

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE080216\
 Data File : BE092118.D
 Acq On : 2 Aug 2016 19:27
 Operator : UM/SJ
 Sample : PB92496BS
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :
 PB92496BS

Quant Time: Aug 03 03:53:41 2016
 Quant Method : Z:\HPCHEM1\BNA_E\METHODS\8270-PAH-BE080216.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Aug 02 16:59:37 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.18	152	12019	5.00	ng	0.01
6) Naphthalene-d8	10.98	136	51098	5.00	ng	-0.01
10) Acenaphthene-d10	14.85	164	25130	5.00	ng	0.00
16) Phenanthrene-d10	17.56	188	49622	5.00	ng	-0.02
22) Chrysene-d12	21.75	240	54033	5.00	ng	0.00
28) Perylene-d12	24.14	264	39856	5.00	ng	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	5.69	112	20491	6.64	ng	0.00
5) Phenol-d6	7.34	99	26487	6.44	ng	-0.01
7) Nitrobenzene-d5	9.34	82	12295	3.05	ng	-0.01
11) 2,4,6-Tribromophenol	16.33	330	5691	6.97	ng	0.00
12) 2-Fluorobiphenyl	13.46	172	26213	3.29	ng	0.00
24) Terphenyl-d14	20.19	244	29044	3.74	ng	-0.02

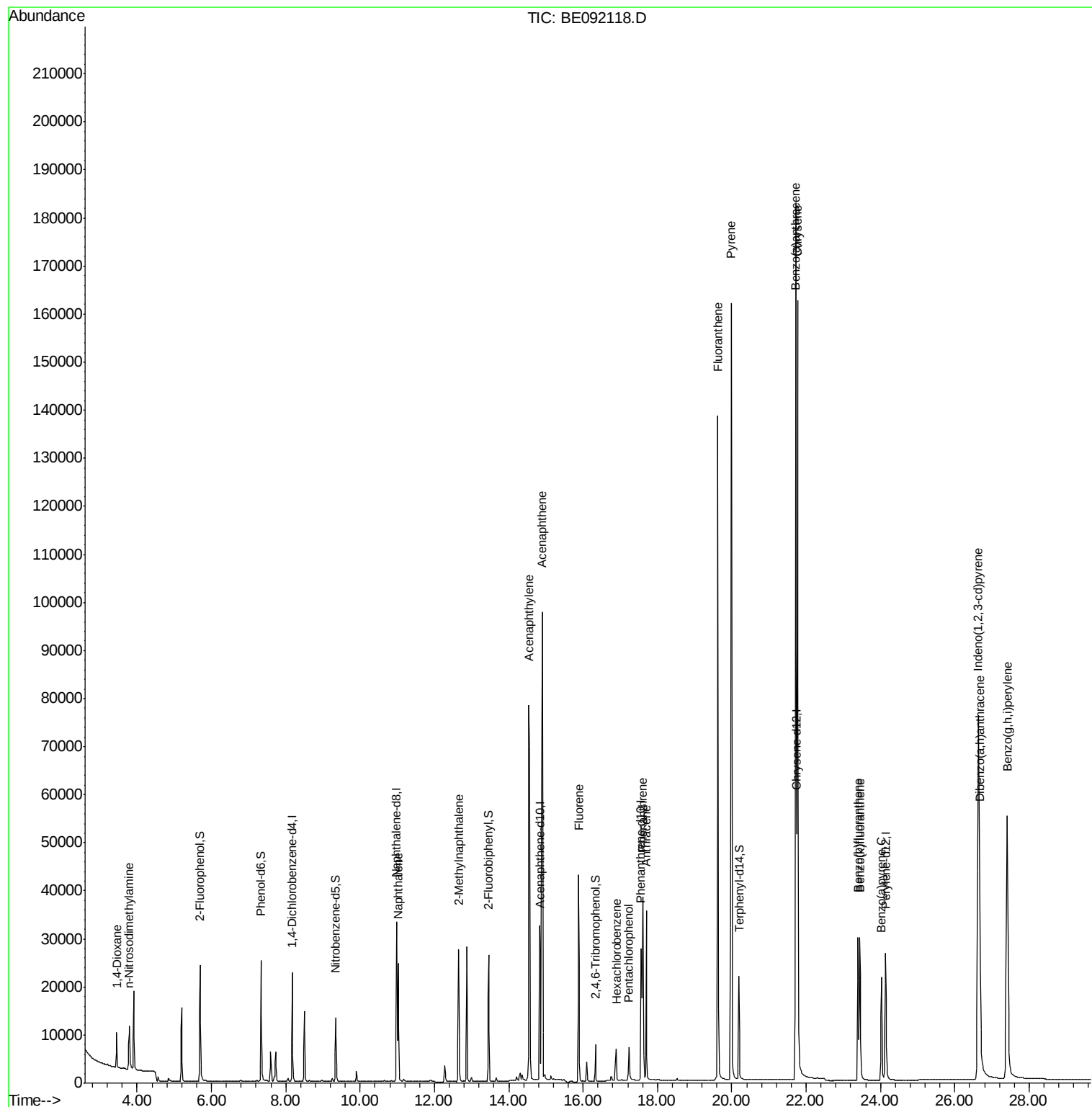
Target Compounds						Qvalue
2) 1,4-Dioxane	3.44	88	4104	2.51	ng	# 71
3) n-Nitrosodimethylamine	3.78	42	7791	3.46	ng	# 88
8) Naphthalene	11.03	128	34261	3.12	ng	95
9) 2-Methylnaphthalene	12.65	142	22824	3.15	ng	98
13) Acenaphthylene	14.54	152	137670	3.11	ng	98
14) Acenaphthene	14.90	154	21623	3.06	ng	# 96
15) Fluorene	15.88	166	26418	2.95	ng	99
17) Hexachlorobenzene	16.89	284	7725	3.18	ng	# 60
18) Pentachlorophenol	17.24	266	5747	6.33	ng	# 81
19) Phenanthrene	17.60	178	45133	3.33	ng	98
20) Anthracene	17.70	178	42648	3.23	ng	99
21) Fluoranthene	19.63	202	179124	2.95	ng	97
23) Pyrene	19.99	202	191799	3.39	ng	98
25) Benzo(a)anthracene	21.72	228	183791	3.09	ng	95
26) Chrysene	21.77	228	173207	2.91	ng	# 85
27) Indeno(1,2,3-cd)pyrene	26.63	276	172057	2.66	ng	99
29) Benzo(b)fluoranthene	23.40	252	43157	3.96	ng	97
30) Benzo(k)fluoranthene	23.45	252	43528	4.17	ng	96
31) Benzo(a)pyrene	24.02	252	37597	3.75	ng	95
32) Dibenzo(a,h)anthracene	26.67	278	36900	3.86	ng	# 93
33) Benzo(g,h,i)perylene	27.42	276	144893	3.55	ng	95

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

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#1

1,4-Dichlorobenzene-d4

Concen: 5.00 ng

RT: 8.18 min Scan# 480

Delta R.T. 0.01 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

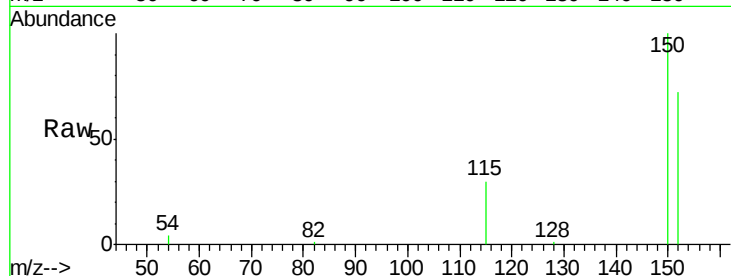
Tgt Ion:152 Resp: 12019

Ion Ratio Lower Upper

152 100

150 138.5 106.0 159.0

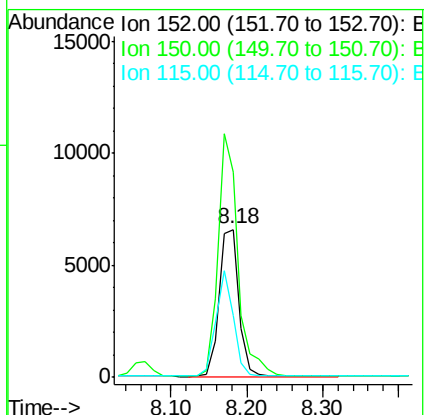
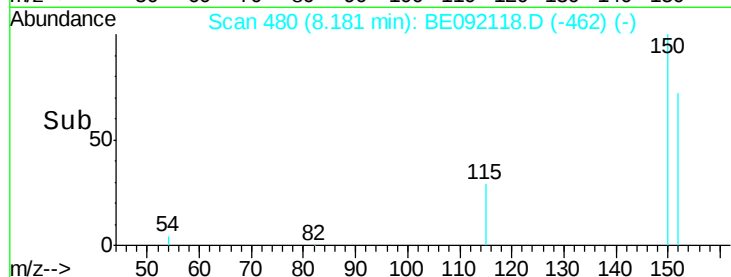
115 41.4 36.9 55.3



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: 2.51 ng

RT: 3.44 min Scan# 74

Delta R.T. -0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

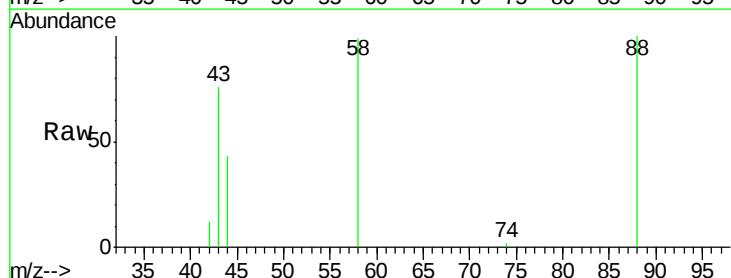
Tgt Ion: 88 Resp: 4104

Ion Ratio Lower Upper

88 100

58 92.4 62.1 93.1

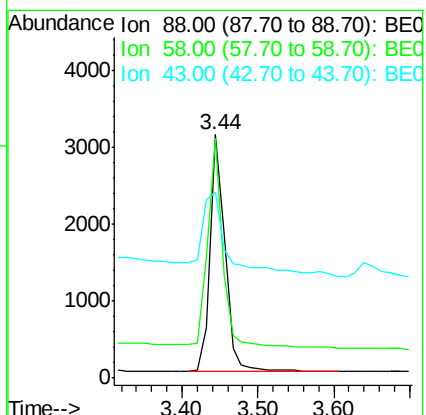
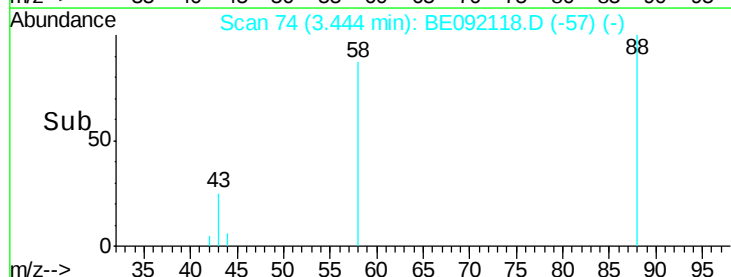
43 65.4 27.2 40.8#

