

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF110216\
 Data File : BF090987.D
 Acq On : 2 Nov 2016 18:40
 Operator : UM/SJ
 Sample : H5509-02MSD
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SB-91-24.5-25.0MSD

Quant Time: Nov 02 23:12:24 2016
 Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF102616.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Nov 01 11:53:50 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.73	152	173979	20.00	ng	-0.02
21) Naphthalene-d8	8.01	136	726748	20.00	ng	-0.03
38) Acenaphthene-d10	9.77	164	413372	20.00	ng	-0.02
63) Phenanthrene-d10	11.25	188	639341	20.00	ng	-0.01
75) Chrysene-d12	13.88	240	466938	20.00	ng	-0.02
86) Perylene-d12	15.28	264	323018	20.00	ng	-0.02

System Monitoring Compounds

5) 2-Fluorophenol	5.33	112	1693895	170.23	ng	0.00
7) Phenol-d6	6.38	99	2025534	150.88	ng	-0.01
23) Nitrobenzene-d5	7.30	82	1374737	123.83	ng	-0.02
41) 2,4,6-Tribromophenol	10.57	330	681882	160.51	ng	-0.01
44) 2-Fluorobiphenyl	9.09	172	2256633	95.86	ng	-0.02
78) Terphenyl-d14	12.84	244	2443927	131.86	ng	-0.01

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.30	88	165881	32.61	ng	# 67
3) Pyridine	2.98	79	601202	43.56	ng	# 72
4) n-Nitrosodimethylamine	2.94	42	253268	65.19	ng	# 63
6) Aniline	6.46	93	1363023	88.88	ng	# 59
8) 2-Chlorophenol	6.51	128	627098	51.09	ng	# 84
9) Benzaldehyde	6.27	77	82370	11.88	ng	# 79
10) Phenol	6.40	94	828902	56.03	ng	# 66
11) bis(2-Chloroethyl)ether	6.46	93	1375533	112.38	ng	# 91
12) 1,3-Dichlorobenzene	6.66	146	613874	48.89	ng	# 91
13) 1,4-Dichlorobenzene	6.74	146	678456	51.38	ng	# 90
14) 1,2-Dichlorobenzene	6.90	146	636132	50.26	ng	# 96
15) Benzyl Alcohol	6.88	79	532174	60.36	ng	# 76
16) 2,2'-oxybis(1-Chloropropan	7.01	45	745221	61.18	ng	# 59
17) 2-Methylphenol	7.00	107	534595	57.25	ng	# 79
18) Hexachloroethane	7.23	117	241207	50.19	ng	# 90
19) n-Nitroso-di-n-propylamine	7.15	70	443679	57.16	ng	# 72
20) 3+4-Methylphenols	7.16	107	665325	61.54	ng	# 90
22) Acetophenone	7.14	105	851781	56.97	ng	# 83
24) Nitrobenzene	7.31	77	680952	57.99	ng	# 66
25) Isophorone	7.56	82	1303672	57.87	ng	# 92
26) 2-Nitrophenol	7.63	139	345915	54.99	ng	# 63
27) 2,4-Dimethylphenol	7.69	122	608443	59.74	ng	# 85
28) bis(2-Chloroethoxy)methane	7.77	93	784560	61.23	ng	# 93
29) 2,4-Dichlorophenol	7.88	162	557941	59.17	ng	# 97
30) 1,2,4-Trichlorobenzene	7.96	180	571492	52.44	ng	# 99
31) Naphthalene	8.03	128	1723804	50.74	ng	# 97
32) Benzoic acid	7.78	122	41278	5.58	ng	# 75
33) 4-Chloroaniline	8.11	127	492844	35.91	ng	# 89
34) Hexachlorobutadiene	8.16	225	334003	52.12	ng	# 99
35) Caprolactam	8.48	113	95240	32.54	ng	# 75
36) 4-Chloro-3-methylphenol	8.59	107	660819	64.43	ng	# 82
37) 2-Methylnaphthalene	8.73	142	1249697	56.96	ng	# 89
39) 1,2,4,5-Tetrachlorobenzene	8.90	216	621207	54.78	ng	# 99
40) Hexachlorocyclopentadiene	8.89	237	544988	104.46	ng	# 97

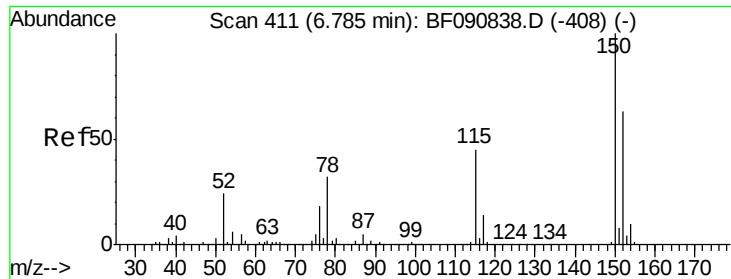
Data Path : Z:\HPCHEM1\BNA_F\DATA\BF110216\
 Data File : BF090987.D
 Acq On : 2 Nov 2016 18:40
 Operator : UM/SJ
 Sample : H5509-02MSD
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SB-91-24.5-25.0MSD

Quant Time: Nov 02 23:12:24 2016
 Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF102616.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Nov 01 11:53:50 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 2,4,6-Trichlorophenol	9.01	196	404159	55.20	ng	99
43) 2,4,5-Trichlorophenol	9.06	196	389550	51.66	ng #	85
45) 1,1'-Biphenyl	9.20	154	1599742	53.73	ng	92
46) 2-Chloronaphthalene	9.22	162	1292422	57.06	ng #	91
47) 2-Nitroaniline	9.32	65	482062	75.43	ng #	76
48) Acenaphthylene	9.63	152	1768990	51.58	ng	95
49) Dimethylphthalate	9.50	163	2270809	82.22	ng #	96
50) 2,6-Dinitrotoluene	9.56	165	305750	50.13	ng #	33
51) Acenaphthene	9.80	154	1043280	44.17	ng	88
52) 3-Nitroaniline	9.73	138	263952	40.65	ng #	59
53) 2,4-Dinitrophenol	9.85	184	161002	50.14	ng #	80
54) Dibenzofuran	9.97	168	1484310	48.70	ng #	84
55) 4-Nitrophenol	9.92	139	443809	112.07	ng #	47
56) 2,4-Dinitrotoluene	9.97	165	450427	59.45	ng #	85
57) Fluorene	10.32	166	1199434	48.04	ng	92
58) 2,3,4,6-Tetrachlorophenol	10.10	232	344212	51.12	ng	92
59) Diethylphthalate	10.20	149	1383175	50.42	ng	98
60) 4-Chlorophenyl-phenylether	10.32	204	601697	49.37	ng	89
61) 4-Nitroaniline	10.35	138	311284	48.40	ng #	43
62) Azobenzene	10.46	77	1679449	62.26	ng	83
64) 4,6-Dinitro-2-methylphenol	10.38	198	224059	52.86	ng #	73
65) n-Nitrosodiphenylamine	10.43	169	1094236	55.87	ng	89
66) 4-Bromophenyl-phenylether	10.80	248	349788	49.96	ng #	89
67) Hexachlorobenzene	10.86	284	427074	51.54	ng #	89
68) Atrazine	10.97	200	332236	54.84	ng	85
69) Pentachlorophenol	11.06	266	420425	94.58	ng	98
70) Phenanthrene	11.32	178	1823007	55.99	ng	95
71) Anthracene	11.32	178	1825324	53.24	ng	96
72) Carbazole	11.48	167	1512667	49.96	ng #	91
73) Di-n-butylphthalate	11.82	149	2165973	55.50	ng #	99
74) Fluoranthene	12.45	202	1724449	48.37	ng	97
76) Benzidine	12.59	184	645032	63.27	ng #	97
77) Pyrene	12.45	202	1712044	57.94	ng	95
79) Butylbenzylphthalate	13.31	149	836884	62.42	ng #	84
80) Benzo(a)anthracene	13.87	228	1408251	56.83	ng	96
81) 3,3'-Dichlorobenzidine	13.84	252	392094	40.76	ng	99
82) Chrysene	13.92	228	1363996	54.42	ng	94
83) Bis(2-ethylhexyl)phthalate	13.87	149	1144225	65.53	ng #	93
84) Di-n-octyl phthalate	14.49	149	1891700	64.52	ng #	93
85) Indeno(1,2,3-cd)pyrene	16.61	276	1144360	51.52	ng #	88
87) Benzo(b)fluoranthene	14.89	252	2201183	101.34	ng #	89
88) Benzo(k)fluoranthene	14.89	252	2201183	128.24	ng #	90
89) Benzo(a)pyrene	15.22	252	990873	53.09	ng #	91
90) Dibenzo(a,h)anthracene	16.63	278	971375	61.48	ng #	80
91) Benzo(g,h,i)perylene	17.00	276	939069	63.11	ng #	79

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



#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.73 min Scan# 406

Delta R.T. -0.02 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Instrument :

BNA_F

ClientSampleId :

