

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE103114\
 Data File : BE088446.D
 Acq On : 1 Nov 2014 5:18
 Operator : TP/JJ
 Sample : F4379-01
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 YS19-SS32-1014

Quant Time: Nov 01 05:31:39 2014
 Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SIM-PAH-BE103114.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Sat Nov 01 00:42:07 2014
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.09	152	40493	5.00	ng	0.00
3) Naphthalene-d8	8.65	136	136582	5.00	ng	0.00
7) Acenaphthene-d10	10.79	164	51013	5.00	ng	0.00
12) Phenanthrene-d10	12.91	188	87376	5.00	ng	0.00
16) Chrysene-d12	18.33	240	45948	5.00	ng	0.01
22) Perylene-d12	21.39	264	43751	5.00	ng	0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) Nitrobenzene-d5	7.79	82	676468	67.54	ng	0.02
8) 2-Fluorobiphenyl	10.00	172	723885	50.34	ng	0.01
18) Terphenyl-d14	16.10	244	417014	49.40	ng	0.03

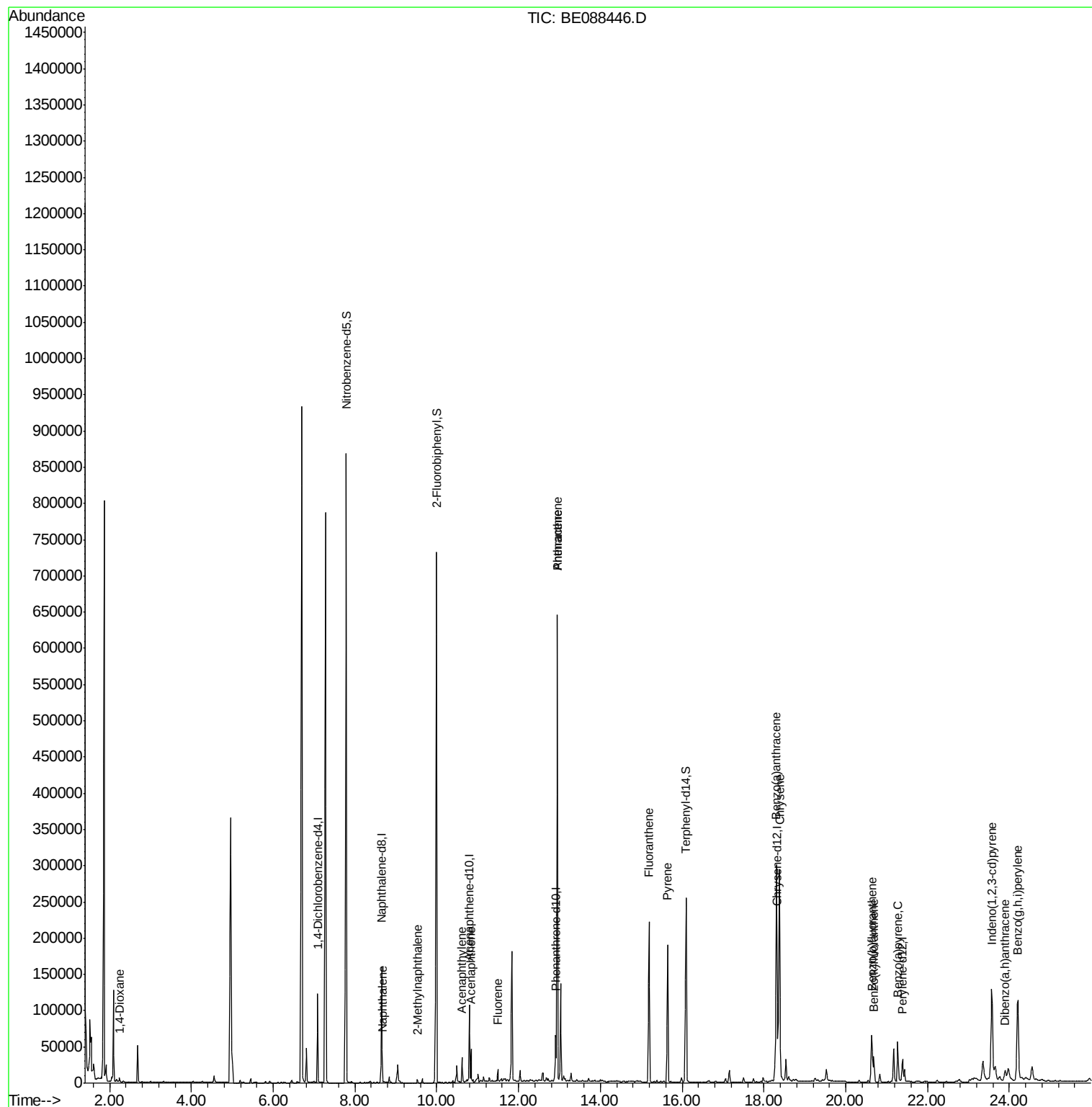
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	2.24	88	170	0.03	ng	# 1
5) Naphthalene	8.68	128	6082	0.22	ng	97
6) 2-Methylnaphthalene	9.53	142	2302	0.13	ng	# 94
9) Acenaphthylene	10.62	152	34223	0.41	ng	97
10) Acenaphthene	10.84	154	7669	0.63	ng	93
11) Fluorene	11.50	166	9250	0.71	ng	98
13) Phenanthrene	12.95	178	806282	10.16	ng	99
14) Anthracene	12.95	178	806282	12.58	ng	99
15) Fluoranthene	15.19	202	224668	17.43	ng	99
17) Pyrene	15.64	202	188528	12.58	ng	96
19) Benzo(a)anthracene	18.31	228	372403	8.61	ng	98
20) Chrysene	18.38	228	399114	9.40	ng	96
21) Indeno(1,2,3-cd)pyrene	23.57	276	217670	5.50	ng	# 84
23) Benzo(b)fluoranthene	20.64	252	115281	12.02	ng	98
24) Benzo(k)fluoranthene	20.69	252	41885	3.96	ng	98
25) Benzo(a)pyrene	21.27	252	76883	8.35	ng	99
26) Dibenzo(a,h)anthracene	23.90	278	10035	1.17	ng	90
27) Benzo(g,h,i)perylene	24.20	276	222800	5.68	ng	99

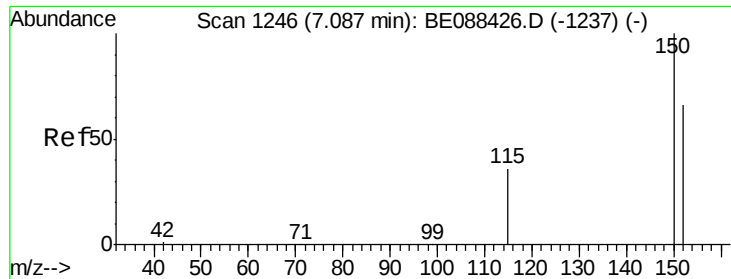
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 7.09 min Scan# 1247

Delta R.T. 0.00 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

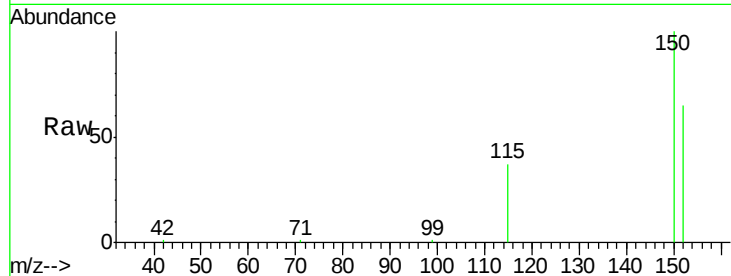
Tgt Ion:152 Resp: 40493

Ion Ratio Lower Upper

152 100

150 154.6 121.8 182.8

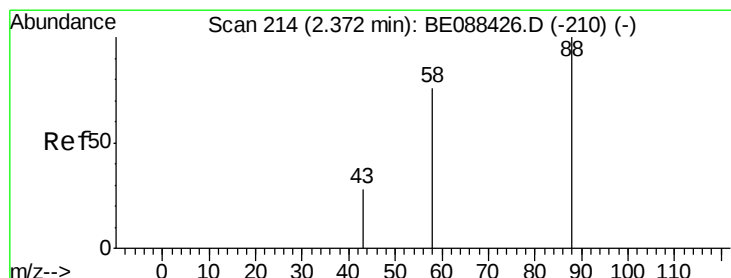
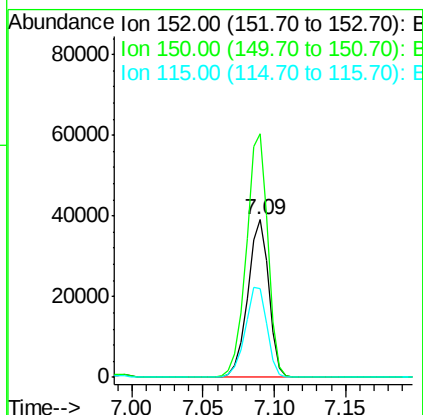
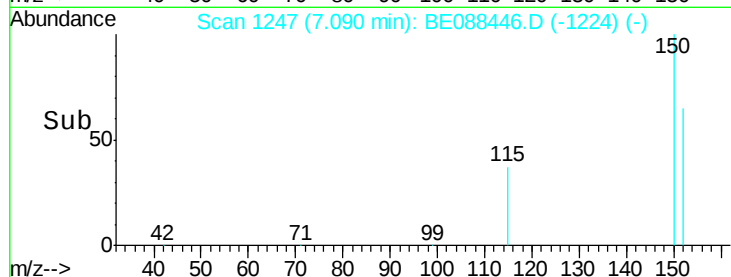
115 56.7 43.9 65.9



