

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022417\
 Data File : BF093191.D
 Acq On : 25 Feb 2017 14:28
 Operator : SJ/MA
 Sample : I1972-20
 Misc :
 ALS Vial : 44 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 E2-HH5-SW-2

Manual Integrations
 APPROVED

mohammad
 2/27/2017 1:09:05 PM

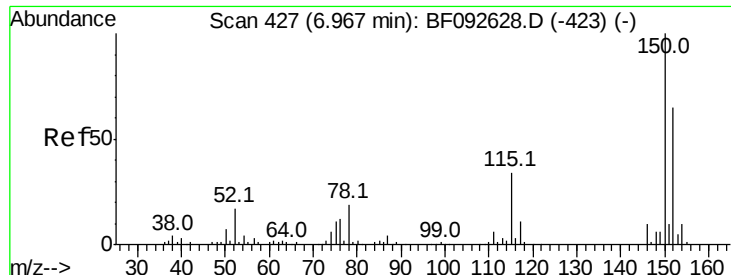
Quant Time: Feb 27 10:24:54 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF013017.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Feb 17 17:31:55 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.83	152	144381	20.00	ng	-0.02
21) Naphthalene-d8	8.12	136	543196	20.00	ng	-0.02
38) Acenaphthene-d10	9.88	164	202064	20.00	ng	-0.01
63) Phenanthrene-d10	11.37	188	317180	20.00	ng	-0.01
75) Chrysene-d12	14.01	240	298039	20.00	ng	-0.01
86) Perylene-d12	15.45	264	238904	20.00	ng	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	5.42	112	857378	101.88	ng	-0.02
7) Phenol-d6	6.49	99	1134272	104.75	ng	0.00
23) Nitrobenzene-d5	7.40	82	594950	60.99	ng	-0.02
41) 2,4,6-Tribromophenol	10.67	330	142473	97.49	ng	-0.01
44) 2-Fluorobiphenyl	9.20	172	951863	85.34	ng	-0.02
78) Terphenyl-d14	12.96	244	702618	55.39	ng	-0.01

Target Compounds						Qvalue
10) Phenol	6.50	94	52285	4.13	ng	# 70
31) Naphthalene	8.14	128	102725	3.73	ng	97
37) 2-Methylnaphthalene	8.83	142	62569	3.54	ng	97
48) Acenaphthylene	9.73	152	65785	3.33	ng	99
49) Dimethylphthalate	9.60	163	79309	5.83	ng	98
51) Acenaphthene	9.90	154	74077	6.27	ng	97
54) Dibenzofuran	10.09	168	79774	5.05	ng	# 90
57) Fluorene	10.42	166	82745m	6.80	ng	
70) Phenanthrene	11.39	178	1053414	57.97	ng	99
71) Anthracene	11.44	178	297958	16.33	ng	96
72) Carbazole	11.60	167	122076	7.00	ng	98
74) Fluoranthene	12.58	202	1258901	67.16	ng	98
77) Pvrene	12.81	202	1193926	53.53	ng	99
80) Benzo(a)anthracene	14.00	228	707467	38.81	ng	97
82) Chrysene	14.04	228	565439	33.13	ng	97
83) Bis(2-ethylhexyl)phthalate	13.99	149	51638	4.17	ng	# 97
85) Indeno(1,2,3-cd)pvrene	16.87	276	241242	18.25	ng	96
87) Benzo(b)fluoranthene	15.04	252	791994m	50.37	ng	
88) Benzo(k)fluoranthene	15.06	252	92457m	6.81	ng	
89) Benzo(a)pvrene	15.39	252	444546	32.68	ng	99
90) Dibenzo(a,h)anthracene	16.87	278	61382m	5.58	ng	
91) Benzo(g,h,i)perylene	17.29	276	227744	20.51	ng	# 87

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



#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 6.83 min Scan# 415

Delta R.T. -0.02 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

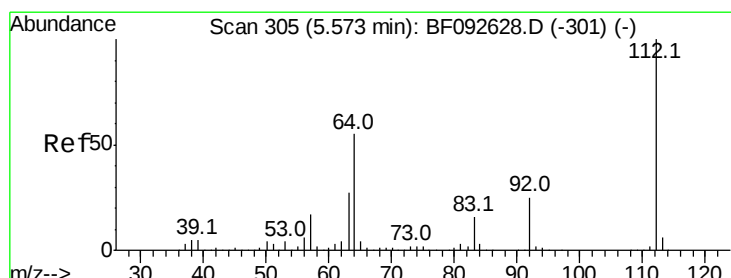
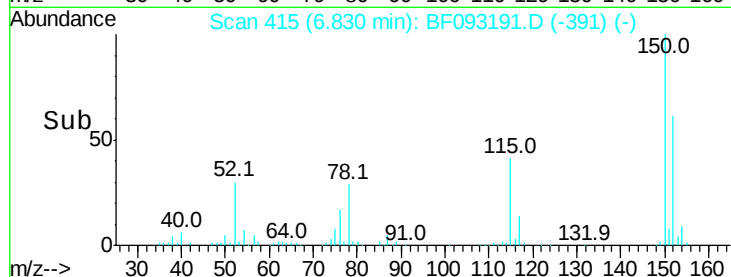
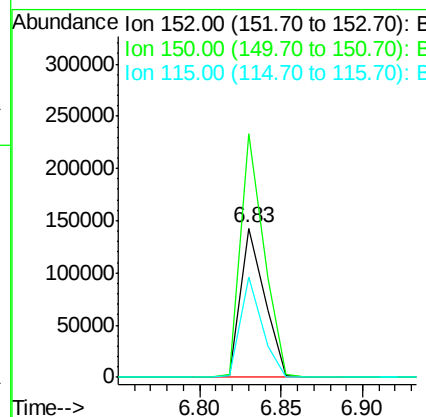
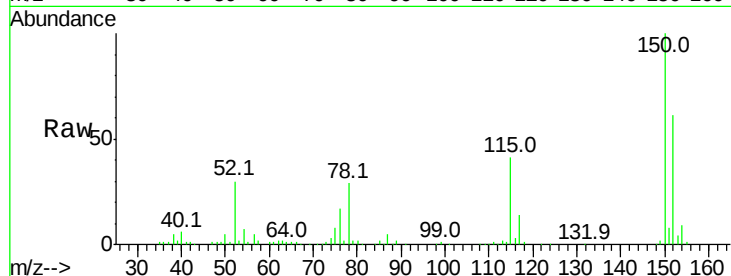
ClientSampleId :

E2-HH5-SW-2

Tot Ion	Ratio	Lower	Upper
152	100		
150	163.4	124.9	187.3
115	67.4	46.0	69.0

Manual Integrations
APPROVED

mohammad
2/27/2017 1:09:05 PM



#5

2-Fluorophenol

Concen: 101.88 ng

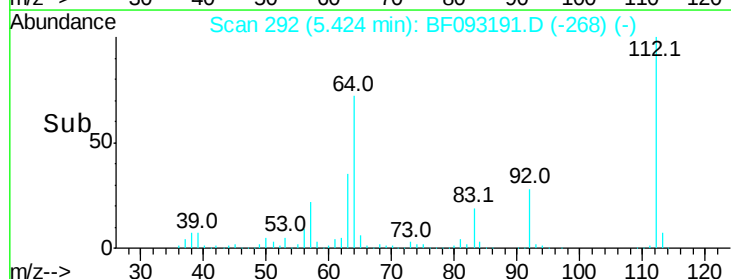
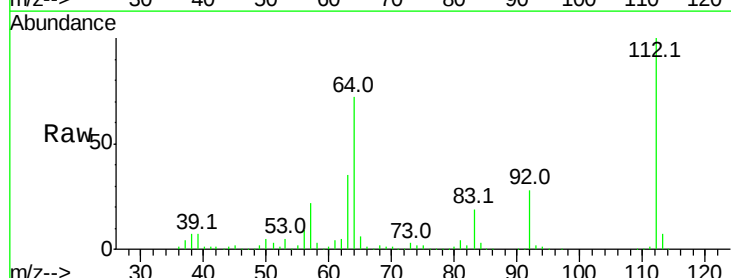
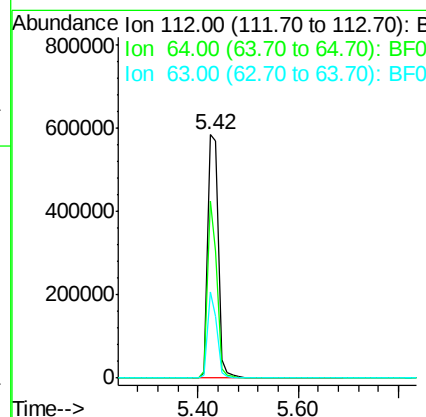
RT: 5.42 min Scan# 292

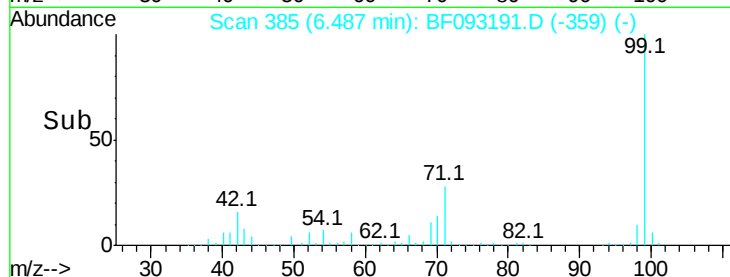
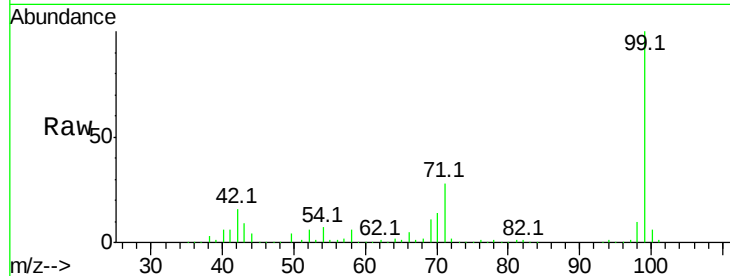
Delta R.T. -0.02 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Lower	Upper
112	100		
64	72.5	46.1	69.1#
63	35.2	23.8	35.6





#7

Phenol-d6

Concen: 104.75 ng

RT: 6.49 min Scan# 385

Delta R.T. -0.00 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Tot Ion: 99 Resp: 1134272

Ion Ratio Lower Upper

99 100

42 16.1 15.6 23.4

71 28.5 27.5 41.3

Instrument :

BNA_F

ClientSampleId :

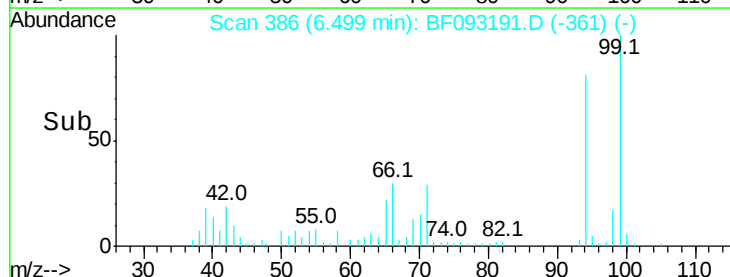
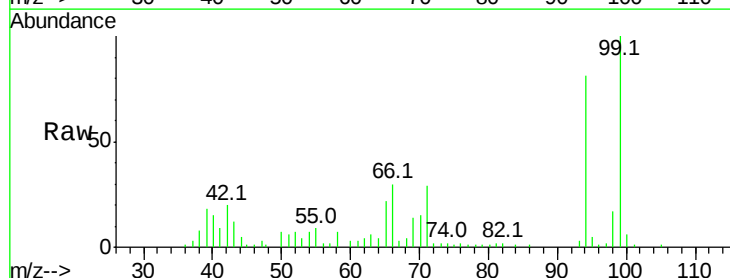
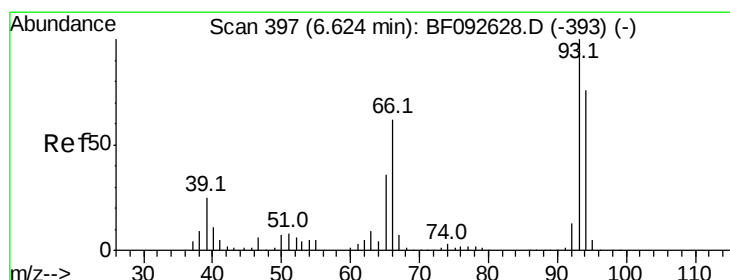
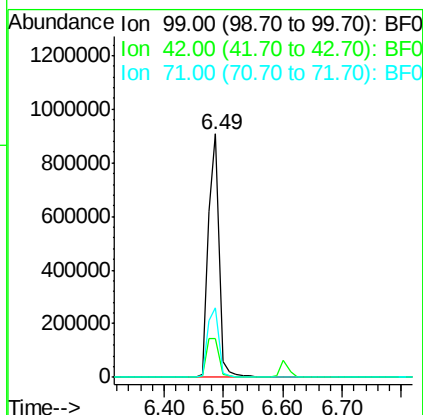
E2-HH5-SW-2

