

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE011515\  
 Data File : BE089395.D  
 Acq On : 15 Jan 2015 16:18  
 Operator : TP/IZ  
 Sample : SSTDICC0.8  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 LabSampleId :  
 SSTDICC001

Quant Time: Jan 16 05:29:02 2015  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-PAH-BE011515.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jan 16 05:21:30 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.80  | 152  | 21948    | 5.00 | ng    | 0.00     |
| 3) Naphthalene-d8         | 8.36  | 136  | 82771    | 5.00 | ng    | 0.00     |
| 7) Acenaphthene-d10       | 10.49 | 164  | 37813    | 5.00 | ng    | 0.00     |
| 12) Phenanthrene-d10      | 12.50 | 188  | 57428    | 5.00 | ng    | 0.00     |
| 17) Chrysene-d12          | 17.78 | 240  | 38814    | 5.00 | ng    | 0.00     |
| 23) Perylene-d12          | 20.81 | 264  | 29551    | 5.00 | ng    | 0.00     |

|                             |       |     |      |      |    |      |
|-----------------------------|-------|-----|------|------|----|------|
| System Monitoring Compounds |       |     |      |      |    |      |
| 4) Nitrobenzene-d5          | 7.50  | 82  | 3397 | 0.63 | ng | 0.00 |
| 8) 2-Fluorobiphenyl         | 9.70  | 172 | 7826 | 0.76 | ng | 0.00 |
| 19) Terphenyl-d14           | 15.59 | 244 | 4574 | 0.70 | ng | 0.00 |

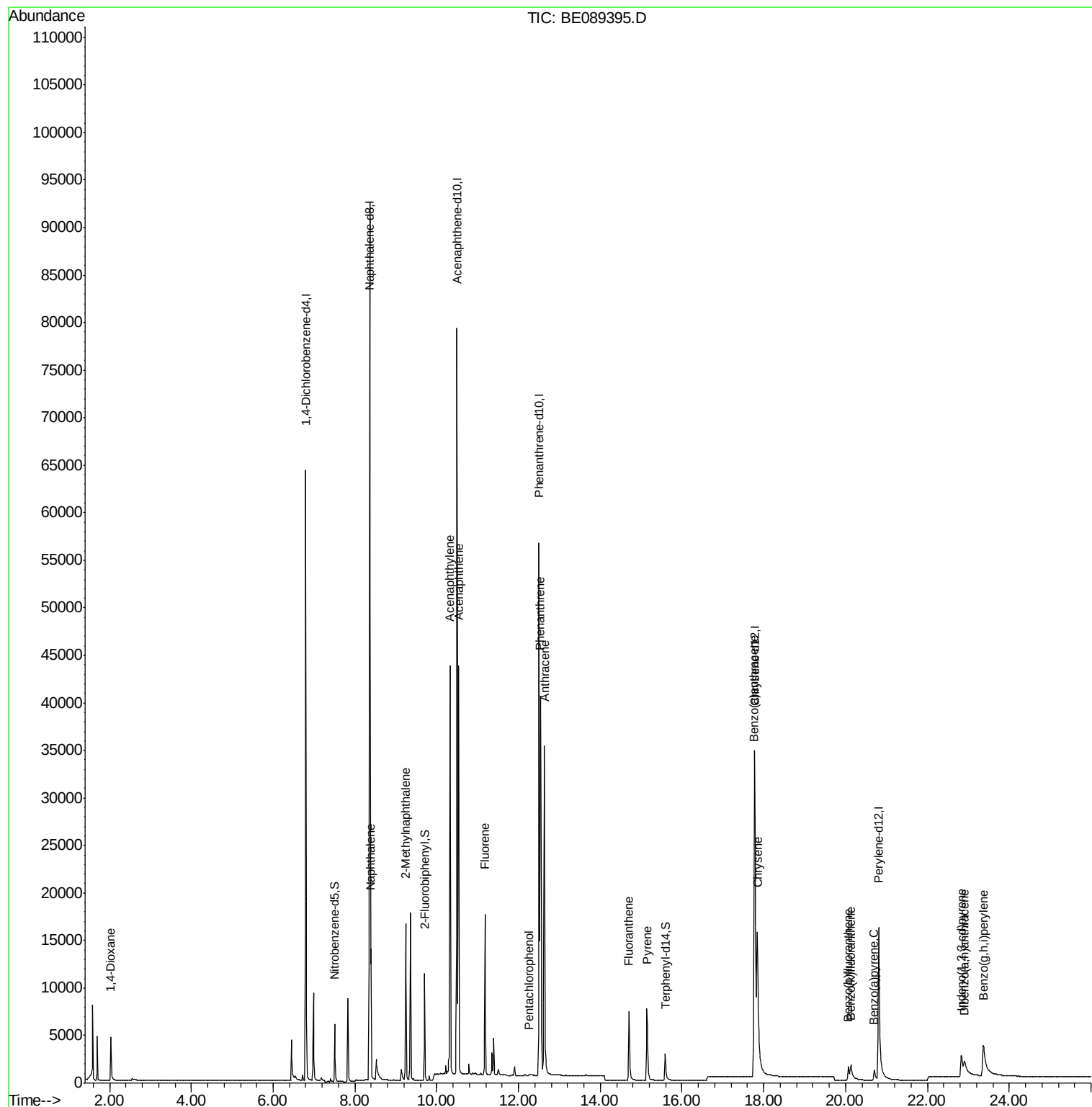
|                            |       |     |       |        |    |      |
|----------------------------|-------|-----|-------|--------|----|------|
| Target Compounds           |       |     |       | Qvalue |    |      |
| 2) 1,4-Dioxane             | 2.03  | 88  | 2527  | 0.80   | ng | 99   |
| 5) Naphthalene             | 8.38  | 128 | 14573 | 0.80   | ng | 99   |
| 6) 2-Methylnaphthalene     | 9.24  | 142 | 8725  | 0.74   | ng | 99   |
| 9) Acenaphthylene          | 10.32 | 152 | 49149 | 0.78   | ng | 100  |
| 10) Acenaphthene           | 10.54 | 154 | 7592  | 0.77   | ng | 100  |
| 11) Fluorene               | 11.18 | 166 | 8206  | 0.80   | ng | 99   |
| 13) Pentachlorophenol      | 12.26 | 266 | 246   | 0.40   | ng | 94   |
| 14) Phenanthrene           | 12.55 | 178 | 45767 | 0.78   | ng | 100  |
| 15) Anthracene             | 12.63 | 178 | 41096 | 0.75   | ng | 100  |
| 16) Fluoranthene           | 14.70 | 202 | 8642  | 0.77   | ng | 100  |
| 18) Pyrene                 | 15.14 | 202 | 9170  | 0.73   | ng | 100  |
| 20) Benzo(a)anthracene     | 17.76 | 228 | 20806 | 0.60   | ng | 97   |
| 21) Chrysene               | 17.84 | 228 | 31307 | 0.79   | ng | 99   |
| 22) Indeno(1,2,3-cd)pyrene | 22.83 | 276 | 4708  | 0.20   | ng | # 71 |
| 24) Benzo(b)fluoranthene   | 20.07 | 252 | 2303  | 0.45   | ng | 100  |
| 25) Benzo(k)fluoranthene   | 20.13 | 252 | 5287  | 0.66   | ng | 98   |
| 26) Benzo(a)pyrene         | 20.70 | 252 | 2344  | 0.46   | ng | 97   |
| 27) Dibenzo(a,h)anthracene | 22.91 | 278 | 1731  | 0.43   | ng | 97   |
| 28) Benzo(g,h,i)perylene   | 23.37 | 276 | 12071 | 0.52   | ng | 98   |

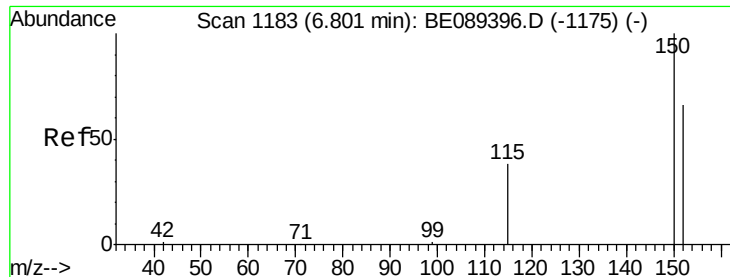
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE011515\  
Data File : BE089395.D  
Acq On : 15 Jan 2015 16:18  
Operator : TP/IZ  
Sample : SSTDICC0.8  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_M  
LabSampleId :  
SSTDICCC001

Quant Time: Jan 16 05:29:02 2015  
Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-PAH-BE011515.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jan 16 05:21:30 2015  
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 6.80 min Scan# 1183

Delta R.T. -0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

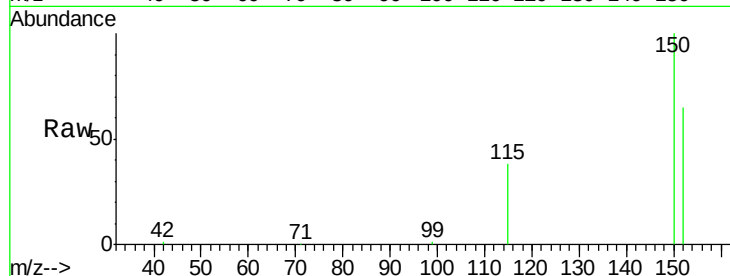
Tgt Ion:152 Resp: 21948

Ion Ratio Lower Upper

152 100

150 153.5 121.9 182.9

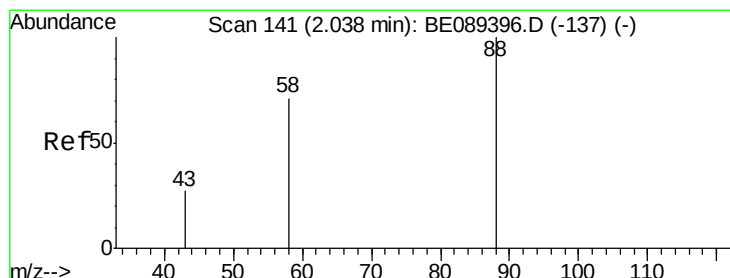
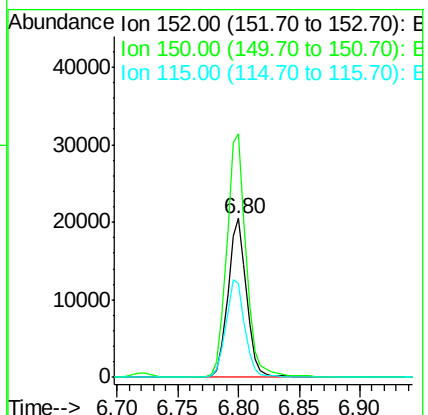
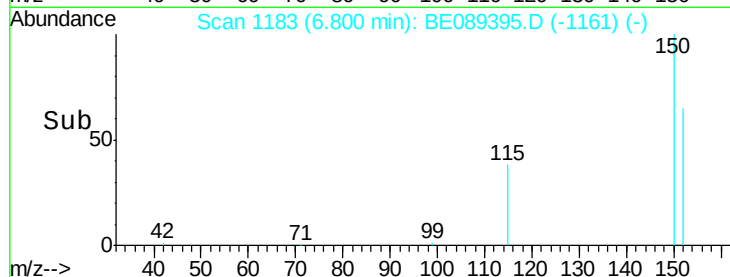
115 59.0 47.0 70.6



