

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF082416\
 Data File : BF089904.D
 Acq On : 25 Aug 2016 5:58
 Operator : UM/SJ
 Sample : H4566-11
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 WC2-B-5

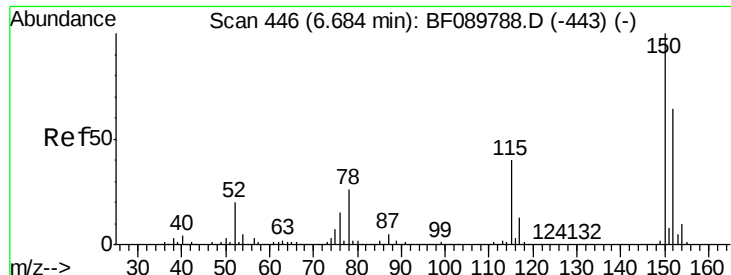
Quant Time: Aug 25 12:28:42 2016
 Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF081916.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Aug 19 14:02:57 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.67	152	414554	20.00	ng	-0.01
21) Naphthalene-d8	7.95	136	1686184	20.00	ng	-0.02
38) Acenaphthene-d10	9.70	164	727900	20.00	ng	-0.01
63) Phenanthrene-d10	11.19	188	1365092	20.00	ng	0.00
75) Chrysene-d12	13.84	240	876635	20.00	ng	-0.03
86) Perylene-d12	15.30	264	910217	20.00	ng	-0.07

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	5.24	112	2180289	90.19	ng	-0.01
7) Phenol-d6	6.31	99	2716414	91.54	ng	-0.01
23) Nitrobenzene-d5	7.23	82	1639207	60.39	ng	-0.02
41) 2,4,6-Tribromophenol	10.49	330	629518	91.00	ng	-0.01
44) 2-Fluorobiphenyl	9.04	172	3165478	76.43	ng	-0.01
78) Terphenyl-d14	12.78	244	2357696	60.84	ng	-0.01

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
10) Phenol	6.32	94	70696	2.03	ng	77
19) n-Nitroso-di-n-propylamine	7.23	70	214072	11.28	ng	# 72
25) Isophorone	7.23	82	1315211	24.03	ng	# 67
49) Dimethylphthalate	9.44	163	1230828	24.02	ng	98
51) Acenaphthene	9.74	154	106193	2.40	ng	98
56) 2,4-Dinitrotoluene	9.70	165	97766	6.37	ng	# 35
57) Fluorene	10.25	166	97967	2.21	ng	99
66) 4-Bromophenyl-phenylether	10.49	248	32790	2.29	ng	# 1
70) Phenanthrene	11.21	178	1311881	19.03	ng	99
71) Anthracene	11.26	178	304756	4.35	ng	96
72) Carbazole	11.42	167	175766	2.80	ng	# 96
74) Fluoranthene	12.39	202	1601562	24.42	ng	96
77) Pyrene	12.62	202	1423864	19.95	ng	99
80) Benzo(a)anthracene	13.83	228	640665	12.76	ng	99
82) Chrysene	13.86	228	493089	11.46	ng	96
85) Indeno(1,2,3-cd)pyrene	16.58	276	532123	9.69	ng	95
87) Benzo(b)fluoranthene	14.93	252	1216528	24.29	ng	98
88) Benzo(k)fluoranthene	14.93	252	1216528	26.78	ng	99
89) Benzo(a)pyrene	15.25	252	687379	14.50	ng	97
90) Dibenzo(a,h)anthracene	16.74	278	104462	2.03	ng	94
91) Benzo(g,h,i)perylene	16.97	276	525396	9.70	ng	96

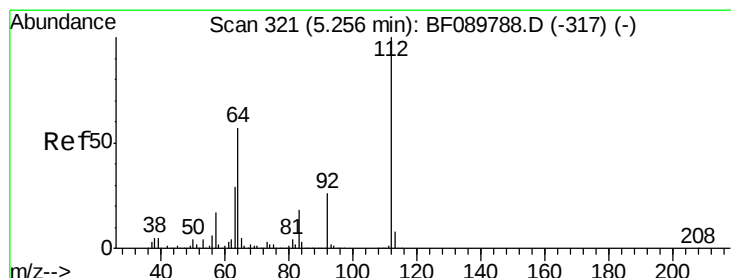
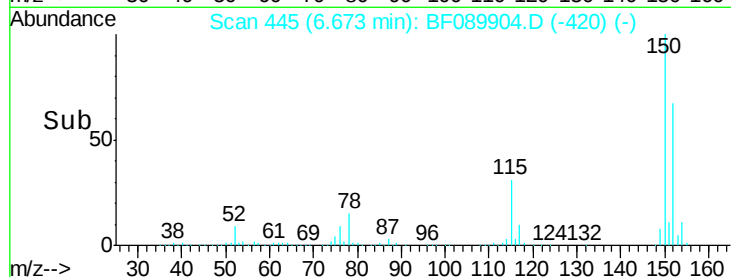
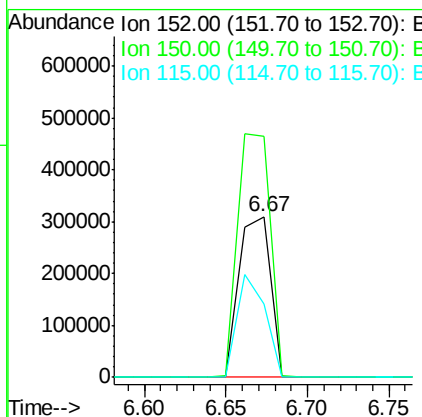
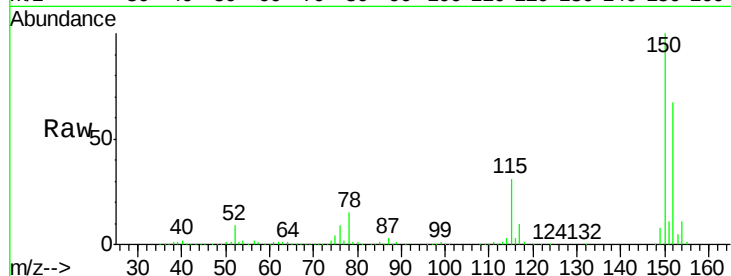
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 1,4-Dichlorobenzene-d4
 Concen: 20.00 ng
 RT: 6.67 min Scan# 445
 Delta R.T. -0.01 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

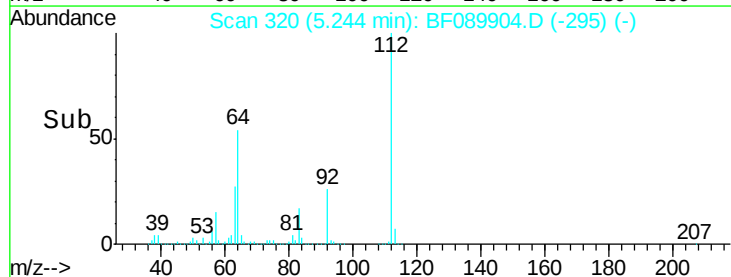
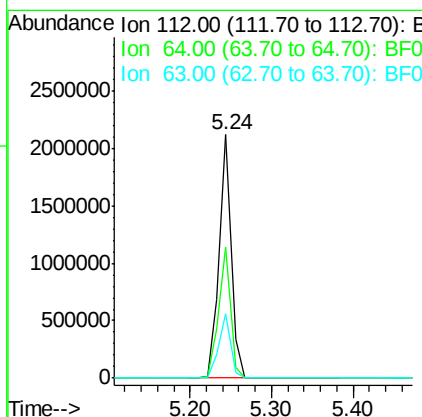
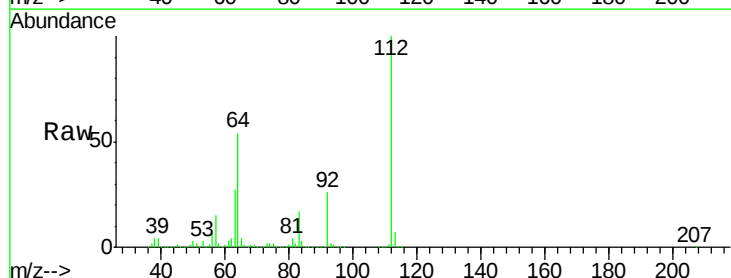
Instrument :
 BNA_F
 ClientSampleId :
 WC2-B-5

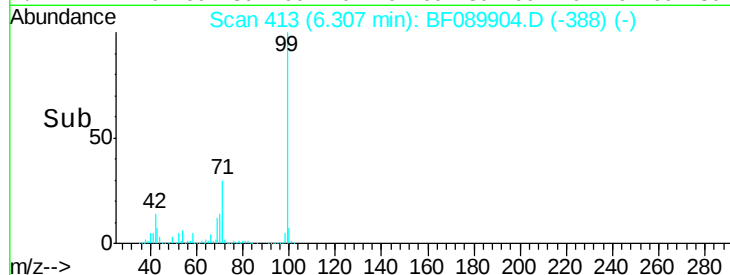
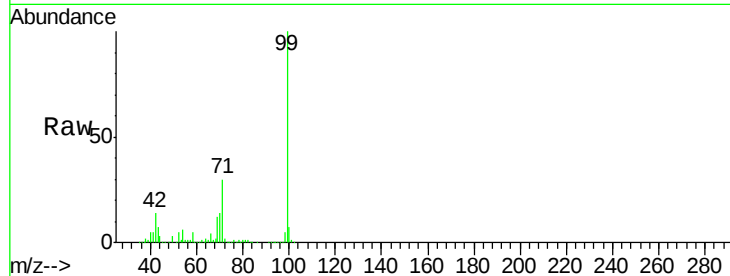
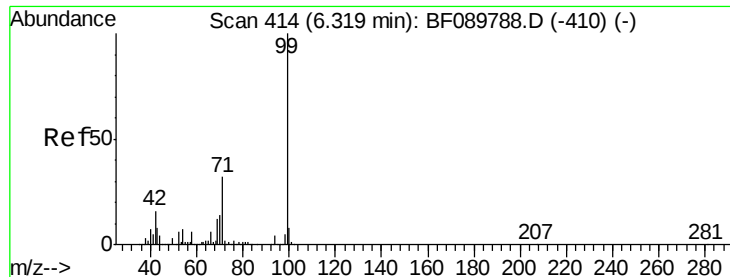
Tgt Ion:152 Resp: 414554
 Ion Ratio Lower Upper
 152 100
 150 149.9 125.3 187.9
 115 46.0 40.9 61.3



#5
 2-Fluorophenol
 Concen: 90.19 ng
 RT: 5.24 min Scan# 320
 Delta R.T. -0.01 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Tgt Ion:112 Resp: 2180289
 Ion Ratio Lower Upper
 112 100
 64 53.9 45.0 67.4
 63 26.6 23.1 34.7





#7

Phenol-d6

Concen: 91.54 ng

RT: 6.31 min Scan# 413

Delta R.T. -0.01 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

Instrument :

BNA_F

ClientSampleId :

WC2-B-5

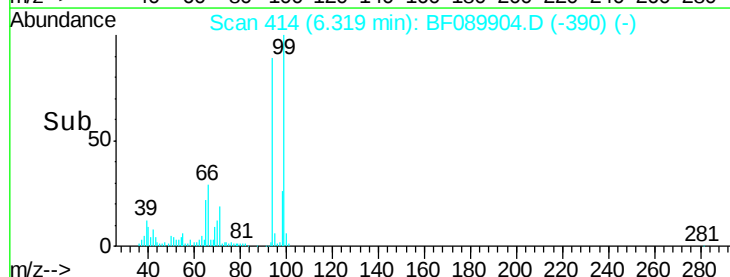
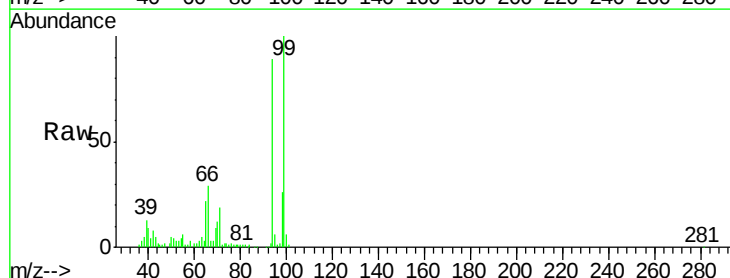
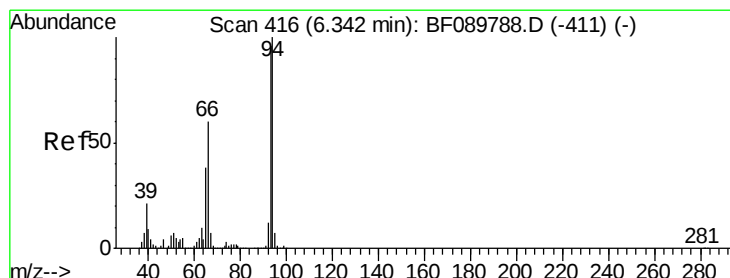
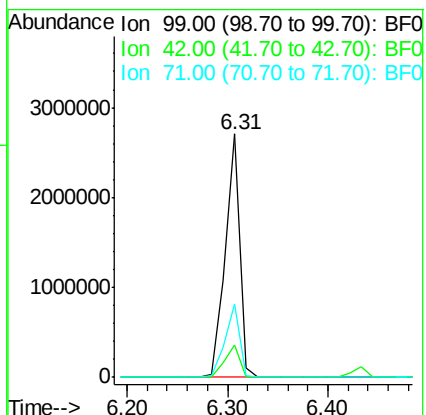
Tgt Ion: 99 Resp: 2716414

