

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE102114\
 Data File : BE088154.D
 Acq On : 21 Oct 2014 21:55
 Operator : TP/JJ
 Sample : F4351-15MSD
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 YS19-SW10-1014MSD

Quant Time: Oct 22 04:39:21 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	25830	5.00	ng	0.00
3) Naphthalene-d8	8.70	136	104557	5.00	ng	0.00
7) Acenaphthene-d10	10.85	164	54314	5.00	ng	0.00
12) Phenanthrene-d10	12.96	188	105144	5.00	ng	0.00
16) Chrysene-d12	18.39	240	67155	5.00	ng	0.00
22) Perylene-d12	21.44	264	55988	5.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) Nitrobenzene-d5	7.83	82	40757	5.41	ng	0.00
8) 2-Fluorobiphenyl	10.04	172	88084	5.87	ng	0.00
18) Terphenyl-d14	16.15	244	99569	9.21	ng	0.00

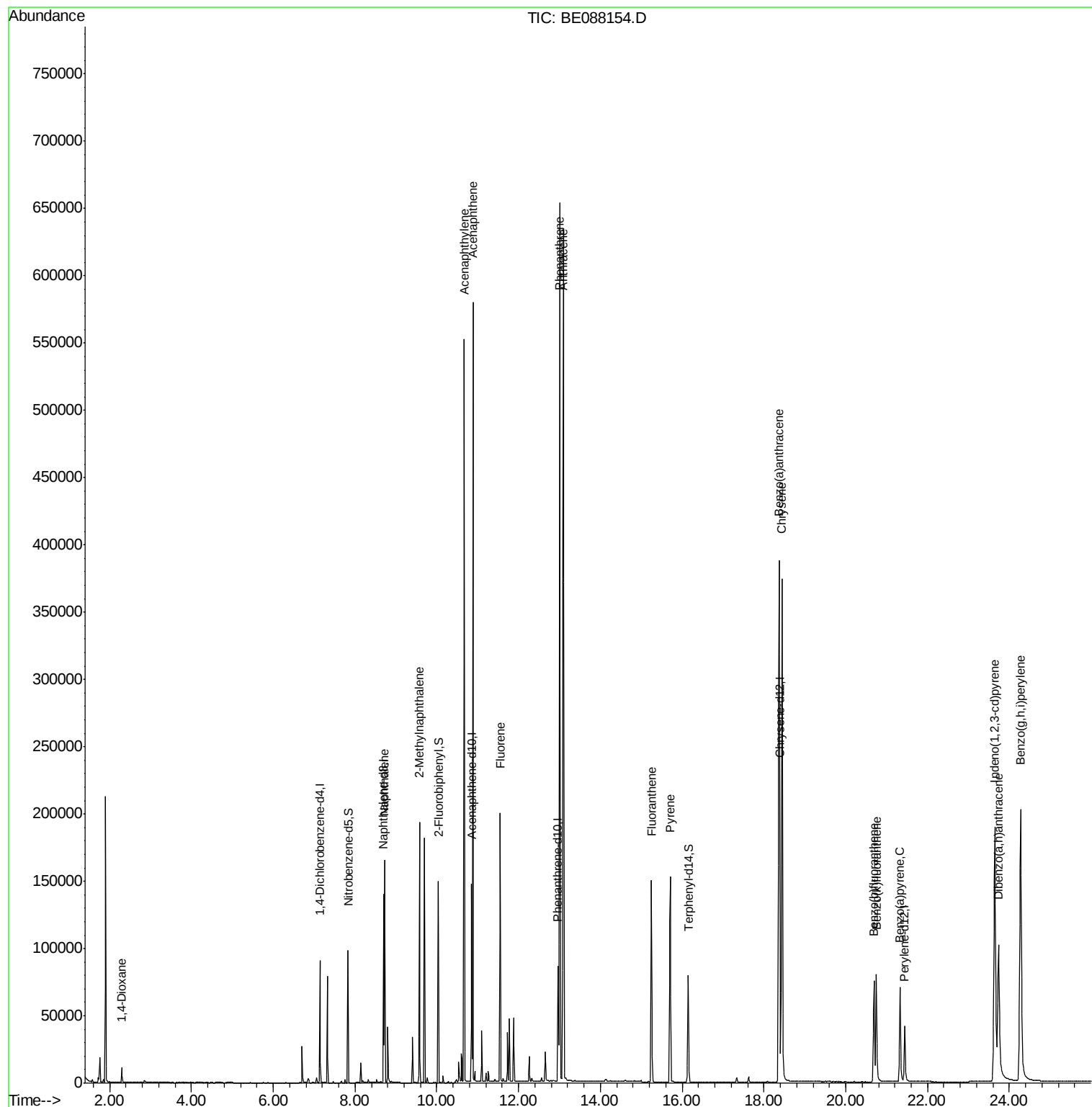
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	2.30	88	6504	1.75	ng	# 86
5) Naphthalene	8.72	128	109273	5.07	ng	99
6) 2-Methylnaphthalene	9.57	142	80470	6.24	ng	95
9) Acenaphthylene	10.67	152	498633	6.03	ng	100
10) Acenaphthene	10.88	154	75208	5.89	ng	99
11) Fluorene	11.55	166	93322	6.89	ng	99
13) Phenanthrene	13.01	178	593884	7.79	ng	95
14) Anthracene	13.09	178	601942	7.34	ng	99
15) Fluoranthene	15.25	202	147198	7.36	ng	99
17) Pyrene	15.71	202	152866	8.37	ng	99
19) Benzo(a)anthracene	18.37	228	481450	8.06	ng	98
20) Chrysene	18.44	228	460651	7.86	ng	99
21) Indeno(1,2,3-cd)pyrene	23.64	276	345964	5.32	ng	# 88
23) Benzo(b)fluoranthene	20.69	252	107359	8.06	ng	100
24) Benzo(k)fluoranthene	20.75	252	115634	8.10	ng	99
25) Benzo(a)pyrene	21.33	252	102176	8.33	ng	99
26) Dibenzo(a,h)anthracene	23.74	278	91655	7.61	ng	98
27) Benzo(g,h,i)perylene	24.28	276	400856	7.53	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: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

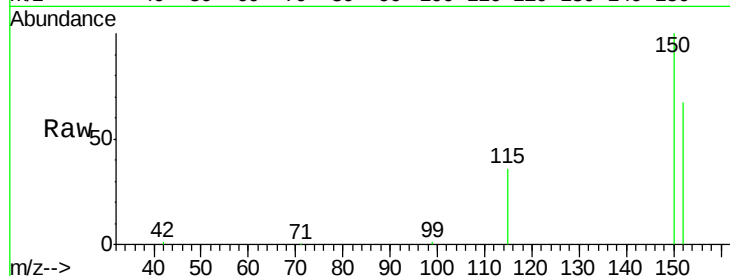
Tgt Ion:152 Resp: 25830

Ion Ratio Lower Upper

152 100

150 149.5 129.2 193.8

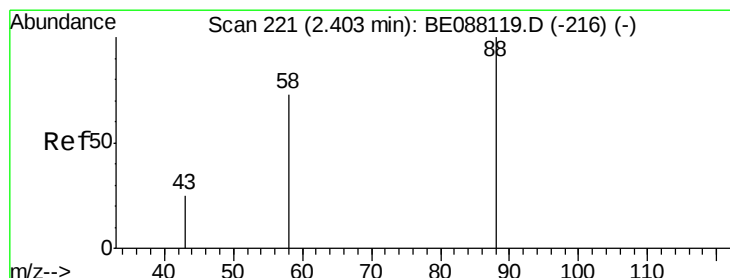
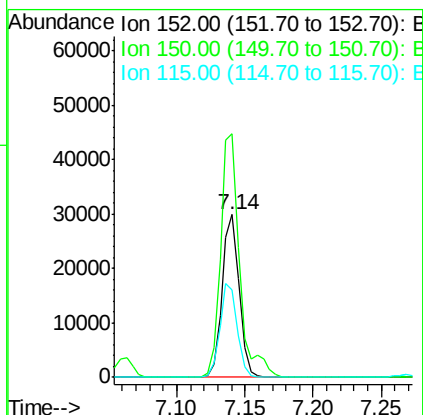
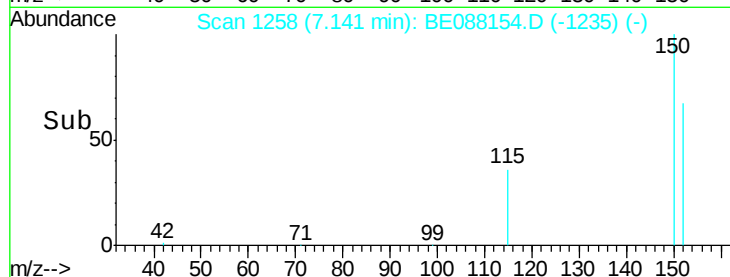
115 53.7 49.3 73.9



