

Data Path : Z:\HPCHEM1\BNA\_E\Data\BE012815\  
 Data File : BE089404.D  
 Acq On : 29 Jan 2015 1:05  
 Operator : TP/IZ  
 Sample : G1110-02  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 BEM-8

Quant Time: Jan 29 05:26:17 2015  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-BE012815.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 29 04:21:19 2015  
 Response via : Initial Calibration

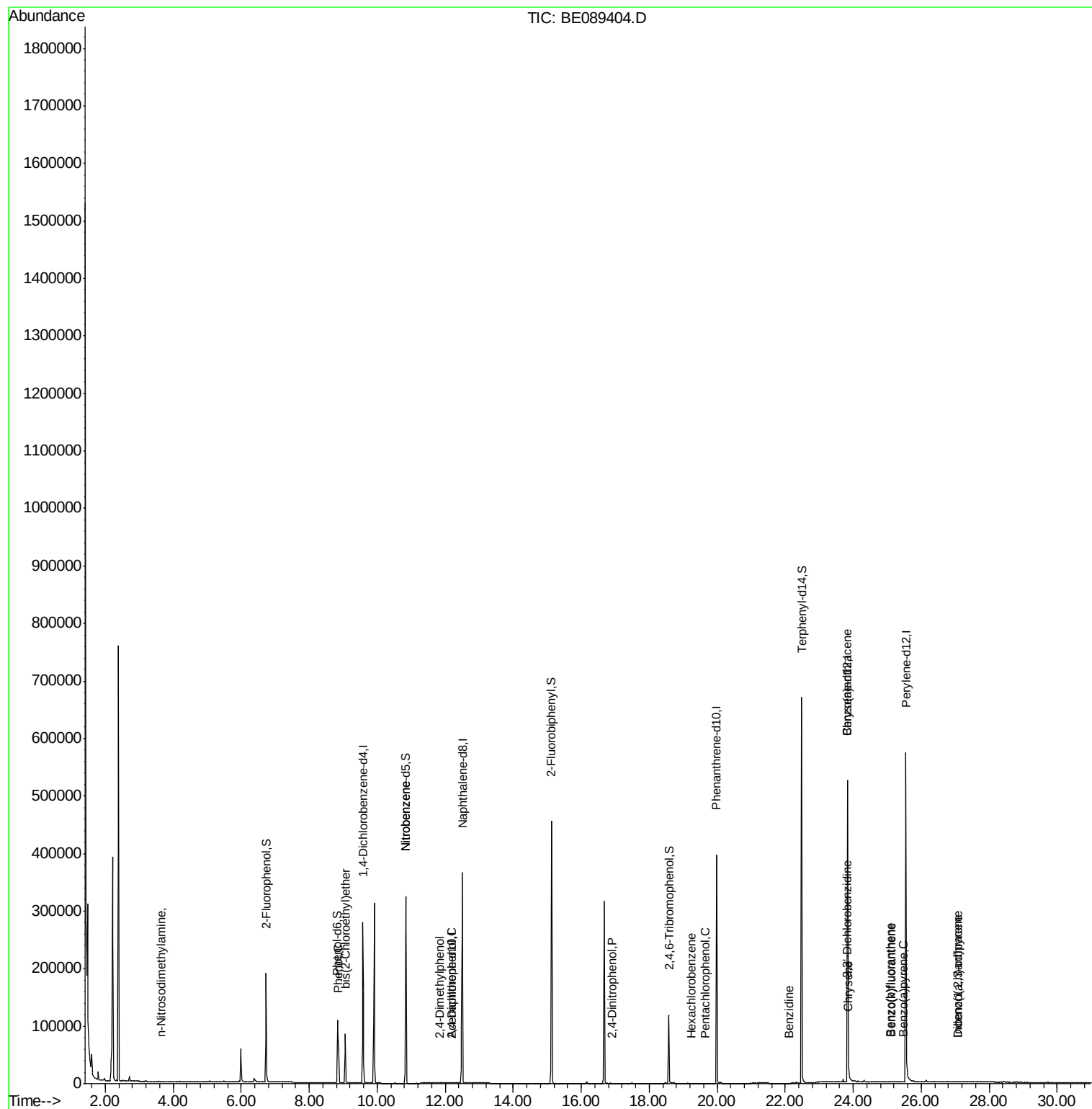
| Internal Standards          | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|-----------------------------|-------|------|----------|---------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 9.58  | 152  | 123921   | 5.00    | ng    | 0.00     |
| 7) Naphthalene-d8           | 12.50 | 136  | 430641   | 5.00    | ng    | 0.00     |
| 13) Acenaphthene-d10        | 12.21 | 164  | 43       | 5.00    | ng    | 0.00     |
| 17) Phenanthrene-d10        | 19.99 | 188  | 392010   | 5.00    | ng    | 0.00     |
| 20) Chrysene-d12            | 23.84 | 240  | 494003   | 5.00    | ng    | 0.00     |
| 27) Perylene-d12            | 25.55 | 264  | 557900   | 5.00    | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |         |       |          |
| 3) 2-Fluorophenol           | 6.73  | 112  | 129292   | 3.34    | ng    | 0.00     |
| 4) Phenol-d6                | 8.84  | 99   | 97849    | 2.05    | ng    | 0.00     |
| 8) Nitrobenzene-d5          | 10.84 | 82   | 242302   | 7.98    | ng    | 0.00     |
| 14) 2,4,6-Tribromophenol    | 18.58 | 330  | 68140    | 1879.43 | ng    | 0.00     |
| 15) 2-Fluorobiphenyl        | 15.13 | 172  | 424009   | 933.08  | ng    | 0.00     |
| 22) Terphenyl-d14           | 22.48 | 244  | 574520   | 10.50   | ng    | 0.00     |
| Target Compounds            |       |      |          |         |       |          |
| 2) n-Nitrosodimethylamine   | 3.64  | 42   | 32       | 0.00    | ng    | # 1      |
| 5) Phenol                   | 8.86  | 94   | 41060    | 0.81    | ng    | # 67     |
| 6) bis(2-Chloroethyl)ether  | 9.06  | 93   | 422      | 0.01    | ng    | # 1      |
| 9) Nitrobenzene             | 10.84 | 77   | 944      | 0.03    | ng    | # 37     |
| 10) 2,4-Dimethylphenol      | 11.82 | 122  | 131      | 0.01    | ng    | # 82     |
| 11) 2,4-Dichlorophenol      | 12.21 | 162  | 56       | 0.00    | ng    | # 1      |
| 16) 2,4-Dinitrophenol       | 16.91 | 184  | 9        | 4.02    | ng    | # 1      |
| 18) Hexachlorobenzene       | 19.23 | 284  | 46       | 0.00    | ng    | # 1      |
| 19) Pentachlorophenol       | 19.65 | 266  | 83       | 0.02    | ng    | # 92     |
| 21) Benzidine               | 22.11 | 184  | 34       | 0.00    | ng    | # 1      |
| 23) Benzo(a)anthracene      | 23.83 | 228  | 10026    | 0.02    | ng    | # 77     |
| 24) 3,3'-Dichlorobenzidine  | 23.82 | 252  | 863      | 0.02    | ng    | # 47     |
| 25) Chrysene                | 23.87 | 228  | 6597     | 0.01    | ng    | # 79     |
| 26) Indeno(1,2,3-cd)pyrene  | 27.06 | 276  | 1765     | 0.01    | ng    | # 100    |
| 28) Benzo(b)fluoranthene    | 25.09 | 252  | 1078     | 0.01    | ng    | # 1      |
| 29) Benzo(k)fluoranthene    | 25.13 | 252  | 1374     | 0.01    | ng    | # 1      |
| 30) Benzo(a)pyrene          | 25.48 | 252  | 665      | 0.01    | ng    | # 1      |
| 31) Dibenzo(a,h)anthracene  | 27.08 | 278  | 1077     | 0.01    | ng    | # 25     |

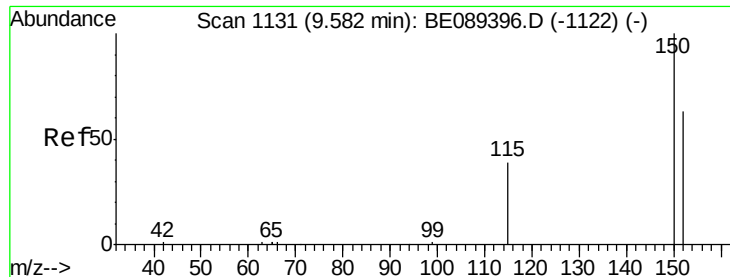
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA\_E\Data\BE012815\  
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Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 9.58 min Scan# 1131

Delta R.T. 0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Instrument :

BNA\_E

ClientSampleId :

BEM-8

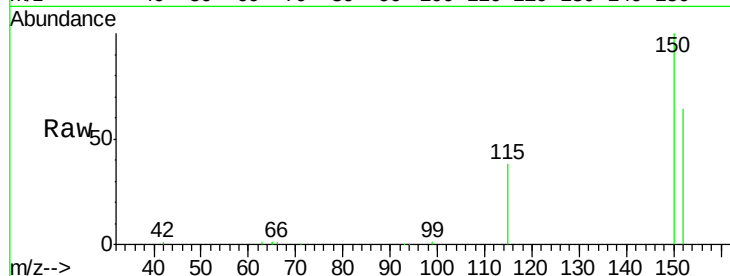
Tgt Ion:152 Resp: 123921

Ion Ratio Lower Upper

152 100

150 156.9 127.2 190.8

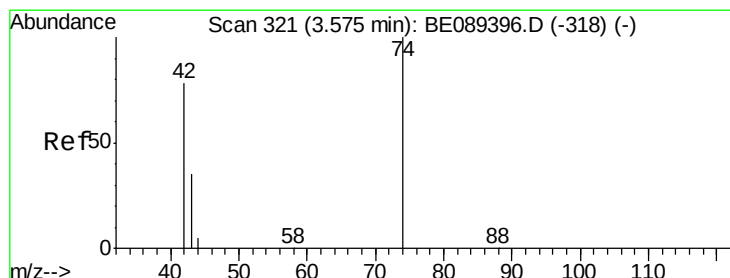
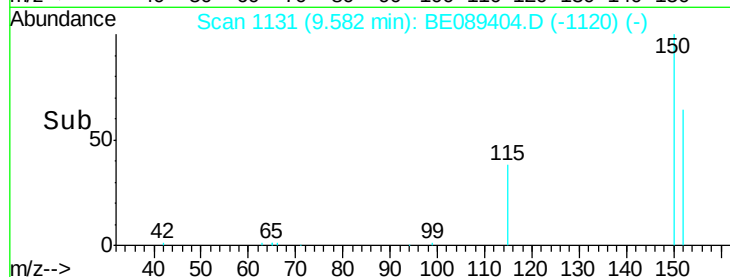
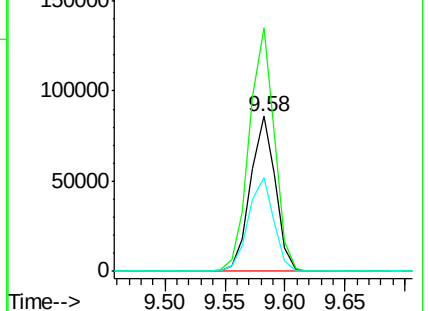
115 60.2 49.3 73.9



