

Data Path : Z:\HPCHEM1\BNA F\DATA\BF113017\
 Data File : BF101052.D
 Acq On : 1 Dec 2017 8:36
 Operator : SJ/JU
 Sample : I6610-02DL 50X
 Misc :
 ALS Vial : 32 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SB-3(0-2)-20171127DL

Manual Integrations
 APPROVED

Sohil
 12/1/2017 11:13:30 AM

Quant Time: Dec 01 10:20:34 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF113017.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 01 09:47:02 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.85	152	54642	20.00	ng	0.00
21) Naphthalene-d8	8.13	136	207261	20.00	ng	0.00
38) Acenaphthene-d10	9.89	164	82077	20.00	ng	0.00
63) Phenanthrene-d10	11.38	188	131320	20.00	ng	0.00
75) Chrysene-d12	14.02	240	122385	20.00	ng	0.00
86) Perylene-d12	15.50	264	82524	20.00	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.47	112	4222	1.28	ng	0.00
7) Phenol-d6	6.48	99	5556	1.38	ng	0.00
23) Nitrobenzene-d5	7.42	82	3016	0.87	ng	0.00
41) 2,4,6-Tribromophenol	10.68	330	724	0.73	ng	0.00
44) 2-Fluorobiphenyl	9.20	172	7038	1.17	ng	0.00
78) Terphenyl-d14	12.96	244	6196	1.11	ng	-0.01
Target Compounds						
51) Acenaphthene	9.92	154	12682	2.413	ng	92
57) Fluorene	10.44	166	15931	2.588	ng	99
70) Phenanthrene	11.40	178	222246	30.732	ng	98
71) Anthracene	11.45	178	53254	7.276	ng	96
72) Carbazole	11.61	167	15105	2.259	ng	100
74) Fluoranthene	12.60	202	367977	45.904	ng	93
77) Pyrene	12.83	202	314014	37.184	ng	98
80) Benzo(a)anthracene	14.02	228	176126	22.793	ng	99
82) Chrysene	14.05	228	155256	21.634	ng	97
85) Indeno(1,2,3-cd)pyrene	16.97	276	55796	8.745	ng	# 88
87) Benzo(b)fluoranthene	15.07	252	146896m	29.718	ng	
88) Benzo(k)fluoranthene	15.09	252	58001m	11.910	ng	
89) Benzo(a)pyrene	15.43	252	96919	21.567	ng	96
90) Dibenzo(a,h)anthracene	16.98	278	12999m	3.281	ng	
91) Benzo(a,h,i)perylene	17.42	276	51041	13.671	ng	# 91

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

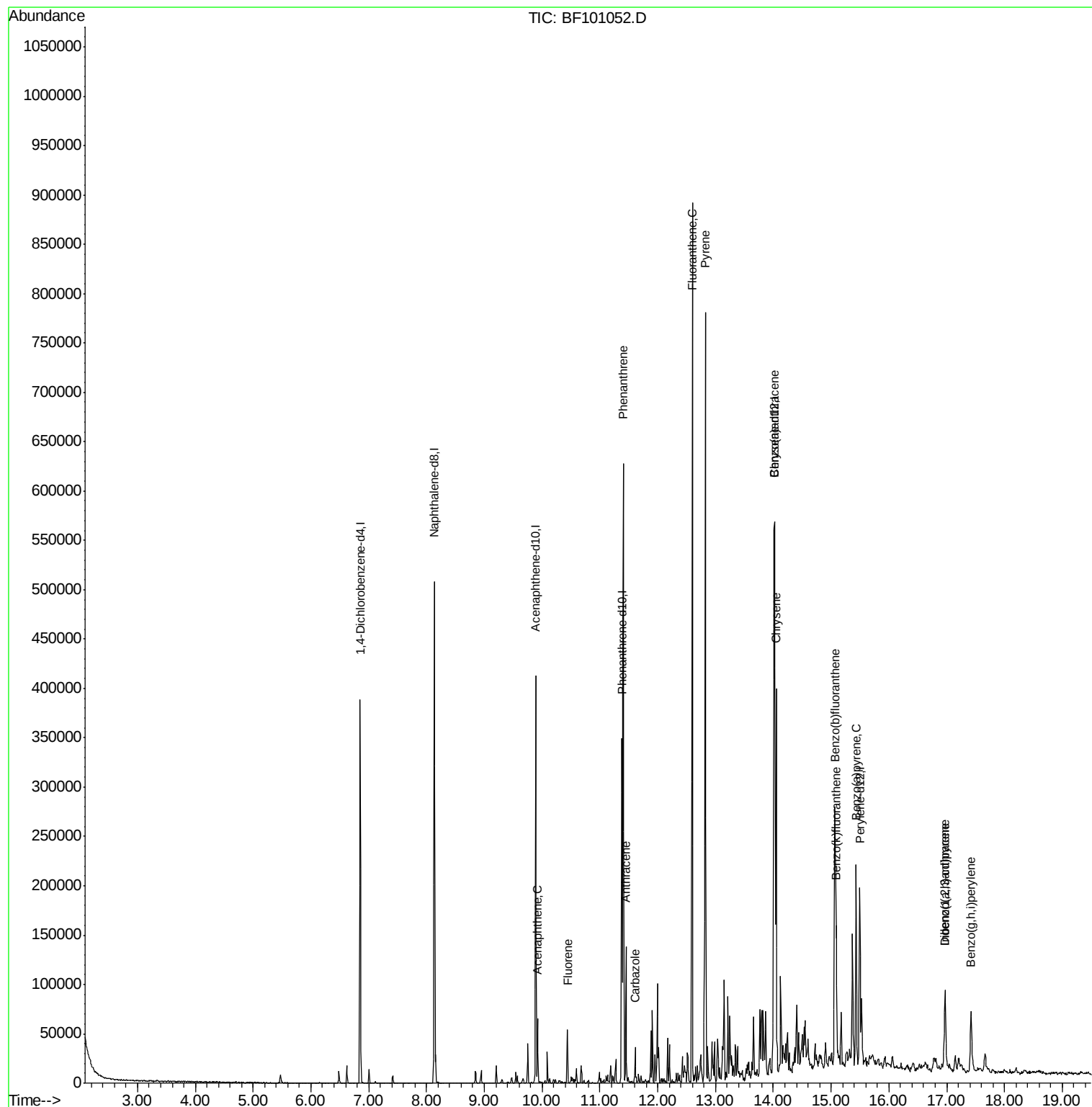
Data Path : Z:\HPCHEM1\BNA F\DATA\BF113017\
Data File : BF101052.D
Acq On : 1 Dec 2017 8:36
Operator : SJ/JU
Sample : I6610-02DL 50X
Misc :
ALS Vial : 32 Sample Multiplier: 1

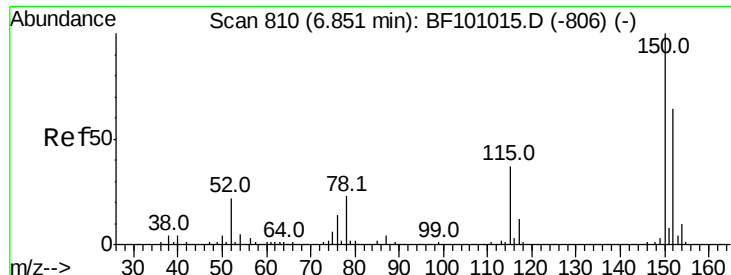
Instrument :
BNA_F
ClientSampleId :
SB-3(0-2)-20171127DL

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM

Quant Time: Dec 01 10:20:34 2017
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF113017.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 01 09:47:02 2017
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 20.000 ng

RT: 6.85 min Scan# 810

Delta R.T. -0.00 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Instrument :

BNA_F

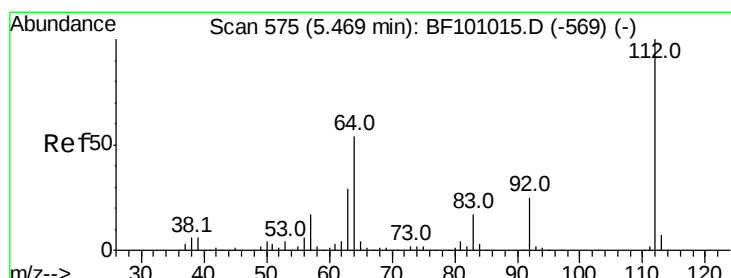
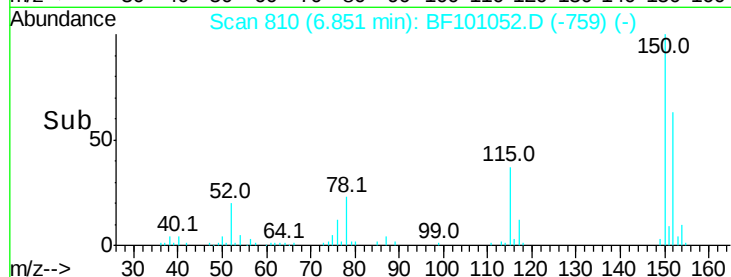
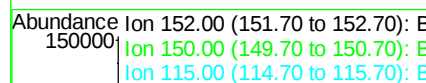
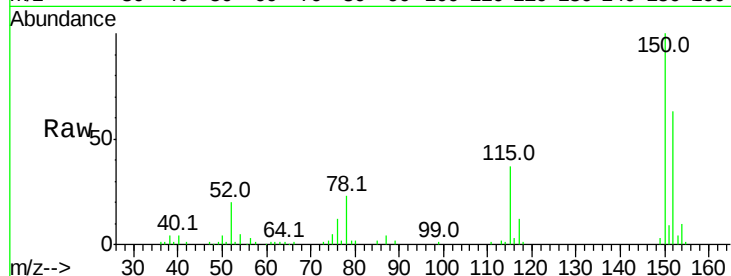
ClientSampleId :

SB-3(0-2)-20171127DL

Tot Ion:	152	Resp:	54642
Ion Ratio	Lower	Upper	
152	100		
150	159.1	124.6	186.8
115	58.5	50.1	75.1

