

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE010715\  
 Data File : BE089350.D  
 Acq On : 8 Jan 2015 6:23  
 Operator : TP/IZ  
 Sample : SSTDCCC001  
 Misc : LOQ-WATER-1.0PPM-SIM  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 LabSampleId :  
 SSTDCCC001

Quant Time: Jan 08 06:59:00 2015  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-PAH-BASE-BE010715.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 08 06:03:23 2015  
 Response via : Initial Calibration

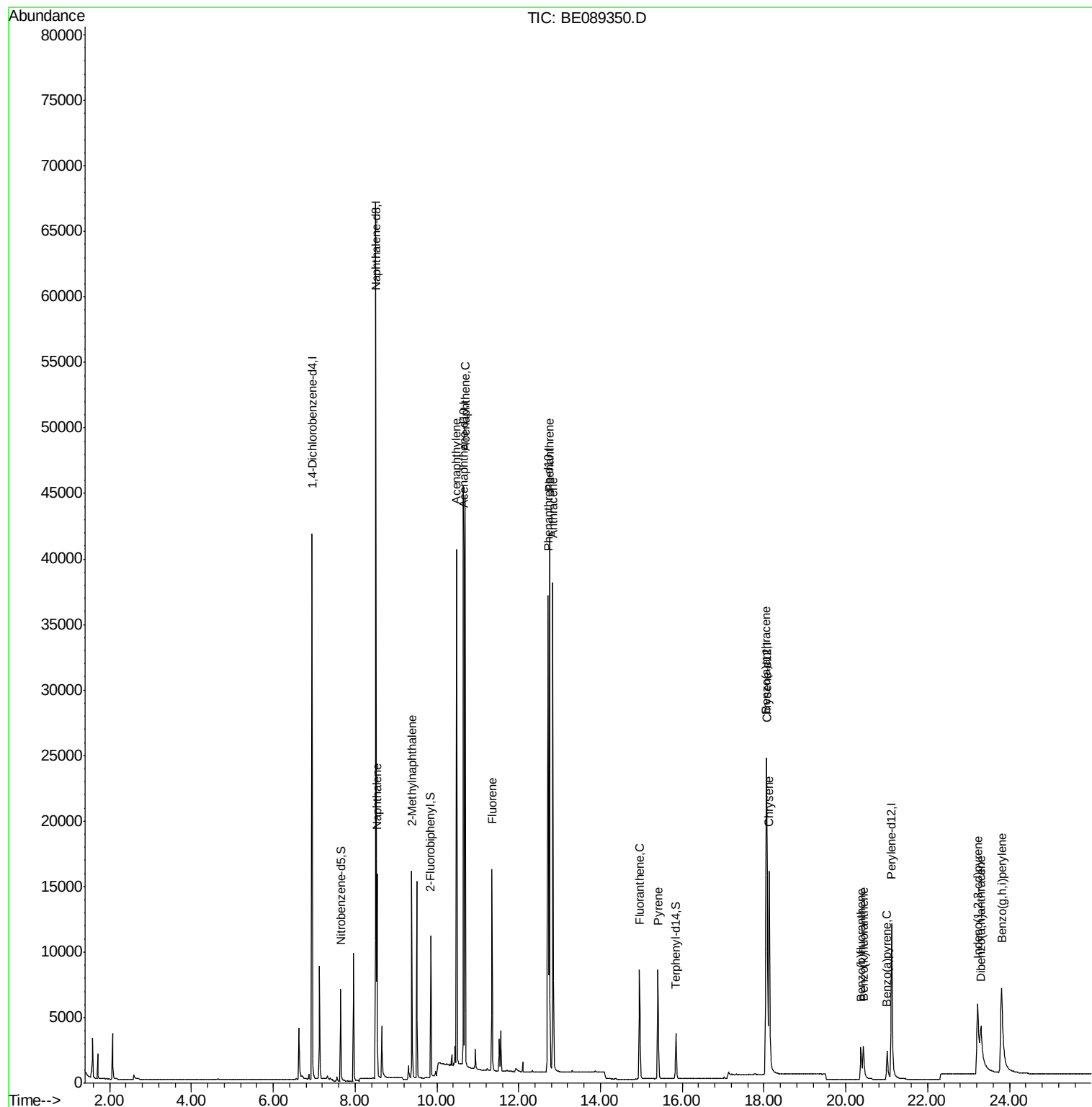
| Internal Standards          | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 6.95  | 152  | 12370    | 5.00 | ng    | 0.00     |
| 2) Naphthalene-d8           | 8.51  | 136  | 48428    | 5.00 | ng    | 0.00     |
| 6) Acenaphthene-d10         | 10.66 | 164  | 23043    | 5.00 | ng    | 0.01     |
| 11) Phenanthrene-d10        | 12.72 | 188  | 37139    | 5.00 | ng    | 0.00     |
| 15) Chrysene-d12            | 18.07 | 240  | 22002    | 5.00 | ng    | 0.00     |
| 21) Perylene-d12            | 21.12 | 264  | 18875    | 5.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |      |       |          |
| 3) Nitrobenzene-d5          | 7.65  | 82   | 3377     | 1.00 | ng    | 0.00     |
| 7) 2-Fluorobiphenyl         | 9.85  | 172  | 6459     | 1.03 | ng    | 0.00     |
| 17) Terphenyl-d14           | 15.85 | 244  | 4764     | 1.22 | ng    | 0.00     |
| Target Compounds            |       |      |          |      |       | Qvalue   |
| 4) Naphthalene              | 8.54  | 128  | 11264    | 1.03 | ng    | 99       |
| 5) 2-Methylnaphthalene      | 9.39  | 142  | 7144     | 1.05 | ng    | 99       |
| 8) Acenaphthylene           | 10.47 | 152  | 41315    | 1.05 | ng    | 99       |
| 9) Acenaphthene             | 10.69 | 154  | 6364     | 1.04 | ng    | 98       |
| 10) Fluorene                | 11.34 | 166  | 6949     | 1.06 | ng    | 100      |
| 12) Phenanthrene            | 12.75 | 178  | 39436    | 1.02 | ng    | 99       |
| 13) Anthracene              | 12.84 | 178  | 37770    | 1.01 | ng    | 99       |
| 14) Fluoranthene            | 14.96 | 202  | 8568     | 1.00 | ng    | 99       |
| 16) Pyrene                  | 15.41 | 202  | 8874     | 1.23 | ng    | 99       |
| 18) Benzo(a)anthracene      | 18.05 | 228  | 21967    | 0.98 | ng    | 98       |
| 19) Chrysene                | 18.13 | 228  | 22924    | 1.02 | ng    | 99       |
| 20) Indeno(1,2,3-cd)pyrene  | 23.22 | 276  | 11865    | 0.55 | ng    | 99       |
| 22) Benzo(b)fluoranthene    | 20.37 | 252  | 3895     | 0.94 | ng    | 97       |
| 23) Benzo(k)fluoranthene    | 20.43 | 252  | 5354     | 1.03 | ng    | 98       |
| 24) Benzo(a)pyrene          | 21.01 | 252  | 3984     | 0.98 | ng    | 97       |
| 25) Dibenzo(a,h)anthracene  | 23.31 | 278  | 3525     | 0.95 | ng    | 94       |
| 26) Benzo(g,h,i)perylene    | 23.81 | 276  | 18613    | 0.99 | ng    | 97       |

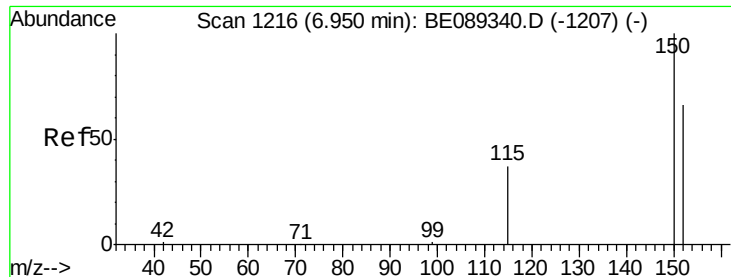
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE010715\  
Data File : BE089350.D  
Acq On : 8 Jan 2015 6:23  
Operator : TP/IZ  
Sample : SSTDCCC001  
Misc : LOQ-WATER-1.0PPM-SIM  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
BNA\_E  
LabSampleId :  
SSTDCCC001

Quant Time: Jan 08 06:59:00 2015  
Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-PAH-BASE-BE010715.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jan 08 06:03:23 2015  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 6.95 min Scan# 1216

Delta R.T. -0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

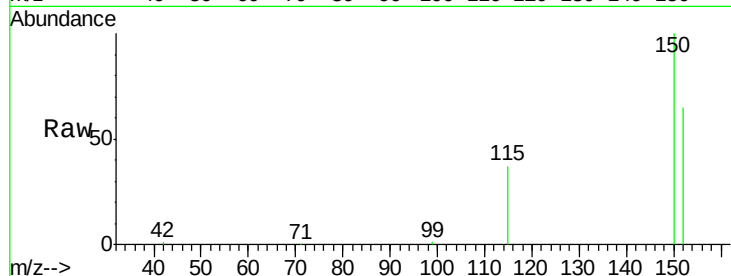
Tgt Ion:152 Resp: 12370

Ion Ratio Lower Upper

152 100

150 153.3 121.5 182.3

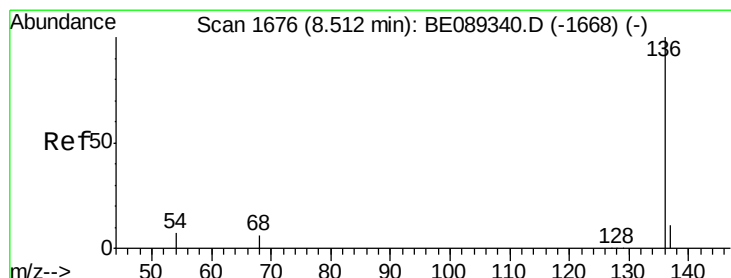
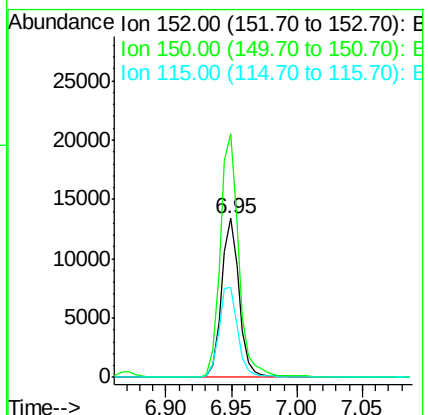
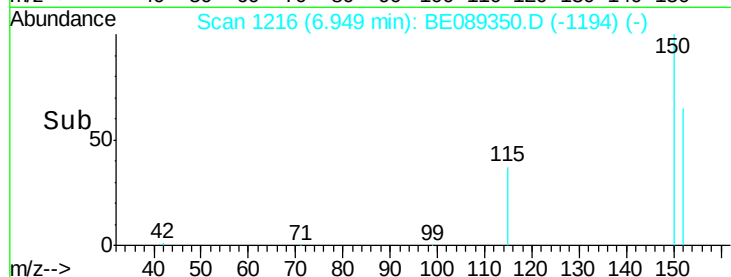
115 57.0 45.2 67.8



