

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE102414\
 Data File : BE088232.D
 Acq On : 25 Oct 2014 5:03
 Operator : TP/JJ
 Sample : F4368-21
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 YS19-SS43P-1014

Quant Time: Oct 27 13:47:10 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 13:04:40 2014
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	28955	5.00	ng	0.00
3) Naphthalene-d8	8.68	136	112069	5.00	ng	0.00
7) Acenaphthene-d10	10.83	164	62463	5.00	ng	0.00
12) Phenanthrene-d10	12.93	188	130235	5.00	ng	0.00
16) Chrysene-d12	18.34	240	69801	5.00	ng	0.00
22) Perylene-d12	21.40	264	52815	5.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) Nitrobenzene-d5	7.81	82	371167	43.84	ng	0.01
8) 2-Fluorobiphenyl	10.02	172	509911	29.27	ng	0.00
18) Terphenyl-d14	16.13	244	473869	41.45	ng	0.02

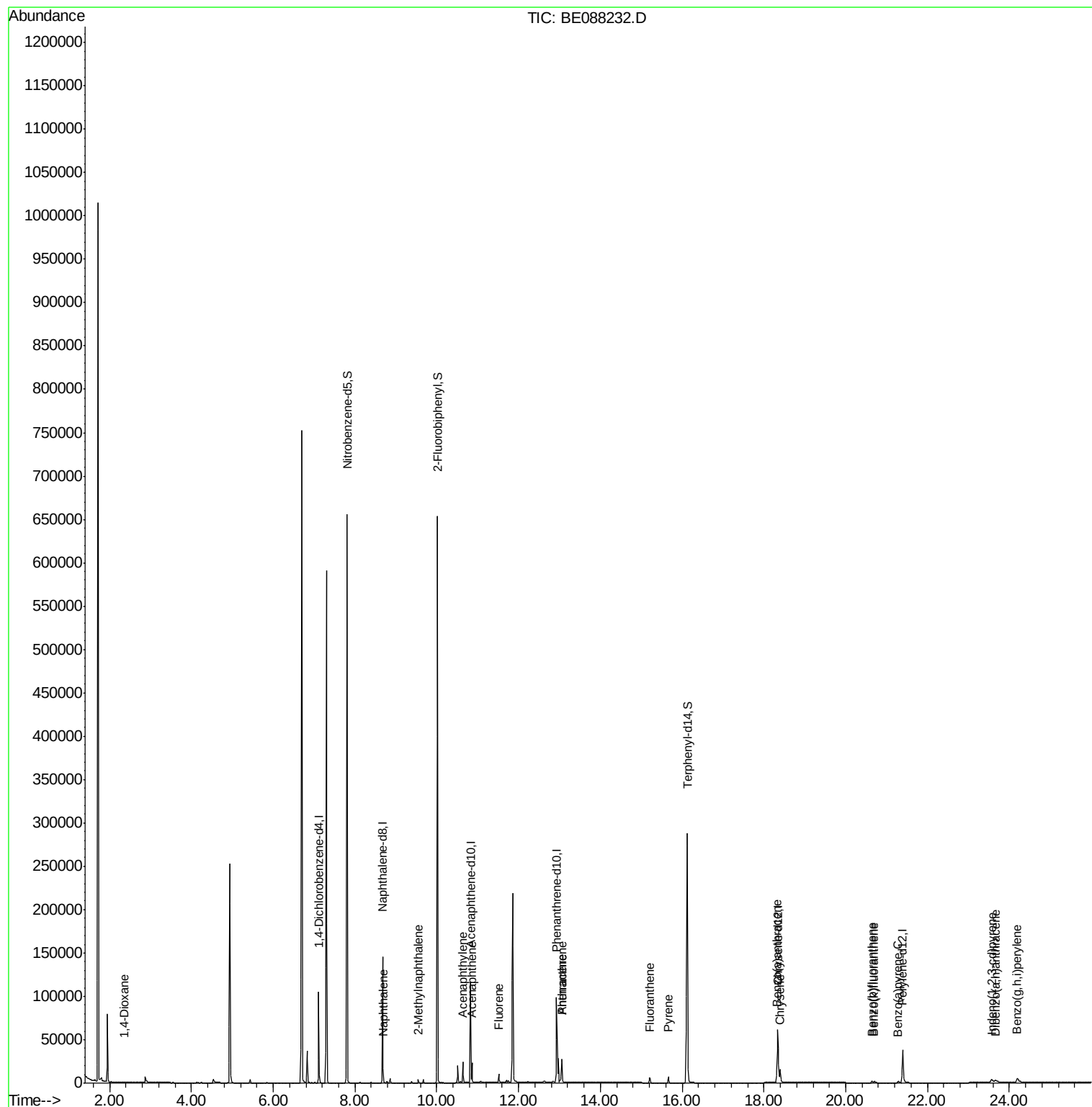
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	2.35	88	146	0.04	ng	# 71
5) Naphthalene	8.70	128	1488	0.07	ng	94
6) 2-Methylnaphthalene	9.55	142	1902	0.14	ng	93
9) Acenaphthylene	10.64	152	20685	0.22	ng	98
10) Acenaphthene	10.86	154	3484	0.24	ng	91
11) Fluorene	11.52	166	4168	0.28	ng	98
13) Phenanthrene	13.06	178	28476	0.23	ng	98
14) Anthracene	13.06	178	28476	0.31	ng	100
15) Fluoranthene	15.20	202	6443	0.34	ng	99
17) Pyrene	15.67	202	6671	0.35	ng	99
19) Benzo(a)anthracene	18.32	228	19625	0.36	ng	98
20) Chrysene	18.40	228	20340	0.33	ng	98
21) Indeno(1,2,3-cd)pyrene	23.57	276	9020	0.38	ng	# 74
23) Benzo(b)fluoranthene	20.64	252	3569	0.47	ng	96
24) Benzo(k)fluoranthene	20.70	252	4666	0.34	ng	96
25) Benzo(a)pyrene	21.28	252	3287	0.46	ng	96
26) Dibenzo(a,h)anthracene	23.67	278	2553	0.44	ng	# 90
27) Benzo(g,h,i)perylene	24.19	276	13844	0.33	ng	93

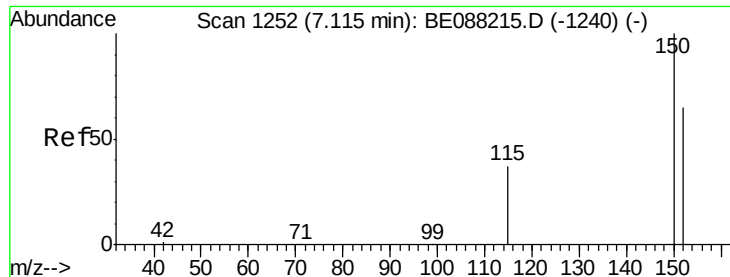
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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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: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

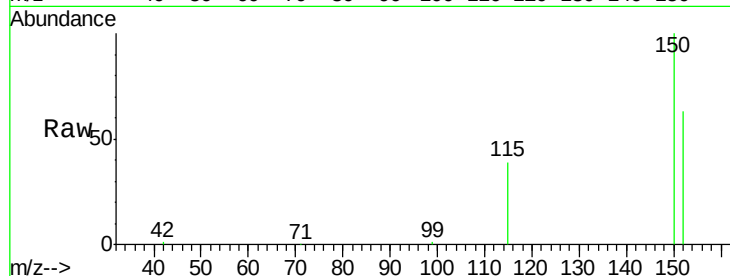
Tgt Ion: 152 Resp: 28955

Ion Ratio Lower Upper

152 100

150 159.9 123.2 184.8

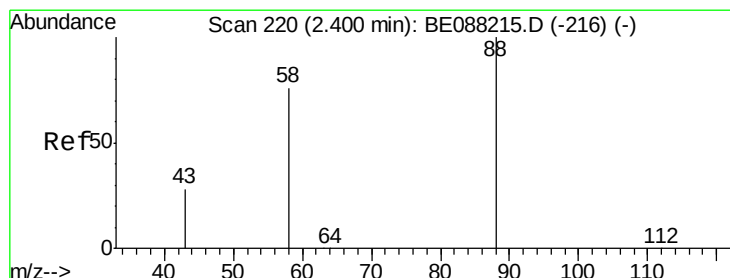
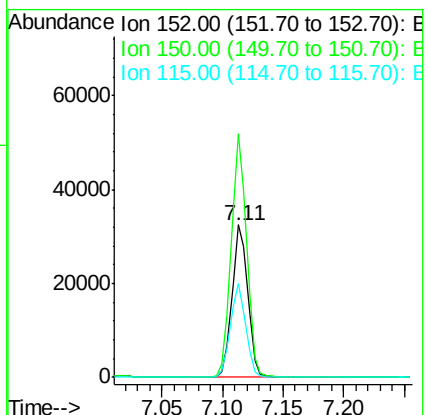
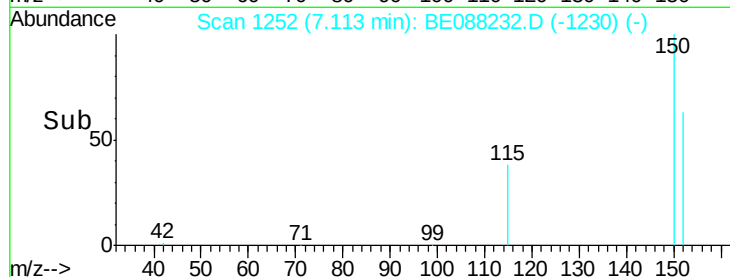
115 61.7 45.3 67.9



