

Data Path : Z:\HPCHEM1\BNA F\DATA\BF052417\  
 Data File : BF095415.D  
 Acq On : 25 May 2017 8:49  
 Operator : SJ/MA  
 Sample : I3300-02 10X  
 Misc :  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: May 25 13:27:24 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF050217.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu May 18 17:07:53 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.75  | 152  | 67238    | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 9.78  | 136  | 256245   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 12.61 | 164  | 109048   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 15.01 | 188  | 187932   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 18.68 | 240  | 179297   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 20.36 | 264  | 120163   | 20.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 5) 2-Fluorophenol           | 5.84  | 112  | 6696     | 1.66 | ng    | 0.10     |
| 7) Phenol-d6                | 7.44  | 99   | 9706     | 2.01 | ng    | 0.13     |
| 23) Nitrobenzene-d5         | 8.74  | 82   | 14093    | 3.47 | ng    | 0.07     |
| 41) 2,4,6-Tribromophenol    | 13.94 | 330  | 8068     | 9.03 | ng    | 0.02     |
| 44) 2-Fluorobiphenyl        | 11.56 | 172  | 47804    | 6.31 | ng    | 0.00     |
| 78) Terphenyl-d14           | 17.32 | 244  | 40586    | 4.99 | ng    | -0.02    |

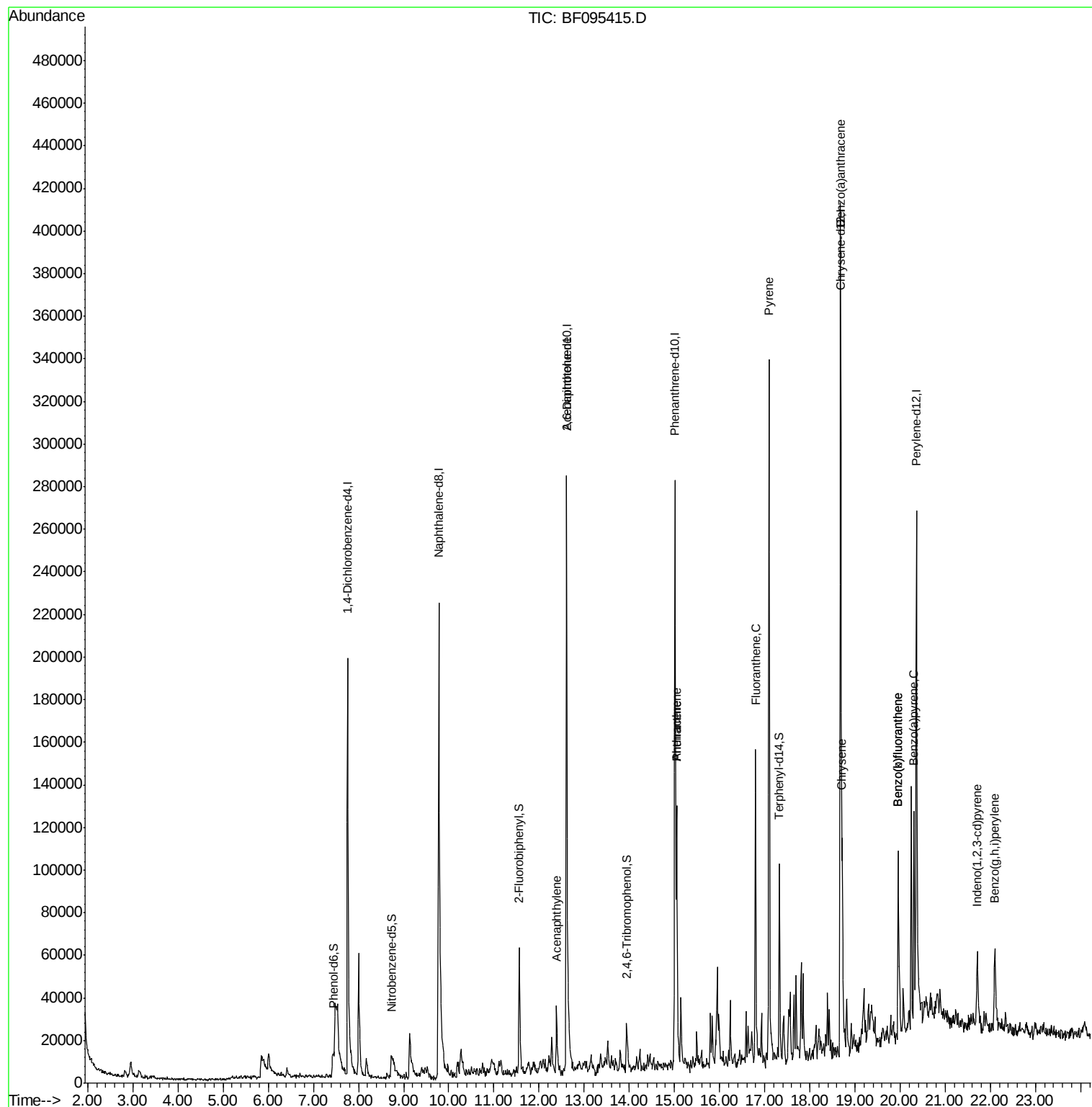
| Target Compounds           | R.T.  | QIon | Response | Conc  | Units | Qvalue |
|----------------------------|-------|------|----------|-------|-------|--------|
| 48) Acenaphthylene         | 12.39 | 152  | 26188    | 2.26  | ng    | 97     |
| 50) 2,6-Dinitrotoluene     | 12.61 | 165  | 11785    | 6.45  | ng    | # 31   |
| 70) Phenanthrene           | 15.05 | 178  | 75041    | 6.95  | ng    | 99     |
| 71) Anthracene             | 15.05 | 178  | 75041    | 6.80  | ng    | 99     |
| 74) Fluoranthene           | 16.79 | 202  | 89883    | 8.11  | ng    | 97     |
| 77) Pyrene                 | 17.09 | 202  | 195025   | 14.54 | ng    | 99     |
| 80) Benzo(a)anthracene     | 18.67 | 228  | 46575    | 4.46  | ng    | 94     |
| 82) Chrysene               | 18.72 | 228  | 51721    | 5.13  | ng    | 93     |
| 85) Indeno(1,2,3-cd)pyrene | 21.71 | 276  | 26840    | 3.28  | ng    | # 90   |
| 87) Benzo(b)fluoranthene   | 19.96 | 252  | 66086    | 8.90  | ng    | # 97   |
| 88) Benzo(k)fluoranthene   | 19.96 | 252  | 66086    | 9.23  | ng    | 98     |
| 89) Benzo(a)pyrene         | 20.31 | 252  | 51508    | 7.52  | ng    | 98     |
| 91) Benzo(a,h,i)perylene   | 22.10 | 276  | 39174    | 7.05  | ng    | 95     |

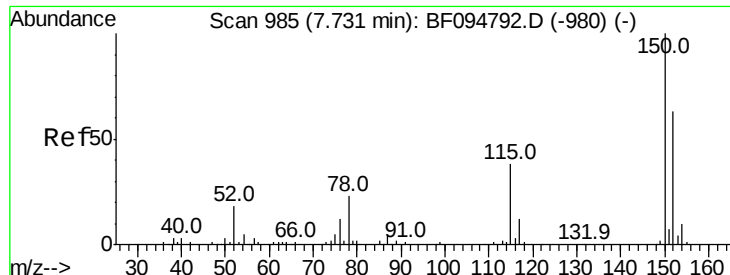
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu May 18 17:07:53 2017  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 7.75 min Scan# 989

Delta R.T. -0.01 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

Instrument :

BNA\_F

ClientSampleId :

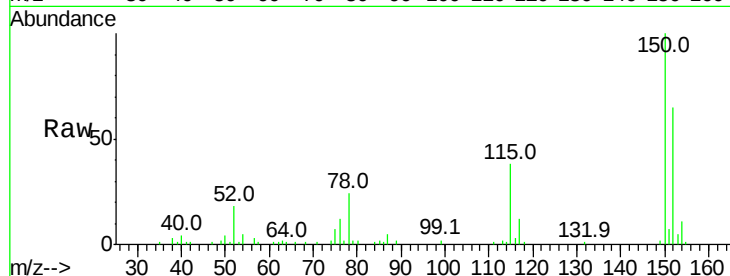
Tot Ion:152 Resp: 67238

Ion Ratio Lower Upper

152 100

150 153.3 126.2 189.2

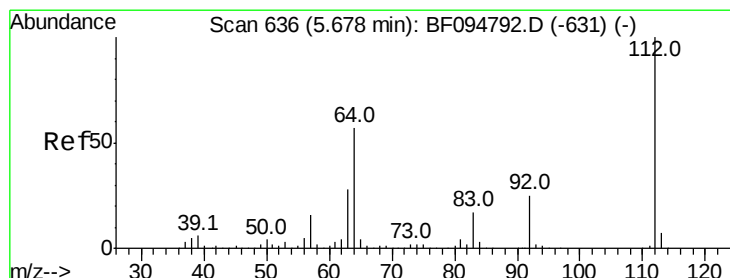
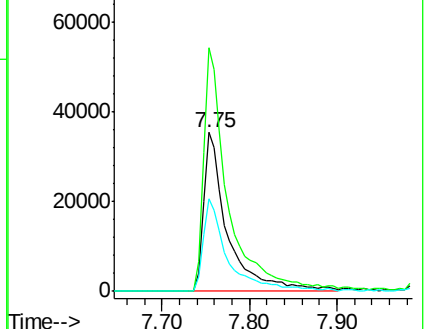
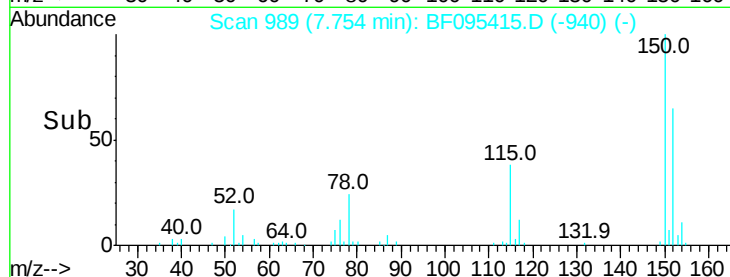
115 58.4 52.2 78.2



