.T. -0.01 min

Lab File: BF099278.D

Acq: 9 Oct 2017 22:38

Instrument :

BNA\_F

ClientSampled :

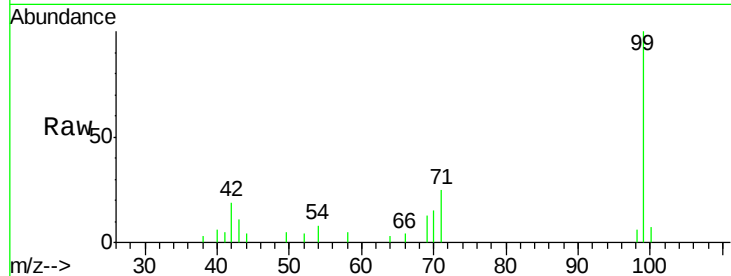
Tot Ion: 99 Resp: 13026

Ion Ratio Lower Upper

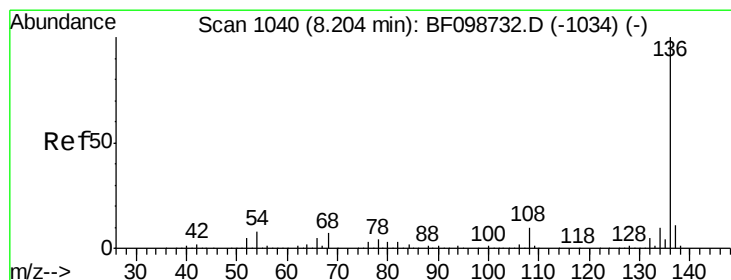
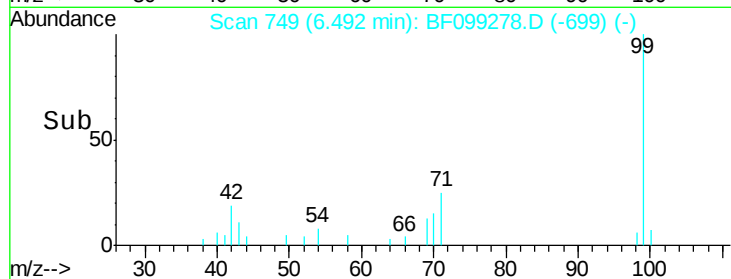
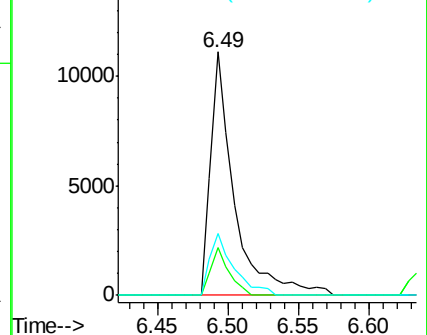
99 100

42 19.4 14.5 21.7

71 25.3 25.4 38.0#



Abundance Ion 99.00 (98.70 to 99.70): BF0  
Ion 42.00 (41.70 to 42.70): BF0  
Ion 71.00 (70.70 to 71.70): BF0



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.15 min Scan# 1030

Delta R.T. -0.01 min

Lab File: BF099278.D

Acq: 9 Oct 2017 22:38

Tgt Ion: 136 Resp: 373304

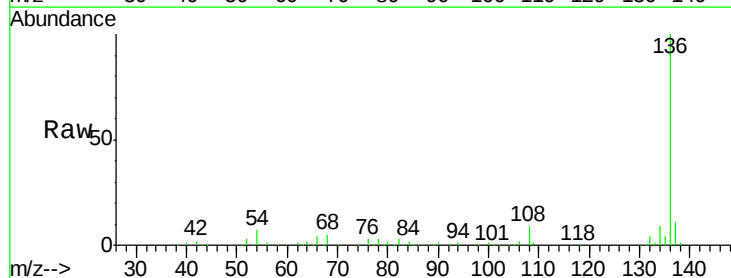
Ion Ratio Lower Upper

136 100

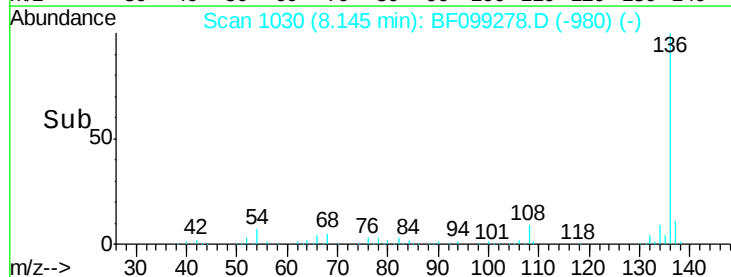
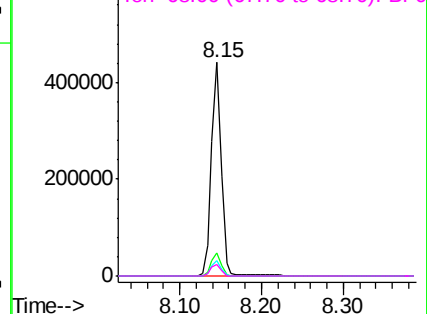
137 10.8 8.9 13.3

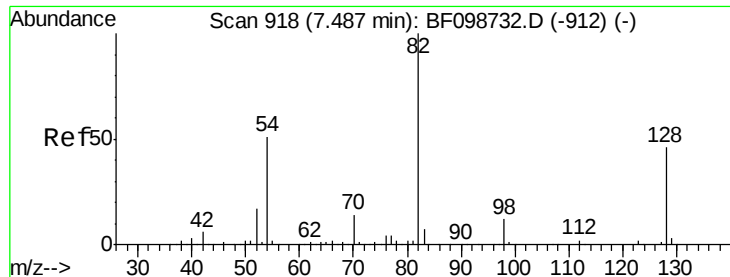
54 6.9 6.6 9.8

68 5.4 5.0 7.4



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): BF0  
Ion 68.00 (67.70 to 68.70): BF0

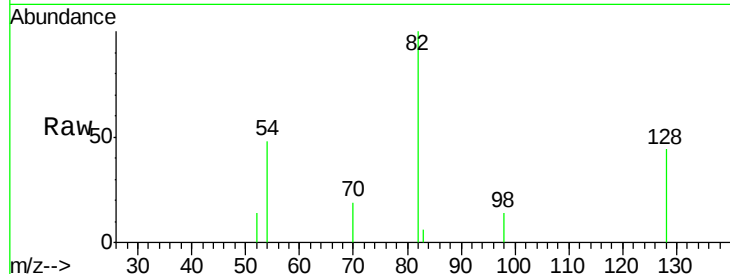




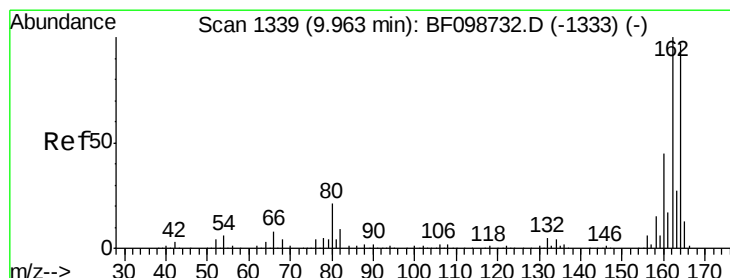
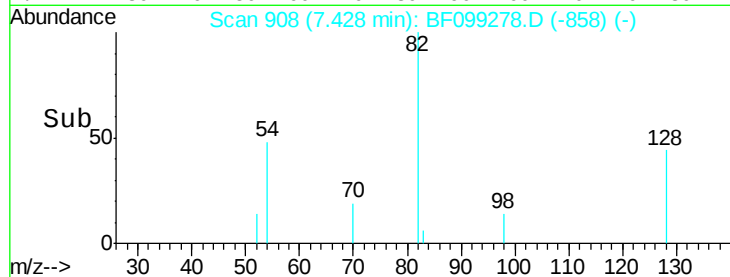
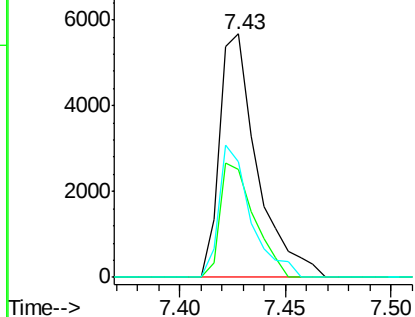
#23  
 Nitrobenzene-d5  
 Concen: 1.21 ng  
 RT: 7.43 min Scan# 908  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion: 82 Resp: 7020  
 Ion Ratio Lower Upper  
 82 100  
 128 44.5 36.1 54.1  
 54 47.6 41.4 62.2

