

Data Path : Z:\HPCHEM1\BNA E\DATA\BE091615\  
 Data File : BE090855.D  
 Acq On : 16 Sep 2015 21:50  
 Operator : UM/IZ  
 Sample : G3679-07  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 WCSB3W

Quant Time: Sep 17 00:57:49 2015  
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE090115.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Sep 02 11:40:50 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|---------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.55  | 152  | 30400    | 5.00 | ng    | 0.00     |
| 6) Naphthalene-d8         | 10.30 | 136  | 147650   | 5.00 | ng    | 0.00     |
| 12) Acenaphthene-d10      | 14.16 | 164  | 83330    | 5.00 | ng    | 0.00     |
| 18) Phenanthrene-d10      | 16.91 | 188  | 207134   | 5.00 | ng    | 0.00     |
| 25) Chrysene-d12          | 21.07 | 240  | 270474   | 5.00 | ng    | 0.00     |
| 32) Perylene-d12          | 23.35 | 264  | 259990   | 5.00 | ng    | -0.01    |

|                             |       |     |        |      |    |       |
|-----------------------------|-------|-----|--------|------|----|-------|
| System Monitoring Compounds |       |     |        |      |    |       |
| 4) 2-Fluorophenol           | 5.18  | 112 | 24614  | 4.16 | ng | -0.01 |
| 5) Phenol-d6                | 6.75  | 99  | 22968  | 2.71 | ng | 0.00  |
| 7) Nitrobenzene-d5          | 8.70  | 82  | 31783  | 3.26 | ng | 0.00  |
| 13) 2,4,6-Tribromophenol    | 15.67 | 330 | 19042  | 7.79 | ng | 0.00  |
| 14) 2-Fluorobiphenyl        | 12.78 | 172 | 73924  | 3.20 | ng | -0.01 |
| 27) Terphenyl-d14           | 19.52 | 244 | 130093 | 4.35 | ng | -0.02 |

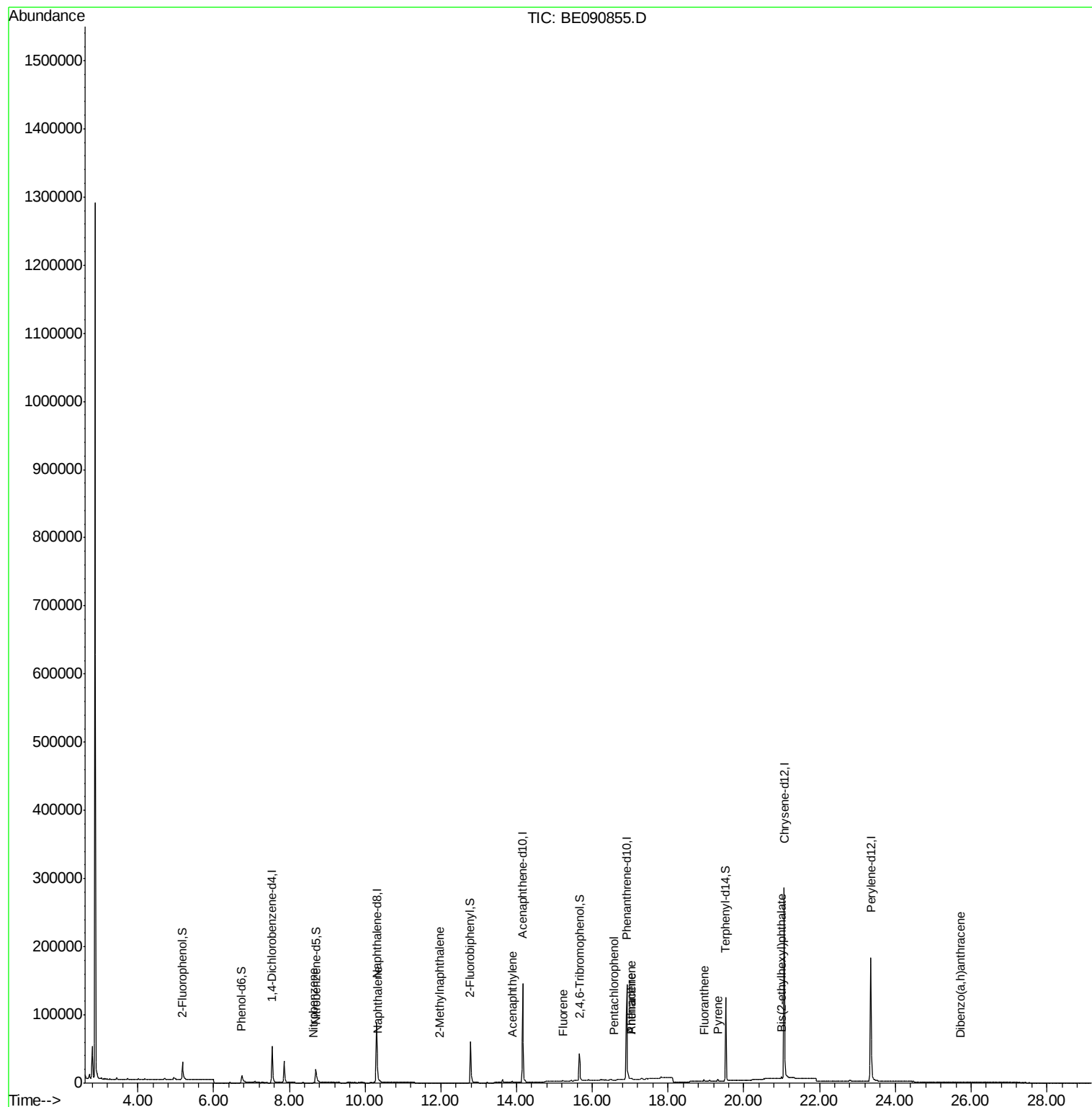
|                                |       |     |      |           |    |    |
|--------------------------------|-------|-----|------|-----------|----|----|
| Target Compounds               |       |     |      | Qvalue    |    |    |
| 2) 1,4-Dioxane                 | 3.14  | 88  | 46   | Below Cal | #  | 1  |
| 3) n-Nitrosodimethylamine      | 3.44  | 42  | 257  | Below Cal | #  | 10 |
| 8) Nitrobenzene                | 8.64  | 77  | 911  | 0.18      | ng | 56 |
| 9) Naphthalene                 | 10.35 | 128 | 1209 | 0.04      | ng | 58 |
| 11) 2-Methylnaphthalene        | 11.98 | 142 | 352  | 0.02      | ng | 78 |
| 15) Acenaphthylene             | 13.88 | 152 | 3219 | 0.02      | ng | 92 |
| 17) Fluorene                   | 15.22 | 166 | 1033 | 0.04      | ng | 90 |
| 20) Hexachlorobenzene          | 16.28 | 284 | 35   | Below Cal | #  | 1  |
| 21) Pentachlorophenol          | 16.58 | 266 | 37   | 0.47      | ng | 63 |
| 22) Phenanthrene               | 17.03 | 178 | 1307 | 0.03      | ng | 96 |
| 23) Anthracene                 | 17.03 | 178 | 1498 | 0.03      | ng | 97 |
| 24) Fluoranthene               | 18.95 | 202 | 2374 | 0.04      | ng | 91 |
| 26) Pyrene                     | 19.31 | 202 | 2871 | 0.05      | ng | 95 |
| 29) Chrysene                   | 21.10 | 228 | 769  | Below Cal | #  | 20 |
| 30) Bis(2-ethylhexyl)phthalate | 21.00 | 149 | 2751 | 0.24      | ng | 92 |
| 36) Dibenzo(a,h)anthracene     | 25.74 | 278 | 273  | 0.14      | ng | 1  |

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

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#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 7.55 min Scan# 837

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

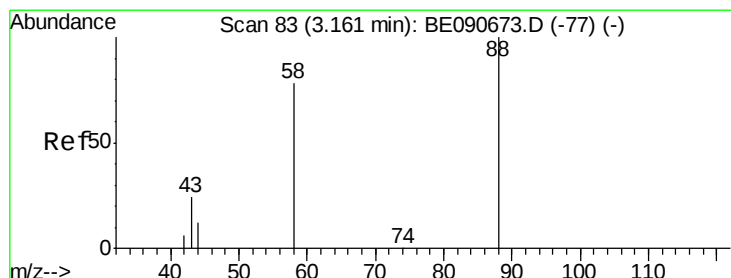
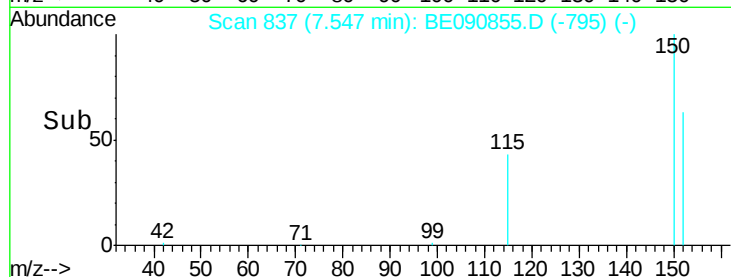
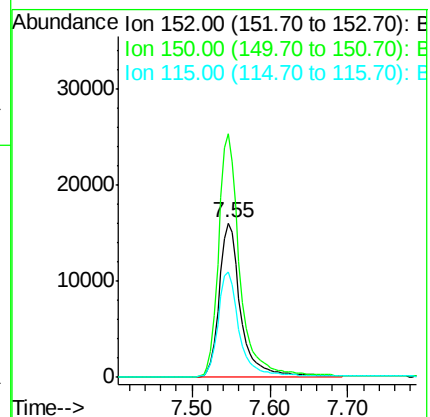
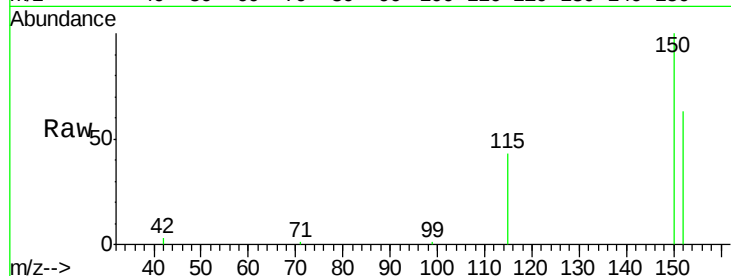
Tot Ion:152 Resp: 30400

