

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF121815\
 Data File : BF083904.D
 Acq On : 18 Dec 2015 8:32
 Operator : UM/SJ
 Sample : G4759-05
 Misc :
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 K210-10-15

Manual Integrations
 APPROVED

MMdadoda
 12/18/2015 6:22:07 PM

Quant Time: Dec 18 12:31:15 2015
 Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121815.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 18 01:01:02 2015
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.89	152	120968	20.00	ng	0.01
21) Naphthalene-d8	8.17	136	428344	20.00	ng	0.01
38) Acenaphthene-d10	9.93	164	179147	20.00	ng	0.01
63) Phenanthrene-d10	11.41	188	274184	20.00	ng	0.02
75) Chrysene-d12	14.07	240	230432	20.00	ng	0.03
86) Perylene-d12	15.51	264	181141	20.00	ng	0.03
System Monitoring Compounds						
5) 2-Fluorophenol	5.50	112	352079	45.55	ng	0.02
7) Phenol-d6	6.53	99	422582	44.66	ng	0.02
23) Nitrobenzene-d5	7.45	82	288057	38.38	ng	0.01
41) 2,4,6-Tribromophenol	10.72	330	72877	36.93	ng	0.01
44) 2-Fluorobiphenyl	9.24	172	484203	34.40	ng	0.00
78) Terphenyl-d14	12.99	244	348977	31.46	ng	0.01
Target Compounds						Qvalue
48) Acenaphthylene	9.79	152	233532	11.18	ng	# 96
49) Dimethylphthalate	9.64	163	79535	5.29	ng	# 89
51) Acenaphthene	9.96	154	193239	15.05	ng	99
54) Dibenzofuran	10.13	168	326636	19.59	ng	# 88
57) Fluorene	10.48	166	167082	10.90	ng	98
70) Phenanthrene	11.45	178	1238198	74.75	ng	97
71) Anthracene	11.49	178	777138	48.53	ng	99
74) Fluoranthene	12.65	202	2079562	125.80	ng	98
77) Pyrene	12.88	202	1869214	102.45	ng	97
80) Benzo(a)anthracene	14.05	228	848045	59.86	ng	96
82) Chrysene	14.09	228	662526m	48.41	ng	
85) Indeno(1,2,3-cd)pyrene	16.96	276	352998	34.49	ng	95
87) Benzo(b)fluoranthene	15.09	252	758187m	57.41	ng	
88) Benzo(k)fluoranthene	15.11	252	276806m	25.41	ng	
89) Benzo(a)pyrene	15.45	252	498500	45.71	ng	# 94
90) Dibenzo(a,h)anthracene	16.96	278	69086	8.14	ng	# 93
91) Benzo(g,h,i)perylene	17.39	276	342085	41.14	ng	100

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

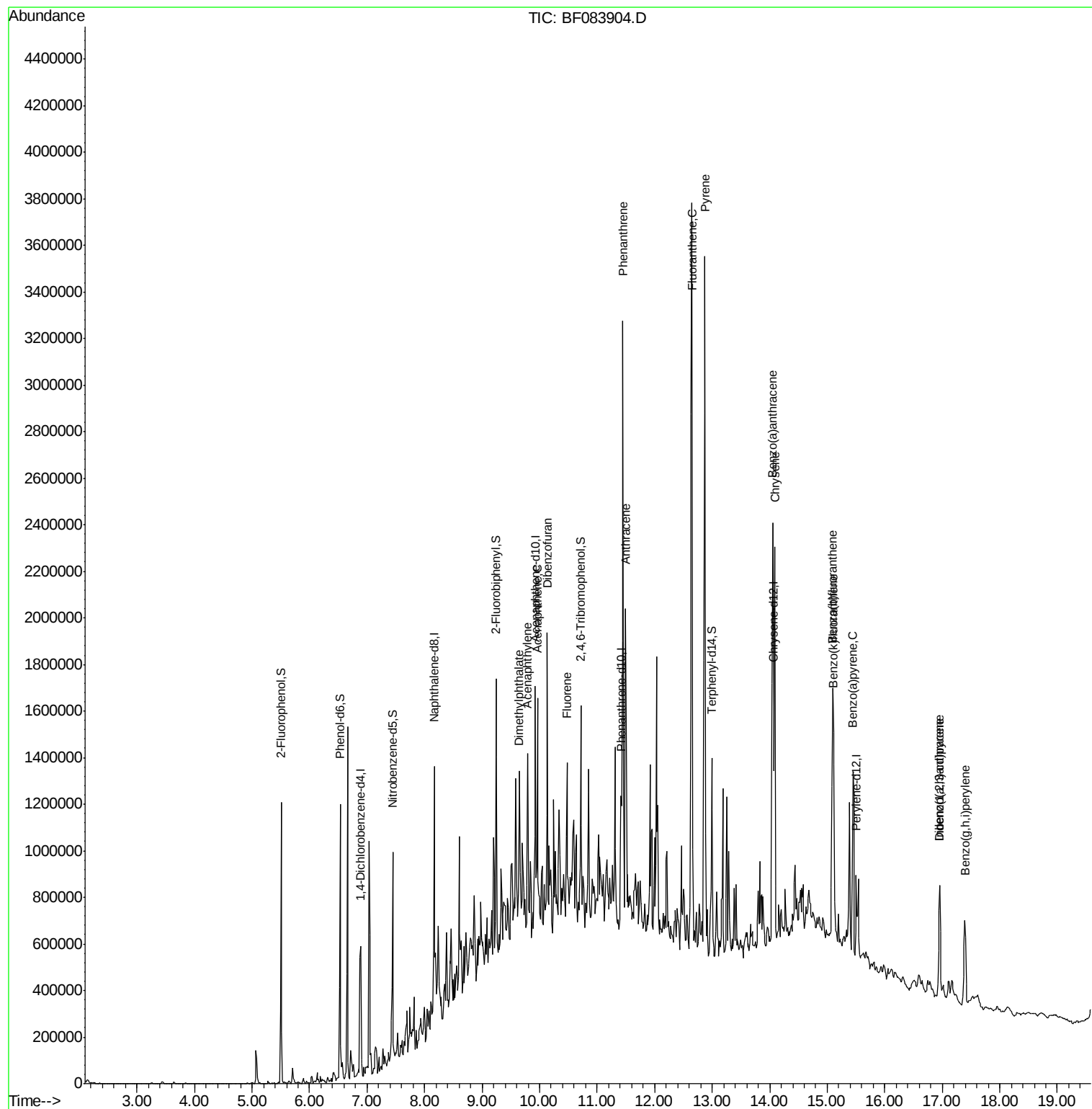
Data Path : Z:\HPCHEM1\BNA_F\DATA\BF121815\
Data File : BF083904.D
Acq On : 18 Dec 2015 8:32
Operator : UM/SJ
Sample : G4759-05
Misc :
ALS Vial : 25 Sample Multiplier: 1

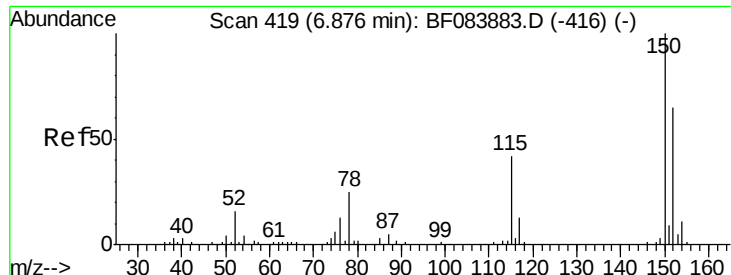
Instrument :
BNA_F
ClientSampleId :
K210-10-15

Manual Integrations
APPROVED

MMdadoda
12/18/2015 6:22:07 PM

Quant Time: Dec 18 12:31:15 2015
Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF121815.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 18 01:01:02 2015
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.89 min Scan# 420

Delta R.T. 0.01 min

Lab File: BF083904.D

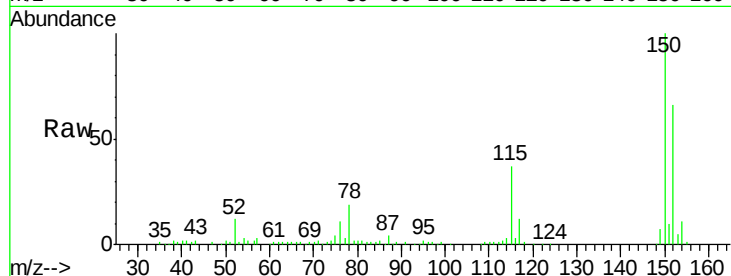
Acq: 18 Dec 2015 8:32

Instrument :

BNA_F

ClientSampleId :

K210-10-15



Tgt Ion:152 Resp: 120968

Ion Ratio Lower Upper

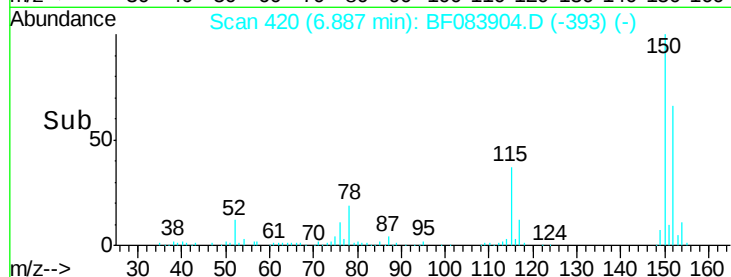
152 100

150 152.0 123.0 184.4

115 56.7 51.4 77.2

Manual Integrations
APPROVED

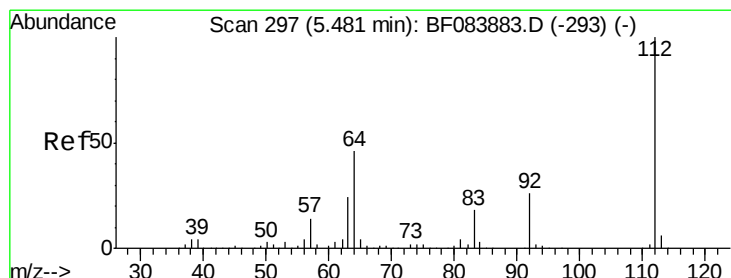
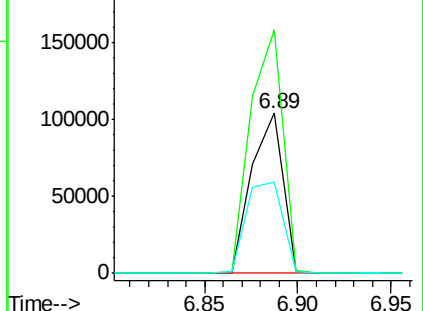
MMdadoda
12/18/2015 6:22:07 PM



