

Data Path : Z:\HPCHEM1\BNA_F\DATA\BF063016\
 Data File : BF088547.D
 Acq On : 30 Jun 2016 23:52
 Operator : UM/SJ
 Sample : H3663-06 5X
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SS-4

Manual Integrations

APPROVED
 SOHIL
 7/1/2016 8:05:29 AM

Quant Time: Jul 01 02:22:34 2016
 Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF063016.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jun 30 18:01:55 2016
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.81	152	230420	20.00	ng	0.00
21) Naphthalene-d8	8.10	136	1002750	20.00	ng	0.00
38) Acenaphthene-d10	9.85	164	443575	20.00	ng	0.00
63) Phenanthrene-d10	11.33	188	769724	20.00	ng	0.00
75) Chrysene-d12	13.97	240	420765	20.00	ng	0.01
86) Perylene-d12	15.37	264	535364	20.00	ng	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.39	112	347211	22.58	ng	-0.01
7) Phenol-d6	6.43	99	493798	24.86	ng	-0.01
23) Nitrobenzene-d5	7.37	82	301547	15.76	ng	-0.01
41) 2,4,6-Tribromophenol	10.63	330	87520	21.25	ng	-0.01
44) 2-Fluorobiphenyl	9.18	172	557510	19.85	ng	0.00
78) Terphenyl-d14	12.91	244	341394	18.07	ng	0.00
Target Compounds						Qvalue
31) Naphthalene	8.12	128	711877	14.40	ng	99
37) 2-Methylnaphthalene	8.81	142	154509	4.85	ng	98
49) Dimethylphthalate	9.56	163	98449	3.12	ng	99
51) Acenaphthene	9.88	154	461677	16.42	ng	98
54) Dibenzofuran	10.04	168	252928	6.87	ng	# 87
57) Fluorene	10.39	166	264295	9.32	ng	99
70) Phenanthrene	11.36	178	1946707	46.27	ng	98
71) Anthracene	11.41	178	719659	17.20	ng	99
72) Carbazole	11.55	167	444890	11.30	ng	99
74) Fluoranthene	12.55	202	2498018	58.56	ng	99
77) Pyrene	12.78	202	2273859	63.74	ng	98
80) Benzo(a)anthracene	13.95	228	1254478	46.30	ng	98
82) Chrysene	13.99	228	1070619	39.94	ng	97
85) Indeno(1,2,3-cd)pyrene	16.74	276	1054742	51.14	ng	# 100
87) Benzo(b)fluoranthene	14.98	252	1898552m	56.53	ng	
88) Benzo(k)fluoranthene	15.01	252	477827m	16.34	ng	
89) Benzo(a)pyrene	15.33	252	1411889m	49.65	ng	
90) Dibenzo(a,h)anthracene	16.74	278	241850	10.19	ng	93
91) Benzo(g,h,i)perylene	17.15	276	977499	39.78	ng	98

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

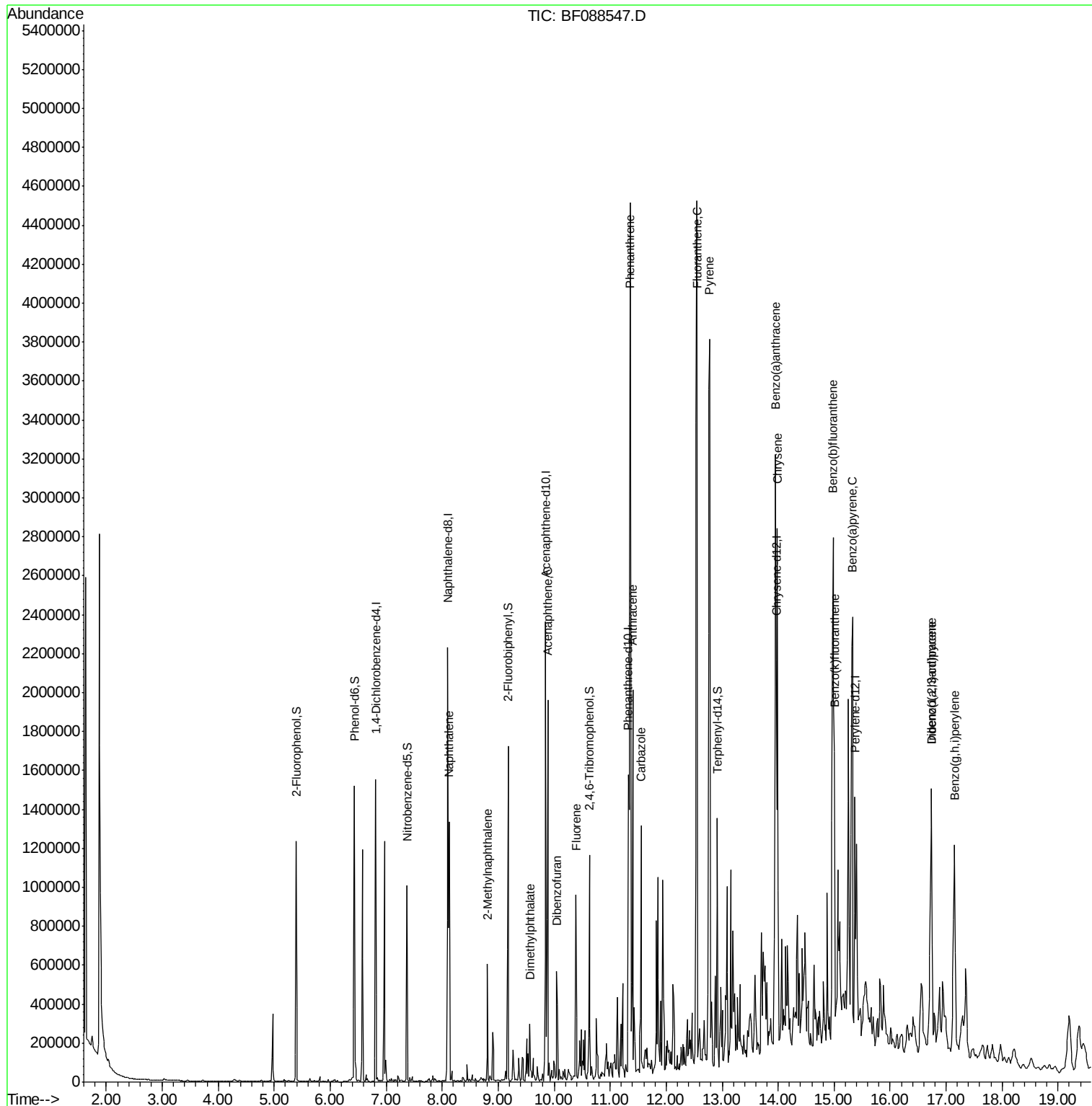
Data Path : Z:\HPCHEM1\BNA_F\DATA\BF063016\
Data File : BF088547.D
Acq On : 30 Jun 2016 23:52
Operator : UM/SJ
Sample : H3663-06 5X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
SS-4

Manual Integrations

Quant Time: Jul 01 02:22:34 2016
Quant Method : Z:\HPCHEM1\BNA_F\METHODS\8270-BF063016.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jun 30 18:01:55 2016
Response via : Initial Calibration

APPROVED
SOHIL
7/1/2016 8:05:29 AM





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.81 min Scan# 457

Delta R.T. -0.00 min

Lab File: BF088547.D

Acq: 30 Jun 2016 23:52

Instrument :

BNA_F

ClientSampled :

SS-4

Tgt Ion:152 Resp: 230420

Ion Ratio Lower Upper

152 100

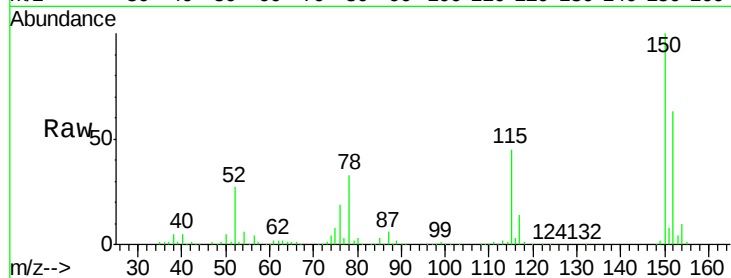
150 158.6 123.8 185.6

115 72.0 39.6 59.4#

Manual Integrations

SOHIL

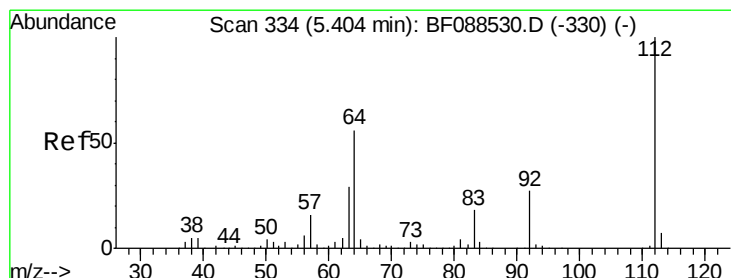
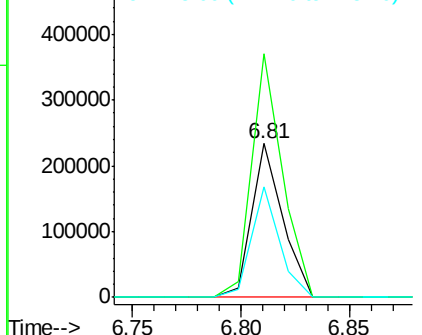
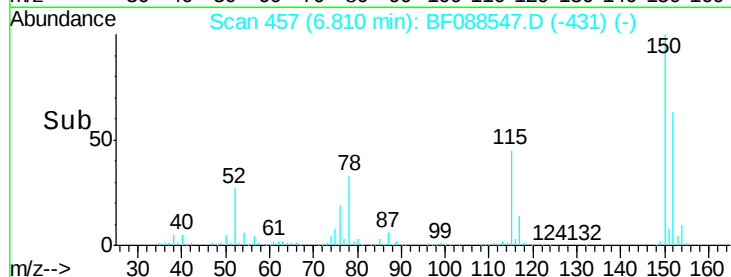
7/1/2016 8:05:29 AM



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: 22.58 ng

RT: 5.39 min Scan# 333

Delta R.T. -0.01 min

Lab File: BF088547.D

Acq: 30 Jun 2016 23:52

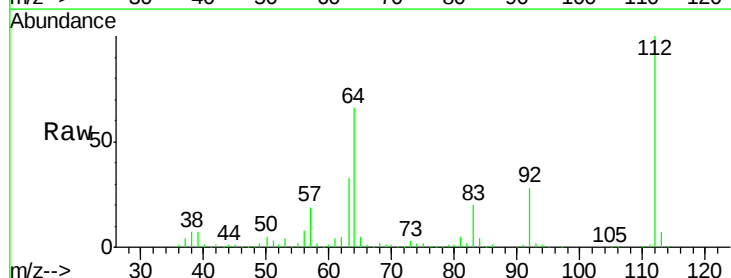
Tgt Ion:112 Resp: 347211

Ion Ratio Lower Upper

112 100

64 65.7 42.2 63.2#

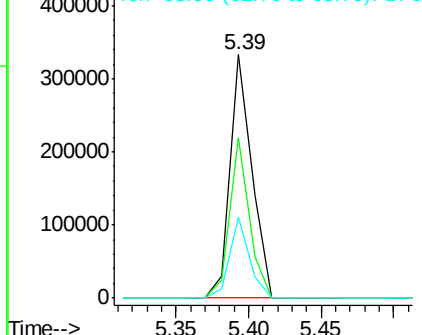
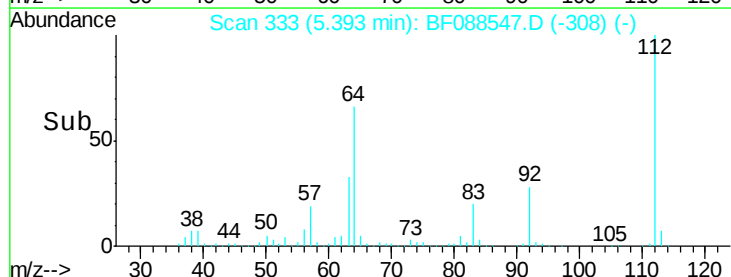
63 33.3 21.8 32.8#