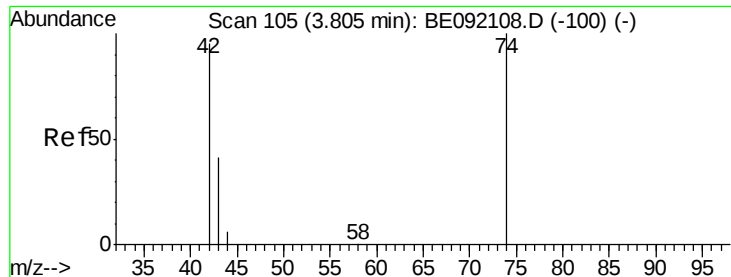


Abundance Ion 88.00 (87.70 to 88.70): BE0

Ion 58.00 (57.70 to 58.70): BE0

Ion 43.00 (42.70 to 43.70): BE0



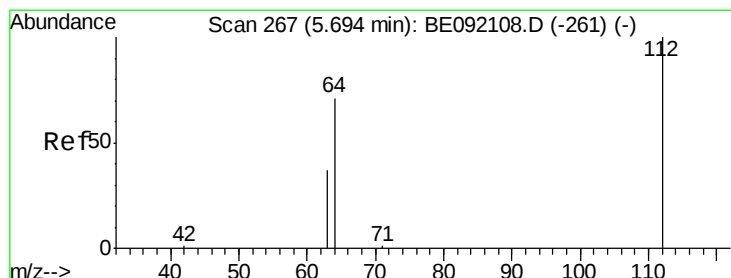
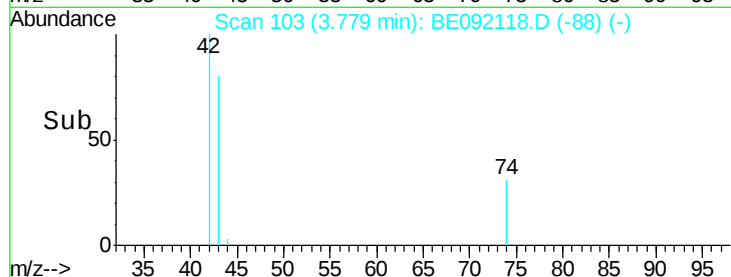
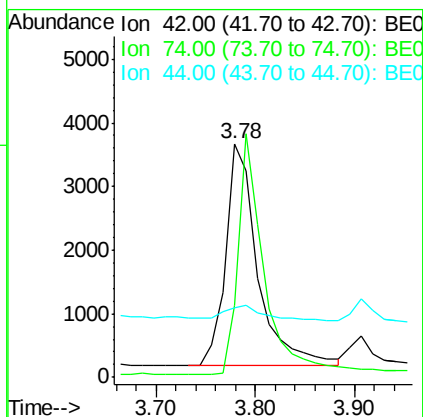
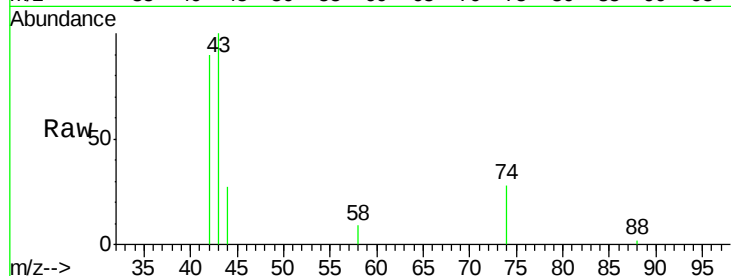


#3

n-Nitrosodimethylamine
Concen: 3.46 ng
RT: 3.78 min Scan# 103
Delta R.T. -0.03 min
Lab File: BE092118.D
Acq: 2 Aug 2016 19:27

Instrument :
BNA_E
ClientSampleId :
PB92496BS

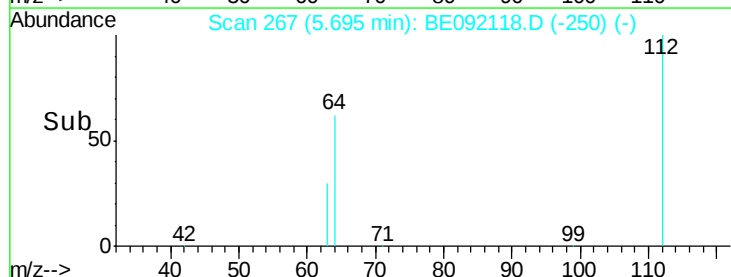
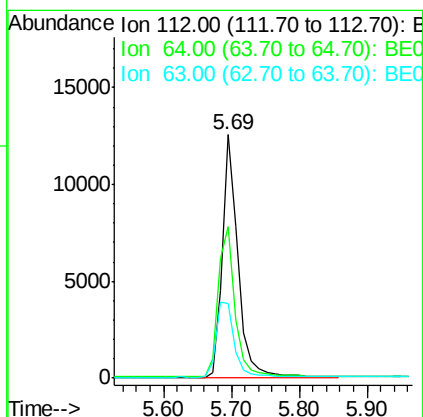
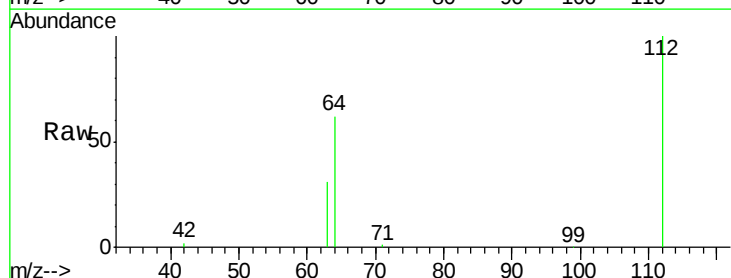
Tgt Ion: 42 Resp: 7791
Ion Ratio Lower Upper
42 100
74 90.7 82.8 124.2
44 8.2 9.0 13.4#



#4

2-Fluorophenol
Concen: 6.64 ng
RT: 5.69 min Scan# 267
Delta R.T. 0.00 min
Lab File: BE092118.D
Acq: 2 Aug 2016 19:27

Tgt Ion: 112 Resp: 20491
Ion Ratio Lower Upper
112 100
64 66.8 55.9 83.9
63 36.4 31.1 46.7





#5

Phenol-d6

Concen: 6.44 ng

RT: 7.34 min Scan# 409

Delta R.T. -0.01 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

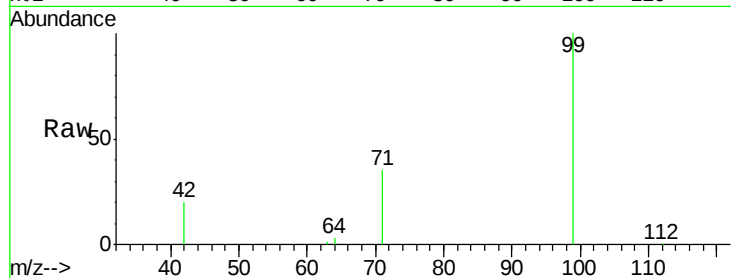
Tgt Ion: 99 Resp: 26487

Ion Ratio Lower Upper

99 100

42 25.4 22.4 33.6

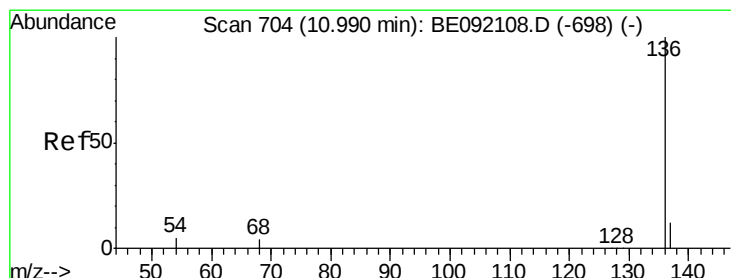
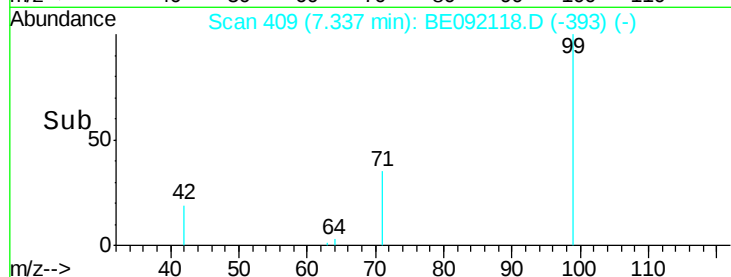
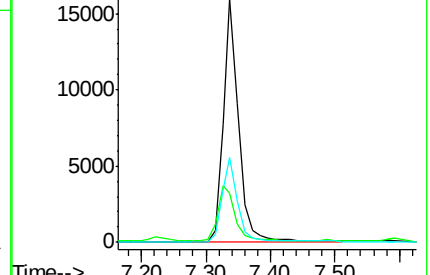
71 35.2 28.9 43.3



Abundance Ion 99.00 (98.70 to 99.70): BE092118.D (-403) (-)

Ion 42.00 (41.70 to 42.70): BE092118.D (-403) (-)

Ion 71.00 (70.70 to 71.70): BE092118.D (-403) (-)



#6

Naphthalene-d8

Concen: 5.00 ng

RT: 10.98 min Scan# 703

Delta R.T. -0.01 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Tgt Ion: 136 Resp: 51098

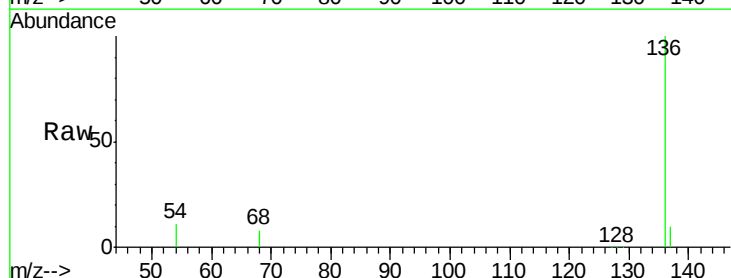
Ion Ratio Lower Upper

136 100

137 10.1 9.1 13.7

54 11.2 2.7 4.1#

68 7.7 2.2 3.4#

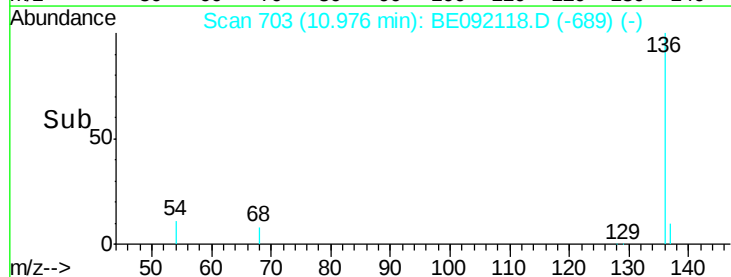
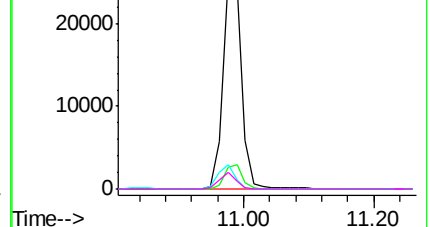


Abundance Ion 136.00 (135.70 to 136.70): BE092118.D (-698) (-)

Ion 137.00 (136.70 to 137.70): BE092118.D (-698) (-)

Ion 54.00 (53.70 to 54.70): BE092118.D (-698) (-)

Ion 68.00 (67.70 to 68.70): BE092118.D (-698) (-)





#7

Nitrobenzene-d5

Concen: 3.05 ng

RT: 9.34 min Scan# 580

Delta R.T. -0.01 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

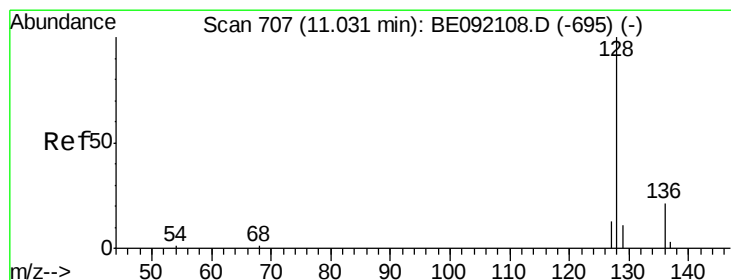
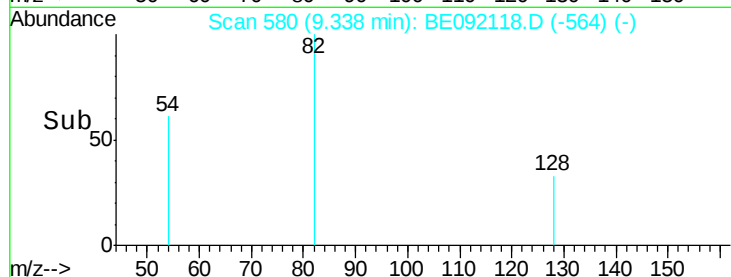
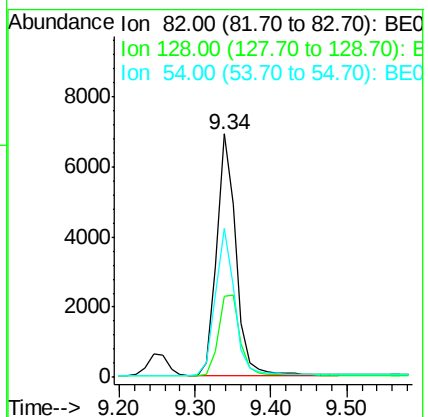
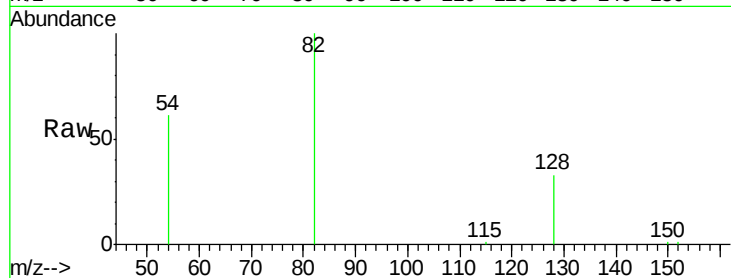
Tgt Ion: 82 Resp: 12295

