

Data Path : Z:\HPCHEM1\BNA\_E\Data\BE102114\  
 Data File : BE088166.D  
 Acq On : 22 Oct 2014 5:47  
 Operator : TP/JJ  
 Sample : F4303-14DL 5X  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_E  
 ClientSampleId :  
 YS19-SB04-1014DL

Quant Time: Oct 22 06:47:43 2014  
 Quant Method : Z:\HPCHEM1\BNA\_E\METHODS\SIM-PAH-BE102014.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Oct 21 02:11:14 2014  
 Response via : Initial Calibration

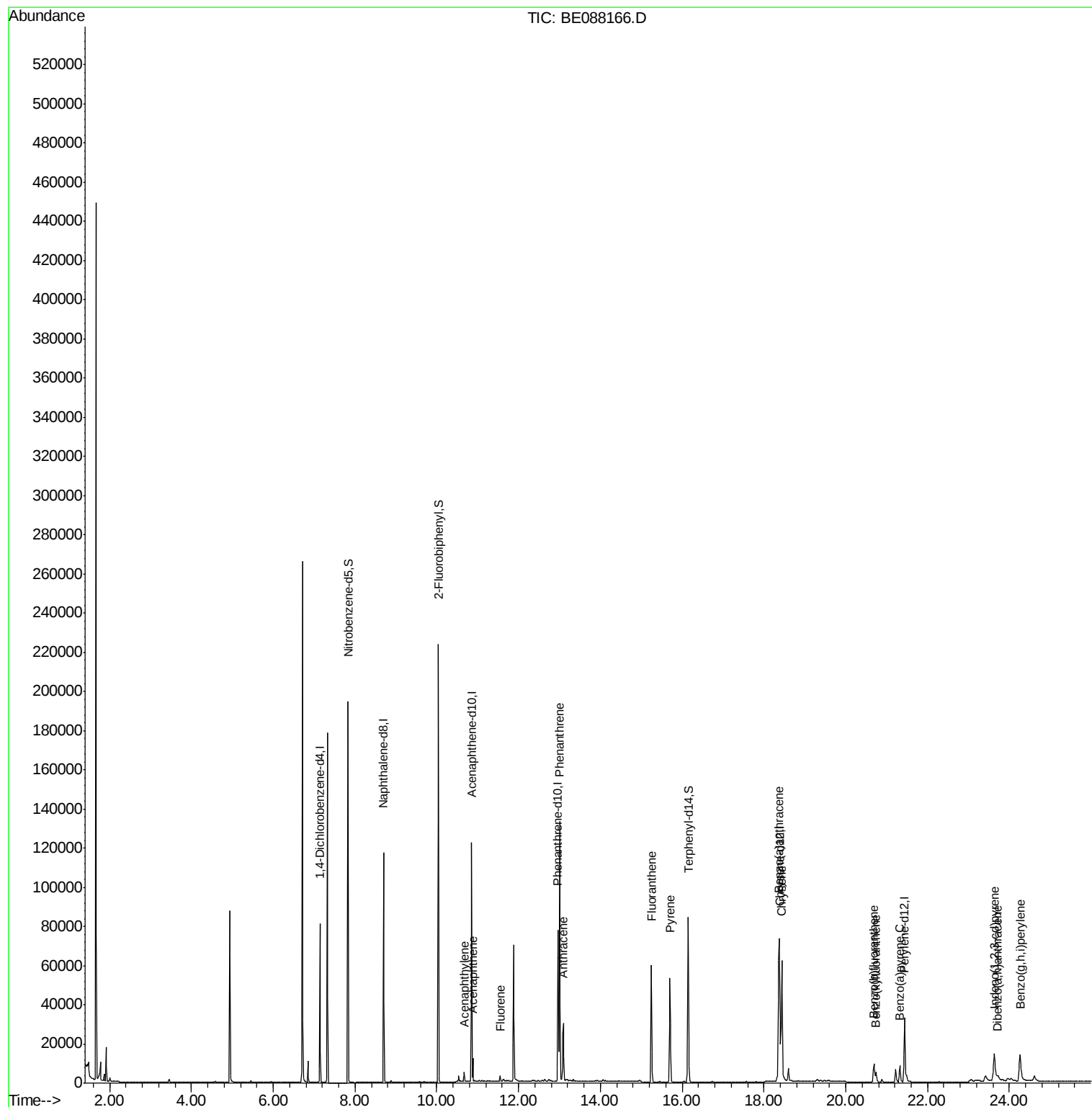
| Internal Standards          | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4   | 7.14  | 152  | 22265    | 5.00  | ng    | 0.00     |
| 3) Naphthalene-d8           | 8.70  | 136  | 87594    | 5.00  | ng    | 0.00     |
| 7) Acenaphthene-d10         | 10.85 | 164  | 47456    | 5.00  | ng    | 0.00     |
| 12) Phenanthrene-d10        | 12.96 | 188  | 90888    | 5.00  | ng    | 0.00     |
| 16) Chrysene-d12            | 18.38 | 240  | 52385    | 5.00  | ng    | 0.00     |
| 22) Perylene-d12            | 21.44 | 264  | 43814    | 5.00  | ng    | 0.00     |
| System Monitoring Compounds |       |      |          |       |       |          |
| 4) Nitrobenzene-d5          | 7.83  | 82   | 82478    | 13.06 | ng    | 0.00     |
| 8) 2-Fluorobiphenyl         | 10.04 | 172  | 132465   | 10.11 | ng    | 0.00     |
| 18) Terphenyl-d14           | 16.15 | 244  | 103789   | 12.31 | ng    | 0.00     |
| Target Compounds            |       |      |          |       |       | Qvalue   |
| 9) Acenaphthylene           | 10.67 | 152  | 5219     | 0.07  | ng    | 99       |
| 10) Acenaphthene            | 10.88 | 154  | 1563     | 0.14  | ng    | 88       |
| 11) Fluorene                | 11.55 | 166  | 1718     | 0.15  | ng    | 97       |
| 13) Phenanthrene            | 13.01 | 178  | 136434   | 1.90  | ng    | 95       |
| 14) Anthracene              | 13.09 | 178  | 29190    | 0.41  | ng    | 97       |
| 15) Fluoranthene            | 15.25 | 202  | 56476    | 3.27  | ng    | 99       |
| 17) Pyrene                  | 15.70 | 202  | 49407    | 3.47  | ng    | 96       |
| 19) Benzo(a)anthracene      | 18.36 | 228  | 80366    | 1.73  | ng    | 98       |
| 20) Chrysene                | 18.44 | 228  | 84081    | 1.84  | ng    | 97       |
| 21) Indeno(1,2,3-cd)pyrene  | 23.63 | 276  | 32385    | 0.64  | ng    | # 89     |
| 23) Benzo(b)fluoranthene    | 20.69 | 252  | 17713    | 1.70  | ng    | 98       |
| 24) Benzo(k)fluoranthene    | 20.74 | 252  | 7544     | 0.68  | ng    | 97       |
| 25) Benzo(a)pyrene          | 21.32 | 252  | 12673    | 1.32  | ng    | 98       |
| 26) Dibenzo(a,h)anthracene  | 23.72 | 278  | 1781     | 0.19  | ng    | # 84     |
| 27) Benzo(g,h,i)perylene    | 24.26 | 276  | 30885    | 0.74  | ng    | 98       |

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

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#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 7.14 min Scan# 1258

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

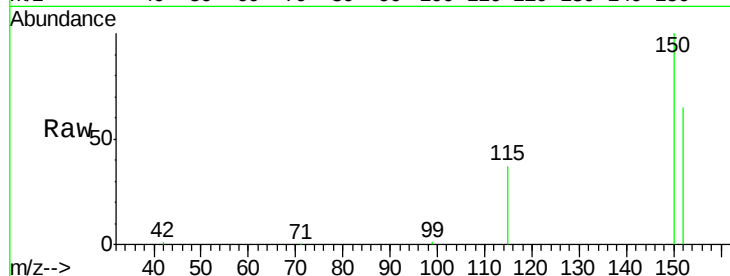
Tgt Ion:152 Resp: 22265

Ion Ratio Lower Upper

152 100

150 153.4 129.2 193.8

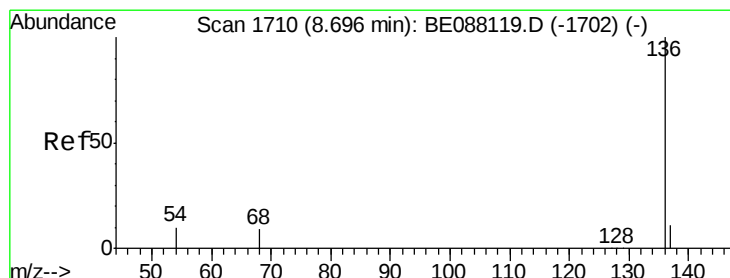
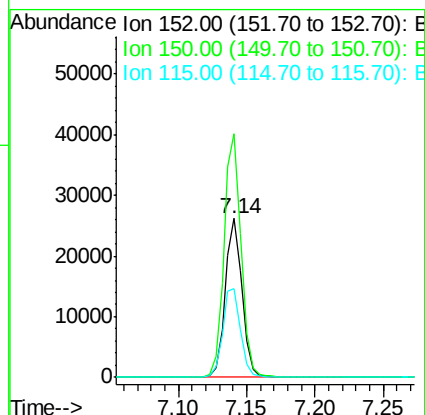
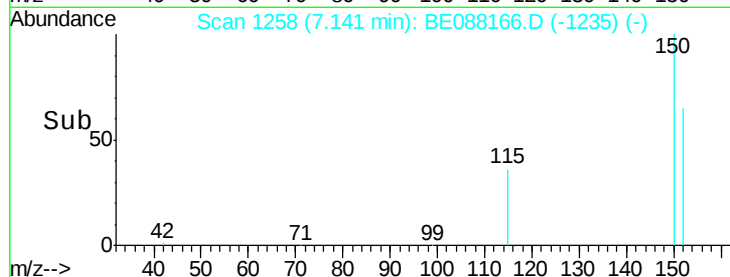
115 56.0 49.3 73.9



