

Data Path : Z:\HPCHEM1\BNA F\DATA\BF032017\
 Data File : BF093781.D
 Acq On : 20 Mar 2017 23:05
 Operator : SJ/MA
 Sample : I2318-03 20X
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 HP-CT-01

Manual Integrations
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 3/21/2017 2:45:39 PM

Quant Time: Mar 21 02:05:24 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF032017.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Mar 20 16:03:59 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.84	152	240437	20.00	ng	-0.01
21) Naphthalene-d8	8.13	136	909567	20.00	ng	-0.01
38) Acenaphthene-d10	9.88	164	407589	20.00	ng	-0.01
63) Phenanthrene-d10	11.35	188	570244	20.00	ng	-0.01
75) Chrysene-d12	13.98	240	347530	20.00	ng	-0.02
86) Perylene-d12	15.40	264	354420	20.00	ng	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.42	112	78363	5.70	ng	-0.02
7) Phenol-d6	6.45	99	96689	5.69	ng	-0.03
23) Nitrobenzene-d5	7.38	82	50340	3.14	ng	-0.02
41) 2,4,6-Tribromophenol	10.65	330	10285	3.26	ng	-0.02
44) 2-Fluorobiphenyl	9.19	172	117243	4.84	ng	-0.02
78) Terphenyl-d14	12.94	244	64277	3.77	ng	-0.01
Target Compounds						Qvalue
31) Naphthalene	8.16	128	5825817	137.99	ng	97
37) 2-Methylnaphthalene	8.84	142	1582768	57.43	ng	99
45) 1,1'-Biphenyl	9.29	154	504827	15.24	ng	96
48) Acenaphthylene	9.74	152	1561743	37.78	ng	98
51) Acenaphthene	9.91	154	515620m	20.89	ng	
54) Dibenzofuran	10.08	168	517001m	15.56	ng	
57) Fluorene	10.42	166	1336971m	52.55	ng	
70) Phenanthrene	11.40	178	4224132	139.09	ng	100
71) Anthracene	11.43	178	1274765	40.77	ng	99
72) Carbazole	11.58	167	302494	9.77	ng	99
74) Fluoranthene	12.57	202	2202102	70.54	ng	96
77) Pyrene	12.80	202	2738377	94.68	ng	99
80) Benzo(a)anthracene	13.98	228	1051920m	48.32	ng	
82) Chrysene	14.01	228	810826	37.28	ng	# 95
85) Indeno(1,2,3-cd)pyrene	16.76	276	291972	16.39	ng	96
87) Benzo(b)fluoranthene	15.00	252	760085m	31.81	ng	
88) Benzo(k)fluoranthene	15.02	252	294747m	16.71	ng	
89) Benzo(a)pyrene	15.34	252	748145	38.62	ng	97
90) Dibenzo(a,h)anthracene	16.77	278	88321	5.49	ng	# 87
91) Benzo(a,h,i)perylene	17.17	276	333144	20.86	ng	99

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

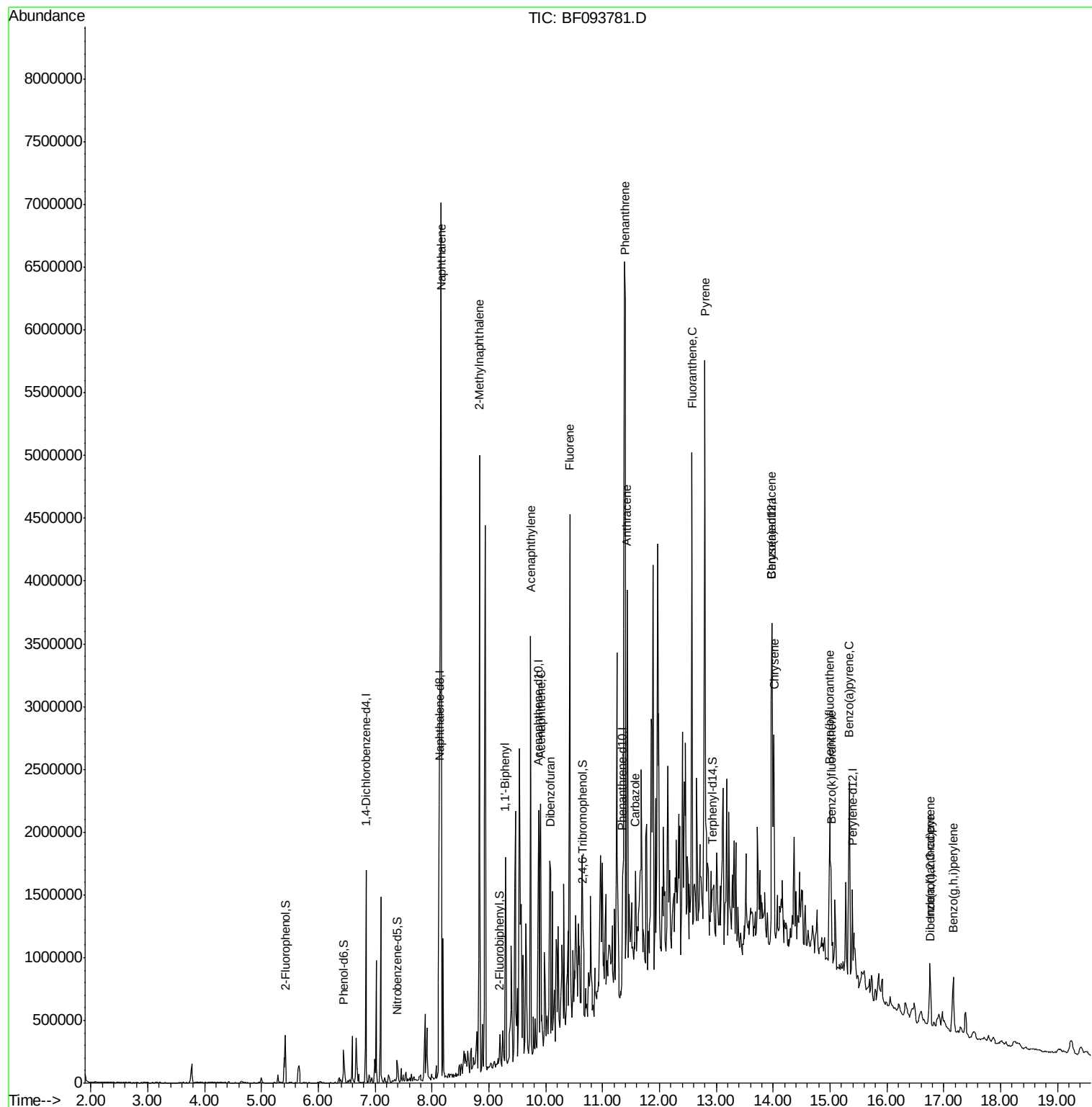
Data Path : Z:\HPCHEM1\BNA F\DATA\BF032017\
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ALS Vial : 16 Sample Multiplier: 1

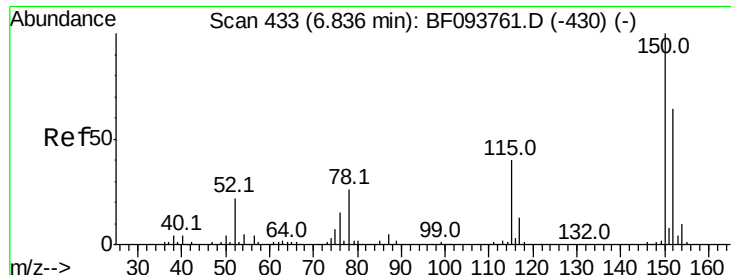
Instrument :
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ClientSampleId :
HP-CT-01

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Quant Time: Mar 21 02:05:24 2017
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
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#1

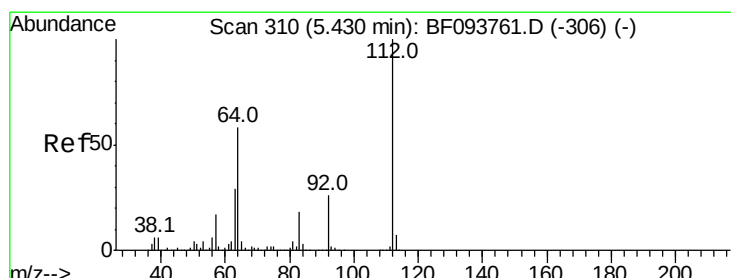
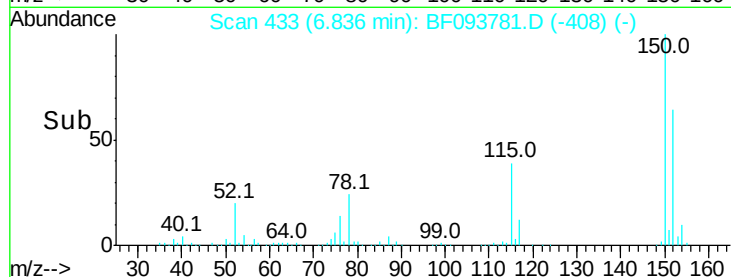
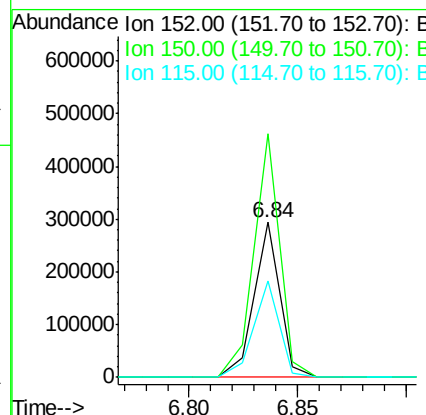
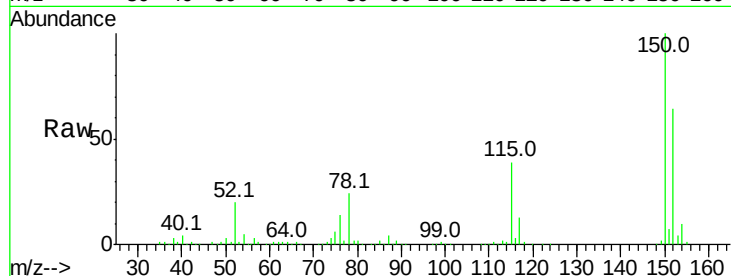
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 6.84 min Scan# 433
Delta R.T. -0.01 min
Lab File: BF093781.D
Acq: 20 Mar 2017 23:05

Instrument :
BNA_F
ClientSampleId :
HP-CT-01

Tot Ion	Ratio	Lower	Upper
152	100		
150	157.0	126.2	189.2
115	61.9	52.2	78.2

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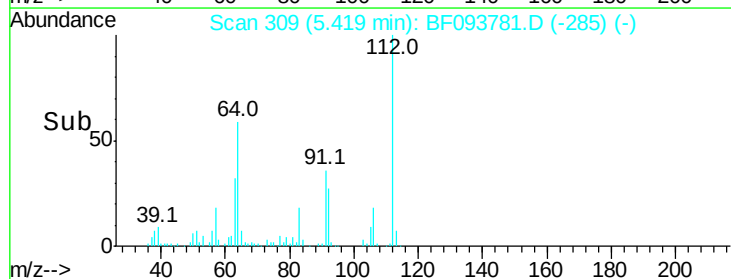
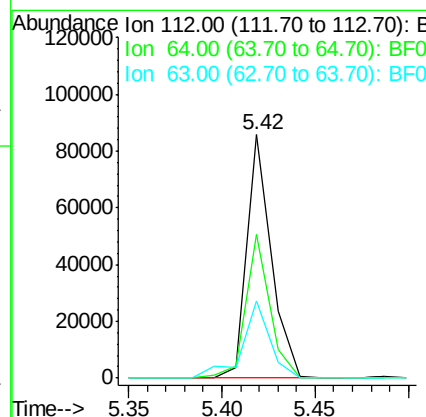
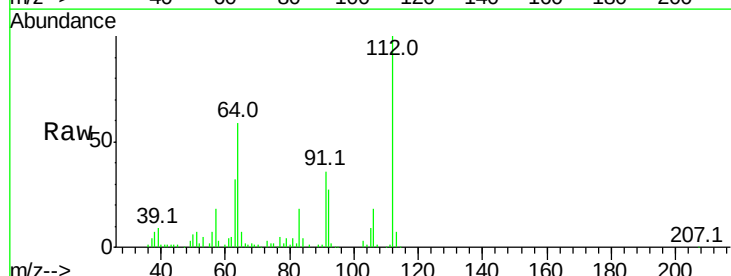
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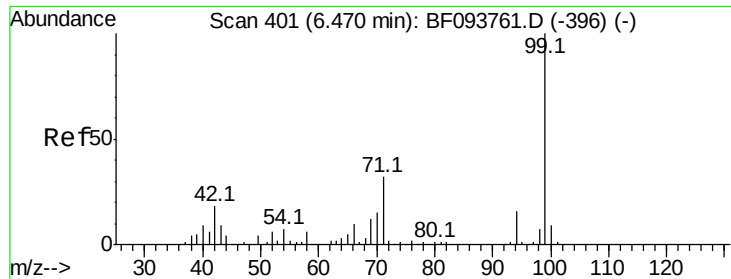


