

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF112315\
 Data File : BF083229.D
 Acq On : 24 Nov 2015 3:29
 Operator : UM/IZ
 Sample : G4480-01RE
 Misc :
 ALS Vial : 30 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 LIBERTY SF_002

Quant Time: Nov 24 04:42:20 2015
 Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF112115.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Sun Nov 22 09:22:46 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.64	152	230800	20.00	ng	-0.02
21) Naphthalene-d8	7.93	136	879301	20.00	ng	-0.02
38) Acenaphthene-d10	9.68	164	391182	20.00	ng	-0.02
63) Phenanthrene-d10	11.15	188	579645	20.00	ng	-0.02
75) Chrysene-d12	13.78	240	489486	20.00	ng	-0.02
86) Perylene-d12	15.14	264	355571	20.00	ng	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	5.26	112	1444646	94.63	ng	-0.02
7) Phenol-d6	6.32	99	2088120	105.72	ng	-0.02
23) Nitrobenzene-d5	7.21	82	1091085	56.70	ng	-0.02
41) 2,4,6-Tribromophenol	10.47	330	274749	68.65	ng	-0.02
44) 2-Fluorobiphenyl	9.02	172	1978184	70.52	ng	-0.01
78) Terphenyl-d14	12.74	244	1384622	66.61	ng	-0.02

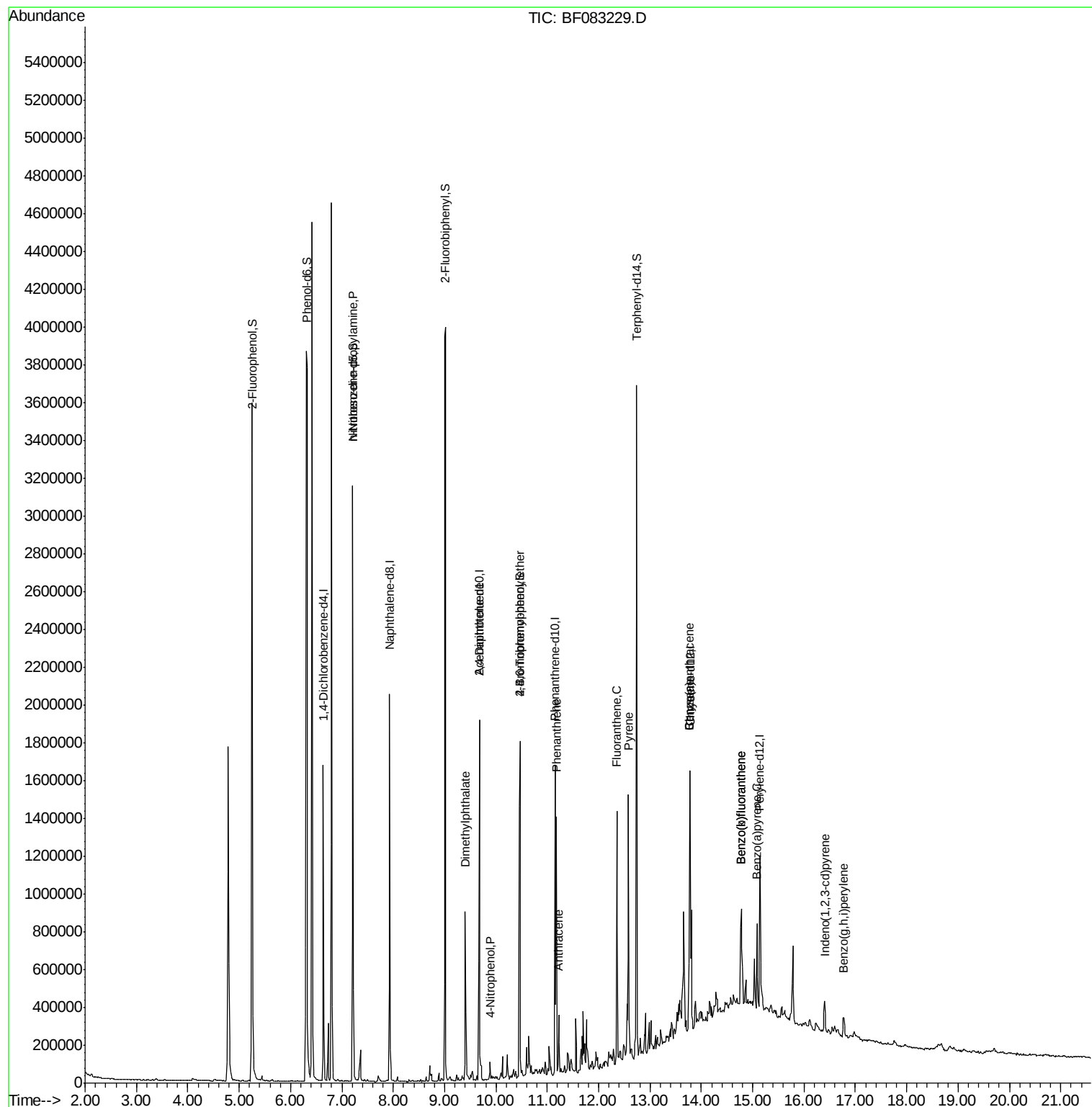
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
9) Benzaldehyde	6.20	77	1948	Below Cal		86
19) n-Nitroso-di-n-propylamine	7.21	70	149956	10.91 ng	#	77
49) Dimethylphthalate	9.40	163	310773	10.32 ng		100
55) 4-Nitrophenol	9.88	139	13172	2.38 ng	#	1
56) 2,4-Dinitrotoluene	9.68	165	52512	6.13 ng	#	10
66) 4-Bromophenyl-phenylether	10.47	248	17249	2.68 ng	#	1
70) Phenanthrene	11.18	178	488123	14.62 ng		97
71) Anthracene	11.22	178	140330	4.12 ng		98
74) Fluoranthene	12.35	202	640370	18.74 ng		96
77) Pyrene	12.58	202	560072	16.75 ng		98
80) Benzo(a)anthracene	13.77	228	390957	12.91 ng		99
82) Chrysene	13.77	228	390957	13.93 ng		95
85) Indeno(1,2,3-cd)pyrene	16.40	276	106754	4.18 ng		98
87) Benzo(b)fluoranthene	14.78	252	384728	15.84 ng	#	93
88) Benzo(k)fluoranthene	14.78	252	384728	21.25 ng	#	95
89) Benzo(a)pyrene	15.09	252	194080	9.68 ng	#	95
91) Benzo(g,h,i)perylene	16.77	276	93802	5.27 ng	#	93

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

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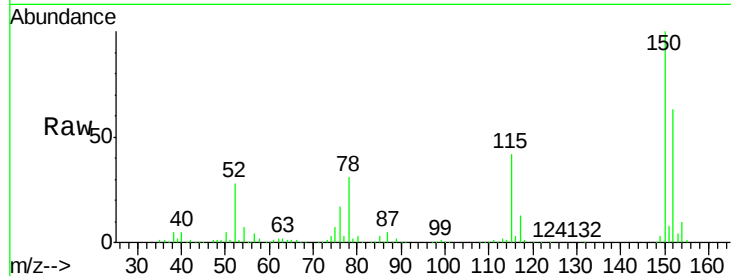




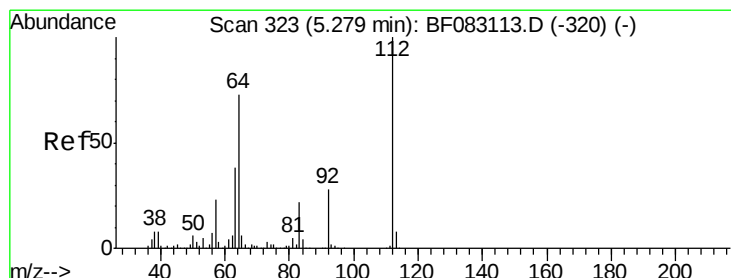
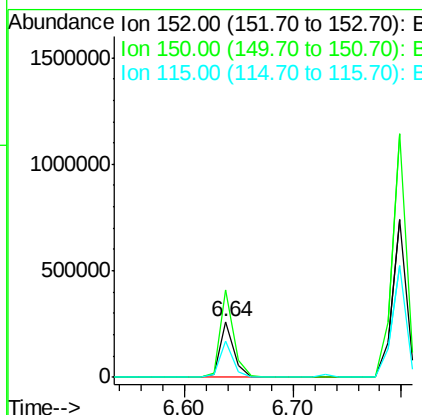
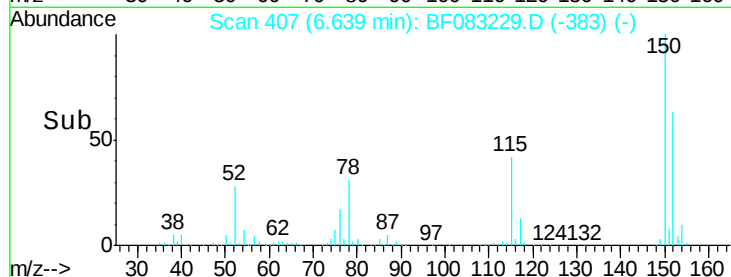
#1
 1,4-Dichlorobenzene-d4
 Concen: 20.00 ng
 RT: 6.64 min Scan# 407
 Delta R.T. -0.02 min
 Lab File: BF083229.D
 Acq: 24 Nov 2015 3:29

Instrument :
 BNA_F
 ClientSampleId :
 LIBERTY_SF_002

Tgt Ion:152 Resp: 230800
 Ion Ratio Lower Upper
 152 100
 150 157.6 125.8 188.8
 115 66.2 46.9 70.3

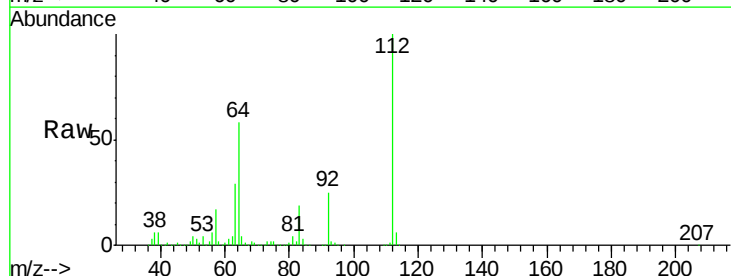


Abundance Ion 152.00 (151.70 to 152.70): E
 Ion 150.00 (149.70 to 150.70): E
 Ion 115.00 (114.70 to 115.70): E

