

Data Path : Z:\HPCHEM1\BNA F\DATA\BF051716\
 Data File : BF087138.D
 Acq On : 18 May 2016 8:33
 Operator : UM/SJ
 Sample : H2994-07RE
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 CH-STA-1767-00(0-2)RE

Manual Integrations
 APPROVED

sohil
 5/18/2016 7:00:28 PM

Quant Time: May 18 13:17:31 2016
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF051716.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue May 17 16:55:01 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.59	152	143139	20.00	ng	-0.01
21) Naphthalene-d8	7.88	136	563645	20.00	ng	-0.01
38) Acenaphthene-d10	9.63	164	251105	20.00	ng	-0.01
63) Phenanthrene-d10	11.11	188	387406	20.00	ng	-0.01
75) Chrysene-d12	13.74	240	257848	20.00	ng	-0.02
86) Perylene-d12	15.11	264	308951	20.00	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.19	112	774077	90.90	ng	-0.01
7) Phenol-d6	6.26	99	1049500	91.89	ng	-0.02
23) Nitrobenzene-d5	7.16	82	688882	60.91	ng	-0.02
41) 2,4,6-Tribromophenol	10.42	330	208840	75.26	ng	-0.02
44) 2-Fluorobiphenyl	8.96	172	923176	60.89	ng	-0.02
78) Terphenyl-d14	12.70	244	582080	51.07	ng	-0.01
Target Compounds						Qvalue
31) Naphthalene	7.90	128	146101	5.30	ng	98
37) 2-Methylnaphthalene	8.59	142	79607	4.52	ng	98
48) Acenaphthylene	9.48	152	316382	12.96	ng	97
49) Dimethylphthalate	9.36	163	104176	5.44	ng	99
54) Dibenzofuran	9.84	168	70923	3.60	ng	# 94
57) Fluorene	10.17	166	74735	4.72	ng	# 97
70) Phenanthrene	11.13	178	688819	32.78	ng	99
71) Anthracene	11.18	178	306889	14.44	ng	98
72) Carbazole	11.35	167	101878	5.25	ng	99
74) Fluoranthene	12.32	202	1368653	65.01	ng	96
77) Pyrene	12.55	202	1409442	75.66	ng	100
80) Benzo(a)anthracene	13.74	228	975646	65.44	ng	# 92
82) Chrysene	13.77	228	809586m	56.12	ng	
85) Indeno(1,2,3-cd)pyrene	16.34	276	388378m	30.67	ng	
87) Benzo(b)fluoranthene	14.74	252	1335305m	65.15	ng	
88) Benzo(k)fluoranthene	14.77	252	431734m	28.29	ng	
89) Benzo(a)pyrene	15.05	252	669395	39.07	ng	96
90) Dibenzo(a,h)anthracene	16.34	278	126792m	8.79	ng	
91) Benzo(a,h,i)perylene	16.72	276	291640	20.02	ng	# 92

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

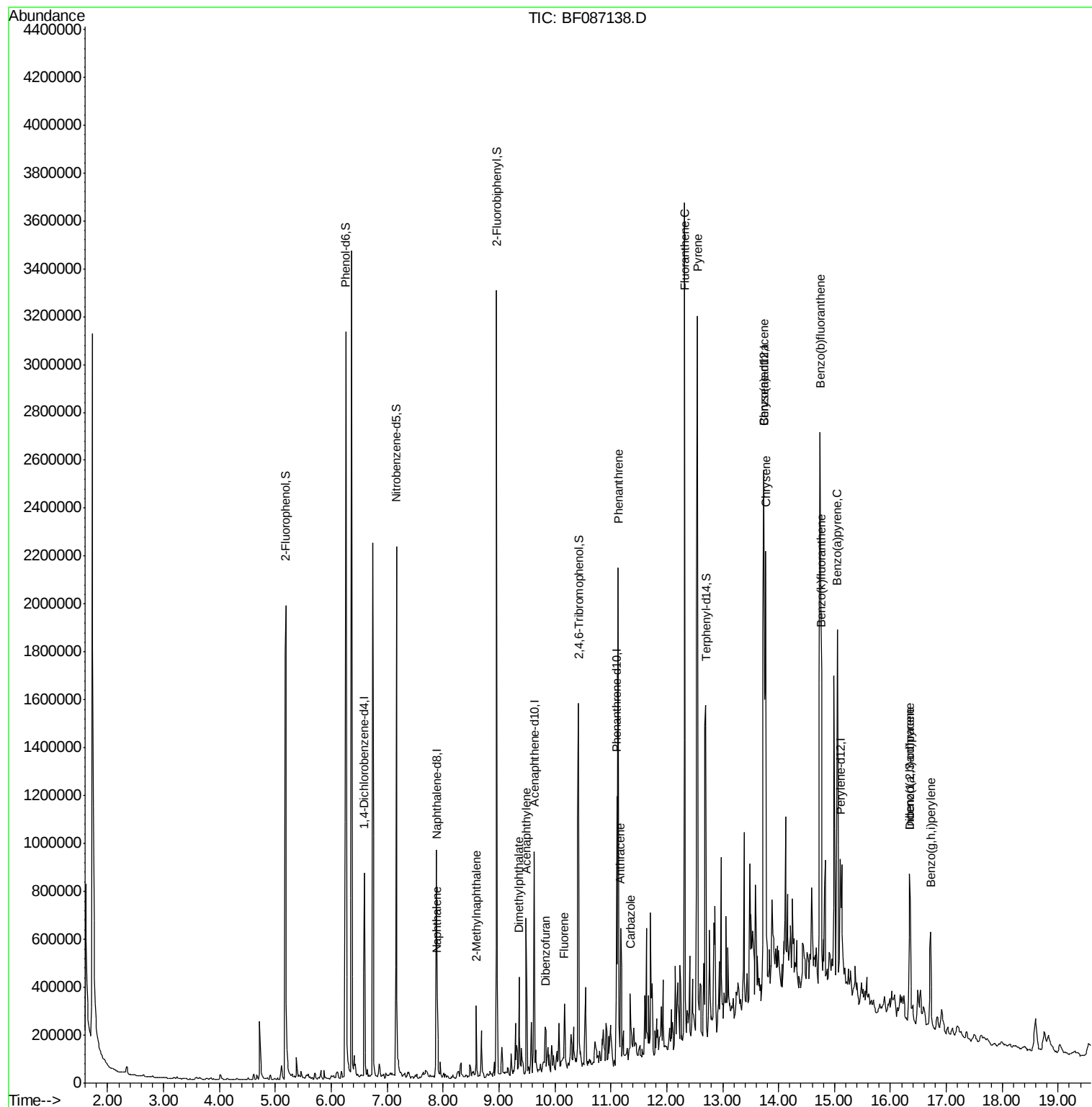
Data Path : Z:\HPCHEM1\BNA F\DATA\BF051716\
Data File : BF087138.D
Acq On : 18 May 2016 8:33
Operator : UM/SJ
Sample : H2994-07RE
Misc :
ALS Vial : 40 Sample Multiplier: 1

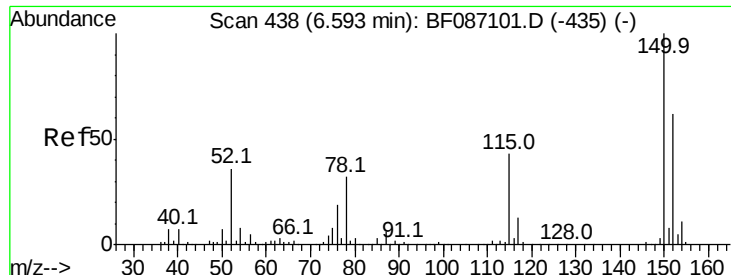
Instrument :
BNA_F
ClientSampleId :
CH-STA-1767-00(0-2)RE

Manual Integrations
APPROVED

sohil
5/18/2016 7:00:28 PM

Quant Time: May 18 13:17:31 2016
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF051716.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue May 17 16:55:01 2016
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.59 min Scan# 438

Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion:152 Resp: 143139

Ion Ratio Lower Upper

152 100

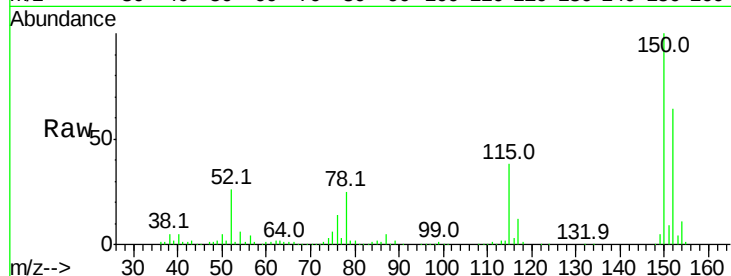
150 156.7 125.8 188.6

115 60.2 51.5 77.3

Manual Integrations
APPROVED

sohil

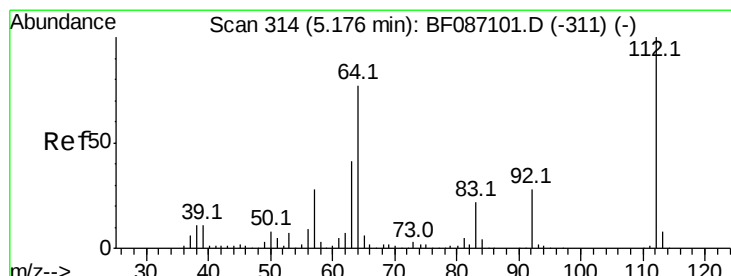
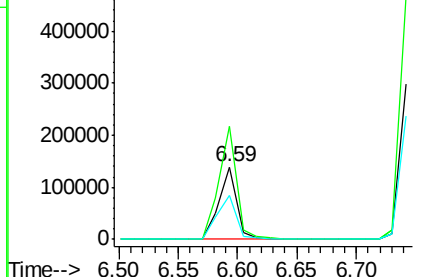
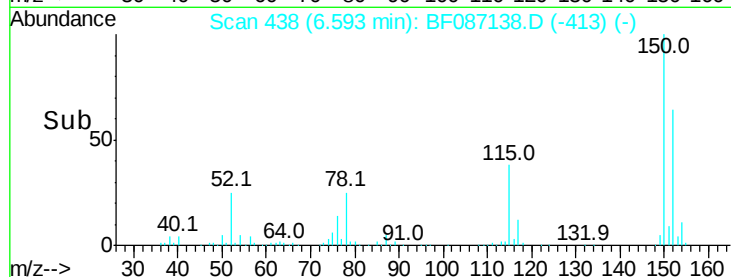
5/18/2016 7:00:28 PM



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: 90.90 ng

RT: 5.19 min Scan# 315

Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

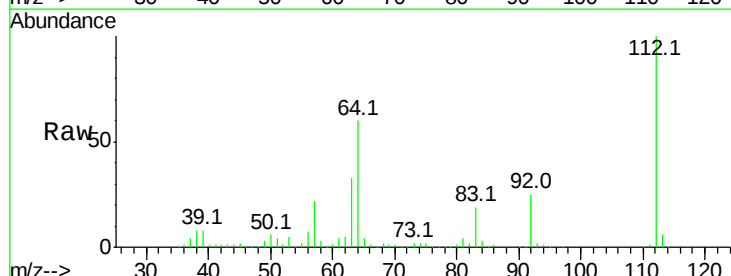
Tgt Ion:112 Resp: 774077

Ion Ratio Lower Upper

112 100

64 60.4 52.1 78.1

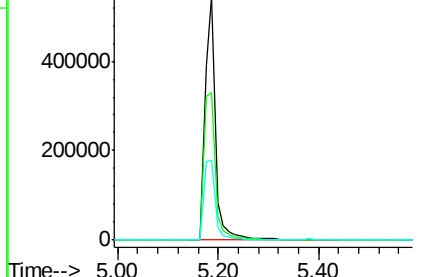
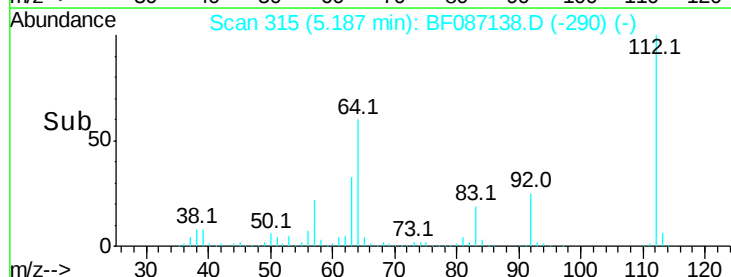
63 32.6 25.7 38.5