Manual Integrations

APPROVED

mohammad

2/27/2017 1:09:05 PM



#10

Phenol

Concen: 4.13 ng

RT: 6.50 min Scan# 386

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

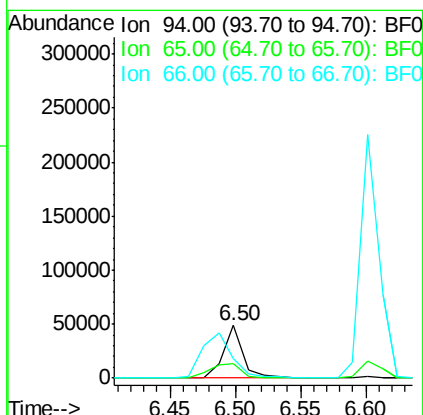
Tgt Ion: 94 Resp: 52285

Ion Ratio Lower Upper

94 100

65 27.5 21.4 61.4

66 36.5 44.0 84.0#





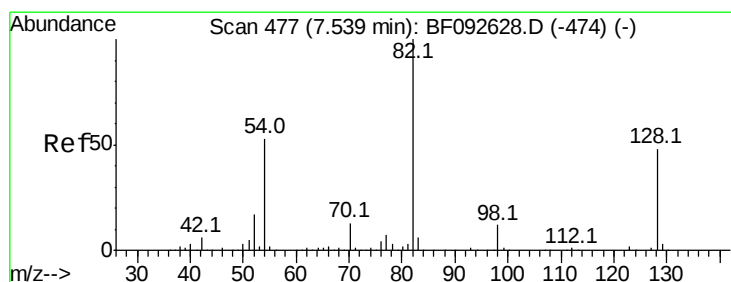
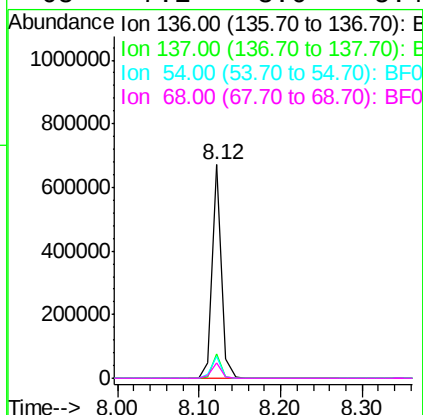
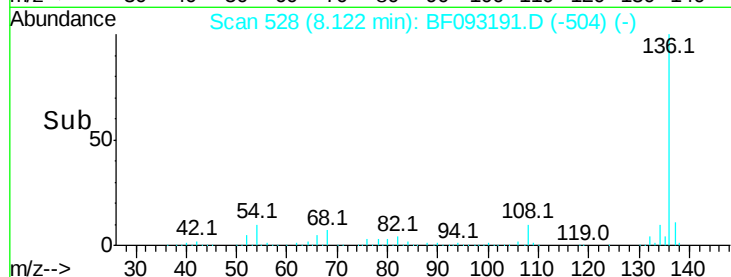
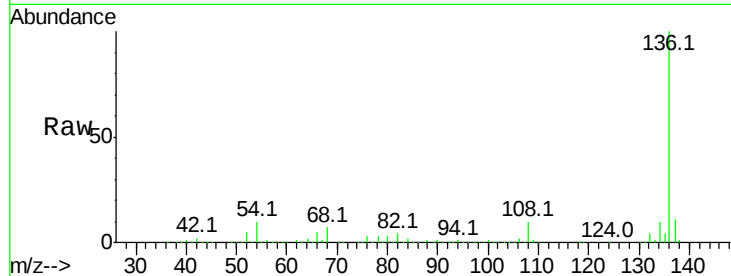
#21
Naphthalene-d8
Concen: 20.00 ng
RT: 8.12 min Scan# 528
Delta R.T. -0.02 min
Lab File: BF093191.D
Acq: 25 Feb 2017 14:28

Instrument :
BNA_F
ClientSampleId :
E2-HH5-SW-2

Tot Ion	Ratio	Resp	Lower	Upper
136	100			
137	11.2	8.4	12.6	
54	10.1	4.5	6.7#	
68	7.1	3.6	5.4#	

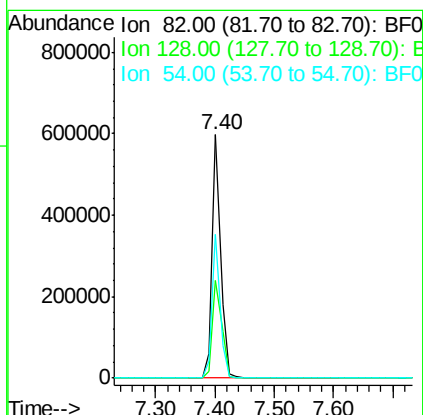
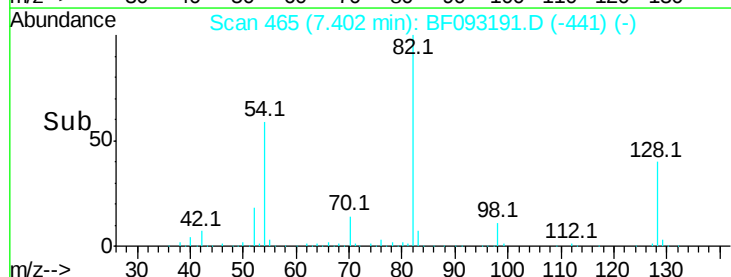
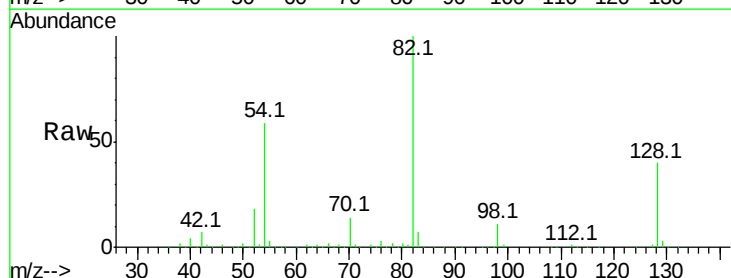
Manual Integrations
APPROVED

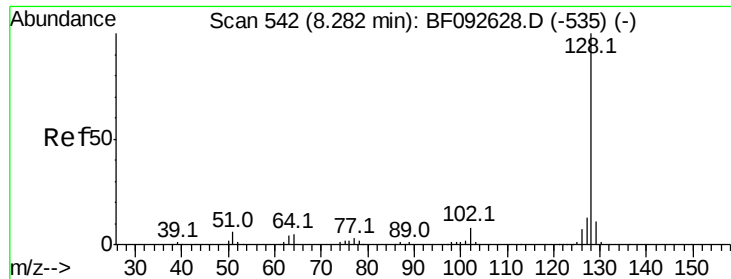
mohammad
2/27/2017 1:09:05 PM



#23
Nitrobenzene-d5
Concen: 60.99 ng
RT: 7.40 min Scan# 465
Delta R.T. -0.02 min
Lab File: BF093191.D
Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Resp	Lower	Upper
82	100			
128	40.0	34.6	52.0	
54	59.3	39.5	59.3#	





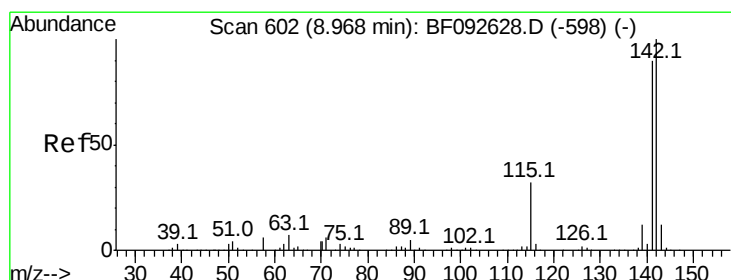
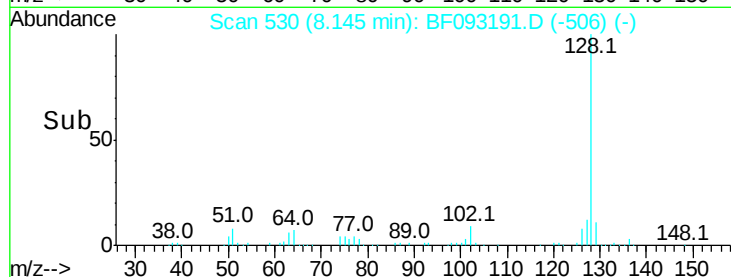
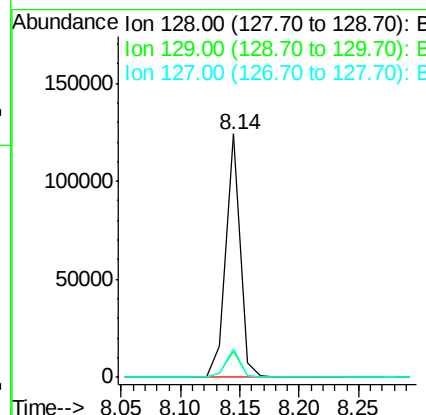
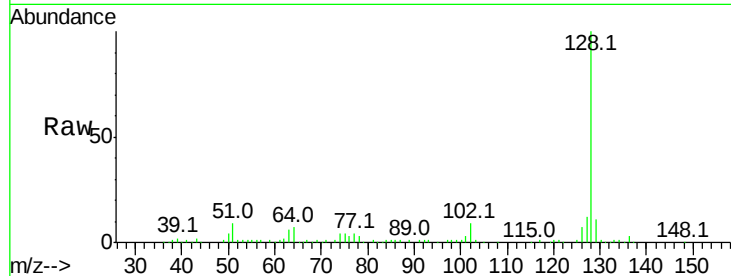
#31
Naphthalene
Concen: 3.73 ng
RT: 8.14 min Scan# 530
Delta R.T. -0.02 min
Lab File: BF093191.D
Acq: 25 Feb 2017 14:28

Instrument :
BNA_F
ClientSampleId :
E2-HH5-SW-2

Tot Ion	Ratio	Lower	Upper
128	100		
129	10.9	9.5	14.3
127	11.9	10.8	16.2

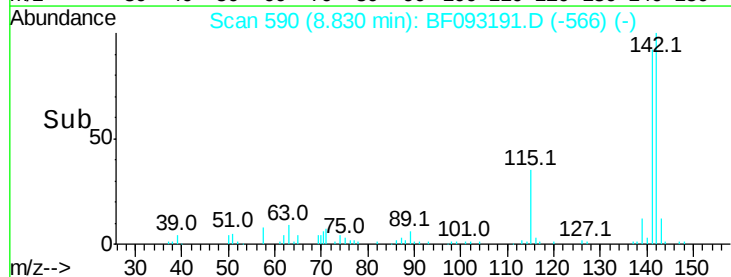
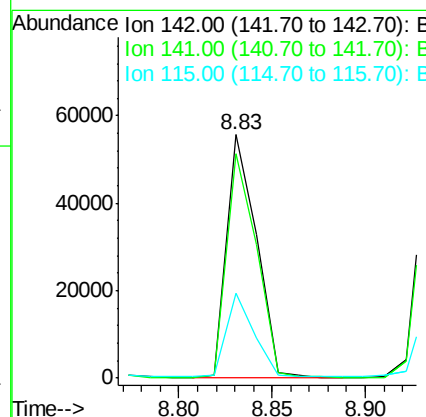
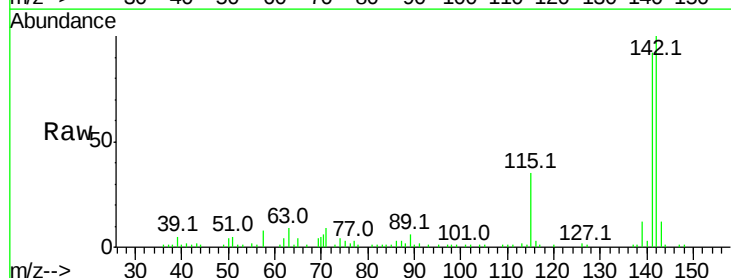
Manual Integrations
APPROVED