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: 1.66 ng

RT: 5.84 min Scan# 663

Delta R.T. 0.10 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

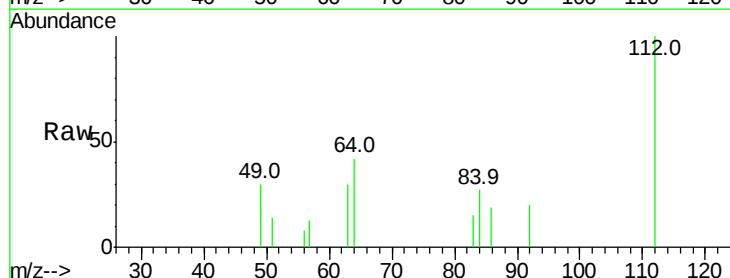
Tgt Ion:112 Resp: 6696

Ion Ratio Lower Upper

112 100

64 42.2 46.0 69.0#

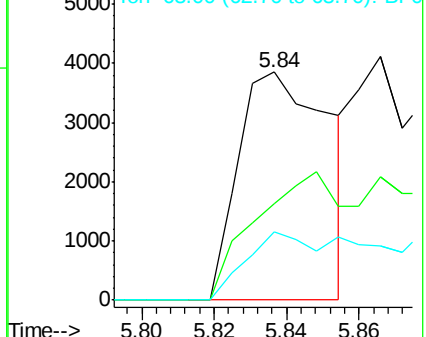
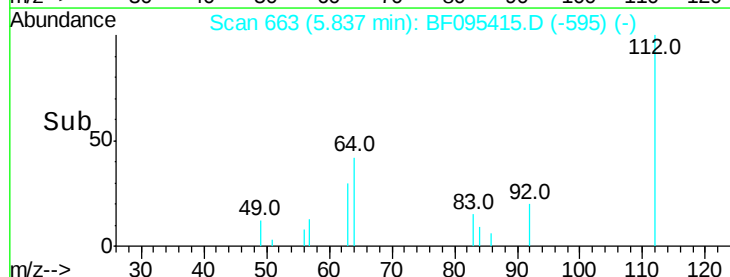
63 30.1 23.4 35.0



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: 2.01 ng

RT: 7.44 min Scan# 936

Delta R.T. 0.13 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

Instrument :

BNA\_F

ClientSampleId :

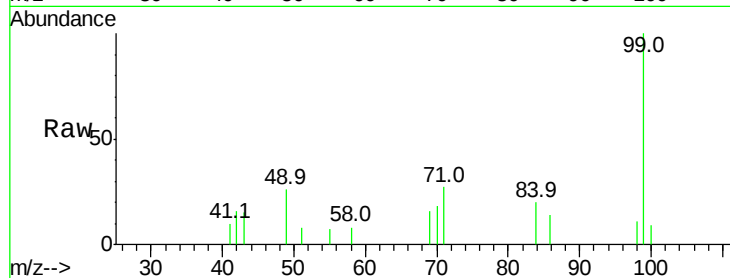
Tot Ion: 99 Resp: 9706

Ion Ratio Lower Upper

99 100

42 16.0 13.5 20.3

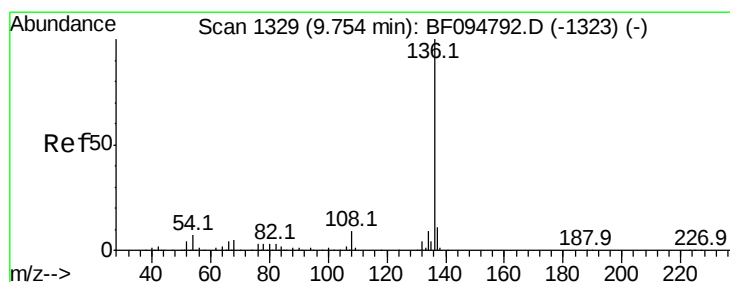
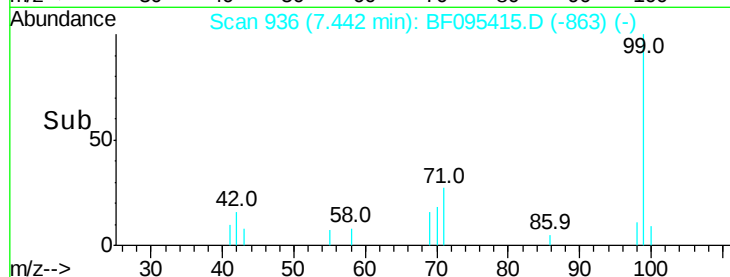
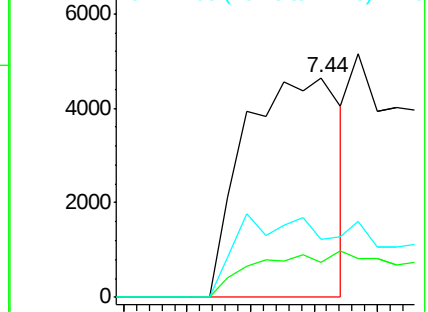
71 26.6 24.5 36.7



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: 9.78 min Scan# 1333

Delta R.T. -0.01 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

Tgt Ion: 136 Resp: 256245

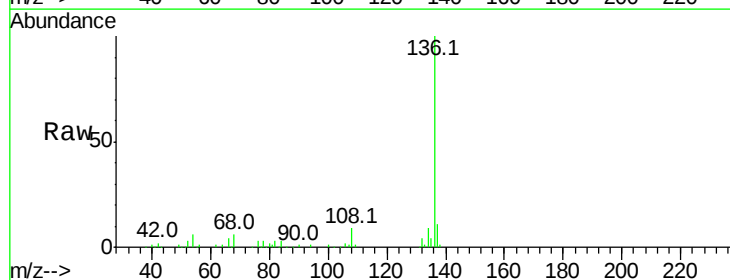
Ion Ratio Lower Upper

136 100

137 10.8 8.5 12.7

54 6.4 4.9 7.3

68 5.8 4.1 6.1

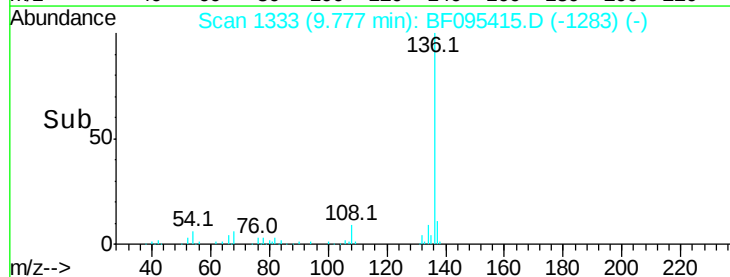
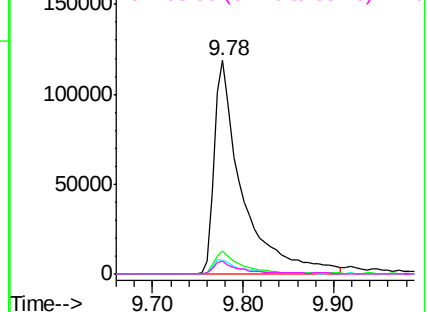


Abundance Ion 136.00 (135.70 to 136.70): E

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

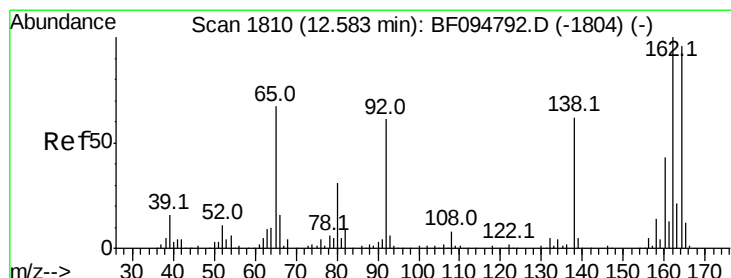
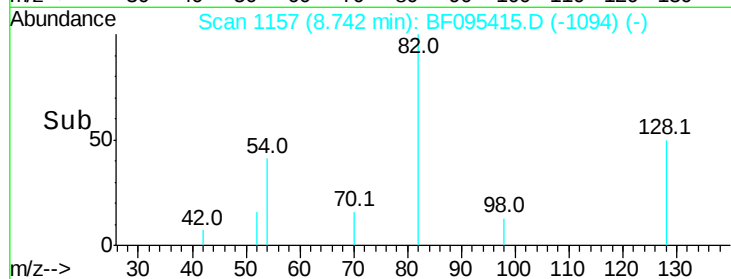
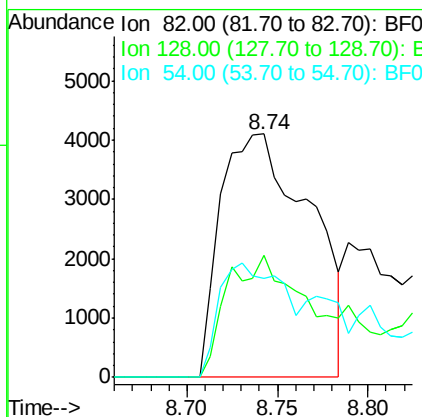
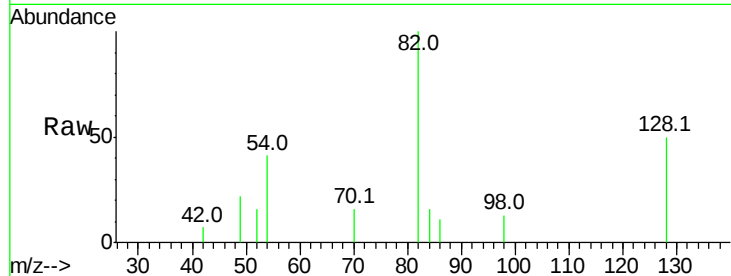




