

Data Path : Z:\HPCHEM1\BNA F\DATA\BF022717\
 Data File : BF093229.D
 Acq On : 28 Feb 2017 2:37
 Operator : SJ/MA
 Sample : I1997-08
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 E2-B1E-ESW-2

Manual Integrations
 APPROVED

mohammad
 2/28/2017 2:35:36 PM

Quant Time: Feb 28 04:53:46 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF013017.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Feb 28 00:51:02 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.82	152	161480	20.00	ng	0.00
21) Naphthalene-d8	8.10	136	570692	20.00	ng	-0.01
38) Acenaphthene-d10	9.86	164	258628	20.00	ng	0.00
63) Phenanthrene-d10	11.34	188	394206	20.00	ng	0.00
75) Chrysene-d12	14.00	240	298150	20.00	ng	0.01
86) Perylene-d12	15.43	264	255329	20.00	ng	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.42	112	910142	96.70	ng	0.01
7) Phenol-d6	6.48	99	1201904	99.24	ng	0.00
23) Nitrobenzene-d5	7.39	82	773508	75.48	ng	0.00
41) 2,4,6-Tribromophenol	10.65	330	155354	83.05	ng	-0.01
44) 2-Fluorobiphenyl	9.18	172	1160073	81.26	ng	0.00
78) Terphenyl-d14	12.93	244	785637	61.91	ng	0.00
Target Compounds						Qvalue
31) Naphthalene	8.12	128	150392	5.20	ng	99
37) 2-Methylnaphthalene	8.82	142	61511	3.31	ng	96
48) Acenaphthylene	9.72	152	214677	8.48	ng	97
49) Dimethylphthalate	9.58	163	378520	21.73	ng	99
51) Acenaphthene	9.89	154	64515	4.26	ng	91
54) Dibenzofuran	10.06	168	79166	3.91	ng	92
57) Fluorene	10.41	166	73034m	4.69	ng	
70) Phenanthrene	11.37	178	971954	43.04	ng	99
71) Anthracene	11.41	178	349962	15.43	ng	99
72) Carbazole	11.58	167	136470	6.29	ng	97
74) Fluoranthene	12.57	202	1967078	84.44	ng	96
77) Pyrene	12.80	202	1834851	82.23	ng	100
80) Benzo(a)anthracene	13.99	228	1070388	58.70	ng	94
82) Chrysene	14.02	228	937390m	54.90	ng	
85) Indeno(1,2,3-cd)pyrene	16.83	276	509390	38.52	ng	99
87) Benzo(b)fluoranthene	15.03	252	1284473m	76.43	ng	
88) Benzo(k)fluoranthene	15.04	252	318383m	21.94	ng	
89) Benzo(a)pyrene	15.37	252	801442	55.13	ng	# 96
90) Dibenzo(a,h)anthracene	16.83	278	148963m	12.68	ng	
91) Benzo(a,h,i)perylene	17.27	276	467703	39.41	ng	# 91

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

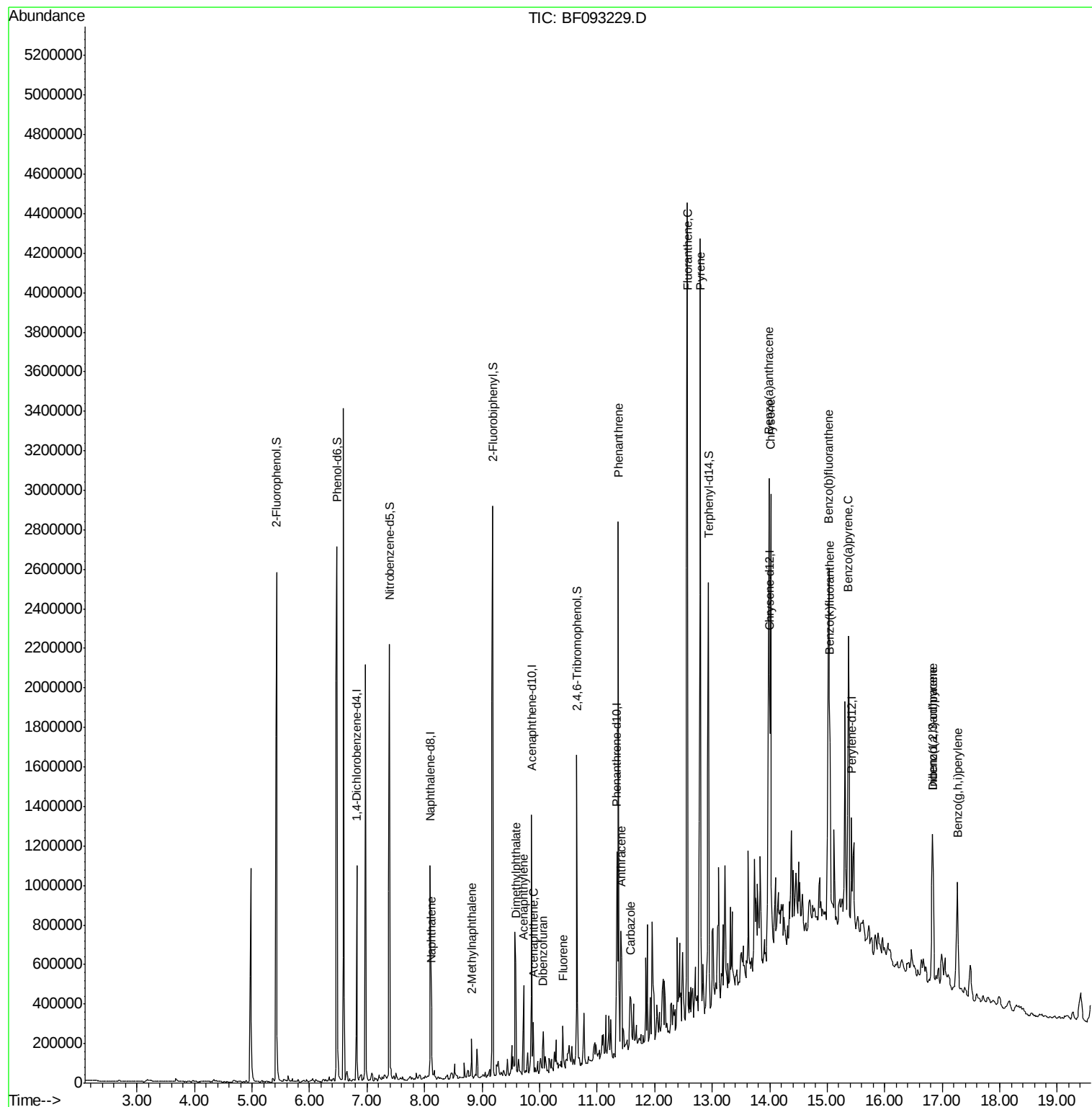
Data Path : Z:\HPCHEM1\BNA F\DATA\BF022717\
Data File : BF093229.D
Acq On : 28 Feb 2017 2:37
Operator : SJ/MA
Sample : I1997-08
Misc :
ALS Vial : 18 Sample Multiplier: 1

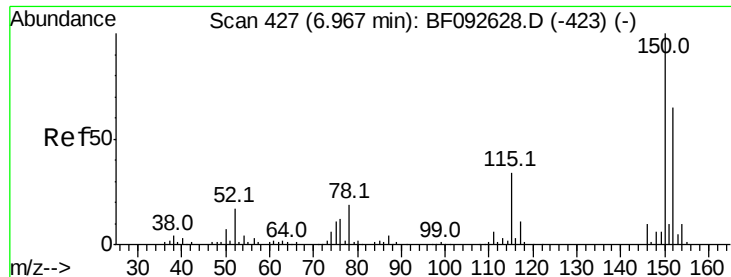
Instrument :
BNA_F
ClientSampleId :
E2-B1E-ESW-2

Manual Integrations
APPROVED

mohammad
2/28/2017 2:35:36 PM

Quant Time: Feb 28 04:53:46 2017
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF013017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 28 00:51:02 2017
Response via : Initial Calibration





#1

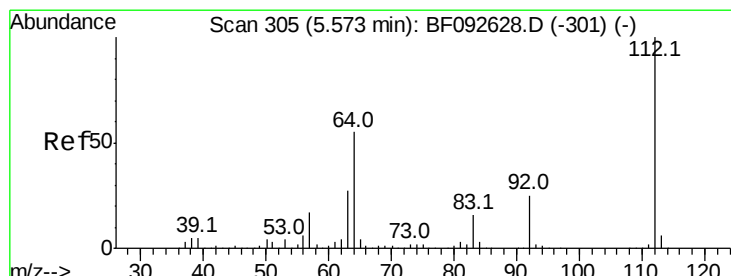
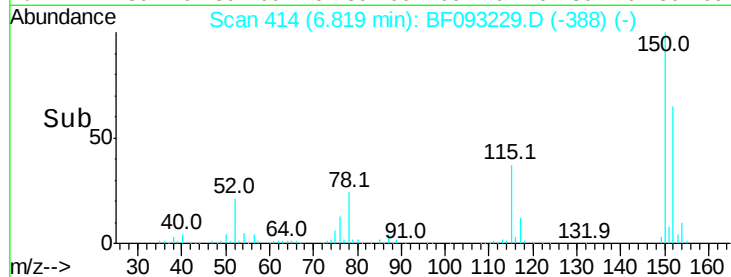
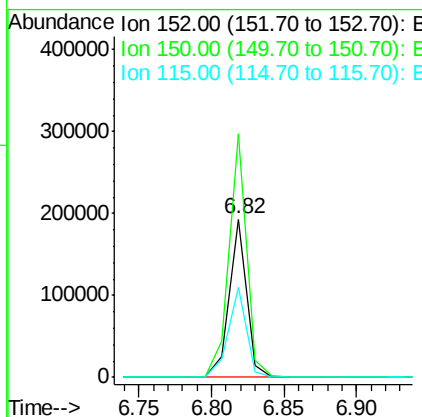
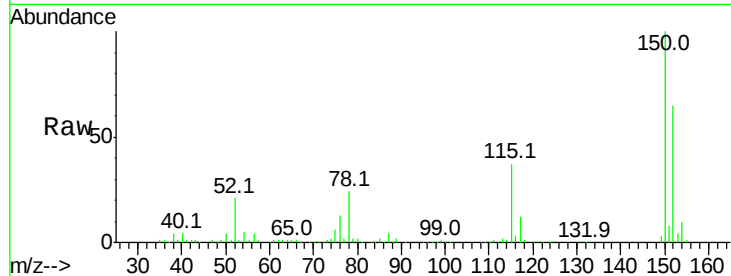
1,4-Dichlorobenzene-d4
 Concen: 20.00 ng
 RT: 6.82 min Scan# 414
 Delta R.T. -0.00 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Instrument :
 BNA_F
 ClientSampleId :
 E2-B1E-ESW-2

Tot Ion	Ratio	Lower	Upper
152	100		
150	154.3	124.9	187.3
115	57.3	46.0	69.0

Manual Integrations
 APPROVED

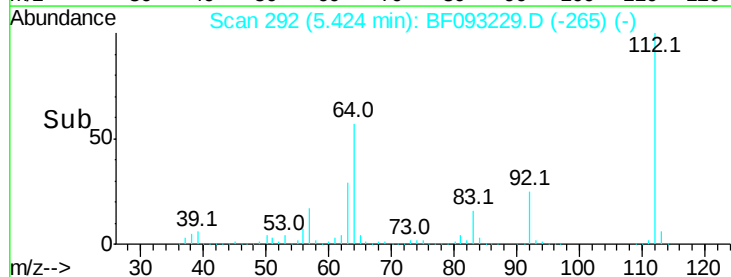
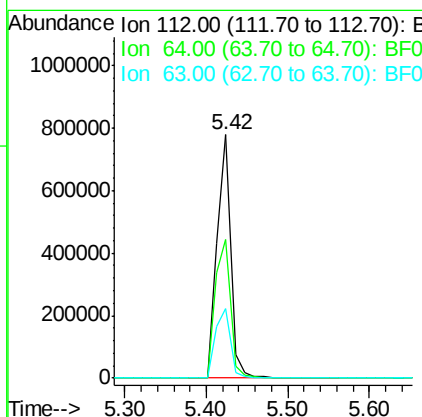
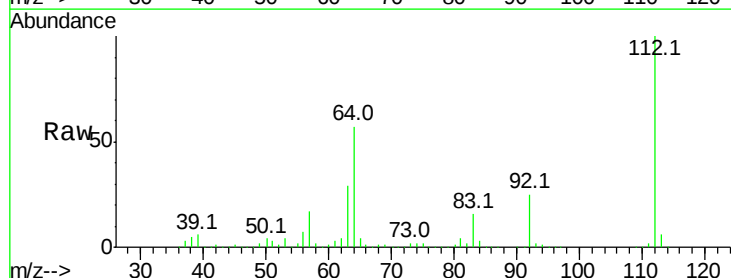
mohammad
 2/28/2017 2:35:36 PM