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



#2

Naphthalene-d8

Concen: 5.00 ng

RT: 8.51 min Scan# 1676

Delta R.T. -0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Tgt Ion:136 Resp: 48428

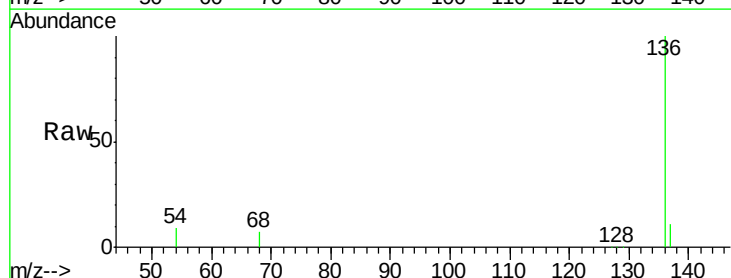
Ion Ratio Lower Upper

136 100

137 10.8 9.0 13.4

54 8.5 5.4 8.0#

68 7.4 4.7 7.1#

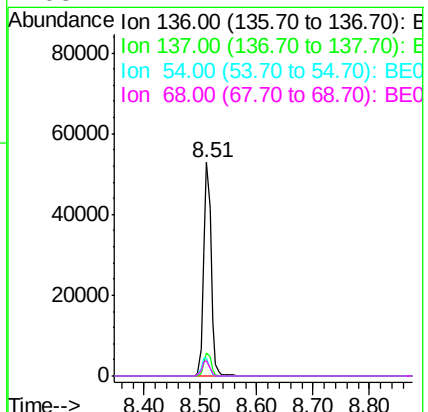
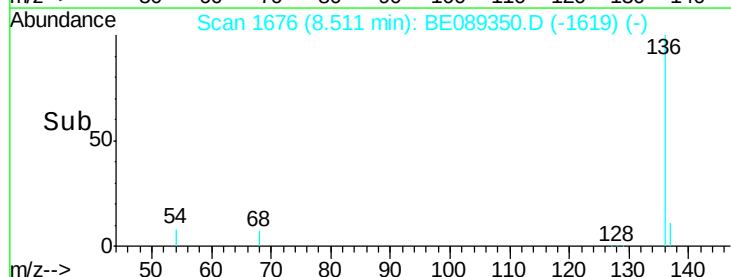


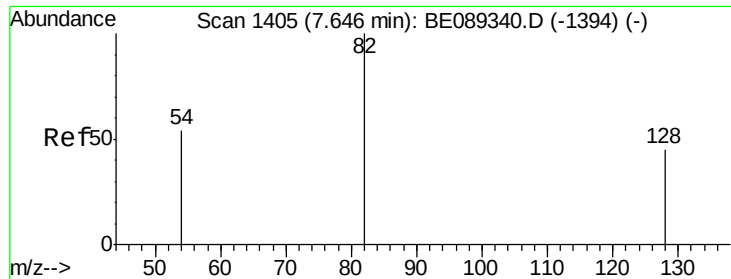
Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0

Ion 68.00 (67.70 to 68.70): BE0





#3

Nitrobenzene-d5

Concen: 1.00 ng

RT: 7.65 min Scan# 1406

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

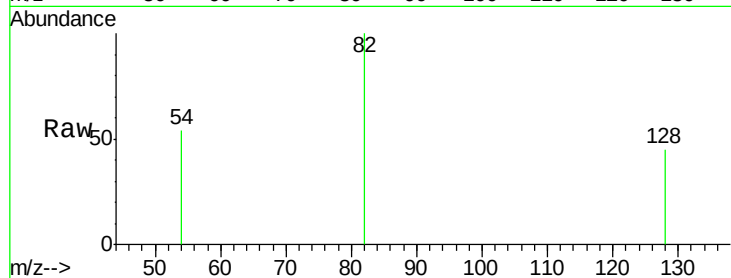
Tgt Ion: 82 Resp: 3377

Ion Ratio Lower Upper

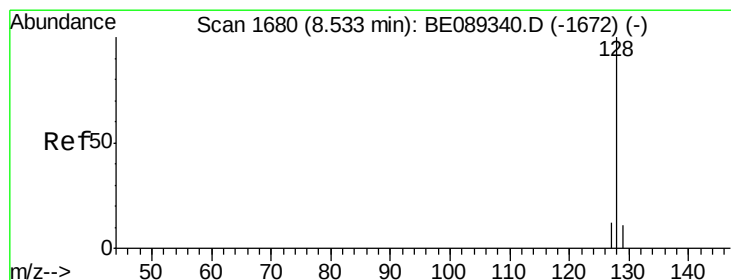
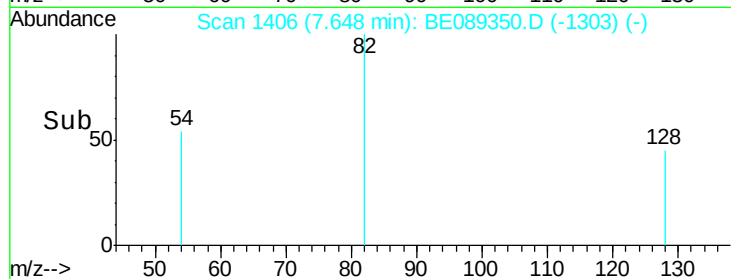
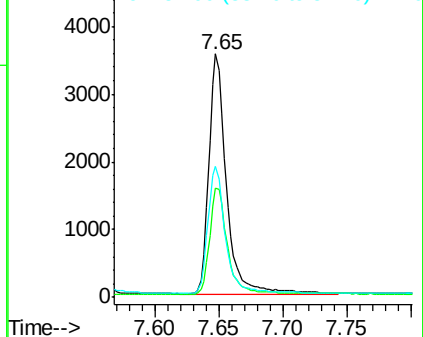
82 100

128 45.0 36.5 54.7

54 54.0 43.5 65.3



Abundance Ion 82.00 (81.70 to 82.70): BE0  
Ion 128.00 (127.70 to 128.70): BE0  
Ion 54.00 (53.70 to 54.70): BE0



#4

Naphthalene

Concen: 1.03 ng

RT: 8.54 min Scan# 1681

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

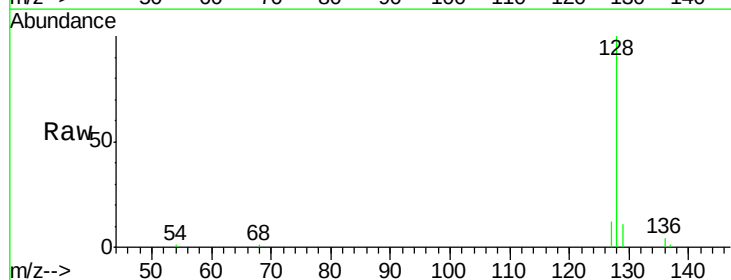
Tgt Ion: 128 Resp: 11264

Ion Ratio Lower Upper

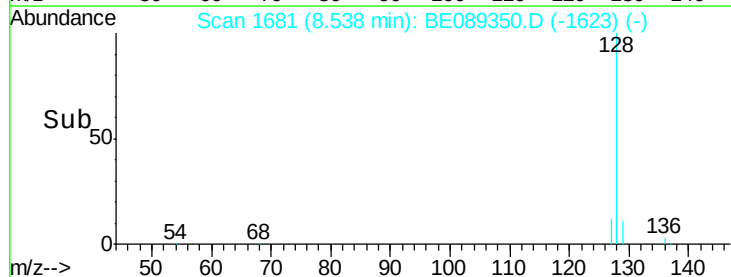
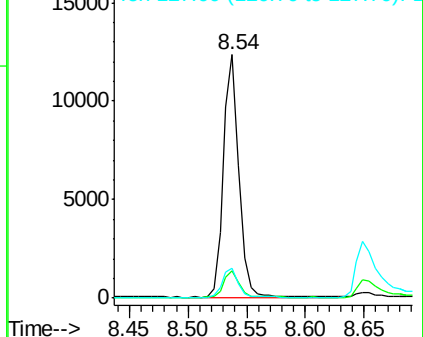
128 100

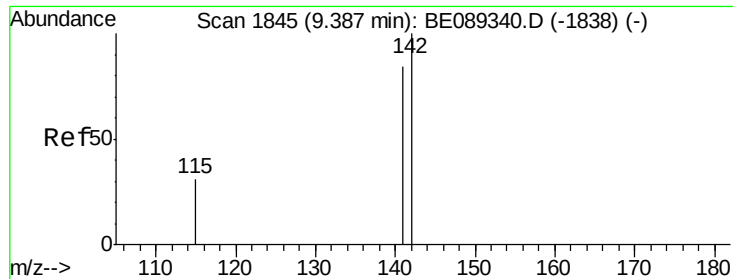
129 11.3 8.8 13.2

127 12.0 10.0 15.0



Abundance Ion 128.00 (127.70 to 128.70): E  
Ion 129.00 (128.70 to 129.70): E  
Ion 127.00 (126.70 to 127.70): E