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: 0.03 ng

RT: 2.24 min Scan# 186

Delta R.T. -0.13 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

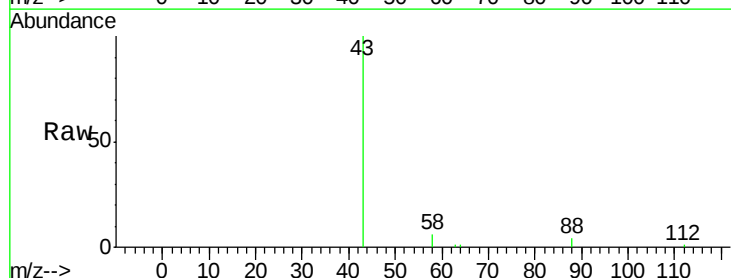
Tgt Ion: 88 Resp: 170

Ion Ratio Lower Upper

88 100

58 104.1 59.1 88.7#

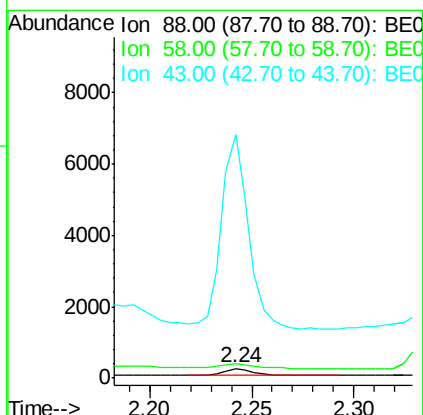
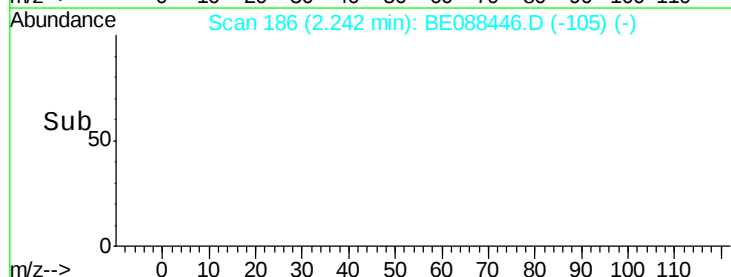
43 2971.2 21.9 32.9#

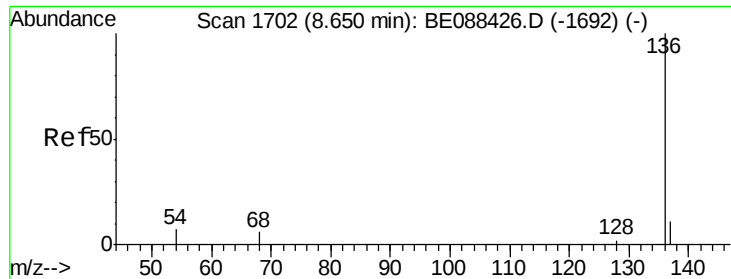


Abundance Ion 88.00 (87.70 to 88.70): BE0

Ion 58.00 (57.70 to 58.70): BE0

Ion 43.00 (42.70 to 43.70): BE0

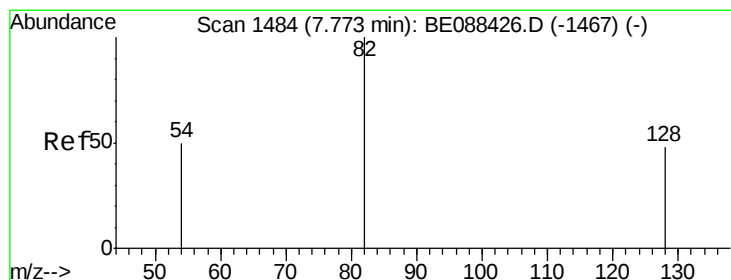
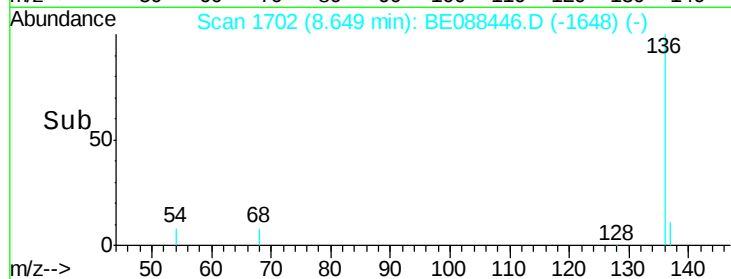
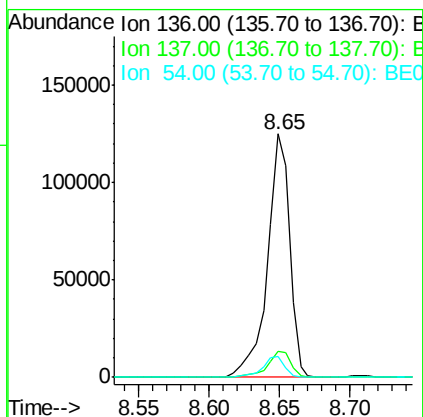
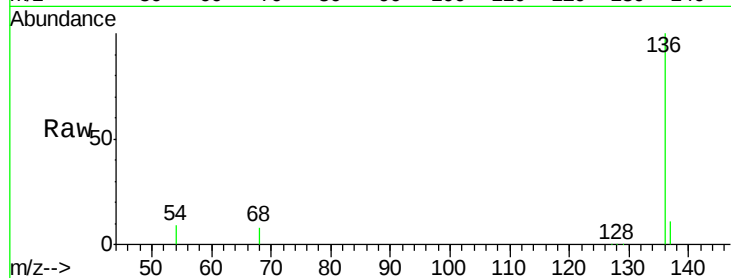




#3
Naphthalene-d8
Concen: 5.00 ng
RT: 8.65 min Scan# 1702
Delta R.T. -0.00 min
Lab File: BE088446.D
Acq: 1 Nov 2014 5:18

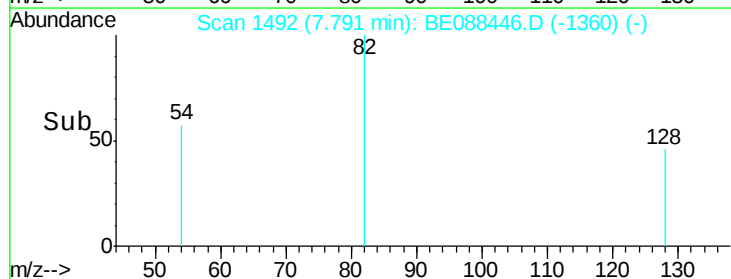
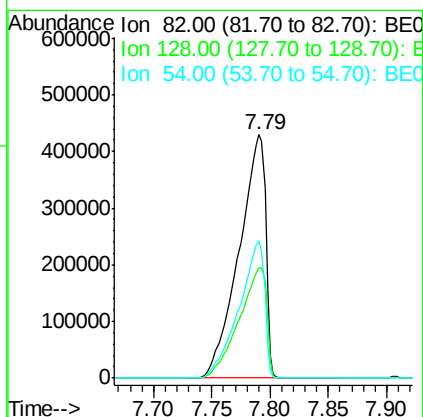
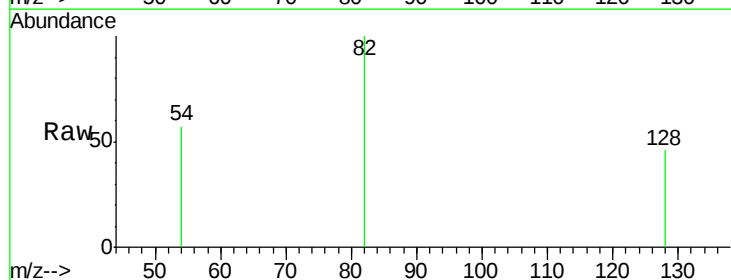
Instrument :
BNA_E
ClientSampleId :
YS19-SS32-1014

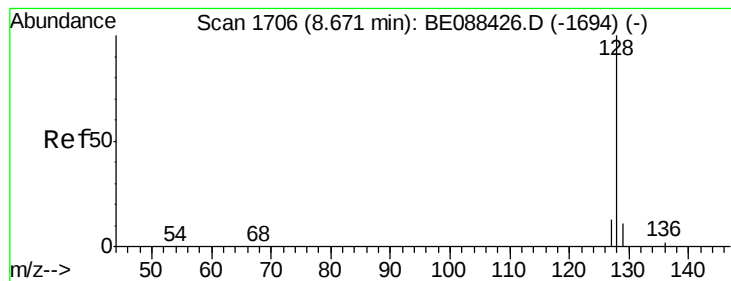
Tgt Ion: 136 Resp: 136582
Ion Ratio Lower Upper
136 100
137 10.8 8.8 13.2
54 8.8 5.3 7.9#



#4
Nitrobenzene-d5
Concen: 67.54 ng
RT: 7.79 min Scan# 1492
Delta R.T. 0.02 min
Lab File: BE088446.D
Acq: 1 Nov 2014 5:18

Tgt Ion: 82 Resp: 676468
Ion Ratio Lower Upper
82 100
128 45.5 38.4 57.6
54 56.6 40.2 60.2





