

Data Path : Z:\HPCHEM1\BNA F\DATA\BF061917\
 Data File : BF096025.D
 Acq On : 20 Jun 2017 3:35
 Operator : SJ/MA
 Sample : I3688-08
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 G16-1.5-3

Manual Integrations
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Quant Time: Jun 20 04:28:06 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF060517.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jun 16 17:12:03 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.30	152	66797	20.00	ng	-0.02
21) Naphthalene-d8	9.34	136	261947	20.00	ng	-0.02
38) Acenaphthene-d10	12.16	164	100504	20.00	ng	-0.02
63) Phenanthrene-d10	14.55	188	148417	20.00	ng	-0.02
75) Chrysene-d12	18.29	240	133507	20.00	ng	-0.01
86) Perylene-d12	19.96	264	97911	20.00	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	5.20	112	567540	135.39	ng	-0.02
7) Phenol-d6	6.89	99	625503	124.64	ng	-0.02
23) Nitrobenzene-d5	8.23	82	359913	85.33	ng	-0.02
41) 2,4,6-Tribromophenol	13.46	330	95706	107.63	ng	-0.02
44) 2-Fluorobiphenyl	11.12	172	686959	95.12	ng	-0.02
78) Terphenyl-d14	16.94	244	446487	83.00	ng	-0.01

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
31) Naphthalene	9.37	128	80806	6.15	ng	99
37) 2-Methylnaphthalene	10.50	142	44869	5.05	ng	96
45) 1,1'-Biphenyl	11.27	154	21650	2.61	ng	93
48) Acenaphthylene	11.93	152	43743	3.95	ng	98
49) Dimethylphthalate	11.82	163	197697	25.91	ng	98
51) Acenaphthene	12.21	154	13039	2.04	ng	97
54) Dibenzofuran	12.50	168	59615	6.63	ng	96
57) Fluorene	13.05	166	28311	3.62	ng	# 89
70) Phenanthrene	14.59	178	268510	31.36	ng	99
71) Anthracene	14.67	178	125991	14.09	ng	97
72) Carbazole	14.99	167	35654	4.09	ng	99
74) Fluoranthene	16.38	202	430317	50.77	ng	98
77) Pvrene	16.68	202	350786	35.21	ng	96
80) Benzo(a)anthracene	18.27	228	188723	24.31	ng	94
82) Chrysene	18.32	228	302587	39.01	ng	99
83) Bis(2-ethylhexyl)phthalate	18.36	149	12693	2.07	ng	# 90
85) Indeno(1,2,3-cd)pvrene	21.13	276	66711	10.05	ng	93
87) Benzo(b)fluoranthene	19.56	252	269805m	44.01	ng	
88) Benzo(k)fluoranthene	19.58	252	72257m	12.33	ng	
89) Benzo(a)pvrene	19.90	252	78282	13.89	ng	# 88
90) Dibenzo(a,h)anthracene	21.11	278	29045	6.08	ng	# 80
91) Benzo(g,h,i)perylene	21.46	276	55179	11.32	ng	99

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

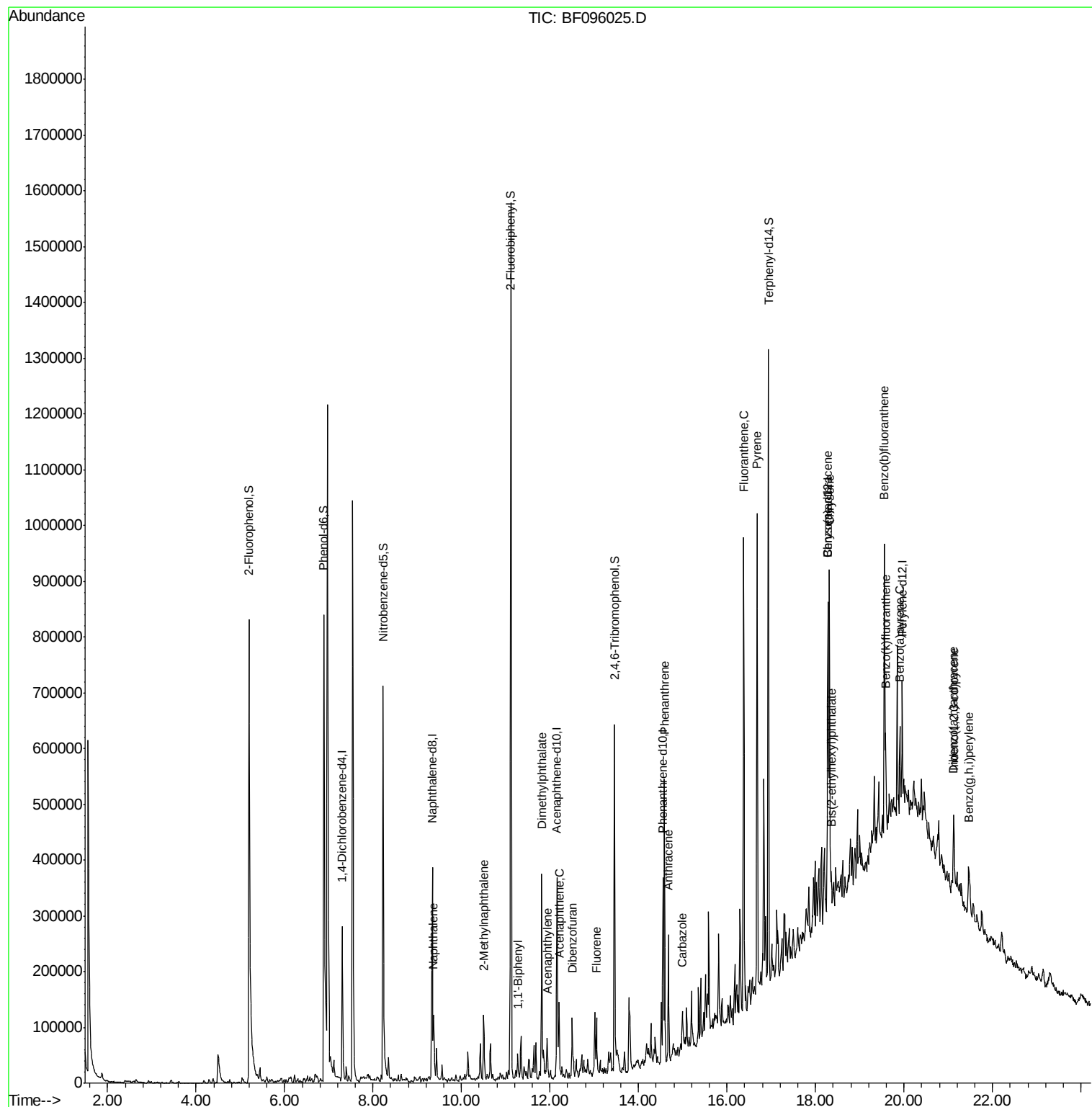
Data Path : Z:\HPCHEM1\BNA F\DATA\BF061917\
Data File : BF096025.D
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Operator : SJ/MA
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ALS Vial : 26 Sample Multiplier: 1

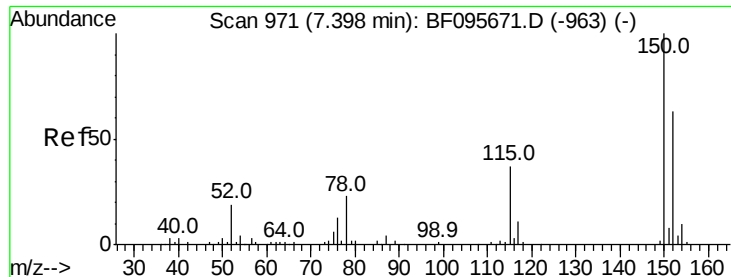
Instrument :
BNA_F
ClientSampleId :
G16-1.5-3

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#1

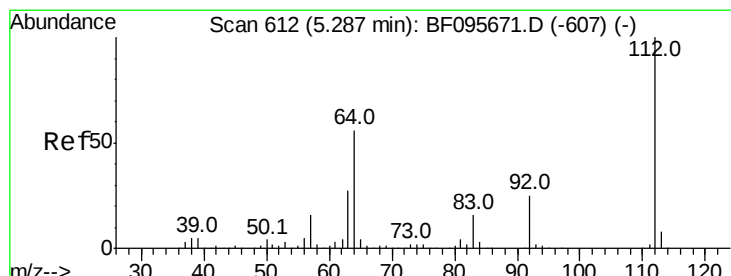
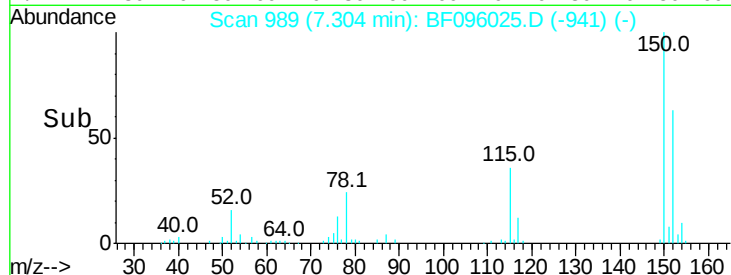
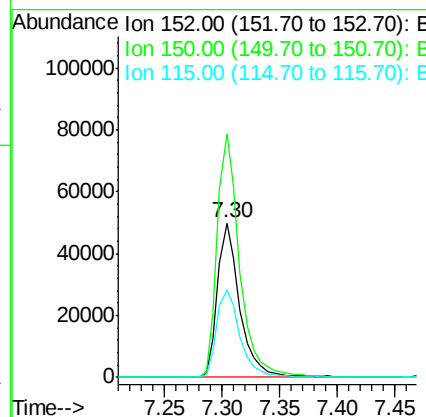
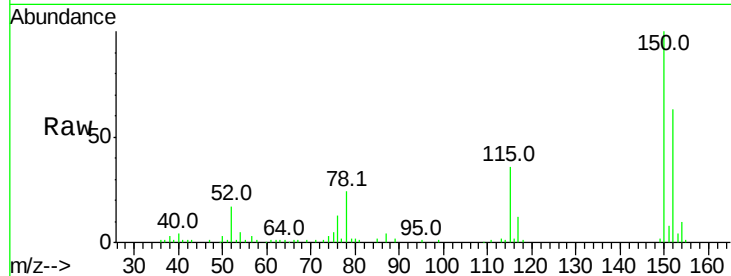
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 7.30 min Scan# 989
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampled :
G16-1.5-3

Tot Ion	Ratio	Lower	Upper
152	100		
150	157.7	126.2	189.2
115	56.7	52.2	78.2

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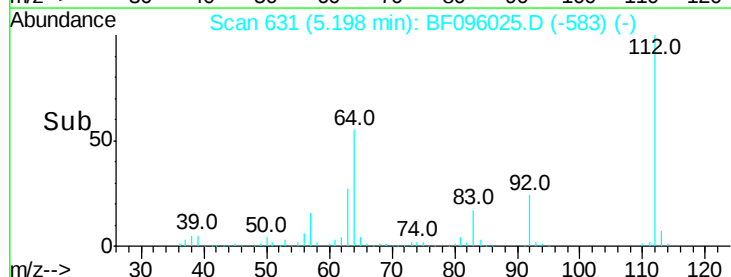
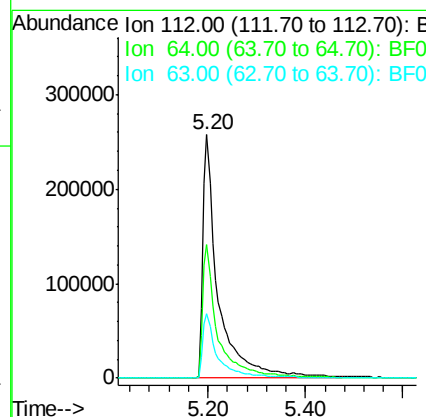
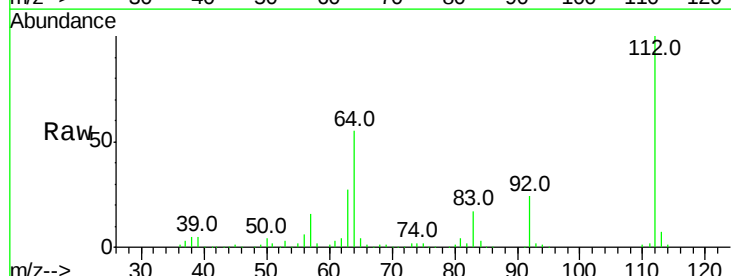
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#5

2-Fluorophenol
Concen: 135.39 ng
RT: 5.20 min Scan# 631
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Lower	Upper
112	100		
64	54.8	46.0	69.0
63	26.6	23.4	35.0





