

Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF103018\
 Data File : BF110305.D
 Acq On : 30 Oct 2018 16:14
 Operator : JU/SJ
 Sample : J5724-04MSD
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Quant Time: Oct 31 04:31:40 2018
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA_F\METHODS\8270-BF102318.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Oct 29 17:29:00 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.97	152	98432	20.00	ng	0.00
21) Naphthalene-d8	8.26	136	404360	20.00	ng	0.00
39) Acenaphthene-d10	10.02	164	184698	20.00	ng	0.00
64) Phenanthrene-d10	11.51	188	299823	20.00	ng	0.00
76) Chrysene-d12	14.16	240	187373	20.00	ng	0.00
87) Perylene-d12	15.70	264	185297	20.00	ng	0.01

System Monitoring Compounds

5) 2-Fluorophenol	5.60	112	577902	95.61	ng	0.01
7) Phenol-d6	6.60	99	732878	94.79	ng	0.00
23) Nitrobenzene-d5	7.53	82	466030	68.36	ng	0.00
42) 2,4,6-Tribromophenol	10.81	330	160149	87.53	ng	0.00
45) 2-Fluorobiphenyl	9.33	172	834511	70.95	ng	0.00
79) Terphenyl-d14	13.09	244	601103	66.72	ng	0.00

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.87	88	67744	21.391	ng	89
3) Pyridine	3.65	79	192126	27.238	ng	# 84
4) n-Nitrosodimethylamine	3.60	42	100007	33.841	ng	91
6) Aniline	6.63	93	222022	22.045	ng	# 53
8) 2-Chlorophenol	6.76	128	224270	32.182	ng	99
9) Benzaldehyde	6.52	77	95815	18.202	ng	95
10) Phenol	6.61	94	319237	38.628	ng	# 66
11) bis(2-Chloroethyl)ether	6.70	93	203155	29.879	ng	95
12) 1,3-Dichlorobenzene	6.91	146	229062	29.868	ng	98
13) 1,4-Dichlorobenzene	6.99	146	233409	30.093	ng	97
14) 1,2-Dichlorobenzene	7.14	146	222749	30.936	ng	99
15) Benzyl Alcohol	7.11	79	196514	33.048	ng	91
16) 2,2'-oxybis(1-Chloropropan	7.24	45	323047	29.716	ng	69
17) 2-Methylphenol	7.22	107	178730	32.181	ng	# 82
18) Hexachloroethane	7.48	117	83135	29.276	ng	98
19) n-Nitroso-di-n-propylamine	7.37	70	149866	30.215	ng	95
20) 3+4-Methylphenols	7.37	107	228888	31.883	ng	92
22) Acetophenone	7.38	105	308600	33.121	ng	# 99
24) Nitrobenzene	7.55	77	225830	32.085	ng	97
25) Isophorone	7.79	82	408839	35.181	ng	96
26) 2-Nitrophenol	7.87	139	114430	34.165	ng	95
27) 2,4-Dimethylphenol	7.90	122	202921	36.542	ng	99
28) bis(2-Chloroethoxy)methane	7.99	93	263332	33.356	ng	99
29) 2,4-Dichlorophenol	8.11	162	186422	33.229	ng	98
30) 1,2,4-Trichlorobenzene	8.19	180	200439	31.896	ng	94
31) Naphthalene	8.27	128	700101	37.566	ng	99
32) Benzoic acid	7.90	122	202921	47.280	ng	# 10
33) 4-Chloroaniline	8.32	127	133910	15.965	ng	97
34) Hexachlorobutadiene	8.39	225	108077	30.975	ng	97
35) Caprolactam	8.73	113	16105	8.236	ng	90
36) 4-Chloro-3-methylphenol	8.80	107	198071	32.649	ng	93
37) 2-Methylnaphthalene	8.97	142	454849	36.888	ng	98
38) 1-Methylnaphthalene	9.07	142	427698	35.893	ng	99
40) 1,2,4,5-Tetrachlorobenzene	9.13	216	185772	32.281	ng	98

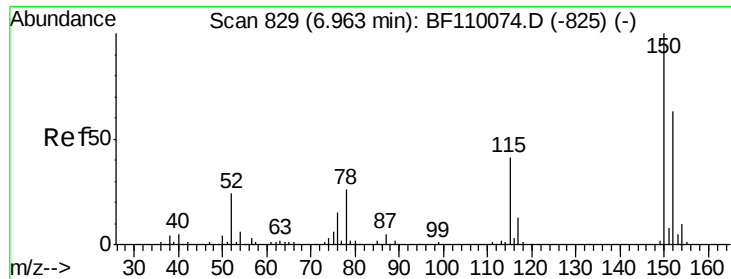
Data Path : Z:\SVOASRV\HPCHEM1\BNA_F\DATA\BF103018\
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Hexachlorocyclopentadiene	9.12	237	96781	32.889	ng	99
43) 2,4,6-Trichlorophenol	9.25	196	127247	34.282	ng	97
44) 2,4,5-Trichlorophenol	9.29	196	132877	33.867	ng	97
46) 1,1'-Biphenyl	9.43	154	532736	31.896	ng	99
47) 2-Chloronaphthalene	9.46	162	396630	32.374	ng	98
48) 2-Nitroaniline	9.56	65	122609	33.025	ng	91
49) Acenaphthylene	9.87	152	639740	36.153	ng	99
50) Dimethylphthalate	9.73	163	540433	39.639	ng	99
51) 2,6-Dinitrotoluene	9.80	165	97565	33.221	ng #	84
52) Acenaphthene	10.05	154	441465	37.711	ng	98
53) 3-Nitroaniline	9.97	138	85789	24.564	ng	86
54) 2,4-Dinitrophenol	10.07	184	18942	20.375	ng	94
55) Dibenzofuran	10.22	168	605134	36.921	ng	98
56) 4-Nitrophenol	10.13	139	205354	79.447	ng	96
57) 2,4-Dinitrotoluene	10.20	165	124449	33.362	ng #	87
58) Fluorene	10.57	166	545052	44.683	ng	98
59) 2,3,4,6-Tetrachlorophenol	10.30	232	92461	28.912	ng	99
60) Diethylphthalate	10.43	149	453483	34.074	ng	99
61) 4-Chlorophenyl-phenylether	10.55	204	197682	30.720	ng	97
62) 4-Nitroaniline	10.59	138	96132	27.675	ng	87
63) Azobenzene	10.72	77	410609	31.082	ng	92
65) 4,6-Dinitro-2-methylphenol	10.62	198	23310	17.017	ng	98
66) n-Nitrosodiphenylamine	10.67	169	361237	36.733	ng	97
67) 4-Bromophenyl-phenylether	11.05	248	113236	34.818	ng	94
68) Hexachlorobenzene	11.12	284	111738	32.381	ng #	94
69) Atrazine	11.20	200	110581	35.582	ng	98
70) Pentachlorophenol	11.32	266	98052	48.730	ng	96
71) Phenanthrene	11.55	178	1715938	109.378	ng	99
72) Anthracene	11.59	178	939388	59.739	ng	99
73) Carbazole	11.75	167	594740	38.736	ng	99
74) Di-n-butylphthalate	12.06	149	630433	36.356	ng	98
75) Fluoranthene	12.74	202	1873003	117.639	ng	97
77) Benzidine	12.85	184	138443	20.641	ng	97
78) Pyrene	12.97	202	1657154	123.364	ng	99
80) Butylbenzylphthalate	13.56	149	206932	35.491	ng	94
81) Benzo(a)anthracene	14.16	228	1017339	91.556	ng	99
82) 3,3'-Dichlorobenzidine	14.11	252	117049	30.251	ng	98
83) Chrysene	14.19	228	831110	78.749	ng	99
84) Bis(2-ethylhexyl)phthalate	14.12	149	278744	35.366	ng #	94
85) Di-n-octyl phthalate	14.73	149	460399	37.567	ng	99
86) Indeno(1,2,3-cd)pyrene	17.29	276	600676	68.606	ng	100
88) Benzo(b)fluoranthene	15.25	252	998029	93.272	ng	98
89) Benzo(k)fluoranthene	15.27	252	580702	55.203	ng #	97
90) Benzo(a)pyrene	15.64	252	808755	82.141	ng	99
91) Dibenzo(a,h)anthracene	17.30	278	340094	40.032	ng	97
92) Benzo(g,h,i)perylene	17.77	276	509291	60.835	ng	98

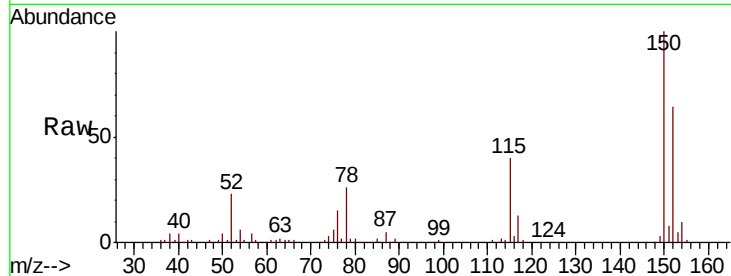
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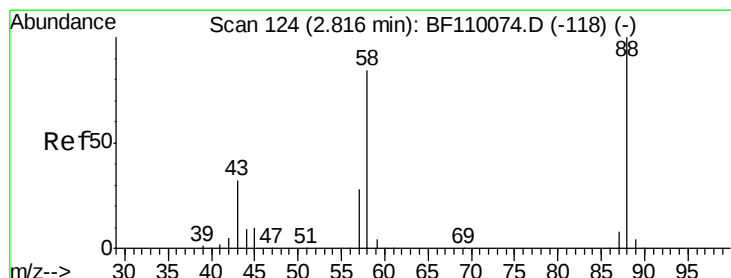
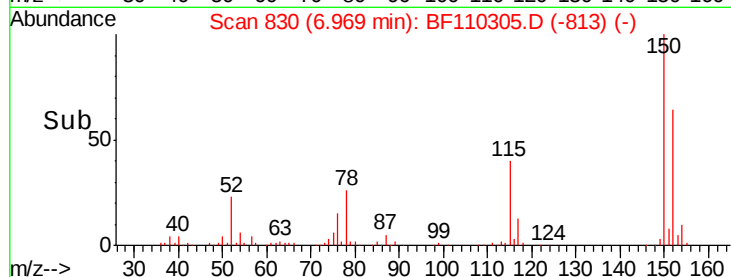
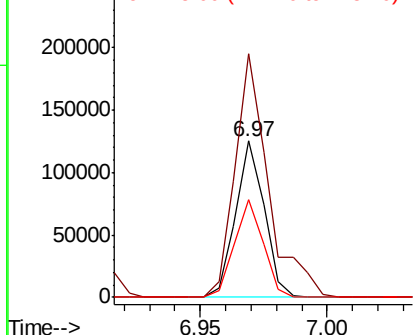
#1
 1,4-Dichlorobenzene-d4
 Concen: 20.000 ng
 RT: 6.97 min Scan# 830
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tgt Ion:152 Resp: 98432
 Ion Ratio Lower Upper
 152 100
 150 156.1 122.7 184.1
 115 62.5 49.1 73.7

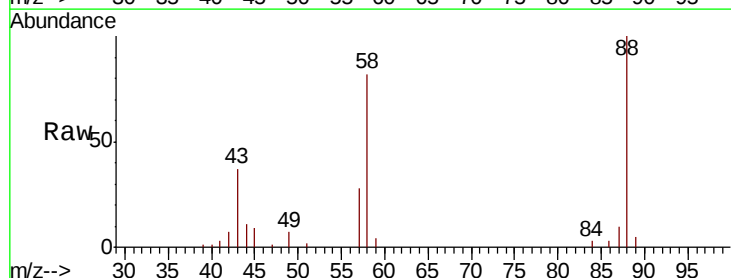


Abundance Ion 152.00 (151.70 to 152.70): E
 Ion 150.00 (149.70 to 150.70): E
 Ion 115.00 (114.70 to 115.70): E

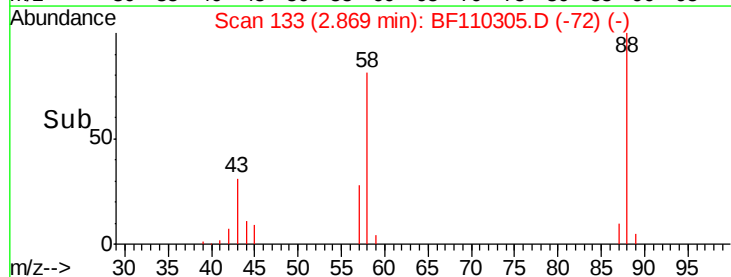
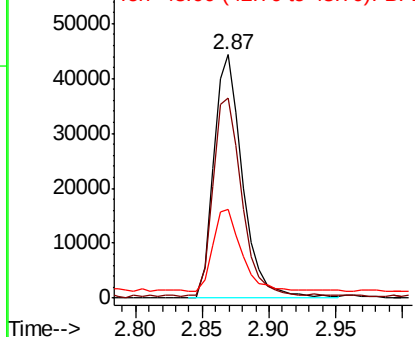


#2
 1,4-Dioxane
 Concen: 21.391 ng
 RT: 2.87 min Scan# 133
 Delta R.T. 0.06 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion: 88 Resp: 67744
 Ion Ratio Lower Upper
 88 100
 58 82.3 57.1 85.7
 43 33.7 24.1 36.1



Abundance Ion 88.00 (87.70 to 88.70): BF1
 Ion 58.00 (57.70 to 58.70): BF1
 Ion 43.00 (42.70 to 43.70): BF1





#3

Pyridine

Concen: 27.238 ng

RT: 3.65 min Scan# 265

Delta R.T. 0.05 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

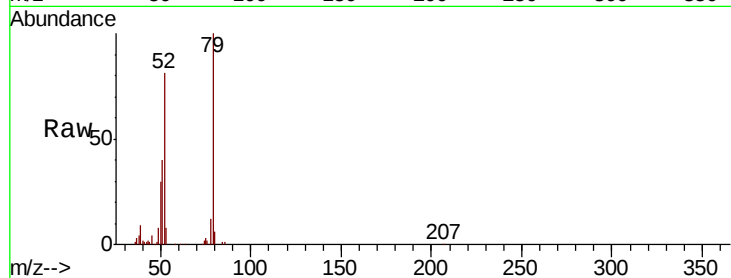
Tgt Ion: 79 Resp: 192126

Ion Ratio Lower Upper

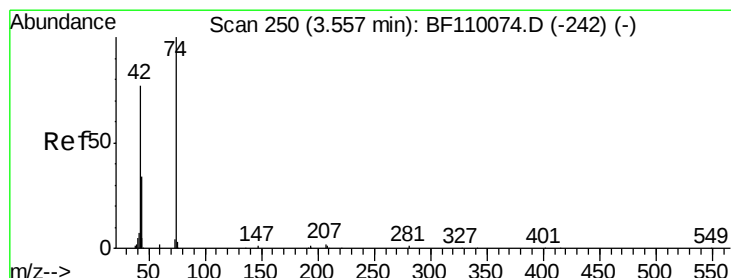
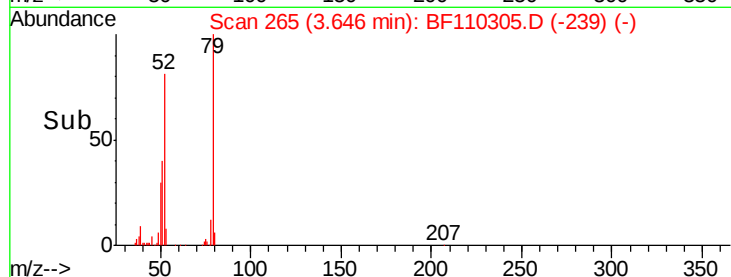
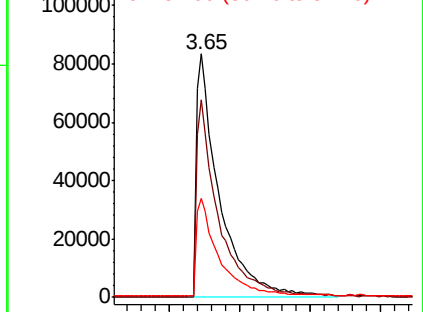
79 100

52 80.9 53.1 79.7#

51 40.4 27.4 41.2



Abundance Ion 79.00 (78.70 to 79.70): BF1
Ion 52.00 (51.70 to 52.70): BF1
Ion 51.00 (50.70 to 51.70): BF1



#4

n-Nitrosodimethylamine

Concen: 33.841 ng

RT: 3.60 min Scan# 257

Delta R.T. 0.05 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

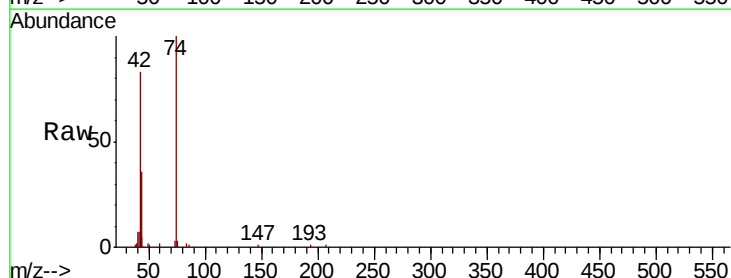
Tgt Ion: 42 Resp: 100007

Ion Ratio Lower Upper

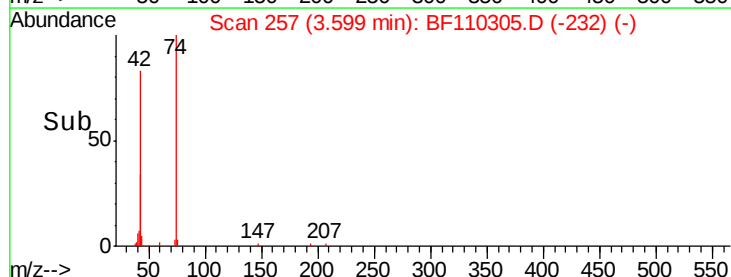
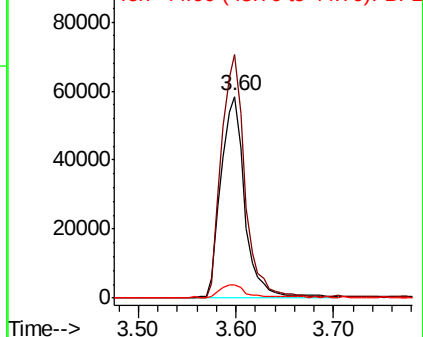
42 100

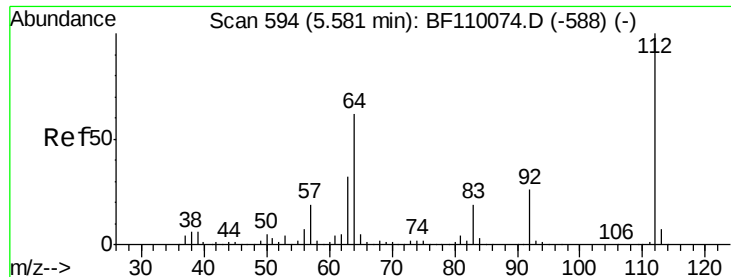
74 120.9 105.5 158.3

44 6.4 4.9 7.3



Abundance Ion 42.00 (41.70 to 42.70): BF1
Ion 74.00 (73.70 to 74.70): BF1
Ion 44.00 (43.70 to 44.70): BF1

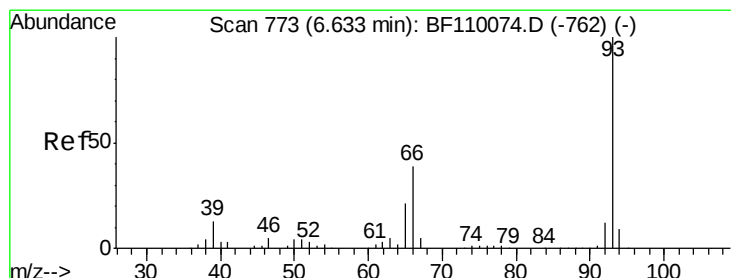
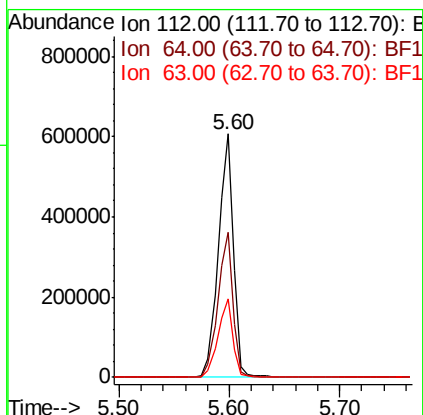
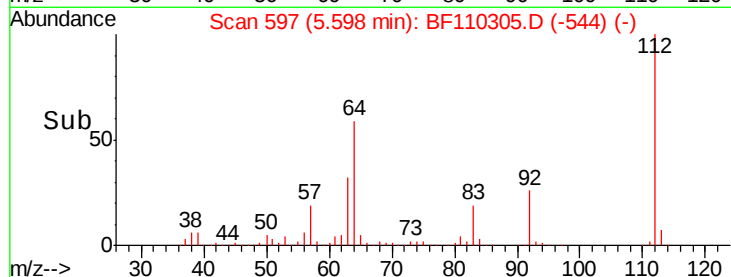
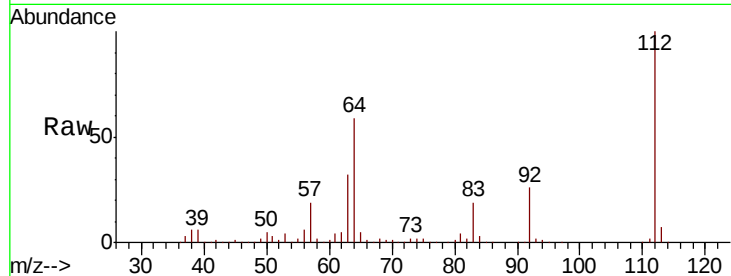




#5
2-Fluorophenol
Concen: 95.608 ng
RT: 5.60 min Scan# 597
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

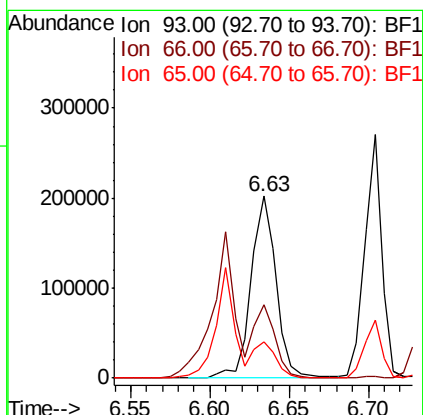
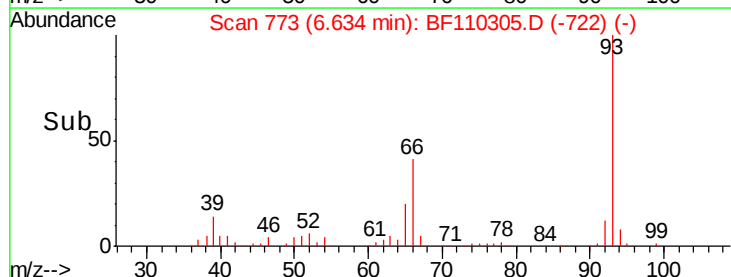
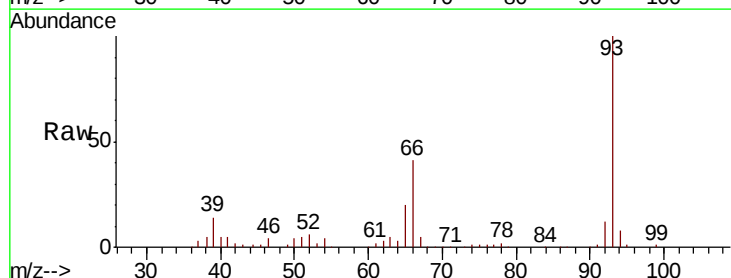
Instrument :
BNA_F
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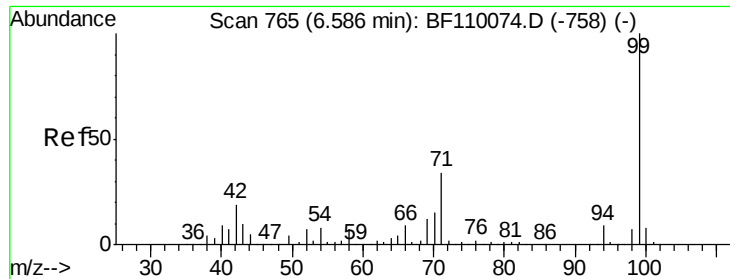
Tgt Ion: 112 Resp: 577902
Ion Ratio Lower Upper
112 100
64 59.5 44.1 66.1
63 32.1 23.7 35.5



#6
Aniline
Concen: 22.045 ng
RT: 6.63 min Scan# 773
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion: 93 Resp: 222022
Ion Ratio Lower Upper
93 100
66 40.7 67.4 101.0#
65 19.9 41.0 61.4#





#7

Phenol-d6

Concen: 94.792 ng

RT: 6.60 min Scan# 767

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

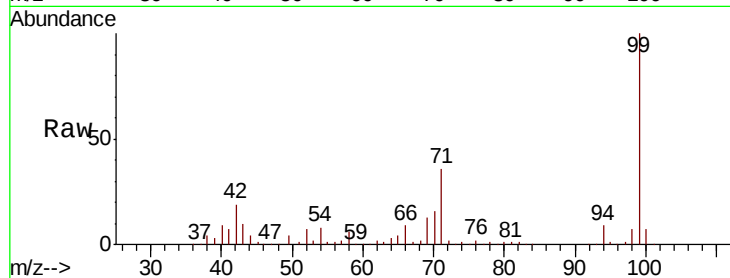
Tgt Ion: 99 Resp: 732878

Ion Ratio Lower Upper

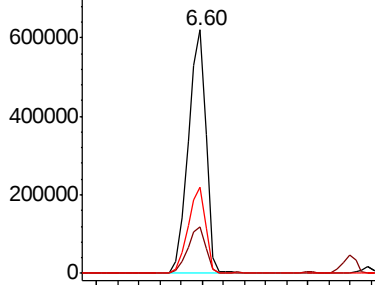
99 100

42 19.1 15.8 23.6

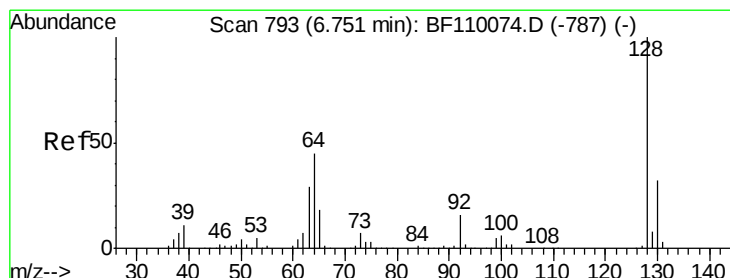
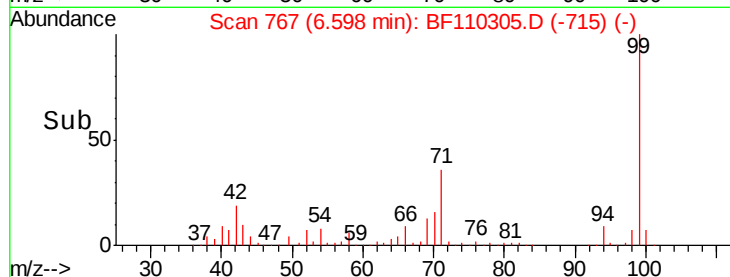
71 35.5 28.0 42.0



Abundance Ion 99.00 (98.70 to 99.70): BF1
Ion 42.00 (41.70 to 42.70): BF1
Ion 71.00 (70.70 to 71.70): BF1



Time-->



#8

2-Chlorophenol

Concen: 32.182 ng

RT: 6.76 min Scan# 794

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

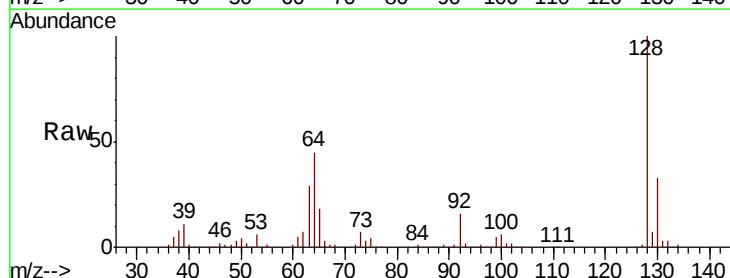
Tgt Ion: 128 Resp: 224270

Ion Ratio Lower Upper

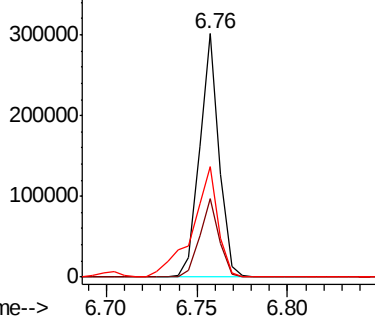
128 100

130 32.5 13.1 53.1

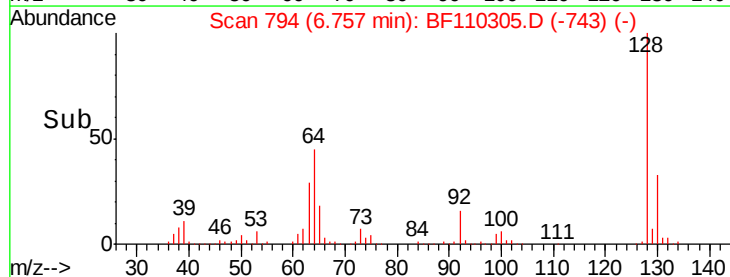
64 45.4 26.0 66.0



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): BF1



Time-->





#9

Benzaldehyde

Concen: 18.202 ng

RT: 6.52 min Scan# 754

Delta R.T. 0.00 min

Lab File: BF110305.D

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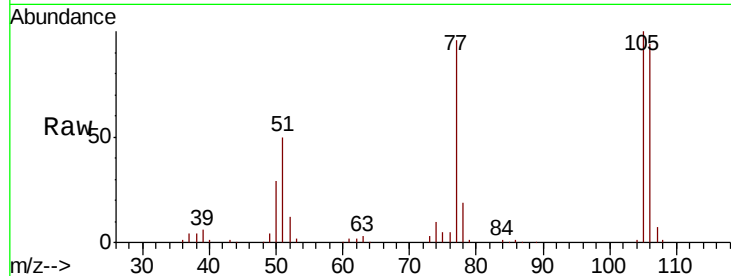
Tgt Ion: 77 Resp: 95815

Ion Ratio Lower Upper

77 100

105 104.4 78.6 118.6

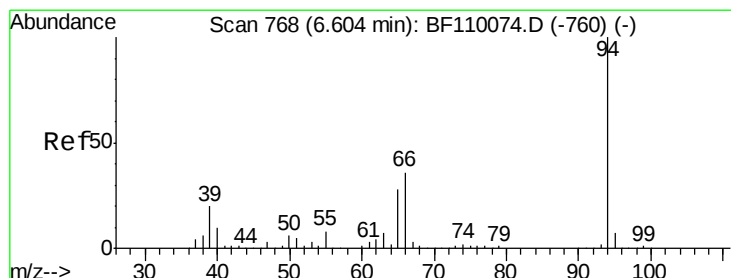
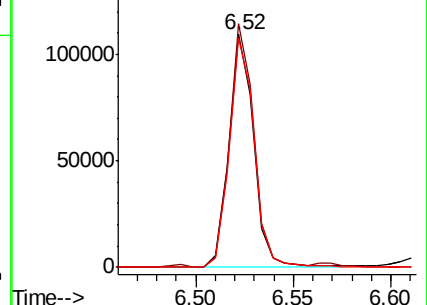
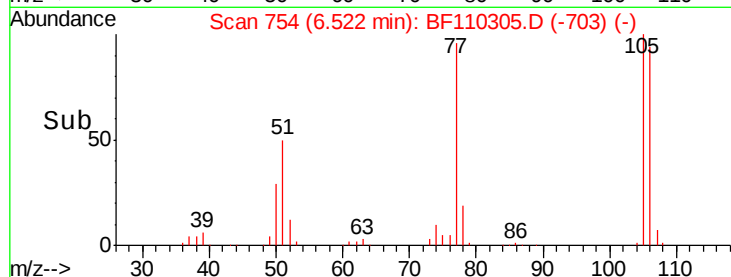
106 98.3 74.8 114.8



