

Data Path : Z:\HPCHEM1\BNA F\DATA\BF030817\
 Data File : BF093448.D
 Acq On : 9 Mar 2017 00:18
 Operator : SJ/MA
 Sample : I2106-05
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 HY-SB413B

Manual Integrations
 APPROVED

mohammad
 3/10/2017 8:12:14 AM

Quant Time: Mar 09 00:54:04 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF030717.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Mar 07 15:55:22 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.77	152	173445	20.00	ng	0.00
21) Naphthalene-d8	8.06	136	568605	20.00	ng	0.00
38) Acenaphthene-d10	9.81	164	236416	20.00	ng	0.00
63) Phenanthrene-d10	11.29	188	322145	20.00	ng	0.01
75) Chrysene-d12	13.95	240	249262	20.00	ng	0.02
86) Perylene-d12	15.37	264	244117	20.00	ng	0.05
System Monitoring Compounds						
5) 2-Fluorophenol	5.36	112	851500	81.71	ng	0.01
7) Phenol-d6	6.42	99	1179249	89.73	ng	0.01
23) Nitrobenzene-d5	7.34	82	699003	68.21	ng	0.00
41) 2,4,6-Tribromophenol	10.61	330	121933	79.16	ng	0.01
44) 2-Fluorobiphenyl	9.13	172	888940	69.94	ng	0.00
78) Terphenyl-d14	12.88	244	451542	47.10	ng	0.01
Target Compounds						Qvalue
10) Phenol	6.44	94	71022	4.41	ng	79
31) Naphthalene	8.08	128	655283	23.00	ng	98
37) 2-Methylnaphthalene	8.77	142	200830	11.08	ng	97
45) 1,1'-Biphenyl	9.24	154	93123	5.41	ng	97
48) Acenaphthylene	9.67	152	54923	2.53	ng	93
49) Dimethylphthalate	9.53	163	95276	6.08	ng	99
51) Acenaphthene	9.84	154	197367	15.35	ng	97
54) Dibenzofuran	10.01	168	412458	25.63	ng	94
57) Fluorene	10.36	166	292195m	21.43	ng	
70) Phenanthrene	11.33	178	909401	49.46	ng	98
71) Anthracene	11.37	178	451642	24.28	ng	99
72) Carbazole	11.53	167	81138	4.64	ng	# 85
74) Fluoranthene	12.52	202	1185944	66.77	ng	100
77) Pyrene	12.74	202	1060500	58.50	ng	99
80) Benzo(a)anthracene	13.95	228	509672	34.62	ng	# 93
82) Chrysene	13.98	228	424459m	31.17	ng	
85) Indeno(1,2,3-cd)pyrene	16.76	276	151842	13.32	ng	99
87) Benzo(b)fluoranthene	14.97	252	479901m	32.28	ng	
88) Benzo(k)fluoranthene	14.99	252	160997m	11.23	ng	
89) Benzo(a)pyrene	15.32	252	288992	21.27	ng	# 85
91) Benzo(g,h,i)perylene	17.18	276	140493	12.18	ng	# 84

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

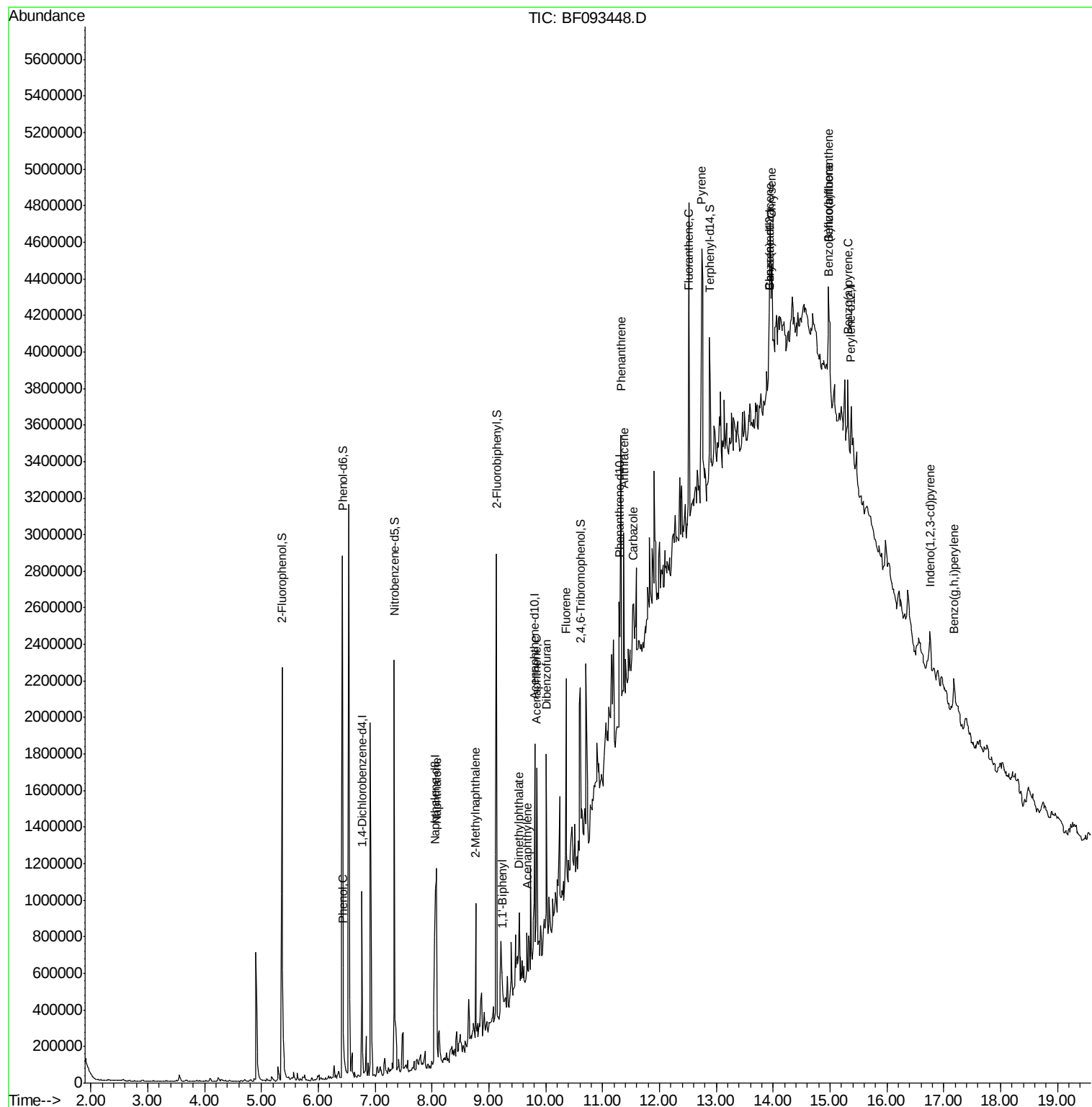
Data Path : Z:\HPCHEM1\BNA F\DATA\BF030817\
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Misc :
ALS Vial : 20 Sample Multiplier: 1

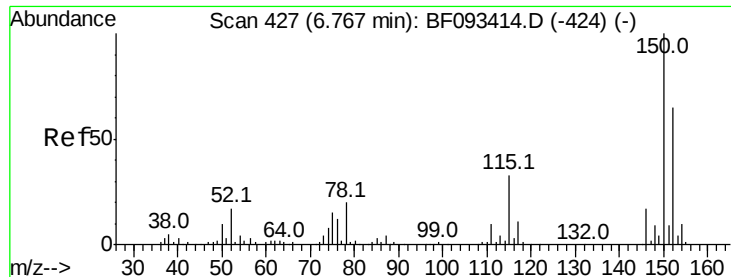
Instrument :
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#1

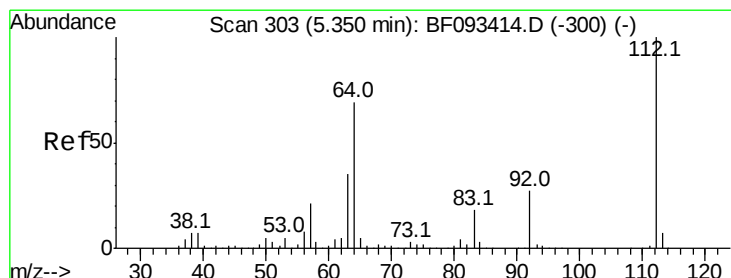
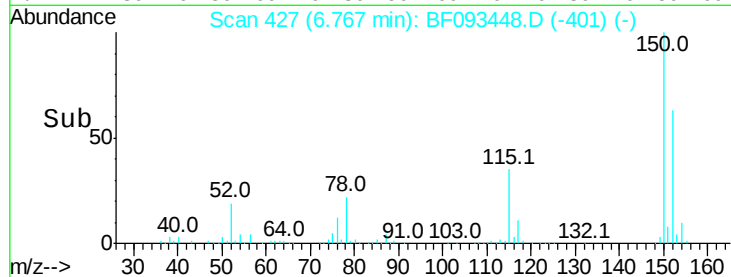
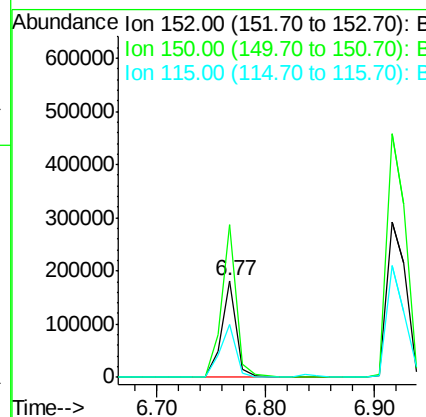
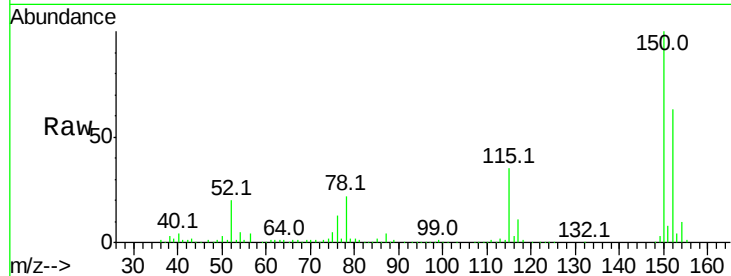
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 6.77 min Scan# 427
Delta R.T. -0.00 min
Lab File: BF093448.D
Acq: 9 Mar 2017 00:18

Instrument :
BNA_F
ClientSampleId :
HY-SB413B

Tot Ion	Ratio	Lower	Upper
152	100		
150	157.7	124.9	187.3
115	54.9	46.0	69.0

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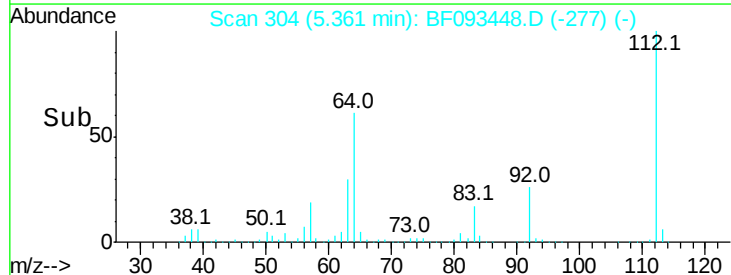
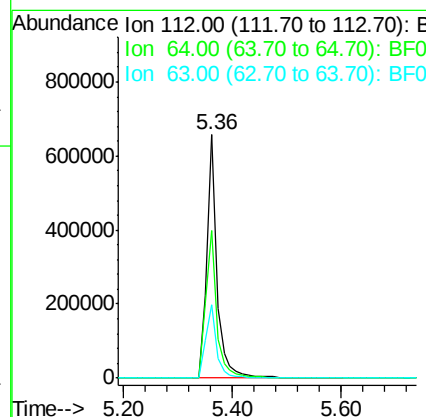
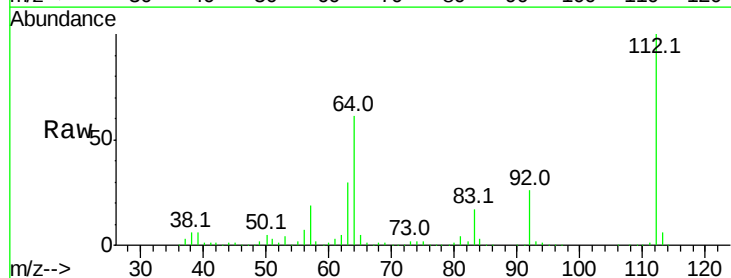
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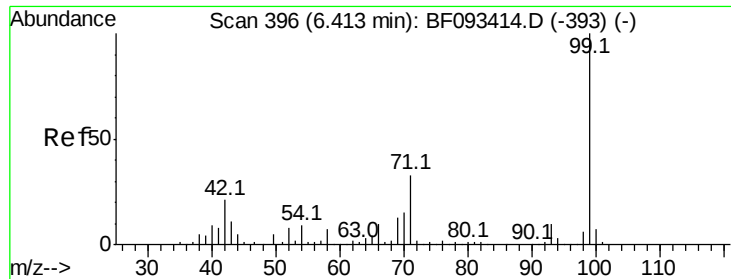