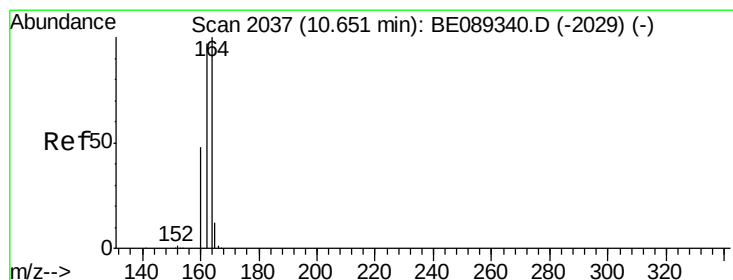
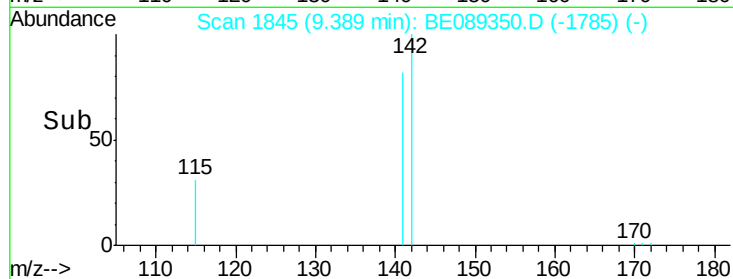
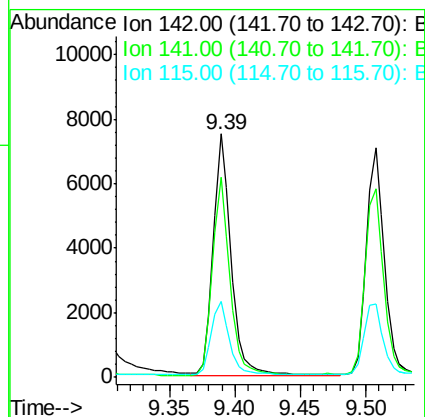
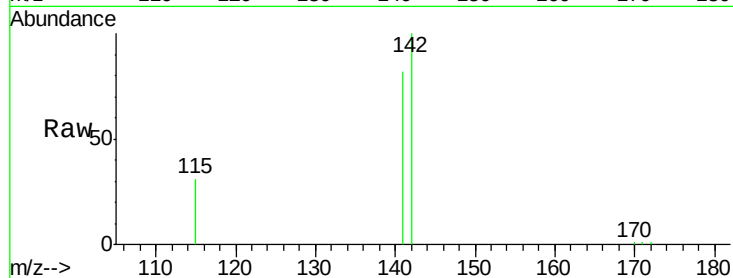




#5  
2-Methylnaphthalene  
Concen: 1.05 ng  
RT: 9.39 min Scan# 1845  
Delta R.T. 0.00 min  
Lab File: BE089350.D  
Acq: 8 Jan 2015 6:23

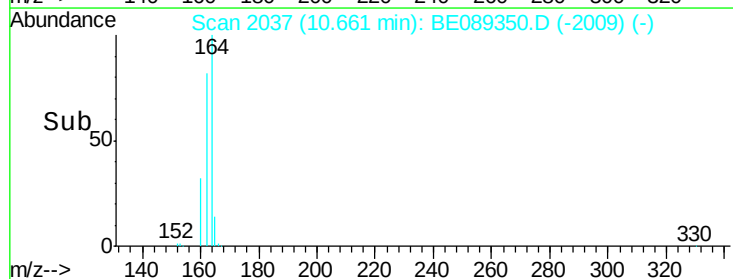
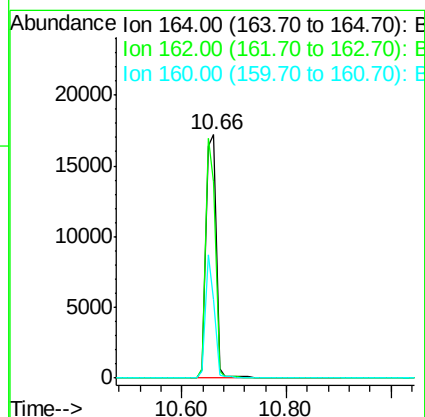
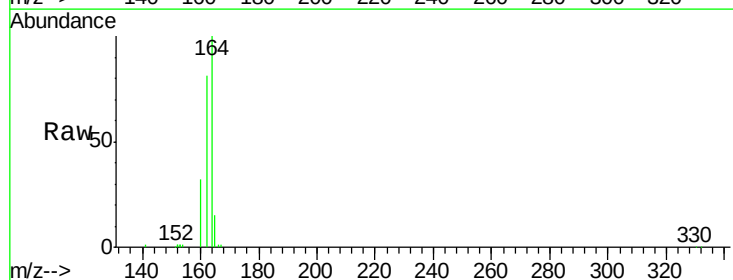
Instrument :  
BNA\_E  
LabSampleId :  
SSTDCCC001

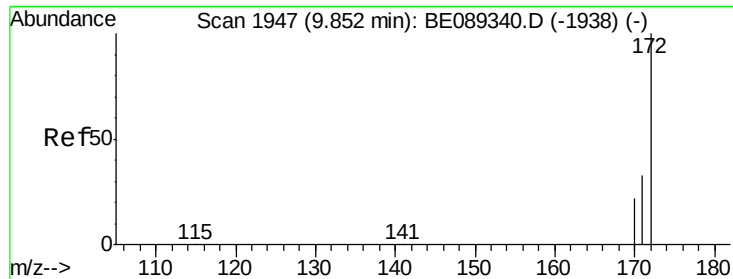
Tgt Ion:142 Resp: 7144  
Ion Ratio Lower Upper  
142 100  
141 82.0 66.3 99.5  
115 31.0 25.2 37.8



#6  
Acenaphthene-d10  
Concen: 5.00 ng  
RT: 10.66 min Scan# 2037  
Delta R.T. 0.01 min  
Lab File: BE089350.D  
Acq: 8 Jan 2015 6:23

Tgt Ion:164 Resp: 23043  
Ion Ratio Lower Upper  
164 100  
162 80.7 77.4 116.2  
160 32.3 38.2 57.4#





#7

2-Fluorobiphenyl

Concen: 1.03 ng

RT: 9.85 min Scan# 1947

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

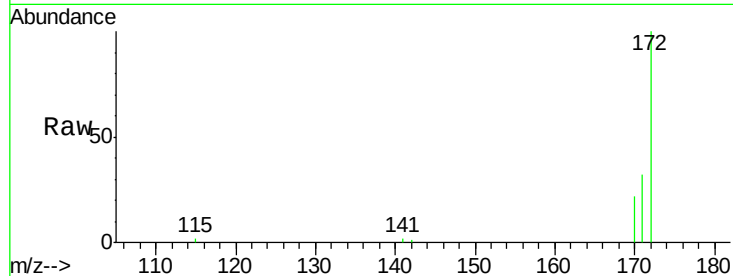
Tgt Ion:172 Resp: 6459

Ion Ratio Lower Upper

172 100

171 31.7 26.4 39.6

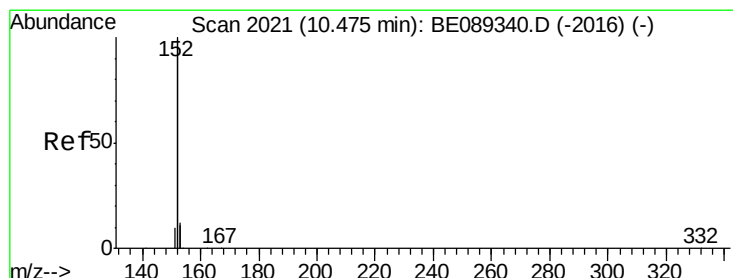
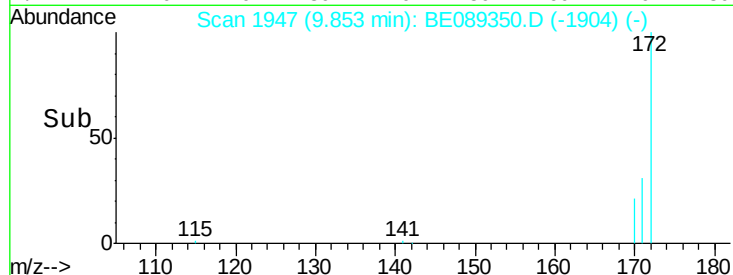
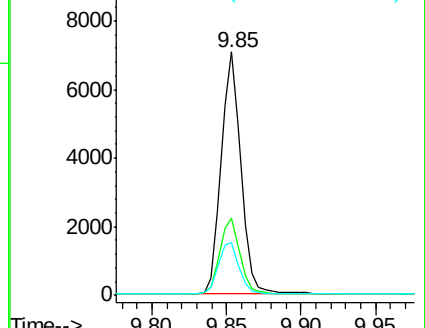
170 21.5 18.0 27.0



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



#8

Acenaphthylene

Concen: 1.05 ng

RT: 10.47 min Scan# 2020

Delta R.T. -0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

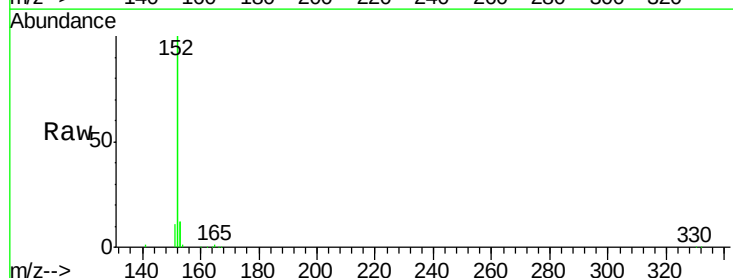
Tgt Ion:152 Resp: 41315

Ion Ratio Lower Upper

152 100

151 5.4 4.1 6.1

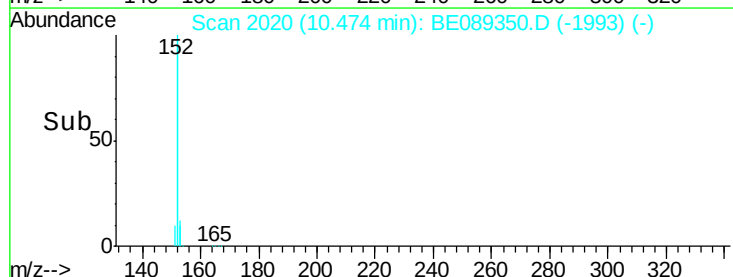
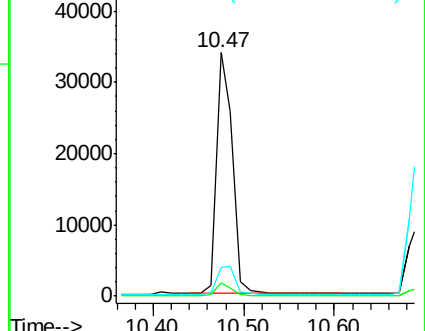
153 11.8 9.8 14.6