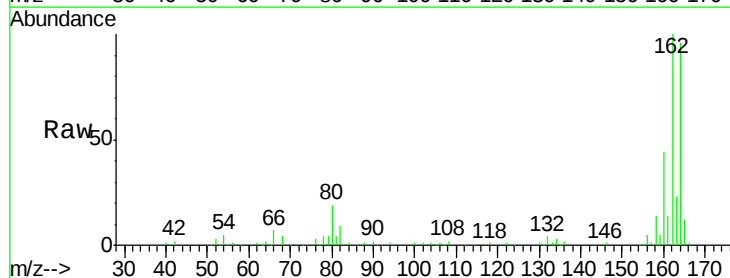


Abundance Ion 82.00 (81.70 to 82.70): BF0  
 Ion 128.00 (127.70 to 128.70): E  
 Ion 54.00 (53.70 to 54.70): BF0

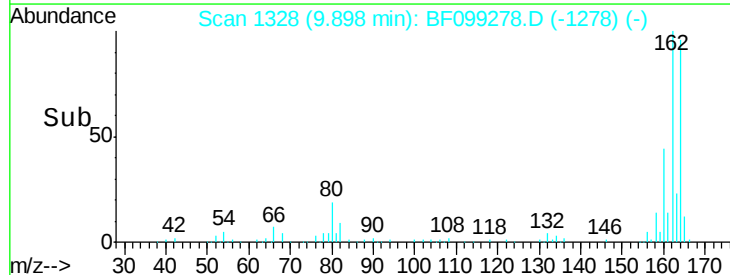
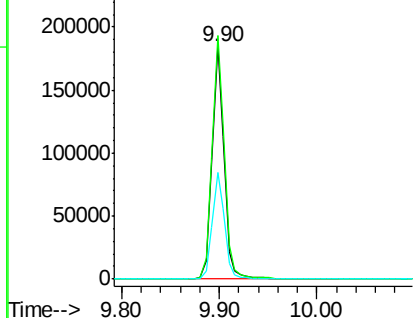


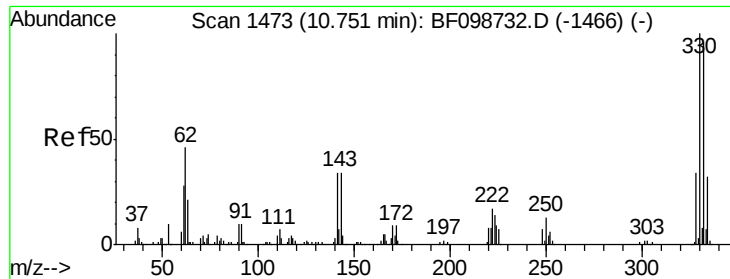
#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 9.90 min Scan# 1328  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

Tgt Ion:164 Resp: 158392  
 Ion Ratio Lower Upper  
 164 100  
 162 104.4 86.1 129.1  
 160 45.8 38.3 57.5



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

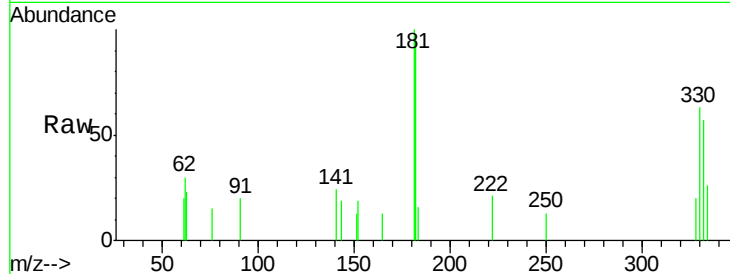




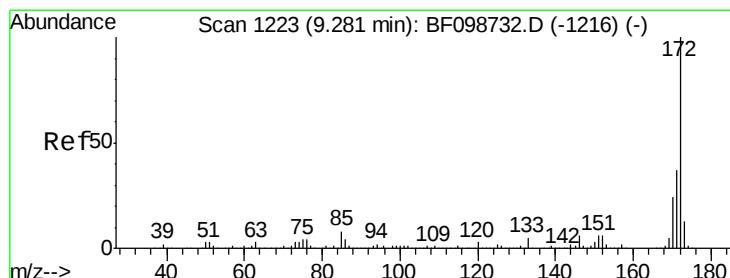
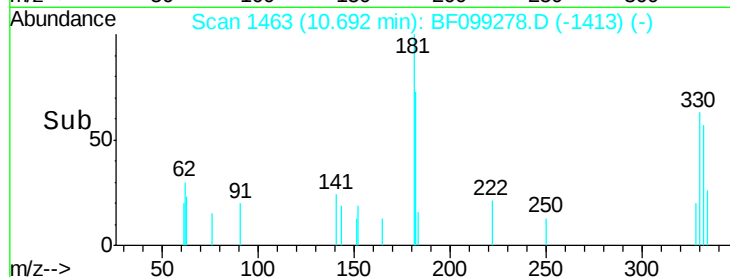
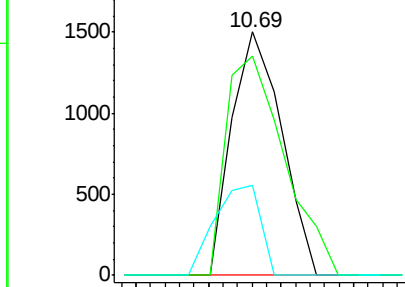
#41  
 2,4,6-Tribromophenol  
 Concen: 1.11 ng  
 RT: 10.69 min Scan# 1463  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:330 Resp: 1438  
 Ion Ratio Lower Upper  
 330 100  
 332 106.1 77.0 115.6  
 141 34.1 29.9 44.9

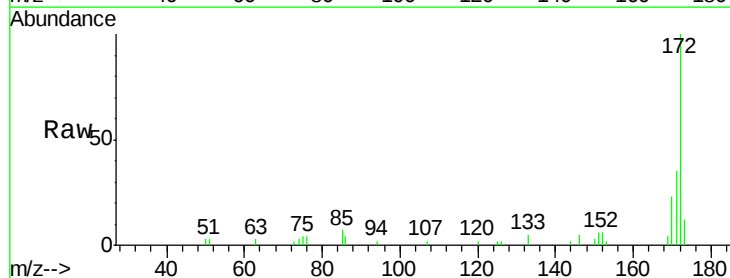


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

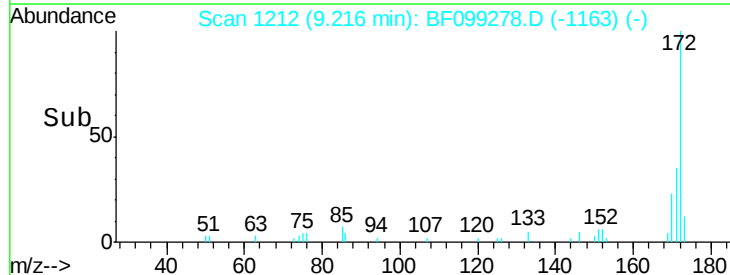
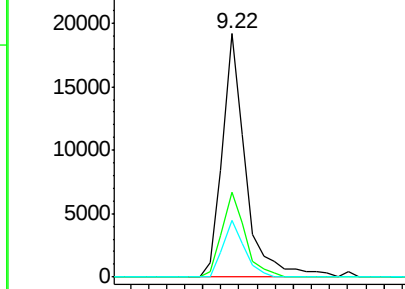


