

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

Manual Integrations
 APPROVED

Sohil
 10/31/2018 11:15:00 AM

Quant Time: Oct 31 05:02:11 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	7.96	122	8987m	2.094	ng	
33) 4-Chloroaniline	8.32	127	133910	15.965	ng	97
34) Hexachlorobutadiene	8.39	225	108077	30.975	ng	97
35) Caprolactam	8.68	113	57195m	29.250	ng	
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

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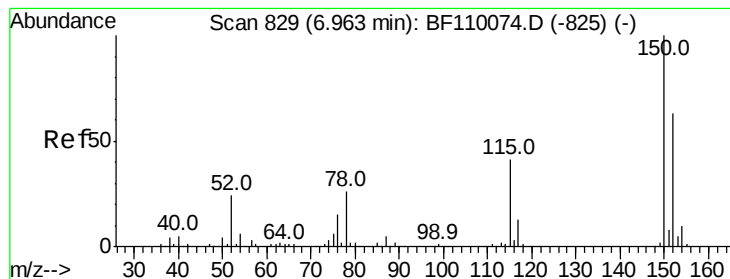
Manual Integrations
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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Hexachlorocyclopentadiene	9.12	237	96781	32.889	ng	99
43) 2,4,6-Trichlorophenol	9.25	196	127247	34.282	ng	97
44) 2,4,5-Trichlorophenol	9.29	196	132877	33.867	ng	97
46) 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	10.34	232	100481m	31.420	ng	
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

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



#1

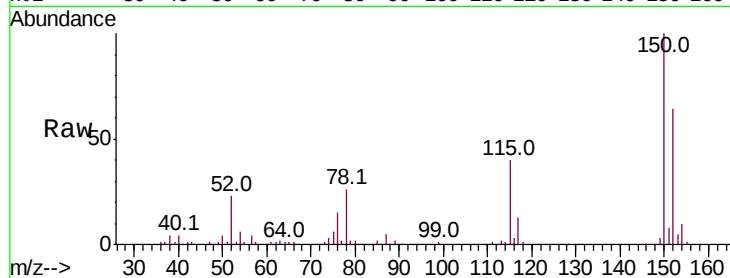
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.97 min Scan# 830
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
152	100		
150	156.1	122.7	184.1
115	62.5	49.1	73.7

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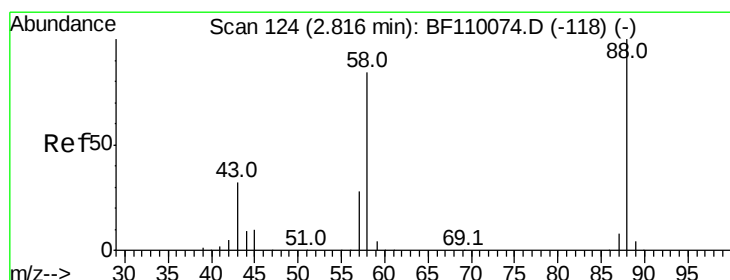
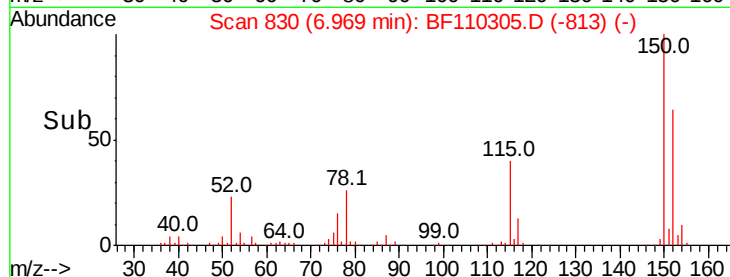
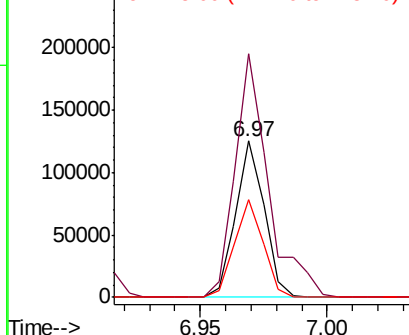


Abundance

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

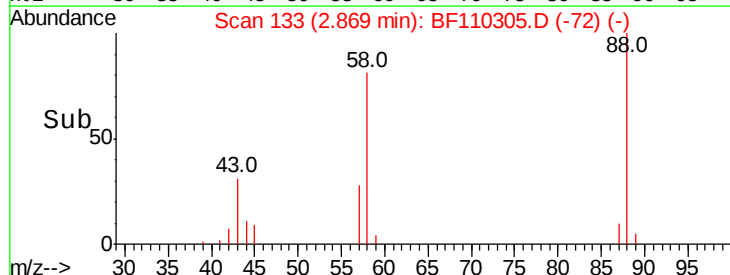
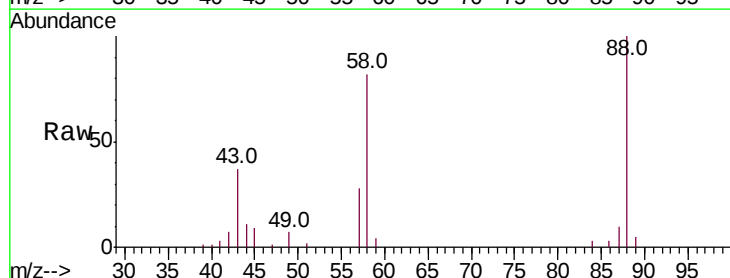
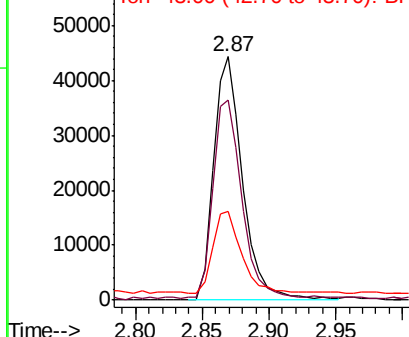
Tgt Ion	Ratio	Lower	Upper
88	100		
58	82.3	57.1	85.7
43	33.7	24.1	36.1

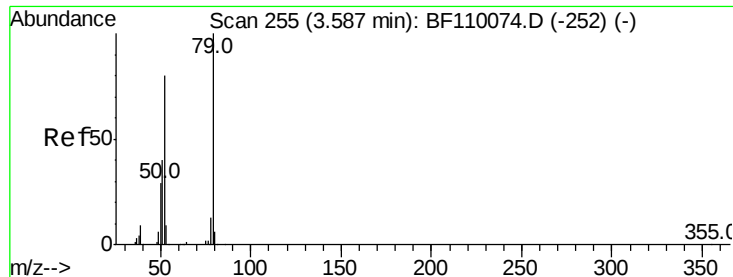
Abundance

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

Pvridine

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

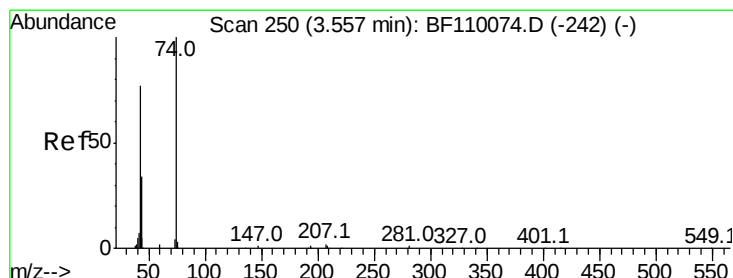
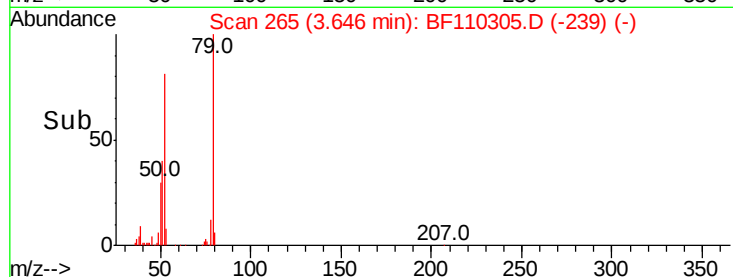
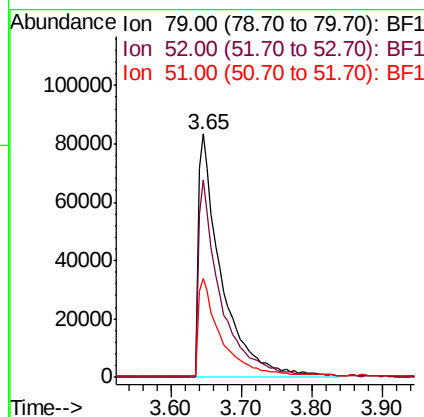
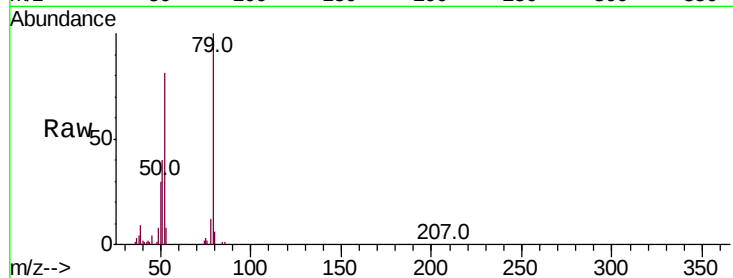
ClientSampleId :

RED-SHALEMSD

Tot Ion:	79	Resp:	192126
Ion Ratio	Lower	Upper	
79	100		
52	80.9	53.1	79.7#
51	40.4	27.4	41.2

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#4

n-Nitrosodimethylamine

Concen: 33.841 ng

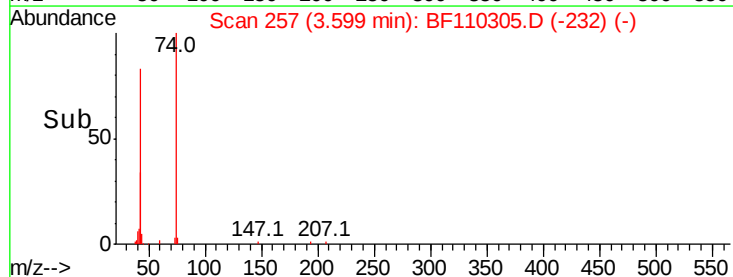
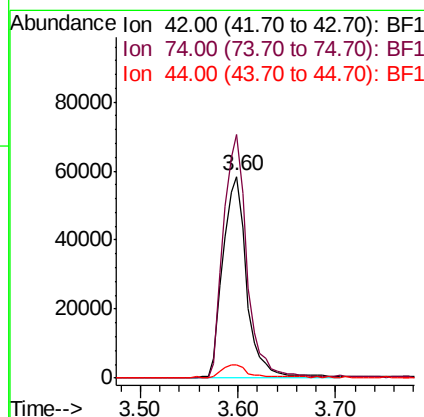
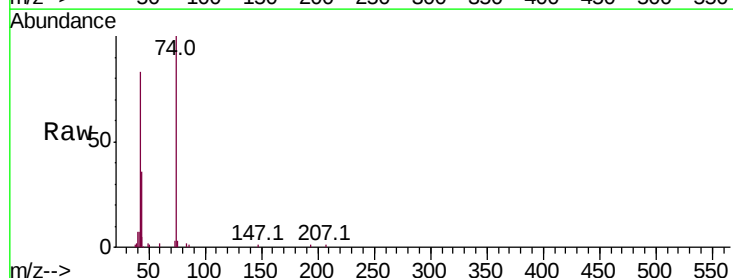
RT: 3.60 min Scan# 257

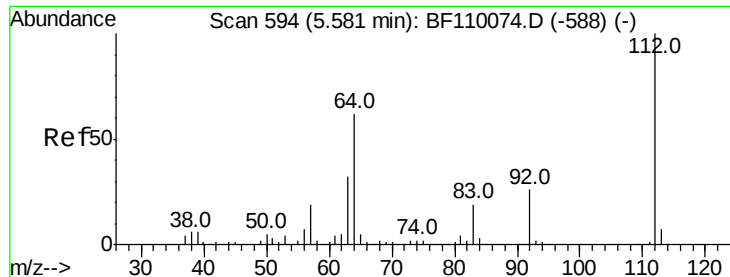
Delta R.T. 0.05 min

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





#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

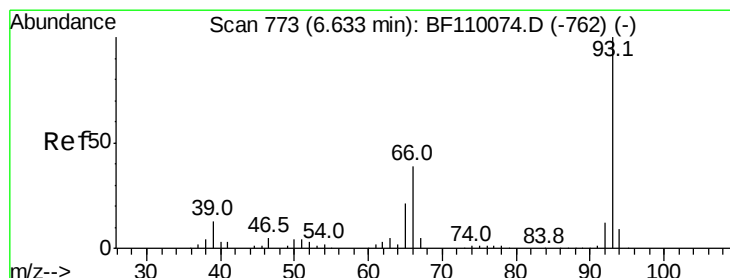
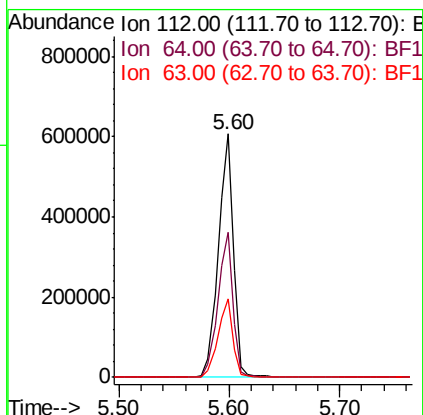
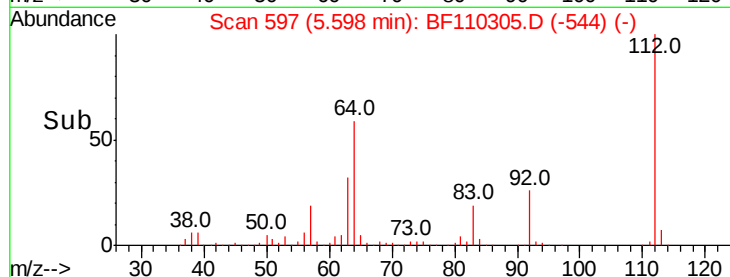
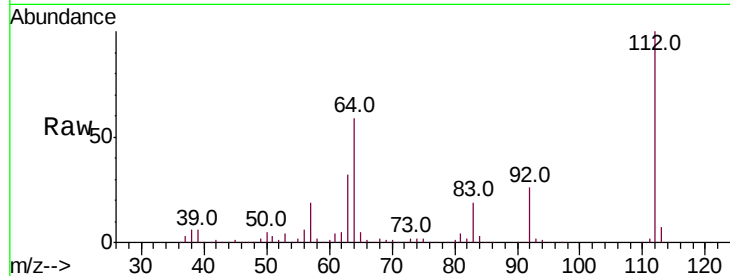
ClientSampleId :

RED-SHALEMSD

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

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#6

Aniline

Concen: 22.045 ng

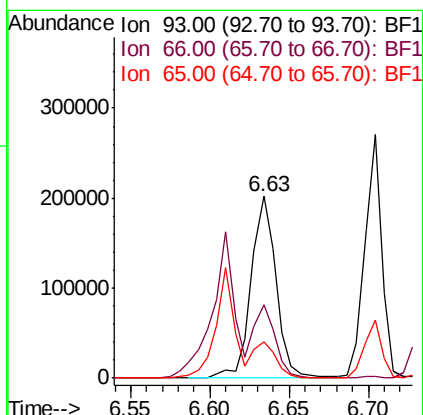
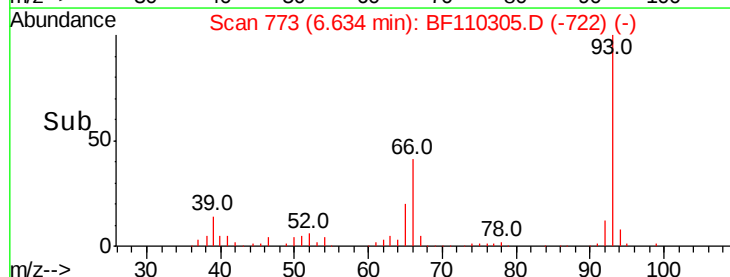
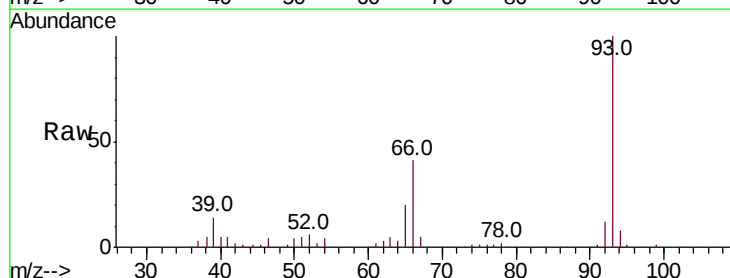
RT: 6.63 min Scan# 773

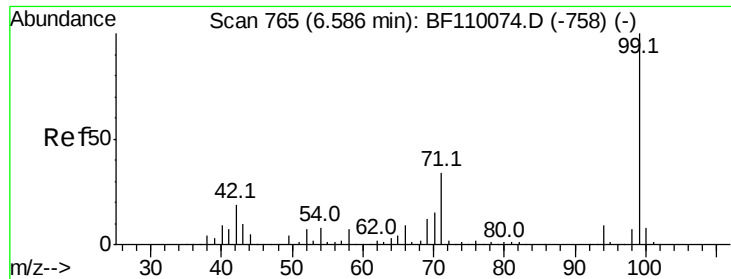
Delta R.T. 0.00 min

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

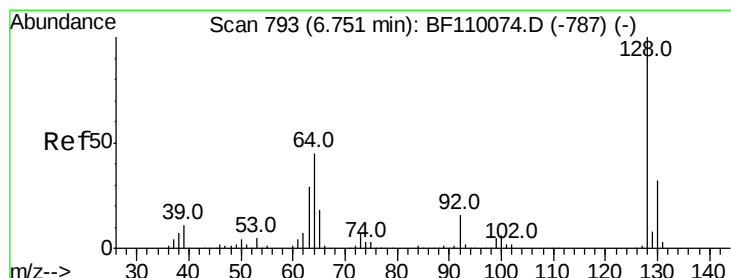
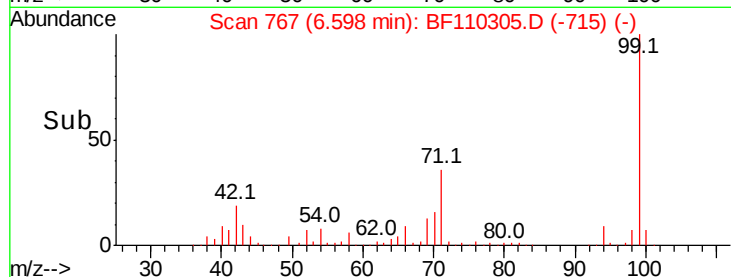
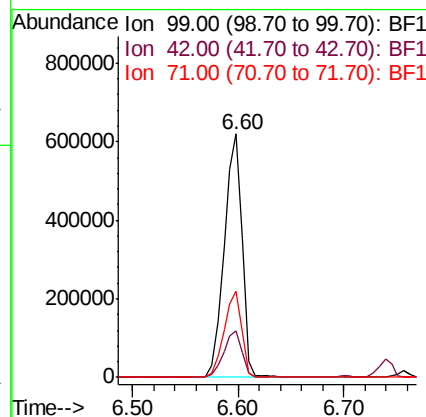
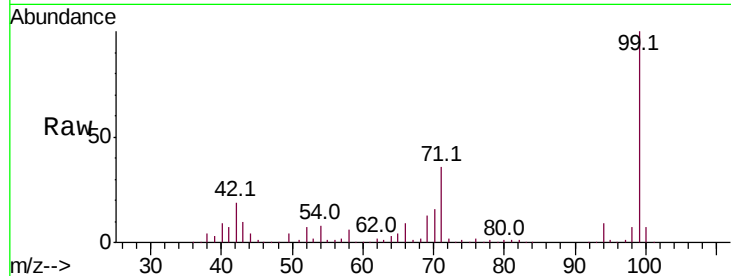
ClientSampleId :

RED-SHALEMSD

Tot Ion:	99	Resp:	732878
Ion Ratio	Lower	Upper	
99	100		
42	19.1	15.8	23.6
71	35.5	28.0	42.0

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#8

2-Chlorophenol

Concen: 32.182 ng

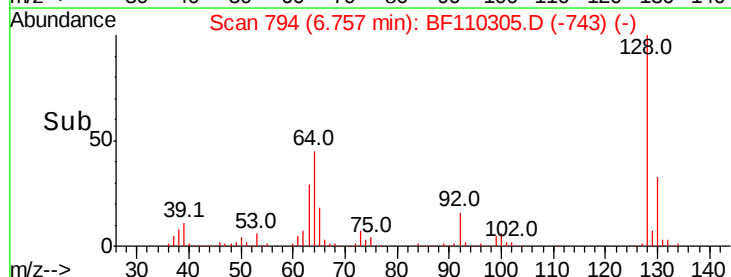
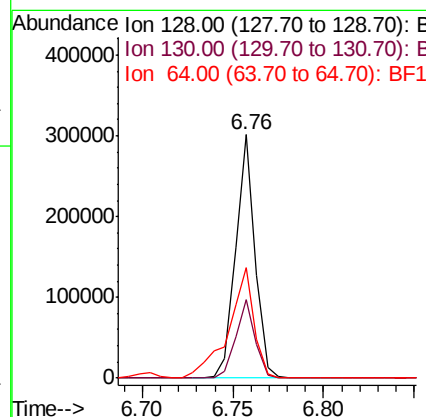
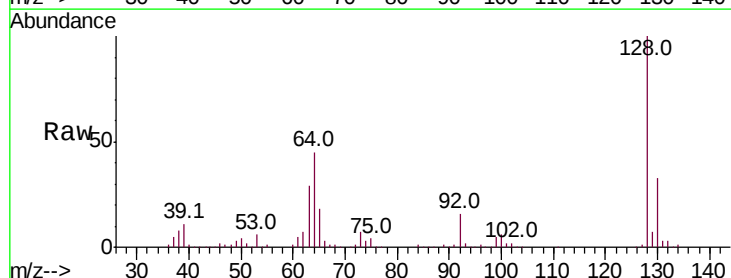
RT: 6.76 min Scan# 794

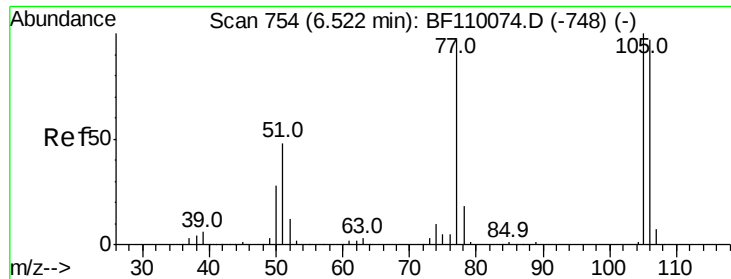
Delta R.T. 0.00 min

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





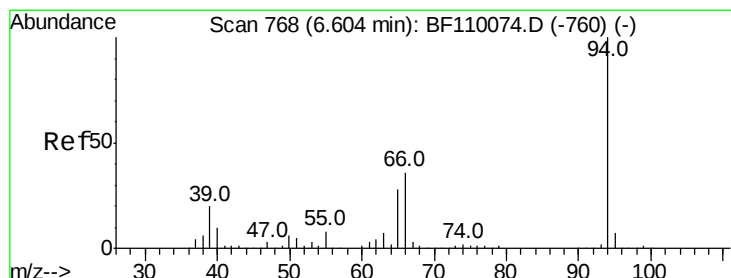
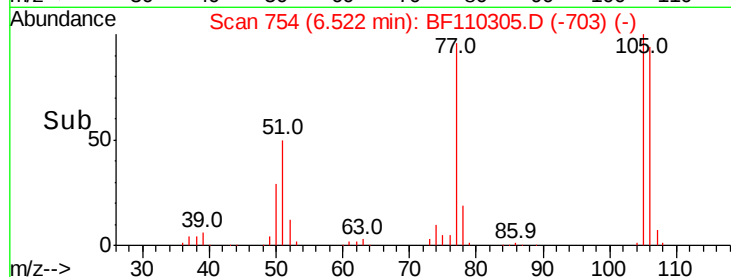
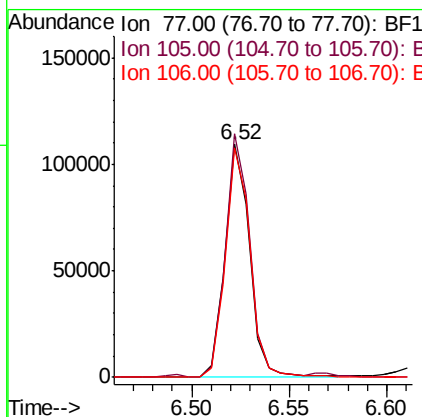
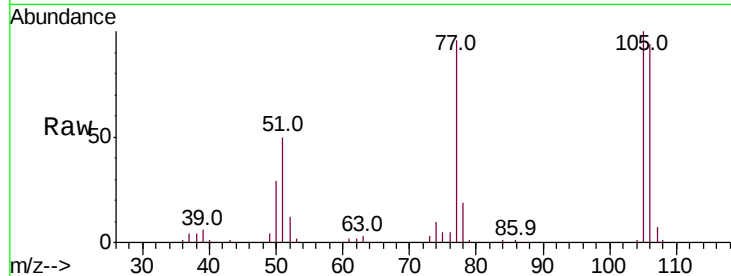
#9
Benzaldehyde
Concen: 18.202 ng
RT: 6.52 min Scan# 754
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion: 77 Resp: 95815
Ion Ratio Lower Upper
77 100
105 104.4 78.6 118.6
106 98.3 74.8 114.8

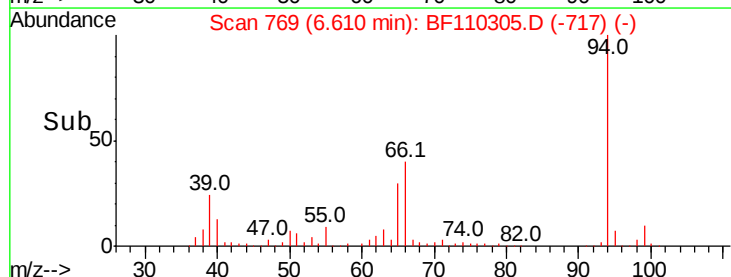
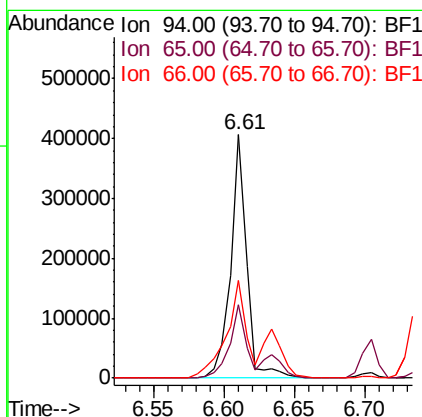
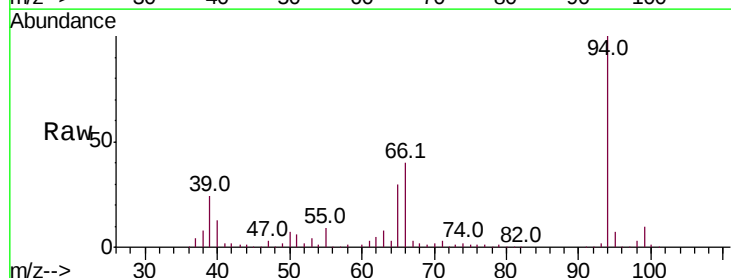
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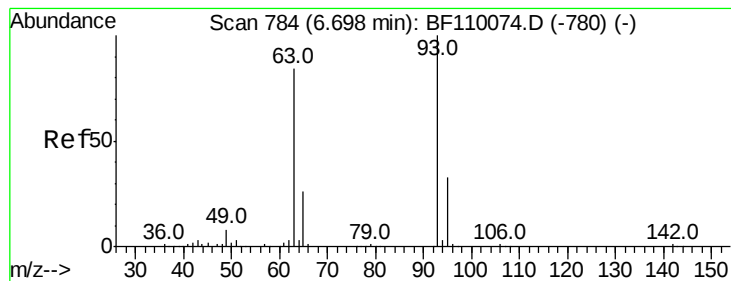
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10/31/2018 11:15:00 AM



#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#





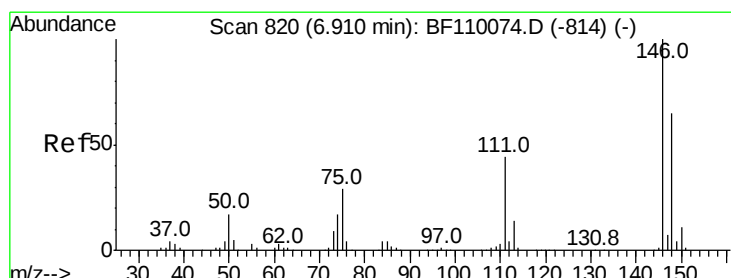
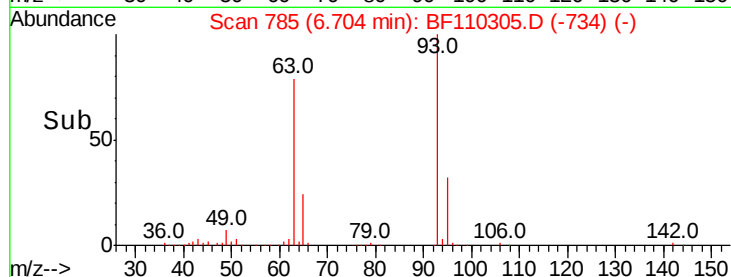
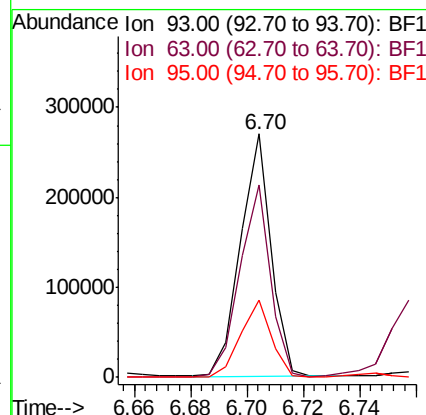
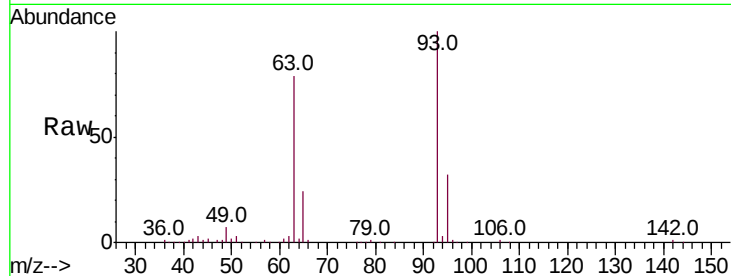
#11
bis(2-Chloroethyl)ether
Concen: 29.879 ng
RT: 6.70 min Scan# 785
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Resp Lower	Upper
93	100		
63	78.9	53.4	93.4
95	31.8	12.1	52.1