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



#2

1,4-Dioxane

Concen: 1.75 ng

RT: 2.30 min Scan# 198

Delta R.T. -0.11 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

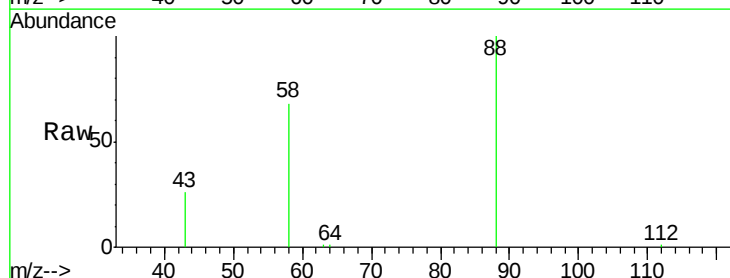
Tgt Ion: 88 Resp: 6504

Ion Ratio Lower Upper

88 100

58 74.9 59.5 89.3

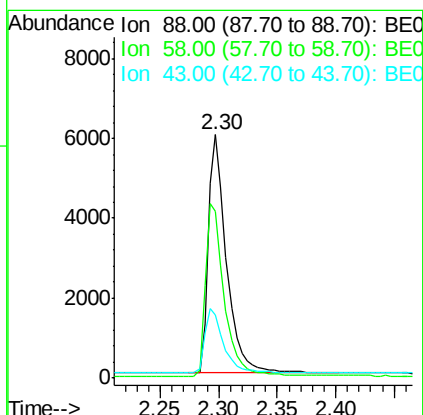
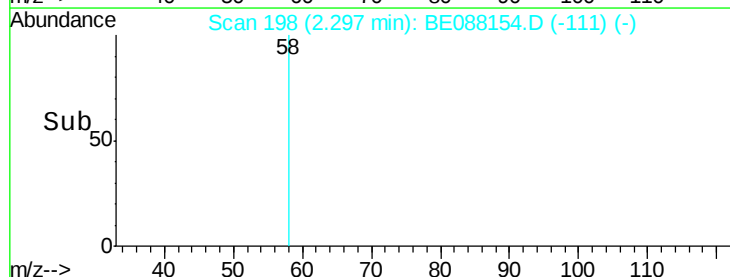
43 0.0 21.2 31.8#

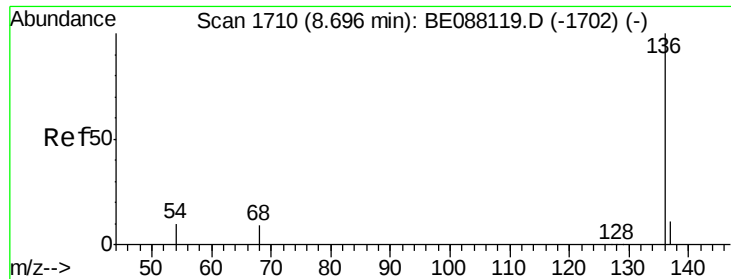


Abundance Ion 88.00 (87.70 to 88.70): BE0

Ion 58.00 (57.70 to 58.70): BE0

Ion 43.00 (42.70 to 43.70): BE0

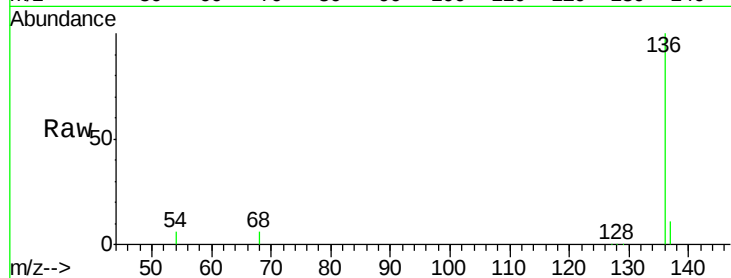




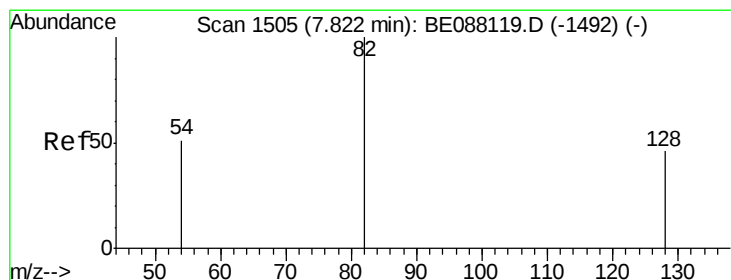
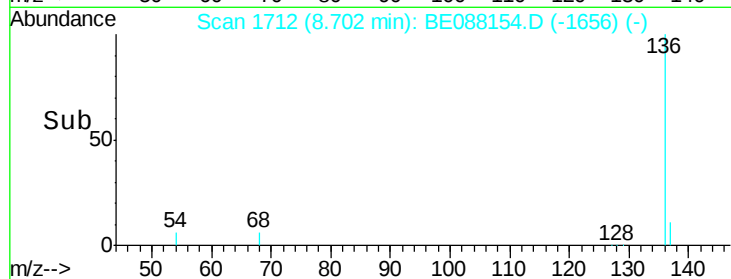
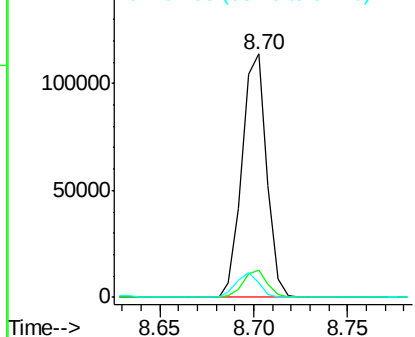
#3
Naphthalene-d8
Concen: 5.00 ng
RT: 8.70 min Scan# 1712
Delta R.T. 0.01 min
Lab File: BE088154.D
Acq: 21 Oct 2014 21:55

Instrument :
BNA_E
ClientSampleId :
YS19-SW10-1014MSD

Tgt Ion: 136 Resp: 104557
Ion Ratio Lower Upper
136 100
137 11.3 8.6 12.8
54 6.0 7.7 11.5#

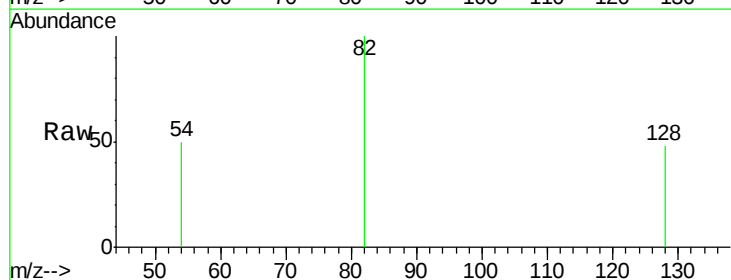


Abundance Ion 136.00 (135.70 to 136.70): E
Ion 137.00 (136.70 to 137.70): E
Ion 54.00 (53.70 to 54.70): BE0

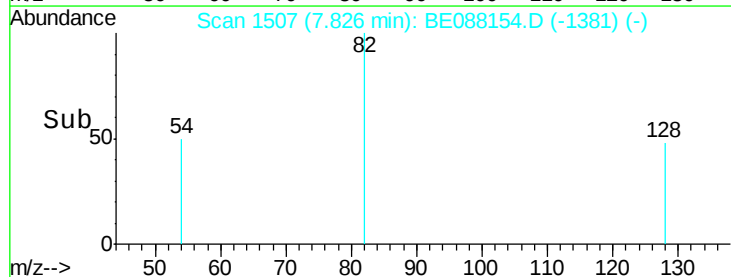
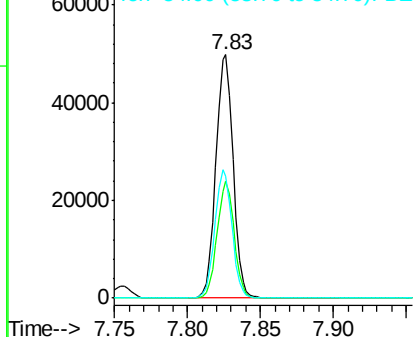


#4
Nitrobenzene-d5
Concen: 5.41 ng
RT: 7.83 min Scan# 1507
Delta R.T. 0.00 min
Lab File: BE088154.D
Acq: 21 Oct 2014 21:55

Tgt Ion: 82 Resp: 40757
Ion Ratio Lower Upper
82 100
128 48.0 37.1 55.7
54 50.3 41.1 61.7



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: 5.07 ng

RT: 8.72 min Scan# 1716

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

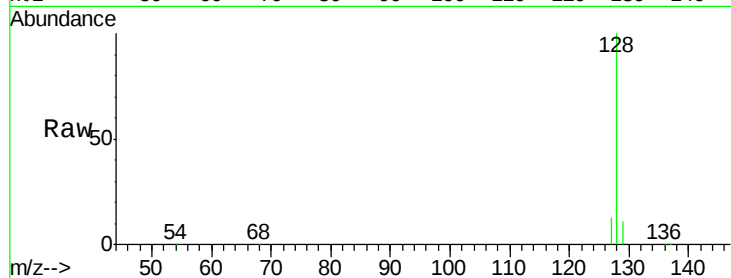
Tgt Ion:128 Resp: 109273

Ion Ratio Lower Upper

128 100

129 10.7 8.9 13.3

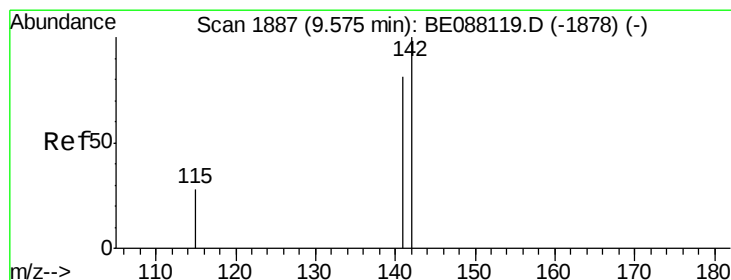
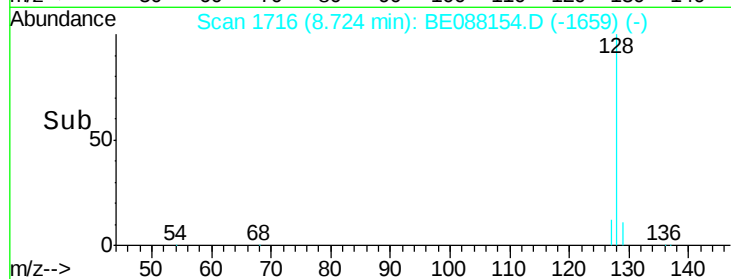
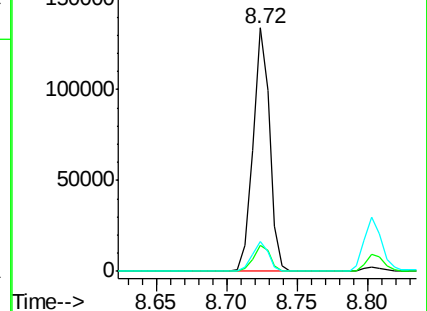
127 12.5 9.7 14.5