#5

Naphthalene

Concen: 0.22 ng

RT: 8.68 min Scan# 1707

Delta R.T. 0.00 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

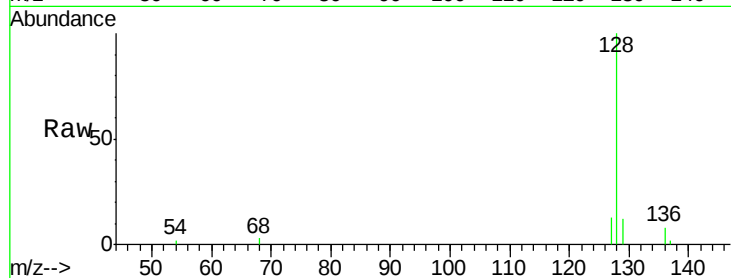
Tgt Ion:128 Resp: 6082

Ion Ratio Lower Upper

128 100

129 12.2 8.6 12.8

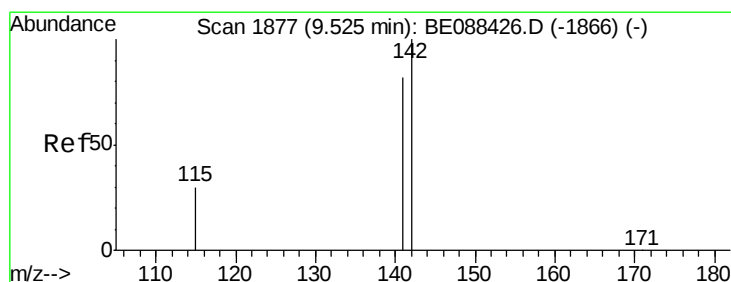
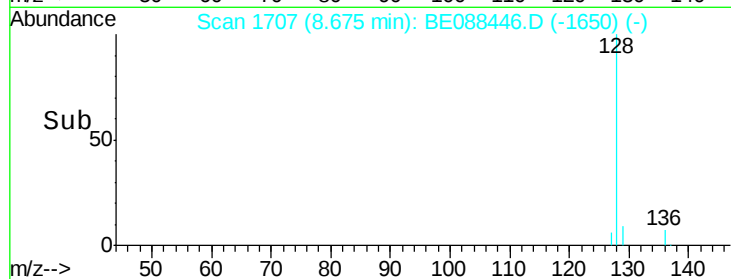
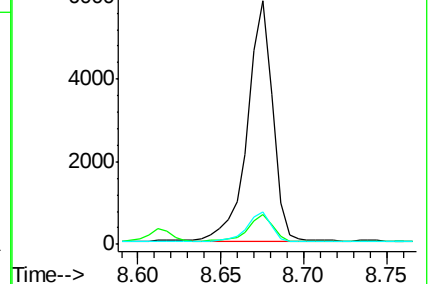
127 13.1 10.1 15.1



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: 0.13 ng

RT: 9.53 min Scan# 1877

Delta R.T. 0.00 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

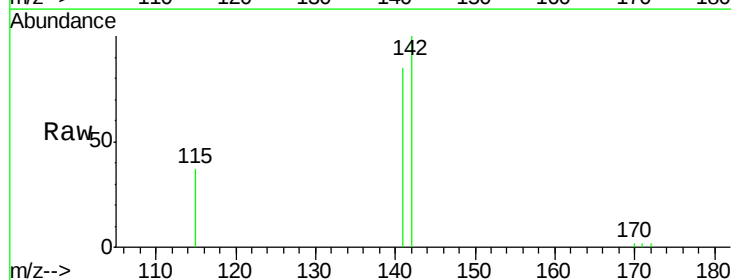
Tgt Ion:142 Resp: 2302

Ion Ratio Lower Upper

142 100

141 85.0 65.8 98.8

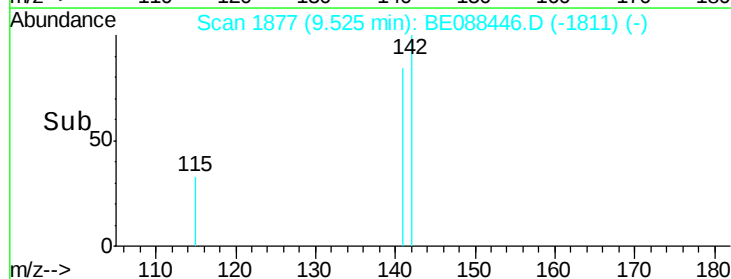
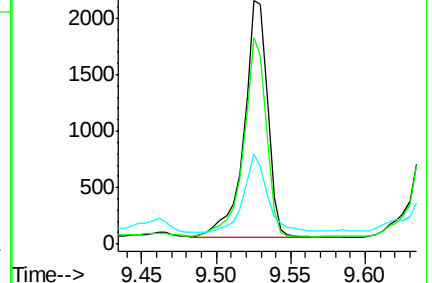
115 37.2 24.2 36.4#



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





#7

Acenaphthene-d10

Concen: 5.00 ng

RT: 10.79 min Scan# 2109

Delta R.T. 0.00 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

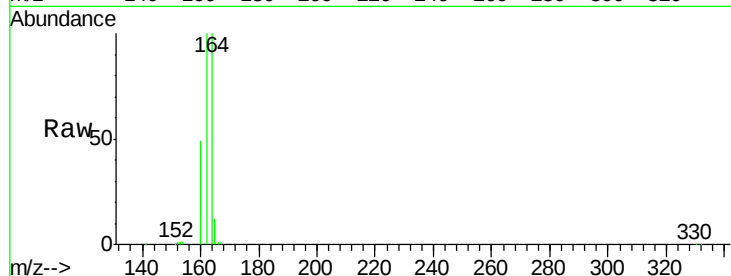
Tgt Ion:164 Resp: 51013

Ion Ratio Lower Upper

164 100

162 99.9 77.0 115.4

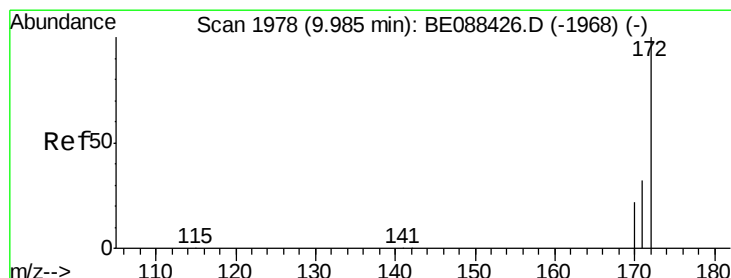
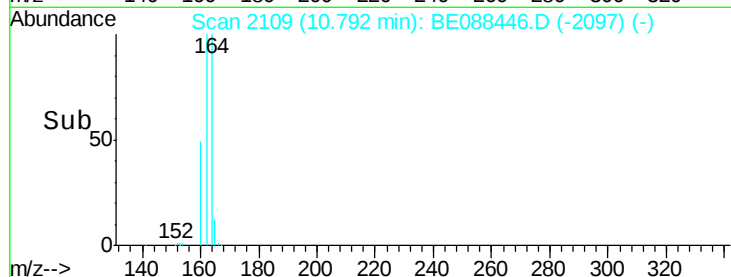
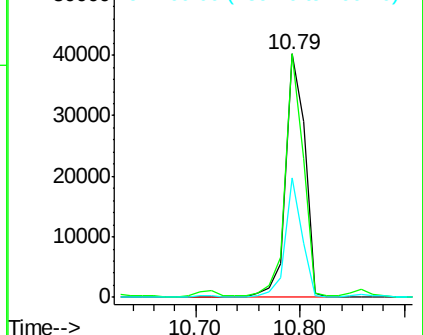
160 49.0 36.8 55.2



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: 50.34 ng

RT: 10.00 min Scan# 1981

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

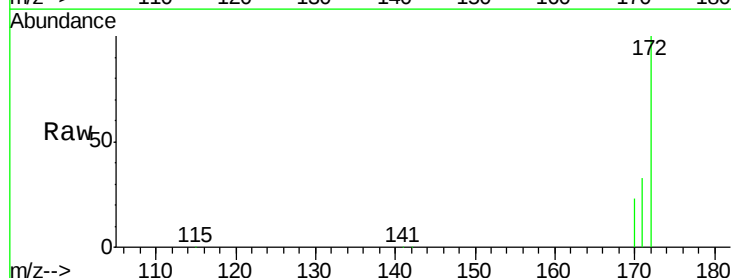
Tgt Ion:172 Resp: 723885

Ion Ratio Lower Upper

172 100

171 33.4 26.0 39.0

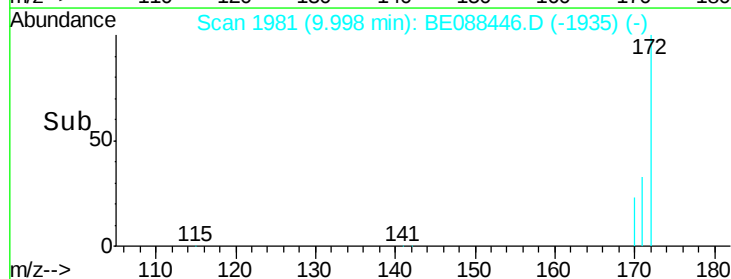
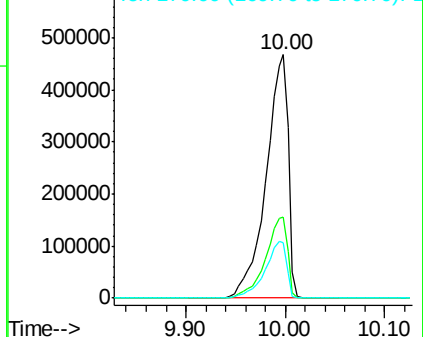
170 22.7 17.6 26.4



Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





#9

Acenaphthylene

Concen: 0.41 ng

RT: 10.62 min Scan# 2093

Delta R.T. 0.00 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

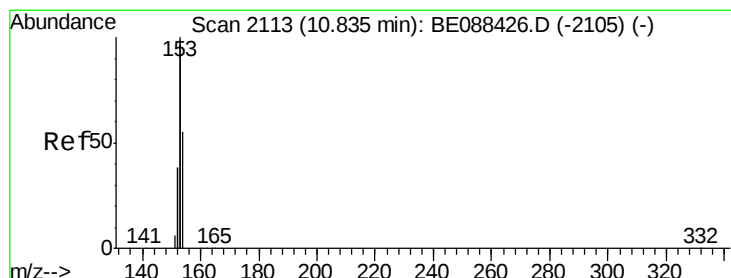
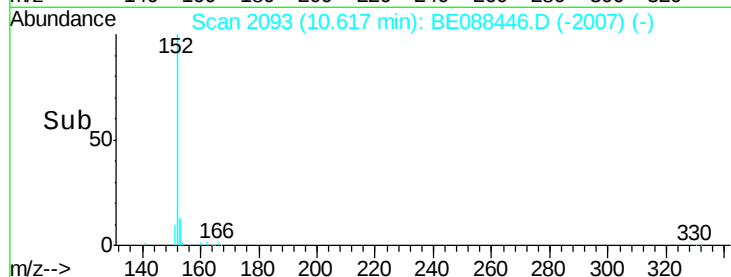
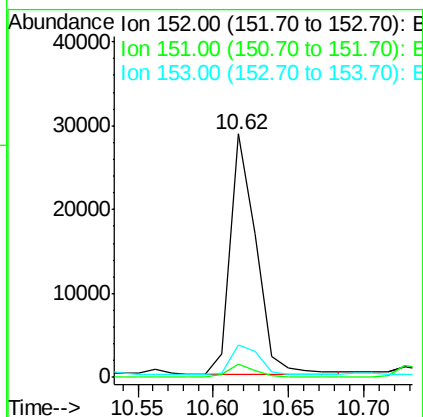
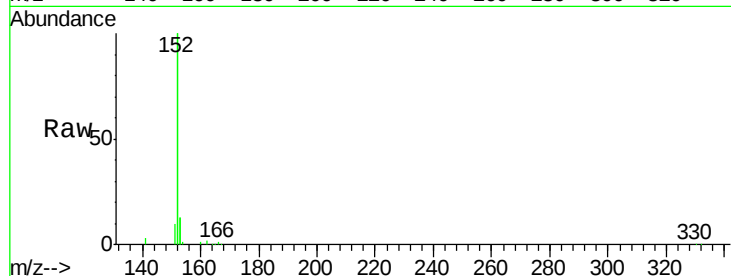
Tgt Ion:152 Resp: 34223

Ion Ratio Lower Upper

152 100

151 4.5 4.4 6.6

153 14.3 10.5 15.7



#10

Acenaphthene

Concen: 0.63 ng

RT: 10.84 min Scan# 2113

Delta R.T. 0.00 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

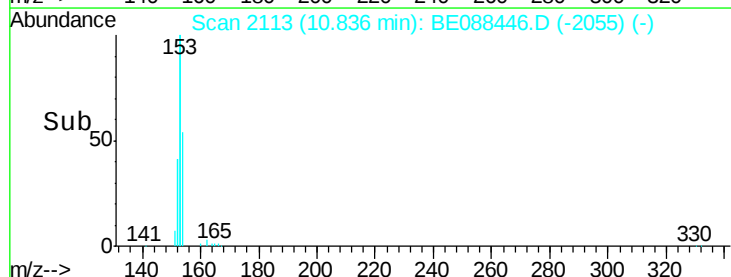
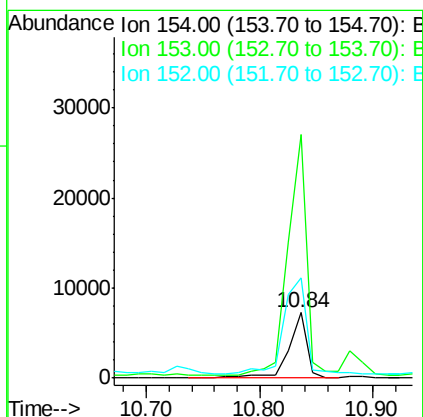
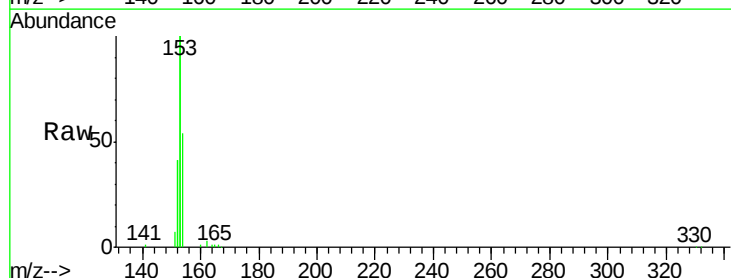
Tgt Ion:154 Resp: 7669

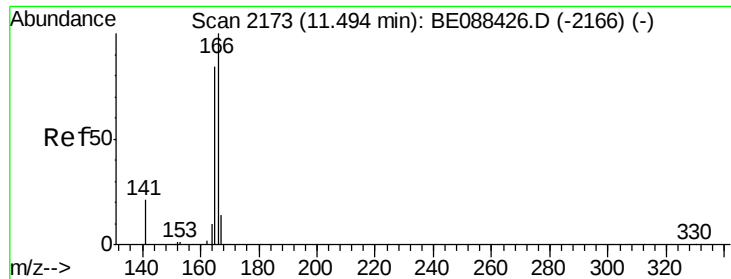
Ion Ratio Lower Upper

154 100

153 393.6 324.3 486.5

152 211.7 154.9 232.3





#11

Fluorene

Concen: 0.71 ng

RT: 11.50 min Scan# 2173

Delta R.T. 0.00 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

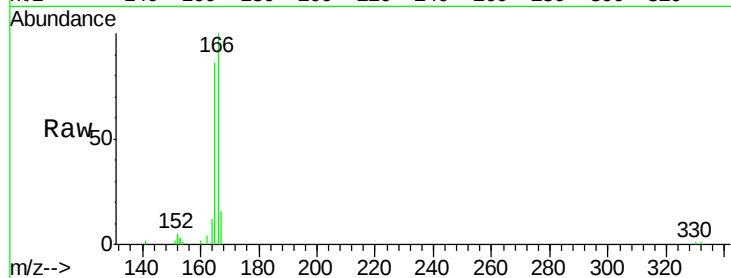
Tgt Ion:166 Resp: 9250

Ion Ratio Lower Upper

166 100

165 91.5 71.3 106.9

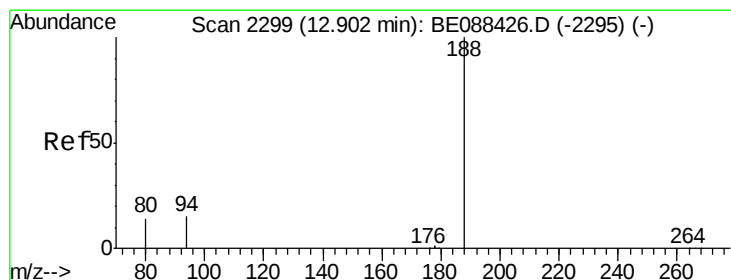
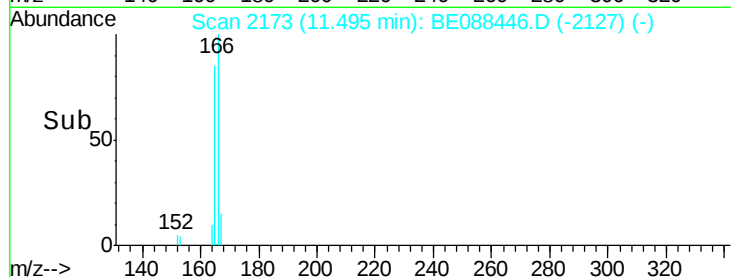
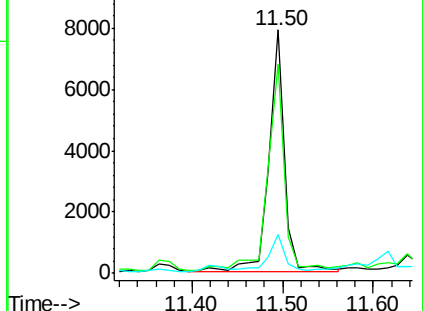
167 13.7 10.7 16.1