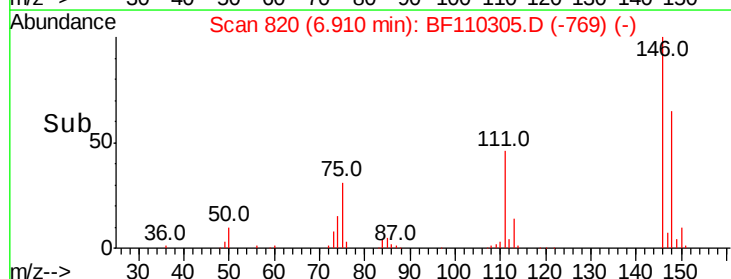
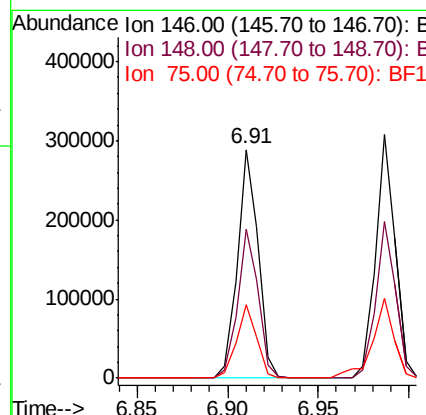
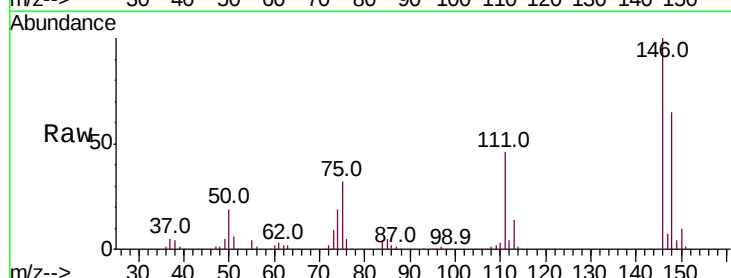
Manual Integrations
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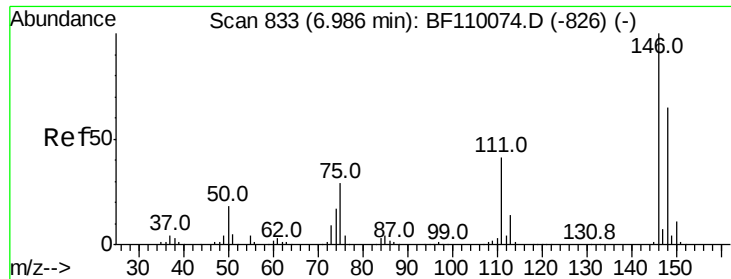
Sohil
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#12
1,3-Dichlorobenzene
Concen: 29.868 ng
RT: 6.91 min Scan# 820
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

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





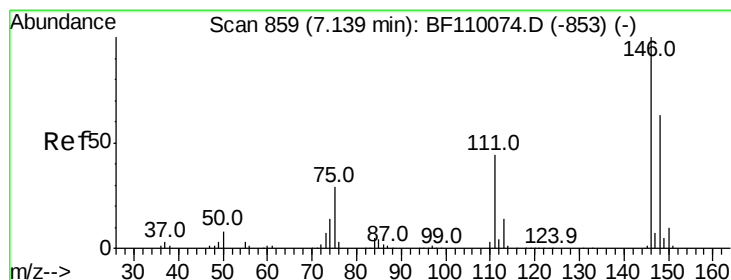
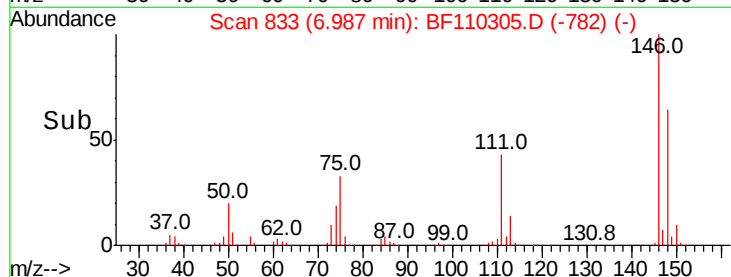
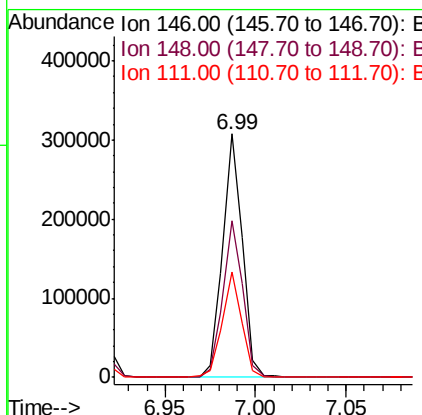
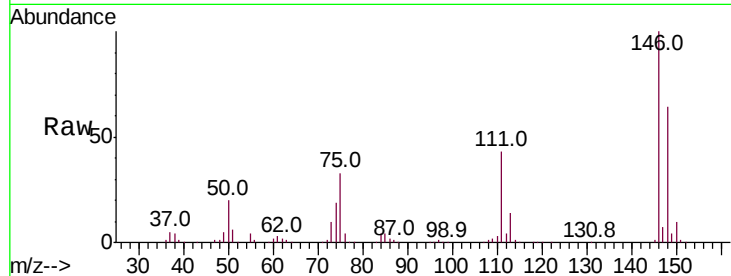
#13
 1,4-Dichlorobenzene
 Concen: 30.093 ng
 RT: 6.99 min Scan# 833
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
146	100		
148	64.2	50.3	75.5
111	43.4	32.7	49.1

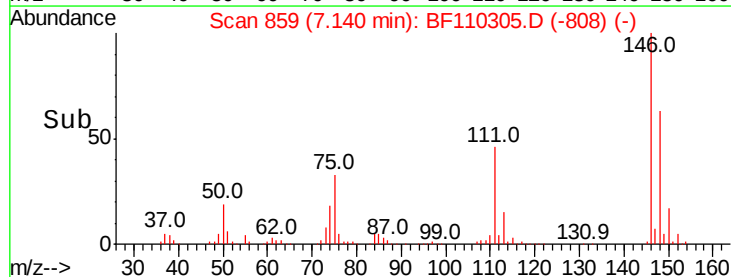
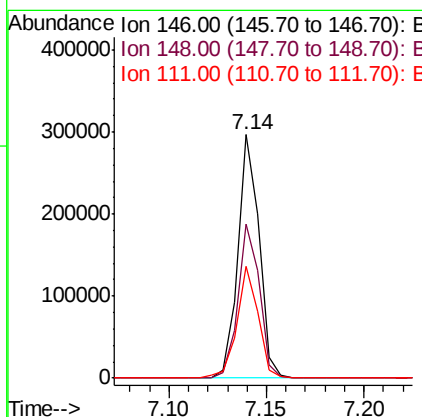
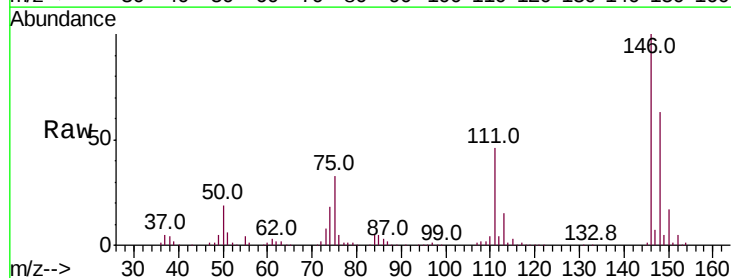
Manual Integrations
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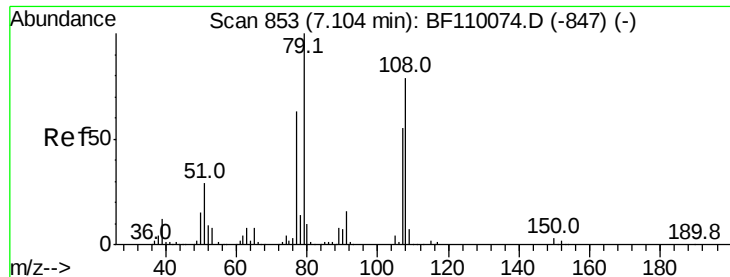
Sohil
 10/31/2018 11:15:00 AM



#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	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

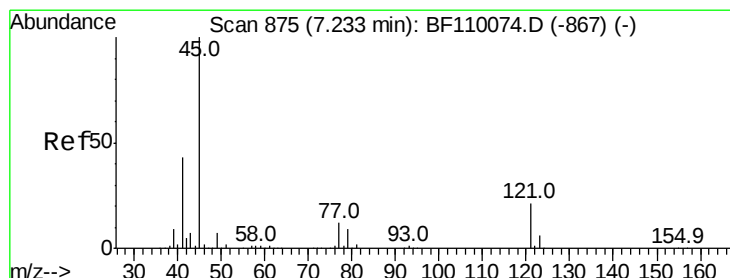
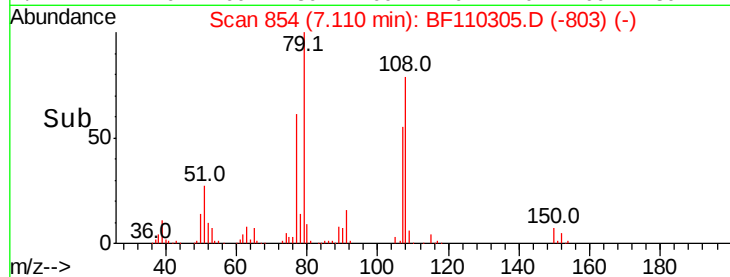
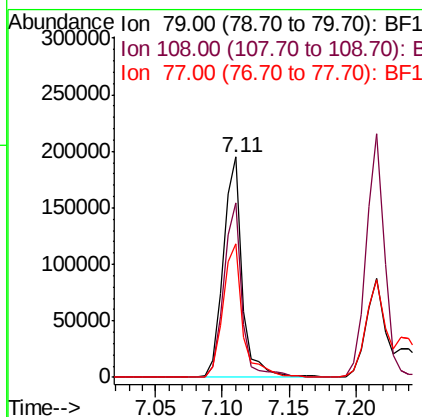
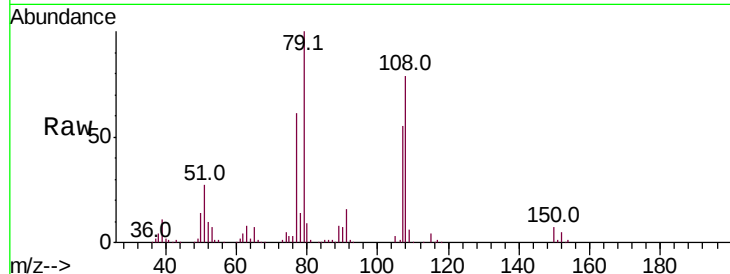
ClientSampleId :

RED-SHALEMSD

Tot Ion:	79	Resp:	196514
Ion Ratio	Lower	Upper	
79	100		
108	79.3	56.3	84.5
77	60.5	52.9	79.3

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#16

2,2'-oxybis(1-chloropropane)

Concen: 29.716 ng

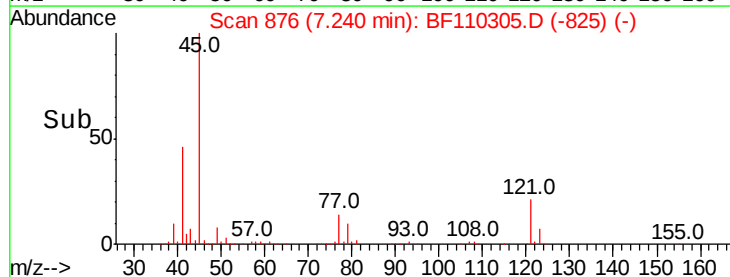
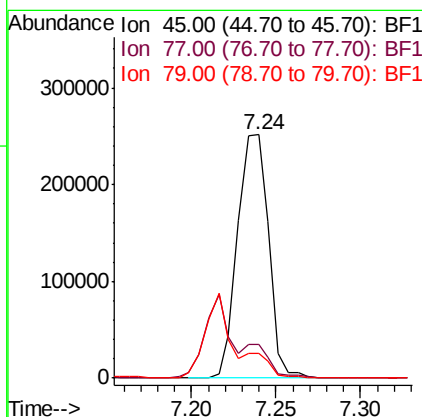
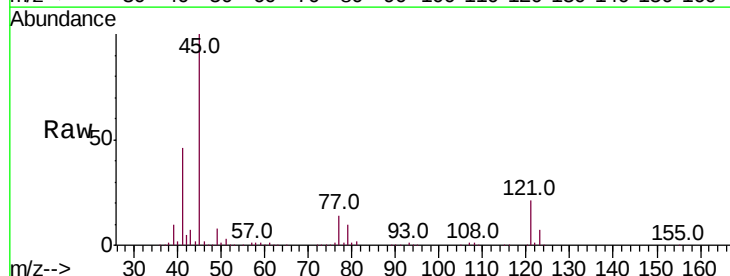
RT: 7.24 min Scan# 876

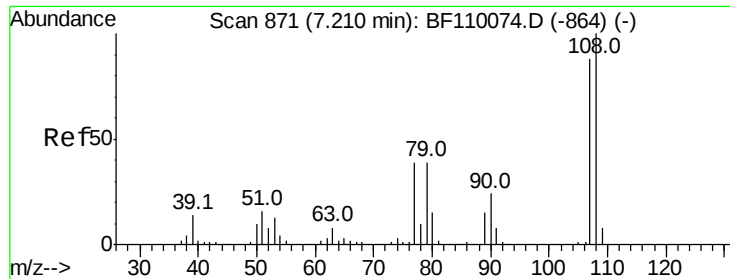
Delta R.T. 0.00 min

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





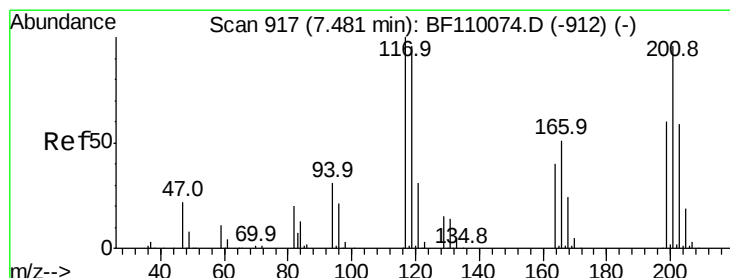
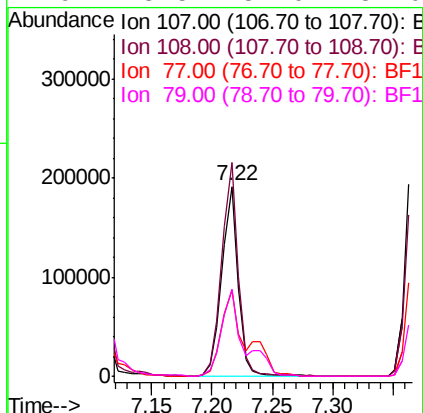
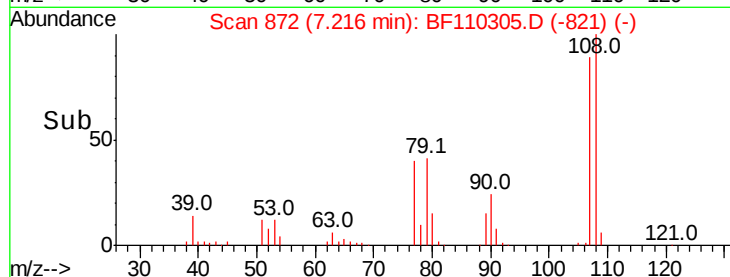
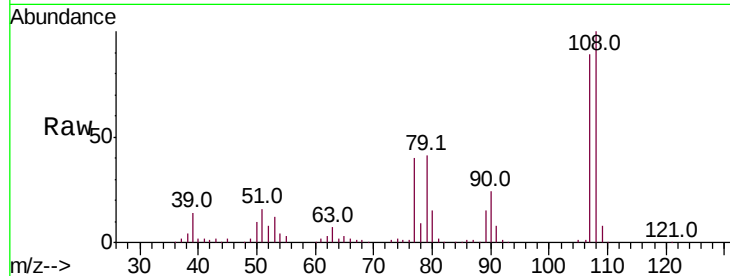
#17
2-Methylphenol
Concen: 32.181 ng
RT: 7.22 min Scan# 872
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot 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#

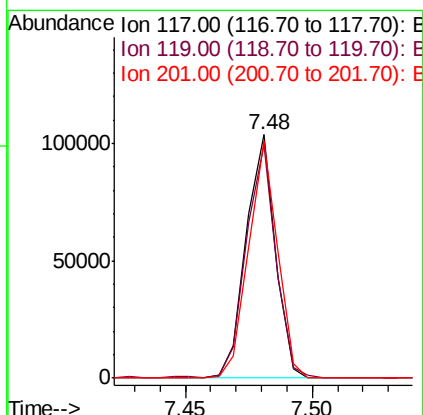
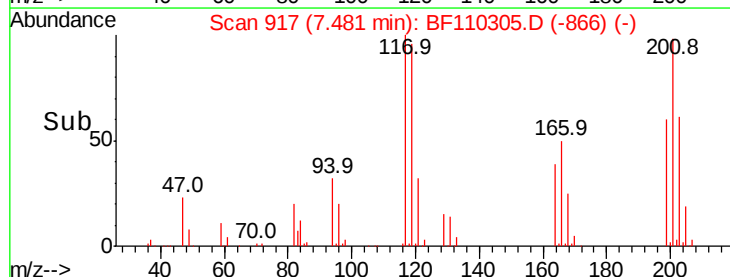
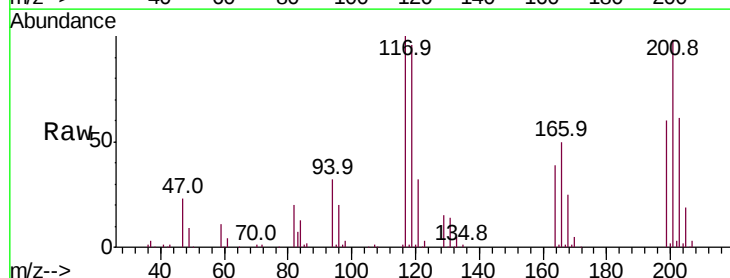
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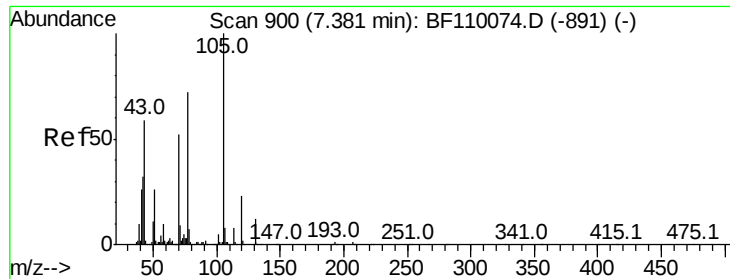
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#18
Hexachloroethane
Concen: 29.276 ng
RT: 7.48 min Scan# 917
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Lower	Upper
117	100		
119	95.8	75.0	112.6
201	97.6	79.2	118.8





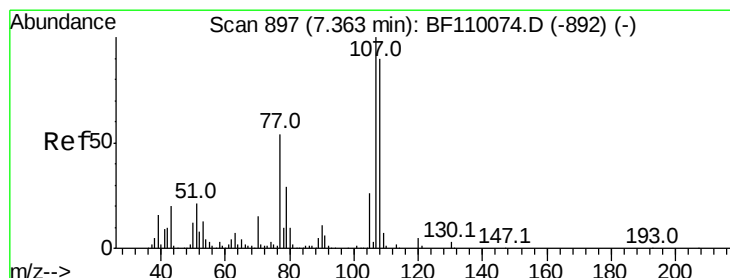
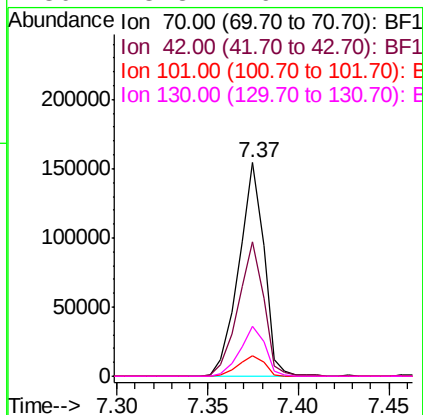
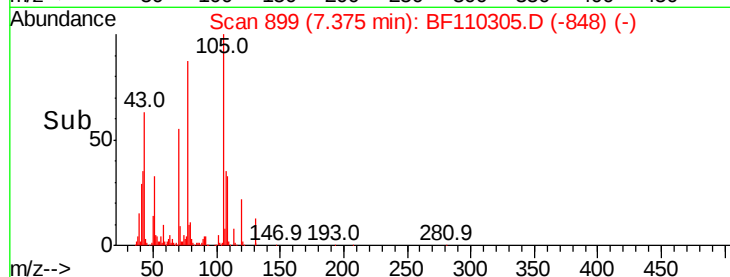
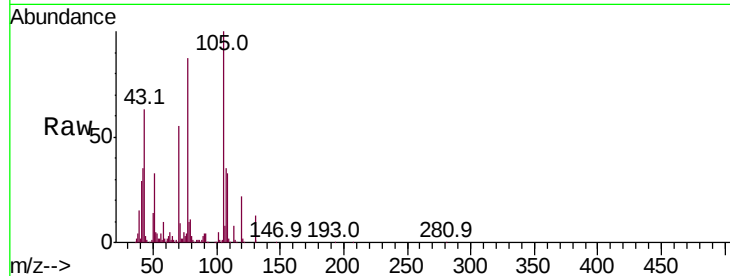
#19
n-Nitroso-di-n-propylamine
Concen: 30.215 ng
RT: 7.37 min Scan# 899
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot 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

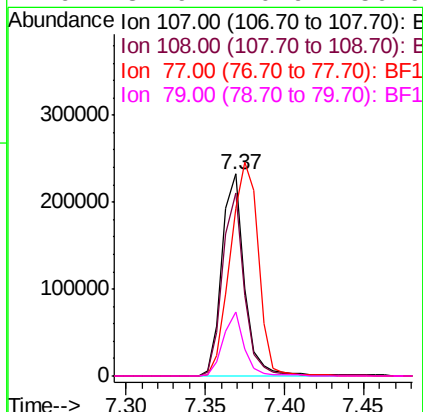
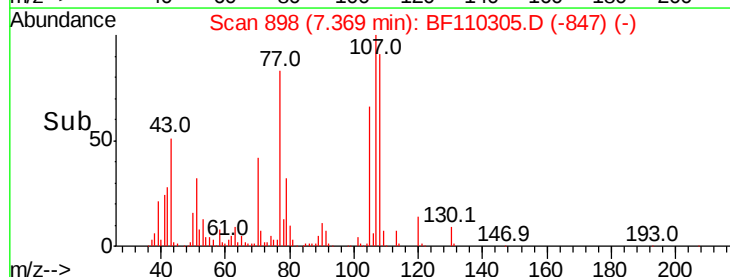
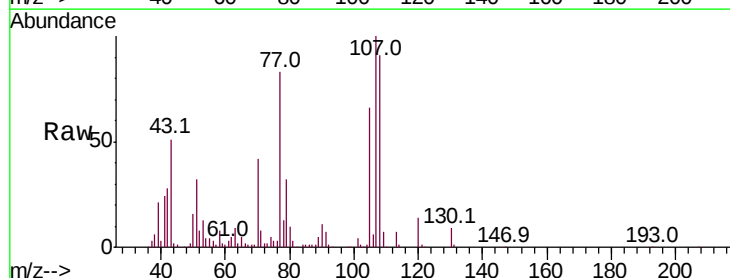
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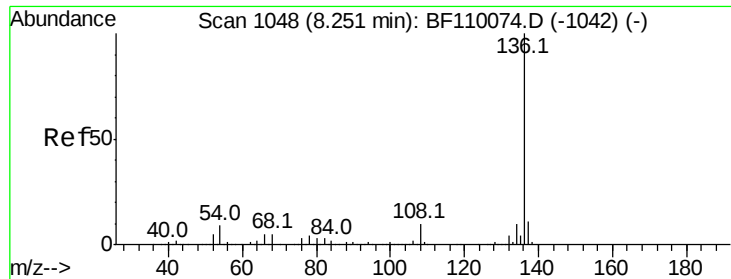
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#20
3+4-Methylphenols
Concen: 31.883 ng
RT: 7.37 min Scan# 898
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion	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

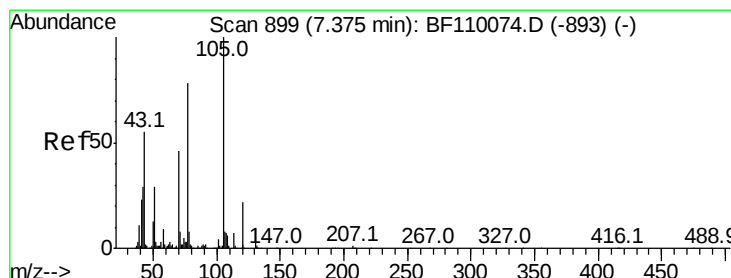
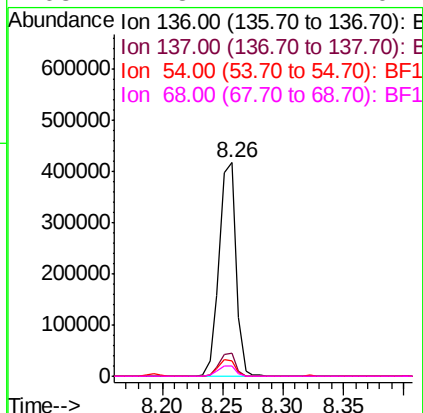
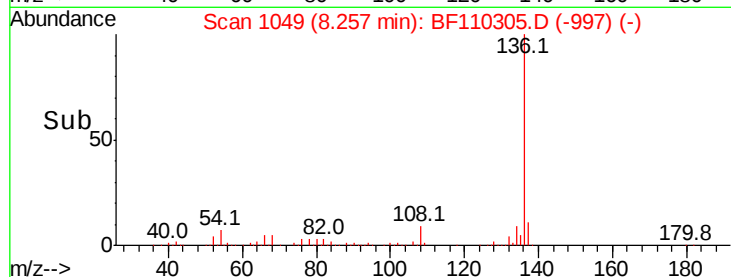
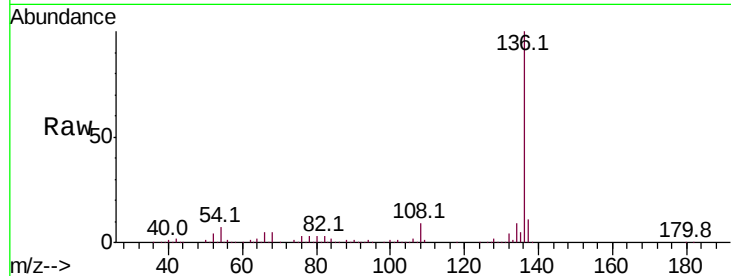
ClientSampleId :

RED-SHALEMSD

Tot Ion	Ratio	Resp	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	

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#22

Acetophenone

Concen: 33.121 ng

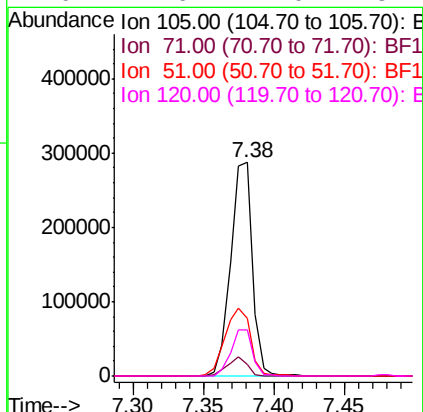
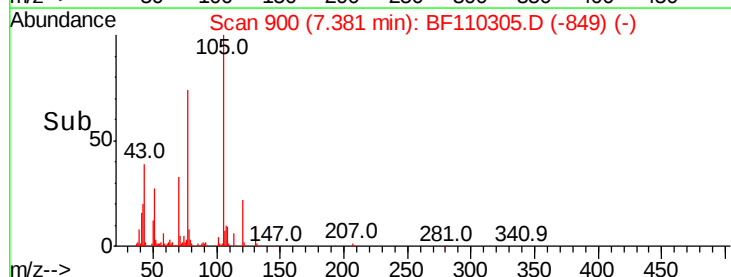
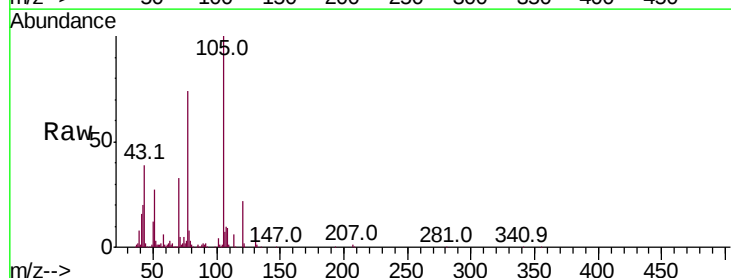
RT: 7.38 min Scan# 900

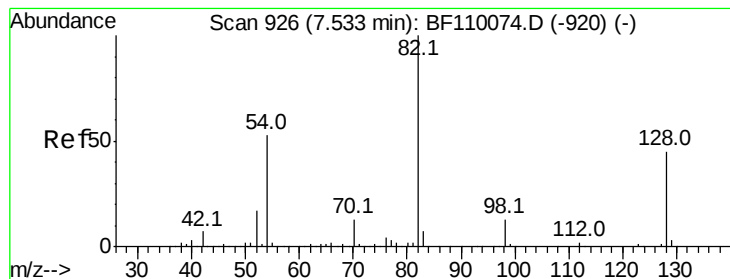
Delta R.T. 0.00 min

Lab File: BF110305.D

Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Resp	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	