Ion Ratio Lower Upper

152 100

150 157.6 122.2 183.4

115 68.3 51.0 76.4



#2

1,4-Dioxane

Concen: Below Cal

RT: 3.14 min Scan# 80

Delta R.T. -0.02 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

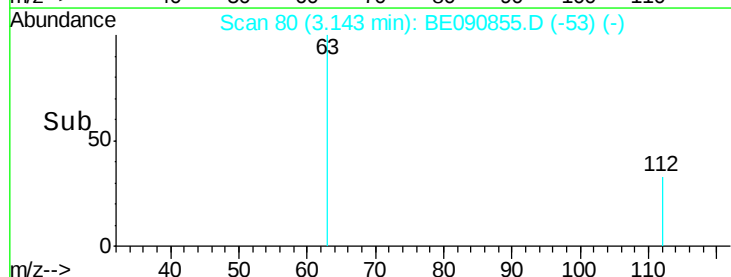
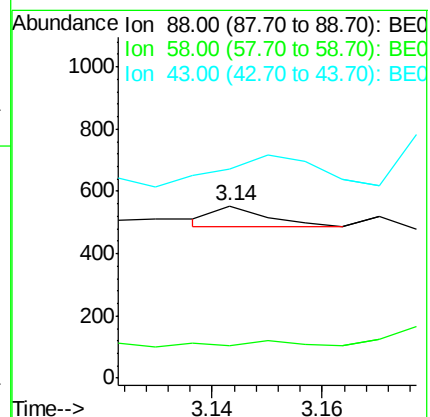
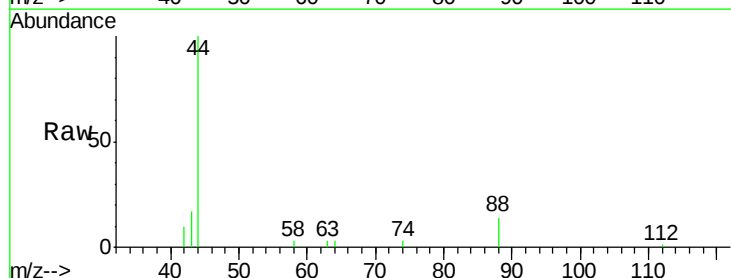
Tgt Ion: 88 Resp: 46

Ion Ratio Lower Upper

88 100

58 110.9 68.4 102.6#

43 1154.3 26.9 40.3#



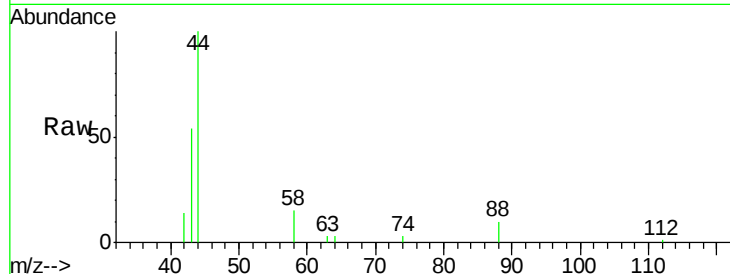


#3

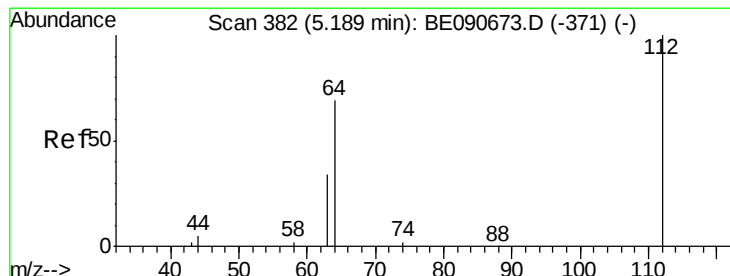
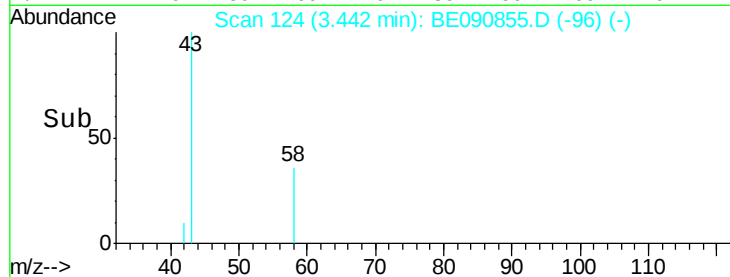
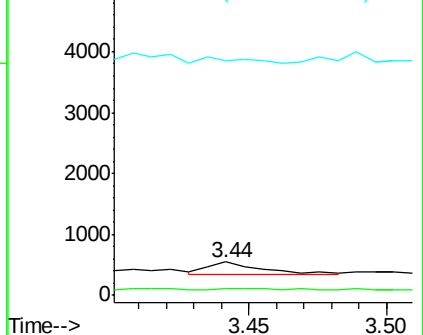
n-Nitrosodimethylamine  
 Concen: Below Cal  
 RT: 3.44 min Scan# 124  
 Delta R.T. -0.01 min  
 Lab File: BE090855.D  
 Acq: 16 Sep 2015 21:50

Instrument :  
 BNA\_E  
 ClientSampleId :  
 WCSB3W

Tot Ion: 42 Resp: 257  
 Ion Ratio Lower Upper  
 42 100  
 74 4.7 83.7 125.5#  
 44 0.0 10.0 15.0#



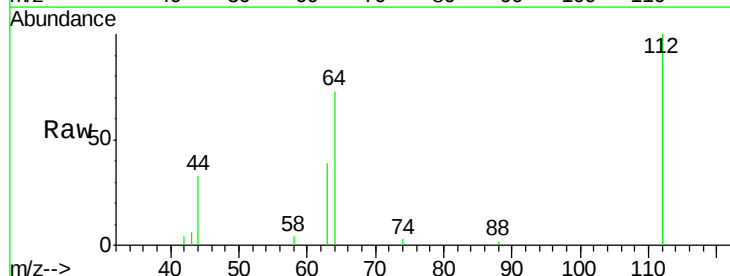
Abundance Ion 42.00 (41.70 to 42.70): BE0  
 Ion 74.00 (73.70 to 74.70): BE0  
 Ion 44.00 (43.70 to 44.70): BE0



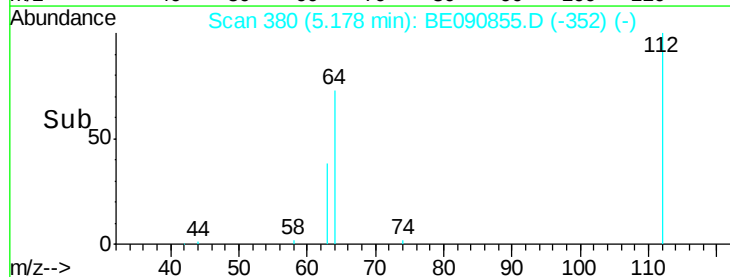
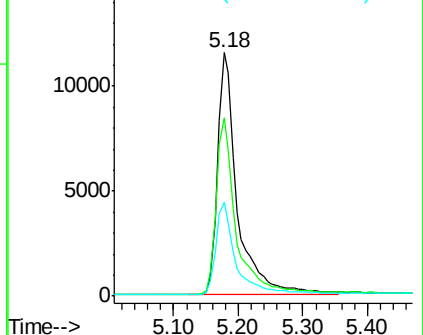
#4

2-Fluorophenol  
 Concen: 4.16 ng  
 RT: 5.18 min Scan# 380  
 Delta R.T. -0.01 min  
 Lab File: BE090855.D  
 Acq: 16 Sep 2015 21:50

Tgt Ion: 112 Resp: 24614  
 Ion Ratio Lower Upper  
 112 100  
 64 73.0 57.3 85.9  
 63 37.3 29.2 43.8



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: 2.71 ng

RT: 6.75 min Scan# 661

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

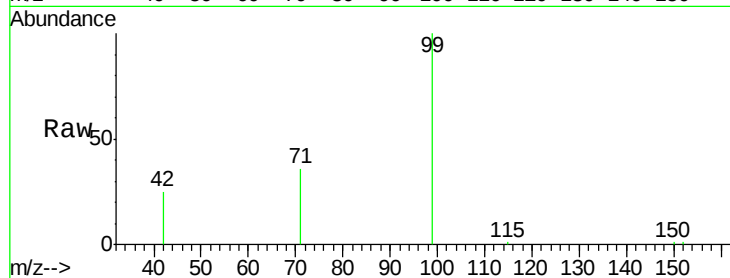
Tot Ion: 99 Resp: 22968

Ion Ratio Lower Upper

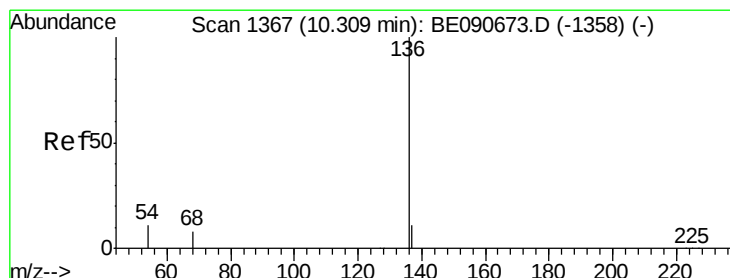
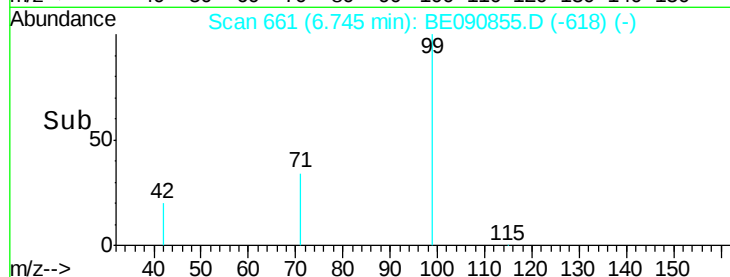
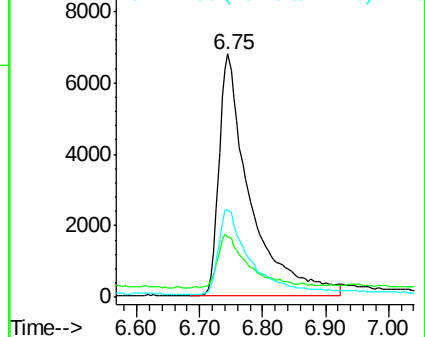
99 100