#5

2-Fluorophenol
Concen: 81.71 ng
RT: 5.36 min Scan# 304
Delta R.T. 0.01 min
Lab File: BF093448.D
Acq: 9 Mar 2017 00:18

Tgt Ion	Ratio	Lower	Upper
112	100		
64	60.8	46.1	69.1
63	30.2	23.8	35.6





#7

Phenol-d6

Concen: 89.73 ng

RT: 6.42 min Scan# 397

Delta R.T. 0.01 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

ClientSampleId :

HY-SB413B

Tot Ion: 99 Resp: 1179249

Ion Ratio Lower Upper

99 100

42 18.3 15.6 23.4

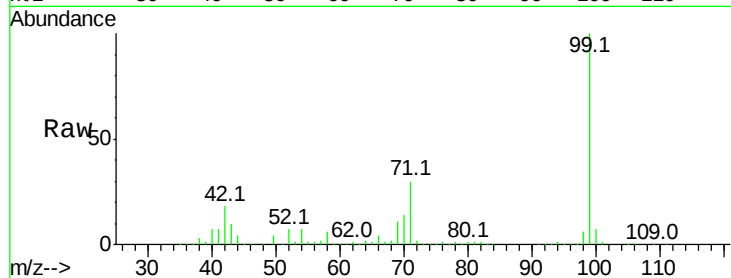
71 30.1 27.5 41.3

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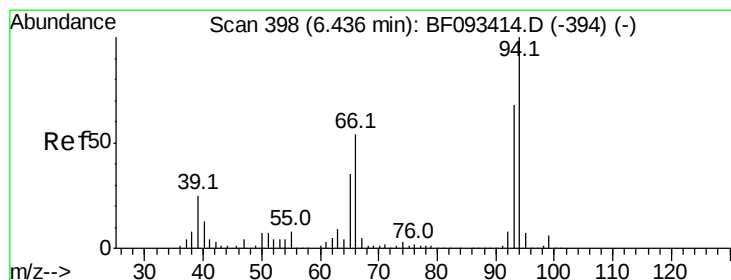
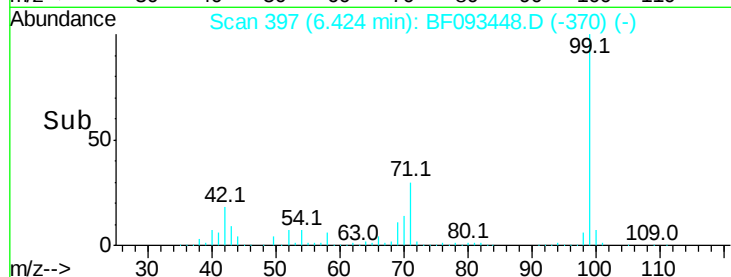
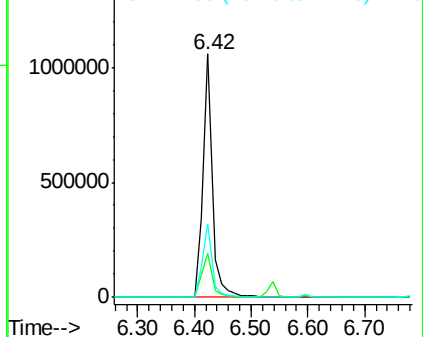
3/10/2017 8:12:14 AM



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



#10

Phenol

Concen: 4.41 ng

RT: 6.44 min Scan# 398

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

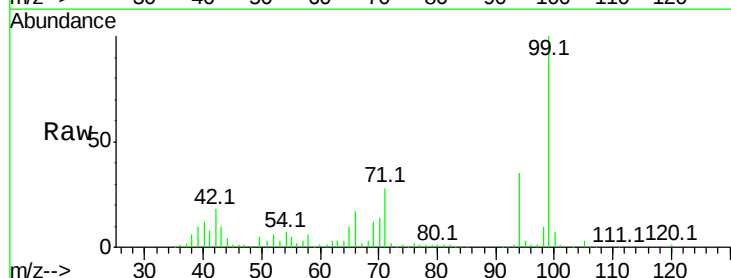
Tgt Ion: 94 Resp: 71022

Ion Ratio Lower Upper

94 100

65 28.8 21.4 61.4

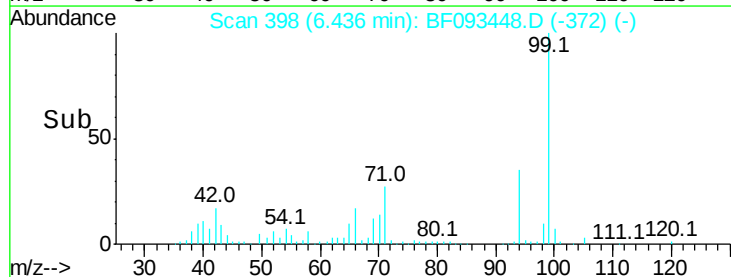
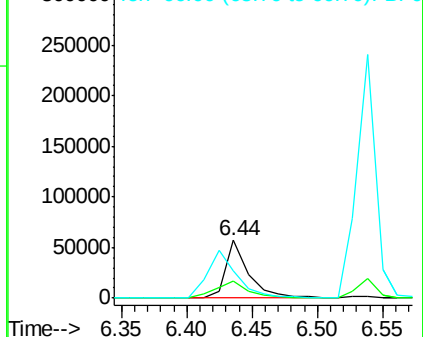
66 47.1 44.0 84.0

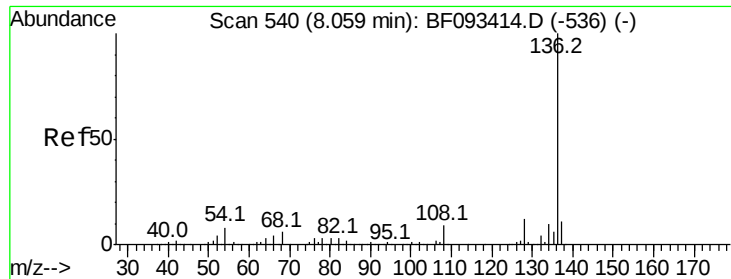


Abundance Ion 94.00 (93.70 to 94.70): BF0

Ion 65.00 (64.70 to 65.70): BF0

Ion 66.00 (65.70 to 66.70): BF0





#21

Naphthalene-d8

Concen: 20.00 ng

RT: 8.06 min Scan# 540

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

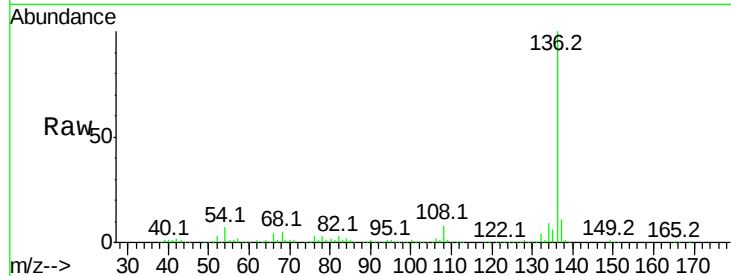
ClientSampleId :

HY-SB413B

Tot Ion	Ratio	Resp Lower	Upper
136	100		
137	10.7	8.4	12.6
54	6.9	4.5	6.7#
68	4.9	3.6	5.4

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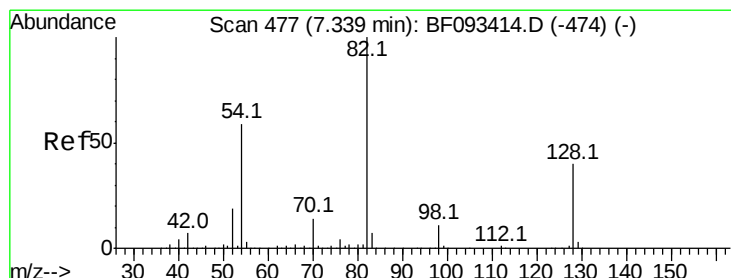
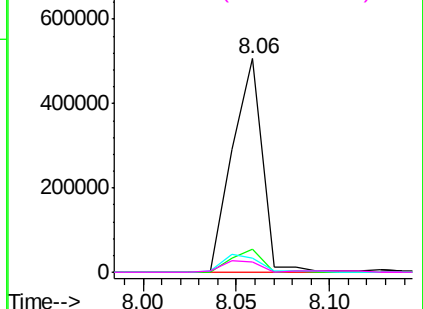
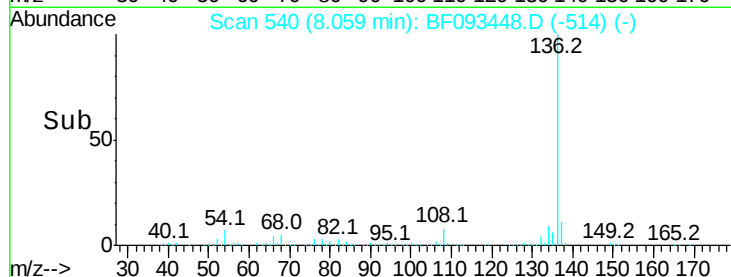


Abundance Ion 136.00 (135.70 to 136.70): E

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: 68.21 ng

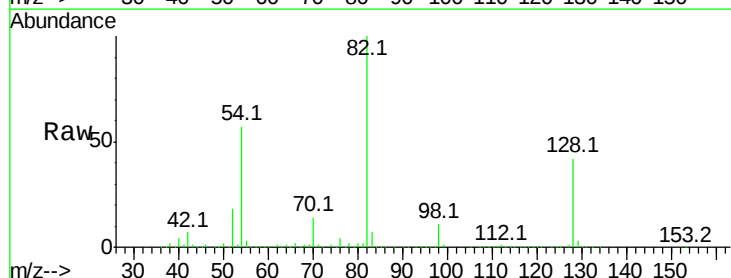
RT: 7.34 min Scan# 477

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

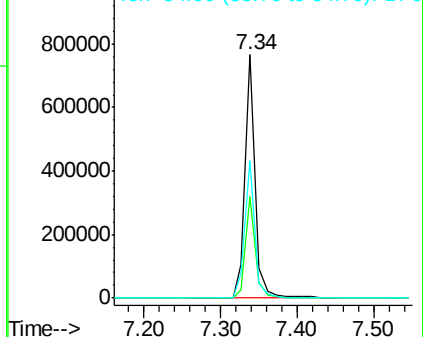
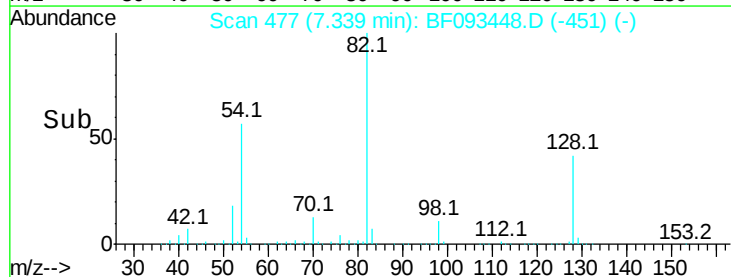
Tgt Ion	Ratio	Resp Lower	Upper
82	100		
128	41.7	34.6	52.0
54	56.7	39.5	59.3

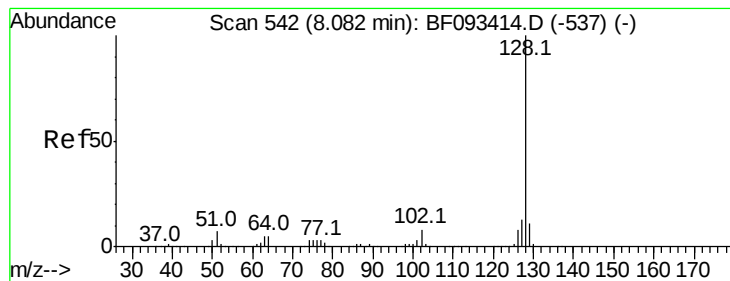


Abundance Ion 82.00 (81.70 to 82.70): BF0

Ion 128.00 (127.70 to 128.70): E

Ion 54.00 (53.70 to 54.70): BF0





#31

Naphthalene

Concen: 23.00 ng

RT: 8.08 min Scan# 542

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

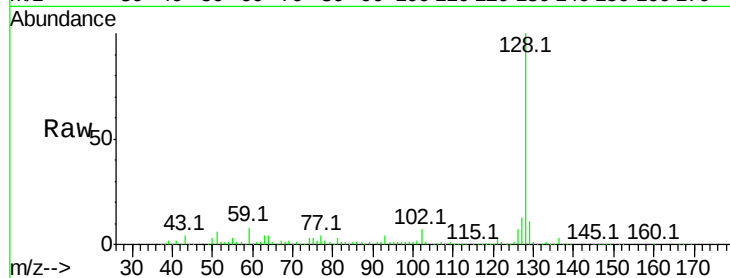
ClientSampleId :