#23  
 Nitrobenzene-d5  
 Concen: 3.47 ng  
 RT: 8.74 min Scan# 1157  
 Delta R.T. 0.07 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

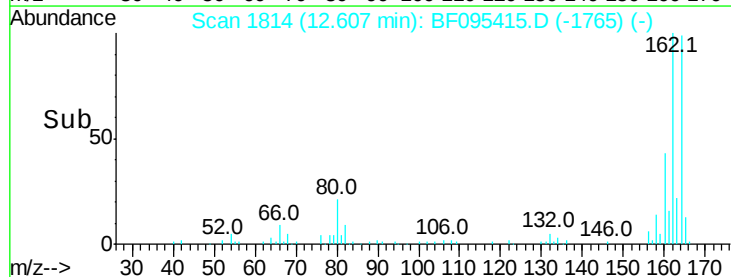
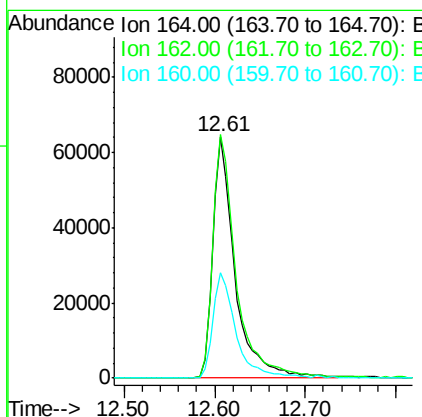
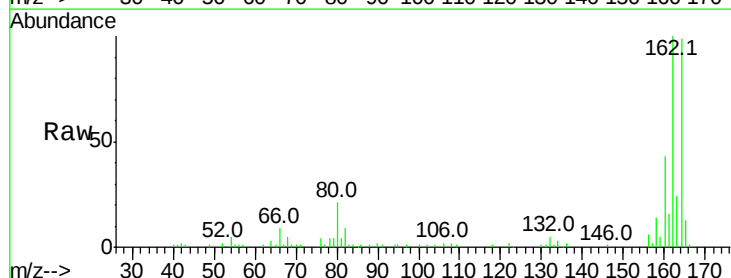
Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion: 82 Resp: 14093  
 Ion Ratio Lower Upper  
 82 100  
 128 49.9 34.0 51.0  
 54 40.9 42.2 63.2#



#38  
 Acenaphthene-d10  
 Concen: 20.00 ng  
 RT: 12.61 min Scan# 1814  
 Delta R.T. -0.01 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

Tgt Ion:164 Resp: 109048  
 Ion Ratio Lower Upper  
 164 100  
 162 100.9 82.6 123.8  
 160 43.6 36.2 54.2

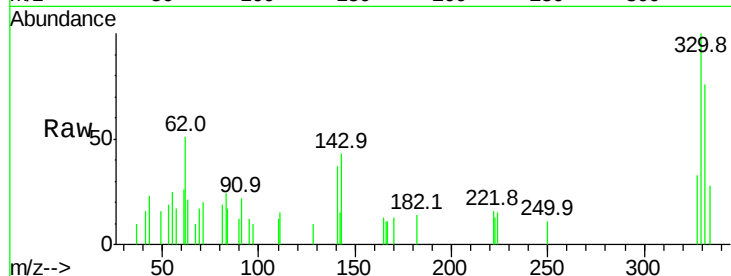




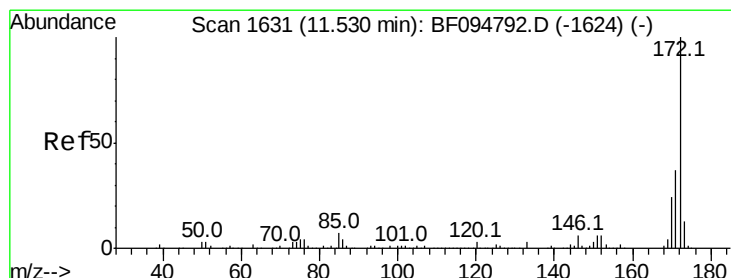
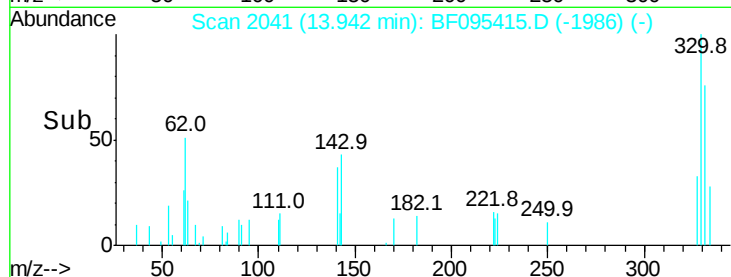
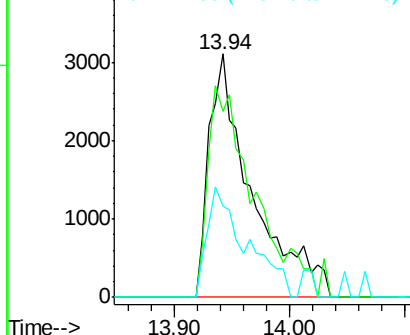
#41  
 2,4,6-Tribromophenol  
 Concen: 9.03 ng  
 RT: 13.94 min Scan# 2041  
 Delta R.T. 0.02 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:330 Resp: 8068  
 Ion Ratio Lower Upper  
 330 100  
 332 85.0 76.6 115.0  
 141 41.4 31.4 47.2

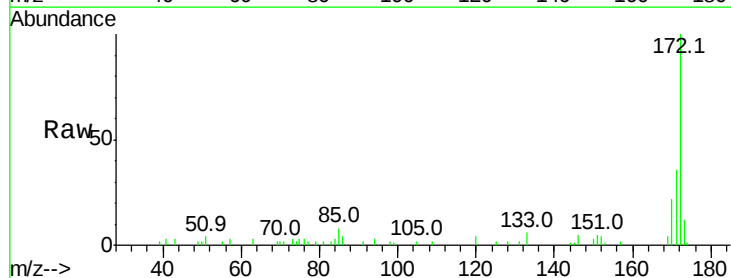


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

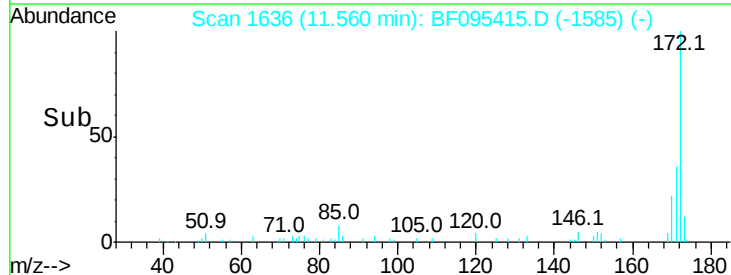
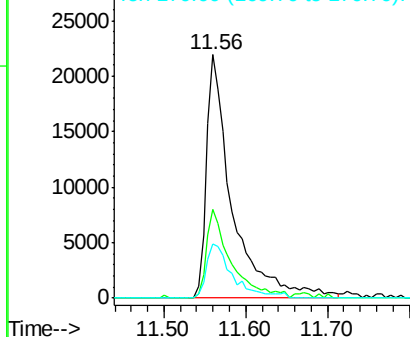


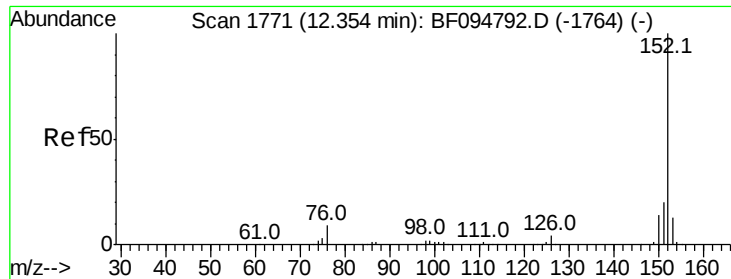
#44  
 2-Fluorobiphenyl  
 Concen: 6.31 ng  
 RT: 11.56 min Scan# 1636  
 Delta R.T. 0.00 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

Tgt Ion:172 Resp: 47804  
 Ion Ratio Lower Upper  
 172 100  
 171 36.2 29.6 44.4  
 170 22.4 19.8 29.8



