

Data Path : Z:\HPCHEM1\BNA E\DATA\BE022315\  
 Data File : BE089652.D  
 Acq On : 23 Feb 2015 22:12  
 Operator : TP/JJ  
 Sample : SSTDICCC001  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 24 03:17:46 2015

Quant Method : Z:\HPCHEM1\BNA E\METHODS\SIMPAH-BE022315.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Tue Feb 24 03:06:59 2015

Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 9.34  | 152  | 31088    | 5.00 | ng    | 0.00     |
| 4) Naphthalene-d8         | 12.24 | 136  | 131938   | 5.00 | ng    | 0.00     |
| 8) Acenaphthene-d10       | 16.42 | 164  | 58856    | 5.00 | ng    | 0.00     |
| 13) Phenanthrene-d10      | 19.76 | 188  | 125748   | 5.00 | ng    | 0.00     |
| 19) Chrysene-d12          | 23.66 | 240  | 89227    | 5.00 | ng    | 0.00     |
| 25) Perylene-d12          | 25.34 | 264  | 69150    | 5.00 | ng    | 0.00     |

#### System Monitoring Compounds

|                     |       |     |       |      |    |      |
|---------------------|-------|-----|-------|------|----|------|
| 5) Nitrobenzene-d5  | 10.60 | 82  | 8530  | 1.42 | ng | 0.00 |
| 9) 2-Fluorobiphenyl | 14.88 | 172 | 17023 | 1.11 | ng | 0.00 |
| 21) Terphenyl-d14   | 22.30 | 244 | 20608 | 1.43 | ng | 0.00 |

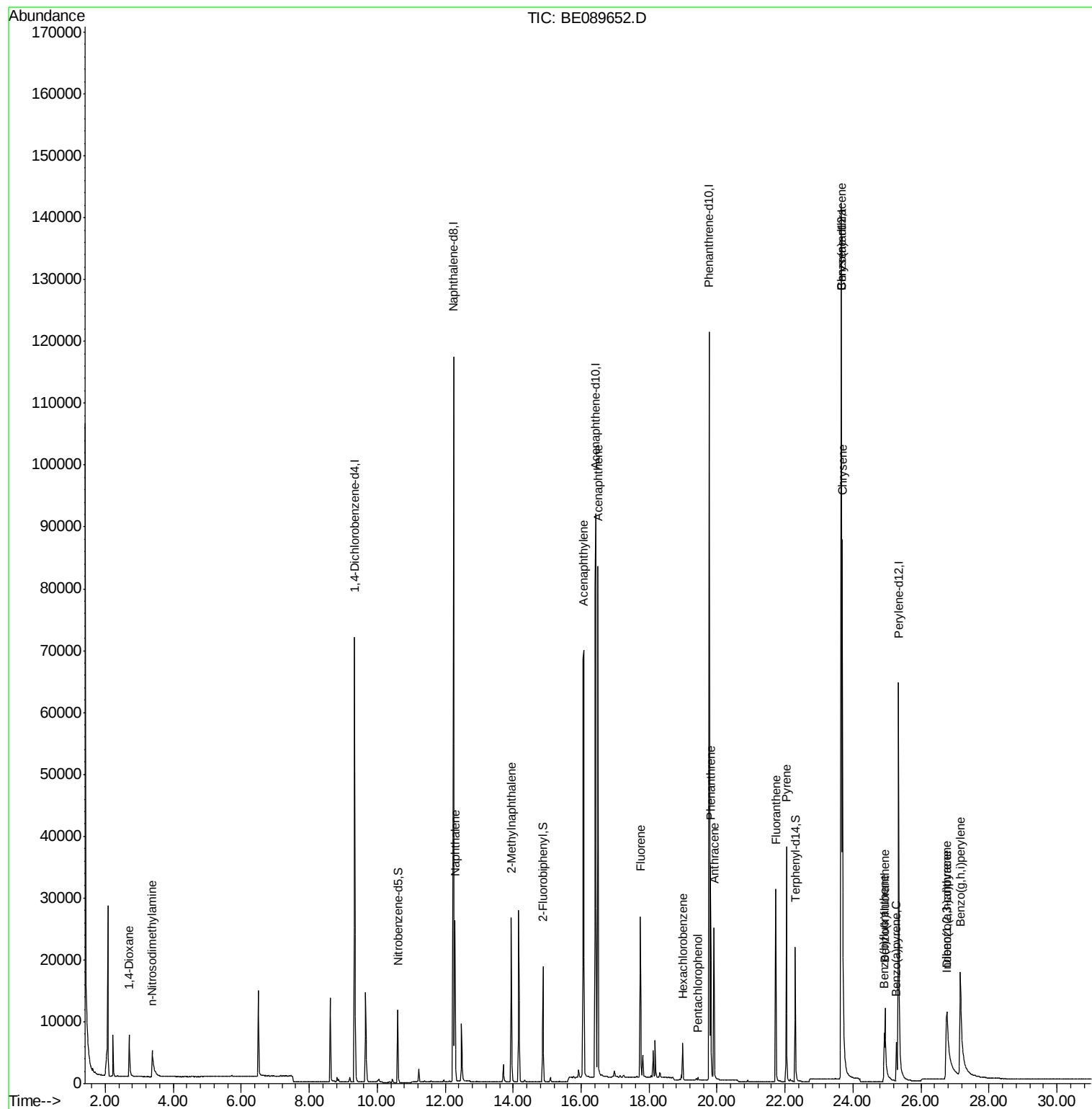
#### Target Compounds

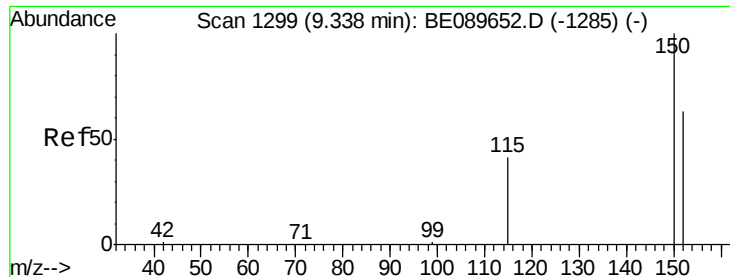
|                            |       |     |        |      |    | Ovalue |
|----------------------------|-------|-----|--------|------|----|--------|
| 2) 1,4-Dioxane             | 2.70  | 88  | 4969   | 0.97 | ng | 100    |
| 3) n-Nitrosodimethylamine  | 3.37  | 42  | 6278   | 1.15 | ng | 99     |
| 6) Naphthalene             | 12.29 | 128 | 31044  | 1.04 | ng | 100    |
| 7) 2-Methylnaphthalene     | 13.94 | 142 | 17870  | 1.06 | ng | 100    |
| 10) Acenaphthylene         | 16.07 | 152 | 102608 | 1.05 | ng | 100    |
| 11) Acenaphthene           | 16.49 | 154 | 16227  | 1.04 | ng | 100    |
| 12) Fluorene               | 17.74 | 166 | 18248  | 1.12 | ng | 100    |
| 14) Hexachlorobenzene      | 18.99 | 284 | 3849   | 0.99 | ng | 100    |
| 15) Pentachlorophenol      | 19.43 | 266 | 412    | 0.43 | ng | 100    |
| 16) Phenanthrene           | 19.81 | 178 | 31777  | 1.01 | ng | 100    |
| 17) Anthracene             | 19.91 | 178 | 27235  | 1.07 | ng | 100    |
| 18) Fluoranthene           | 21.72 | 202 | 24328  | 1.06 | ng | 100    |
| 20) Pyrene                 | 22.04 | 202 | 26309  | 0.94 | ng | 100    |
| 22) Benzo(a)anthracene     | 23.64 | 228 | 71761  | 1.10 | ng | 100    |
| 23) Chrysene               | 23.69 | 228 | 96724  | 1.00 | ng | 100    |
| 24) Indeno(1,2,3-cd)pyrene | 26.74 | 276 | 40013  | 1.10 | ng | 100    |
| 26) Benzo(b)fluoranthene   | 24.91 | 252 | 7147   | 1.08 | ng | 100    |
| 27) Benzo(k)fluoranthene   | 24.94 | 252 | 22194  | 1.28 | ng | 100    |
| 28) Benzo(a)pyrene         | 25.27 | 252 | 8715   | 1.14 | ng | 100    |
| 29) Dibenzo(a,h)anthracene | 26.77 | 278 | 7344   | 1.15 | ng | 100    |
| 30) Benzo(g,h,i)perylene   | 27.16 | 276 | 42118  | 1.06 | ng | 100    |

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

Data Path : Z:\HPCHEM1\BNA E\DATA\BE022315\  
Data File : BE089652.D  
Acq On : 23 Feb 2015 22:12  
Operator : TP/JJ  
Sample : SSTDICCC001  
Misc :  
ALS Vial : 6 Sample Multiplier: 1

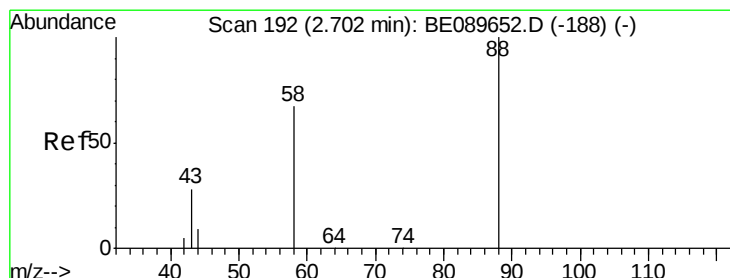
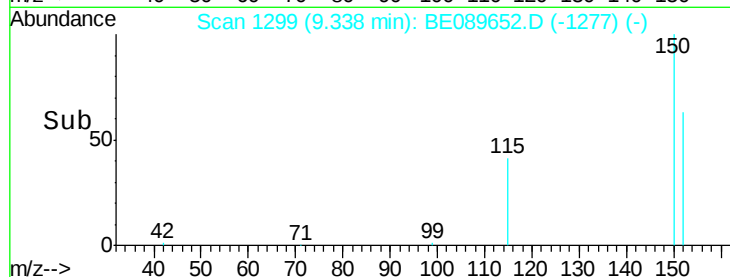
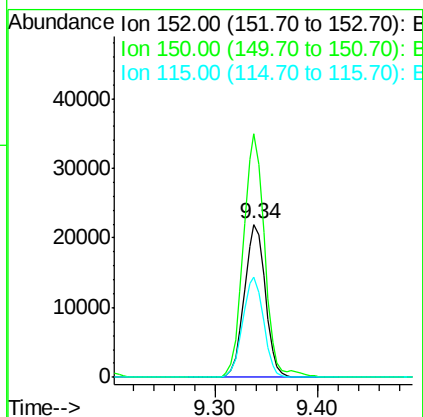
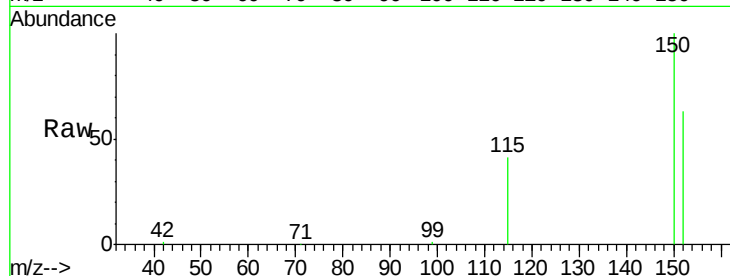
Quant Time: Feb 24 03:17:46 2015  
Quant Method : Z:\HPCHEM1\BNA E\METHODS\SIMPAH-BE022315.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Tue Feb 24 03:06:59 2015  
Response via : Initial Calibration