Ion Ratio Lower Upper

99 100

42 13.5 12.2 18.4

71 30.2 23.8 35.8



#10

Phenol

Concen: 2.03 ng

RT: 6.32 min Scan# 414

Delta R.T. -0.02 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

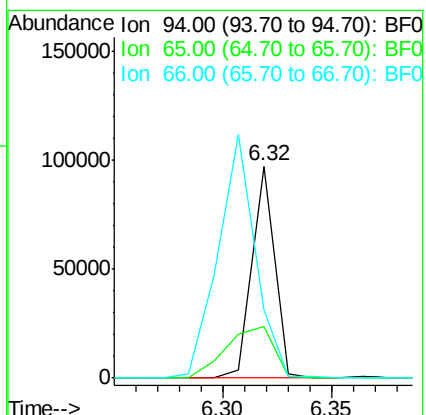
Tgt Ion: 94 Resp: 70696

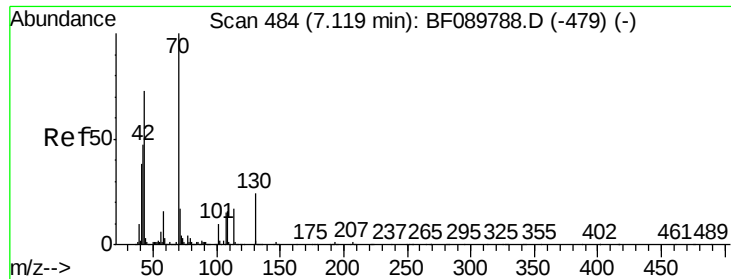
Ion Ratio Lower Upper

94 100

65 24.2 14.0 54.0

66 32.1 31.2 71.2

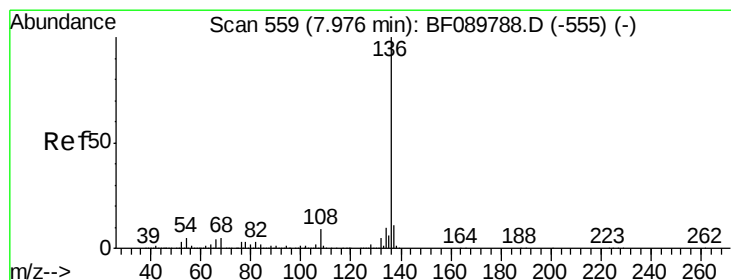
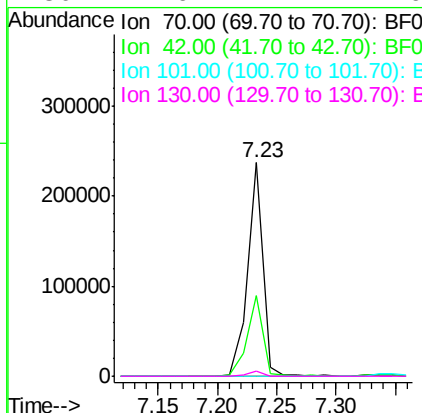
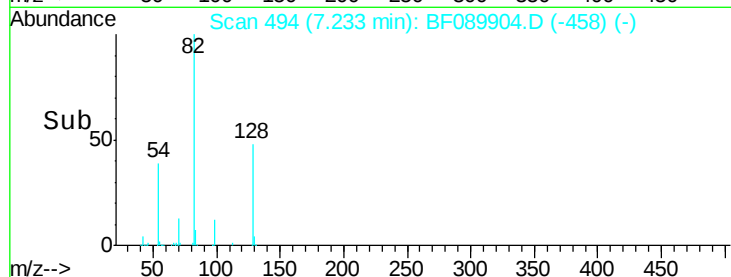
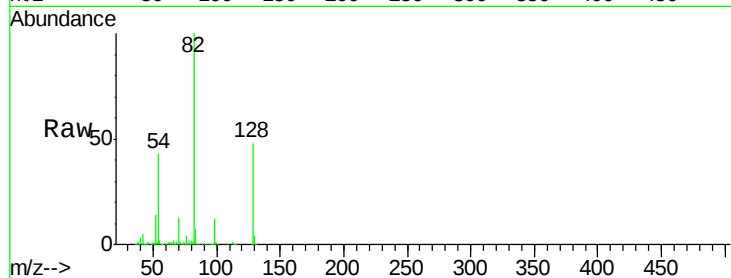




#19
n-Nitroso-di-n-propylamine
Concen: 11.28 ng
RT: 7.23 min Scan# 494
Delta R.T. 0.11 min
Lab File: BF089904.D
Acq: 25 Aug 2016 5:58

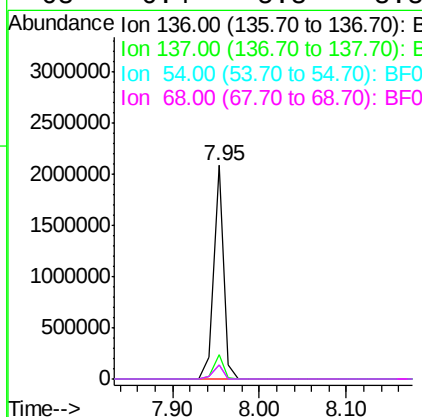
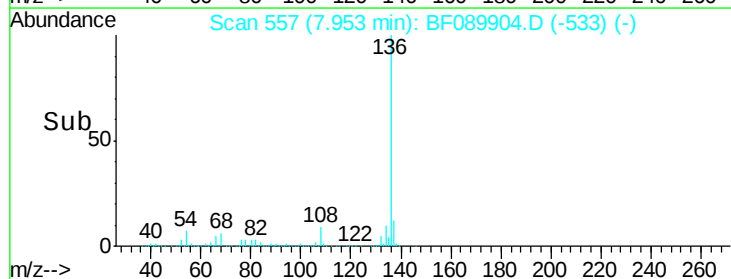
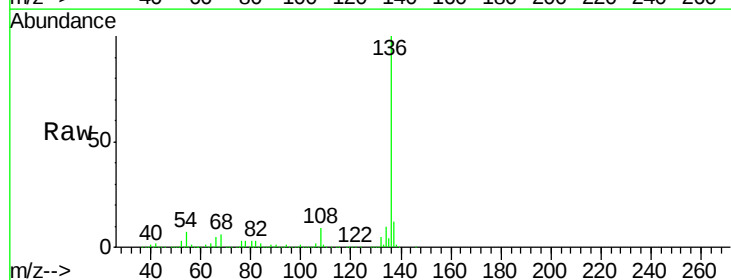
Instrument :
BNA_F
ClientSampleId :
WC2-B-5

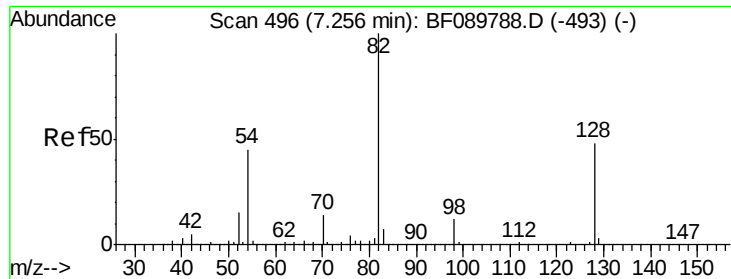
Tgt Ion: 70 Resp: 214072
Ion Ratio Lower Upper
70 100
42 38.1 46.3 69.5#
101 0.0 7.0 10.6#
130 2.6 14.4 21.6#



#21
Naphthalene-d8
Concen: 20.00 ng
RT: 7.95 min Scan# 557
Delta R.T. -0.02 min
Lab File: BF089904.D
Acq: 25 Aug 2016 5:58

Tgt Ion: 136 Resp: 1686184
Ion Ratio Lower Upper
136 100
137 11.5 9.2 13.8
54 6.5 7.2 10.8#
68 6.4 5.8 8.8

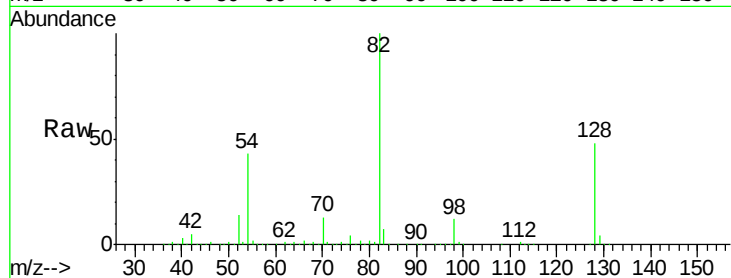




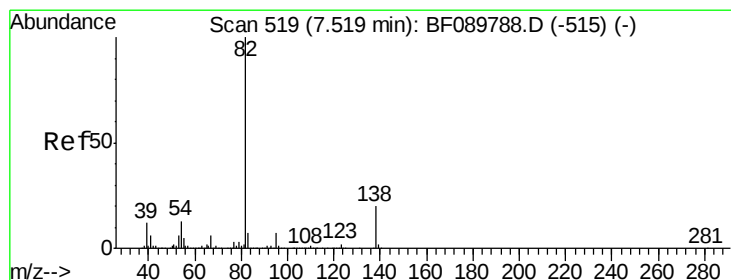
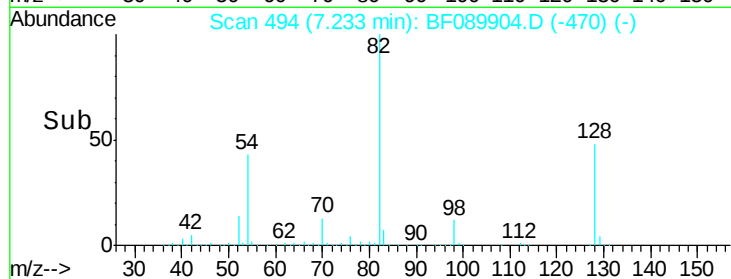
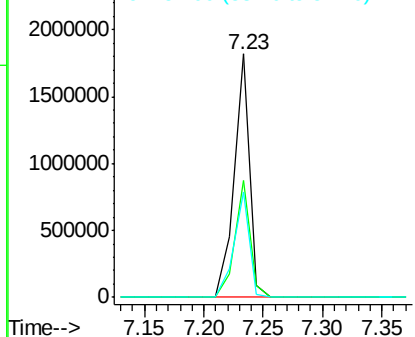
#23
 Nitrobenzene-d5
 Concen: 60.39 ng
 RT: 7.23 min Scan# 494
 Delta R.T. -0.02 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Instrument :
 BNA_F
 ClientSampleId :
 WC2-B-5

Tgt Ion: 82 Resp: 1639207
 Ion Ratio Lower Upper
 82 100
 128 48.2 34.4 51.6
 54 43.2 40.3 60.5

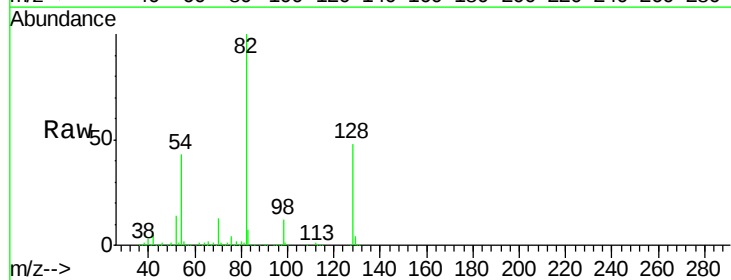


Abundance Ion 82.00 (81.70 to 82.70): BF0
 Ion 128.00 (127.70 to 128.70): BF0
 Ion 54.00 (53.70 to 54.70): BF0