42 21.7 16.8 25.2

71 34.9 28.3 42.5



Abundance Ion 99.00 (98.70 to 99.70): BE0  
Ion 42.00 (41.70 to 42.70): BE0  
Ion 71.00 (70.70 to 71.70): BE0



#6

Naphthalene-d8

Concen: 5.00 ng

RT: 10.30 min Scan# 1366

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Tgt Ion: 136 Resp: 147650

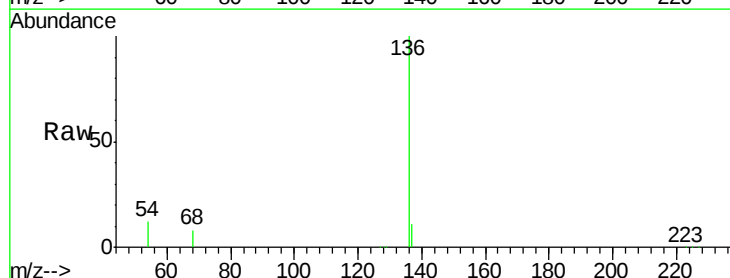
Ion Ratio Lower Upper

136 100

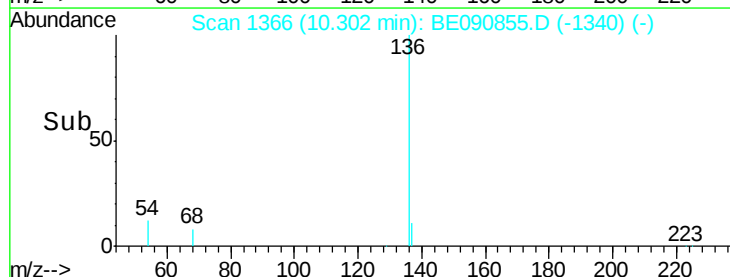
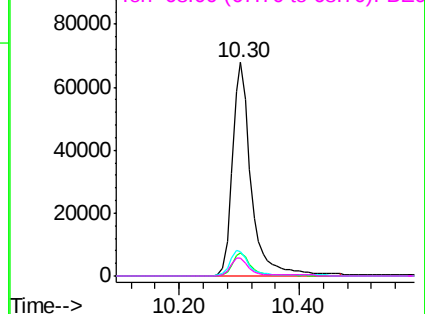
137 10.9 8.7 13.1

54 11.7 9.0 13.6

68 8.2 6.3 9.5



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





#7

Nitrobenzene-d5

Concen: 3.26 ng

RT: 8.70 min Scan# 1086

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

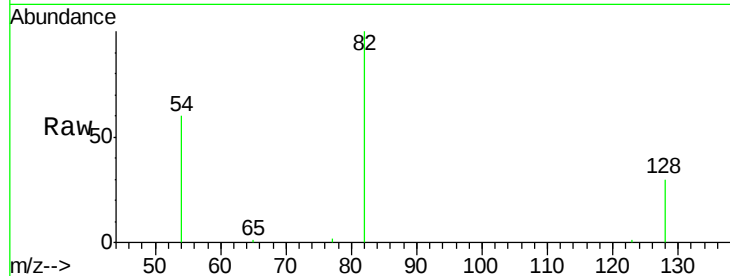
Tot Ion: 82 Resp: 31783

Ion Ratio Lower Upper

82 100

128 30.0 25.0 37.4

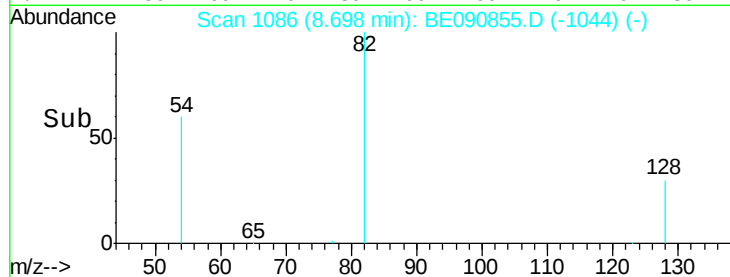
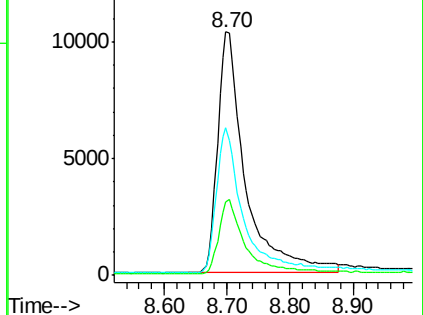
54 60.5 46.3 69.5



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



#8

Nitrobenzene

Concen: 0.18 ng

RT: 8.64 min Scan# 1073

Delta R.T. -0.11 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

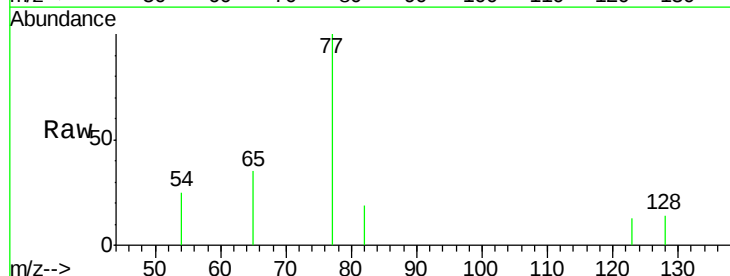
Tgt Ion: 77 Resp: 911

Ion Ratio Lower Upper

77 100

123 0.4 25.1 37.7#

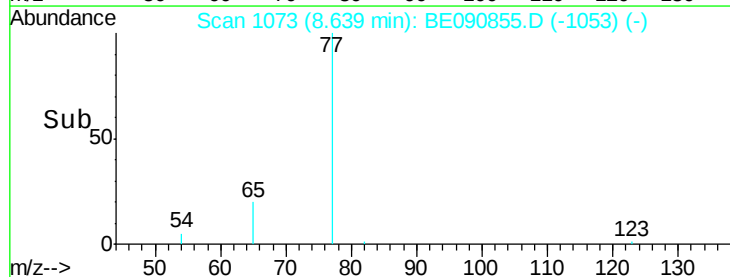
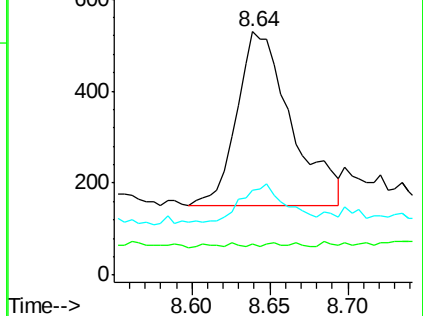
65 17.9 9.9 14.9#



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





#9

Naphthalene

Concen: 0.04 ng

RT: 10.35 min Scan# 1373

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

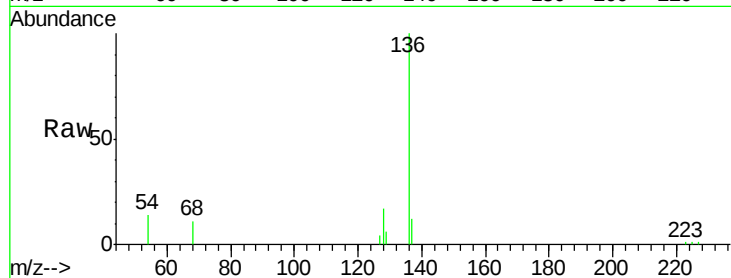
Tot Ion:128 Resp: 1209

Ion Ratio Lower Upper

128 100

129 34.8 9.0 13.6#

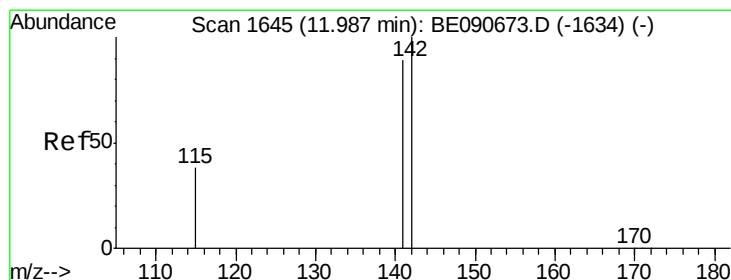
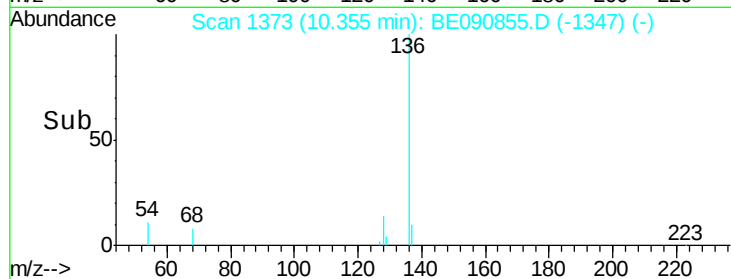
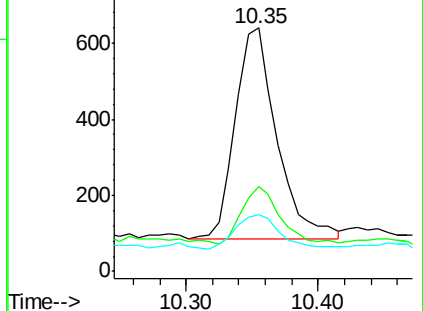
127 23.4 10.6 15.8#