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





#48

Acenaphthylene

Concen: 2.26 ng

RT: 12.39 min Scan# 1777

Delta R.T. 0.00 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

Instrument :

BNA\_F

ClientSampleId :

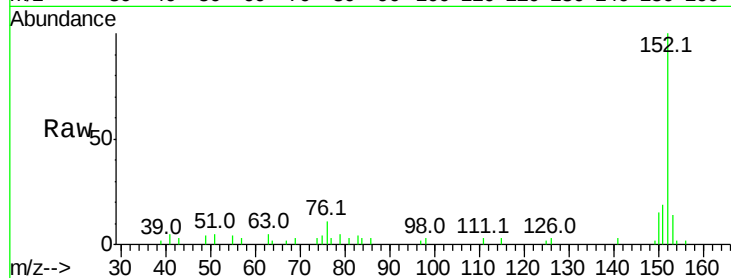
Tot Ion:152 Resp: 26188

Ion Ratio Lower Upper

152 100

151 18.8 16.8 25.2

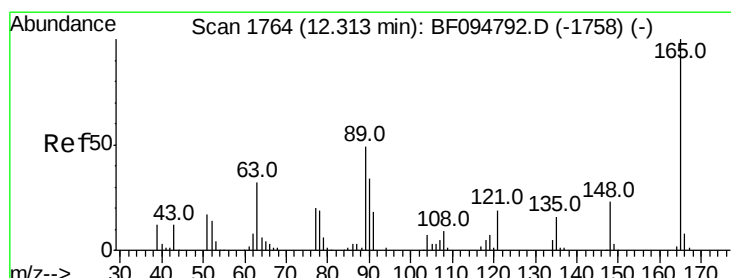
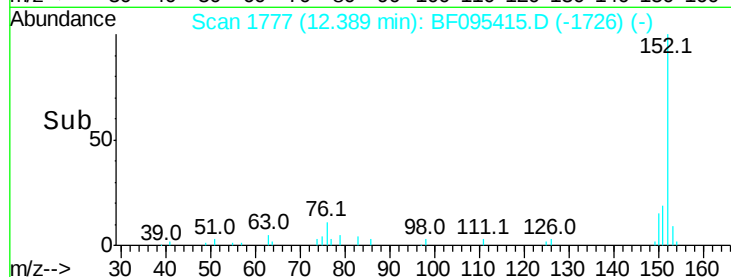
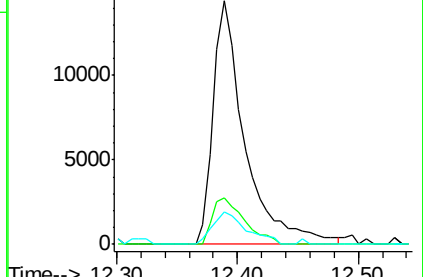
153 13.5 10.8 16.2



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E



#50

2,6-Dinitrotoluene

Concen: 6.45 ng

RT: 12.61 min Scan# 1814

Delta R.T. 0.25 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

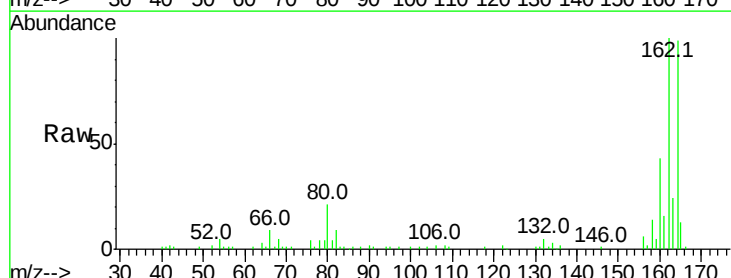
Tgt Ion:165 Resp: 11785

Ion Ratio Lower Upper

165 100

63 0.0 34.3 51.5#

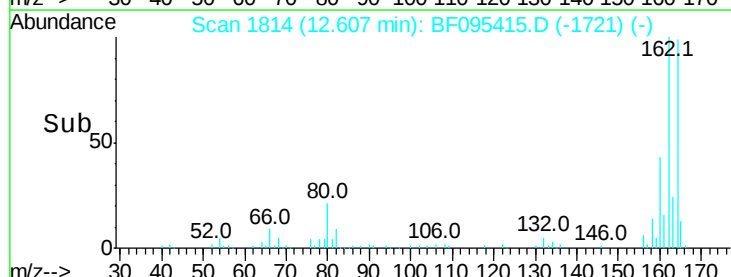
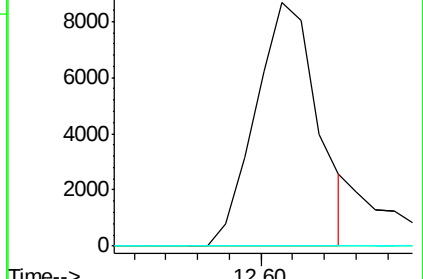
89 0.0 37.1 55.7#



Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0

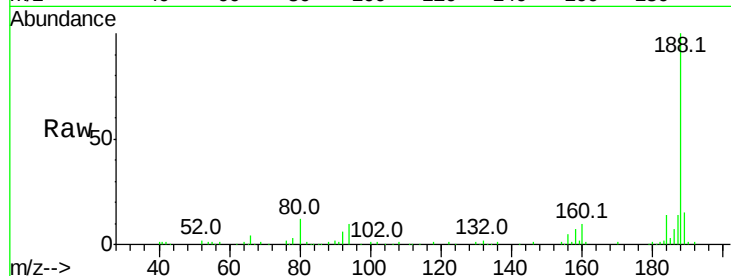




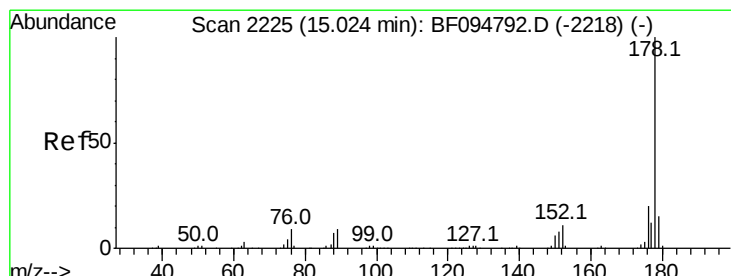
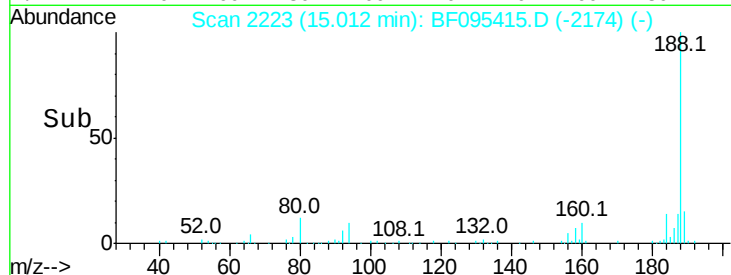
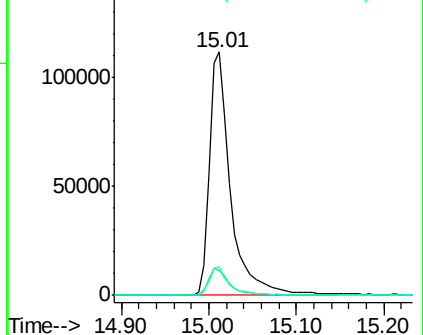
#63  
 Phenanthrene-d10  
 Concen: 20.00 ng  
 RT: 15.01 min Scan# 2223  
 Delta R.T. -0.01 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:188 Resp: 187932  
 Ion Ratio Lower Upper  
 188 100  
 94 10.4 9.4 14.2  
 80 11.7 10.2 15.2

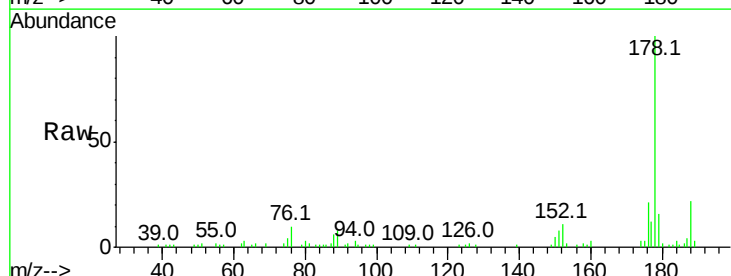


Abundance Ion 188.00 (187.70 to 188.70): E  
 Ion 94.00 (93.70 to 94.70): BF0  
 Ion 80.00 (79.70 to 80.70): BF0

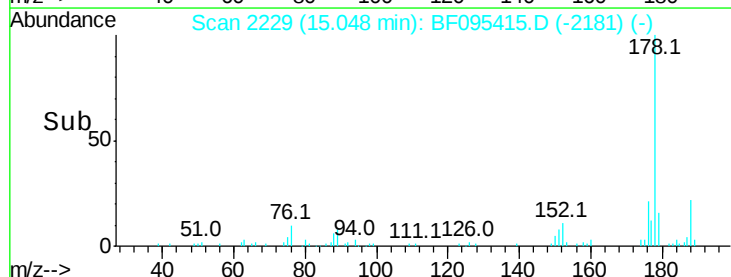
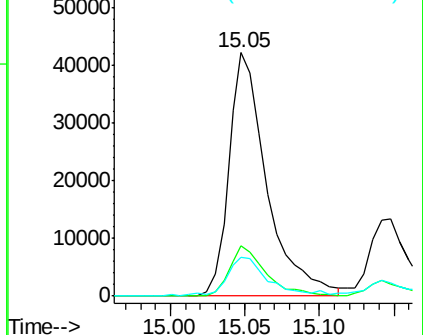