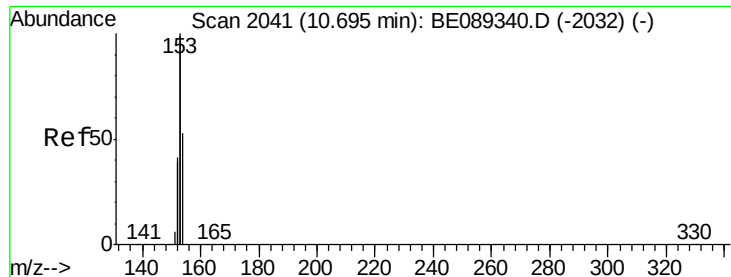


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#9

Acenaphthene

Concen: 1.04 ng

RT: 10.69 min Scan# 2040

Delta R.T. -0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

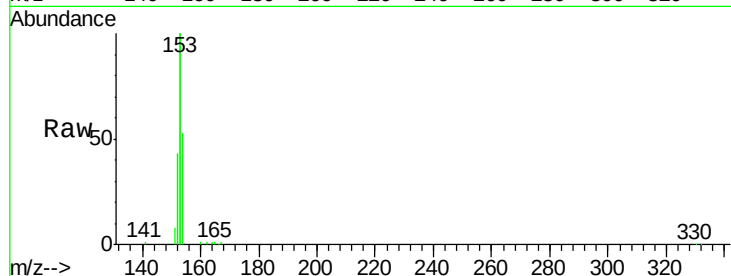
Tgt Ion:154 Resp: 6364

Ion Ratio Lower Upper

154 100

153 377.5 300.6 450.8

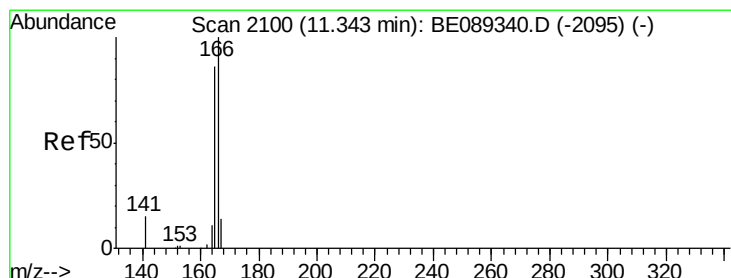
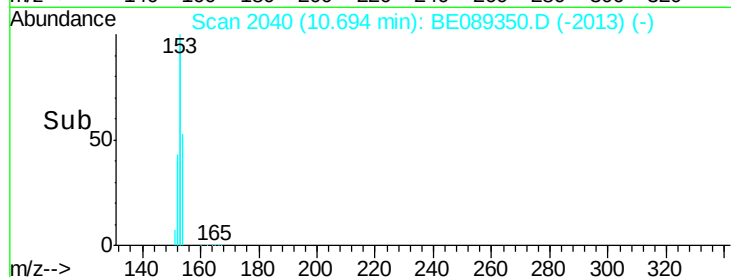
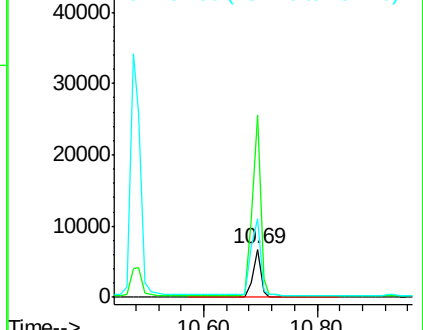
152 162.0 123.3 184.9



Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E



#10

Fluorene

Concen: 1.06 ng

RT: 11.34 min Scan# 2099

Delta R.T. -0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

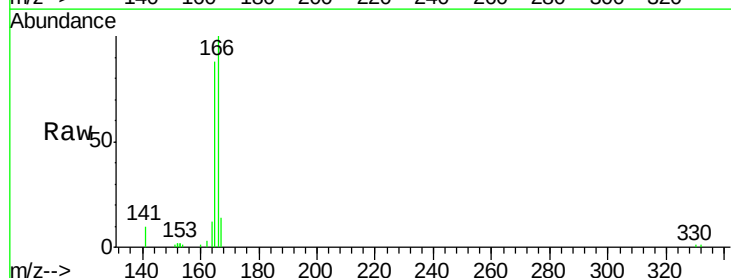
Tgt Ion:166 Resp: 6949

Ion Ratio Lower Upper

166 100

165 89.8 72.1 108.1

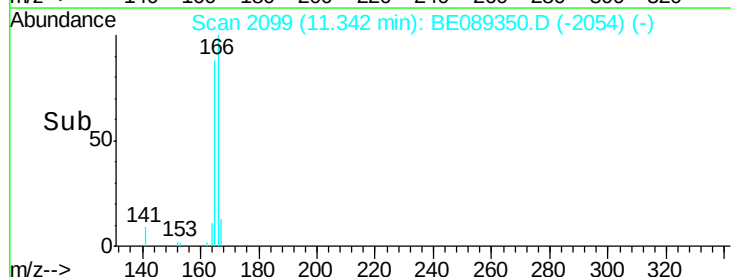
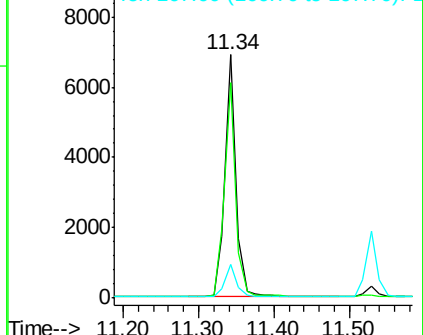
167 13.7 11.0 16.4

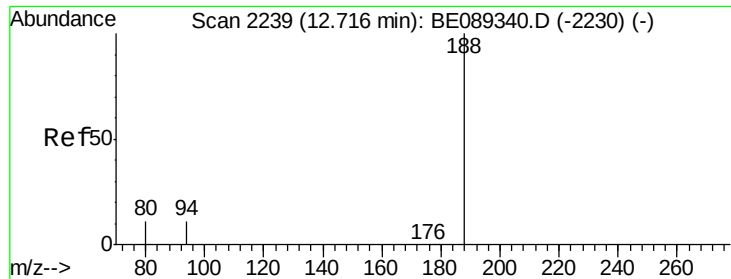


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

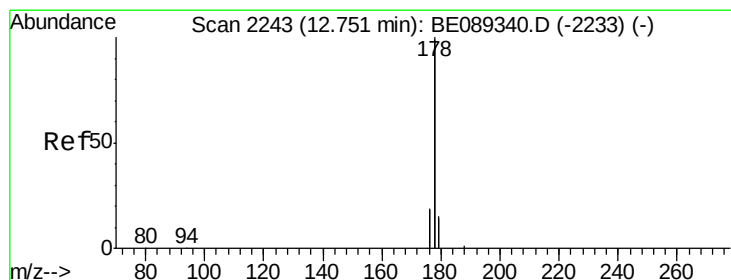
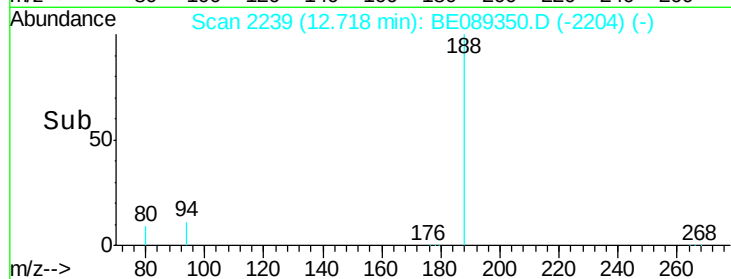
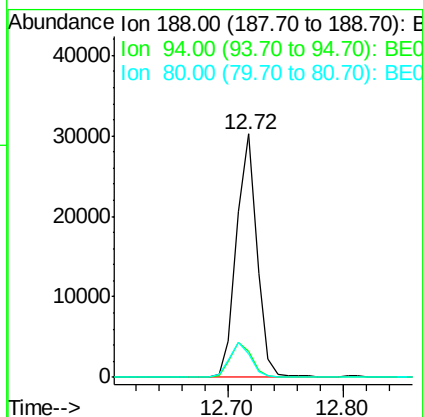
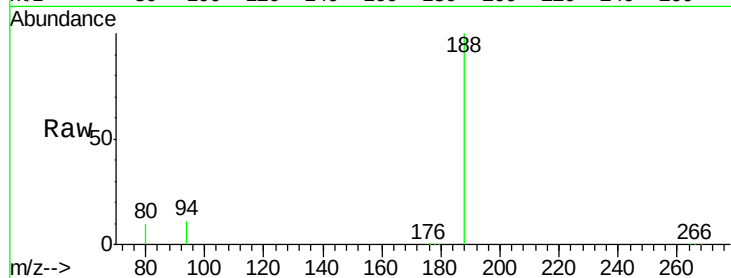




#11  
 Phenanthrene-d10  
 Concen: 5.00 ng  
 RT: 12.72 min Scan# 2239  
 Delta R.T. 0.00 min  
 Lab File: BE089350.D  
 Acq: 8 Jan 2015 6:23