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

n-Nitrosodimethylamine

Concen: 0.00 ng

RT: 3.64 min Scan# 330

Delta R.T. 0.06 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

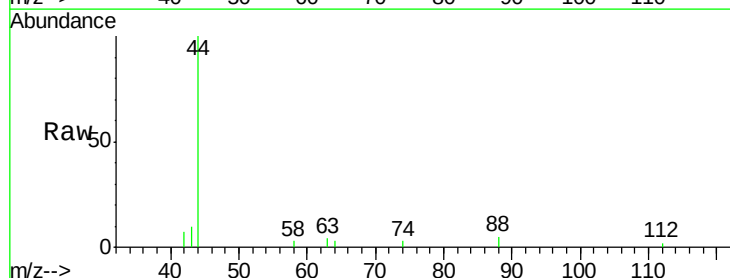
Tgt Ion: 42 Resp: 32

Ion Ratio Lower Upper

42 100

74 41.3 101.2 151.8#

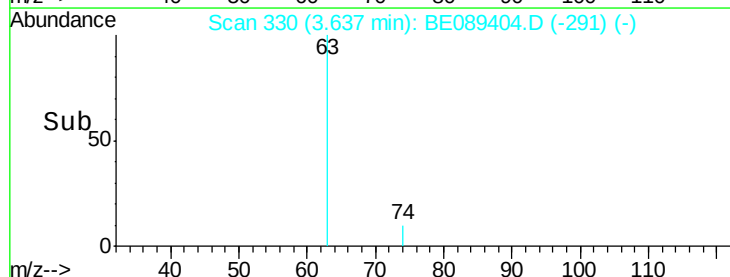
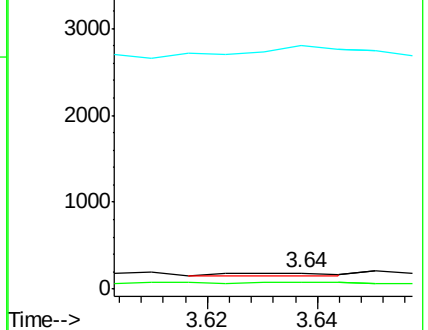
44 1523.4 26.4 39.6#

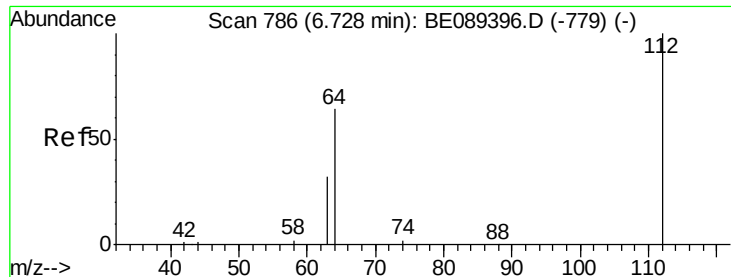


Abundance Ion 42.00 (41.70 to 42.70): BE0

Ion 74.00 (73.70 to 74.70): BE0

Ion 44.00 (43.70 to 44.70): BE0

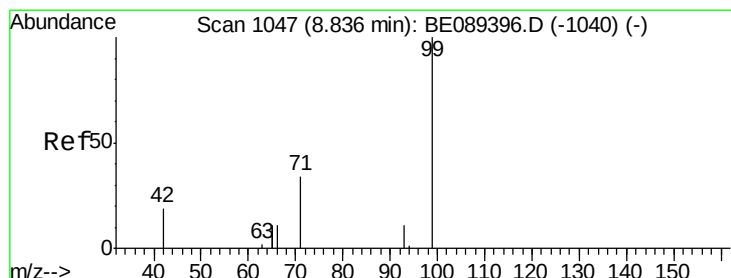
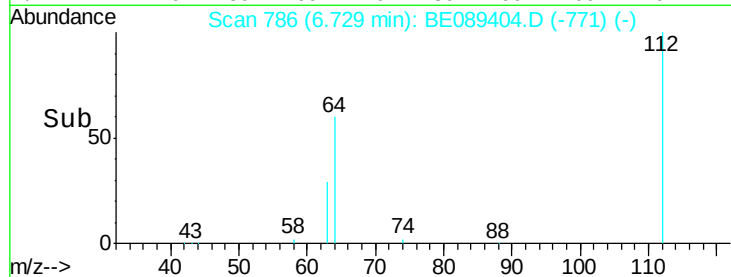
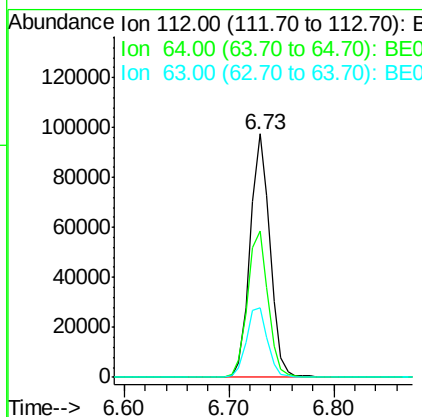
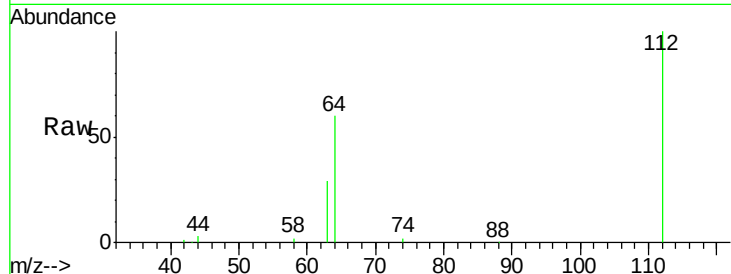




#3  
 2-Fluorophenol  
 Concen: 3.34 ng  
 RT: 6.73 min Scan# 786  
 Delta R.T. 0.00 min  
 Lab File: BE089404.D  
 Acq: 29 Jan 2015 1:05

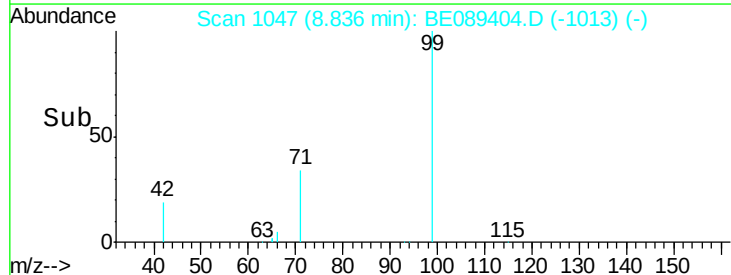
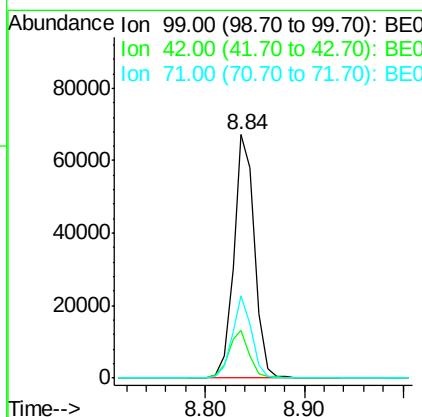
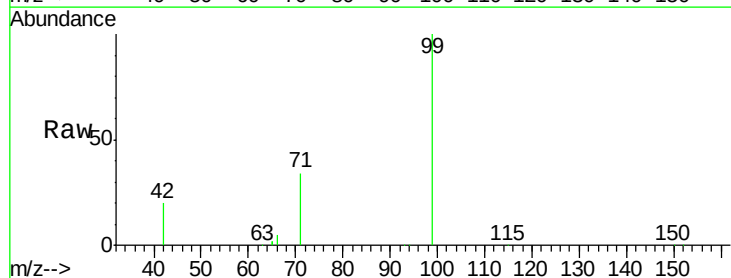
Instrument :  
 BNA\_E  
 ClientSampleId :  
 BEM-8

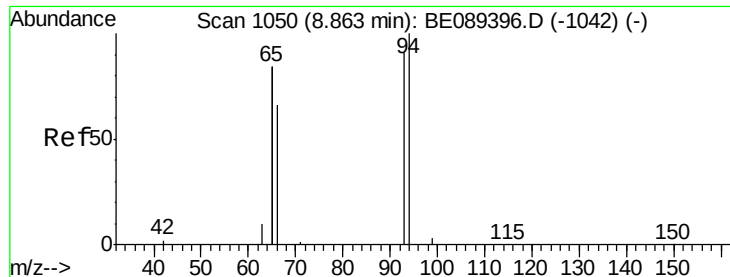
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 112   | Resp: | 129292 |
| Ion      | Ratio | Lower | Upper  |
| 112      | 100   |       |        |
| 64       | 60.3  | 51.7  | 77.5   |
| 63       | 28.7  | 25.7  | 38.5   |



#4  
 Phenol-d6  
 Concen: 2.05 ng  
 RT: 8.84 min Scan# 1047  
 Delta R.T. 0.00 min  
 Lab File: BE089404.D  
 Acq: 29 Jan 2015 1:05

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 99    | Resp: | 97849 |
| Ion      | Ratio | Lower | Upper |
| 99       | 100   |       |       |
| 42       | 19.6  | 15.3  | 22.9  |
| 71       | 33.8  | 27.0  | 40.6  |





#5

Phenol

Concen: 0.81 ng

RT: 8.86 min Scan# 1050

Delta R.T. 0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Instrument :

BNA\_E

ClientSampleId :

BEM-8

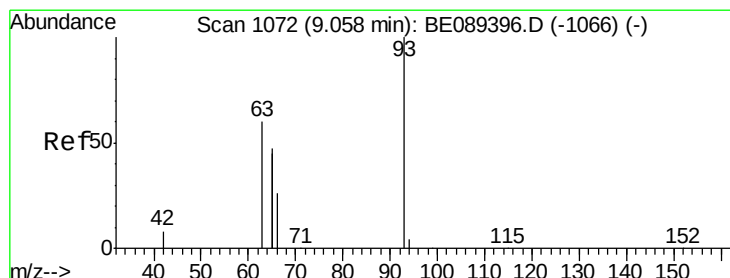
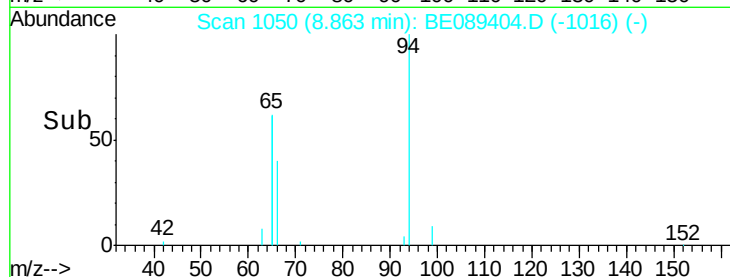
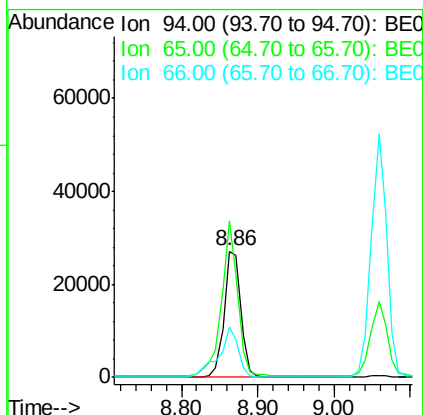
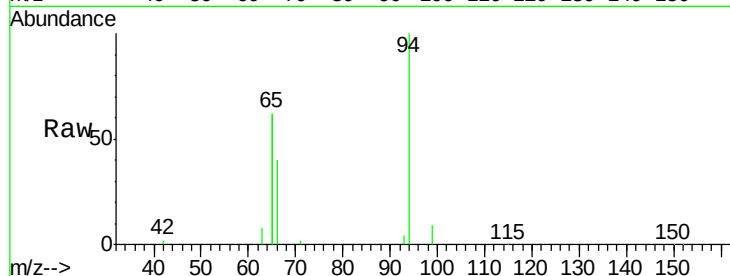
Tgt Ion: 94 Resp: 41060