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: 12.91 min Scan# 2300

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

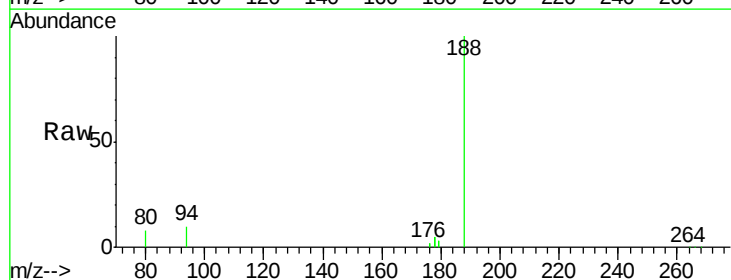
Tgt Ion:188 Resp: 87376

Ion Ratio Lower Upper

188 100

94 9.8 11.8 17.8#

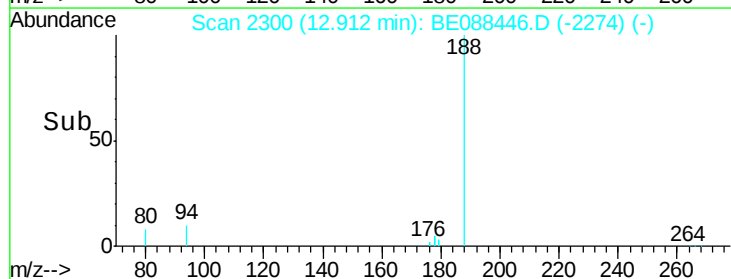
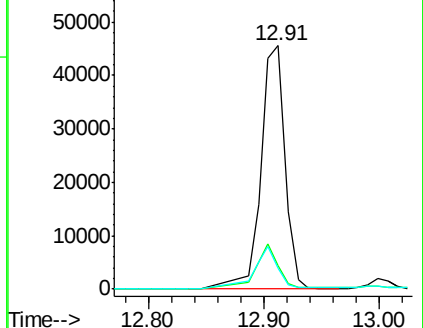
80 8.4 10.9 16.3#

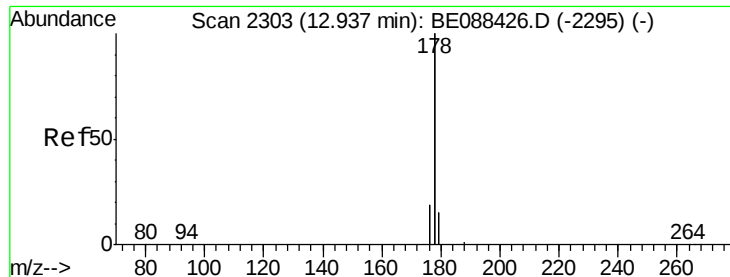


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BE0

Ion 80.00 (79.70 to 80.70): BE0





#13

Phenanthrene

Concen: 10.16 ng

RT: 12.95 min Scan# 2304

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

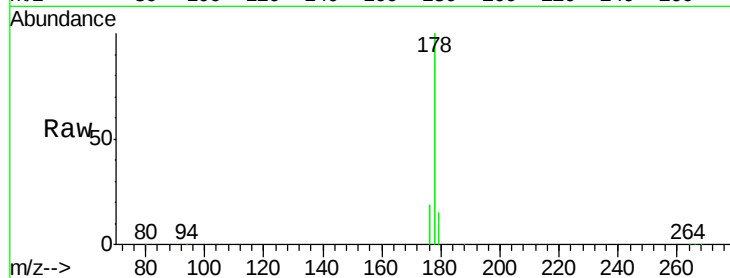
Tgt Ion:178 Resp: 806282

Ion Ratio Lower Upper

178 100

176 18.9 15.4 23.2

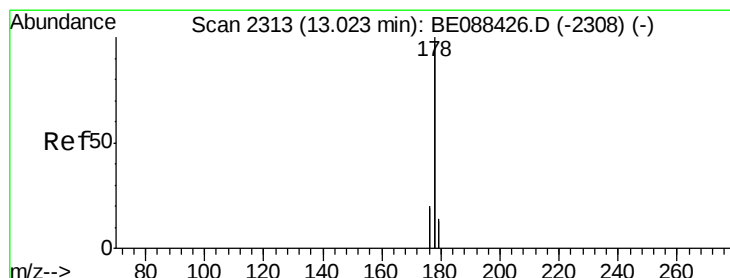
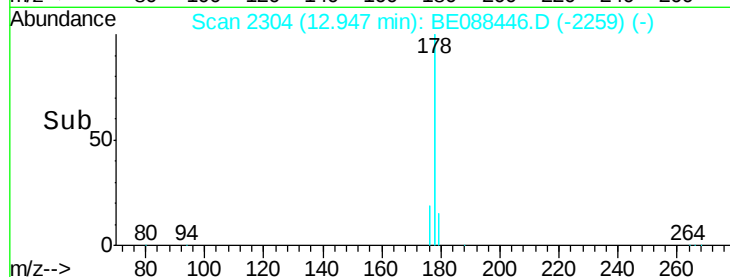
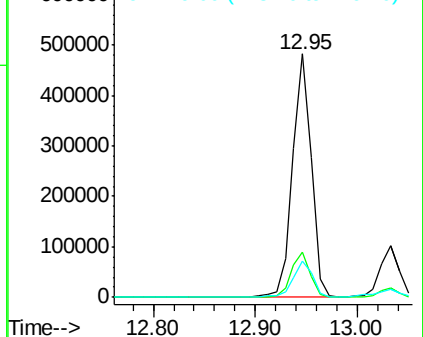
179 16.0 12.8 19.2



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



#14

Anthracene

Concen: 12.58 ng

RT: 12.95 min Scan# 2304

Delta R.T. -0.08 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

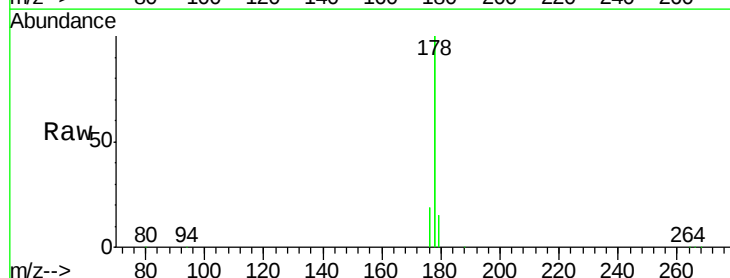
Tgt Ion:178 Resp: 806282

Ion Ratio Lower Upper

178 100

176 18.9 15.0 22.4

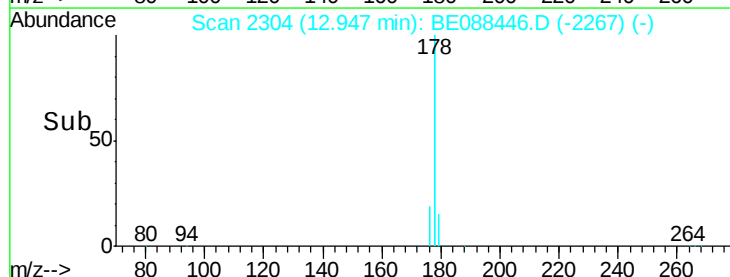
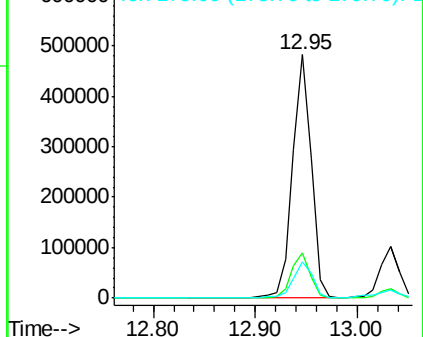
179 16.0 12.5 18.7

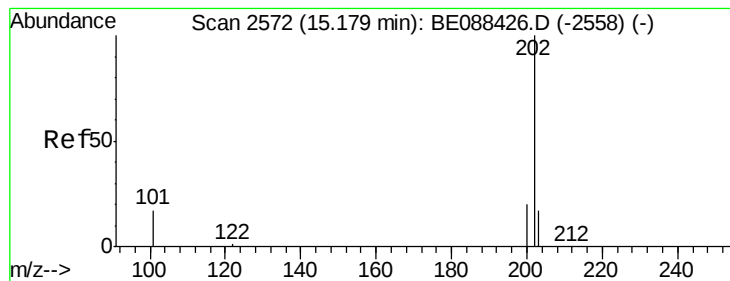


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#15

Fluoranthene

Concen: 17.43 ng

RT: 15.19 min Scan# 2574

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

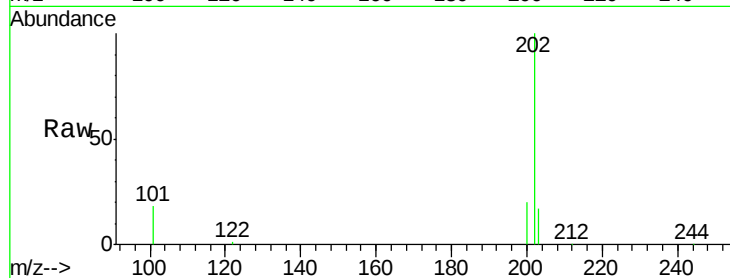
Tgt Ion: 202 Resp: 224668

Ion Ratio Lower Upper

202 100

101 17.6 14.3 21.5

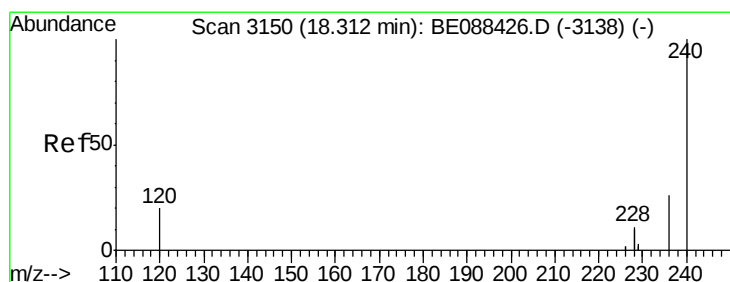
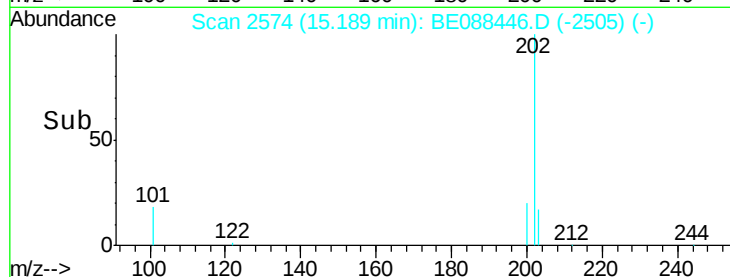
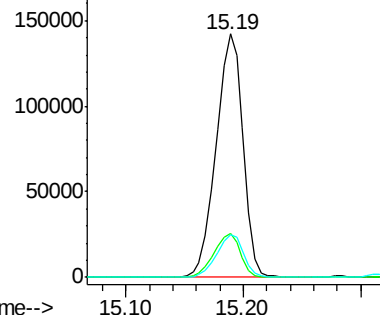
203 17.4 13.6 20.4



