

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA F\DATA\BF091417\
 Data File : BF098553.D
 Acq On : 15 Sep 2017 3:04
 Operator : SJ/JU
 Sample : I5218-01 5X
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SU-02-091217

Manual Integrations
 APPROVED

Sohil
 9/15/2017 5:44:33 PM

Quant Time: Sep 15 07:23:47 2017
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF091117.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Sep 12 02:14:50 2017
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.65	152	124744	20.00	ng	-0.02
21) Naphthalene-d8	7.93	136	460205	20.00	ng	-0.02
38) Acenaphthene-d10	9.68	164	172888	20.00	ng	-0.02
63) Phenanthrene-d10	11.16	188	298056	20.00	ng	-0.02
75) Chrysene-d12	13.80	240	300829	20.00	ng	-0.02
86) Perylene-d12	15.20	264	280388	20.00	ng	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	5.25	112	171036	20.27	ng	-0.02
7) Phenol-d6	6.30	99	199320	18.61	ng	-0.02
23) Nitrobenzene-d5	7.22	82	110864	13.43	ng	-0.02
41) 2,4,6-Tribromophenol	10.47	330	26500	22.97	ng	-0.02
44) 2-Fluorobiphenyl	9.00	172	178358	17.49	ng	-0.03
78) Terphenyl-d14	12.74	244	153623	11.02	ng	-0.03
Target Compounds						
57) Fluorene	10.23	166	28550	2.507	ng	99
70) Phenanthrene	11.19	178	445739	28.210	ng	98
71) Anthracene	11.24	178	95936	5.914	ng	97
72) Carbazole	11.40	167	40688	2.691	ng	98
74) Fluoranthene	12.37	202	527680	33.360	ng	97
77) Pyrene	12.60	202	438797	18.490	ng	98
80) Benzo(a)anthracene	13.79	228	215291	12.207	ng	99
82) Chrysene	13.82	228	179858	10.088	ng	95
85) Indeno(1,2,3-cd)pyrene	16.53	276	61708	4.933	ng	# 89
87) Benzo(b)fluoranthene	14.80	252	228342m	12.952	ng	
88) Benzo(k)fluoranthene	14.83	252	63872m	3.881	ng	
89) Benzo(a)pyrene	15.14	252	139068	8.854	ng	98
91) Benzo(a,h,i)perylene	16.93	276	53650	4.669	ng	95

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

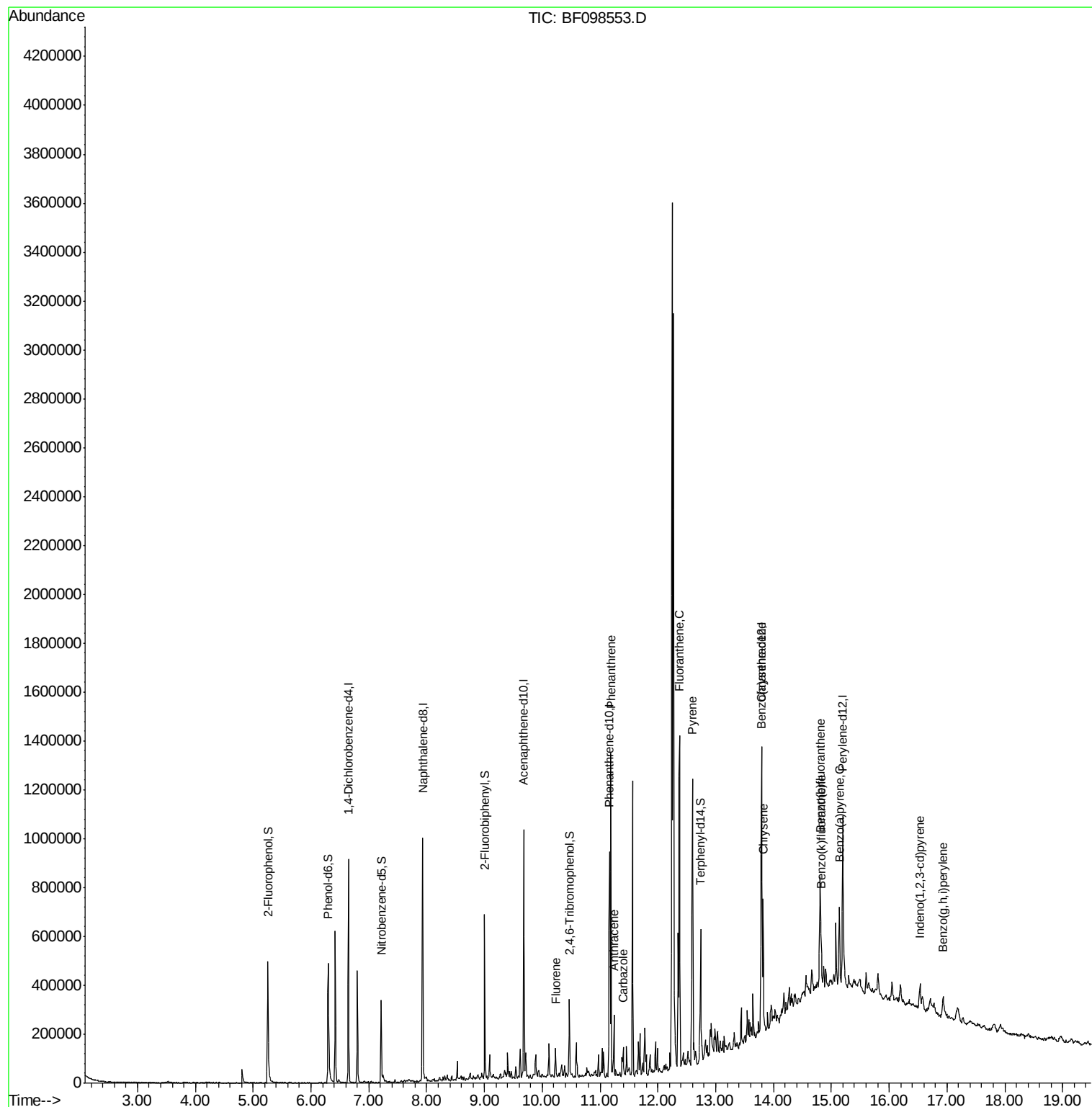
Data Path : \\74.0.250.170\SVOASRV\HPCHEM1\BNA F\DATA\BF091417\
Data File : BF098553.D
Acq On : 15 Sep 2017 3:04
Operator : SJ/JU
Sample : I5218-01 5X
Misc :
ALS Vial : 23 Sample Multiplier: 1

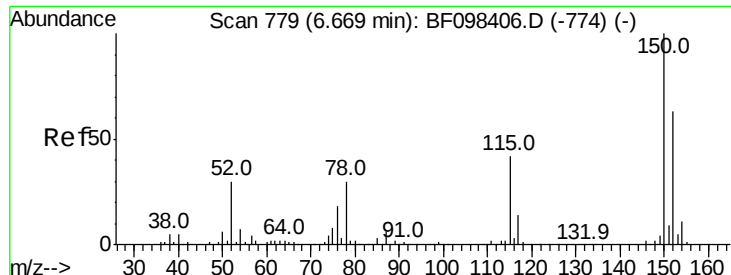
Instrument :
BNA_F
ClientSampleId :
SU-02-091217

Manual Integrations
APPROVED

Sohil
9/15/2017 5:44:33 PM

Quant Time: Sep 15 07:23:47 2017
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF091117.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Sep 12 02:14:50 2017
Response via : Initial Calibration





#1

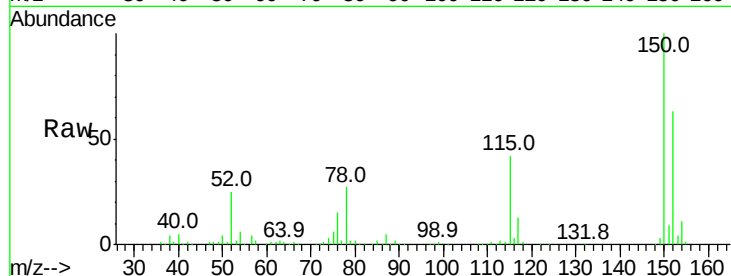
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.65 min Scan# 775
Delta R.T. -0.02 min
Lab File: BF098553.D
Acq: 15 Sep 2017 3:04

Instrument :
BNA_F
ClientSampleId :
SU-02-091217

Tot Ion	Ratio	Lower	Upper
152	100		
150	159.6	126.2	189.2
115	67.3	52.2	78.2

Manual Integrations
APPROVED

Sohil
9/15/2017 5:44:33 PM

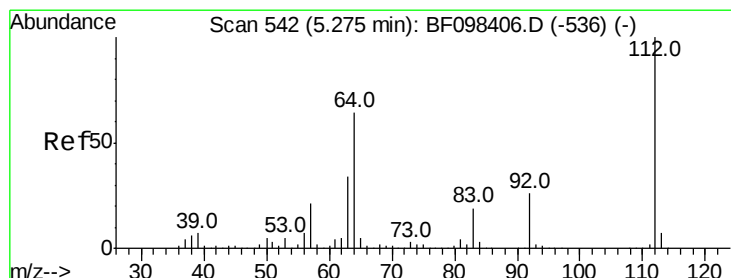
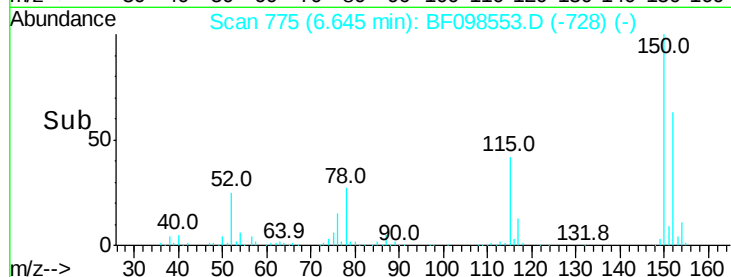
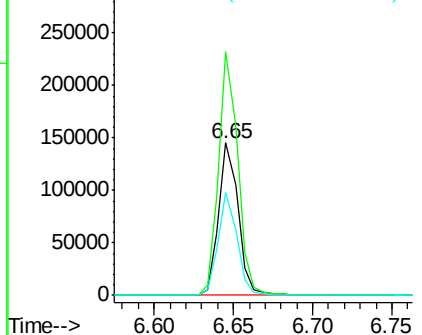