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



#5

2-Fluorophenol

Concen: 45.55 ng

RT: 5.50 min Scan# 299

Delta R.T. 0.02 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

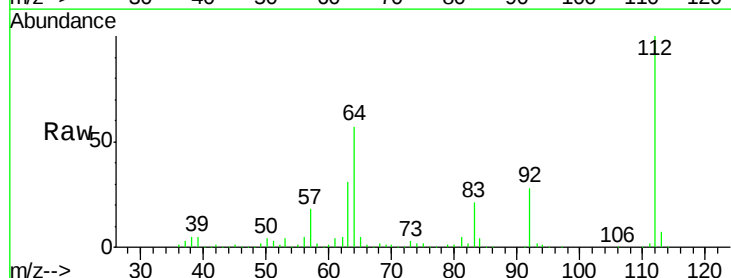
Tgt Ion:112 Resp: 352079

Ion Ratio Lower Upper

112 100

64 56.6 36.6 55.0#

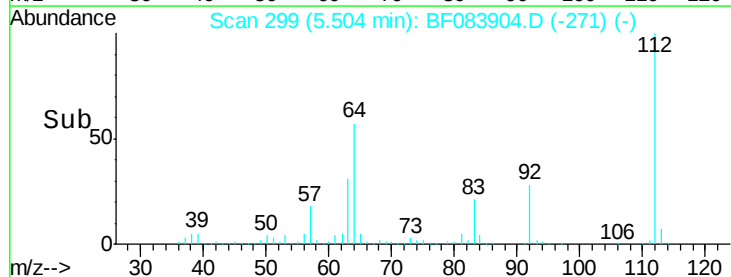
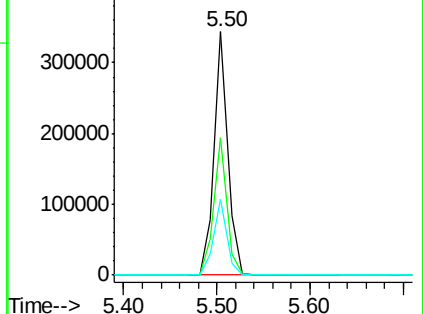
63 31.0 19.4 29.0#

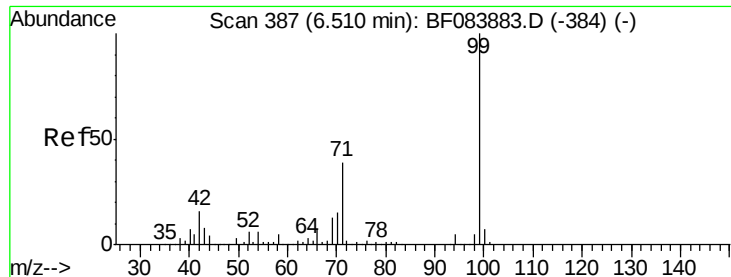


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 44.66 ng

RT: 6.53 min Scan# 389

Delta R.T. 0.02 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Instrument :

BNA_F

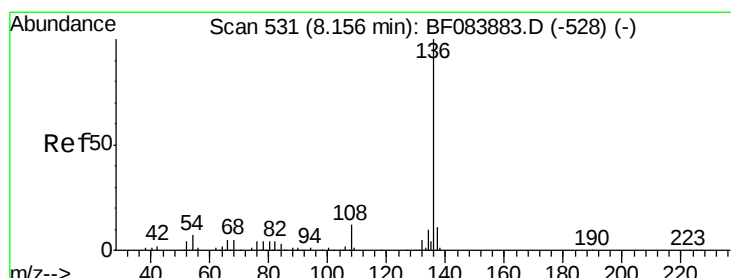
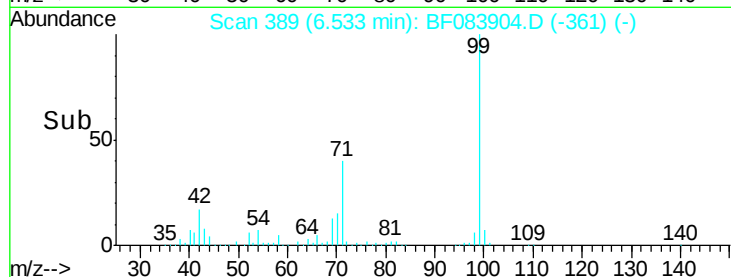
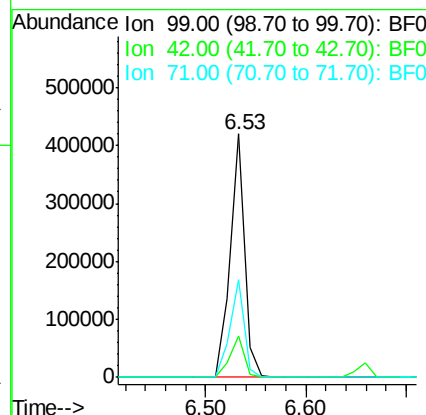
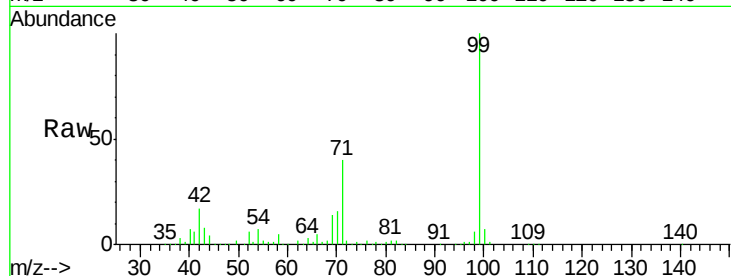
ClientSampleId :

K210-10-15

Tgt Ion:	99	Resp:	422582
Ion Ratio	Lower	Upper	
99	100		
42	17.1	12.8	19.2
71	40.2	30.9	46.3

Manual Integrations
APPROVED

MMdadoda
12/18/2015 6:22:07 PM



#21

Naphthalene-d8

Concen: 20.00 ng

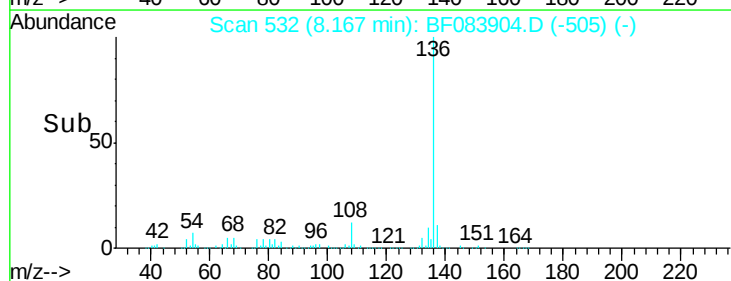
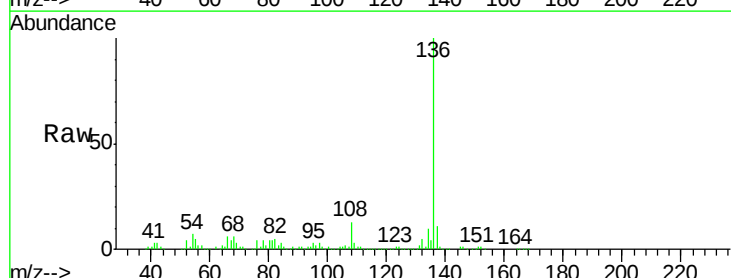
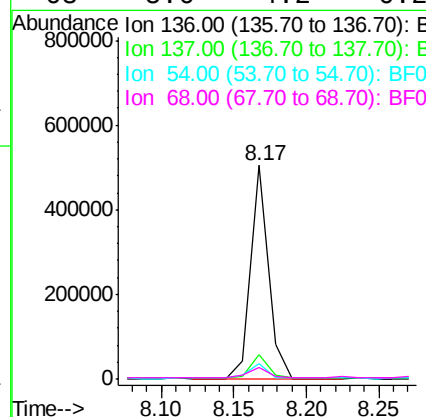
RT: 8.17 min Scan# 532

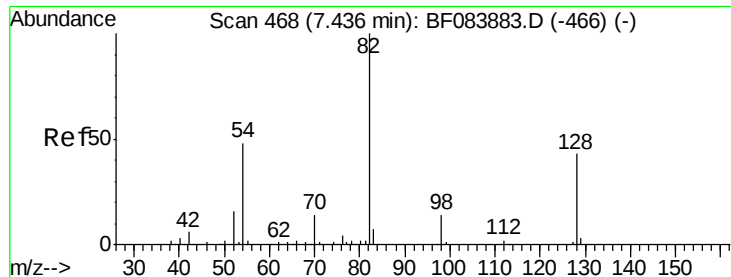
Delta R.T. 0.01 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Tgt Ion:	136	Resp:	428344
Ion Ratio	Lower	Upper	
136	100		
137	11.5	8.7	13.1
54	7.2	5.8	8.8
68	5.6	4.2	6.2





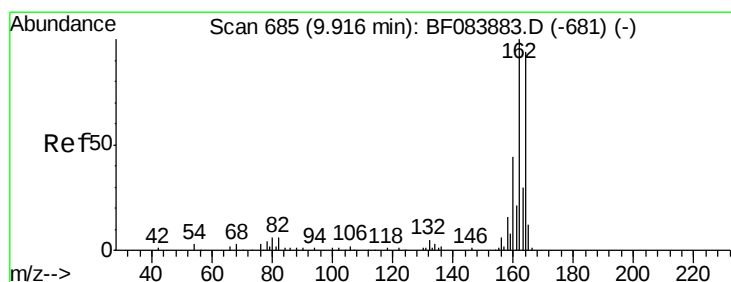
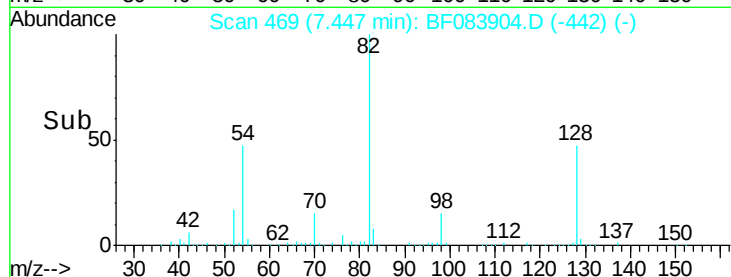
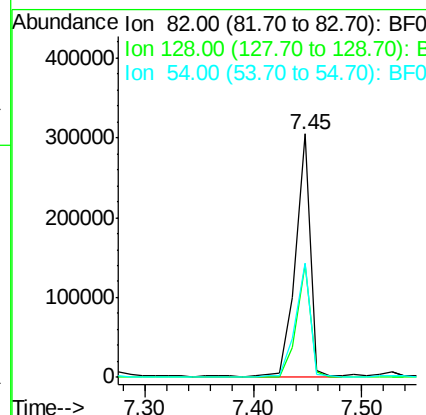
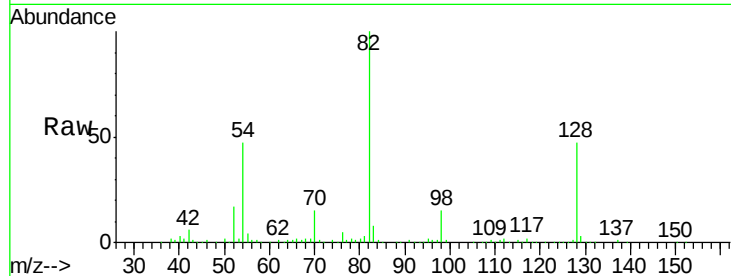
#23
Nitrobenzene-d5
Concen: 38.38 ng
RT: 7.45 min Scan# 469
Delta R.T. 0.01 min
Lab File: BF083904.D
Acq: 18 Dec 2015 8:32

Instrument :
BNA_F
ClientSampleId :
K210-10-15

Tgt Ion	Ratio	Resp	Lower	Upper
82	100	288057		
128	46.5		34.6	51.8
54	47.1		38.4	57.6