Abundance Ion 77.00 (76.70 to 77.70): BF1

Ion 105.00 (104.70 to 105.70): BF1

Ion 106.00 (105.70 to 106.70): BF1



#10

Phenol

Concen: 38.628 ng

RT: 6.61 min Scan# 769

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

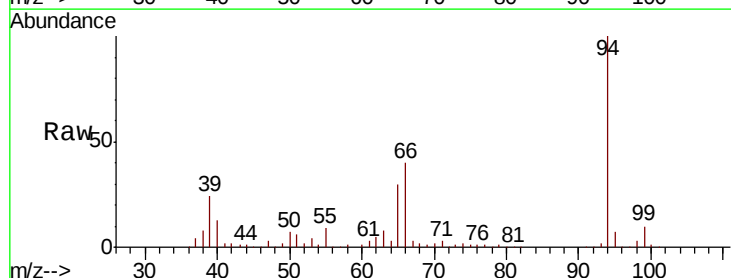
Tgt Ion: 94 Resp: 319237

Ion Ratio Lower Upper

94 100

65 30.4 25.3 65.3

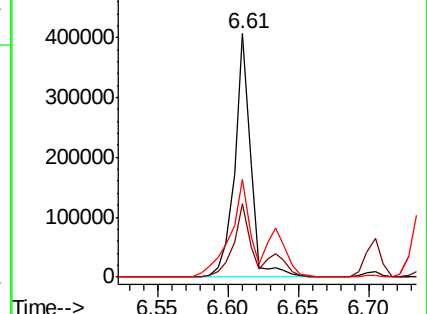
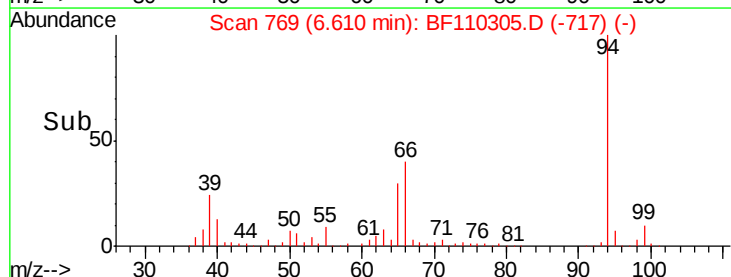
66 40.1 54.5 94.5#



Abundance Ion 94.00 (93.70 to 94.70): BF1

Ion 65.00 (64.70 to 65.70): BF1

Ion 66.00 (65.70 to 66.70): BF1

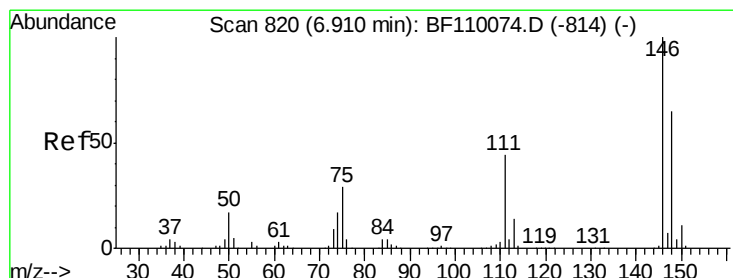
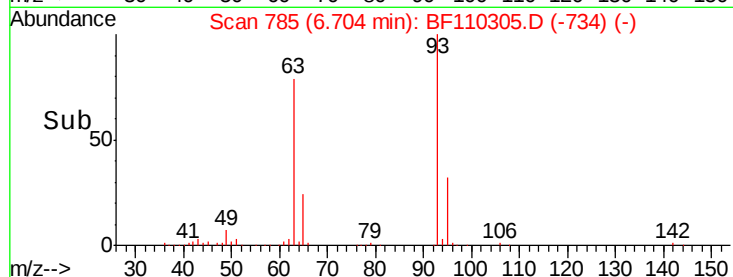
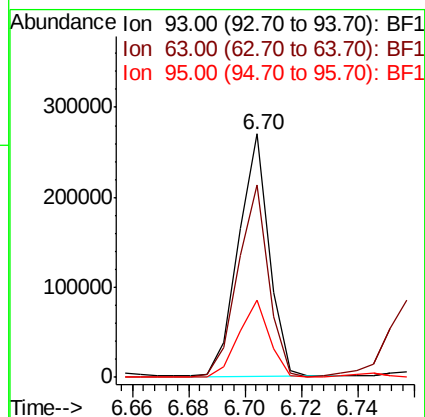
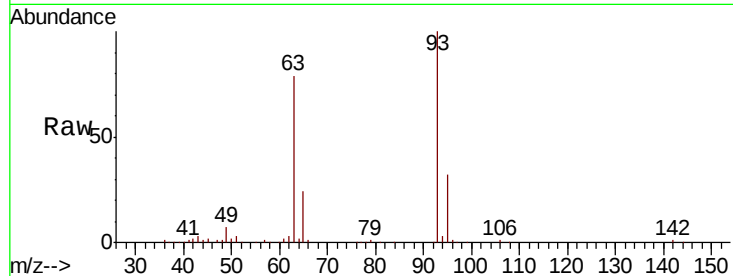




#11
bis(2-Chloroethyl)ether
Concen: 29.879 ng
RT: 6.70 min Scan# 785
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

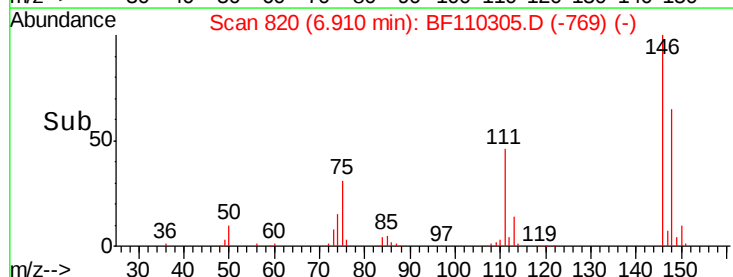
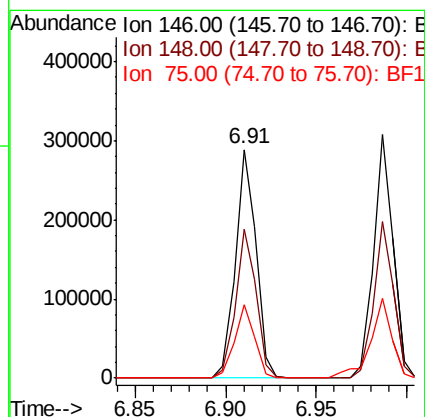
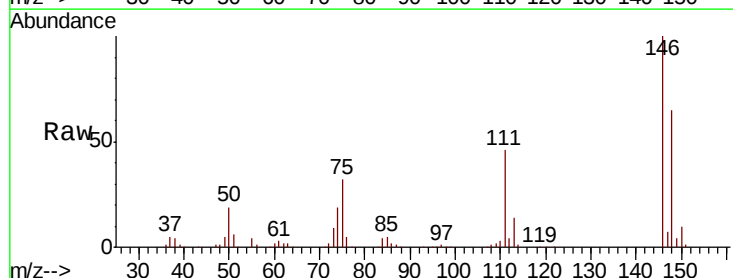
Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

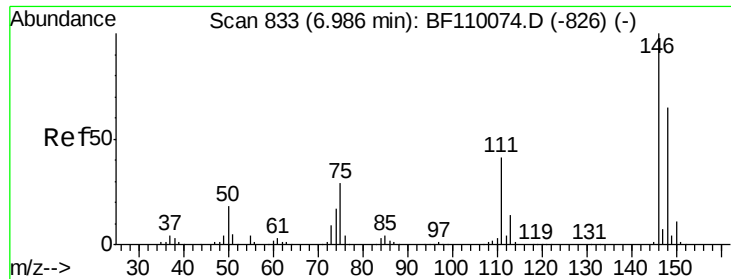
Tgt Ion: 93 Resp: 203155
Ion Ratio Lower Upper
93 100
63 78.9 53.4 93.4
95 31.8 12.1 52.1



#12
1,3-Dichlorobenzene
Concen: 29.868 ng
RT: 6.91 min Scan# 820
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion: 146 Resp: 229062
Ion Ratio Lower Upper
146 100
148 65.4 50.4 75.6
75 32.1 25.8 38.6

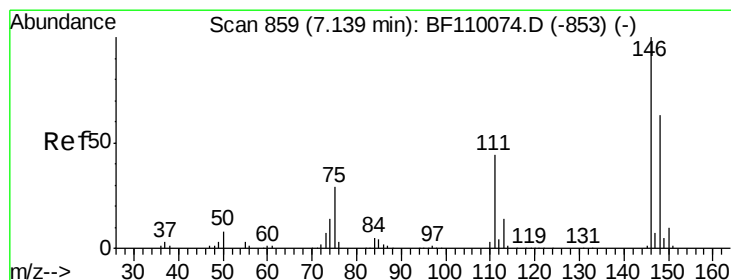
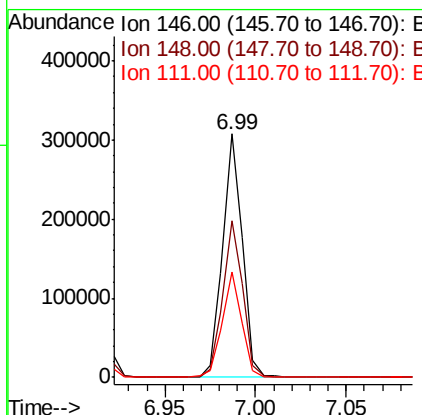
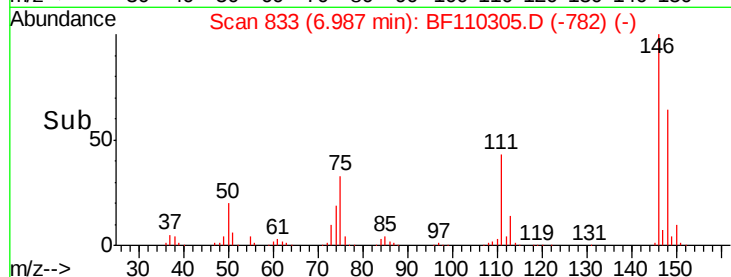
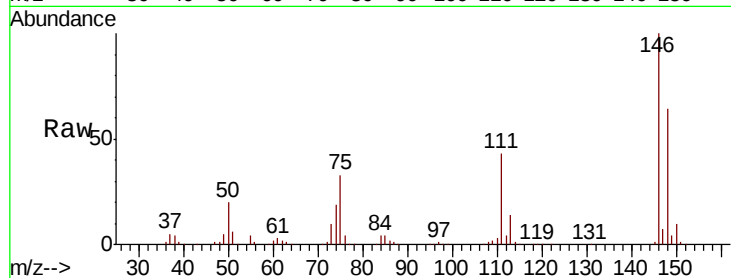




#13
 1,4-Dichlorobenzene
 Concen: 30.093 ng
 RT: 6.99 min Scan# 833
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

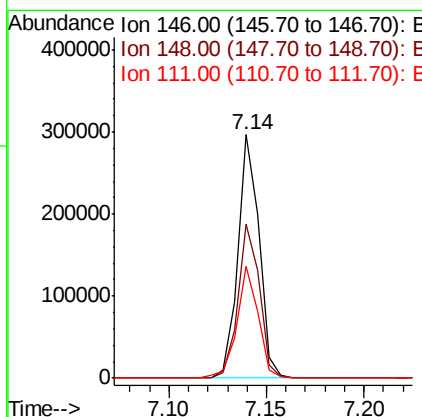
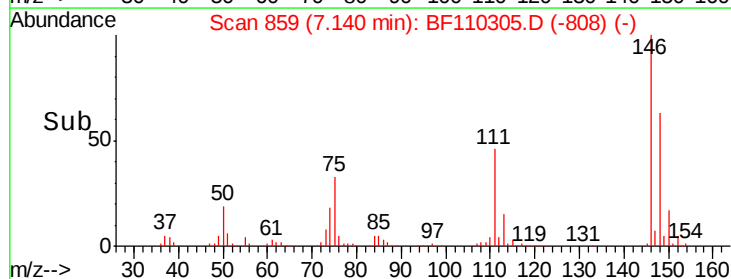
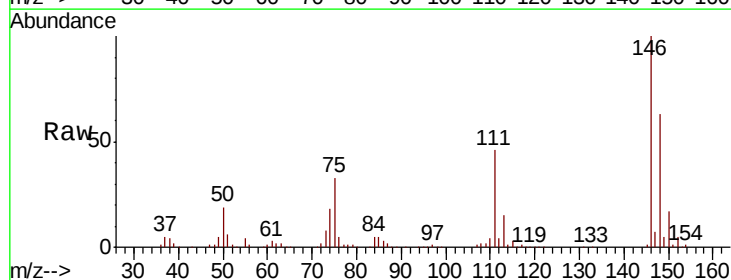
Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

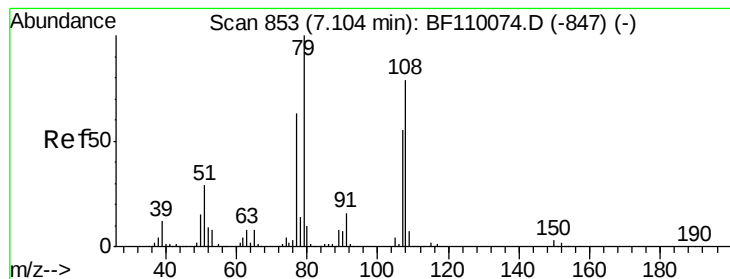
Tgt Ion:146 Resp: 233409
 Ion Ratio Lower Upper
 146 100
 148 64.2 50.3 75.5
 111 43.4 32.7 49.1



#14
 1,2-Dichlorobenzene
 Concen: 30.936 ng
 RT: 7.14 min Scan# 859
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:146 Resp: 222749
 Ion Ratio Lower Upper
 146 100
 148 63.4 51.1 76.7
 111 45.7 35.8 53.6





#15

Benzyl Alcohol

Concen: 33.048 ng

RT: 7.11 min Scan# 854

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

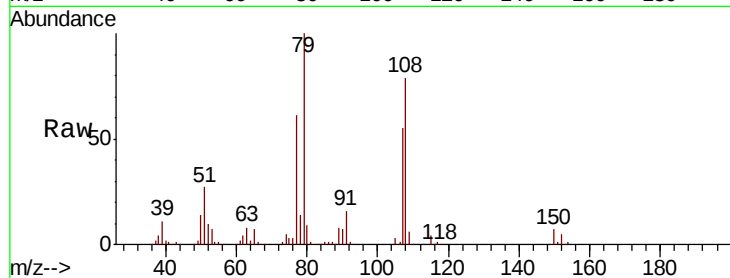
Tgt Ion: 79 Resp: 196514

Ion Ratio Lower Upper

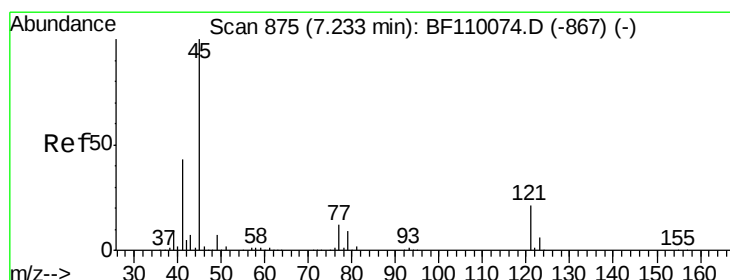
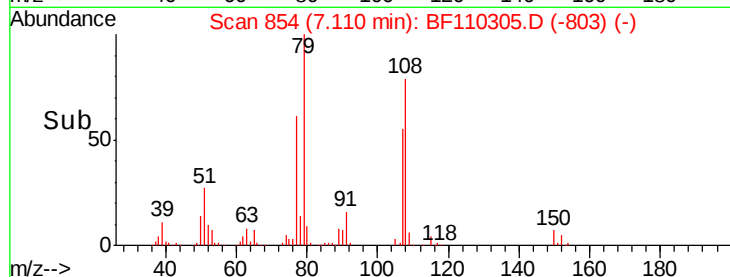
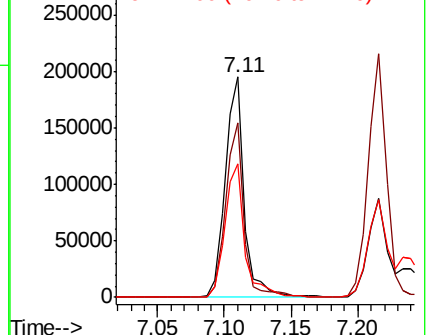
79 100

108 79.3 56.3 84.5

77 60.5 52.9 79.3



Abundance Ion 79.00 (78.70 to 79.70): BF1
Ion 108.00 (107.70 to 108.70): BF1
Ion 77.00 (76.70 to 77.70): BF1



#16

2,2'-oxybis(1-Chloropropane)

Concen: 29.716 ng

RT: 7.24 min Scan# 876

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

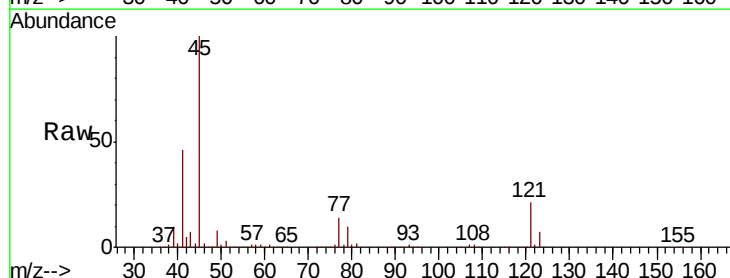
Tgt Ion: 45 Resp: 323047

Ion Ratio Lower Upper

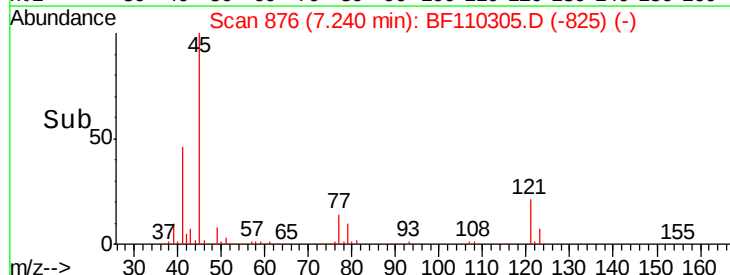
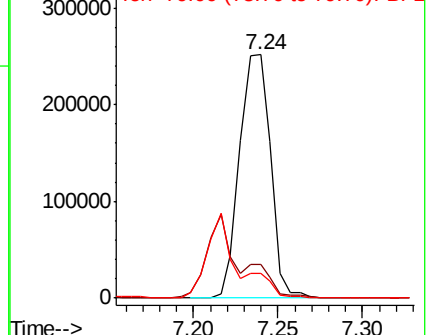
45 100

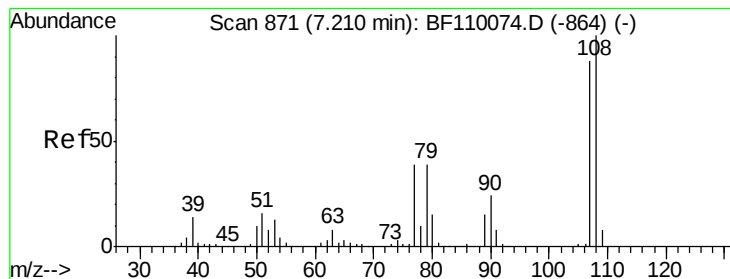
77 13.8 10.0 50.0

79 10.2 6.1 46.1



Abundance Ion 45.00 (44.70 to 45.70): BF1
Ion 77.00 (76.70 to 77.70): BF1
Ion 79.00 (78.70 to 79.70): BF1





#17

2-Methylphenol

Concen: 32.181 ng

RT: 7.22 min Scan# 872

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

Tgt Ion:107 Resp: 178730

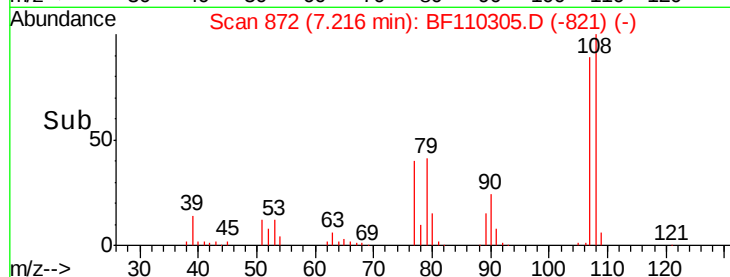
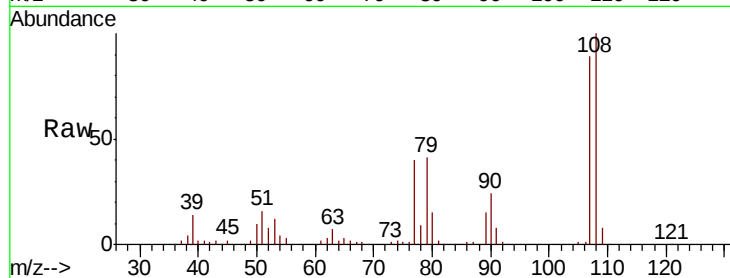
Ion Ratio Lower Upper

107 100

108 112.4 92.6 138.8

77 45.3 59.4 89.2#

79 45.5 54.0 81.0#



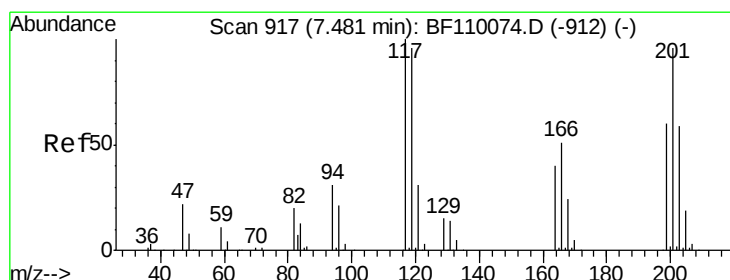
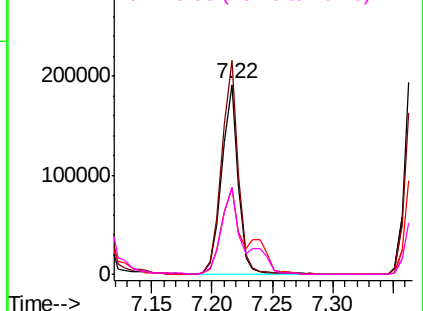
Abundance

Ion 107.00 (106.70 to 107.70): E

Ion 108.00 (107.70 to 108.70): E

Ion 77.00 (76.70 to 77.70): BF1

Ion 79.00 (78.70 to 79.70): BF1



#18

Hexachloroethane

Concen: 29.276 ng

RT: 7.48 min Scan# 917

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

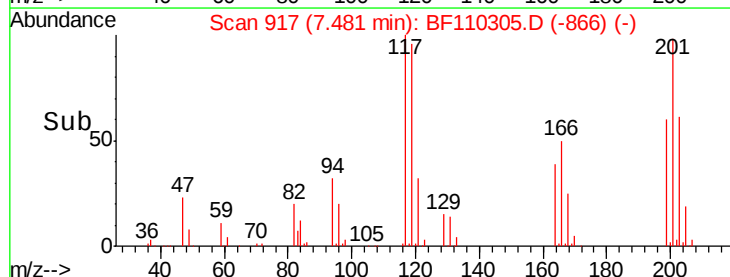
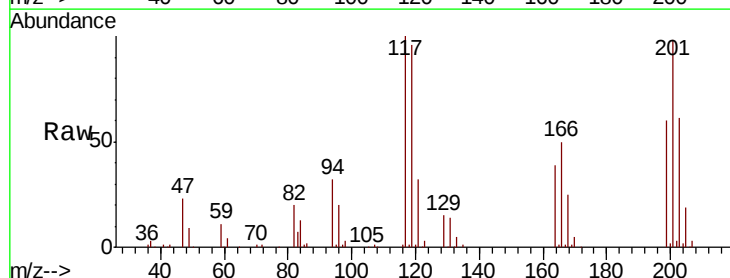
Tgt Ion:117 Resp: 83135

Ion Ratio Lower Upper

117 100

119 95.8 75.0 112.6

201 97.6 79.2 118.8

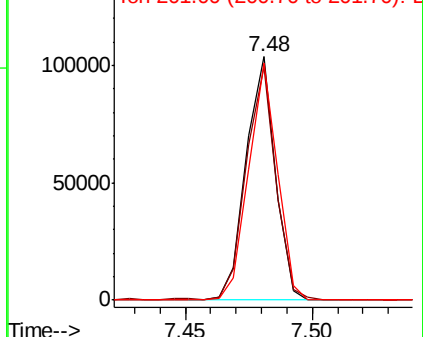


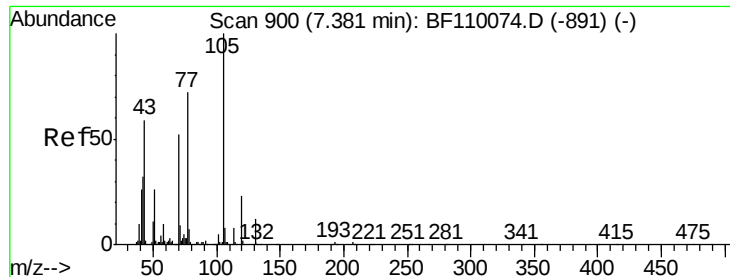
Abundance

Ion 117.00 (116.70 to 117.70): E

Ion 119.00 (118.70 to 119.70): E

Ion 201.00 (200.70 to 201.70): E

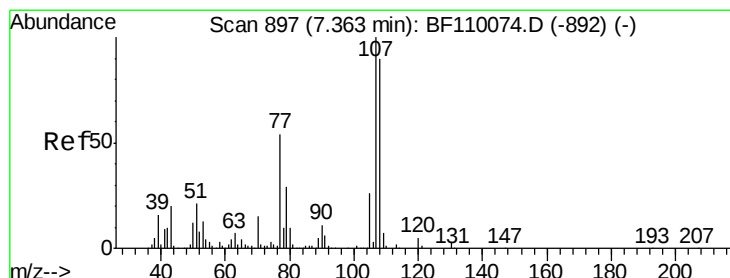
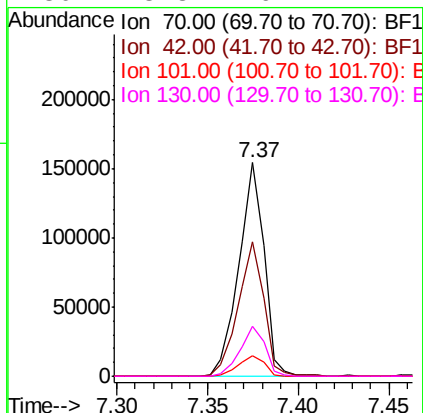
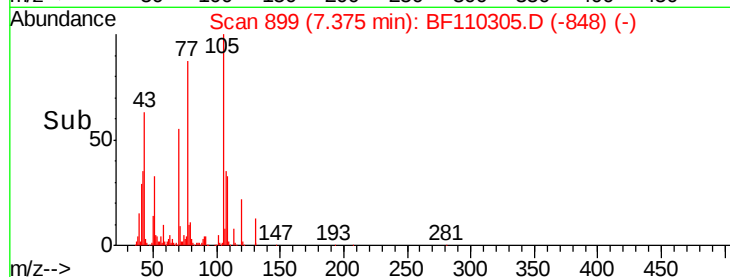
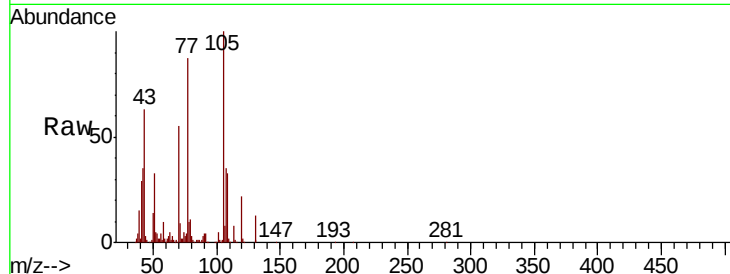




#19
n-Nitroso-di-n-propylamine
Concen: 30.215 ng
RT: 7.37 min Scan# 899
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

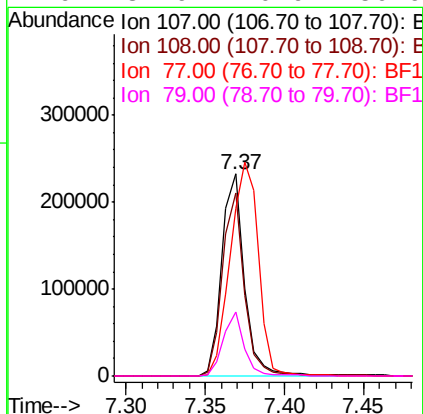
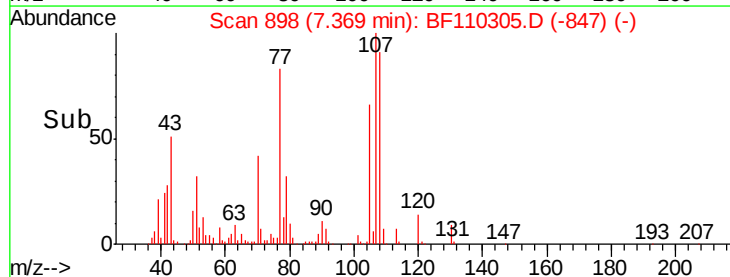
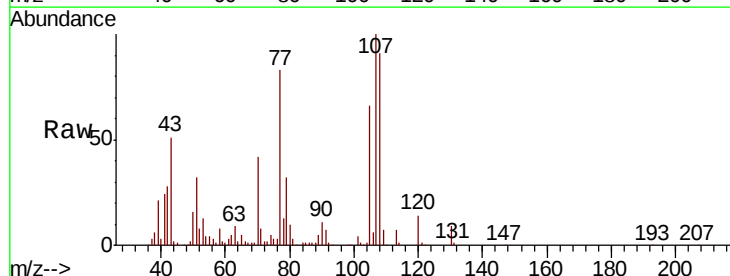
Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

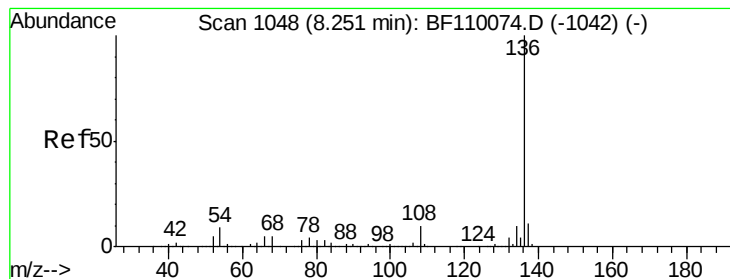
Tgt Ion:	70	Resp:	149866
Ion	Ratio	Lower	Upper
70	100		
42	63.1	47.4	71.2
101	9.3	7.3	10.9
130	23.3	16.2	24.2



#20
3+4-Methylphenols
Concen: 31.883 ng
RT: 7.37 min Scan# 898
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion:	107	Resp:	228888
Ion	Ratio	Lower	Upper
107	100		
108	91.1	71.4	111.4
77	83.4	47.3	87.3
79	31.9	10.9	50.9





