

Data Path : Z:\HPCHEM1\BNA E\DATA\BE020515\  
 Data File : BE089501.D  
 Acq On : 5 Feb 2015 12:01  
 Operator : TP/IZ  
 Sample : SSTDICC005  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 LabSampleId :  
 SSTDICC005

Quant Time: Feb 06 02:48:23 2015  
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\SIMPAH-BE020515.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Feb 06 02:40:17 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 9.49  | 152  | 28909    | 5.00 | ng    | 0.00     |
| 2) Naphthalene-d8         | 12.40 | 136  | 120078   | 5.00 | ng    | 0.00     |
| 6) Acenaphthene-d10       | 16.59 | 164  | 57584    | 5.00 | ng    | 0.00     |
| 11) Phenanthrene-d10      | 19.90 | 188  | 110666   | 5.00 | ng    | 0.00     |
| 16) Chrysene-d12          | 23.77 | 240  | 120459   | 5.00 | ng    | 0.00     |
| 22) Perylene-d12          | 25.46 | 264  | 117266   | 5.00 | ng    | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 3) Nitrobenzene-d5          | 10.76 | 82   | 47256    | 5.16 | ng    | 0.00     |
| 7) 2-Fluorobiphenyl         | 15.03 | 172  | 84171    | 4.64 | ng    | 0.00     |
| 18) Terphenyl-d14           | 22.40 | 244  | 101687   | 4.85 | ng    | 0.00     |

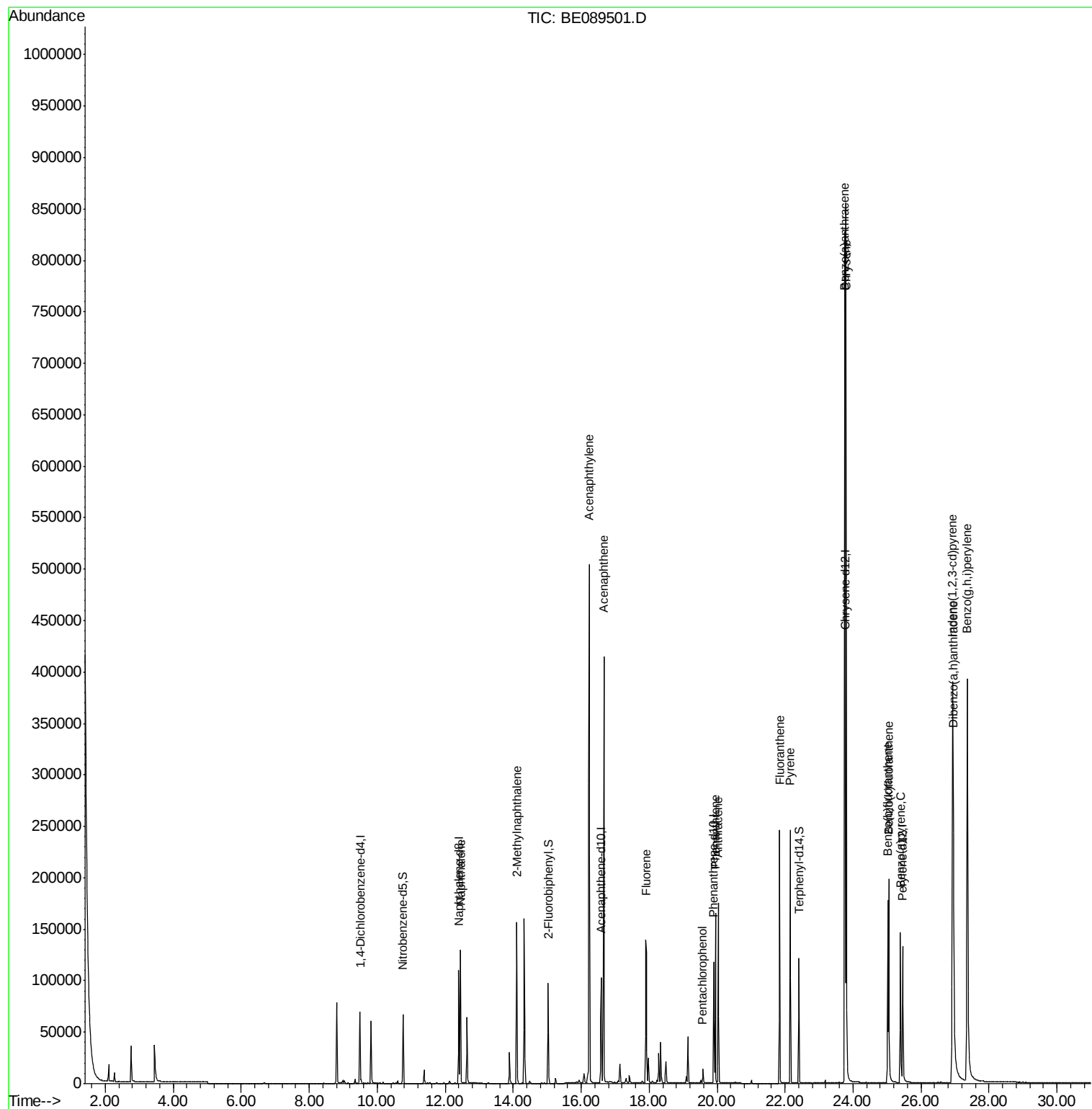
| Target Compounds           | R.T.  | QIon | Response | Conc | Units | Ovalue |
|----------------------------|-------|------|----------|------|-------|--------|
| 4) Naphthalene             | 12.45 | 128  | 143543   | 4.75 | ng    | 99     |
| 5) 2-Methylnaphthalene     | 14.11 | 142  | 95923    | 4.84 | ng    | 100    |
| 8) Acenaphthylene          | 16.24 | 152  | 611313   | 4.95 | ng    | 100    |
| 9) Acenaphthene            | 16.66 | 154  | 88061    | 4.64 | ng    | 99     |
| 10) Fluorene               | 17.91 | 166  | 102926   | 4.87 | ng    | 99     |
| 12) Pentachlorophenol      | 19.58 | 266  | 7245     | 6.66 | ng    | 94     |
| 13) Phenanthrene           | 19.95 | 178  | 156838   | 4.67 | ng    | 99     |
| 14) Anthracene             | 20.04 | 178  | 153262   | 5.10 | ng    | 100    |
| 15) Fluoranthene           | 21.84 | 202  | 160761   | 5.01 | ng    | 100    |
| 17) Pyrene                 | 22.15 | 202  | 167759   | 4.87 | ng    | 100    |
| 19) Benzo(a)anthracene     | 23.75 | 228  | 637936   | 4.83 | ng    | 97     |
| 20) Chrysene               | 23.79 | 228  | 630076   | 4.64 | ng    | 97     |
| 21) Indeno(1,2,3-cd)pyrene | 26.93 | 276  | 727501   | 5.15 | ng    | 99     |
| 23) Benzo(b)fluoranthene   | 25.02 | 252  | 150749   | 5.53 | ng    | 99     |
| 24) Benzo(k)fluoranthene   | 25.05 | 252  | 177270   | 4.74 | ng    | 99     |
| 25) Benzo(a)pyrene         | 25.39 | 252  | 152068   | 5.50 | ng    | 99     |
| 26) Dibenzo(a,h)anthracene | 26.95 | 278  | 156043   | 5.29 | ng    | 99     |
| 27) Benzo(a,h,i)perylene   | 27.36 | 276  | 592779   | 4.92 | ng    | 99     |

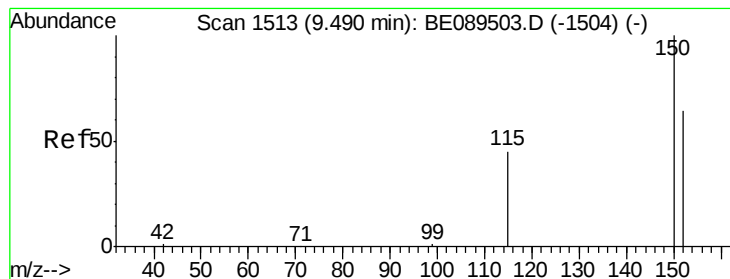
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA E\DATA\BE020515\  
Data File : BE089501.D  
Acq On : 5 Feb 2015 12:01  
Operator : TP/IZ  
Sample : SSTDICC005  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
BNA\_E  
LabSampleId :  
SSTDICC005

Quant Time: Feb 06 02:48:23 2015  
Quant Method : Z:\HPCHEM1\BNA E\METHODS\SIMPAH-BE020515.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Feb 06 02:40:17 2015  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 9.49 min Scan# 1514

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDIC005

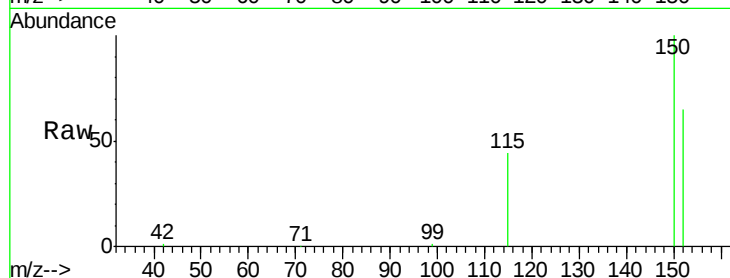
Tot Ion:152 Resp: 28909

Ion Ratio Lower Upper

152 100

150 154.7 125.0 187.6

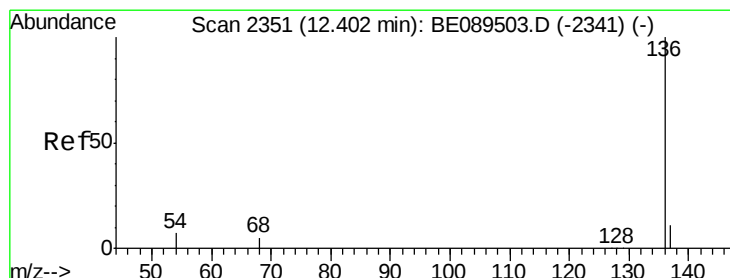
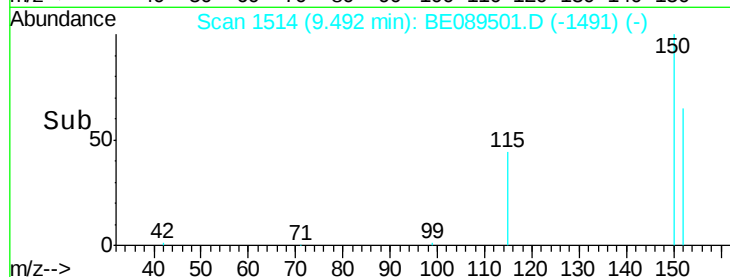
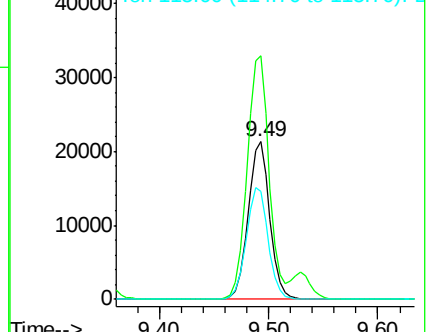
115 68.5 56.6 85.0