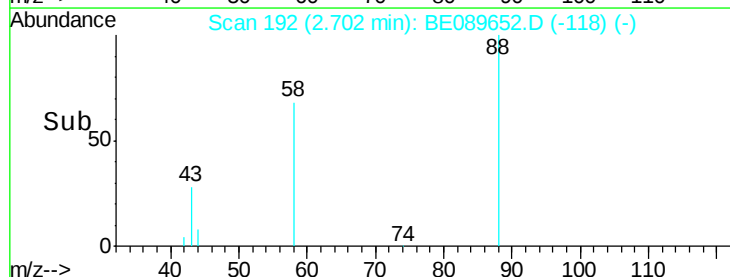
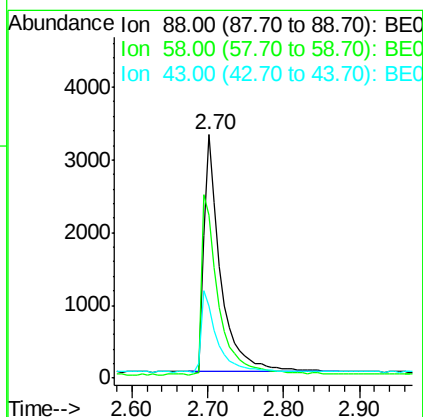
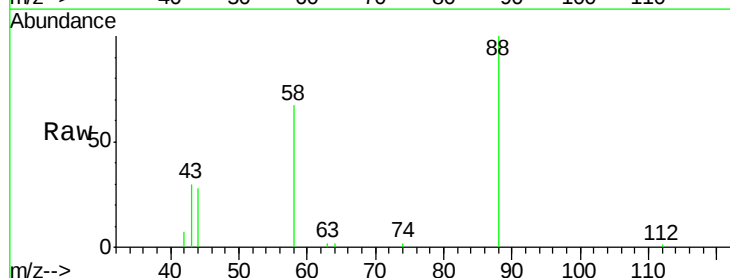
#1  
 1,4-Dichlorobenzene-d4  
 Concen: 5.00 ng  
 RT: 9.34 min Scan# 1299  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

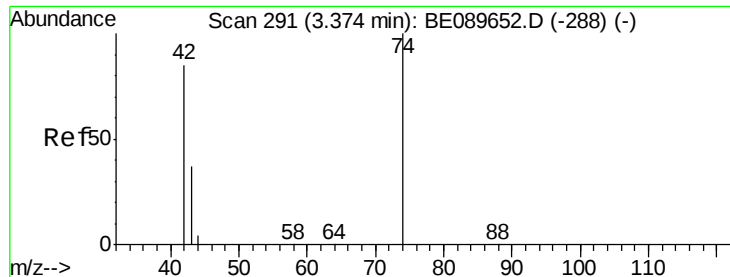
Tot Ion:152 Resp: 31088  
 Ion Ratio Lower Upper  
 152 100  
 150 158.8 127.0 190.6  
 115 65.5 52.4 78.6



#2  
 1,4-Dioxane  
 Concen: 0.97 ng  
 RT: 2.70 min Scan# 192  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

Tgt Ion: 88 Resp: 4969  
 Ion Ratio Lower Upper  
 88 100  
 58 77.2 61.8 92.6  
 43 33.0 26.4 39.6

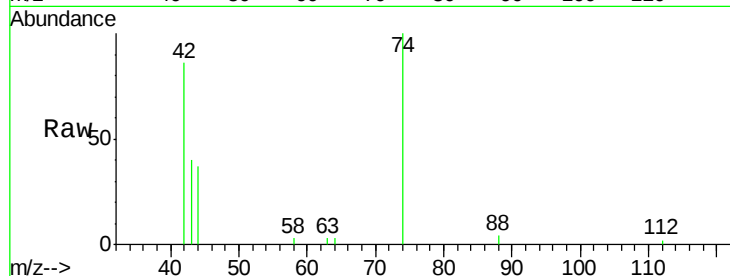




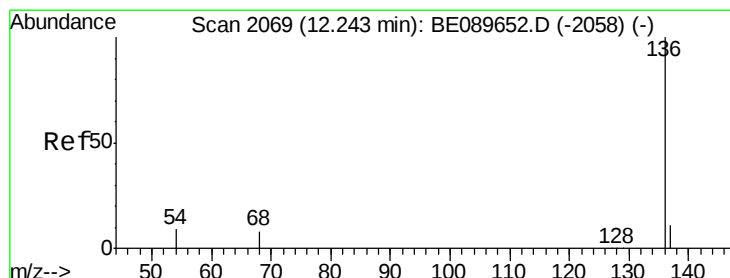
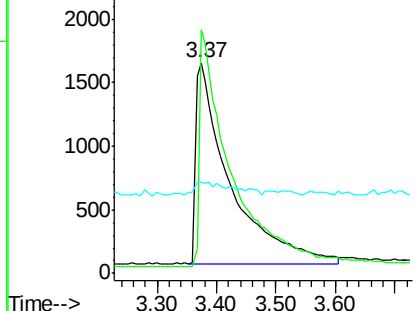
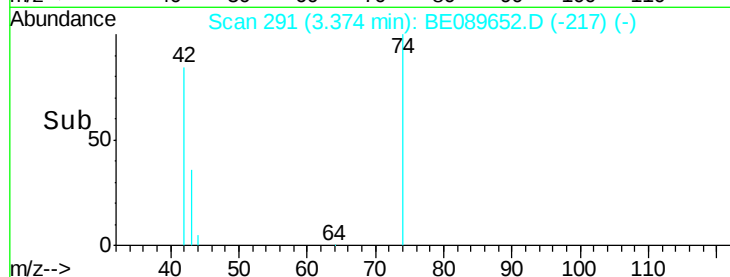
#3

n-Nitrosodimethylamine  
 Concen: 1.15 ng  
 RT: 3.37 min Scan# 291  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 74      | 116.4 | 92.5  | 138.7 |
| 44      | 6.1   | 4.9   | 7.3   |



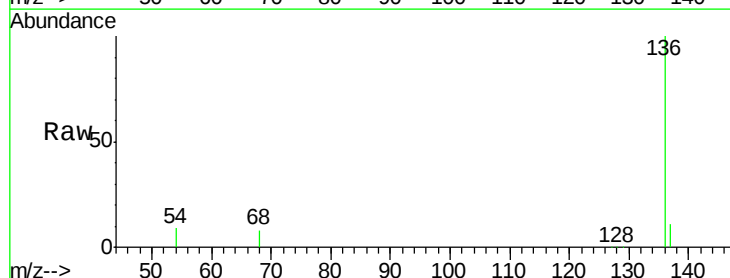
Abundance Ion 42.00 (41.70 to 42.70): BE0  
 Ion 74.00 (73.70 to 74.70): BE0  
 Ion 44.00 (43.70 to 44.70): BE0



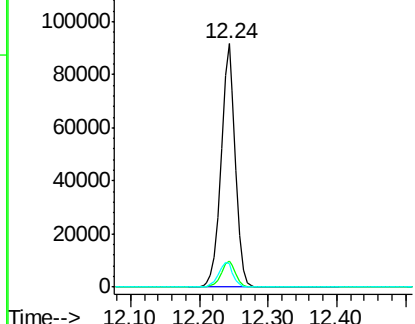
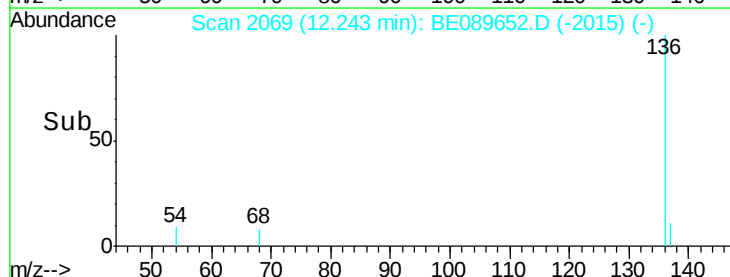
#4

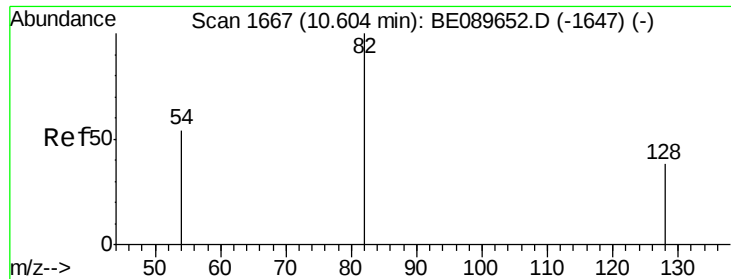
Naphthalene-d8  
 Concen: 5.00 ng  
 RT: 12.24 min Scan# 2069  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 136     | 100   |       |       |
| 137     | 10.9  | 8.7   | 13.1  |
| 54      | 9.4   | 7.5   | 11.3  |



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





#5

Nitrobenzene-d5

Concen: 1.42 ng

RT: 10.60 min Scan# 1667

Delta R.T. 0.00 min

Lab File: BE089652.D

Acq: 23 Feb 2015 22:12

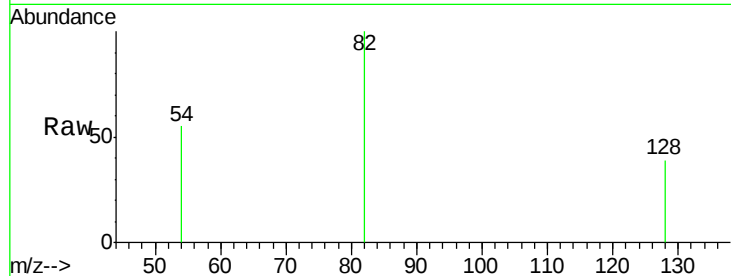
Tot Ion: 82 Resp: 8530

Ion Ratio Lower Upper

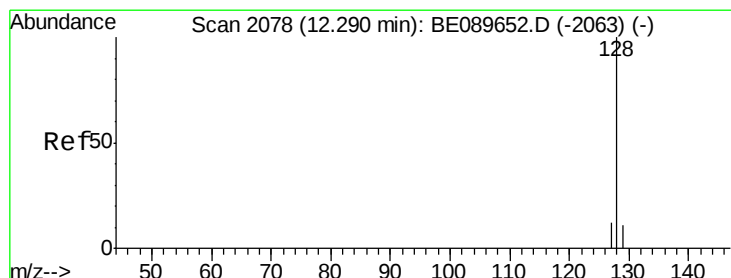
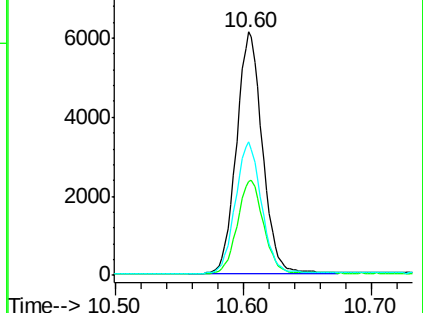
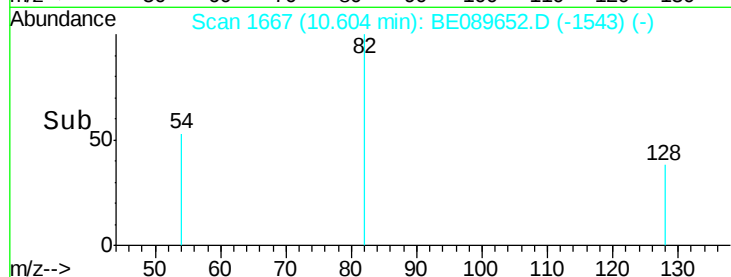
82 100