Ion Ratio Lower Upper

82 100

128 33.1 33.0 49.4

54 61.4 42.6 63.8



#8

Naphthalene

Concen: 3.12 ng

RT: 11.03 min Scan# 707

Delta R.T. -0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

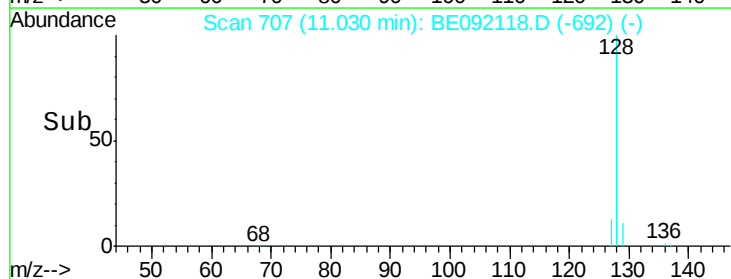
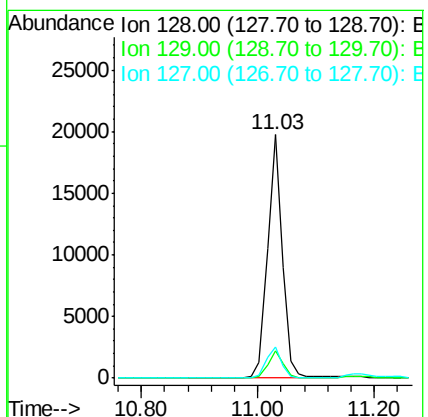
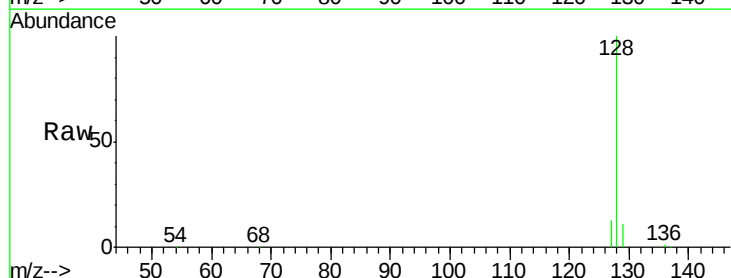
Tgt Ion: 128 Resp: 34261

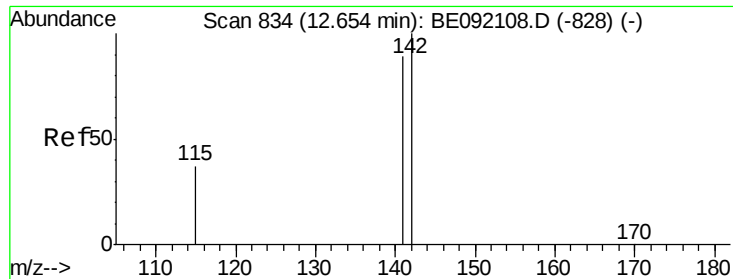
Ion Ratio Lower Upper

128 100

129 11.2 11.1 16.7

127 12.7 11.3 16.9

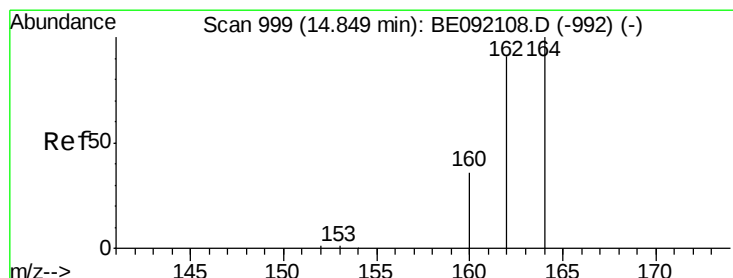
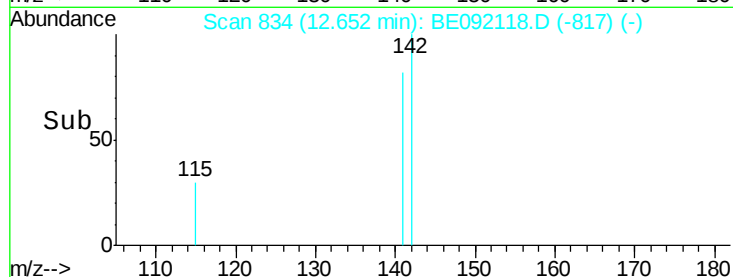
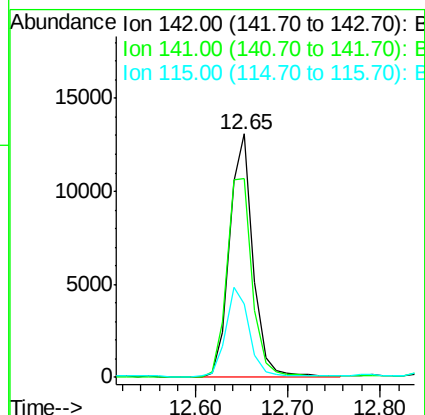
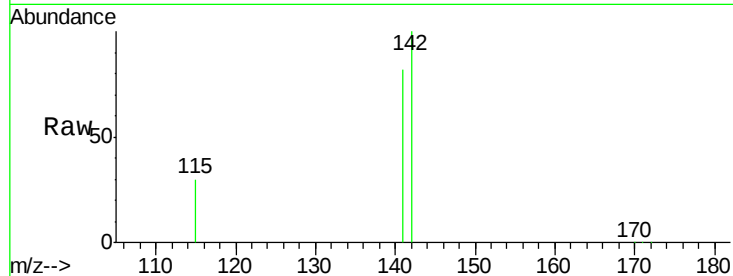




#9
2-Methylnaphthalene
Concen: 3.15 ng
RT: 12.65 min Scan# 834
Delta R.T. -0.00 min
Lab File: BE092118.D
Acq: 2 Aug 2016 19:27

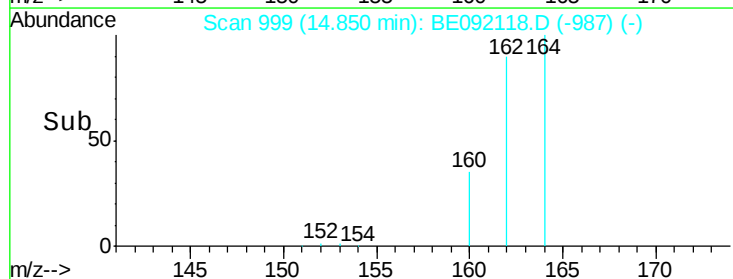
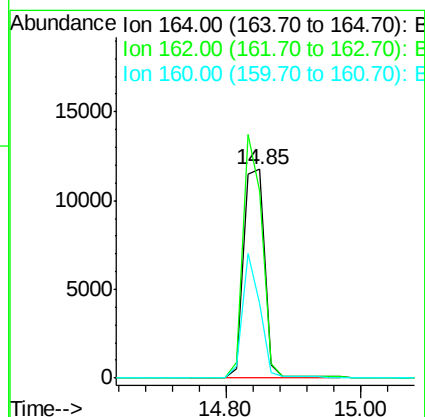
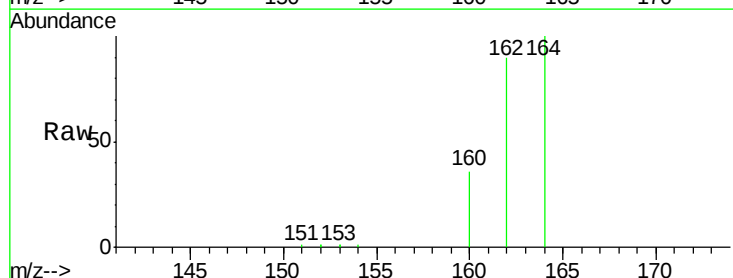
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PB92496BS

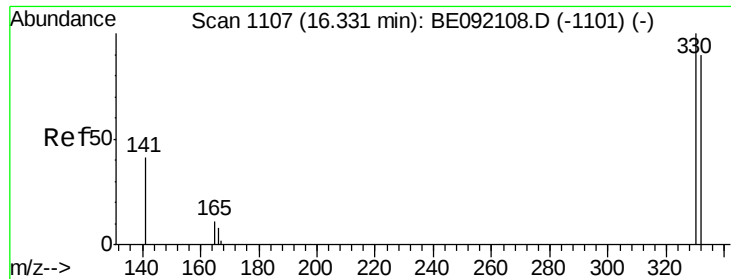
Tgt Ion:142 Resp: 22824
Ion Ratio Lower Upper
142 100
141 81.8 65.1 97.7
115 29.9 27.0 40.4



#10
Acenaphthene-d10
Concen: 5.00 ng
RT: 14.85 min Scan# 999
Delta R.T. 0.00 min
Lab File: BE092118.D
Acq: 2 Aug 2016 19:27

Tgt Ion:164 Resp: 25130
Ion Ratio Lower Upper
164 100
162 89.6 69.5 104.3
160 35.6 27.6 41.4

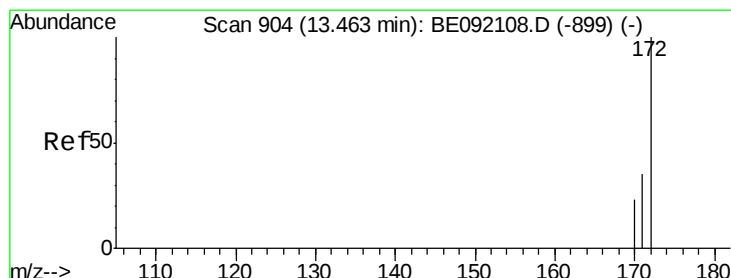
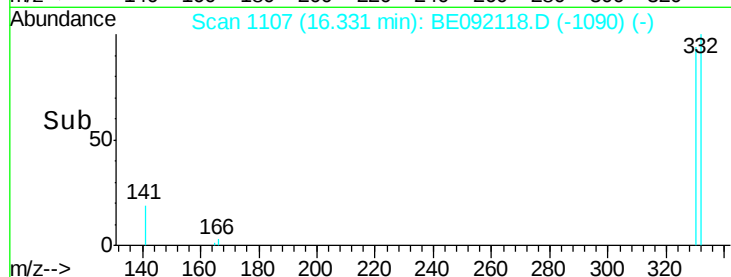
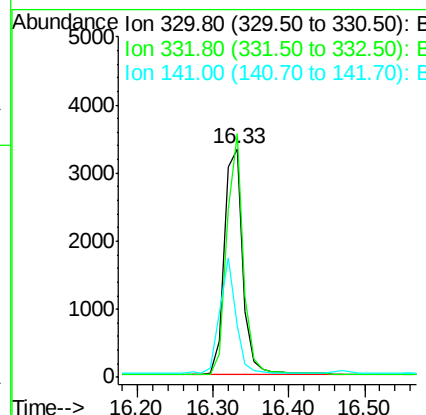
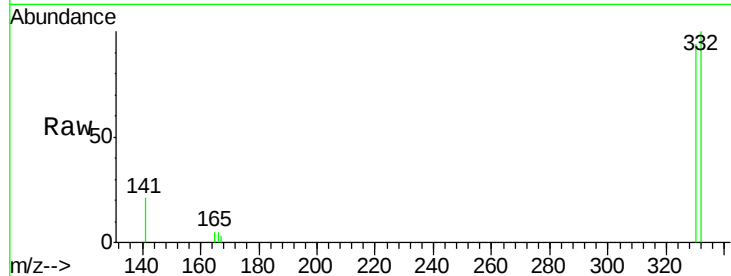