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM



#5

2-Fluorophenol

Concen: 1.277 ng

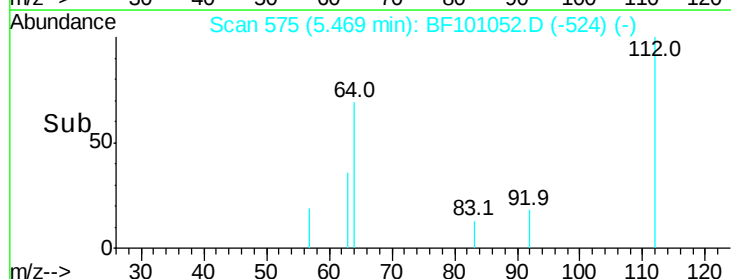
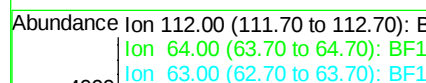
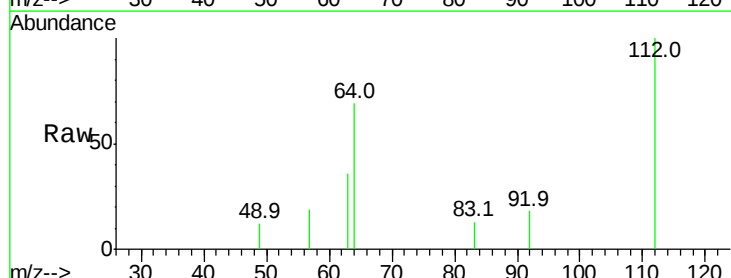
RT: 5.47 min Scan# 575

Delta R.T. 0.00 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Tgt Ion:	112	Resp:	4222
Ion Ratio	Lower	Upper	
112	100		
64	68.6	47.9	71.9
63	35.6	23.7	35.5





#7

Phenol-d6

Concen: 1.384 ng

RT: 6.48 min Scan# 747

Delta R.T. -0.01 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Instrument :

BNA_F

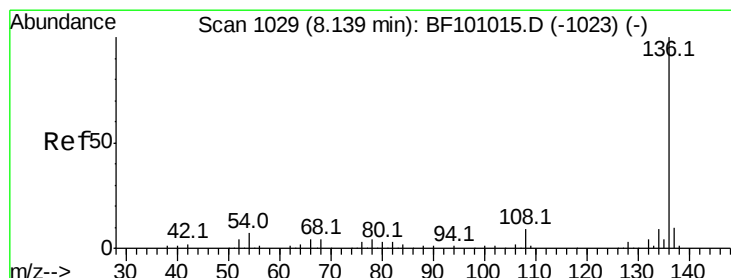
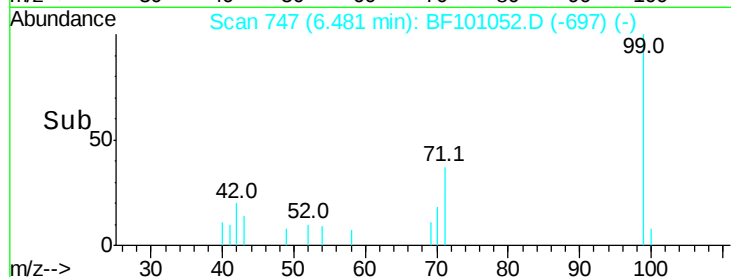
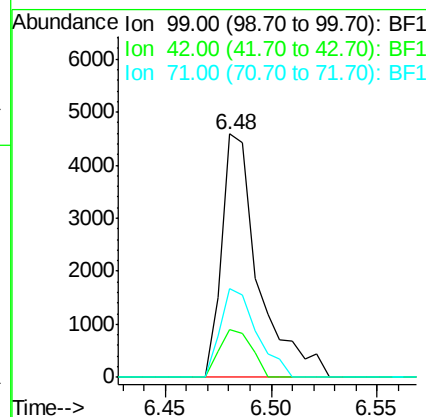
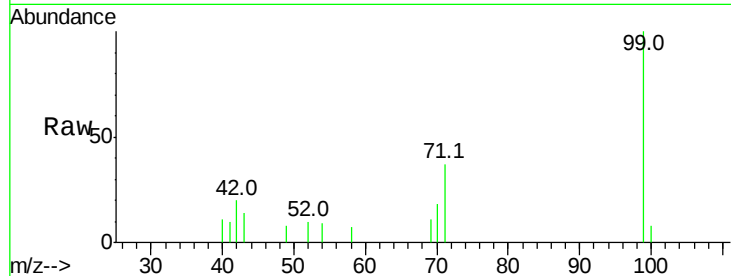
ClientSampleId :

SB-3(0-2)-20171127DL

Tot Ion:	99	Resp:	5556
Ion	Ratio	Lower	Upper
99	100		
42	19.5	14.5	21.7
71	36.6	25.4	38.0

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM



#21

Naphthalene-d8

Concen: 20.000 ng

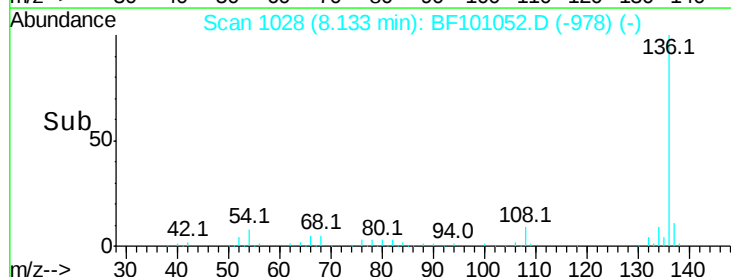
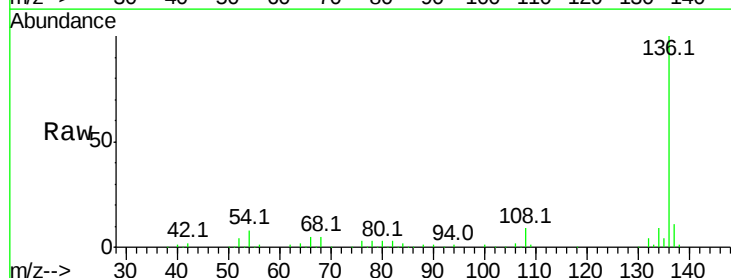
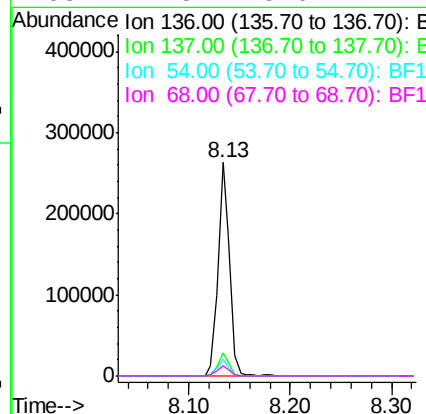
RT: 8.13 min Scan# 1028

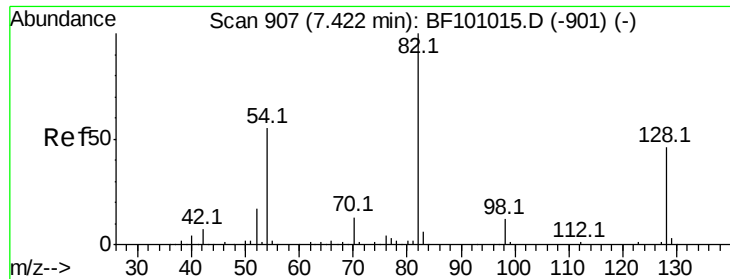
Delta R.T. -0.01 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Tgt Ion:	136	Resp:	207261
Ion	Ratio	Lower	Upper
136	100		
137	10.8	8.9	13.3
54	7.5	6.6	9.8
68	4.8	5.0	7.4#





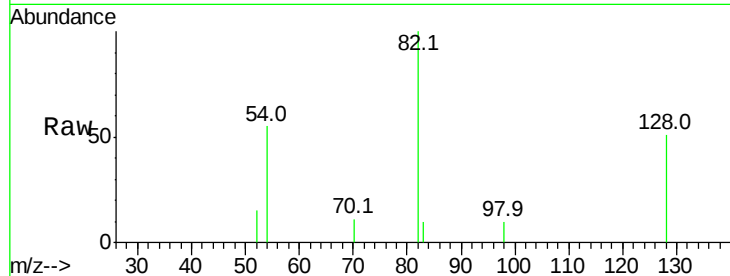
#23
Nitrobenzene-d5
Concen: 0.868 ng
RT: 7.42 min Scan# 906
Delta R.T. -0.01 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Instrument :
BNA_F
ClientSampleId :
SB-3(0-2)-20171127DL

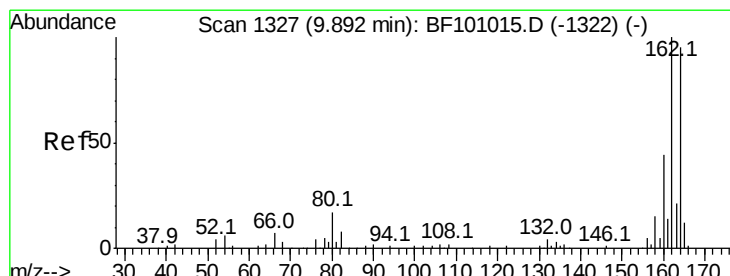
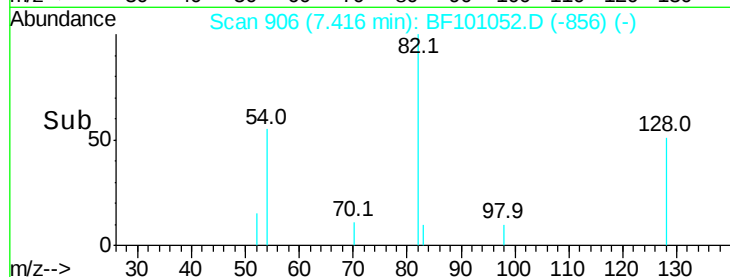
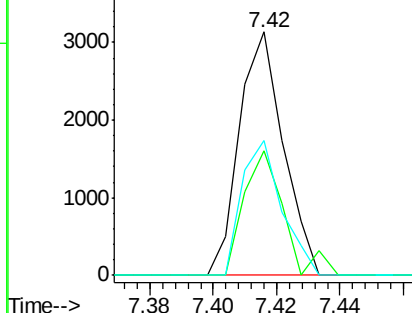
Tot Ion	Ratio	Lower	Upper
82	100		
128	51.1	36.1	54.1
54	55.3	41.4	62.2