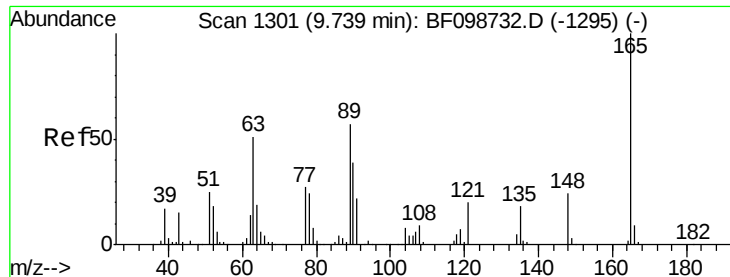
#44  
 2-Fluorobiphenyl  
 Concen: 1.82 ng  
 RT: 9.22 min Scan# 1212  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

Tgt Ion:172 Resp: 17241  
 Ion Ratio Lower Upper  
 172 100  
 171 34.9 29.7 44.5  
 170 23.3 19.6 29.4



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

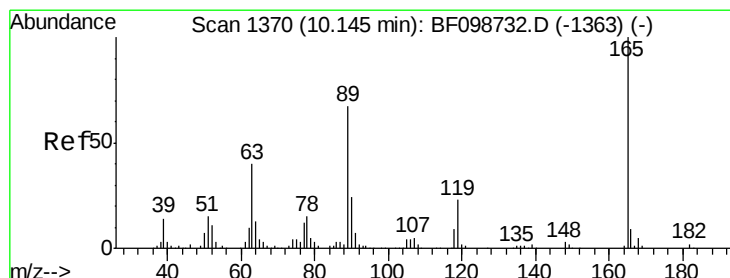
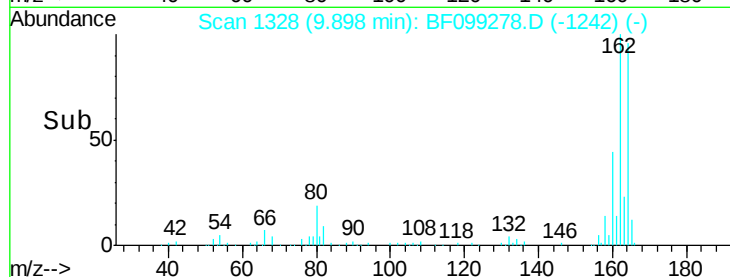
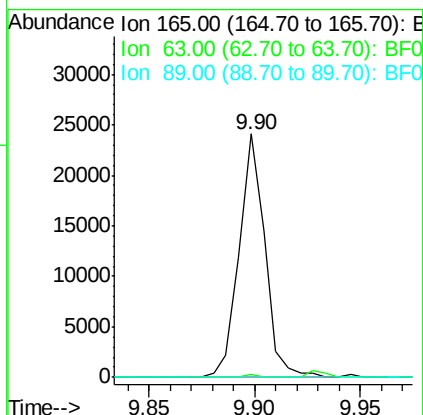
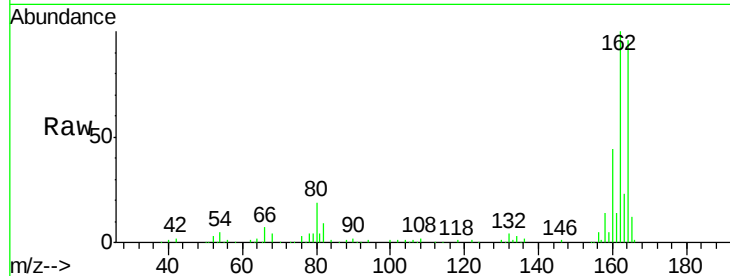




#50  
 2,6-Dinitrotoluene  
 Concen: 7.78 ng  
 RT: 9.90 min Scan# 1328  
 Delta R.T. 0.21 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

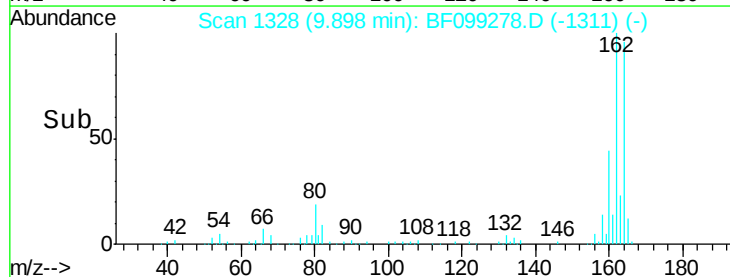
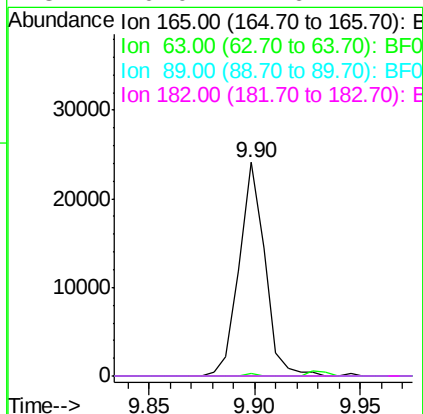
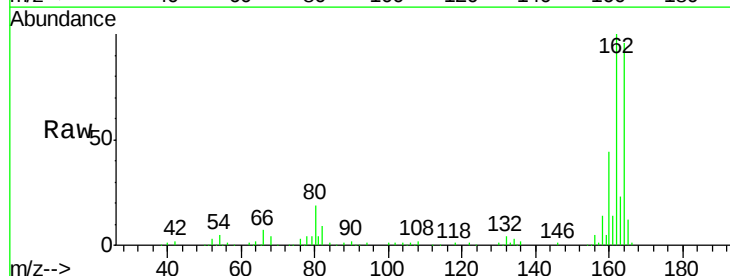
Instrument :  
 BNA\_F  
 ClientSampleId :

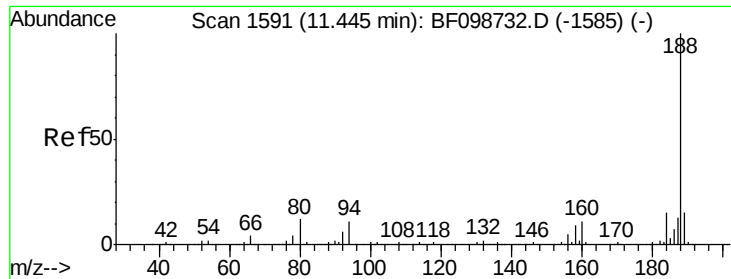
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.3   | 44.7  | 67.1# |
| 89      | 0.0   | 44.0  | 66.0# |



#56  
 2,4-Dinitrotoluene  
 Concen: 6.00 ng  
 RT: 9.90 min Scan# 1328  
 Delta R.T. -0.20 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 165     | 100   |       |       |
| 63      | 1.3   | 36.4  | 54.6# |
| 89      | 0.0   | 57.8  | 86.6# |
| 182     | 0.0   | 1.6   | 2.4#  |