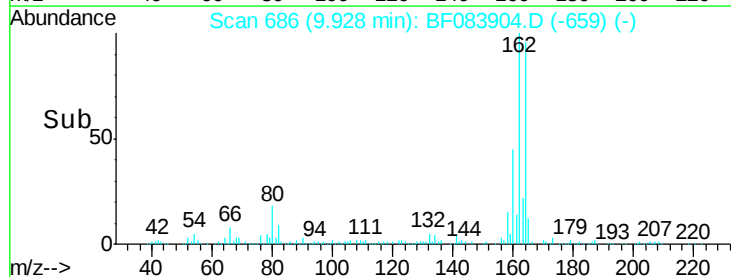
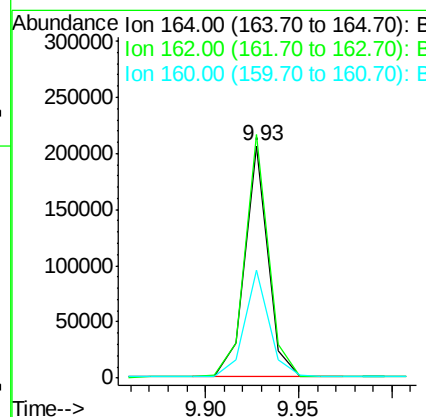
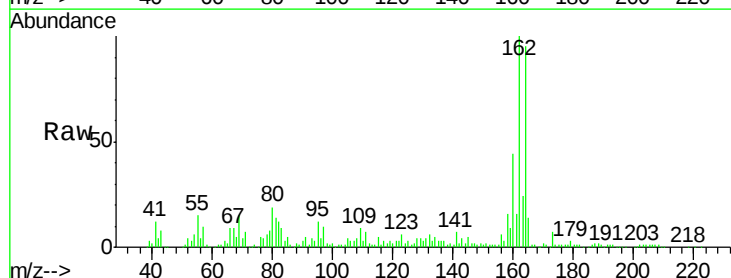
Manual Integrations
APPROVED

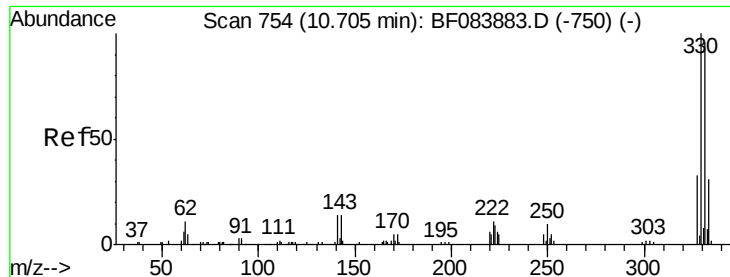
MMdadoda
12/18/2015 6:22:07 PM



#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 9.93 min Scan# 686
Delta R.T. 0.01 min
Lab File: BF083904.D
Acq: 18 Dec 2015 8:32

Tgt Ion	Ratio	Resp	Lower	Upper
164	100	179147		
162	104.9		85.1	127.7
160	46.6		37.5	56.3





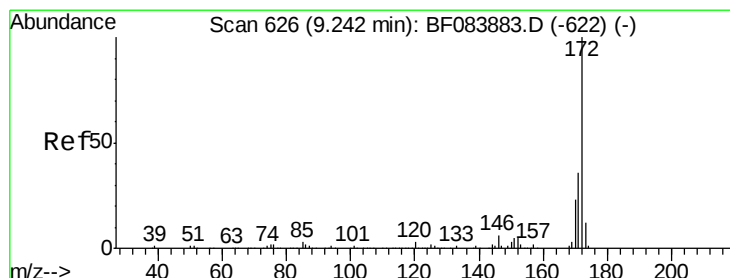
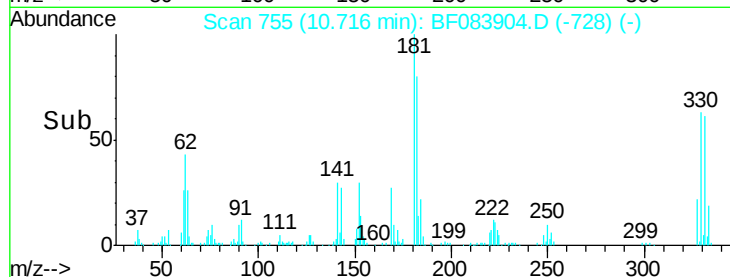
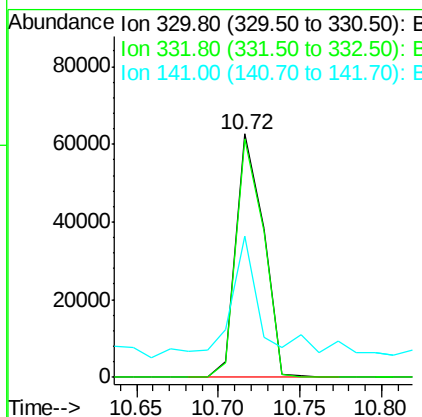
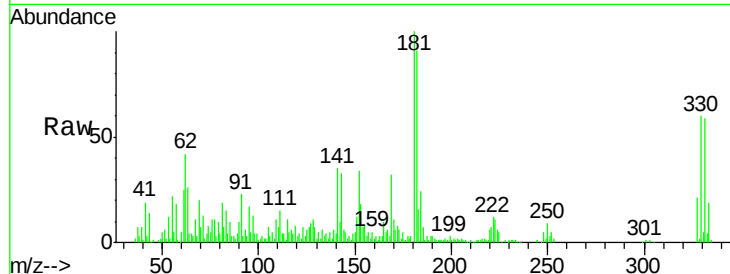
#41
 2,4,6-Tribromophenol
 Concen: 36.93 ng
 RT: 10.72 min Scan# 755
 Delta R.T. 0.01 min
 Lab File: BF083904.D
 Acq: 18 Dec 2015 8:32

Instrument :
 BNA_F
 ClientSampleId :
 K210-10-15

Tgt Ion	Ratio	Resp	Lower	Upper
330	100	72877		
332	97.4	76.6	114.8	
141	49.3	27.8	41.6	

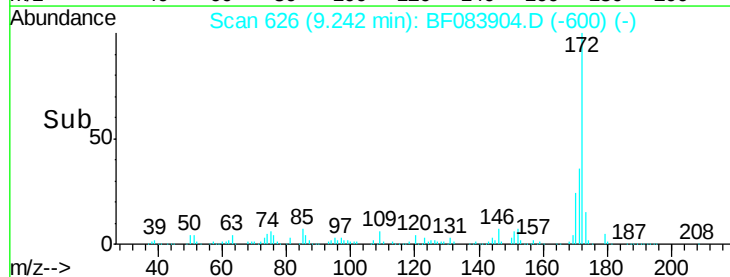
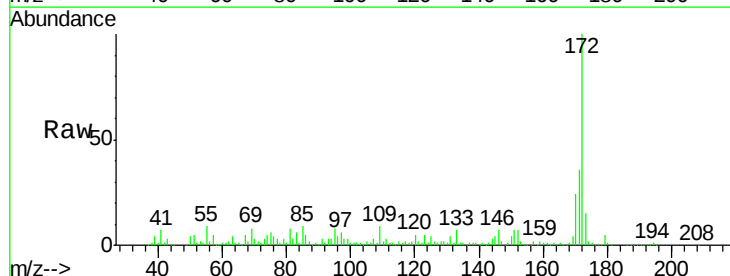
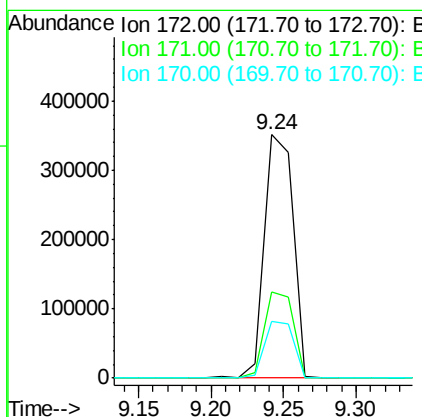
Manual Integrations
 APPROVED

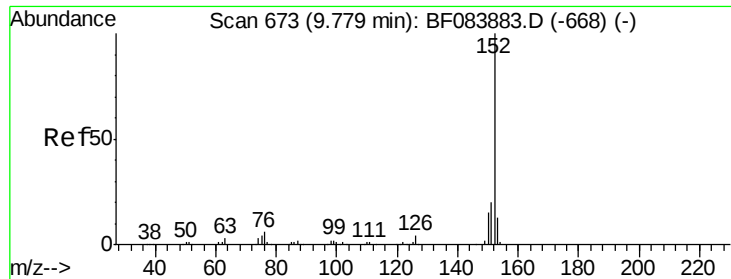
MMdadoda
 12/18/2015 6:22:07 PM



#44
 2-Fluorobiphenyl
 Concen: 34.40 ng
 RT: 9.24 min Scan# 626
 Delta R.T. 0.00 min
 Lab File: BF083904.D
 Acq: 18 Dec 2015 8:32

Tgt Ion	Ratio	Resp	Lower	Upper
172	100	484203		
171	35.6	28.9	43.3	
170	23.5	18.6	27.8	





#48

Acenaphthylene

Concen: 11.18 ng

RT: 9.79 min Scan# 674

Delta R.T. 0.01 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Instrument :

BNA_F

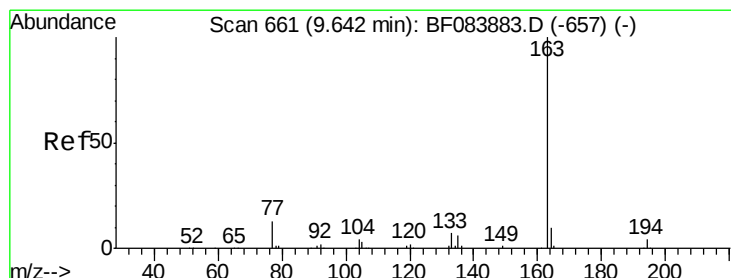
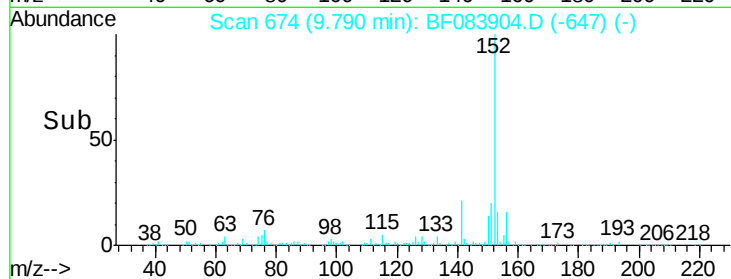
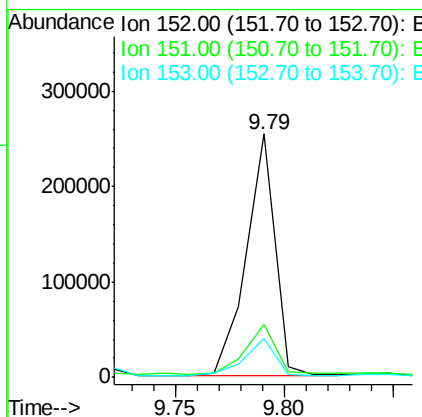
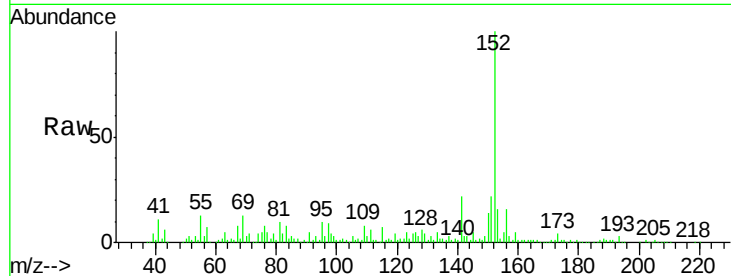
ClientSampleId :