Ion Ratio Lower Upper

94 100

65 124.4 148.6 188.6#

66 40.2 46.2 86.2#



#6

bis(2-Chloroethyl)ether

Concen: 0.01 ng

RT: 9.06 min Scan# 1072

Delta R.T. 0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

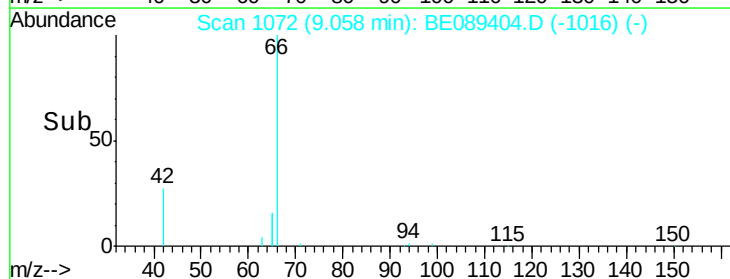
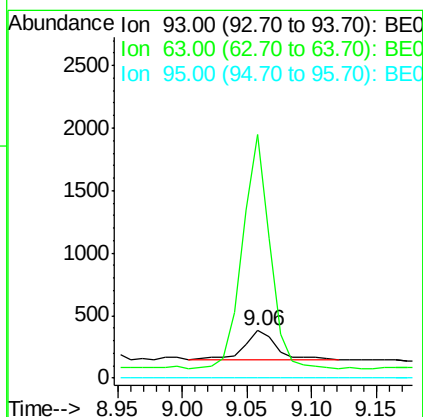
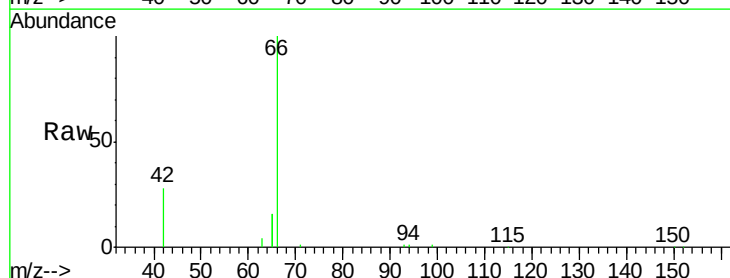
Tgt Ion: 93 Resp: 422

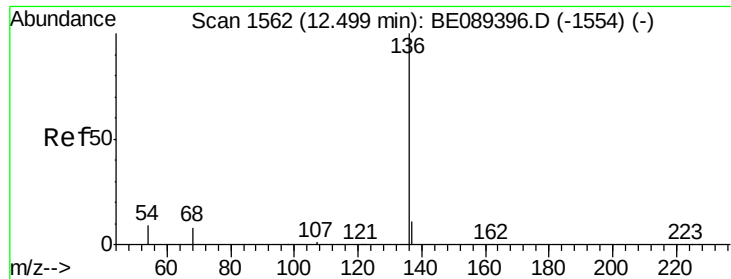
Ion Ratio Lower Upper

93 100

63 652.1 58.9 88.3#

95 0.0 0.0 0.0





#7

Naphthalene-d8

Concen: 5.00 ng

RT: 12.50 min Scan# 1562

Delta R.T. 0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Instrument :

BNA\_E

ClientSampleId :

BEM-8

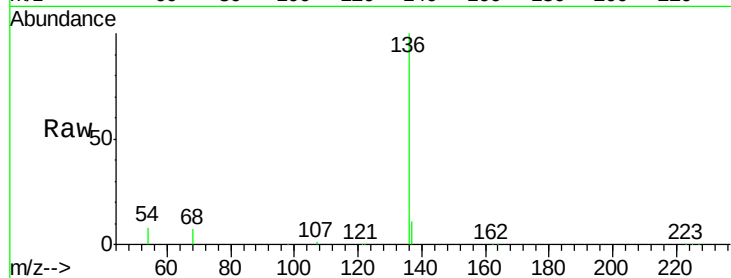
Tgt Ion: 136 Resp: 430641

Ion Ratio Lower Upper

136 100

137 10.9 8.7 13.1

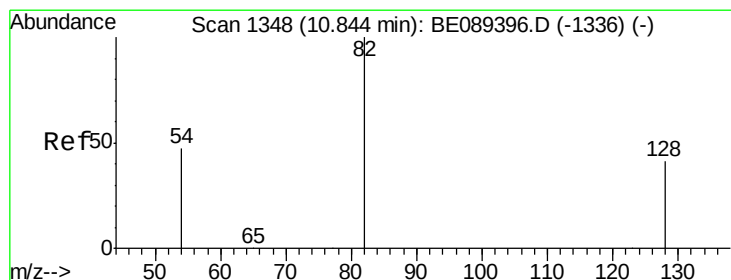
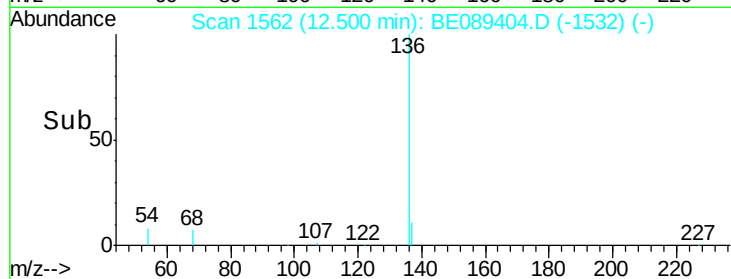
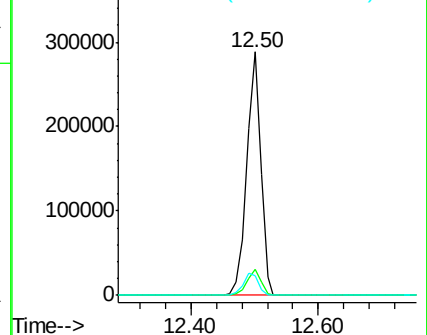
54 8.3 7.4 11.0



Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0



#8

Nitrobenzene-d5

Concen: 7.98 ng

RT: 10.84 min Scan# 1348

Delta R.T. -0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

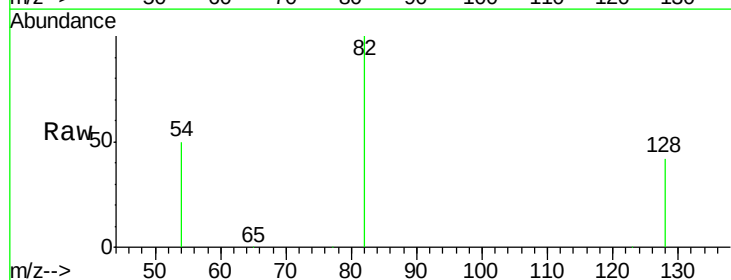
Tgt Ion: 82 Resp: 242302

Ion Ratio Lower Upper

82 100

128 41.5 33.6 50.4

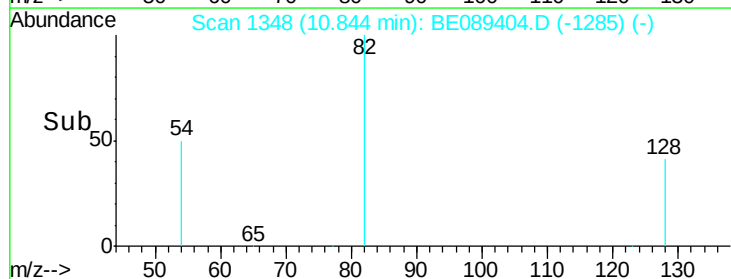
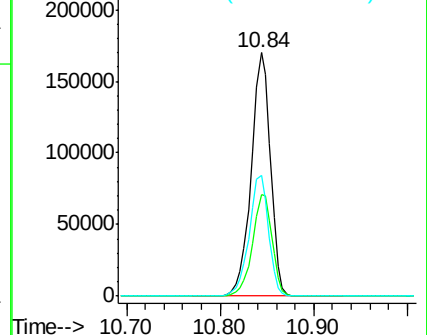
54 49.6 37.7 56.5

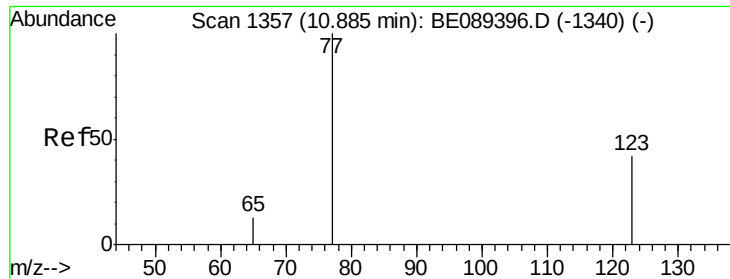


Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BE0





#9

Nitrobenzene

Concen: 0.03 ng

RT: 10.84 min Scan# 1348

Delta R.T. -0.04 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Instrument :

BNA\_E

ClientSampleId :

BEM-8

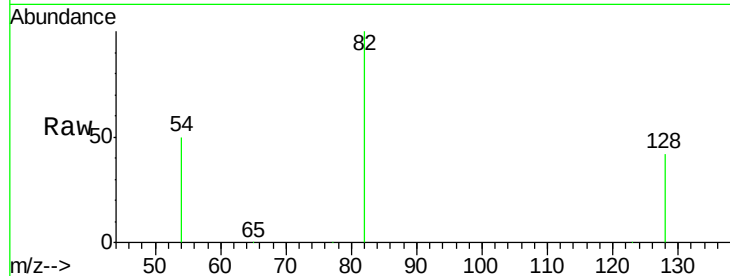
Tgt Ion: 77 Resp: 944

Ion Ratio Lower Upper

77 100

123 0.0 34.7 52.1#

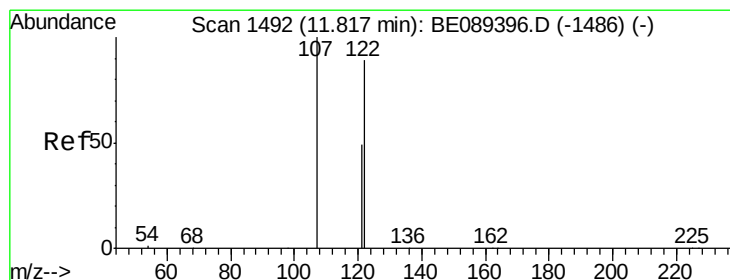
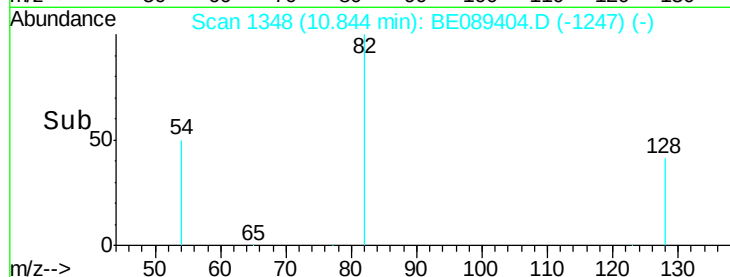
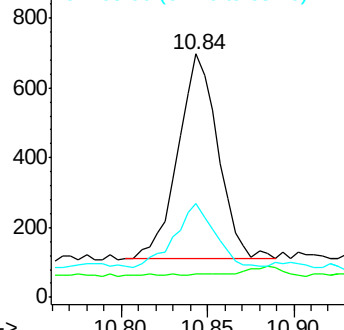
65 32.0 10.6 15.8#