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM



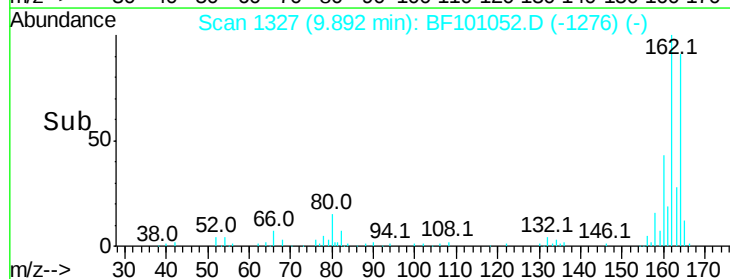
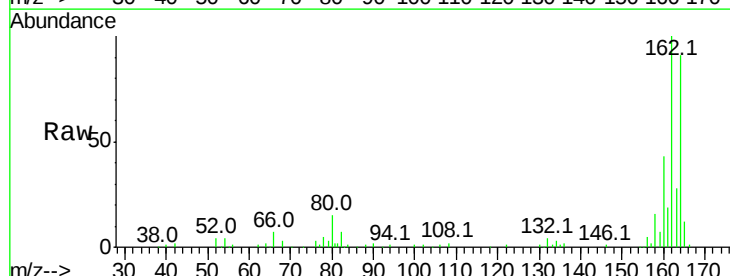
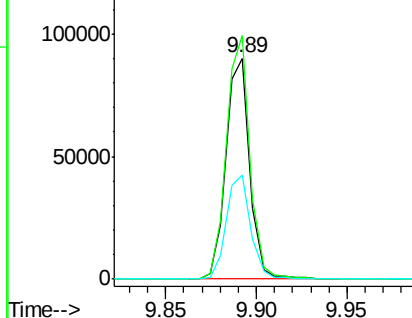
Abundance Ion 82.00 (81.70 to 82.70): BF1
Ion 128.00 (127.70 to 128.70): BF1
Ion 54.00 (53.70 to 54.70): BF1

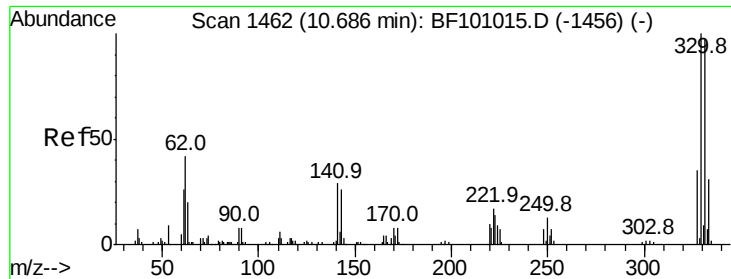


#38
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.89 min Scan# 1327
Delta R.T. -0.00 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Tgt Ion	Ratio	Lower	Upper
164	100		
162	110.2	86.1	129.1
160	46.9	38.3	57.5

Abundance Ion 164.00 (163.70 to 164.70): BF1
Ion 162.00 (161.70 to 162.70): BF1
Ion 160.00 (159.70 to 160.70): BF1





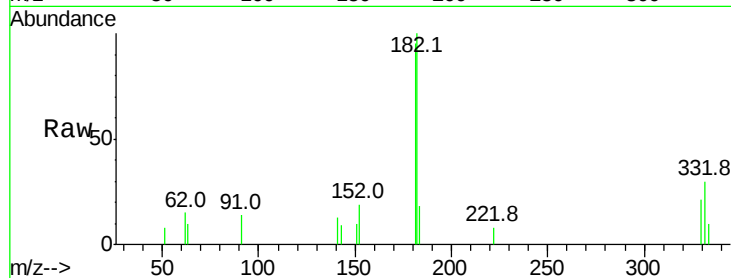
#41
 2,4,6-Tribromophenol
 Concen: 0.734 ng
 RT: 10.68 min Scan# 1461
 Delta R.T. -0.01 min
 Lab File: BF101052.D
 Acq: 1 Dec 2017 8:36

Instrument :
 BNA_F
 ClientSampleId :
 SB-3(0-2)-20171127DL

Tot Ion	Ratio	Lower	Upper
330	100		
332	125.7	77.0	115.6#
141	24.4	29.9	44.9#

Manual Integrations
 APPROVED

Sohil
 12/1/2017 11:13:30 AM

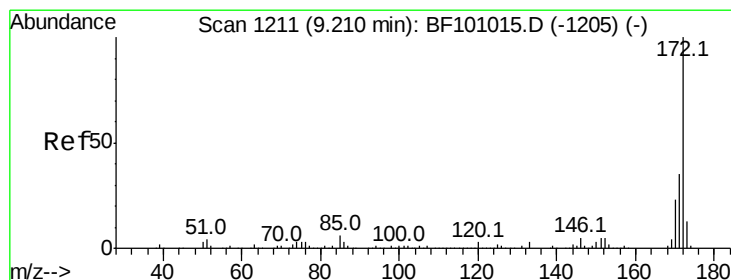
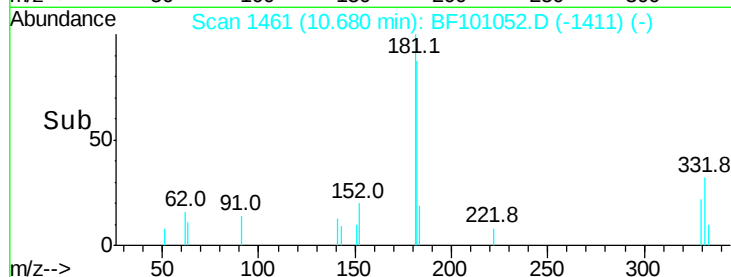
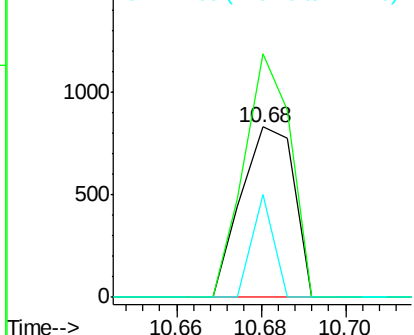


Abundance

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: 1.173 ng
 RT: 9.20 min Scan# 1210
 Delta R.T. -0.01 min
 Lab File: BF101052.D
 Acq: 1 Dec 2017 8:36

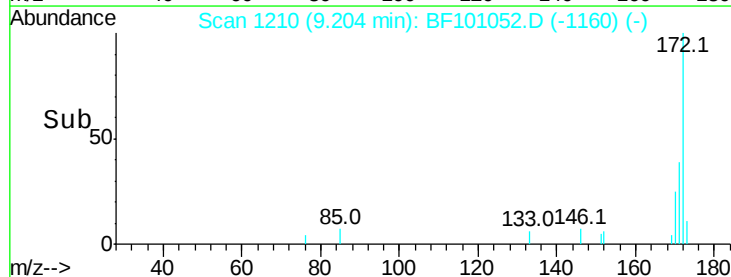
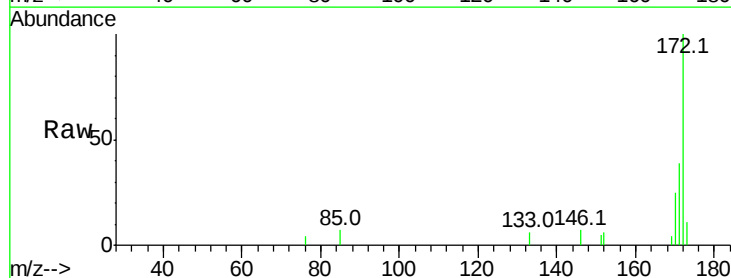
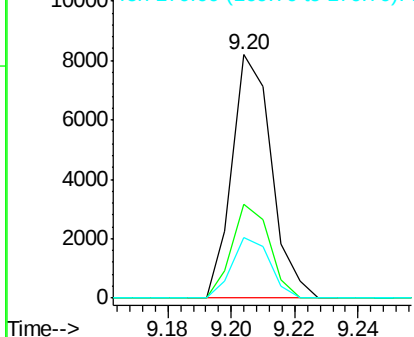
Tgt Ion	Ratio	Lower	Upper
172	100		
171	38.7	29.7	44.5
170	24.9	19.6	29.4

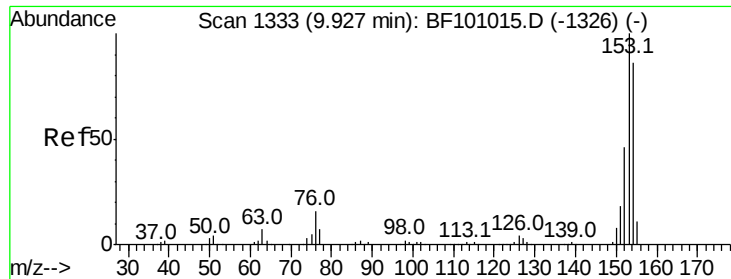
Abundance

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





#51

Acenaphthene

Concen: 2.413 ng

RT: 9.92 min Scan# 1332

Delta R.T. -0.01 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Instrument :

BNA_F

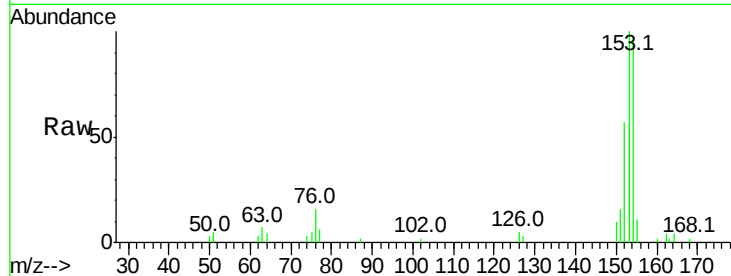
ClientSampleId :