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

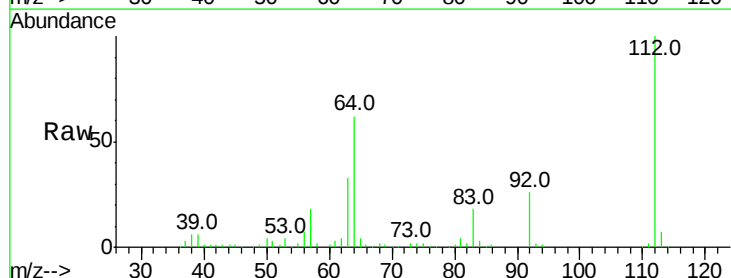
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol
Concen: 20.272 ng
RT: 5.25 min Scan# 538
Delta R.T. -0.02 min
Lab File: BF098553.D
Acq: 15 Sep 2017 3:04

Tgt Ion	Ratio	Lower	Upper
112	100		
64	62.3	46.0	69.0
63	32.7	23.4	35.0

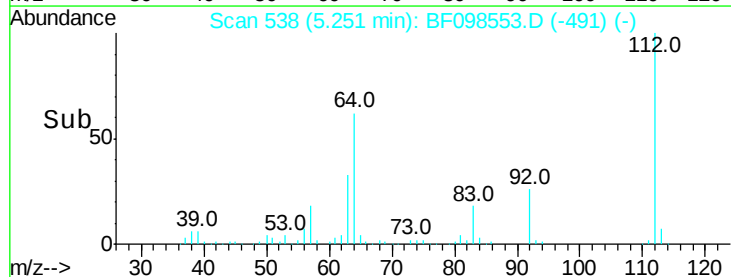
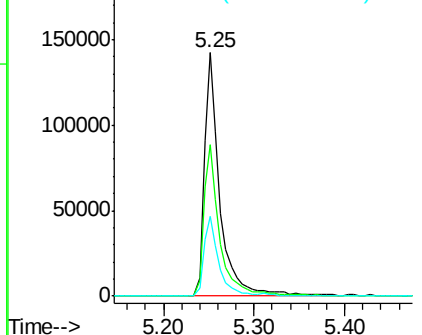


Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF0

Ion 63.00 (62.70 to 63.70): BF0





#7

Phenol-d6

Concen: 18.607 ng

RT: 6.30 min Scan# 716

Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Instrument :

BNA_F

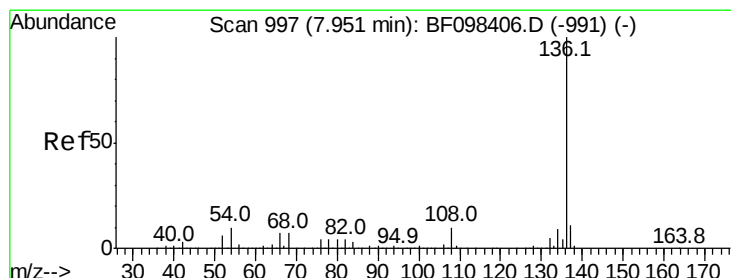
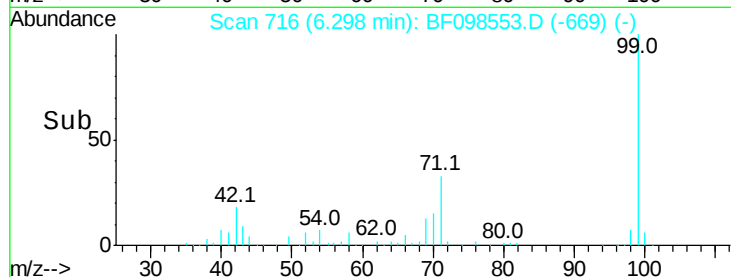
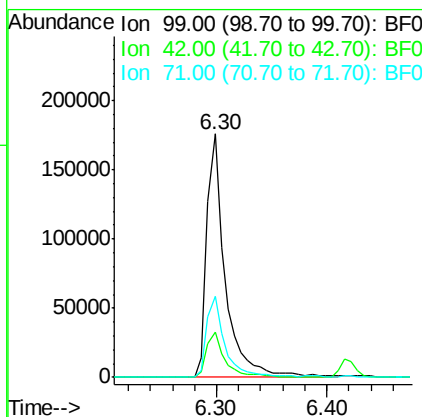
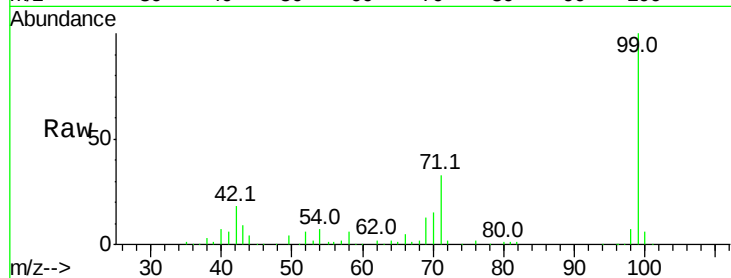
ClientSampleId :

SU-02-091217

Tot Ion	Ion	Ratio	Resp	Lower	Upper
99	100		199320		
42	18.4	13.5	20.3		
71	33.1	24.5	36.7		

Manual Integrations
APPROVED

Sohil
9/15/2017 5:44:33 PM



#21

Naphthalene-d8

Concen: 20.000 ng

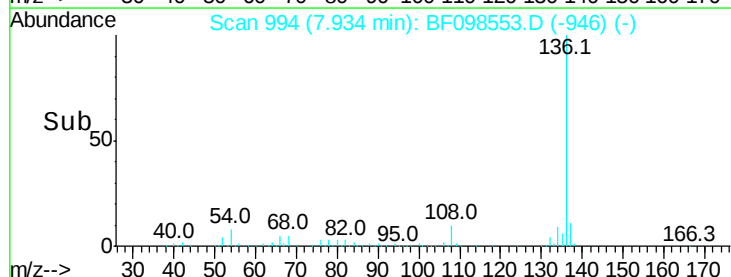
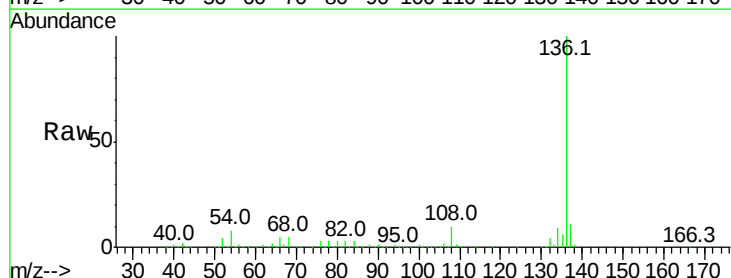
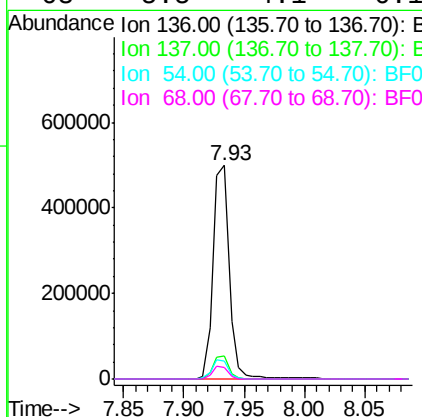
RT: 7.93 min Scan# 994

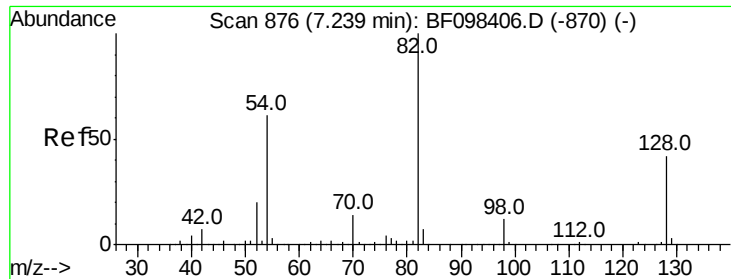
Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
136	100		460205		
137	11.0	8.5	12.7		
54	8.3	4.9	7.3#		
68	5.5	4.1	6.1		





#23

Nitrobenzene-d5

Concen: 13.430 ng

RT: 7.22 min Scan# 872

Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Instrument :

BNA_F

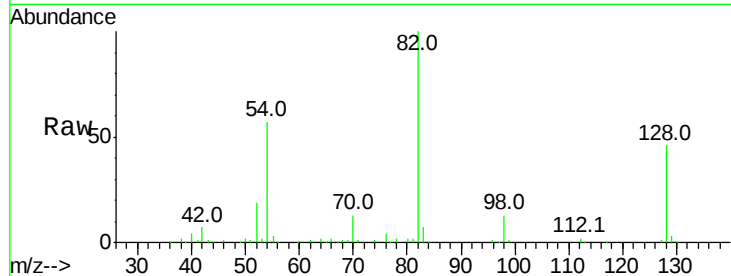
ClientSampled :

SU-02-091217

Tot Ion:	82	Resp:	110864
Ion Ratio	Lower	Upper	
82	100		
128	45.7	34.0	51.0
54	56.7	42.2	63.2