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

Ion 115.00 (114.70 to 115.70): E



#3

Naphthalene-d8

Concen: 5.00 ng

RT: 8.70 min Scan# 1712

Delta R.T. 0.01 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

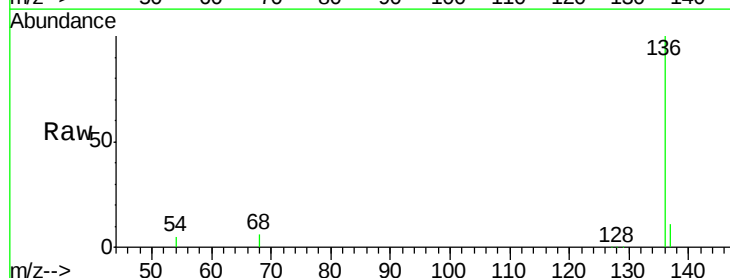
Tgt Ion:136 Resp: 87594

Ion Ratio Lower Upper

136 100

137 11.2 8.6 12.8

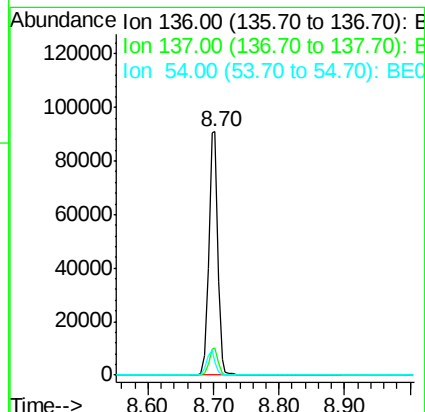
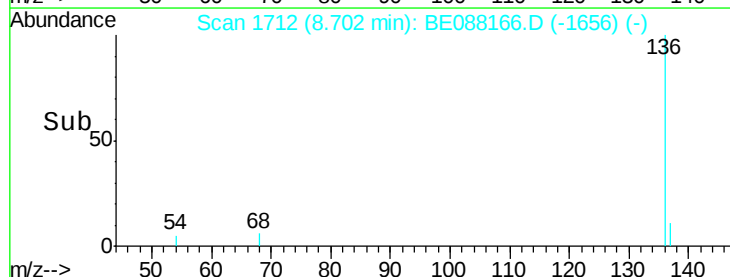
54 5.4 7.7 11.5#

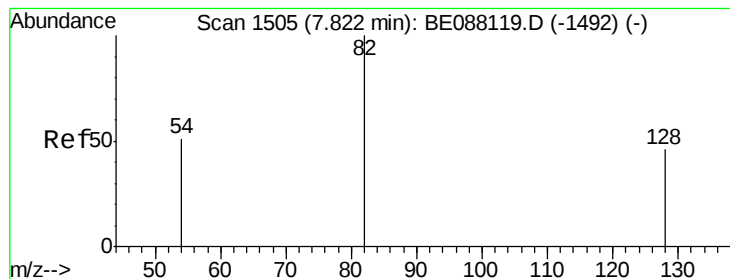


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BE0





#4

Nitrobenzene-d5

Concen: 13.06 ng

RT: 7.83 min Scan# 1507

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

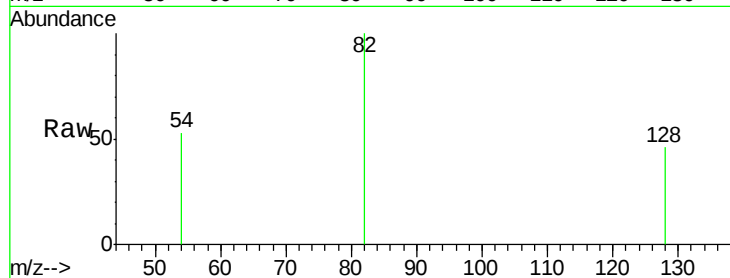
Tgt Ion: 82 Resp: 82478

Ion Ratio Lower Upper

82 100

128 45.7 37.1 55.7

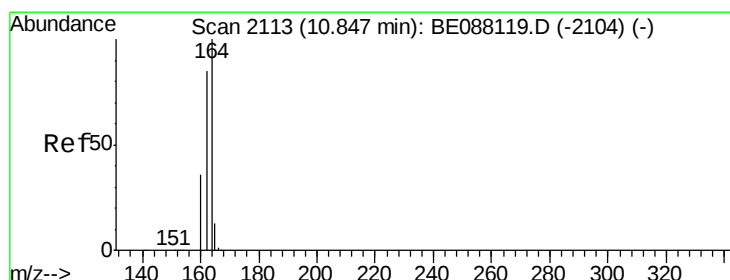
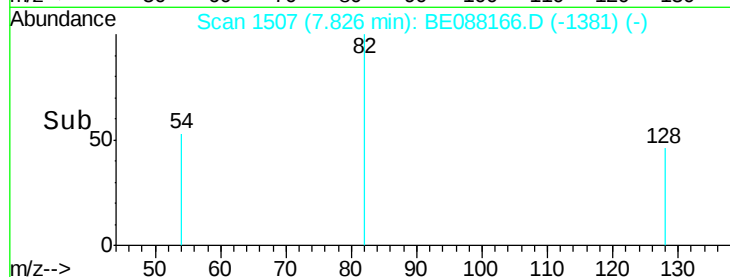
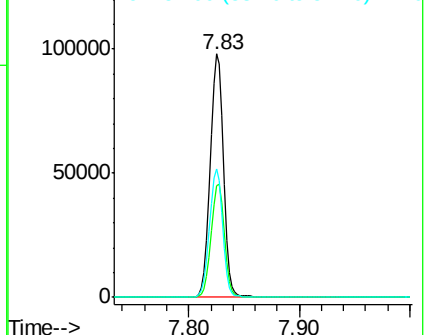
54 52.9 41.1 61.7



Abundance Ion 82.00 (81.70 to 82.70): BE088119.D (-1492) (-)

Ion 128.00 (127.70 to 128.70): BE088119.D (-1492) (-)

Ion 54.00 (53.70 to 54.70): BE088119.D (-1492) (-)



#7

Acenaphthene-d10

Concen: 5.00 ng

RT: 10.85 min Scan# 2114

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

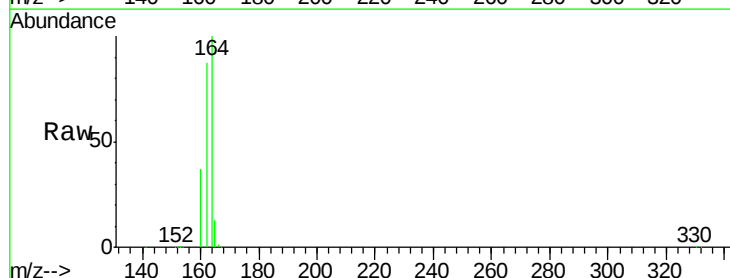
Tgt Ion: 164 Resp: 47456

Ion Ratio Lower Upper

164 100

162 86.7 68.3 102.5

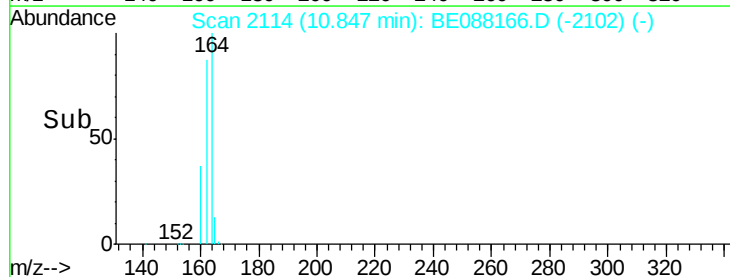
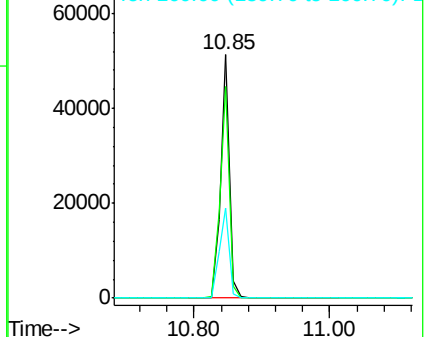
160 37.0 28.7 43.1