SB-3(0-2)-20171127DL

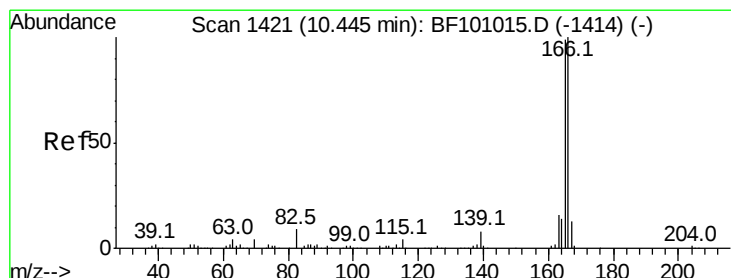
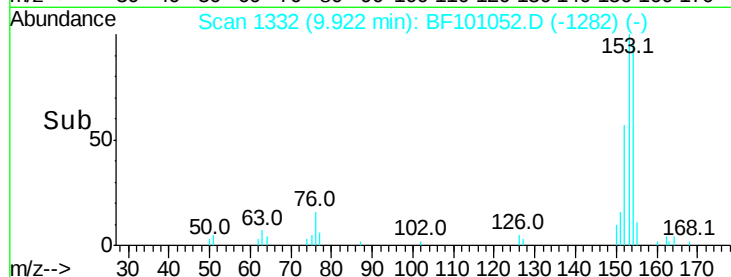
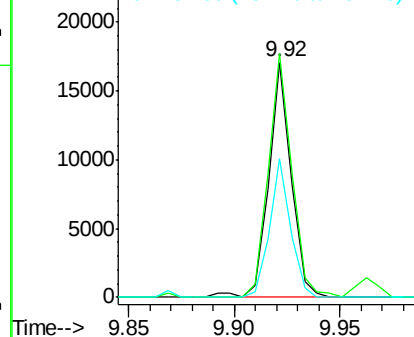
Tot Ion:	154	Resp:	12682
Ion Ratio	Lower	Upper	
154	100		
153	103.7	91.2	136.8
152	59.1	43.8	65.8

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM



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



#57

Fluorene

Concen: 2.588 ng

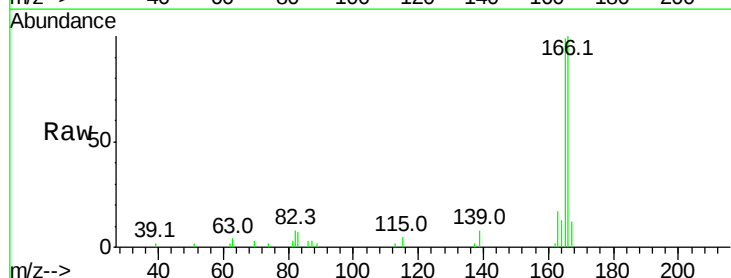
RT: 10.44 min Scan# 1420

Delta R.T. -0.01 min

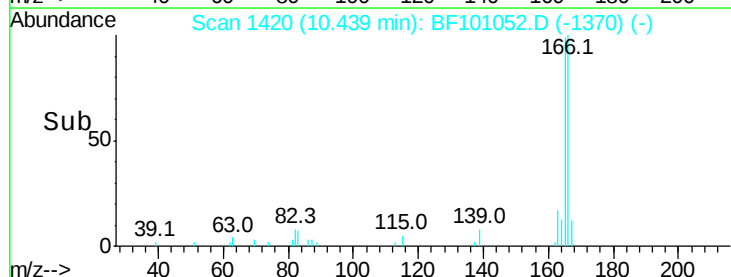
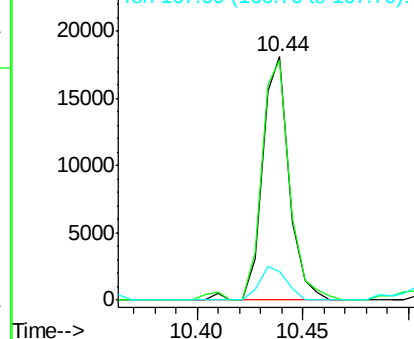
Lab File: BF101052.D

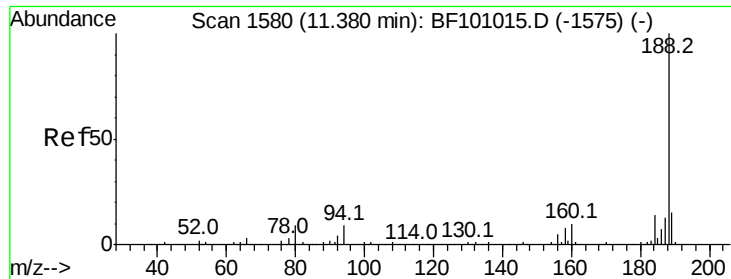
Acq: 1 Dec 2017 8:36

Tgt Ion:	166	Resp:	15931
Ion Ratio	Lower	Upper	
166	100		
165	98.7	79.8	119.8
167	11.7	10.6	16.0



Abundance Ion 166.00 (165.70 to 166.70): E
Ion 165.00 (164.70 to 165.70): E
Ion 167.00 (166.70 to 167.70): E





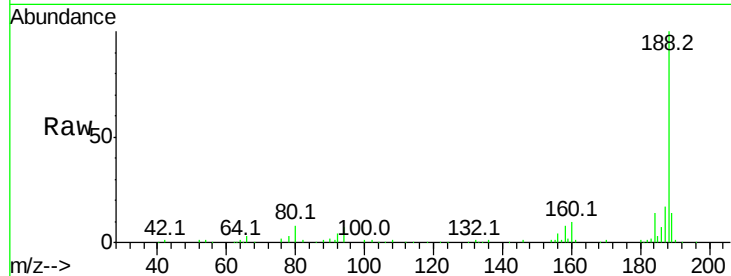
#63
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.38 min Scan# 1580
Delta R.T. -0.00 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Instrument :
BNA_F
ClientSampleId :
SB-3(0-2)-20171127DL

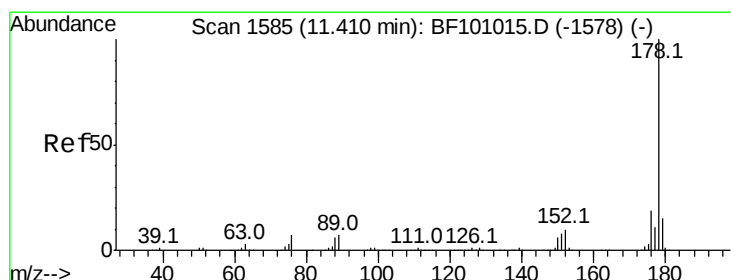
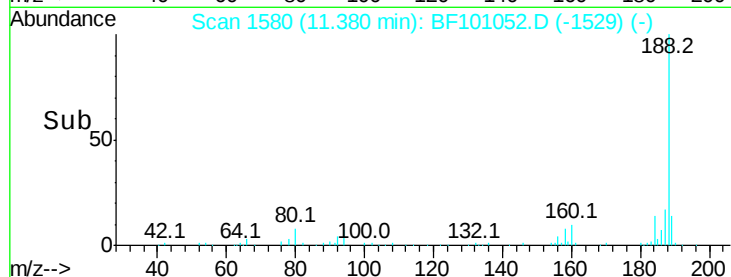
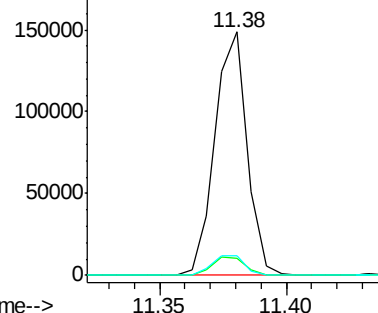
Tot Ion	Ratio	Resp Lower	Resp Upper
188	100		
94	7.2	8.5	12.7#
80	8.0	9.2	13.8#

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM

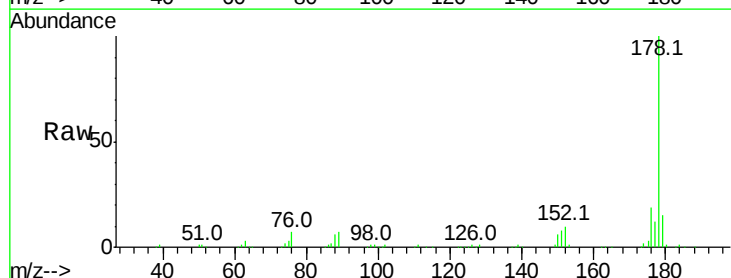


Abundance Ion 188.00 (187.70 to 188.70): E
Ion 94.00 (93.70 to 94.70): BF1
Ion 80.00 (79.70 to 80.70): BF1

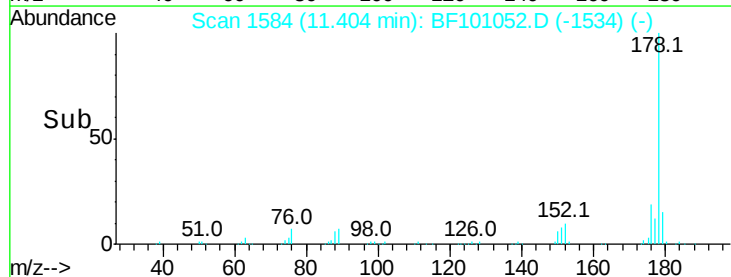
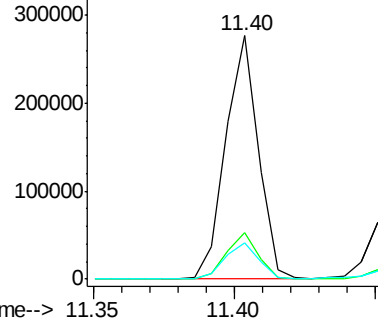


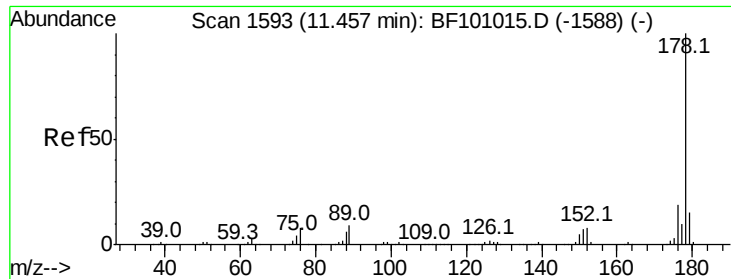
#70
Phenanthrene
Concen: 30.732 ng
RT: 11.40 min Scan# 1584
Delta R.T. -0.01 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Tgt Ion	Ratio	Resp Lower	Resp Upper
178	100		
176	19.2	15.8	23.8
179	15.0	13.0	19.6



