

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\
 Data File : BF111554.D
 Acq On : 17 Dec 2018 22:17
 Operator : JU/SJ
 Sample : J6403-21 5X
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 TP-3-B

Manual Integrations
 APPROVED

Sohil
 12/18/2018 12:49:34 PM

Quant Time: Dec 18 06:51:28 2018
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 14 13:26:17 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.79	152	145511	20.00	ng	0.00
21) Naphthalene-d8	8.07	136	781584	20.00	ng	0.00
39) Acenaphthene-d10	9.83	164	356712	20.00	ng	0.00
64) Phenanthrene-d10	11.32	188	504452	20.00	ng	0.00
76) Chrysene-d12	13.95	240	375311	20.00	ng	0.00
87) Perylene-d12	15.39	264	383160	20.00	ng	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	5.42	112	133677	15.29	ng	0.00
7) Phenol-d6	6.43	99	182243	15.67	ng	0.00
23) Nitrobenzene-d5	7.35	82	165598	12.62	ng	-0.01
42) 2,4,6-Tribromophenol	10.62	330	41325	12.93	ng	0.00
45) 2-Fluorobiphenyl	9.15	172	280719	12.16	ng	-0.01
79) Terphenyl-d14	12.89	244	179189	11.21	ng	0.00

Target Compounds				Qvalue		
31) Naphthalene	8.10	128	3298603	90.233	ng	99
37) 2-Methylnaphthalene	8.80	142	3884165	157.019	ng	97
38) 1-Methylnaphthalene	8.90	142	3636863	152.184	ng	98
46) 1,1'-Biphenyl	9.25	154	473369	15.662	ng	95
49) Acenaphthylene	9.69	152	387087	11.351	ng	# 75
52) Acenaphthene	9.87	154	2284203	105.975	ng	99
58) Fluorene	10.38	166	1390377	61.269	ng	99
71) Phenanthrene	11.35	178	4016908	154.535	ng	99
72) Anthracene	11.39	178	1426080	53.646	ng	96
75) Fluoranthene	12.53	202	1298361	51.058	ng	100
78) Pyrene	12.76	202	2038358	77.033	ng	97
81) Benzo(a)anthracene	13.94	228	863070m	42.293	ng	
83) Chrysene	13.98	228	888583	41.334	ng	98
86) Indeno(1,2,3-cd)pyrene	16.80	276	123533	7.962	ng	95
88) Benzo(b)fluoranthene	14.98	252	457546m	20.482	ng	
89) Benzo(k)fluoranthene	14.99	252	175634m	8.228	ng	
90) Benzo(a)pyrene	15.33	252	536708	26.643	ng	97
91) Dibenzo(a,h)anthracene	16.81	278	52244	3.288	ng	# 87
92) Benzo(a,h,i)perylene	17.23	276	122847	7.876	ng	98

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

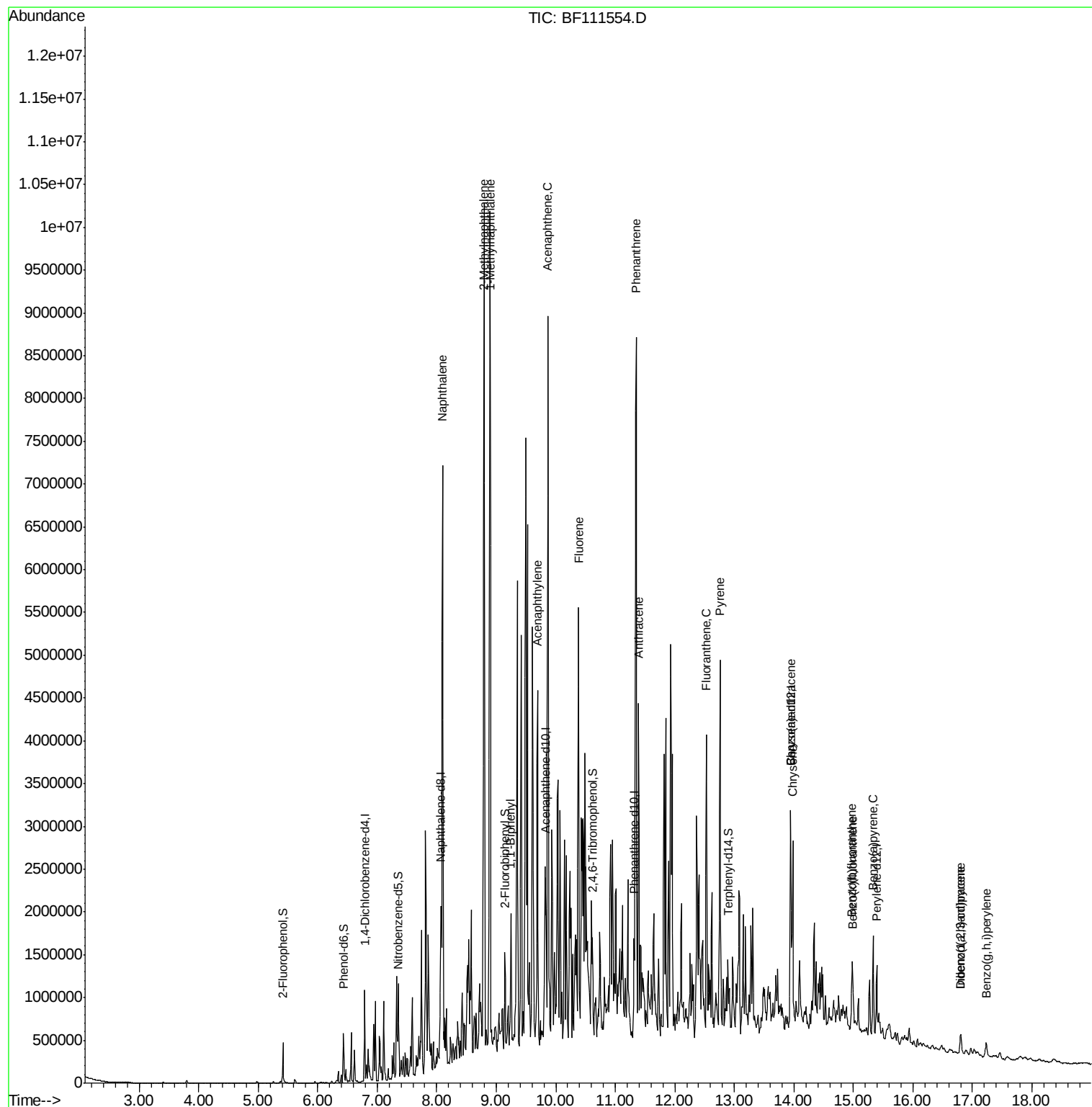
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121718\
Data File : BF111554.D
Acq On : 17 Dec 2018 22:17
Operator : JU/SJ
Sample : J6403-21 5X
Misc :
ALS Vial : 15 Sample Multiplier: 1