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: 24.86 ng

RT: 6.43 min Scan# 424

Delta R.T. -0.01 min

Lab File: BF088547.D

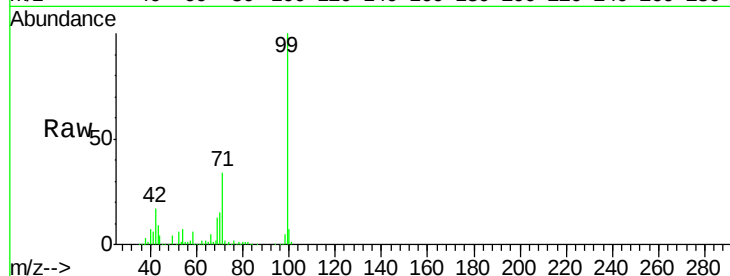
Acq: 30 Jun 2016 23:52

Instrument :

BNA_F

ClientSampleId :

SS-4



Tgt Ion: 99 Resp: 493798

Ion Ratio Lower Upper

99 100

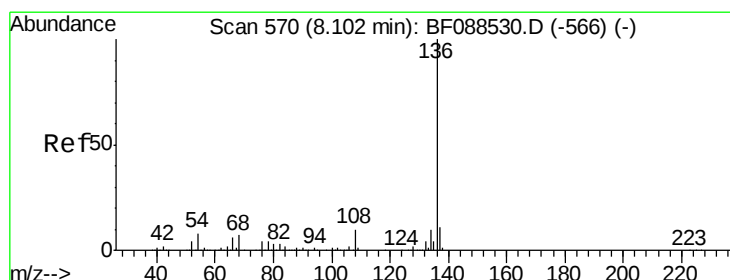
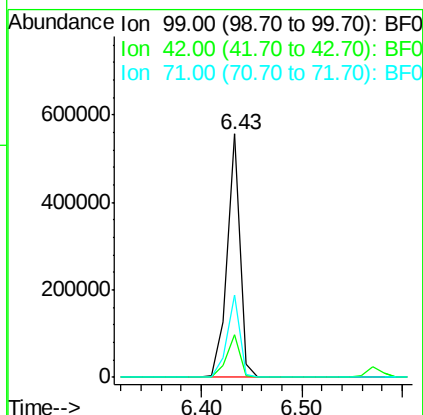
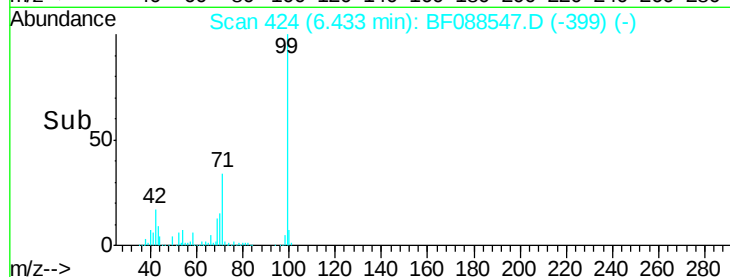
42 17.5 12.2 18.2

71 33.9 23.4 35.0

Manual Integrations

SOHIL

7/1/2016 8:05:29 AM



#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.10 min Scan# 570

Delta R.T. -0.00 min

Lab File: BF088547.D

Acq: 30 Jun 2016 23:52

Tgt Ion: 136 Resp: 1002750

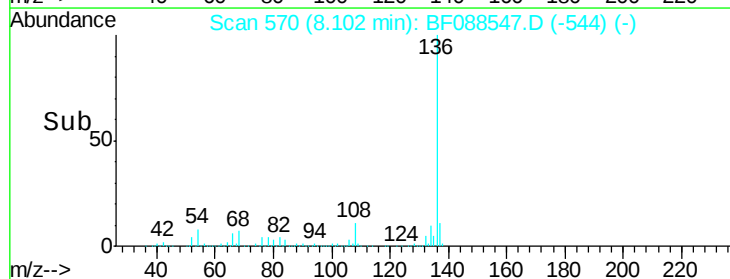
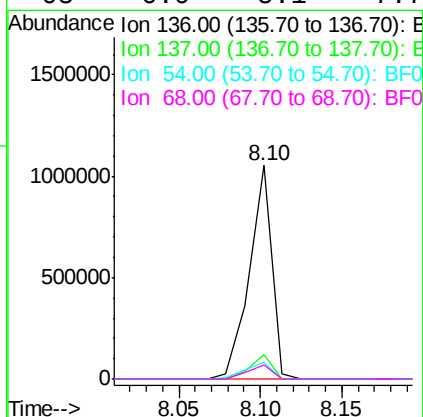
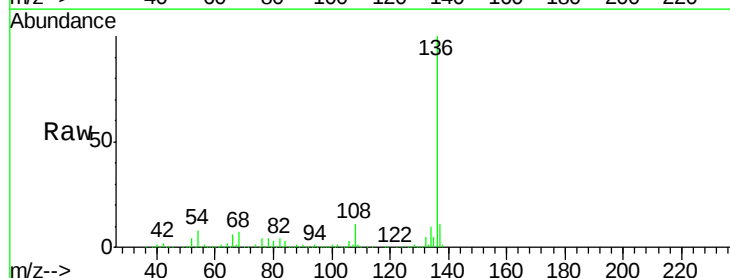
Ion Ratio Lower Upper

136 100

137 11.3 9.1 13.7

54 7.9 6.6 10.0

68 6.9 5.1 7.7





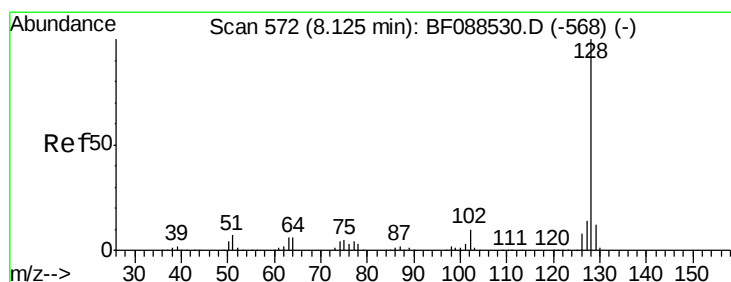
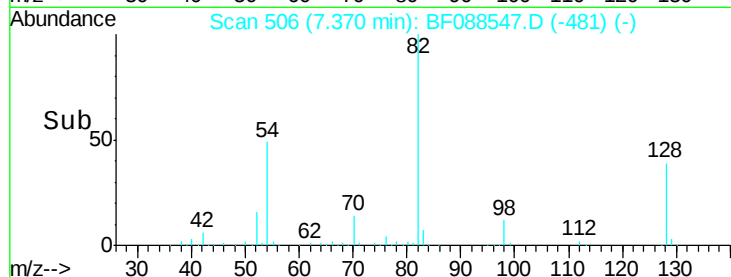
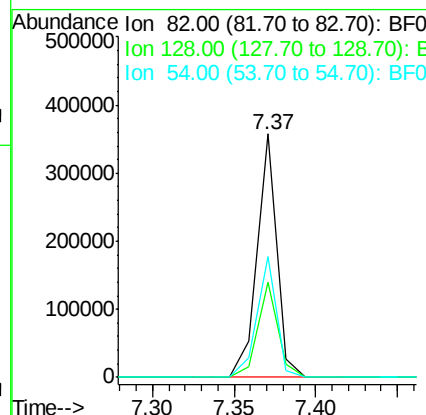
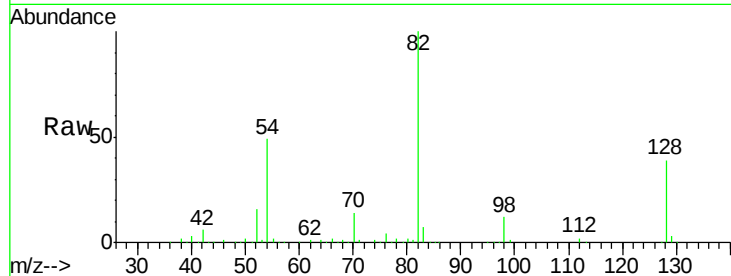
#23
 Nitrobenzene-d5
 Concen: 15.76 ng
 RT: 7.37 min Scan# 506
 Delta R.T. -0.01 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Instrument :
 BNA_F
 ClientSampled :
 SS-4

Tgt Ion	82	Resp	301547
Ion Ratio	100	Lower	Upper
128	39.3	35.9	53.9
54	49.4	40.9	61.3

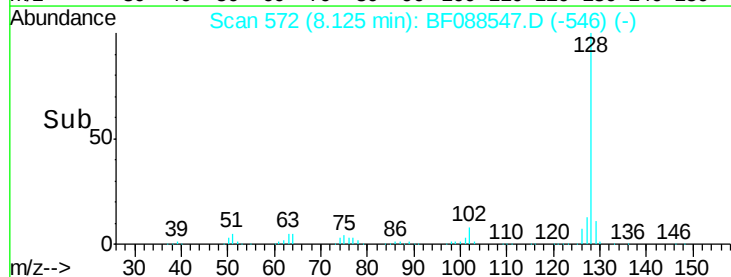
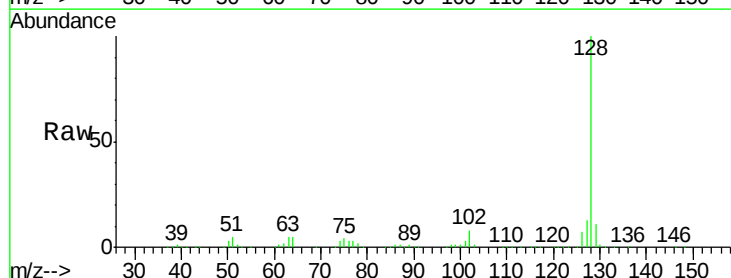
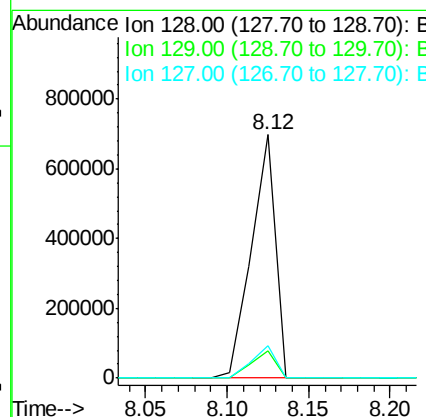
Manual Integrations

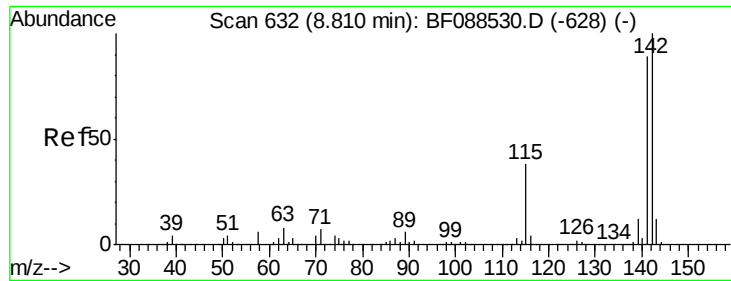
APPROVED
 SOHIL
 7/1/2016 8:05:29 AM



#31
 Naphthalene
 Concen: 14.40 ng
 RT: 8.12 min Scan# 572
 Delta R.T. -0.00 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Tgt Ion	128	Resp	711877
Ion Ratio	100	Lower	Upper
129	11.1	9.4	14.2
127	13.3	10.9	16.3