128 38.7 31.0 46.4

54 54.8 43.8 65.8



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



#6

Naphthalene

Concen: 1.04 ng

RT: 12.29 min Scan# 2078

Delta R.T. 0.00 min

Lab File: BE089652.D

Acq: 23 Feb 2015 22:12

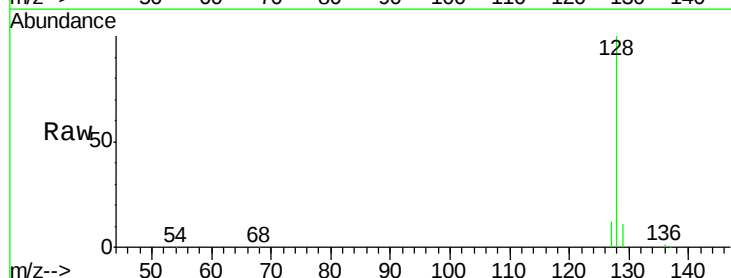
Tgt Ion: 128 Resp: 31044

Ion Ratio Lower Upper

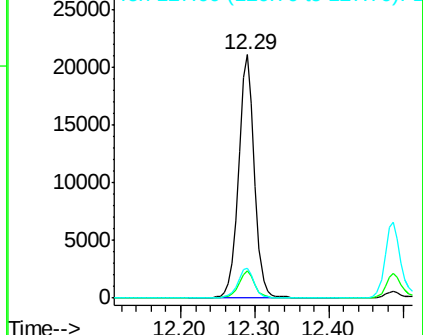
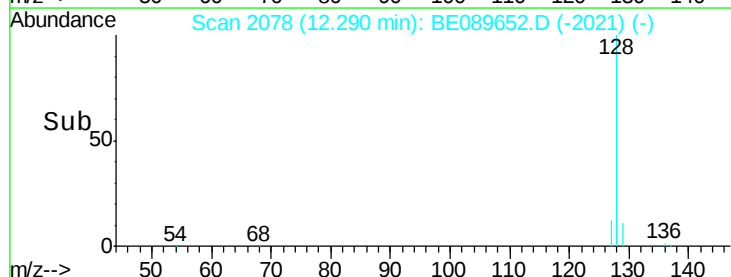
128 100

129 11.0 8.8 13.2

127 12.2 9.8 14.6



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





#7

2-Methylnaphthalene

Concen: 1.06 ng

RT: 13.94 min Scan# 2416

Delta R.T. 0.00 min

Lab File: BE089652.D

Acq: 23 Feb 2015 22:12

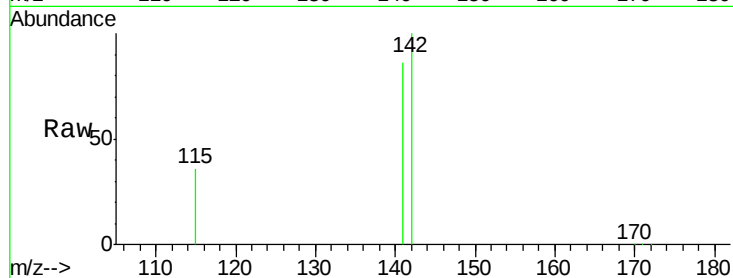
Tot Ion:142 Resp: 17870

Ion Ratio Lower Upper

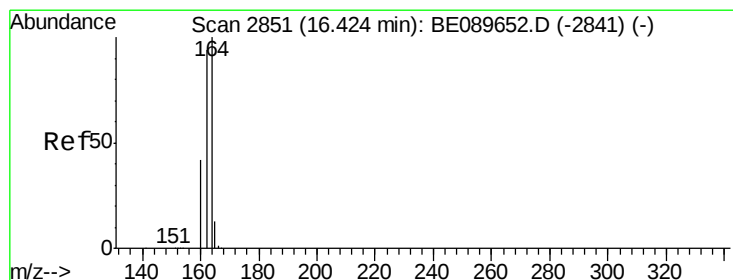
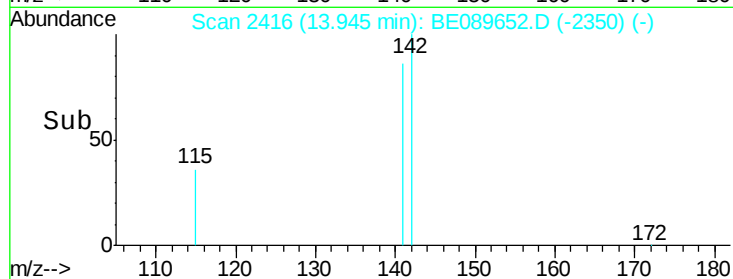
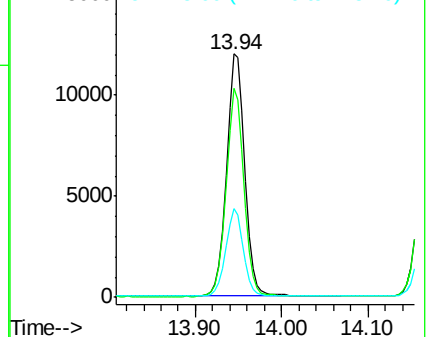
142 100

141 85.8 68.6 103.0

115 36.3 29.0 43.6



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: 16.42 min Scan# 2851

Delta R.T. 0.00 min

Lab File: BE089652.D

Acq: 23 Feb 2015 22:12

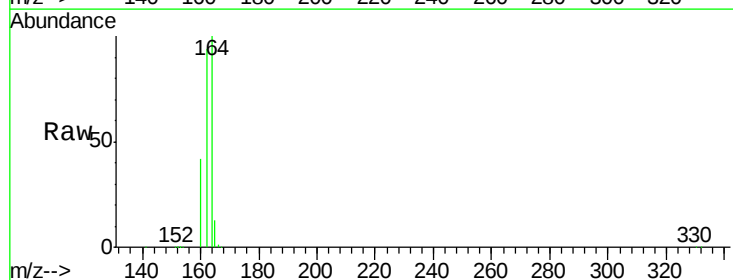
Tgt Ion:164 Resp: 58856

Ion Ratio Lower Upper

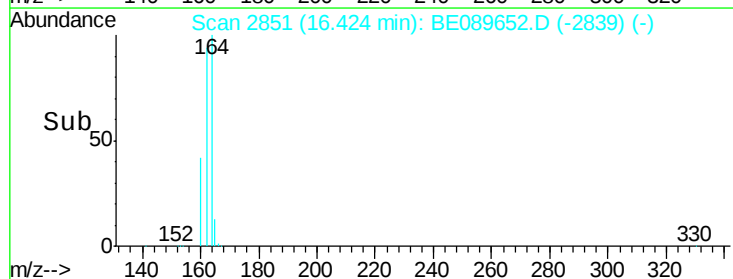
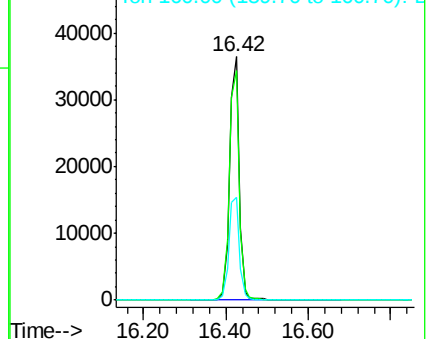
164 100

162 94.3 75.4 113.2

160 42.1 33.7 50.5



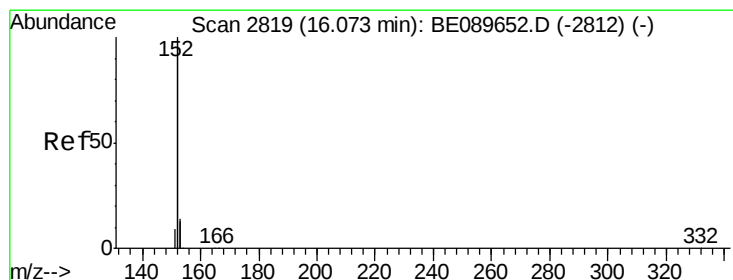
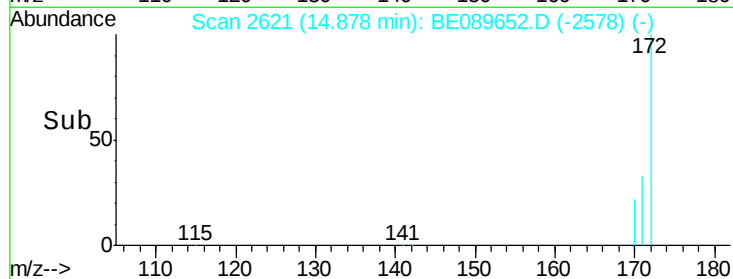
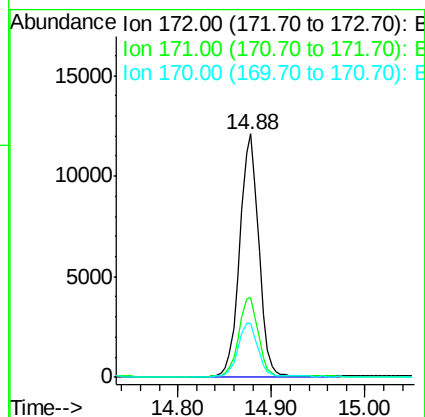
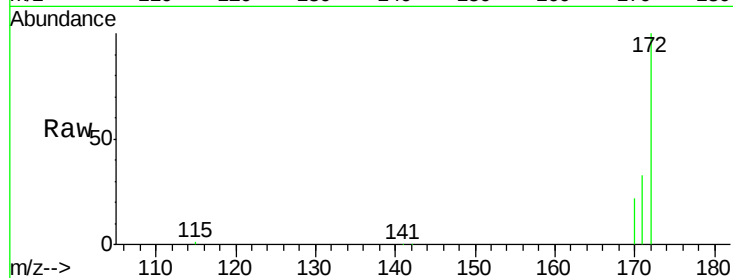
Abundance Ion 164.00 (163.70 to 164.70): E  
Ion 162.00 (161.70 to 162.70): E  
Ion 160.00 (159.70 to 160.70): E