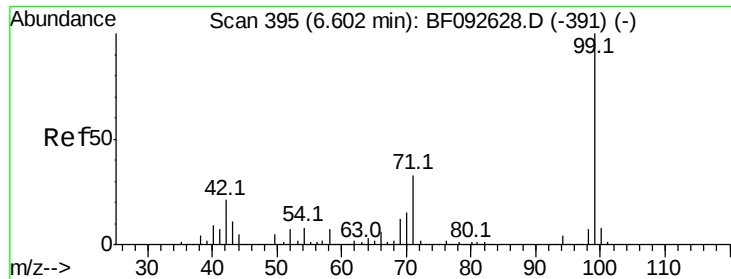


#5

2-Fluorophenol
 Concen: 96.70 ng
 RT: 5.42 min Scan# 292
 Delta R.T. 0.01 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Lower	Upper
112	100		
64	57.2	46.1	69.1
63	28.6	23.8	35.6





#7

Phenol-d6

Concen: 99.24 ng

RT: 6.48 min Scan# 384

Delta R.T. -0.00 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

Instrument :

BNA_F

ClientSampleId :

E2-B1E-ESW-2

Tot Ion: 99 Resp: 1201904

Ion Ratio Lower Upper

99 100

42 16.6 15.6 23.4

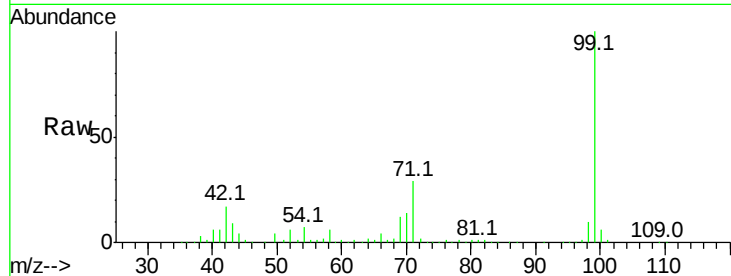
71 29.2 27.5 41.3

Manual Integrations

APPROVED

mohammad

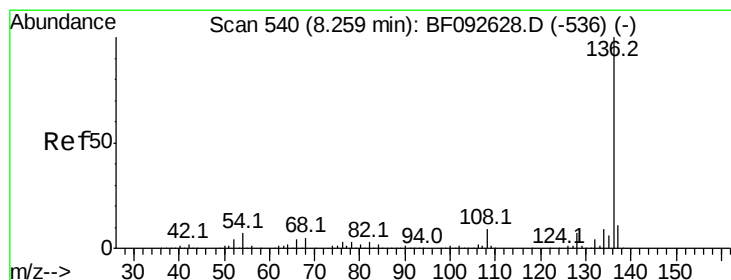
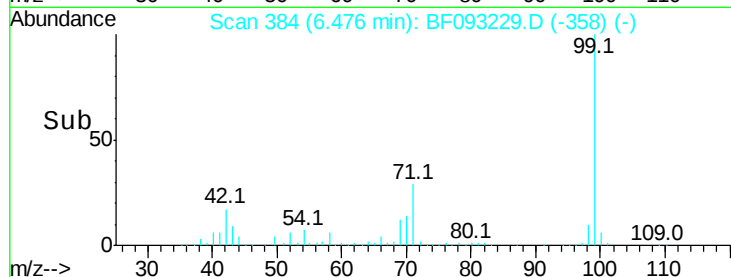
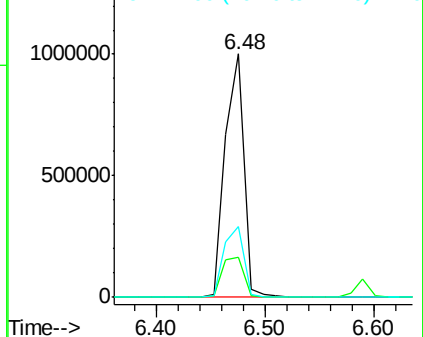
2/28/2017 2:35:36 PM



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: 8.10 min Scan# 526

Delta R.T. -0.01 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

Tgt Ion:136 Resp: 570692

Ion Ratio Lower Upper

136 100

137 11.3 8.4 12.6

54 12.5 4.5 6.7#

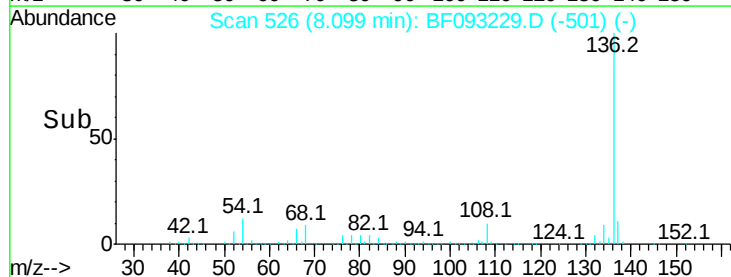
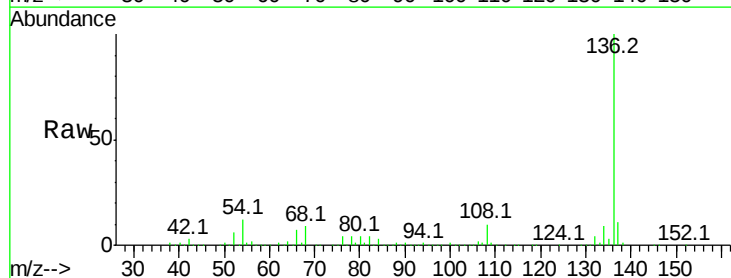
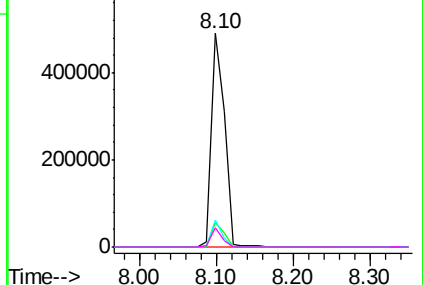
68 8.8 3.6 5.4#

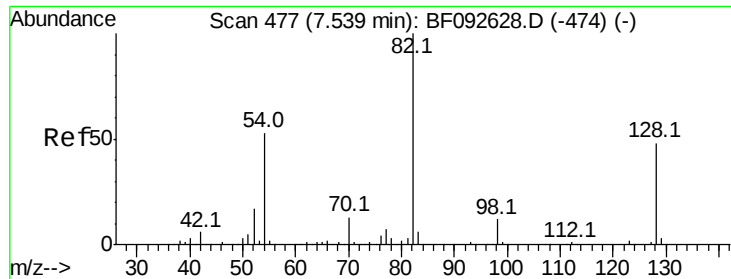
Abundance Ion 136.00 (135.70 to 136.70): E

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





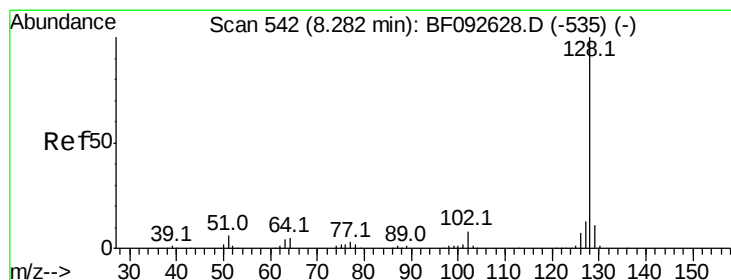
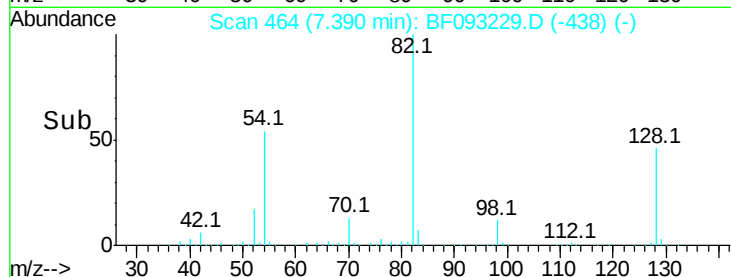
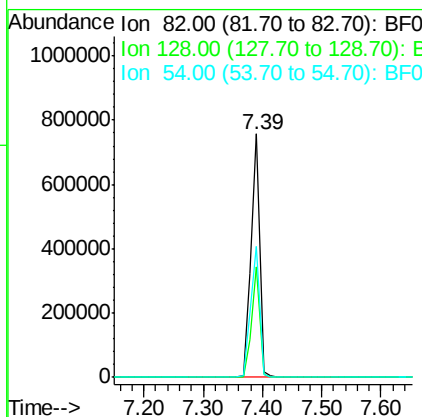
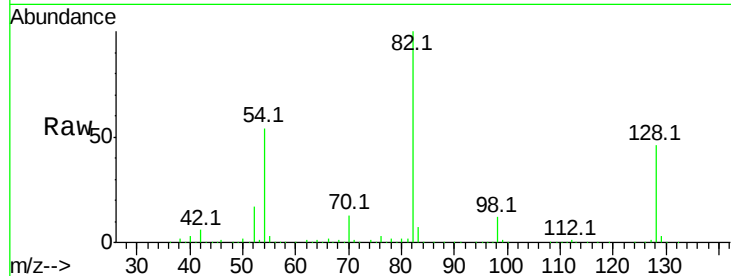
#23
 Nitrobenzene-d5
 Concen: 75.48 ng
 RT: 7.39 min Scan# 464
 Delta R.T. -0.00 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Instrument :
 BNA_F
 ClientSampleId :
 E2-B1E-ESW-2

Tot Ion	Ratio	Lower	Upper
82	100		
128	45.6	34.6	52.0
54	53.7	39.5	59.3

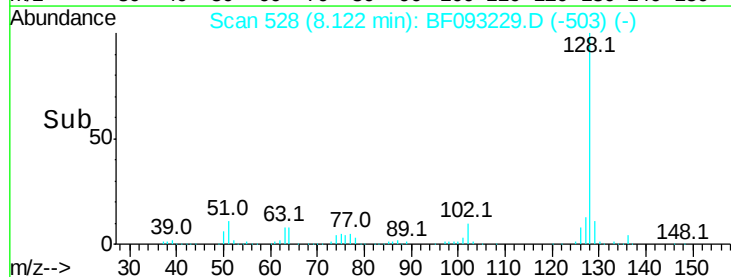
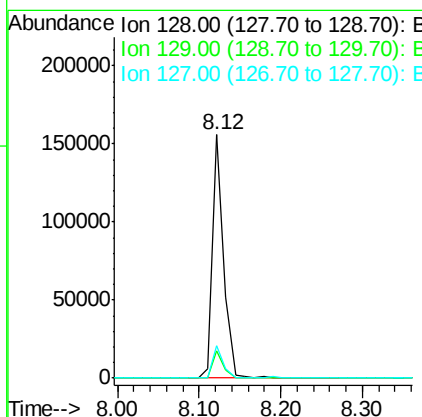
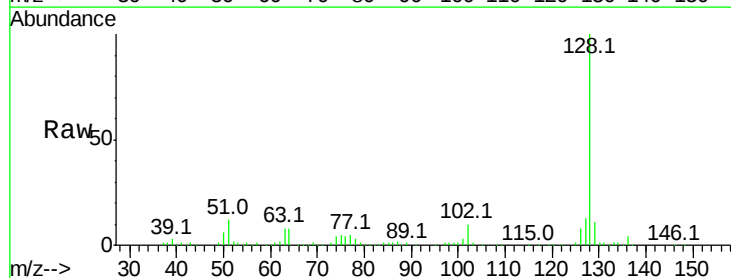
Manual Integrations
 APPROVED