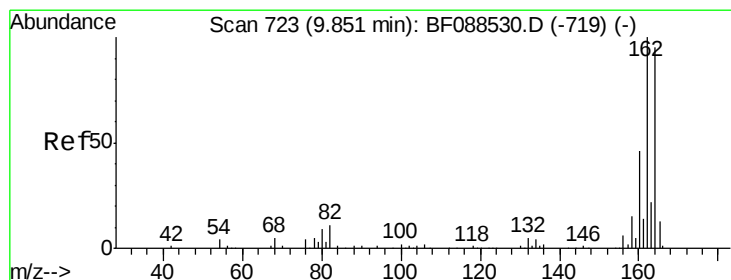
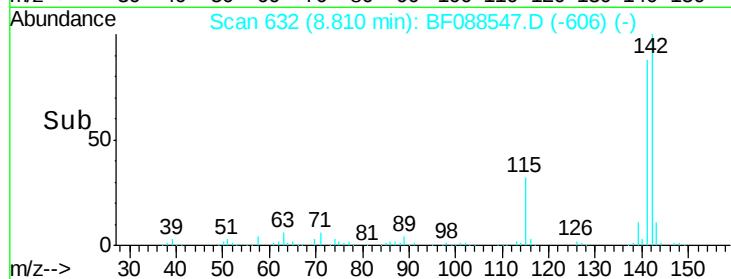
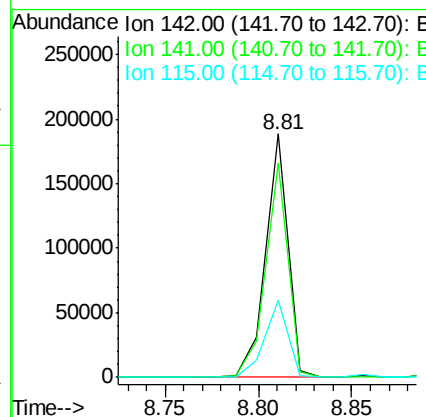
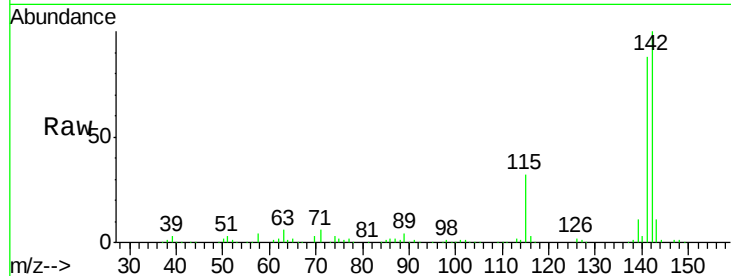
#37
 2-Methylnaphthalene
 Concen: 4.85 ng
 RT: 8.81 min Scan# 632
 Delta R.T. -0.00 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Instrument :
 BNA_F
 ClientSampleId :
 SS-4

Tgt Ion:142 Resp: 154509
 Ion Ratio Lower Upper
 142 100
 141 88.2 71.0 106.6
 115 31.8 22.6 33.8

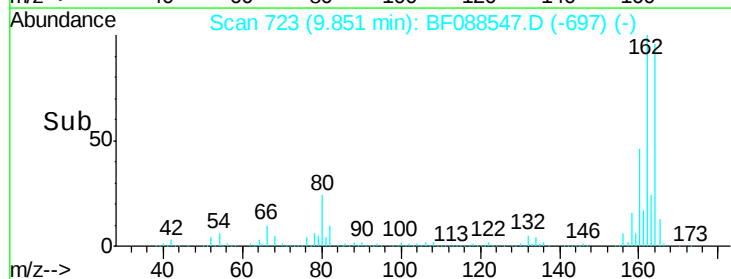
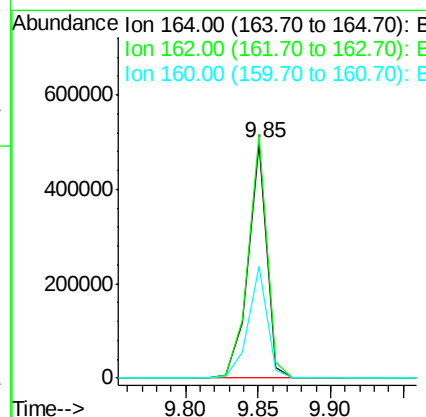
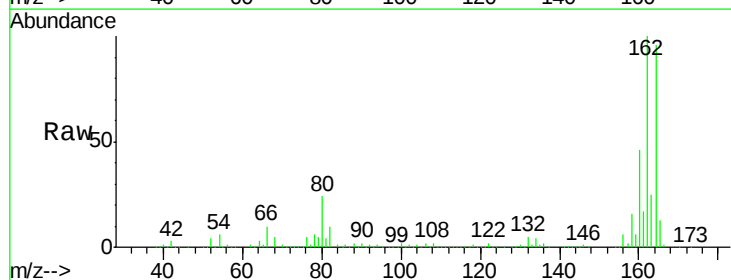
Manual Integrations

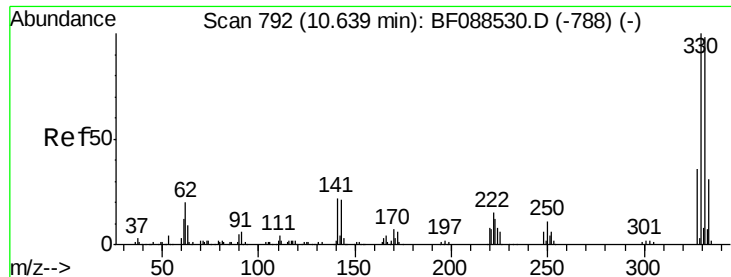
SOHIL
 7/1/2016 8:05:29 AM



#38
 Acenaphthene-d10
 Concen: 20.00 ng
 RT: 9.85 min Scan# 723
 Delta R.T. -0.00 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Tgt Ion:164 Resp: 443575
 Ion Ratio Lower Upper
 164 100
 162 103.6 85.4 128.2
 160 47.7 39.5 59.3





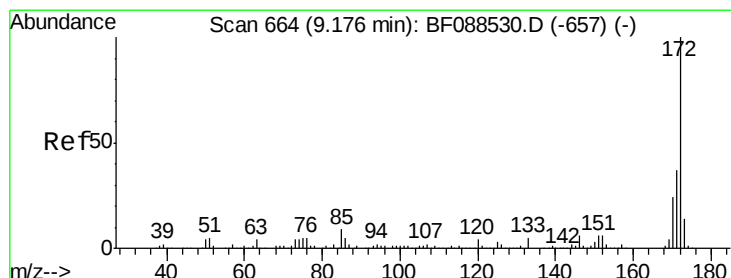
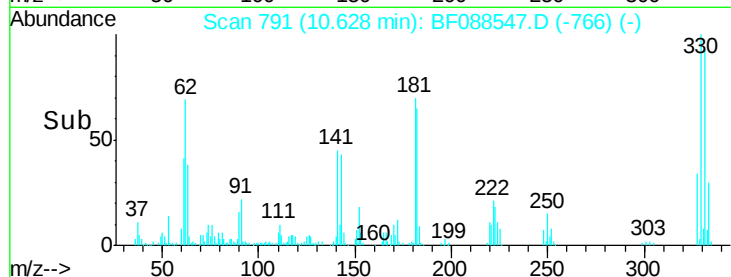
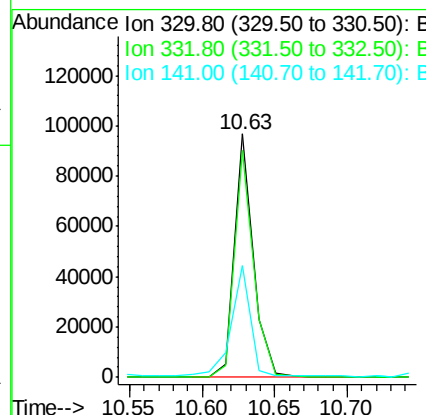
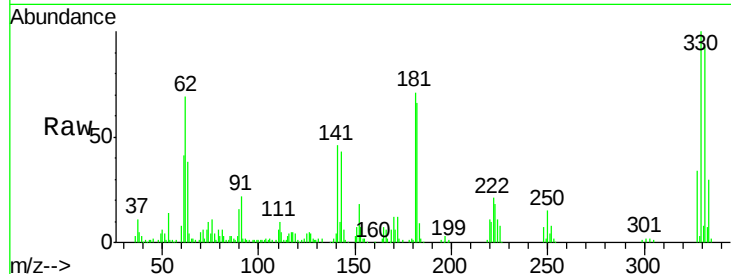
#41
 2,4,6-Tribromophenol
 Concen: 21.25 ng
 RT: 10.63 min Scan# 791
 Delta R.T. -0.01 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Instrument :
 BNA_F
 ClientSampleId :
 SS-4

Tgt Ion	Ratio	Resp	Lower	Upper
330	100	87520		
332	94.4	0.0	0.0	0.0
141	47.5	0.0	0.0	0.0

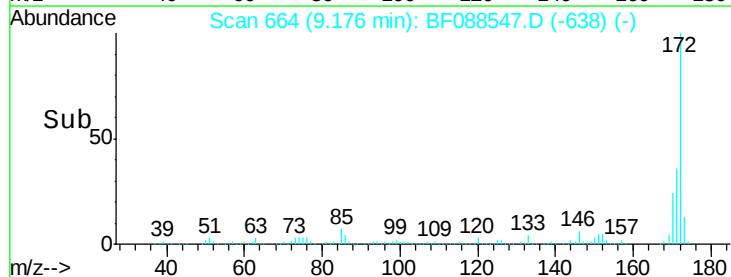
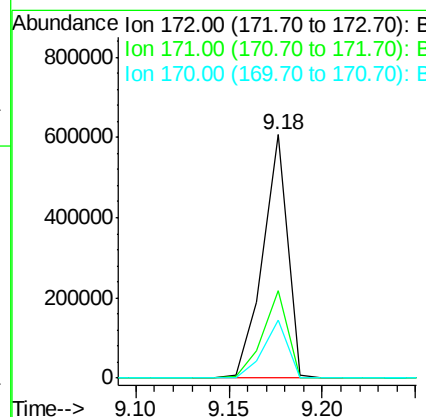
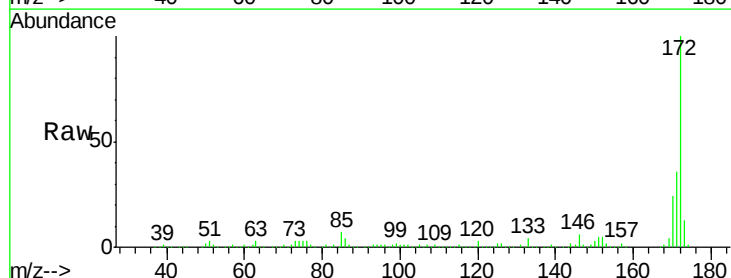
Manual Integrations

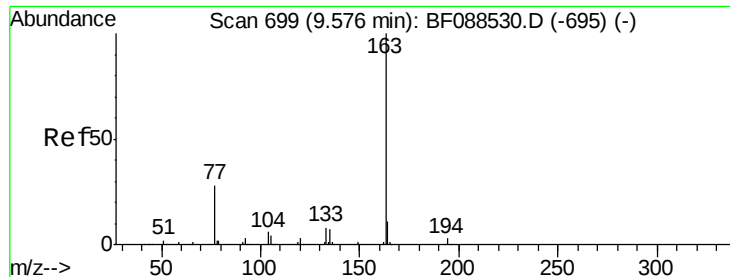
APPROVED
 SOHIL
 7/1/2016 8:05:29 AM



#44
 2-Fluorobiphenyl
 Concen: 19.85 ng
 RT: 9.18 min Scan# 664
 Delta R.T. -0.00 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Tgt Ion	Ratio	Resp	Lower	Upper
172	100	557510		
171	35.7	28.6	43.0	
170	23.7	19.2	28.8	