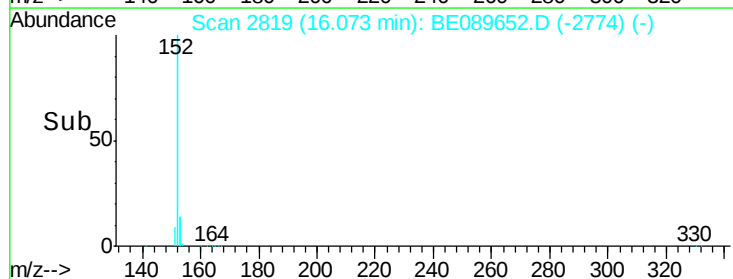
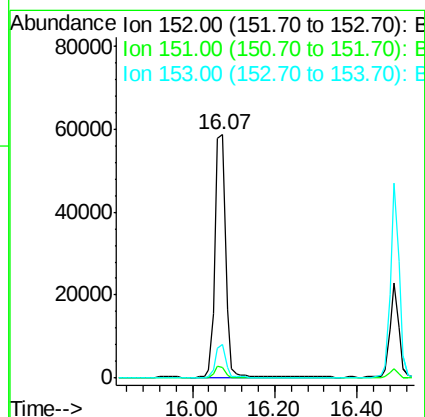
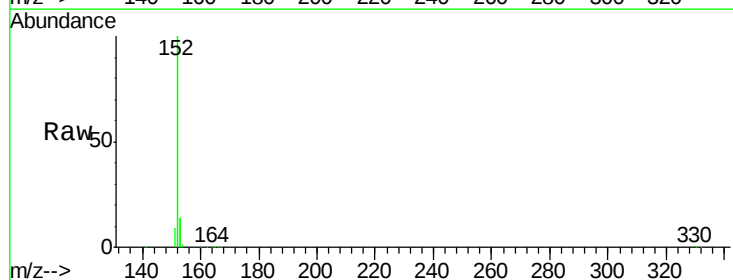
#9  
 2-Fluorobiphenyl  
 Concen: 1.11 ng  
 RT: 14.88 min Scan# 2621  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

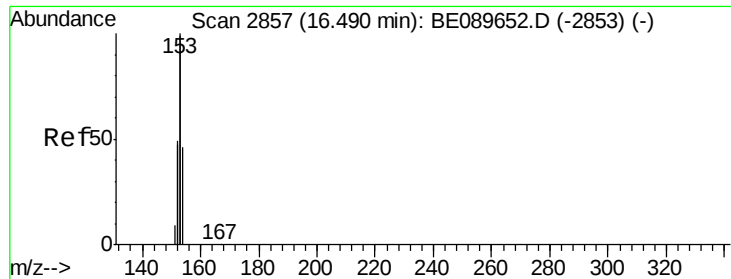
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 172     | 100   |       |       |
| 171     | 32.8  | 26.2  | 39.4  |
| 170     | 22.1  | 17.7  | 26.5  |



#10  
 Acenaphthylene  
 Concen: 1.05 ng  
 RT: 16.07 min Scan# 2819  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

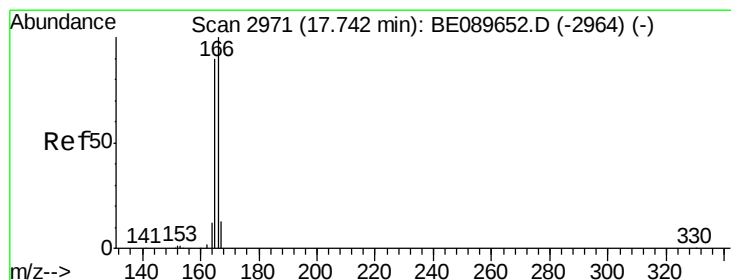
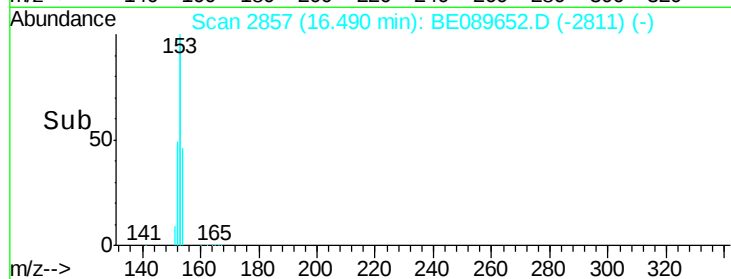
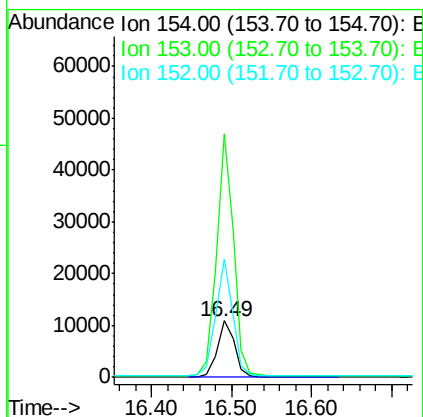
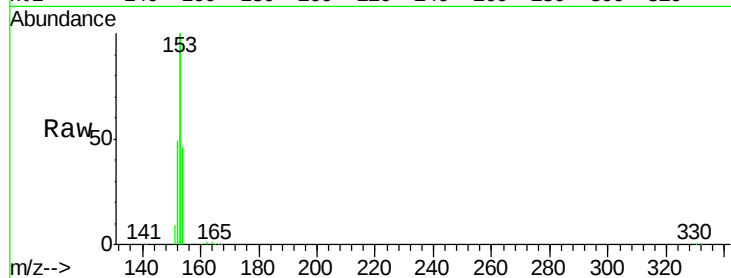
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 151     | 4.7   | 3.8   | 5.6   |
| 153     | 13.0  | 10.4  | 15.6  |





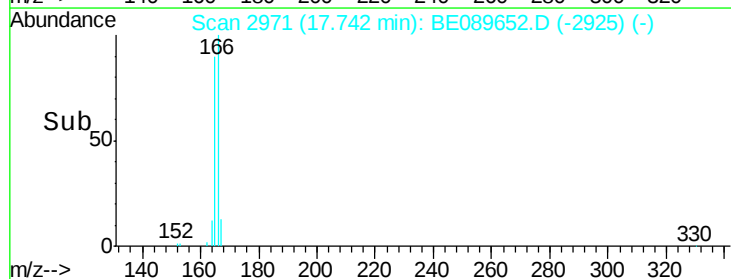
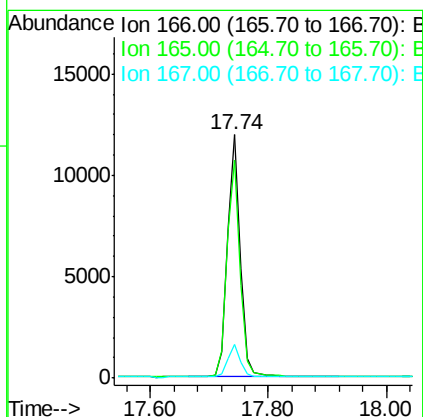
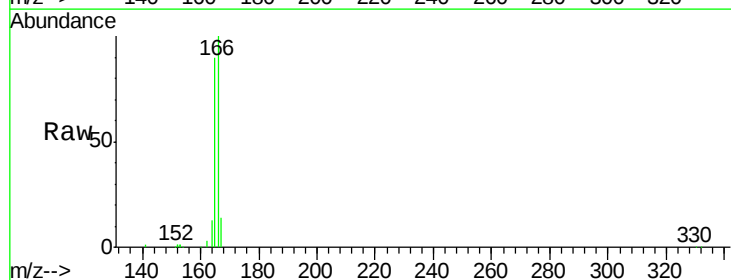
#11  
Acenaphthene  
Concen: 1.04 ng  
RT: 16.49 min Scan# 2857  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

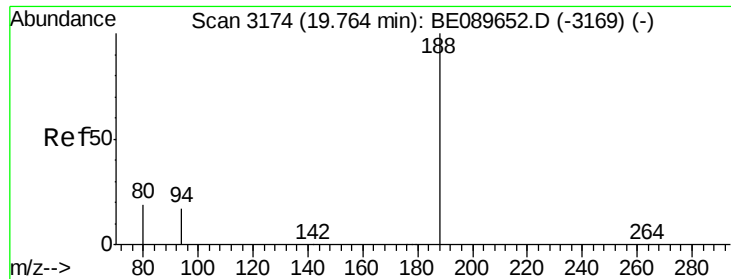
Tot Ion:154 Resp: 16227  
Ion Ratio Lower Upper  
154 100  
153 428.7 343.0 514.4  
152 207.3 165.8 248.8



#12  
Fluorene  
Concen: 1.12 ng  
RT: 17.74 min Scan# 2971  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

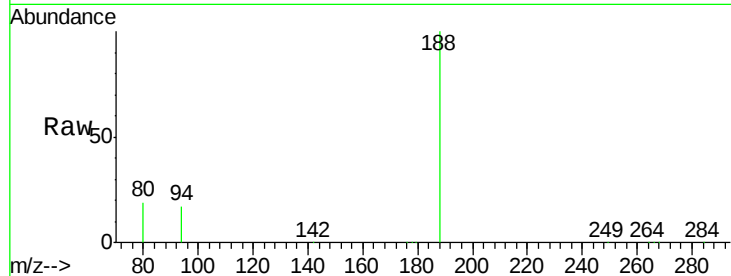
Tgt Ion:166 Resp: 18248  
Ion Ratio Lower Upper  
166 100  
165 92.0 73.6 110.4  
167 13.1 10.5 15.7





#13  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 19.76 min Scan# 3174  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

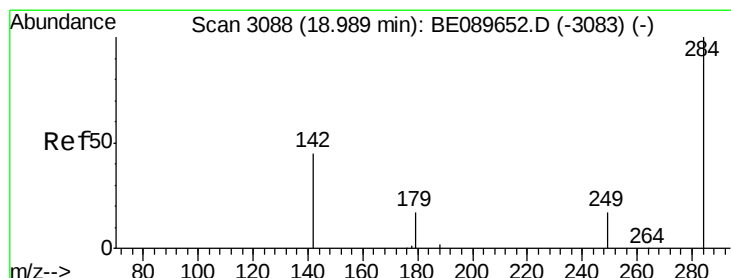
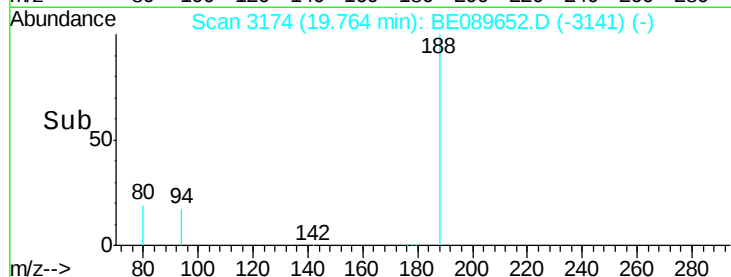
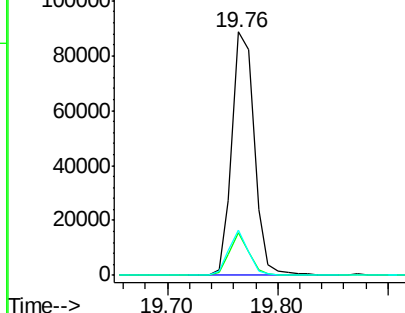
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 17.3  | 13.8  | 20.8  |
| 80      | 18.8  | 15.0  | 22.6  |



Abundance Ion 188.00 (187.70 to 188.70): E

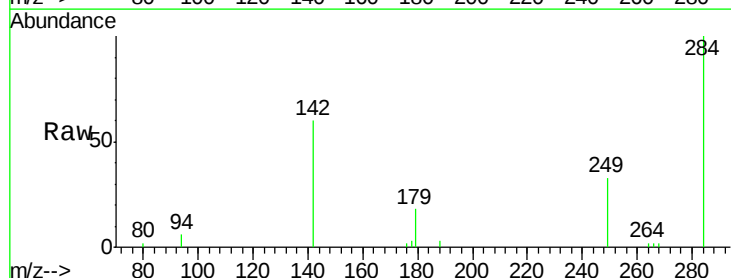
Ion 94.00 (93.70 to 94.70): BE0

Ion 80.00 (79.70 to 80.70): BE0



#14  
Hexachlorobenzene  
Concen: 0.99 ng  
RT: 18.99 min Scan# 3088  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