Abundance Ion 77.00 (76.70 to 77.70): BE0

Ion 123.00 (122.70 to 123.70): BE0

Ion 65.00 (64.70 to 65.70): BE0



#10

2,4-Dimethylphenol

Concen: 0.01 ng

RT: 11.82 min Scan# 1492

Delta R.T. 0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

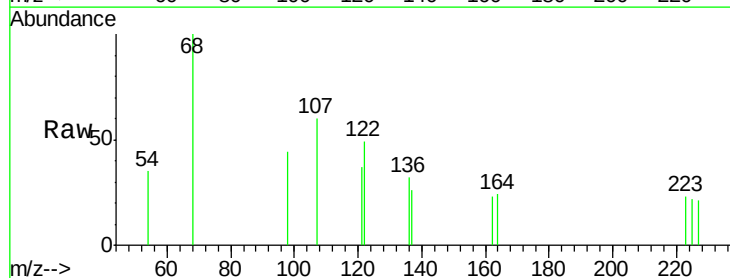
Tgt Ion: 122 Resp: 131

Ion Ratio Lower Upper

122 100

107 123.9 89.4 134.2

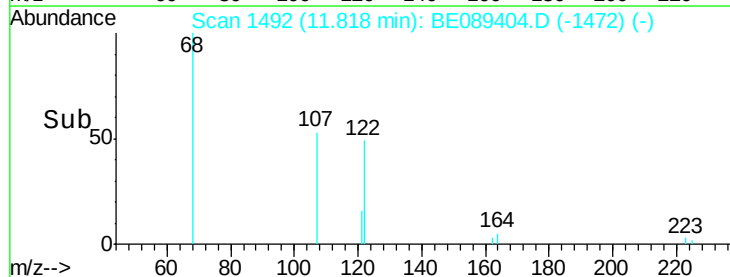
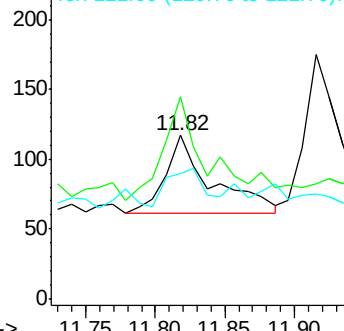
121 76.9 43.6 65.4#

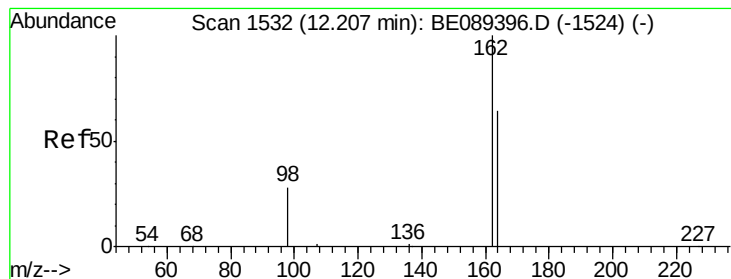


Abundance Ion 122.00 (121.70 to 122.70): E

Ion 107.00 (106.70 to 107.70): E

Ion 121.00 (120.70 to 121.70): E





#11

2,4-Dichlorophenol

Concen: 0.00 ng

RT: 12.21 min Scan# 1532

Delta R.T. 0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Instrument :

BNA\_E

ClientSampled :

BEM-8

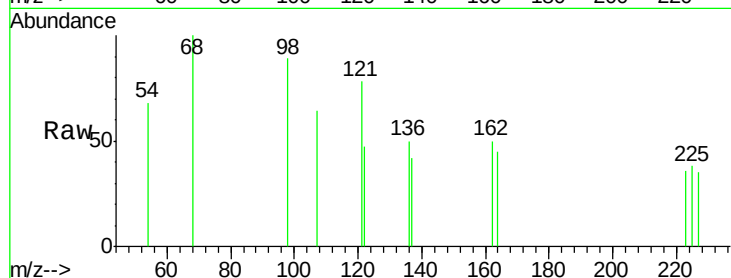
Tgt Ion:162 Resp: 56

Ion Ratio Lower Upper

162 100

164 90.3 44.6 84.6#

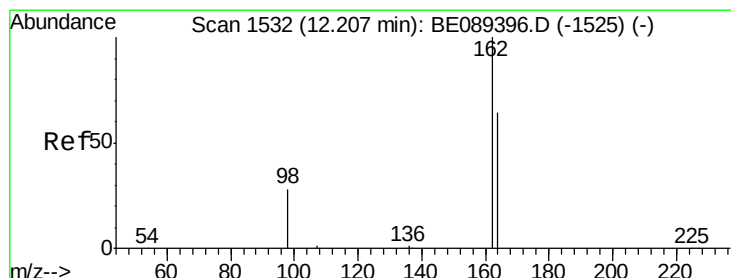
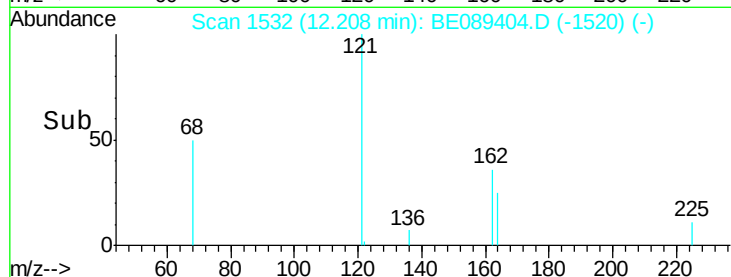
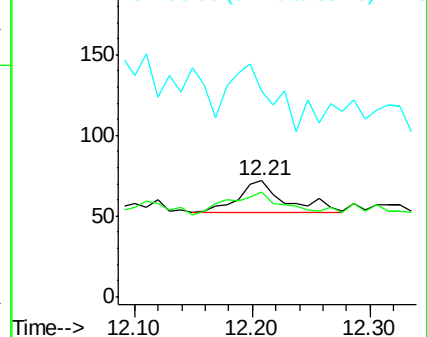
98 177.8 8.7 48.7#



Abundance Ion 162.00 (161.70 to 162.70): E

Ion 164.00 (163.70 to 164.70): E

Ion 98.00 (97.70 to 98.70): BE0



#13

Acenaphthene-d10

Concen: 5.00 ng

RT: 12.21 min Scan# 1532

Delta R.T. 0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

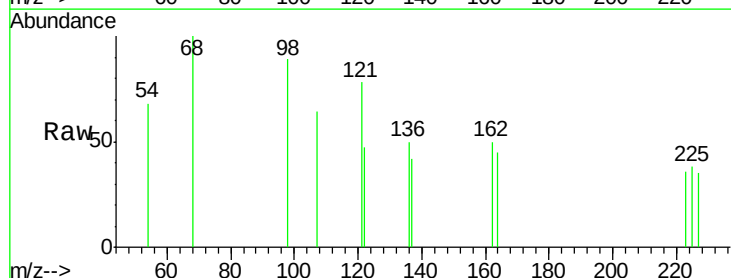
Tgt Ion:164 Resp: 43

Ion Ratio Lower Upper

164 100

162 110.8 123.9 185.9#

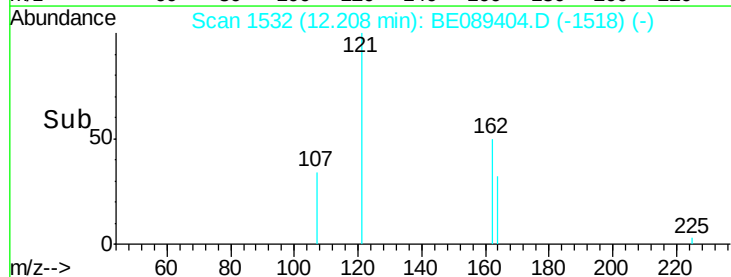
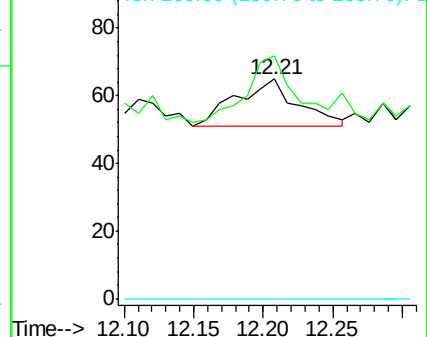
160 0.0 0.0 0.0



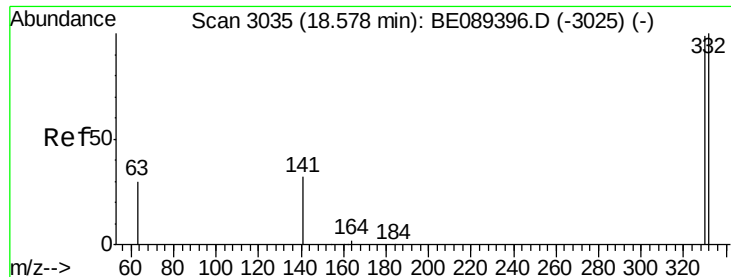
Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



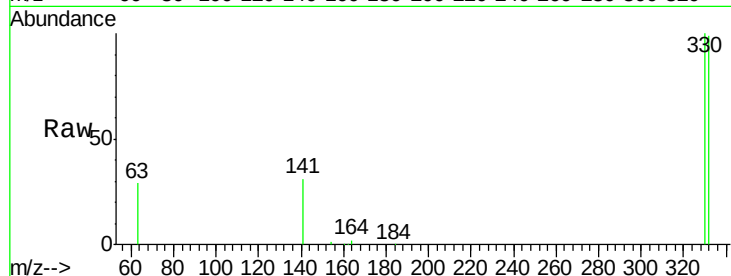




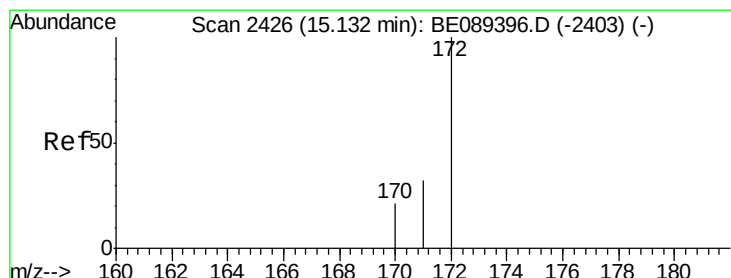
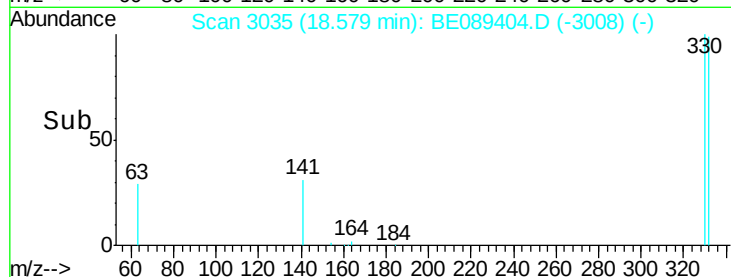
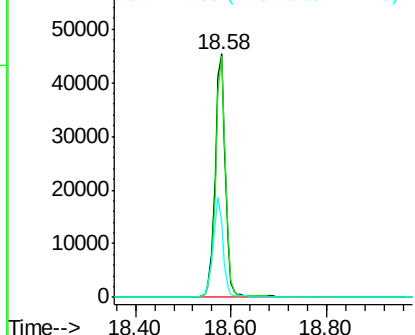
#14  
 2,4,6-Tribromophenol  
 Concen: 1879.43 ng  
 RT: 18.58 min Scan# 3035  
 Delta R.T. 0.00 min  
 Lab File: BE089404.D  
 Acq: 29 Jan 2015 1:05

Instrument :  
 BNA\_E  
 ClientSampleId :  
 BEM-8

Tgt Ion:330 Resp: 68140  
 Ion Ratio Lower Upper  
 330 100  
 332 97.3 77.5 116.3  
 141 39.7 32.4 48.6

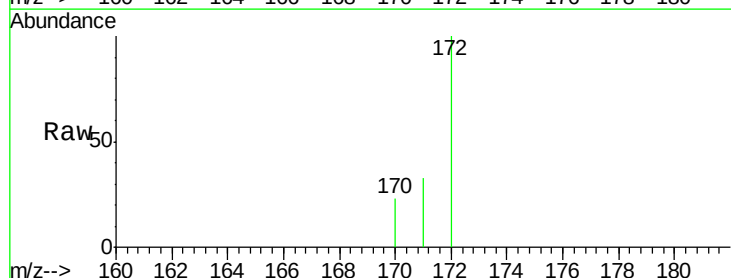


Abundance Ion 329.80 (329.50 to 330.50): E  
 Ion 331.80 (331.50 to 332.50): E  
 Ion 141.00 (140.70 to 141.70): E