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



#11

2-Methylnaphthalene

Concen: 0.02 ng

RT: 11.98 min Scan# 1644

Delta R.T. -0.00 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

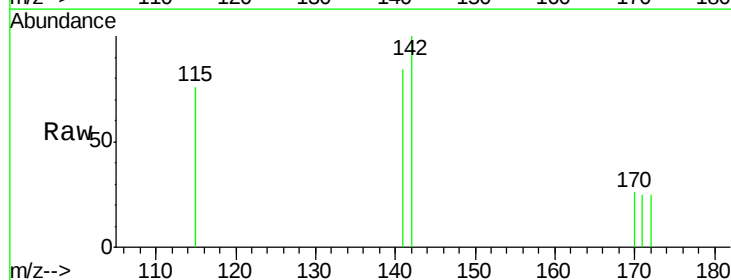
Tgt Ion:142 Resp: 352

Ion Ratio Lower Upper

142 100

141 84.3 71.4 107.2

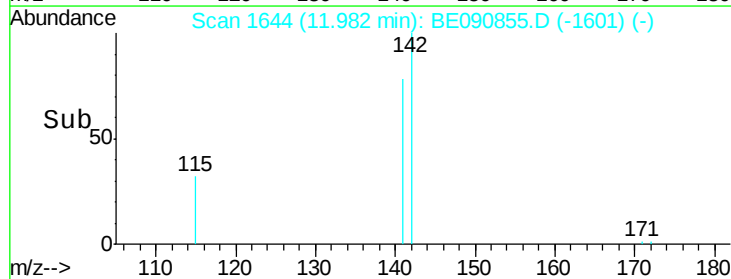
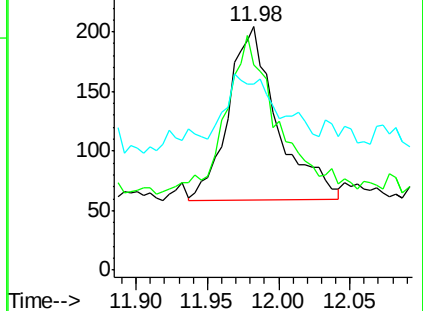
115 76.5 31.0 46.4#

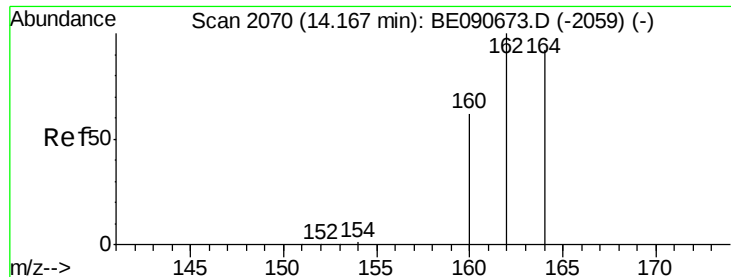


Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E





#12

Acenaphthene-d10

Concen: 5.00 ng

RT: 14.16 min Scan# 2069

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

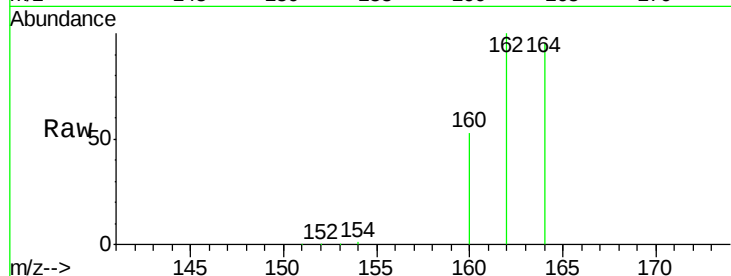
Tot Ion:164 Resp: 83330

Ion Ratio Lower Upper

164 100

162 105.2 86.8 130.2

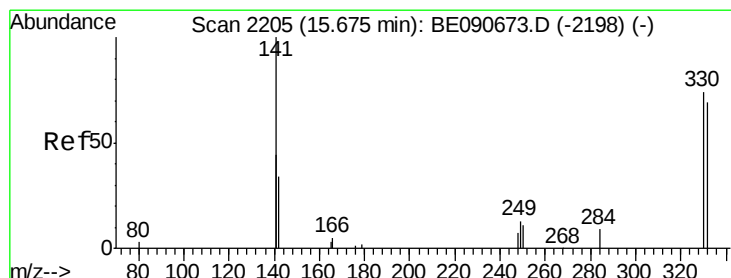
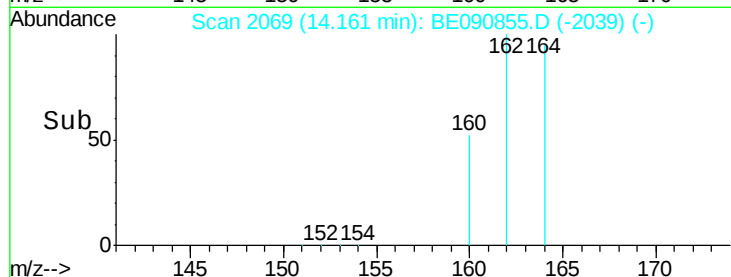
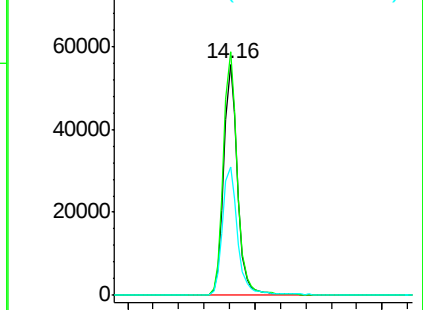
160 55.3 53.9 80.9



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



#13

2,4,6-Tribromophenol

Concen: 7.79 ng

RT: 15.67 min Scan# 2204

Delta R.T. -0.00 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

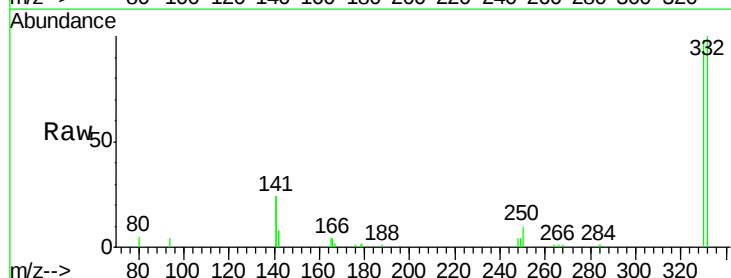
Tgt Ion:330 Resp: 19042

Ion Ratio Lower Upper

330 100

332 97.2 74.9 112.3

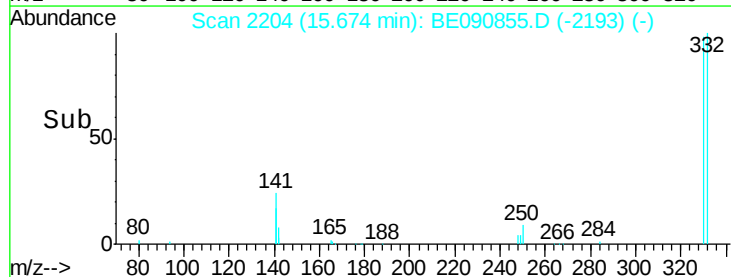
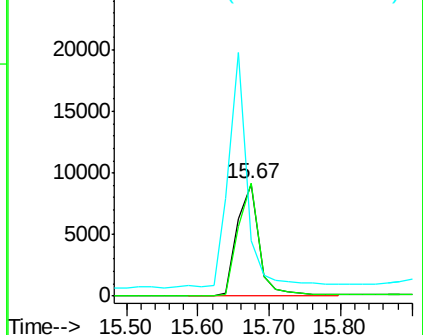
141 186.5 145.2 217.8

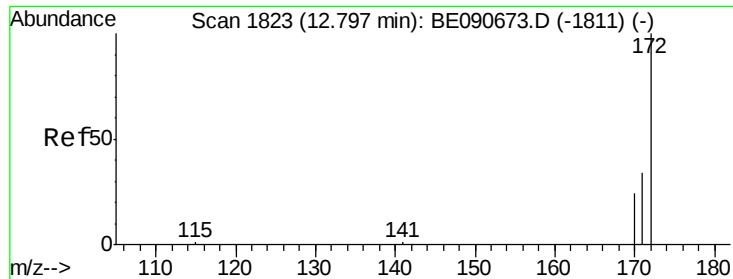


Abundance Ion 329.80 (329.50 to 330.50): E

Ion 331.80 (331.50 to 332.50): E

Ion 141.00 (140.70 to 141.70): E

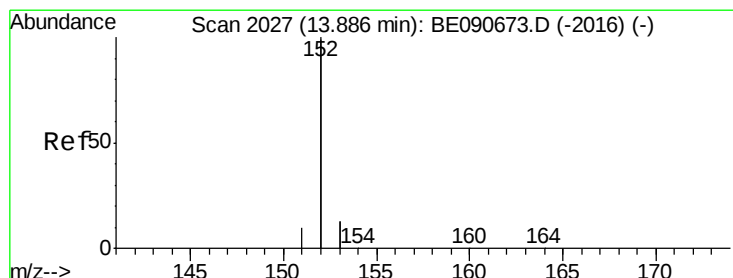
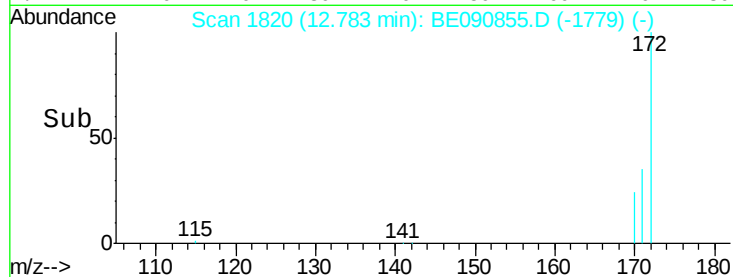
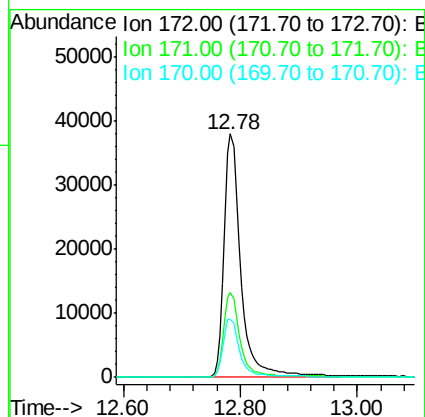
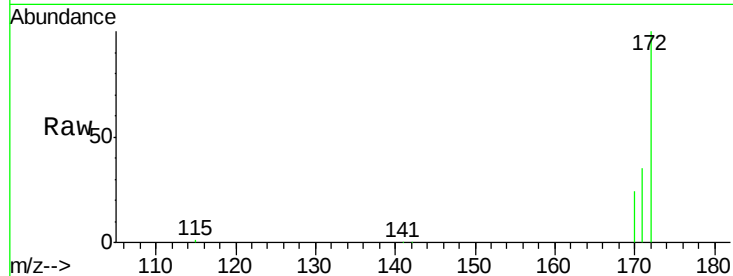