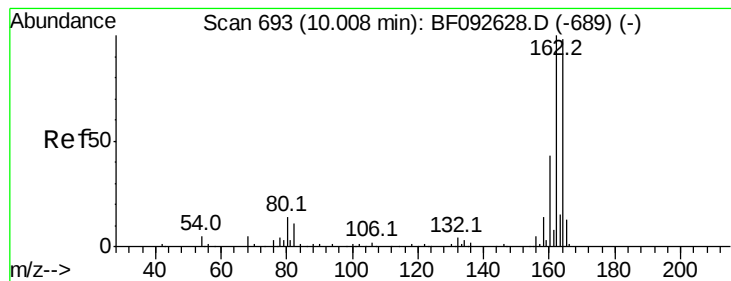
mohammad
2/27/2017 1:09:05 PM



#37
2-Methylnaphthalene
Concen: 3.54 ng
RT: 8.83 min Scan# 590
Delta R.T. -0.02 min
Lab File: BF093191.D
Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Lower	Upper
142	100		
141	92.2	71.0	106.6
115	34.8	28.3	42.5





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.88 min Scan# 682

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

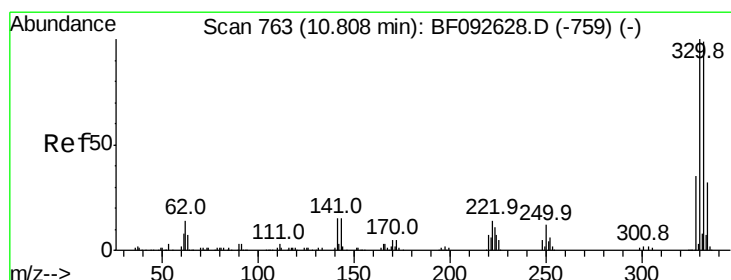
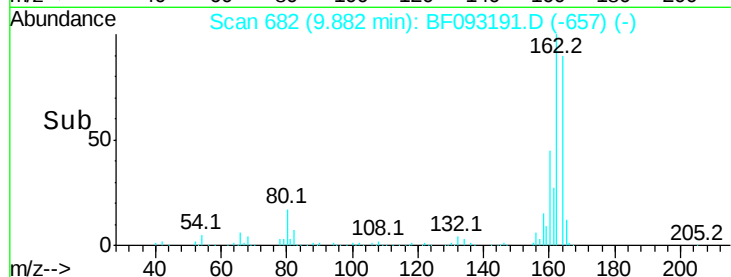
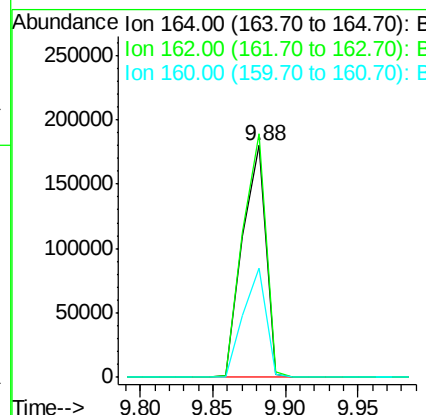
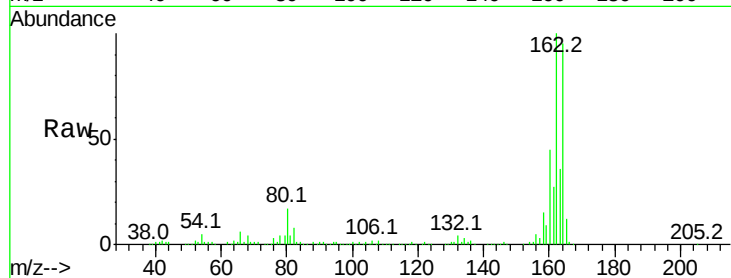
ClientSampleID :

E2-HH5-SW-2

Tot Ion:	164	Resp:	202064
Ion Ratio	Lower	Upper	
164	100		
162	105.1	80.2	120.2
160	47.1	36.9	55.3

Manual Integrations
APPROVED

mohammad
2/27/2017 1:09:05 PM



#41

2,4,6-Tribromophenol

Concen: 97.49 ng

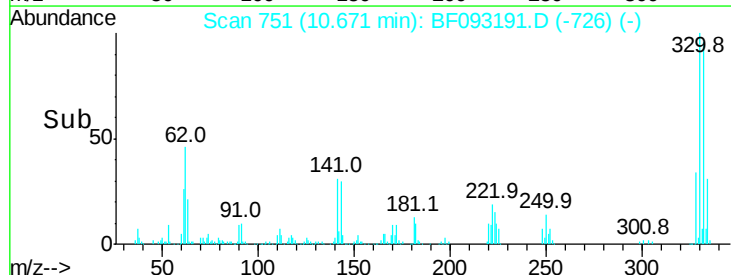
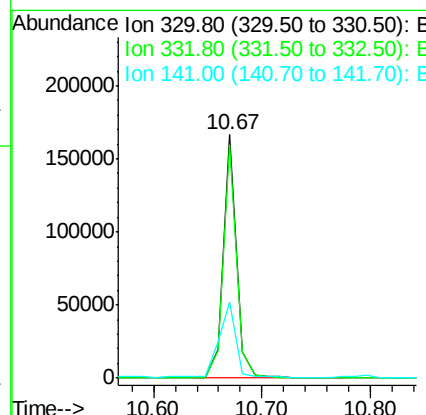
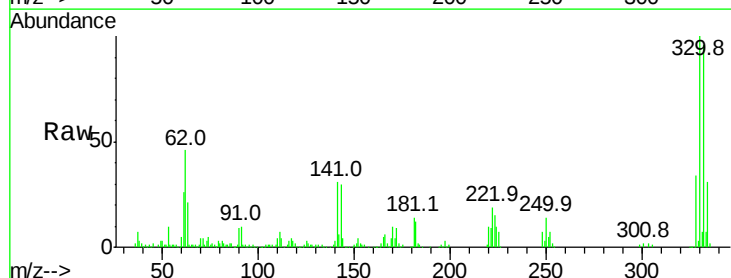
RT: 10.67 min Scan# 751

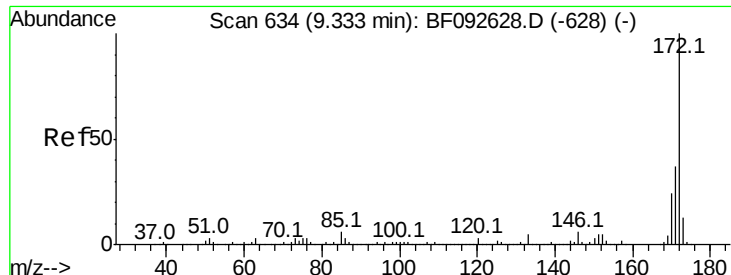
Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Tgt Ion:	330	Resp:	142473
Ion Ratio	Lower	Upper	
330	100		
332	96.5	77.4	116.2
141	39.9	34.1	51.1





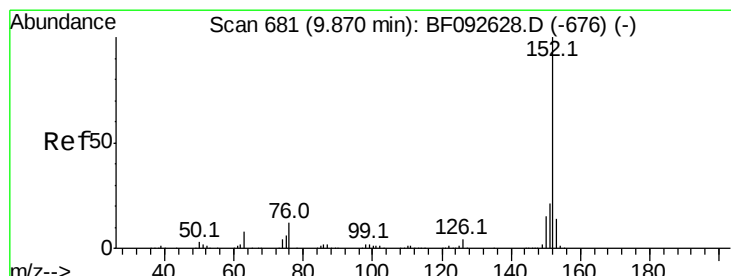
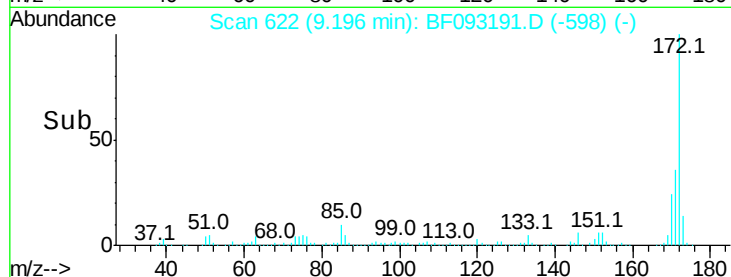
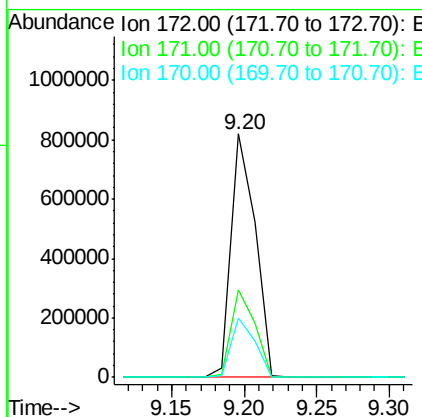
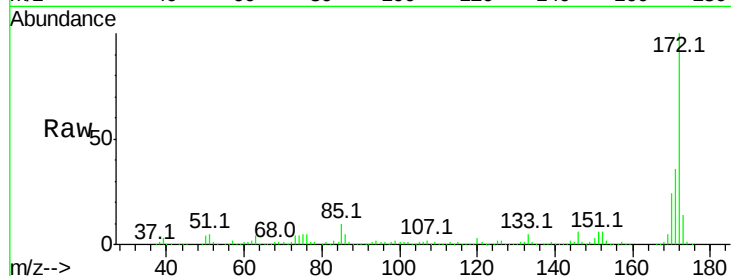
#44
 2-Fluorobiphenyl
 Concen: 85.34 ng
 RT: 9.20 min Scan# 622
 Delta R.T. -0.02 min
 Lab File: BF093191.D
 Acq: 25 Feb 2017 14:28

Instrument :
 BNA_F
 ClientSampled :
 E2-HH5-SW-2

Tot Ion	Ratio	Resp	Lower	Upper
172	100	951863		
171	35.7		29.4	44.0
170	24.2		20.2	30.4

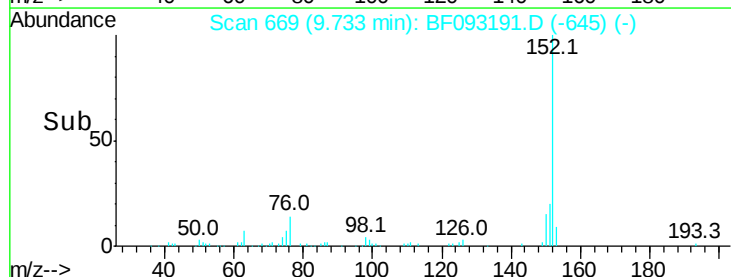
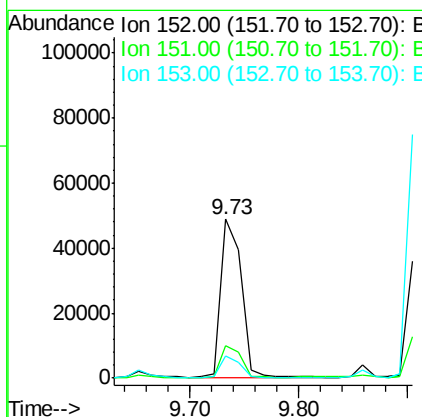
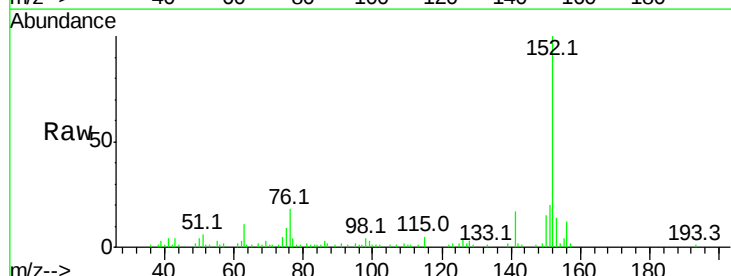
Manual Integrations
 APPROVED

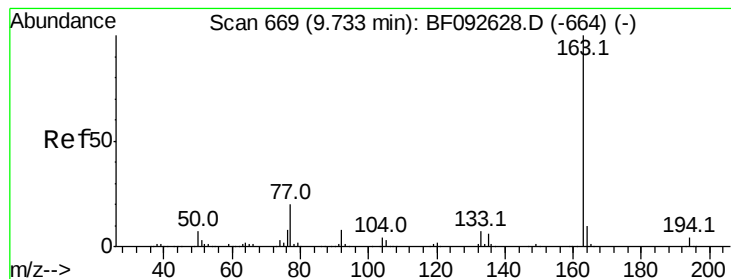
mohammad
 2/27/2017 1:09:05 PM



#48
 Acenaphthylene
 Concen: 3.33 ng
 RT: 9.73 min Scan# 669
 Delta R.T. -0.02 min
 Lab File: BF093191.D
 Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Resp	Lower	Upper
152	100	65785		
151	20.1		16.9	25.3
153	14.4		11.4	17.2