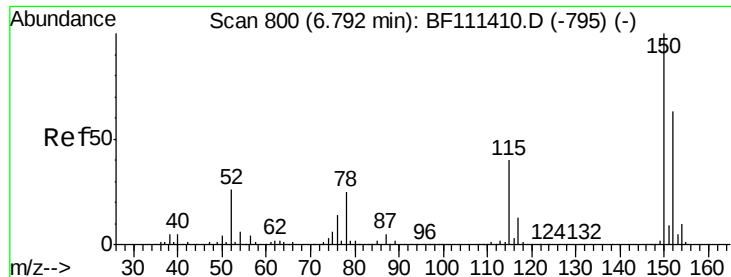
Instrument :
BNA_F
ClientSampleId :
TP-3-B

Quant Time: Dec 18 06:51:28 2018
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF121418.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 14 13:26:17 2018
Response via : Initial Calibration

Manual Integrations
APPROVED

Sohil
12/18/2018 12:49:34 PM





#1

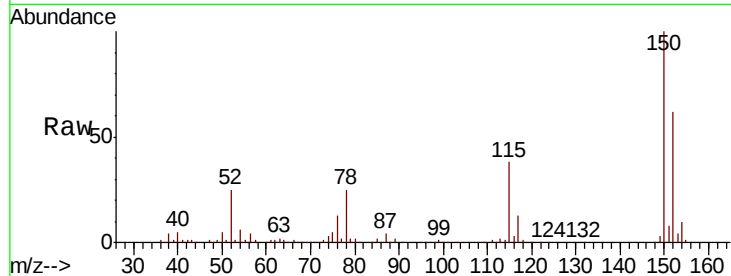
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.79 min Scan# 799
Delta R.T. -0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampleId :
TP-3-B

Tot Ion	Ratio	Lower	Upper
152	100		
150	161.8	126.6	189.8
115	62.2	50.7	76.1

Manual Integrations
APPROVED

Sohil
12/18/2018 12:49:34 PM

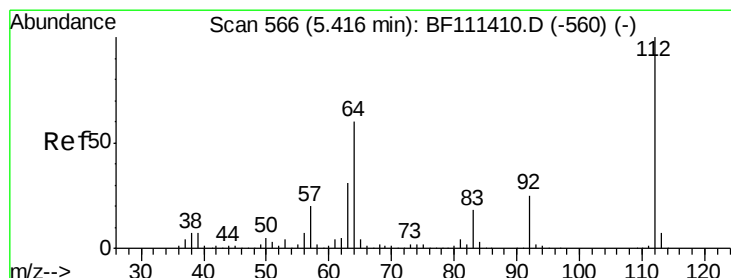
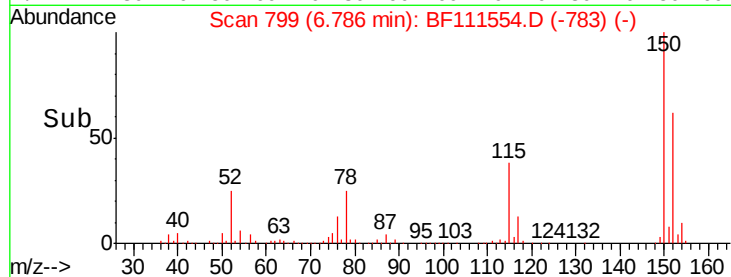
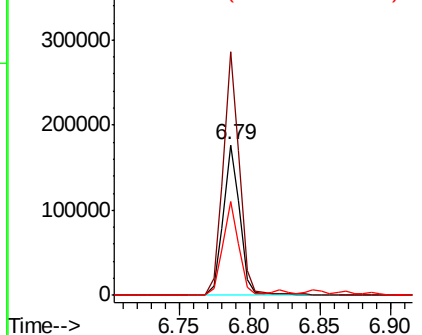


