

Data Path : Z:\HPCHEM1\BNA\_E\DATA\BE102414\  
 Data File : BE088208.D  
 Acq On : 24 Oct 2014 12:40  
 Operator : TP/JJ  
 Sample : SSTDICC0.1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 DFTPP

Quant Time: Oct 27 12:41:36 2014  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-PAH-BE102414.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Oct 27 12:38:23 2014  
 Response via : Initial Calibration

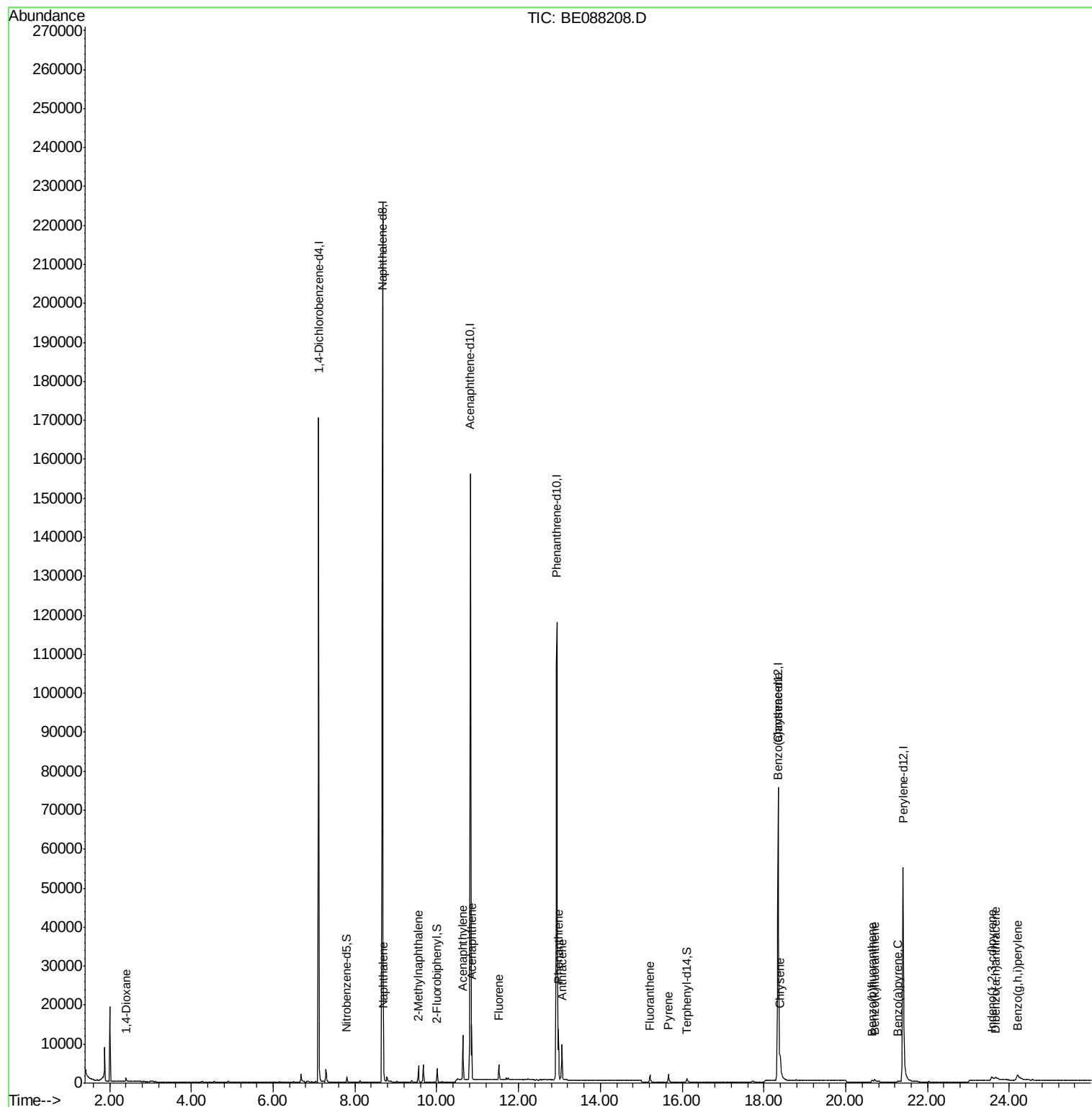
| Internal Standards          | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|-----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.11  | 152  | 55434    | 5.00 | ng    | 0.00     |
| 3) Naphthalene-d8           | 8.68  | 136  | 209512   | 5.00 | ng    | 0.00     |
| 7) Acenaphthene-d10         | 10.83 | 164  | 92417    | 5.00 | ng    | 0.00     |
| 12) Phenanthrene-d10        | 12.94 | 188  | 162425   | 5.00 | ng    | 0.00     |
| 16) Chrysene-d12            | 18.35 | 240  | 91442    | 5.00 | ng    | 0.00     |
| 22) Perylene-d12            | 21.40 | 264  | 82054    | 5.00 | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |      |       |          |
| 4) Nitrobenzene-d5          | 7.80  | 82   | 903      | 0.07 | ng    | 0.00     |
| 8) 2-Fluorobiphenyl         | 10.01 | 172  | 2451     | 0.10 | ng    | 0.00     |
| 18) Terphenyl-d14           | 16.11 | 244  | 1194     | 0.08 | ng    | 0.00     |
| Target Compounds            |       |      |          |      |       | Qvalue   |
| 2) 1,4-Dioxane              | 2.40  | 88   | 680      | 0.09 | ng    | # 80     |
| 5) Naphthalene              | 8.70  | 128  | 4244     | 0.10 | ng    | 98       |
| 6) 2-Methylnaphthalene      | 9.55  | 142  | 2314     | 0.09 | ng    | 98       |
| 9) Acenaphthylene           | 10.64 | 152  | 11746    | 0.09 | ng    | 99       |
| 10) Acenaphthene            | 10.86 | 154  | 2359     | 0.11 | ng    | 86       |
| 11) Fluorene                | 11.52 | 166  | 1965     | 0.09 | ng    | 98       |
| 13) Phenanthrene            | 12.97 | 178  | 17064    | 0.13 | ng    | # 75     |
| 14) Anthracene              | 13.06 | 178  | 10166    | 0.09 | ng    | # 92     |
| 15) Fluoranthene            | 15.21 | 202  | 1854     | 0.08 | ng    | 99       |
| 17) Pyrene                  | 15.67 | 202  | 2017     | 0.08 | ng    | 99       |
| 19) Benzo(a)anthracene      | 18.33 | 228  | 6641     | 0.09 | ng    | 94       |
| 20) Chrysene                | 18.40 | 228  | 8664     | 0.11 | ng    | # 92     |
| 21) Indeno(1,2,3-cd)pyrene  | 23.57 | 276  | 2209     | 0.03 | ng    | # 65     |
| 23) Benzo(b)fluoranthene    | 20.64 | 252  | 792      | 0.06 | ng    | # 77     |
| 24) Benzo(k)fluoranthene    | 20.70 | 252  | 2048     | 0.10 | ng    | # 84     |
| 25) Benzo(a)pyrene          | 21.28 | 252  | 646      | 0.05 | ng    | # 72     |
| 26) Dibenzo(a,h)anthracene  | 23.68 | 278  | 620      | 0.05 | ng    | # 63     |
| 27) Benzo(g,h,i)perylene    | 24.20 | 276  | 5486     | 0.08 | ng    | # 79     |

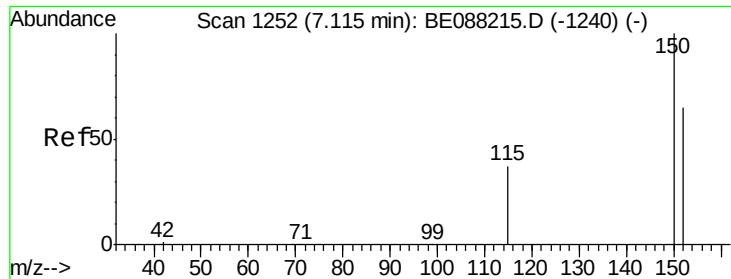
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Mon Oct 27 12:38:23 2014  
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#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 7.11 min Scan# 1252

Delta R.T. -0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

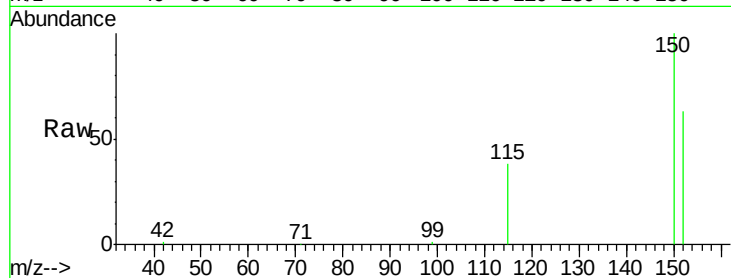
Tgt Ion: 152 Resp: 55434

Ion Ratio Lower Upper

152 100

150 157.8 123.2 184.8

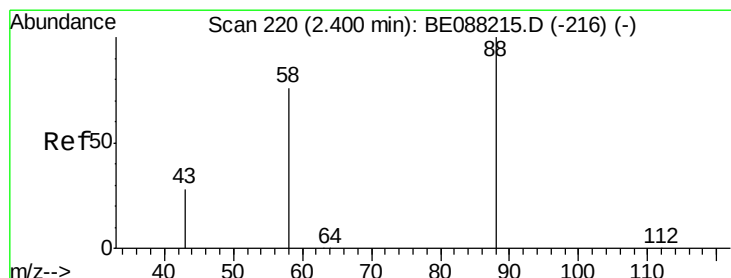
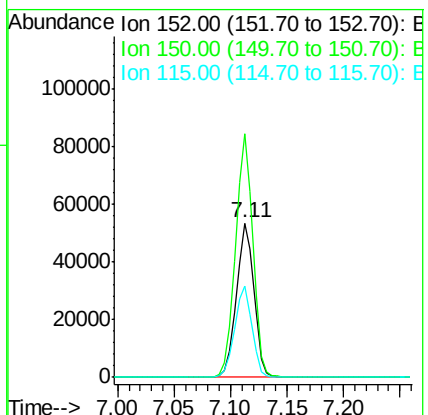
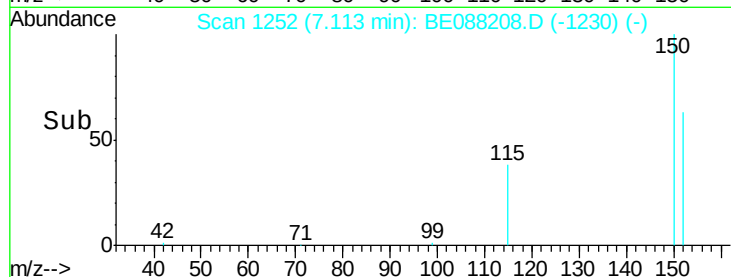
115 59.3 45.3 67.9