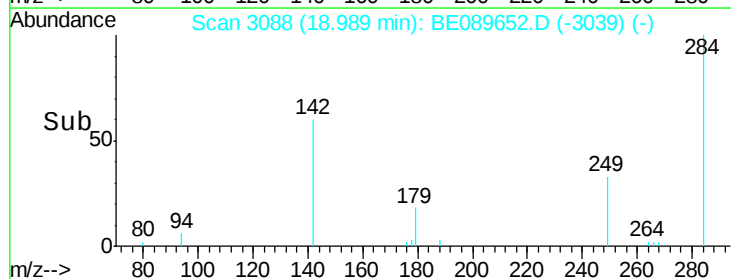
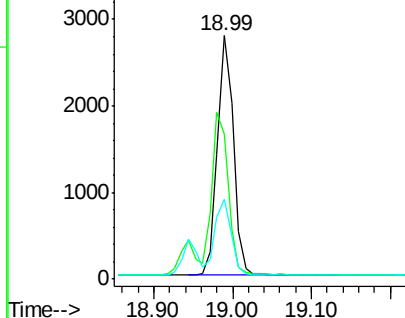
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 284     | 100   |       |       |
| 142     | 68.8  | 55.0  | 82.6  |
| 249     | 32.6  | 26.1  | 39.1  |

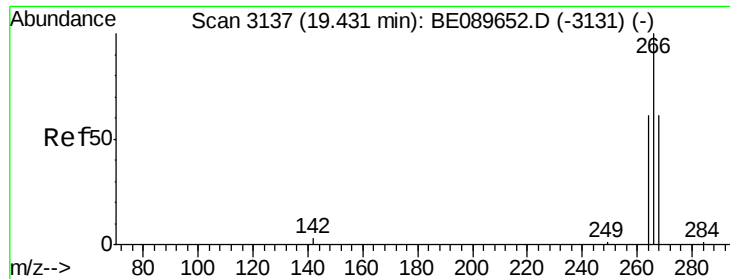


Abundance Ion 283.80 (283.50 to 284.50): E

Ion 142.00 (141.70 to 142.70): E

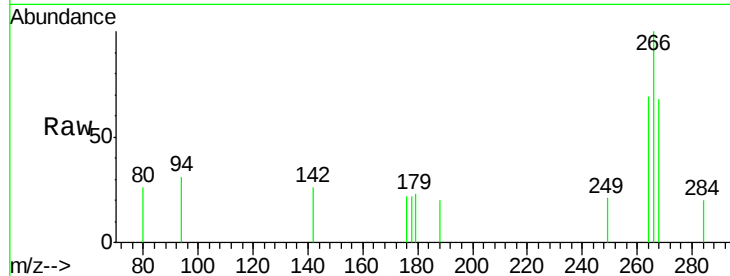
Ion 249.00 (248.70 to 249.70): E



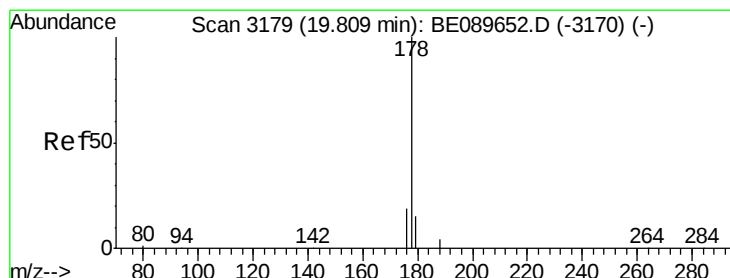
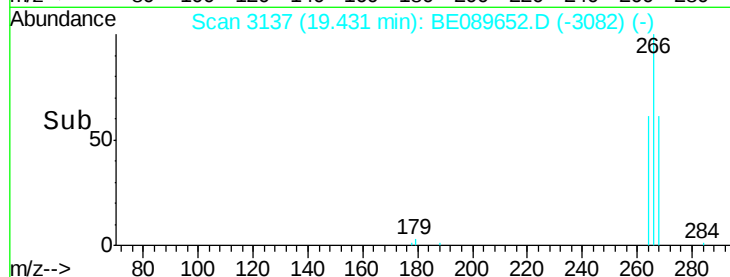
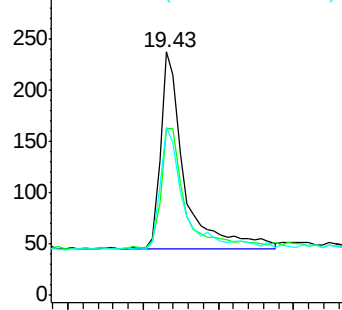


#15  
 Pentachlorophenol  
 Concen: 0.43 ng  
 RT: 19.43 min Scan# 3137  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 266     | 100   |       |       |
| 268     | 68.4  | 54.7  | 82.1  |
| 264     | 69.2  | 55.4  | 83.0  |

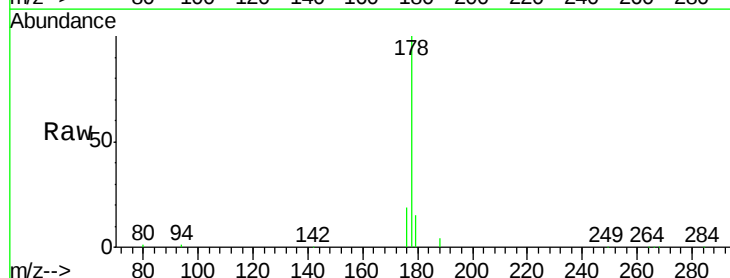


Abundance Ion 265.70 (265.40 to 266.40): E  
 Ion 268.00 (267.70 to 268.70): E  
 Ion 264.00 (263.70 to 264.70): E

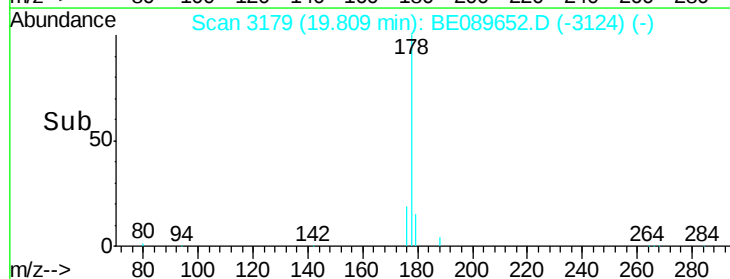
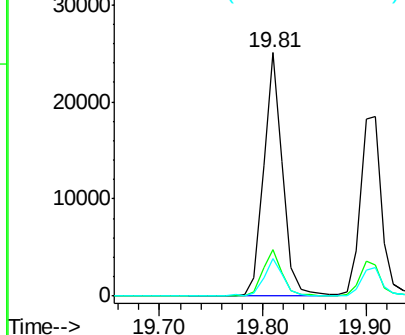


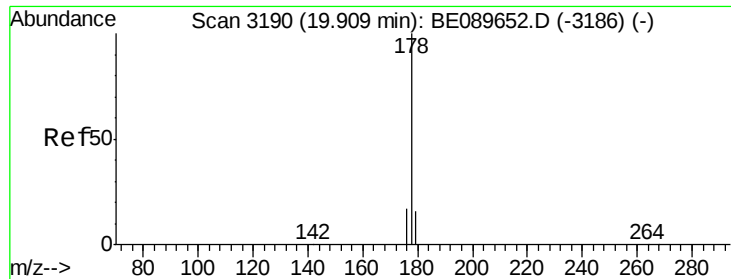
#16  
 Phenanthrene  
 Concen: 1.01 ng  
 RT: 19.81 min Scan# 3179  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 19.1  | 15.3  | 22.9  |
| 179     | 15.4  | 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





#17

Anthracene

Concen: 1.07 ng

RT: 19.91 min Scan# 3190

Delta R.T. 0.00 min

Lab File: BE089652.D

Acq: 23 Feb 2015 22:12

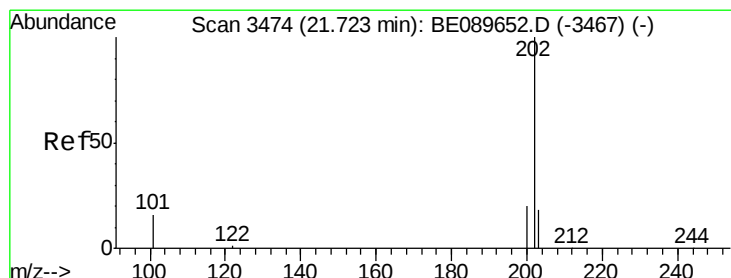
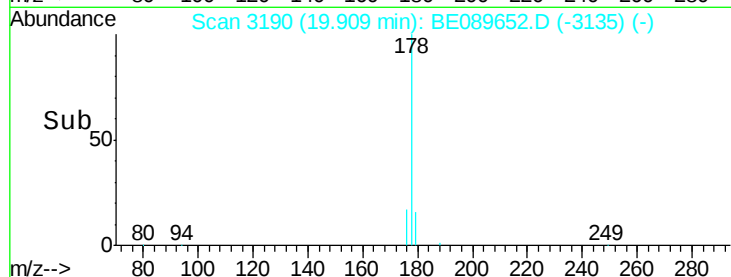
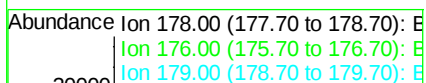
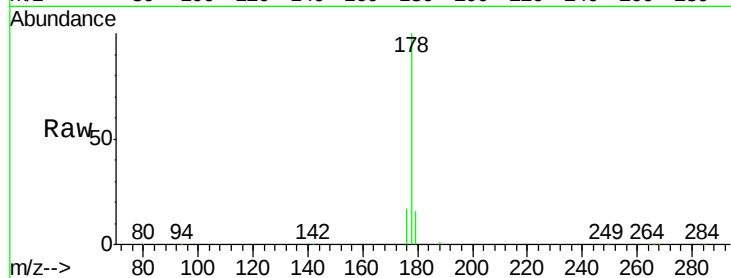
Tot Ion:178 Resp: 27235

Ion Ratio Lower Upper

178 100

176 17.9 14.3 21.5

179 15.1 12.1 18.1



#18

Fluoranthene

Concen: 1.06 ng

RT: 21.72 min Scan# 3474

Delta R.T. 0.00 min

Lab File: BE089652.D

Acq: 23 Feb 2015 22:12

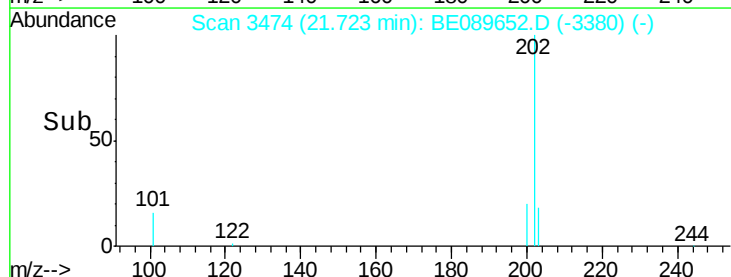
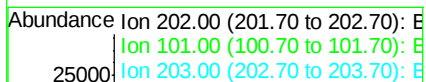
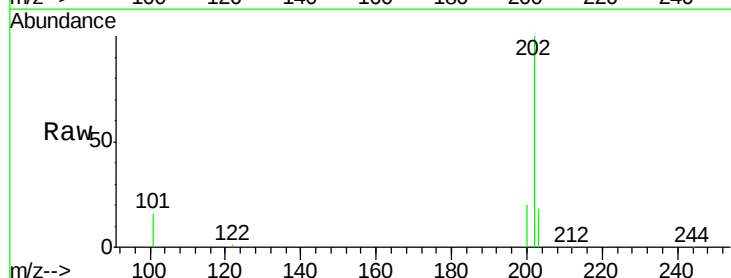
Tgt Ion:202 Resp: 24328