#5

2-Fluorophenol
Concen: 5.70 ng
RT: 5.42 min Scan# 309
Delta R.T. -0.02 min
Lab File: BF093781.D
Acq: 20 Mar 2017 23:05

Tgt Ion	Ratio	Lower	Upper
112	100		
64	59.2	46.0	69.0
63	31.7	23.4	35.0





#7

Phenol-d6

Concen: 5.69 ng

RT: 6.45 min Scan# 399

Delta R.T. -0.03 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Instrument :

BNA_F

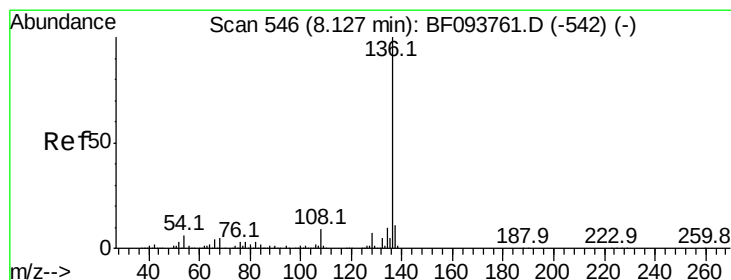
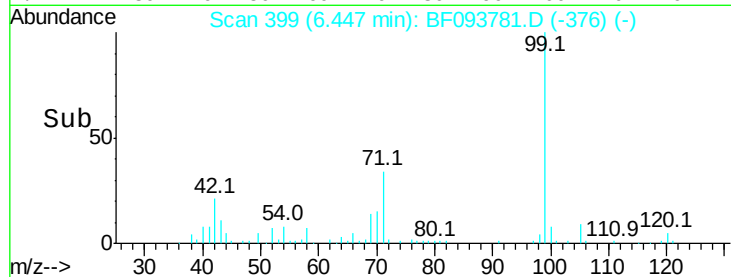
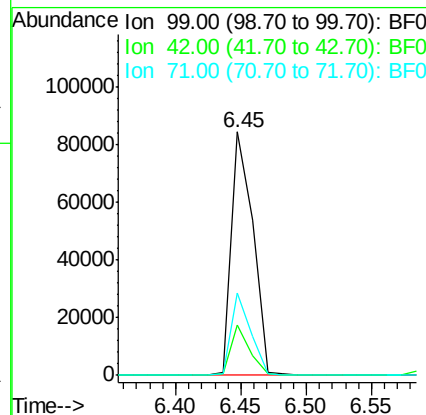
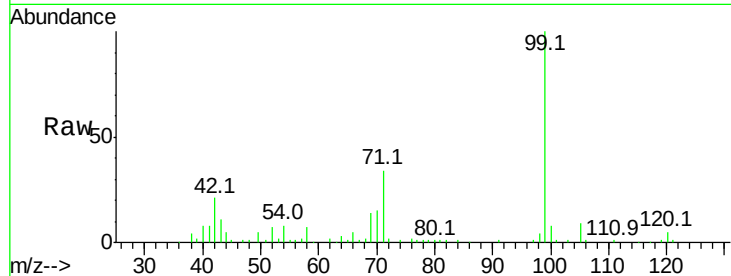
ClientSampleId :

HP-CT-01

Tot Ion:	99	Resp:	96689
Ion Ratio	Lower	Upper	
99	100		
42	20.7	13.5	20.3#
71	33.7	24.5	36.7

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#21

Naphthalene-d8

Concen: 20.00 ng

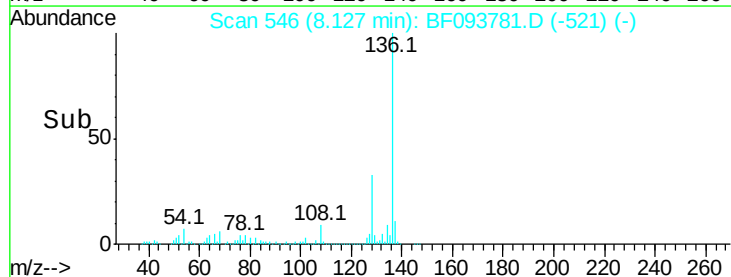
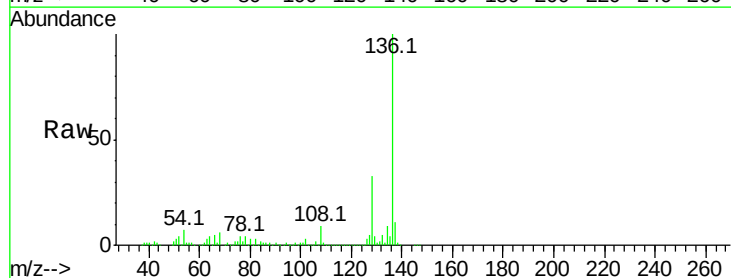
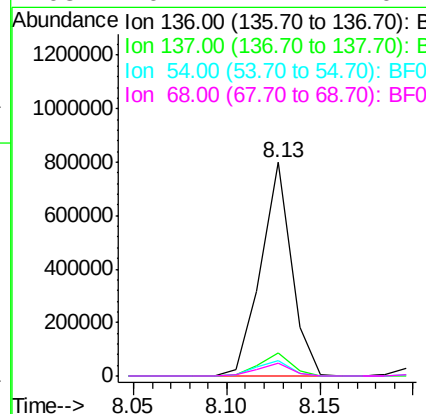
RT: 8.13 min Scan# 546

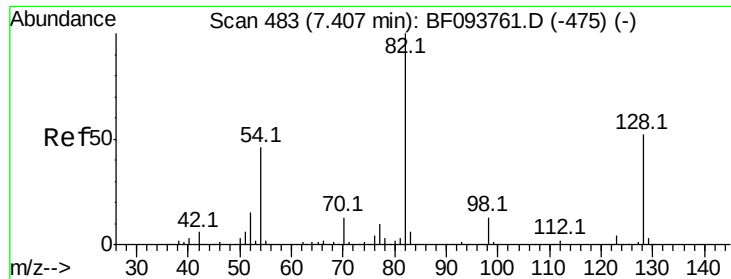
Delta R.T. -0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Tgt Ion:	136	Resp:	909567
Ion Ratio	Lower	Upper	
136	100		
137	10.8	8.5	12.7
54	7.5	4.9	7.3#
68	6.2	4.1	6.1#





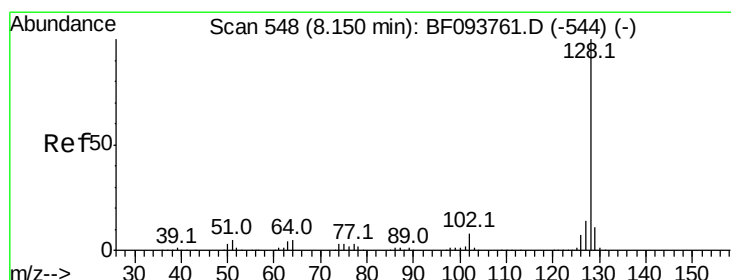
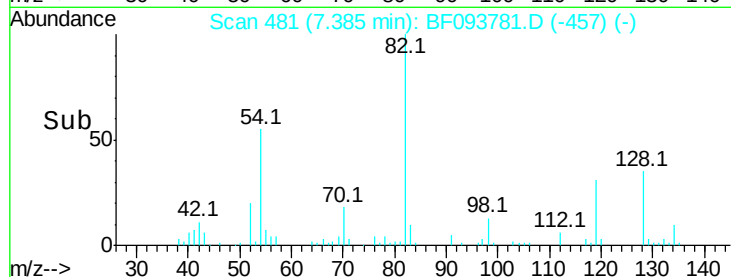
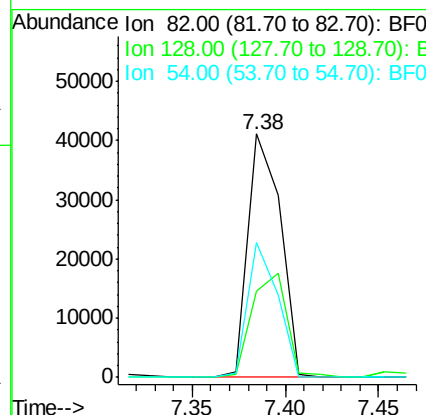
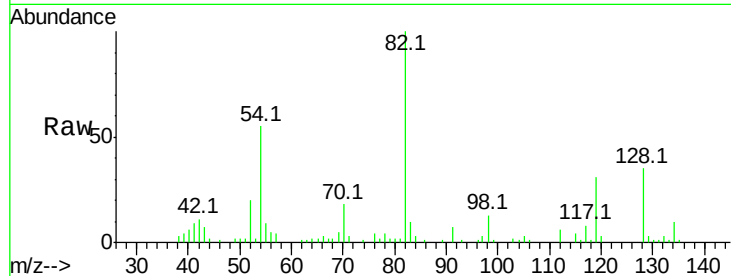
#23
 Nitrobenzene-d5
 Concen: 3.14 ng
 RT: 7.38 min Scan# 481
 Delta R.T. -0.02 min
 Lab File: BF093781.D
 Acq: 20 Mar 2017 23:05

Instrument :
 BNA_F
 ClientSampleId :
 HP-CT-01

Tot Ion	82	Resp	50340
Ion Ratio	100	Lower	Upper
82	100		
128	35.2	34.0	51.0
54	55.4	42.2	63.2

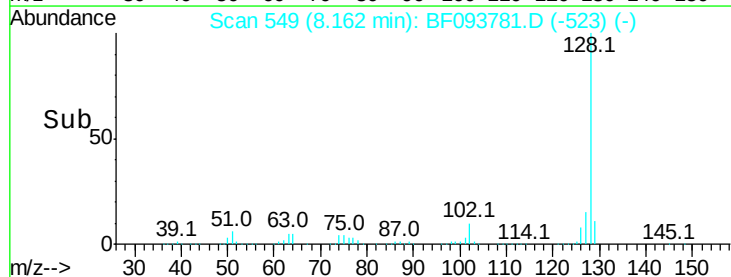
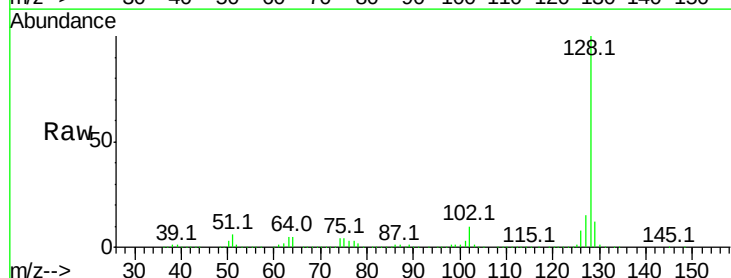
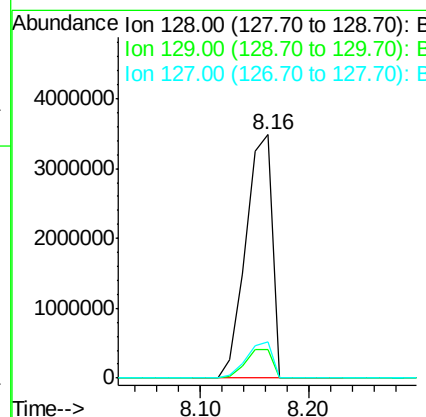
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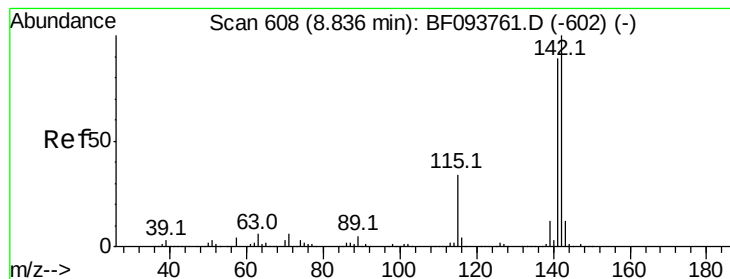
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#31
 Naphthalene
 Concen: 137.99 ng
 RT: 8.16 min Scan# 549
 Delta R.T. 0.00 min
 Lab File: BF093781.D
 Acq: 20 Mar 2017 23:05