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

1,4-Dioxane

Concen: 0.09 ng

RT: 2.40 min Scan# 221

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

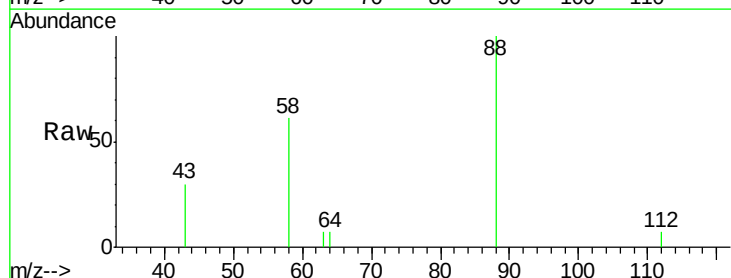
Tgt Ion: 88 Resp: 680

Ion Ratio Lower Upper

88 100

58 80.1 59.0 88.4

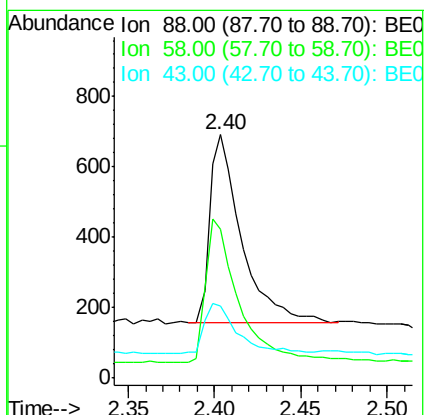
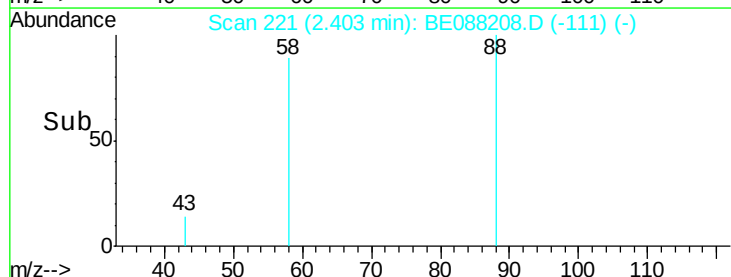
43 0.0 21.9 32.9#

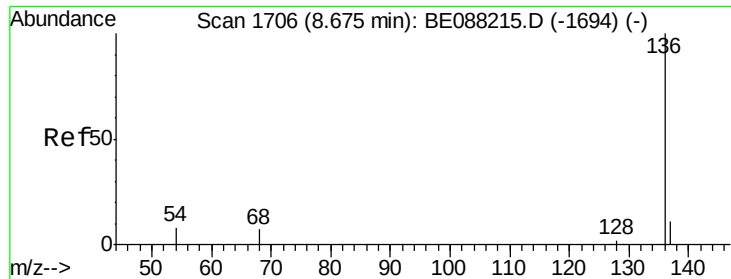


Abundance Ion 88.00 (87.70 to 88.70): BE0

Ion 58.00 (57.70 to 58.70): BE0

Ion 43.00 (42.70 to 43.70): BE0

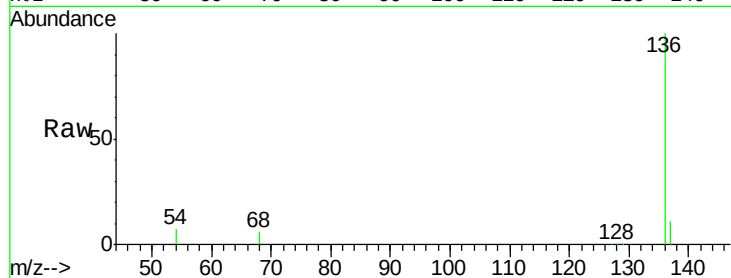




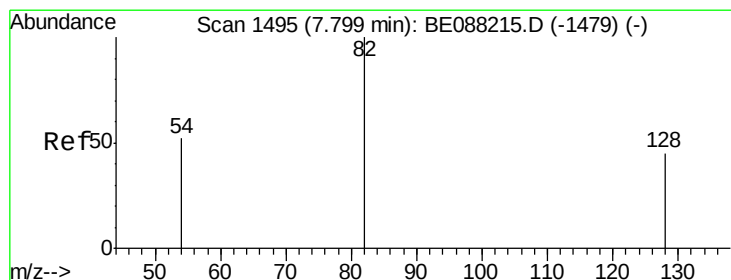
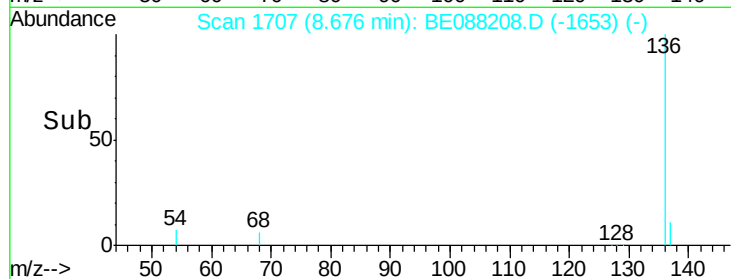
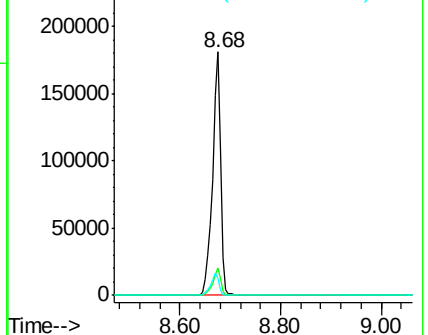
#3  
Naphthalene-d8  
Concen: 5.00 ng  
RT: 8.68 min Scan# 1707  
Delta R.T. 0.00 min  
Lab File: BE088208.D  
Acq: 24 Oct 2014 12:40

Instrument :  
BNA\_E  
ClientSampleId :  
DFTPP

Tgt Ion: 136 Resp: 209512  
Ion Ratio Lower Upper  
136 100  
137 11.0 8.7 13.1  
54 6.9 6.1 9.1

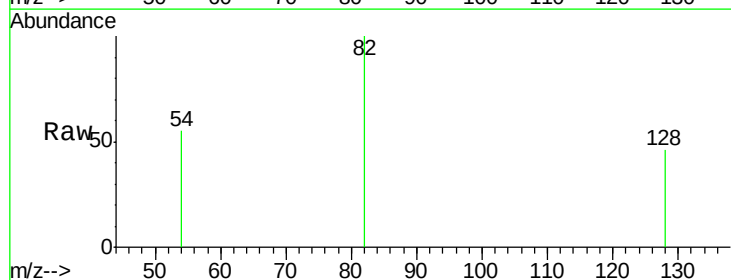


Abundance Ion 136.00 (135.70 to 136.70): BE088208.D (-1694) (-)  
Ion 137.00 (136.70 to 137.70): BE088208.D (-1694) (-)  
Ion 54.00 (53.70 to 54.70): BE088208.D (-1694) (-)

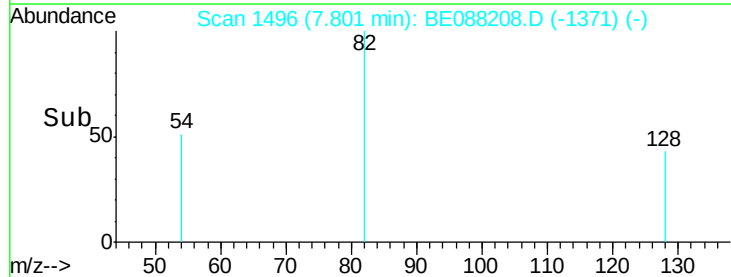
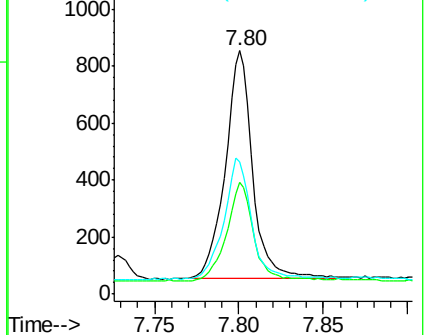


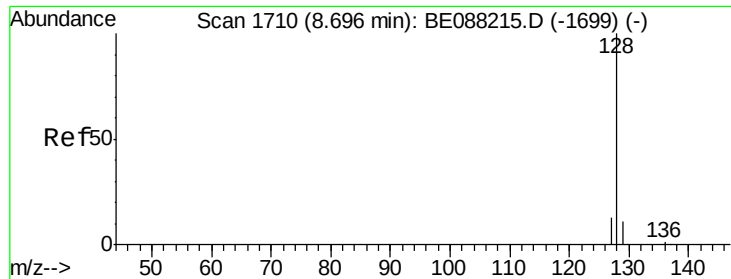
#4  
Nitrobenzene-d5  
Concen: 0.07 ng  
RT: 7.80 min Scan# 1496  
Delta R.T. 0.00 min  
Lab File: BE088208.D  
Acq: 24 Oct 2014 12:40

Tgt Ion: 82 Resp: 903  
Ion Ratio Lower Upper  
82 100  
128 46.1 36.2 54.2  
54 54.5 41.8 62.8



Abundance Ion 82.00 (81.70 to 82.70): BE088208.D (-1371) (-)  
Ion 128.00 (127.70 to 128.70): BE088208.D (-1371) (-)  
Ion 54.00 (53.70 to 54.70): BE088208.D (-1371) (-)





