

Data Path : Z:\HPCHEM1\BNA F\DATA\BF052417\
 Data File : BF095401.D
 Acq On : 24 May 2017 21:39
 Operator : SJ/MA
 Sample : I3221-04MSD
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

Quant Time: May 25 04:48:25 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF050217.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu May 18 17:07:53 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.75	152	86673	20.00	ng	-0.01
21) Naphthalene-d8	9.77	136	335324	20.00	ng	-0.02
38) Acenaphthene-d10	12.59	164	132267	20.00	ng	-0.02
63) Phenanthrene-d10	15.01	188	194630	20.00	ng	-0.02
75) Chrysene-d12	18.68	240	173308	20.00	ng	-0.01
86) Perylene-d12	20.36	264	120762	20.00	ng	0.00

System Monitoring Compounds

5) 2-Fluorophenol	5.73	112	905578	174.19	ng	0.00
7) Phenol-d6	7.31	99	1036729	166.21	ng	0.00
23) Nitrobenzene-d5	8.66	82	604645	113.71	ng	-0.01
41) 2,4,6-Tribromophenol	13.91	330	159156	146.93	ng	-0.01
44) 2-Fluorobiphenyl	11.54	172	990532	107.79	ng	-0.02
78) Terphenyl-d14	17.33	244	727789	92.49	ng	-0.02

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.24	88	111150	43.59	ng	92
3) Pyridine	2.95	79	258827	43.80	ng	95
4) n-Nitrosodimethylamine	2.87	42	103336	41.95	ng	# 78
6) Aniline	7.27	93	294088	37.35	ng	94
8) 2-Chlorophenol	7.45	128	322830	54.56	ng	95
9) Benzaldehyde	7.08	77	99145	26.03	ng	95
10) Phenol	7.32	94	342237	52.07	ng	90
11) bis(2-Chloroethyl)ether	7.40	93	287172	52.92	ng	94
12) 1,3-Dichlorobenzene	7.65	146	346227	51.58	ng	98
13) 1,4-Dichlorobenzene	7.78	146	353395	51.92	ng	97
14) 1,2-Dichlorobenzene	8.01	146	329986	51.94	ng	96
15) Benzyl Alcohol	8.04	79	247491	61.69	ng	95
16) 2,2'-oxybis(1-Chloropropan	8.24	45	389376	50.70	ng	97
17) 2-Methylphenol	8.27	107	257735	53.22	ng	94
18) Hexachloroethane	8.52	117	92813	40.25	ng	# 86
19) n-Nitroso-di-n-propylamine	8.47	70	223260	52.92	ng	93
20) 3+4-Methylphenols	8.52	107	330041	50.16	ng	# 56
22) Acetophenone	8.42	105	444309	55.23	ng	# 84
24) Nitrobenzene	8.69	77	302154	54.21	ng	92
25) Isophorone	9.09	82	533167	56.15	ng	# 94
26) 2-Nitrophenol	9.20	139	97874	32.54	ng	97
27) 2,4-Dimethylphenol	9.33	122	254293	52.29	ng	97
28) bis(2-Chloroethoxy)methane	9.45	93	357135	54.37	ng	99
29) 2,4-Dichlorophenol	9.62	162	243887	53.12	ng	99
30) 1,2,4-Trichlorobenzene	9.70	180	251565	51.14	ng	99
31) Naphthalene	9.80	128	863741	51.25	ng	100
32) Benzoic acid	9.64	122	5955	6.75	ng	93
33) 4-Chloroaniline	9.97	127	102836	16.37	ng	93
34) Hexachlorobutadiene	10.01	225	127586	49.16	ng	97
35) Caprolactam	10.57	113	68377	49.59	ng	90
36) 4-Chloro-3-methylphenol	10.81	107	232890	47.44	ng	92
37) 2-Methylnaphthalene	10.92	142	559439	50.58	ng	98
39) 1,2,4,5-Tetrachlorobenzene	11.21	216	217650	53.51	ng	99
40) Hexachlorocyclopentadiene	11.18	237	5711	9.14	ng	90

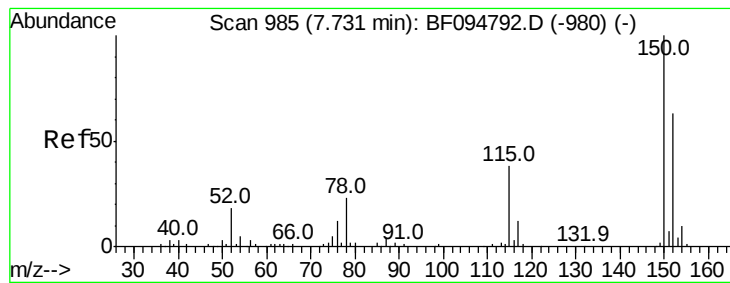
Data Path : Z:\HPCHEM1\BNA F\DATA\BF052417\
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) 2,4,6-Trichlorophenol	11.44	196	140131	51.60	nq	99
43) 2,4,5-Trichlorophenol	11.54	196	124669	42.71	nq	94
45) 1,1'-Biphenyl	11.69	154	616194	55.33	nq	98
46) 2-Chloronaphthalene	11.71	162	470348	52.31	nq	97
47) 2-Nitroaniline	11.94	65	138270	56.18	nq	# 80
48) Acenaphthylene	12.37	152	732205	51.99	nq	98
49) Dimethylphthalate	12.24	163	697799	64.26	nq	100
50) 2,6-Dinitrotoluene	12.34	165	98692	44.55	nq	94
51) Acenaphthene	12.65	154	432761	51.44	nq	98
52) 3-Nitroaniline	12.62	138	128829	54.18	nq	90
54) Dibenzofuran	12.94	168	643410	55.27	nq	98
55) 4-Nitrophenol	13.05	139	99155	69.43	nq	# 79
56) 2,4-Dinitrotoluene	13.02	165	113210	39.77	nq	93
57) Fluorene	13.49	166	483773	47.79	nq	100
58) 2,3,4,6-Tetrachlorophenol	13.19	232	98053	53.38	nq	96
59) Diethylphthalate	13.39	149	531648	51.08	nq	99
60) 4-Chlorophenyl-phenylether	13.52	204	212679	47.81	nq	88
61) 4-Nitroaniline	13.62	138	114663	52.53	nq	96
62) Azobenzene	13.78	77	423920	50.69	nq	93
64) 4,6-Dinitro-2-methylphenol	13.71	198	2902	2.22	nq	# 1
65) n-Nitrosodiphenylamine	13.72	169	407893	57.74	nq	98
66) 4-Bromophenyl-phenylether	14.31	248	115248	56.05	nq	95
67) Hexachlorobenzene	14.39	284	108426	51.45	nq	# 89
68) Atrazine	14.65	200	98115	49.19	nq	98
69) Pentachlorophenol	14.75	266	85600	89.12	nq	99
70) Phenanthrene	15.04	178	621105	55.54	nq	98
71) Anthracene	15.12	178	624621	54.68	nq	98
72) Carbazole	15.41	167	599479	57.68	nq	97
73) Di-n-butylphthalate	15.97	149	722472	55.74	nq	99
74) Fluoranthene	16.79	202	670578	58.46	nq	99
76) Benzidine	17.02	184	185955	40.82	nq	# 91
77) Pyrene	17.09	202	689589	53.20	nq	99
79) Butylbenzylphthalate	17.99	149	320328	53.13	nq	92
80) Benzo(a)anthracene	18.67	228	540634	53.60	nq	98
81) 3,3'-Dichlorobenzidine	18.65	252	167637	48.12	nq	# 96
82) Chrysene	18.72	228	491071	50.35	nq	99
83) Bis(2-ethylhexyl)phthalate	18.73	149	443279	51.60	nq	# 97
84) Di-n-octyl phthalate	19.50	149	777513	55.21	nq	99
85) Indeno(1,2,3-cd)pyrene	21.69	276	359484	45.39	nq	99
87) Benzo(b)fluoranthene	19.95	252	428961	57.49	nq	97
88) Benzo(k)fluoranthene	19.98	252	385240	53.52	nq	97
89) Benzo(a)pyrene	20.31	252	356470	51.77	nq	99
90) Dibenzo(a,h)anthracene	21.69	278	303714	53.41	nq	96
91) Benzo(g,h,i)perylene	22.08	276	306823	54.98	nq	98

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



#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 7.75 min Scan# 989

Delta R.T. -0.01 min

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EX-02MSD

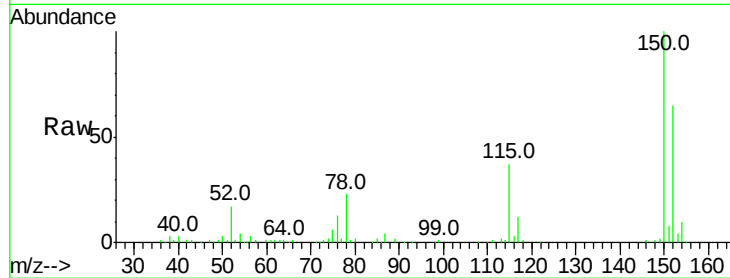
Tot Ion:152 Resp: 86673

Ion Ratio Lower Upper

152 100

150 154.7 126.2 189.2

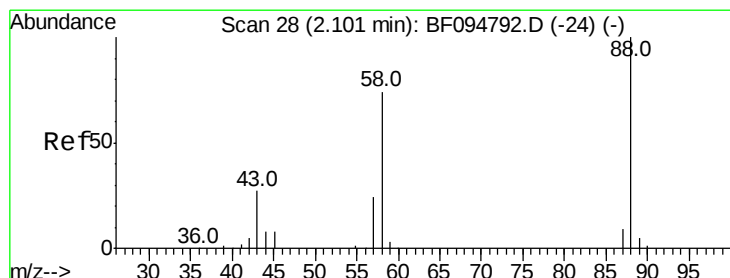
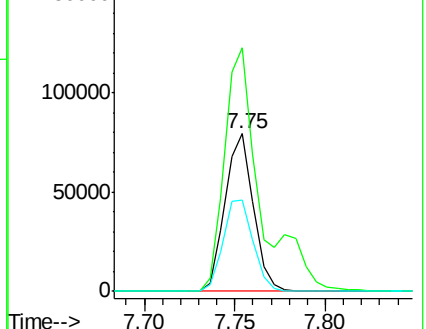
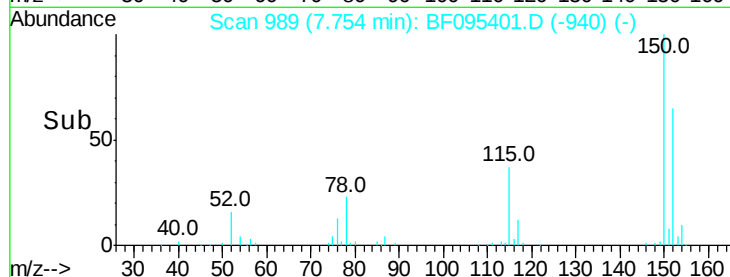
115 58.0 52.2 78.2



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: 43.59 ng

RT: 2.24 min Scan# 52

Delta R.T. 0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

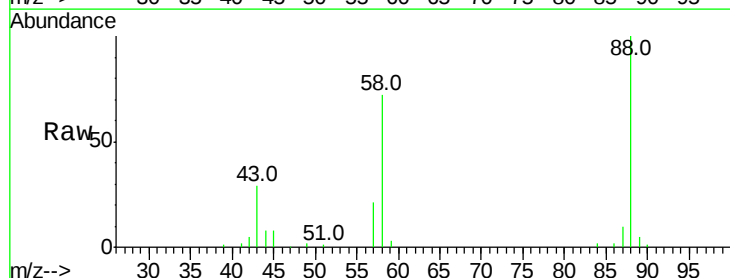
Tgt Ion: 88 Resp: 111150

Ion Ratio Lower Upper

88 100

58 69.6 61.4 92.0

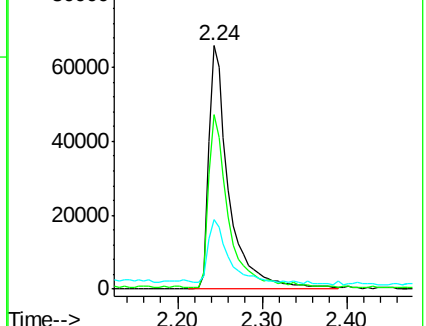
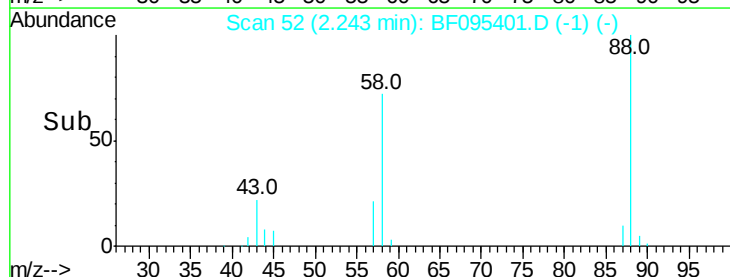
43 24.5 23.4 35.0

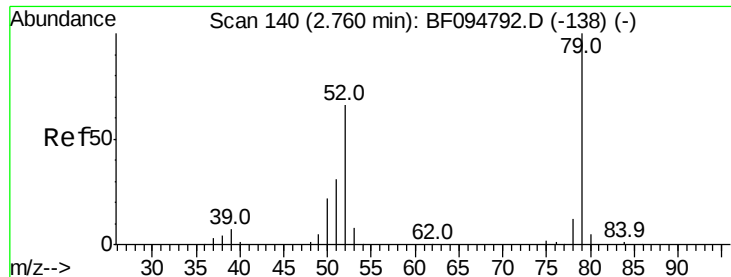


Abundance Ion 88.00 (87.70 to 88.70): BF0

Ion 58.00 (57.70 to 58.70): BF0

Ion 43.00 (42.70 to 43.70): BF0





#3

Pvridine

Concen: 43.80 ng

RT: 2.95 min Scan# 172

Delta R.T. 0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

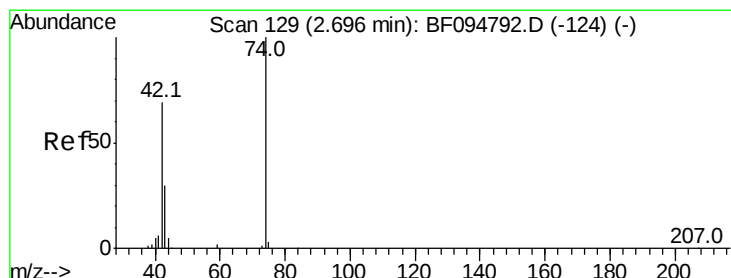
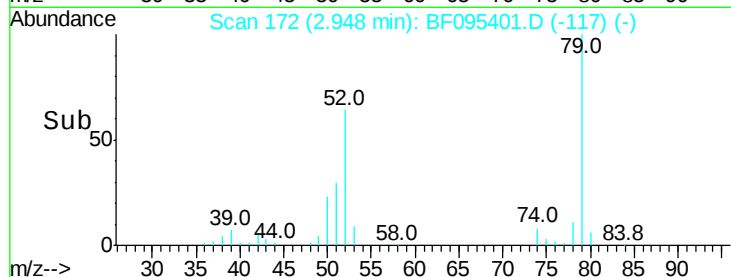
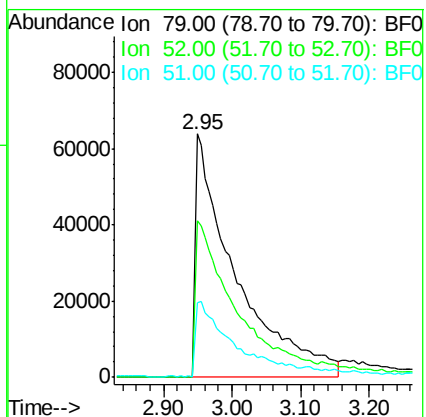
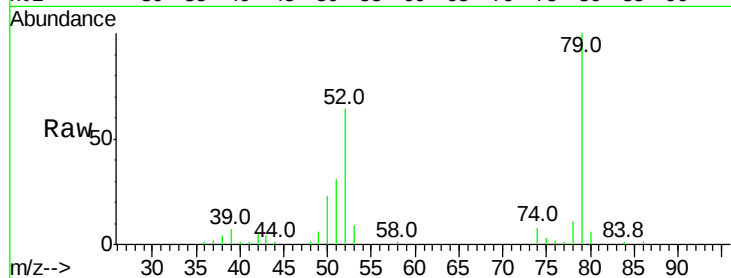
Tot Ion: 79 Resp: 258827

Ion Ratio Lower Upper

79 100

52 64.4 54.8 82.2

51 30.9 27.0 40.4



#4

n-Nitrosodimethylamine

Concen: 41.95 ng

RT: 2.87 min Scan# 159

Delta R.T. 0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

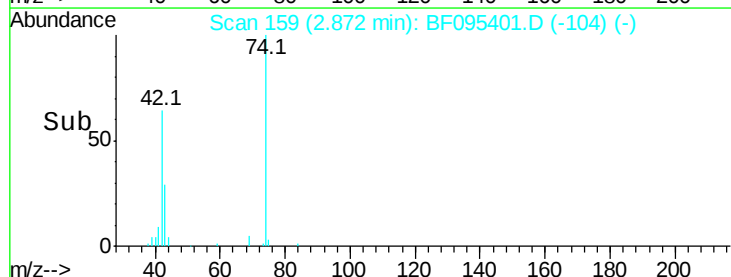
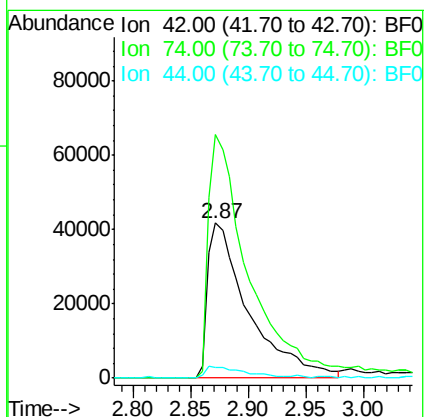
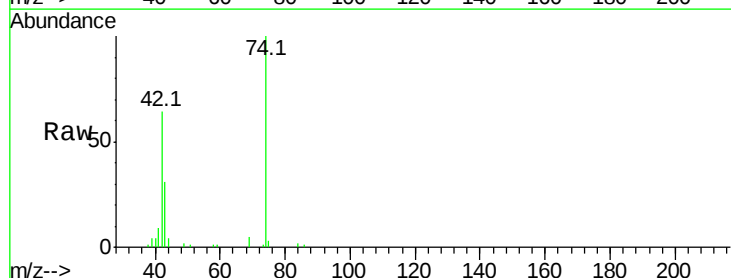
Tgt Ion: 42 Resp: 103336

Ion Ratio Lower Upper

42 100

74 157.1 103.9 155.9#

44 6.7 5.7 8.5

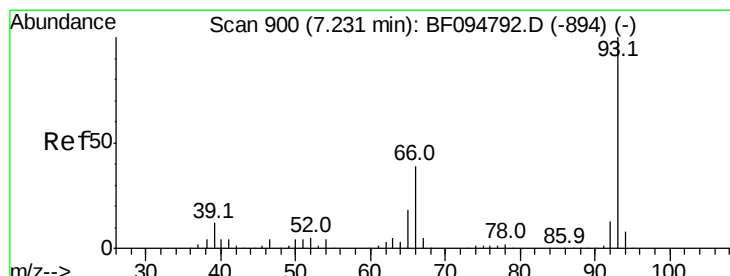
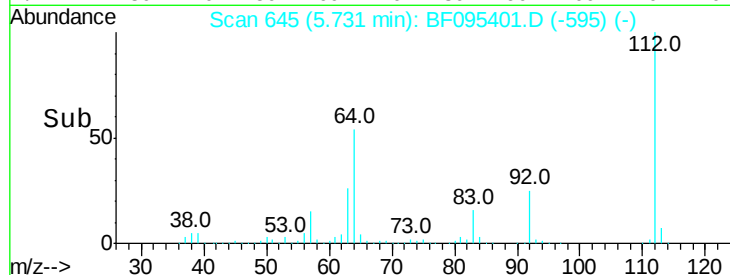
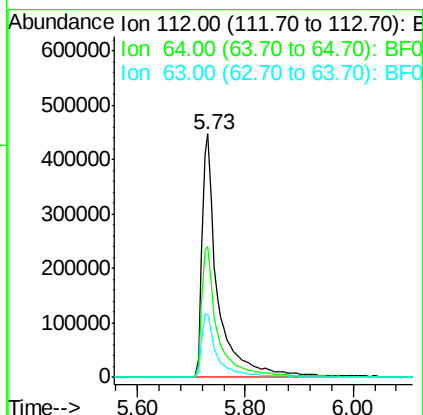
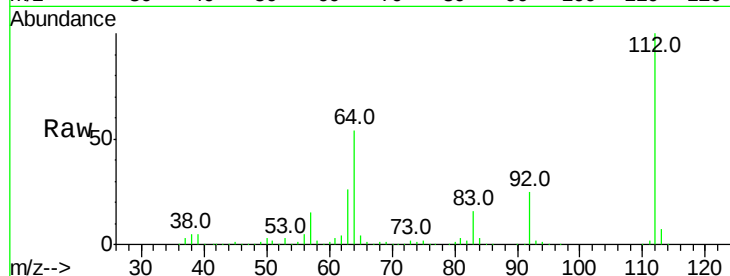




#5
 2-Fluorophenol
 Concen: 174.19 ng
 RT: 5.73 min Scan# 645
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

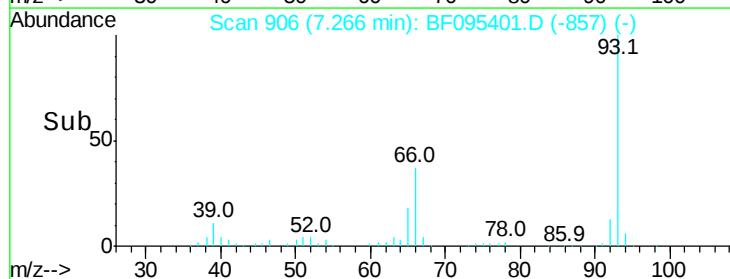
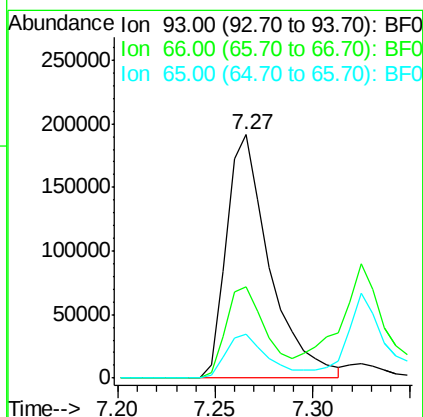
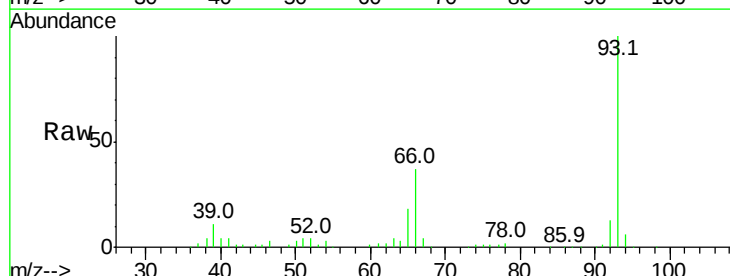
Instrument :
 BNA_F
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Tot Ion:	112	Resp:	905578
Ion	Ratio	Lower	Upper
112	100		
64	53.8	46.0	69.0
63	25.9	23.4	35.0



#6
 Aniline
 Concen: 37.35 ng
 RT: 7.27 min Scan# 906
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion:	93	Resp:	294088
Ion	Ratio	Lower	Upper
93	100		
66	37.3	32.9	49.3
65	17.9	16.0	24.0





#7

Phenol-d6

Concen: 166.21 ng

RT: 7.31 min Scan# 913

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

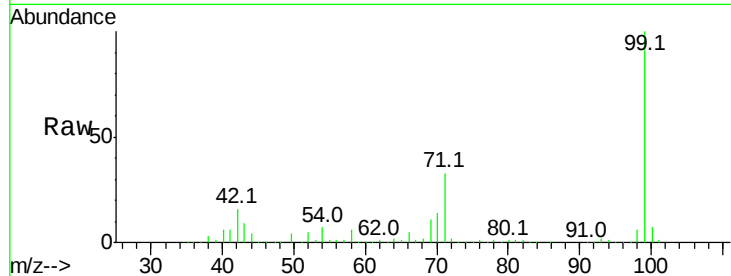
Tot Ion: 99 Resp: 1036729

Ion Ratio Lower Upper

99 100

42 16.0 13.5 20.3

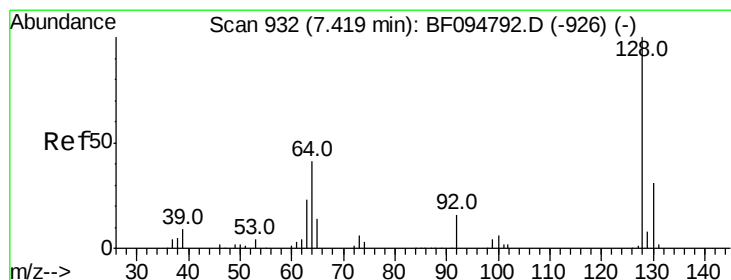
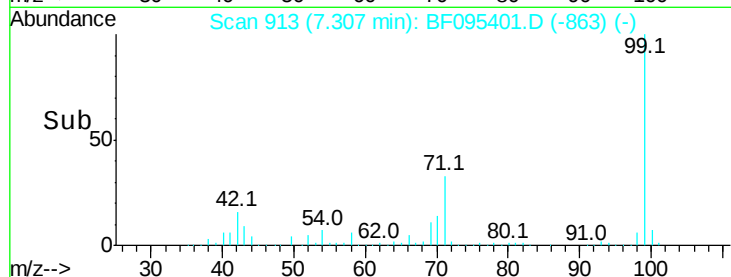
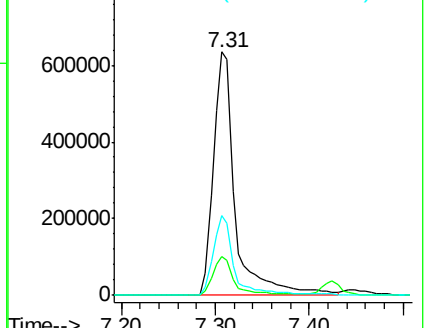
71 32.7 24.5 36.7



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: 54.56 ng

RT: 7.45 min Scan# 937

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

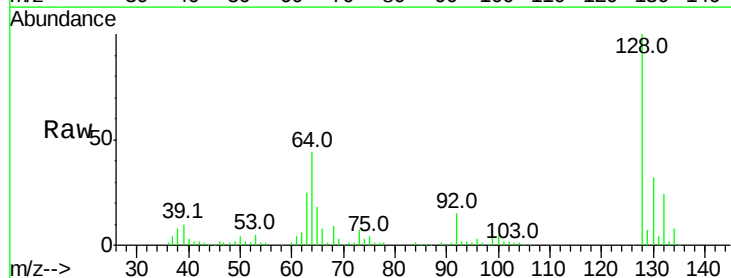
Tgt Ion: 128 Resp: 322830

Ion Ratio Lower Upper

128 100

130 32.2 12.9 52.9

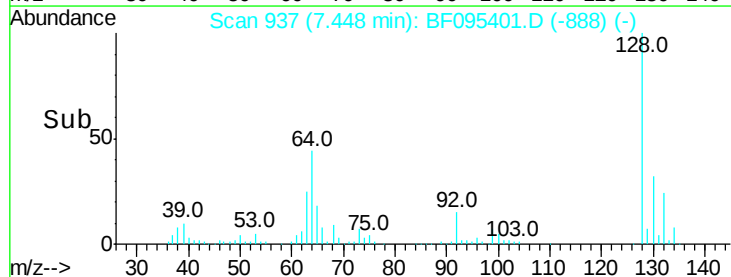
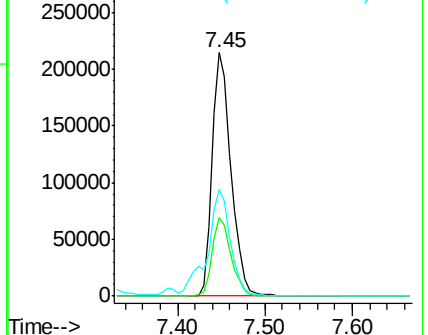
64 43.8 28.4 68.4

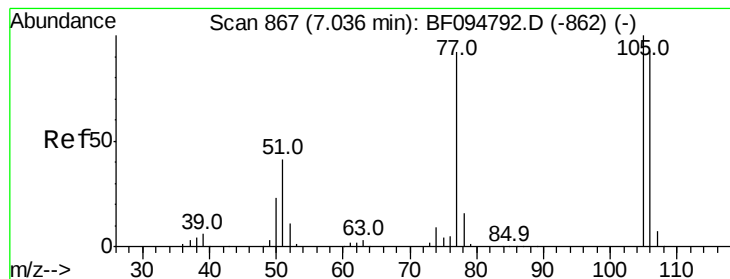


Abundance Ion 128.00 (127.70 to 128.70): E

Ion 130.00 (129.70 to 130.70): E

Ion 64.00 (63.70 to 64.70): BF0





#9

Benzaldehyde

Concen: 26.03 ng

RT: 7.08 min Scan# 875

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

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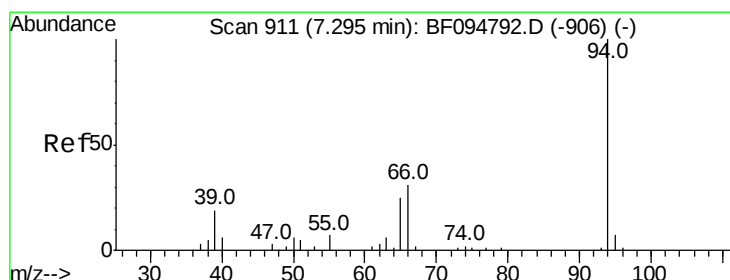
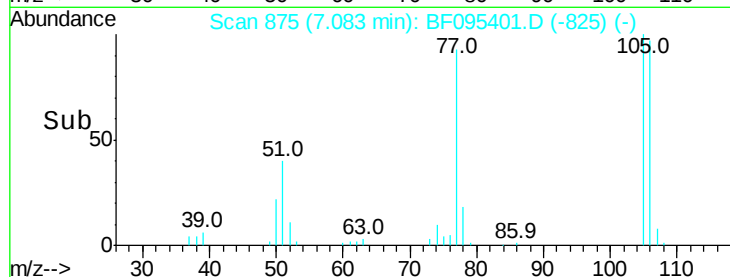
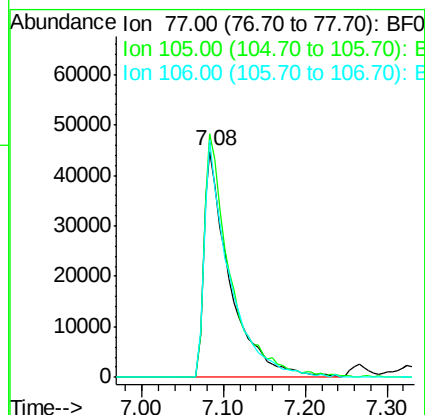
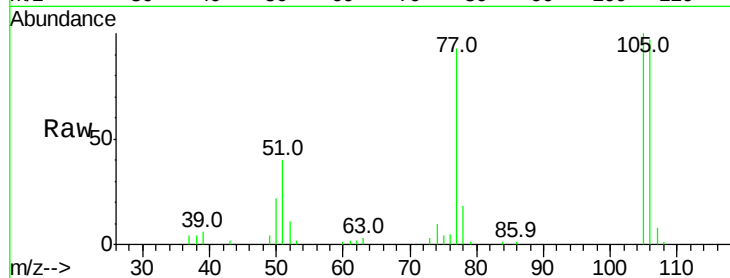
Tot Ion: 77 Resp: 99145