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

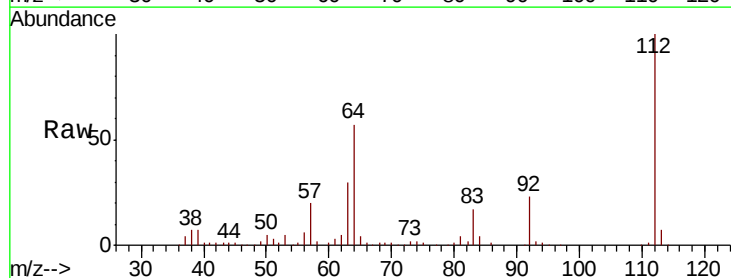
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol
Concen: 15.287 ng
RT: 5.42 min Scan# 566
Delta R.T. 0.00 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion	Ratio	Lower	Upper
112	100		
64	56.9	51.8	77.6
63	30.5	26.8	40.2

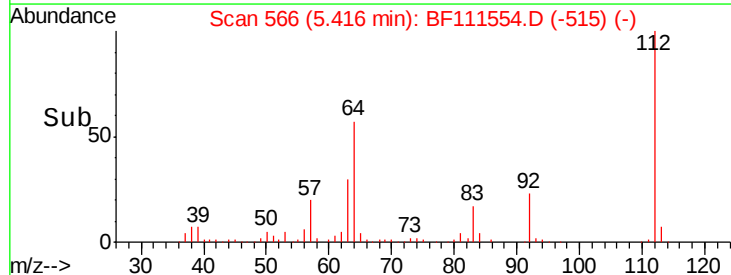
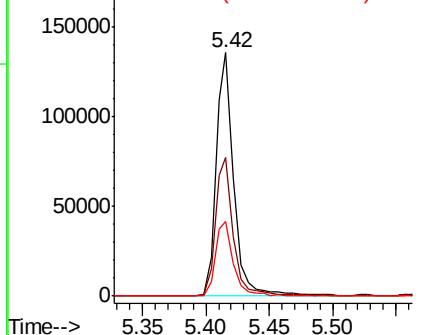


Abundance

Ion 112.00 (111.70 to 112.70): E

Ion 64.00 (63.70 to 64.70): BF1

Ion 63.00 (62.70 to 63.70): BF1





#7

Phenol-d6

Concen: 15.668 ng

RT: 6.43 min Scan# 739

Delta R.T. -0.01 min

Lab File: BF111554.D

Acq: 17 Dec 2018 22:17

Instrument :

BNA_F

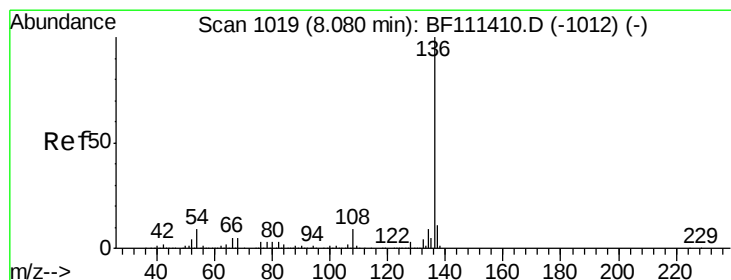
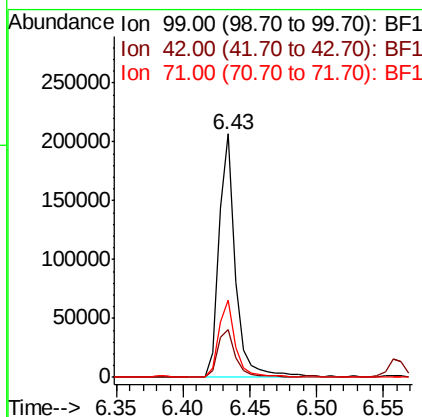
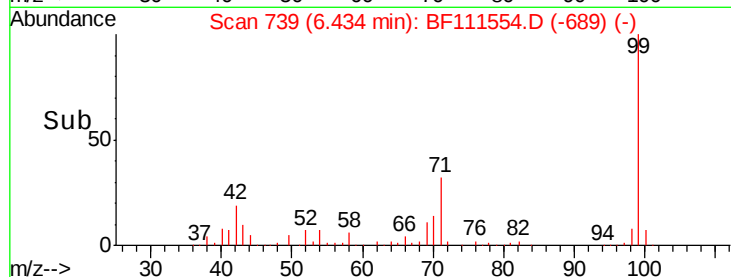
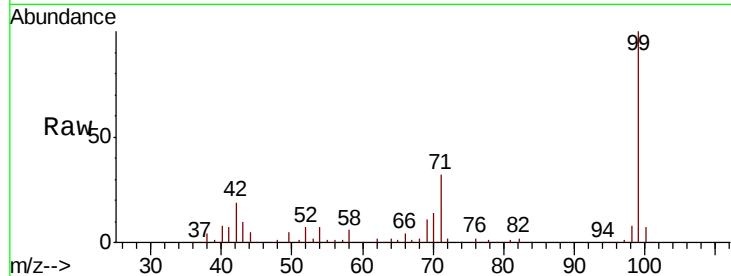
ClientSampled :