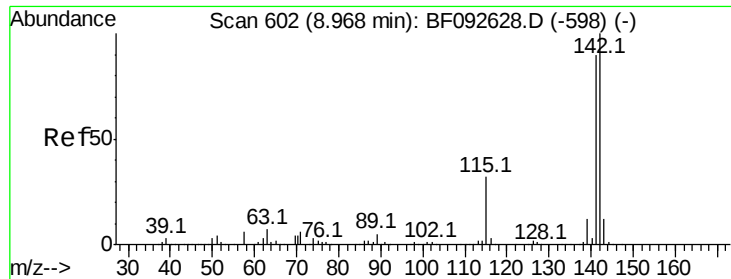
mohammad
 2/28/2017 2:35:36 PM



#31
 Naphthalene
 Concen: 5.20 ng
 RT: 8.12 min Scan# 528
 Delta R.T. -0.01 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Lower	Upper
128	100		
129	11.2	9.5	14.3
127	13.3	10.8	16.2





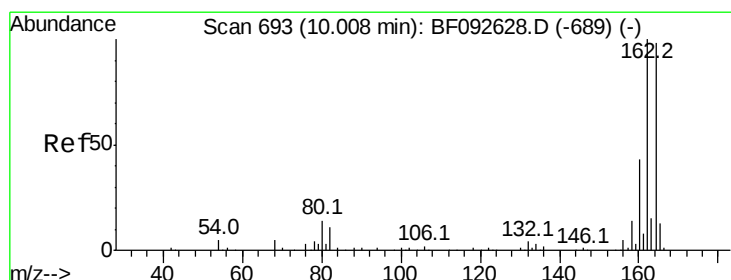
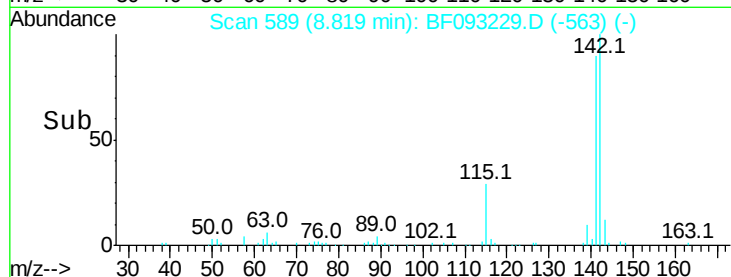
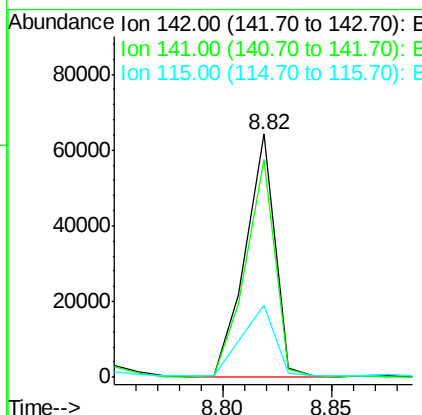
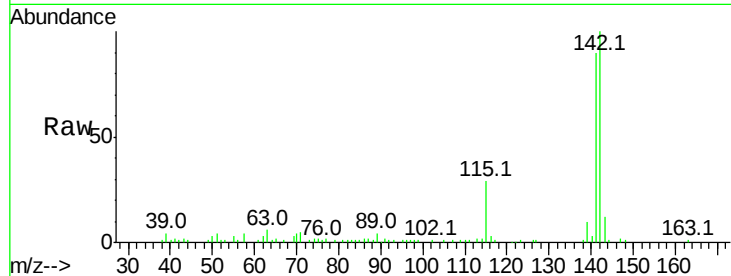
#37
2-Methylnaphthalene
Concen: 3.31 ng
RT: 8.82 min Scan# 589
Delta R.T. -0.00 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Instrument :
BNA_F
ClientSampleId :
E2-B1E-ESW-2

Tot Ion	Ratio	Lower	Upper
142	100		
141	89.7	71.0	106.6
115	29.5	28.3	42.5

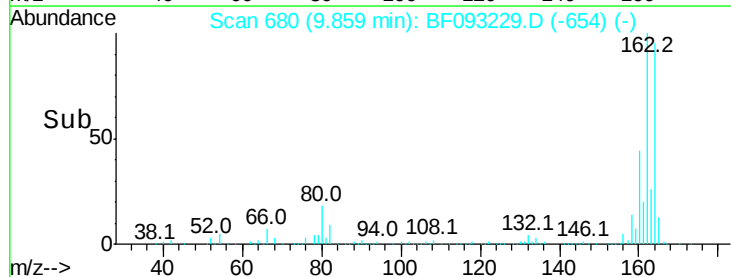
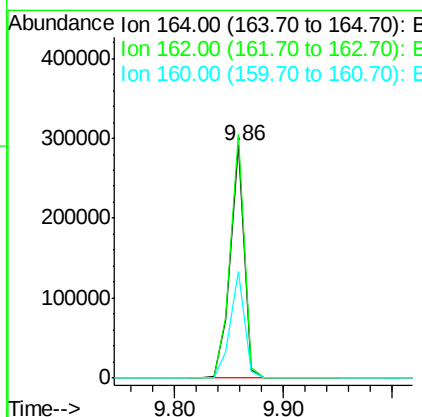
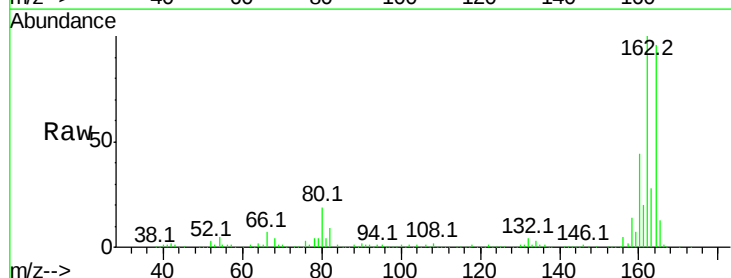
Manual Integrations
APPROVED

mohammad
2/28/2017 2:35:36 PM



#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 9.86 min Scan# 680
Delta R.T. -0.00 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Lower	Upper
164	100		
162	104.5	80.2	120.2
160	45.8	36.9	55.3





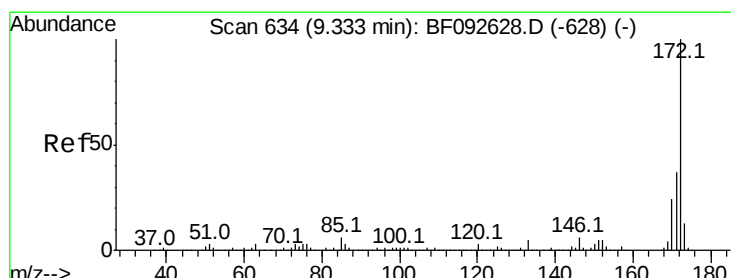
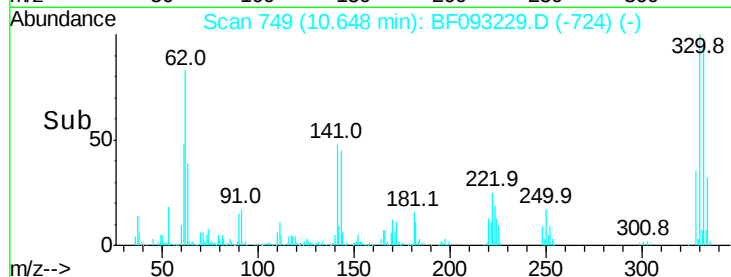
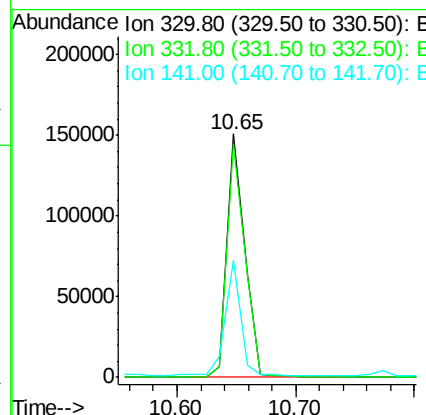
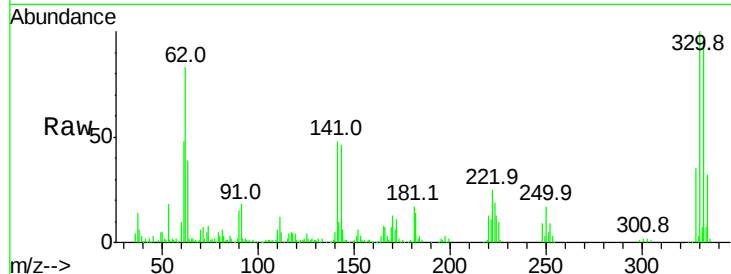
#41
 2,4,6-Tribromophenol
 Concen: 83.05 ng
 RT: 10.65 min Scan# 749
 Delta R.T. -0.01 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Instrument :
 BNA_F
 ClientSampleId :
 E2-B1E-ESW-2

Tot Ion	Ratio	Resp	Lower	Upper
330	100	155354		
332	96.8	77.4	116.2	
141	43.4	34.1	51.1	

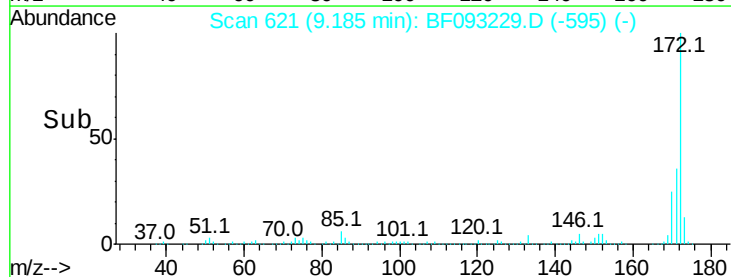
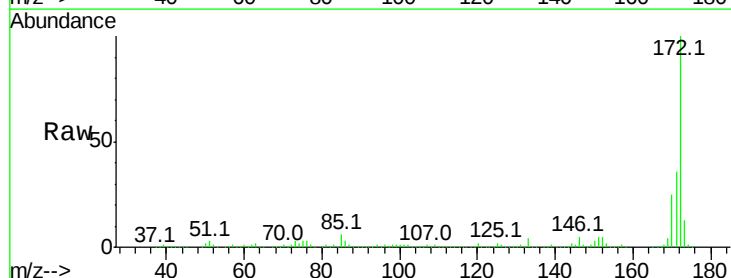
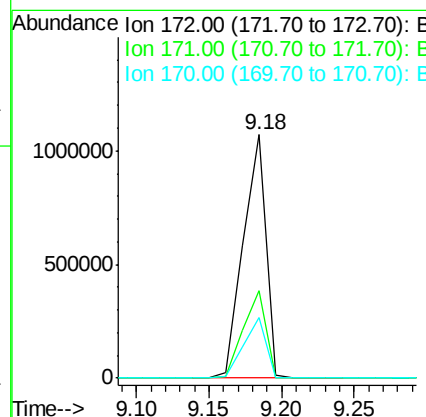
Manual Integrations
 APPROVED

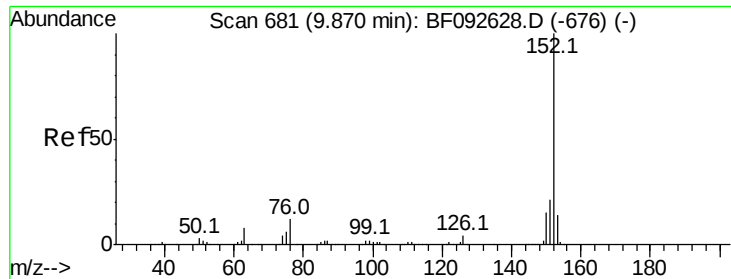
mohammad
 2/28/2017 2:35:36 PM



#44
 2-Fluorobiphenyl
 Concen: 81.26 ng
 RT: 9.18 min Scan# 621
 Delta R.T. -0.00 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Resp	Lower	Upper
172	100	1160073		
171	36.0	29.4	44.0	
170	24.7	20.2	30.4	