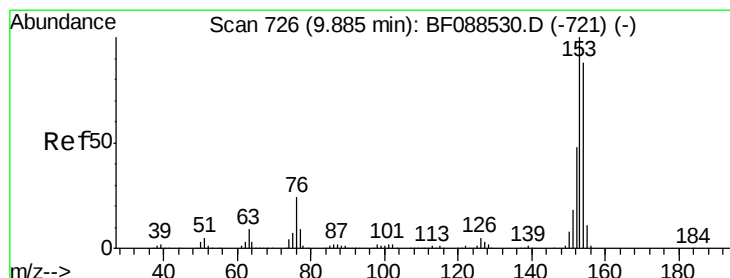
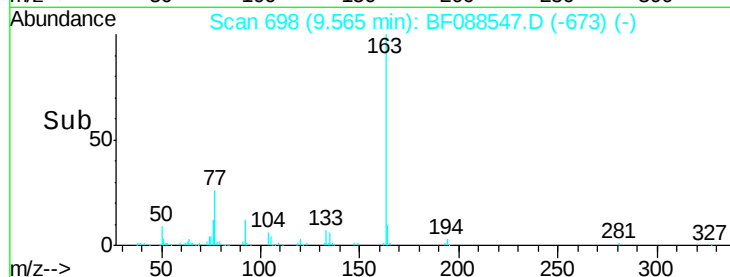
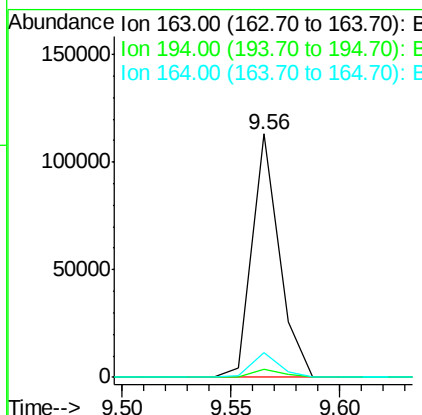
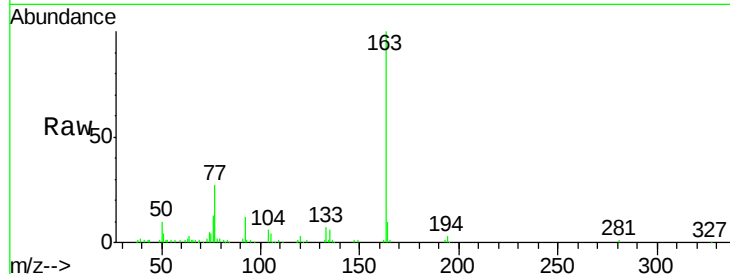
#49
Dimethylphthalate
Concen: 3.12 ng
RT: 9.56 min Scan# 698
Delta R.T. -0.01 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Instrument :
BNA_F
ClientSampleId :
SS-4

Tgt Ion	Ratio	Lower	Upper
163	100		
194	3.2	2.8	4.2
164	10.1	8.3	12.5

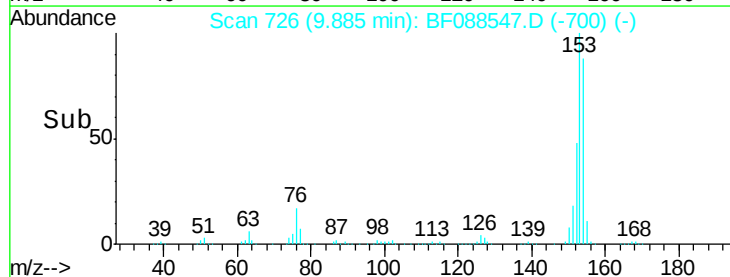
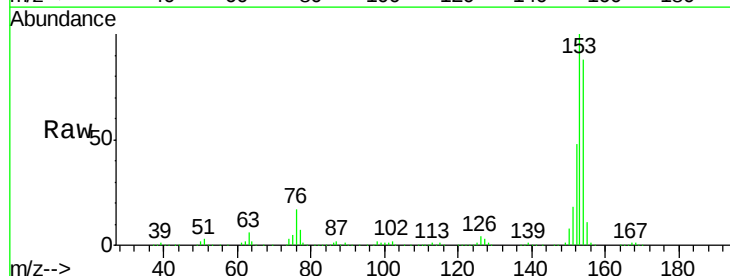
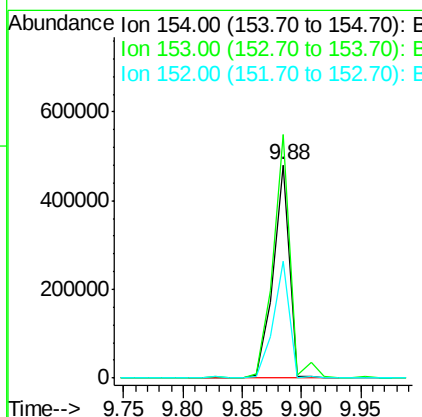
Manual Integrations

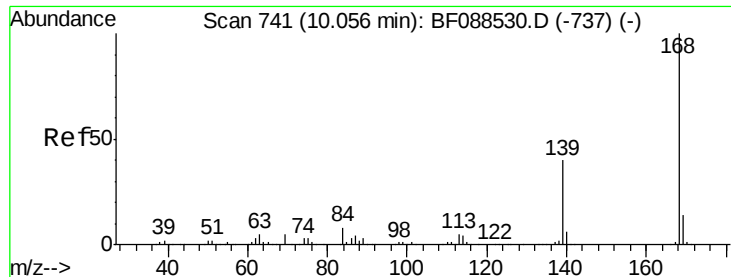
APPROVED
SOHIL
7/1/2016 8:05:29 AM



#51
Acenaphthene
Concen: 16.42 ng
RT: 9.88 min Scan# 726
Delta R.T. -0.00 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Tgt Ion	Ratio	Lower	Upper
154	100		
153	114.1	89.5	134.3
152	54.7	42.7	64.1





#54

Dibenzenofuran

Concen: 6.87 ng

RT: 10.04 min Scan# 740

Delta R.T. -0.01 min

Lab File: BF088547.D

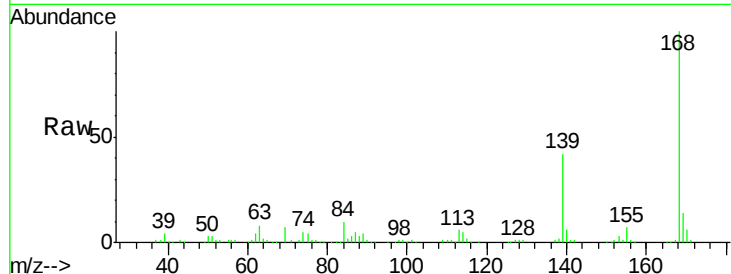
Acq: 30 Jun 2016 23:52

Instrument :

BNA_F

ClientSampled :

SS-4

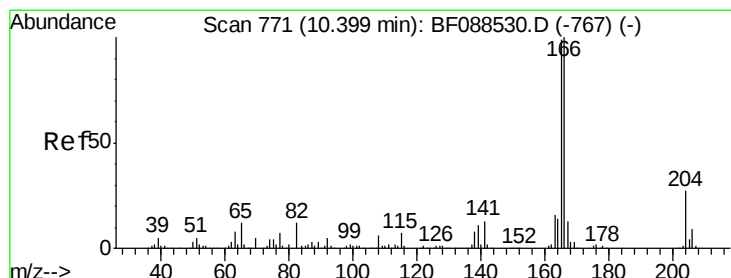
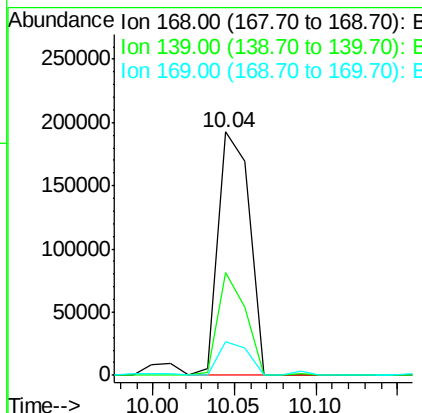
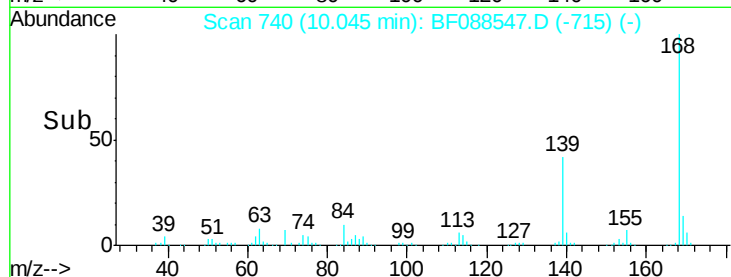


Tgt Ion:	168	Resp:	252928
Ion Ratio	Lower	Upper	
168	100		
139	42.4	26.4	39.6#
169	13.9	10.4	15.6

Manual Integrations

SOHIL

7/1/2016 8:05:29 AM



#57

Fluorene

Concen: 9.32 ng

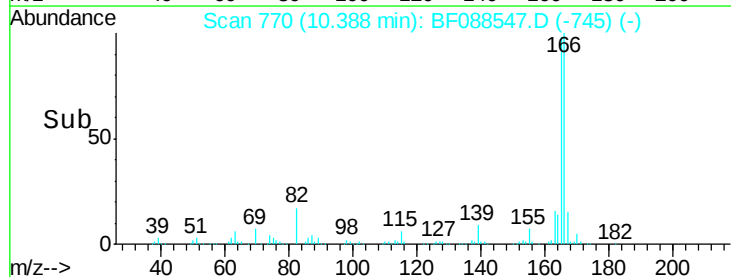
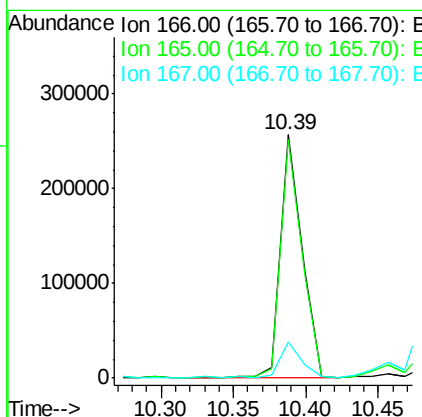
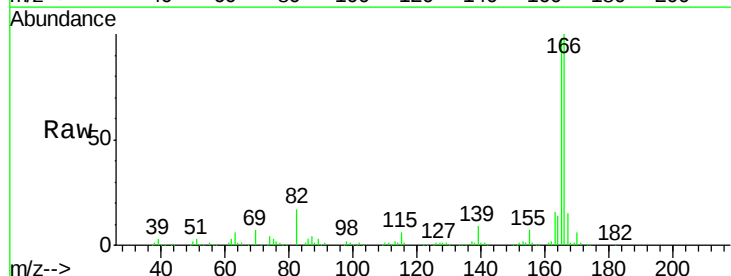
RT: 10.39 min Scan# 770

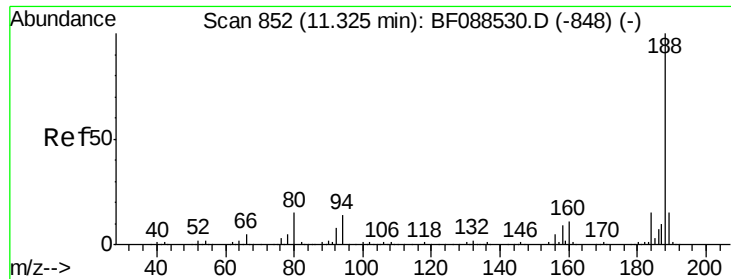
Delta R.T. -0.01 min

Lab File: BF088547.D

Acq: 30 Jun 2016 23:52

Tgt Ion:	166	Resp:	264295
Ion Ratio	Lower	Upper	
166	100		
165	98.2	77.8	116.8
167	15.0	11.2	16.8





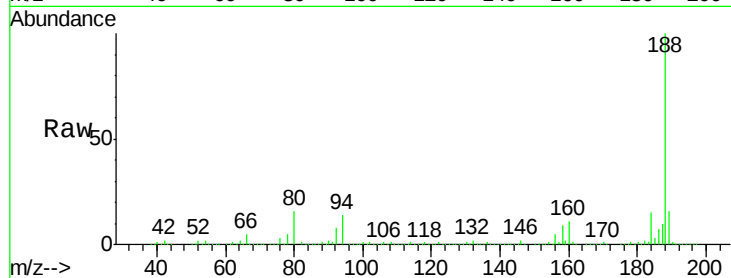
#63
Phenanthrene-d10
Concen: 20.00 ng
RT: 11.33 min Scan# 852
Delta R.T. -0.00 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Instrument :
BNA_F
ClientSampleId :
SS-4