Tgt Ion	128	Resp	5825817
Ion Ratio	100	Lower	Upper
128	100		
129	11.9	9.0	13.6
127	15.0	10.8	16.2





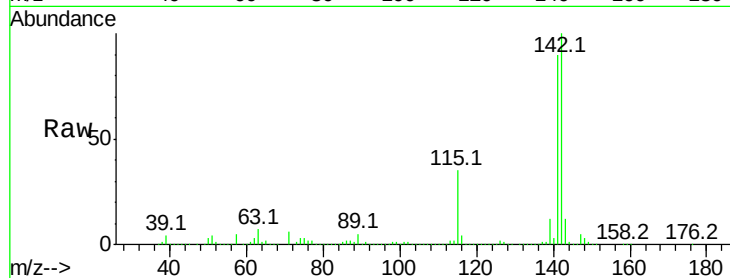
#37
2-Methylnaphthalene
Concen: 57.43 ng
RT: 8.84 min Scan# 608
Delta R.T. -0.01 min
Lab File: BF093781.D
Acq: 20 Mar 2017 23:05

Instrument :
BNA_F
ClientSampleId :
HP-CT-01

Tot Ion	Ratio	Lower	Upper
142	100		
141	89.6	71.3	106.9
115	35.4	27.1	40.7

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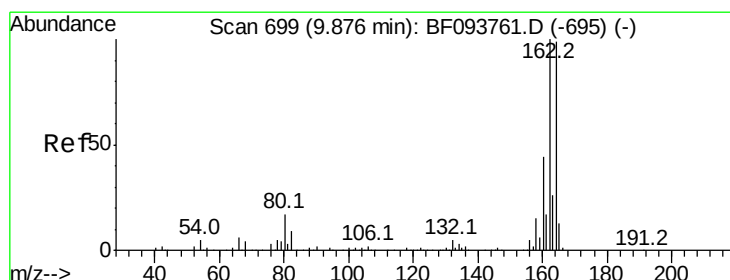
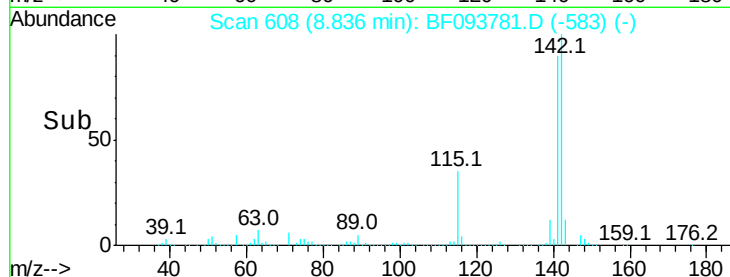
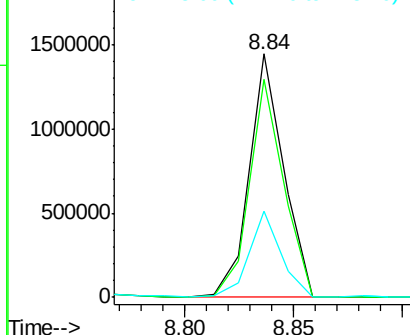


Abundance

Ion 142.00 (141.70 to 142.70): E

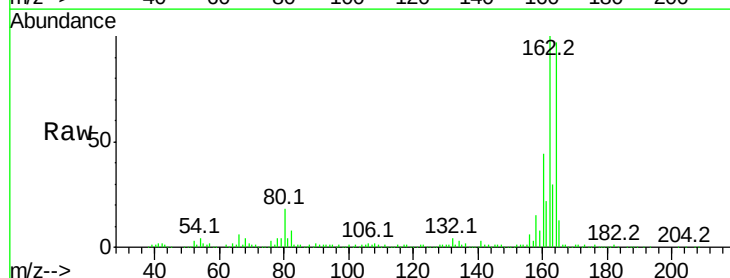
Ion 141.00 (140.70 to 141.70): E

Ion 115.00 (114.70 to 115.70): E



#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 9.88 min Scan# 699
Delta R.T. -0.01 min
Lab File: BF093781.D
Acq: 20 Mar 2017 23:05

Tgt Ion	Ratio	Lower	Upper
164	100		
162	103.3	82.6	123.8
160	45.1	36.2	54.2

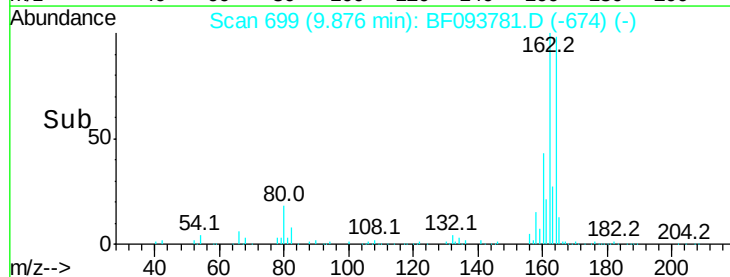
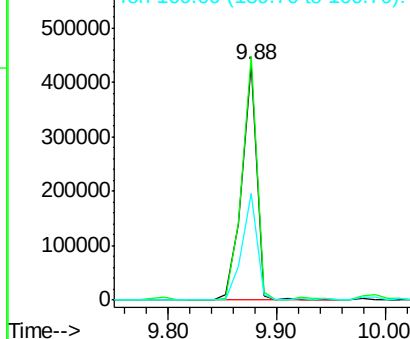


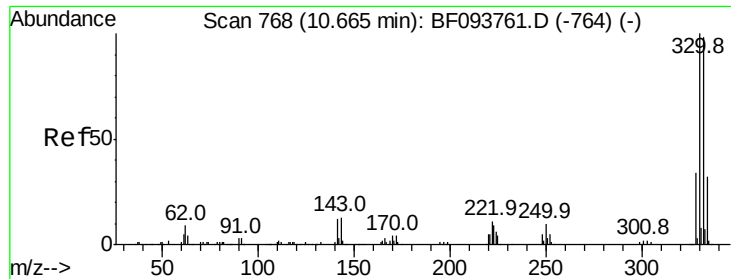
Abundance

Ion 164.00 (163.70 to 164.70): E

Ion 162.00 (161.70 to 162.70): E

Ion 160.00 (159.70 to 160.70): E





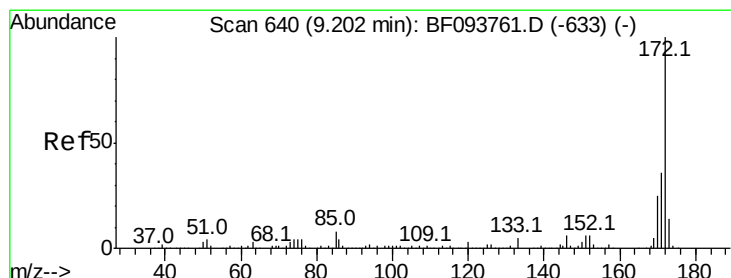
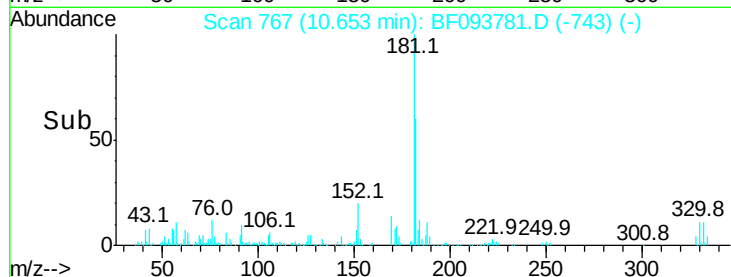
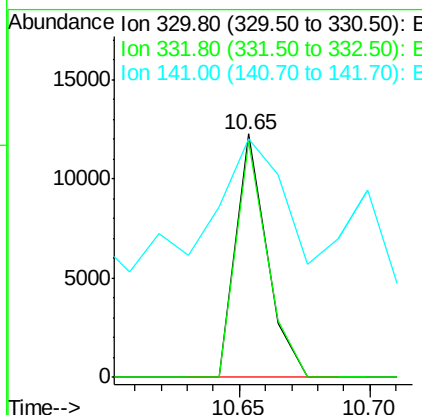
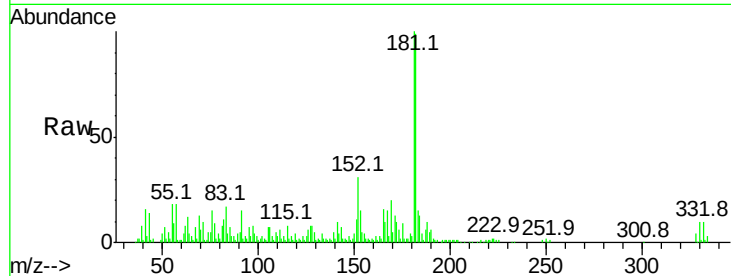
#41
 2,4,6-Tribromophenol
 Concen: 3.26 ng
 RT: 10.65 min Scan# 767
 Delta R.T. -0.02 min
 Lab File: BF093781.D
 Acq: 20 Mar 2017 23:05

Instrument :
 BNA_F
 ClientSampleId :
 HP-CT-01

Tot Ion	Ratio	Lower	Upper
330	100		
332	98.2	76.6	115.0
141	130.6	31.4	47.2#

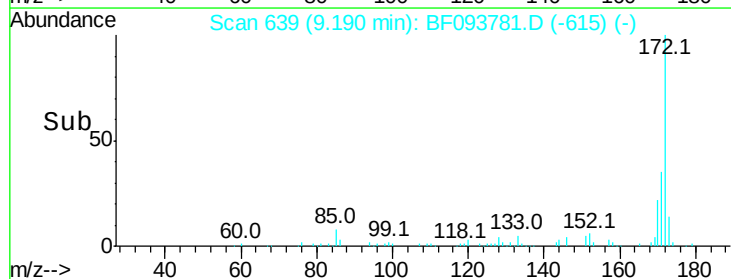
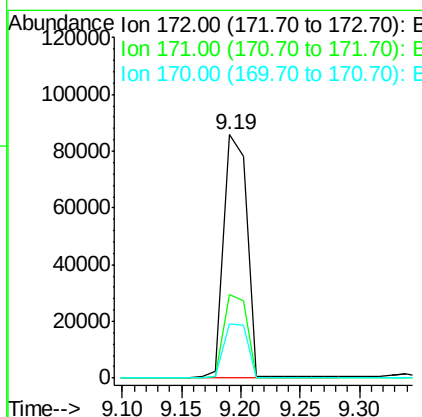
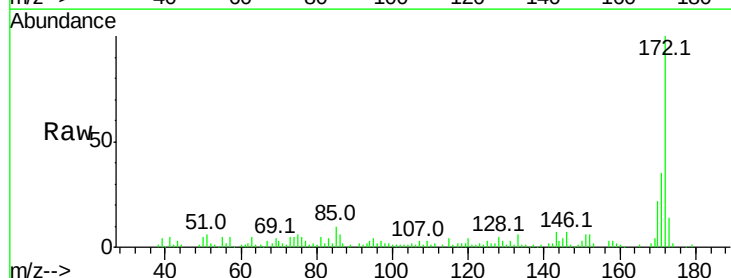
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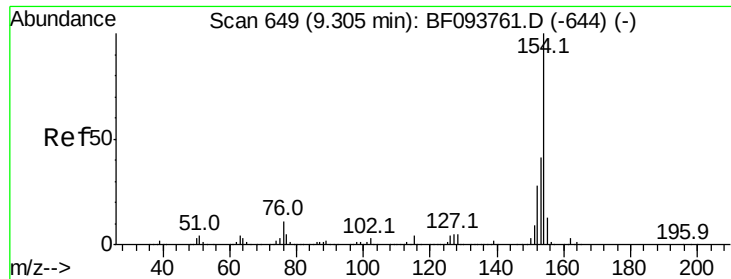
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#44
 2-Fluorobiphenyl
 Concen: 4.84 ng
 RT: 9.19 min Scan# 639
 Delta R.T. -0.02 min
 Lab File: BF093781.D
 Acq: 20 Mar 2017 23:05