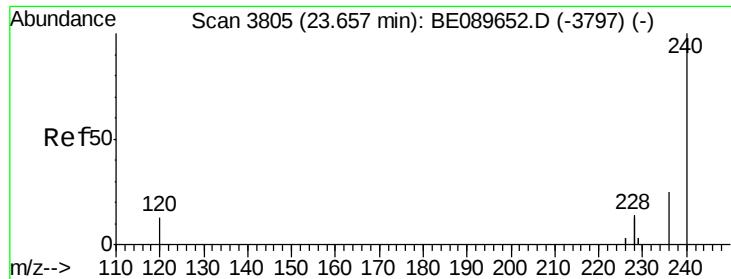
Ion Ratio Lower Upper

202 100

101 18.6 14.9 22.3

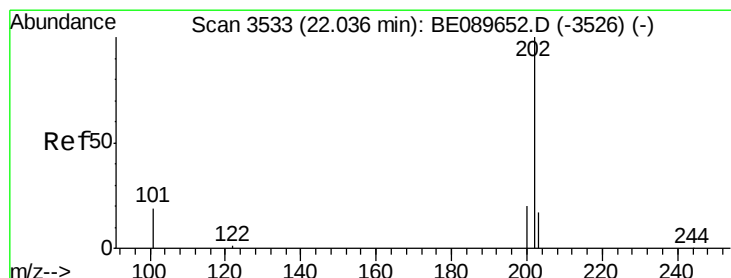
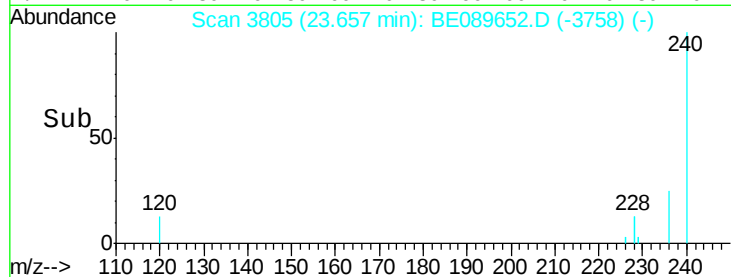
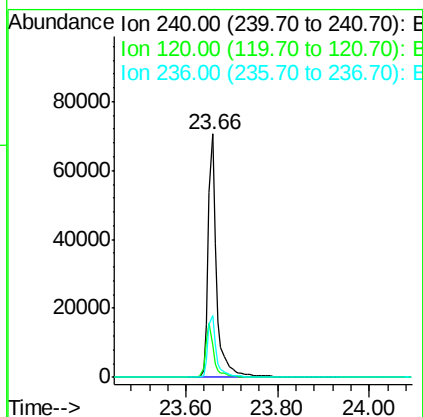
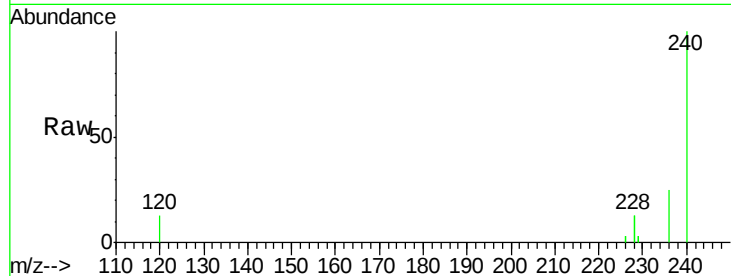
203 17.1 13.7 20.5





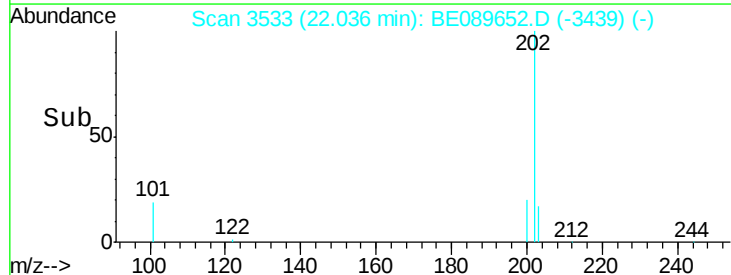
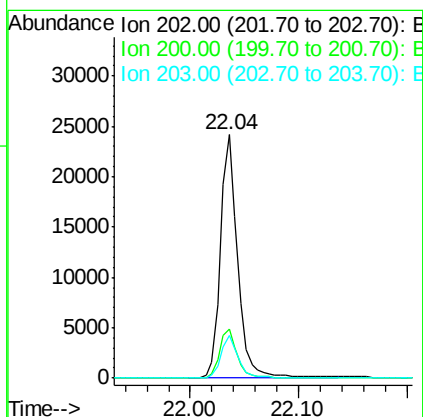
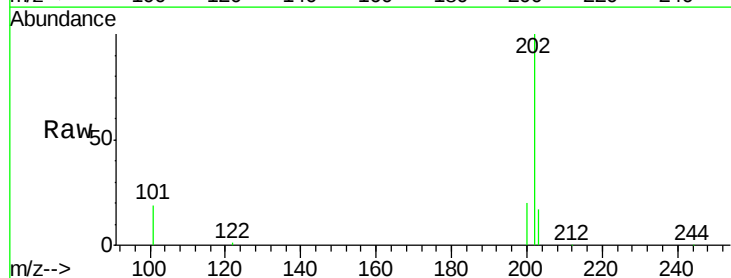
#19  
Chrysene-d12  
Concen: 5.00 ng  
RT: 23.66 min Scan# 3805  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

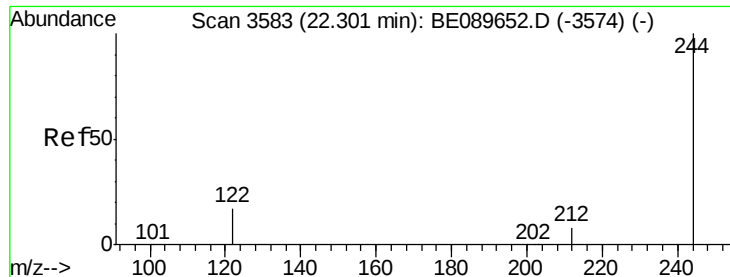
Tot Ion:240 Resp: 89227  
Ion Ratio Lower Upper  
240 100  
120 13.2 10.6 15.8  
236 25.4 20.3 30.5



#20  
Pyrene  
Concen: 0.94 ng  
RT: 22.04 min Scan# 3533  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

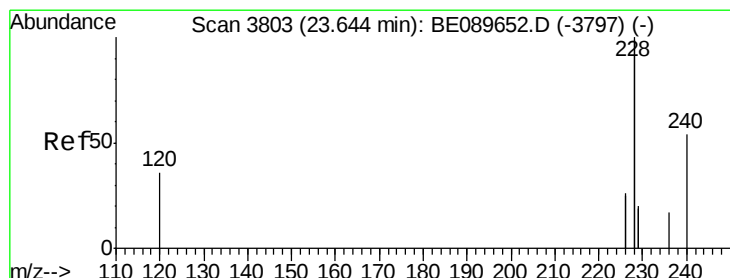
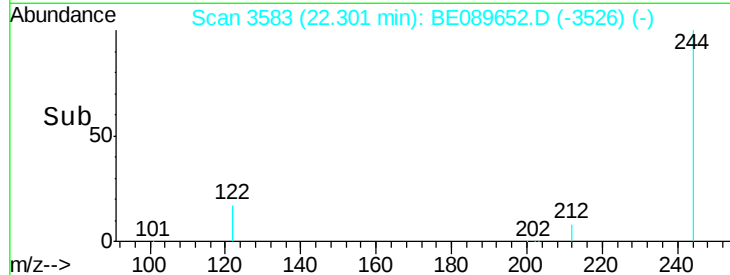
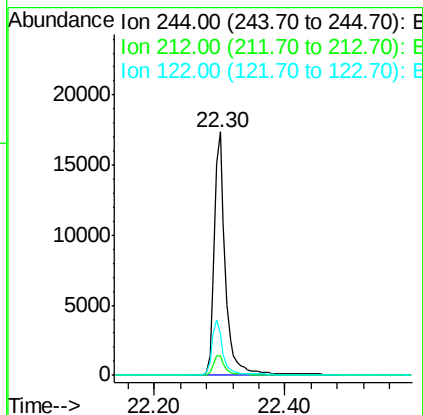
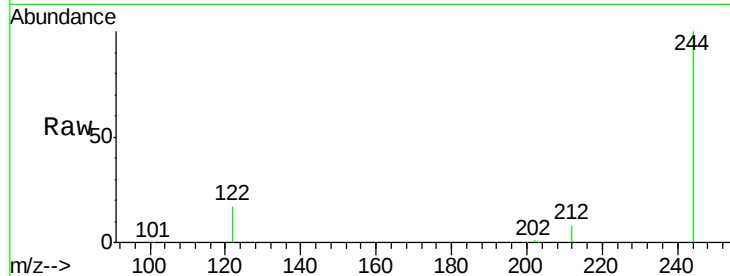
Tgt Ion:202 Resp: 26309  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 17.2 13.8 20.6





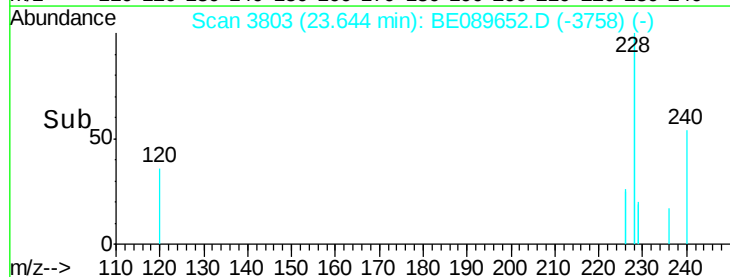
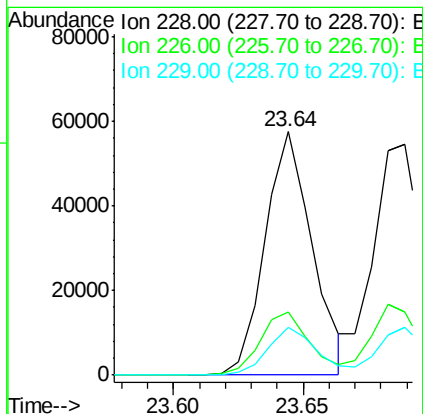
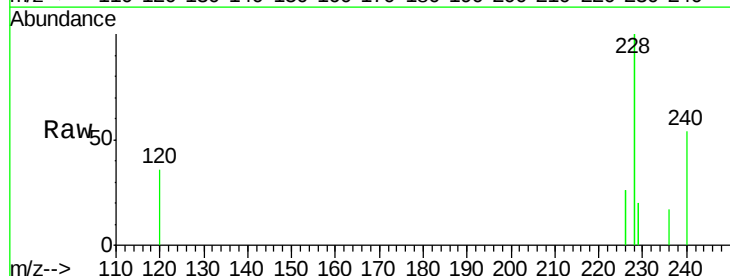
#21  
 Terphenyl-d14  
 Concen: 1.43 ng  
 RT: 22.30 min Scan# 3583  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