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: 0.04 ng

RT: 2.35 min Scan# 209

Delta R.T. -0.05 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

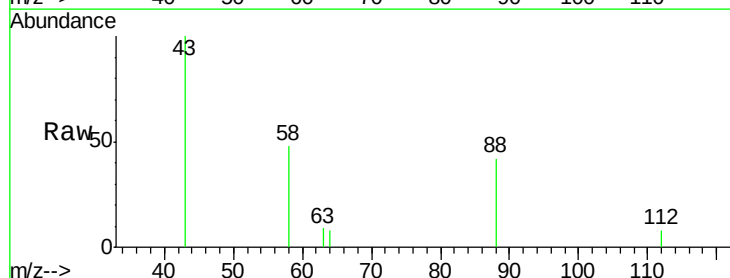
Tgt Ion: 88 Resp: 146

Ion Ratio Lower Upper

88 100

58 91.1 59.0 88.4#

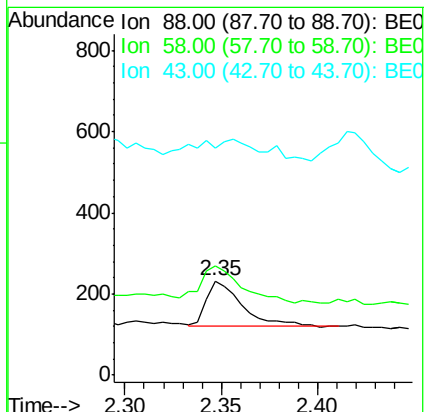
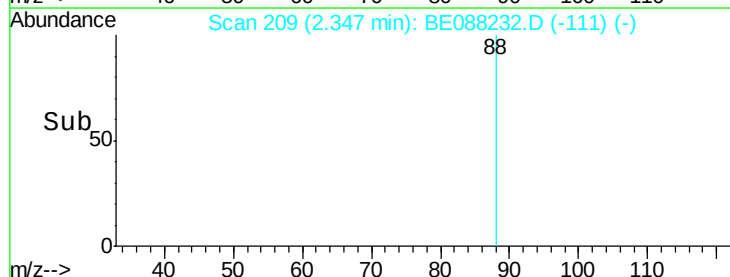
43 0.0 21.9 32.9#

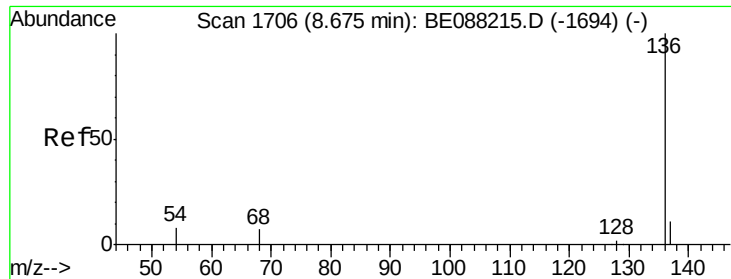


Abundance Ion 88.00 (87.70 to 88.70): BE0

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: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

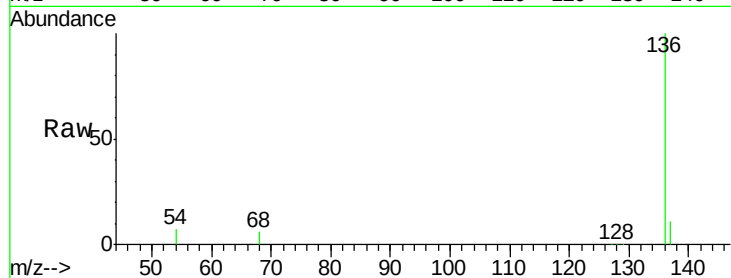
Tgt Ion: 136 Resp: 112069

Ion Ratio Lower Upper

136 100

137 11.0 8.7 13.1

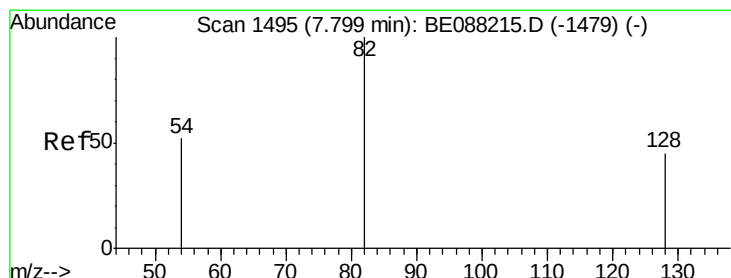
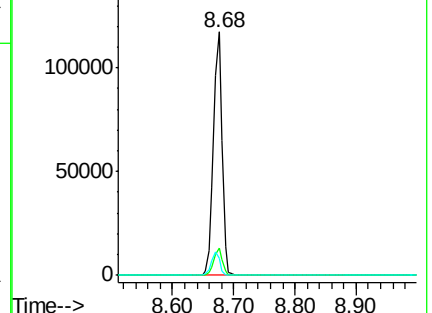
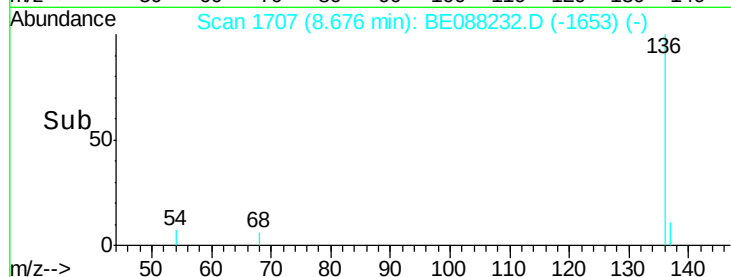
54 6.8 6.1 9.1



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: 43.84 ng

RT: 7.81 min Scan# 1500

Delta R.T. 0.01 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

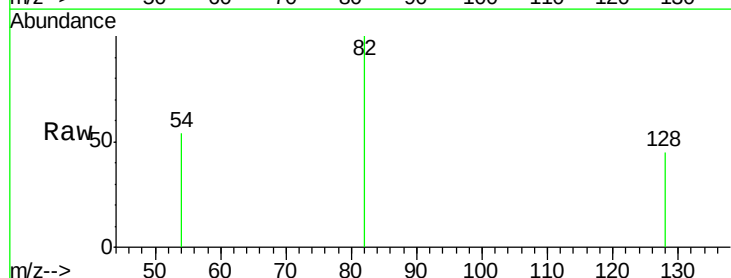
Tgt Ion: 82 Resp: 371167

Ion Ratio Lower Upper

82 100

128 45.2 36.2 54.2

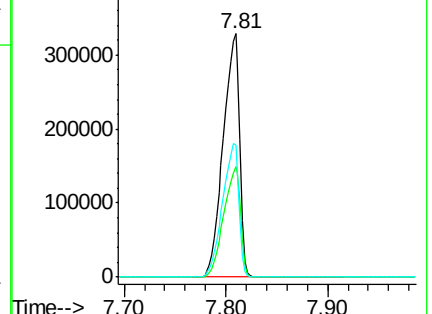
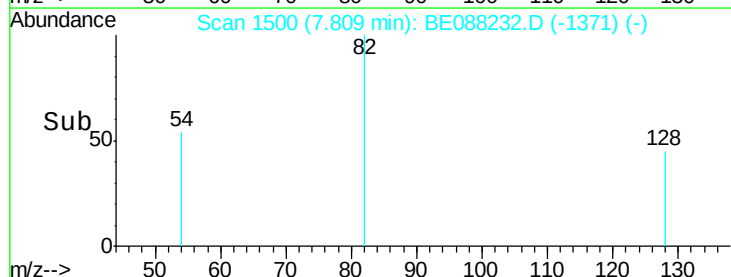
54 54.3 41.8 62.8

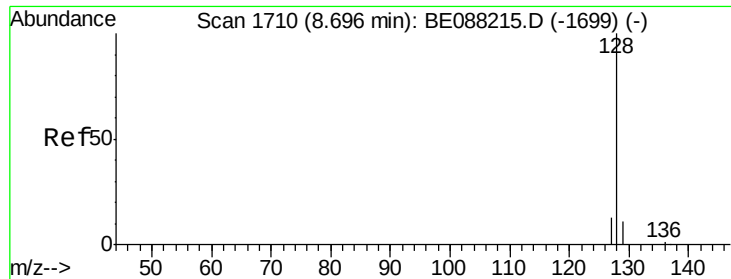


Abundance Ion 82.00 (81.70 to 82.70): BE0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BE0





#5

Naphthalene

Concen: 0.07 ng

RT: 8.70 min Scan# 1711

Delta R.T. 0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

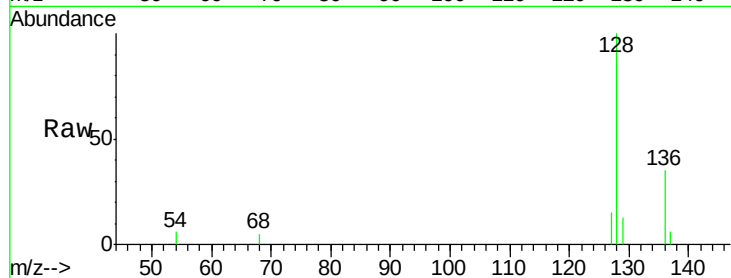
Tgt Ion:128 Resp: 1488

Ion Ratio Lower Upper

128 100

129 12.7 8.6 12.8

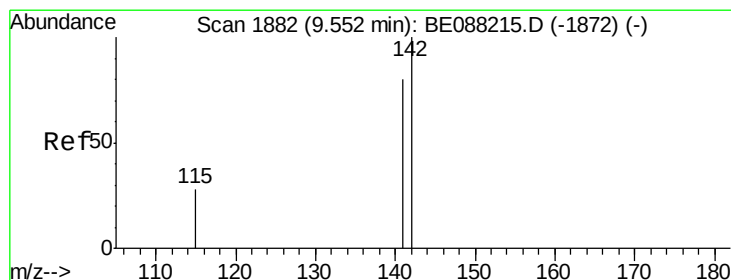
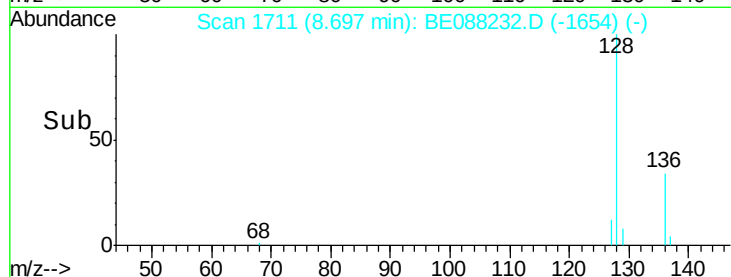
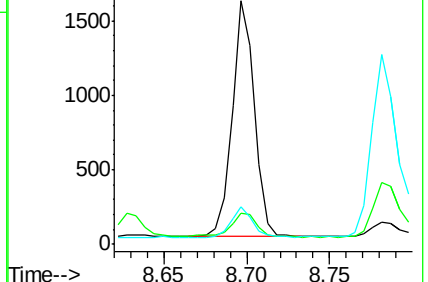
127 15.3 10.4 15.6