#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.26 min Scan# 1049

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

Tgt Ion:136 Resp: 404360

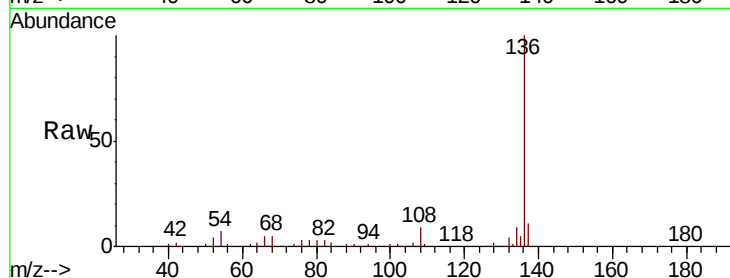
Ion Ratio Lower Upper

136 100

137 11.0 8.8 13.2

54 6.9 5.4 8.2

68 4.8 4.2 6.2

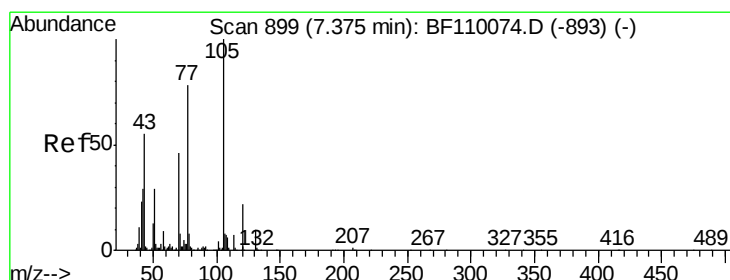
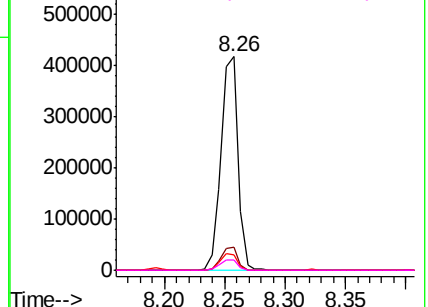
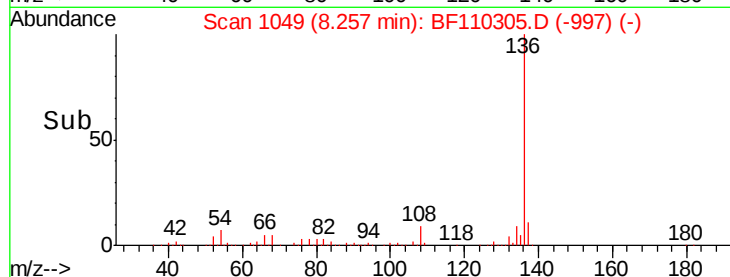


Abundance Ion 136.00 (135.70 to 136.70): E

Ion 137.00 (136.70 to 137.70): E

Ion 54.00 (53.70 to 54.70): BF1

Ion 68.00 (67.70 to 68.70): BF1



#22

Acetophenone

Concen: 33.121 ng

RT: 7.38 min Scan# 900

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Tgt Ion:105 Resp: 308600

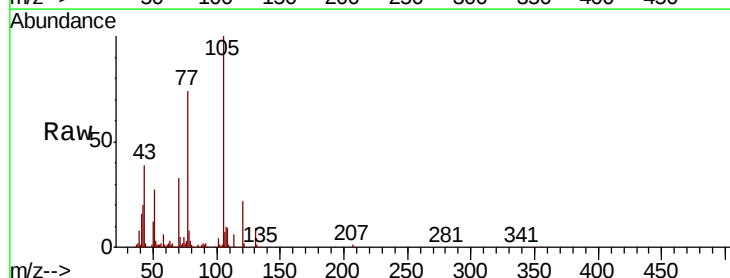
Ion Ratio Lower Upper

105 100

71 5.2 5.2 7.8#

51 26.9 21.8 32.8

120 21.6 17.0 25.4

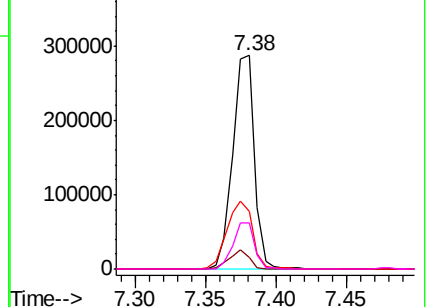
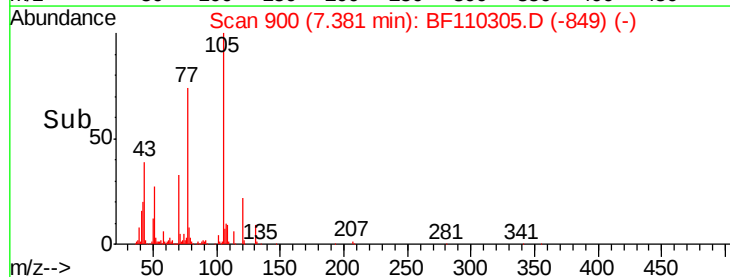


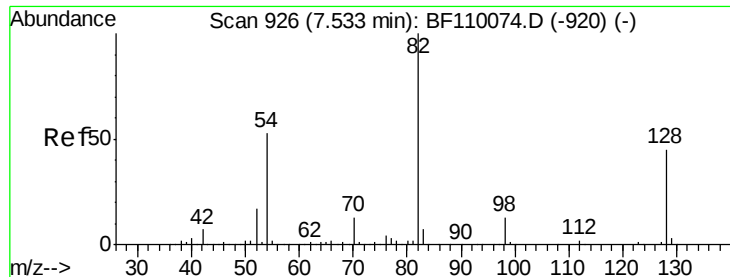
Abundance Ion 105.00 (104.70 to 105.70): E

Ion 71.00 (70.70 to 71.70): BF1

Ion 51.00 (50.70 to 51.70): BF1

Ion 120.00 (119.70 to 120.70): E

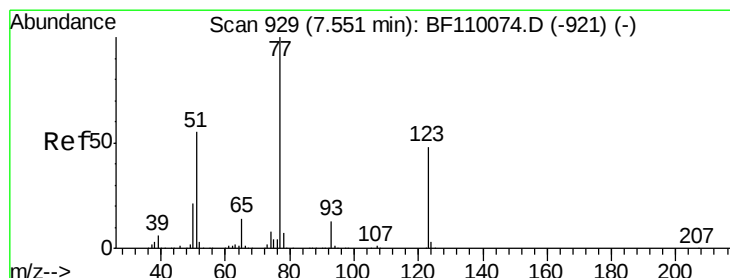
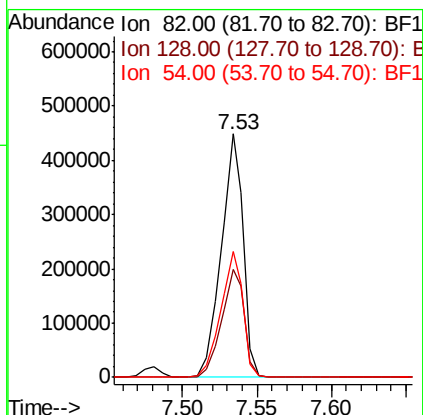
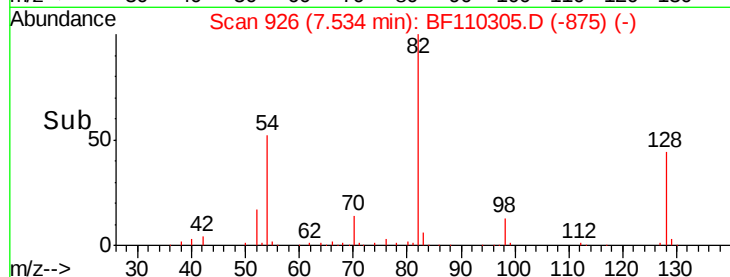
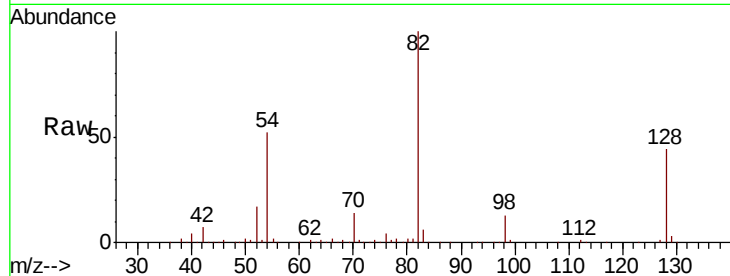




#23
 Nitrobenzene-d5
 Concen: 68.359 ng
 RT: 7.53 min Scan# 926
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

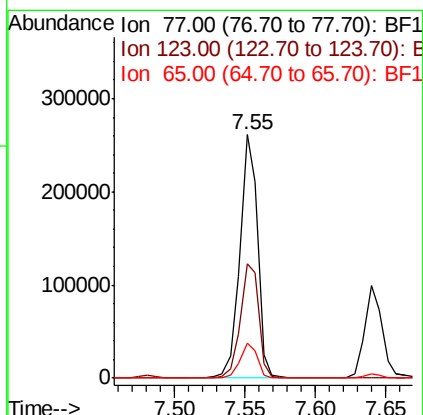
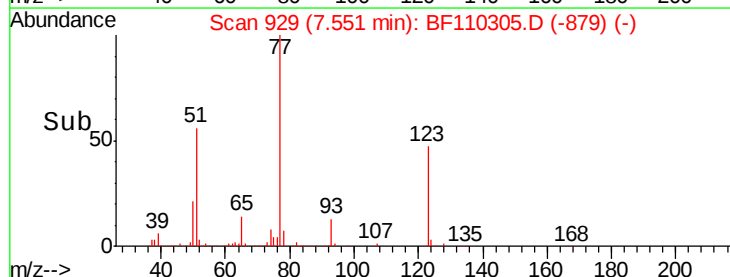
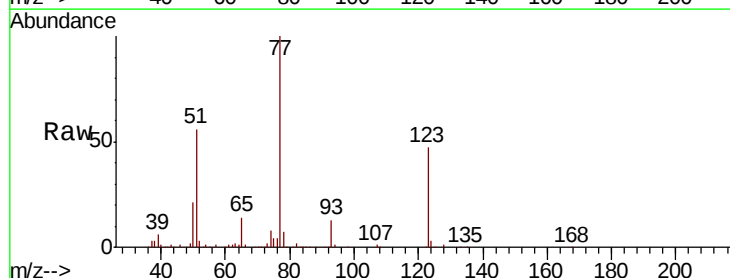
Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

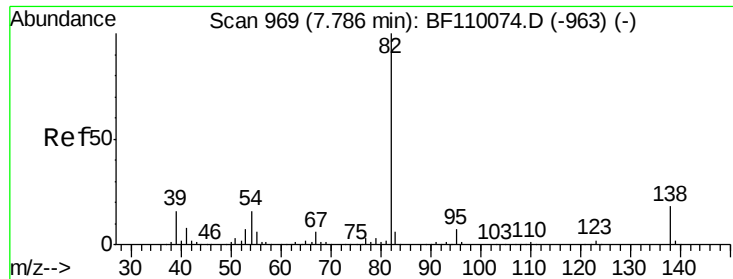
Tgt Ion: 82 Resp: 466030
 Ion Ratio Lower Upper
 82 100
 128 44.4 34.2 51.2
 54 51.8 38.6 58.0



#24
 Nitrobenzene
 Concen: 32.085 ng
 RT: 7.55 min Scan# 929
 Delta R.T. -0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion: 77 Resp: 225830
 Ion Ratio Lower Upper
 77 100
 123 46.8 35.7 53.5
 65 14.3 10.7 16.1

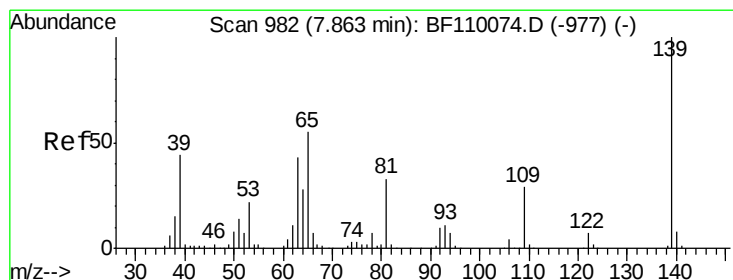
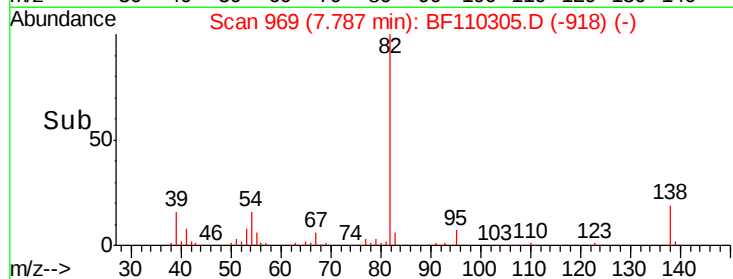
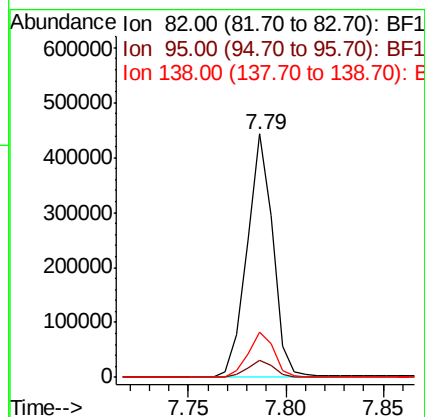
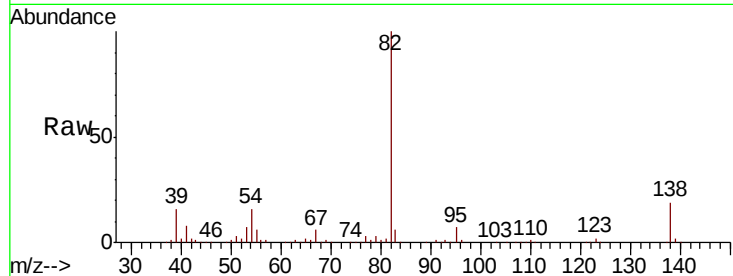




#25
Isophorone
Concen: 35.181 ng
RT: 7.79 min Scan# 969
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

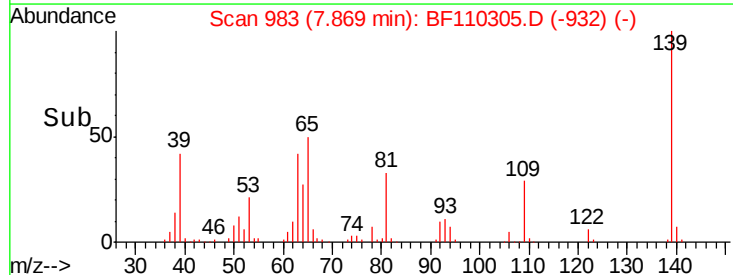
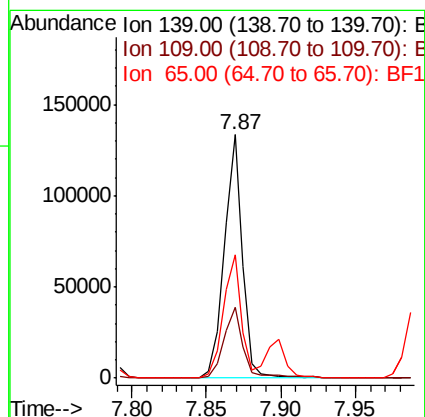
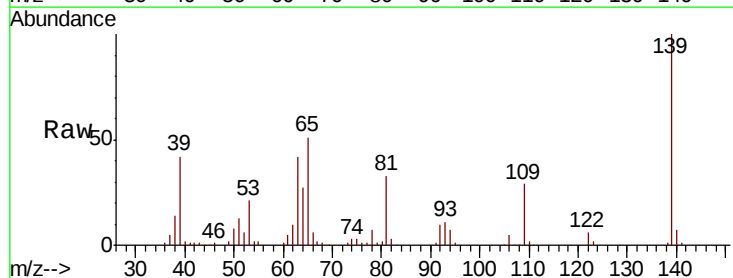
Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

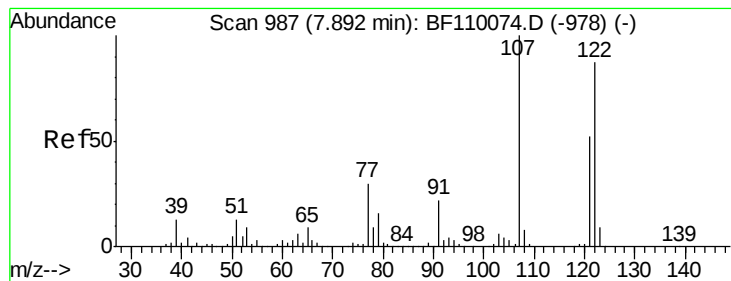
Tgt Ion: 82 Resp: 408839
Ion Ratio Lower Upper
82 100
95 7.2 5.7 8.5
138 18.6 13.2 19.8



#26
2-Nitrophenol
Concen: 34.165 ng
RT: 7.87 min Scan# 983
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion: 139 Resp: 114430
Ion Ratio Lower Upper
139 100
109 29.3 25.0 37.6
65 50.9 44.0 66.0





#27

2,4-Dimethylphenol

Concen: 36.542 ng

RT: 7.90 min Scan# 988

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

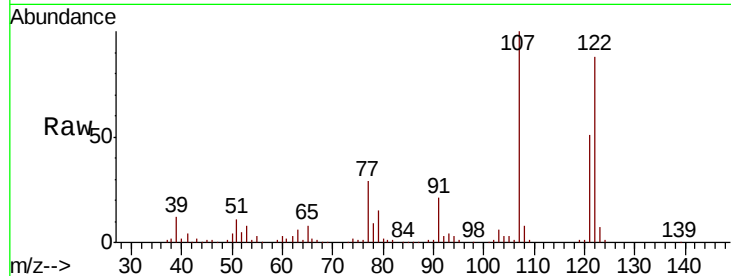
Tgt Ion:122 Resp: 202921

Ion Ratio Lower Upper

122 100

107 113.6 92.5 138.7

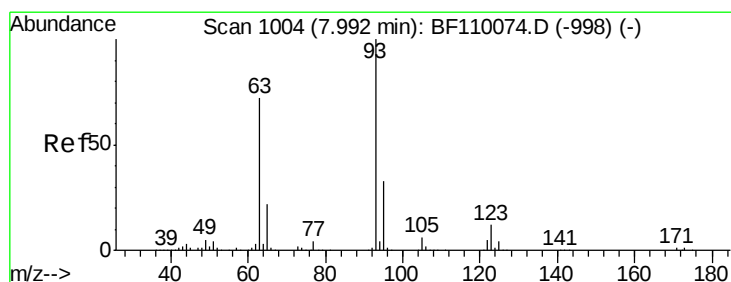
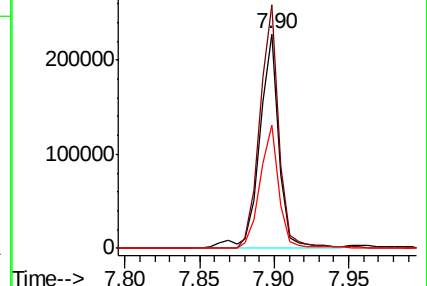
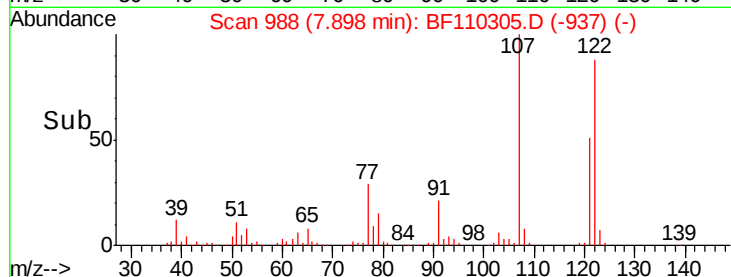
121 57.7 45.8 68.8



Abundance Ion 122.00 (121.70 to 122.70): E

Ion 107.00 (106.70 to 107.70): E

Ion 121.00 (120.70 to 121.70): E



#28

bis(2-Chloroethoxy)methane

Concen: 33.356 ng

RT: 7.99 min Scan# 1004

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

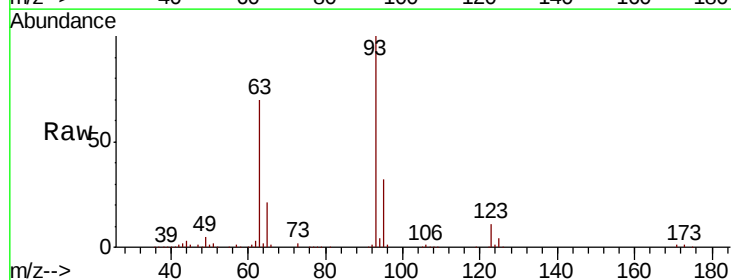
Tgt Ion: 93 Resp: 263332

Ion Ratio Lower Upper

93 100

95 32.0 26.4 39.6

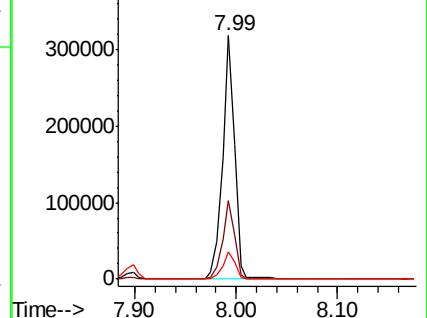
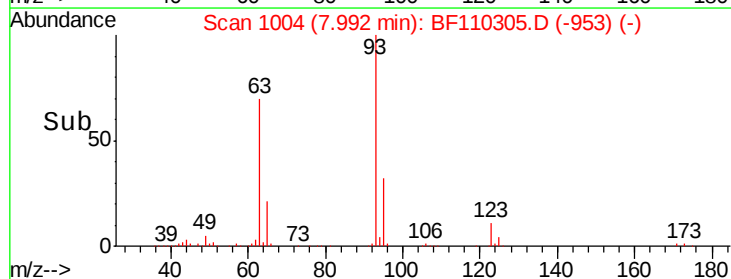
123 11.1 9.0 13.6

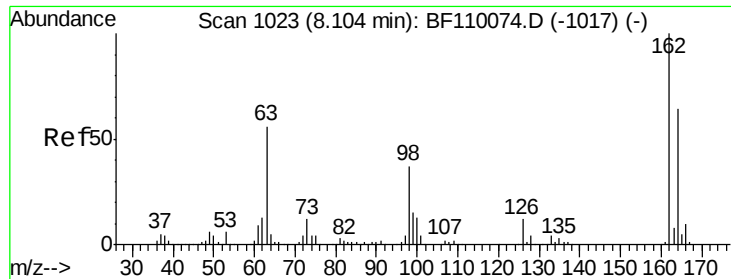


Abundance Ion 93.00 (92.70 to 93.70): BF1

Ion 95.00 (94.70 to 95.70): BF1

Ion 123.00 (122.70 to 123.70): E

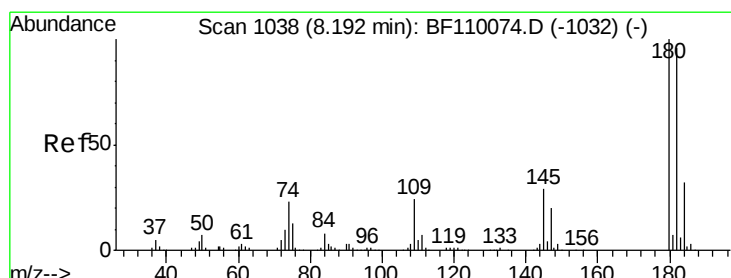
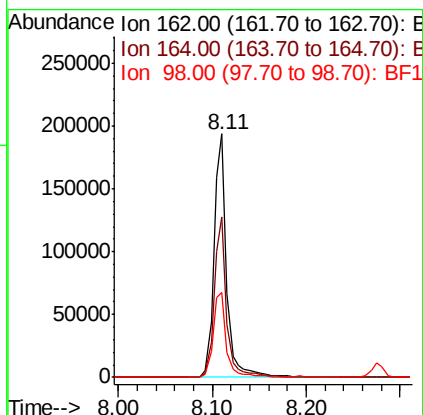
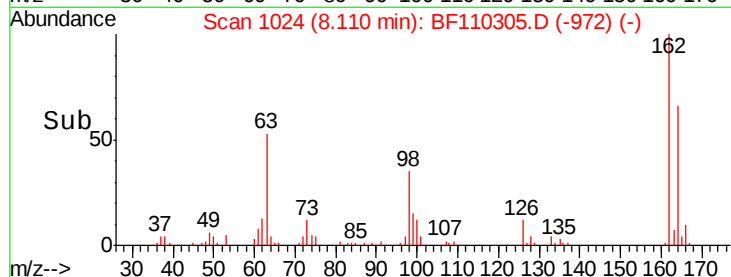
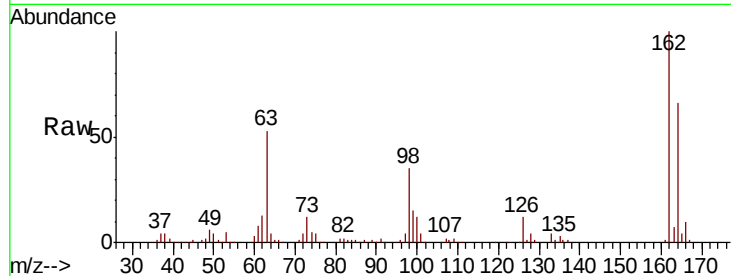




#29
 2,4-Dichlorophenol
 Concen: 33.229 ng
 RT: 8.11 min Scan# 1024
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

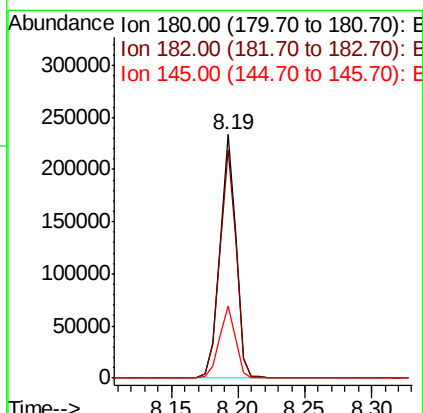
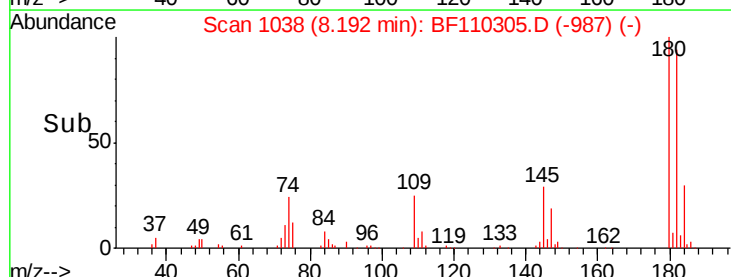
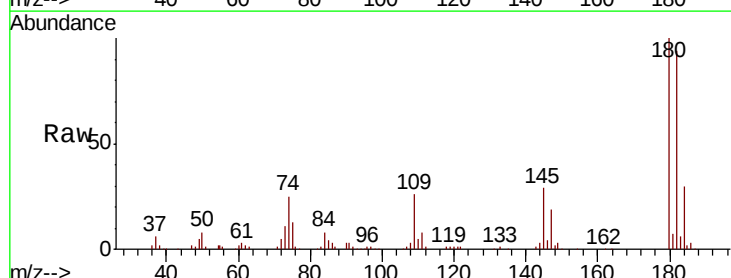
Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

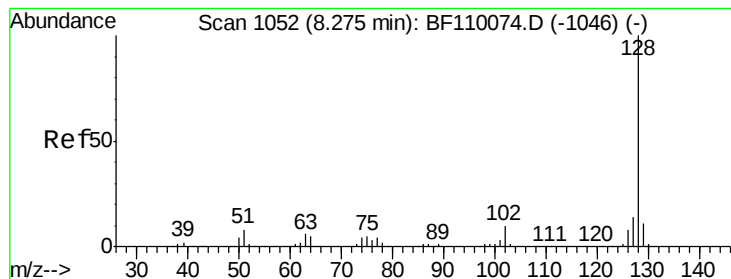
Tgt Ion:162 Resp: 186422
 Ion Ratio Lower Upper
 162 100
 164 65.7 44.6 84.6
 98 34.8 17.4 57.4



#30
 1,2,4-Trichlorobenzene
 Concen: 31.896 ng
 RT: 8.19 min Scan# 1038
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:180 Resp: 200439
 Ion Ratio Lower Upper
 180 100
 182 93.7 80.3 120.5
 145 29.4 25.4 38.0





#31

Naphthalene

Concen: 37.566 ng

RT: 8.27 min Scan# 1052

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

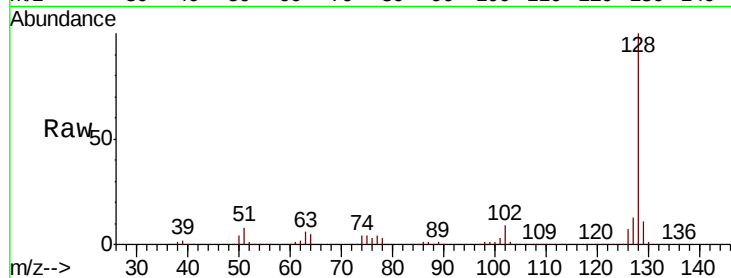
Tgt Ion:128 Resp: 700101

Ion Ratio Lower Upper

128 100

129 11.4 8.8 13.2

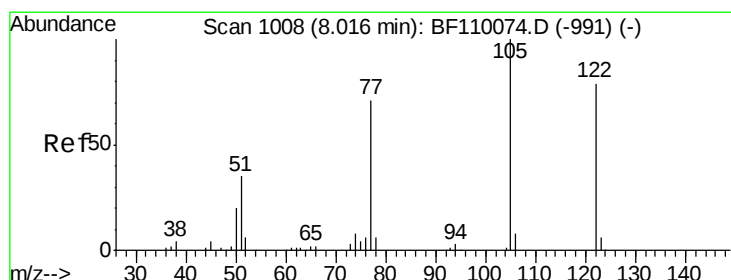
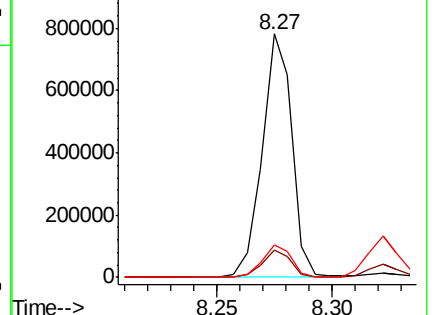
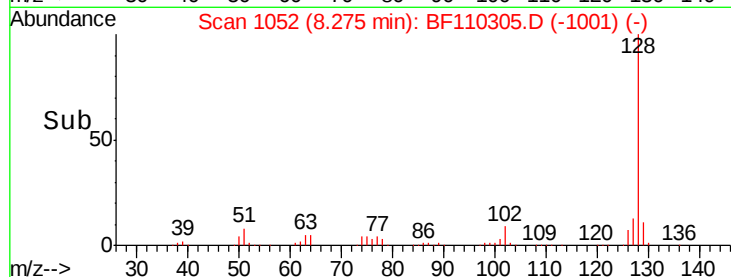
127 13.1 10.8 16.2



Abundance Ion 128.00 (127.70 to 128.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 127.00 (126.70 to 127.70): E