#7

Phenol-d6

Concen: 124.64 ng

RT: 6.89 min Scan# 919

Delta R.T. -0.02 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Instrument :

BNA_F

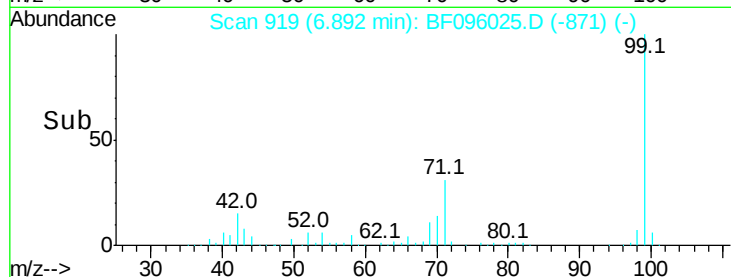
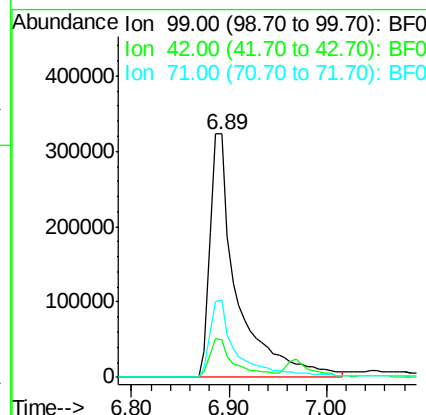
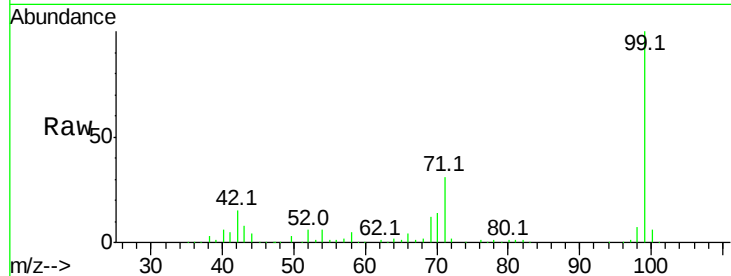
ClientSampleId :

G16-1.5-3

Tot Ion	Ion	Ratio	Resp	Lower	Upper
99	100		625503		
42	15.3	13.5	20.3		
71	31.5	24.5	36.7		

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#21

Naphthalene-d8

Concen: 20.00 ng

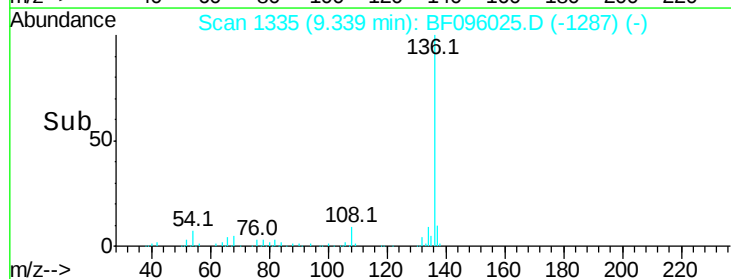
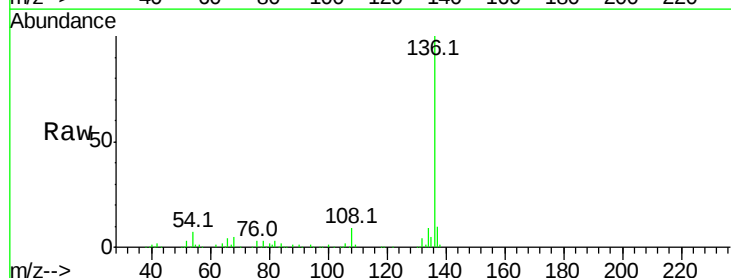
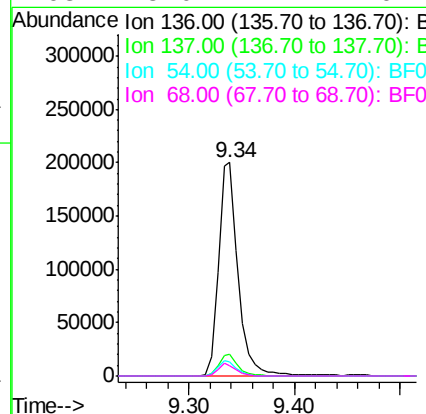
RT: 9.34 min Scan# 1335

Delta R.T. -0.02 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
136	100		261947		
137	10.3	8.5	12.7		
54	6.6	4.9	7.3		
68	5.0	4.1	6.1		





#23

Nitrobenzene-d5

Concen: 85.33 ng

RT: 8.23 min Scan# 1146

Delta R.T. -0.02 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Instrument :

BNA_F

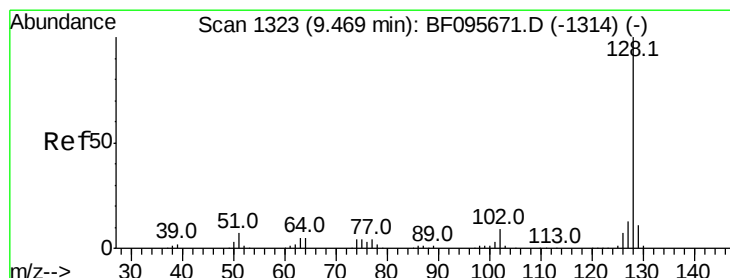
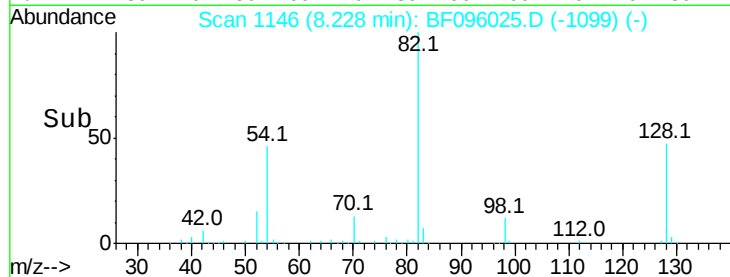
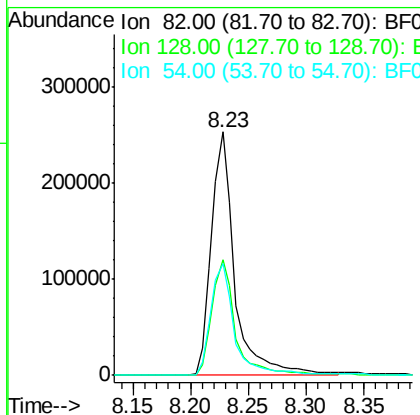
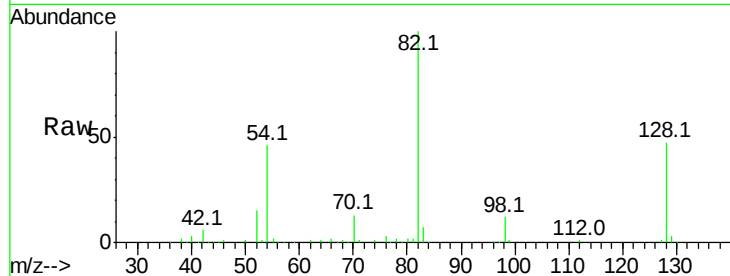
ClientSampleId :

G16-1.5-3

Tot Ion:	82	Resp:	359913
Ion Ratio	Lower	Upper	
82	100		
128	47.3	34.0	51.0
54	46.1	42.2	63.2

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#31

Naphthalene

Concen: 6.15 ng

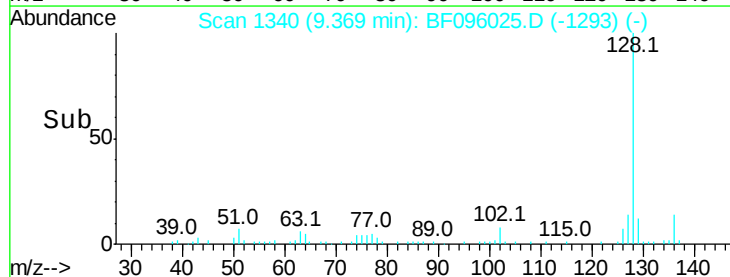
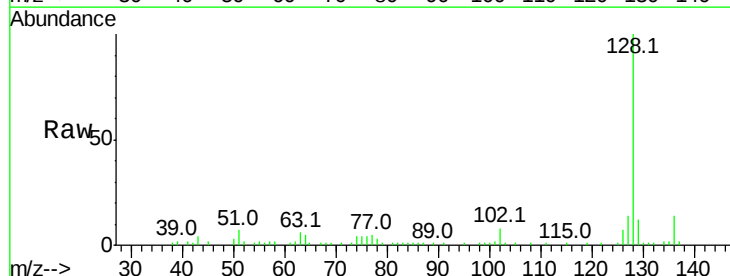
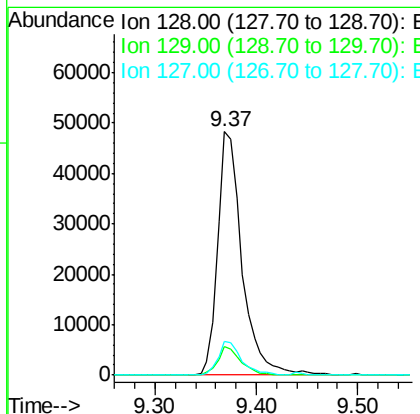
RT: 9.37 min Scan# 1340

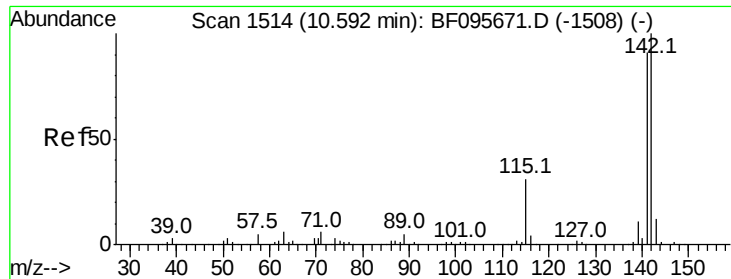
Delta R.T. -0.02 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Tgt Ion:	128	Resp:	80806
Ion Ratio	Lower	Upper	
128	100		
129	11.9	9.0	13.6
127	14.1	10.8	16.2





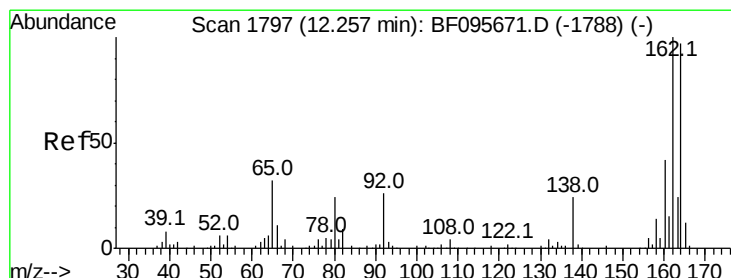
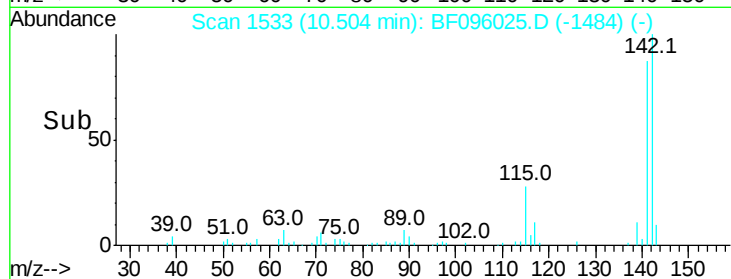
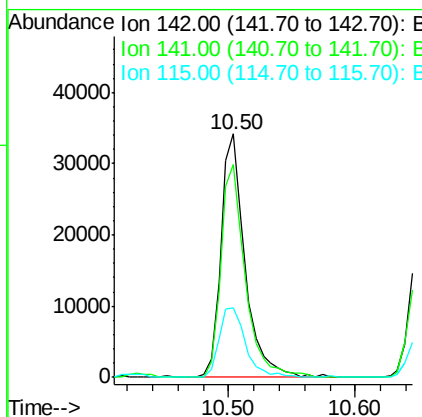
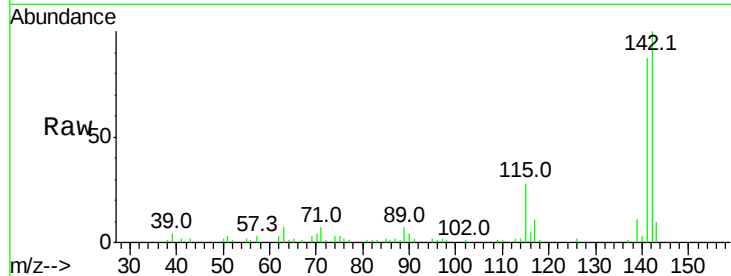
#37
2-Methylnaphthalene
Concen: 5.05 ng
RT: 10.50 min Scan# 1533
Delta R.T. -0.01 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampleId :
G16-1.5-3