Manual Integrations
APPROVED

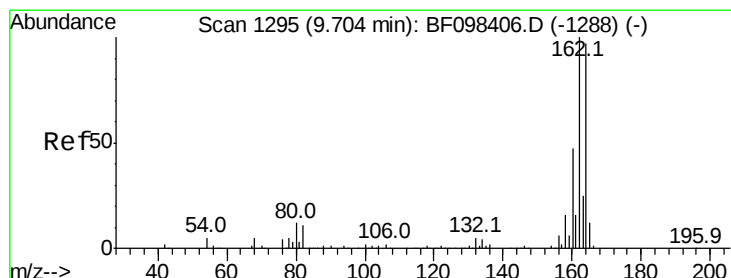
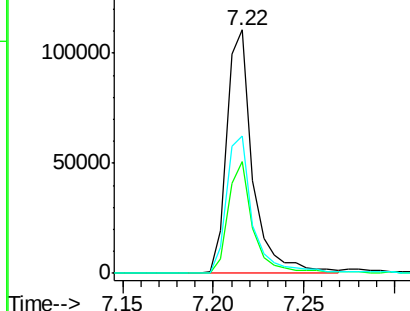
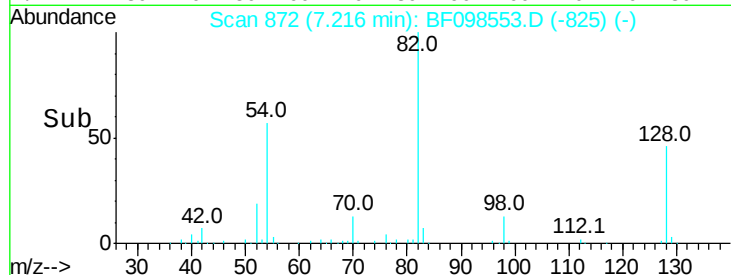
Sohil
9/15/2017 5:44:33 PM



Abundance Ion 82.00 (81.70 to 82.70): BF098553.D (-825) (-)

Ion 128.00 (127.70 to 128.70): BF098553.D (-825) (-)

Ion 54.00 (53.70 to 54.70): BF098553.D (-825) (-)



#38

Acenaphthene-d10

Concen: 20.000 ng

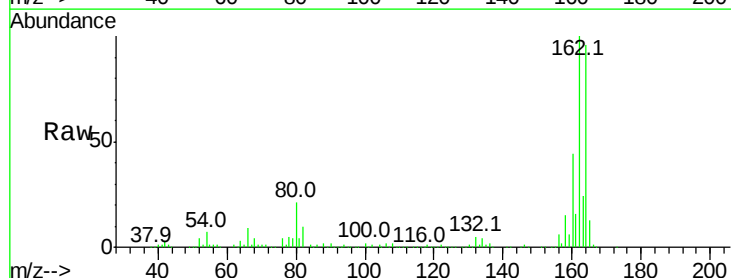
RT: 9.68 min Scan# 1291

Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

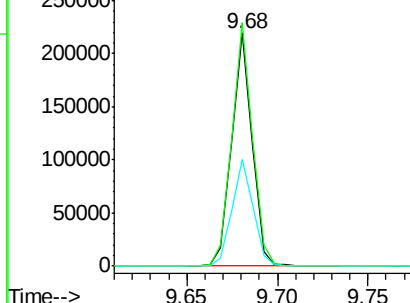
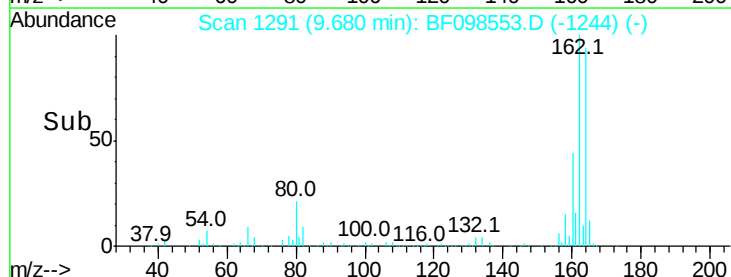
Tgt Ion:	164	Resp:	172888
Ion Ratio	Lower	Upper	
164	100		
162	104.5	82.6	123.8
160	45.8	36.2	54.2

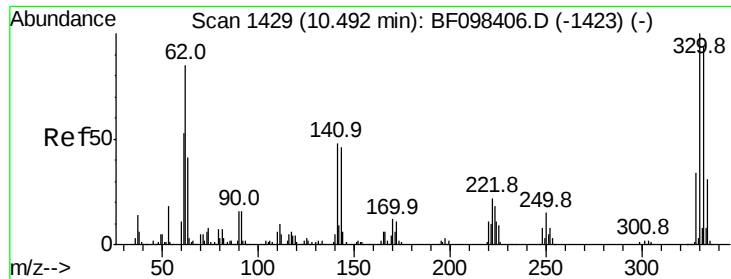


Abundance Ion 164.00 (163.70 to 164.70): BF098553.D (-1244) (-)

Ion 162.00 (161.70 to 162.70): BF098553.D (-1244) (-)

Ion 160.00 (159.70 to 160.70): BF098553.D (-1244) (-)





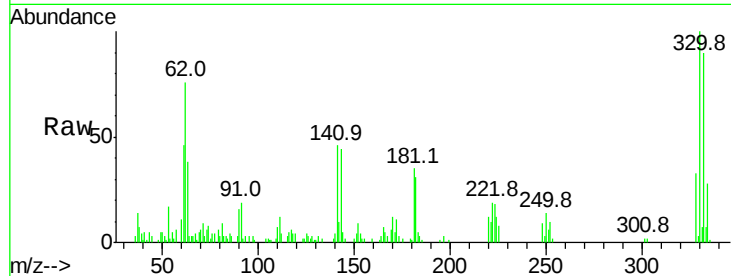
#41
 2,4,6-Tribromophenol
 Concen: 22.966 ng
 RT: 10.47 min Scan# 1425
 Delta R.T. -0.02 min
 Lab File: BF098553.D
 Acq: 15 Sep 2017 3:04

Instrument :
 BNA_F
 ClientSampleId :
 SU-02-091217

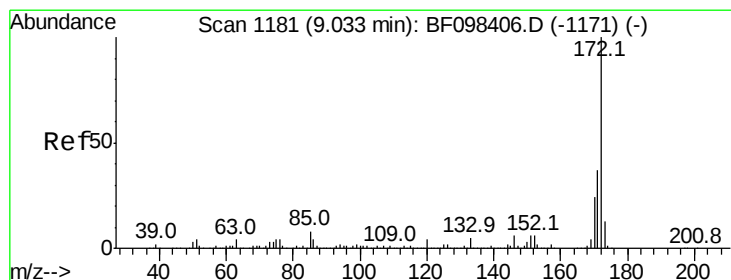
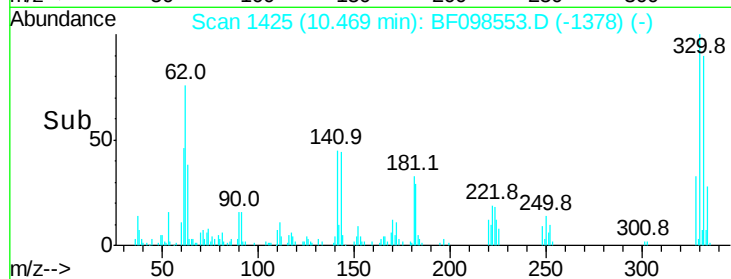
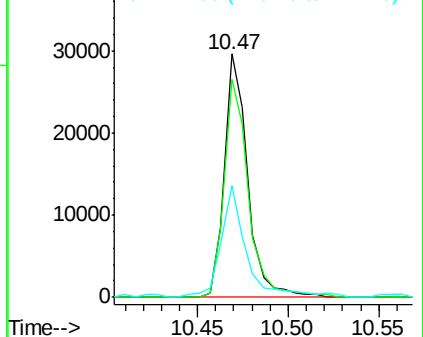
Tot Ion	Ratio	Resp	Lower	Upper
330	100			
332	93.6	76.6	115.0	
141	49.9	31.4	47.2	

Manual Integrations
 APPROVED

Sohil
 9/15/2017 5:44:33 PM

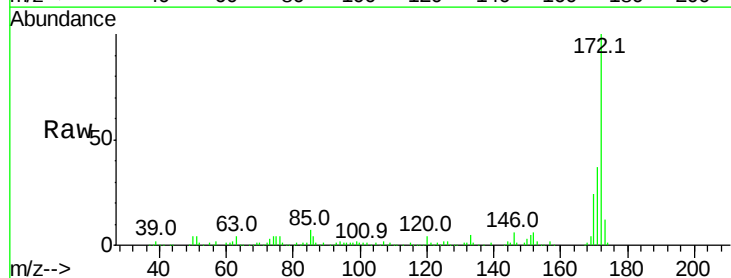


Abundance Ion 329.80 (329.50 to 330.50): E
 Ion 331.80 (331.50 to 332.50): E
 Ion 141.00 (140.70 to 141.70): E

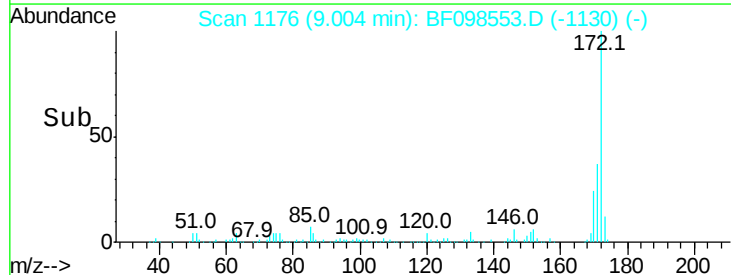
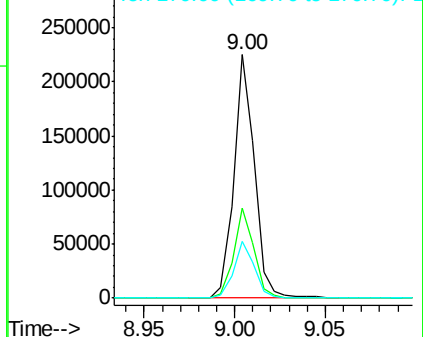