Tgt Ion	Ratio	Lower	Upper
172	100		
171	34.6	29.6	44.4
170	22.1	19.8	29.8





#45

1,1'-Biphenyl

Concen: 15.24 ng

RT: 9.29 min Scan# 648

Delta R.T. -0.02 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Instrument :

BNA_F

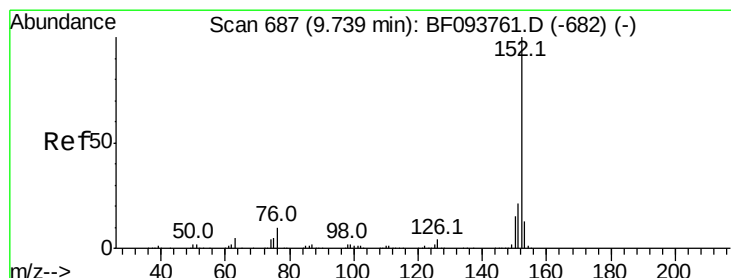
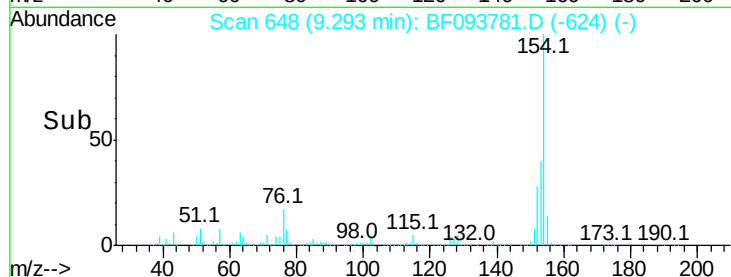
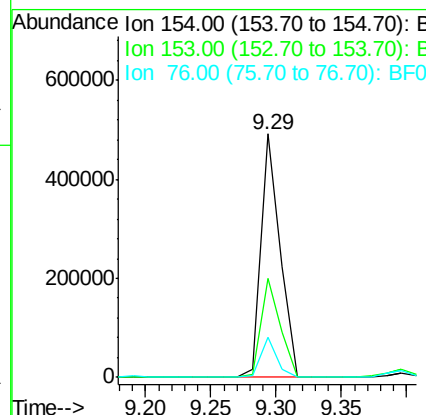
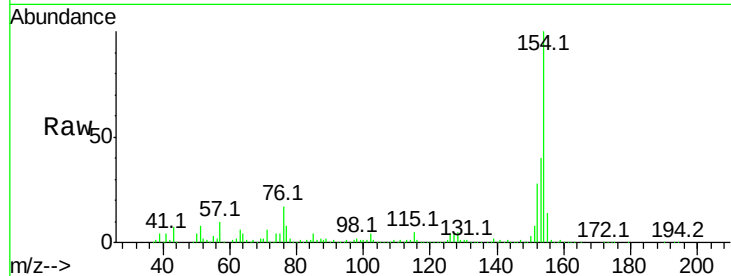
ClientSampleId :

HP-CT-01

Tot Ion:	154	Resp:	504827
Ion Ratio	Lower	Upper	
154	100		
153	40.4	21.2	61.2
76	16.6	0.0	29.9

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#48

Acenaphthylene

Concen: 37.78 ng

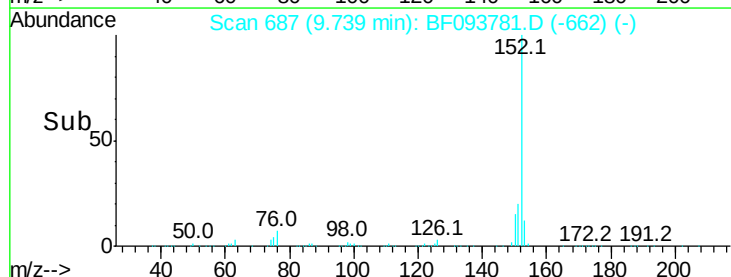
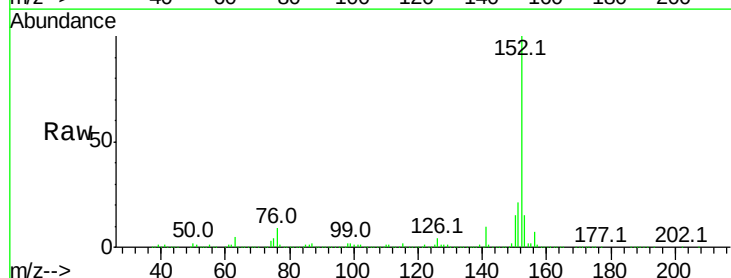
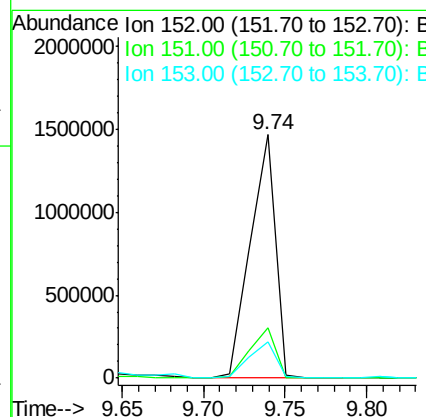
RT: 9.74 min Scan# 687

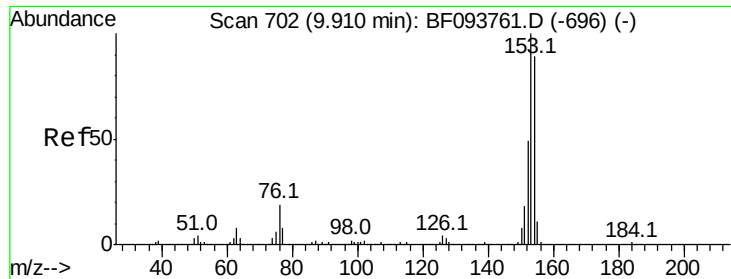
Delta R.T. -0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Tgt Ion:	152	Resp:	1561743
Ion Ratio	Lower	Upper	
152	100		
151	20.7	16.8	25.2
153	14.7	10.8	16.2





#51

Acenaphthene

Concen: 20.89 ng m

RT: 9.91 min Scan# 702

Delta R.T. -0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Instrument :

BNA_F

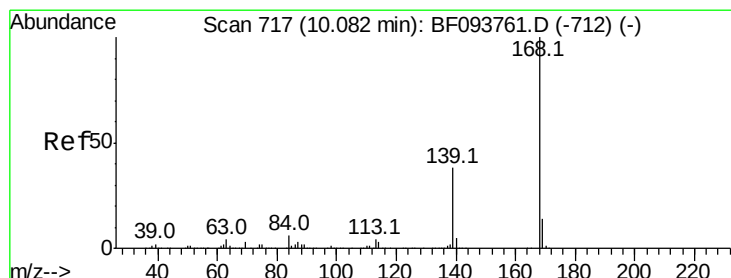
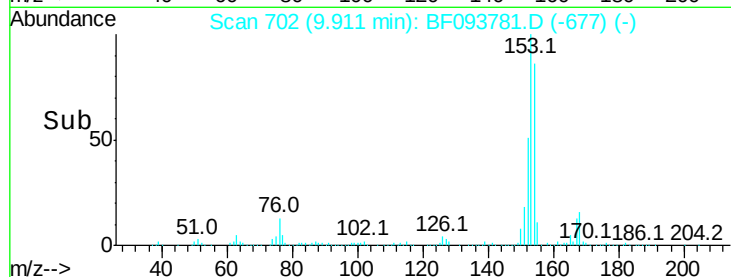
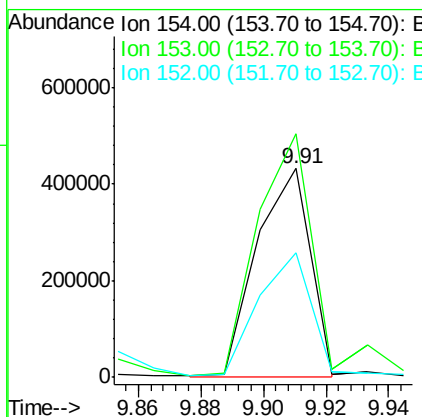
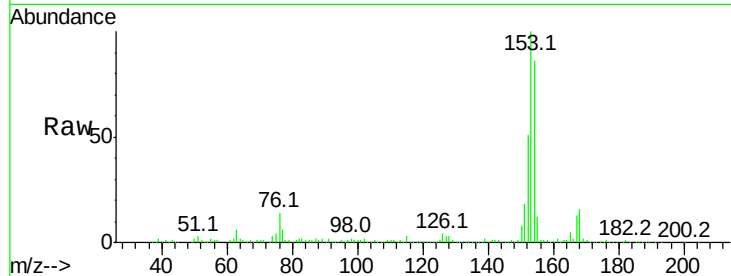
ClientSampleId :

HP-CT-01

Tot Ion:	154	Resp:	515620
Ion Ratio	Lower	Upper	
154	100		
153	116.6	90.5	135.7
152	59.5	43.6	65.4

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#54

Dibenzofuran

Concen: 15.56 ng m

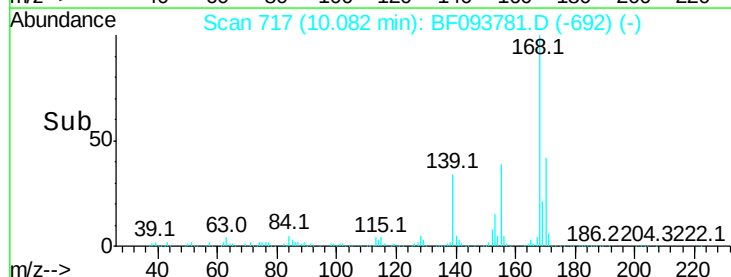
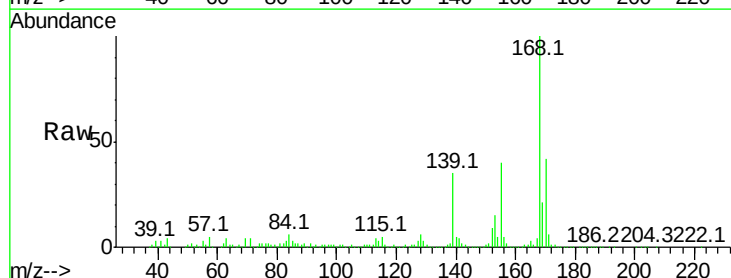
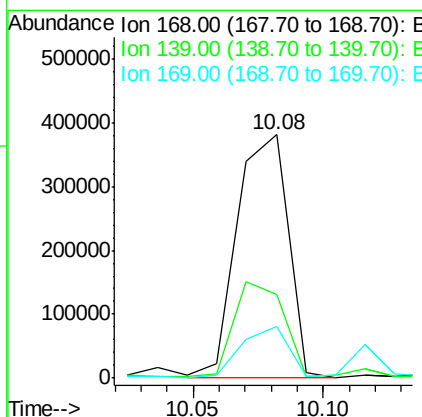
RT: 10.08 min Scan# 717

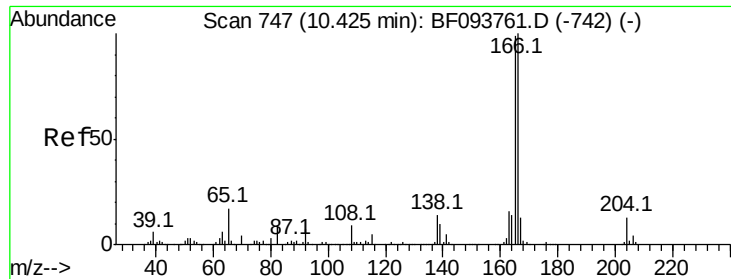
Delta R.T. -0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Tgt Ion:	168	Resp:	517001
Ion Ratio	Lower	Upper	
168	100		
139	34.6	30.6	45.8
169	21.5	10.8	16.2#