#5

Naphthalene

Concen: 0.10 ng

RT: 8.70 min Scan# 1711

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

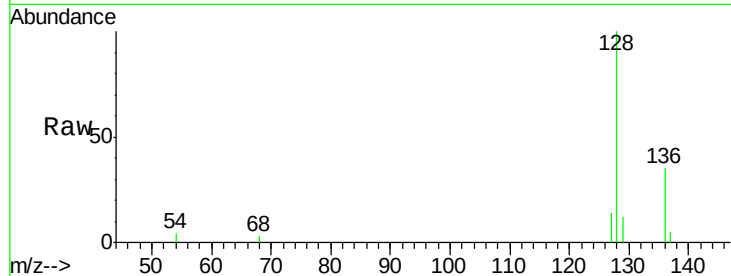
Tgt Ion:128 Resp: 4244

Ion Ratio Lower Upper

128 100

129 11.9 8.6 12.8

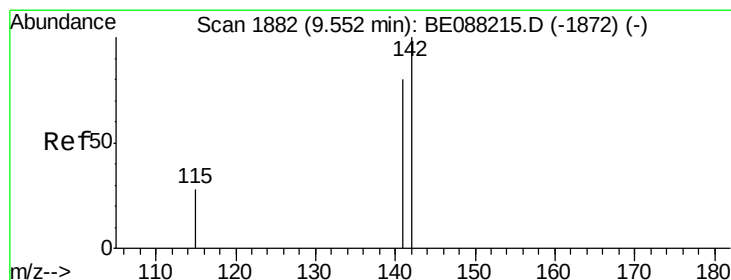
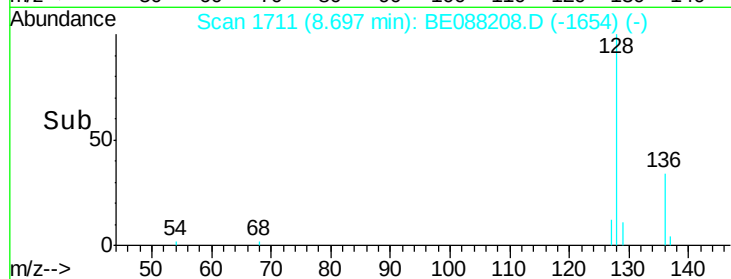
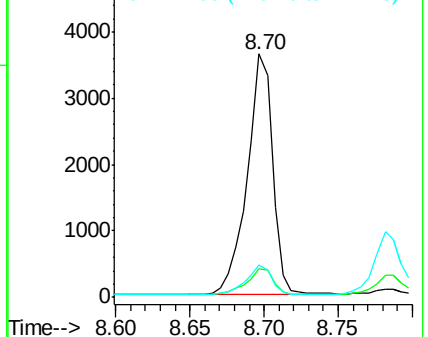
127 13.6 10.4 15.6



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#6

2-Methylnaphthalene

Concen: 0.09 ng

RT: 9.55 min Scan# 1883

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

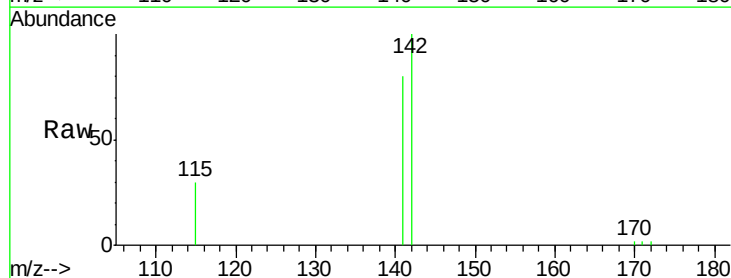
Tgt Ion:142 Resp: 2314

Ion Ratio Lower Upper

142 100

141 80.3 63.7 95.5

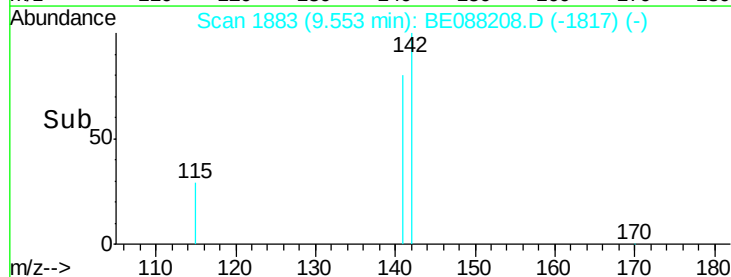
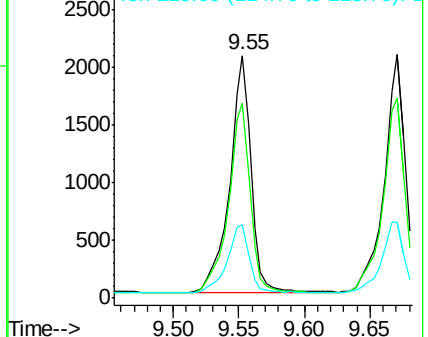
115 30.2 22.6 34.0

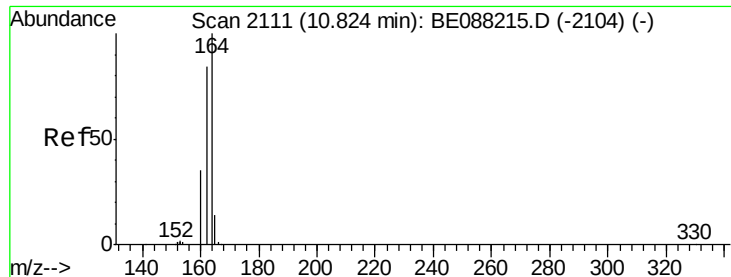


Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E





#7

Acenaphthene-d10

Concen: 5.00 ng

RT: 10.83 min Scan# 2112

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

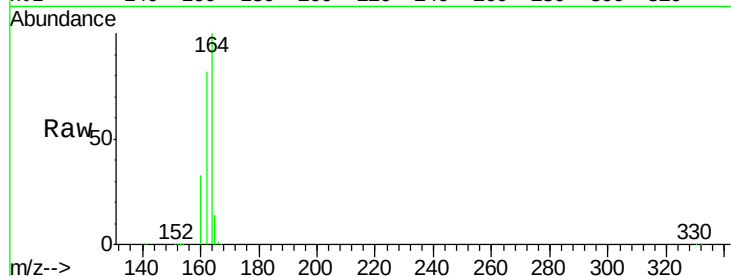
Tgt Ion:164 Resp: 92417

Ion Ratio Lower Upper

164 100

162 82.1 67.4 101.0

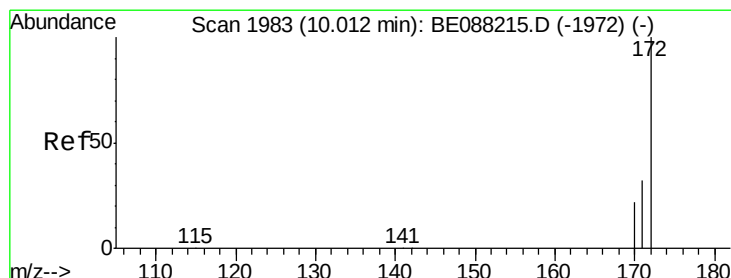
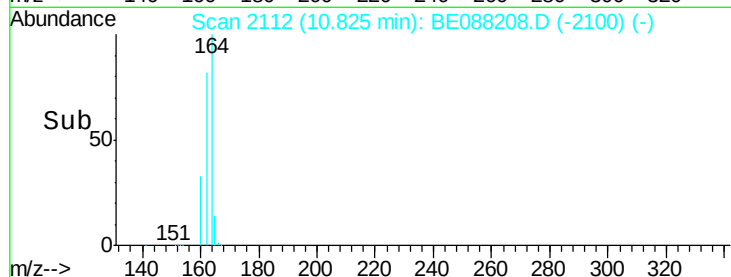
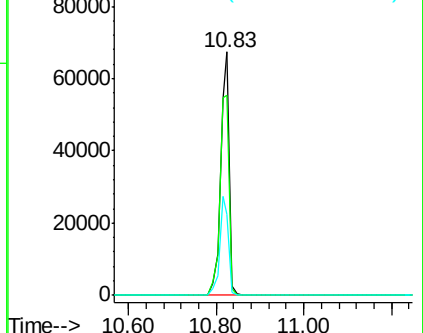
160 33.4 27.7 41.5



Abundance Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E



#8

2-Fluorobiphenyl

Concen: 0.10 ng

RT: 10.01 min Scan# 1984

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

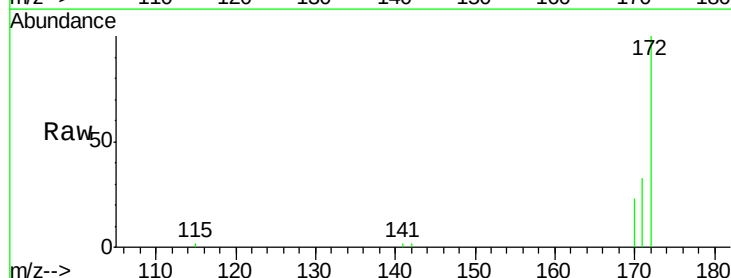
Tgt Ion:172 Resp: 2451

Ion Ratio Lower Upper

172 100

171 32.9 25.8 38.6

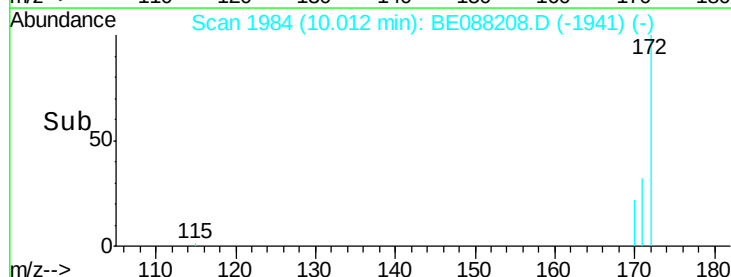
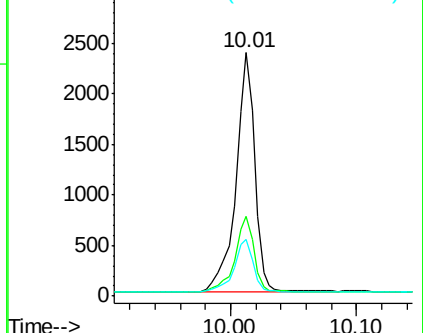
170 23.1 17.4 26.0