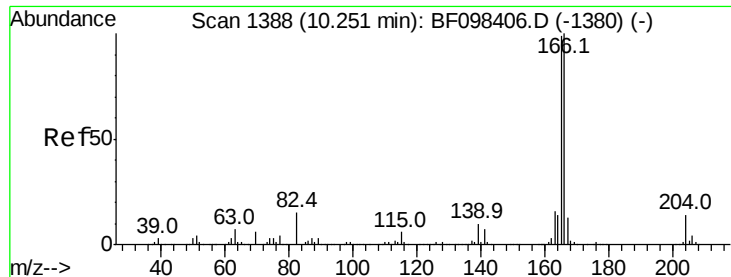
#44
 2-Fluorobiphenyl
 Concen: 17.485 ng
 RT: 9.00 min Scan# 1176
 Delta R.T. -0.03 min
 Lab File: BF098553.D
 Acq: 15 Sep 2017 3:04

Tgt Ion	Ratio	Resp	Lower	Upper
172	100			
171	37.0	29.6	44.4	
170	23.5	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





#57

Fluorene

Concen: 2.507 ng

RT: 10.23 min Scan# 1384

Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Instrument :

BNA_F

ClientSampleId :

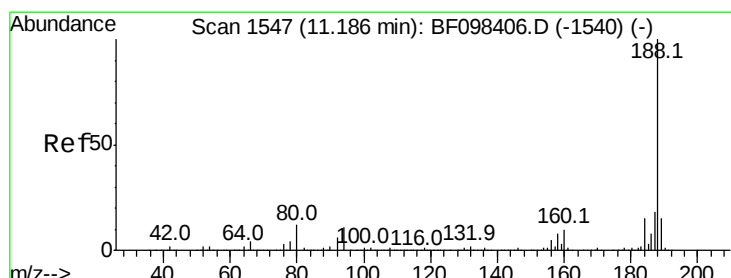
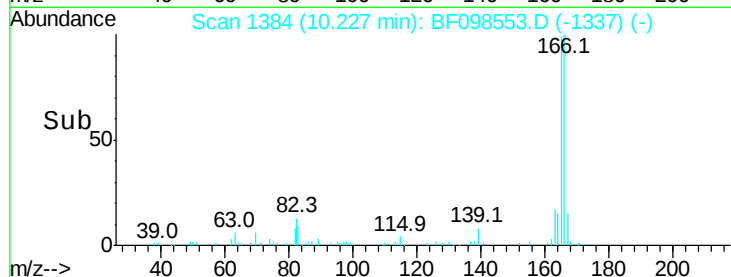
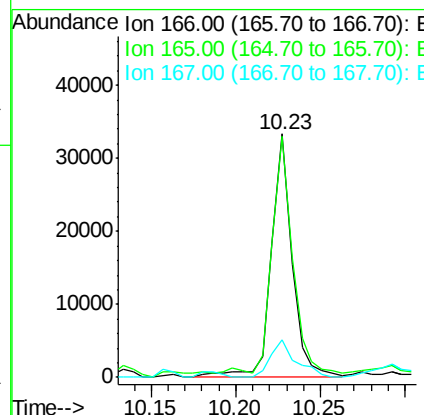
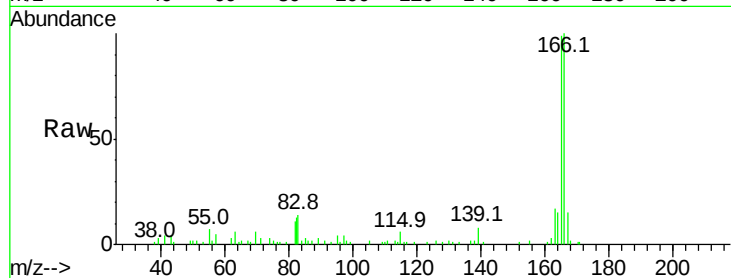
SU-02-091217

Tot Ion	Ratio	Resp	Lower	Upper
166	100	28550		
165	98.8		78.8	118.2
167	15.4		10.6	16.0

Manual Integrations
APPROVED

Sohil

9/15/2017 5:44:33 PM



#63

Phenanthrene-d10

Concen: 20.000 ng

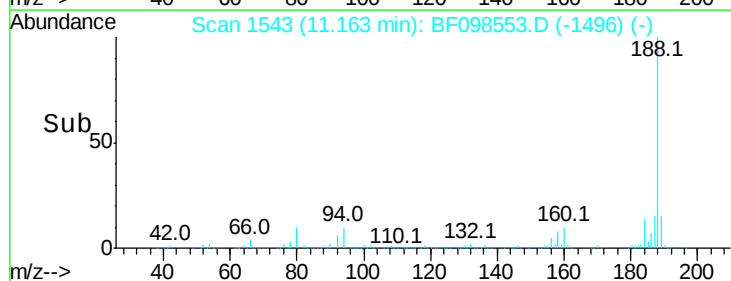
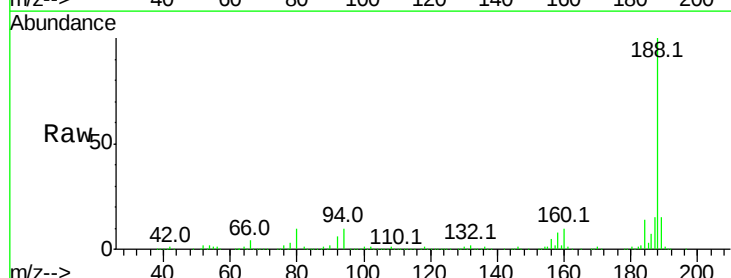
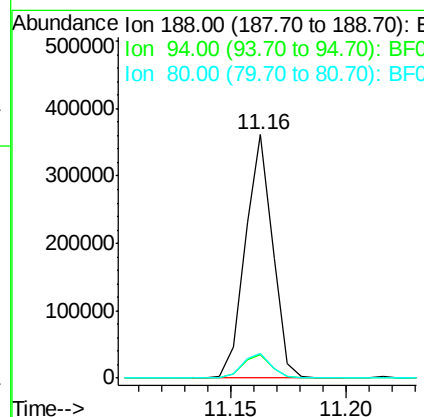
RT: 11.16 min Scan# 1543

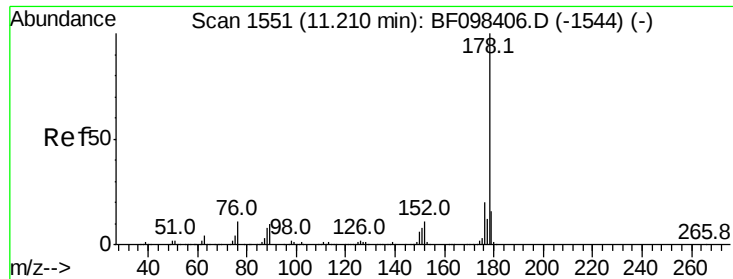
Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Tgt Ion	Ratio	Resp	Lower	Upper
188	100	298056		
94	9.6		9.4	14.2
80	10.3		10.2	15.2





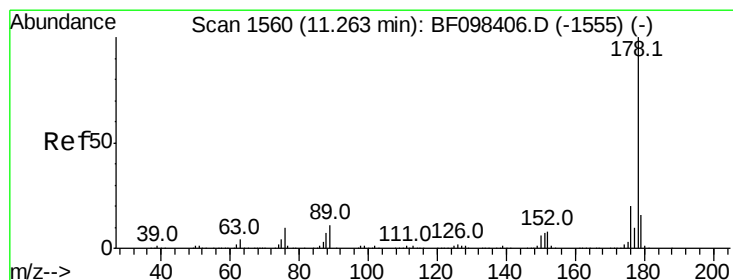
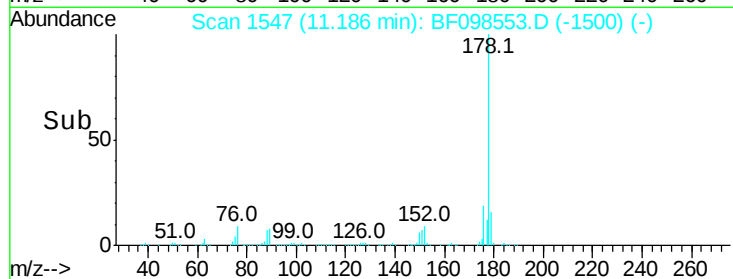
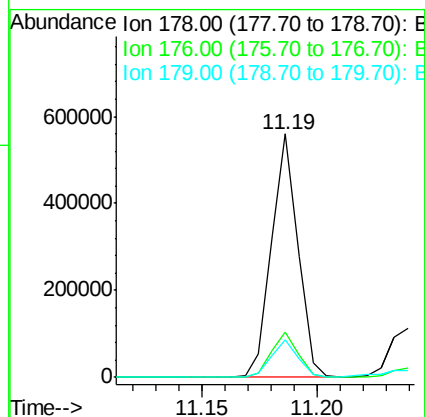
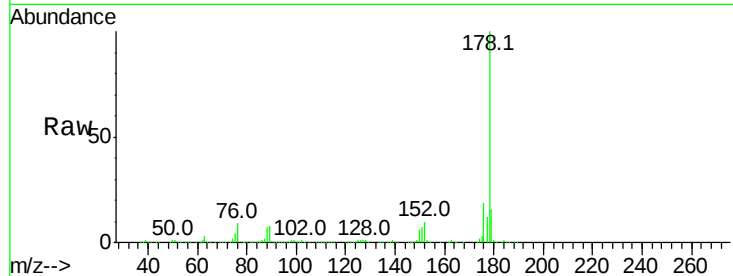
#70
Phenanthrene
Concen: 28.210 ng
RT: 11.19 min Scan# 1547
Delta R.T. -0.02 min
Lab File: BF098553.D
Acq: 15 Sep 2017 3:04

