

Data Path : Z:\HPCHEM1\BNA E\DATA\BE100715\  
 Data File : BE090988.D  
 Acq On : 7 Oct 2015 16:24  
 Operator : UM/IZ  
 Sample : PB85999BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB85999BL

Quant Time: Oct 08 01:46:37 2015  
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE092815.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Oct 08 01:45:47 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.95  | 152  | 64453    | 5.00 | ng    | 0.00     |
| 7) Naphthalene-d8         | 9.64  | 136  | 284044   | 5.00 | ng    | 0.00     |
| 13) Acenaphthene-d10      | 13.46 | 164  | 155966   | 5.00 | ng    | 0.00     |
| 19) Phenanthrene-d10      | 16.19 | 188  | 404212   | 5.00 | ng    | 0.00     |
| 26) Chrysene-d12          | 20.33 | 240  | 542325   | 5.00 | ng    | 0.00     |
| 35) Perylene-d12          | 22.25 | 264  | 575738   | 5.00 | ng    | 0.00     |

|                             |       |     |        |      |    |       |
|-----------------------------|-------|-----|--------|------|----|-------|
| System Monitoring Compounds |       |     |        |      |    |       |
| 4) 2-Fluorophenol           | 4.98  | 112 | 121618 | 9.29 | ng | -0.02 |
| 5) Phenol-d6                | 6.61  | 99  | 160409 | 9.72 | ng | -0.01 |
| 8) Nitrobenzene-d5          | 8.23  | 82  | 85543  | 4.58 | ng | 0.00  |
| 14) 2,4,6-Tribromophenol    | 14.98 | 330 | 37787  | 7.01 | ng | 0.00  |
| 15) 2-Fluorobiphenyl        | 12.09 | 172 | 170294 | 4.03 | ng | 0.00  |
| 29) Terphenyl-d14           | 18.73 | 244 | 288728 | 4.32 | ng | 0.00  |

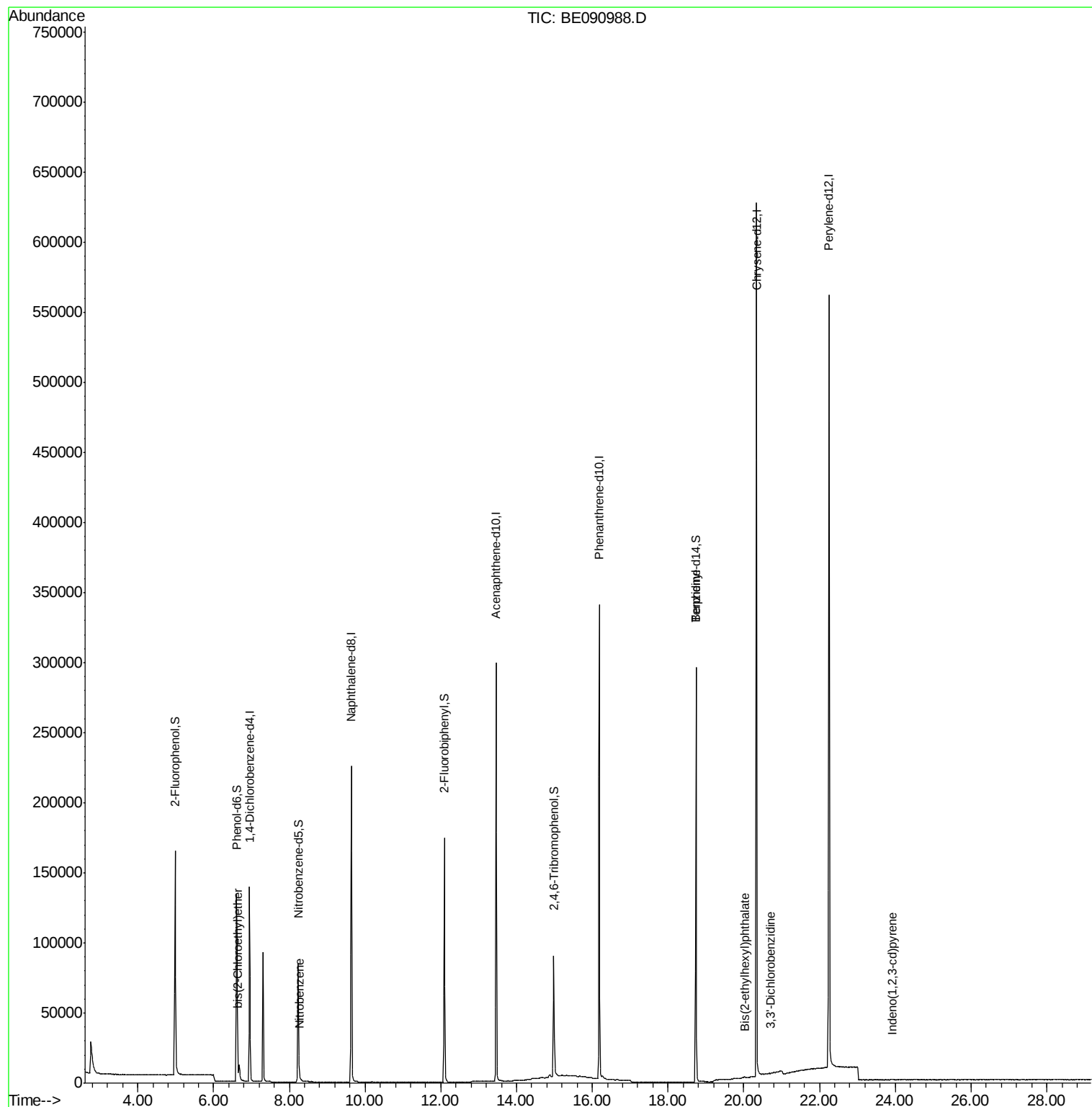
|                                |       |     |      |           |    |    |
|--------------------------------|-------|-----|------|-----------|----|----|
| Target Compounds               |       |     |      | Qvalue    |    |    |
| 2) 1,4-Dioxane                 | 3.11  | 88  | 114  | Below Cal | #  | 18 |
| 3) n-Nitrosodimethylamine      | 3.73  | 42  | 83   | Below Cal | #  | 1  |
| 6) bis(2-Chloroethyl)ether     | 6.64  | 93  | 12   | 0.04      | ng | 28 |
| 9) Nitrobenzene                | 8.28  | 77  | 29   | 0.29      | ng | 40 |
| 10) Naphthalene                | 9.69  | 128 | 60   | Below Cal | #  | 1  |
| 11) Hexachlorobutadiene        | 9.89  | 225 | 9    | Below Cal | #  | 63 |
| 21) Hexachlorobenzene          | 15.48 | 284 | 17   | Below Cal | #  | 38 |
| 23) Phenanthrene               | 16.21 | 178 | 1348 | Below Cal | #  | 83 |
| 25) Fluoranthene               | 18.20 | 202 | 112  | Below Cal | #  | 24 |
| 27) Benzidine                  | 18.73 | 184 | 5308 | 0.69      | ng | 84 |
| 28) Pyrene                     | 18.58 | 202 | 193  | Below Cal | #  | 73 |
| 31) 3,3'-Dichlorobenzidine     | 20.71 | 252 | 171  | 0.03      | ng | 29 |
| 32) Chrysene                   | 20.33 | 228 | 1837 | Below Cal | #  | 73 |
| 33) Bis(2-ethylhexyl)phthalate | 20.02 | 149 | 3193 | 0.13      | ng | 72 |
| 34) Indeno(1,2,3-cd)pyrene     | 23.92 | 276 | 198  | 0.11      | ng | 69 |
| 37) Benzo(k)fluoranthene       | 21.70 | 252 | 179  | Below Cal | #  | 1  |

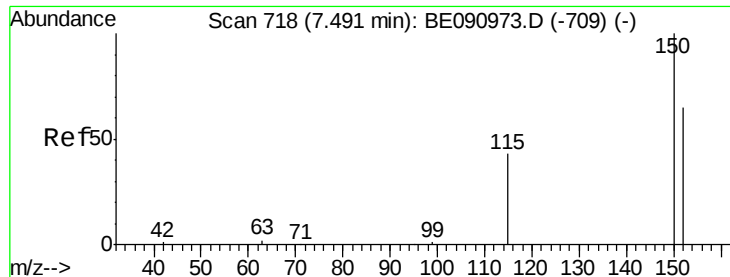
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\HPCHEM1\BNA E\DATA\BE100715\  
Data File : BE090988.D  
Acq On : 7 Oct 2015 16:24  
Operator : UM/IZ  
Sample : PB85999BL  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
BNA\_E  
ClientSampleId :  
PB85999BL

Quant Time: Oct 08 01:46:37 2015  
Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE092815.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Oct 08 01:45:47 2015  
Response via : Initial Calibration



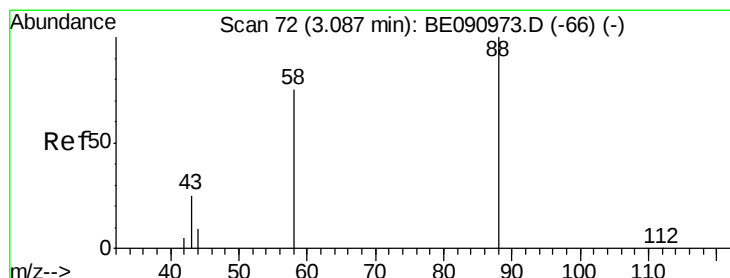
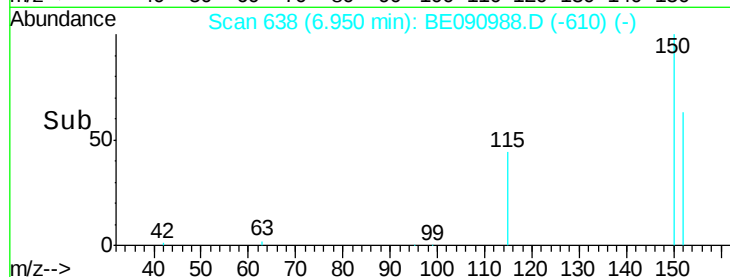
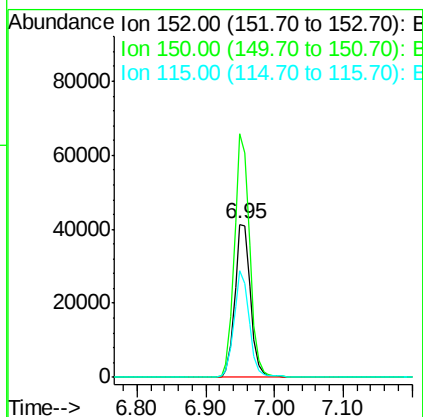
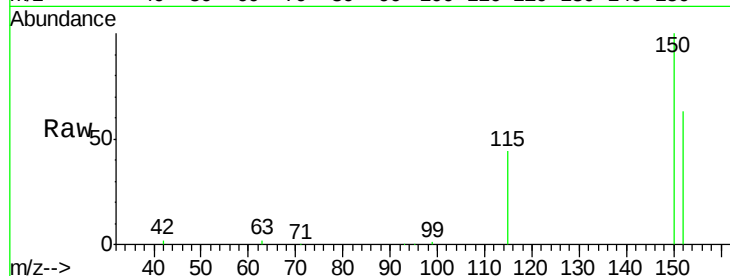