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: 0.14 ng

RT: 9.55 min Scan# 1882

Delta R.T. -0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

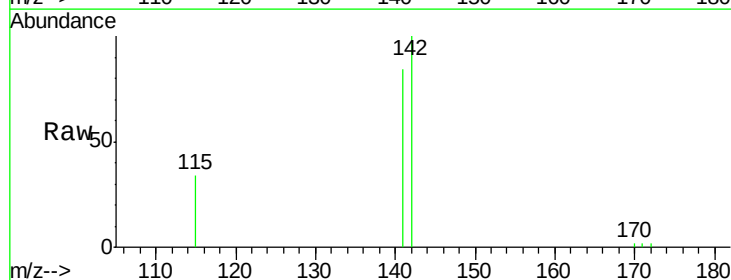
Tgt Ion:142 Resp: 1902

Ion Ratio Lower Upper

142 100

141 84.2 63.7 95.5

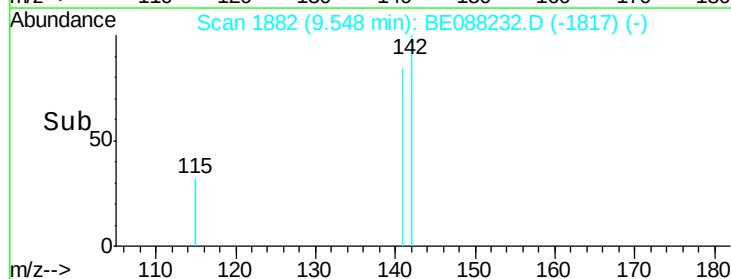
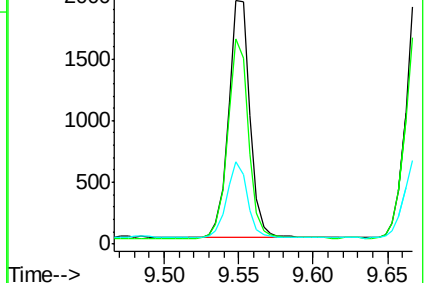
115 33.8 22.6 34.0

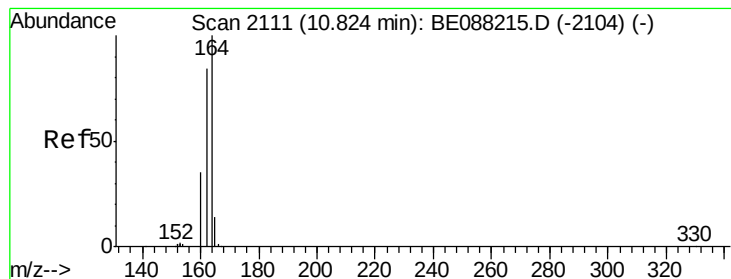


Abundance Ion 142.00 (141.70 to 142.70): E

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: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

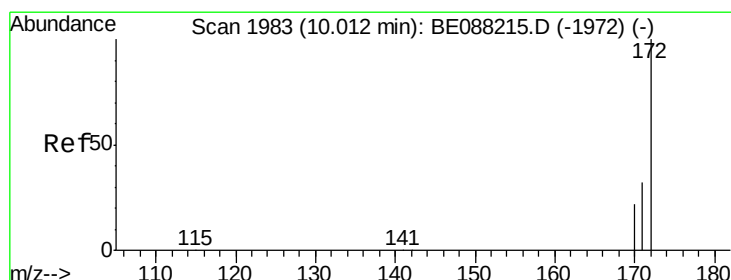
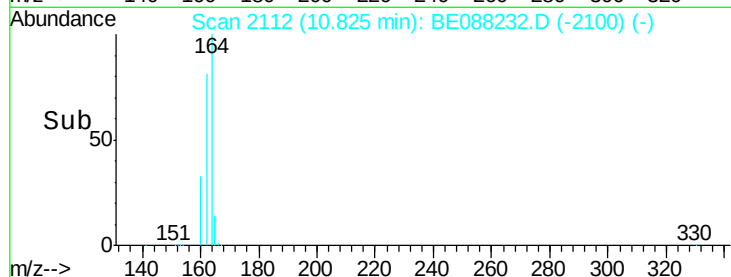
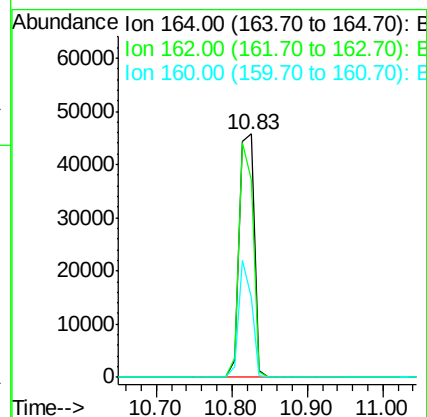
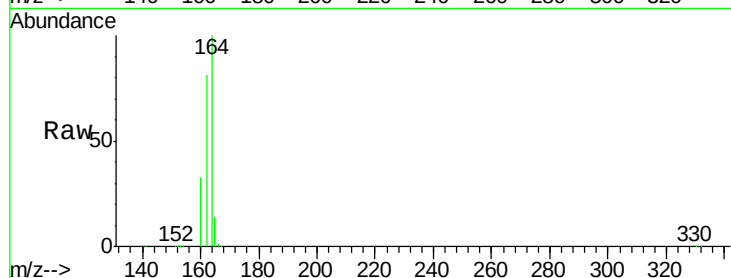
Tgt Ion:164 Resp: 62463

Ion Ratio Lower Upper

164 100

162 81.1 67.4 101.0

160 32.6 27.7 41.5



#8

2-Fluorobiphenyl

Concen: 29.27 ng

RT: 10.02 min Scan# 1985

Delta R.T. 0.01 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

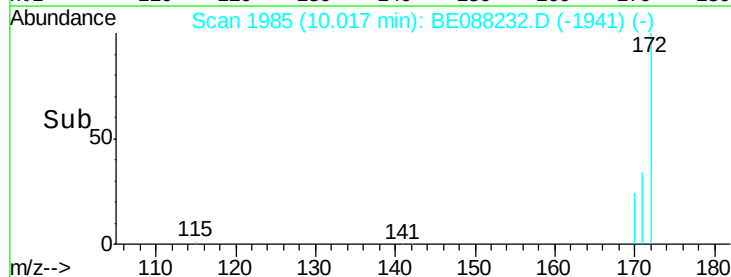
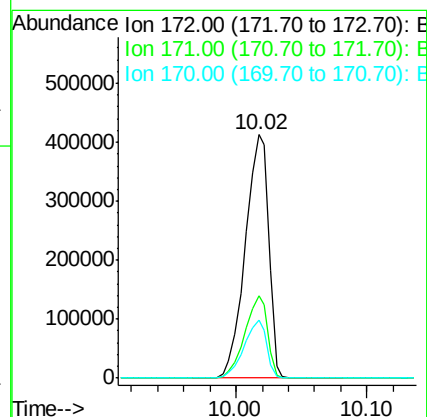
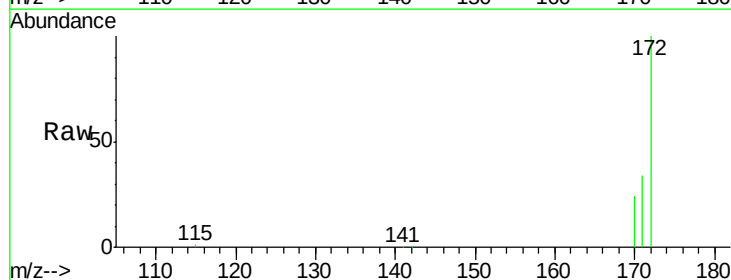
Tgt Ion:172 Resp: 509911

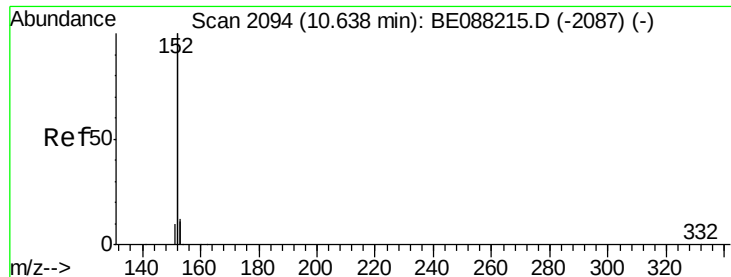
Ion Ratio Lower Upper

172 100

171 33.9 25.8 38.6

170 23.7 17.4 26.0





#9

Acenaphthylene

Concen: 0.22 ng

RT: 10.64 min Scan# 2095

Delta R.T. 0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

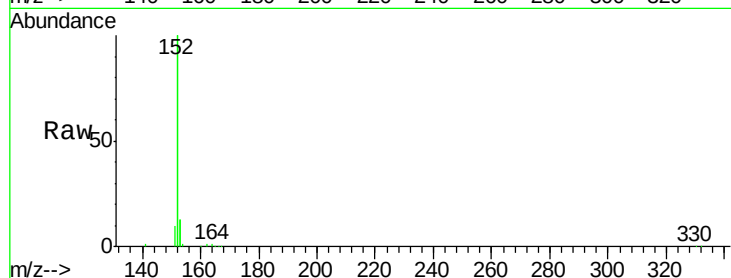
Tgt Ion:152 Resp: 20685

Ion Ratio Lower Upper

152 100

151 4.4 3.7 5.5

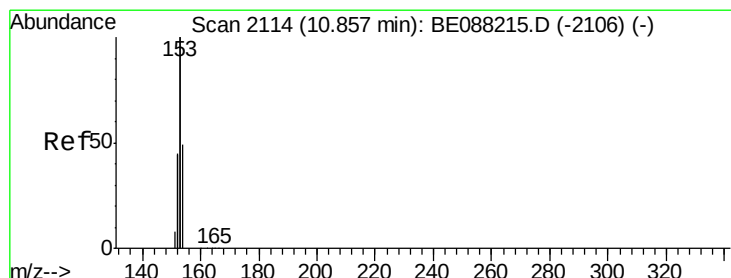
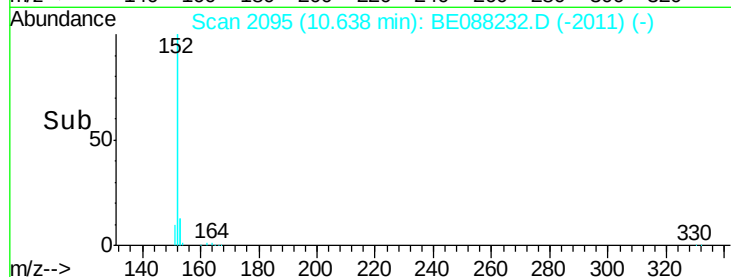
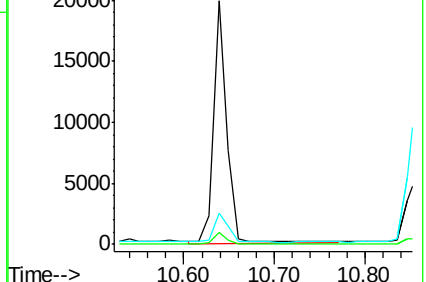
153 13.8 10.3 15.5



