

Data Path : Z:\HPCHEM1\BNA F\Data\BF040717\  
 Data File : BF094276.D  
 Acq On : 7 Apr 2017 16:41  
 Operator : SJ/MA  
 Sample : I2528-02  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TS-3

Quant Time: Apr 07 17:11:01 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF032217.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Apr 06 13:20:29 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.   | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|--------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 5.845  | 152  | 174669   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 7.345  | 136  | 685241   | 20.00 | ng    | -0.02    |
| 38) Acenaphthene-d10      | 9.486  | 164  | 294698   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 11.310 | 188  | 466087   | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 14.563 | 240  | 313122   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 16.192 | 264  | 280128   | 20.00 | ng    | 0.00     |

|                             |        |     |         |        |    |       |
|-----------------------------|--------|-----|---------|--------|----|-------|
| System Monitoring Compounds |        |     |         |        |    |       |
| 5) 2-Fluorophenol           | 4.387  | 112 | 1336180 | 129.21 | ng | 0.00  |
| 7) Phenol-d6                | 5.463  | 99  | 1726062 | 134.92 | ng | 0.00  |
| 23) Nitrobenzene-d5         | 6.498  | 82  | 1062646 | 88.50  | ng | -0.01 |
| 41) 2,4,6-Tribromophenol    | 10.463 | 330 | 315077  | 135.30 | ng | -0.01 |
| 44) 2-Fluorobiphenyl        | 8.675  | 172 | 1622989 | 84.00  | ng | -0.01 |
| 78) Terphenyl-d14           | 13.292 | 244 | 999250  | 71.53  | ng | 0.00  |

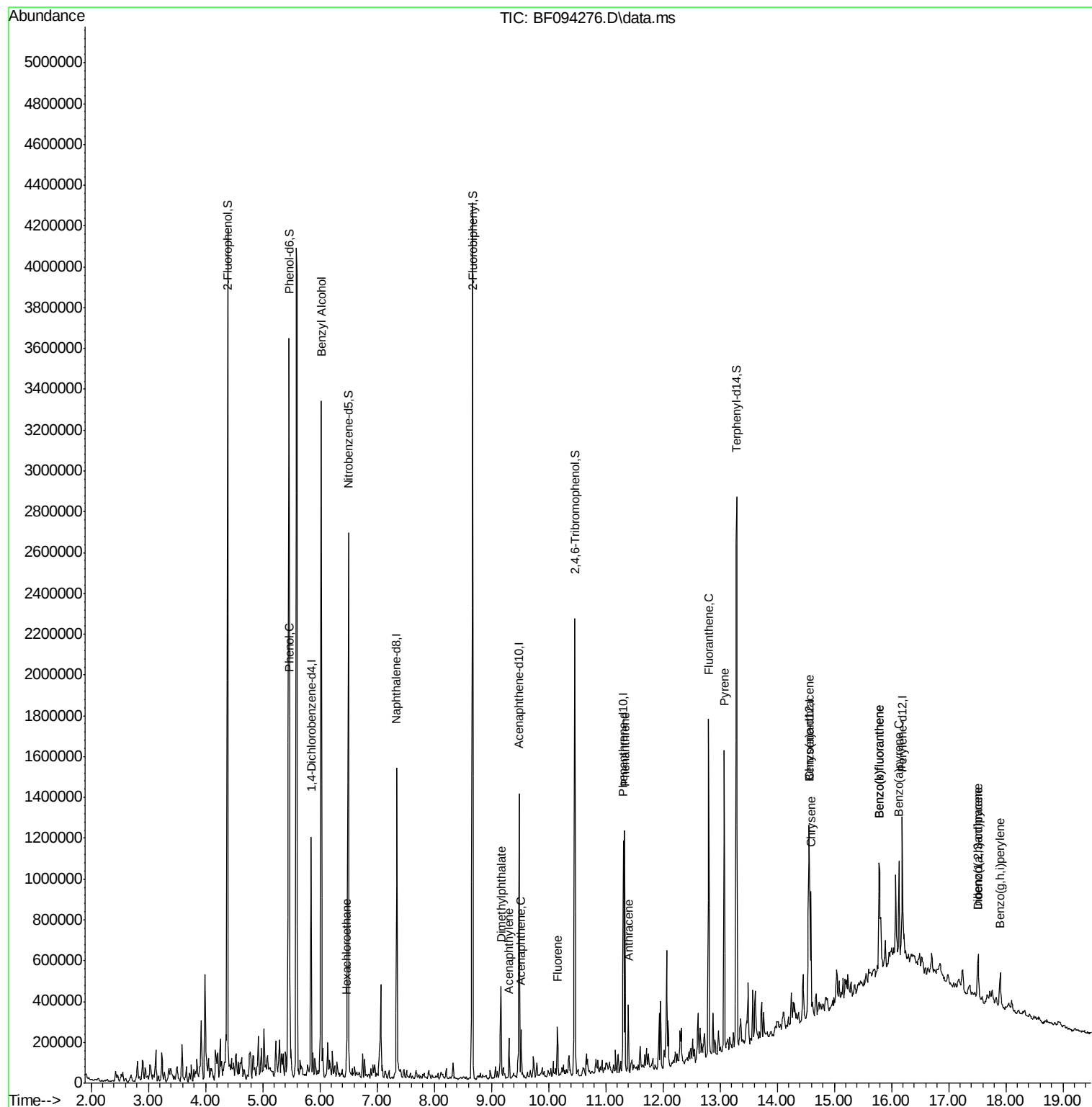
|                            |        |     |        |        |    |      |
|----------------------------|--------|-----|--------|--------|----|------|
| Target Compounds           |        |     |        | Qvalue |    |      |
| 10) Phenol                 | 5.475  | 94  | 126431 | 8.68   | ng | 88   |
| 15) Benzyl Alcohol         | 6.022  | 79  | 19559  | 2.09   | ng | # 46 |
| 18) Hexachloroethane       | 6.463  | 117 | 14449  | 3.18   | ng | # 37 |
| 48) Acenaphthylene         | 9.310  | 152 | 80998  | 2.62   | ng | 98   |
| 49) Dimethylphthalate      | 9.169  | 163 | 203457 | 9.71   | ng | 98   |
| 51) Acenaphthene           | 9.522  | 154 | 48602  | 2.69   | ng | 99   |
| 57) Fluorene               | 10.157 | 166 | 63092  | 3.10   | ng | 99   |
| 70) Phenanthrene           | 11.339 | 178 | 515550 | 19.88  | ng | 99   |
| 71) Anthracene             | 11.398 | 178 | 128001 | 4.79   | ng | 98   |
| 74) Fluoranthene           | 12.804 | 202 | 759777 | 28.62  | ng | 99   |
| 77) Pyrene                 | 13.080 | 202 | 693812 | 30.53  | ng | 99   |
| 80) Benzo(a)anthracene     | 14.551 | 228 | 231006 | 12.65  | ng | 95   |
| 82) Chrysene               | 14.592 | 228 | 266818 | 15.75  | ng | 98   |
| 85) Indeno(1,2,3-cd)pyrene | 17.509 | 276 | 125904 | 8.58   | ng | 95   |
| 87) Benzo(b)fluoranthene   | 15.786 | 252 | 404754 | 23.57  | ng | # 97 |
| 88) Benzo(k)fluoranthene   | 15.786 | 252 | 404754 | 24.09  | ng | 99   |
| 89) Benzo(a)pyrene         | 16.133 | 252 | 207924 | 13.15  | ng | 97   |
| 90) Dibenzo(a,h)anthracene | 17.521 | 278 | 31942  | 2.39   | ng | # 73 |
| 91) Benzo(a,h,i)perylene   | 17.903 | 276 | 124928 | 9.26   | ng | 96   |

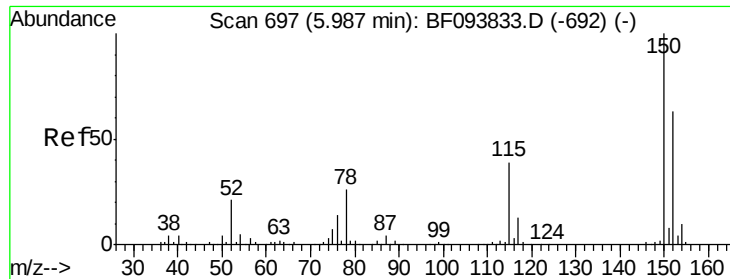
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA F\Data\BF040717\  
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Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
BNA\_F  
ClientSampled :  
TS-3

Quant Time: Apr 07 17:11:01 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF032217.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Apr 06 13:20:29 2017  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 5.845 min Scan# 67

Delta R.T. -0.012 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

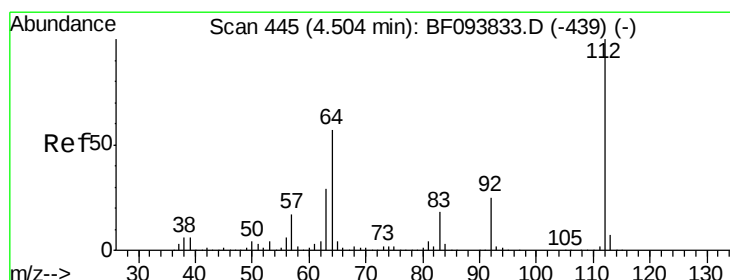
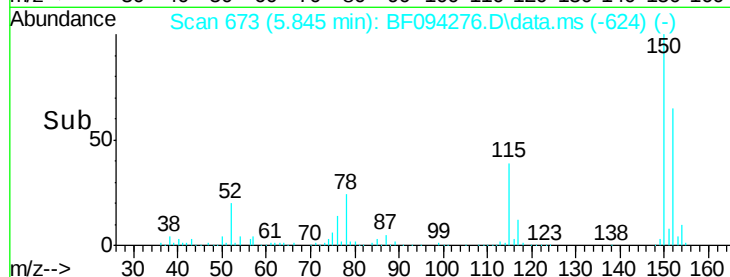
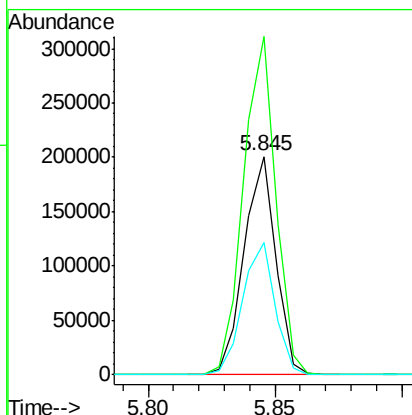
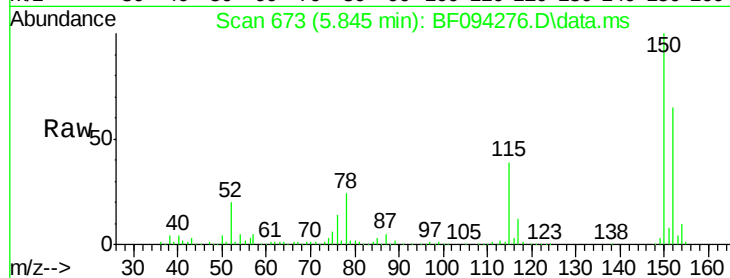
Tot Ion:152 Resp: 174669