Tot Ion:244 Resp: 20608  
 Ion Ratio Lower Upper  
 244 100  
 212 8.3 6.6 10.0  
 122 17.1 13.7 20.5



#22  
 Benzo(a)anthracene  
 Concen: 1.10 ng  
 RT: 23.64 min Scan# 3803  
 Delta R.T. 0.00 min  
 Lab File: BE089652.D  
 Acq: 23 Feb 2015 22:12

Tgt Ion:228 Resp: 71761  
 Ion Ratio Lower Upper  
 228 100  
 226 26.1 20.9 31.3  
 229 19.7 15.8 23.6





#23

Chrysene

Concen: 1.00 ng

RT: 23.69 min Scan# 3810

Delta R.T. 0.00 min

Lab File: BE089652.D

Acq: 23 Feb 2015 22:12

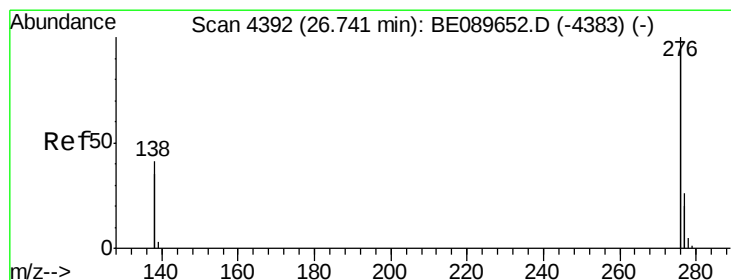
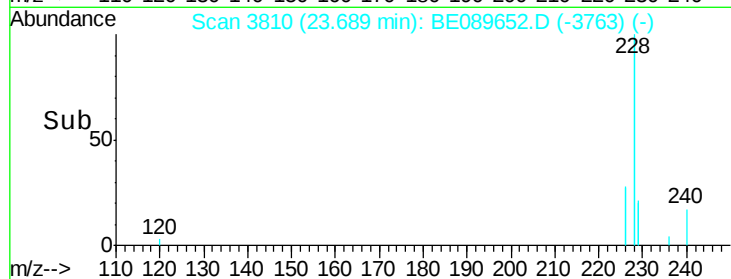
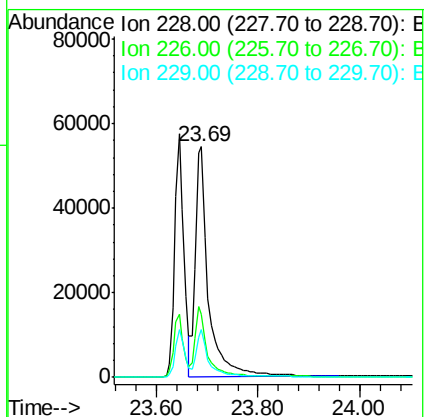
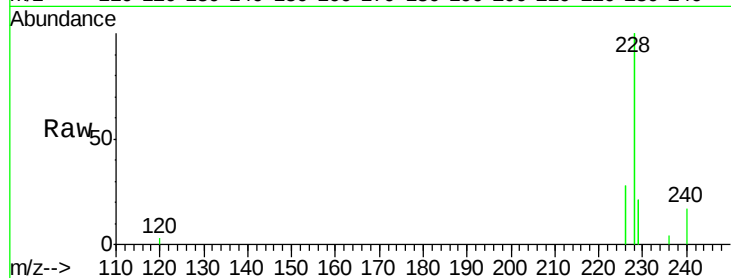
Tot Ion:228 Resp: 96724

Ion Ratio Lower Upper

228 100

226 27.5 22.0 33.0

229 20.7 16.6 24.8



#24

Indeno(1,2,3-cd)pyrene

Concen: 1.10 ng

RT: 26.74 min Scan# 4392

Delta R.T. 0.00 min

Lab File: BE089652.D

Acq: 23 Feb 2015 22:12

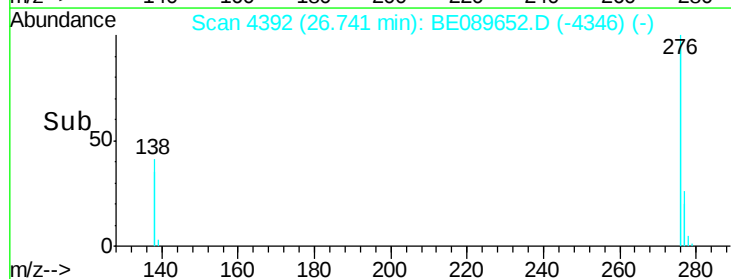
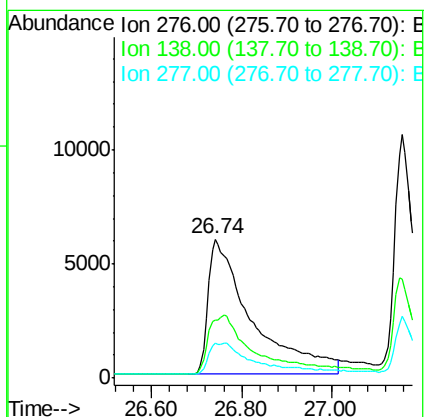
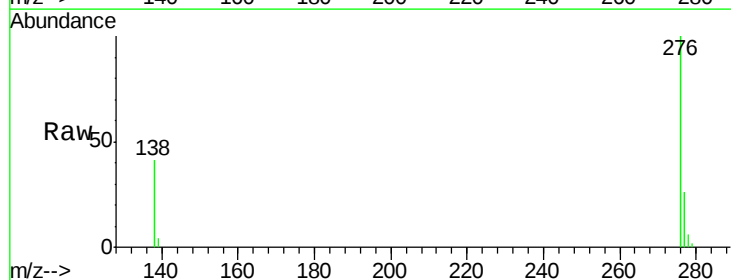
Tgt Ion:276 Resp: 40013

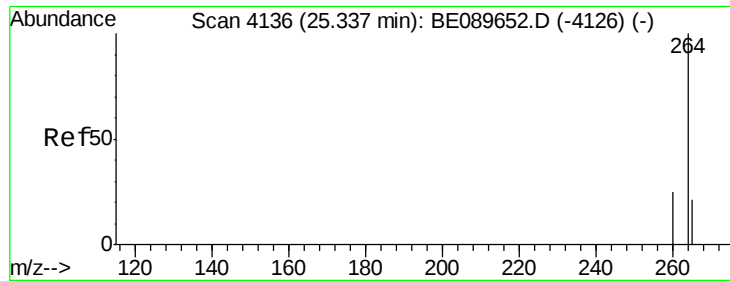
Ion Ratio Lower Upper

276 100

138 45.3 36.2 54.4

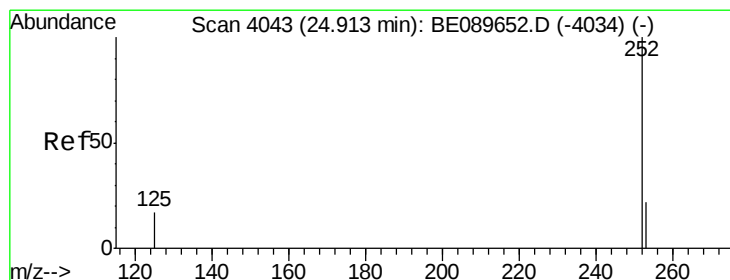
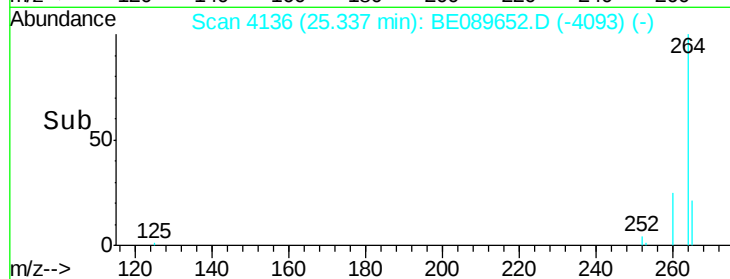
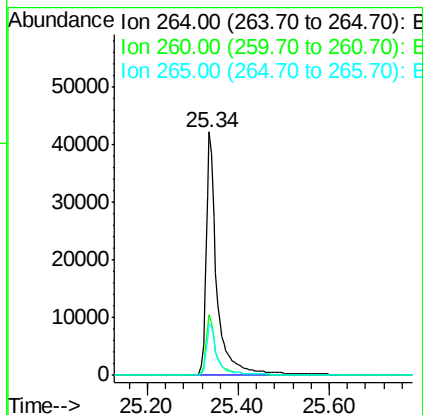
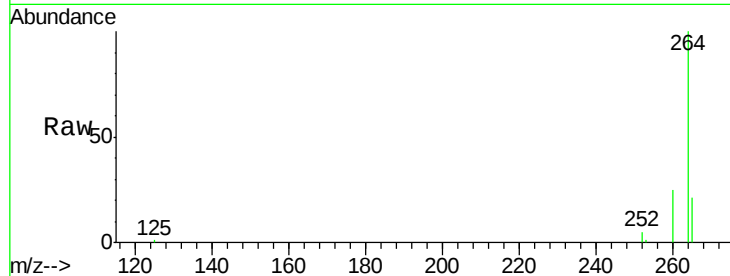
277 6.8 5.4 8.2





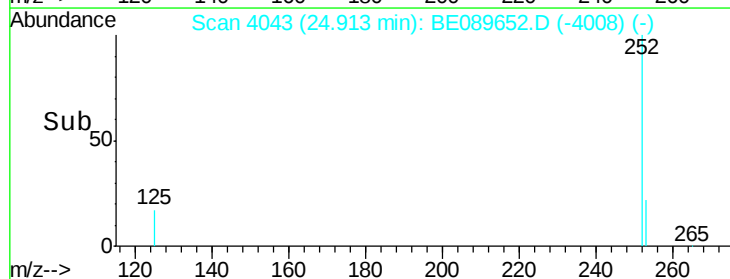
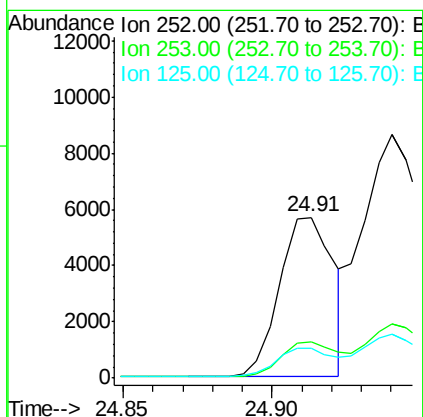
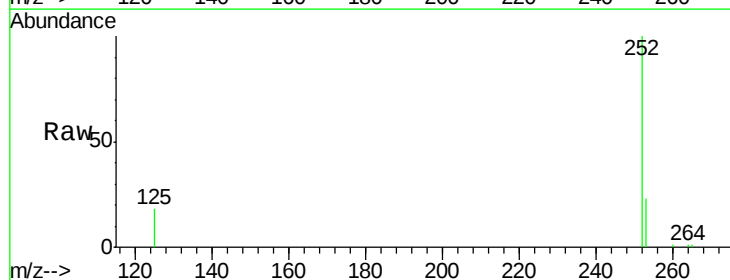
#25  
Pervlene-d12  
Concen: 5.00 ng  
RT: 25.34 min Scan# 4136  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

