

Data Path : Z:\HPCHEM1\BNA F\DATA\BF112917\
 Data File : BF100988.D
 Acq On : 29 Nov 2017 19:51
 Operator : SJ/JU
 Sample : I6304-30 5X
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 CL-02-112817-E

Manual Integrations
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Sohil
 11/30/2017 4:30:00 PM

Quant Time: Nov 30 06:52:03 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF110817.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Nov 28 15:21:02 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.85	152	76121	20.00	ng	0.00
21) Naphthalene-d8	8.14	136	279103	20.00	ng	0.00
38) Acenaphthene-d10	9.89	164	111347	20.00	ng	0.00
63) Phenanthrene-d10	11.39	188	172956	20.00	ng	0.00
75) Chrysene-d12	14.04	240	128753	20.00	ng	0.01
86) Perylene-d12	15.51	264	108697	20.00	ng	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.46	112	74308	15.65	ng	-0.01
7) Phenol-d6	6.47	99	90632	15.48	ng	-0.02
23) Nitrobenzene-d5	7.41	82	50466	11.95	ng	-0.02
41) 2,4,6-Tribromophenol	10.68	330	16680	14.70	ng	0.00
44) 2-Fluorobiphenyl	9.20	172	111182	15.20	ng	-0.01
78) Terphenyl-d14	12.96	244	80175	14.31	ng	0.00
Target Compounds						Qvalue
31) Naphthalene	8.16	128	557807	41.494	ng	99
37) 2-Methylnaphthalene	8.85	142	301629	33.796	ng	99
45) 1,1'-Biphenyl	9.31	154	54909	5.702	ng	94
48) Acenaphthylene	9.75	152	130228	11.248	ng	96
51) Acenaphthene	9.93	154	252175	35.812	ng	99
54) Dibenzofuran	10.10	168	365511	37.035	ng	98
57) Fluorene	10.45	166	483852	66.923	ng	100
70) Phenanthrene	11.42	178	1924717	211.359	ng	99
71) Anthracene	11.47	178	687612	74.426	ng	99
72) Carbazole	11.61	167	164878	19.341	ng	99
74) Fluoranthene	12.62	202	2014747	208.760	ng	98
77) Pyrene	12.85	202	1789633	194.991	ng	97
80) Benzo(a)anthracene	14.03	228	1027740	132.553	ng	97
82) Chrysene	14.07	228	758867	101.072	ng	96
85) Indeno(1,2,3-cd)pyrene	17.00	276	304641	50.163	ng	# 87
87) Benzo(b)fluoranthene	15.09	252	759550m	117.948	ng	
88) Benzo(k)fluoranthene	15.11	252	297652m	48.919	ng	
89) Benzo(a)pyrene	15.46	252	578753	101.375	ng	96
90) Dibenzo(a,h)anthracene	17.00	278	88468m	18.948	ng	
91) Benzo(a,h,i)perylene	17.45	276	276191	60.431	ng	# 92

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

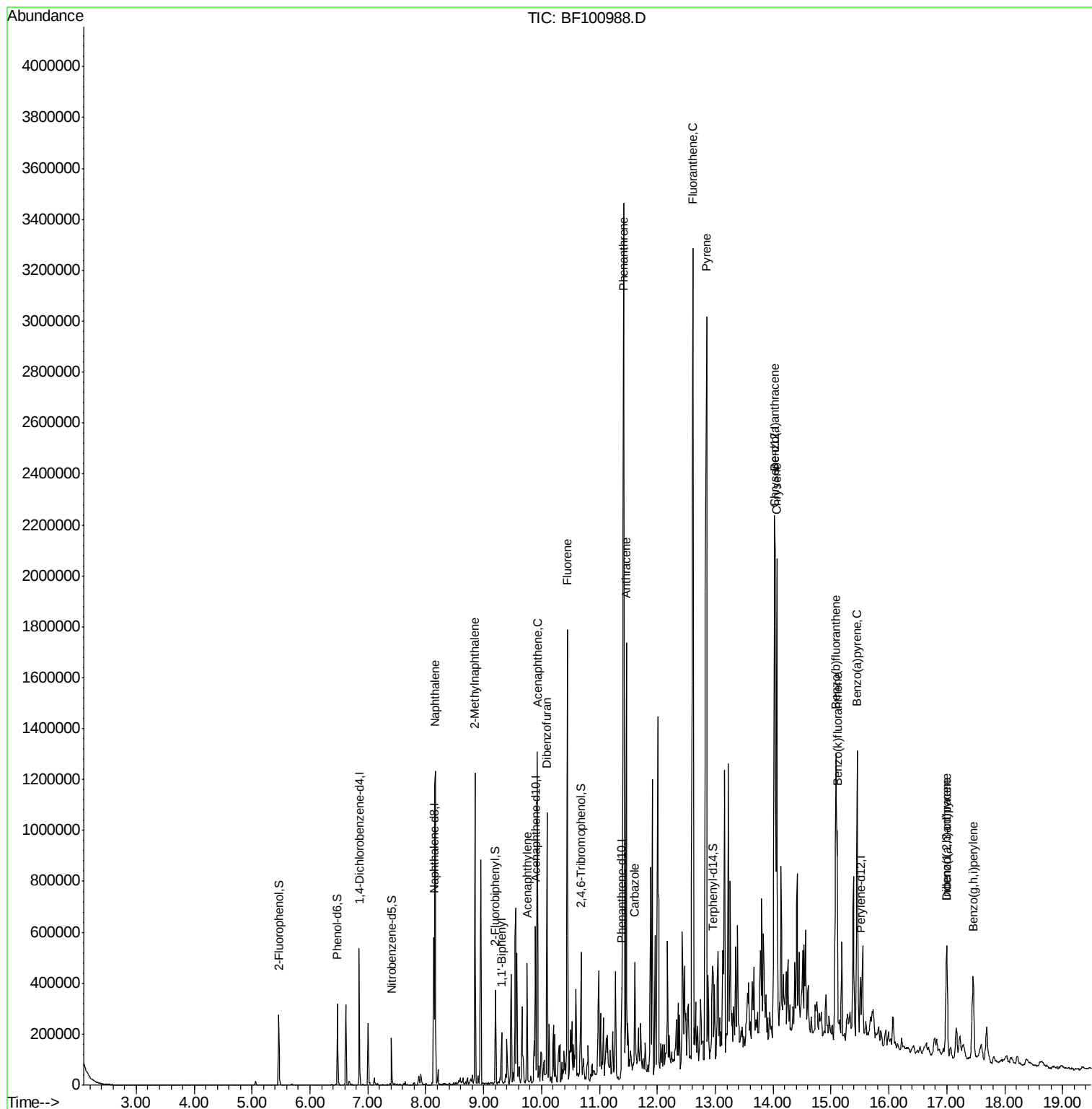
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ALS Vial : 17 Sample Multiplier: 1

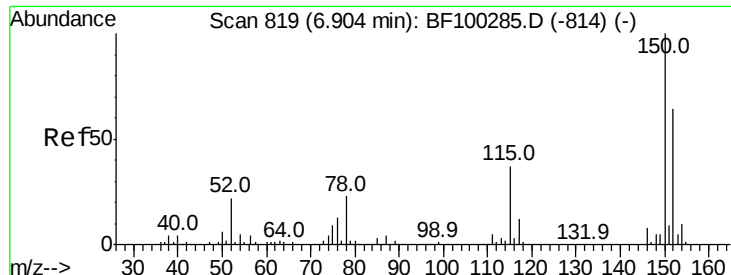
Instrument :
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CL-02-112817-E

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#1

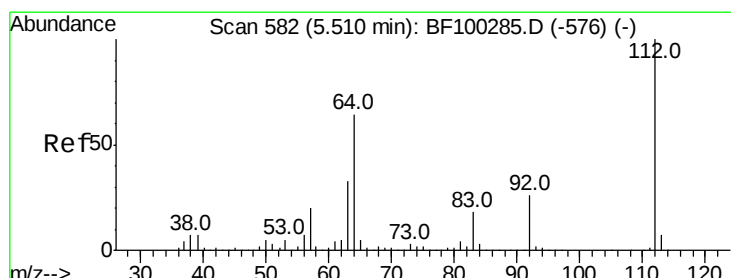
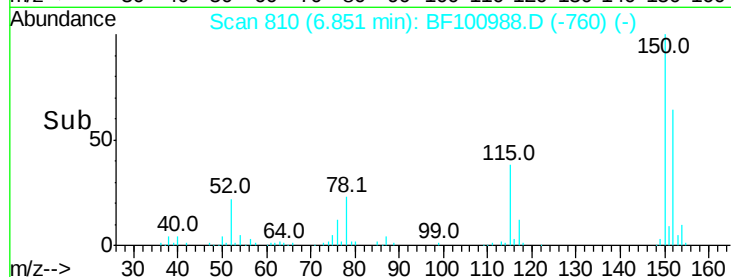
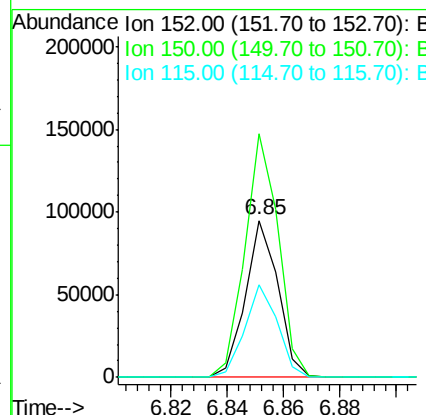
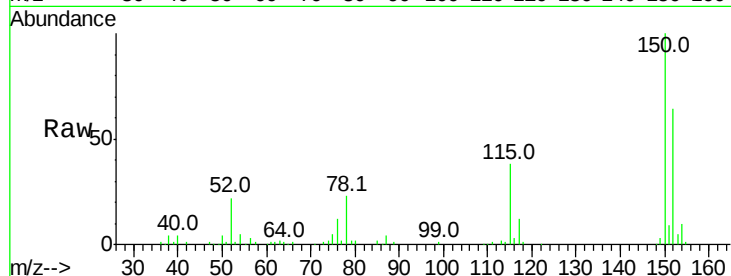
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.85 min Scan# 810
Delta R.T. -0.01 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Instrument :
BNA_F
ClientSampleId :
CL-02-112817-E

Tot Ion	Ratio	Lower	Upper
152	100		
150	155.3	124.6	186.8
115	58.7	50.1	75.1

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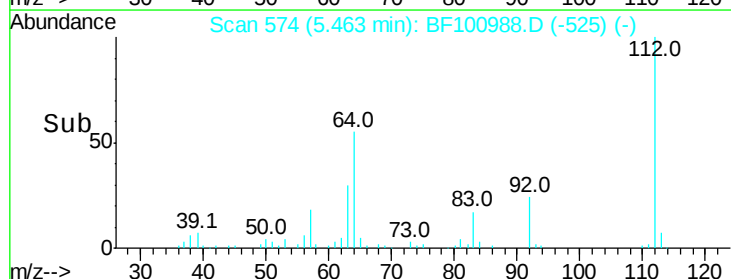
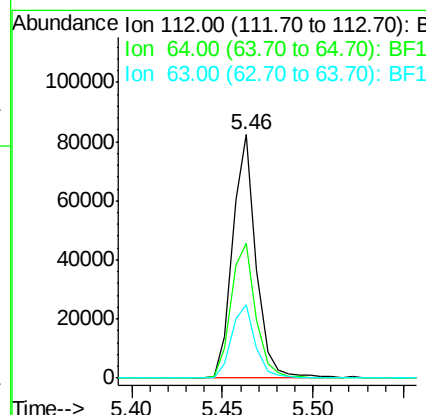
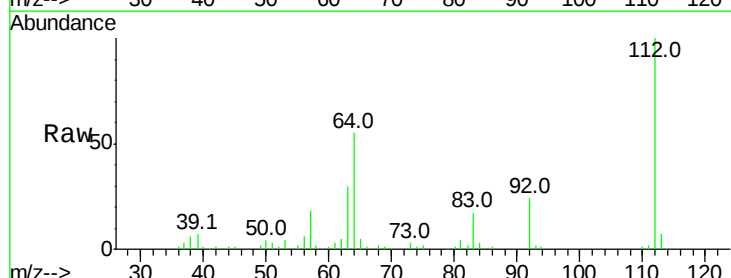
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#5