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

1,4-Dioxane

Concen: 0.80 ng

RT: 2.03 min Scan# 139

Delta R.T. -0.01 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

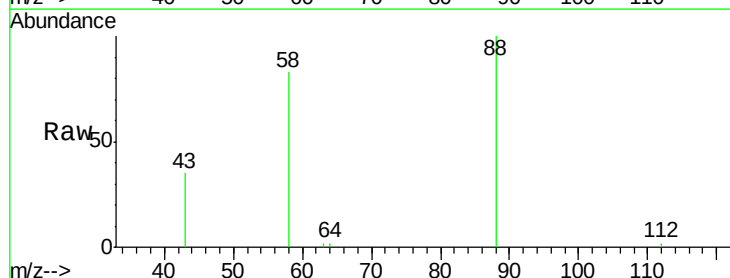
Tgt Ion: 88 Resp: 2527

Ion Ratio Lower Upper

88 100

58 79.3 64.6 96.8

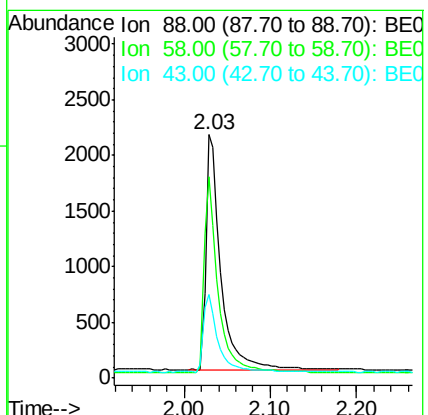
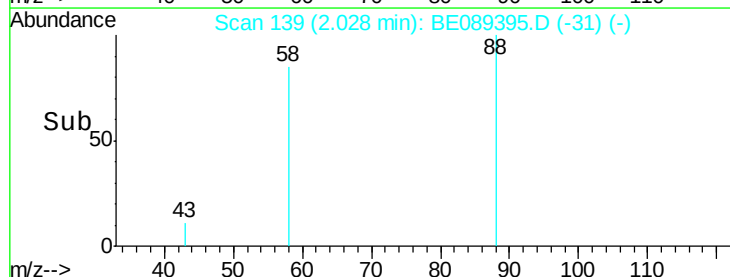
43 31.4 25.7 38.5

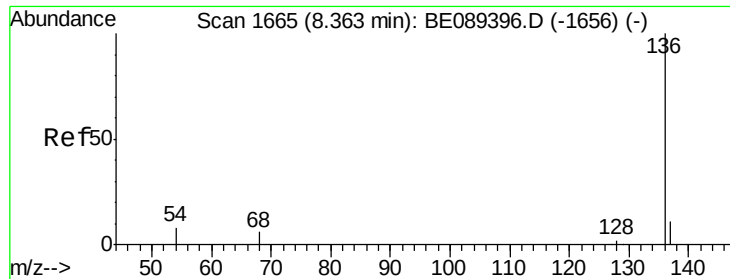


Abundance Ion 88.00 (87.70 to 88.70): BE0

Ion 58.00 (57.70 to 58.70): BE0

Ion 43.00 (42.70 to 43.70): BE0





#3

Naphthalene-d8

Concen: 5.00 ng

RT: 8.36 min Scan# 1666

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

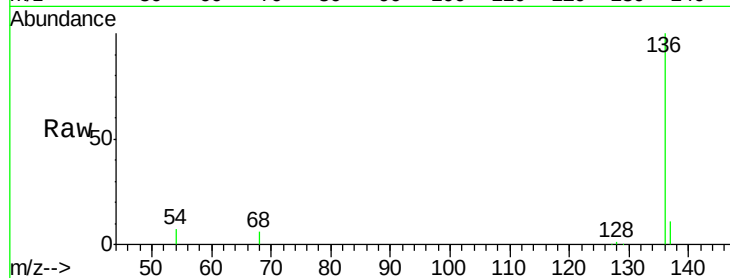
Tgt Ion: 136 Resp: 82771

Ion Ratio Lower Upper

136 100

137 11.1 8.7 13.1

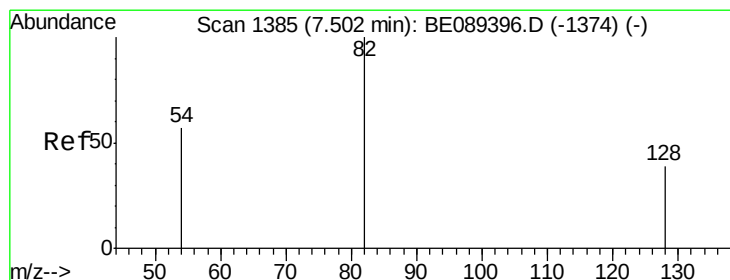
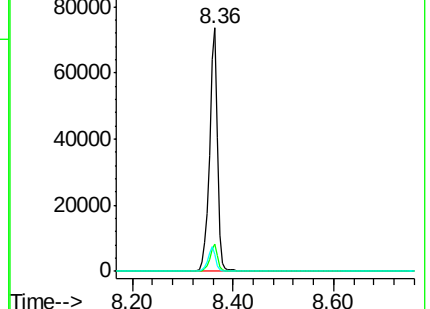
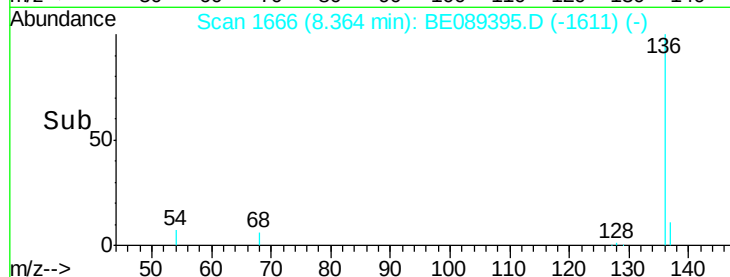
54 7.0 6.5 9.7



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



#4

Nitrobenzene-d5

Concen: 0.63 ng

RT: 7.50 min Scan# 1386

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

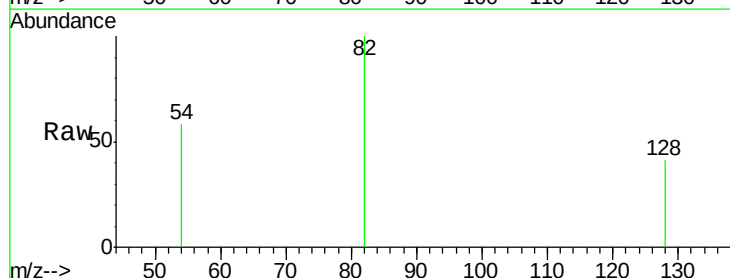
Tgt Ion: 82 Resp: 3397

Ion Ratio Lower Upper

82 100

128 41.3 31.5 47.3

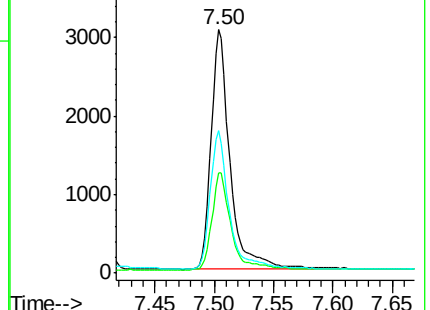
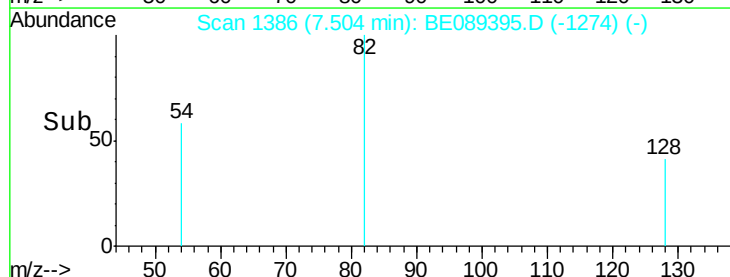
54 58.4 46.2 69.2

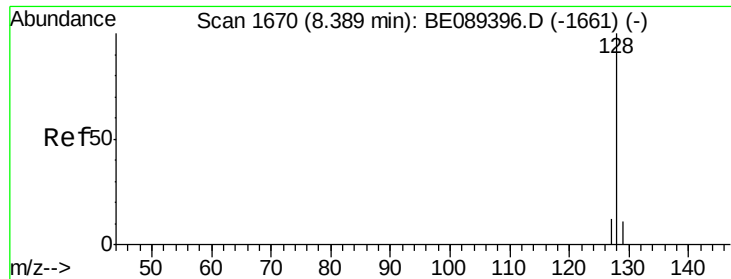


Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BE0





#5

Naphthalene

Concen: 0.80 ng

RT: 8.38 min Scan# 1670

Delta R.T. -0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

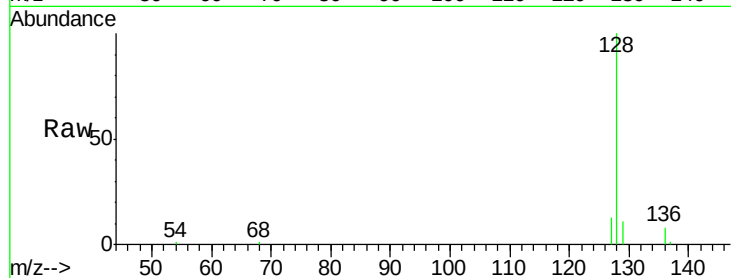
Tgt Ion:128 Resp: 14573

Ion Ratio Lower Upper

128 100

129 11.1 9.0 13.6

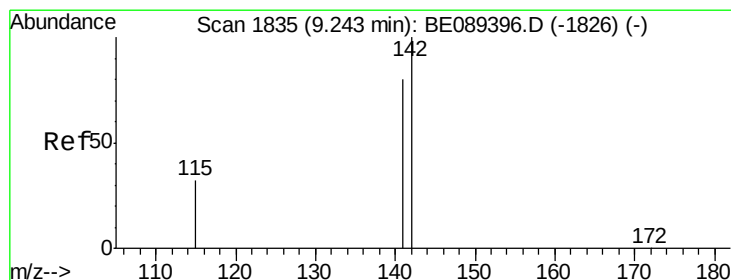
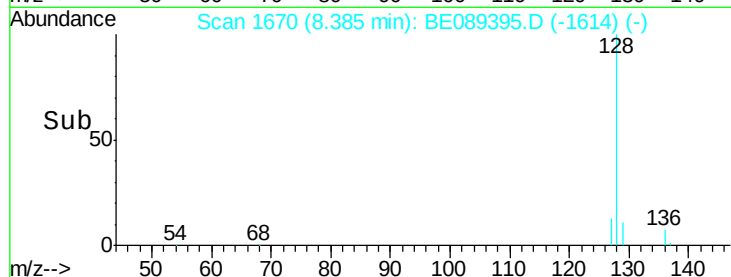
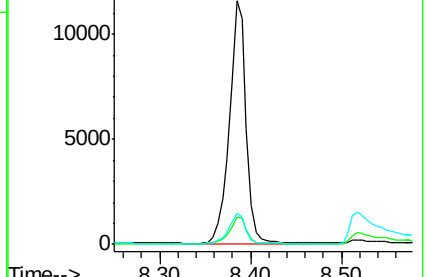
127 12.8 9.6 14.4