Instrument :
BNA_F
ClientSampleId :
SU-02-091217

Tot Ion	Ratio	Lower	Upper
178	100		
176	18.7	16.2	24.4
179	15.7	12.6	19.0

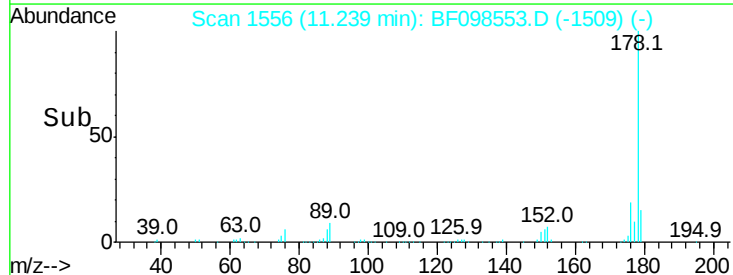
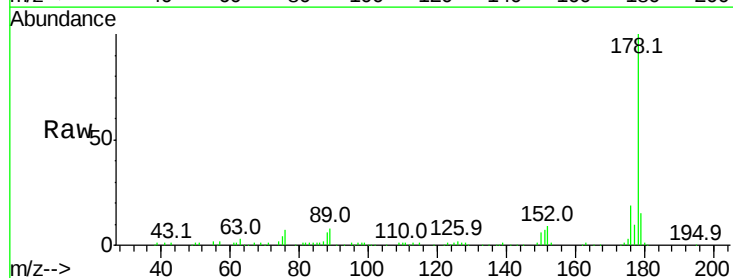
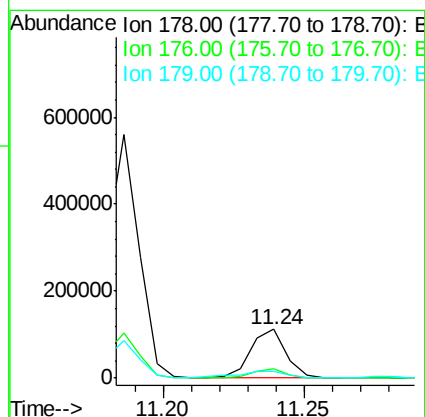
Manual Integrations
APPROVED

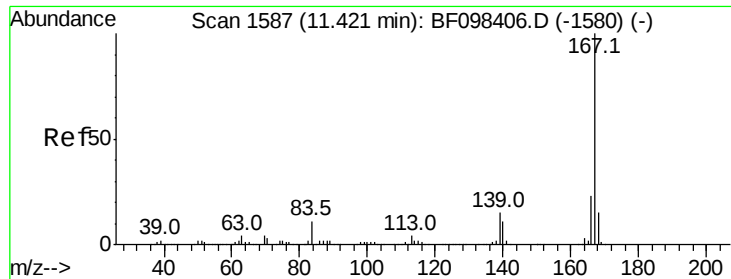
Sohil
9/15/2017 5:44:33 PM



#71
Anthracene
Concen: 5.914 ng
RT: 11.24 min Scan# 1556
Delta R.T. -0.02 min
Lab File: BF098553.D
Acq: 15 Sep 2017 3:04

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.5	15.8	23.8
179	14.6	12.7	19.1





#72

Carbazole

Concen: 2.691 ng

RT: 11.40 min Scan# 1583

Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Instrument :

BNA_F

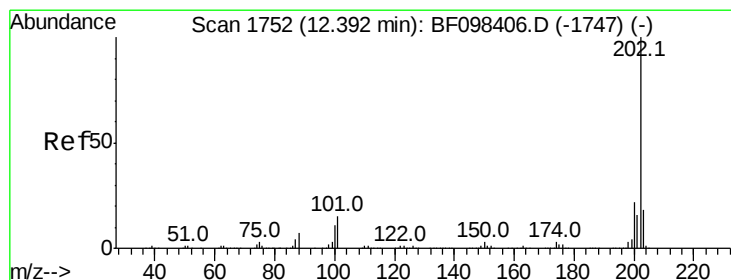
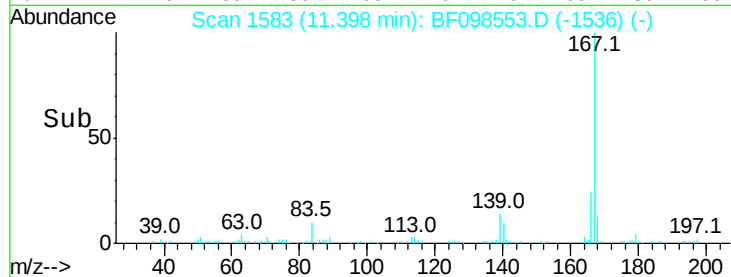
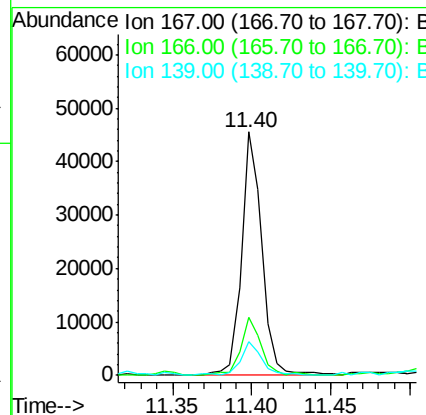
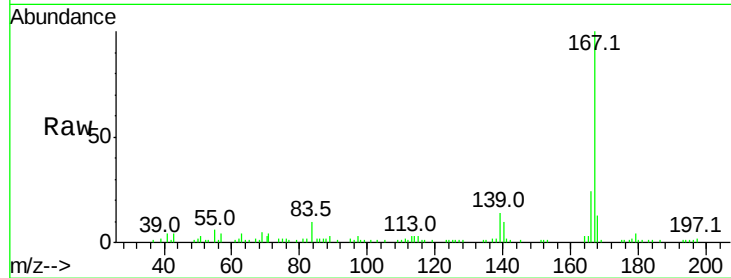
ClientSampleId :

SU-02-091217

Tot Ion	Ratio	Lower	Upper
167	100		
166	23.6	18.1	27.1
139	13.8	11.7	17.5

Manual Integrations
APPROVED

Sohil
9/15/2017 5:44:33 PM



#74

Fluoranthene

Concen: 33.360 ng

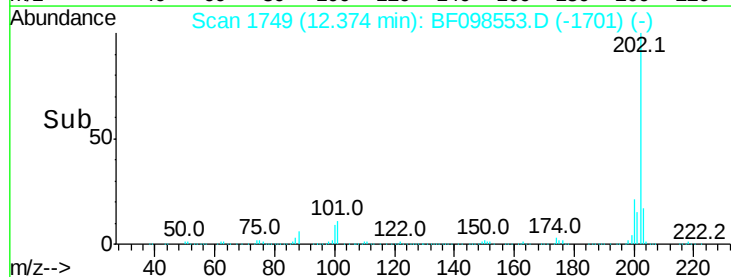
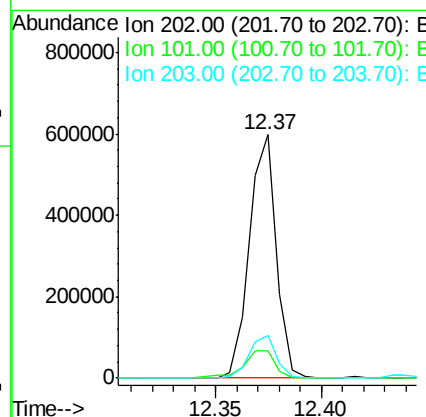
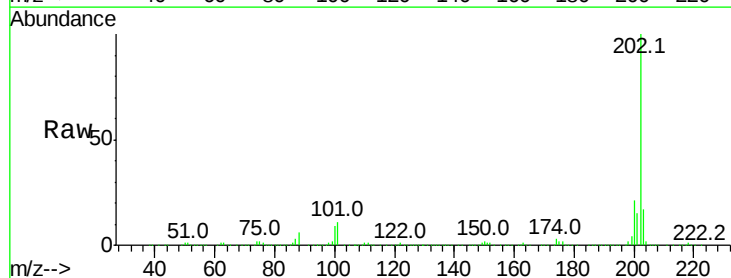
RT: 12.37 min Scan# 1749

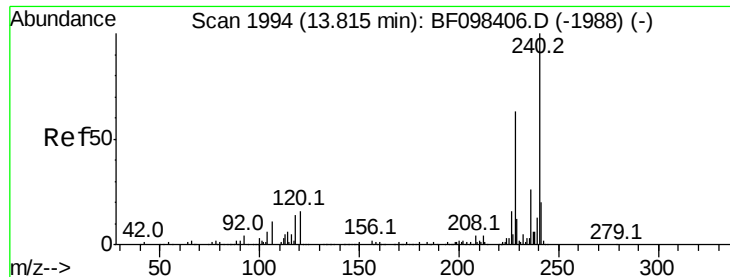
Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Tgt Ion	Ratio	Lower	Upper
202	100		
101	11.4	0.0	33.2
203	17.5	0.0	38.1





#75

Chrysene-d12

Concen: 20.000 ng

RT: 13.80 min Scan# 1991

Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Instrument :