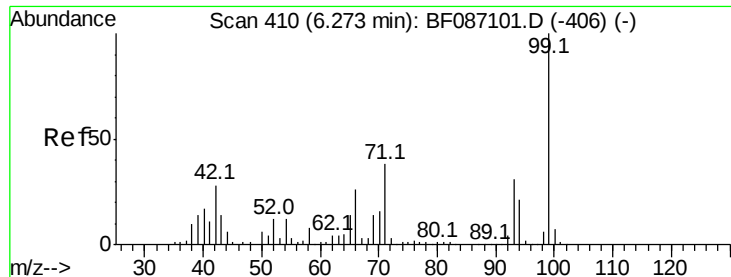


Abundance Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 91.89 ng

RT: 6.26 min Scan# 409

Delta R.T. -0.02 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion: 99 Resp: 1049500

Ion Ratio Lower Upper

99 100

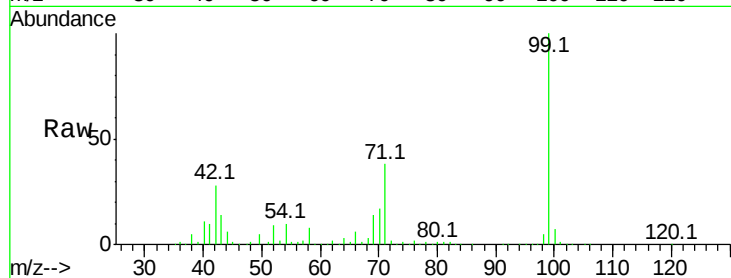
42 27.9 13.6 20.4#

71 38.3 24.6 36.8#

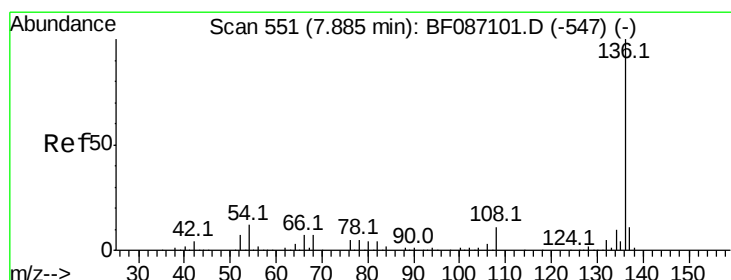
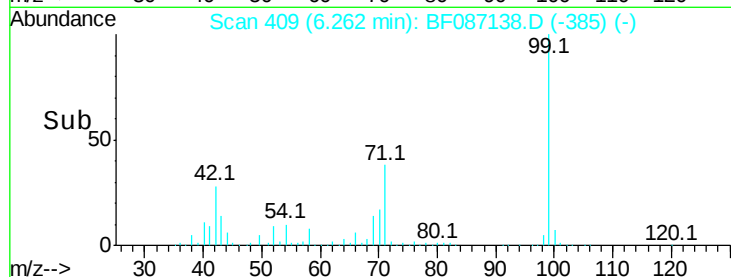
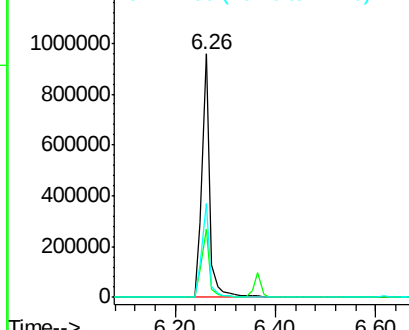
Manual Integrations
APPROVED

sohil

5/18/2016 7:00:28 PM



Abundance Ion 99.00 (98.70 to 99.70): BF0
Ion 42.00 (41.70 to 42.70): BF0
Ion 71.00 (70.70 to 71.70): BF0



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 7.88 min Scan# 551

Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Tgt Ion: 136 Resp: 563645

Ion Ratio Lower Upper

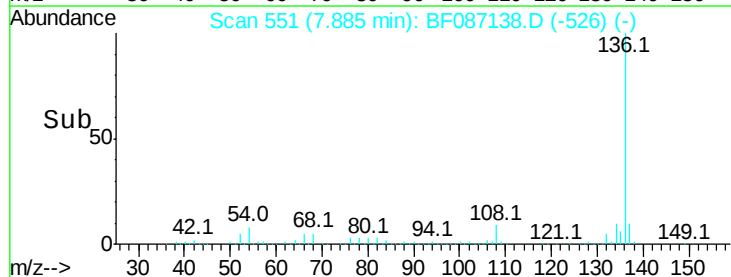
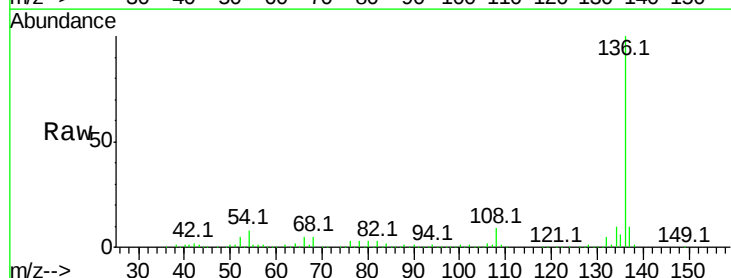
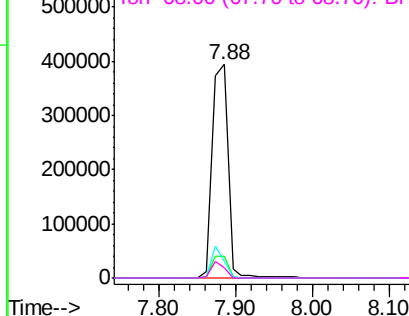
136 100

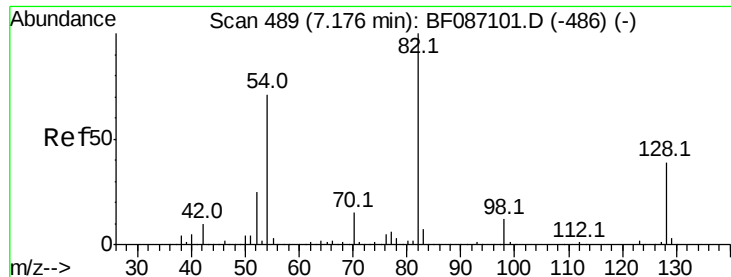
137 10.4 8.8 13.2

54 7.9 5.0 7.4#

68 4.6 4.4 6.6

Abundance Ion 136.00 (135.70 to 136.70): E
Ion 137.00 (136.70 to 137.70): E
Ion 54.00 (53.70 to 54.70): BF0
Ion 68.00 (67.70 to 68.70): BF0





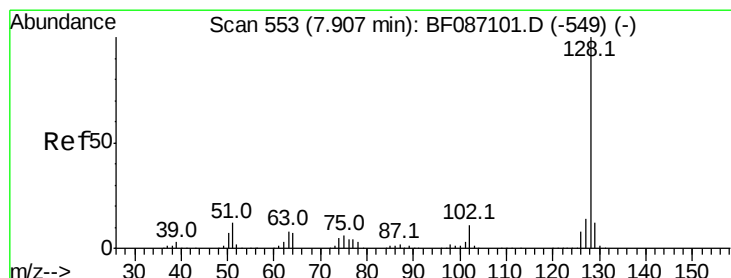
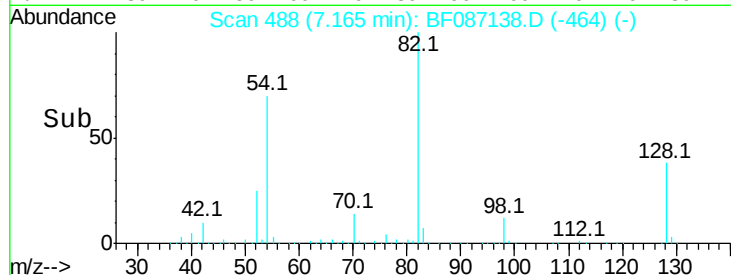
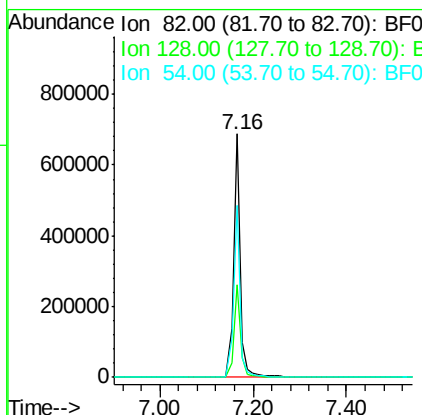
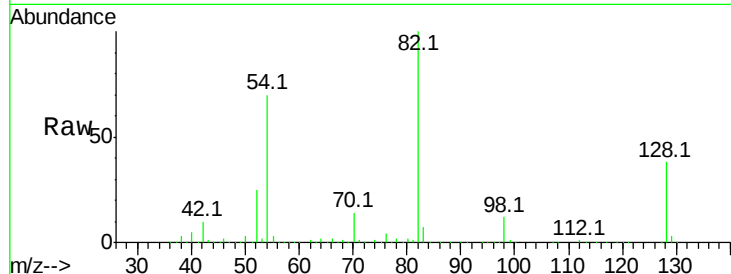
#23
 Nitrobenzene-d5
 Concen: 60.91 ng
 RT: 7.16 min Scan# 488
 Delta R.T. -0.02 min
 Lab File: BF087138.D
 Acq: 18 May 2016 8:33

Instrument :
 BNA_F
 ClientSampleId :
 CH-STA-1767-00(0-2)RE

Tot Ion:	82	Resp:	688882
Ion Ratio		Lower	Upper
82	100		
128	38.1	40.6	61.0#
54	70.4	38.1	57.1#

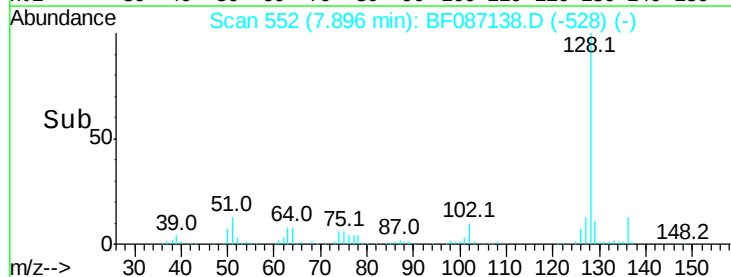
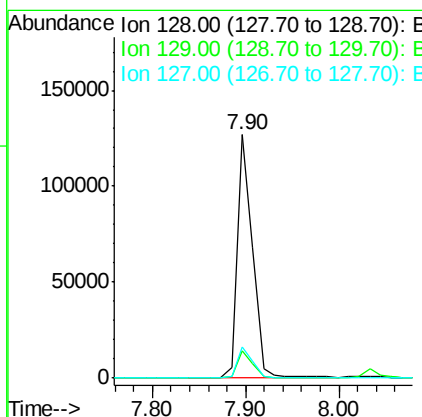
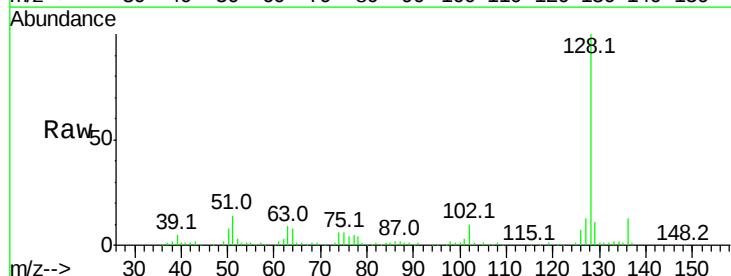
Manual Integrations
 APPROVED