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: 12.40 min Scan# 2351

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

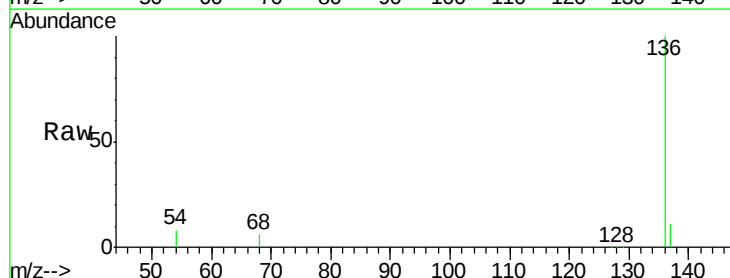
Tgt Ion:136 Resp: 120078

Ion Ratio Lower Upper

136 100

137 10.8 8.6 12.8

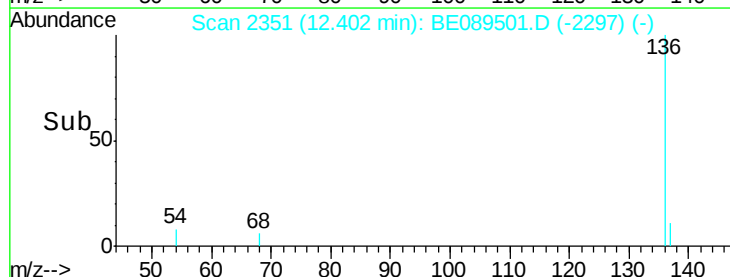
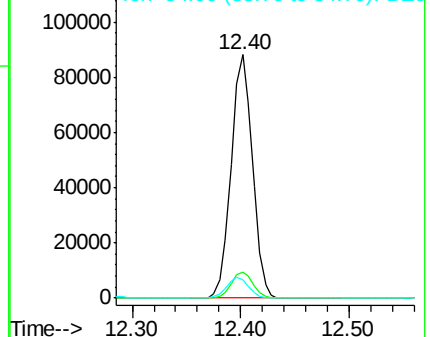
54 7.8 6.0 9.0

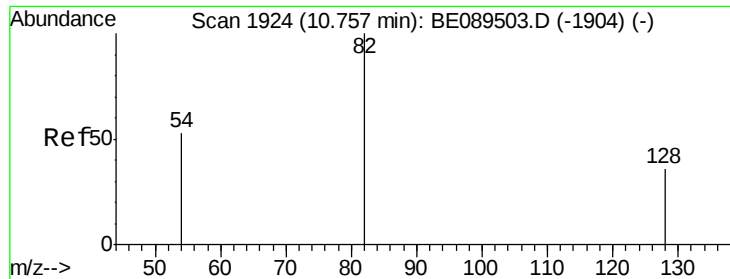


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0





#3

Nitrobenzene-d5

Concen: 5.16 ng

RT: 10.76 min Scan# 1925

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDIC005

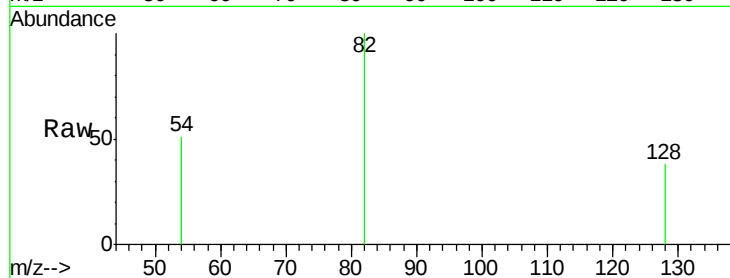
Tot Ion: 82 Resp: 47256

Ion Ratio Lower Upper

82 100

128 38.2 29.3 43.9

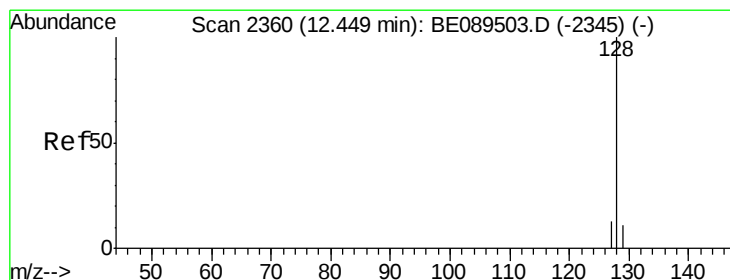
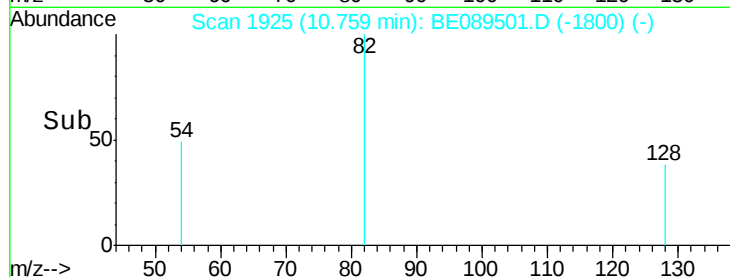
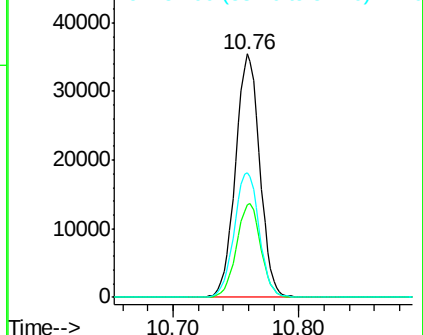
54 51.2 42.6 64.0



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: 4.75 ng

RT: 12.45 min Scan# 2360

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

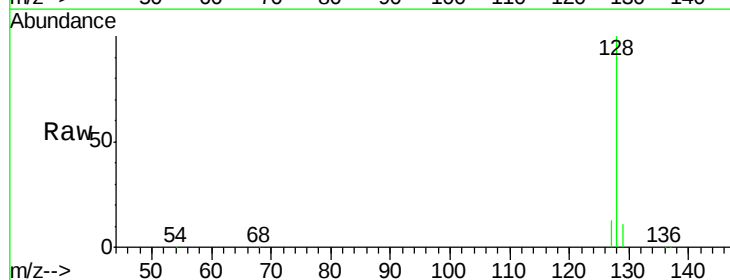
Tgt Ion: 128 Resp: 143543

Ion Ratio Lower Upper

128 100

129 10.7 8.8 13.2

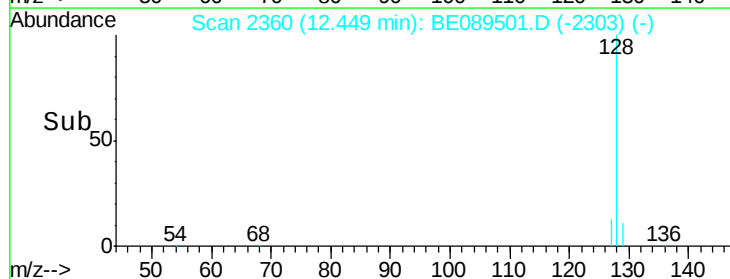
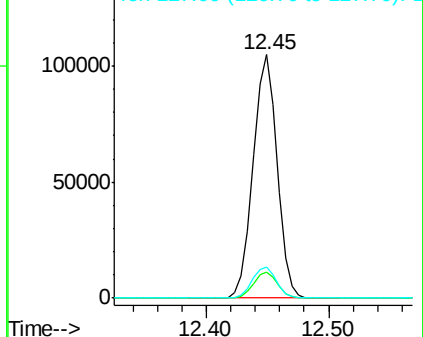
127 12.8 10.3 15.5