#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

Tot Ion: 82 Resp: 466030

Ion Ratio Lower Upper

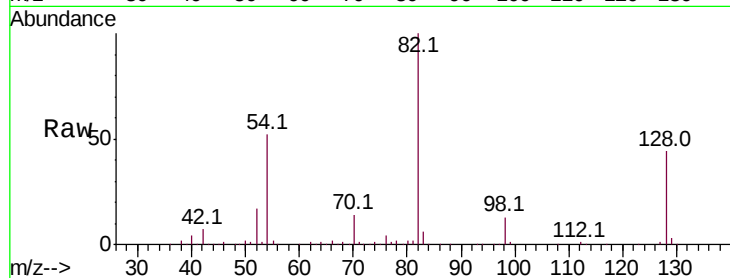
82 100

128 44.4 34.2 51.2

54 51.8 38.6 58.0

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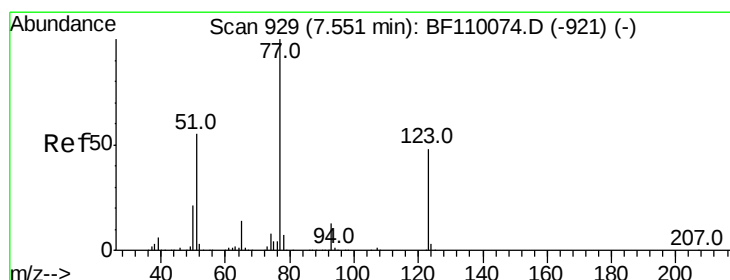
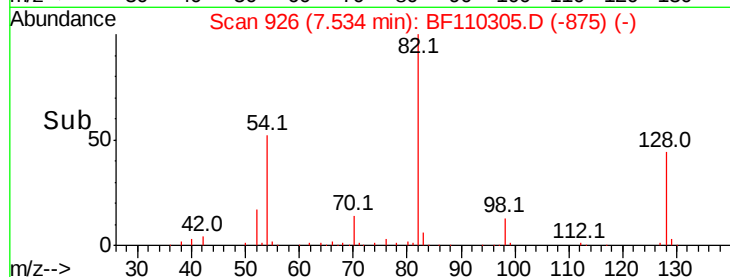
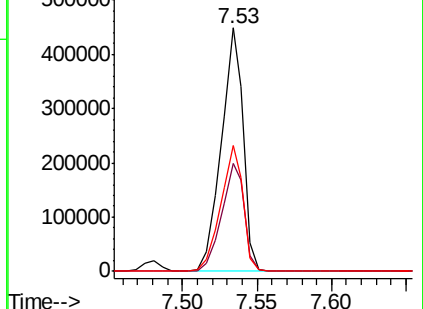
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Abundance Ion 82.00 (81.70 to 82.70): BF1

Ion 128.00 (127.70 to 128.70): BF1

Ion 54.00 (53.70 to 54.70): BF1



#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

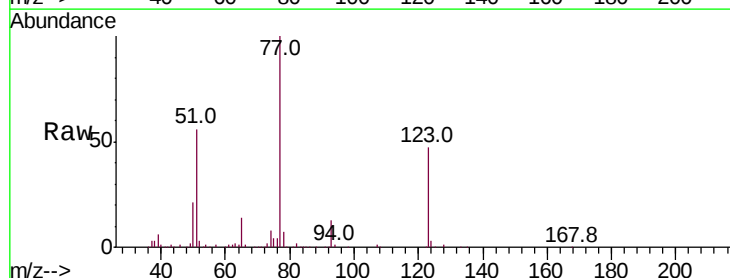
Tgt Ion: 77 Resp: 225830

Ion Ratio Lower Upper

77 100

123 46.8 35.7 53.5

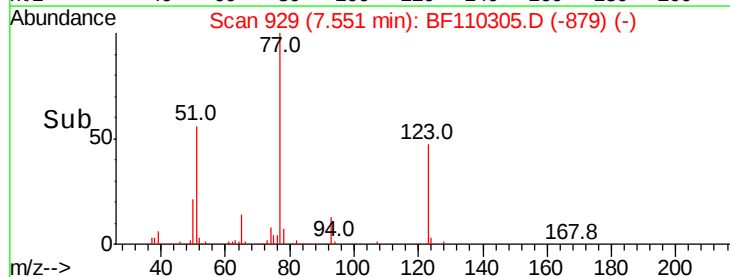
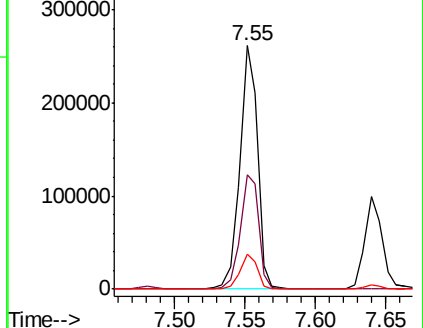
65 14.3 10.7 16.1

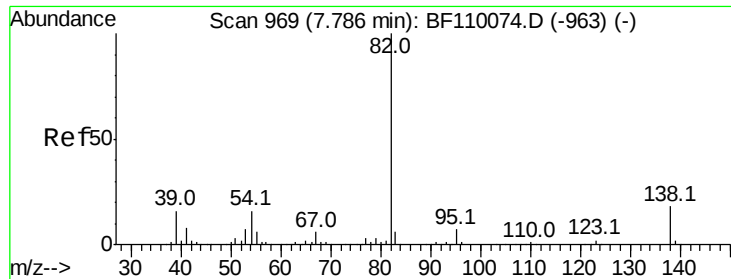


Abundance Ion 77.00 (76.70 to 77.70): BF1

Ion 123.00 (122.70 to 123.70): BF1

Ion 65.00 (64.70 to 65.70): BF1





#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

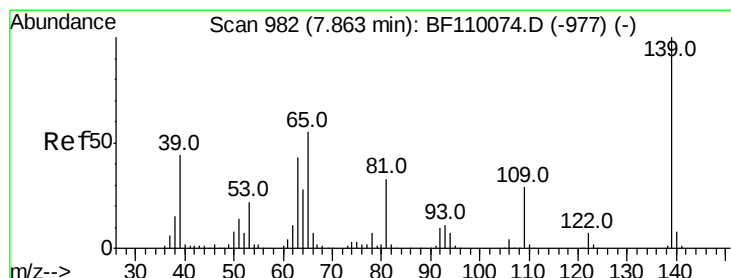
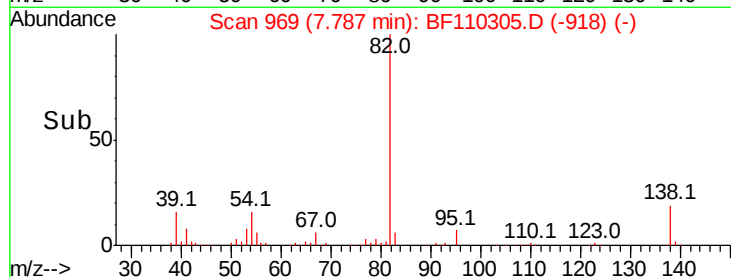
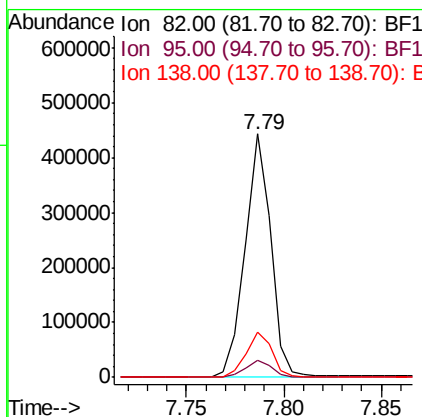
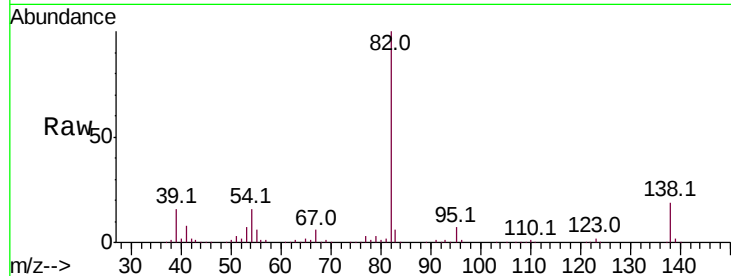
ClientSampleId :

RED-SHALEMSD

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

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#26

2-Nitrophenol

Concen: 34.165 ng

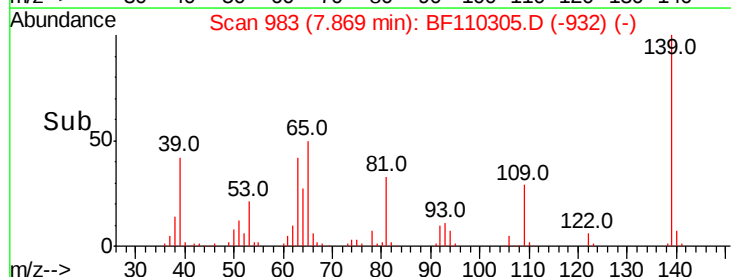
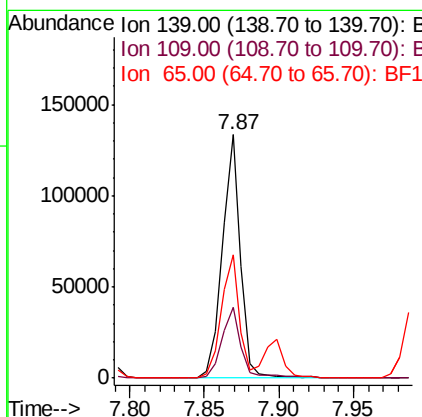
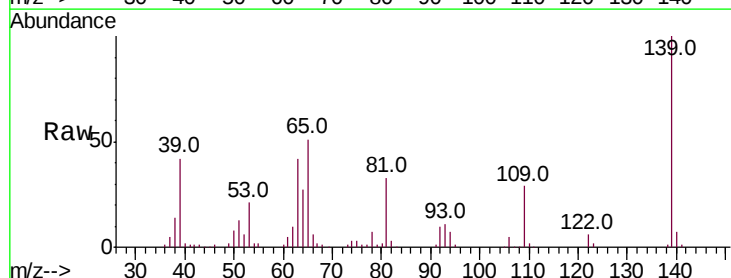
RT: 7.87 min Scan# 983

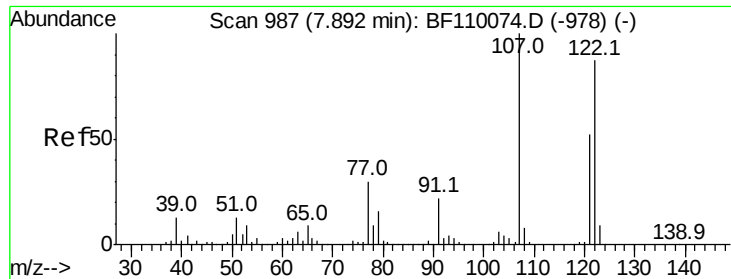
Delta R.T. 0.00 min

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





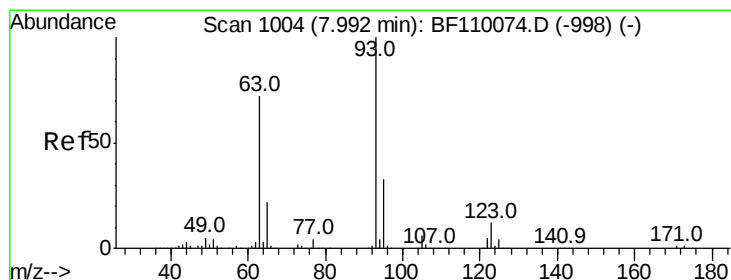
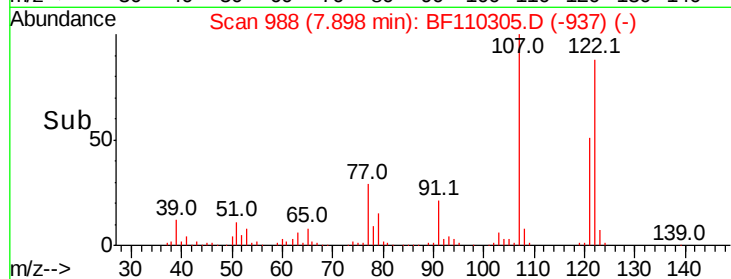
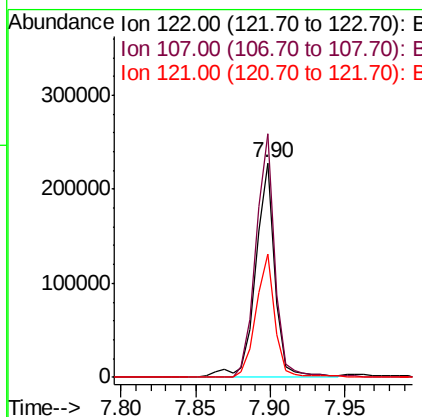
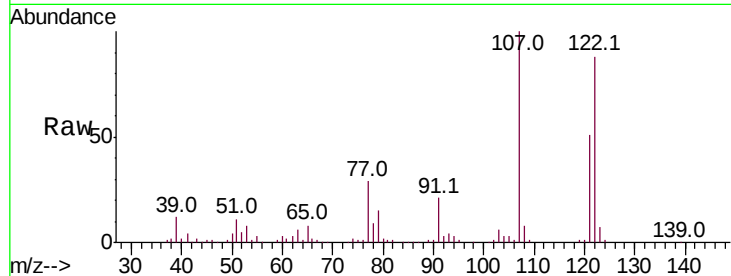
#27
2,4-Dimethylphenol
Concen: 36.542 ng
RT: 7.90 min Scan# 988
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
122	100		
107	113.6	92.5	138.7
121	57.7	45.8	68.8

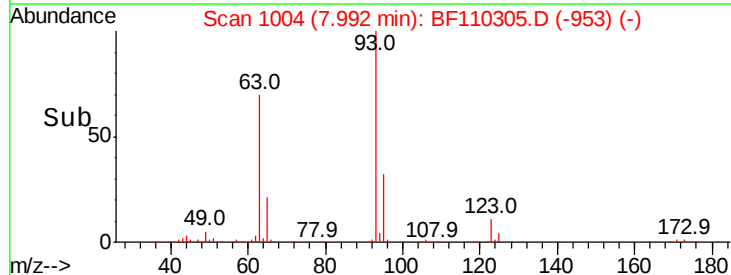
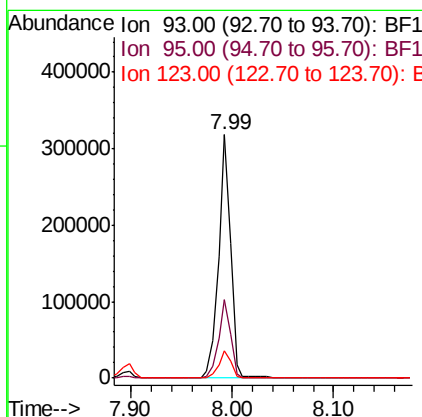
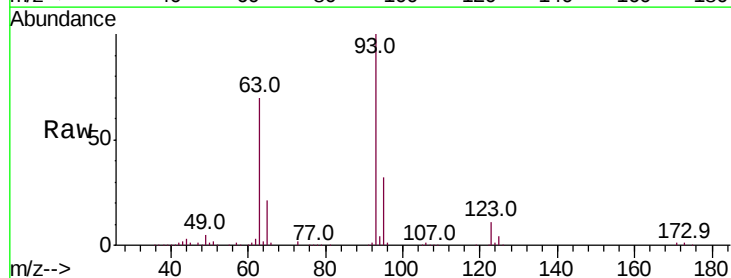
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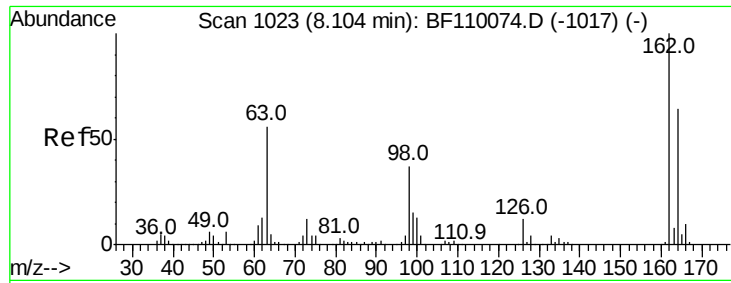
Sohil
10/31/2018 11:15:00 AM



#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	Ratio	Lower	Upper
93	100		
95	32.0	26.4	39.6
123	11.1	9.0	13.6





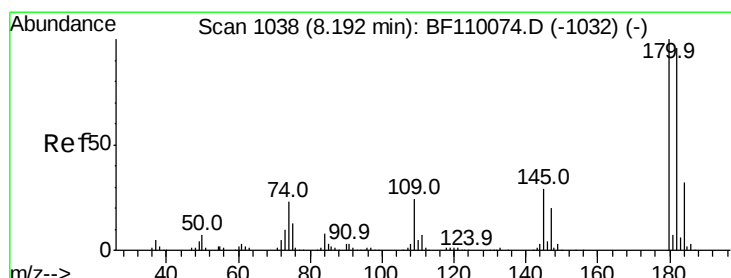
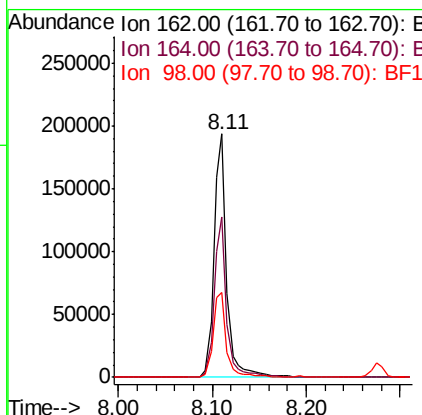
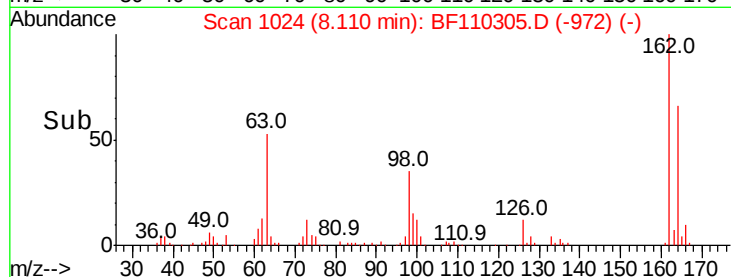
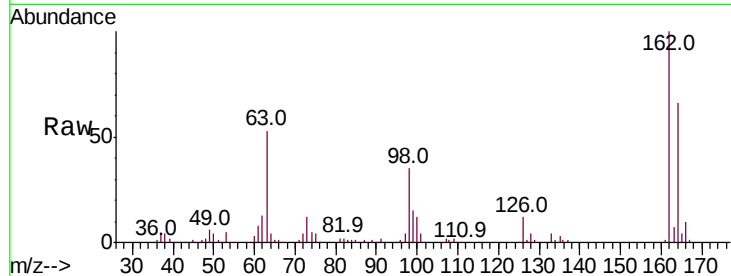
#29
 2,4-Dichlorophenol
 Concen: 33.229 ng
 RT: 8.11 min Scan# 1024
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tot Ion	Ratio	Resp Lower	Upper
162	100		
164	65.7	44.6	84.6
98	34.8	17.4	57.4

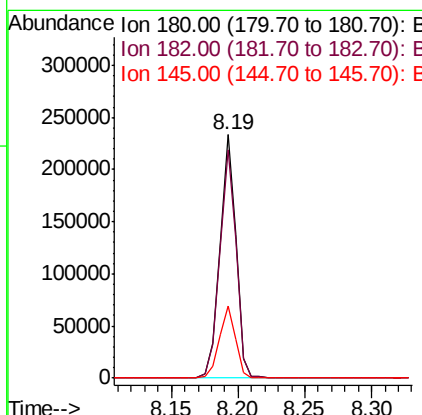
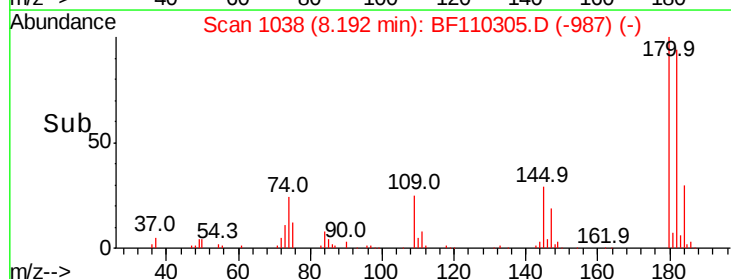
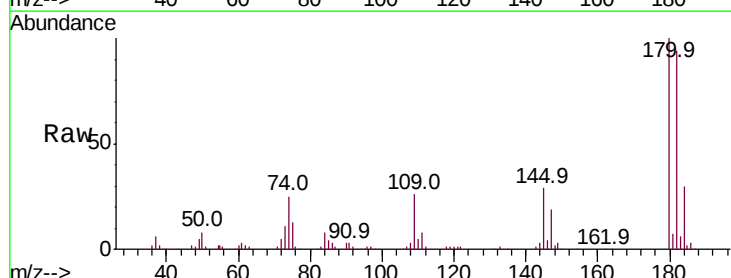
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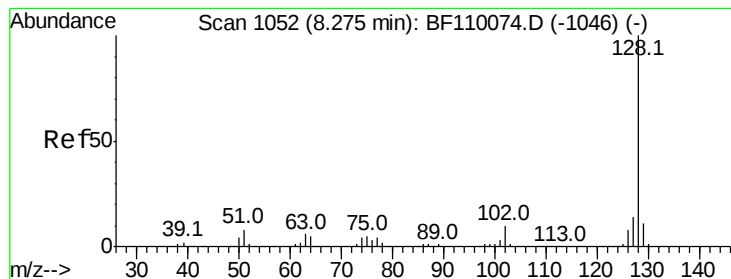
Sohil
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#30
 1,2,4-Trichlorobenzene
 Concen: 31.896 ng
 RT: 8.19 min Scan# 1038
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Resp 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

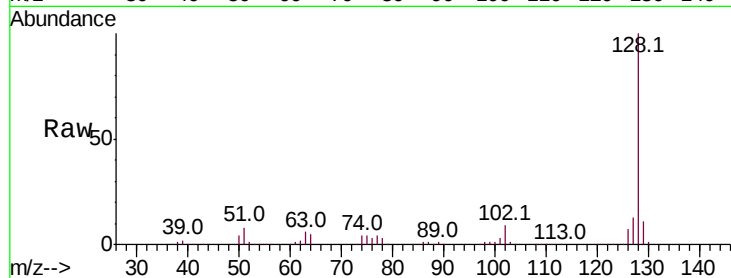
ClientSampleId :

RED-SHALEMSD

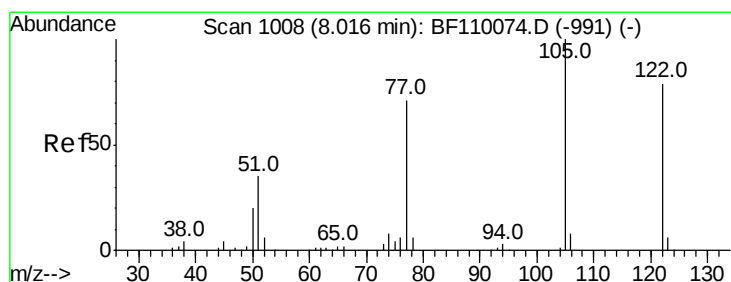
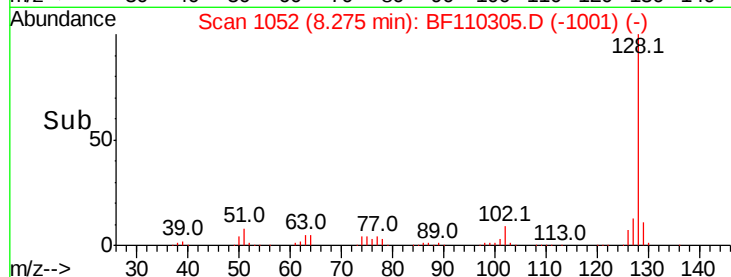
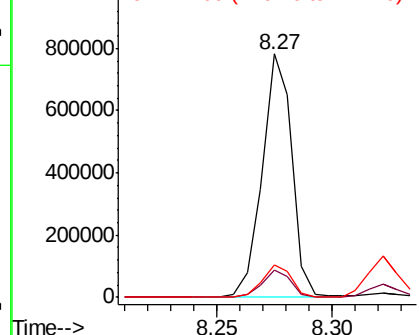
Tot Ion:	128	Resp:	700101
Ion Ratio	Lower	Upper	
128	100		
129	11.4	8.8	13.2
127	13.1	10.8	16.2

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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: 2.094 ng m

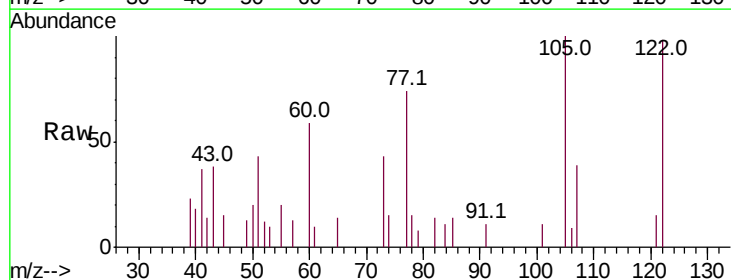
RT: 7.96 min Scan# 998

Delta R.T. -0.06 min

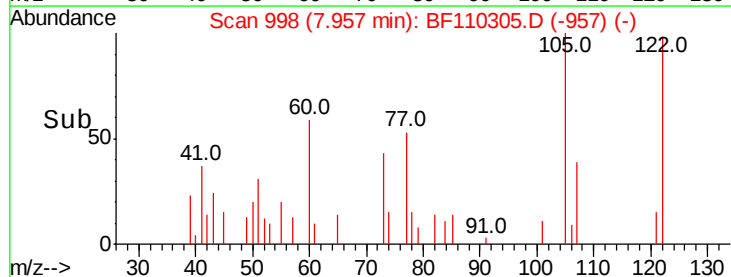
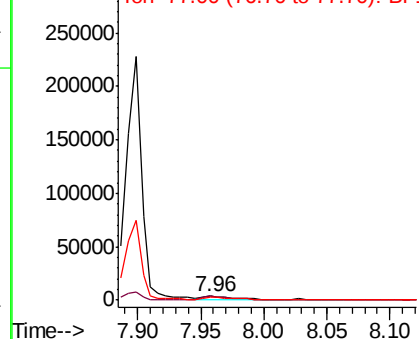
Lab File: BF110305.D

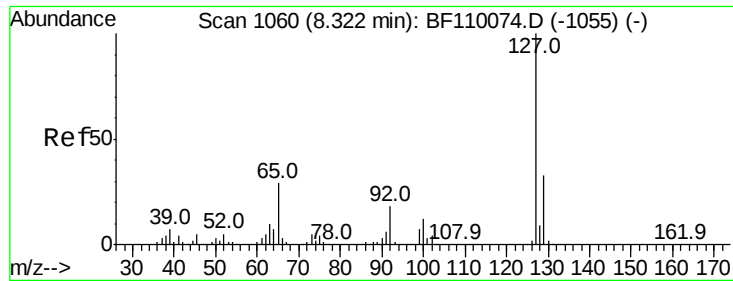
Acq: 30 Oct 2018 16:14

Tgt Ion:	122	Resp:	8987
Ion Ratio	Lower	Upper	
122	100		
105	101.7	109.0	149.0#
77	75.5	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





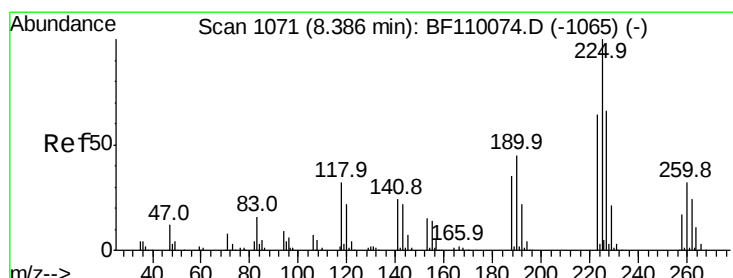
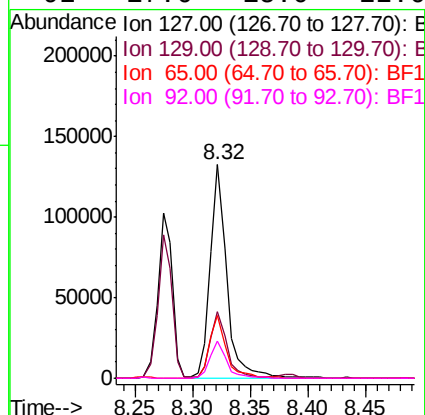
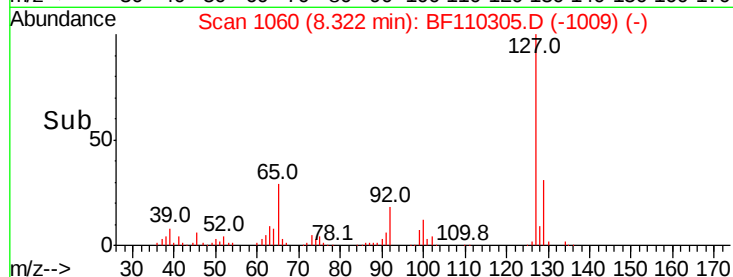
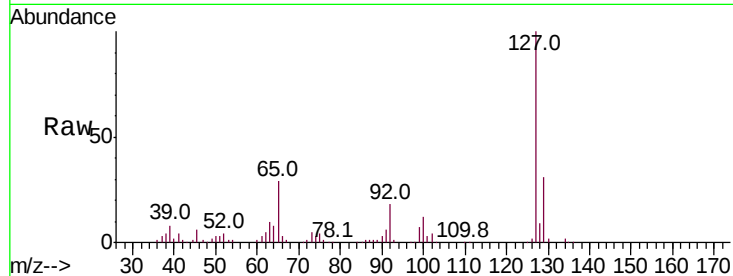
#33
4-Chloroaniline
Concen: 15.965 ng
RT: 8.32 min Scan# 1060
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ion	Ratio	Resp	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		