Tot Ion	Ratio	Lower	Upper
142	100		
141	87.2	71.3	106.9
115	28.3	27.1	40.7

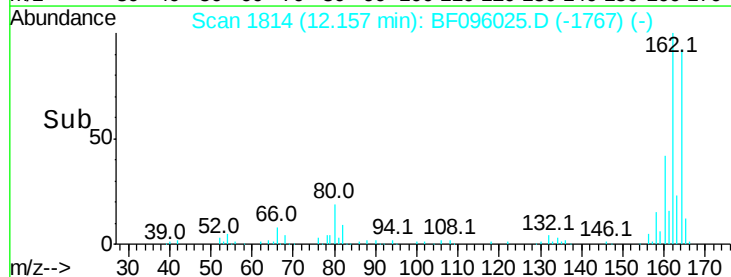
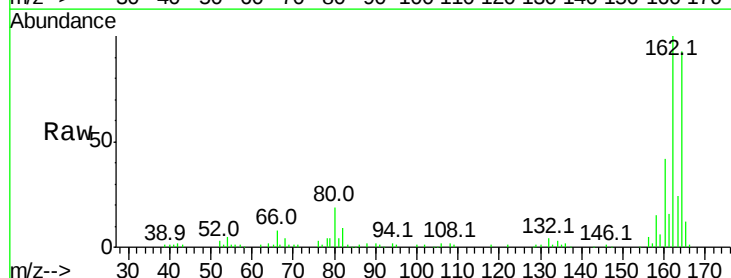
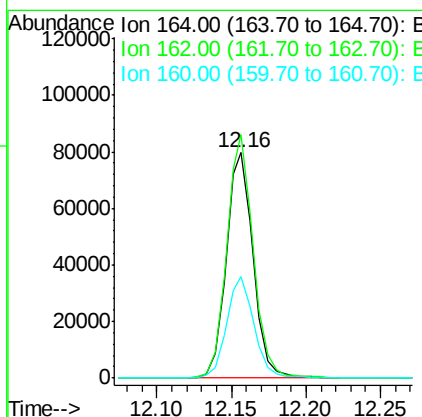
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#38
Acenaphthene-d10
Concen: 20.00 ng
RT: 12.16 min Scan# 1814
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Lower	Upper
164	100		
162	108.1	82.6	123.8
160	44.9	36.2	54.2





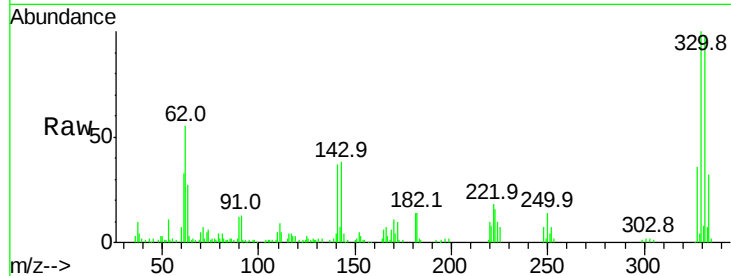
#41
 2,4,6-Tribromophenol
 Concen: 107.63 ng
 RT: 13.46 min Scan# 2035
 Delta R.T. -0.02 min
 Lab File: BF096025.D
 Acq: 20 Jun 2017 3:35

Instrument :
 BNA_F
 ClientSampleId :
 G16-1.5-3

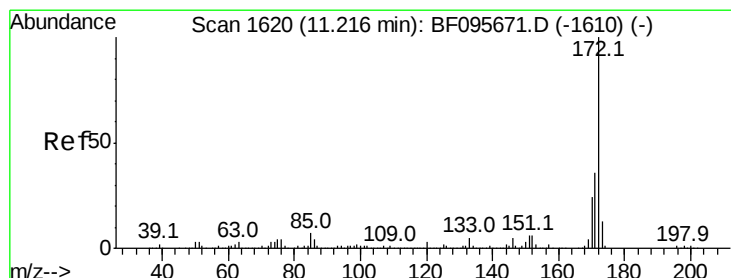
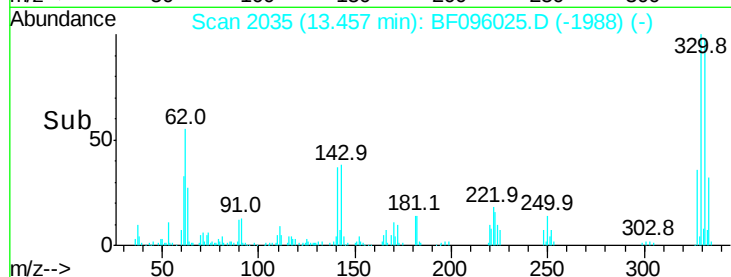
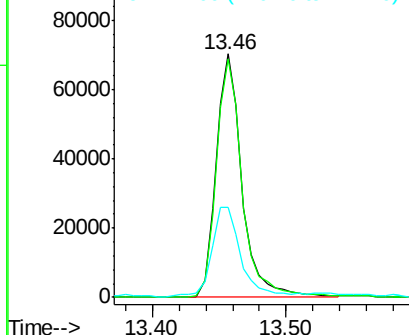
Tot Ion	Ratio	Resp	Lower	Upper
330	100			
332	99.4	76.6	115.0	
141	43.0	31.4	47.2	

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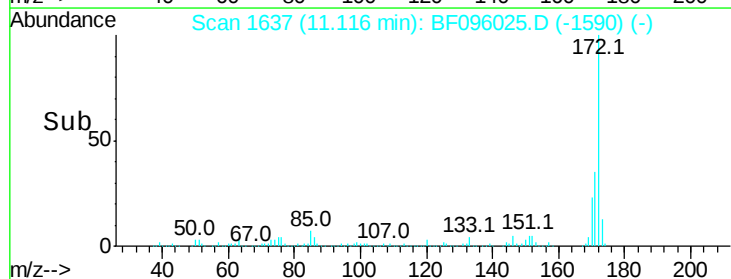
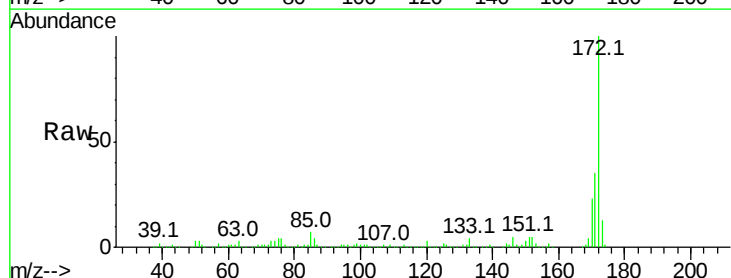
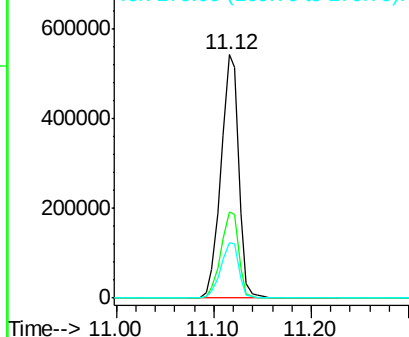
Abundance Ion 329.80 (329.50 to 330.50): E
 Ion 331.80 (331.50 to 332.50): E
 Ion 141.00 (140.70 to 141.70): E

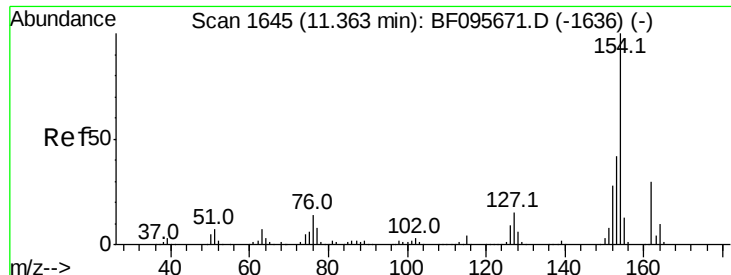


#44
 2-Fluorobiphenyl
 Concen: 95.12 ng
 RT: 11.12 min Scan# 1637
 Delta R.T. -0.02 min
 Lab File: BF096025.D
 Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Resp	Lower	Upper
172	100			
171	35.4	29.6	44.4	
170	22.8	19.8	29.8	

Abundance Ion 172.00 (171.70 to 172.70): E
 Ion 171.00 (170.70 to 171.70): E
 Ion 170.00 (169.70 to 170.70): E





#45

1,1'-Biphenyl

Concen: 2.61 ng

RT: 11.27 min Scan# 1663

Delta R.T. -0.02 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Instrument :

BNA_F

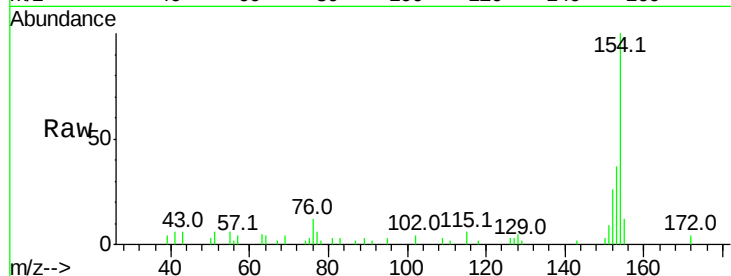
ClientSampleId :

G16-1.5-3

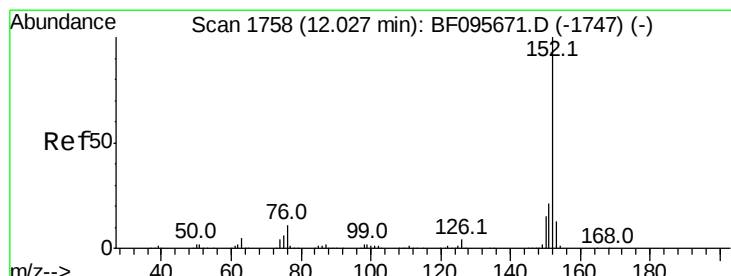
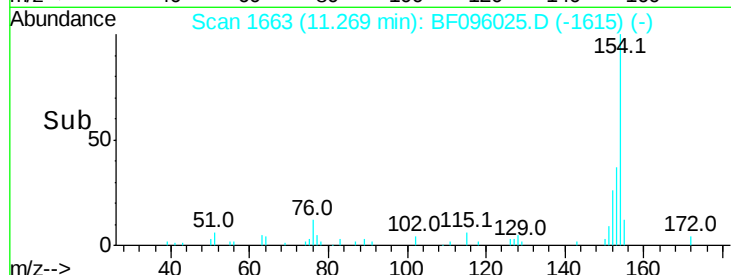
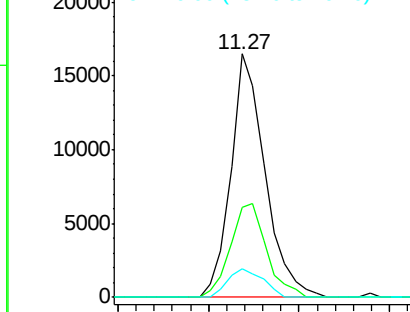
Tot Ion:	154	Resp:	21650
Ion Ratio	Lower	Upper	
154	100		
153	37.0	21.2	61.2
76	12.0	0.0	29.9

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Abundance Ion 154.00 (153.70 to 154.70): E
Ion 153.00 (152.70 to 153.70): E
Ion 76.00 (75.70 to 76.70): BF0



#48

Acenaphthylene

Concen: 3.95 ng

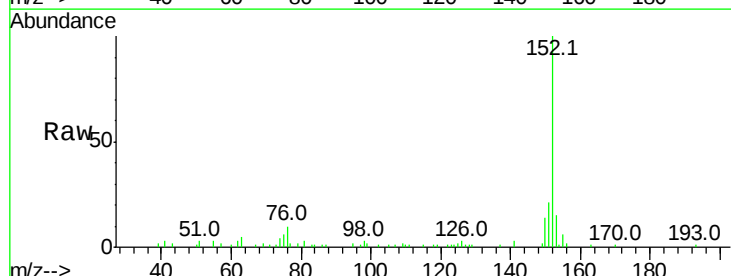
RT: 11.93 min Scan# 1776

Delta R.T. -0.02 min

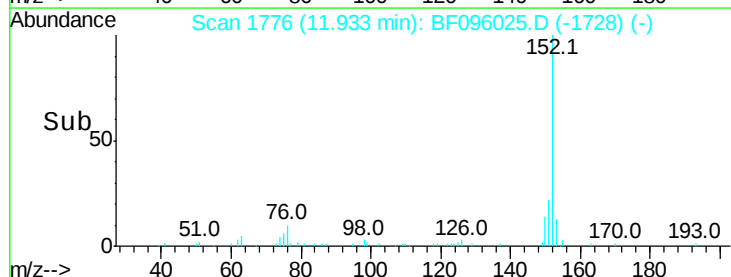
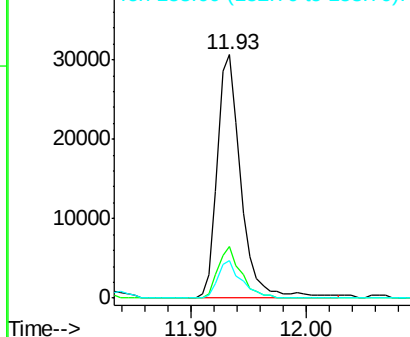
Lab File: BF096025.D