SB-91-24.5-25.0MSD

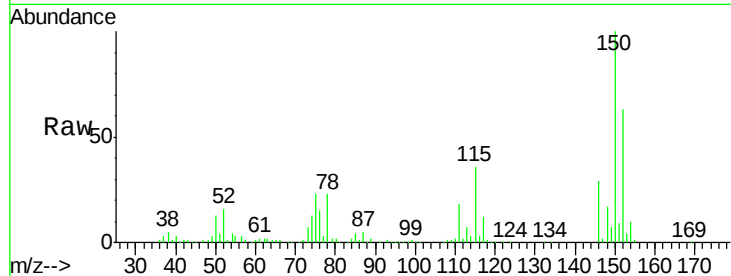
Tgt Ion:152 Resp: 173979

Ion Ratio Lower Upper

152 100

150 157.8 124.7 187.1

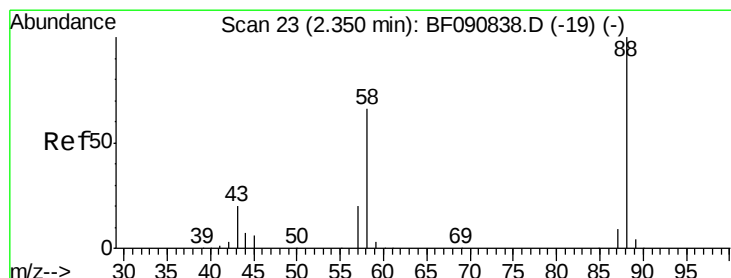
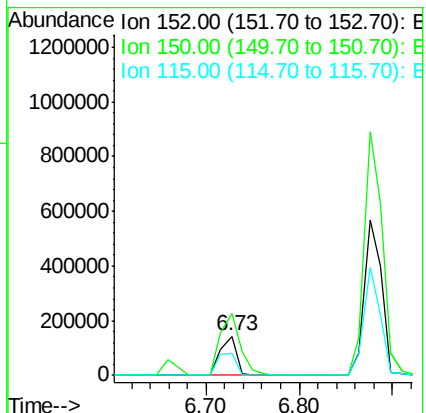
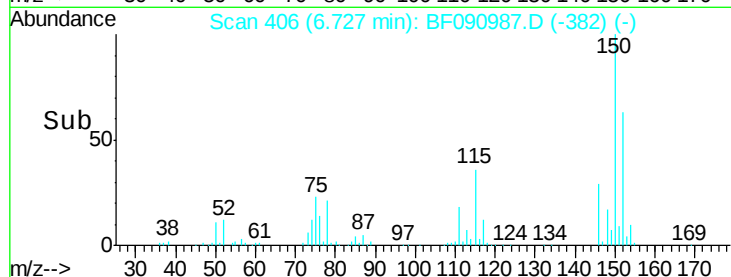
115 56.9 39.0 58.4



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: 32.61 ng

RT: 2.30 min Scan# 19

Delta R.T. 0.06 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

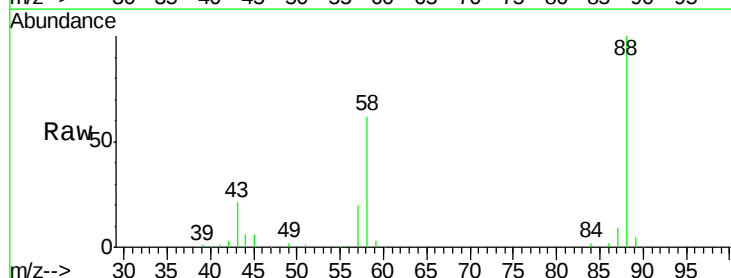
Tgt Ion: 88 Resp: 165881

Ion Ratio Lower Upper

88 100

58 62.6 77.7 116.5#

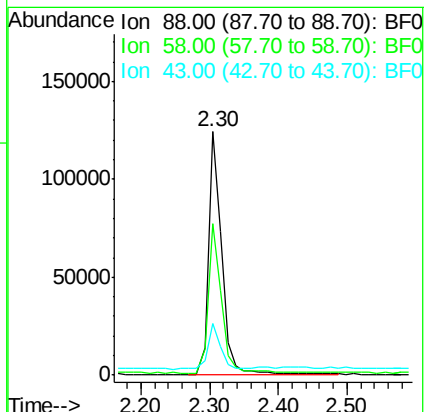
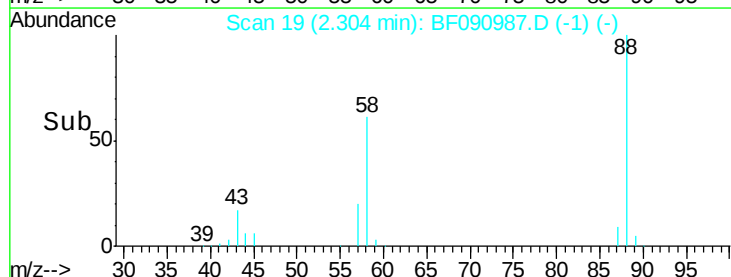
43 17.7 26.6 40.0#

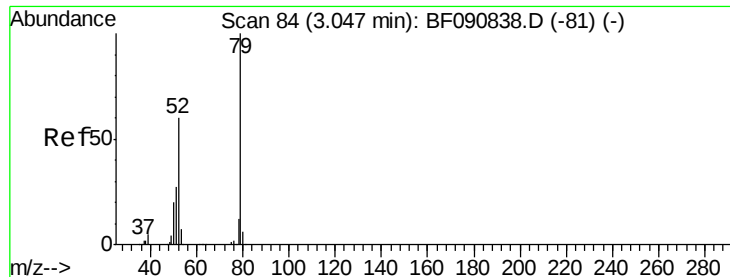


Abundance Ion 88.00 (87.70 to 88.70): BF0

Ion 58.00 (57.70 to 58.70): BF0

Ion 43.00 (42.70 to 43.70): BF0





#3

Pyridine

Concen: 43.56 ng

RT: 2.98 min Scan# 78

Delta R.T. 0.05 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Instrument :

BNA_F

ClientSampleId :

SB-91-24.5-25.0MSD

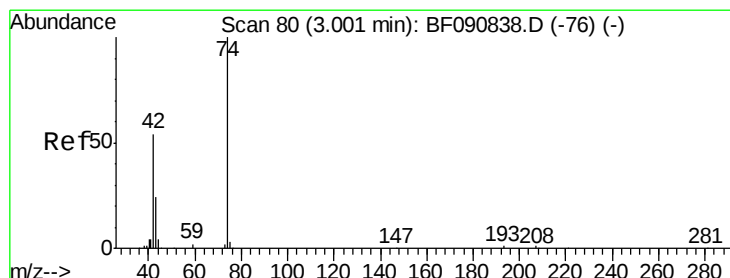
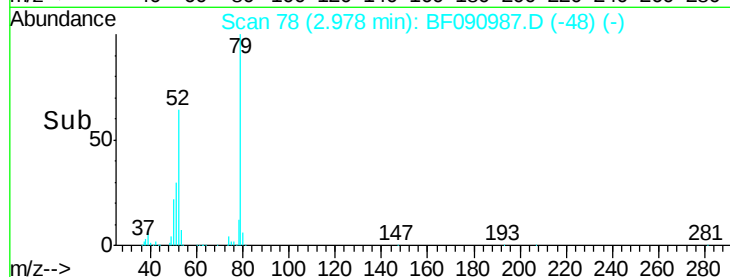
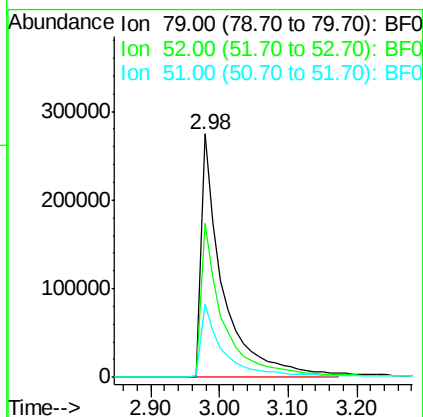
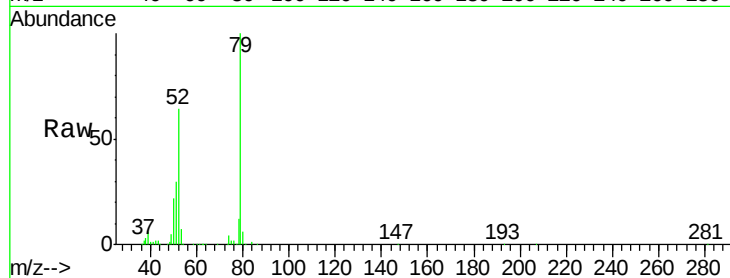
Tgt Ion: 79 Resp: 601202

Ion Ratio Lower Upper

79 100

52 63.5 76.8 115.2#

51 30.1 32.2 48.4#



#4

n-Nitrosodimethylamine

Concen: 65.19 ng

RT: 2.94 min Scan# 75

Delta R.T. 0.06 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

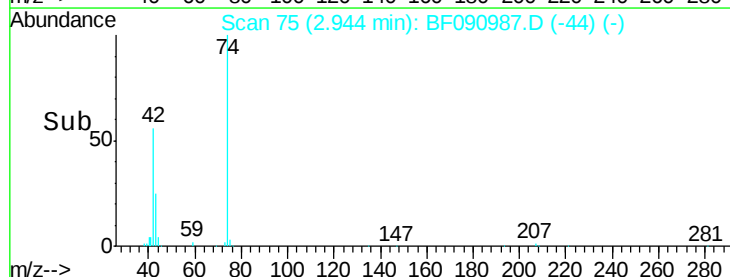
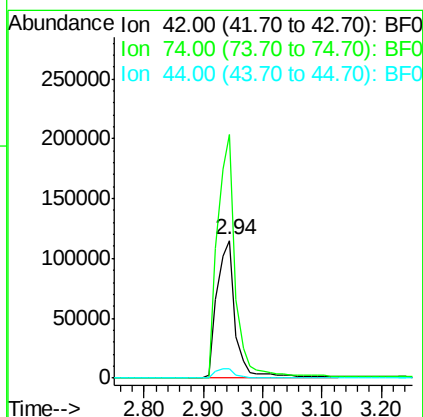
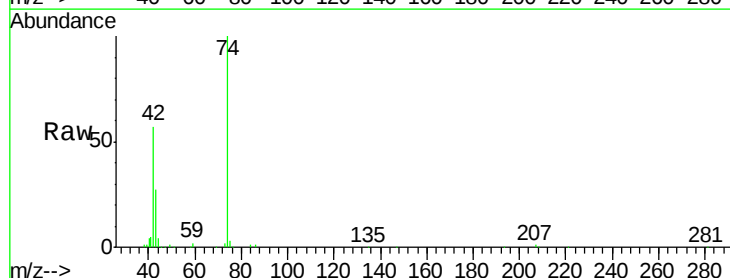
Tgt Ion: 42 Resp: 253268