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: 4.84 ng

RT: 14.11 min Scan# 2694

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDICC005

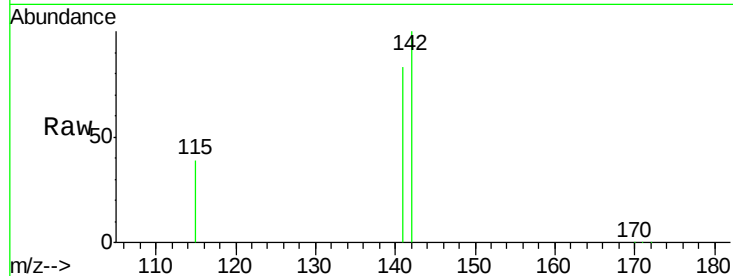
Tot Ion:142 Resp: 95923

Ion Ratio Lower Upper

142 100

141 83.3 66.3 99.5

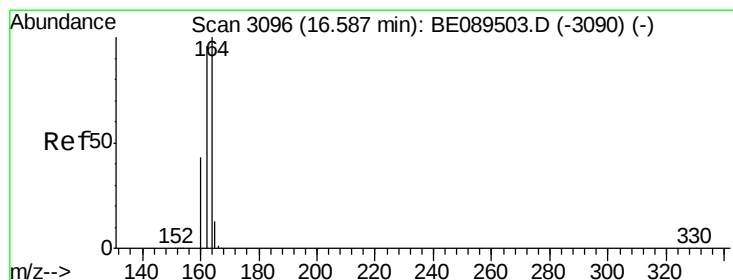
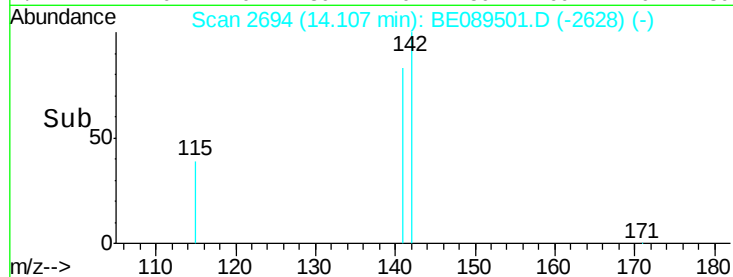
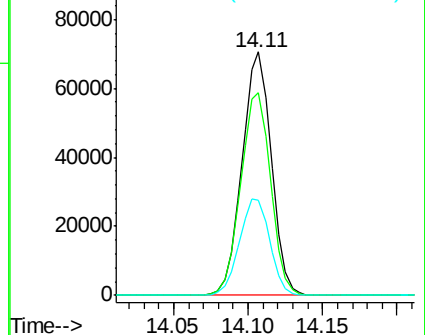
115 39.2 31.1 46.7



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E



#6

Acenaphthene-d10

Concen: 5.00 ng

RT: 16.59 min Scan# 3096

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

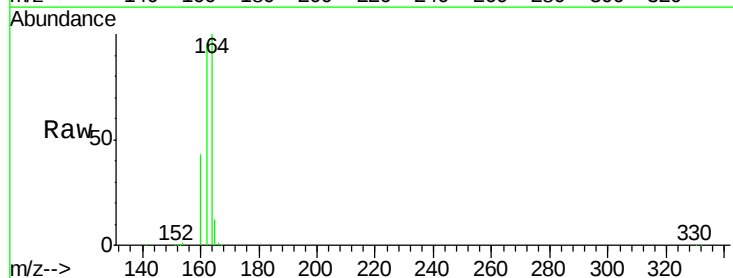
Tgt Ion:164 Resp: 57584

Ion Ratio Lower Upper

164 100

162 95.7 76.6 115.0

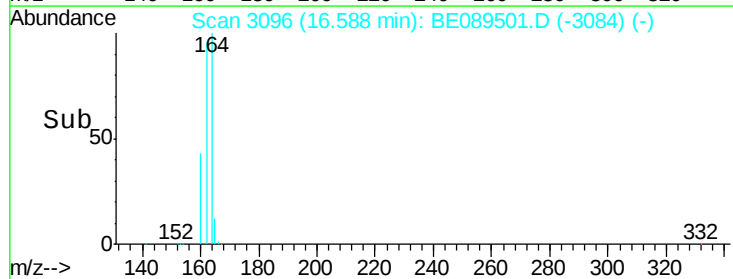
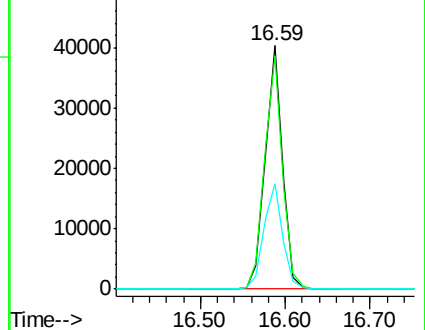
160 43.1 34.6 52.0



Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#7

2-Fluorobiphenyl

Concen: 4.64 ng

RT: 15.03 min Scan# 2897

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDIC005

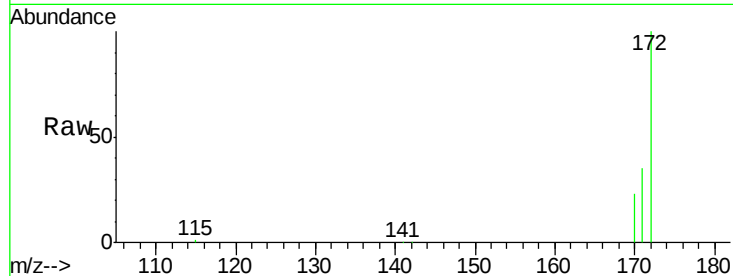
Tot Ion:172 Resp: 84171

Ion Ratio Lower Upper

172 100

171 34.7 27.4 41.0

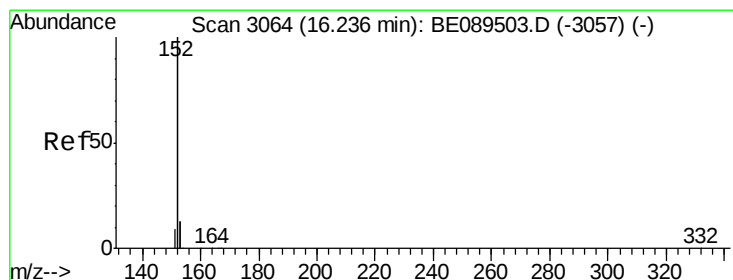
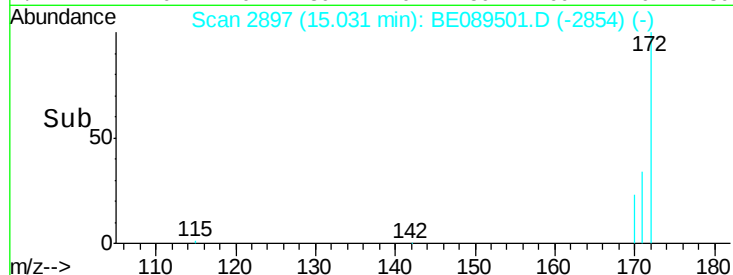
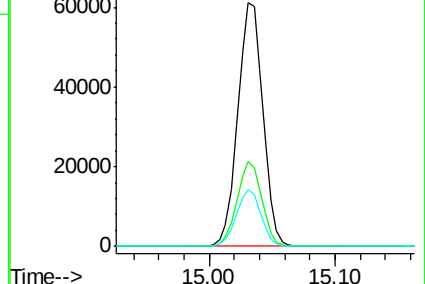
170 23.5 18.4 27.6



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: 4.95 ng

RT: 16.24 min Scan# 3064

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

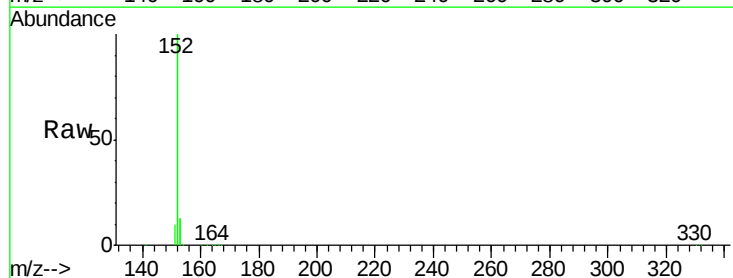
Tgt Ion:152 Resp: 611313

Ion Ratio Lower Upper

152 100

151 4.9 3.9 5.9

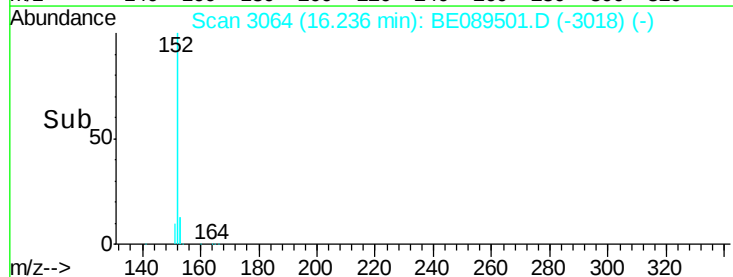
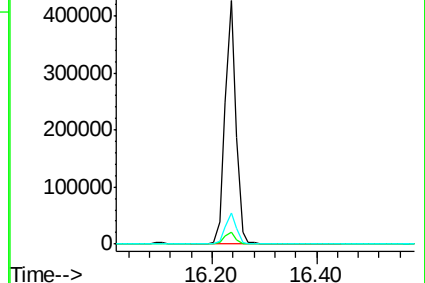
153 12.9 10.4 15.6