#1

1,4-Dichlorobenzene-d4  
Concen: 5.00 ng  
RT: 6.95 min Scan# 638  
Delta R.T. -0.01 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

Instrument :  
BNA\_E  
ClientSampleId :  
PB85999BL

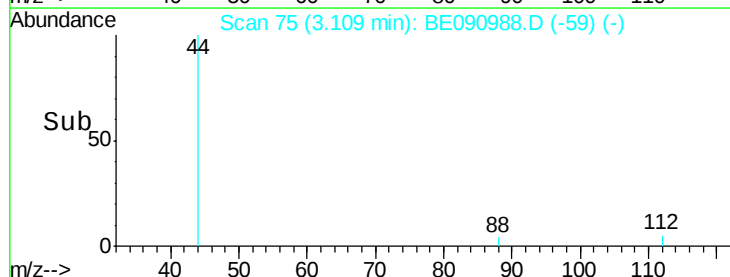
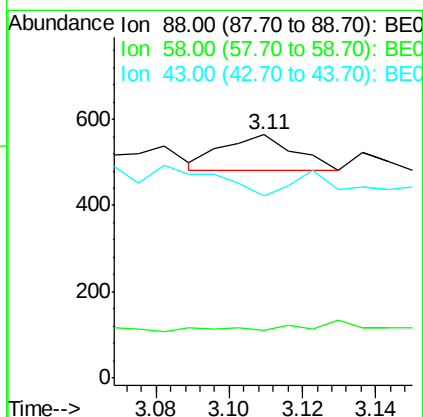
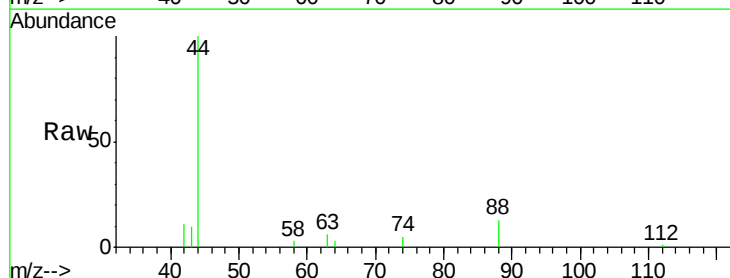
Tot Ion:152 Resp: 64453  
Ion Ratio Lower Upper  
152 100  
150 159.4 122.6 183.8  
115 70.2 52.8 79.2

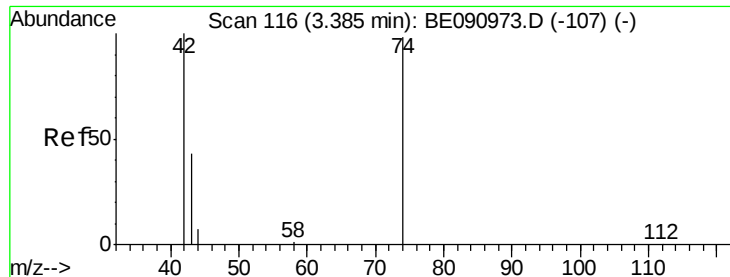


#2

1,4-Dioxane  
Concen: Below Cal  
RT: 3.11 min Scan# 75  
Delta R.T. -0.09 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

Tgt Ion: 88 Resp: 114  
Ion Ratio Lower Upper  
88 100  
58 0.0 65.8 98.6#  
43 0.0 25.3 37.9#



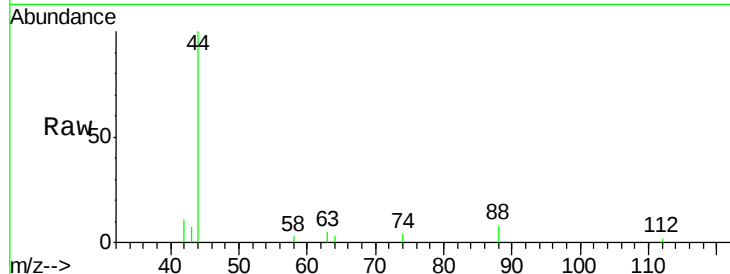


#3

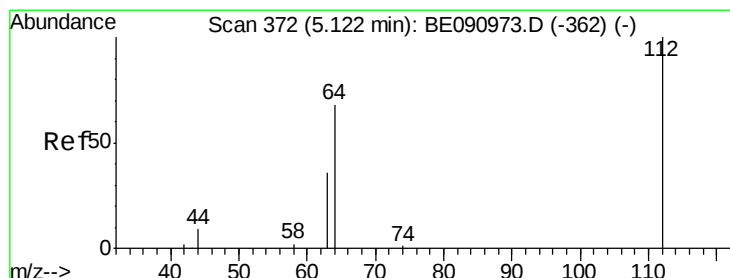
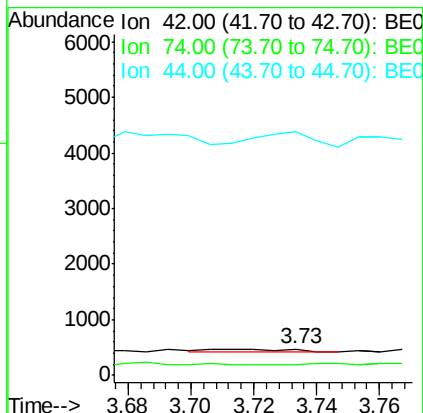
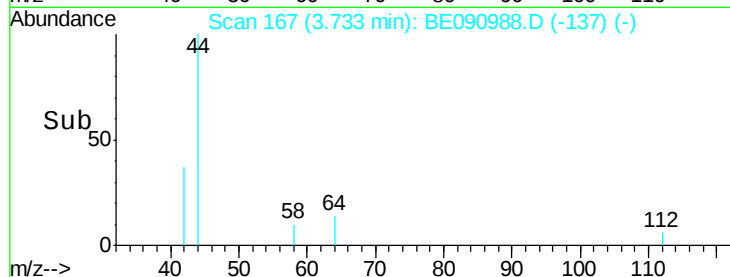
n-Nitrosodimethylamine  
 Concen: Below Cal  
 RT: 3.73 min Scan# 167  
 Delta R.T. 0.00 min  
 Lab File: BE090988.D  
 Acq: 7 Oct 2015 16:24

Instrument :  
 BNA\_E  
 ClientSampleId :  
 PB85999BL

Tot Ion: 42 Resp: 83  
 Ion Ratio Lower Upper  
 42 100  
 74 33.7 87.9 131.9#  
 44 428.9 6.6 9.8#



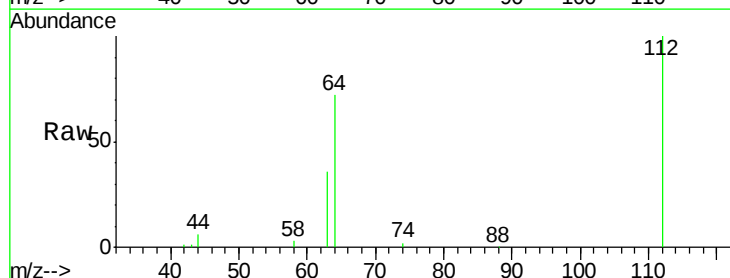
Abundance Ion 42.00 (41.70 to 42.70): BE0  
 Ion 74.00 (73.70 to 74.70): BE0  
 Ion 44.00 (43.70 to 44.70): BE0



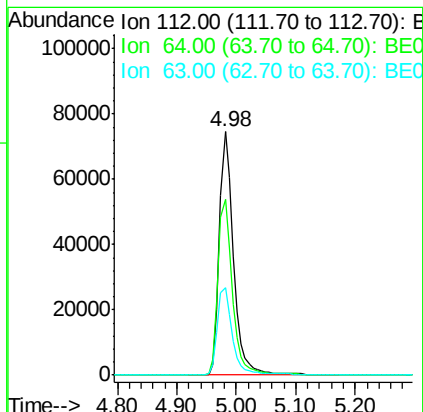
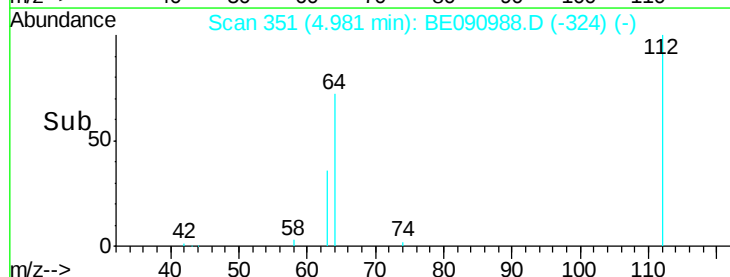
#4

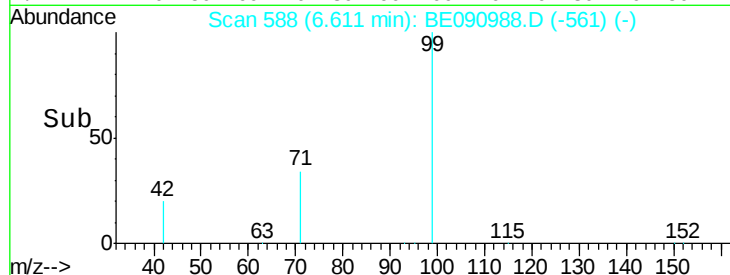
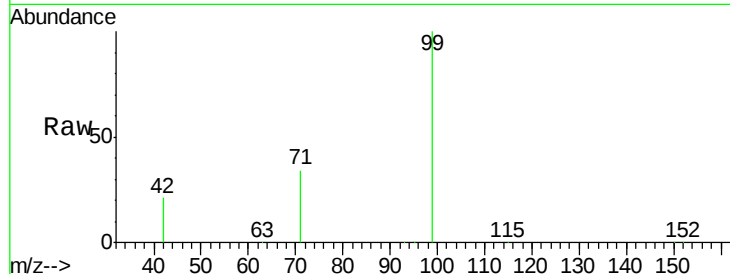
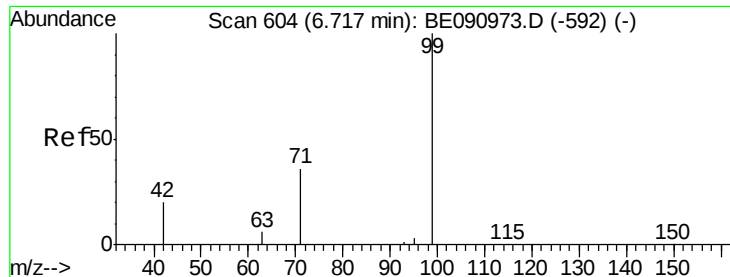
2-Fluorophenol  
 Concen: 9.29 ng  
 RT: 4.98 min Scan# 351  
 Delta R.T. -0.02 min  
 Lab File: BE090988.D  
 Acq: 7 Oct 2015 16:24