BNA_F

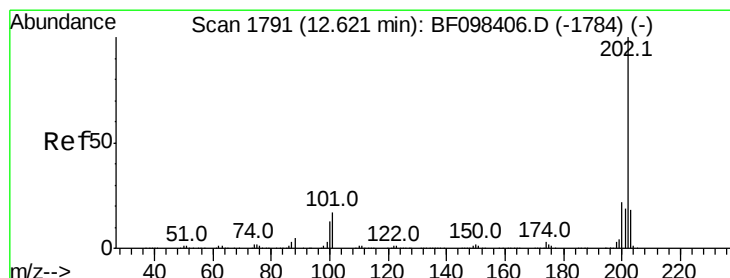
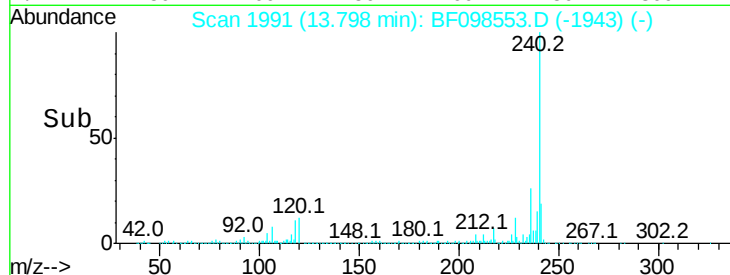
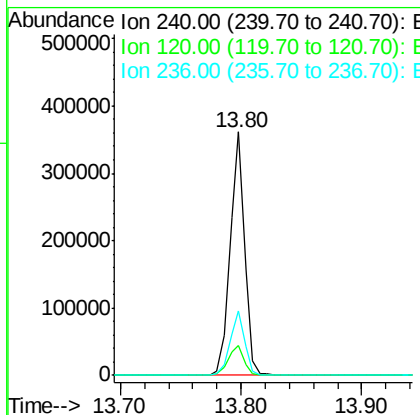
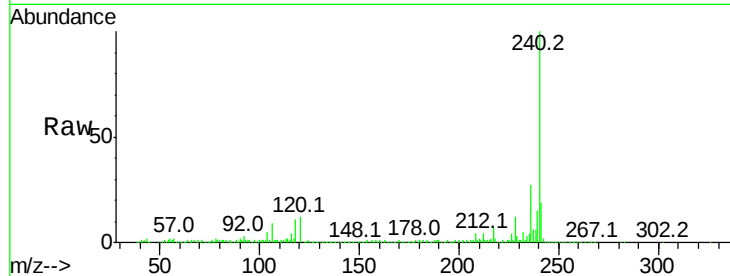
ClientSampleId :

SU-02-091217

Tot Ion:	240	Resp:	300829
Ion Ratio	Lower	Upper	
240	100		
120	12.2	5.8	8.8#
236	26.6	20.5	30.7

Manual Integrations
APPROVED

Sohil
9/15/2017 5:44:33 PM



#77

Pyrene

Concen: 18.490 ng

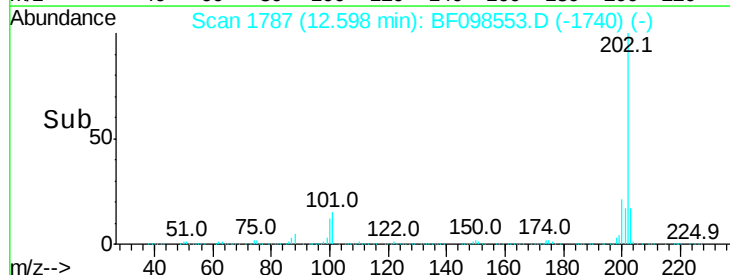
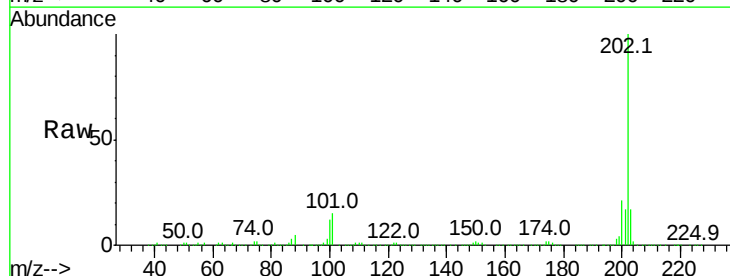
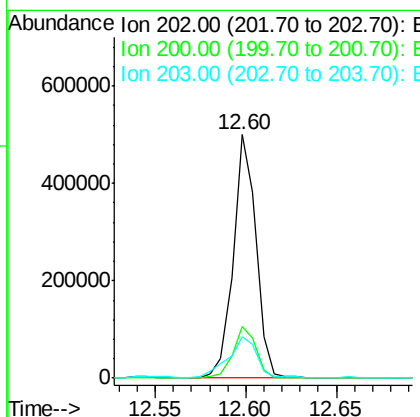
RT: 12.60 min Scan# 1787

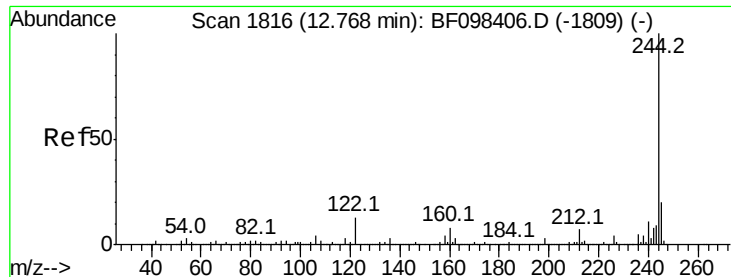
Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Tgt Ion:	202	Resp:	438797
Ion Ratio	Lower	Upper	
202	100		
200	21.3	17.6	26.4
203	17.0	14.4	21.6





#78

Terphenyl-d14

Concen: 11.023 ng

RT: 12.74 min Scan# 1811

Delta R.T. -0.03 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Instrument :

BNA_F

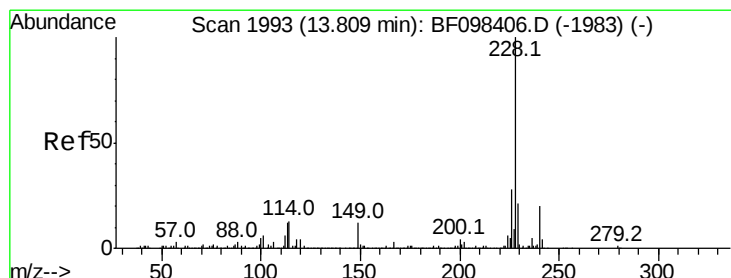
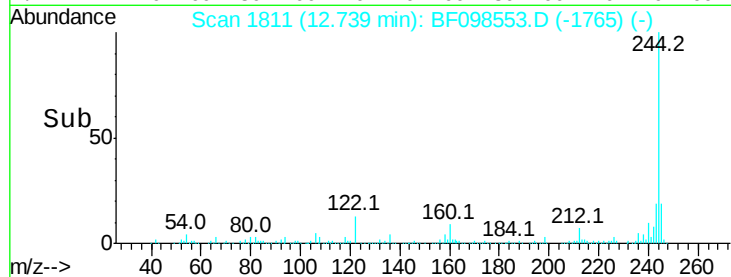
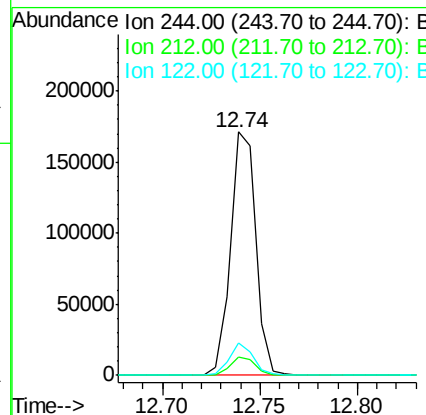
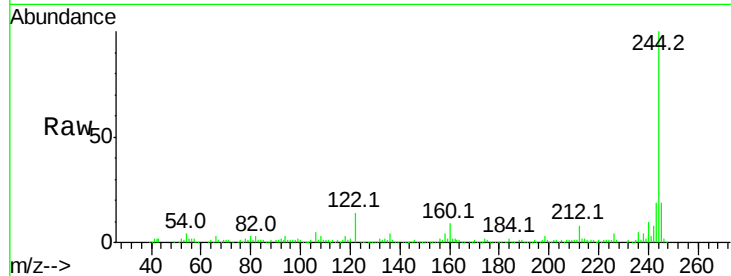
ClientSampleId :

SU-02-091217

Tot Ion:	244	Resp:	153623
Ion Ratio	Lower	Upper	
244	100		
212	7.6	6.0	9.0
122	13.5	10.3	15.5

Manual Integrations
APPROVED

Sohil
9/15/2017 5:44:33 PM



#80

Benzo(a)anthracene

Concen: 12.207 ng

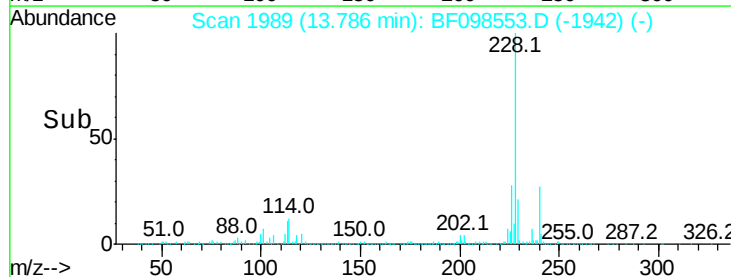
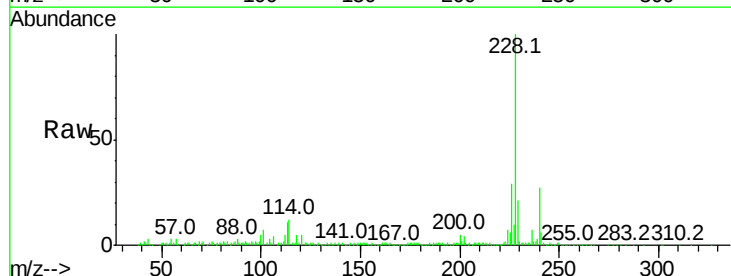
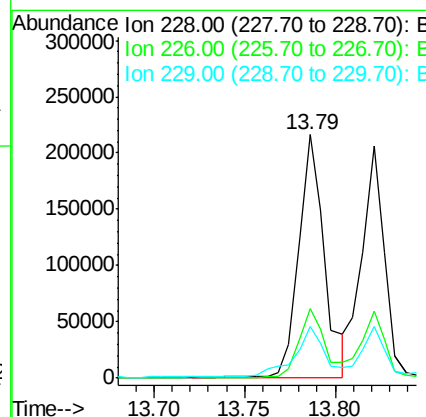
RT: 13.79 min Scan# 1989