2-Fluorophenol
Concen: 15.648 ng
RT: 5.46 min Scan# 574
Delta R.T. -0.01 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Lower	Upper
112	100		
64	55.1	47.9	71.9
63	30.2	23.7	35.5





#7

Phenol-d6

Concen: 15.477 ng

RT: 6.47 min Scan# 746

Delta R.T. -0.02 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Instrument :

BNA_F

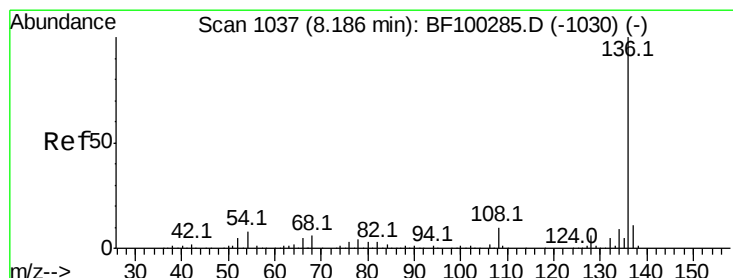
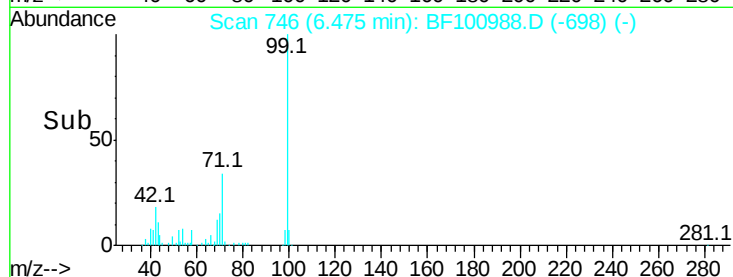
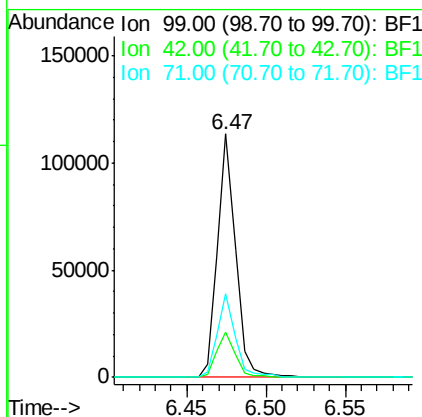
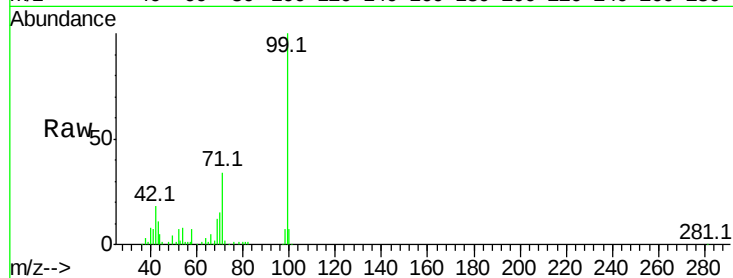
ClientSampleId :

CL-02-112817-E

Tot Ion	Ion	Ratio	Resp	Lower	Upper
99	100				
42	18.4	14.5	21.7		
71	34.2	25.4	38.0		

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#21

Naphthalene-d8

Concen: 20.000 ng

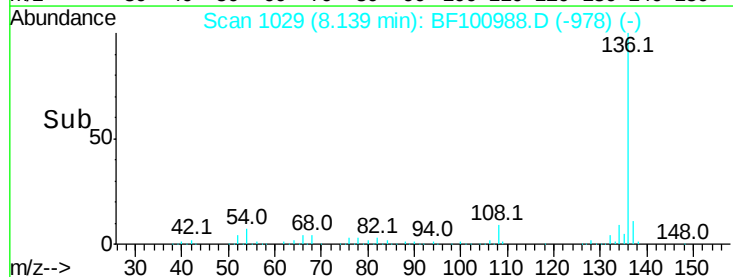
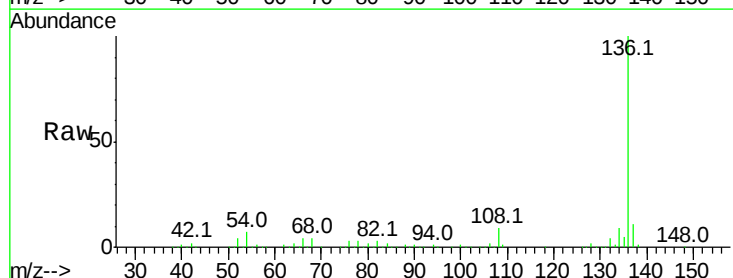
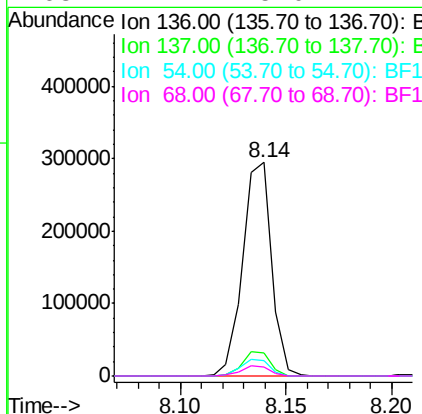
RT: 8.14 min Scan# 1029

Delta R.T. -0.00 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
136	100				
137	10.7	8.9	13.3		
54	7.2	6.6	9.8		
68	4.4	5.0	7.4		





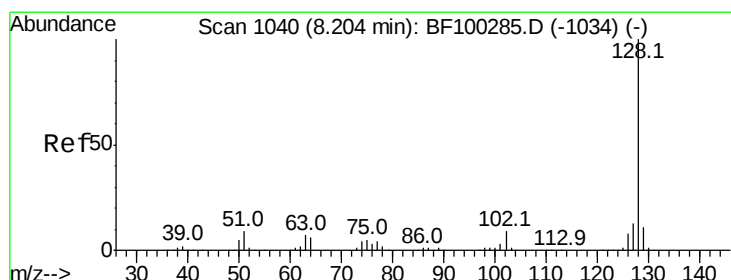
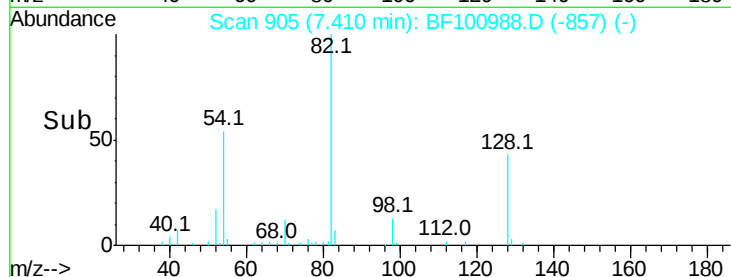
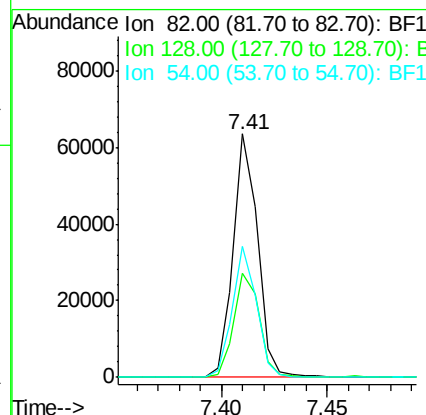
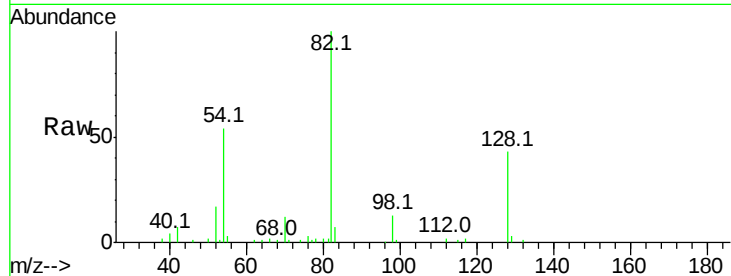
#23
Nitrobenzene-d5
Concen: 11.954 ng
RT: 7.41 min Scan# 905
Delta R.T. -0.02 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Instrument :
BNA_F
ClientSampleId :
CL-02-112817-E

Tot Ion	Ratio	Lower	Upper
82	100		
128	42.7	36.1	54.1
54	53.8	41.4	62.2

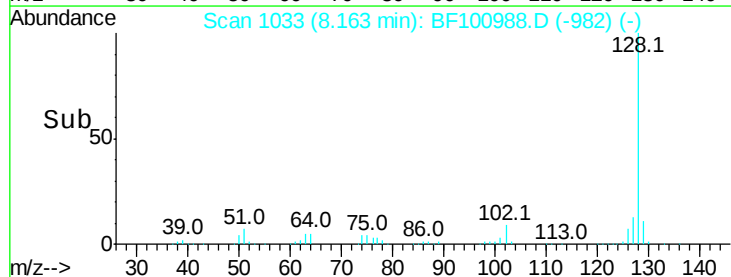
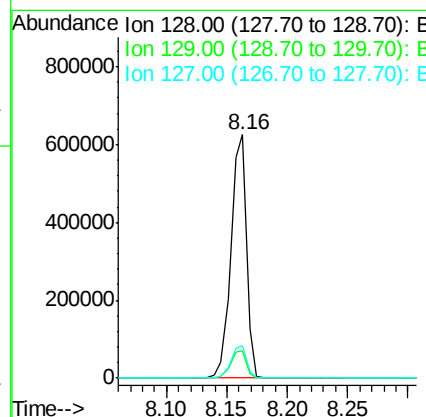
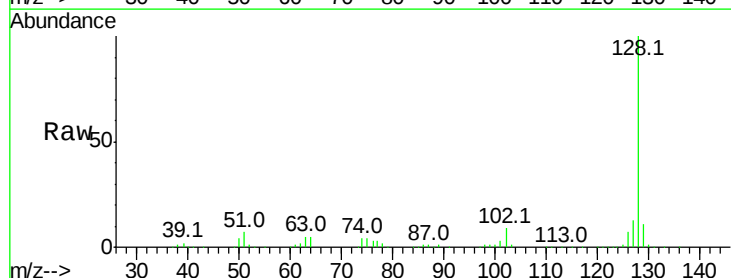
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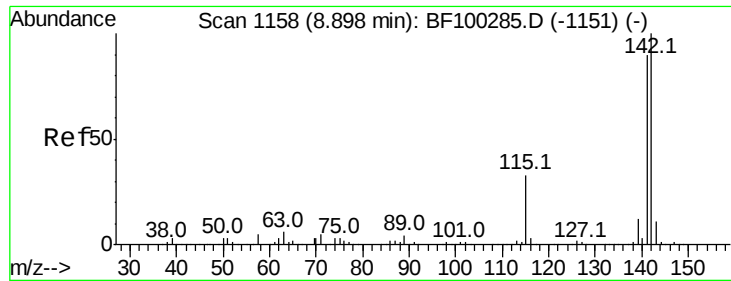
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#31
Naphthalene
Concen: 41.494 ng
RT: 8.16 min Scan# 1033
Delta R.T. -0.00 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Lower	Upper
128	100		
129	11.1	8.8	13.2
127	13.2	10.9	16.3