Tgt Ion: 112 Resp: 121618  
 Ion Ratio Lower Upper  
 112 100  
 64 73.9 30.9 46.3#  
 63 36.8 16.7 25.1#



Abundance Ion 112.00 (111.70 to 112.70): E  
 Ion 64.00 (63.70 to 64.70): BE0  
 Ion 63.00 (62.70 to 63.70): BE0





#5

Phenol-d6

Concen: 9.72 ng

RT: 6.61 min Scan# 588

Delta R.T. -0.01 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

Instrument :

BNA\_E

ClientSampled :

PB85999BL

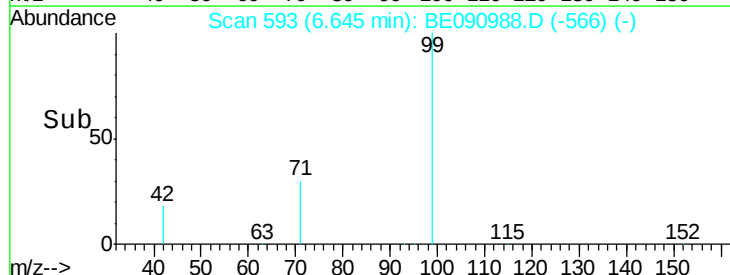
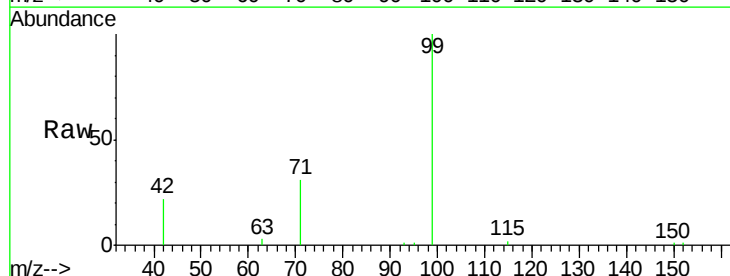
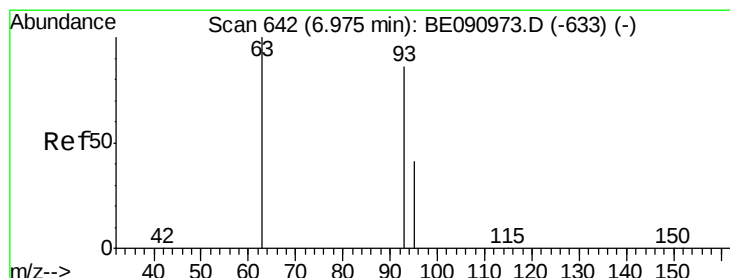
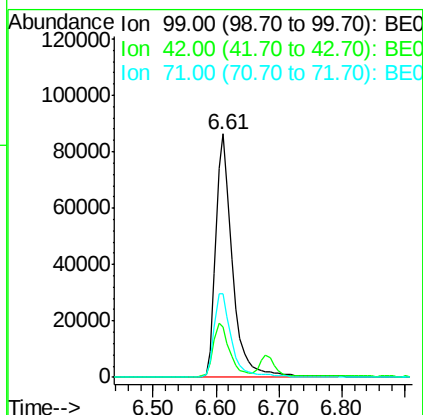
Tot Ion: 99 Resp: 160409

Ion Ratio Lower Upper

99 100

42 20.8 16.2 24.2

71 36.1 29.0 43.4



#6

bis(2-Chloroethyl)ether

Concen: 0.04 ng

RT: 6.64 min Scan# 593

Delta R.T. -0.01 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

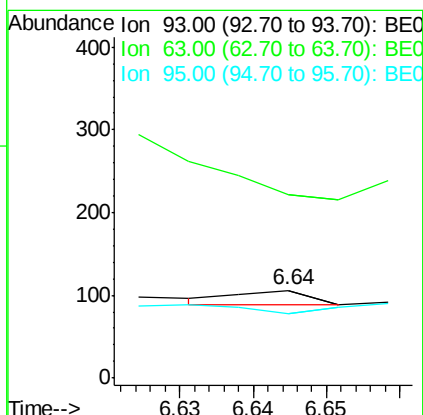
Tgt Ion: 93 Resp: 12

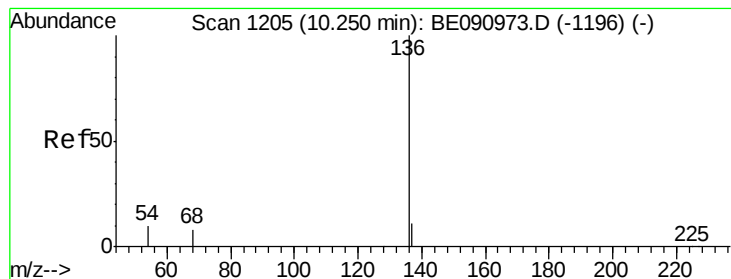
Ion Ratio Lower Upper

93 100

63 0.0 49.5 74.3#

95 0.0 22.2 33.4#





#7

Naphthalene-d8

Concen: 5.00 ng

RT: 9.64 min Scan# 1161

Delta R.T. -0.00 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

Instrument :

BNA\_E

ClientSampleId :

PB85999BL

Tot Ion:136 Resp: 284044

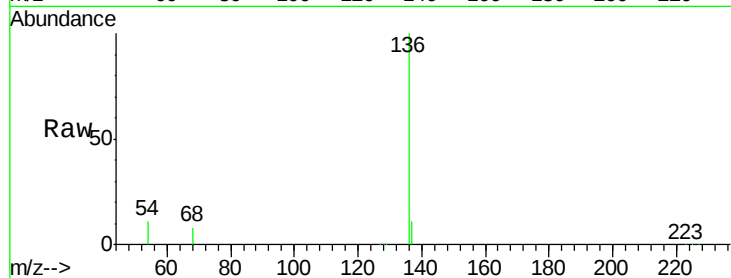
Ion Ratio Lower Upper

136 100

137 11.1 8.9 13.3

54 11.4 8.2 12.4

68 8.3 6.2 9.4

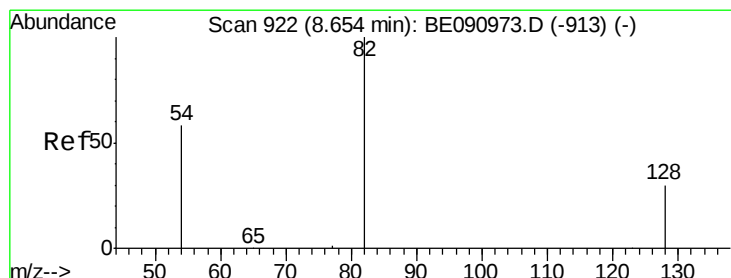
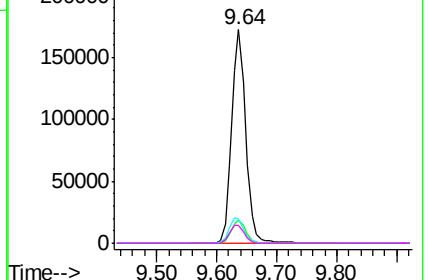
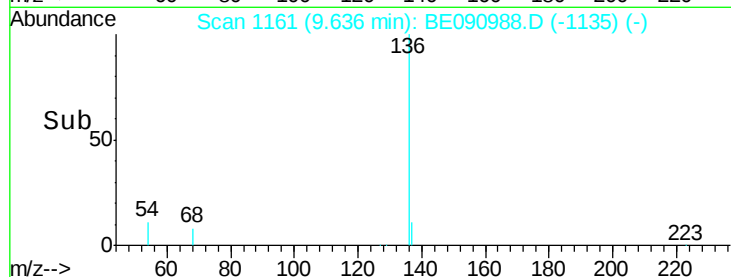


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0

Ion 68.00 (67.70 to 68.70): BE0



#8

Nitrobenzene-d5

Concen: 4.58 ng

RT: 8.23 min Scan# 876

Delta R.T. -0.01 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

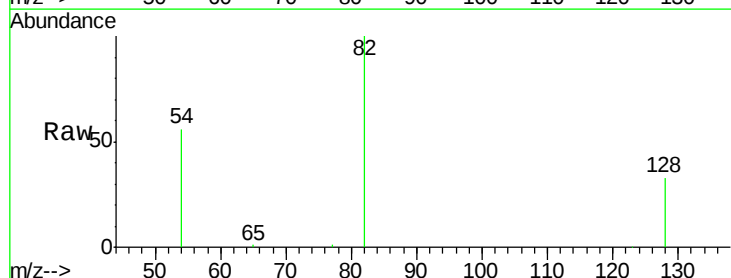
Tgt Ion: 82 Resp: 85543

Ion Ratio Lower Upper

82 100

128 32.9 25.4 38.0

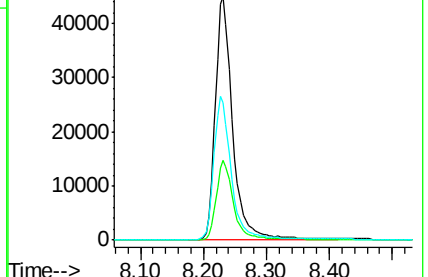
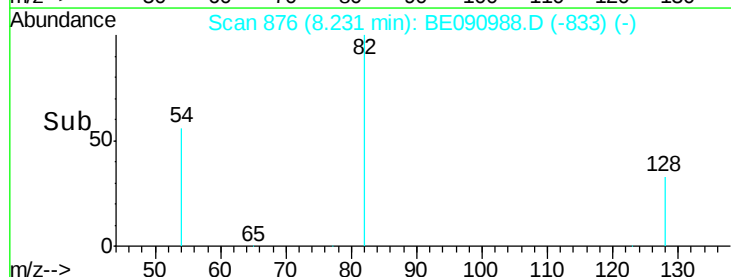
54 56.3 48.4 72.6

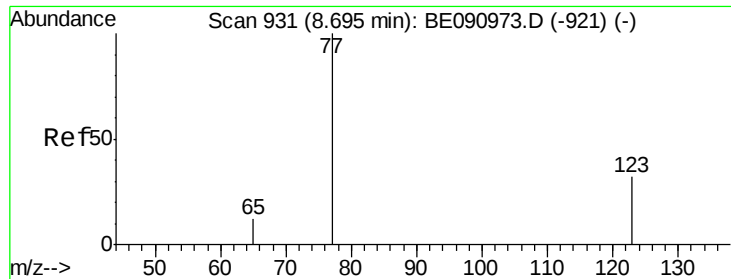


Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BE0





#9

Nitrobenzene

Concen: 0.29 ng

RT: 8.28 min Scan# 886

Delta R.T. 0.01 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

Instrument :