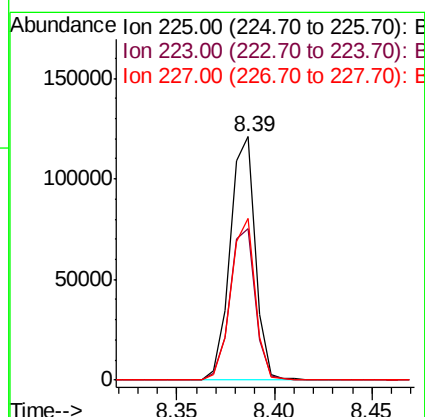
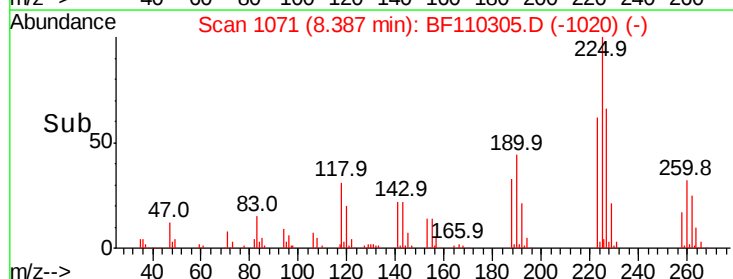
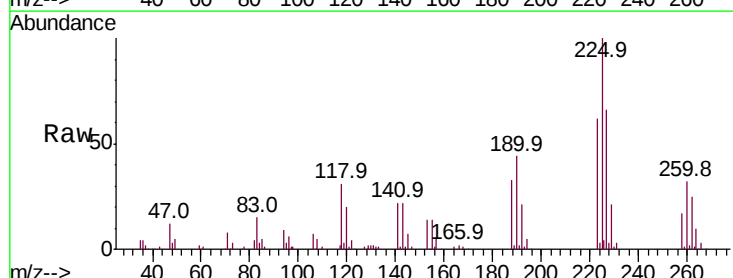
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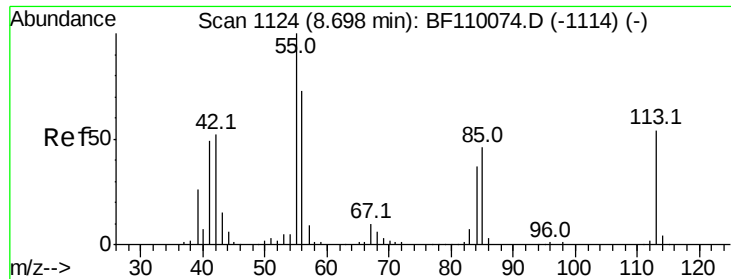
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#34
Hexachlorobutadiene
Concen: 30.975 ng
RT: 8.39 min Scan# 1071
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
225	100				
223	62.1	51.4	77.2		
227	66.4	51.0	76.6		





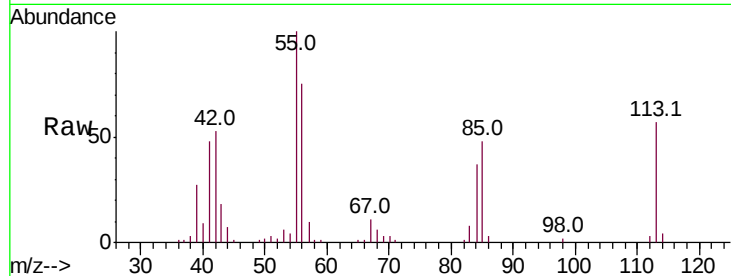
#35
 Caprolactam
 Concen: 29.250 ng/ml
 RT: 8.68 min Scan# 1121
 Delta R.T. -0.02 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleID :
 RED-SHALEMSD

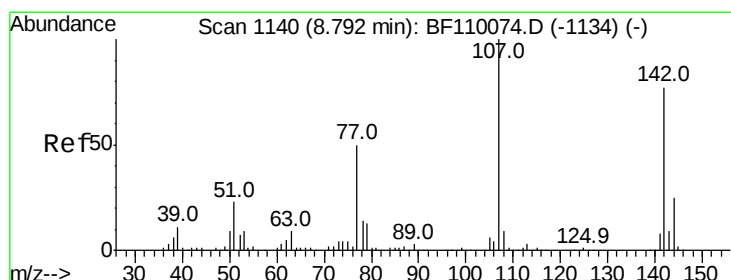
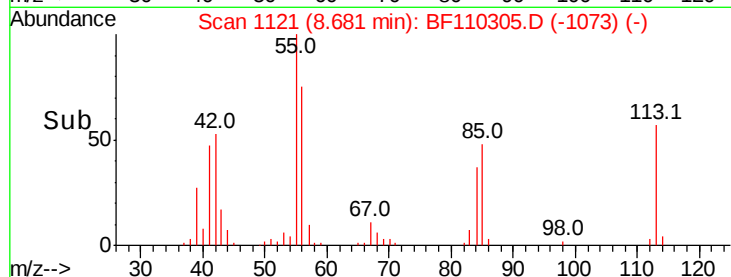
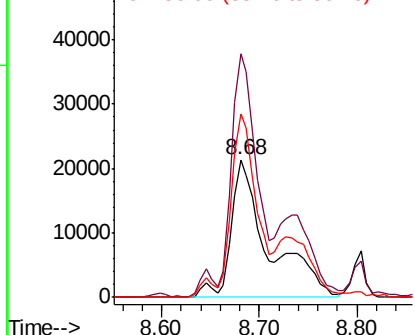
Tot Ion:113 Resp: 57195
 Ion Ratio Lower Upper
 113 100
 55 176.8 142.8 182.8
 56 133.5 105.0 145.0

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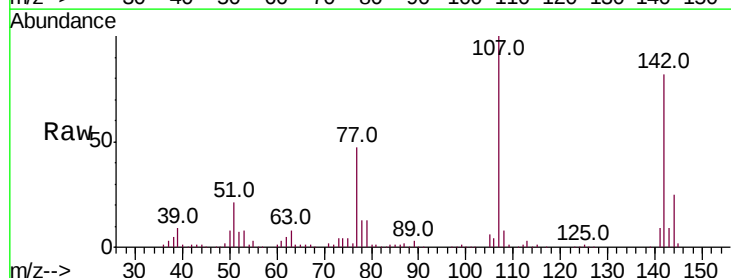


Abundance Ion 113.00 (112.70 to 113.70): E
 Ion 55.00 (54.70 to 55.70): BF1
 Ion 56.00 (55.70 to 56.70): BF1

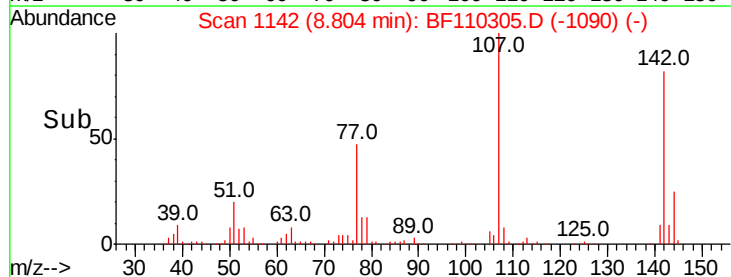
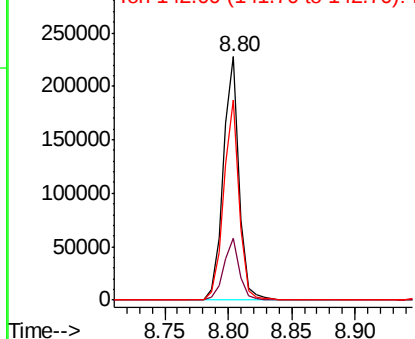


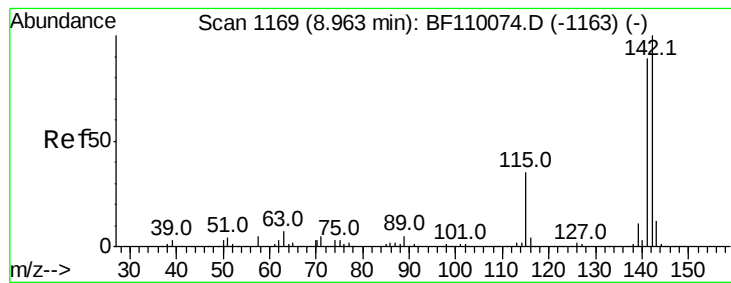
#36
 4-Chloro-3-methylphenol
 Concen: 32.649 ng/ml
 RT: 8.80 min Scan# 1142
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

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



Abundance Ion 107.00 (106.70 to 107.70): E
 Ion 144.00 (143.70 to 144.70): E
 Ion 142.00 (141.70 to 142.70): E





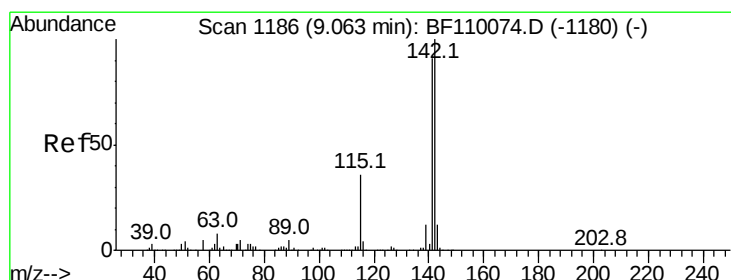
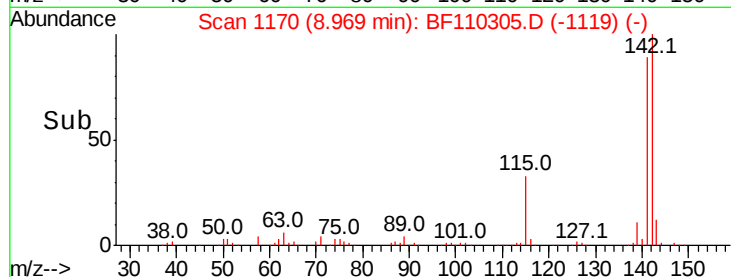
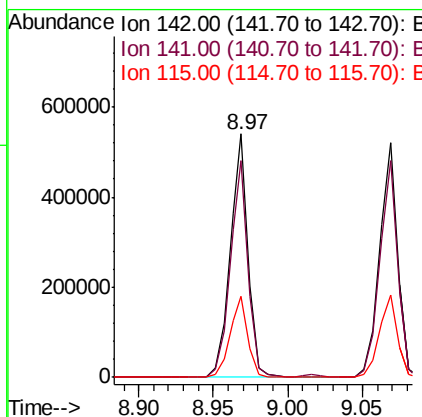
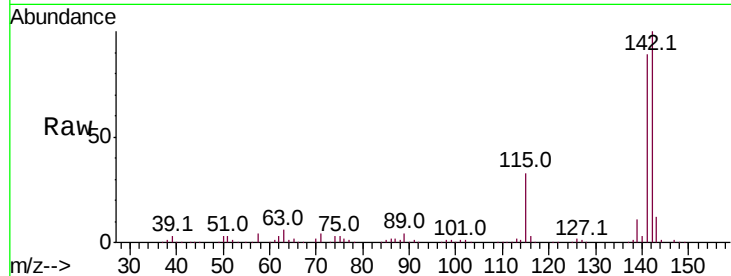
#37
 2-Methylnaphthalene
 Concen: 36.888 ng
 RT: 8.97 min Scan# 1170
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
142	100		
141	89.0	71.4	107.2
115	33.1	28.7	43.1

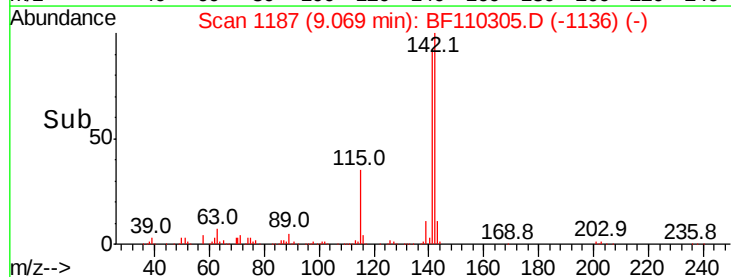
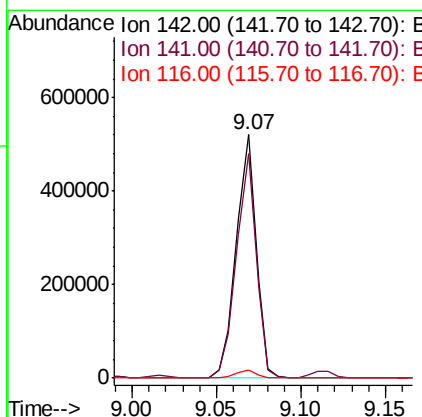
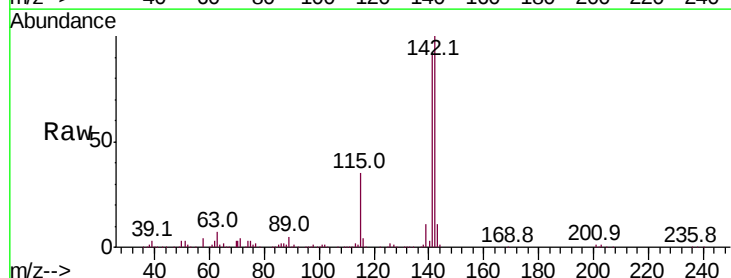
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#38
 1-Methylnaphthalene
 Concen: 35.893 ng
 RT: 9.07 min Scan# 1187
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Lower	Upper
142	100		
141	92.2	74.2	111.4
116	3.6	2.6	4.0





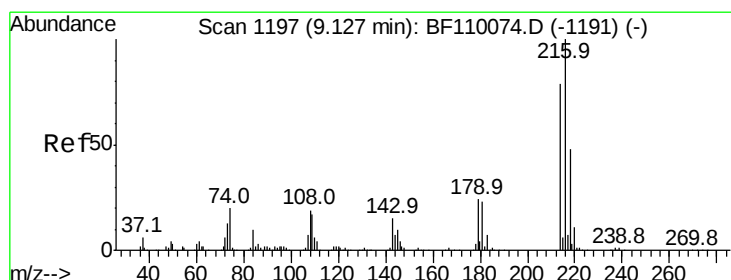
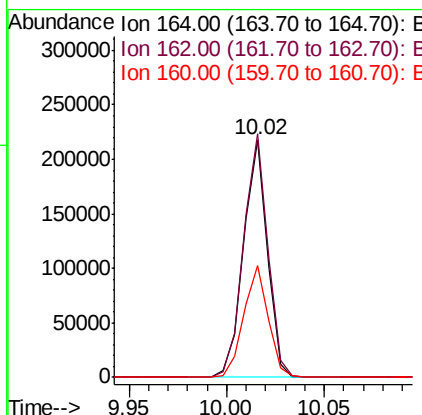
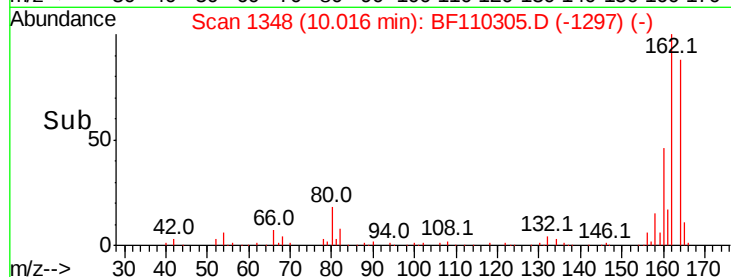
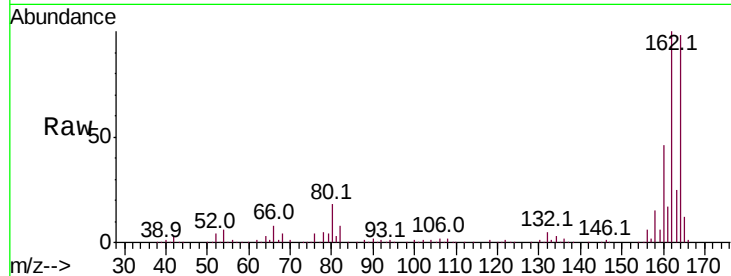
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 10.02 min Scan# 1348
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
164	100		
162	102.5	83.0	124.6
160	46.9	37.0	55.6

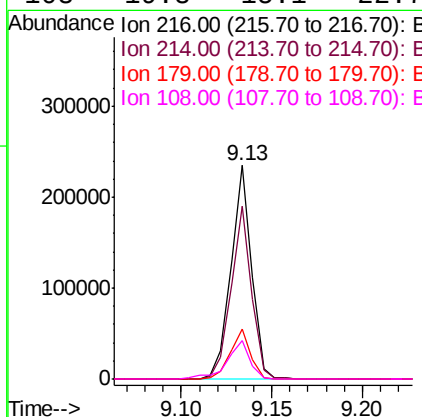
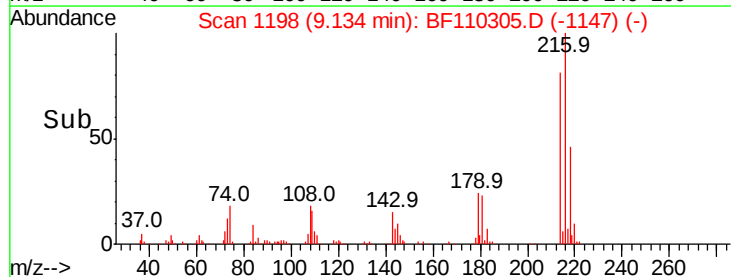
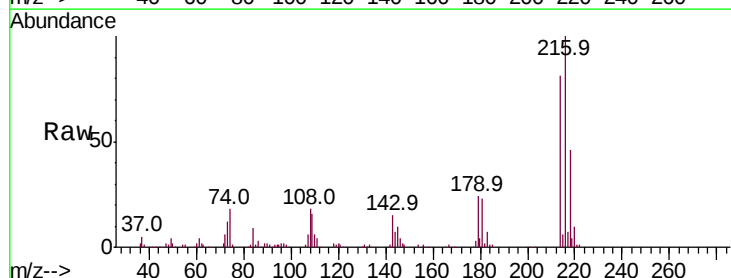
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#40
1,2,4,5-Tetrachlorobenzene
Concen: 32.281 ng
RT: 9.13 min Scan# 1198
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion	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

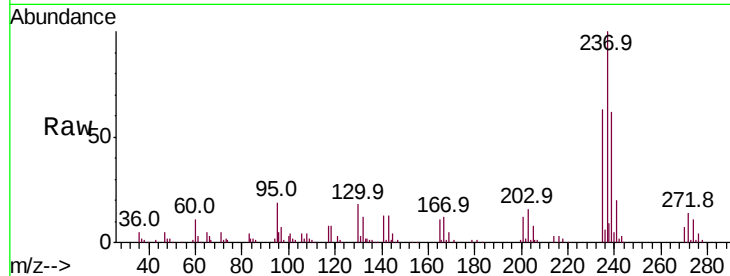
ClientSampleId :

RED-SHALEMSD

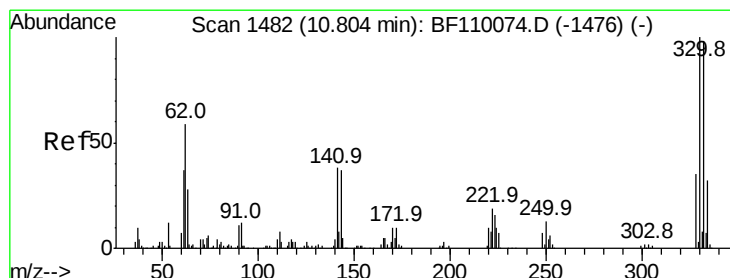
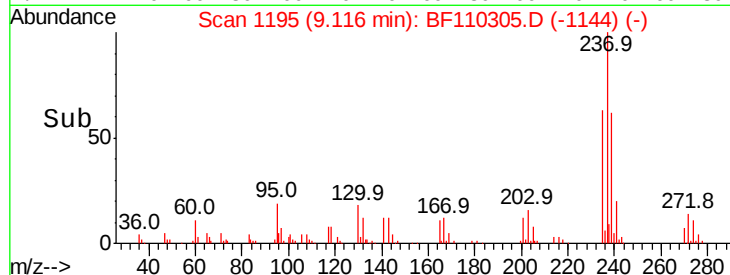
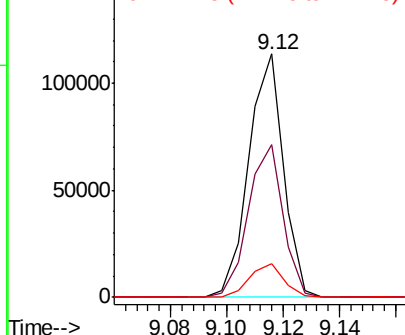
Tot Ion:	237	Resp:	96781
Ion Ratio	Lower	Upper	
237	100		
235	63.0	43.1	83.1
272	13.7	0.0	32.6

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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

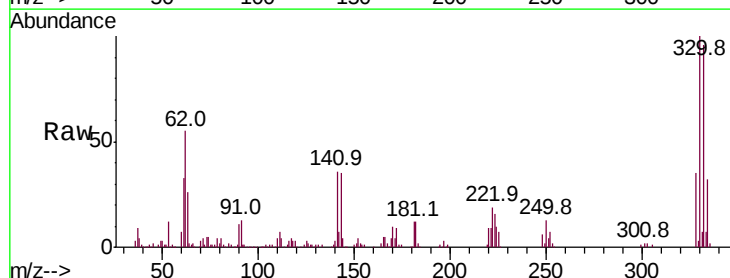
RT: 10.81 min Scan# 1483

Delta R.T. 0.00 min

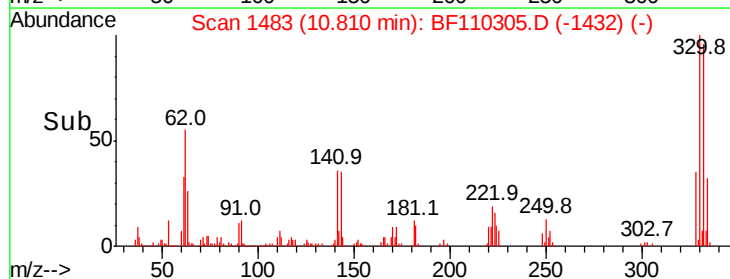
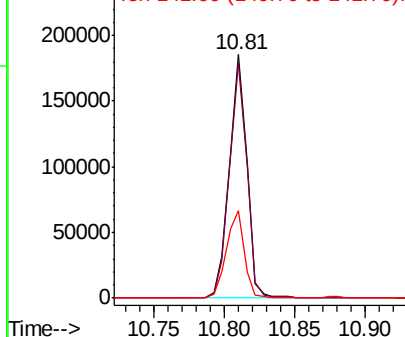
Lab File: BF110305.D

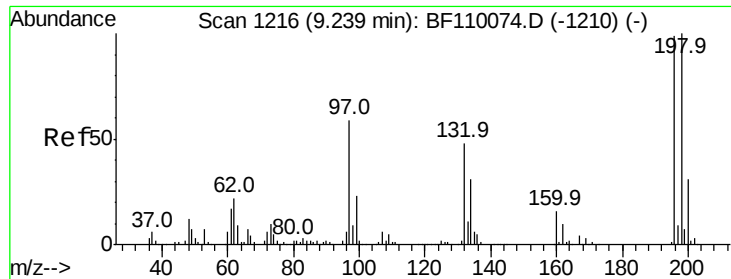
Acq: 30 Oct 2018 16:14

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





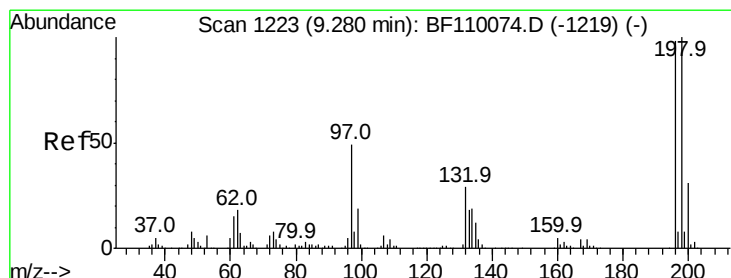
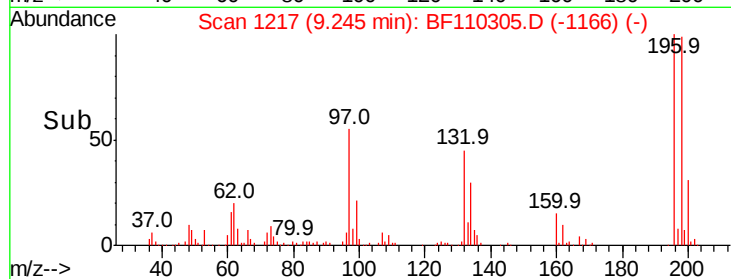
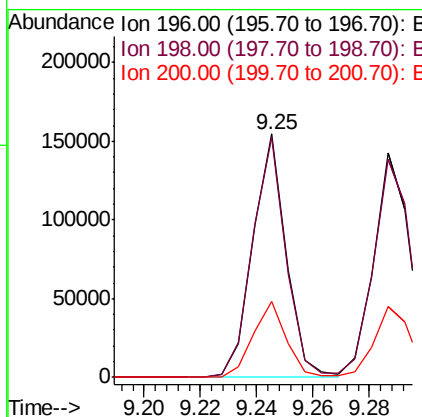
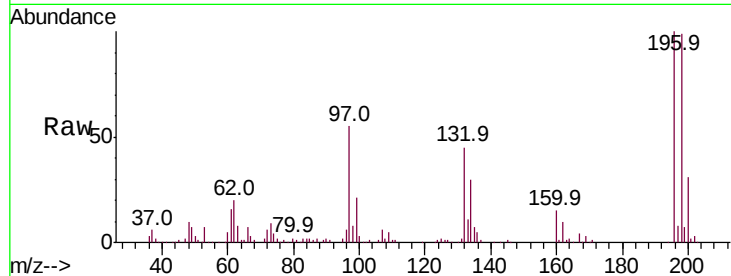
#43
 2,4,6-Trichlorophenol
 Concen: 34.282 ng
 RT: 9.25 min Scan# 1217
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

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

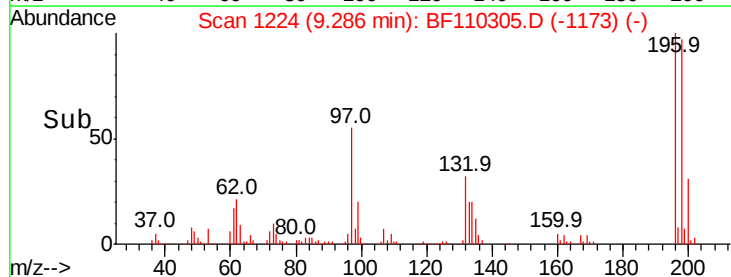
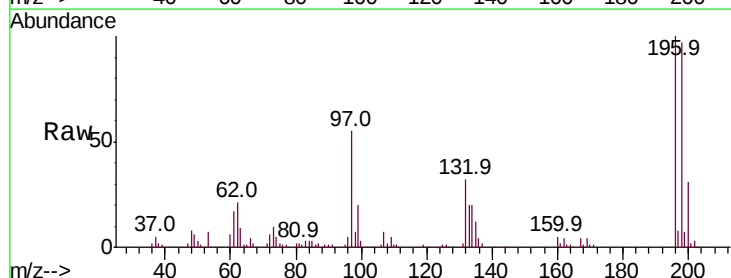
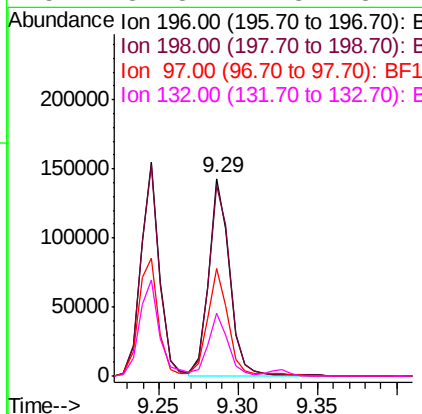
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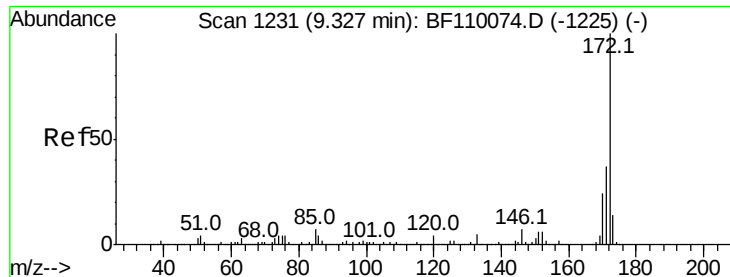
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#44
 2,4,5-Trichlorophenol
 Concen: 33.867 ng
 RT: 9.29 min Scan# 1224
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

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





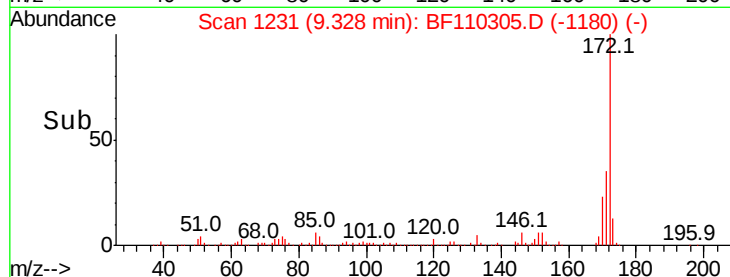
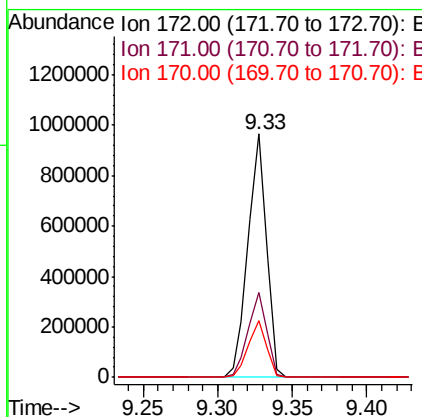
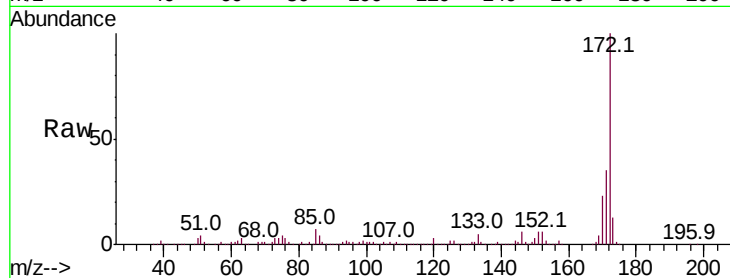
#45
2-Fluorobiphenyl
Concen: 70.948 ng
RT: 9.33 min Scan# 1231
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
172	100		
171	35.1	28.6	43.0
170	23.3	19.7	29.5