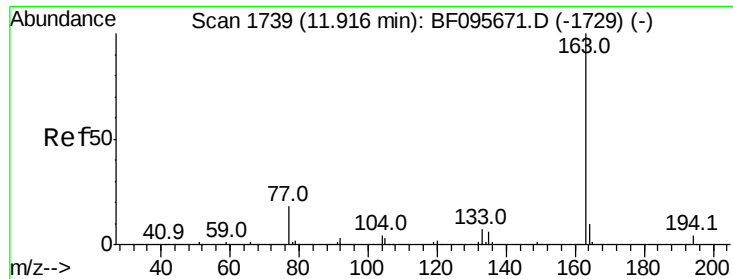
Acq: 20 Jun 2017 3:35

Tgt Ion:	152	Resp:	43743
Ion Ratio	Lower	Upper	
152	100		
151	21.1	16.8	25.2
153	15.2	10.8	16.2



Abundance Ion 152.00 (151.70 to 152.70): E
Ion 151.00 (150.70 to 151.70): E
Ion 153.00 (152.70 to 153.70): E





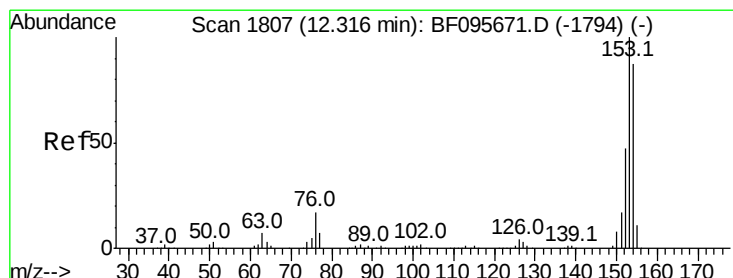
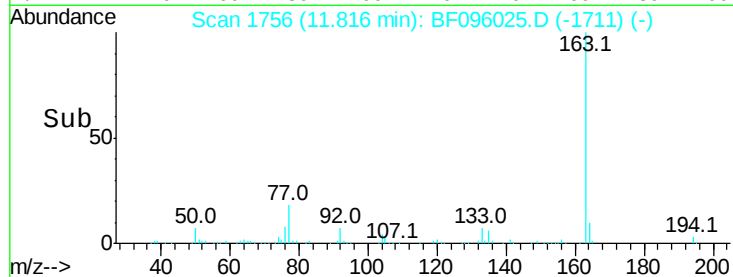
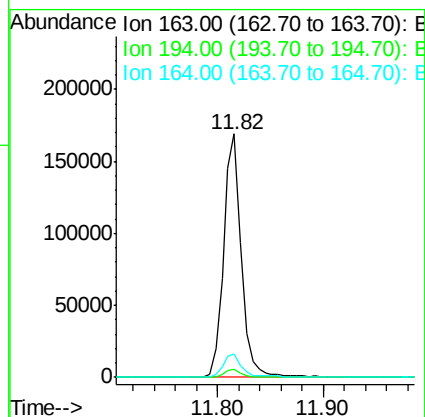
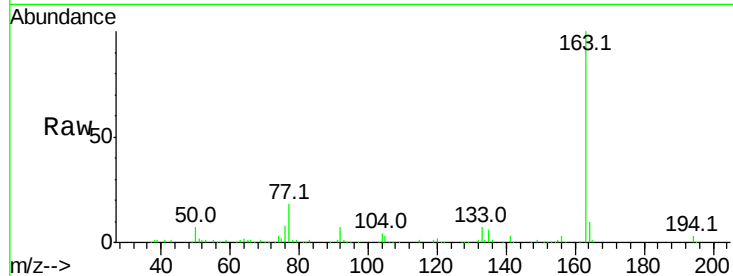
#49
Dimethylphthalate
Concen: 25.91 ng
RT: 11.82 min Scan# 1756
Delta R.T. -0.04 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampleId :
G16-1.5-3

Tot Ion:	163	Resp:	197697
Ion Ratio	Lower	Upper	
163	100		
194	3.3	2.6	4.0
164	9.6	8.4	12.6

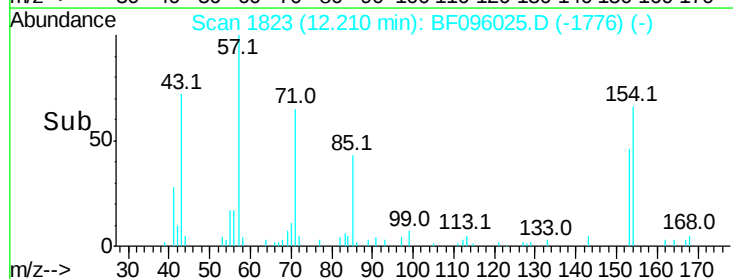
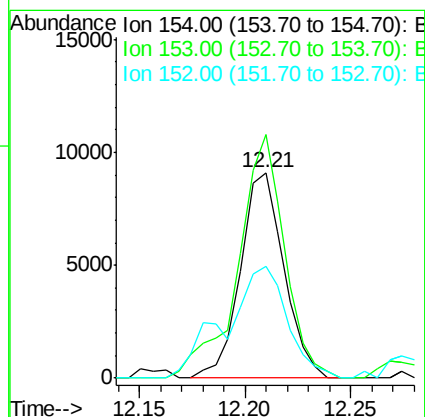
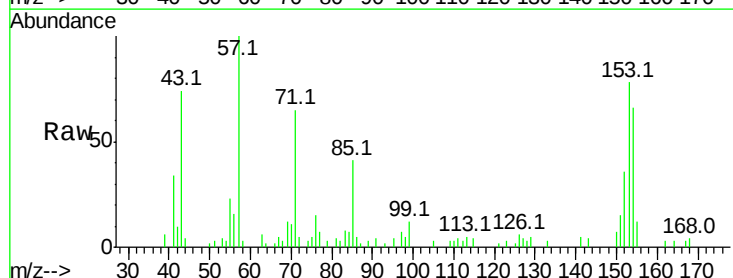
Manual Integrations
APPROVED

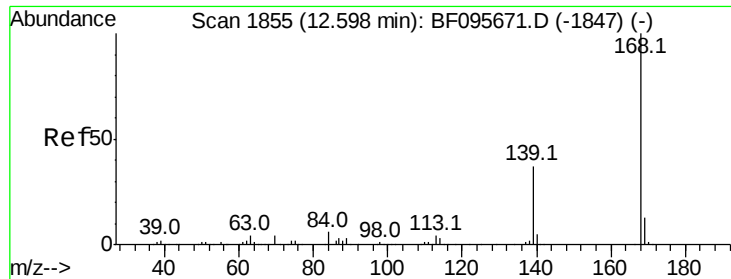
mohammad
6/20/2017 4:29:23 PM



#51
Acenaphthene
Concen: 2.04 ng
RT: 12.21 min Scan# 1823
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion:	154	Resp:	13039
Ion Ratio	Lower	Upper	
154	100		
153	118.4	90.5	135.7
152	54.1	43.6	65.4





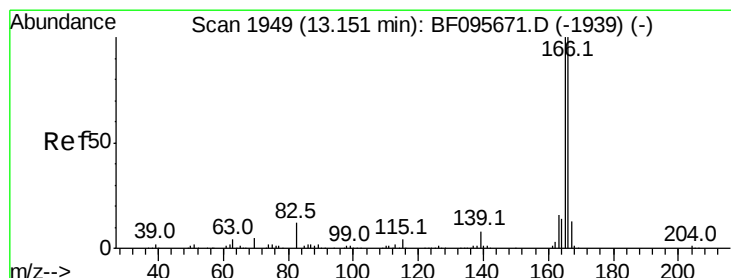
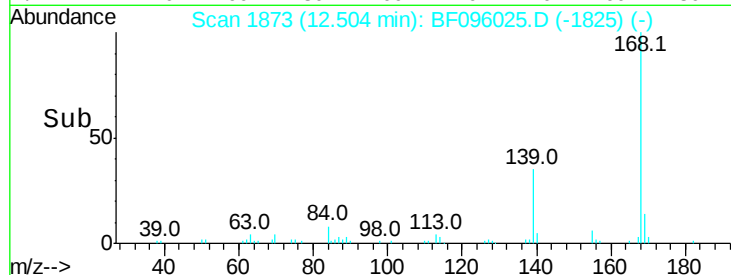
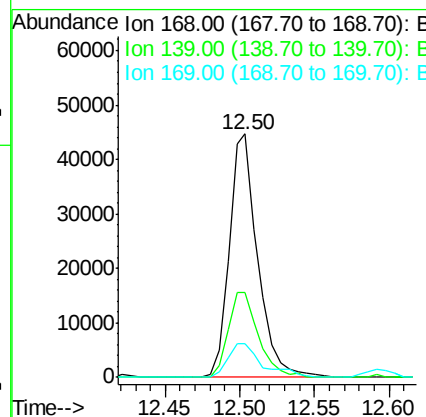
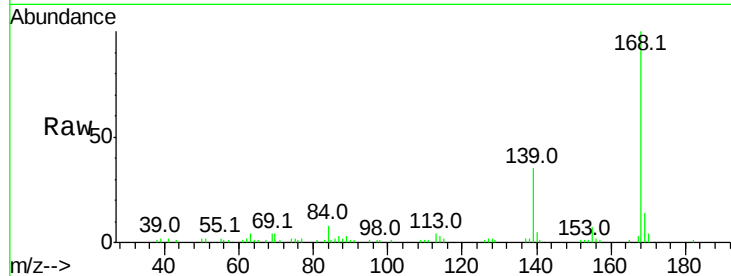
#54
Dibenzenofuran
Concen: 6.63 ng
RT: 12.50 min Scan# 1873
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampleId :
G16-1.5-3

Tot Ion	Ratio	Resp	Lower	Upper
168	100	59615		
139	34.8		30.6	45.8
169	13.6		10.8	16.2

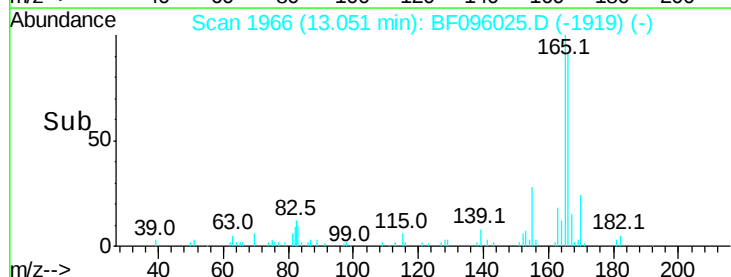
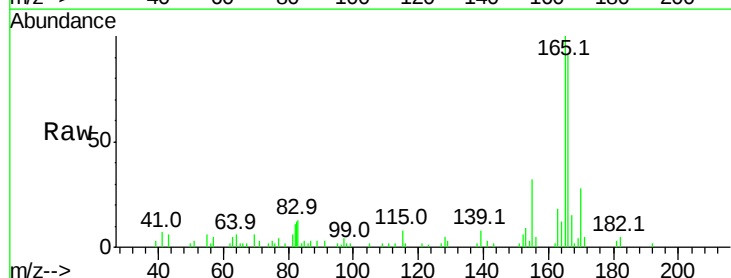
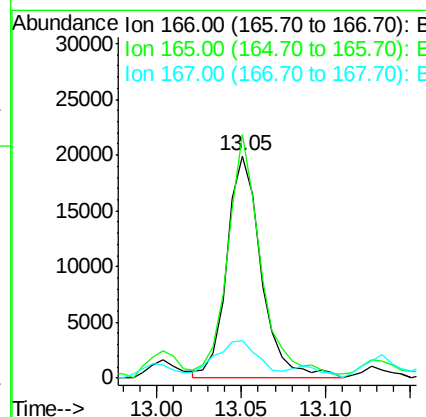
Manual Integrations
APPROVED