Ion Ratio Lower Upper

77 100

105 107.7 83.8 123.8

106 104.7 79.1 119.1



#10

Phenol

Concen: 52.07 ng

RT: 7.32 min Scan# 916

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

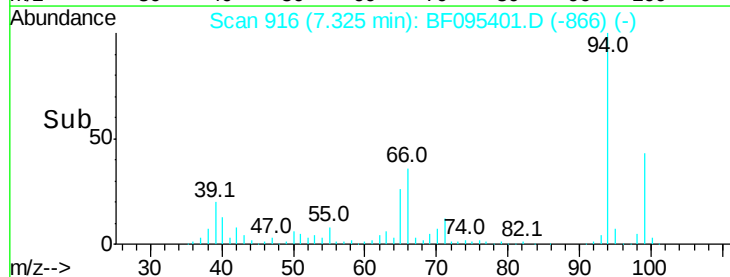
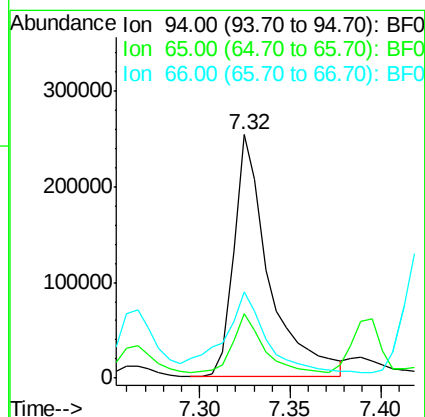
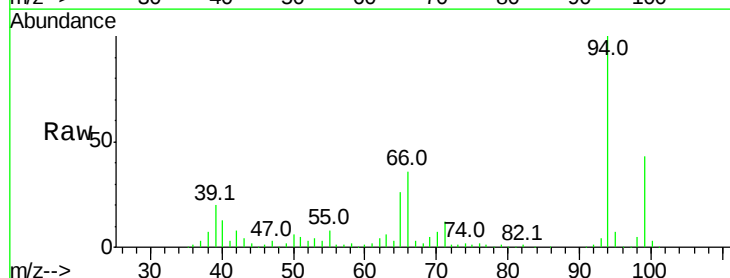
Tgt Ion: 94 Resp: 342237

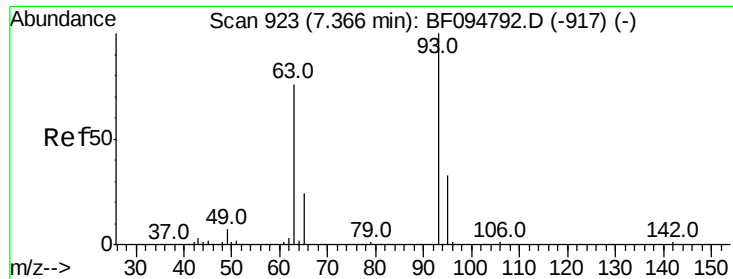
Ion Ratio Lower Upper

94 100

65 26.2 9.9 49.9

66 35.5 23.1 63.1





#11

bis(2-Chloroethyl)ether

Concen: 52.92 ng

RT: 7.40 min Scan# 928

Delta R.T. -0.01 min

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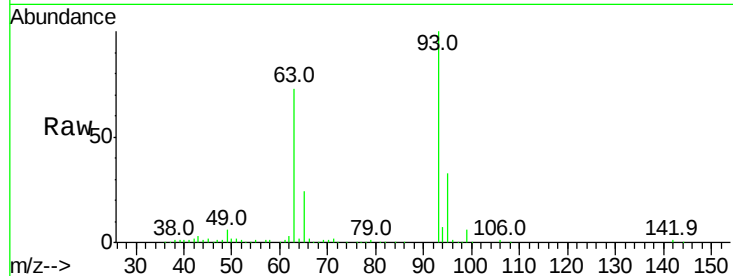
Tot Ion: 93 Resp: 287172

Ion Ratio Lower Upper

93 100

63 72.6 59.2 99.2

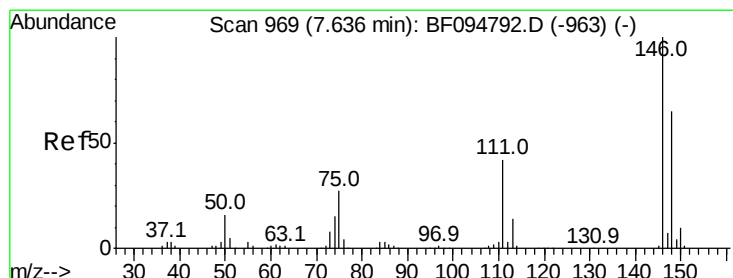
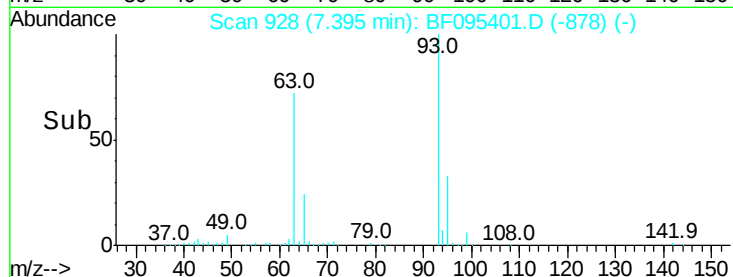
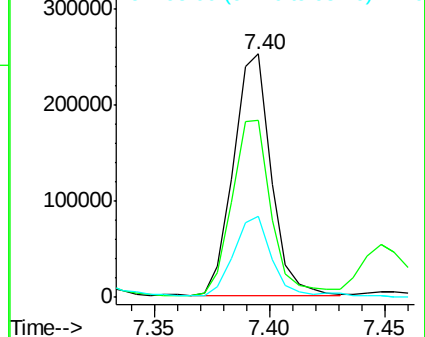
95 33.3 12.8 52.8



Abundance Ion 93.00 (92.70 to 93.70): BF0

Ion 63.00 (62.70 to 63.70): BF0

Ion 95.00 (94.70 to 95.70): BF0



#12

1,3-Dichlorobenzene

Concen: 51.58 ng

RT: 7.65 min Scan# 972

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

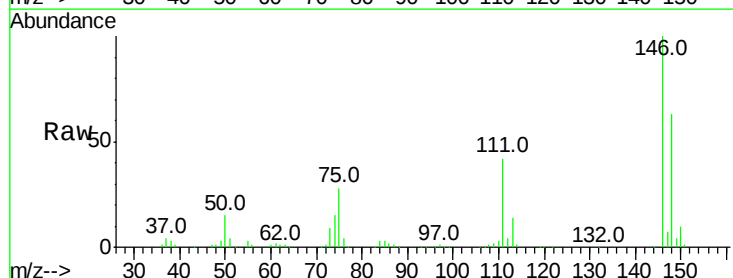
Tgt Ion: 146 Resp: 346227

Ion Ratio Lower Upper

146 100

148 62.7 51.8 77.6

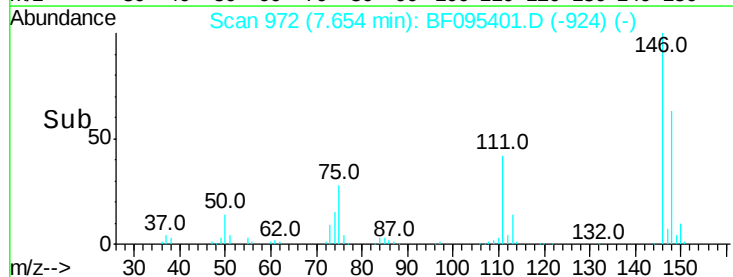
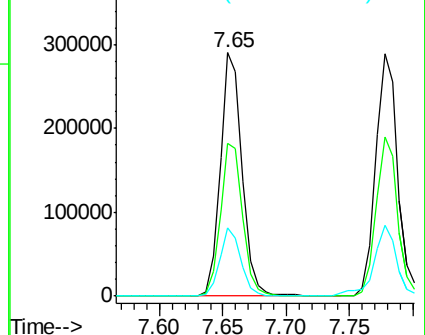
75 27.9 23.1 34.7

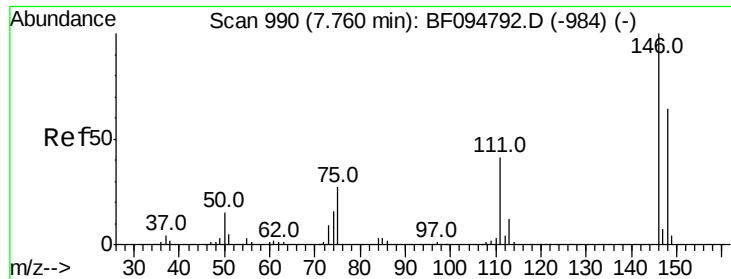


Abundance Ion 146.00 (145.70 to 146.70): E

Ion 148.00 (147.70 to 148.70): E

Ion 75.00 (74.70 to 75.70): BF0





#13

1,4-Dichlorobenzene

Concen: 51.92 ng

RT: 7.78 min Scan# 993

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

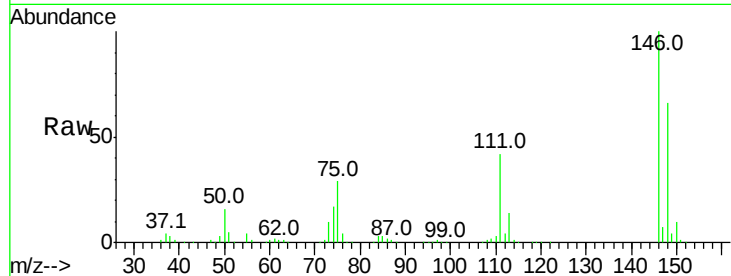
Tot Ion:146 Resp: 353395

Ion Ratio Lower Upper

146 100

148 65.5 52.2 78.2

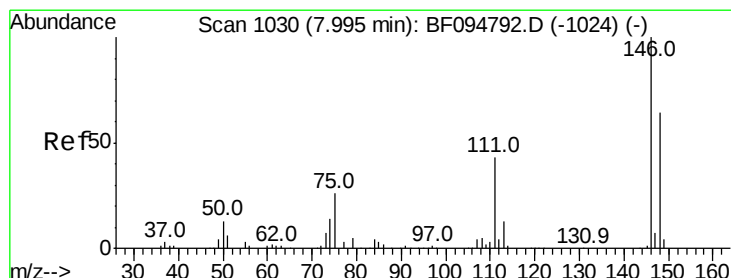
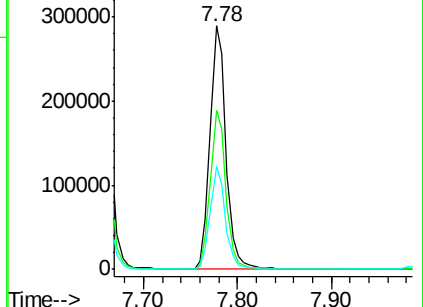
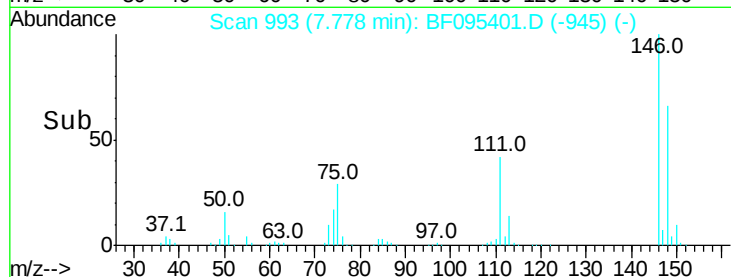
111 42.1 30.3 45.5



Abundance Ion 146.00 (145.70 to 146.70): E

Ion 148.00 (147.70 to 148.70): E

Ion 111.00 (110.70 to 111.70): E



#14

1,2-Dichlorobenzene

Concen: 51.94 ng

RT: 8.01 min Scan# 1033

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

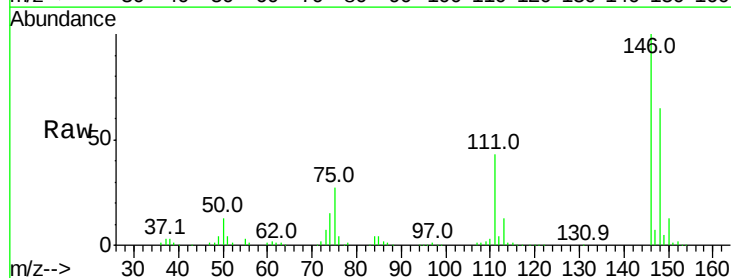
Tgt Ion:146 Resp: 329986

Ion Ratio Lower Upper

146 100

148 64.5 50.4 75.6

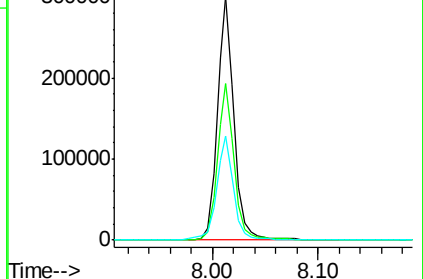
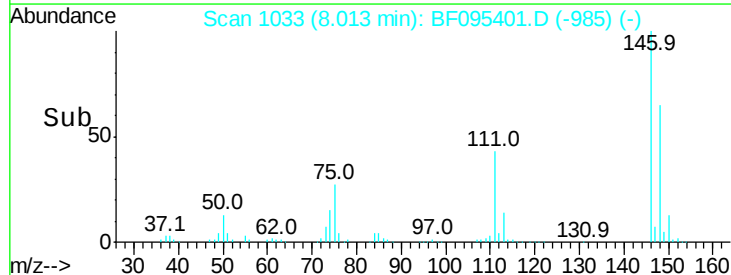
111 42.6 38.2 57.4

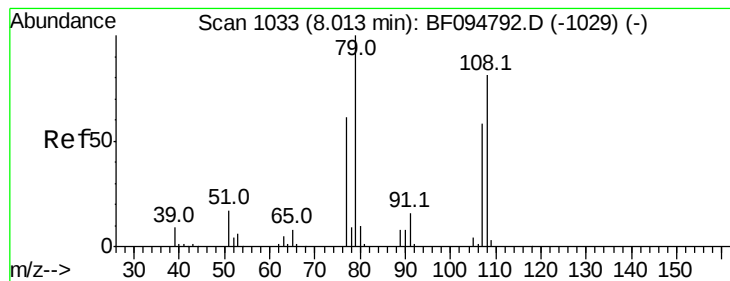


Abundance Ion 146.00 (145.70 to 146.70): E

Ion 148.00 (147.70 to 148.70): E

Ion 111.00 (110.70 to 111.70): E





#15

Benzyl Alcohol

Concen: 61.69 ng

RT: 8.04 min Scan# 1038

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

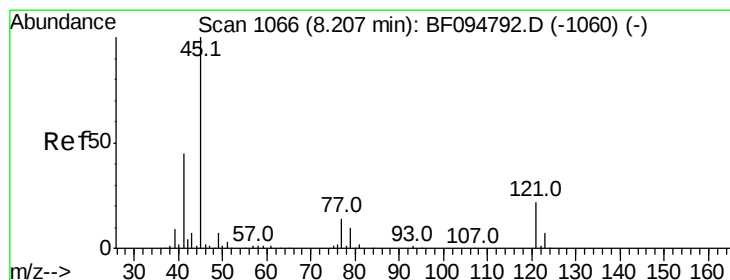
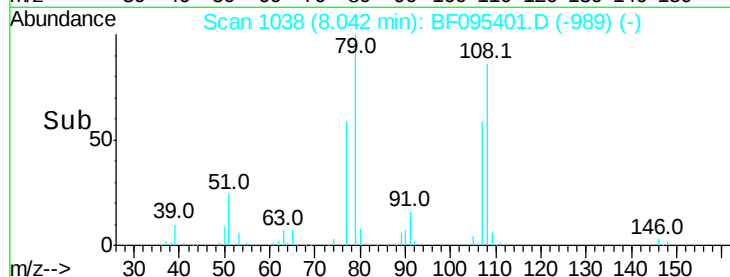
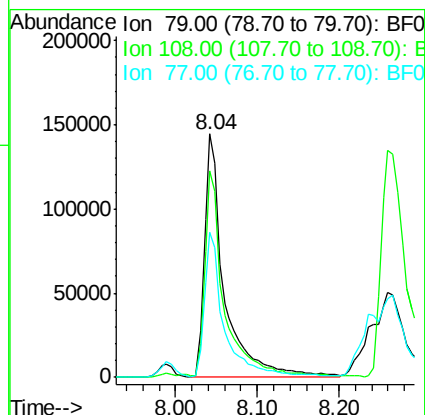
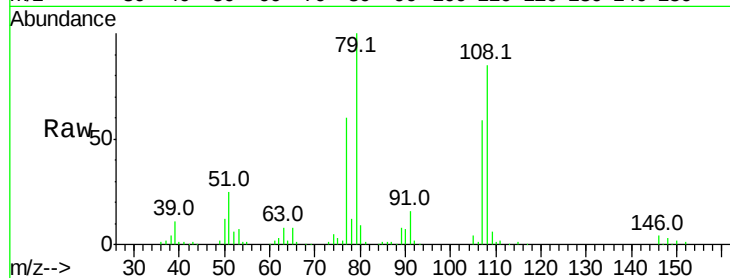
Tot Ion: 79 Resp: 247491

Ion Ratio Lower Upper

79 100

108 85.0 63.4 95.0

77 59.7 49.2 73.8



#16

2,2'-oxybis(1-chloropropane)

Concen: 50.70 ng

RT: 8.24 min Scan# 1071

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

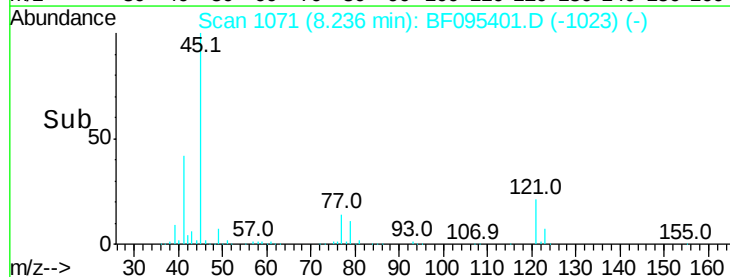
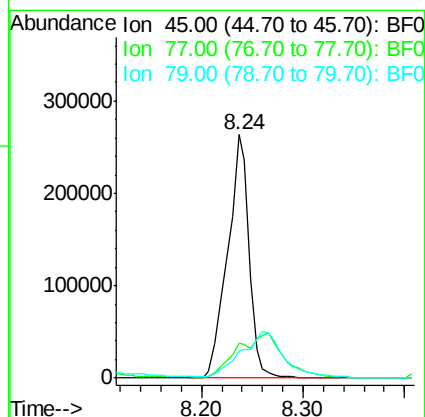
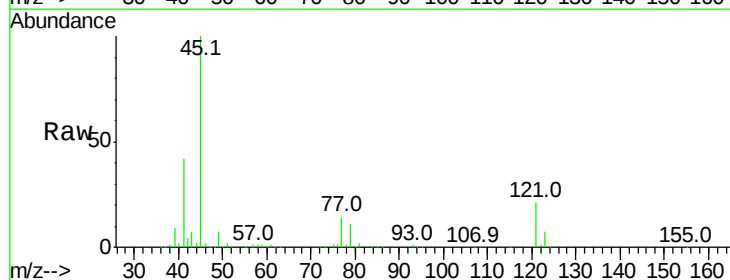
Tgt Ion: 45 Resp: 389376

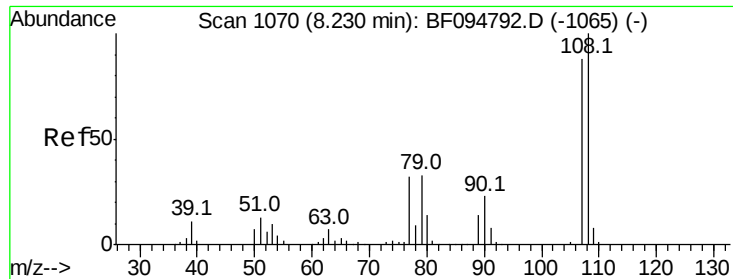
Ion Ratio Lower Upper

45 100

77 14.2 0.0 33.2

79 11.3 0.0 30.0

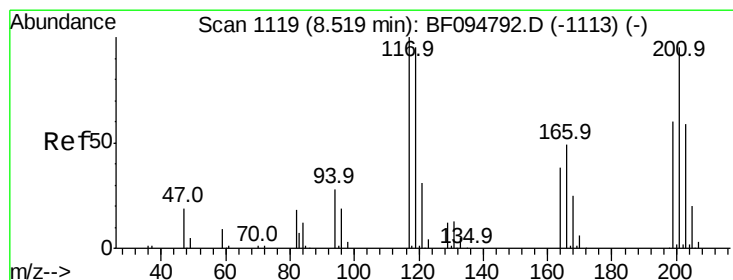
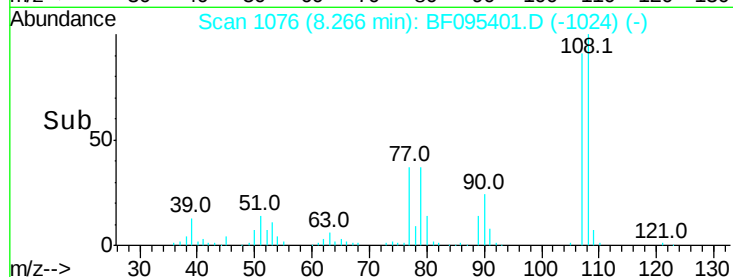
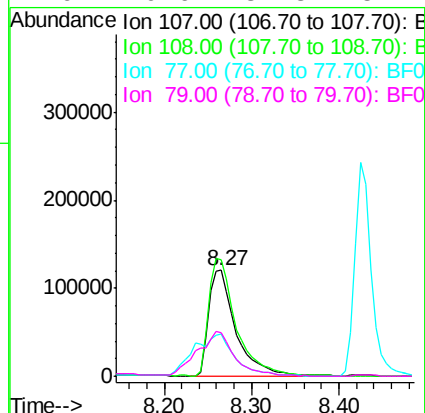
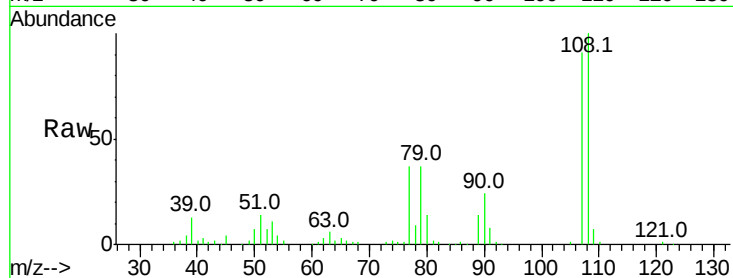




#17
2-Methylphenol
Concen: 53.22 ng
RT: 8.27 min Scan# 1076
Delta R.T. 0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

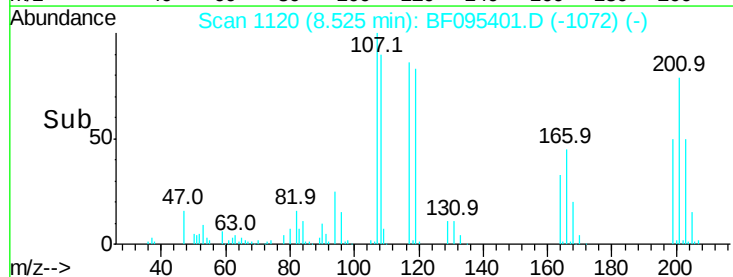
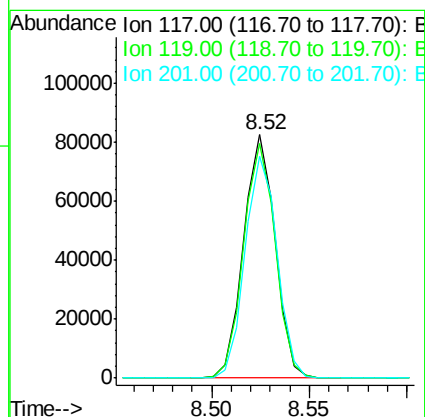
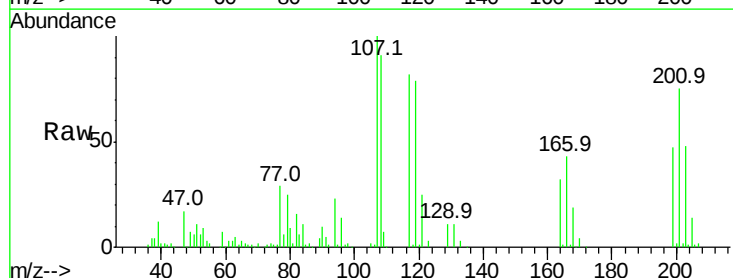
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

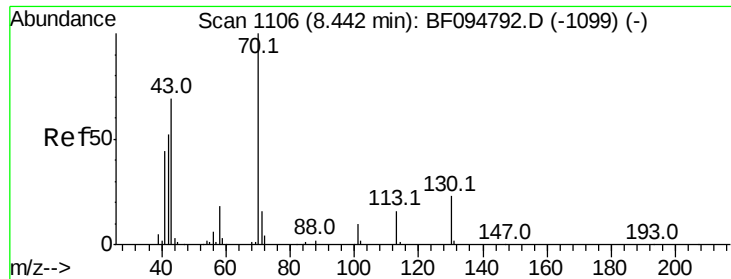
Tot Ion:107 Resp: 257735
Ion Ratio Lower Upper
107 100
108 110.0 93.4 140.0
77 40.4 35.8 53.6
79 40.6 34.8 52.2



#18
Hexachloroethane
Concen: 40.25 ng
RT: 8.52 min Scan# 1120
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:117 Resp: 92813
Ion Ratio Lower Upper
117 100
119 96.3 77.4 116.0
201 91.2 94.6 141.8#

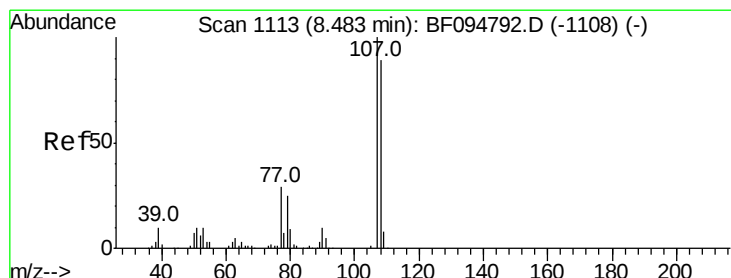
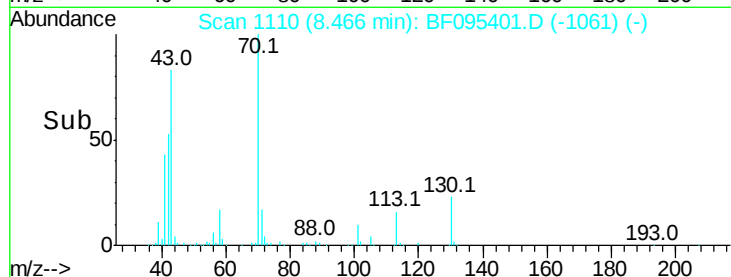
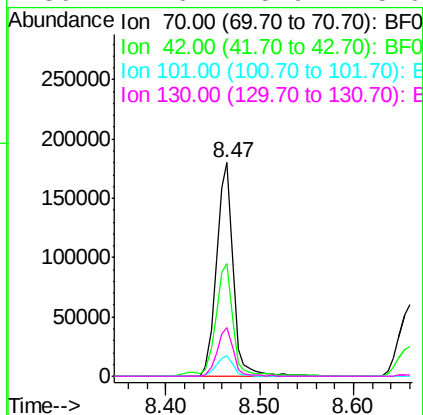
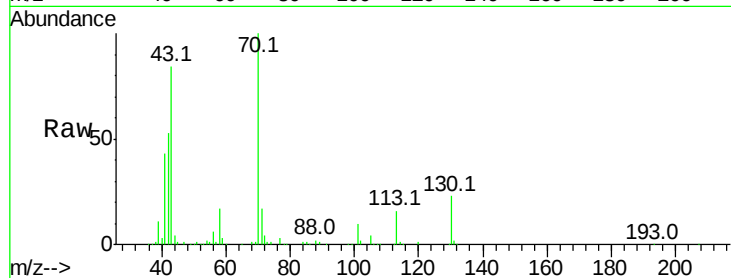




#19
n-Nitroso-di-n-propylamine
Concen: 52.92 ng
RT: 8.47 min Scan# 1110
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

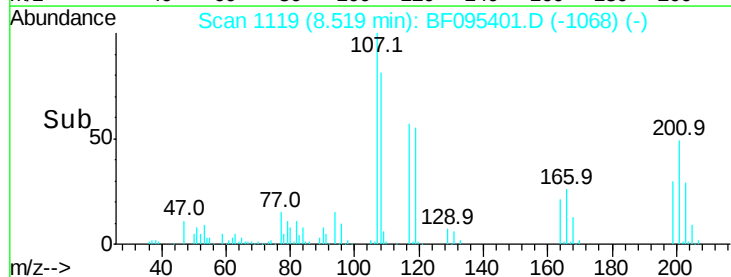
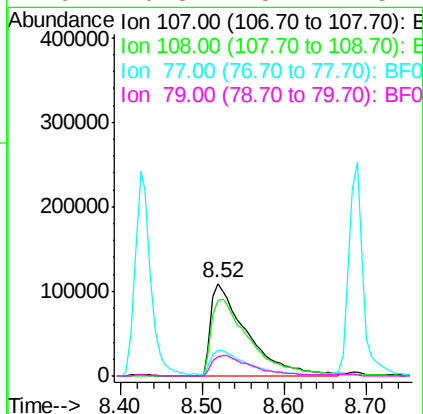
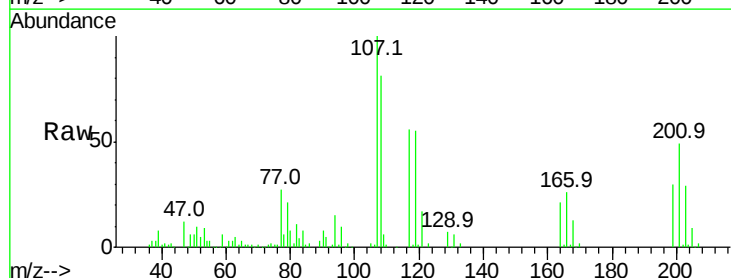
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

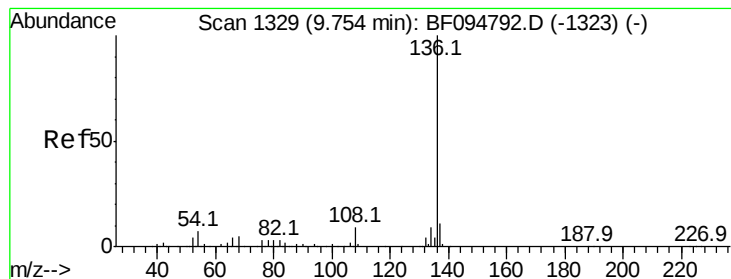
Tot Ion: 70 Resp: 223260
Ion Ratio Lower Upper
70 100
42 52.9 47.2 70.8
101 9.8 7.2 10.8
130 22.6 15.9 23.9



#20
3+4-Methylphenols
Concen: 50.16 ng
RT: 8.52 min Scan# 1119
Delta R.T. -0.00 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:107 Resp: 330041
Ion Ratio Lower Upper
107 100
108 81.4 71.0 111.0
77 27.1 90.5 130.5#
79 20.8 8.4 48.4





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 9.77 min Scan# 1331

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

Tot Ion:136 Resp: 335324

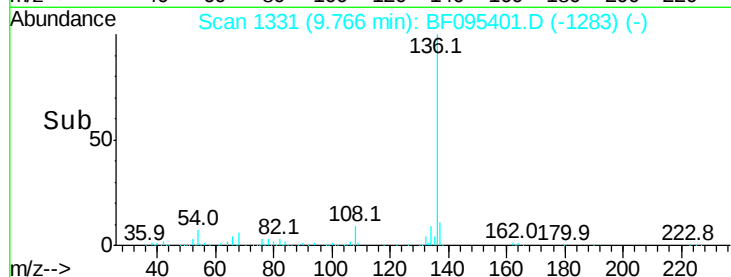
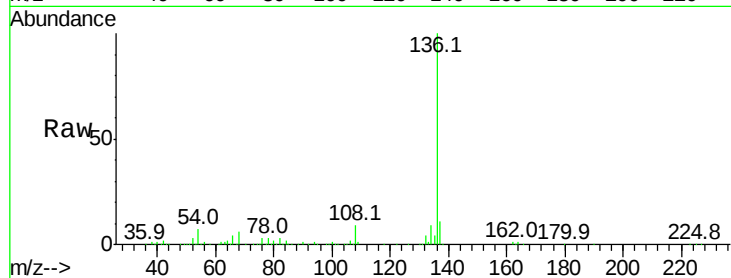
Ion Ratio Lower Upper