K210-10-15

Tgt Ion	Ratio	Resp Lower	Upper
152	100		
151	21.6	16.3	24.5
153	15.9	10.4	15.6

Manual Integrations
APPROVED

MMdadoda
12/18/2015 6:22:07 PM



#49

Dimethylphthalate

Concen: 5.29 ng

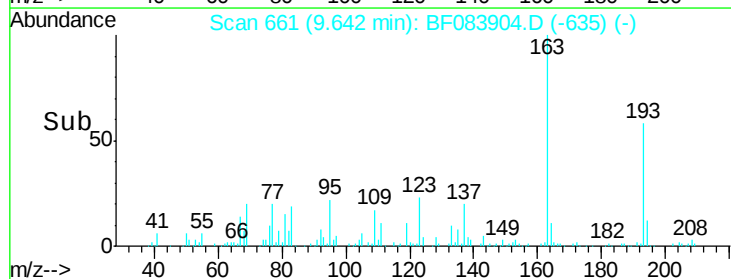
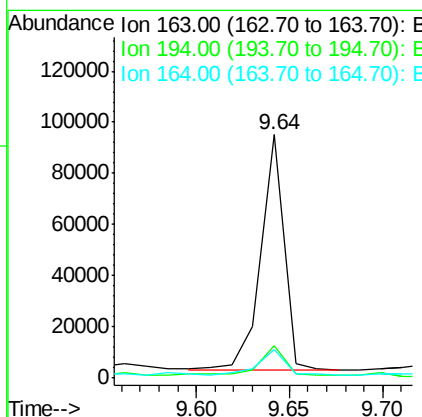
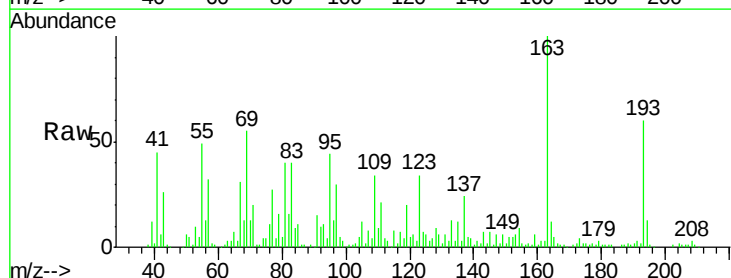
RT: 9.64 min Scan# 661

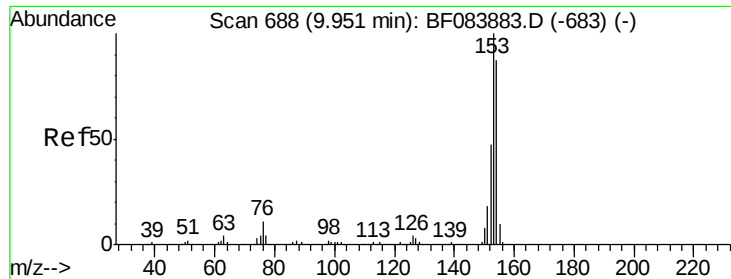
Delta R.T. -0.00 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Tgt Ion	Ratio	Resp Lower	Upper
163	100		
194	13.2	3.0	4.6
164	11.5	7.9	11.9





#51

Acenaphthene

Concen: 15.05 ng

RT: 9.96 min Scan# 689

Delta R.T. 0.01 min

Lab File: BF083904.D

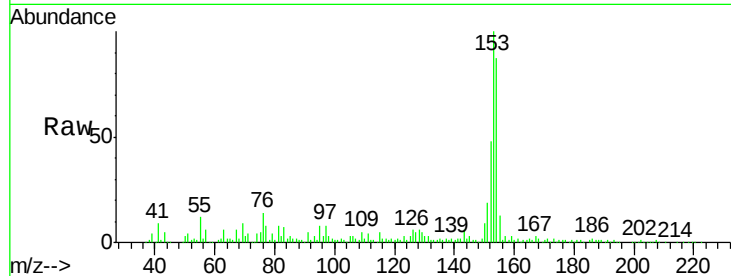
Acq: 18 Dec 2015 8:32

Instrument :

BNA_F

ClientSampleId :

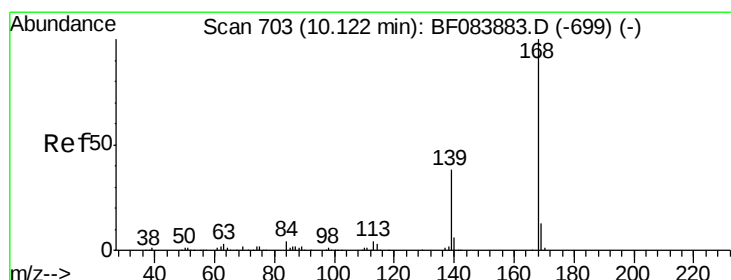
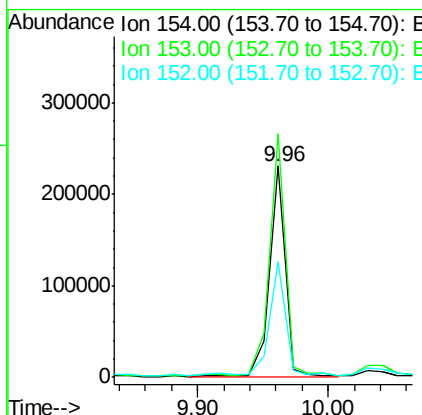
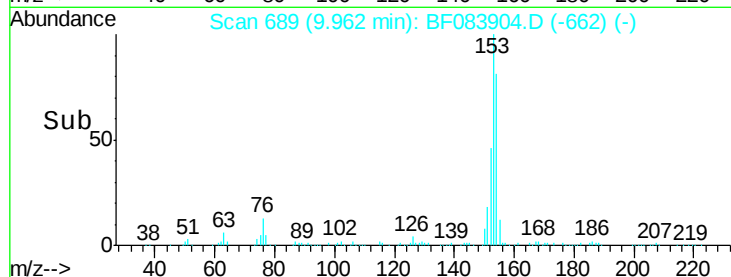
K210-10-15



Tgt Ion:	154	Resp:	193239
Ion Ratio	Lower	Upper	
154	100		
153	115.1	91.5	137.3
152	54.9	43.0	64.6

Manual Integrations
APPROVED

MMdadoda
12/18/2015 6:22:07 PM



#54

Dibenzofuran

Concen: 19.59 ng

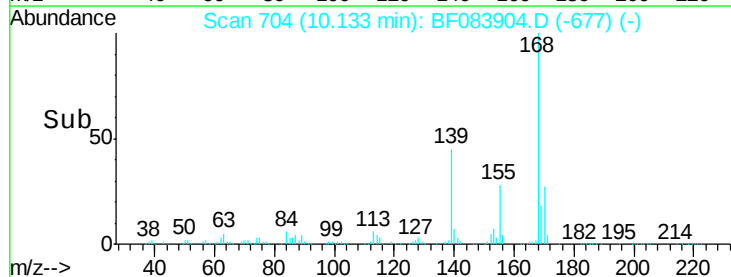
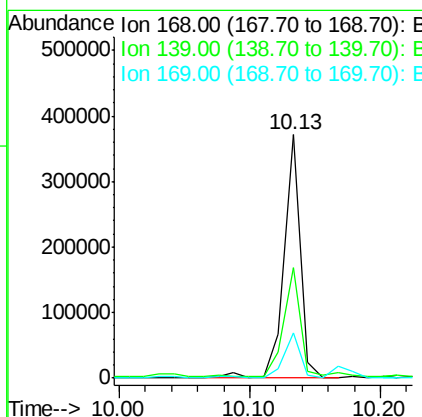
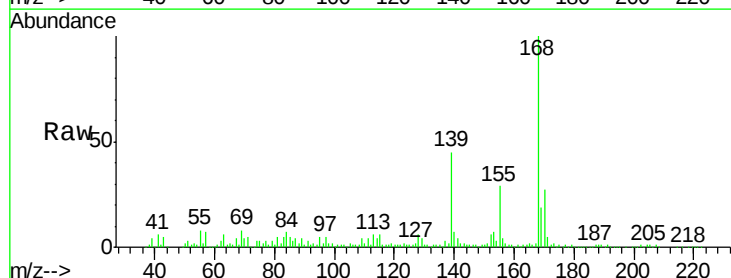
RT: 10.13 min Scan# 704

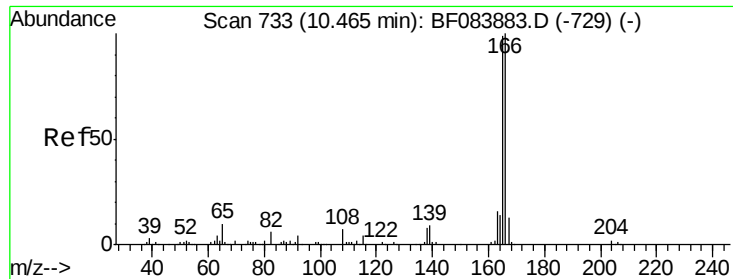
Delta R.T. 0.01 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Tgt Ion:	168	Resp:	326636
Ion Ratio	Lower	Upper	
168	100		
139	45.2	30.5	45.7
169	18.5	10.4	15.6#





#57

Fluorene

Concen: 10.90 ng

RT: 10.48 min Scan# 734

Delta R.T. 0.01 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Instrument :

BNA_F

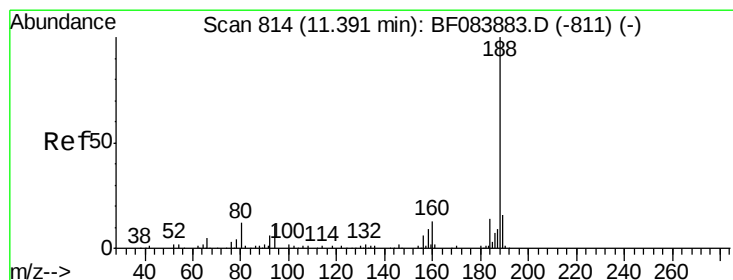
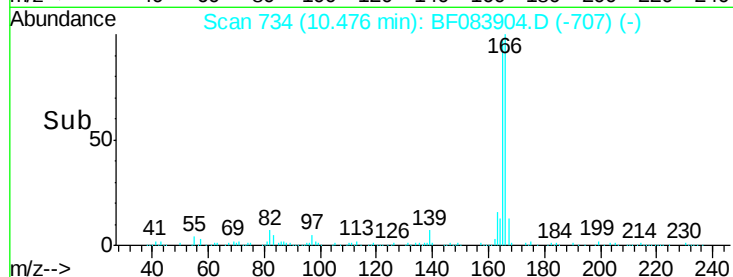
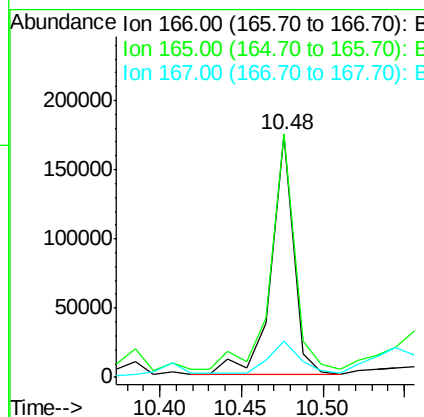
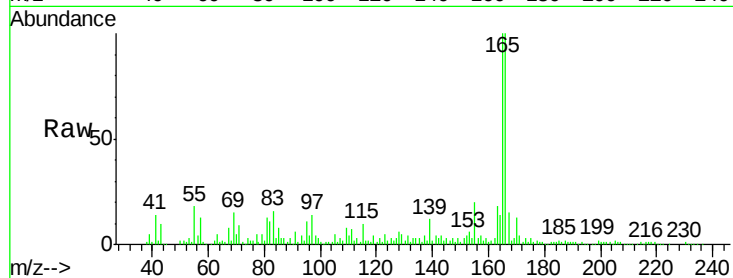
ClientSampleId :