#11
 2,4,6-Tribromophenol
 Concen: 6.97 ng
 RT: 16.33 min Scan# 1107
 Delta R.T. 0.00 min
 Lab File: BE092118.D
 Acq: 2 Aug 2016 19:27

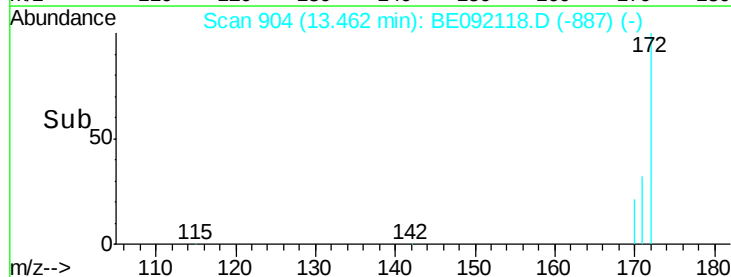
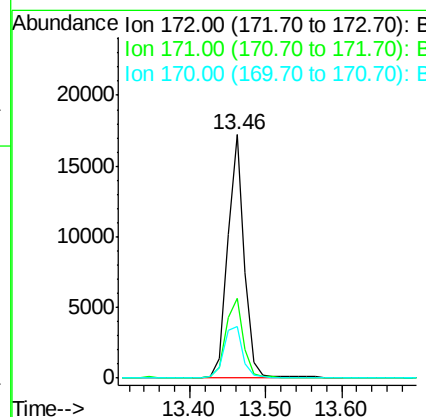
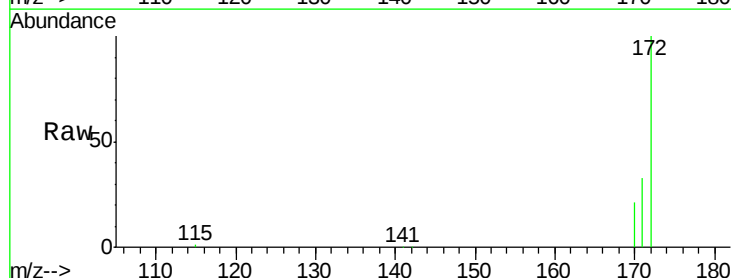
Instrument :
 BNA_E
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 PB92496BS

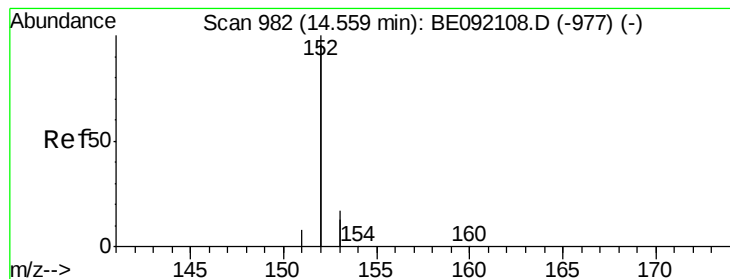
Tgt Ion:330 Resp: 5691
 Ion Ratio Lower Upper
 330 100
 332 96.6 74.2 111.4
 141 44.8 139.8 209.8#



#12
 2-Fluorobiphenyl
 Concen: 3.29 ng
 RT: 13.46 min Scan# 904
 Delta R.T. -0.00 min
 Lab File: BE092118.D
 Acq: 2 Aug 2016 19:27

Tgt Ion:172 Resp: 26213
 Ion Ratio Lower Upper
 172 100
 171 32.8 30.3 45.5
 170 21.1 21.6 32.4#





#13

Acenaphthylene

Concen: 3.11 ng

RT: 14.54 min Scan# 981

Delta R.T. -0.02 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

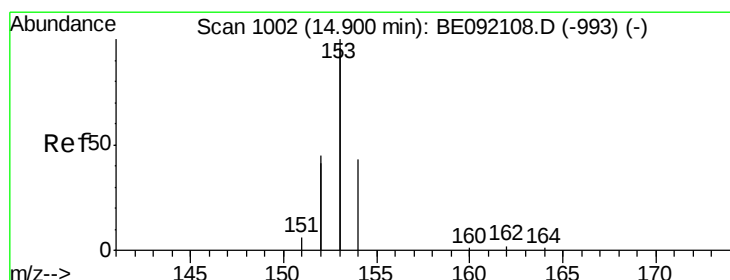
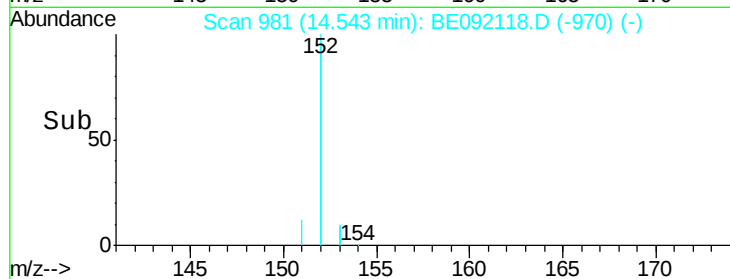
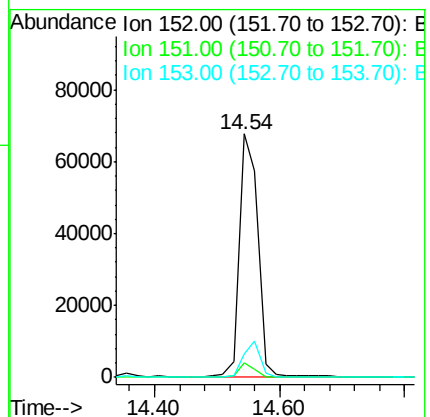
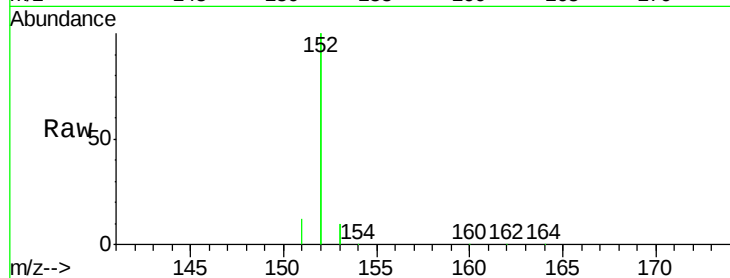
Tgt Ion:152 Resp: 137670

Ion Ratio Lower Upper

152 100

151 4.8 4.0 6.0

153 13.1 9.6 14.4



#14

Acenaphthene

Concen: 3.06 ng

RT: 14.90 min Scan# 1002

Delta R.T. 0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

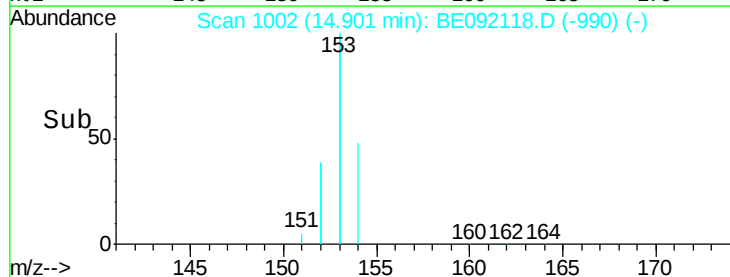
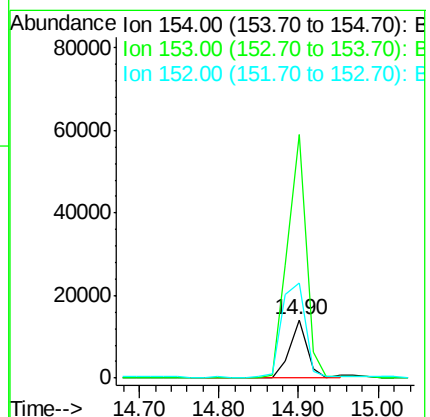
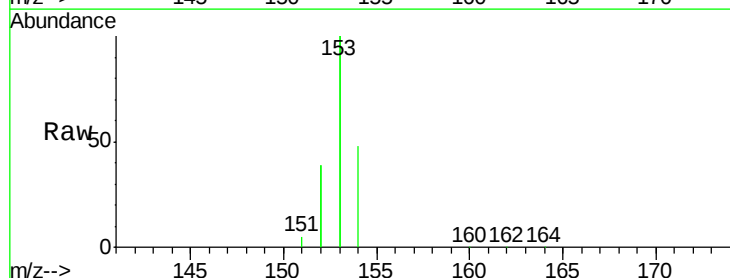
Tgt Ion:154 Resp: 21623

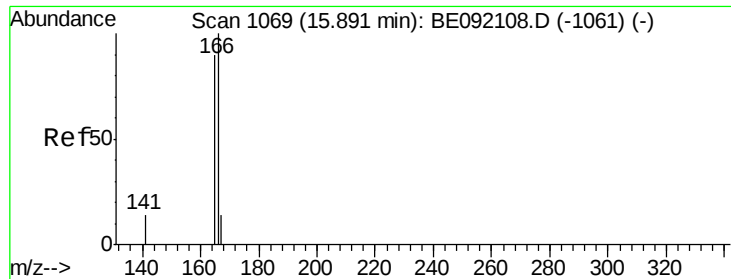
Ion Ratio Lower Upper

154 100

153 440.2 345.1 517.7

152 215.6 0.0 0.0#





#15

Fluorene

Concen: 2.95 ng

RT: 15.88 min Scan# 1068

Delta R.T. -0.01 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

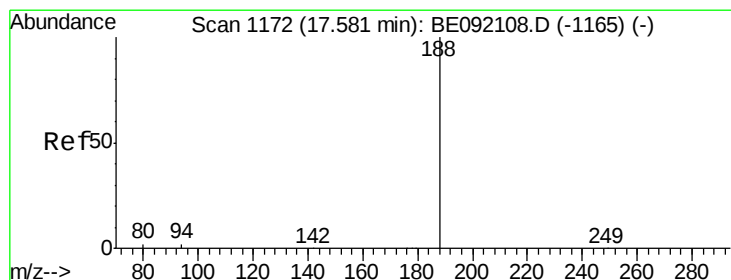
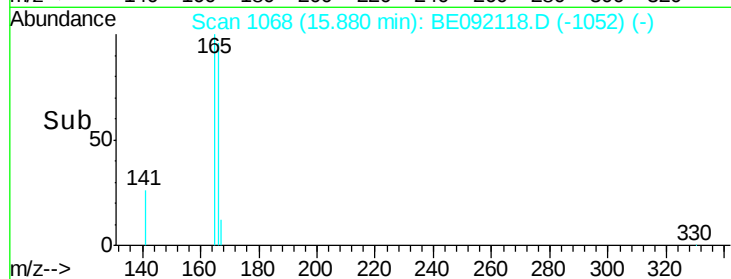
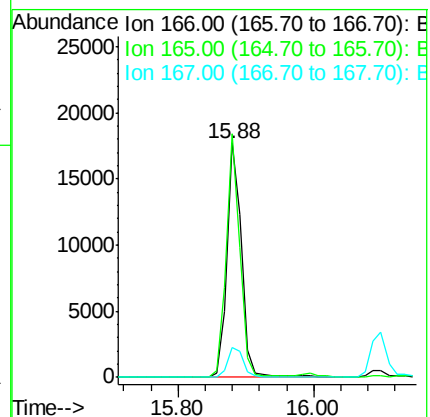
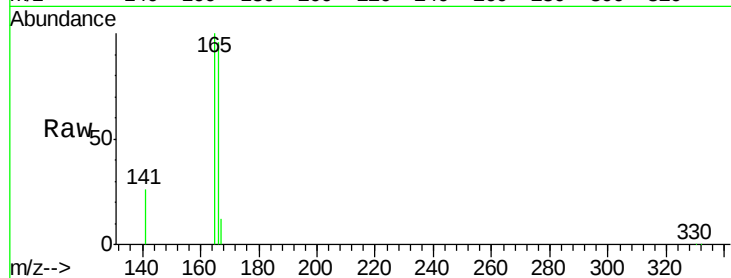
Tgt Ion:166 Resp: 26418