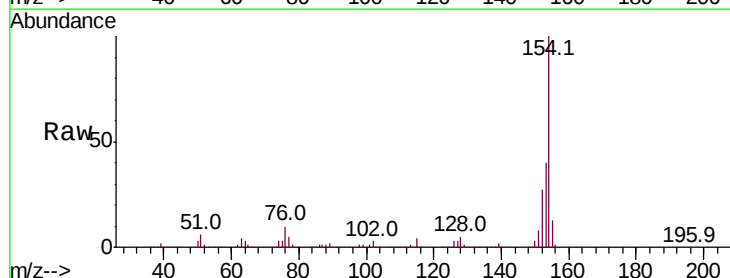
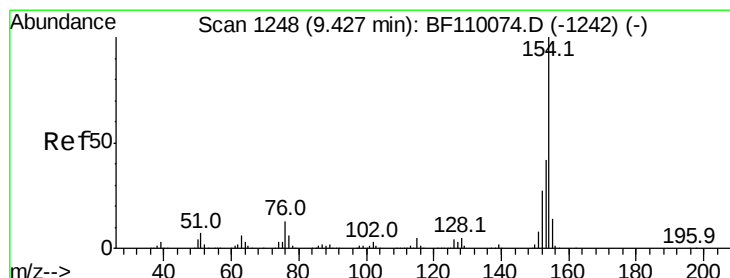
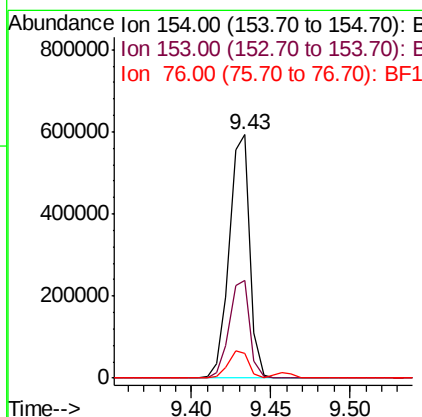
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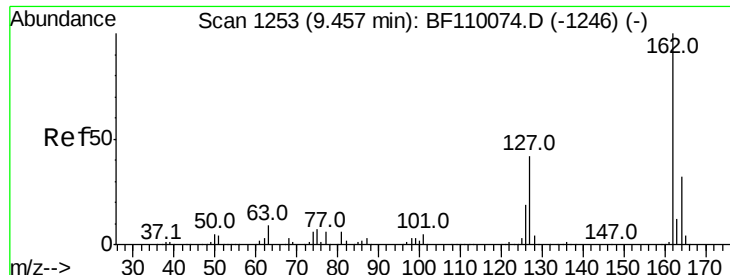
Sohil
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#46
1,1'-Biphenyl
Concen: 31.896 ng
RT: 9.43 min Scan# 1249
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

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





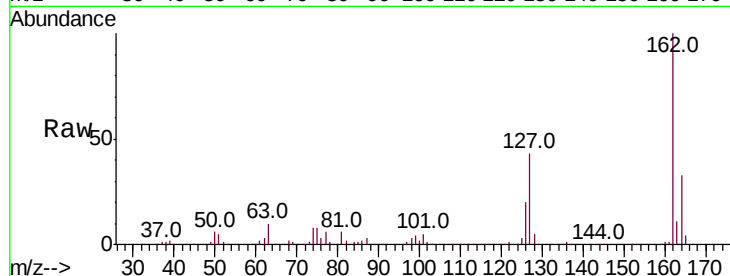
#47
 2-Chloronaphthalene
 Concen: 32.374 ng
 RT: 9.46 min Scan# 1253
 Delta R.T. -0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

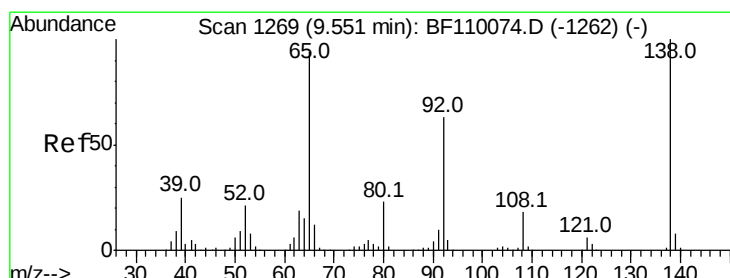
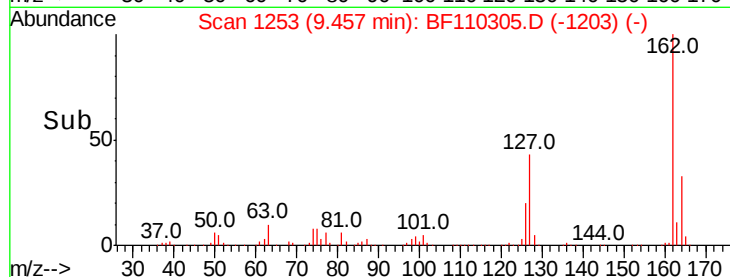
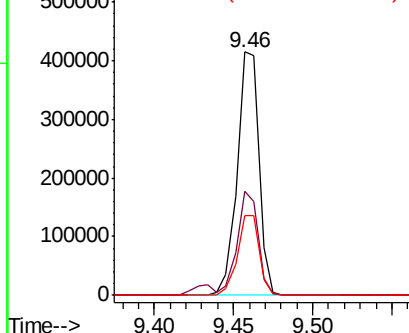
Tot Ion	Ratio	Lower	Upper
162	100		
127	42.9	32.6	48.8
164	32.8	25.9	38.9

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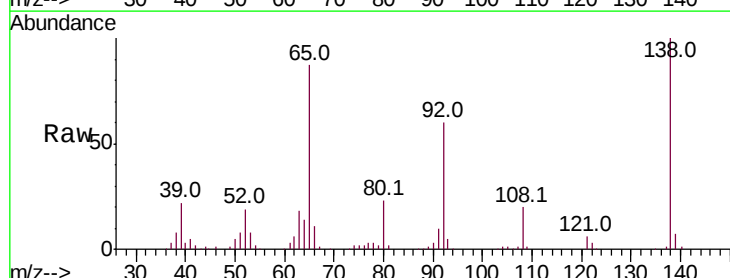


Abundance Ion 162.00 (161.70 to 162.70): E
 Ion 127.00 (126.70 to 127.70): E
 Ion 164.00 (163.70 to 164.70): E

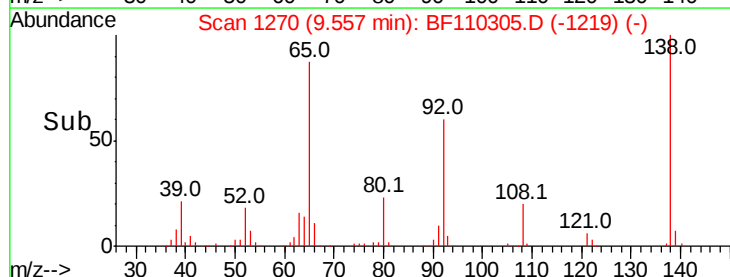
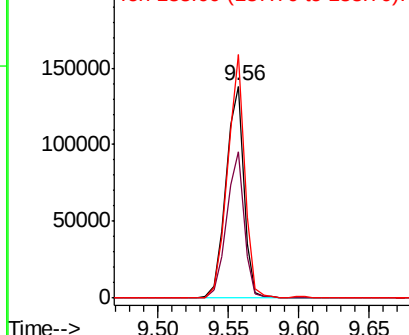


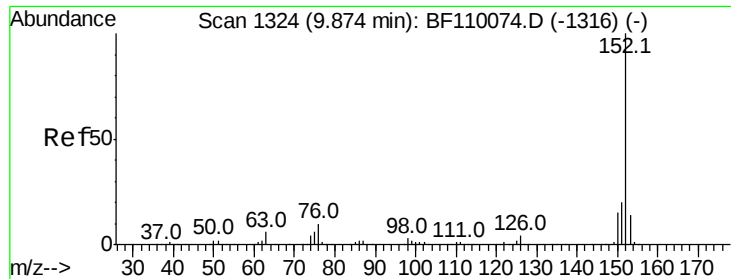
#48
 2-Nitroaniline
 Concen: 33.025 ng
 RT: 9.56 min Scan# 1270
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

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

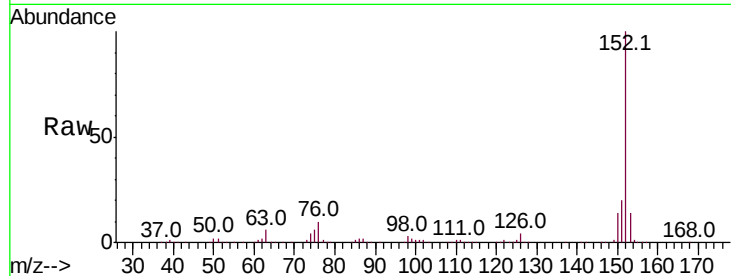
ClientSampleId :

RED-SHALEMSD

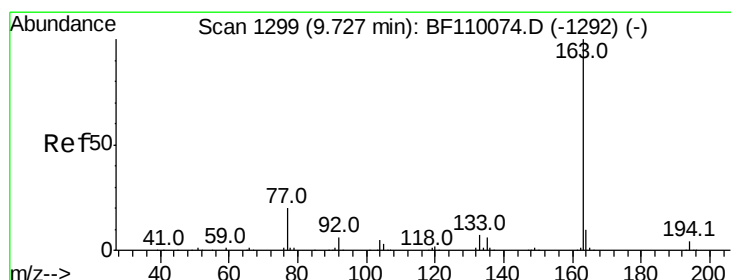
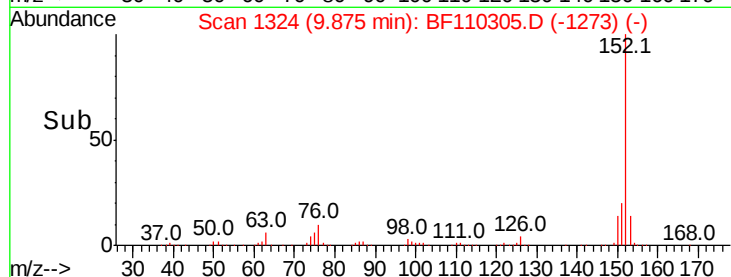
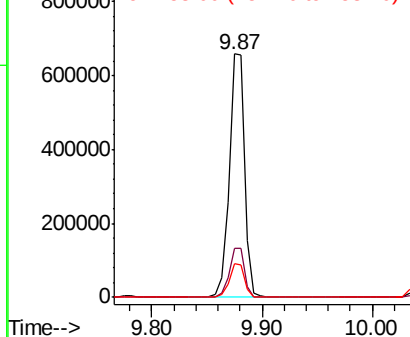
Tot Ion:	152	Resp:	639740
Ion Ratio	Lower	Upper	
152	100		
151	20.1	15.8	23.8
153	14.1	10.4	15.6

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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

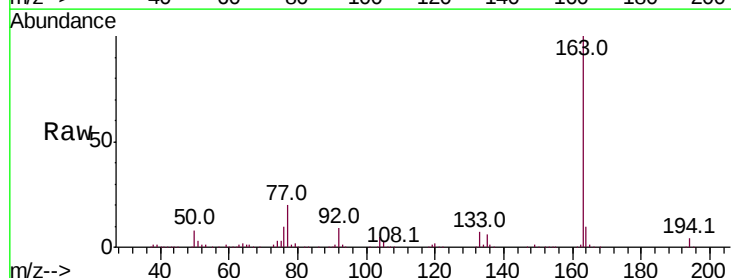
RT: 9.73 min Scan# 1299

Delta R.T. 0.00 min

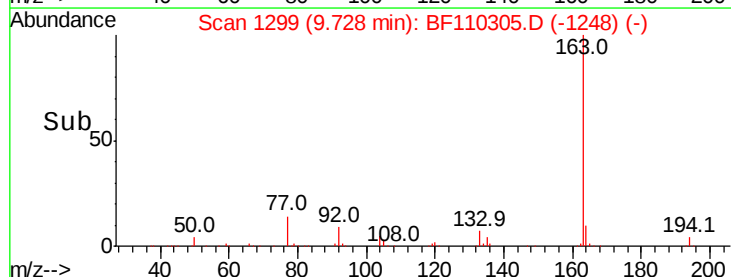
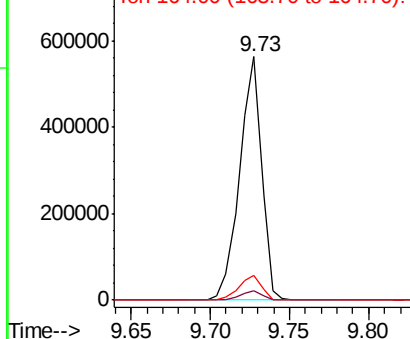
Lab File: BF110305.D

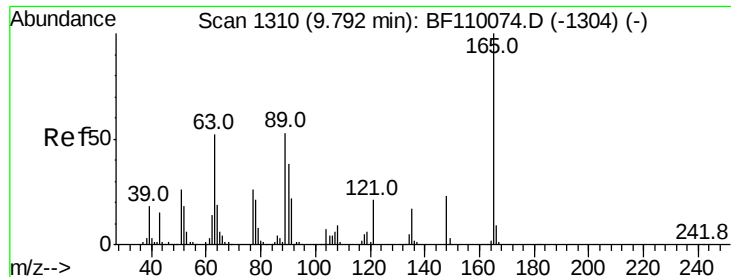
Acq: 30 Oct 2018 16:14

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

Tot Ion:165 Resp: 97565

Ion Ratio Lower Upper

165 100

63 47.6 48.9 73.3#

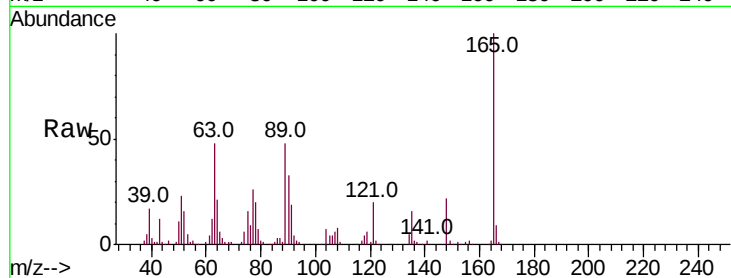
89 47.6 46.6 69.8

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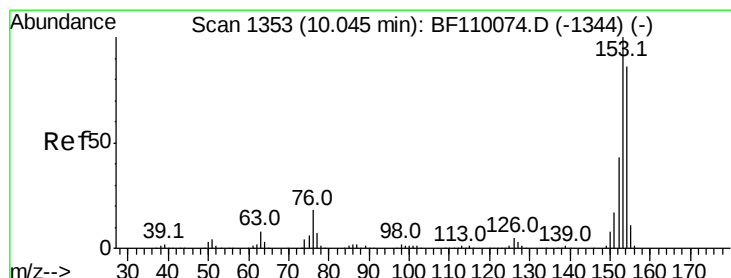
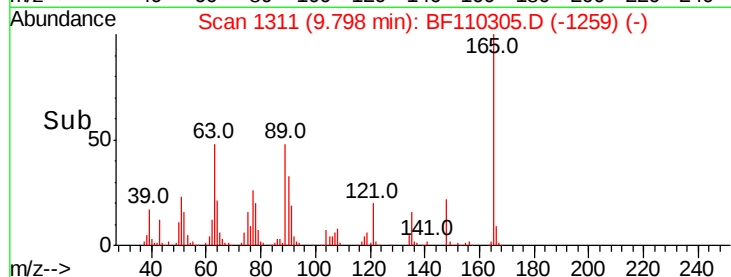
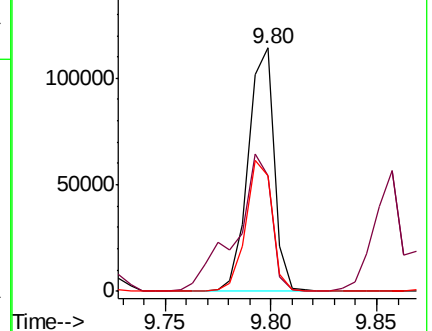
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Abundance Ion 165.00 (164.70 to 165.70): E

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

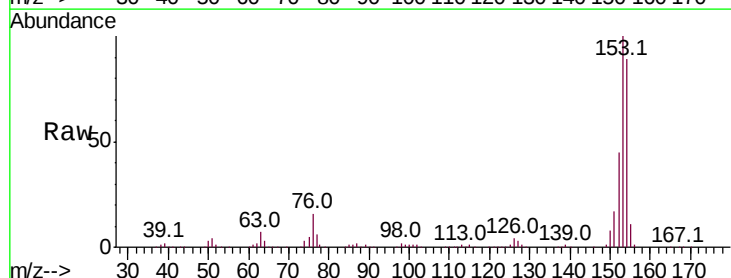
Tgt Ion:154 Resp: 441465

Ion Ratio Lower Upper

154 100

153 113.0 90.1 135.1

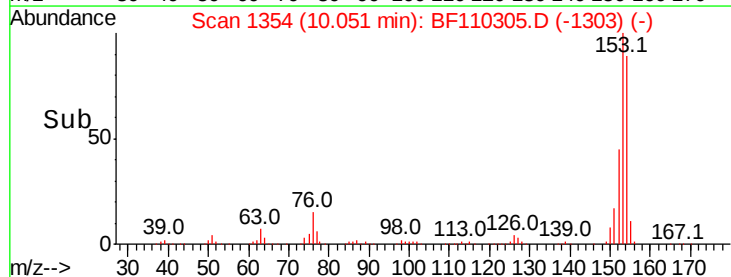
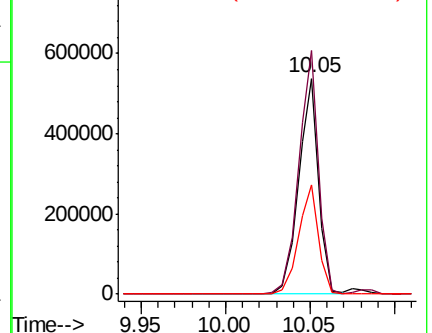
152 50.6 43.4 65.2

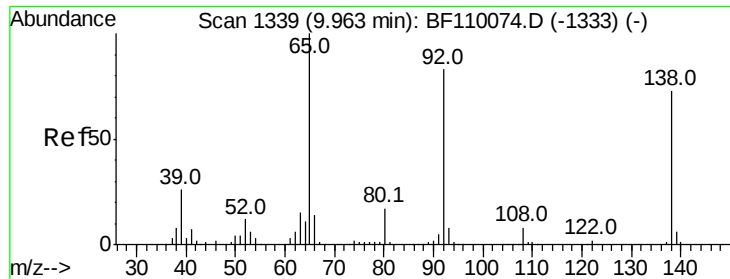


Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E





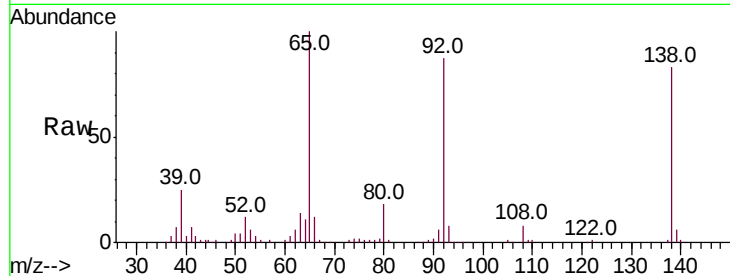
#53
 3-Nitroaniline
 Concen: 24.564 ng
 RT: 9.97 min Scan# 1340
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

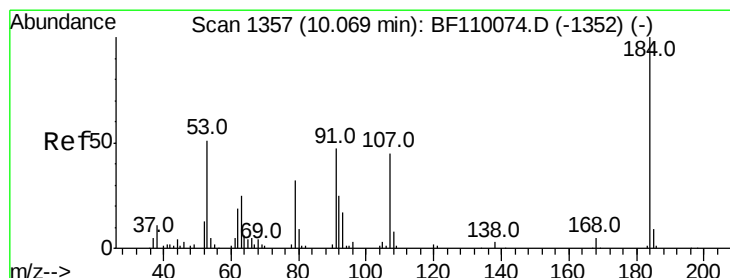
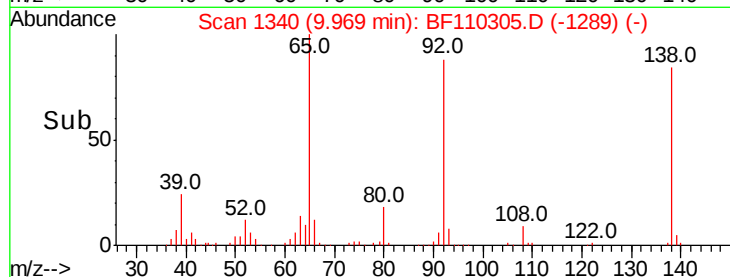
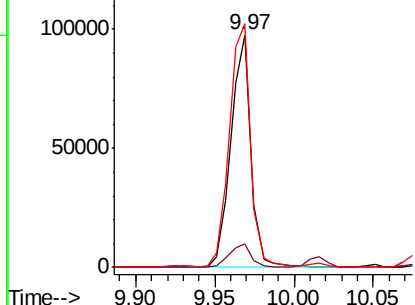
Tot Ion	Ratio	Lower	Upper
138	100		
108	10.2	8.7	13.1
92	104.8	97.0	145.4

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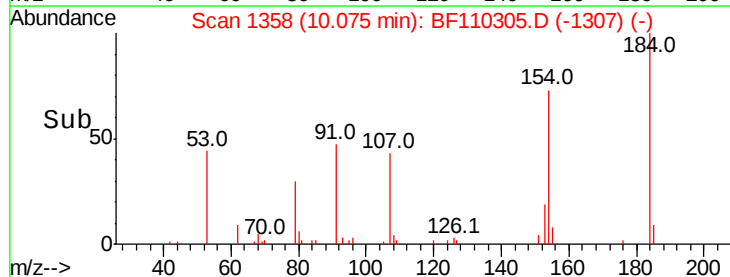
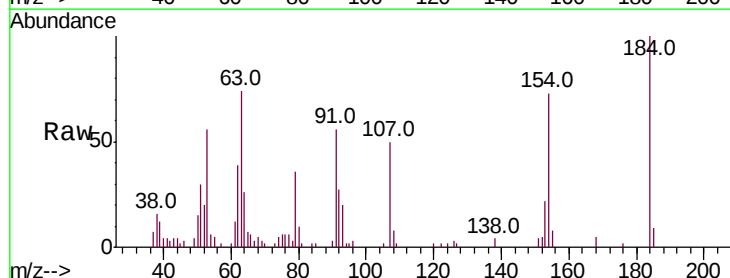
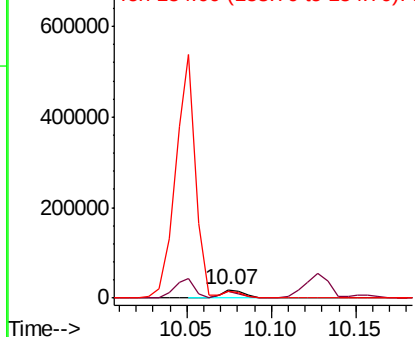
Abundance Ion 138.00 (137.70 to 138.70): E
 Ion 108.00 (107.70 to 108.70): E
 Ion 92.00 (91.70 to 92.70): BF1

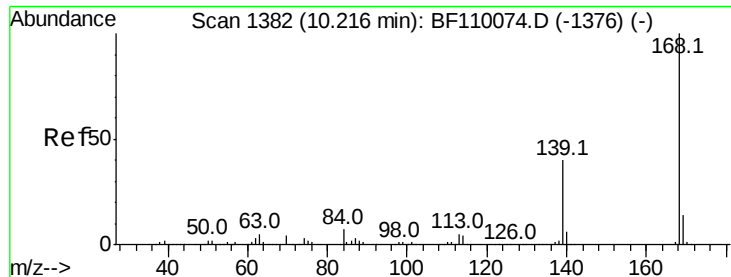


#54
 2,4-Dinitrophenol
 Concen: 20.375 ng
 RT: 10.07 min Scan# 1358
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion	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





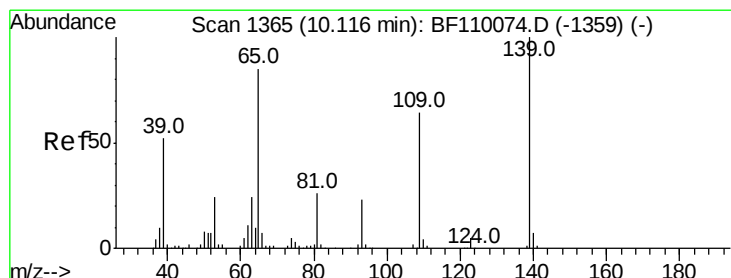
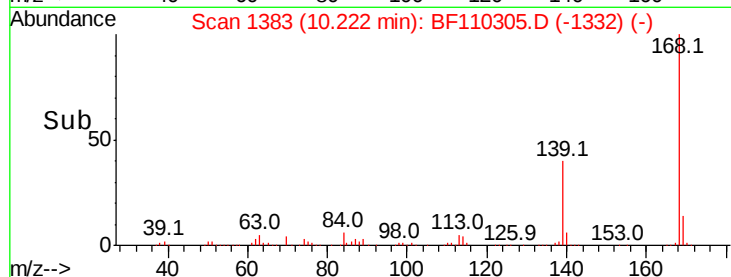
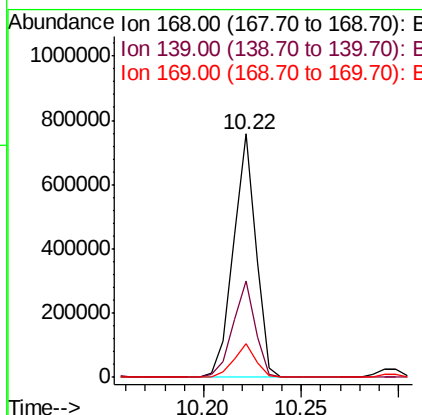
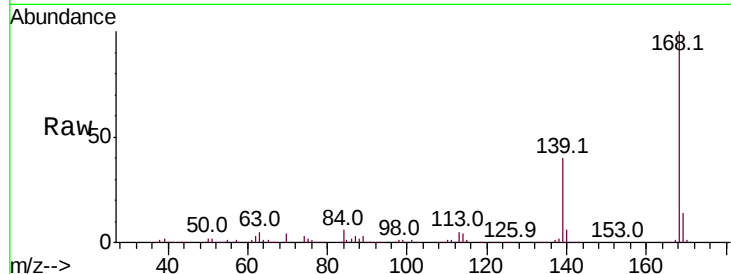
#55
Dibenzofuran
Concen: 36.921 ng
RT: 10.22 min Scan# 1383
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
168	100		
139	39.5	33.0	49.6
169	13.6	11.3	16.9

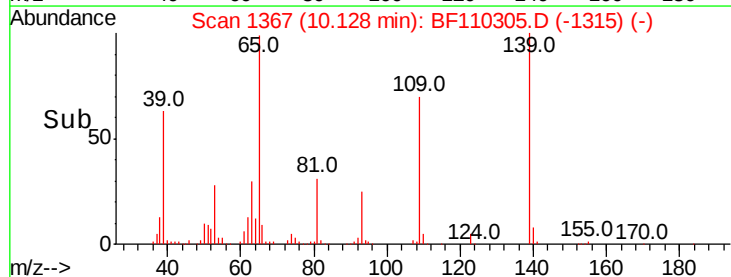
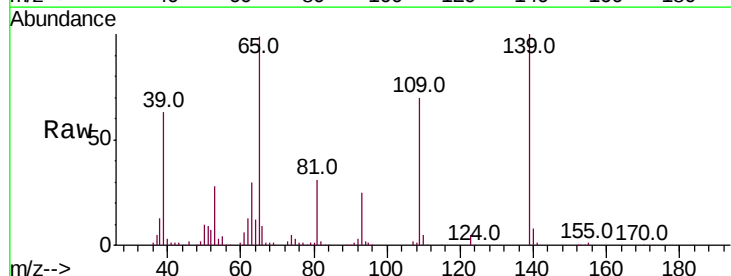
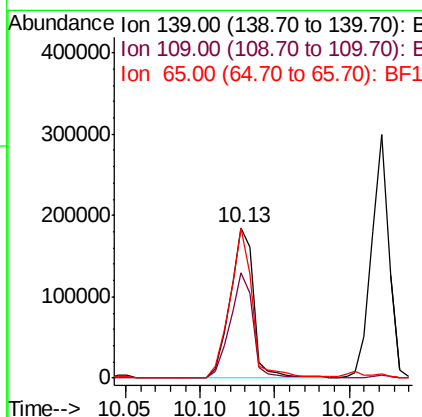
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#56
4-Nitrophenol
Concen: 79.447 ng
RT: 10.13 min Scan# 1367
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

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





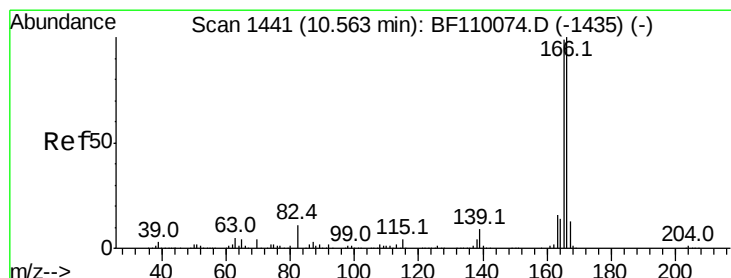
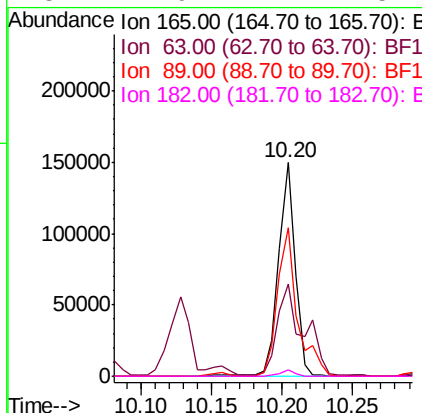
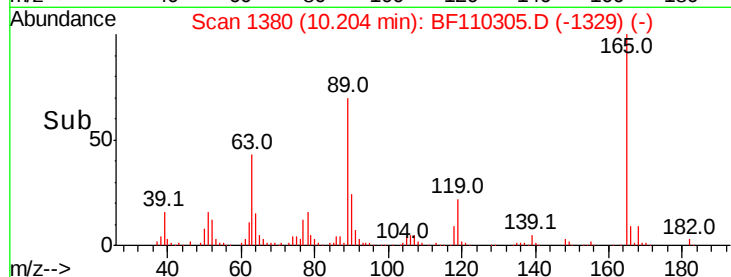
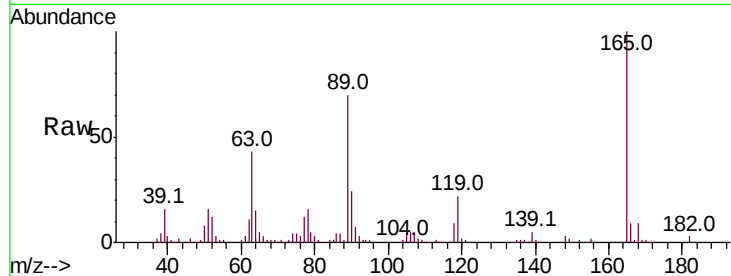
#57
2,4-Dinitrotoluene
Concen: 33.362 ng
RT: 10.20 min Scan# 1380
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Resp	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	