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



#6

2-Methylnaphthalene

Concen: 0.74 ng

RT: 9.24 min Scan# 1836

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

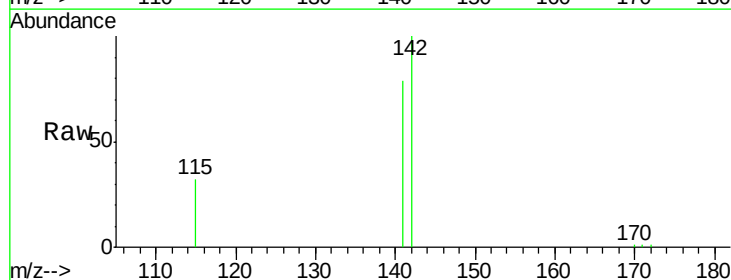
Tgt Ion:142 Resp: 8725

Ion Ratio Lower Upper

142 100

141 79.0 63.7 95.5

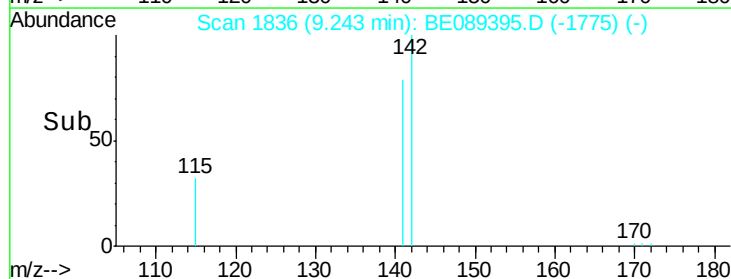
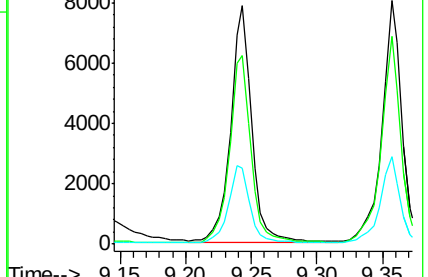
115 31.9 25.4 38.0

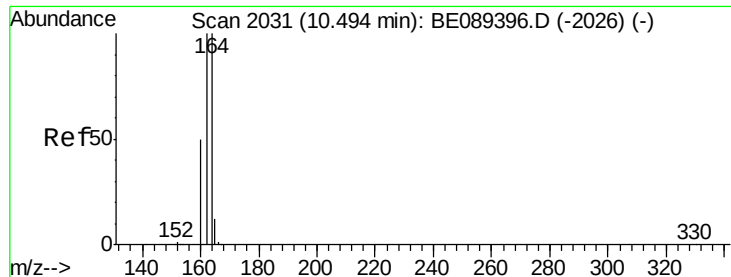


Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E





#7

Acenaphthene-d10

Concen: 5.00 ng

RT: 10.49 min Scan# 2032

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

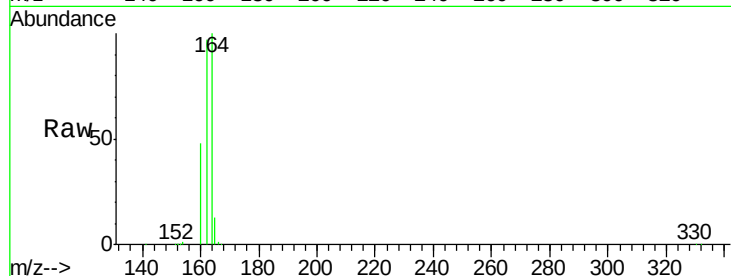
Tgt Ion:164 Resp: 37813

Ion Ratio Lower Upper

164 100

162 97.4 80.2 120.4

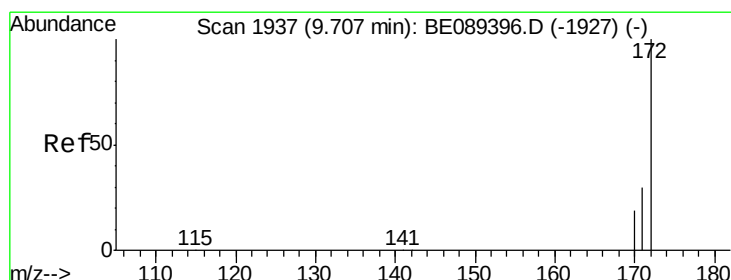
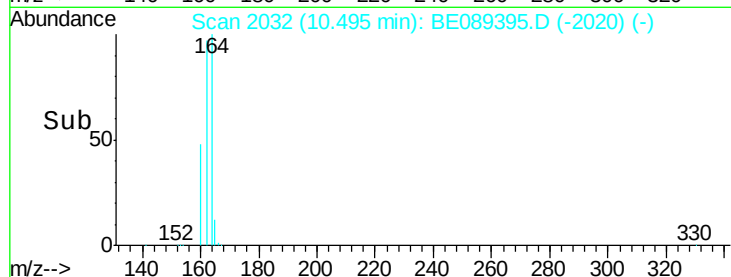
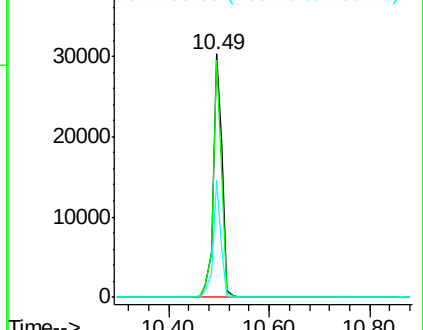
160 48.2 40.1 60.1



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



#8

2-Fluorobiphenyl

Concen: 0.76 ng

RT: 9.70 min Scan# 1937

Delta R.T. -0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

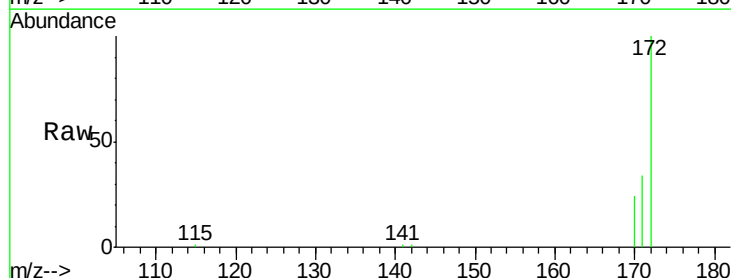
Tgt Ion:172 Resp: 7826

Ion Ratio Lower Upper

172 100

171 34.1 24.4 36.6

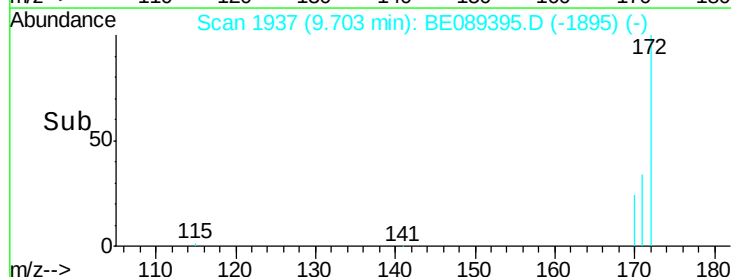
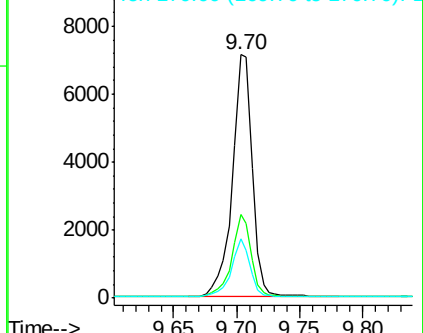
170 24.2 15.8 23.6#

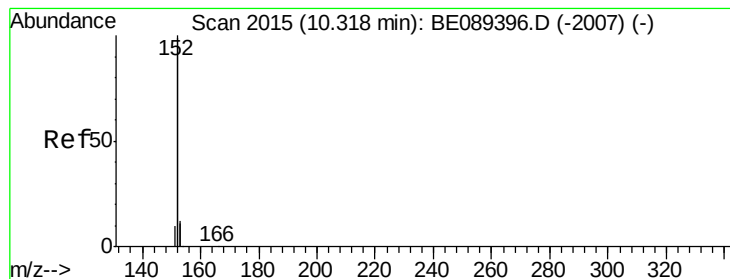


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





#9

Acenaphthylene

Concen: 0.78 ng

RT: 10.32 min Scan# 2016

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

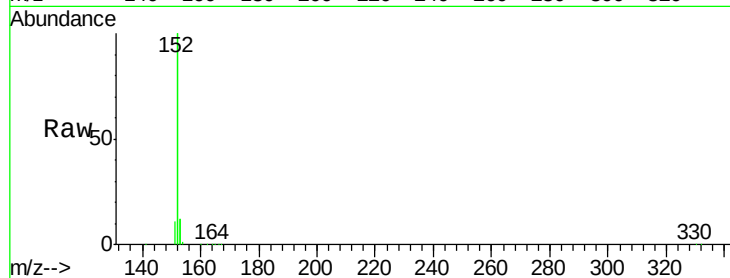
Tgt Ion:152 Resp: 49149

Ion Ratio Lower Upper

152 100

151 4.6 3.7 5.5

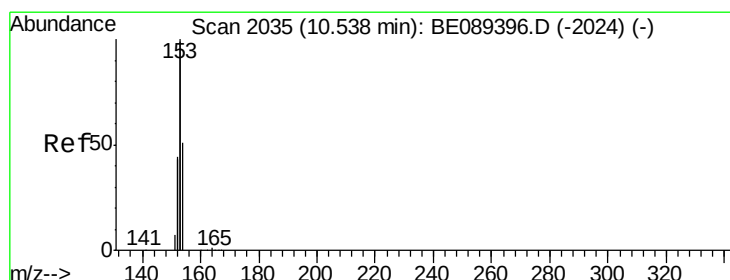
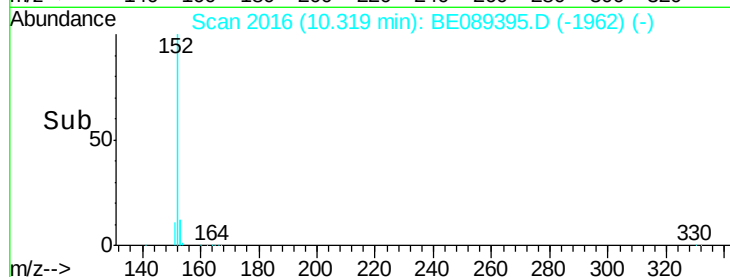
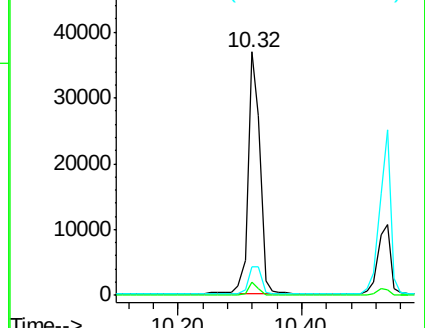
153 13.0 10.2 15.4