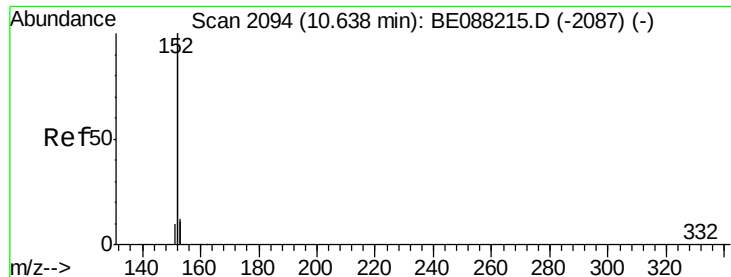


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





#9

Acenaphthylene

Concen: 0.09 ng

RT: 10.64 min Scan# 2095

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

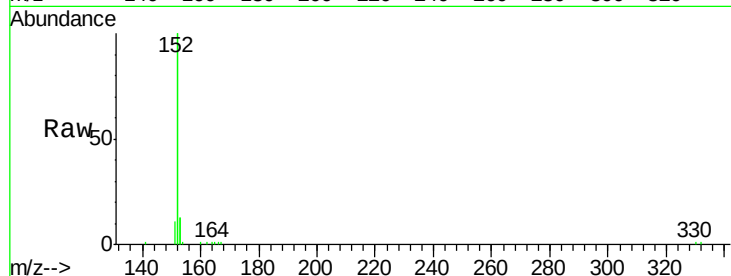
Tgt Ion:152 Resp: 11746

Ion Ratio Lower Upper

152 100

151 4.5 3.7 5.5

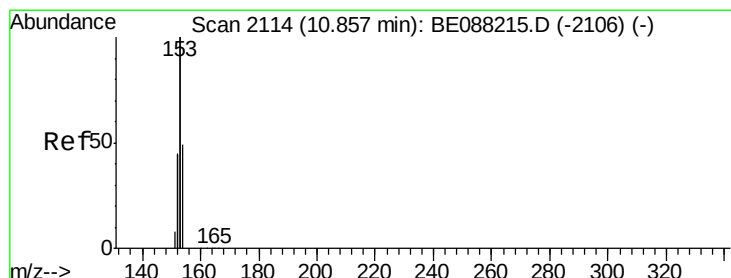
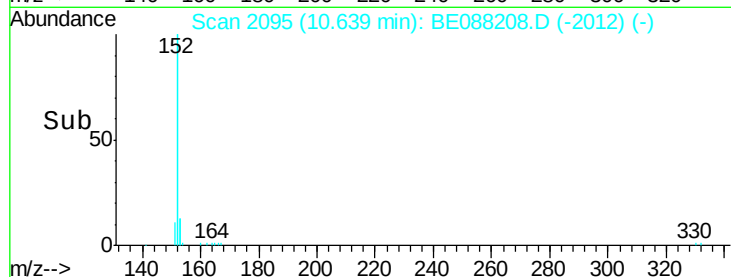
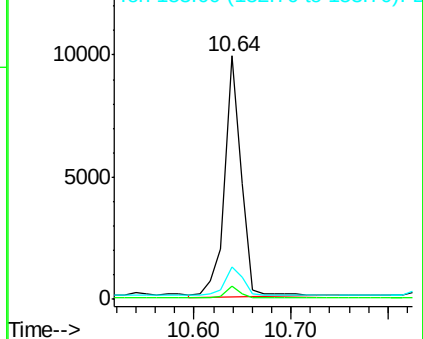
153 12.4 10.3 15.5



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E



#10

Acenaphthene

Concen: 0.11 ng

RT: 10.86 min Scan# 2115

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

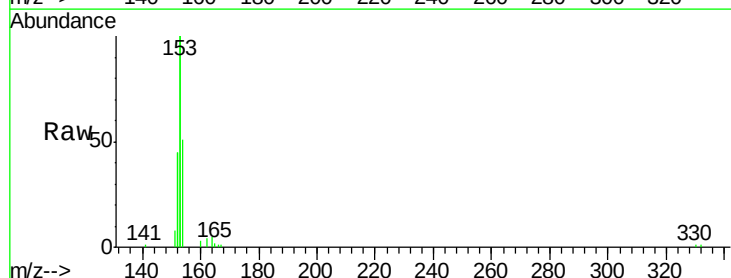
Tgt Ion:154 Resp: 2359

Ion Ratio Lower Upper

154 100

153 360.1 326.0 489.0

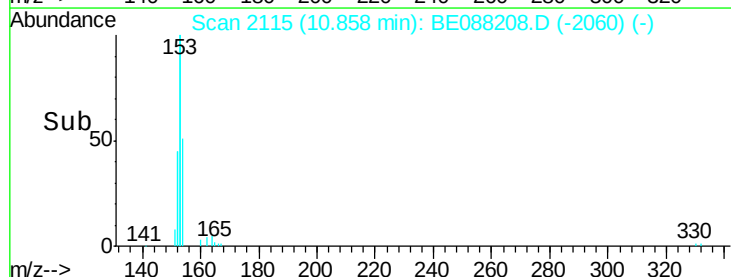
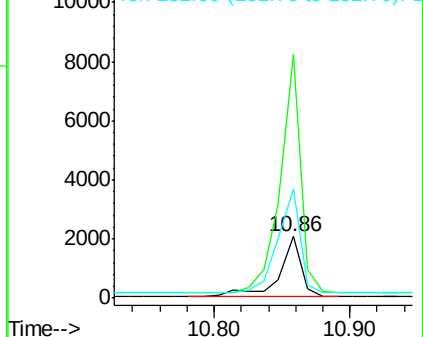
152 192.5 155.6 233.4

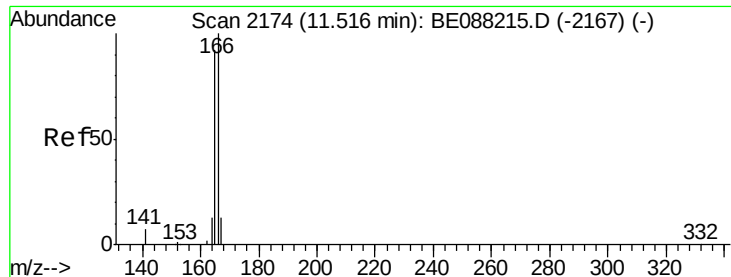


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E

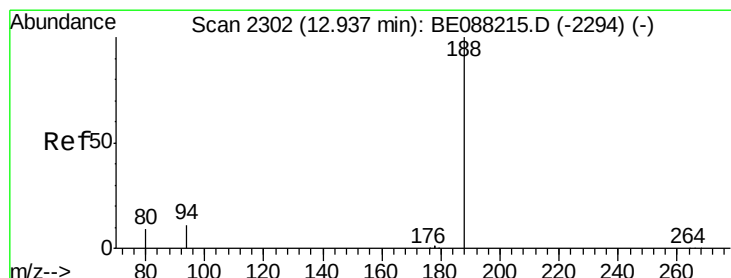
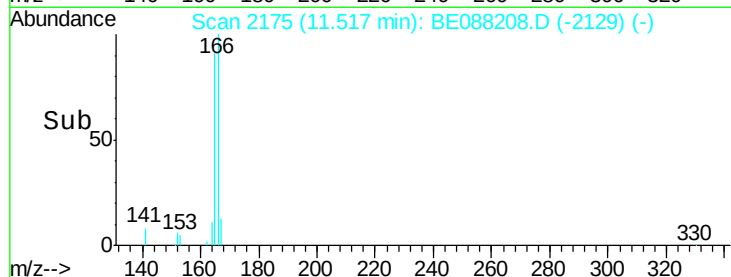
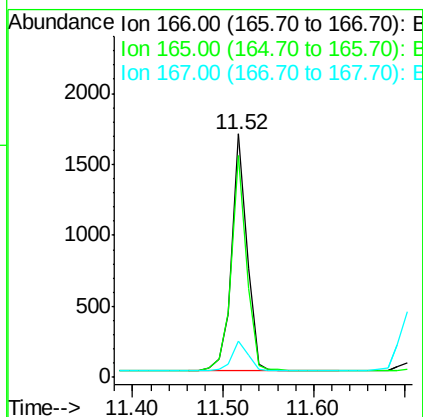
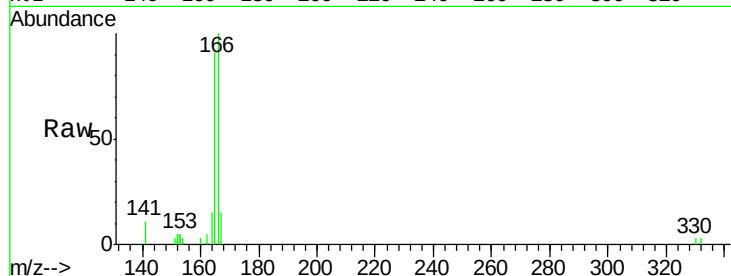




#11  
 Fluorene  
 Concen: 0.09 ng  
 RT: 11.52 min Scan# 2175  
 Delta R.T. 0.00 min  
 Lab File: BE088208.D  
 Acq: 24 Oct 2014 12:40

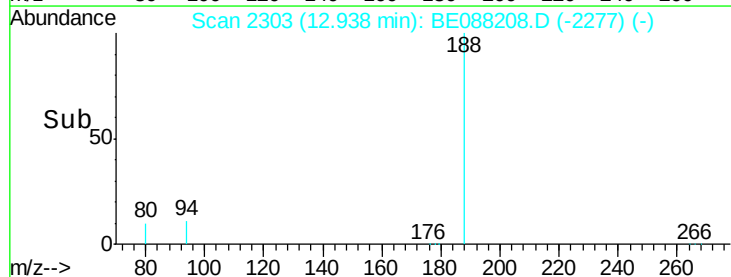
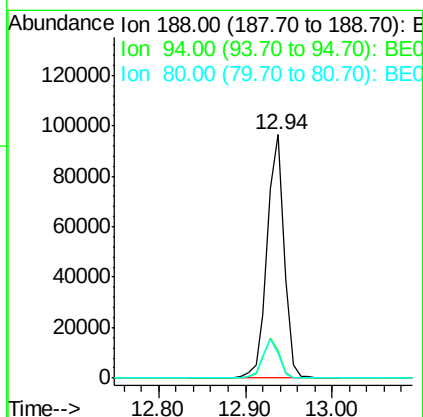
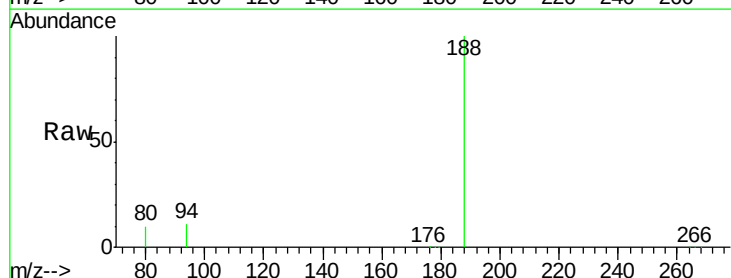
Instrument :  
 BNA\_E  
 ClientSampleId :  
 DFTPP

Tgt Ion:166 Resp: 1965  
 Ion Ratio Lower Upper  
 166 100  
 165 91.3 71.8 107.6  
 167 13.7 10.7 16.1

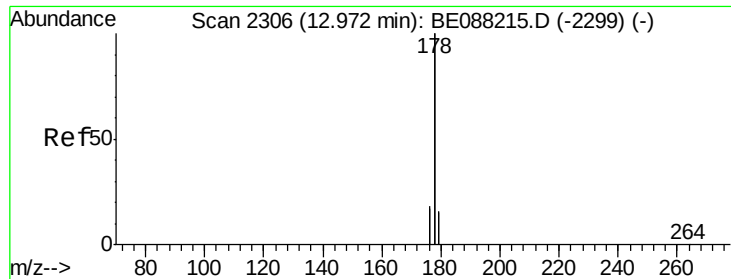


#12  
 Phenanthrene-d10  
 Concen: 5.00 ng  
 RT: 12.94 min Scan# 2303  
 Delta R.T. 0.00 min  
 Lab File: BE088208.D  
 Acq: 24 Oct 2014 12:40