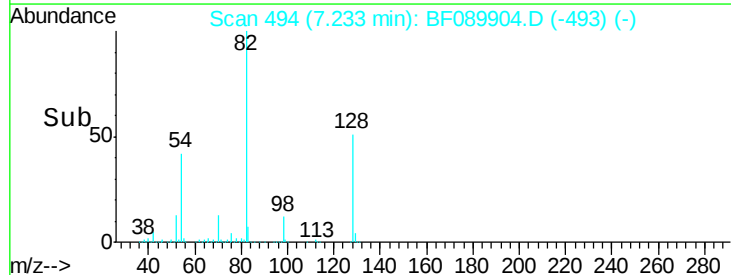
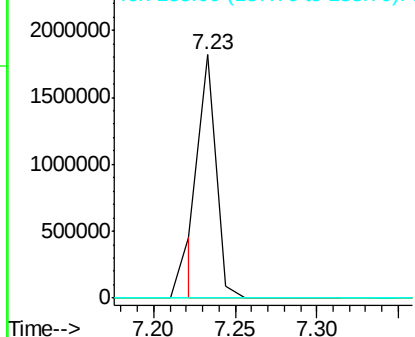


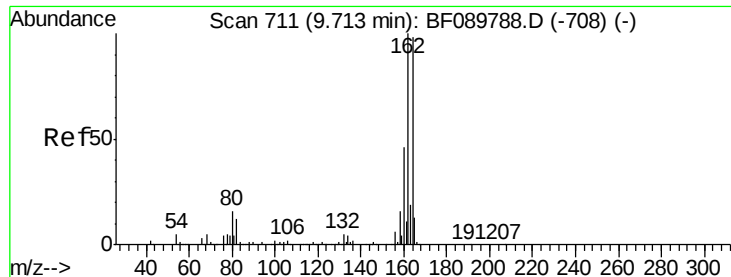
#25
 Isophorone
 Concen: 24.03 ng
 RT: 7.23 min Scan# 494
 Delta R.T. -0.29 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Tgt Ion: 82 Resp: 1315211
 Ion Ratio Lower Upper
 82 100
 95 0.0 5.3 7.9#
 138 0.0 13.0 19.4#



Abundance Ion 82.00 (81.70 to 82.70): BF0
 Ion 95.00 (94.70 to 95.70): BF0
 Ion 138.00 (137.70 to 138.70): BF0

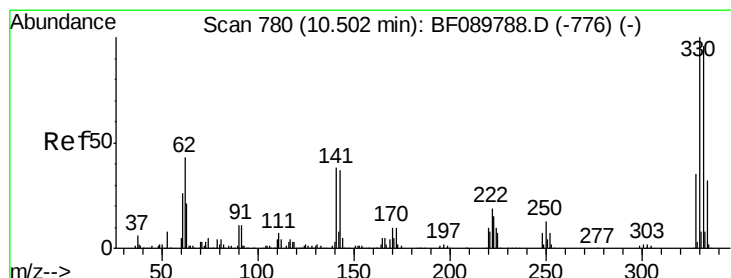
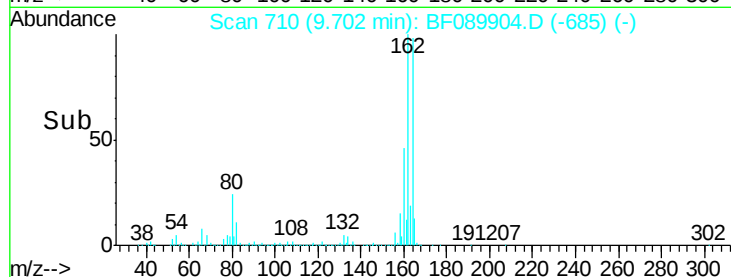
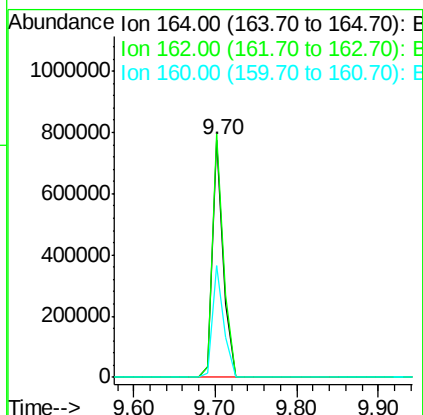
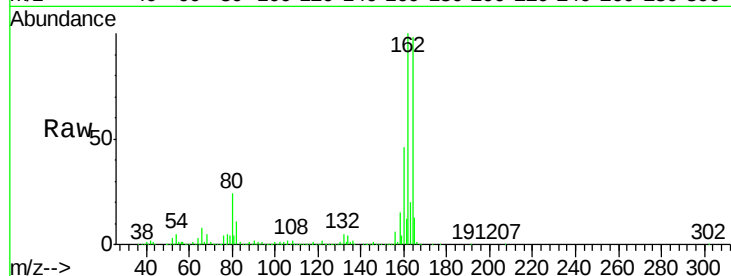




#38
 Acenaphthene-d10
 Concen: 20.00 ng
 RT: 9.70 min Scan# 710
 Delta R.T. -0.01 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

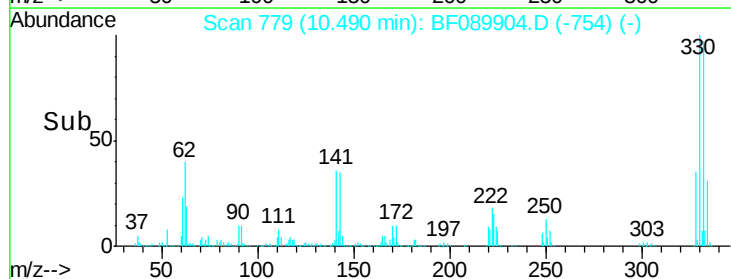
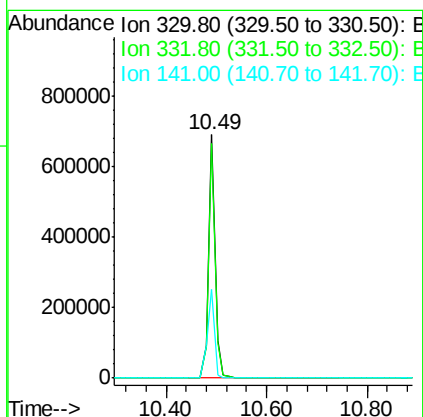
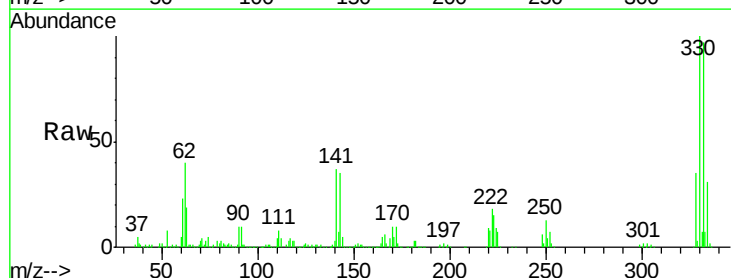
Instrument :
 BNA_F
 ClientSampled :
 WC2-B-5

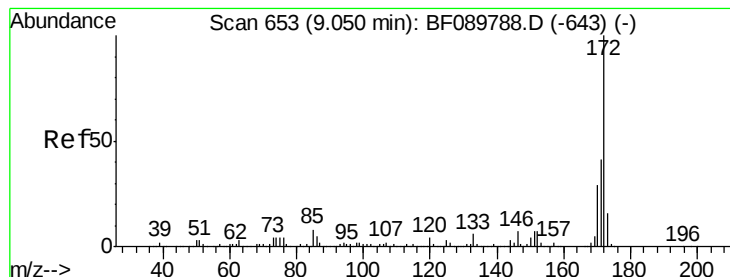
Tgt Ion	Ratio	Lower	Upper
164	100		
162	102.4	81.4	122.2
160	47.0	37.8	56.6



#41
 2,4,6-Tribromophenol
 Concen: 91.00 ng
 RT: 10.49 min Scan# 779
 Delta R.T. -0.01 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Tgt Ion	Ratio	Lower	Upper
330	100		
332	96.4	76.7	115.1
141	39.2	30.2	45.2

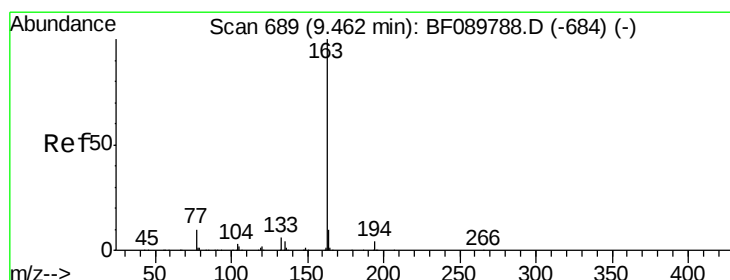
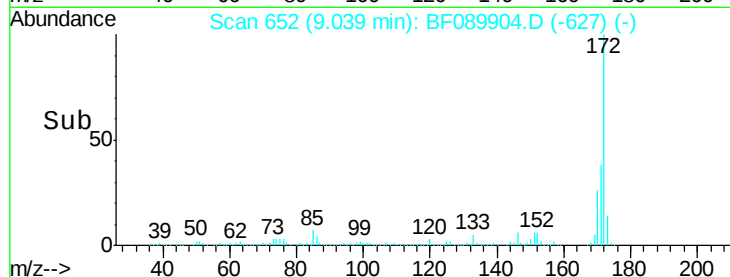
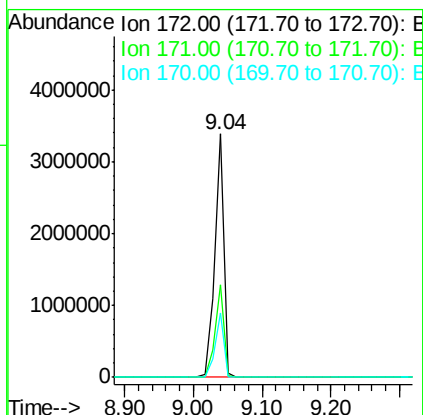
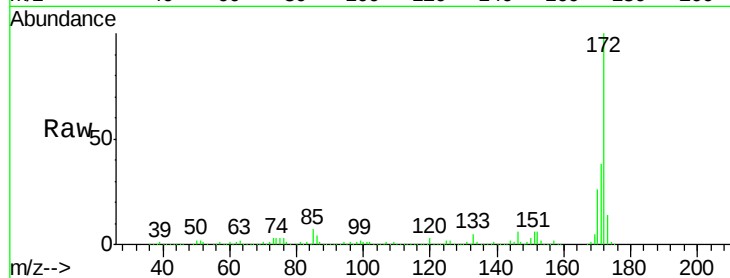




#44
 2-Fluorobiphenyl
 Concen: 76.43 ng
 RT: 9.04 min Scan# 652
 Delta R.T. -0.01 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

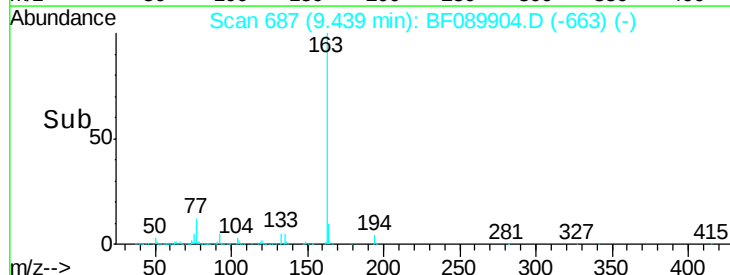
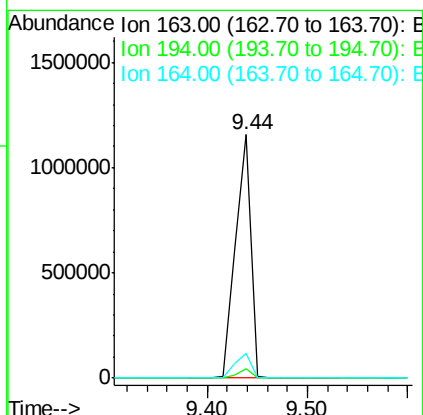
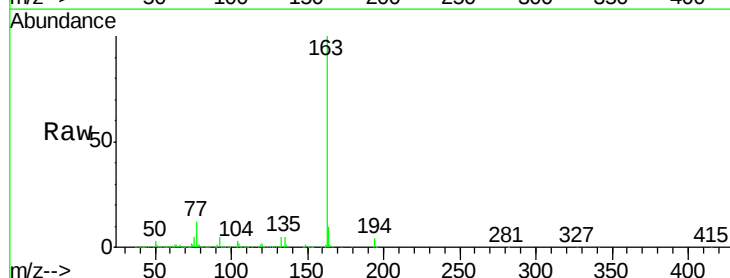
Instrument :
 BNA_F
 ClientSampleId :
 WC2-B-5