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: 0.24 ng

RT: 10.86 min Scan# 2115

Delta R.T. 0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

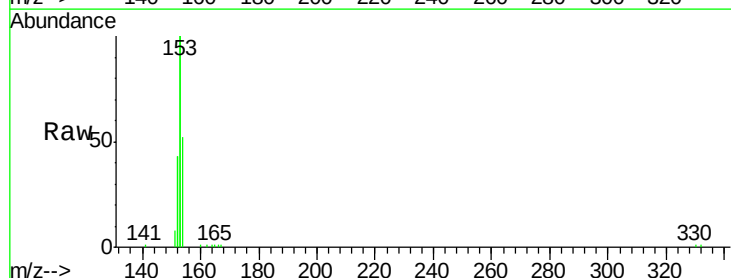
Tgt Ion:154 Resp: 3484

Ion Ratio Lower Upper

154 100

153 380.7 326.0 489.0

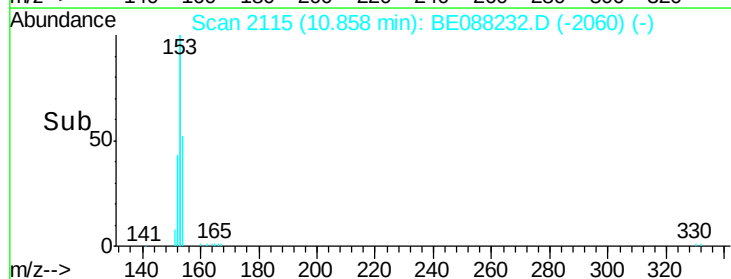
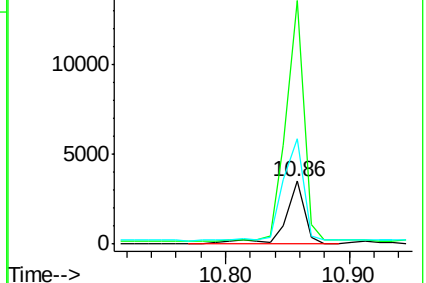
152 188.9 155.6 233.4

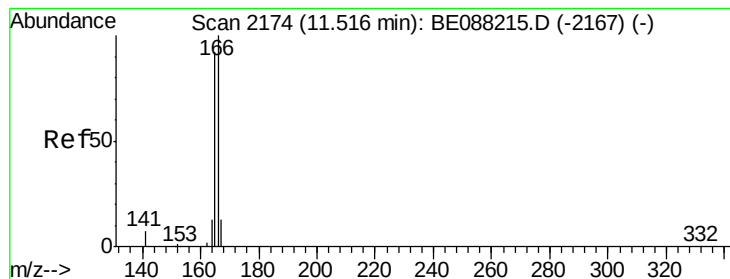


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E





#11

Fluorene

Concen: 0.28 ng

RT: 11.52 min Scan# 2175

Delta R.T. 0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

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YS19-SS43P-1014

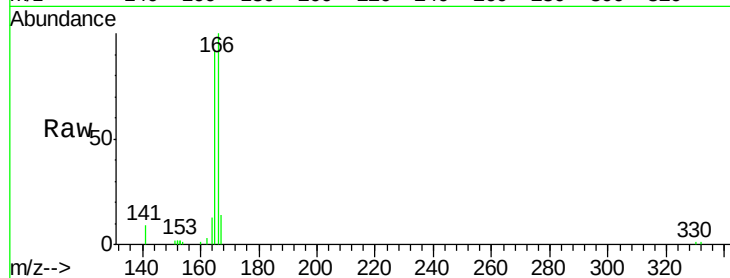
Tgt Ion:166 Resp: 4168

Ion Ratio Lower Upper

166 100

165 91.6 71.8 107.6

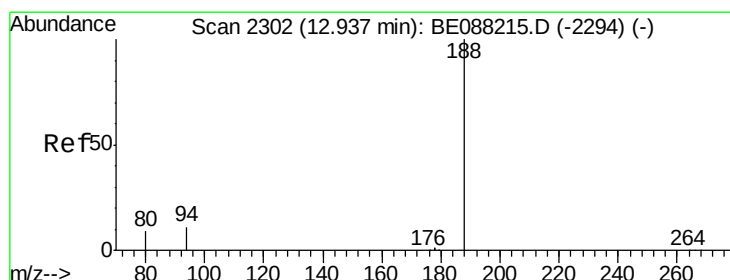
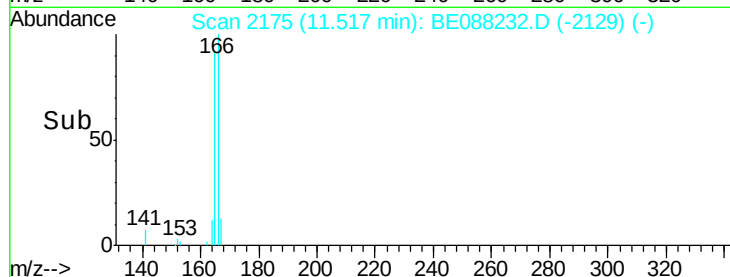
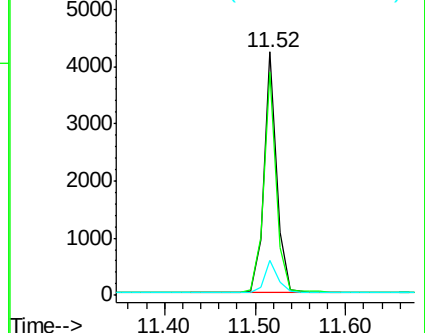
167 13.7 10.7 16.1



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: 12.93 min Scan# 2302

Delta R.T. -0.01 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

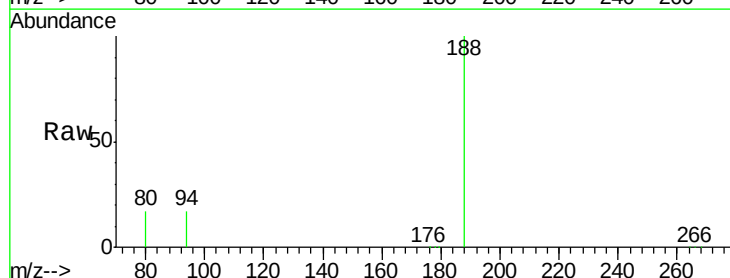
Tgt Ion:188 Resp: 130235

Ion Ratio Lower Upper

188 100

94 17.5 8.5 12.7#

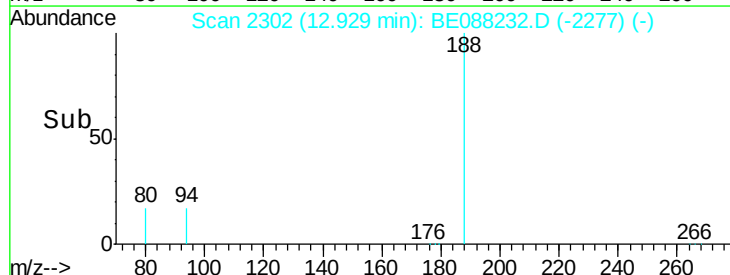
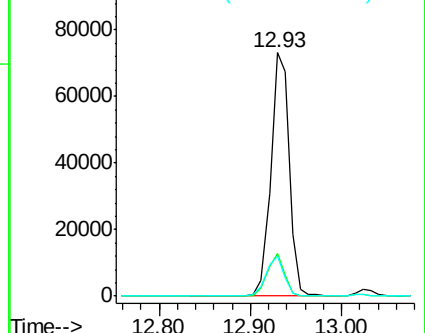
80 16.7 7.4 11.0#