HY-SB413B

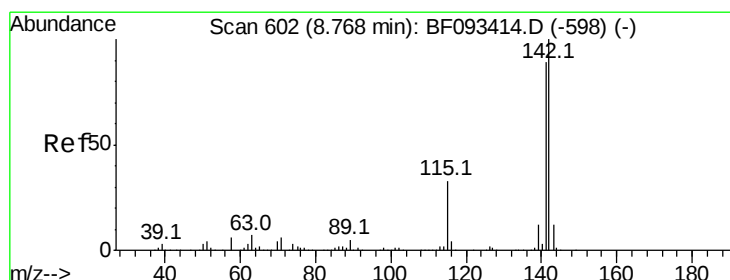
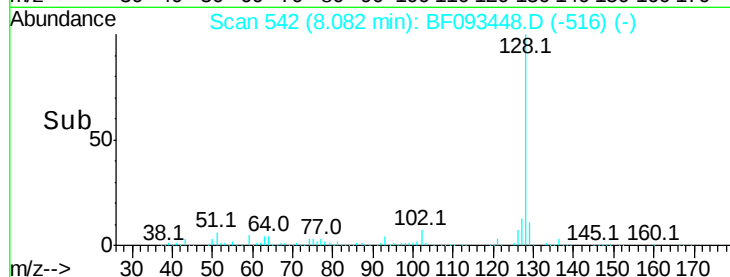
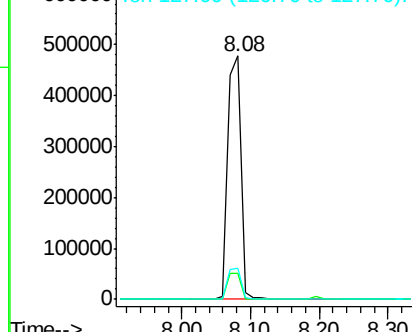
Tot Ion:128	Resp:	655283
Ion Ratio	Lower	Upper
128 100		
129 10.9	9.5	14.3
127 12.9	10.8	16.2

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Abundance Ion 128.00 (127.70 to 128.70): E
Ion 129.00 (128.70 to 129.70): E
Ion 127.00 (126.70 to 127.70): E



#37

2-Methylnaphthalene

Concen: 11.08 ng

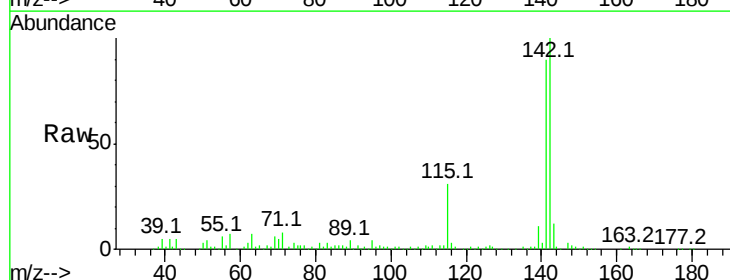
RT: 8.77 min Scan# 602

Delta R.T. -0.00 min

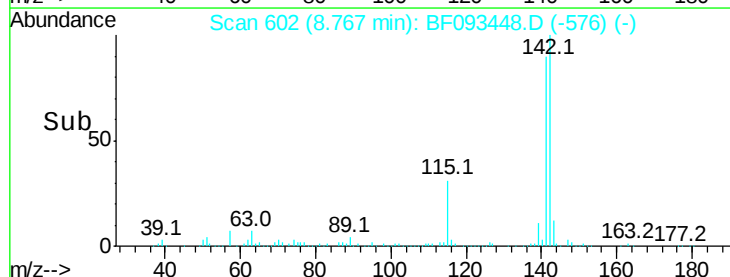
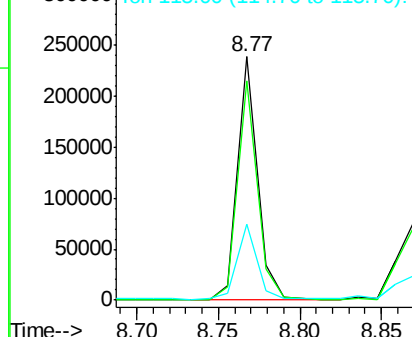
Lab File: BF093448.D

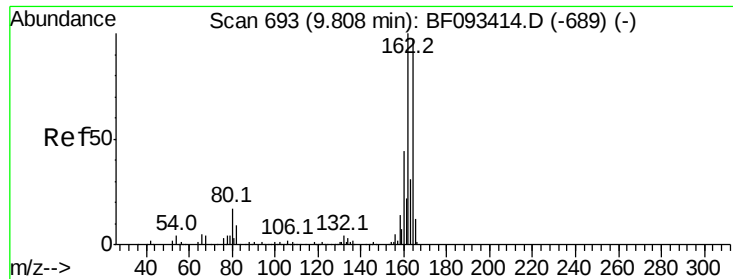
Acq: 9 Mar 2017 00:18

Tgt Ion:142	Resp:	200830
Ion Ratio	Lower	Upper
142 100		
141 90.3	71.0	106.6
115 31.2	28.3	42.5



Abundance Ion 142.00 (141.70 to 142.70): E
Ion 141.00 (140.70 to 141.70): E
Ion 115.00 (114.70 to 115.70): E





#38

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.81 min Scan# 693

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

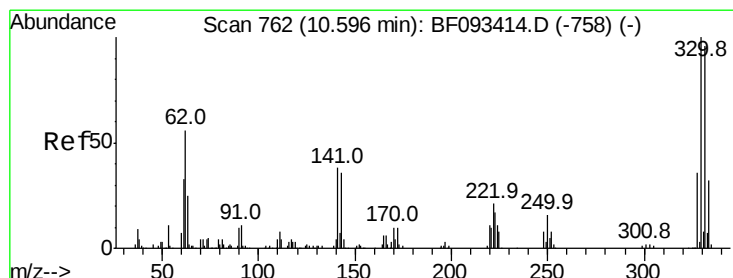
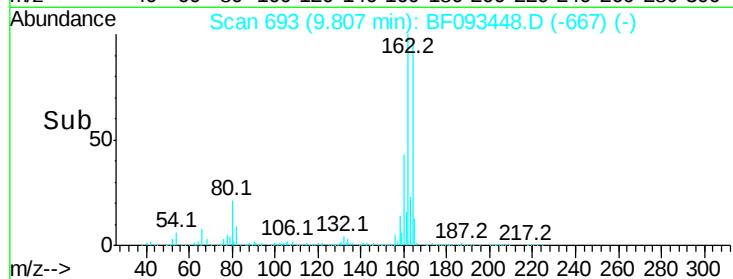
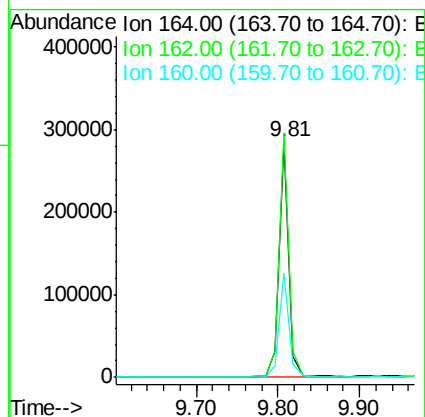
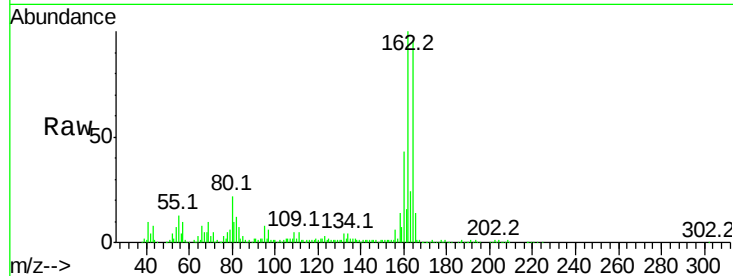
ClientSampleId :

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Tot Ion:	164	Resp:	236416
Ion Ratio	Lower	Upper	
164	100		
162	103.7	80.2	120.2
160	44.2	36.9	55.3

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#41

2,4,6-Tribromophenol

Concen: 79.16 ng

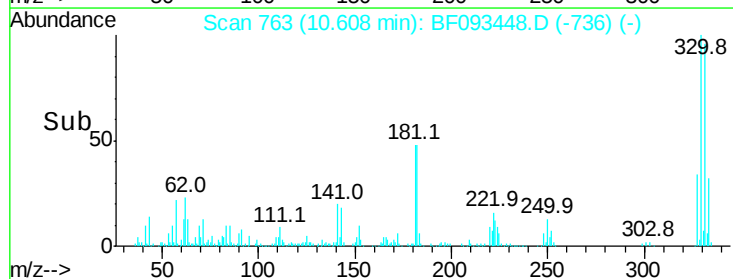
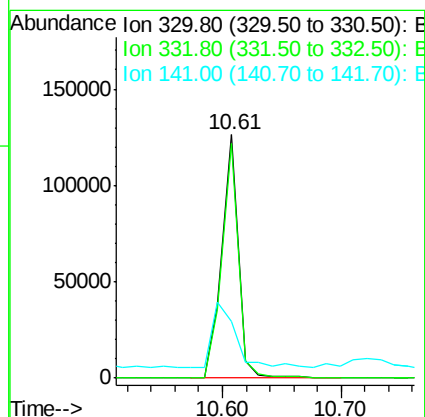
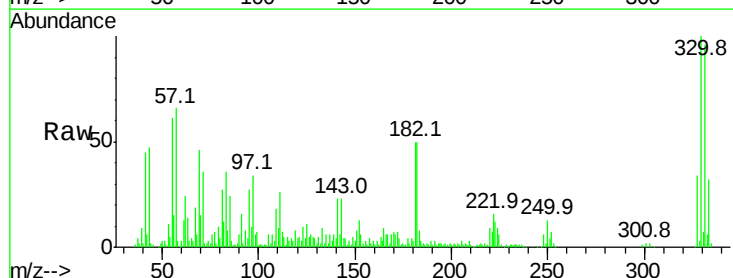
RT: 10.61 min Scan# 763

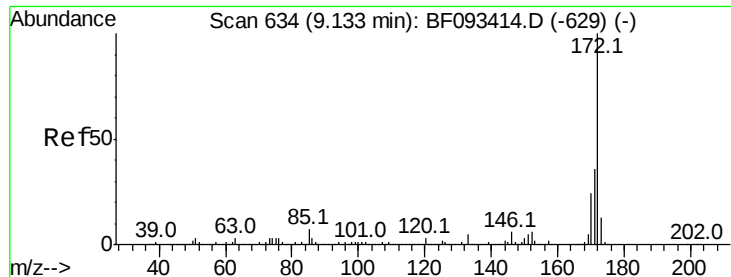
Delta R.T. 0.01 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion:	330	Resp:	121933
Ion Ratio	Lower	Upper	
330	100		
332	97.0	77.4	116.2
141	38.3	34.1	51.1