Tgt Ion:188 Resp: 162425  
 Ion Ratio Lower Upper  
 188 100  
 94 11.3 8.5 12.7  
 80 10.0 7.4 11.0







#13

Phenanthrene

Concen: 0.13 ng

RT: 12.97 min Scan# 2307

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

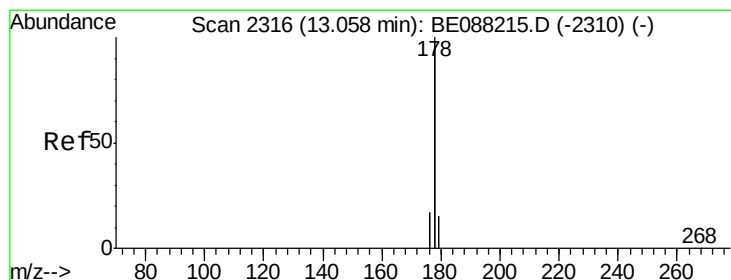
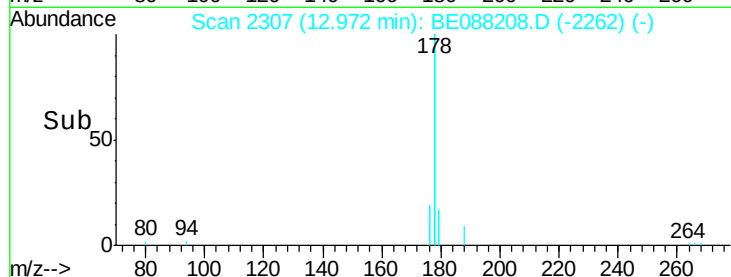
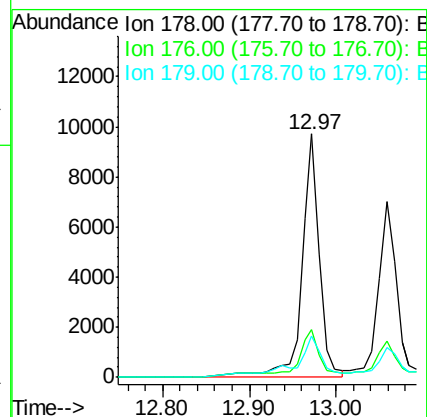
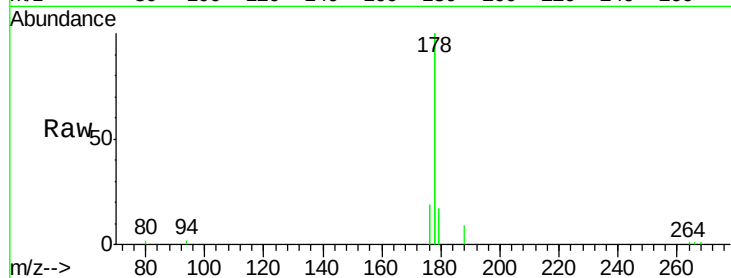
Tgt Ion:178 Resp: 17064

Ion Ratio Lower Upper

178 100

176 26.9 14.0 21.0#

179 26.3 11.8 17.6#



#14

Anthracene

Concen: 0.09 ng

RT: 13.06 min Scan# 2317

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

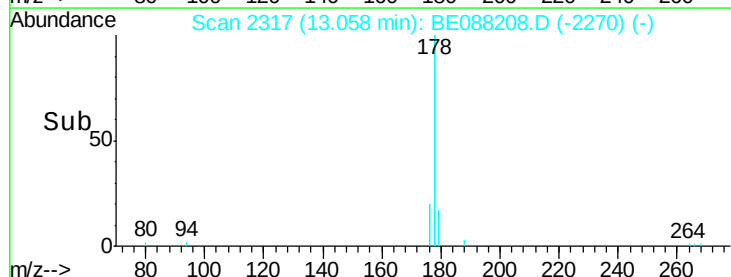
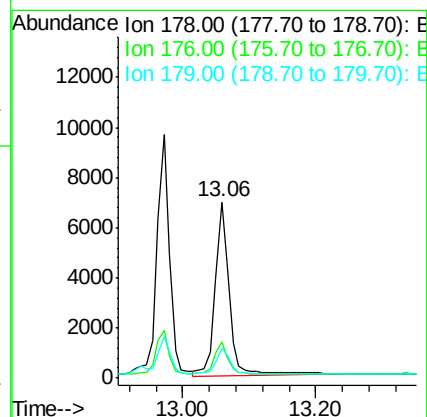
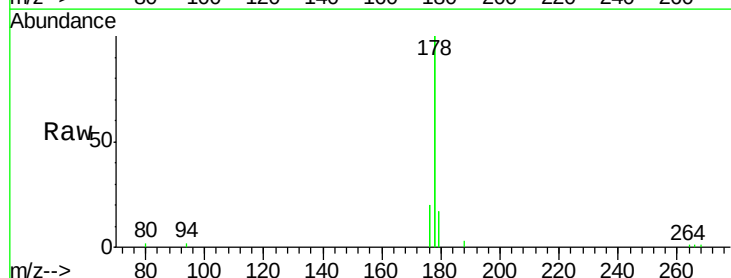
Tgt Ion:178 Resp: 10166

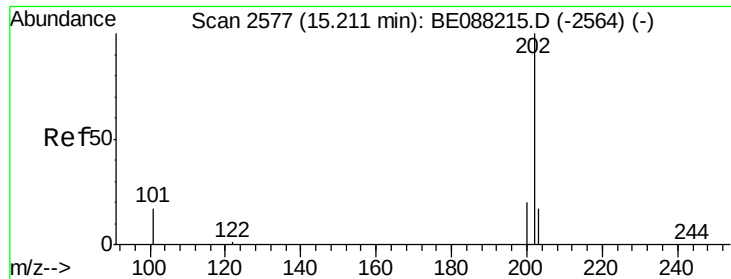
Ion Ratio Lower Upper

178 100

176 21.5 14.7 22.1

179 19.3 12.3 18.5#

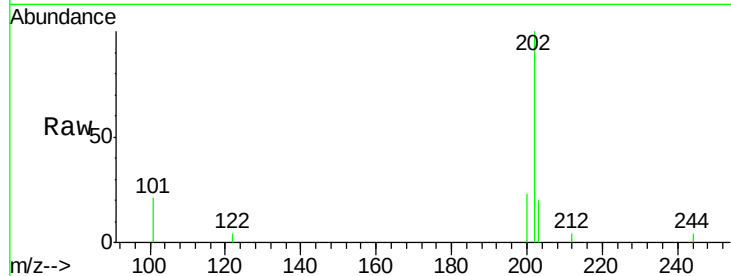




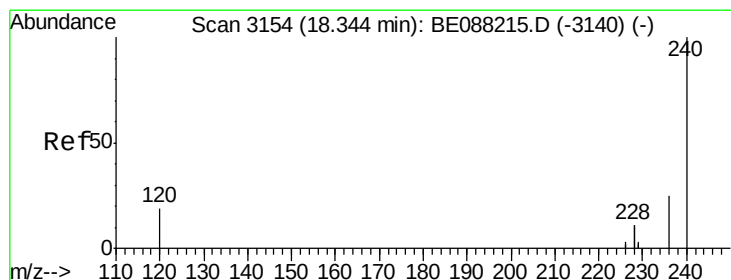
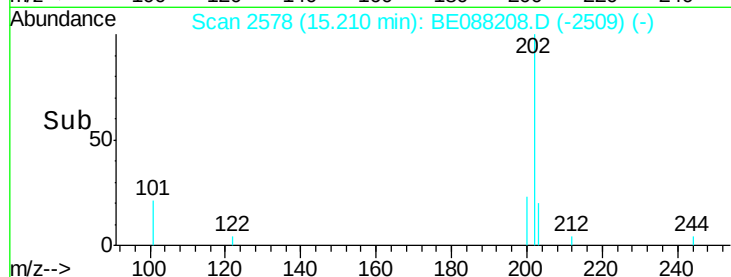
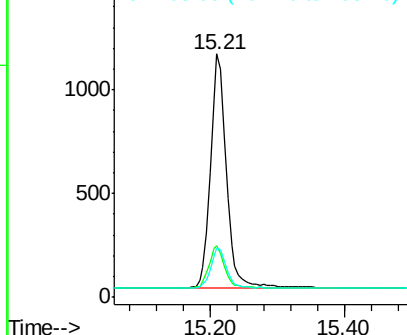
#15  
 Fluoranthene  
 Concen: 0.08 ng  
 RT: 15.21 min Scan# 2578  
 Delta R.T. -0.00 min  
 Lab File: BE088208.D  
 Acq: 24 Oct 2014 12:40

Instrument :  
 BNA\_E  
 ClientSampleId :  
 DFTPP

Tgt Ion: 202 Resp: 1854  
 Ion Ratio Lower Upper  
 202 100  
 101 17.6 14.4 21.6  
 203 16.2 13.4 20.2

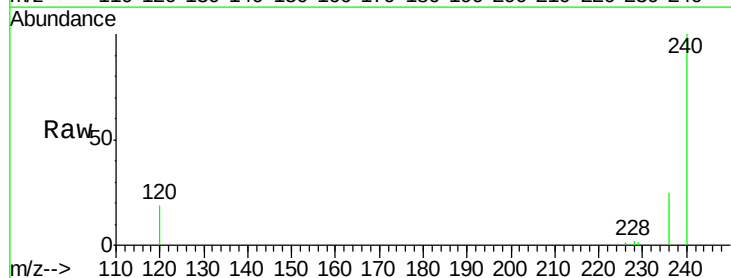


Abundance Ion 202.00 (201.70 to 202.70): E  
 Ion 101.00 (100.70 to 101.70): E  
 Ion 203.00 (202.70 to 203.70): E