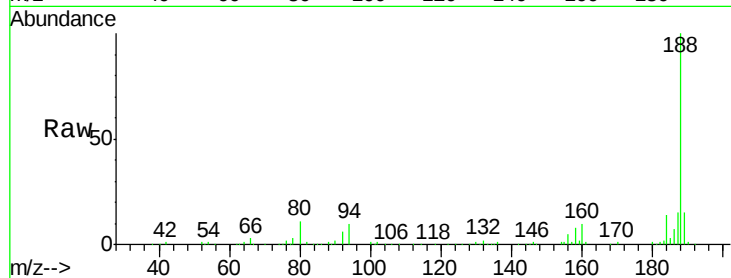




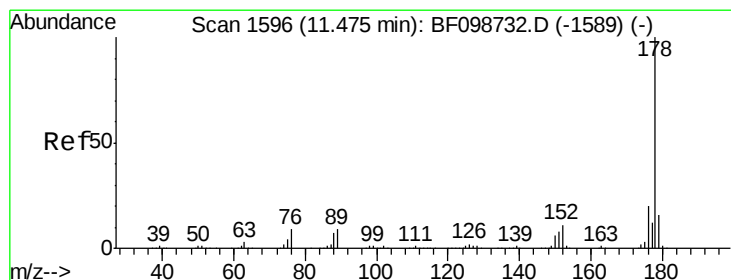
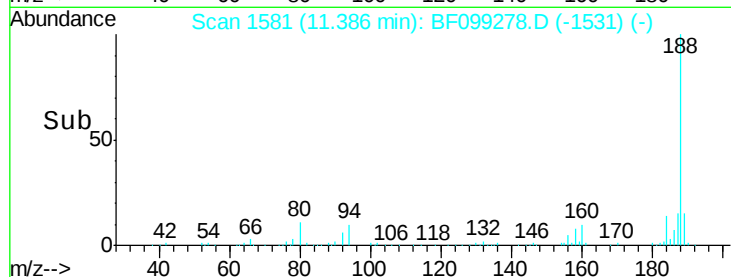
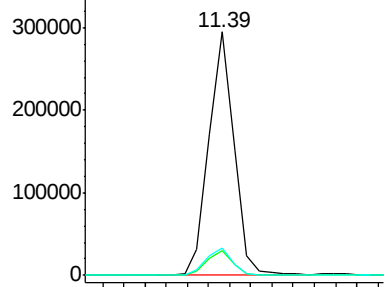
#63  
Phenanthrene-d10  
Concen: 20.00 ng  
RT: 11.39 min Scan# 1581  
Delta R.T. -0.01 min  
Lab File: BF099278.D  
Acq: 9 Oct 2017 22:38

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:188 Resp: 242433  
Ion Ratio Lower Upper  
188 100  
94 10.2 8.5 12.7  
80 11.1 9.2 13.8

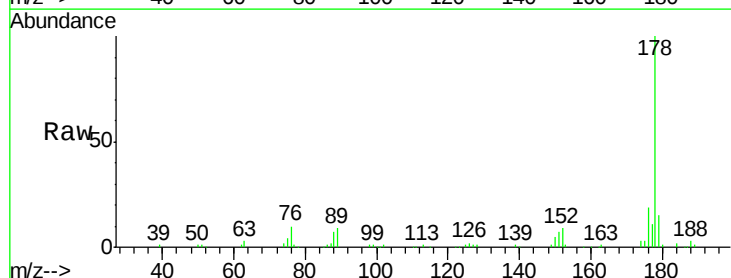


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BF0  
Ion 80.00 (79.70 to 80.70): BF0

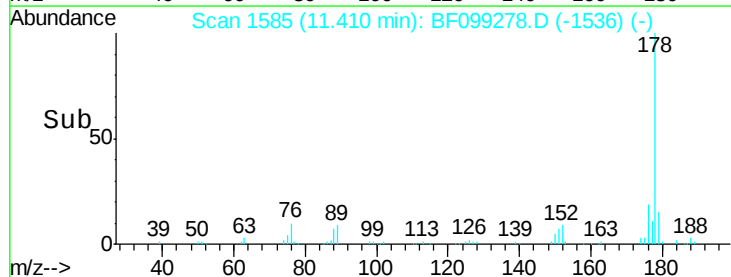
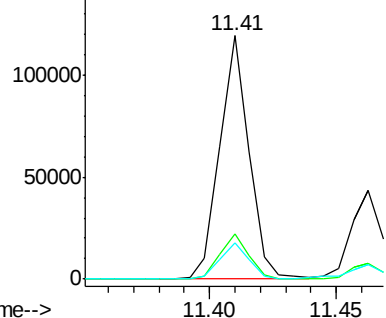


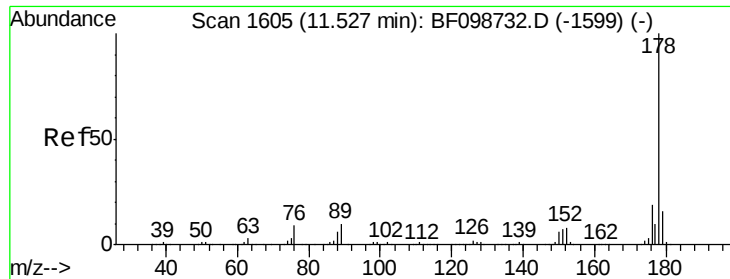
#70  
Phenanthrene  
Concen: 7.41 ng  
RT: 11.41 min Scan# 1585  
Delta R.T. -0.01 min  
Lab File: BF099278.D  
Acq: 9 Oct 2017 22:38

Tgt Ion:178 Resp: 96220  
Ion Ratio Lower Upper  
178 100  
176 18.7 15.8 23.8  
179 15.0 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

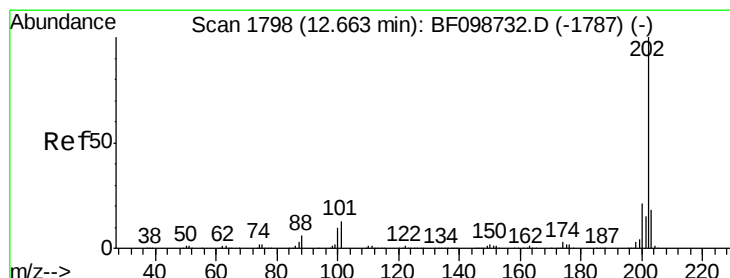
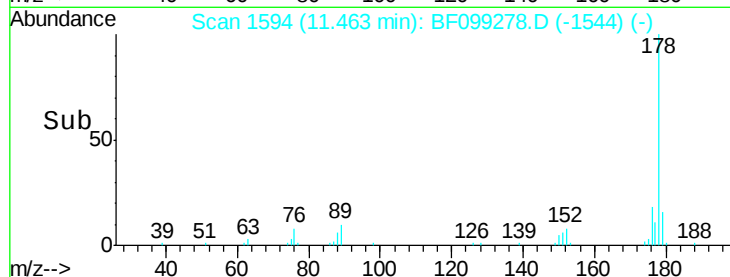
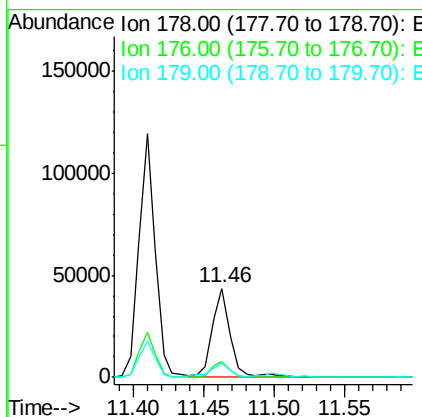
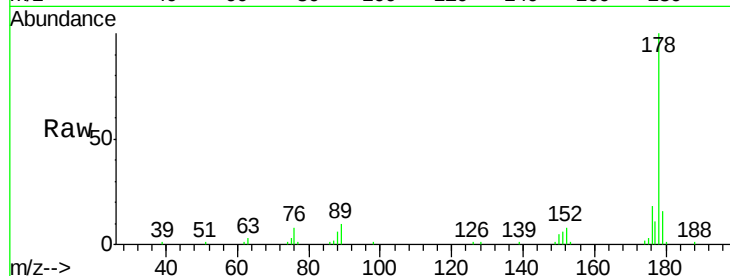




#71  
 Anthracene  
 Concen: 2.98 ng  
 RT: 11.46 min Scan# 1594  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