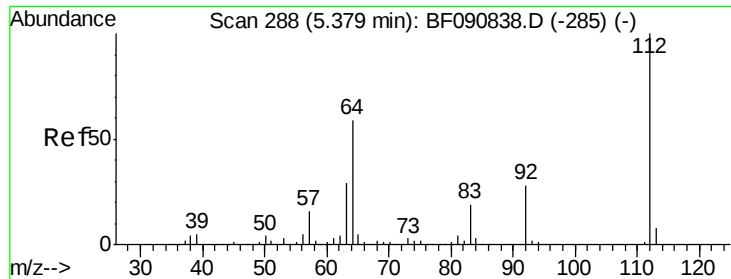
Ion Ratio Lower Upper

42 100

74 176.9 105.0 157.6#

44 7.3 6.6 10.0





#5

2-Fluorophenol

Concen: 170.23 ng

RT: 5.33 min Scan# 284

Delta R.T. -0.00 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Instrument :

BNA_F

ClientSampleId :

SB-91-24.5-25.0MSD

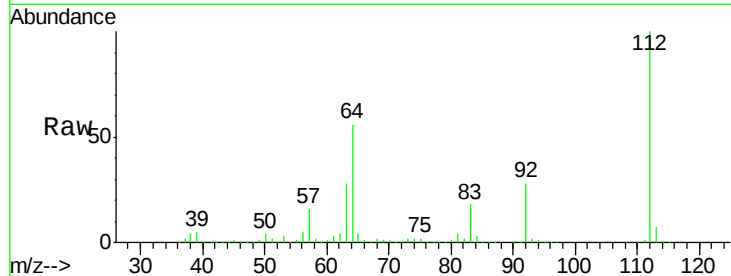
Tgt Ion: 112 Resp: 1693895

Ion Ratio Lower Upper

112 100

64 55.9 39.7 59.5

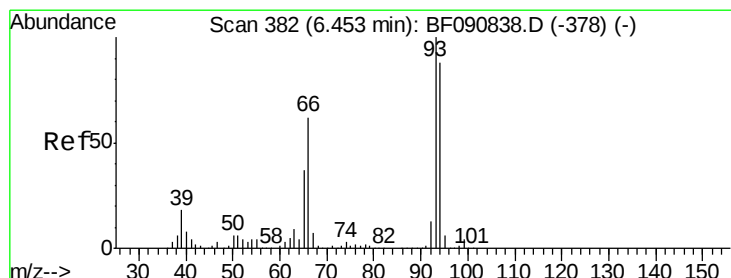
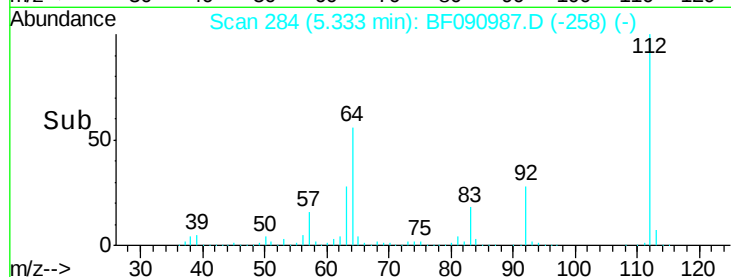
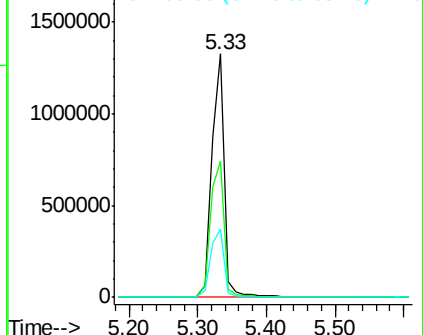
63 28.1 17.4 26.0#



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



#6

Aniline

Concen: 88.88 ng

RT: 6.46 min Scan# 383

Delta R.T. 0.06 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

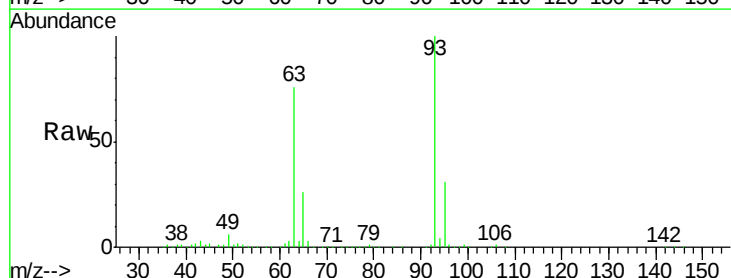
Tgt Ion: 93 Resp: 1363023

Ion Ratio Lower Upper

93 100

66 3.2 27.2 40.8#

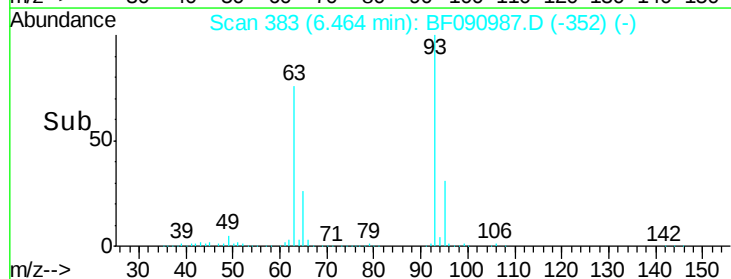
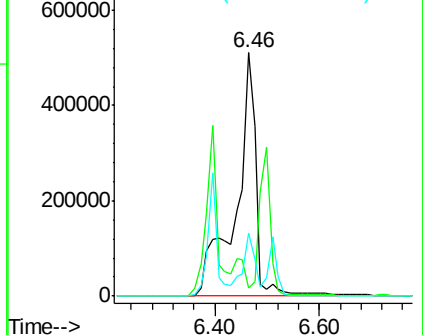
65 25.7 14.7 22.1#

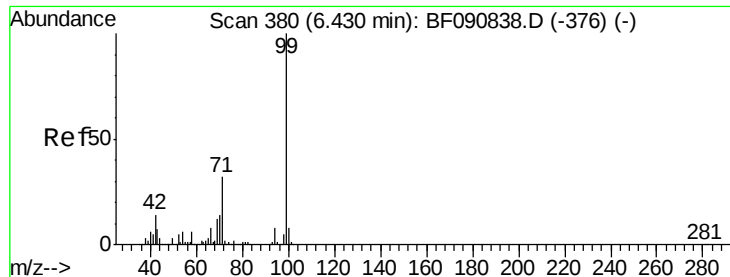


Abundance Ion 93.00 (92.70 to 93.70): BF0

Ion 66.00 (65.70 to 66.70): BF0

Ion 65.00 (64.70 to 65.70): BF0





#7

Phenol-d6

Concen: 150.88 ng

RT: 6.38 min Scan# 376

Delta R.T. -0.01 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Instrument :

BNA_F

ClientSampleId :

SB-91-24.5-25.0MSD

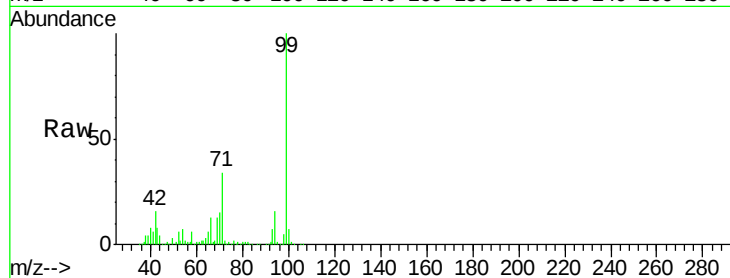
Tgt Ion: 99 Resp: 202534

Ion Ratio Lower Upper

99 100

42 16.0 13.7 20.5

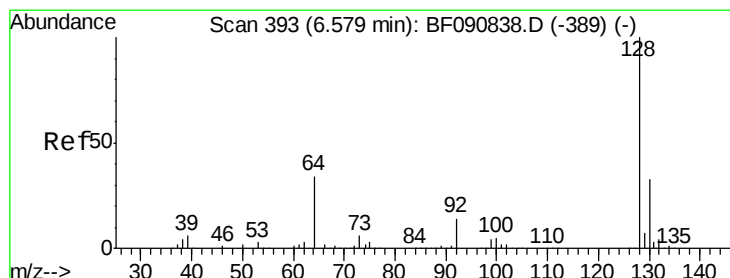
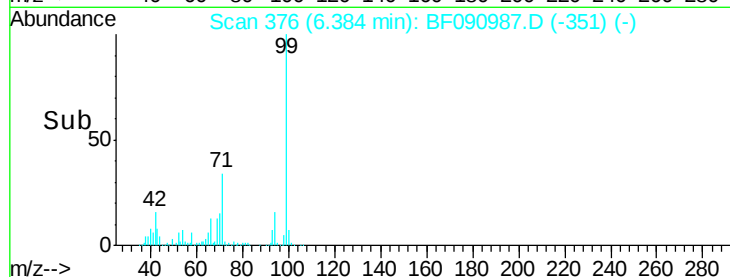
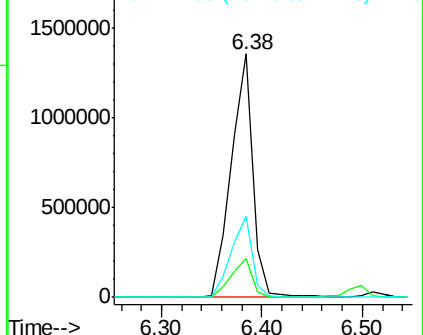
71 33.5 14.2 21.2#