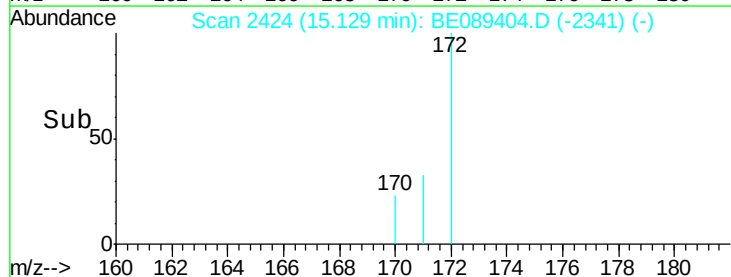
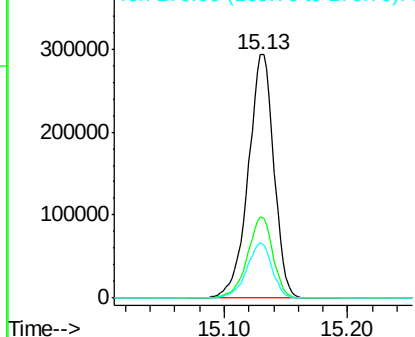


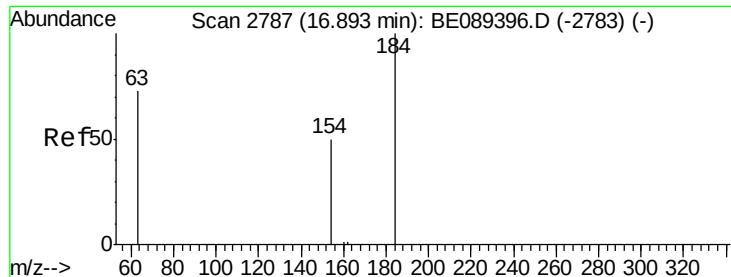
#15  
 2-Fluorobiphenyl  
 Concen: 933.08 ng  
 RT: 15.13 min Scan# 2424  
 Delta R.T. -0.00 min  
 Lab File: BE089404.D  
 Acq: 29 Jan 2015 1:05

Tgt Ion:172 Resp: 424009  
 Ion Ratio Lower Upper  
 172 100  
 171 33.3 25.6 38.4  
 170 22.6 17.0 25.4



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

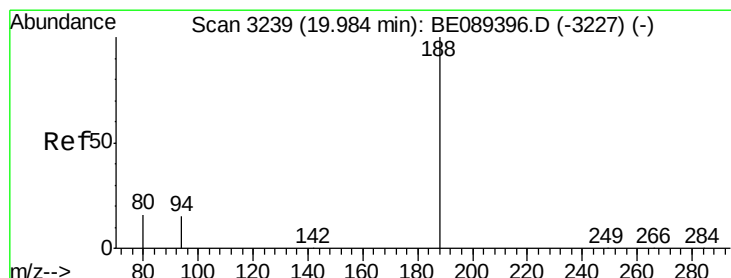
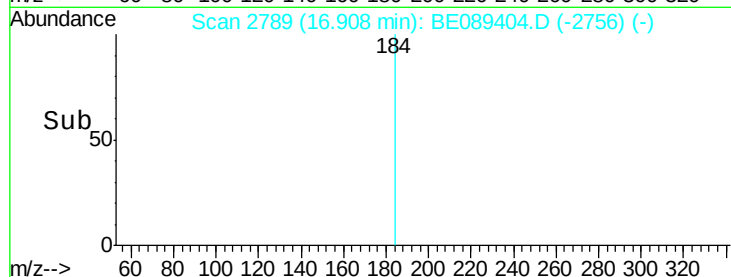
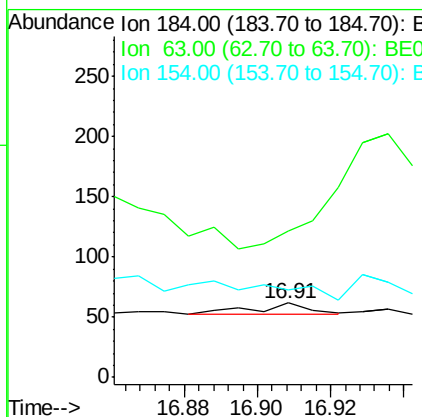
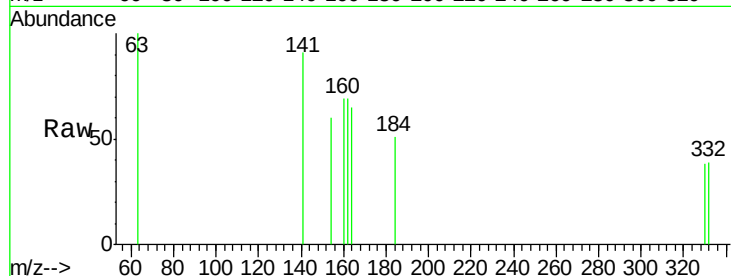




#16  
2,4-Dinitrophenol  
Concen: 4.02 ng  
RT: 16.91 min Scan# 2789  
Delta R.T. 0.02 min  
Lab File: BE089404.D  
Acq: 29 Jan 2015 1:05

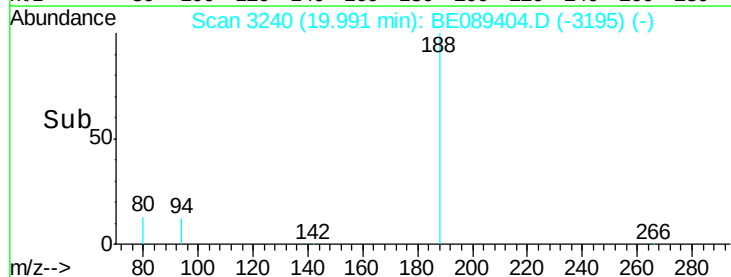
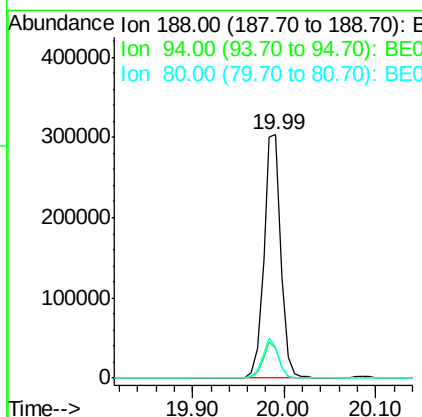
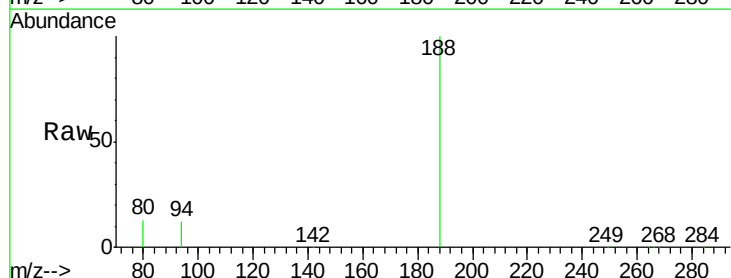
Instrument :  
BNA\_E  
ClientSampled :  
BEM-8

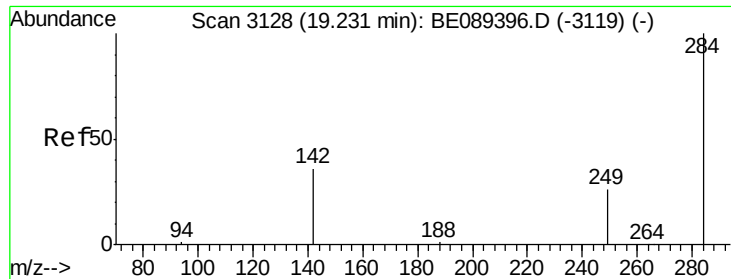
Tgt Ion:184 Resp: 9  
Ion Ratio Lower Upper  
184 100  
63 196.8 66.9 100.3#  
154 117.7 45.1 67.7#



#17  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 19.99 min Scan# 3240  
Delta R.T. 0.01 min  
Lab File: BE089404.D  
Acq: 29 Jan 2015 1:05

Tgt Ion:188 Resp: 392010  
Ion Ratio Lower Upper  
188 100  
94 12.5 12.0 18.0  
80 12.6 13.2 19.8#

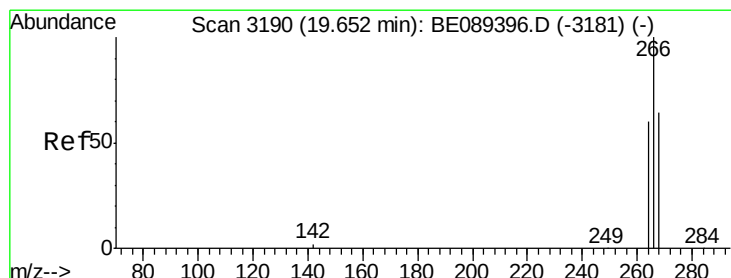
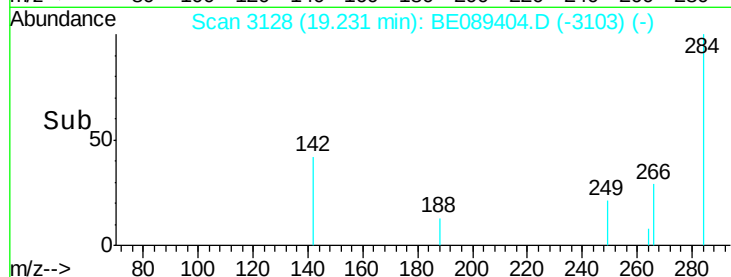
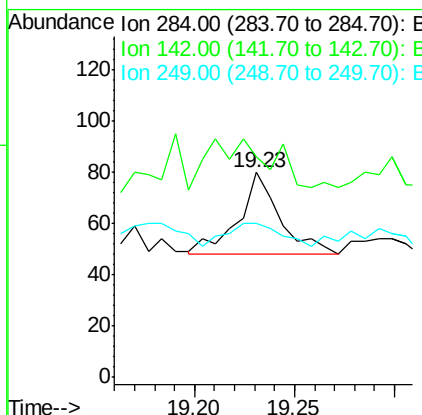
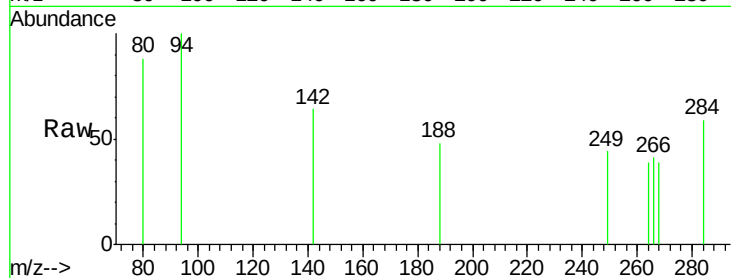




#18  
Hexachlorobenzene  
Concen: 0.00 ng  
RT: 19.23 min Scan# 3128  
Delta R.T. -0.00 min  
Lab File: BE089404.D  
Acq: 29 Jan 2015 1:05