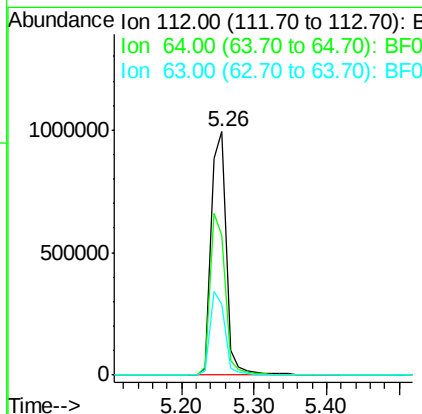
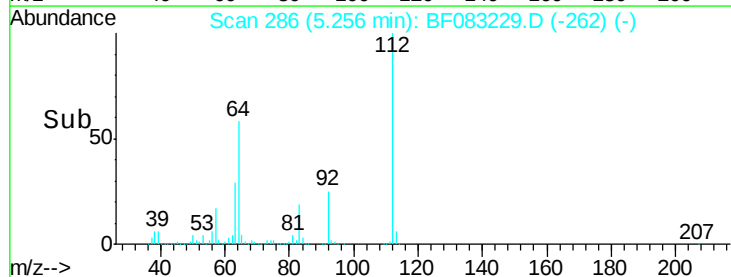


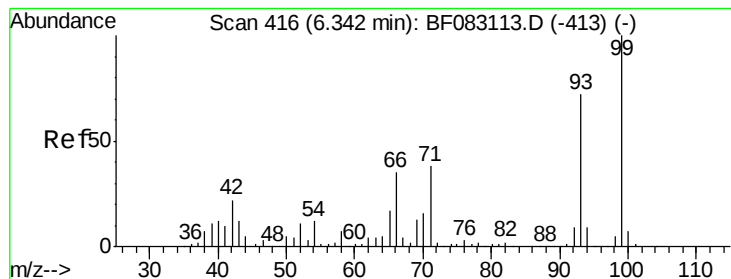
#5
 2-Fluorophenol
 Concen: 94.63 ng
 RT: 5.26 min Scan# 286
 Delta R.T. -0.02 min
 Lab File: BF083229.D
 Acq: 24 Nov 2015 3:29

Tgt Ion:112 Resp: 1444646
 Ion Ratio Lower Upper
 112 100
 64 57.5 58.4 87.6#
 63 29.1 30.0 45.0#



Abundance Ion 112.00 (111.70 to 112.70): E
 Ion 64.00 (63.70 to 64.70): BF0
 Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 105.72 ng

RT: 6.32 min Scan# 379

Delta R.T. -0.02 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

Instrument :

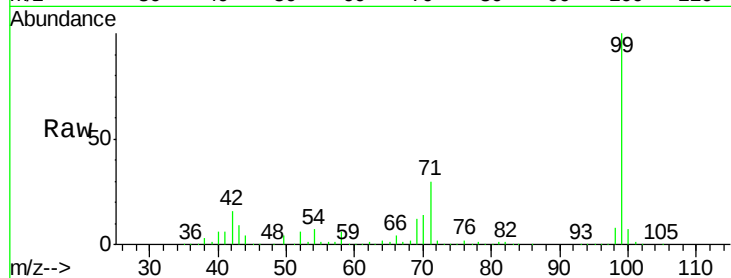
BNA_F

ClientSampleId :

LIBERTY SF_002

Tgt Ion: 99 Resp: 2088120

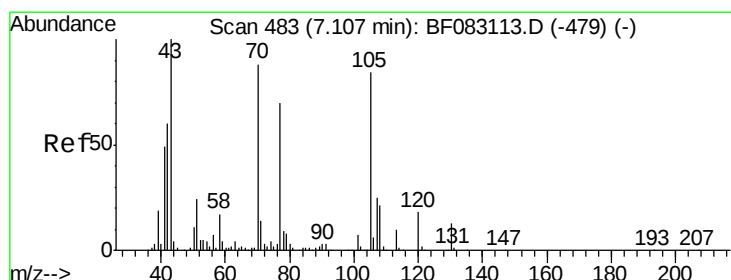
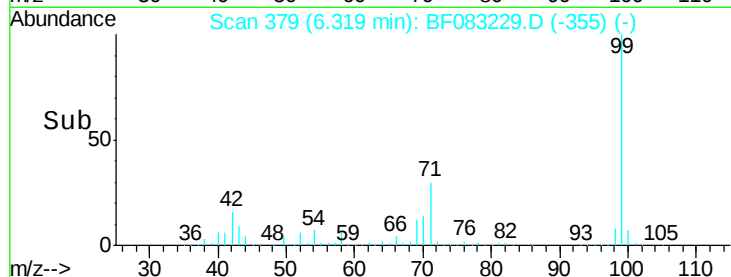
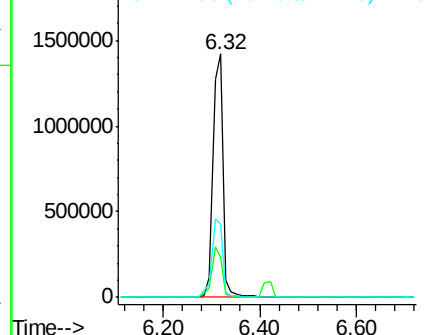
Ion	Ratio	Lower	Upper
99	100		
42	16.5	17.7	26.5#
71	30.3	30.2	45.4



Abundance Ion 99.00 (98.70 to 99.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 71.00 (70.70 to 71.70): BF0



#19

n-Nitroso-di-n-propylamine

Concen: 10.91 ng

RT: 7.21 min Scan# 457

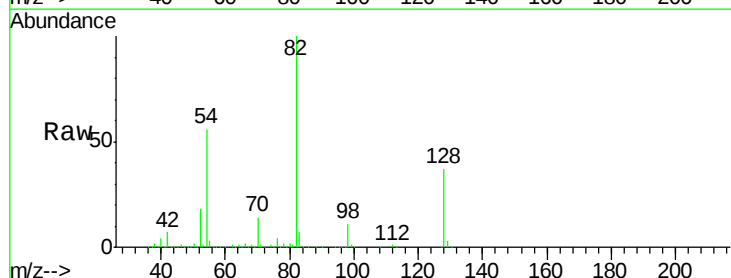
Delta R.T. 0.10 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

Tgt Ion: 70 Resp: 149956

Ion	Ratio	Lower	Upper
70	100		
42	50.4	54.5	81.7#
101	0.0	6.6	9.8#
130	2.0	11.5	17.3#

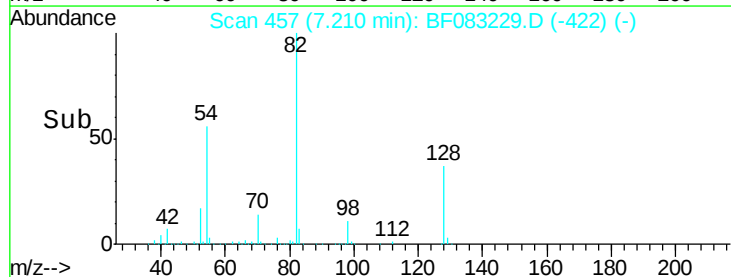
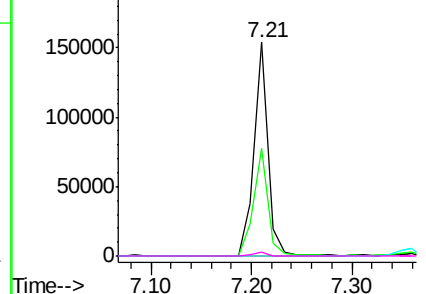


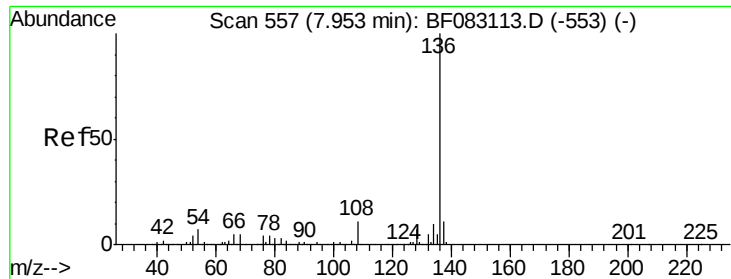
Abundance Ion 70.00 (69.70 to 70.70): BF0

Ion 42.00 (41.70 to 42.70): BF0

Ion 101.00 (100.70 to 101.70): E

Ion 130.00 (129.70 to 130.70): E

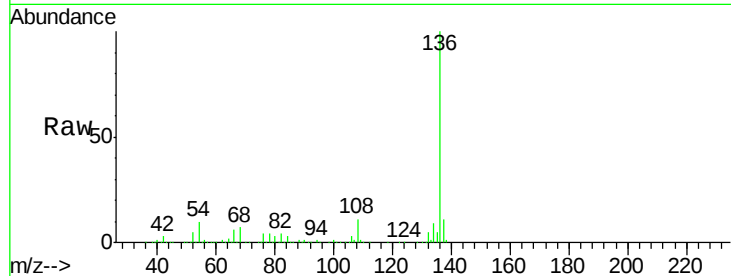




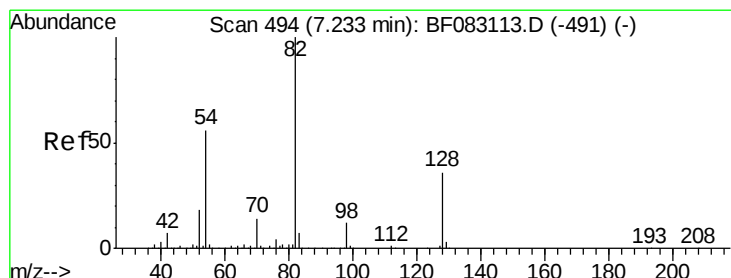
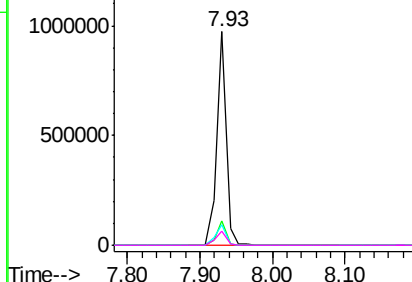
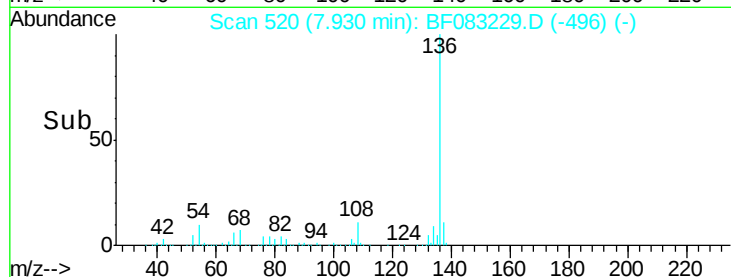
#21
Naphthalene-d8
Concen: 20.00 ng
RT: 7.93 min Scan# 520
Delta R.T. -0.02 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

Instrument :
BNA_F
ClientSampleId :
LIBERTY SF_002

Tgt Ion:	136	Resp:	879301
Ion	Ratio	Lower	Upper
136	100		
137	11.3	8.7	13.1
54	9.7	5.8	8.6#
68	6.9	3.8	5.8#