TP-3-B

Tot Ion:	99	Resp:	182243
Ion	Ratio	Lower	Upper
99	100		
42	19.5	17.4	26.0
71	31.9	26.1	39.1

Manual Integrations
APPROVED

Sohil
12/18/2018 12:49:34 PM



#21

Naphthalene-d8

Concen: 20.000 ng

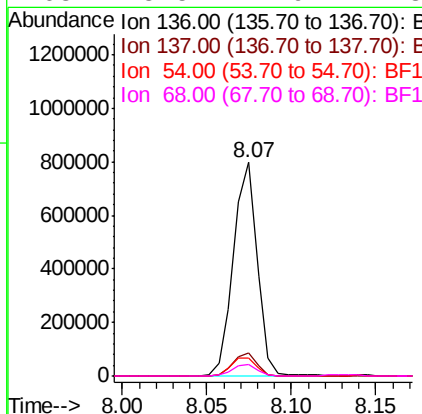
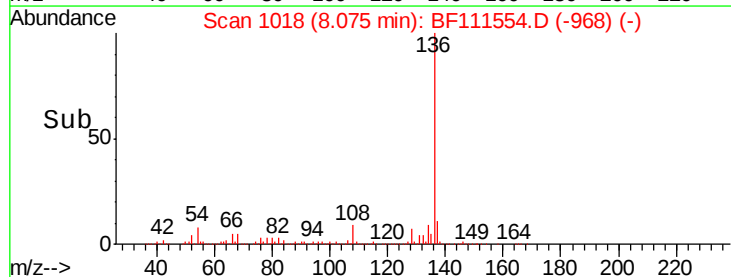
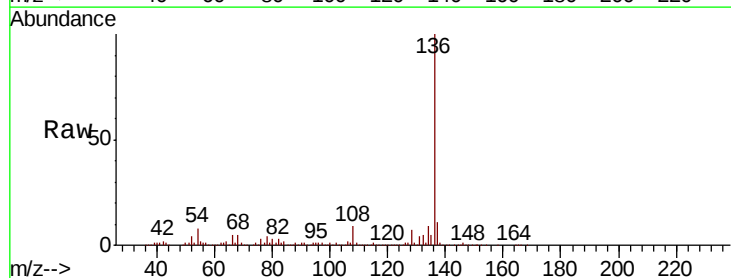
RT: 8.07 min Scan# 1018

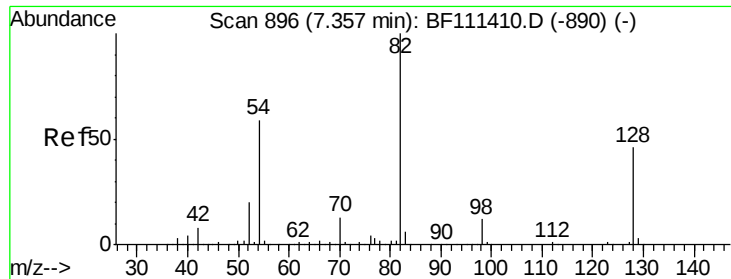
Delta R.T. -0.01 min

Lab File: BF111554.D

Acq: 17 Dec 2018 22:17

Tgt Ion:	136	Resp:	781584
Ion	Ratio	Lower	Upper
136	100		
137	10.7	9.1	13.7
54	8.2	7.7	11.5
68	5.5	4.9	7.3





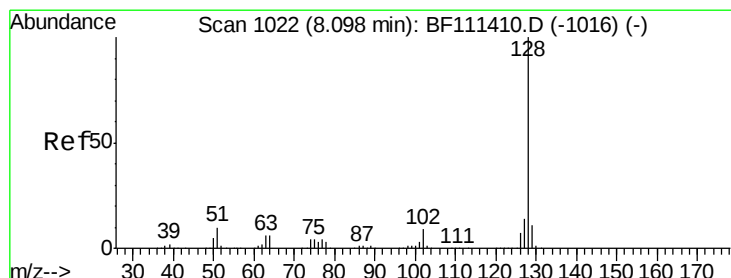
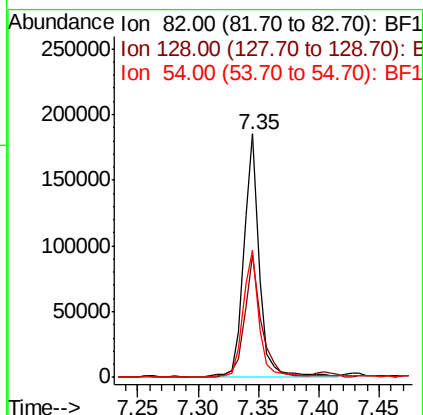
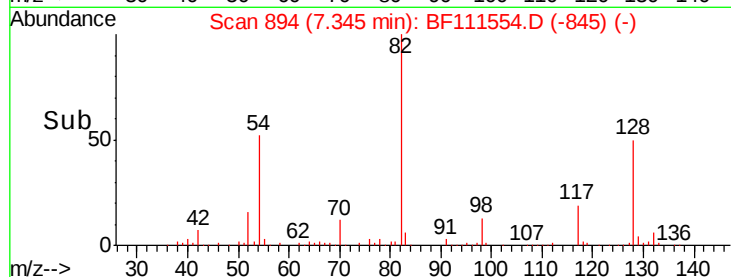
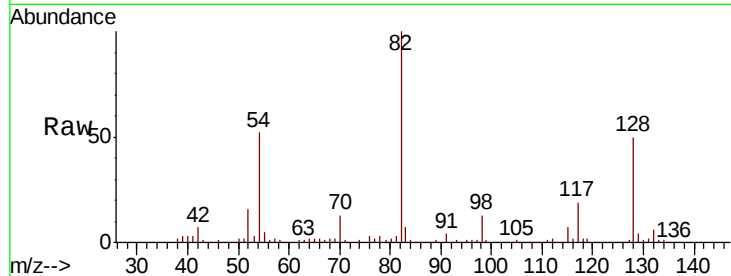
#23
Nitrobenzene-d5
Concen: 12.617 ng
RT: 7.35 min Scan# 894
Delta R.T. -0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampled :
TP-3-B