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



#8

2-Chlorophenol

Concen: 51.09 ng

RT: 6.51 min Scan# 387

Delta R.T. -0.02 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

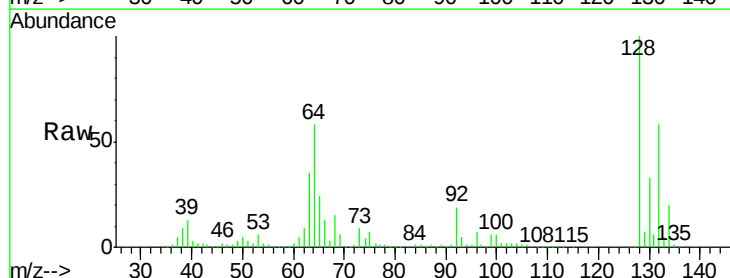
Tgt Ion: 128 Resp: 627098

Ion Ratio Lower Upper

128 100

130 32.5 12.2 52.2

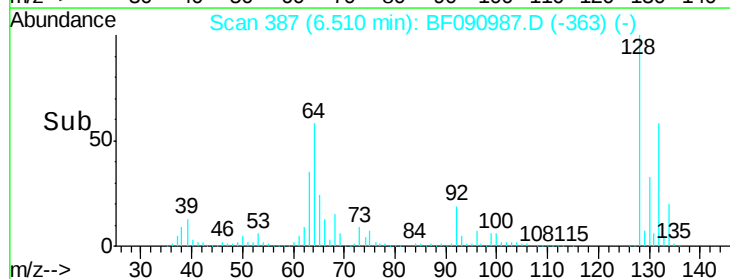
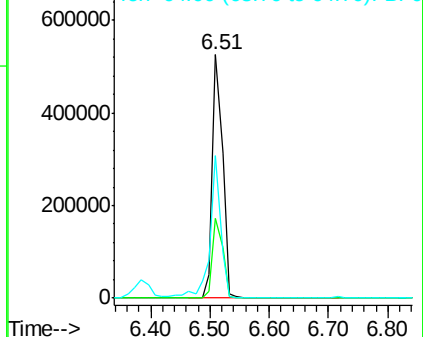
64 58.3 20.5 60.5

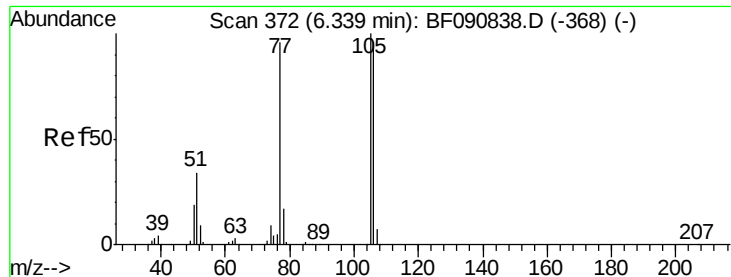


Abundance Ion 128.00 (127.70 to 128.70): E

Ion 130.00 (129.70 to 130.70): E

Ion 64.00 (63.70 to 64.70): BF0





#9

Benzaldehyde

Concen: 11.88 ng

RT: 6.27 min Scan# 366

Delta R.T. -0.02 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Instrument :

BNA_F

ClientSampleId :

SB-91-24.5-25.0MSD

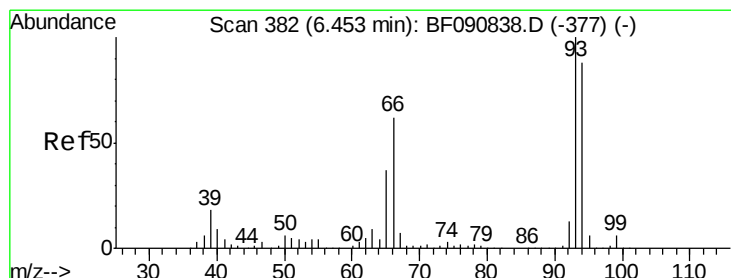
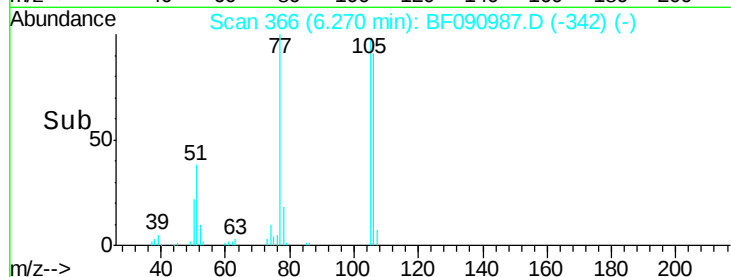
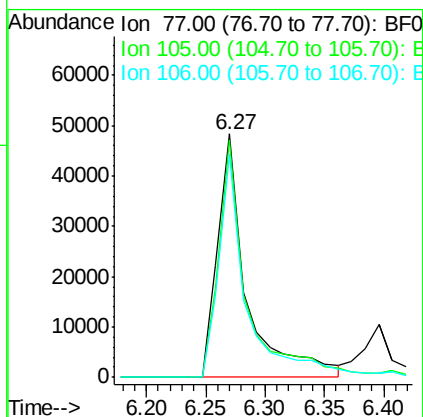
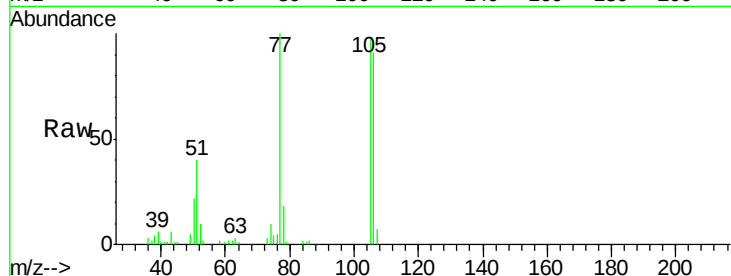
Tgt Ion: 77 Resp: 82370

Ion Ratio Lower Upper

77 100

105 97.6 91.6 131.6

106 91.5 102.6 142.6#



#10

Phenol

Concen: 56.03 ng

RT: 6.40 min Scan# 377

Delta R.T. -0.01 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

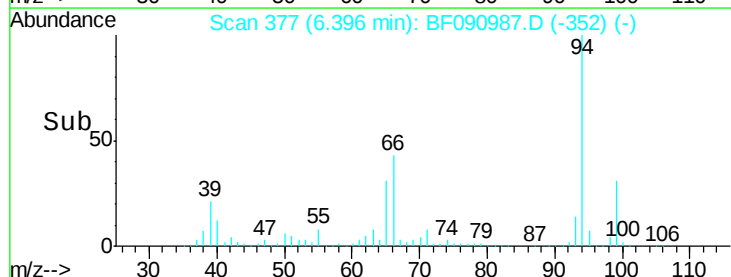
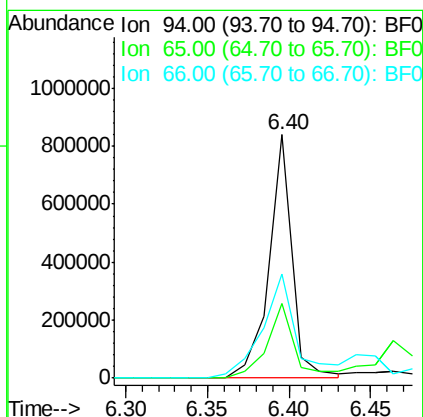
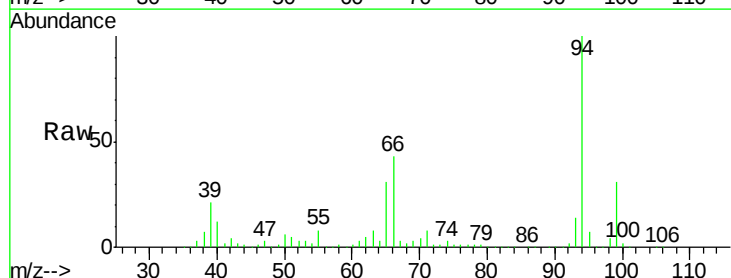
Tgt Ion: 94 Resp: 828902