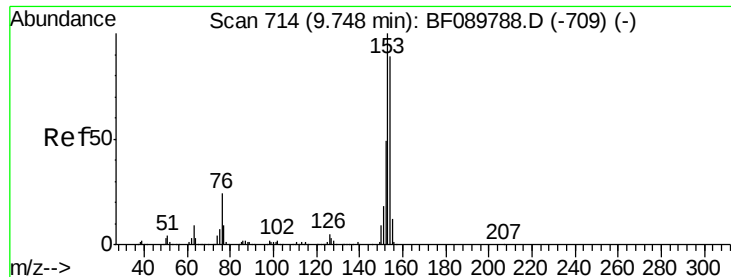
Tgt Ion:172 Resp: 3165478
 Ion Ratio Lower Upper
 172 100
 171 38.1 30.5 45.7
 170 26.3 20.6 31.0



#49
 Dimethylphthalate
 Concen: 24.02 ng
 RT: 9.44 min Scan# 687
 Delta R.T. -0.02 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Tgt Ion:163 Resp: 1230828
 Ion Ratio Lower Upper
 163 100
 194 3.8 2.6 3.8
 164 10.1 8.6 12.8





#51

Acenaphthene

Concen: 2.40 ng

RT: 9.74 min Scan# 713

Delta R.T. -0.01 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

Instrument :

BNA_F

ClientSampleId :

WC2-B-5

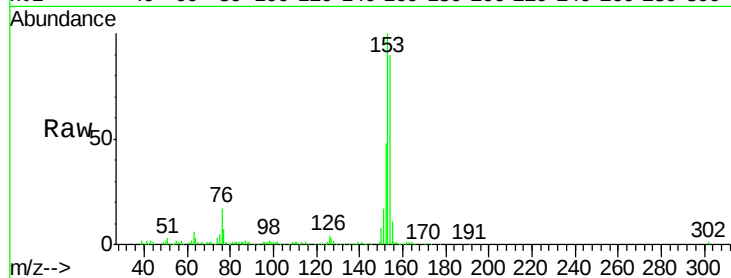
Tgt Ion:154 Resp: 106193

Ion Ratio Lower Upper

154 100

153 111.5 90.5 135.7

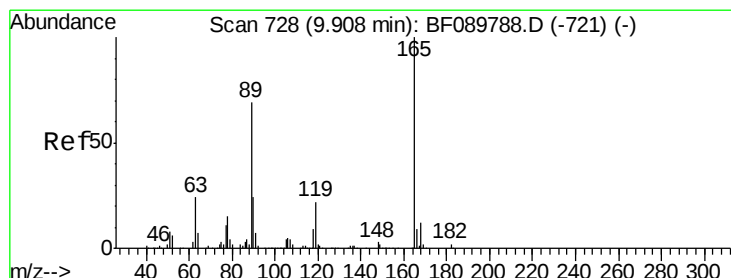
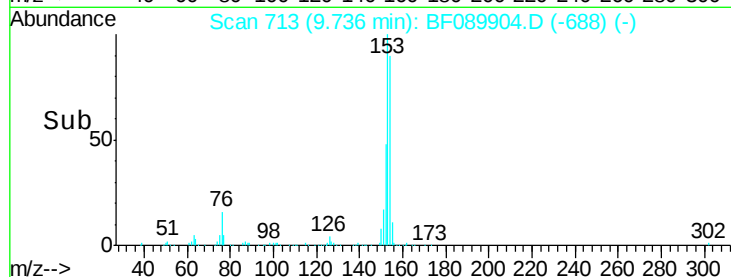
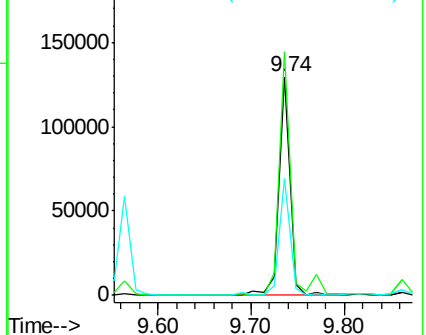
152 53.6 44.6 67.0



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



#56

2,4-Dinitrotoluene

Concen: 6.37 ng

RT: 9.70 min Scan# 710

Delta R.T. -0.21 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

Tgt Ion:165 Resp: 97766

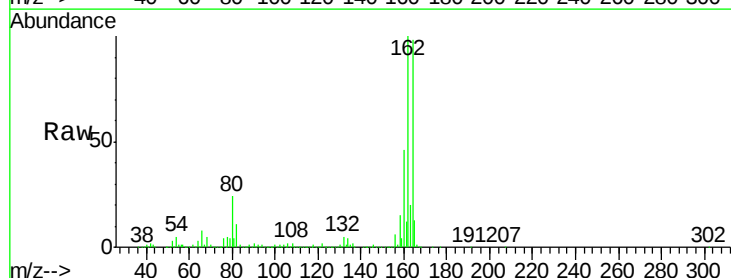
Ion Ratio Lower Upper

165 100

63 1.0 23.7 35.5#

89 1.2 44.0 66.0#

182 0.0 2.0 3.0#

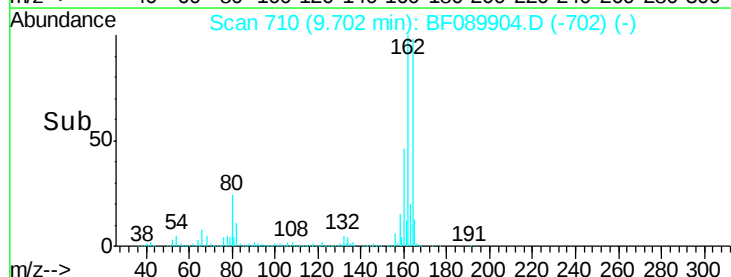
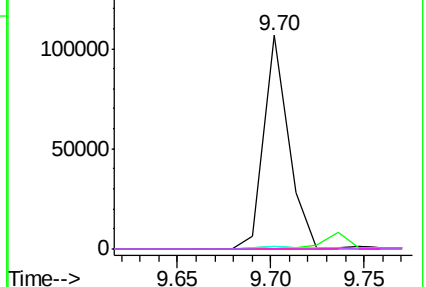


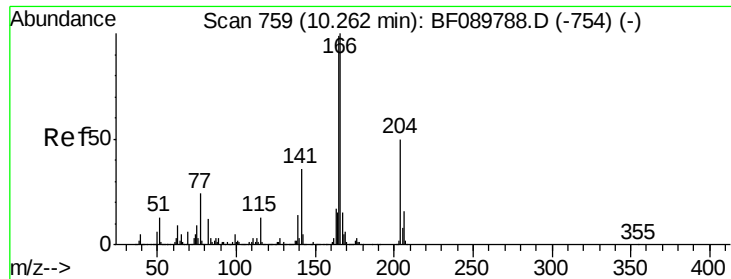
Abundance Ion 165.00 (164.70 to 165.70): E

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

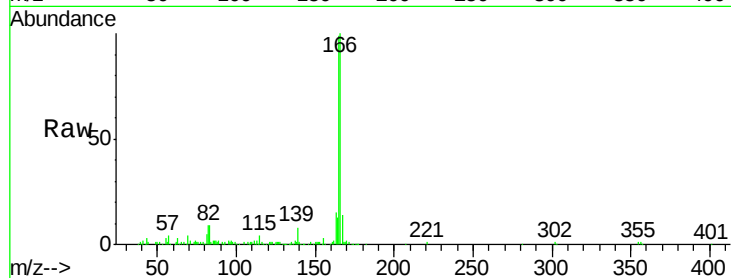




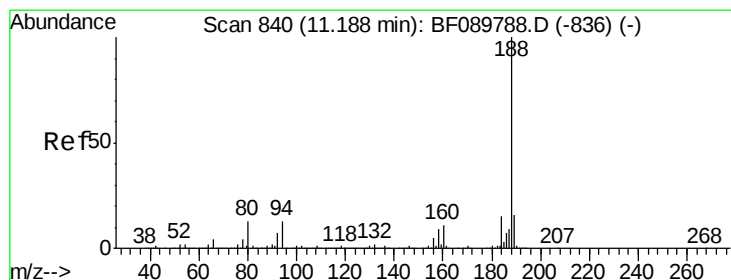
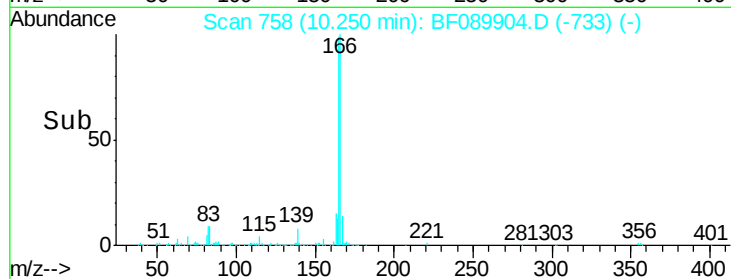
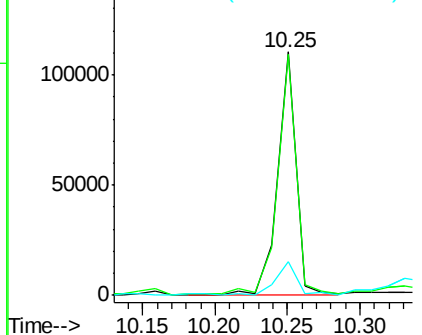
#57
Fluorene
 Concen: 2.21 ng
 RT: 10.25 min Scan# 758
 Delta R.T. -0.01 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Instrument :
 BNA_F
 ClientSampleId :
 WC2-B-5

Tgt Ion	Ratio	Lower	Upper
166	100		
165	99.1	80.2	120.4
167	13.9	11.3	16.9

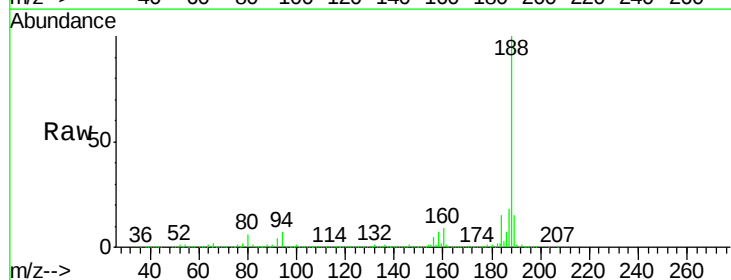


Abundance Ion 166.00 (165.70 to 166.70): E
 Ion 165.00 (164.70 to 165.70): E
 Ion 167.00 (166.70 to 167.70): E

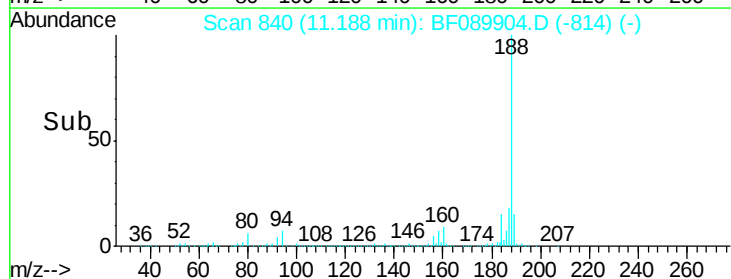
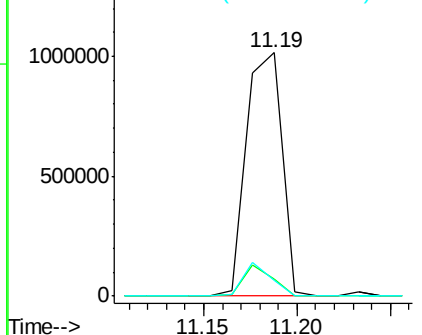