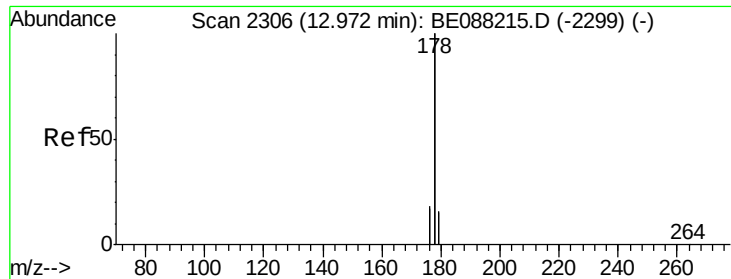


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BE0

Ion 80.00 (79.70 to 80.70): BE0





#13

Phenanthrene

Concen: 0.23 ng

RT: 13.06 min Scan# 2317

Delta R.T. 0.09 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

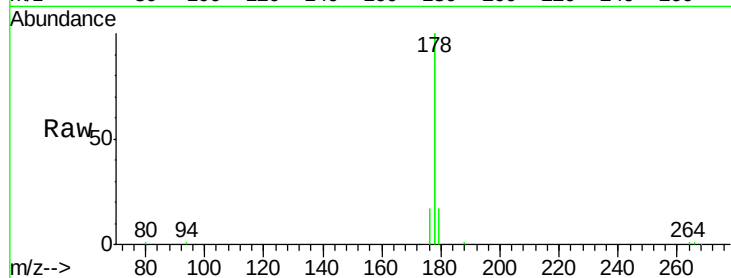
Tgt Ion:178 Resp: 28476

Ion Ratio Lower Upper

178 100

176 18.4 14.0 21.0

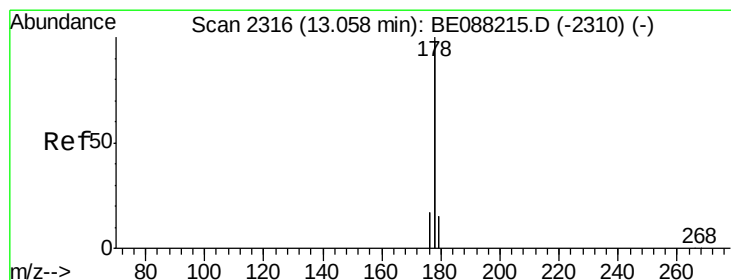
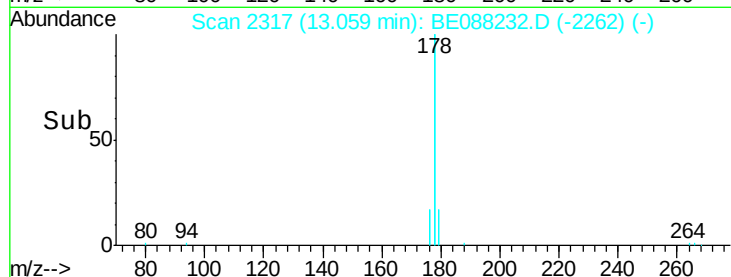
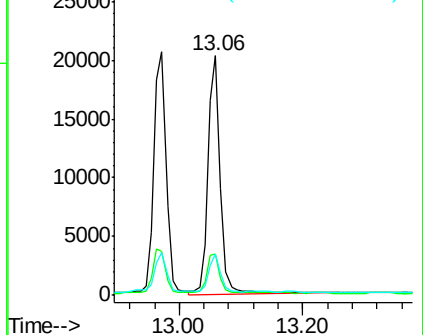
179 15.2 11.8 17.6



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: 0.31 ng

RT: 13.06 min Scan# 2317

Delta R.T. 0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

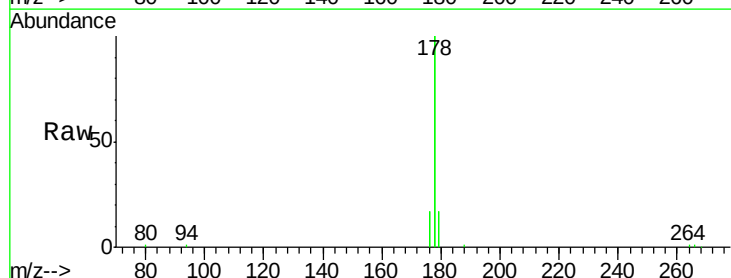
Tgt Ion:178 Resp: 28476

Ion Ratio Lower Upper

178 100

176 18.4 14.7 22.1

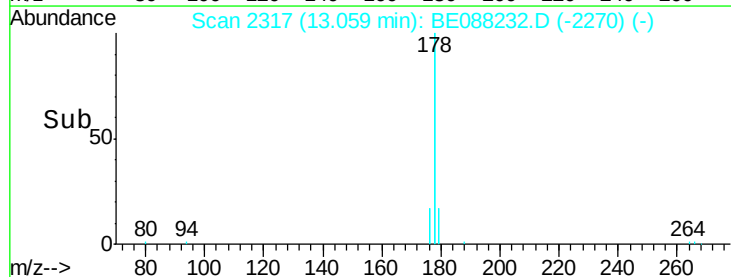
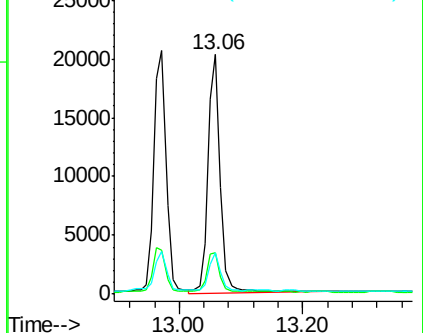
179 15.2 12.3 18.5

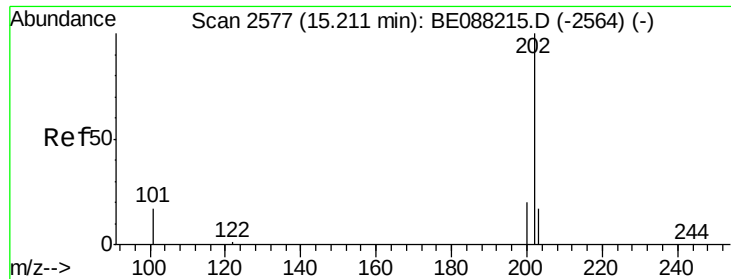


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





#15

Fluoranthene

Concen: 0.34 ng

RT: 15.20 min Scan# 2577

Delta R.T. -0.01 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

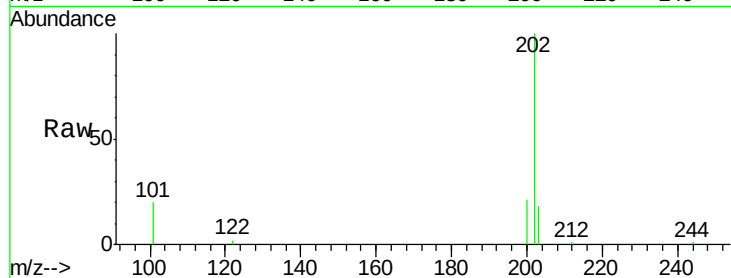
Tgt Ion:202 Resp: 6443

Ion Ratio Lower Upper

202 100

101 17.8 14.4 21.6

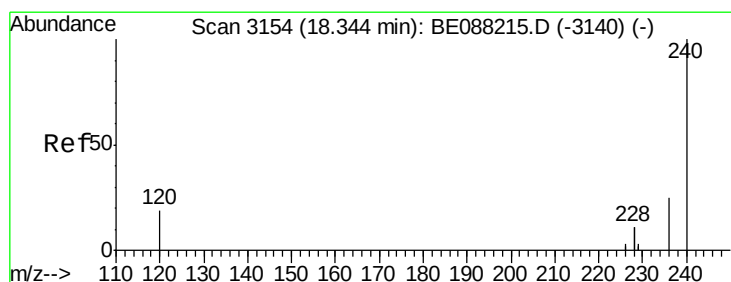
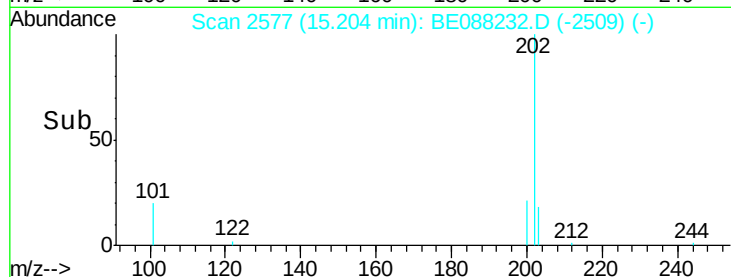
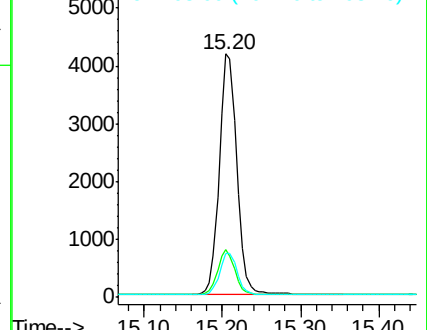
203 17.3 13.4 20.2



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: 18.34 min Scan# 3155

Delta R.T. 0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

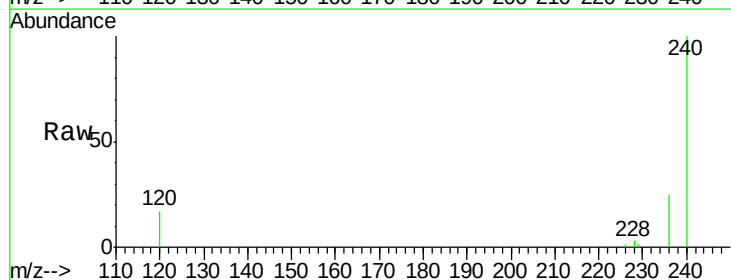
Tgt Ion:240 Resp: 69801

Ion Ratio Lower Upper

240 100

120 17.1 15.1 22.7

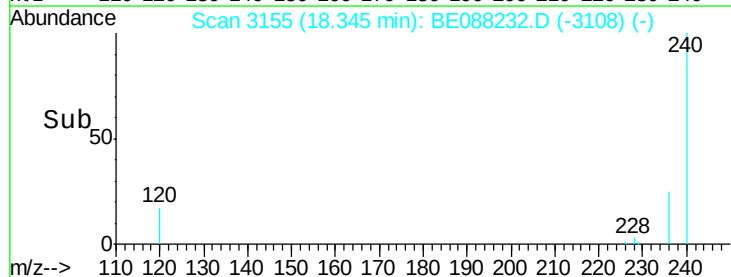
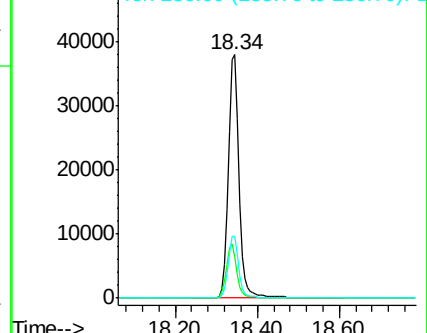
236 25.3 20.1 30.1