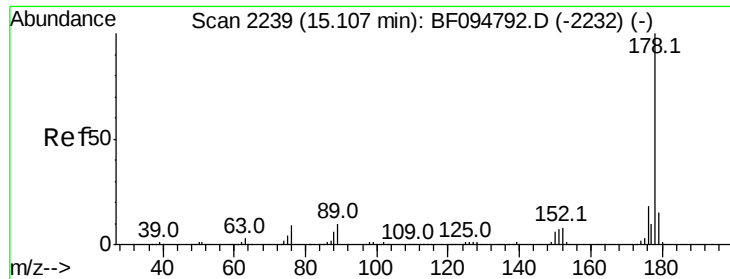
#70  
 Phenanthrene  
 Concen: 6.95 ng  
 RT: 15.05 min Scan# 2229  
 Delta R.T. -0.02 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

Tgt Ion:178 Resp: 75041  
 Ion Ratio Lower Upper  
 178 100  
 176 20.6 16.2 24.4  
 179 16.2 12.6 19.0



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

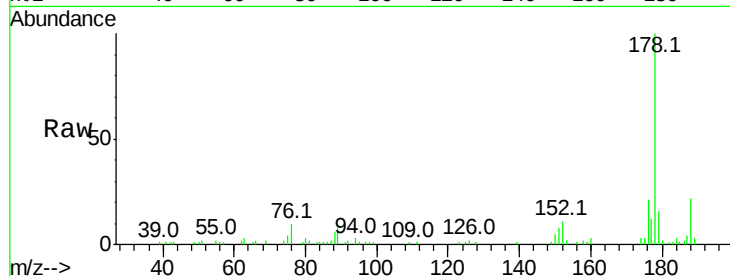




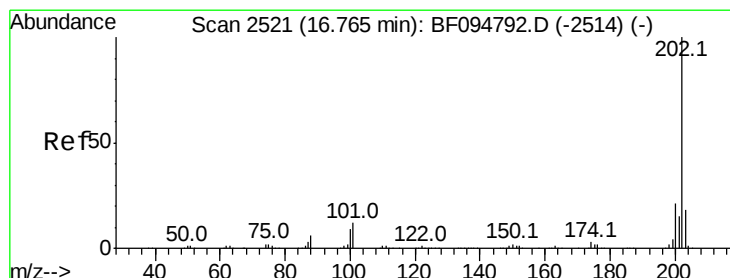
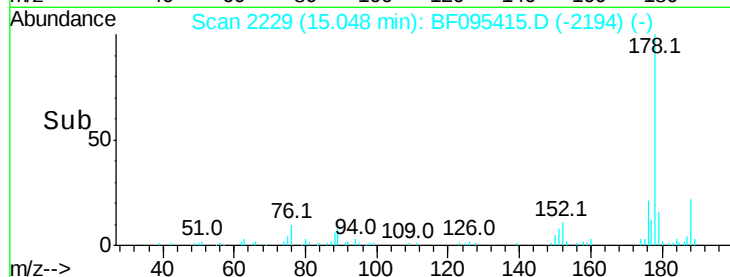
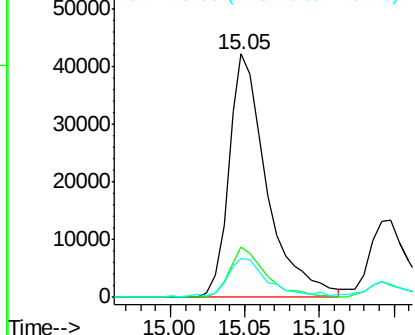
#71  
 Anthracene  
 Concen: 6.80 ng  
 RT: 15.05 min Scan# 2229  
 Delta R.T. -0.09 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

Instrument :  
 BNA\_F  
 ClientSampled :

Tot Ion:178 Resp: 75041  
 Ion Ratio Lower Upper  
 178 100  
 176 20.6 15.8 23.8  
 179 16.2 12.7 19.1

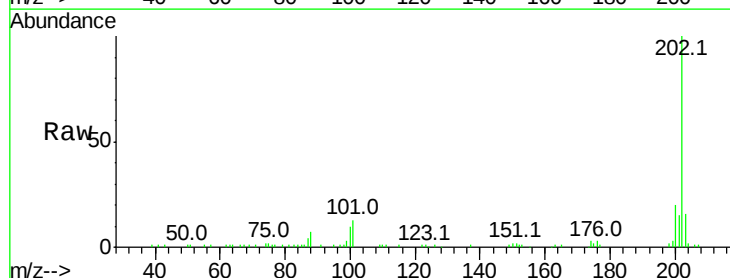


Abundance Ion 178.00 (177.70 to 178.70): E  
 Ion 176.00 (175.70 to 176.70): E  
 Ion 179.00 (178.70 to 179.70): E

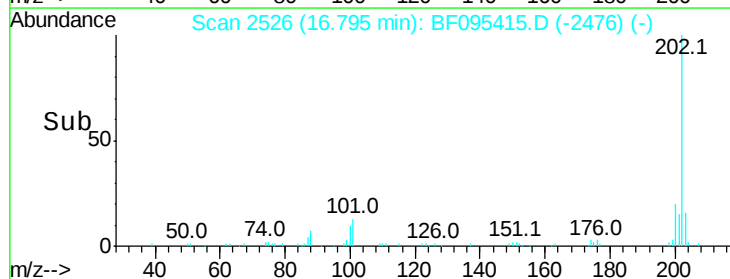
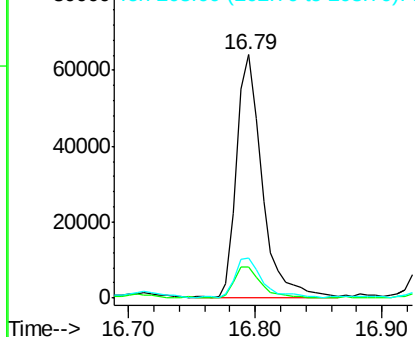


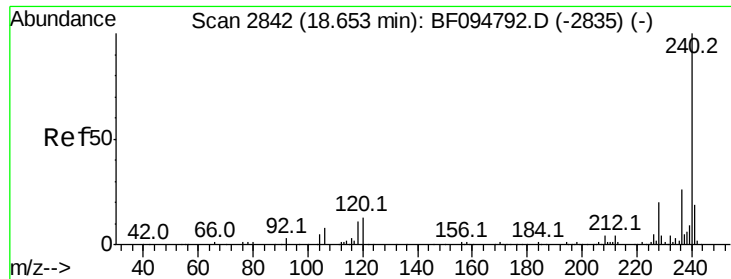
#74  
 Fluoranthene  
 Concen: 8.11 ng  
 RT: 16.79 min Scan# 2526  
 Delta R.T. -0.01 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

Tgt Ion:202 Resp: 89883  
 Ion Ratio Lower Upper  
 202 100  
 101 12.6 0.0 33.2  
 203 16.4 0.0 38.1



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

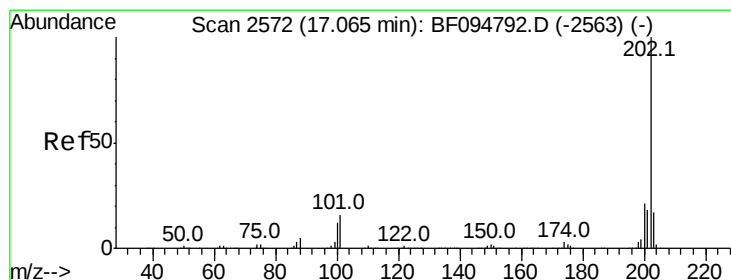
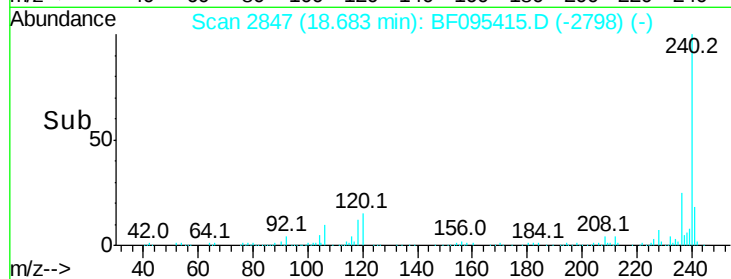
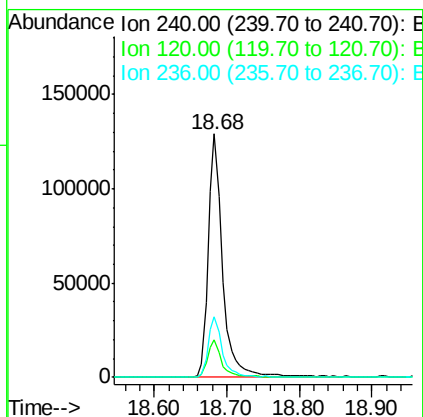
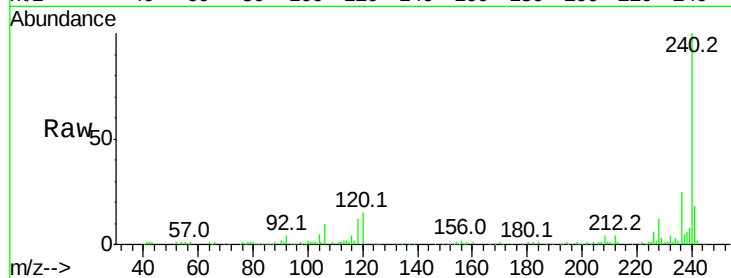