#44

2-Fluorobiphenyl

Concen: 69.94 ng

RT: 9.13 min Scan# 634

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

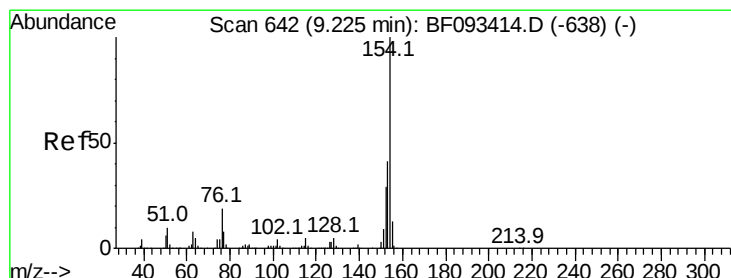
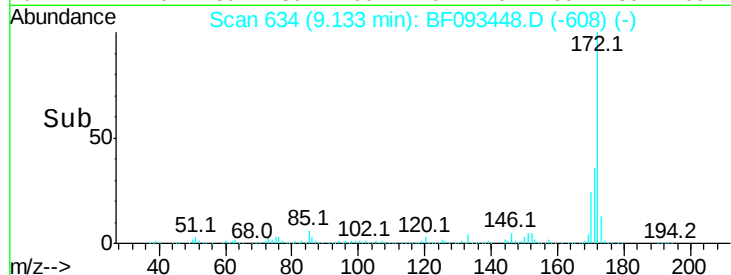
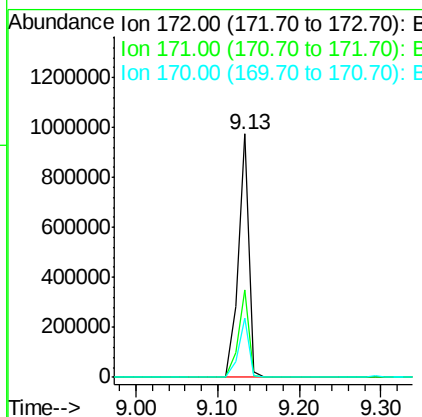
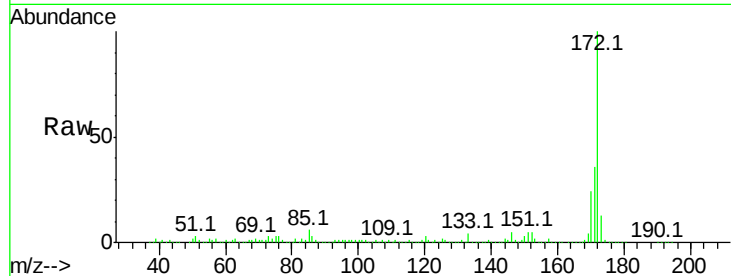
ClientSampleId :

HY-SB413B

Tot Ion:	172	Resp:	888940
Ion Ratio	Lower	Upper	
172	100		
171	35.7	29.4	44.0
170	24.1	20.2	30.4

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#45

1,1'-Biphenyl

Concen: 5.41 ng

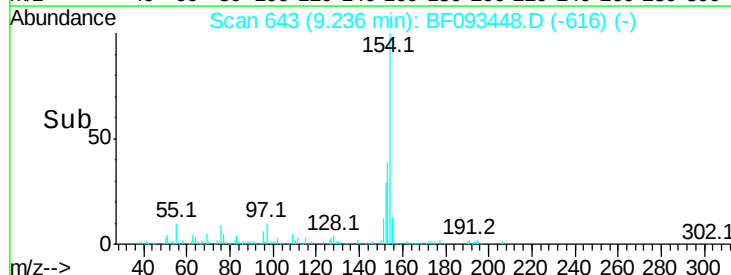
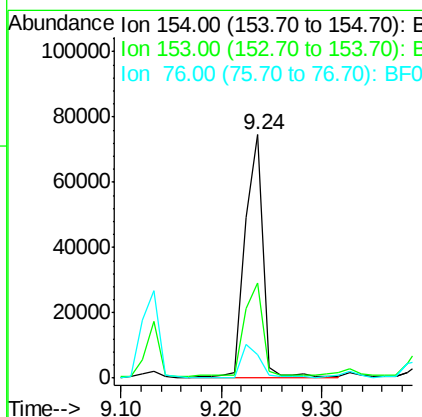
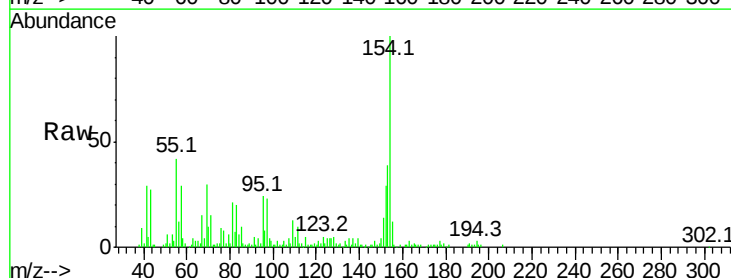
RT: 9.24 min Scan# 643

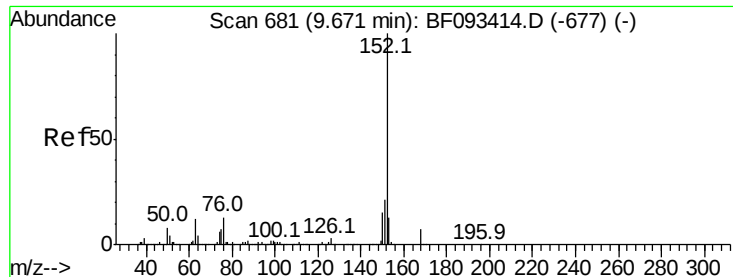
Delta R.T. 0.01 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion:	154	Resp:	93123
Ion Ratio	Lower	Upper	
154	100		
153	39.2	20.9	60.9
76	9.4	0.0	30.5





#48

Acenaphthylene

Concen: 2.53 ng

RT: 9.67 min Scan# 681

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

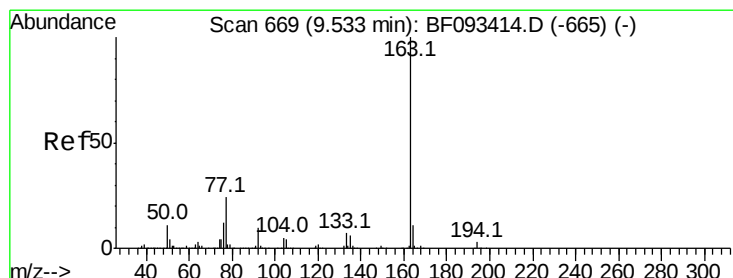
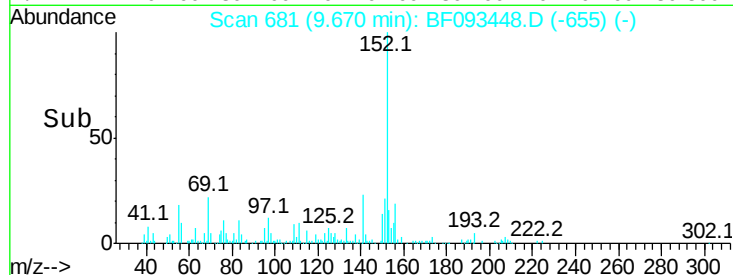
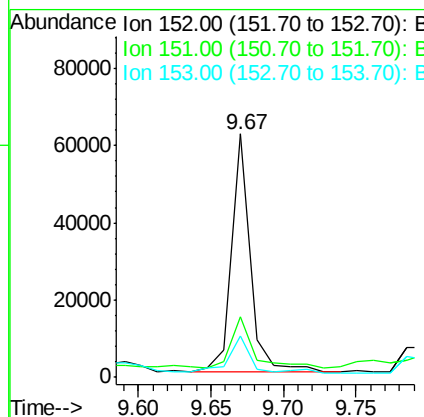
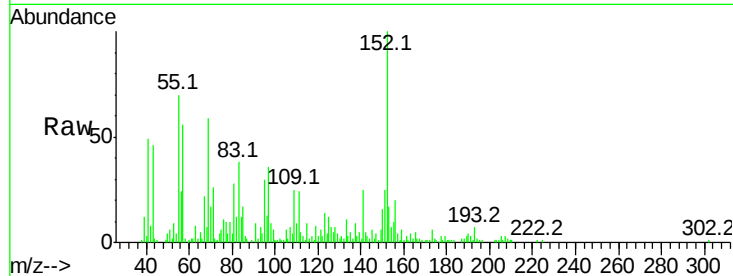
ClientSampleId :

HY-SB413B

Tot Ion:	152	Resp:	54923
Ion Ratio	Lower	Upper	
152	100		
151	25.0	16.9	25.3
153	16.9	11.4	17.2

Manual Integrations
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#49

Dimethylphthalate

Concen: 6.08 ng

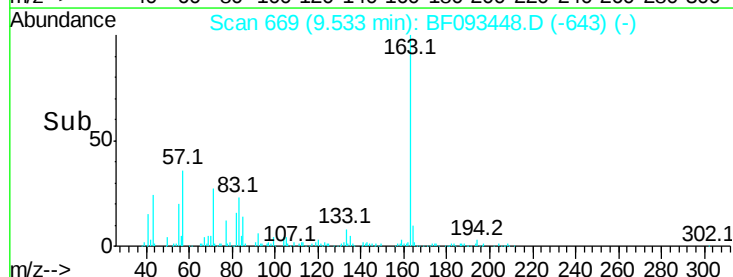
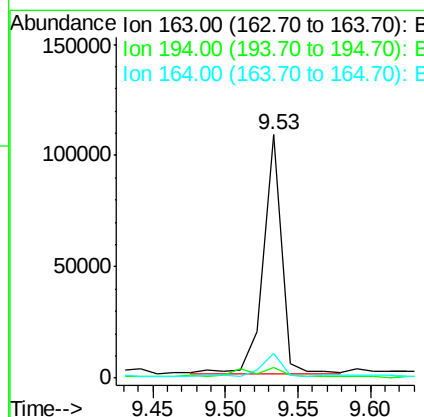
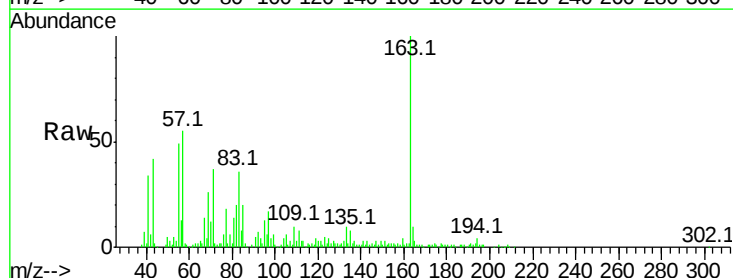
RT: 9.53 min Scan# 669

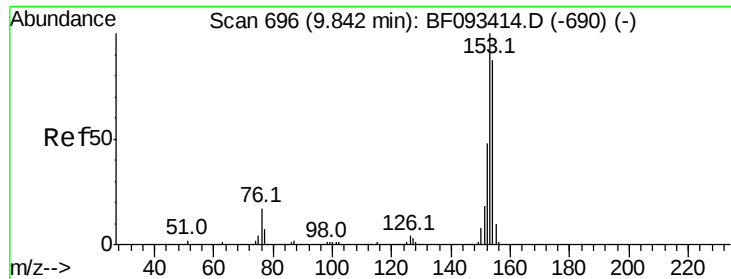
Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion:	163	Resp:	95276
Ion Ratio	Lower	Upper	
163	100		
194	4.3	3.0	4.4
164	10.1	8.0	12.0





#51

Acenaphthene

Concen: 15.35 ng

RT: 9.84 min Scan# 696

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

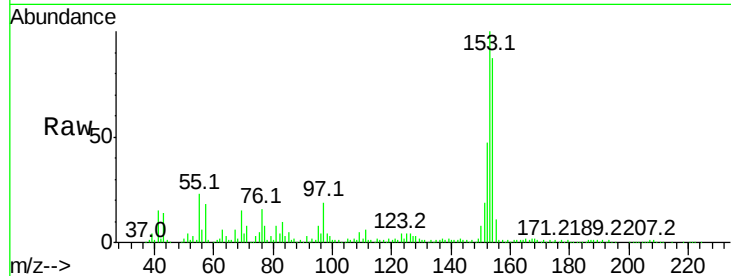
ClientSampleId :

HY-SB413B

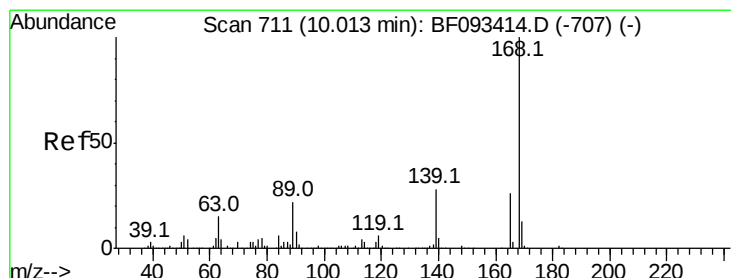
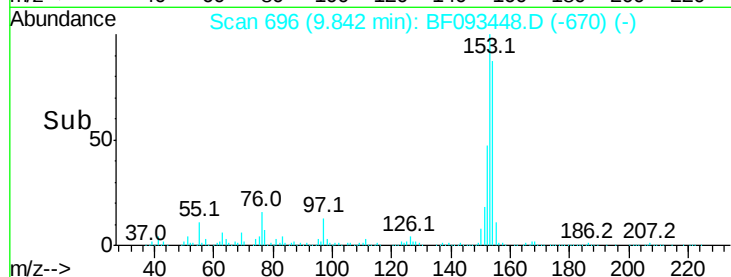
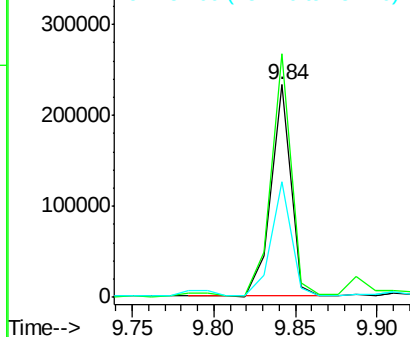
Tot Ion:	154	Resp:	197367
Ion Ratio	Lower	Upper	
154	100		
153	114.4	88.6	133.0
152	54.3	41.6	62.4