Tot Ion	Ratio	Resp	Lower	Upper
82	100	165598		
128	50.0	37.4	56.2	
54	52.3	47.6	71.4	

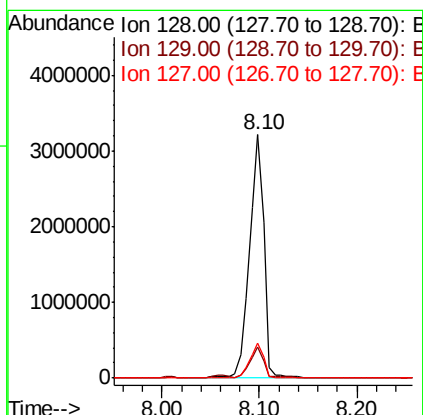
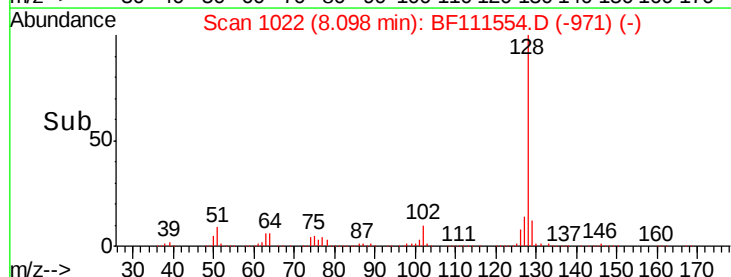
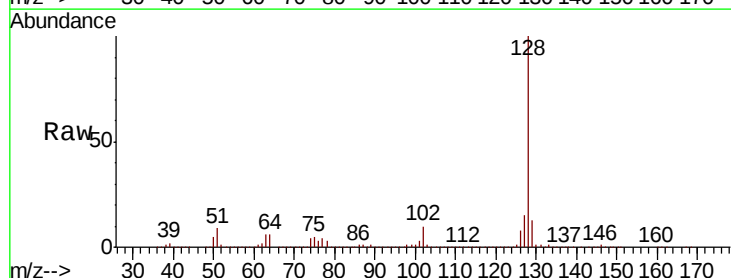
Manual Integrations
APPROVED

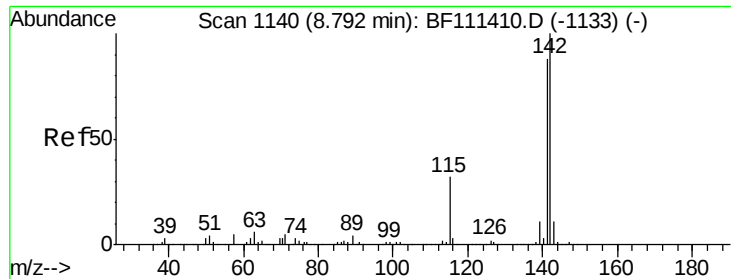
Sohil
12/18/2018 12:49:34 PM



#31
Naphthalene
Concen: 90.233 ng
RT: 8.10 min Scan# 1022
Delta R.T. 0.00 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion	Ratio	Resp	Lower	Upper
128	100	3298603		
129	12.6	9.8	14.8	
127	14.5	12.0	18.0	