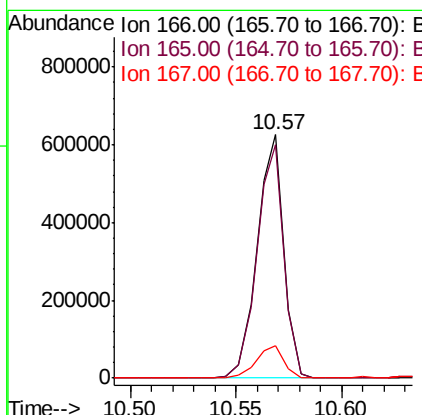
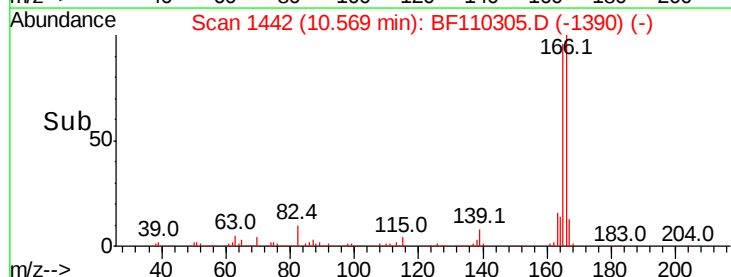
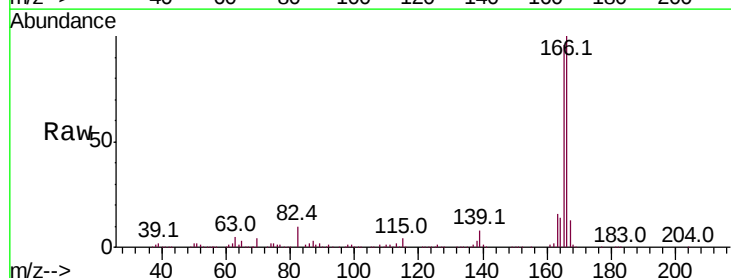
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#58
Fluorene
Concen: 44.683 ng
RT: 10.57 min Scan# 1442
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

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





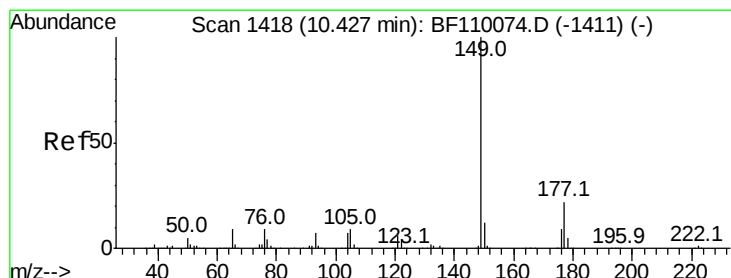
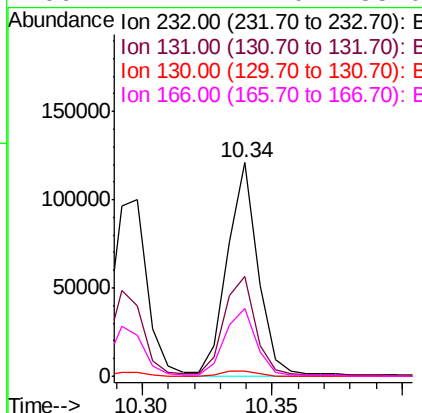
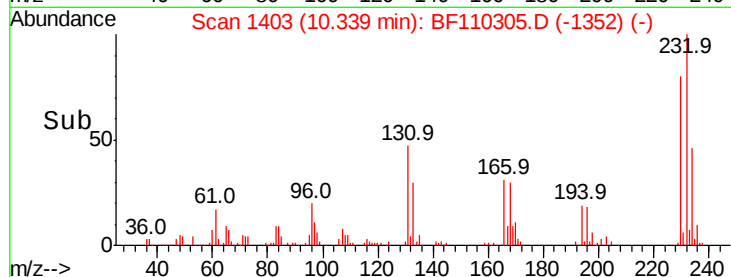
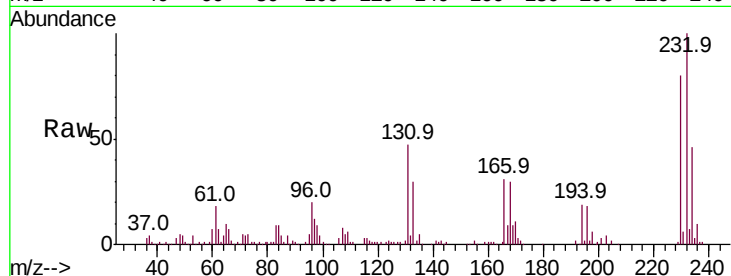
#59
2,3,4,6-Tetrachlorophenol
Concen: 31.420 ng
RT: 10.34 min Scan# 1403
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Resp	Lower	Upper
232	100	100481		
131	41.8		37.0	55.4
130	2.2		1.8	2.6
166	24.4		22.0	33.0

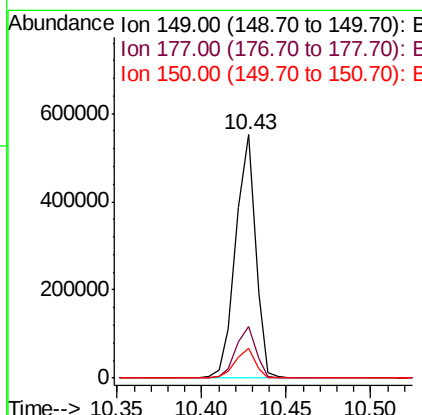
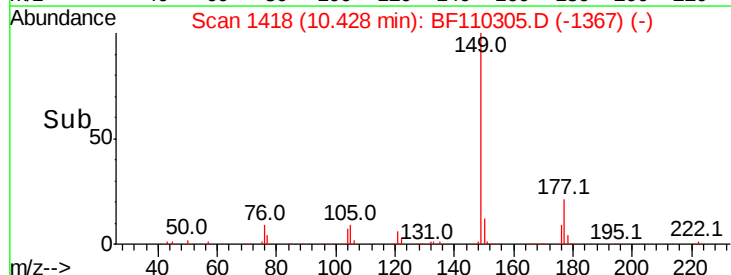
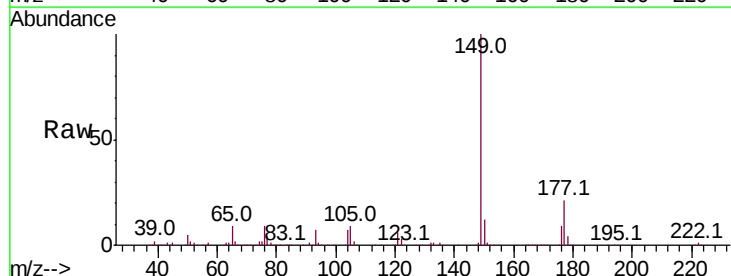
Manual Integrations
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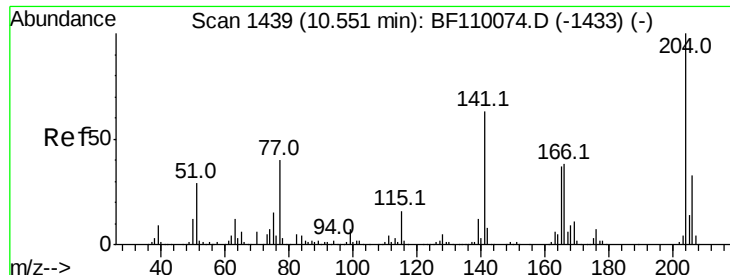
Sohil
10/31/2018 11:15:00 AM



#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	Ratio	Resp	Lower	Upper
149	100	453483		
177	21.4		17.4	26.2
150	12.2		9.8	14.8





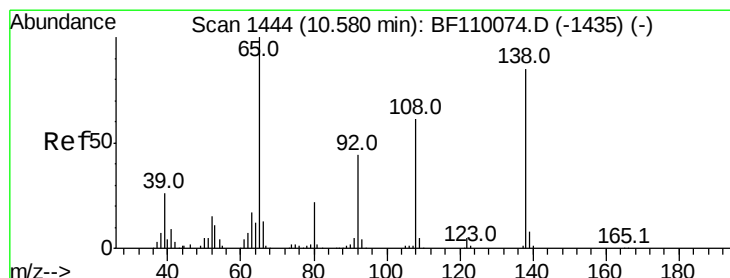
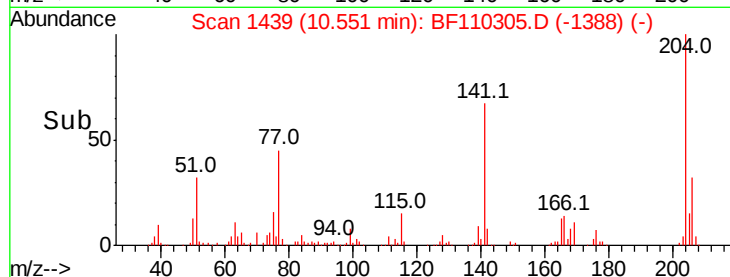
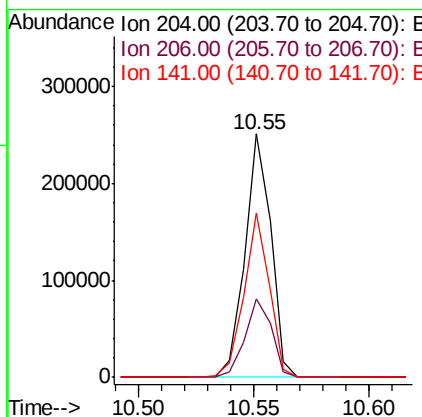
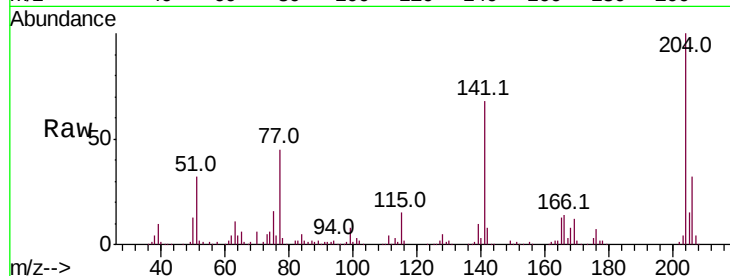
#61
4-Chlorophenyl-phenylether
Concen: 30.720 ng
RT: 10.55 min Scan# 1439
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
204	100		
206	32.4	26.5	39.7
141	67.6	51.8	77.8

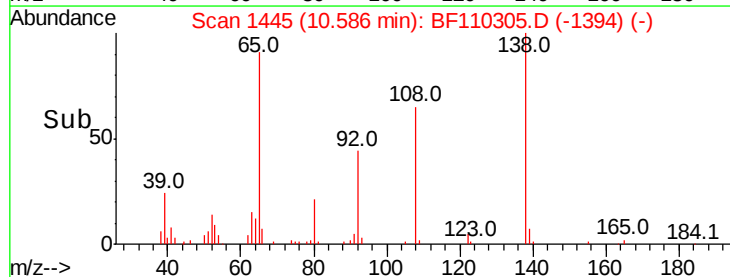
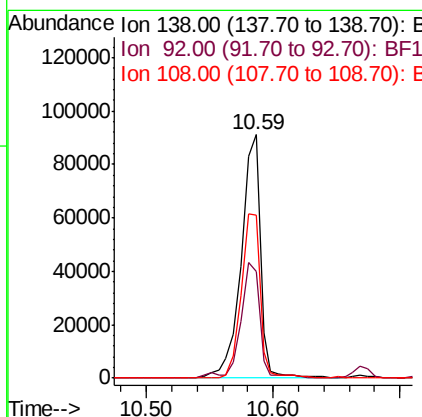
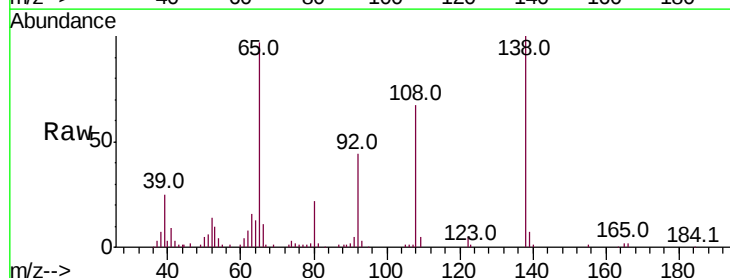
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#62
4-Nitroaniline
Concen: 27.675 ng
RT: 10.59 min Scan# 1445
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

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





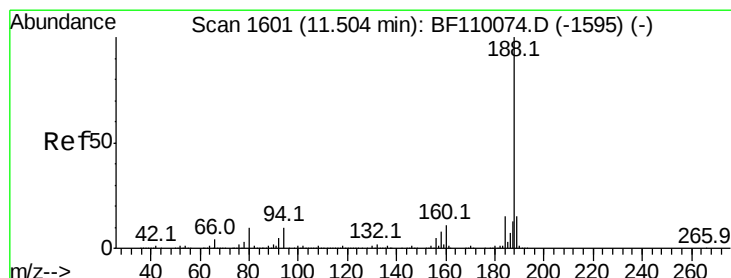
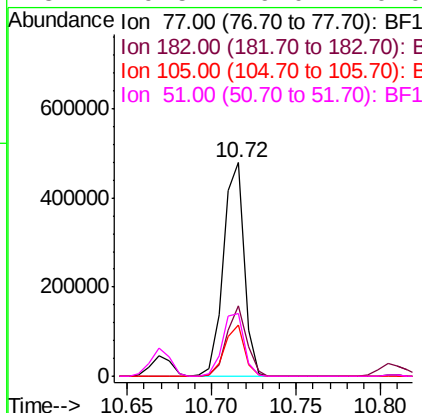
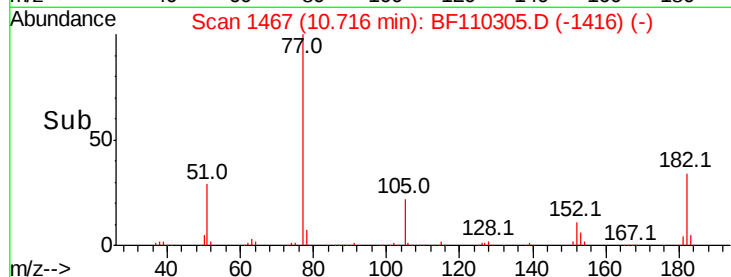
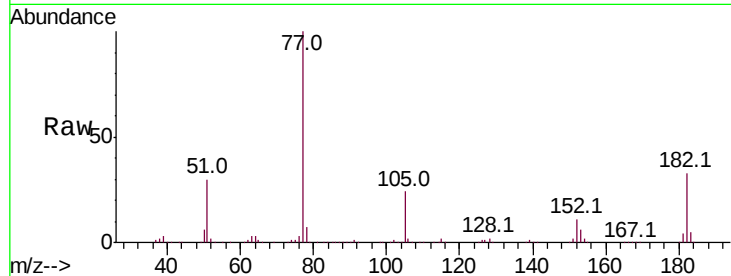
#63
Azobenzene
Concen: 31.082 ng
RT: 10.72 min Scan# 1467
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ion	Ratio	Resp	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		

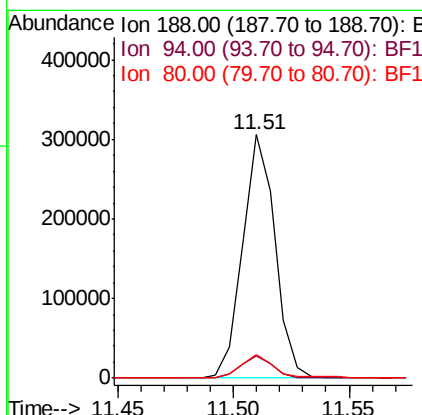
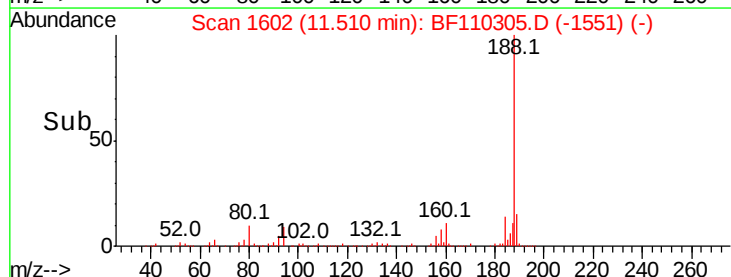
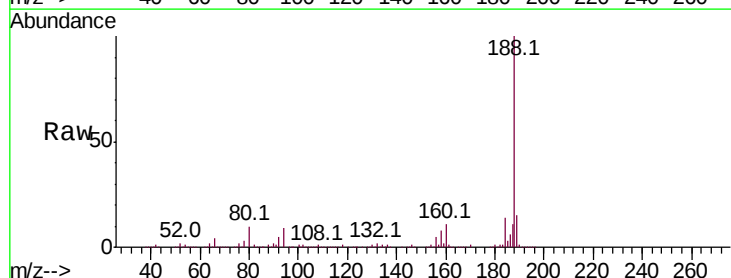
Manual Integrations
APPROVED

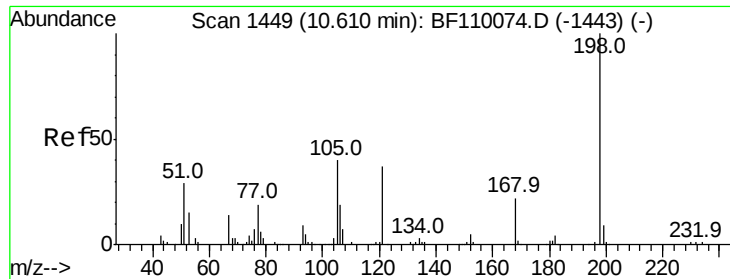
Sohil
10/31/2018 11:15:00 AM



#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	Ion	Ratio	Resp	Lower	Upper
188	100				
94	9.2	7.2	10.8		
80	9.7	7.9	11.9		





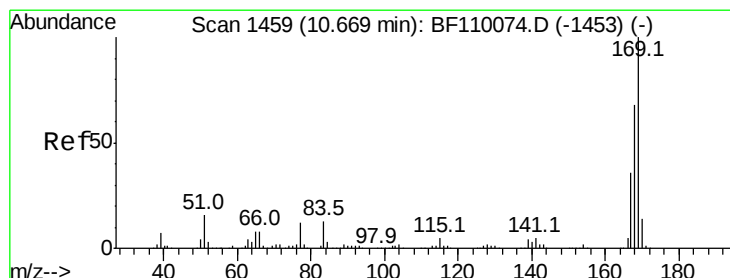
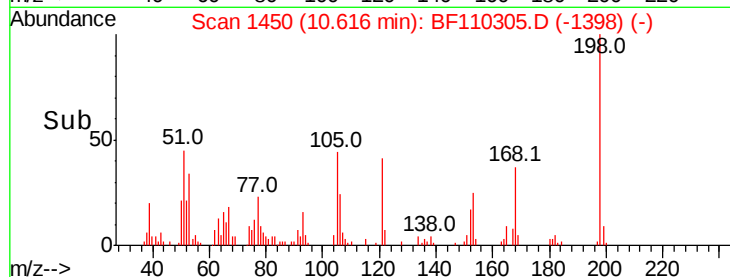
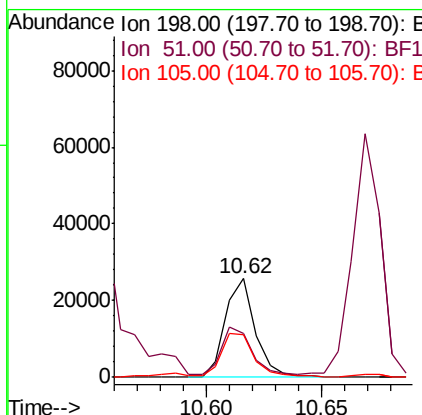
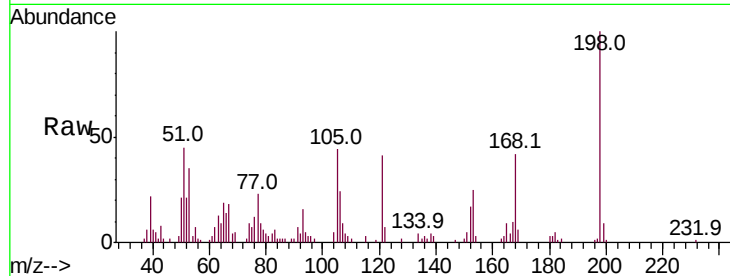
#65
 4,6-Dinitro-2-methylphenol
 Concen: 17.017 ng
 RT: 10.62 min Scan# 1450
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
198	100		
51	44.9	22.8	62.8
105	43.6	23.6	63.6

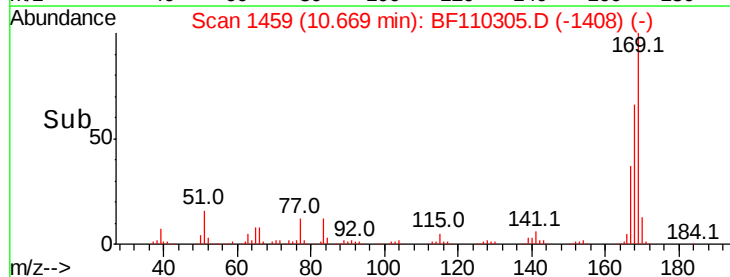
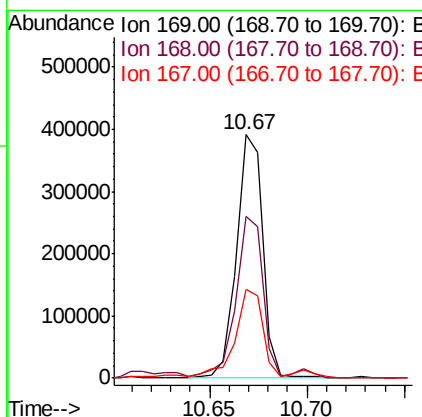
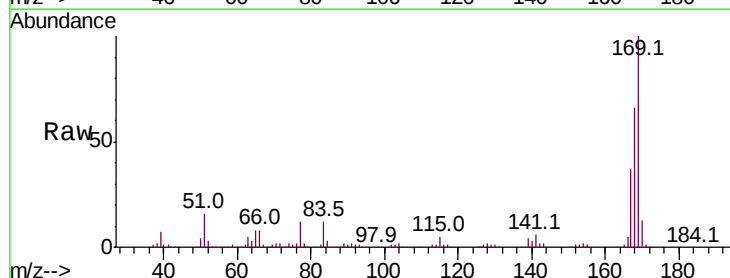
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#66
 n-Nitrosodiphenylamine
 Concen: 36.733 ng
 RT: 10.67 min Scan# 1459
 Delta R.T. 0.00 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Tgt Ion	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

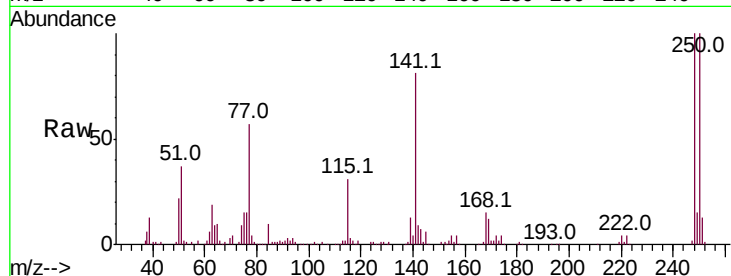
ClientSampleId :

RED-SHALEMSD

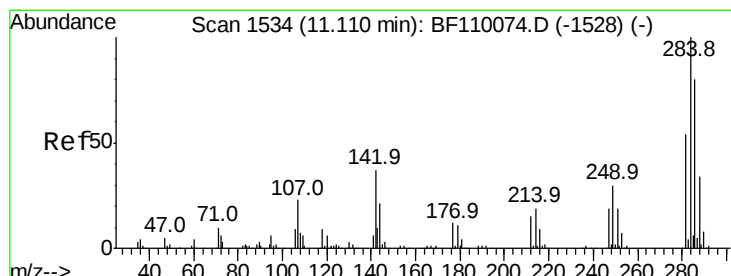
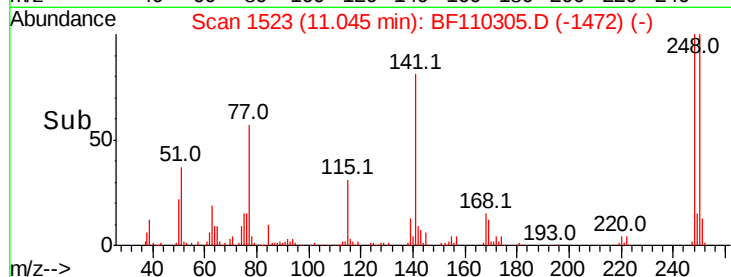
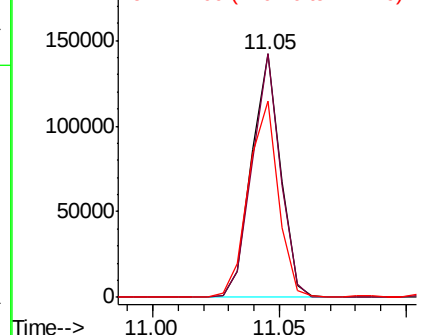
Tot Ion:	248	Resp:	113236
Ion Ratio	Lower	Upper	
248	100		
250	100.1	79.4	119.2
141	80.7	55.9	83.9

Manual Integrations
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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

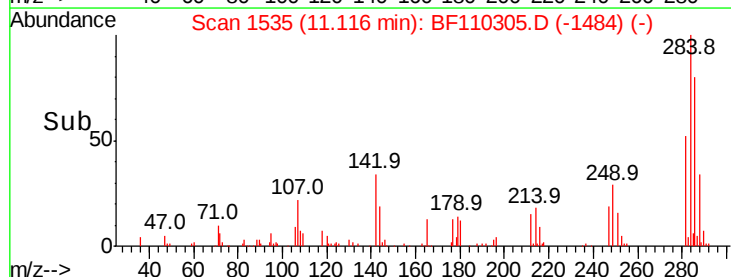
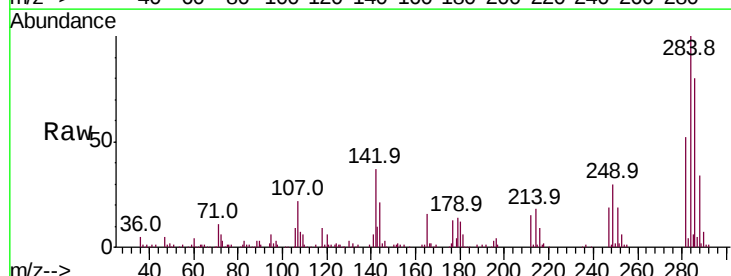
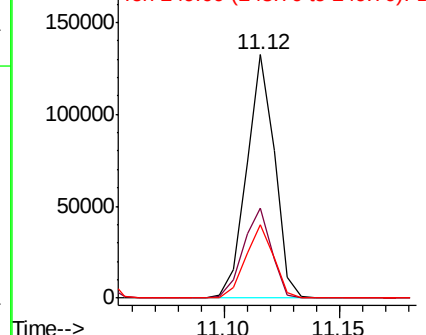
Delta R.T. 0.00 min

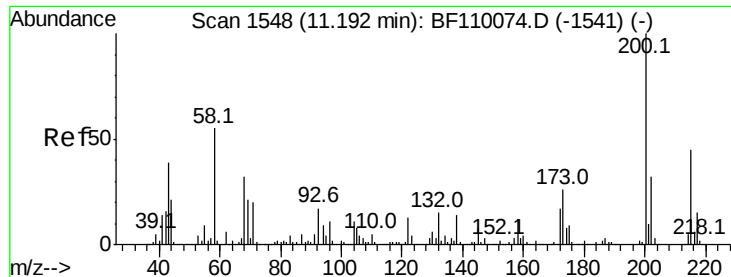
Lab File: BF110305.D

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





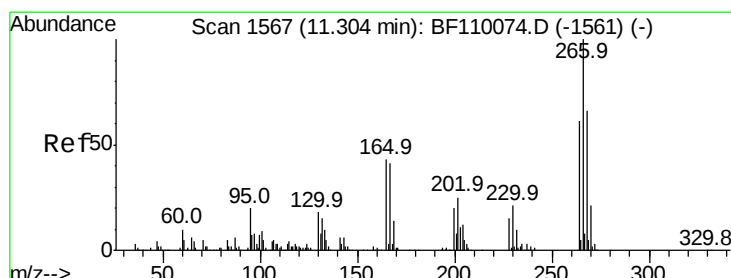
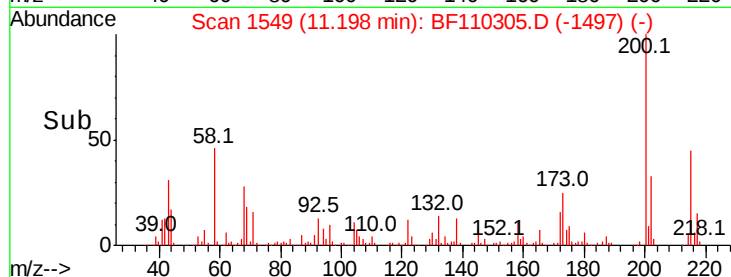
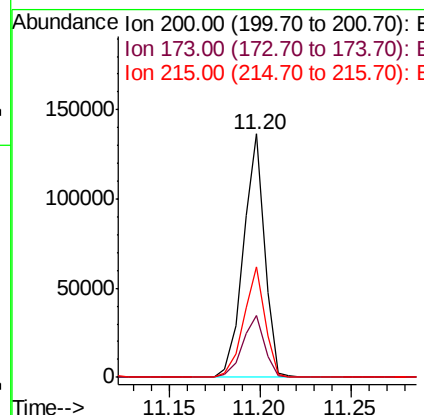
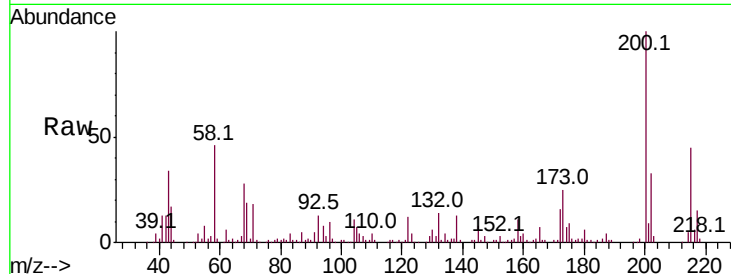
#69
Atrazine
Concen: 35.582 ng
RT: 11.20 min Scan# 1549
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Resp Lower	Upper
200	100		
173	25.4	6.6	46.6
215	45.3	26.3	66.3