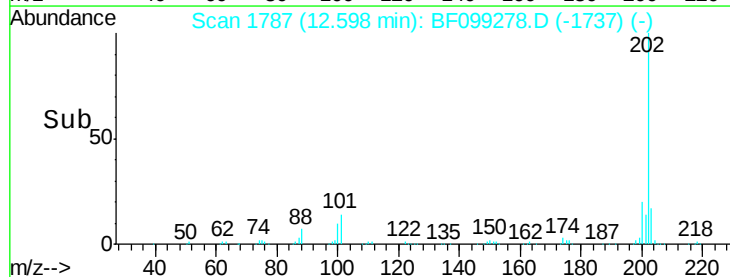
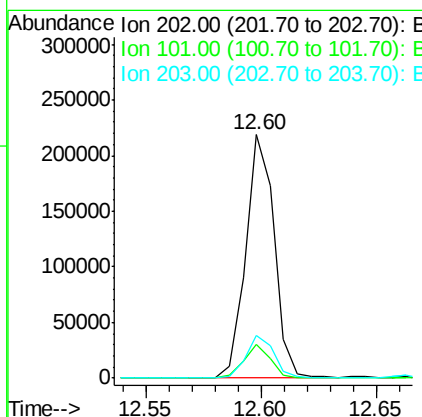
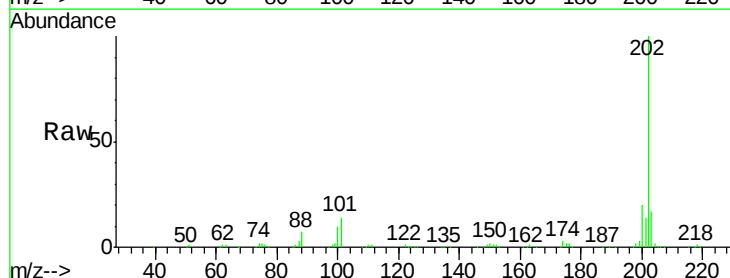
Instrument :  
 BNA\_F  
 ClientSampleId :

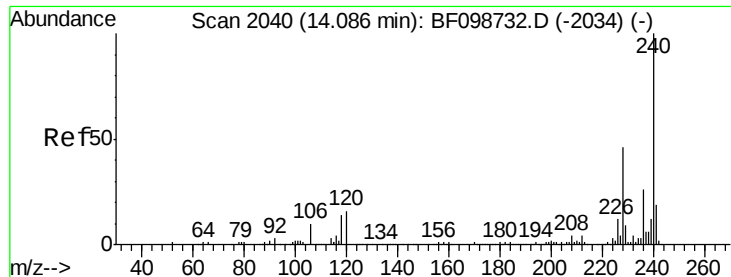
Tot Ion:178 Resp: 39587  
 Ion Ratio Lower Upper  
 178 100  
 176 18.2 15.4 23.2  
 179 15.9 12.6 19.0



#74  
 Fluoranthene  
 Concen: 14.37 ng  
 RT: 12.60 min Scan# 1787  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

Tgt Ion:202 Resp: 188832  
 Ion Ratio Lower Upper  
 202 100  
 101 13.6 0.0 34.1  
 203 17.4 0.0 38.1





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.03 min Scan# 2030

Delta R.T. -0.01 min

Lab File: BF099278.D

Acq: 9 Oct 2017 22:38

Instrument :

BNA\_F

ClientSampled :

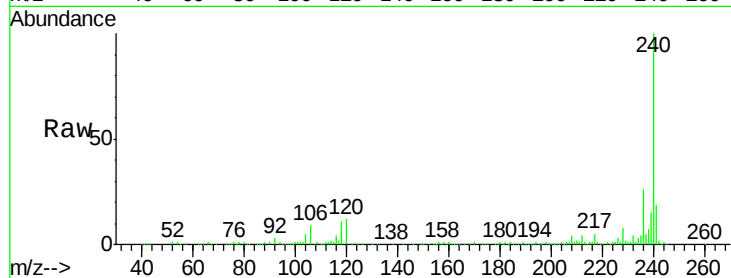
Tot Ion:240 Resp: 174099

Ion Ratio Lower Upper

240 100

120 12.4 9.5 14.3

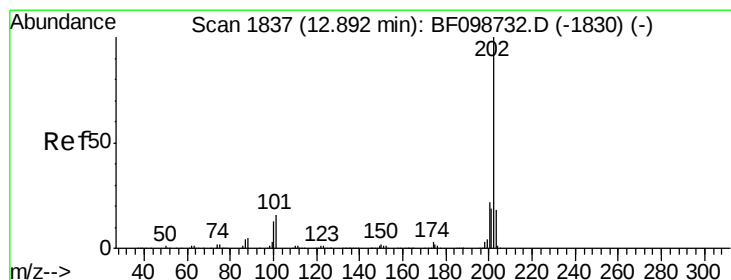
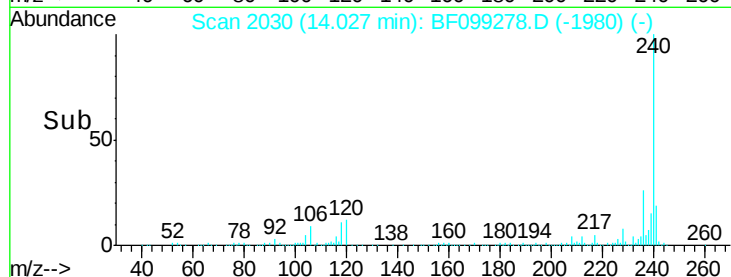
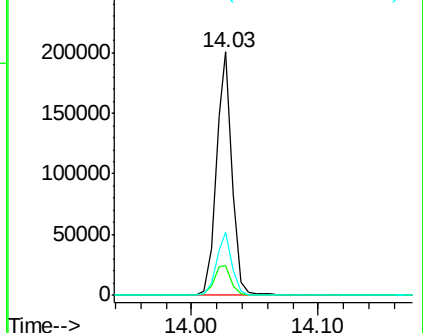
236 26.1 20.7 31.1



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



#77

Pyrene

Concen: 12.06 ng

RT: 12.83 min Scan# 1826

Delta R.T. -0.01 min

Lab File: BF099278.D

Acq: 9 Oct 2017 22:38

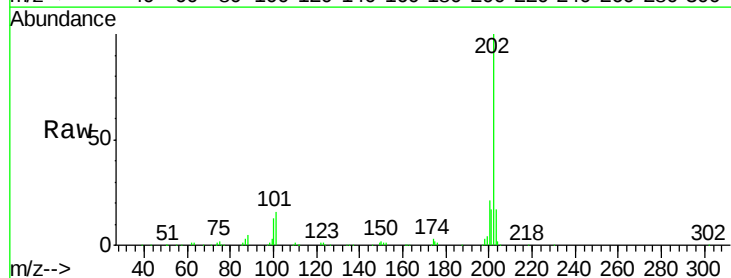
Tgt Ion:202 Resp: 160045

Ion Ratio Lower Upper

202 100

200 21.1 17.4 26.2

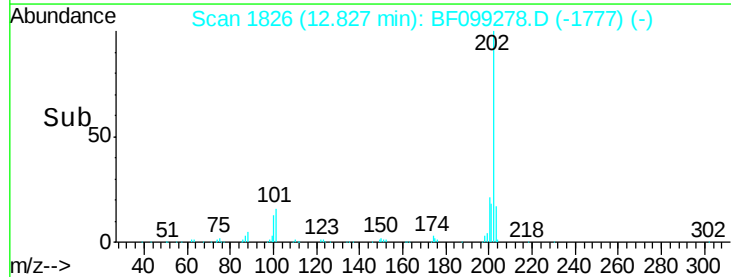
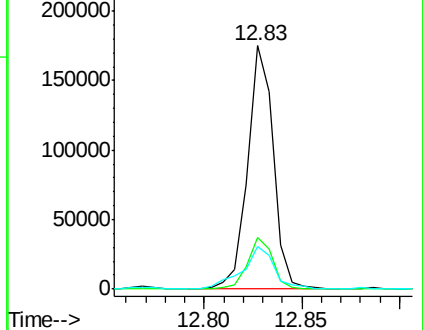
203 17.3 14.3 21.5