BNA\_E

ClientSampled :

PB85999BL

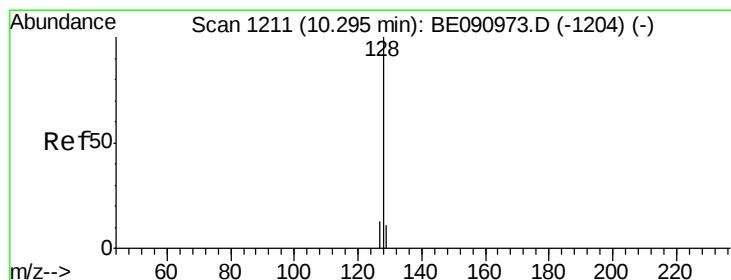
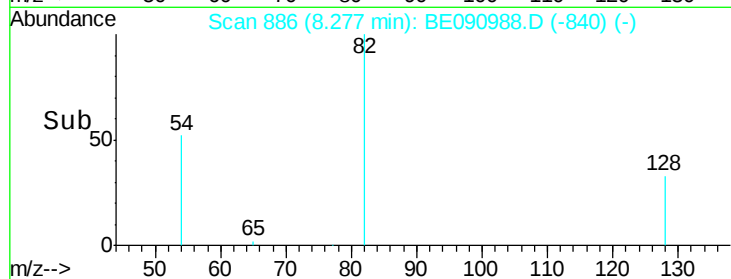
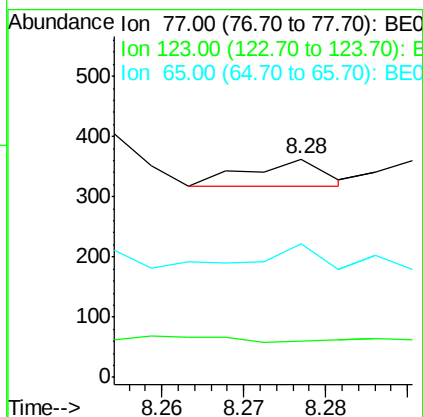
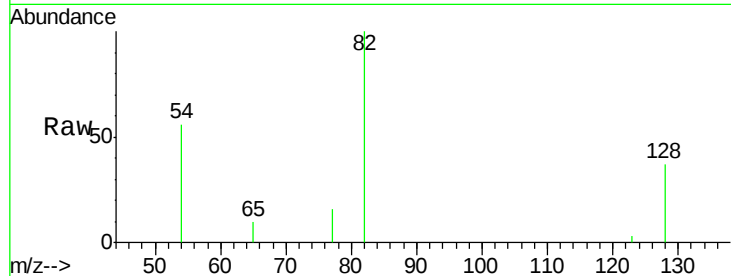
Tot Ion: 77 Resp: 29

Ion Ratio Lower Upper

77 100

123 27.6 26.9 40.3

65 89.7 9.4 14.2#



#10

Naphthalene

Concen: Below Cal

RT: 9.69 min Scan# 1168

Delta R.T. 0.01 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

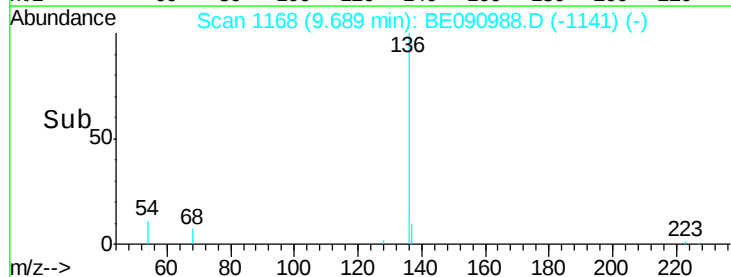
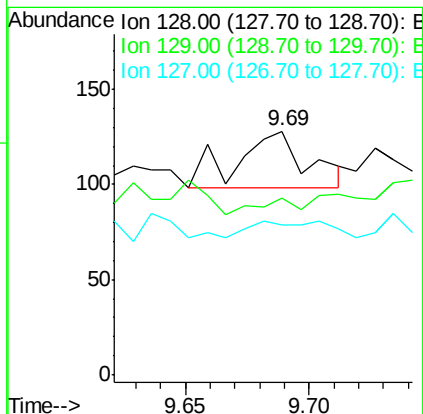
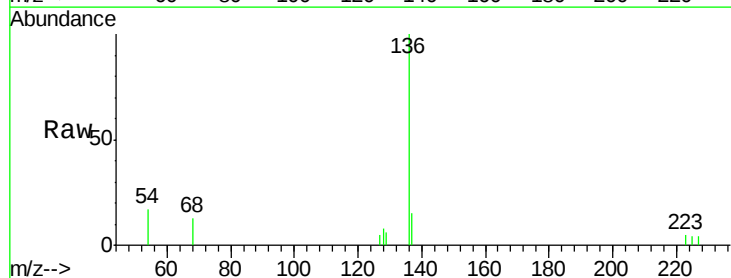
Tgt Ion: 128 Resp: 60

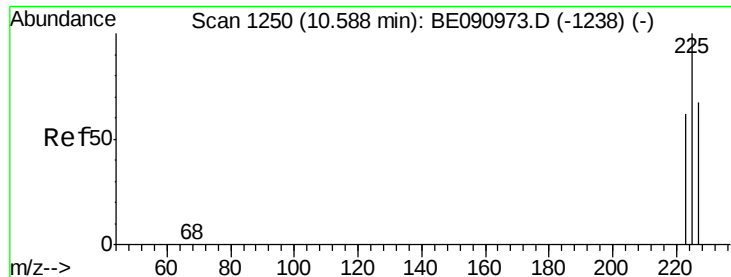
Ion Ratio Lower Upper

128 100

129 72.7 9.3 13.9#

127 61.7 10.7 16.1#

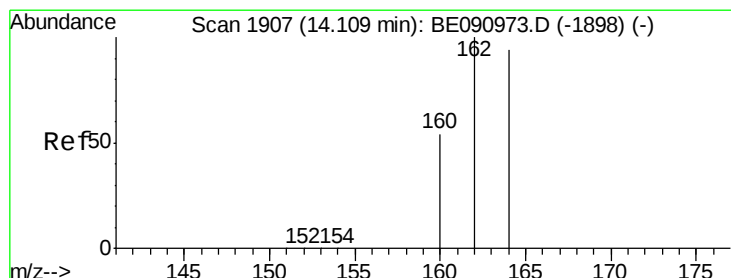
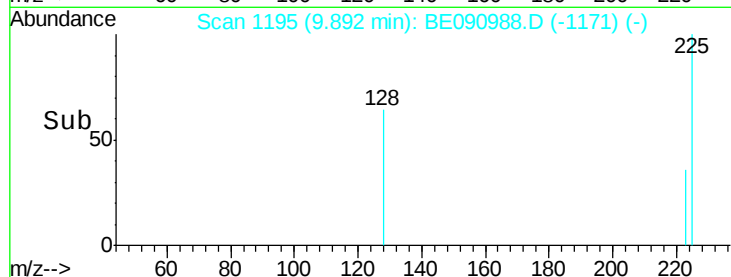
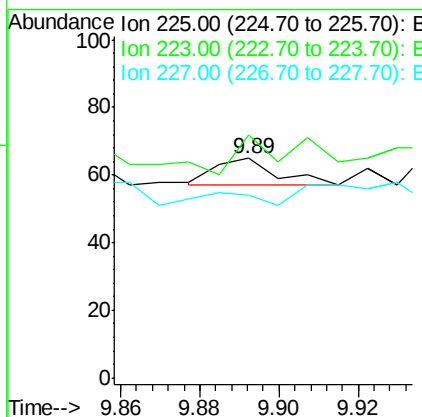
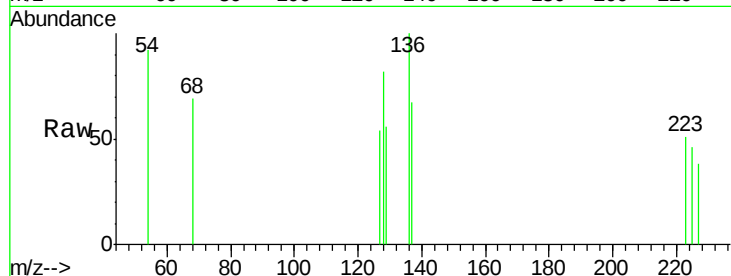




#11  
Hexachlorobutadiene  
Concen: Below Cal  
RT: 9.89 min Scan# 1195  
Delta R.T. -0.02 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

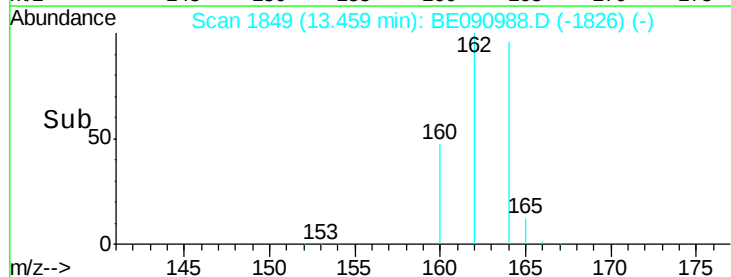
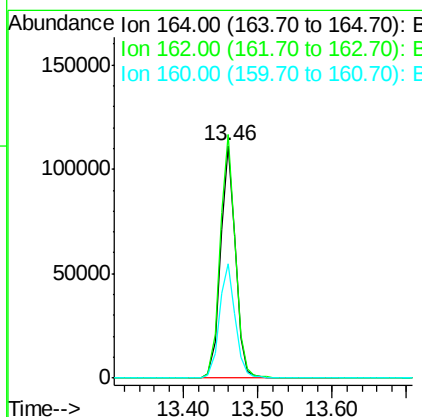
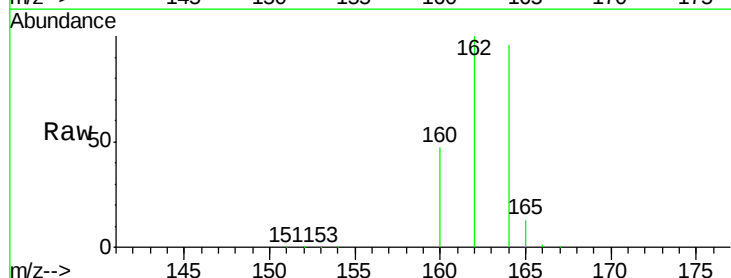
Instrument :  
BNA\_E  
ClientSampleId :  
PB85999BL