Ion Ratio Lower Upper

166 100

165 97.6 78.6 118.0

167 13.3 11.1 16.7



#16

Phenanthrene-d10

Concen: 5.00 ng

RT: 17.56 min Scan# 1171

Delta R.T. -0.02 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

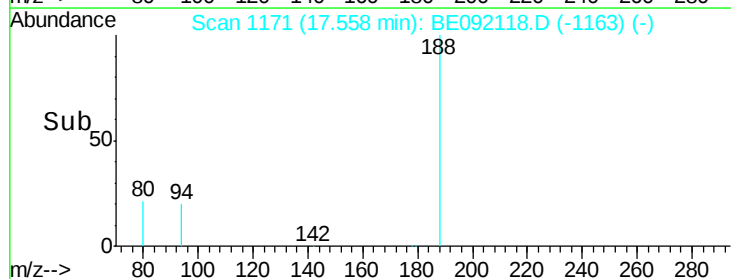
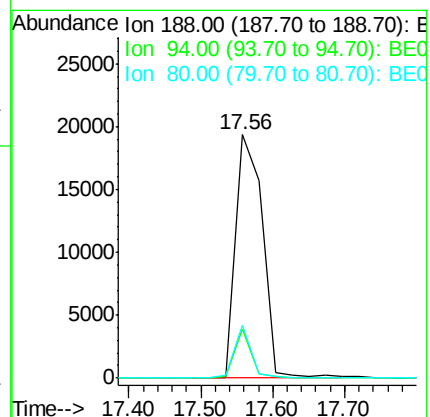
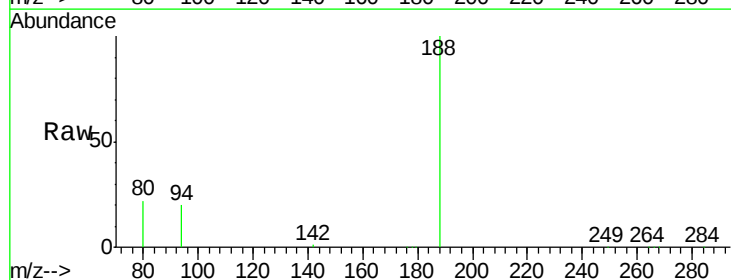
Tgt Ion:188 Resp: 49622

Ion Ratio Lower Upper

188 100

94 20.3 3.9 5.9#

80 21.6 3.4 5.0#

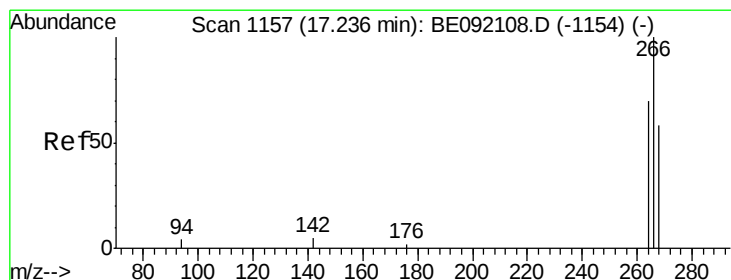
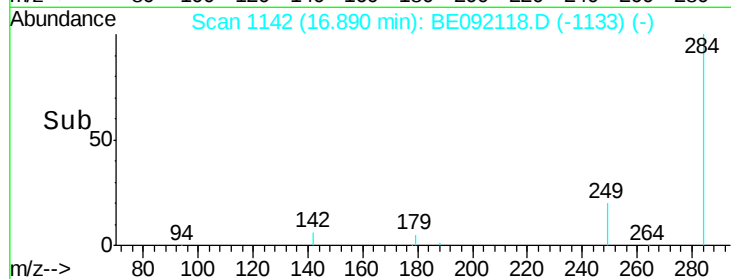
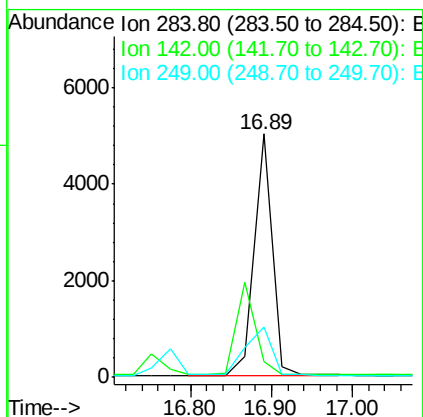
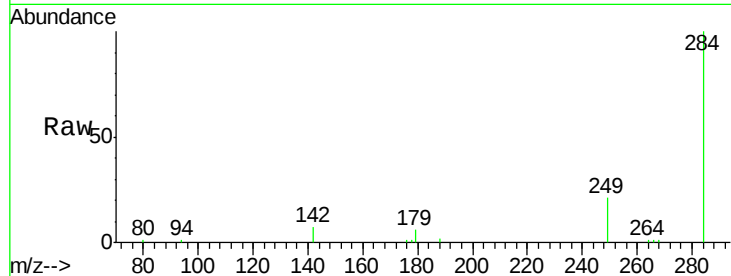




#17
Hexachlorobenzene
Concen: 3.18 ng
RT: 16.89 min Scan# 1142
Delta R.T. -0.00 min
Lab File: BE092118.D
Acq: 2 Aug 2016 19:27

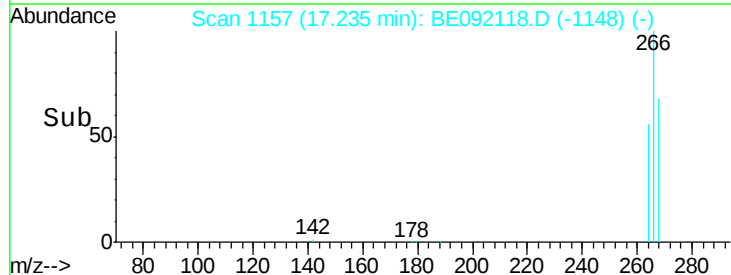
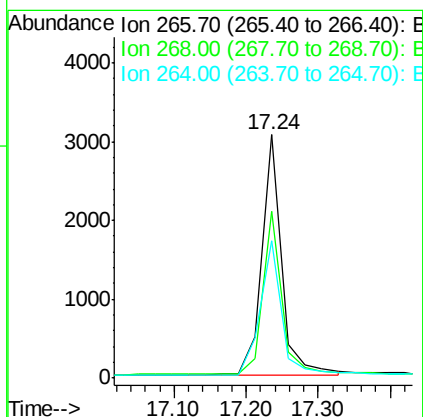
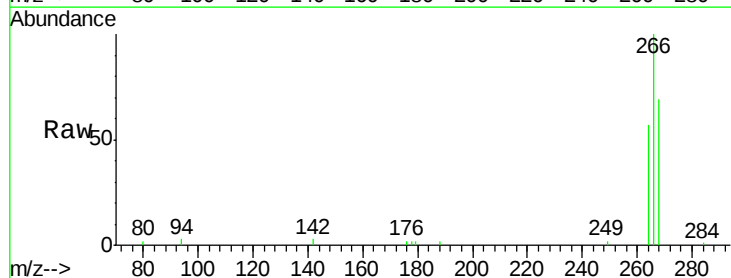
Instrument :
BNA_E
ClientSampleId :
PB92496BS

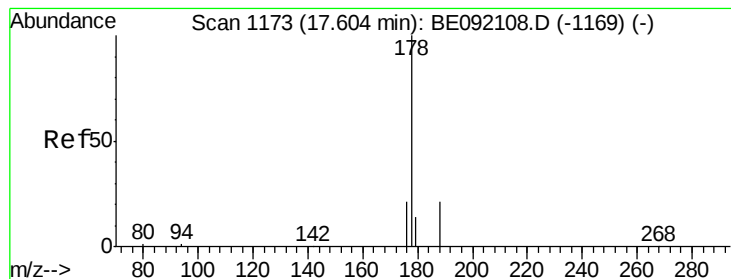
Tgt Ion:284 Resp: 7725
Ion Ratio Lower Upper
284 100
142 0.0 33.3 49.9#
249 28.3 25.4 38.0



#18
Pentachlorophenol
Concen: 6.33 ng
RT: 17.24 min Scan# 1157
Delta R.T. 0.00 min
Lab File: BE092118.D
Acq: 2 Aug 2016 19:27

Tgt Ion:266 Resp: 5747
Ion Ratio Lower Upper
266 100
268 68.6 62.7 94.1
264 56.7 63.5 95.3#





#19

Phenanthrene

Concen: 3.33 ng

RT: 17.60 min Scan# 1173

Delta R.T. -0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

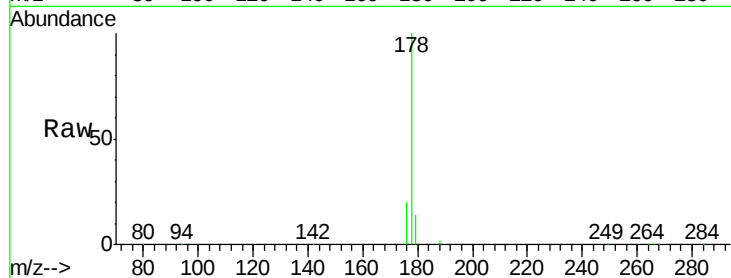
Tgt Ion:178 Resp: 45133

Ion Ratio Lower Upper

178 100

176 19.7 15.4 23.0

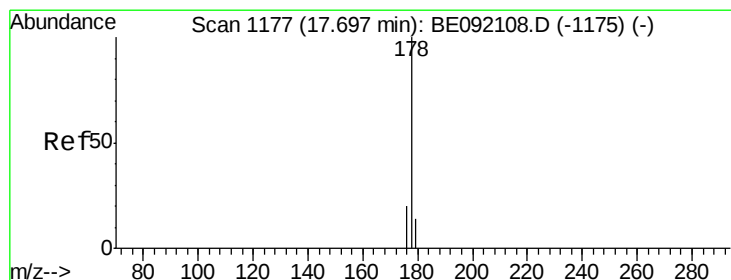
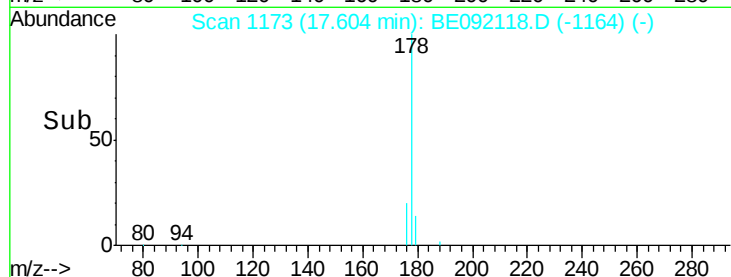
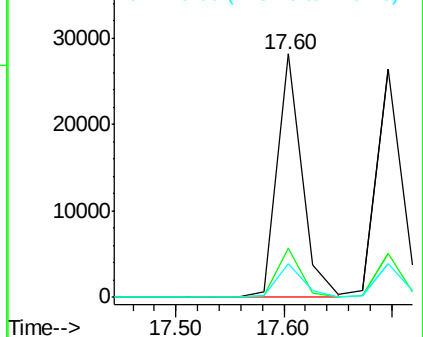
179 14.6 12.7 19.1