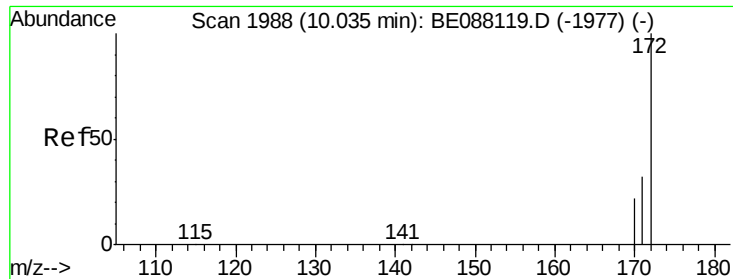


Abundance Ion 164.00 (163.70 to 164.70): BE088119.D (-2104) (-)

Ion 162.00 (161.70 to 162.70): BE088119.D (-2104) (-)

Ion 160.00 (159.70 to 160.70): BE088119.D (-2104) (-)





#8

2-Fluorobiphenyl

Concen: 10.11 ng

RT: 10.04 min Scan# 1990

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

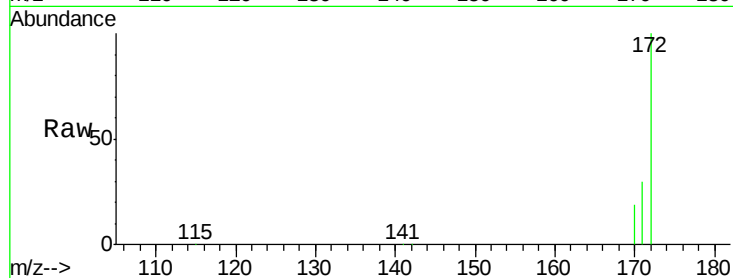
Tgt Ion:172 Resp: 132465

Ion Ratio Lower Upper

172 100

171 30.4 25.4 38.2

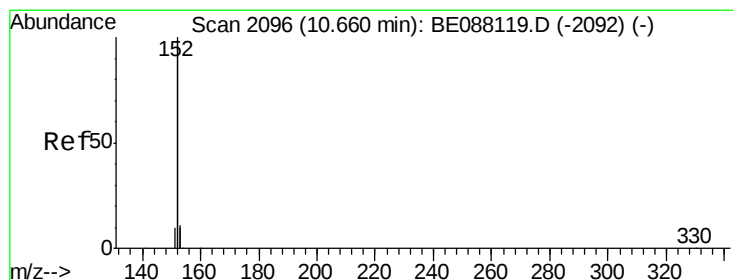
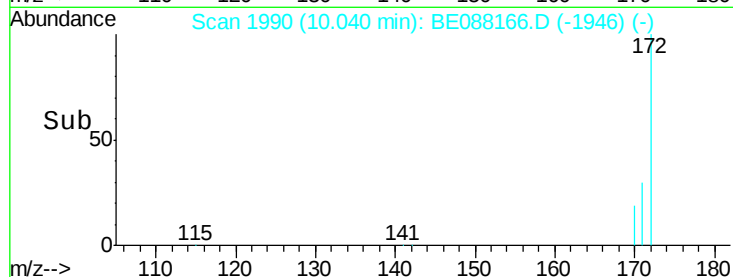
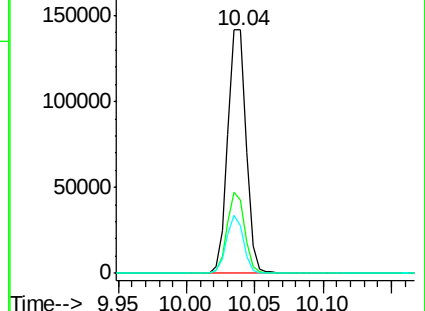
170 19.4 17.4 26.2



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: 0.07 ng

RT: 10.67 min Scan# 2098

Delta R.T. 0.01 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

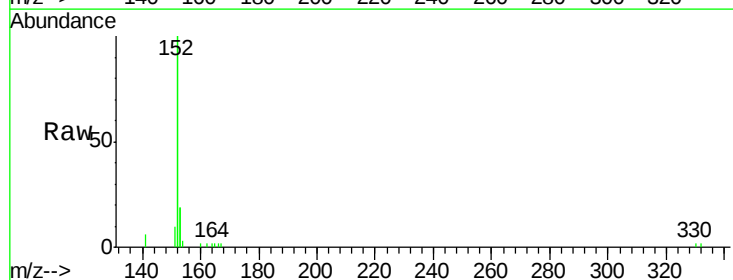
Tgt Ion:152 Resp: 5219

Ion Ratio Lower Upper

152 100

151 4.6 3.7 5.5

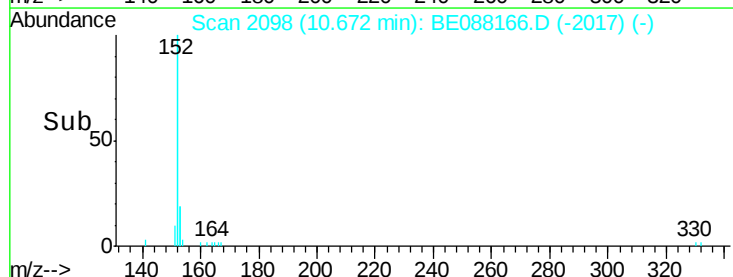
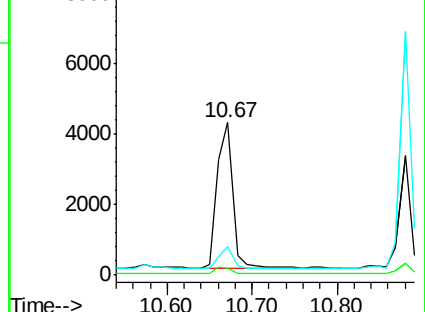
153 13.7 10.4 15.6

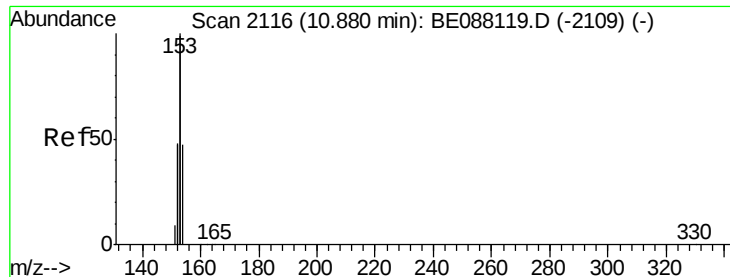


Abundance Ion 152.00 (151.70 to 152.70): E

Ion 151.00 (150.70 to 151.70): E

Ion 153.00 (152.70 to 153.70): E





#10

Acenaphthene

Concen: 0.14 ng

RT: 10.88 min Scan# 2117

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

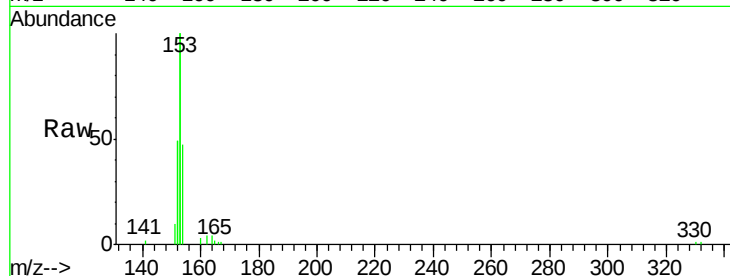
Tgt Ion:154 Resp: 1563

Ion Ratio Lower Upper

154 100

153 369.9 327.8 491.6

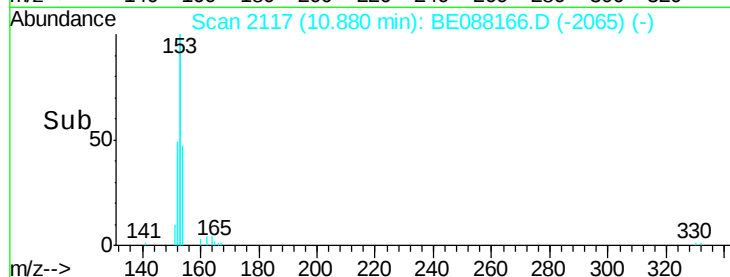
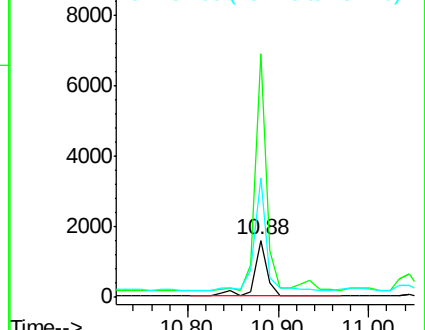
152 200.6 157.6 236.4



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: 0.15 ng

RT: 11.55 min Scan# 2178

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

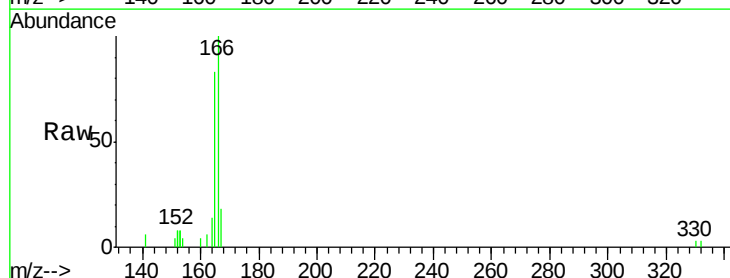
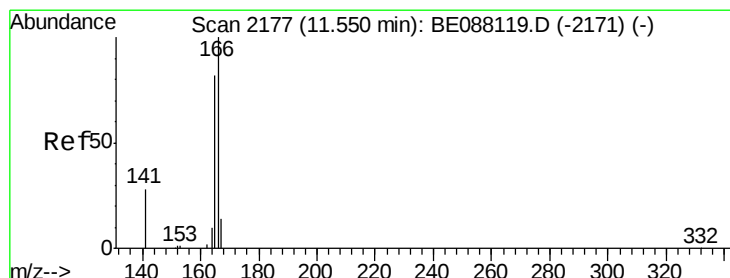
Tgt Ion:166 Resp: 1718