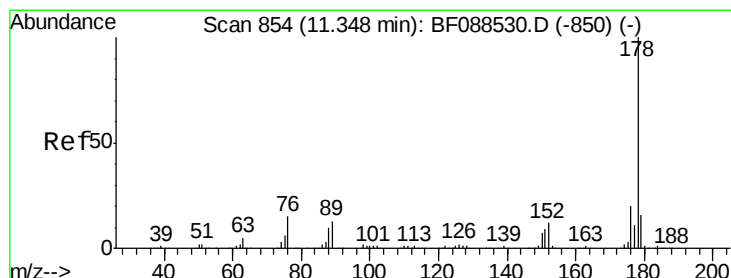
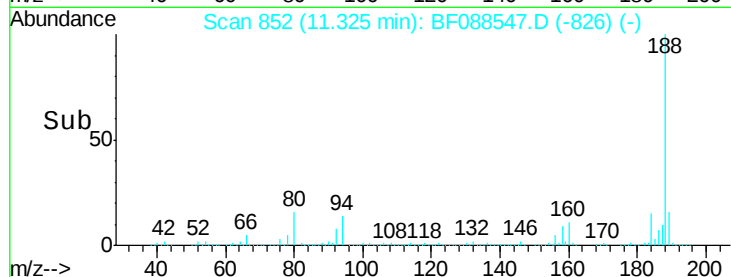
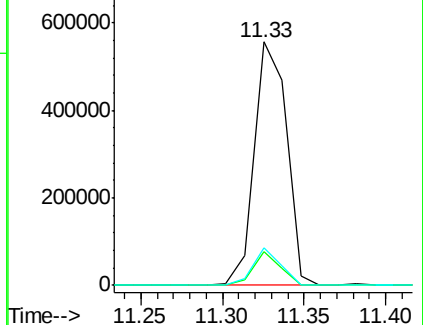
Tgt Ion	Ratio	Resp	Lower	Upper
188	100	769724		
94	13.6	9.0	13.6#	
80	15.6	10.0	15.0#	

Manual Integrations

SOHIL
7/1/2016 8:05:29 AM



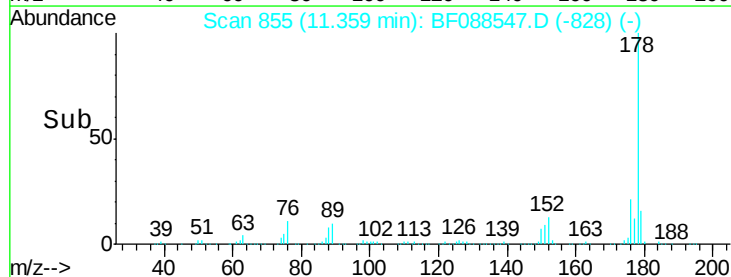
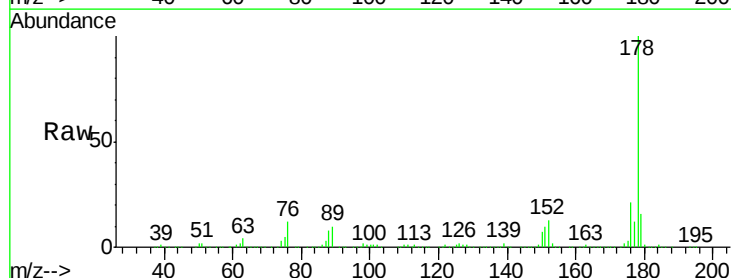
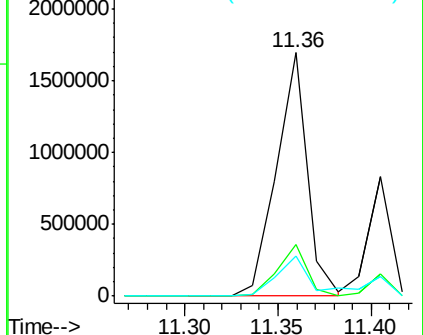
Abundance Ion 188.00 (187.70 to 188.70): E
Ion 94.00 (93.70 to 94.70): BF0
Ion 80.00 (79.70 to 80.70): BF0

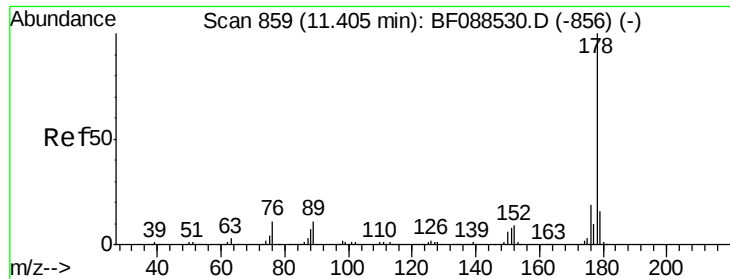


#70
Phenanthrene
Concen: 46.27 ng
RT: 11.36 min Scan# 855
Delta R.T. 0.01 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Tgt Ion	Ratio	Resp	Lower	Upper
178	100	1946707		
176	21.1	15.8	23.6	
179	16.5	13.0	19.4	

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





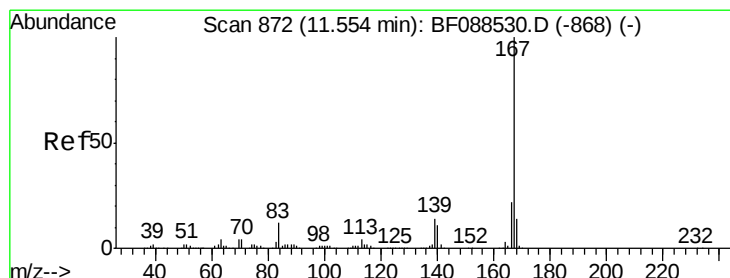
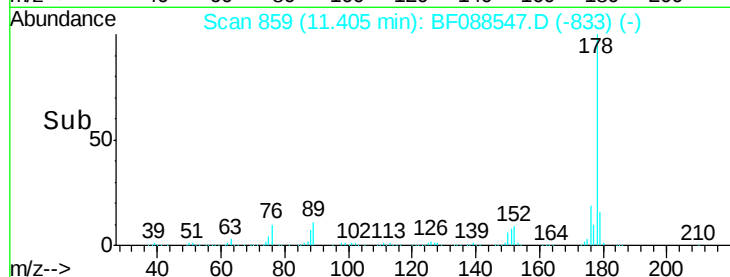
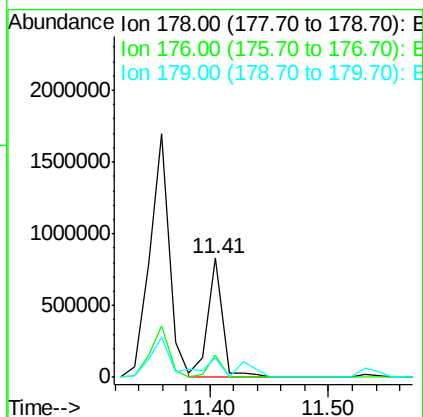
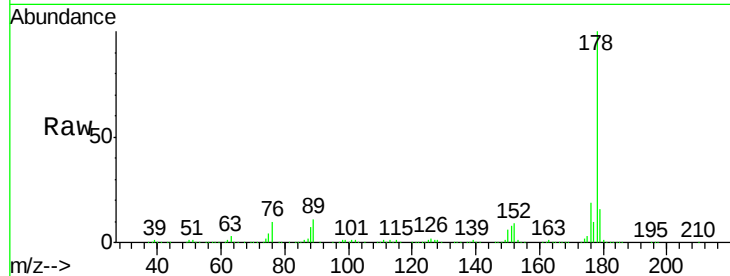
#71
 Anthracene
 Concen: 17.20 ng
 RT: 11.41 min Scan# 859
 Delta R.T. -0.00 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Instrument :
 BNA_F
 ClientSampled :
 SS-4

Tgt Ion:178 Resp: 719659
 Ion Ratio Lower Upper
 178 100
 176 19.1 15.6 23.4
 179 16.0 12.8 19.2

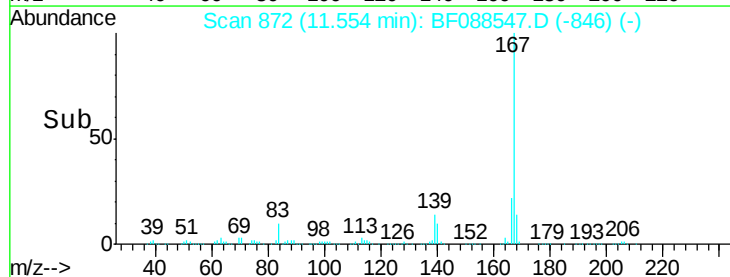
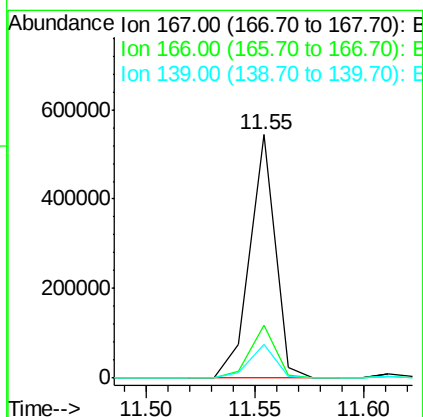
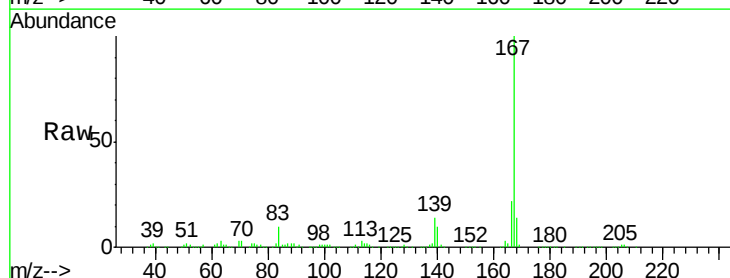
Manual Integrations

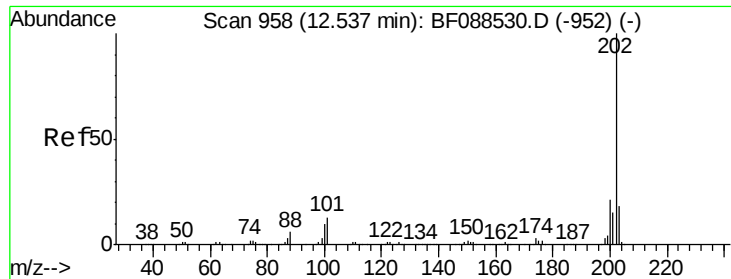
APPROVED
 SOHIL
 7/1/2016 8:05:29 AM



#72
 Carbazole
 Concen: 11.30 ng
 RT: 11.55 min Scan# 872
 Delta R.T. -0.00 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Tgt Ion:167 Resp: 444890
 Ion Ratio Lower Upper
 167 100
 166 22.0 17.8 26.6
 139 13.7 11.2 16.8





#74

Fluoranthene

Concen: 58.56 ng

RT: 12.55 min Scan# 959

Delta R.T. 0.01 min

Lab File: BF088547.D

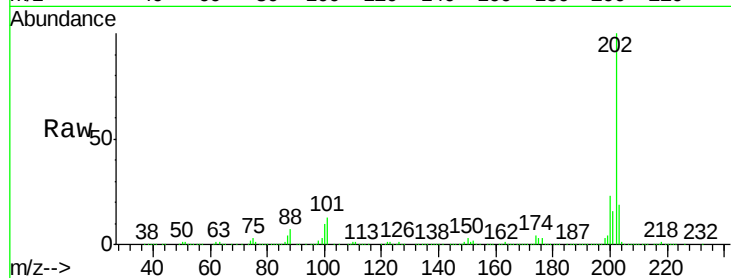
Acq: 30 Jun 2016 23:52

Instrument :

BNA_F

ClientSampleId :