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



#20

Anthracene

Concen: 3.23 ng

RT: 17.70 min Scan# 1177

Delta R.T. -0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

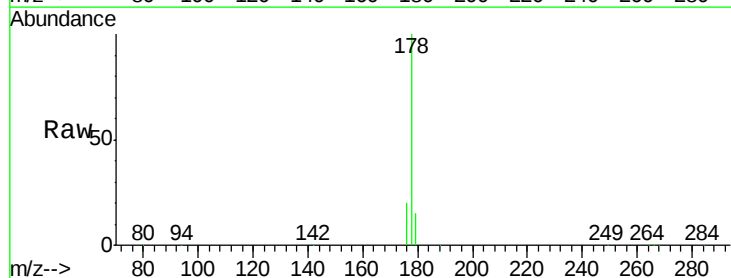
Tgt Ion:178 Resp: 42648

Ion Ratio Lower Upper

178 100

176 19.0 15.2 22.8

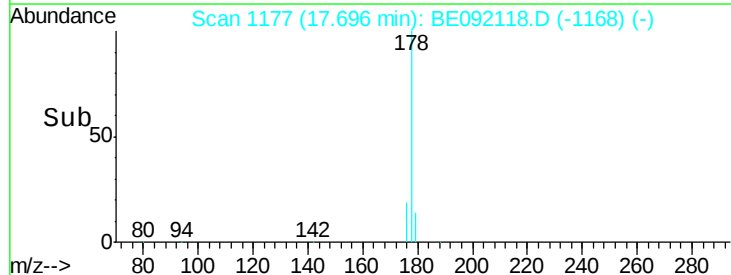
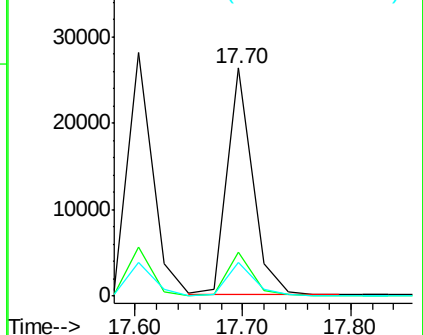
179 14.7 12.2 18.4



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





#21

Fluoranthene

Concen: 2.95 ng

RT: 19.63 min Scan# 1284

Delta R.T. 0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

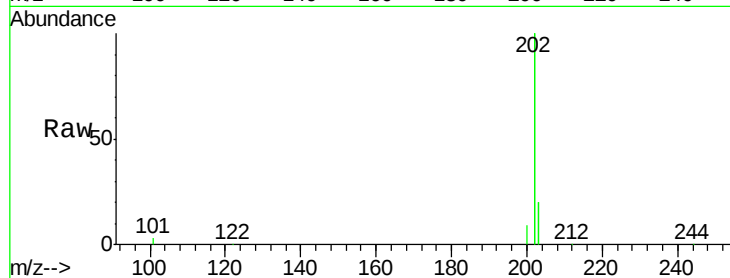
Tgt Ion:202 Resp: 179124

Ion Ratio Lower Upper

202 100

101 2.8 2.2 3.2

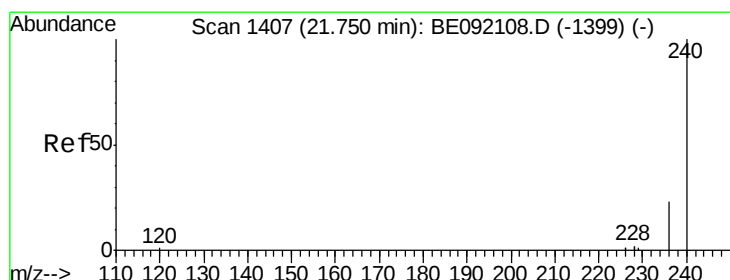
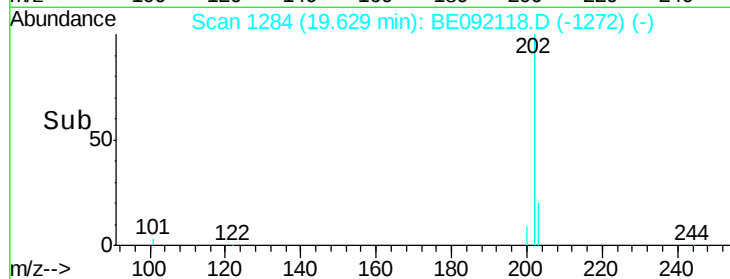
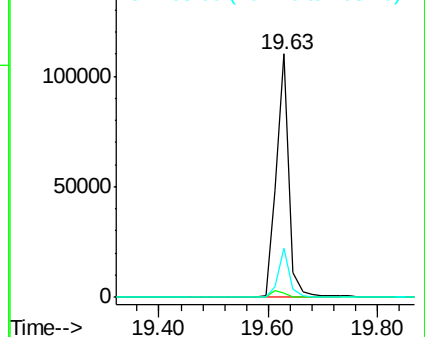
203 17.7 13.0 19.4



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



#22

Chrysene-d12

Concen: 5.00 ng

RT: 21.75 min Scan# 1407

Delta R.T. 0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

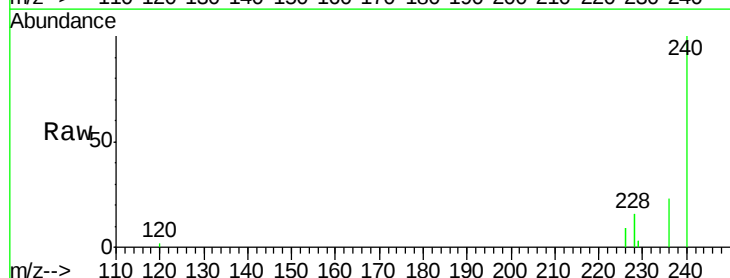
Tgt Ion:240 Resp: 54033

Ion Ratio Lower Upper

240 100

120 1.6 0.6 1.0#

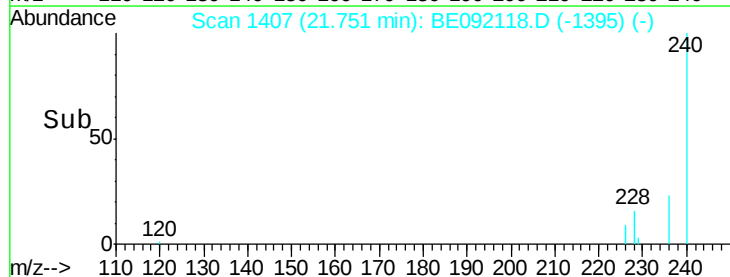
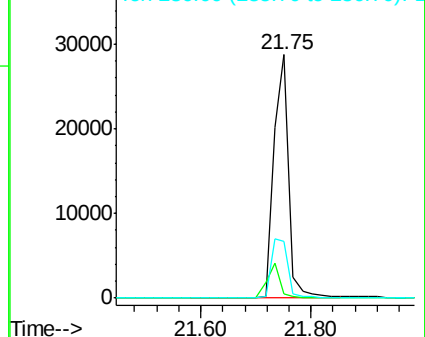
236 23.1 18.2 27.4

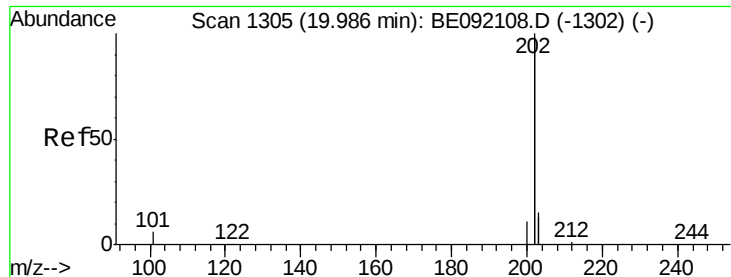


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E

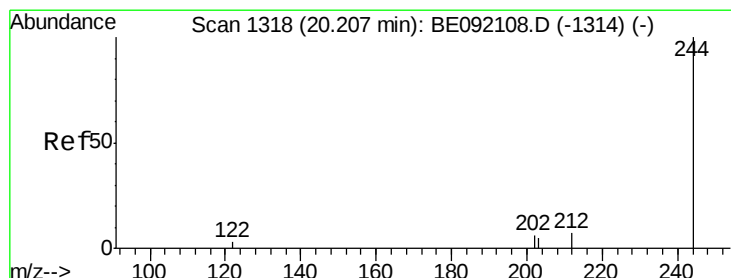
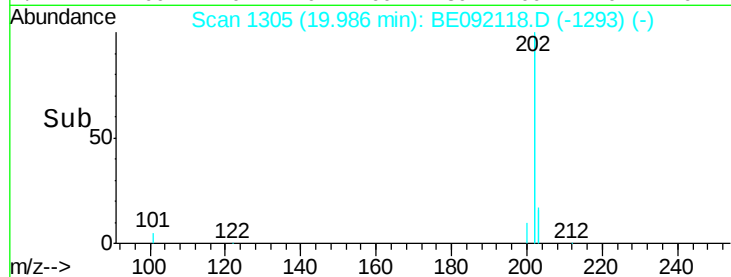
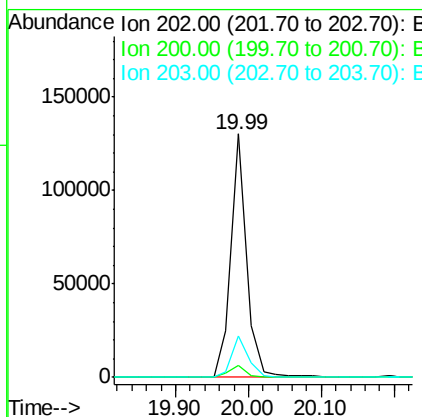
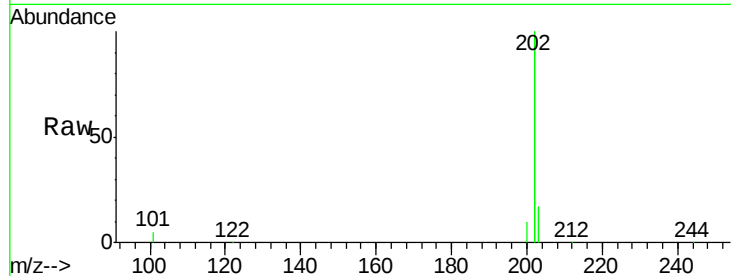




#23
 Pyrene
 Concen: 3.39 ng
 RT: 19.99 min Scan# 1305
 Delta R.T. 0.00 min
 Lab File: BE092118.D
 Acq: 2 Aug 2016 19:27

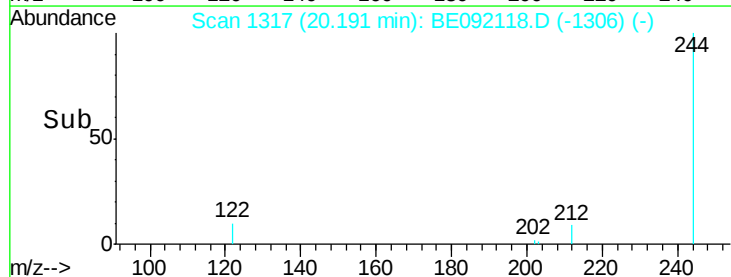
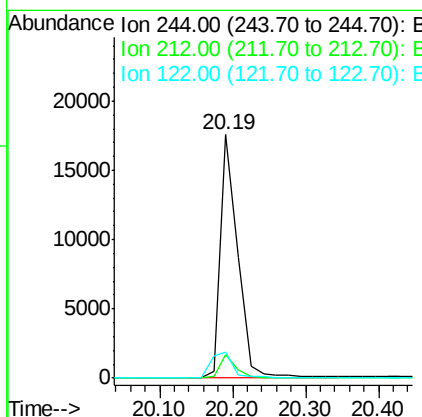
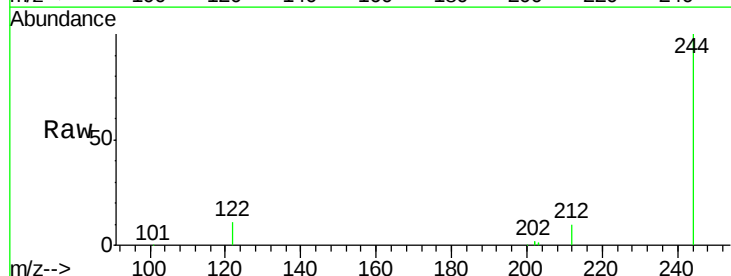
Instrument :
 BNA_E
 ClientSampleId :
 PB92496BS