#49

Dimethylphthalate

Concen: 5.83 ng

RT: 9.60 min Scan# 657

Delta R.T. -0.02 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

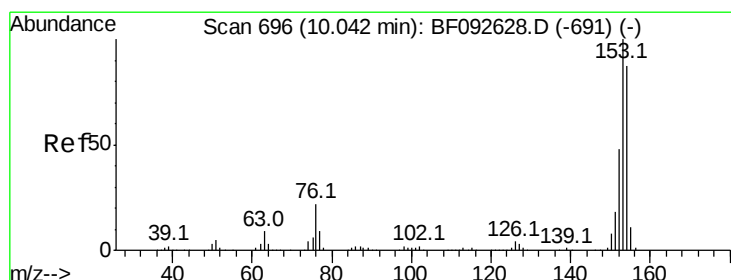
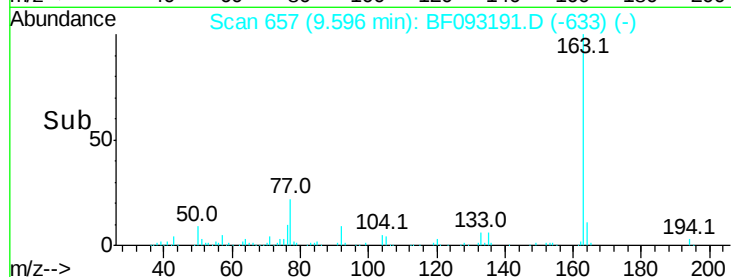
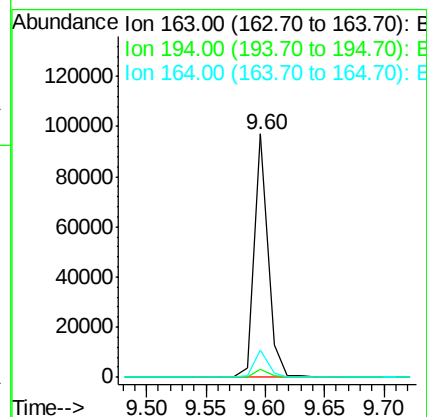
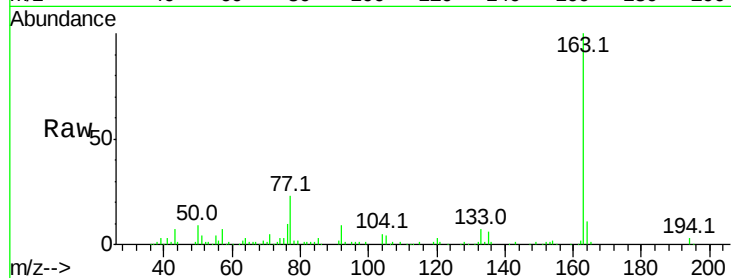
ClientSampleId :

E2-HH5-SW-2

Tot Ion:	163	Resp:	79309
Ion Ratio	Lower	Upper	
163	100		
194	3.2	3.0	4.4
164	11.0	8.0	12.0

Manual Integrations
APPROVED

mohammad
2/27/2017 1:09:05 PM



#51

Acenaphthene

Concen: 6.27 ng

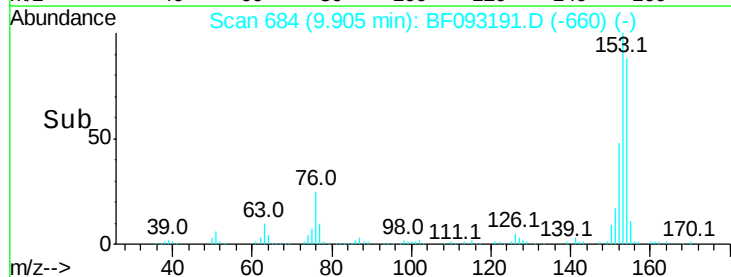
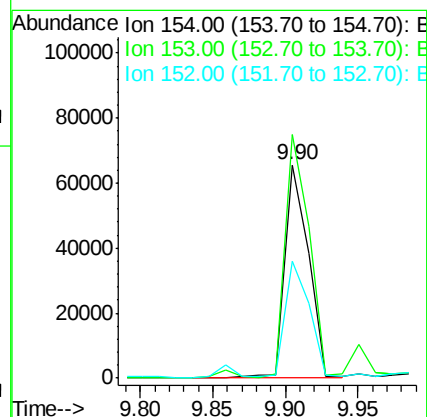
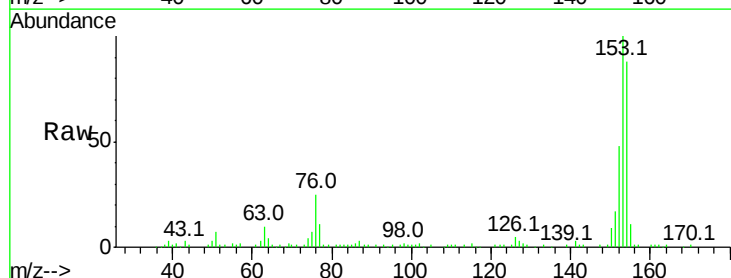
RT: 9.90 min Scan# 684

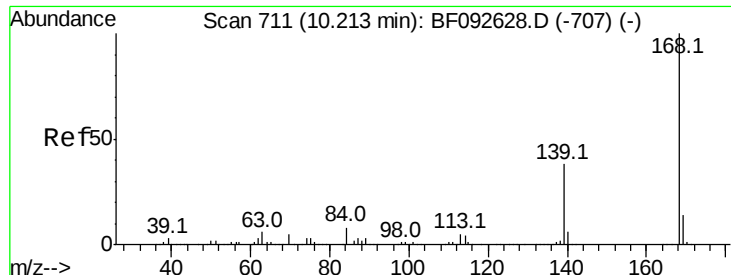
Delta R.T. -0.02 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Tgt Ion:	154	Resp:	74077
Ion Ratio	Lower	Upper	
154	100		
153	114.1	88.6	133.0
152	54.7	41.6	62.4





#54

Dibenzenofuran

Concen: 5.05 ng

RT: 10.09 min Scan# 700

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

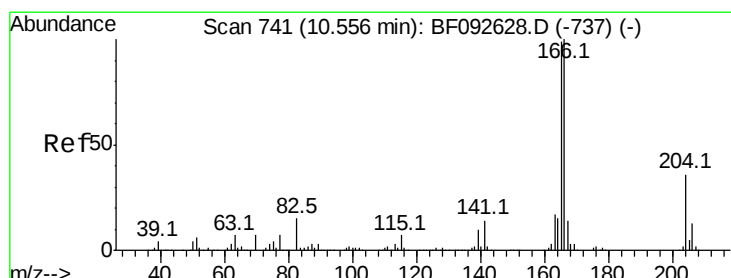
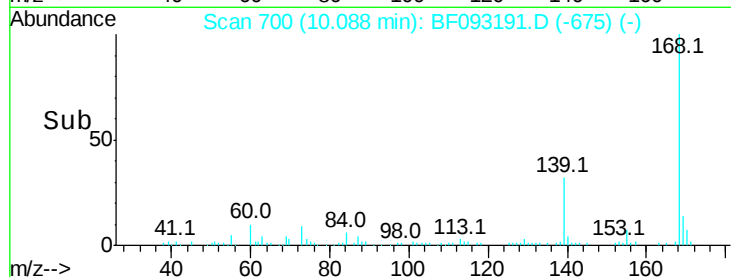
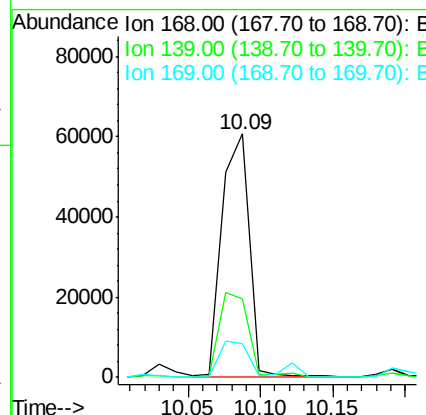
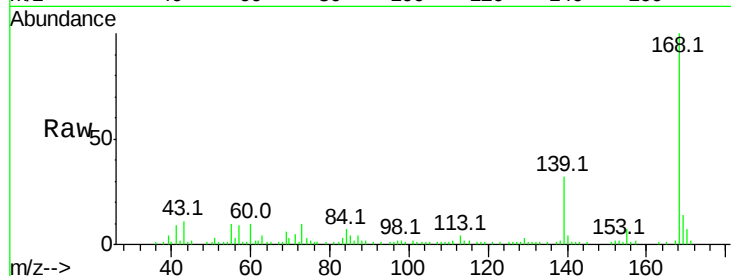
ClientSampleId :

E2-HH5-SW-2

Tot Ion	Ratio	Lower	Upper
168	100		
139	32.3	32.6	49.0#
169	13.8	11.3	16.9

Manual Integrations
APPROVED

mohammad
2/27/2017 1:09:05 PM



#57

Fluorene

Concen: 6.80 ng m

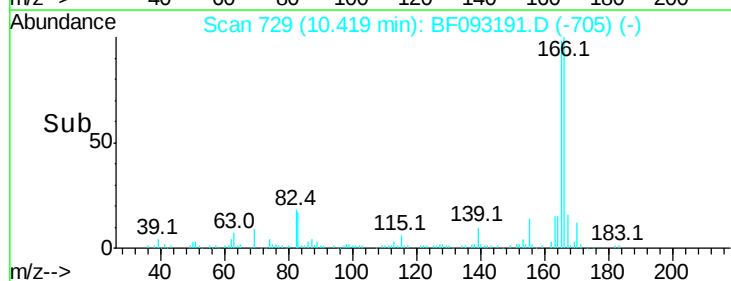
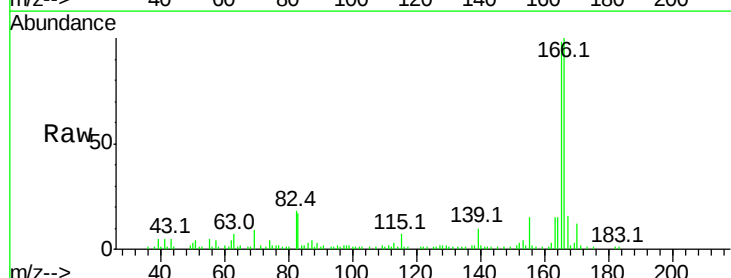
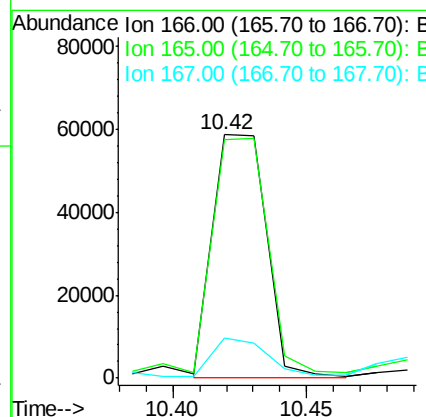
RT: 10.42 min Scan# 729

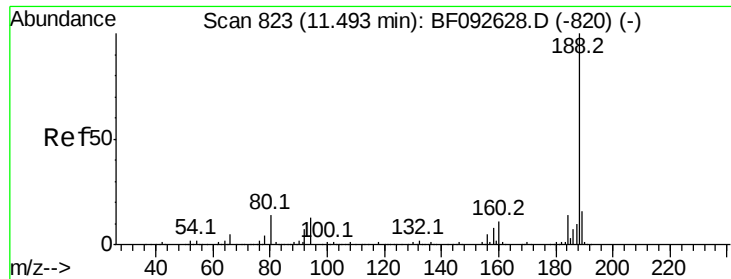
Delta R.T. -0.02 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Lower	Upper
166	100		
165	97.8	77.8	116.8
167	16.5	10.8	16.2#





#63

Phenanthrene-d10

Concen: 20.00 ng

RT: 11.37 min Scan# 812

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

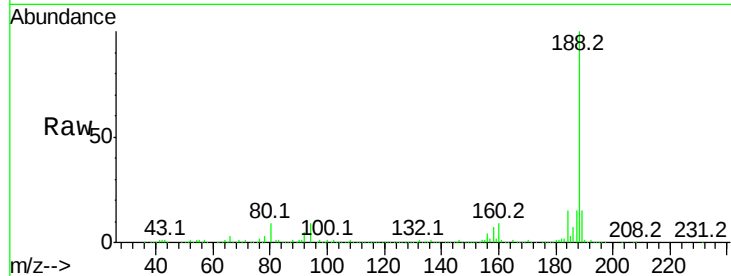
ClientSampleId :