Ion Ratio Lower Upper

152 100

150 155.0 126.2 189.2

115 60.6 52.2 78.2



#5

2-Fluorophenol

Concen: 129.21 ng

RT: 4.387 min Scan# 425

Delta R.T. -0.000 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

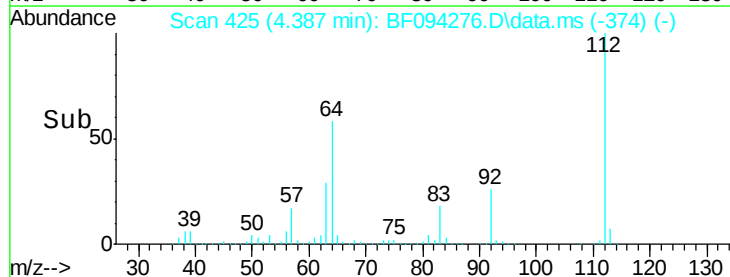
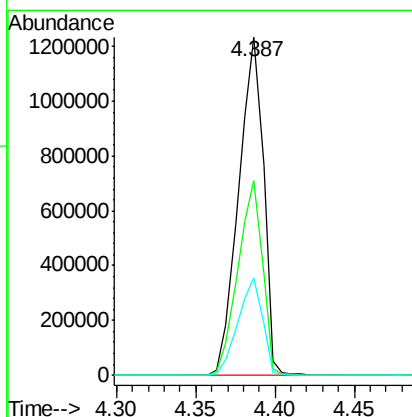
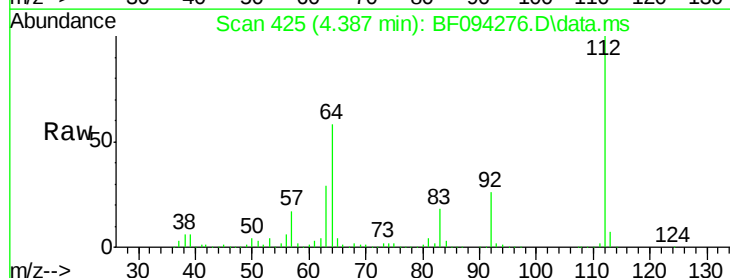
Tgt Ion:112 Resp: 1336180

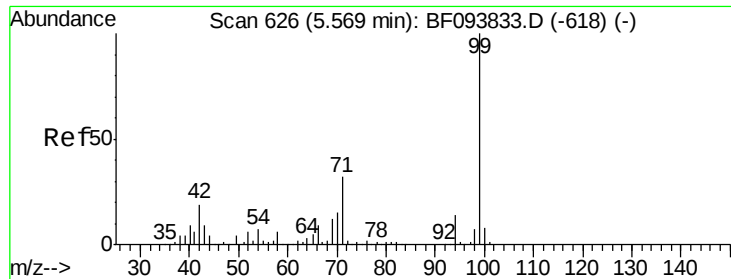
Ion Ratio Lower Upper

112 100

64 57.7 46.0 69.0

63 28.8 23.4 35.0





#7

Phenol-d6

Concen: 134.92 ng

RT: 5.463 min Scan# 60

Delta R.T. -0.000 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

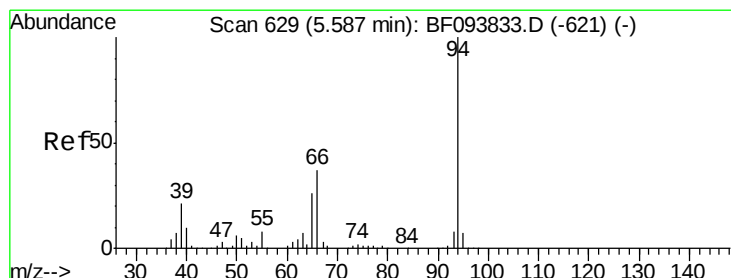
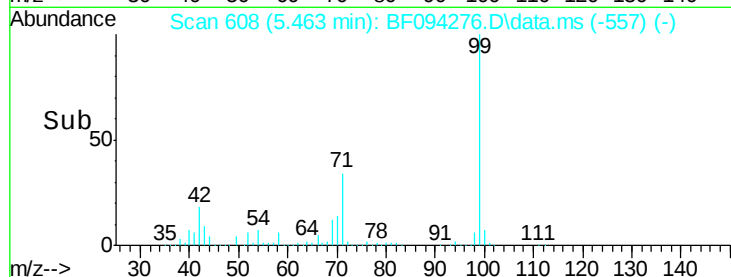
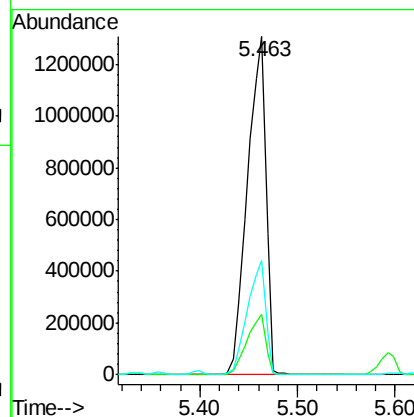
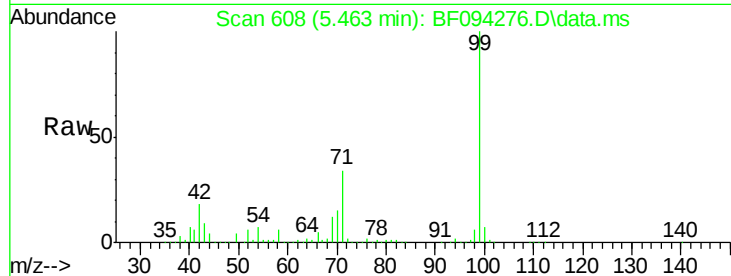
Tot Ion: 99 Resp: 1726062

Ion Ratio Lower Upper

99 100

42 17.7 13.5 20.3

71 33.9 24.5 36.7



#10

Phenol

Concen: 8.68 ng

RT: 5.475 min Scan# 610

Delta R.T. -0.006 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

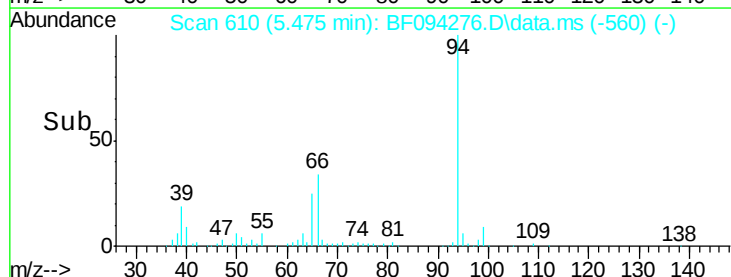
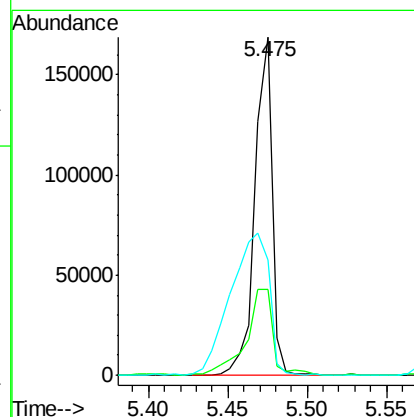
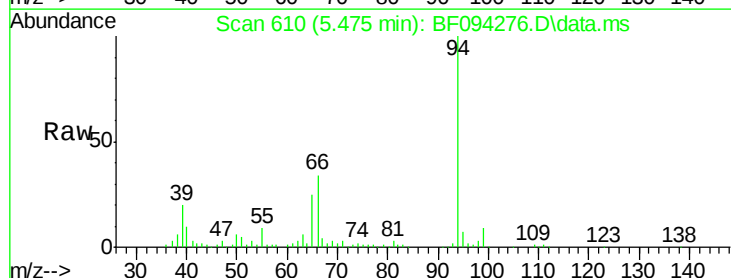
Tgt Ion: 94 Resp: 126431

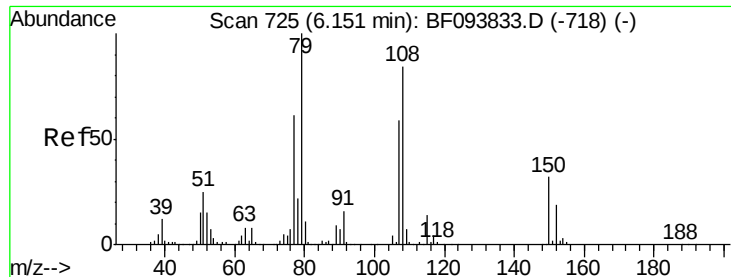
Ion Ratio Lower Upper

94 100

65 25.4 9.9 49.9

66 33.9 23.1 63.1





#15

Benzyl Alcohol

Concen: 2.09 ng

RT: 6.022 min Scan# 70

Delta R.T. -0.006 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

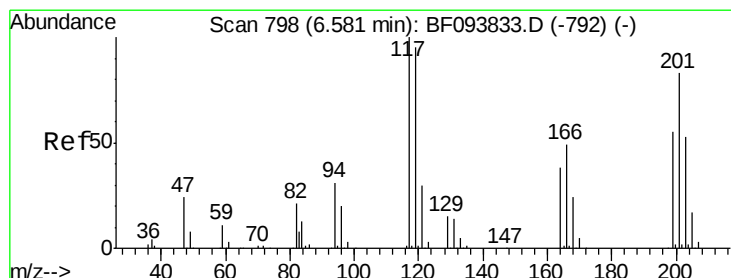
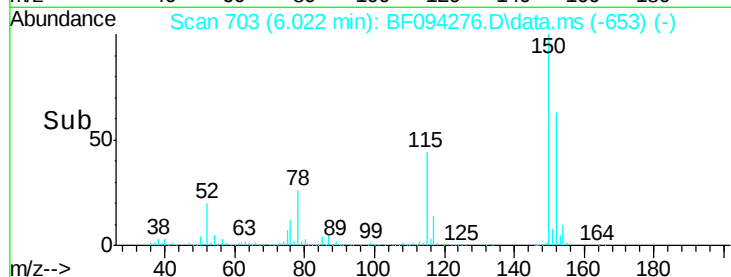
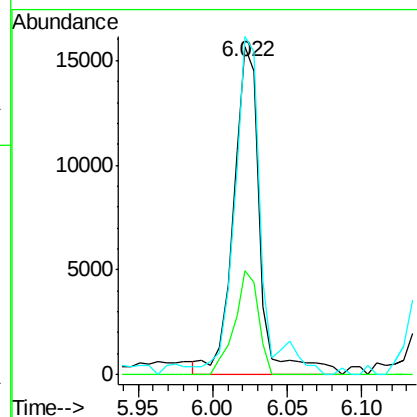
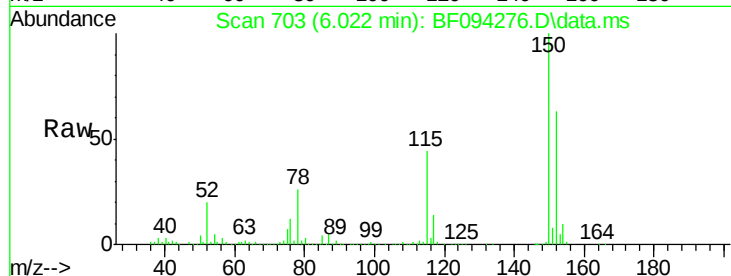
Tot Ion: 79 Resp: 19559

Ion Ratio Lower Upper

79 100

108 31.5 63.4 95.0#

77 103.2 49.2 73.8#



#18

Hexachloroethane

Concen: 3.18 ng

RT: 6.463 min Scan# 778

Delta R.T. 0.018 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

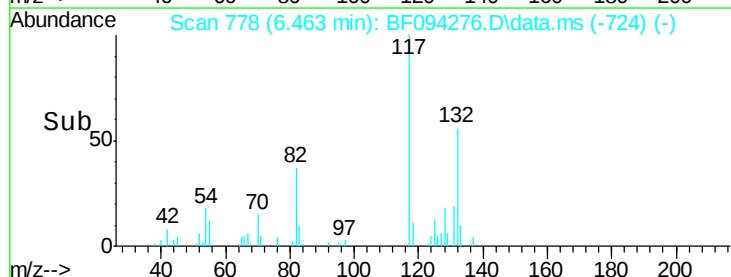
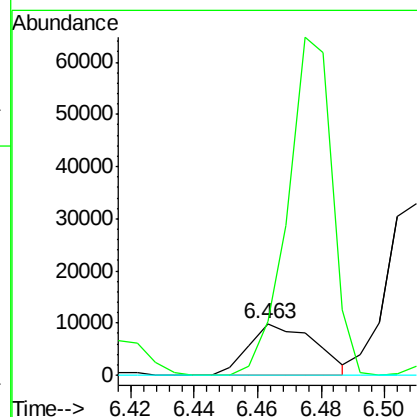
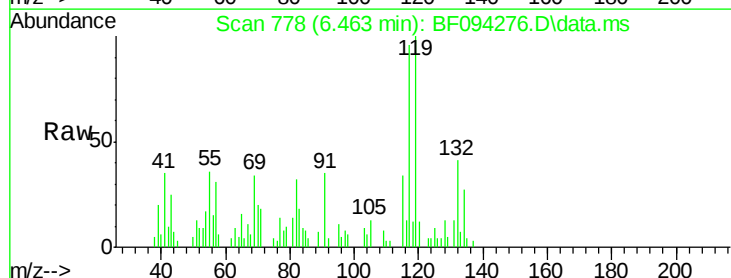
Tgt Ion: 117 Resp: 14449