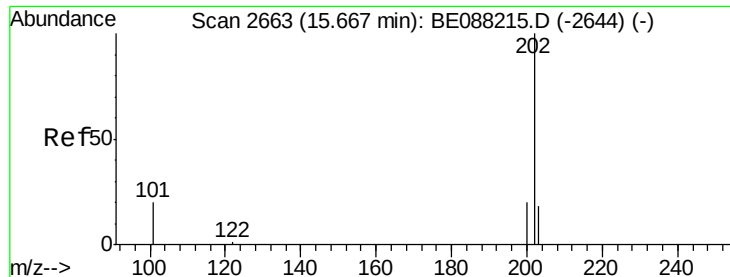


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

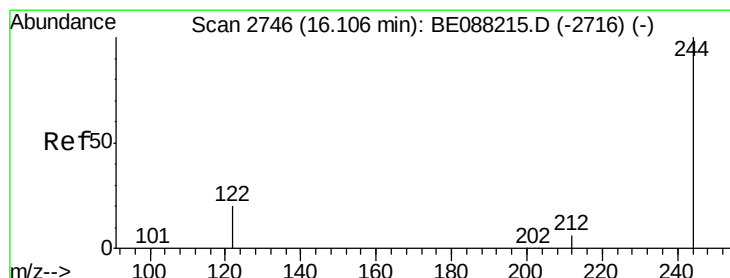
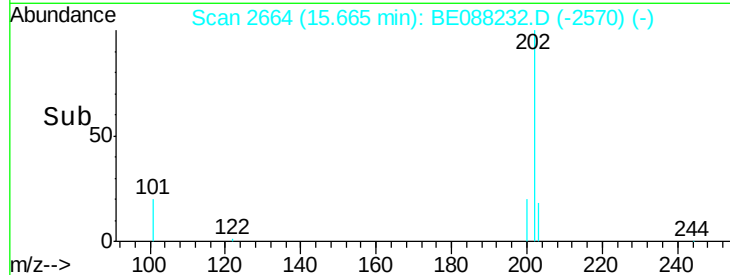
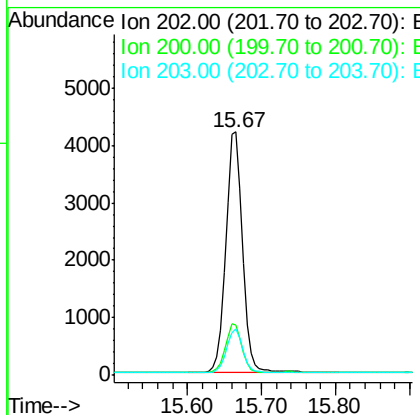
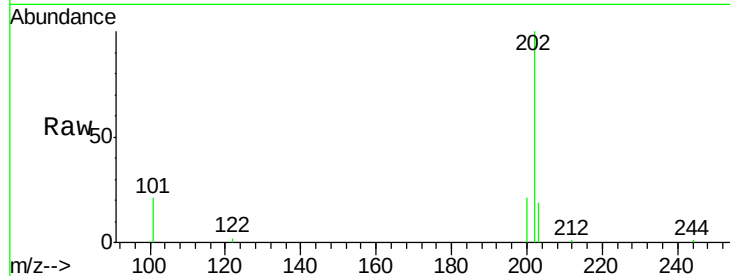




#17
Pyrene
 Concen: 0.35 ng
 RT: 15.67 min Scan# 2664
 Delta R.T. -0.00 min
 Lab File: BE088232.D
 Acq: 25 Oct 2014 5:03

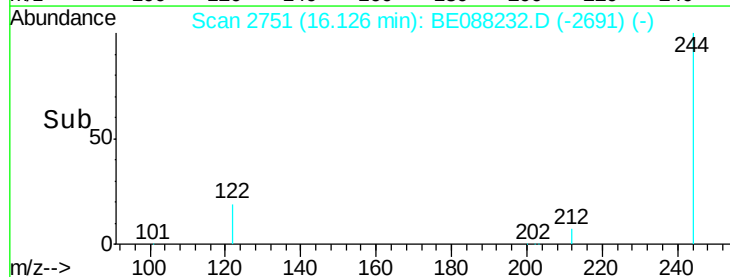
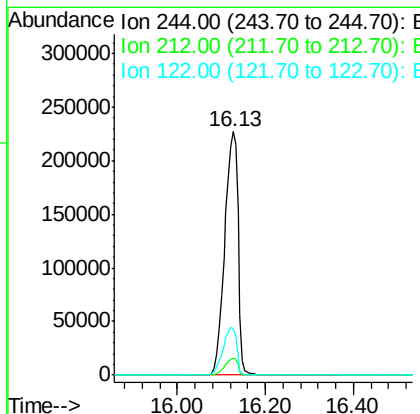
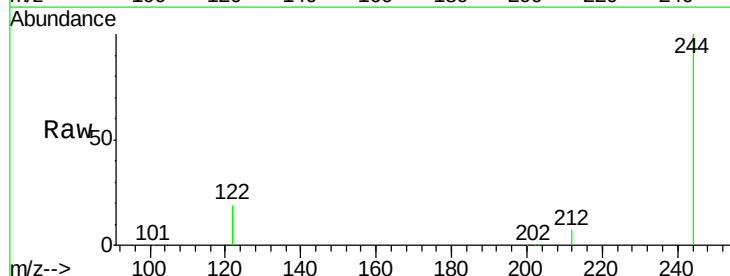
Instrument :
 BNA_E
 ClientSampleId :
 YS19-SS43P-1014

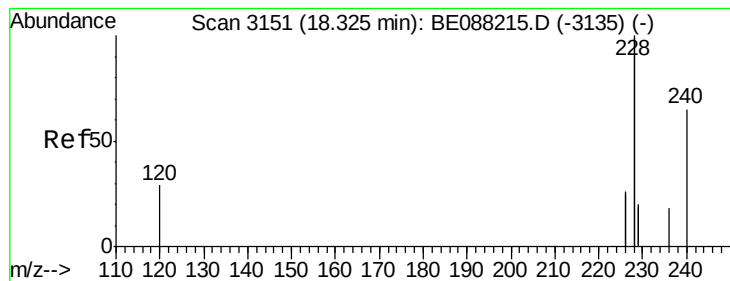
Tgt Ion: 202 Resp: 6671
 Ion Ratio Lower Upper
 202 100
 200 20.1 16.2 24.2
 203 17.7 13.8 20.8



#18
Terphenyl-d14
 Concen: 41.45 ng
 RT: 16.13 min Scan# 2751
 Delta R.T. 0.02 min
 Lab File: BE088232.D
 Acq: 25 Oct 2014 5:03

Tgt Ion: 244 Resp: 473869
 Ion Ratio Lower Upper
 244 100
 212 6.8 5.4 8.2
 122 19.4 16.7 25.1





#19

Benzo(a)anthracene

Concen: 0.36 ng

RT: 18.32 min Scan# 3151

Delta R.T. -0.01 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

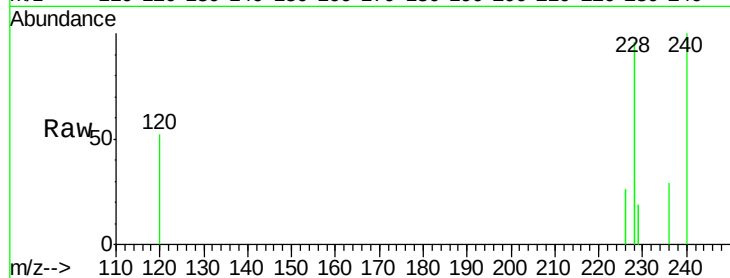
Tgt Ion:228 Resp: 19625

Ion Ratio Lower Upper

228 100

226 26.9 20.5 30.7

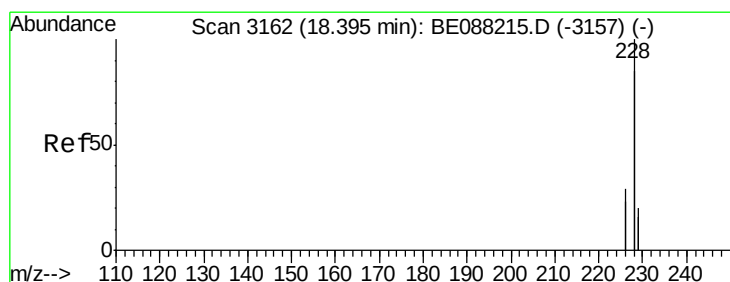
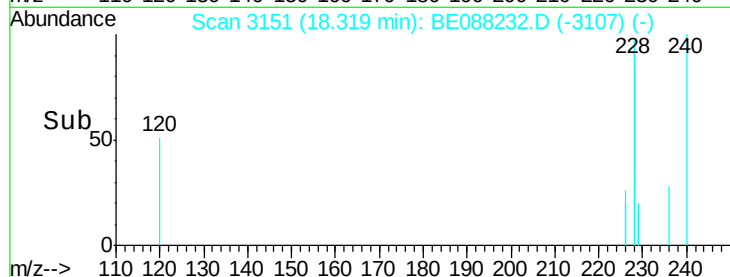
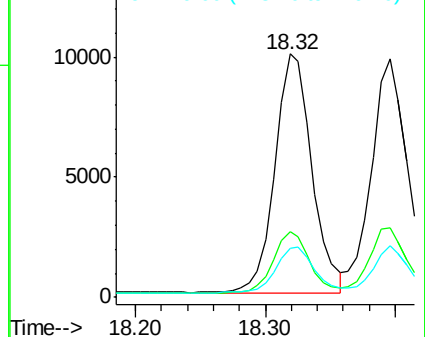
229 20.3 16.1 24.1



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: 0.33 ng

RT: 18.40 min Scan# 3163

Delta R.T. 0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

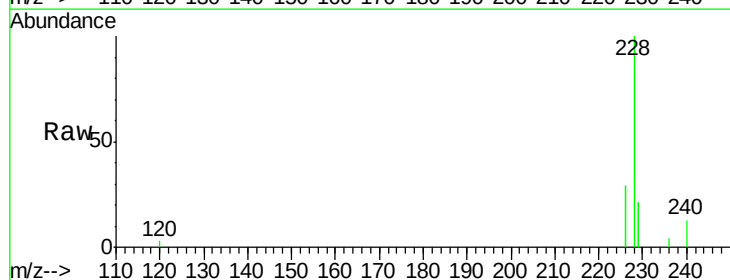
Tgt Ion:228 Resp: 20340

Ion Ratio Lower Upper

228 100

226 29.3 23.3 34.9

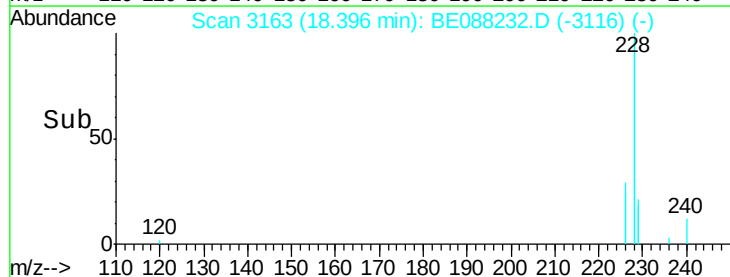
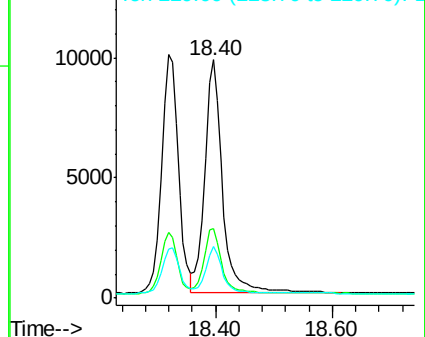
229 21.4 15.6 23.4