#32

Benzoic acid

Concen: 47.280 ng

RT: 7.90 min Scan# 988

Delta R.T. -0.12 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

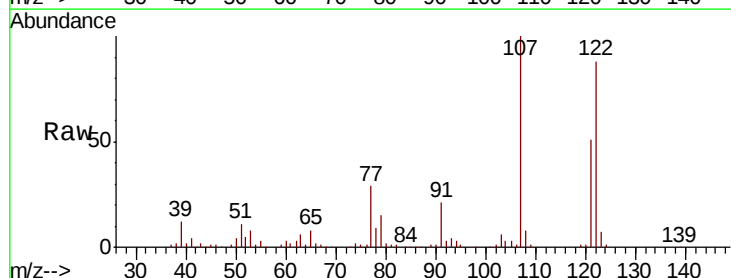
Tgt Ion:122 Resp: 202921

Ion Ratio Lower Upper

122 100

105 3.5 109.0 149.0#

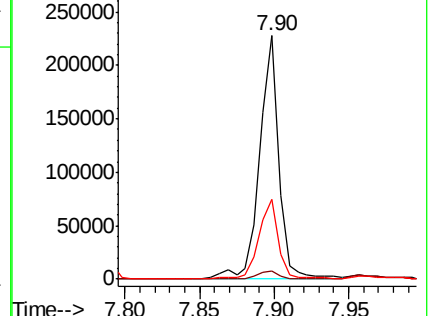
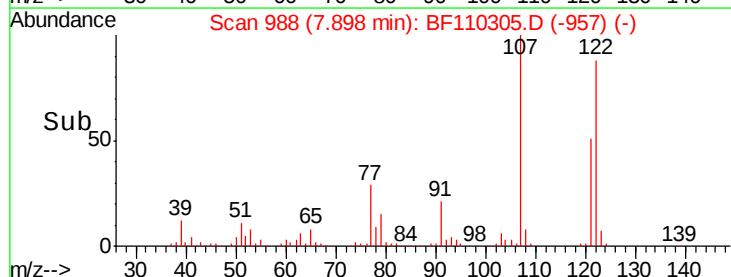
77 33.0 79.0 119.0#

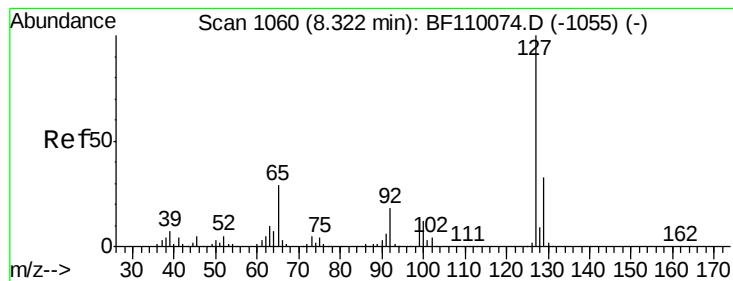


Abundance Ion 122.00 (121.70 to 122.70): E

Ion 105.00 (104.70 to 105.70): E

Ion 77.00 (76.70 to 77.70): BF1





#33

4-Chloroaniline

Concen: 15.965 ng

RT: 8.32 min Scan# 1060

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

Tgt Ion:127 Resp: 133910

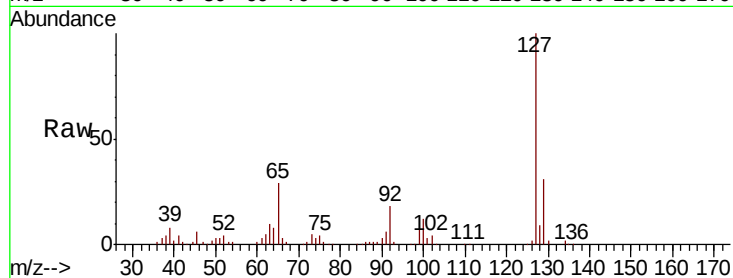
Ion Ratio Lower Upper

127 100

129 31.5 26.0 39.0

65 29.3 25.1 37.7

92 17.6 15.0 22.6

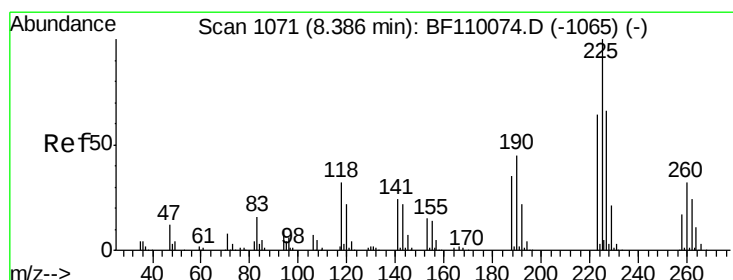
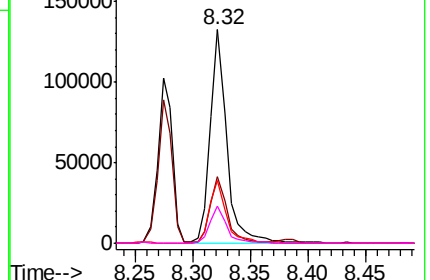
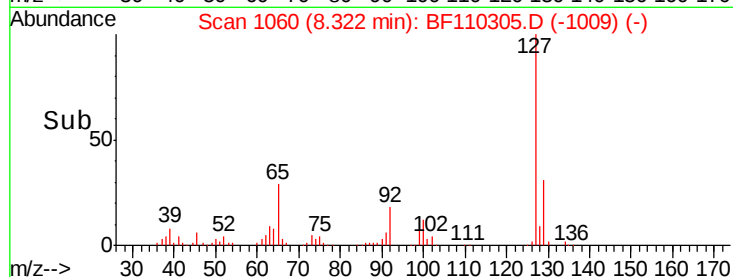


Abundance Ion 127.00 (126.70 to 127.70): E

Ion 129.00 (128.70 to 129.70): E

Ion 65.00 (64.70 to 65.70): BF1

Ion 92.00 (91.70 to 92.70): BF1



#34

Hexachlorobutadiene

Concen: 30.975 ng

RT: 8.39 min Scan# 1071

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

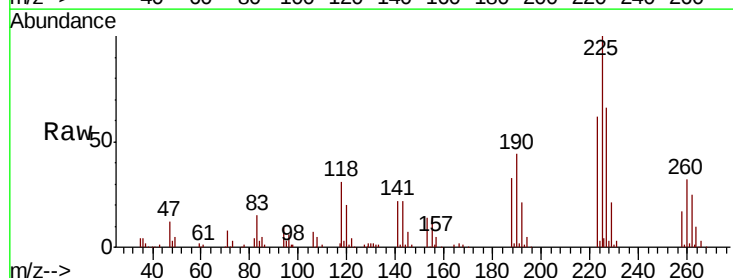
Tgt Ion:225 Resp: 108077

Ion Ratio Lower Upper

225 100

223 62.1 51.4 77.2

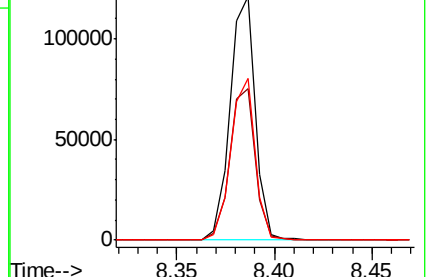
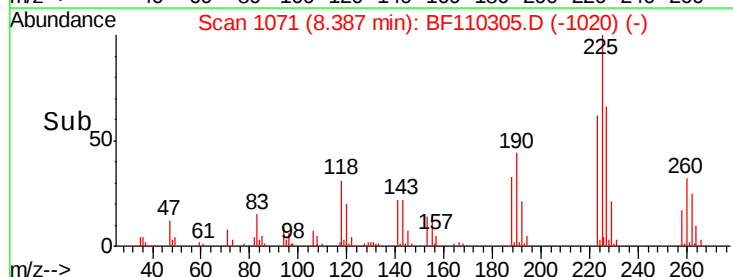
227 66.4 51.0 76.6



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

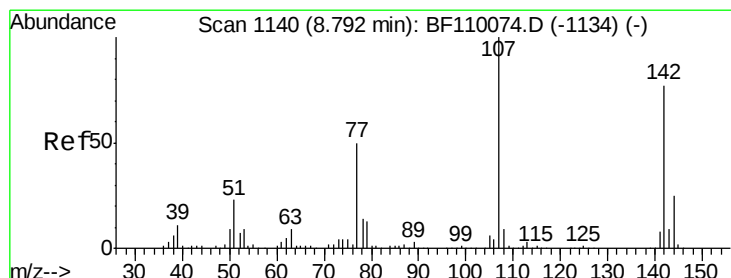
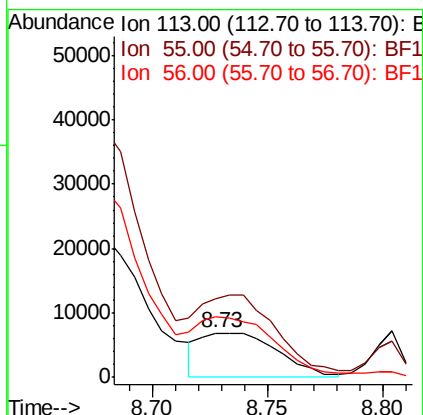
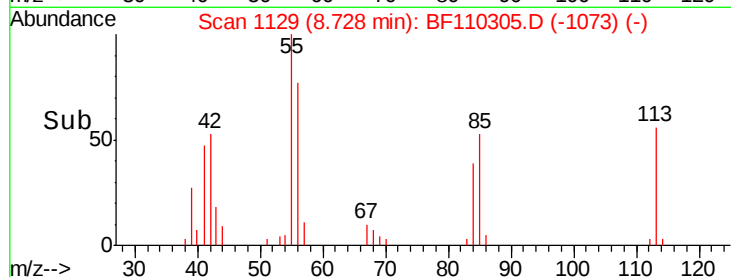
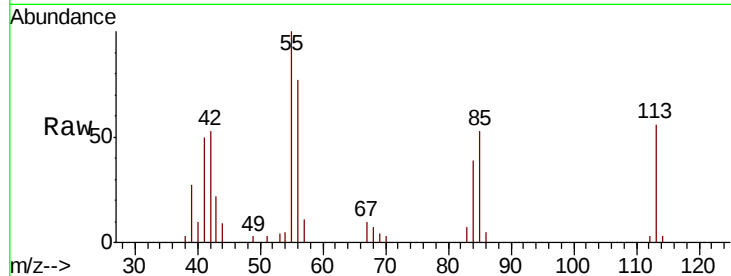




#35
 Caprolactam
 Concen: 8.236 ng
 RT: 8.73 min Scan# 1129
 Delta R.T. 0.03 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

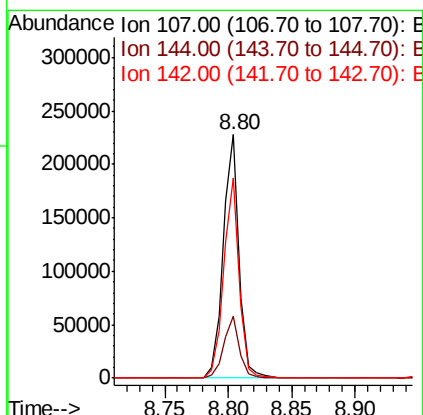
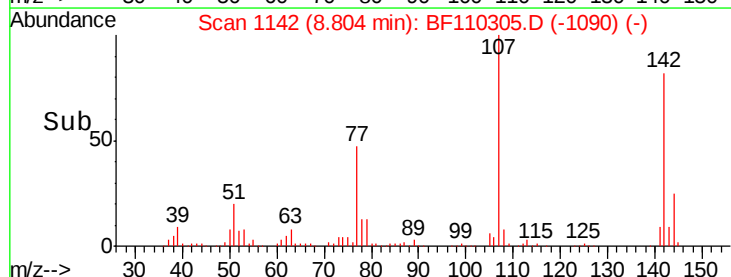
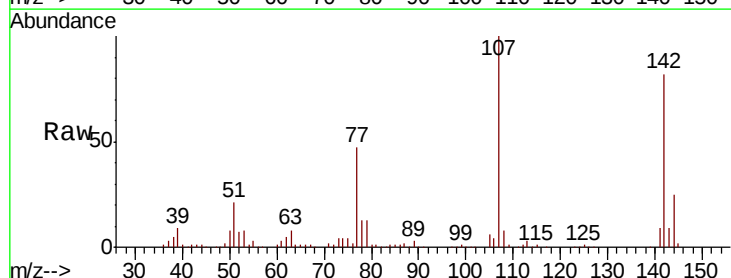
Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

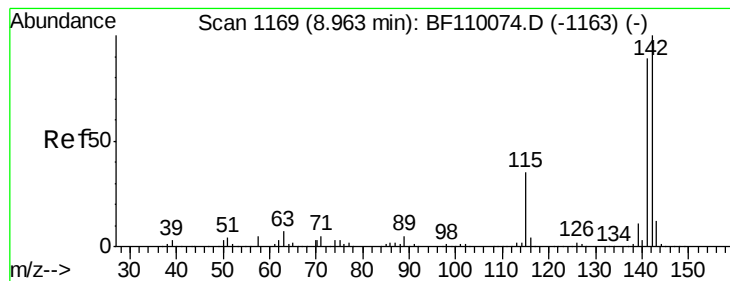
Tgt Ion:113 Resp: 16105
 Ion Ratio Lower Upper
 113 100
 55 177.5 142.8 182.8
 56 136.1 105.0 145.0



#36
 4-Chloro-3-methylphenol
 Concen: 32.649 ng
 RT: 8.80 min Scan# 1142
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:107 Resp: 198071
 Ion Ratio Lower Upper
 107 100
 144 25.4 20.0 30.0
 142 82.0 59.7 89.5





#37

2-Methylnaphthalene

Concen: 36.888 ng

RT: 8.97 min Scan# 1170

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

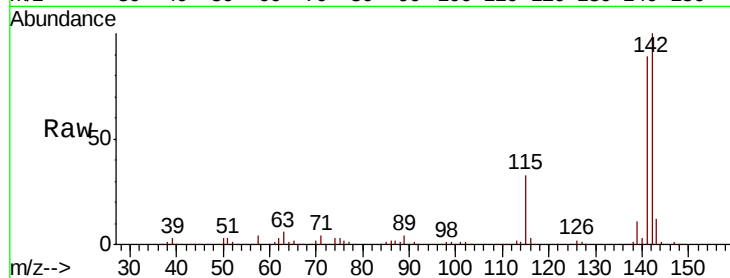
Tgt Ion:142 Resp: 454849

Ion Ratio Lower Upper

142 100

141 89.0 71.4 107.2

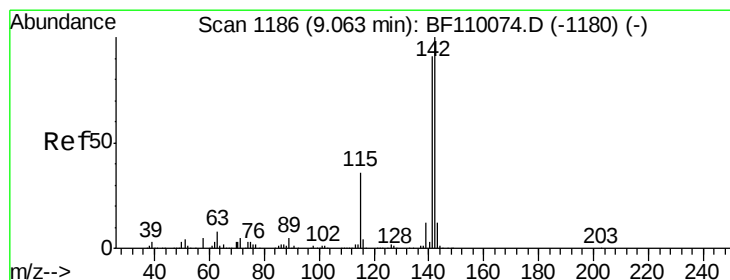
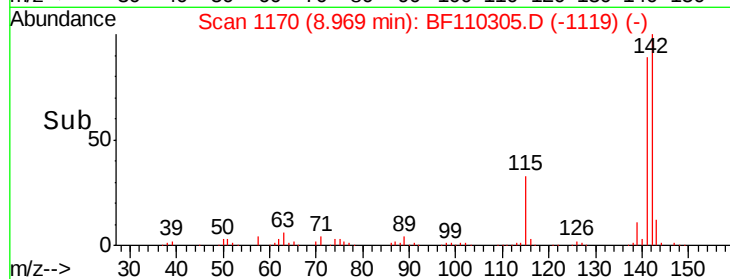
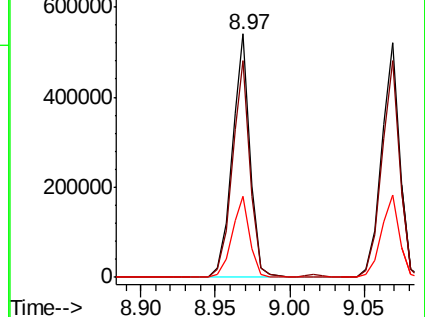
115 33.1 28.7 43.1



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E



#38

1-Methylnaphthalene

Concen: 35.893 ng

RT: 9.07 min Scan# 1187

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

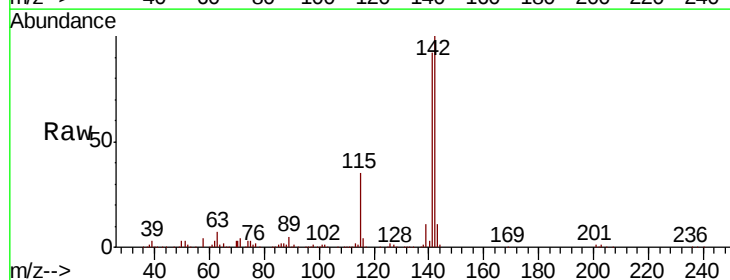
Tgt Ion:142 Resp: 427698

Ion Ratio Lower Upper

142 100

141 92.2 74.2 111.4

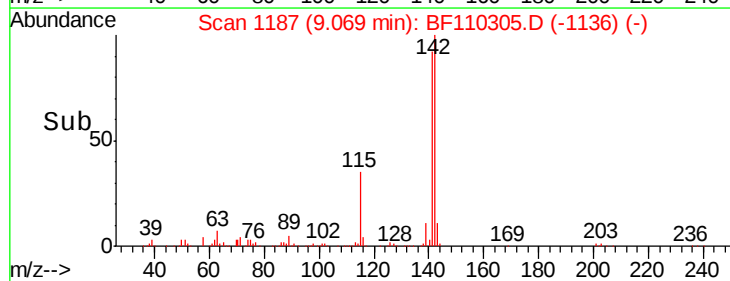
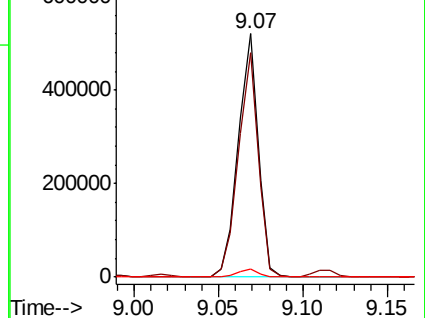
116 3.6 2.6 4.0



Abundance Ion 142.00 (141.70 to 142.70): E

Ion 141.00 (140.70 to 141.70): E

Ion 116.00 (115.70 to 116.70): E





#39

Acenaphthene-d10

Concen: 20.000 ng

RT: 10.02 min Scan# 1348

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

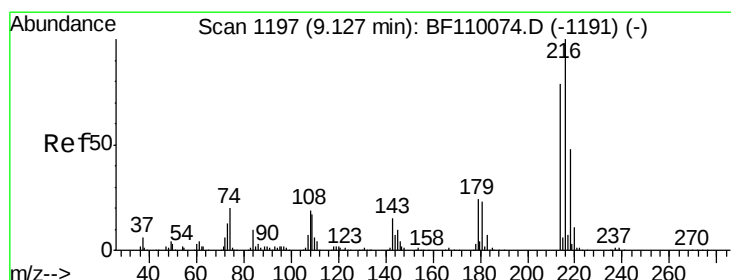
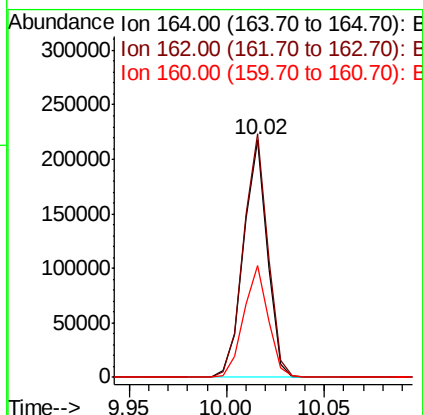
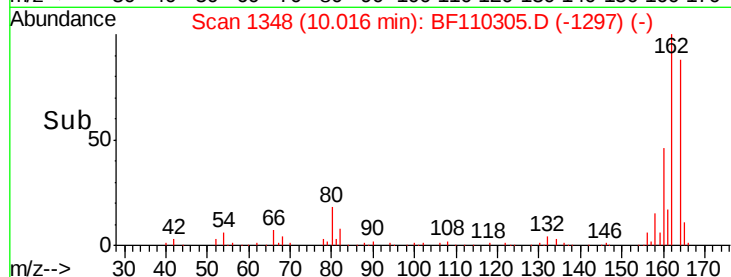
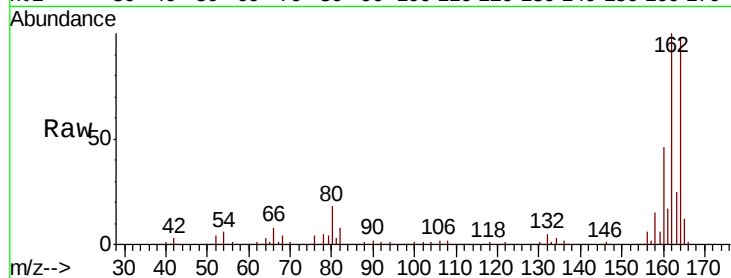
Tgt Ion:164 Resp: 184698

Ion Ratio Lower Upper

164 100

162 102.5 83.0 124.6

160 46.9 37.0 55.6



#40

1,2,4,5-Tetrachlorobenzene

Concen: 32.281 ng

RT: 9.13 min Scan# 1198

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Tgt Ion:216 Resp: 185772

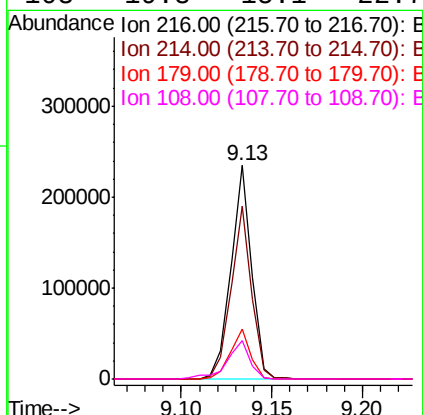
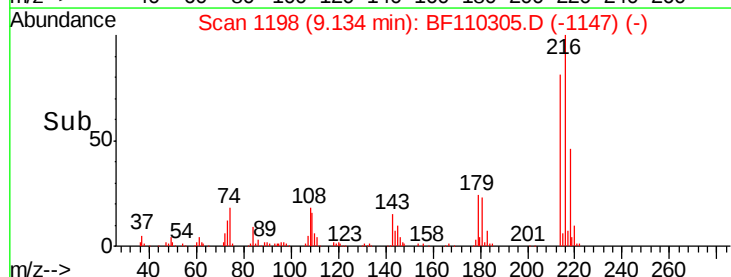
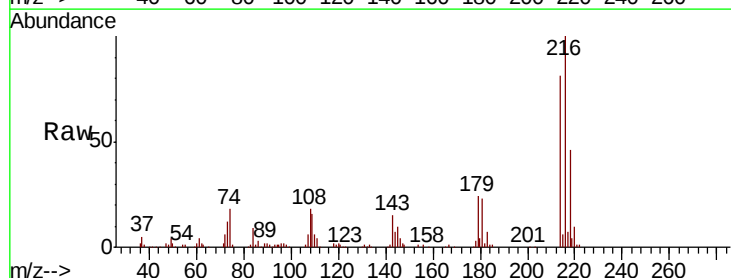
Ion Ratio Lower Upper

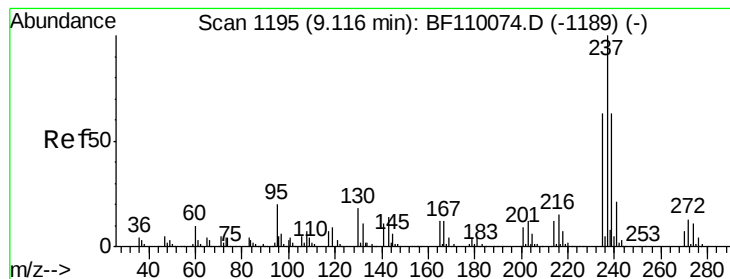
216 100

214 80.6 63.8 95.6

179 23.1 16.6 25.0

108 19.8 15.1 22.7





#41

Hexachlorocyclopentadiene

Concen: 32.889 ng

RT: 9.12 min Scan# 1195

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

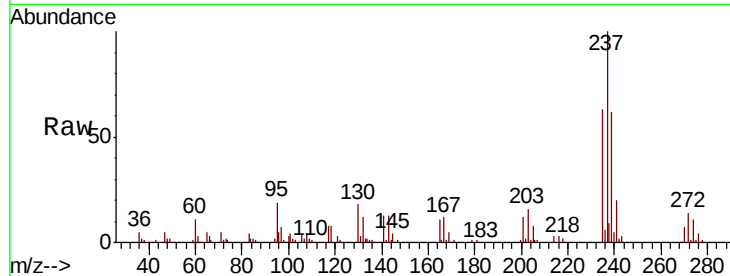
Tgt Ion:237 Resp: 96781

Ion Ratio Lower Upper

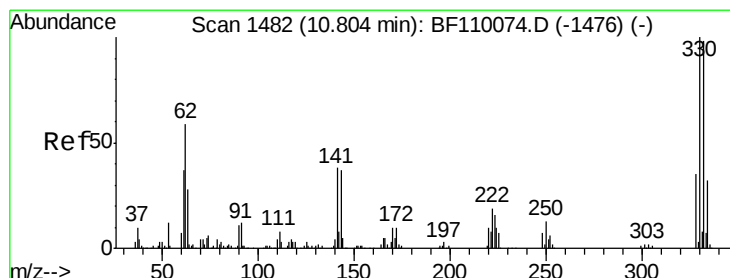
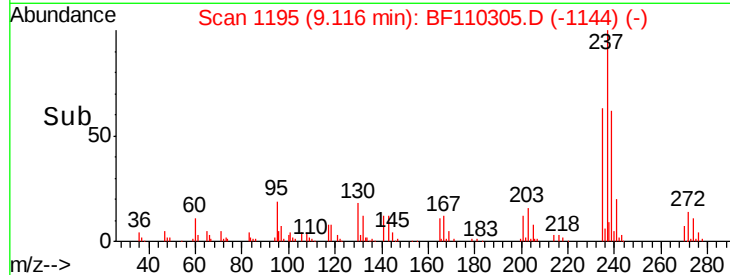
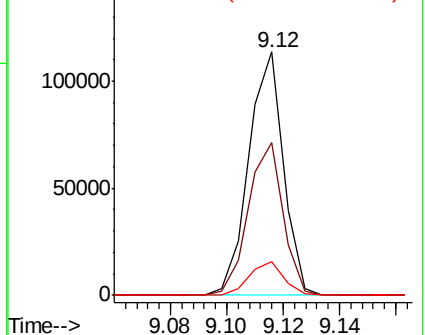
237 100

235 63.0 43.1 83.1

272 13.7 0.0 32.6



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



#42

2,4,6-Tribromophenol

Concen: 87.534 ng

RT: 10.81 min Scan# 1483

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

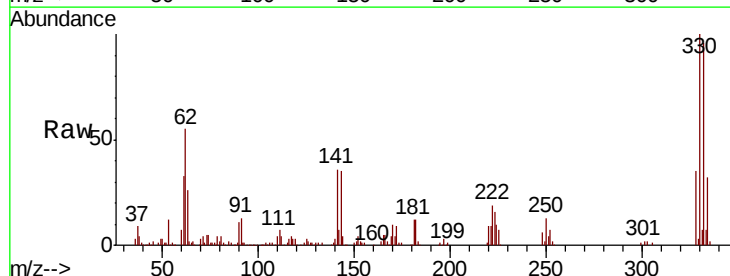
Tgt Ion:330 Resp: 160149

Ion Ratio Lower Upper

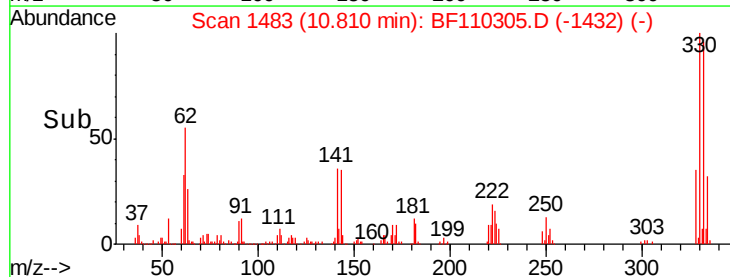
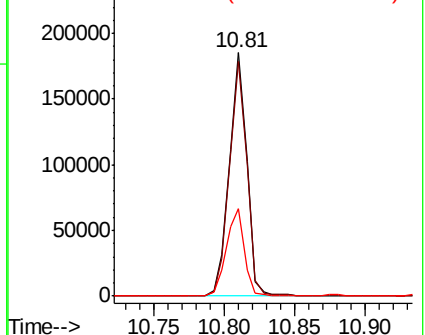
330 100

332 97.0 77.1 115.7

141 37.5 27.0 40.4



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

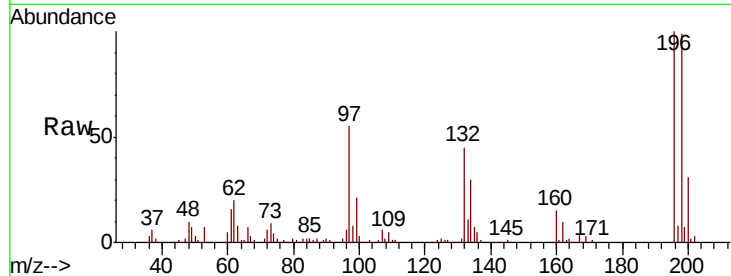




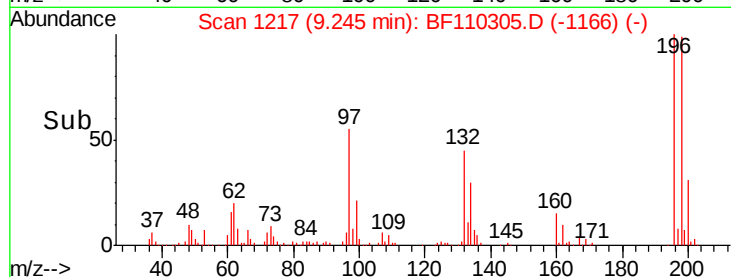
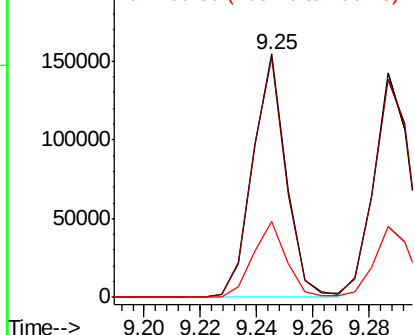
#43
 2,4,6-Trichlorophenol
 Concen: 34.282 ng
 RT: 9.25 min Scan# 1217
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tgt Ion:196 Resp: 127247
 Ion Ratio Lower Upper
 196 100
 198 98.7 76.2 114.4
 200 31.0 24.4 36.6



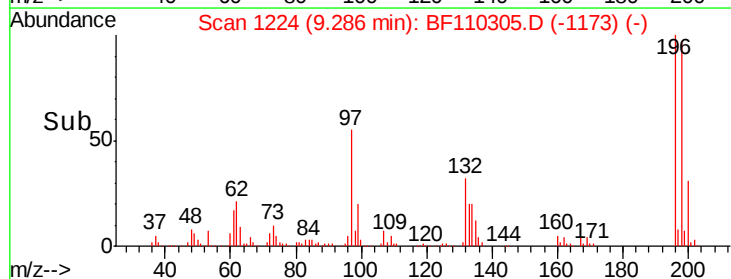
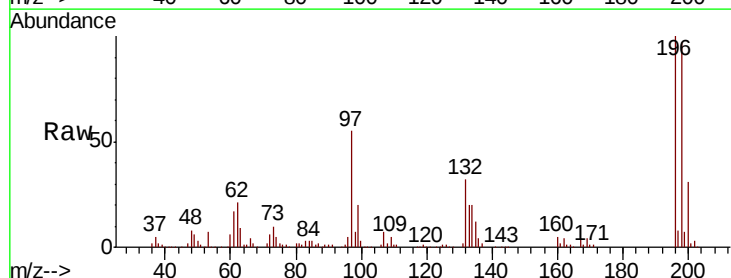
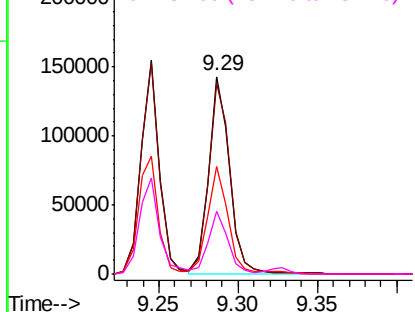
Abundance Ion 196.00 (195.70 to 196.70): E
 Ion 198.00 (197.70 to 198.70): E
 Ion 200.00 (199.70 to 200.70): E