136 100

137 11.3 8.5 12.7

54 6.5 4.9 7.3

68 6.0 4.1 6.1

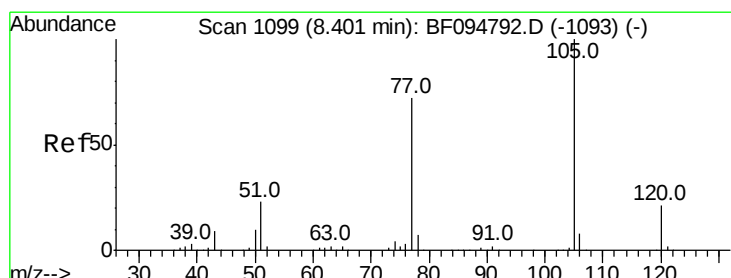
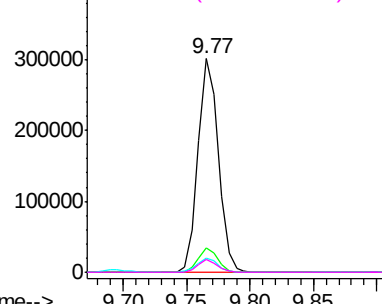


Abundance Ion 136.00 (135.70 to 136.70): E

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



#22

Acetophenone

Concen: 55.23 ng

RT: 8.42 min Scan# 1103

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Tgt Ion:105 Resp: 444309

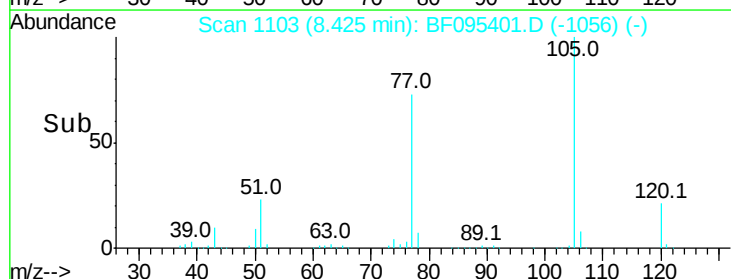
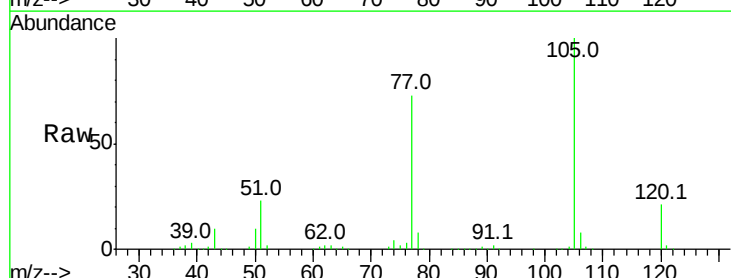
Ion Ratio Lower Upper

105 100

71 0.0 2.8 4.2#

51 23.1 30.7 46.1#

120 21.2 17.4 26.0

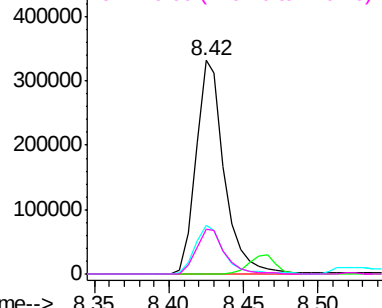


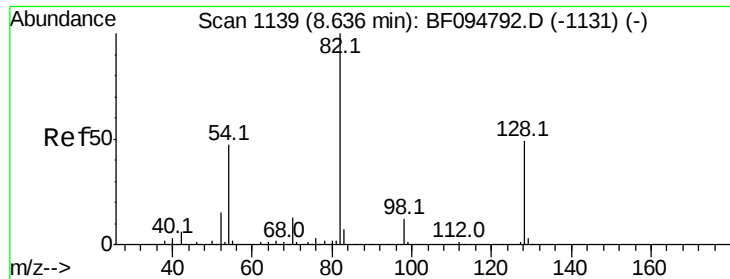
Abundance Ion 105.00 (104.70 to 105.70): E

Ion 71.00 (70.70 to 71.70): BF0

Ion 51.00 (50.70 to 51.70): BF0

Ion 120.00 (119.70 to 120.70): E

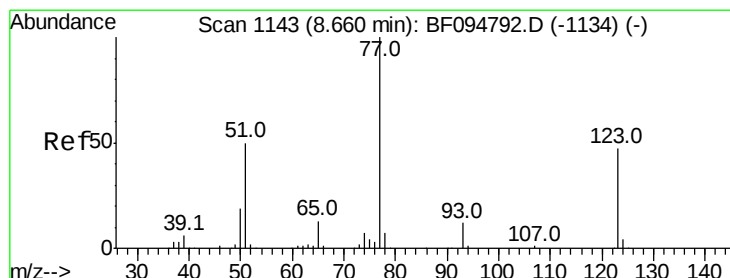
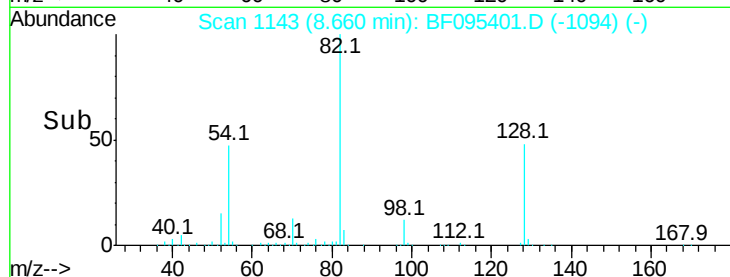
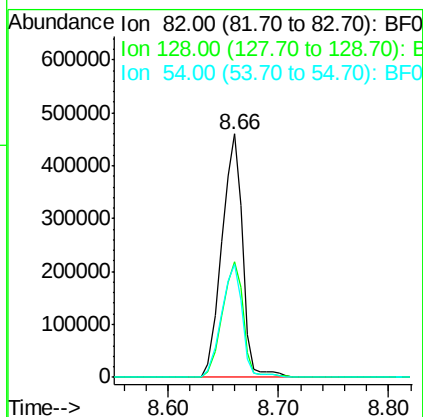
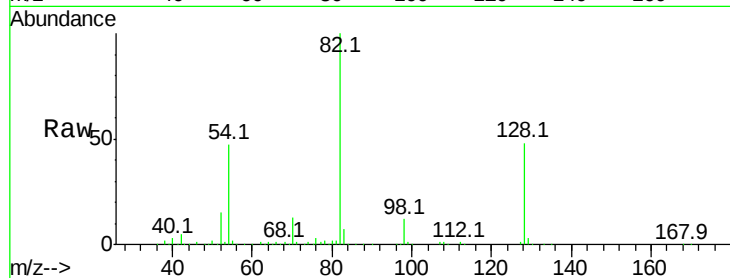




#23
 Nitrobenzene-d5
 Concen: 113.71 ng
 RT: 8.66 min Scan# 1143
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

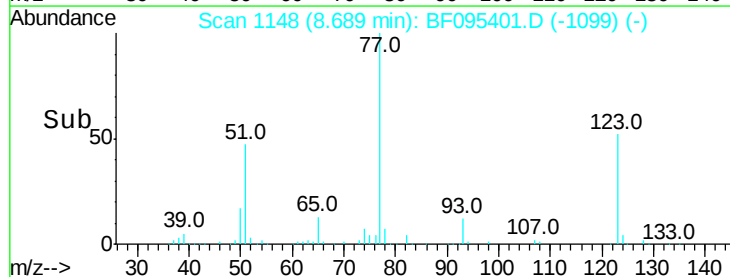
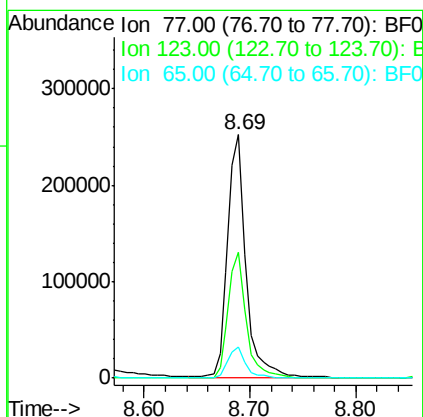
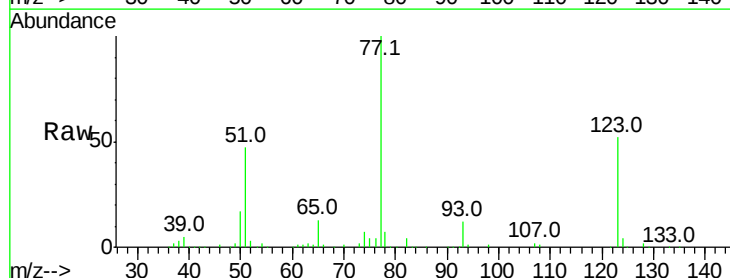
Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

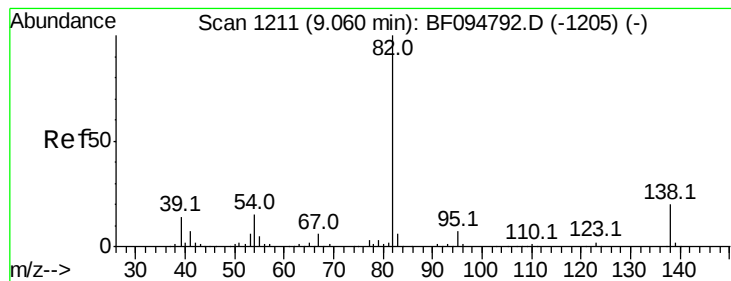
Tot Ion	82	Resp	604645
Ion Ratio	100	Lower	Upper
128	47.6	34.0	51.0
54	46.6	42.2	63.2



#24
 Nitrobenzene
 Concen: 54.21 ng
 RT: 8.69 min Scan# 1148
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion	77	Resp	302154
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
123	51.8	35.8	53.8
65	12.9	10.6	15.8





#25

Isophorone

Concen: 56.15 ng

RT: 9.09 min Scan# 1216

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampled :

EX-02MSD

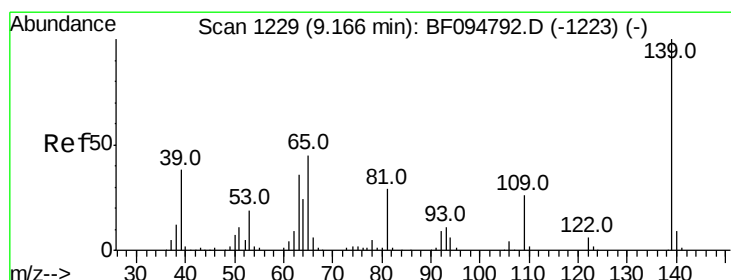
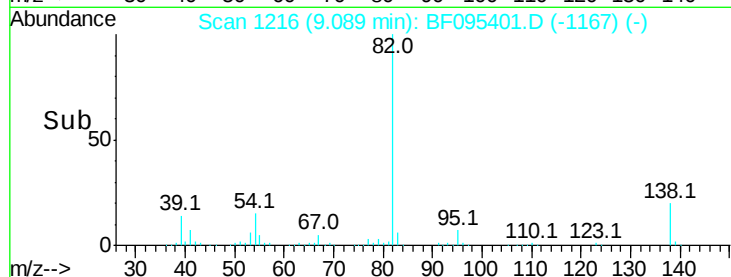
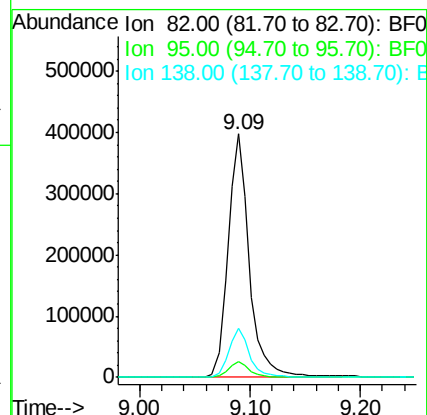
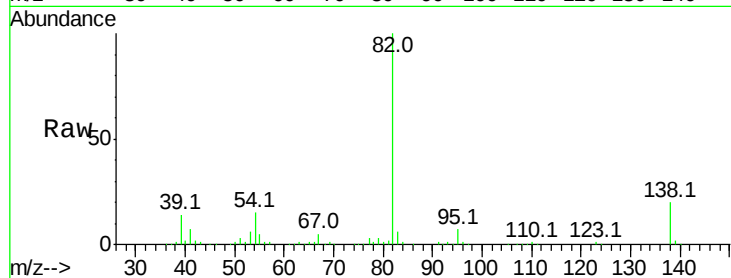
Tot Ion: 82 Resp: 533167

Ion Ratio Lower Upper

82 100

95 6.7 5.3 7.9

138 20.1 13.1 19.7#



#26

2-Nitrophenol

Concen: 32.54 ng

RT: 9.20 min Scan# 1234

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

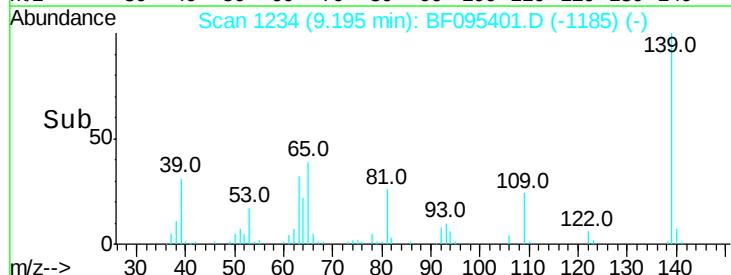
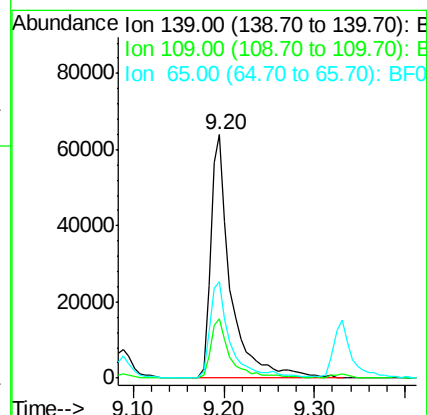
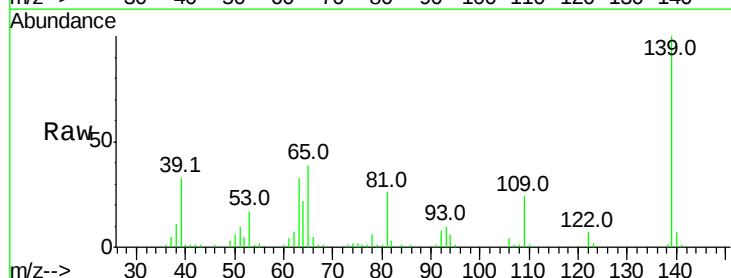
Tgt Ion:139 Resp: 97874

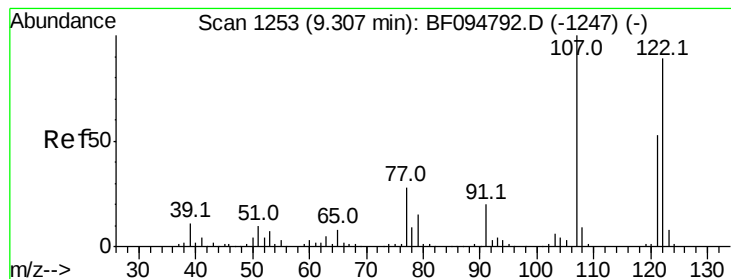
Ion Ratio Lower Upper

139 100

109 24.4 21.0 31.6

65 39.5 33.0 49.6

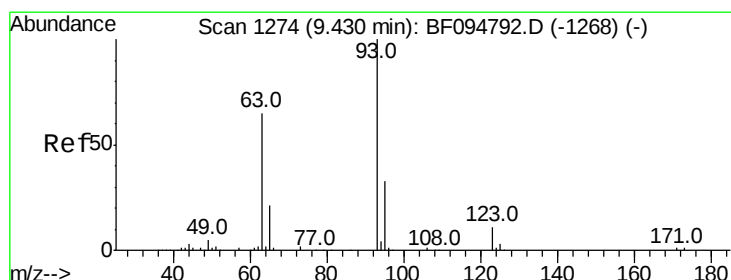
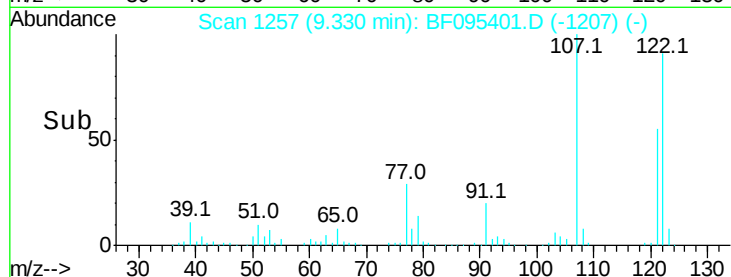
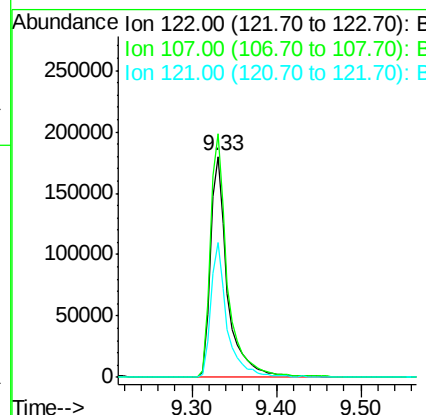
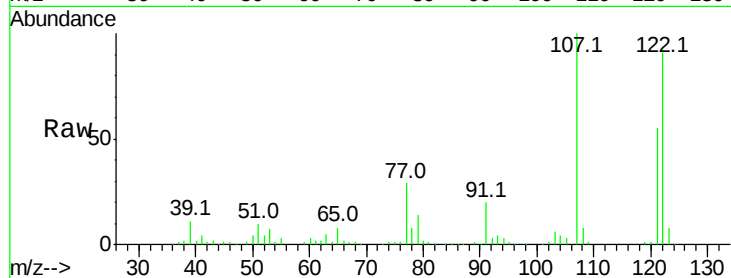




#27
2,4-Dimethylphenol
Concen: 52.29 ng
RT: 9.33 min Scan# 1257
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

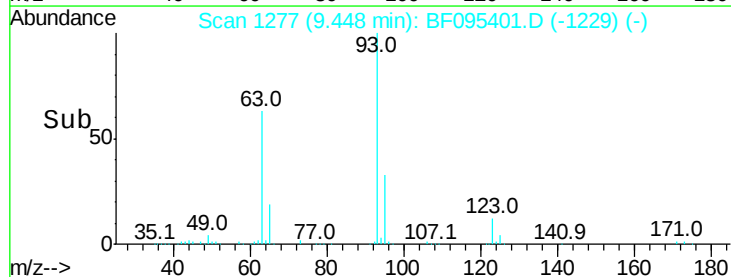
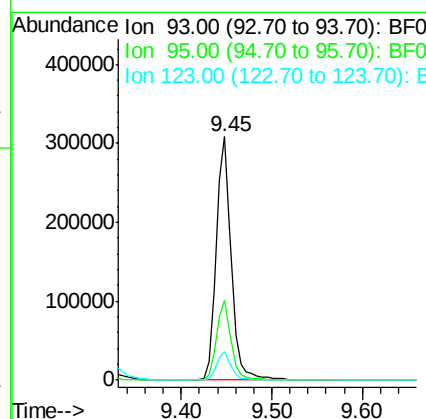
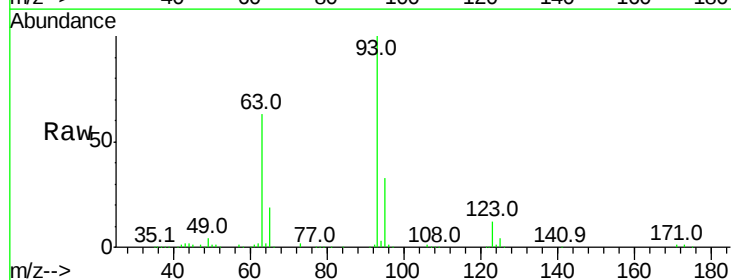
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

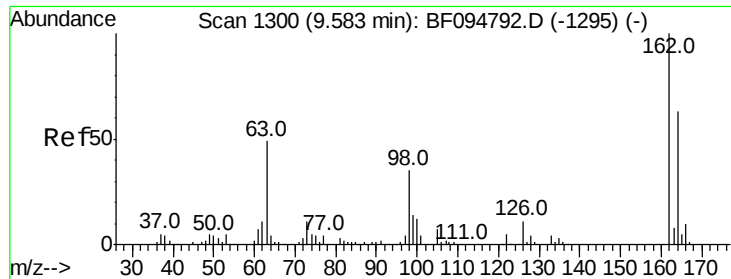
Tot Ion:122 Resp: 254293
Ion Ratio Lower Upper
122 100
107 110.2 89.2 133.8
121 60.9 45.2 67.8



#28
bis(2-Chloroethoxy)methane
Concen: 54.37 ng
RT: 9.45 min Scan# 1277
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion: 93 Resp: 357135
Ion Ratio Lower Upper
93 100
95 32.9 26.5 39.7
123 11.7 9.0 13.4

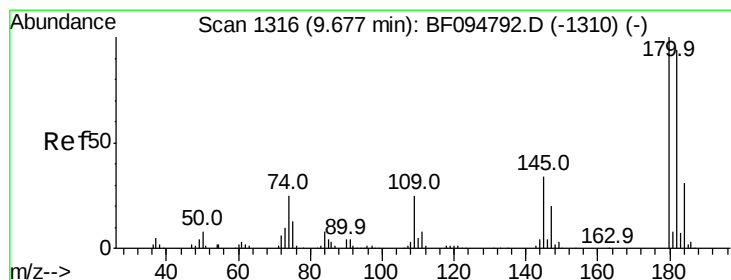
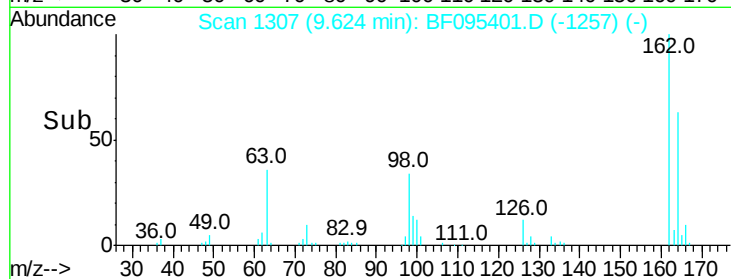
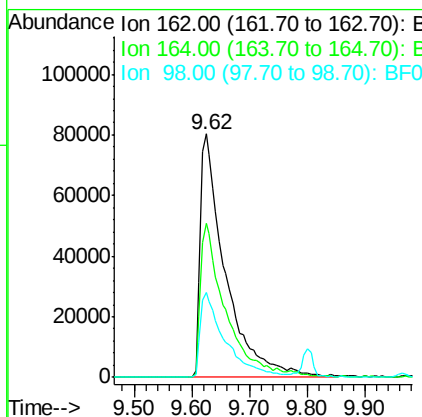
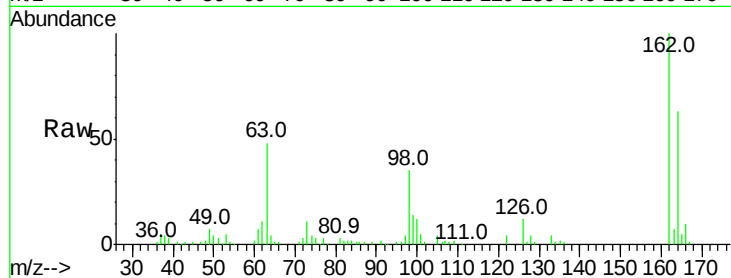




#29
 2,4-Dichlorophenol
 Concen: 53.12 ng
 RT: 9.62 min Scan# 1307
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

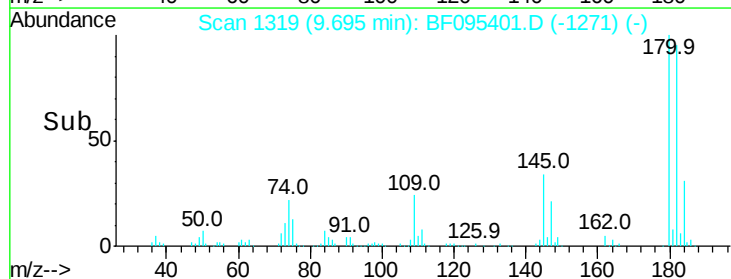
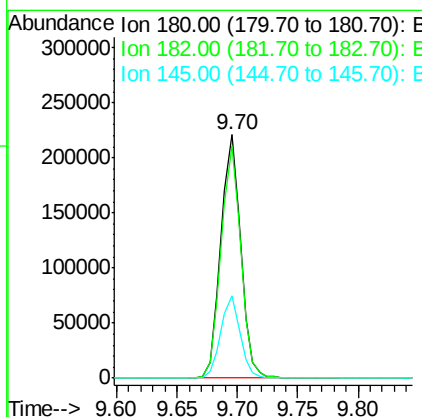
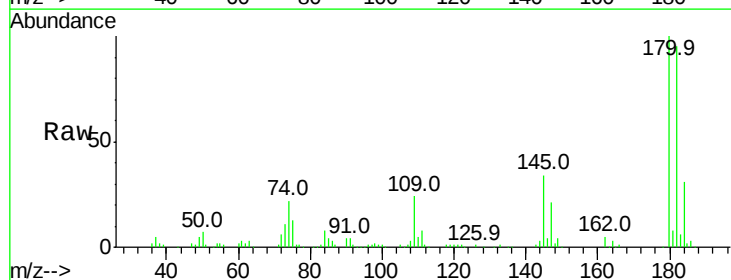
Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

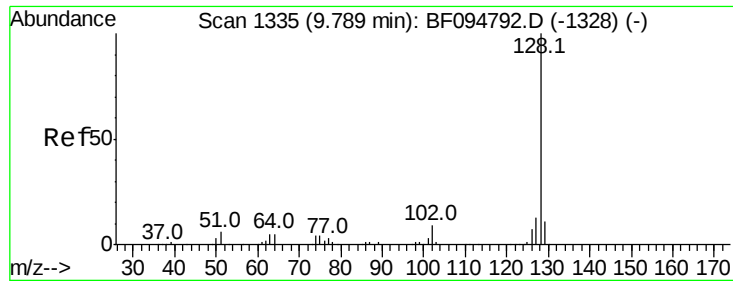
Tot Ion	Ratio	Lower	Upper
162	100		
164	63.2	44.6	84.6
98	34.9	14.8	54.8



#30
 1,2,4-Trichlorobenzene
 Concen: 51.14 ng
 RT: 9.70 min Scan# 1319
 Delta R.T. -0.02 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion	Ratio	Lower	Upper
180	100		
182	95.2	75.8	113.6
145	33.8	25.3	37.9

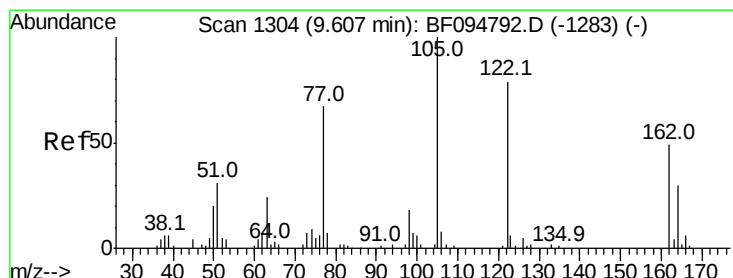
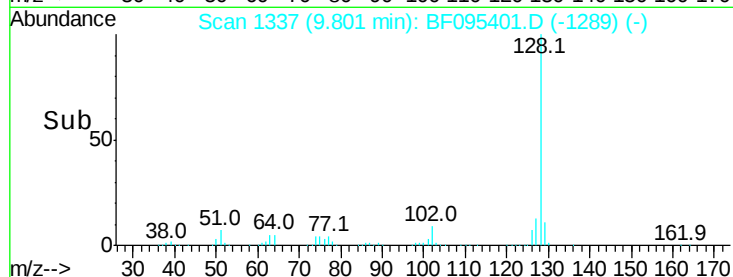
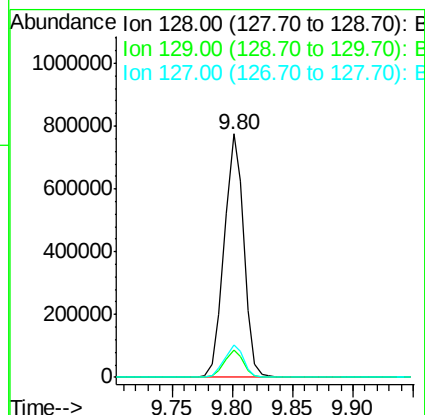
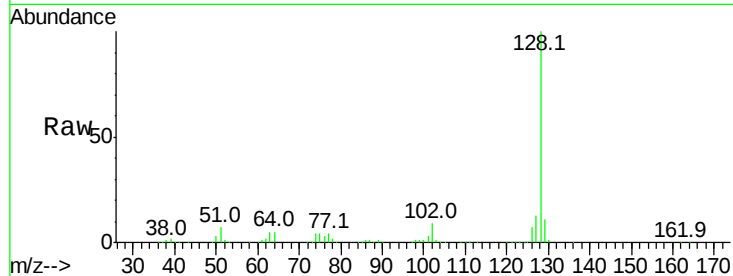




#31
Naphthalene
Concen: 51.25 ng
RT: 9.80 min Scan# 1337
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

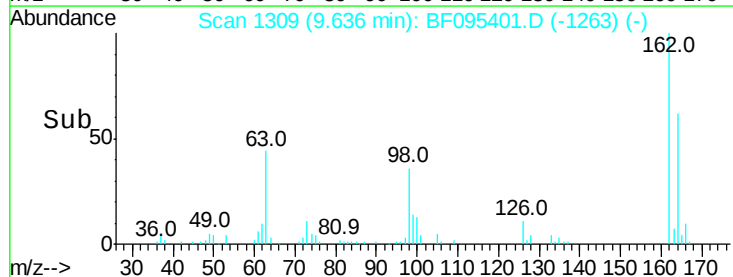
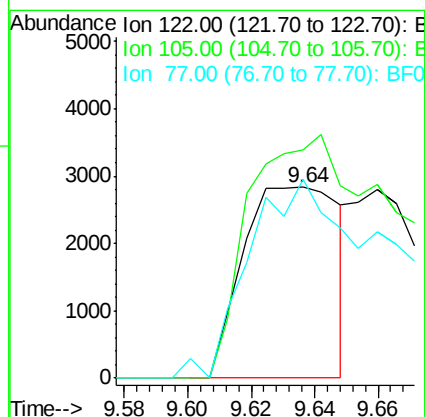
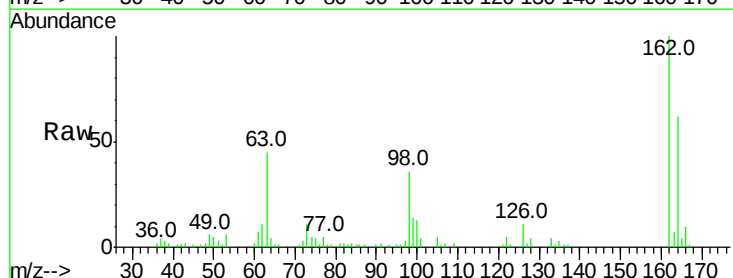
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