#75  
 Chrysene-d12  
 Concen: 20.00 ng  
 RT: 18.68 min Scan# 2847  
 Delta R.T. -0.01 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

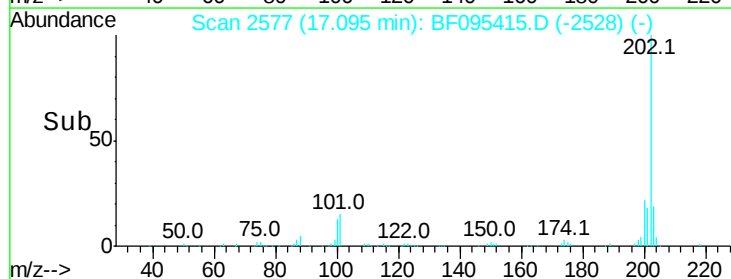
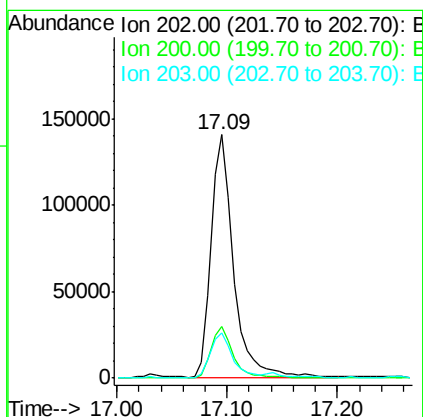
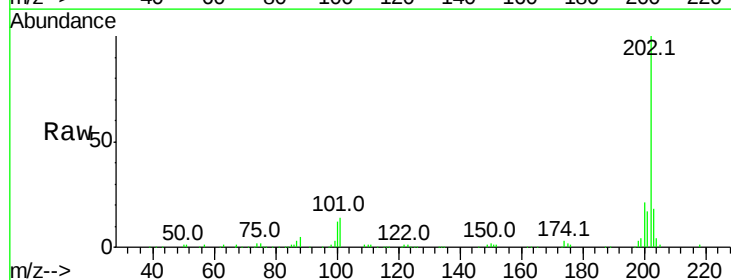
Instrument :  
 BNA\_F  
 ClientSampleId :

Tot Ion:240 Resp: 179297  
 Ion Ratio Lower Upper  
 240 100  
 120 15.3 5.8 8.8#  
 236 24.7 20.5 30.7



#77  
 Pyrene  
 Concen: 14.54 ng  
 RT: 17.09 min Scan# 2577  
 Delta R.T. -0.01 min  
 Lab File: BF095415.D  
 Acq: 25 May 2017 8:49

Tgt Ion:202 Resp: 195025  
 Ion Ratio Lower Upper  
 202 100  
 200 21.2 17.6 26.4  
 203 18.3 14.4 21.6





#78

Terphenyl-d14

Concen: 4.99 ng

RT: 17.32 min Scan# 2616

Delta R.T. -0.02 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

Instrument :

BNA\_F

ClientSampleId :

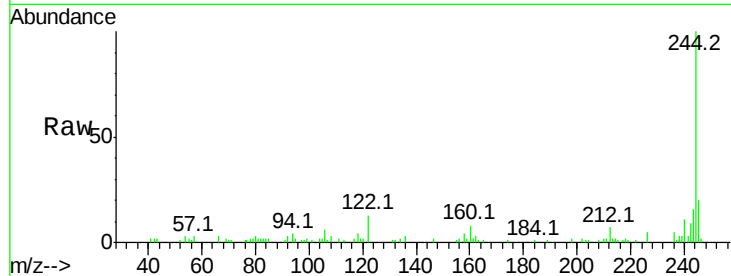
Tot Ion:244 Resp: 40586

Ion Ratio Lower Upper

244 100

212 6.7 6.0 9.0

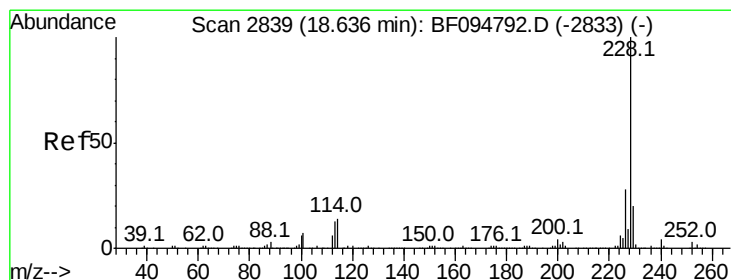
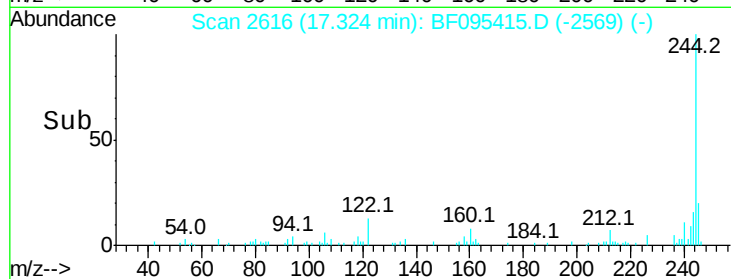
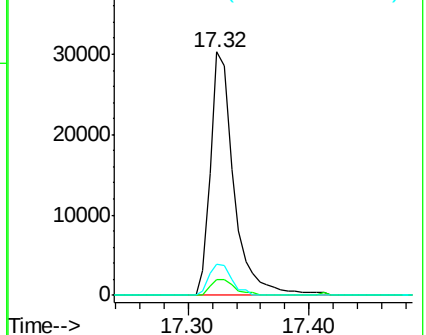
122 13.0 10.3 15.5



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



#80

Benzo(a)anthracene

Concen: 4.46 ng

RT: 18.67 min Scan# 2845

Delta R.T. -0.01 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

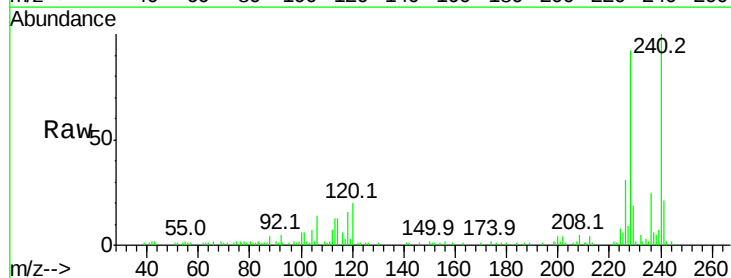
Tgt Ion:228 Resp: 46575

Ion Ratio Lower Upper

228 100

226 33.4 22.6 33.8

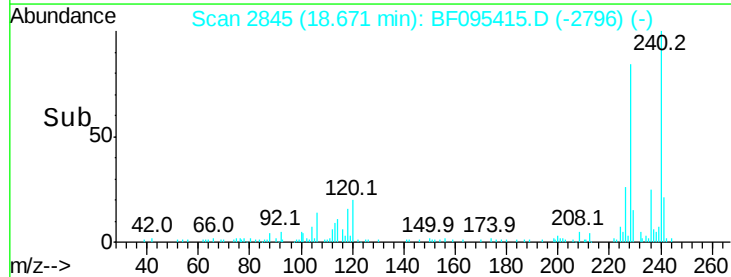
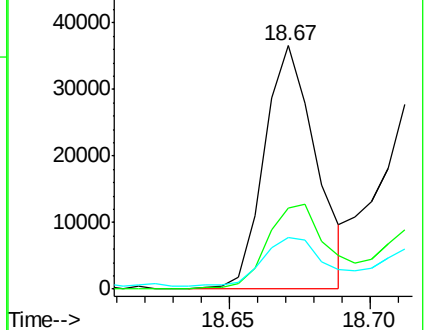
229 21.0 16.3 24.5

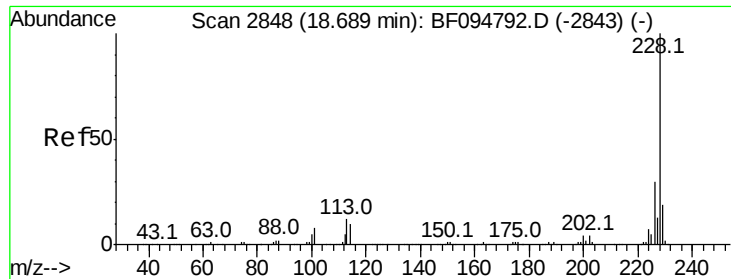


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#82

Chrysene

Concen: 5.13 ng

RT: 18.72 min Scan# 2853

Delta R.T. -0.01 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

Instrument :

BNA\_F

ClientSampled :