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



#10

Acenaphthene

Concen: 0.77 ng

RT: 10.54 min Scan# 2036

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

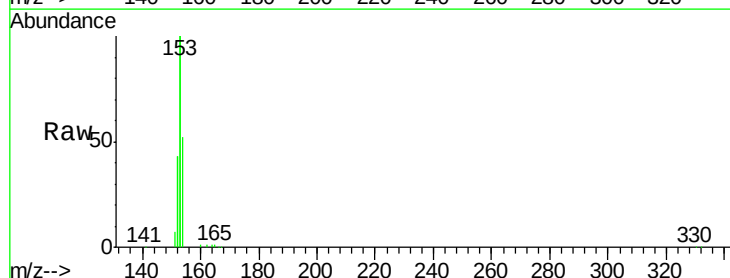
Tgt Ion:154 Resp: 7592

Ion Ratio Lower Upper

154 100

153 409.3 327.0 490.4

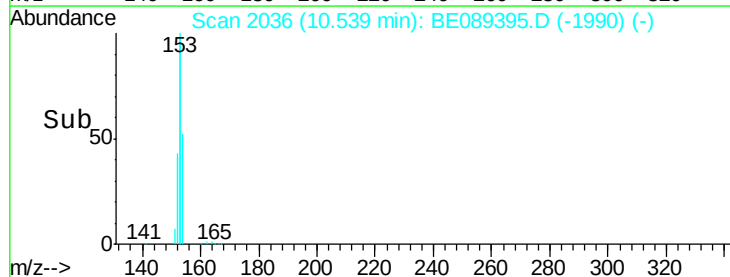
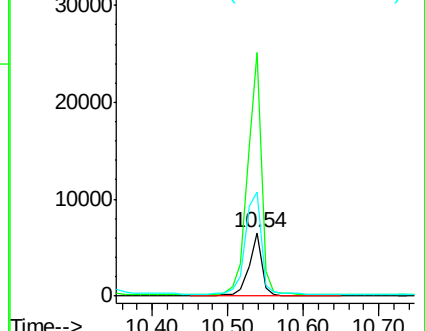
152 202.3 162.2 243.4

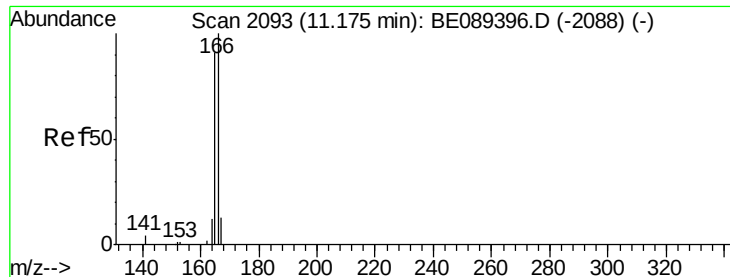


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

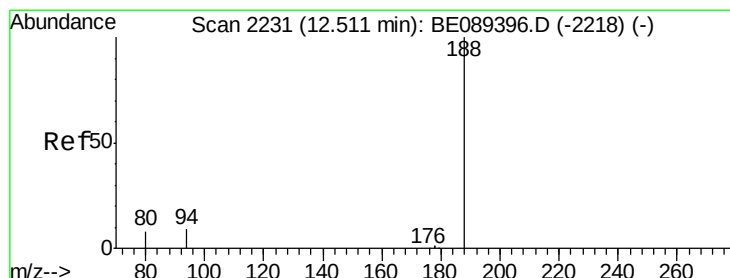
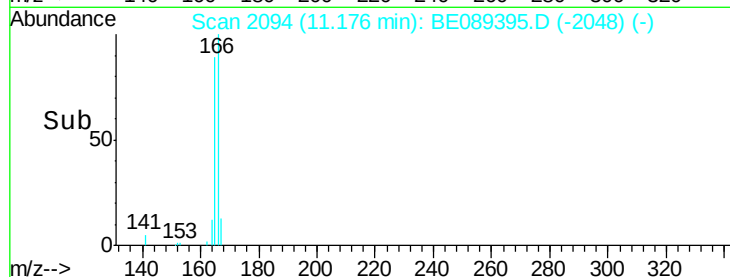
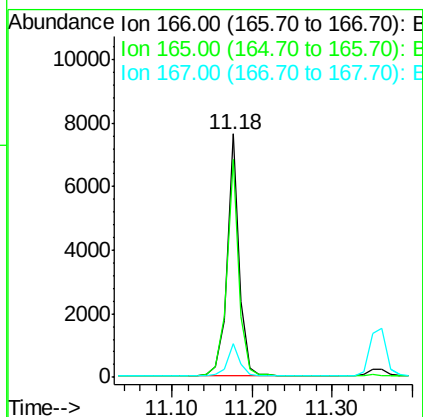
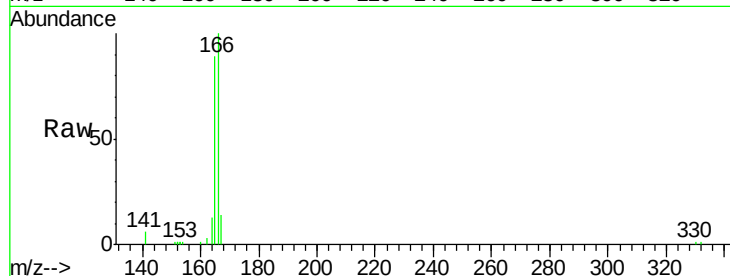




#11  
 Fluorene  
 Concen: 0.80 ng  
 RT: 11.18 min Scan# 2094  
 Delta R.T. 0.00 min  
 Lab File: BE089395.D  
 Acq: 15 Jan 2015 16:18

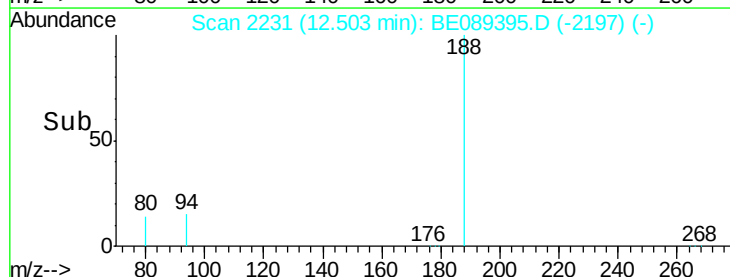
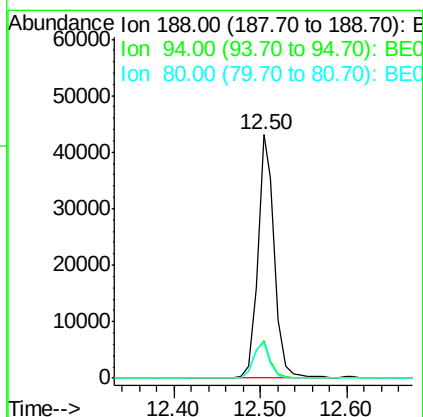
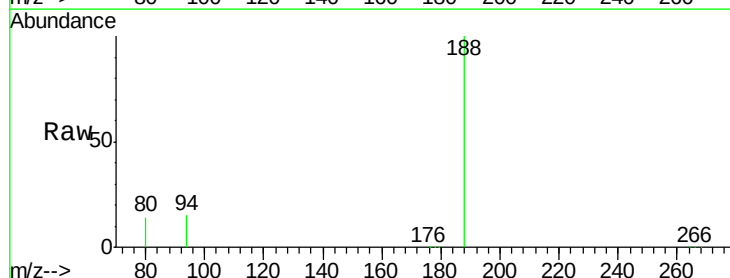
Instrument :  
 BNA\_M  
 LabSampleId :  
 SSTDICC001

Tgt Ion:166 Resp: 8206  
 Ion Ratio Lower Upper  
 166 100  
 165 90.0 72.5 108.7  
 167 13.6 10.7 16.1

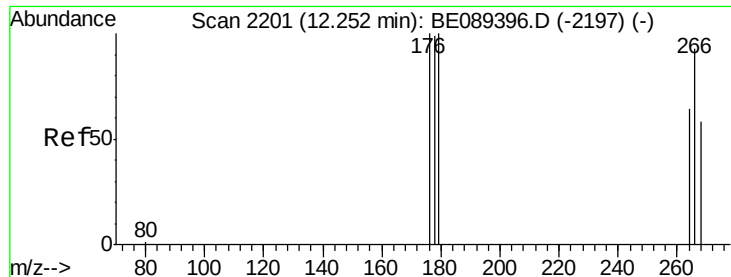


#12  
 Phenanthrene-d10  
 Concen: 5.00 ng  
 RT: 12.50 min Scan# 2231  
 Delta R.T. -0.01 min  
 Lab File: BE089395.D  
 Acq: 15 Jan 2015 16:18

Tgt Ion:188 Resp: 57428  
 Ion Ratio Lower Upper  
 188 100  
 94 15.4 7.6 11.4#  
 80 14.4 6.8 10.2#