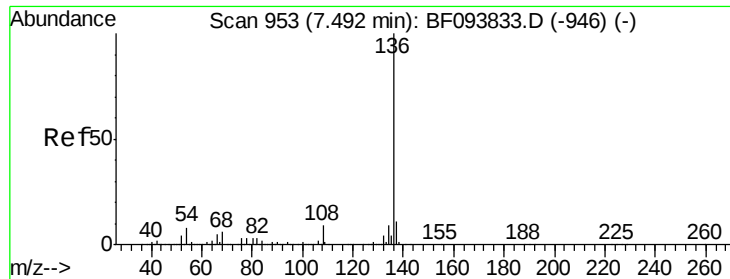
Ion Ratio Lower Upper

117 100

119 104.3 77.4 116.0

201 0.0 94.6 141.8#

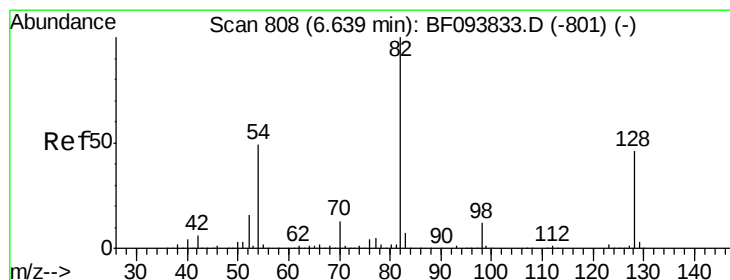
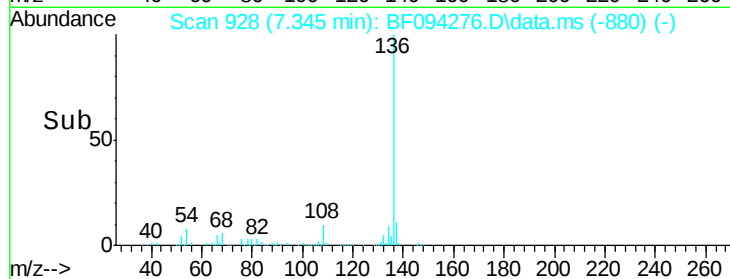
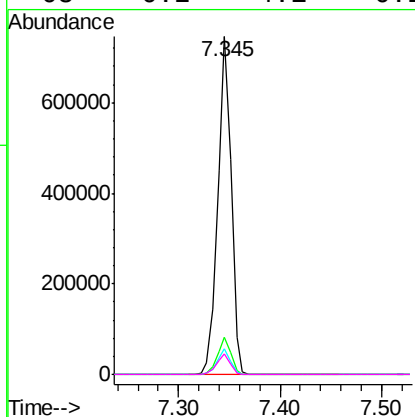
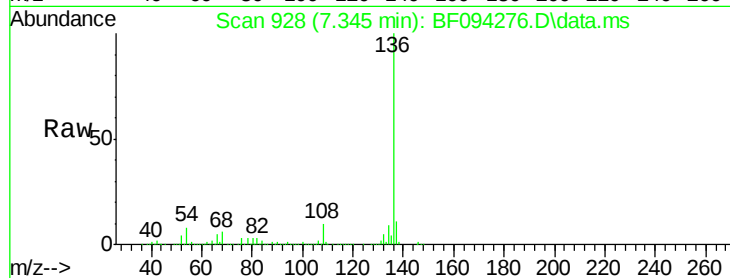




#21  
Naphthalene-d8  
Concen: 20.00 ng  
RT: 7.345 min Scan# 92  
Delta R.T. -0.018 min  
Lab File: BF094276.D  
Acq: 7 Apr 2017 16:41

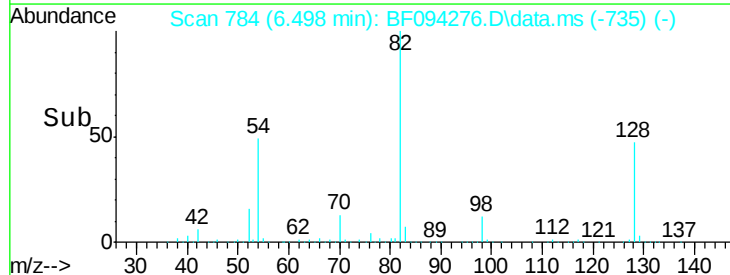
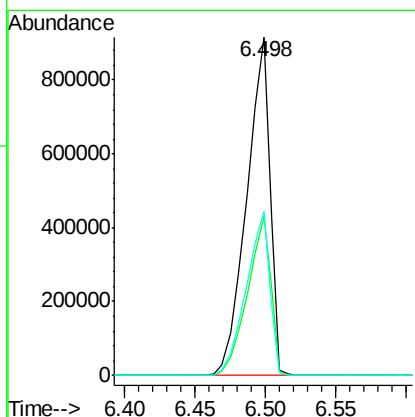
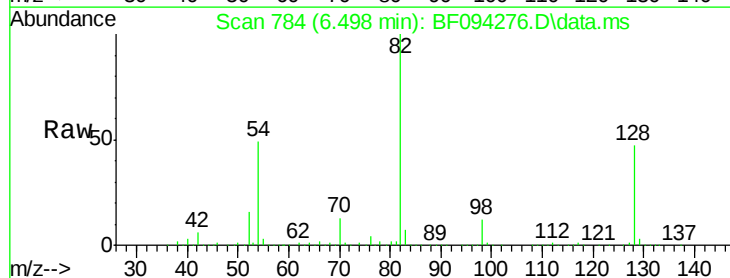
Instrument :  
BNA\_F  
ClientSampleId :  
TS-3

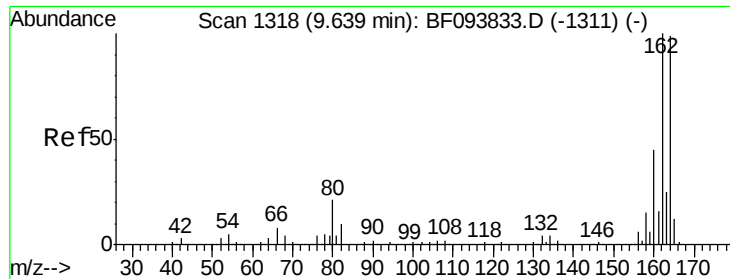
|             |       |          |
|-------------|-------|----------|
| Tot Ion:136 | Resp: | 685241   |
| Ion Ratio   | Lower | Upper    |
| 136         | 100   |          |
| 137         | 10.9  | 8.5 12.7 |
| 54          | 7.8   | 4.9 7.3# |
| 68          | 6.2   | 4.1 6.1# |



#23  
Nitrobenzene-d5  
Concen: 88.50 ng  
RT: 6.498 min Scan# 784  
Delta R.T. -0.012 min  
Lab File: BF094276.D  
Acq: 7 Apr 2017 16:41

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion: 82 | Resp: | 1062646   |
| Ion Ratio   | Lower | Upper     |
| 82          | 100   |           |
| 128         | 47.0  | 34.0 51.0 |
| 54          | 48.6  | 42.2 63.2 |





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.486 min Scan# 12

Delta R.T. -0.012 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

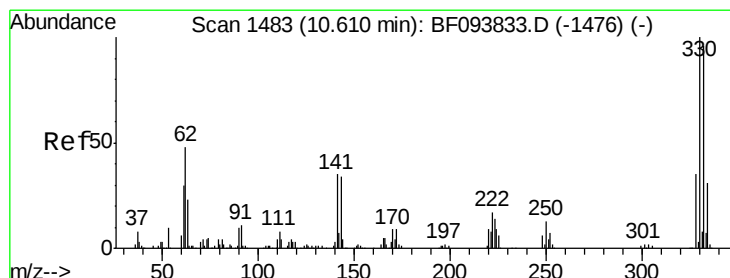
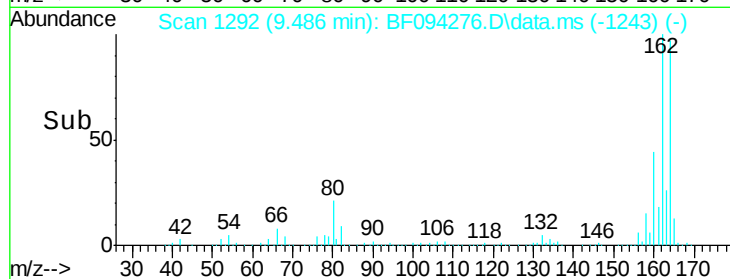
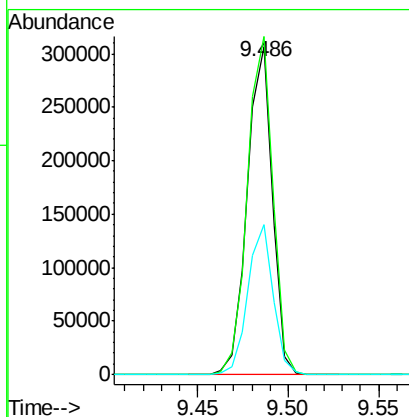
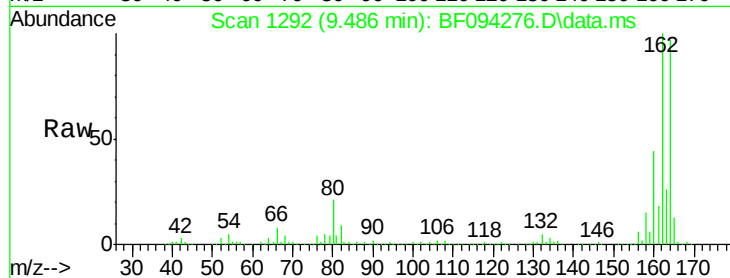
Tot Ion:164 Resp: 294698

Ion Ratio Lower Upper

164 100

162 103.0 82.6 123.8

160 45.5 36.2 54.2



#41

2,4,6-Tribromophenol

Concen: 135.30 ng

RT: 10.463 min Scan# 1458

Delta R.T. -0.012 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

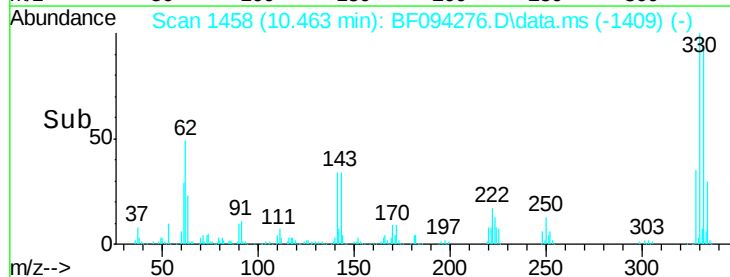
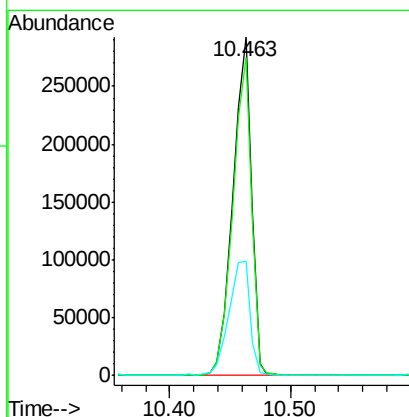
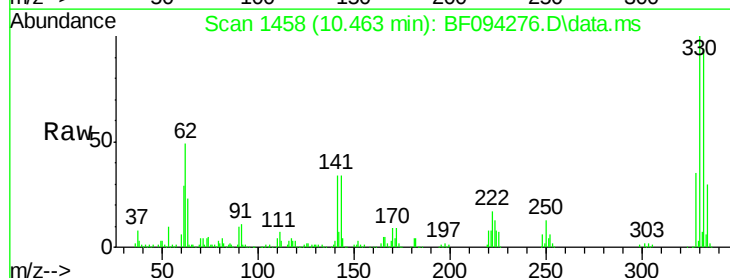
Tgt Ion:330 Resp: 315077