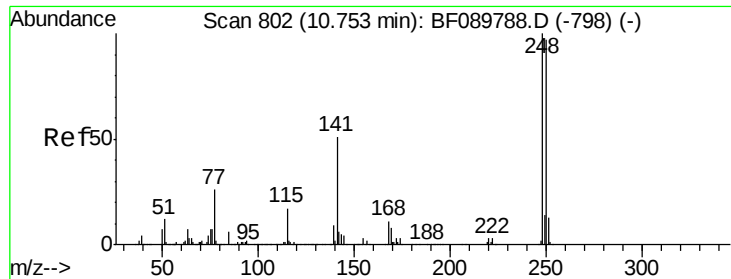
#63
Phenanthrene-d10
 Concen: 20.00 ng
 RT: 11.19 min Scan# 840
 Delta R.T. -0.00 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Tgt Ion	Ratio	Lower	Upper
188	100		
94	6.9	10.2	15.2#
80	6.4	10.9	16.3#



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

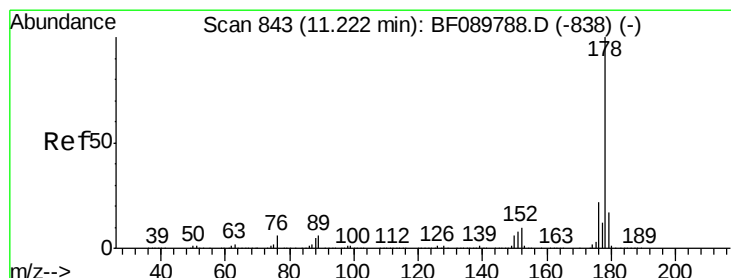
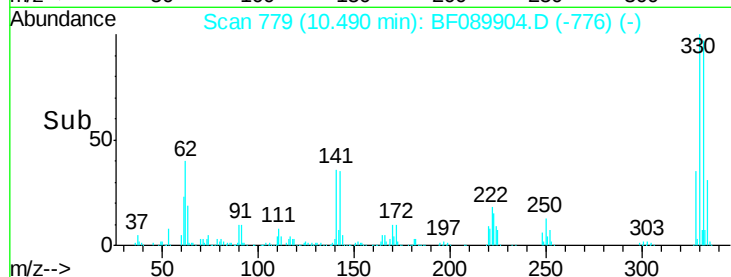
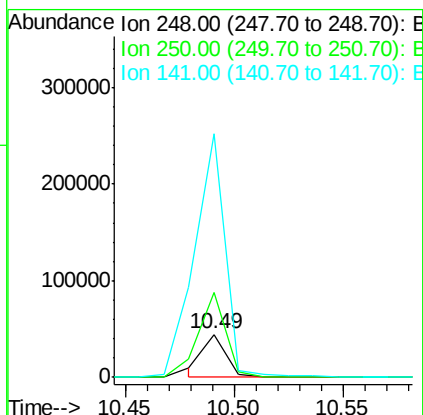
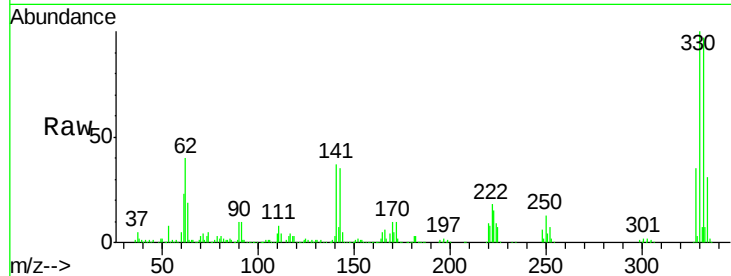




#66
4-Bromophenyl-phenylether
Concen: 2.29 ng
RT: 10.49 min Scan# 779
Delta R.T. -0.26 min
Lab File: BF089904.D
Acq: 25 Aug 2016 5:58

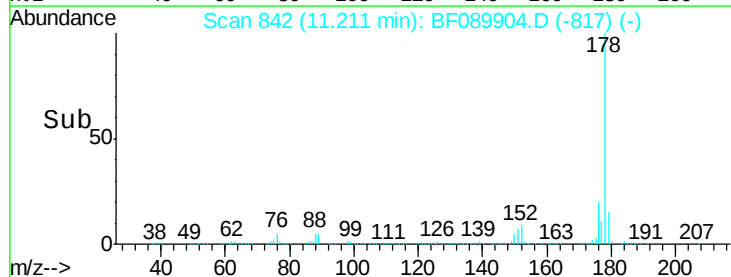
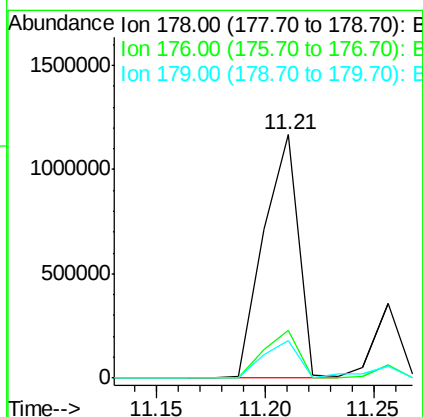
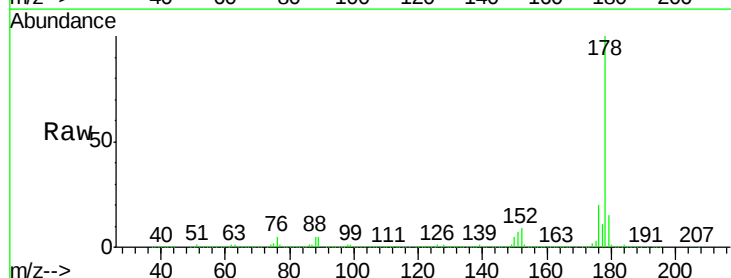
Instrument :
BNA_F
ClientSampleId :
WC2-B-5

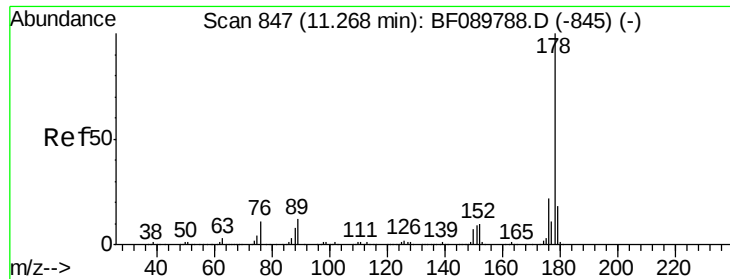
Tgt Ion:248 Resp: 32790
Ion Ratio Lower Upper
248 100
250 198.7 78.6 117.8#
141 566.4 31.4 47.2#



#70
Phenanthrene
Concen: 19.03 ng
RT: 11.21 min Scan# 842
Delta R.T. -0.01 min
Lab File: BF089904.D
Acq: 25 Aug 2016 5:58

Tgt Ion:178 Resp: 1311881
Ion Ratio Lower Upper
178 100
176 19.6 16.4 24.6
179 15.3 12.5 18.7

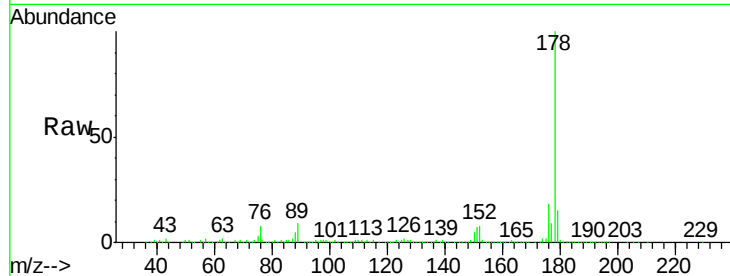




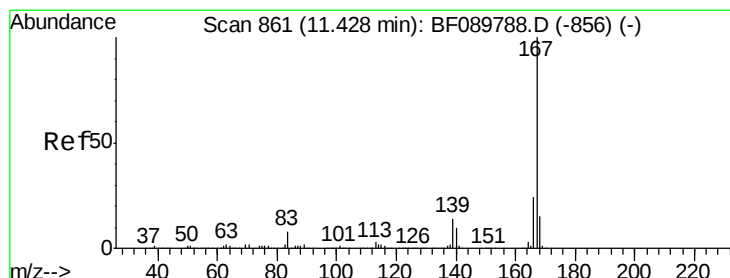
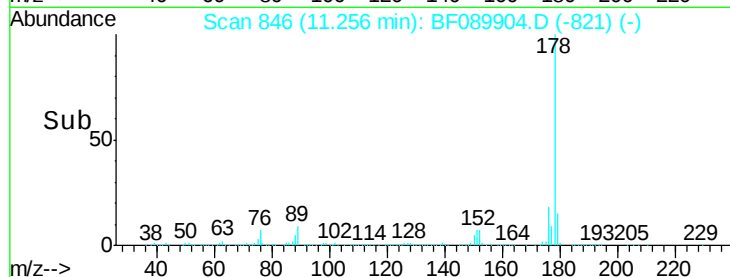
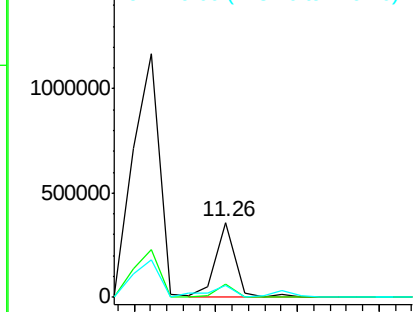
#71
 Anthracene
 Concen: 4.35 ng
 RT: 11.26 min Scan# 846
 Delta R.T. -0.01 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Instrument :
 BNA_F
 ClientSampleId :
 WC2-B-5

Tgt Ion:178 Resp: 304756
 Ion Ratio Lower Upper
 178 100
 176 18.4 16.4 24.6
 179 15.3 13.1 19.7

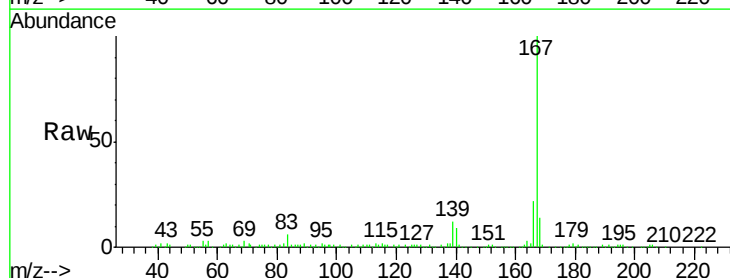


Abundance Ion 178.00 (177.70 to 178.70): E
 Ion 176.00 (175.70 to 176.70): E
 Ion 179.00 (178.70 to 179.70): E

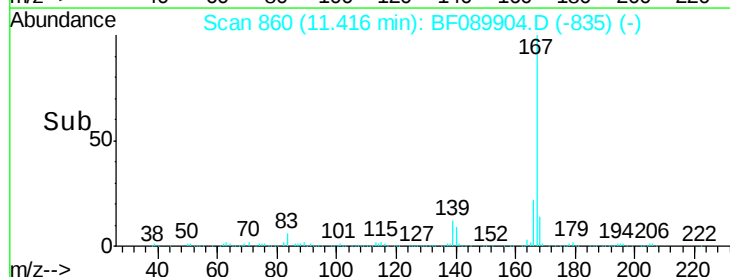
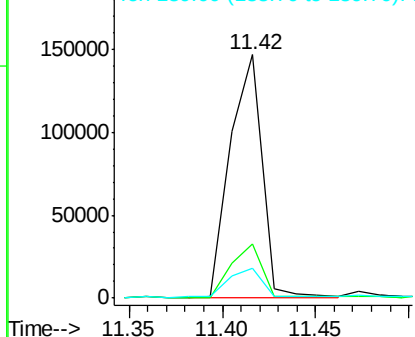