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: 6.24 ng

RT: 9.57 min Scan# 1888

Delta R.T. -0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

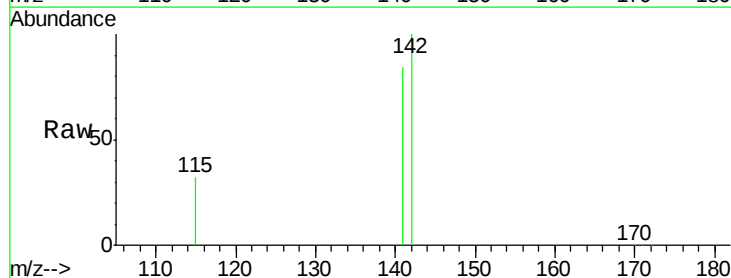
Tgt Ion:142 Resp: 80470

Ion Ratio Lower Upper

142 100

141 84.2 64.6 97.0

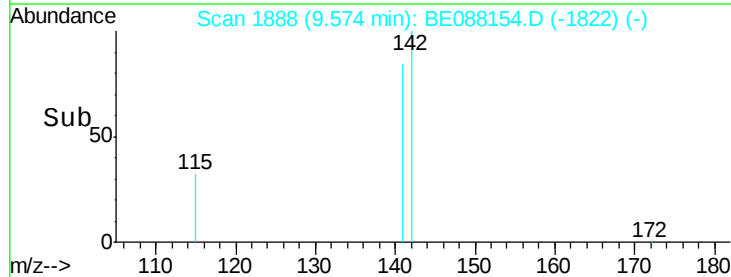
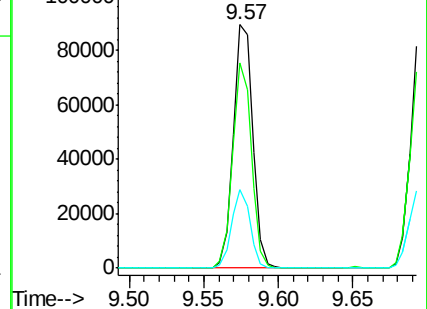
115 32.3 22.6 34.0



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: 10.85 min Scan# 2114

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

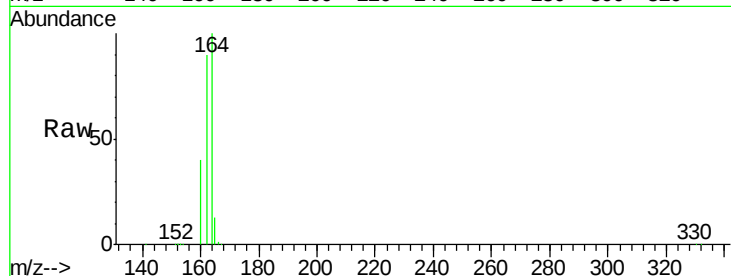
Tgt Ion:164 Resp: 54314

Ion Ratio Lower Upper

164 100

162 90.0 68.3 102.5

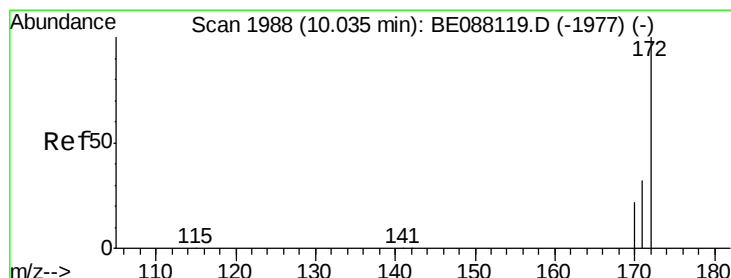
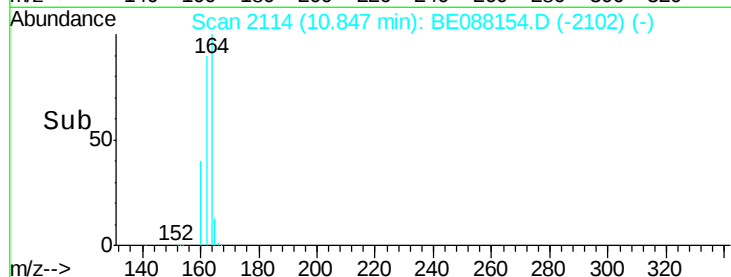
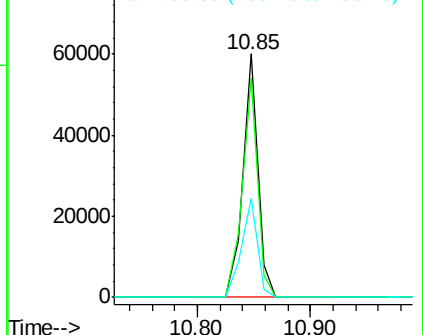
160 40.4 28.7 43.1



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: 5.87 ng

RT: 10.04 min Scan# 1990

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

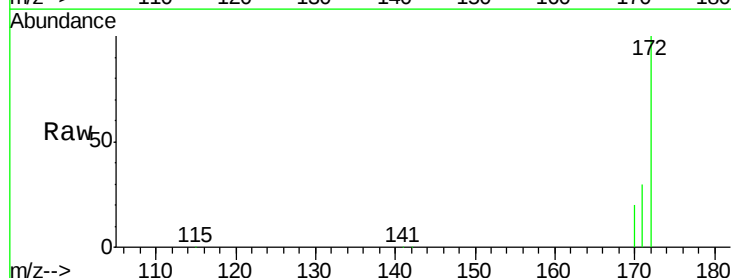
Tgt Ion:172 Resp: 88084

Ion Ratio Lower Upper

172 100

171 30.5 25.4 38.2

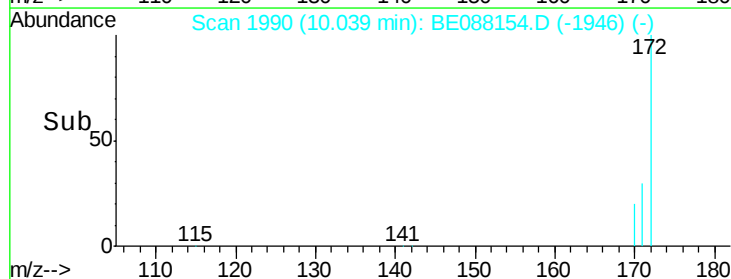
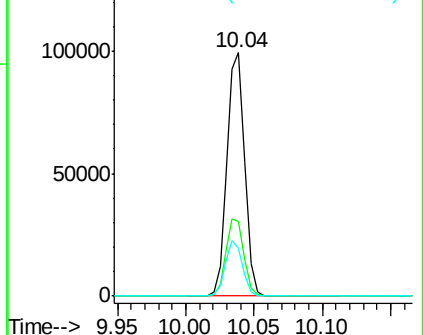
170 19.7 17.4 26.2

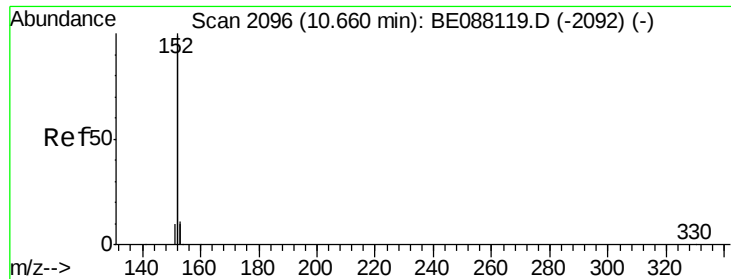


Abundance Ion 172.00 (171.70 to 172.70): E

Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E





#9

Acenaphthylene

Concen: 6.03 ng

RT: 10.67 min Scan# 2098

Delta R.T. 0.01 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

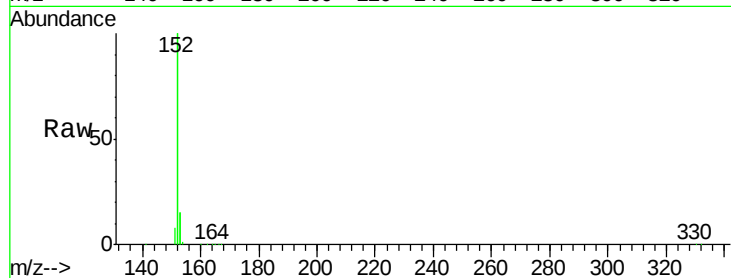
Tgt Ion:152 Resp: 498633

Ion Ratio Lower Upper

152 100

151 4.6 3.7 5.5

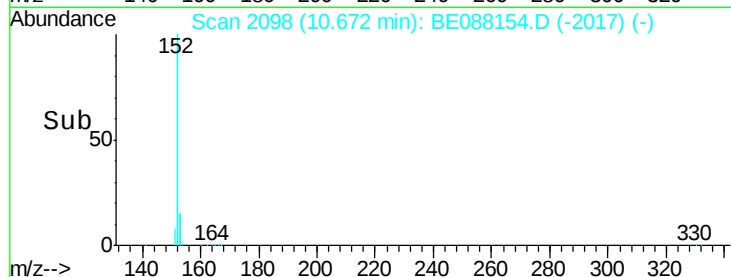
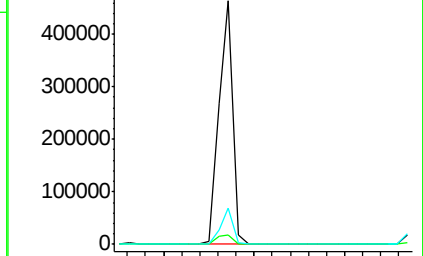
153 13.1 10.4 15.6