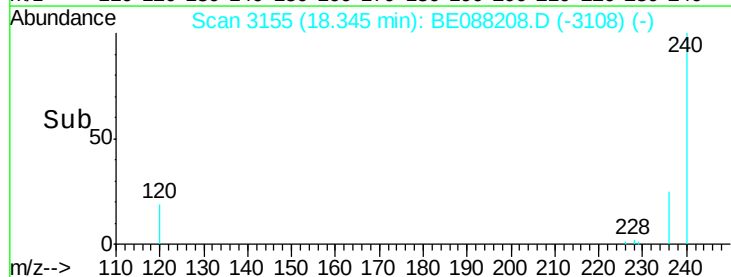
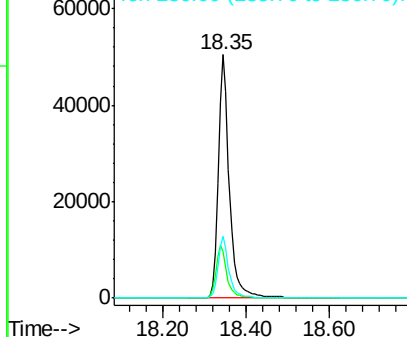


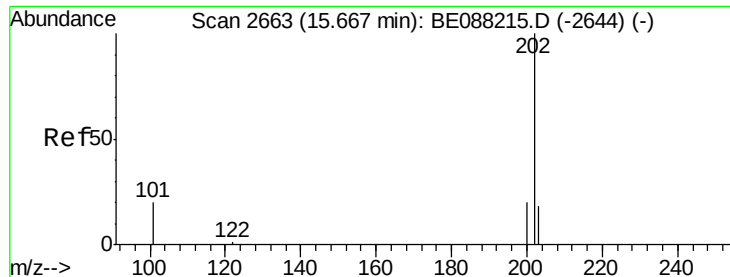
#16  
 Chrysene-d12  
 Concen: 5.00 ng  
 RT: 18.35 min Scan# 3155  
 Delta R.T. 0.00 min  
 Lab File: BE088208.D  
 Acq: 24 Oct 2014 12:40

Tgt Ion: 240 Resp: 91442  
 Ion Ratio Lower Upper  
 240 100  
 120 19.2 15.1 22.7  
 236 25.2 20.1 30.1



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



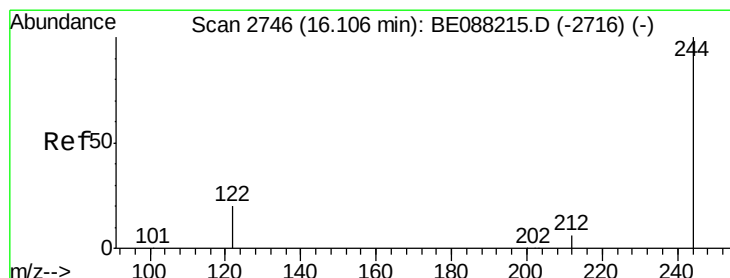
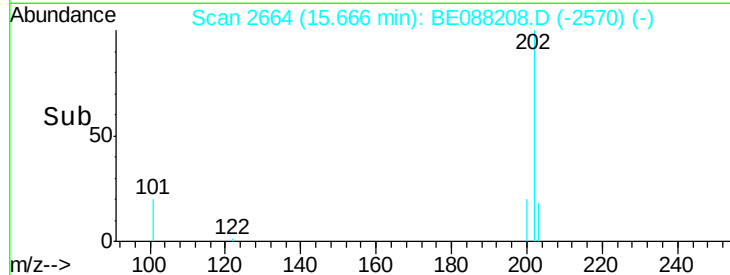
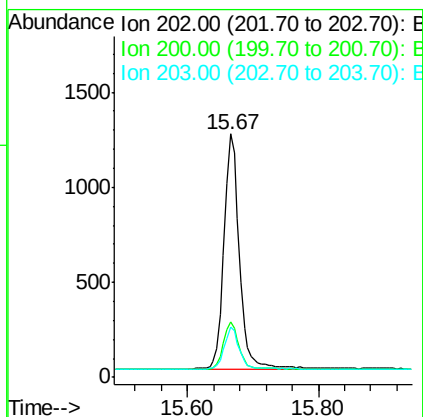
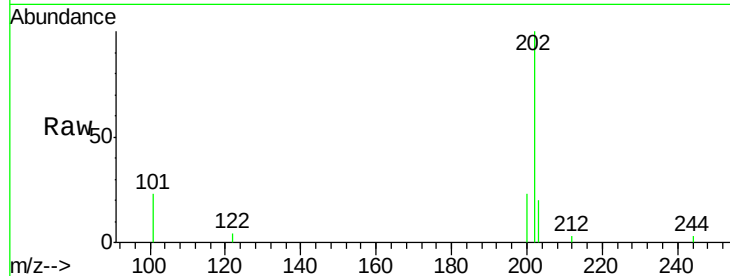


#17  
 Pyrene  
 Concen: 0.08 ng  
 RT: 15.67 min Scan# 2664  
 Delta R.T. -0.00 min  
 Lab File: BE088208.D  
 Acq: 24 Oct 2014 12:40

Instrument :  
 BNA\_E  
 ClientSampleId :  
 DFTPP

Tgt Ion: 202 Resp: 2017  

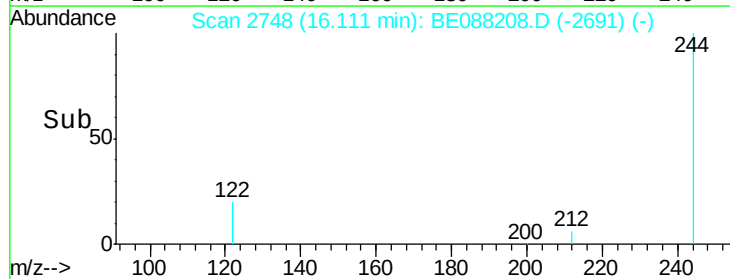
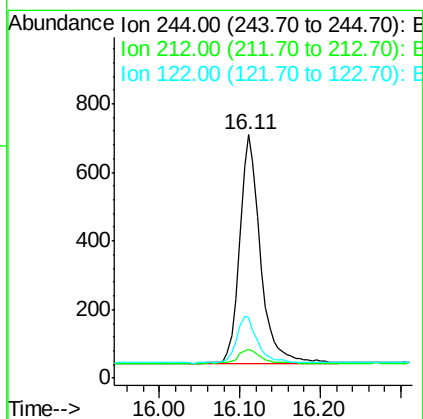
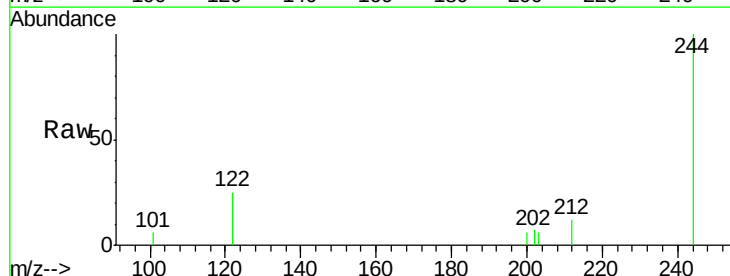
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 202 | 100   |       |       |
| 200 | 20.5  | 16.2  | 24.2  |
| 203 | 16.9  | 13.8  | 20.8  |

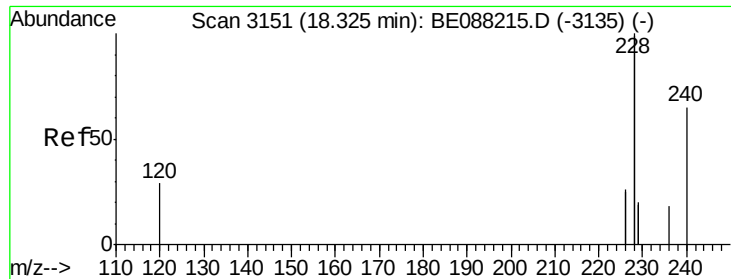


#18  
 Terphenyl-d14  
 Concen: 0.08 ng  
 RT: 16.11 min Scan# 2748  
 Delta R.T. 0.00 min  
 Lab File: BE088208.D  
 Acq: 24 Oct 2014 12:40

Tgt Ion: 244 Resp: 1194  

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 244 | 100   |       |       |
| 212 | 11.7  | 5.4   | 8.2#  |
| 122 | 24.8  | 16.7  | 25.1  |





#19

Benzo(a)anthracene

Concen: 0.09 ng

RT: 18.33 min Scan# 3153

Delta R.T. 0.01 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

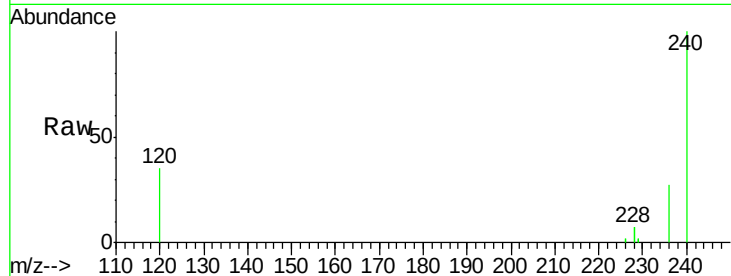
Tgt Ion:228 Resp: 6641

Ion Ratio Lower Upper

228 100

226 28.0 20.5 30.7

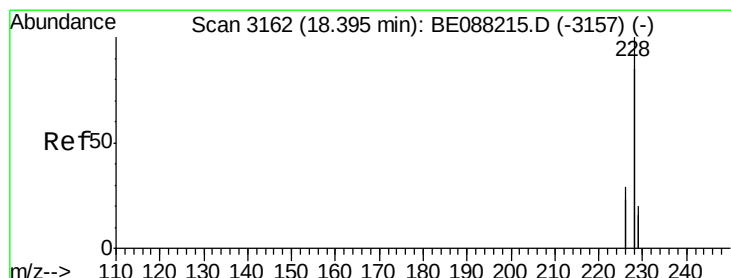
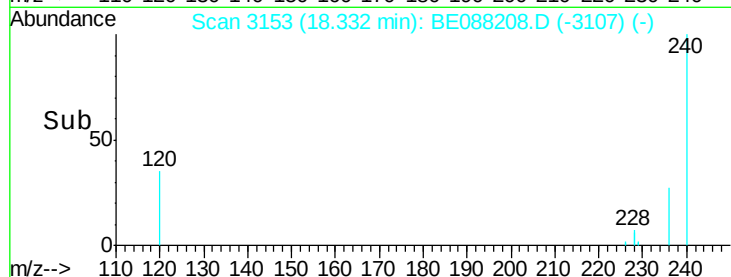
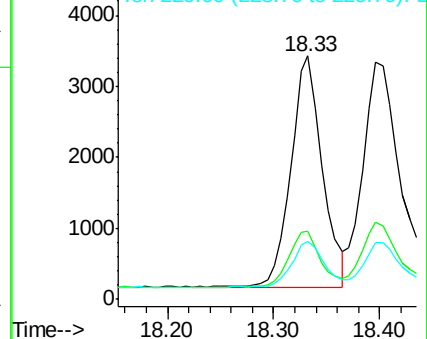
229 24.0 16.1 24.1



