

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE032415\  
 Data File : BE089815.D  
 Acq On : 24 Mar 2015 14:49  
 Operator : TP/JJ  
 Sample : SSTDICCC001  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 SSTDICCC001

Quant Time: Mar 24 18:25:45 2015  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIMPAH-BE032415.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Mar 24 18:03:12 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.50  | 152  | 152830   | 5.00 | ng    | 0.00     |
| 4) Naphthalene-d8         | 10.26 | 136  | 633172   | 5.00 | ng    | 0.00     |
| 8) Acenaphthene-d10       | 14.40 | 164  | 320706   | 5.00 | ng    | 0.01     |
| 13) Phenanthrene-d10      | 17.92 | 188  | 535559   | 5.00 | ng    | 0.00     |
| 19) Chrysene-d12          | 24.26 | 240  | 432336   | 5.00 | ng    | 0.00     |
| 25) Perylene-d12          | 27.41 | 264  | 364287   | 5.00 | ng    | 0.00     |

|                             |       |     |       |      |    |      |
|-----------------------------|-------|-----|-------|------|----|------|
| System Monitoring Compounds |       |     |       |      |    |      |
| 5) Nitrobenzene-d5          | 8.68  | 82  | 30534 | 0.90 | ng | 0.00 |
| 9) 2-Fluorobiphenyl         | 12.85 | 172 | 72755 | 0.97 | ng | 0.00 |
| 21) Terphenyl-d14           | 21.86 | 244 | 61029 | 0.96 | ng | 0.00 |

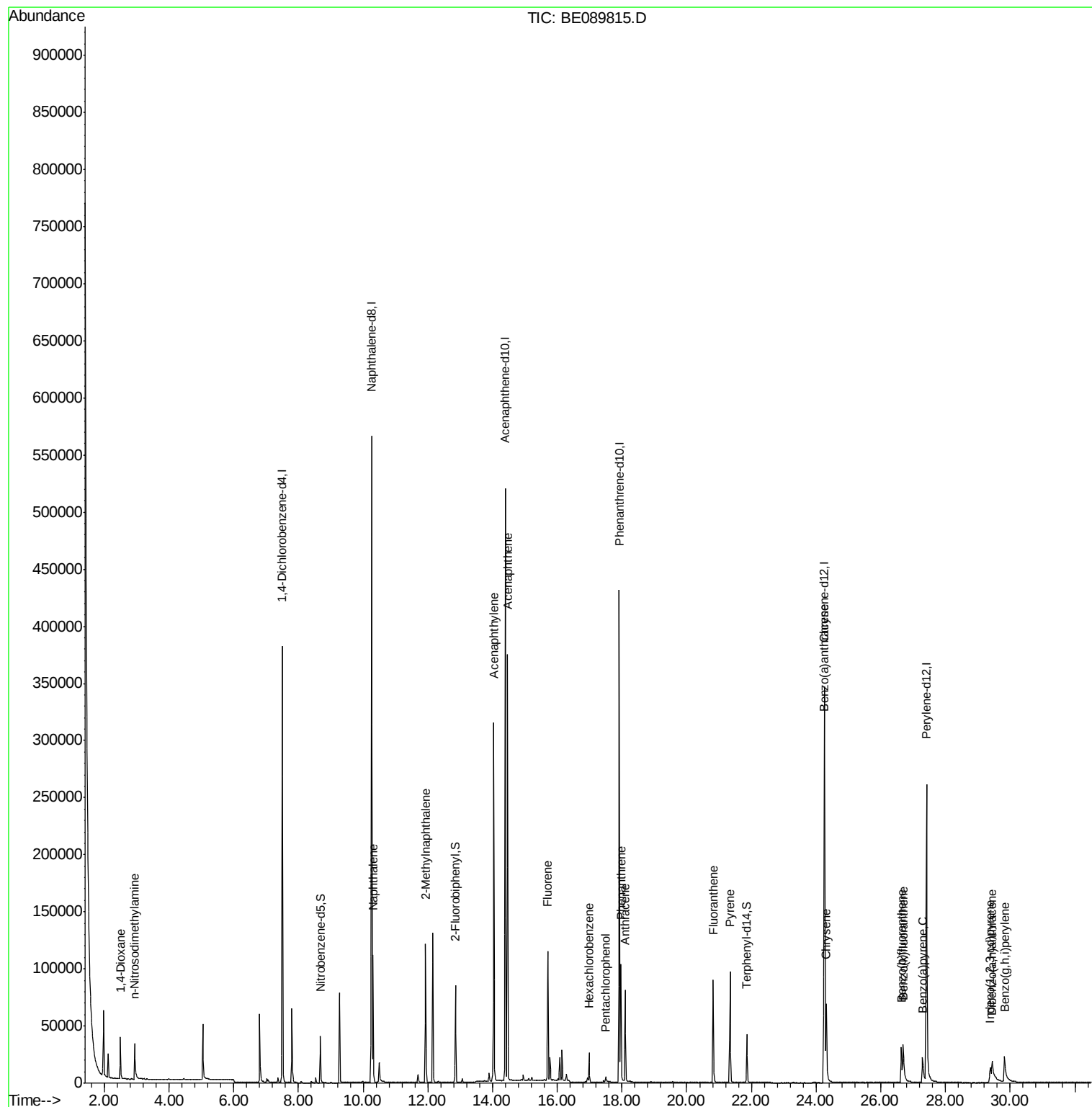
|                            |       |     |        |        |    |      |
|----------------------------|-------|-----|--------|--------|----|------|
| Target Compounds           |       |     |        | Qvalue |    |      |
| 2) 1,4-Dioxane             | 2.49  | 88  | 19336  | 0.98   | ng | 93   |
| 3) n-Nitrosodimethylamine  | 2.92  | 42  | 27791  | 0.96   | ng | # 90 |
| 6) Naphthalene             | 10.31 | 128 | 120366 | 0.96   | ng | 96   |
| 7) 2-Methylnaphthalene     | 11.93 | 142 | 71928  | 1.03   | ng | 98   |
| 10) Acenaphthylene         | 14.04 | 152 | 439510 | 0.96   | ng | 98   |
| 11) Acenaphthene           | 14.46 | 154 | 66890  | 0.95   | ng | 86   |
| 12) Fluorene               | 15.70 | 166 | 81690  | 0.96   | ng | 94   |
| 14) Hexachlorobenzene      | 16.98 | 284 | 16948  | 0.95   | ng | 98   |
| 15) Pentachlorophenol      | 17.50 | 266 | 3717   | 0.74   | ng | 95   |
| 16) Phenanthrene           | 17.97 | 178 | 111118 | 0.94   | ng | 100  |
| 17) Anthracene             | 18.10 | 178 | 101407 | 0.96   | ng | 100  |
| 18) Fluoranthene           | 20.82 | 202 | 99090  | 0.93   | ng | 98   |
| 20) Pyrene                 | 21.34 | 202 | 104223 | 0.95   | ng | 99   |
| 22) Benzo(a)anthracene     | 24.24 | 228 | 74533  | 0.92   | ng | 98   |
| 23) Chrysene               | 24.32 | 228 | 86448  | 0.98   | ng | 98   |
| 24) Indeno(1,2,3-cd)pyrene | 29.38 | 276 | 25732  | 0.70   | ng | # 75 |
| 26) Benzo(b)fluoranthene   | 26.64 | 252 | 48970  | 0.91   | ng | 97   |
| 27) Benzo(k)fluoranthene   | 26.69 | 252 | 77197  | 1.03   | ng | # 94 |
| 28) Benzo(a)pyrene         | 27.30 | 252 | 47284  | 0.91   | ng | # 89 |
| 29) Dibenzo(a,h)anthracene | 29.45 | 278 | 37091  | 0.92   | ng | # 78 |
| 30) Benzo(g,h,i)perylene   | 29.83 | 276 | 55462  | 0.95   | ng | # 86 |

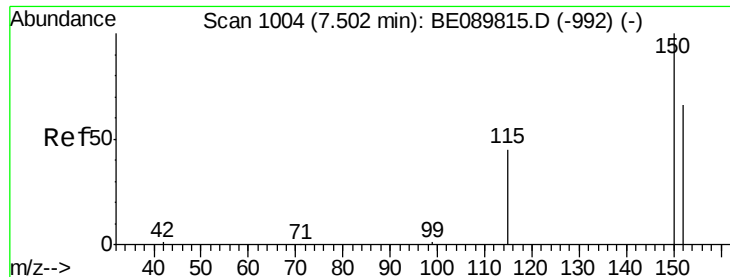
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE032415\  
Data File : BE089815.D  
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Sample : SSTDICCC001  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
BNA\_E  
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Quant Time: Mar 24 18:25:45 2015  
Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIMPAH-BE032415.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Mar 24 18:03:12 2015  
Response via : Initial Calibration

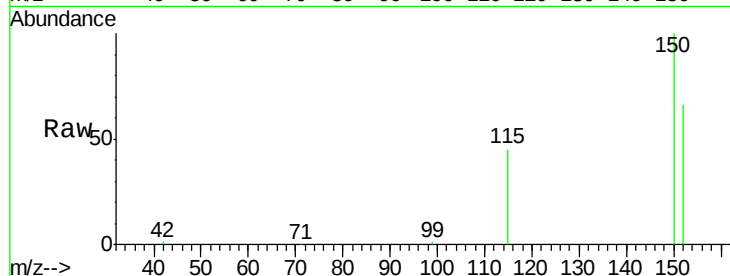




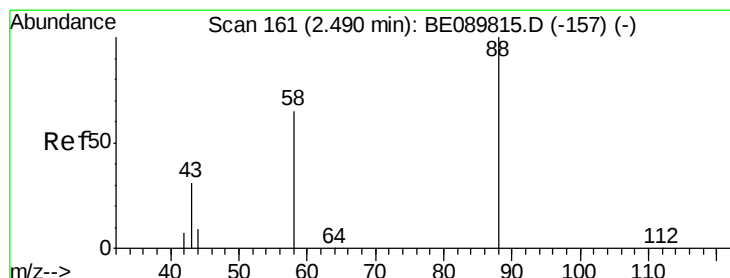
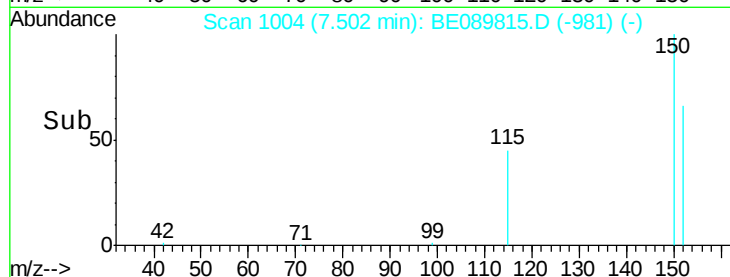
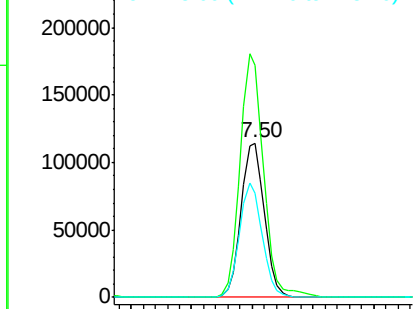
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 5.00 ng  
 RT: 7.50 min Scan# 1004  
 Delta R.T. 0.00 min  
 Lab File: BE089815.D  
 Acq: 24 Mar 2015 14:49

Instrument :  
 BNA\_E  
 ClientSampleId :  
 SSTDICC001

Tgt Ion: 152 Resp: 152830  
 Ion Ratio Lower Upper  
 152 100  
 150 151.0 125.5 188.3  
 115 67.6 58.0 87.0