SS-4



Tgt Ion:202 Resp: 2498018

Ion Ratio Lower Upper

202 100

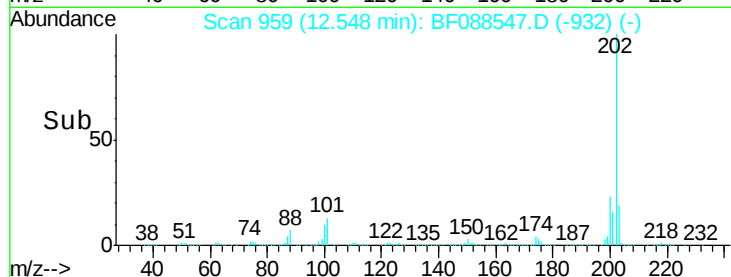
101 12.9 0.0 33.1

203 18.8 0.0 38.1

Manual Integrations

SOHIL

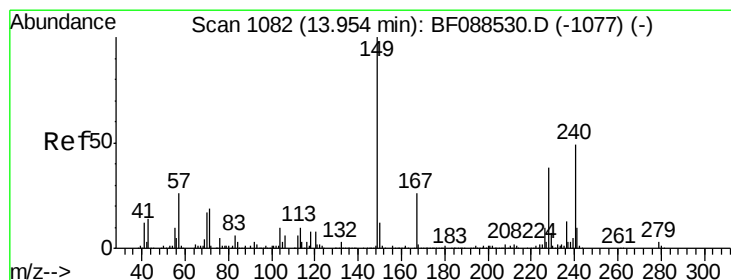
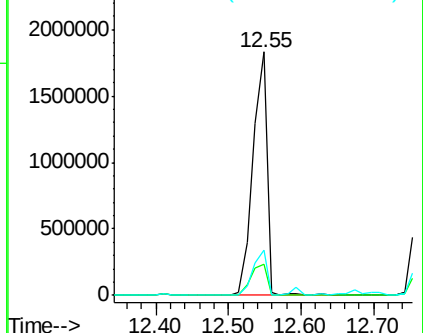
7/1/2016 8:05:29 AM



Abundance Ion 202.00 (201.70 to 202.70): E

Ion 101.00 (100.70 to 101.70): E

Ion 203.00 (202.70 to 203.70): E



#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.97 min Scan# 1083

Delta R.T. 0.01 min

Lab File: BF088547.D

Acq: 30 Jun 2016 23:52

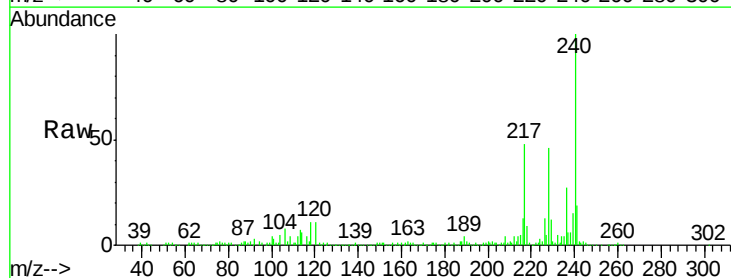
Tgt Ion:240 Resp: 420765

Ion Ratio Lower Upper

240 100

120 11.0 6.8 10.2#

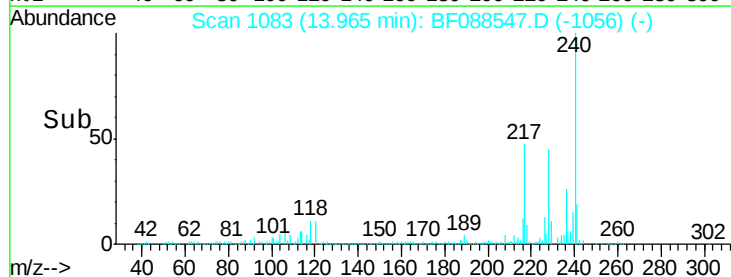
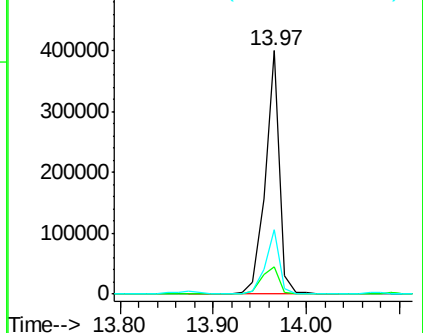
236 26.6 20.2 30.2

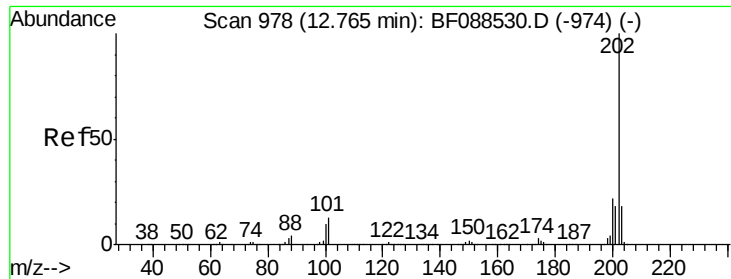


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#77

Pyrene

Concen: 63.74 ng

RT: 12.78 min Scan# 979

Delta R.T. 0.01 min

Lab File: BF088547.D

Acq: 30 Jun 2016 23:52

Instrument :

BNA_F

ClientSampleId :

SS-4

Tgt Ion:202 Resp: 2273859

Ion Ratio Lower Upper

202 100

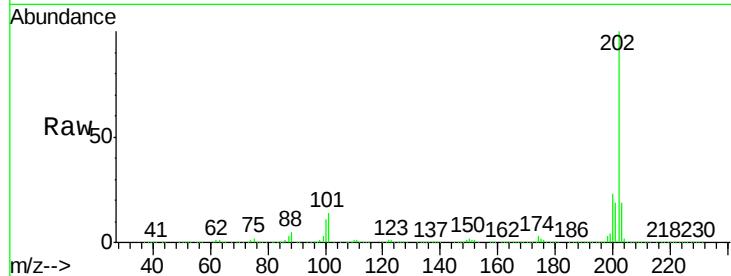
200 22.8 17.4 26.2

203 18.8 14.5 21.7

Manual Integrations

SOHIL

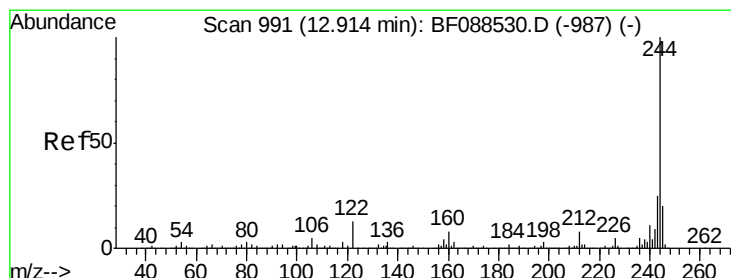
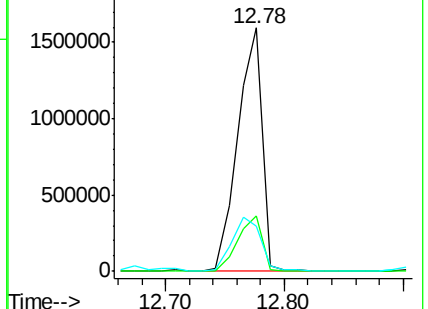
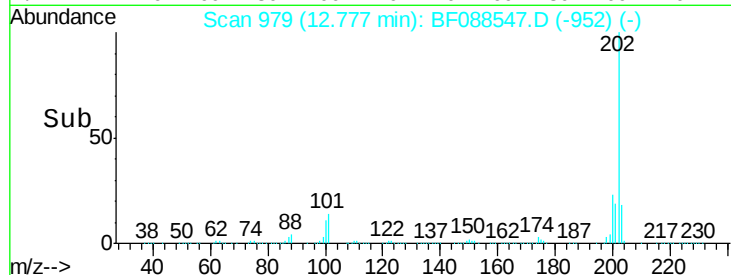
7/1/2016 8:05:29 AM



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: 18.07 ng

RT: 12.91 min Scan# 991

Delta R.T. -0.00 min

Lab File: BF088547.D

Acq: 30 Jun 2016 23:52

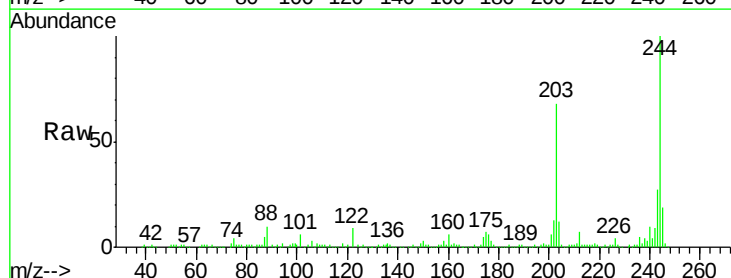
Tgt Ion:244 Resp: 341394

Ion Ratio Lower Upper

244 100

212 6.6 6.0 9.0

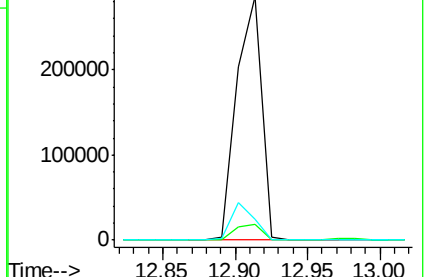
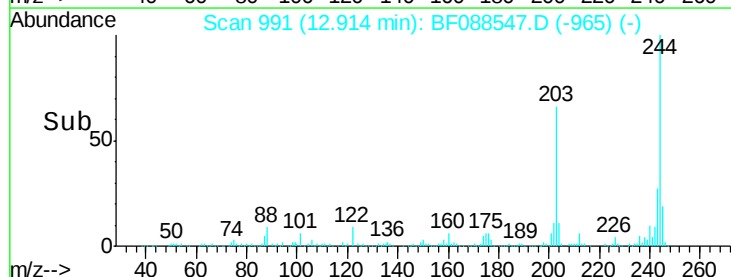
122 8.5 11.2 16.8#

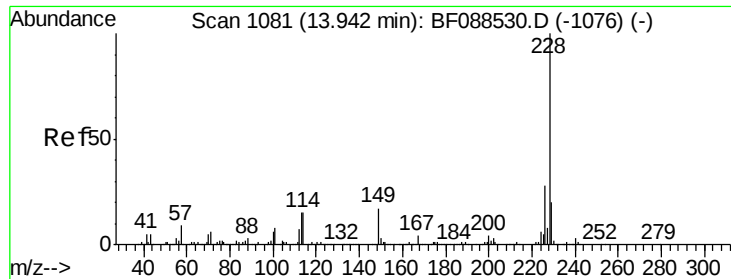


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





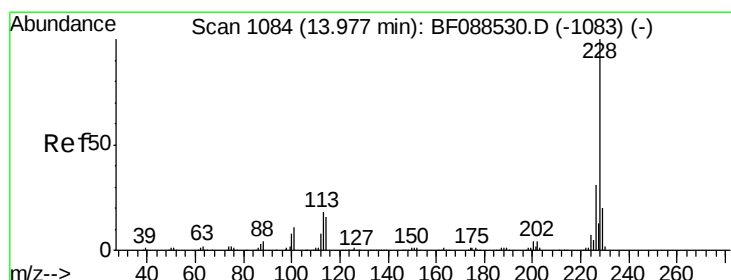
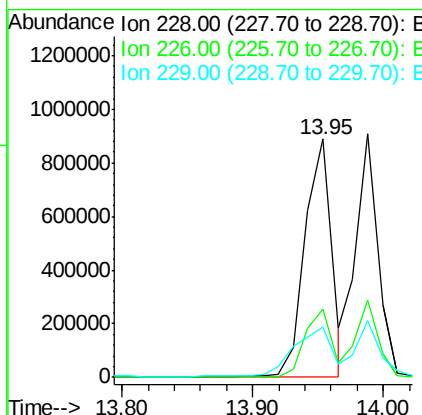
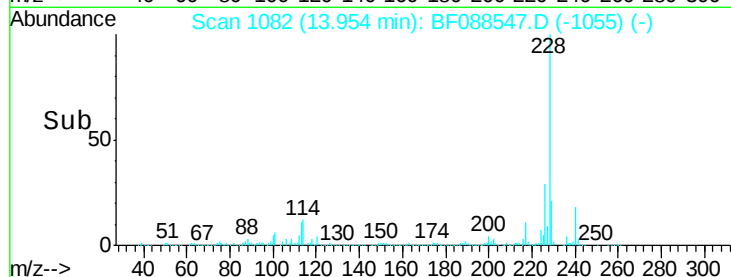
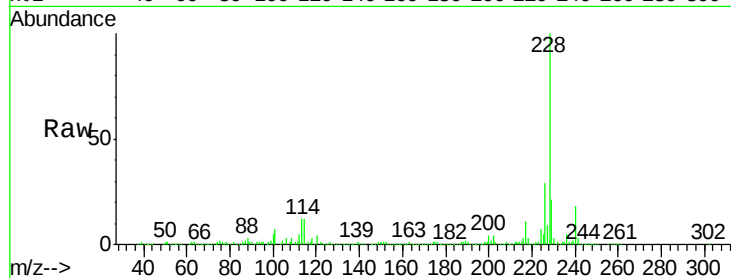
#80
Benzo(a)anthracene
Concen: 46.30 ng
RT: 13.95 min Scan# 1082
Delta R.T. 0.01 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Instrument :
BNA_F
ClientSampleId :
SS-4