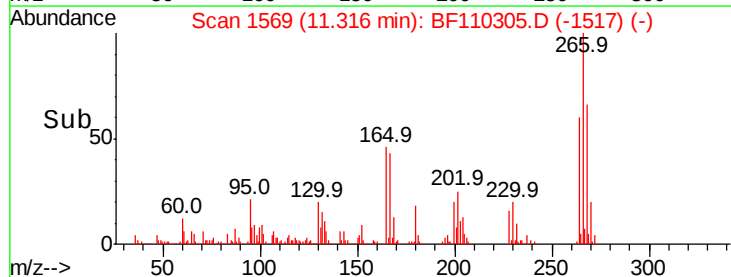
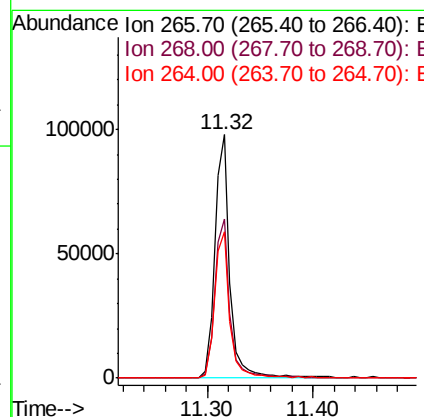
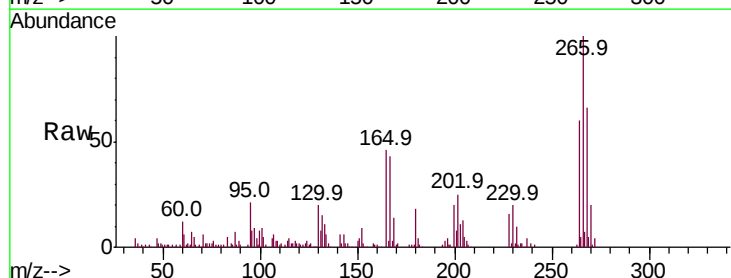
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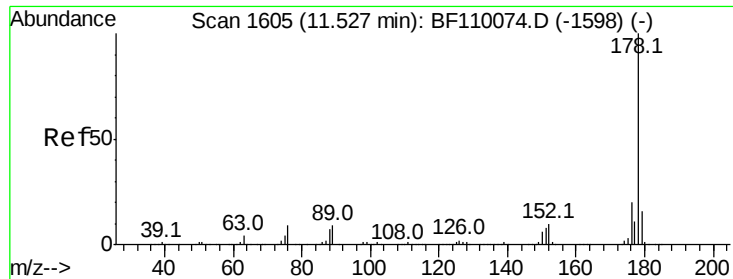
Sohil
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#70
Pentachlorophenol
Concen: 48.730 ng
RT: 11.32 min Scan# 1569
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

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





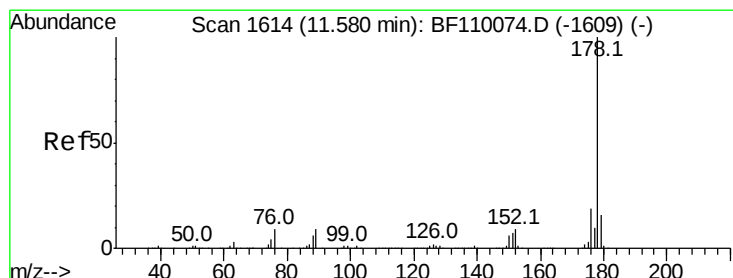
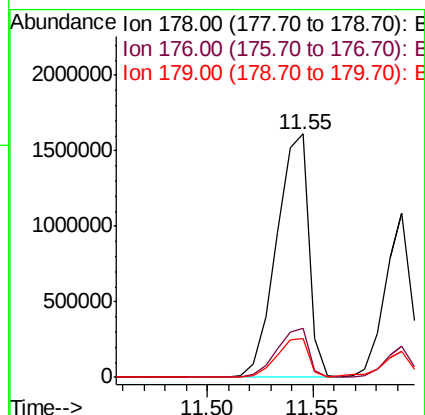
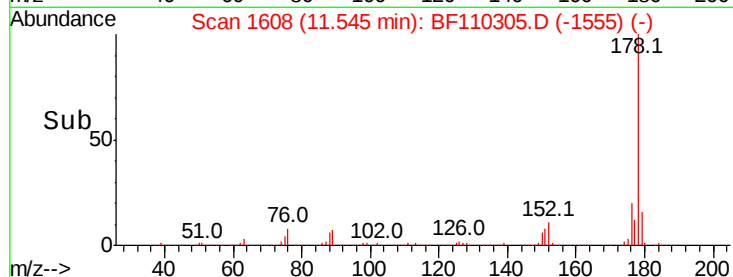
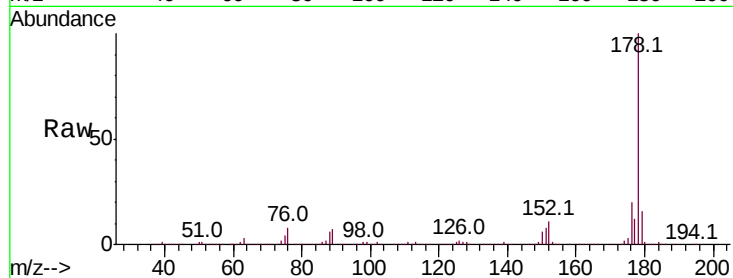
#71
Phenanthrene
Concen: 109.378 ng
RT: 11.55 min Scan# 1608
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
178	100		
176	19.9	15.5	23.3
179	16.0	12.5	18.7

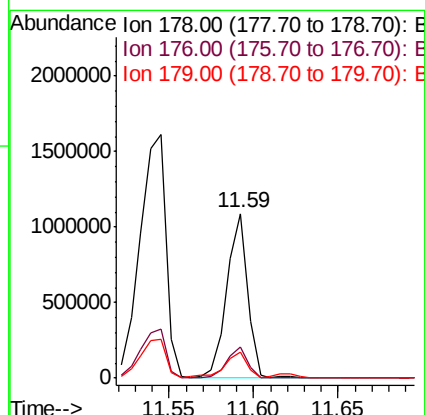
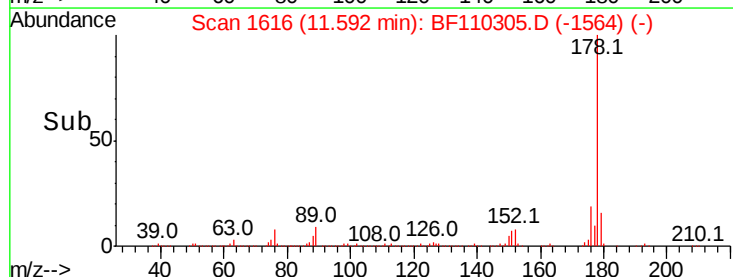
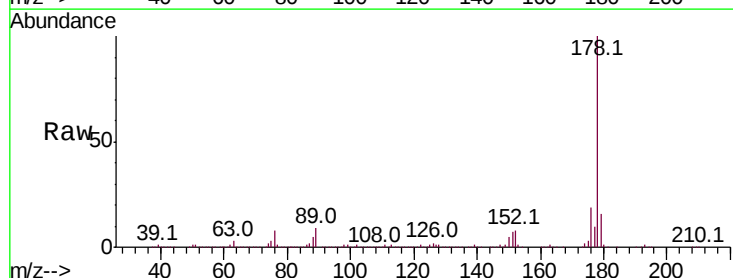
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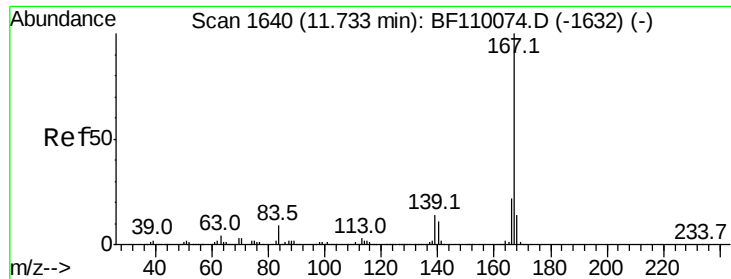
Sohil
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#72
Anthracene
Concen: 59.739 ng
RT: 11.59 min Scan# 1616
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

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





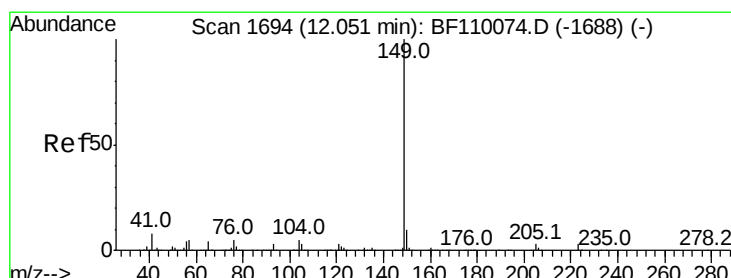
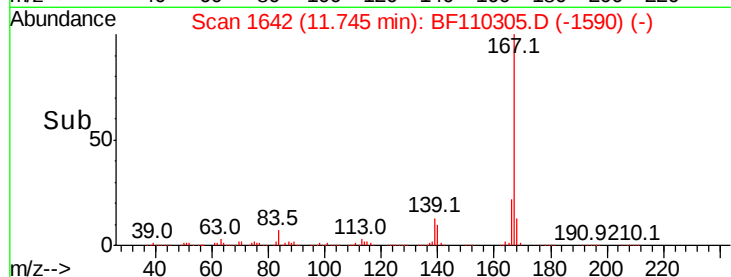
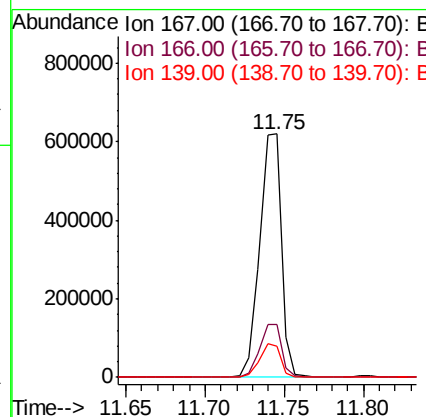
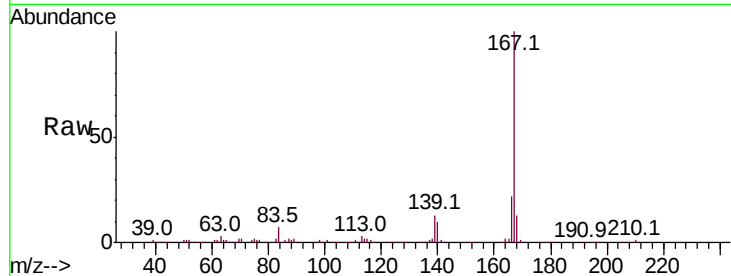
#73
 Carbazole
 Concen: 38.736 ng
 RT: 11.75 min Scan# 1642
 Delta R.T. 0.01 min
 Lab File: BF110305.D
 Acq: 30 Oct 2018 16:14

Instrument :
 BNA_F
 ClientSampleId :
 RED-SHALEMSD

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

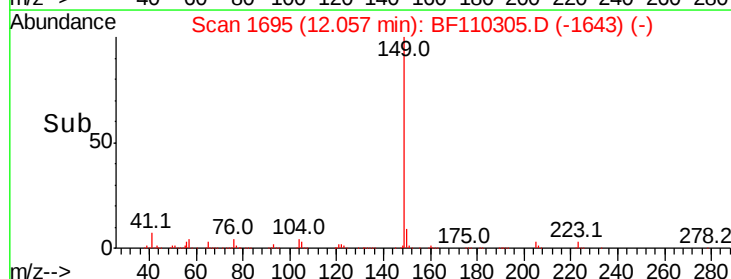
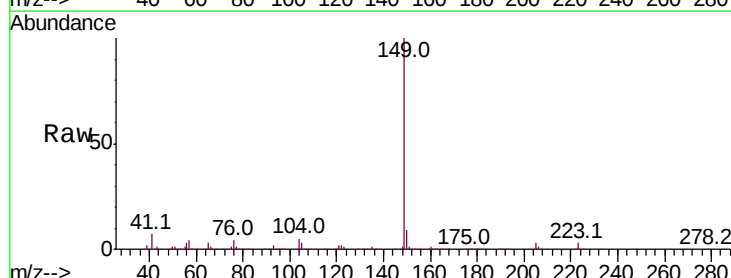
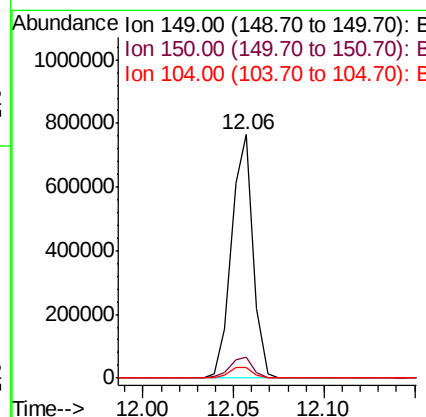
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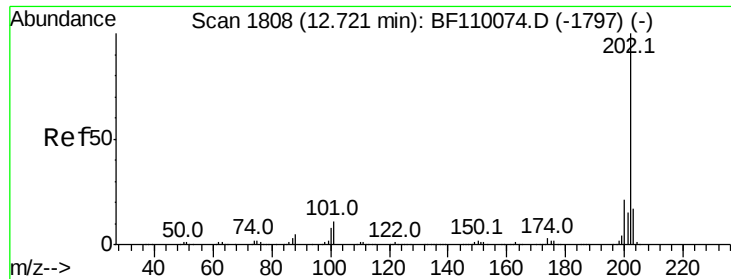
Sohil
 10/31/2018 11:15:00 AM



#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





#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

Tot Ion:202 Resp: 1873003

Ion Ratio Lower Upper

202 100

101 13.1 0.0 31.4

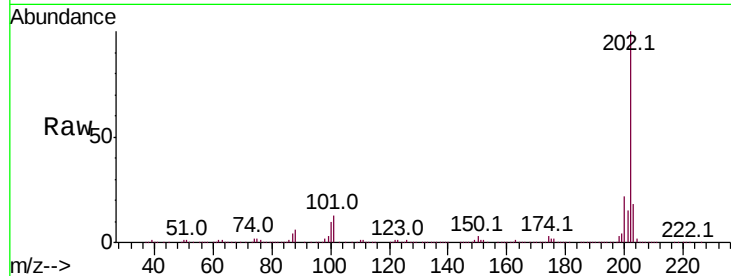
203 18.3 0.0 37.7

Manual Integrations

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Sohil

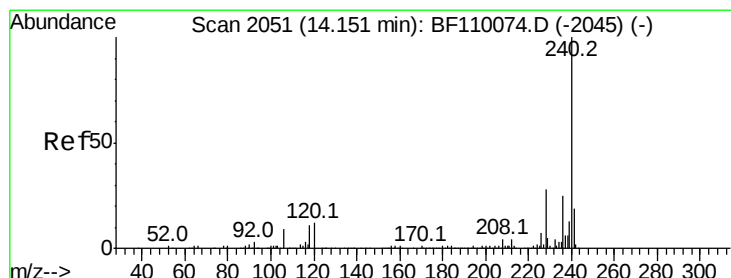
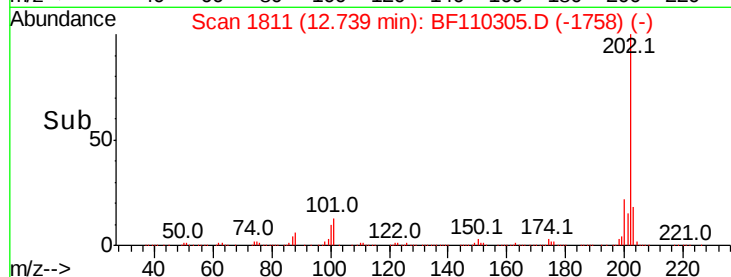
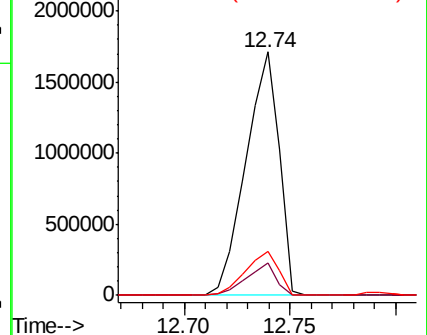
10/31/2018 11:15:00 AM



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

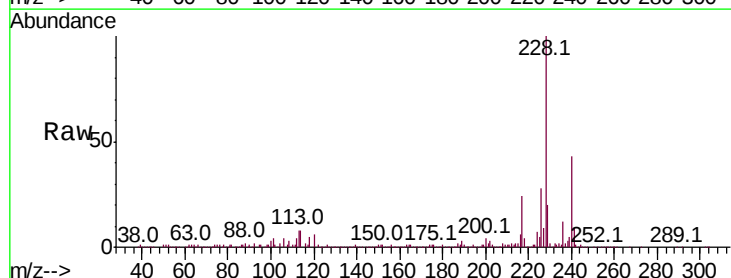
Tgt Ion:240 Resp: 187373

Ion Ratio Lower Upper

240 100

120 13.1 8.3 12.5#

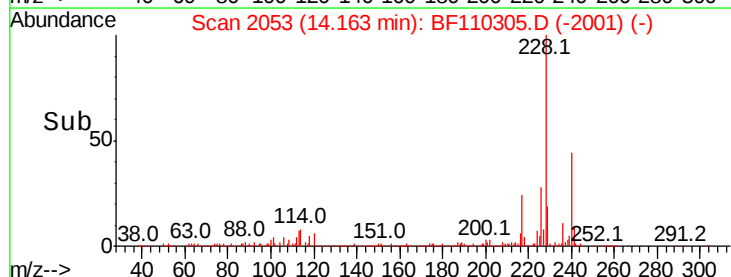
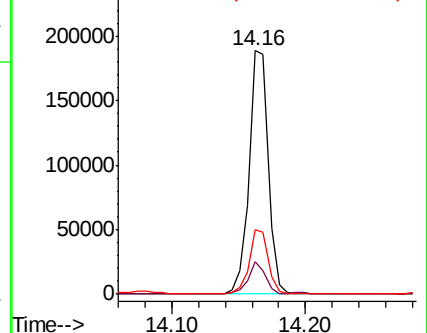
236 26.7 21.2 31.8

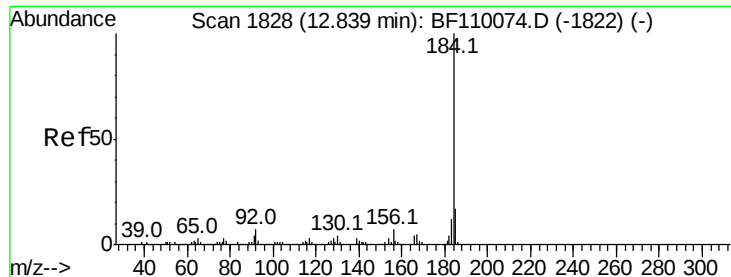


Abundance Ion 240.00 (239.70 to 240.70): E

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

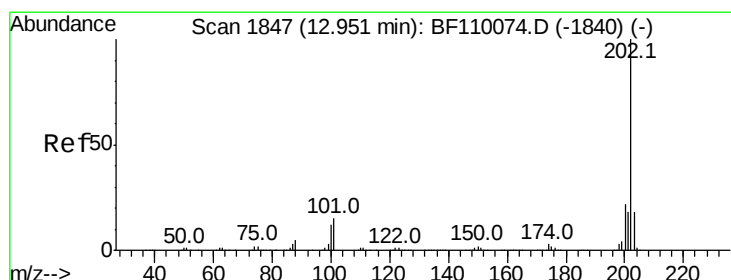
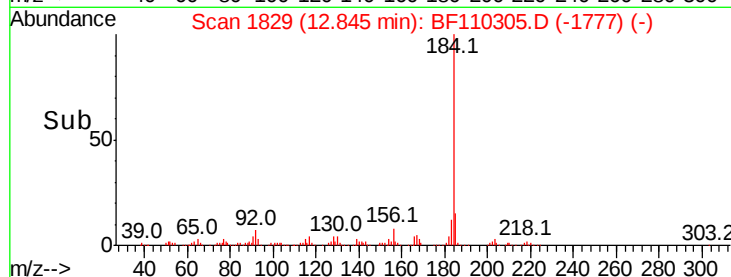
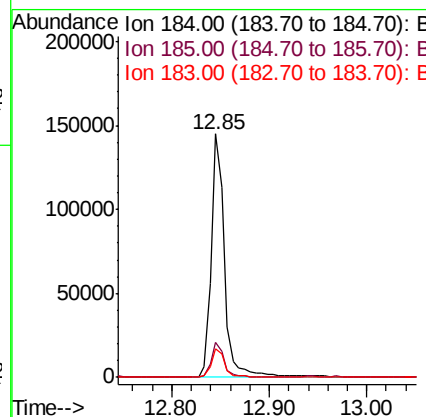
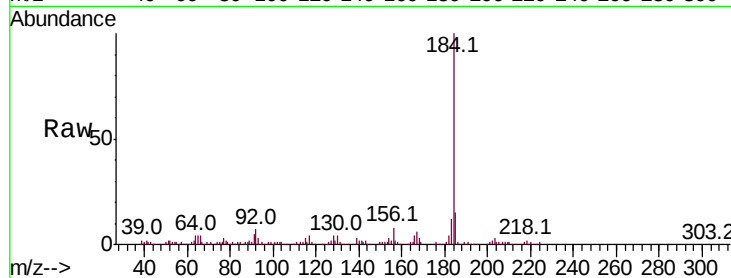
ClientSampleId :

RED-SHALEMSD

Tot Ion:	184	Resp:	138443
Ion Ratio	Lower	Upper	
184	100		
185	14.6	13.4	20.2
183	11.9	9.4	14.2

Manual Integrations
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#78

Pyrene

Concen: 123.364 ng

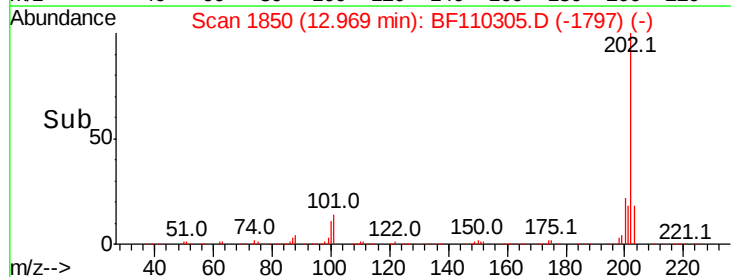
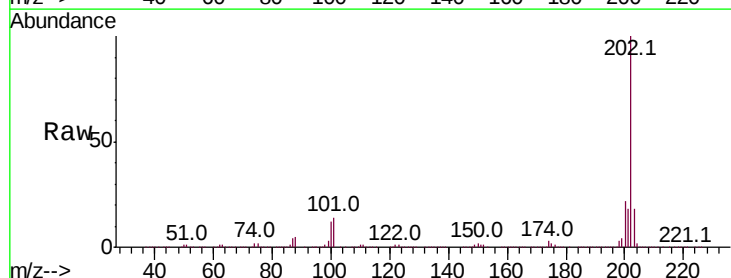
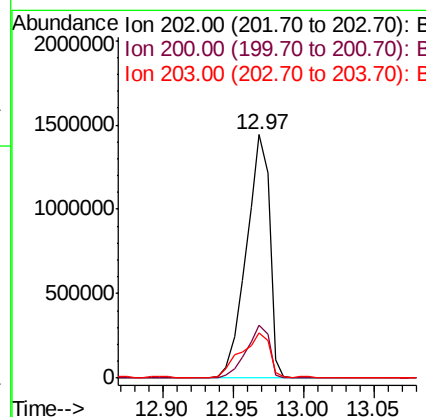
RT: 12.97 min Scan# 1850

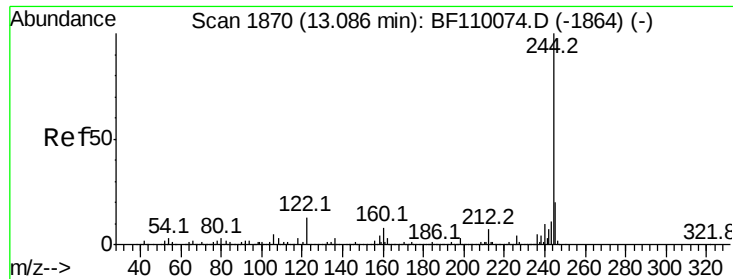
Delta R.T. 0.01 min

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





#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

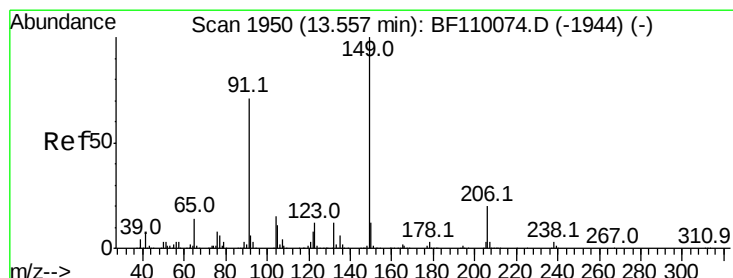
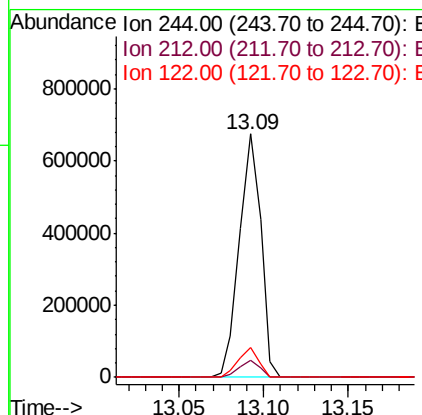
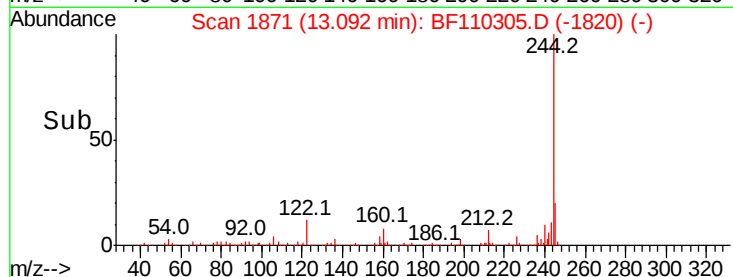
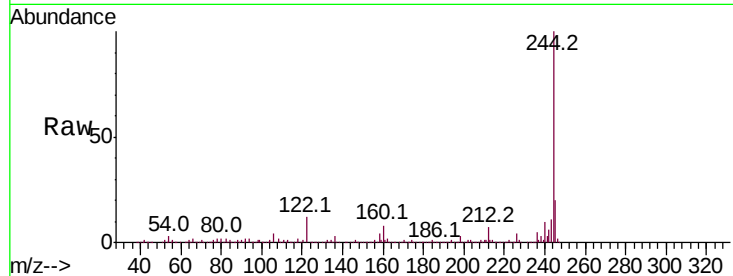
ClientSampleId :

RED-SHALEMSD

Tot Ion:	244	Resp:	601103
Ion Ratio		Lower	Upper
244	100		
212	7.0	5.8	8.8
122	12.3	8.7	13.1

Manual Integrations
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#80

Butylbenzylphthalate

Concen: 35.491 ng

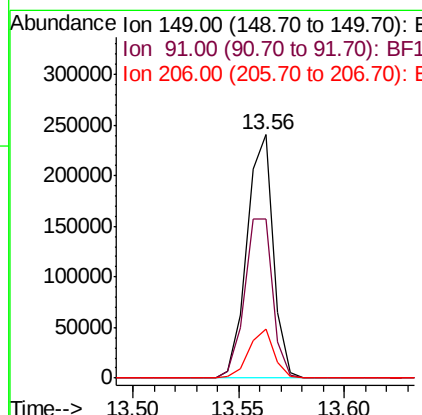
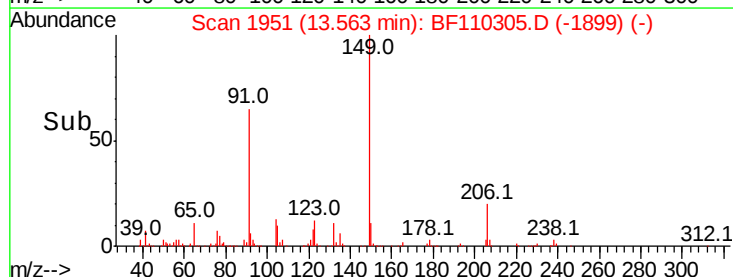
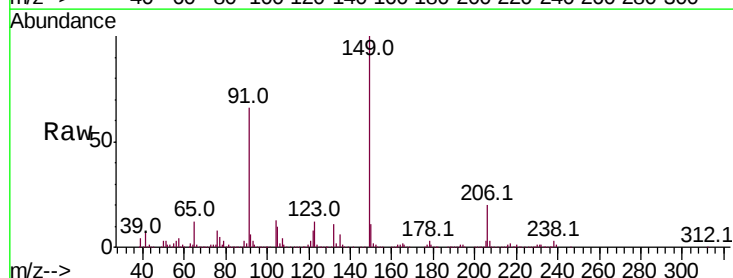
RT: 13.56 min Scan# 1951