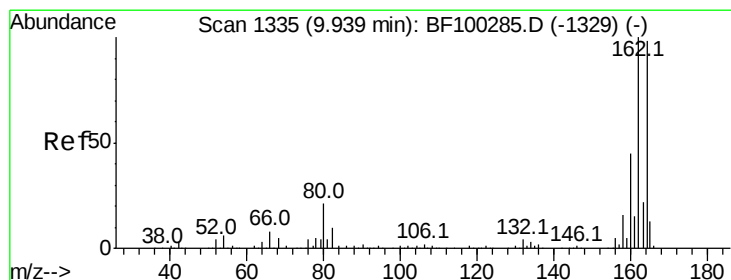
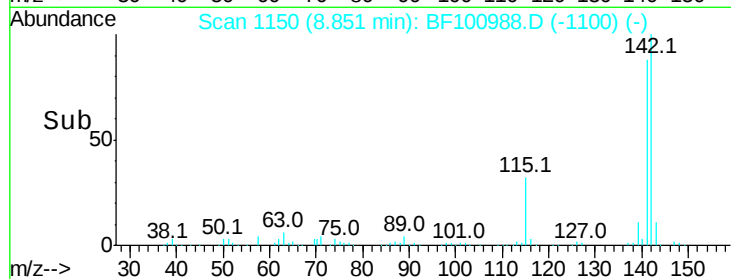
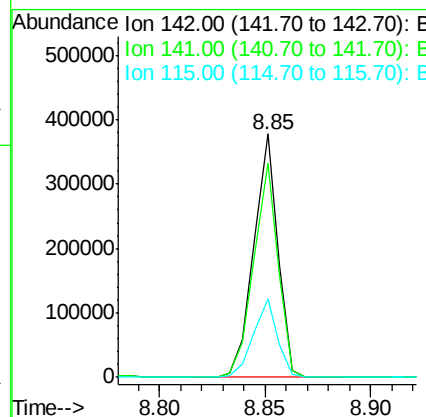
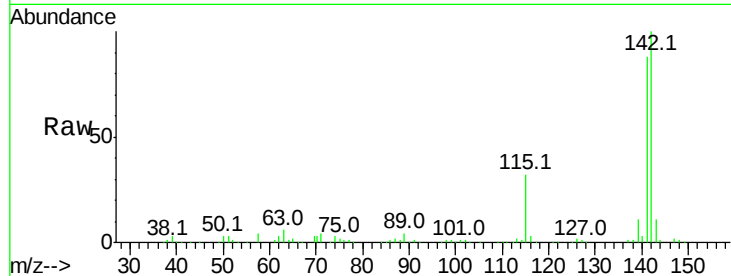
#37
2-Methylnaphthalene
Concen: 33.796 ng
RT: 8.85 min Scan# 1150
Delta R.T. -0.01 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Instrument :
BNA_F
ClientSampleId :
CL-02-112817-E

Tot Ion	Ratio	Lower	Upper
142	100		
141	87.9	70.8	106.2
115	32.3	26.1	39.1

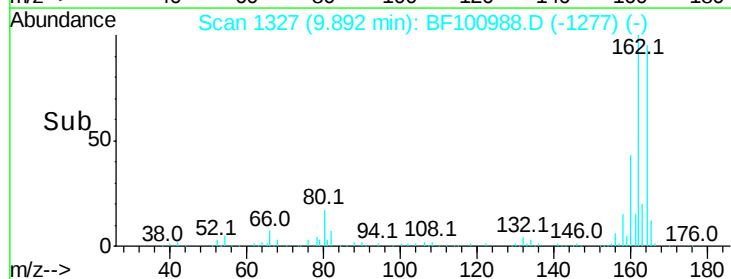
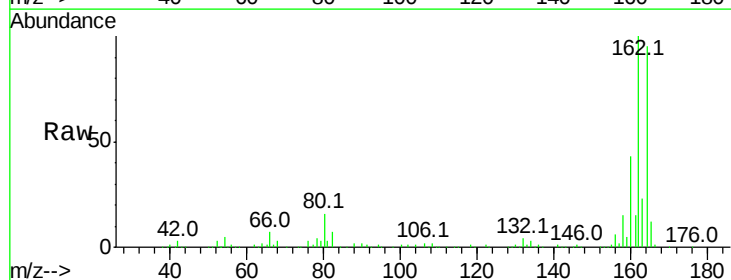
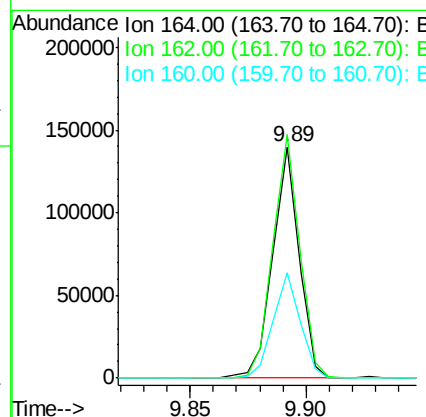
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#38
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.89 min Scan# 1327
Delta R.T. -0.01 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Lower	Upper
164	100		
162	105.3	86.1	129.1
160	45.3	38.3	57.5





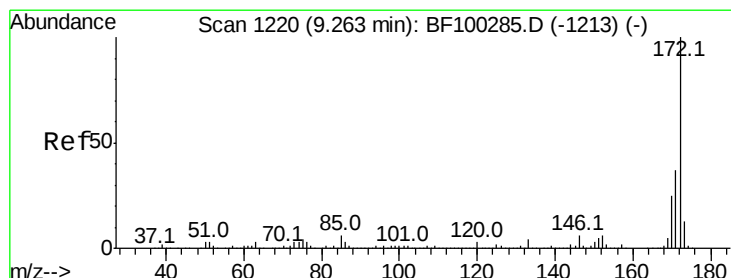
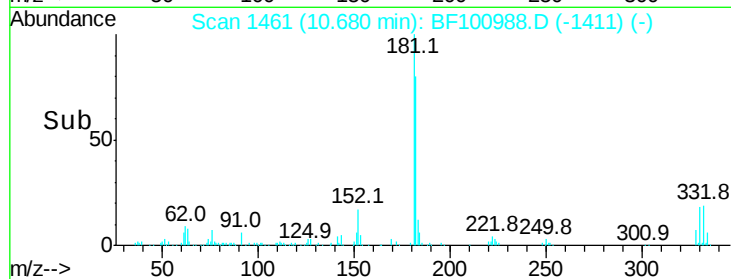
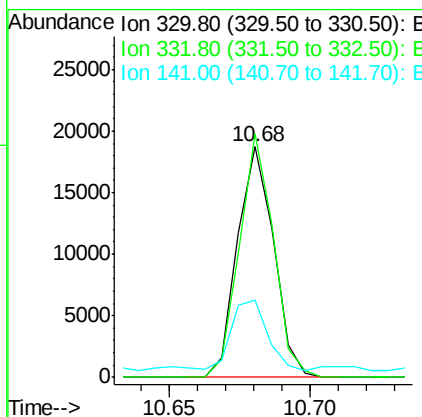
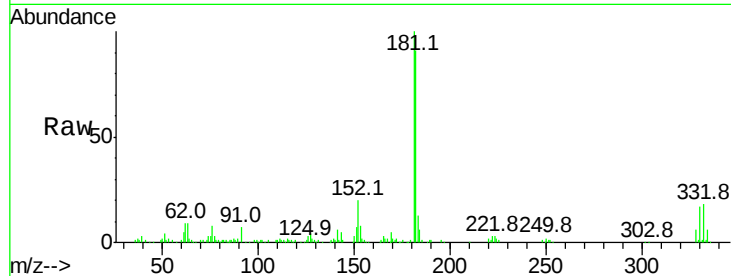
#41
 2,4,6-Tribromophenol
 Concen: 14.701 ng
 RT: 10.68 min Scan# 1461
 Delta R.T. -0.01 min
 Lab File: BF100988.D
 Acq: 29 Nov 2017 19:51

Instrument :
 BNA_F
 ClientSampled :
 CL-02-112817-E

Tot Ion	Ratio	Resp	Lower	Upper
330	100			
332	99.0	77.0	115.6	
141	36.5	29.9	44.9	

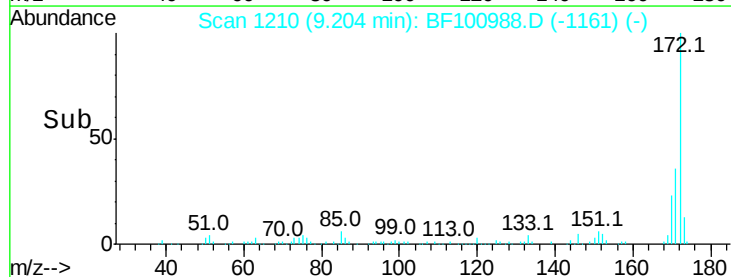
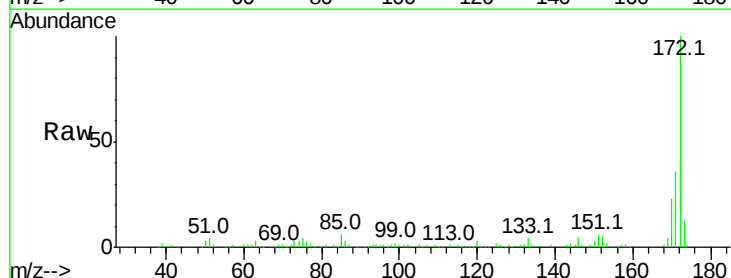
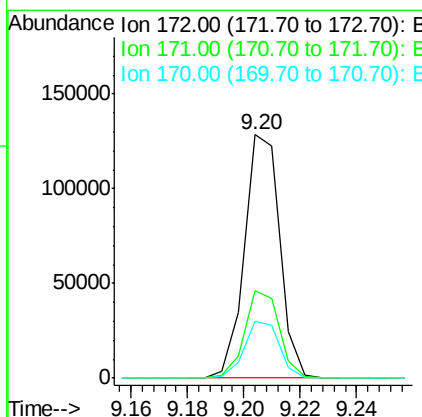
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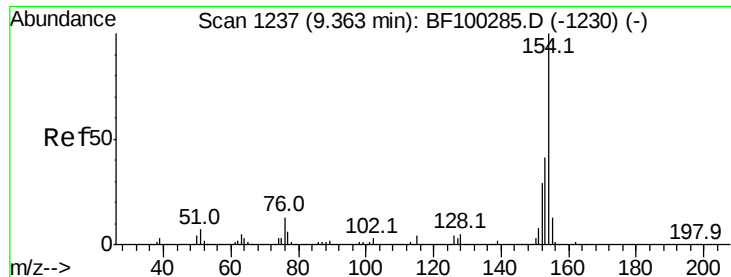
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#44
 2-Fluorobiphenyl
 Concen: 15.205 ng
 RT: 9.20 min Scan# 1210
 Delta R.T. -0.01 min
 Lab File: BF100988.D
 Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Resp	Lower	Upper
172	100			
171	35.8	29.7	44.5	
170	23.4	19.6	29.4	





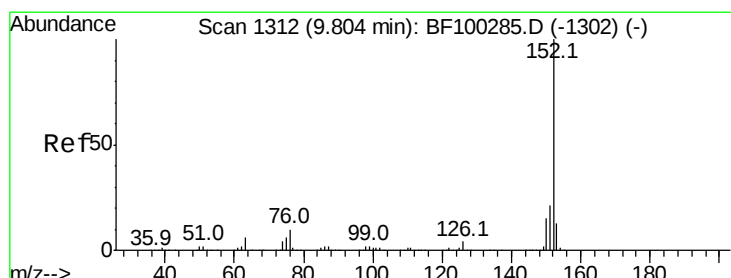
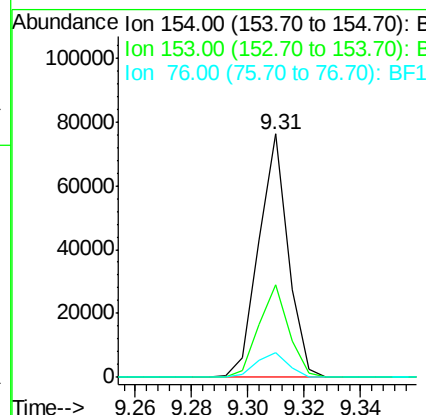
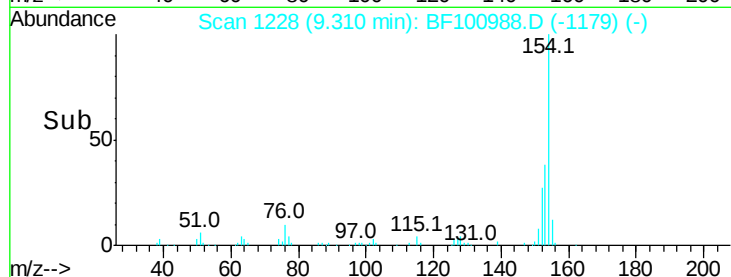
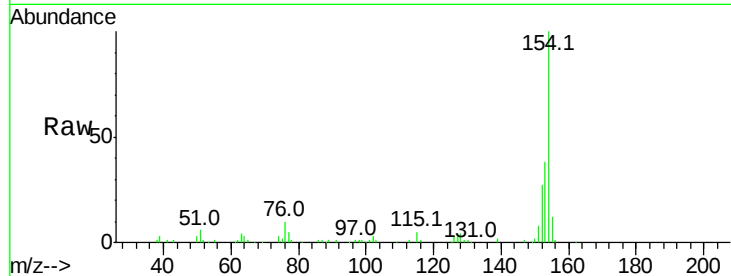
#45
1,1'-Biphenyl
Concen: 5.702 ng
RT: 9.31 min Scan# 1228
Delta R.T. -0.01 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Instrument :
BNA_F
ClientSampleId :
CL-02-112817-E