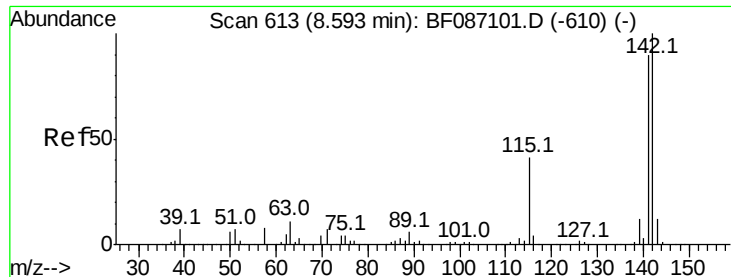
sohil
 5/18/2016 7:00:28 PM



#31
 Naphthalene
 Concen: 5.30 ng
 RT: 7.90 min Scan# 552
 Delta R.T. -0.02 min
 Lab File: BF087138.D
 Acq: 18 May 2016 8:33

Tgt Ion:	128	Resp:	146101
Ion Ratio		Lower	Upper
128	100		
129	11.4	8.6	13.0
127	12.6	10.8	16.2





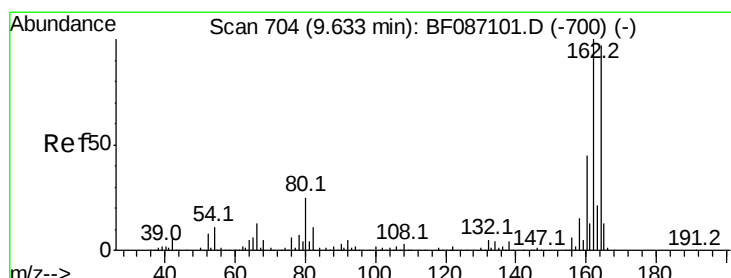
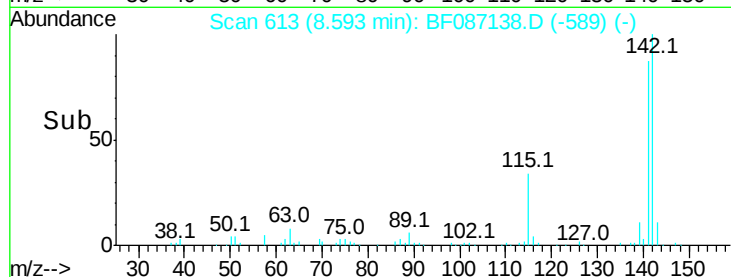
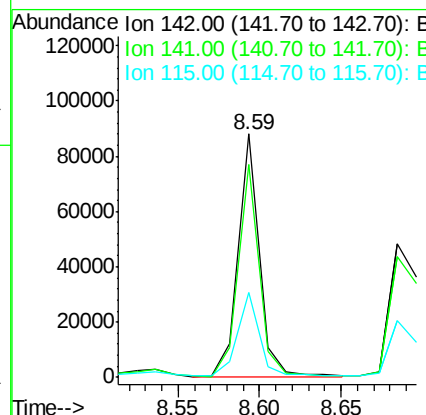
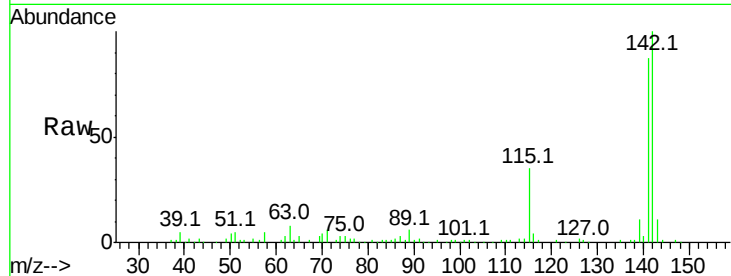
#37
 2-Methylnaphthalene
 Concen: 4.52 ng
 RT: 8.59 min Scan# 613
 Delta R.T. -0.02 min
 Lab File: BF087138.D
 Acq: 18 May 2016 8:33

Instrument :
 BNA_F
 ClientSampleId :
 CH-STA-1767-00(0-2)RE

Tot Ion	Ratio	Lower	Upper
142	100		
141	87.4	71.0	106.6
115	34.7	26.6	39.8

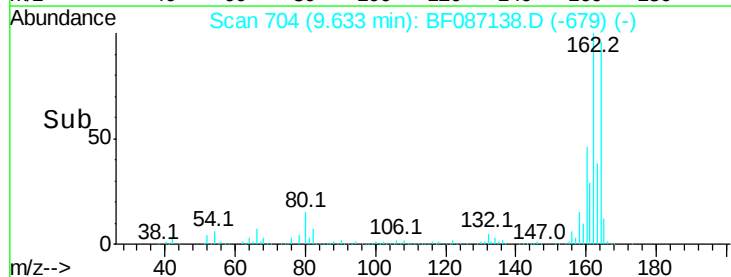
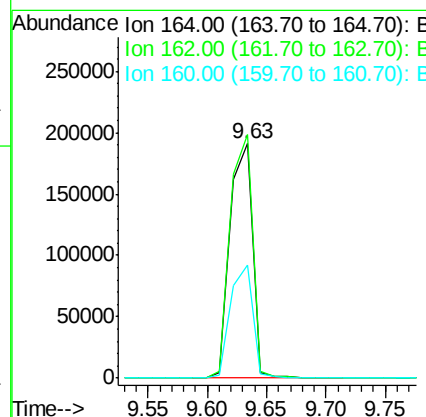
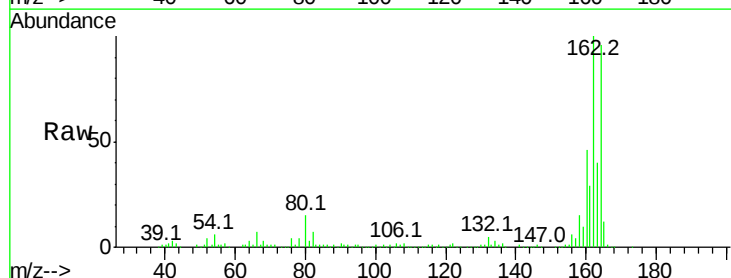
Manual Integrations
 APPROVED

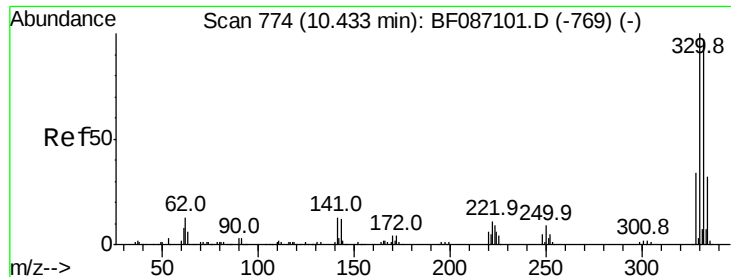
sohil
 5/18/2016 7:00:28 PM



#38
 Acenaphthene-d10
 Concen: 20.00 ng
 RT: 9.63 min Scan# 704
 Delta R.T. -0.01 min
 Lab File: BF087138.D
 Acq: 18 May 2016 8:33

Tgt Ion	Ratio	Lower	Upper
164	100		
162	103.8	82.8	124.2
160	48.3	36.9	55.3





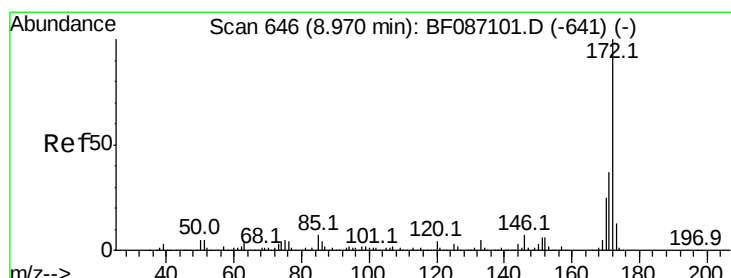
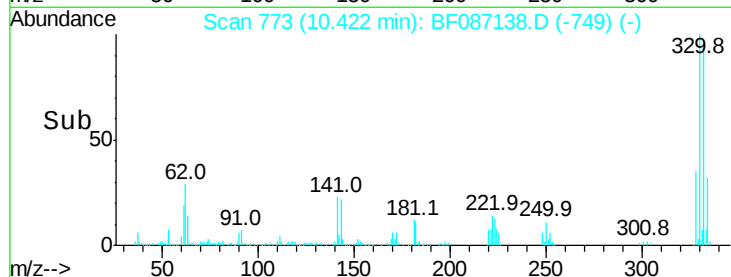
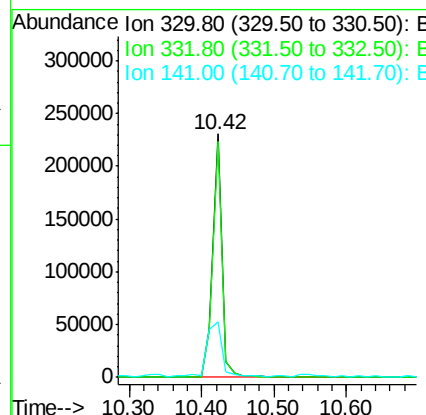
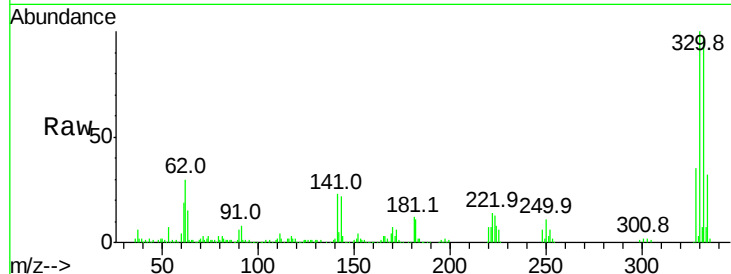
#41
 2,4,6-Tribromophenol
 Concen: 75.26 ng
 RT: 10.42 min Scan# 773
 Delta R.T. -0.02 min
 Lab File: BF087138.D
 Acq: 18 May 2016 8:33

Instrument :
 BNA_F
 ClientSampleId :
 CH-STA-1767-00(0-2)RE

Tot Ion	Ratio	Resp	Lower	Upper
330	100	208840		
332	96.3	79.0	118.4	
141	37.4	31.2	46.8	

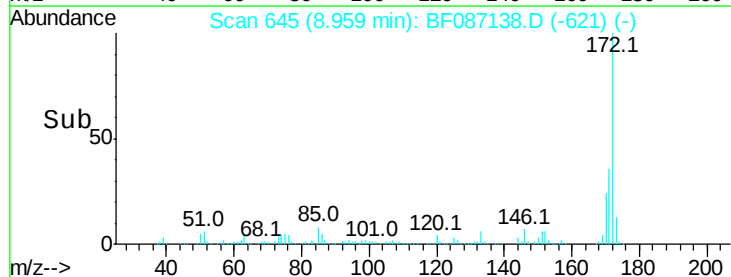
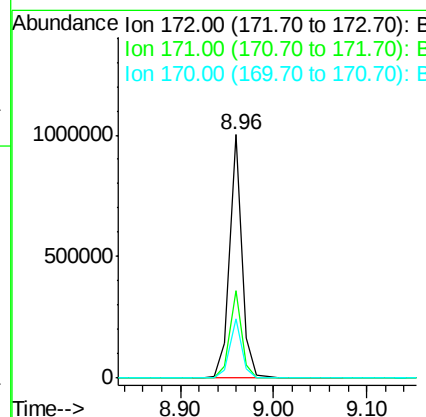
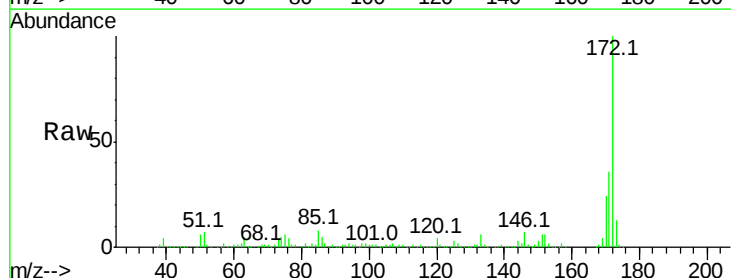
Manual Integrations
 APPROVED

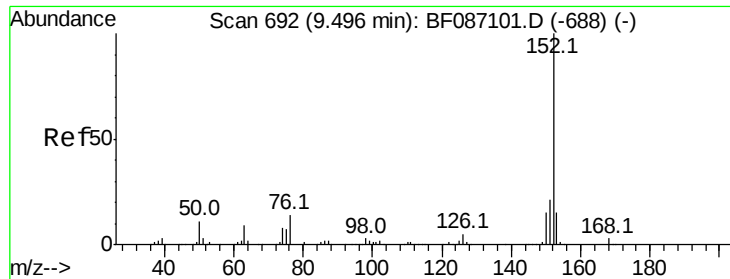
sohil
 5/18/2016 7:00:28 PM



#44
 2-Fluorobiphenyl
 Concen: 60.89 ng
 RT: 8.96 min Scan# 645
 Delta R.T. -0.02 min
 Lab File: BF087138.D
 Acq: 18 May 2016 8:33