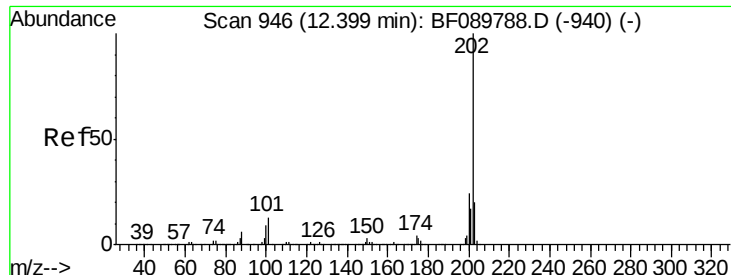
#72
 Carbazole
 Concen: 2.80 ng
 RT: 11.42 min Scan# 860
 Delta R.T. -0.01 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Tgt Ion:167 Resp: 175766
 Ion Ratio Lower Upper
 167 100
 166 22.1 17.9 26.9
 139 12.0 12.4 18.6#



Abundance Ion 167.00 (166.70 to 167.70): E
 Ion 166.00 (165.70 to 166.70): E
 Ion 139.00 (138.70 to 139.70): E





#74

Fluoranthene

Concen: 24.42 ng

RT: 12.39 min Scan# 945

Delta R.T. -0.01 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

Instrument :

BNA_F

ClientSampleId :

WC2-B-5

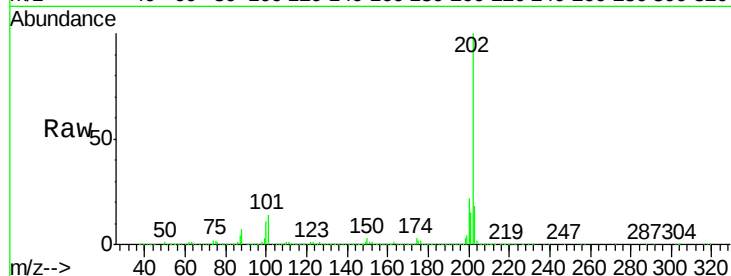
Tgt Ion:202 Resp: 1601562

Ion Ratio Lower Upper

202 100

101 14.5 0.0 31.2

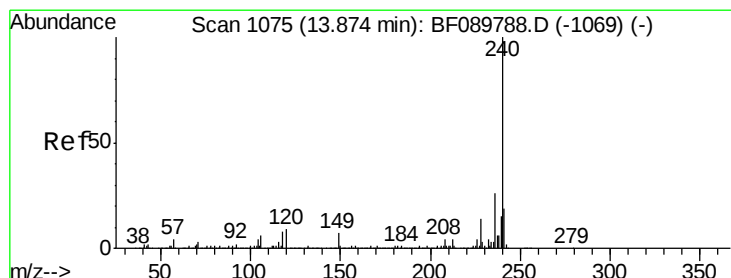
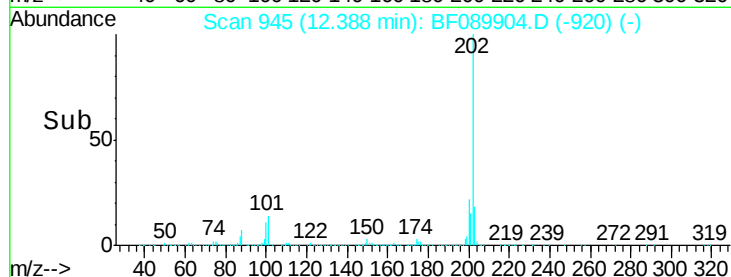
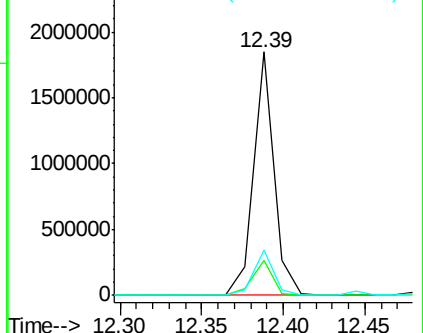
203 18.5 0.0 38.1



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



#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.84 min Scan# 1072

Delta R.T. -0.03 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

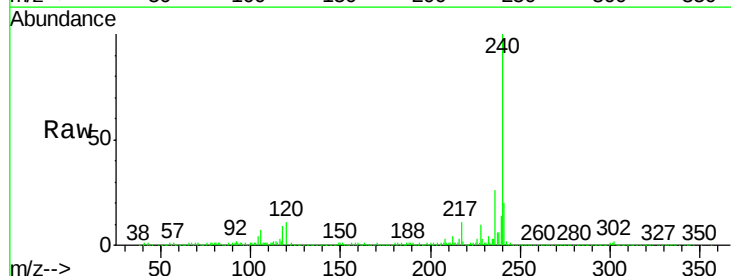
Tgt Ion:240 Resp: 876635

Ion Ratio Lower Upper

240 100

120 10.6 8.3 12.5

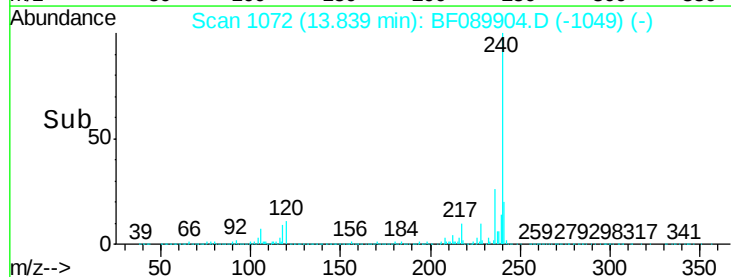
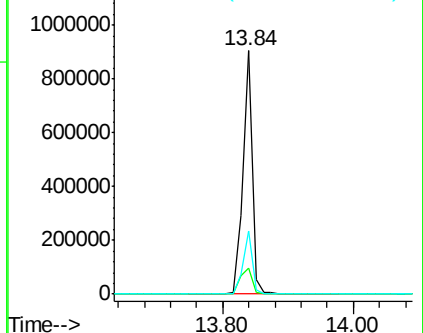
236 26.1 21.3 31.9

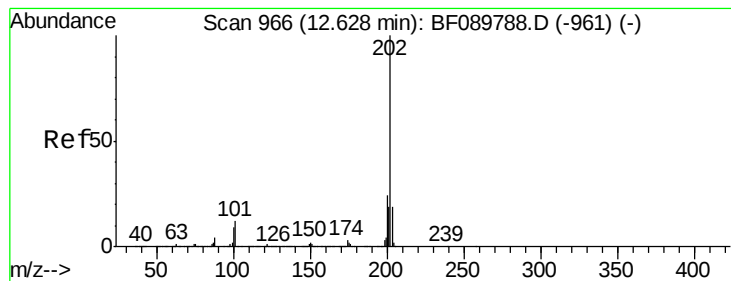


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Pyrene

Concen: 19.95 ng

RT: 12.62 min Scan# 965

Delta R.T. -0.01 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

Instrument :

BNA_F

ClientSampleId :

WC2-B-5

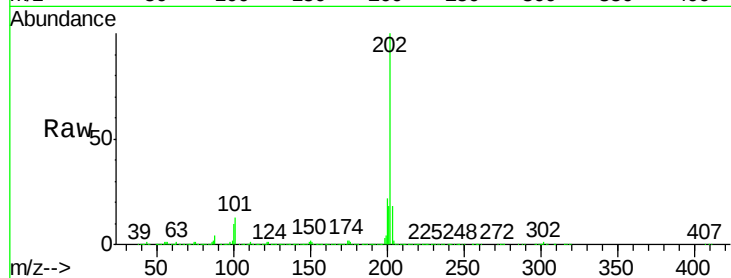
Tgt Ion:202 Resp: 1423864

Ion Ratio Lower Upper

202 100

200 21.6 17.8 26.6

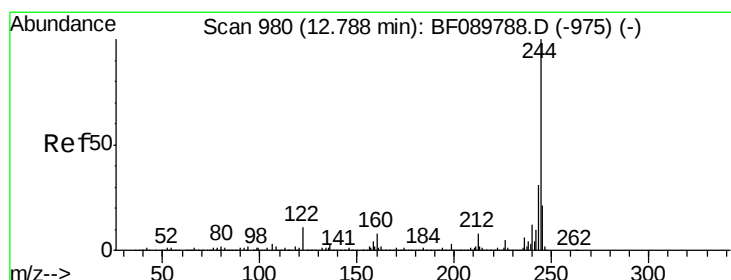
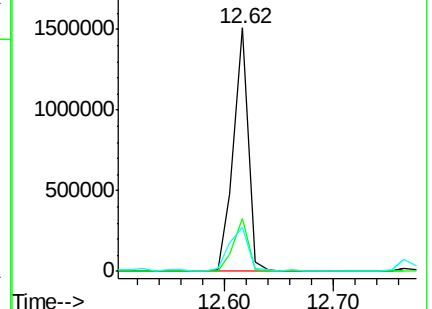
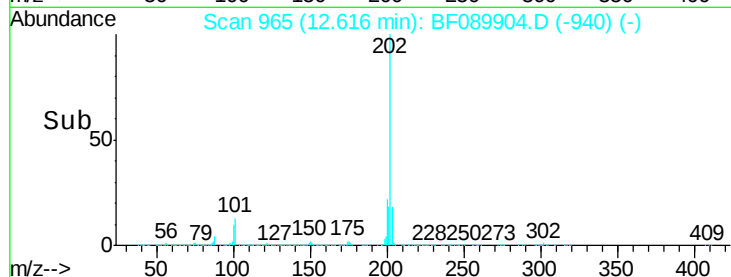
203 18.0 14.2 21.4



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: 60.84 ng

RT: 12.78 min Scan# 979

Delta R.T. -0.01 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

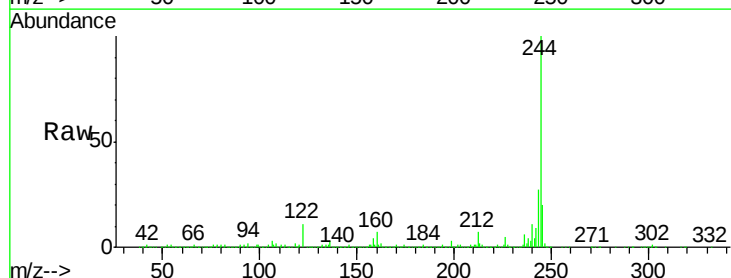
Tgt Ion:244 Resp: 2357696

Ion Ratio Lower Upper

244 100

212 7.3 6.3 9.5

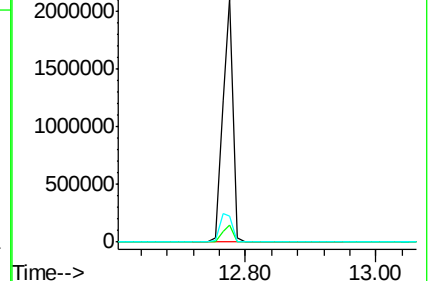
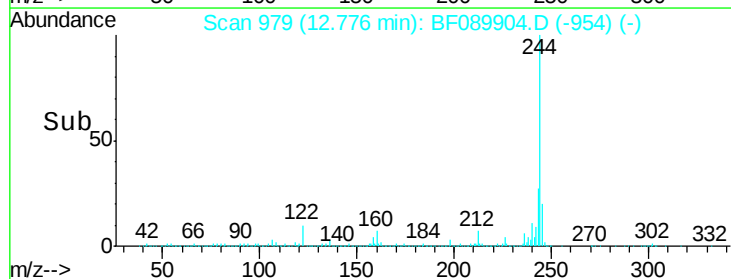
122 10.5 12.0 18.0#