Tot Ion	Ratio	Resp	Lower	Upper
154	100			
153	38.0	21.3	61.3	
76	10.0	0.0	34.0	

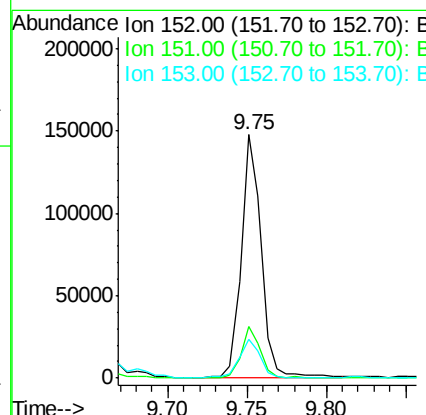
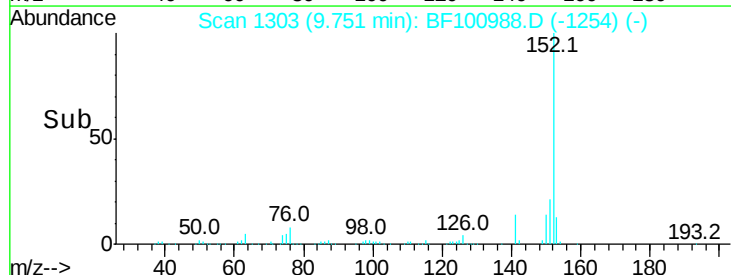
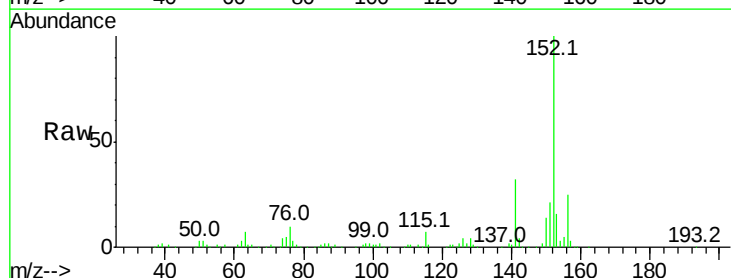
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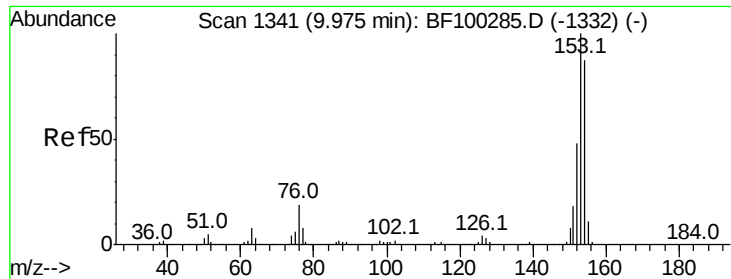
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#48
Acenaphthylene
Concen: 11.248 ng
RT: 9.75 min Scan# 1303
Delta R.T. -0.01 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Resp	Lower	Upper
152	100			
151	21.4	16.3	24.5	
153	15.9	10.7	16.1	





#51

Acenaphthene

Concen: 35.812 ng

RT: 9.93 min Scan# 1333

Delta R.T. -0.01 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Instrument :

BNA_F

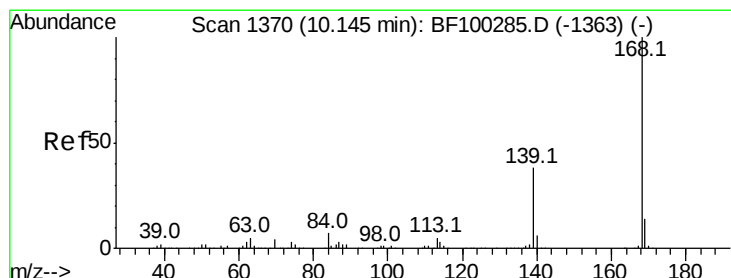
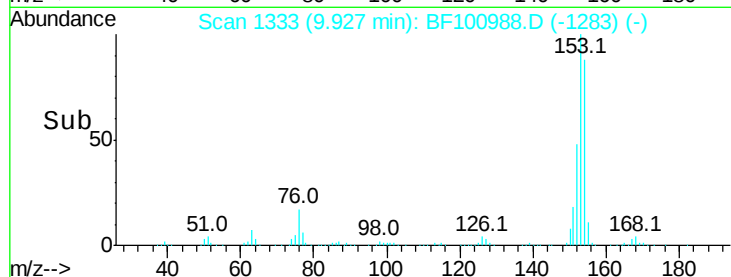
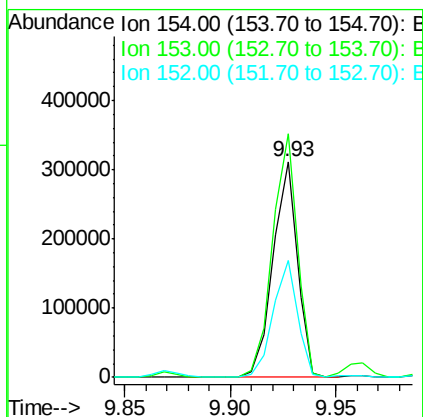
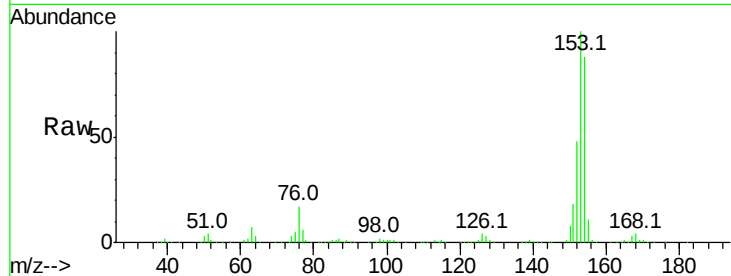
ClientSampleId :

CL-02-112817-E

Tot Ion:	154	Resp:	252175
Ion Ratio	Lower	Upper	
154	100		
153	113.0	91.2	136.8
152	54.4	43.8	65.8

Manual Integrations
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#54

Dibenzofuran

Concen: 37.035 ng

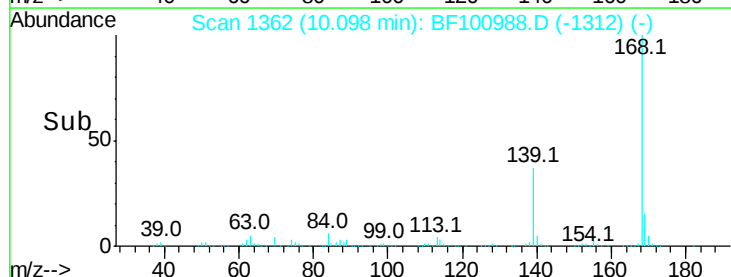
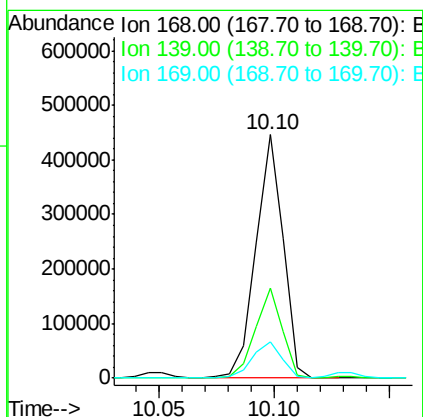
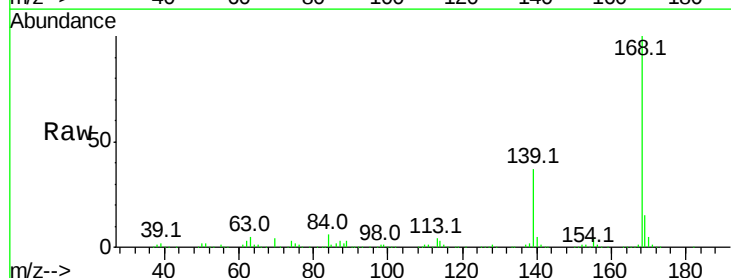
RT: 10.10 min Scan# 1362

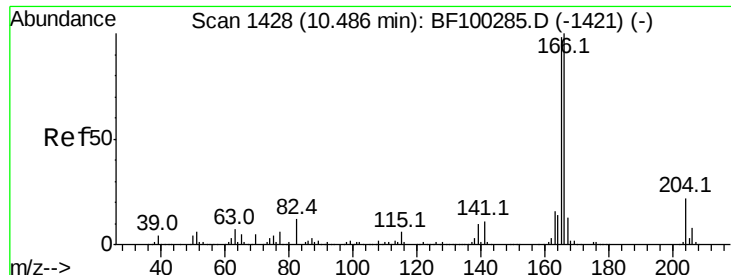
Delta R.T. -0.01 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Tgt Ion:	168	Resp:	365511
Ion Ratio	Lower	Upper	
168	100		
139	37.1	30.1	45.1
169	15.0	10.9	16.3





#57

Fluorene

Concen: 66.923 ng

RT: 10.45 min Scan# 1421

Delta R.T. -0.00 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Instrument :

BNA_F

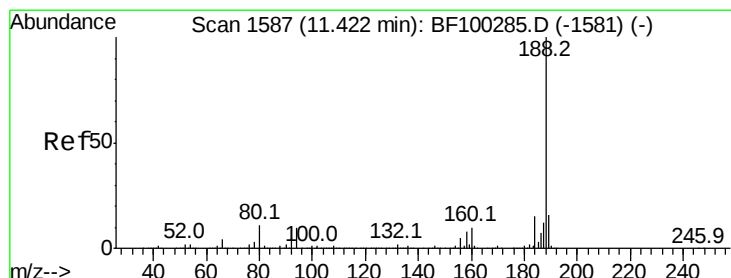
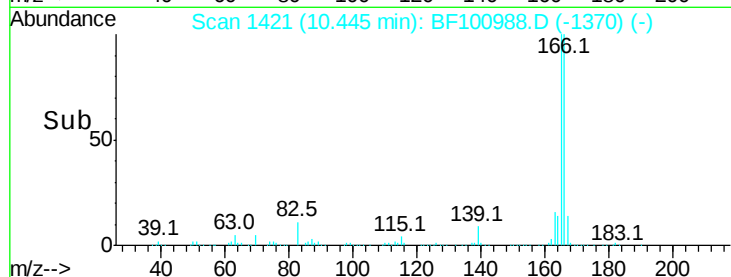
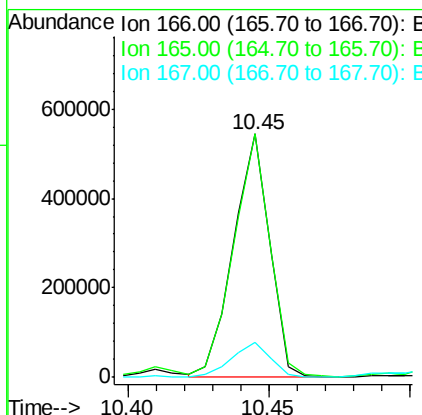
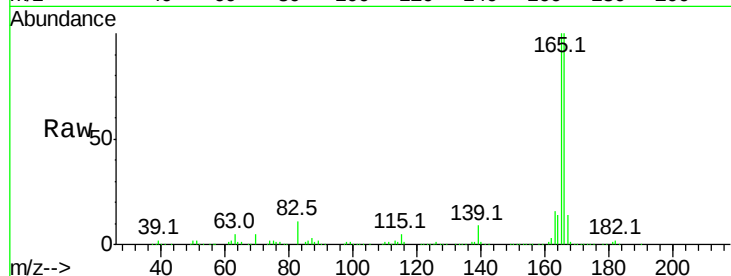
ClientSampleId :