Tgt Ion	Ratio	Resp	Lower	Upper
172	100	923176		
171	36.0	29.0	43.6	
170	24.2	19.8	29.8	





#48

Acenaphthylene

Concen: 12.96 ng

RT: 9.48 min Scan# 691

Delta R.T. -0.02 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

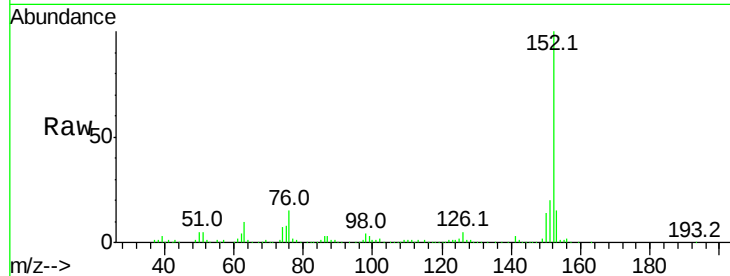
ClientSampleId :

CH-STA-1767-00(0-2)RE

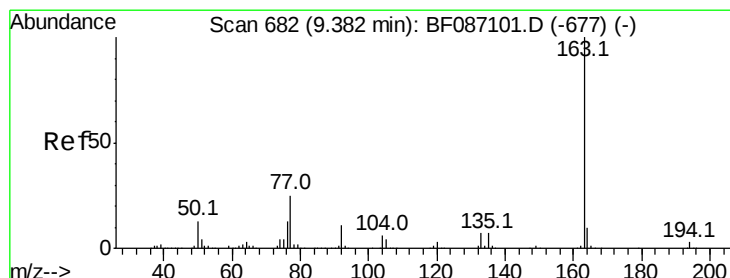
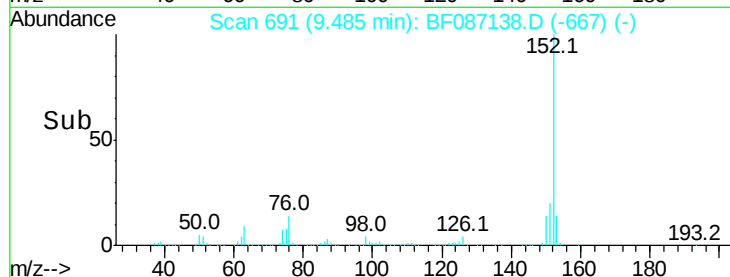
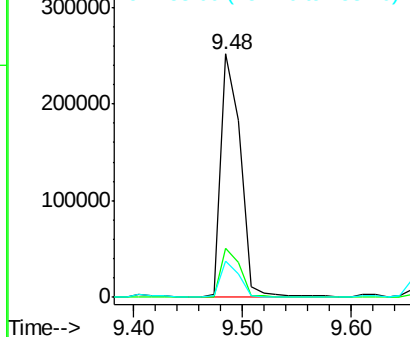
Tot Ion:	152	Resp:	316382
Ion Ratio	Lower	Upper	
152	100		
151	20.0	16.8	25.2
153	14.8	10.9	16.3

Manual Integrations
APPROVED

sohil
5/18/2016 7:00:28 PM



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



#49

Dimethylphthalate

Concen: 5.44 ng

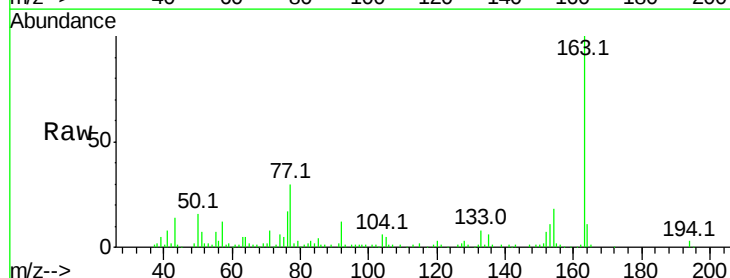
RT: 9.36 min Scan# 680

Delta R.T. -0.03 min

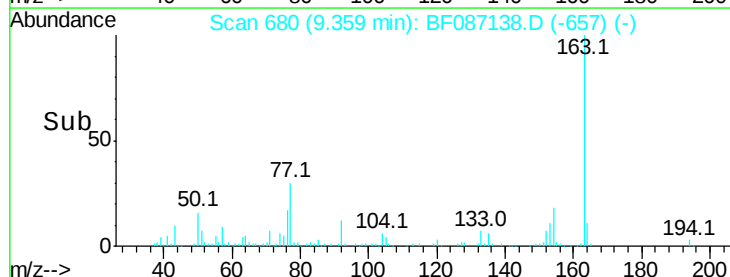
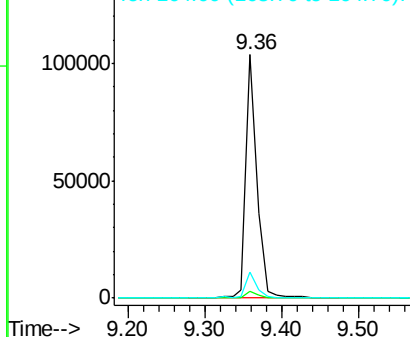
Lab File: BF087138.D

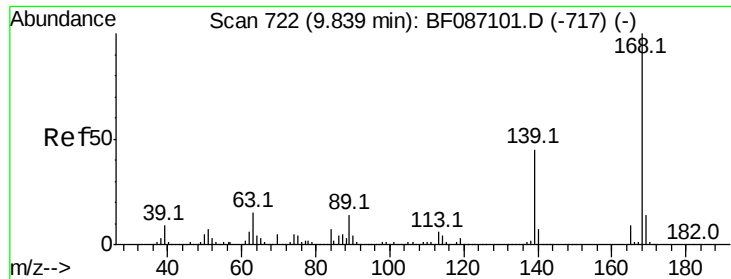
Acq: 18 May 2016 8:33

Tgt Ion:	163	Resp:	104176
Ion Ratio	Lower	Upper	
163	100		
194	3.0	2.6	4.0
164	10.5	8.2	12.4



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





#54

Dibenzenofuran

Concen: 3.60 ng

RT: 9.84 min Scan# 722

Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

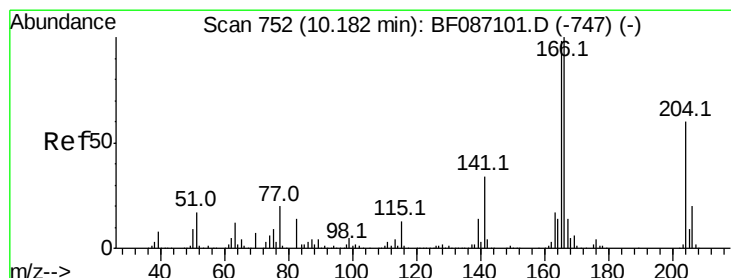
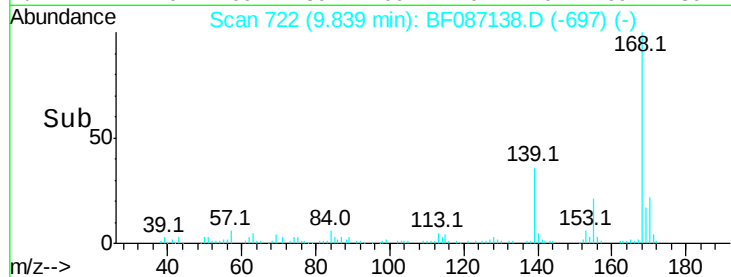
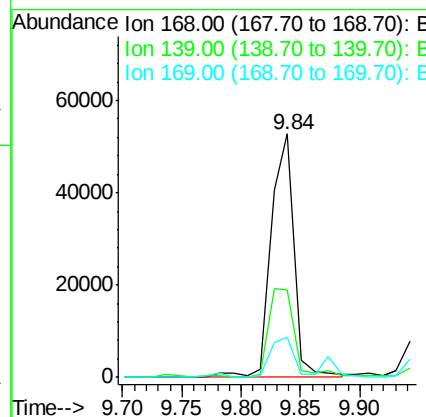
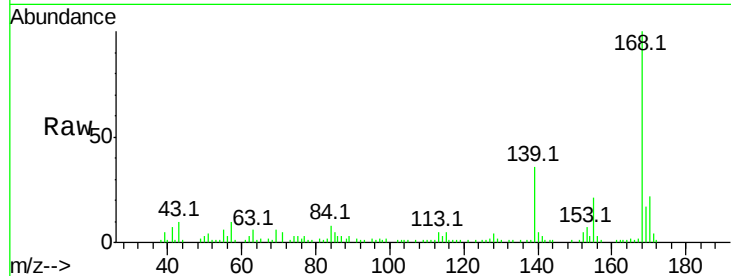
ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion:	168	Resp:	70923
Ion Ratio	Lower	Upper	
168	100		
139	35.7	31.4	47.0
169	16.7	10.7	16.1#

Manual Integrations
APPROVED

sohil
5/18/2016 7:00:28 PM



#57

Fluorene

Concen: 4.72 ng

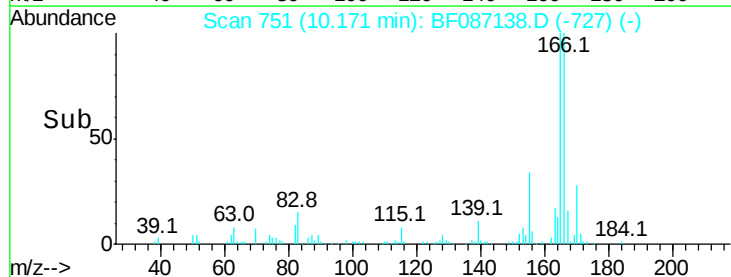
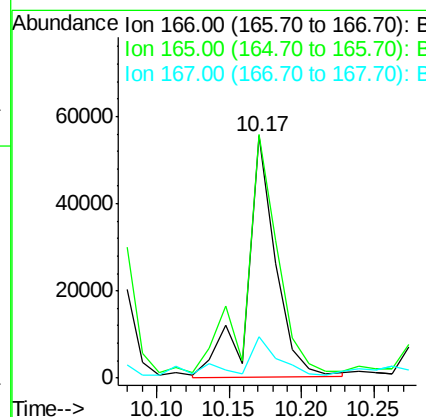
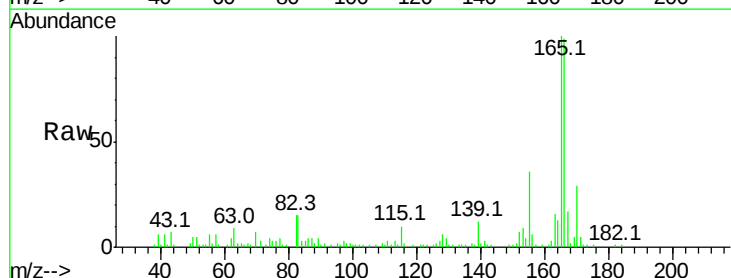
RT: 10.17 min Scan# 751

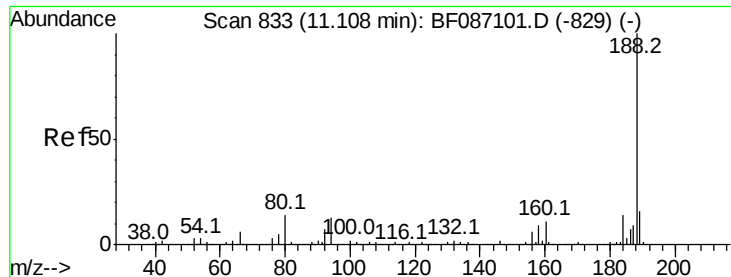
Delta R.T. -0.02 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Tgt Ion:	166	Resp:	74735
Ion Ratio	Lower	Upper	
166	100		
165	100.7	79.0	118.6
167	17.0	10.6	15.8#