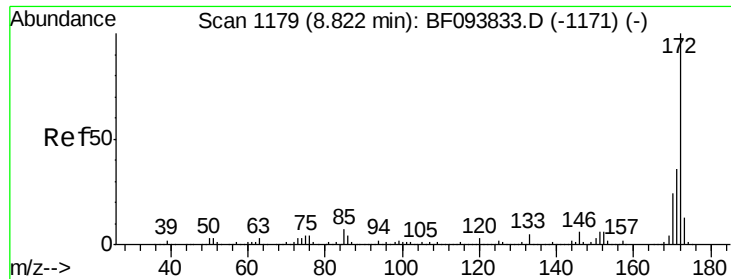
Ion Ratio Lower Upper

330 100

332 94.5 76.6 115.0

141 38.6 31.4 47.2

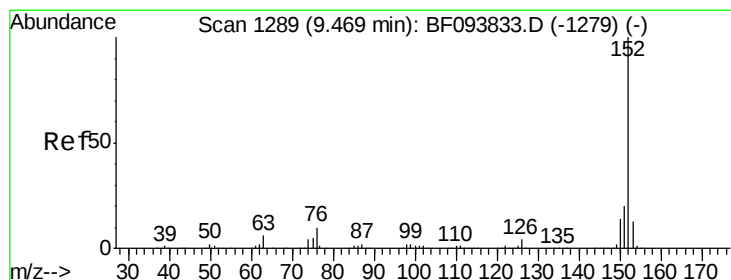
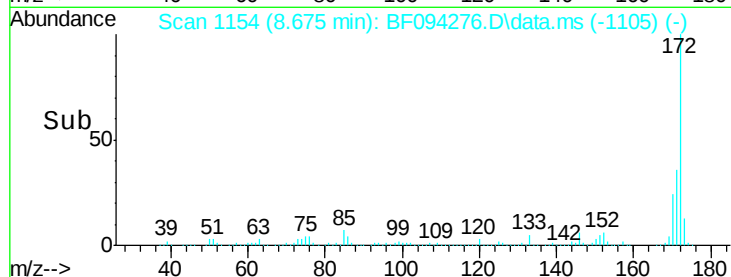
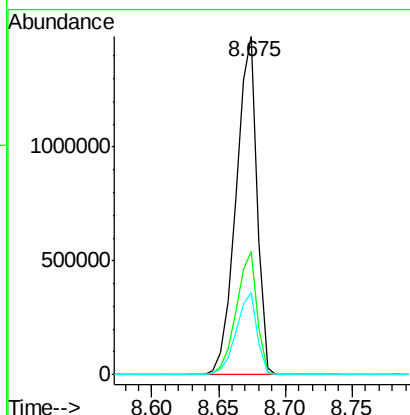
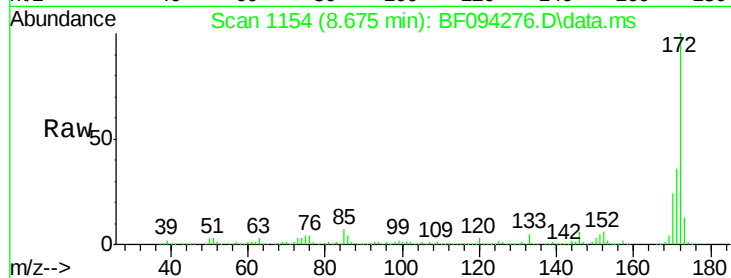




#44  
2-Fluorobiphenyl  
Concen: 84.00 ng  
RT: 8.675 min Scan# 1179  
Delta R.T. -0.012 min  
Lab File: BF094276.D  
Acq: 7 Apr 2017 16:41

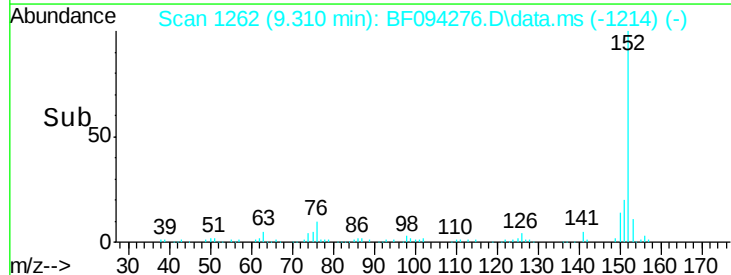
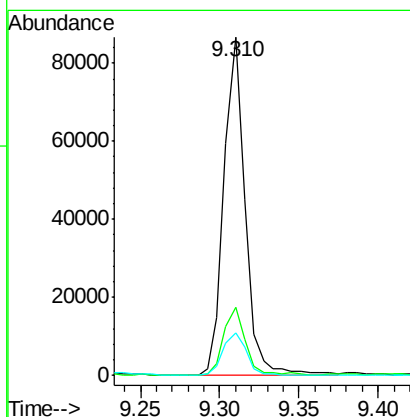
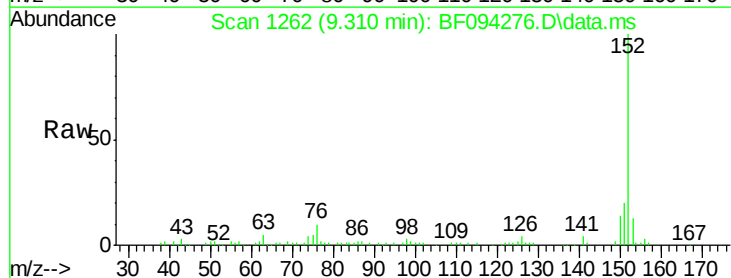
Instrument :  
BNA\_F  
ClientSampleId :  
TS-3

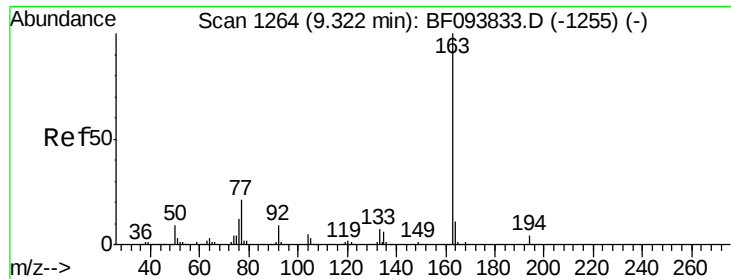
Tot Ion:172 Resp: 1622989  
Ion Ratio Lower Upper  
172 100  
171 36.3 29.6 44.4  
170 24.4 19.8 29.8



#48  
Acenaphthylene  
Concen: 2.62 ng  
RT: 9.310 min Scan# 1262  
Delta R.T. -0.018 min  
Lab File: BF094276.D  
Acq: 7 Apr 2017 16:41

Tgt Ion:152 Resp: 80998  
Ion Ratio Lower Upper  
152 100  
151 20.0 16.8 25.2  
153 12.7 10.8 16.2





#49

Dimethylphthalate

Concen: 9.71 ng

RT: 9.169 min Scan# 12

Delta R.T. -0.024 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

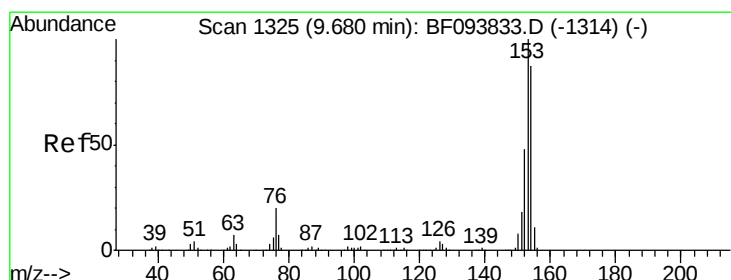
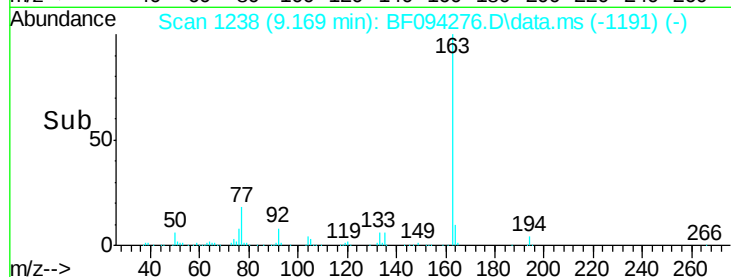
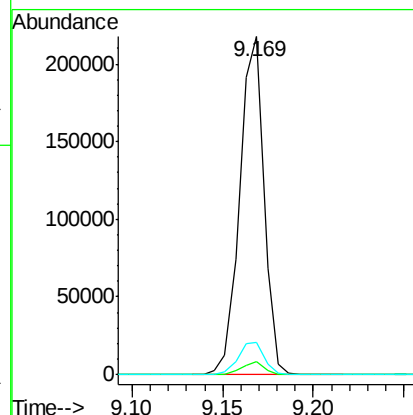
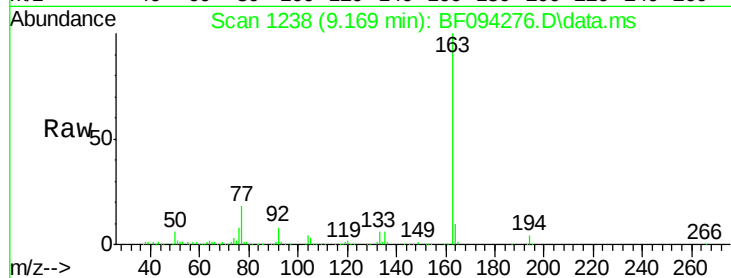
Tot Ion:163 Resp: 203457

Ion Ratio Lower Upper

163 100

194 3.8 2.6 4.0

164 9.6 8.4 12.6



#51

Acenaphthene

Concen: 2.69 ng

RT: 9.522 min Scan# 1298

Delta R.T. -0.024 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

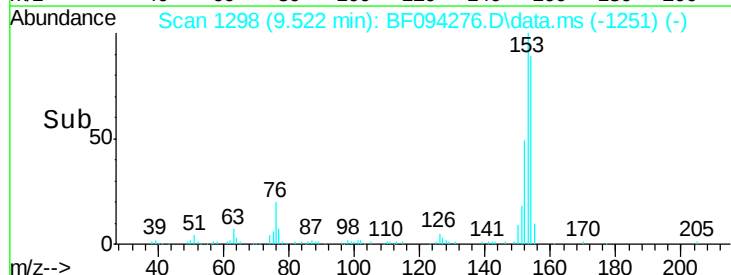
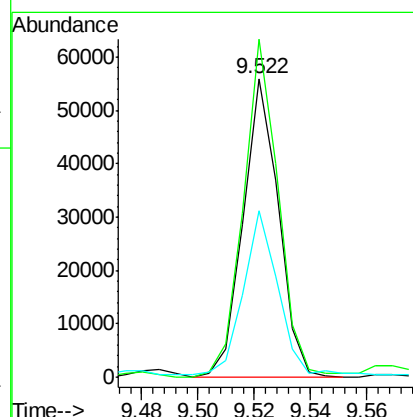
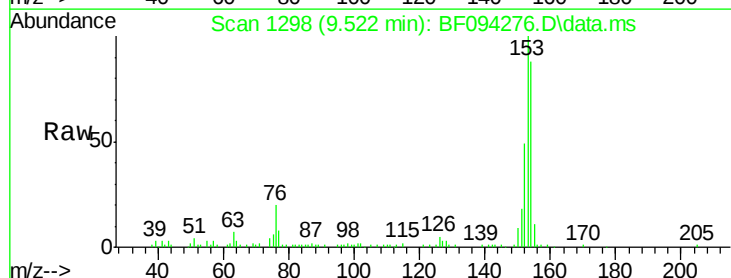
Tgt Ion:154 Resp: 48602