CL-02-112817-E

Tot Ion:	166	Resp:	483852
Ion Ratio	Lower	Upper	
166	100		
165	99.9	79.8	119.8
167	14.5	10.6	16.0

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#63

Phenanthrene-d10

Concen: 20.000 ng

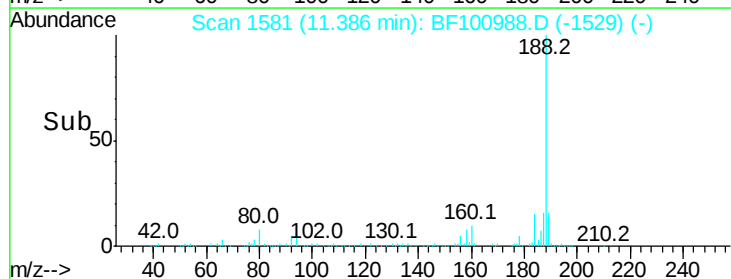
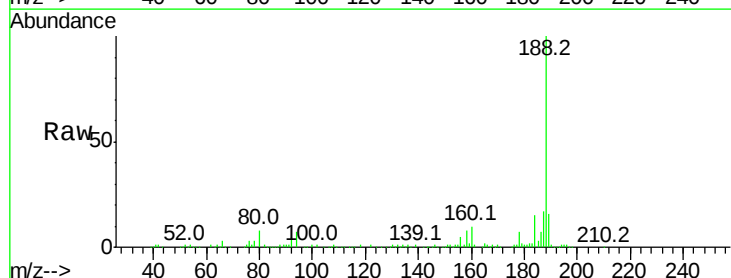
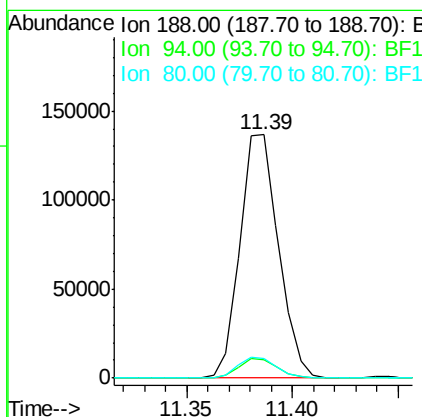
RT: 11.39 min Scan# 1581

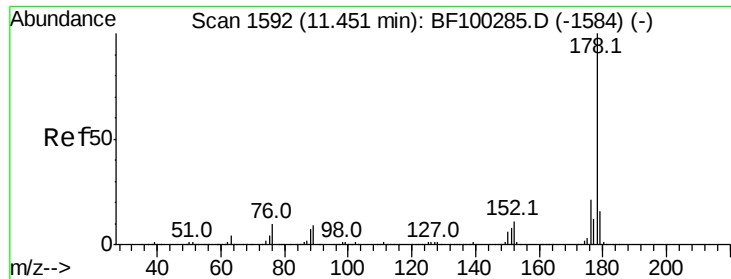
Delta R.T. 0.01 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Tgt Ion:	188	Resp:	172956
Ion Ratio	Lower	Upper	
188	100		
94	7.4	8.5	12.7#
80	7.9	9.2	13.8#





#70

Phenanthrene

Concen: 211.359 ng

RT: 11.42 min Scan# 1587

Delta R.T. 0.01 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Instrument :

BNA_F

ClientSampleId :

CL-02-112817-E

Tot Ion:178 Resp: 1924717

Ion Ratio Lower Upper

178 100

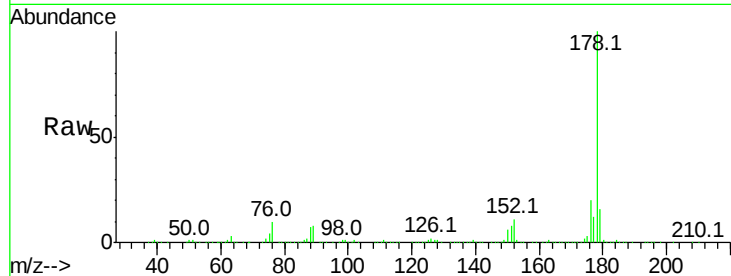
176 19.6 15.8 23.8

179 15.9 13.0 19.6

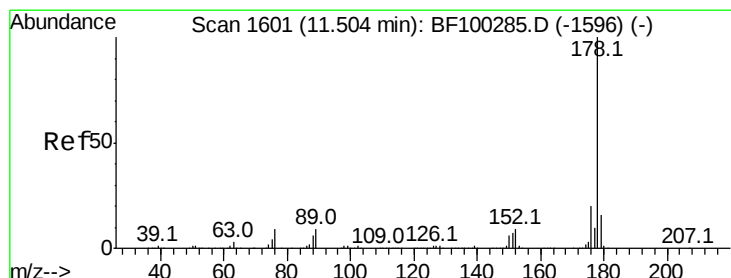
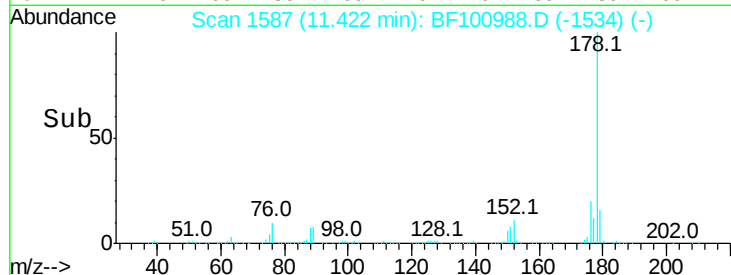
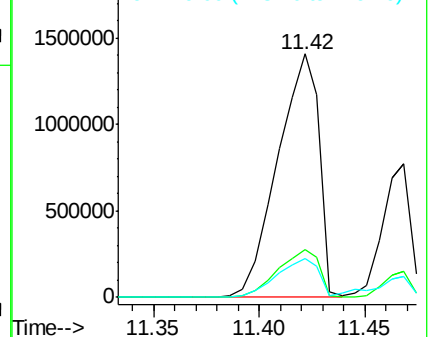
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Abundance Ion 178.00 (177.70 to 178.70): E
Ion 176.00 (175.70 to 176.70): E
Ion 179.00 (178.70 to 179.70): E



#71

Anthracene

Concen: 74.426 ng

RT: 11.47 min Scan# 1595

Delta R.T. 0.01 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

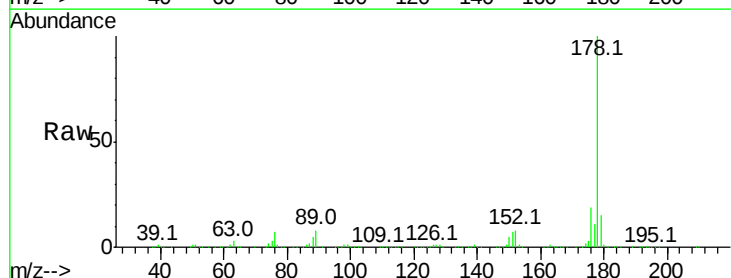
Tgt Ion:178 Resp: 687612

Ion Ratio Lower Upper

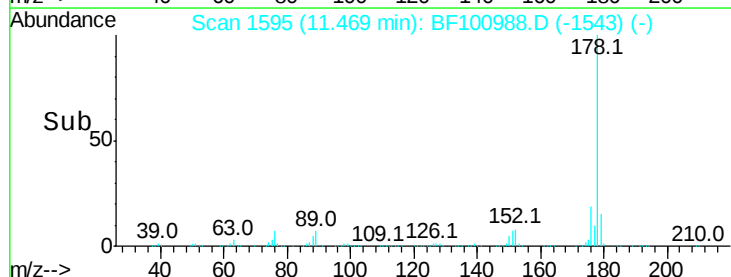
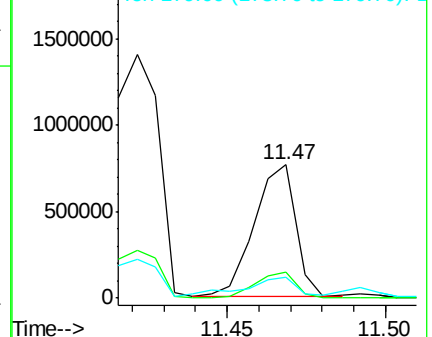
178 100

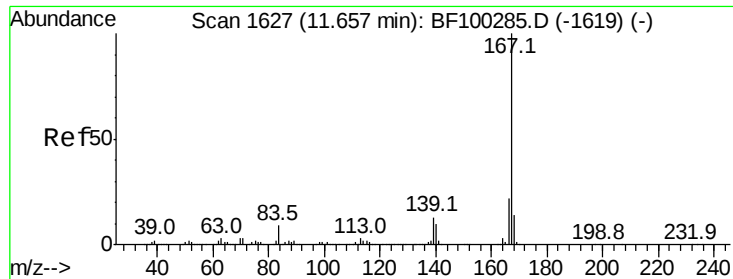
176 19.1 15.4 23.2

179 15.4 12.6 19.0



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





#72

Carbazole

Concen: 19.341 ng

RT: 11.61 min Scan# 1619

Delta R.T. -0.01 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Instrument :

BNA_F

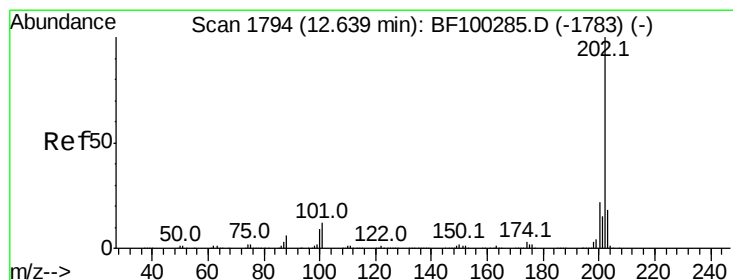
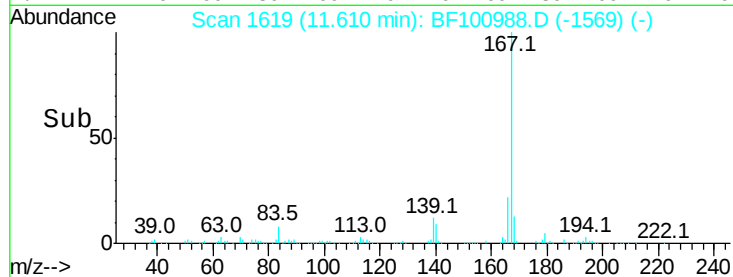
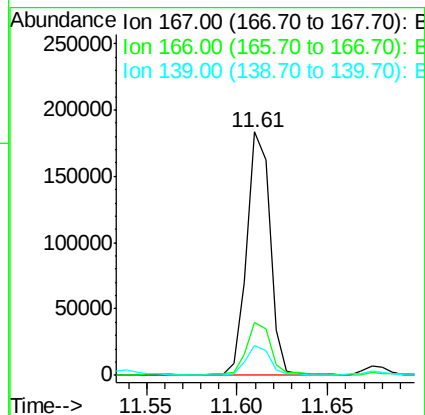
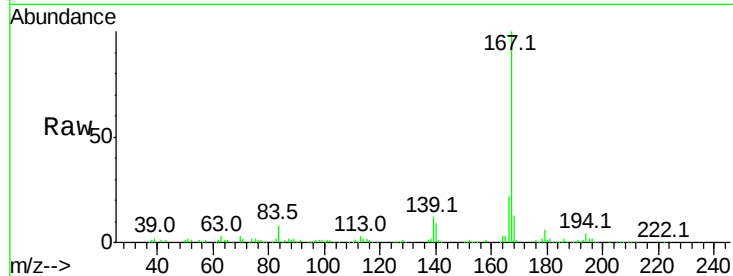
ClientSampleId :