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: 5.89 ng

RT: 10.88 min Scan# 2117

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

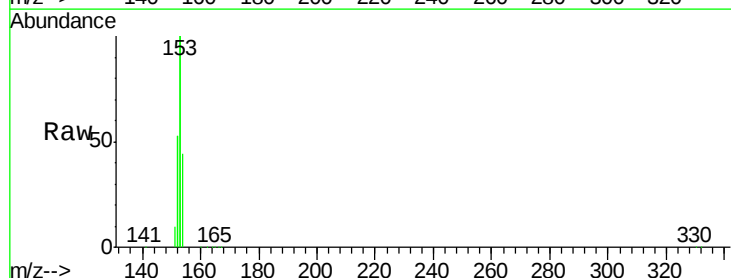
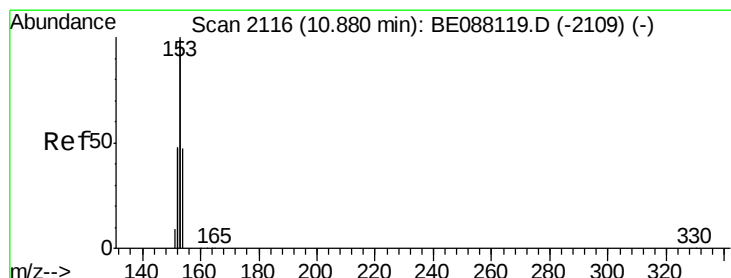
Tgt Ion:154 Resp: 75208

Ion Ratio Lower Upper

154 100

153 407.7 327.8 491.6

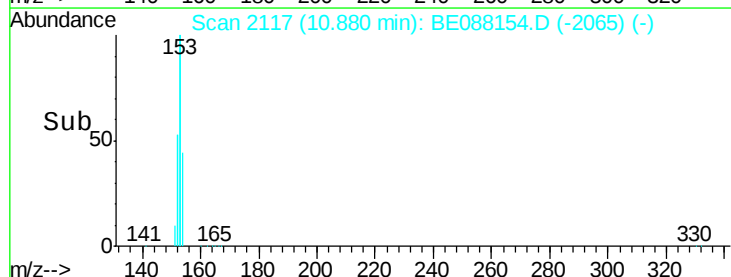
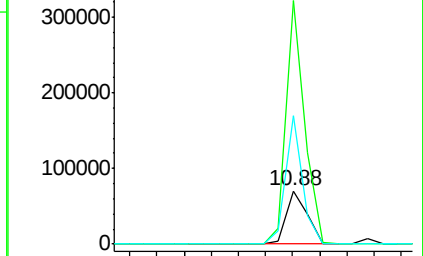
152 198.6 157.6 236.4



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: 6.89 ng

RT: 11.55 min Scan# 2178

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

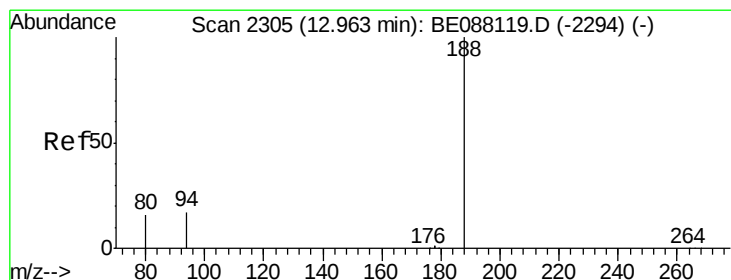
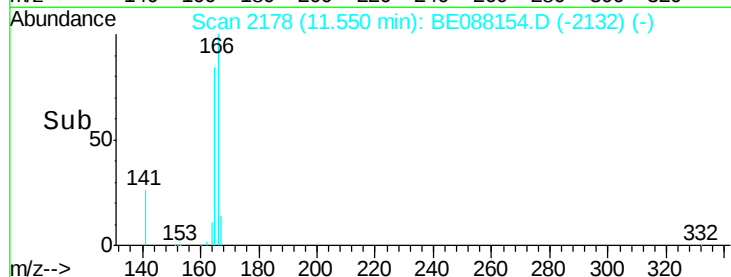
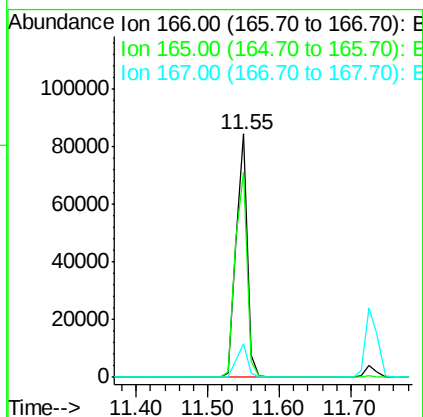
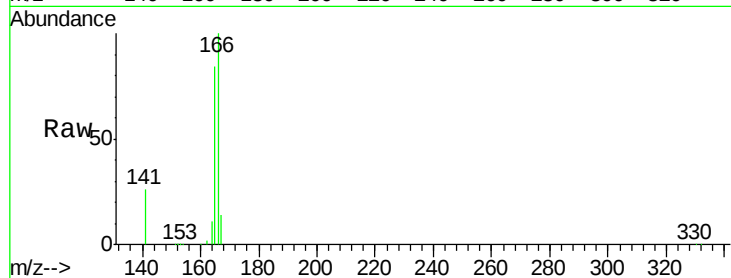
Tgt Ion:166 Resp: 93322

Ion Ratio Lower Upper

166 100

165 90.0 71.4 107.2

167 13.5 10.6 16.0



#12

Phenanthrene-d10

Concen: 5.00 ng

RT: 12.96 min Scan# 2306

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

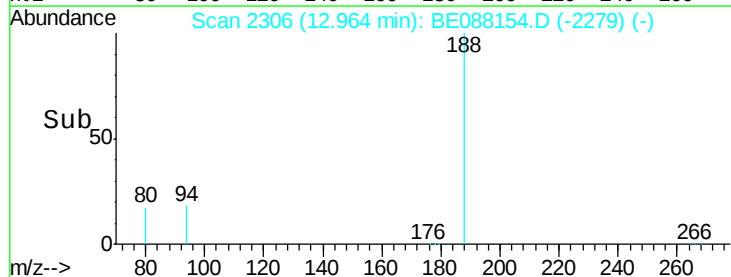
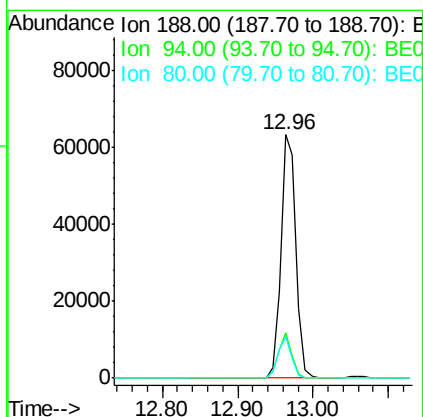
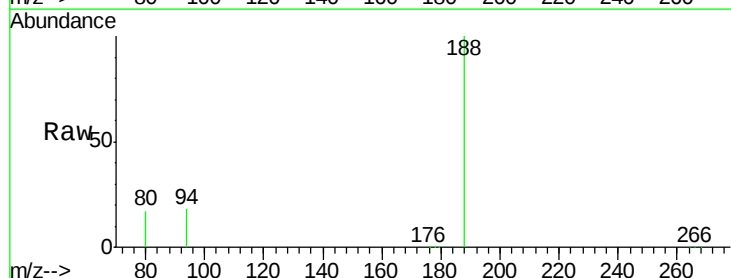
Tgt Ion:188 Resp: 105144