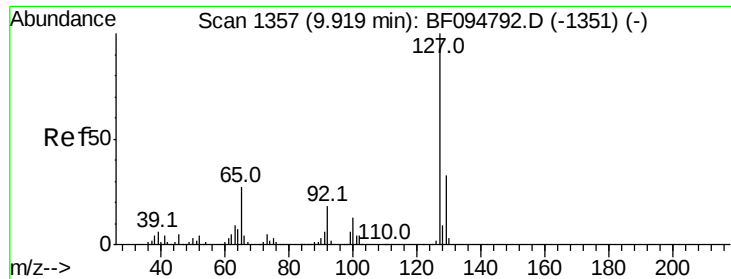
Tot Ion:128 Resp: 863741
Ion Ratio Lower Upper
128 100
129 11.2 9.0 13.6
127 13.5 10.8 16.2



#32
Benzoic acid
Concen: 6.75 ng
RT: 9.64 min Scan# 1309
Delta R.T. -0.03 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:122 Resp: 5955
Ion Ratio Lower Upper
122 100
105 119.4 103.3 143.3
77 104.4 73.7 113.7

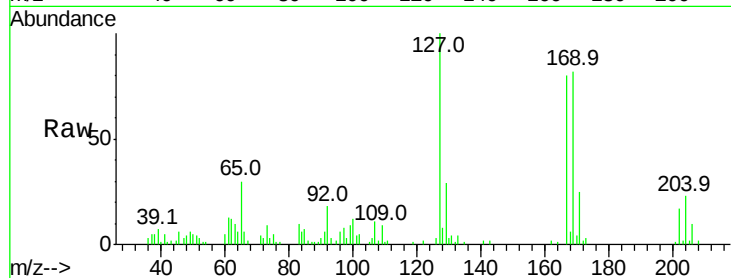




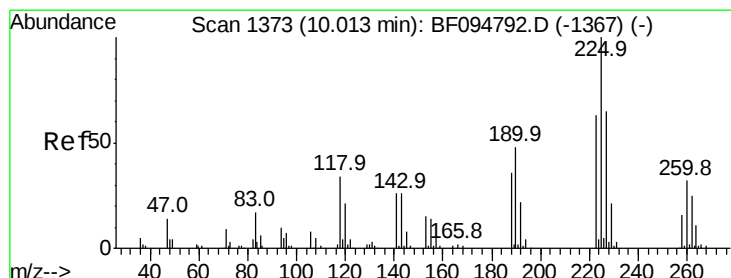
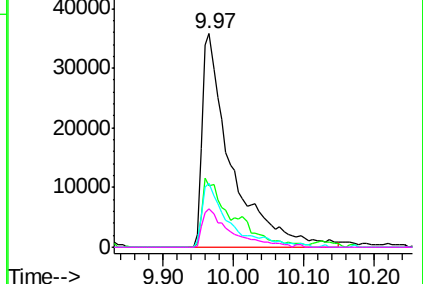
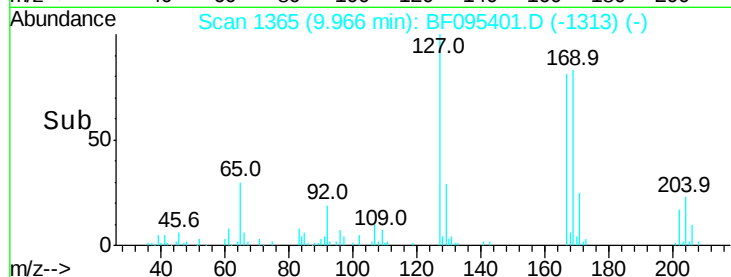
#33
4-Chloroaniline
Concen: 16.37 ng
RT: 9.97 min Scan# 1365
Delta R.T. 0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Instrument :
BNA_F
ClientSampleId :
EX-02MSD

Tot Ion:	127	Resp:	102836
Ion	Ratio	Lower	Upper
127	100		
129	28.8	26.2	39.2
65	30.2	27.8	41.8
92	18.3	16.8	25.2

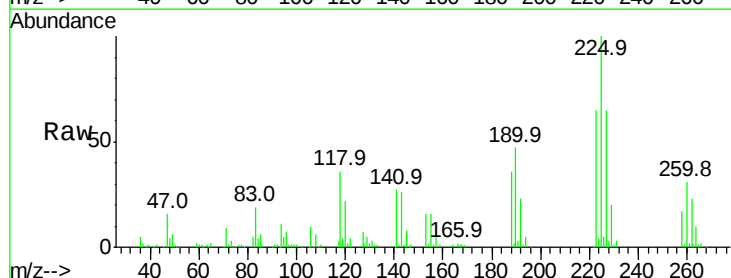


Abundance Ion 127.00 (126.70 to 127.70): E
Ion 129.00 (128.70 to 129.70): E
Ion 65.00 (64.70 to 65.70): BF0
Ion 92.00 (91.70 to 92.70): BF0

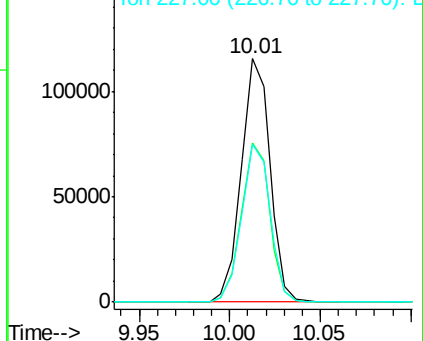
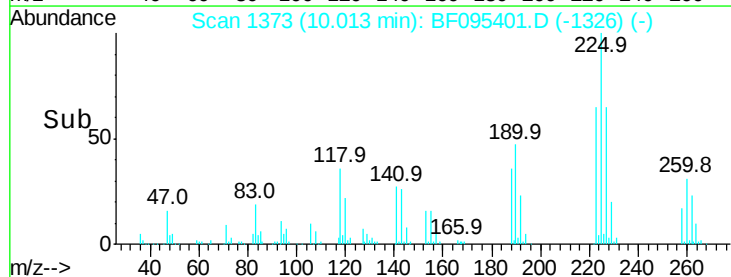


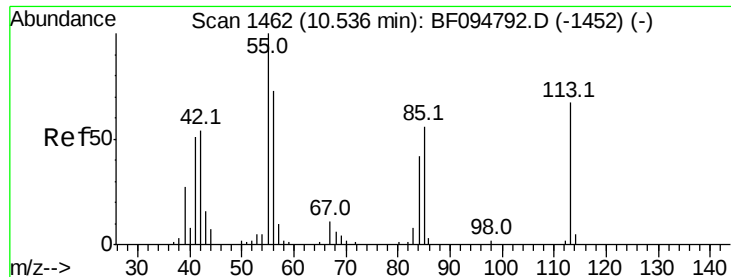
#34
Hexachlorobutadiene
Concen: 49.16 ng
RT: 10.01 min Scan# 1373
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:	225	Resp:	127586
Ion	Ratio	Lower	Upper
225	100		
223	65.2	48.8	73.2
227	64.6	51.1	76.7



Abundance Ion 225.00 (224.70 to 225.70): E
Ion 223.00 (222.70 to 223.70): E
Ion 227.00 (226.70 to 227.70): E





#35

Caprolactam

Concen: 49.59 ng

RT: 10.57 min Scan# 1468

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

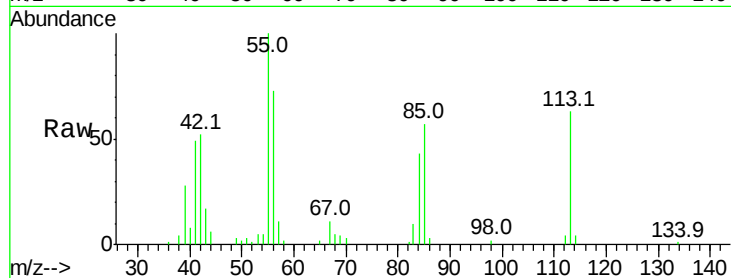
Tot Ion:113 Resp: 68377

Ion Ratio Lower Upper

113 100

55 157.8 150.2 190.2

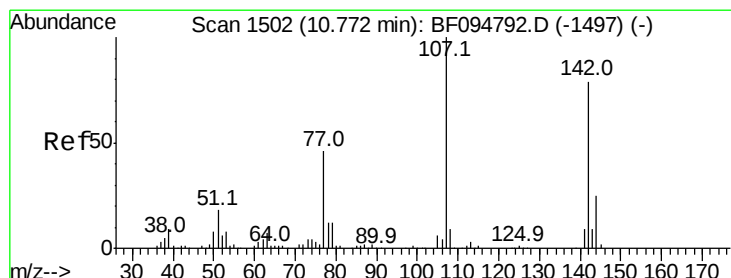
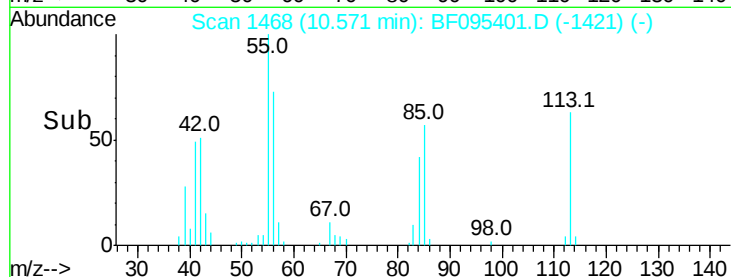
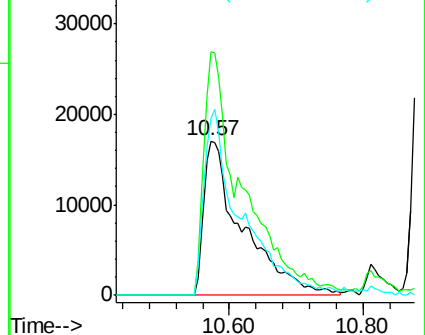
56 114.7 107.8 147.8



Abundance Ion 113.00 (112.70 to 113.70): E

Ion 55.00 (54.70 to 55.70): BF0

Ion 56.00 (55.70 to 56.70): BF0



#36

4-Chloro-3-methylphenol

Concen: 47.44 ng

RT: 10.81 min Scan# 1509

Delta R.T. -0.00 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

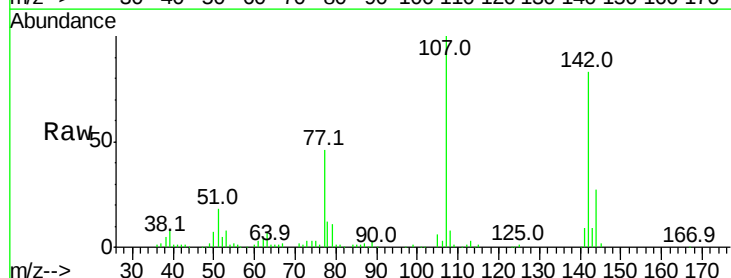
Tgt Ion:107 Resp: 232890

Ion Ratio Lower Upper

107 100

144 26.9 24.2 36.4

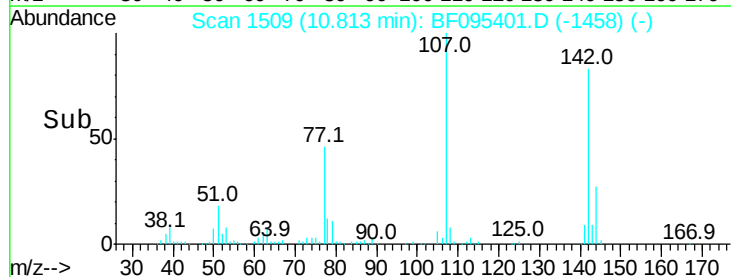
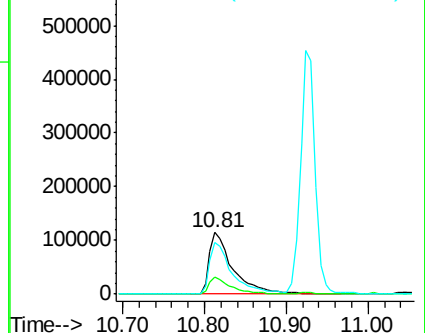
142 83.0 73.4 110.0

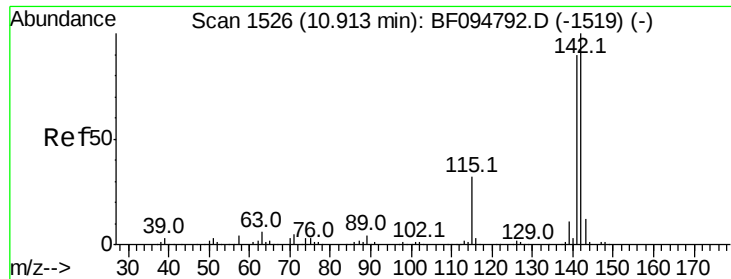


Abundance Ion 107.00 (106.70 to 107.70): E

Ion 144.00 (143.70 to 144.70): E

Ion 142.00 (141.70 to 142.70): E

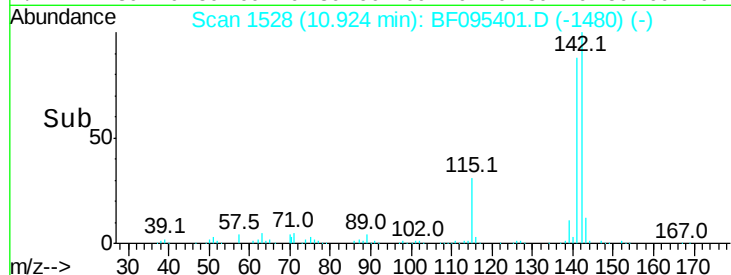
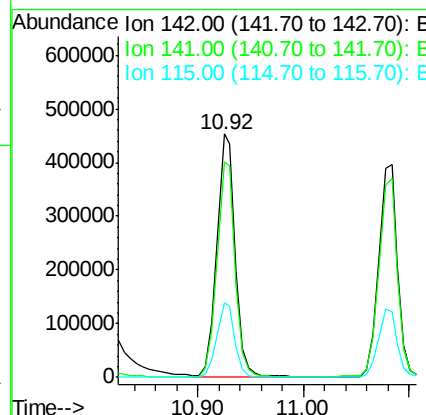
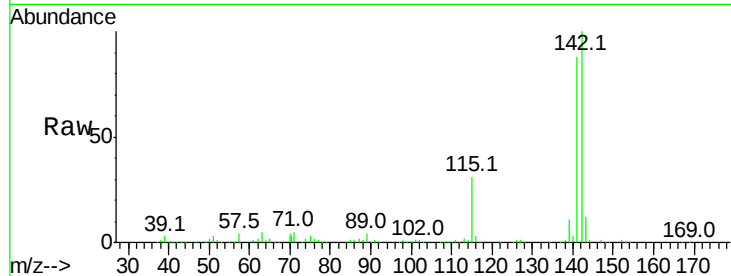




#37
2-Methylnaphthalene
Concen: 50.58 ng
RT: 10.92 min Scan# 1528
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

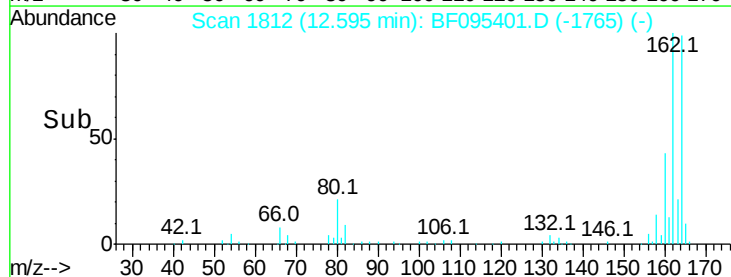
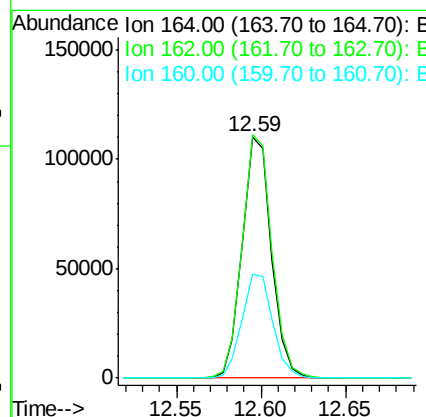
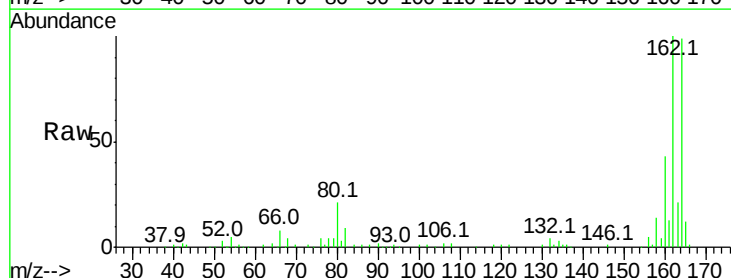
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

Tot Ion:142 Resp: 559439
Ion Ratio Lower Upper
142 100
141 88.5 71.3 106.9
115 30.7 27.1 40.7



#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 12.59 min Scan# 1812
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:164 Resp: 132267
Ion Ratio Lower Upper
164 100
162 100.9 82.6 123.8
160 43.1 36.2 54.2





#39

1,2,4,5-Tetrachlorobenzene

Concen: 53.51 ng

RT: 11.21 min Scan# 1576

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

Tot Ion:216 Resp: 217650

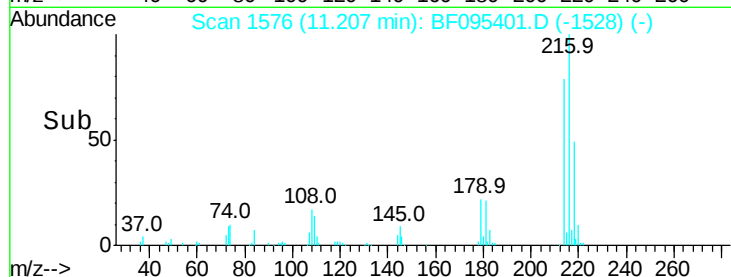
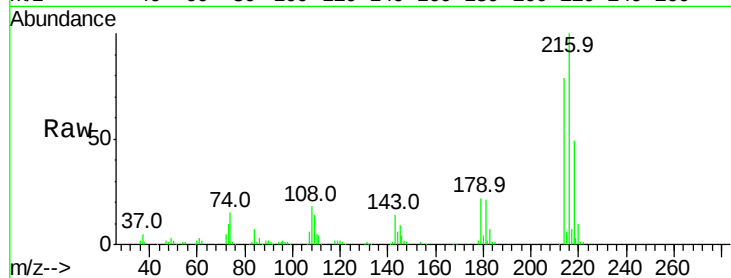
Ion Ratio Lower Upper

216 100

214 78.9 63.4 95.2

179 22.2 17.9 26.9

108 17.9 16.5 24.7

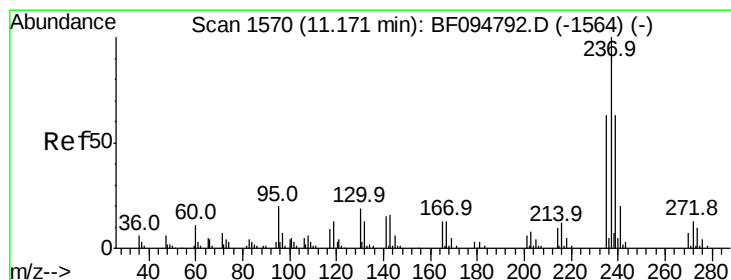
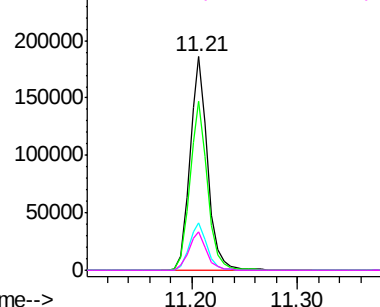


Abundance Ion 216.00 (215.70 to 216.70): E

Ion 214.00 (213.70 to 214.70): E

Ion 179.00 (178.70 to 179.70): E

Ion 108.00 (107.70 to 108.70): E



#40

Hexachlorocyclopentadiene

Concen: 9.14 ng

RT: 11.18 min Scan# 1571

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

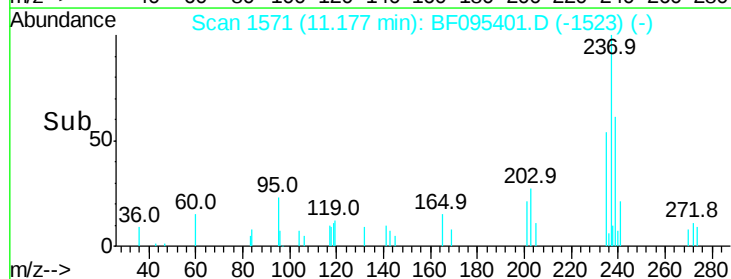
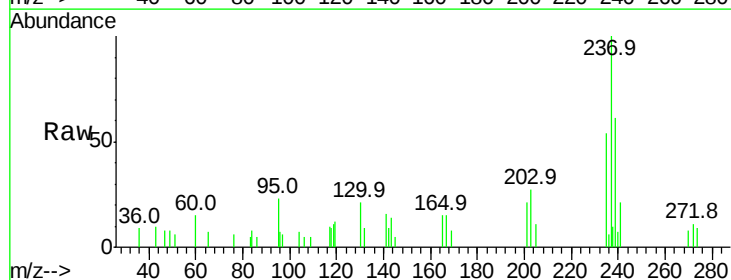
Tgt Ion:237 Resp: 5711

Ion Ratio Lower Upper

237 100

235 53.8 42.6 82.6

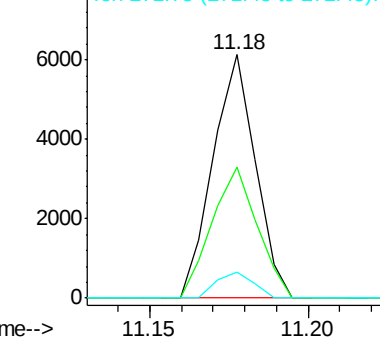
272 10.7 0.0 31.9

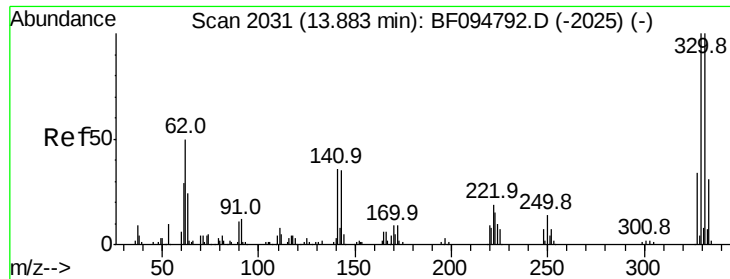


Abundance Ion 236.80 (236.50 to 237.50): E

Ion 234.90 (234.60 to 235.60): E

Ion 271.75 (271.45 to 272.45): E

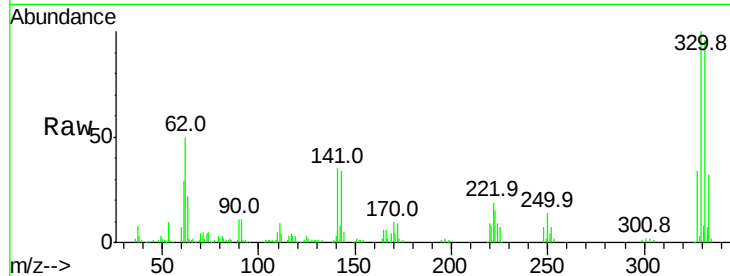




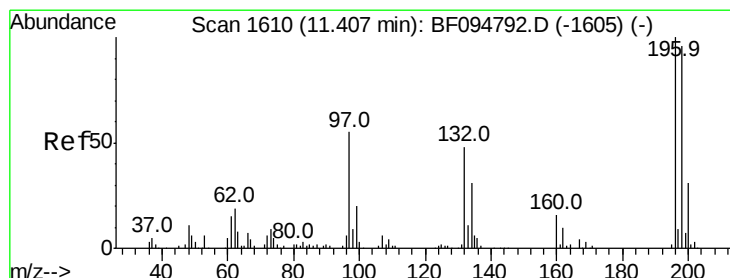
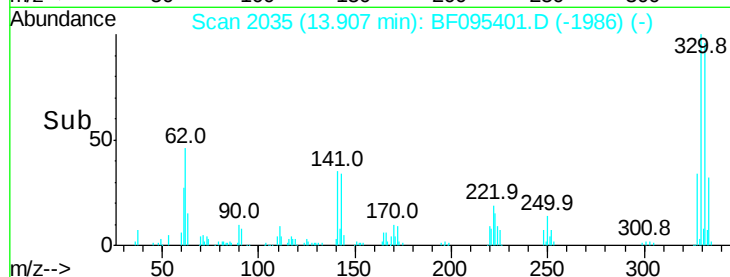
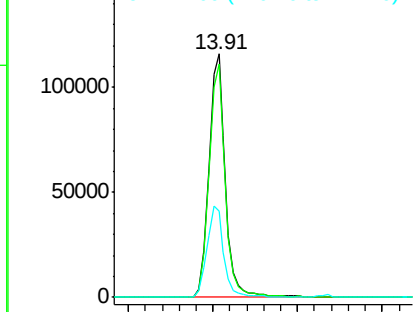
#41
 2,4,6-Tribromophenol
 Concen: 146.93 ng
 RT: 13.91 min Scan# 2035
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

Tot Ion:330 Resp: 159156
 Ion Ratio Lower Upper
 330 100
 332 95.0 76.6 115.0
 141 38.5 31.4 47.2

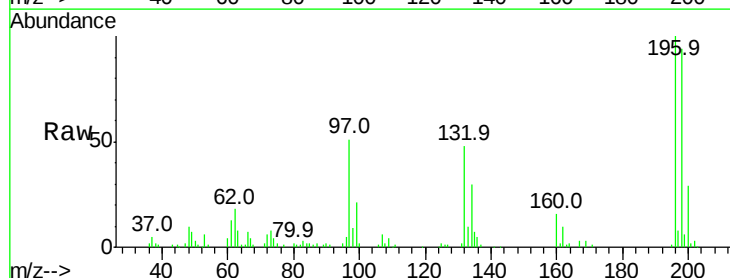


Abundance Ion 329.80 (329.50 to 330.50): E
 Ion 331.80 (331.50 to 332.50): E
 Ion 141.00 (140.70 to 141.70): E

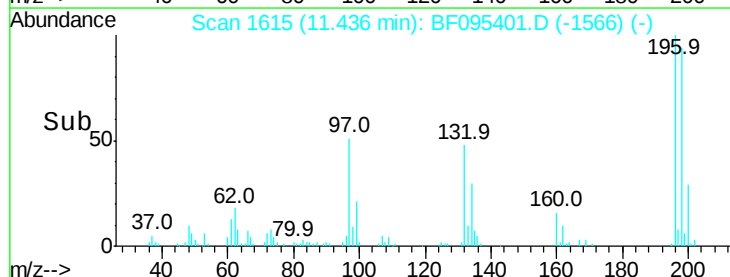
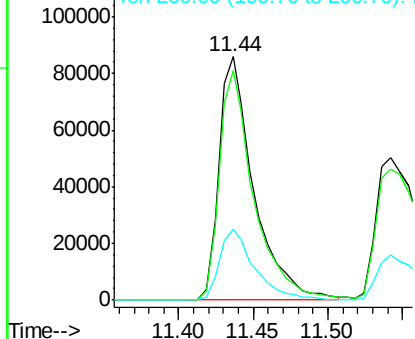


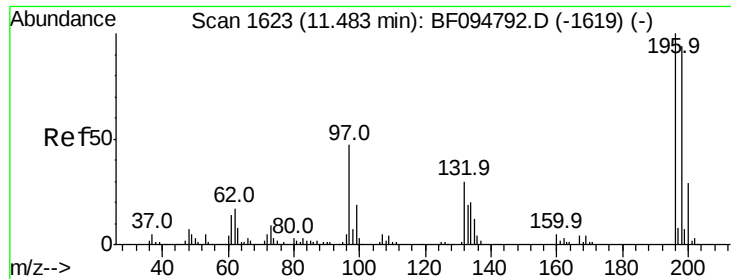
#42
 2,4,6-Trichlorophenol
 Concen: 51.60 ng
 RT: 11.44 min Scan# 1615
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion:196 Resp: 140131
 Ion Ratio Lower Upper
 196 100
 198 94.1 74.2 111.4
 200 29.3 24.0 36.0



Abundance Ion 196.00 (195.70 to 196.70): E
 Ion 198.00 (197.70 to 198.70): E
 Ion 200.00 (199.70 to 200.70): E

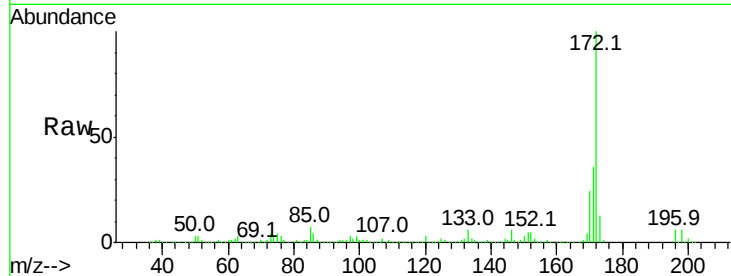




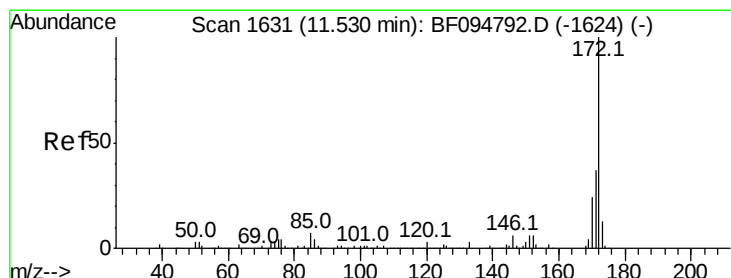
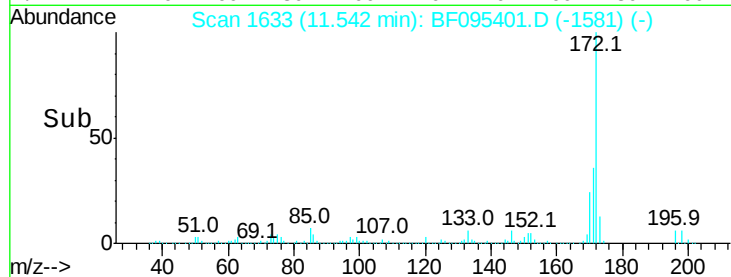
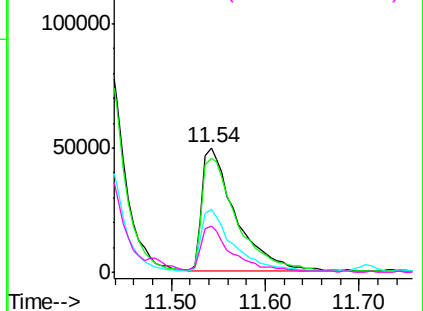
#43
 2,4,5-Trichlorophenol
 Concen: 42.71 ng
 RT: 11.54 min Scan# 1633
 Delta R.T. 0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

Tot Ion	Ratio	Lower	Upper
196	100		
198	92.0	75.7	113.5
97	50.6	47.7	71.5
132	37.0	28.0	42.0

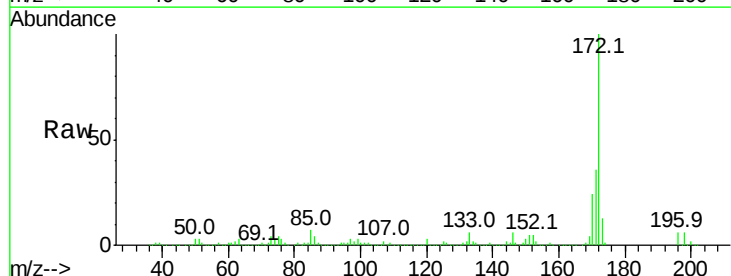


Abundance Ion 196.00 (195.70 to 196.70): E
 Ion 198.00 (197.70 to 198.70): E
 Ion 97.00 (96.70 to 97.70): BF0
 Ion 132.00 (131.70 to 132.70): E