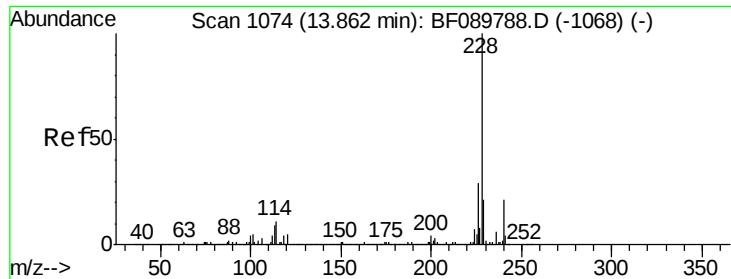


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E

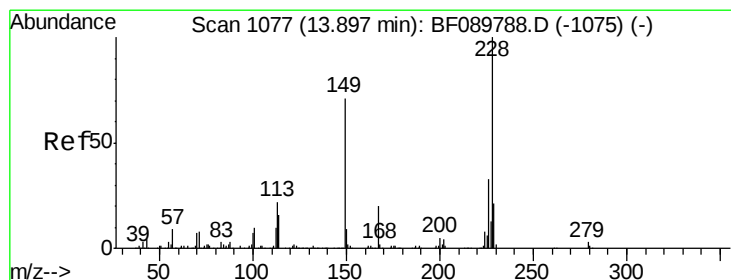
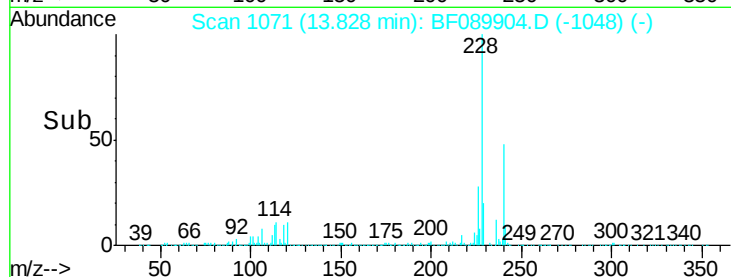
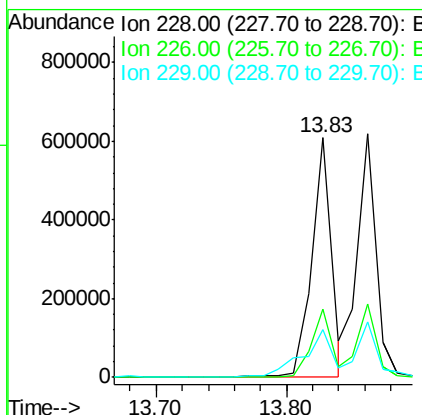
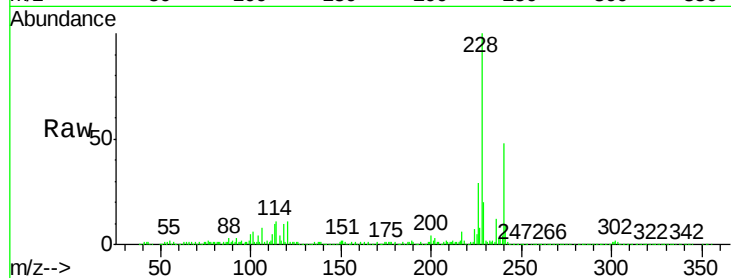




#80
Benzo(a)anthracene
Concen: 12.76 ng
RT: 13.83 min Scan# 1071
Delta R.T. -0.03 min
Lab File: BF089904.D
Acq: 25 Aug 2016 5:58

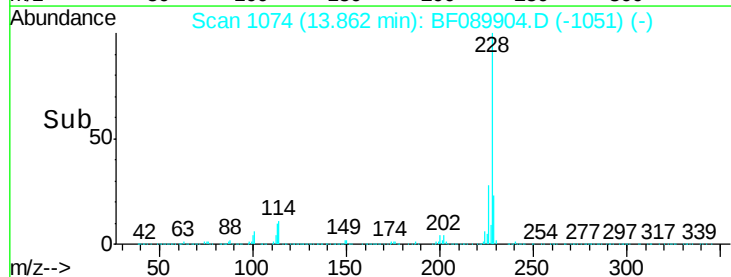
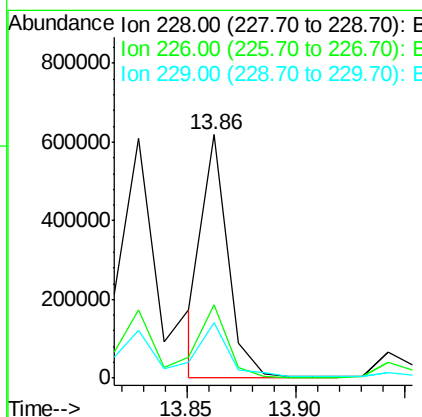
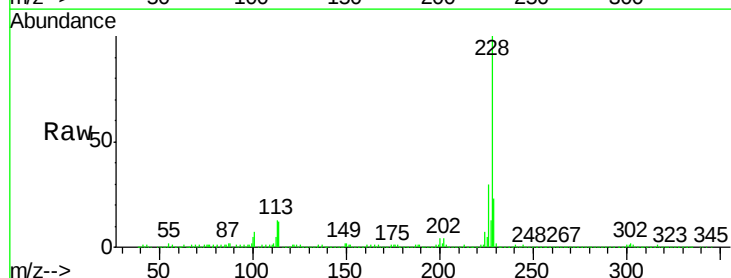
Instrument :
BNA_F
ClientSampleId :
WC2-B-5

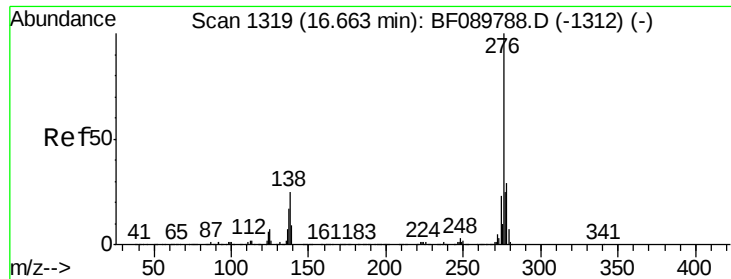
Tgt Ion:228 Resp: 640665
Ion Ratio Lower Upper
228 100
226 28.6 23.2 34.8
229 20.2 16.2 24.4



#82
Chrysene
Concen: 11.46 ng
RT: 13.86 min Scan# 1074
Delta R.T. -0.03 min
Lab File: BF089904.D
Acq: 25 Aug 2016 5:58

Tgt Ion:228 Resp: 493089
Ion Ratio Lower Upper
228 100
226 30.2 25.4 38.0
229 22.9 16.5 24.7

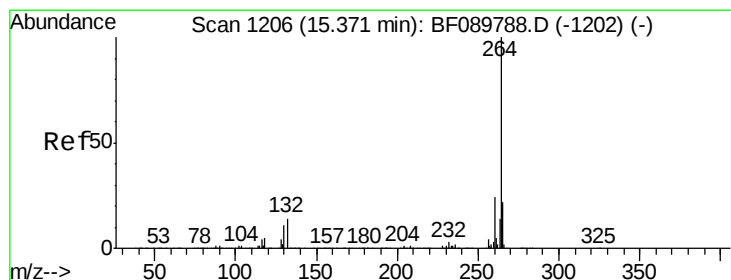
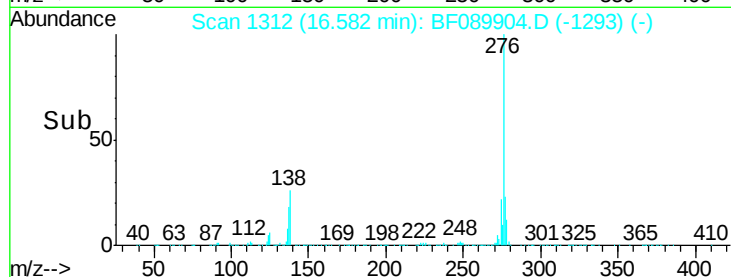
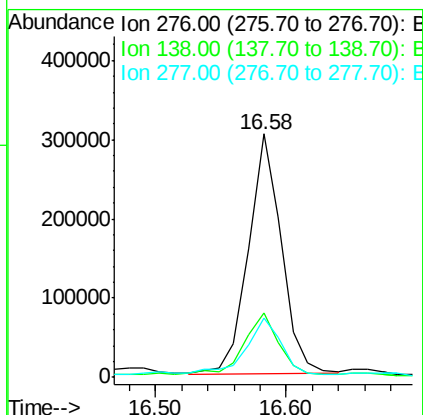
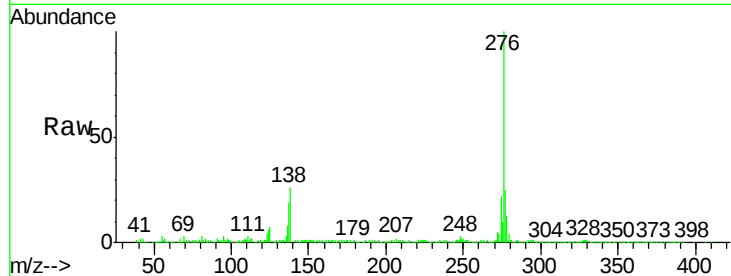




#85
 Indeno(1,2,3-cd)pyrene
 Concen: 9.69 ng
 RT: 16.58 min Scan# 1312
 Delta R.T. -0.08 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

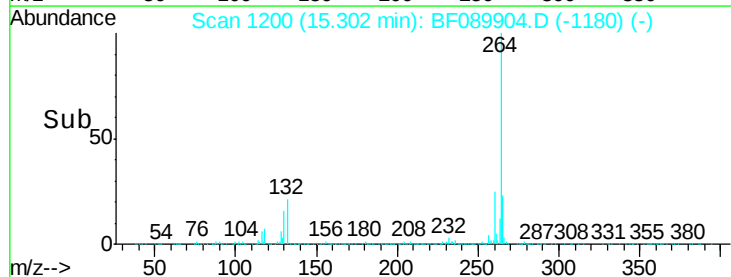
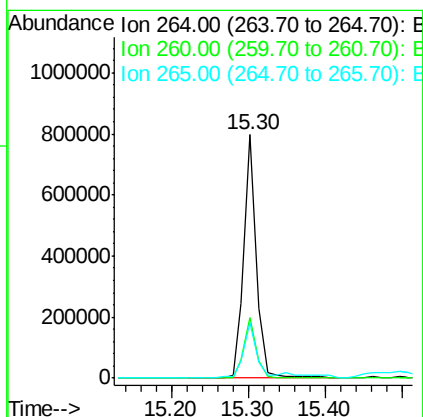
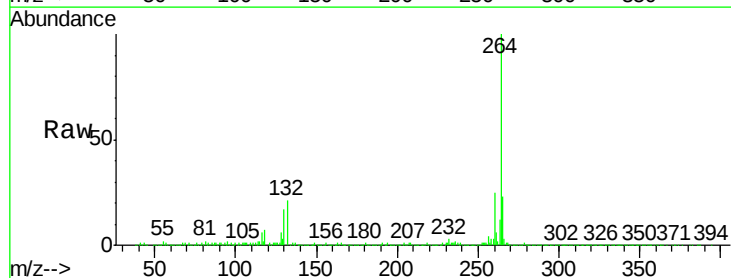
Instrument :
 BNA_F
 ClientSampleId :
 WC2-B-5

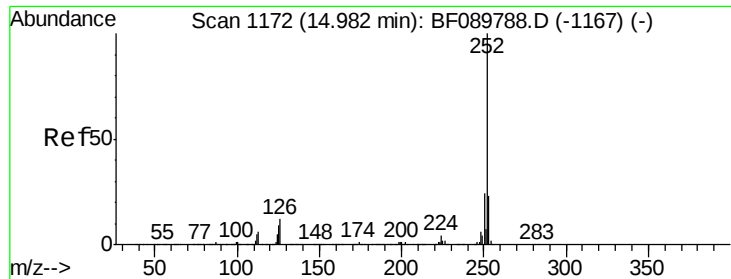
Tgt Ion	Ratio	Lower	Upper
276	100		
138	28.3	24.6	36.8
277	28.5	20.4	30.6



#86
 Perylene-d12
 Concen: 20.00 ng
 RT: 15.30 min Scan# 1200
 Delta R.T. -0.07 min
 Lab File: BF089904.D
 Acq: 25 Aug 2016 5:58

Tgt Ion	Ratio	Lower	Upper
264	100		
260	24.8	20.2	30.2
265	22.7	17.4	26.2





#87

Benzo(b)fluoranthene

Concen: 24.29 ng

RT: 14.93 min Scan# 1167

Delta R.T. -0.06 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

Instrument :

BNA_F

ClientSampleId :