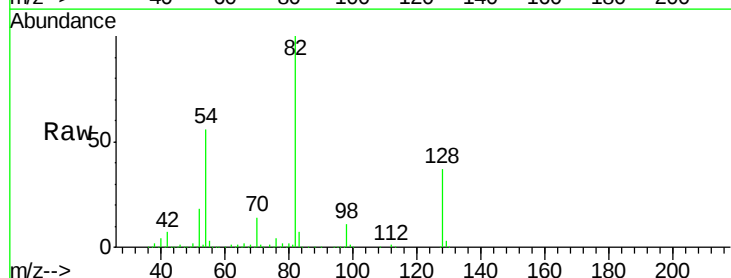


Abundance Ion 136.00 (135.70 to 136.70): E
Ion 137.00 (136.70 to 137.70): E
Ion 54.00 (53.70 to 54.70): BF0
Ion 68.00 (67.70 to 68.70): BF0

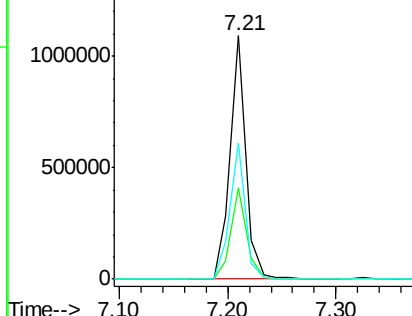
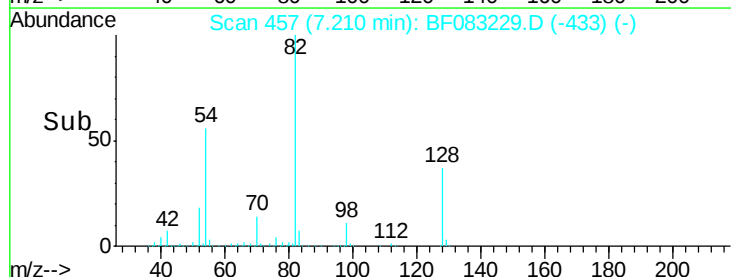


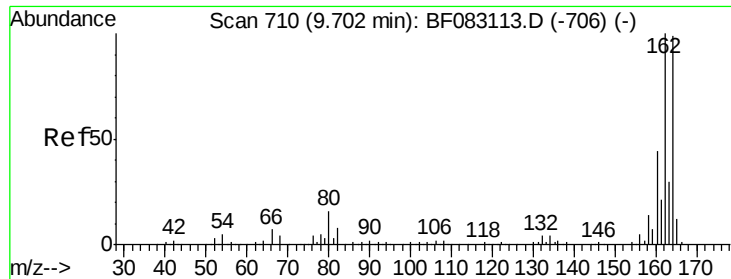
#23
Nitrobenzene-d5
Concen: 56.70 ng
RT: 7.21 min Scan# 457
Delta R.T. -0.02 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

Tgt Ion:	82	Resp:	1091085
Ion	Ratio	Lower	Upper
82	100		
128	37.4	28.5	42.7
54	55.9	44.6	67.0



Abundance Ion 82.00 (81.70 to 82.70): BF0
Ion 128.00 (127.70 to 128.70): E
Ion 54.00 (53.70 to 54.70): BF0

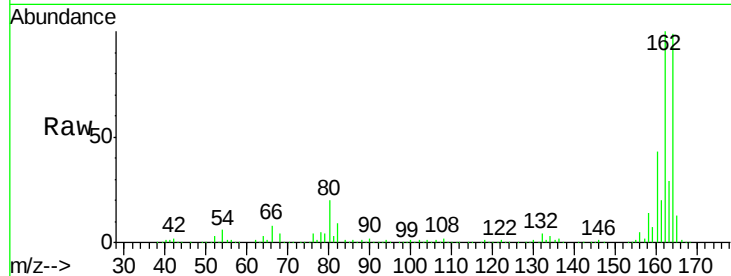




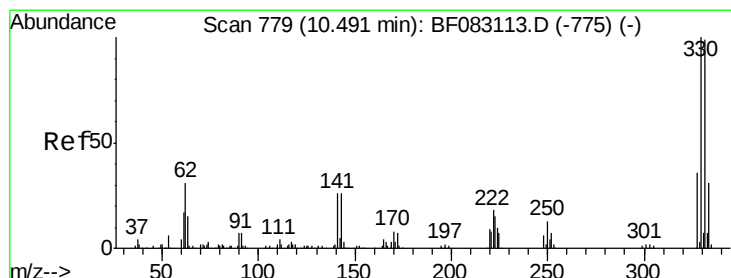
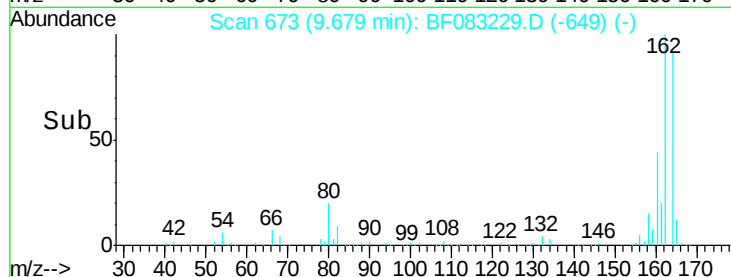
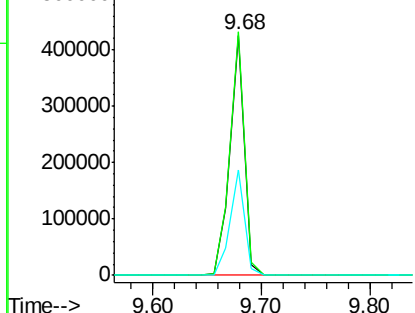
#38
 Acenaphthene-d10
 Concen: 20.00 ng
 RT: 9.68 min Scan# 673
 Delta R.T. -0.02 min
 Lab File: BF083229.D
 Acq: 24 Nov 2015 3:29

Instrument :
 BNA_F
 ClientSampleId :
 LIBERTY SF_002

Tgt Ion:164 Resp: 391182
 Ion Ratio Lower Upper
 164 100
 162 101.3 81.2 121.8
 160 43.9 35.6 53.4

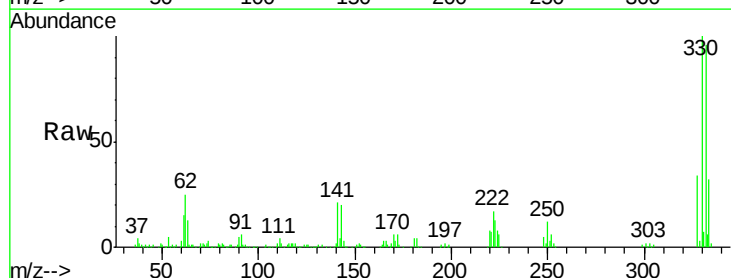


Abundance Ion 164.00 (163.70 to 164.70): E
 Ion 162.00 (161.70 to 162.70): E
 Ion 160.00 (159.70 to 160.70): E

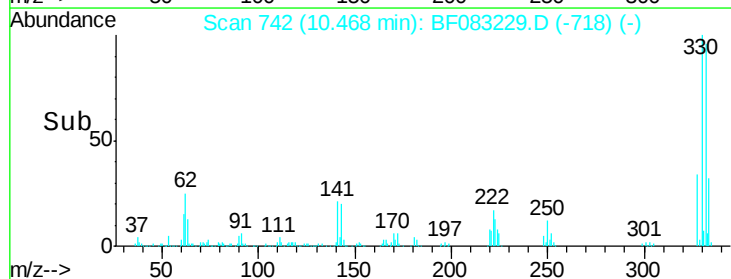
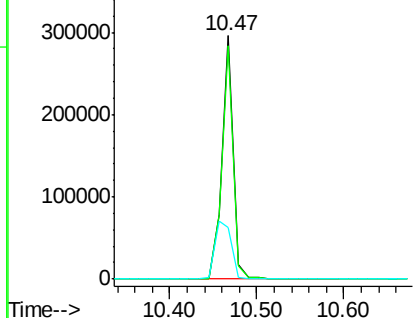


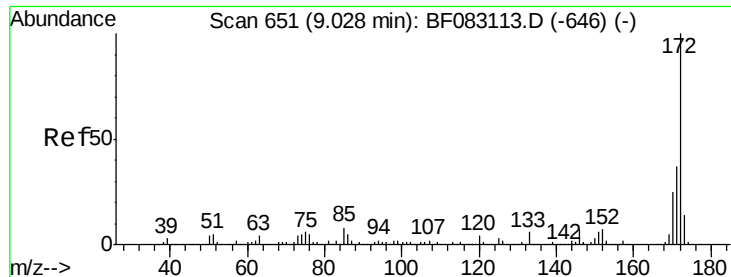
#41
 2,4,6-Tribromophenol
 Concen: 68.65 ng
 RT: 10.47 min Scan# 742
 Delta R.T. -0.02 min
 Lab File: BF083229.D
 Acq: 24 Nov 2015 3:29

Tgt Ion:330 Resp: 274749
 Ion Ratio Lower Upper
 330 100
 332 96.3 77.7 116.5
 141 34.9 29.7 44.5



Abundance Ion 329.80 (329.50 to 330.50): E
 Ion 331.80 (331.50 to 332.50): E
 Ion 141.00 (140.70 to 141.70): E

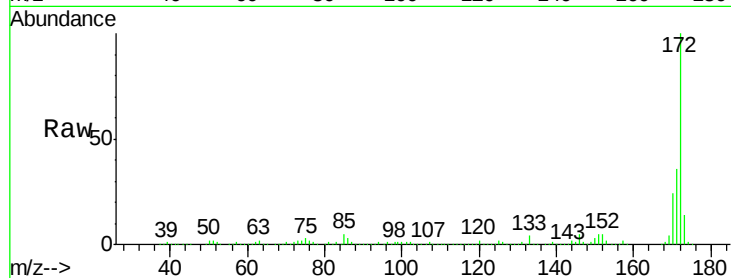




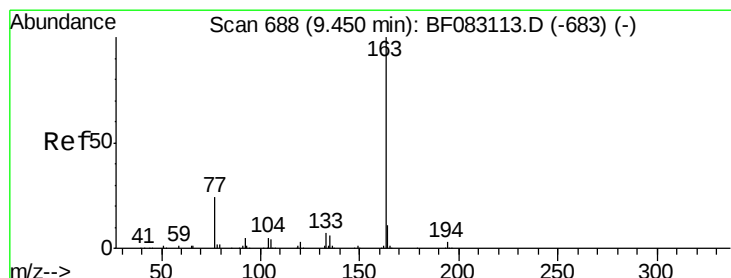
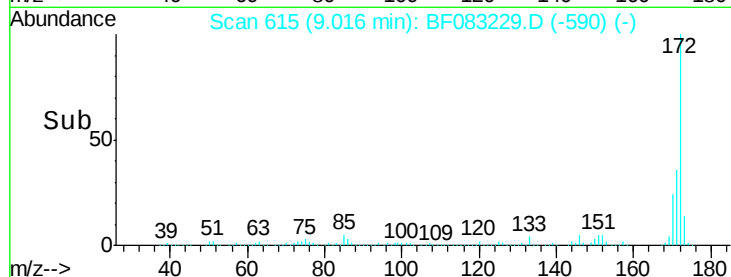
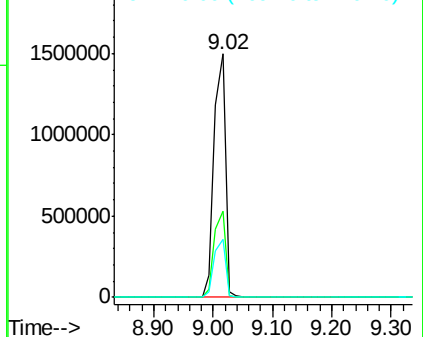
#44
 2-Fluorobiphenyl
 Concen: 70.52 ng
 RT: 9.02 min Scan# 615
 Delta R.T. -0.01 min
 Lab File: BF083229.D
 Acq: 24 Nov 2015 3:29