#14  
2-Fluorobiphenyl  
Concen: 3.20 ng  
RT: 12.78 min Scan# 1820  
Delta R.T. -0.01 min  
Lab File: BE090855.D  
Acq: 16 Sep 2015 21:50

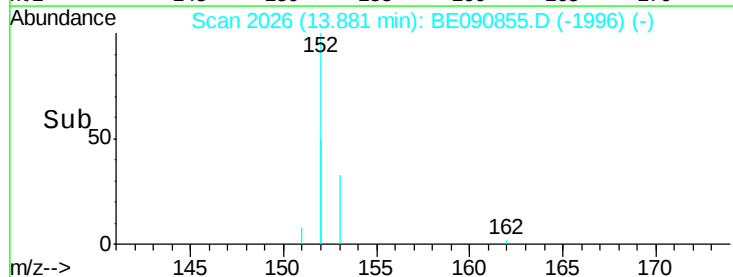
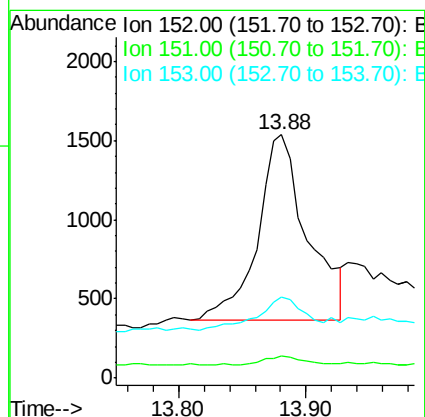
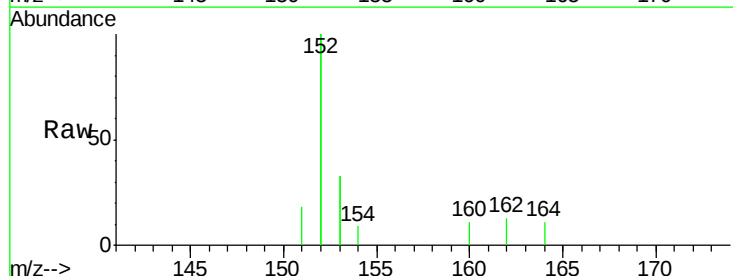
Instrument :  
BNA\_E  
ClientSampleId :  
WCSB3W

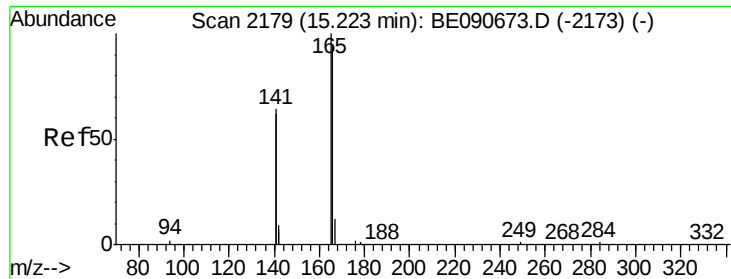
Tot Ion:172 Resp: 73924  
Ion Ratio Lower Upper  
172 100  
171 34.6 27.8 41.8  
170 23.7 19.8 29.6



#15  
Acenaphthylene  
Concen: 0.02 ng  
RT: 13.88 min Scan# 2026  
Delta R.T. -0.01 min  
Lab File: BE090855.D  
Acq: 16 Sep 2015 21:50

Tgt Ion:152 Resp: 3219  
Ion Ratio Lower Upper  
152 100  
151 4.1 3.9 5.9  
153 17.1 10.3 15.5#

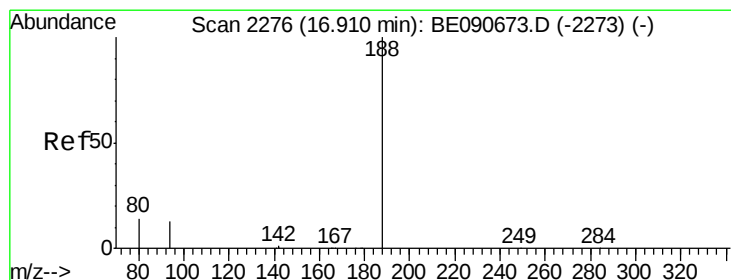
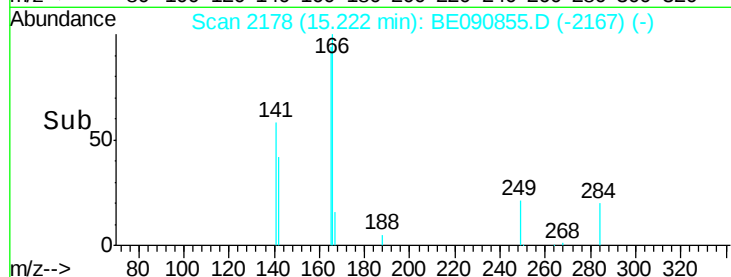
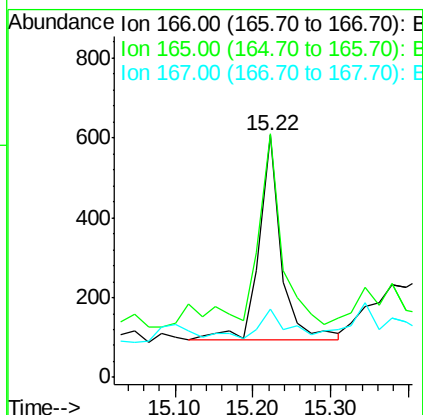
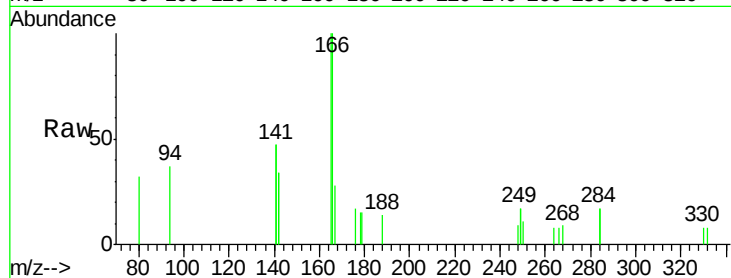




#17  
Fluorene  
Concen: 0.04 ng  
RT: 15.22 min Scan# 2178  
Delta R.T. -0.00 min  
Lab File: BE090855.D  
Acq: 16 Sep 2015 21:50

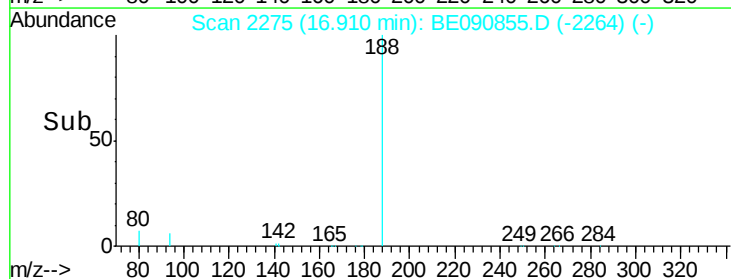
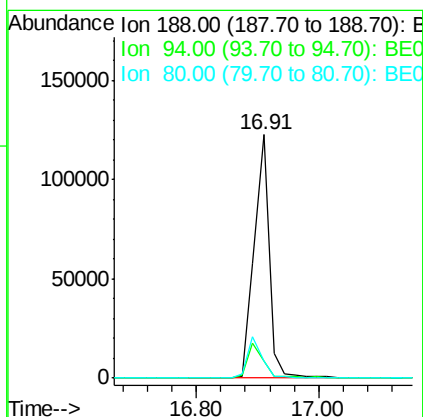
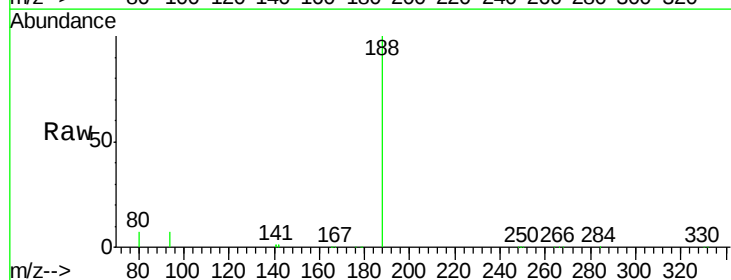
Instrument :  
BNA\_E  
ClientSampleId :  
WCSB3W

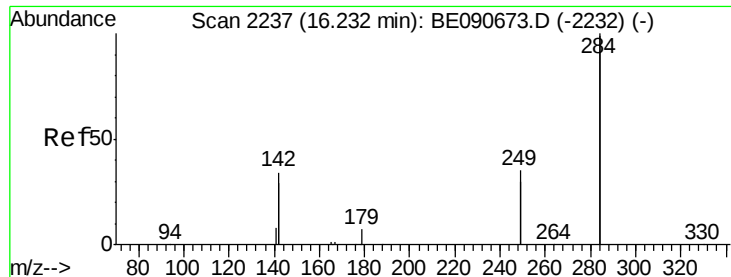
Tot Ion:166 Resp: 1033  
Ion Ratio Lower Upper  
166 100  
165 92.3 82.7 124.1  
167 15.7 10.7 16.1



#18  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 16.91 min Scan# 2275  
Delta R.T. -0.00 min  
Lab File: BE090855.D  
Acq: 16 Sep 2015 21:50

Tgt Ion:188 Resp: 207134  
Ion Ratio Lower Upper  
188 100  
94 6.8 10.3 15.5#  
80 6.8 11.0 16.6#