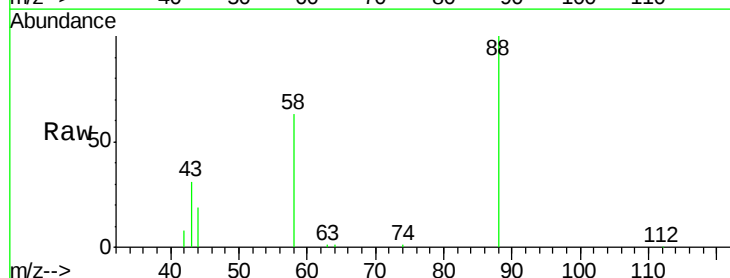


Abundance Ion 152.00 (151.70 to 152.70): E  
 Ion 150.00 (149.70 to 150.70): E  
 Ion 115.00 (114.70 to 115.70): E

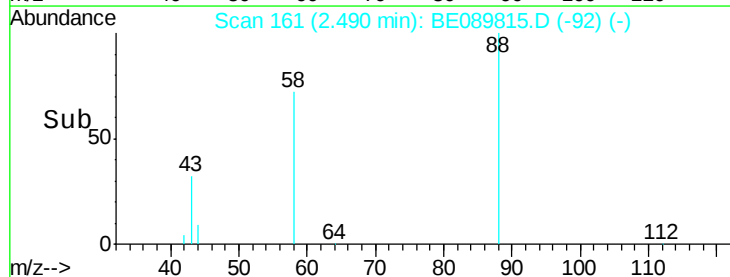
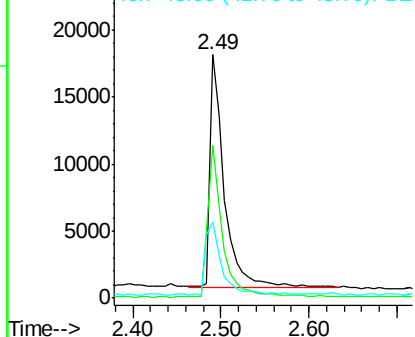


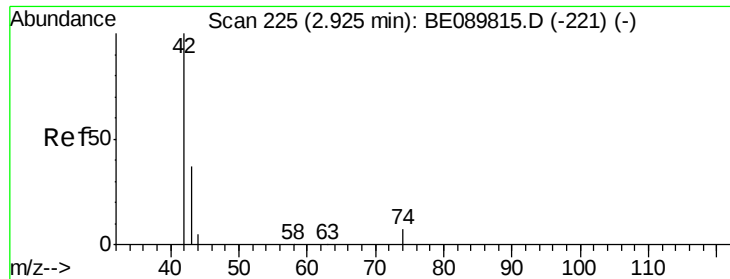
#2  
 1,4-Dioxane  
 Concen: 0.98 ng  
 RT: 2.49 min Scan# 161  
 Delta R.T. -0.03 min  
 Lab File: BE089815.D  
 Acq: 24 Mar 2015 14:49

Tgt Ion: 88 Resp: 19336  
 Ion Ratio Lower Upper  
 88 100  
 58 68.1 48.6 72.8  
 43 34.4 28.6 43.0



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



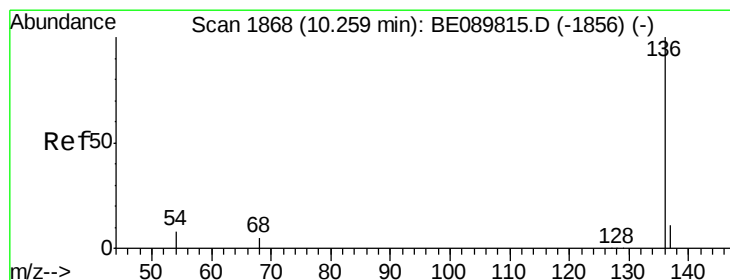
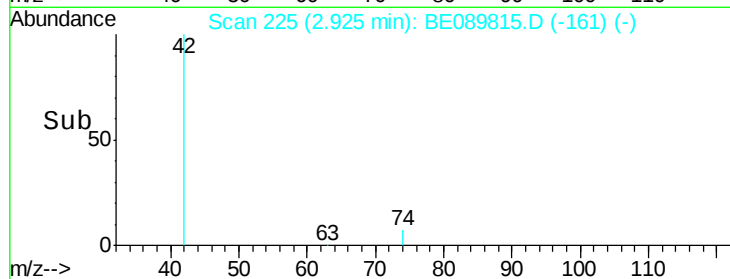
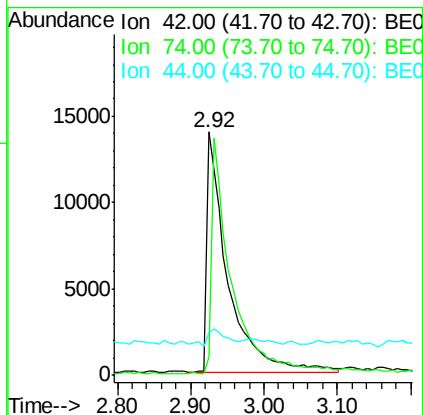
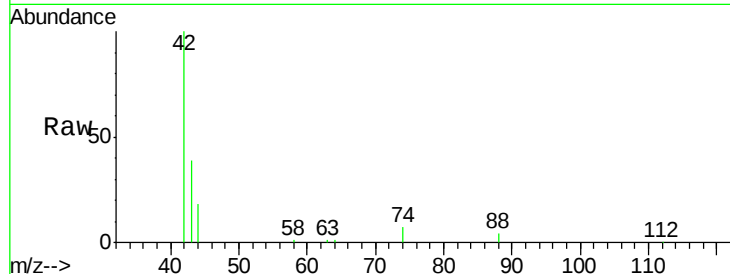


#3

n-Nitrosodimethylamine  
 Concen: 0.96 ng  
 RT: 2.92 min Scan# 225  
 Delta R.T. -0.07 min  
 Lab File: BE089815.D  
 Acq: 24 Mar 2015 14:49

Instrument :  
 BNA\_E  
 ClientSampleId :  
 SSTDICC001

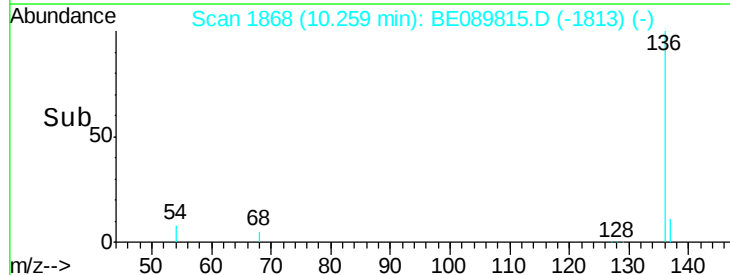
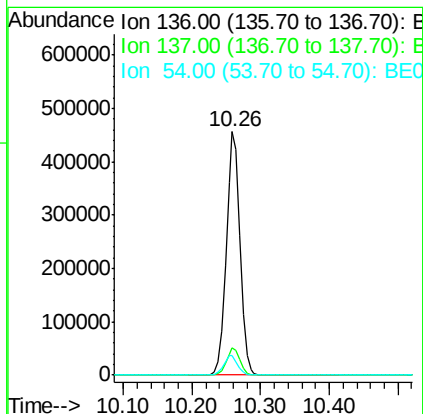
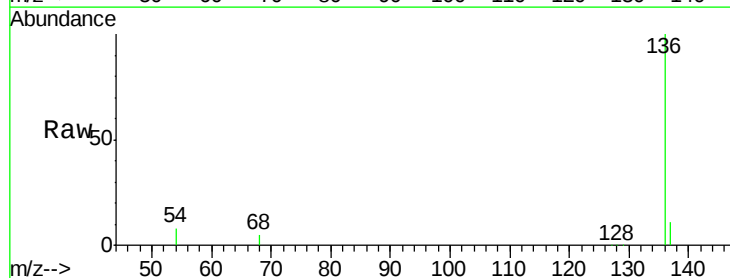
Tgt Ion: 42 Resp: 27791  
 Ion Ratio Lower Upper  
 42 100  
 74 95.1 68.7 103.1  
 44 6.2 6.2 9.4#

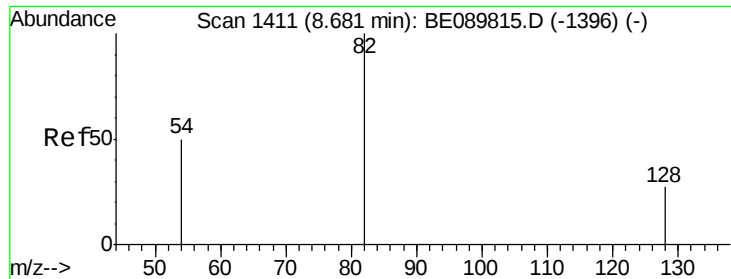


#4

Naphthalene-d8  
 Concen: 5.00 ng  
 RT: 10.26 min Scan# 1868  
 Delta R.T. 0.00 min  
 Lab File: BE089815.D  
 Acq: 24 Mar 2015 14:49

Tgt Ion: 136 Resp: 633172  
 Ion Ratio Lower Upper  
 136 100  
 137 11.1 8.8 13.2  
 54 8.0 7.0 10.4





#5

Nitrobenzene-d5

Concen: 0.90 ng

RT: 8.68 min Scan# 1411

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

Instrument :

BNA\_E

ClientSampleId :

SSTDICCC001

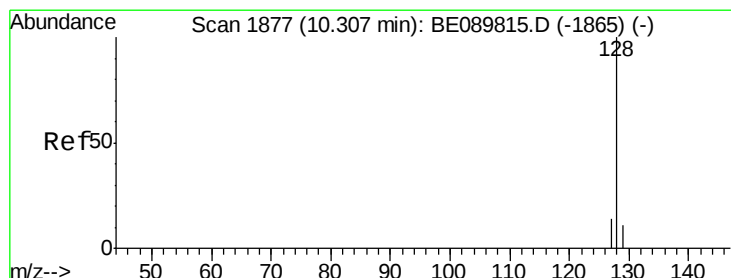
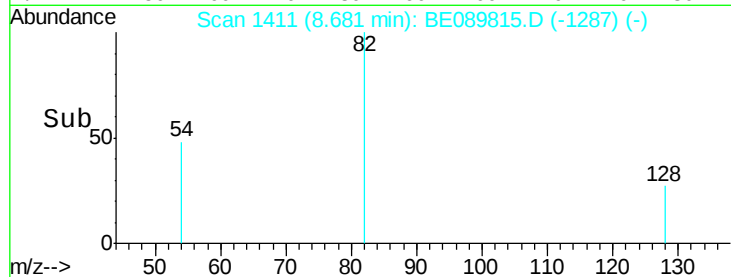
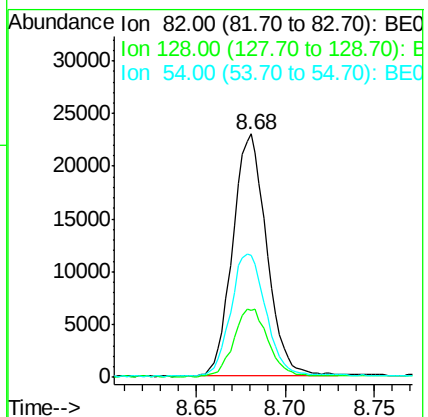
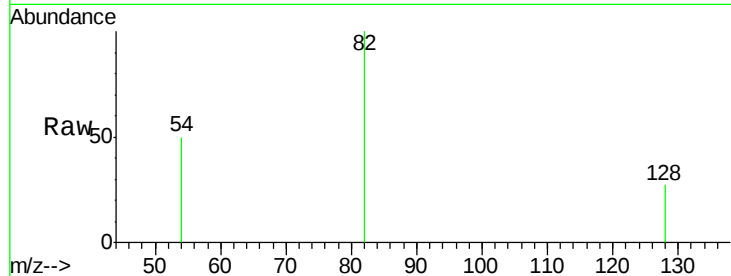
Tgt Ion: 82 Resp: 30534