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.11 min Scan# 833

Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

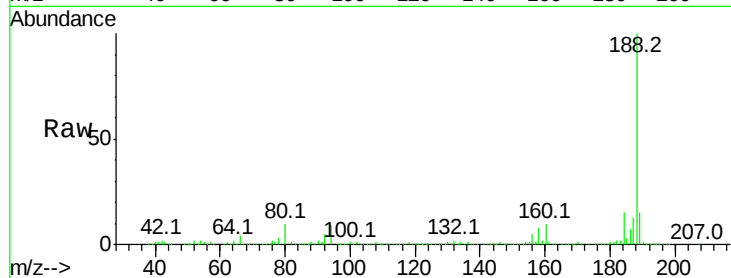
ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion:188	Resp:	387406
Ion Ratio	Lower	Upper
188 100		
94 9.4	6.8	10.2
80 10.0	7.1	10.7

Manual Integrations
APPROVED

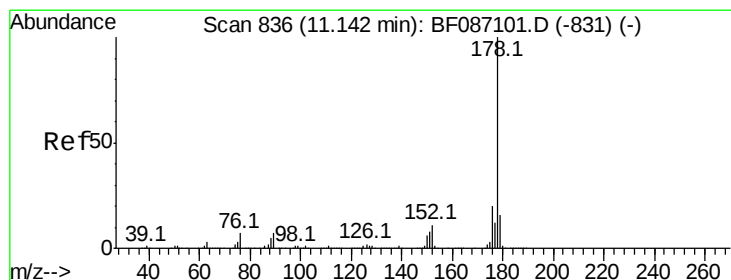
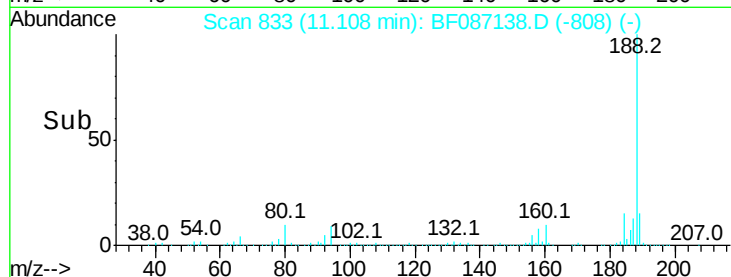
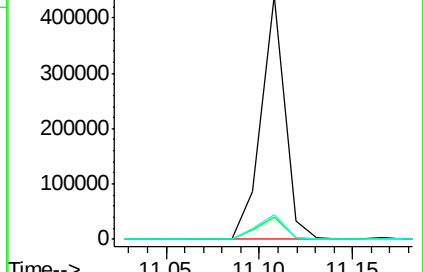
sohil
5/18/2016 7:00:28 PM



Abundance Ion 188.00 (187.70 to 188.70): E

Ion 94.00 (93.70 to 94.70): BF0

Ion 80.00 (79.70 to 80.70): BF0



#70

Phenanthrene

Concen: 32.78 ng

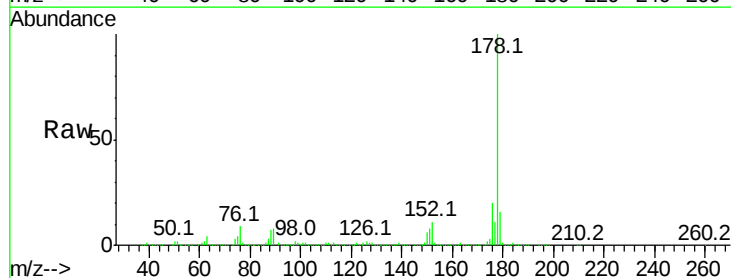
RT: 11.13 min Scan# 835

Delta R.T. -0.02 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

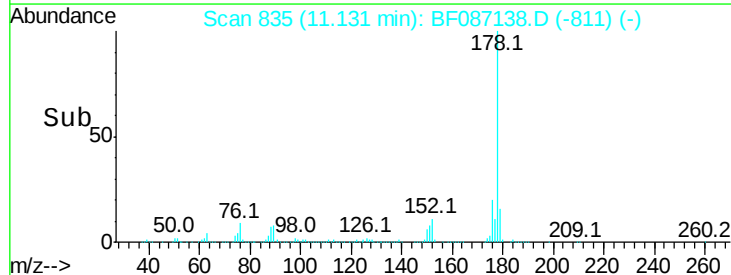
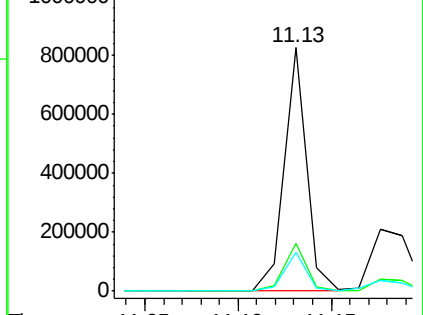
Tgt Ion:178	Resp:	688819
Ion Ratio	Lower	Upper
178 100		
176 19.6	16.0	24.0
179 15.9	12.6	18.8

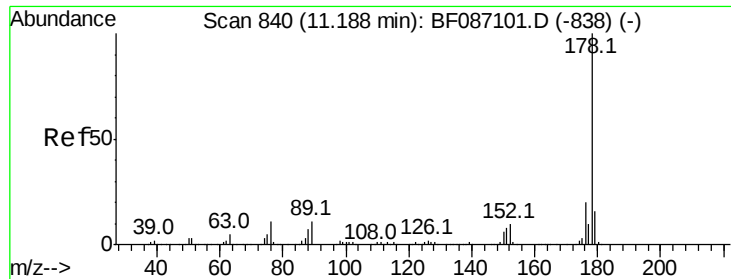


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





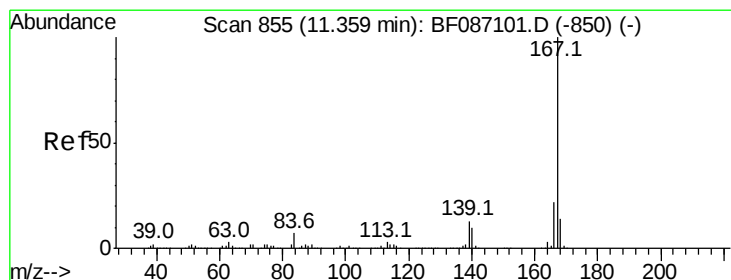
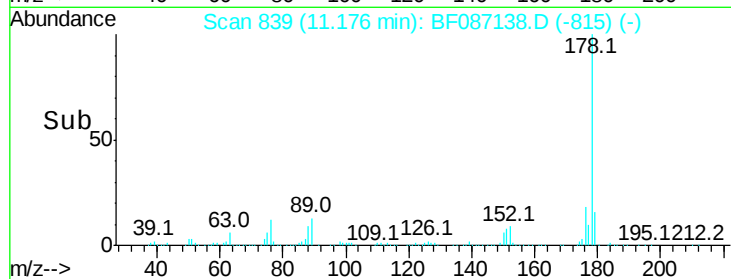
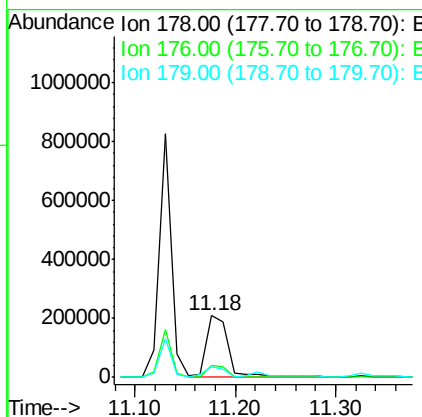
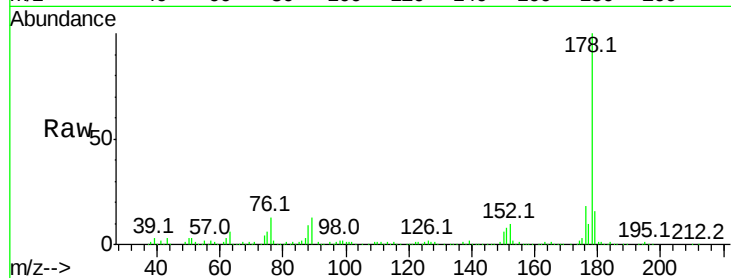
#71
 Anthracene
 Concen: 14.44 ng
 RT: 11.18 min Scan# 839
 Delta R.T. -0.02 min
 Lab File: BF087138.D
 Acq: 18 May 2016 8:33

Instrument :
 BNA_F
 ClientSampleId :
 CH-STA-1767-00(0-2)RE

Tot Ion	Ratio	Lower	Upper
178	100		
176	18.4	15.6	23.4
179	16.3	12.7	19.1

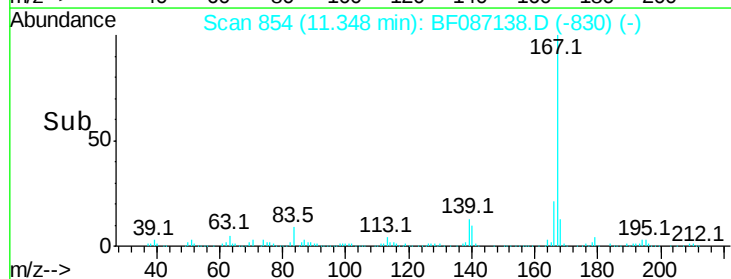
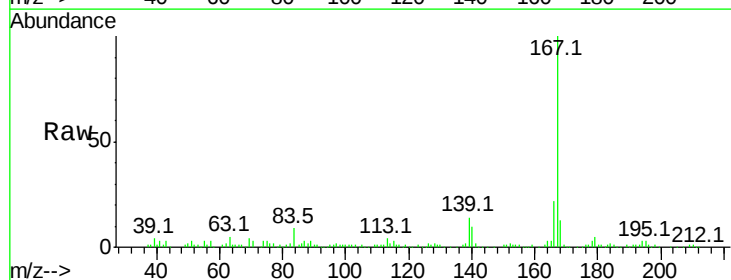
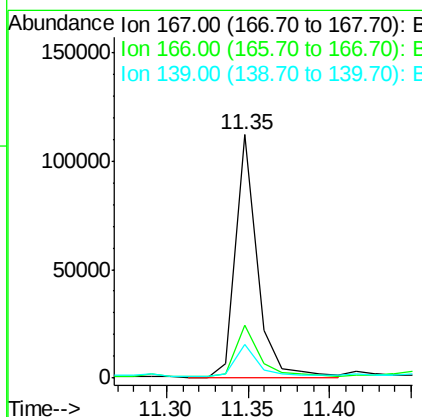
Manual Integrations
 APPROVED

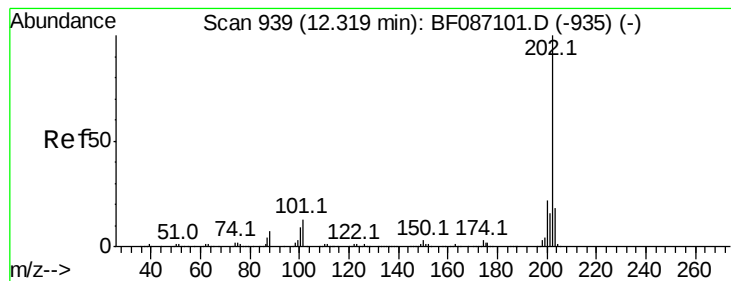
sohil
 5/18/2016 7:00:28 PM



#72
 Carbazole
 Concen: 5.25 ng
 RT: 11.35 min Scan# 854
 Delta R.T. -0.02 min
 Lab File: BF087138.D
 Acq: 18 May 2016 8:33

Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.8	17.7	26.5
139	13.9	10.8	16.2