#44
 2,4,5-Trichlorophenol
 Concen: 33.867 ng
 RT: 9.29 min Scan# 1224
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:196 Resp: 132877
 Ion Ratio Lower Upper
 196 100
 198 96.8 75.8 113.6
 97 54.5 42.4 63.6
 132 31.8 22.8 34.2

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): BF1
 Ion 132.00 (131.70 to 132.70): E

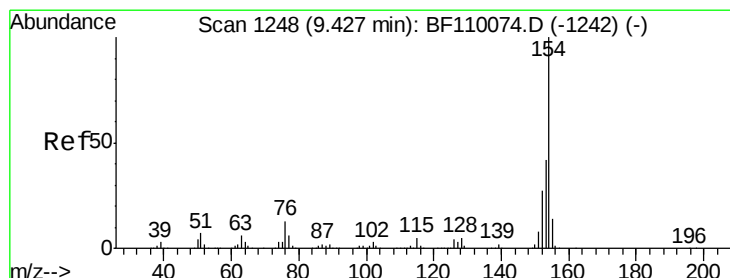
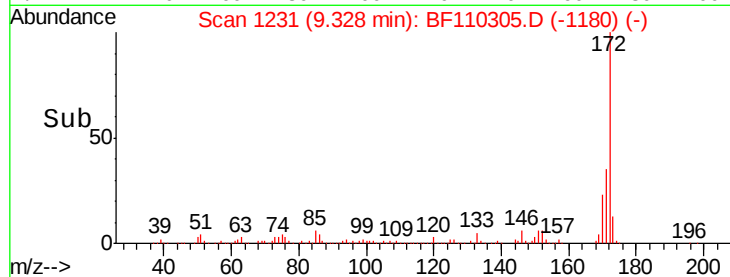
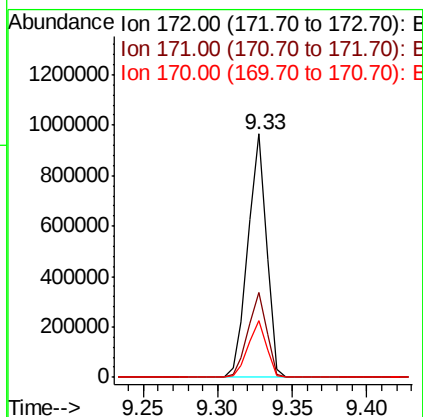
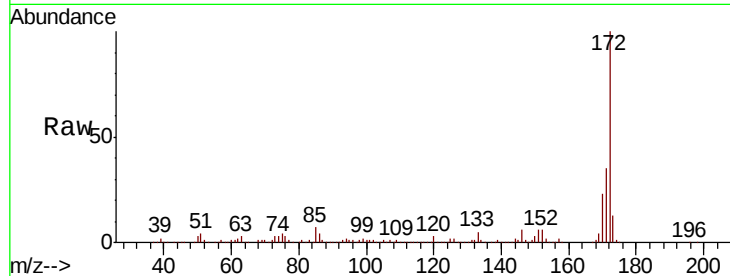




#45
 2-Fluorobiphenyl
 Concen: 70.948 ng
 RT: 9.33 min Scan# 1231
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

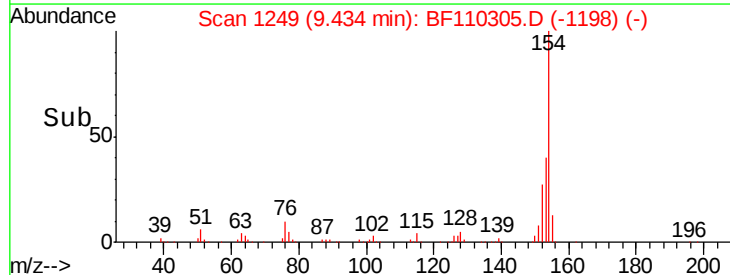
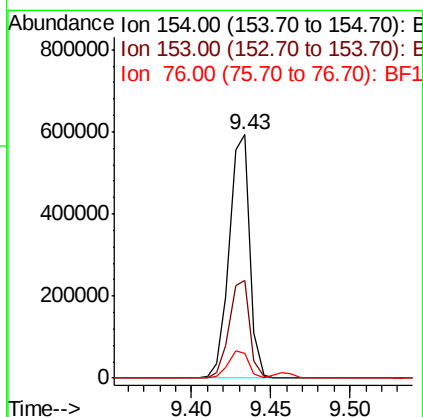
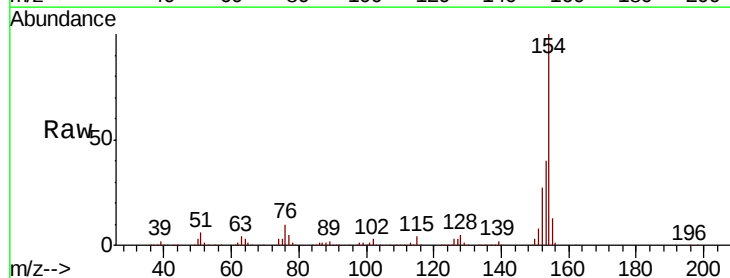
Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

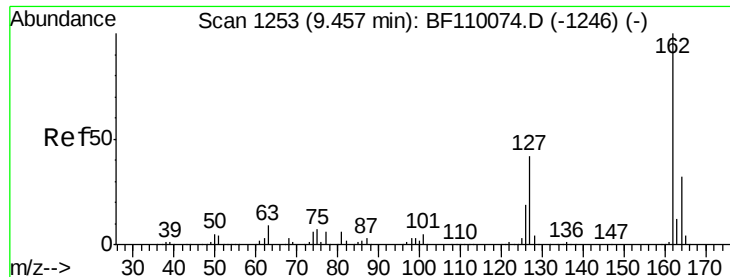
Tgt Ion:172 Resp: 834511
 Ion Ratio Lower Upper
 172 100
 171 35.1 28.6 43.0
 170 23.3 19.7 29.5



#46
 1,1'-Biphenyl
 Concen: 31.896 ng
 RT: 9.43 min Scan# 1249
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:154 Resp: 532736
 Ion Ratio Lower Upper
 154 100
 153 40.2 20.4 60.4
 76 10.0 0.0 31.9

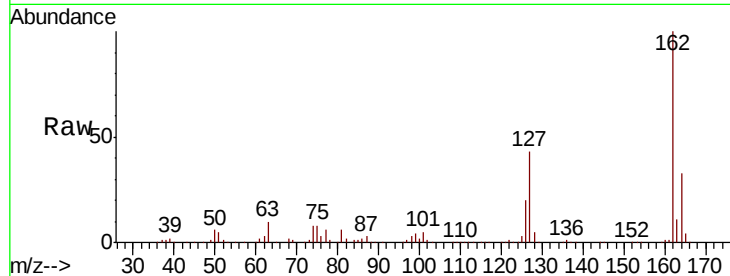




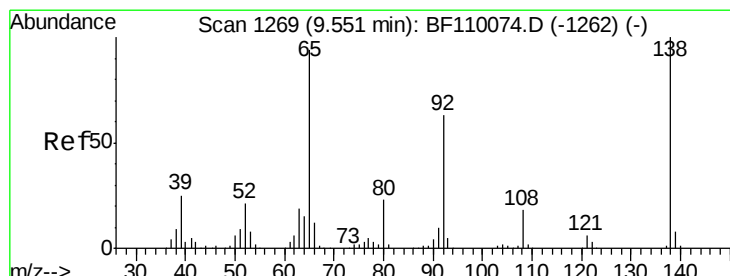
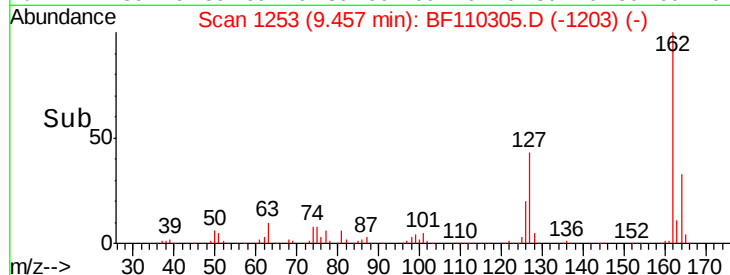
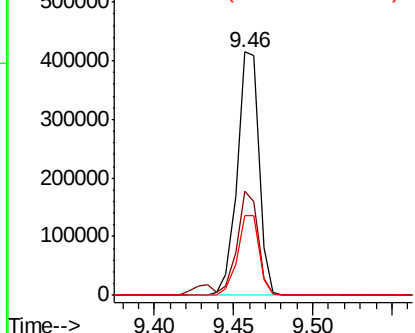
#47
 2-Chloronaphthalene
 Concen: 32.374 ng
 RT: 9.46 min Scan# 1253
 Delta R.T. -0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tgt Ion	Ratio	Lower	Upper
162	100		
127	42.9	32.6	48.8
164	32.8	25.9	38.9

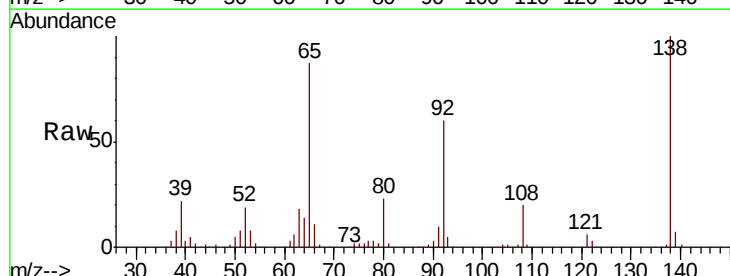


Abundance Ion 162.00 (161.70 to 162.70): E
 Ion 127.00 (126.70 to 127.70): E
 Ion 164.00 (163.70 to 164.70): E

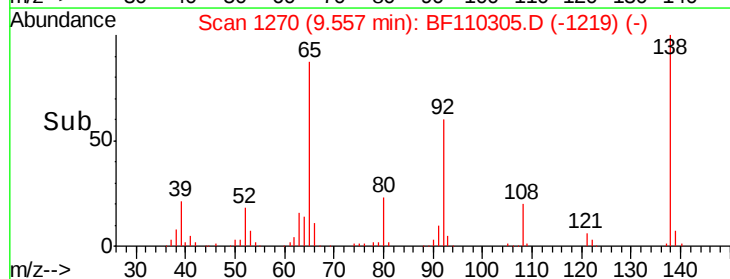
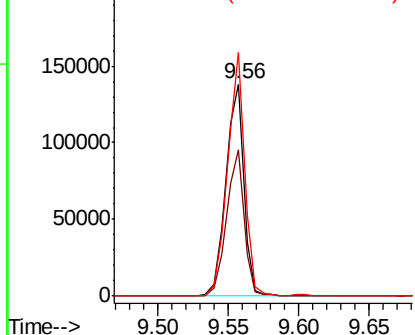


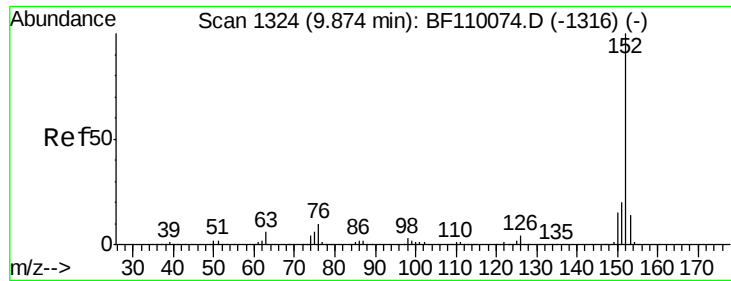
#48
 2-Nitroaniline
 Concen: 33.025 ng
 RT: 9.56 min Scan# 1270
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Lower	Upper
65	100		
92	69.0	54.6	81.8
138	115.0	80.3	120.5



Abundance Ion 65.00 (64.70 to 65.70): BF1
 Ion 92.00 (91.70 to 92.70): BF1
 Ion 138.00 (137.70 to 138.70): E





#49

Acenaphthylene

Concen: 36.153 ng

RT: 9.87 min Scan# 1324

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

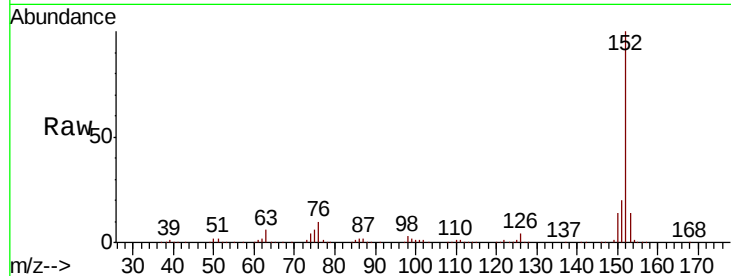
Tgt Ion:152 Resp: 639740

Ion Ratio Lower Upper

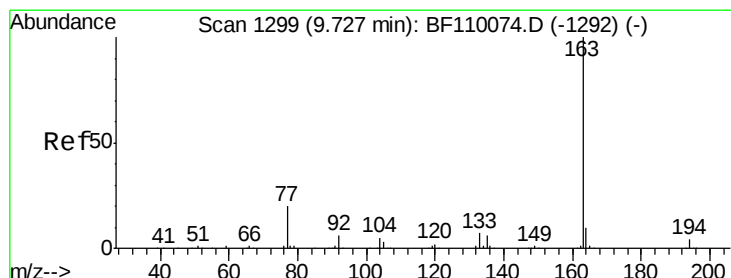
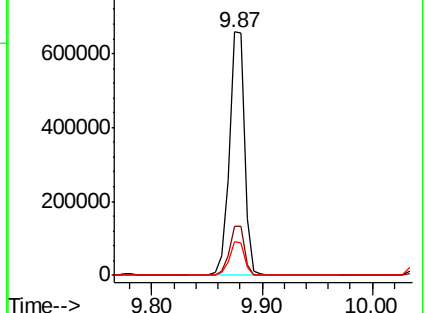
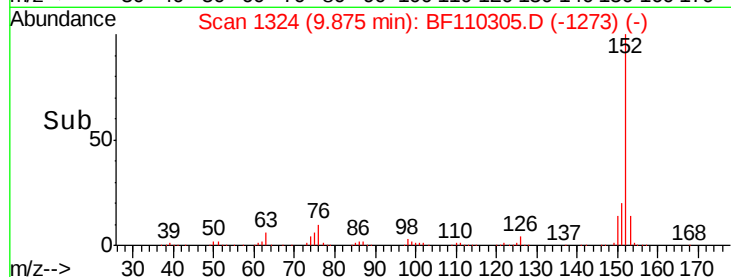
152 100

151 20.1 15.8 23.8

153 14.1 10.4 15.6



Abundance Ion 152.00 (151.70 to 152.70): E
Ion 151.00 (150.70 to 151.70): E
Ion 153.00 (152.70 to 153.70): E



#50

Dimethylphthalate

Concen: 39.639 ng

RT: 9.73 min Scan# 1299

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

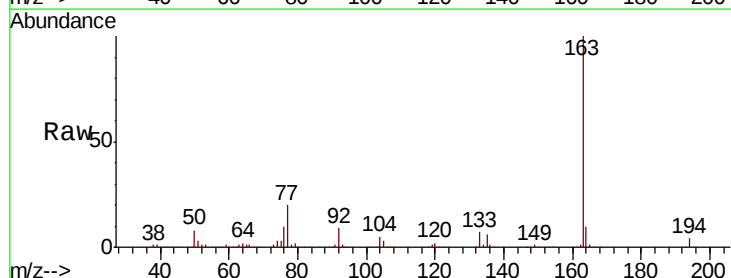
Tgt Ion:163 Resp: 540433

Ion Ratio Lower Upper

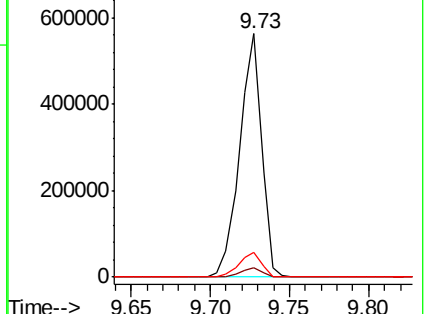
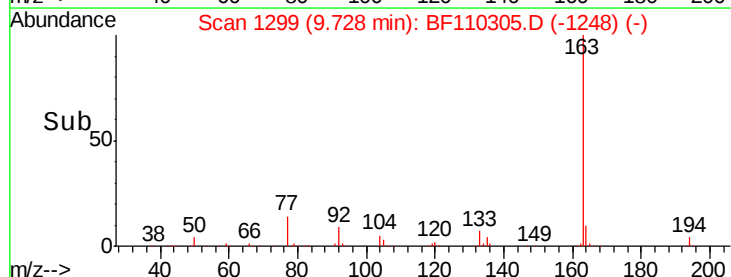
163 100

194 3.6 3.2 4.8

164 10.0 8.1 12.1



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

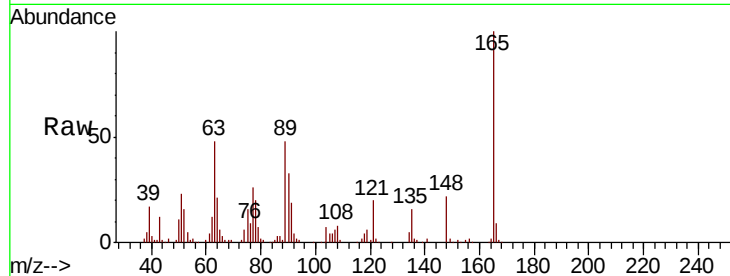




#51
 2,6-Dinitrotoluene
 Concen: 33.221 ng
 RT: 9.80 min Scan# 1311
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tgt Ion	Ratio	Lower	Upper
165	100		
63	47.6	48.9	73.3#
89	47.6	46.6	69.8

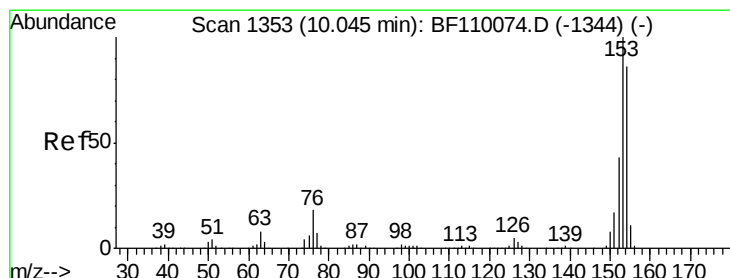
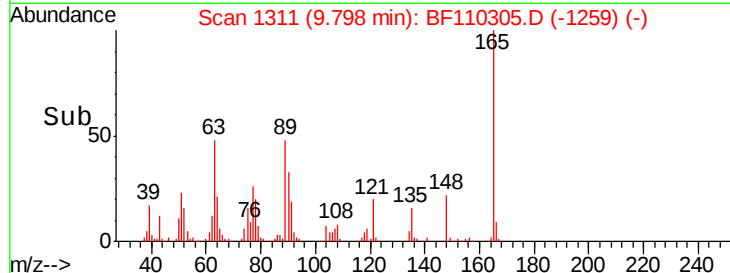
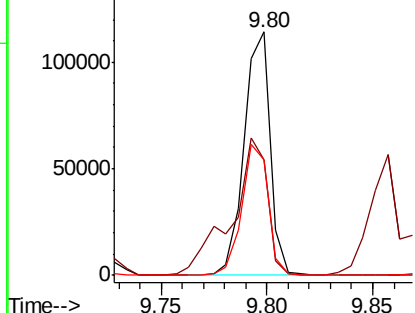


Abundance

Ion 165.00 (164.70 to 165.70): E

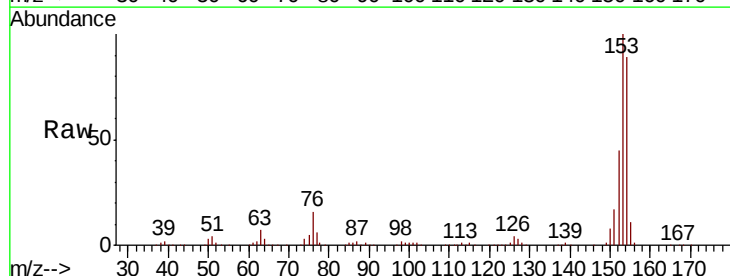
Ion 63.00 (62.70 to 63.70): BF1

Ion 89.00 (88.70 to 89.70): BF1



#52
 Acenaphthene
 Concen: 37.711 ng
 RT: 10.05 min Scan# 1354
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Lower	Upper
154	100		
153	113.0	90.1	135.1
152	50.6	43.4	65.2

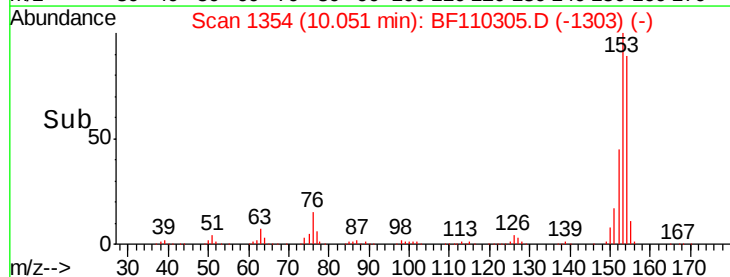
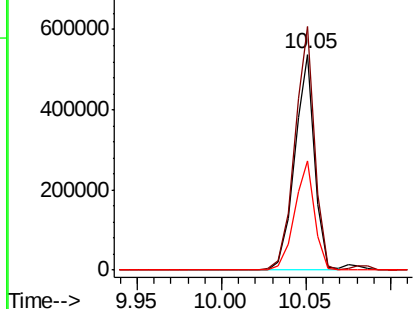


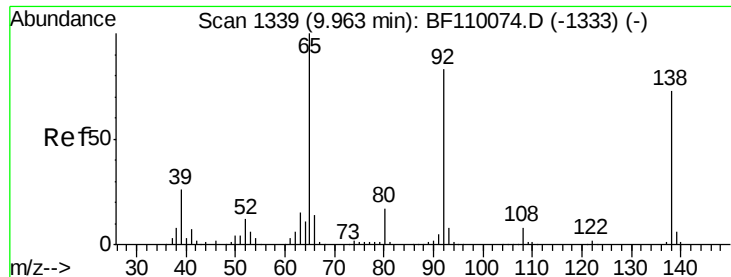
Abundance

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

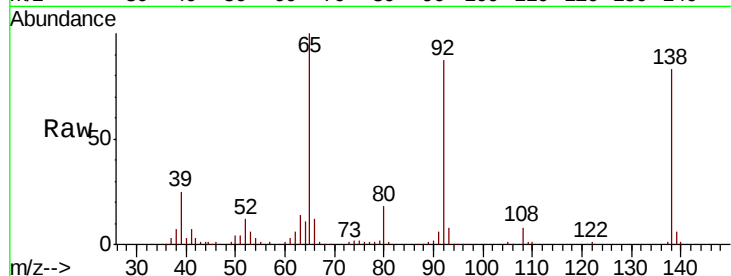




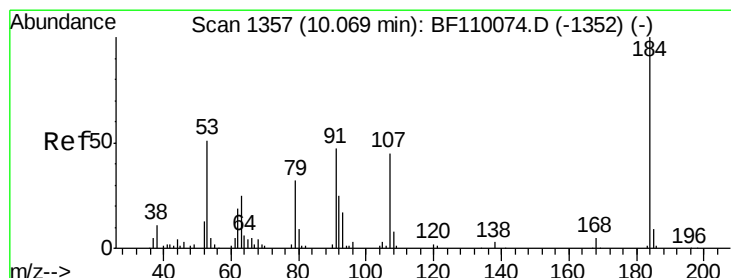
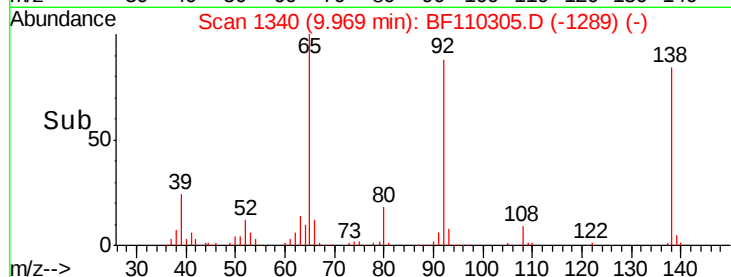
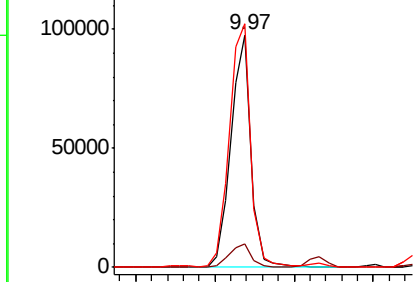
#53
3-Nitroaniline
Concen: 24.564 ng
RT: 9.97 min Scan# 1340
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tgt Ion:138 Resp: 85789
Ion Ratio Lower Upper
138 100
108 10.2 8.7 13.1
92 104.8 97.0 145.4

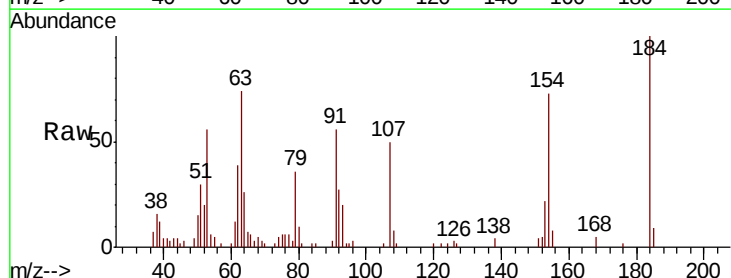


Abundance Ion 138.00 (137.70 to 138.70): E
Ion 108.00 (107.70 to 108.70): E
Ion 92.00 (91.70 to 92.70): BF1

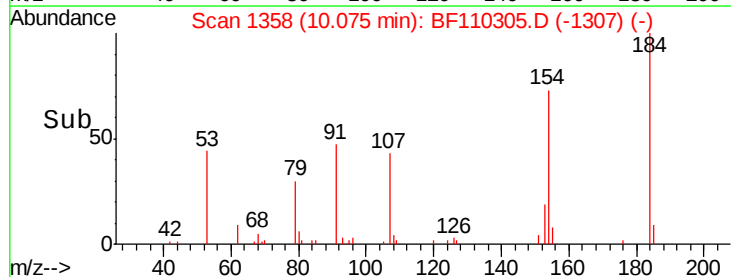
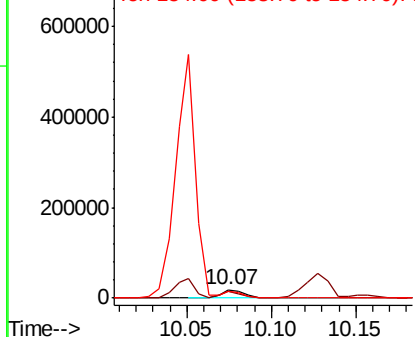


#54
2,4-Dinitrophenol
Concen: 20.375 ng
RT: 10.07 min Scan# 1358
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion:184 Resp: 18942
Ion Ratio Lower Upper
184 100
63 73.9 55.8 83.6
154 72.7 63.2 94.8



Abundance Ion 184.00 (183.70 to 184.70): E
Ion 63.00 (62.70 to 63.70): BF1
Ion 154.00 (153.70 to 154.70): E

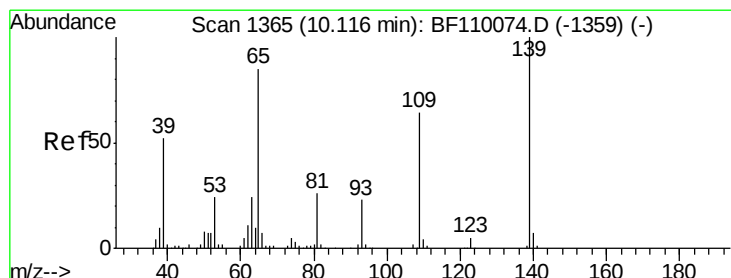
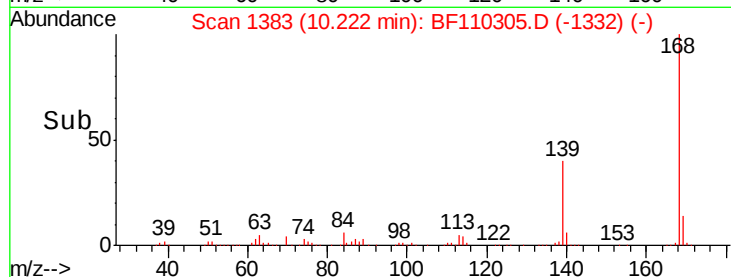
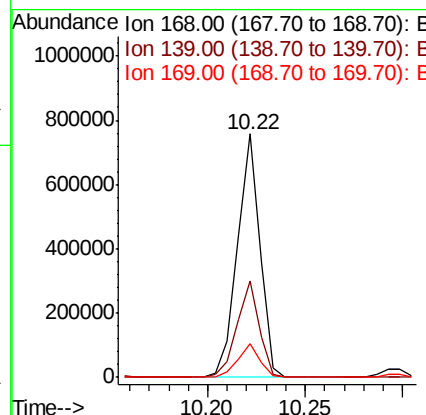
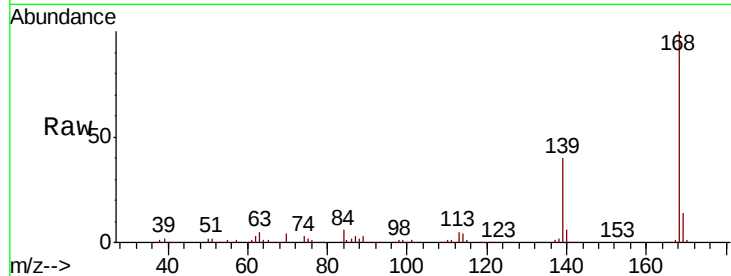




#55
Dibenzenofuran
Concen: 36.921 ng
RT: 10.22 min Scan# 1383
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

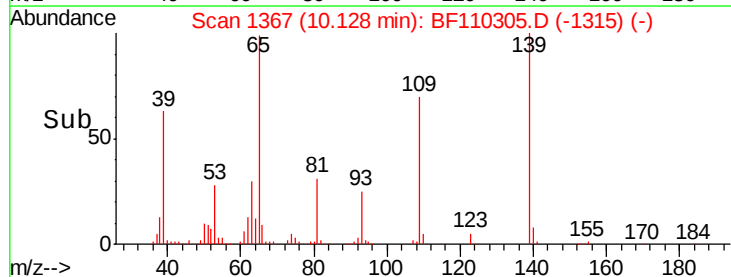
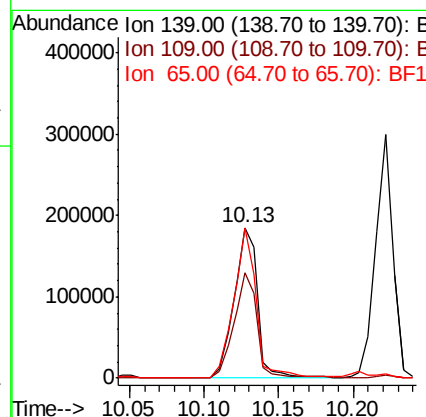
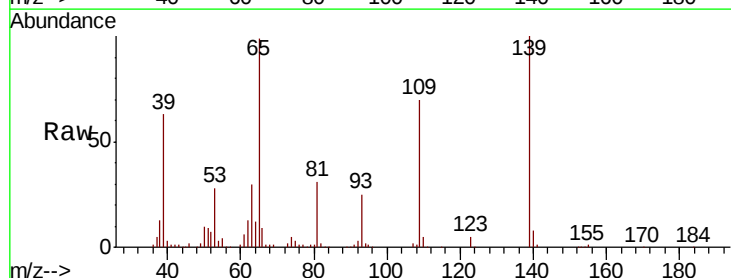
Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tgt Ion:168 Resp: 605134
Ion Ratio Lower Upper
168 100
139 39.5 33.0 49.6
169 13.6 11.3 16.9