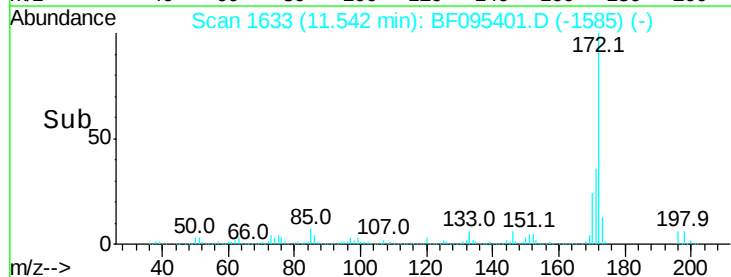
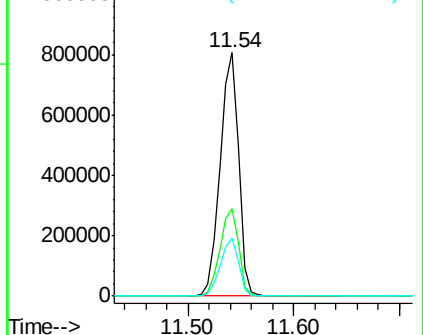


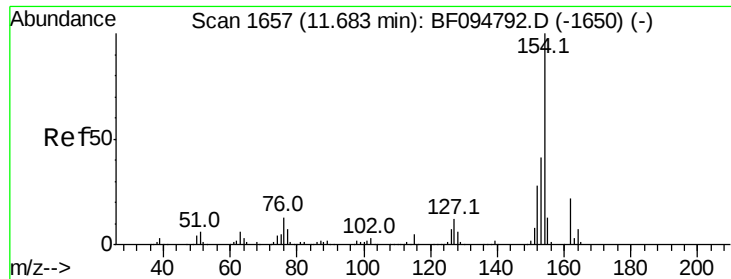
#44
 2-Fluorobiphenyl
 Concen: 107.79 ng
 RT: 11.54 min Scan# 1633
 Delta R.T. -0.02 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion	Ratio	Lower	Upper
172	100		
171	36.2	29.6	44.4
170	23.8	19.8	29.8



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

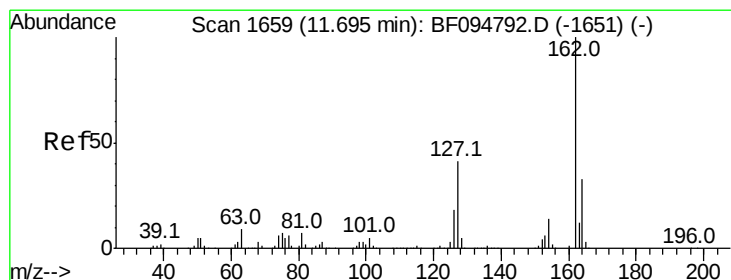
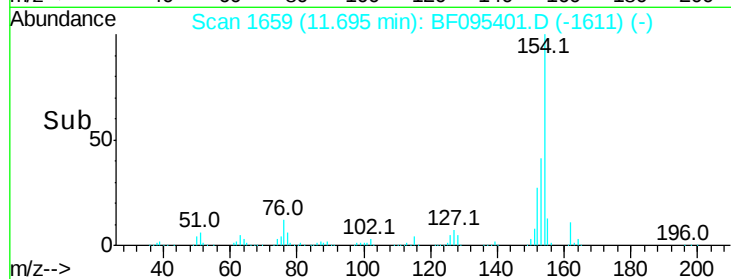
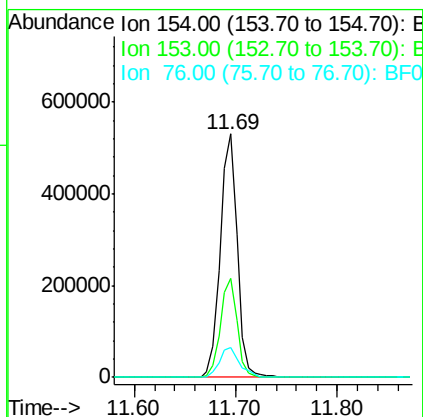
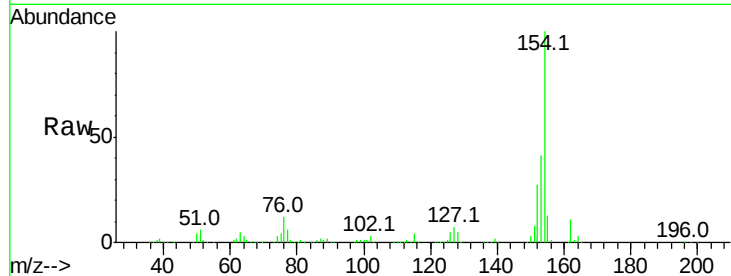




#45
 1,1'-Biphenyl
 Concen: 55.33 ng
 RT: 11.69 min Scan# 1659
 Delta R.T. -0.02 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

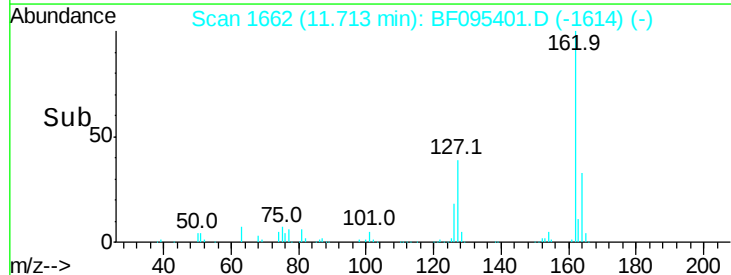
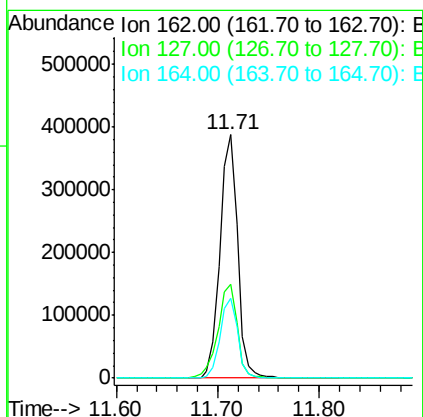
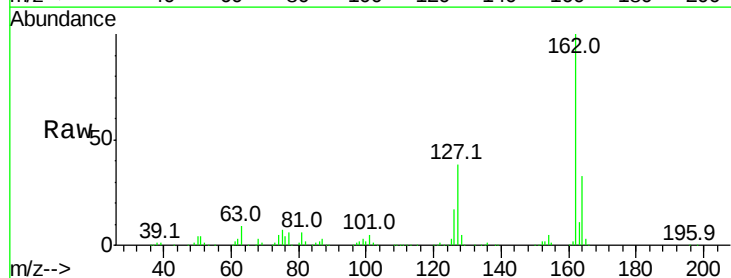
Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

Tot Ion:154 Resp: 616194
 Ion Ratio Lower Upper
 154 100
 153 40.6 21.2 61.2
 76 12.4 0.0 29.9



#46
 2-Chloronaphthalene
 Concen: 52.31 ng
 RT: 11.71 min Scan# 1662
 Delta R.T. -0.02 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion:162 Resp: 470348
 Ion Ratio Lower Upper
 162 100
 127 38.3 28.3 42.5
 164 32.7 27.0 40.4

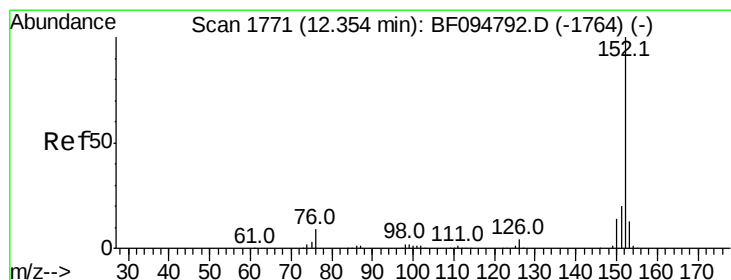
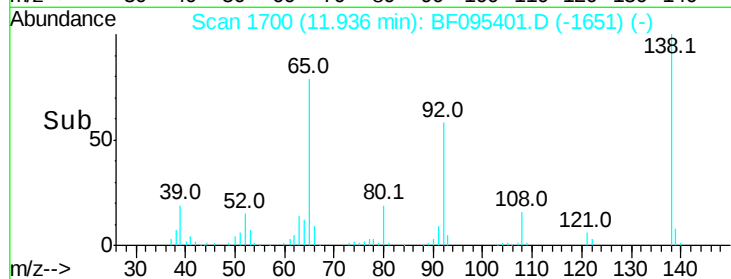
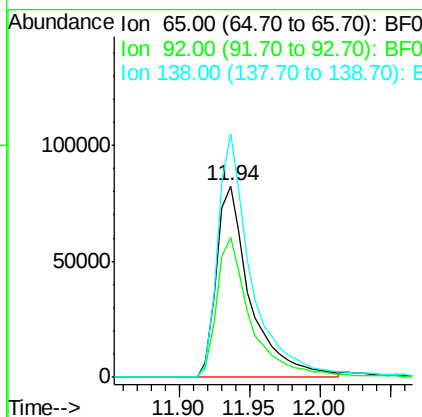
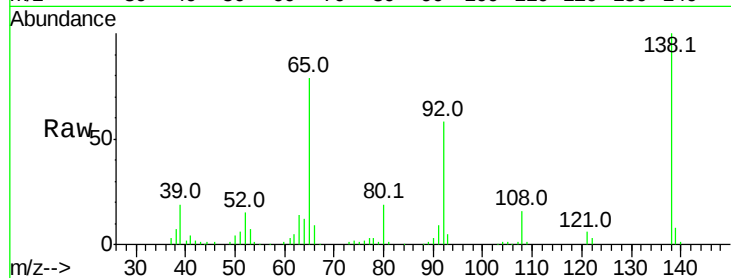




#47
 2-Nitroaniline
 Concen: 56.18 ng
 RT: 11.94 min Scan# 1700
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

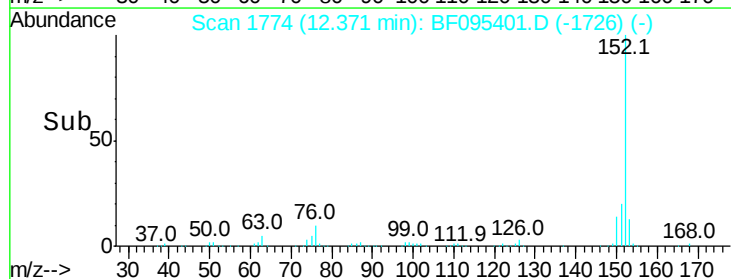
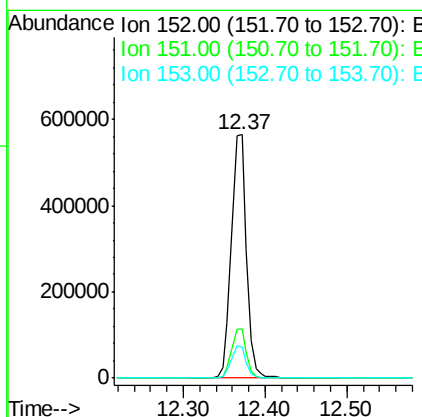
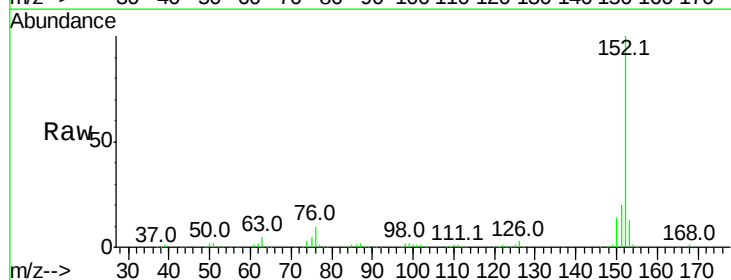
Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

Tot Ion: 65 Resp: 138270
 Ion Ratio Lower Upper
 65 100
 92 73.2 53.9 80.9
 138 127.2 78.8 118.2#



#48
 Acenaphthylene
 Concen: 51.99 ng
 RT: 12.37 min Scan# 1774
 Delta R.T. -0.02 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion: 152 Resp: 732205
 Ion Ratio Lower Upper
 152 100
 151 20.2 16.8 25.2
 153 12.7 10.8 16.2





#49

Dimethylphthalate

Concen: 64.26 ng

RT: 12.24 min Scan# 1752

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

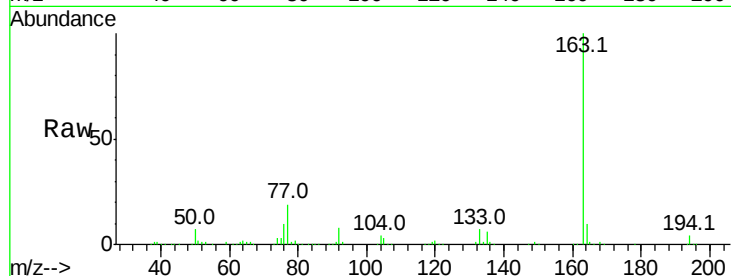
Tot Ion:163 Resp: 697799

Ion Ratio Lower Upper

163 100

194 3.6 2.6 4.0

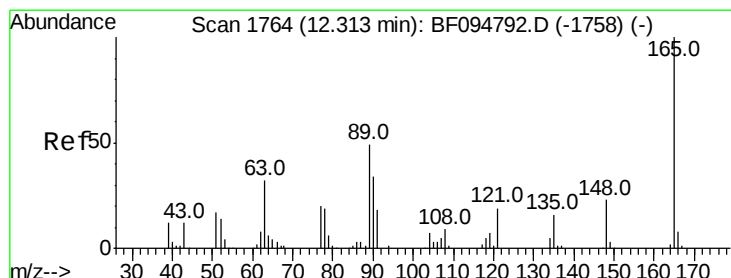
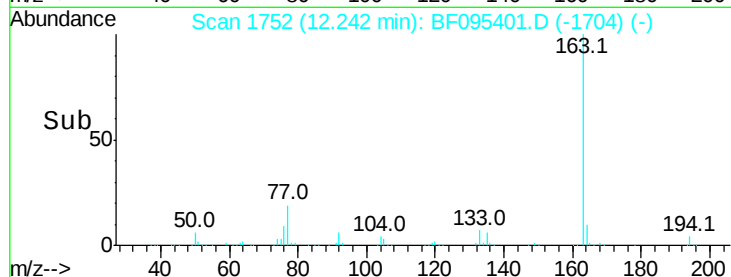
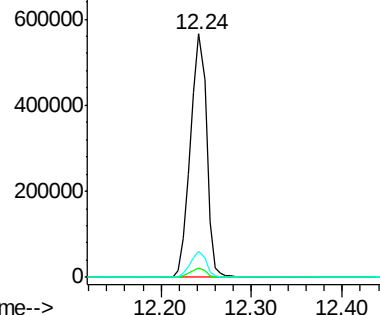
164 10.5 8.4 12.6



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



#50

2,6-Dinitrotoluene

Concen: 44.55 ng

RT: 12.34 min Scan# 1769

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

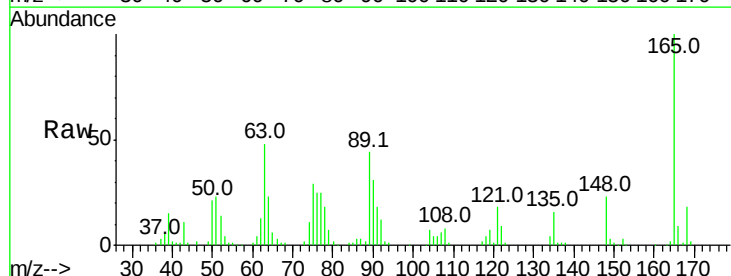
Tgt Ion:165 Resp: 98692

Ion Ratio Lower Upper

165 100

63 47.7 34.3 51.5

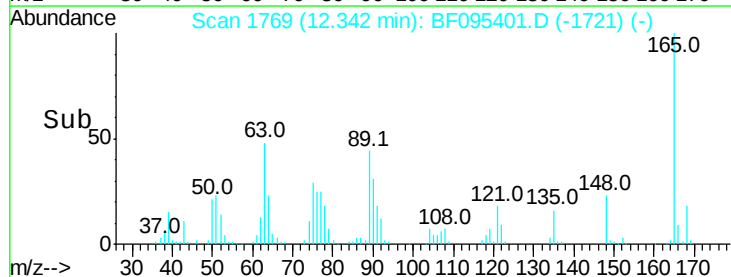
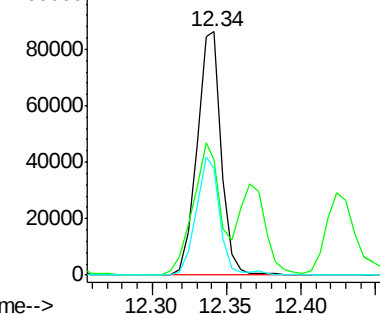
89 43.9 37.1 55.7

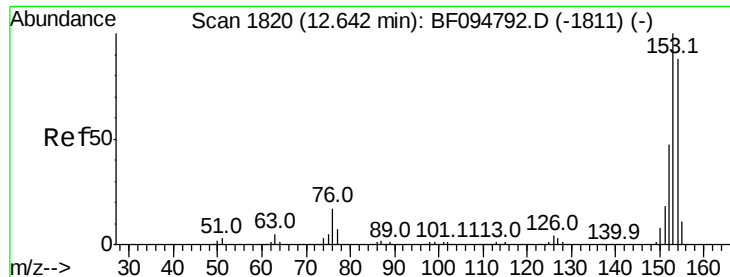


Abundance Ion 165.00 (164.70 to 165.70): E

Ion 63.00 (62.70 to 63.70): BF0

Ion 89.00 (88.70 to 89.70): BF0





#51

Acenaphthene

Concen: 51.44 ng

RT: 12.65 min Scan# 1822

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

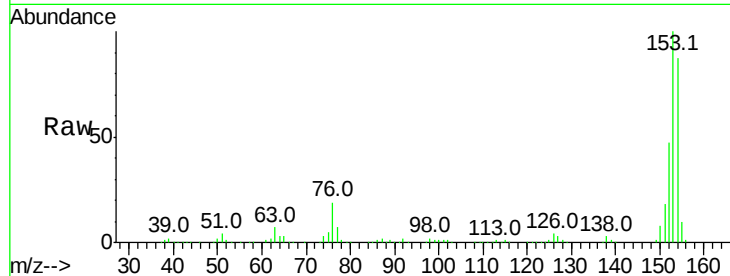
Tot Ion:154 Resp: 432761

Ion Ratio Lower Upper

154 100

153 115.3 90.5 135.7

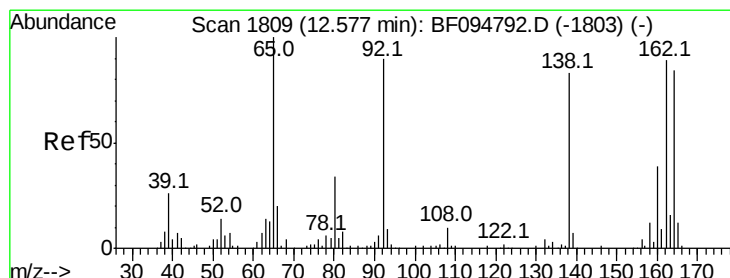
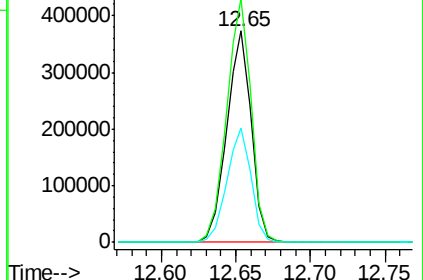
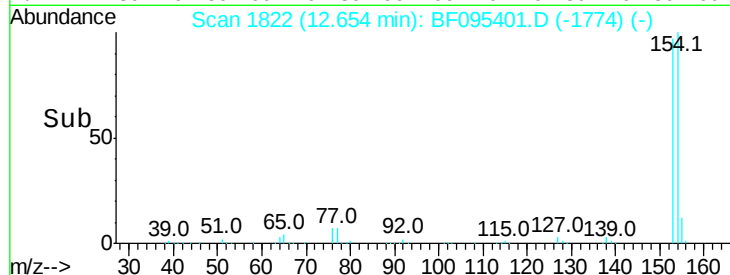
152 54.0 43.6 65.4



Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E



#52

3-Nitroaniline

Concen: 54.18 ng

RT: 12.62 min Scan# 1816

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

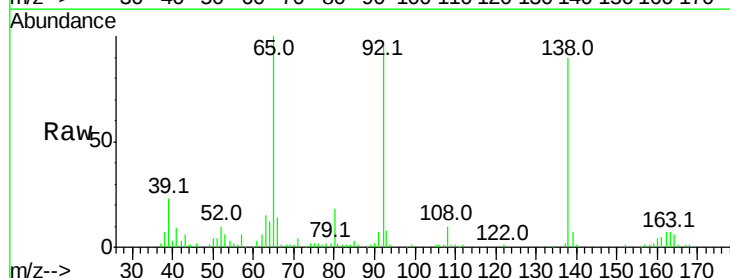
Tgt Ion:138 Resp: 128829

Ion Ratio Lower Upper

138 100

108 11.4 9.1 13.7

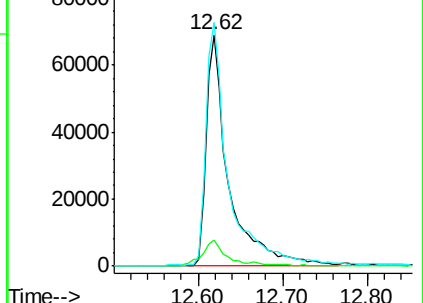
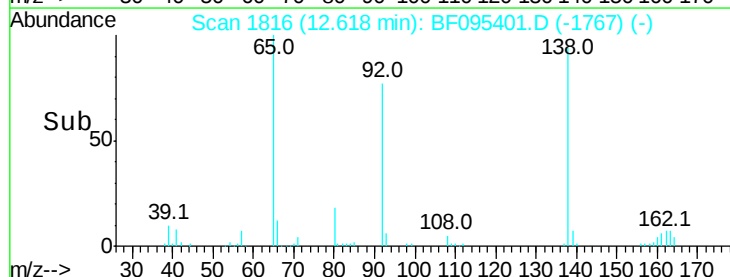
92 105.4 93.8 140.6

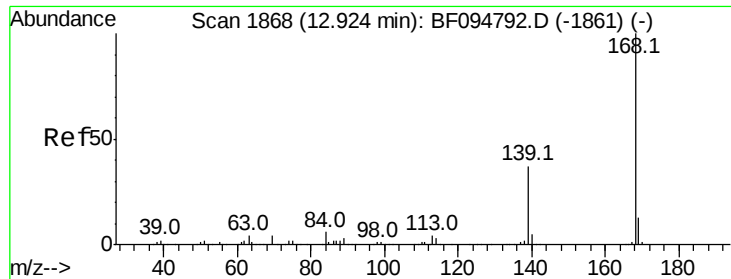


Abundance Ion 138.00 (137.70 to 138.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 92.00 (91.70 to 92.70): BF0

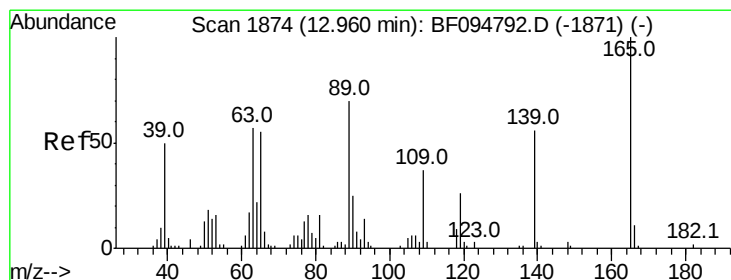
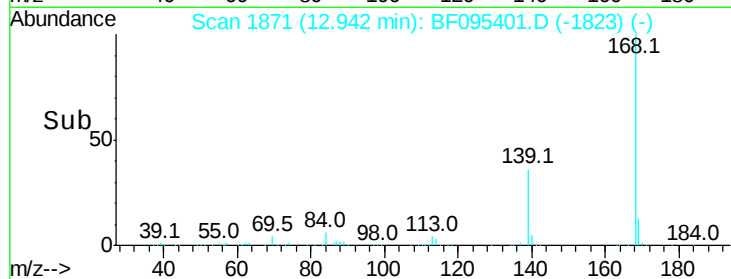
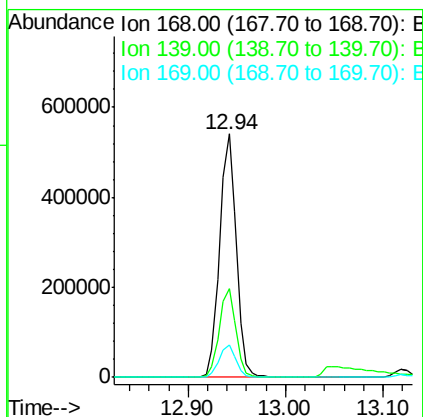
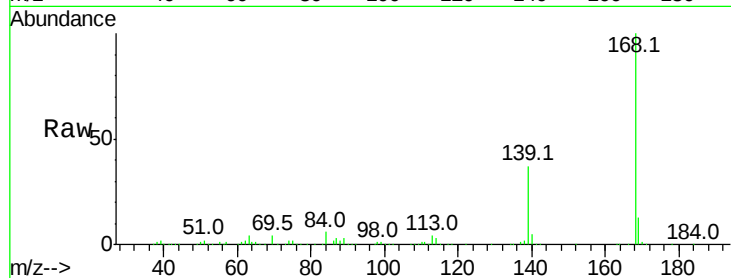




#54
Dibenzofuran
Concen: 55.27 ng
RT: 12.94 min Scan# 1871
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

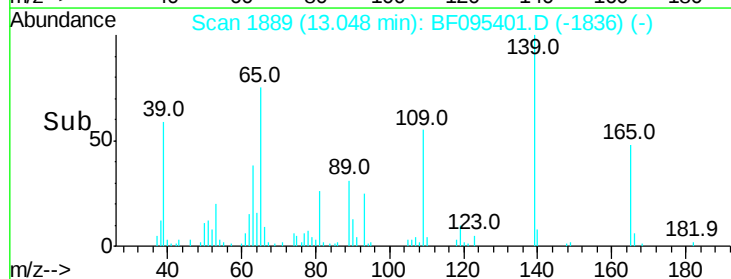
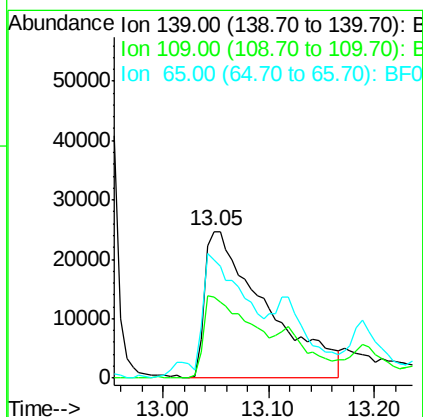
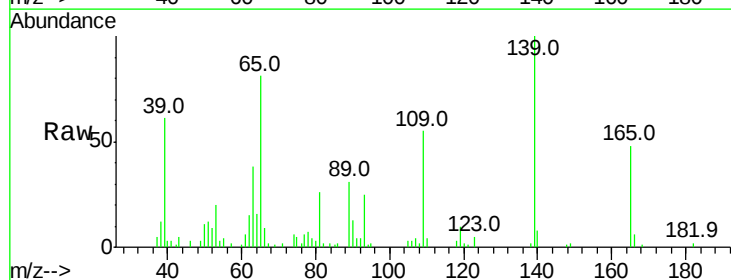
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

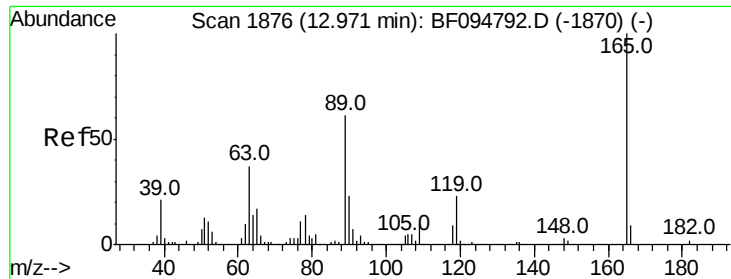
Tot Ion:168 Resp: 643410
Ion Ratio Lower Upper
168 100
139 36.6 30.6 45.8
169 13.3 10.8 16.2



#55
4-Nitrophenol
Concen: 69.43 ng
RT: 13.05 min Scan# 1889
Delta R.T. 0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:139 Resp: 99155
Ion Ratio Lower Upper
139 100
109 55.4 34.1 74.1
65 80.7 31.4 71.4#

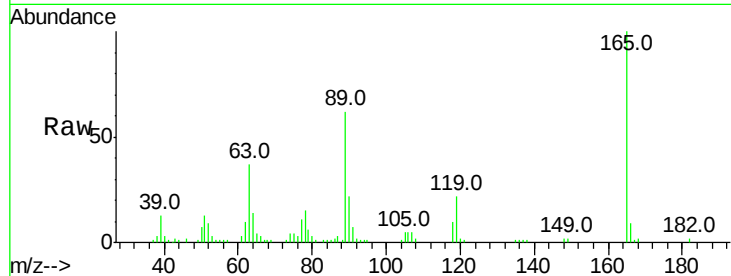




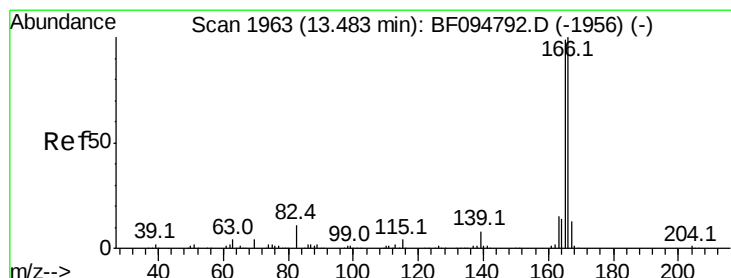
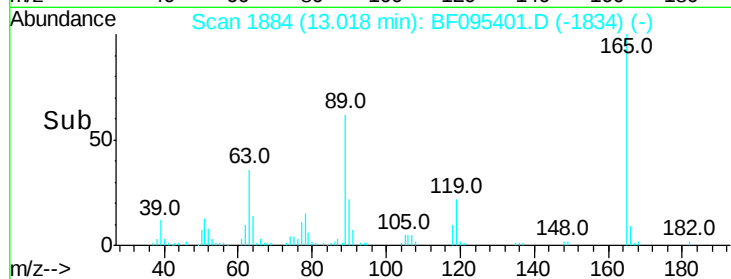
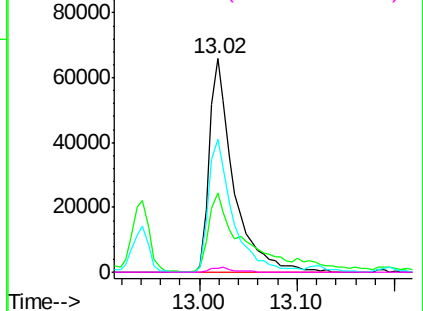
#56
2,4-Dinitrotoluene
Concen: 39.77 ng
RT: 13.02 min Scan# 1884
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Instrument :
BNA_F
ClientSampleId :
EX-02MSD

Tot Ion:165 Resp: 113210
Ion Ratio Lower Upper
165 100
63 37.0 25.4 38.0
89 62.4 46.4 69.6
182 2.1 1.8 2.6

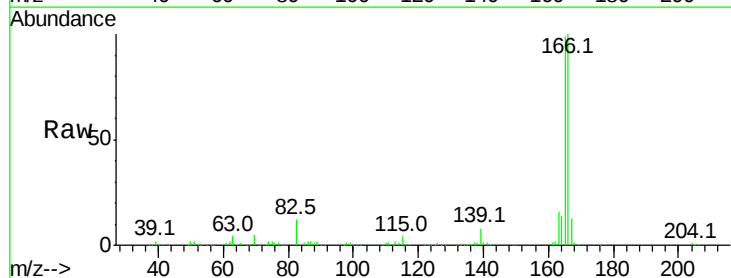


Abundance Ion 165.00 (164.70 to 165.70): E
Ion 63.00 (62.70 to 63.70): BF0
Ion 89.00 (88.70 to 89.70): BF0
Ion 182.00 (181.70 to 182.70): E