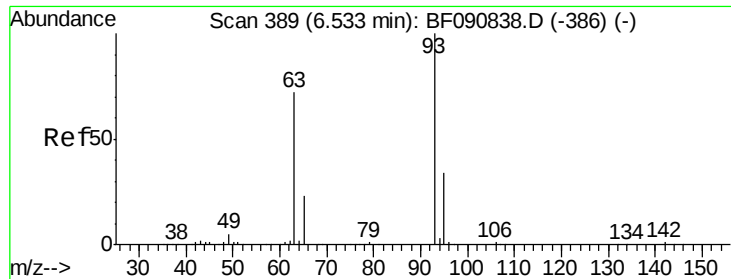
Ion Ratio Lower Upper

94 100

65 30.8 0.7 40.7

66 42.5 0.8 40.8#

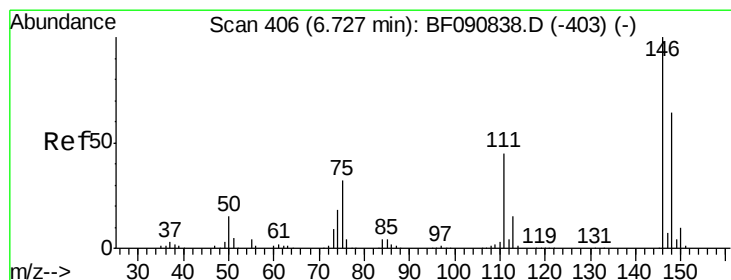
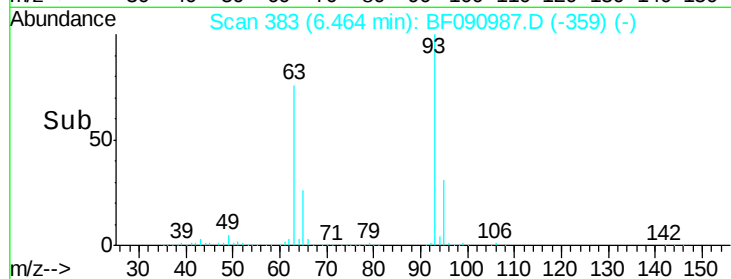
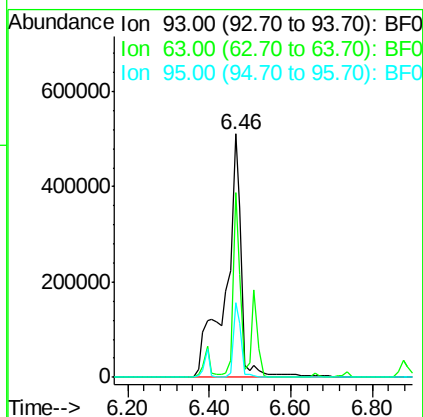
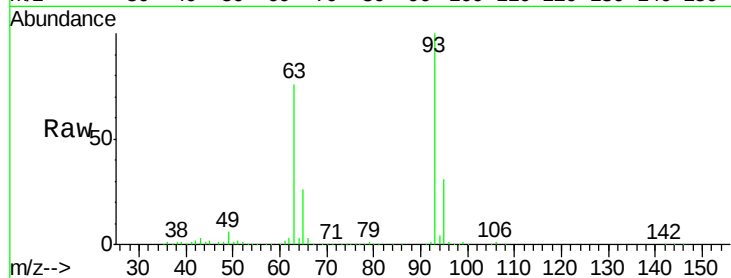




#11
bis(2-Chloroethyl)ether
Concen: 112.38 ng
RT: 6.46 min Scan# 383
Delta R.T. -0.02 min
Lab File: BF090987.D
Acq: 2 Nov 2016 18:40

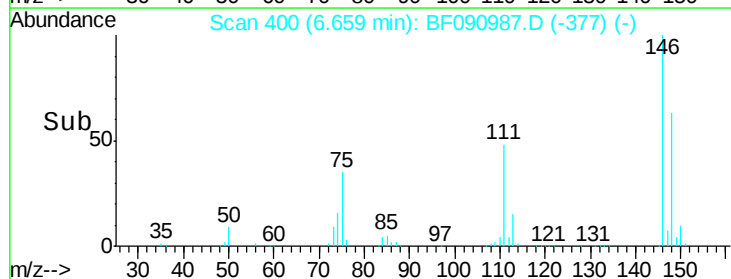
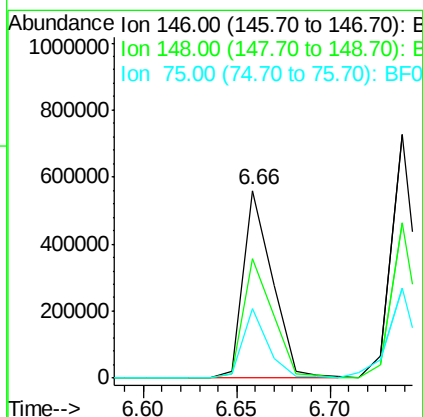
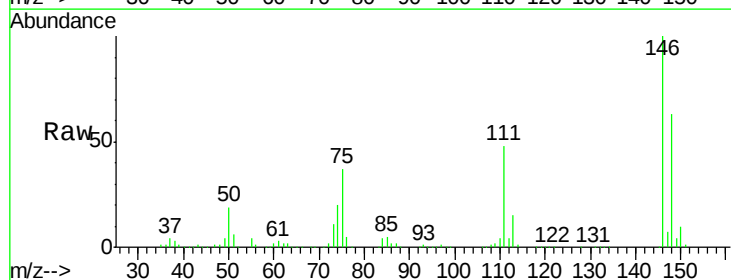
Instrument :
BNA_F
ClientSampleId :
SB-91-24.5-25.0MSD

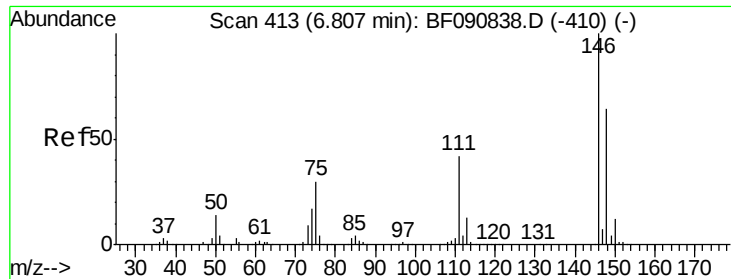
Tgt Ion: 93 Resp: 1375533
Ion Ratio Lower Upper
93 100
63 75.8 65.6 105.6
95 30.6 13.6 53.6



#12
1,3-Dichlorobenzene
Concen: 48.89 ng
RT: 6.66 min Scan# 400
Delta R.T. -0.03 min
Lab File: BF090987.D
Acq: 2 Nov 2016 18:40

Tgt Ion: 146 Resp: 613874
Ion Ratio Lower Upper
146 100
148 63.3 51.0 76.4
75 36.8 15.0 22.6#

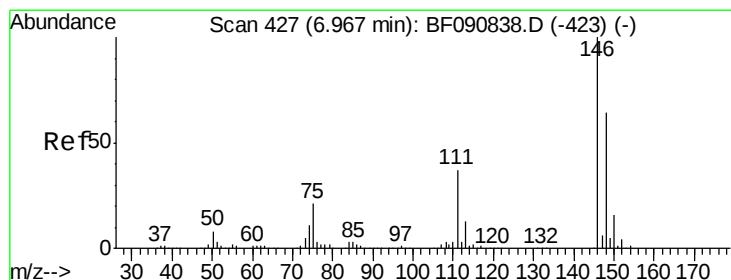
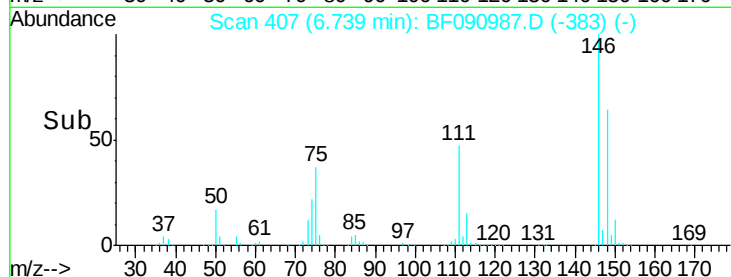
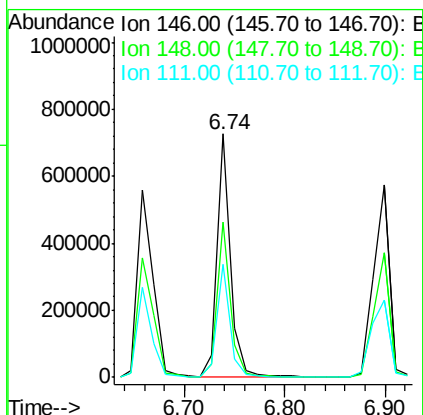
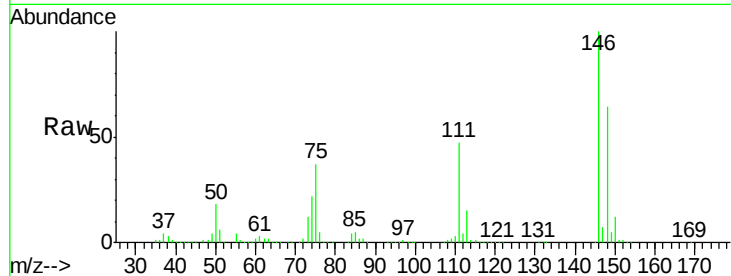




#13
 1,4-Dichlorobenzene
 Concen: 51.38 ng
 RT: 6.74 min Scan# 407
 Delta R.T. -0.02 min
 Lab File: BF090987.D
 Acq: 2 Nov 2016 18:40

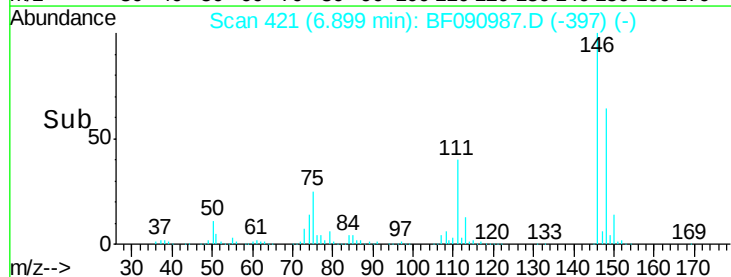
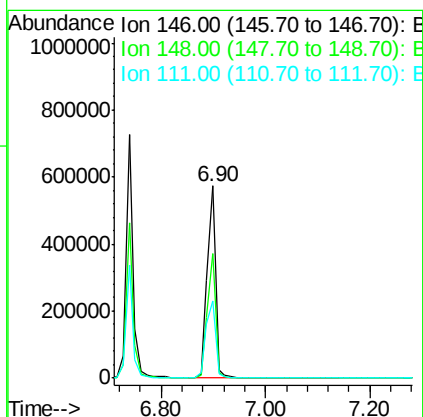
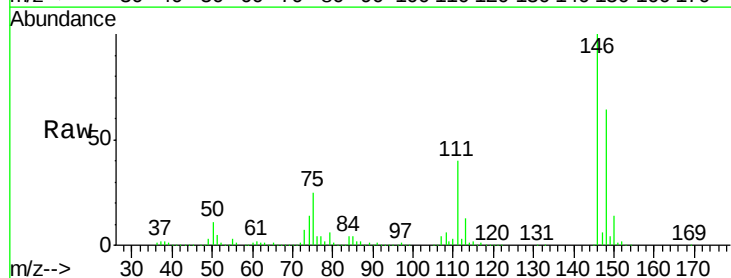
Instrument :
 BNA_F
 ClientSampleId :
 SB-91-24.5-25.0MSD