K210-10-15

Manual Integrations
APPROVED

MMdadoda
12/18/2015 6:22:07 PM

Tgt Ion	Ratio	Resp	Lower	Upper
166	100	167082		
165	100.3	79.1	118.7	
167	14.8	10.4	15.6	



#63

Phenanthrene-d10

Concen: 20.00 ng

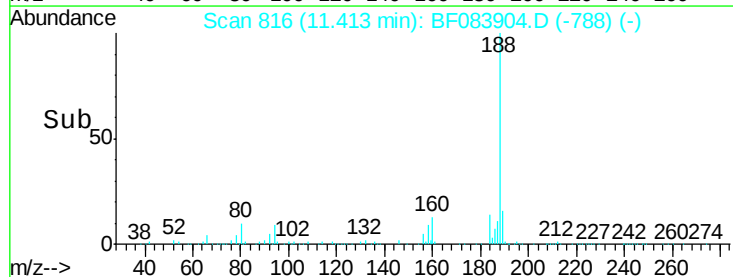
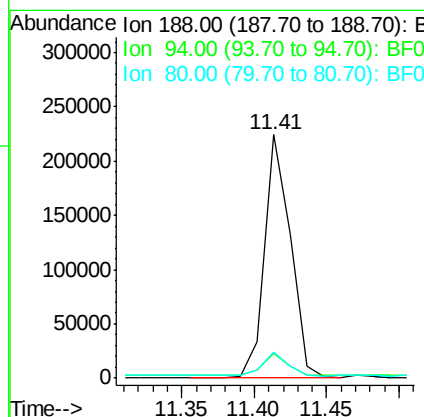
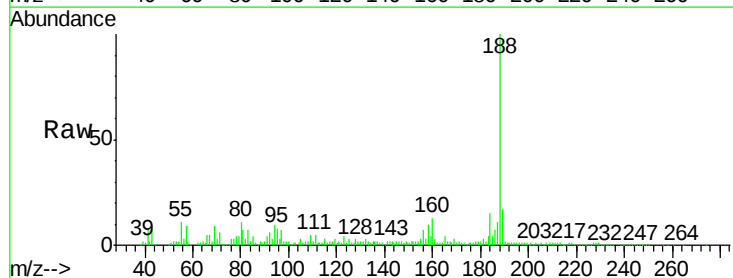
RT: 11.41 min Scan# 816

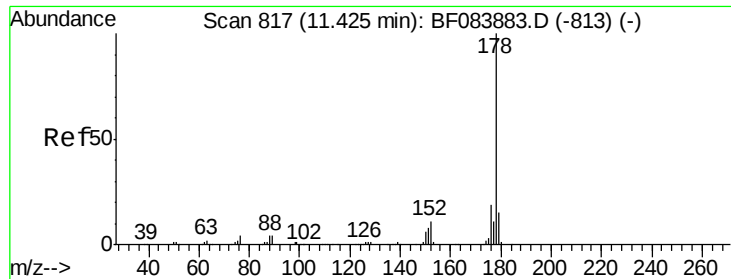
Delta R.T. 0.02 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Tgt Ion	Ratio	Resp	Lower	Upper
188	100	274184		
94	10.1	9.0	13.4	
80	10.9	9.6	14.4	





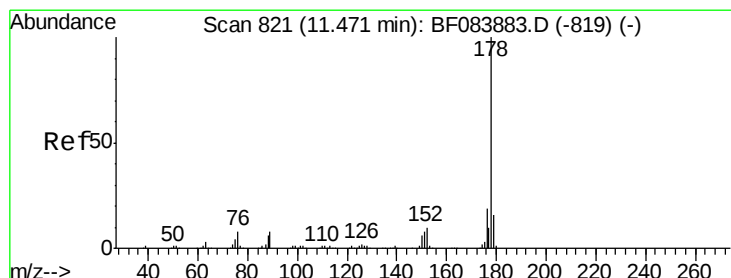
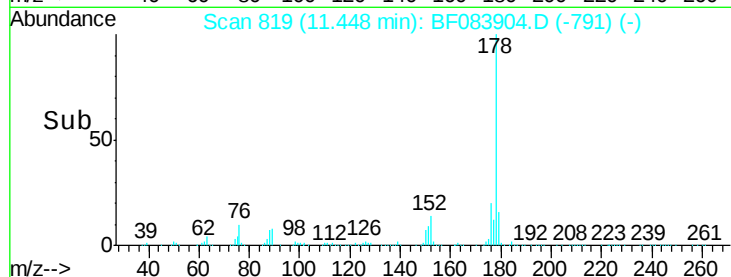
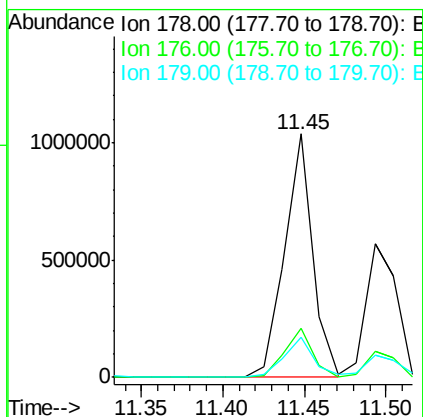
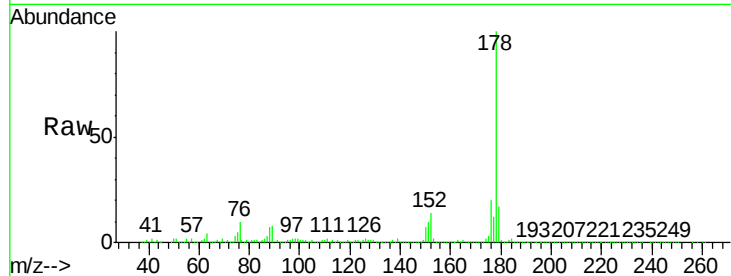
#70
Phenanthrene
Concen: 74.75 ng
RT: 11.45 min Scan# 819
Delta R.T. 0.02 min
Lab File: BF083904.D
Acq: 18 Dec 2015 8:32

Instrument :
BNA_F
ClientSampleId :
K210-10-15

Tgt Ion	Ratio	Lower	Upper
178	100		
176	20.2	15.3	22.9
179	16.6	12.0	18.0

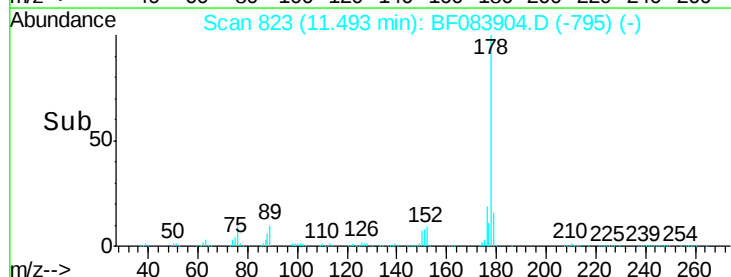
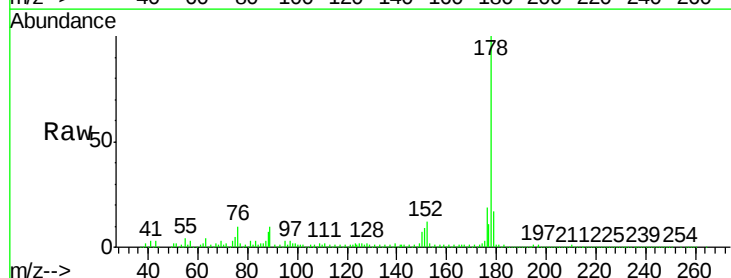
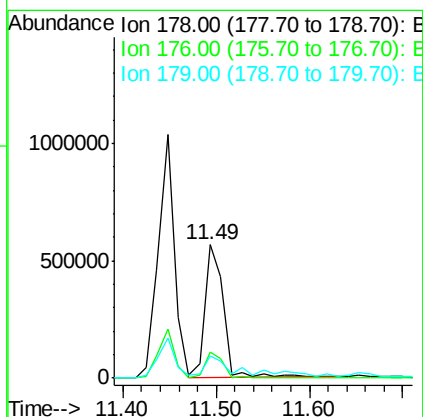
Manual Integrations
APPROVED

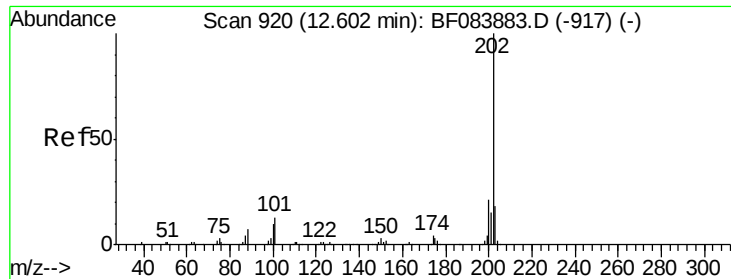
MMdadoda
12/18/2015 6:22:07 PM



#71
Anthracene
Concen: 48.53 ng
RT: 11.49 min Scan# 823
Delta R.T. 0.02 min
Lab File: BF083904.D
Acq: 18 Dec 2015 8:32

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.0
179	16.7	12.5	18.7





#74

Fluoranthene

Concen: 125.80 ng

RT: 12.65 min Scan# 924

Delta R.T. 0.05 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Instrument :

BNA_F

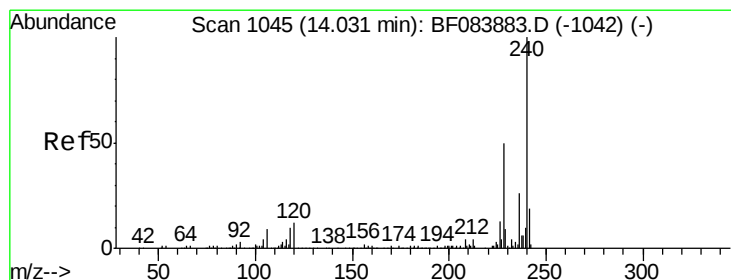
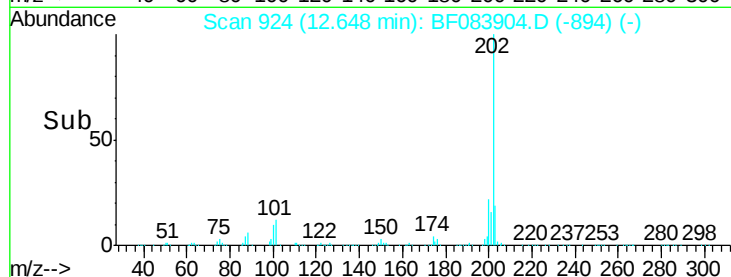
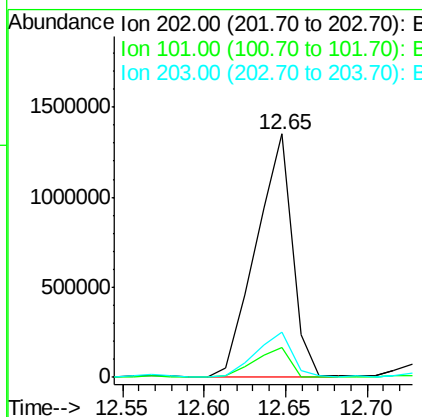
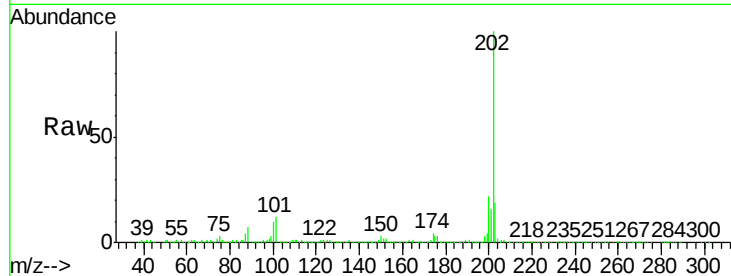
ClientSampleId :