Ion Ratio Lower Upper

82 100

128 27.4 24.6 37.0

54 50.0 43.0 64.6



#6

Naphthalene

Concen: 0.96 ng

RT: 10.31 min Scan# 1877

Delta R.T. 0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

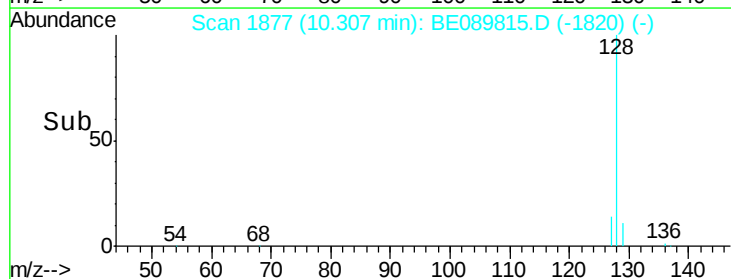
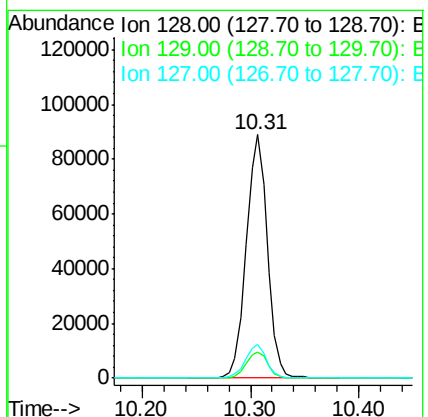
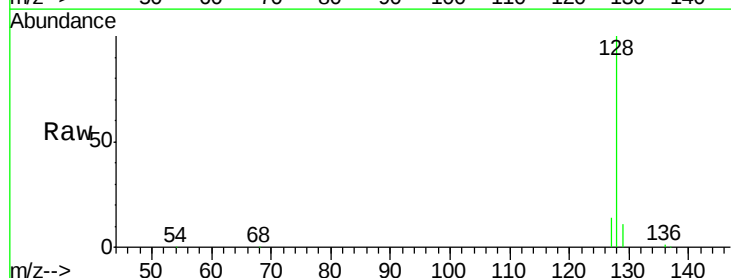
Tgt Ion: 128 Resp: 120366

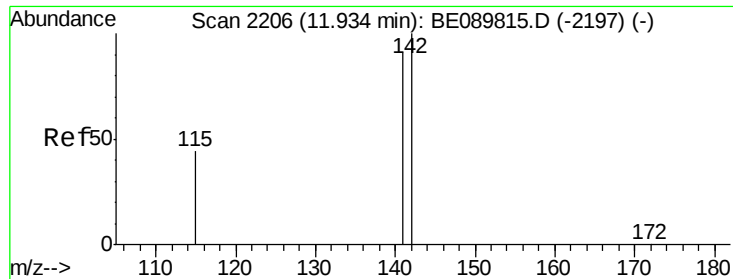
Ion Ratio Lower Upper

128 100

129 10.8 10.0 15.0

127 13.7 12.5 18.7





#7

2-Methylnaphthalene

Concen: 1.03 ng

RT: 11.93 min Scan# 2206

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

Instrument :

BNA\_E

ClientSampleId :

SSTDICCC001

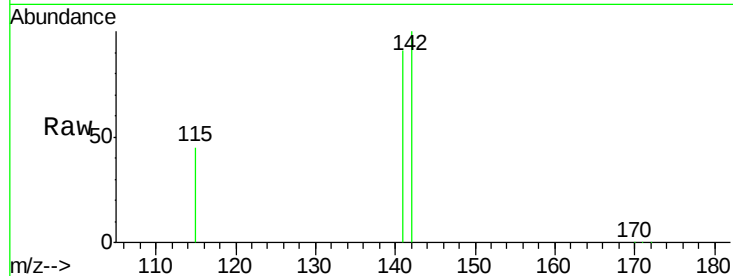
Tgt Ion:142 Resp: 71928

Ion Ratio Lower Upper

142 100

141 90.8 72.8 109.2

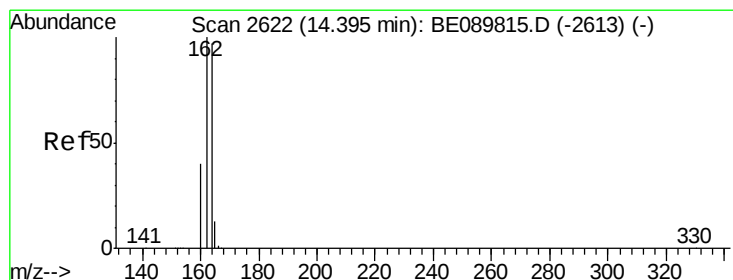
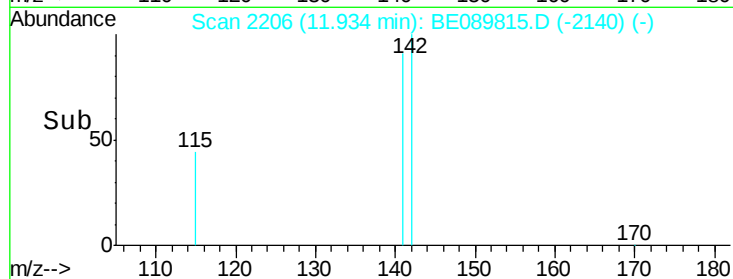
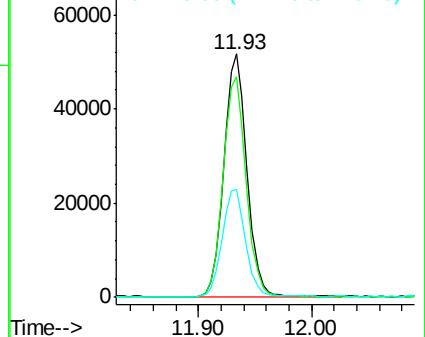
115 44.5 32.9 49.3



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



#8

Acenaphthene-d10

Concen: 5.00 ng

RT: 14.40 min Scan# 2622

Delta R.T. 0.01 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

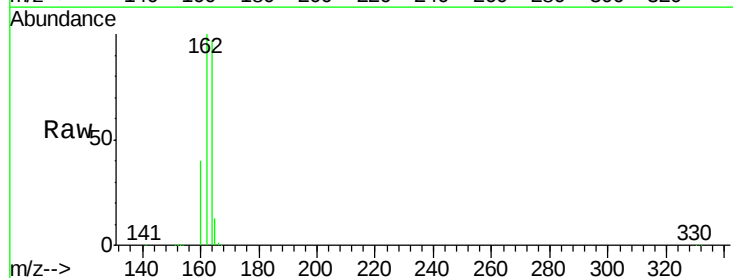
Tgt Ion:164 Resp: 320706

Ion Ratio Lower Upper

164 100

162 103.1 87.6 131.4

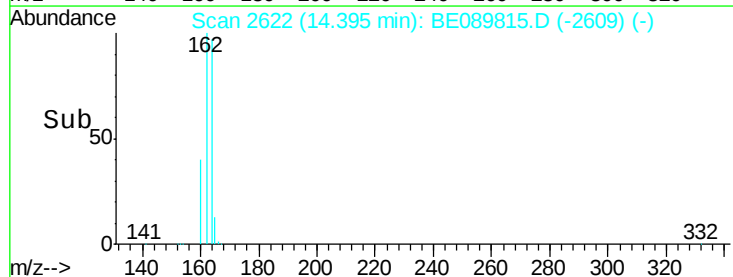
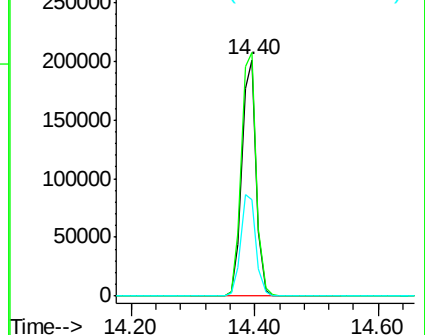
160 40.9 36.7 55.1

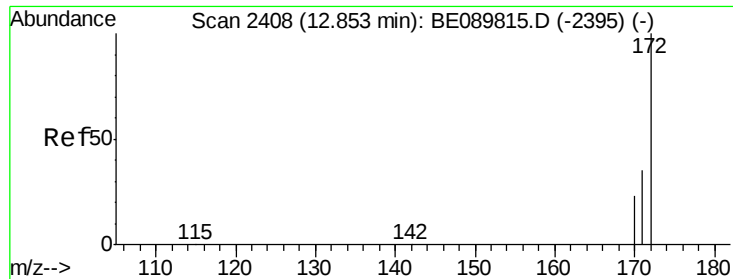


Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





#9

2-Fluorobiphenyl

Concen: 0.97 ng

RT: 12.85 min Scan# 2408

Delta R.T. 0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

Instrument :

BNA\_E

ClientSampleId :

SSTDICCC001

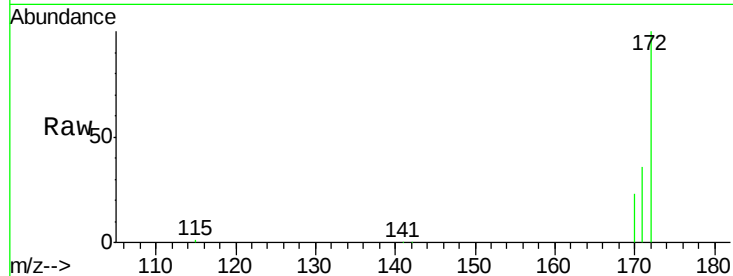
Tgt Ion:172 Resp: 72755

Ion Ratio Lower Upper

172 100

171 35.5 30.8 46.2

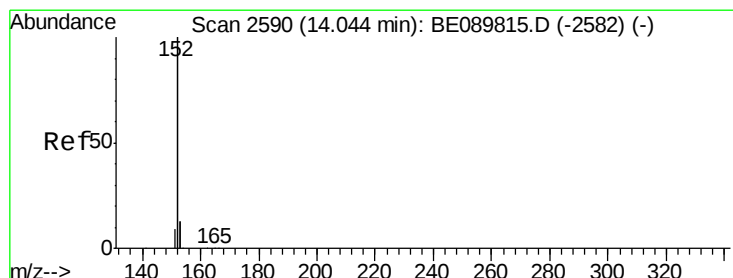
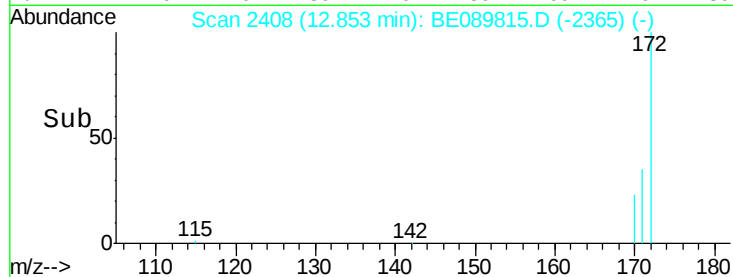
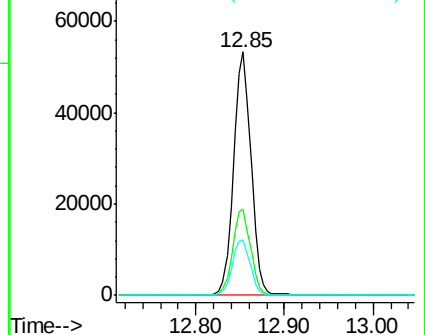
170 22.8 21.0 31.4