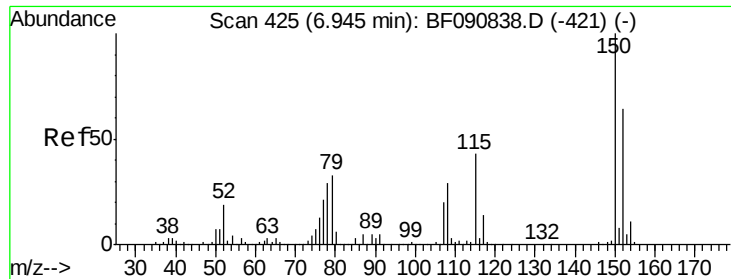
Tgt Ion:146 Resp: 678456
 Ion Ratio Lower Upper
 146 100
 148 63.8 51.8 77.6
 111 46.6 24.9 37.3#



#14
 1,2-Dichlorobenzene
 Concen: 50.26 ng
 RT: 6.90 min Scan# 421
 Delta R.T. -0.02 min
 Lab File: BF090987.D
 Acq: 2 Nov 2016 18:40

Tgt Ion:146 Resp: 636132
 Ion Ratio Lower Upper
 146 100
 148 64.5 52.7 79.1
 111 40.4 28.8 43.2





#15

Benzyl Alcohol

Concen: 60.36 ng

RT: 6.88 min Scan# 419

Delta R.T. -0.02 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Instrument :

BNA_F

ClientSampleId :

SB-91-24.5-25.0MSD

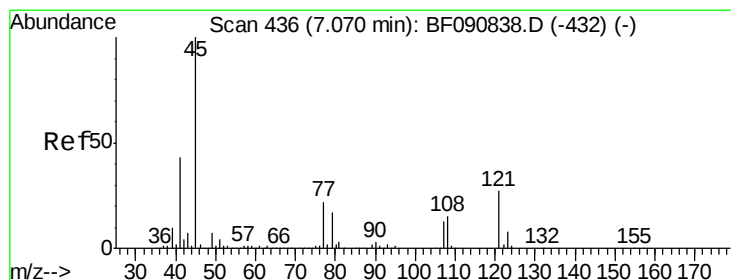
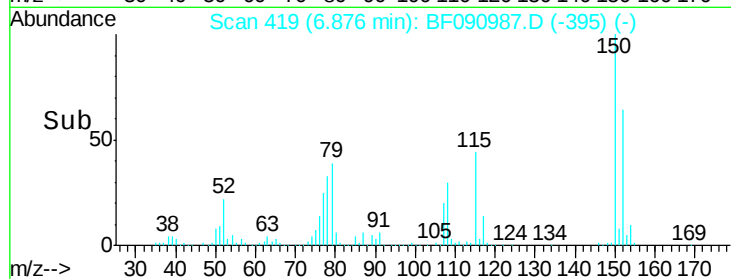
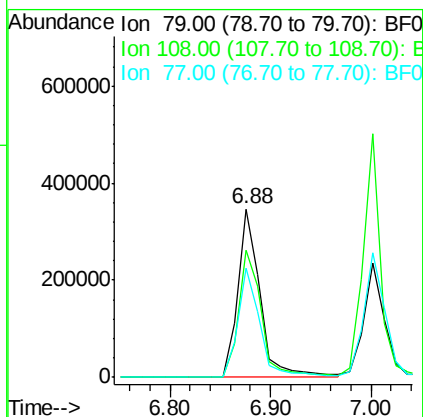
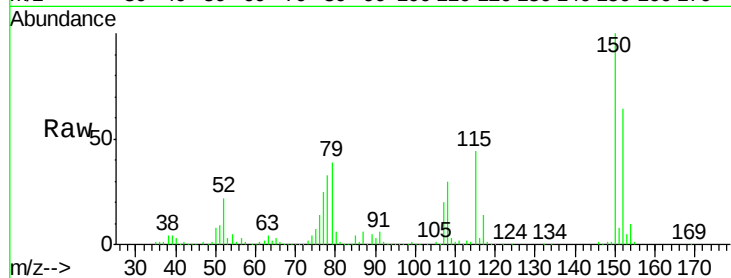
Tgt Ion: 79 Resp: 532174

Ion Ratio Lower Upper

79 100

108 75.9 88.6 132.8#

77 64.7 47.0 70.4



#16

2,2'-oxybis(1-Chloropropane)

Concen: 61.18 ng

RT: 7.01 min Scan# 431

Delta R.T. -0.02 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

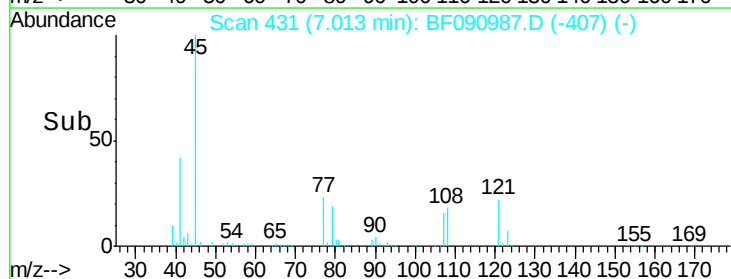
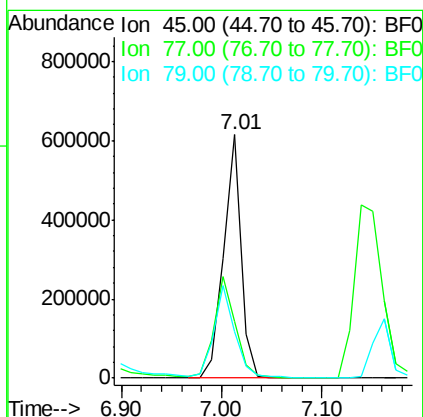
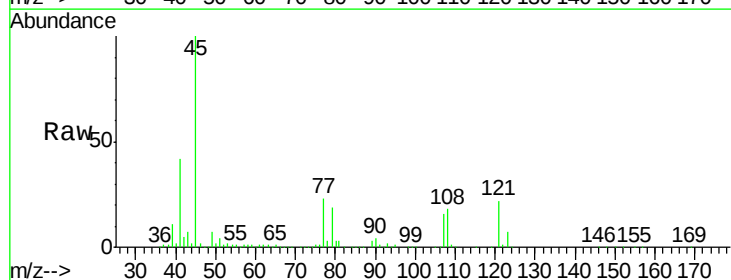
Tgt Ion: 45 Resp: 745221

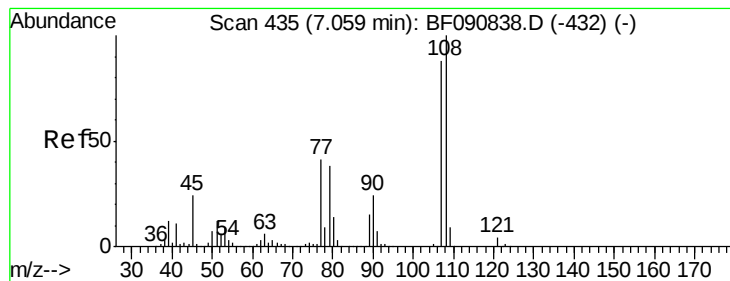
Ion Ratio Lower Upper

45 100

77 23.1 0.0 28.1

79 19.4 0.0 26.0





#17

2-Methylphenol

Concen: 57.25 ng

RT: 7.00 min Scan# 430

Delta R.T. -0.01 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Instrument :

BNA_F

ClientSampleId :

SB-91-24.5-25.0MSD

Tgt Ion:107 Resp: 534595

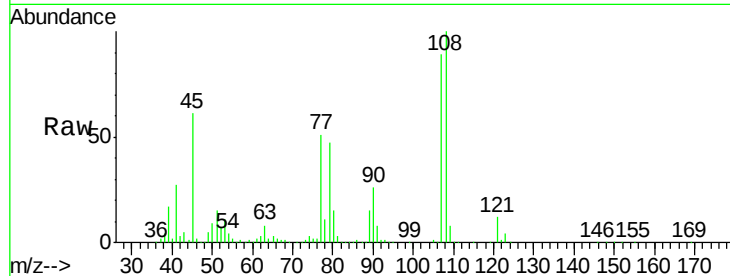
Ion Ratio Lower Upper

107 100

108 112.1 96.6 145.0

77 57.2 23.3 34.9#

79 52.6 22.0 33.0#



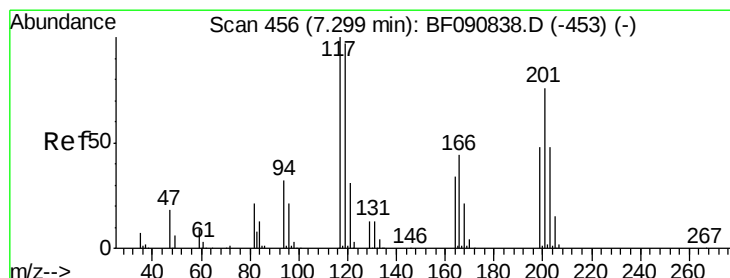
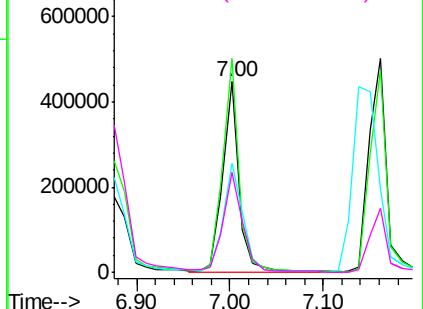
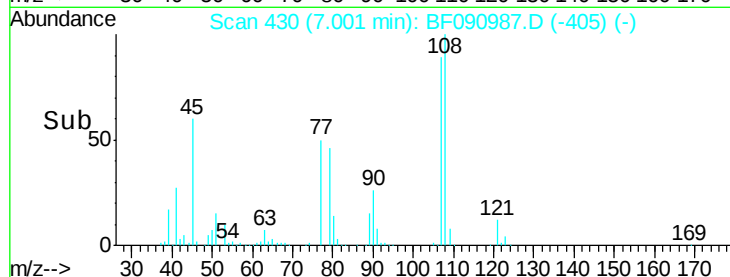
Abundance