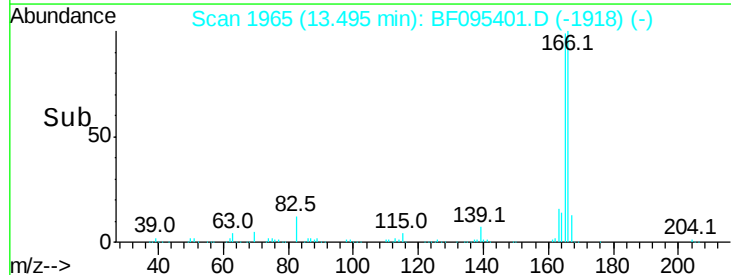
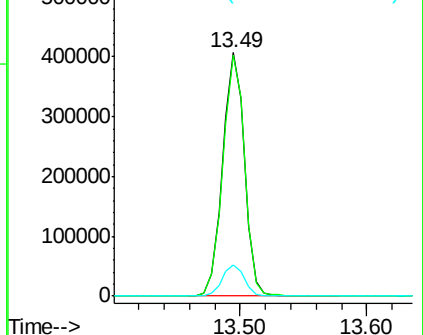


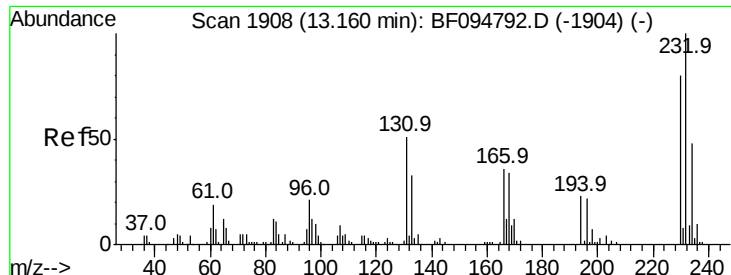
#57
Fluorene
Concen: 47.79 ng
RT: 13.49 min Scan# 1965
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:166 Resp: 483773
Ion Ratio Lower Upper
166 100
165 98.8 78.8 118.2
167 13.0 10.6 16.0



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

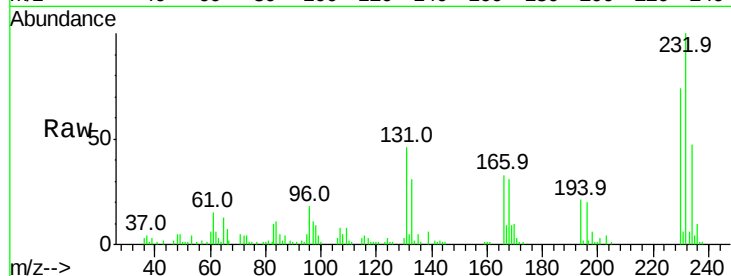




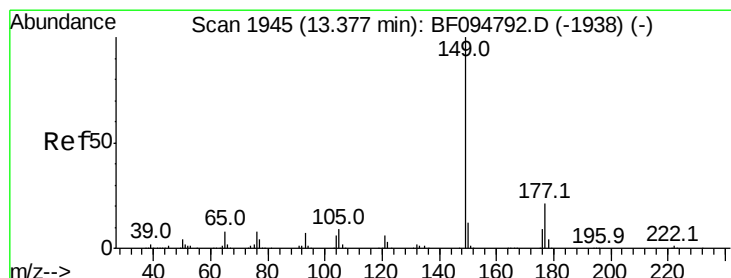
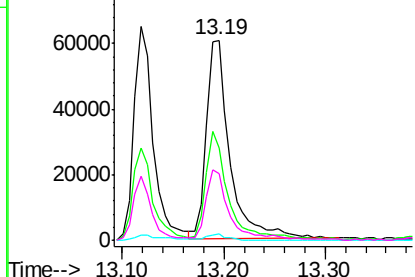
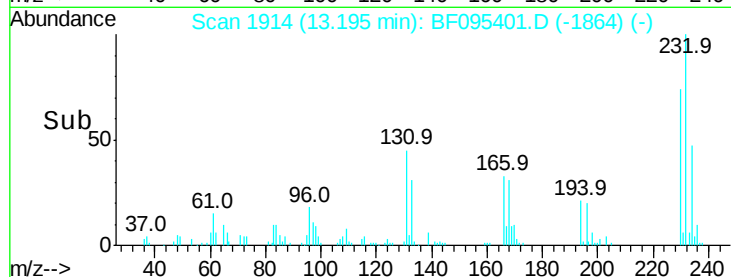
#58
 2,3,4,6-Tetrachlorophenol
 Concen: 53.38 ng
 RT: 13.19 min Scan# 1914
 Delta R.T. -0.01 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

Tot Ion:232 Resp: 98053
 Ion Ratio Lower Upper
 232 100
 131 50.9 44.8 67.2
 130 2.5 2.3 3.5
 166 36.3 29.0 43.4

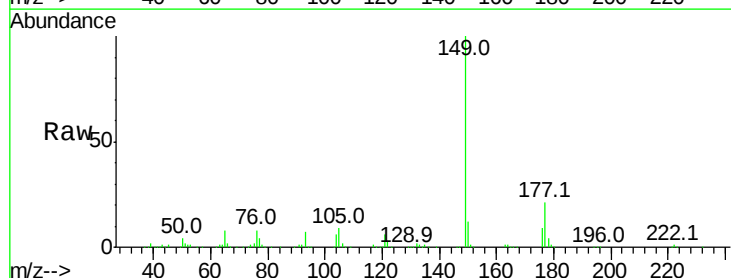


Abundance Ion 232.00 (231.70 to 232.70): E
 100000
 Ion 131.00 (130.70 to 131.70): E
 Ion 130.00 (129.70 to 130.70): E
 Ion 166.00 (165.70 to 166.70): E

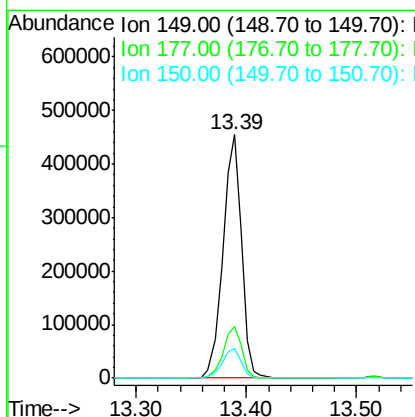
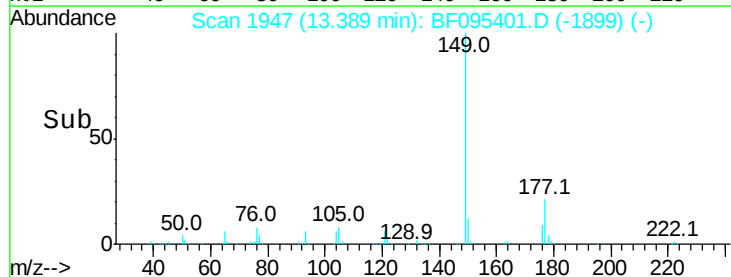


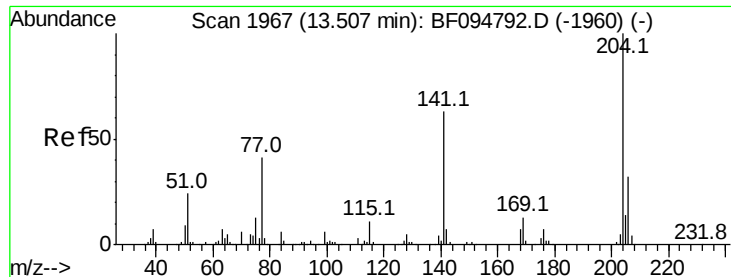
#59
 Diethylphthalate
 Concen: 51.08 ng
 RT: 13.39 min Scan# 1947
 Delta R.T. -0.02 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion:149 Resp: 531648
 Ion Ratio Lower Upper
 149 100
 177 21.4 16.7 25.1
 150 12.2 10.2 15.2



Abundance Ion 149.00 (148.70 to 149.70): E
 600000
 Ion 177.00 (176.70 to 177.70): E
 Ion 150.00 (149.70 to 150.70): E

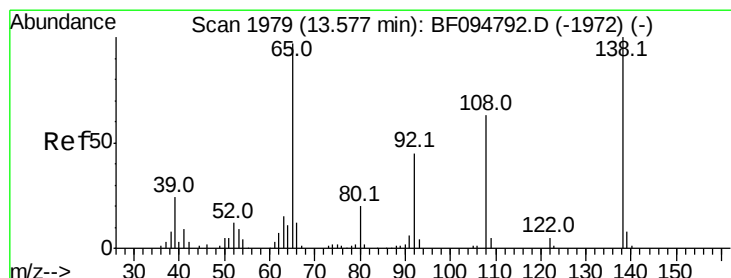
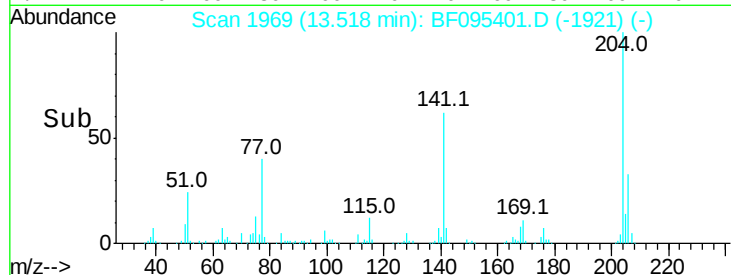
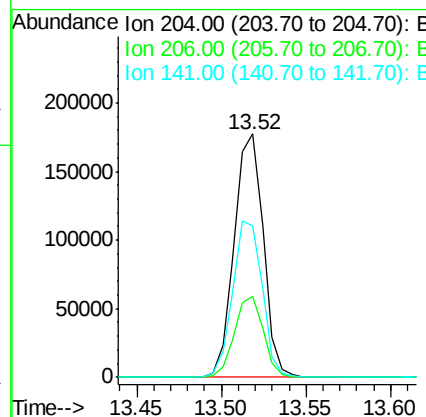
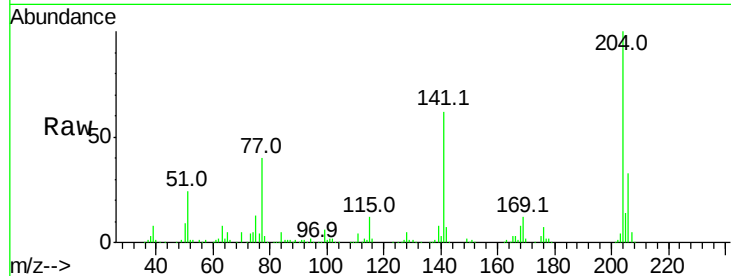




#60
4-Chlorophenyl-phenylether
Concen: 47.81 ng
RT: 13.52 min Scan# 1969
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

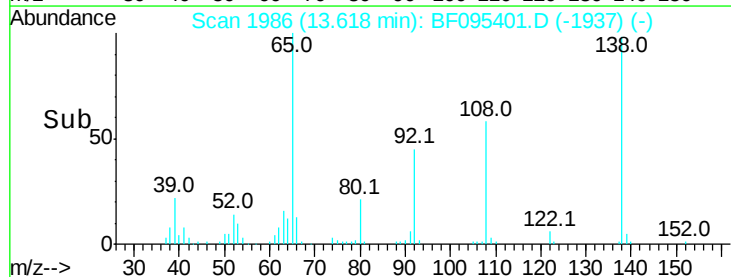
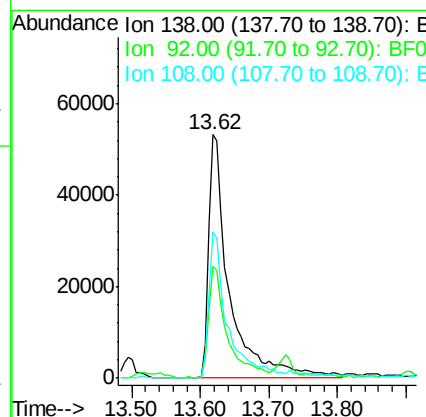
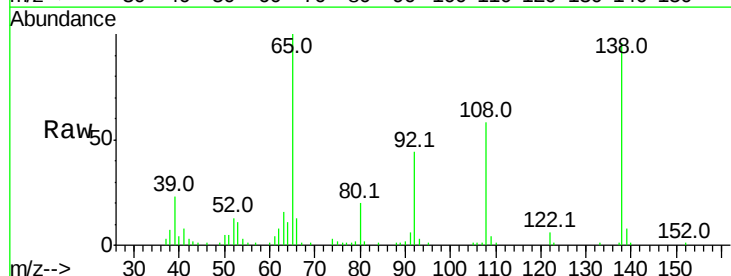
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

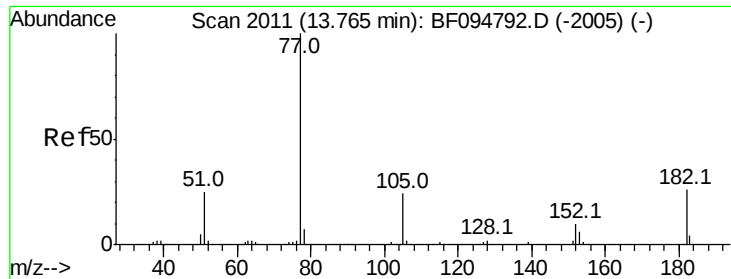
Tot Ion:204 Resp: 212679
Ion Ratio Lower Upper
204 100
206 33.3 26.2 39.2
141 62.2 60.8 91.2



#61
4-Nitroaniline
Concen: 52.53 ng
RT: 13.62 min Scan# 1986
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:138 Resp: 114663
Ion Ratio Lower Upper
138 100
92 45.7 21.8 61.8
108 60.3 42.3 82.3





#62

Azobenzene

Concen: 50.69 ng

RT: 13.78 min Scan# 2013

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

Tot Ion: 77 Resp: 423920

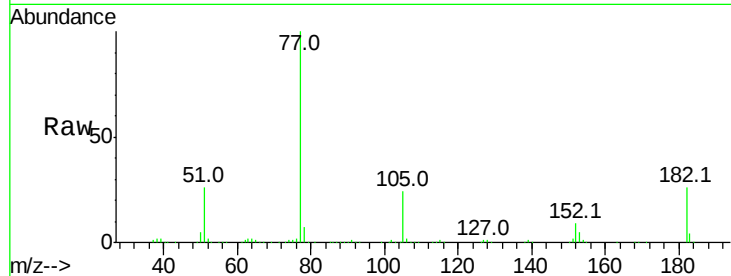
Ion	Ratio	Lower	Upper
77	100		
182	25.8	0.1	40.1
105	24.4	3.6	43.6
51	25.8	9.4	49.4

77 100

182 25.8 0.1 40.1

105 24.4 3.6 43.6

51 25.8 9.4 49.4

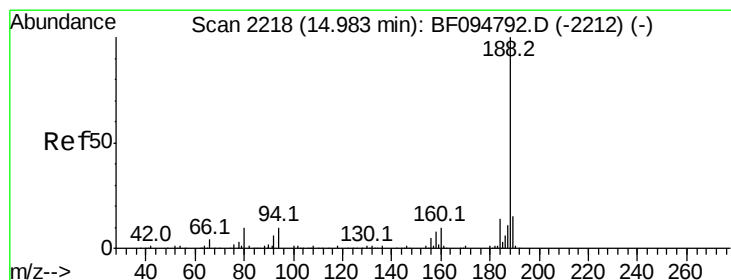
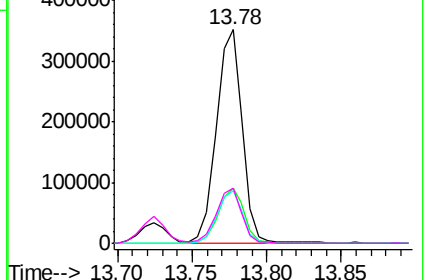
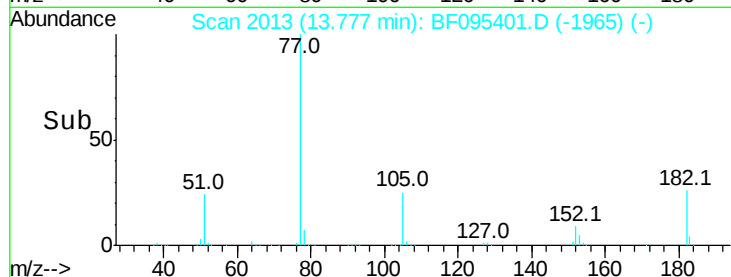


Abundance Ion 77.00 (76.70 to 77.70): BF0

Ion 182.00 (181.70 to 182.70): E

Ion 105.00 (104.70 to 105.70): E

Ion 51.00 (50.70 to 51.70): BF0



#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 15.01 min Scan# 2222

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

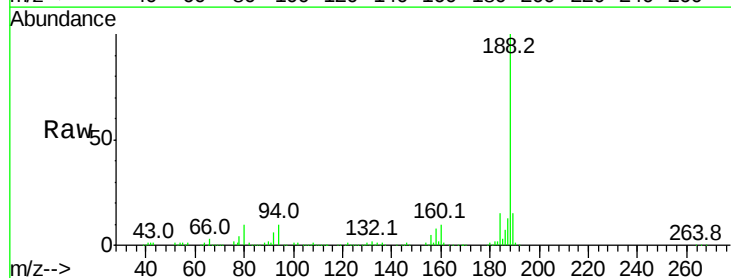
Tgt Ion: 188 Resp: 194630

Ion	Ratio	Lower	Upper
188	100		
94	10.1	9.4	14.2
80	10.3	10.2	15.2

188 100

94 10.1 9.4 14.2

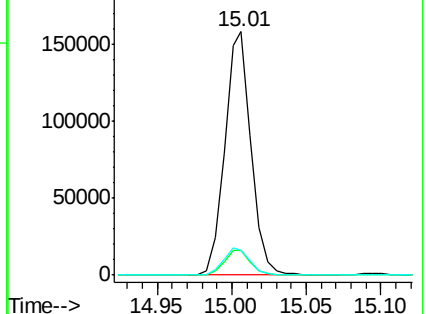
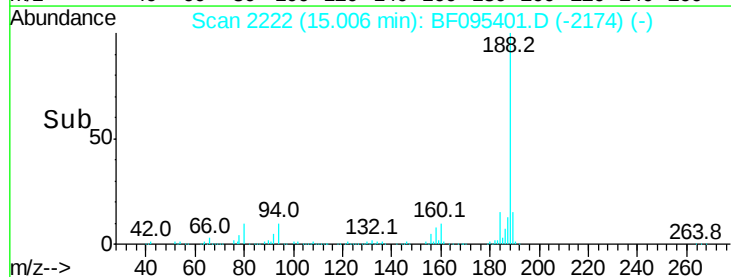
80 10.3 10.2 15.2

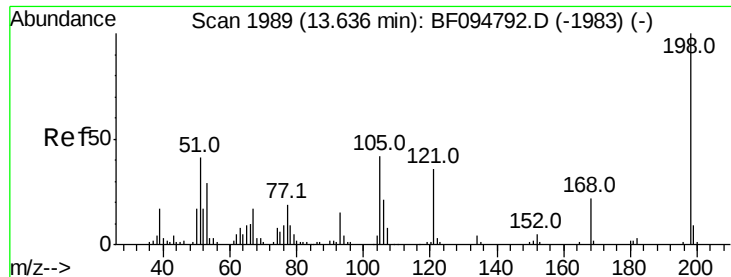


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0





#64

4,6-Dinitro-2-methylphenol

Concen: 2.22 ng

RT: 13.71 min Scan# 2002

Delta R.T. 0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

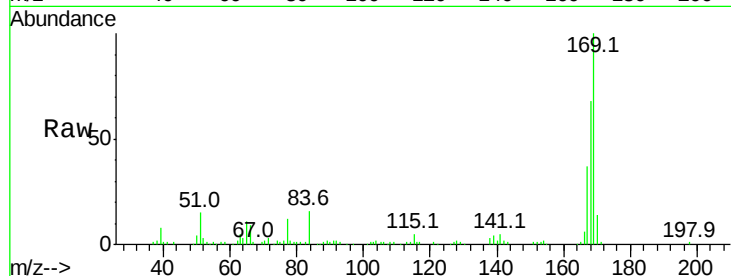
Tot Ion:198 Resp: 2902

Ion Ratio Lower Upper

198 100

51 1045.7 53.2 93.2#

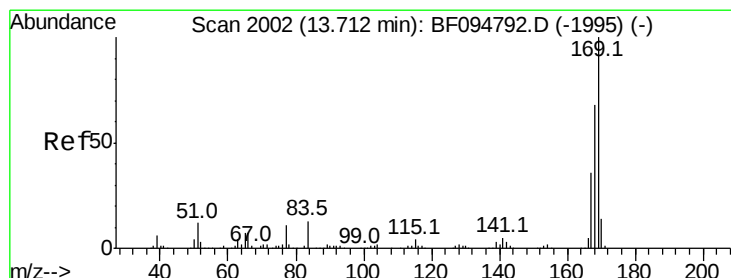
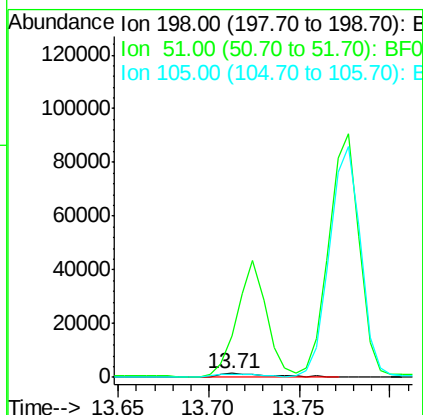
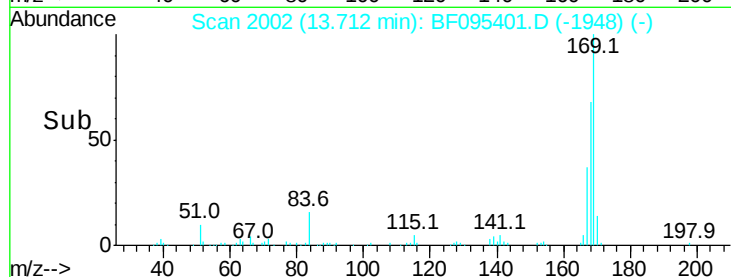
105 69.5 45.8 85.8



Abundance Ion 198.00 (197.70 to 198.70): E

Ion 51.00 (50.70 to 51.70): BF0

Ion 105.00 (104.70 to 105.70): E



#65

n-Nitrosodiphenylamine

Concen: 57.74 ng

RT: 13.72 min Scan# 2004

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

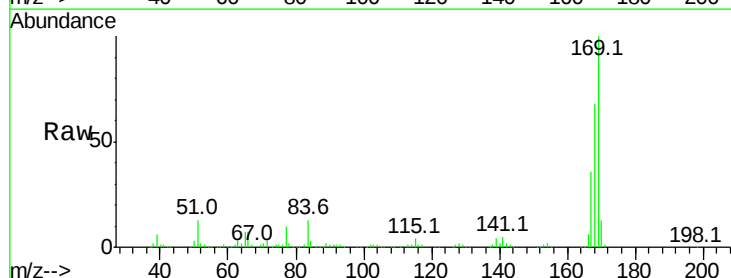
Tgt Ion:169 Resp: 407893

Ion Ratio Lower Upper

169 100

168 67.9 53.2 79.8

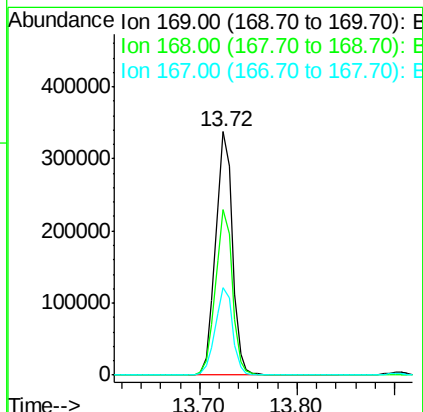
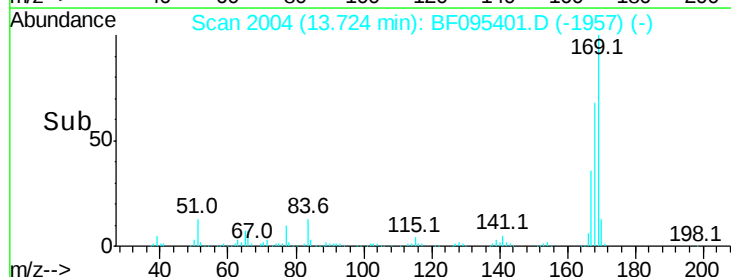
167 36.1 29.5 44.3

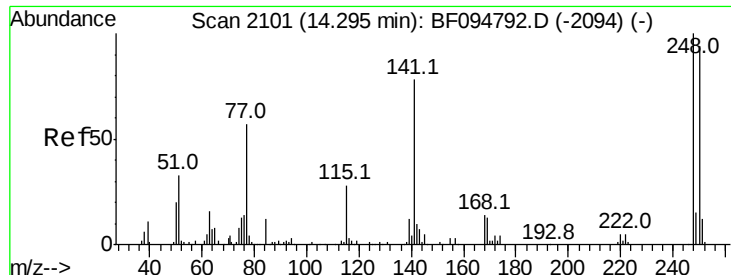


Abundance Ion 169.00 (168.70 to 169.70): E

Ion 168.00 (167.70 to 168.70): E

Ion 167.00 (166.70 to 167.70): E

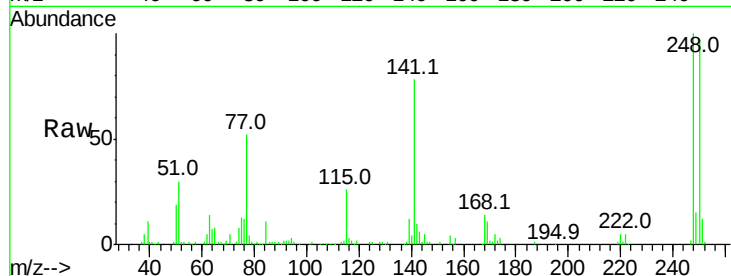




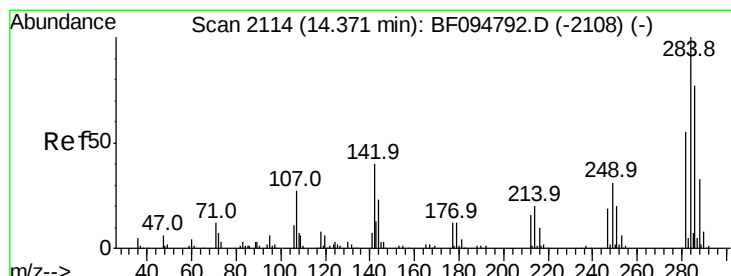
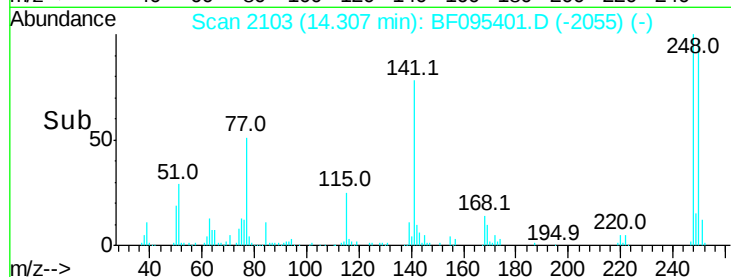
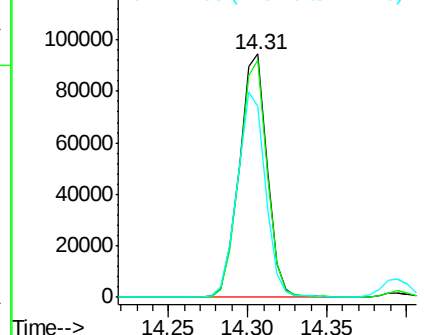
#66
4-Bromophenyl-phenylether
Concen: 56.05 ng
RT: 14.31 min Scan# 2103
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Instrument :
BNA_F
ClientSampleId :
EX-02MSD

Tot Ion:248 Resp: 115248
Ion Ratio Lower Upper
248 100
250 97.4 76.8 115.2
141 78.4 68.6 103.0

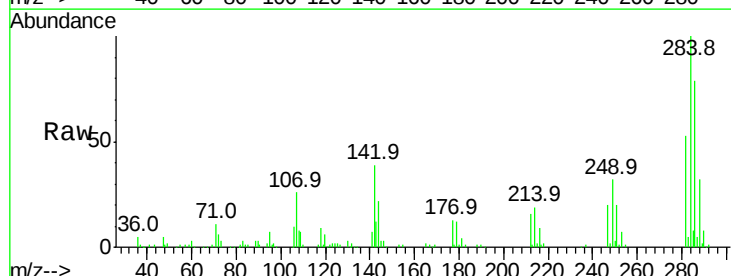


Abundance Ion 248.00 (247.70 to 248.70): E
Ion 250.00 (249.70 to 250.70): E
Ion 141.00 (140.70 to 141.70): E

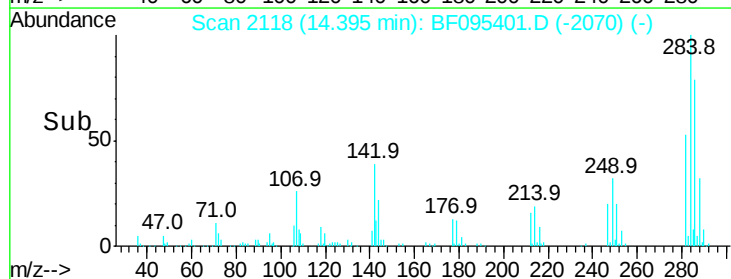
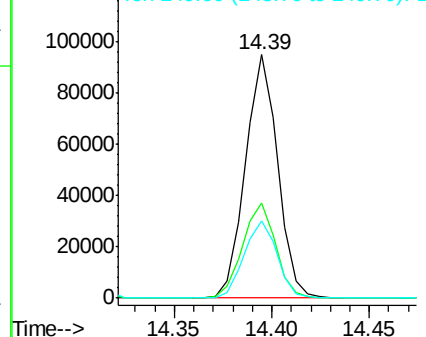


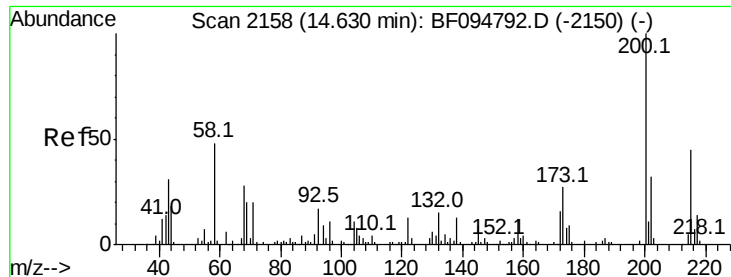
#67
Hexachlorobenzene
Concen: 51.45 ng
RT: 14.39 min Scan# 2118
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:284 Resp: 108426
Ion Ratio Lower Upper
284 100
142 39.1 22.8 34.2#
249 31.6 24.0 36.0



Abundance Ion 283.80 (283.50 to 284.50): E
Ion 142.00 (141.70 to 142.70): E
Ion 249.00 (248.70 to 249.70): E