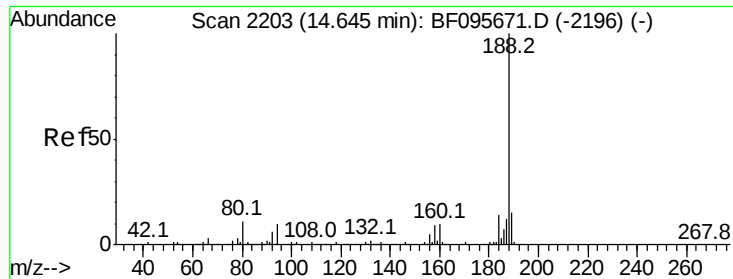
mohammad
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#57
Fluorene
Concen: 3.62 ng
RT: 13.05 min Scan# 1966
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Resp	Lower	Upper
166	100	28311		
165	109.5		78.8	118.2
167	16.8		10.6	16.0#





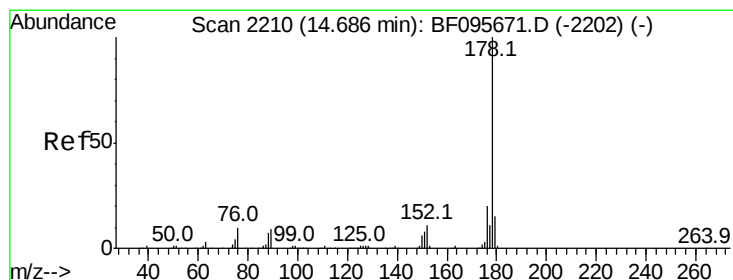
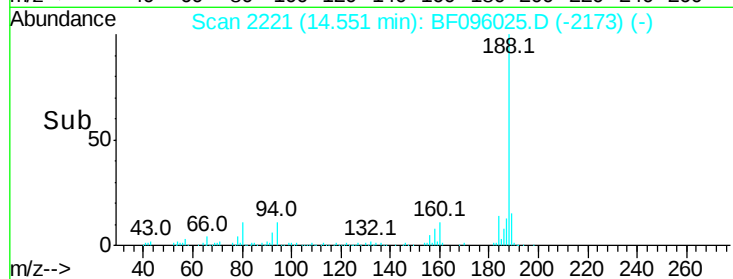
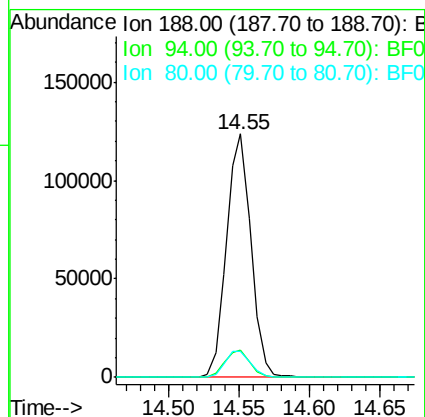
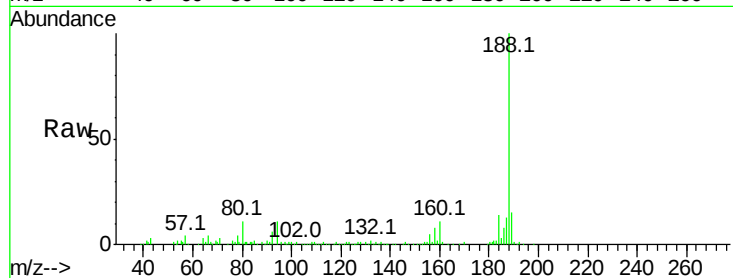
#63
Phenanthrene-d10
Concen: 20.00 ng
RT: 14.55 min Scan# 2221
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampleId :
G16-1.5-3

Tot Ion	Ratio	Resp Lower	Resp Upper
188	100		
94	11.4	9.4	14.2
80	11.0	10.2	15.2

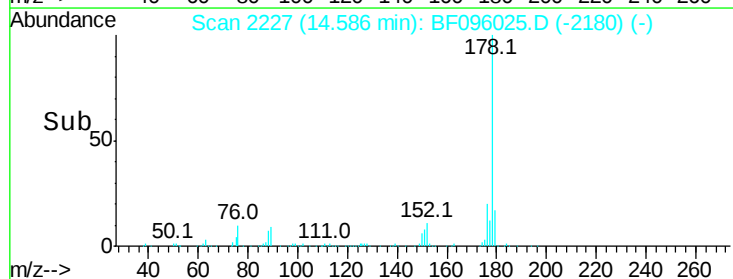
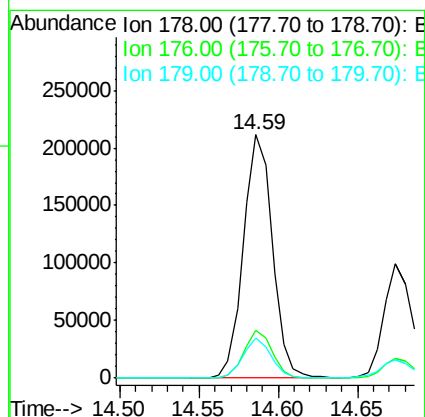
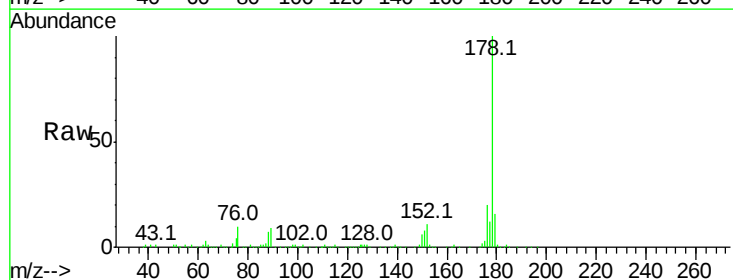
Manual Integrations
APPROVED

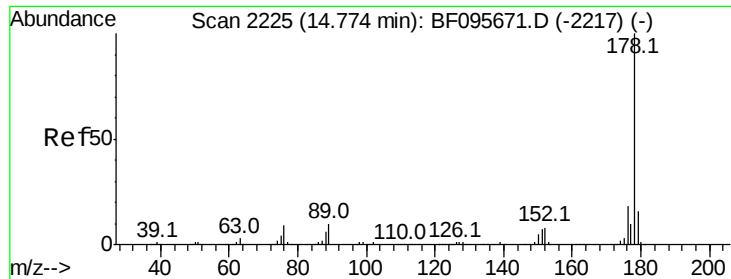
mohammad
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#70
Phenanthrene
Concen: 31.36 ng
RT: 14.59 min Scan# 2227
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Resp Lower	Resp Upper
178	100		
176	19.8	16.2	24.4
179	16.5	12.6	19.0





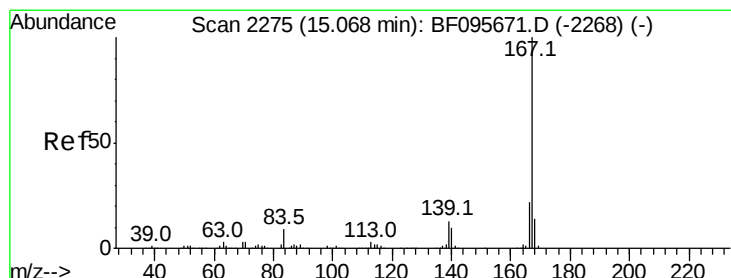
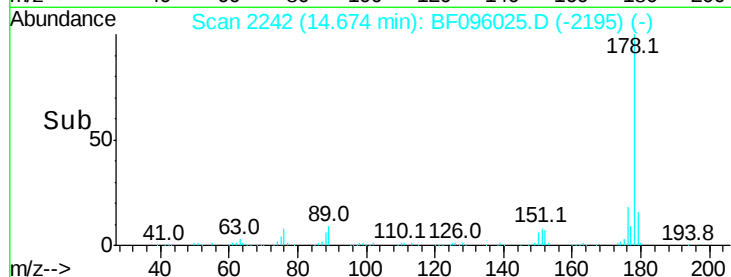
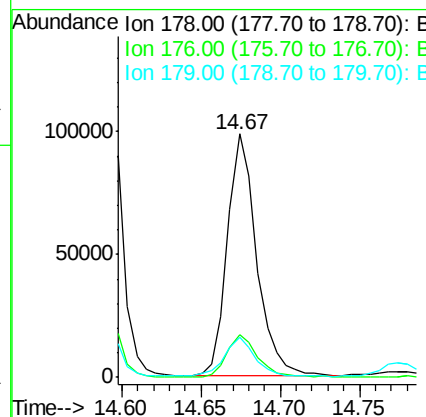
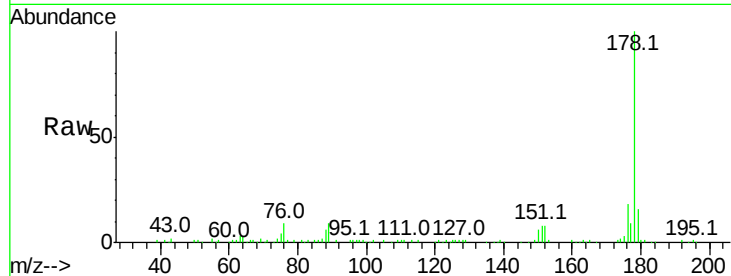
#71
 Anthracene
 Concen: 14.09 ng
 RT: 14.67 min Scan# 2242
 Delta R.T. -0.02 min
 Lab File: BF096025.D
 Acq: 20 Jun 2017 3:35

Instrument :
 BNA_F
 ClientSampled :
 G16-1.5-3

Tot Ion	Ratio	Lower	Upper
178	100		
176	17.7	15.8	23.8
179	16.4	12.7	19.1

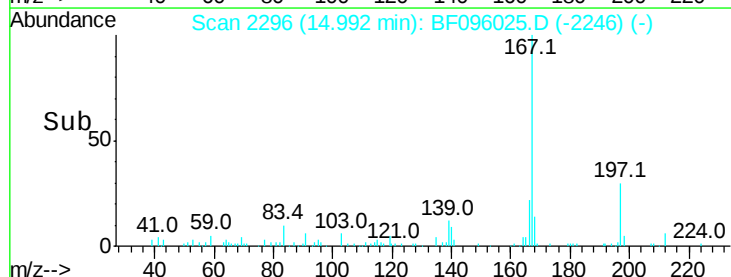
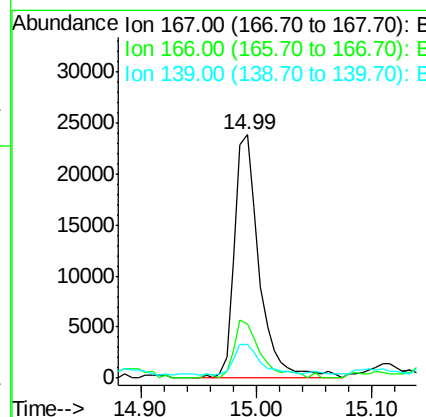
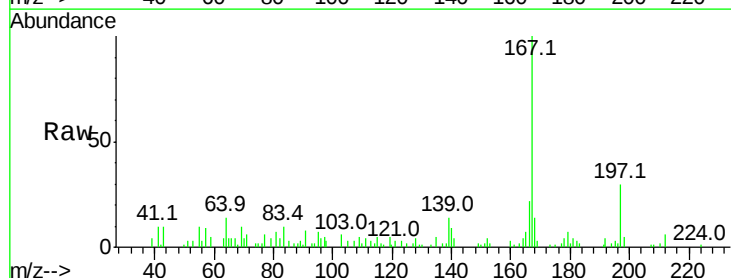
Manual Integrations
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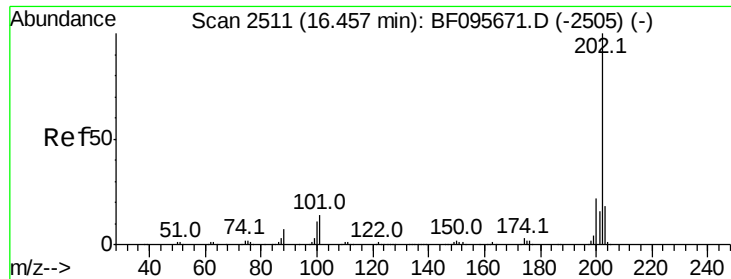
mohammad
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#72
 Carbazole
 Concen: 4.09 ng
 RT: 14.99 min Scan# 2296
 Delta R.T. -0.01 min
 Lab File: BF096025.D
 Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Lower	Upper
167	100		
166	22.5	18.1	27.1
139	13.8	11.7	17.5





#74

Fluoranthene

Concen: 50.77 ng

RT: 16.38 min Scan# 2532

Delta R.T. -0.01 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Instrument :