Instrument :
 BNA_F
 ClientSampleId :
 LIBERTY_SF_002

Tgt Ion:172 Resp: 1978184
 Ion Ratio Lower Upper
 172 100
 171 35.6 29.5 44.3
 170 24.0 19.9 29.9

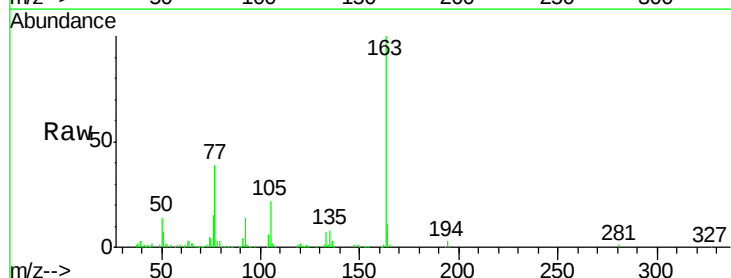


Abundance Ion 172.00 (171.70 to 172.70): E
 Ion 171.00 (170.70 to 171.70): E
 Ion 170.00 (169.70 to 170.70): E

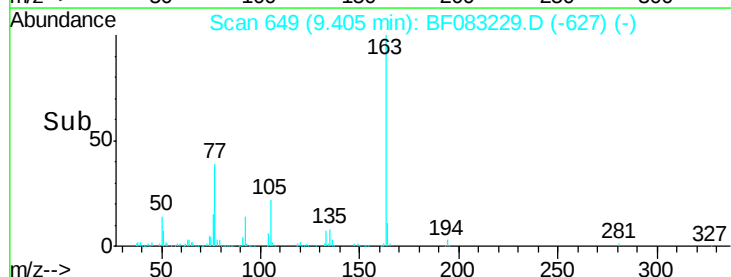
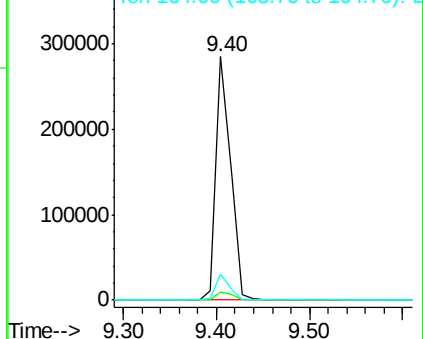


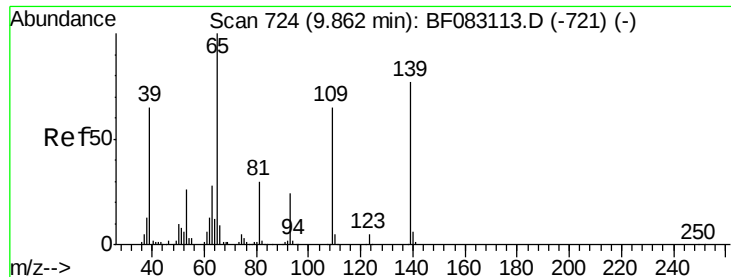
#49
 Dimethylphthalate
 Concen: 10.32 ng
 RT: 9.40 min Scan# 649
 Delta R.T. -0.05 min
 Lab File: BF083229.D
 Acq: 24 Nov 2015 3:29

Tgt Ion:163 Resp: 310773
 Ion Ratio Lower Upper
 163 100
 194 3.3 2.6 4.0
 164 10.9 8.6 12.8



Abundance Ion 163.00 (162.70 to 163.70): E
 Ion 194.00 (193.70 to 194.70): E
 Ion 164.00 (163.70 to 164.70): E





#55

4-Nitrophenol

Concen: 2.38 ng

RT: 9.88 min Scan# 691

Delta R.T. 0.02 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

Instrument :

BNA_F

ClientSampleId :

LIBERTY SF_002

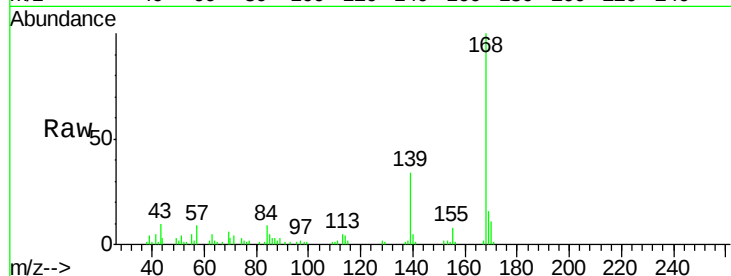
Tgt Ion:139 Resp: 13172

Ion Ratio Lower Upper

139 100

109 2.7 64.0 104.0#

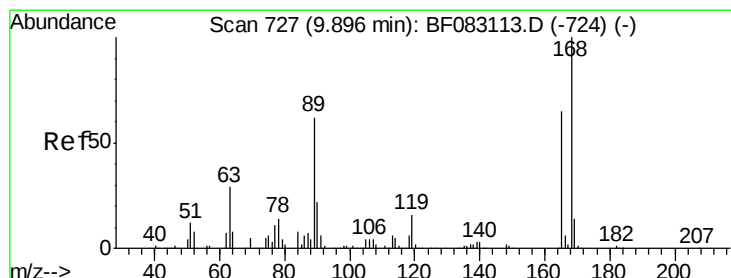
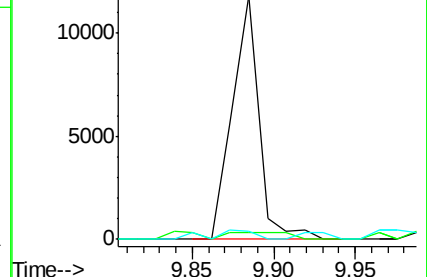
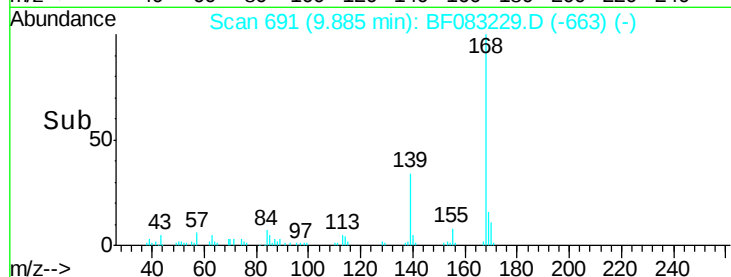
65 3.5 109.5 149.5#



Abundance Ion 139.00 (138.70 to 139.70): E

Ion 109.00 (108.70 to 109.70): E

Ion 65.00 (64.70 to 65.70): BF0



#56

2,4-Dinitrotoluene

Concen: 6.13 ng

RT: 9.68 min Scan# 673

Delta R.T. -0.22 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

Tgt Ion:165 Resp: 52512

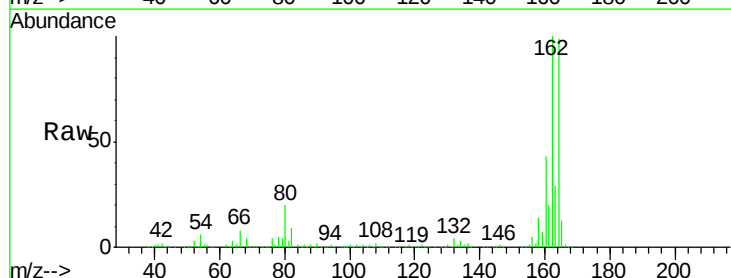
Ion Ratio Lower Upper

165 100

63 1.4 54.5 81.7#

89 1.5 77.3 115.9#

182 0.0 1.8 2.6#

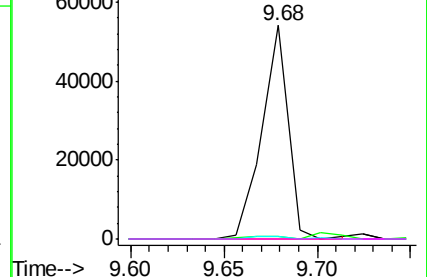
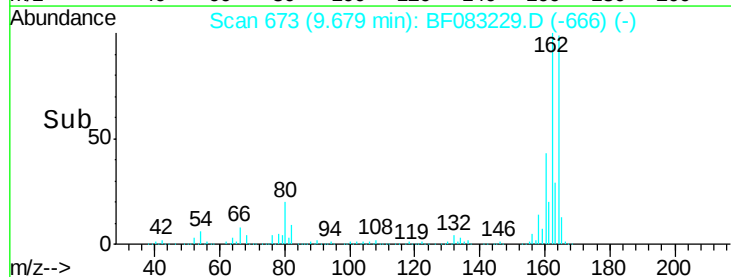


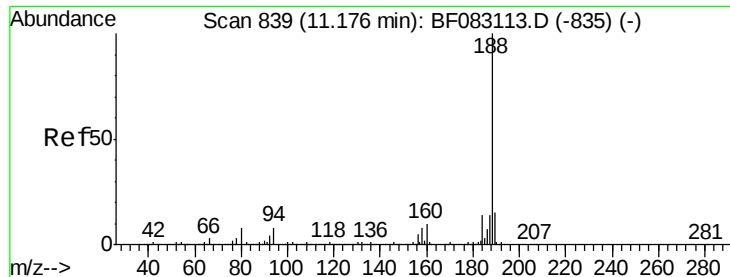
Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0