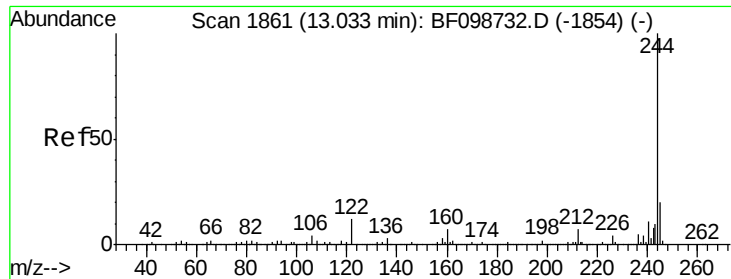


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E

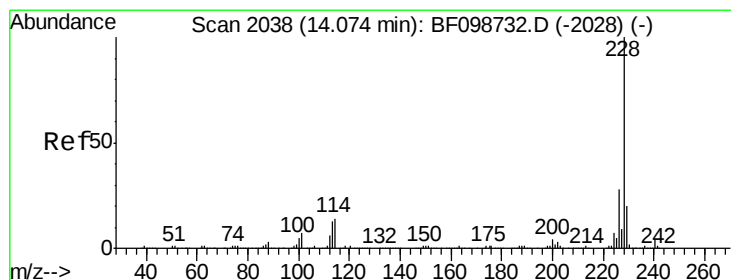
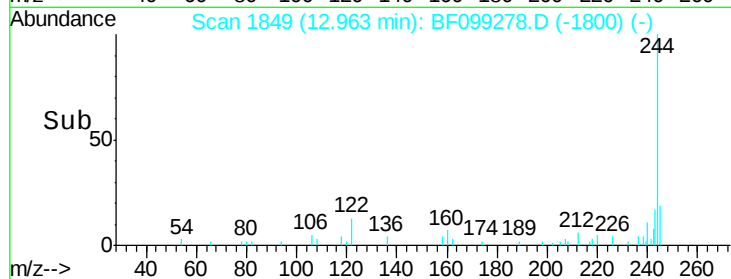
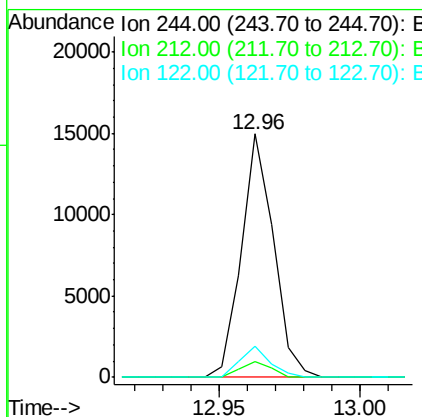
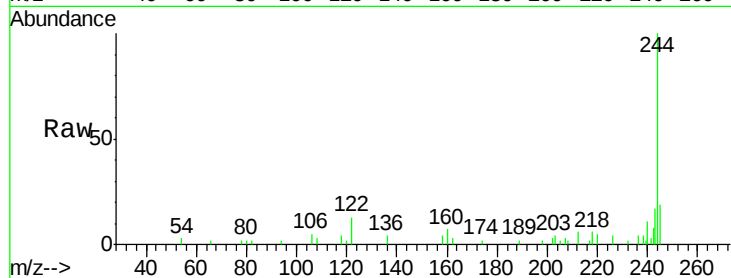




#78  
 Terphenyl-d14  
 Concen: 1.54 ng  
 RT: 12.96 min Scan# 1849  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

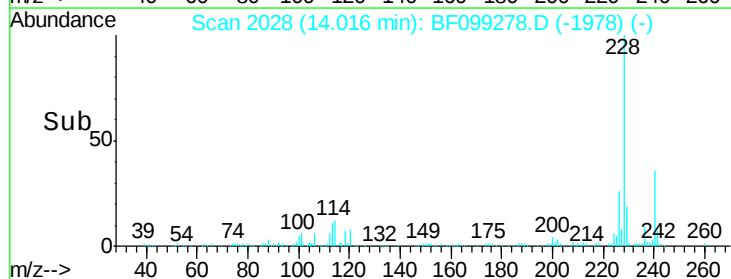
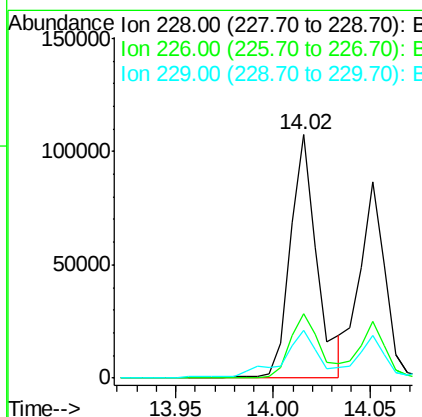
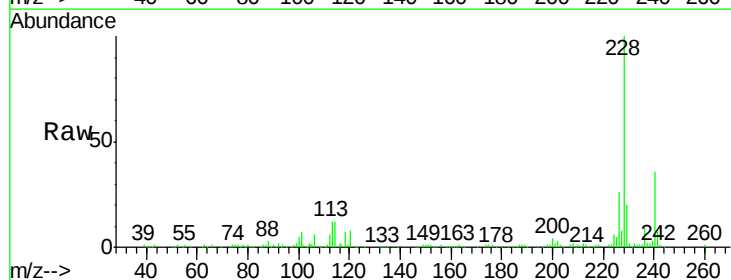
Instrument :  
 BNA\_F  
 ClientSampleId :

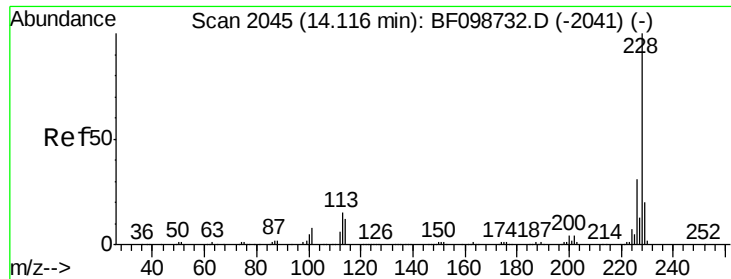
Tot Ion:244 Resp: 11810  
 Ion Ratio Lower Upper  
 244 100  
 212 6.5 5.4 8.0  
 122 12.9 11.0 16.4



#80  
 Benzo(a)anthracene  
 Concen: 9.71 ng  
 RT: 14.02 min Scan# 2028  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

Tgt Ion:228 Resp: 102322  
 Ion Ratio Lower Upper  
 228 100  
 226 26.3 22.6 33.8  
 229 19.7 15.8 23.6





#82

Chrysene

Concen: 7.95 ng

RT: 14.05 min Scan# 2034

Delta R.T. -0.01 min

Lab File: BF099278.D

Acq: 9 Oct 2017 22:38

Instrument :

BNA\_F

ClientSampleId :

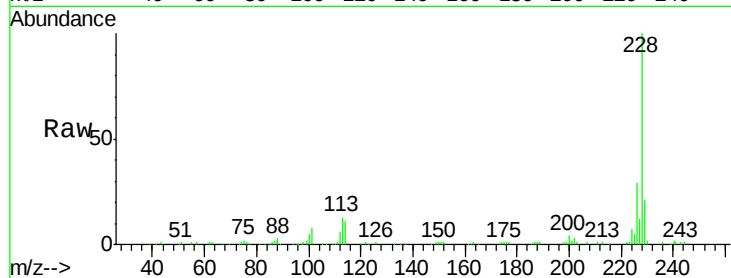
Tot Ion:228 Resp: 79767

Ion Ratio Lower Upper

228 100

226 28.9 25.0 37.6

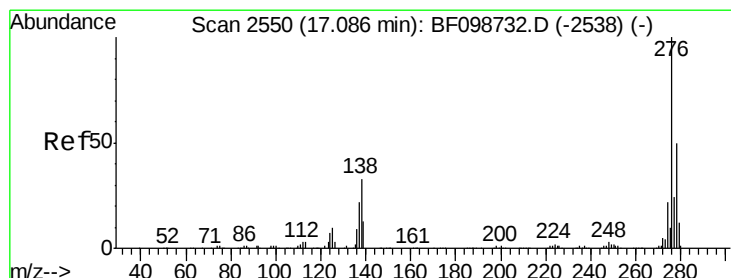
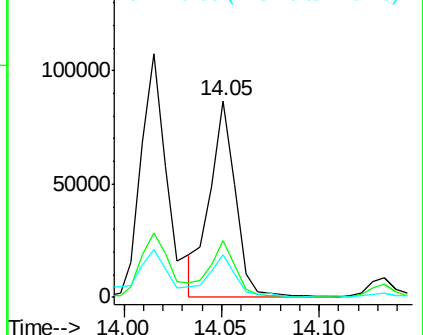
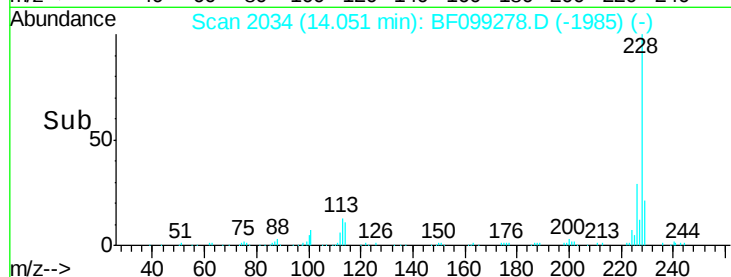
229 21.4 16.2 24.4