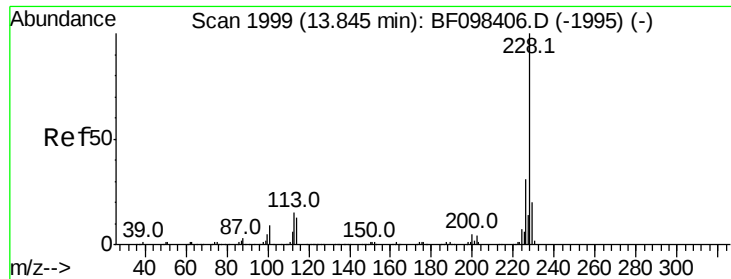
Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Tgt Ion:	228	Resp:	215291
Ion Ratio	Lower	Upper	
228	100		
226	28.6	22.6	33.8
229	21.0	16.3	24.5





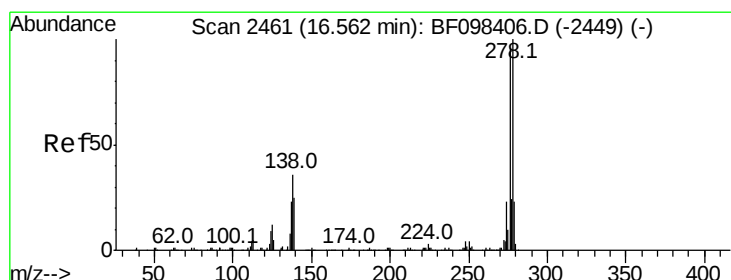
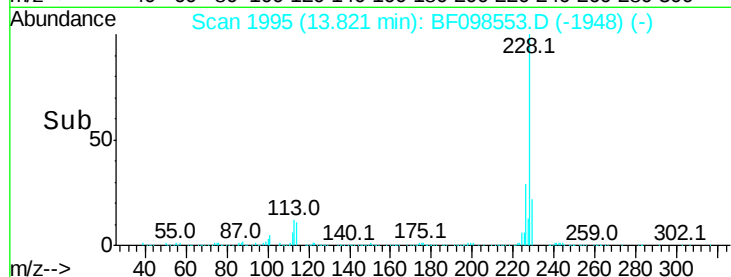
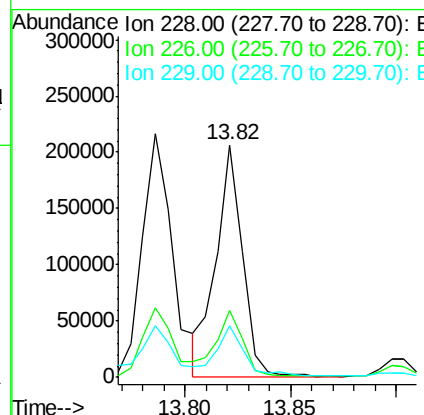
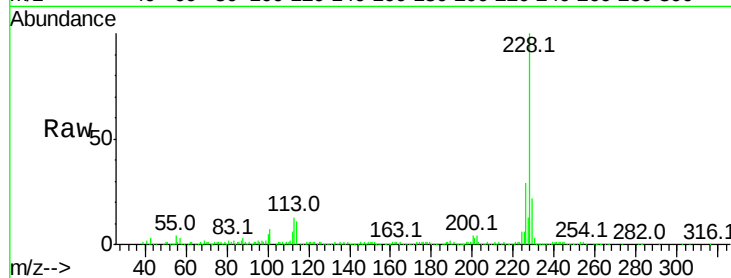
#82
Chrysene
Concen: 10.088 ng
RT: 13.82 min Scan# 1995
Delta R.T. -0.02 min
Lab File: BF098553.D
Acq: 15 Sep 2017 3:04

Instrument :
BNA_F
ClientSampleId :
SU-02-091217

Tot Ion	Ratio	Lower	Upper
228	100		
226	29.1	24.9	37.3
229	22.4	15.8	23.6

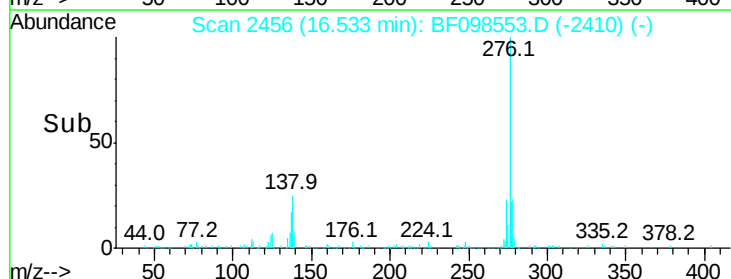
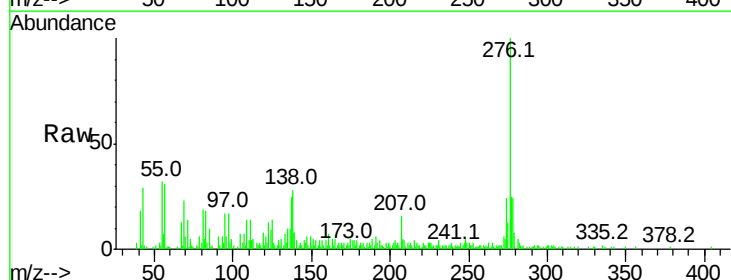
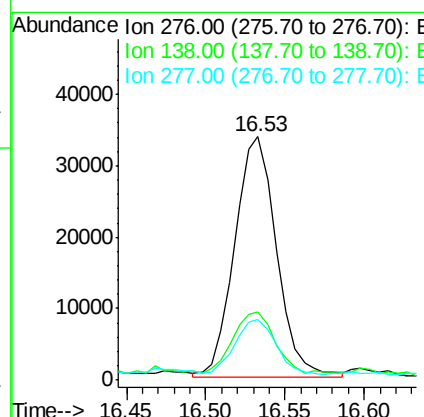
Manual Integrations
APPROVED

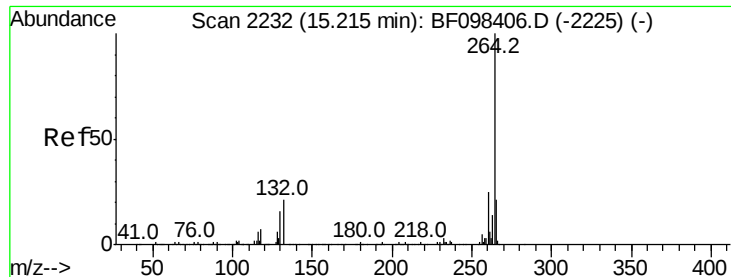
Sohil
9/15/2017 5:44:33 PM



#85
Indeno(1,2,3-cd)pyrene
Concen: 4.933 ng
RT: 16.53 min Scan# 2456
Delta R.T. -0.03 min
Lab File: BF098553.D
Acq: 15 Sep 2017 3:04

Tgt Ion	Ratio	Lower	Upper
276	100		
138	26.2	27.8	41.6#
277	22.7	20.2	30.4





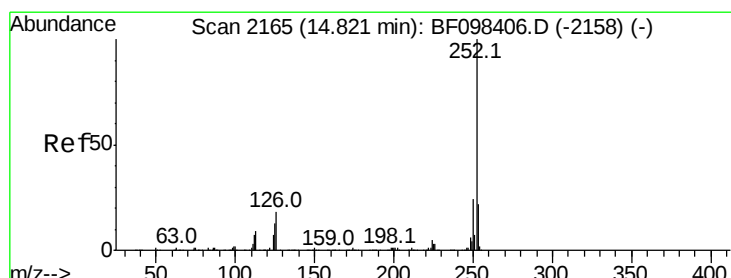
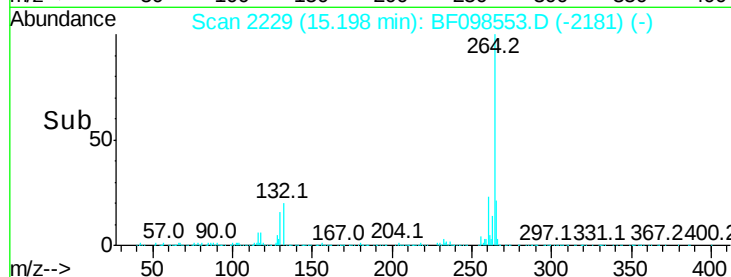
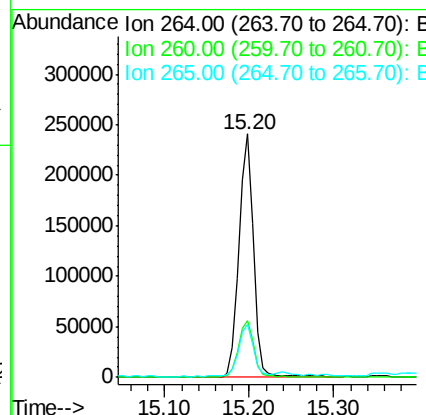
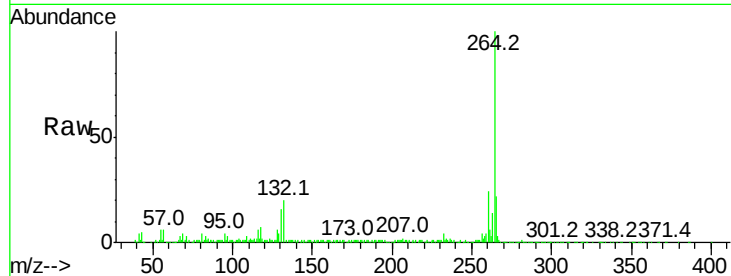
#86
Pervlene-d12
Concen: 20.000 ng
RT: 15.20 min Scan# 2229
Delta R.T. -0.02 min
Lab File: BF098553.D
Acq: 15 Sep 2017 3:04