#20

Hexachlorobenzene

Concen: Below Cal

RT: 16.28 min Scan# 2239

Delta R.T. 0.05 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

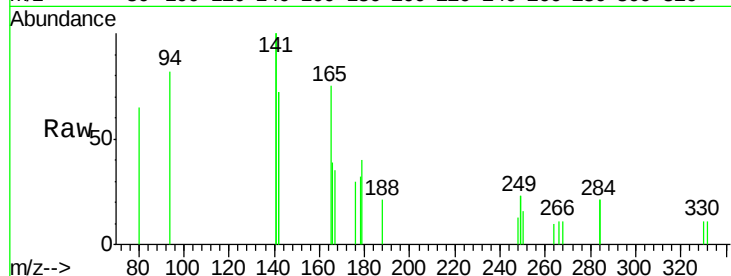
Tot Ion:284 Resp: 35

Ion Ratio Lower Upper

284 100

142 602.9 35.0 52.4#

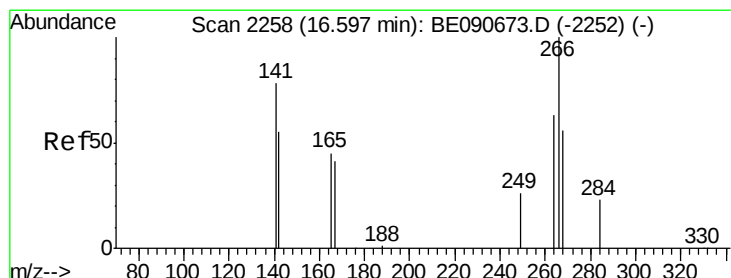
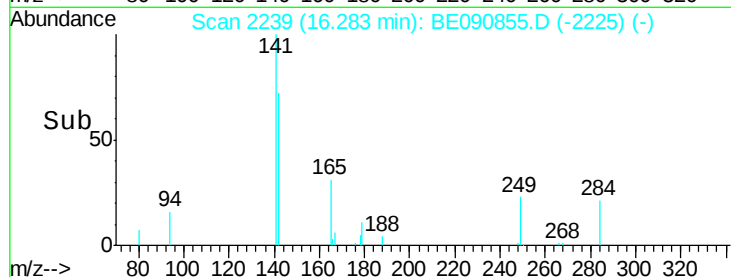
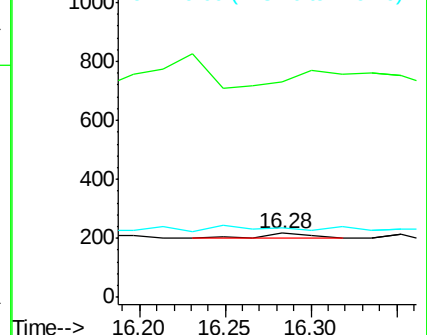
249 0.0 25.5 38.3#



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



#21

Pentachlorophenol

Concen: 0.47 ng

RT: 16.58 min Scan# 2256

Delta R.T. -0.02 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

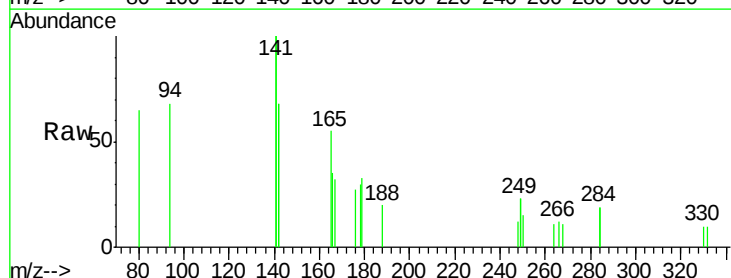
Tgt Ion:266 Resp: 37

Ion Ratio Lower Upper

266 100

268 95.3 49.6 74.4#

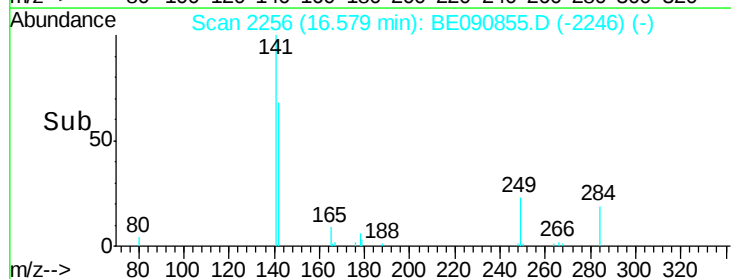
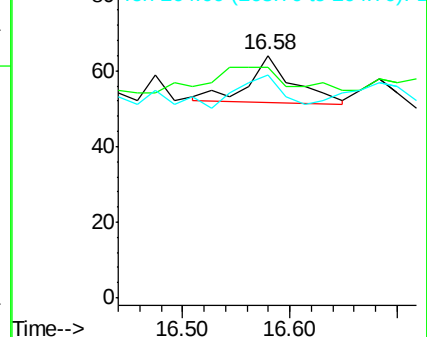
264 92.2 53.9 80.9#

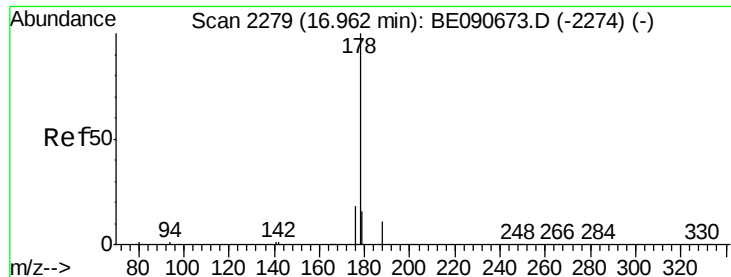


Abundance Ion 265.70 (265.40 to 266.40): E

Ion 268.00 (267.70 to 268.70): E

Ion 264.00 (263.70 to 264.70): E





#22

Phenanthrene

Concen: 0.03 ng

RT: 17.03 min Scan# 2282

Delta R.T. 0.07 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

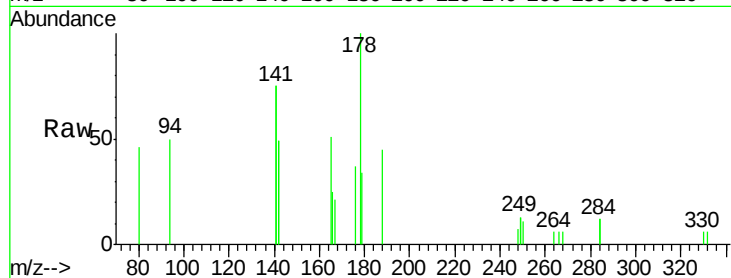
Tot Ion:178 Resp: 1307

Ion Ratio Lower Upper

178 100

176 21.3 15.6 23.4

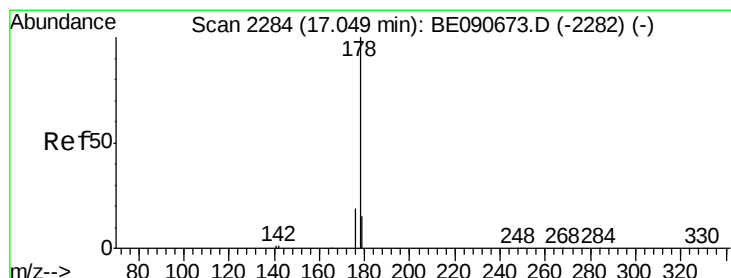
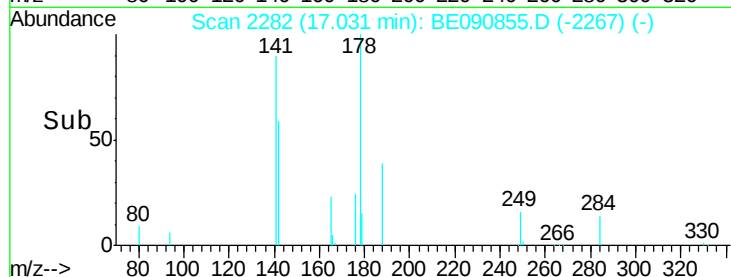
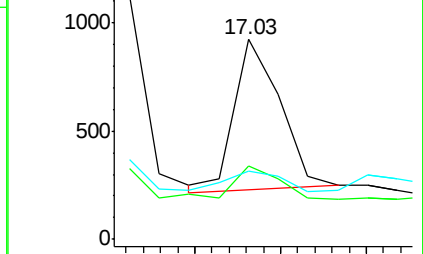
179 18.1 12.8 19.2



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



#23

Anthracene

Concen: 0.03 ng

RT: 17.03 min Scan# 2282

Delta R.T. -0.02 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

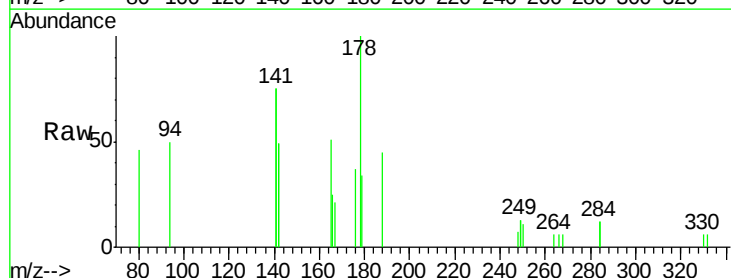
Tgt Ion:178 Resp: 1498

Ion Ratio Lower Upper

178 100

176 19.9 15.0 22.6

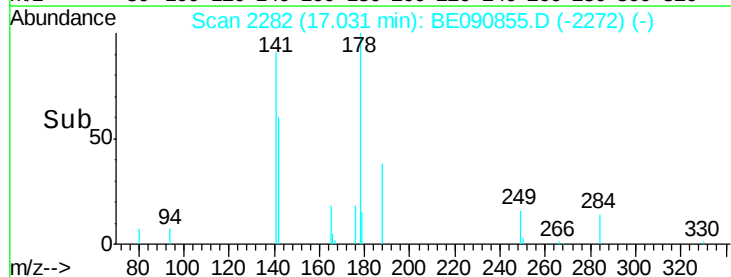
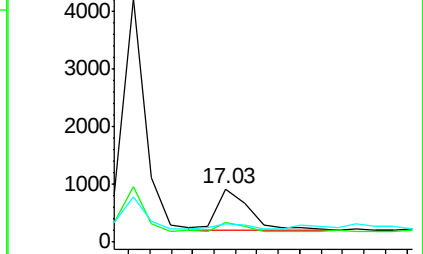
179 14.2 12.3 18.5