Tgt Ion: 202 Resp: 191799
 Ion Ratio Lower Upper
 202 100
 200 5.3 4.4 6.6
 203 17.8 13.4 20.0



#24
 Terphenyl-d14
 Concen: 3.74 ng
 RT: 20.19 min Scan# 1317
 Delta R.T. -0.02 min
 Lab File: BE092118.D
 Acq: 2 Aug 2016 19:27

Tgt Ion: 244 Resp: 29044
 Ion Ratio Lower Upper
 244 100
 212 9.6 9.1 13.7
 122 10.7 11.0 16.4#





#25

Benzo(a)anthracene

Concen: 3.09 ng

RT: 21.72 min Scan# 1405

Delta R.T. 0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

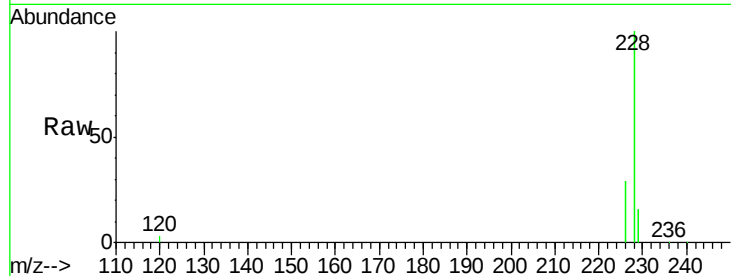
Tgt Ion:228 Resp: 183791

Ion Ratio Lower Upper

228 100

226 29.0 22.1 33.1

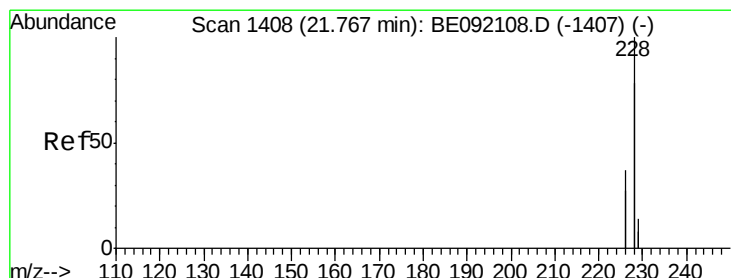
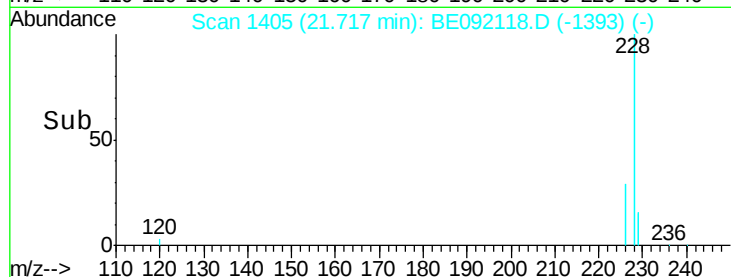
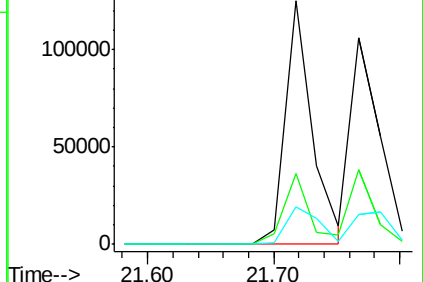
229 15.7 15.1 22.7



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



#26

Chrysene

Concen: 2.91 ng

RT: 21.77 min Scan# 1408

Delta R.T. 0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

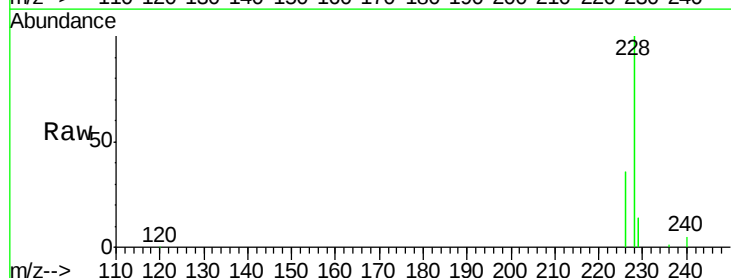
Tgt Ion:228 Resp: 173207

Ion Ratio Lower Upper

228 100

226 35.9 22.3 33.5#

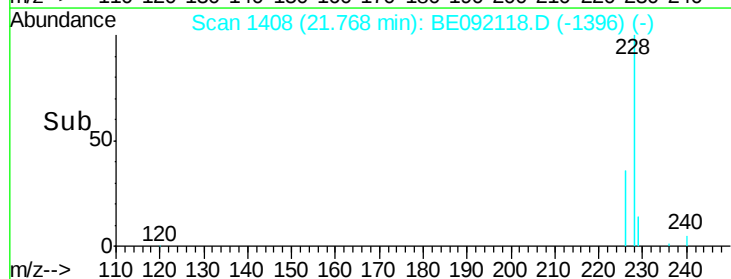
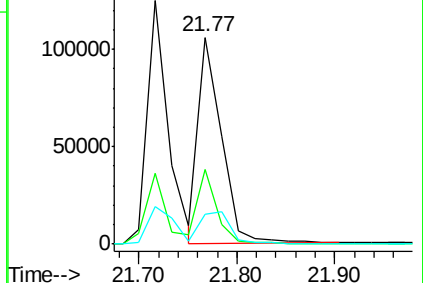
229 14.4 16.9 25.3#



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

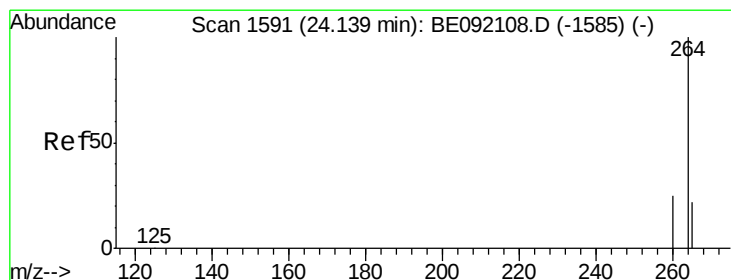
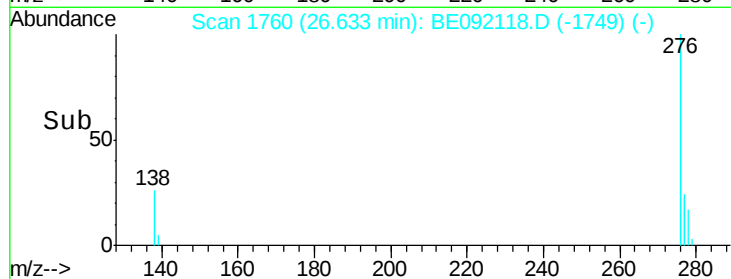
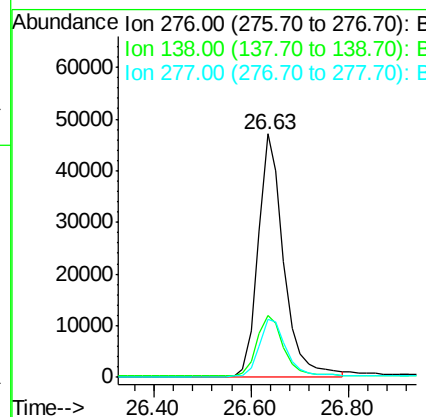
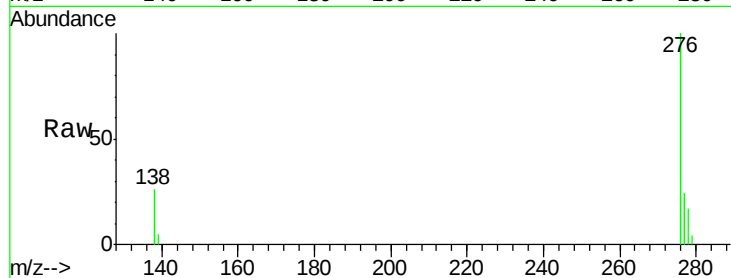




#27
 Indeno(1,2,3-cd)pyrene
 Concen: 2.66 ng
 RT: 26.63 min Scan# 1760
 Delta R.T. -0.02 min
 Lab File: BE092118.D
 Acq: 2 Aug 2016 19:27

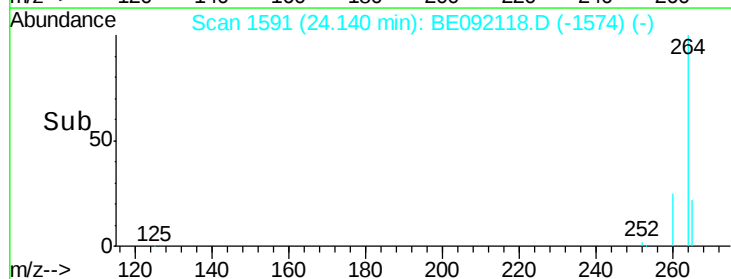
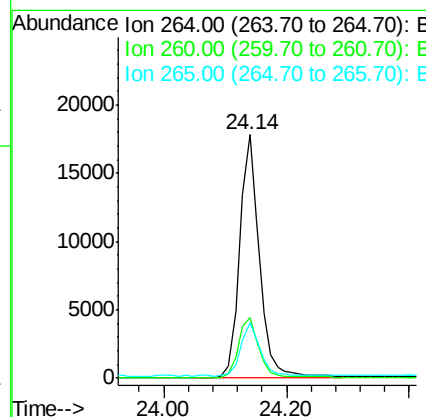
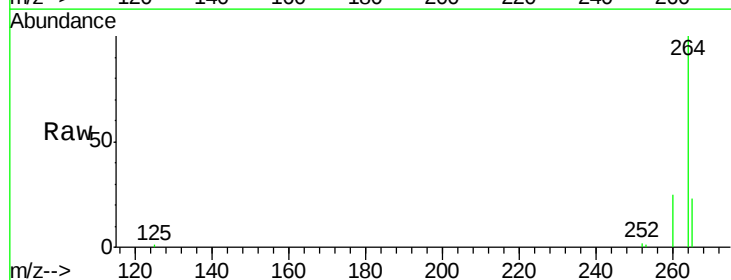
Instrument :
 BNA_E
 ClientSampleId :
 PB92496BS

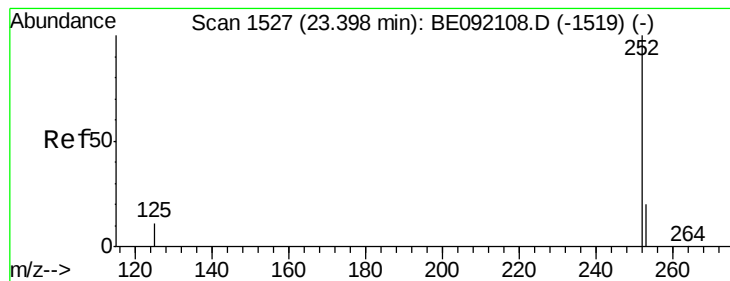
Tgt Ion: 276 Resp: 172057
 Ion Ratio Lower Upper
 276 100
 138 27.0 21.2 31.8
 277 24.9 19.8 29.8



#28
 Perylene-d12
 Concen: 5.00 ng
 RT: 24.14 min Scan# 1591
 Delta R.T. 0.00 min
 Lab File: BE092118.D
 Acq: 2 Aug 2016 19:27

Tgt Ion: 264 Resp: 39856
 Ion Ratio Lower Upper
 264 100
 260 24.9 20.8 31.2
 265 22.6 16.6 25.0