K210-10-15

Tgt	Ion	Ratio	Resp	Lower	Upper
202	100		2079562		
101	12.2	0.0	32.8		
203	18.8	0.0	37.9		

Manual Integrations
APPROVED

MMdadoda
12/18/2015 6:22:07 PM



#75

Chrysene-d12

Concen: 20.00 ng

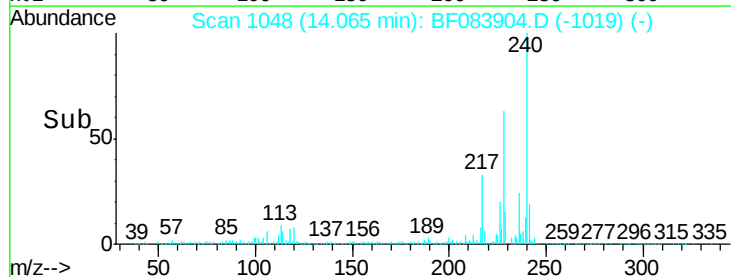
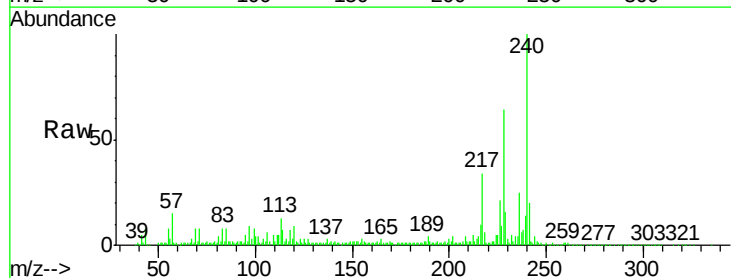
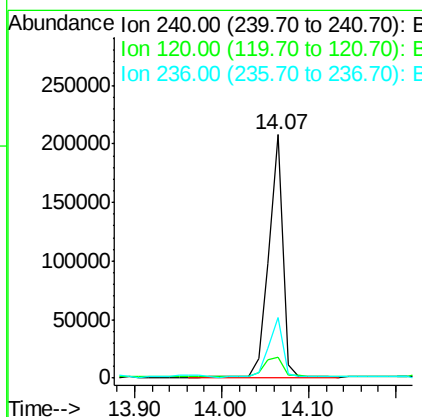
RT: 14.07 min Scan# 1048

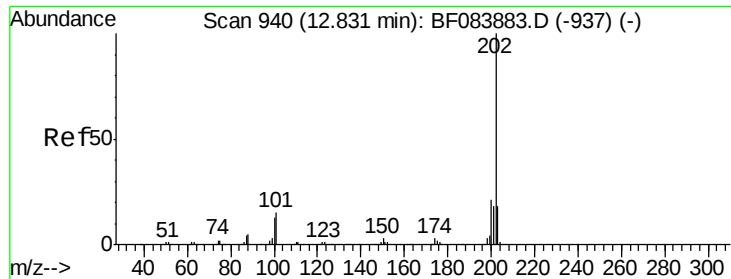
Delta R.T. 0.03 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Tgt	Ion	Ratio	Resp	Lower	Upper
240	100		230432		
120	8.6	9.5	14.3#		
236	25.0	20.6	31.0		





#77

Pyrene

Concen: 102.45 ng

RT: 12.88 min Scan# 944

Delta R.T. 0.05 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

Instrument :

BNA_F

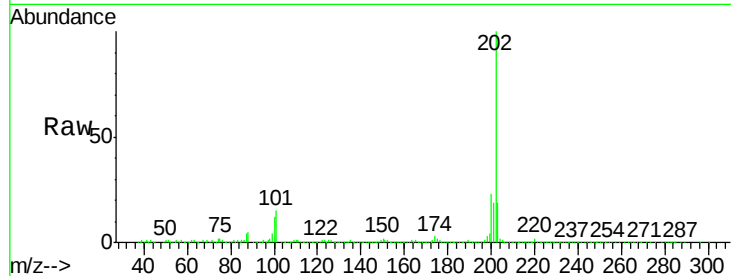
ClientSampleId :

K210-10-15

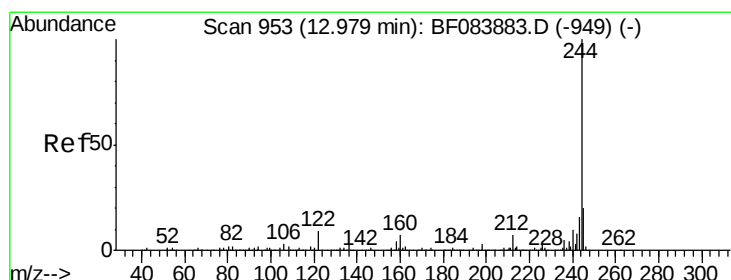
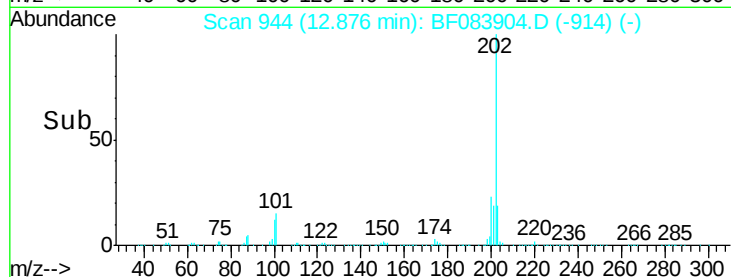
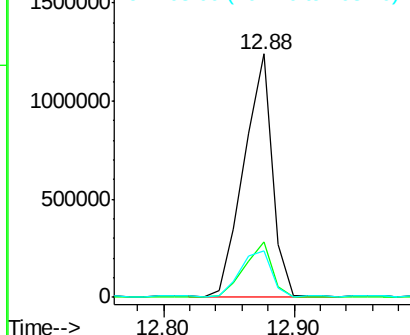
Tgt Ion:	202	Resp:	1869214
Ion	Ratio	Lower	Upper
202	100		
200	22.6	17.2	25.8
203	19.2	14.3	21.5

Manual Integrations
APPROVED

MMdadoda
12/18/2015 6:22:07 PM



Abundance Ion 202.00 (201.70 to 202.70): E
Ion 200.00 (199.70 to 200.70): E
Ion 203.00 (202.70 to 203.70): E



#78

Terphenyl-d14

Concen: 31.46 ng

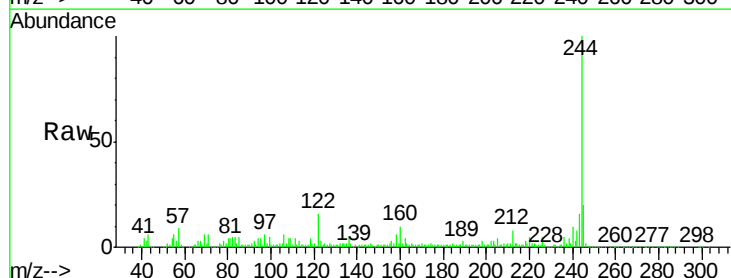
RT: 12.99 min Scan# 954

Delta R.T. 0.01 min

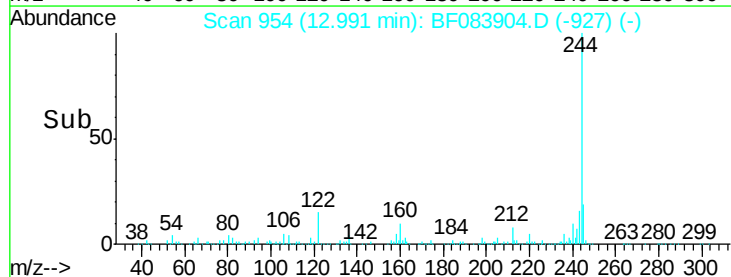
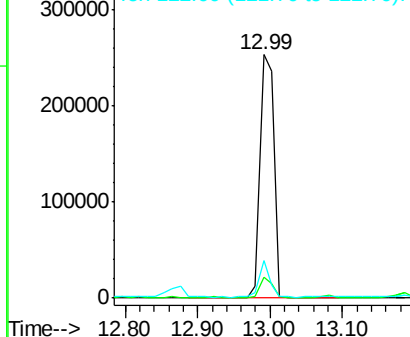
Lab File: BF083904.D

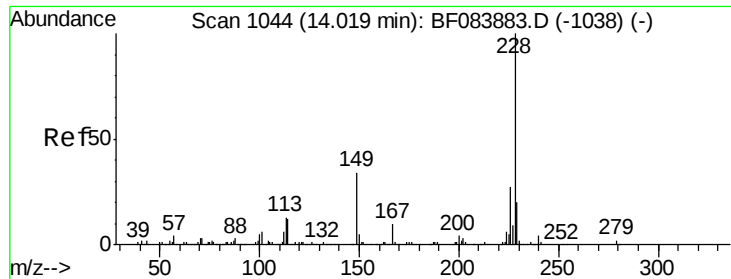
Acq: 18 Dec 2015 8:32

Tgt Ion:	244	Resp:	348977
Ion	Ratio	Lower	Upper
244	100		
212	8.5	5.7	8.5
122	15.5	7.4	11.0#



Abundance Ion 244.00 (243.70 to 244.70): E
Ion 212.00 (211.70 to 212.70): E
Ion 122.00 (121.70 to 122.70): E





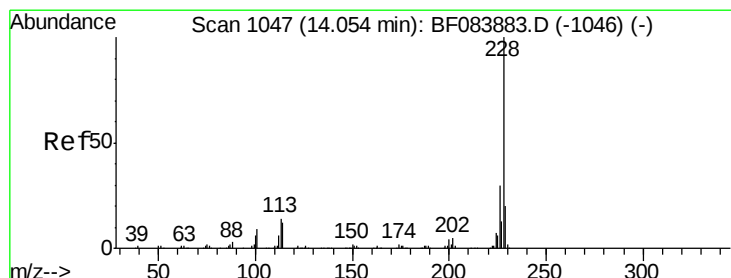
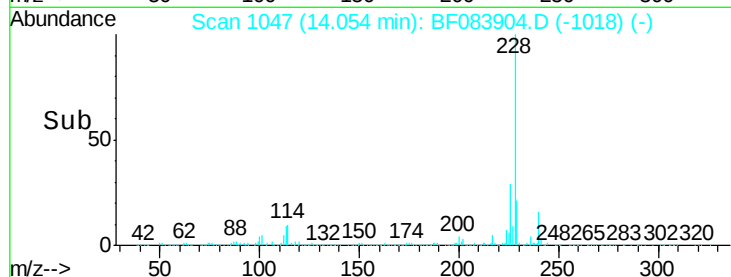
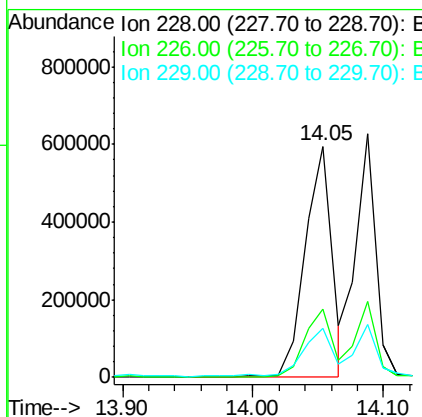
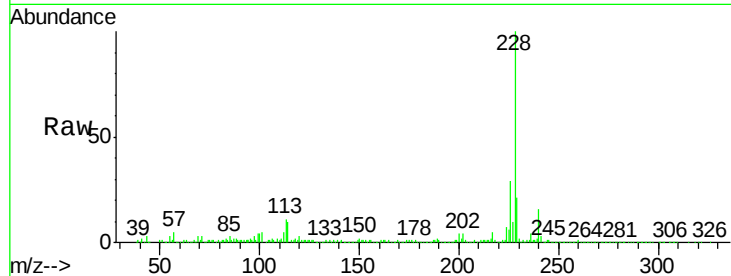
#80
Benzo(a)anthracene
Concen: 59.86 ng
RT: 14.05 min Scan# 1047
Delta R.T. 0.03 min
Lab File: BF083904.D
Acq: 18 Dec 2015 8:32