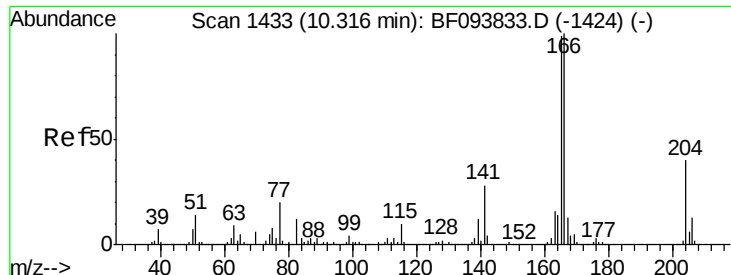
Ion Ratio Lower Upper

154 100

153 113.2 90.5 135.7

152 55.6 43.6 65.4





#57

Fluorene

Concen: 3.10 ng

RT: 10.157 min Scan# 14

Delta R.T. -0.018 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

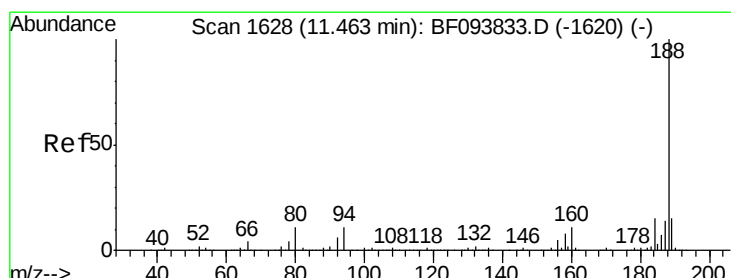
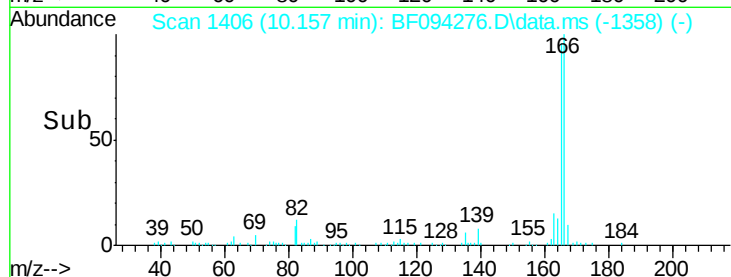
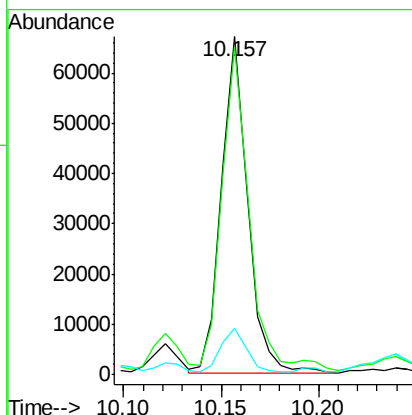
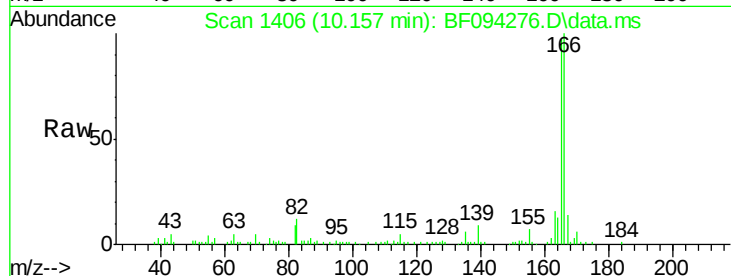
Tot Ion:166 Resp: 63092

Ion Ratio Lower Upper

166 100

165 97.0 78.8 118.2

167 13.7 10.6 16.0



#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.310 min Scan# 1602

Delta R.T. -0.012 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

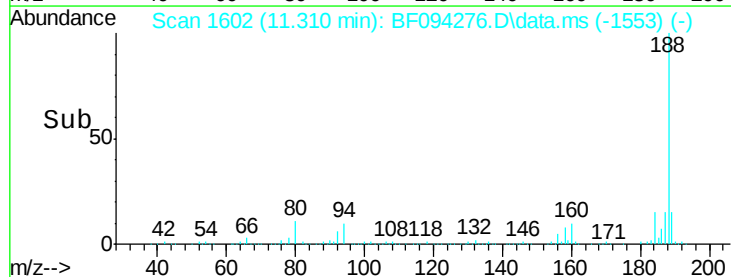
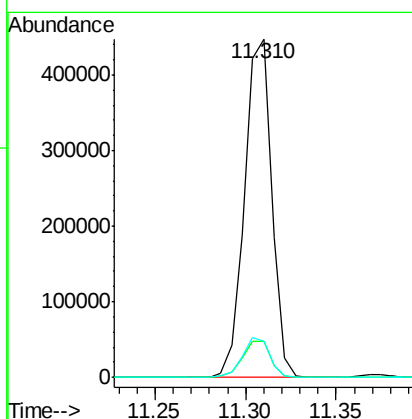
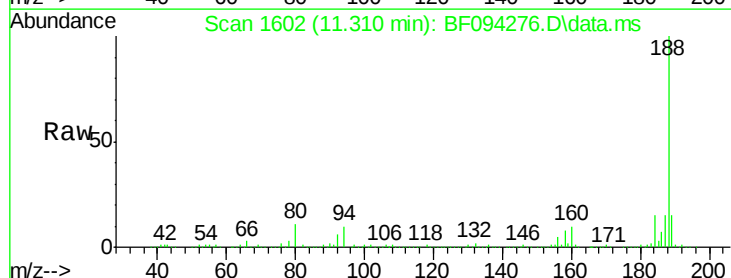
Tgt Ion:188 Resp: 466087

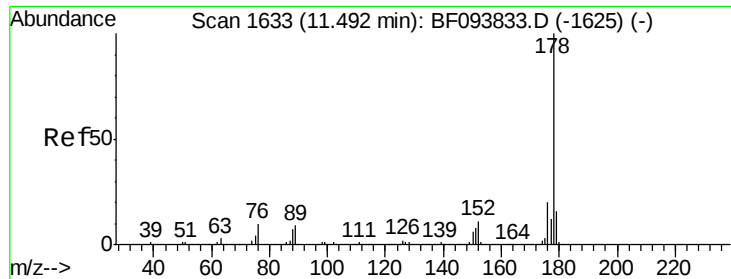
Ion Ratio Lower Upper

188 100

94 10.5 9.4 14.2

80 10.8 10.2 15.2





#70

Phenanthrene

Concen: 19.88 ng

RT: 11.339 min Scan# 16

Delta R.T. -0.012 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

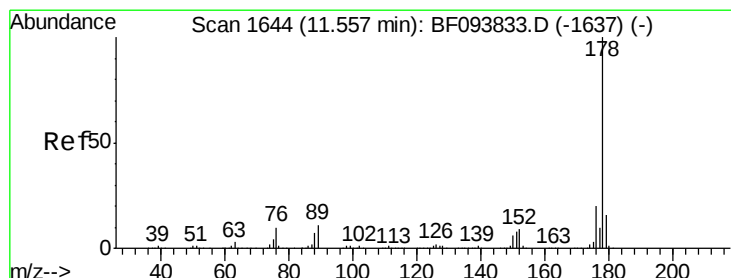
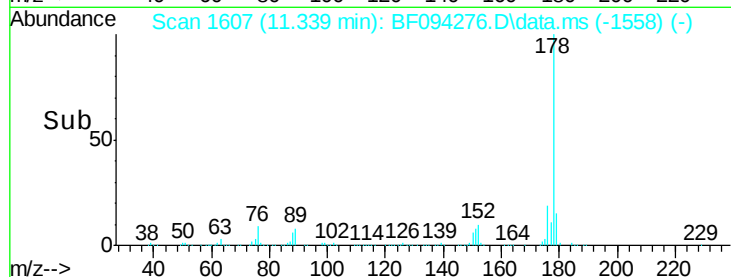
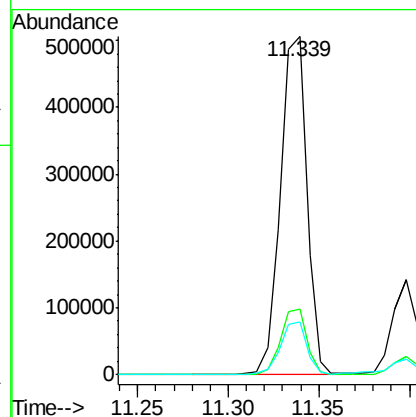
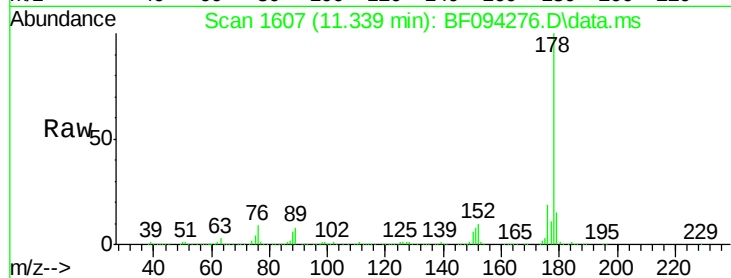
Tot Ion:178 Resp: 515550

Ion Ratio Lower Upper

178 100

176 19.4 16.2 24.4

179 15.4 12.6 19.0



#71

Anthracene

Concen: 4.79 ng

RT: 11.398 min Scan# 1617

Delta R.T. -0.018 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

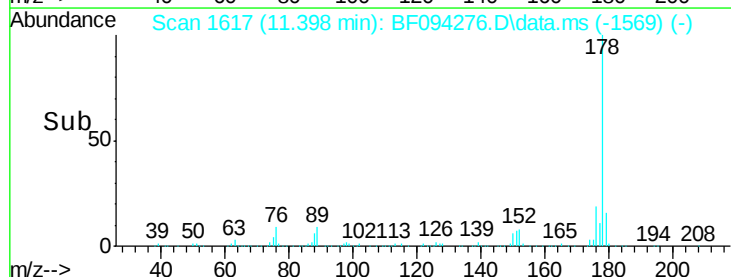
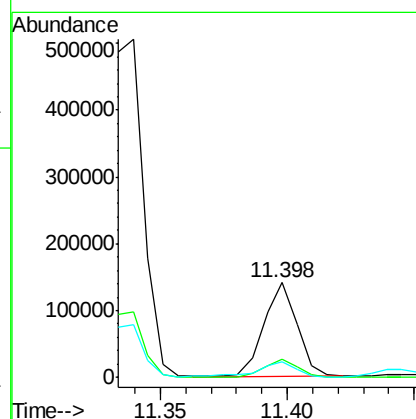
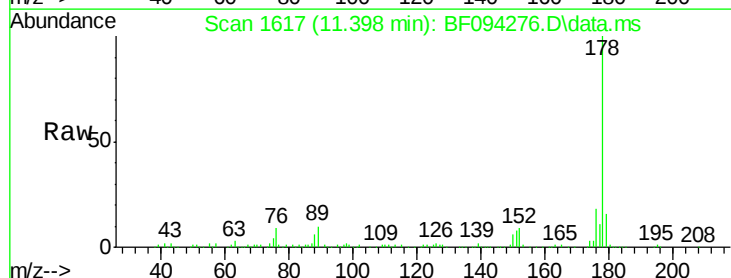
Tgt Ion:178 Resp: 128001