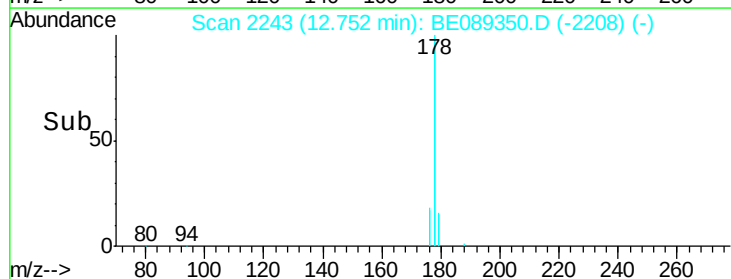
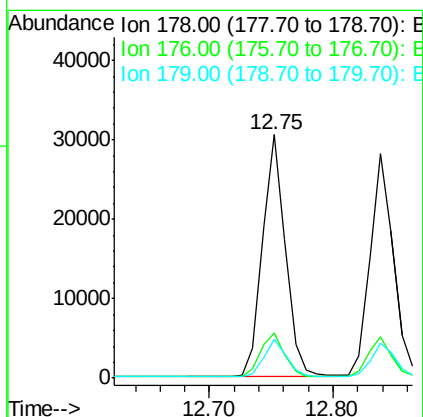
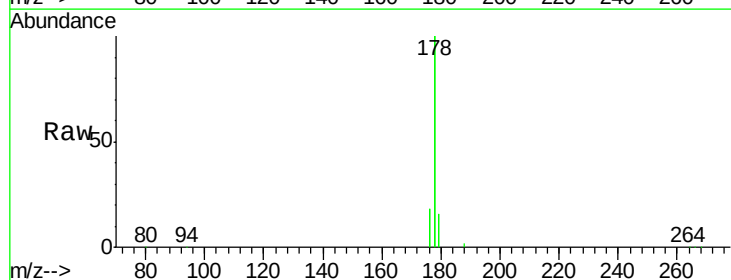
Instrument :  
 BNA\_E  
 LabSampleId :  
 SSTDCCC001

Tgt Ion:188 Resp: 37139  
 Ion Ratio Lower Upper  
 188 100  
 94 10.8 11.0 12.2#  
 80 9.5 10.1 11.1#

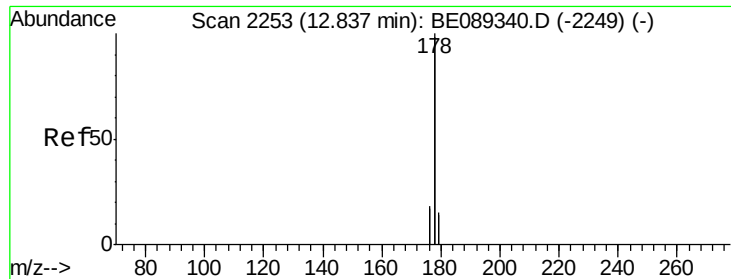


#12  
 Phenanthrene  
 Concen: 1.02 ng  
 RT: 12.75 min Scan# 2243  
 Delta R.T. 0.00 min  
 Lab File: BE089350.D  
 Acq: 8 Jan 2015 6:23

Tgt Ion:178 Resp: 39436  
 Ion Ratio Lower Upper  
 178 100  
 176 18.5 15.1 22.7  
 179 15.8 12.2 18.2







#13

Anthracene

Concen: 1.01 ng

RT: 12.84 min Scan# 2253

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

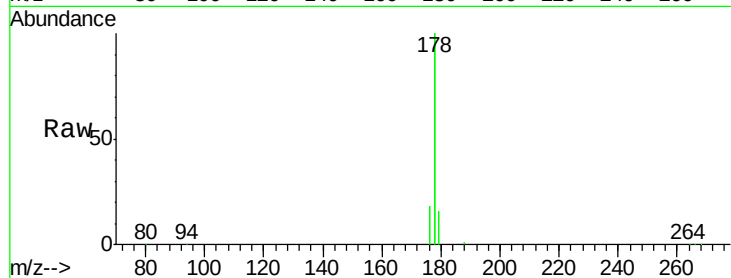
Tgt Ion:178 Resp: 37770

Ion Ratio Lower Upper

178 100

176 18.2 14.7 22.1

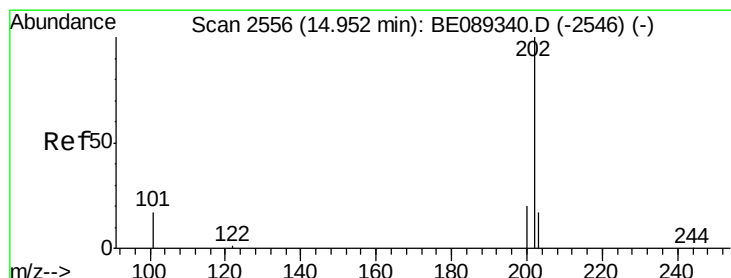
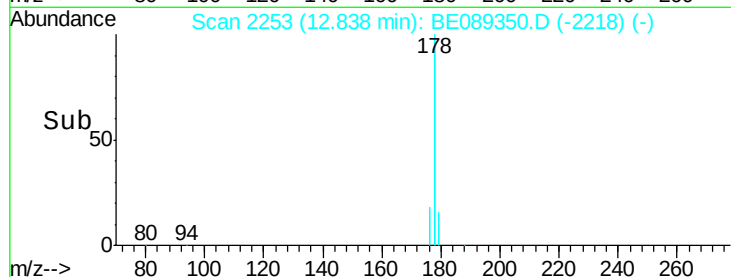
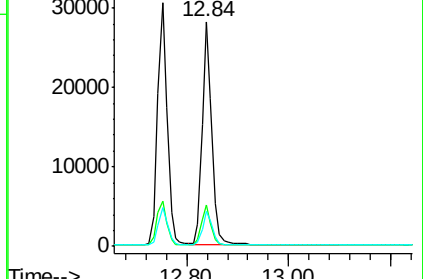
179 15.8 12.0 18.0



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



#14

Fluoranthene

Concen: 1.00 ng

RT: 14.96 min Scan# 2557

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

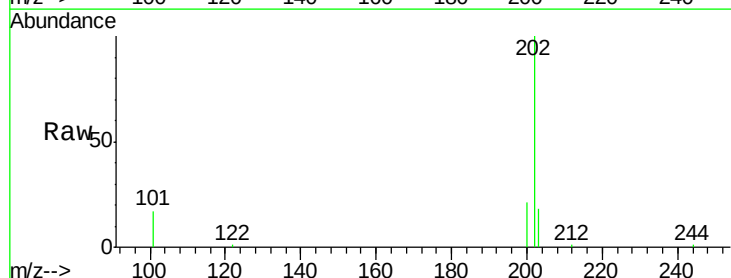
Tgt Ion:202 Resp: 8568

Ion Ratio Lower Upper

202 100

101 17.4 0.0 37.9

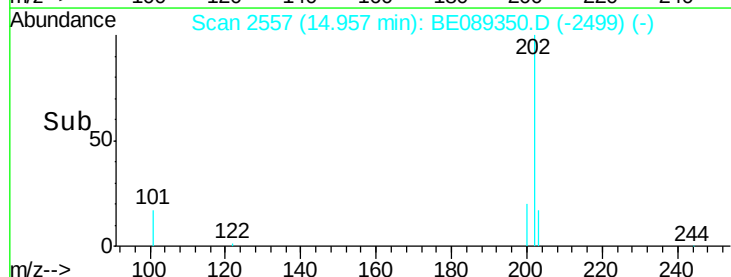
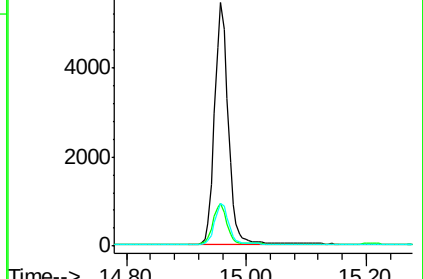
203 17.6 0.0 37.5

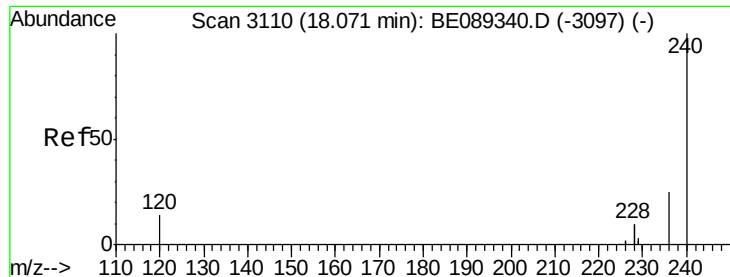


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E

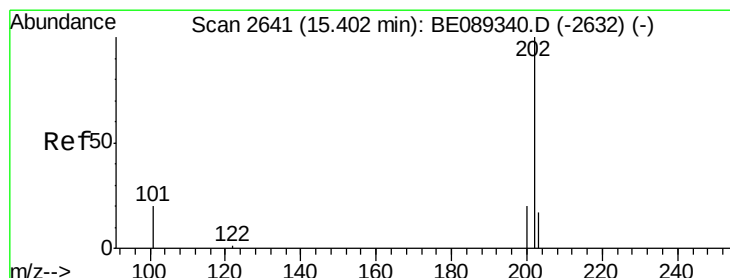
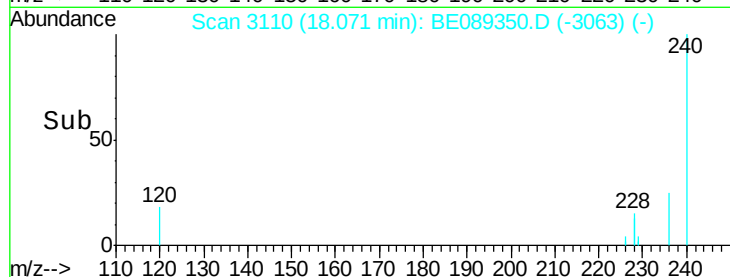
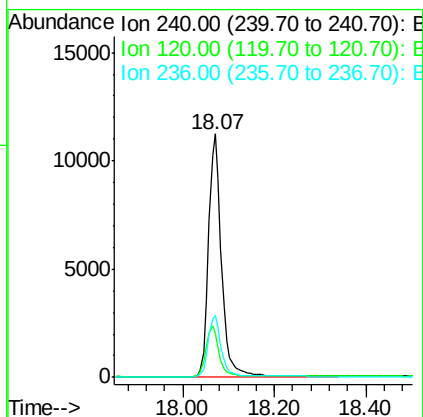
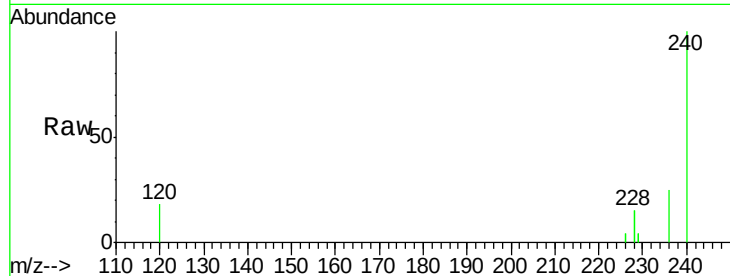