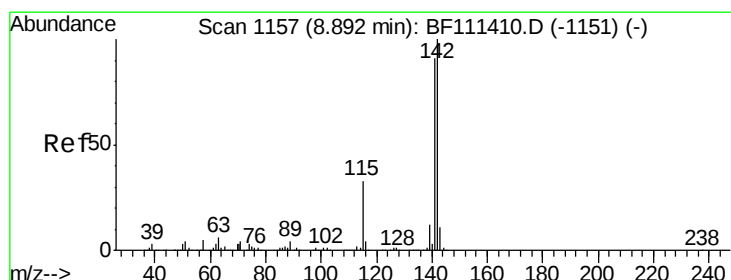
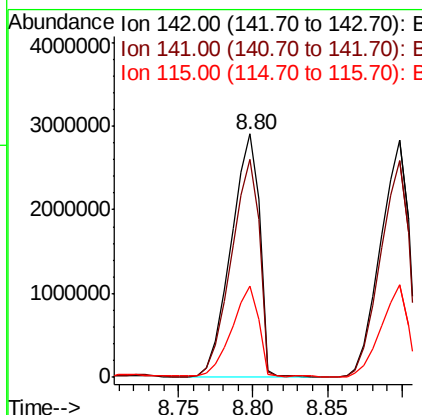
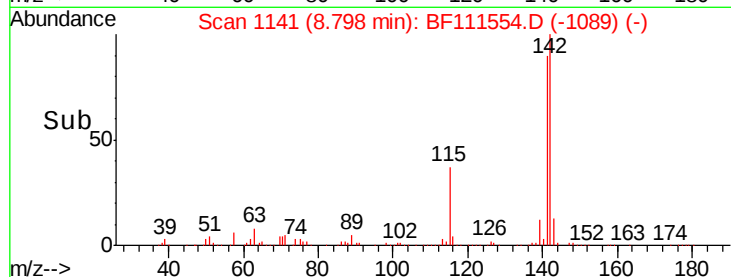
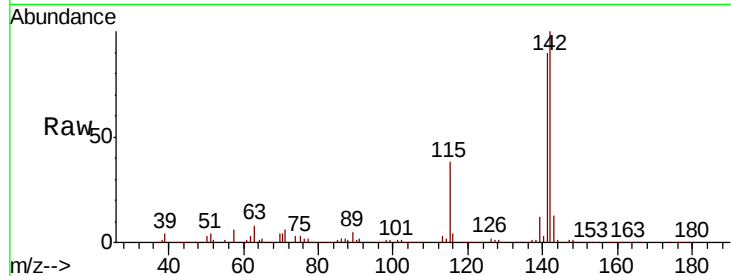
#37
2-Methylnaphthalene
Concen: 157.019 ng
RT: 8.80 min Scan# 1141
Delta R.T. 0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampleId :
TP-3-B

Tot Ion:142 Resp: 3884165
Ion Ratio Lower Upper
142 100
141 89.6 70.6 105.8
115 37.6 27.0 40.6

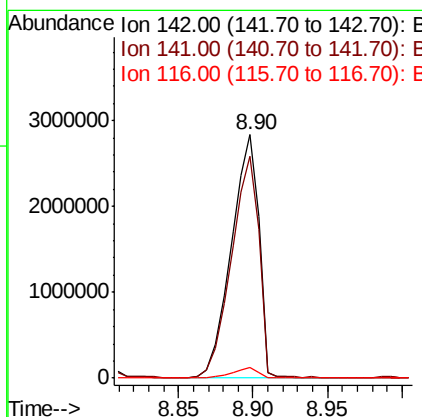
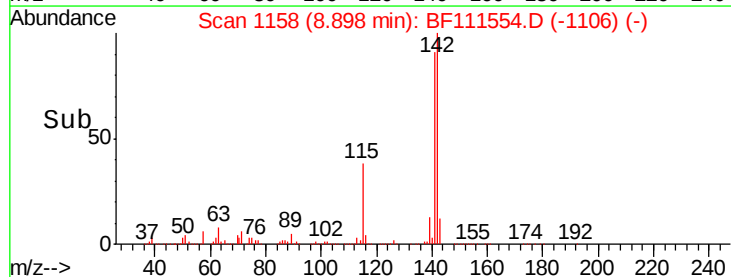
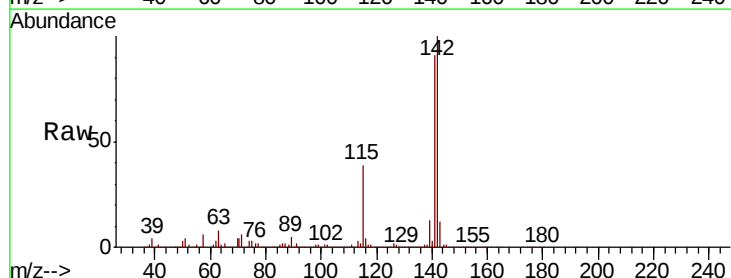
Manual Integrations
APPROVED

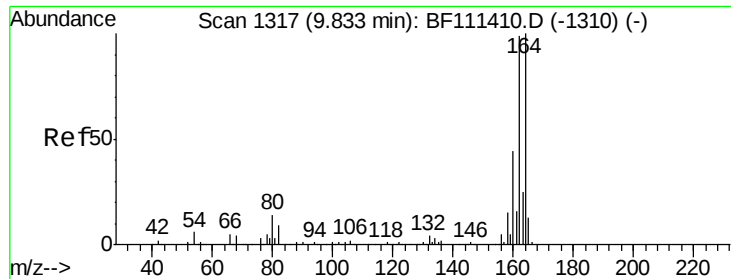
Sohil
12/18/2018 12:49:34 PM



#38
1-Methylnaphthalene
Concen: 152.184 ng
RT: 8.90 min Scan# 1158
Delta R.T. 0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion:142 Resp: 3636863
Ion Ratio Lower Upper
142 100
141 91.0 74.2 111.4
116 4.3 2.9 4.3