Ion Ratio Lower Upper

166 100

165 92.5 71.4 107.2

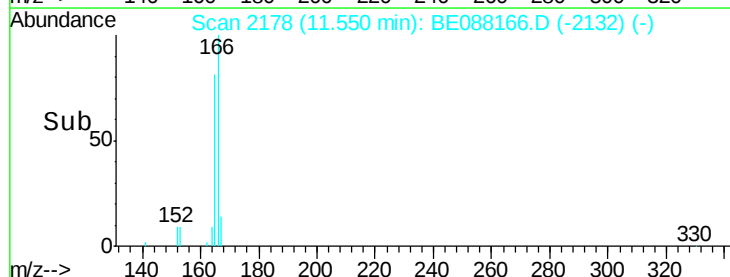
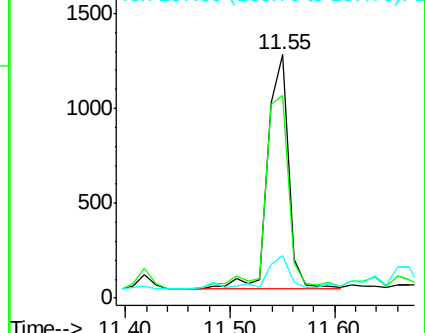
167 14.4 10.6 16.0

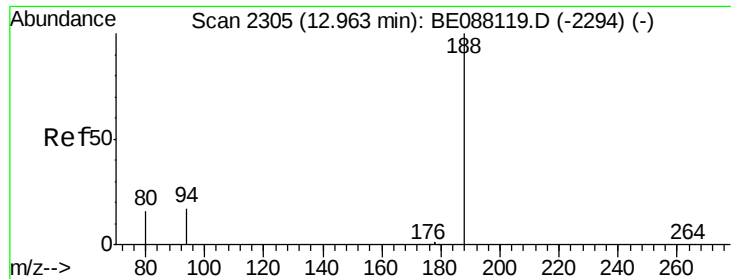


Abundance Ion 166.00 (165.70 to 166.70): E

Ion 165.00 (164.70 to 165.70): E

Ion 167.00 (166.70 to 167.70): E

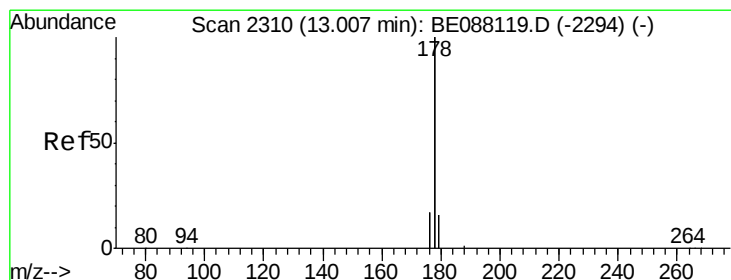
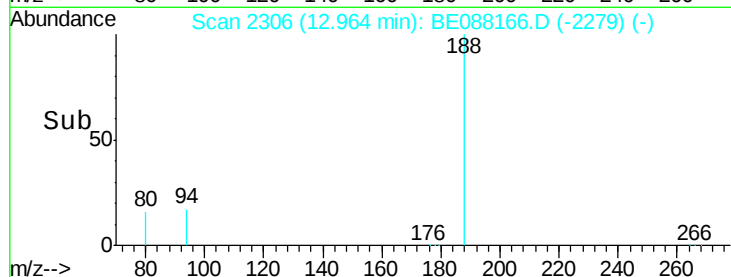
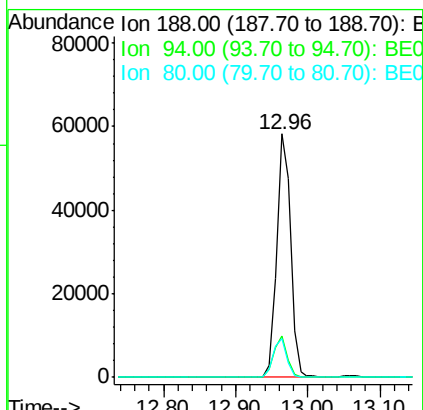
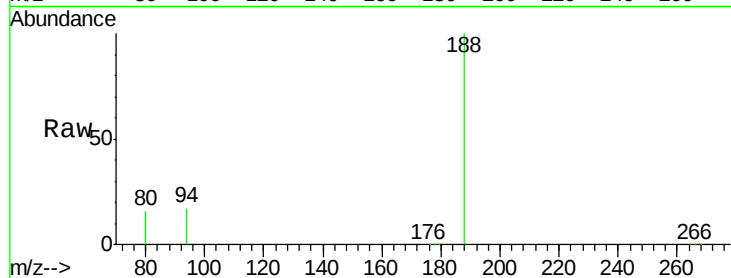




#12  
Phenanthrene-d10  
Concen: 5.00 ng  
RT: 12.96 min Scan# 2306  
Delta R.T. 0.00 min  
Lab File: BE088166.D  
Acq: 22 Oct 2014 5:47

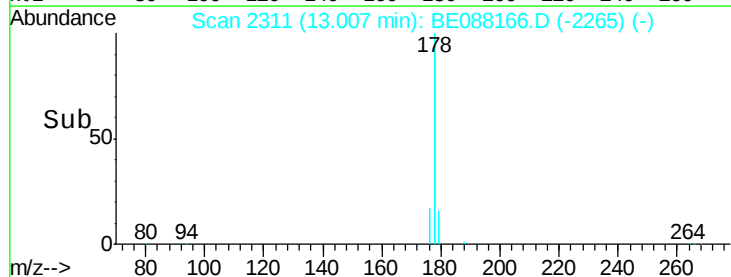
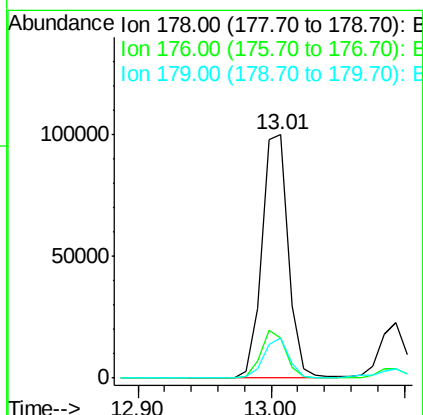
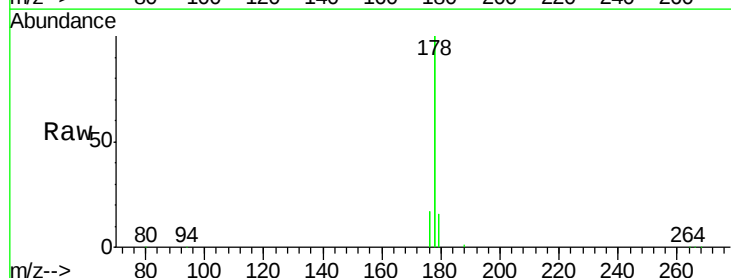
Instrument :  
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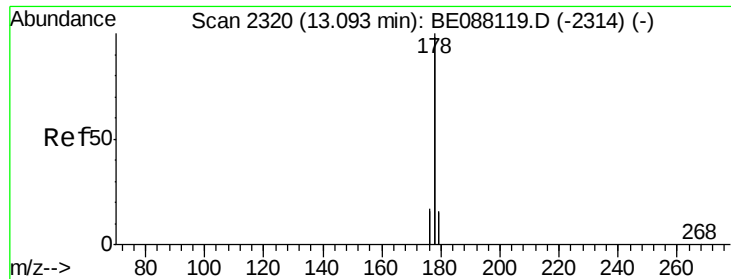
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 188     | 100   |       |       |
| 94      | 16.8  | 13.9  | 20.9  |
| 80      | 15.9  | 12.9  | 19.3  |



#13  
Phenanthrene  
Concen: 1.90 ng  
RT: 13.01 min Scan# 2311  
Delta R.T. 0.00 min  
Lab File: BE088166.D  
Acq: 22 Oct 2014 5:47

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 178     | 100   |       |       |
| 176     | 18.4  | 12.5  | 18.7  |
| 179     | 15.4  | 13.5  | 20.3  |