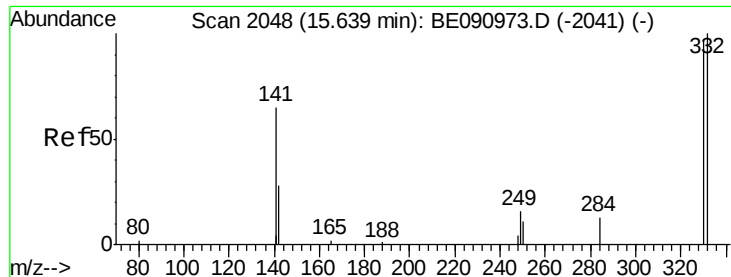
Tot Ion:225 Resp: 9  
Ion Ratio Lower Upper  
225 100  
223 88.9 49.0 73.6#  
227 33.3 50.3 75.5#



#13  
Acenaphthene-d10  
Concen: 5.00 ng  
RT: 13.46 min Scan# 1849  
Delta R.T. 0.00 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

Tgt Ion:164 Resp: 155966  
Ion Ratio Lower Upper  
164 100  
162 104.7 85.3 127.9  
160 49.3 46.2 69.2

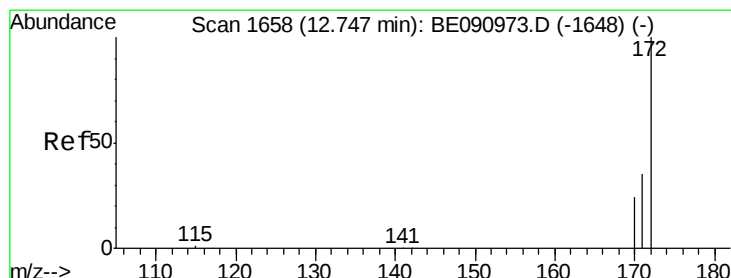
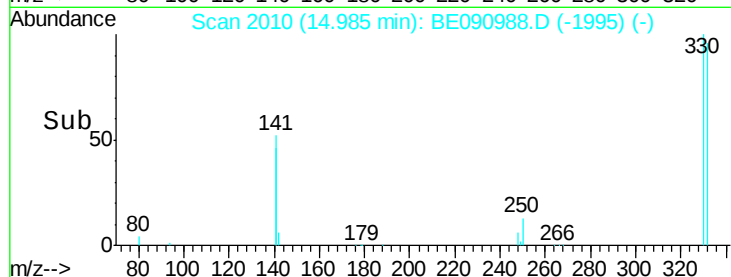
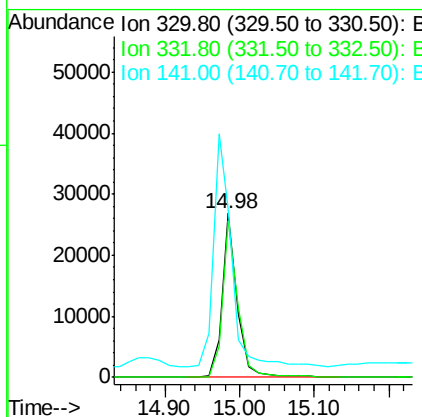
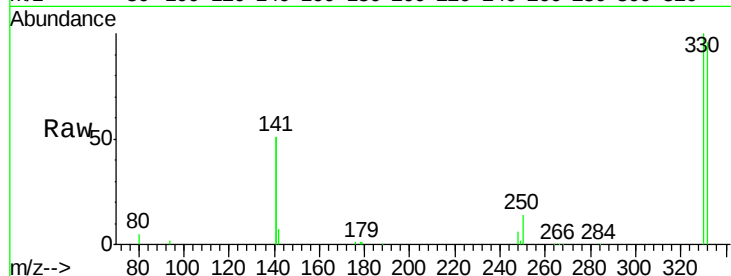




#14  
 2,4,6-Tribromophenol  
 Concen: 7.01 ng  
 RT: 14.98 min Scan# 2010  
 Delta R.T. 0.00 min  
 Lab File: BE090988.D  
 Acq: 7 Oct 2015 16:24

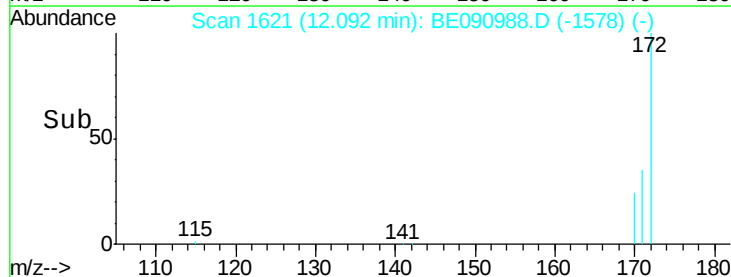
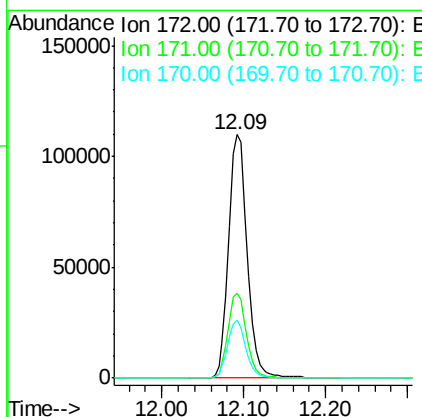
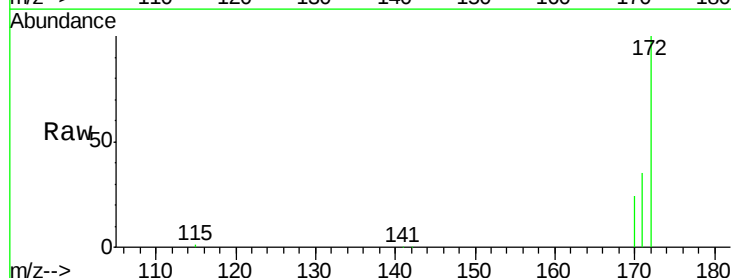
Instrument :  
 BNA\_E  
 ClientSampled :  
 PB85999BL

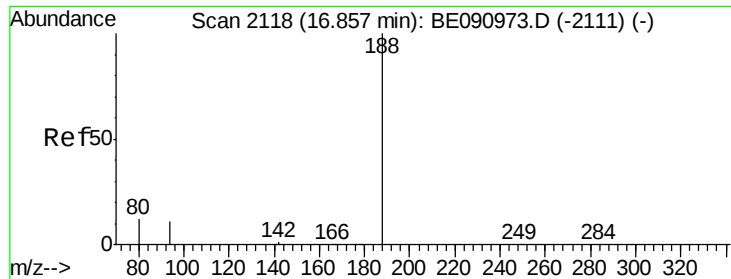
Tot Ion:330 Resp: 37787  
 Ion Ratio Lower Upper  
 330 100  
 332 97.7 79.1 118.7  
 141 170.4 125.4 188.0



#15  
 2-Fluorobiphenyl  
 Concen: 4.03 ng  
 RT: 12.09 min Scan# 1621  
 Delta R.T. -0.00 min  
 Lab File: BE090988.D  
 Acq: 7 Oct 2015 16:24

Tgt Ion:172 Resp: 170294  
 Ion Ratio Lower Upper  
 172 100  
 171 34.9 28.8 43.2  
 170 23.7 19.3 28.9

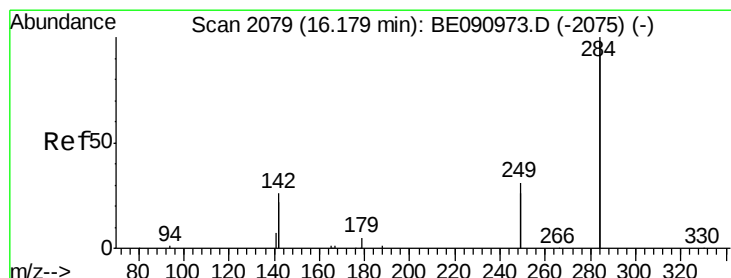
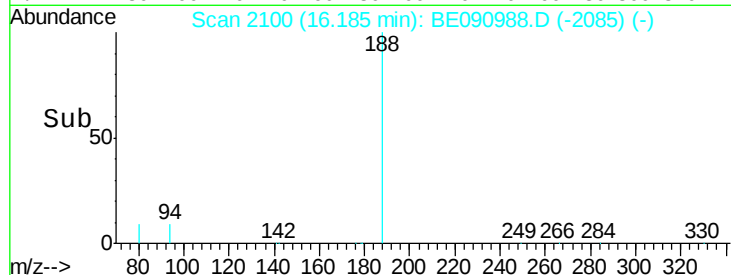
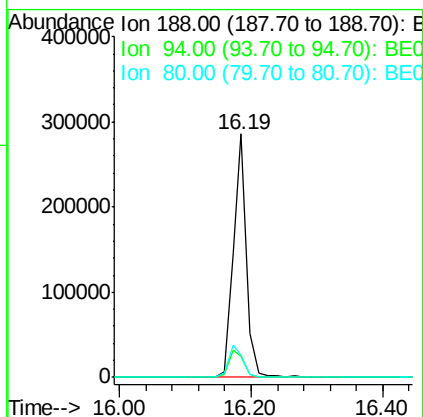
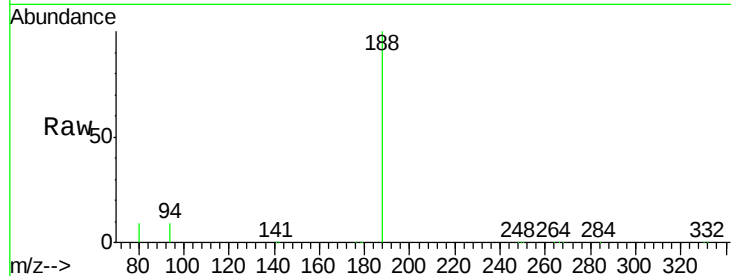




#19  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 16.19 min Scan# 2100  
Delta R.T. 0.00 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