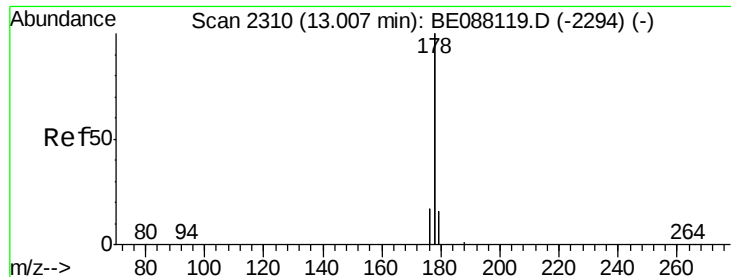
Ion Ratio Lower Upper

188 100

94 18.3 13.9 20.9

80 17.1 12.9 19.3

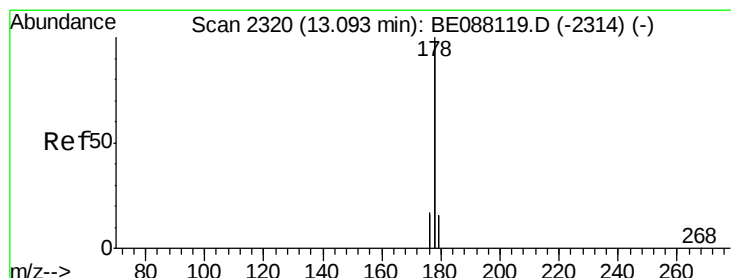
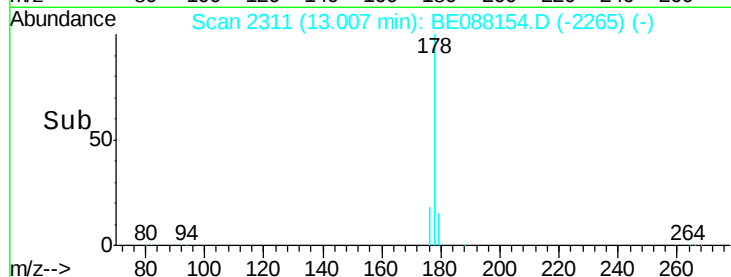
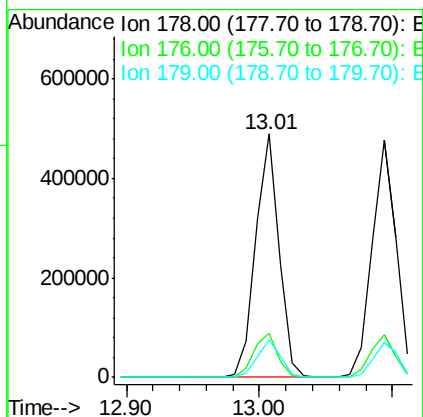
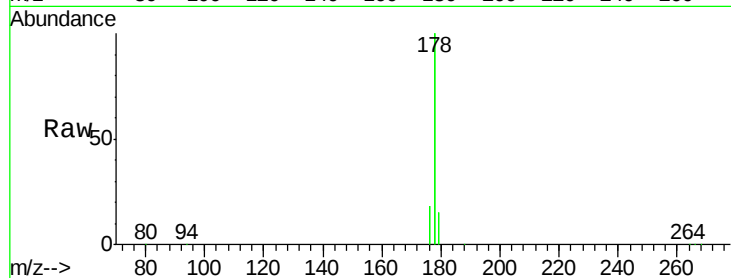




#13
Phenanthrene
Concen: 7.79 ng
RT: 13.01 min Scan# 2311
Delta R.T. 0.00 min
Lab File: BE088154.D
Acq: 21 Oct 2014 21:55

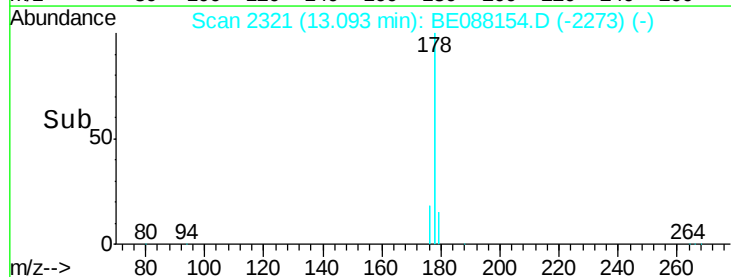
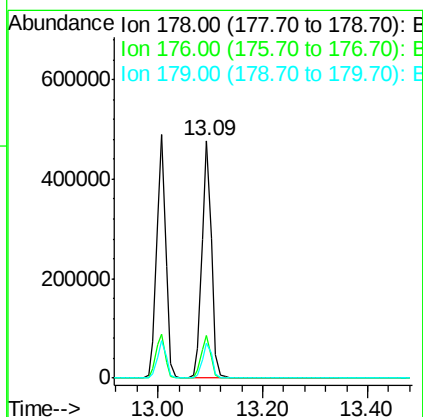
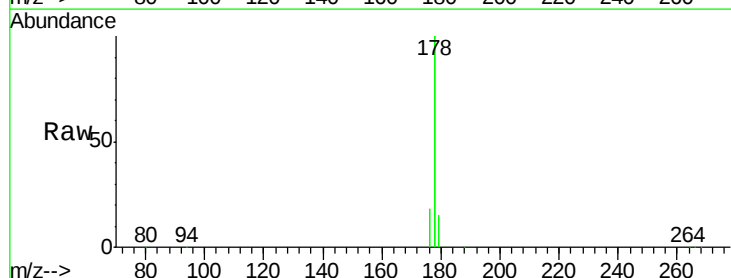
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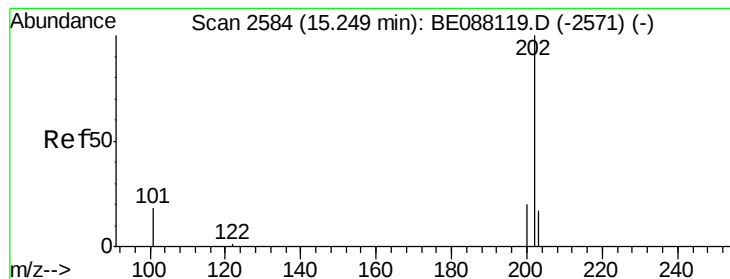
Tgt Ion:178 Resp: 593884
Ion Ratio Lower Upper
178 100
176 18.6 12.5 18.7
179 15.2 13.5 20.3



#14
Anthracene
Concen: 7.34 ng
RT: 13.09 min Scan# 2321
Delta R.T. 0.00 min
Lab File: BE088154.D
Acq: 21 Oct 2014 21:55

Tgt Ion:178 Resp: 601942
Ion Ratio Lower Upper
178 100
176 17.8 14.6 21.8
179 15.0 12.5 18.7





#15

Fluoranthene

Concen: 7.36 ng

RT: 15.25 min Scan# 2585

Delta R.T. -0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

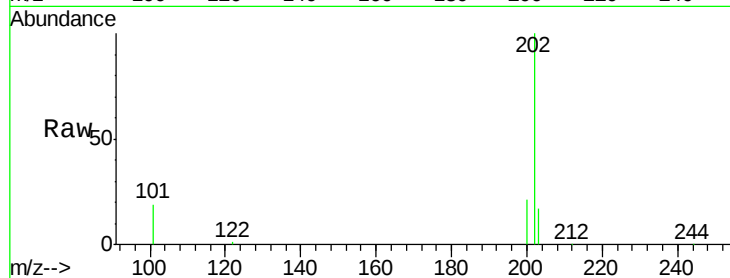
Tgt Ion: 202 Resp: 147198

Ion Ratio Lower Upper

202 100

101 18.3 14.8 22.2

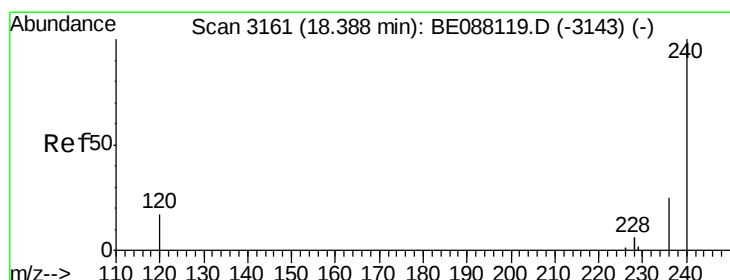
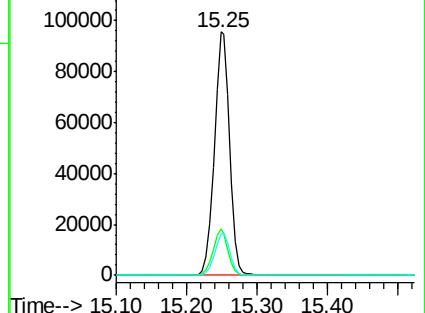
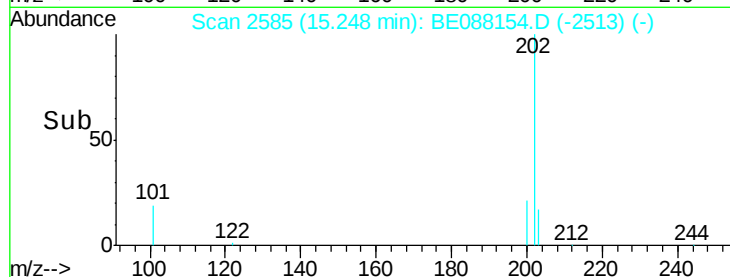
203 17.3 13.5 20.3



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: 18.39 min Scan# 3162

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

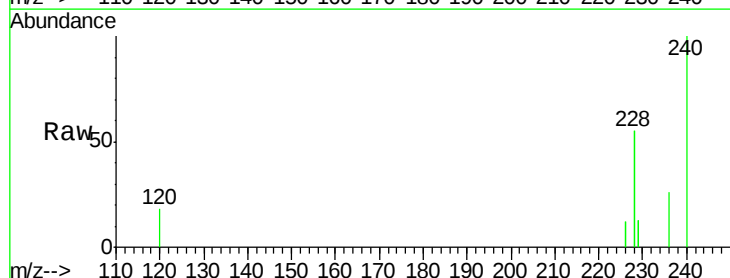
Tgt Ion: 240 Resp: 67155

Ion Ratio Lower Upper

240 100

120 18.2 13.9 20.9

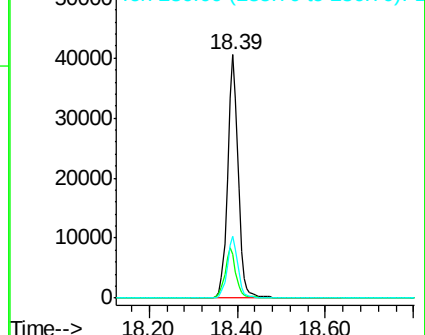
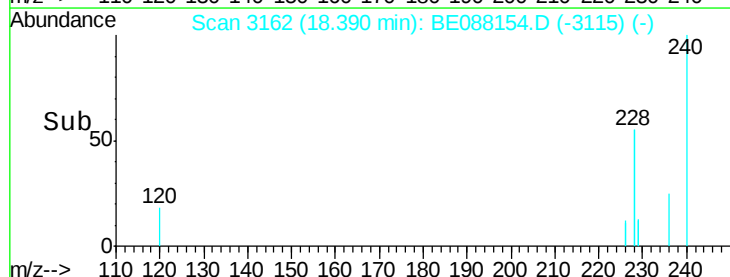
236 25.6 19.9 29.9