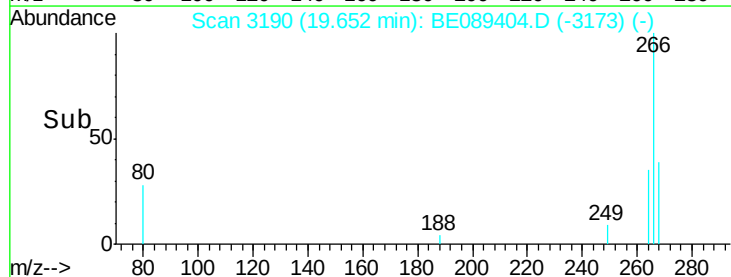
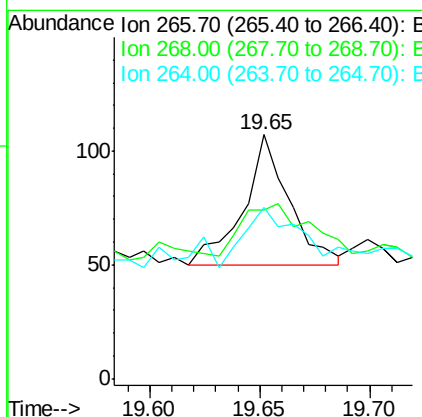
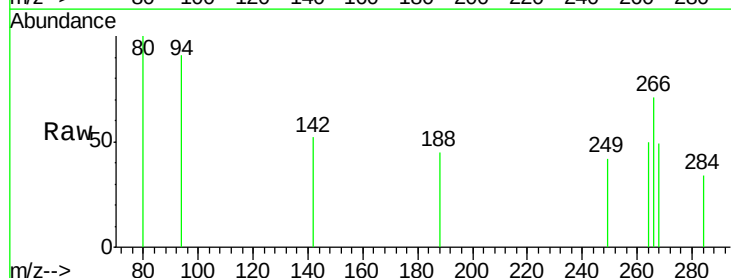
Instrument :  
BNA\_E  
ClientSampled :  
BEM-8

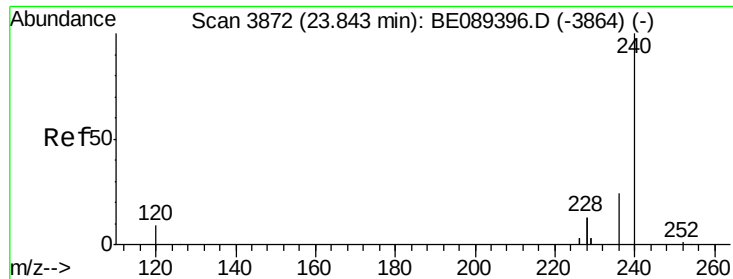
Tgt Ion: 284 Resp: 46  
Ion Ratio Lower Upper  
284 100  
142 107.5 30.7 46.1#  
249 75.0 23.4 35.2#



#19  
Pentachlorophenol  
Concen: 0.02 ng  
RT: 19.65 min Scan# 3190  
Delta R.T. -0.00 min  
Lab File: BE089404.D  
Acq: 29 Jan 2015 1:05

Tgt Ion: 266 Resp: 83  
Ion Ratio Lower Upper  
266 100  
268 69.2 52.5 78.7  
264 70.1 48.8 73.2





#20

Chrysene-d12

Concen: 5.00 ng

RT: 23.84 min Scan# 3872

Delta R.T. -0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Instrument :

BNA\_E

ClientSampleId :

BEM-8

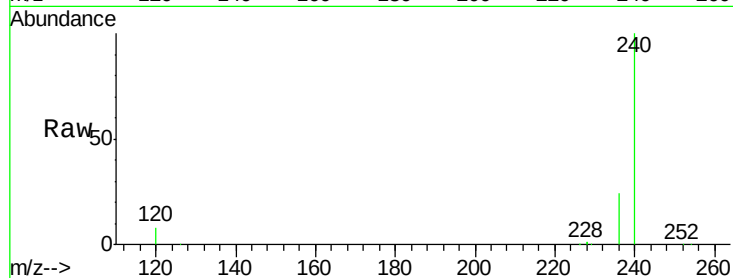
Tgt Ion:240 Resp: 494003

Ion Ratio Lower Upper

240 100

120 7.6 7.1 10.7

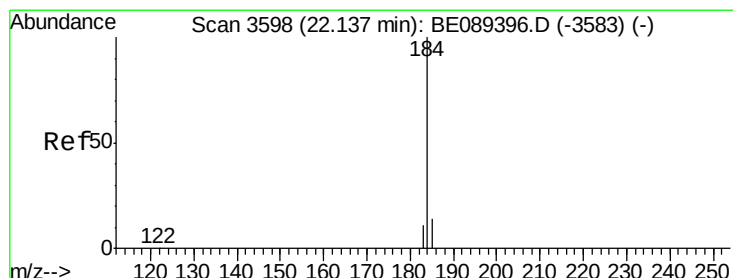
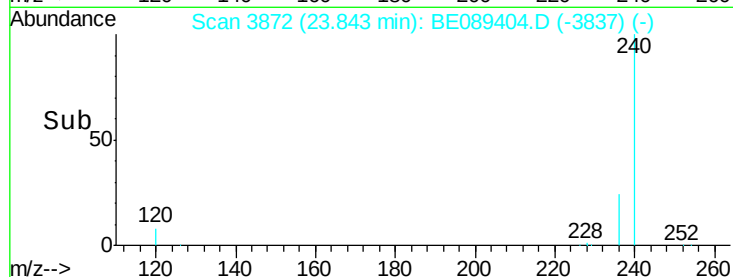
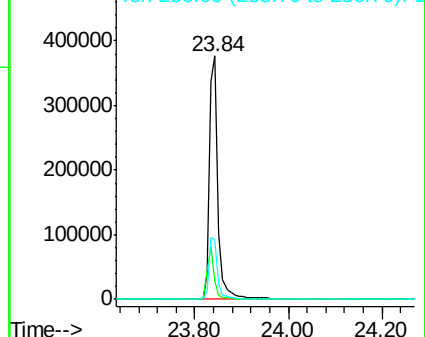
236 24.3 19.5 29.3



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



#21

Benzidine

Concen: 0.00 ng

RT: 22.11 min Scan# 3593

Delta R.T. -0.02 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

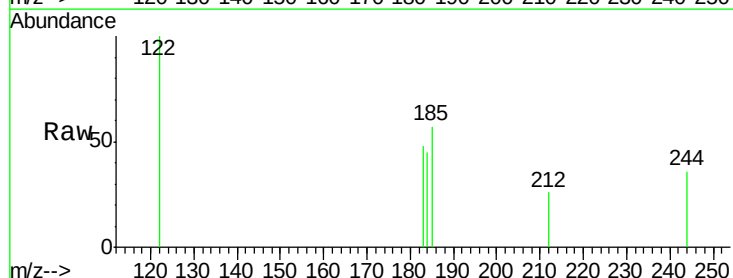
Tgt Ion:184 Resp: 34

Ion Ratio Lower Upper

184 100

185 125.8 11.4 17.0#

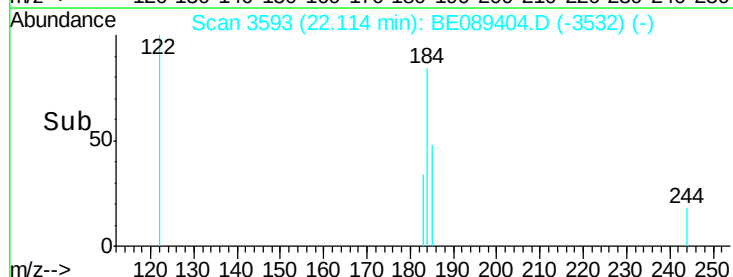
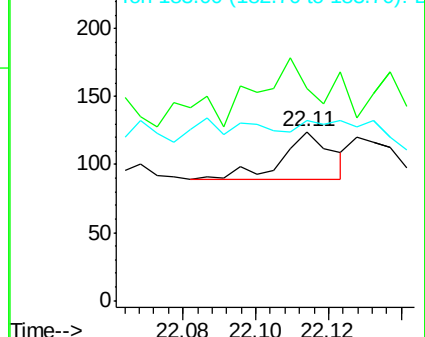
183 106.5 8.7 13.1#

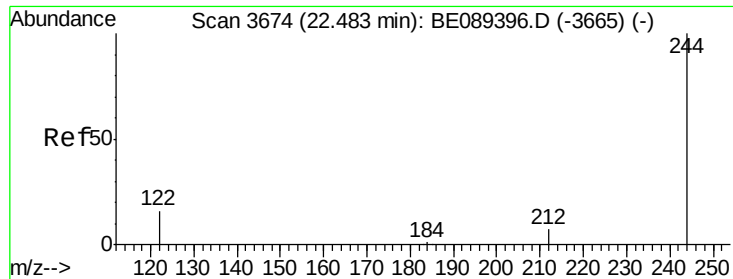


Abundance Ion 184.00 (183.70 to 184.70): E

Ion 185.00 (184.70 to 185.70): E

Ion 183.00 (182.70 to 183.70): E

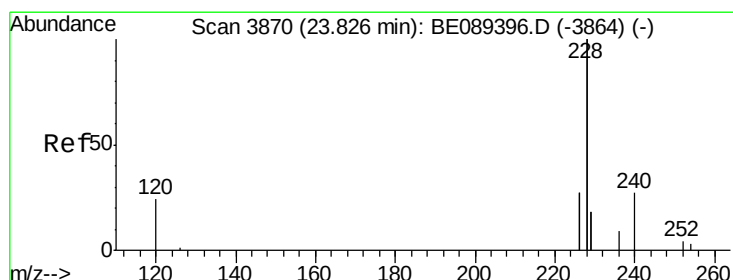
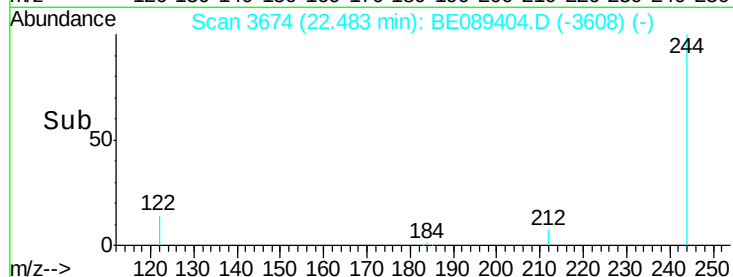
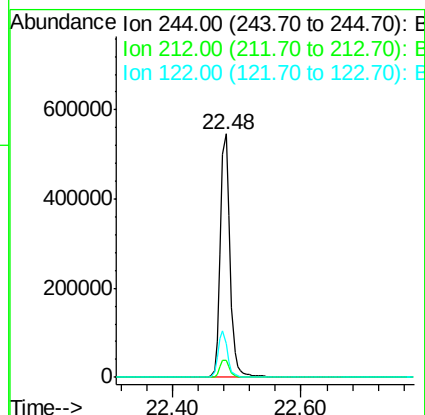
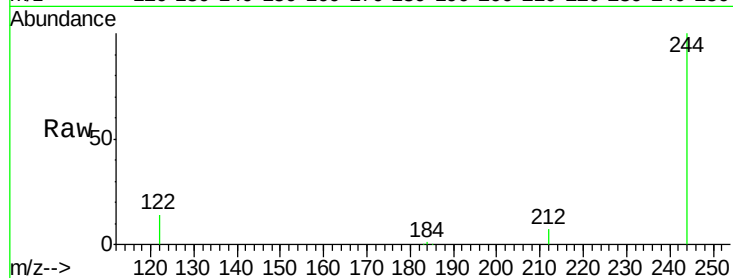




#22  
 Terphenyl-d14  
 Concen: 10.50 ng  
 RT: 22.48 min Scan# 3674  
 Delta R.T. 0.00 min  
 Lab File: BE089404.D  
 Acq: 29 Jan 2015 1:05