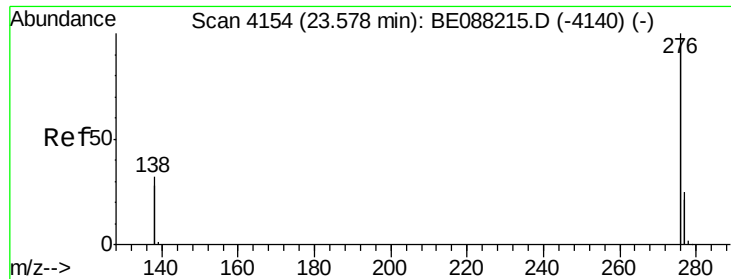


Abundance Ion 228.00 (227.70 to 228.70): E

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: 0.38 ng

RT: 23.57 min Scan# 4154

Delta R.T. -0.01 min

Lab File: BE088232.D

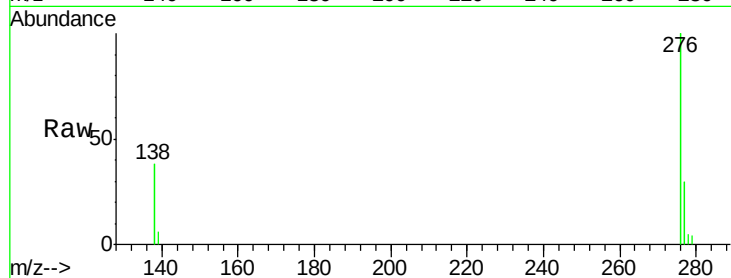
Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014



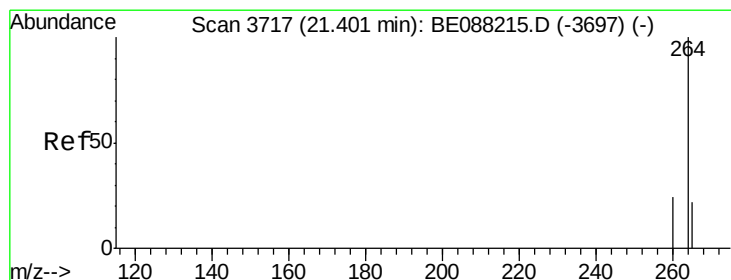
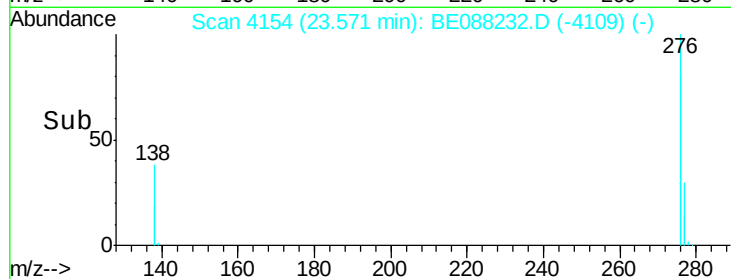
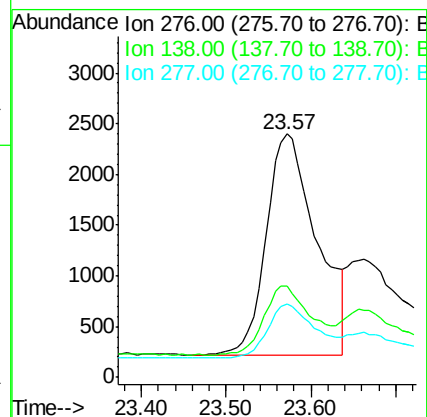
Tgt Ion:276 Resp: 9020

Ion Ratio Lower Upper

276 100

138 29.8 13.9 20.9#

277 23.1 10.7 16.1#



#22

Perylene-d12

Concen: 5.00 ng

RT: 21.40 min Scan# 3717

Delta R.T. -0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

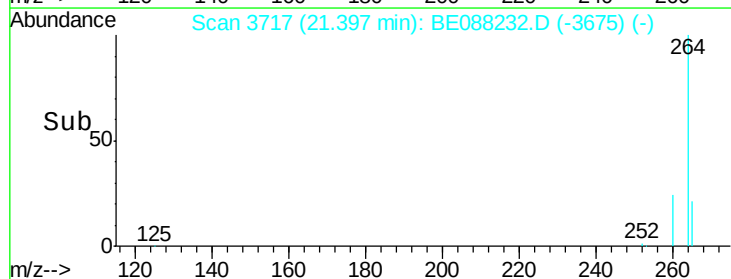
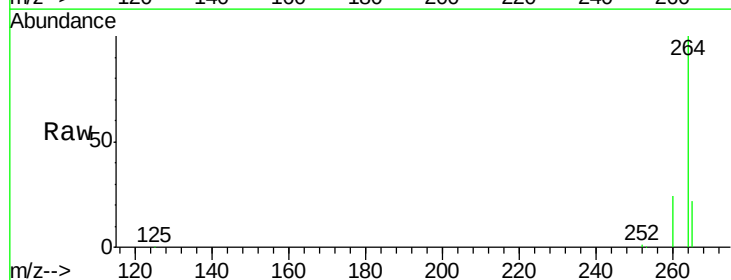
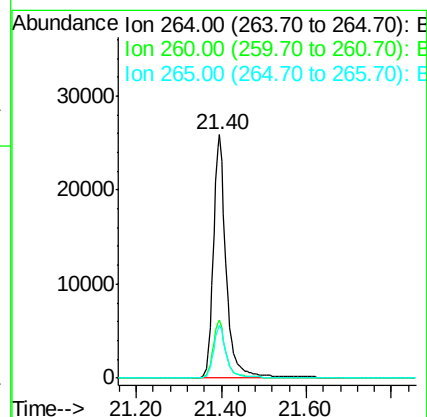
Tgt Ion:264 Resp: 52815

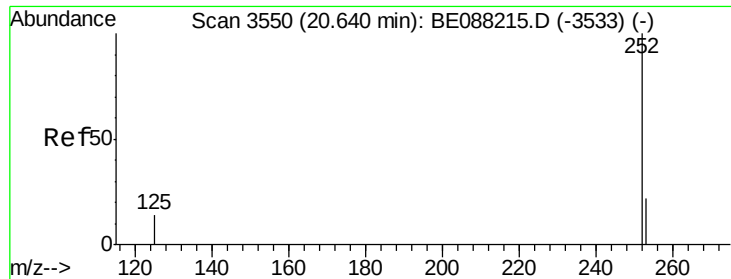
Ion Ratio Lower Upper

264 100

260 23.6 19.0 28.4

265 21.6 17.4 26.2





#23

Benzo(b)fluoranthene

Concen: 0.47 ng

RT: 20.64 min Scan# 3550

Delta R.T. -0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014

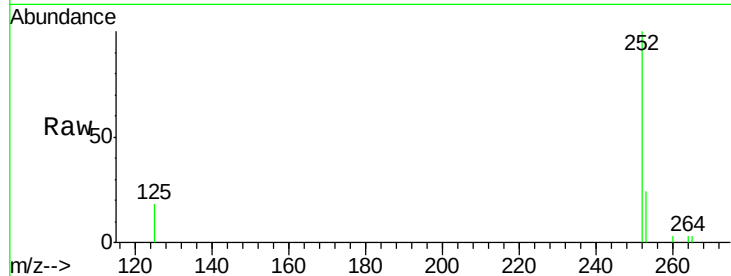
Tgt Ion:252 Resp: 3569

Ion Ratio Lower Upper

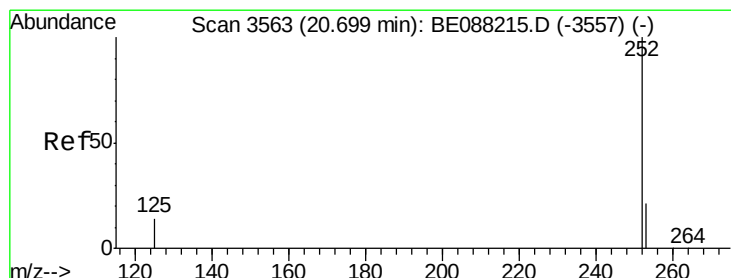
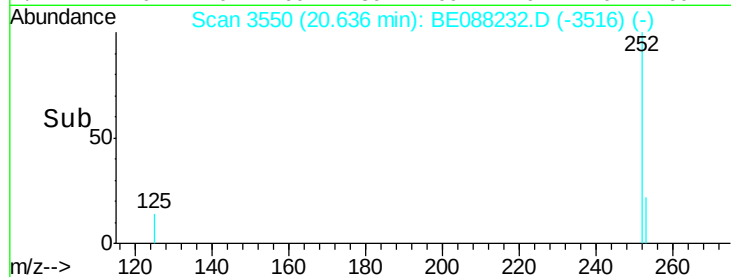
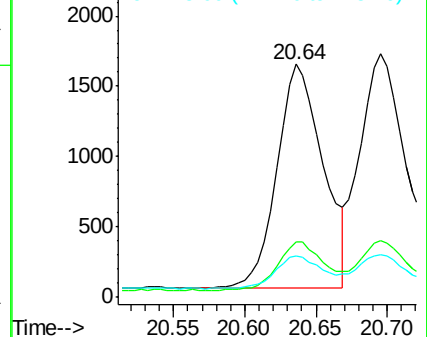
252 100