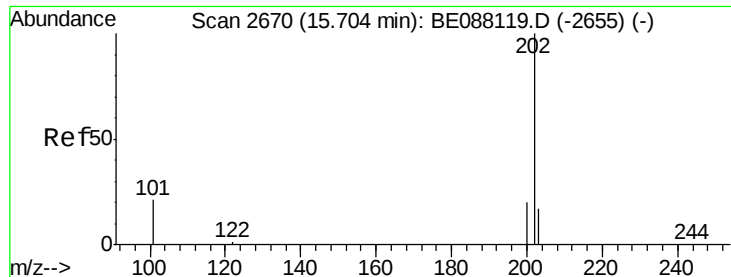


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

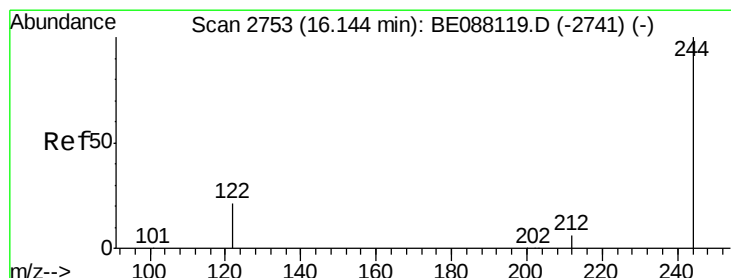
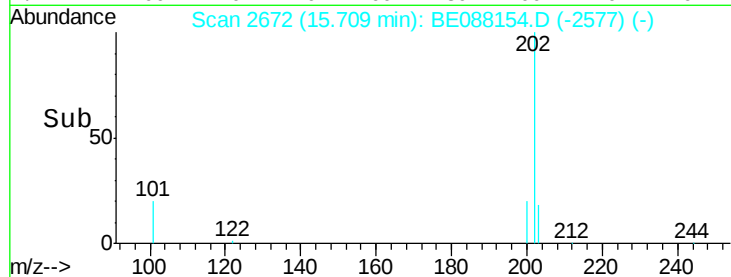
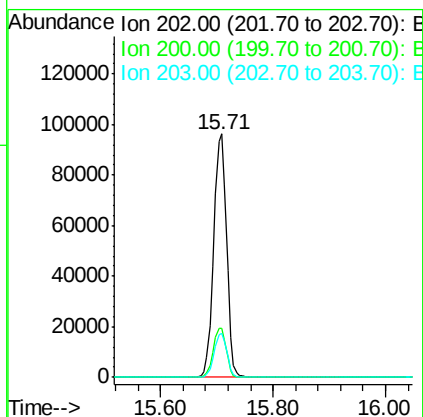
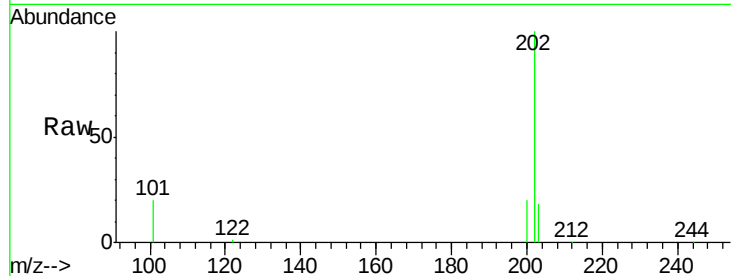




#17
 Pyrene
 Concen: 8.37 ng
 RT: 15.71 min Scan# 2672
 Delta R.T. 0.00 min
 Lab File: BE088154.D
 Acq: 21 Oct 2014 21:55

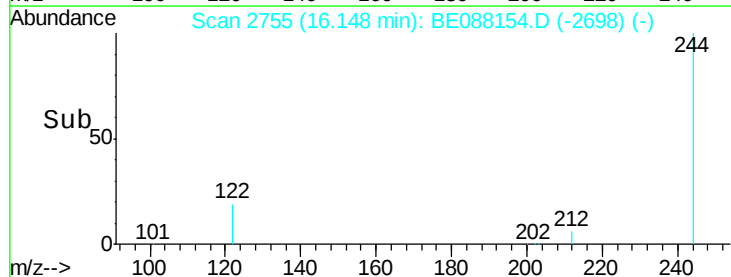
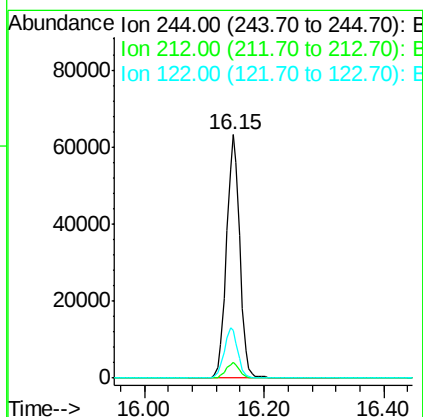
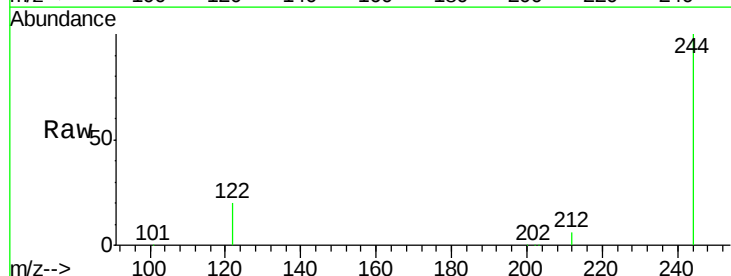
Instrument :
 BNA_E
 ClientSampleId :
 YS19-SW10-1014MSD

Tgt Ion: 202 Resp: 152866
 Ion Ratio Lower Upper
 202 100
 200 20.2 16.1 24.1
 203 18.0 13.9 20.9



#18
 Terphenyl-d14
 Concen: 9.21 ng
 RT: 16.15 min Scan# 2755
 Delta R.T. 0.00 min
 Lab File: BE088154.D
 Acq: 21 Oct 2014 21:55

Tgt Ion: 244 Resp: 99569
 Ion Ratio Lower Upper
 244 100
 212 6.4 5.4 8.0
 122 19.6 17.5 26.3





#19

Benzo(a)anthracene

Concen: 8.06 ng

RT: 18.37 min Scan# 3159

Delta R.T. 0.01 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

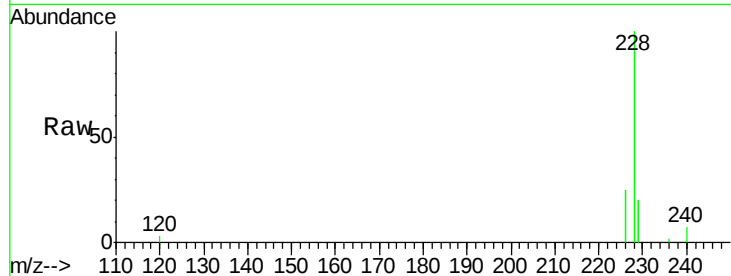
Tgt Ion:228 Resp: 481450

Ion Ratio Lower Upper

228 100

226 25.1 20.8 31.2

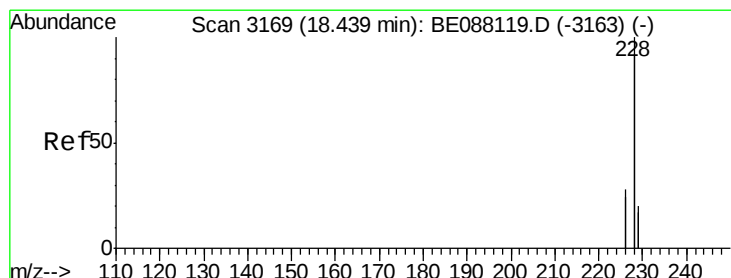
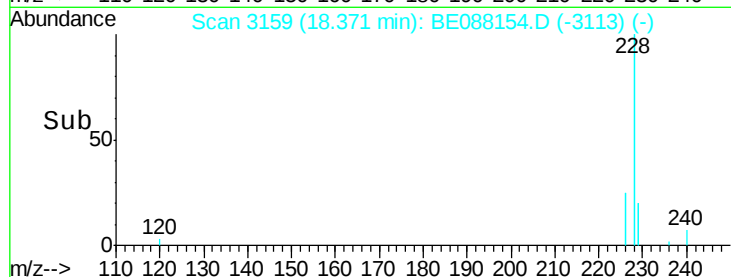
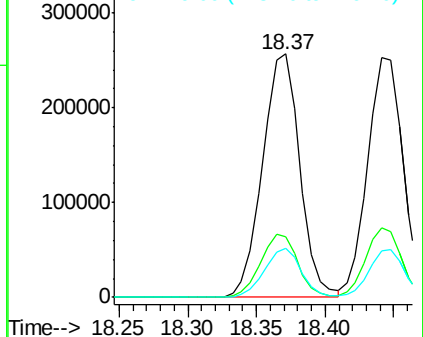
229 20.0 15.6 23.4