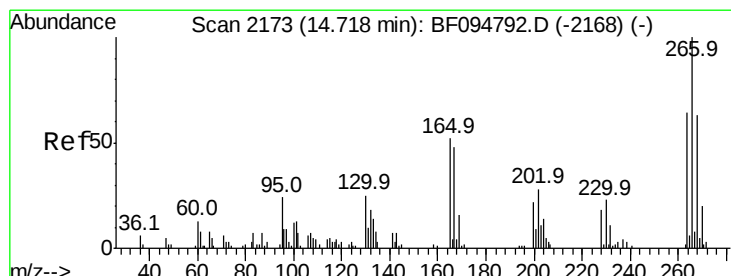
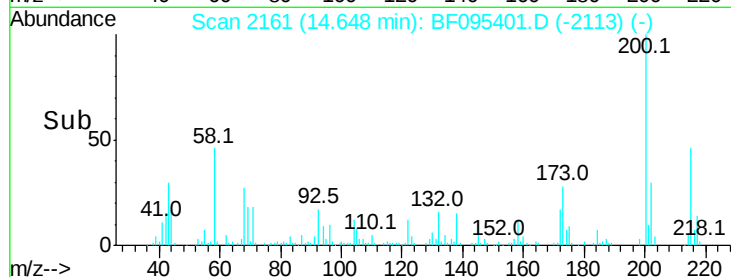
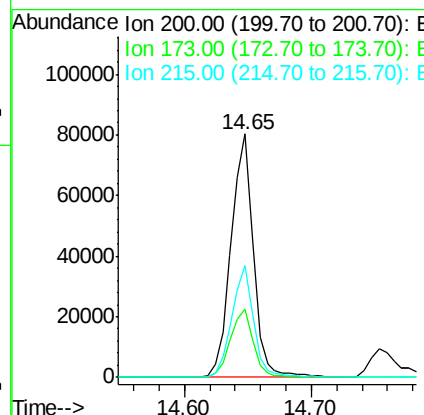
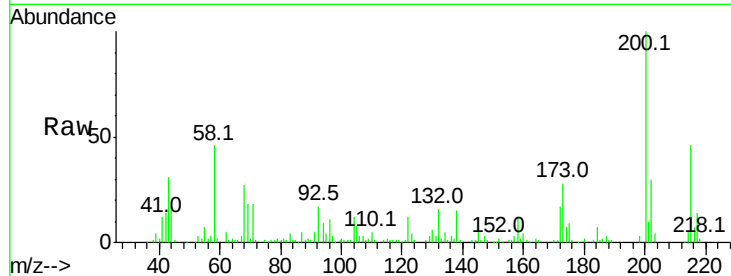




#68
 Atrazine
 Concen: 49.19 ng
 RT: 14.65 min Scan# 2161
 Delta R.T. -0.02 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

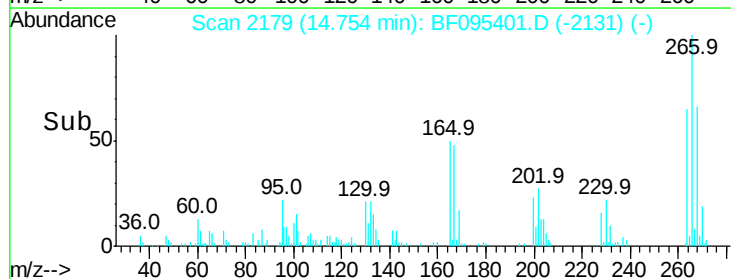
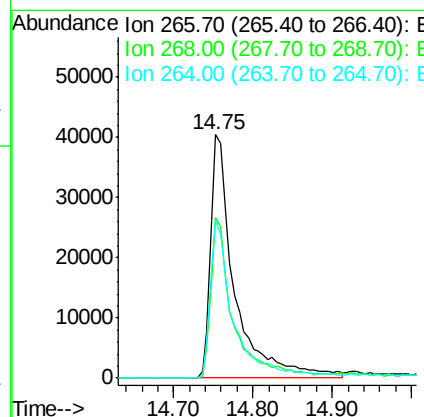
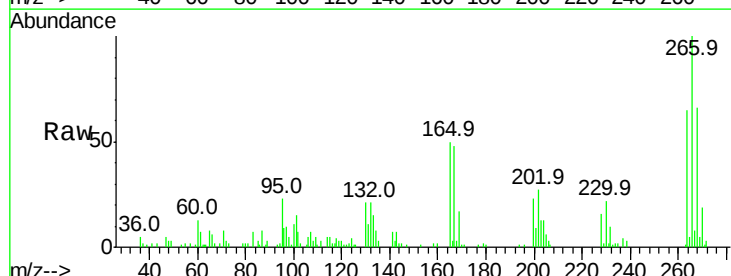
Instrument :
 BNA_F
 ClientSampleId :
 EX-02MSD

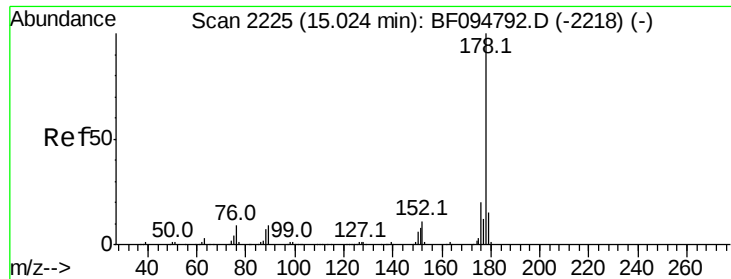
Tot Ion:200 Resp: 98115
 Ion Ratio Lower Upper
 200 100
 173 28.2 6.3 46.3
 215 46.2 27.2 67.2



#69
 Pentachlorophenol
 Concen: 89.12 ng
 RT: 14.75 min Scan# 2179
 Delta R.T. -0.02 min
 Lab File: BF095401.D
 Acq: 24 May 2017 21:39

Tgt Ion:266 Resp: 85600
 Ion Ratio Lower Upper
 266 100
 268 65.8 51.1 76.7
 264 64.7 51.7 77.5

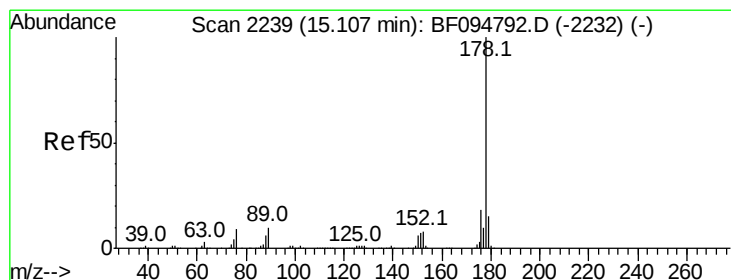
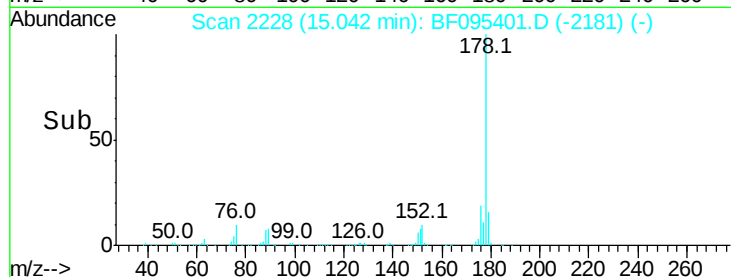
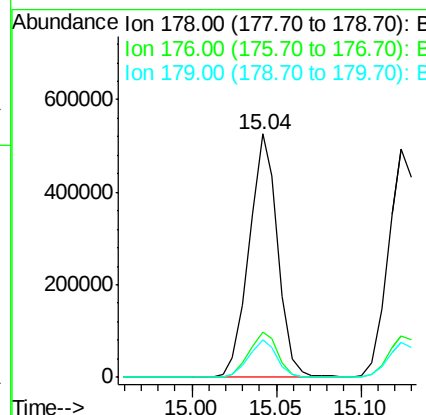
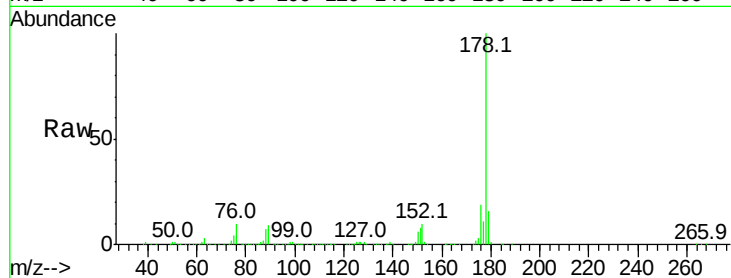




#70
Phenanthrene
Concen: 55.54 ng
RT: 15.04 min Scan# 2228
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

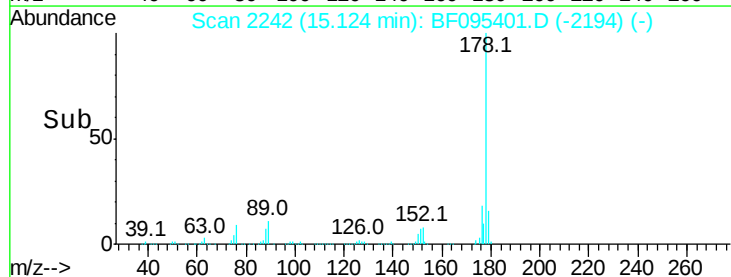
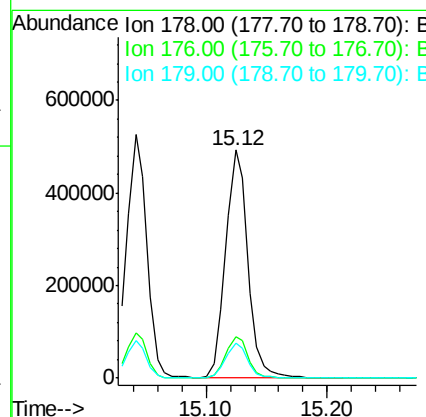
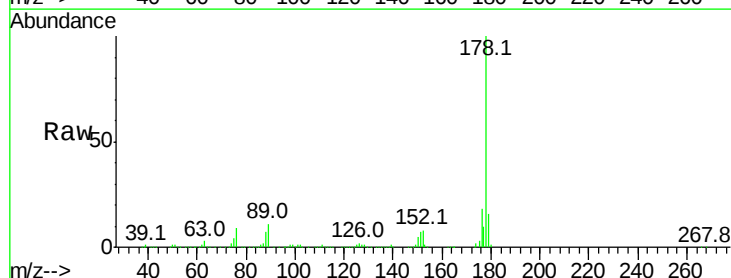
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

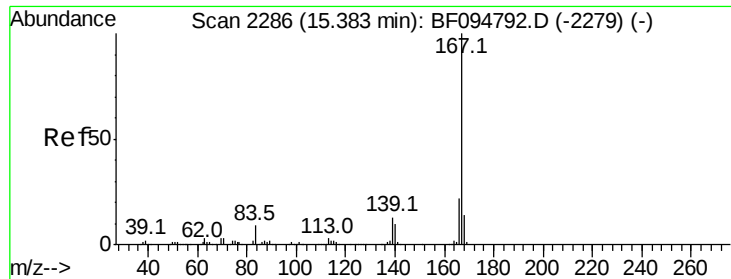
Tot Ion:178 Resp: 621105
Ion Ratio Lower Upper
178 100
176 18.7 16.2 24.4
179 15.6 12.6 19.0



#71
Anthracene
Concen: 54.68 ng
RT: 15.12 min Scan# 2242
Delta R.T. -0.02 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:178 Resp: 624621
Ion Ratio Lower Upper
178 100
176 18.3 15.8 23.8
179 15.6 12.7 19.1





#72

Carbazole

Concen: 57.68 ng

RT: 15.41 min Scan# 2291

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

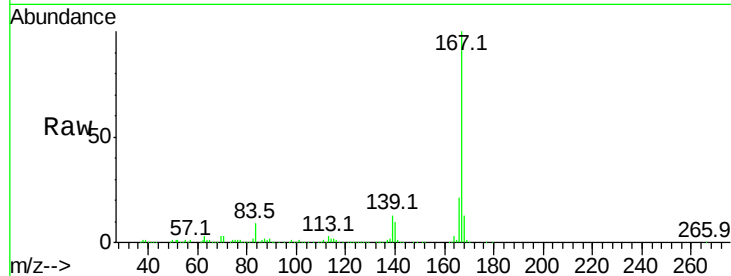
Tot Ion:167 Resp: 599479

Ion Ratio Lower Upper

167 100

166 21.4 18.1 27.1

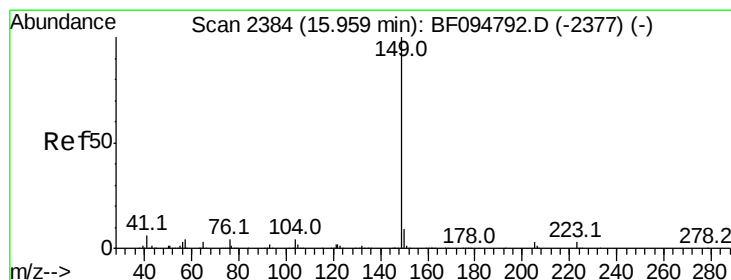
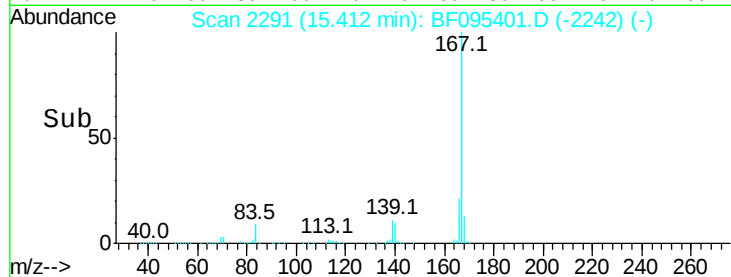
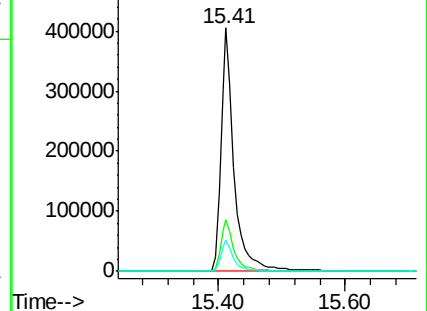
139 12.8 11.7 17.5



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



#73

Di-n-butylphthalate

Concen: 55.74 ng

RT: 15.97 min Scan# 2385

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

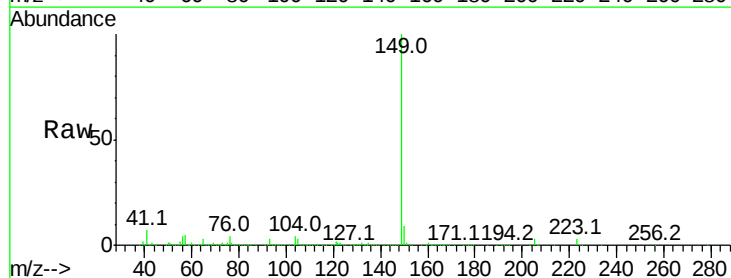
Tgt Ion:149 Resp: 722472

Ion Ratio Lower Upper

149 100

150 9.4 7.7 11.5

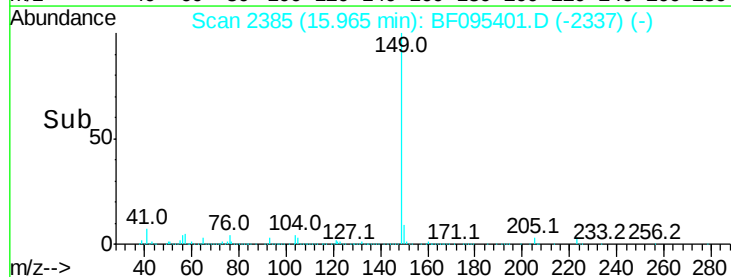
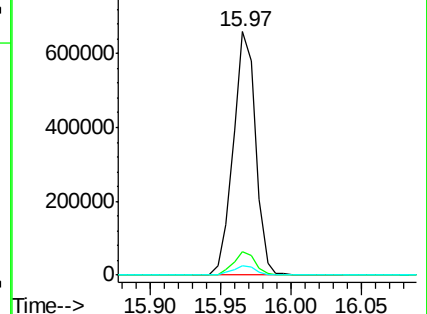
104 4.0 4.0 6.0

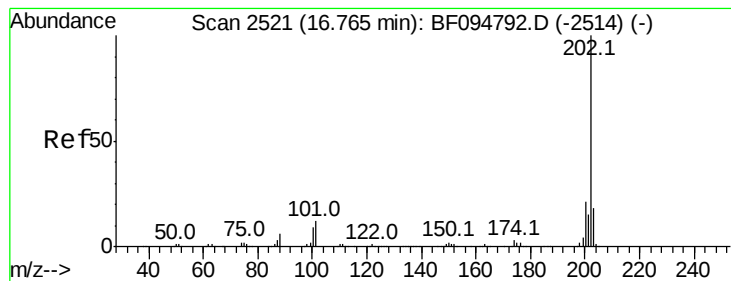


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 150.00 (149.70 to 150.70): E

Ion 104.00 (103.70 to 104.70): E





#74

Fluoranthene

Concen: 58.46 ng

RT: 16.79 min Scan# 2525

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

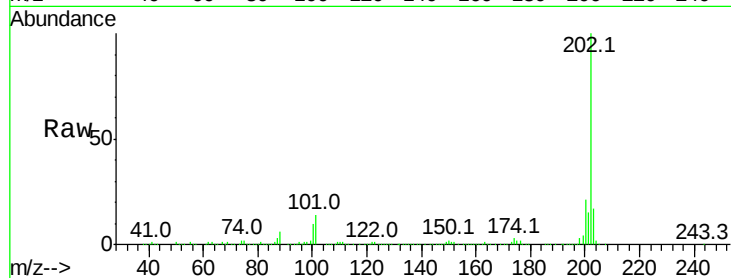
Tot Ion:202 Resp: 670578

Ion Ratio Lower Upper

202 100

101 13.7 0.0 33.2

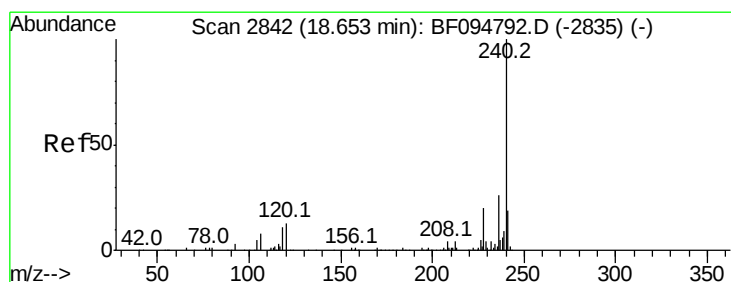
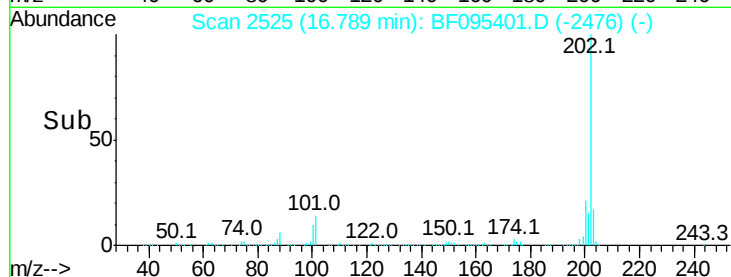
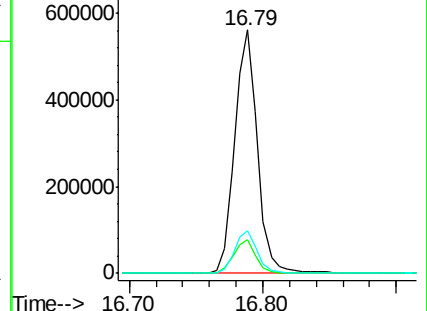
203 17.4 0.0 38.1



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: 18.68 min Scan# 2847

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

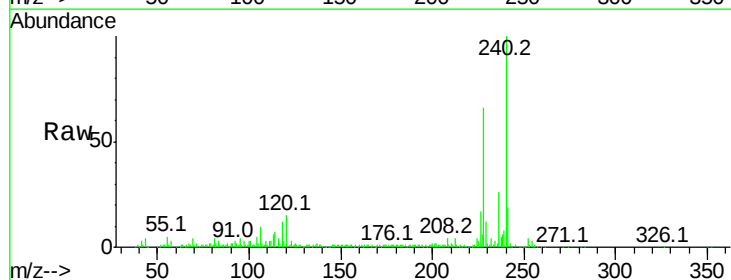
Tgt Ion:240 Resp: 173308

Ion Ratio Lower Upper

240 100

120 14.6 5.8 8.8#

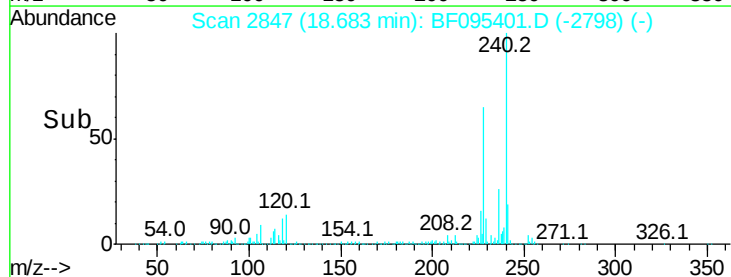
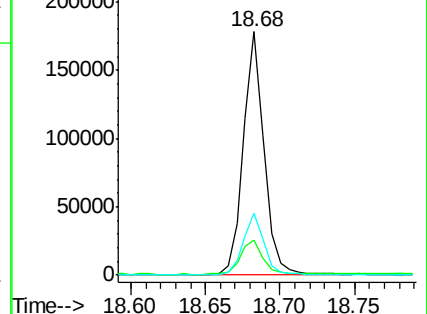
236 25.6 20.5 30.7

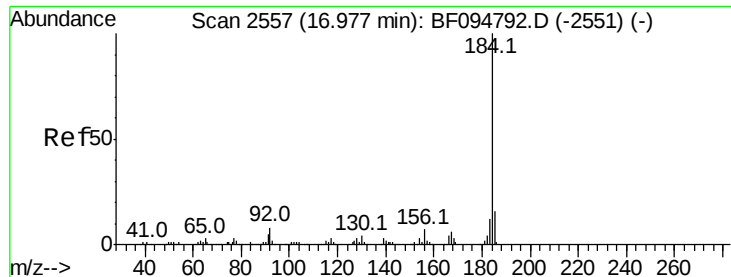


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#76

Benzidine

Concen: 40.82 ng

RT: 17.02 min Scan# 2564

Delta R.T. -0.00 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

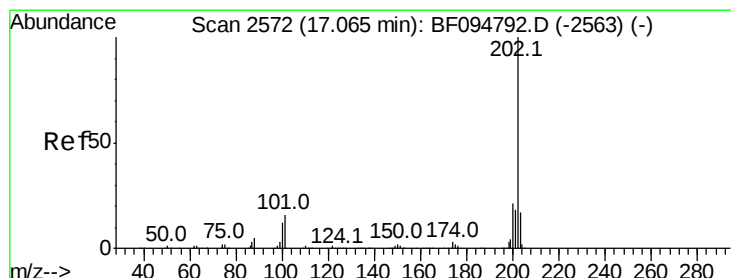
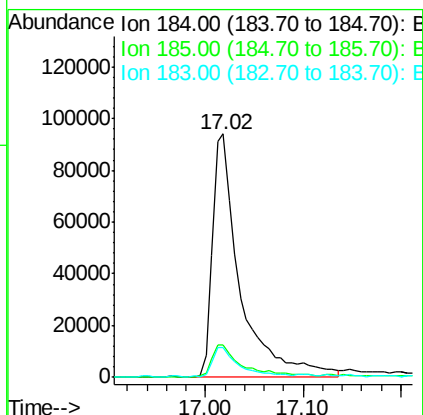
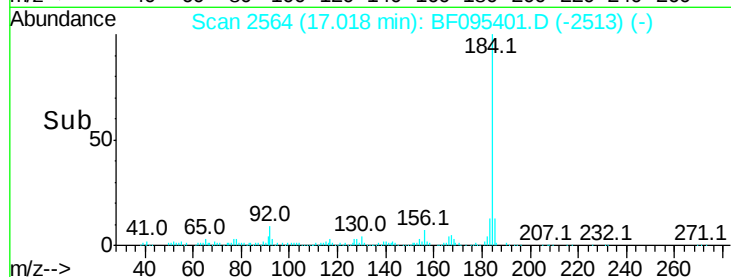
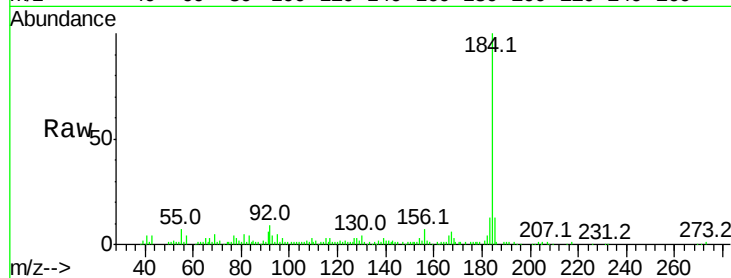
Tot Ion:184 Resp: 185955

Ion Ratio Lower Upper

184 100

185 13.1 15.5 23.3#

183 12.5 9.8 14.6



#77

Pyrene

Concen: 53.20 ng

RT: 17.09 min Scan# 2576

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

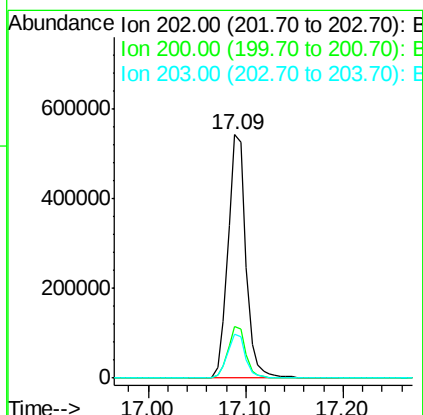
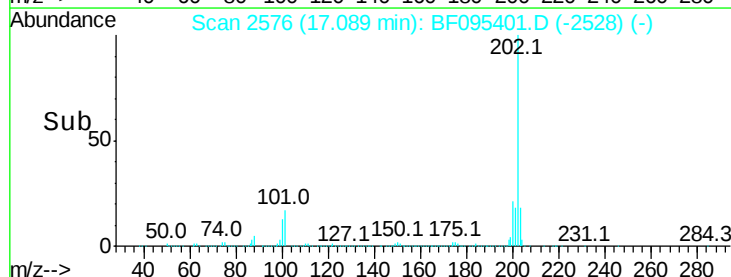
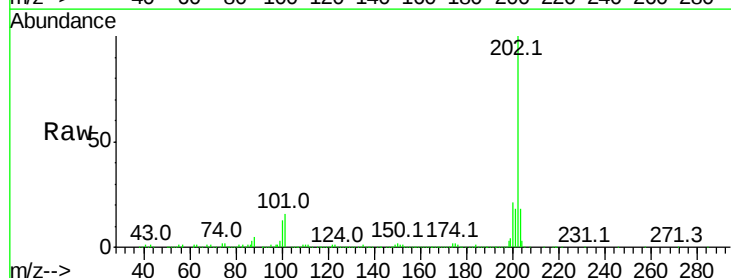
Tgt Ion:202 Resp: 689589

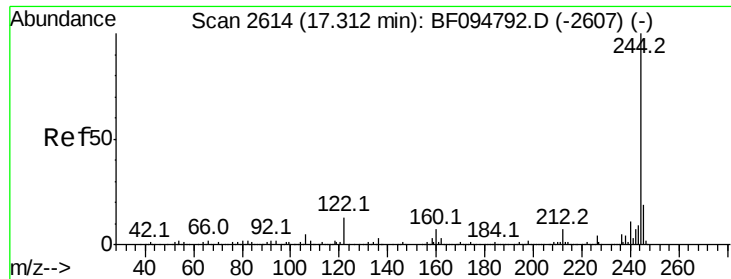
Ion Ratio Lower Upper

202 100

200 21.0 17.6 26.4

203 18.0 14.4 21.6





#78

Terphenyl-d14

Concen: 92.49 ng

RT: 17.33 min Scan# 2617

Delta R.T. -0.02 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

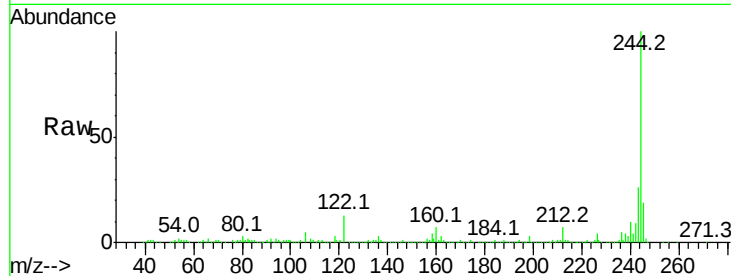
Tot Ion:244 Resp: 727789

Ion Ratio Lower Upper

244 100

212 7.0 6.0 9.0

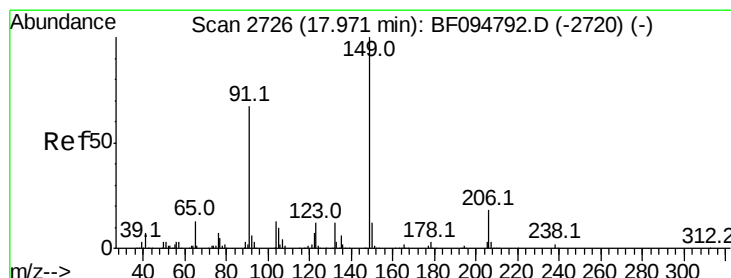
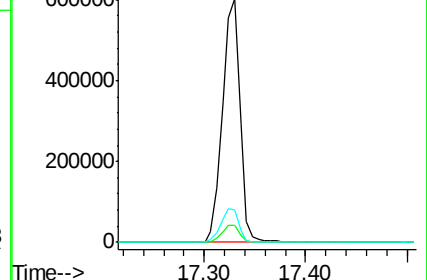
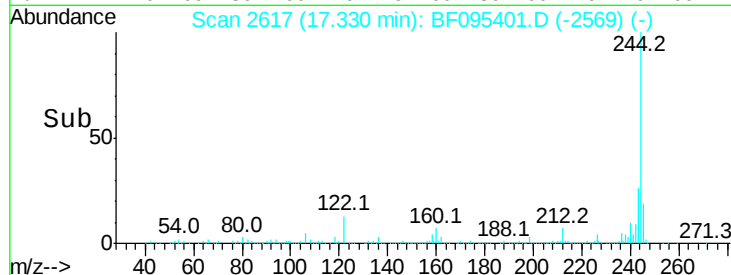
122 13.5 10.3 15.5



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



#79

Butylbenzylphthalate

Concen: 53.13 ng

RT: 17.99 min Scan# 2729

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

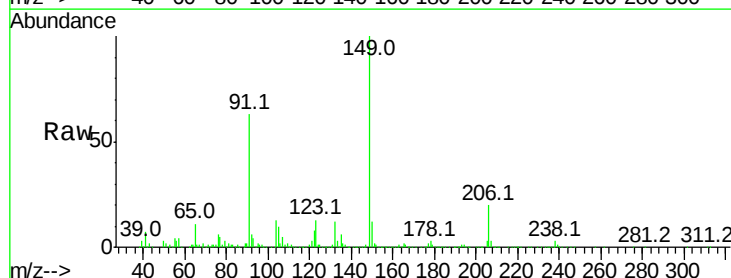
Tgt Ion:149 Resp: 320328

Ion Ratio Lower Upper

149 100

91 63.3 45.0 67.4

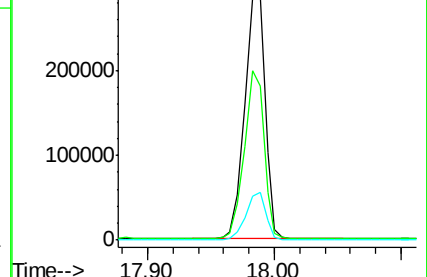
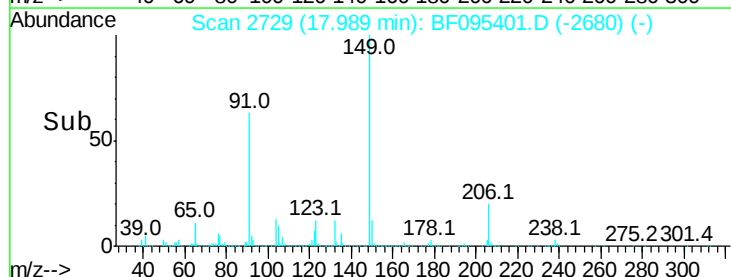
206 19.7 17.0 25.6