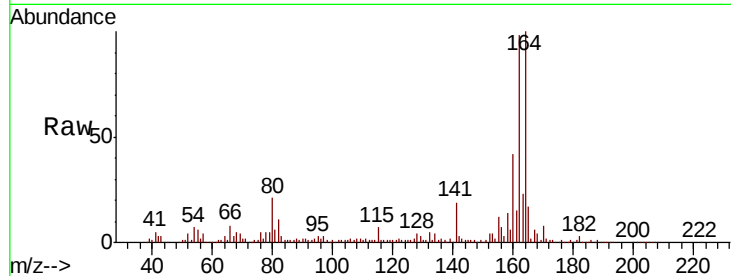
#39
 Acenaphthene-d10
 Concen: 20.000 ng
 RT: 9.83 min Scan# 1316
 Delta R.T. -0.01 min
 Lab File: BF111554.D
 Acq: 17 Dec 2018 22:17

Instrument :
 BNA_F
 ClientSampled :
 TP-3-B

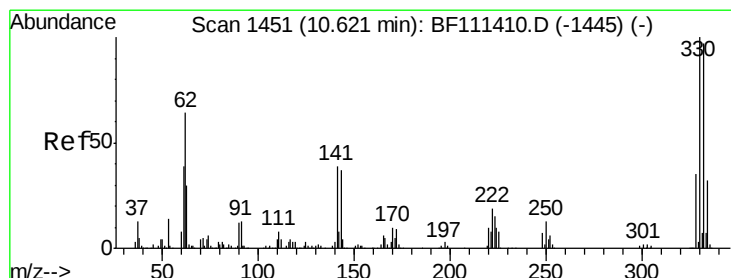
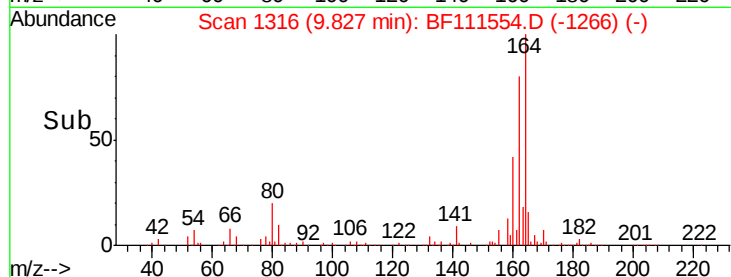
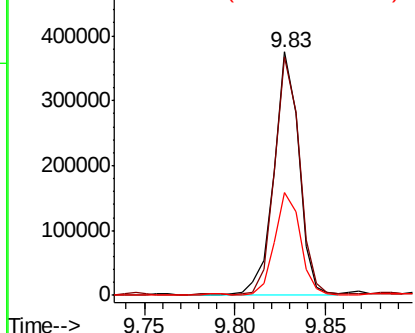
Tot Ion	Ratio	Lower	Upper
164	100		
162	98.2	81.4	122.0
160	42.4	35.7	53.5

Manual Integrations
 APPROVED

Sohil
 12/18/2018 12:49:34 PM

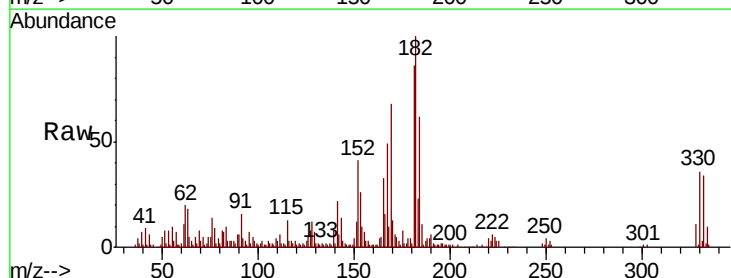


Abundance Ion 164.00 (163.70 to 164.70): E
 Ion 162.00 (161.70 to 162.70): E
 Ion 160.00 (159.70 to 160.70): E

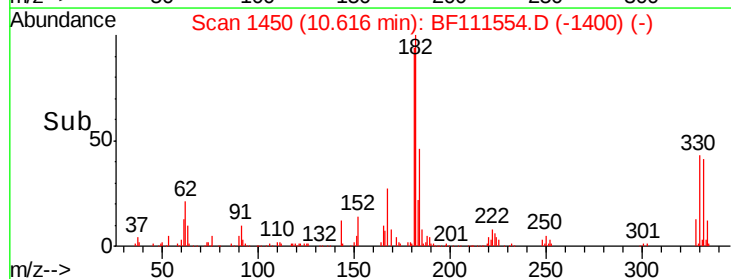
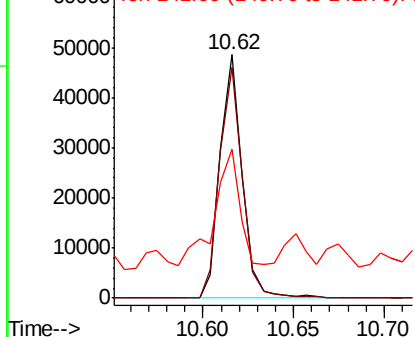