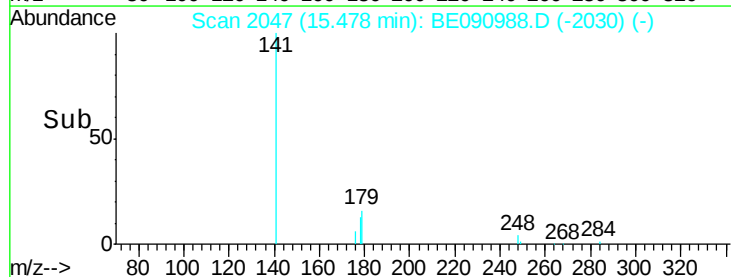
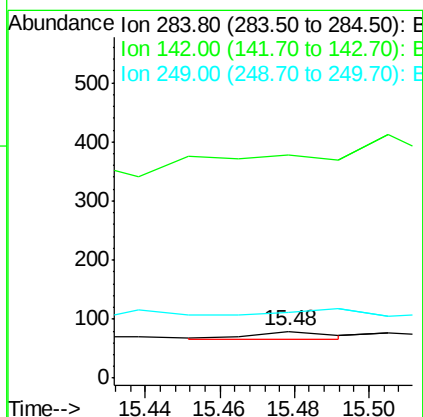
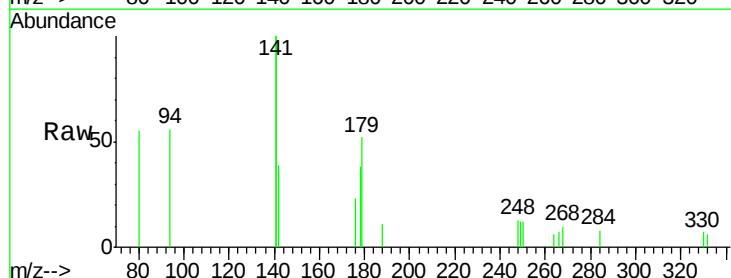
Instrument :  
BNA\_E  
ClientSampleId :  
PB85999BL

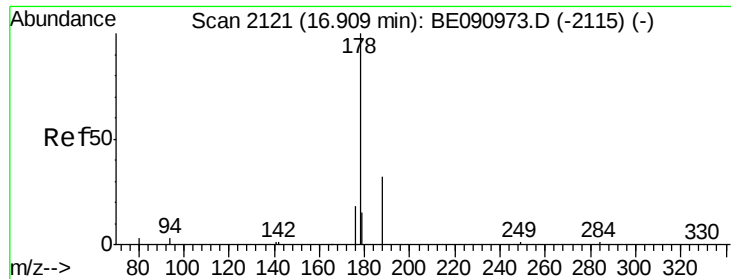
Tot Ion:188 Resp: 404212  
Ion Ratio Lower Upper  
188 100  
94 8.8 8.7 13.1  
80 9.3 9.4 14.0#



#21  
Hexachlorobenzene  
Concen: Below Cal  
RT: 15.48 min Scan# 2047  
Delta R.T. 0.03 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

Tgt Ion:284 Resp: 17  
Ion Ratio Lower Upper  
284 100  
142 0.0 32.2 48.2#  
249 0.0 25.4 38.2#





#23

Phenanthrene

Concen: Below Cal

RT: 16.21 min Scan# 2102

Delta R.T. -0.01 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

Instrument :

BNA\_E

ClientSampleId :

PB85999BL

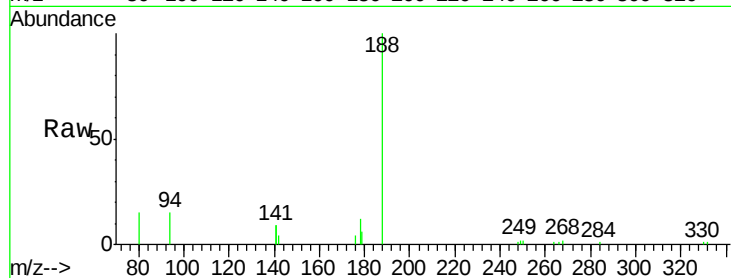
Tot Ion:178 Resp: 1348

Ion Ratio Lower Upper

178 100

176 19.4 15.3 22.9

179 0.0 12.6 18.8#



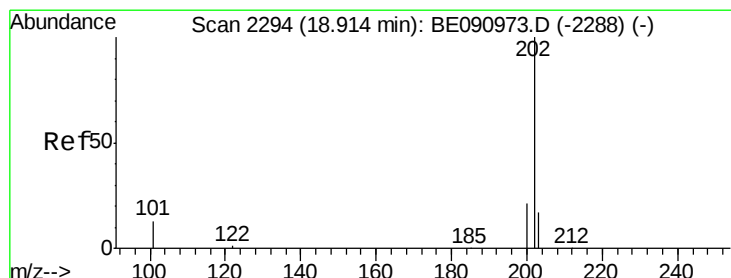
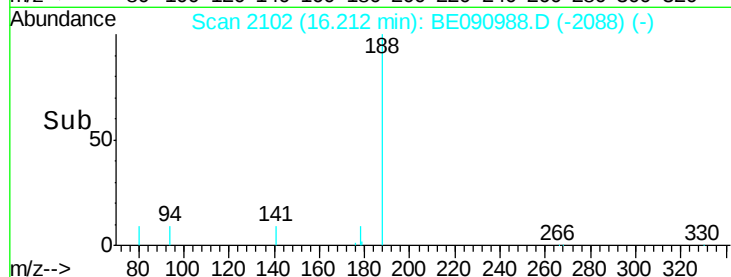
Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E

16.21

Time-->



#25

Fluoranthene

Concen: Below Cal

RT: 18.20 min Scan# 2317

Delta R.T. -0.00 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

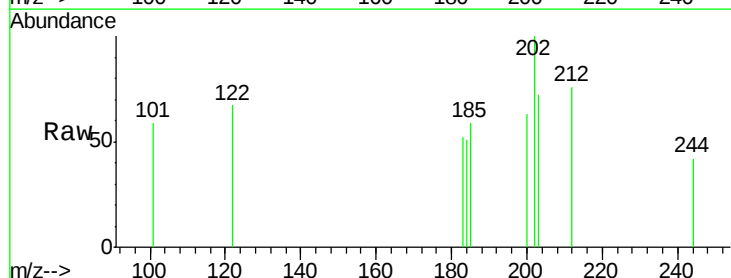
Tgt Ion:202 Resp: 112

Ion Ratio Lower Upper

202 100

101 8.0 11.0 16.6#

203 72.3 13.9 20.9#



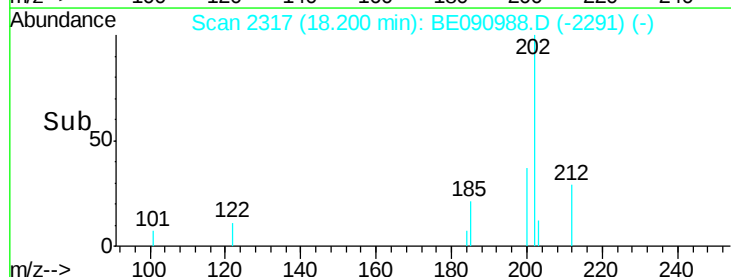
Abundance Ion 202.00 (201.70 to 202.70): E

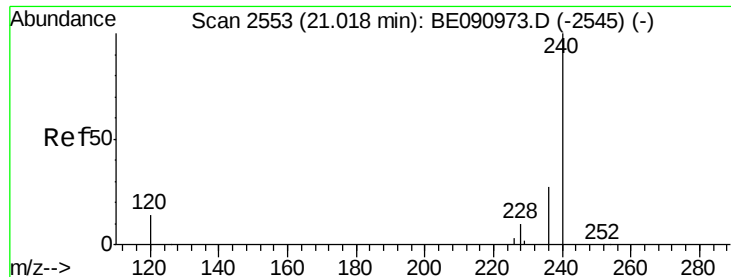
Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E

18.20

Time-->

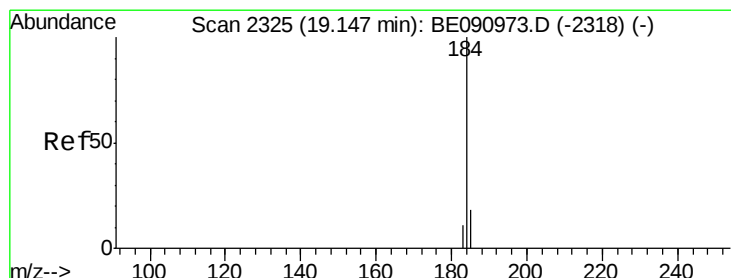
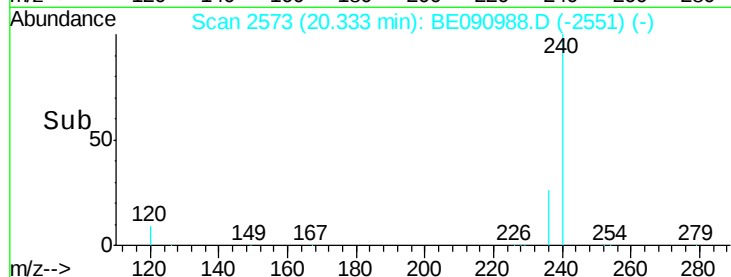
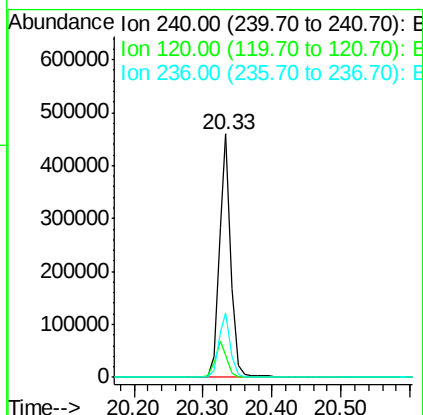
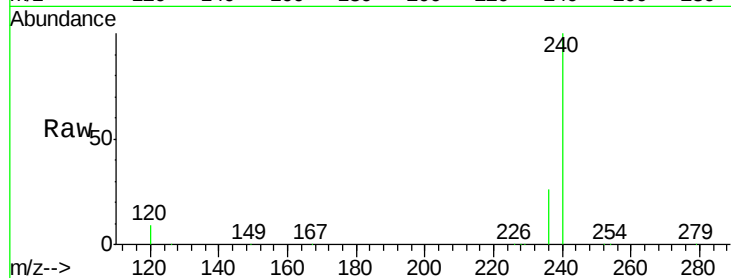




#26  
Chrysene-d12  
Concen: 5.00 ng  
RT: 20.33 min Scan# 2573  
Delta R.T. 0.00 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

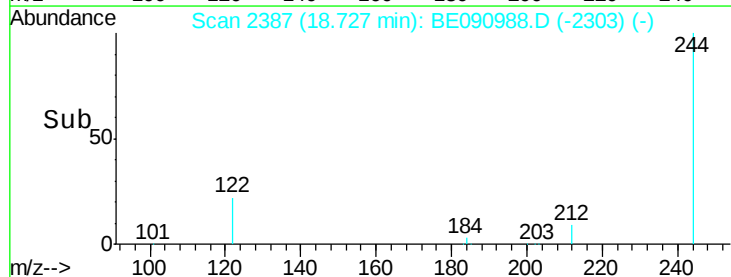
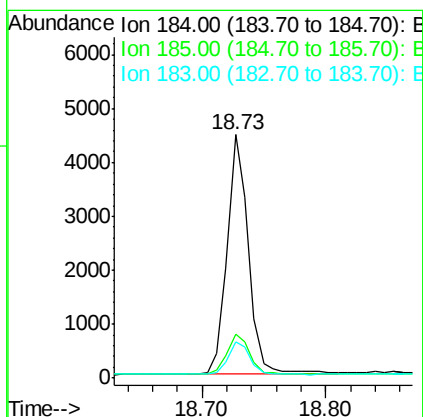
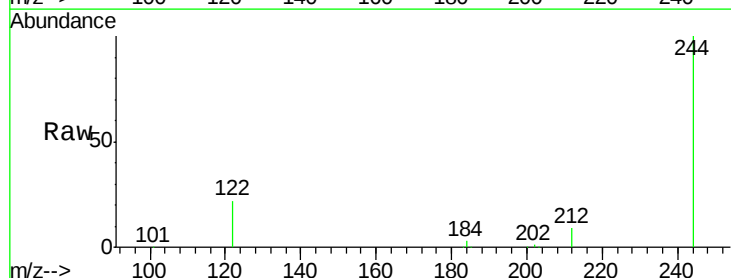
Instrument :  
BNA\_E  
ClientSampleId :  
PB85999BL