Ion 182.00 (181.70 to 182.70): E

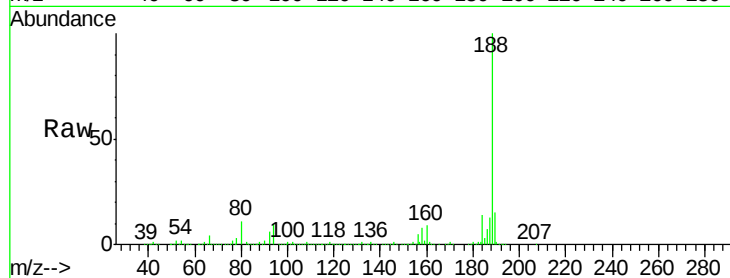




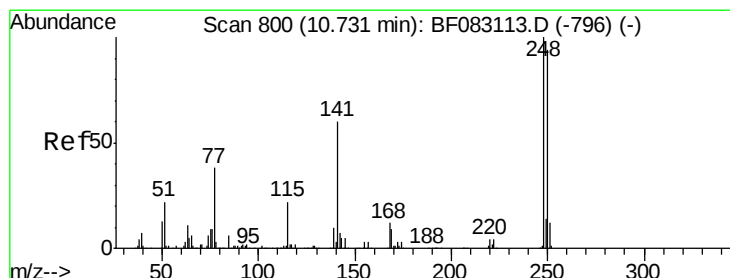
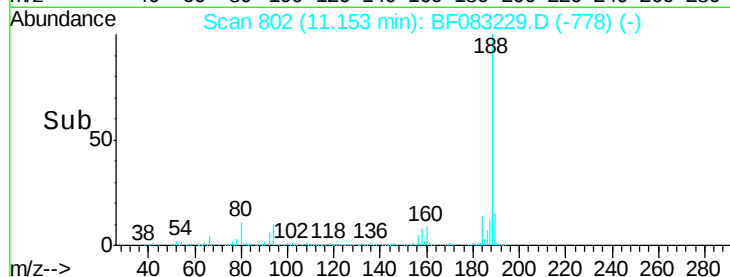
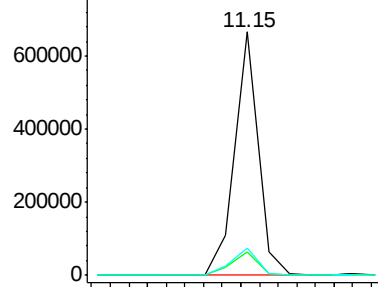
#63
Phenanthrene-d10
Concen: 20.00 ng
RT: 11.15 min Scan# 802
Delta R.T. -0.02 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

Instrument :
BNA_F
ClientSampleId :
LIBERTY_SF_002

Tgt Ion:188 Resp: 579645
Ion Ratio Lower Upper
188 100
94 9.8 6.0 9.0#
80 11.2 6.7 10.1#

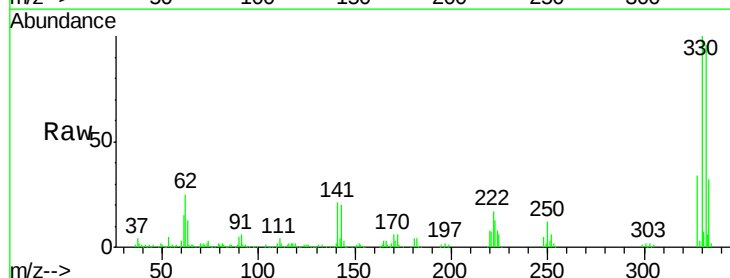


Abundance Ion 188.00 (187.70 to 188.70): E
Ion 94.00 (93.70 to 94.70): BF0
Ion 80.00 (79.70 to 80.70): BF0

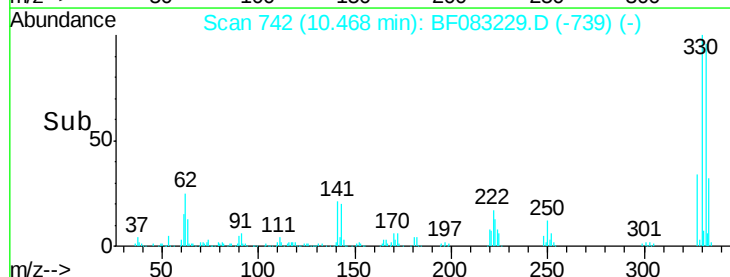
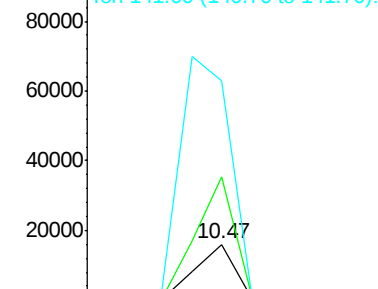


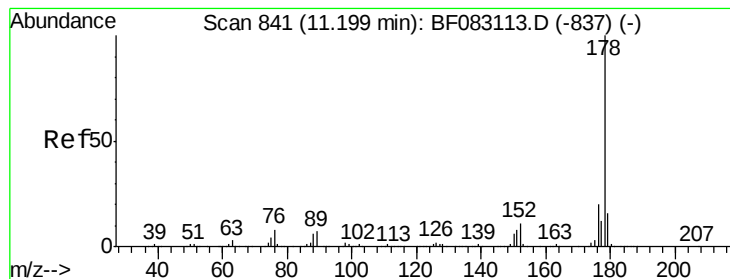
#66
4-Bromophenyl-phenylether
Concen: 2.68 ng
RT: 10.47 min Scan# 742
Delta R.T. -0.26 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

Tgt Ion:248 Resp: 17249
Ion Ratio Lower Upper
248 100
250 220.4 75.4 113.2#
141 392.1 48.1 72.1#



Abundance Ion 248.00 (247.70 to 248.70): E
Ion 250.00 (249.70 to 250.70): E
Ion 141.00 (140.70 to 141.70): E





#70

Phenanthrene

Concen: 14.62 ng

RT: 11.18 min Scan# 804

Delta R.T. -0.02 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

Instrument :

BNA_F

ClientSampleId :

LIBERTY SF_002

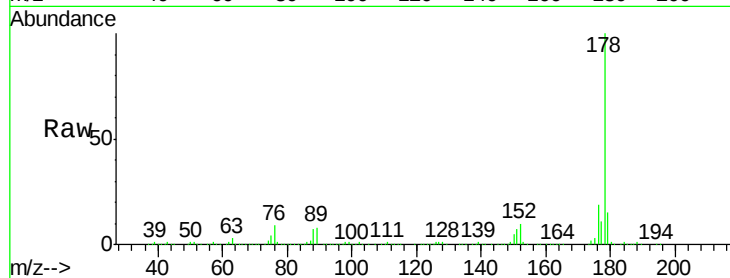
Tgt Ion:178 Resp: 488123

Ion Ratio Lower Upper

178 100

176 18.6 16.2 24.2

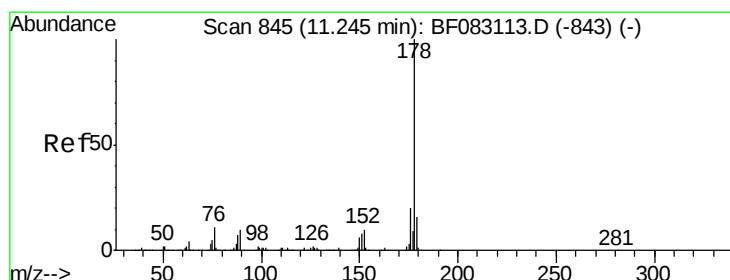
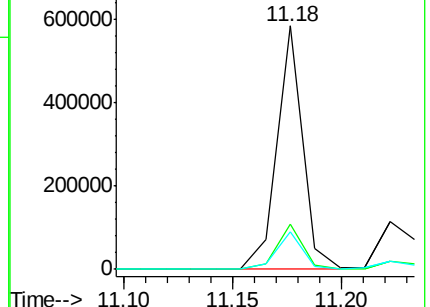
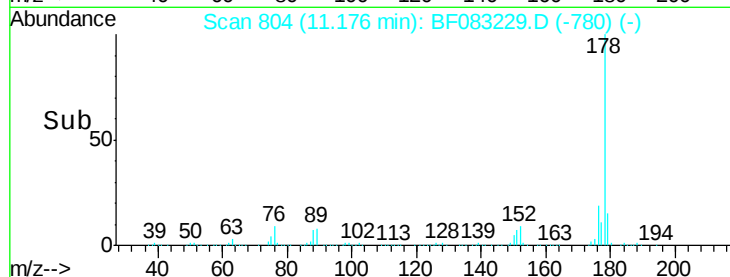
179 15.4 12.8 19.2



Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#71

Anthracene

Concen: 4.12 ng

RT: 11.22 min Scan# 808

Delta R.T. -0.02 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

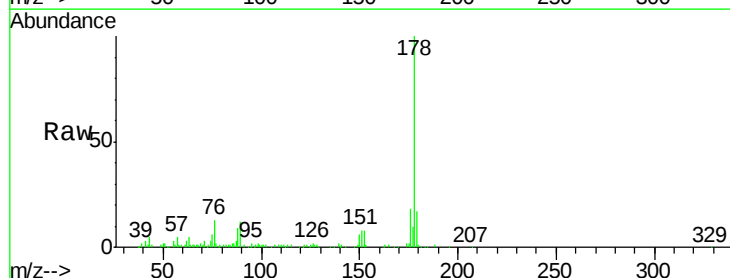
Tgt Ion:178 Resp: 140330

Ion Ratio Lower Upper

178 100

176 18.2 15.6 23.4

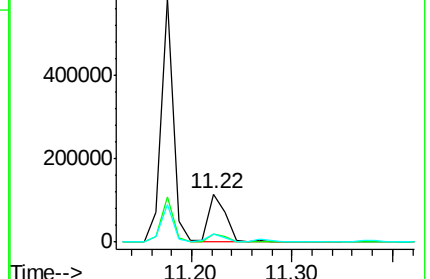
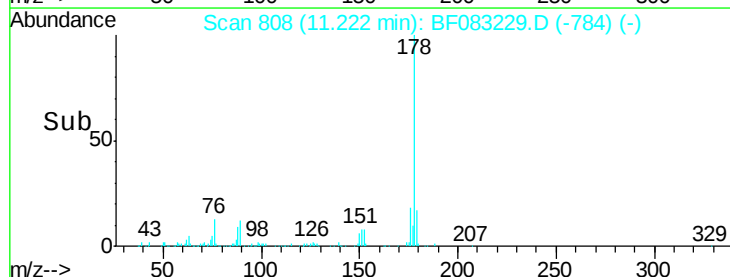
179 16.9 13.2 19.8