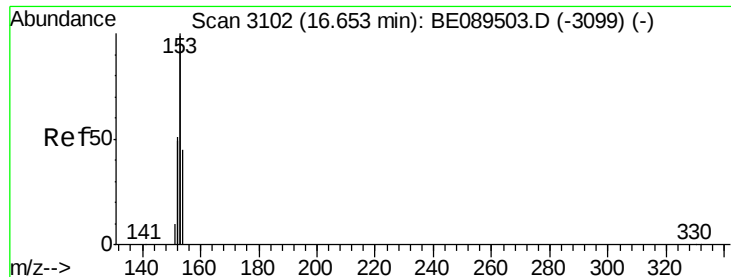


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#9

Acenaphthene

Concen: 4.64 ng

RT: 16.66 min Scan# 3103

Delta R.T. 0.01 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDIC005

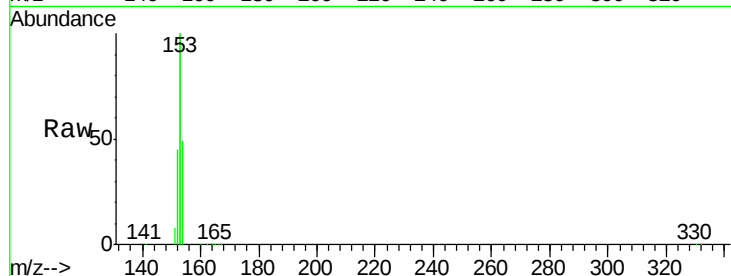
Tot Ion:154 Resp: 88061

Ion Ratio Lower Upper

154 100

153 430.6 341.5 512.3

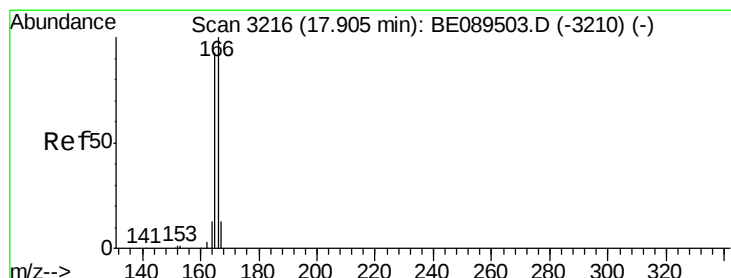
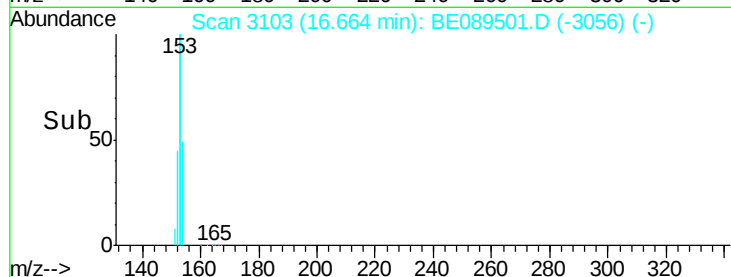
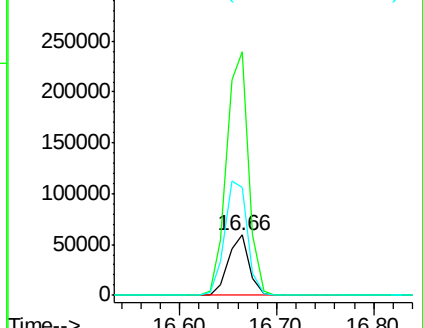
152 208.1 166.6 249.8



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: 4.87 ng

RT: 17.91 min Scan# 3216

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

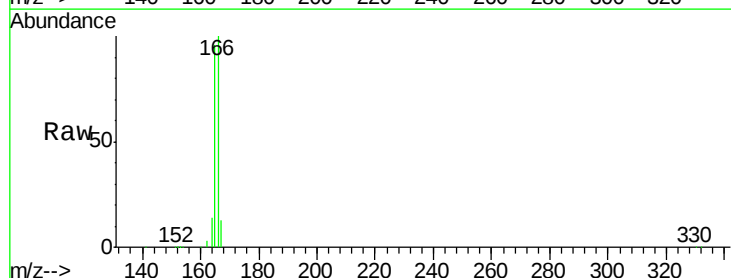
Tgt Ion:166 Resp: 102926

Ion Ratio Lower Upper

166 100

165 93.0 73.6 110.4

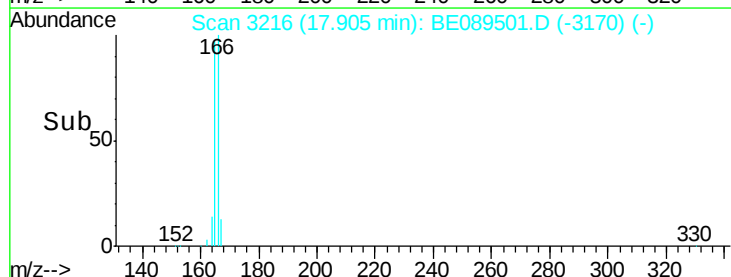
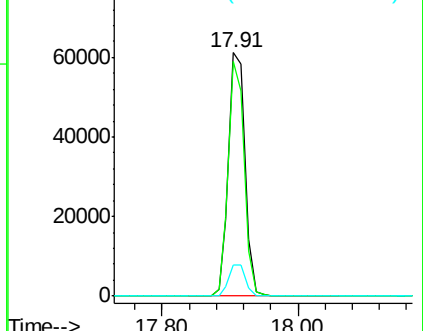
167 13.1 10.6 15.8

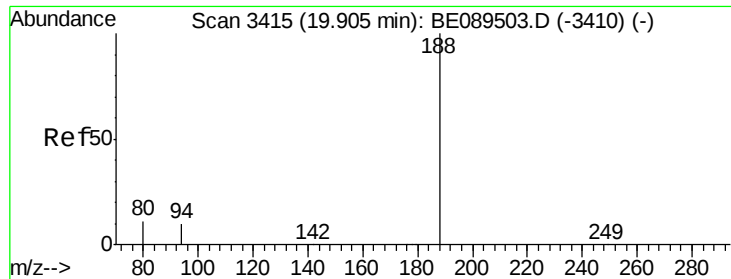


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

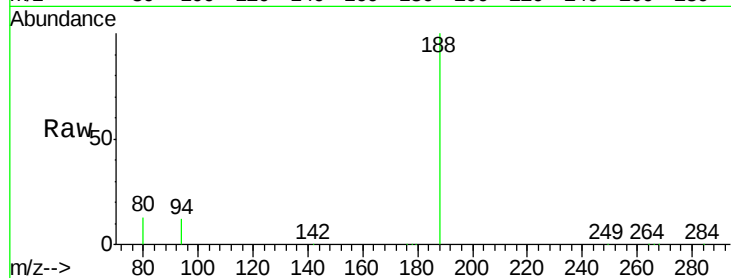




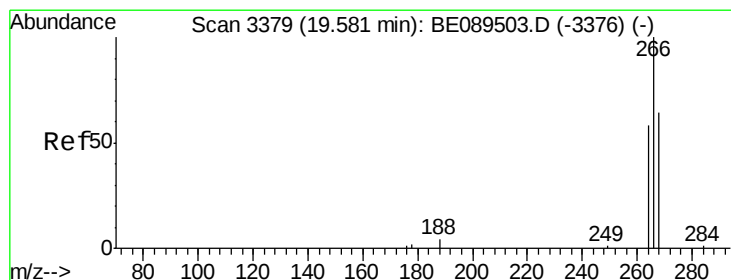
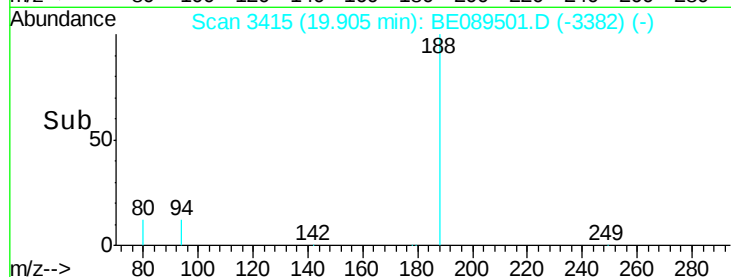
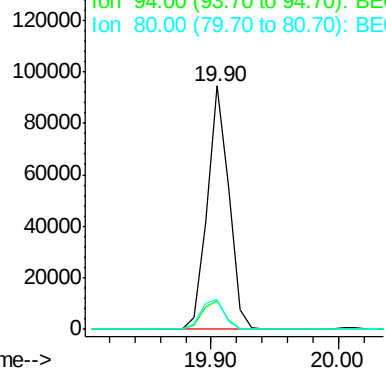
#11  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 19.90 min Scan# 3415  
Delta R.T. -0.00 min  
Lab File: BE089501.D  
Acq: 5 Feb 2015 12:01

Instrument :  
BNA\_E  
LabSampleId :  
SSTDIC005

Tot Ion:188 Resp: 110666  
Ion Ratio Lower Upper  
188 100  
94 12.0 8.2 12.4  
80 12.5 8.7 13.1

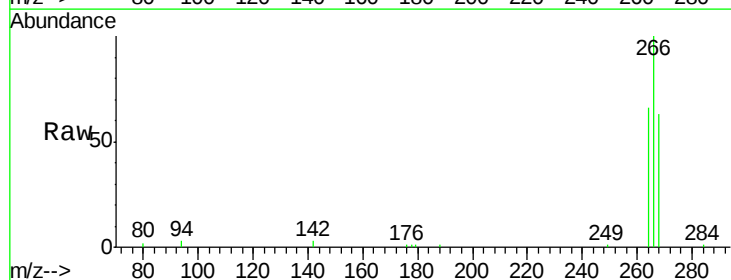


Abundance Ion 188.00 (187.70 to 188.70): E  
Ion 94.00 (93.70 to 94.70): BE0  
Ion 80.00 (79.70 to 80.70): BE0

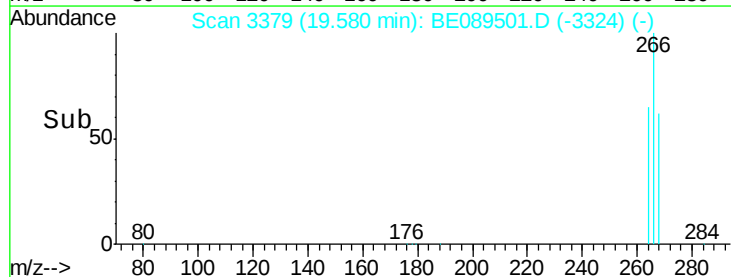
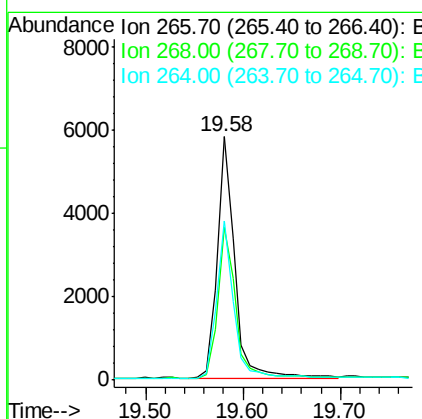


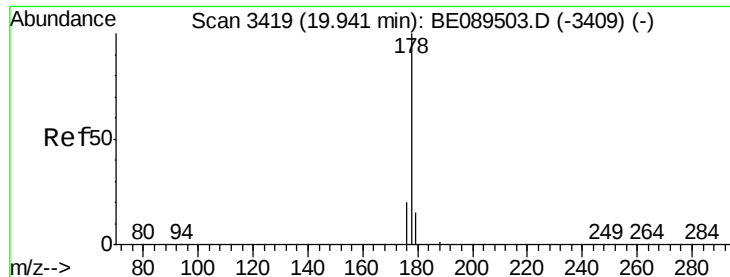
#12  
Pentachlorophenol  
Concen: 6.66 ng  
RT: 19.58 min Scan# 3379  
Delta R.T. -0.00 min  
Lab File: BE089501.D  
Acq: 5 Feb 2015 12:01