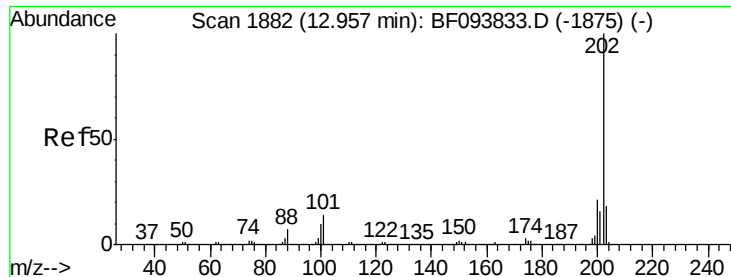
Ion Ratio Lower Upper

178 100

176 18.5 15.8 23.8

179 15.9 12.7 19.1





#74

Fluoranthene

Concen: 28.62 ng

RT: 12.804 min Scan# 18

Delta R.T. -0.012 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

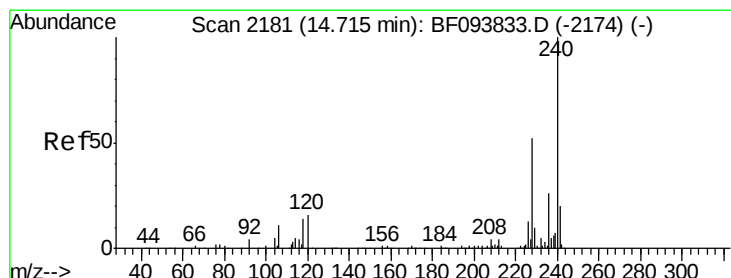
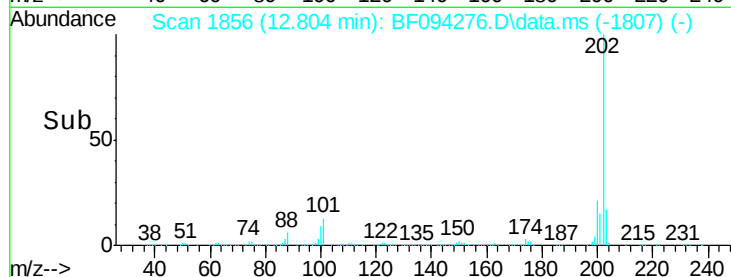
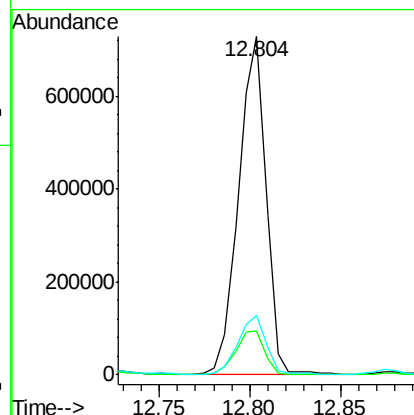
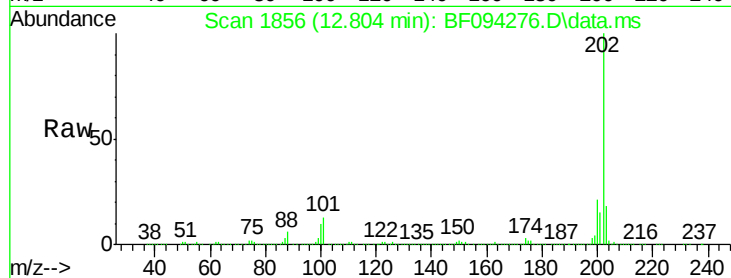
Tot Ion:202 Resp: 759777

Ion Ratio Lower Upper

202 100

101 13.1 0.0 33.2

203 17.6 0.0 38.1



#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.563 min Scan# 2155

Delta R.T. -0.012 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

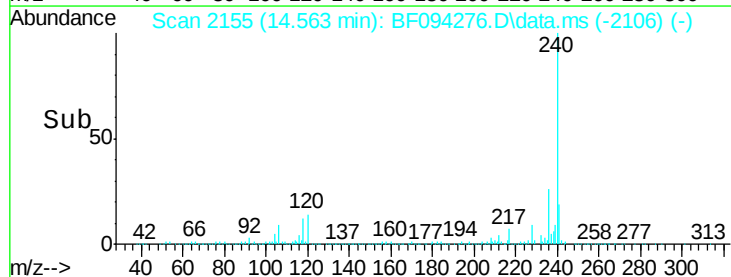
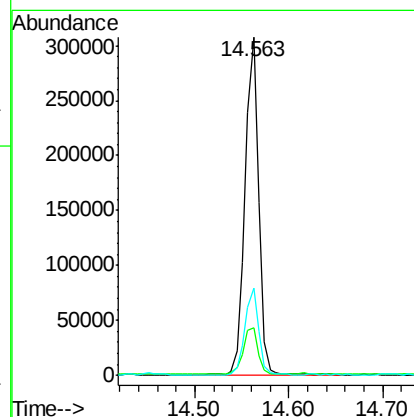
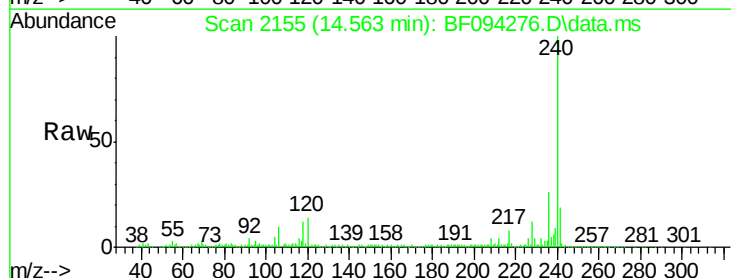
Tgt Ion:240 Resp: 313122

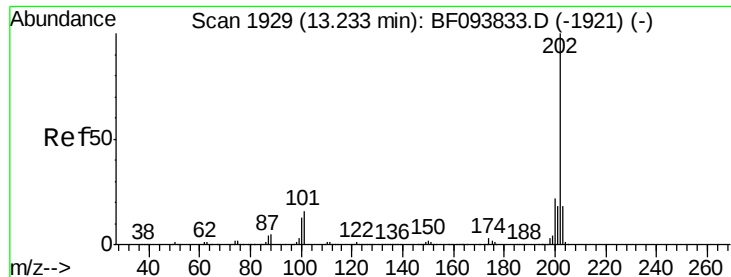
Ion Ratio Lower Upper

240 100

120 13.9 5.8 8.8#

236 25.8 20.5 30.7

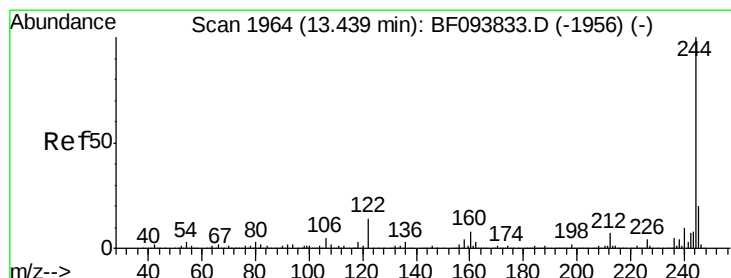
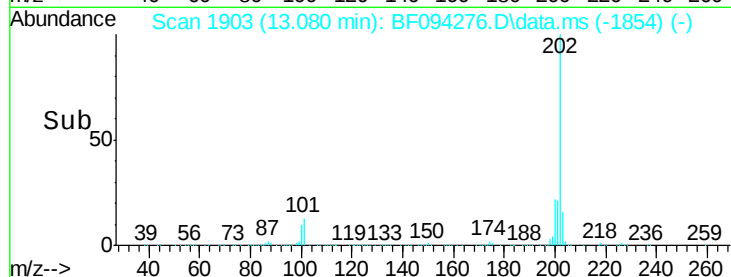
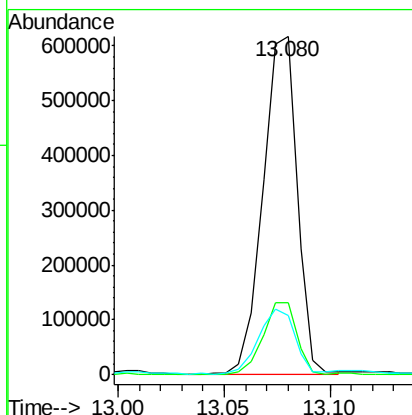
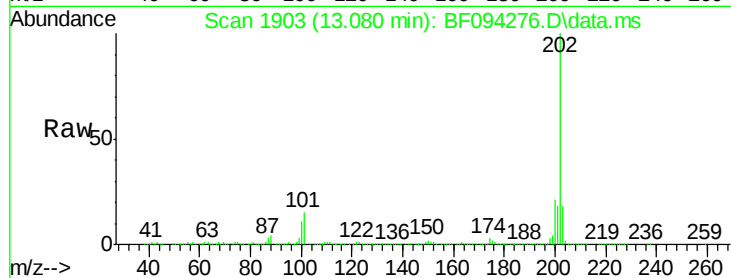




#77  
Pvrene  
Concen: 30.53 ng  
RT: 13.080 min Scan# 19  
Delta R.T. -0.012 min  
Lab File: BF094276.D  
Acq: 7 Apr 2017 16:41

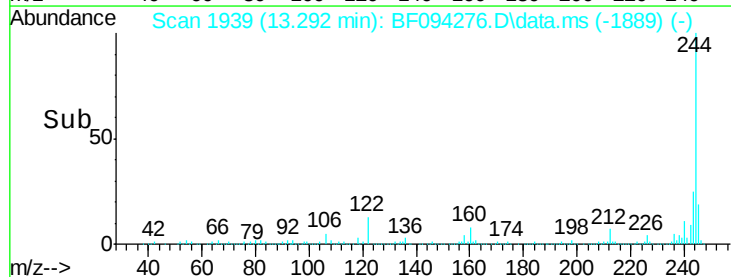
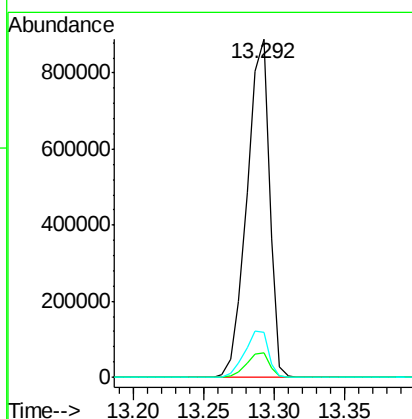
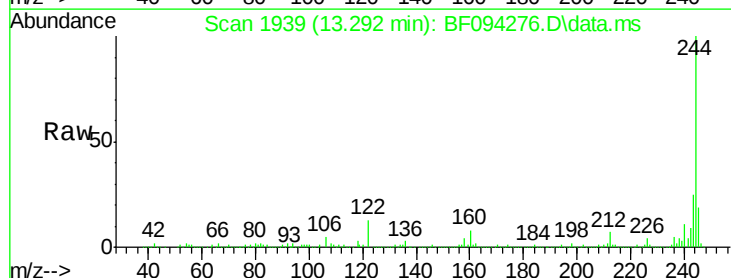
Instrument :  
BNA\_F  
ClientSampleId :  
TS-3

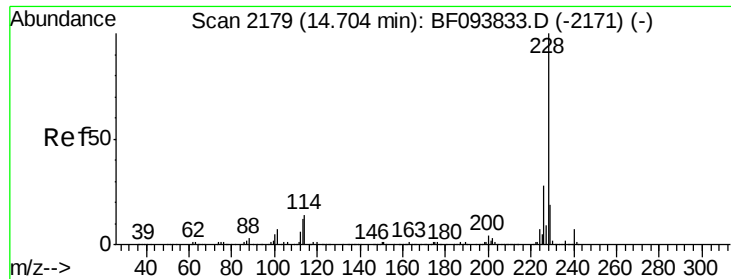
Tot Ion:202 Resp: 693812  
Ion Ratio Lower Upper  
202 100  
200 21.4 17.6 26.4  
203 17.5 14.4 21.6



#78  
Terphenyl-d14  
Concen: 71.53 ng  
RT: 13.292 min Scan# 1939  
Delta R.T. -0.006 min  
Lab File: BF094276.D  
Acq: 7 Apr 2017 16:41