#14

Anthracene

Concen: 0.41 ng

RT: 13.09 min Scan# 2321

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

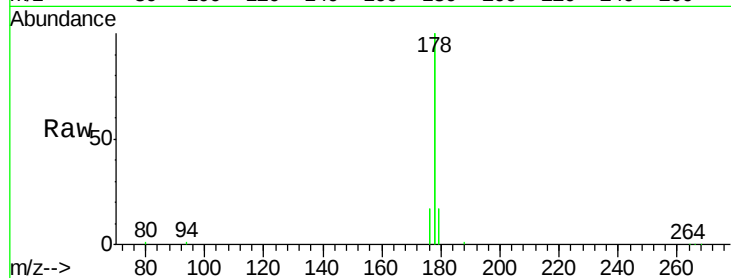
Tgt Ion:178 Resp: 29190

Ion Ratio Lower Upper

178 100

176 18.1 14.6 21.8

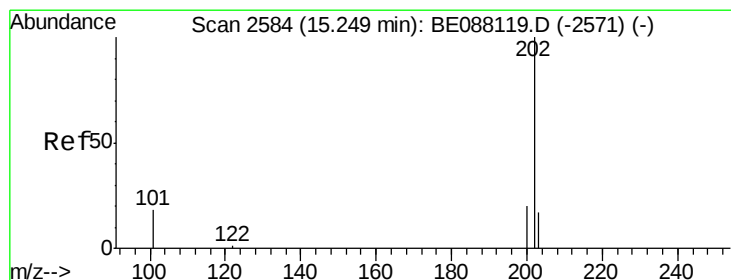
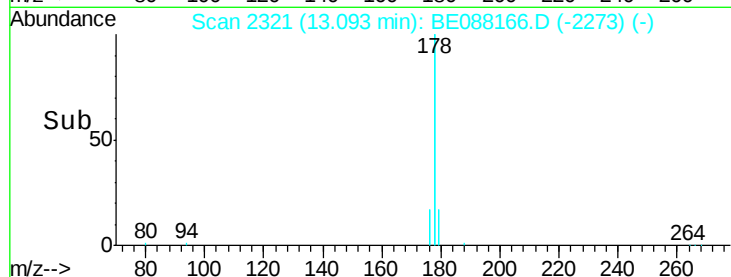
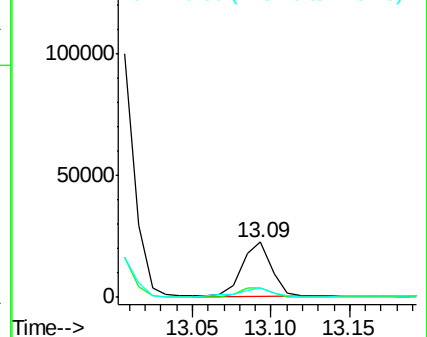
179 18.3 12.5 18.7



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



#15

Fluoranthene

Concen: 3.27 ng

RT: 15.25 min Scan# 2585

Delta R.T. -0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

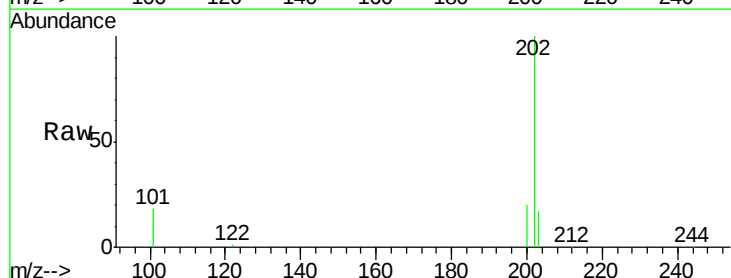
Tgt Ion:202 Resp: 56476

Ion Ratio Lower Upper

202 100

101 18.2 14.8 22.2

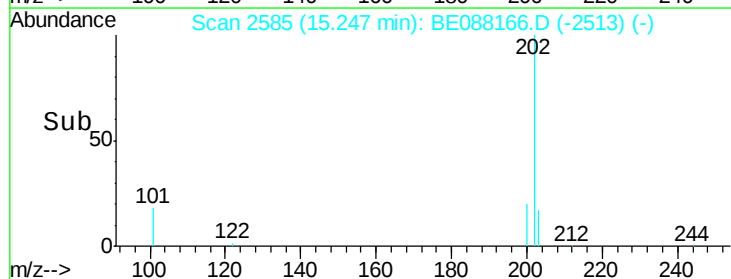
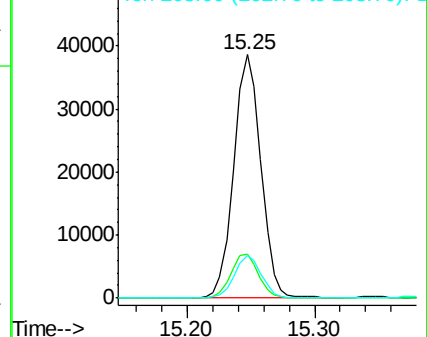
203 17.2 13.5 20.3

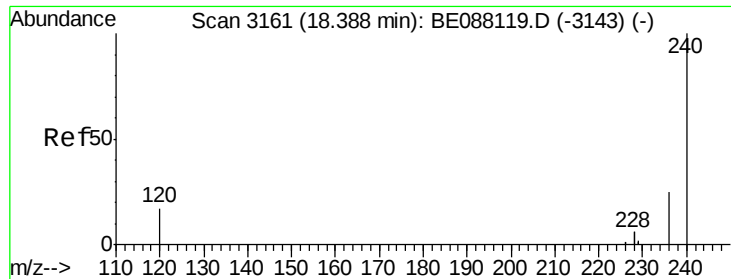


Abundance Ion 202.00 (201.70 to 202.70): E

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: 18.38 min Scan# 3161

Delta R.T. -0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

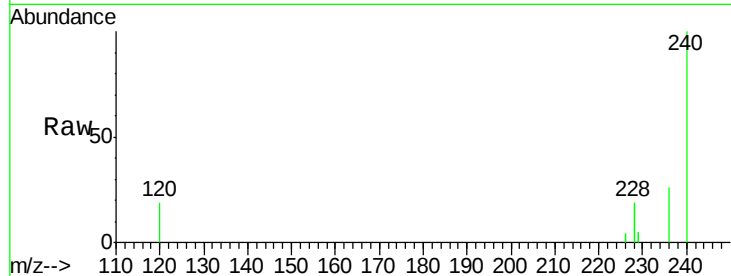
Tgt Ion:240 Resp: 52385

Ion Ratio Lower Upper

240 100

120 19.5 13.9 20.9

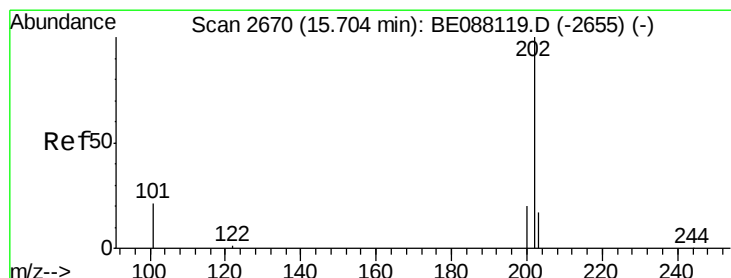
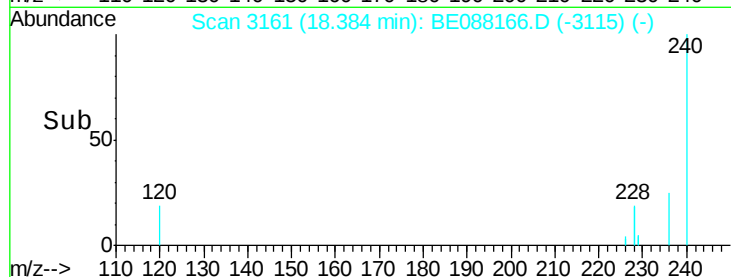
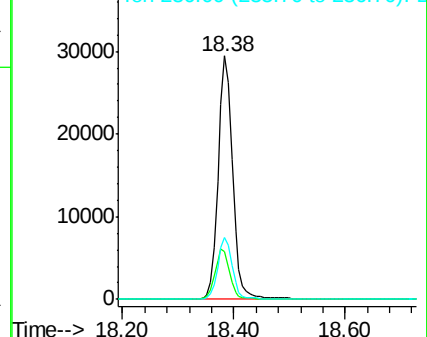
236 25.6 19.9 29.9



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



#17

Pyrene

Concen: 3.47 ng

RT: 15.70 min Scan# 2671

Delta R.T. -0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

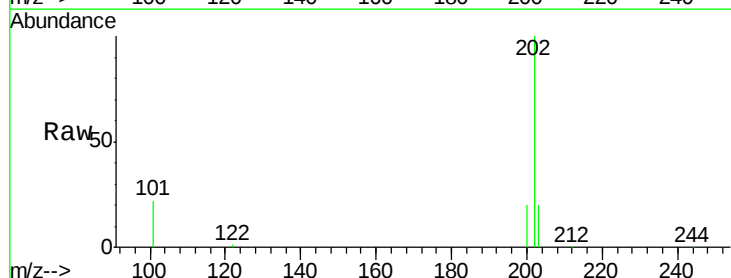
Tgt Ion:202 Resp: 49407

Ion Ratio Lower Upper

202 100

200 20.3 16.1 24.1

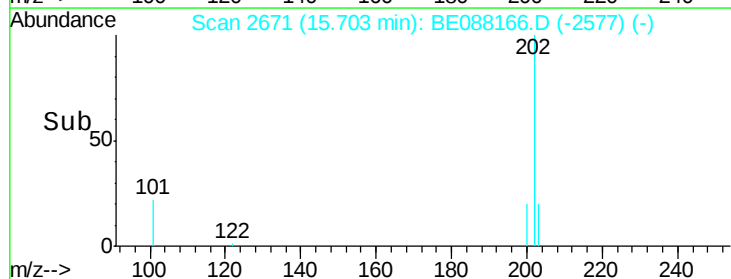
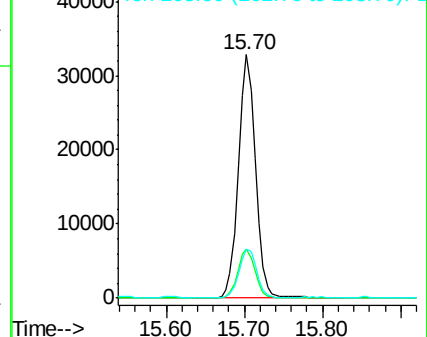
203 20.6 13.9 20.9