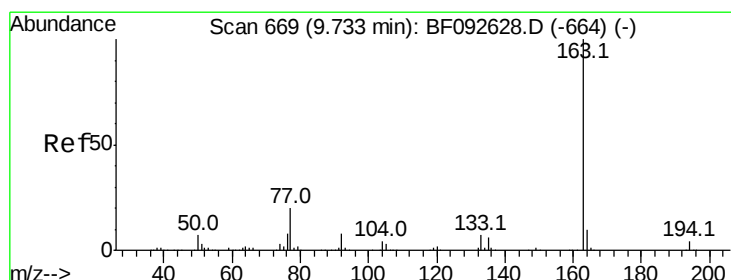
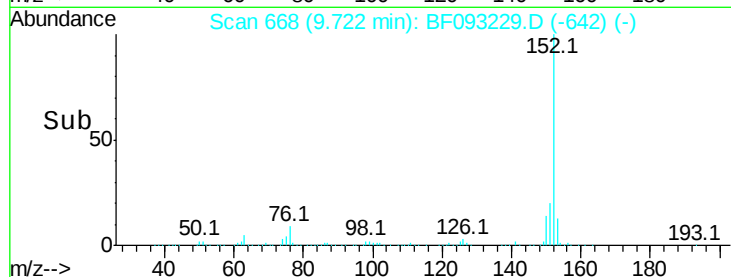
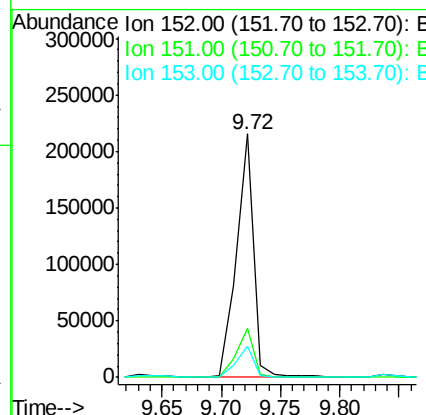
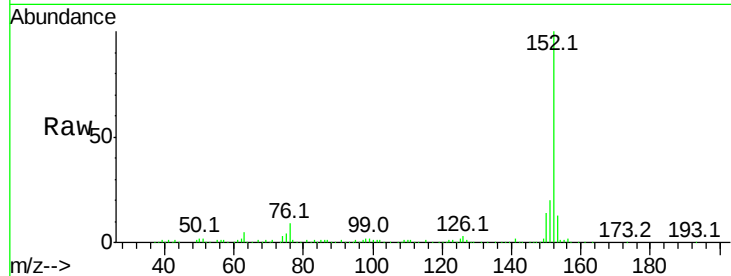
#48
Acenaphthylene
Concen: 8.48 ng
RT: 9.72 min Scan# 668
Delta R.T. -0.00 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Instrument :
BNA_F
ClientSampleId :
E2-B1E-ESW-2

Tot Ion	Ratio	Resp	Lower	Upper
152	100	214677		
151	20.0		16.9	25.3
153	13.0		11.4	17.2

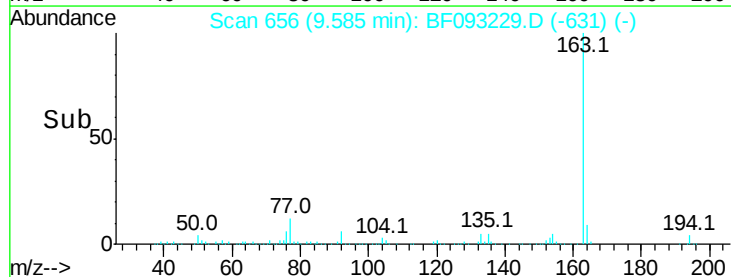
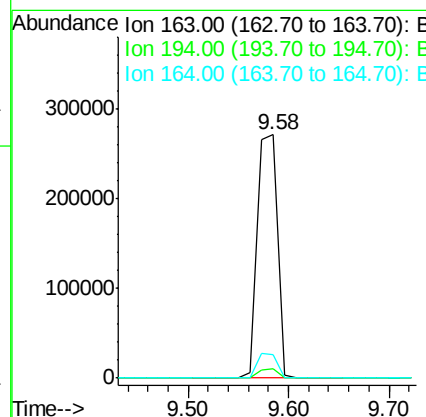
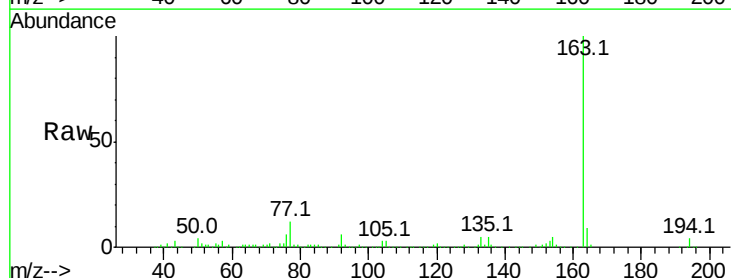
Manual Integrations
APPROVED

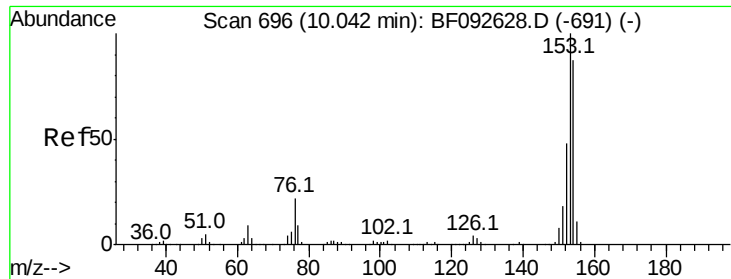
mohammad
2/28/2017 2:35:36 PM



#49
Dimethylphthalate
Concen: 21.73 ng
RT: 9.58 min Scan# 656
Delta R.T. -0.01 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Resp	Lower	Upper
163	100	378520		
194	4.1		3.0	4.4
164	9.5		8.0	12.0





#51

Acenaphthene

Concen: 4.26 ng

RT: 9.89 min Scan# 683

Delta R.T. -0.00 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

Instrument :

BNA_F

ClientSampleId :

E2-B1E-ESW-2

Tot Ion:154 Resp: 64515

Ion Ratio Lower Upper

154 100

153 121.3 88.6 133.0

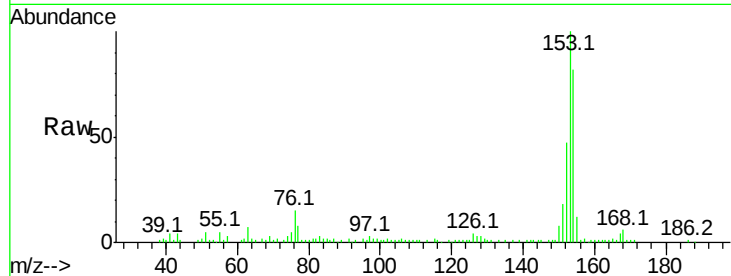
152 56.7 41.6 62.4

Manual Integrations

APPROVED

mohammad

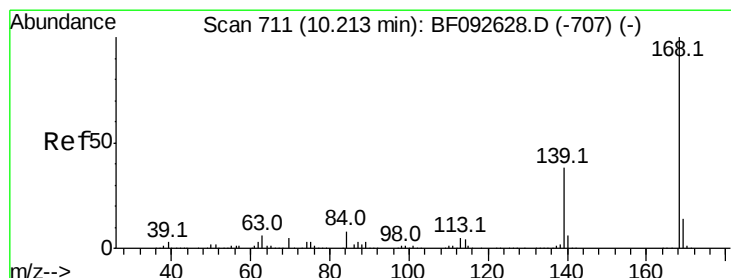
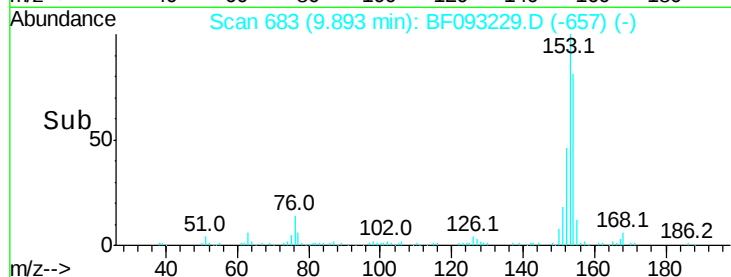
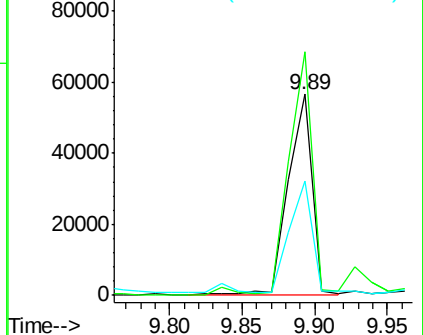
2/28/2017 2:35:36 PM



Abundance Ion 154.00 (153.70 to 154.70): E

Ion 153.00 (152.70 to 153.70): E

Ion 152.00 (151.70 to 152.70): E



#54

Dibenzofuran

Concen: 3.91 ng

RT: 10.06 min Scan# 698

Delta R.T. -0.00 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

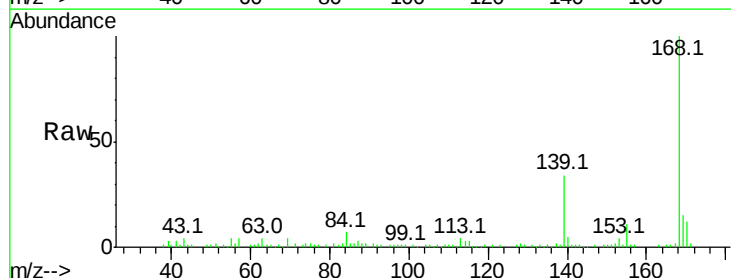
Tgt Ion:168 Resp: 79166

Ion Ratio Lower Upper

168 100

139 34.2 32.6 49.0

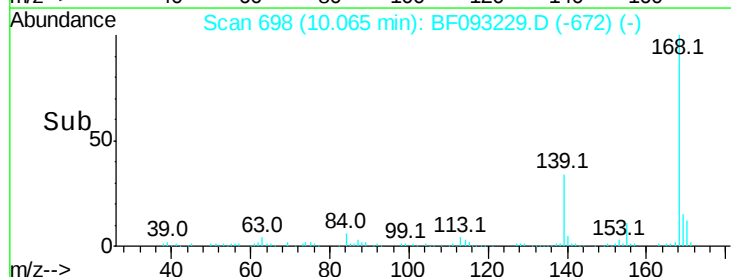
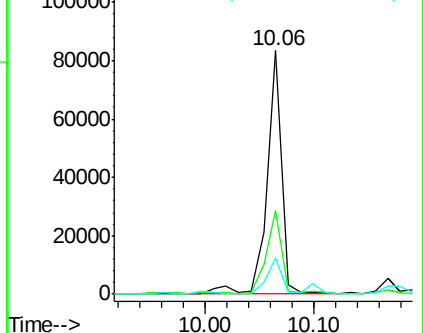
169 15.1 11.3 16.9

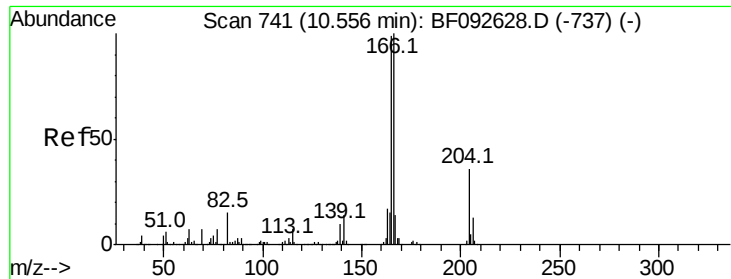


Abundance Ion 168.00 (167.70 to 168.70): E

Ion 139.00 (138.70 to 139.70): E

Ion 169.00 (168.70 to 169.70): E





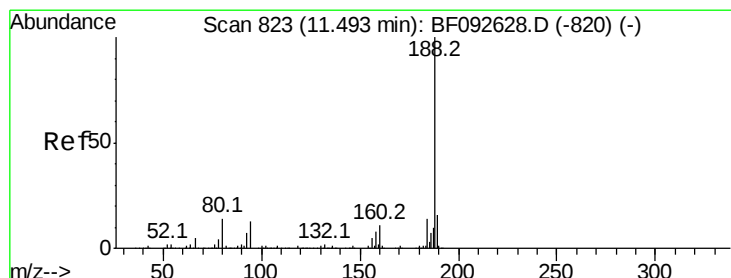
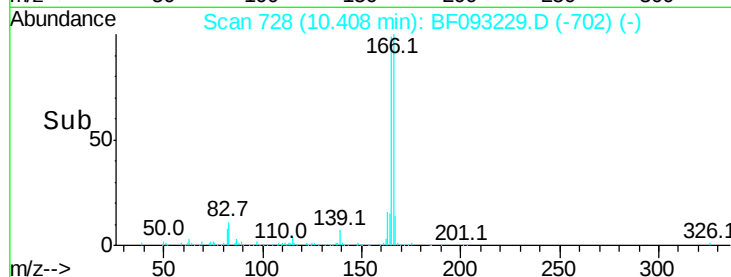
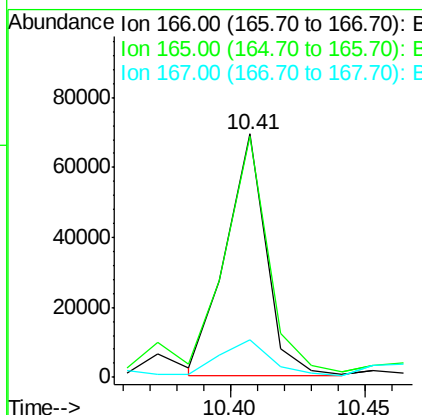
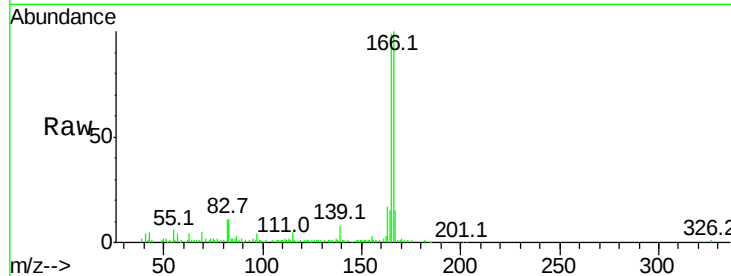
#57
Fluorene
 Concen: 4.69 ng/mL
 RT: 10.41 min Scan# 728
 Delta R.T. -0.00 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Instrument :
 BNA_F
 ClientSampleId :
 E2-B1E-ESW-2