Ion 107.00 (106.70 to 107.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 77.00 (76.70 to 77.70): BF0

Ion 79.00 (78.70 to 79.70): BF0



#18

Hexachloroethane

Concen: 50.19 ng

RT: 7.23 min Scan# 450

Delta R.T. -0.03 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

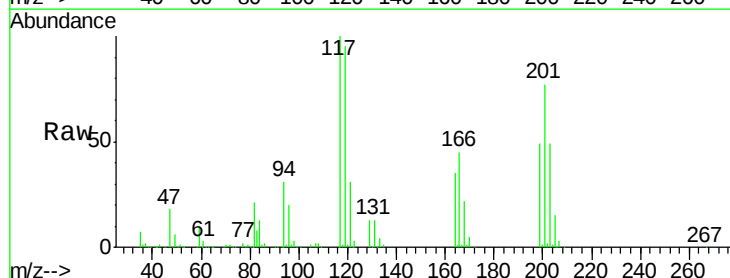
Tgt Ion:117 Resp: 241207

Ion Ratio Lower Upper

117 100

119 95.4 83.8 125.6

201 77.2 55.1 82.7

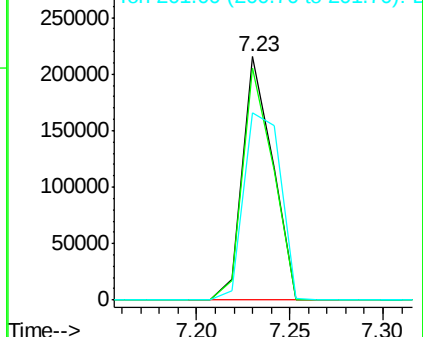
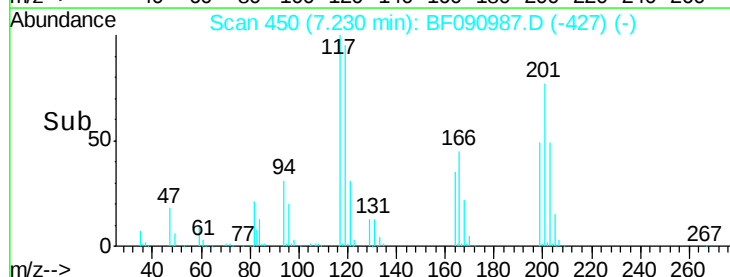


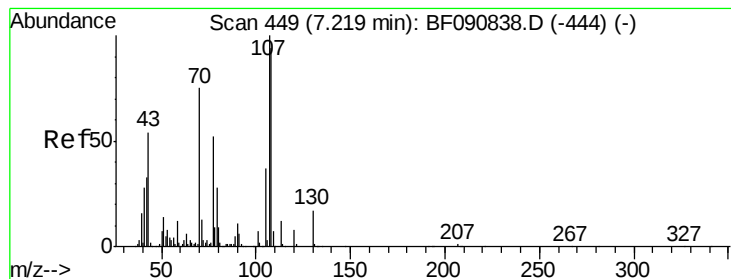
Abundance

Ion 117.00 (116.70 to 117.70): E

Ion 119.00 (118.70 to 119.70): E

Ion 201.00 (200.70 to 201.70): E





#19

n-Nitroso-di-n-propylamine

Concen: 57.16 ng

RT: 7.15 min Scan# 443

Delta R.T. -0.02 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Instrument :

BNA_F

ClientSampleId :

SB-91-24.5-25.0MSD

Tgt Ion: 70 Resp: 443679

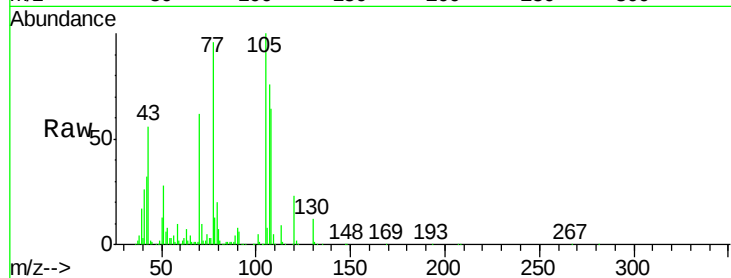
Ion Ratio Lower Upper

70 100

42 50.8 63.8 95.6#

101 8.8 9.2 13.8#

130 19.7 27.3 40.9#



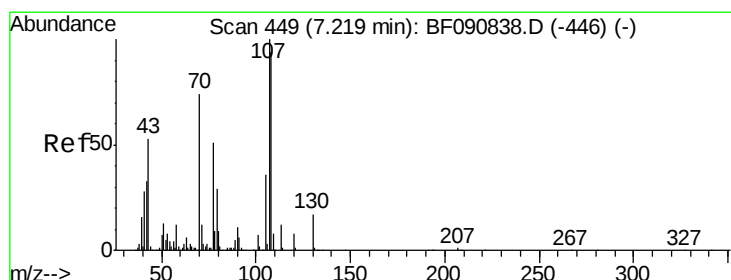
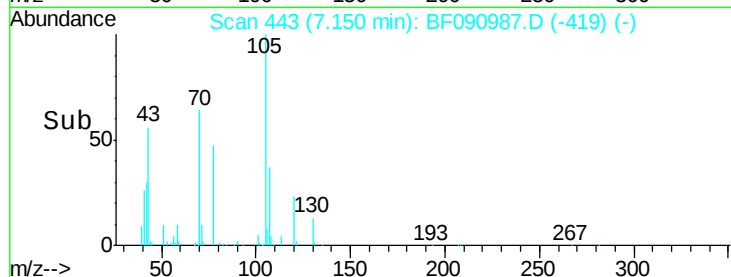
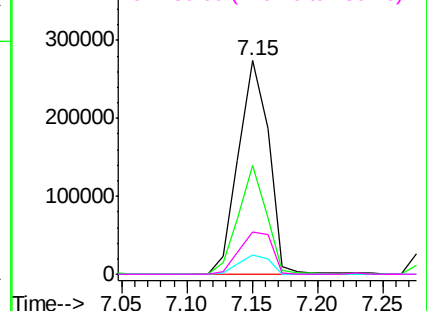
Abundance

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



#20

3+4-Methylphenols

Concen: 61.54 ng

RT: 7.16 min Scan# 444

Delta R.T. -0.01 min

Lab File: BF090987.D

Acq: 2 Nov 2016 18:40

Tgt Ion: 107 Resp: 665325

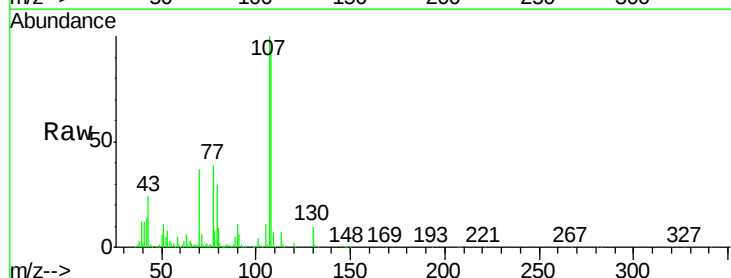
Ion Ratio Lower Upper

107 100

108 94.7 74.6 114.6

77 38.9 0.7 40.7

79 29.9 0.0 38.9



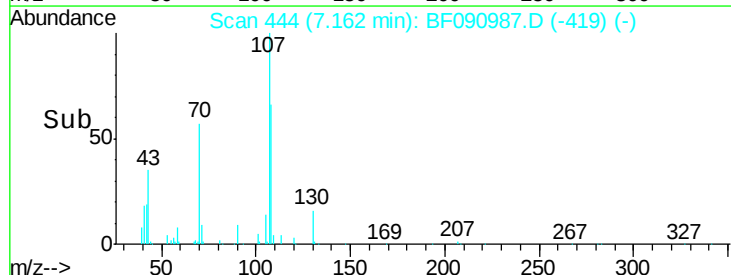
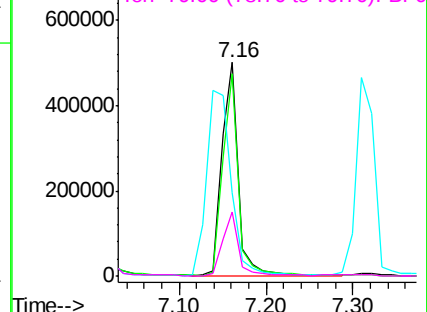
Abundance

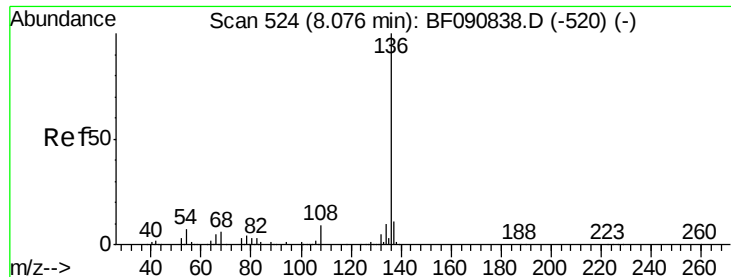
Ion 107.00 (106.70 to 107.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 77.00 (76.70 to 77.70): BF0