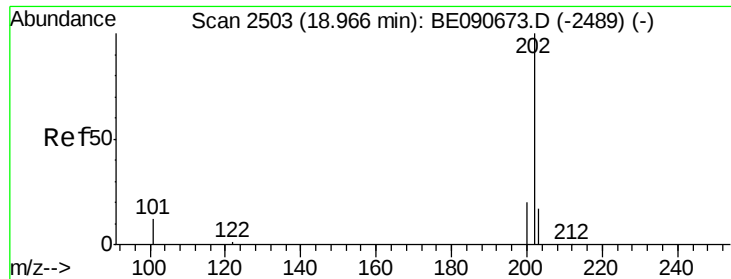


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#24

Fluoranthene

Concen: 0.04 ng

RT: 18.95 min Scan# 2499

Delta R.T. -0.02 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

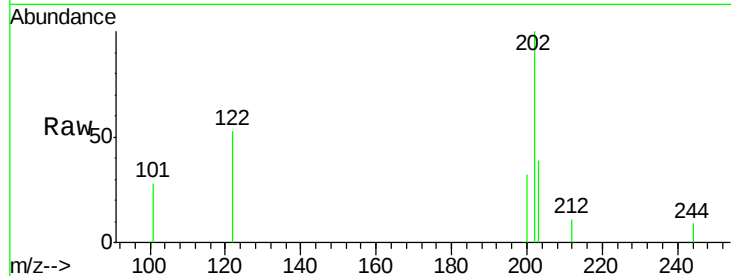
Tot Ion:202 Resp: 2374

Ion Ratio Lower Upper

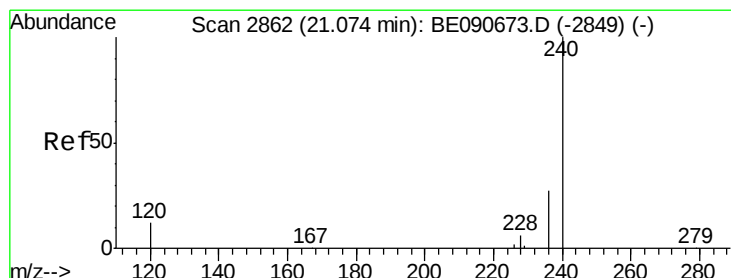
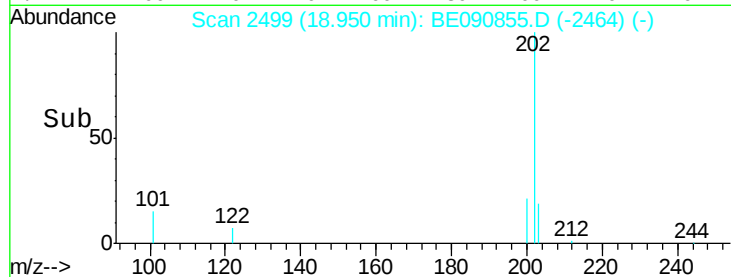
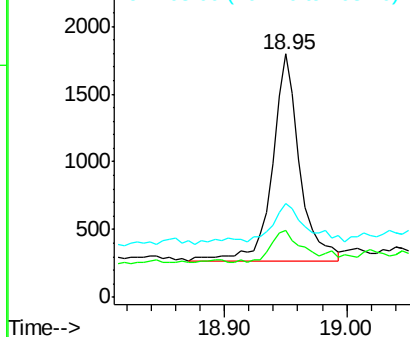
202 100

101 17.4 11.0 16.6#

203 21.7 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



#25

Chrysene-d12

Concen: 5.00 ng

RT: 21.07 min Scan# 2859

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

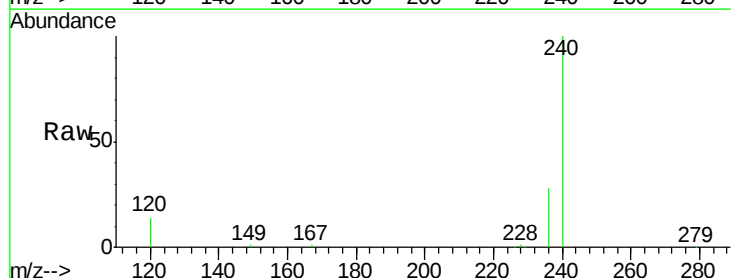
Tgt Ion:240 Resp: 270474

Ion Ratio Lower Upper

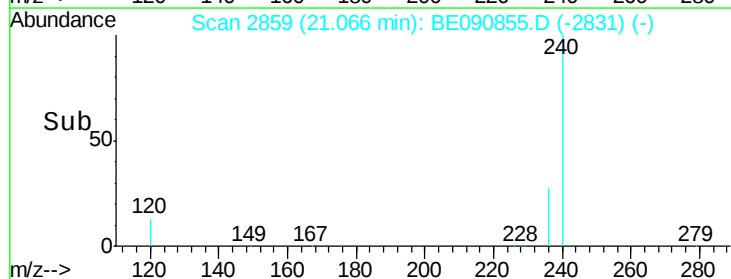
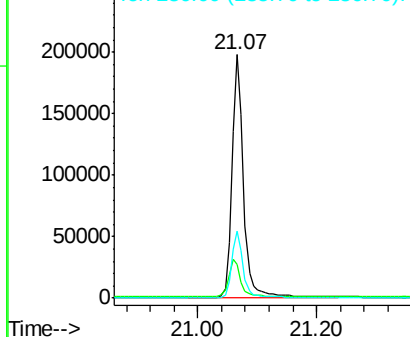
240 100

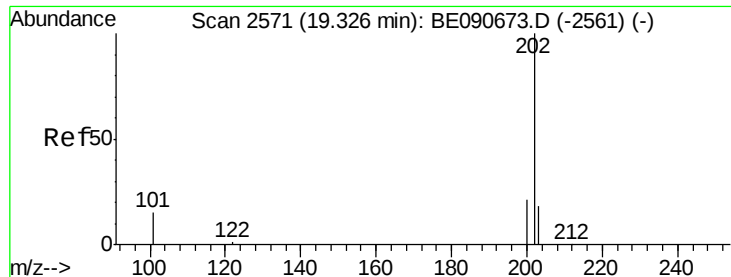
120 14.1 10.1 15.1

236 27.6 21.9 32.9



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





#26

Pvrene

Concen: 0.05 ng

RT: 19.31 min Scan# 2567

Delta R.T. -0.02 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

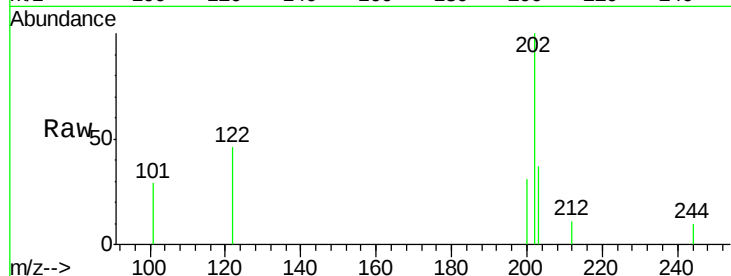
Tot Ion:202 Resp: 2871

Ion Ratio Lower Upper

202 100

200 21.4 16.7 25.1

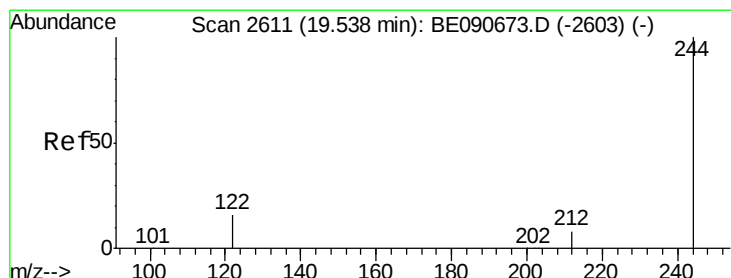
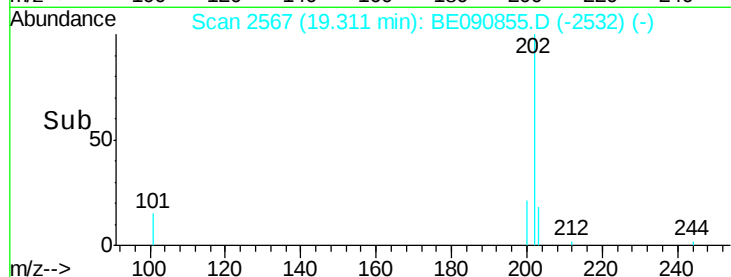
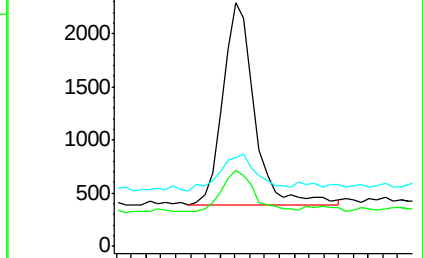
203 21.7 13.8 20.6#



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#27

Terphenyl-d14

Concen: 4.35 ng

RT: 19.52 min Scan# 2607

Delta R.T. -0.02 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

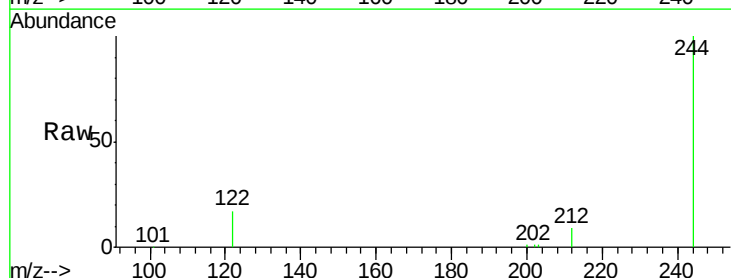
Tgt Ion:244 Resp: 130093

Ion Ratio Lower Upper

244 100

212 8.7 6.9 10.3

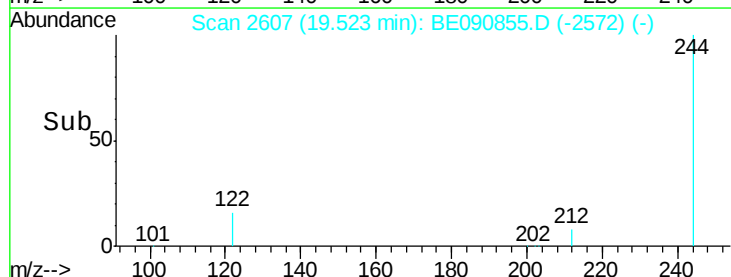
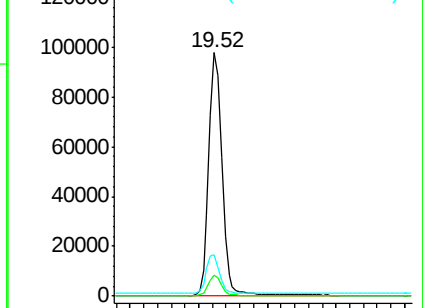
122 16.8 12.9 19.3