Tgt Ion:228 Resp: 1254478
Ion Ratio Lower Upper
228 100
226 28.8 22.3 33.5
229 21.0 16.0 24.0

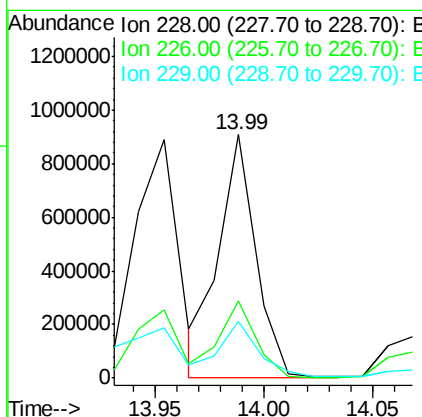
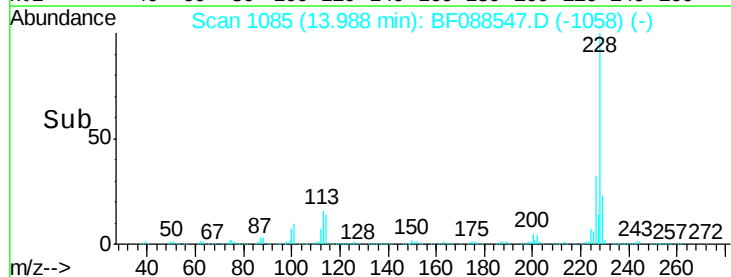
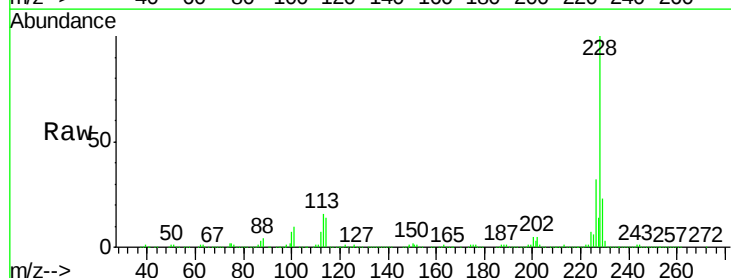
Manual Integrations

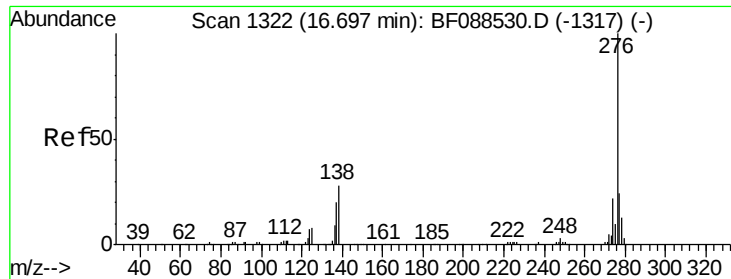
APPROVED
SOHIL
7/1/2016 8:05:29 AM



#82
Chrysene
Concen: 39.94 ng
RT: 13.99 min Scan# 1085
Delta R.T. 0.01 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Tgt Ion:228 Resp: 1070619
Ion Ratio Lower Upper
228 100
226 31.6 25.4 38.2
229 23.4 16.3 24.5





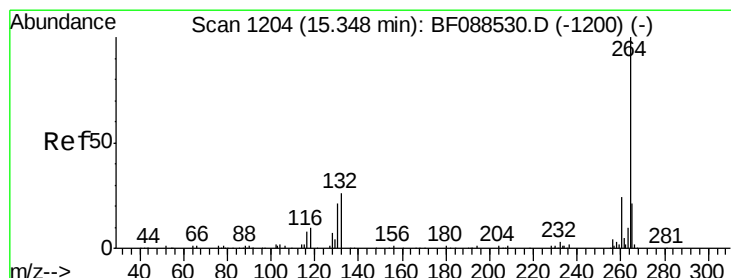
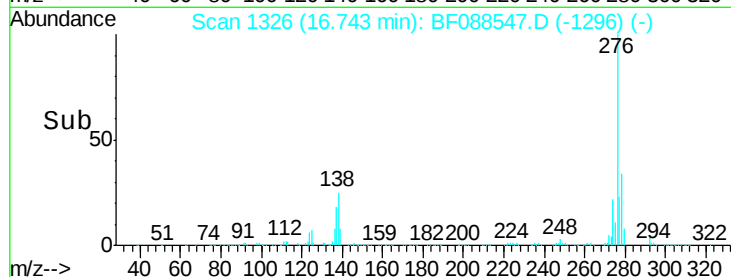
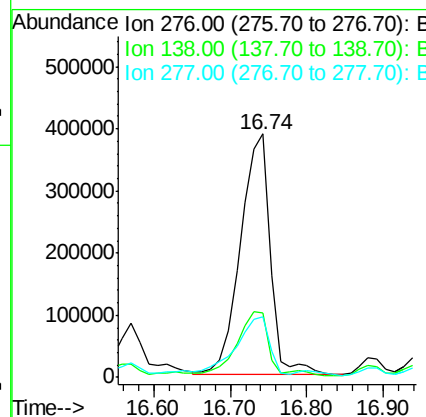
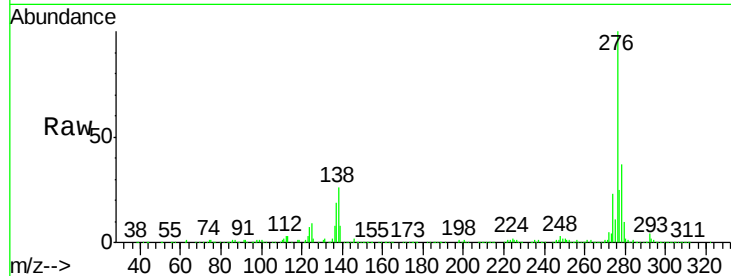
#85
Indeno(1,2,3-cd)pyrene
Concen: 51.14 ng
RT: 16.74 min Scan# 1326
Delta R.T. 0.05 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Instrument :
BNA_F
ClientSampled :
SS-4

Tgt Ion: 276 Resp: 1054742
Ion Ratio Lower Upper
276 100
138 26.6 0.0 0.0#
277 26.8 0.0 0.0#

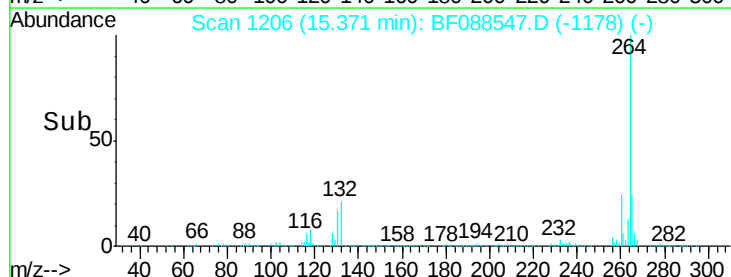
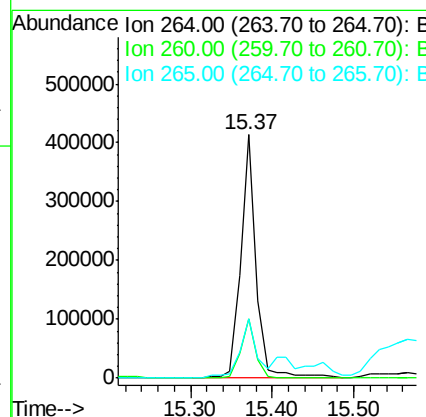
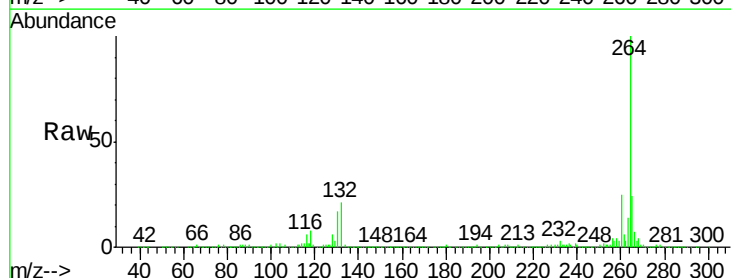
Manual Integrations

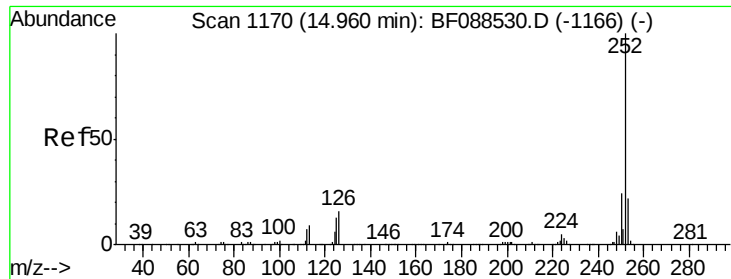
APPROVED
SOHIL
7/1/2016 8:05:29 AM



#86
Perylene-d12
Concen: 20.00 ng
RT: 15.37 min Scan# 1206
Delta R.T. 0.02 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Tgt Ion: 264 Resp: 535364
Ion Ratio Lower Upper
264 100
260 24.6 19.2 28.8
265 24.2 16.9 25.3





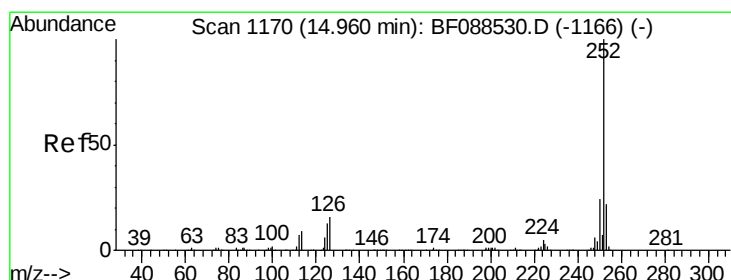
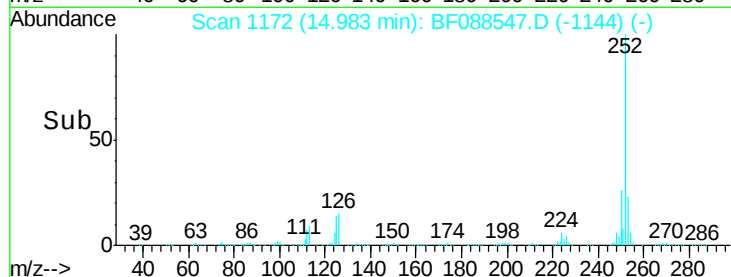
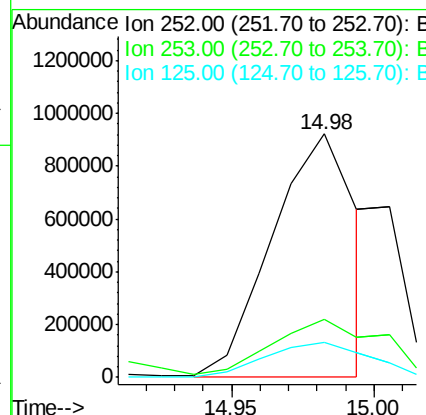
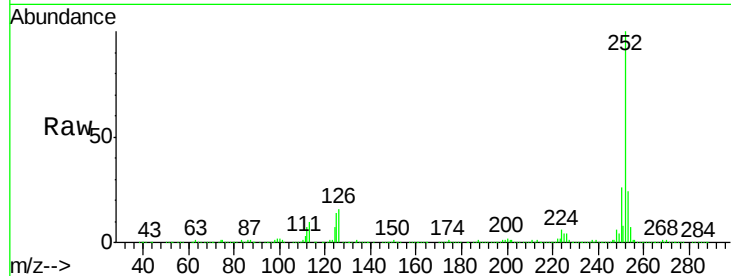
#87
Benzo(b)fluoranthene
Concen: 56.53 ng m
RT: 14.98 min Scan# 1172
Delta R.T. 0.02 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Instrument :
BNA_F
ClientSampleId :
SS-4