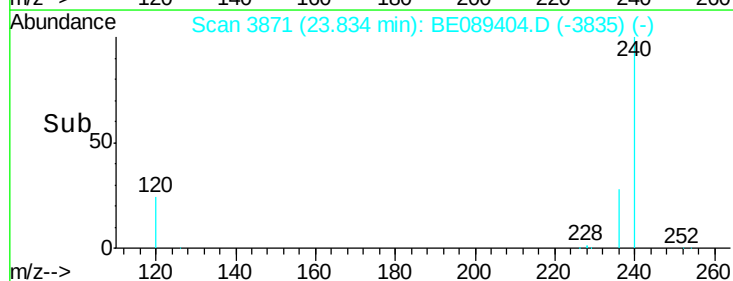
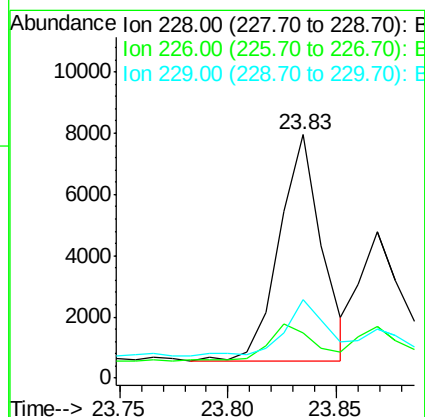
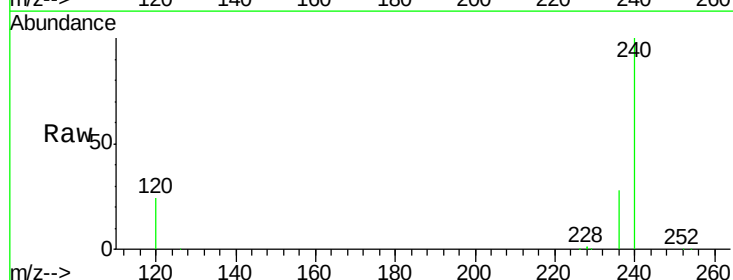
Instrument :  
 BNA\_E  
 ClientSampleId :  
 BEM-8

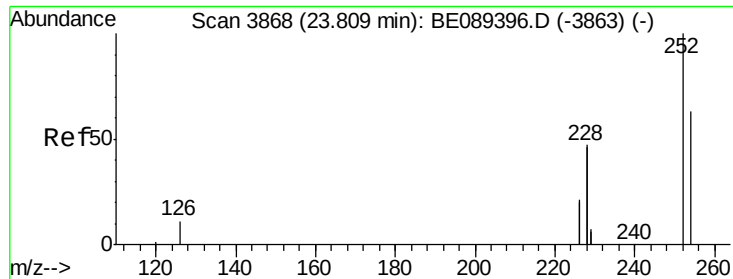
Tgt Ion:244 Resp: 574520  
 Ion Ratio Lower Upper  
 244 100  
 212 7.2 5.9 8.9  
 122 13.9 12.8 19.2



#23  
 Benzo(a)anthracene  
 Concen: 0.02 ng  
 RT: 23.83 min Scan# 3871  
 Delta R.T. 0.01 min  
 Lab File: BE089404.D  
 Acq: 29 Jan 2015 1:05

Tgt Ion:228 Resp: 10026  
 Ion Ratio Lower Upper  
 228 100  
 226 18.6 21.8 32.6#  
 229 32.4 14.5 21.7#

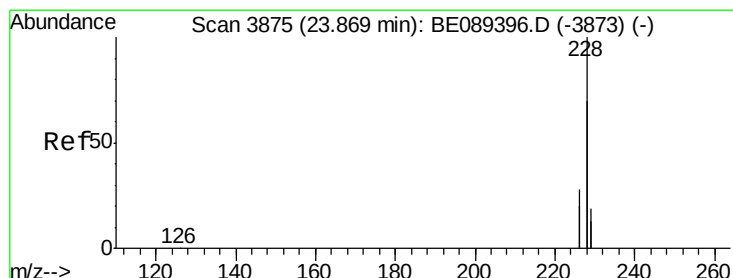
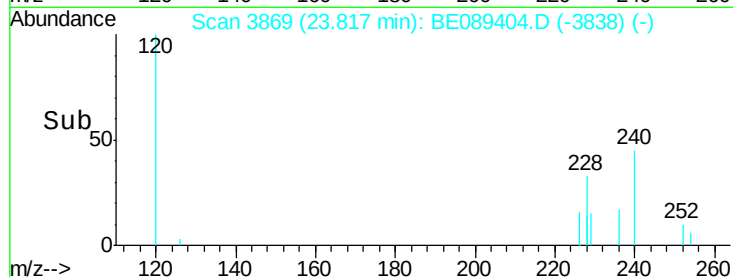
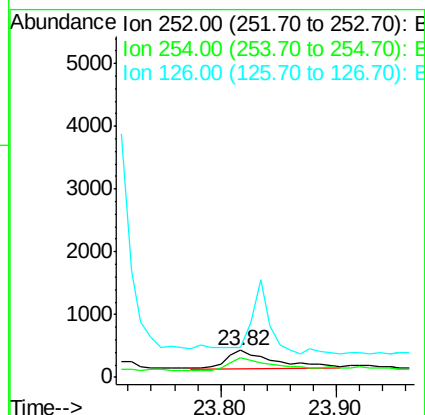
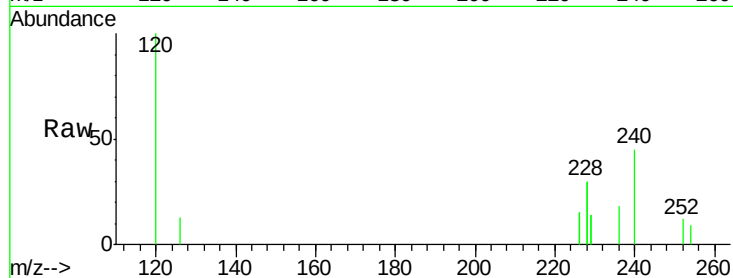




#24  
 3,3'-Dichlorobenzidine  
 Concen: 0.02 ng  
 RT: 23.82 min Scan# 3869  
 Delta R.T. 0.01 min  
 Lab File: BE089404.D  
 Acq: 29 Jan 2015 1:05

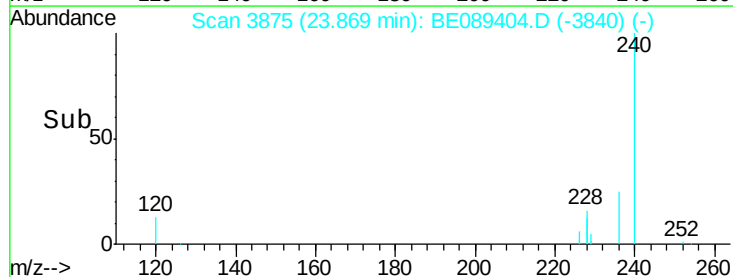
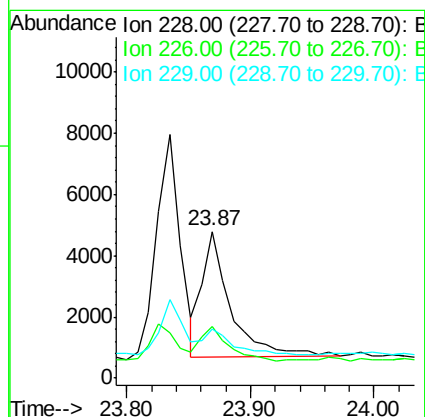
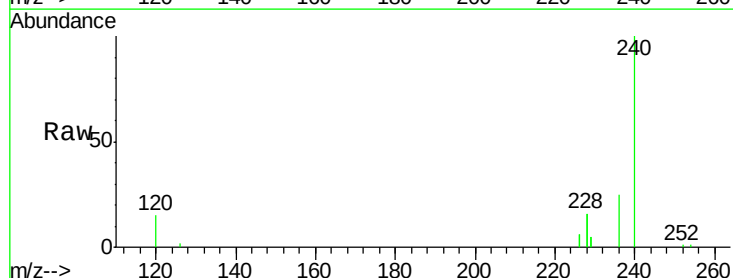
Instrument :  
 BNA\_E  
 ClientSampled :  
 BEM-8

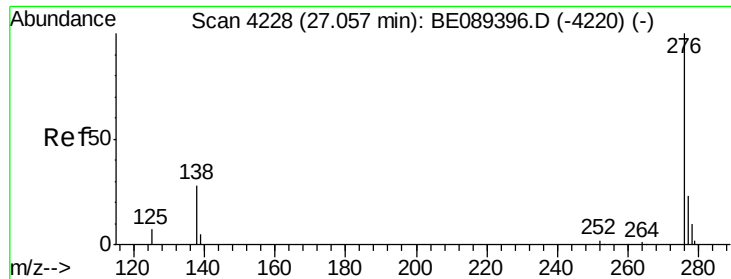
Tgt Ion: 252 Resp: 863  
 Ion Ratio Lower Upper  
 252 100  
 254 74.2 50.2 75.4  
 126 108.8 9.8 14.6#



#25  
 Chrysene  
 Concen: 0.01 ng  
 RT: 23.87 min Scan# 3875  
 Delta R.T. -0.00 min  
 Lab File: BE089404.D  
 Acq: 29 Jan 2015 1:05

Tgt Ion: 228 Resp: 6597  
 Ion Ratio Lower Upper  
 228 100  
 226 35.5 22.7 34.1#  
 229 33.5 15.2 22.8#





#26

Indeno(1,2,3-cd)pyrene

Concen: 0.01 ng

RT: 27.06 min Scan# 4228

Delta R.T. 0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Instrument :

BNA\_E

ClientSampled :

BEM-8

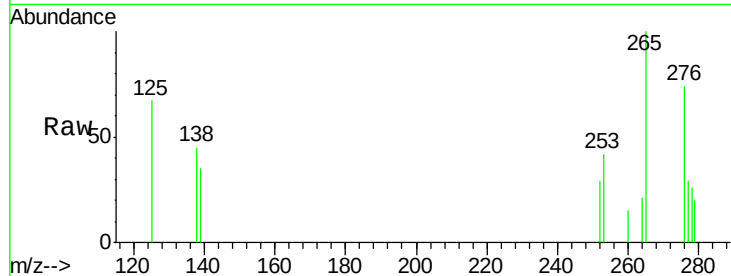
Tgt Ion: 276 Resp: 1765

Ion Ratio Lower Upper

276 100

138 25.0 0.0 0.0#

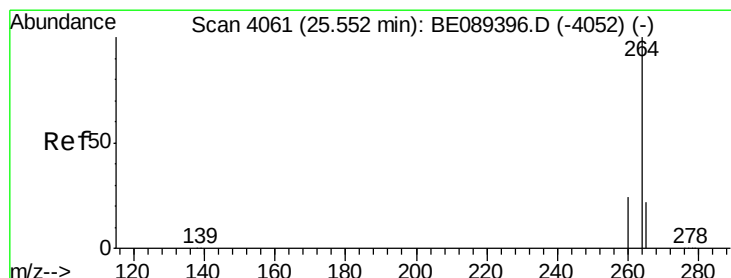
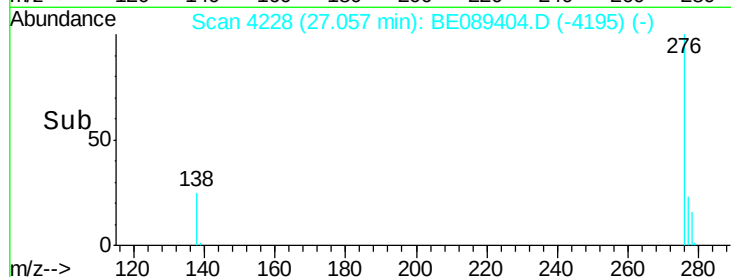
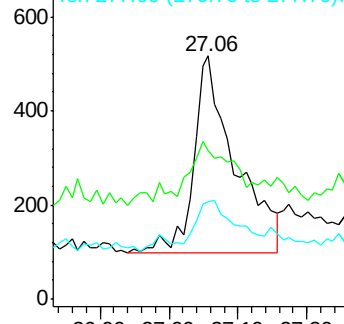
277 19.6 0.0 0.0#