Instrument :
BNA_F
ClientSampleId :
K210-10-15

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.3	21.8	32.6
229	21.2	15.8	23.8

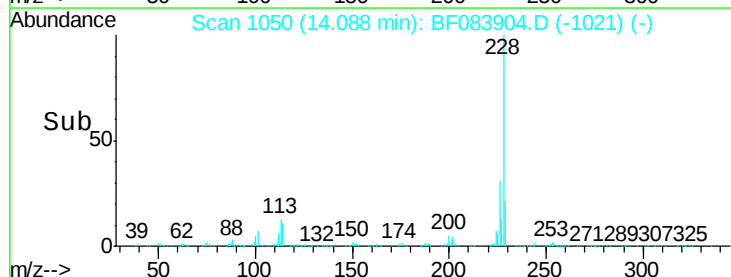
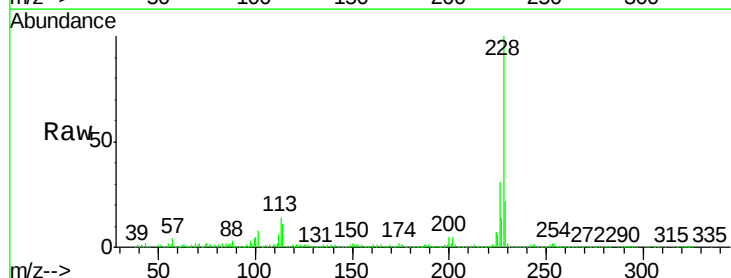
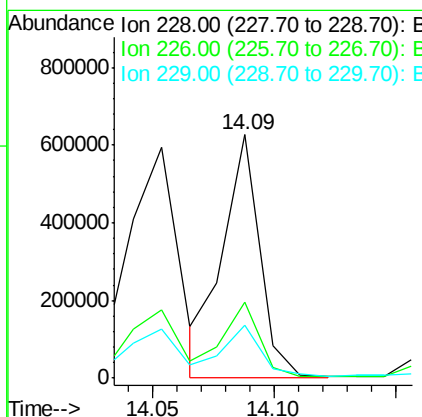
Manual Integrations
APPROVED

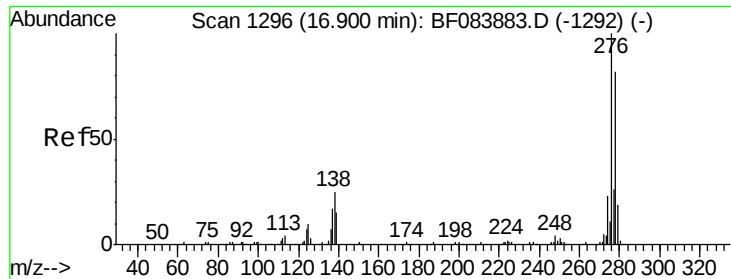
MMdadoda
12/18/2015 6:22:07 PM



#82
Chrysene
Concen: 48.41 ng m
RT: 14.09 min Scan# 1050
Delta R.T. 0.03 min
Lab File: BF083904.D
Acq: 18 Dec 2015 8:32

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.9	24.3	36.5
229	21.6	16.1	24.1





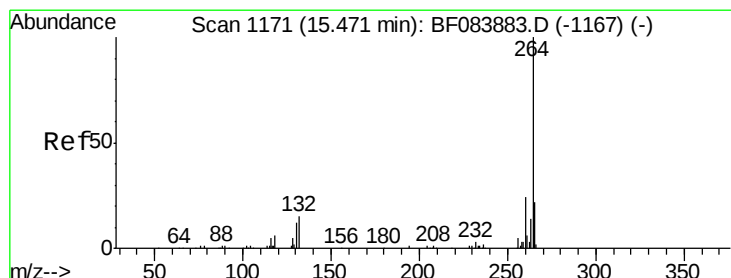
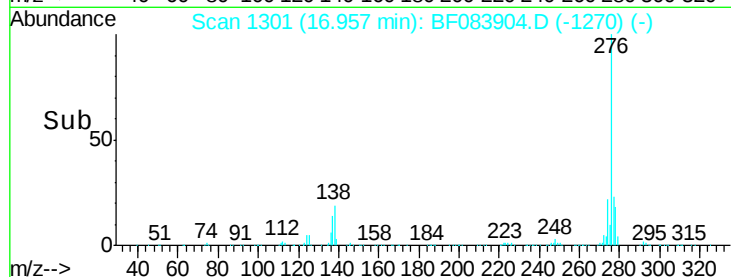
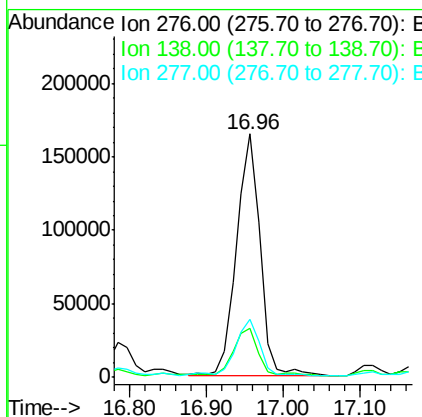
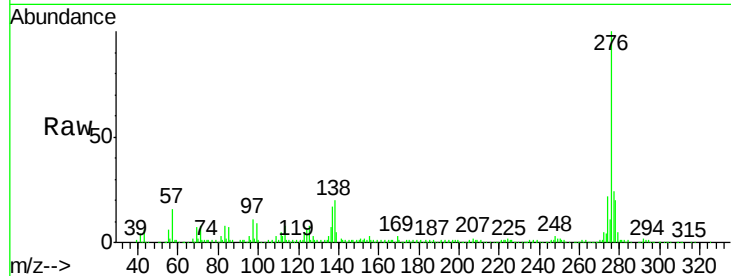
#85
 Indeno(1,2,3-cd)pyrene
 Concen: 34.49 ng
 RT: 16.96 min Scan# 1301
 Delta R.T. 0.06 min
 Lab File: BF083904.D
 Acq: 18 Dec 2015 8:32

Instrument :
 BNA_F
 ClientSampleId :
 K210-10-15

Tgt Ion	Ratio	Resp	Lower	Upper
276	100	352998		
138	21.4		20.6	30.8
277	24.5		20.1	30.1

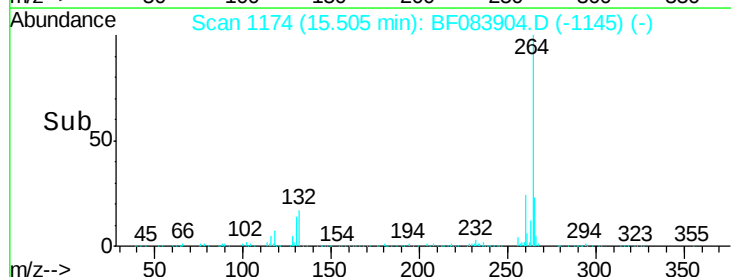
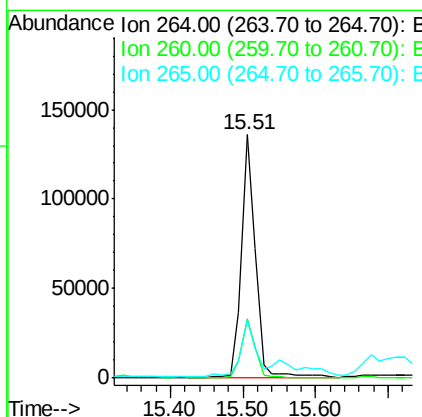
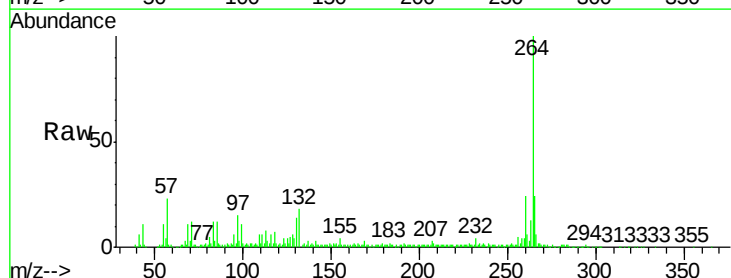
Manual Integrations
 APPROVED

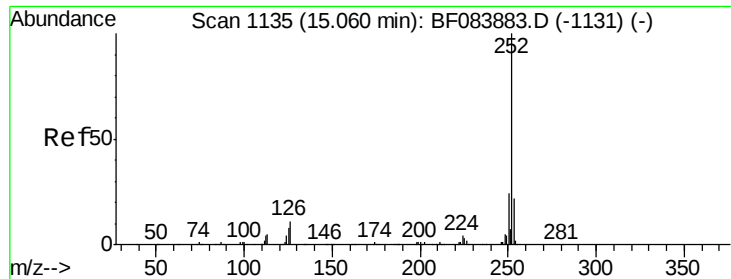
MMdadoda
 12/18/2015 6:22:07 PM



#86
 Perylene-d12
 Concen: 20.00 ng
 RT: 15.51 min Scan# 1174
 Delta R.T. 0.03 min
 Lab File: BF083904.D
 Acq: 18 Dec 2015 8:32

Tgt Ion	Ratio	Resp	Lower	Upper
264	100	181141		
260	24.3		19.4	29.2
265	23.7		17.8	26.6





#87

Benzo(b)fluoranthene

Concen: 57.41 ng m

RT: 15.09 min Scan# 1138

Delta R.T. 0.03 min

Lab File: BF083904.D

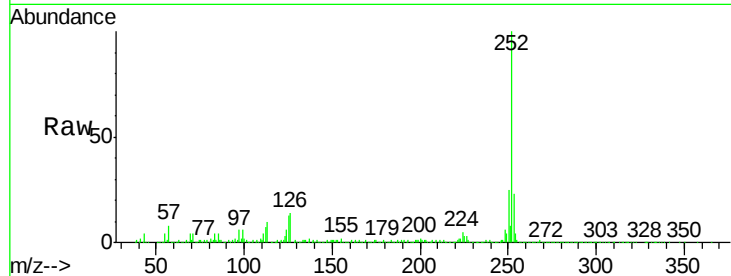
Acq: 18 Dec 2015 8:32

Instrument :

BNA_F

ClientSampleId :