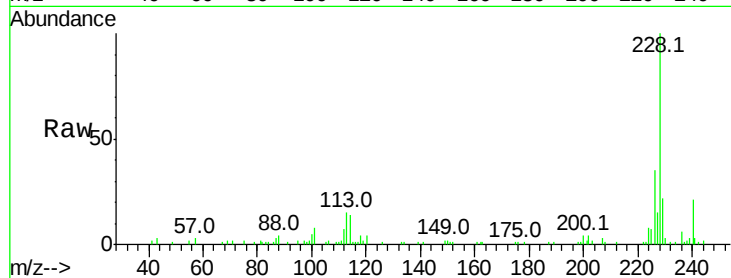
Tot Ion:228 Resp: 51721

Ion Ratio Lower Upper

228 100

226 35.4 24.9 37.3

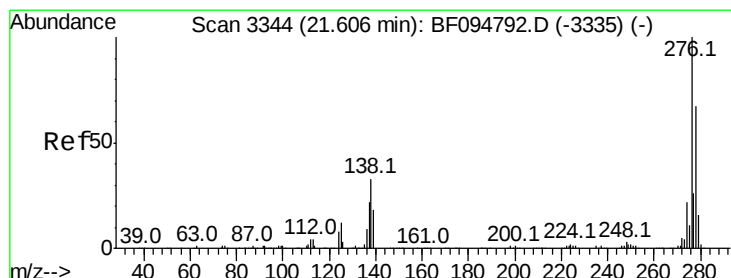
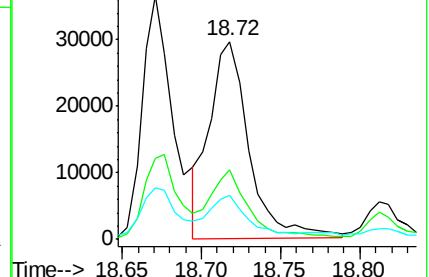
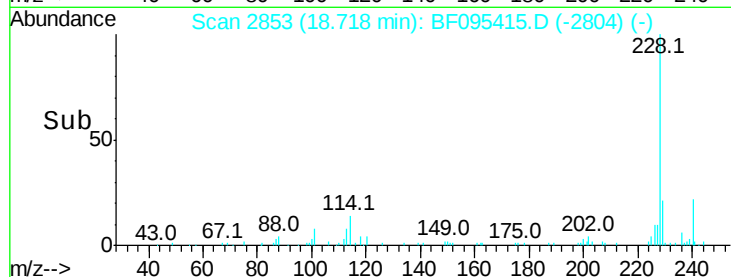
229 21.9 15.8 23.6



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: 3.28 ng

RT: 21.71 min Scan# 3362

Delta R.T. 0.01 min

Lab File: BF095415.D

Acq: 25 May 2017 8:49

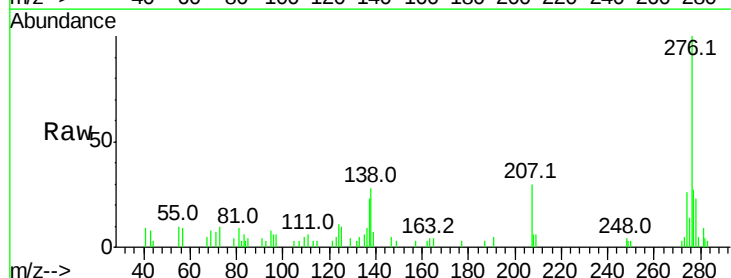
Tgt Ion:276 Resp: 26840

Ion Ratio Lower Upper

276 100

138 26.1 27.8 41.6#

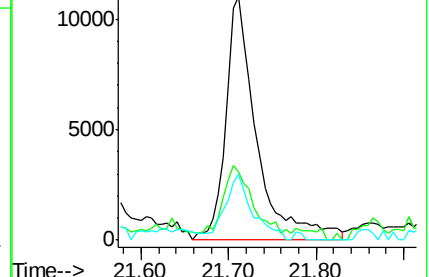
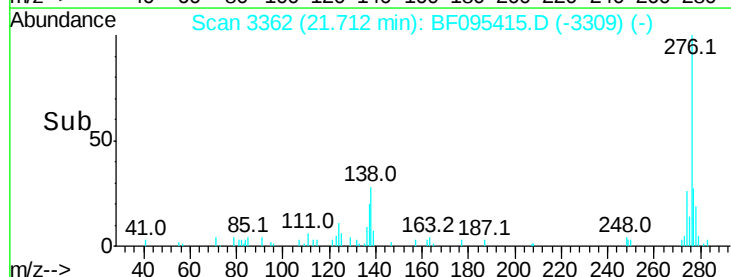
277 23.7 20.2 30.4

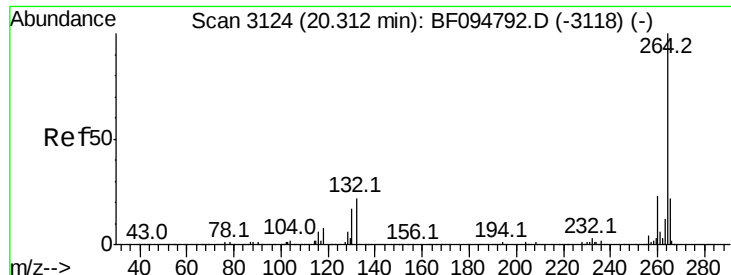


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

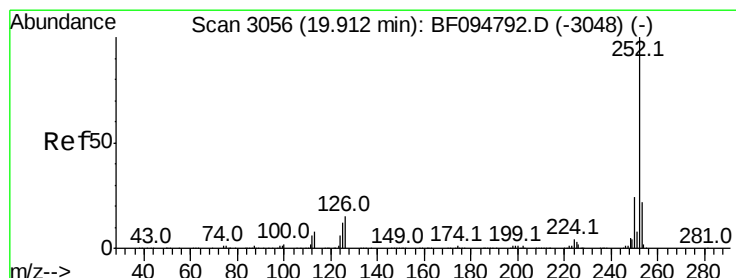
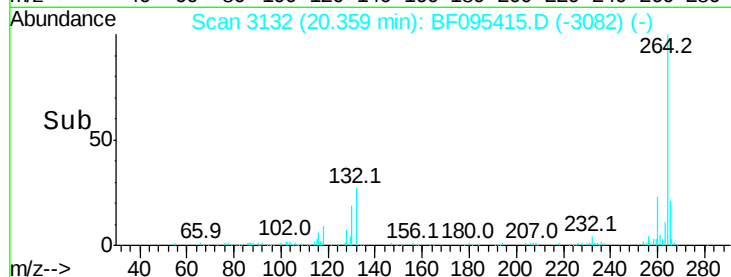
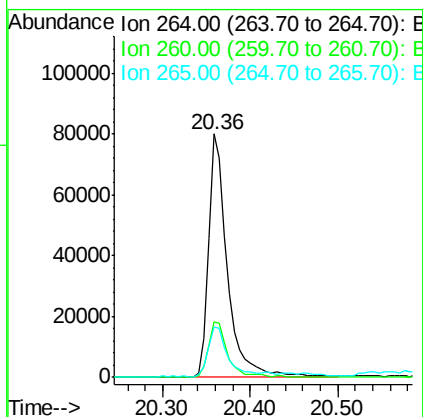
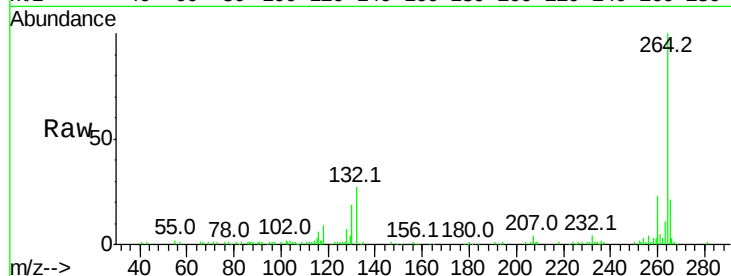




#86  
Pervlene-d12  
Concen: 20.00 ng  
RT: 20.36 min Scan# 3132  
Delta R.T. -0.01 min  
Lab File: BF095415.D  
Acq: 25 May 2017 8:49

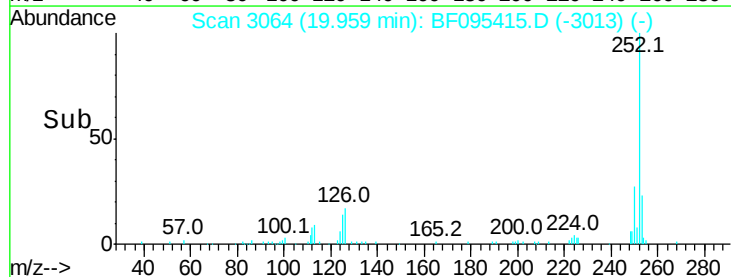
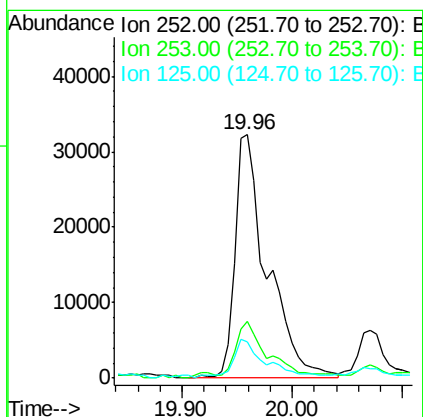
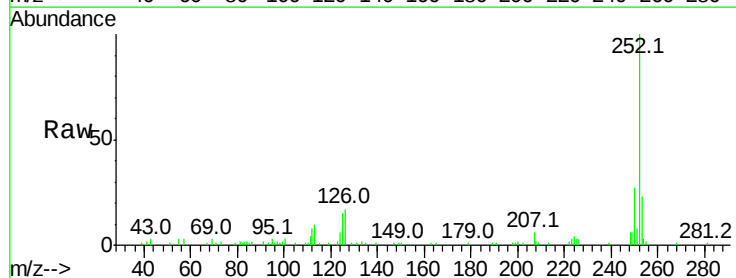
Instrument :  
BNA\_F  
ClientSampled :