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



#10

Acenaphthylene

Concen: 0.96 ng

RT: 14.04 min Scan# 2590

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

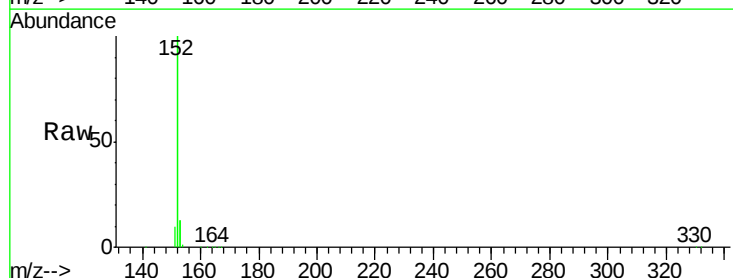
Tgt Ion:152 Resp: 439510

Ion Ratio Lower Upper

152 100

151 5.0 3.9 5.9

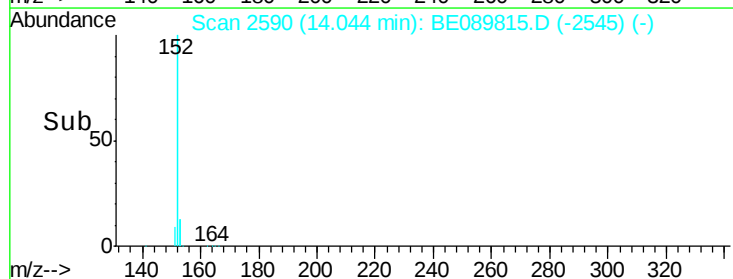
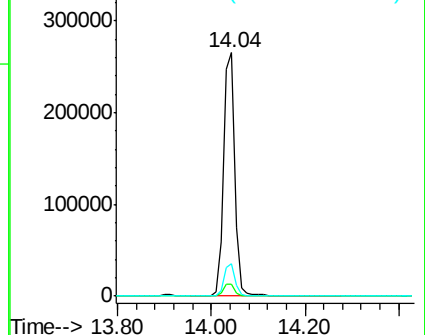
153 12.8 11.0 16.4

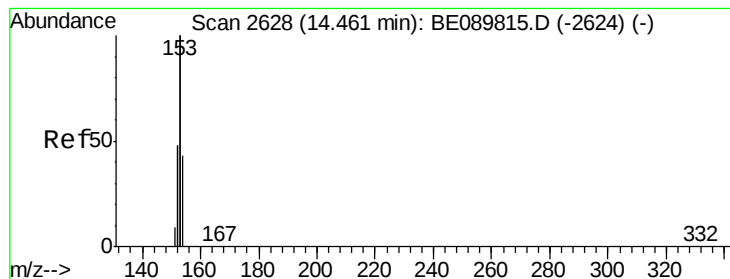


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#11

Acenaphthene

Concen: 0.95 ng

RT: 14.46 min Scan# 2628

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

Instrument :

BNA\_E

ClientSampleId :

SSTDICCC001

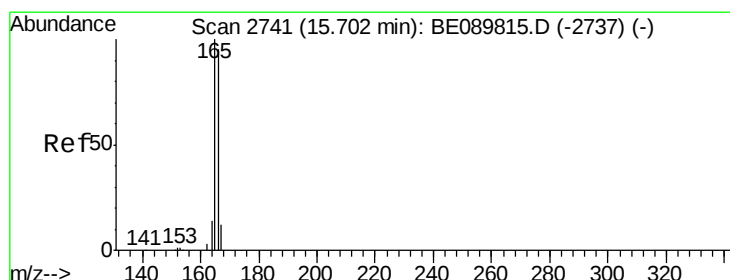
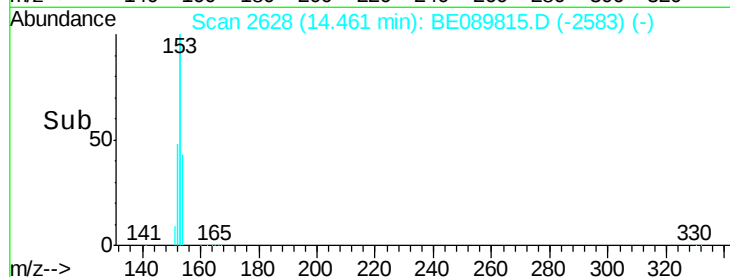
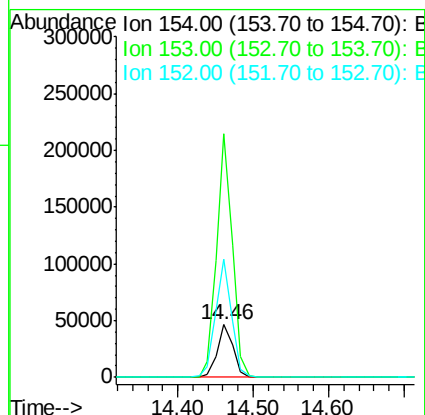
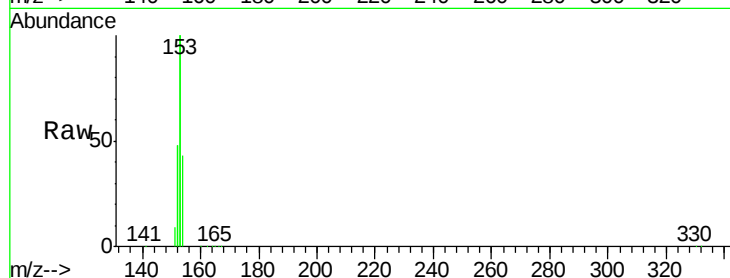
Tgt Ion:154 Resp: 66890

Ion Ratio Lower Upper

154 100

153 461.7 401.5 602.3

152 223.5 198.6 298.0



#12

Fluorene

Concen: 0.96 ng

RT: 15.70 min Scan# 2741

Delta R.T. -0.01 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

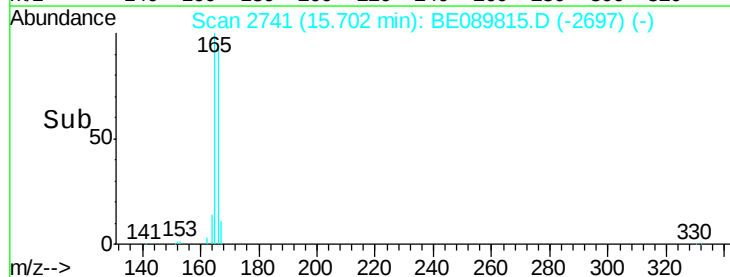
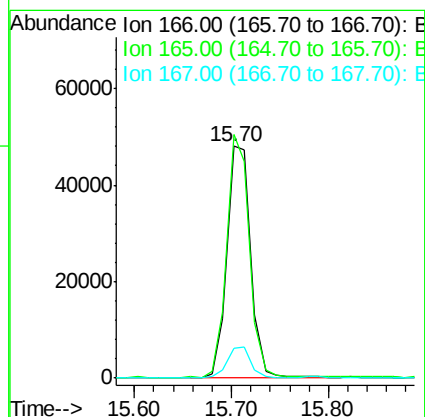
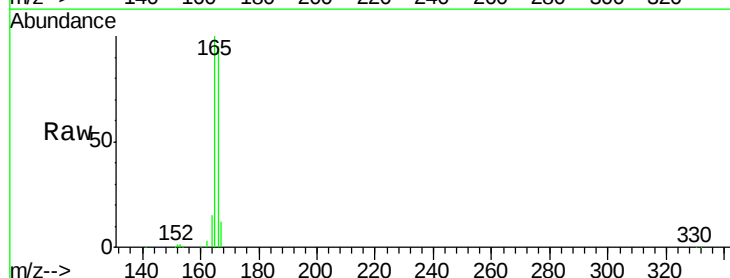
Tgt Ion:166 Resp: 81690

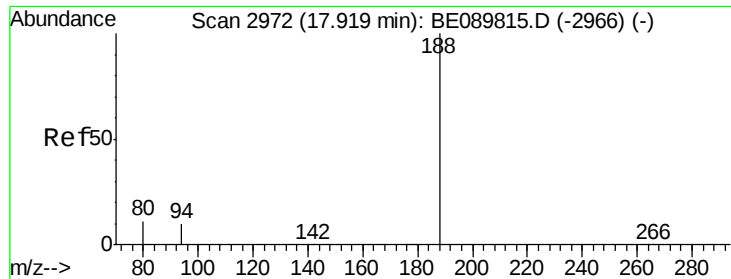
Ion Ratio Lower Upper

166 100

165 99.8 85.1 127.7

167 12.9 12.2 18.4

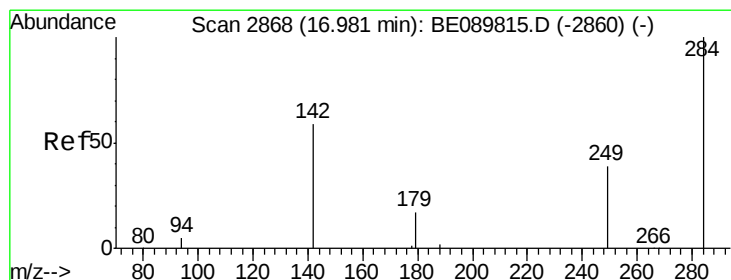
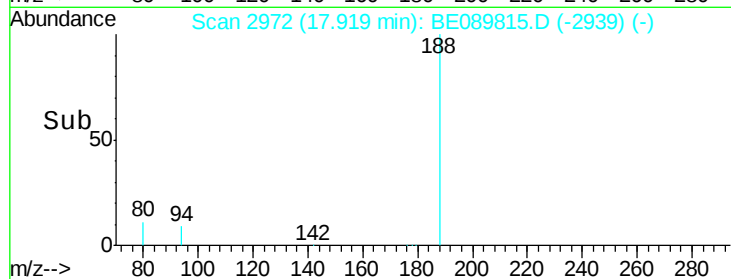
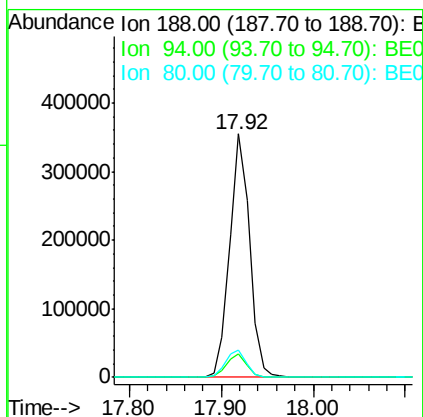
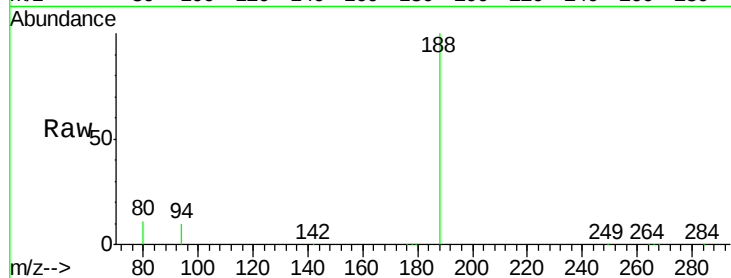




#13  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 17.92 min Scan# 2972  
Delta R.T. -0.00 min  
Lab File: BE089815.D  
Acq: 24 Mar 2015 14:49