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: 18.33 min Scan# 3152

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

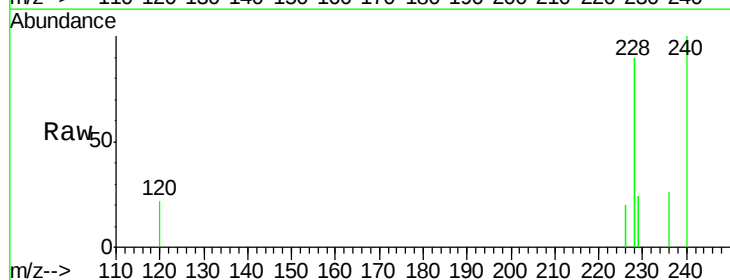
Tgt Ion: 240 Resp: 45948

Ion Ratio Lower Upper

240 100

120 21.8 16.4 24.6

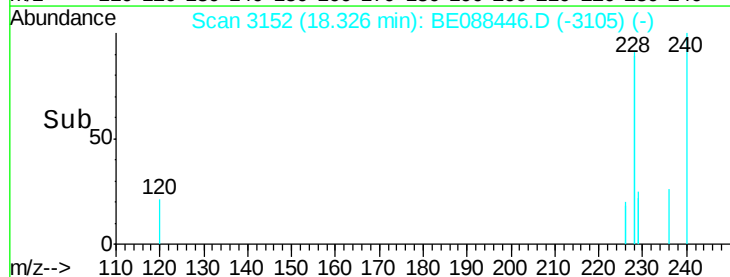
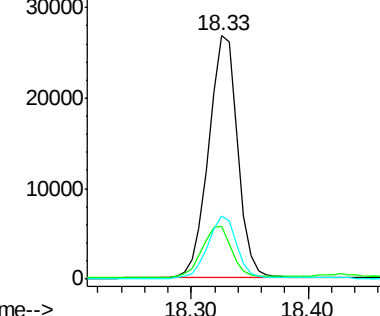
236 25.8 20.5 30.7

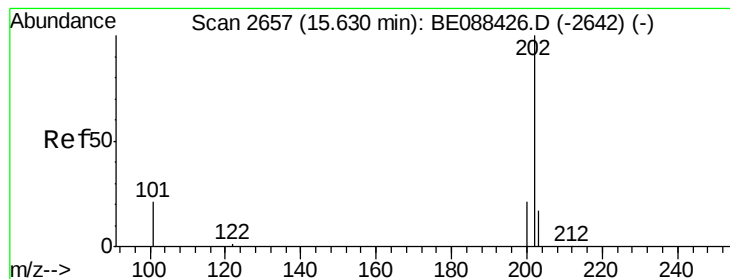


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#17

Pyrene

Concen: 12.58 ng

RT: 15.64 min Scan# 2660

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

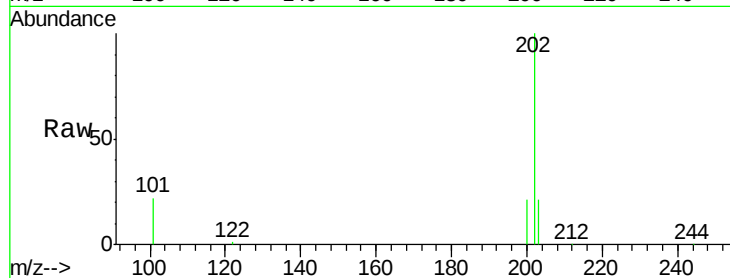
Tgt Ion:202 Resp: 188528

Ion Ratio Lower Upper

202 100

200 20.5 16.1 24.1

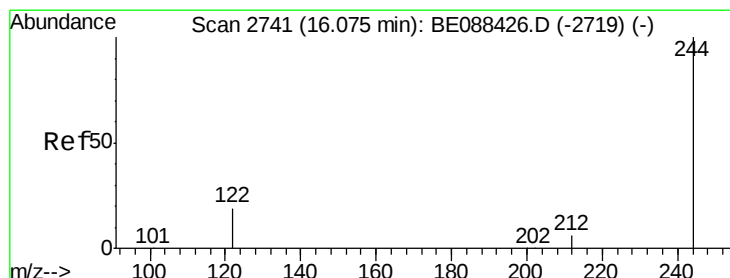
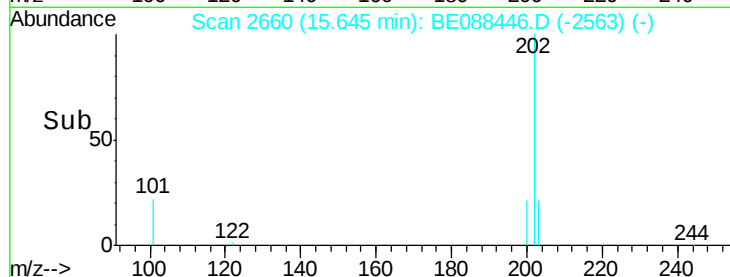
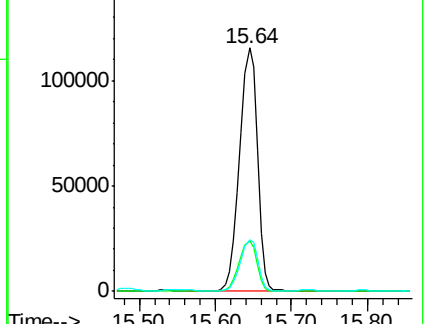
203 20.7 13.8 20.8



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: 49.40 ng

RT: 16.10 min Scan# 2746

Delta R.T. 0.03 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

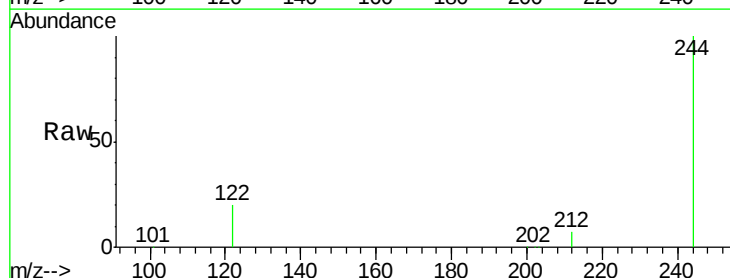
Tgt Ion:244 Resp: 417014

Ion Ratio Lower Upper

244 100

212 7.0 5.5 8.3

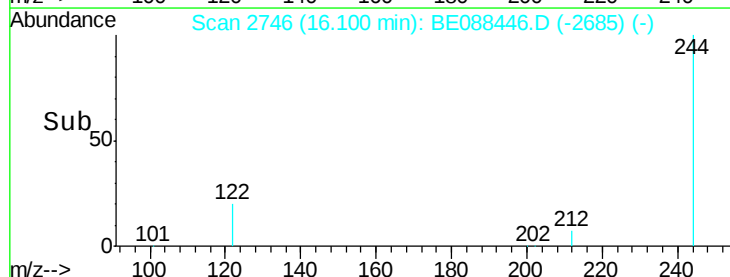
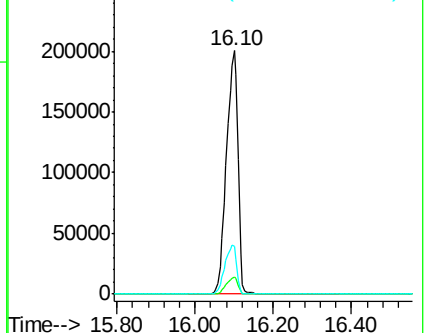
122 19.6 15.6 23.4



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: 8.61 ng

RT: 18.31 min Scan# 3149

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

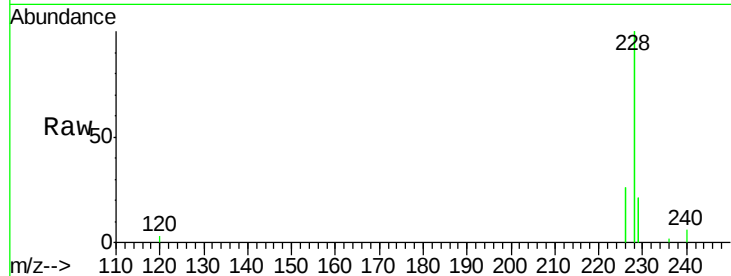
Tgt Ion:228 Resp: 372403

Ion Ratio Lower Upper

228 100

226 25.7 19.8 29.6

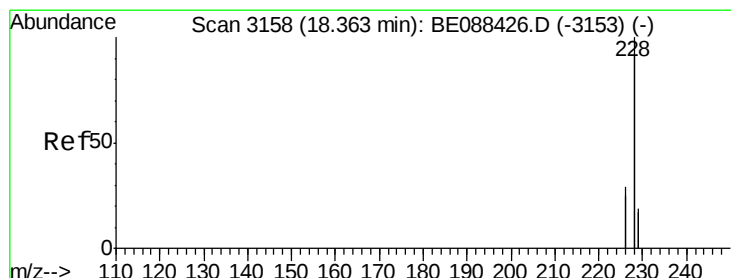
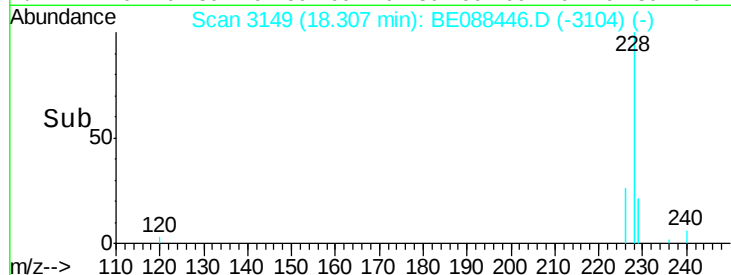
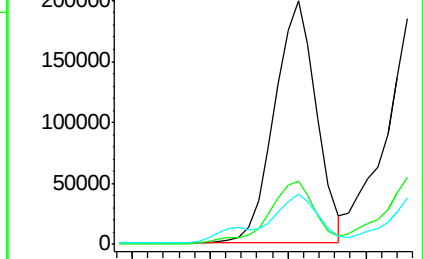
229 20.6 16.0 24.0