#15  
Chrysene-d12  
Concen: 5.00 ng  
RT: 18.07 min Scan# 3110  
Delta R.T. -0.00 min  
Lab File: BE089350.D  
Acq: 8 Jan 2015 6:23

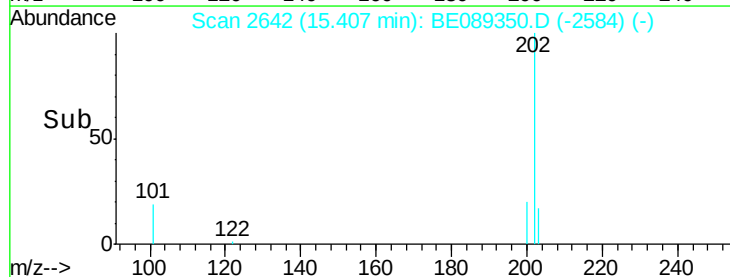
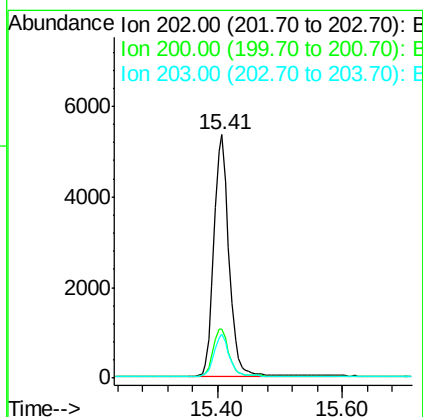
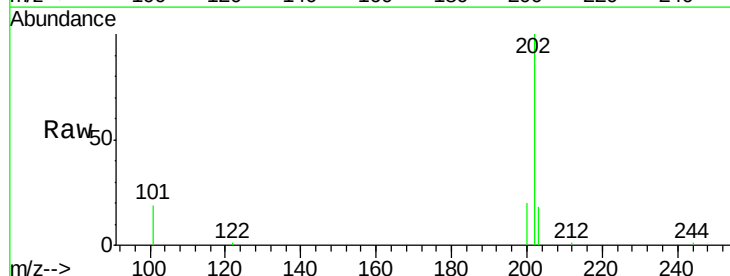
Instrument :  
BNA\_E  
LabSampleId :  
SSTDCCC001

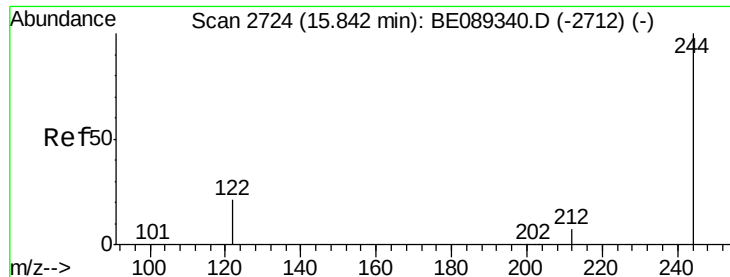
Tgt Ion:240 Resp: 22002  
Ion Ratio Lower Upper  
240 100  
120 18.3 11.8 17.6#  
236 25.3 20.0 30.0



#16  
Pyrene  
Concen: 1.23 ng  
RT: 15.41 min Scan# 2642  
Delta R.T. 0.00 min  
Lab File: BE089350.D  
Acq: 8 Jan 2015 6:23

Tgt Ion:202 Resp: 8874  
Ion Ratio Lower Upper  
202 100  
200 20.3 16.8 25.2  
203 18.1 14.0 21.0

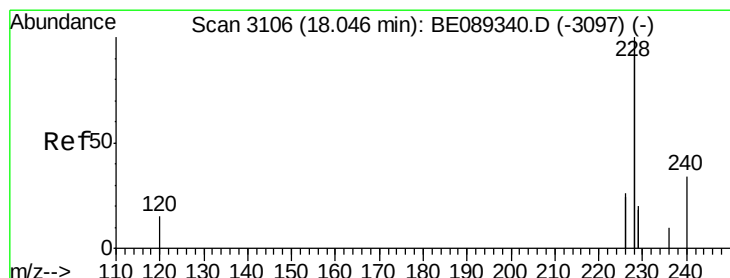
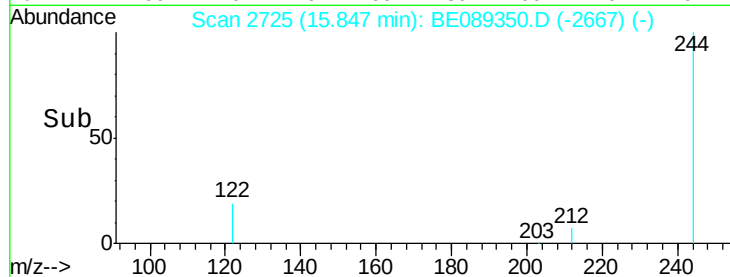
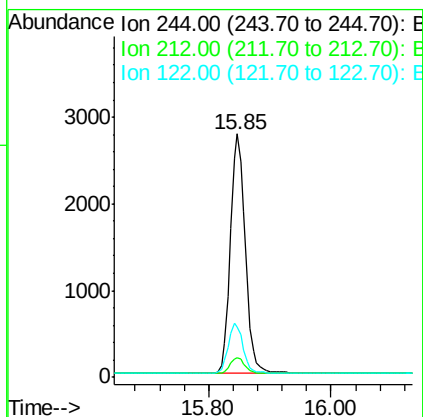
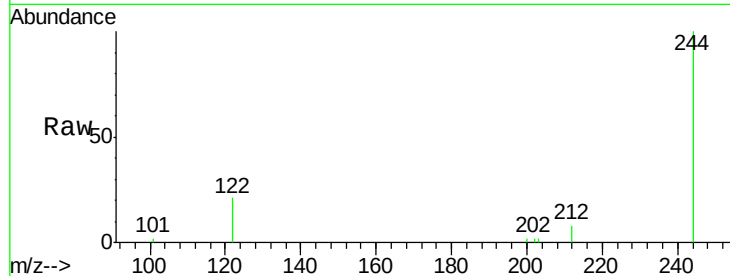




#17  
 Terphenyl-d14  
 Concen: 1.22 ng  
 RT: 15.85 min Scan# 2725  
 Delta R.T. 0.00 min  
 Lab File: BE089350.D  
 Acq: 8 Jan 2015 6:23

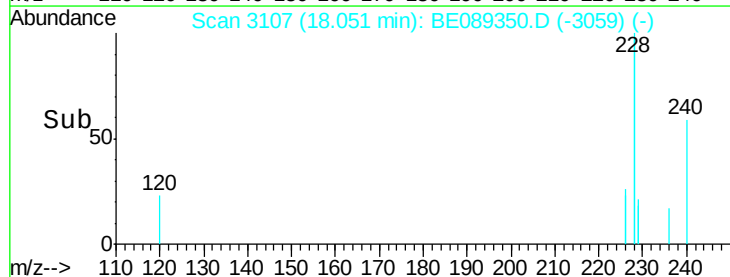
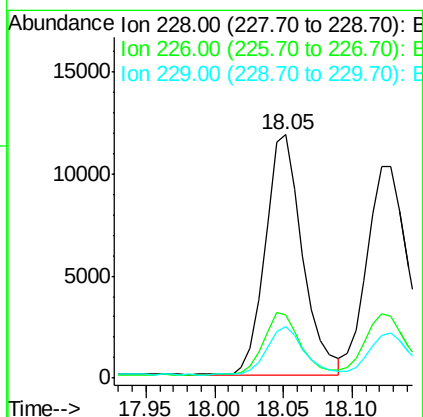
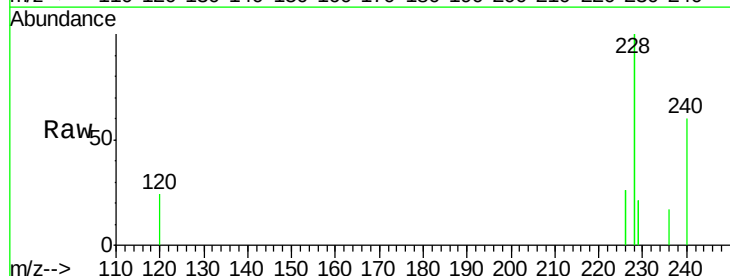
Instrument :  
 BNA\_E  
 LabSampleId :  
 SSTDCCC001

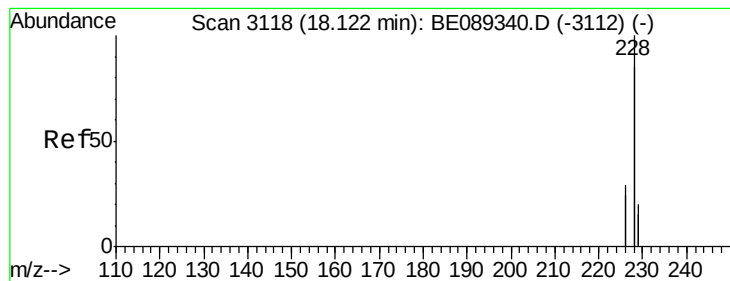
Tgt Ion: 244 Resp: 4764  
 Ion Ratio Lower Upper  
 244 100  
 212 8.2 6.3 9.5  
 122 20.6 17.7 26.5



#18  
 Benzo(a)anthracene  
 Concen: 0.98 ng  
 RT: 18.05 min Scan# 3107  
 Delta R.T. 0.01 min  
 Lab File: BE089350.D  
 Acq: 8 Jan 2015 6:23

Tgt Ion: 228 Resp: 21967  
 Ion Ratio Lower Upper  
 228 100  
 226 26.0 21.0 31.6  
 229 21.3 16.0 24.0