#74

Fluoranthene

Concen: 65.01 ng

RT: 12.32 min Scan# 939

Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

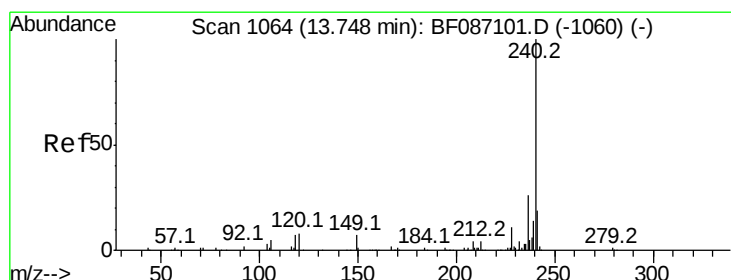
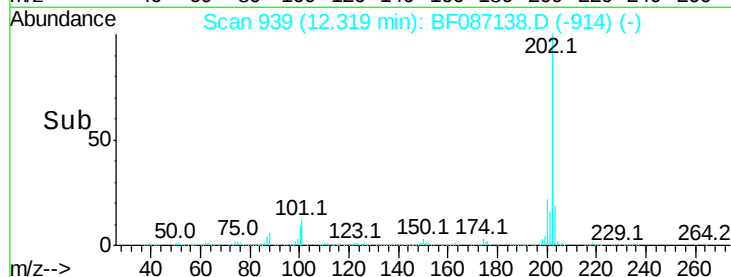
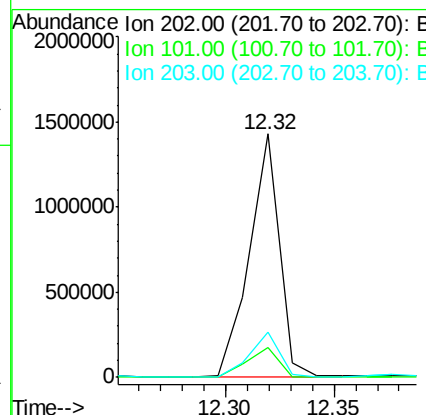
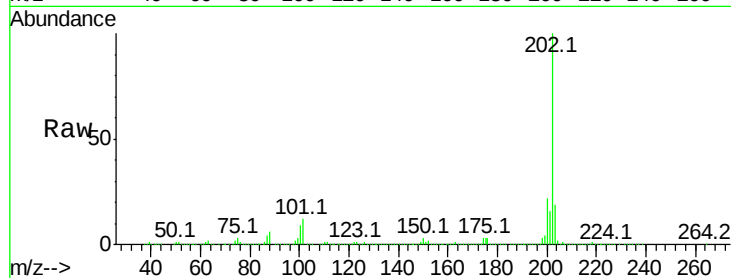
ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion	Ratio	Resp	Lower	Upper
202	100			
101	12.3	0.0	35.4	
203	18.5	0.0	38.1	

Manual Integrations
APPROVED

sohil
5/18/2016 7:00:28 PM



#75

Chrysene-d12

Concen: 20.00 ng

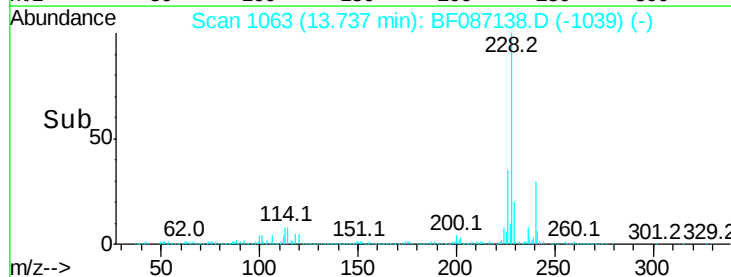
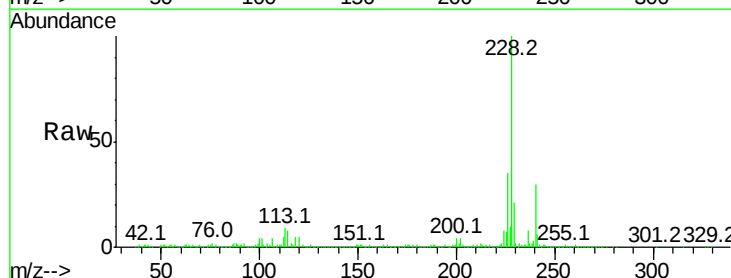
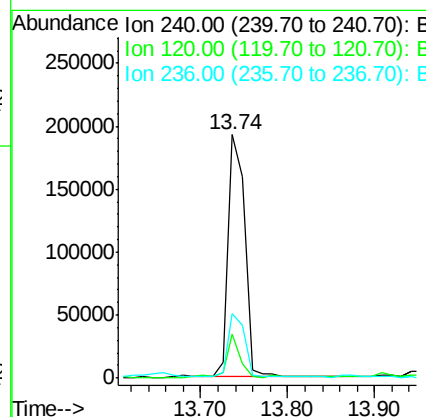
RT: 13.74 min Scan# 1063

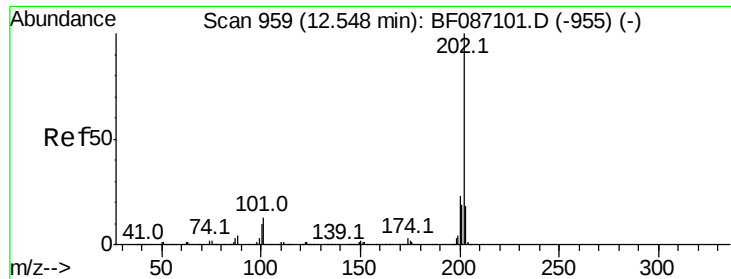
Delta R.T. -0.02 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Tgt Ion	Ratio	Resp	Lower	Upper
240	100			
120	18.1	11.2	16.8#	
236	26.4	21.2	31.8	





#77

Pvrene

Concen: 75.66 ng

RT: 12.55 min Scan# 959

Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

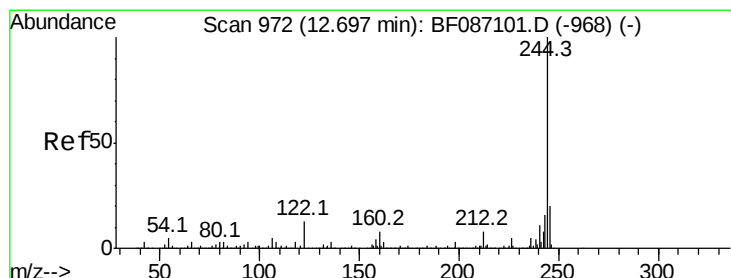
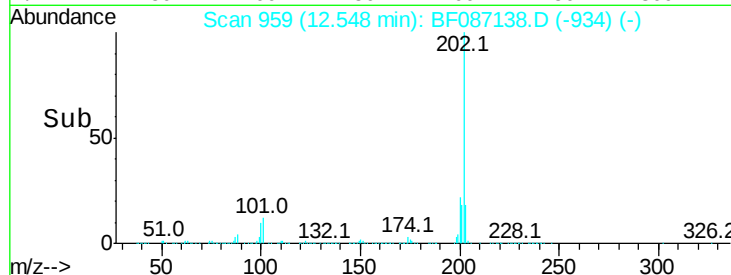
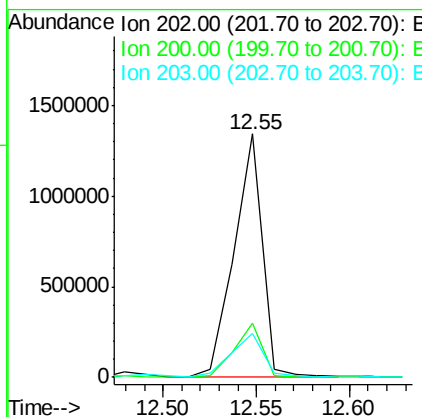
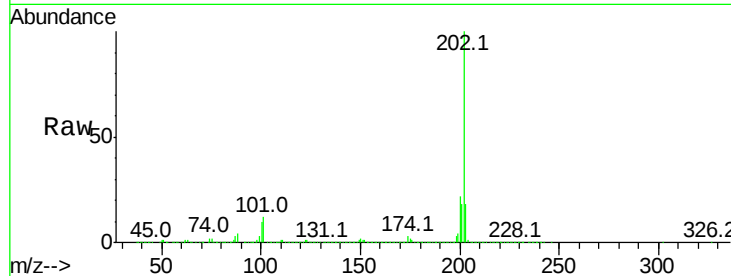
ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion:	202	Resp:	1409442
Ion Ratio	Lower	Upper	
202	100		
200	22.2	17.7	26.5
203	18.0	14.2	21.4

Manual Integrations
APPROVED

sohil
5/18/2016 7:00:28 PM



#78

Terphenyl-d14

Concen: 51.07 ng

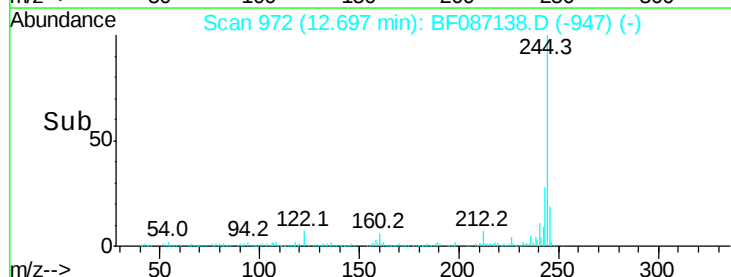
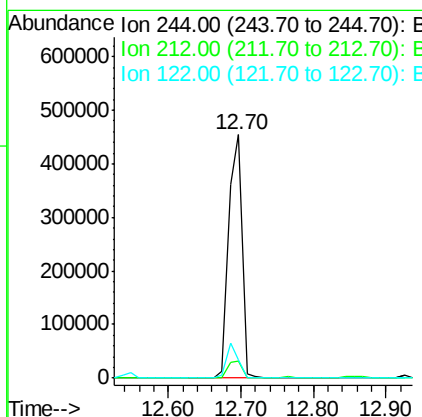
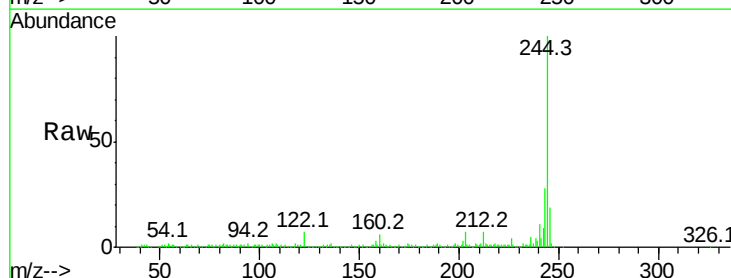
RT: 12.70 min Scan# 972

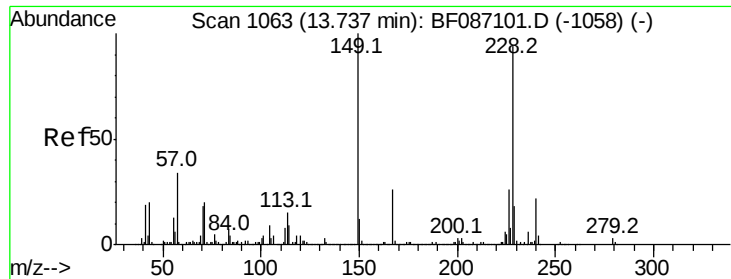
Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Tgt Ion:	244	Resp:	582080
Ion Ratio	Lower	Upper	
244	100		
212	6.9	6.2	9.2
122	7.3	12.0	18.0#