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



#85

Indeno(1,2,3-cd)pyrene

Concen: 5.03 ng

RT: 16.99 min Scan# 2533

Delta R.T. -0.01 min

Lab File: BF099278.D

Acq: 9 Oct 2017 22:38

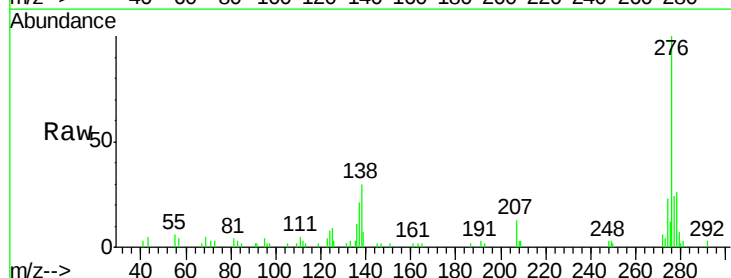
Tgt Ion:276 Resp: 40421

Ion Ratio Lower Upper

276 100

138 32.0 25.0 37.6

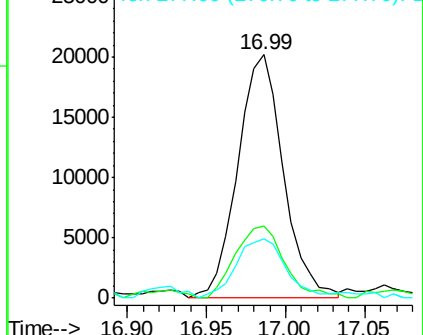
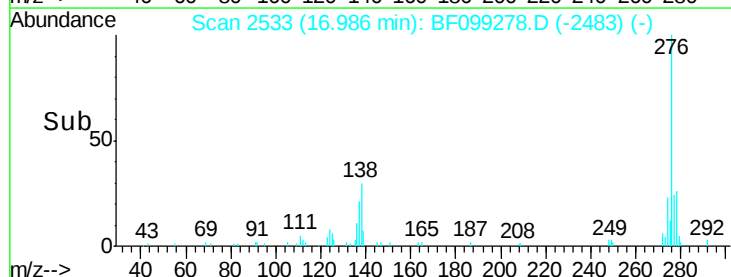
277 26.7 20.1 30.1

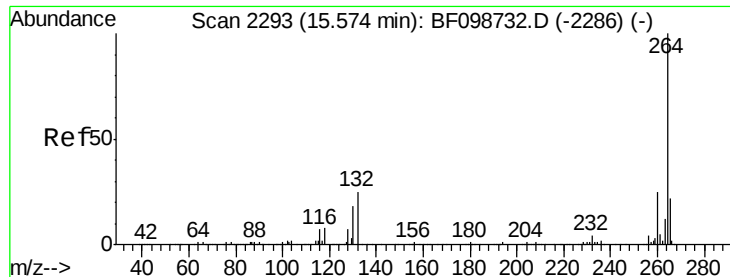


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

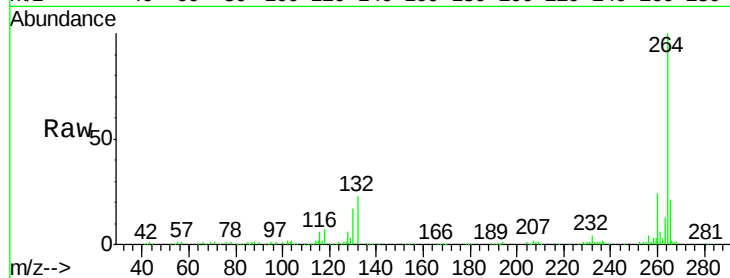




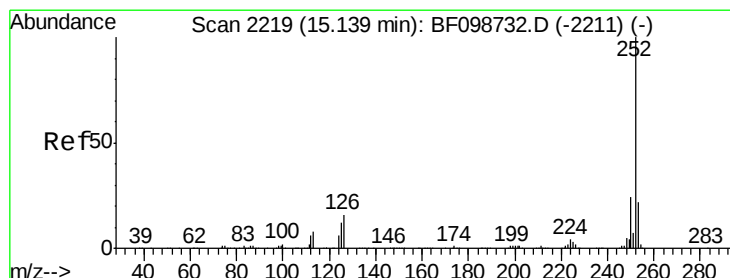
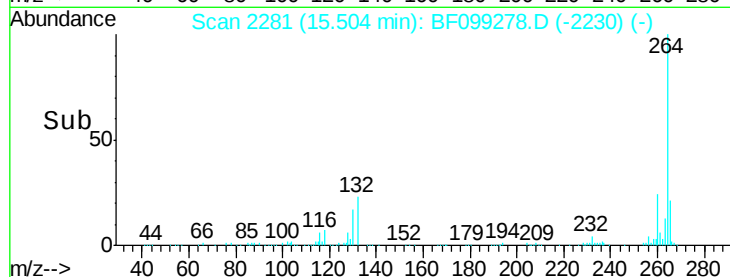
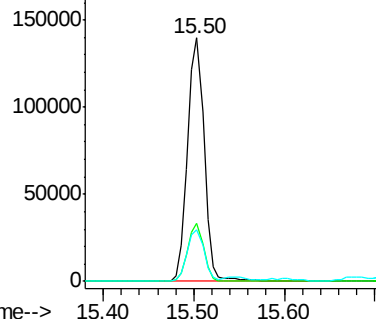
#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 15.50 min Scan# 2281  
Delta R.T. 0.00 min  
Lab File: BF099278.D  
Acq: 9 Oct 2017 22:38

Instrument :  
BNA\_F  
ClientSampleId :

Tot Ion:264 Resp: 178466  
Ion Ratio Lower Upper  
264 100  
260 23.6 19.2 28.8  
265 21.3 17.5 26.3

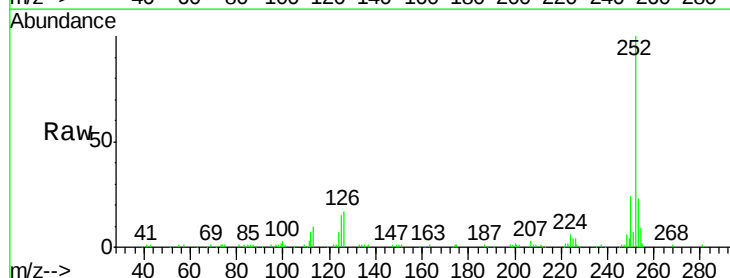


Abundance Ion 264.00 (263.70 to 264.70): E  
Ion 260.00 (259.70 to 260.70): E  
Ion 265.00 (264.70 to 265.70): E

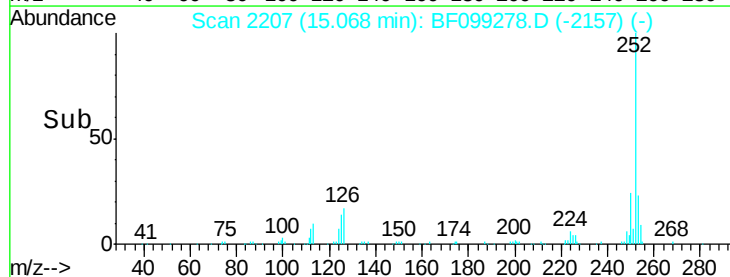
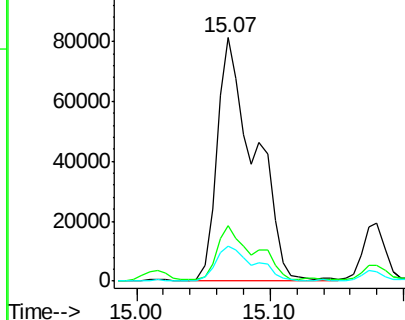