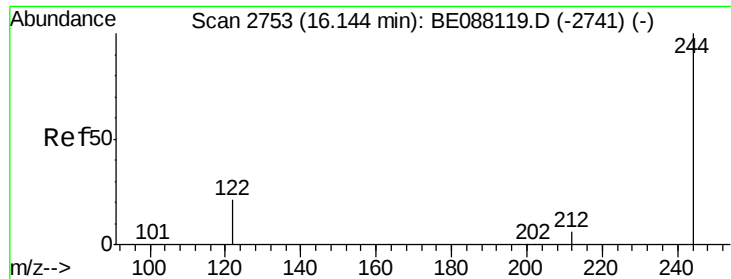


Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E





#18

Terphenyl-d14

Concen: 12.31 ng

RT: 16.15 min Scan# 2755

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

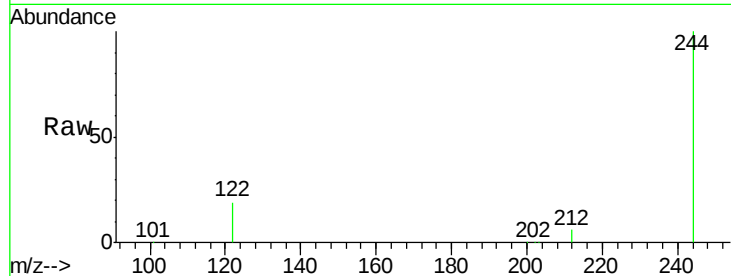
Tgt Ion:244 Resp: 103789

Ion Ratio Lower Upper

244 100

212 6.4 5.4 8.0

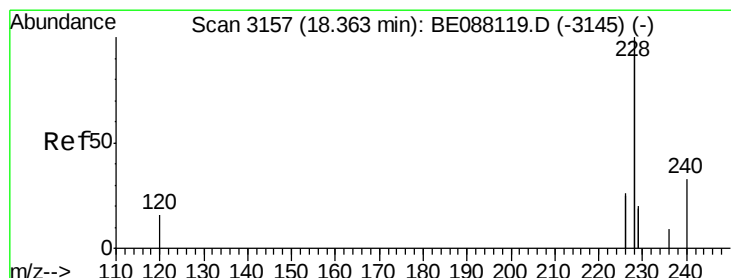
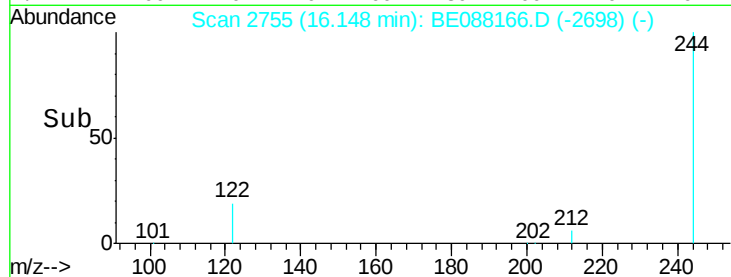
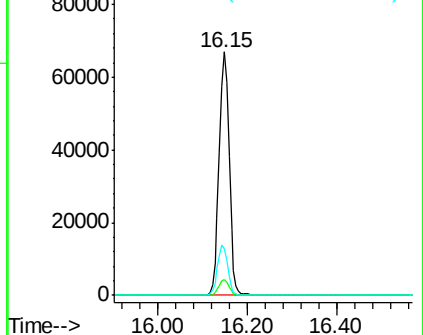
122 19.3 17.5 26.3



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



#19

Benzo(a)anthracene

Concen: 1.73 ng

RT: 18.36 min Scan# 3158

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

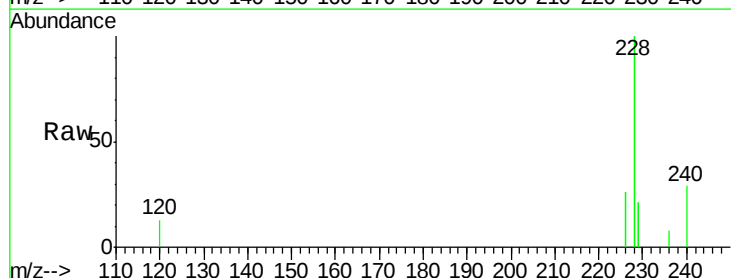
Tgt Ion:228 Resp: 80366

Ion Ratio Lower Upper

228 100

226 25.8 20.8 31.2

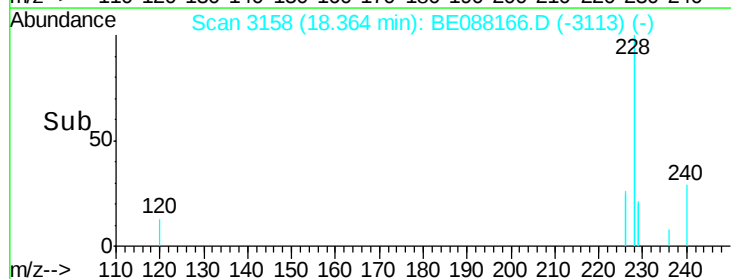
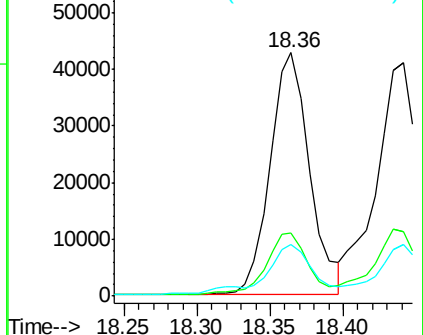
229 21.3 15.6 23.4

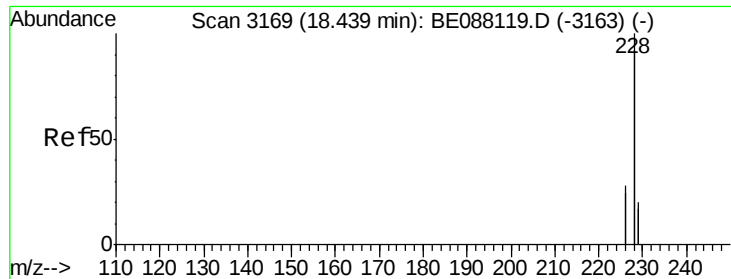


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





#20

Chrysene

Concen: 1.84 ng

RT: 18.44 min Scan# 3170

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

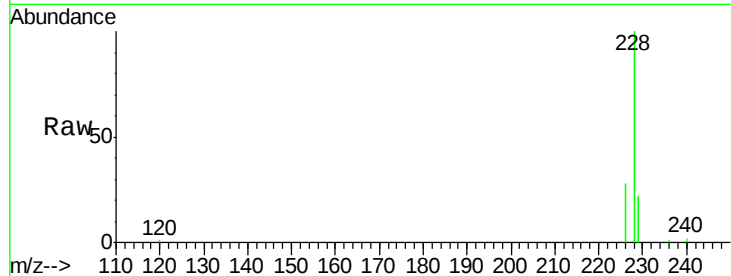
Tgt Ion:228 Resp: 84081

Ion Ratio Lower Upper

228 100

226 27.7 22.7 34.1

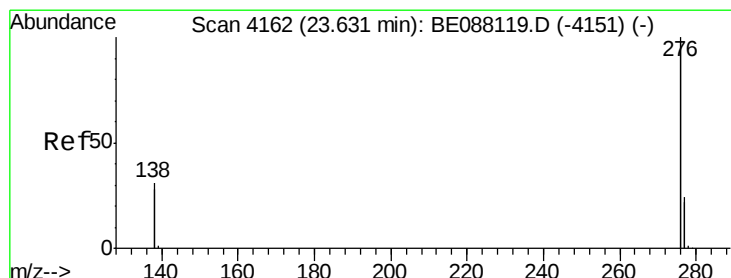
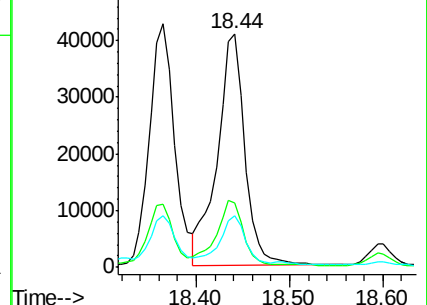
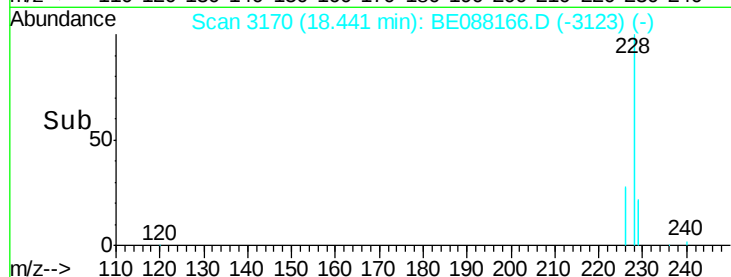
229 22.0 15.8 23.6