#56
4-Nitrophenol
Concen: 79.447 ng
RT: 10.13 min Scan# 1367
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion:139 Resp: 205354
Ion Ratio Lower Upper
139 100
109 70.3 55.8 95.8
65 99.2 77.9 117.9

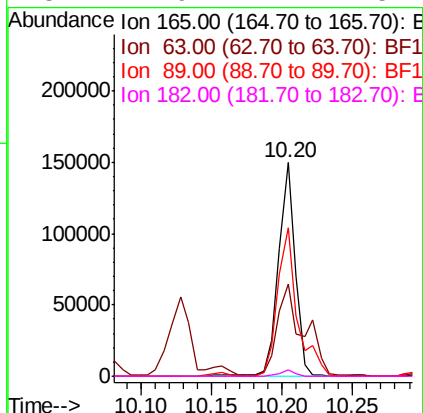
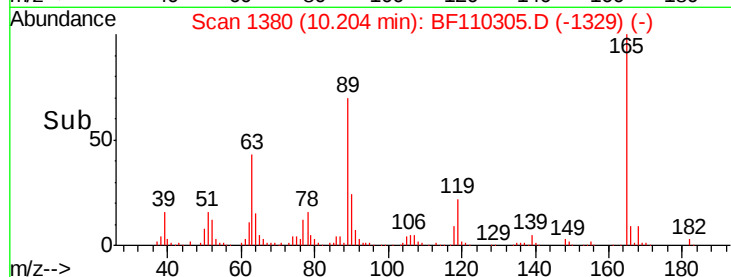
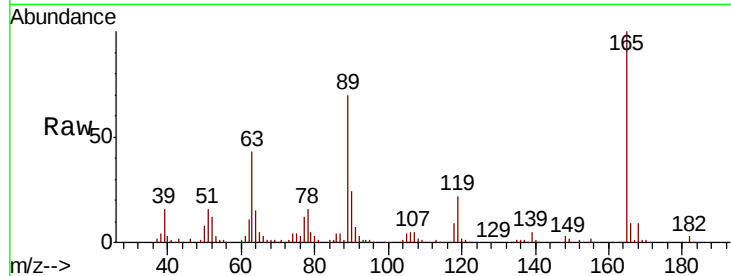




#57
2,4-Dinitrotoluene
Concen: 33.362 ng
RT: 10.20 min Scan# 1380
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

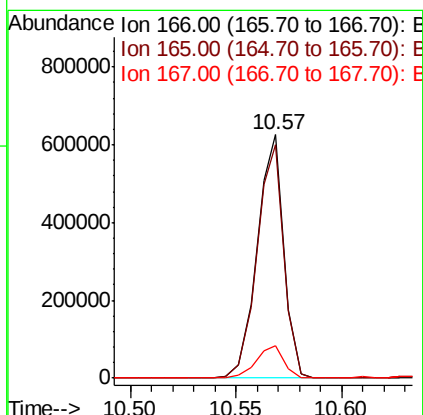
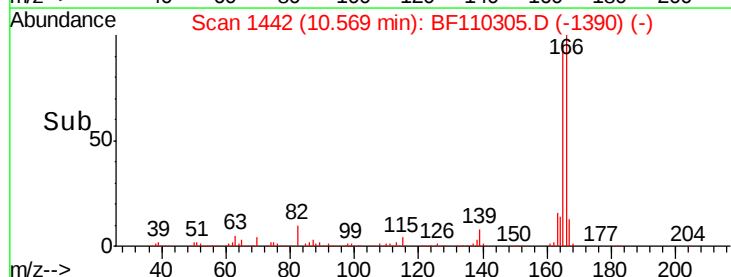
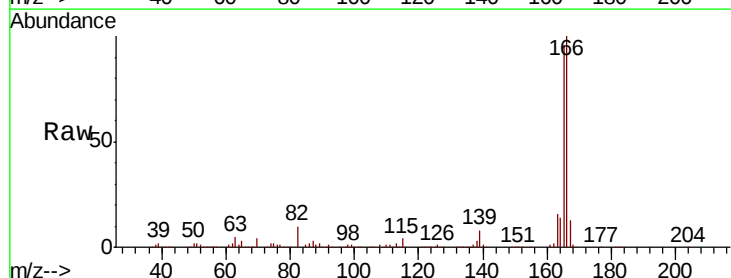
Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

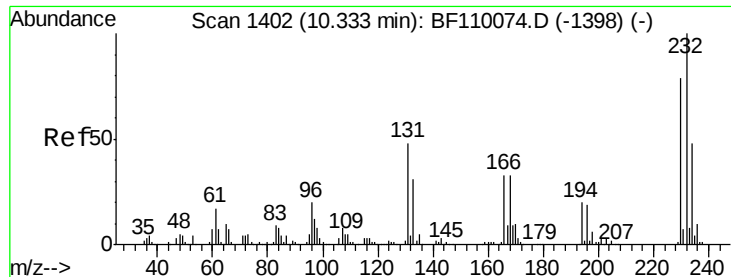
Tgt Ion	Ratio	Lower	Upper
165	100		
63	43.3	44.8	67.2#
89	69.7	62.2	93.4
182	2.9	2.1	3.1



#58
Fluorene
Concen: 44.683 ng
RT: 10.57 min Scan# 1442
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Lower	Upper
166	100		
165	95.7	78.6	117.8
167	13.2	10.8	16.2

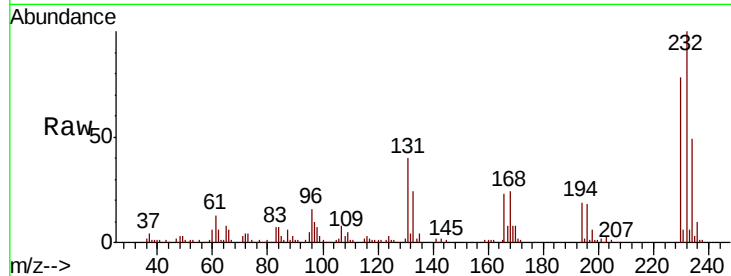




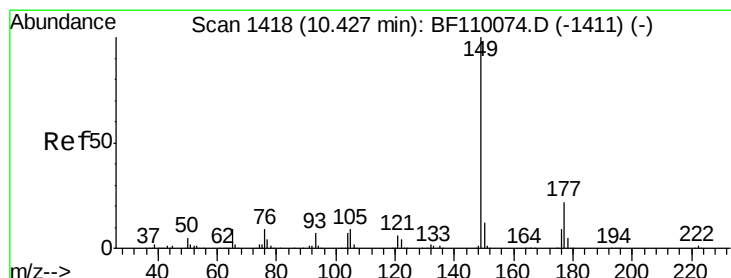
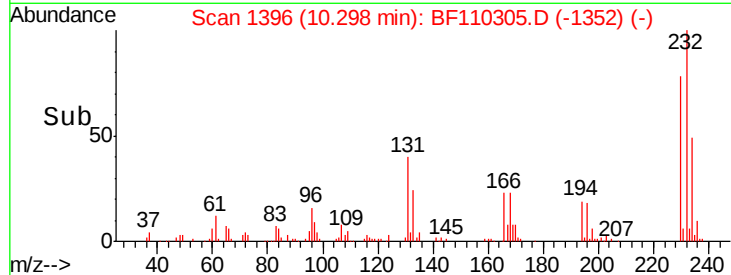
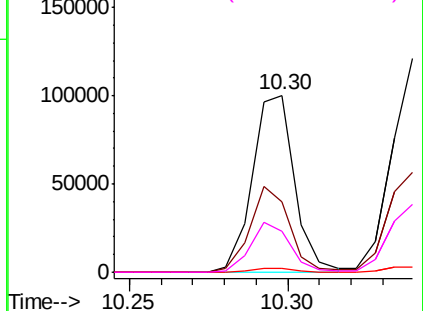
#59
 2,3,4,6-Tetrachlorophenol
 Concen: 28.912 ng
 RT: 10.30 min Scan# 1396
 Delta R.T. -0.04 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tgt Ion:	232	Resp:	92461
Ion	Ratio	Lower	Upper
232	100		
131	45.4	37.0	55.4
130	2.4	1.8	2.6
166	26.5	22.0	33.0

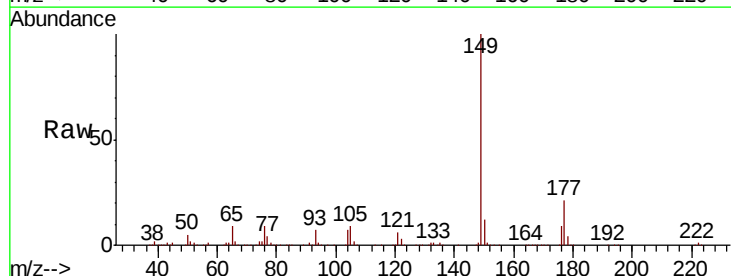


Abundance Ion 232.00 (231.70 to 232.70): E
 Ion 131.00 (130.70 to 131.70): E
 Ion 130.00 (129.70 to 130.70): E
 Ion 166.00 (165.70 to 166.70): E

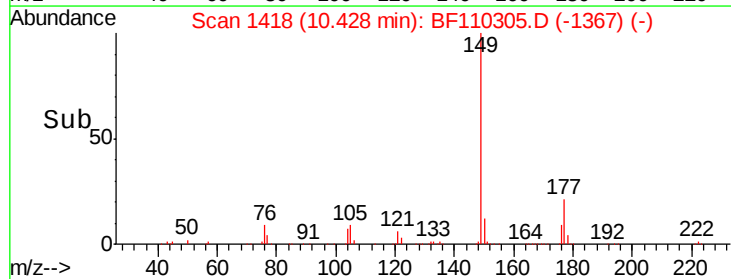
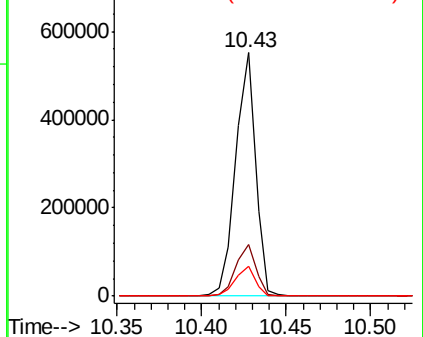


#60
 Diethylphthalate
 Concen: 34.074 ng
 RT: 10.43 min Scan# 1418
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:	149	Resp:	453483
Ion	Ratio	Lower	Upper
149	100		
177	21.4	17.4	26.2
150	12.2	9.8	14.8



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

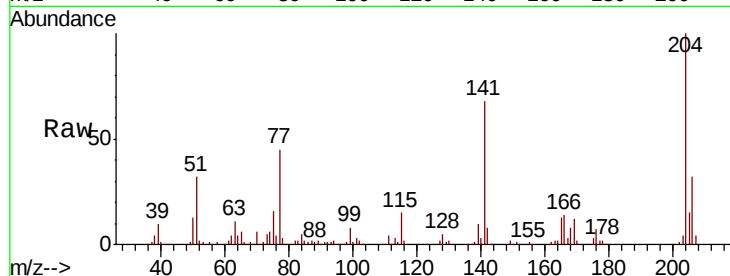




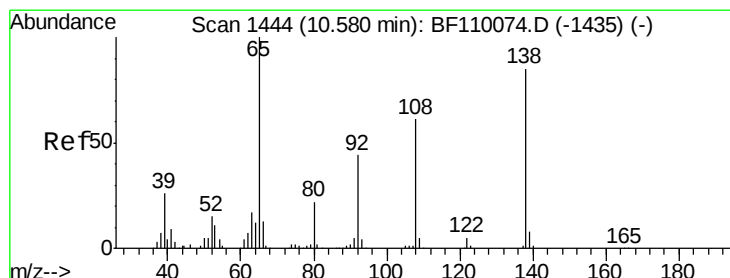
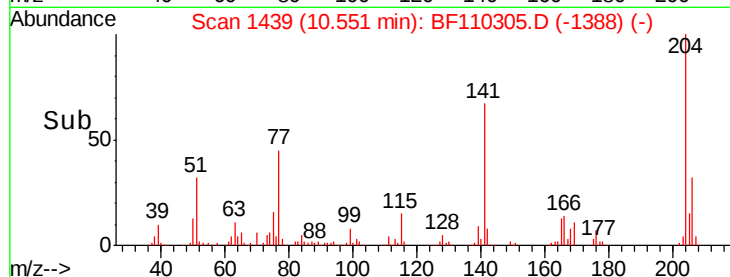
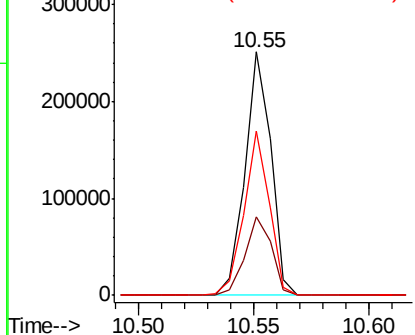
#61
4-Chlorophenyl-phenylether
Concen: 30.720 ng
RT: 10.55 min Scan# 1439
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tgt Ion:204 Resp: 197682
Ion Ratio Lower Upper
204 100
206 32.4 26.5 39.7
141 67.6 51.8 77.8

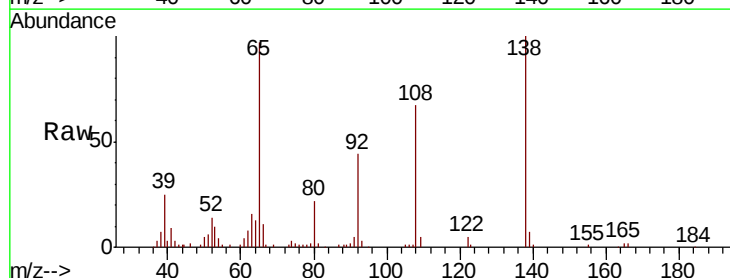


Abundance Ion 204.00 (203.70 to 204.70): E
Ion 206.00 (205.70 to 206.70): E
Ion 141.00 (140.70 to 141.70): E

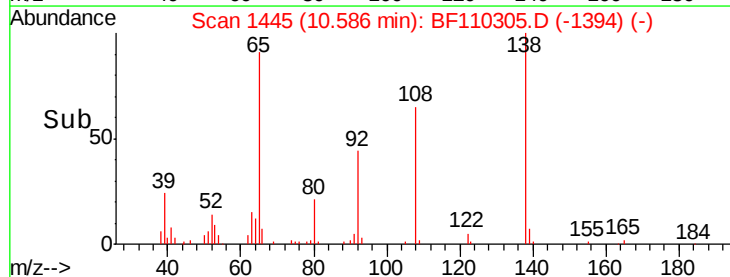
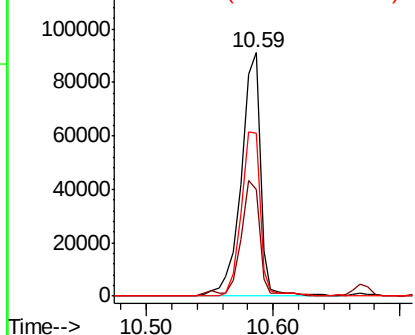


#62
4-Nitroaniline
Concen: 27.675 ng
RT: 10.59 min Scan# 1445
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion:138 Resp: 96132
Ion Ratio Lower Upper
138 100
92 44.1 31.7 71.7
108 66.8 59.3 99.3



Abundance Ion 138.00 (137.70 to 138.70): E
Ion 92.00 (91.70 to 92.70): BF1
Ion 108.00 (107.70 to 108.70): E





#63

Azobenzene

Concen: 31.082 ng

RT: 10.72 min Scan# 1467

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

Tgt Ion: 77 Resp: 410609

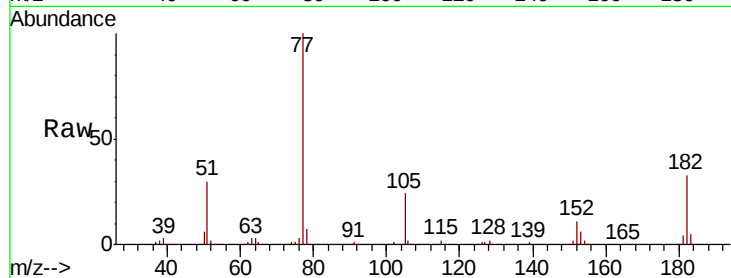
Ion Ratio Lower Upper

77 100

182 33.1 4.3 44.3

105 23.7 1.3 41.3

51 29.5 9.0 49.0

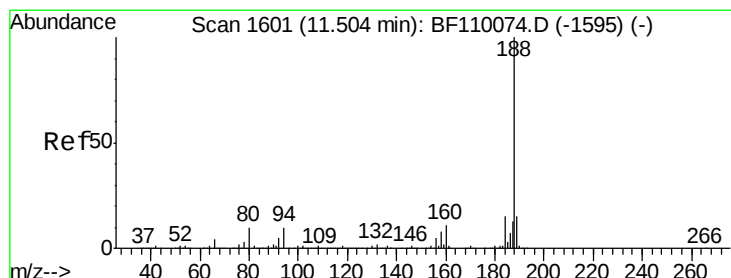
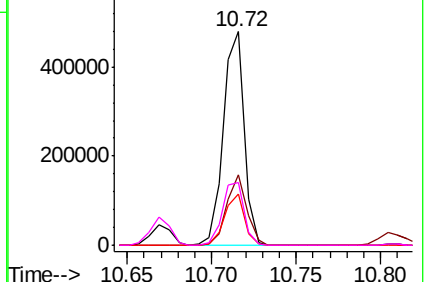
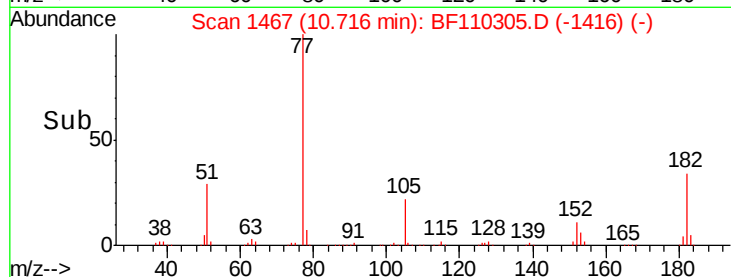


Abundance Ion 77.00 (76.70 to 77.70): BF1

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): BF1



#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.51 min Scan# 1602

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

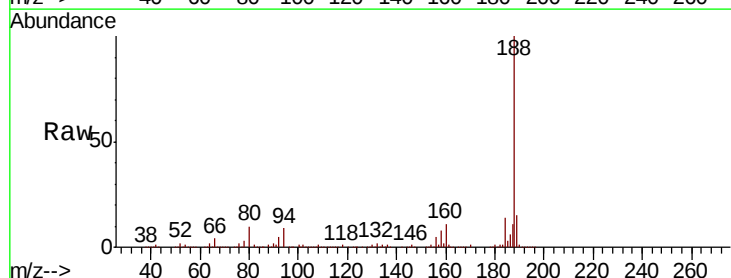
Tgt Ion: 188 Resp: 299823

Ion Ratio Lower Upper

188 100

94 9.2 7.2 10.8

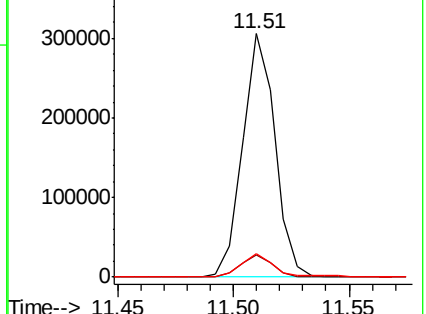
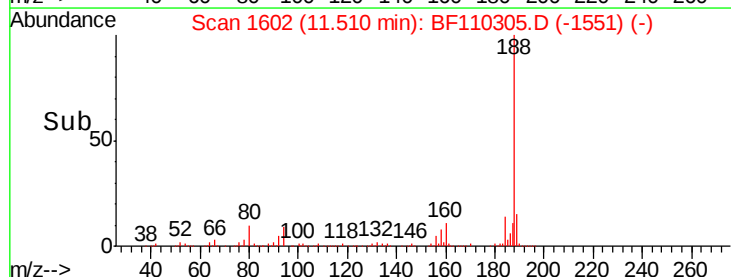
80 9.7 7.9 11.9

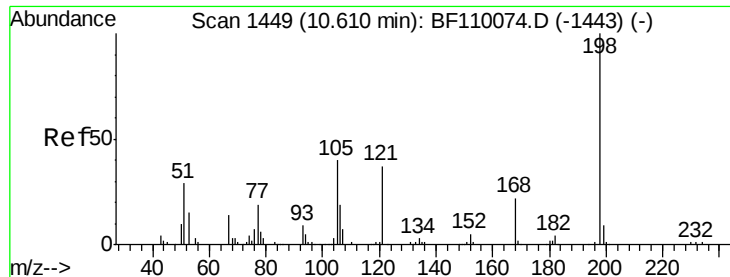


Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF1

Ion 80.00 (79.70 to 80.70): BF1

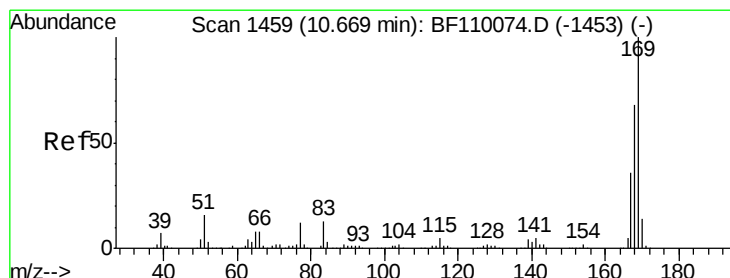
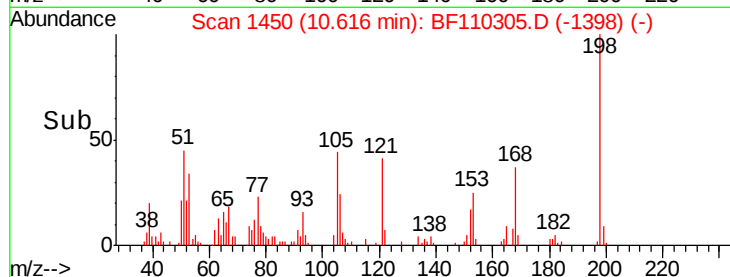
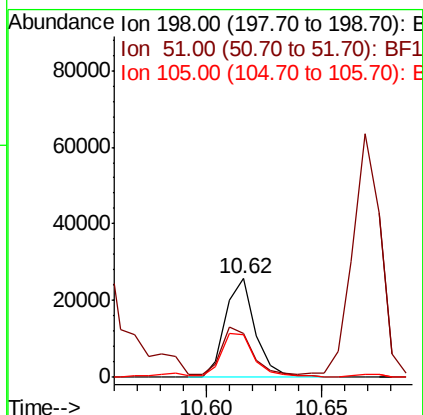
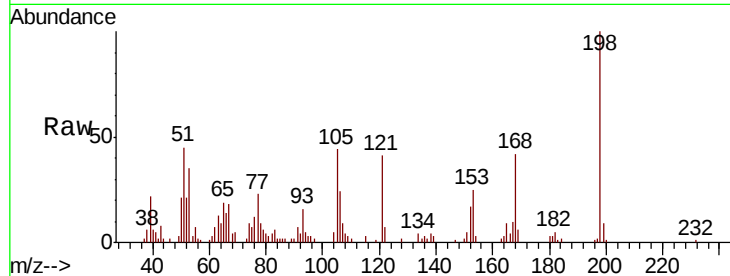




#65
 4,6-Dinitro-2-methylphenol
 Concen: 17.017 ng
 RT: 10.62 min Scan# 1450
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

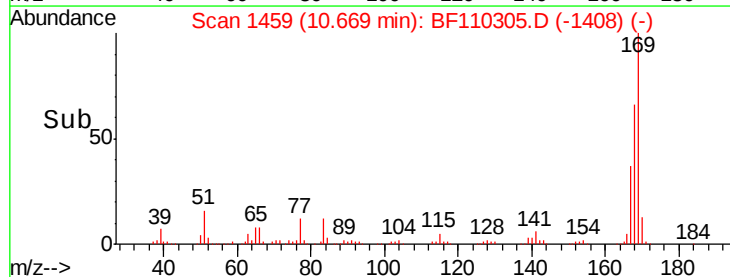
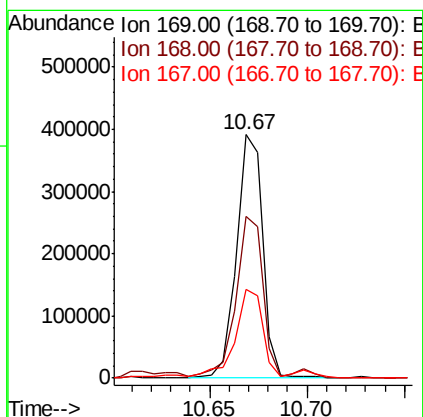
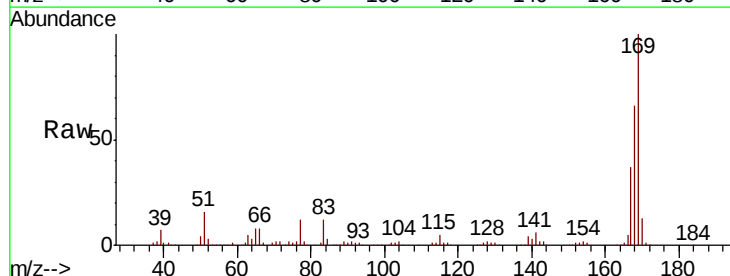
Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tgt Ion:198 Resp: 23310
 Ion Ratio Lower Upper
 198 100
 51 44.9 22.8 62.8
 105 43.6 23.6 63.6



#66
 n-Nitrosodiphenylamine
 Concen: 36.733 ng
 RT: 10.67 min Scan# 1459
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:169 Resp: 361237
 Ion Ratio Lower Upper
 169 100
 168 66.2 51.2 76.8
 167 36.7 27.8 41.6

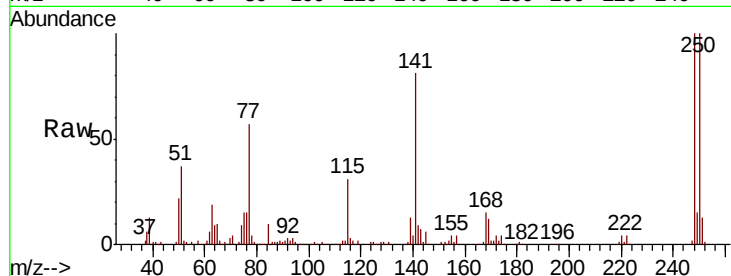




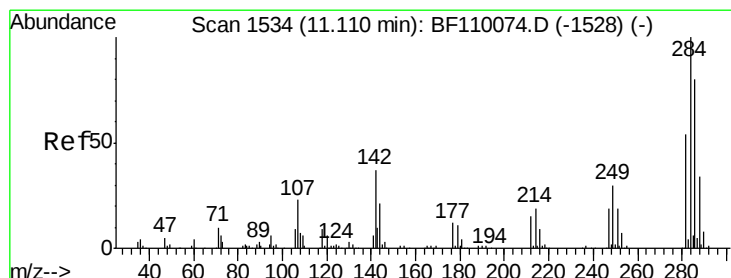
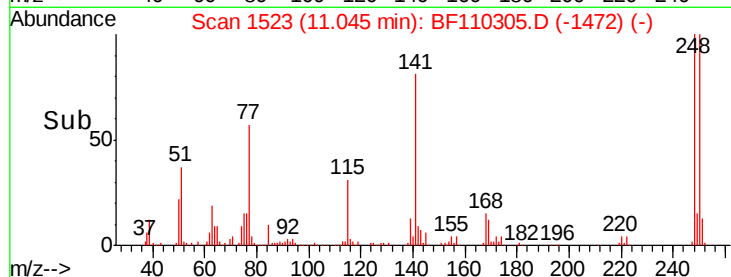
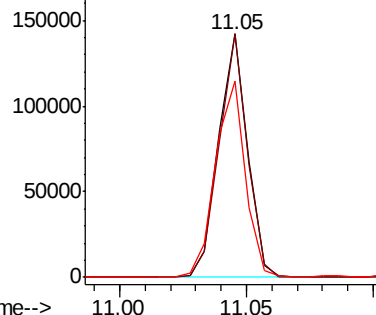
#67
 4-Bromophenyl-phenylether
 Concen: 34.818 ng
 RT: 11.05 min Scan# 1523
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tgt Ion:248 Resp: 113236
 Ion Ratio Lower Upper
 248 100
 250 100.1 79.4 119.2
 141 80.7 55.9 83.9

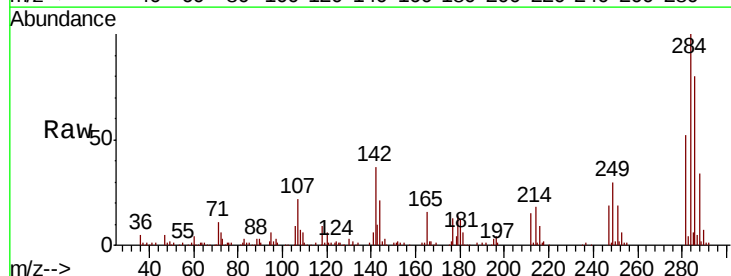


Abundance Ion 248.00 (247.70 to 248.70): E
 Ion 250.00 (249.70 to 250.70): E
 Ion 141.00 (140.70 to 141.70): E

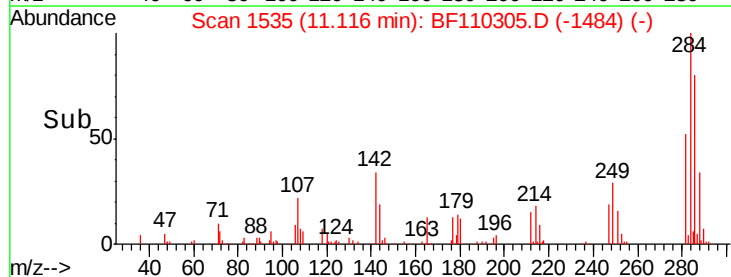
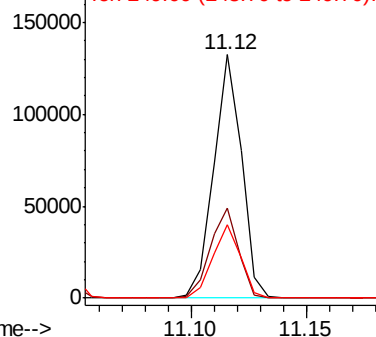


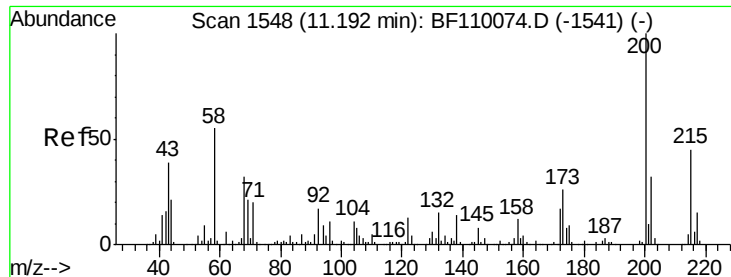
#68
 Hexachlorobenzene
 Concen: 32.381 ng
 RT: 11.12 min Scan# 1535
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:284 Resp: 111738
 Ion Ratio Lower Upper
 284 100
 142 36.9 23.9 35.9#
 249 30.2 24.2 36.2