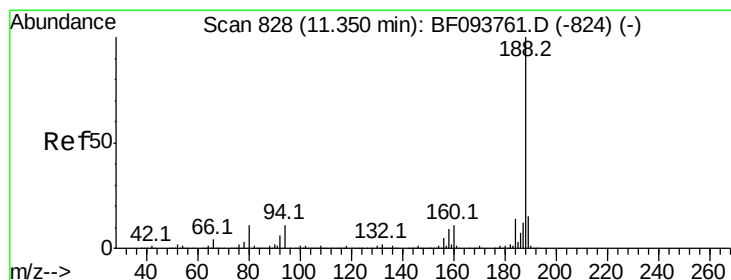
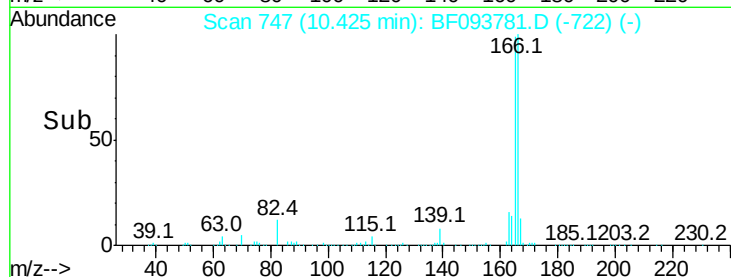
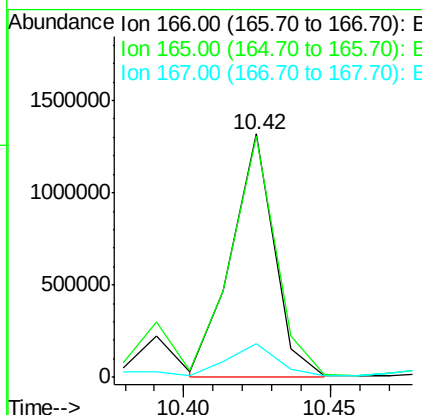
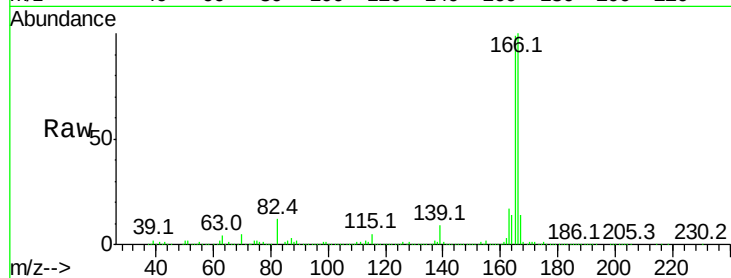
#57
Fluorene
 Concen: 52.55 ng/ml
 RT: 10.42 min Scan# 747
 Delta R.T. -0.01 min
 Lab File: BF093781.D
 Acq: 20 Mar 2017 23:05

Instrument :
 BNA_F
 ClientSampleId :
 HP-CT-01

Tot Ion	Ratio	Lower	Upper
166	100		
165	98.8	78.8	118.2
167	13.8	10.6	16.0

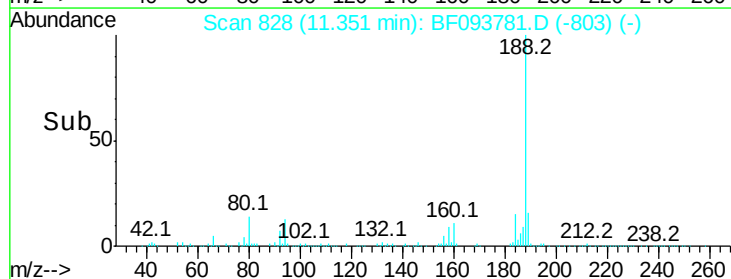
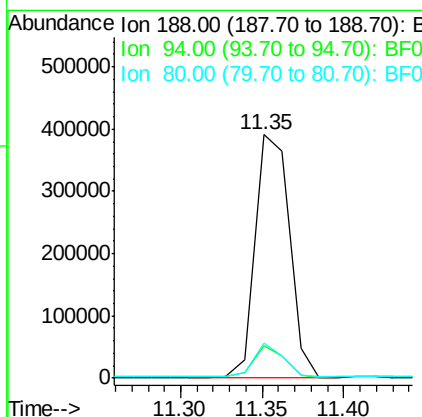
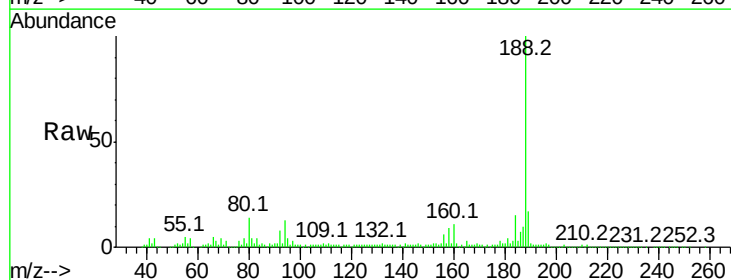
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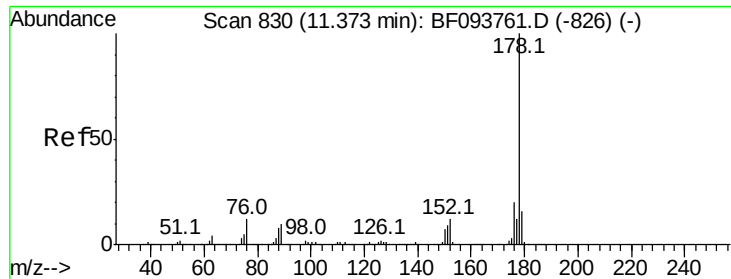
mohammad
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#63
Phenanthrene-d10
 Concen: 20.00 ng/ml
 RT: 11.35 min Scan# 828
 Delta R.T. -0.01 min
 Lab File: BF093781.D
 Acq: 20 Mar 2017 23:05

Tgt Ion	Ratio	Lower	Upper
188	100		
94	13.3	9.4	14.2
80	14.2	10.2	15.2





#70

Phenanthrene

Concen: 139.09 ng

RT: 11.40 min Scan# 832

Delta R.T. 0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Instrument :

BNA_F

ClientSampleId :

HP-CT-01

Tot Ion:178 Resp: 4224132

Ion Ratio Lower Upper

178 100

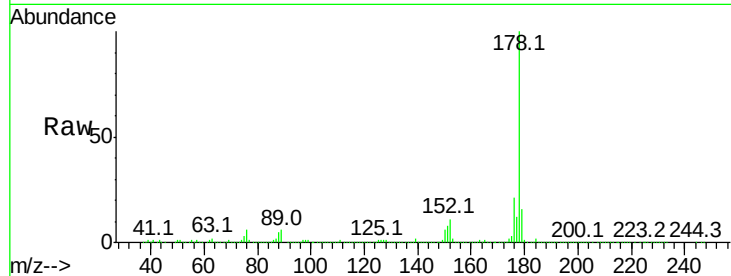
176 20.5 16.2 24.4

179 16.0 12.6 19.0

Manual Integrations
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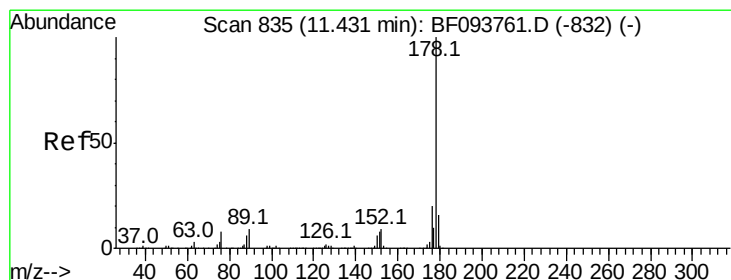
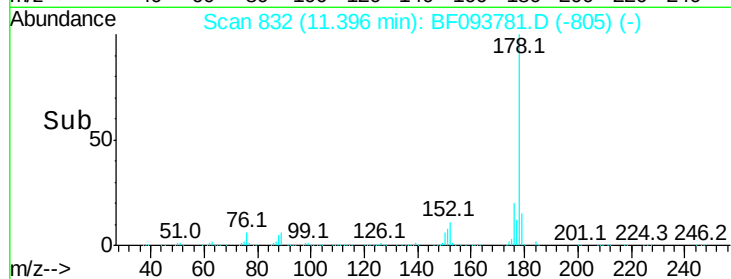
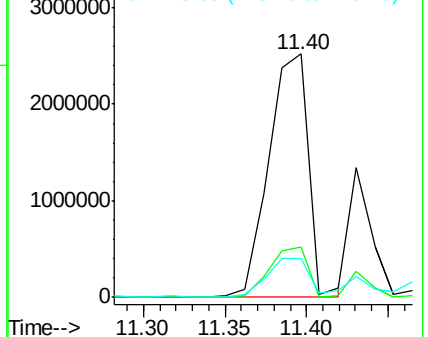
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Abundance Ion 178.00 (177.70 to 178.70): E

Ion 176.00 (175.70 to 176.70): E

Ion 179.00 (178.70 to 179.70): E



#71

Anthracene

Concen: 40.77 ng

RT: 11.43 min Scan# 835

Delta R.T. -0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Tgt Ion:178 Resp: 1274765

Ion Ratio Lower Upper

178 100

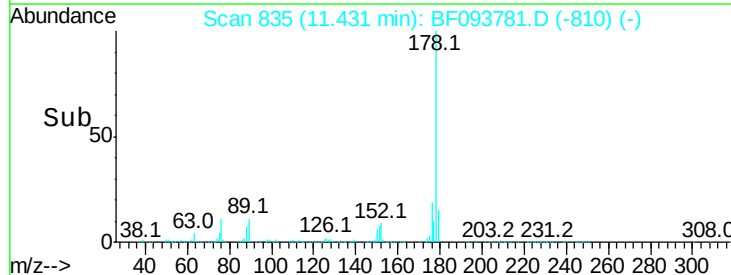
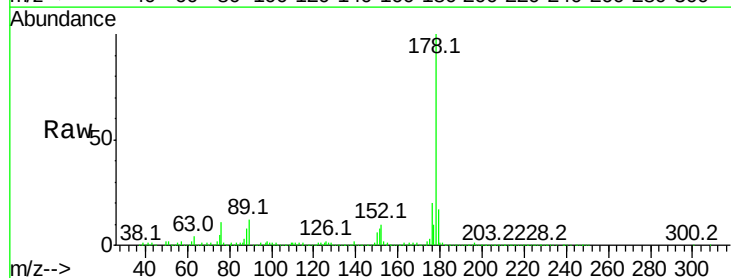
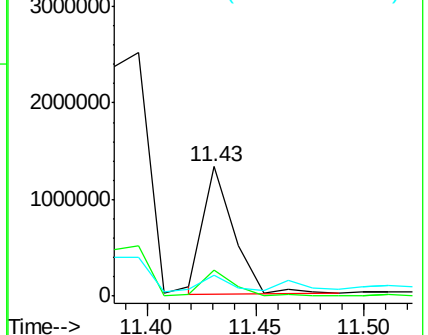
176 19.7 15.8 23.8

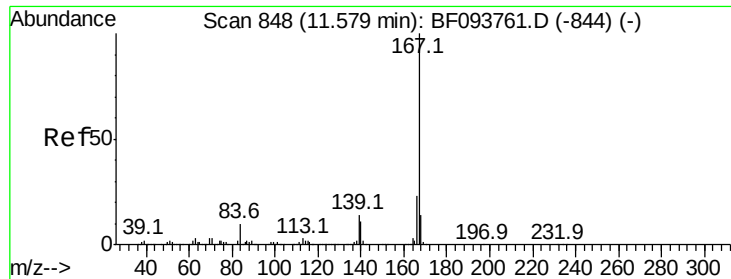
179 16.5 12.7 19.1

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





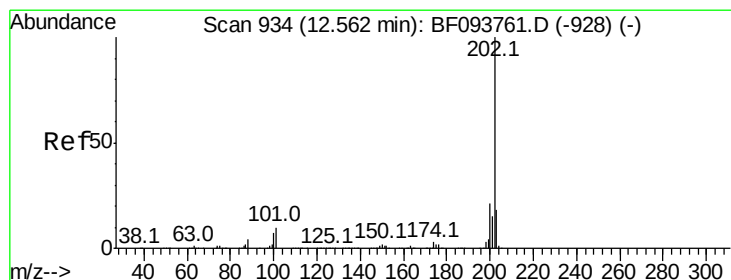
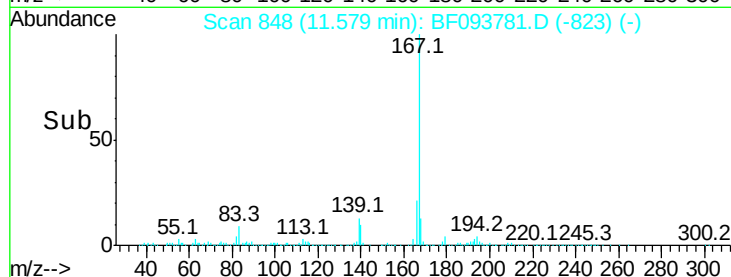
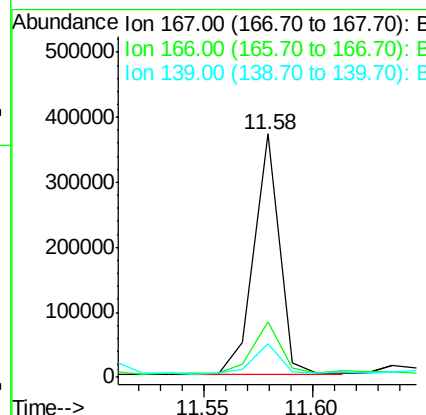
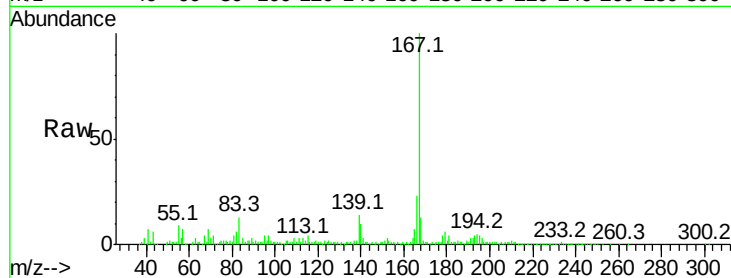
#72
 Carbazole
 Concen: 9.77 ng
 RT: 11.58 min Scan# 848
 Delta R.T. -0.01 min
 Lab File: BF093781.D
 Acq: 20 Mar 2017 23:05