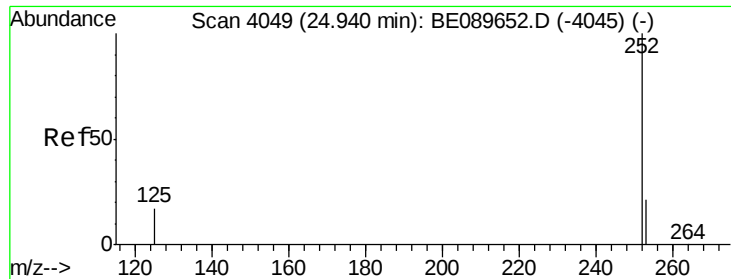
Tot Ion:264 Resp: 69150  
Ion Ratio Lower Upper  
264 100  
260 25.0 20.0 30.0  
265 21.0 16.8 25.2



#26  
Benzo(b)fluoranthene  
Concen: 1.08 ng  
RT: 24.91 min Scan# 4043  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

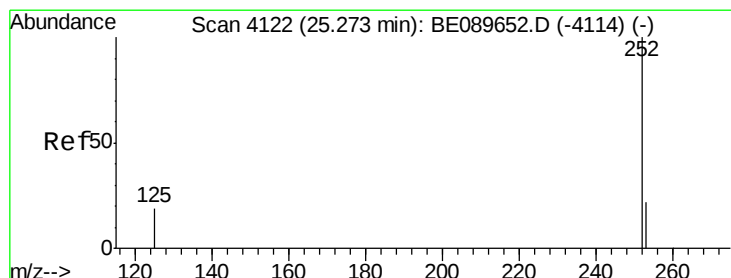
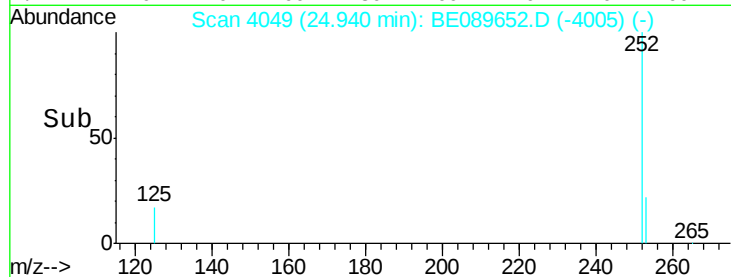
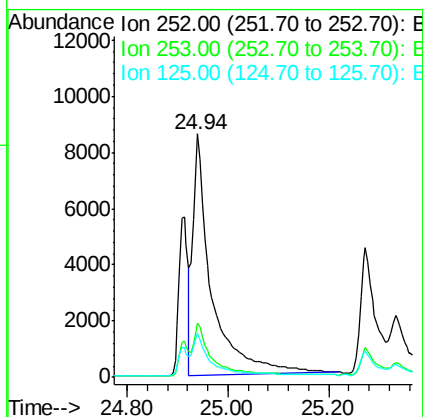
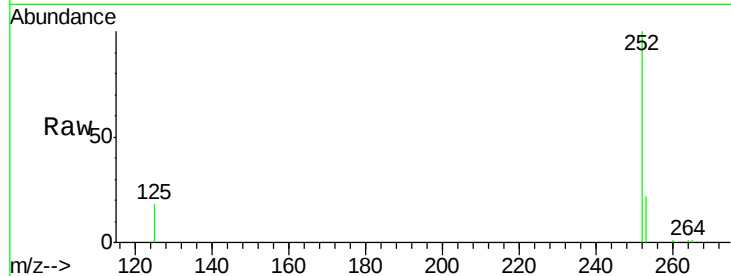
Tgt Ion:252 Resp: 7147  
Ion Ratio Lower Upper  
252 100  
253 22.9 18.3 27.5  
125 18.3 14.6 22.0





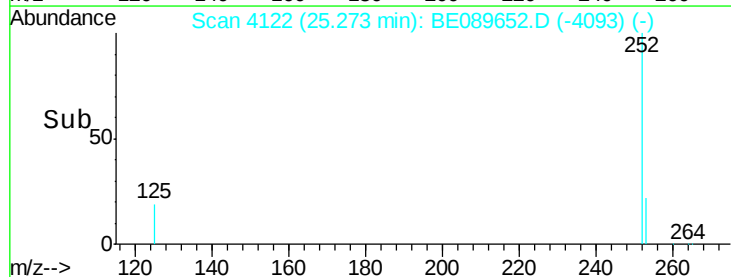
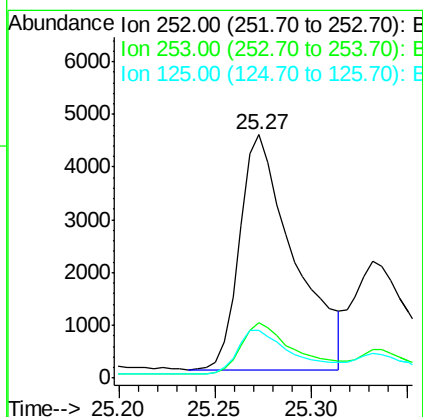
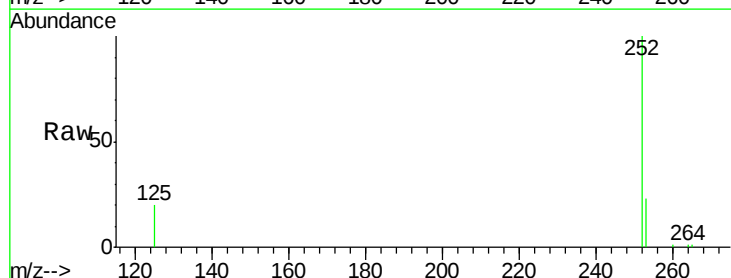
#27  
Benzo(k)fluoranthene  
Concen: 1.28 ng  
RT: 24.94 min Scan# 4049  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

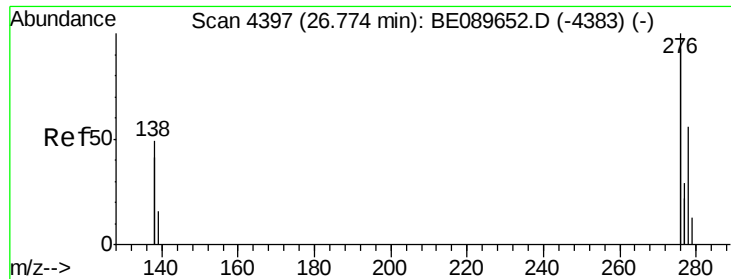
Tot Ion:252 Resp: 22194  
Ion Ratio Lower Upper  
252 100  
253 22.3 17.8 26.8  
125 17.9 14.3 21.5



#28  
Benzo(a)pyrene  
Concen: 1.14 ng  
RT: 25.27 min Scan# 4122  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

Tgt Ion:252 Resp: 8715  
Ion Ratio Lower Upper  
252 100  
253 23.0 18.4 27.6  
125 19.9 15.9 23.9

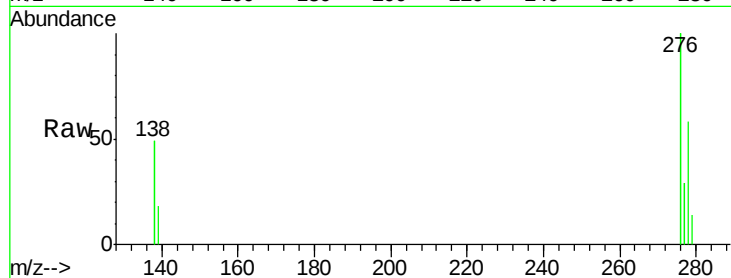




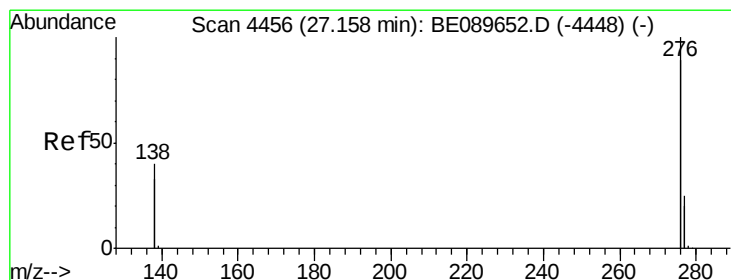
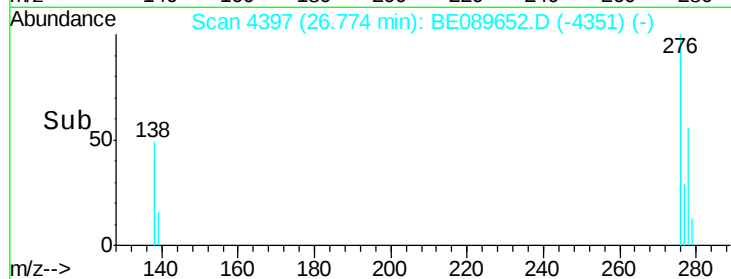
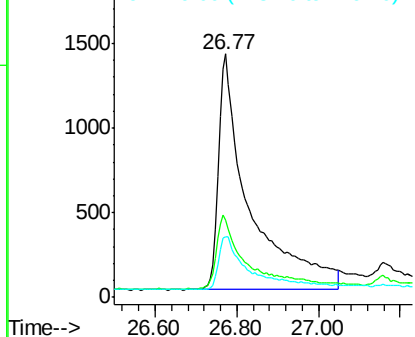
#29  
Dibenzo(a,h)anthracene  
Concen: 1.15 ng  
RT: 26.77 min Scan# 4397  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

Tot Ion: 278 Resp: 7344  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 278 | 100   |       |       |
| 139 | 31.8  | 25.4  | 38.2  |
| 279 | 25.0  | 20.0  | 30.0  |



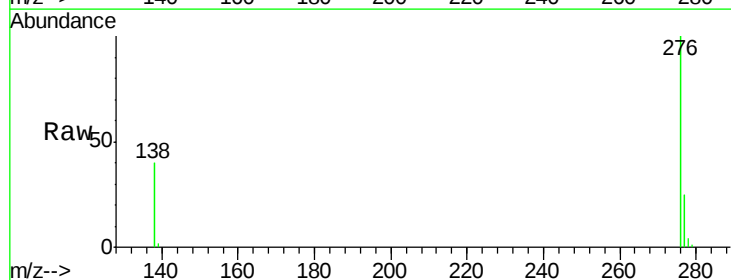
Abundance Ion 278.00 (277.70 to 278.70): E  
Ion 139.00 (138.70 to 139.70): E  
Ion 279.00 (278.70 to 279.70): E



#30  
Benzo(g,h,i)perylene  
Concen: 1.06 ng  
RT: 27.16 min Scan# 4456  
Delta R.T. 0.00 min  
Lab File: BE089652.D  
Acq: 23 Feb 2015 22:12

Tgt Ion: 276 Resp: 42118  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 276 | 100   |       |       |
| 277 | 25.2  | 20.2  | 30.2  |
| 138 | 40.5  | 32.4  | 48.6  |



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