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



#20

Chrysene

Concen: 0.11 ng

RT: 18.40 min Scan# 3163

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

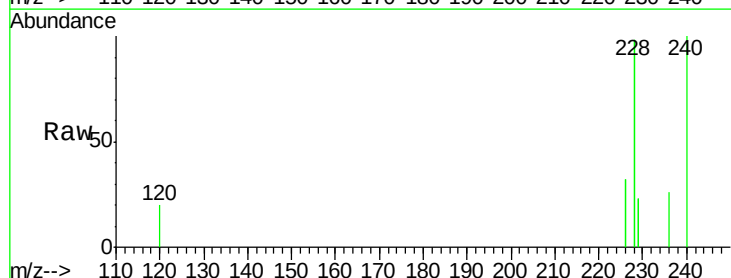
Tgt Ion:228 Resp: 8664

Ion Ratio Lower Upper

228 100

226 32.7 23.3 34.9

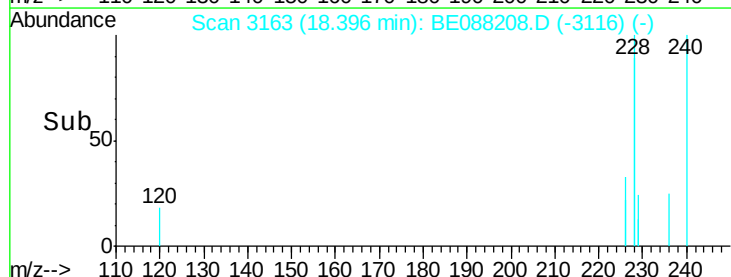
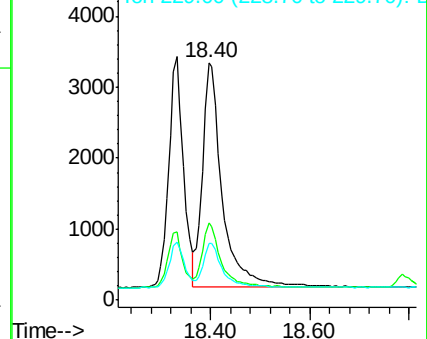
229 23.9 15.6 23.4#

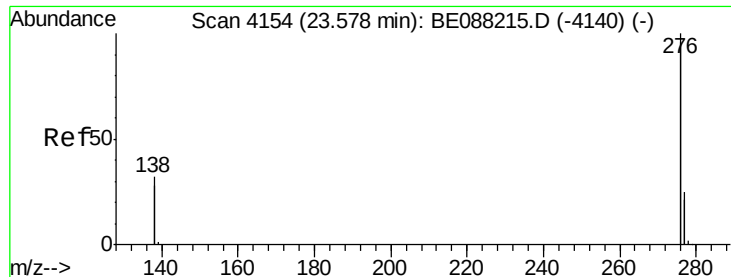


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#21

Indeno(1,2,3-cd)pyrene

Concen: 0.03 ng

RT: 23.57 min Scan# 4154

Delta R.T. -0.01 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

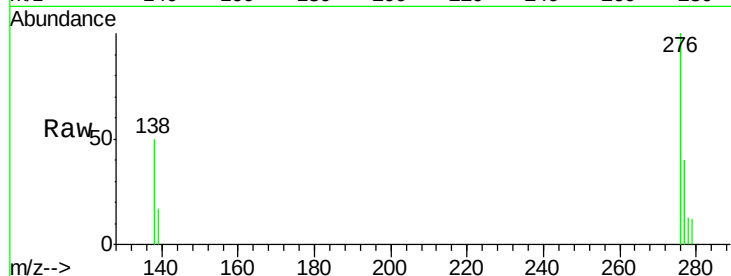
Tgt Ion: 276 Resp: 2209

Ion Ratio Lower Upper

276 100

138 35.2 13.9 20.9#

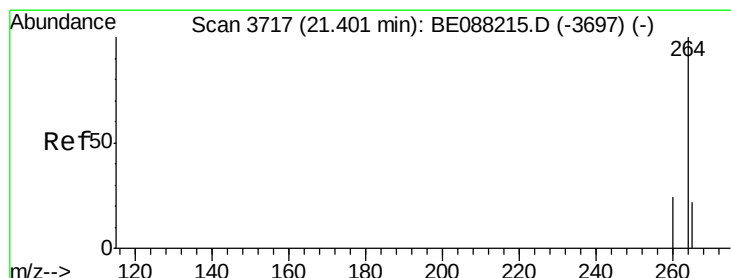
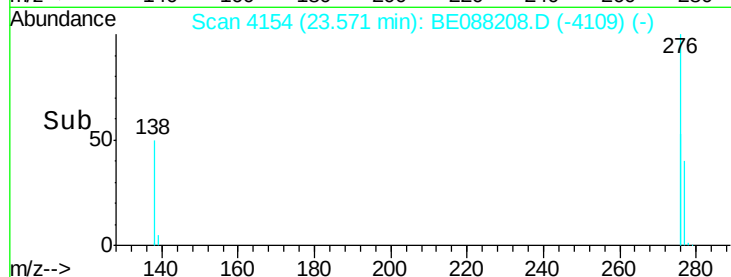
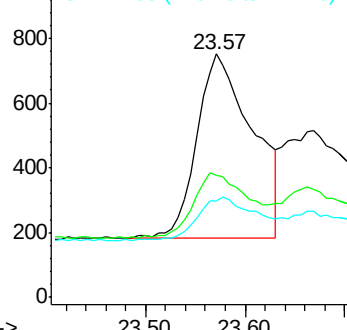
277 24.6 10.7 16.1#



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



#22

Perylene-d12

Concen: 5.00 ng

RT: 21.40 min Scan# 3718

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

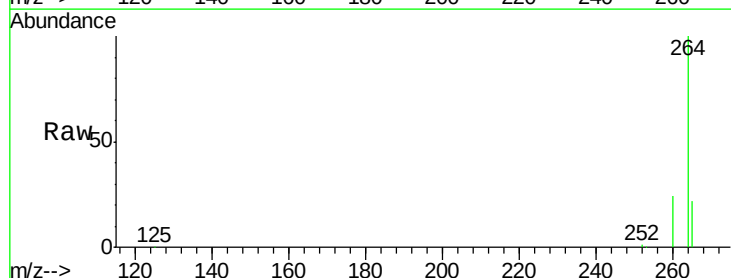
Tgt Ion: 264 Resp: 82054

Ion Ratio Lower Upper

264 100

260 23.7 19.0 28.4

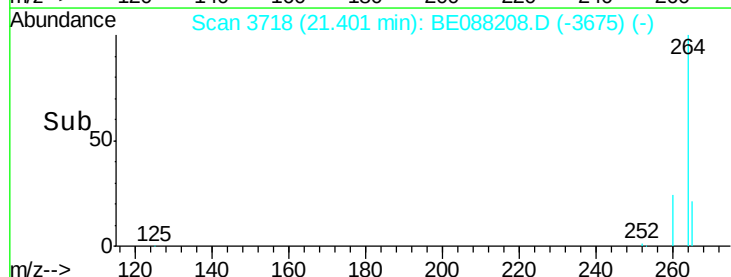
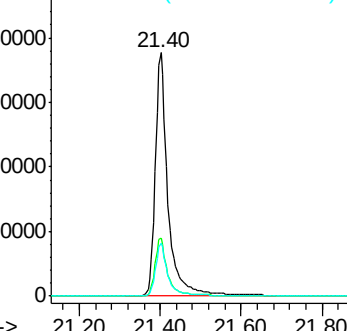
265 21.6 17.4 26.2

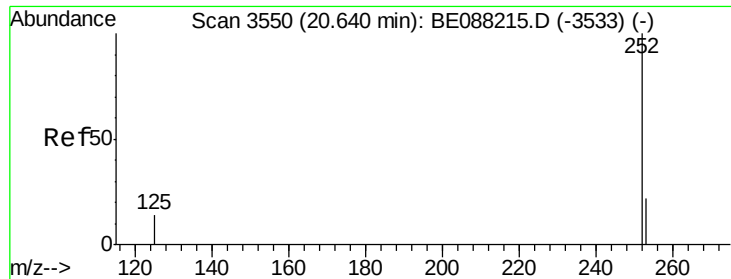


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#23

Benzo(b)fluoranthene

Concen: 0.06 ng

RT: 20.64 min Scan# 3551

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

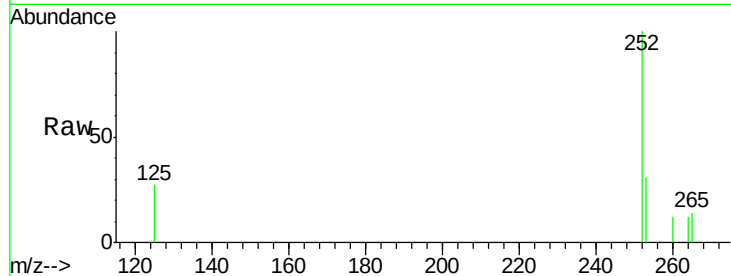
Tgt Ion:252 Resp: 792

Ion Ratio Lower Upper

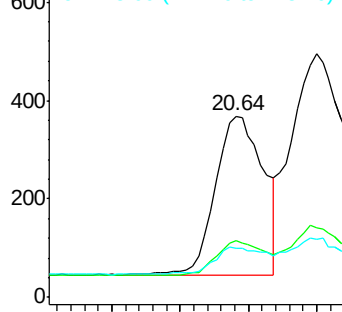
252 100

253 31.4 17.9 26.9#

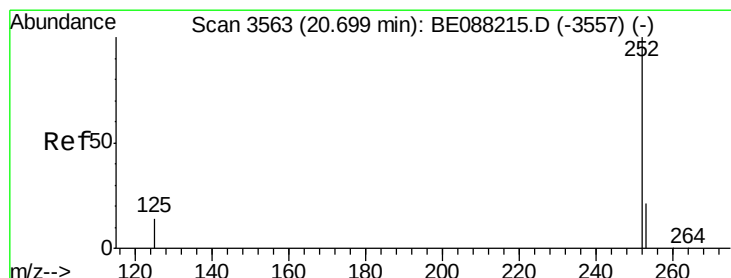
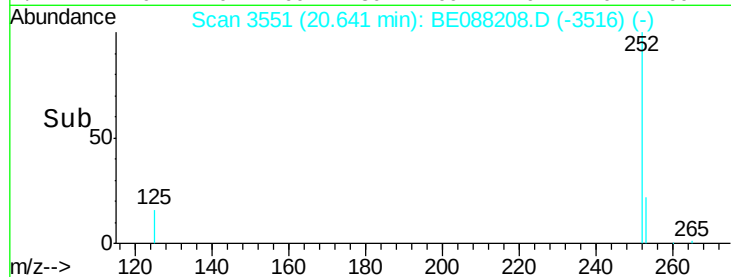
125 27.1 12.2 18.2#