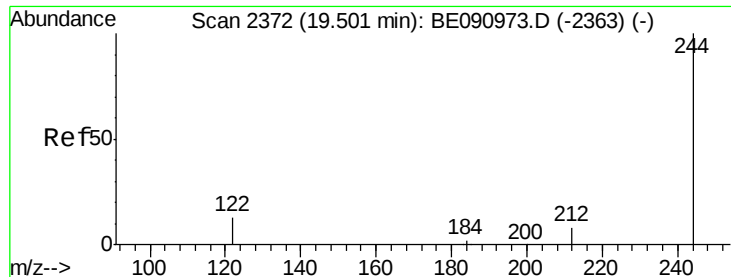
Tot Ion:240 Resp: 542325  
Ion Ratio Lower Upper  
240 100  
120 8.9 11.0 16.4#  
236 26.2 21.7 32.5



#27  
Benzidine  
Concen: 0.69 ng  
RT: 18.73 min Scan# 2387  
Delta R.T. 0.13 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

Tgt Ion:184 Resp: 5308  
Ion Ratio Lower Upper  
184 100  
185 18.1 22.3 33.5#  
183 15.2 16.4 24.6#





#29

Terphenyl-d14

Concen: 4.32 ng

RT: 18.73 min Scan# 2388

Delta R.T. -0.00 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

Instrument :

BNA\_E

ClientSampleId :

PB85999BL

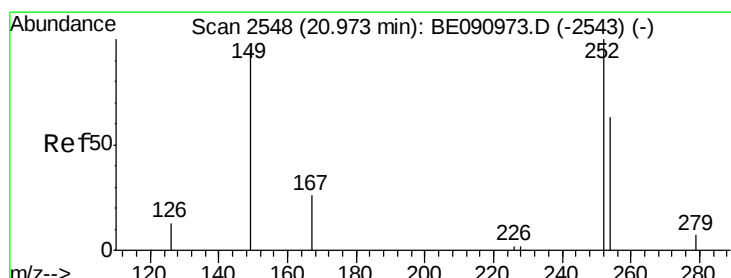
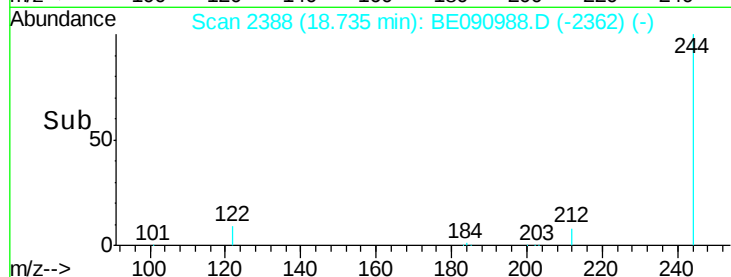
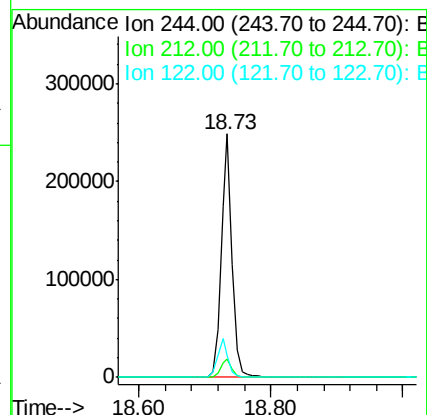
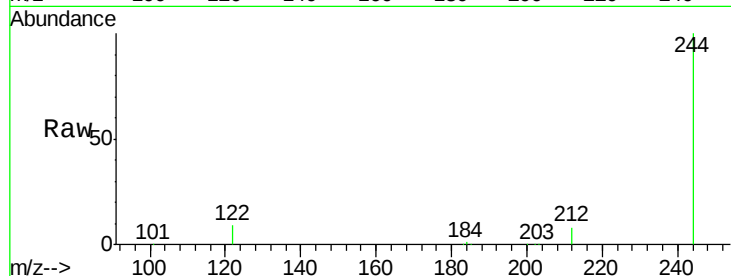
Tot Ion:244 Resp: 288728

Ion Ratio Lower Upper

244 100

212 7.7 6.9 10.3

122 9.0 11.0 16.4#



#31

3,3'-Dichlorobenzidine

Concen: 0.03 ng

RT: 20.71 min Scan# 2615

Delta R.T. -0.13 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

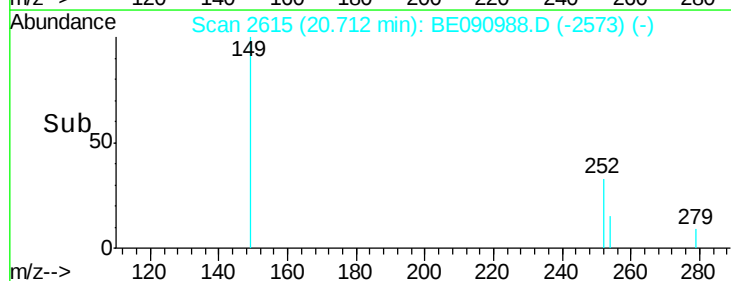
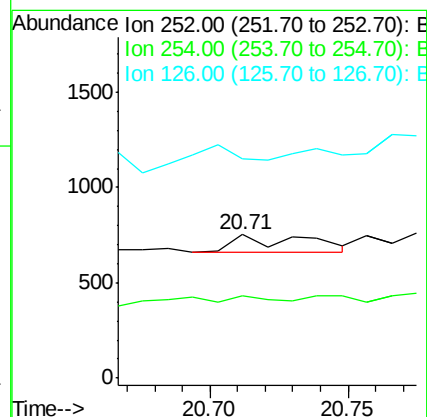
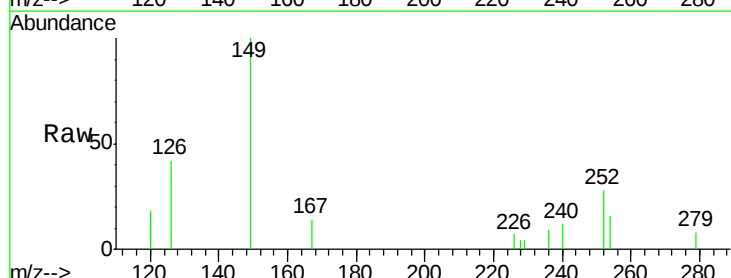
Tgt Ion:252 Resp: 171

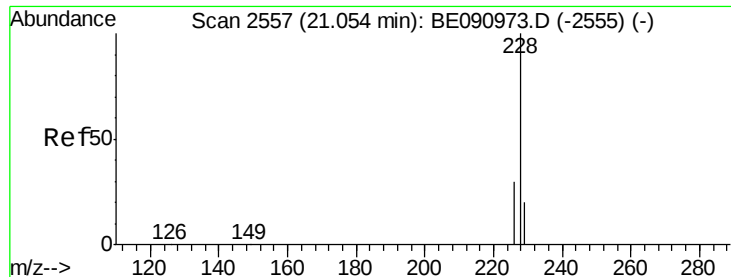
Ion Ratio Lower Upper

252 100

254 57.0 51.1 76.7

126 152.4 12.6 18.8#





#32

Chrysene

Concen: Below Cal

RT: 20.33 min Scan# 2573

Delta R.T. -0.03 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

Instrument :

BNA\_E

ClientSampled :

PB85999BL

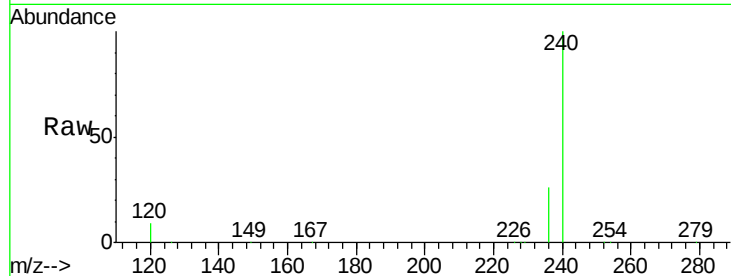
Tot Ion:228 Resp: 1837

Ion Ratio Lower Upper

228 100

226 20.9 24.0 36.0#

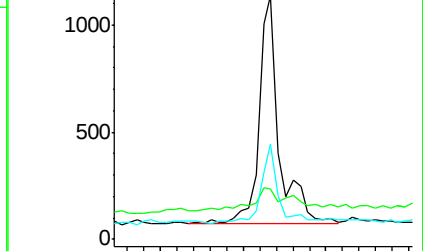
229 38.9 15.9 23.9#



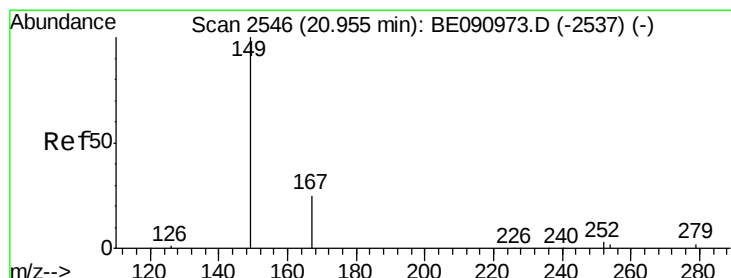
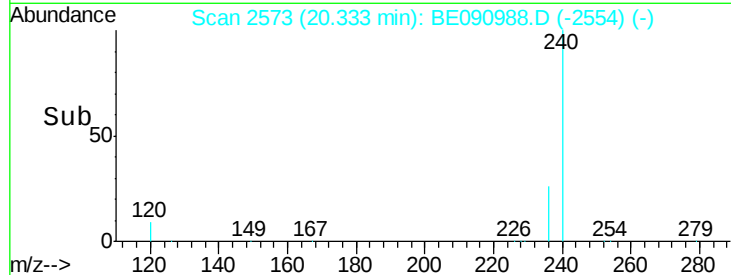
Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