WC2-B-5

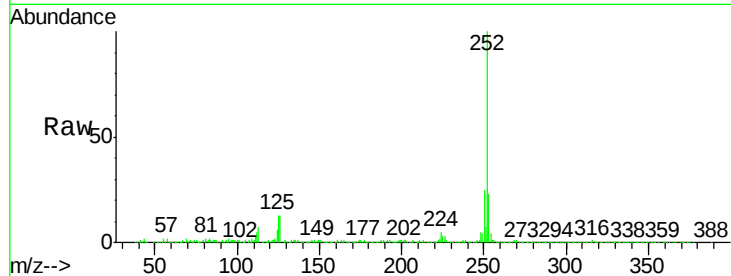
Tgt Ion:252 Resp: 1216528

Ion Ratio Lower Upper

252 100

253 23.0 17.8 26.8

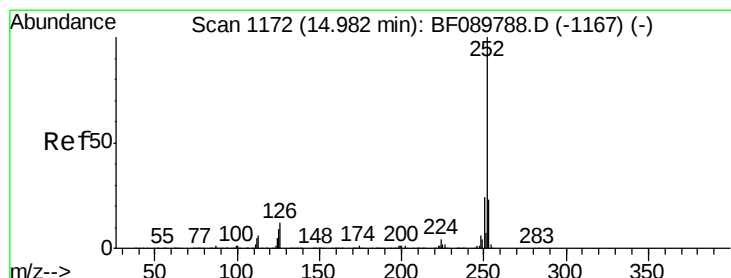
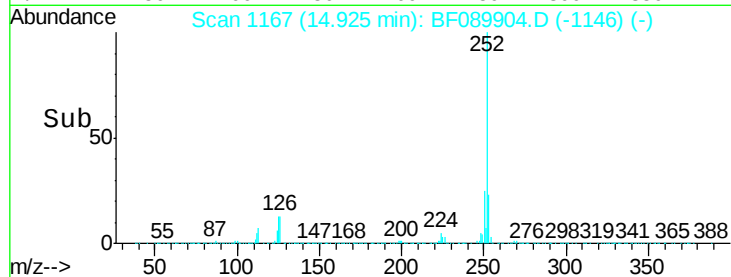
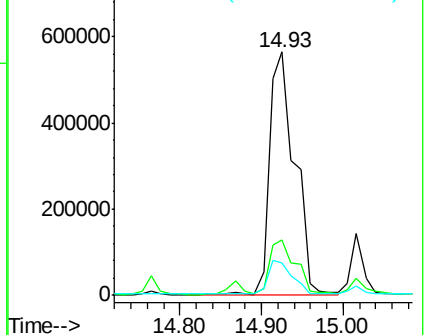
125 13.1 11.4 17.2



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



#88

Benzo(k)fluoranthene

Concen: 26.78 ng

RT: 14.93 min Scan# 1167

Delta R.T. -0.08 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

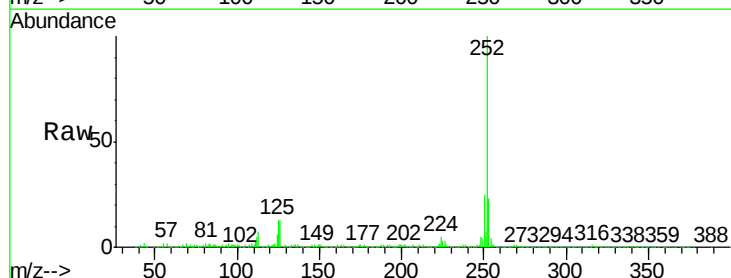
Tgt Ion:252 Resp: 1216528

Ion Ratio Lower Upper

252 100

253 23.0 18.4 27.6

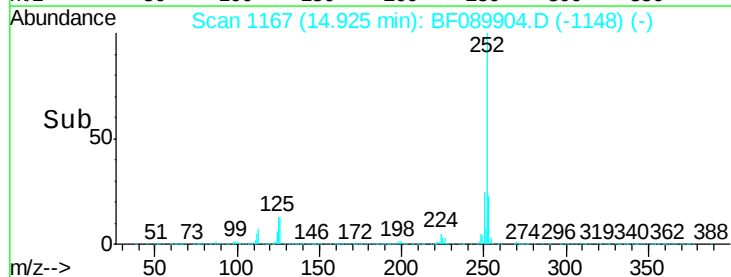
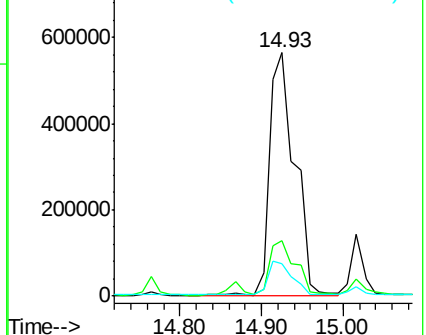
125 13.1 9.8 14.6

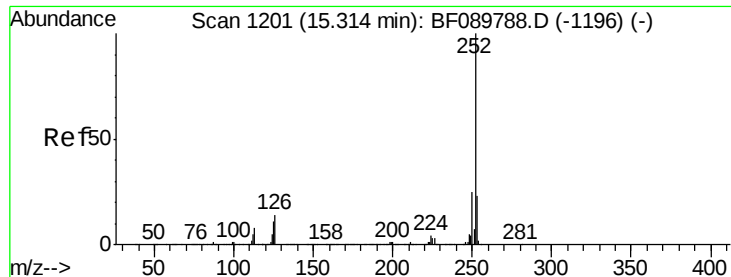


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#89

Benzo(a)pyrene

Concen: 14.50 ng

RT: 15.25 min Scan# 1195

Delta R.T. -0.07 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

Instrument :

BNA_F

ClientSampleId :

WC2-B-5

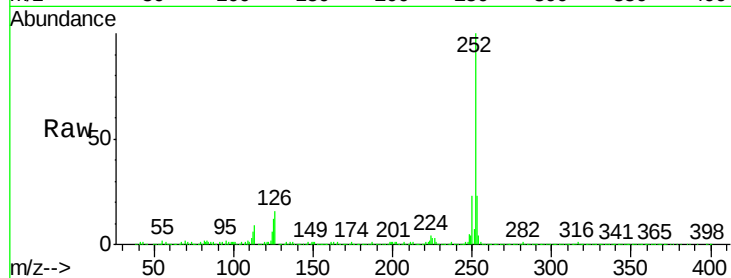
Tgt Ion:252 Resp: 687379

Ion Ratio Lower Upper

252 100

253 23.2 17.8 26.8

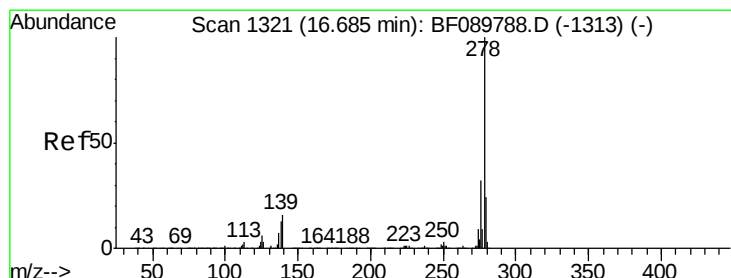
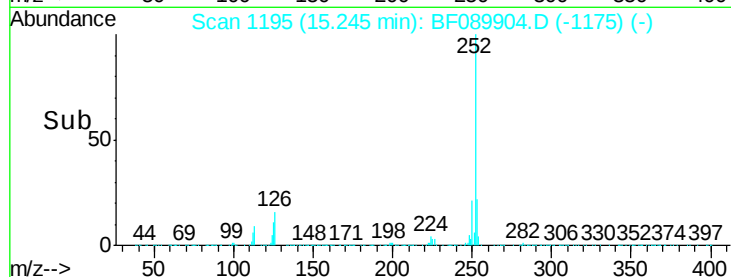
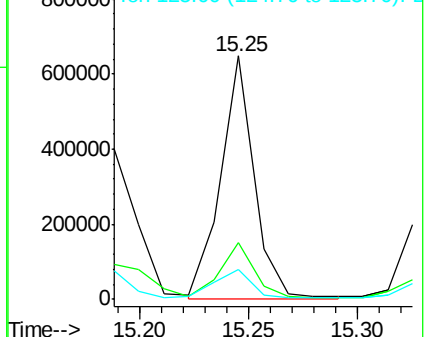
125 12.4 11.7 17.5



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#90

Dibenzo(a,h)anthracene

Concen: 2.03 ng

RT: 16.74 min Scan# 1326

Delta R.T. 0.06 min

Lab File: BF089904.D

Acq: 25 Aug 2016 5:58

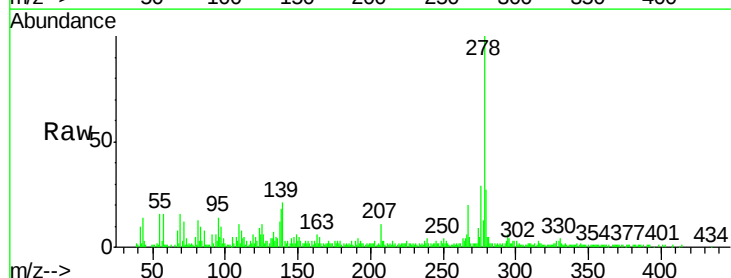
Tgt Ion:278 Resp: 104462

Ion Ratio Lower Upper

278 100

139 20.7 14.9 22.3

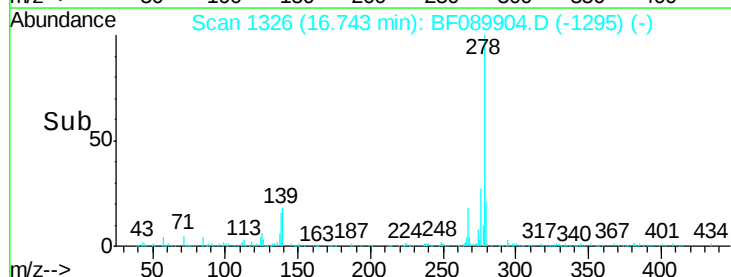
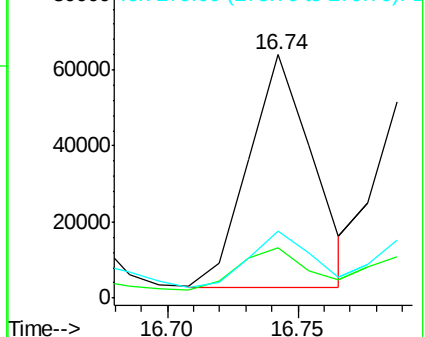
279 27.4 19.2 28.8

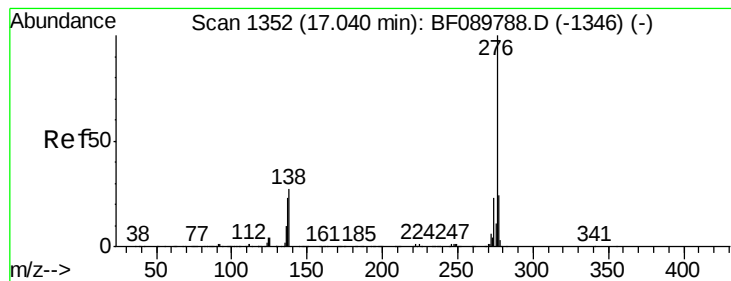


Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E





#91

Benzo(g,h,i)perylene

Concen: 9.70 ng

RT: 16.97 min Scan# 1346

Delta R.T. -0.07 min

Lab File: BF089904.D

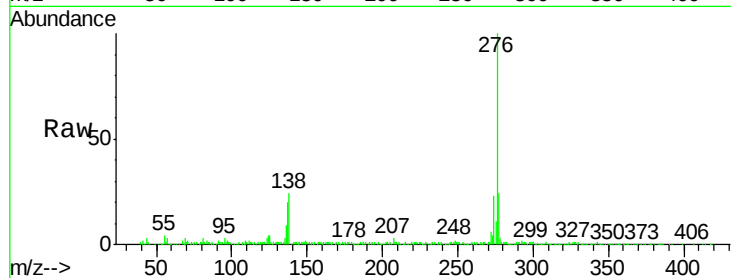
Acq: 25 Aug 2016 5:58

Instrument :

BNA_F

ClientSampleId :

WC2-B-5



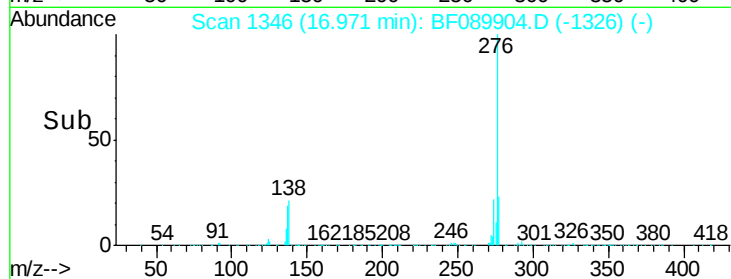
Tgt Ion: 276 Resp: 525396

Ion Ratio Lower Upper

276 100

277 24.3 19.2 28.8

138 23.6 22.1 33.1



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