Tgt Ion:266 Resp: 7245  
Ion Ratio Lower Upper  
266 100  
268 62.7 56.7 85.1  
264 65.5 51.9 77.9



Abundance Ion 265.70 (265.40 to 266.40): E  
Ion 268.00 (267.70 to 268.70): E  
Ion 264.00 (263.70 to 264.70): E

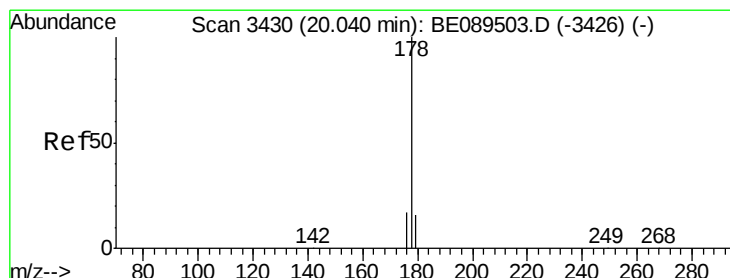
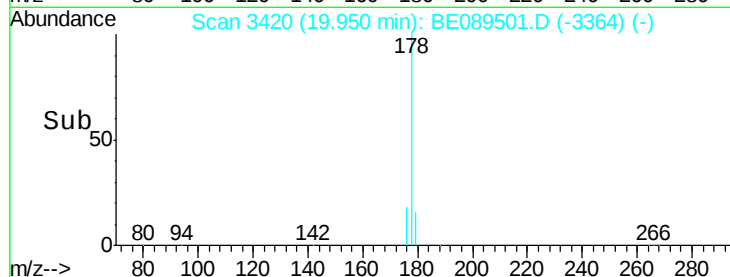
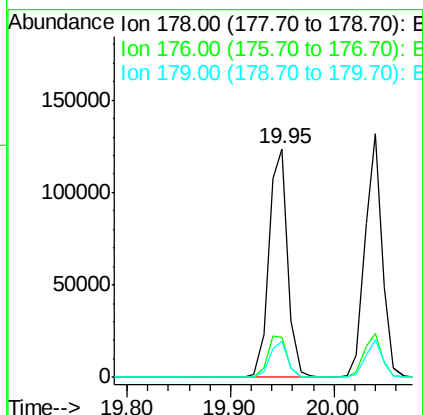
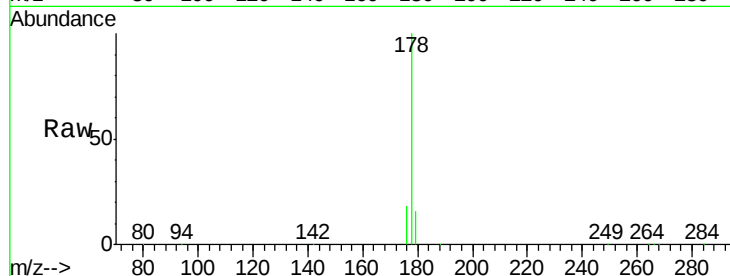




#13  
Phenanthrene  
Concen: 4.67 ng  
RT: 19.95 min Scan# 3420  
Delta R.T. 0.01 min  
Lab File: BE089501.D  
Acq: 5 Feb 2015 12:01

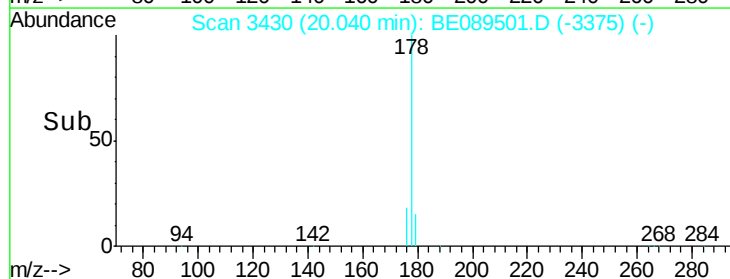
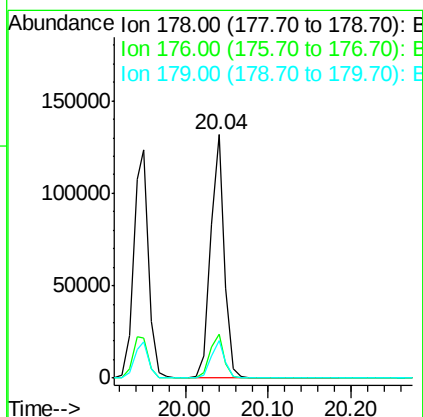
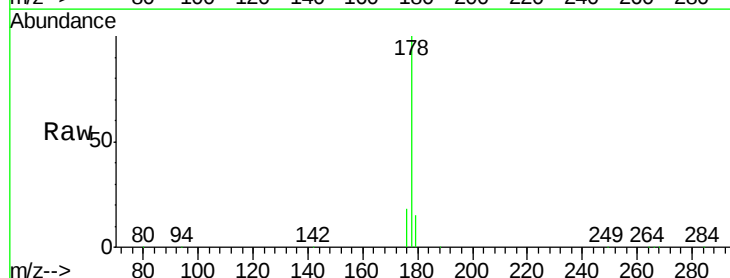
Instrument :  
BNA\_E  
LabSampleId :  
SSTDIC005

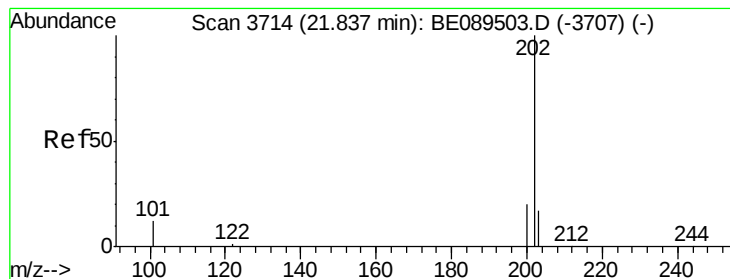
Tot Ion:178 Resp: 156838  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.4 23.0  
179 15.2 12.4 18.6



#14  
Anthracene  
Concen: 5.10 ng  
RT: 20.04 min Scan# 3430  
Delta R.T. -0.00 min  
Lab File: BE089501.D  
Acq: 5 Feb 2015 12:01

Tgt Ion:178 Resp: 153262  
Ion Ratio Lower Upper  
178 100  
176 18.2 14.6 22.0  
179 15.2 12.1 18.1





#15

Fluoranthene

Concen: 5.01 ng

RT: 21.84 min Scan# 3714

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDIC005

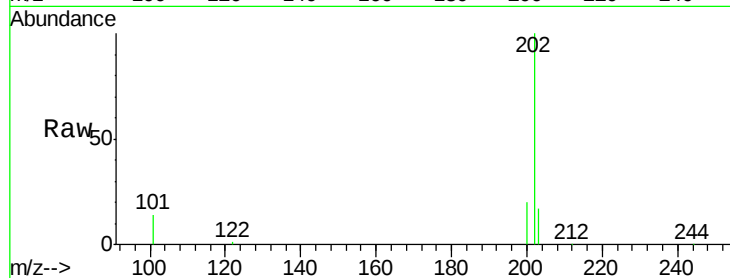
Tot Ion:202 Resp: 160761

Ion Ratio Lower Upper

202 100

101 14.3 11.3 16.9

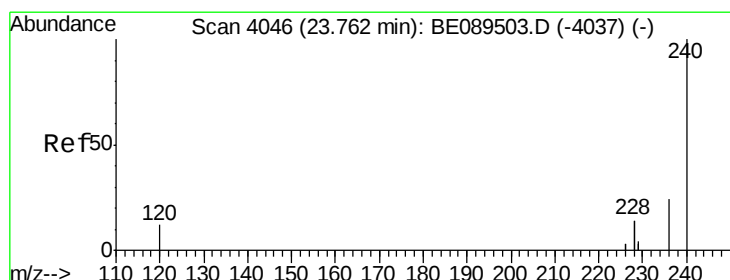
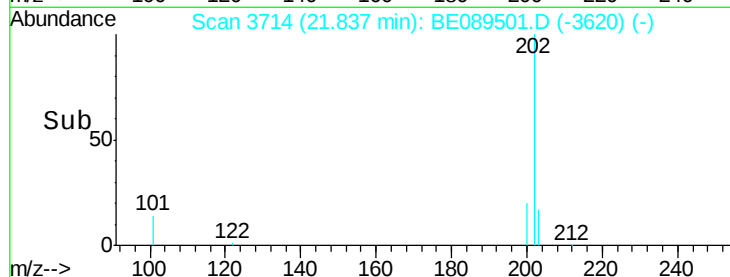
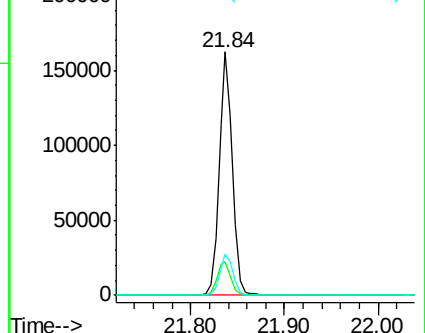
203 17.2 13.8 20.6