Instrument :
 BNA_F
 ClientSampleID :
 HP-CT-01

Tot Ion	167	Resp	302494
Ion Ratio	Lower	Upper	
167	100		
166	22.6	18.1	27.1
139	13.7	11.7	17.5

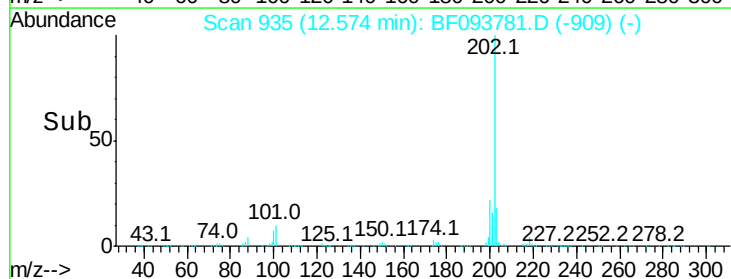
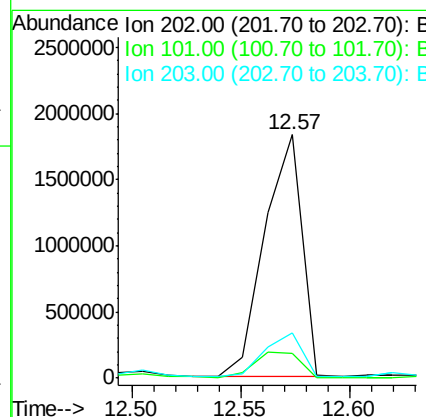
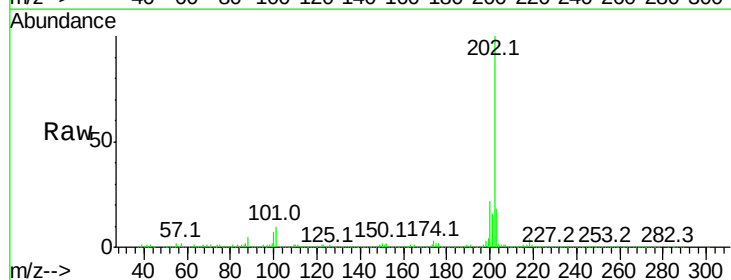
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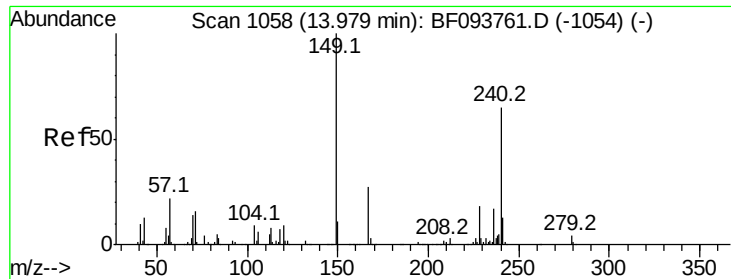
mohammad
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#74
 Fluoranthene
 Concen: 70.54 ng
 RT: 12.57 min Scan# 935
 Delta R.T. 0.00 min
 Lab File: BF093781.D
 Acq: 20 Mar 2017 23:05

Tgt Ion	202	Resp	2202102
Ion Ratio	Lower	Upper	
202	100		
101	10.2	0.0	33.2
203	18.4	0.0	38.1





#75

Chrysene-d12

Concen: 20.00 ng

RT: 13.98 min Scan# 1058

Delta R.T. -0.02 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Instrument :

BNA_F

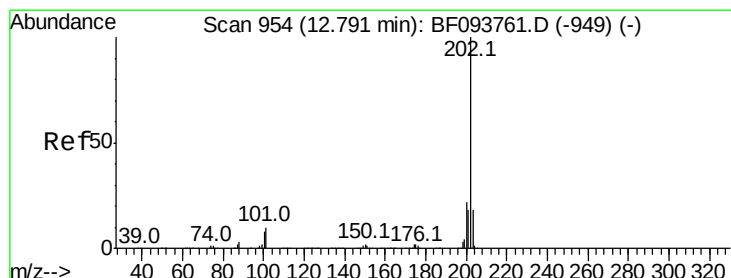
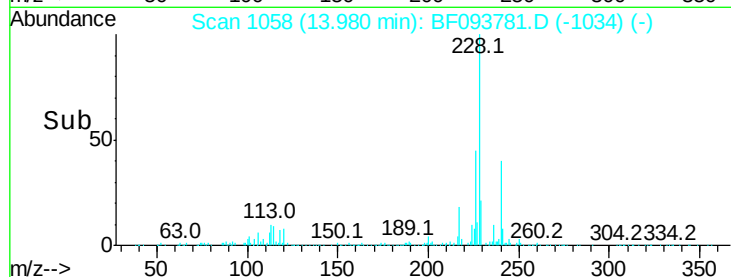
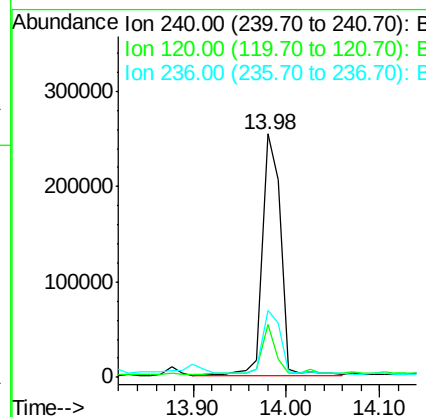
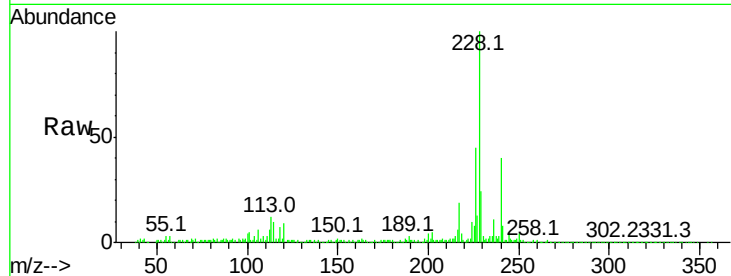
ClientSampleId :

HP-CT-01

Tot Ion	Ratio	Lower	Upper
240	100		
120	21.5	5.8	8.8#
236	27.4	20.5	30.7

Manual Integrations
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#77

Pyrene

Concen: 94.68 ng

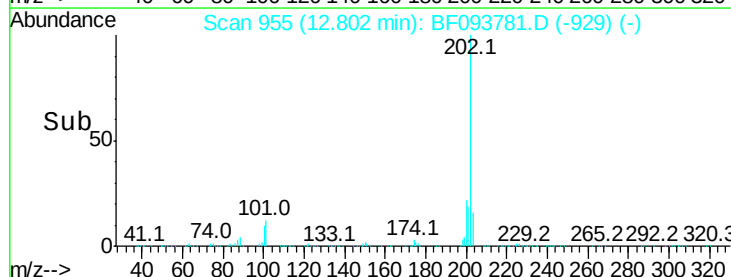
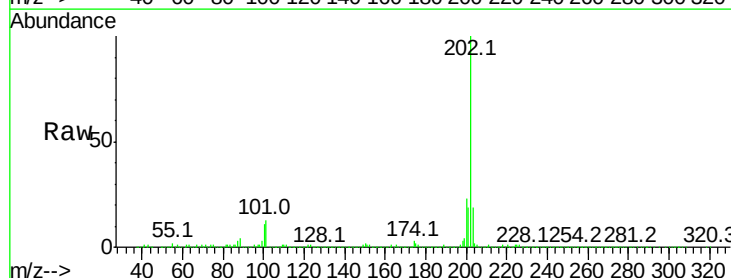
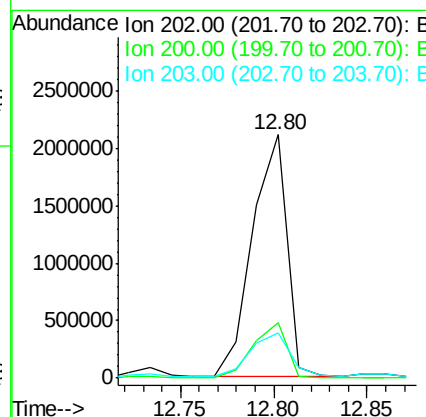
RT: 12.80 min Scan# 955

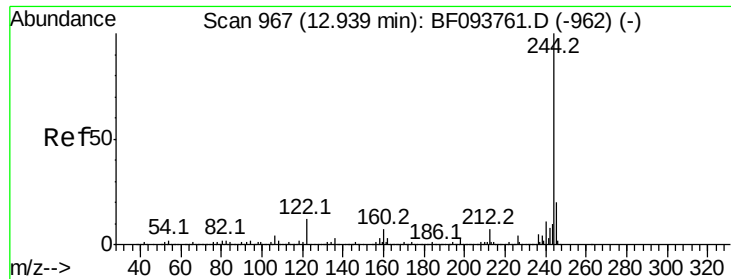
Delta R.T. 0.00 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Tgt Ion	Ratio	Lower	Upper
202	100		
200	22.7	17.6	26.4
203	18.6	14.4	21.6





#78

Terphenyl-d14

Concen: 3.77 ng

RT: 12.94 min Scan# 967

Delta R.T. -0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Instrument :

BNA_F

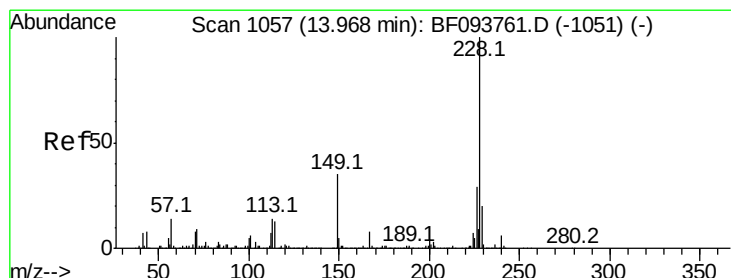
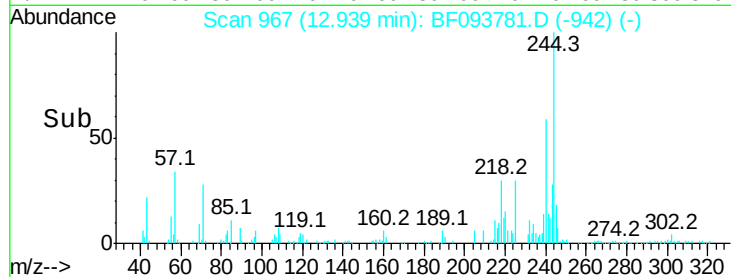
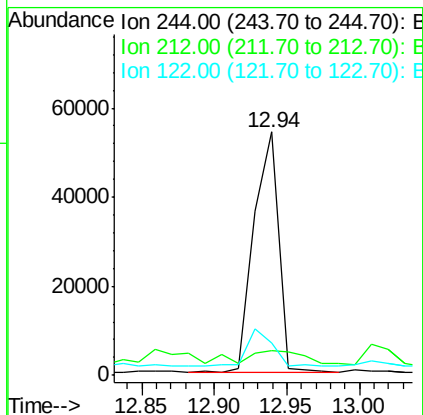
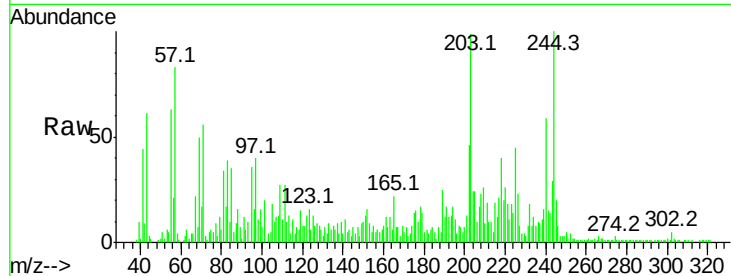
ClientSampleId :