Tot Ion	Ratio	Resp	Lower	Upper
166	100	73034		
165	99.2		77.8	116.8
167	15.3		10.8	16.2

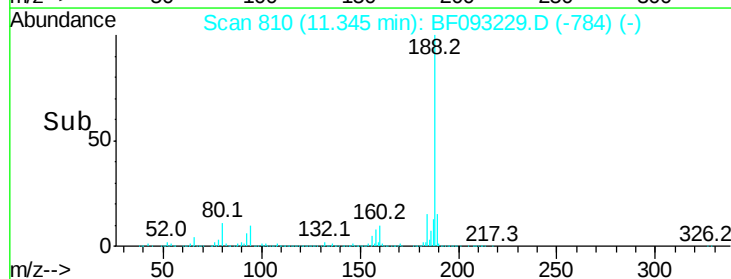
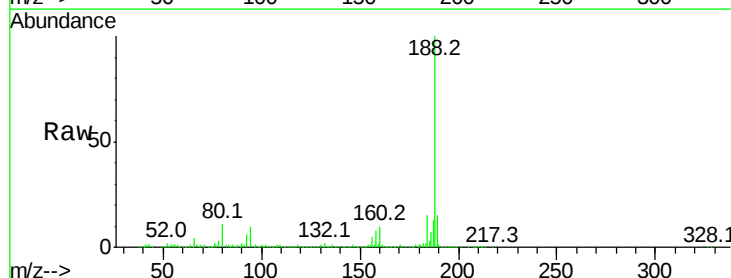
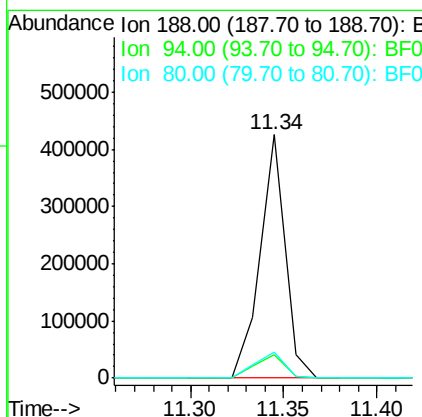
Manual Integrations
 APPROVED

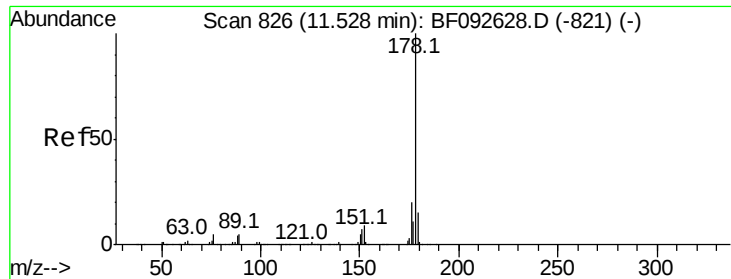
mohammad
 2/28/2017 2:35:36 PM



#63
Phenanthrene-d10
 Concen: 20.00 ng/mL
 RT: 11.34 min Scan# 810
 Delta R.T. -0.00 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Resp	Lower	Upper
188	100	394206		
94	9.9		10.0	15.0#
80	10.8		11.2	16.8#





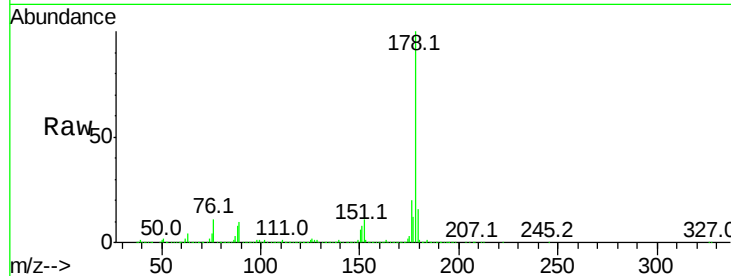
#70
Phenanthrene
Concen: 43.04 ng
RT: 11.37 min Scan# 812
Delta R.T. -0.00 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Instrument :
BNA_F
ClientSampled :
E2-B1E-ESW-2

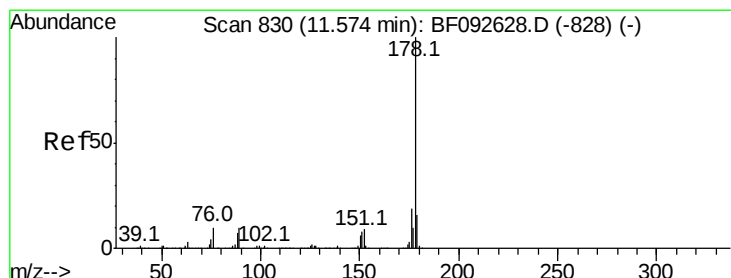
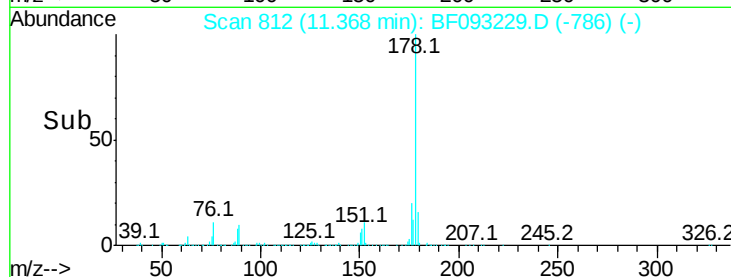
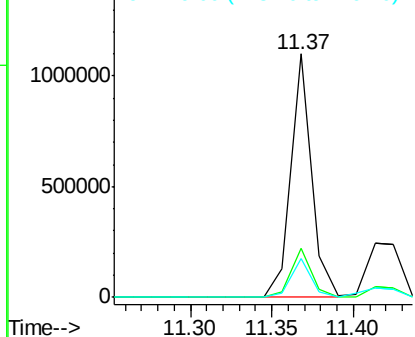
Tot Ion	Ratio	Lower	Upper
178	100		
176	20.0	16.6	25.0
179	15.8	12.8	19.2

Manual Integrations
APPROVED

mohammad
2/28/2017 2:35:36 PM



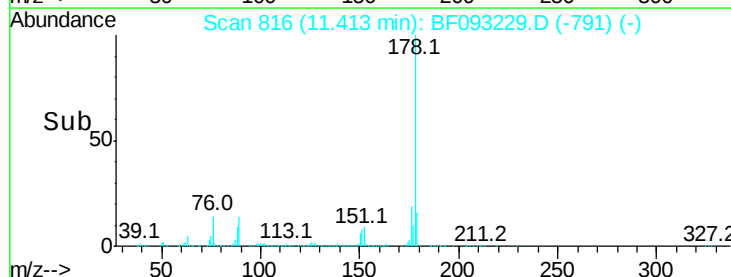
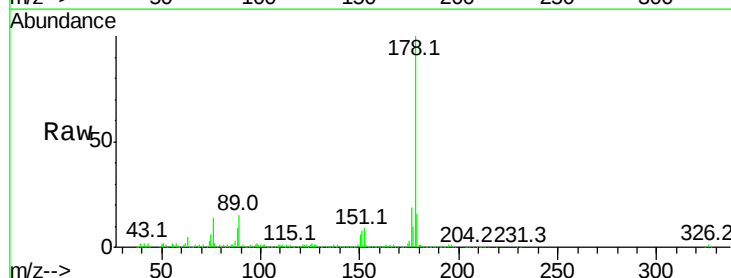
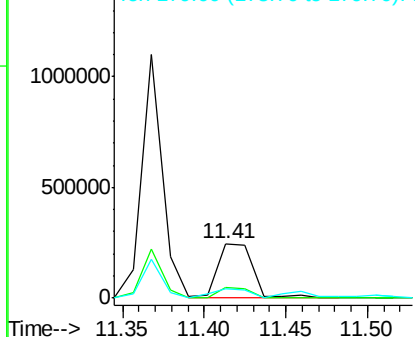
Abundance Ion 178.00 (177.70 to 178.70): E
1500000 Ion 176.00 (175.70 to 176.70): E
Ion 179.00 (178.70 to 179.70): E

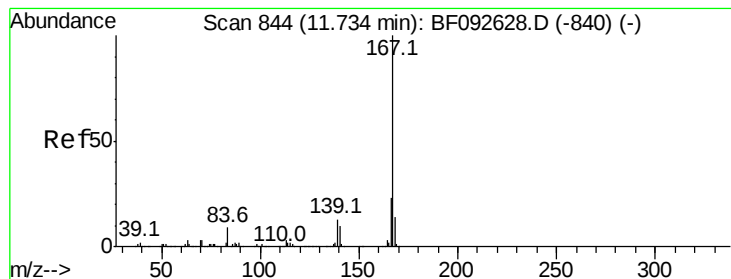


#71
Anthracene
Concen: 15.43 ng
RT: 11.41 min Scan# 816
Delta R.T. -0.01 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.9	23.9
179	16.3	13.2	19.8

Abundance Ion 178.00 (177.70 to 178.70): E
1500000 Ion 176.00 (175.70 to 176.70): E
Ion 179.00 (178.70 to 179.70): E





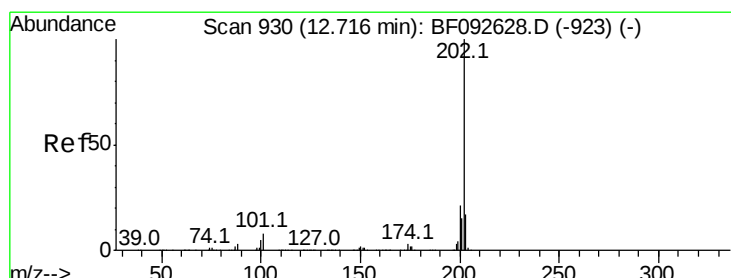
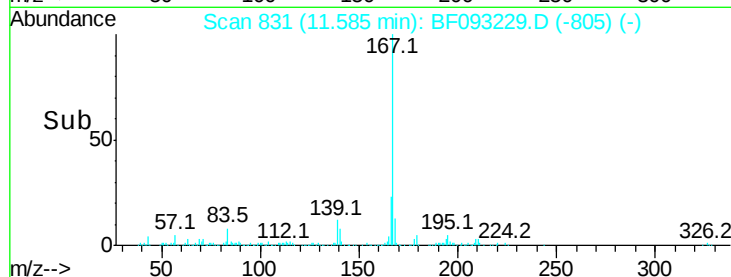
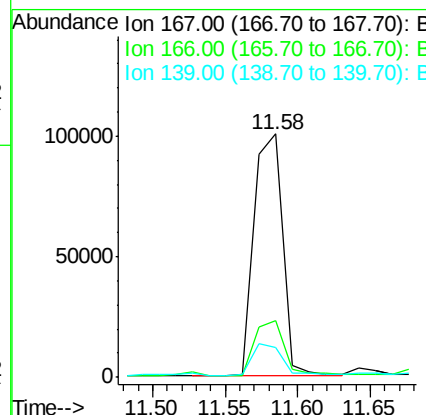
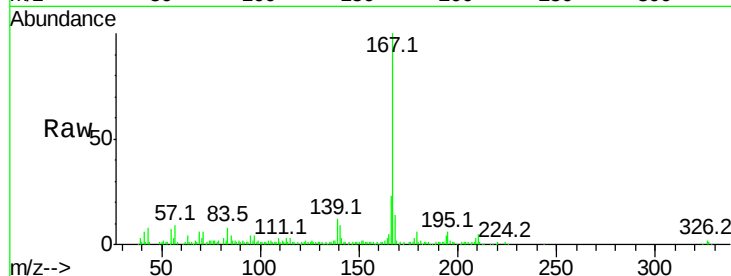
#72
 Carbazole
 Concen: 6.29 ng
 RT: 11.58 min Scan# 831
 Delta R.T. -0.00 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Instrument :
 BNA_F
 ClientSampleId :
 E2-B1E-ESW-2