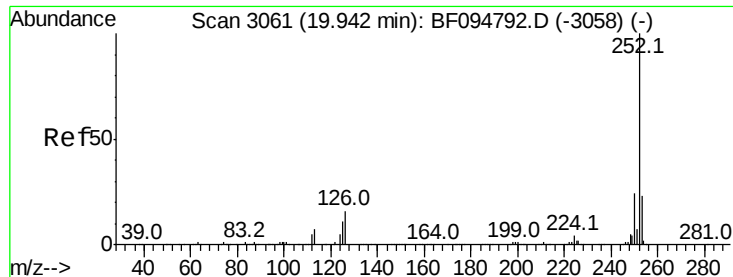
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 264     | 100   |       |       |
| 260     | 23.0  | 19.5  | 29.3  |
| 265     | 20.9  | 17.2  | 25.8  |



#87  
Benzo(b)fluoranthene  
Concen: 8.90 ng  
RT: 19.96 min Scan# 3064  
Delta R.T. 0.00 min  
Lab File: BF095415.D  
Acq: 25 May 2017 8:49

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 252     | 100   |       |       |
| 253     | 23.3  | 18.1  | 27.1  |
| 125     | 15.1  | 9.8   | 14.8  |

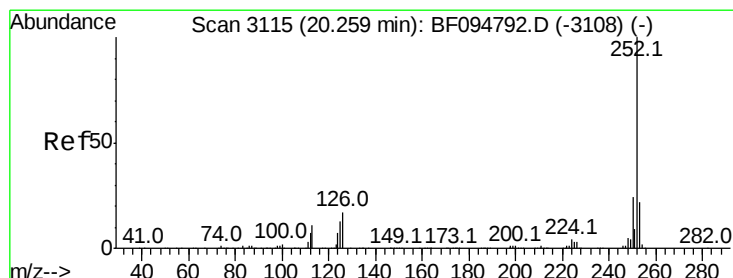
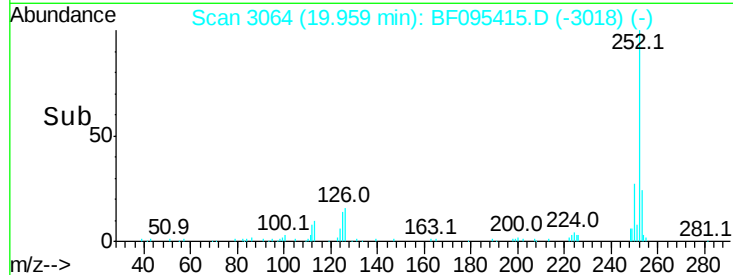
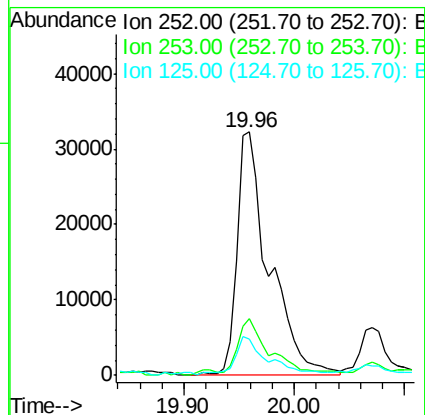
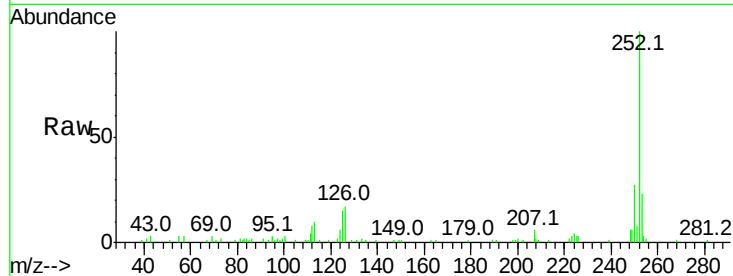




#88  
Benzo(k)fluoranthene  
Concen: 9.23 ng  
RT: 19.96 min Scan# 3064  
Delta R.T. -0.03 min  
Lab File: BF095415.D  
Acq: 25 May 2017 8:49

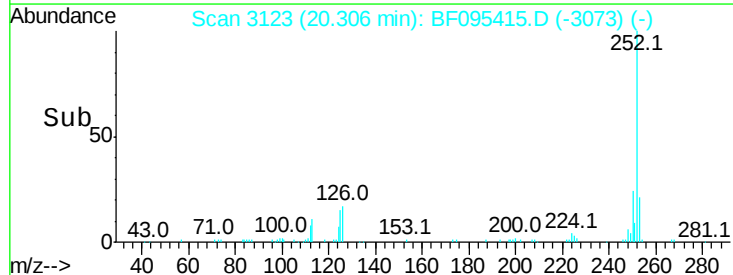
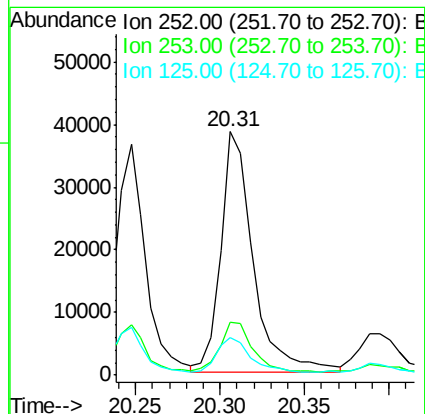
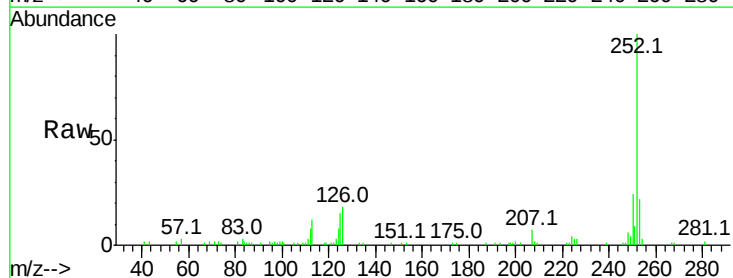
Instrument :  
BNA\_F  
ClientSampleId :

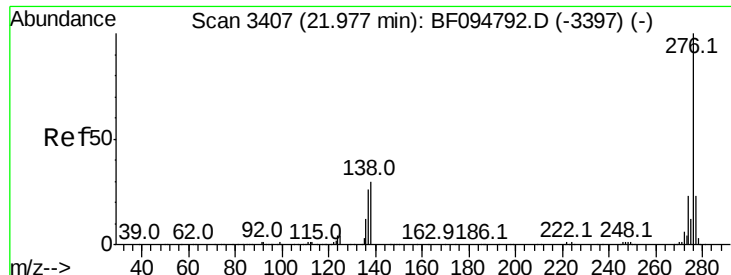
Tot Ion:252 Resp: 66086  
Ion Ratio Lower Upper  
252 100  
253 23.3 18.4 27.6  
125 15.1 13.1 19.7



#89  
Benzo(a)pyrene  
Concen: 7.52 ng  
RT: 20.31 min Scan# 3123  
Delta R.T. -0.01 min  
Lab File: BF095415.D  
Acq: 25 May 2017 8:49

Tgt Ion:252 Resp: 51508  
Ion Ratio Lower Upper  
252 100  
253 21.8 17.5 26.3  
125 15.4 11.0 16.4





#91

Benzo(a,h,i)perylene

Concen: 7.05 ng

RT: 22.10 min Scan# 3428

Delta R.T. 0.02 min

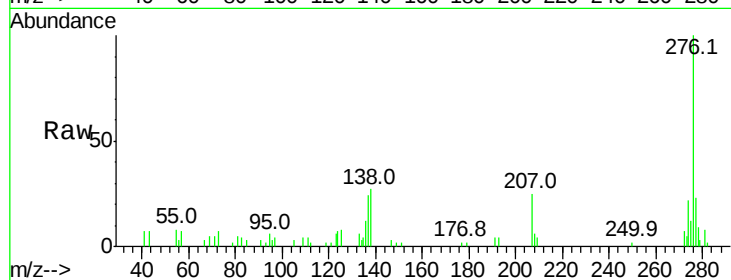
Lab File: BF095415.D

Acq: 25 May 2017 8:49

Instrument :

BNA\_F

ClientSampleId :



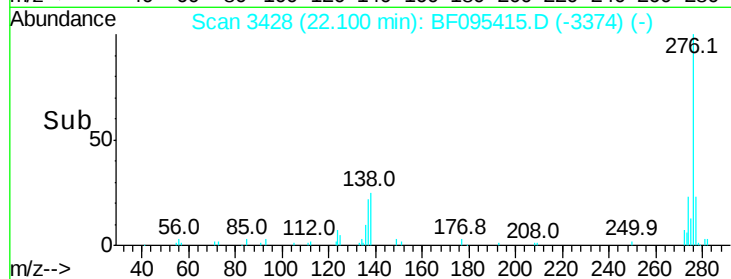
Tot Ion: 276 Resp: 39174

Ion Ratio Lower Upper

276 100

277 23.5 18.6 28.0

138 27.0 25.4 38.0



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