E2-HH5-SW-2

Tot Ion:	188	Resp:	317180
Ion Ratio	Lower	Upper	
188	100		
94	9.4	10.0	15.0#
80	9.1	11.2	16.8#

Manual Integrations
APPROVED

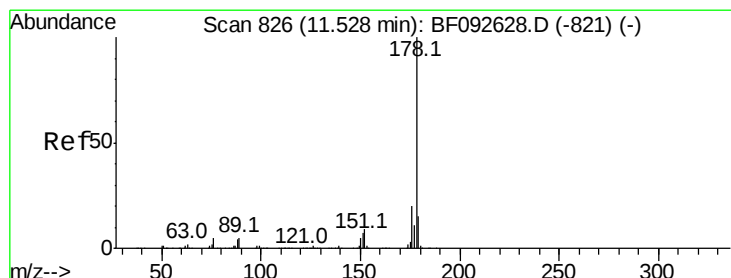
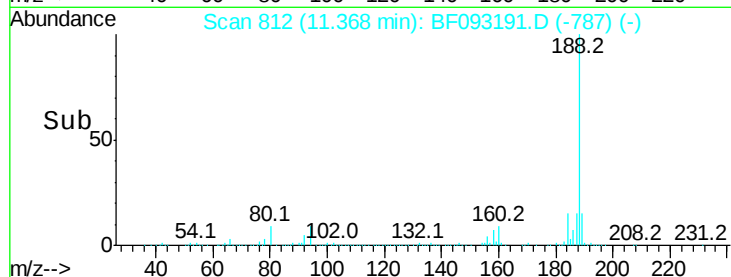
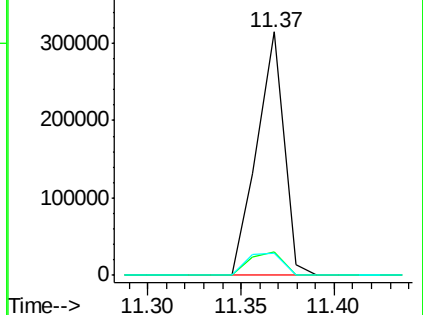
mohammad
2/27/2017 1:09:05 PM



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: 57.97 ng

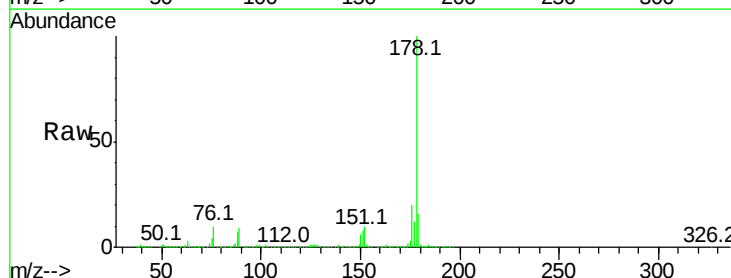
RT: 11.39 min Scan# 814

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

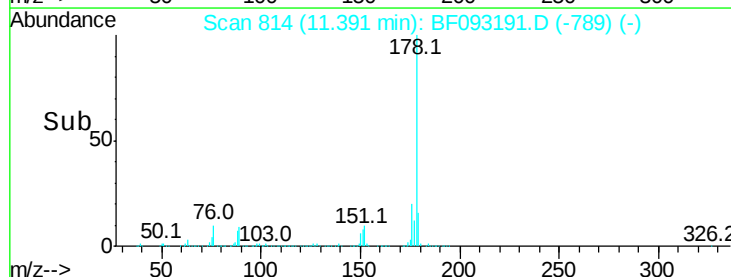
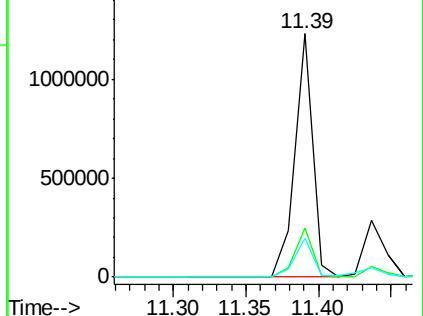
Tgt Ion:	178	Resp:	1053414
Ion Ratio	Lower	Upper	
178	100		
176	19.9	16.6	25.0
179	15.9	12.8	19.2

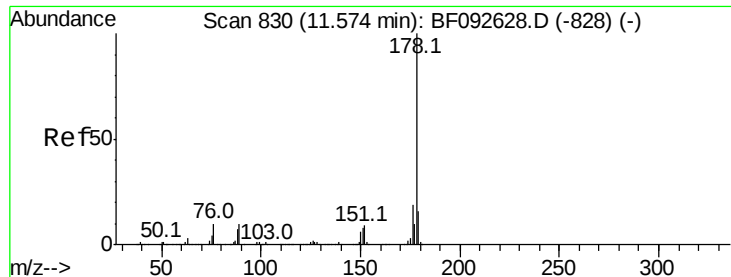


Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E





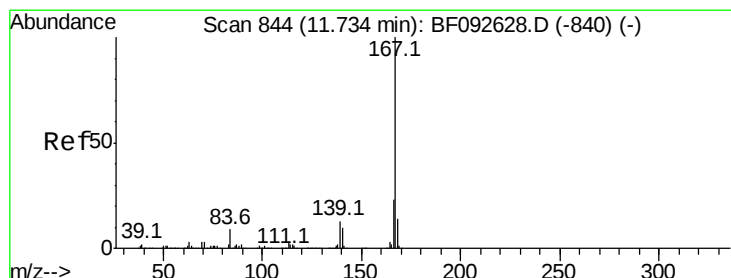
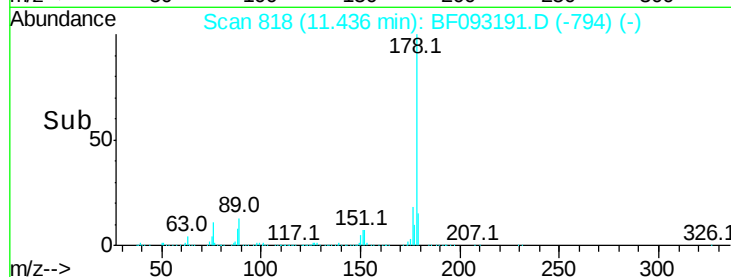
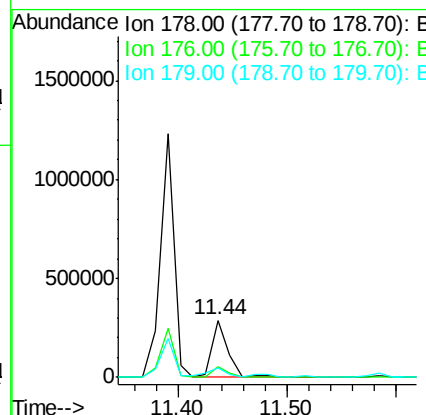
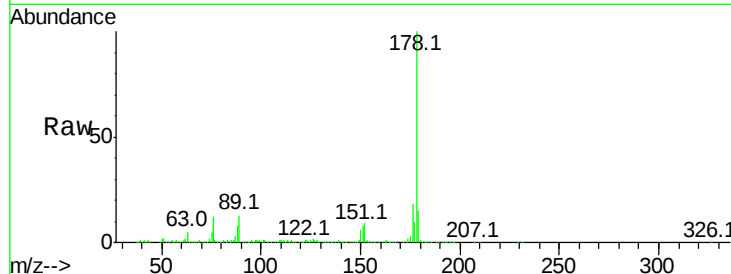
#71
 Anthracene
 Concen: 16.33 ng
 RT: 11.44 min Scan# 818
 Delta R.T. -0.02 min
 Lab File: BF093191.D
 Acq: 25 Feb 2017 14:28

Instrument :
 BNA_F
 ClientSampleId :
 E2-HH5-SW-2

Tot Ion	Ratio	Lower	Upper
178	100		
176	17.8	15.9	23.9
179	15.4	13.2	19.8

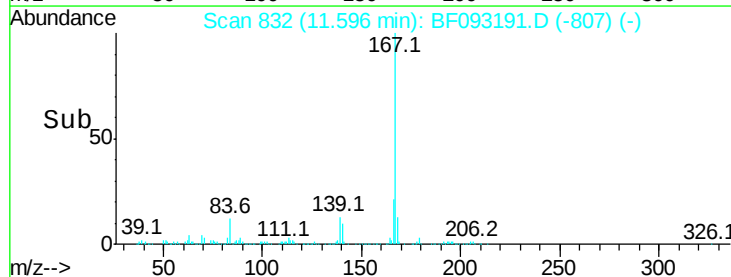
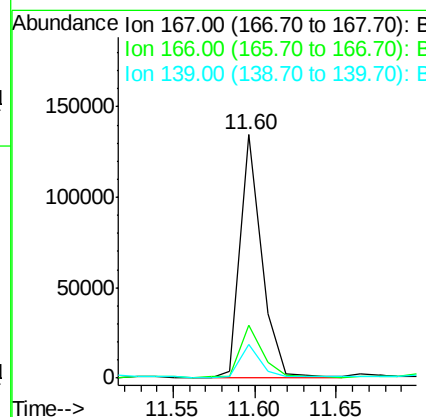
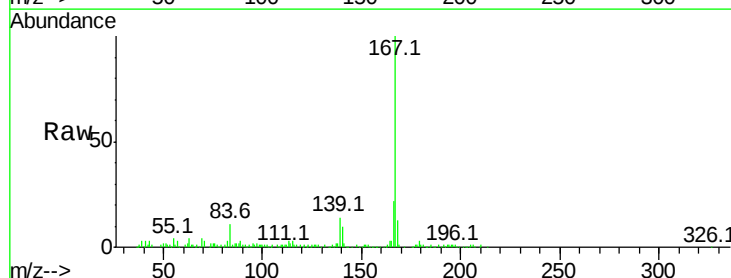
Manual Integrations
 APPROVED

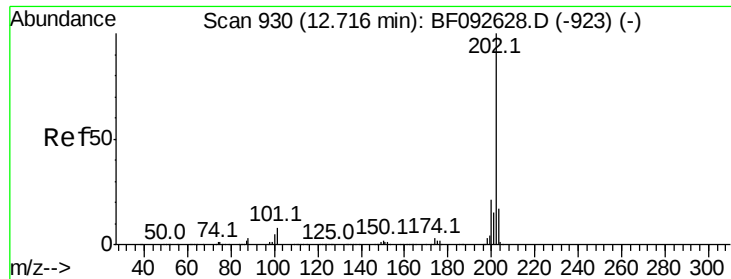
mohammad
 2/27/2017 1:09:05 PM



#72
 Carbazole
 Concen: 7.00 ng
 RT: 11.60 min Scan# 832
 Delta R.T. -0.01 min
 Lab File: BF093191.D
 Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.6	18.2	27.2
139	13.7	11.4	17.2





#74

Fluoranthene

Concen: 67.16 ng

RT: 12.58 min Scan# 918

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

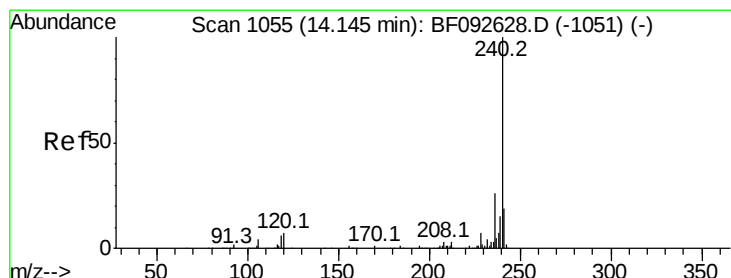
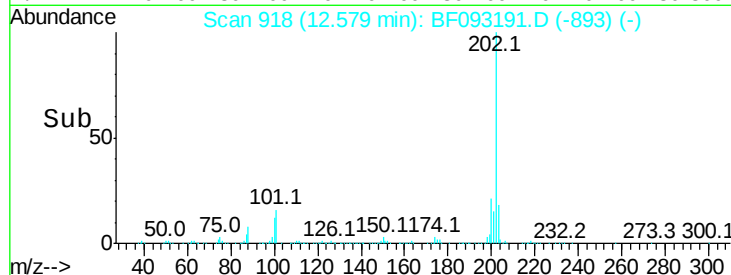
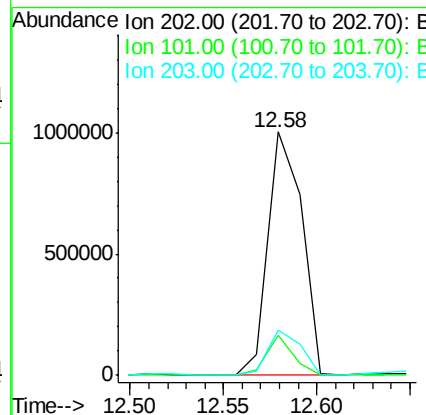
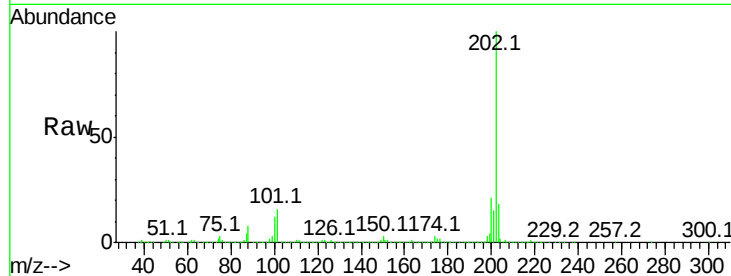
ClientSampled :