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



#16

Chrysene-d12

Concen: 5.00 ng

RT: 23.77 min Scan# 4047

Delta R.T. 0.01 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

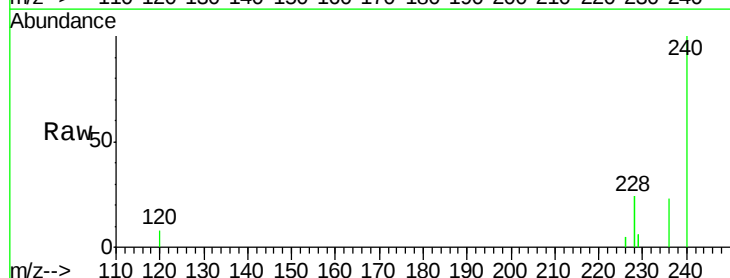
Tgt Ion:240 Resp: 120459

Ion Ratio Lower Upper

240 100

120 8.1 9.6 14.4#

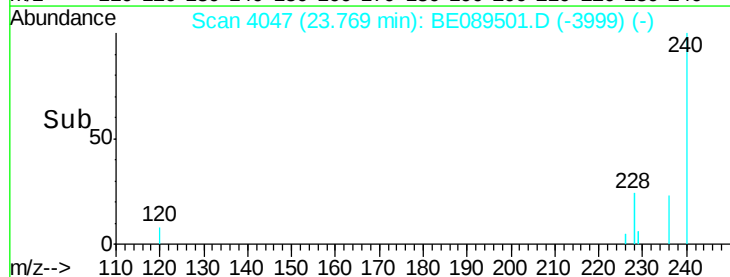
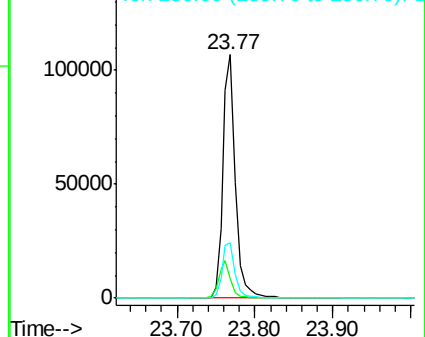
236 22.8 19.4 29.2

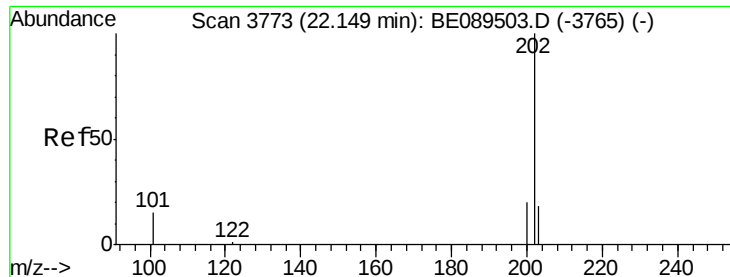


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

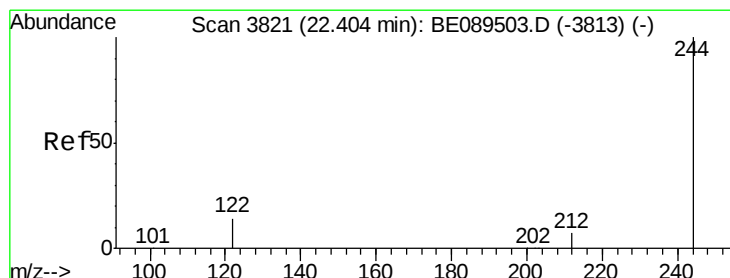
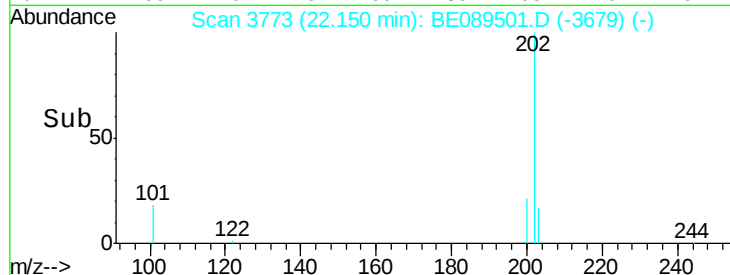
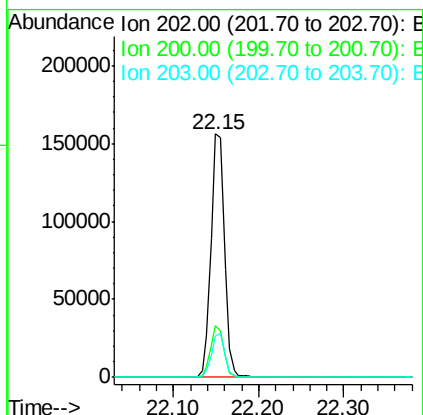
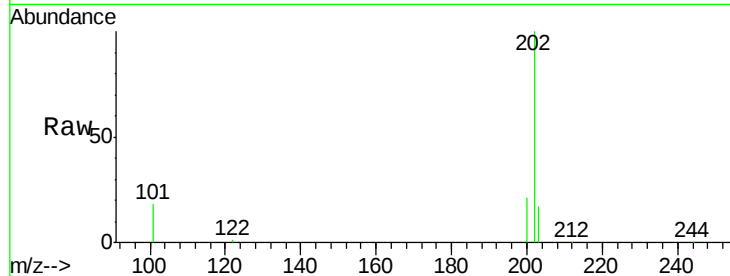




#17  
Pvrene  
Concen: 4.87 ng  
RT: 22.15 min Scan# 3773  
Delta R.T. 0.00 min  
Lab File: BE089501.D  
Acq: 5 Feb 2015 12:01

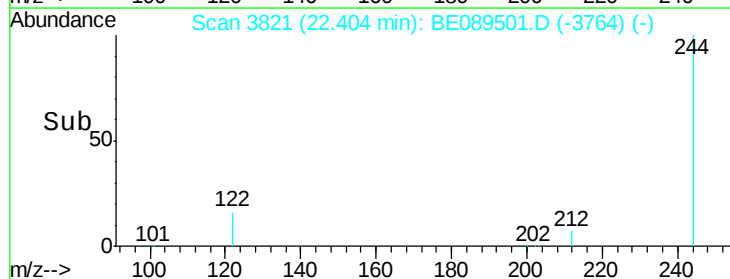
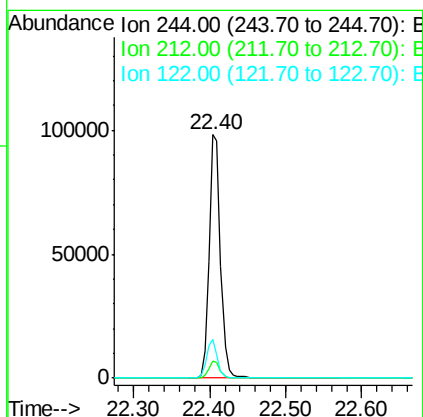
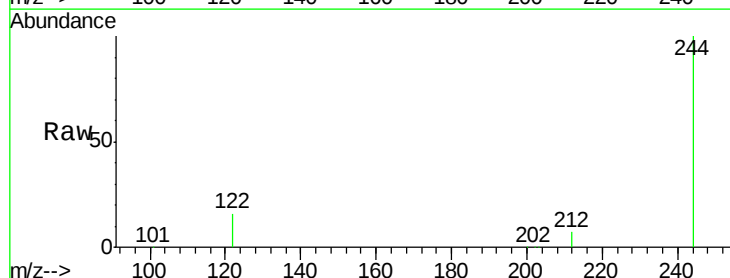
Instrument :  
BNA\_E  
LabSampleId :  
SSTDIC005

Tot Ion:202 Resp: 167759  
Ion Ratio Lower Upper  
202 100  
200 20.8 16.5 24.7  
203 17.5 14.0 21.0



#18  
Terphenyl-d14  
Concen: 4.85 ng  
RT: 22.40 min Scan# 3821  
Delta R.T. 0.00 min  
Lab File: BE089501.D  
Acq: 5 Feb 2015 12:01

Tgt Ion:244 Resp: 101687  
Ion Ratio Lower Upper  
244 100  
212 7.1 5.5 8.3  
122 16.0 11.1 16.7





#19

Benzo(a)anthracene

Concen: 4.83 ng

RT: 23.75 min Scan# 4044

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDIC005

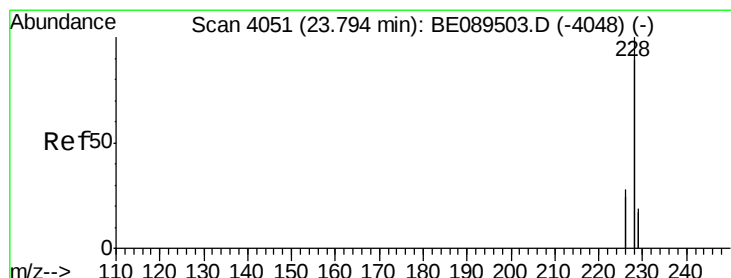
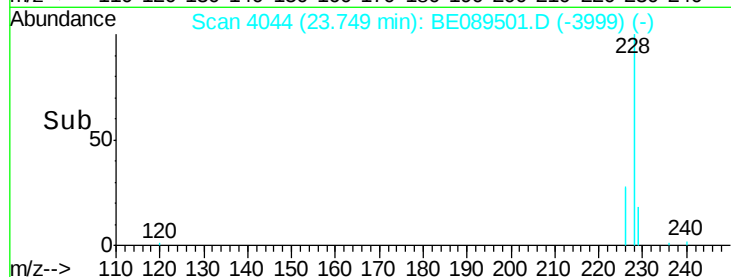
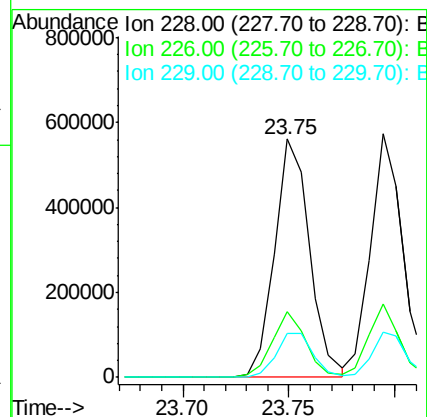
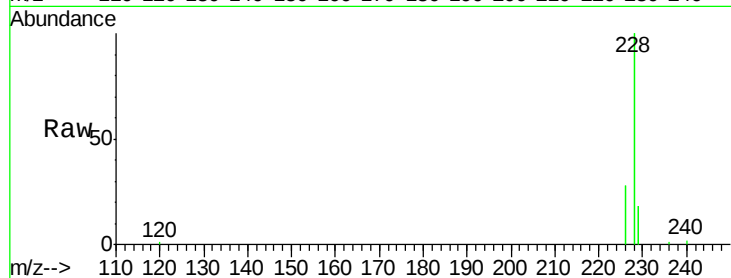
Tot Ion:228 Resp: 637936