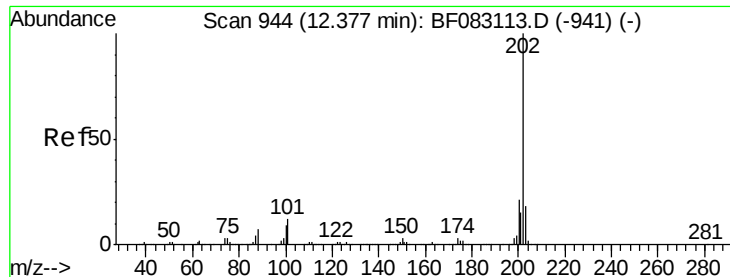


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E

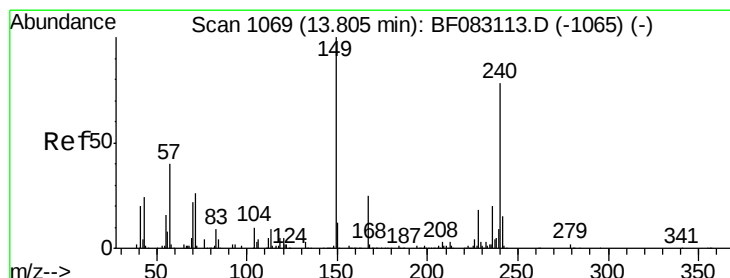
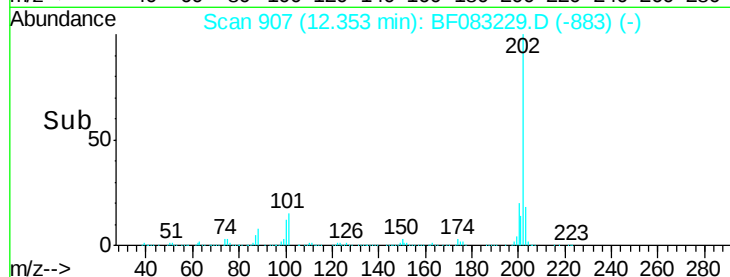
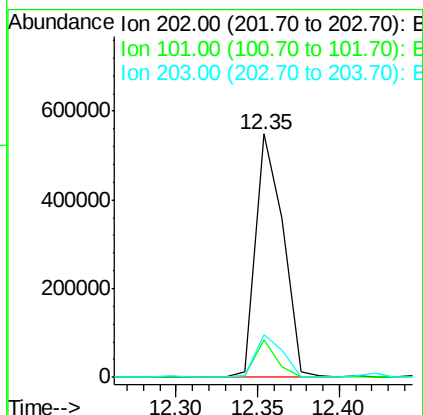
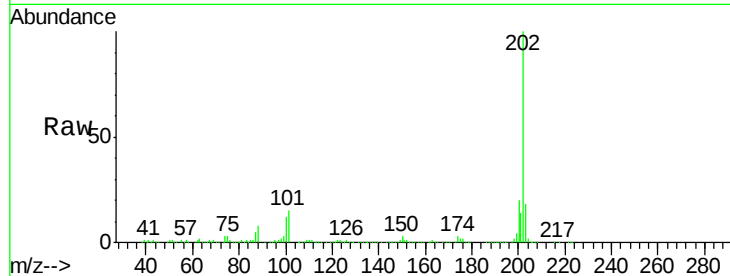




#74
 Fluoranthene
 Concen: 18.74 ng
 RT: 12.35 min Scan# 907
 Delta R.T. -0.02 min
 Lab File: BF083229.D
 Acq: 24 Nov 2015 3:29

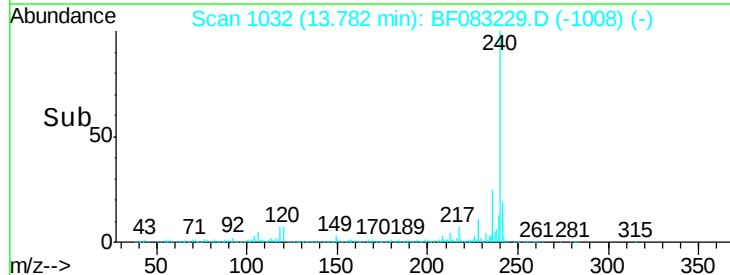
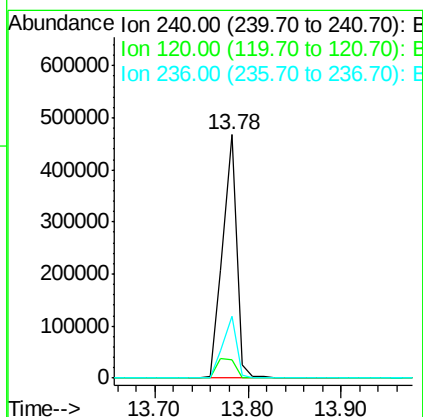
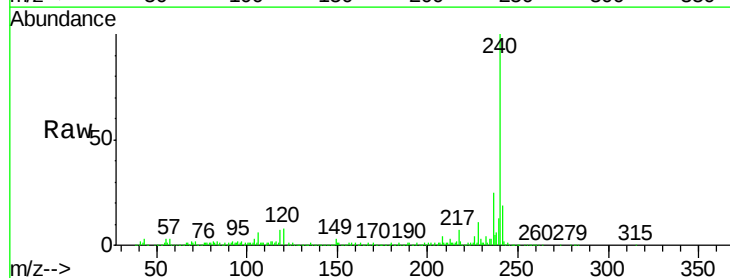
Instrument :
 BNA_F
 ClientSampleId :
 LIBERTY SF_002

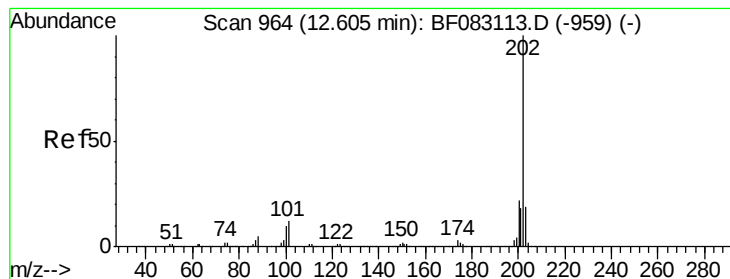
Tgt Ion	Ratio	Lower	Upper
202	100		
101	15.4	0.0	32.3
203	17.6	0.0	38.4



#75
 Chrysene-d12
 Concen: 20.00 ng
 RT: 13.78 min Scan# 1032
 Delta R.T. -0.02 min
 Lab File: BF083229.D
 Acq: 24 Nov 2015 3:29

Tgt Ion	Ratio	Lower	Upper
240	100		
120	7.6	5.4	8.2
236	25.2	20.6	31.0





#77

Pyrene

Concen: 16.75 ng

RT: 12.58 min Scan# 927

Delta R.T. -0.02 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

Instrument :

BNA_F

ClientSampleId :

LIBERTY SF_002

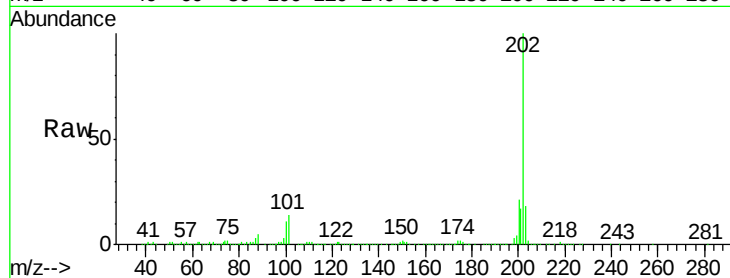
Tgt Ion:202 Resp: 560072

Ion Ratio Lower Upper

202 100

200 21.0 17.8 26.6

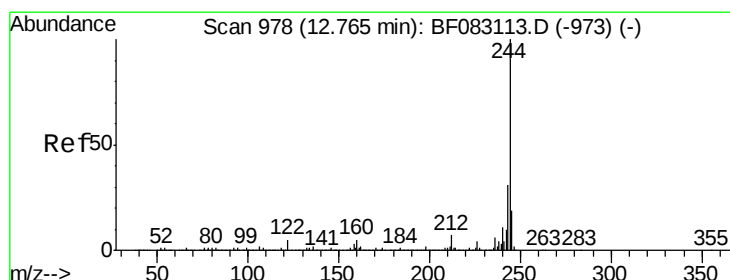
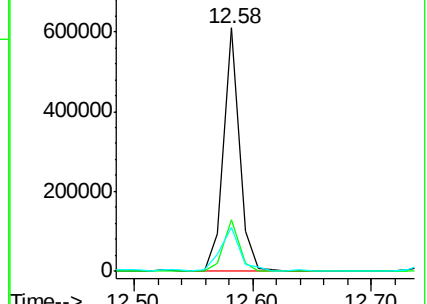
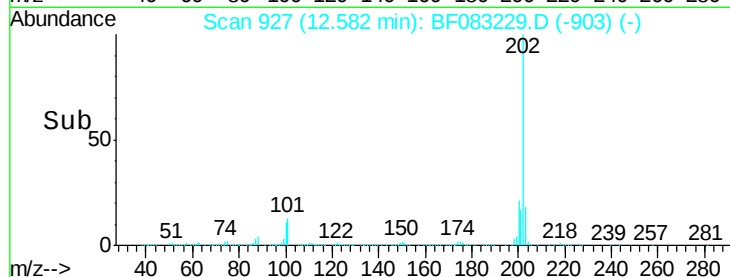
203 18.2 15.0 22.4



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



#78

Terphenyl-d14

Concen: 66.61 ng

RT: 12.74 min Scan# 941

Delta R.T. -0.02 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

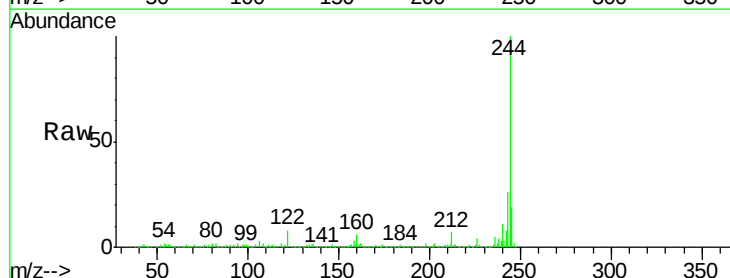
Tgt Ion:244 Resp: 1384622

Ion Ratio Lower Upper

244 100

212 6.9 5.4 8.2

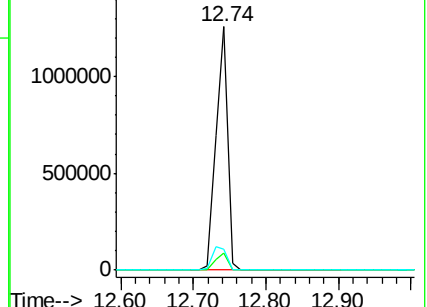
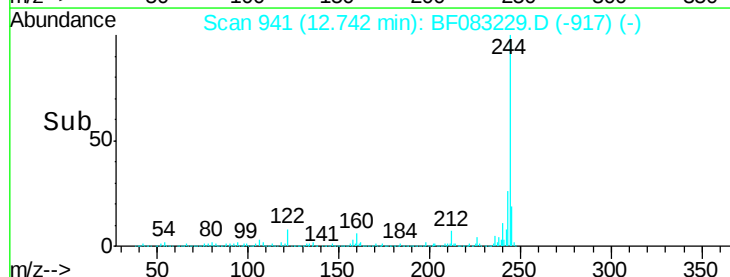
122 8.3 4.3 6.5#