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: 7.86 ng

RT: 18.44 min Scan# 3170

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

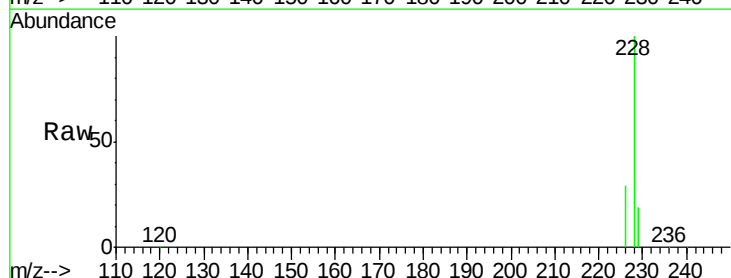
Tgt Ion:228 Resp: 460651

Ion Ratio Lower Upper

228 100

226 29.0 22.7 34.1

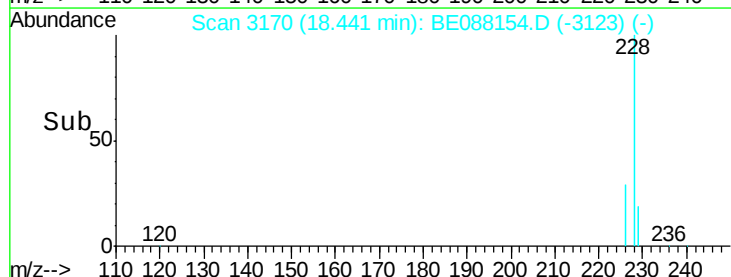
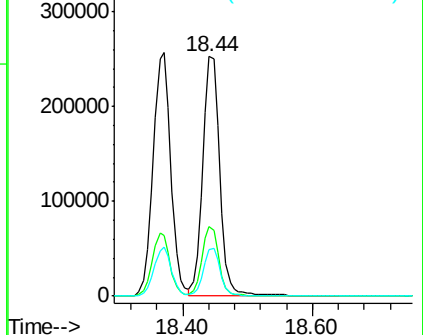
229 19.2 15.8 23.6

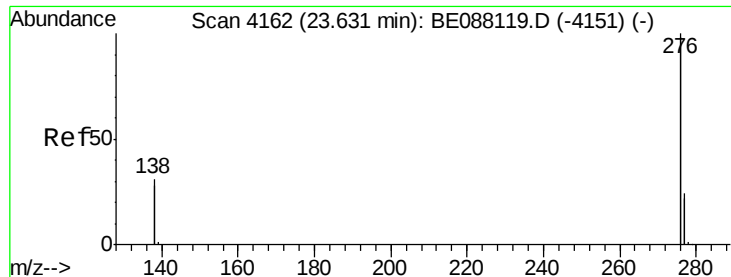


Abundance Ion 228.00 (227.70 to 228.70): E

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: 5.32 ng

RT: 23.64 min Scan# 4165

Delta R.T. 0.01 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

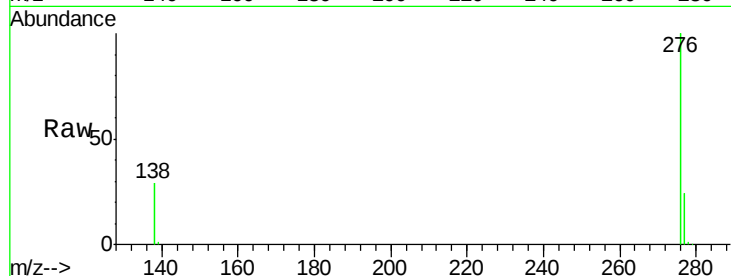
Tgt Ion: 276 Resp: 345964

Ion Ratio Lower Upper

276 100

138 28.8 18.5 27.7#

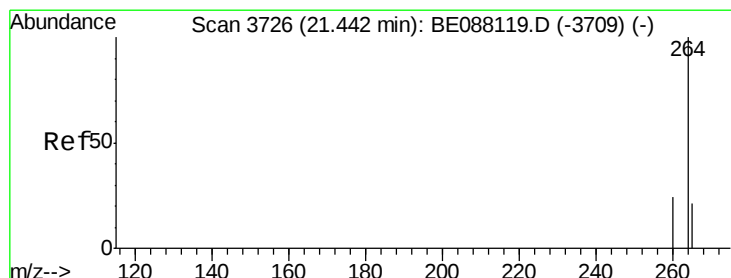
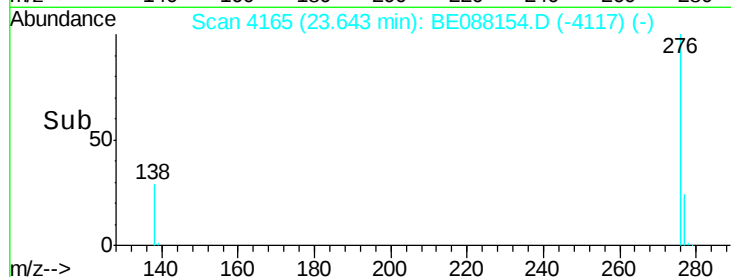
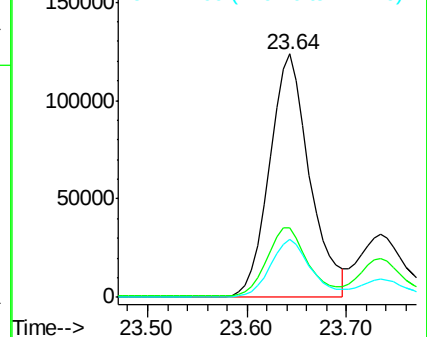
277 23.7 14.6 21.8#



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# 3727

Delta R.T. 0.00 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

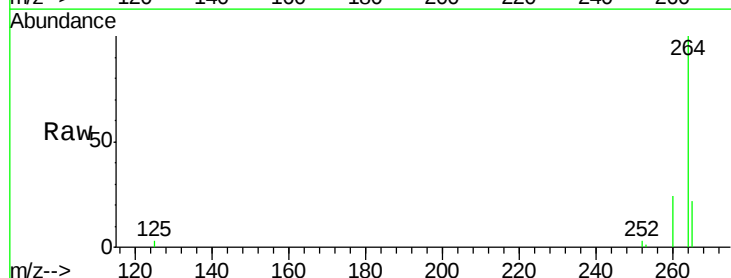
Tgt Ion: 264 Resp: 55988

Ion Ratio Lower Upper

264 100

260 24.3 19.0 28.4

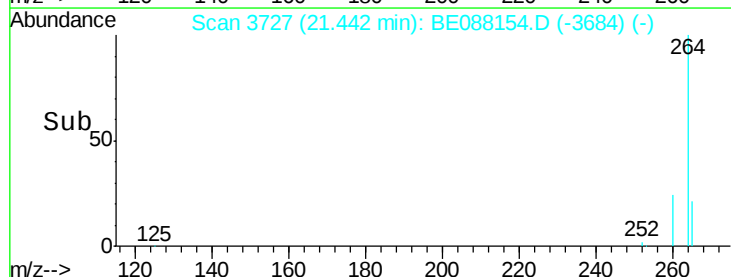
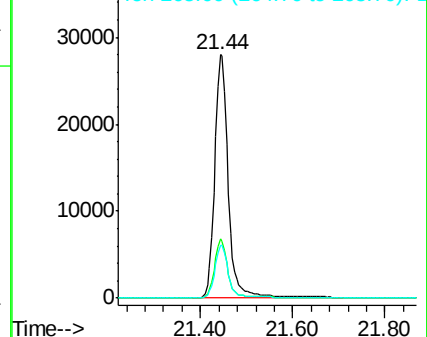
265 21.5 17.2 25.8

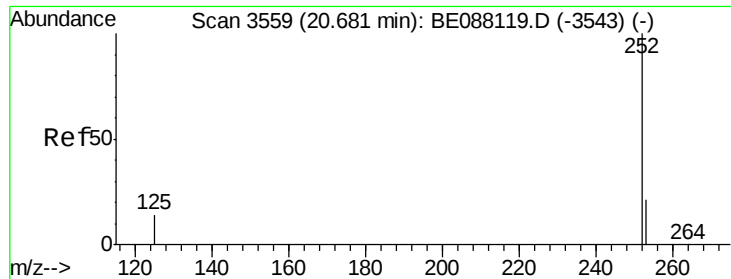


Abundance Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





#23

Benzo(b)fluoranthene

Concen: 8.06 ng

RT: 20.69 min Scan# 3561

Delta R.T. 0.01 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

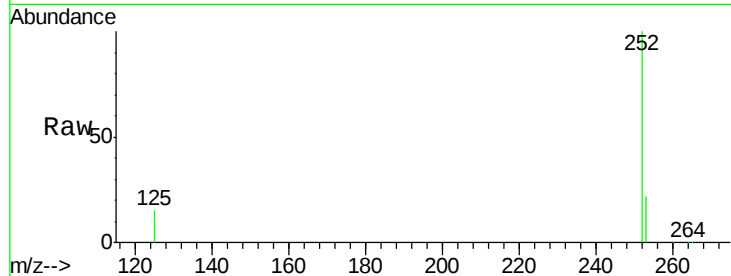
Tgt Ion:252 Resp: 107359

Ion Ratio Lower Upper

252 100

253 21.7 17.4 26.0

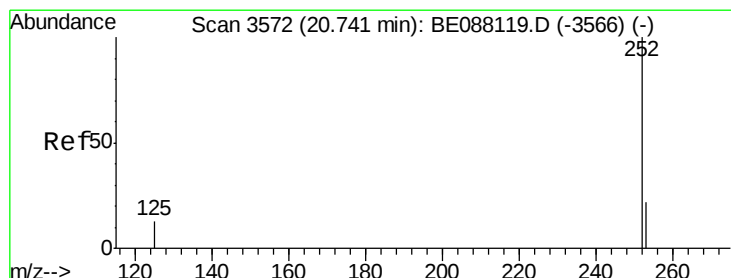
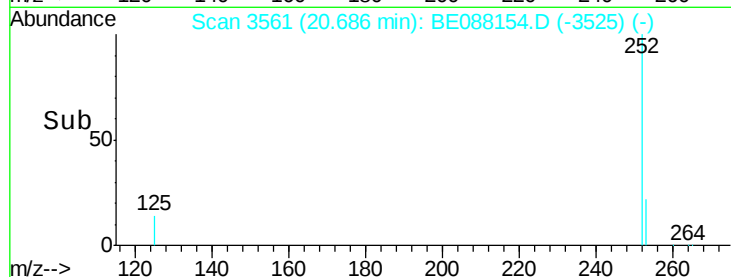
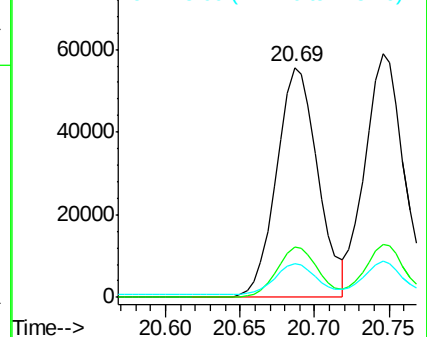
125 14.9 11.8 17.8