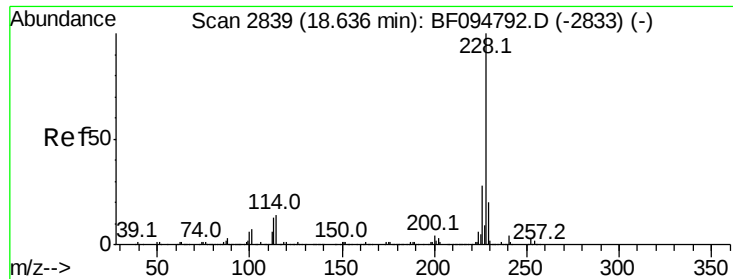


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 91.00 (90.70 to 91.70): BF0

Ion 206.00 (205.70 to 206.70): E





#80

Benzo(a)anthracene

Concen: 53.60 ng

RT: 18.67 min Scan# 2845

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

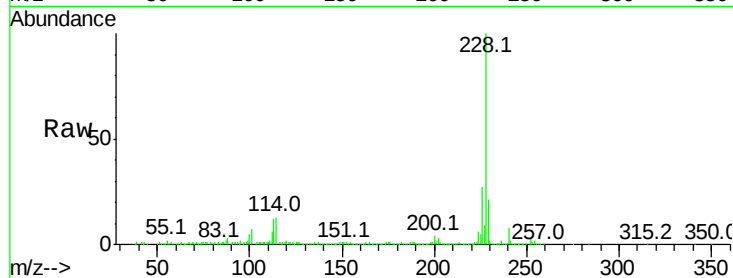
Tot Ion:228 Resp: 540634

Ion Ratio Lower Upper

228 100

226 26.9 22.6 33.8

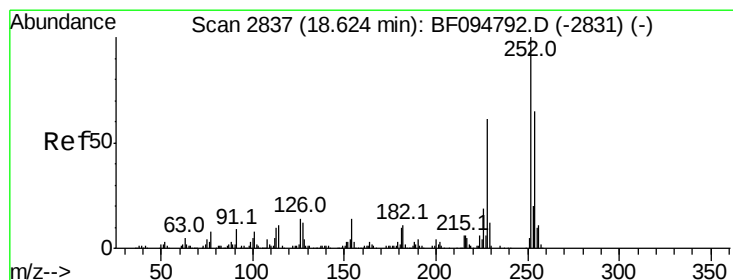
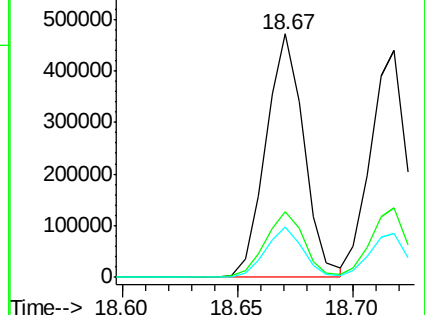
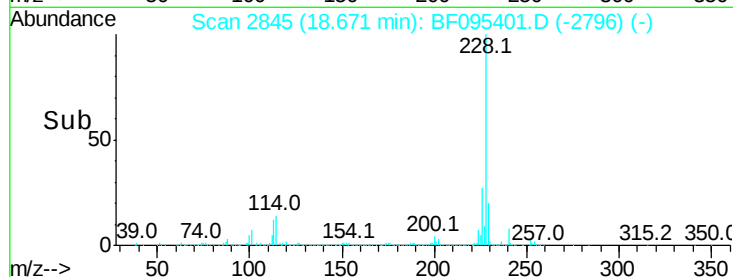
229 20.5 16.3 24.5



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#81

3,3'-Dichlorobenzidine

Concen: 48.12 ng

RT: 18.65 min Scan# 2842

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

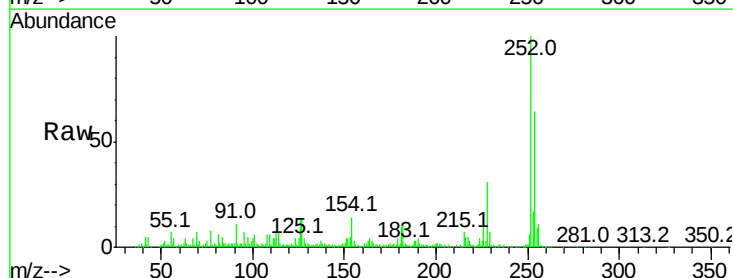
Tgt Ion:252 Resp: 167637

Ion Ratio Lower Upper

252 100

254 63.7 51.5 77.3

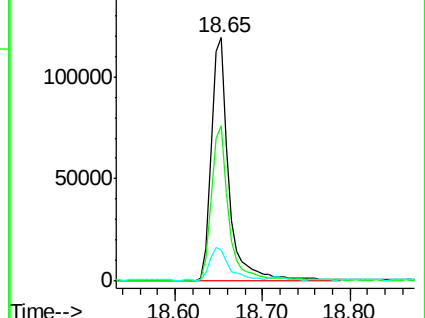
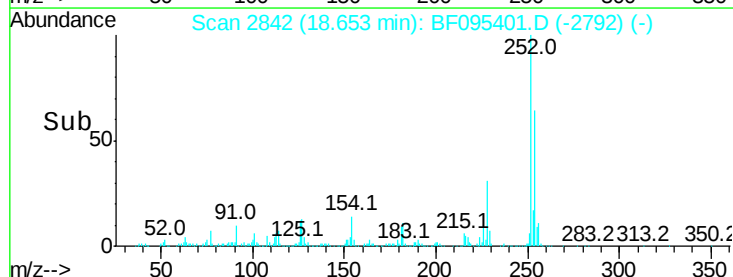
126 12.6 15.8 23.8#

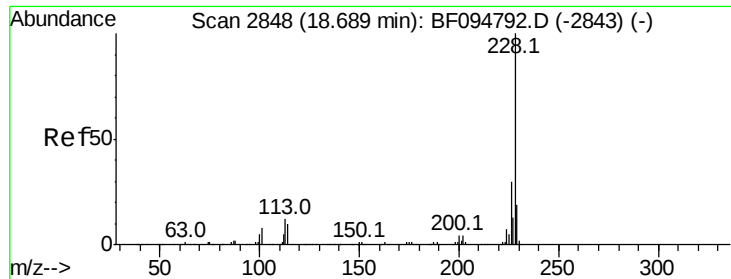


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 254.00 (253.70 to 254.70): E

Ion 126.00 (125.70 to 126.70): E





#82

Chrysene

Concen: 50.35 ng

RT: 18.72 min Scan# 2853

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

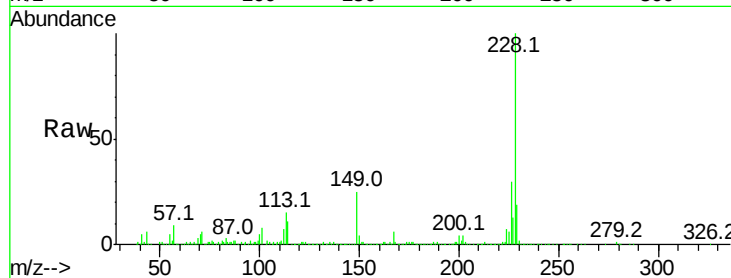
Tot Ion:228 Resp: 491071

Ion Ratio Lower Upper

228 100

226 30.4 24.9 37.3

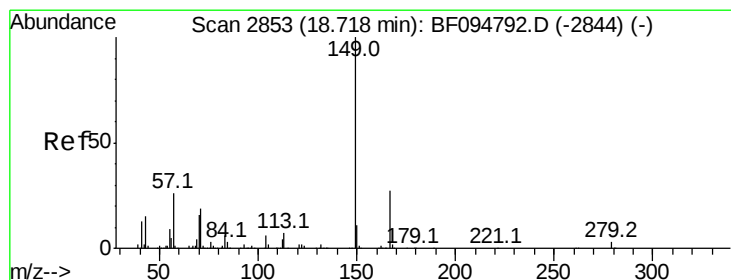
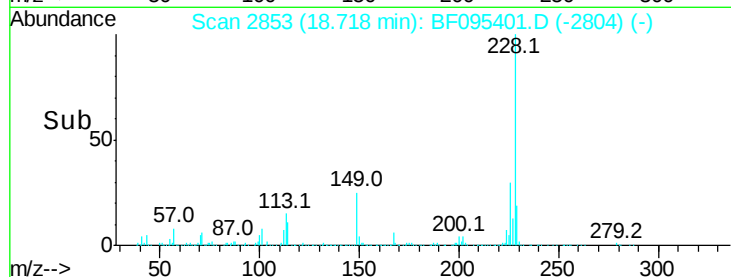
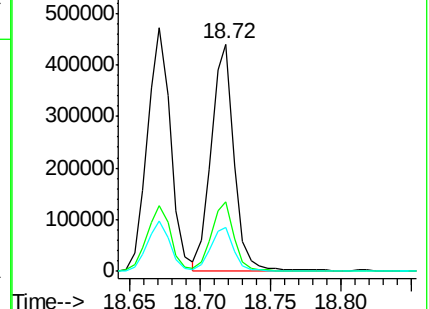
229 19.4 15.8 23.6



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#83

Bis(2-ethylhexyl)phthalate

Concen: 51.60 ng

RT: 18.73 min Scan# 2855

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

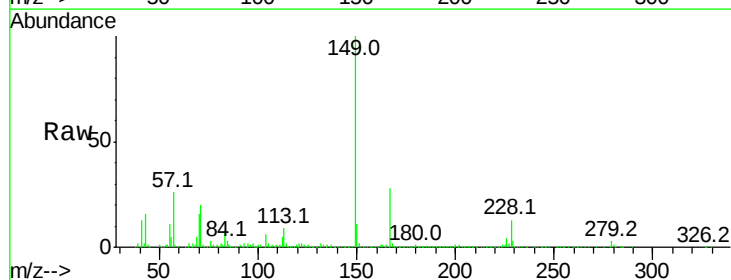
Tgt Ion:149 Resp: 443279

Ion Ratio Lower Upper

149 100

167 27.5 21.0 31.4

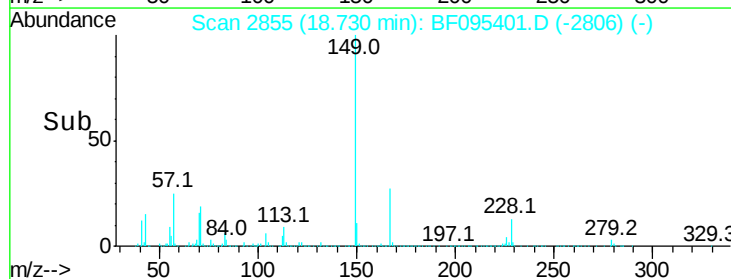
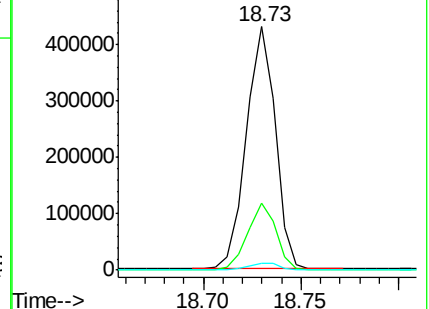
279 2.9 1.9 2.9#

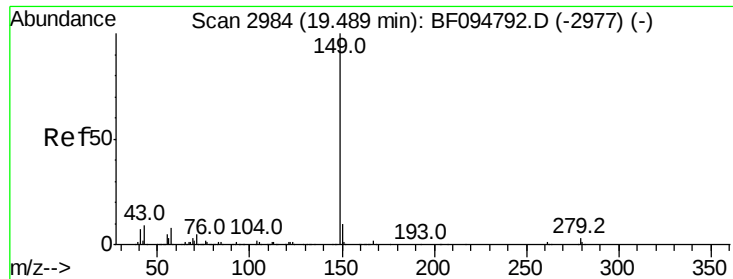


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E





#84

Di-n-octyl phthalate

Concen: 55.21 ng

RT: 19.50 min Scan# 2986

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

Instrument :

BNA_F

ClientSampleId :

EX-02MSD

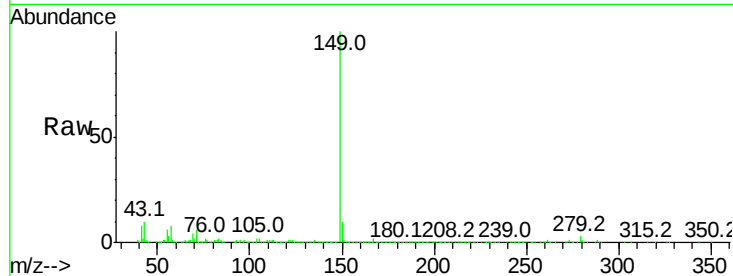
Tot Ion:149 Resp: 777513

Ion Ratio Lower Upper

149 100

167 1.7 1.2 1.8

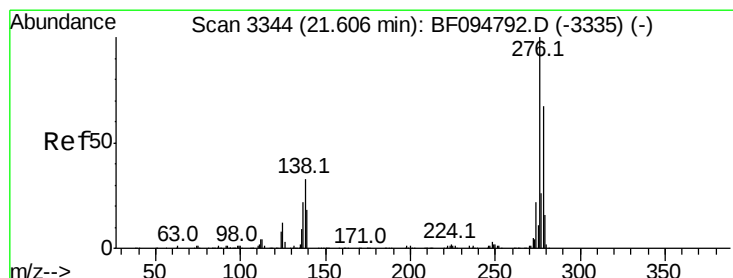
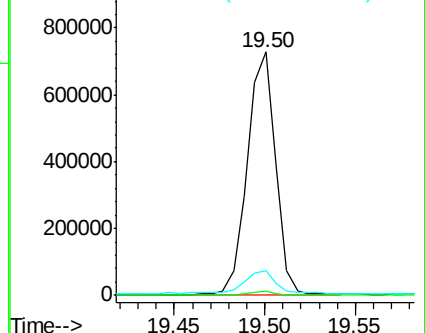
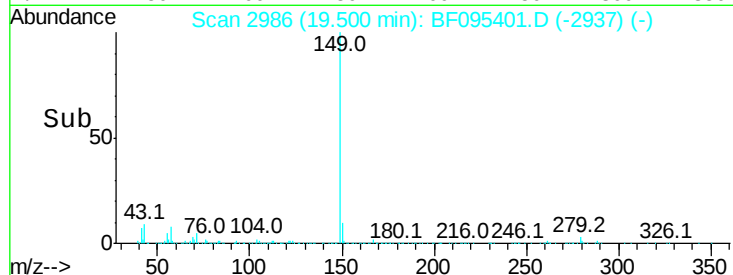
43 10.0 8.5 12.7



Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 43.00 (42.70 to 43.70): BF0



#85

Indeno(1,2,3-cd)pyrene

Concen: 45.39 ng

RT: 21.69 min Scan# 3358

Delta R.T. -0.01 min

Lab File: BF095401.D

Acq: 24 May 2017 21:39

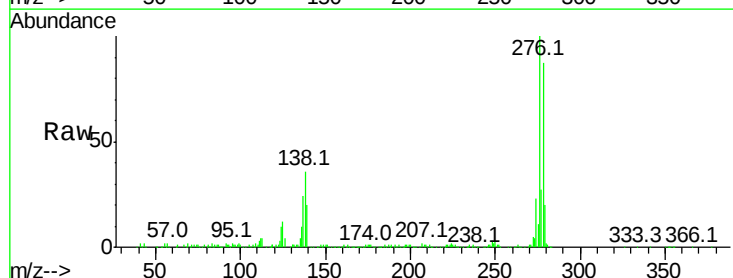
Tgt Ion:276 Resp: 359484

Ion Ratio Lower Upper

276 100

138 34.4 27.8 41.6

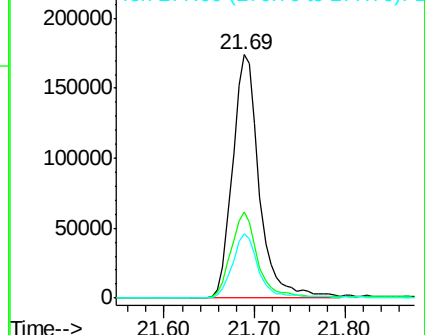
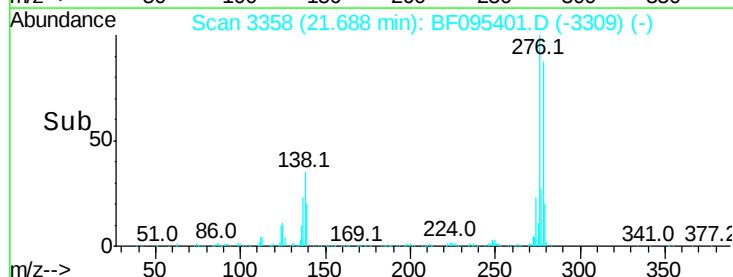
277 26.1 20.2 30.4

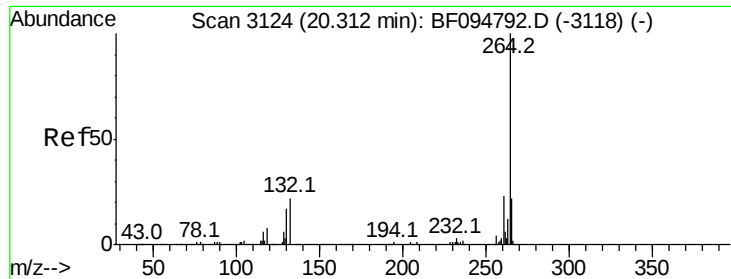


Abundance Ion 276.00 (275.70 to 276.70): E

Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E

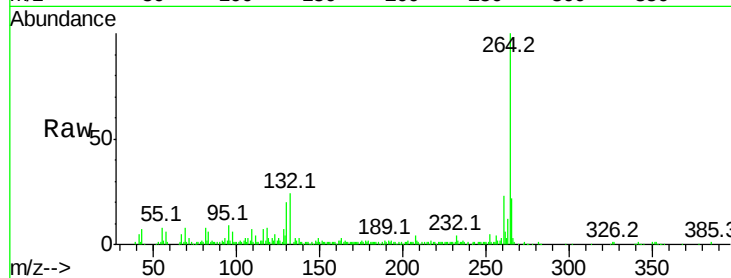




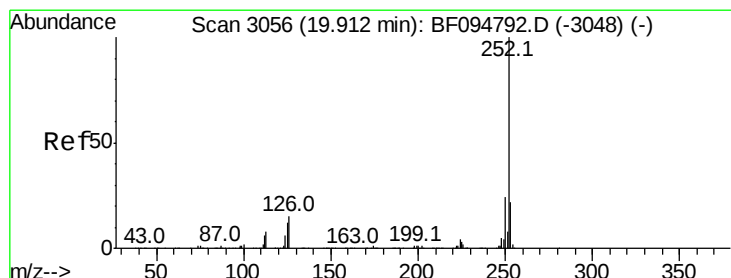
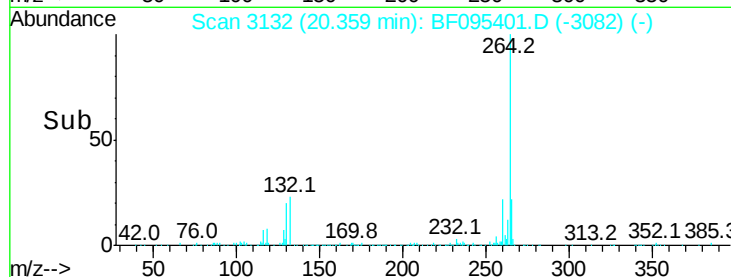
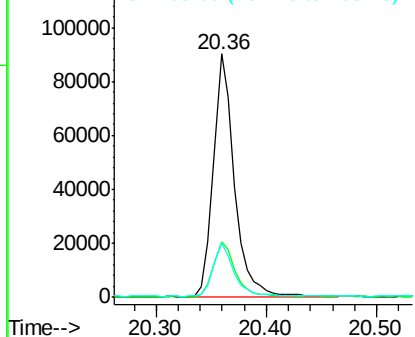
#86
Pervlene-d12
Concen: 20.00 ng
RT: 20.36 min Scan# 3132
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Instrument :
BNA_F
ClientSampleId :
EX-02MSD

Tot Ion:264 Resp: 120762
Ion Ratio Lower Upper
264 100
260 22.8 19.5 29.3
265 22.3 17.2 25.8

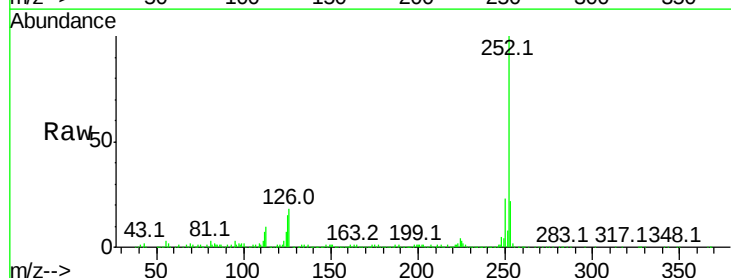


Abundance Ion 264.00 (263.70 to 264.70): E
Ion 260.00 (259.70 to 260.70): E
Ion 265.00 (264.70 to 265.70): E

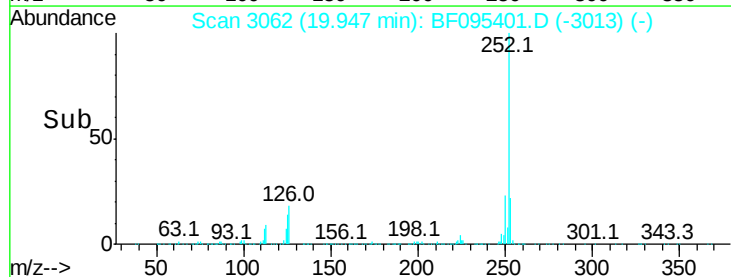
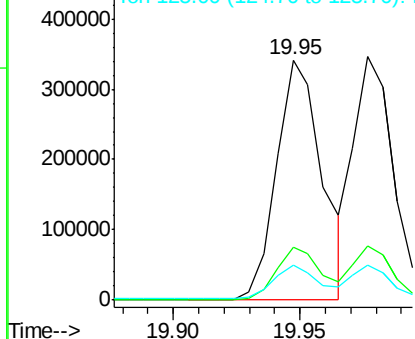


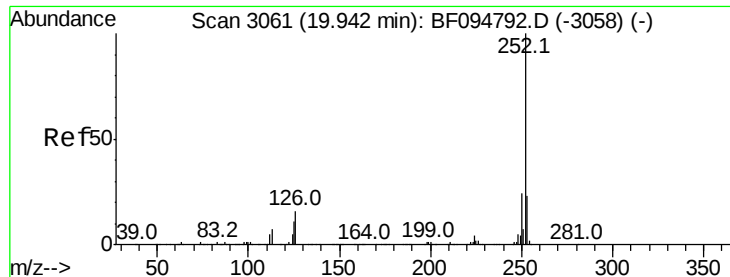
#87
Benzo(b)fluoranthene
Concen: 57.49 ng
RT: 19.95 min Scan# 3062
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:252 Resp: 428961
Ion Ratio Lower Upper
252 100
253 22.2 18.1 27.1
125 14.6 9.8 14.8



Abundance Ion 252.00 (251.70 to 252.70): E
Ion 253.00 (252.70 to 253.70): E
Ion 125.00 (124.70 to 125.70): E

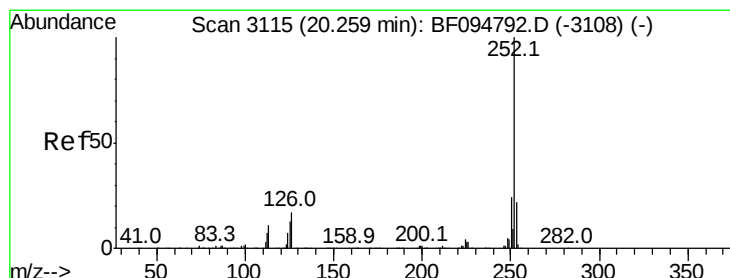
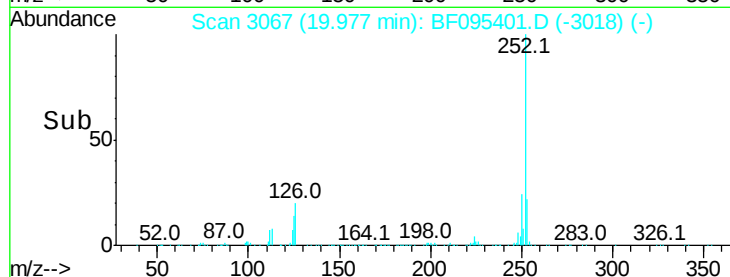
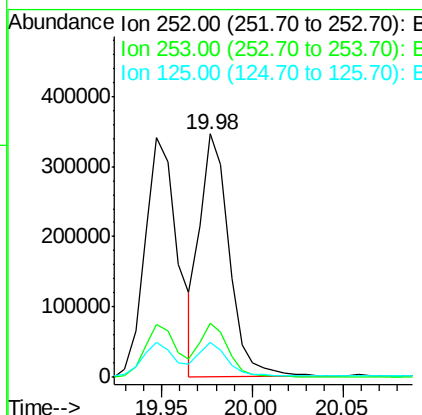
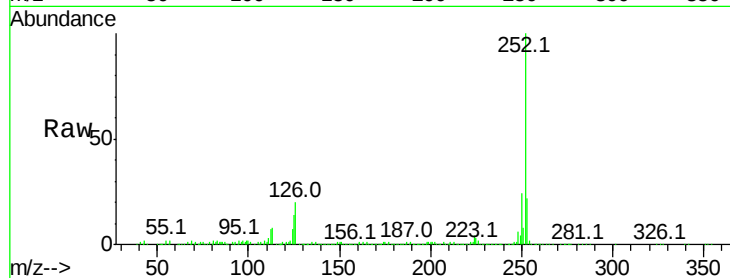




#88
Benzo(k)fluoranthene
Concen: 53.52 ng
RT: 19.98 min Scan# 3067
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

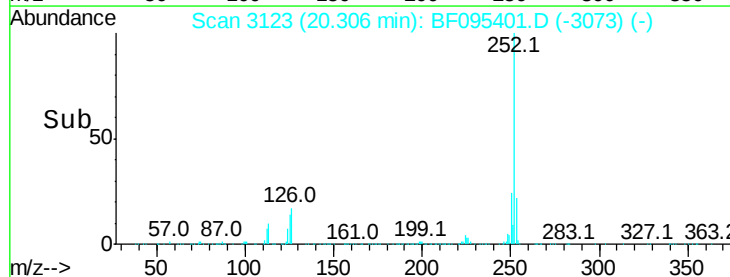
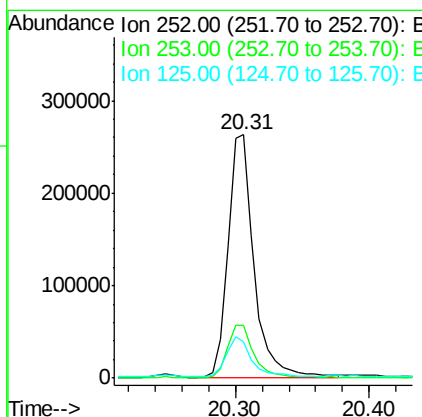
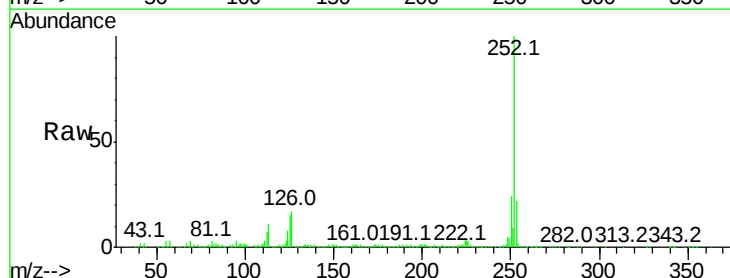
Instrument :
BNA_F
ClientSampleId :
EX-02MSD

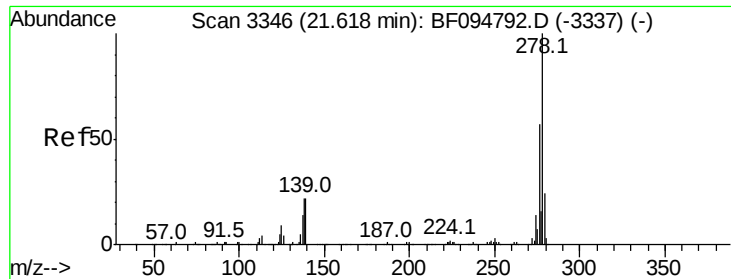
Tot Ion:252 Resp: 385240
Ion Ratio Lower Upper
252 100
253 22.3 18.4 27.6
125 14.3 13.1 19.7



#89
Benzo(a)pyrene
Concen: 51.77 ng
RT: 20.31 min Scan# 3123
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion:252 Resp: 356470
Ion Ratio Lower Upper
252 100
253 21.9 17.5 26.3
125 15.0 11.0 16.4

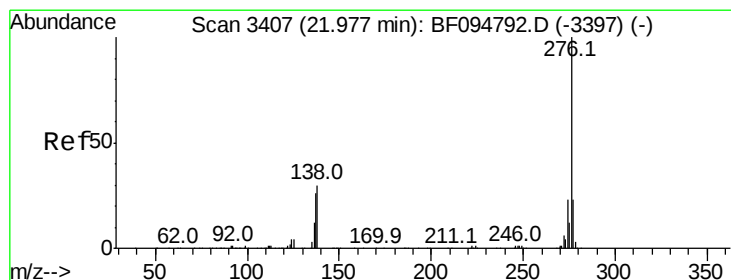
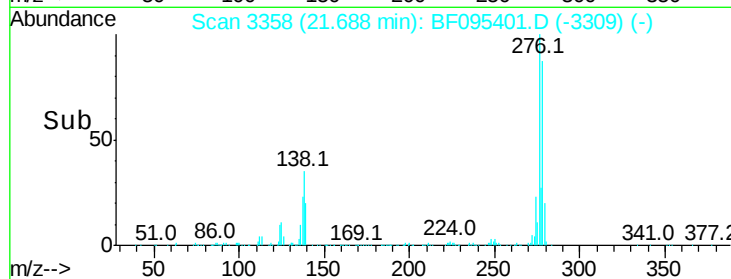
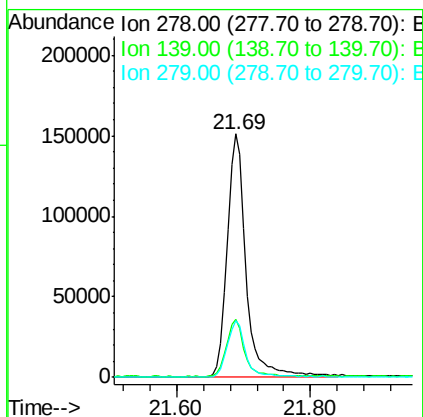
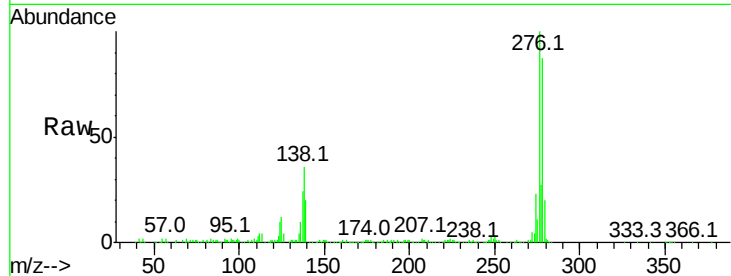




#90
Dibenzo(a,h)anthracene
Concen: 53.41 ng
RT: 21.69 min Scan# 3358
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Instrument :
BNA_F
ClientSampleId :
EX-02MSD

Tot Ion	Ratio	Lower	Upper
278	100		
139	23.6	16.6	24.8
279	23.3	19.3	28.9



#91
Benzo(g,h,i)perylene
Concen: 54.98 ng
RT: 22.08 min Scan# 3424
Delta R.T. -0.01 min
Lab File: BF095401.D
Acq: 24 May 2017 21:39

Tgt Ion	Ratio	Lower	Upper
276	100		
277	22.6	18.6	28.0
138	30.0	25.4	38.0