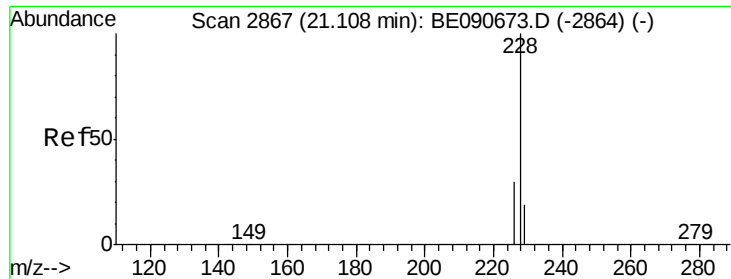


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





#29

Chrysene

Concen: Below Cal

RT: 21.10 min Scan# 2864

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

Instrument :

BNA\_E

ClientSampleId :

WCSB3W

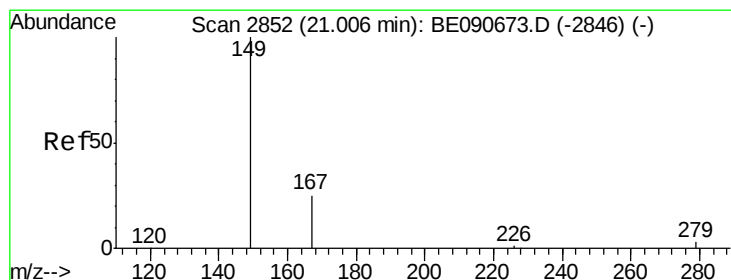
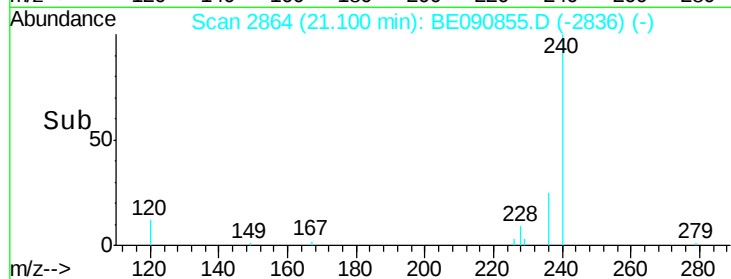
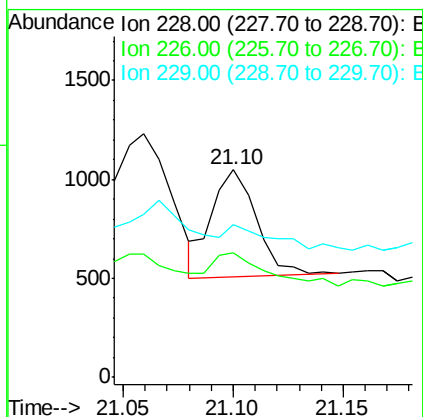
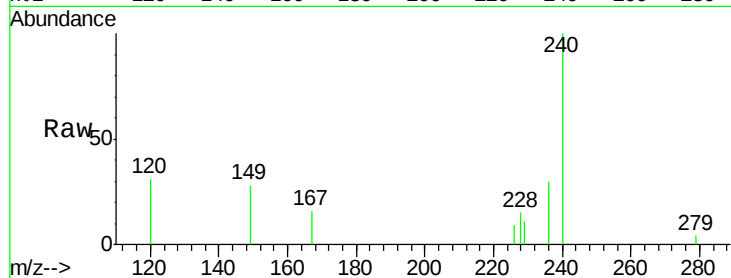
Tot Ion:228 Resp: 769

Ion Ratio Lower Upper

228 100

226 60.2 24.2 36.4#

229 73.5 15.3 22.9#



#30

Bis(2-ethylhexyl)phthalate

Concen: 0.24 ng

RT: 21.00 min Scan# 2849

Delta R.T. -0.01 min

Lab File: BE090855.D

Acq: 16 Sep 2015 21:50

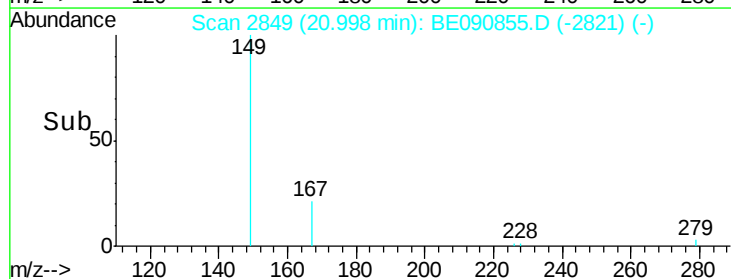
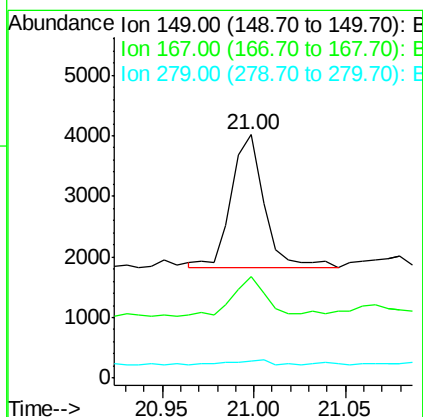
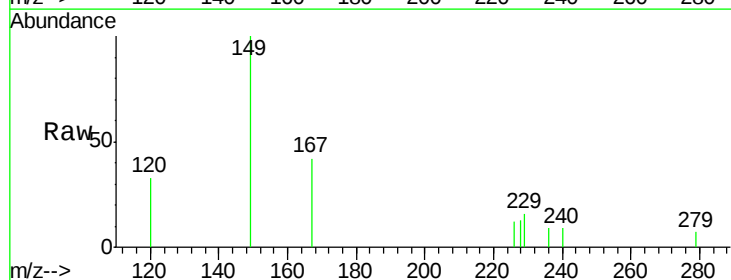
Tgt Ion:149 Resp: 2751

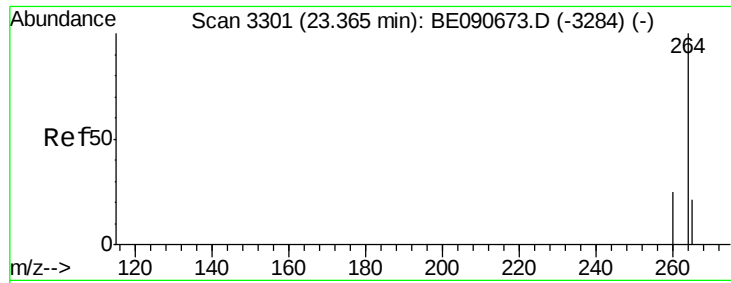
Ion Ratio Lower Upper

149 100

167 29.3 20.1 30.1

279 5.2 2.3 3.5#

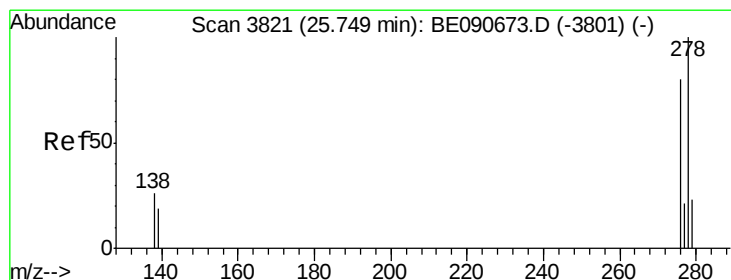
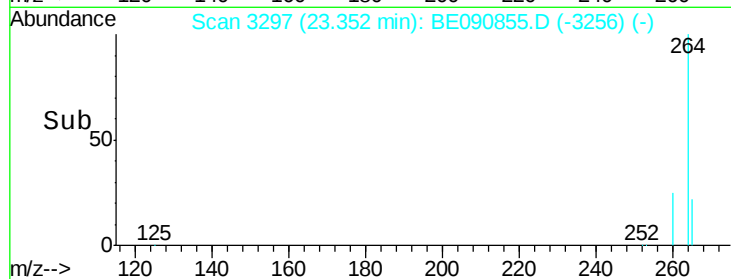
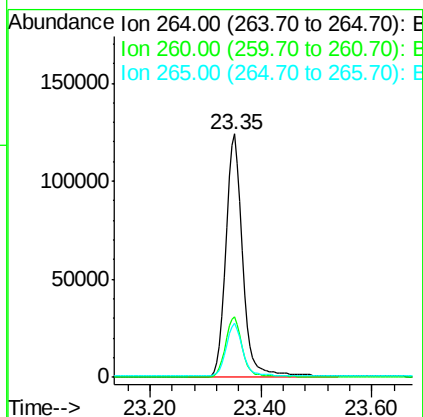
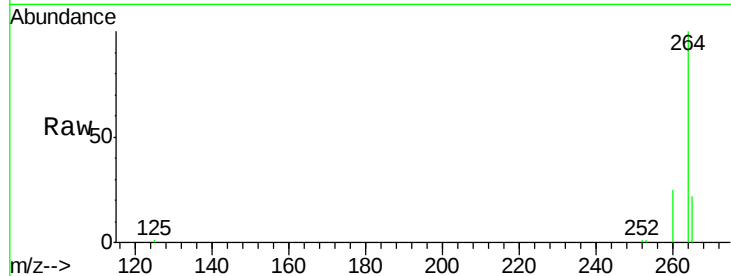




#32  
 Pervlene-d12  
 Concen: 5.00 ng  
 RT: 23.35 min Scan# 3297  
 Delta R.T. -0.01 min  
 Lab File: BE090855.D  
 Acq: 16 Sep 2015 21:50

Instrument :  
 BNA\_E  
 ClientSampleId :  
 WCSB3W

Tot Ion:264 Resp: 259990  
 Ion Ratio Lower Upper  
 264 100  
 260 24.8 19.7 29.5  
 265 22.1 17.5 26.3



#36  
 Dibenzo(a,h)anthracene  
 Concen: 0.14 ng  
 RT: 25.74 min Scan# 3817  
 Delta R.T. -0.01 min  
 Lab File: BE090855.D  
 Acq: 16 Sep 2015 21:50

Tgt Ion:278 Resp: 273  
 Ion Ratio Lower Upper  
 278 100  
 139 170.6 15.4 23.0#  
 279 98.2 18.8 28.2#