Tgt Ion:252 Resp: 1898552
Ion Ratio Lower Upper
252 100
253 23.8 17.4 26.2
125 14.2 7.1 10.7#

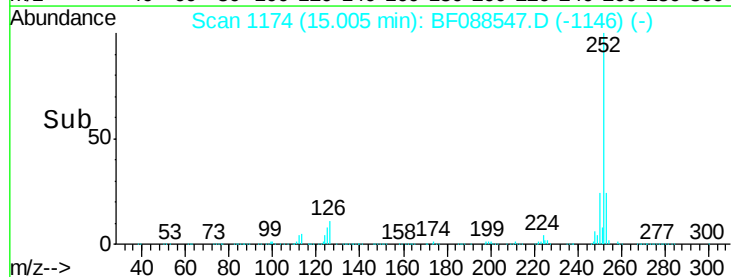
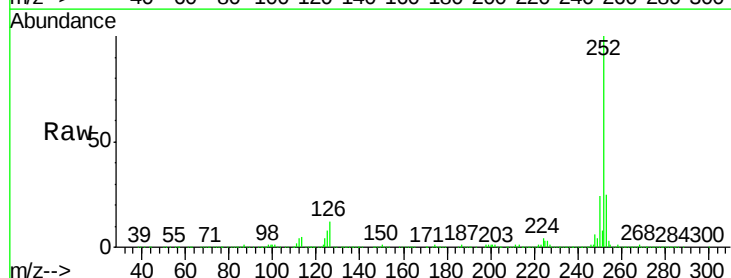
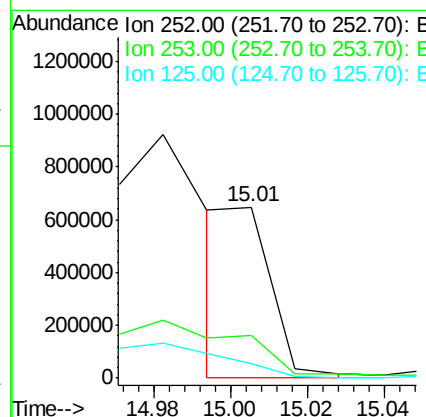
Manual Integrations

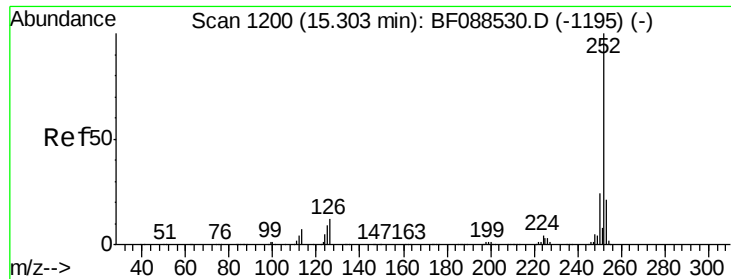
APPROVED
SOHIL
7/1/2016 8:05:29 AM



#88
Benzo(k)fluoranthene
Concen: 16.34 ng m
RT: 15.01 min Scan# 1174
Delta R.T. 0.02 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Tgt Ion:252 Resp: 477827
Ion Ratio Lower Upper
252 100
253 24.8 18.0 27.0
125 8.2 11.2 16.8#





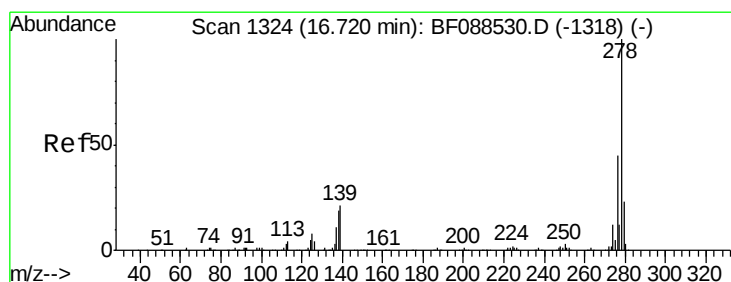
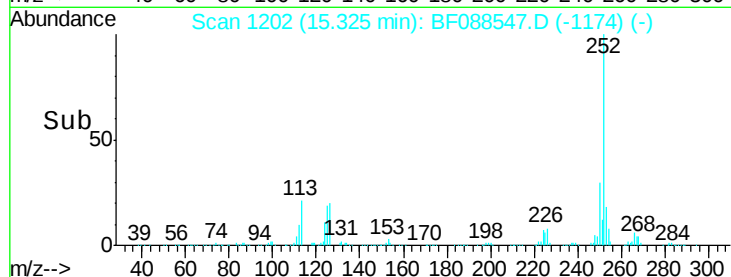
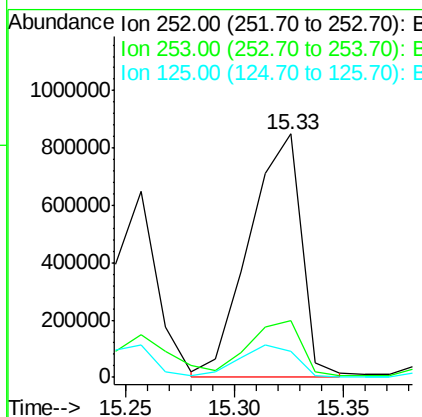
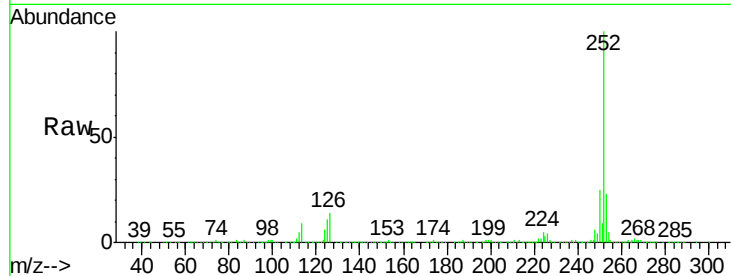
#89
Benzo(a)pyrene
Concen: 49.65 ng m
RT: 15.33 min Scan# 1202
Delta R.T. 0.02 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Instrument :
BNA_F
ClientSampleId :
SS-4

Tgt Ion: 252 Resp: 1411889
Ion Ratio Lower Upper
252 100
253 23.1 17.9 26.9
125 10.7 12.5 18.7#

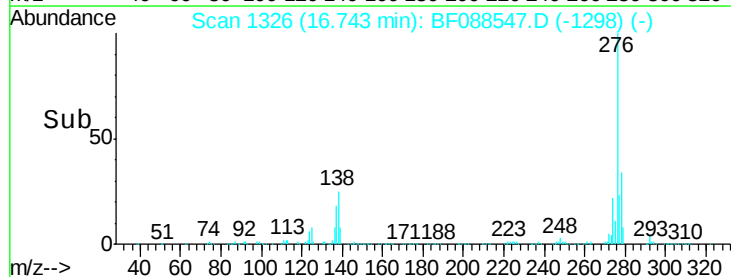
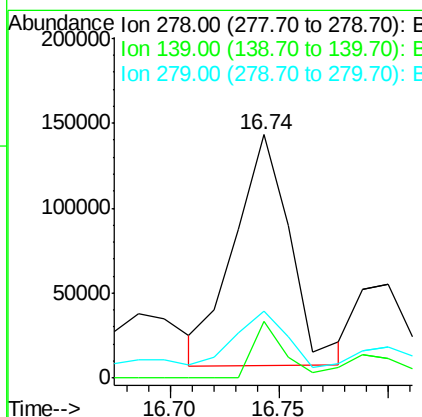
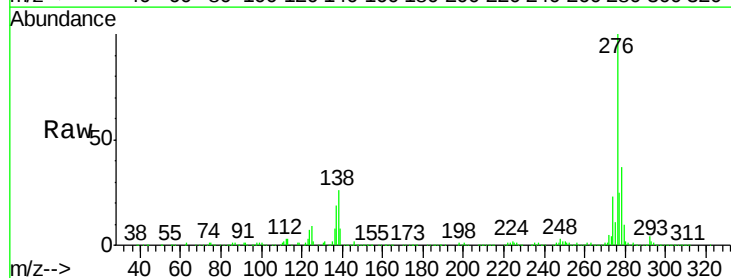
Manual Integrations

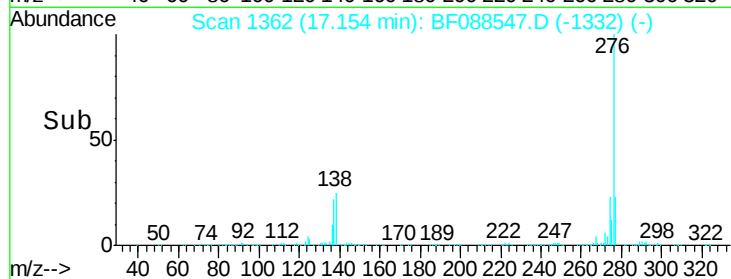
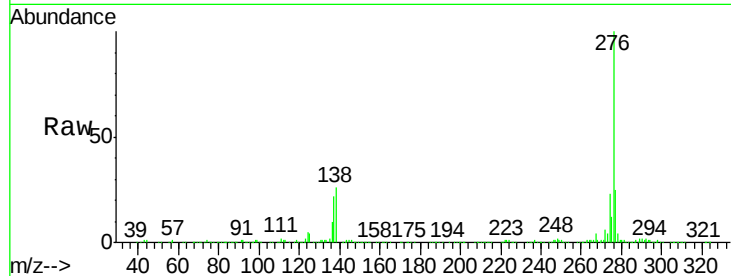
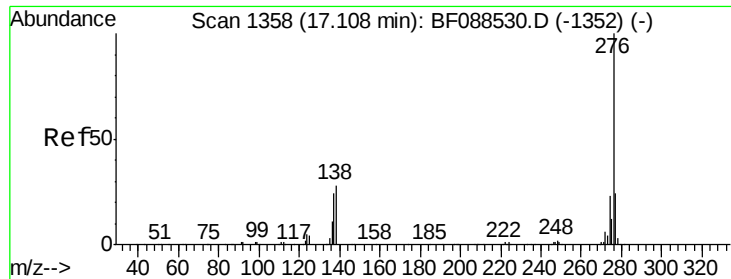
APPROVED
SOHIL
7/1/2016 8:05:29 AM



#90
Dibenzo(a,h)anthracene
Concen: 10.19 ng
RT: 16.74 min Scan# 1326
Delta R.T. 0.02 min
Lab File: BF088547.D
Acq: 30 Jun 2016 23:52

Tgt Ion: 278 Resp: 241850
Ion Ratio Lower Upper
278 100
139 23.1 15.7 23.5
279 27.5 19.4 29.2





#91
 Benzo(g,h,i)perylene
 Concen: 39.78 ng
 RT: 17.15 min Scan# 1362
 Delta R.T. 0.05 min
 Lab File: BF088547.D
 Acq: 30 Jun 2016 23:52

Instrument :
 BNA_F
 ClientSampleId :
 SS-4

Tgt Ion	Ratio	Lower	Upper
276	100		
277	24.5	18.9	28.3
138	25.8	21.4	32.2

Manual Integrations

APPROVED
 SOHIL
 7/1/2016 8:05:29 AM