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

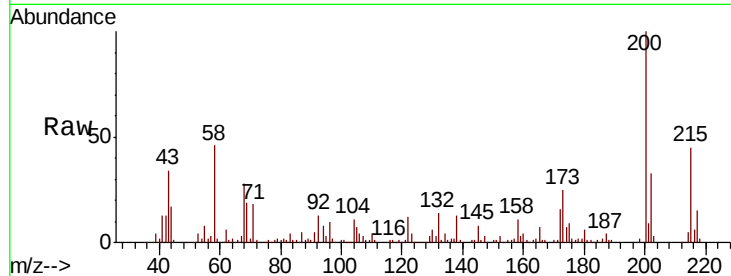




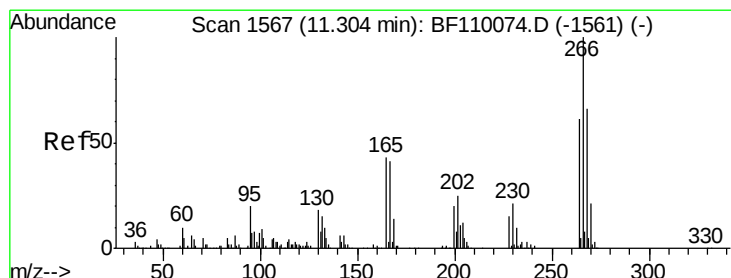
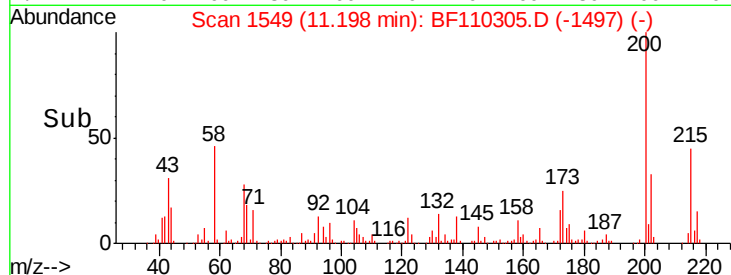
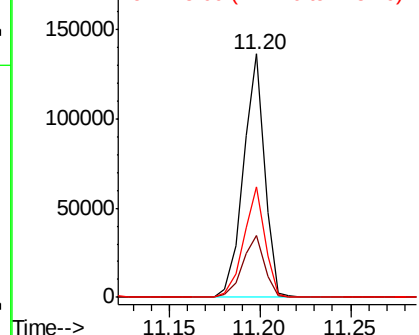
#69
Atrazine
Concen: 35.582 ng
RT: 11.20 min Scan# 1549
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tgt Ion:200 Resp: 110581
Ion Ratio Lower Upper
200 100
173 25.4 6.6 46.6
215 45.3 26.3 66.3

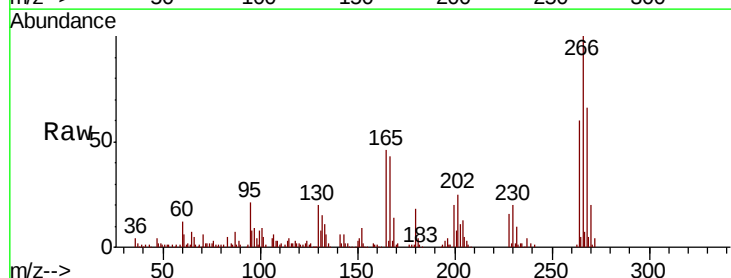


Abundance Ion 200.00 (199.70 to 200.70): E
Ion 173.00 (172.70 to 173.70): E
Ion 215.00 (214.70 to 215.70): E

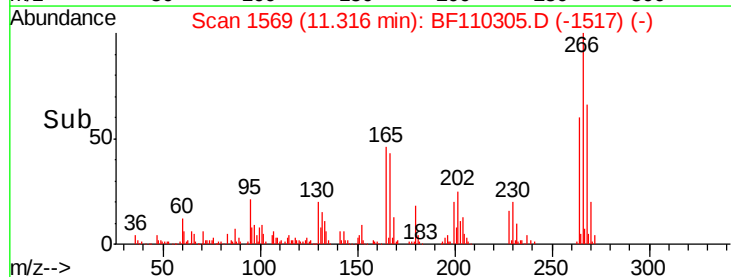
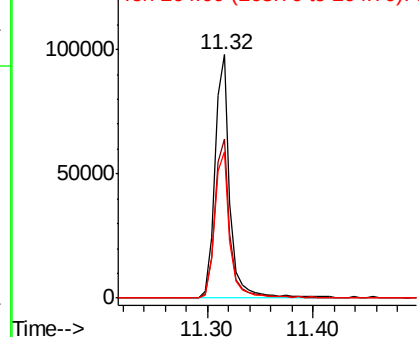


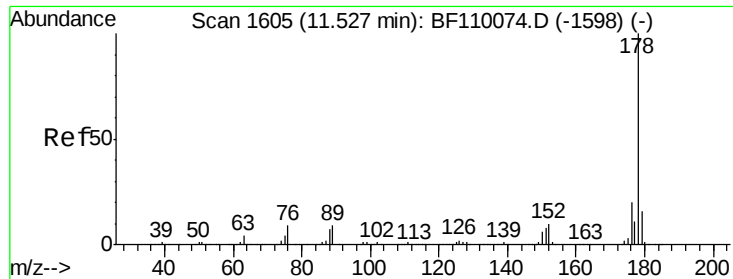
#70
Pentachlorophenol
Concen: 48.730 ng
RT: 11.32 min Scan# 1569
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion:266 Resp: 98052
Ion Ratio Lower Upper
266 100
268 65.6 50.6 75.8
264 60.0 50.6 75.8



Abundance Ion 265.70 (265.40 to 266.40): E
Ion 268.00 (267.70 to 268.70): E
Ion 264.00 (263.70 to 264.70): E

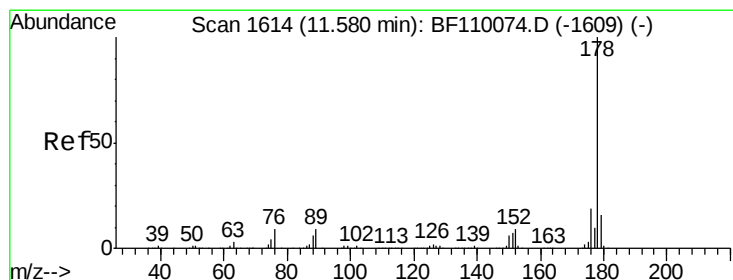
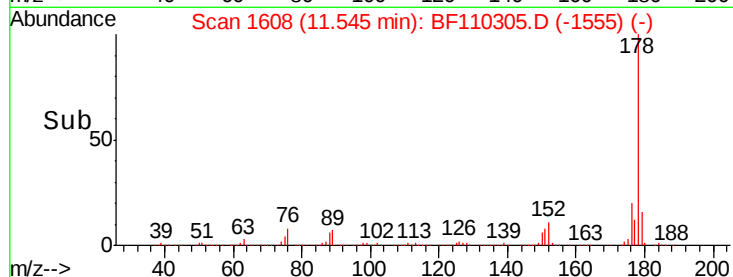
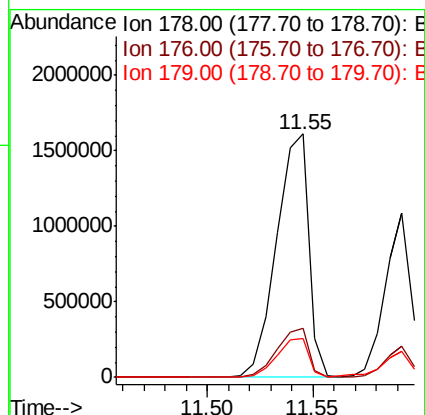
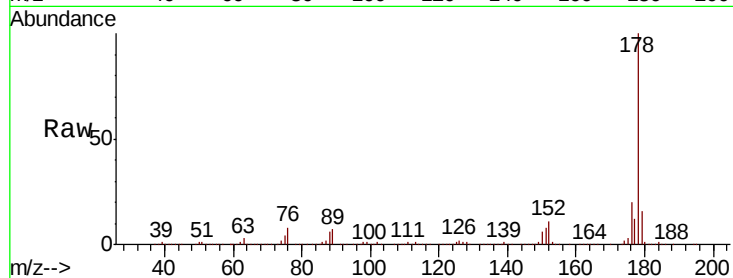




#71
Phenanthrene
Concen: 109.378 ng
RT: 11.55 min Scan# 1608
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

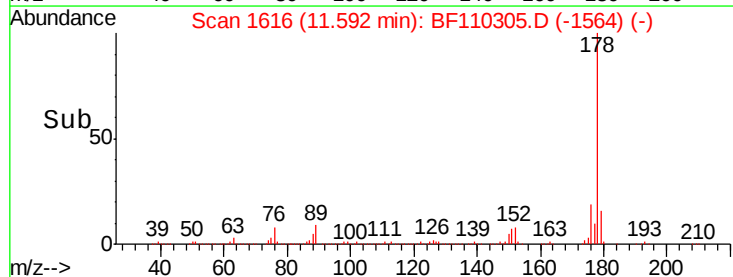
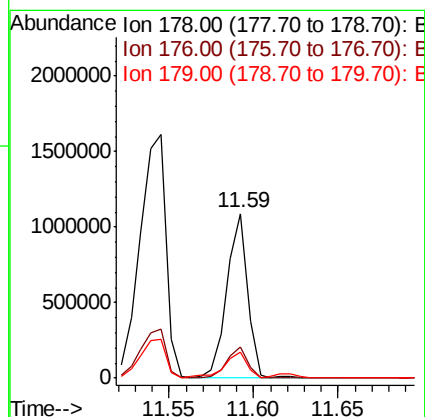
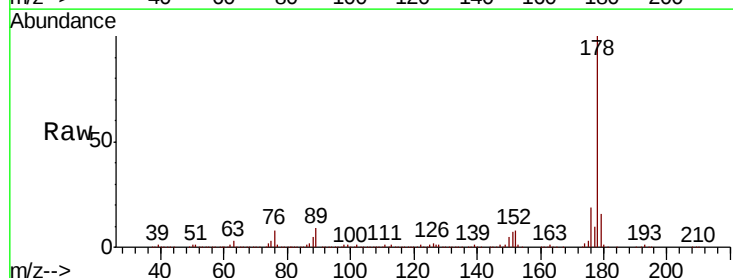
Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

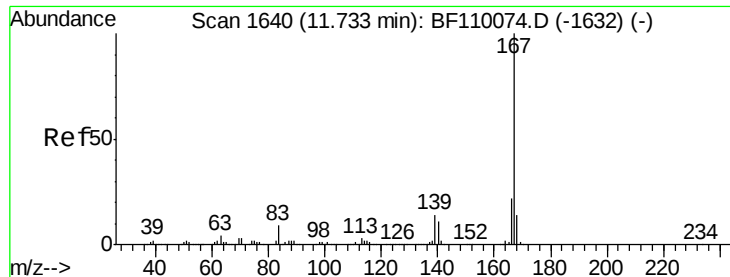
Tgt Ion:178 Resp: 1715938
Ion Ratio Lower Upper
178 100
176 19.9 15.5 23.3
179 16.0 12.5 18.7



#72
Anthracene
Concen: 59.739 ng
RT: 11.59 min Scan# 1616
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion:178 Resp: 939388
Ion Ratio Lower Upper
178 100
176 18.9 15.4 23.2
179 15.7 12.6 18.8

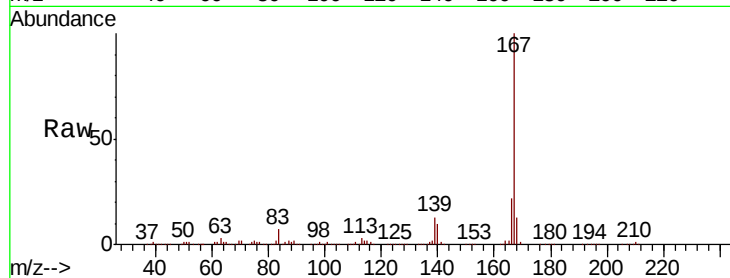




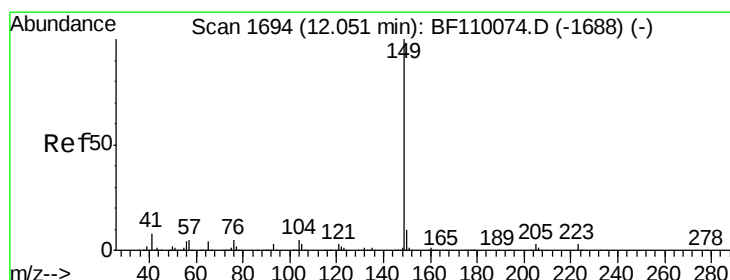
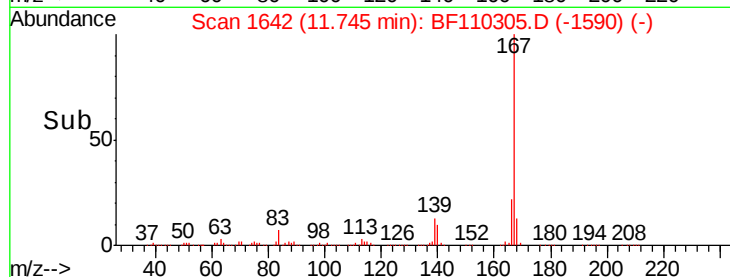
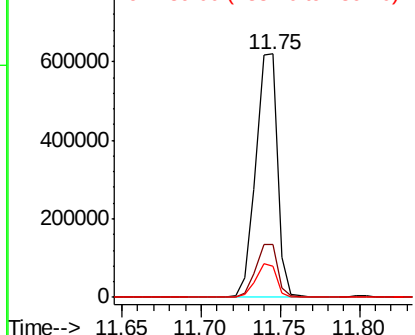
#73
 Carbazole
 Concen: 38.736 ng
 RT: 11.75 min Scan# 1642
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tgt Ion:167 Resp: 594740
 Ion Ratio Lower Upper
 167 100
 166 21.6 17.4 26.0
 139 12.8 10.9 16.3

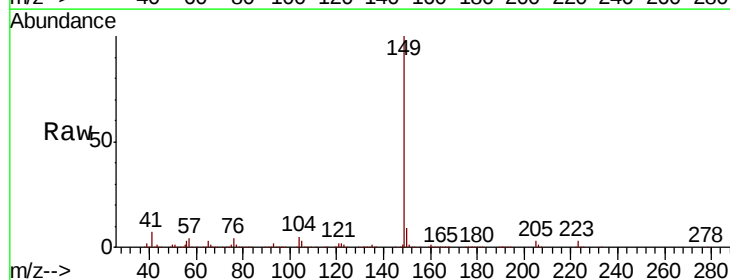


Abundance Ion 167.00 (166.70 to 167.70): E
 Ion 166.00 (165.70 to 166.70): E
 Ion 139.00 (138.70 to 139.70): E

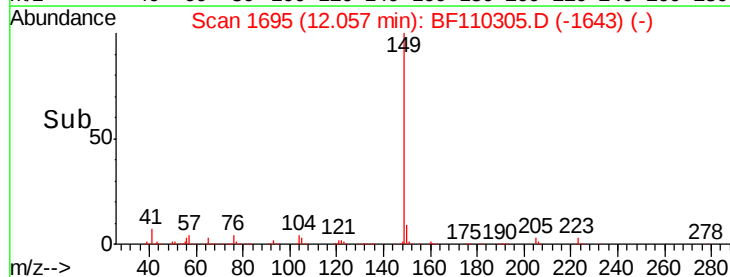
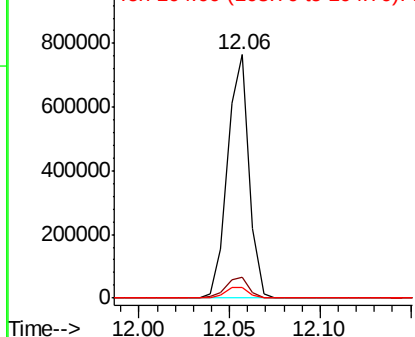


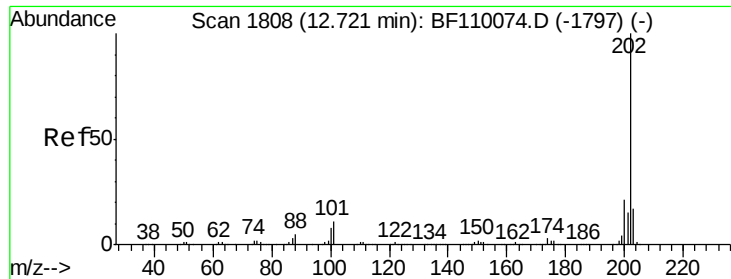
#74
 Di-n-butylphthalate
 Concen: 36.356 ng
 RT: 12.06 min Scan# 1695
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion:149 Resp: 630433
 Ion Ratio Lower Upper
 149 100
 150 8.8 7.7 11.5
 104 4.6 4.2 6.4



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





#75

Fluoranthene

Concen: 117.639 ng

RT: 12.74 min Scan# 1811

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

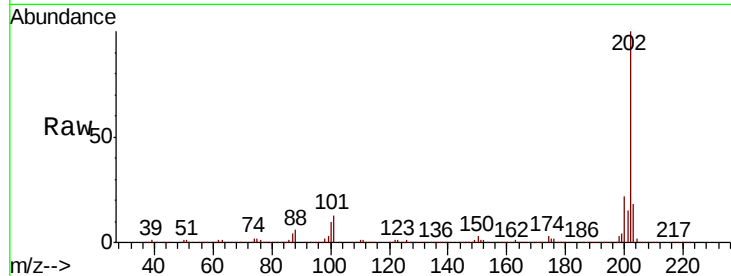
Tgt Ion:202 Resp: 1873003

Ion Ratio Lower Upper

202 100

101 13.1 0.0 31.4

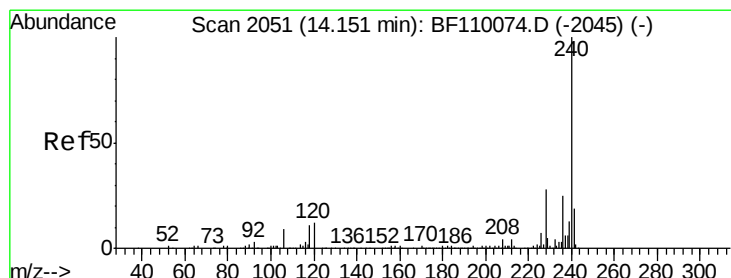
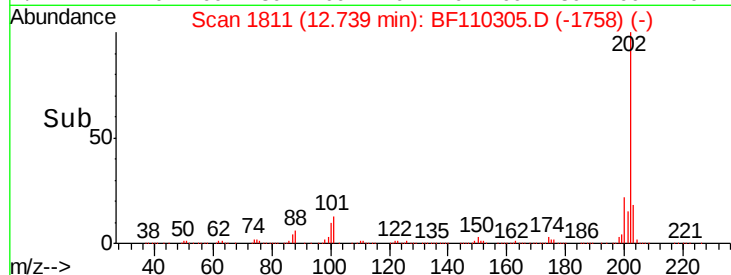
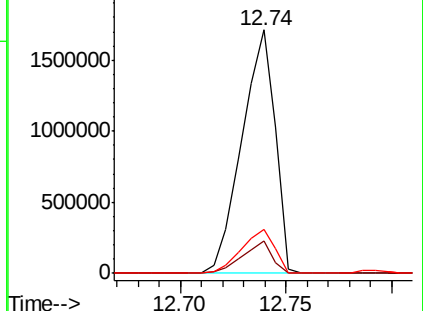
203 18.3 0.0 37.7



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



#76

Chrysene-d12

Concen: 20.000 ng

RT: 14.16 min Scan# 2053

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

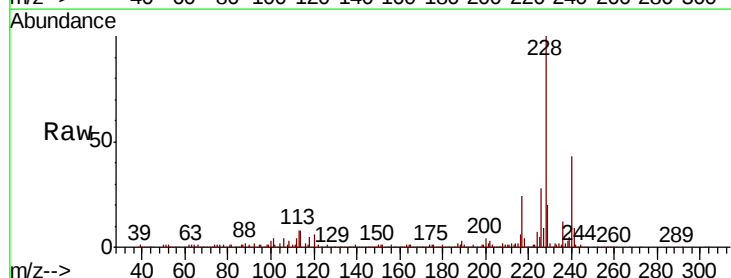
Tgt Ion:240 Resp: 187373

Ion Ratio Lower Upper

240 100

120 13.1 8.3 12.5#

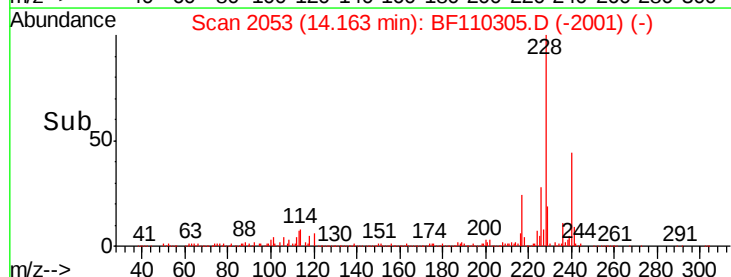
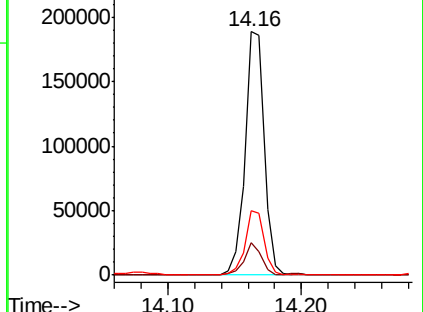
236 26.7 21.2 31.8

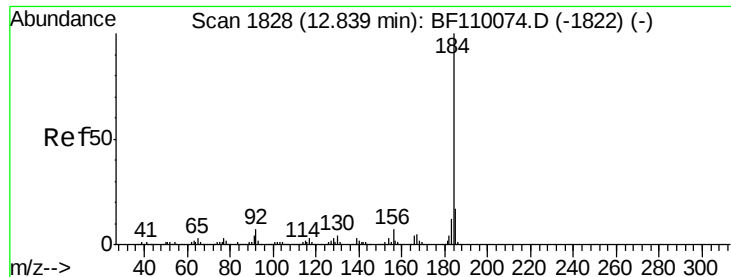


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Benzidine

Concen: 20.641 ng

RT: 12.85 min Scan# 1829

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

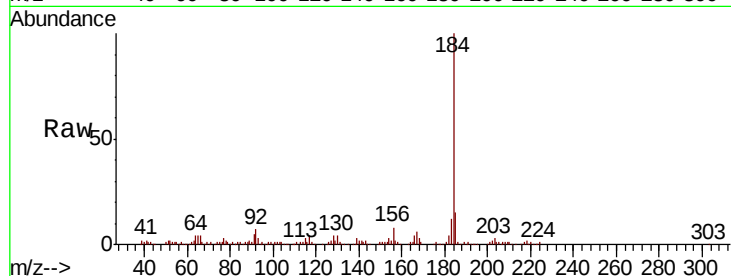
Tgt Ion:184 Resp: 138443

Ion Ratio Lower Upper

184 100

185 14.6 13.4 20.2

183 11.9 9.4 14.2

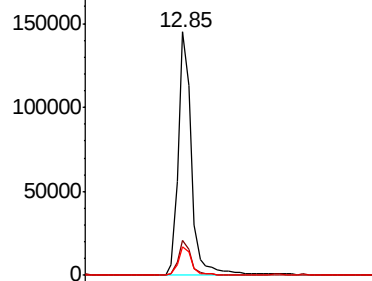


Abundance

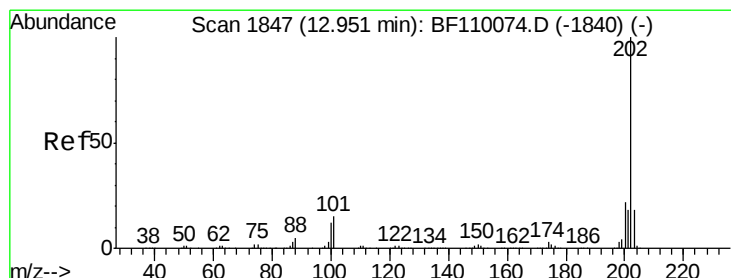
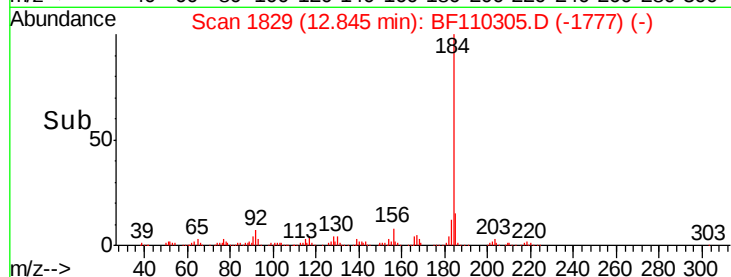
Ion 184.00 (183.70 to 184.70): E

Ion 185.00 (184.70 to 185.70): E

Ion 183.00 (182.70 to 183.70): E



Time-->



#78

Pyrene

Concen: 123.364 ng

RT: 12.97 min Scan# 1850

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

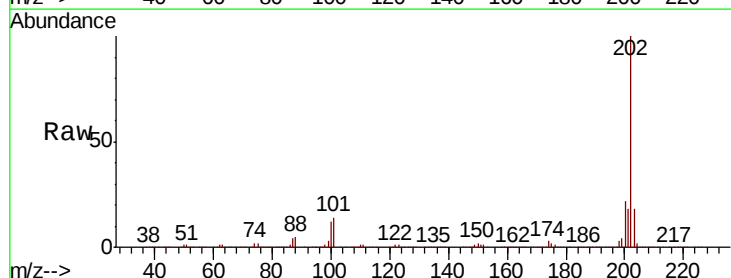
Tgt Ion:202 Resp: 1657154

Ion Ratio Lower Upper

202 100

200 21.7 17.8 26.6

203 18.4 14.2 21.4

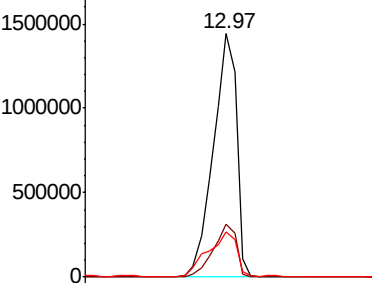


Abundance

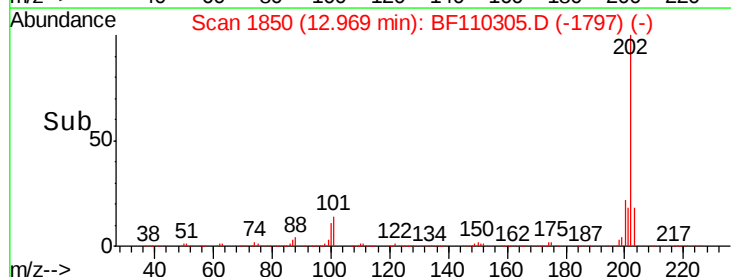
Ion 202.00 (201.70 to 202.70): E

Ion 200.00 (199.70 to 200.70): E

Ion 203.00 (202.70 to 203.70): E



Time-->





#79

Terphenyl-d14

Concen: 66.718 ng

RT: 13.09 min Scan# 1871

Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

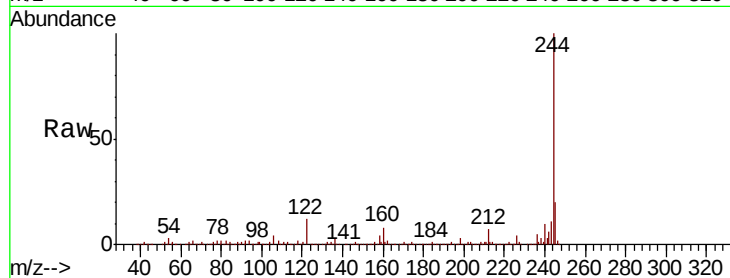
Tgt Ion:244 Resp: 601103

Ion Ratio Lower Upper

244 100

212 7.0 5.8 8.8

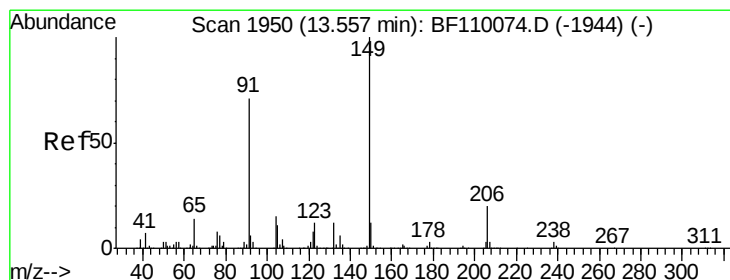
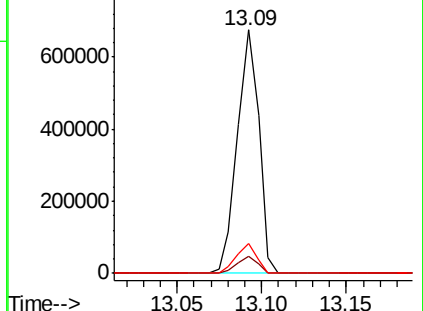
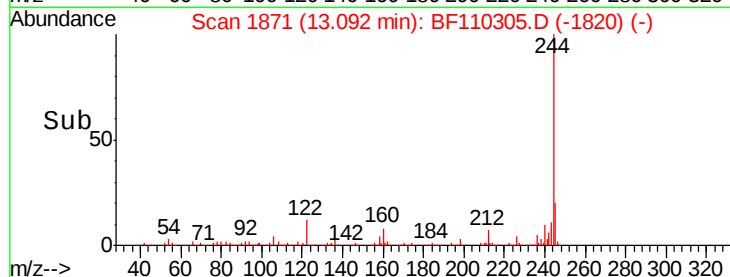
122 12.3 8.7 13.1



Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E



#80

Butylbenzylphthalate

Concen: 35.491 ng

RT: 13.56 min Scan# 1951

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

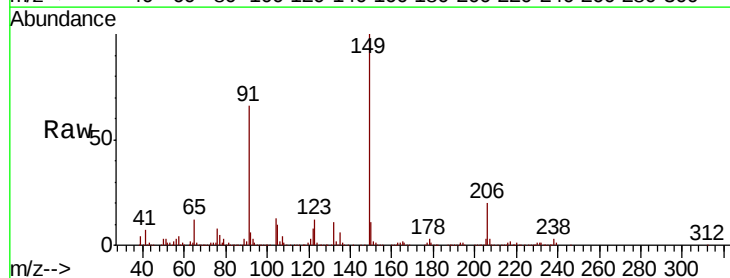
Tgt Ion:149 Resp: 206932

Ion Ratio Lower Upper

149 100

91 65.6 57.2 85.8

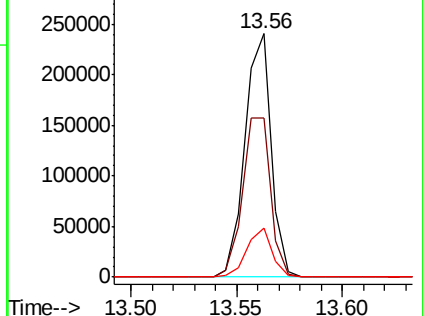
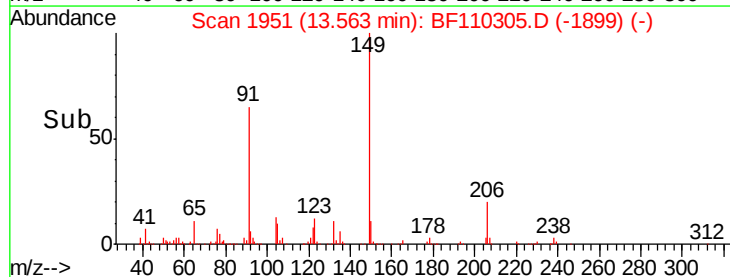
206 19.9 15.7 23.5

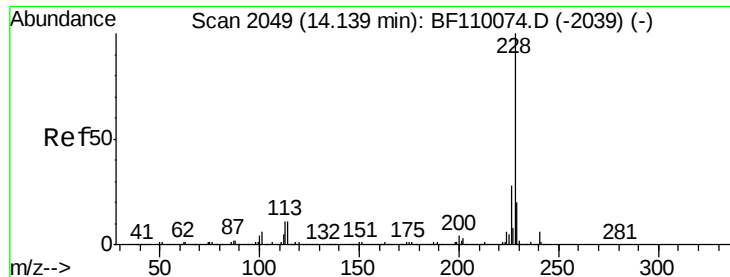


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 91.00 (90.70 to 91.70): BF1