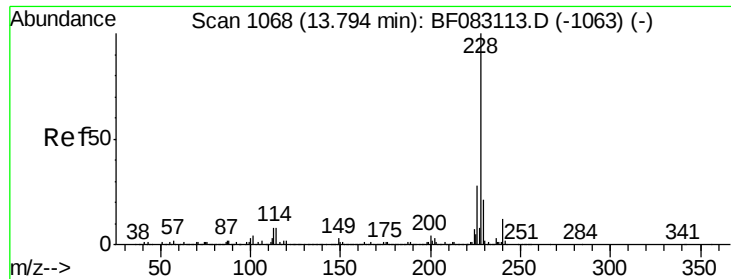


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

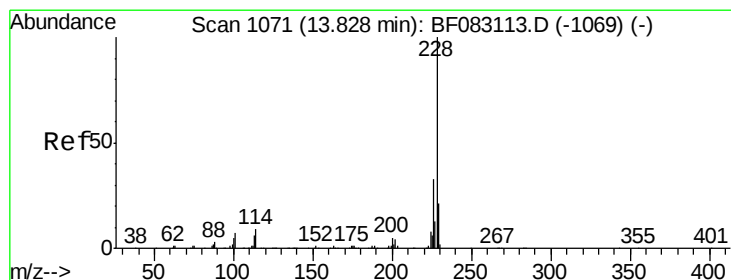
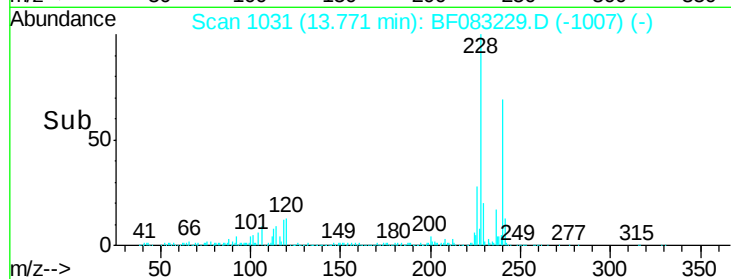
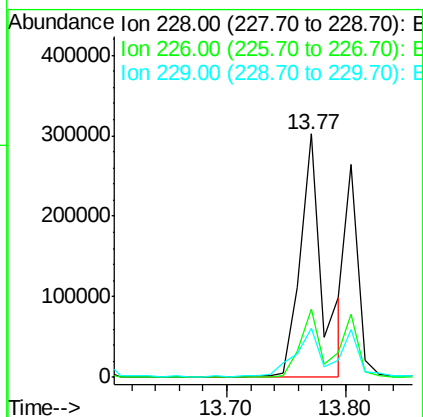
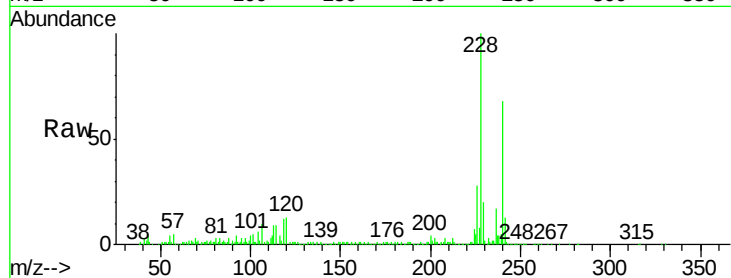




#80
Benzo(a)anthracene
Concen: 12.91 ng
RT: 13.77 min Scan# 1031
Delta R.T. -0.02 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

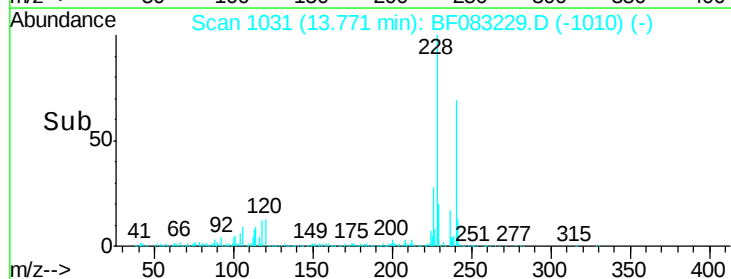
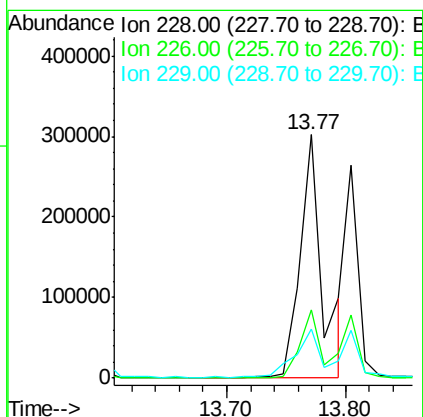
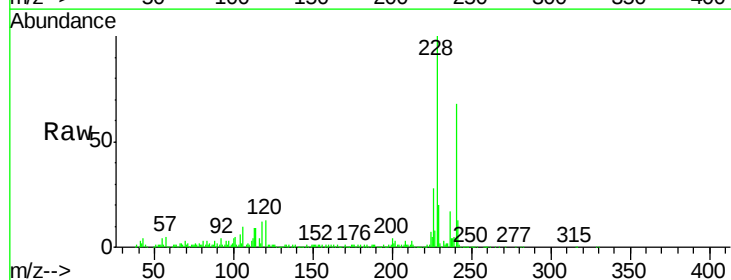
Instrument :
BNA_F
ClientSampleId :
LIBERTY SF_002

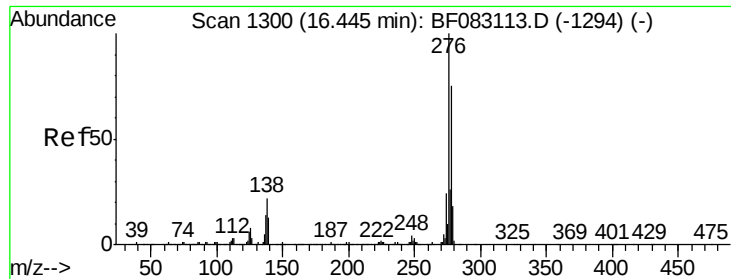
Tgt Ion:228 Resp: 390957
Ion Ratio Lower Upper
228 100
226 27.9 22.6 33.8
229 20.0 16.6 24.8



#82
Chrysene
Concen: 13.93 ng
RT: 13.77 min Scan# 1031
Delta R.T. -0.06 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

Tgt Ion:228 Resp: 390957
Ion Ratio Lower Upper
228 100
226 27.9 25.5 38.3
229 20.0 16.6 25.0

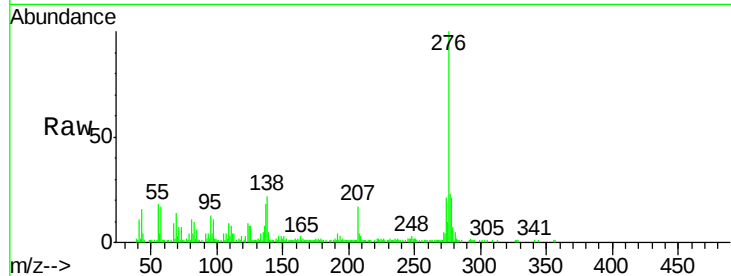




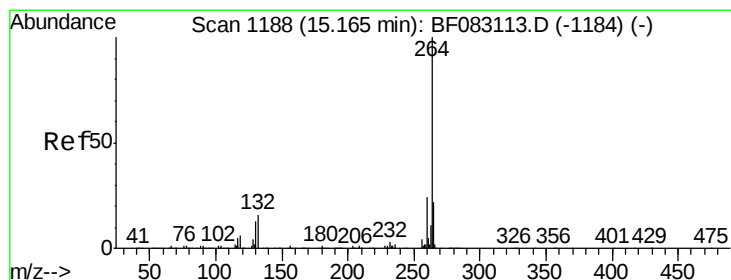
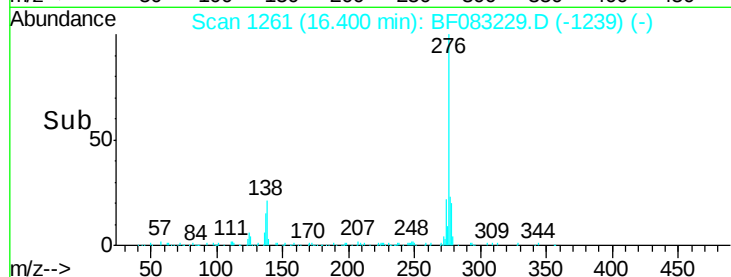
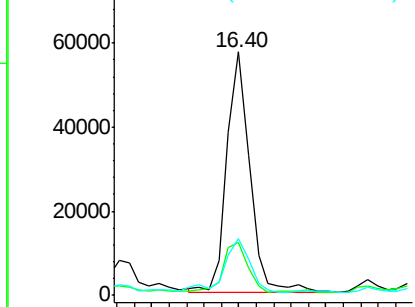
#85
Indeno(1,2,3-cd)pyrene
Concen: 4.18 ng
RT: 16.40 min Scan# 1261
Delta R.T. -0.05 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

Instrument :
BNA_F
ClientSampleId :
LIBERTY SF_002

Tgt Ion	Ratio	Lower	Upper
276	100		
138	21.1	18.0	27.0
277	25.7	20.2	30.4

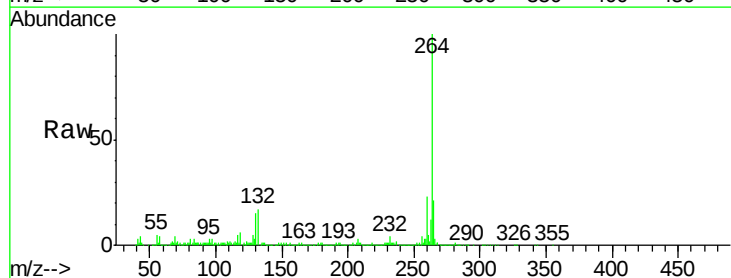


Abundance Ion 276.00 (275.70 to 276.70): E
Ion 138.00 (137.70 to 138.70): E
Ion 277.00 (276.70 to 277.70): E

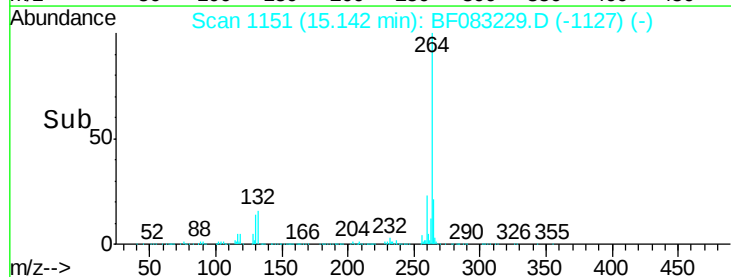
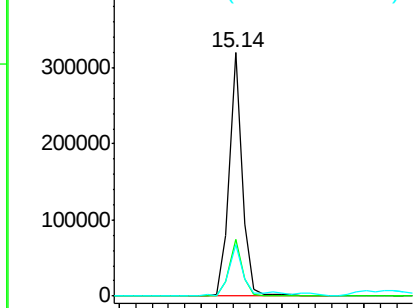