Tgt Ion:244 Resp: 999250  
Ion Ratio Lower Upper  
244 100  
212 7.2 6.0 9.0  
122 13.2 10.3 15.5

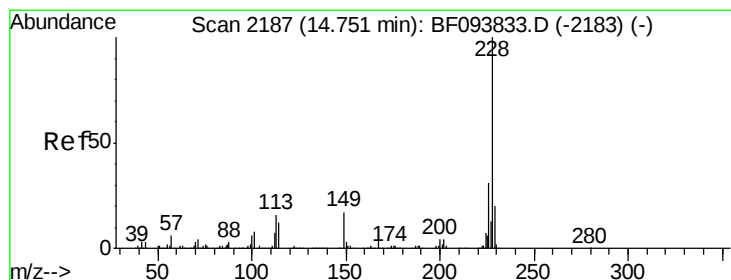
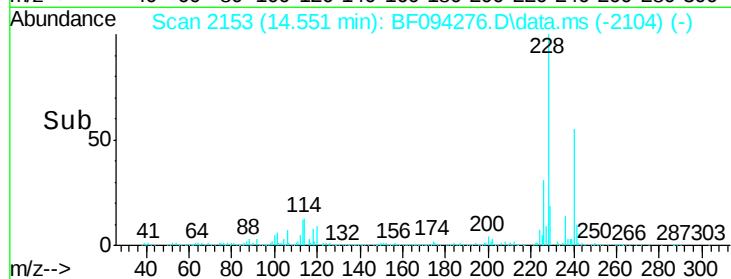
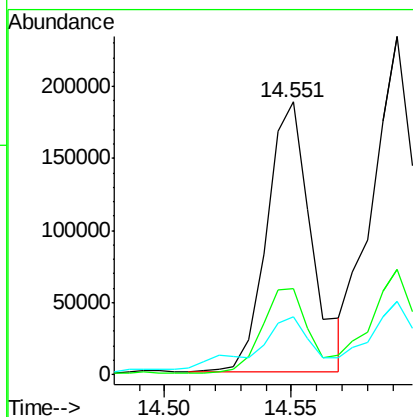
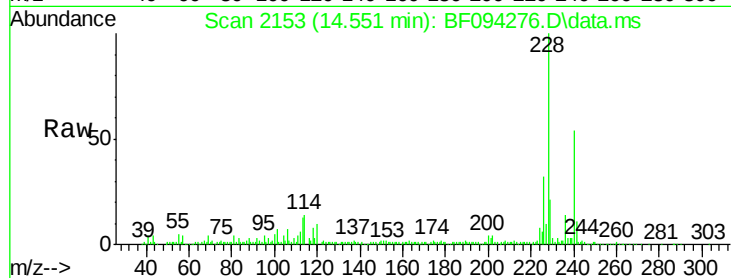




#80  
Benzo(a)anthracene  
Concen: 12.65 ng  
RT: 14.551 min Scan# 2179  
Delta R.T. -0.012 min  
Lab File: BF094276.D  
Acq: 7 Apr 2017 16:41

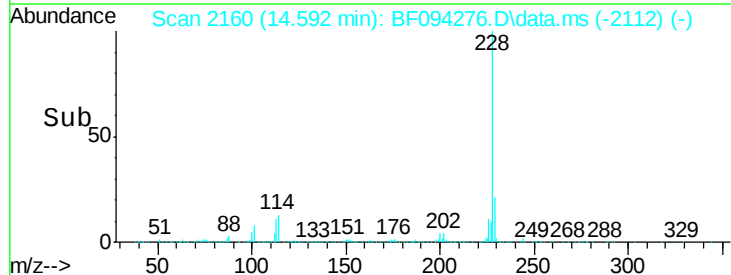
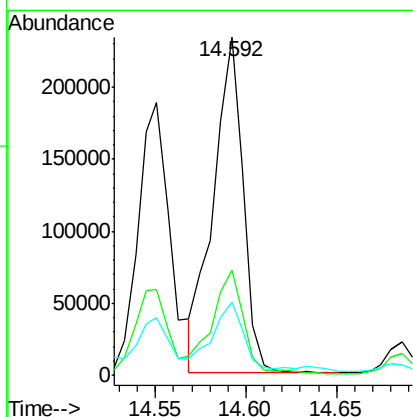
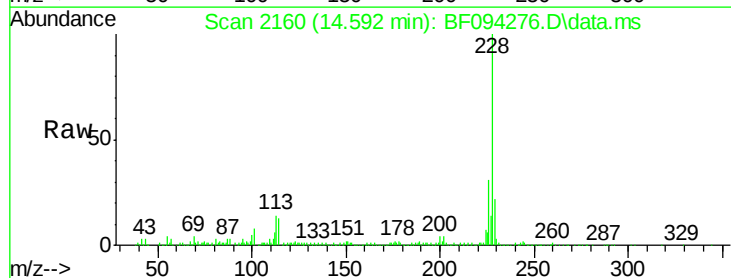
Instrument :  
BNA\_F  
ClientSampleId :  
TS-3

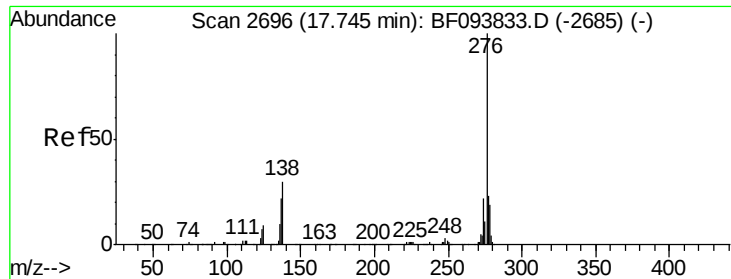
|             |       |           |
|-------------|-------|-----------|
| Tot Ion:228 | Resp: | 231006    |
| Ion Ratio   | Lower | Upper     |
| 228         | 100   |           |
| 226         | 31.6  | 22.6 33.8 |
| 229         | 21.3  | 16.3 24.5 |



#82  
Chrysene  
Concen: 15.75 ng  
RT: 14.592 min Scan# 2160  
Delta R.T. -0.018 min  
Lab File: BF094276.D  
Acq: 7 Apr 2017 16:41

|             |       |           |
|-------------|-------|-----------|
| Tgt Ion:228 | Resp: | 266818    |
| Ion Ratio   | Lower | Upper     |
| 228         | 100   |           |
| 226         | 30.9  | 24.9 37.3 |
| 229         | 21.8  | 15.8 23.6 |





#85

Indeno(1,2,3-cd)pyrene

Concen: 8.58 ng

RT: 17.509 min Scan# 26

Delta R.T. -0.012 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

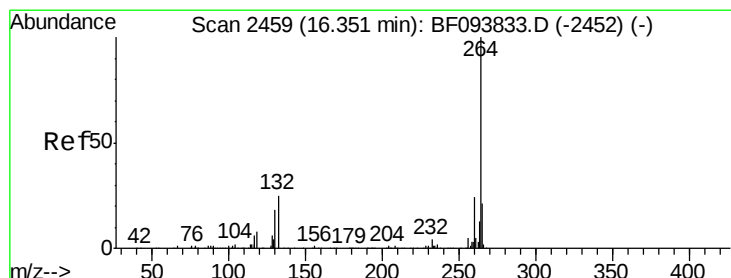
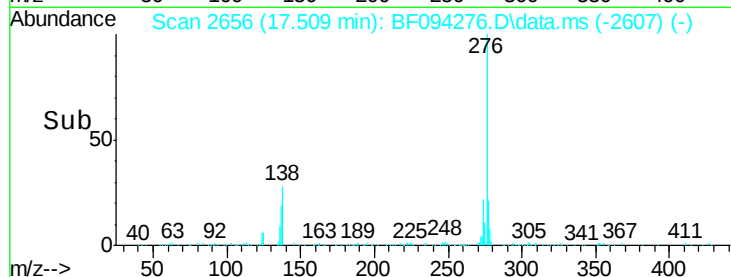
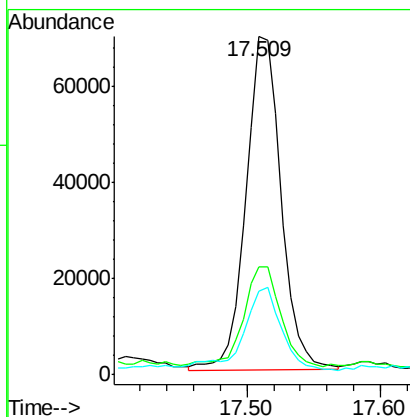
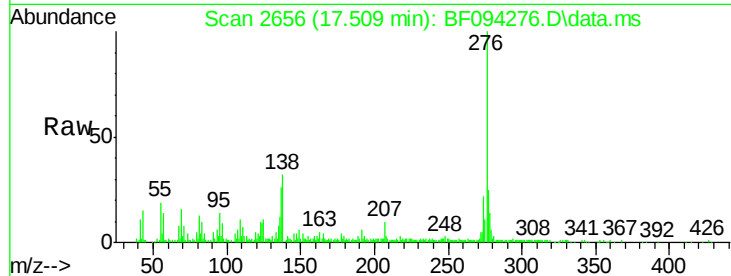
Tot Ion:276 Resp: 125904

Ion Ratio Lower Upper

276 100

138 31.8 27.8 41.6

277 27.4 20.2 30.4



#86

Perylene-d12

Concen: 20.00 ng

RT: 16.192 min Scan# 2432

Delta R.T. -0.000 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

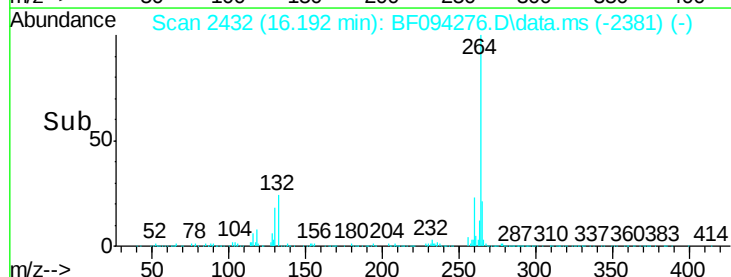
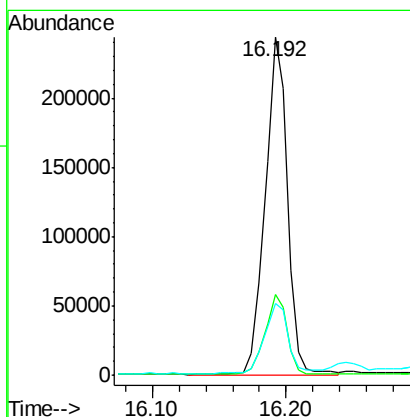
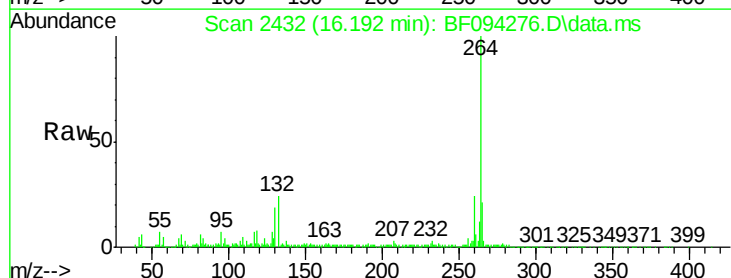
Tgt Ion:264 Resp: 280128