Instrument :
BNA_F
ClientSampleId :
SU-02-091217

Tot Ion	Ratio	Lower	Upper
264	100		
260	23.6	19.5	29.3
265	21.7	17.2	25.8

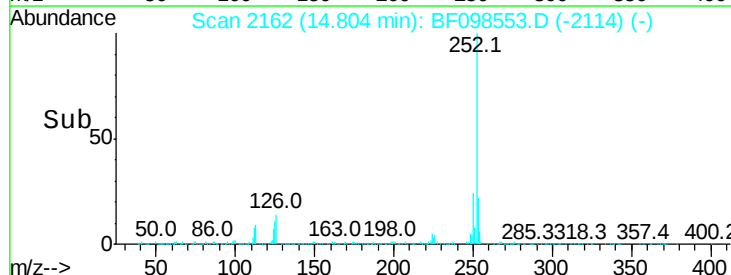
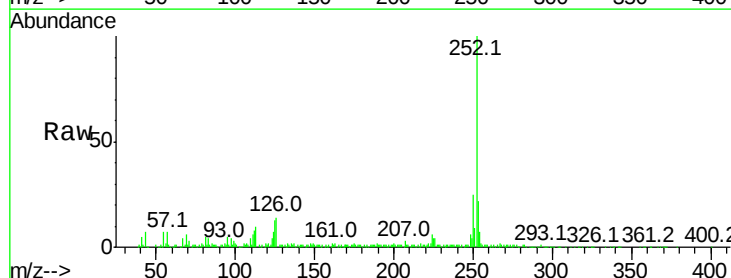
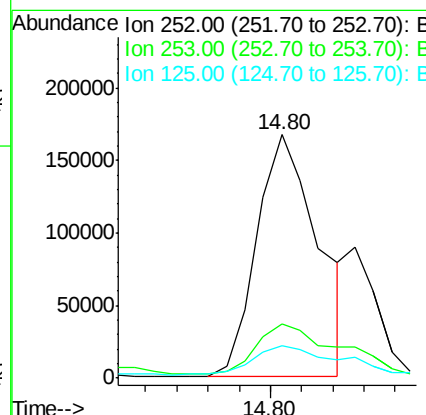
Manual Integrations
APPROVED

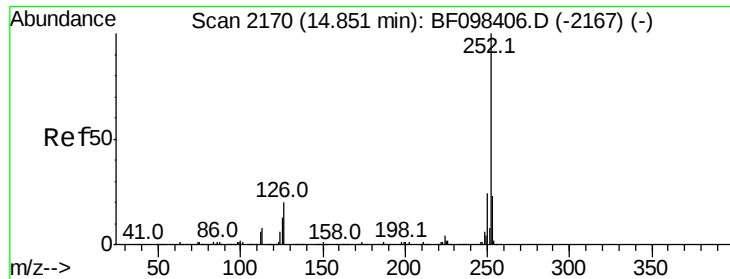
Sohil
9/15/2017 5:44:33 PM



#87
Benzo(b)fluoranthene
Concen: 12.952 ng m
RT: 14.80 min Scan# 2162
Delta R.T. -0.02 min
Lab File: BF098553.D
Acq: 15 Sep 2017 3:04

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.2	18.1	27.1
125	13.2	9.8	14.8





#88

Benzo(k)fluoranthene

Concen: 3.881 ng

RT: 14.83 min Scan# 2166

Delta R.T. -0.02 min

Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Instrument :

BNA_F

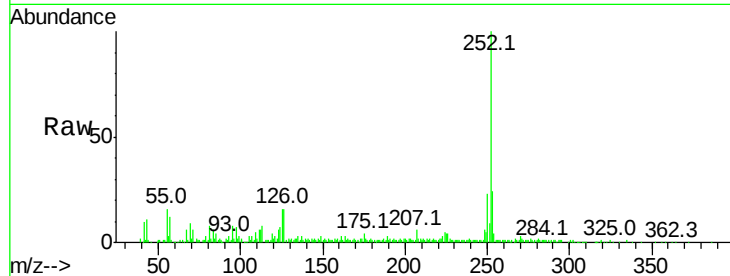
ClientSampleId :

SU-02-091217

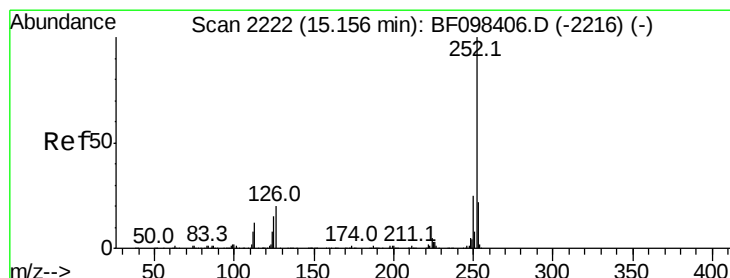
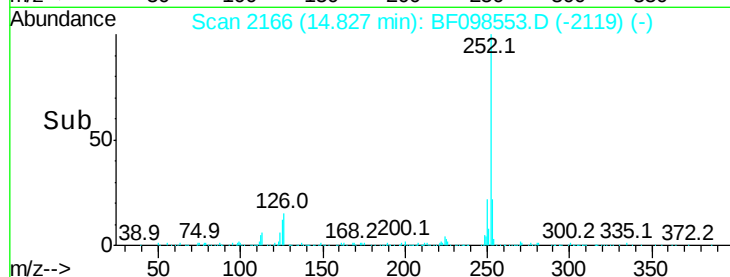
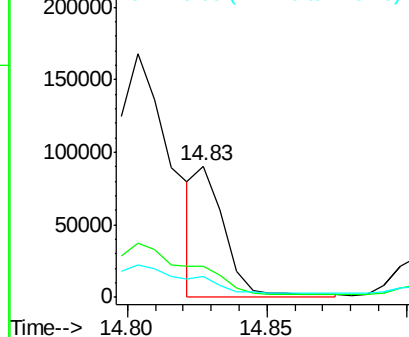
Tot Ion:	252	Resp:	63872
Ion Ratio	Lower	Upper	
252	100		
253	24.0	18.4	27.6
125	15.5	13.1	19.7

Manual Integrations
APPROVED

Sohil
9/15/2017 5:44:33 PM



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: 8.854 ng

RT: 15.14 min Scan# 2219

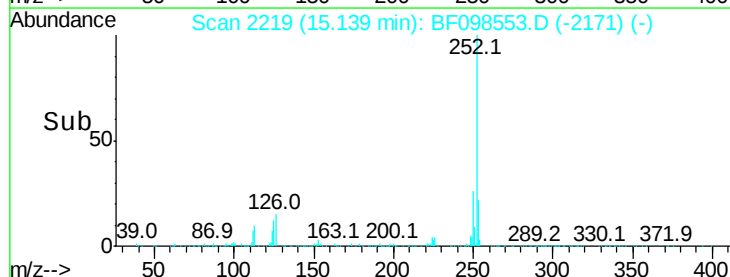
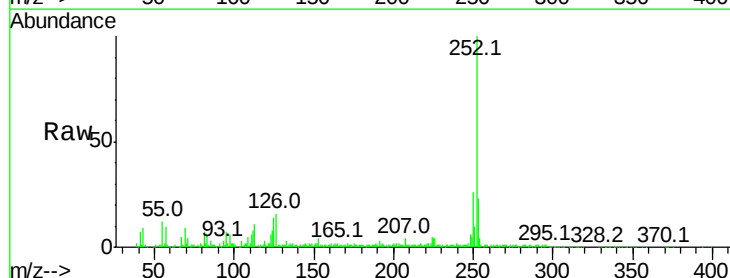
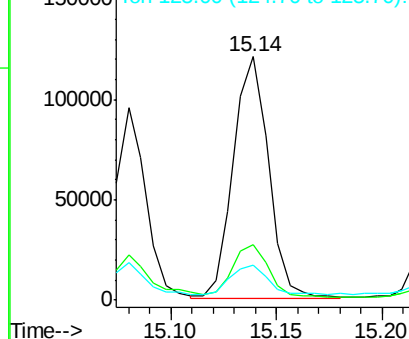
Delta R.T. -0.02 min

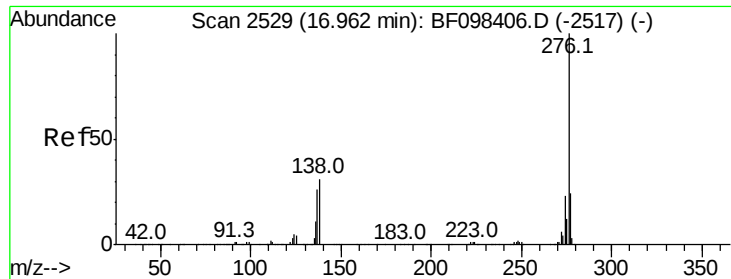
Lab File: BF098553.D

Acq: 15 Sep 2017 3:04

Tgt Ion:	252	Resp:	139068
Ion Ratio	Lower	Upper	
252	100		
253	22.9	17.5	26.3
125	14.5	11.0	16.4

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





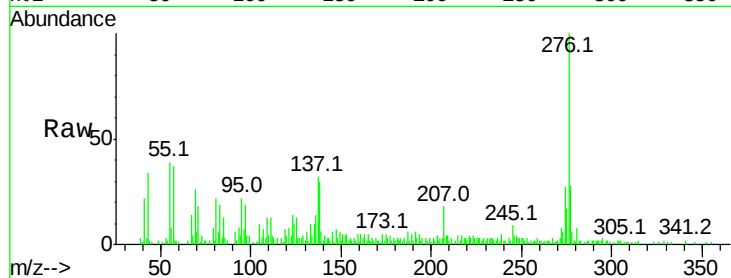
#91
 Benzo(a,h,i)perylene
 Concen: 4.669 ng
 RT: 16.93 min Scan# 2524
 Delta R.T. -0.03 min
 Lab File: BF098553.D
 Acq: 15 Sep 2017 3:04

Instrument :
 BNA_F
 ClientSampleId :
 SU-02-091217

Tot Ion	Ratio	Lower	Upper
276	100		
277	27.7	18.6	28.0
138	30.3	25.4	38.0

Manual Integrations
 APPROVED

Sohil
 9/15/2017 5:44:33 PM



Abundance

Ion 276.00 (275.70 to 276.70): E

Ion 277.00 (276.70 to 277.70): E

Ion 138.00 (137.70 to 138.70): E