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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: 25.63 ng

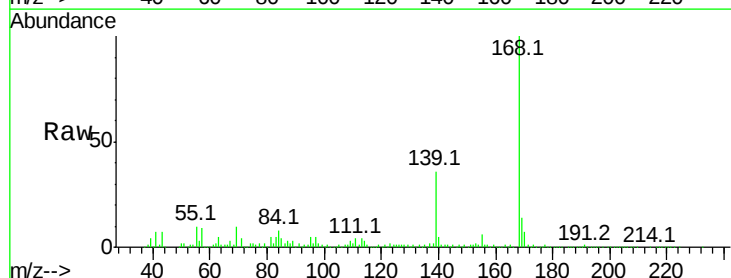
RT: 10.01 min Scan# 711

Delta R.T. -0.00 min

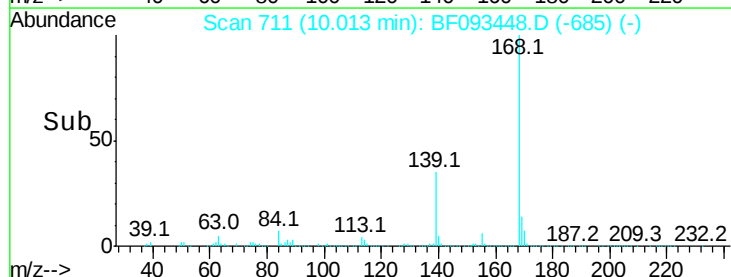
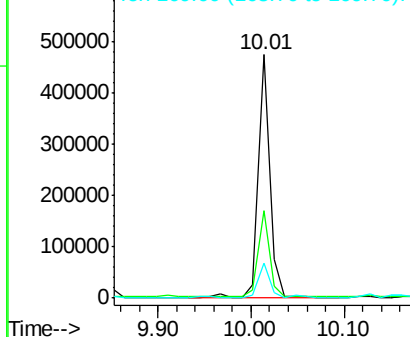
Lab File: BF093448.D

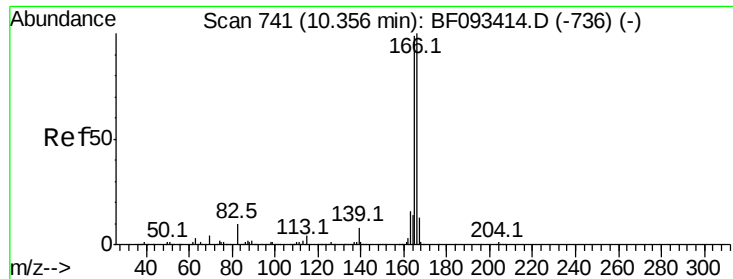
Acq: 9 Mar 2017 00:18

Tgt Ion:	168	Resp:	412458
Ion Ratio	Lower	Upper	
168	100		
139	36.0	32.6	49.0
169	14.3	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: 21.43 ng

RT: 10.36 min Scan# 741

Delta R.T. -0.00 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

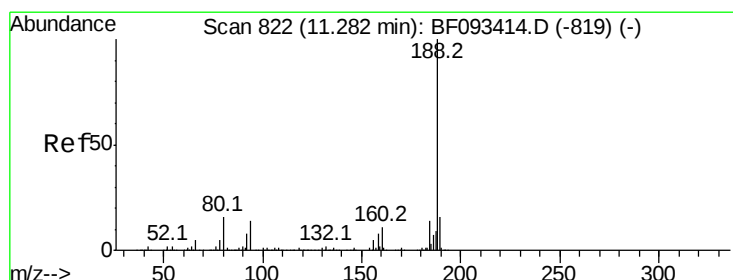
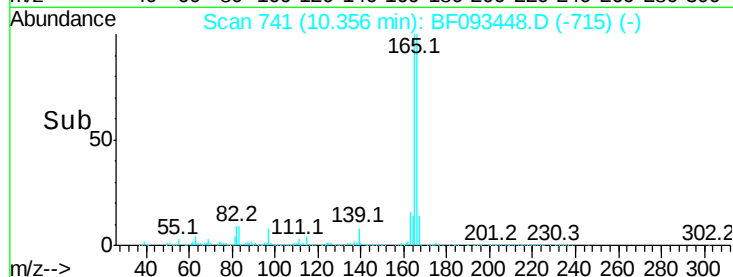
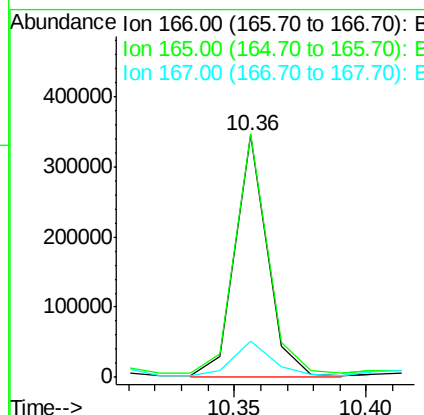
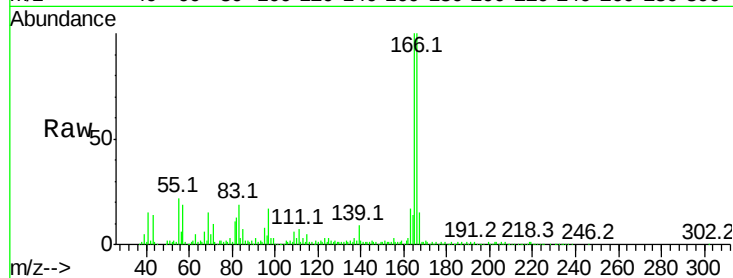
ClientSampleId :

HY-SB413B

Tot Ion:	166	Resp:	292195
Ion Ratio	Lower	Upper	
166	100		
165	100.5	77.8	116.8
167	14.7	10.8	16.2

Manual Integrations
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#63

Phenanthrene-d10

Concen: 20.00 ng

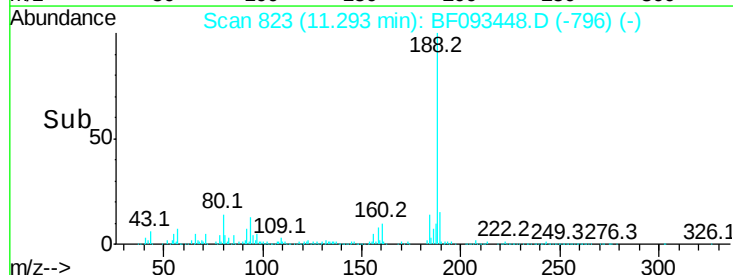
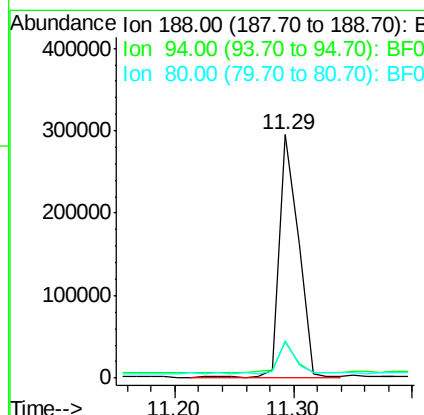
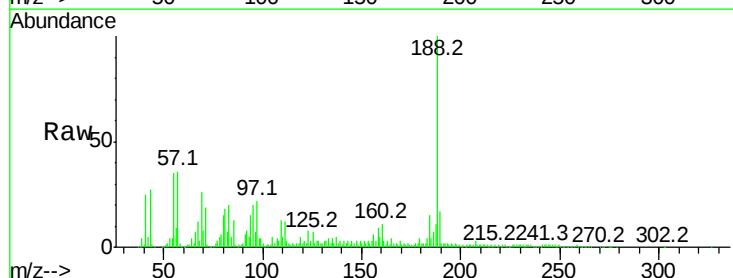
RT: 11.29 min Scan# 823

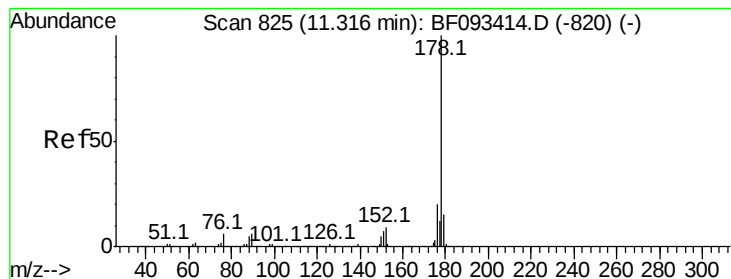
Delta R.T. 0.01 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion:	188	Resp:	322145
Ion Ratio	Lower	Upper	
188	100		
94	14.9	10.0	15.0
80	15.2	11.2	16.8





#70

Phenanthrene

Concen: 49.46 ng

RT: 11.33 min Scan# 826

Delta R.T. 0.01 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

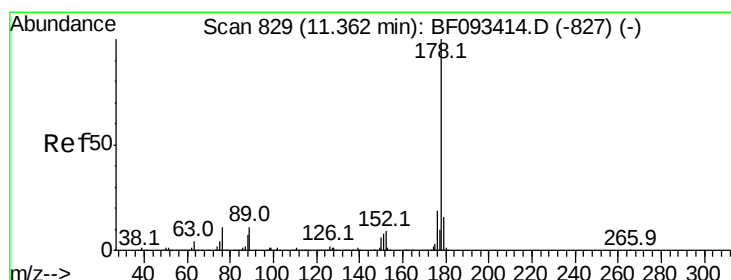
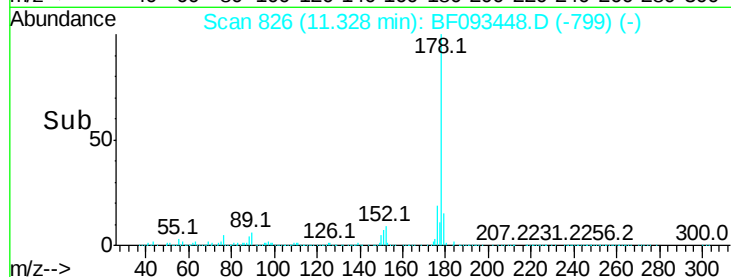
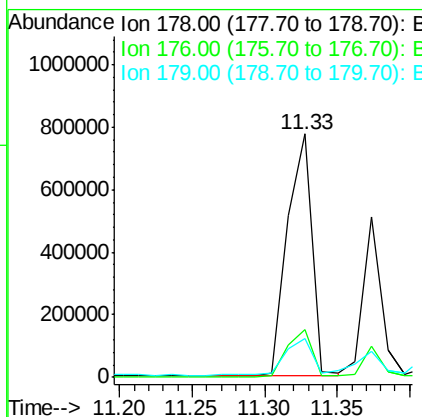
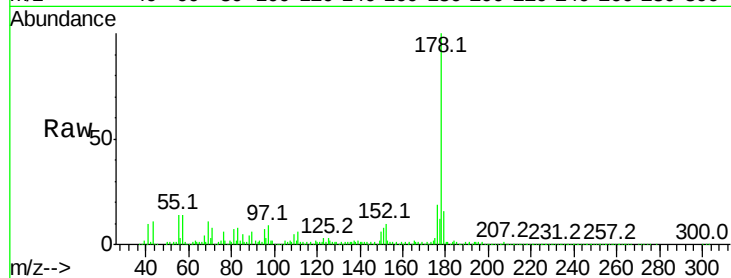
ClientSampled :

HY-SB413B

Tot Ion:178	Resp:	909401
Ion Ratio	Lower	Upper
178	100	
176	19.5	16.6 25.0
179	16.0	12.8 19.2