E2-HH5-SW-2

Tot Ion:	202	Resp:	1258901
Ion Ratio	Lower	Upper	
202	100		
101	16.2	0.0	34.6
203	18.4	0.0	38.7

Manual Integrations
APPROVED

mohammad
2/27/2017 1:09:05 PM



#75

Chrysene-d12

Concen: 20.00 ng

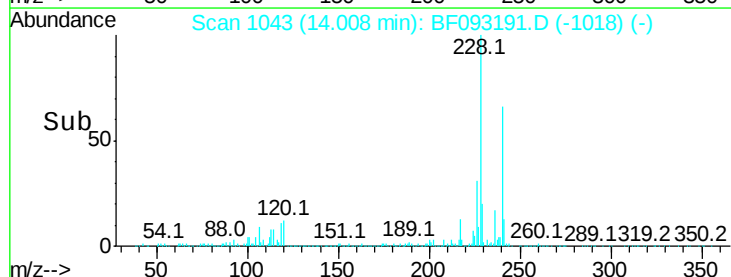
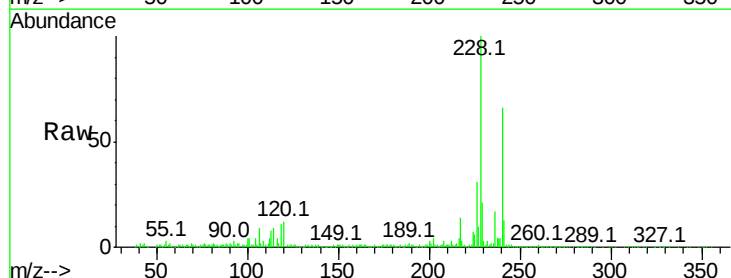
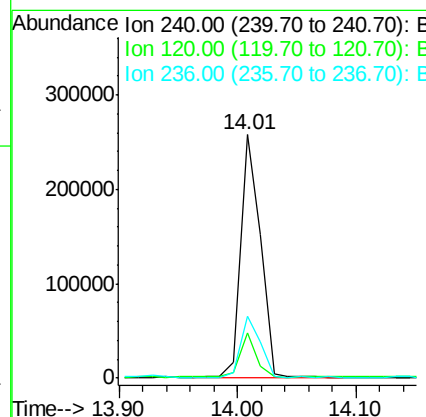
RT: 14.01 min Scan# 1043

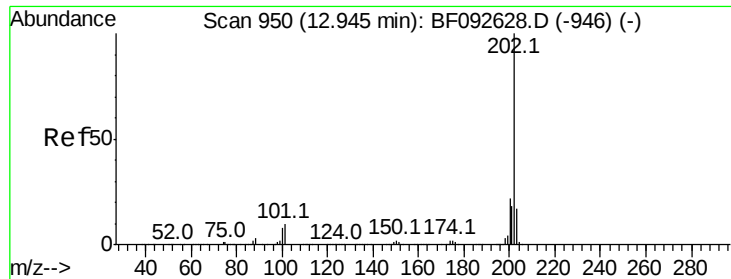
Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Tgt Ion:	240	Resp:	298039
Ion Ratio	Lower	Upper	
240	100		
120	18.5	12.9	19.3
236	25.3	20.9	31.3





#77

Pvrene

Concen: 53.53 ng

RT: 12.81 min Scan# 938

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

ClientSampleId :

E2-HH5-SW-2

Tot Ion:202 Resp: 1193926

Ion Ratio Lower Upper

202 100

200 21.7 17.7 26.5

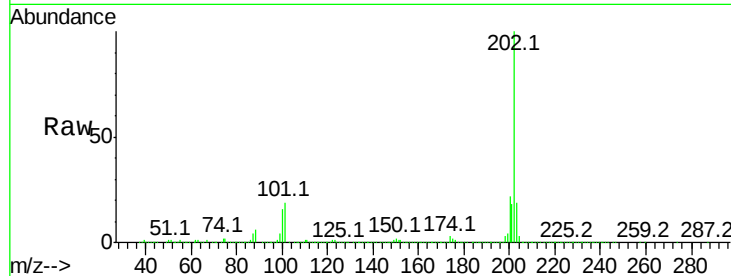
203 18.7 14.7 22.1

Manual Integrations

APPROVED

mohammad

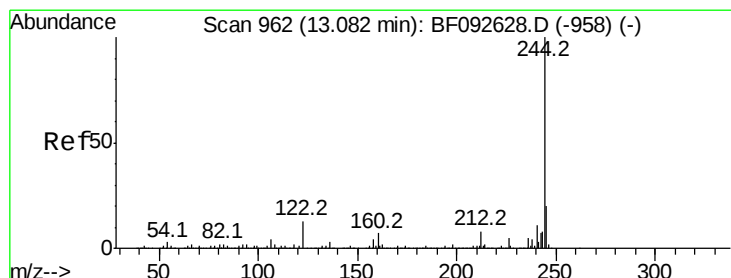
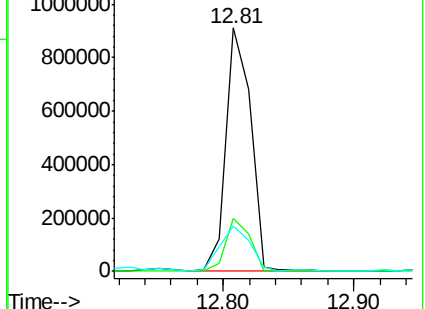
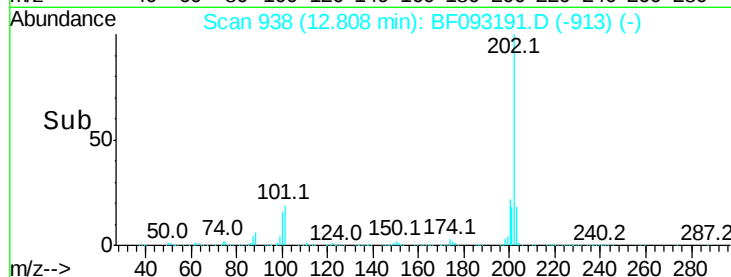
2/27/2017 1:09:05 PM



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: 55.39 ng

RT: 12.96 min Scan# 951

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

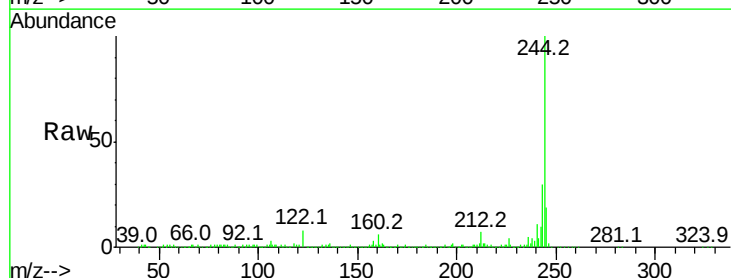
Tgt Ion:244 Resp: 702618

Ion Ratio Lower Upper

244 100

212 6.7 6.2 9.2

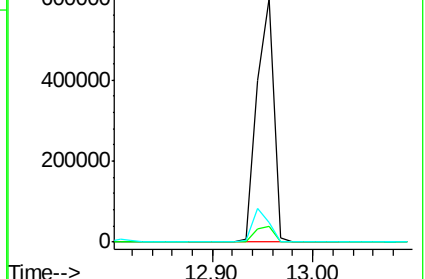
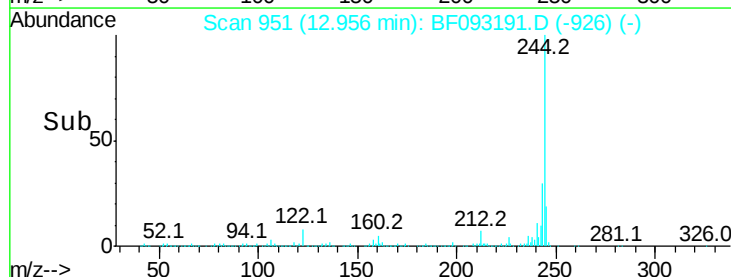
122 8.2 11.4 17.2#

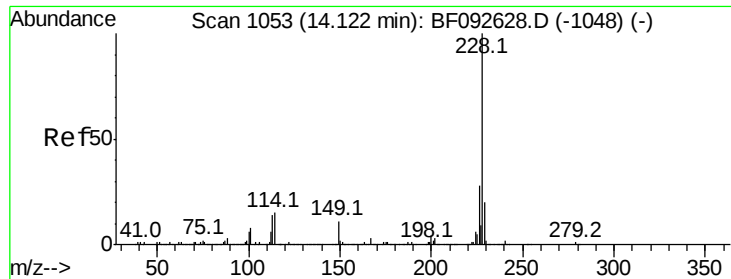


Abundance Ion 244.00 (243.70 to 244.70): E

Ion 212.00 (211.70 to 212.70): E

Ion 122.00 (121.70 to 122.70): E





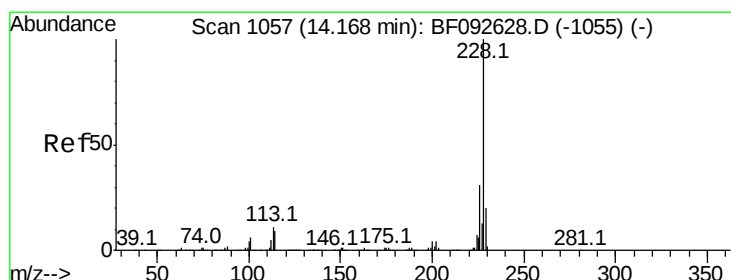
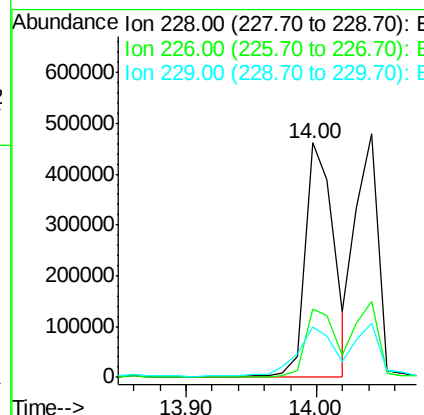
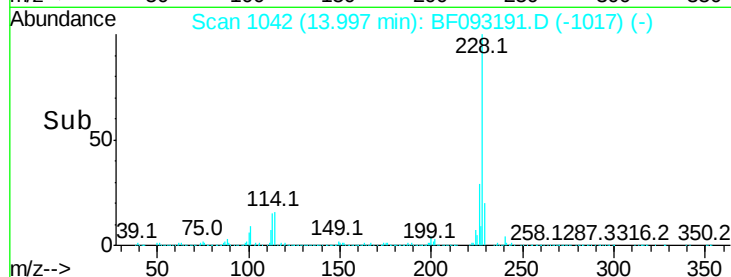
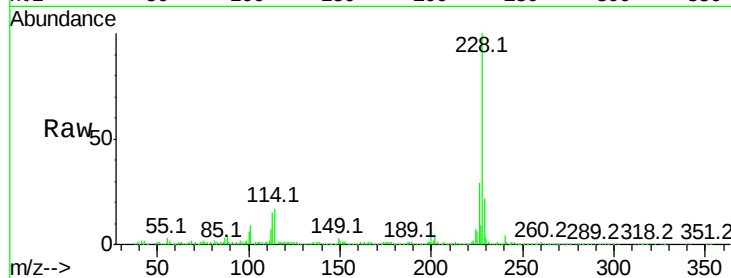
#80
Benzo(a)anthracene
Concen: 38.81 ng
RT: 14.00 min Scan# 1042
Delta R.T. -0.01 min
Lab File: BF093191.D
Acq: 25 Feb 2017 14:28