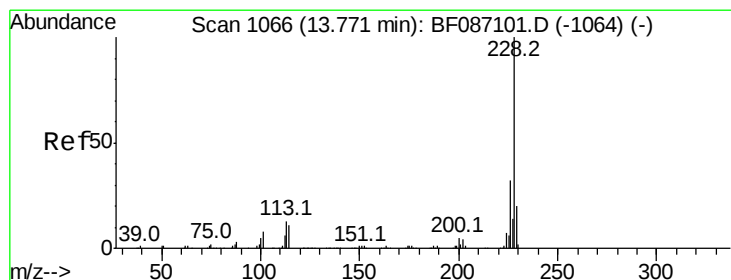
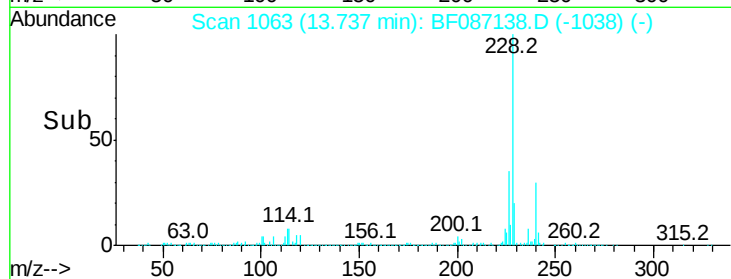
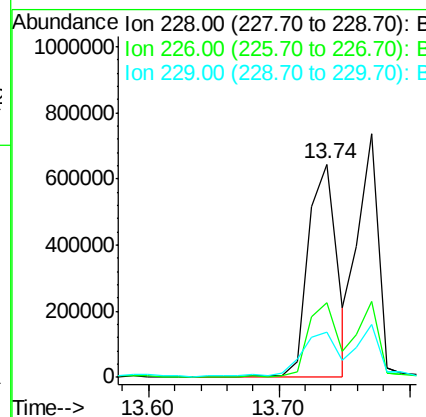
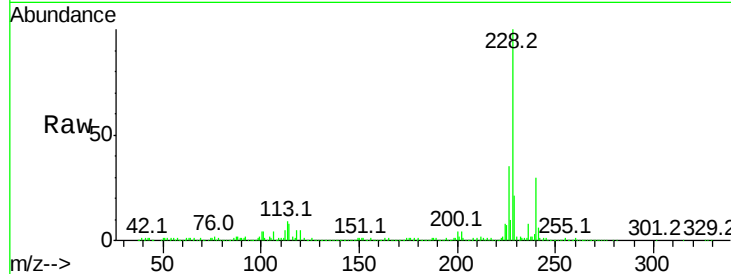
#80
Benzo(a)anthracene
Concen: 65.44 ng
RT: 13.74 min Scan# 1063
Delta R.T. -0.01 min
Lab File: BF087138.D
Acq: 18 May 2016 8:33

Instrument :
BNA_F
ClientSampleId :
CH-STA-1767-00(0-2)RE

Tot Ion	Ratio	Lower	Upper
228	100		
226	35.3	22.5	33.7#
229	21.0	16.6	25.0

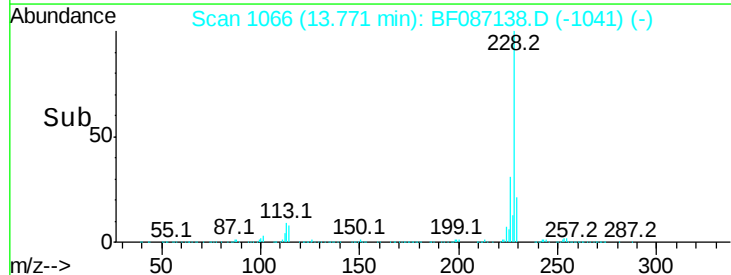
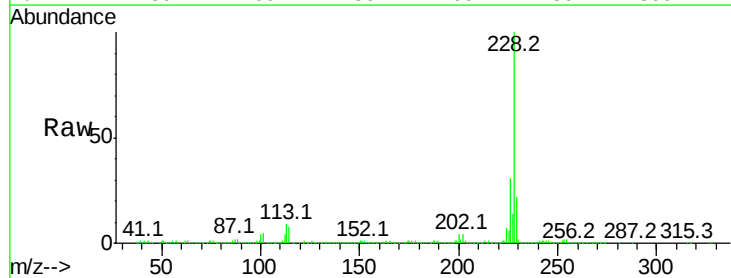
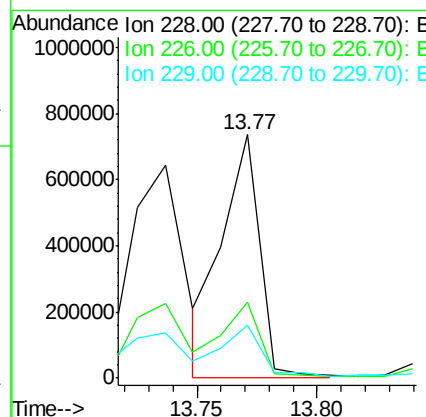
Manual Integrations
APPROVED

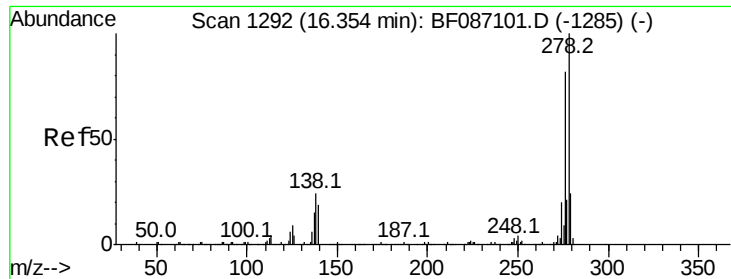
sohil
5/18/2016 7:00:28 PM



#82
Chrysene
Concen: 56.12 ng m
RT: 13.77 min Scan# 1066
Delta R.T. -0.01 min
Lab File: BF087138.D
Acq: 18 May 2016 8:33

Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.2	24.4	36.6
229	21.8	15.8	23.8





#85

Indeno(1,2,3-cd)pyrene

Concen: 30.67 ng/mL

RT: 16.34 min Scan# 1291

Delta R.T. -0.02 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

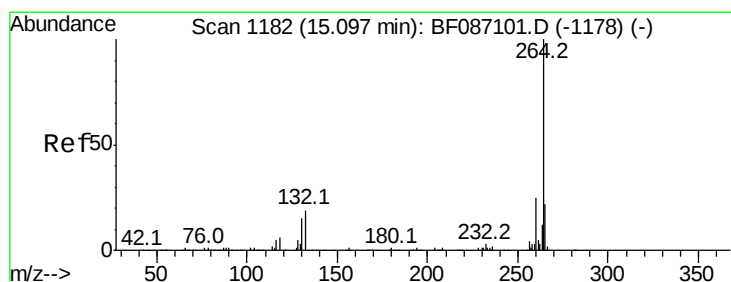
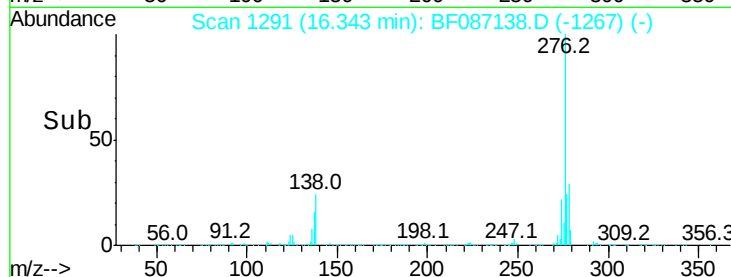
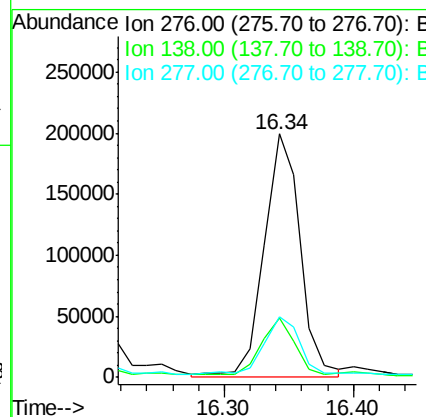
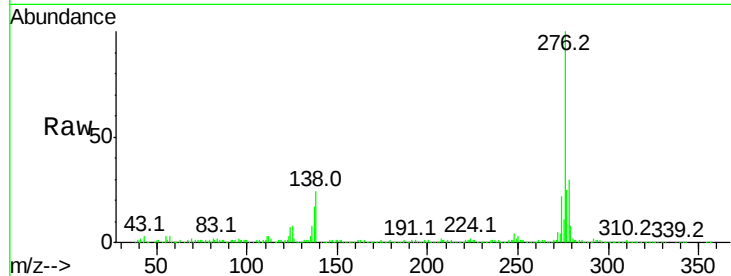
ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion	Ratio	Resp	Lower	Upper
276	100			
138	5.5	25.6	38.4#	
277	5.1	20.5	30.7#	

Manual Integrations
APPROVED

sohil
5/18/2016 7:00:28 PM



#86

Perylene-d12

Concen: 20.00 ng/mL

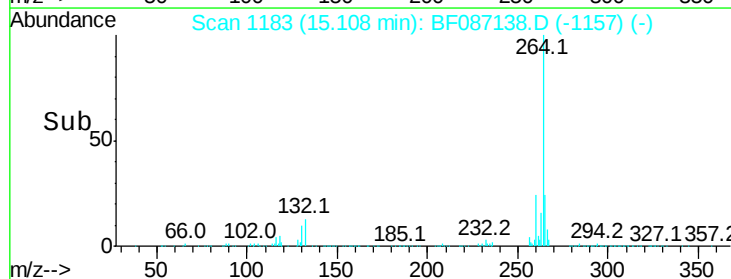
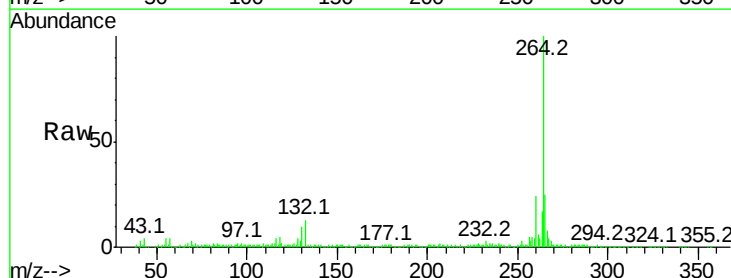
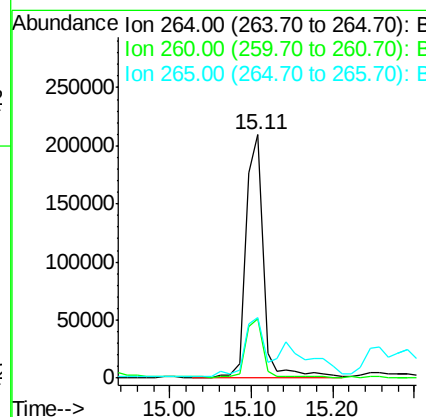
RT: 15.11 min Scan# 1183

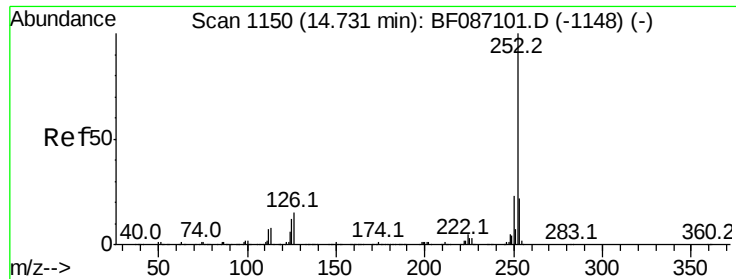
Delta R.T. 0.00 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Tgt Ion	Ratio	Resp	Lower	Upper
264	100			
260	24.3	19.5	29.3	
265	25.0	17.3	25.9	





#87

Benzo(b)fluoranthene

Concen: 65.15 ng m

RT: 14.74 min Scan# 1151

Delta R.T. 0.00 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

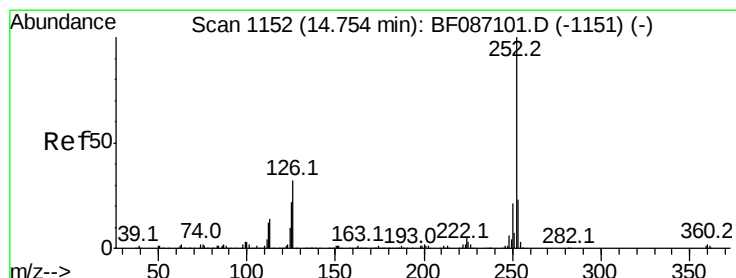
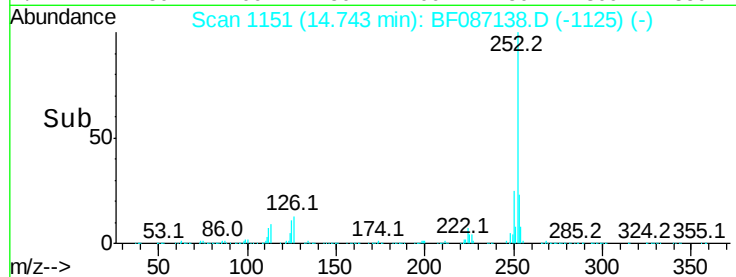
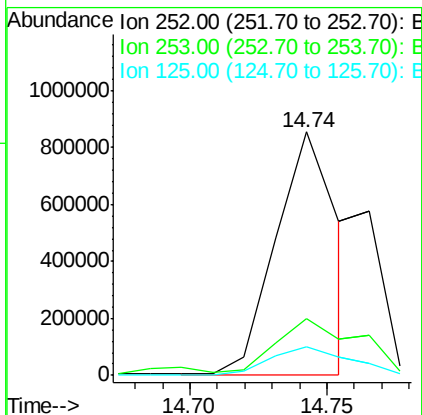
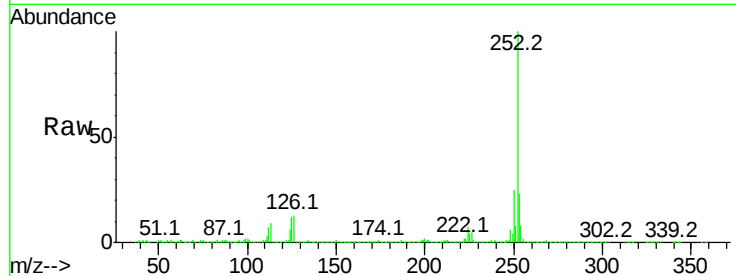
ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion:	252	Resp:	1335305
Ion Ratio	Lower	Upper	
252	100		
253	23.1	17.8	26.6
125	11.6	11.4	17.0