Manual Integrations
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#71

Anthracene

Concen: 24.28 ng

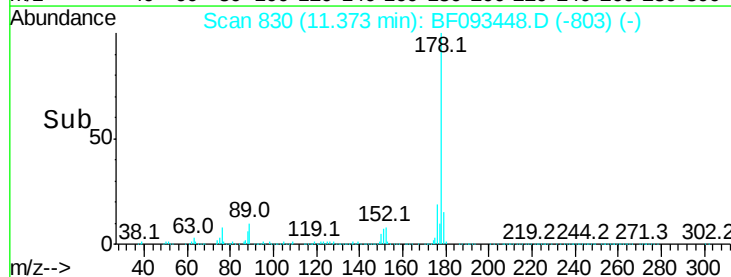
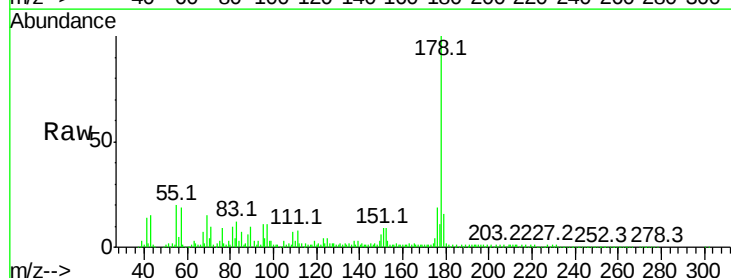
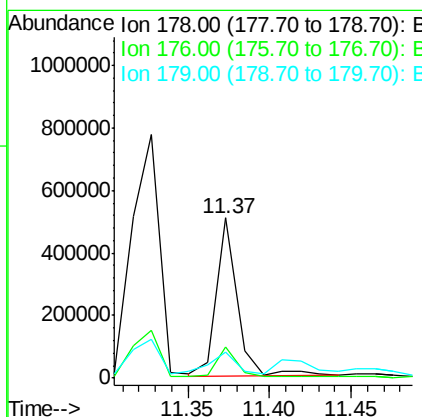
RT: 11.37 min Scan# 830

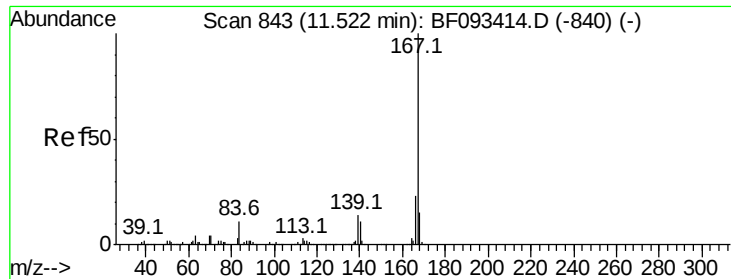
Delta R.T. 0.01 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion:178	Resp:	451642
Ion Ratio	Lower	Upper
178	100	
176	19.1	15.9 23.9
179	16.5	13.2 19.8





#72

Carbazole

Concen: 4.64 ng

RT: 11.53 min Scan# 844

Delta R.T. 0.01 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

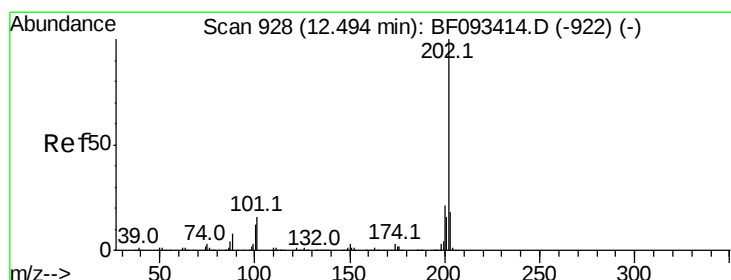
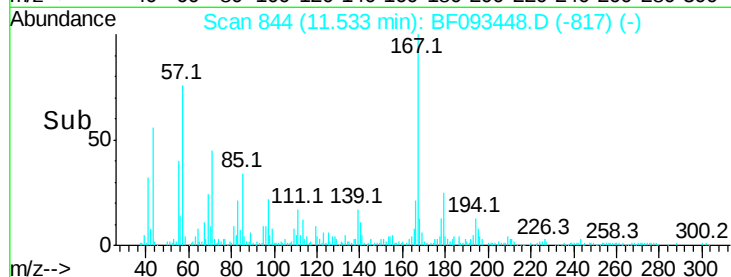
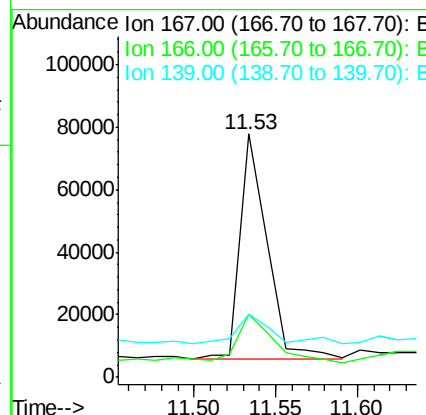
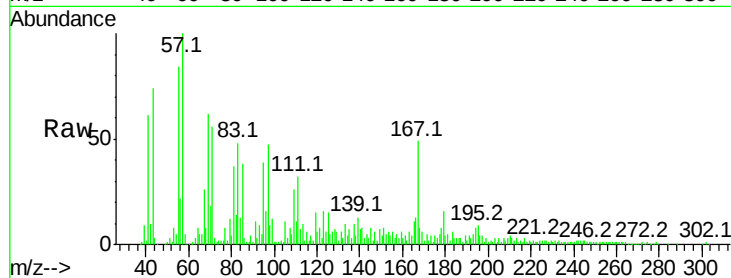
ClientSampleId :

HY-SB413B

Tot Ion	Ratio	Lower	Upper
167	100		
166	25.8	18.2	27.2
139	26.1	11.4	17.2

Manual Integrations
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#74

Fluoranthene

Concen: 66.77 ng

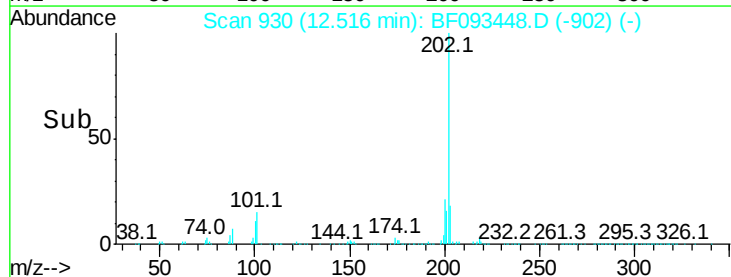
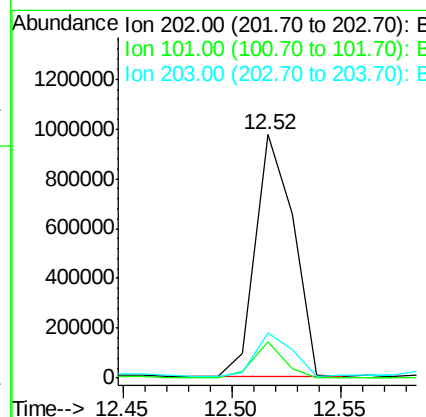
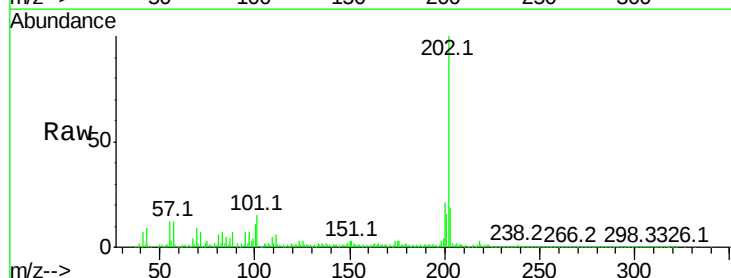
RT: 12.52 min Scan# 930

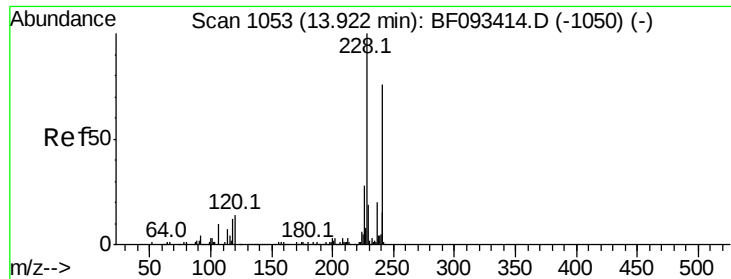
Delta R.T. 0.02 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	34.6
203	18.7	0.0	38.7





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.95 min Scan# 1055

Delta R.T. 0.02 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

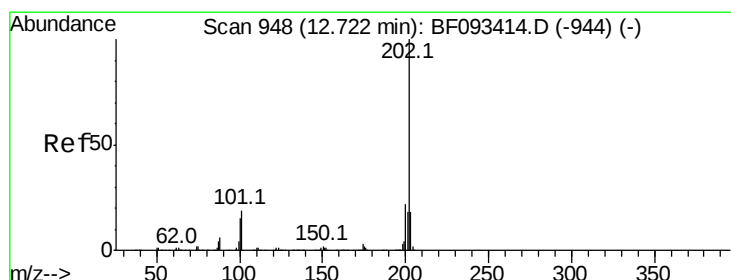
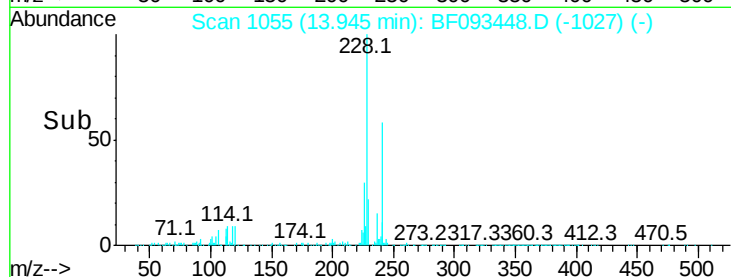
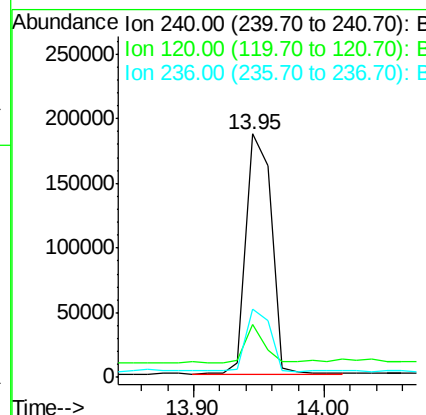
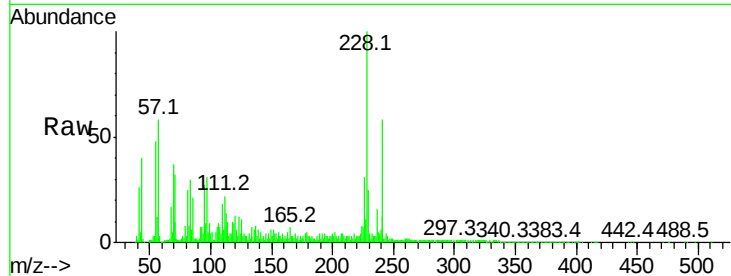
ClientSampled :

HY-SB413B

Tot Ion	Ratio	Lower	Upper
240	100		
120	21.7	12.9	19.3#
236	27.8	20.9	31.3

Manual Integrations
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#77

Pyrene

Concen: 58.50 ng

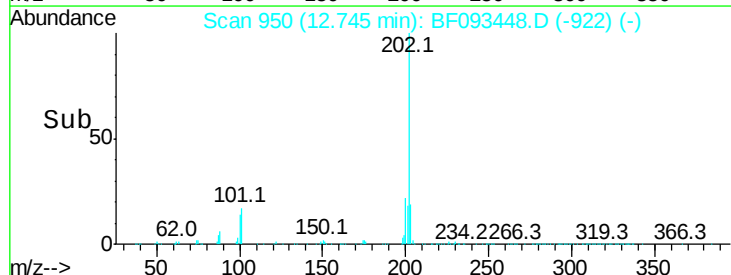
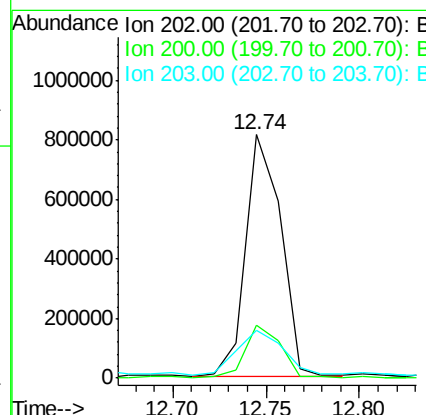
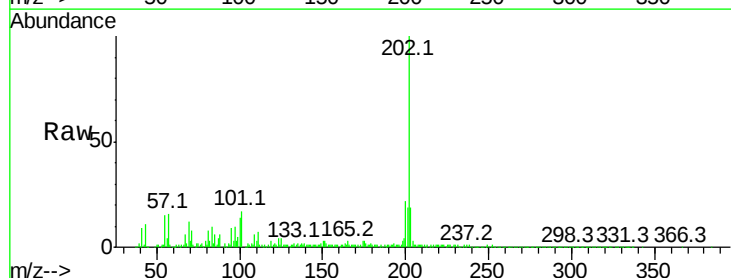
RT: 12.74 min Scan# 950