CL-02-112817-E

Tot Ion:	167	Resp:	164878
Ion Ratio	Lower	Upper	
167	100		
166	22.0	17.6	26.4
139	12.4	10.9	16.3

Manual Integrations
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#74

Fluoranthene

Concen: 208.760 ng

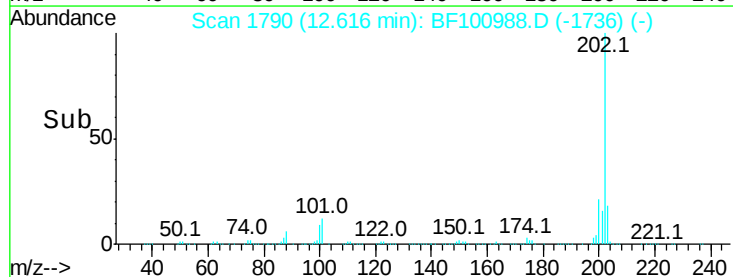
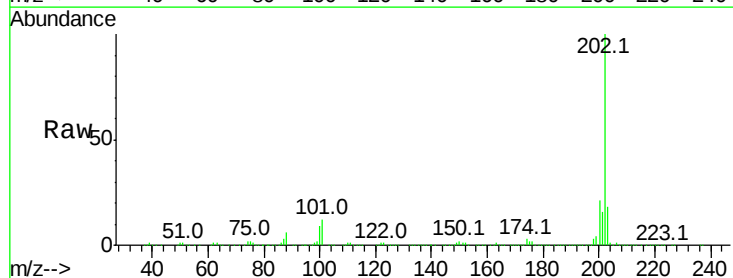
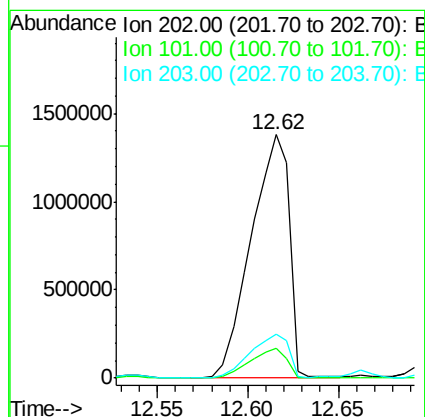
RT: 12.62 min Scan# 1790

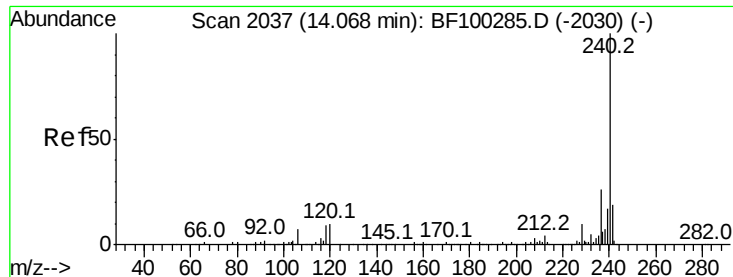
Delta R.T. 0.02 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Tgt Ion:	202	Resp:	2014747
Ion Ratio	Lower	Upper	
202	100		
101	12.4	0.0	34.1
203	18.1	0.0	38.1





#75

Chrysene-d12

Concen: 20.000 ng

RT: 14.04 min Scan# 2032

Delta R.T. 0.01 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Instrument :

BNA_F

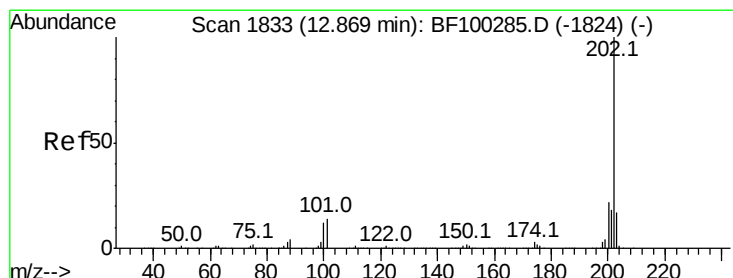
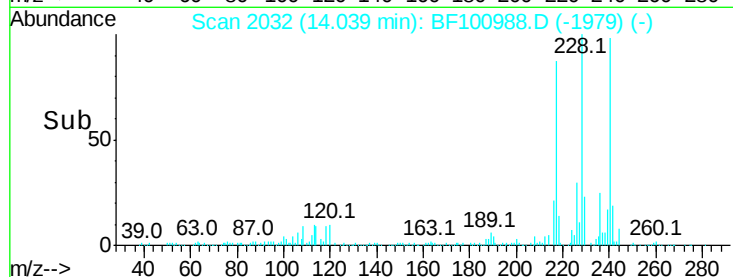
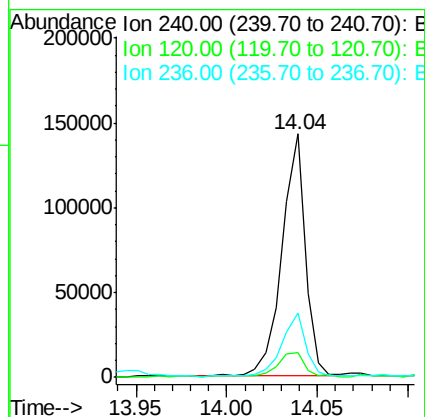
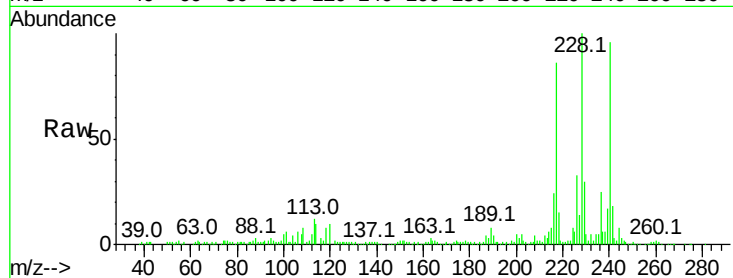
ClientSampleId :

CL-02-112817-E

Tot Ion:	240	Resp:	128753
Ion Ratio	Lower	Upper	
240	100		
120	10.0	9.5	14.3
236	26.2	20.7	31.1

Manual Integrations
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#77

Pyrene

Concen: 194.991 ng

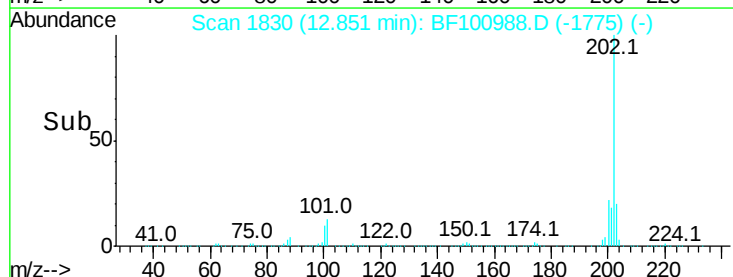
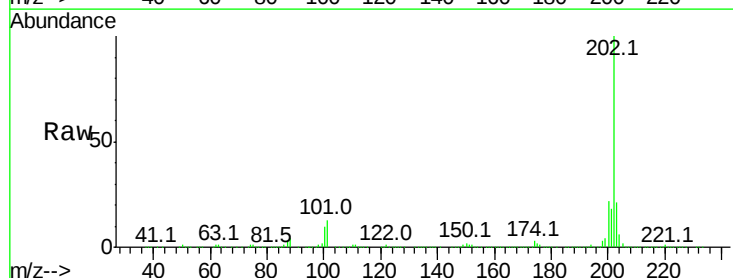
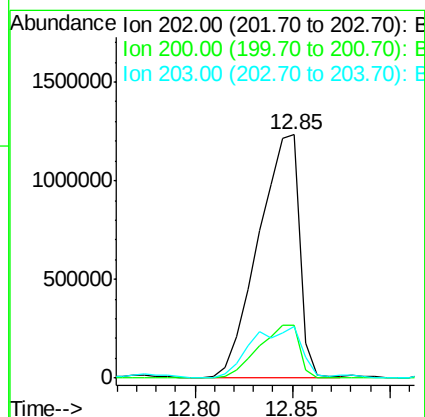
RT: 12.85 min Scan# 1830

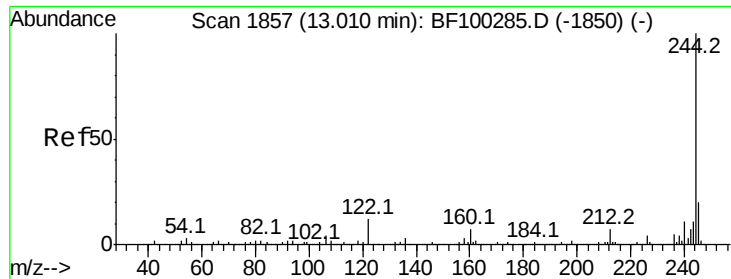
Delta R.T. 0.02 min

Lab File: BF100988.D

Acq: 29 Nov 2017 19:51

Tgt Ion:	202	Resp:	1789633
Ion Ratio	Lower	Upper	
202	100		
200	21.7	17.4	26.2
203	21.0	14.3	21.5





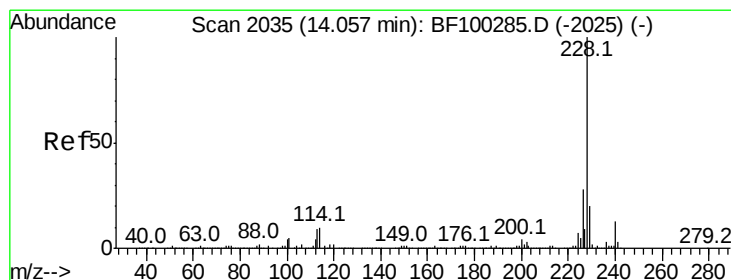
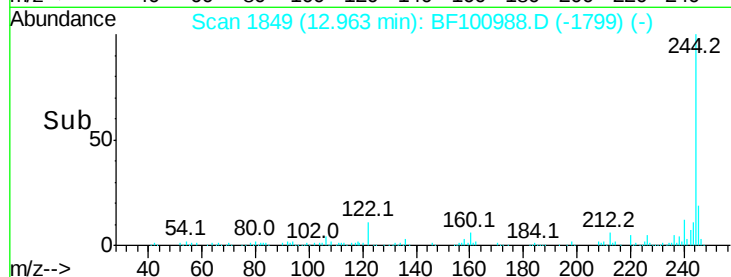
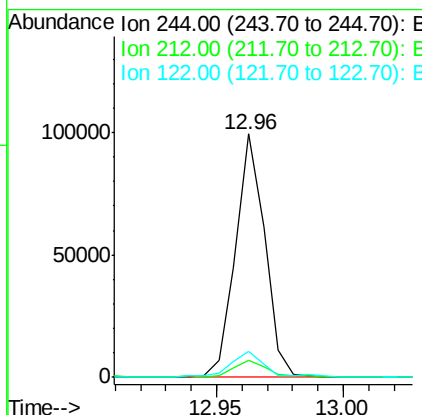
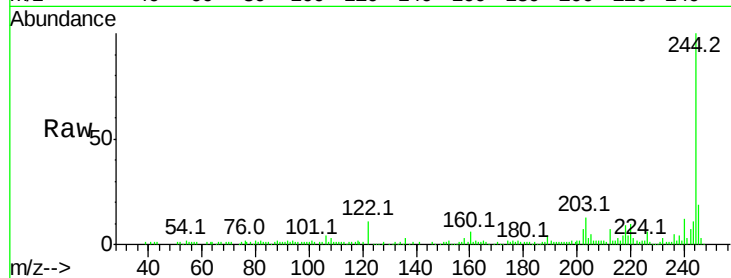
#78
 Terphenyl-d14
 Concen: 14.308 ng
 RT: 12.96 min Scan# 1849
 Delta R.T. -0.01 min
 Lab File: BF100988.D
 Acq: 29 Nov 2017 19:51