Manual Integrations
APPROVED

sohil
5/18/2016 7:00:28 PM



#88

Benzo(k)fluoranthene

Concen: 28.29 ng m

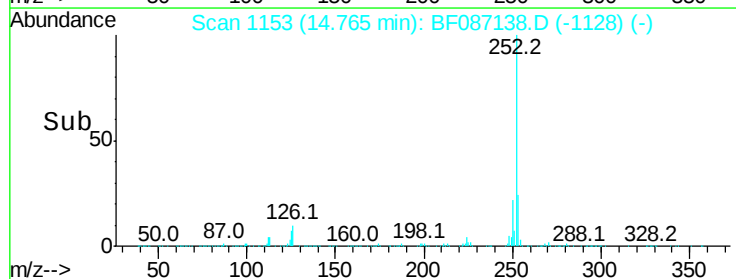
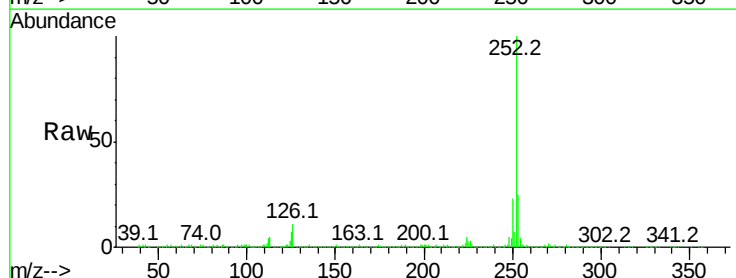
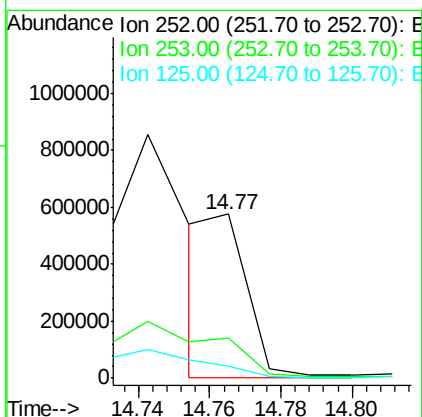
RT: 14.77 min Scan# 1153

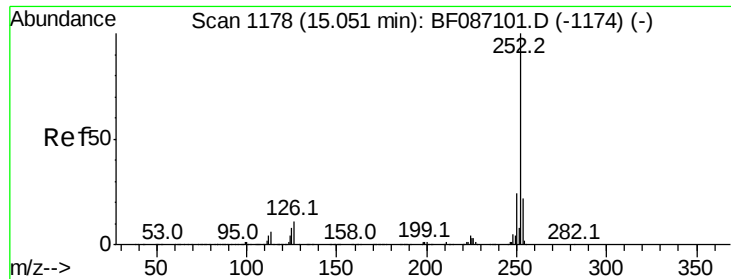
Delta R.T. -0.01 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Tgt Ion:	252	Resp:	431734
Ion Ratio	Lower	Upper	
252	100		
253	24.5	17.8	26.6
125	7.4	9.1	13.7#





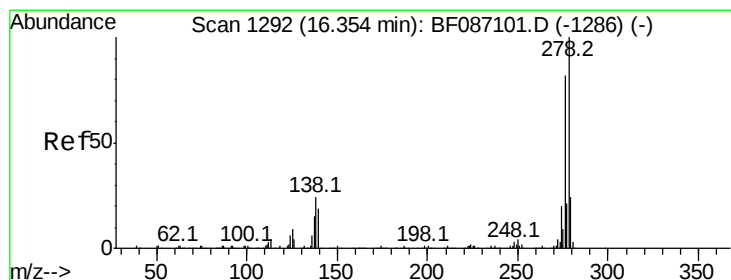
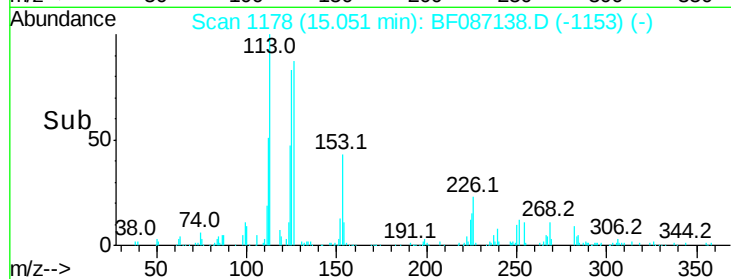
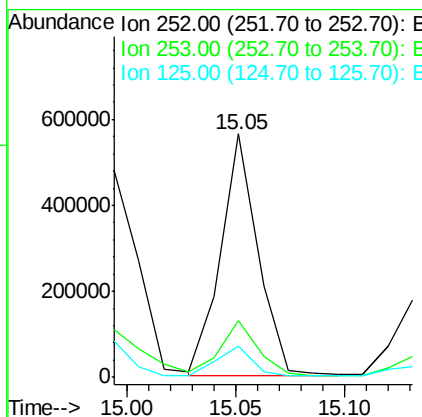
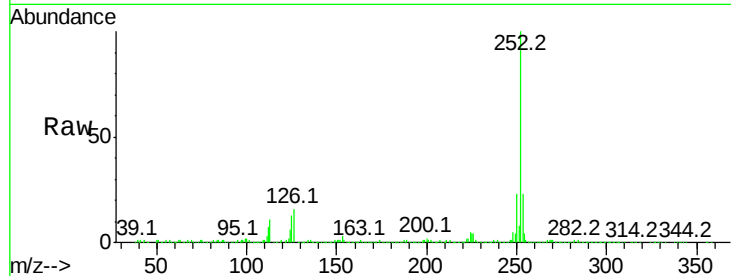
#89
Benzo(a)pyrene
Concen: 39.07 ng
RT: 15.05 min Scan# 1178
Delta R.T. -0.01 min
Lab File: BF087138.D
Acq: 18 May 2016 8:33

Instrument :
BNA_F
ClientSampleId :
CH-STA-1767-00(0-2)RE

Tot Ion	Ratio	Resp Lower	Upper
252	100		
253	23.3	17.2	25.8
125	12.6	9.0	13.6

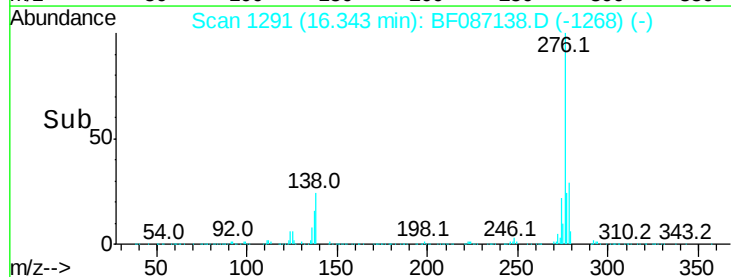
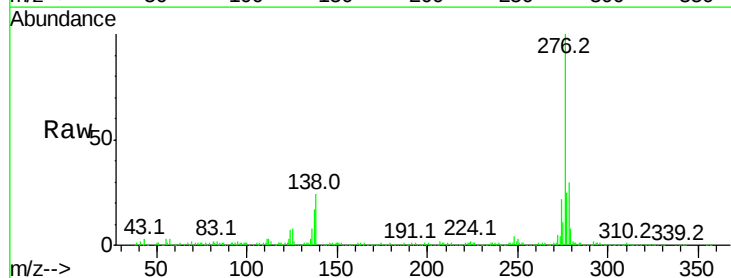
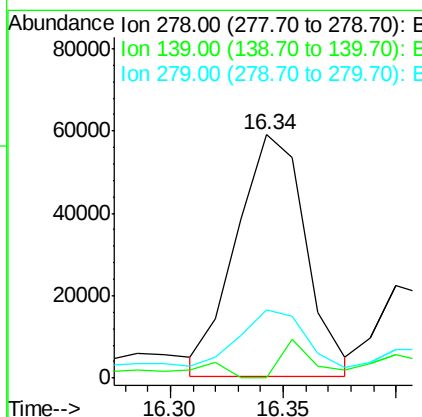
Manual Integrations
APPROVED

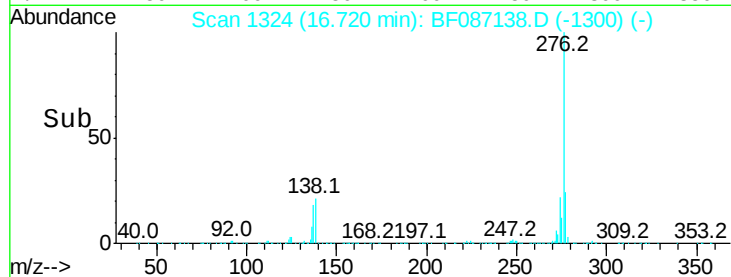
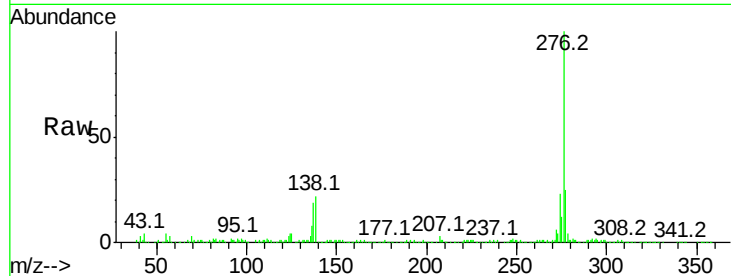
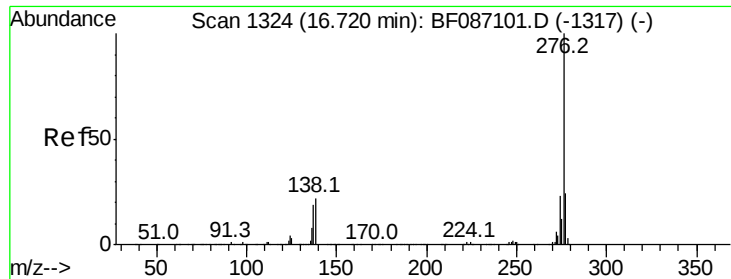
sohil
5/18/2016 7:00:28 PM



#90
Dibenzo(a,h)anthracene
Concen: 8.79 ng m
RT: 16.34 min Scan# 1291
Delta R.T. -0.03 min
Lab File: BF087138.D
Acq: 18 May 2016 8:33

Tgt Ion	Ratio	Resp Lower	Upper
278	100		
139	0.0	16.6	24.8#
279	27.9	19.6	29.4





#91

Benzo(a,h,i)perylene

Concen: 20.02 ng

RT: 16.72 min Scan# 1324

Delta R.T. -0.02 min

Lab File: BF087138.D

Acq: 18 May 2016 8:33

Instrument :

BNA_F

ClientSampleId :

CH-STA-1767-00(0-2)RE

Tot Ion:	276	Resp:	291640
Ion Ratio	Lower	Upper	
276	100		
277	24.7	19.6	29.4
138	21.6	23.6	35.4

Manual Integrations
APPROVED

sohil
5/18/2016 7:00:28 PM