BNA_F

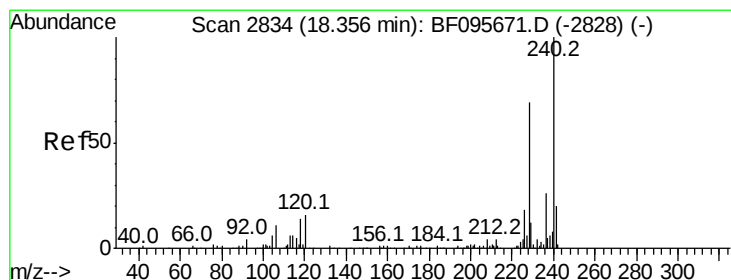
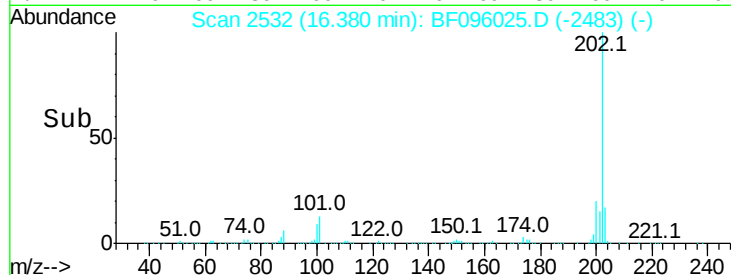
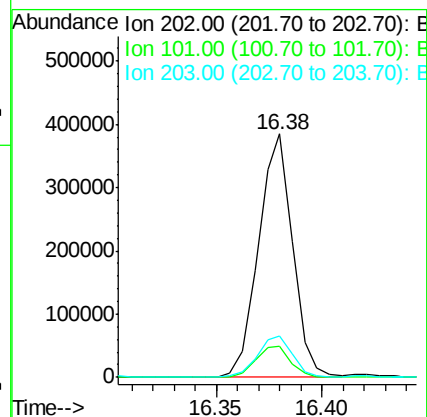
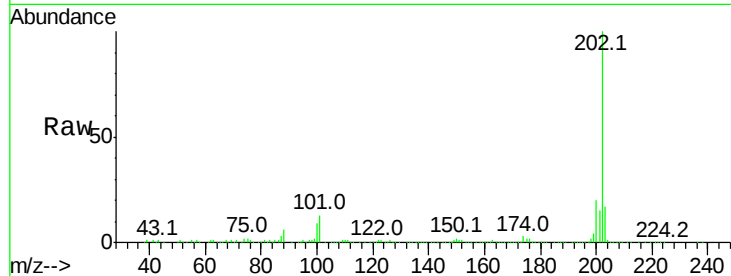
ClientSampled :

G16-1.5-3

Tot Ion	Ratio	Resp Lower	Upper
202	100		
101	12.9	0.0	33.2
203	16.8	0.0	38.1

Manual Integrations
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#75

Chrysene-d12

Concen: 20.00 ng

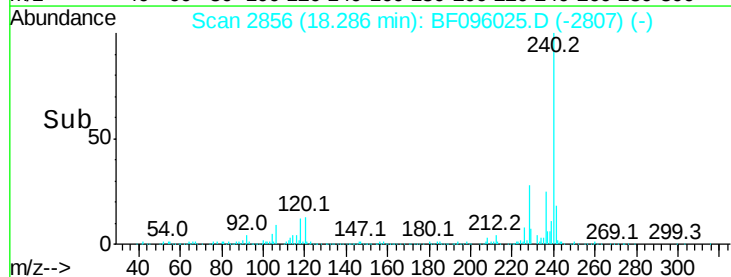
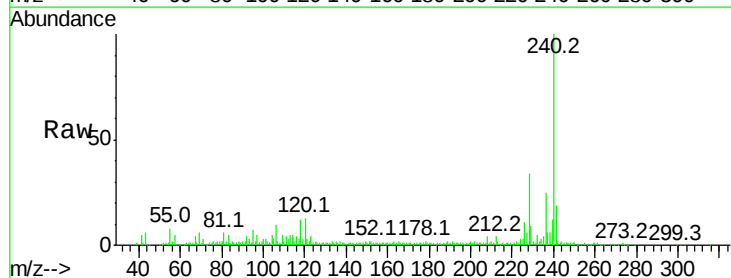
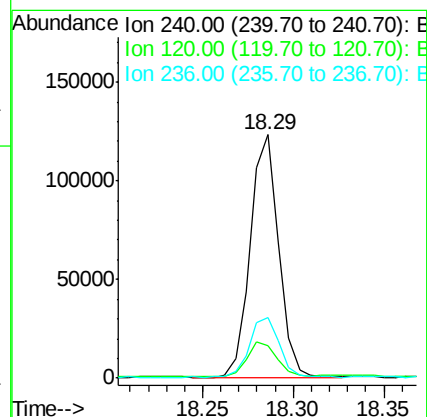
RT: 18.29 min Scan# 2856

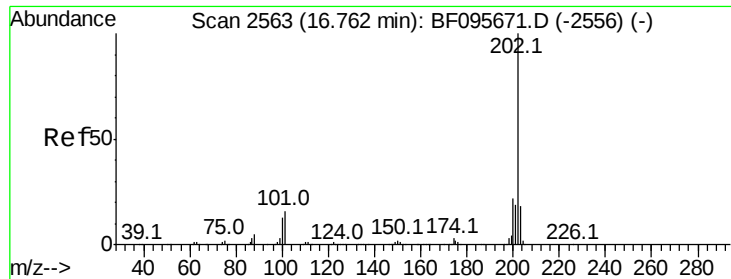
Delta R.T. -0.01 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Resp Lower	Upper
240	100		
120	13.5	5.8	8.8#
236	25.0	20.5	30.7





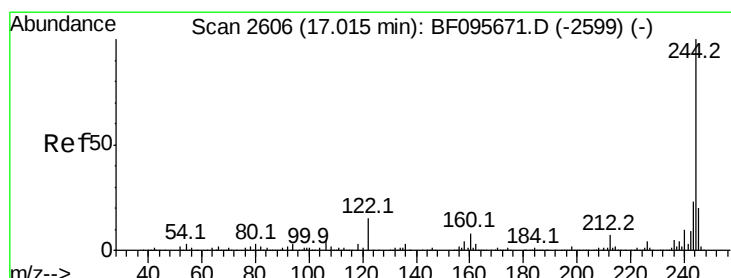
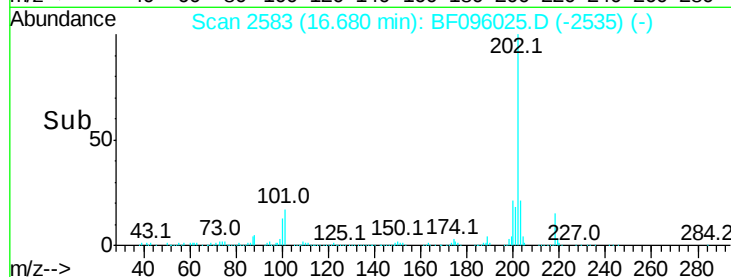
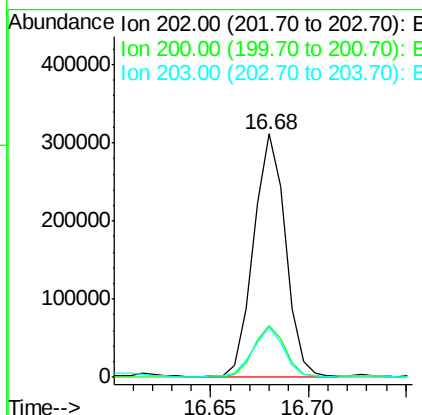
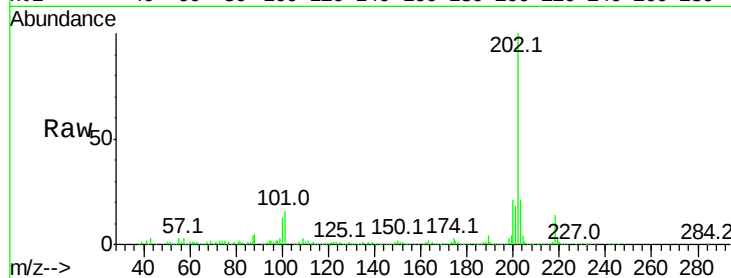
#77
Pvrene
Concen: 35.21 ng
RT: 16.68 min Scan# 2583
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampleId :
G16-1.5-3

Tot Ion	Ratio	Resp Lower	Upper
202	100		
200	21.1	17.6	26.4
203	20.6	14.4	21.6

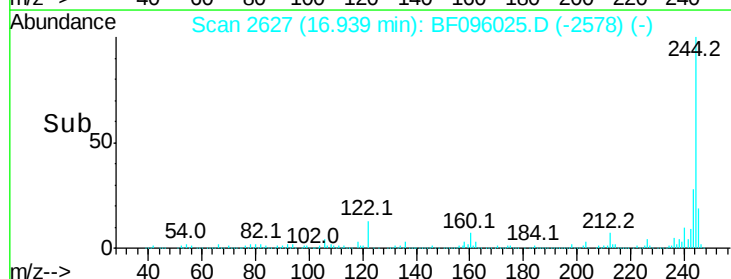
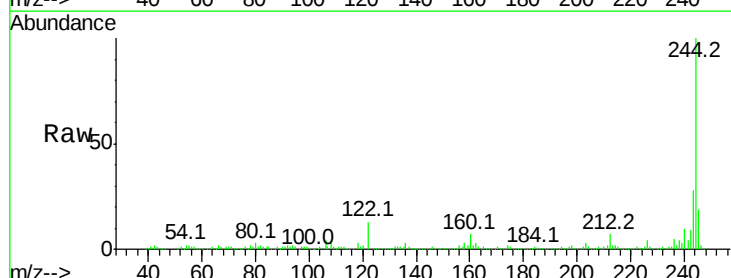
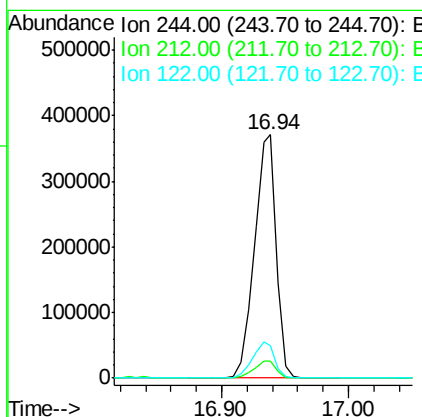
Manual Integrations
APPROVED

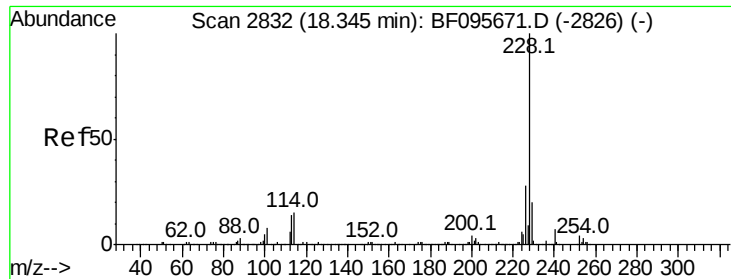
mohammad
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#78
Terphenyl-d14
Concen: 83.00 ng
RT: 16.94 min Scan# 2627
Delta R.T. -0.01 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Resp Lower	Upper
244	100		
212	7.1	6.0	9.0
122	13.3	10.3	15.5