Ion 79.00 (78.70 to 79.70): BF0

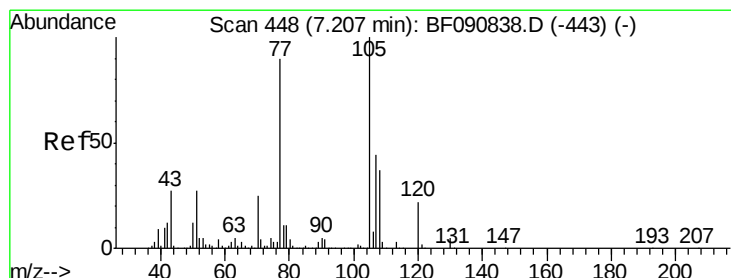
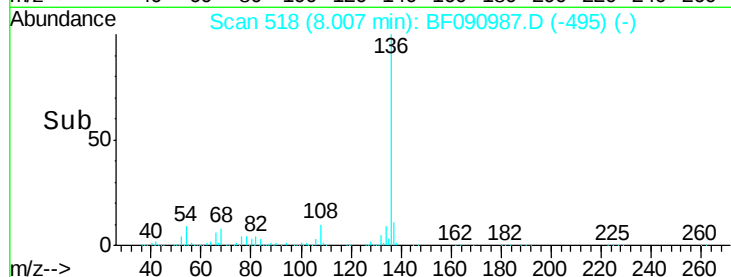
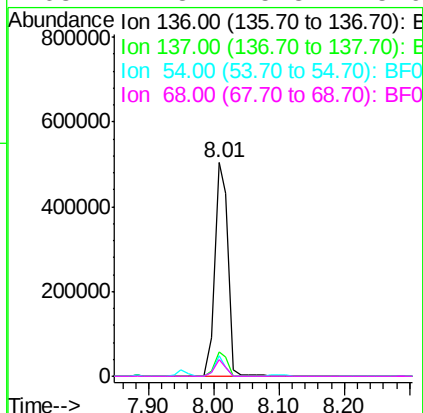
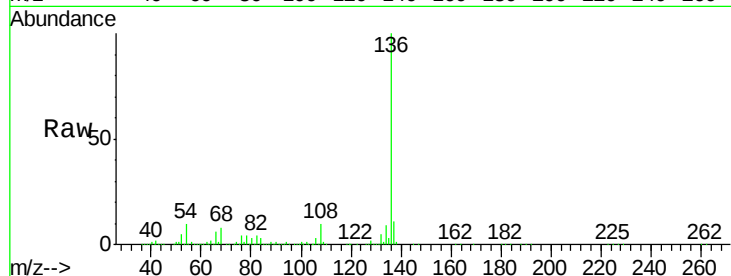




#21
Naphthalene-d8
Concen: 20.00 ng
RT: 8.01 min Scan# 518
Delta R.T. -0.03 min
Lab File: BF090987.D
Acq: 2 Nov 2016 18:40

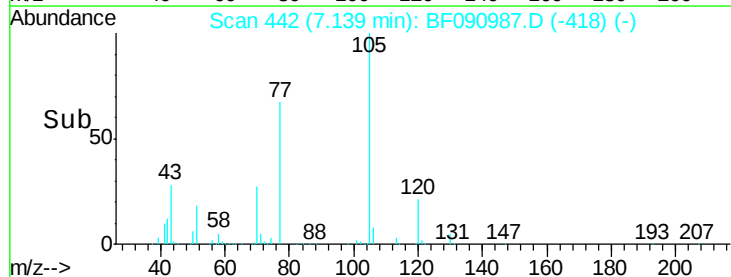
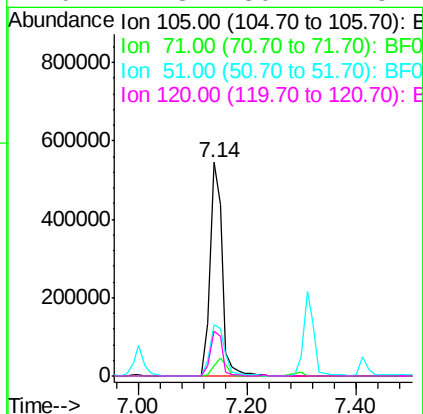
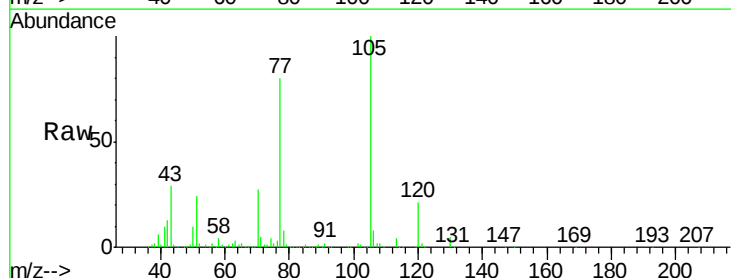
Instrument :
BNA_F
ClientSampleId :
SB-91-24.5-25.0MSD

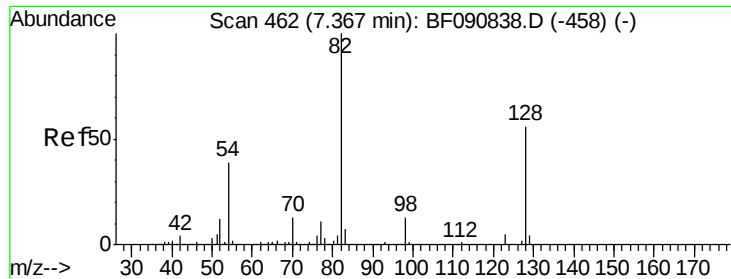
Tgt Ion:	136	Resp:	726748
Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.0	13.6
54	9.5	8.2	12.2
68	7.8	5.8	8.6



#22
Acetophenone
Concen: 56.97 ng
RT: 7.14 min Scan# 442
Delta R.T. -0.02 min
Lab File: BF090987.D
Acq: 2 Nov 2016 18:40

Tgt Ion:	105	Resp:	851781
Ion	Ratio	Lower	Upper
105	100		
71	4.7	4.7	7.1
51	23.8	22.0	33.0
120	21.3	30.1	45.1#

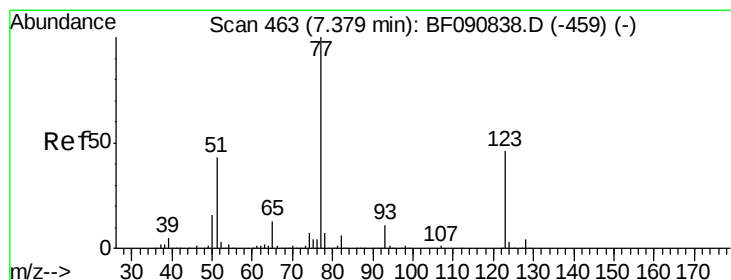
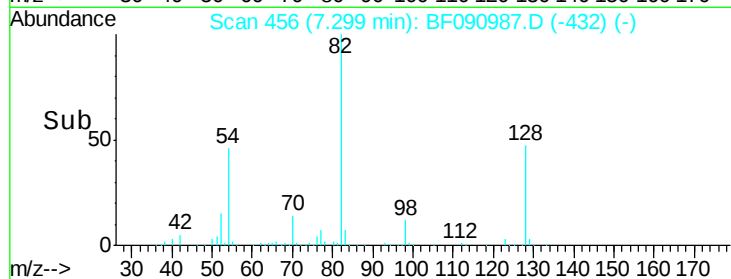
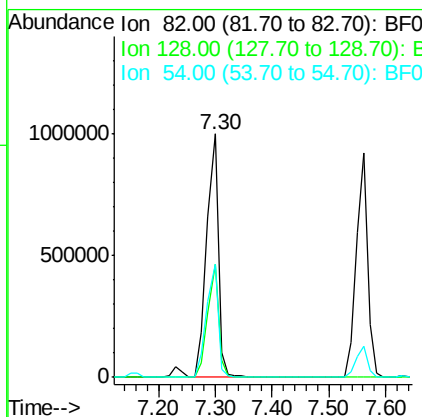
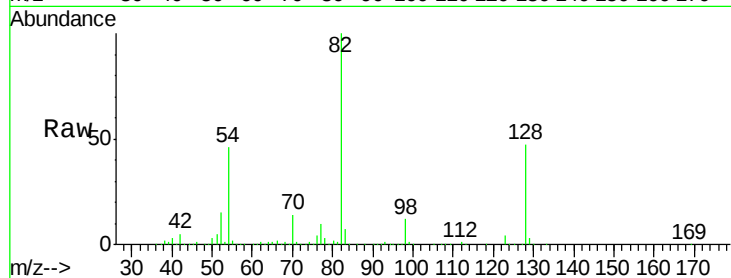




#23
 Nitrobenzene-d5
 Concen: 123.83 ng
 RT: 7.30 min Scan# 456
 Delta R.T. -0.02 min
 Lab File: BF090987.D
 Acq: 2 Nov 2016 18:40

Instrument :
 BNA_F
 ClientSampleId :
 SB-91-24.5-25.0MSD

Tgt Ion: 82 Resp: 1374737
 Ion Ratio Lower Upper
 82 100
 128 46.6 51.0 76.6#
 54 46.5 47.5 71.3#



#24
 Nitrobenzene
 Concen: 57.99 ng
 RT: 7.31 min Scan# 457
 Delta R.T. -0.03 min
 Lab File: BF090987.D
 Acq: 2 Nov 2016 18:40

Tgt Ion: 77 Resp: 680952
 Ion Ratio Lower Upper
 77 100
 123 41.5 59.8 89.8#
 65 13.4 10.2 15.4