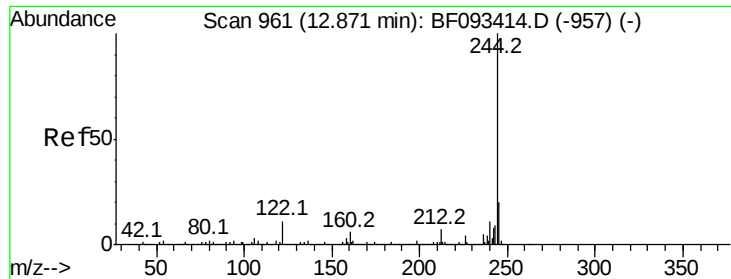
Delta R.T. 0.02 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion	Ratio	Lower	Upper
202	100		
200	22.0	17.7	26.5
203	19.4	14.7	22.1





#78

Terphenyl-d14

Concen: 47.10 ng

RT: 12.88 min Scan# 962

Delta R.T. 0.01 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

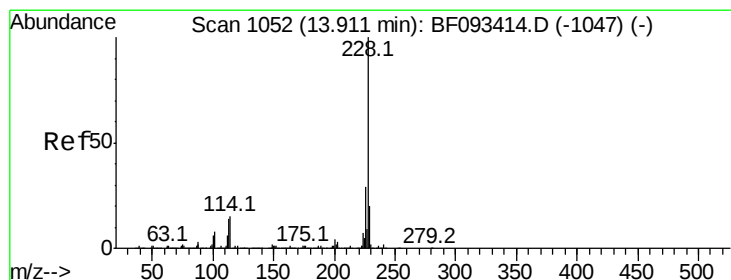
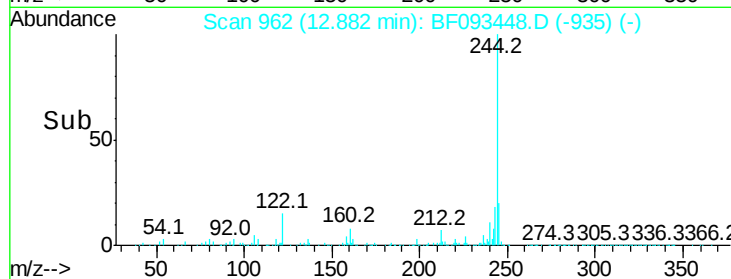
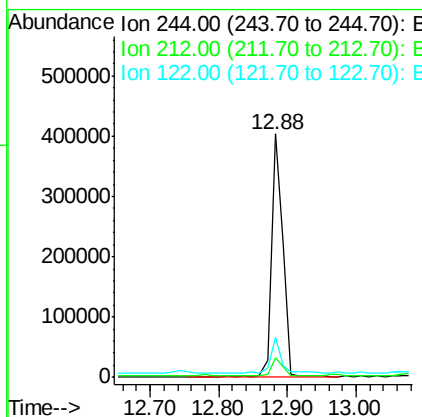
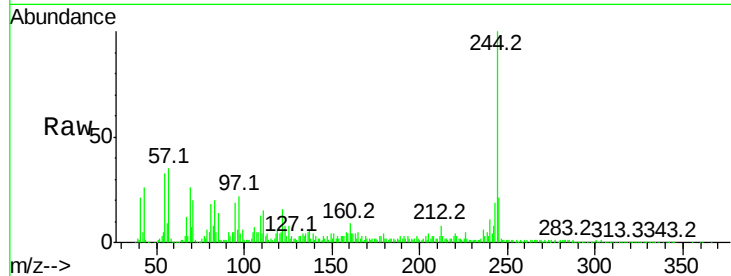
ClientSampled :

HY-SB413B

Tot Ion	Ratio	Lower	Upper
244	100		
212	8.1	6.2	9.2
122	16.3	11.4	17.2

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#80

Benzo(a)anthracene

Concen: 34.62 ng

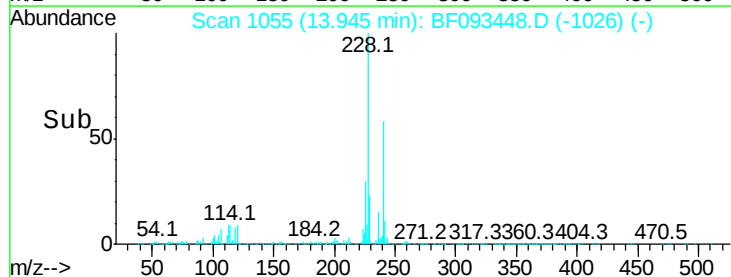
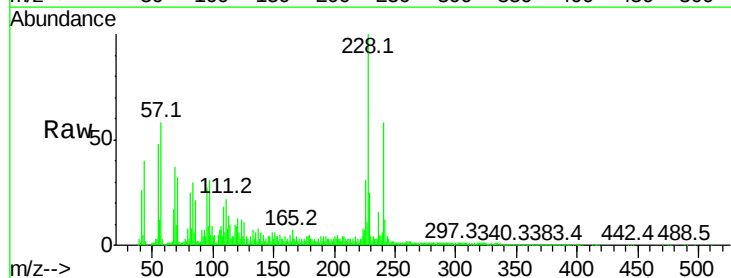
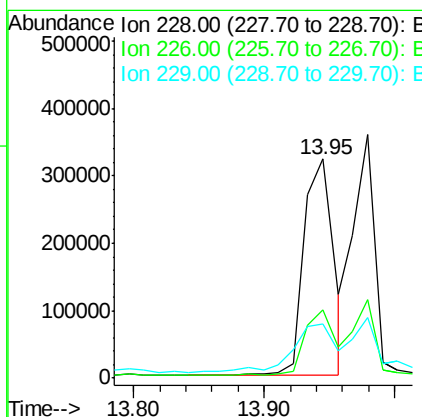
RT: 13.95 min Scan# 1055

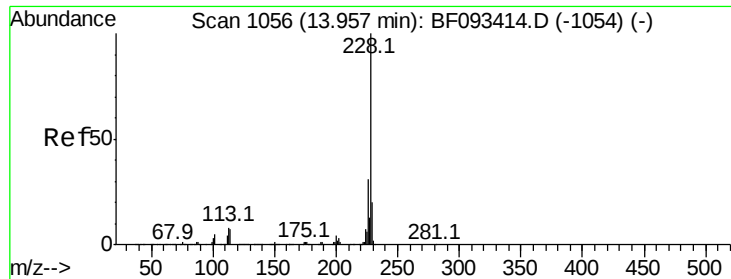
Delta R.T. 0.03 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.1	22.4	33.6
229	24.7	16.2	24.4





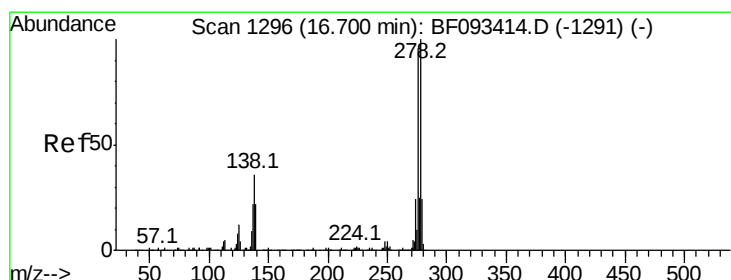
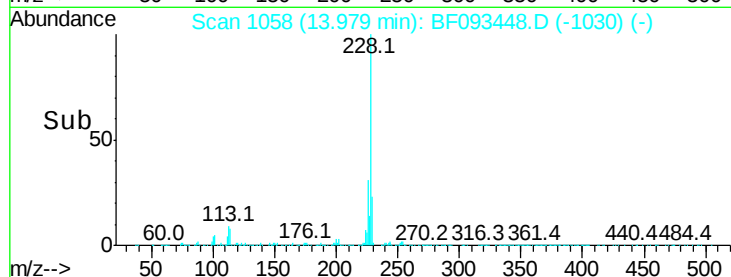
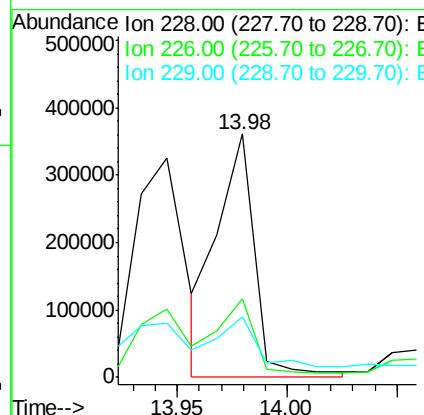
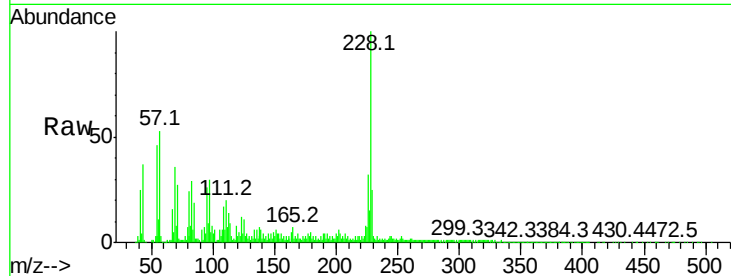
#82
Chrysene
Concen: 31.17 ng/ml
RT: 13.98 min Scan# 1058
Delta R.T. 0.02 min
Lab File: BF093448.D
Acq: 9 Mar 2017 00:18

Instrument :
BNA_F
ClientSampleID :
HY-SB413B

Tot Ion	Ratio	Lower	Upper
228	100		
226	32.3	25.4	38.0
229	24.7	16.2	24.2

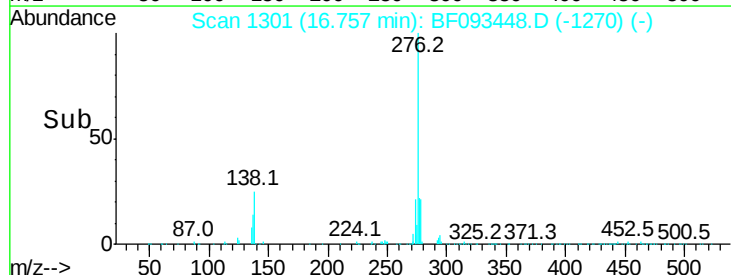
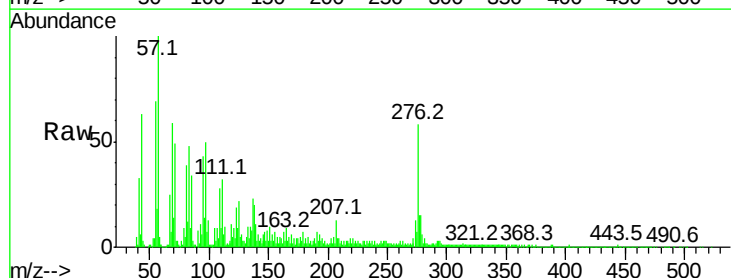
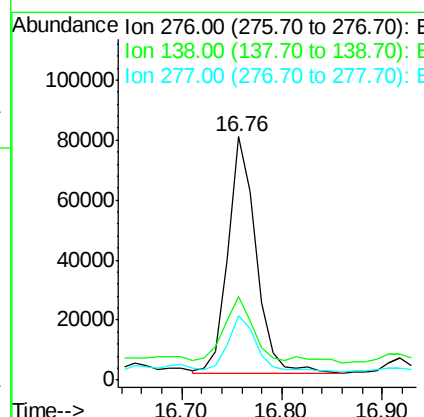
Manual Integrations
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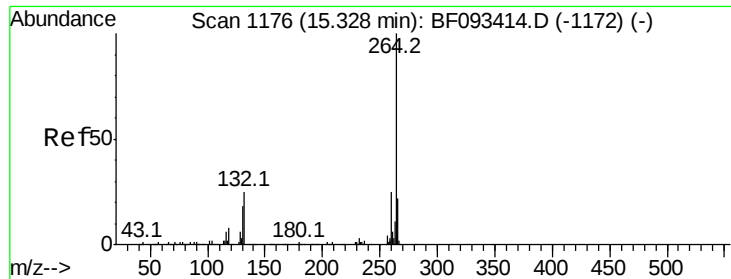
mohammad
3/10/2017 8:12:14 AM



#85
Indeno(1,2,3-cd)pyrene
Concen: 13.32 ng/ml
RT: 16.76 min Scan# 1301
Delta R.T. 0.06 min
Lab File: BF093448.D
Acq: 9 Mar 2017 00:18