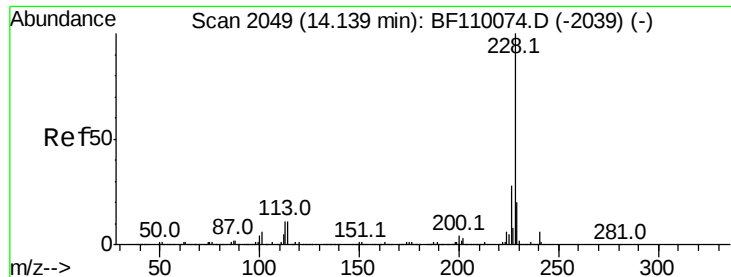
Delta R.T. 0.01 min

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





#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

Tot Ion:228 Resp: 1017339

Ion Ratio Lower Upper

228 100

226 28.1 22.1 33.1

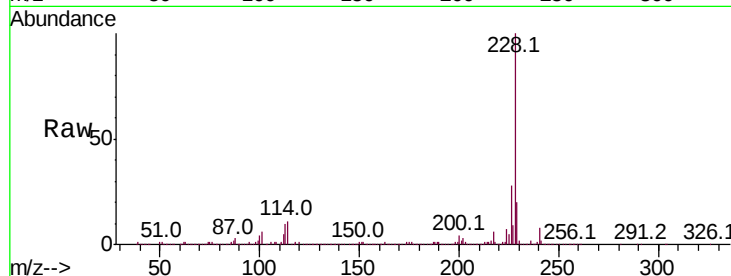
229 20.4 15.6 23.4

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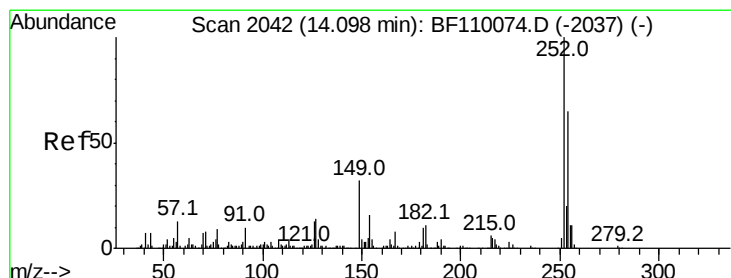
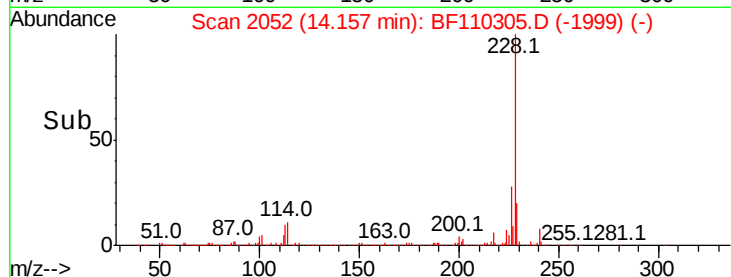
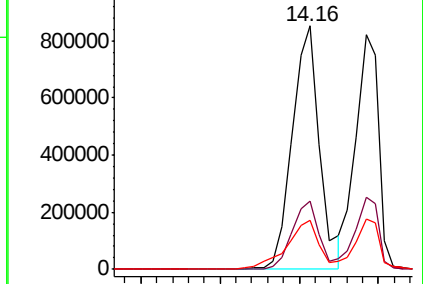
10/31/2018 11:15:00 AM



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



#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

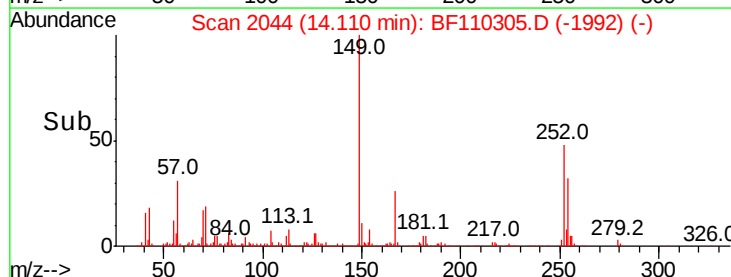
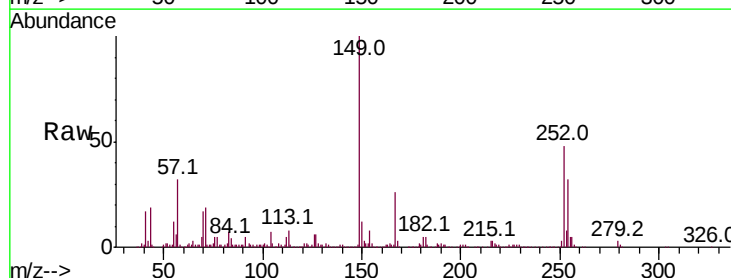
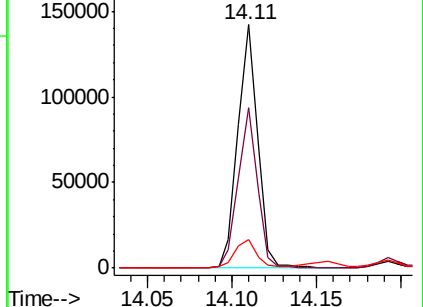
254 65.9 51.3 76.9

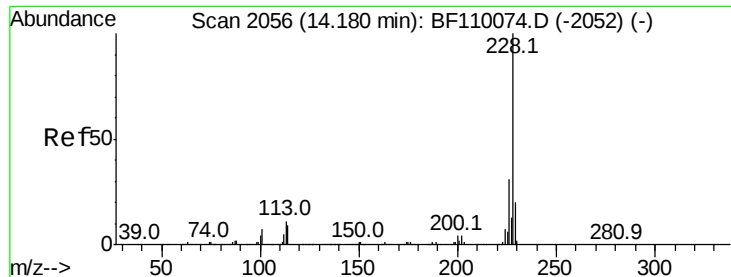
126 11.9 9.4 14.2

Abundance Ion 252.00 (251.70 to 252.70): E

Ion 254.00 (253.70 to 254.70): E

Ion 126.00 (125.70 to 126.70): E





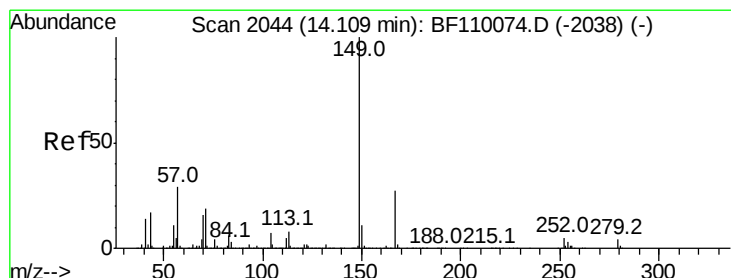
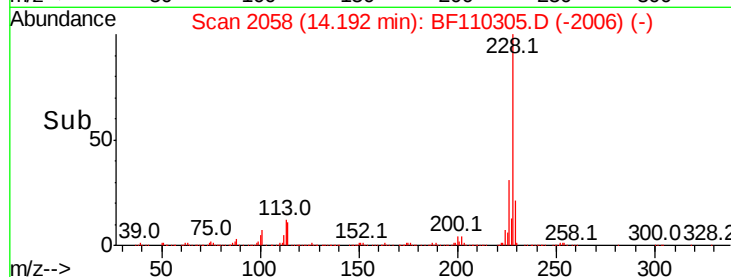
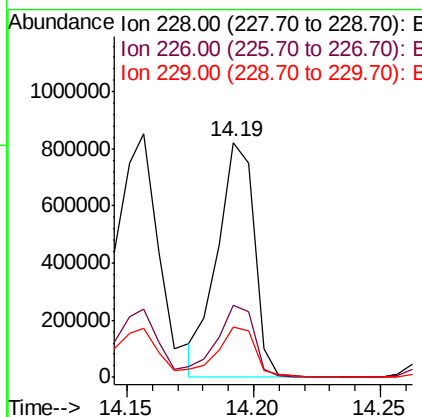
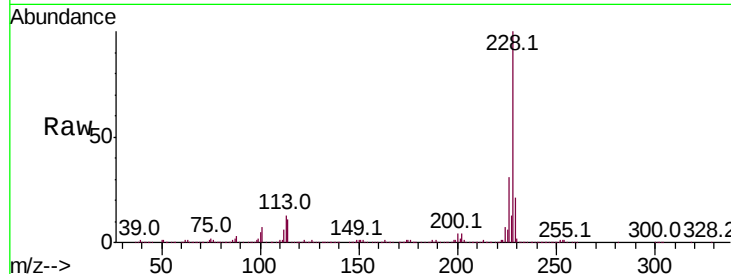
#83
Chrysene
Concen: 78.749 ng
RT: 14.19 min Scan# 2058
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
228	100		
226	30.7	24.7	37.1
229	21.3	15.9	23.9

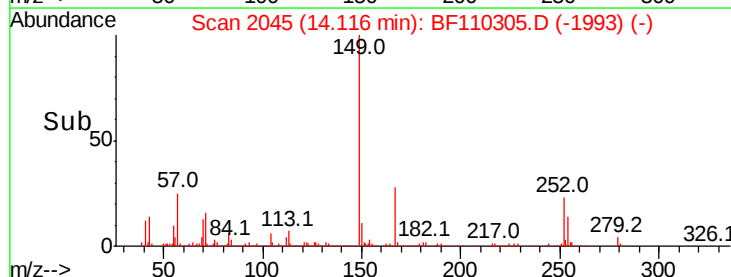
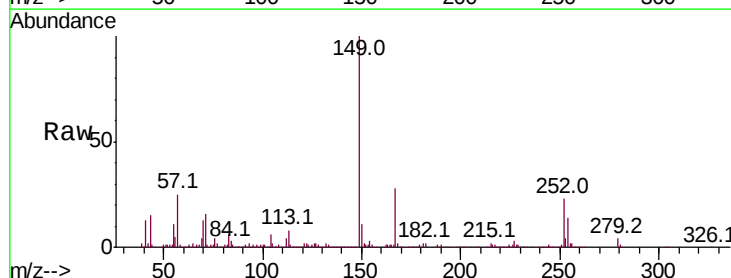
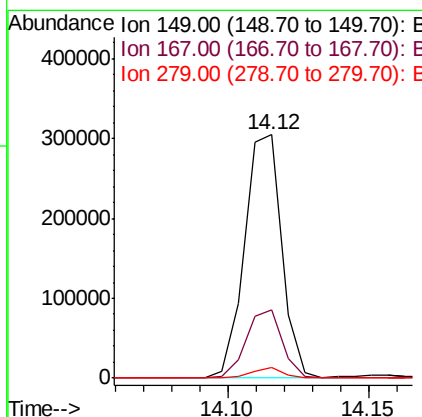
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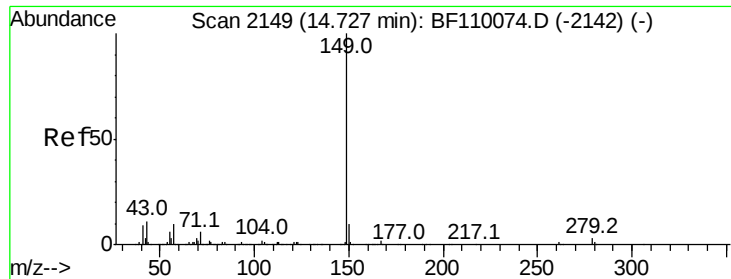
Sohil
10/31/2018 11:15:00 AM



#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	Ratio	Lower	Upper
149	100		
167	27.9	19.8	29.8
279	4.1	2.7	4.1#





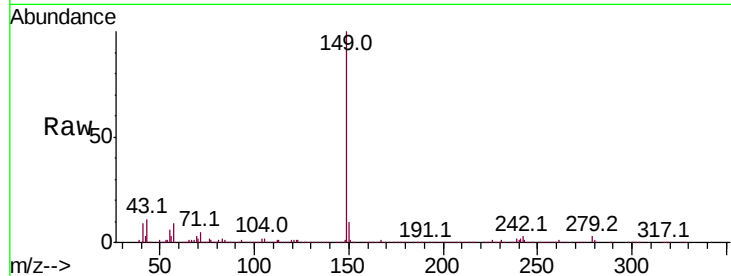
#85
Di-n-octyl phthalate
Concen: 37.567 ng
RT: 14.73 min Scan# 2150
Delta R.T. 0.00 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

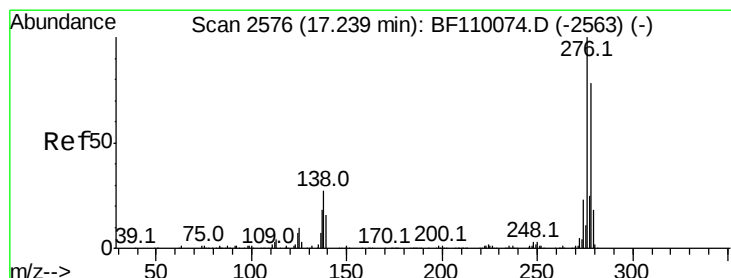
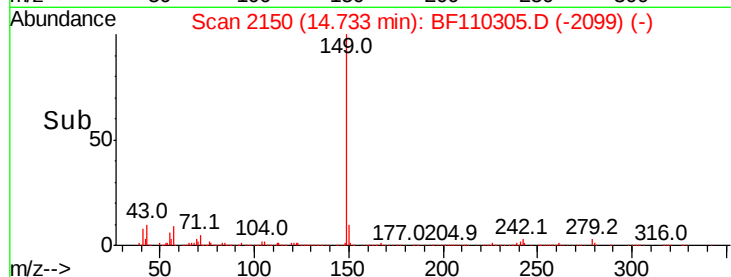
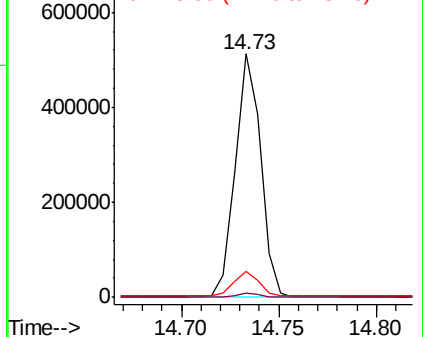
Tot Ion	Ratio	Resp	Lower	Upper
149	100			
167	1.5	1.1	1.7	
43	10.0	7.8	11.8	

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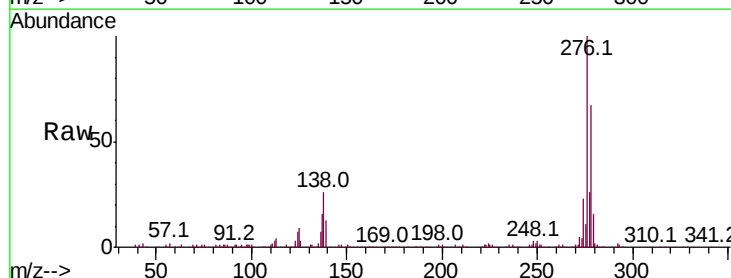


Abundance Ion 149.00 (148.70 to 149.70): E
Ion 167.00 (166.70 to 167.70): E
Ion 43.00 (42.70 to 43.70): BF1

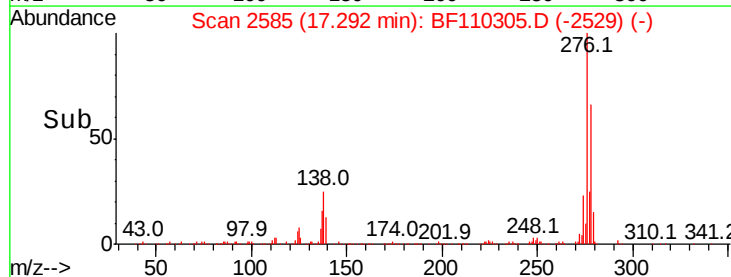
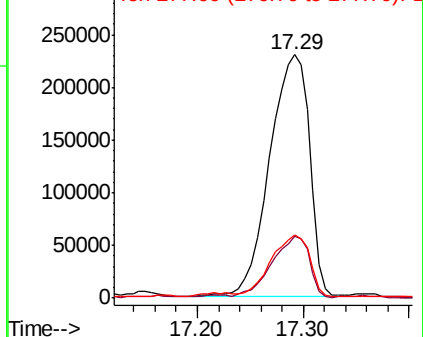


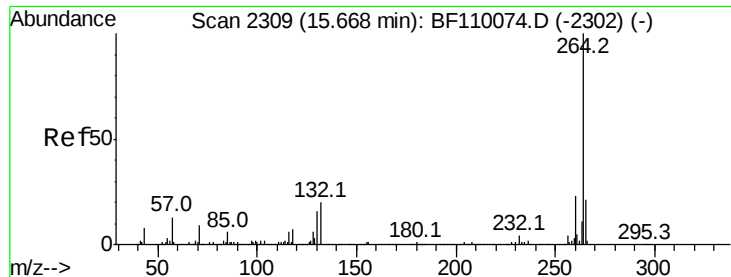
#86
Indeno(1,2,3-cd)pyrene
Concen: 68.606 ng
RT: 17.29 min Scan# 2585
Delta R.T. 0.03 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Tgt Ion	Ratio	Resp	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

Pervlene-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

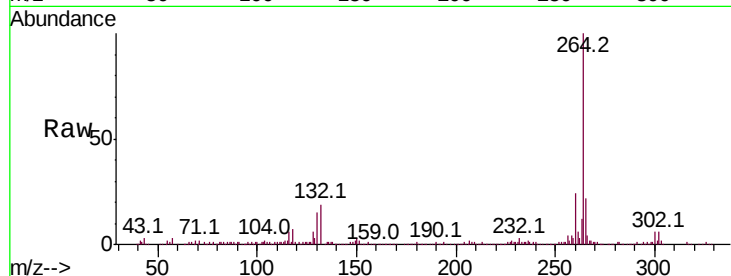
ClientSampleId :

RED-SHALEMSD

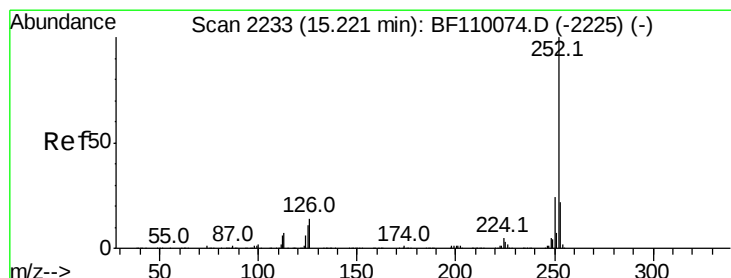
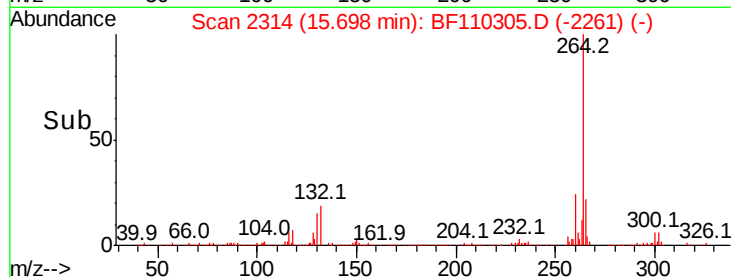
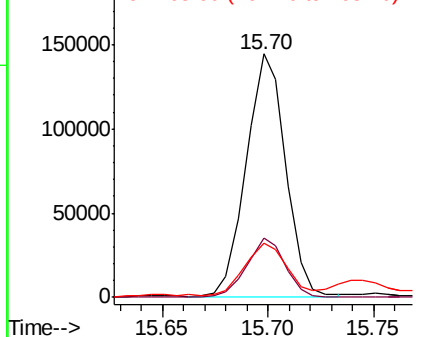
Tot Ion:	264	Resp:	185297
Ion Ratio	Lower	Upper	
264	100		
260	24.2	18.7	28.1
265	22.0	16.7	25.1

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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

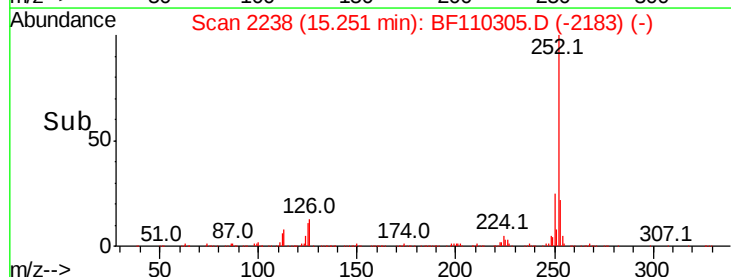
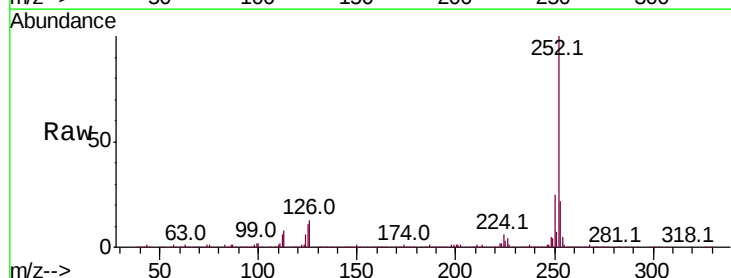
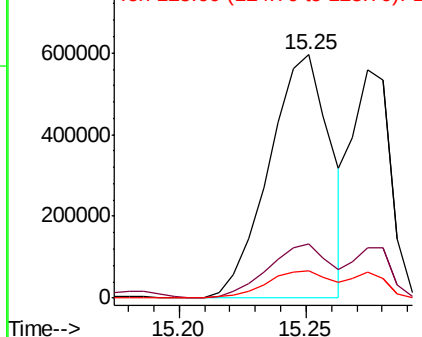
Delta R.T. 0.02 min

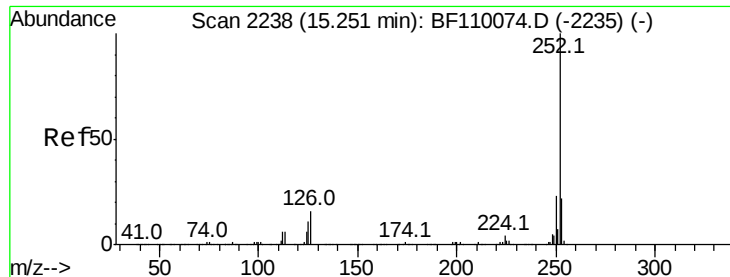
Lab File: BF110305.D

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





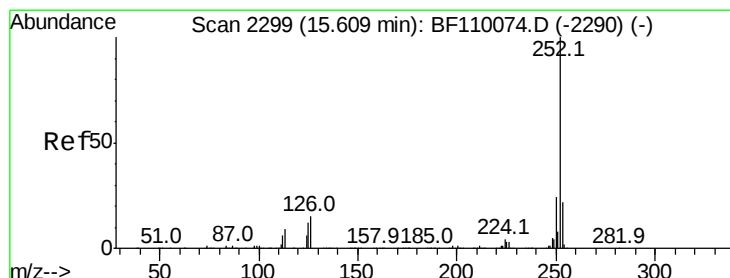
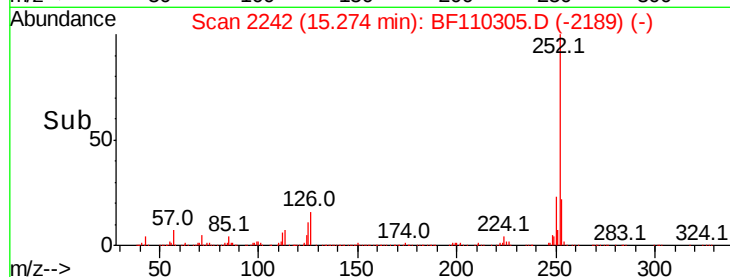
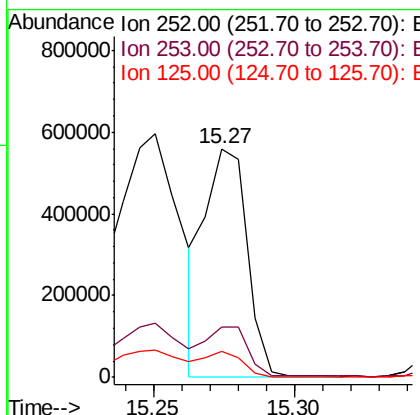
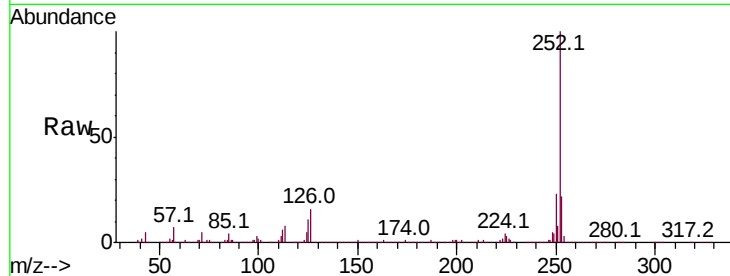
#89
Benzo(k)fluoranthene
Concen: 55.203 ng
RT: 15.27 min Scan# 2242
Delta R.T. 0.01 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
252	100		
253	22.3	17.2	25.8
125	11.3	7.4	11.0

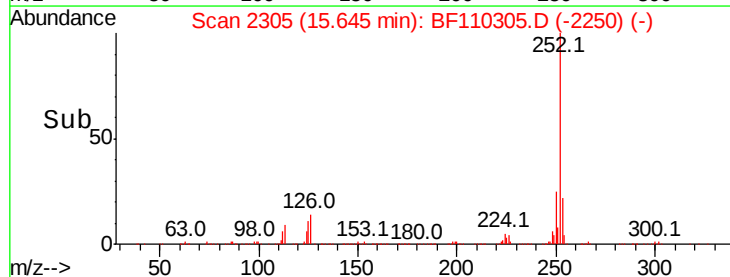
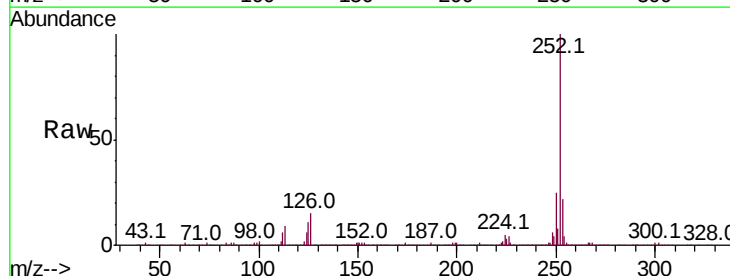
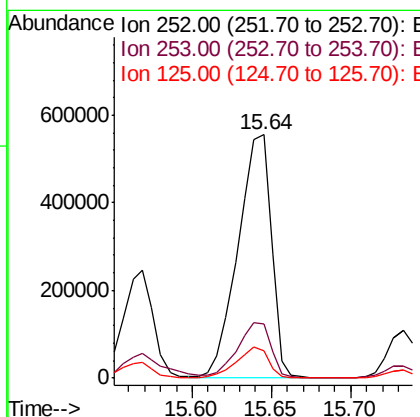
Manual Integrations
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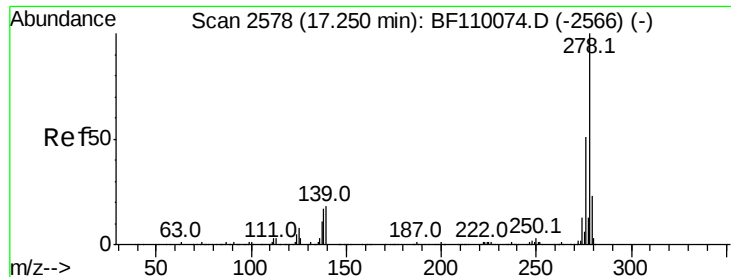
Sohil
10/31/2018 11:15:00 AM



#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	Ratio	Lower	Upper
252	100		
253	22.2	18.2	27.4
125	11.3	9.0	13.6





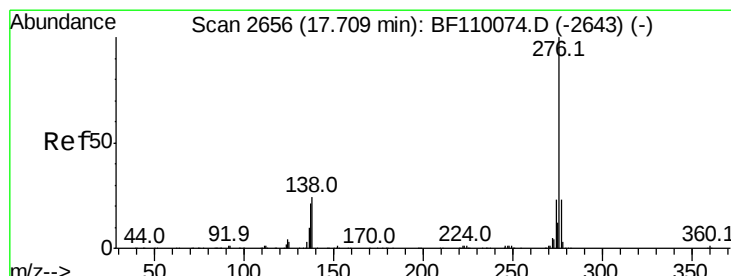
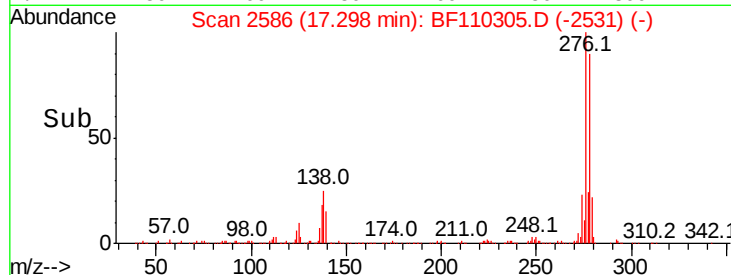
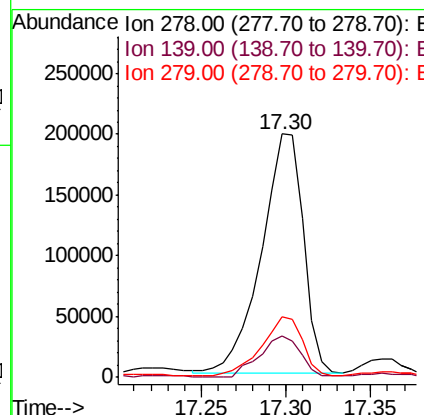
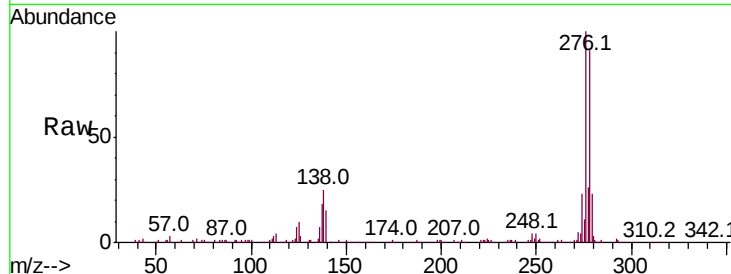
#91
Dibenzo(a,h)anthracene
Concen: 40.032 ng
RT: 17.30 min Scan# 2586
Delta R.T. 0.02 min
Lab File: BF110305.D
Acq: 30 Oct 2018 16:14

Instrument :
BNA_F
ClientSampleId :
RED-SHALEMSD

Tot Ion	Ratio	Lower	Upper
278	100		
139	17.0	12.7	19.1
279	25.1	19.0	28.4

Manual Integrations
APPROVED

Sohil
10/31/2018 11:15:00 AM



#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	Ratio	Lower	Upper
276	100		
277	24.1	18.8	28.2
138	21.2	16.0	24.0