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





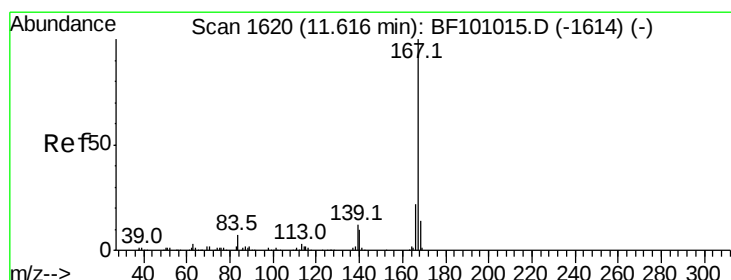
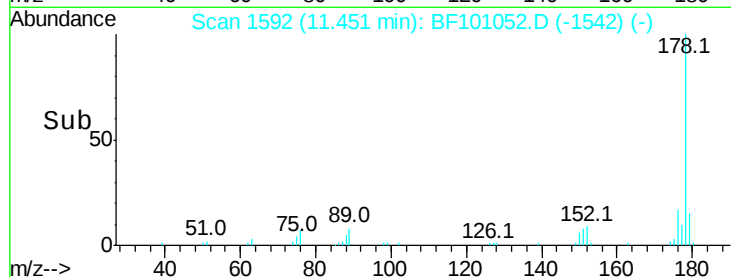
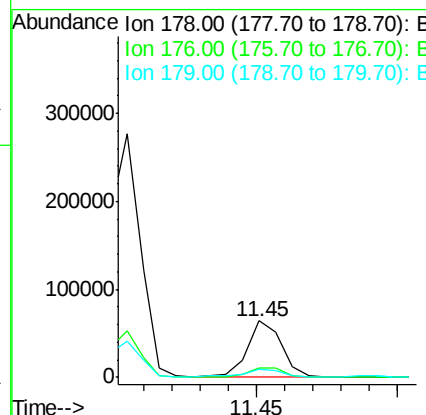
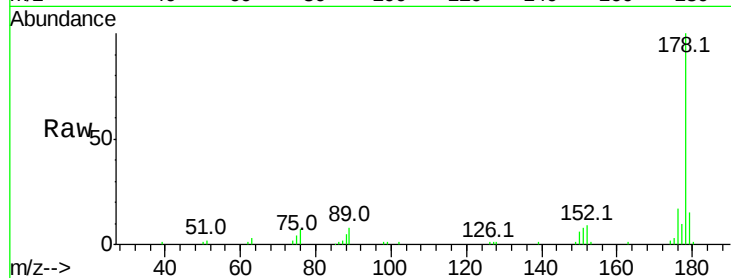
#71
 Anthracene
 Concen: 7.276 ng
 RT: 11.45 min Scan# 1592
 Delta R.T. -0.01 min
 Lab File: BF101052.D
 Acq: 1 Dec 2017 8:36

Instrument :
 BNA_F
 ClientSampleId :
 SB-3(0-2)-20171127DL

Tot Ion	Ratio	Lower	Upper
178	100		
176	17.2	15.4	23.2
179	14.7	12.6	19.0

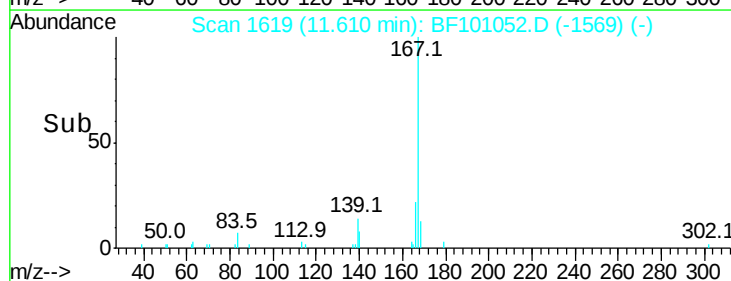
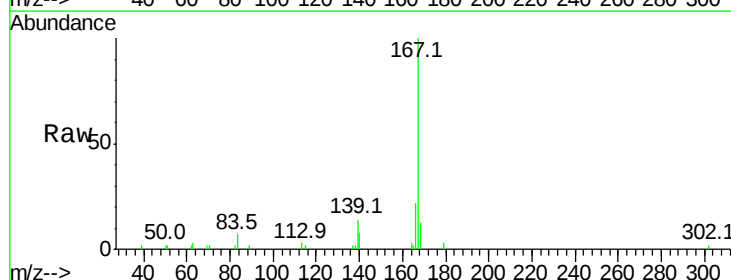
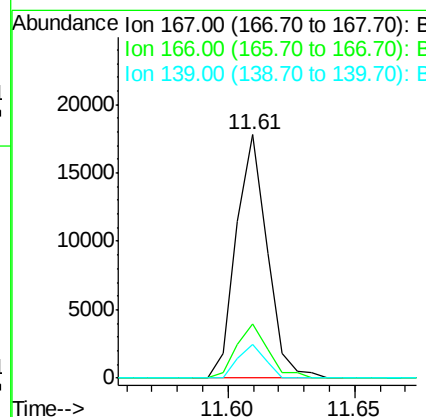
Manual Integrations
 APPROVED

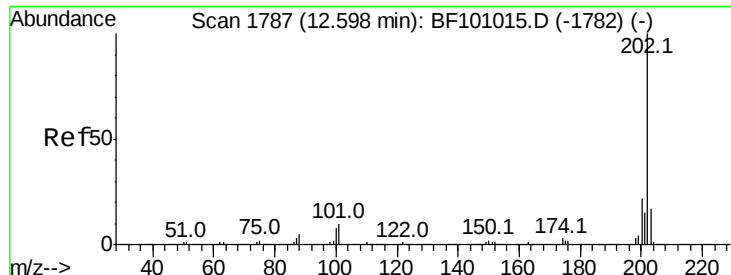
Sohil
 12/1/2017 11:13:30 AM



#72
 Carbazole
 Concen: 2.259 ng
 RT: 11.61 min Scan# 1619
 Delta R.T. -0.01 min
 Lab File: BF101052.D
 Acq: 1 Dec 2017 8:36

Tgt Ion	Ratio	Lower	Upper
167	100		
166	22.2	17.6	26.4
139	13.6	10.9	16.3





#74

Fluoranthene

Concen: 45.904 ng

RT: 12.60 min Scan# 1787

Delta R.T. -0.00 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Instrument :

BNA_F

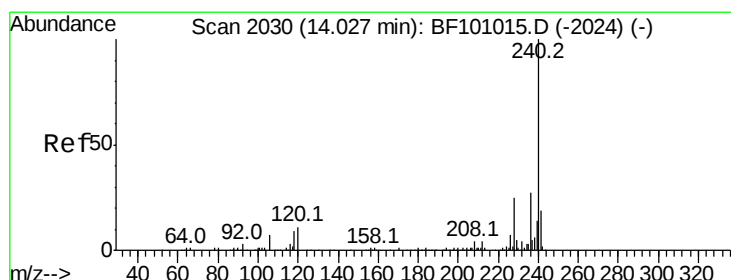
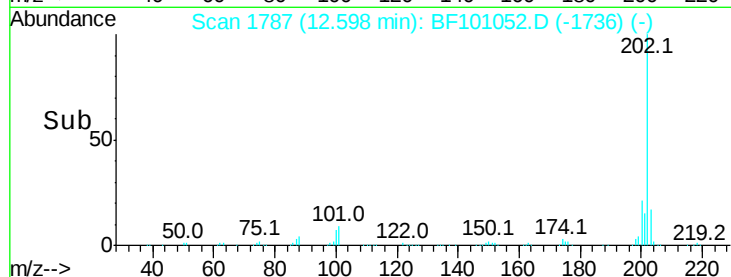
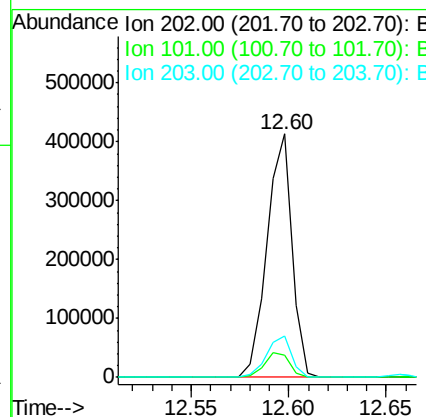
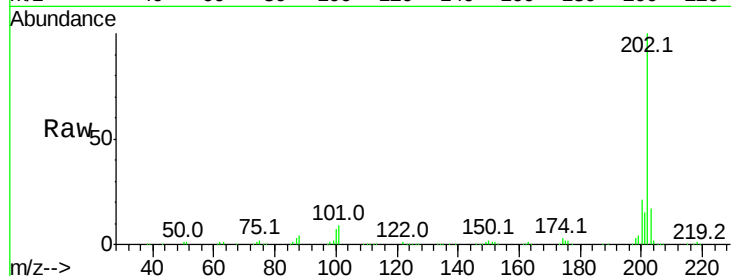
ClientSampleId :

SB-3(0-2)-20171127DL

Tot Ion	Ratio	Resp Lower	Upper
202	100		
101	9.1	0.0	34.1
203	17.0	0.0	38.1

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM



#75

Chrysene-d12

Concen: 20.000 ng

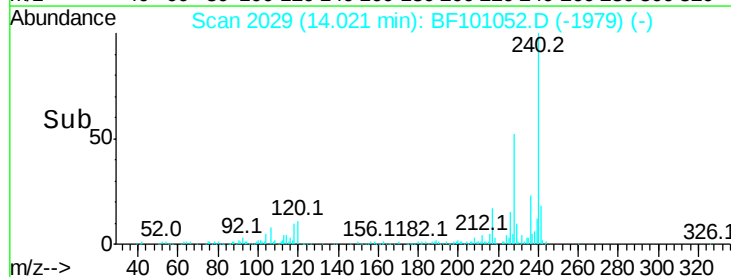
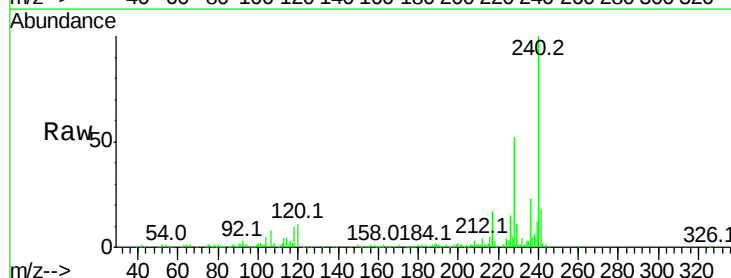
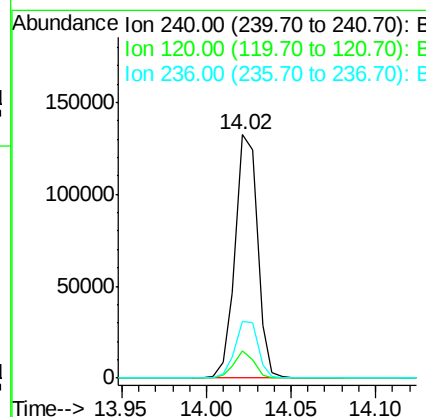
RT: 14.02 min Scan# 2029