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: 8.10 ng

RT: 20.75 min Scan# 3574

Delta R.T. 0.01 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

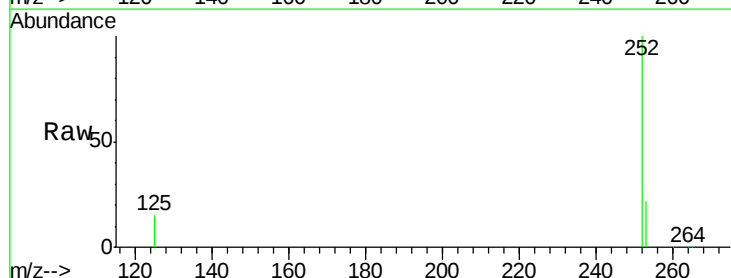
Tgt Ion:252 Resp: 115634

Ion Ratio Lower Upper

252 100

253 21.7 17.6 26.4

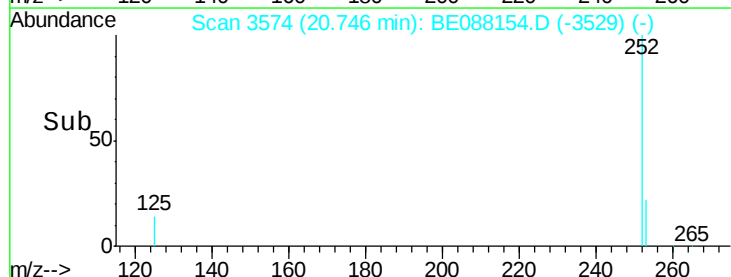
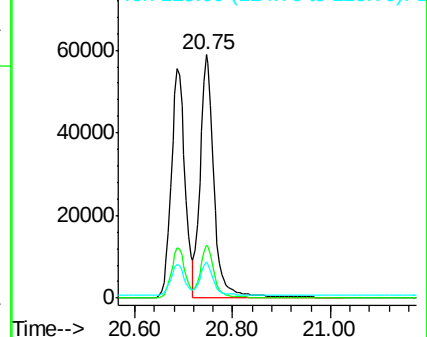
125 14.7 11.5 17.3



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: 8.33 ng

RT: 21.33 min Scan# 3702

Delta R.T. 0.01 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD

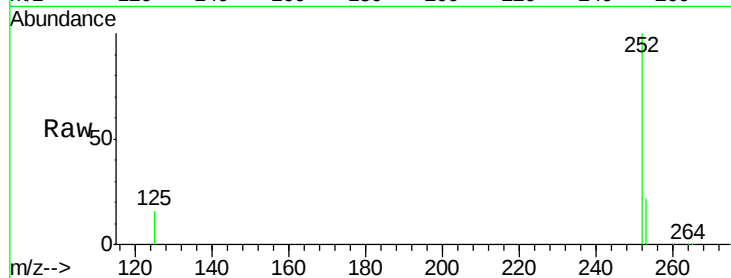
Tgt Ion:252 Resp: 102176

Ion Ratio Lower Upper

252 100

253 21.8 17.5 26.3

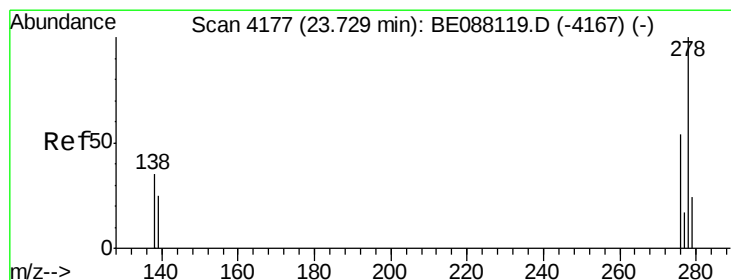
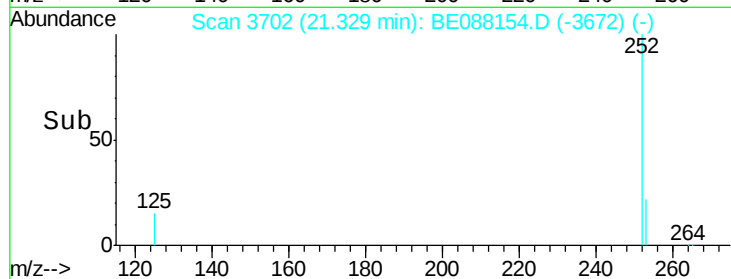
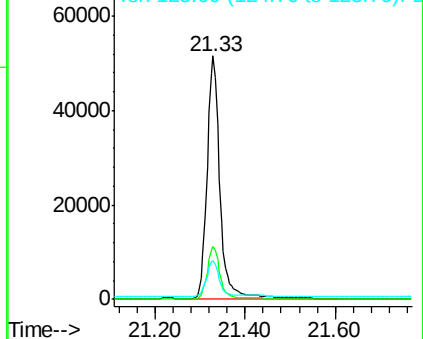
125 16.0 13.0 19.6



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: 7.61 ng

RT: 23.74 min Scan# 4180

Delta R.T. 0.01 min

Lab File: BE088154.D

Acq: 21 Oct 2014 21:55

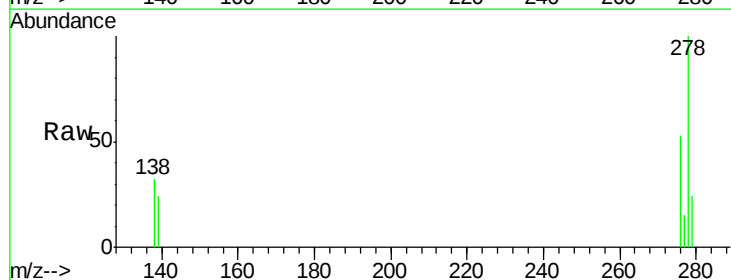
Tgt Ion:278 Resp: 91655

Ion Ratio Lower Upper

278 100

139 24.4 20.9 31.3

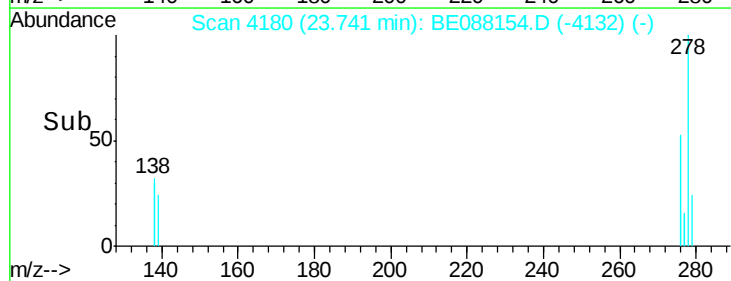
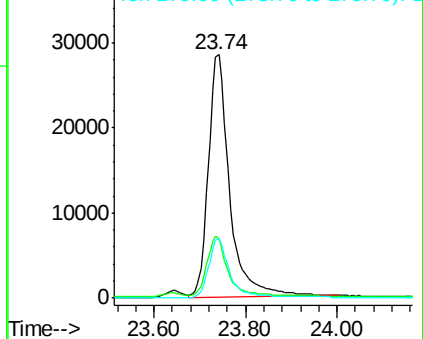
279 24.1 19.8 29.8

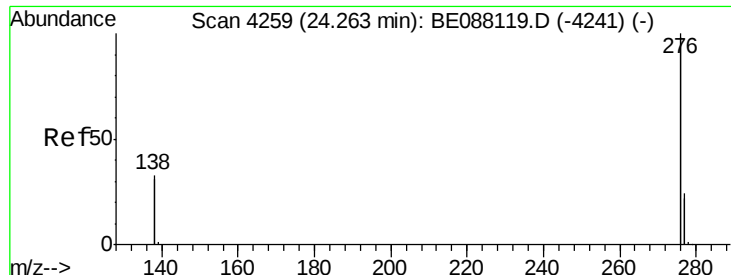


Abundance Ion 278.00 (277.70 to 278.70): E

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: 7.53 ng

RT: 24.28 min Scan# 4262

Delta R.T. 0.01 min

Lab File: BE088154.D

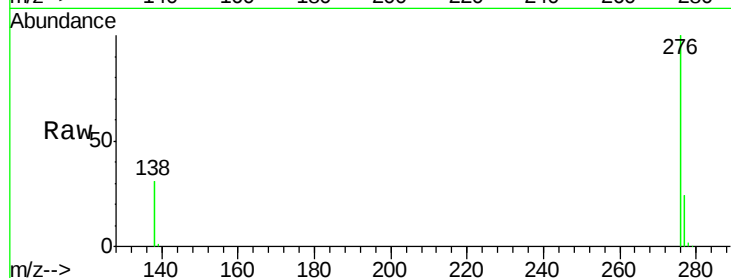
Acq: 21 Oct 2014 21:55

Instrument :

BNA_E

ClientSampleId :

YS19-SW10-1014MSD



Tgt Ion: 276 Resp: 400856

Ion Ratio Lower Upper

276 100

277 23.8 19.2 28.8

138 31.3 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