Instrument :
 BNA_F
 ClientSampleId :
 CL-02-112817-E

Tot Ion	Ratio	Lower	Upper
244	100		
212	6.8	5.4	8.0
122	10.7	11.0	16.4

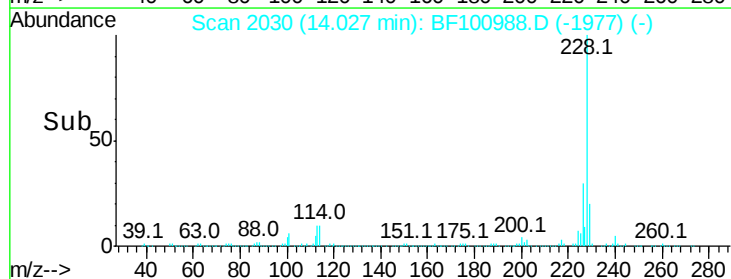
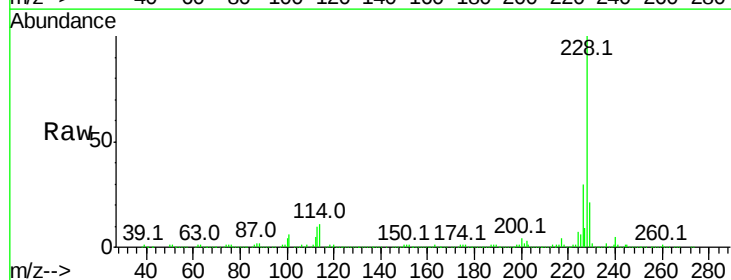
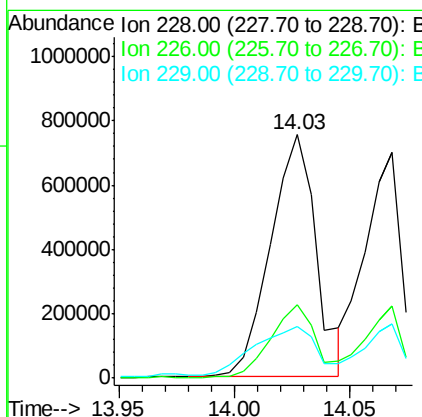
Manual Integrations
 APPROVED

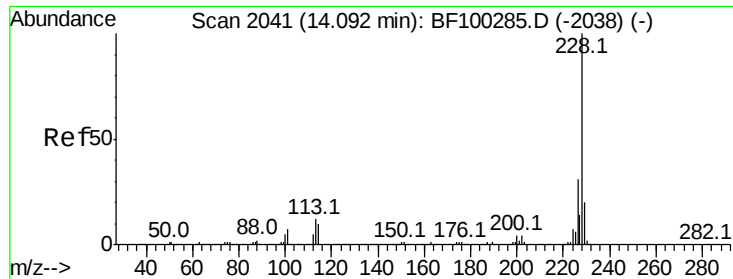
Sohil
 11/30/2017 4:30:00 PM



#80
 Benzo(a)anthracene
 Concen: 132.553 ng
 RT: 14.03 min Scan# 2030
 Delta R.T. 0.01 min
 Lab File: BF100988.D
 Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.0	22.6	33.8
229	21.0	15.8	23.6





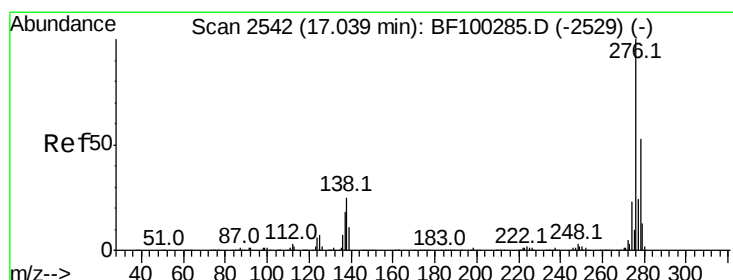
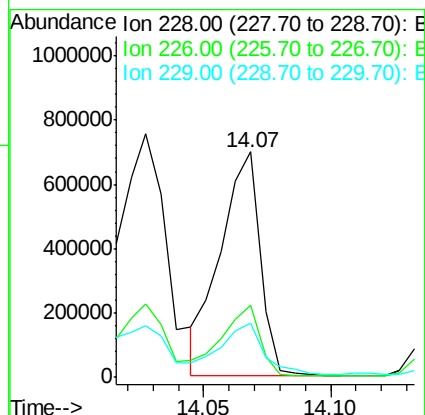
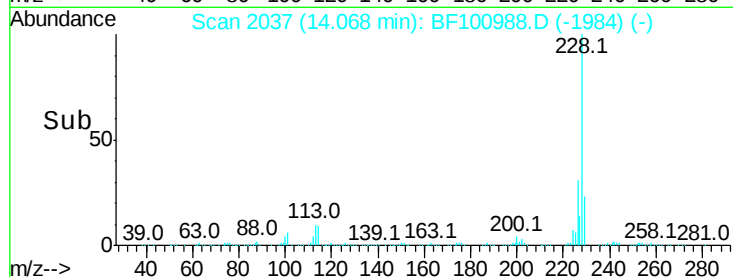
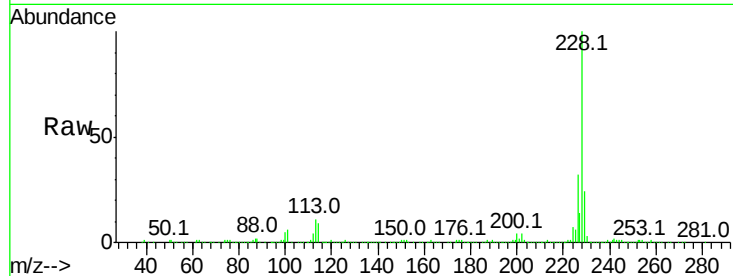
#82
Chrysene
Concen: 101.072 ng
RT: 14.07 min Scan# 2037
Delta R.T. 0.01 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Instrument :
BNA_F
ClientSampleId :
CL-02-112817-E

Tot Ion	Ratio	Lower	Upper
228	100		
226	31.9	25.0	37.6
229	24.0	16.2	24.4

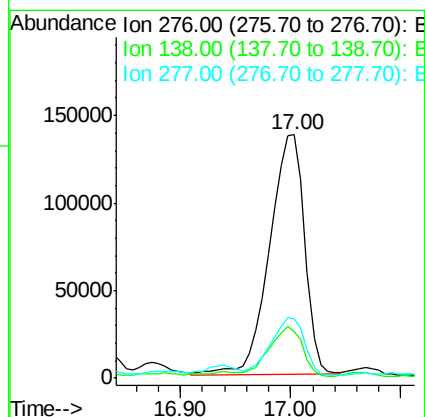
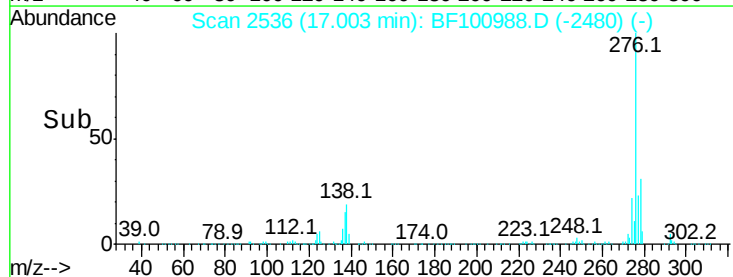
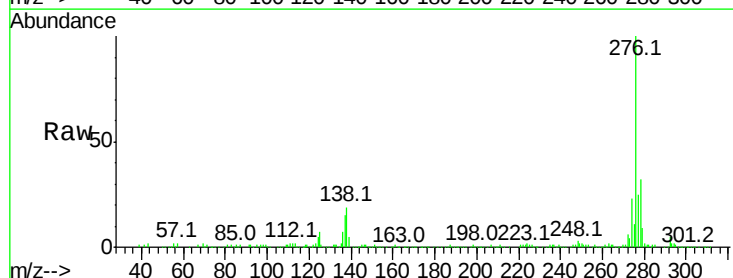
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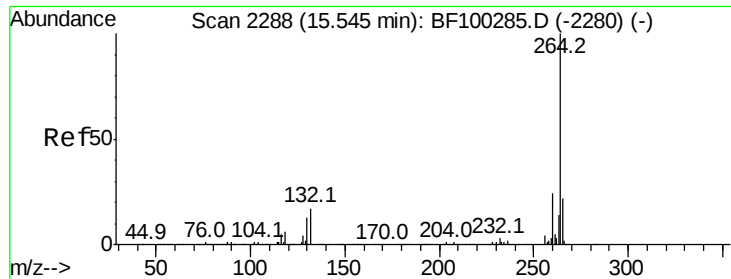
Sohil
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#85
Indeno(1,2,3-cd)pyrene
Concen: 50.163 ng
RT: 17.00 min Scan# 2536
Delta R.T. 0.03 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Lower	Upper
276	100		
138	19.5	25.0	37.6#
277	23.4	20.1	30.1





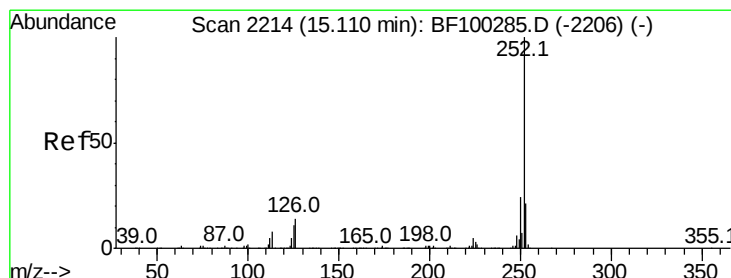
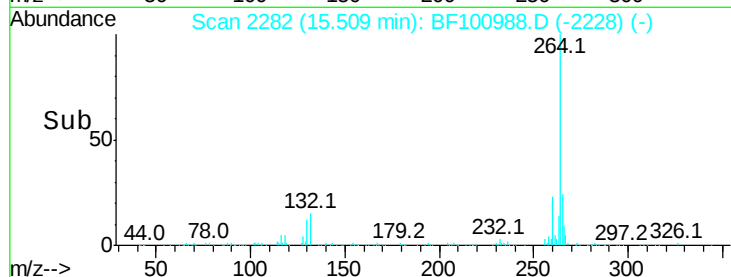
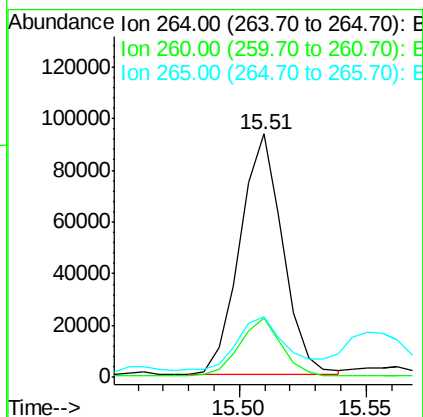
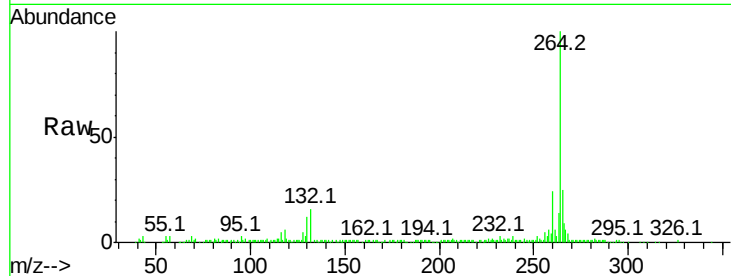
#86
Pervlene-d12
Concen: 20.000 ng
RT: 15.51 min Scan# 2282
Delta R.T. 0.02 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Instrument :
BNA_F
ClientSampleId :
CL-02-112817-E