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: 0.64 ng

RT: 23.63 min Scan# 4163

Delta R.T. -0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

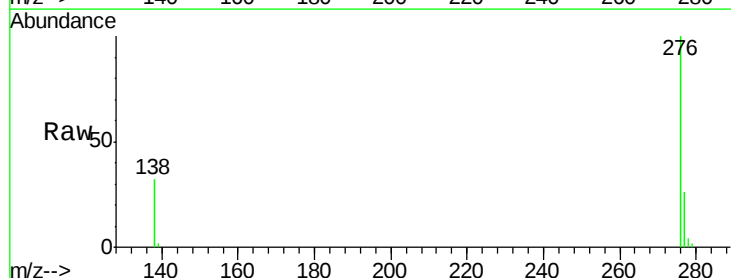
Tgt Ion:276 Resp: 32385

Ion Ratio Lower Upper

276 100

138 26.4 18.5 27.7

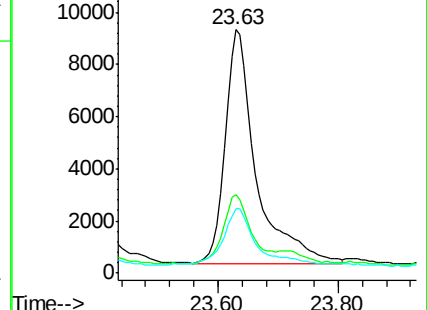
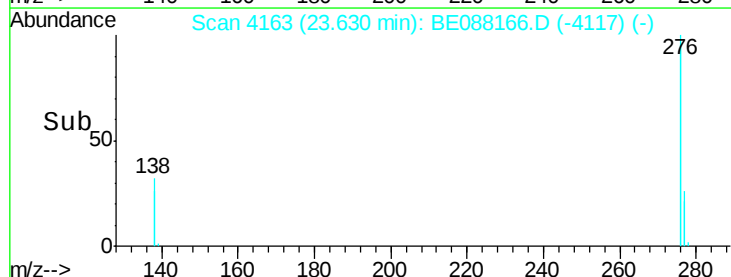
277 25.3 14.6 21.8#

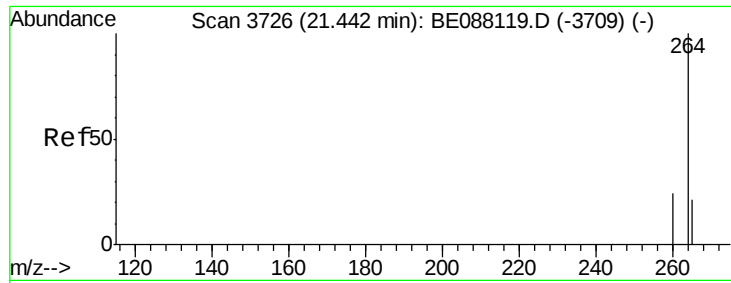


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E





#22

Perylene-d12

Concen: 5.00 ng

RT: 21.44 min Scan# 3726

Delta R.T. -0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

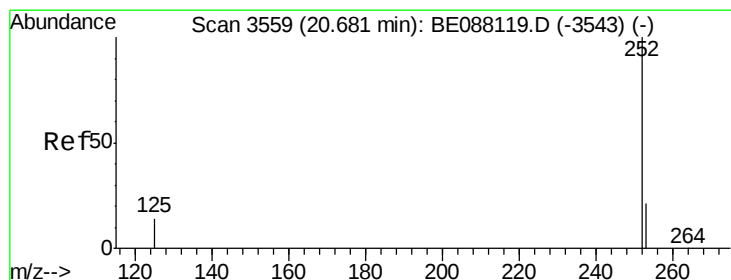
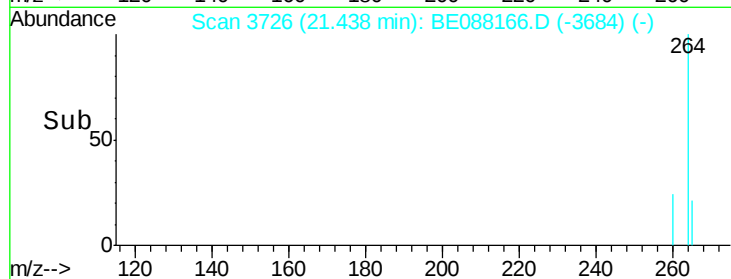
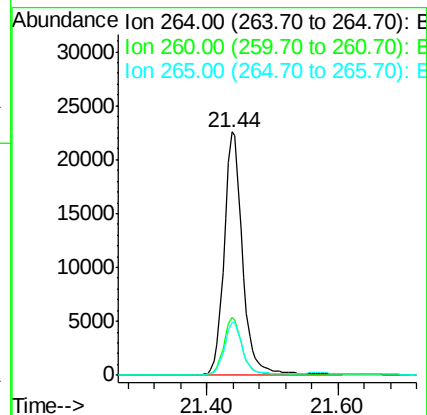
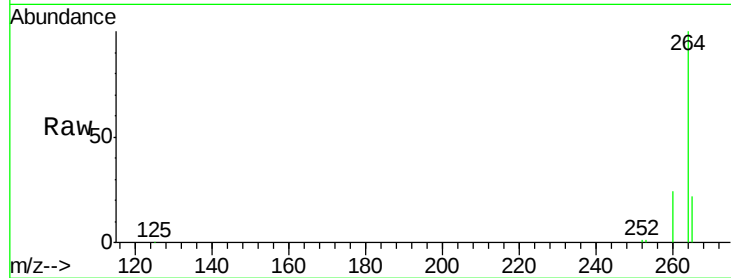
Tgt Ion:264 Resp: 43814

Ion Ratio Lower Upper

264 100

260 23.9 19.0 28.4

265 21.5 17.2 25.8



#23

Benzo(b)fluoranthene

Concen: 1.70 ng

RT: 20.69 min Scan# 3561

Delta R.T. 0.01 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

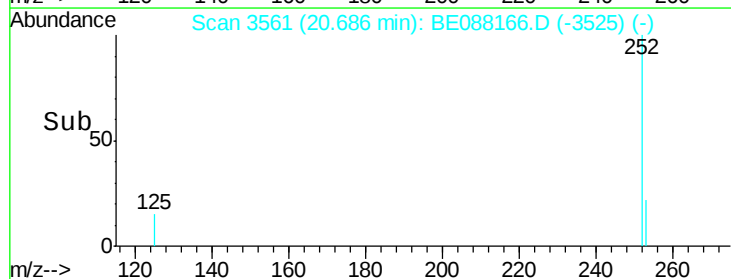
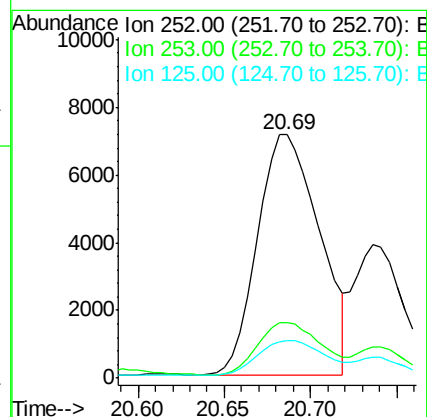
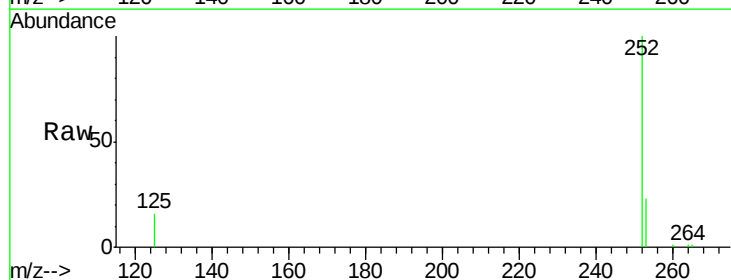
Tgt Ion:252 Resp: 17713