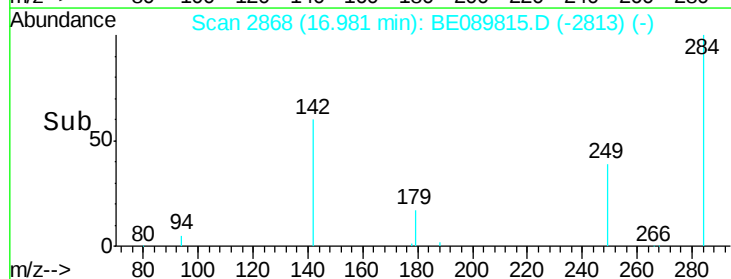
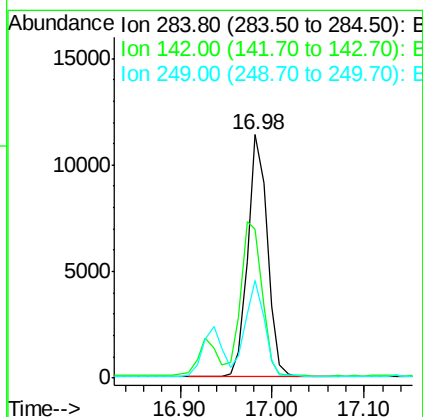
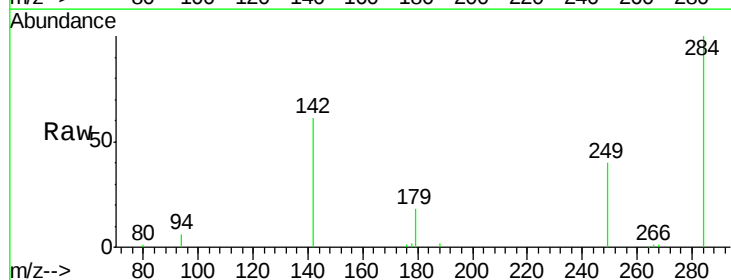
Instrument :  
BNA\_E  
ClientSampleId :  
SSTDICCC001

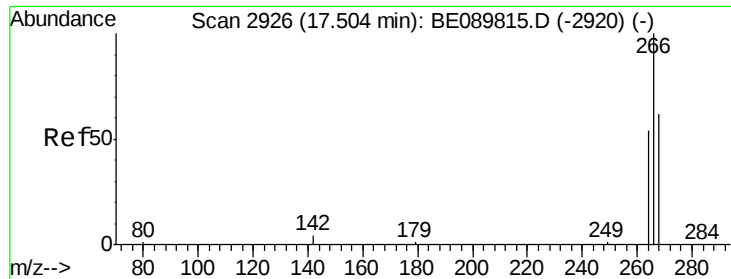
Tgt Ion:188 Resp: 535559  
Ion Ratio Lower Upper  
188 100  
94 9.5 8.5 12.7  
80 11.4 10.0 15.0



#14  
Hexachlorobenzene  
Concen: 0.95 ng  
RT: 16.98 min Scan# 2868  
Delta R.T. -0.00 min  
Lab File: BE089815.D  
Acq: 24 Mar 2015 14:49

Tgt Ion:284 Resp: 16948  
Ion Ratio Lower Upper  
284 100  
142 69.2 53.3 79.9  
249 38.8 31.1 46.7

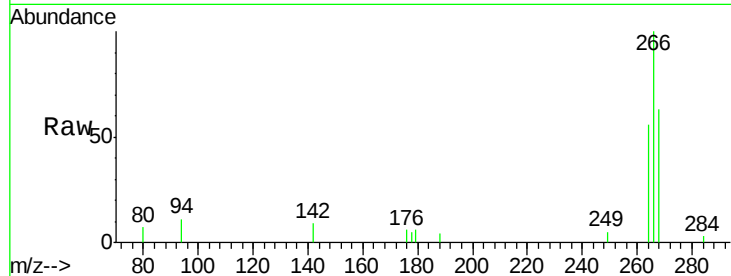




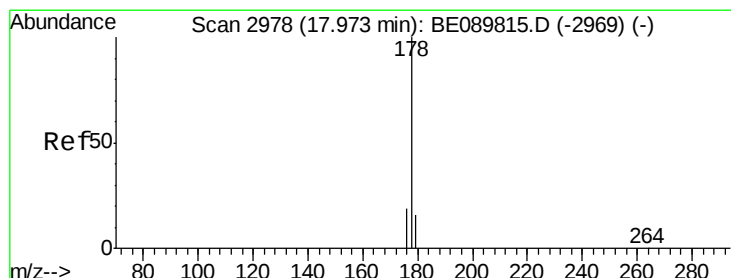
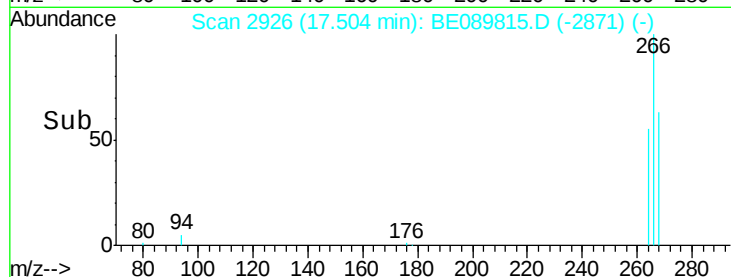
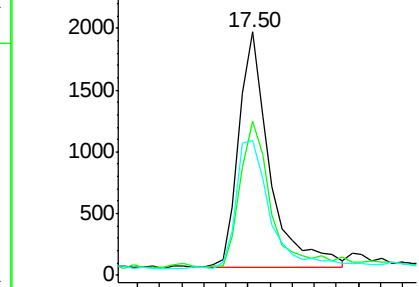
#15  
 Pentachlorophenol  
 Concen: 0.74 ng  
 RT: 17.50 min Scan# 2926  
 Delta R.T. 0.00 min  
 Lab File: BE089815.D  
 Acq: 24 Mar 2015 14:49

Instrument :  
 BNA\_E  
 ClientSampleId :  
 SSTDICC001

Tgt Ion: 266 Resp: 3717  
 Ion Ratio Lower Upper  
 266 100  
 268 63.5 51.6 77.4  
 264 55.6 50.2 75.2

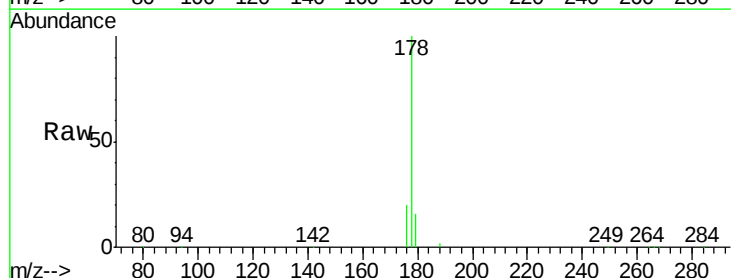


Abundance Ion 265.70 (265.40 to 266.40): E  
 Ion 268.00 (267.70 to 268.70): E  
 Ion 264.00 (263.70 to 264.70): E

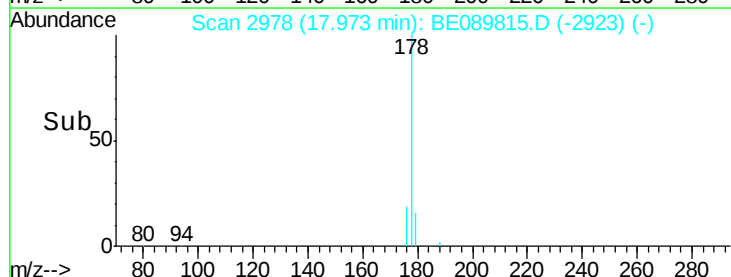
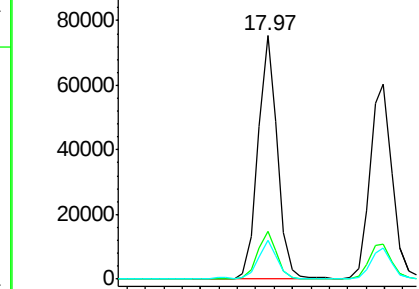


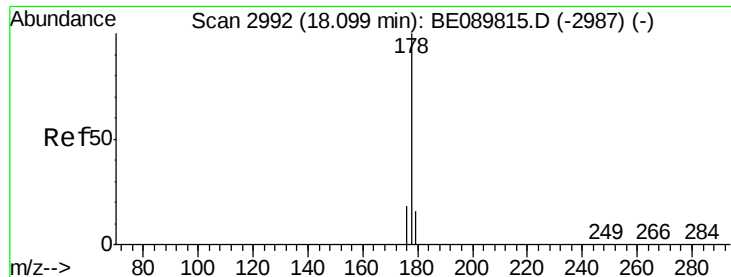
#16  
 Phenanthrene  
 Concen: 0.94 ng  
 RT: 17.97 min Scan# 2978  
 Delta R.T. -0.00 min  
 Lab File: BE089815.D  
 Acq: 24 Mar 2015 14:49

Tgt Ion: 178 Resp: 111118  
 Ion Ratio Lower Upper  
 178 100  
 176 19.0 15.4 23.0  
 179 15.1 12.2 18.4



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





#17

Anthracene

Concen: 0.96 ng

RT: 18.10 min Scan# 2992

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

Instrument :

BNA\_E

ClientSampleId :

SSTDICCC001

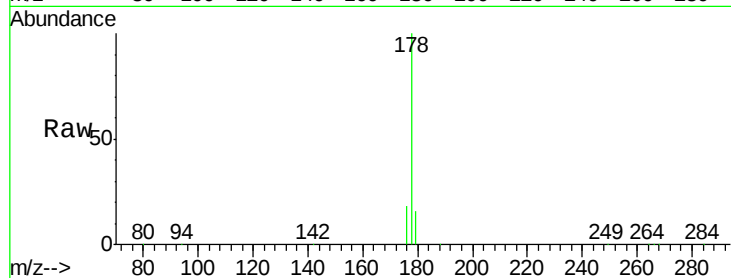
Tgt Ion:178 Resp: 101407

Ion Ratio Lower Upper

178 100

176 17.9 14.6 21.8

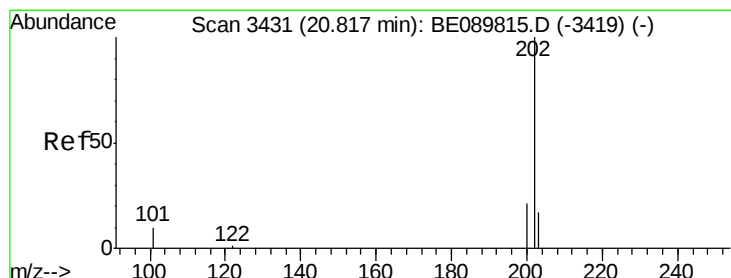
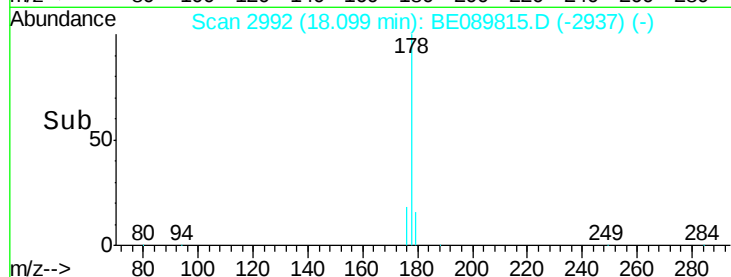
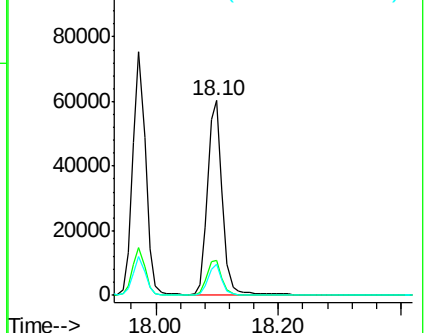
179 15.1 12.1 18.1