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



#27

Perylene-d12

Concen: 5.00 ng

RT: 25.55 min Scan# 4061

Delta R.T. -0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

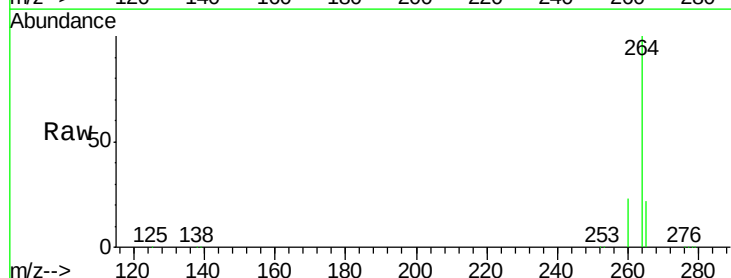
Tgt Ion: 264 Resp: 557900

Ion Ratio Lower Upper

264 100

260 23.2 18.9 28.3

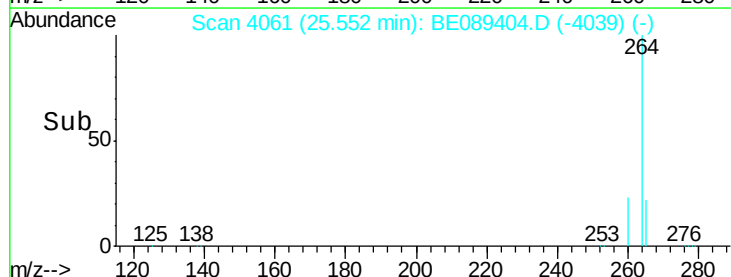
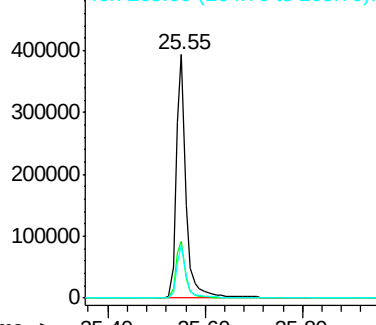
265 22.0 17.5 26.3

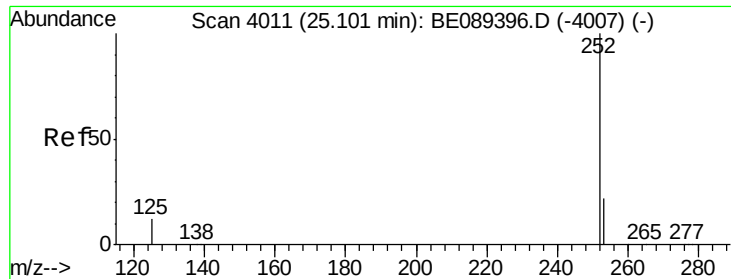


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E

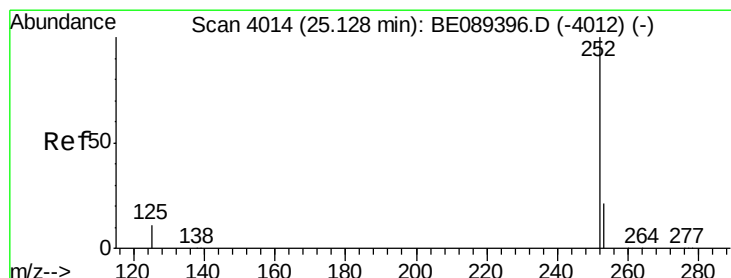
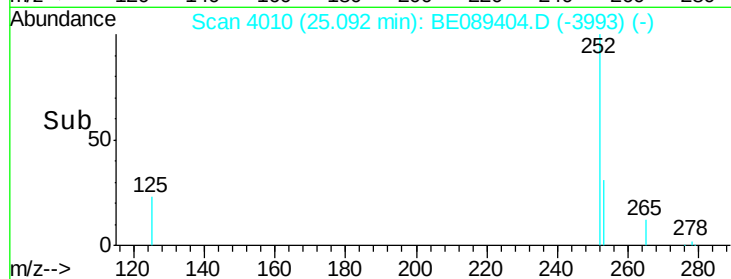
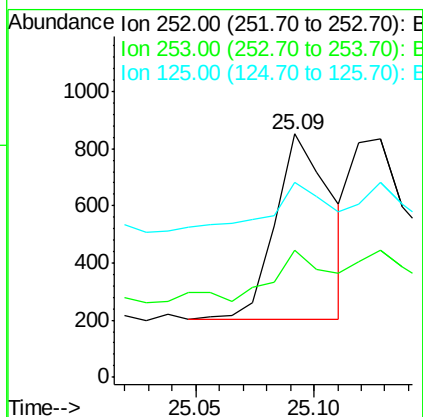
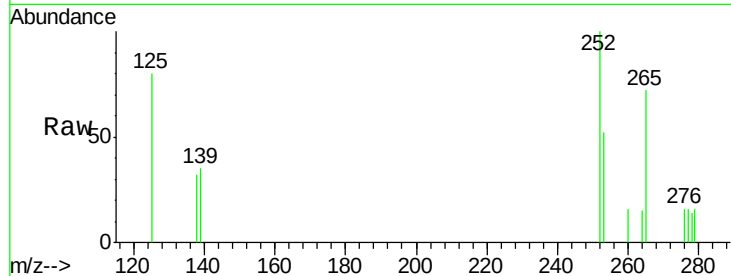




#28  
Benzo(b)fluoranthene  
Concen: 0.01 ng  
RT: 25.09 min Scan# 4010  
Delta R.T. -0.01 min  
Lab File: BE089404.D  
Acq: 29 Jan 2015 1:05

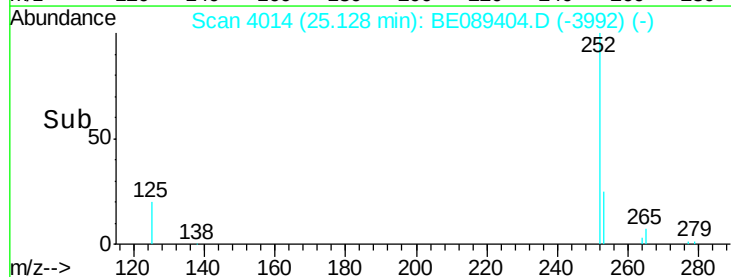
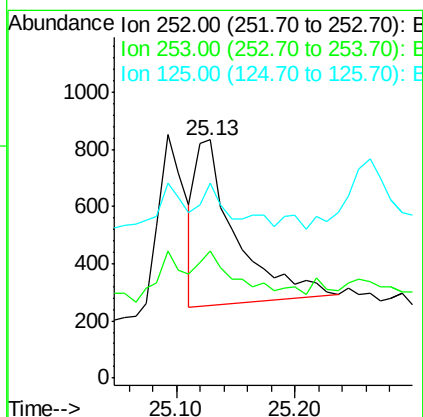
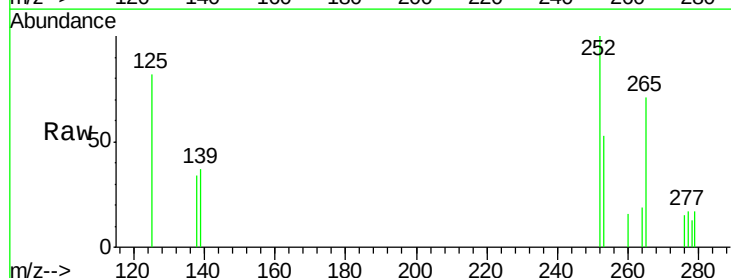
Instrument :  
BNA\_E  
ClientSampleId :  
BEM-8

Tgt Ion: 252 Resp: 1078  
Ion Ratio Lower Upper  
252 100  
253 52.0 17.6 26.4#  
125 80.2 9.8 14.6#

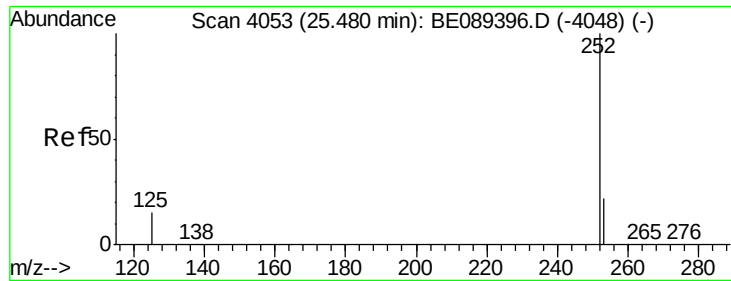


#29  
Benzo(k)fluoranthene  
Concen: 0.01 ng  
RT: 25.13 min Scan# 4014  
Delta R.T. 0.00 min  
Lab File: BE089404.D  
Acq: 29 Jan 2015 1:05

Tgt Ion: 252 Resp: 1374  
Ion Ratio Lower Upper  
252 100  
253 53.1 17.3 25.9#  
125 81.5 10.2 15.4#







#30

Benzo(a)pyrene

Concen: 0.01 ng

RT: 25.48 min Scan# 4053

Delta R.T. -0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Instrument :

BNA\_E

ClientSampleId :

BEM-8

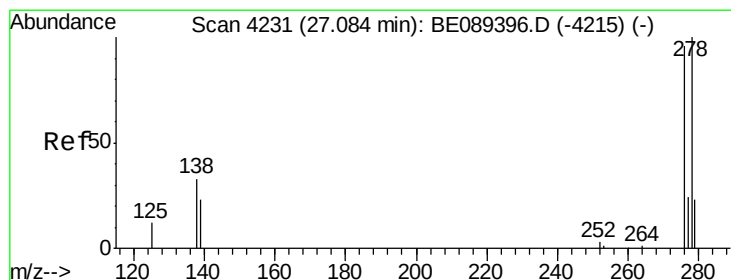
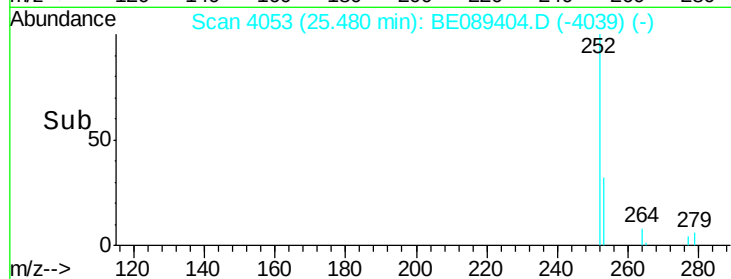
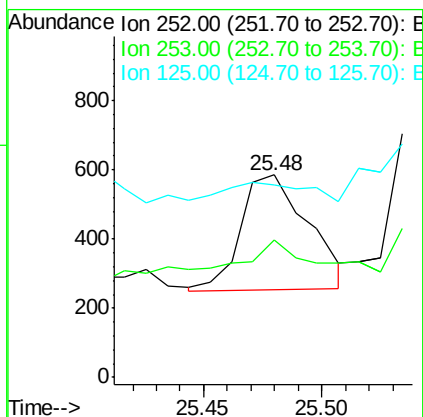
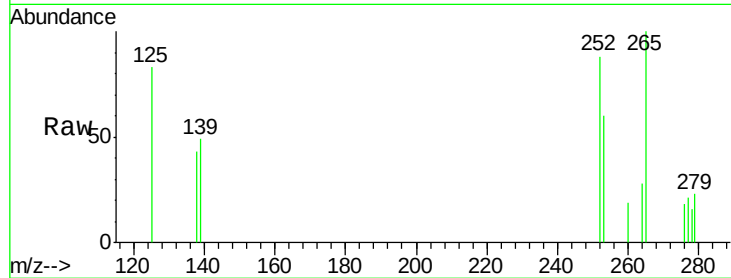
Tgt Ion: 252 Resp: 665

Ion Ratio Lower Upper

252 100

253 67.7 17.5 26.3#

125 94.7 12.2 18.4#



#31

Dibenzo(a,h)anthracene

Concen: 0.01 ng

RT: 27.08 min Scan# 4231

Delta R.T. -0.00 min

Lab File: BE089404.D

Acq: 29 Jan 2015 1:05

Tgt Ion: 278 Resp: 1077

Ion Ratio Lower Upper

278 100

139 68.3 18.5 27.7#

279 51.5 18.6 28.0#