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: 9.40 ng

RT: 18.38 min Scan# 3161

Delta R.T. 0.02 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

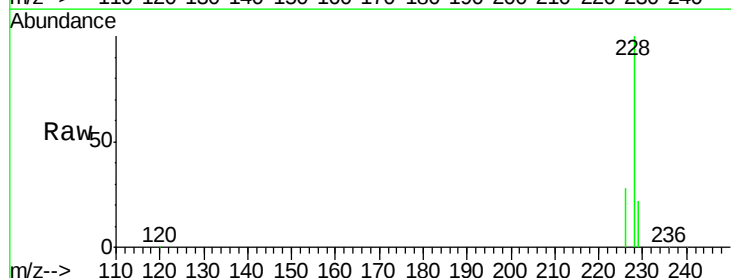
Tgt Ion:228 Resp: 399114

Ion Ratio Lower Upper

228 100

226 27.9 23.6 35.4

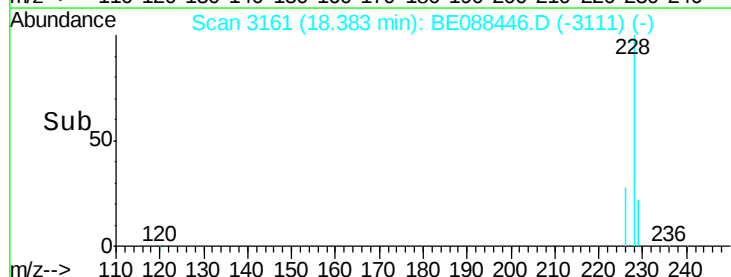
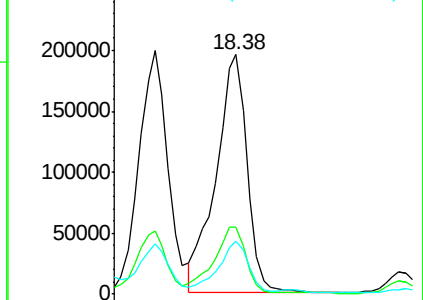
229 22.0 15.4 23.2



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: 5.50 ng

RT: 23.57 min Scan# 4154

Delta R.T. 0.03 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

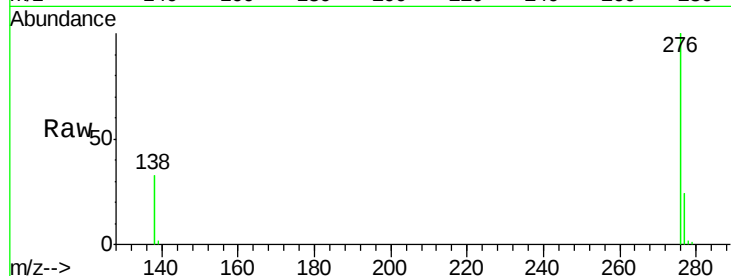
Tgt Ion:276 Resp: 217670

Ion Ratio Lower Upper

276 100

138 33.8 20.2 30.2#

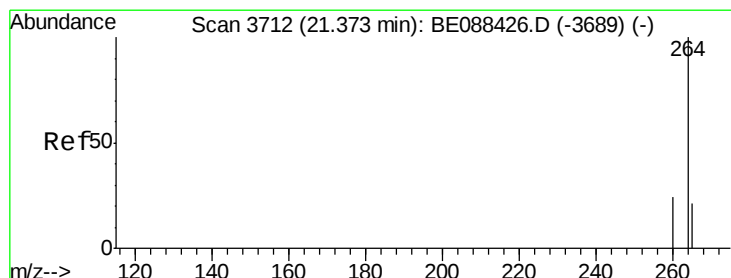
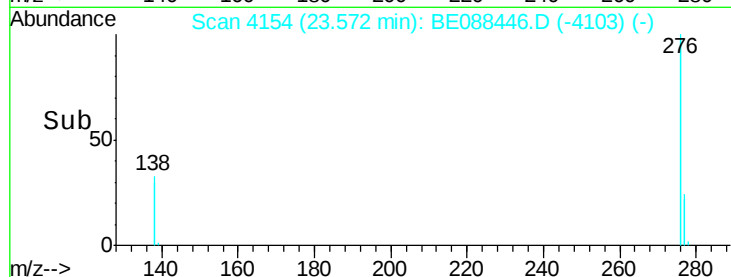
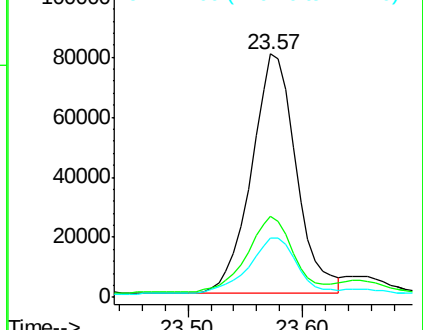
277 24.5 14.8 22.2#



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: 21.39 min Scan# 3715

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

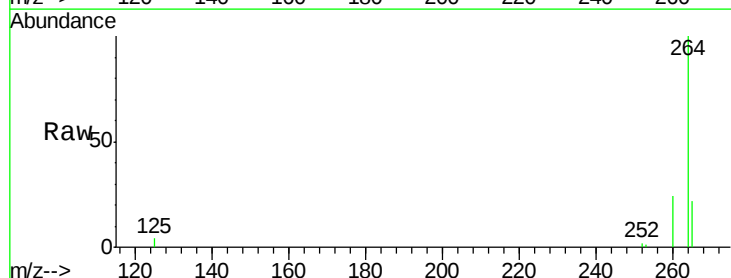
Tgt Ion:264 Resp: 43751

Ion Ratio Lower Upper

264 100

260 23.8 18.9 28.3

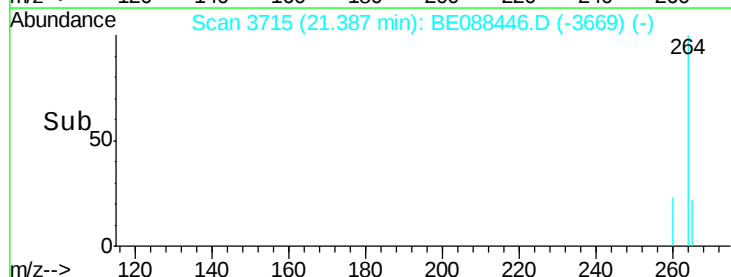
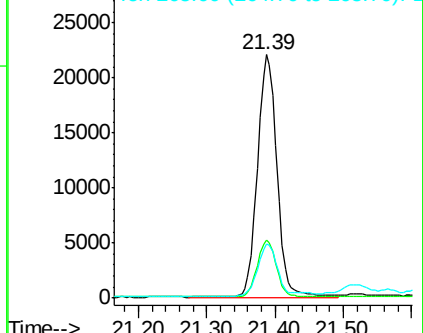
265 22.1 17.2 25.8



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: 12.02 ng

RT: 20.64 min Scan# 3550

Delta R.T. 0.02 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

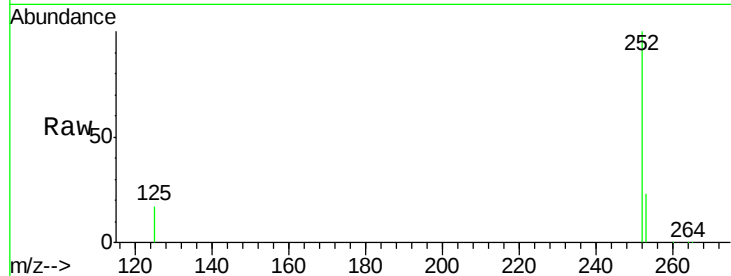
Tgt Ion:252 Resp: 115281

Ion Ratio Lower Upper

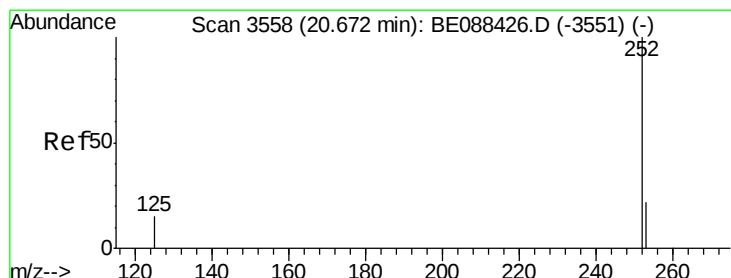
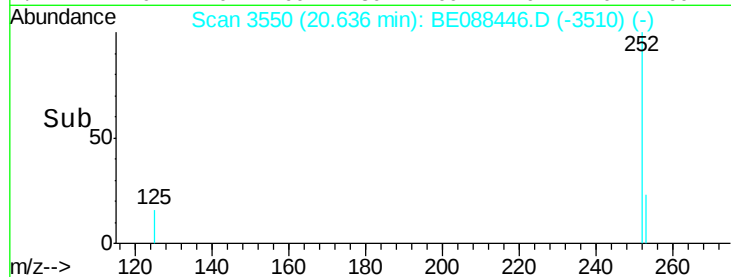
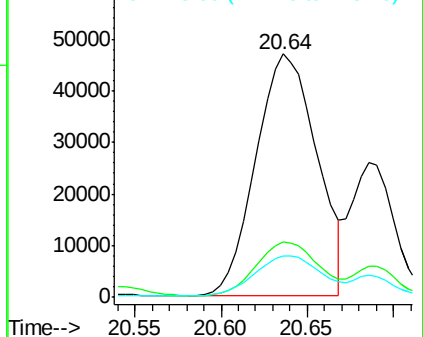
252 100