HP-CT-01

Tot Ion:244 Resp: 64277
 Ion Ratio Lower Upper
 244 100
 212 10.4 6.0 9.0#
 122 13.4 10.3 15.5

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#80

Benzo(a)anthracene

Concen: 48.32 ng m

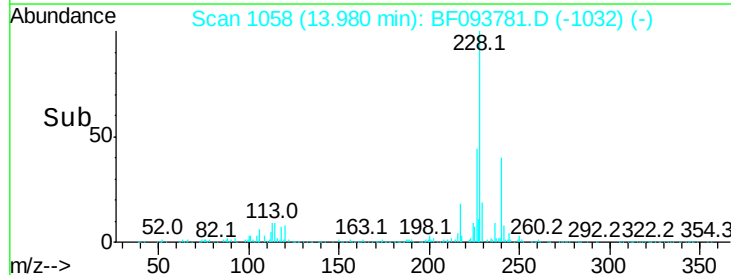
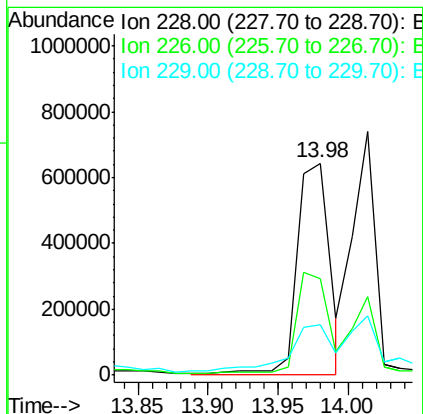
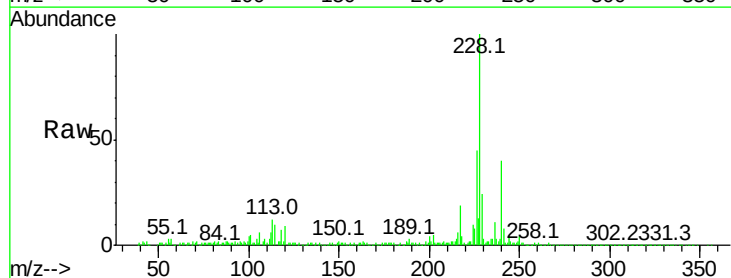
RT: 13.98 min Scan# 1058

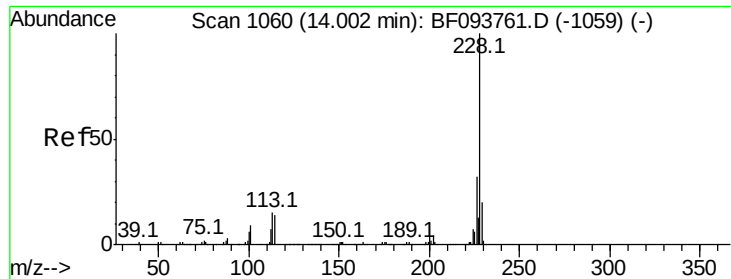
Delta R.T. 0.00 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Tgt Ion:228 Resp: 1051920
 Ion Ratio Lower Upper
 228 100
 226 45.5 22.6 33.8#
 229 23.6 16.3 24.5





#82

Chrysene

Concen: 37.28 ng

RT: 14.01 min Scan# 1061

Delta R.T. -0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Instrument :

BNA_F

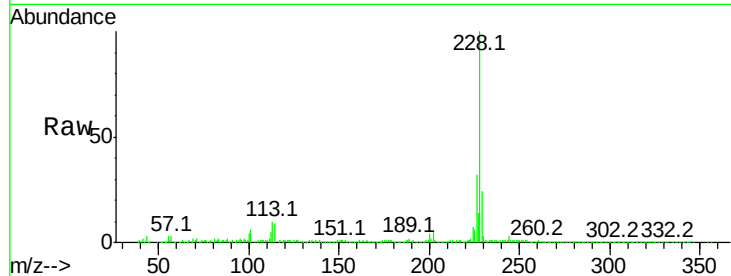
ClientSampled :

HP-CT-01

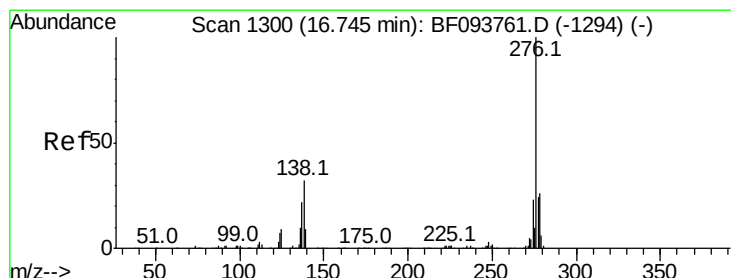
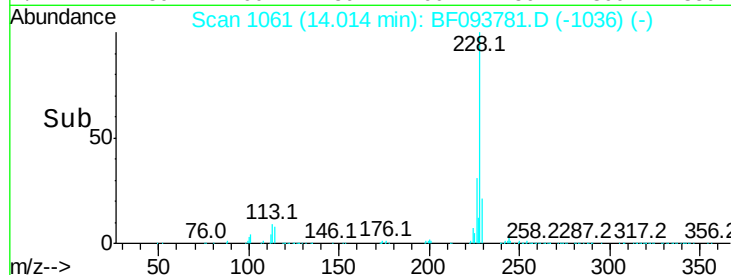
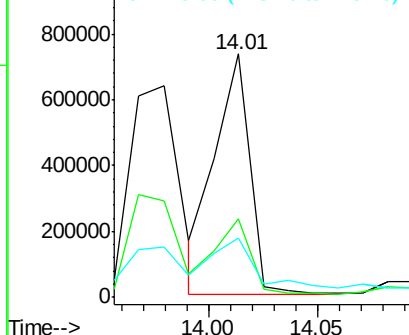
Tot Ion:	228	Resp:	810826
Ion Ratio	Lower	Upper	
228	100		
226	32.1	24.9	37.3
229	24.2	15.8	23.6

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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: 16.39 ng

RT: 16.76 min Scan# 1301

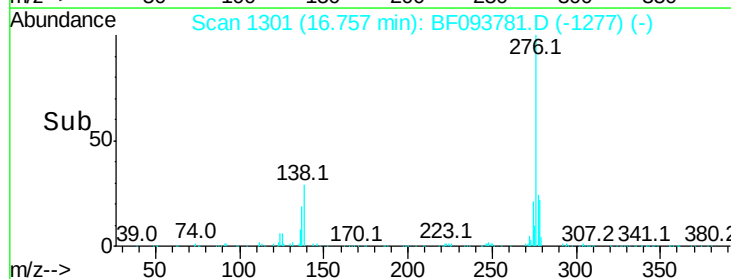
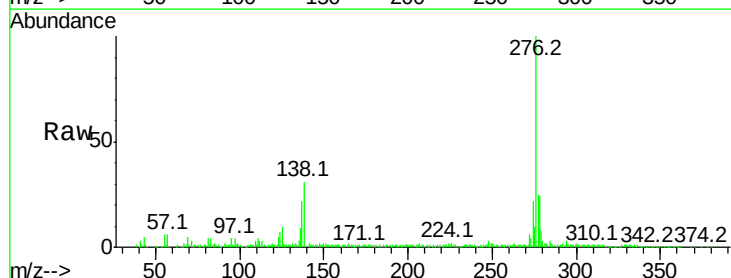
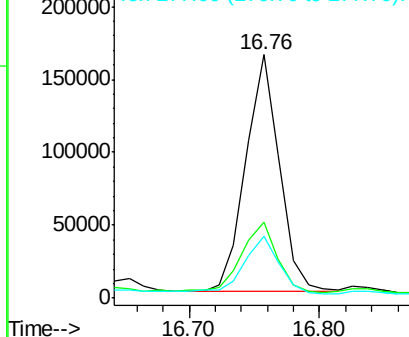
Delta R.T. -0.02 min

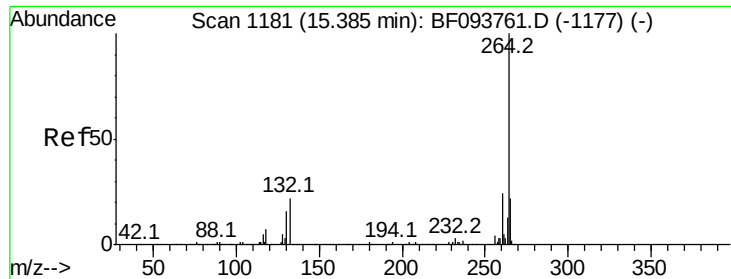
Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Tgt Ion:	276	Resp:	291972
Ion Ratio	Lower	Upper	
276	100		
138	31.5	27.8	41.6
277	25.9	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: 15.40 min Scan# 1182

Delta R.T. -0.01 min

Lab File: BF093781.D

Acq: 20 Mar 2017 23:05

Instrument :

BNA_F

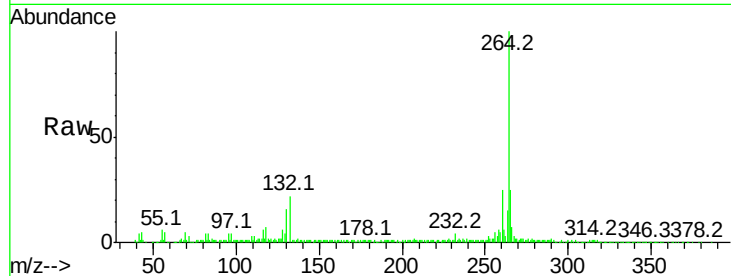
ClientSampleId :

HP-CT-01

Tot Ion:	264	Resp:	354420
Ion Ratio	Lower	Upper	
264	100		
260	24.7	19.5	29.3
265	25.5	17.2	25.8

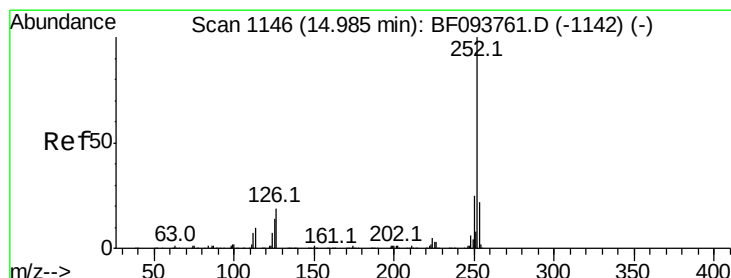
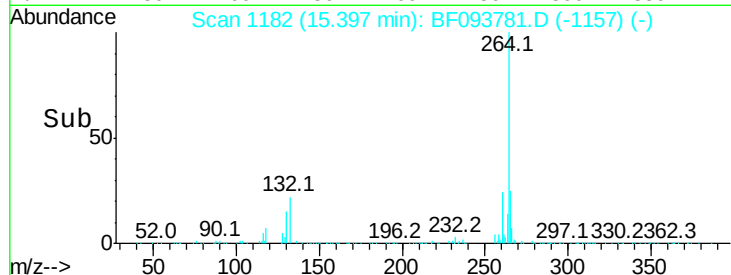
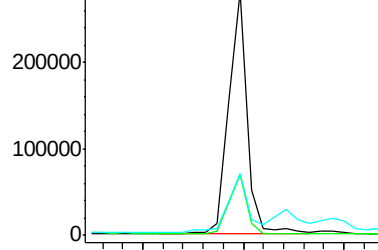
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Abundance Ion 264.00 (263.70 to 264.70): E
Ion 260.00 (259.70 to 260.70): E
Ion 265.00 (264.70 to 265.70): E