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#18

Fluoranthene

Concen: 0.93 ng

RT: 20.82 min Scan# 3431

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

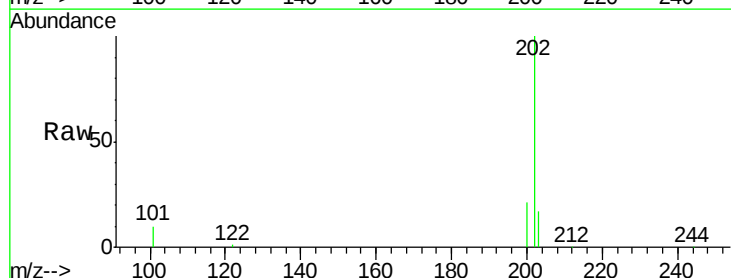
Tgt Ion:202 Resp: 99090

Ion Ratio Lower Upper

202 100

101 9.3 8.2 12.2

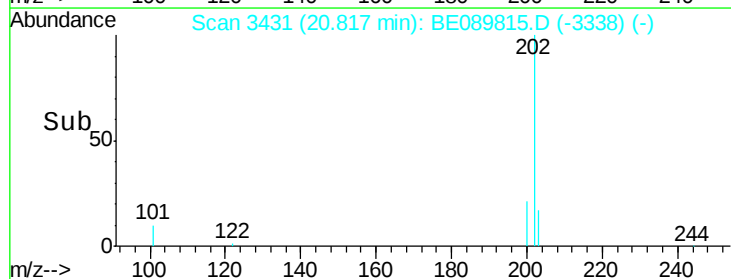
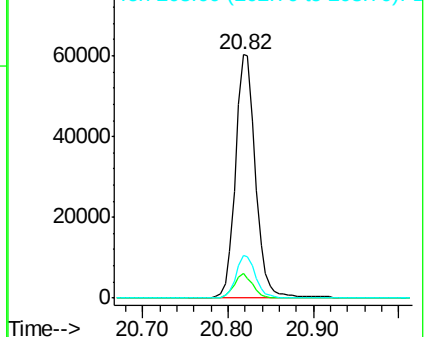
203 17.1 14.2 21.4

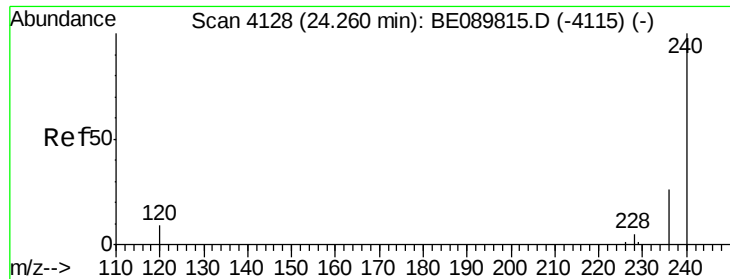


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E





#19

Chrysene-d12

Concen: 5.00 ng

RT: 24.26 min Scan# 4128

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

Instrument :

BNA\_E

ClientSampleId :

SSTDICCC001

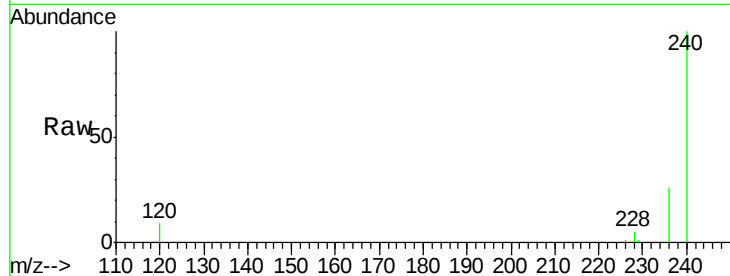
Tgt Ion:240 Resp: 432336

Ion Ratio Lower Upper

240 100

120 8.5 7.5 11.3

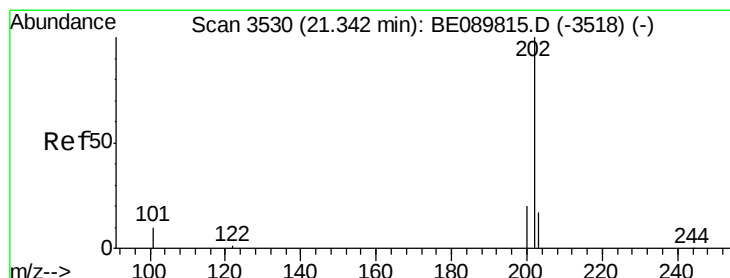
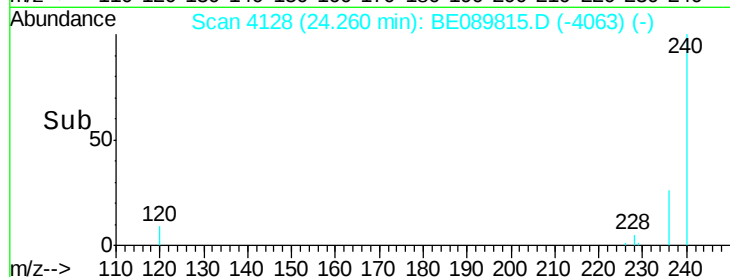
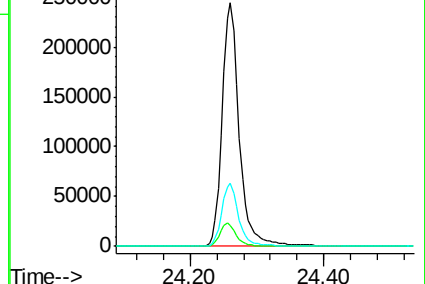
236 25.9 20.5 30.7



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



#20

Pyrene

Concen: 0.95 ng

RT: 21.34 min Scan# 3530

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

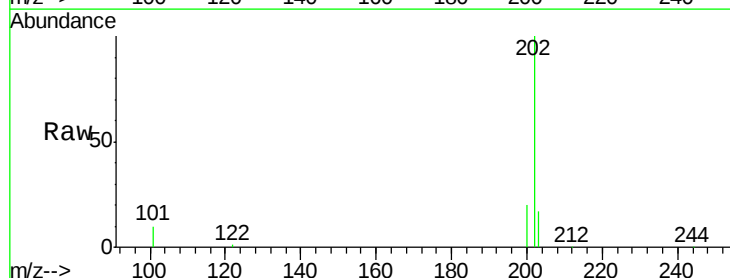
Tgt Ion:202 Resp: 104223

Ion Ratio Lower Upper

202 100

200 20.7 15.9 23.9

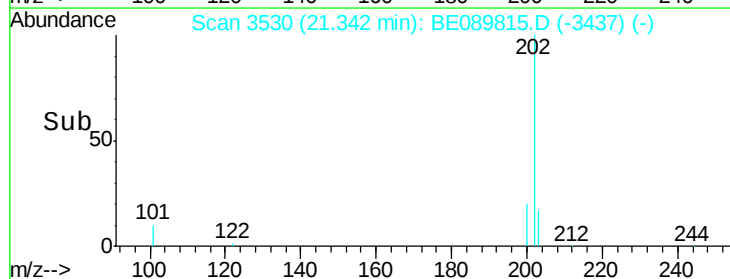
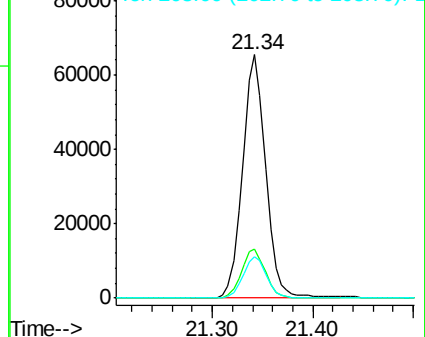
203 17.2 13.6 20.4

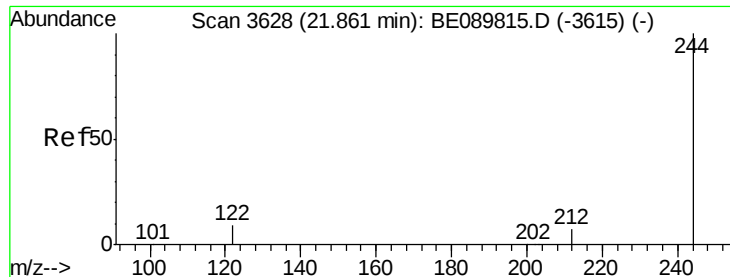


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#21

Terphenyl-d14

Concen: 0.96 ng

RT: 21.86 min Scan# 3628

Delta R.T. 0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

Instrument :

BNA\_E

ClientSampleId :

SSTDICCC001

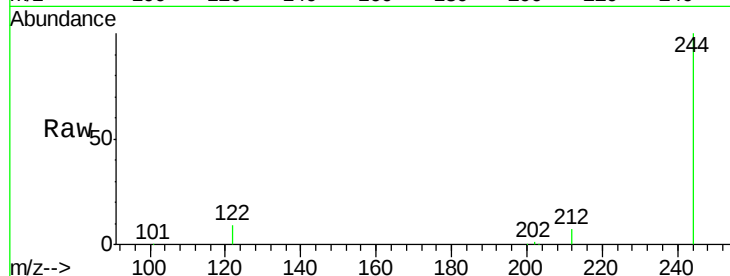
Tgt Ion:244 Resp: 61029

Ion Ratio Lower Upper

244 100

212 7.2 7.3 10.9#

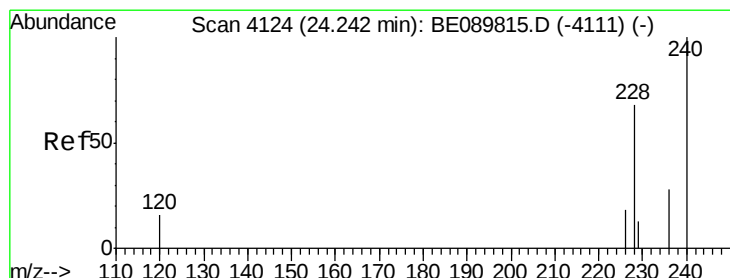
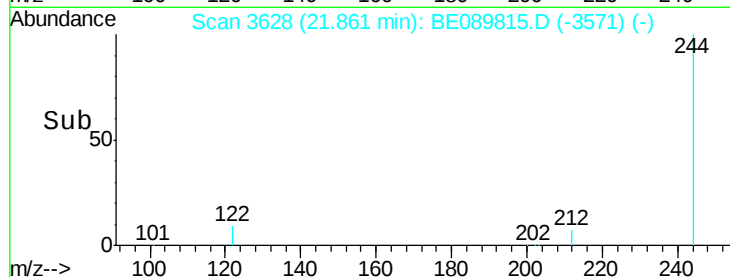
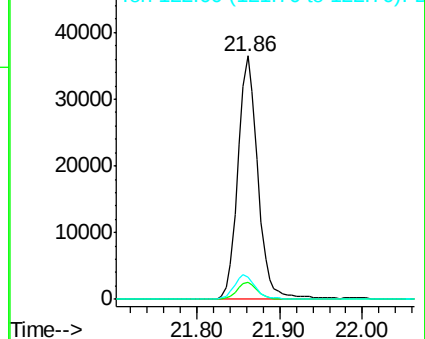
122 9.3 10.5 15.7#