253 22.9 17.8 26.8

125 16.9 12.3 18.5



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



#24

Benzo(k)fluoranthene

Concen: 3.96 ng

RT: 20.69 min Scan# 3561

Delta R.T. 0.01 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

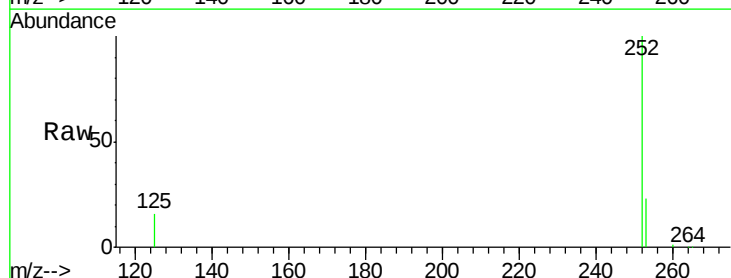
Tgt Ion:252 Resp: 41885

Ion Ratio Lower Upper

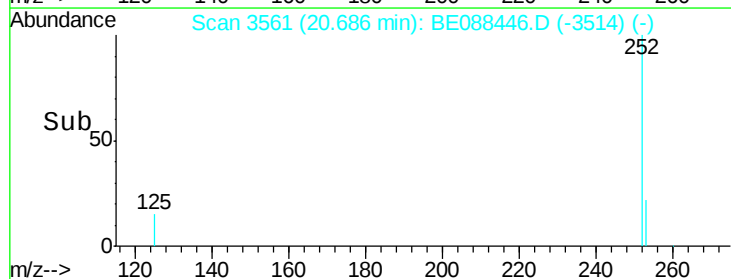
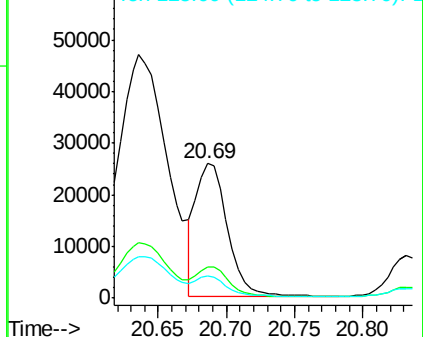
252 100

253 22.9 17.8 26.8

125 16.1 12.2 18.4



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: 8.35 ng

RT: 21.27 min Scan# 3690

Delta R.T. 0.02 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014

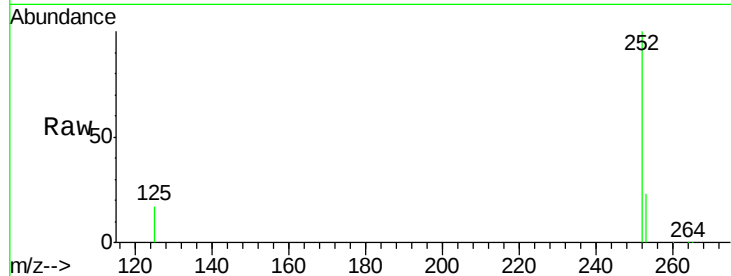
Tgt Ion: 252 Resp: 76883

Ion Ratio Lower Upper

252 100

253 23.3 18.2 27.4

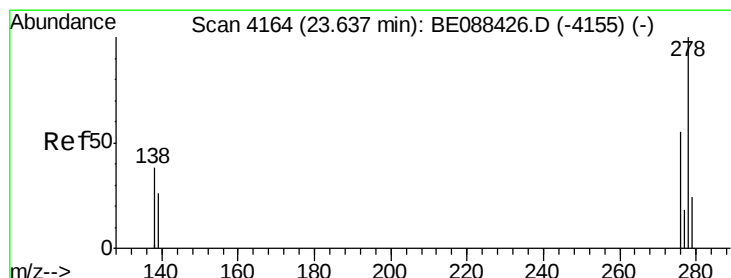
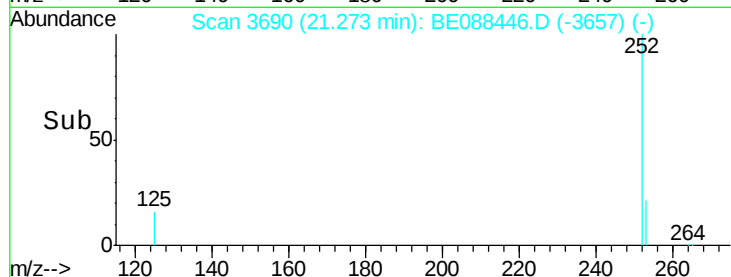
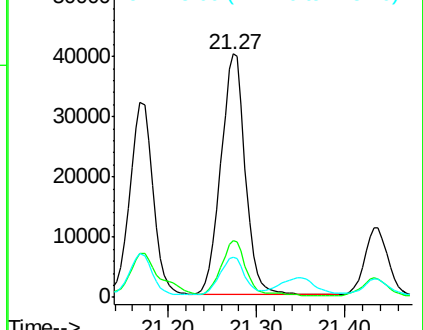
125 16.7 13.7 20.5



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: 1.17 ng

RT: 23.90 min Scan# 4204

Delta R.T. 0.26 min

Lab File: BE088446.D

Acq: 1 Nov 2014 5:18

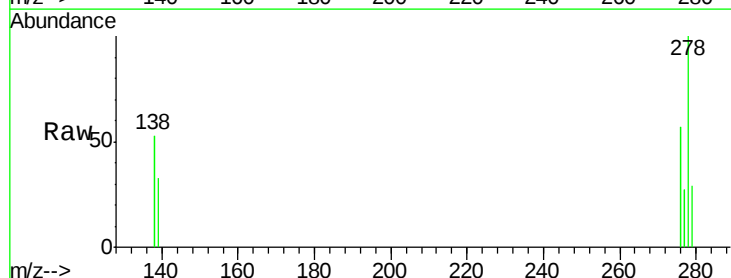
Tgt Ion: 278 Resp: 10035

Ion Ratio Lower Upper

278 100

139 33.1 22.1 33.1

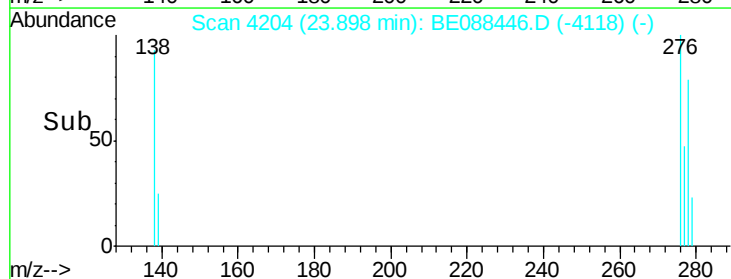
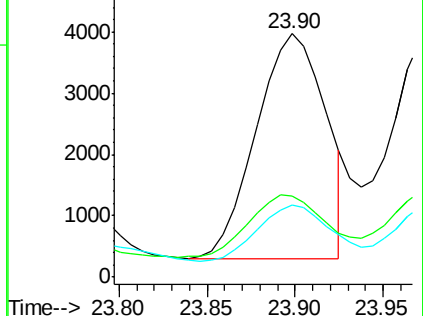
279 29.5 19.7 29.5



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: 5.68 ng

RT: 24.20 min Scan# 4251

Delta R.T. 0.04 min

Lab File: BE088446.D

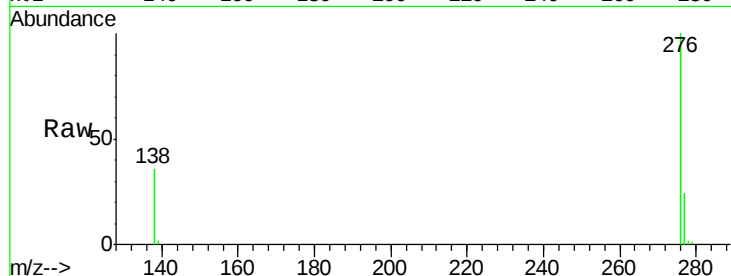
Acq: 1 Nov 2014 5:18

Instrument :

BNA_E

ClientSampleId :

YS19-SS32-1014



Tgt Ion: 276 Resp: 222800

Ion Ratio Lower Upper

276 100

277 24.3 19.8 29.6

138 35.8 29.3 43.9

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