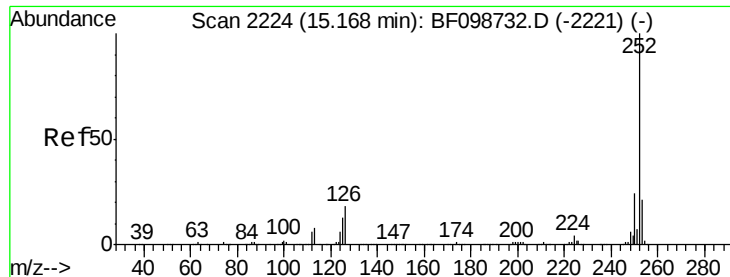
#87  
Benzo(b)fluoranthene  
Concen: 14.55 ng  
RT: 15.07 min Scan# 2207  
Delta R.T. -0.01 min  
Lab File: BF099278.D  
Acq: 9 Oct 2017 22:38

Tgt Ion:252 Resp: 159600  
Ion Ratio Lower Upper  
252 100  
253 22.7 17.0 25.6  
125 14.6 9.0 13.6#



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





#88

Benzo(k)fluoranthene

Concen: 14.73 ng

RT: 15.07 min Scan# 2207

Delta R.T. -0.04 min

Lab File: BF099278.D

Acq: 9 Oct 2017 22:38

Instrument :

BNA\_F

ClientSampleId :

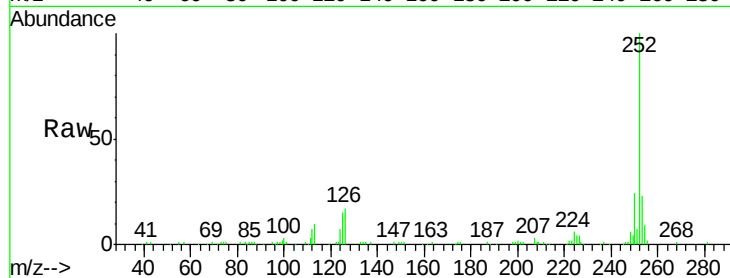
Tot Ion:252 Resp: 159600

Ion Ratio Lower Upper

252 100

253 22.7 17.9 26.9

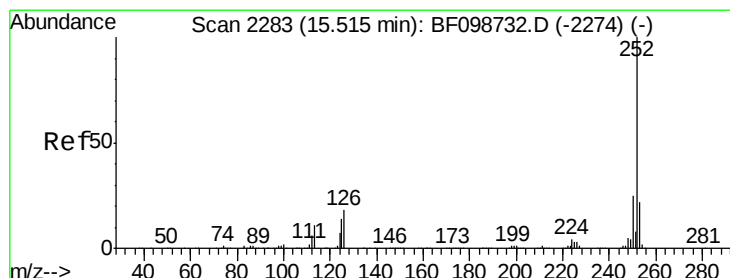
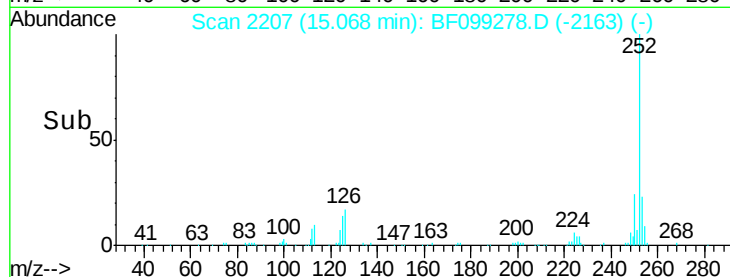
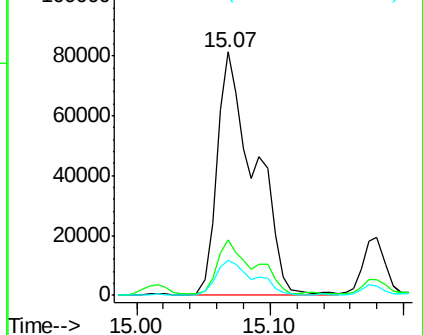
125 14.6 10.2 15.2



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(a)pyrene

Concen: 7.98 ng

RT: 15.44 min Scan# 2270

Delta R.T. -0.01 min

Lab File: BF099278.D

Acq: 9 Oct 2017 22:38

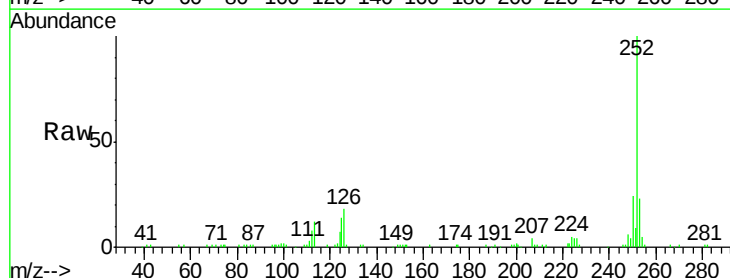
Tgt Ion:252 Resp: 80372

Ion Ratio Lower Upper

252 100

253 22.8 17.1 25.7

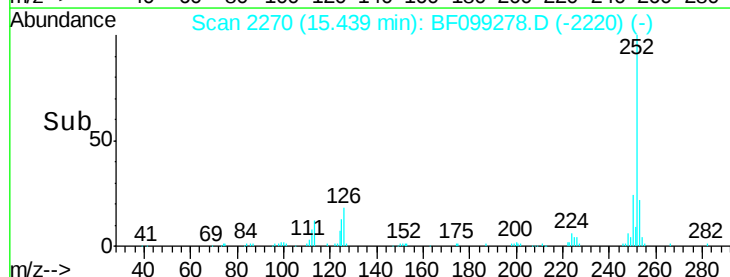
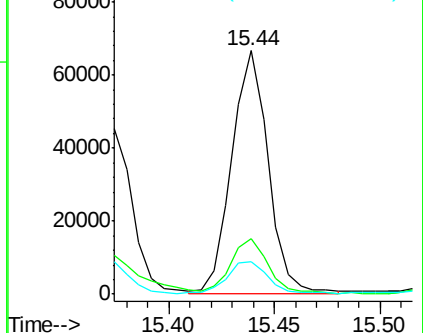
125 13.5 9.8 14.6

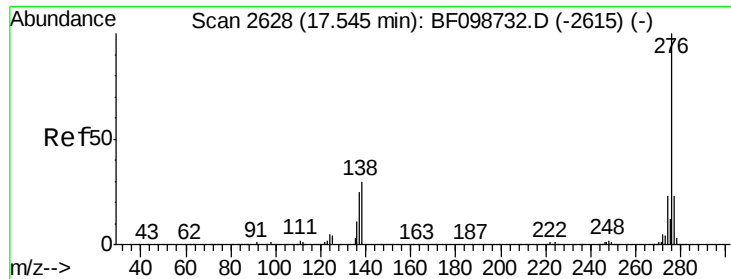


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

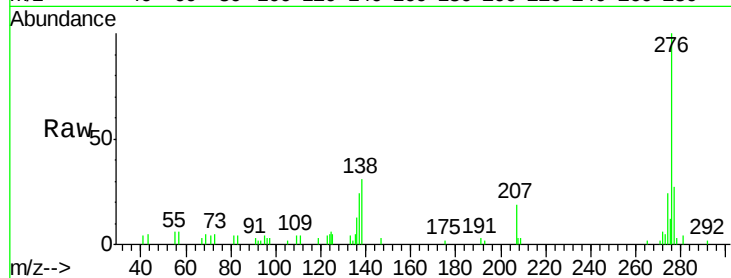




#91  
 Benzo(a,h,i)perylene  
 Concen: 4.34 ng  
 RT: 17.43 min Scan# 2609  
 Delta R.T. -0.01 min  
 Lab File: BF099278.D  
 Acq: 9 Oct 2017 22:38

Instrument :  
 BNA\_F  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 276     | 100   |       |       |
| 277     | 27.1  | 17.9  | 26.9  |
| 138     | 30.9  | 21.8  | 32.8  |



Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