Tot Ion	Ratio	Lower	Upper
264	100		
260	24.3	19.2	28.8
265	24.7	17.5	26.3

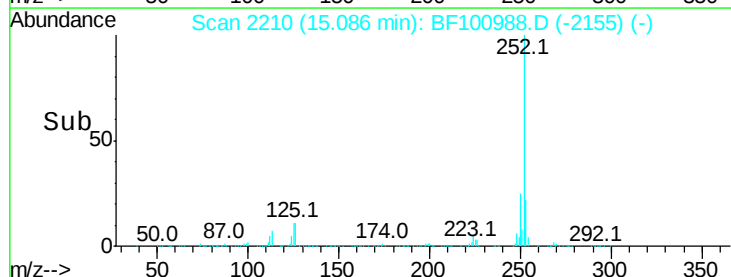
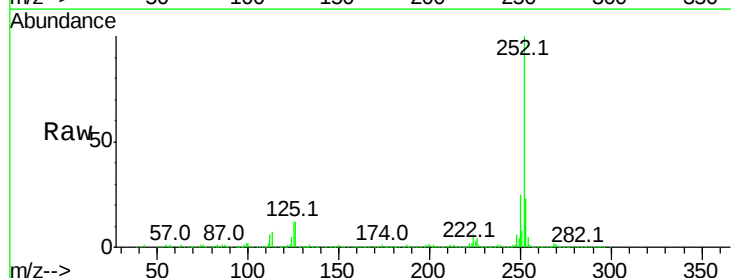
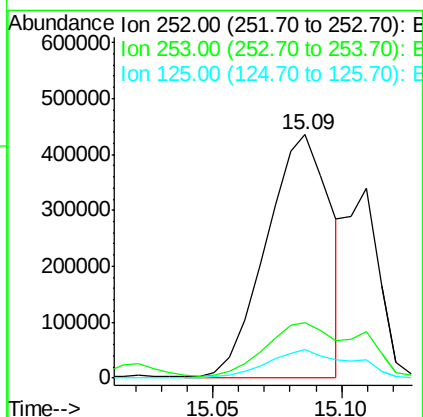
Manual Integrations
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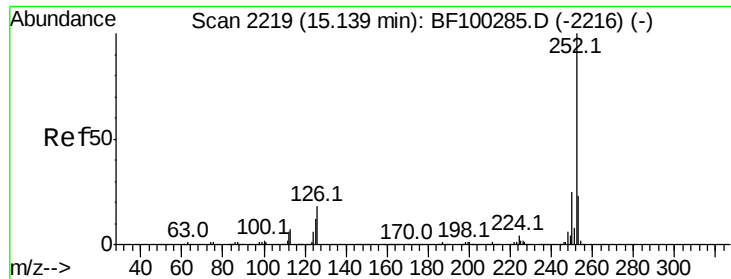
Sohil
11/30/2017 4:30:00 PM



#87
Benzo(b)fluoranthene
Concen: 117.948 ng m
RT: 15.09 min Scan# 2210
Delta R.T. 0.02 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.9	17.0	25.6
125	11.5	9.0	13.6





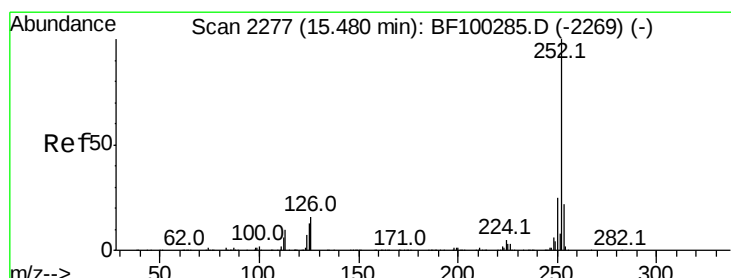
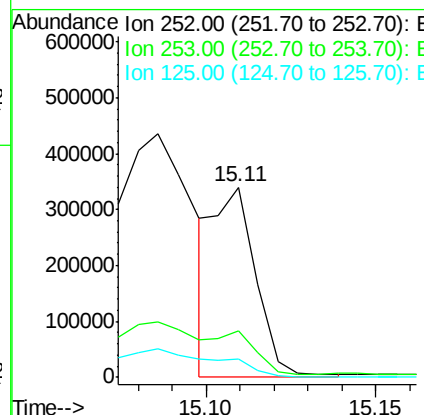
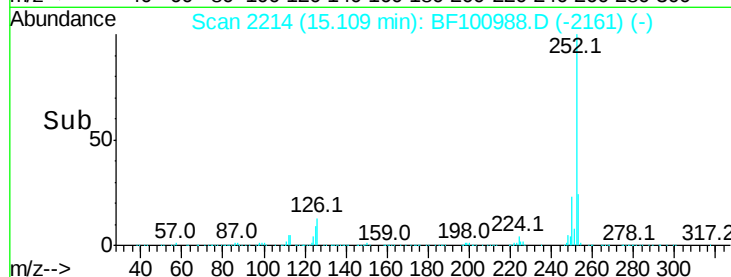
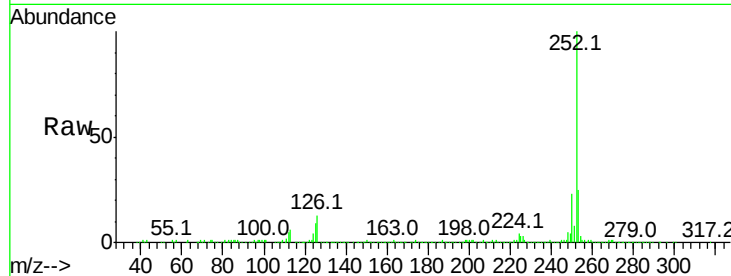
#88
Benzo(k)fluoranthene
Concen: 48.919 ng/mL
RT: 15.11 min Scan# 2214
Delta R.T. 0.01 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Instrument :
BNA_F
ClientSampleId :
CL-02-112817-E

Tot Ion	Ratio	Resp	Lower	Upper
252	100	297652		
253	24.7	17.9	26.9	
125	9.5	10.2	15.2	

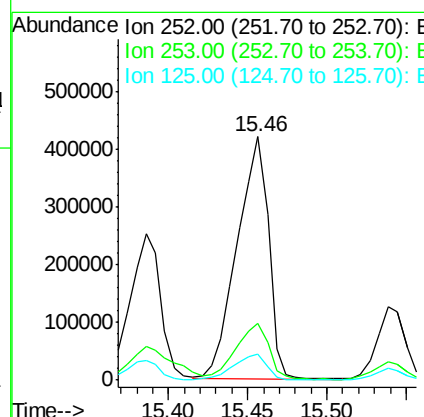
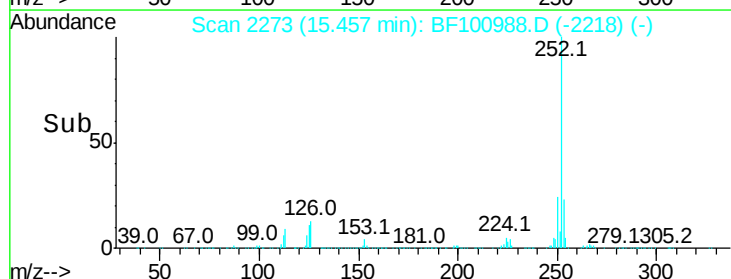
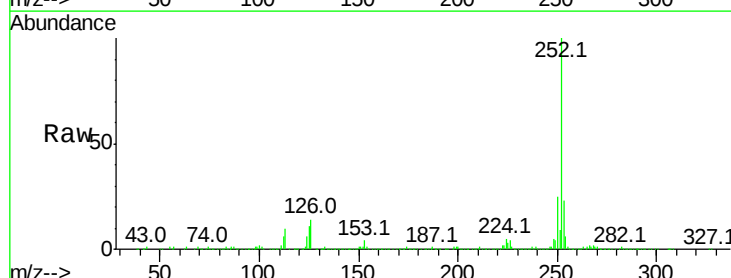
Manual Integrations
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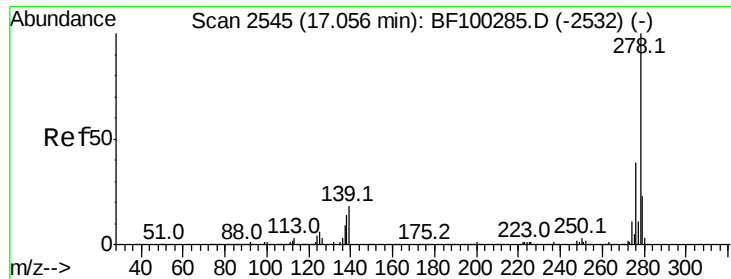
Sohil
11/30/2017 4:30:00 PM



#89
Benzo(a)pyrene
Concen: 101.375 ng/mL
RT: 15.46 min Scan# 2273
Delta R.T. 0.02 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Resp	Lower	Upper
252	100	578753		
253	23.4	17.1	25.7	
125	10.8	9.8	14.6	





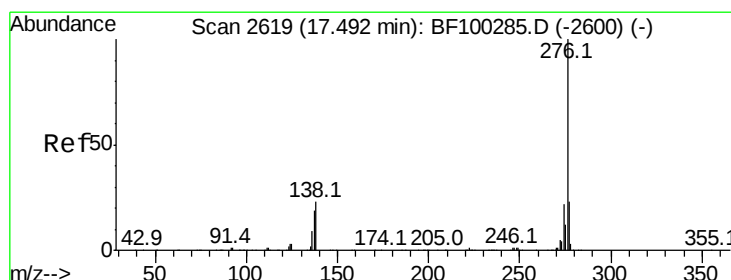
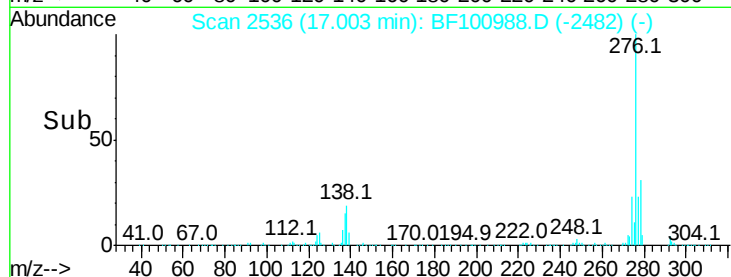
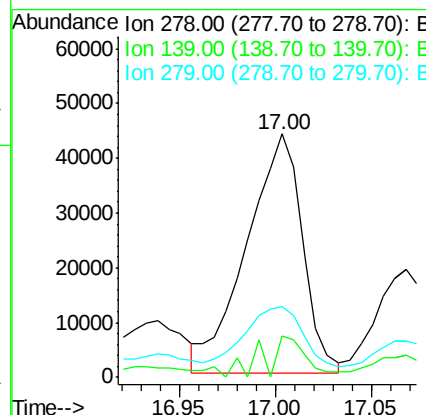
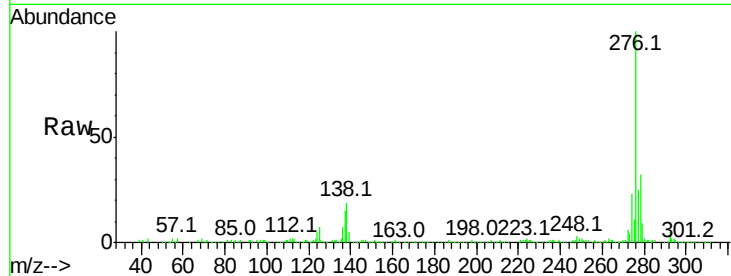
#90
Dibenzo(a,h)anthracene
Concen: 18.948 ng/mL
RT: 17.00 min Scan# 2536
Delta R.T. 0.02 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Instrument :
BNA_F
ClientSampleId :
CL-02-112817-E

Tot Ion	Ratio	Lower	Upper
278	100		
139	17.0	15.9	23.9
279	29.2	19.0	28.4

Manual Integrations
APPROVED

Sohil
11/30/2017 4:30:00 PM



#91
Benzo(g,h,i)perylene
Concen: 60.431 ng/mL
RT: 17.45 min Scan# 2612
Delta R.T. 0.03 min
Lab File: BF100988.D
Acq: 29 Nov 2017 19:51

Tgt Ion	Ratio	Lower	Upper
276	100		
277	23.1	17.9	26.9
138	20.8	21.8	32.8