Tot Ion	Ratio	Resp	Lower	Upper
167	100			
166	23.3	18.2	27.2	
139	12.4	11.4	17.2	

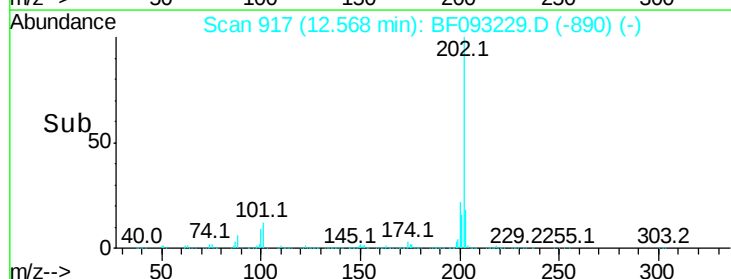
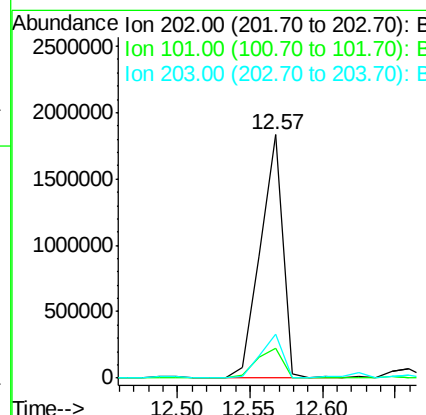
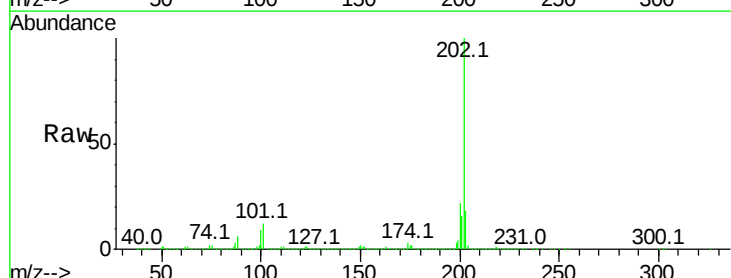
Manual Integrations
 APPROVED

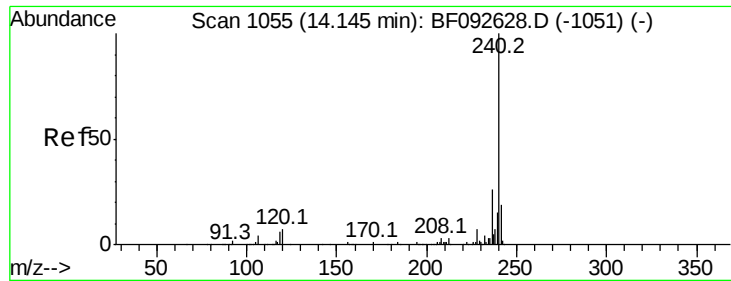
mohammad
 2/28/2017 2:35:36 PM



#74
 Fluoranthene
 Concen: 84.44 ng
 RT: 12.57 min Scan# 917
 Delta R.T. 0.01 min
 Lab File: BF093229.D
 Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Resp	Lower	Upper
202	100			
101	12.1	0.0	34.6	
203	18.0	0.0	38.7	





#75

Chrysene-d12

Concen: 20.00 ng

RT: 14.00 min Scan# 1042

Delta R.T. 0.01 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

Instrument :

BNA_F

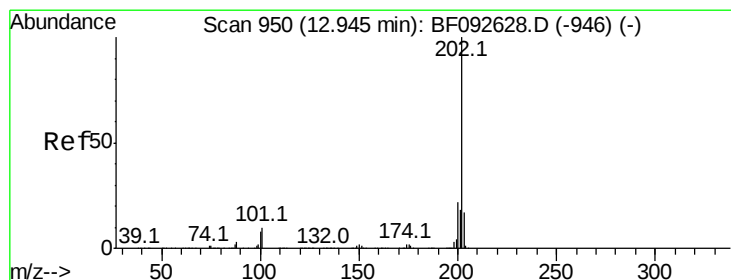
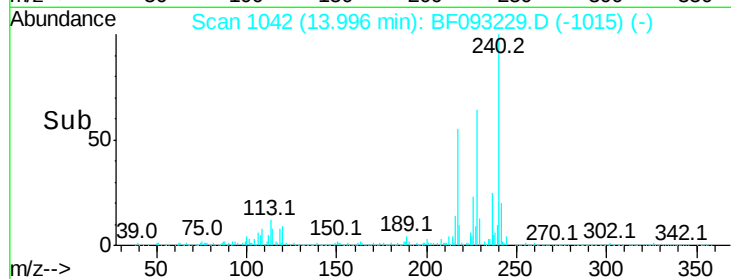
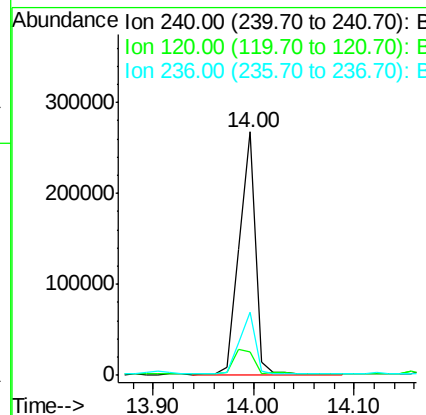
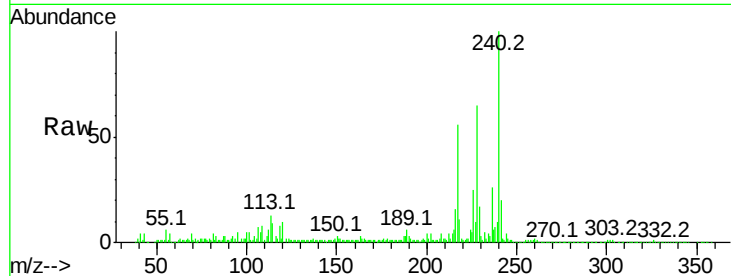
ClientSampleId :

E2-B1E-ESW-2

Tot Ion	Ratio	Resp	Lower	Upper
240	100	298150		
120	9.7	12.9	19.3	
236	25.8	20.9	31.3	

Manual Integrations
APPROVED

mohammad
2/28/2017 2:35:36 PM



#77

Pyrene

Concen: 82.23 ng

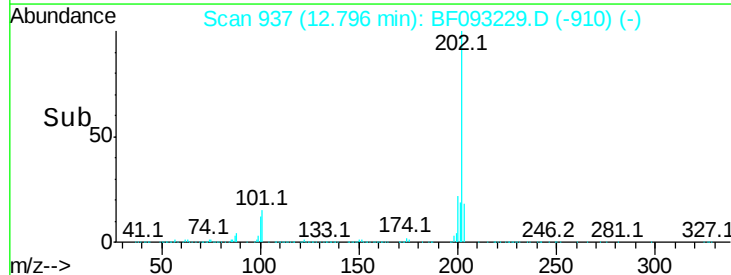
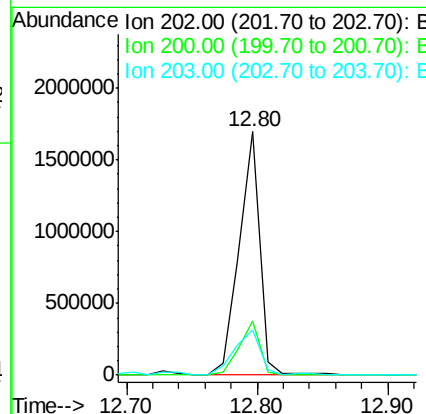
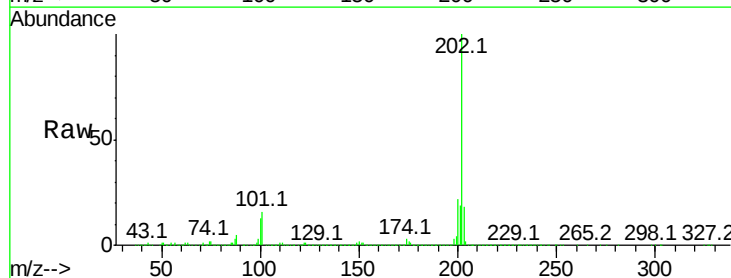
RT: 12.80 min Scan# 937

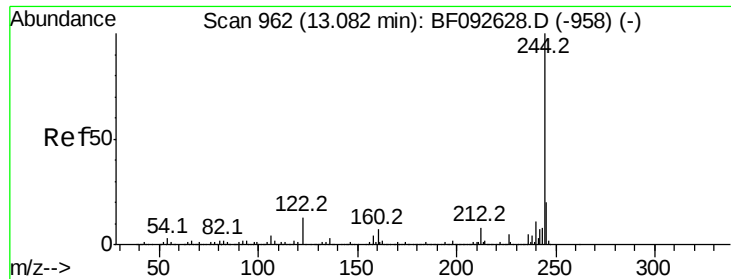
Delta R.T. 0.01 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Resp	Lower	Upper
202	100	1834851		
200	22.4	17.7	26.5	
203	18.3	14.7	22.1	





#78

Terphenyl-d14

Concen: 61.91 ng

RT: 12.93 min Scan# 949

Delta R.T. -0.00 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

Instrument :

BNA_F

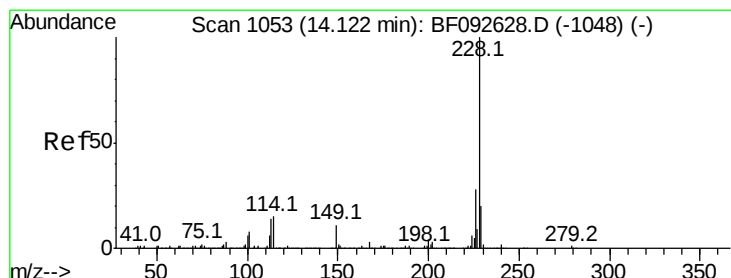
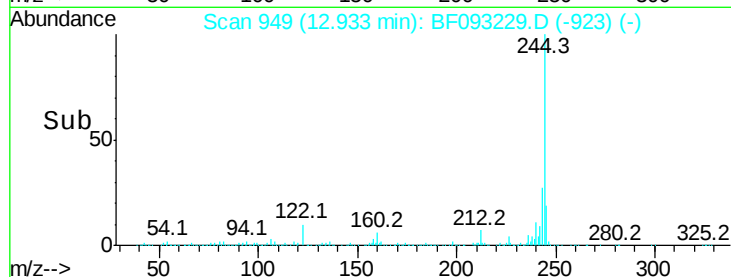
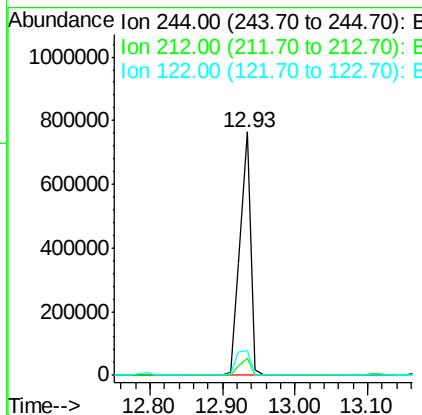
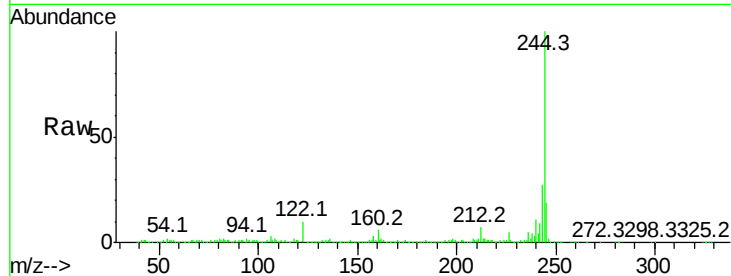
ClientSampleId :