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



#22

Benzo(a)anthracene

Concen: 0.92 ng

RT: 24.24 min Scan# 4124

Delta R.T. -0.01 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

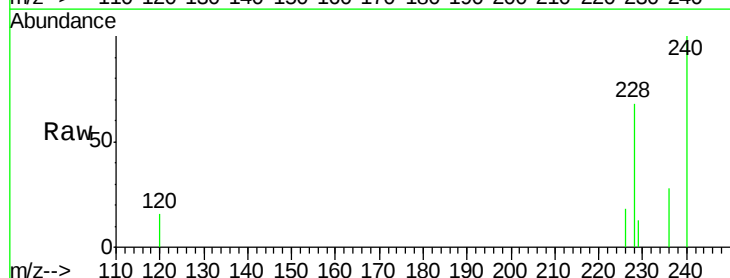
Tgt Ion:228 Resp: 74533

Ion Ratio Lower Upper

228 100

226 25.8 19.8 29.8

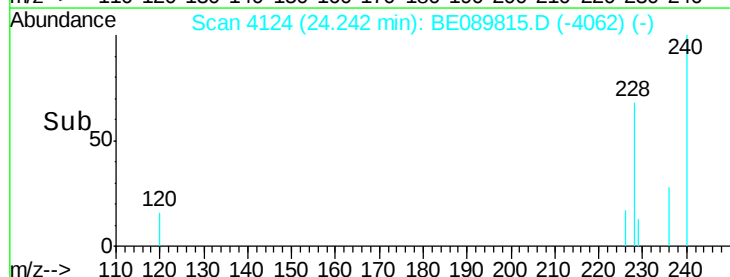
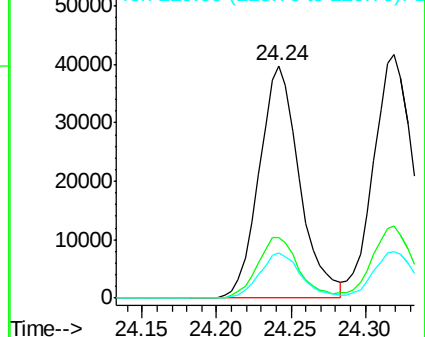
229 19.5 16.3 24.5

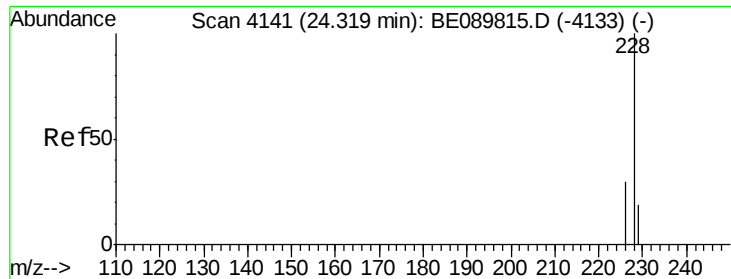


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#23

Chrysene

Concen: 0.98 ng

RT: 24.32 min Scan# 4141

Delta R.T. 0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

Instrument :

BNA\_E

ClientSampleId :

SSTDICCC001

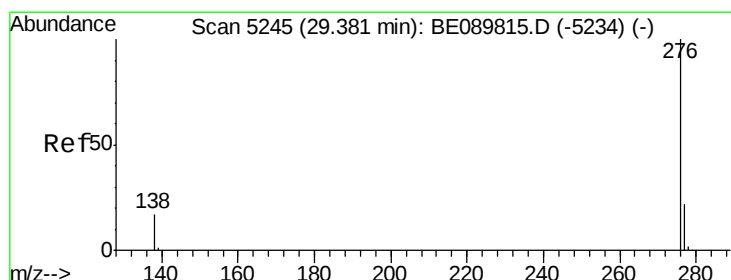
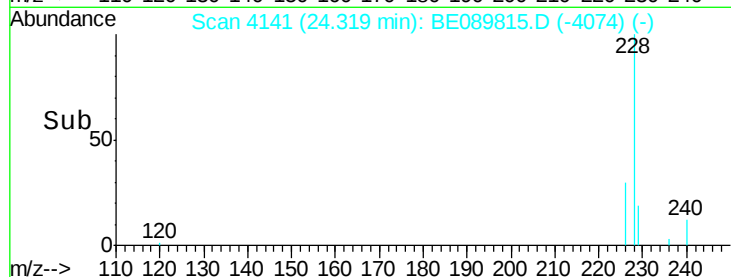
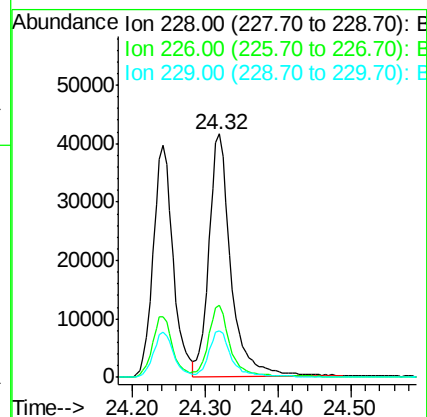
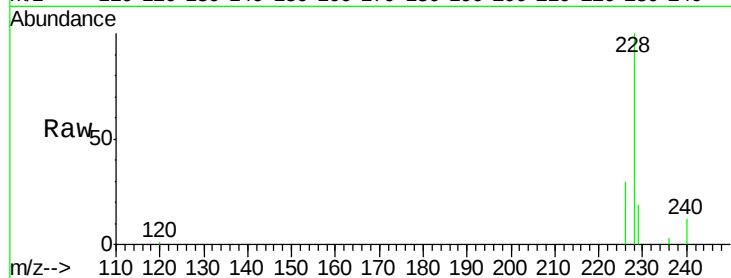
Tgt Ion:228 Resp: 86448

Ion Ratio Lower Upper

228 100

226 29.9 23.0 34.4

229 19.2 15.8 23.6



#24

Indeno(1,2,3-cd)pyrene

Concen: 0.70 ng

RT: 29.38 min Scan# 5245

Delta R.T. -0.00 min

Lab File: BE089815.D

Acq: 24 Mar 2015 14:49

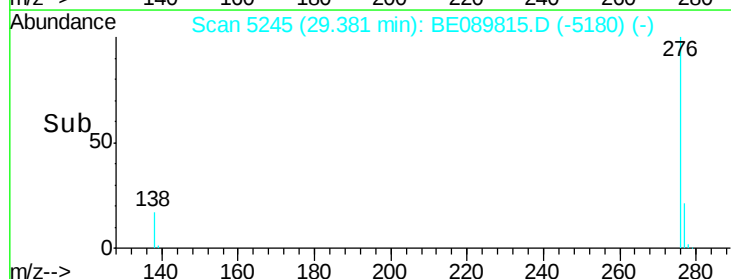
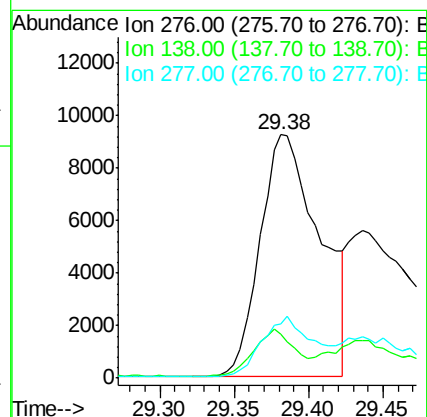
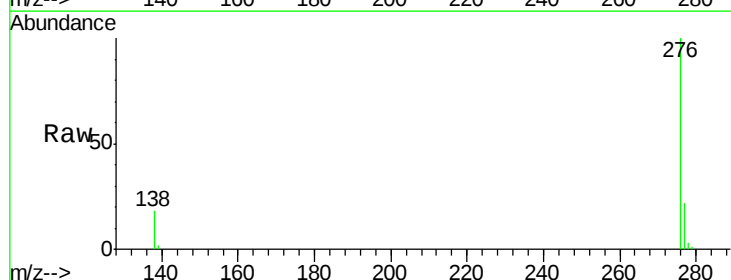
Tgt Ion:276 Resp: 25732

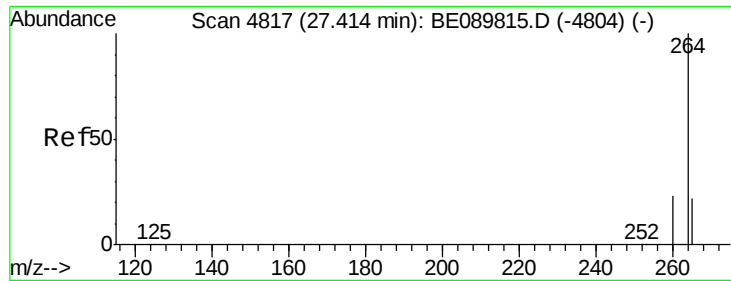
Ion Ratio Lower Upper

276 100

138 13.4 4.3 6.5#

277 20.9 9.0 13.4#

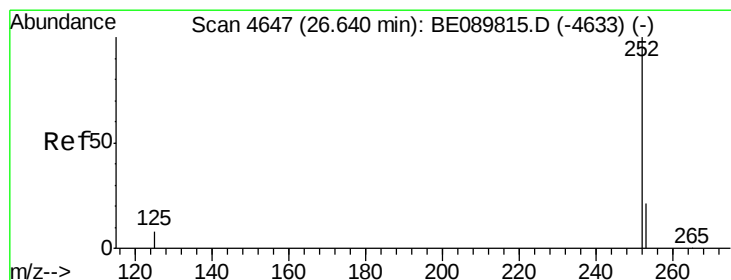
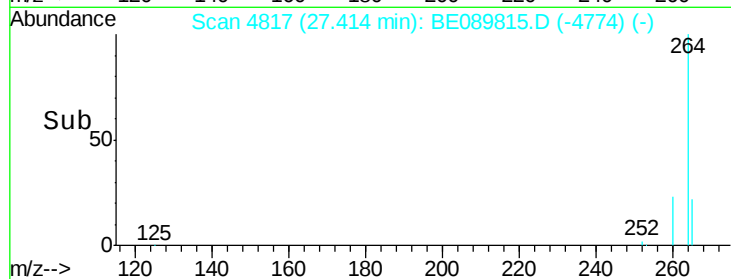
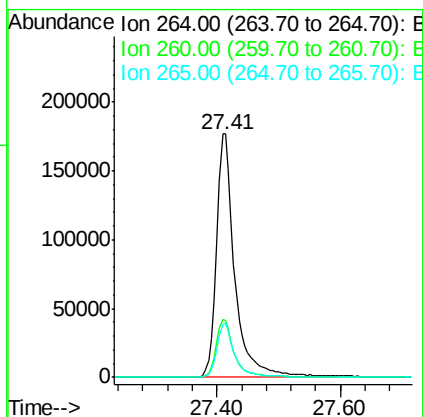
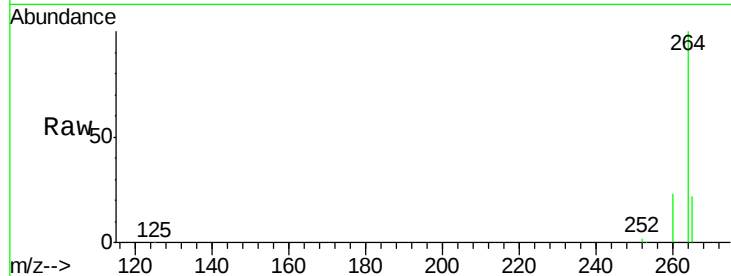




#25  
 Perylene-d12  
 Concen: 5.00 ng  
 RT: 27.41 min Scan# 4817  
 Delta R.T. -0.00 min  
 Lab File: BE089815.D  
 Acq: 24 Mar 2015 14:49

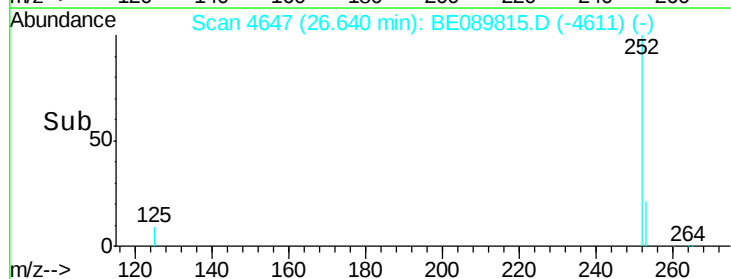
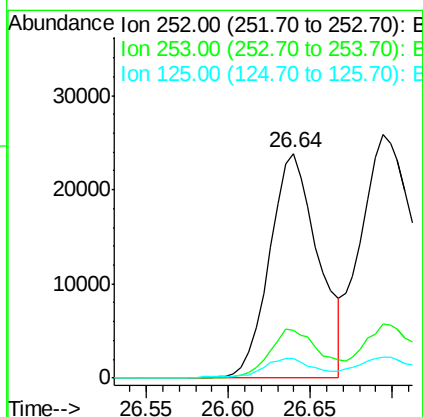
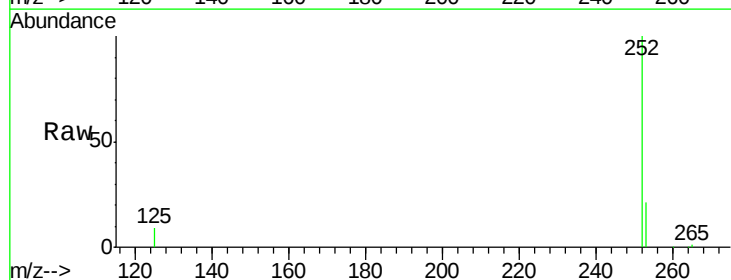
Instrument :  
 BNA\_E  
 ClientSampleId :  
 SSTDICC001