Ion Ratio Lower Upper

228 100

226 27.6 21.0 31.6

229 18.2 15.5 23.3



#20

Chrysene

Concen: 4.64 ng

RT: 23.79 min Scan# 4051

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

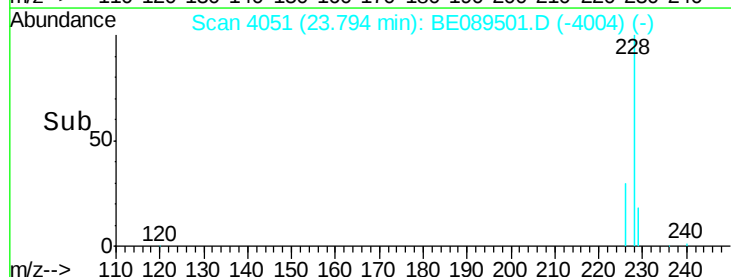
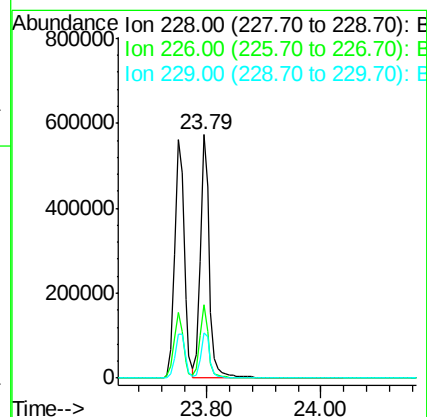
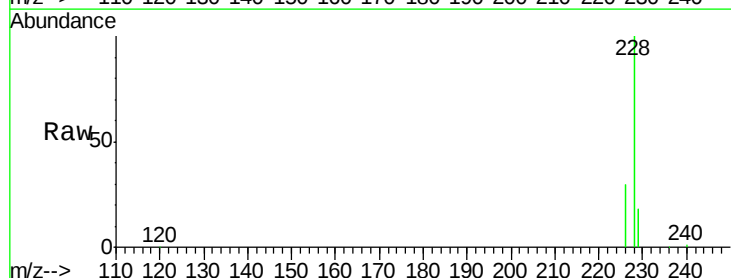
Tgt Ion:228 Resp: 630076

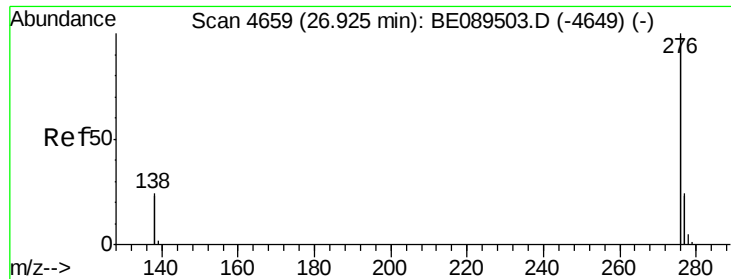
Ion Ratio Lower Upper

228 100

226 30.2 22.3 33.5

229 18.3 15.4 23.0

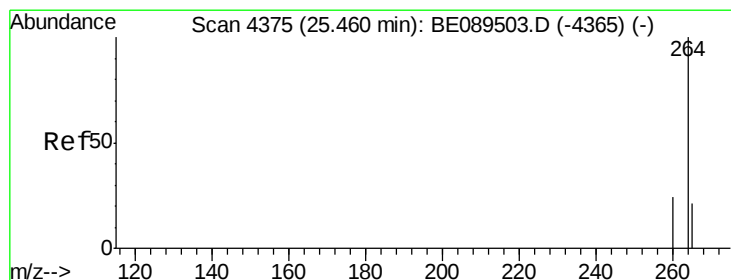
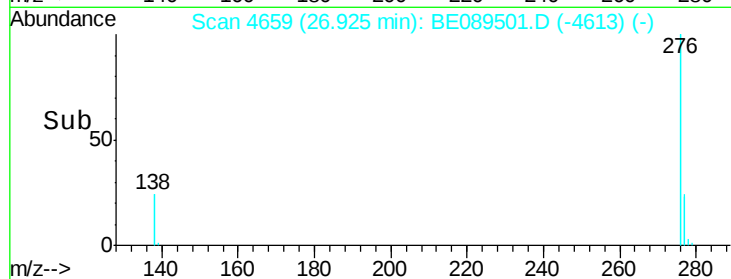
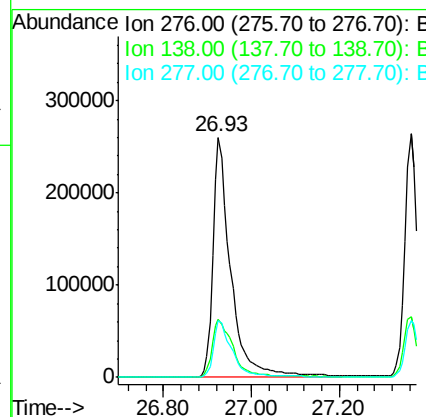
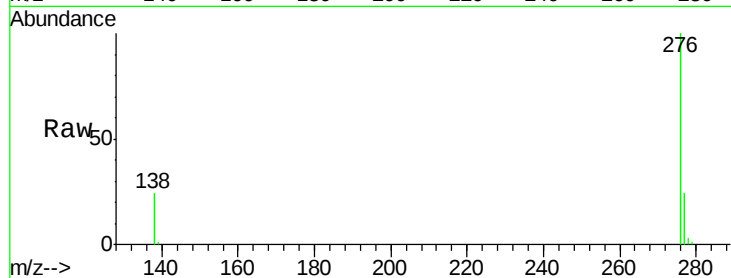




#21  
 Indeno(1,2,3-cd)pyrene  
 Concen: 5.15 ng  
 RT: 26.93 min Scan# 4659  
 Delta R.T. -0.00 min  
 Lab File: BE089501.D  
 Acq: 5 Feb 2015 12:01

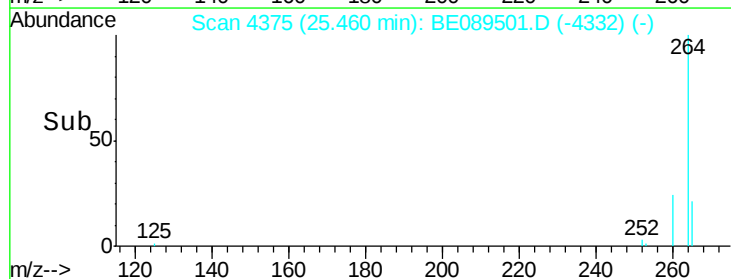
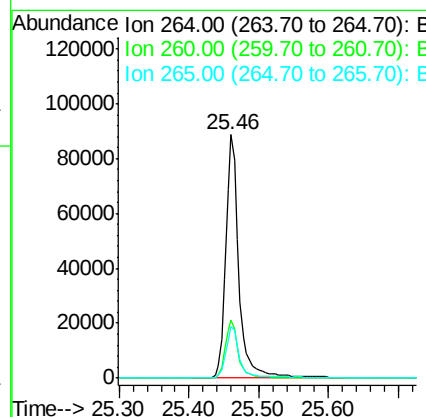
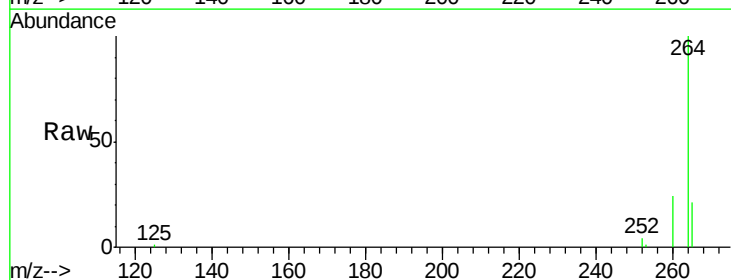
Instrument :  
 BNA\_E  
 LabSampleId :  
 SSTDICC005

Tot Ion:276 Resp: 727501  
 Ion Ratio Lower Upper  
 276 100  
 138 28.8 23.2 34.8  
 277 25.1 19.8 29.6



#22  
 Perylene-d12  
 Concen: 5.00 ng  
 RT: 25.46 min Scan# 4375  
 Delta R.T. 0.00 min  
 Lab File: BE089501.D  
 Acq: 5 Feb 2015 12:01

Tgt Ion:264 Resp: 117266  
 Ion Ratio Lower Upper  
 264 100  
 260 23.9 19.0 28.6  
 265 21.3 17.0 25.6