E2-B1E-ESW-2

Tot Ion	Ratio	Lower	Upper
244	100		
212	7.2	6.2	9.2
122	10.1	11.4	17.2

Manual Integrations
APPROVED

mohammad
2/28/2017 2:35:36 PM



#80

Benzo(a)anthracene

Concen: 58.70 ng

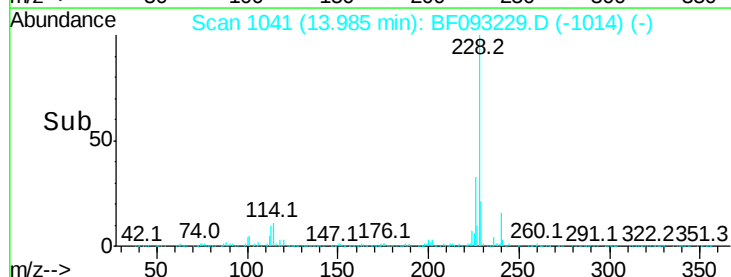
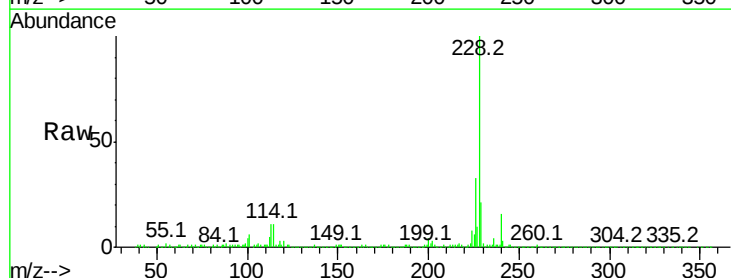
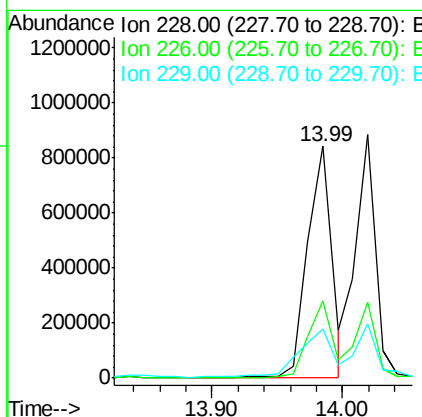
RT: 13.99 min Scan# 1041

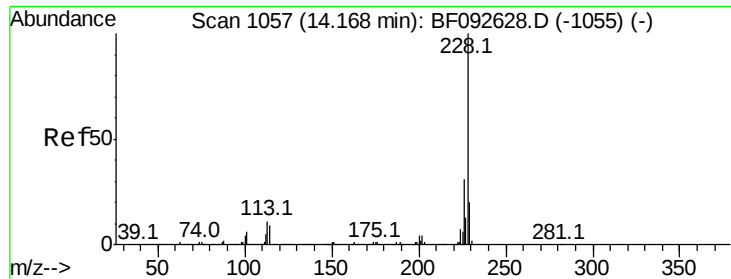
Delta R.T. 0.01 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Lower	Upper
228	100		
226	33.1	22.4	33.6
229	21.0	16.2	24.4





#82

Chrysene

Concen: 54.90 ng/mL

RT: 14.02 min Scan# 1044

Delta R.T. -0.00 min

Lab File: BF093229.D

Acq: 28 Feb 2017 2:37

Instrument :

BNA_F

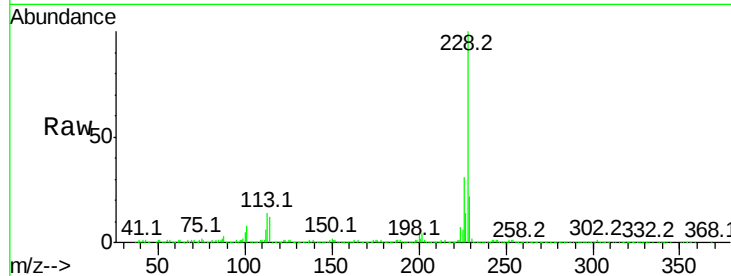
ClientSampleId :

E2-B1E-ESW-2

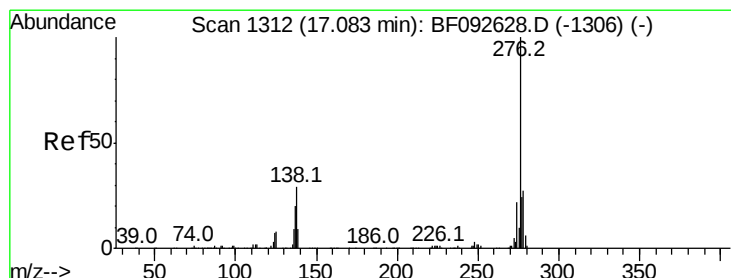
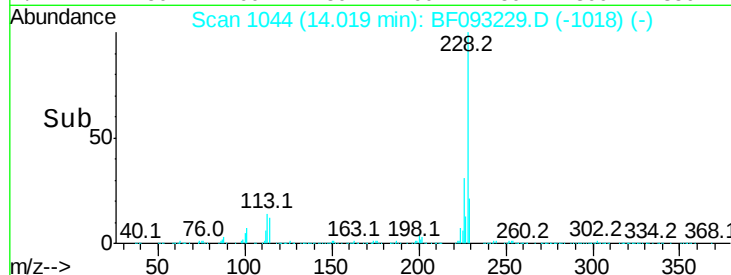
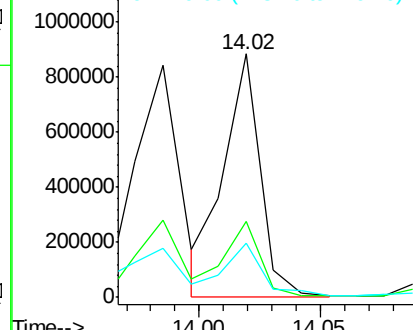
Tot Ion:	228	Resp:	937390
Ion Ratio	Lower	Upper	
228	100		
226	31.3	25.4	38.0
229	22.2	16.2	24.2

Manual Integrations
APPROVED

mohammad
2/28/2017 2:35:36 PM



Abundance Ion 228.00 (227.70 to 228.70): E
Ion 226.00 (225.70 to 226.70): E
Ion 229.00 (228.70 to 229.70): E



#85

Indeno(1,2,3-cd)pyrene

Concen: 38.52 ng/mL

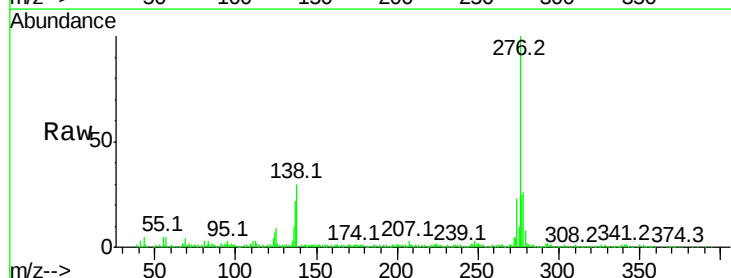
RT: 16.83 min Scan# 1290

Delta R.T. 0.01 min

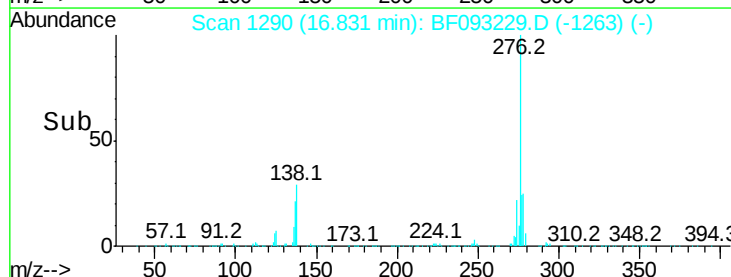
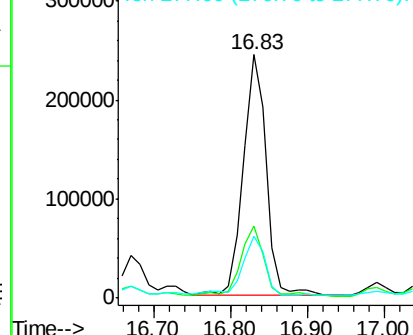
Lab File: BF093229.D

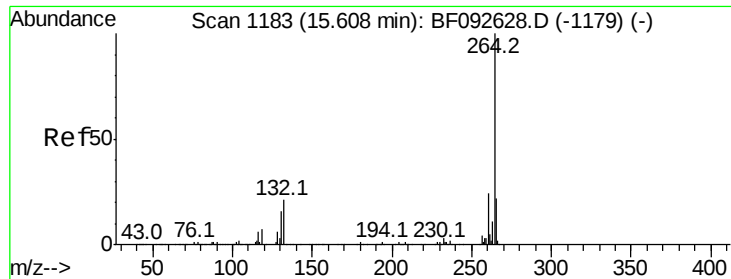
Acq: 28 Feb 2017 2:37

Tgt Ion:	276	Resp:	509390
Ion Ratio	Lower	Upper	
276	100		
138	27.1	21.8	32.6
277	24.3	20.2	30.4



Abundance Ion 276.00 (275.70 to 276.70): E
Ion 138.00 (137.70 to 138.70): E
Ion 277.00 (276.70 to 277.70): E





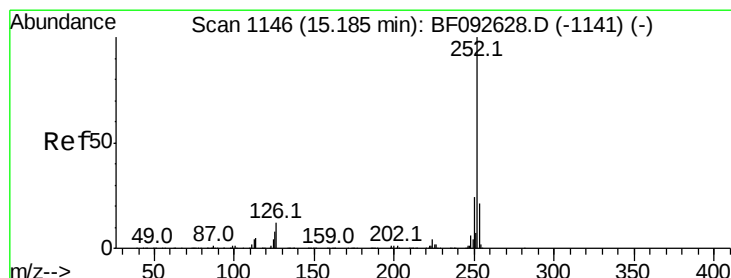
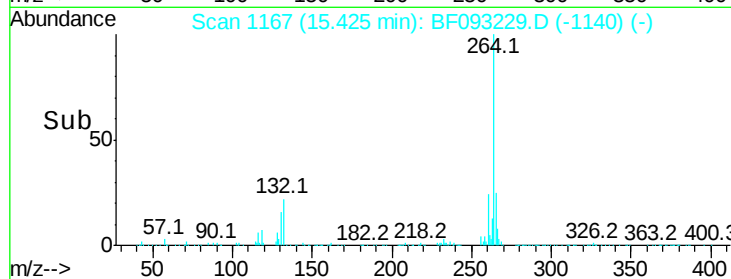
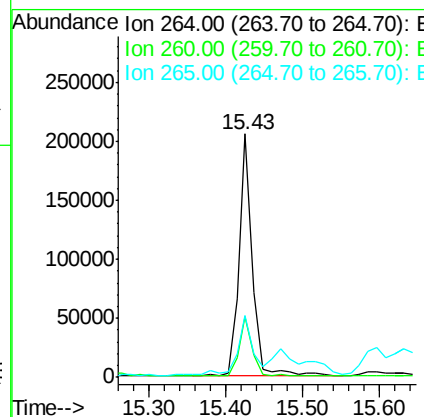
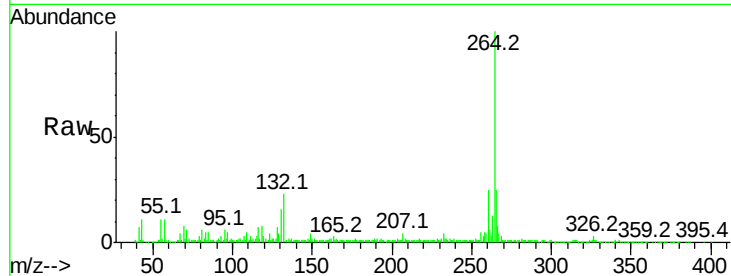
#86
Pervlene-d12
Concen: 20.00 ng
RT: 15.43 min Scan# 1167
Delta R.T. 0.01 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Instrument :
BNA_F
ClientSampleId :
E2-B1E-ESW-2