K210-10-15



Tgt Ion: 252 Resp: 758187

Ion Ratio Lower Upper

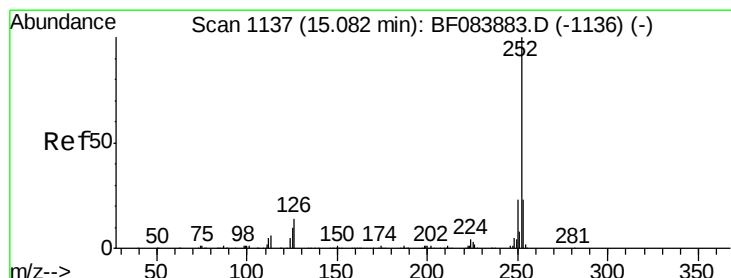
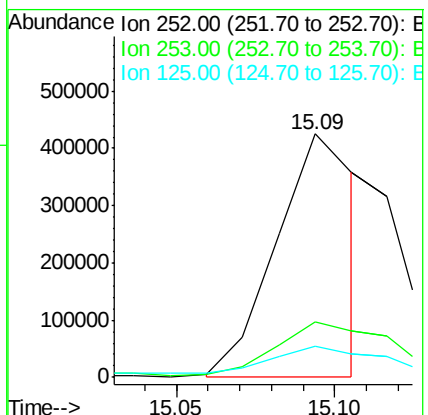
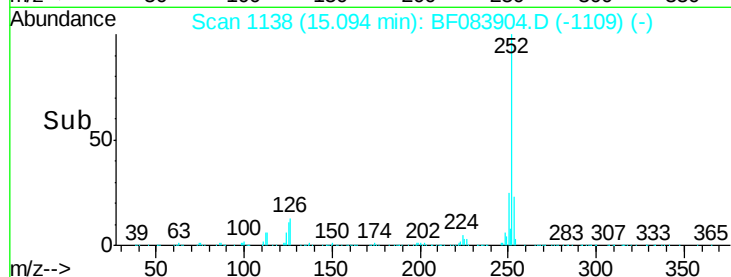
252 100

253 23.0 17.3 25.9

125 12.9 6.5 9.7

Manual Integrations
APPROVED

MMdadoda
12/18/2015 6:22:07 PM



#88

Benzo(k)fluoranthene

Concen: 25.41 ng m

RT: 15.11 min Scan# 1139

Delta R.T. 0.02 min

Lab File: BF083904.D

Acq: 18 Dec 2015 8:32

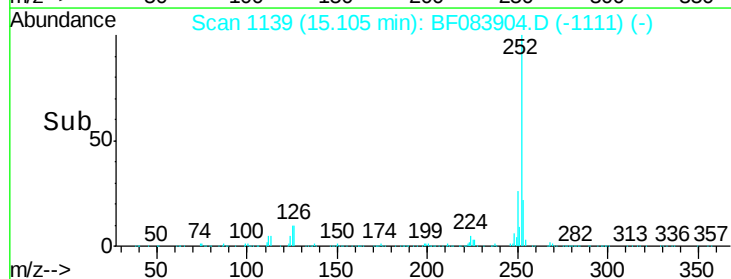
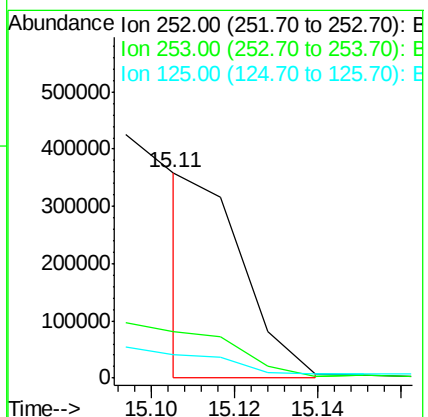
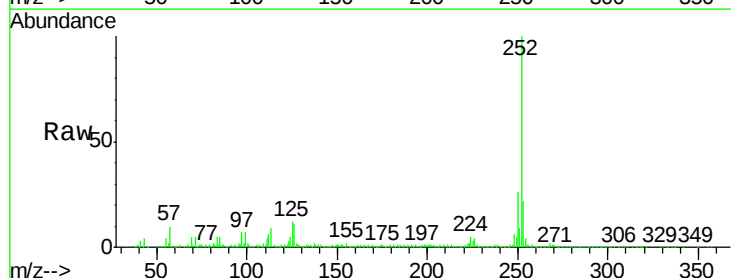
Tgt Ion: 252 Resp: 276806

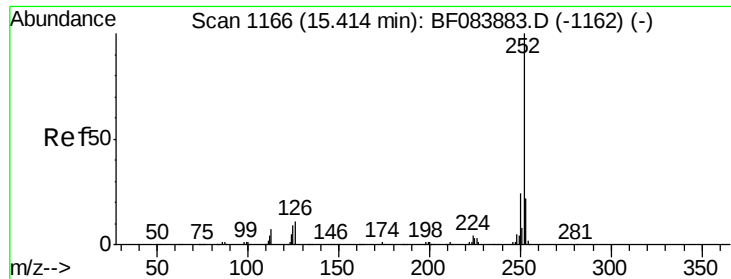
Ion Ratio Lower Upper

252 100

253 22.4 18.1 27.1

125 11.7 9.0 13.6





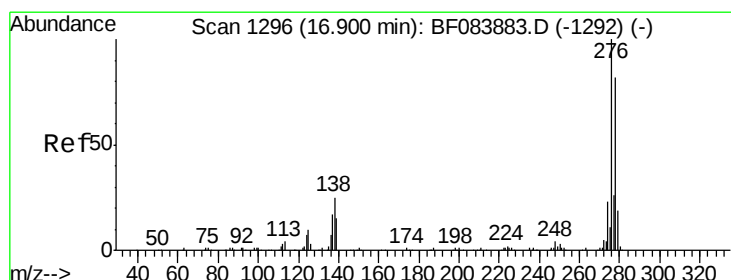
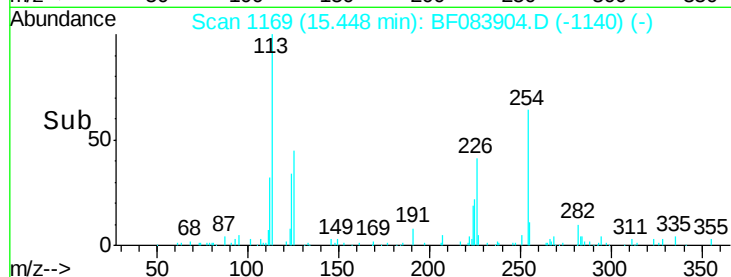
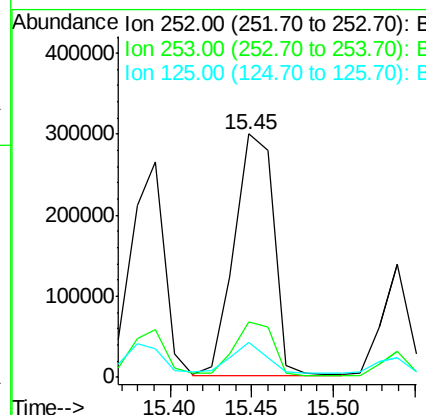
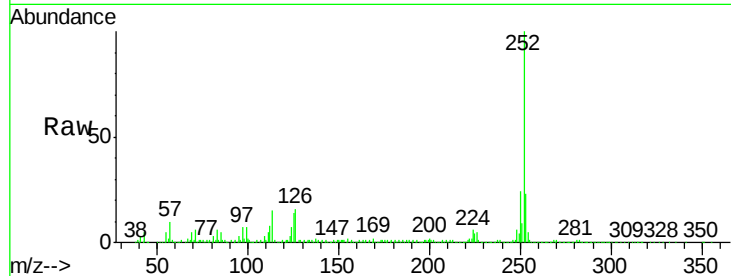
#89
Benzo(a)pyrene
Concen: 45.71 ng
RT: 15.45 min Scan# 1169
Delta R.T. 0.03 min
Lab File: BF083904.D
Acq: 18 Dec 2015 8:32

Instrument :
BNA_F
ClientSampleId :
K210-10-15

Tgt Ion	Ratio	Resp Lower	Resp Upper
252	100		
253	22.9	17.3	25.9
125	14.2	7.0	10.4

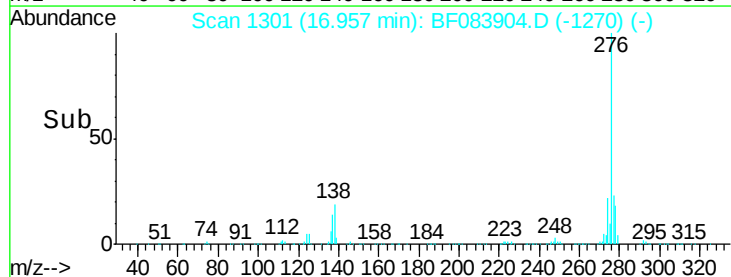
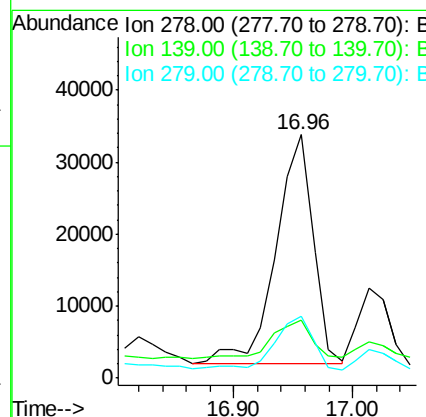
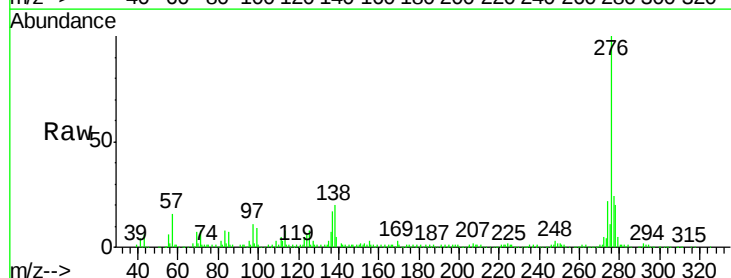
Manual Integrations
APPROVED

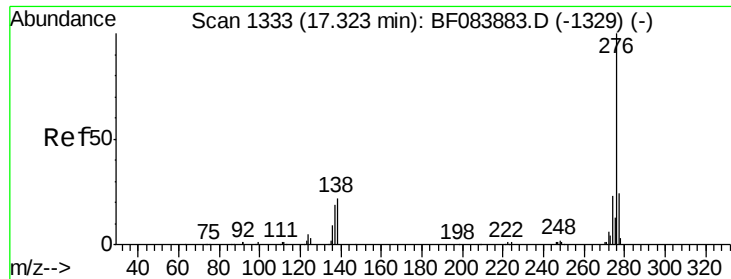
MMdadoda
12/18/2015 6:22:07 PM



#90
Dibenzo(a,h)anthracene
Concen: 8.14 ng
RT: 16.96 min Scan# 1301
Delta R.T. 0.06 min
Lab File: BF083904.D
Acq: 18 Dec 2015 8:32

Tgt Ion	Ratio	Resp Lower	Resp Upper
278	100		
139	23.7	15.0	22.4
279	25.7	18.9	28.3





#91
 Benzo(g,h,i)perylene
 Concen: 41.14 ng
 RT: 17.39 min Scan# 1339
 Delta R.T. 0.07 min
 Lab File: BF083904.D
 Acq: 18 Dec 2015 8:32

Instrument :
 BNA_F
 ClientSampleId :
 K210-10-15

Tgt Ion	Ratio	Lower	Upper
276	100		
277	23.7	18.8	28.2
138	22.5	17.8	26.6

Manual Integrations
 APPROVED

MMdadoda
 12/18/2015 6:22:07 PM