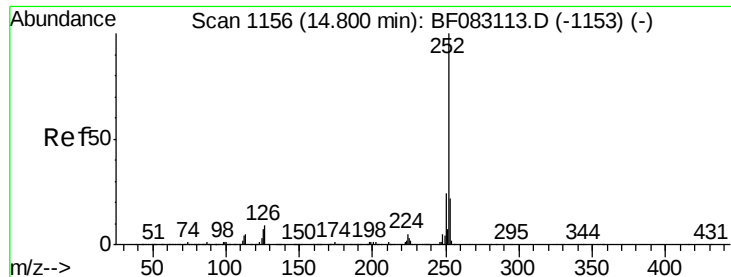
#86
Perylene-d12
Concen: 20.00 ng
RT: 15.14 min Scan# 1151
Delta R.T. -0.02 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

Tgt Ion	Ratio	Lower	Upper
264	100		
260	23.2	19.1	28.7
265	21.1	18.2	27.4



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

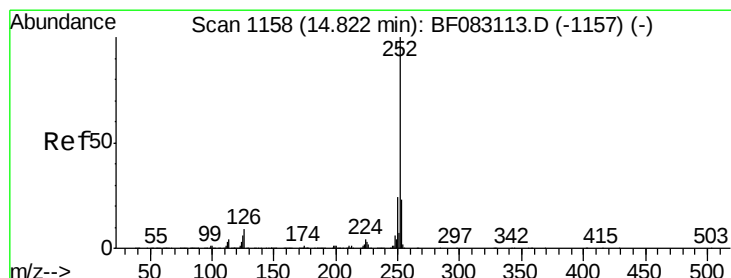
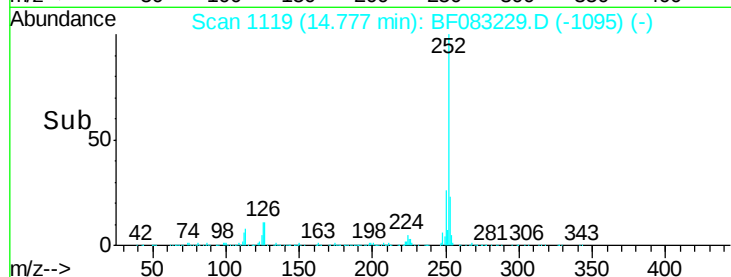
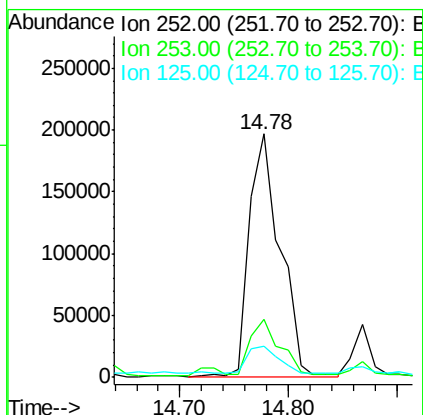
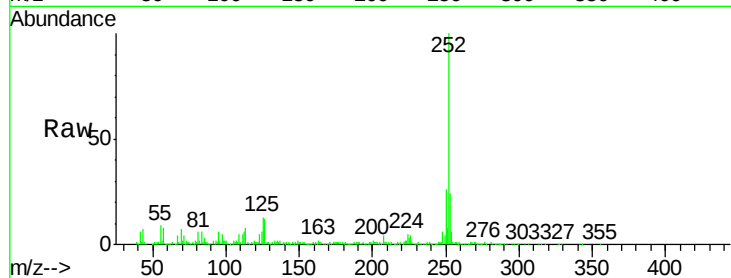




#87
Benzo(b)fluoranthene
Concen: 15.84 ng
RT: 14.78 min Scan# 1119
Delta R.T. -0.02 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

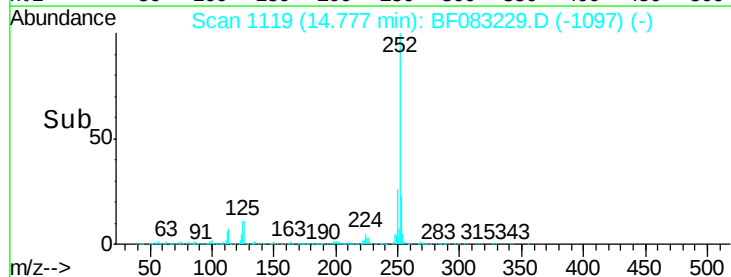
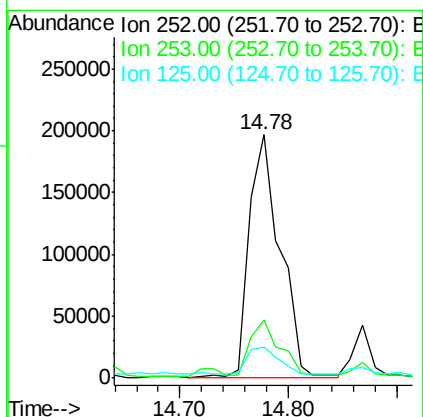
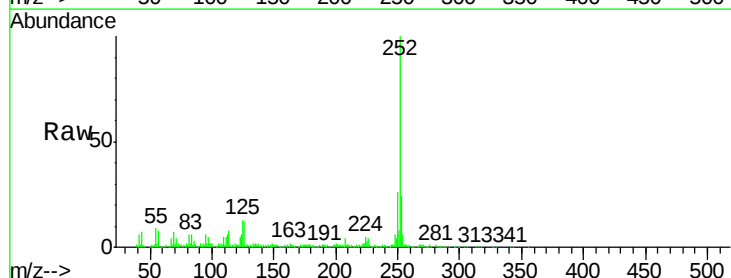
Instrument :
BNA_F
ClientSampleId :
LIBERTY SF_002

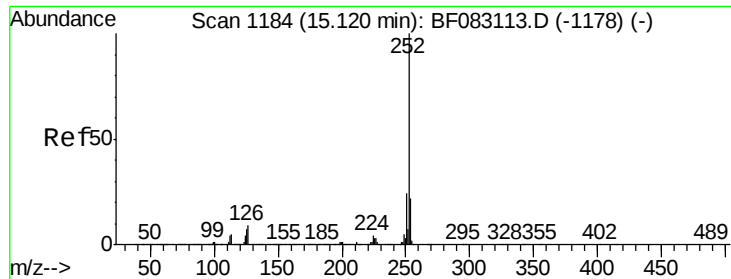
Tgt Ion: 252 Resp: 384728
Ion Ratio Lower Upper
252 100
253 23.7 17.7 26.5
125 12.9 5.6 8.4#



#88
Benzo(k)fluoranthene
Concen: 21.25 ng
RT: 14.78 min Scan# 1119
Delta R.T. -0.05 min
Lab File: BF083229.D
Acq: 24 Nov 2015 3:29

Tgt Ion: 252 Resp: 384728
Ion Ratio Lower Upper
252 100
253 23.7 18.2 27.2
125 12.9 6.8 10.2#





#89

Benzo(a)pyrene

Concen: 9.68 ng

RT: 15.09 min Scan# 1146

Delta R.T. -0.03 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

Instrument :

BNA_F

ClientSampleId :

LIBERTY SF_002

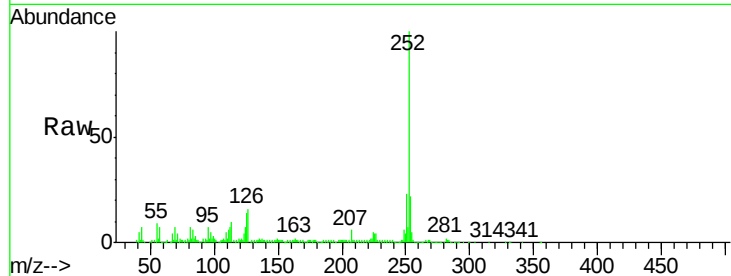
Tgt Ion: 252 Resp: 194080

Ion Ratio Lower Upper

252 100

253 22.2 17.5 26.3

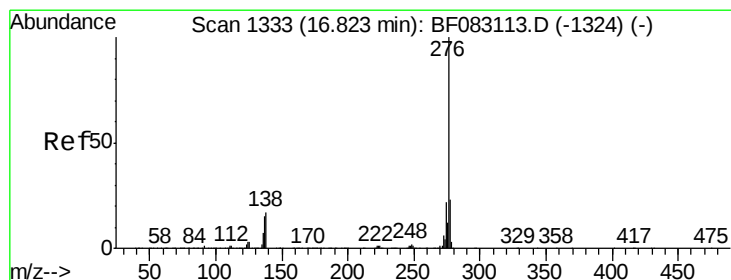
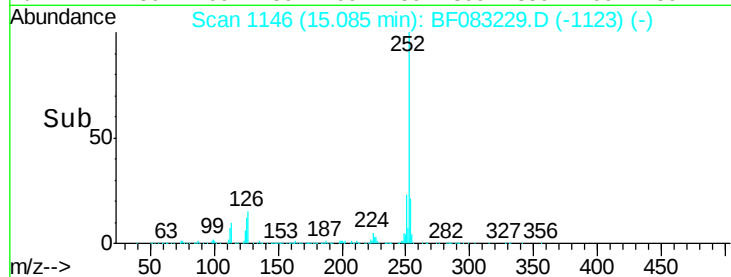
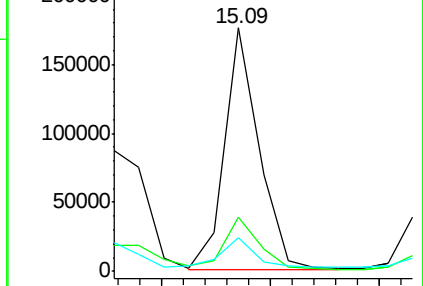
125 14.0 5.4 8.0#



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



#91

Benzo(g,h,i)perylene

Concen: 5.27 ng

RT: 16.77 min Scan# 1293

Delta R.T. -0.06 min

Lab File: BF083229.D

Acq: 24 Nov 2015 3:29

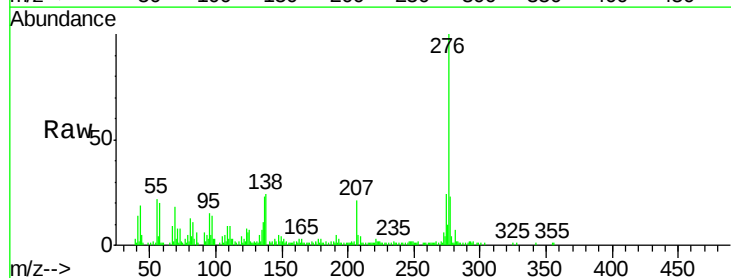
Tgt Ion: 276 Resp: 93802

Ion Ratio Lower Upper

276 100

277 23.5 18.7 28.1

138 24.1 13.9 20.9#



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