#23

Benzo(b)fluoranthene

Concen: 5.53 ng

RT: 25.02 min Scan# 4278

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDIC005

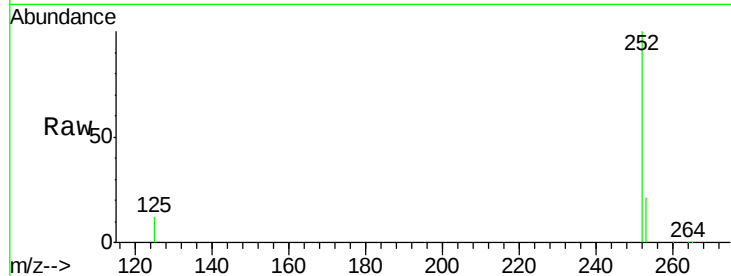
Tot Ion:252 Resp: 150749

Ion Ratio Lower Upper

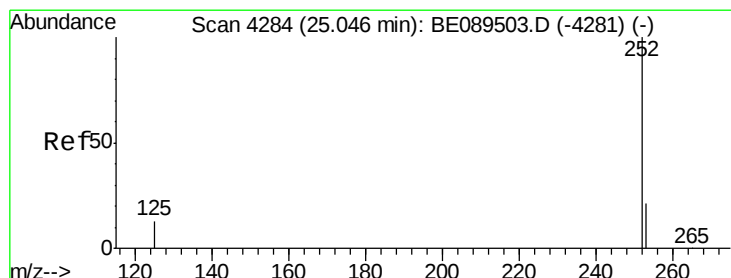
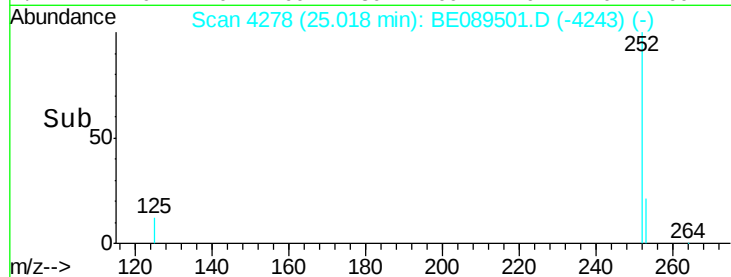
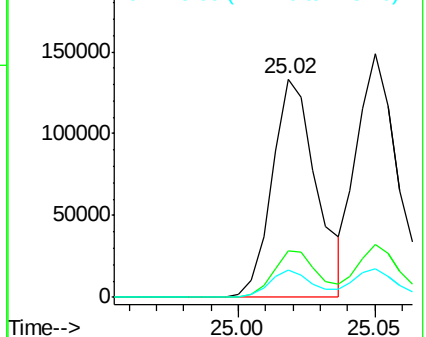
252 100

253 21.2 17.4 26.0

125 12.5 9.6 14.4



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



#24

Benzo(k)fluoranthene

Concen: 4.74 ng

RT: 25.05 min Scan# 4285

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

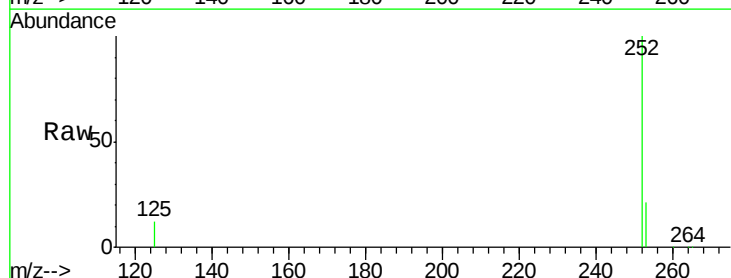
Tgt Ion:252 Resp: 177270

Ion Ratio Lower Upper

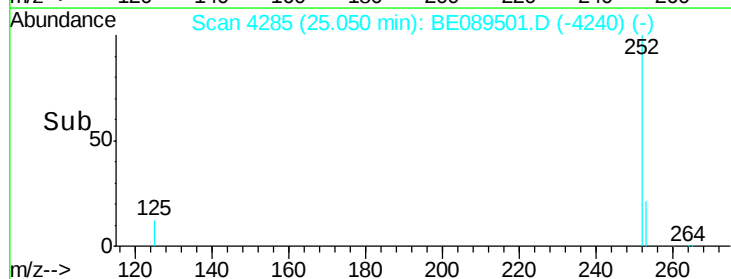
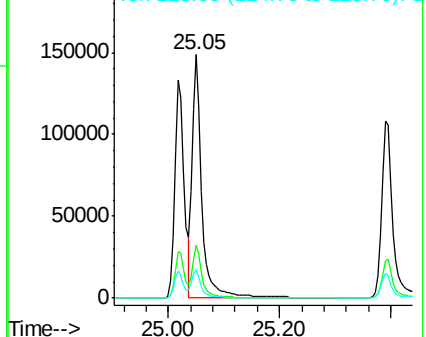
252 100

253 21.5 17.0 25.6

125 11.9 10.2 15.4



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





#25

Benzo(a)pyrene

Concen: 5.50 ng

RT: 25.39 min Scan# 4360

Delta R.T. 0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDICC005

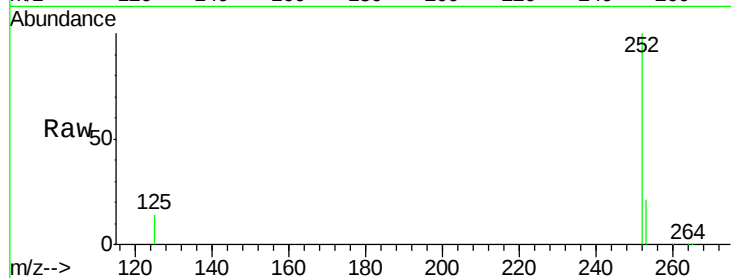
Tot Ion:252 Resp: 152068

Ion Ratio Lower Upper

252 100

253 21.5 17.8 26.6

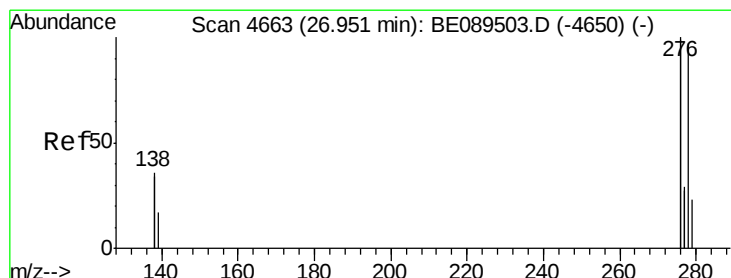
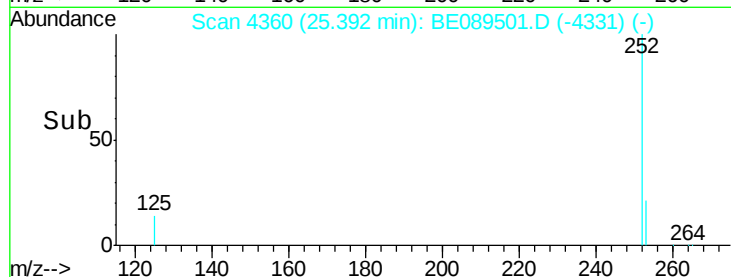
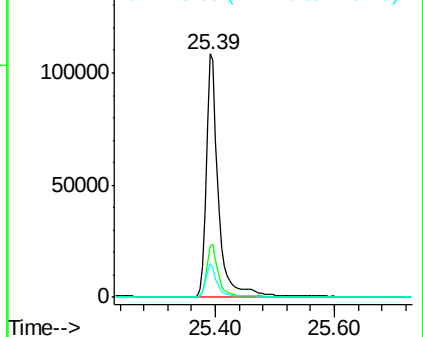
125 13.8 10.7 16.1



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#26

Dibenzo(a,h)anthracene

Concen: 5.29 ng

RT: 26.95 min Scan# 4663

Delta R.T. -0.00 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

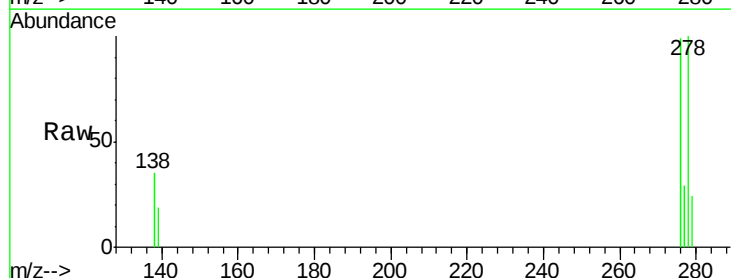
Tgt Ion:278 Resp: 156043

Ion Ratio Lower Upper

278 100

139 19.2 14.6 22.0

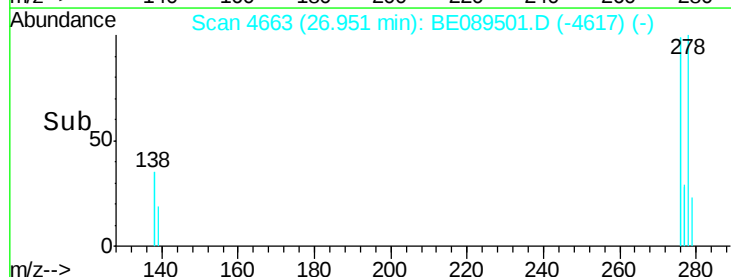
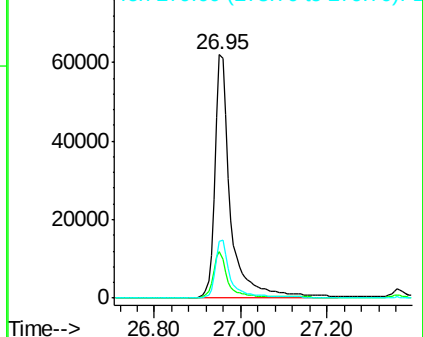
279 23.5 19.0 28.4



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





#27

Benzo(a,h,i)perylene

Concen: 4.92 ng

RT: 27.36 min Scan# 4726

Delta R.T. 0.01 min

Lab File: BE089501.D

Acq: 5 Feb 2015 12:01

Instrument :

BNA\_E

LabSampleId :

SSTDIC005

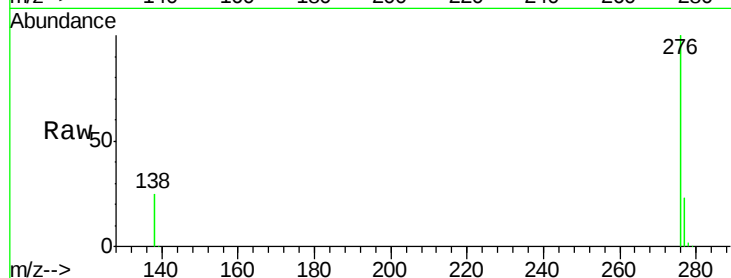
Tot Ion:276 Resp: 592779

Ion Ratio Lower Upper

276 100

277 23.3 18.6 28.0

138 24.8 20.8 31.2



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