253 23.7 17.9 26.9

125 17.5 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



#24

Benzo(k)fluoranthene

Concen: 0.34 ng

RT: 20.70 min Scan# 3563

Delta R.T. -0.00 min

Lab File: BE088232.D

Acq: 25 Oct 2014 5:03

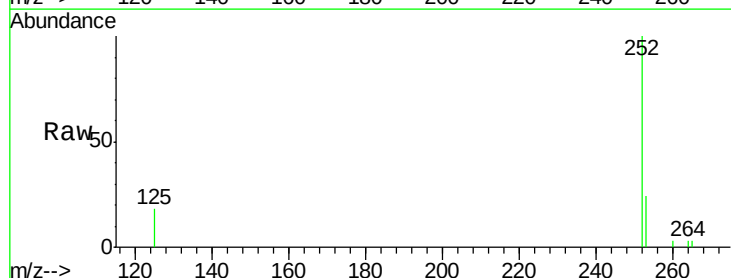
Tgt Ion:252 Resp: 4666

Ion Ratio Lower Upper

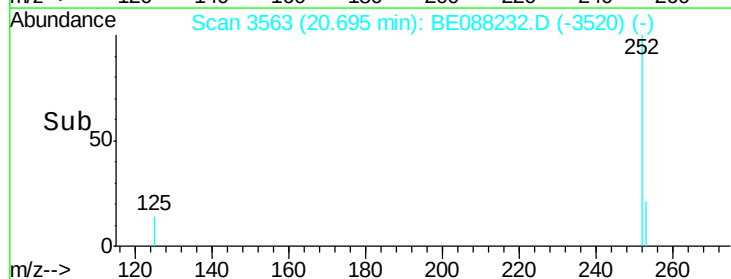
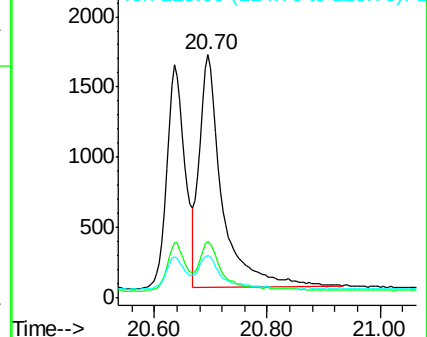
252 100

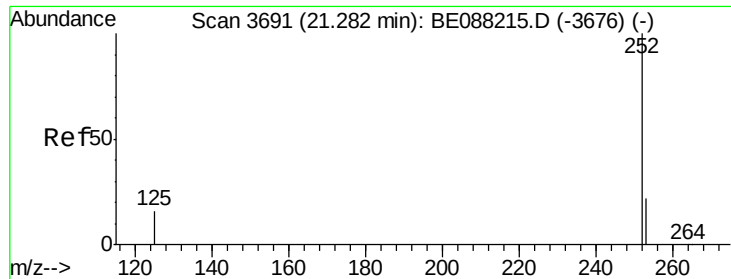
253 23.5 17.6 26.4

125 17.5 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

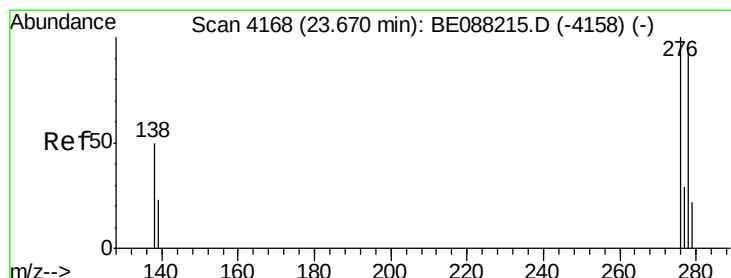
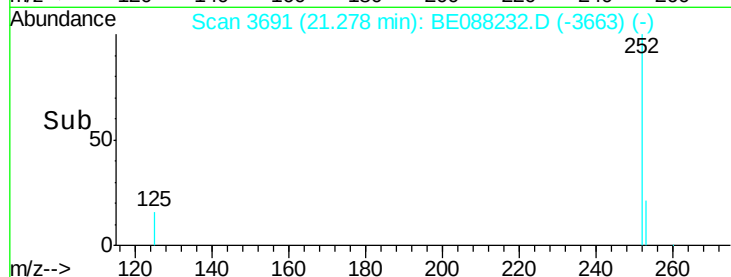
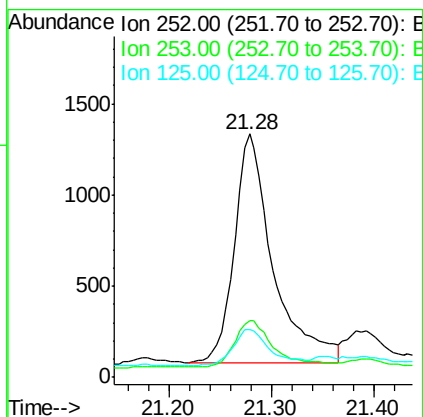
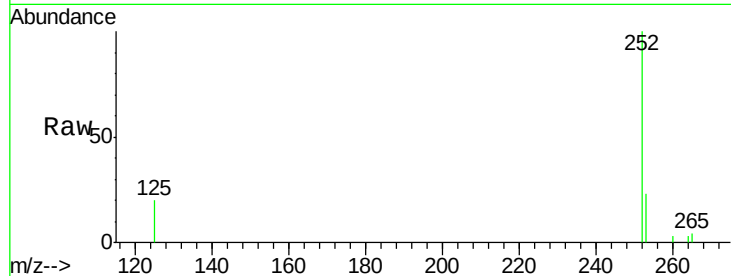




#25
Benzo(a)pyrene
Concen: 0.46 ng
RT: 21.28 min Scan# 3691
Delta R.T. -0.00 min
Lab File: BE088232.D
Acq: 25 Oct 2014 5:03

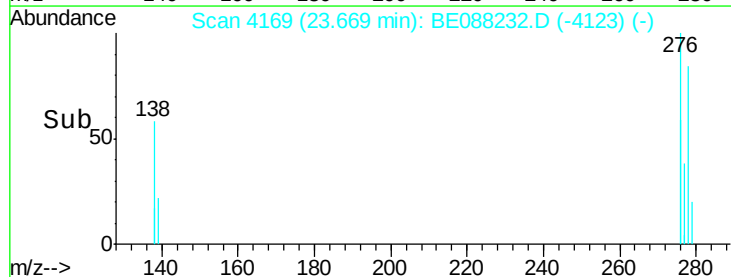
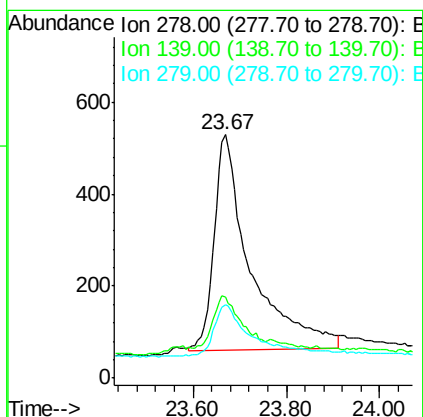
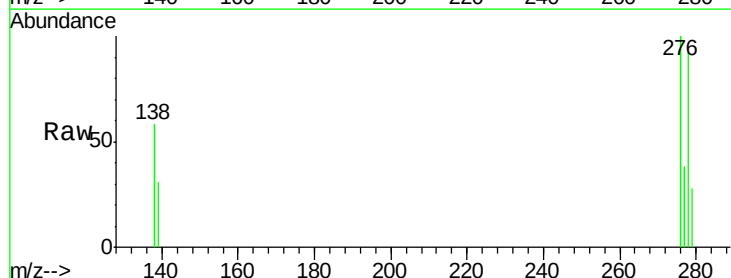
Instrument :
BNA_E
ClientSampleId :
YS19-SS43P-1014

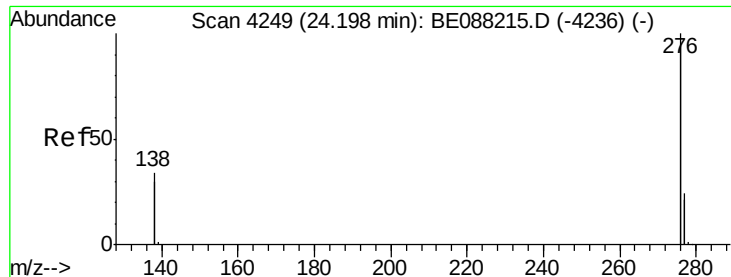
Tgt Ion: 252 Resp: 3287
Ion Ratio Lower Upper
252 100
253 23.4 17.8 26.8
125 19.7 13.5 20.3



#26
Dibenzo(a,h)anthracene
Concen: 0.44 ng
RT: 23.67 min Scan# 4169
Delta R.T. 0.00 min
Lab File: BE088232.D
Acq: 25 Oct 2014 5:03

Tgt Ion: 278 Resp: 2553
Ion Ratio Lower Upper
278 100
139 33.5 22.1 33.1#
279 30.1 20.2 30.2





#27

Benzo(g,h,i)perylene

Concen: 0.33 ng

RT: 24.19 min Scan# 4249

Delta R.T. -0.01 min

Lab File: BE088232.D

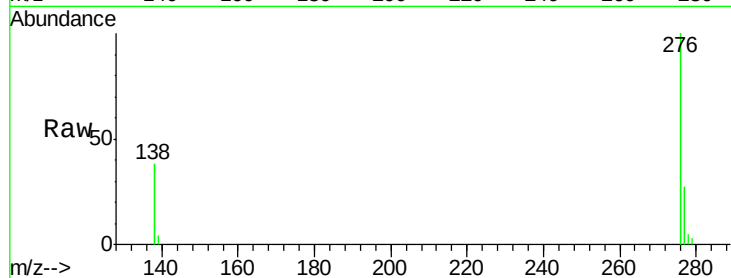
Acq: 25 Oct 2014 5:03

Instrument :

BNA_E

ClientSampleId :

YS19-SS43P-1014



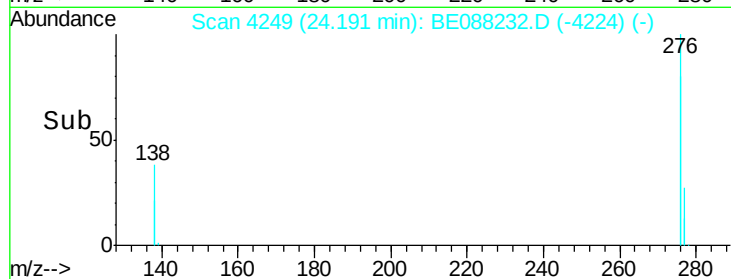
Tgt Ion: 276 Resp: 13844

Ion Ratio Lower Upper

276 100

277 27.2 19.4 29.2

138 38.2 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