#29

Benzo(b)fluoranthene

Concen: 3.96 ng

RT: 23.40 min Scan# 1527

Delta R.T. 0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

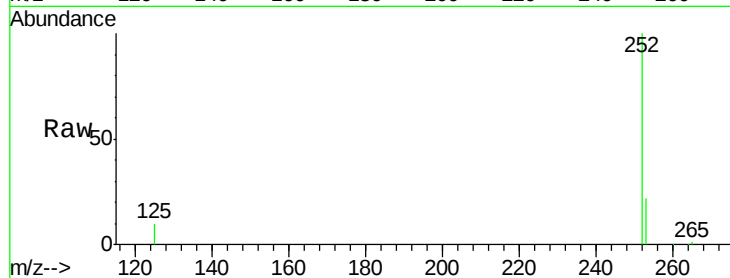
Tgt Ion:252 Resp: 43157

Ion Ratio Lower Upper

252 100

253 22.5 17.4 26.0

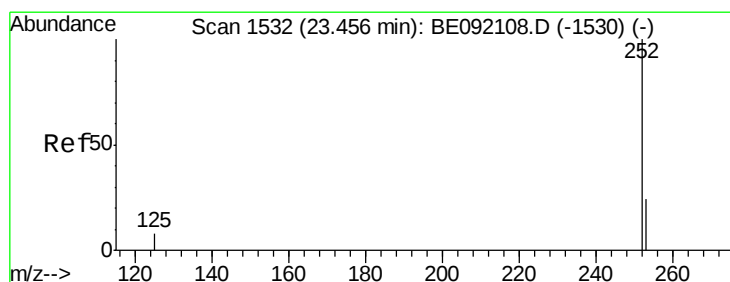
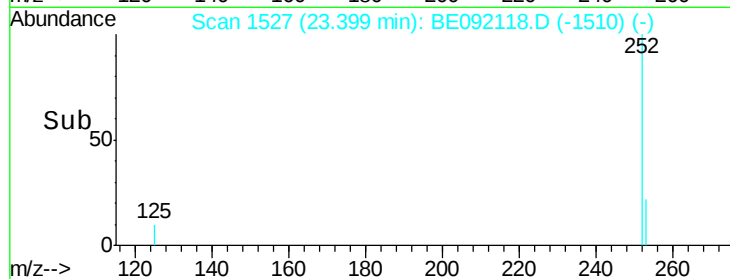
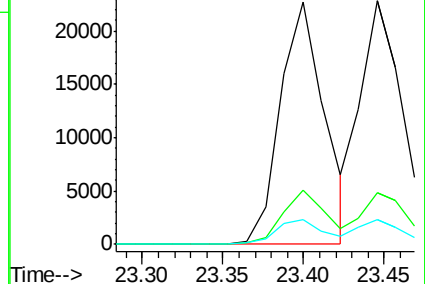
125 10.2 10.2 15.2



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



#30

Benzo(k)fluoranthene

Concen: 4.17 ng

RT: 23.45 min Scan# 1531

Delta R.T. -0.01 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

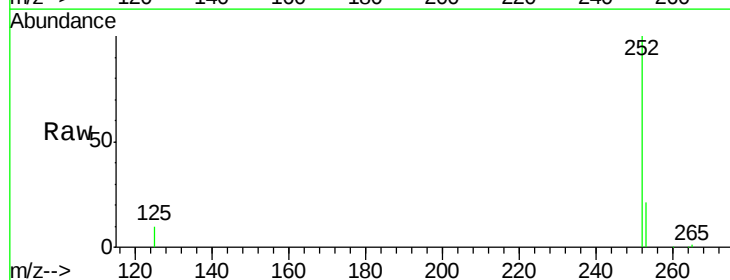
Tgt Ion:252 Resp: 43528

Ion Ratio Lower Upper

252 100

253 21.5 19.4 29.0

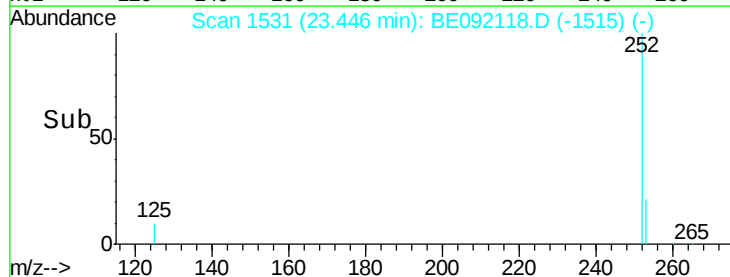
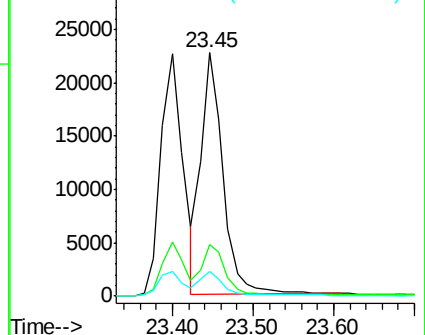
125 10.4 8.9 13.3

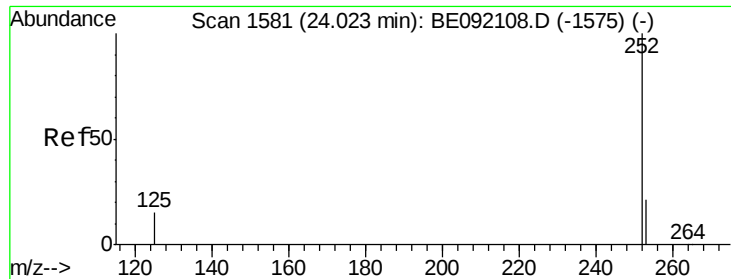


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#31

Benzo(a)pyrene

Concen: 3.75 ng

RT: 24.02 min Scan# 1581

Delta R.T. 0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS

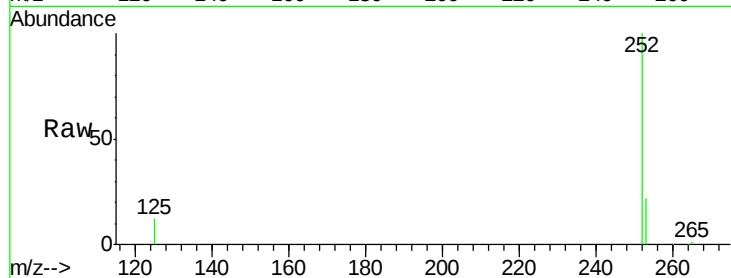
Tgt Ion:252 Resp: 37597

Ion Ratio Lower Upper

252 100

253 21.8 19.8 29.8

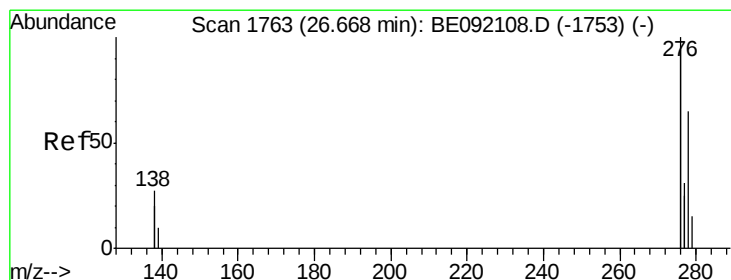
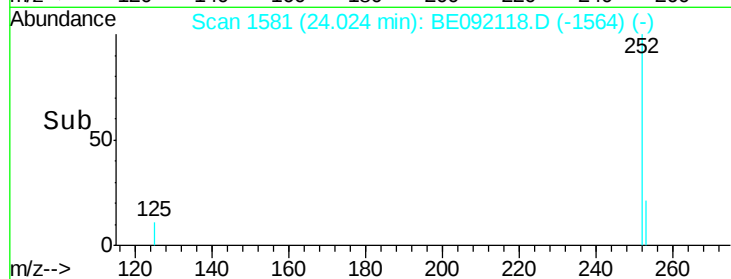
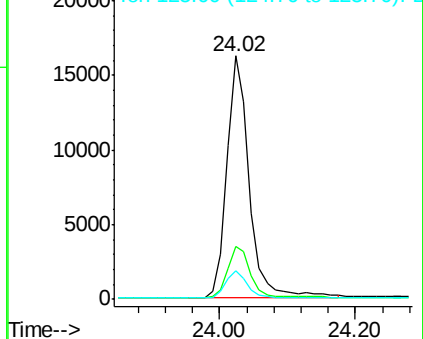
125 11.6 10.4 15.6



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



#32

Dibenzo(a,h)anthracene

Concen: 3.86 ng

RT: 26.67 min Scan# 1762

Delta R.T. -0.00 min

Lab File: BE092118.D

Acq: 2 Aug 2016 19:27

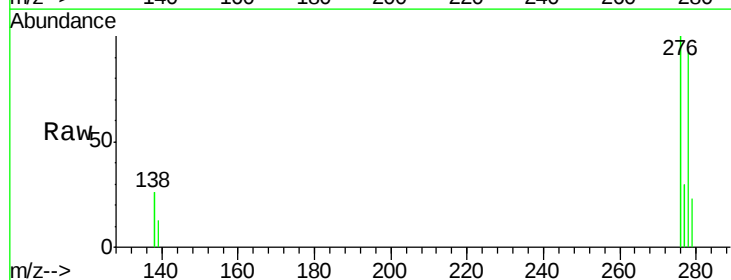
Tgt Ion:278 Resp: 36900

Ion Ratio Lower Upper

278 100

139 14.2 16.7 25.1#

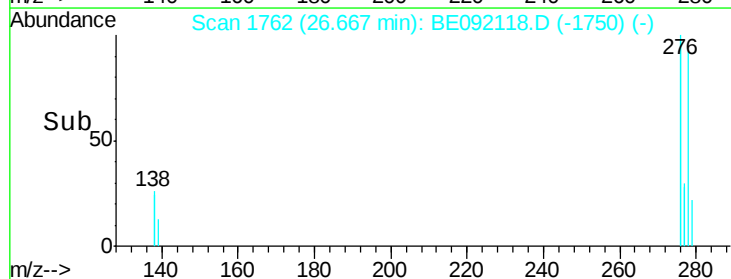
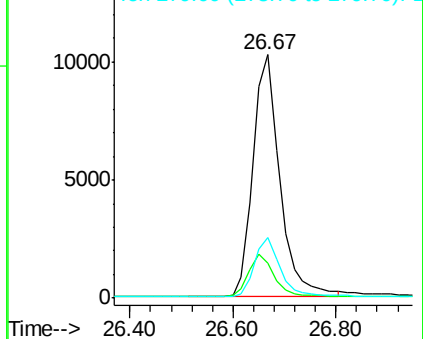
279 24.7 20.3 30.5

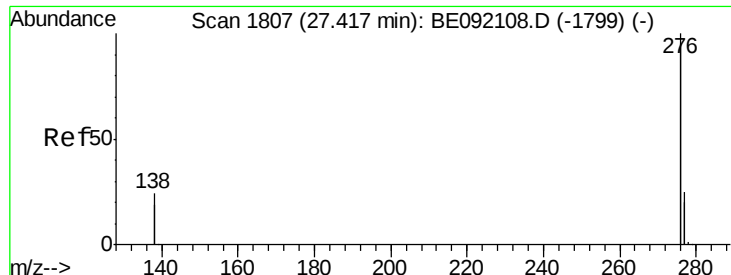


Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E





#33

Benzo(g,h,i)perylene

Concen: 3.55 ng

RT: 27.42 min Scan# 1806

Delta R.T. -0.00 min

Lab File: BE092118.D

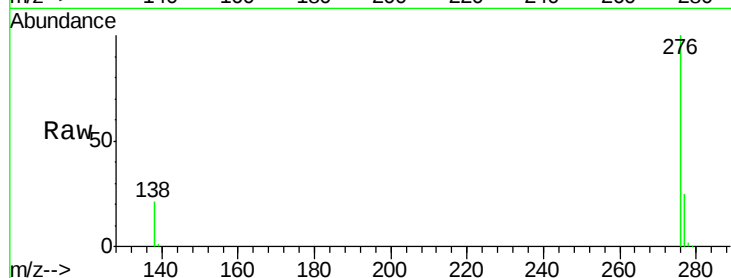
Acq: 2 Aug 2016 19:27

Instrument :

BNA_E

ClientSampleId :

PB92496BS



Tgt Ion: 276 Resp: 144893

Ion Ratio Lower Upper

276 100

277 24.8 19.5 29.3

138 20.9 20.8 31.2