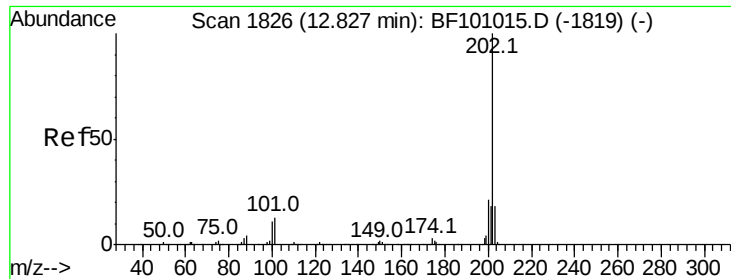
Delta R.T. -0.01 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Tgt Ion	Ratio	Resp Lower	Upper
240	100		
120	11.3	9.5	14.3
236	23.5	20.7	31.1





#77

Pvrene

Concen: 37.184 ng

RT: 12.83 min Scan# 1826

Delta R.T. -0.00 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Instrument :

BNA_F

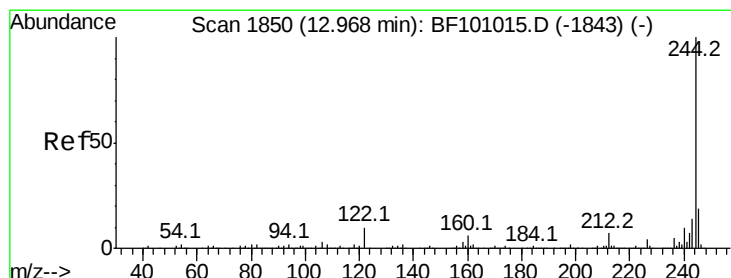
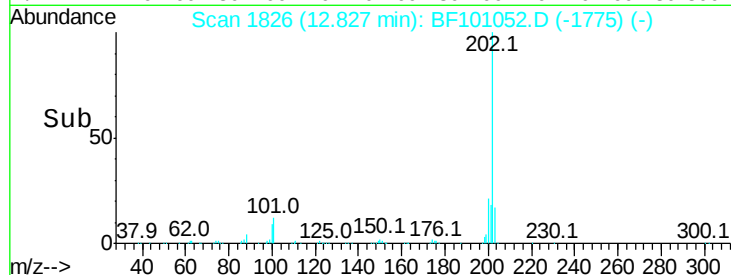
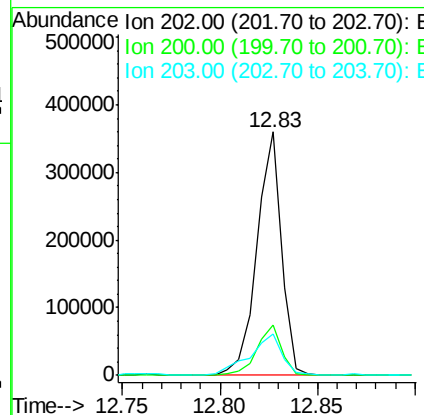
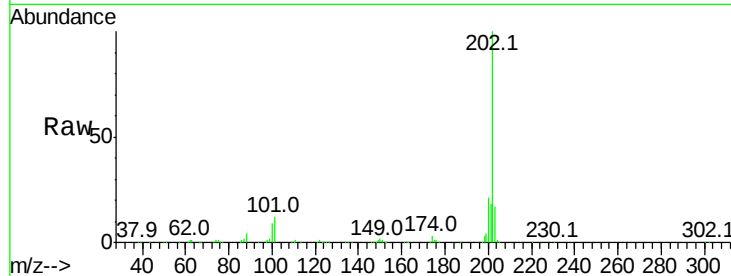
ClientSampleId :

SB-3(0-2)-20171127DL

Tot Ion:	202	Resp:	314014
Ion Ratio		Lower	Upper
202	100		
200	20.8	17.4	26.2
203	17.1	14.3	21.5

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM



#78

Terphenyl-d14

Concen: 1.107 ng

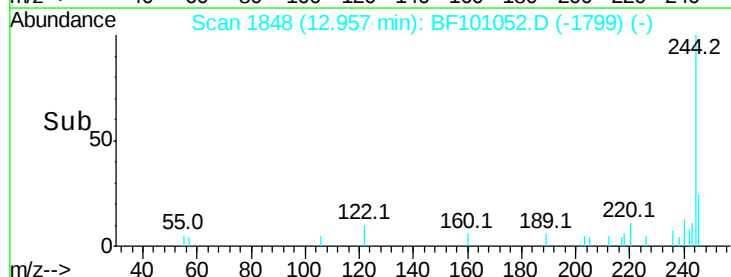
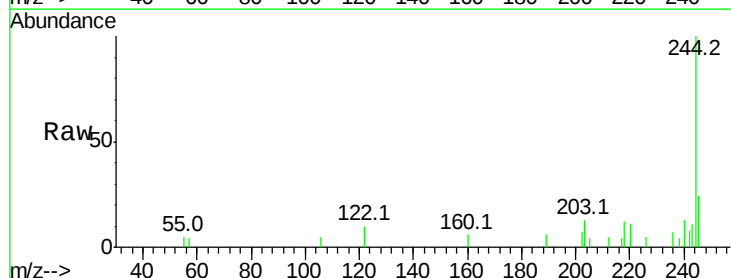
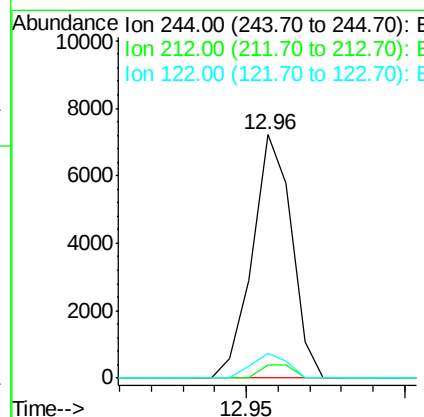
RT: 12.96 min Scan# 1848

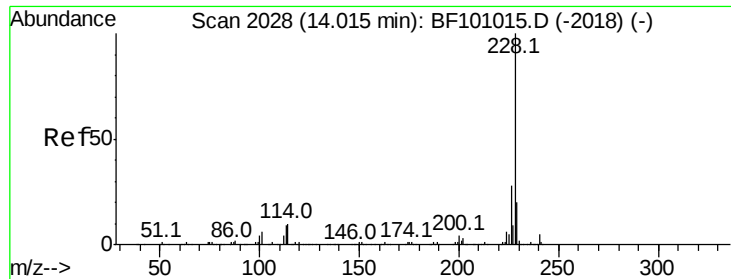
Delta R.T. -0.01 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Tgt Ion:	244	Resp:	6196
Ion Ratio		Lower	Upper
244	100		
212	5.2	5.4	8.0#
122	10.3	11.0	16.4#





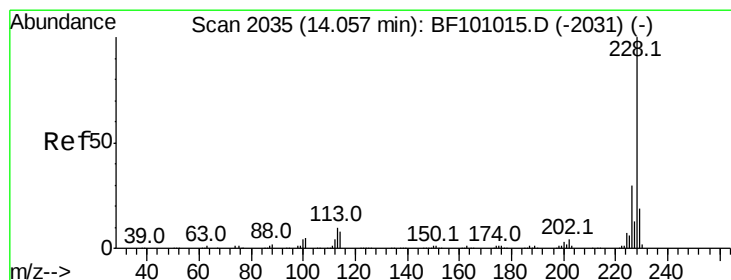
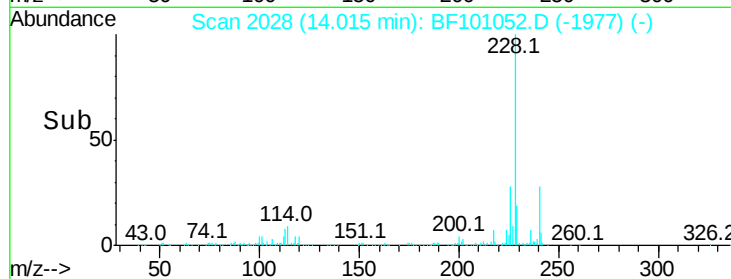
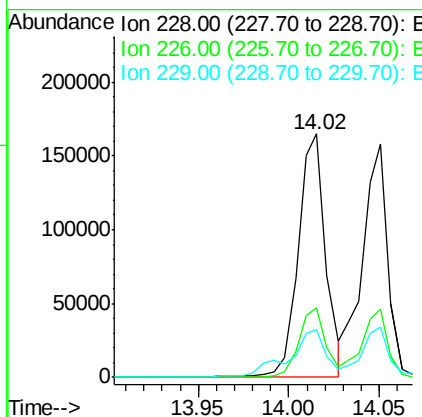
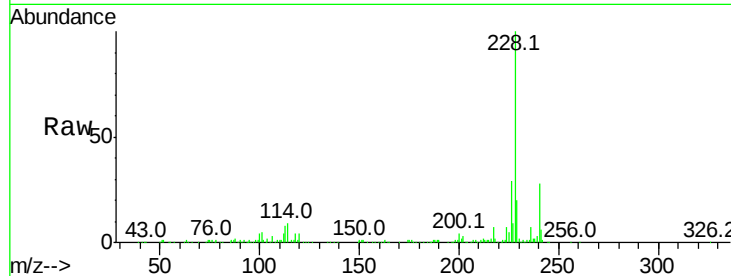
#80
Benzo(a)anthracene
Concen: 22.793 ng
RT: 14.02 min Scan# 2028
Delta R.T. -0.00 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Instrument :
BNA_F
ClientSampleId :
SB-3(0-2)-20171127DL