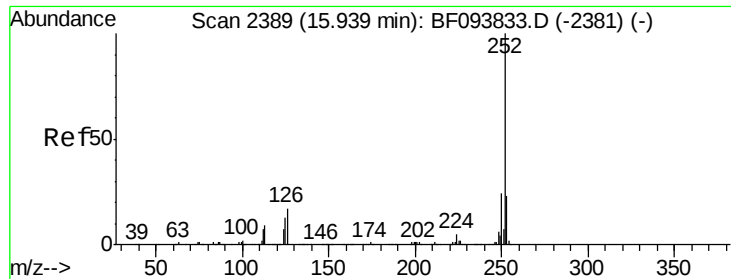
Ion Ratio Lower Upper

264 100

260 23.8 19.5 29.3

265 21.4 17.2 25.8





#87

Benzo(b)fluoranthene

Concen: 23.57 ng

RT: 15.786 min Scan# 2363

Delta R.T. -0.006 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

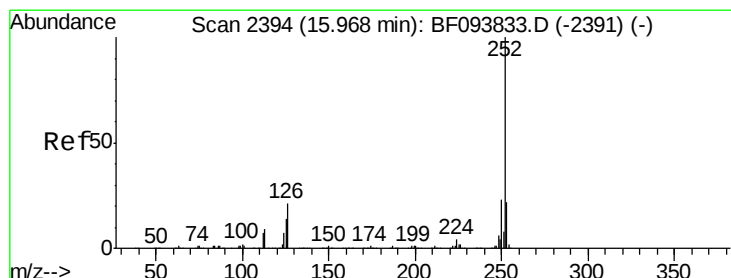
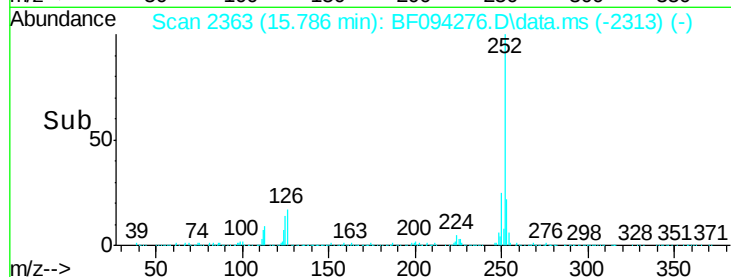
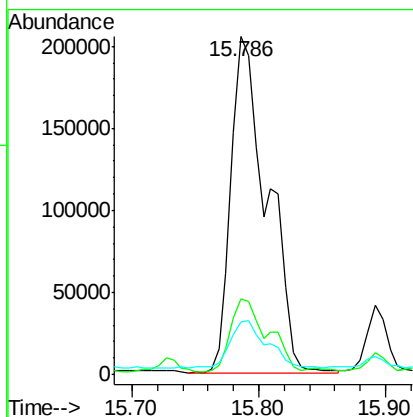
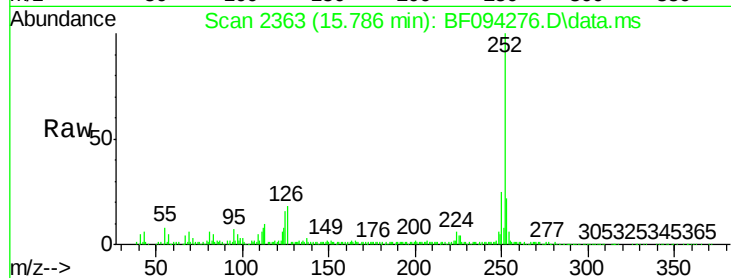
Tot Ion:252 Resp: 404754

Ion Ratio Lower Upper

252 100

253 22.4 18.1 27.1

125 15.6 9.8 14.8#



#88

Benzo(k)fluoranthene

Concen: 24.09 ng

RT: 15.786 min Scan# 2363

Delta R.T. -0.041 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

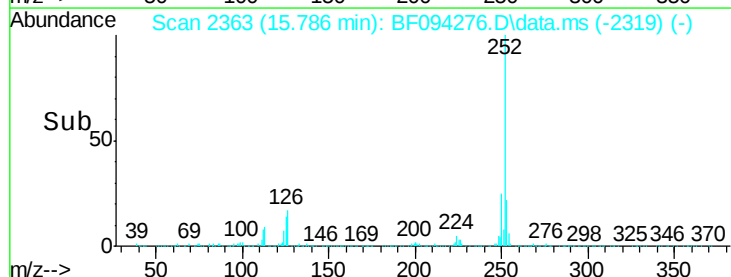
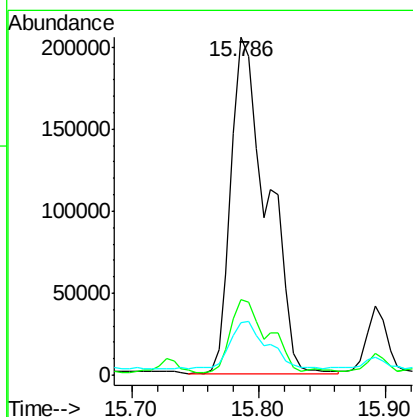
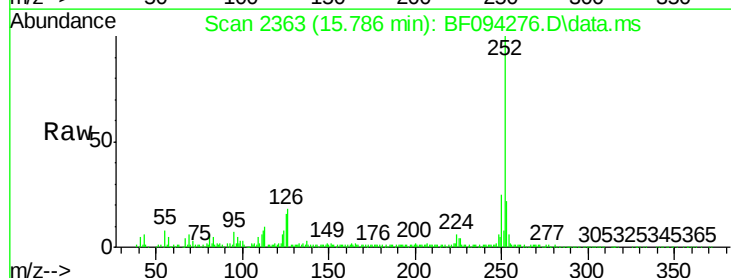
Tgt Ion:252 Resp: 404754

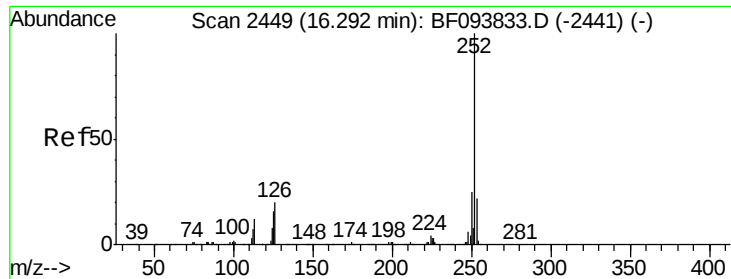
Ion Ratio Lower Upper

252 100

253 22.4 18.4 27.6

125 15.6 13.1 19.7





#89

Benzo(a)pyrene

Concen: 13.15 ng

RT: 16.133 min Scan# 24

Delta R.T. -0.006 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

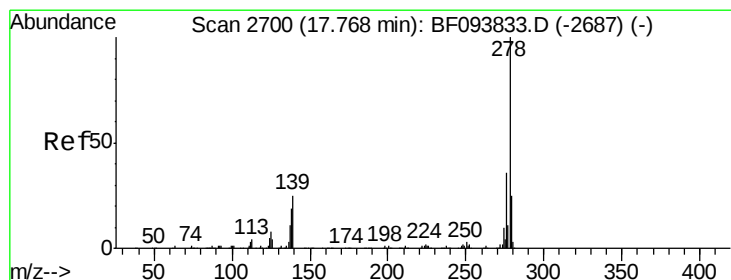
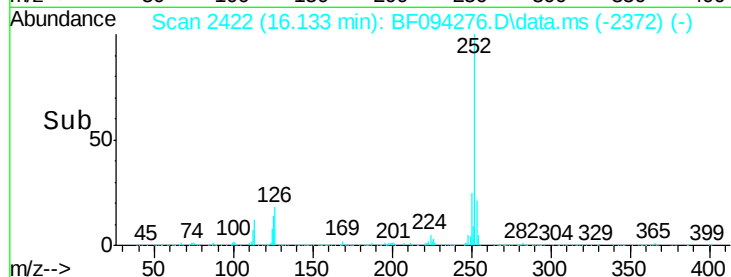
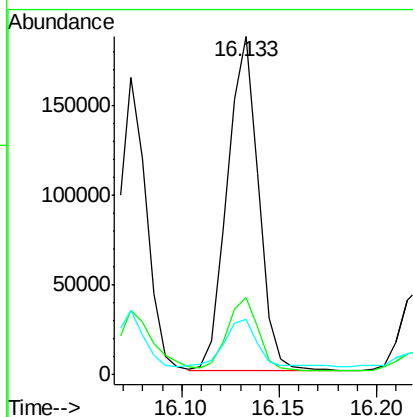
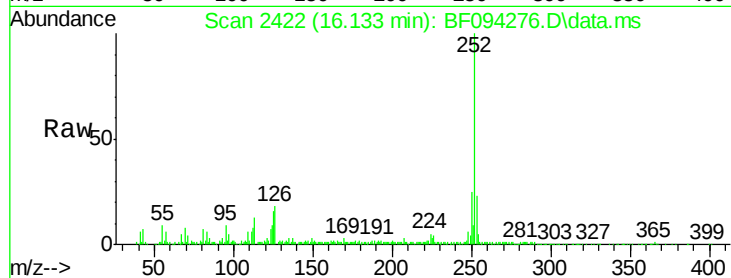
Tot Ion:252 Resp: 207924

Ion Ratio Lower Upper

252 100

253 22.6 17.5 26.3

125 16.2 11.0 16.4



#90

Dibenzo(a,h)anthracene

Concen: 2.39 ng

RT: 17.521 min Scan# 2658

Delta R.T. -0.018 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

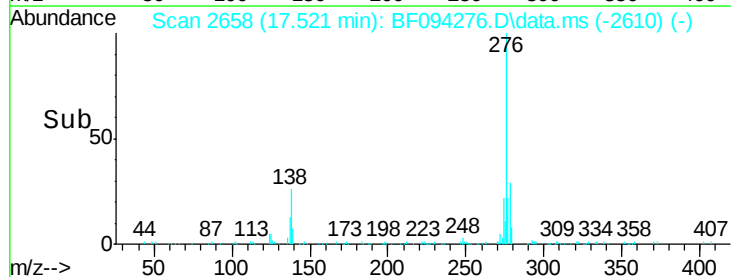
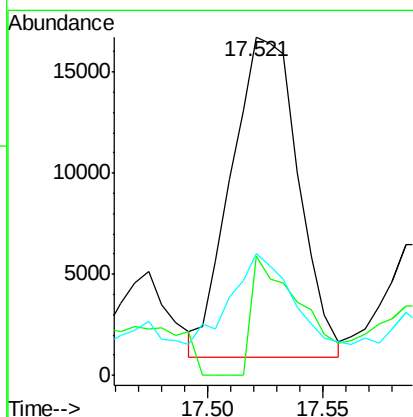
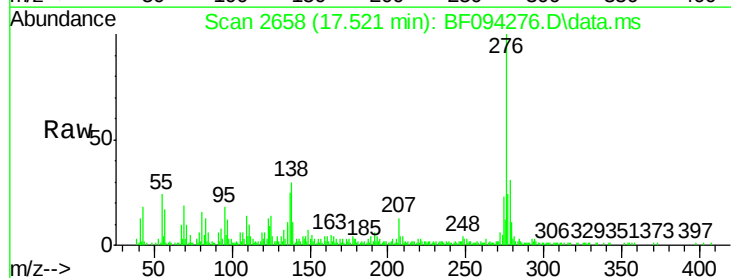
Tgt Ion:278 Resp: 31942

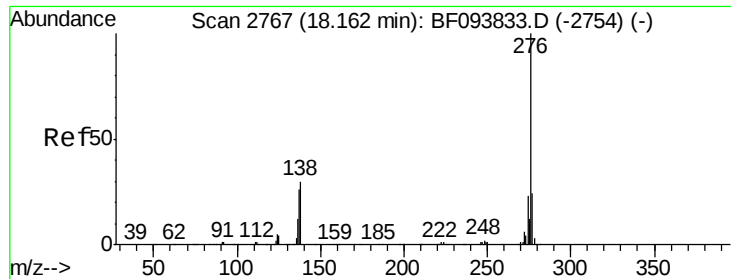
Ion Ratio Lower Upper

278 100

139 35.3 16.6 24.8#

279 36.0 19.3 28.9#





#91

Benzo(a,h,i)perylene

Concen: 9.26 ng

RT: 17.903 min Scan# 27

Delta R.T. -0.006 min

Lab File: BF094276.D

Acq: 7 Apr 2017 16:41

Instrument :

BNA\_F

ClientSampleId :

TS-3

Tot Ion: 276 Resp: 124928

Ion Ratio Lower Upper

276 100

277 23.1 18.6 28.0

138 28.4 25.4 38.0