#13

Pentachlorophenol

Concen: 0.40 ng

RT: 12.26 min Scan# 2203

Delta R.T. 0.01 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

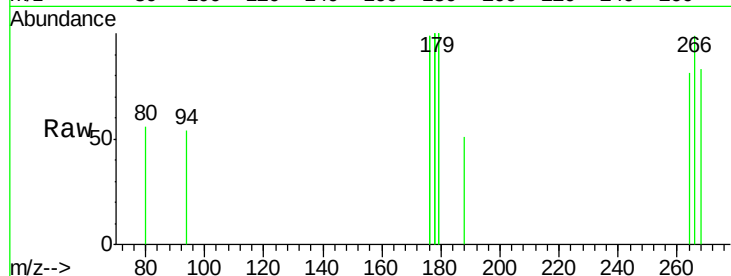
Tgt Ion: 266 Resp: 246

Ion Ratio Lower Upper

266 100

268 84.1 60.5 90.7

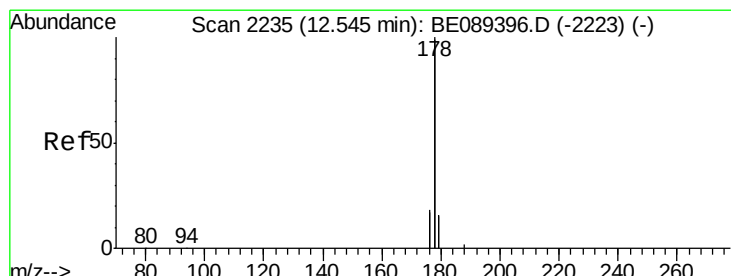
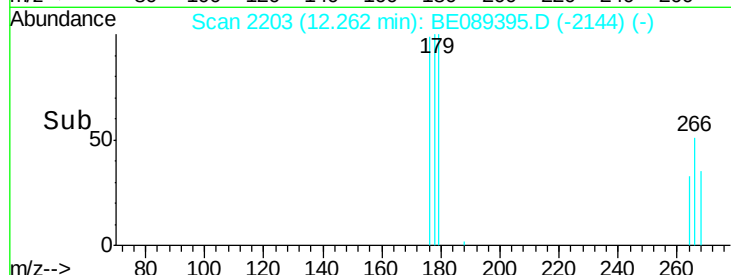
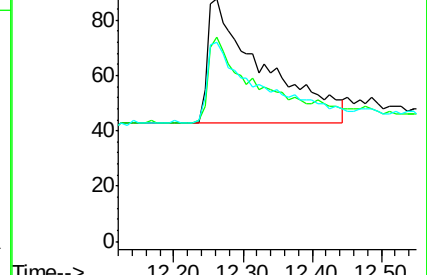
264 81.8 63.6 95.4



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



#14

Phenanthrene

Concen: 0.78 ng

RT: 12.55 min Scan# 2236

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

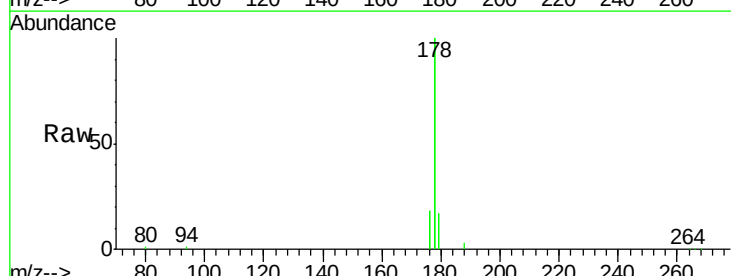
Tgt Ion: 178 Resp: 45767

Ion Ratio Lower Upper

178 100

176 18.8 14.9 22.3

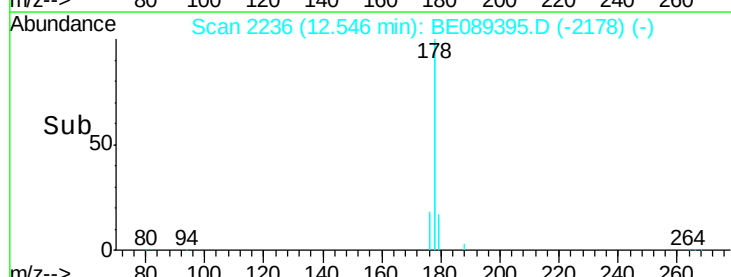
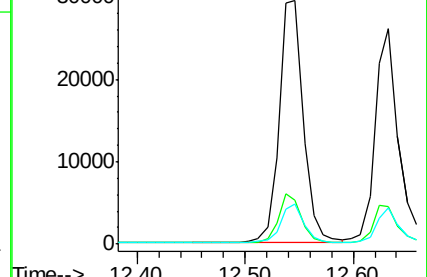
179 15.5 12.3 18.5

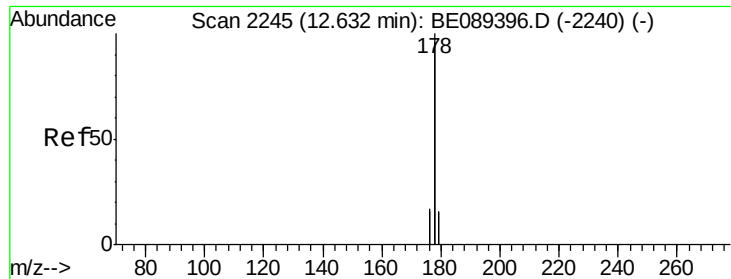


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#15

Anthracene

Concen: 0.75 ng

RT: 12.63 min Scan# 2246

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

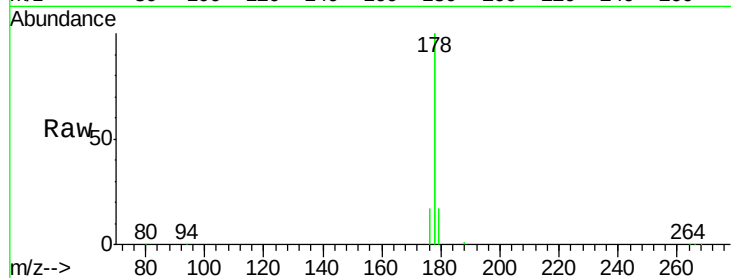
Tgt Ion:178 Resp: 41096

Ion Ratio Lower Upper

178 100

176 17.9 14.4 21.6

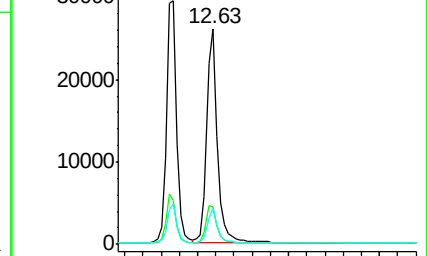
179 15.0 12.0 18.0



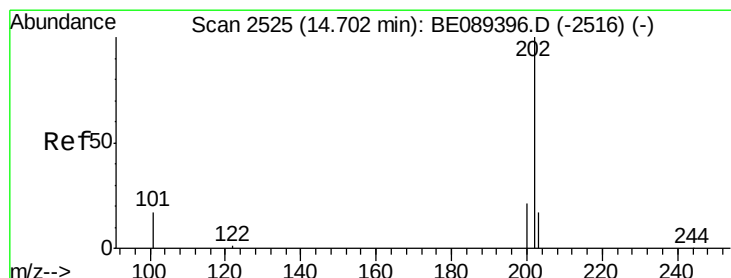
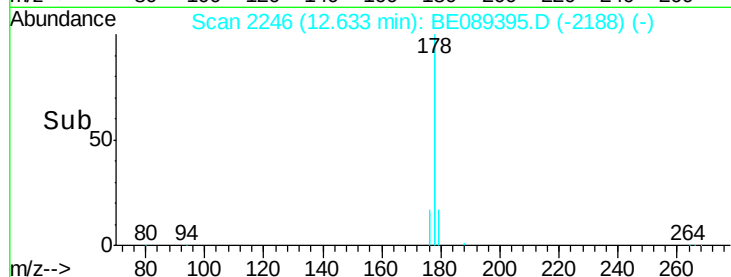
Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



Time-->



#16

Fluoranthene

Concen: 0.77 ng

RT: 14.70 min Scan# 2526

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

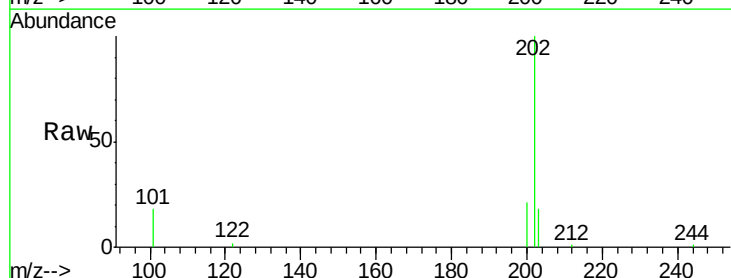
Tgt Ion:202 Resp: 8642

Ion Ratio Lower Upper

202 100

101 16.8 13.2 19.8

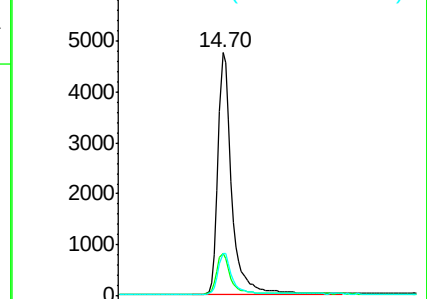
203 17.0 13.5 20.3



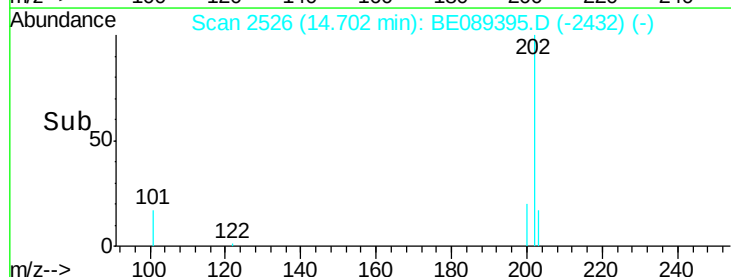
Abundance Ion 202.00 (201.70 to 202.70): E

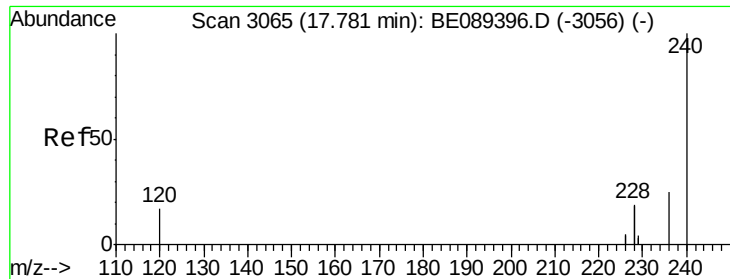
Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