Ion 206.00 (205.70 to 206.70): E

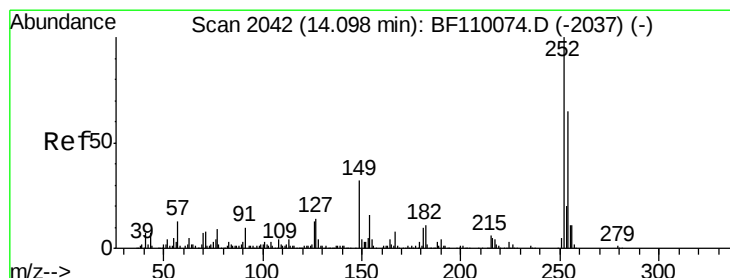
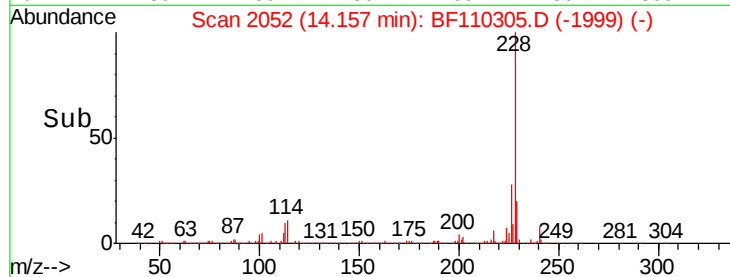
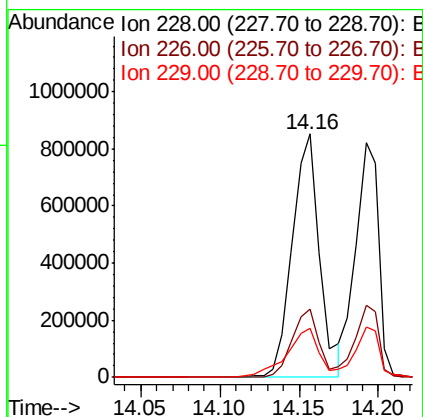
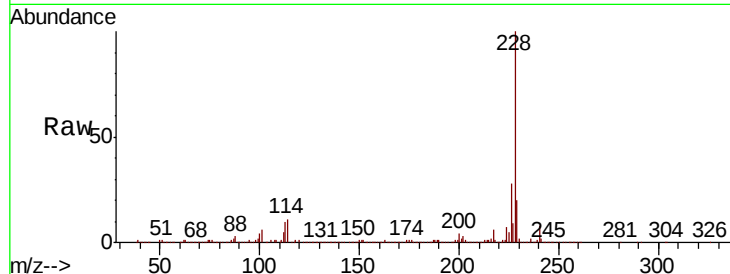




#81
Benzo(a)anthracene
Concen: 91.556 ng
RT: 14.16 min Scan# 2052
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

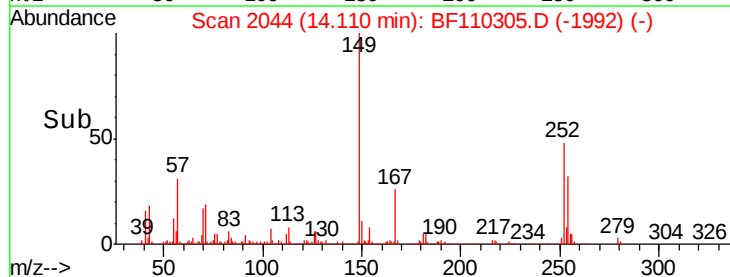
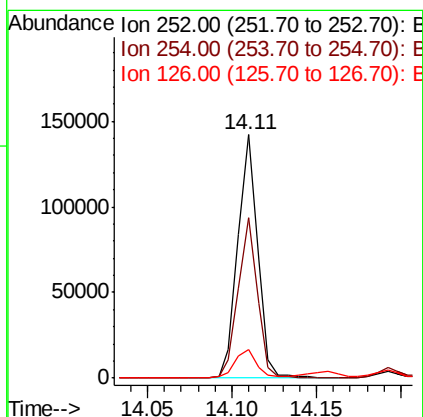
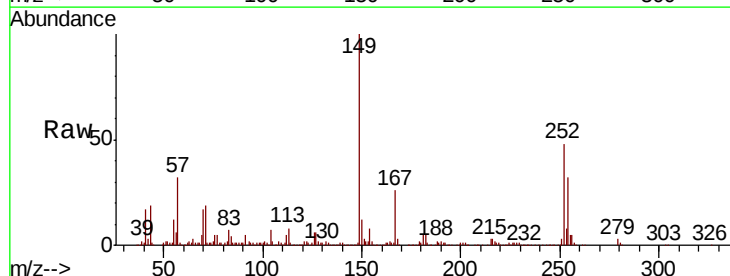
Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

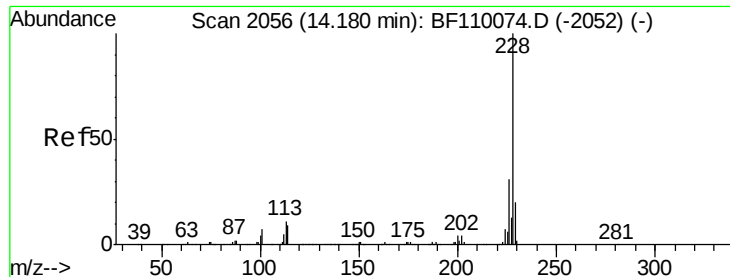
Tgt Ion:228 Resp: 1017339
Ion Ratio Lower Upper
228 100
226 28.1 22.1 33.1
229 20.4 15.6 23.4



#82
3,3'-Dichlorobenzidine
Concen: 30.251 ng
RT: 14.11 min Scan# 2044
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion:252 Resp: 117049
Ion Ratio Lower Upper
252 100
254 65.9 51.3 76.9
126 11.9 9.4 14.2





#83

Chrysene

Concen: 78.749 ng

RT: 14.19 min Scan# 2058

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

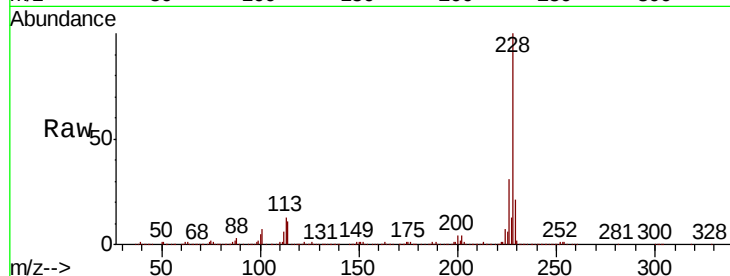
Tgt Ion:228 Resp: 831110

Ion Ratio Lower Upper

228 100

226 30.7 24.7 37.1

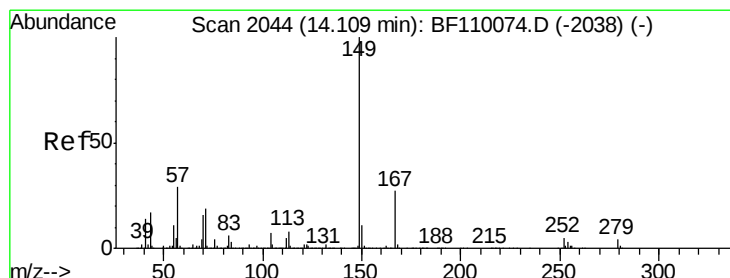
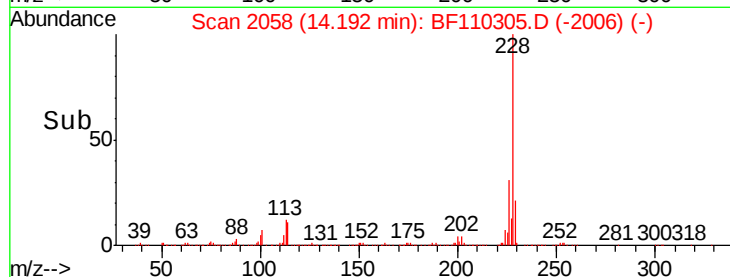
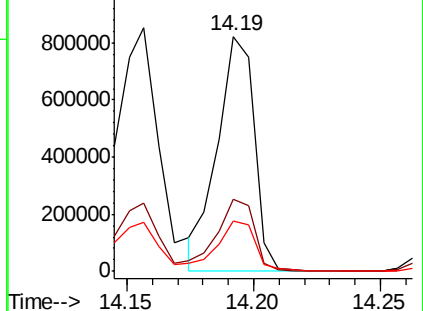
229 21.3 15.9 23.9



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



#84

Bis(2-ethylhexyl)phthalate

Concen: 35.366 ng

RT: 14.12 min Scan# 2045

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

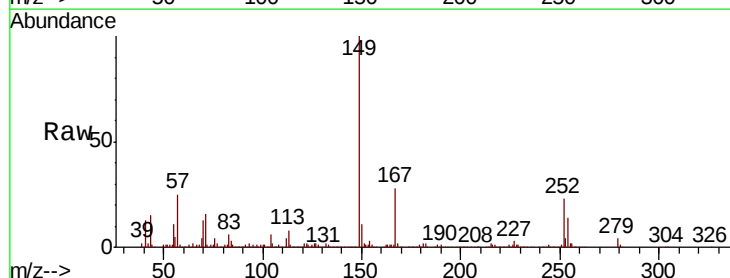
Tgt Ion:149 Resp: 278744

Ion Ratio Lower Upper

149 100

167 27.9 19.8 29.8

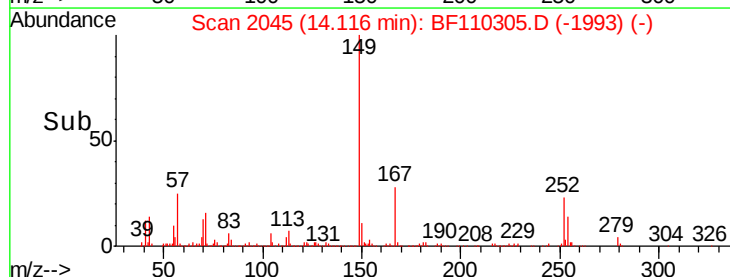
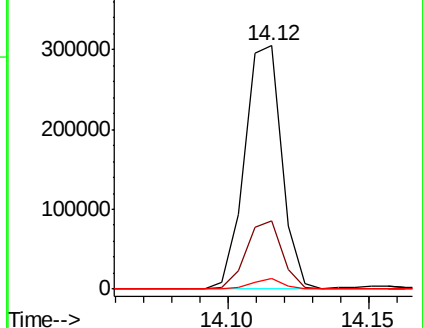
279 4.1 2.7 4.1#

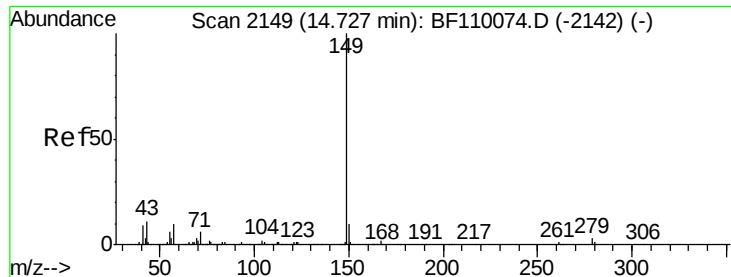


Abundance Ion 149.00 (148.70 to 149.70): E

Ion 167.00 (166.70 to 167.70): E

Ion 279.00 (278.70 to 279.70): E

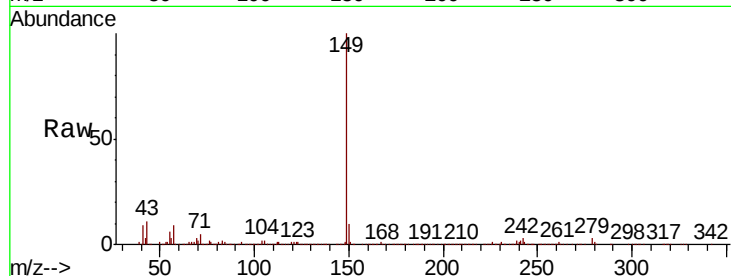




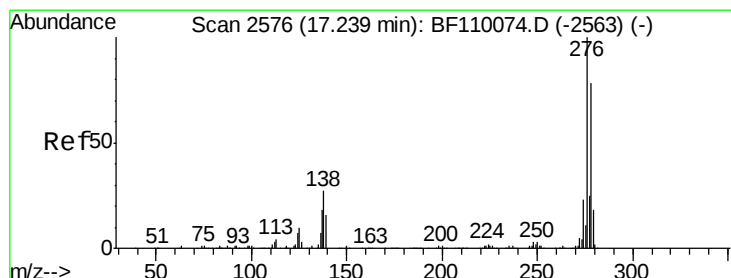
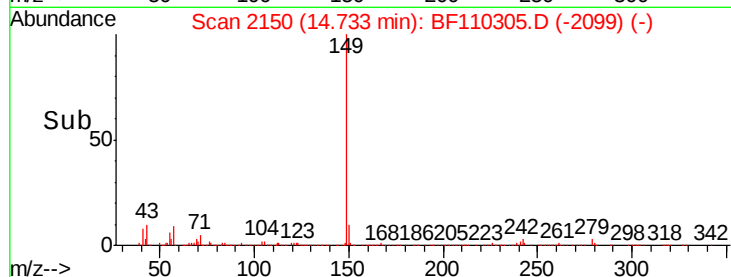
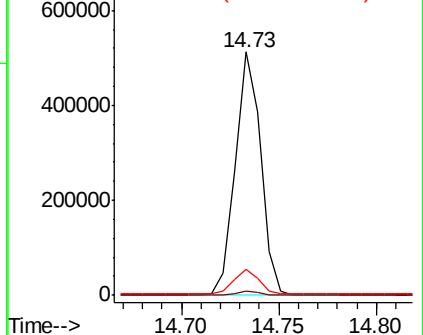
#85
Di-n-octyl phthalate
Concen: 37.567 ng
RT: 14.73 min Scan# 2150
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tgt Ion	Ratio	Lower	Upper
149	100		
167	1.5	1.1	1.7
43	10.0	7.8	11.8

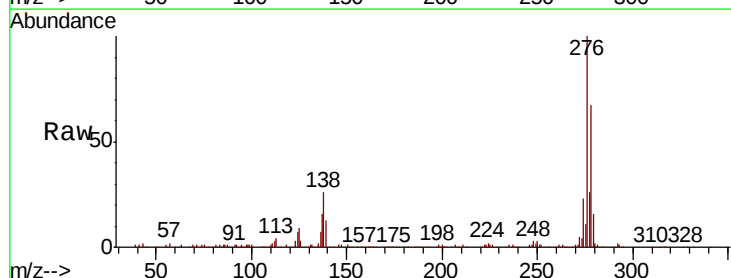


Abundance Ion 149.00 (148.70 to 149.70): E
Ion 167.00 (166.70 to 167.70): E
Ion 43.00 (42.70 to 43.70): BF1

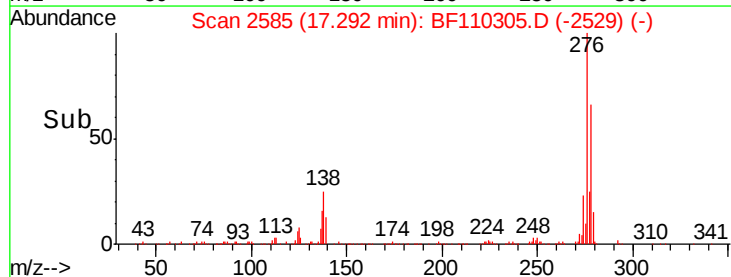
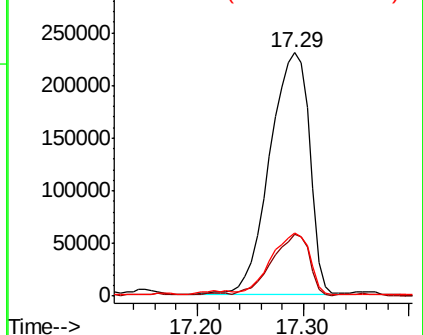


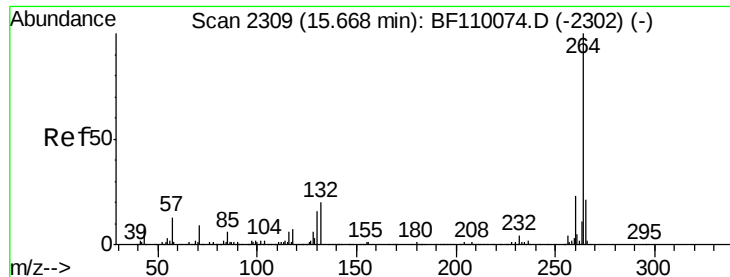
#86
Indeno(1,2,3-cd)pyrene
Concen: 68.606 ng
RT: 17.29 min Scan# 2585
Delta R.T. 0.03 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Lower	Upper
276	100		
138	23.4	18.5	27.7
277	25.1	20.0	30.0



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



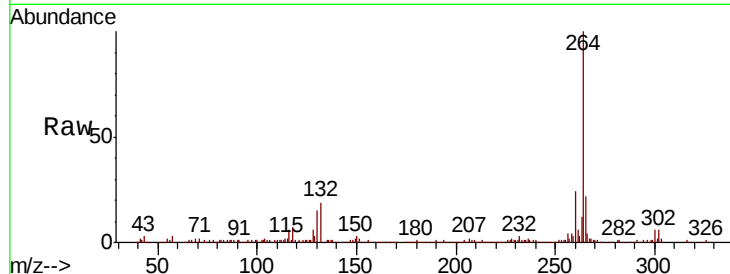


#87
Perylene-d12
Concen: 20.000 ng
RT: 15.70 min Scan# 2314
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

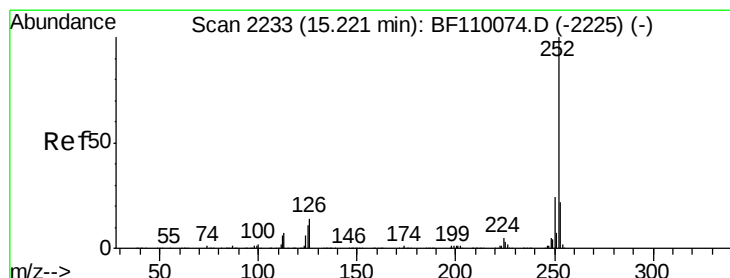
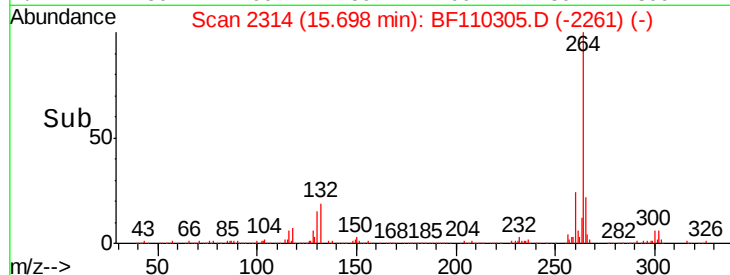
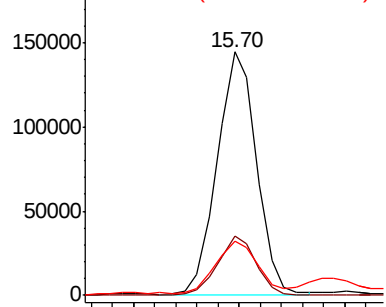
Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tgt Ion:264 Resp: 185297

Ion	Ratio	Lower	Upper
264	100		
260	24.2	18.7	28.1
265	22.0	16.7	25.1



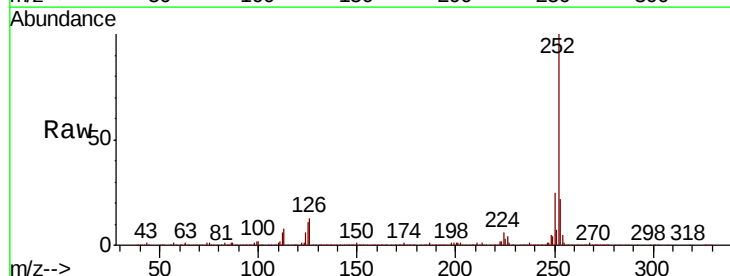
Abundance Ion 264.00 (263.70 to 264.70): E
Ion 260.00 (259.70 to 260.70): E
Ion 265.00 (264.70 to 265.70): E



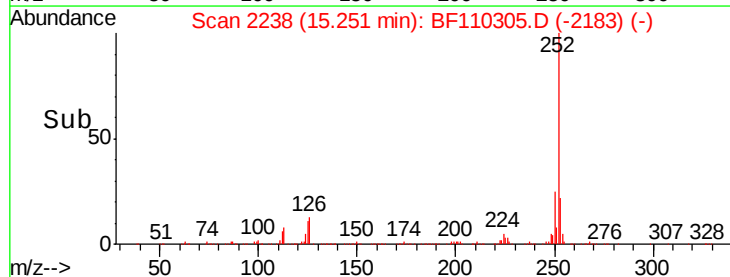
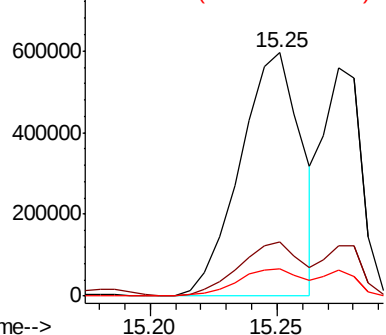
#88
Benzo(b)fluoranthene
Concen: 93.272 ng
RT: 15.25 min Scan# 2238
Delta R.T. 0.02 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

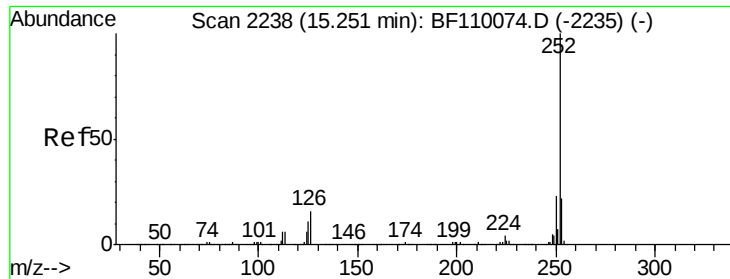
Tgt Ion:252 Resp: 998029

Ion	Ratio	Lower	Upper
252	100		
253	22.4	17.2	25.8
125	11.3	8.2	12.4



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





#89

Benzo(k)fluoranthene

Concen: 55.203 ng

RT: 15.27 min Scan# 2242

Delta R.T. 0.01 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

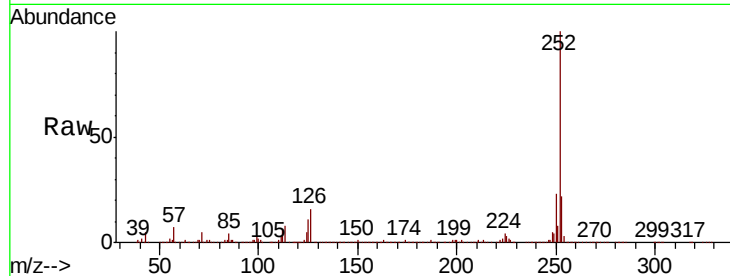
Tgt Ion:252 Resp: 580702

Ion Ratio Lower Upper

252 100

253 22.3 17.2 25.8

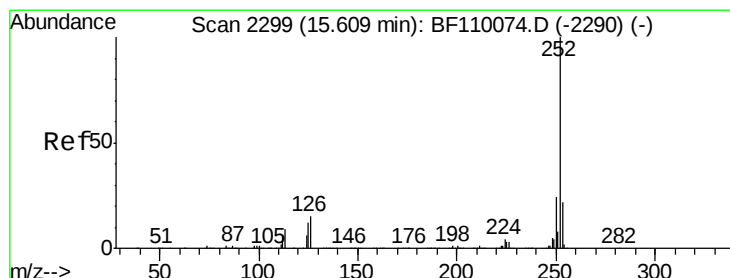
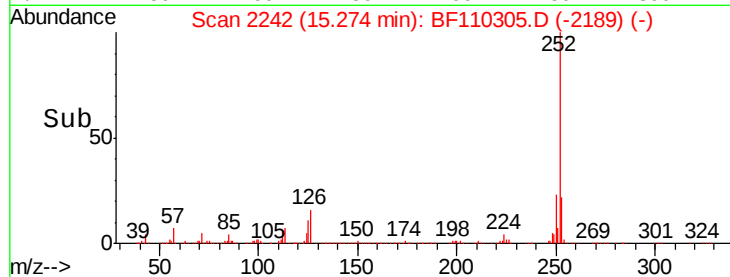
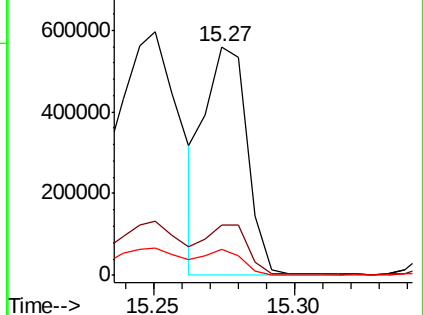
125 11.3 7.4 11.0#



Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E



#90

Benzo(a)pyrene

Concen: 82.141 ng

RT: 15.64 min Scan# 2305

Delta R.T. 0.02 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

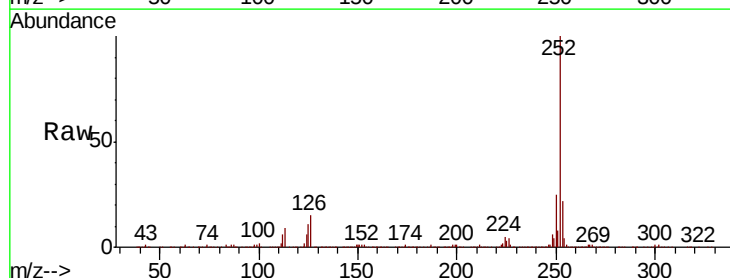
Tgt Ion:252 Resp: 808755

Ion Ratio Lower Upper

252 100

253 22.2 18.2 27.4

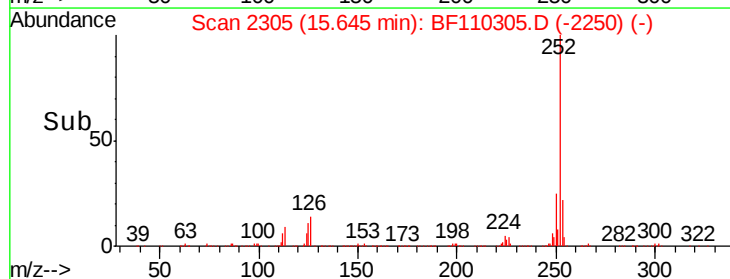
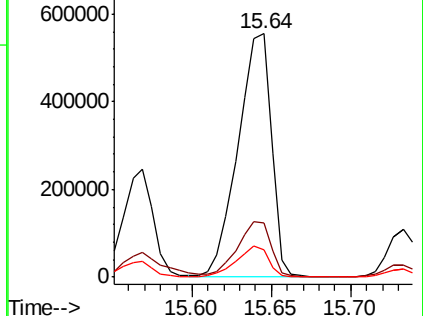
125 11.3 9.0 13.6

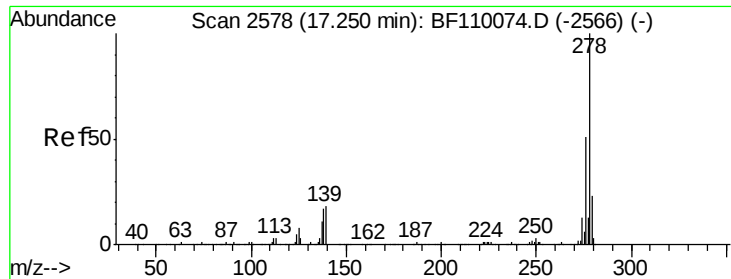


Abundance Ion 252.00 (251.70 to 252.70): E

Ion 253.00 (252.70 to 253.70): E

Ion 125.00 (124.70 to 125.70): E





#91

Dibenzo(a,h)anthracene

Concen: 40.032 ng

RT: 17.30 min Scan# 2586

Delta R.T. 0.02 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Instrument :

BNA_F

ClientSampleId :

RED-SHALEMSD

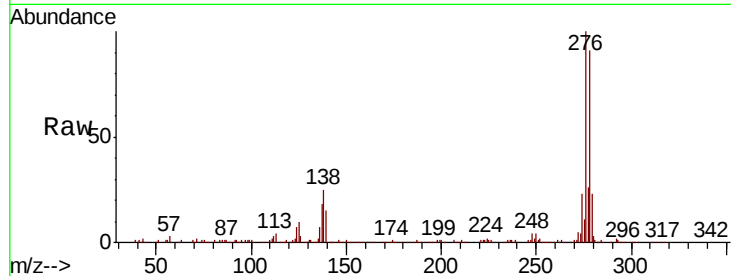
Tgt Ion:278 Resp: 340094

Ion Ratio Lower Upper

278 100

139 17.0 12.7 19.1

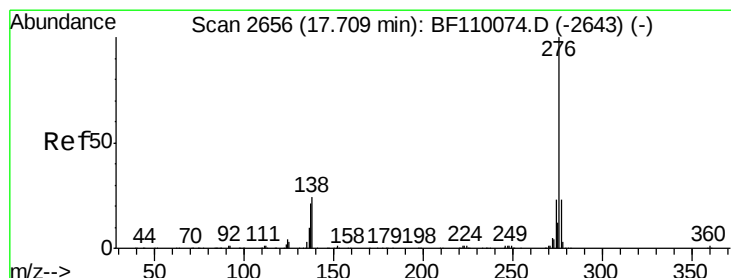
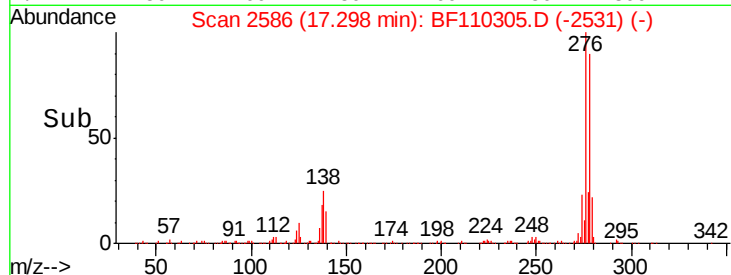
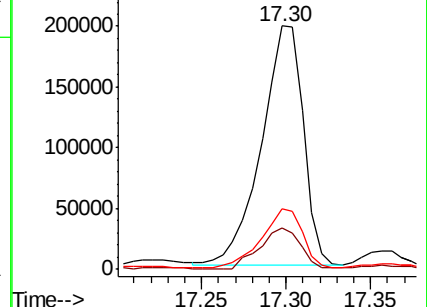
279 25.1 19.0 28.4



Abundance Ion 278.00 (277.70 to 278.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 279.00 (278.70 to 279.70): E



#92

Benzo(g,h,i)perylene

Concen: 60.835 ng

RT: 17.77 min Scan# 2667

Delta R.T. 0.04 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

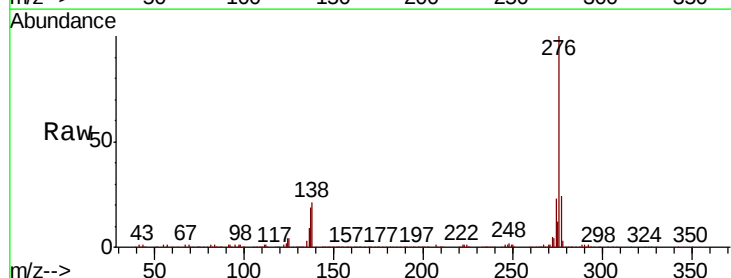
Tgt Ion:276 Resp: 509291

Ion Ratio Lower Upper

276 100

277 24.1 18.8 28.2

138 21.2 16.0 24.0



Abundance Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