Tgt Ion	Ratio	Lower	Upper
276	100		
138	26.8	21.8	32.6
277	24.1	20.2	30.4





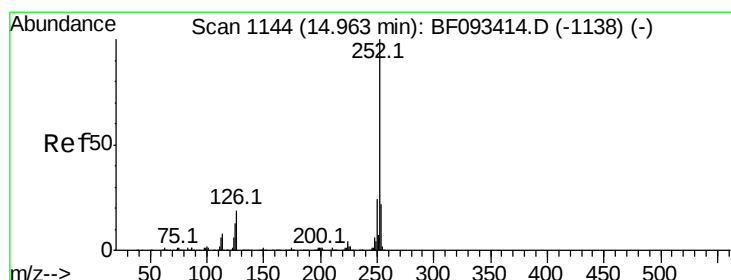
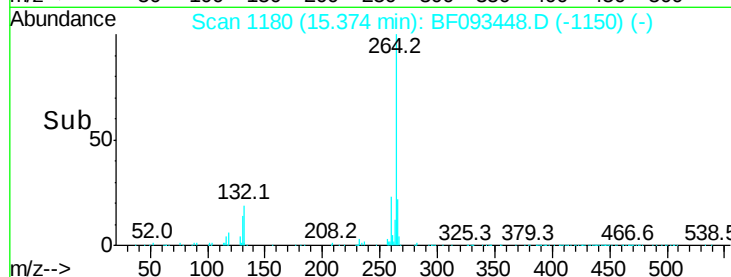
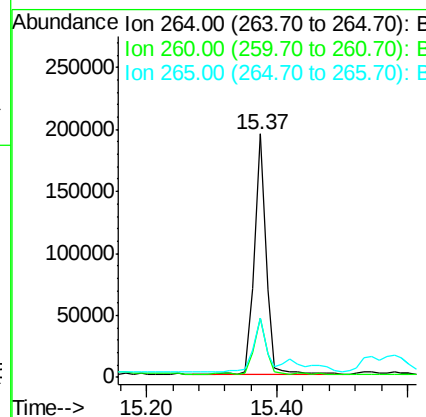
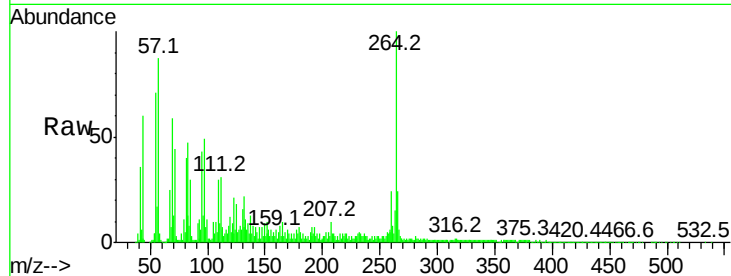
#86
Pervlene-d12
Concen: 20.00 ng
RT: 15.37 min Scan# 1180
Delta R.T. 0.05 min
Lab File: BF093448.D
Acq: 9 Mar 2017 00:18

Instrument :
BNA_F
ClientSampled :
HY-SB413B

Tot Ion	Ratio	Lower	Upper
264	100		
260	24.5	19.2	28.8
265	24.3	17.4	26.0

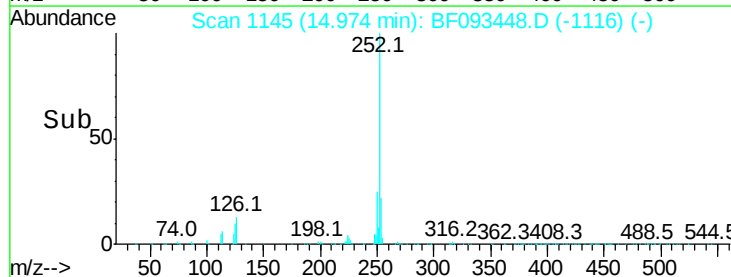
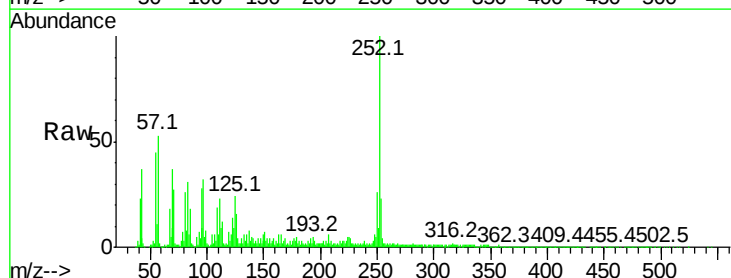
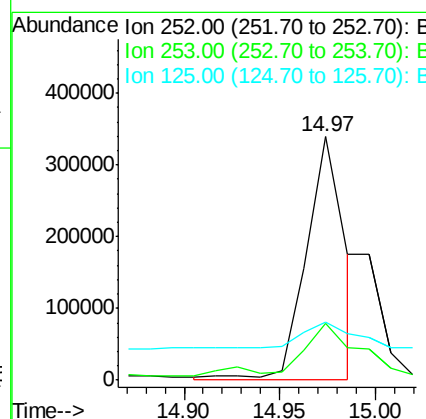
Manual Integrations
APPROVED

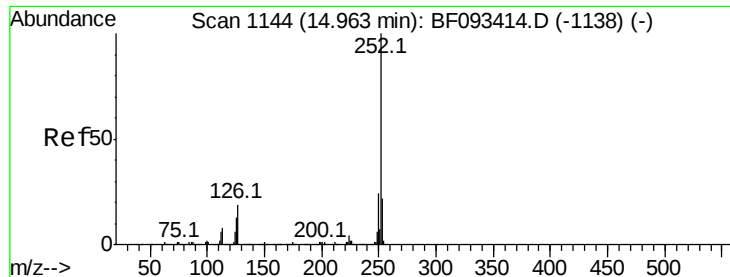
mohammad
3/10/2017 8:12:14 AM



#87
Benzo(b)fluoranthene
Concen: 32.28 ng m
RT: 14.97 min Scan# 1145
Delta R.T. 0.03 min
Lab File: BF093448.D
Acq: 9 Mar 2017 00:18

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.5	18.2	27.4
125	23.9	9.8	14.6#





#88

Benzo(k)fluoranthene

Concen: 11.23 ng m

RT: 14.99 min Scan# 1146

Delta R.T. 0.02 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Instrument :

BNA_F

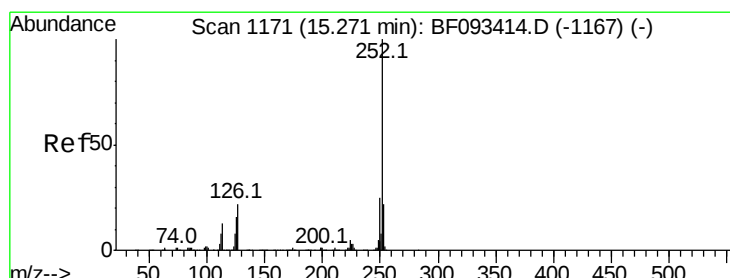
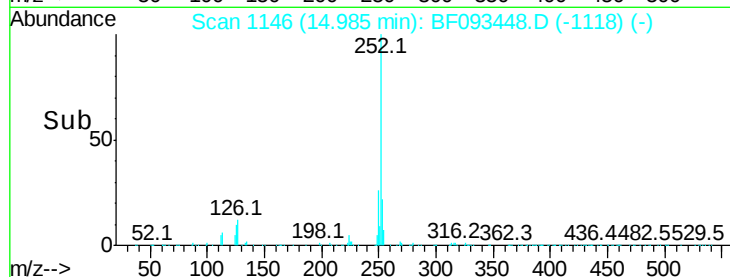
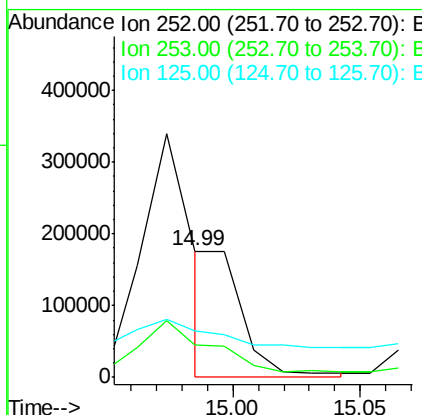
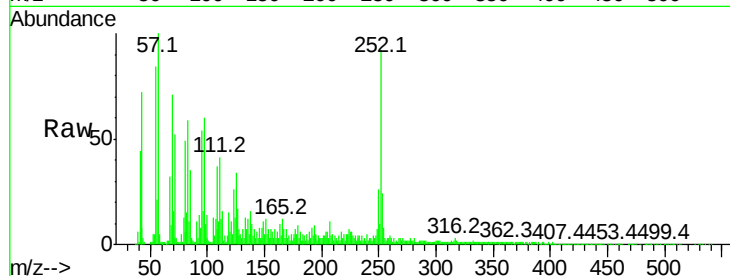
ClientSampleId :

HY-SB413B

Tot Ion	Ratio	Lower	Upper
252	100		
253	25.6	18.5	27.7
125	36.8	8.9	13.3

Manual Integrations
APPROVED

mohammad
3/10/2017 8:12:14 AM



#89

Benzo(a)pyrene

Concen: 21.27 ng

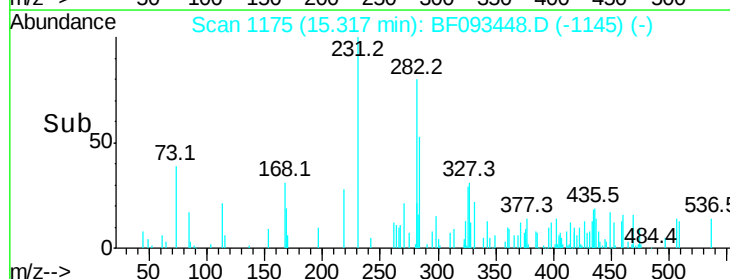
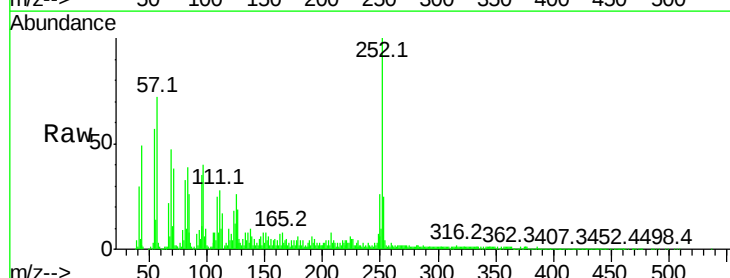
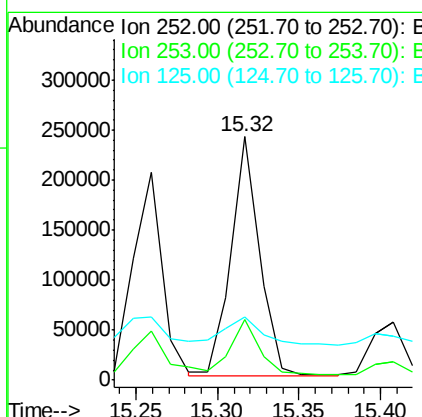
RT: 15.32 min Scan# 1175

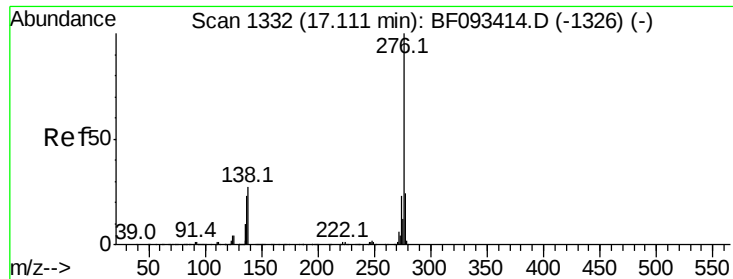
Delta R.T. 0.05 min

Lab File: BF093448.D

Acq: 9 Mar 2017 00:18

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.6	18.2	27.2
125	26.2	10.0	15.0





#91
 Benzo(a,h,i)perylene
 Concen: 12.18 ng
 RT: 17.18 min Scan# 1338
 Delta R.T. 0.07 min
 Lab File: BF093448.D
 Acq: 9 Mar 2017 00:18

Instrument :
 BNA_F
 ClientSampleId :
 HY-SB413B

Tot Ion	Ratio	Lower	Upper
276	100		
277	26.6	19.2	28.8
138	33.0	16.0	24.0

Manual Integrations
 APPROVED

mohammad
 3/10/2017 8:12:14 AM