Instrument :
BNA_F
ClientSampleId :
E2-HH5-SW-2

Tot Ion	Ratio	Lower	Upper
228	100		
226	29.3	22.4	33.6
229	21.5	16.2	24.4

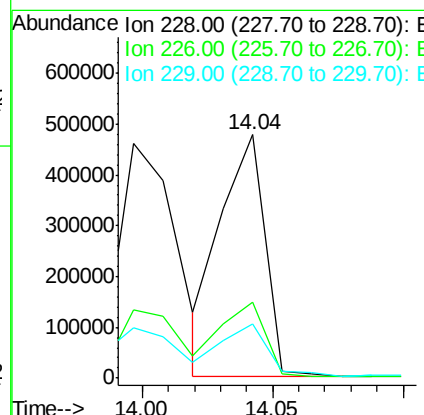
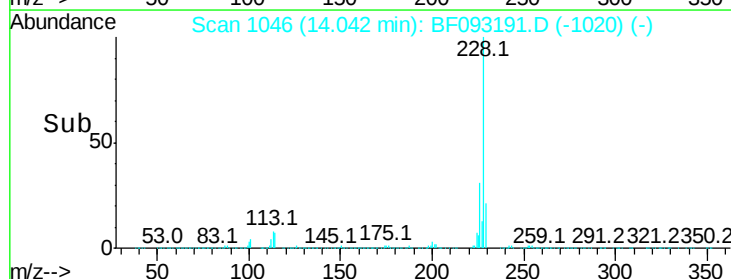
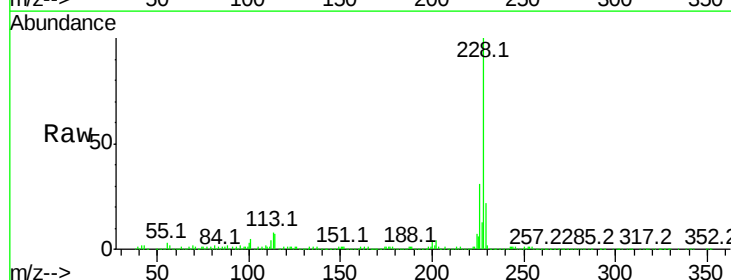
Manual Integrations
APPROVED

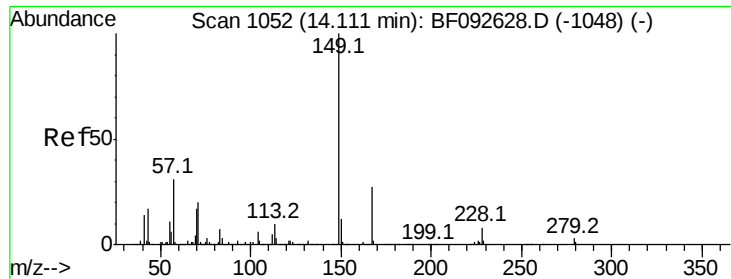
mohammad
2/27/2017 1:09:05 PM



#82
Chrysene
Concen: 33.13 ng
RT: 14.04 min Scan# 1046
Delta R.T. -0.00 min
Lab File: BF093191.D
Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.1	25.4	38.0
229	22.4	16.2	24.2





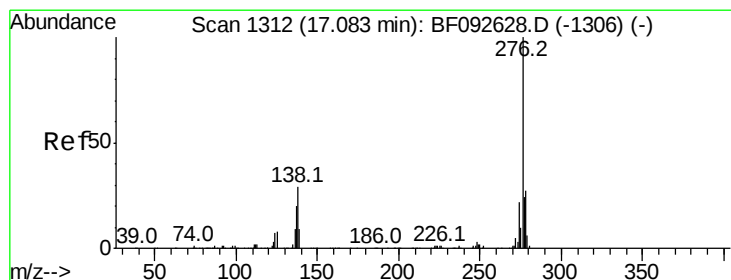
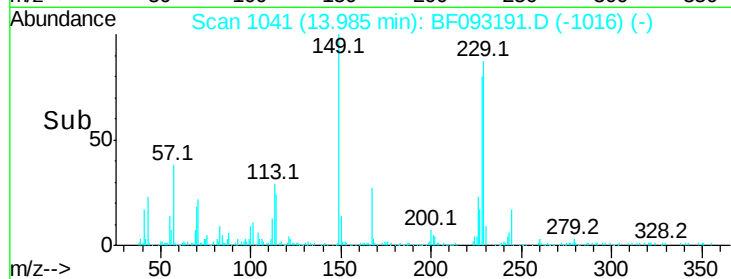
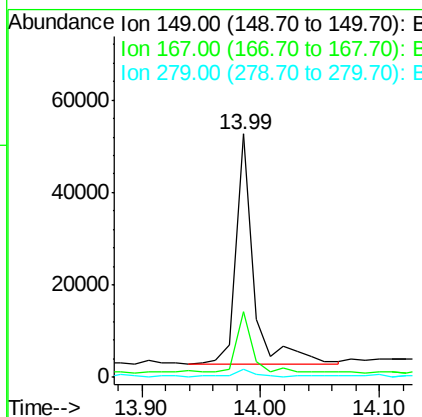
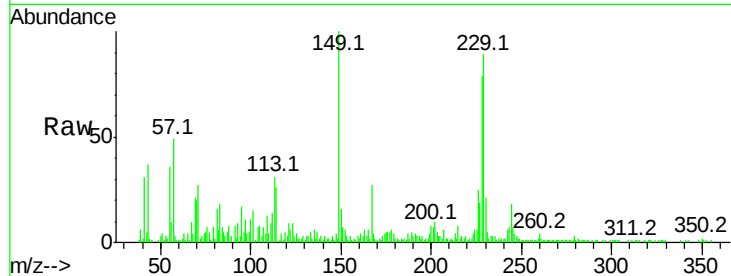
#83
 Bis(2-ethylhexyl)phthalate
 Concen: 4.17 ng
 RT: 13.99 min Scan# 1041
 Delta R.T. -0.01 min
 Lab File: BF093191.D
 Acq: 25 Feb 2017 14:28

Instrument :
 BNA_F
 ClientSampleId :
 E2-HH5-SW-2

Tot Ion	Ratio	Lower	Upper
149	100		
167	27.1	20.2	30.4
279	3.2	1.8	2.8

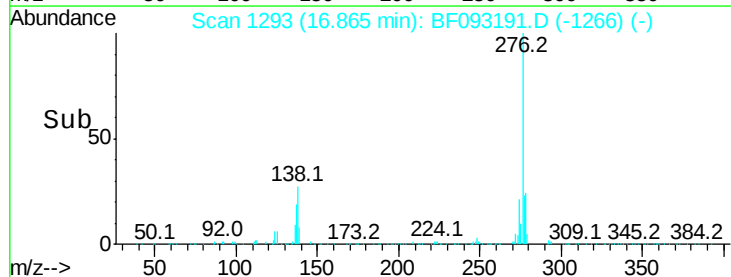
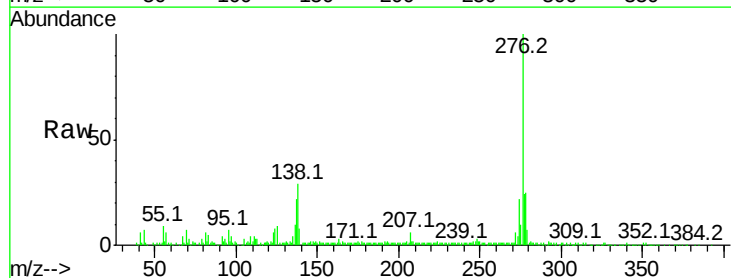
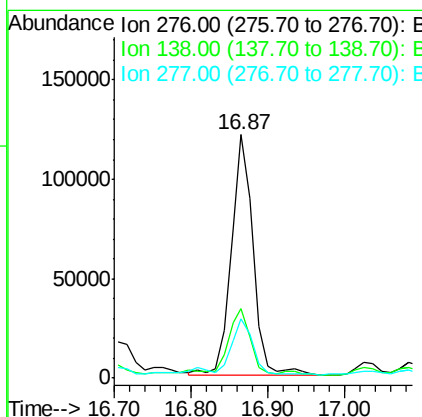
Manual Integrations
 APPROVED

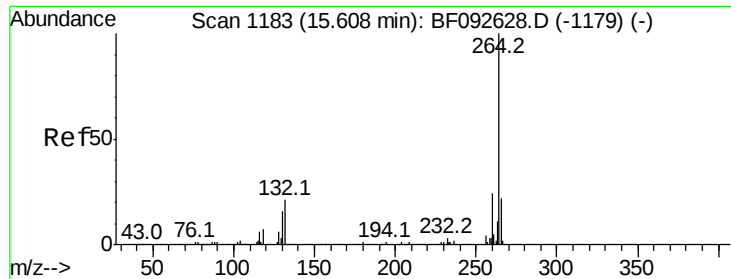
mohammad
 2/27/2017 1:09:05 PM



#85
 Indeno(1,2,3-cd)pyrene
 Concen: 18.25 ng
 RT: 16.87 min Scan# 1293
 Delta R.T. 0.01 min
 Lab File: BF093191.D
 Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Lower	Upper
276	100		
138	26.6	21.8	32.6
277	22.1	20.2	30.4





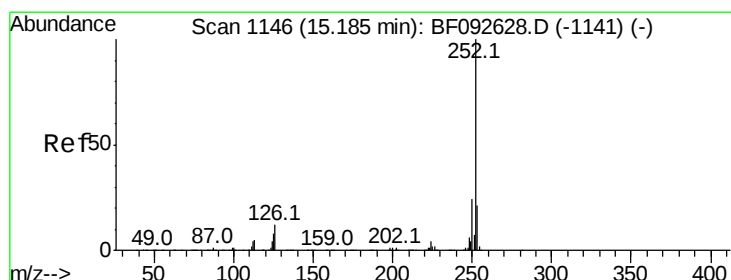
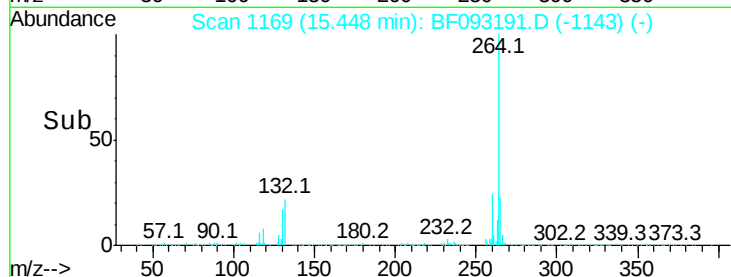
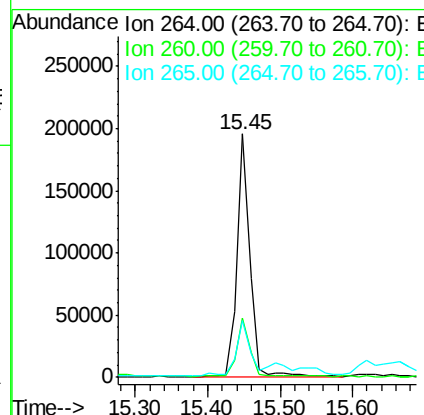
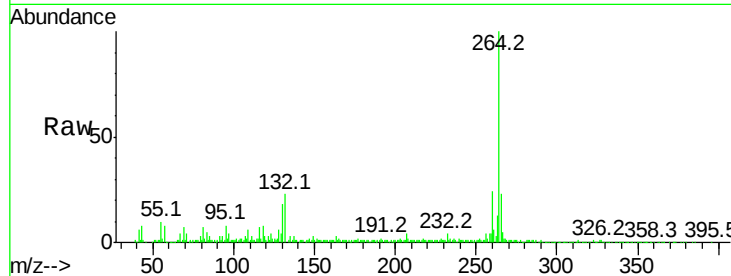
#86
Pervlene-d12
Concen: 20.00 ng
RT: 15.45 min Scan# 1169
Delta R.T. -0.00 min
Lab File: BF093191.D
Acq: 25 Feb 2017 14:28

Instrument :
BNA_F
ClientSampleId :
E2-HH5-SW-2

Tot Ion	Ratio	Resp	Lower	Upper
264	100	238904		
260	24.4	19.2	28.8	
265	23.2	17.4	26.0	