Time-->

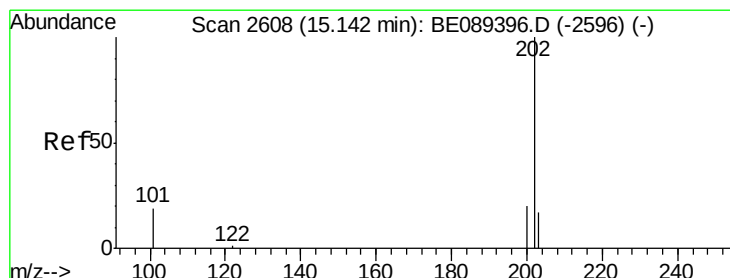
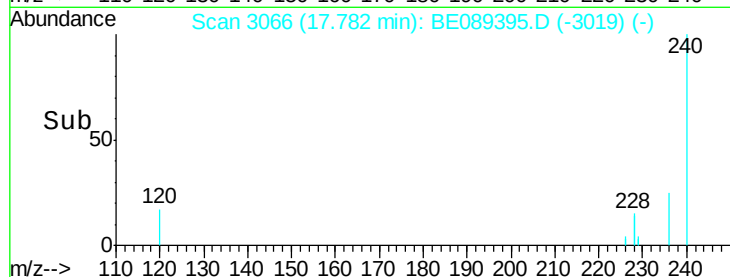
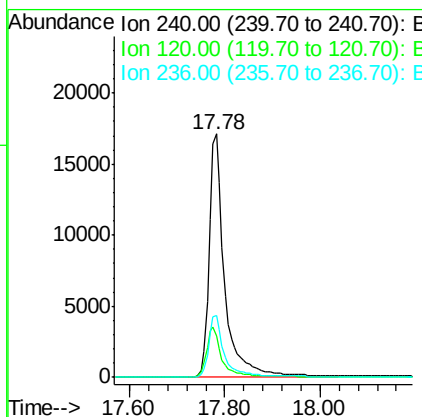
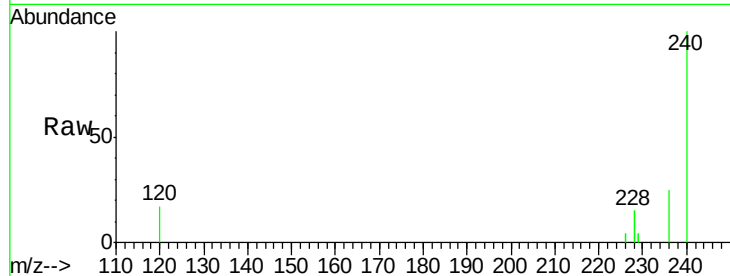




#17  
**Chrysene-d12**  
 Concen: 5.00 ng  
 RT: 17.78 min Scan# 3066  
 Delta R.T. 0.00 min  
 Lab File: BE089395.D  
 Acq: 15 Jan 2015 16:18

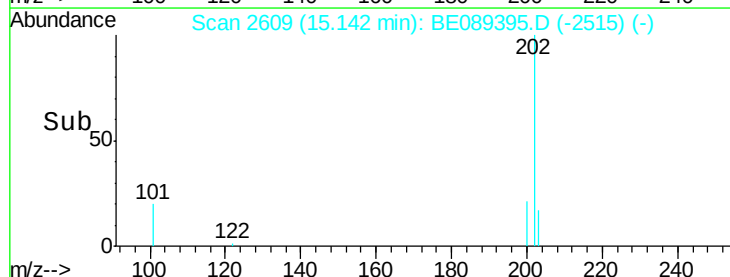
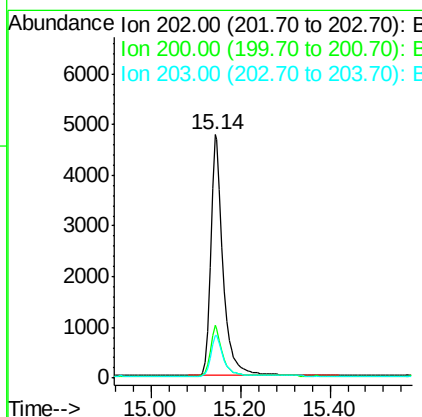
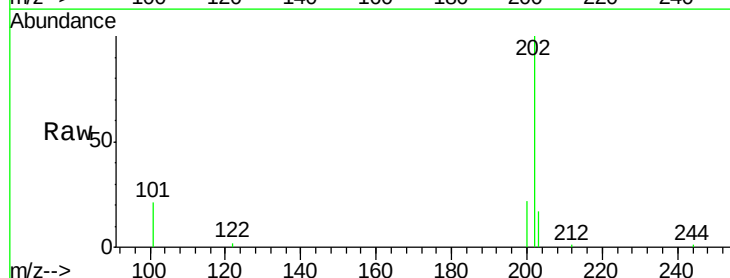
Instrument :  
 BNA\_M  
 LabSampleId :  
 SSTDICC001

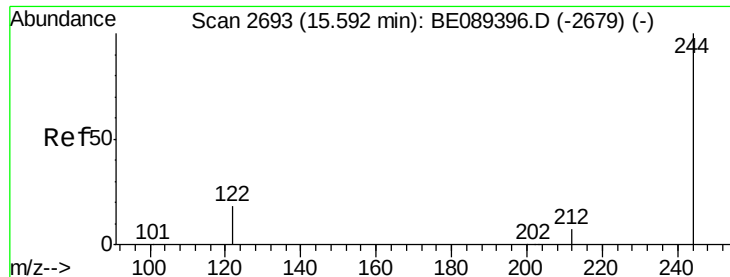
Tgt Ion:240 Resp: 38814  
 Ion Ratio Lower Upper  
 240 100  
 120 17.0 14.2 21.2  
 236 25.4 20.6 30.8



#18  
**Pyrene**  
 Concen: 0.73 ng  
 RT: 15.14 min Scan# 2609  
 Delta R.T. 0.00 min  
 Lab File: BE089395.D  
 Acq: 15 Jan 2015 16:18

Tgt Ion:202 Resp: 9170  
 Ion Ratio Lower Upper  
 202 100  
 200 20.1 16.2 24.2  
 203 17.1 13.7 20.5





#19

Terphenyl-d14

Concen: 0.70 ng

RT: 15.59 min Scan# 2693

Delta R.T. -0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

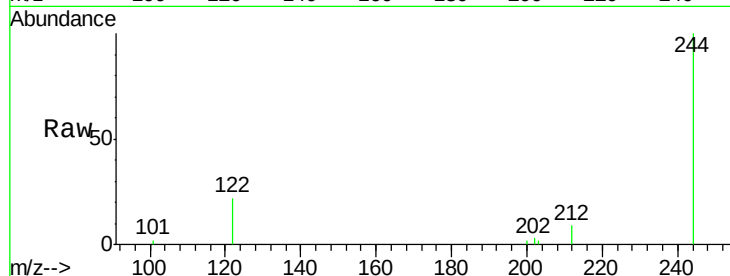
Tgt Ion:244 Resp: 4574

Ion Ratio Lower Upper

244 100

212 8.6 6.7 10.1

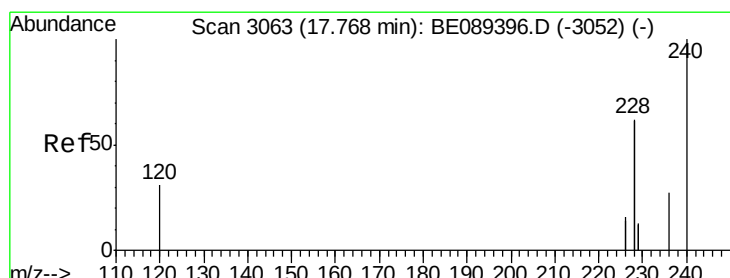
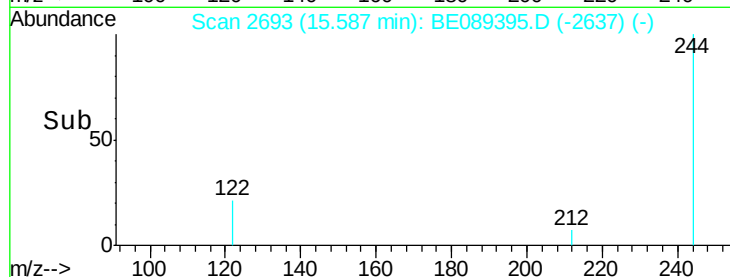
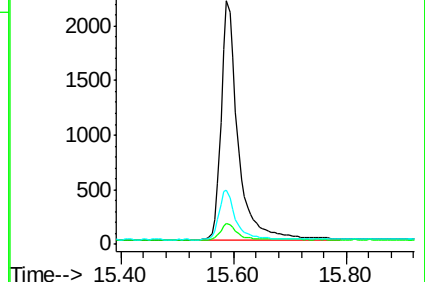
122 22.2 15.7 23.5



Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#20

Benzo(a)anthracene

Concen: 0.60 ng

RT: 17.76 min Scan# 3063

Delta R.T. -0.01 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

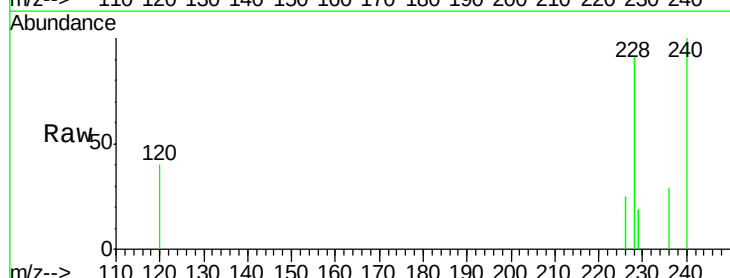
Tgt Ion:228 Resp: 20806

Ion Ratio Lower Upper

228 100

226 27.4 20.6 31.0

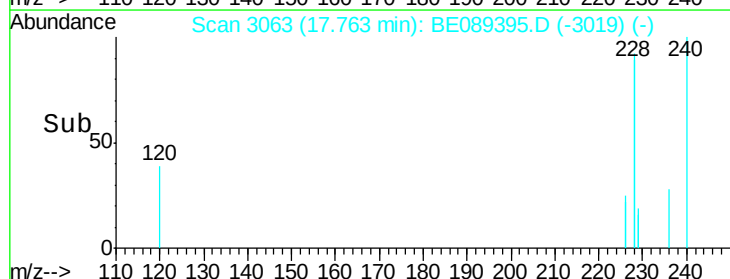
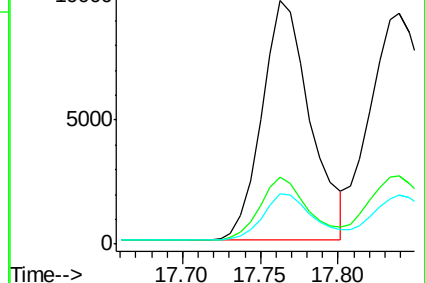
229 20.5 17.1 25.7