Tot Ion	Ratio	Lower	Upper
264	100		
260	24.8	19.2	28.8
265	25.3	17.4	26.0

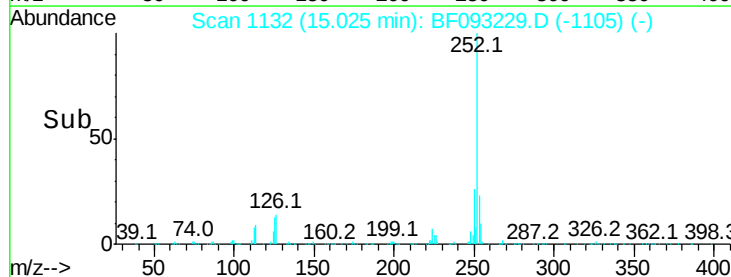
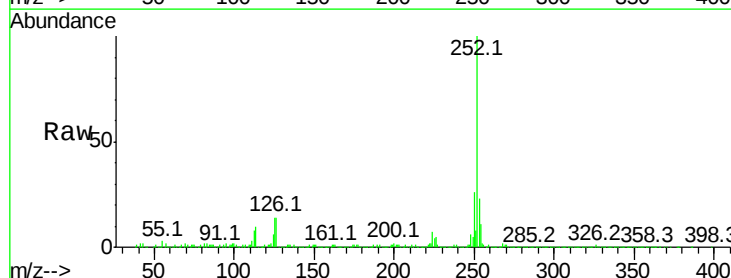
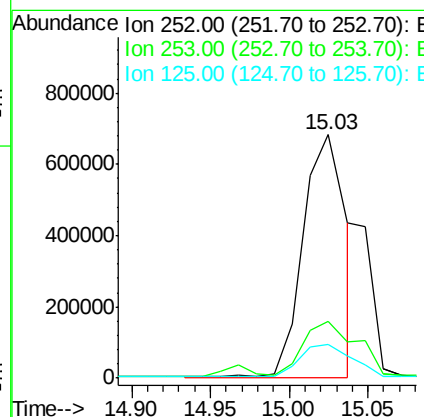
Manual Integrations
APPROVED

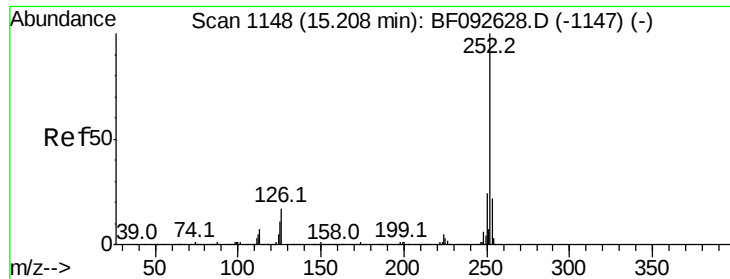
mohammad
2/28/2017 2:35:36 PM



#87
Benzo(b)fluoranthene
Concen: 76.43 ng m
RT: 15.03 min Scan# 1132
Delta R.T. 0.01 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.2	18.2	27.4
125	13.6	9.8	14.6





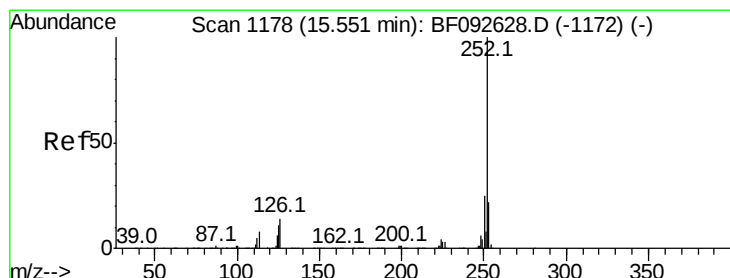
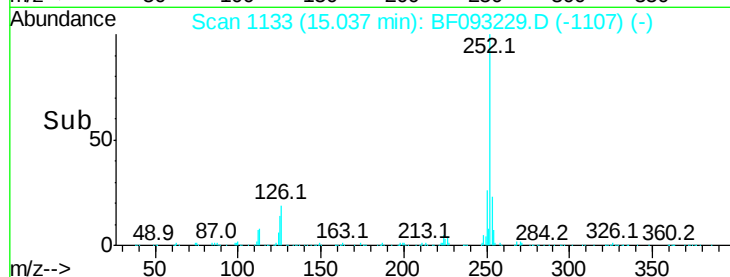
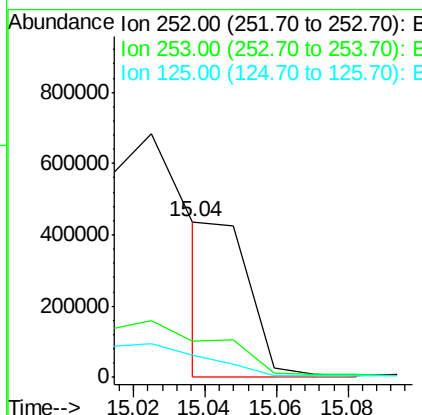
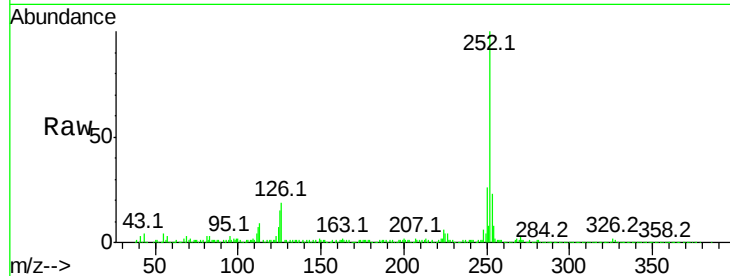
#88
Benzo(k)fluoranthene
Concen: 21.94 ng m
RT: 15.04 min Scan# 1133
Delta R.T. -0.00 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Instrument :
BNA_F
ClientSampleId :
E2-B1E-ESW-2

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.5	18.5	27.7
125	14.6	8.9	13.3

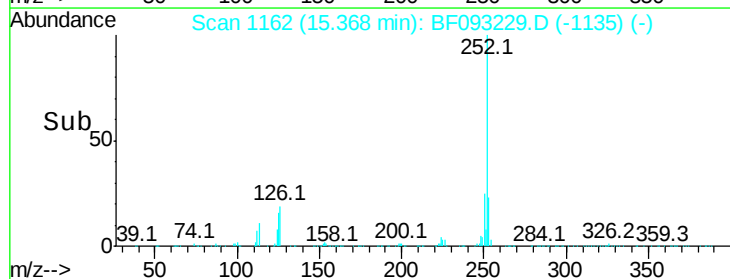
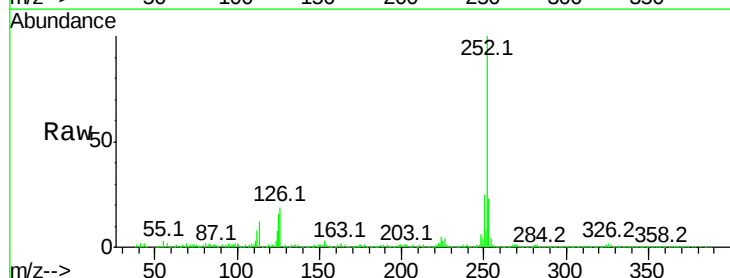
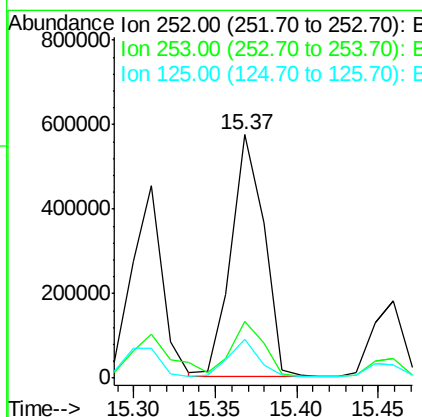
Manual Integrations
APPROVED

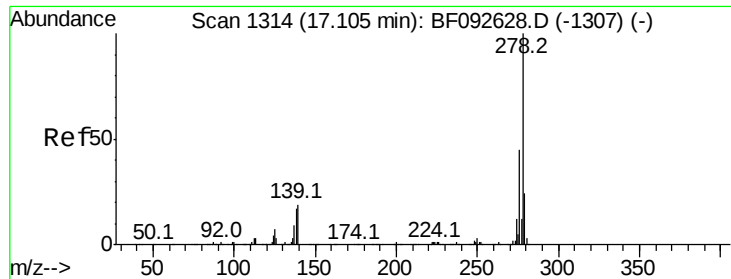
mohammad
2/28/2017 2:35:36 PM



#89
Benzo(a)pyrene
Concen: 55.13 ng
RT: 15.37 min Scan# 1162
Delta R.T. 0.01 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.5	18.2	27.2
125	15.9	10.0	15.0





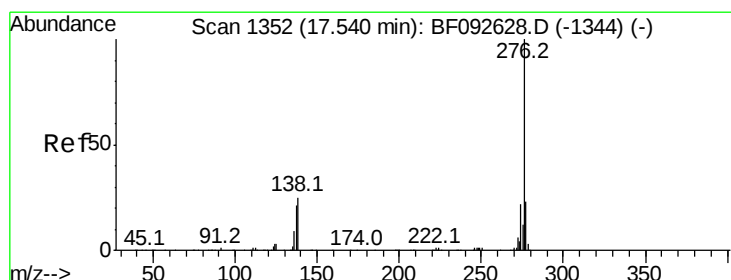
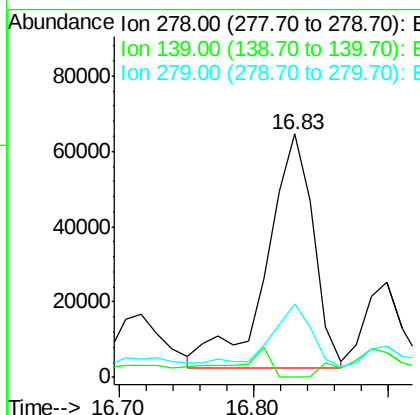
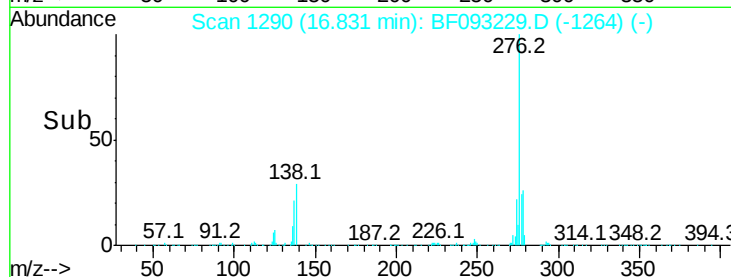
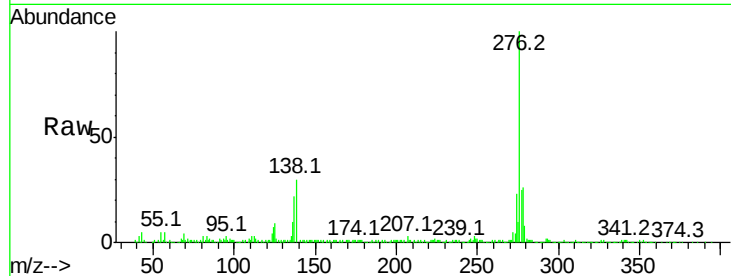
#90
Dibenzo(a,h)anthracene
Concen: 12.68 ng/mL
RT: 16.83 min Scan# 1290
Delta R.T. -0.00 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Instrument :
BNA_F
ClientSampleId :
E2-B1E-ESW-2

Tot Ion	Ratio	Lower	Upper
278	100		
139	0.0	14.8	22.2#
279	29.9	19.8	29.6#

Manual Integrations
APPROVED

mohammad
2/28/2017 2:35:36 PM



#91
Benzo(g,h,i)perylene
Concen: 39.41 ng/mL
RT: 17.27 min Scan# 1328
Delta R.T. 0.02 min
Lab File: BF093229.D
Acq: 28 Feb 2017 2:37

Tgt Ion	Ratio	Lower	Upper
276	100		
277	25.1	19.2	28.8
138	27.6	16.0	24.0#