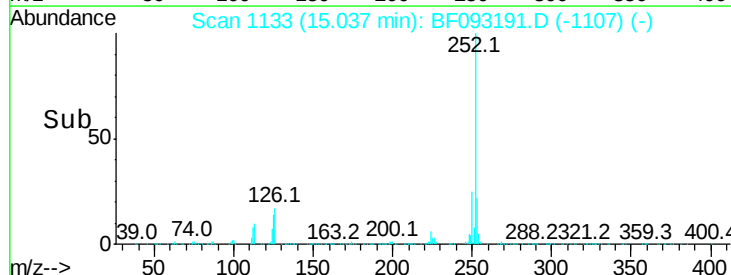
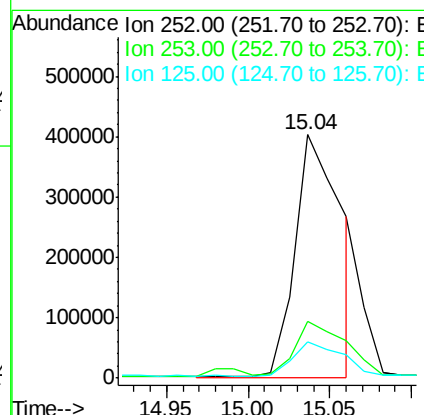
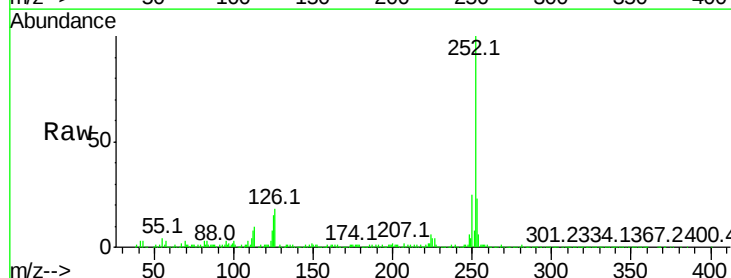
Manual Integrations
APPROVED

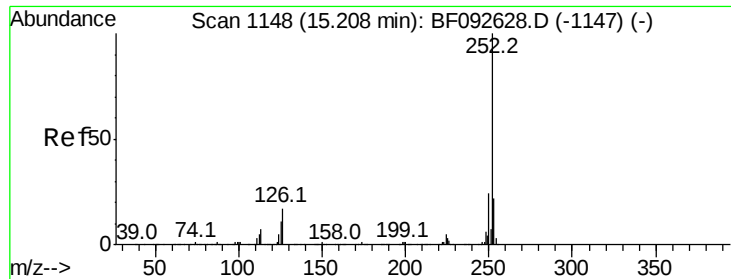
mohammad
2/27/2017 1:09:05 PM



#87
Benzo(b)fluoranthene
Concen: 50.37 ng m
RT: 15.04 min Scan# 1133
Delta R.T. -0.00 min
Lab File: BF093191.D
Acq: 25 Feb 2017 14:28

Tgt Ion	Ratio	Resp	Lower	Upper
252	100	791994		
253	23.0	18.2	27.4	
125	14.9	9.8	14.6	





#88

Benzo(k)fluoranthene

Concen: 6.81 ng

RT: 15.06 min Scan# 1135

Delta R.T. -0.01 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

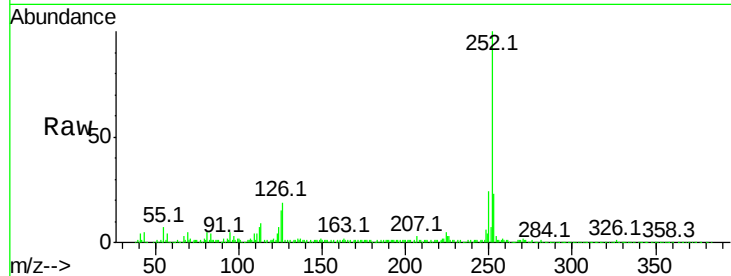
ClientSampled :

E2-HH5-SW-2

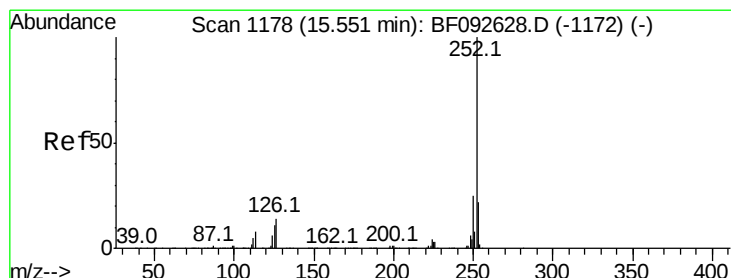
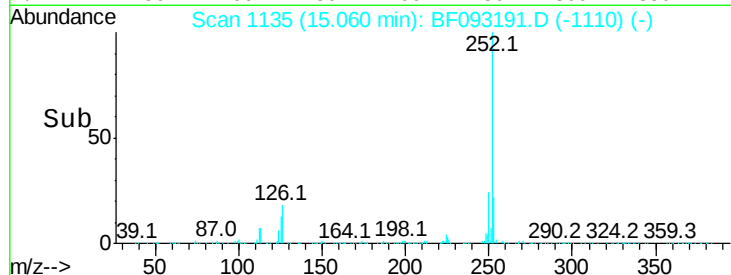
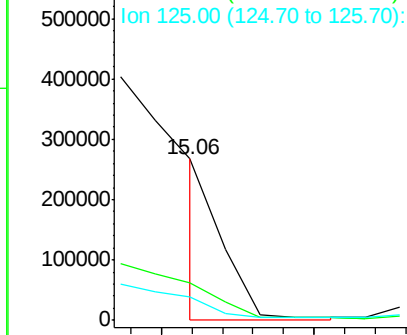
Tot Ion:	252	Resp:	92457
Ion Ratio	Lower	Upper	
252	100		
253	22.9	18.5	27.7
125	14.6	8.9	13.3

Manual Integrations
APPROVED

mohammad
2/27/2017 1:09:05 PM



Abundance Ion 252.00 (251.70 to 252.70): E
Ion 253.00 (252.70 to 253.70): E
Ion 125.00 (124.70 to 125.70): E



#89

Benzo(a)pyrene

Concen: 32.68 ng

RT: 15.39 min Scan# 1164

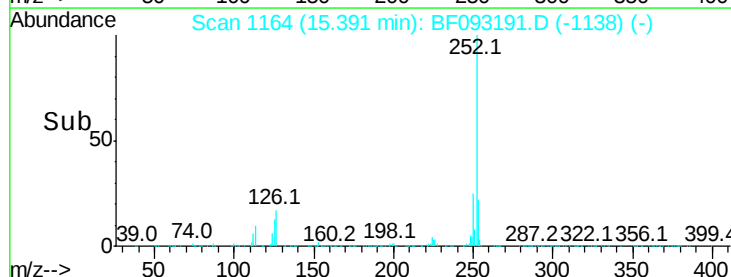
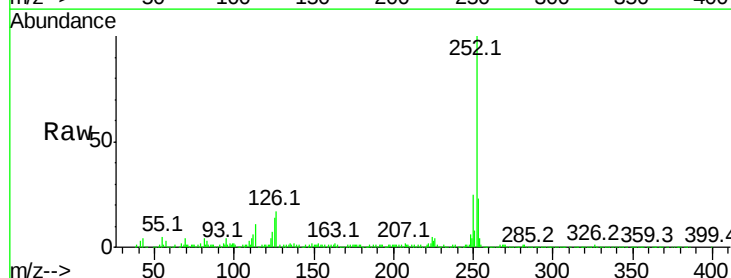
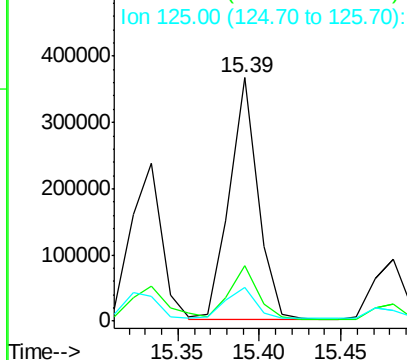
Delta R.T. -0.00 min

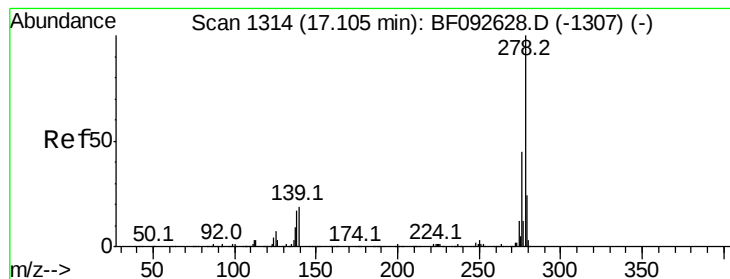
Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Tgt Ion:	252	Resp:	444546
Ion Ratio	Lower	Upper	
252	100		
253	22.8	18.2	27.2
125	14.0	10.0	15.0

Abundance Ion 252.00 (251.70 to 252.70): E
Ion 253.00 (252.70 to 253.70): E
Ion 125.00 (124.70 to 125.70): E





#90

Dibenzo(a,h)anthracene

Concen: 5.58 ng/mL

RT: 16.87 min Scan# 1293

Delta R.T. -0.00 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Instrument :

BNA_F

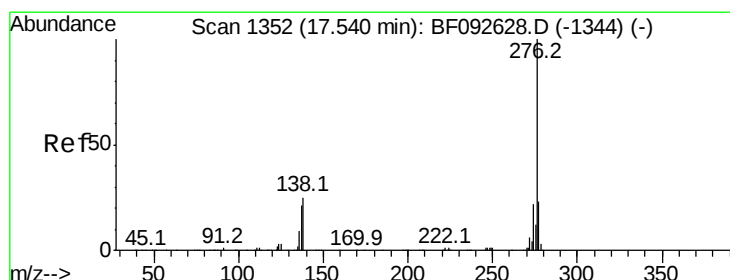
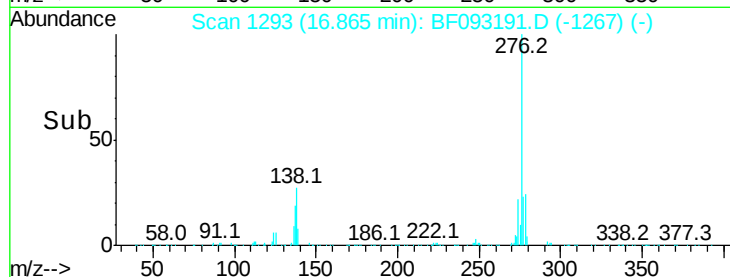
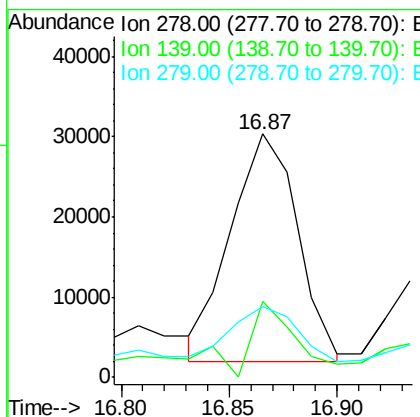
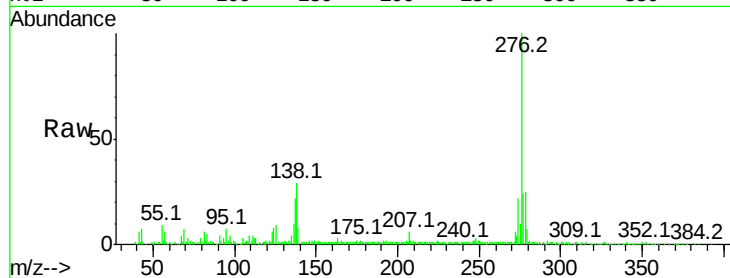
ClientSampleId :

E2-HH5-SW-2

Tot Ion:	278	Resp:	61382
Ion Ratio	Lower	Upper	
278	100		
139	30.9	14.8	22.2#
279	29.3	19.8	29.6

Manual Integrations
APPROVED

mohammad
2/27/2017 1:09:05 PM



#91

Benzo(g,h,i)perylene

Concen: 20.51 ng/mL

RT: 17.29 min Scan# 1330

Delta R.T. -0.00 min

Lab File: BF093191.D

Acq: 25 Feb 2017 14:28

Tgt Ion:	276	Resp:	227744
Ion Ratio	Lower	Upper	
276	100		
277	24.5	19.2	28.8
138	32.3	16.0	24.0#