Tot Ion	Ratio	Lower	Upper
228	100		
226	28.7	22.6	33.8
229	19.8	15.8	23.6

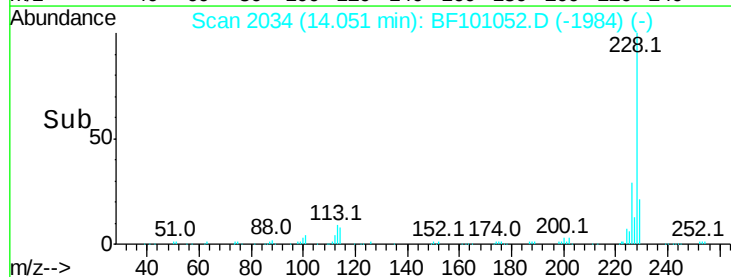
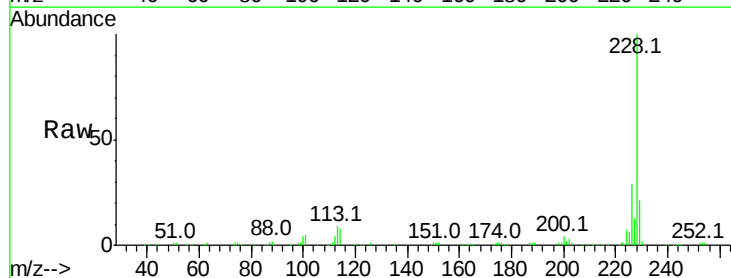
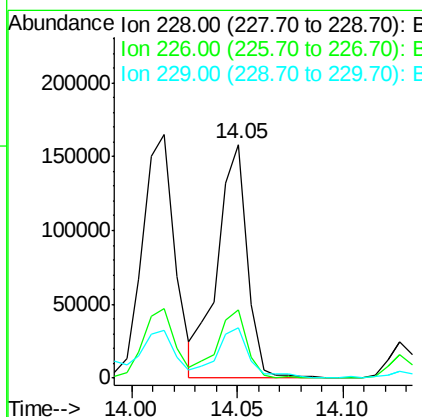
Manual Integrations
APPROVED

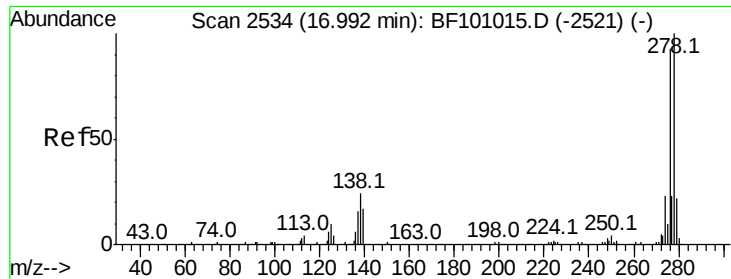
Sohil
12/1/2017 11:13:30 AM



#82
Chrysene
Concen: 21.634 ng
RT: 14.05 min Scan# 2034
Delta R.T. -0.01 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.0	25.0	37.6
229	21.3	16.2	24.4





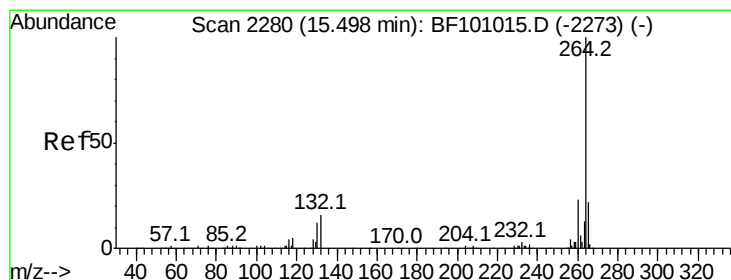
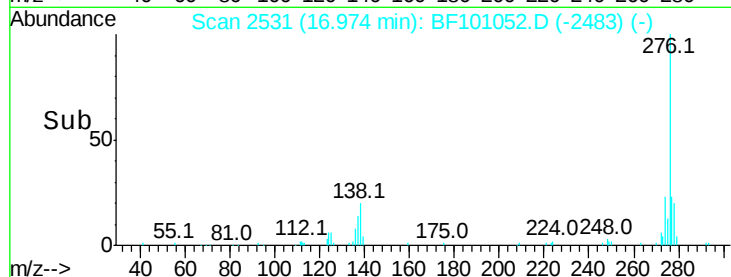
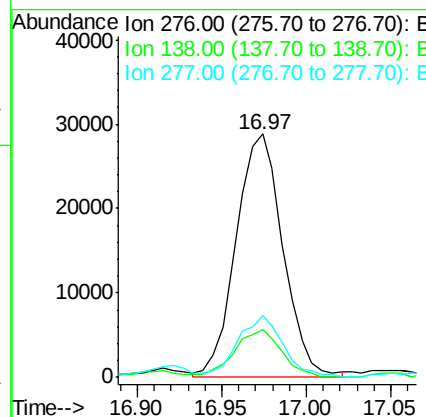
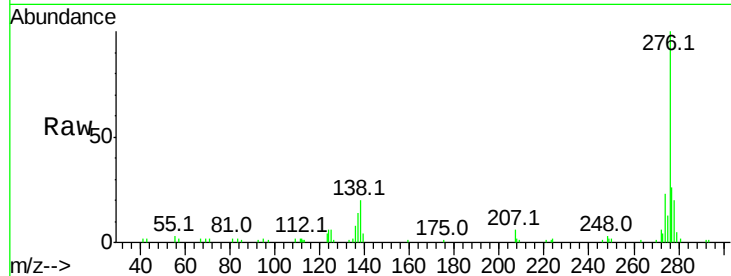
#85
Indeno(1,2,3-cd)pyrene
Concen: 8.745 ng
RT: 16.97 min Scan# 2531
Delta R.T. -0.02 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Instrument :
BNA_F
ClientSampleId :
SB-3(0-2)-20171127DL

Tot Ion	Ratio	Resp Lower	Upper
276	100		
138	20.1	25.0	37.6#
277	24.6	20.1	30.1

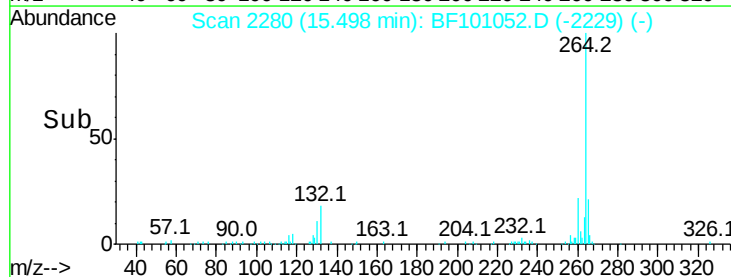
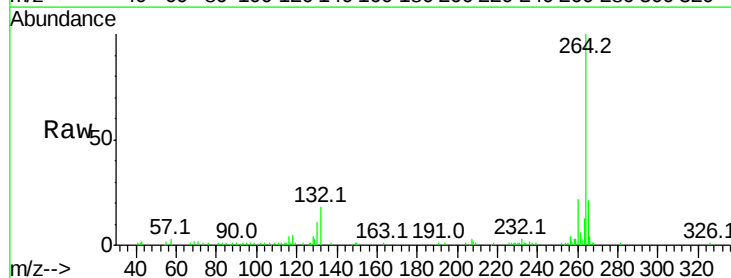
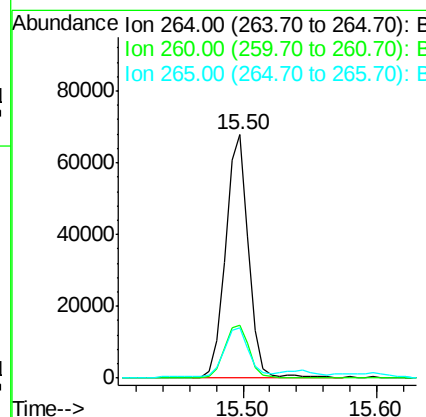
Manual Integrations
APPROVED

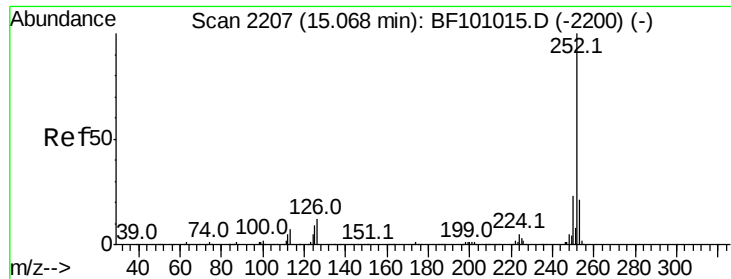
Sohil
12/1/2017 11:13:30 AM



#86
Perylene-d12
Concen: 20.000 ng
RT: 15.50 min Scan# 2280
Delta R.T. -0.00 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Tgt Ion	Ratio	Resp Lower	Upper
264	100		
260	21.7	19.2	28.8
265	20.9	17.5	26.3





#87

Benzo(b)fluoranthene

Concen: 29.718 ng m

RT: 15.07 min Scan# 2207

Delta R.T. -0.00 min

Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Instrument :

BNA_F

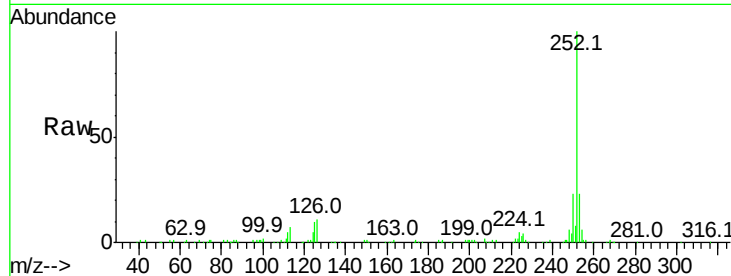
ClientSampleId :