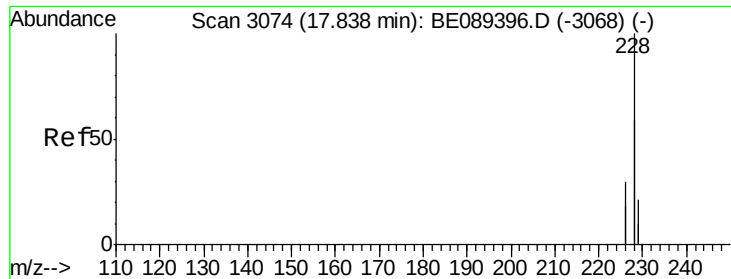


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#21

Chrysene

Concen: 0.79 ng

RT: 17.84 min Scan# 3075

Delta R.T. 0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

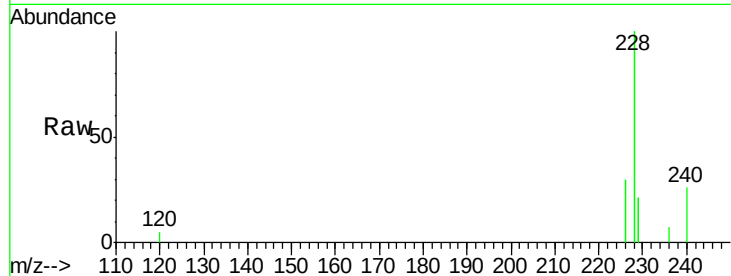
Tgt Ion:228 Resp: 31307

Ion Ratio Lower Upper

228 100

226 29.8 24.2 36.4

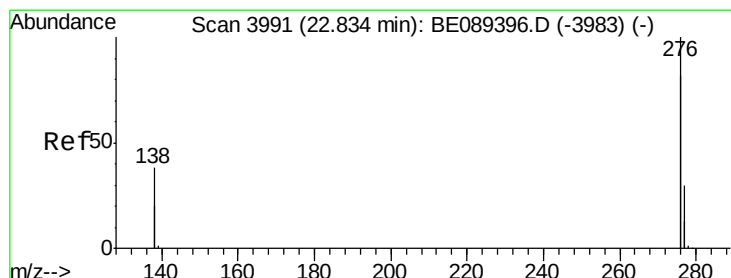
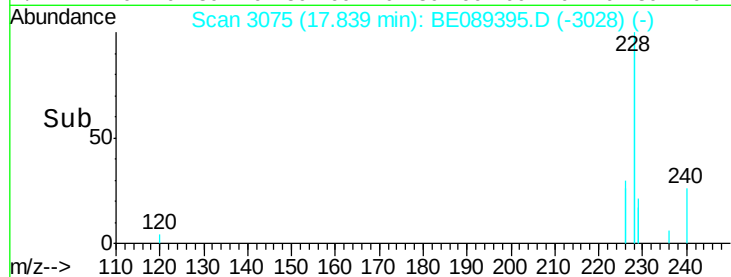
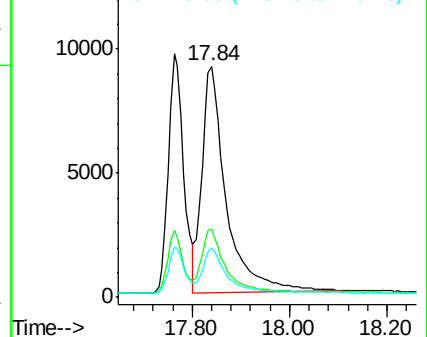
229 21.2 16.5 24.7



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



#22

Indeno(1,2,3-cd)pyrene

Concen: 0.20 ng

RT: 22.83 min Scan# 3991

Delta R.T. -0.01 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

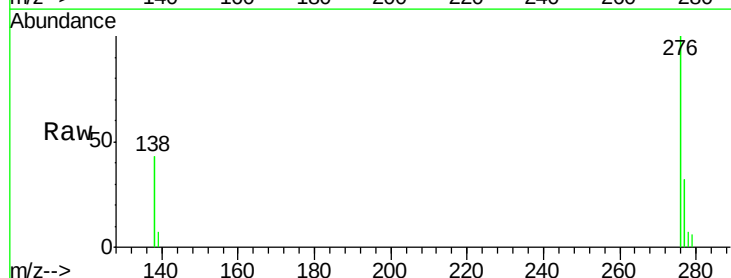
Tgt Ion:276 Resp: 4708

Ion Ratio Lower Upper

276 100

138 33.4 15.0 22.6#

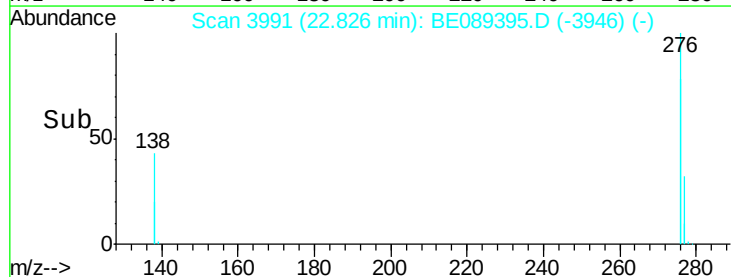
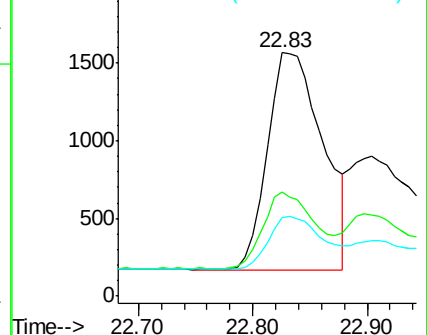
277 23.9 11.4 17.2#

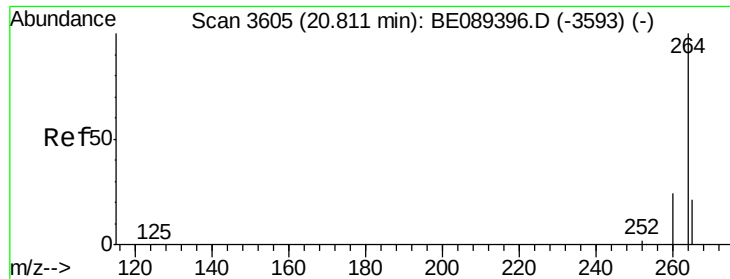


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

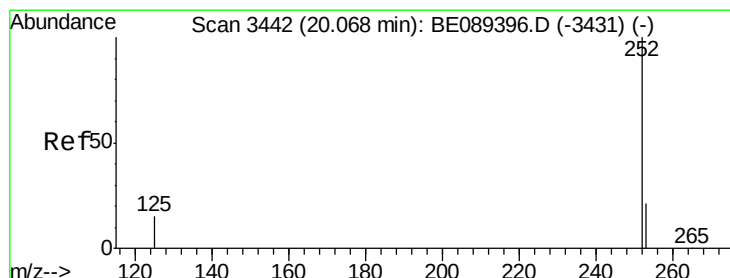
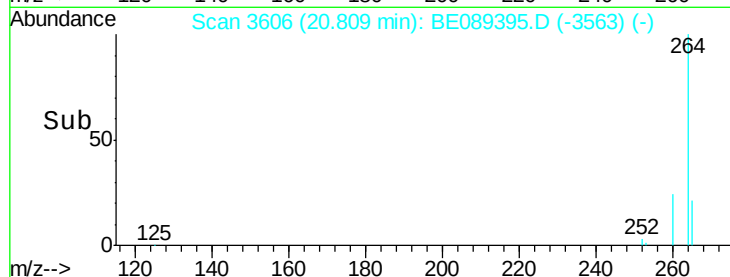
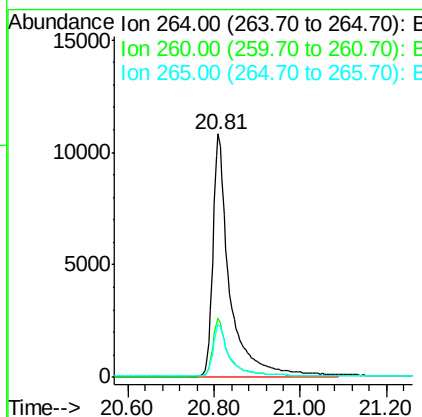
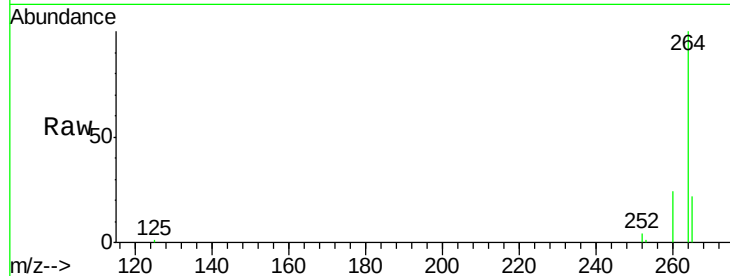




#23  
 Perylene-d12  
 Concen: 5.00 ng  
 RT: 20.81 min Scan# 3606  
 Delta R.T. -0.00 min  
 Lab File: BE089395.D  
 Acq: 15 Jan 2015 16:18

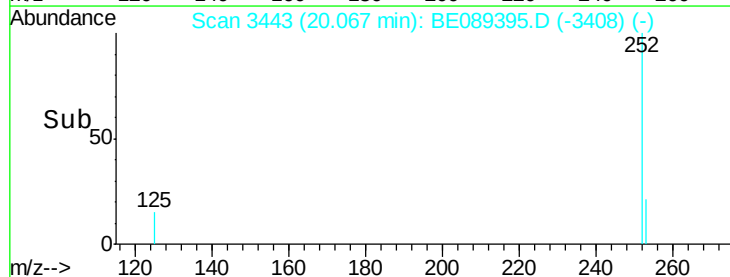
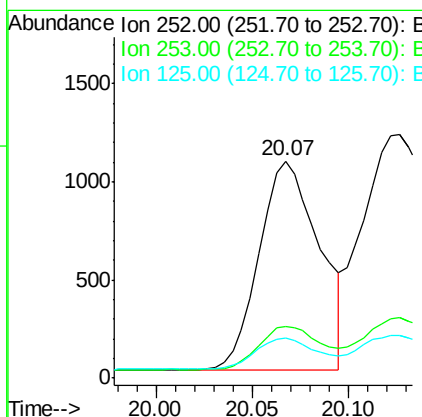
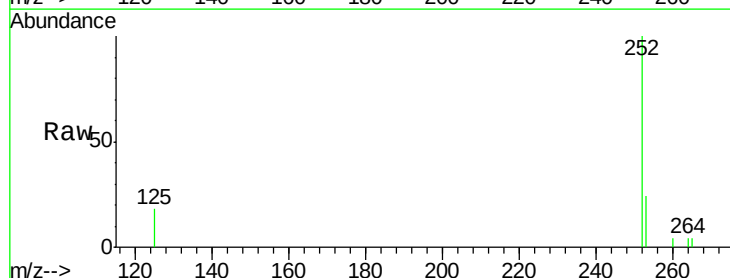
Instrument :  
 BNA\_M  
 LabSampleId :  
 SSTD1CCC001