#19

Chrysene

Concen: 1.02 ng

RT: 18.13 min Scan# 3119

Delta R.T. 0.01 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

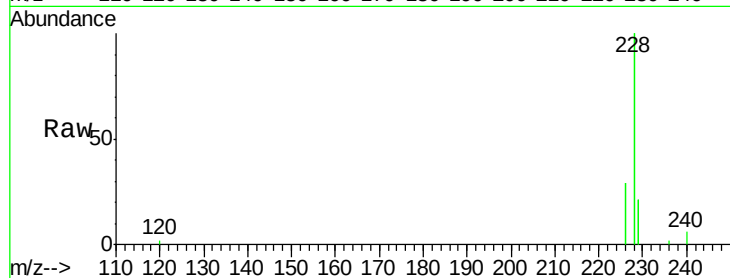
Tgt Ion:228 Resp: 22924

Ion Ratio Lower Upper

228 100

226 29.1 23.5 35.3

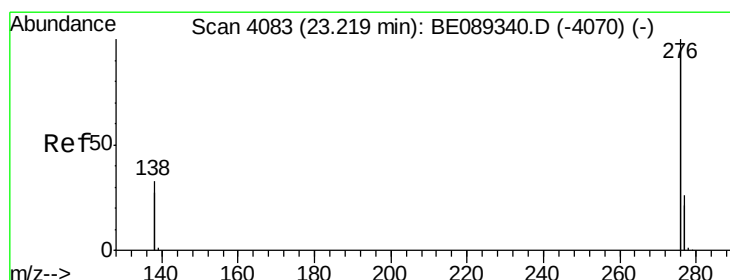
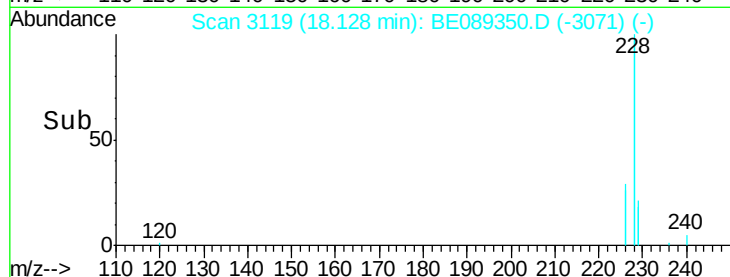
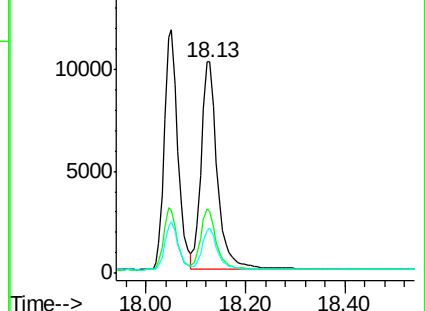
229 21.2 16.1 24.1



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



#20

Indeno(1,2,3-cd)pyrene

Concen: 0.55 ng

RT: 23.22 min Scan# 4084

Delta R.T. 0.01 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

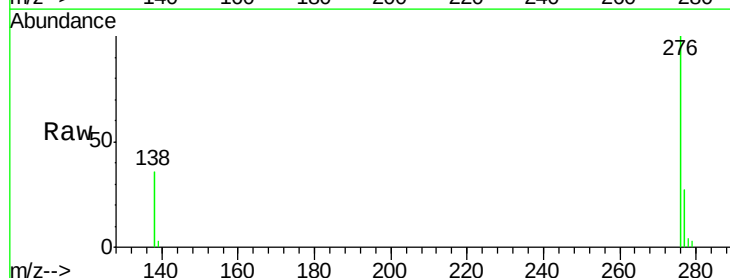
Tgt Ion:276 Resp: 11865

Ion Ratio Lower Upper

276 100

138 29.9 23.8 35.8

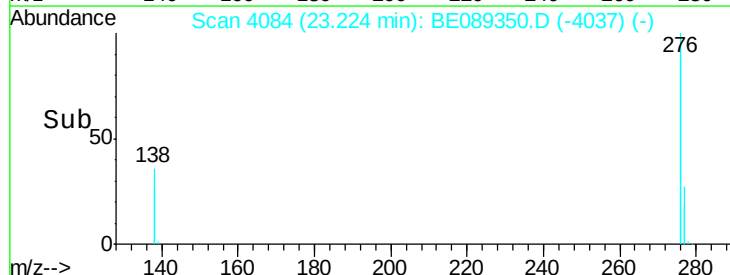
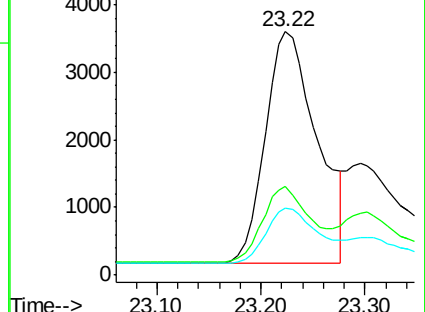
277 23.8 18.2 27.4

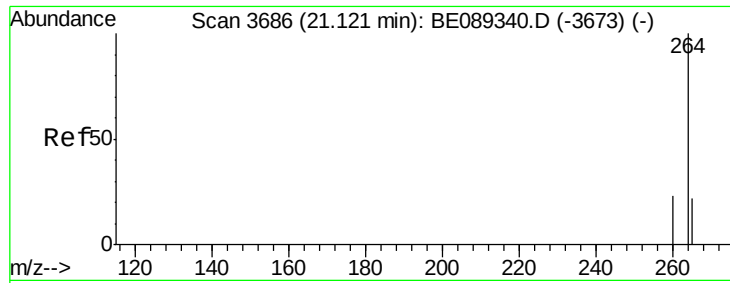


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





#21

Perylene-d12

Concen: 5.00 ng

RT: 21.12 min Scan# 3687

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

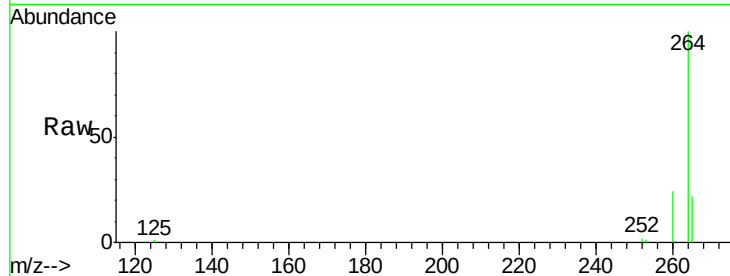
Tgt Ion:264 Resp: 18875

Ion Ratio Lower Upper

264 100

260 23.7 18.9 28.3

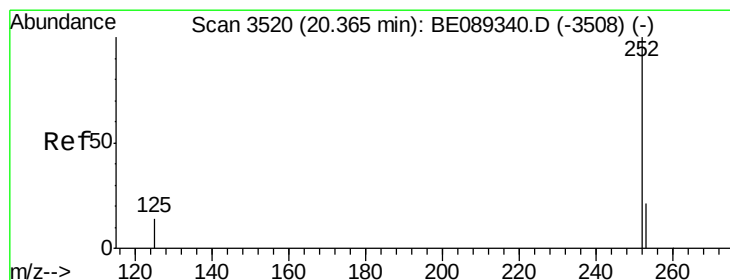
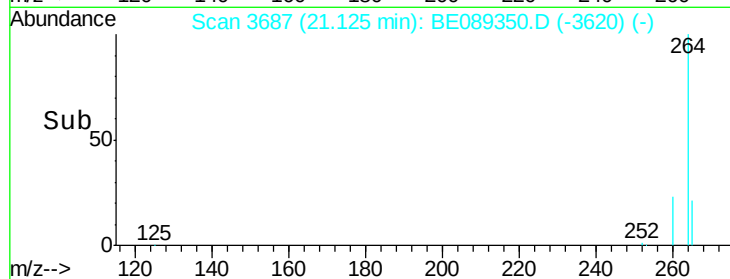
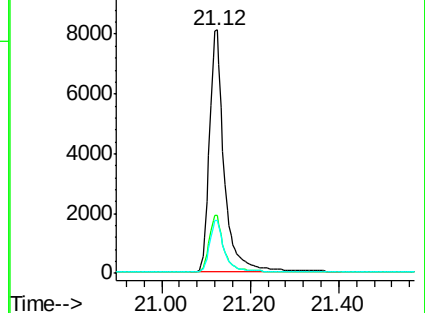
265 21.8 17.4 26.2



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



#22

Benzo(b)fluoranthene

Concen: 0.94 ng

RT: 20.37 min Scan# 3521

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

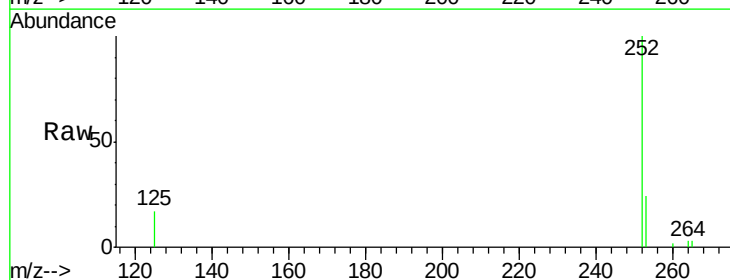
Tgt Ion:252 Resp: 3895

Ion Ratio Lower Upper

252 100

253 23.5 17.8 26.6

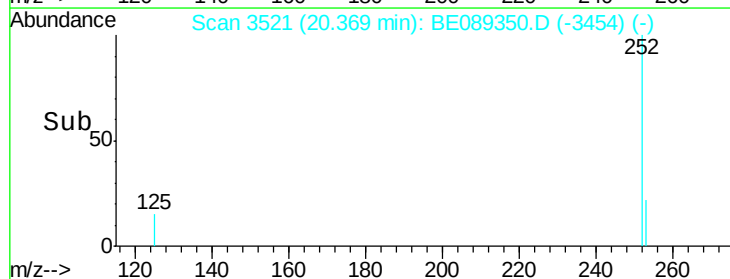
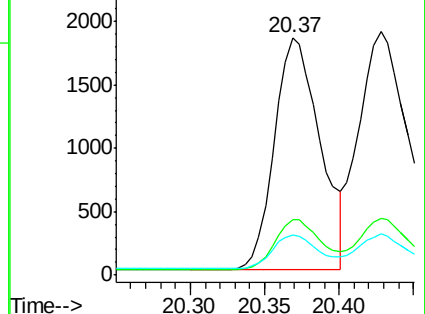
125 17.0 12.6 18.8