SB-3(0-2)-20171127DL

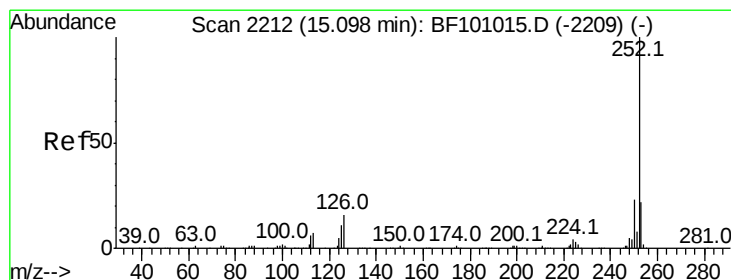
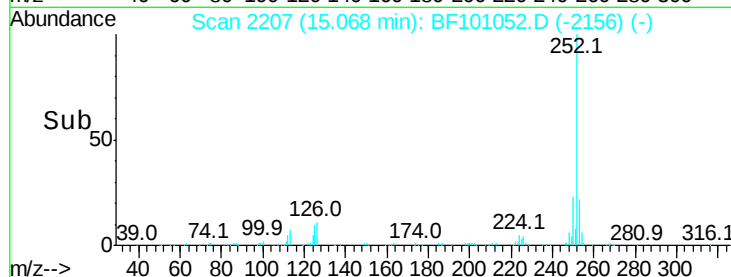
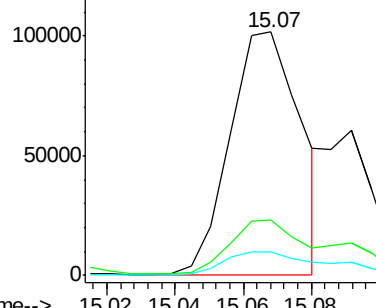
Tot Ion:	252	Resp:	146896
Ion Ratio	Lower	Upper	
252	100		
253	22.6	17.0	25.6
125	9.5	9.0	13.6

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM



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



#88

Benzo(k)fluoranthene

Concen: 11.910 ng m

RT: 15.09 min Scan# 2211

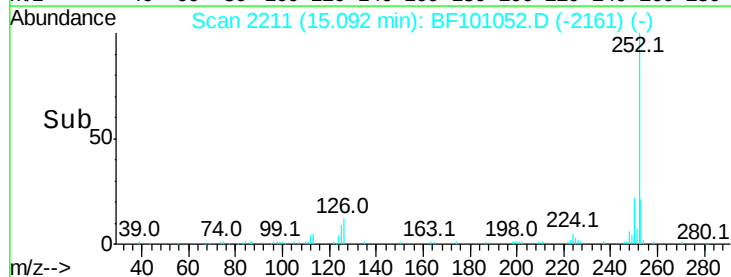
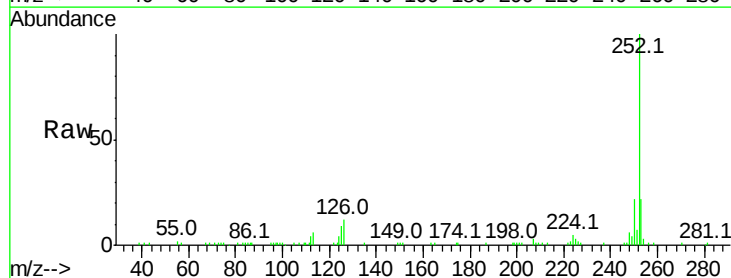
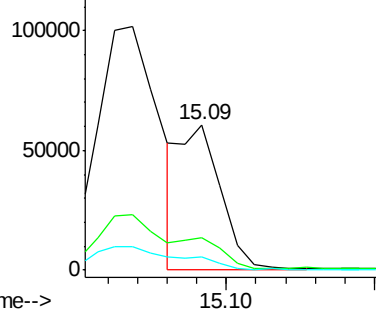
Delta R.T. -0.01 min

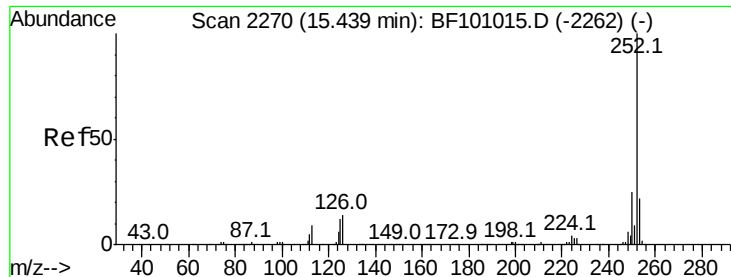
Lab File: BF101052.D

Acq: 1 Dec 2017 8:36

Tgt Ion:	252	Resp:	58001
Ion Ratio	Lower	Upper	
252	100		
253	22.1	17.9	26.9
125	8.8	10.2	15.2#

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





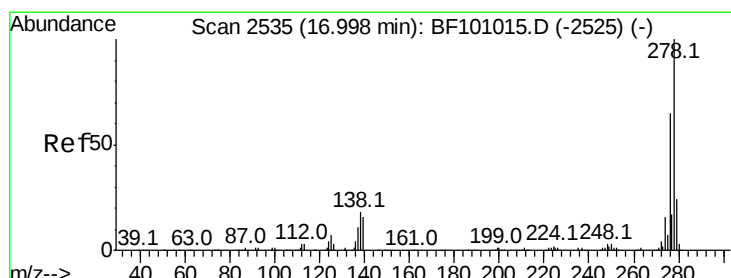
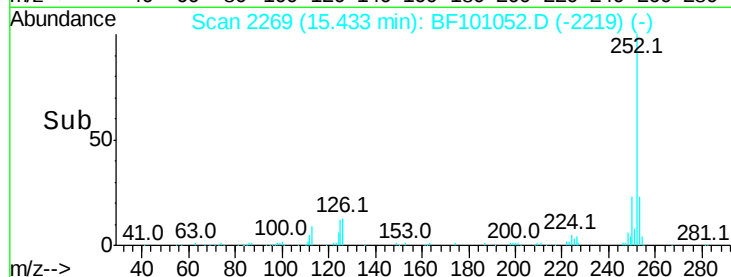
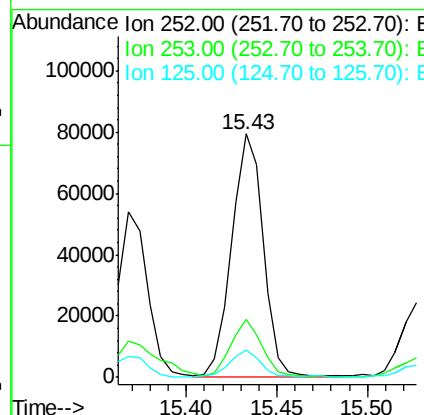
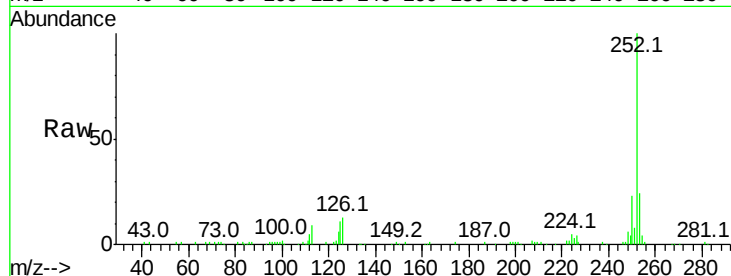
#89
Benzo(a)pyrene
Concen: 21.567 ng
RT: 15.43 min Scan# 2269
Delta R.T. -0.01 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Instrument :
BNA_F
ClientSampleID :
SB-3(0-2)-20171127DL

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.8	17.1	25.7
125	11.5	9.8	14.6

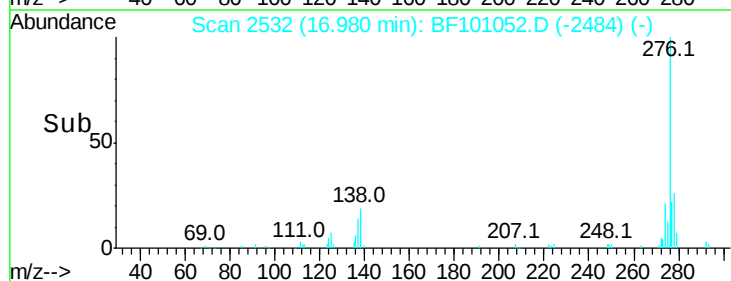
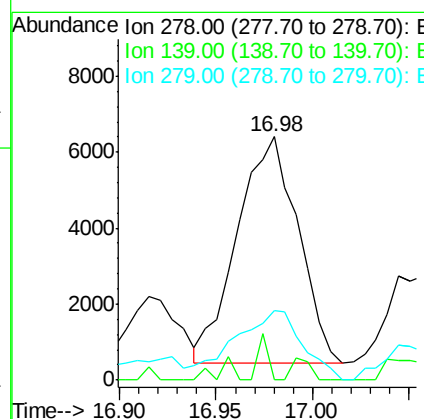
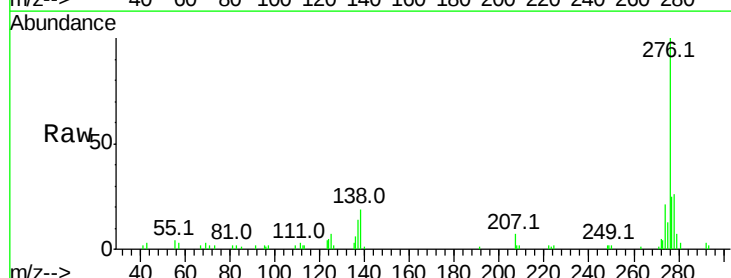
Manual Integrations
APPROVED

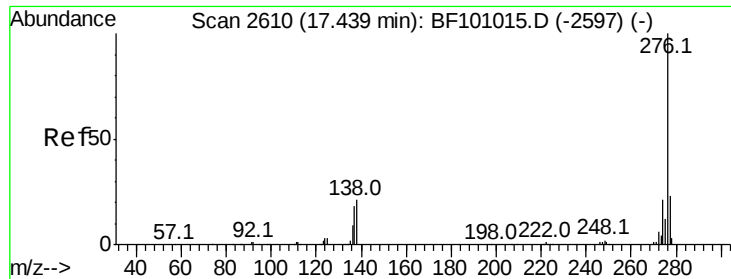
Sohil
12/1/2017 11:13:30 AM



#90
Dibenzo(a,h)anthracene
Concen: 3.281 ng m
RT: 16.98 min Scan# 2532
Delta R.T. -0.02 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Tgt Ion	Ratio	Lower	Upper
278	100		
139	4.9	15.9	23.9#
279	28.8	19.0	28.4#





#91
Benzo(a,h,i)perylene
Concen: 13.671 ng
RT: 17.42 min Scan# 2607
Delta R.T. -0.02 min
Lab File: BF101052.D
Acq: 1 Dec 2017 8:36

Instrument :
BNA_F
ClientSampleId :
SB-3(0-2)-20171127DL

Tot Ion	Ratio	Lower	Upper
276	100		
277	25.2	17.9	26.9
138	21.3	21.8	32.8

Manual Integrations
APPROVED

Sohil
12/1/2017 11:13:30 AM