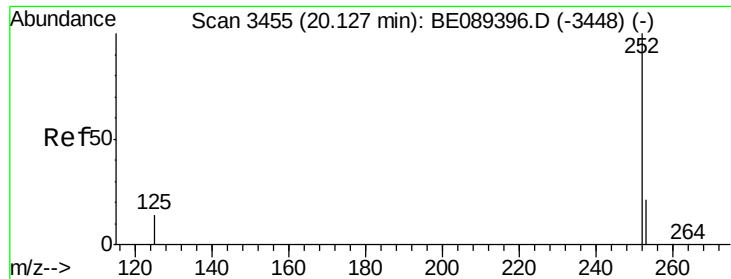
Tgt Ion: 264 Resp: 29551  
 Ion Ratio Lower Upper  
 264 100  
 260 24.2 19.2 28.8  
 265 21.5 17.3 25.9



#24  
 Benzo(b)fluoranthene  
 Concen: 0.45 ng  
 RT: 20.07 min Scan# 3443  
 Delta R.T. -0.00 min  
 Lab File: BE089395.D  
 Acq: 15 Jan 2015 16:18

Tgt Ion: 252 Resp: 2303  
 Ion Ratio Lower Upper  
 252 100  
 253 24.0 19.1 28.7  
 125 18.3 14.5 21.7





#25

Benzo(k)fluoranthene

Concen: 0.66 ng

RT: 20.13 min Scan# 3456

Delta R.T. -0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

Instrument :

BNA\_M

LabSampleId :

SSTDICCC001

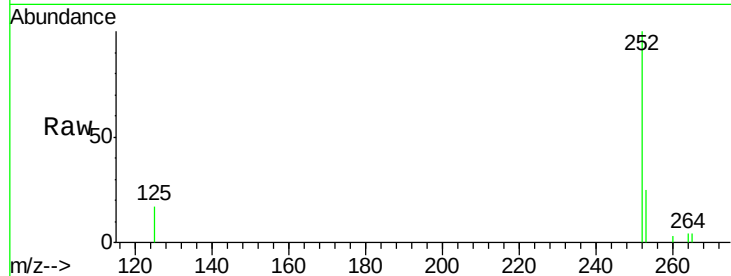
Tgt Ion:252 Resp: 5287

Ion Ratio Lower Upper

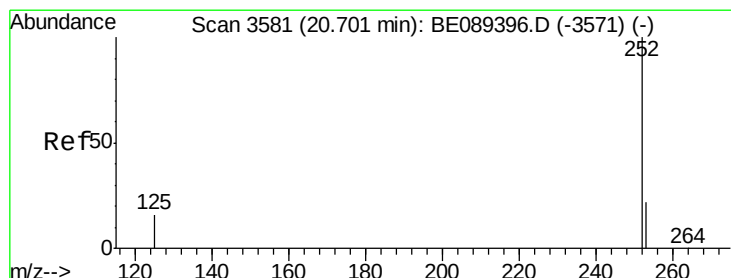
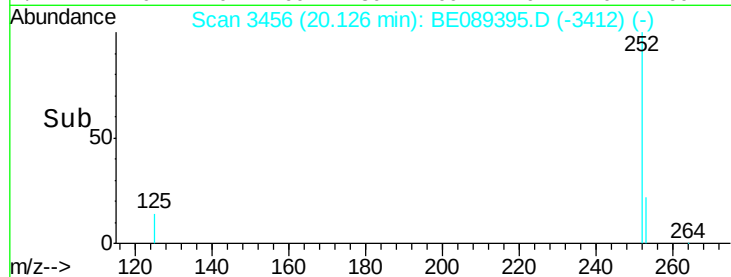
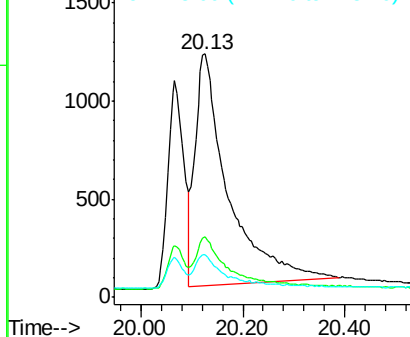
252 100

253 24.7 18.7 28.1

125 17.3 13.1 19.7



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

Benzo(a)pyrene

Concen: 0.46 ng

RT: 20.70 min Scan# 3582

Delta R.T. -0.00 min

Lab File: BE089395.D

Acq: 15 Jan 2015 16:18

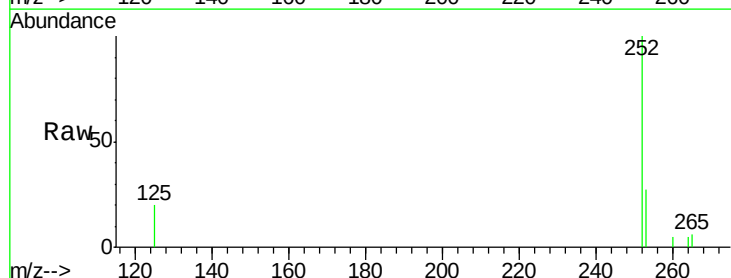
Tgt Ion:252 Resp: 2344

Ion Ratio Lower Upper

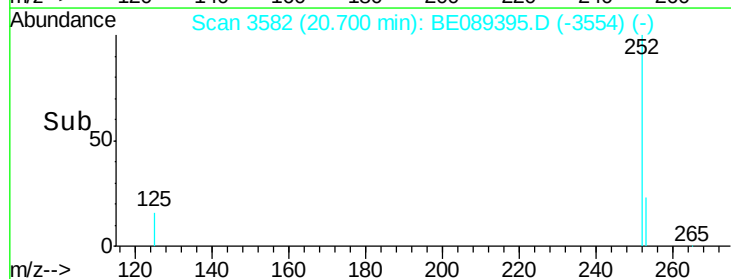
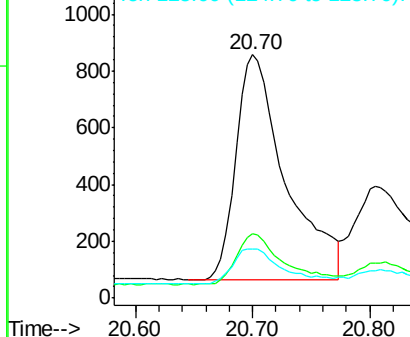
252 100

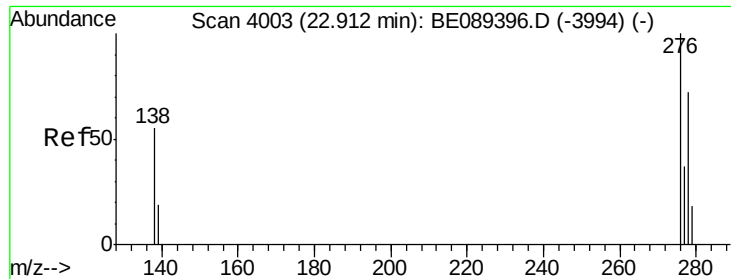
253 26.6 20.0 30.0

125 20.3 15.4 23.2



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

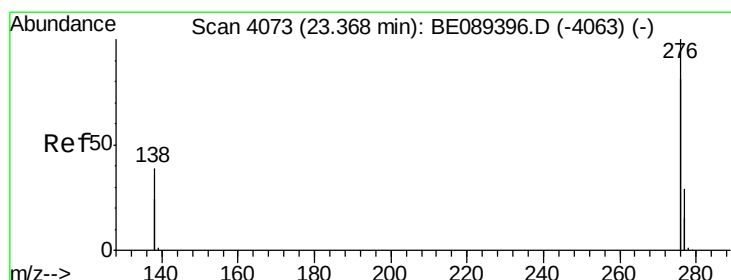
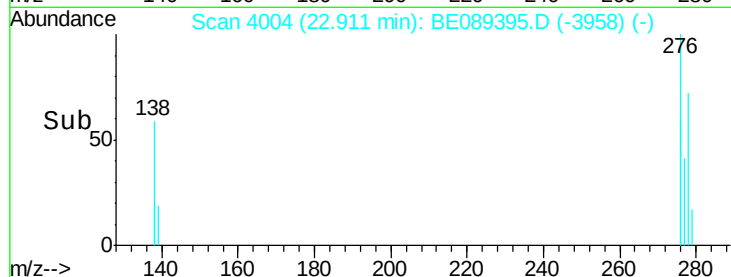
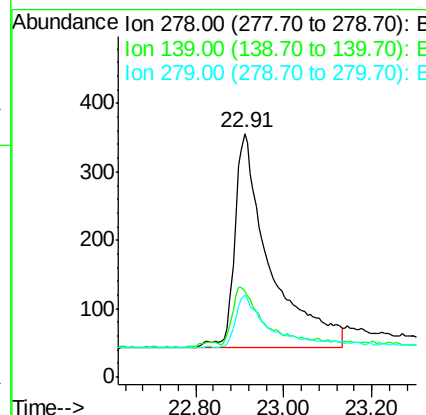
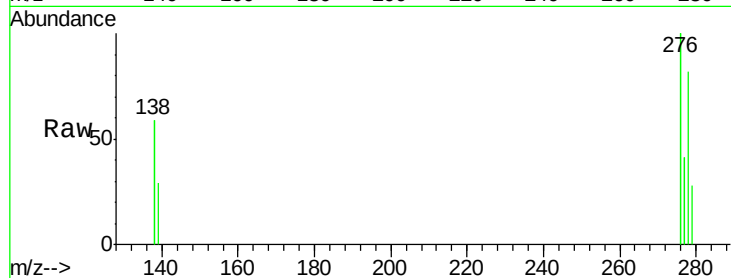




#27  
Dibenzo(a,h)anthracene  
Concen: 0.43 ng  
RT: 22.91 min Scan# 4004  
Delta R.T. -0.00 min  
Lab File: BE089395.D  
Acq: 15 Jan 2015 16:18

Instrument :  
BNA\_M  
LabSampleId :  
SSTDICCC001

Tgt Ion: 278 Resp: 1731  
Ion Ratio Lower Upper  
278 100  
139 35.4 26.8 40.2  
279 33.7 25.4 38.0



#28  
Benzo(g,h,i)perylene  
Concen: 0.52 ng  
RT: 23.37 min Scan# 4075  
Delta R.T. 0.01 min  
Lab File: BE089395.D  
Acq: 15 Jan 2015 16:18

Tgt Ion: 276 Resp: 12071  
Ion Ratio Lower Upper  
276 100  
277 29.2 22.9 34.3  
138 37.9 31.2 46.8