15.40



#87

Benzo(b)fluoranthene

Concen: 31.81 ng m

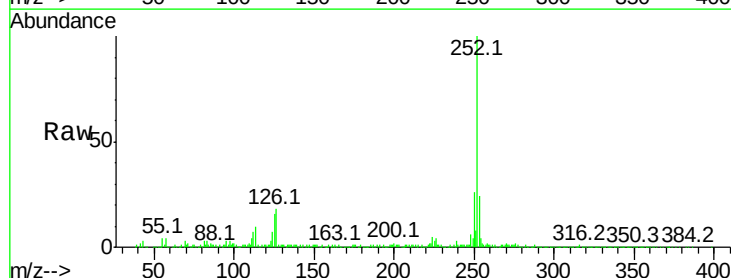
RT: 15.00 min Scan# 1147

Delta R.T. -0.01 min

Lab File: BF093781.D

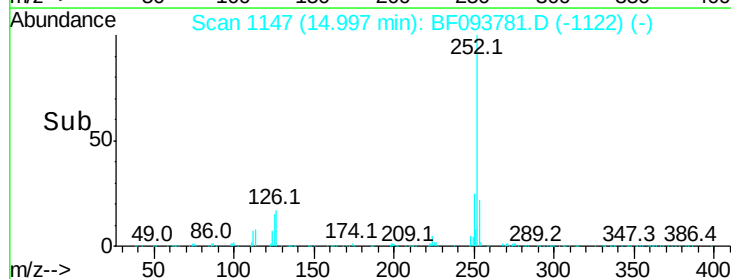
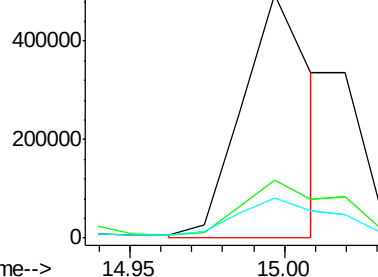
Acq: 20 Mar 2017 23:05

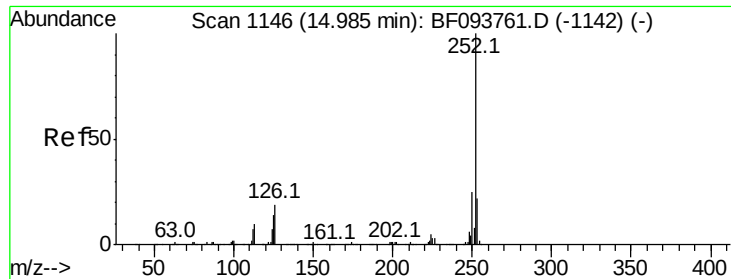
Tgt Ion:	252	Resp:	760085
Ion Ratio	Lower	Upper	
252	100		
253	23.9	18.1	27.1
125	16.3	9.8	14.8#



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

15.00





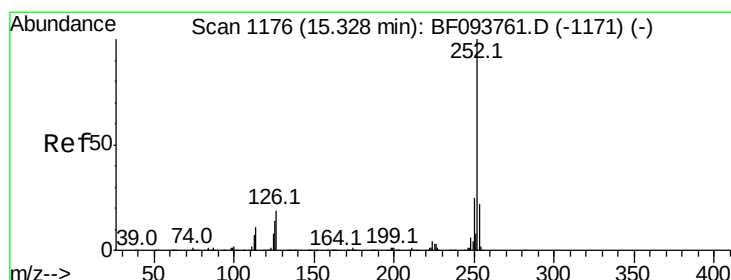
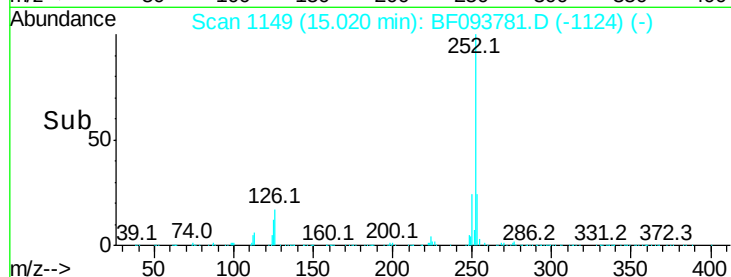
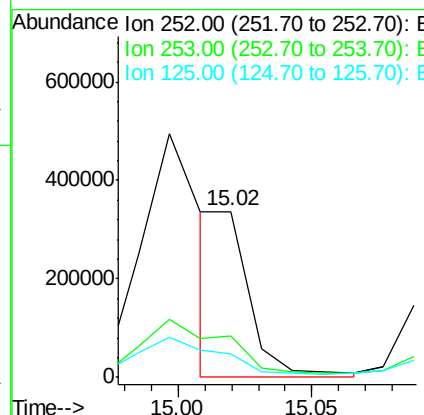
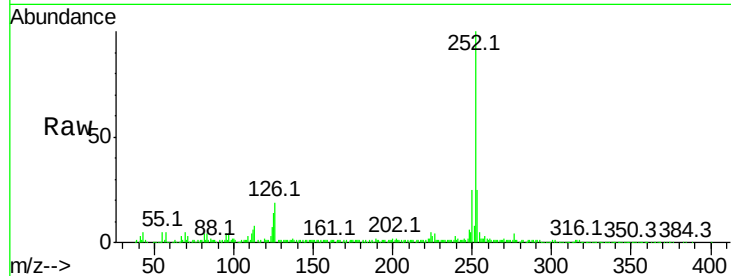
#88
Benzo(k)fluoranthene
Concen: 16.71 ng m
RT: 15.02 min Scan# 1149
Delta R.T. -0.01 min
Lab File: BF093781.D
Acq: 20 Mar 2017 23:05

Instrument :
BNA_F
ClientSampleId :
HP-CT-01

Tot Ion	Ratio	Lower	Upper
252	100		
253	24.9	18.4	27.6
125	14.4	13.1	19.7

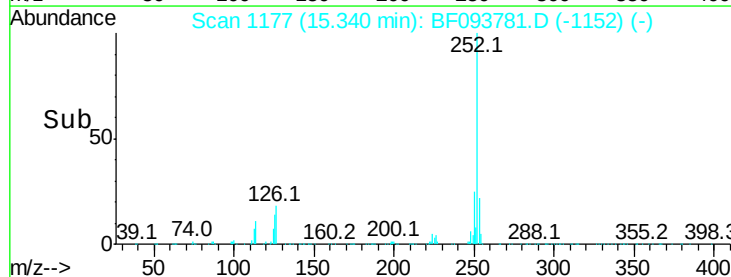
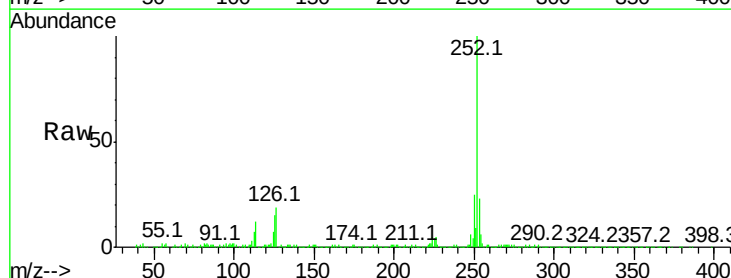
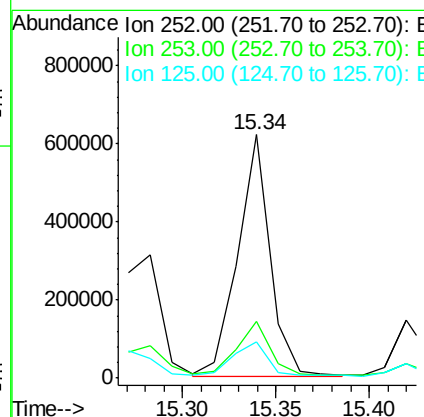
Manual Integrations
APPROVED

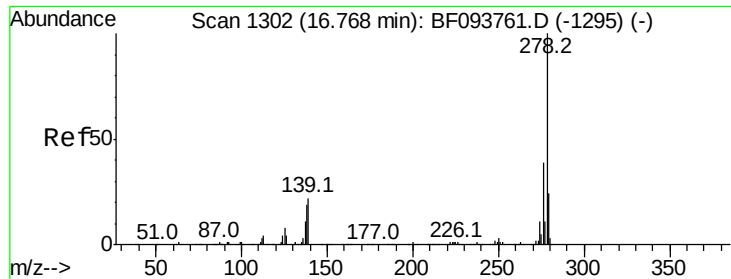
mohammad
3/21/2017 2:45:39 PM



#89
Benzo(a)pyrene
Concen: 38.62 ng
RT: 15.34 min Scan# 1177
Delta R.T. -0.01 min
Lab File: BF093781.D
Acq: 20 Mar 2017 23:05

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.3	17.5	26.3
125	14.9	11.0	16.4





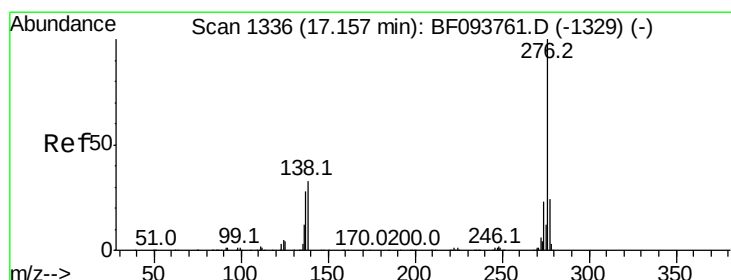
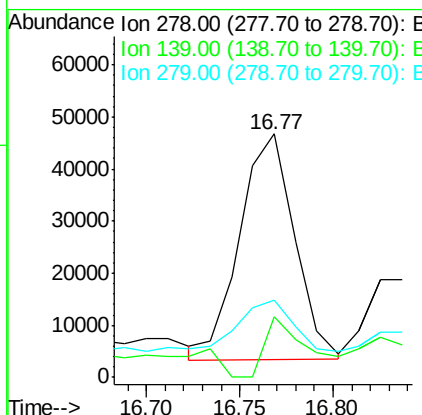
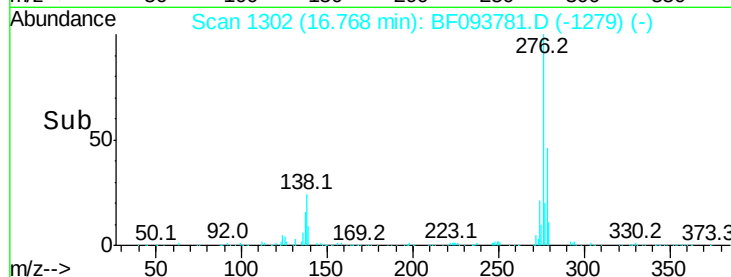
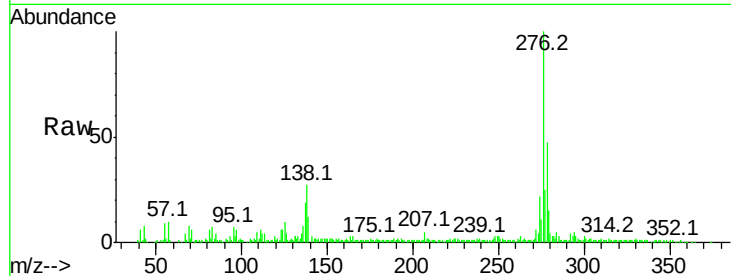
#90
Dibenzo(a,h)anthracene
Concen: 5.49 ng
RT: 16.77 min Scan# 1302
Delta R.T. -0.03 min
Lab File: BF093781.D
Acq: 20 Mar 2017 23:05

Instrument :
BNA_F
ClientSampleId :
HP-CT-01

Tot Ion	Ratio	Lower	Upper
278	100		
139	25.0	16.6	24.8#
279	31.7	19.3	28.9#

Manual Integrations
APPROVED

mohammad
3/21/2017 2:45:39 PM



#91
Benzo(g,h,i)perylene
Concen: 20.86 ng
RT: 17.17 min Scan# 1337
Delta R.T. -0.02 min
Lab File: BF093781.D
Acq: 20 Mar 2017 23:05

Tgt Ion	Ratio	Lower	Upper
276	100		
277	24.2	18.6	28.0
138	31.3	25.4	38.0