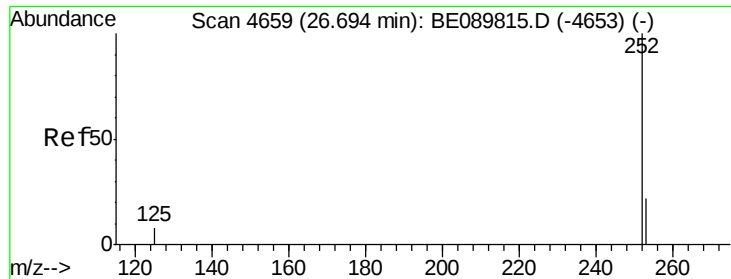
Tgt Ion: 264 Resp: 364287  
 Ion Ratio Lower Upper  
 264 100  
 260 23.5 18.2 27.2  
 265 22.1 17.3 25.9



#26  
 Benzo(b)fluoranthene  
 Concen: 0.91 ng  
 RT: 26.64 min Scan# 4647  
 Delta R.T. 0.00 min  
 Lab File: BE089815.D  
 Acq: 24 Mar 2015 14:49

Tgt Ion: 252 Resp: 48970  
 Ion Ratio Lower Upper  
 252 100  
 253 21.5 17.8 26.6  
 125 8.8 8.7 13.1

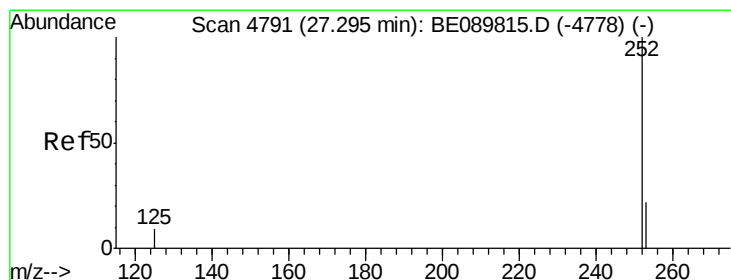
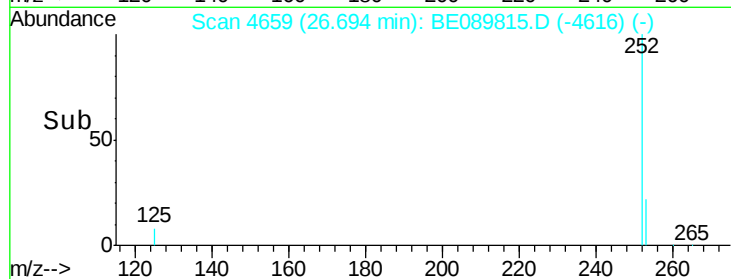
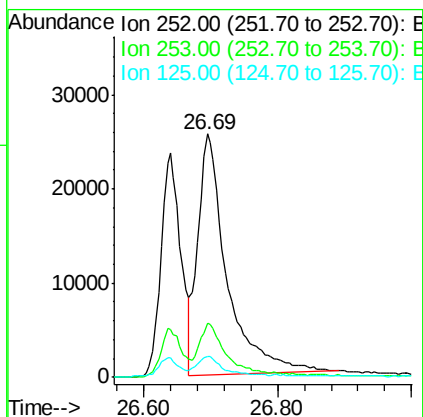
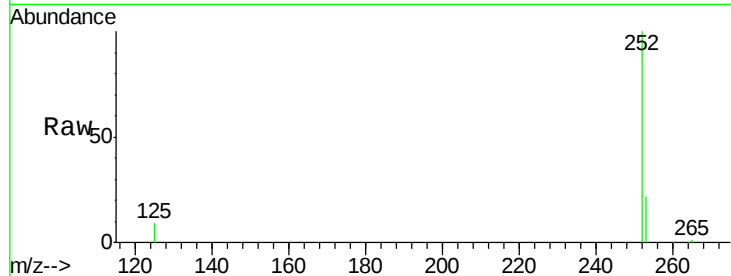




#27  
Benzo(k)fluoranthene  
Concen: 1.03 ng  
RT: 26.69 min Scan# 4659  
Delta R.T. -0.01 min  
Lab File: BE089815.D  
Acq: 24 Mar 2015 14:49

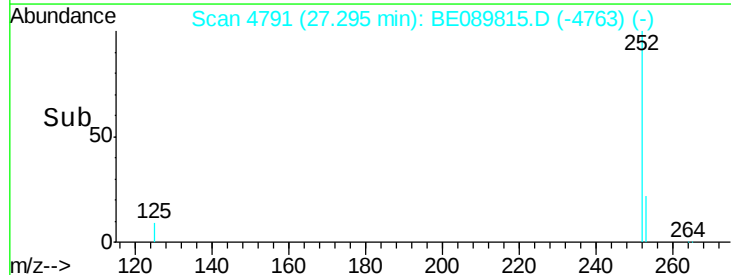
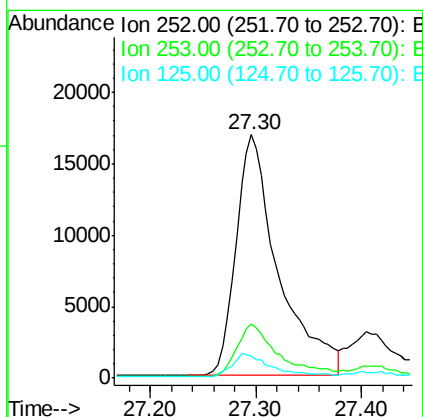
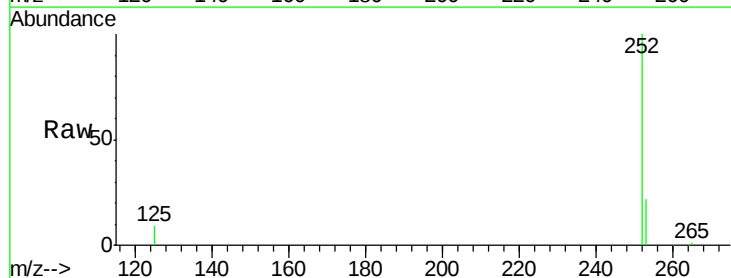
Instrument :  
BNA\_E  
ClientSampleId :  
SSTDICCC001

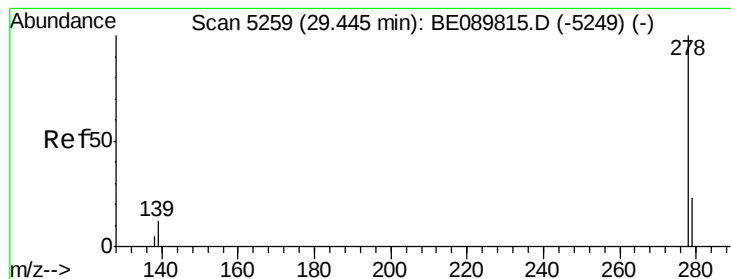
Tgt Ion: 252 Resp: 77197  
Ion Ratio Lower Upper  
252 100  
253 22.0 18.6 28.0  
125 8.7 10.8 16.2#



#28  
Benzo(a)pyrene  
Concen: 0.91 ng  
RT: 27.30 min Scan# 4791  
Delta R.T. -0.00 min  
Lab File: BE089815.D  
Acq: 24 Mar 2015 14:49

Tgt Ion: 252 Resp: 47284  
Ion Ratio Lower Upper  
252 100  
253 22.1 21.0 31.4  
125 9.3 13.3 19.9#

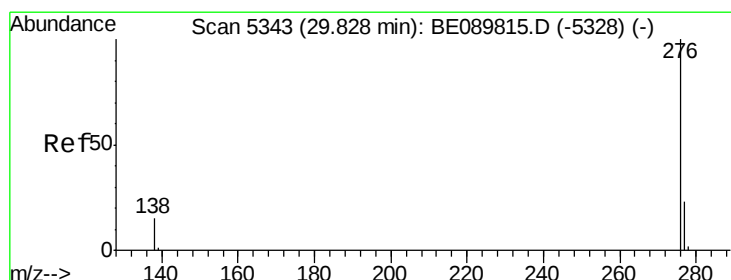
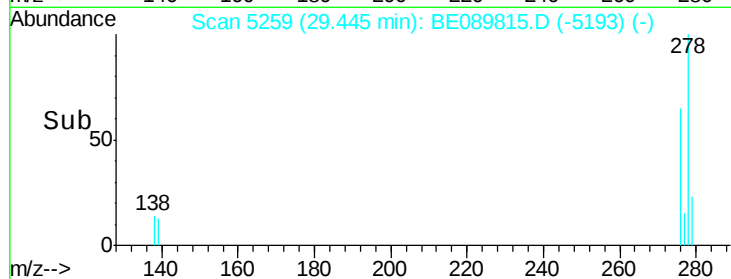
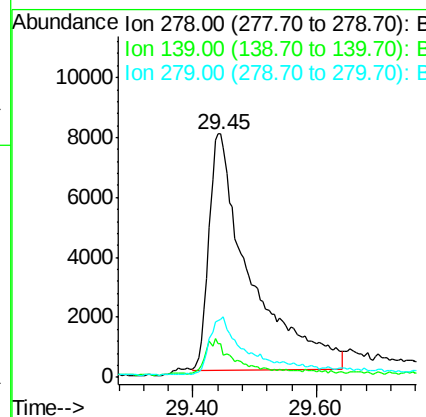
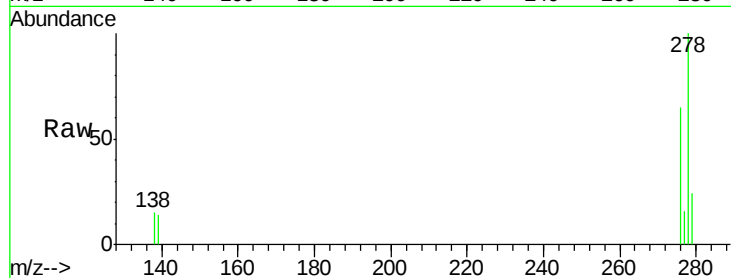




#29  
Dibenzo(a,h)anthracene  
Concen: 0.92 ng  
RT: 29.45 min Scan# 5259  
Delta R.T. 0.00 min  
Lab File: BE089815.D  
Acq: 24 Mar 2015 14:49

Instrument :  
BNA\_E  
ClientSampleId :  
SSTDICCC001

Tgt Ion: 278 Resp: 37091  
Ion Ratio Lower Upper  
278 100  
139 13.6 20.0 30.0#  
279 23.9 28.9 43.3#



#30  
Benzo(g,h,i)perylene  
Concen: 0.95 ng  
RT: 29.83 min Scan# 5343  
Delta R.T. 0.01 min  
Lab File: BE089815.D  
Acq: 24 Mar 2015 14:49

Tgt Ion: 276 Resp: 55462  
Ion Ratio Lower Upper  
276 100  
277 23.7 19.2 28.8  
138 15.5 22.9 34.3#