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



Time-->



#24

Benzo(k)fluoranthene

Concen: 0.10 ng

RT: 20.70 min Scan# 3564

Delta R.T. 0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

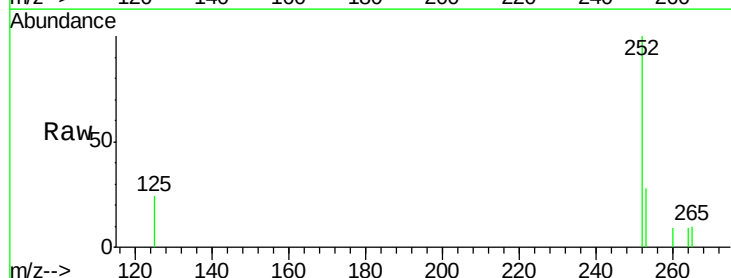
Tgt Ion:252 Resp: 2048

Ion Ratio Lower Upper

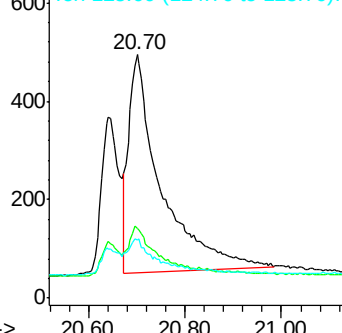
252 100

253 28.5 17.6 26.4#

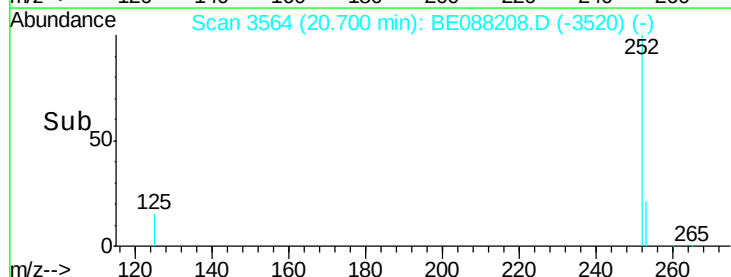
125 23.6 12.1 18.1#

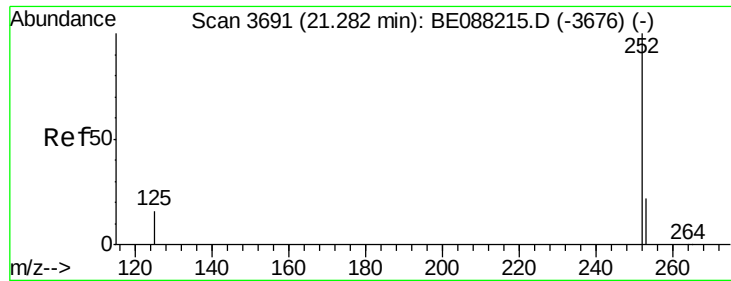


Abundance Ion 252.00 (251.70 to 252.70): E  
Ion 253.00 (252.70 to 253.70): E  
Ion 125.00 (124.70 to 125.70): E



Time-->





#25

Benzo(a)pyrene

Concen: 0.05 ng

RT: 21.28 min Scan# 3691

Delta R.T. -0.00 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP

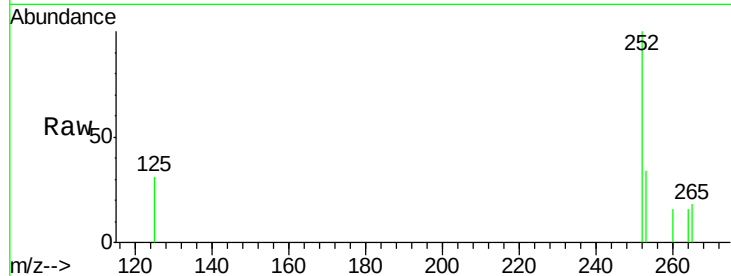
Tgt Ion: 252 Resp: 646

Ion Ratio Lower Upper

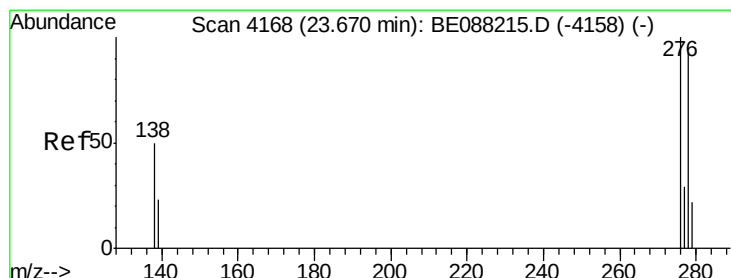
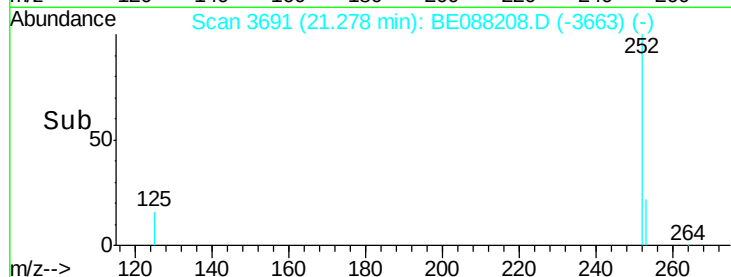
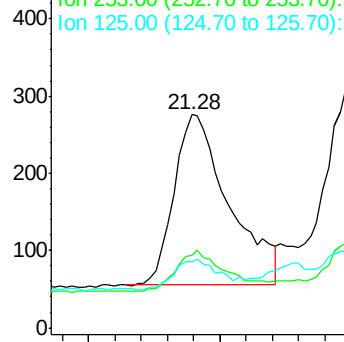
252 100

253 34.1 17.8 26.8#

125 31.2 13.5 20.3#



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



#26

Dibenzo(a,h)anthracene

Concen: 0.05 ng

RT: 23.68 min Scan# 4170

Delta R.T. 0.01 min

Lab File: BE088208.D

Acq: 24 Oct 2014 12:40

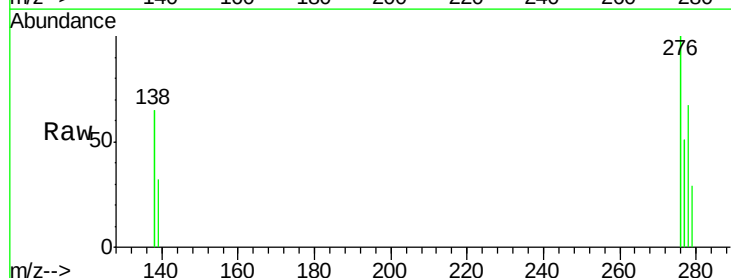
Tgt Ion: 278 Resp: 620

Ion Ratio Lower Upper

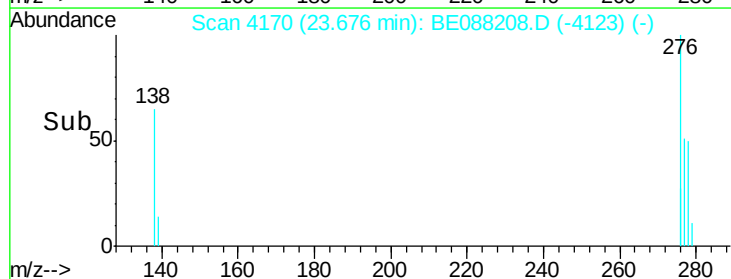
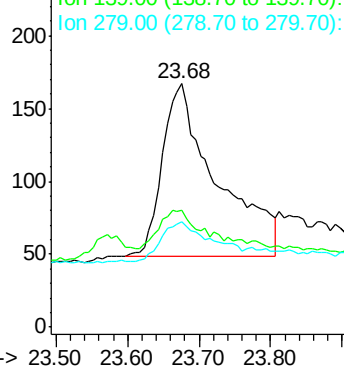
278 100

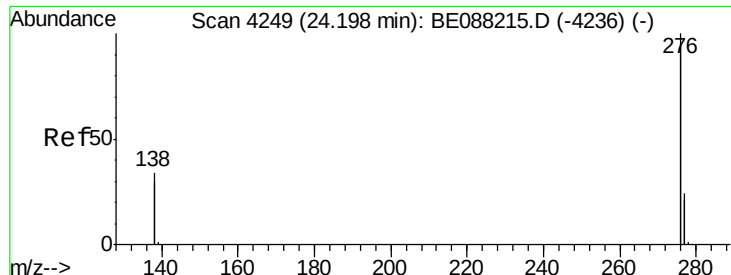
139 47.9 22.1 33.1#

279 43.1 20.2 30.2#



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





#27

Benzo(g,h,i)perylene

Concen: 0.08 ng

RT: 24.20 min Scan# 4251

Delta R.T. 0.01 min

Lab File: BE088208.D

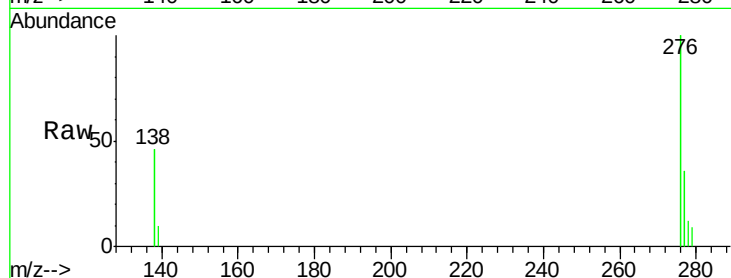
Acq: 24 Oct 2014 12:40

Instrument :

BNA\_E

ClientSampleId :

DFTPP



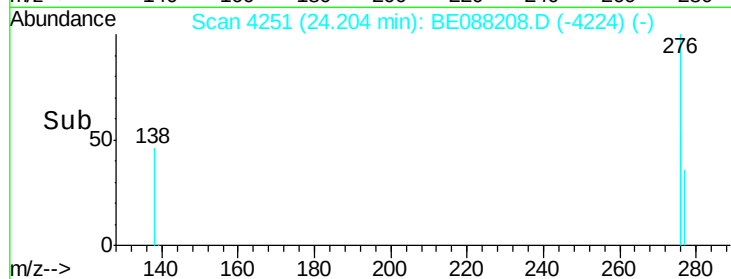
Tgt Ion: 276 Resp: 5486

Ion Ratio Lower Upper

276 100

277 35.9 19.4 29.2#

138 45.6 27.3 40.9#



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