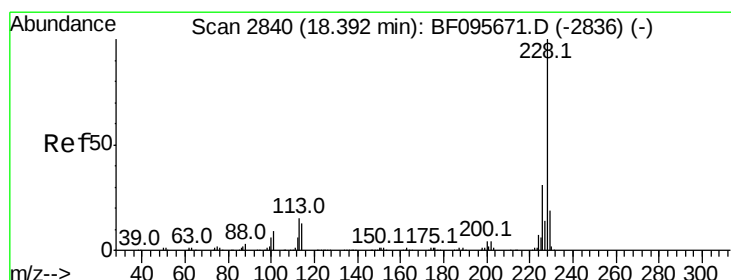
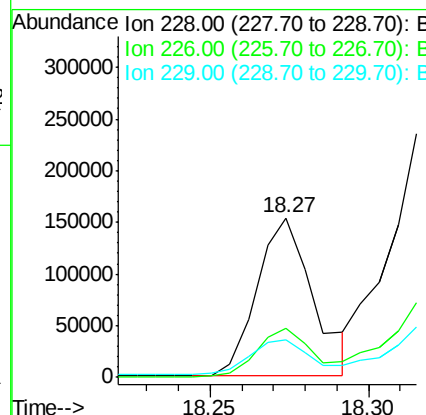
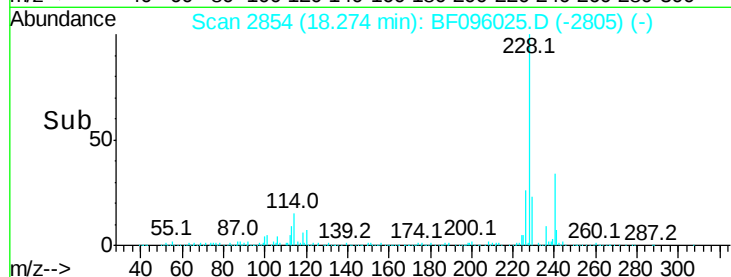
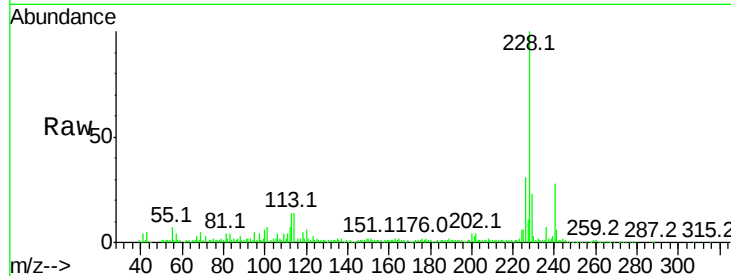
#80
Benzo(a)anthracene
Concen: 24.31 ng
RT: 18.27 min Scan# 2854
Delta R.T. -0.01 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampleId :
G16-1.5-3

Tot Ion	Ratio	Lower	Upper
228	100		
226	30.7	22.6	33.8
229	23.5	16.3	24.5

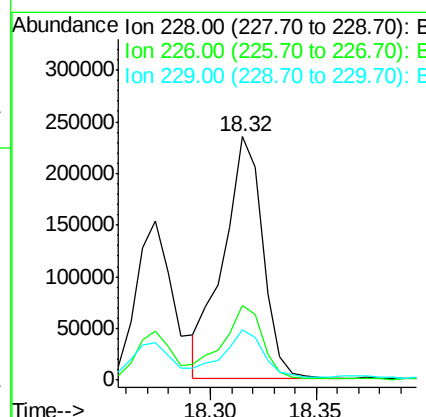
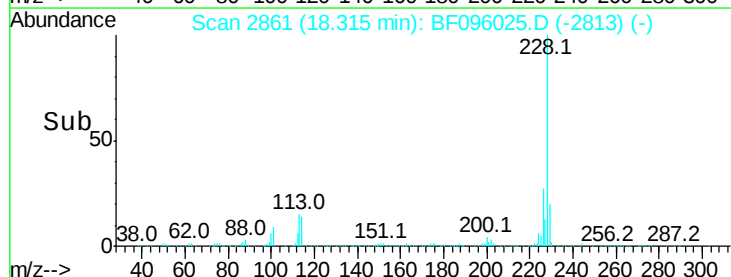
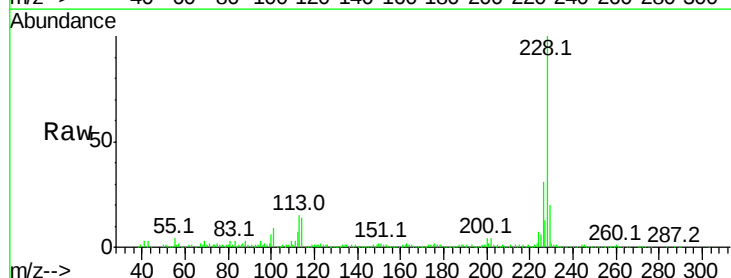
Manual Integrations
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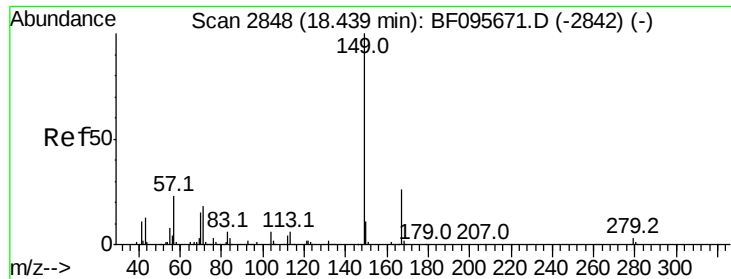
mohammad
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#82
Chrysene
Concen: 39.01 ng
RT: 18.32 min Scan# 2861
Delta R.T. -0.02 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.8	24.9	37.3
229	20.5	15.8	23.6





#83

Bis(2-ethylhexyl)phthalate

Concen: 2.07 ng

RT: 18.36 min Scan# 2868

Delta R.T. -0.01 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Instrument :

BNA_F

ClientSampleId :

G16-1.5-3

Tot Ion:149 Resp: 12693

Ion Ratio Lower Upper

149 100

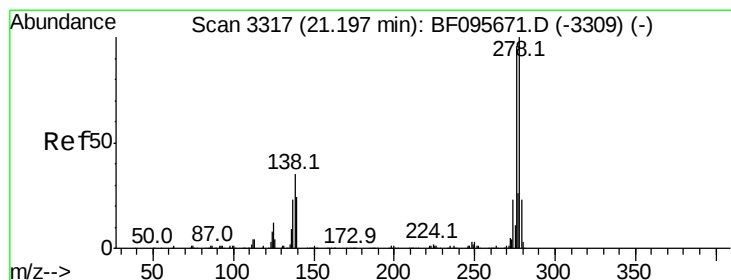
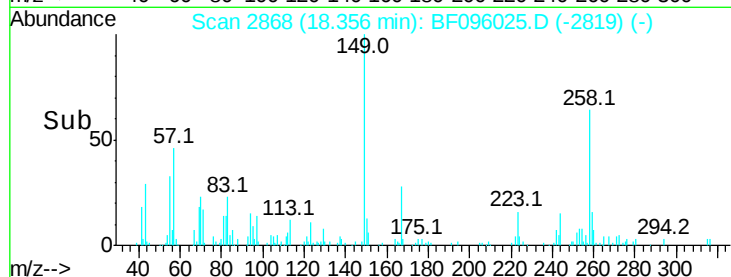
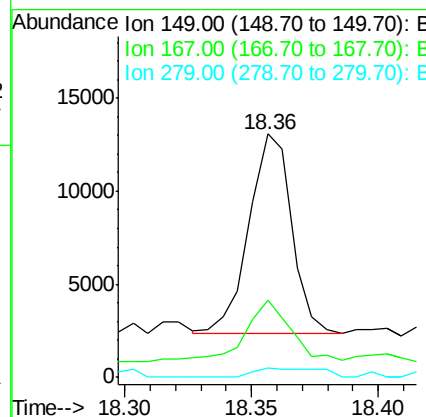
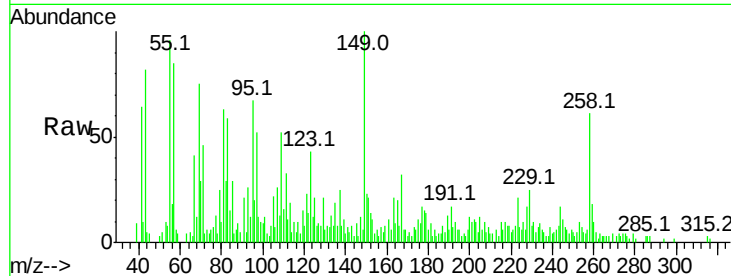
167 31.6 21.0 31.4#

279 3.7 1.9 2.9#

Manual Integrations
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#85

Indeno(1,2,3-cd)pyrene

Concen: 10.05 ng

RT: 21.13 min Scan# 3339

Delta R.T. 0.00 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

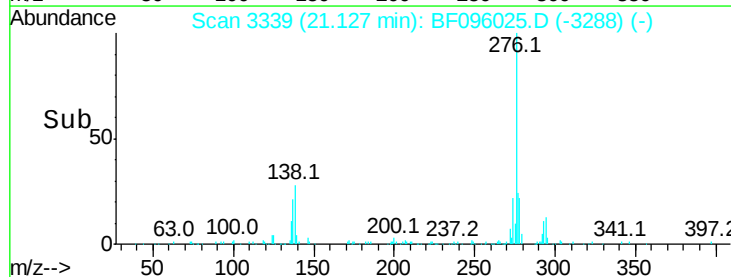
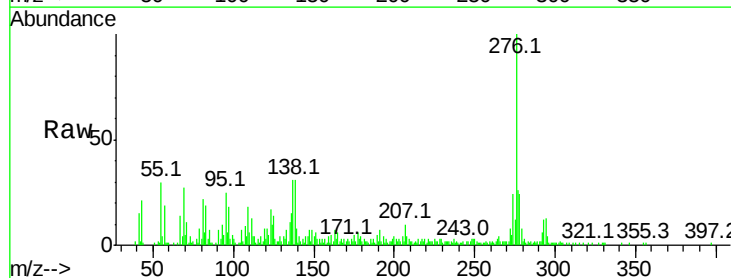
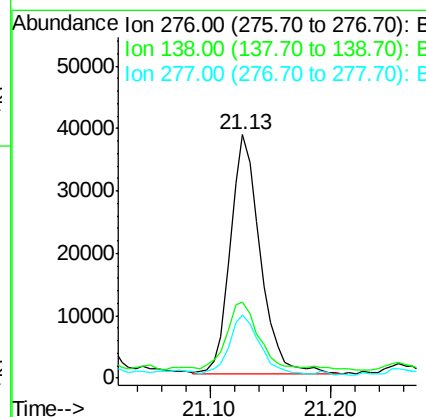
Tgt Ion:276 Resp: 66711

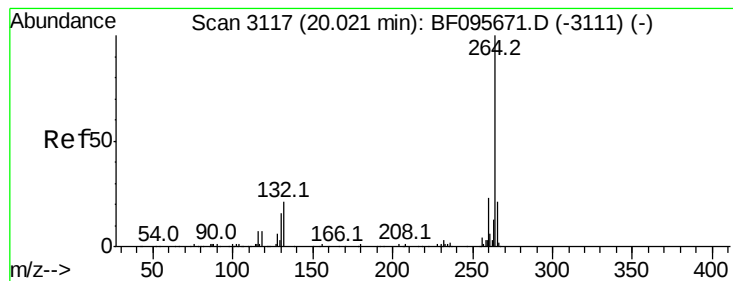
Ion Ratio Lower Upper

276 100

138 28.5 27.8 41.6

277 23.9 20.2 30.4





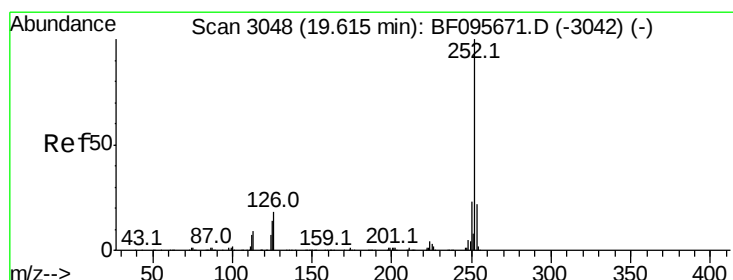
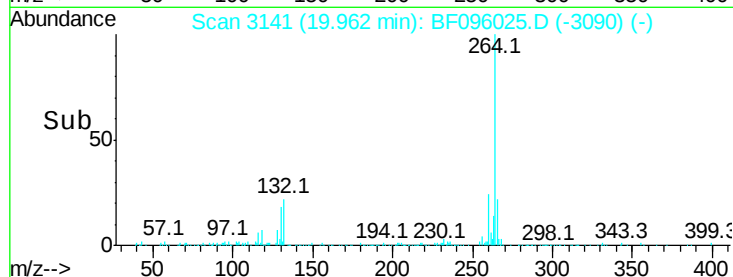
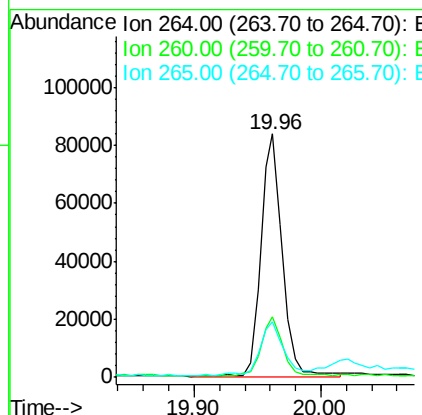
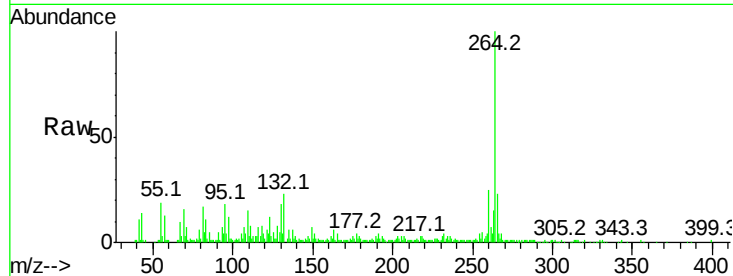
#86
Pervlene-d12
Concen: 20.00 ng
RT: 19.96 min Scan# 3141
Delta R.T. 0.00 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampled :
G16-1.5-3