Time-->



#33

Bis(2-ethylhexyl)phthalate

Concen: 0.13 ng

RT: 20.02 min Scan# 2538

Delta R.T. 0.00 min

Lab File: BE090988.D

Acq: 7 Oct 2015 16:24

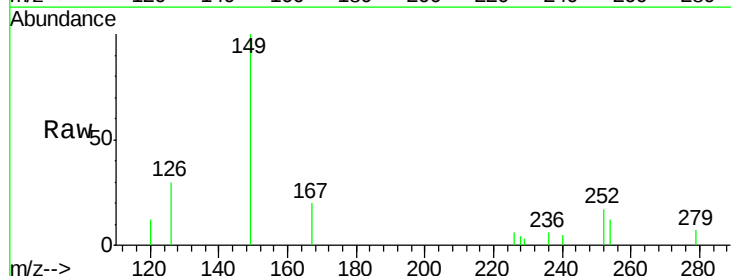
Tgt Ion:149 Resp: 3193

Ion Ratio Lower Upper

149 100

167 9.2 19.5 29.3#

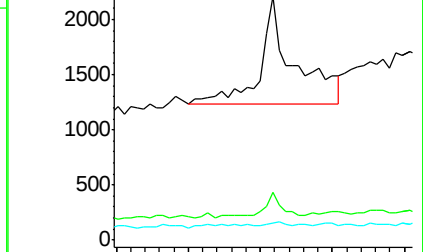
279 1.8 2.3 3.5#



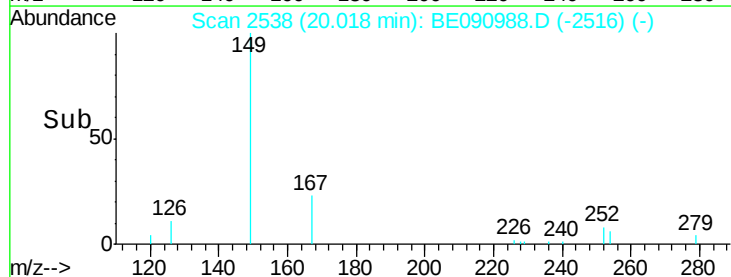
Abundance Ion 149.00 (148.70 to 149.70): E

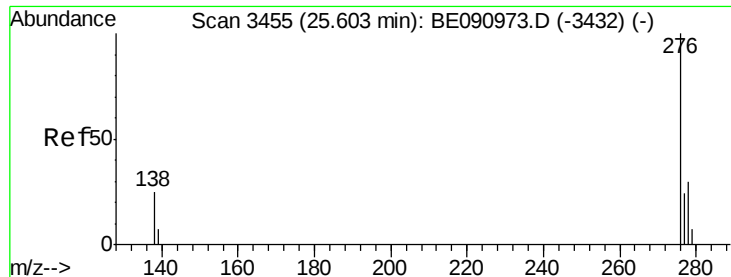
Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E



Time-->

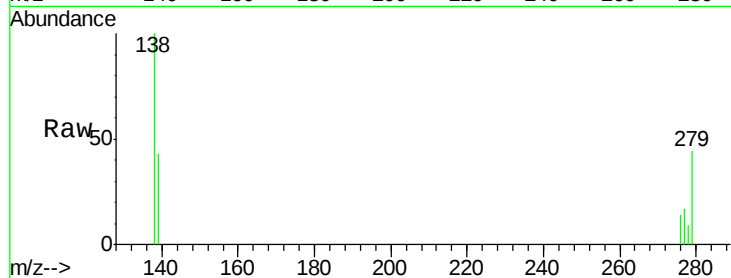




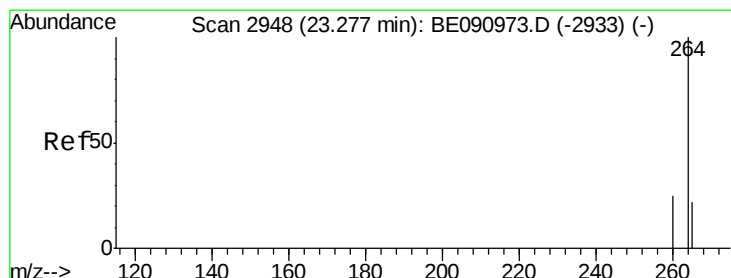
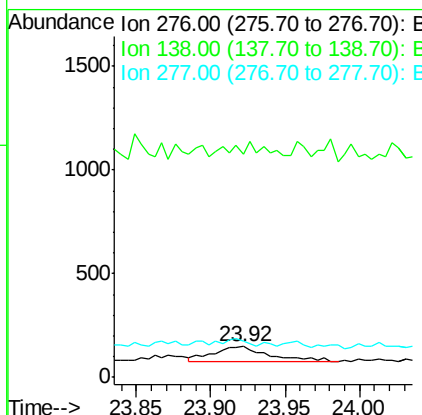
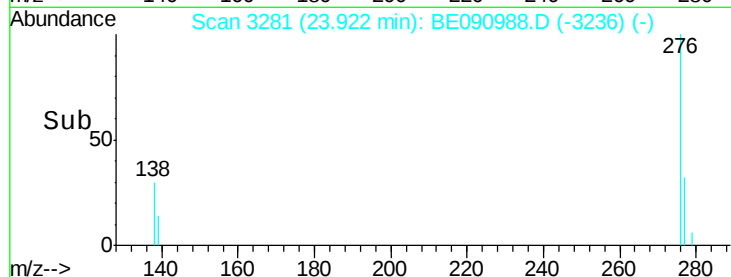
#34  
Indeno(1,2,3-cd)pyrene  
Concen: 0.11 ng  
RT: 23.92 min Scan# 3281  
Delta R.T. 0.00 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

Instrument :  
BNA\_E  
ClientSampleId :  
PB85999BL

Tot Ion:276 Resp: 198  
Ion Ratio Lower Upper  
276 100  
138 4.0 23.4 35.2#  
277 19.2 19.8 29.8#

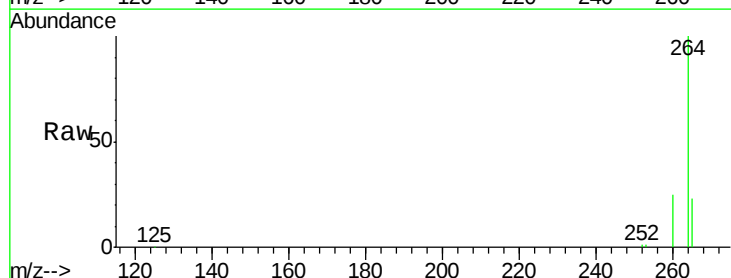


Abundance Ion 276.00 (275.70 to 276.70): E  
Ion 138.00 (137.70 to 138.70): E  
Ion 277.00 (276.70 to 277.70): E

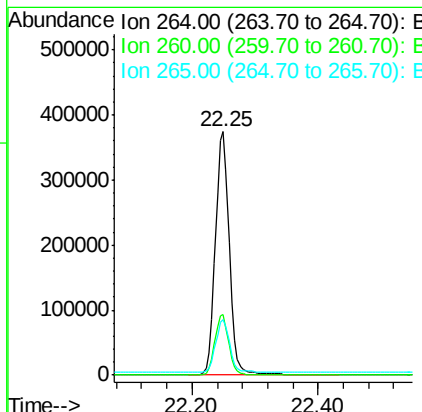
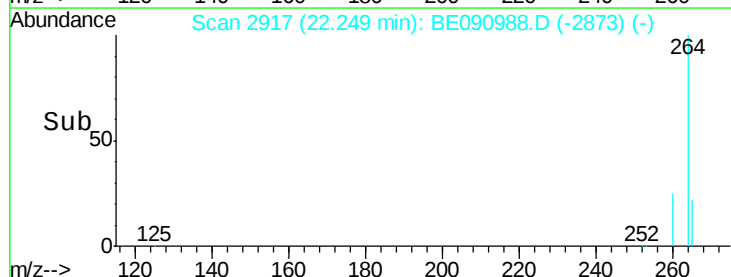


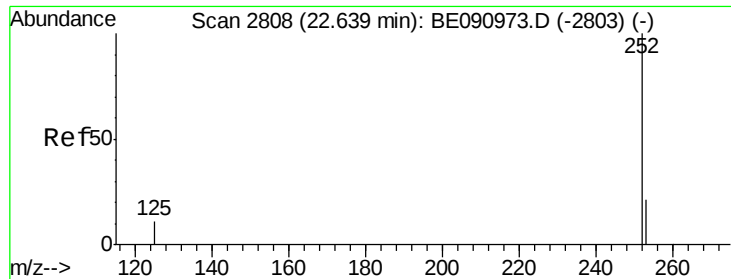
#35  
Perylene-d12  
Concen: 5.00 ng  
RT: 22.25 min Scan# 2917  
Delta R.T. 0.00 min  
Lab File: BE090988.D  
Acq: 7 Oct 2015 16:24

Tgt Ion:264 Resp: 575738  
Ion Ratio Lower Upper  
264 100  
260 25.0 20.0 30.0  
265 23.0 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





#37

Benzo(k)fluoranthene

Concen: Below Cal

RT: 21.70 min Scan# 2797

Delta R.T. -0.00 min

Lab File: BE090988.D

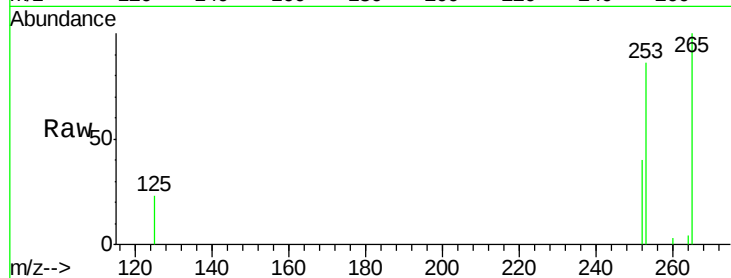
Acq: 7 Oct 2015 16:24

Instrument :

BNA\_E

ClientSampleId :

PB85999BL



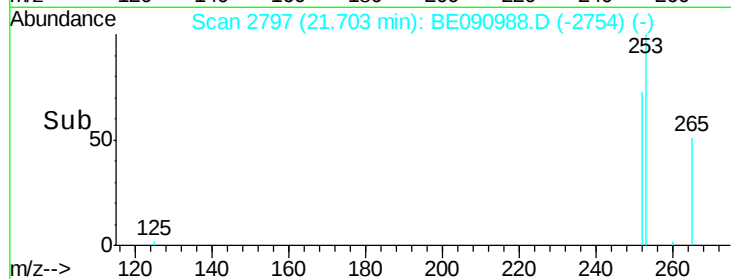
Tot Ion: 252 Resp: 179

Ion Ratio Lower Upper

252 100

253 216.1 17.6 26.4#

125 57.1 9.9 14.9#



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E