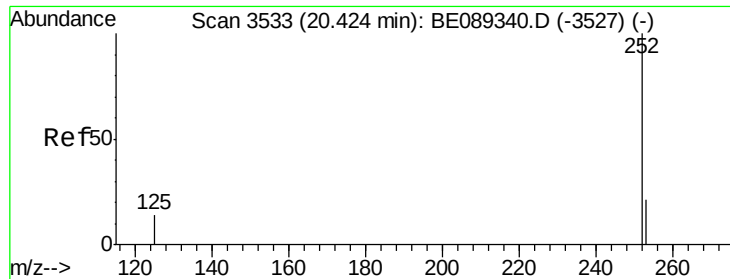


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#23

Benzo(k)fluoranthene

Concen: 1.03 ng

RT: 20.43 min Scan# 3534

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

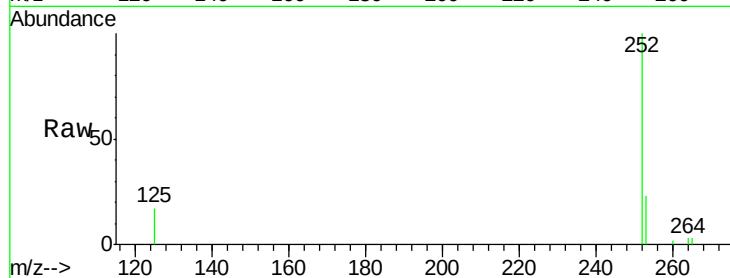
Tgt Ion:252 Resp: 5354

Ion Ratio Lower Upper

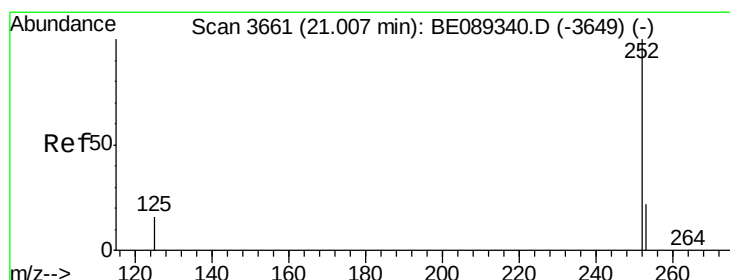
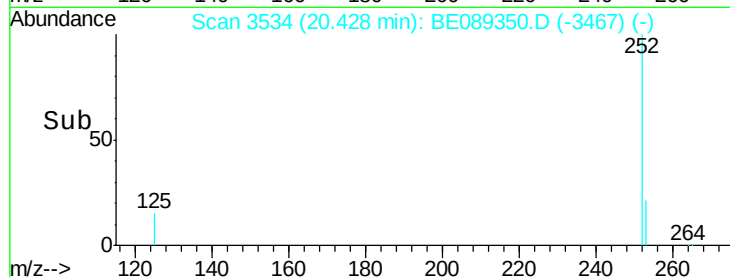
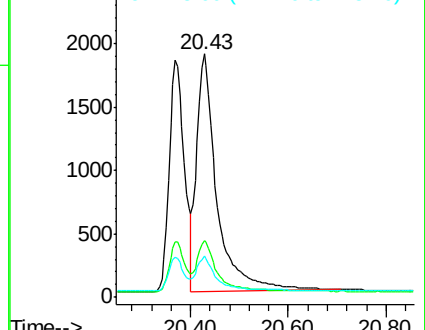
252 100

253 23.3 18.0 27.0

125 17.0 12.4 18.6



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



#24

Benzo(a)pyrene

Concen: 0.98 ng

RT: 21.01 min Scan# 3662

Delta R.T. 0.00 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

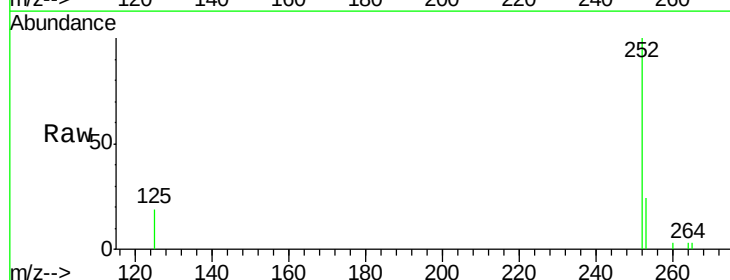
Tgt Ion:252 Resp: 3984

Ion Ratio Lower Upper

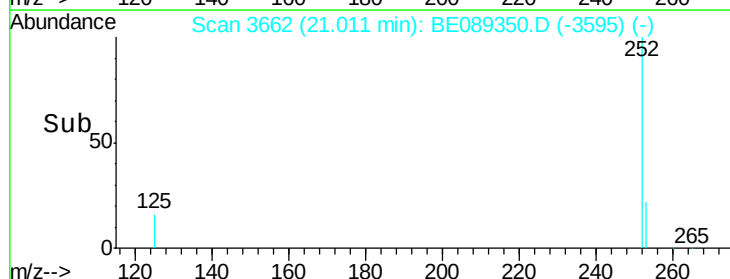
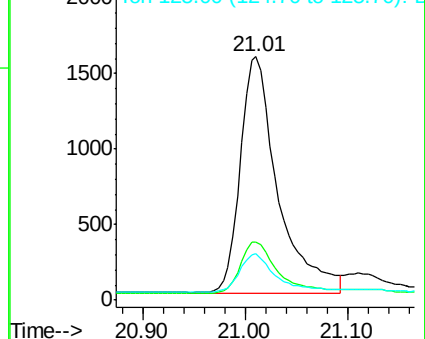
252 100

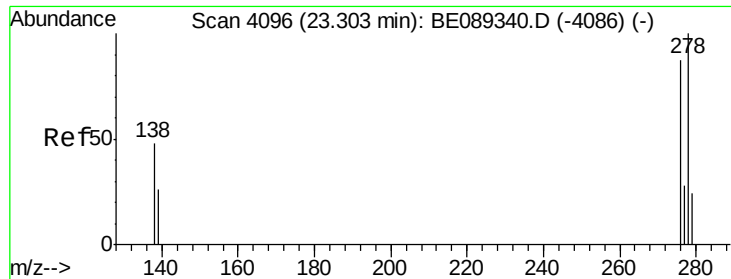
253 24.0 18.3 27.5

125 19.2 13.8 20.8



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





#25

Dibenzo(a,h)anthracene

Concen: 0.95 ng

RT: 23.31 min Scan# 4097

Delta R.T. 0.01 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

Instrument :

BNA\_E

LabSampleId :

SSTDCCC001

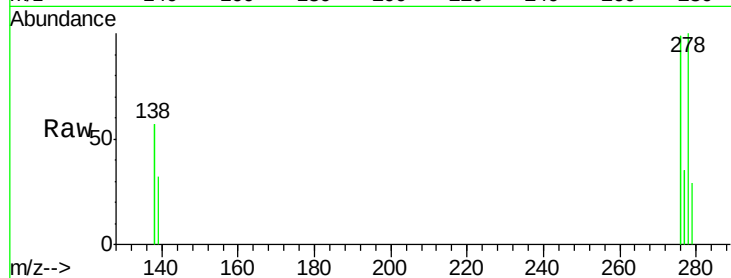
Tgt Ion: 278 Resp: 3525

Ion Ratio Lower Upper

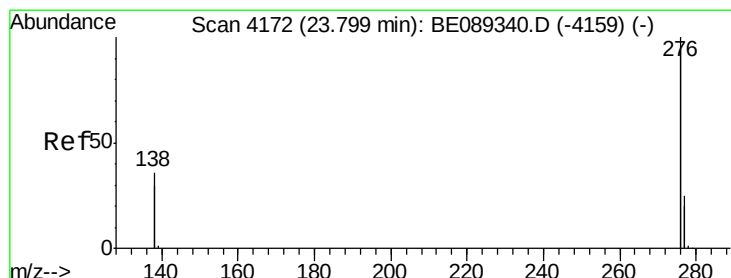
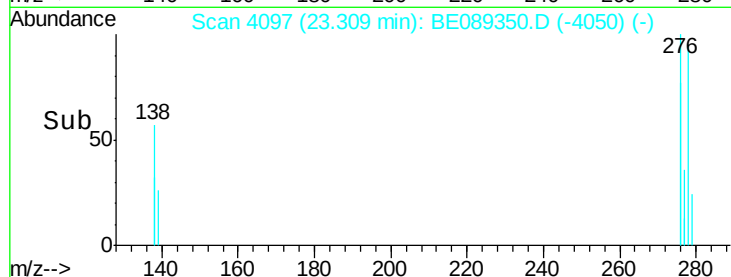
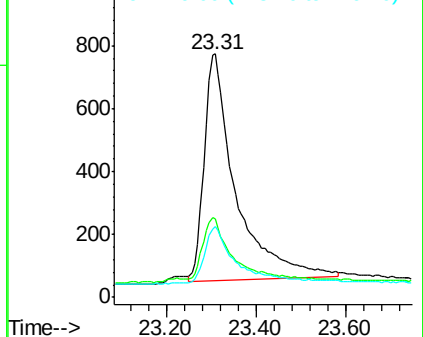
278 100

139 32.0 22.9 34.3

279 28.9 20.8 31.2



Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E



#26

Benzo(g,h,i)perylene

Concen: 0.99 ng

RT: 23.81 min Scan# 4174

Delta R.T. 0.01 min

Lab File: BE089350.D

Acq: 8 Jan 2015 6:23

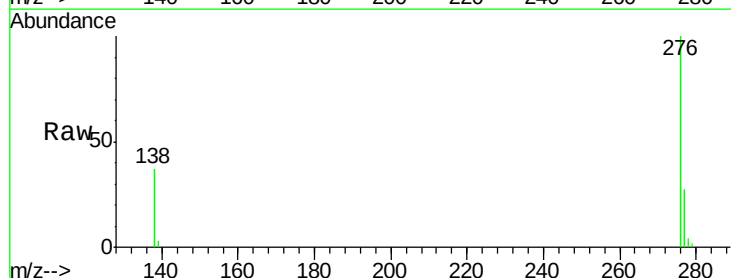
Tgt Ion: 276 Resp: 18613

Ion Ratio Lower Upper

276 100

277 26.9 20.0 30.0

138 37.0 28.5 42.7



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