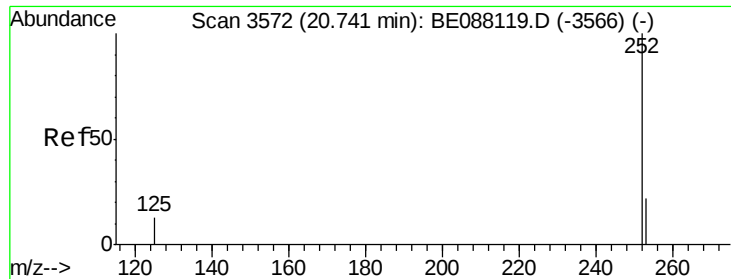
Ion Ratio Lower Upper

252 100

253 22.9 17.4 26.0

125 15.5 11.8 17.8





#24

Benzo(k)fluoranthene

Concen: 0.68 ng

RT: 20.74 min Scan# 3572

Delta R.T. -0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

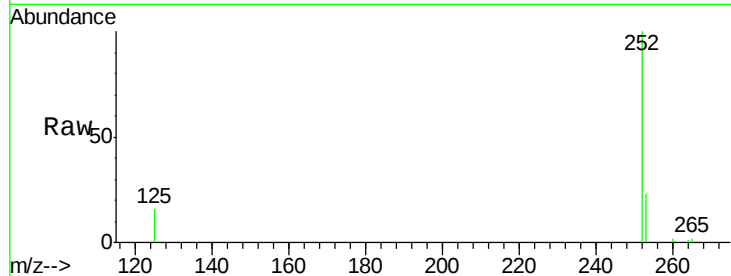
Tgt Ion:252 Resp: 7544

Ion Ratio Lower Upper

252 100

253 23.5 17.6 26.4

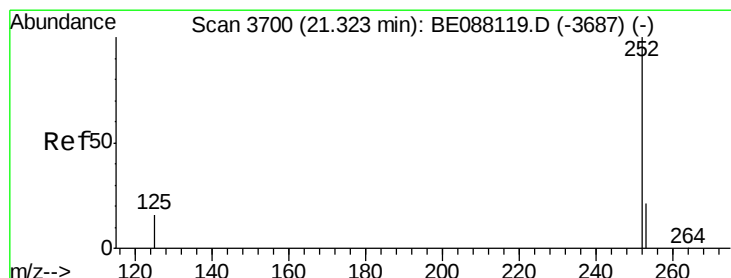
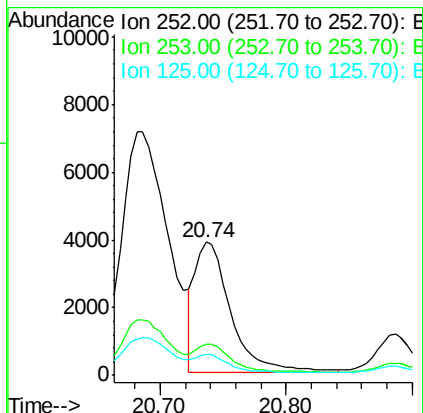
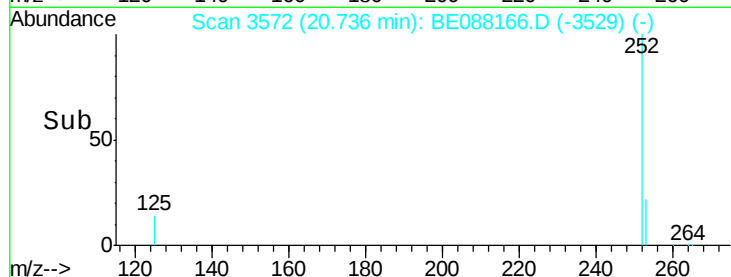
125 15.8 11.5 17.3



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



#25

Benzo(a)pyrene

Concen: 1.32 ng

RT: 21.32 min Scan# 3701

Delta R.T. 0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

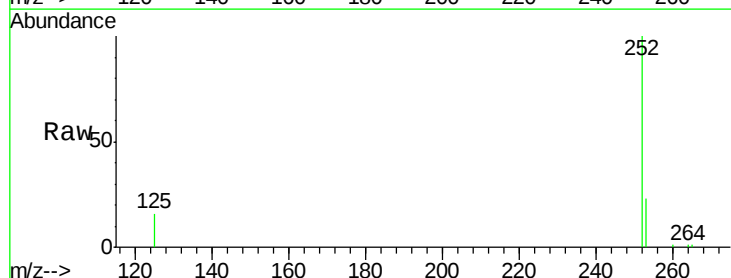
Tgt Ion:252 Resp: 12673

Ion Ratio Lower Upper

252 100

253 23.4 17.5 26.3

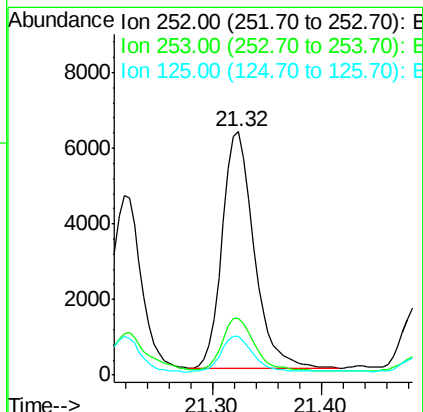
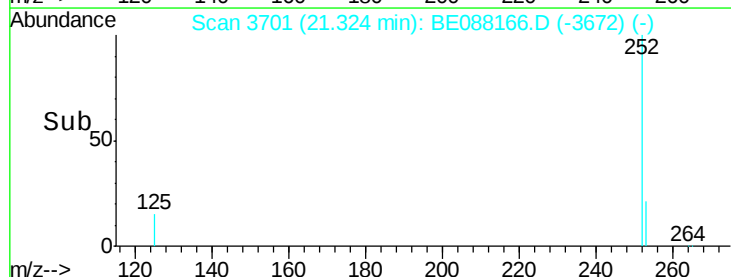
125 16.1 13.0 19.6

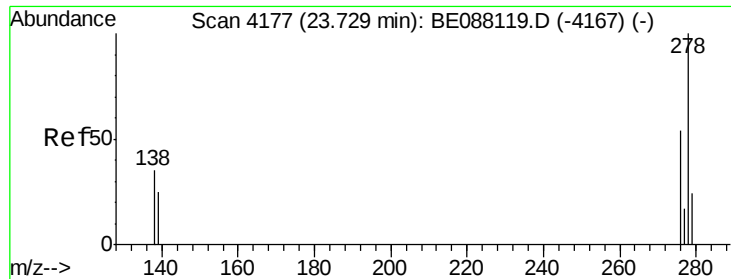


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#26

Dibenzo(a,h)anthracene

Concen: 0.19 ng

RT: 23.72 min Scan# 4177

Delta R.T. -0.01 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

Instrument :

BNA\_E

ClientSampleId :

YS19-SB04-1014DL

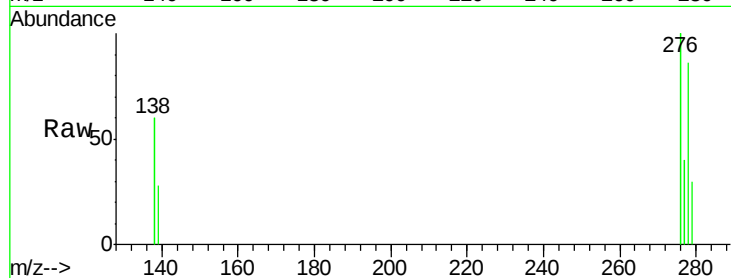
Tgt Ion: 278 Resp: 1781

Ion Ratio Lower Upper

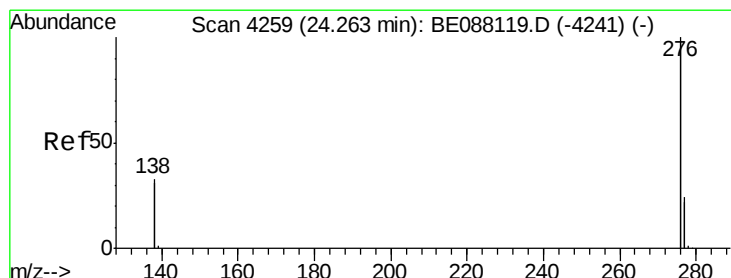
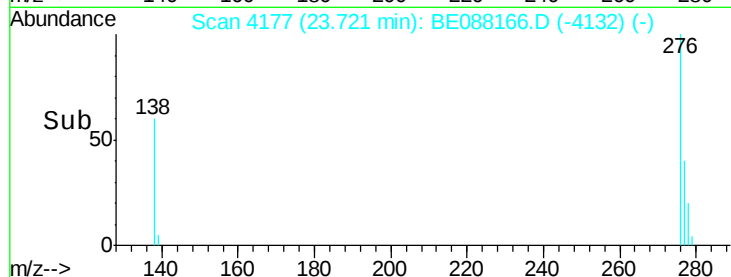
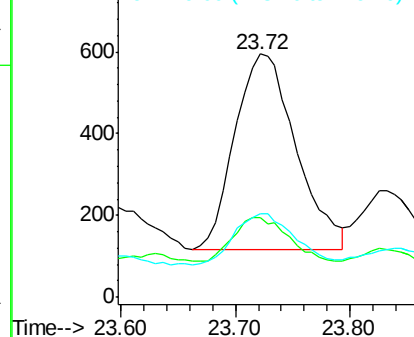
278 100

139 32.8 20.9 31.3#

279 34.3 19.8 29.8#



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: 0.74 ng

RT: 24.26 min Scan# 4260

Delta R.T. -0.00 min

Lab File: BE088166.D

Acq: 22 Oct 2014 5:47

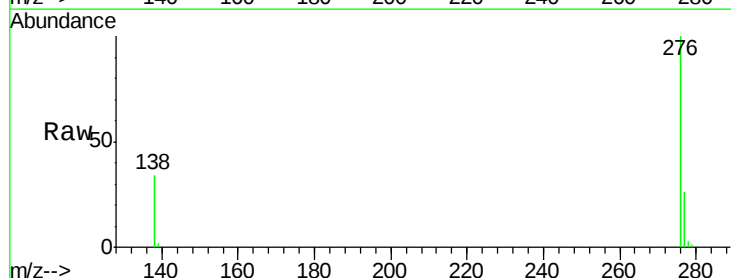
Tgt Ion: 276 Resp: 30885

Ion Ratio Lower Upper

276 100

277 25.5 19.2 28.8

138 33.8 26.6 40.0



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