Tot Ion	Ratio	Lower	Upper
264	100		
260	25.1	19.5	29.3
265	22.7	17.2	25.8

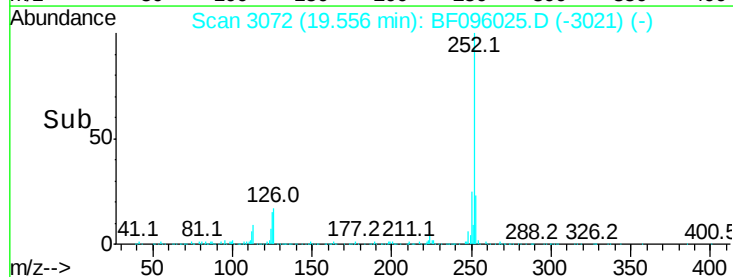
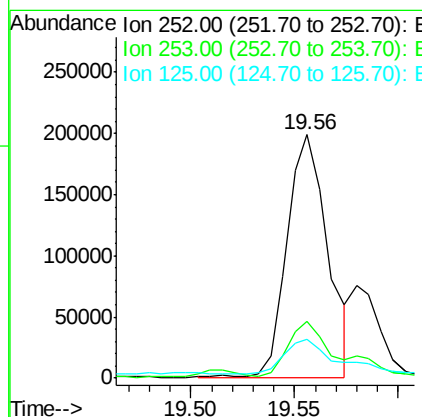
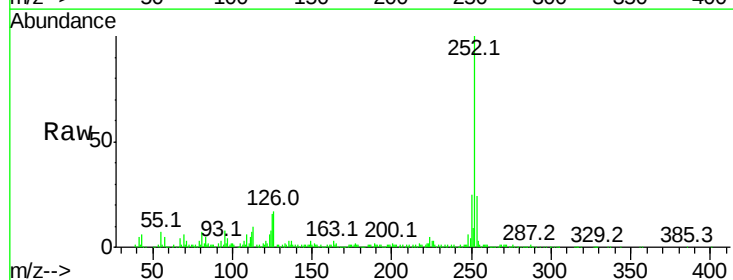
Manual Integrations
APPROVED

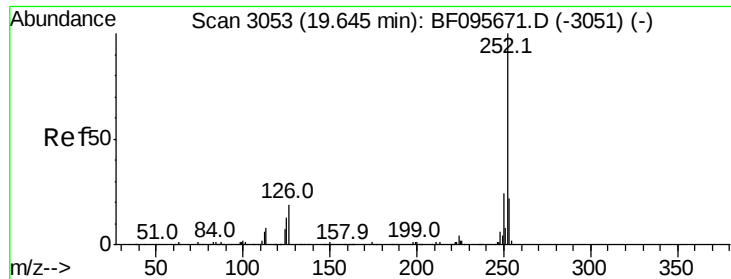
mohammad
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#87
Benzo(b)fluoranthene
Concen: 44.01 ng m
RT: 19.56 min Scan# 3072
Delta R.T. 0.00 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.5	18.1	27.1
125	16.2	9.8	14.8





#88

Benzo(k)fluoranthene

Concen: 12.33 ng

RT: 19.58 min Scan# 3076

Delta R.T. -0.01 min

Lab File: BF096025.D

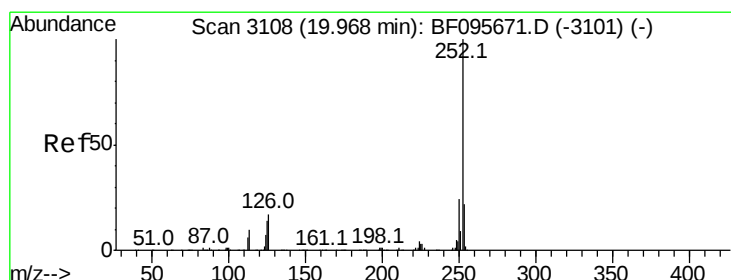
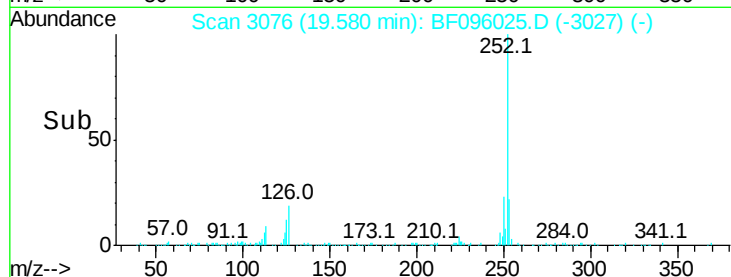
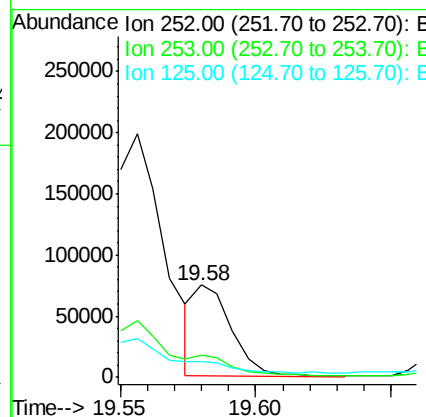
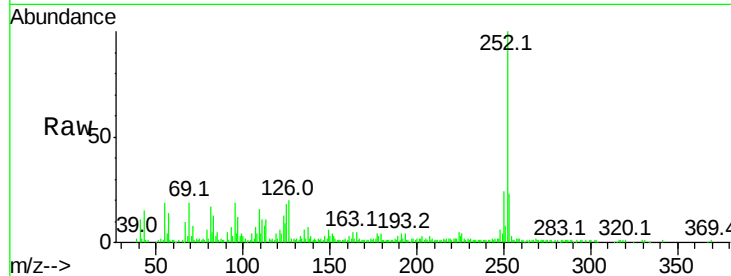
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampled :
G16-1.5-3

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.4	18.4	27.6
125	17.6	13.1	19.7

Manual Integrations
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mohammad
6/20/2017 4:29:23 PM



#89

Benzo(a)pyrene

Concen: 13.89 ng

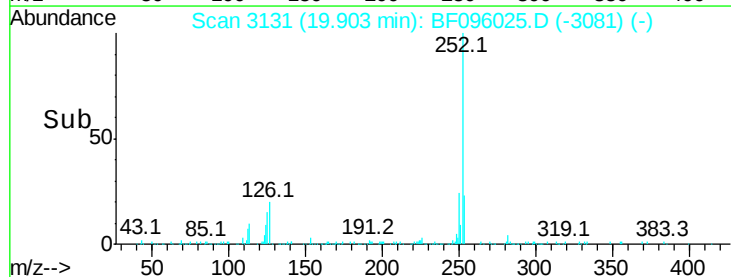
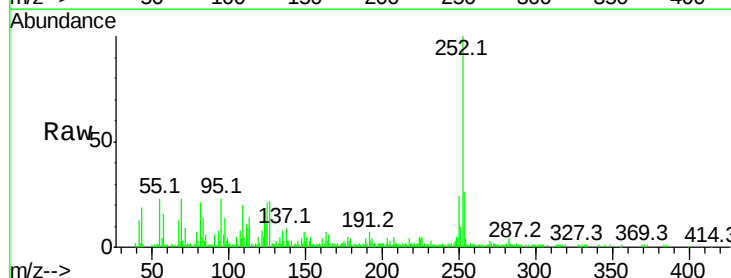
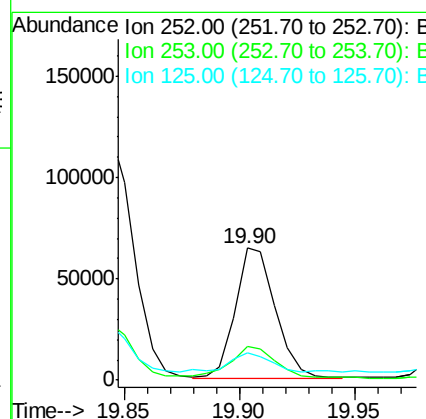
RT: 19.90 min Scan# 3131

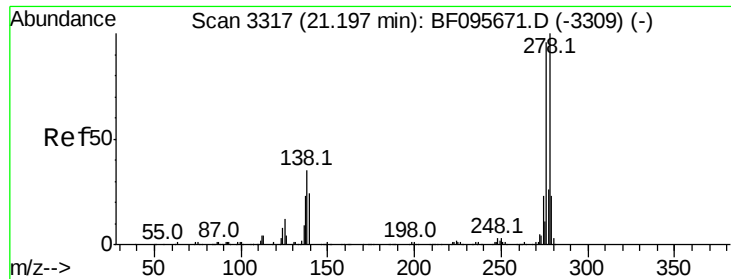
Delta R.T. -0.01 min

Lab File: BF096025.D

Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Lower	Upper
252	100		
253	25.8	17.5	26.3
125	20.5	11.0	16.4





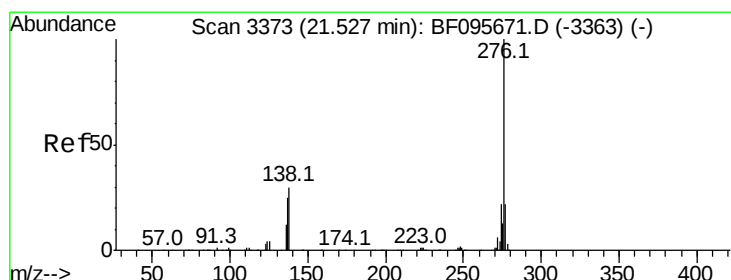
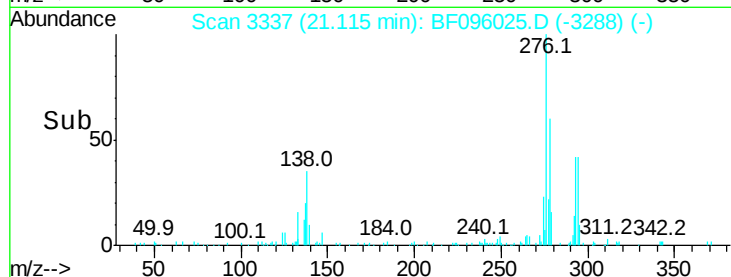
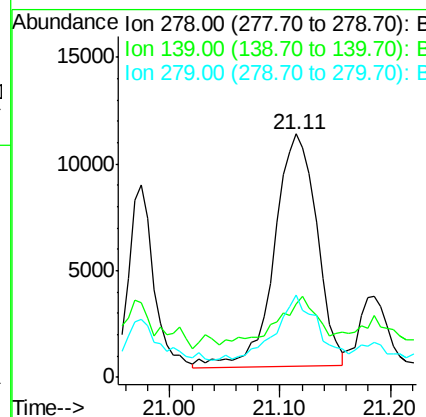
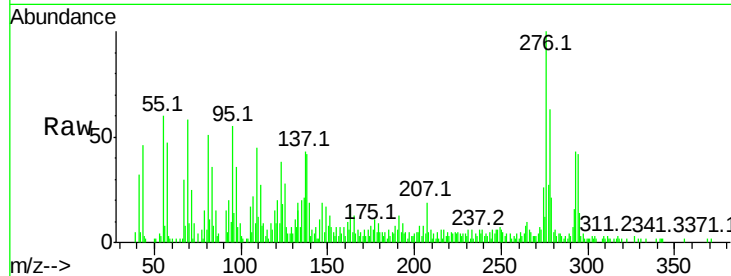
#90
Dibenzo(a,h)anthracene
Concen: 6.08 ng
RT: 21.11 min Scan# 3337
Delta R.T. -0.01 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Instrument :
BNA_F
ClientSampled :
G16-1.5-3

Tot Ion	Ratio	Lower	Upper
278	100		
139	30.3	16.6	24.8#
279	33.9	19.3	28.9#

Manual Integrations
APPROVED

mohammad
6/20/2017 4:29:23 PM



#91
Benzo(g,h,i)perylene
Concen: 11.32 ng
RT: 21.46 min Scan# 3395
Delta R.T. 0.01 min
Lab File: BF096025.D
Acq: 20 Jun 2017 3:35

Tgt Ion	Ratio	Lower	Upper
276	100		
277	23.5	18.6	28.0
138	32.4	25.4	38.0