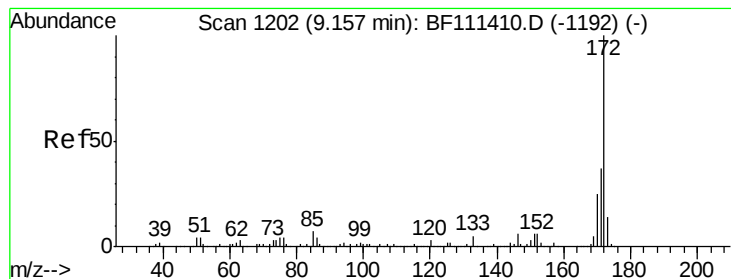
#42
 2,4,6-Tribromophenol
 Concen: 12.933 ng
 RT: 10.62 min Scan# 1450
 Delta R.T. -0.01 min
 Lab File: BF111554.D
 Acq: 17 Dec 2018 22:17

Tgt Ion	Ratio	Lower	Upper
330	100		
332	97.8	76.0	114.0
141	53.2	31.0	46.6#



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





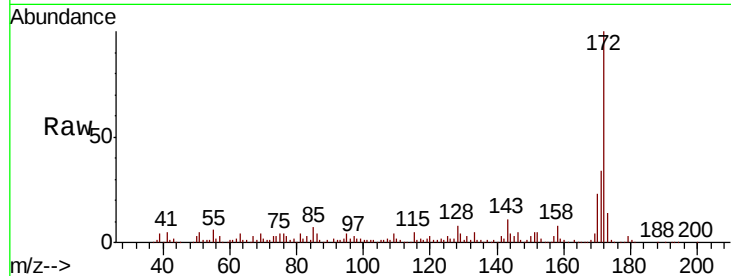
#45
2-Fluorobiphenyl
Concen: 12.156 ng
RT: 9.15 min Scan# 1200
Delta R.T. -0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampleId :
TP-3-B

Tot Ion	Ion	Ratio	Resp	Lower	Upper
172	100		280719		
171	34.4	33.0	49.4		
170	22.8	22.3	33.5		

Manual Integrations
APPROVED

Sohil
12/18/2018 12:49:34 PM

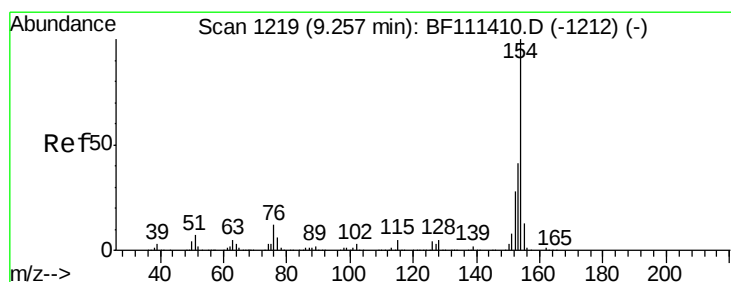
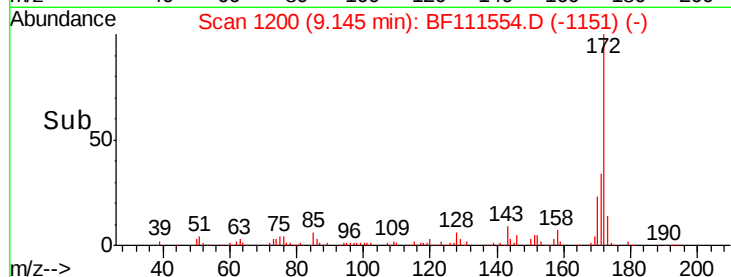
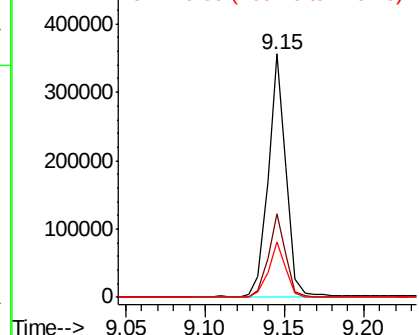


Abundance

Ion 172.00 (171.70 to 172.70): E

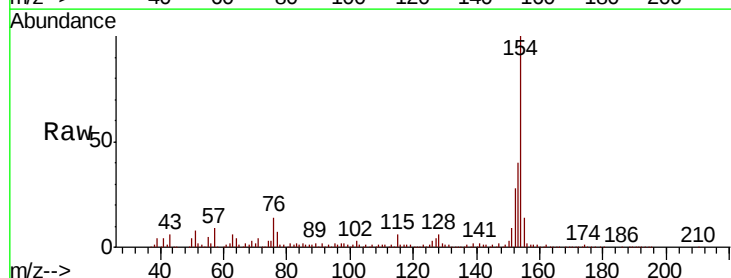
Ion 171.00 (170.70 to 171.70): E

Ion 170.00 (169.70 to 170.70): E



#46
1,1'-Biphenyl
Concen: 15.662 ng
RT: 9.25 min Scan# 1217
Delta R.T. -0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
154	100		473369		
153	39.6	23.7	63.7		
76	14.2	0.0	35.0		

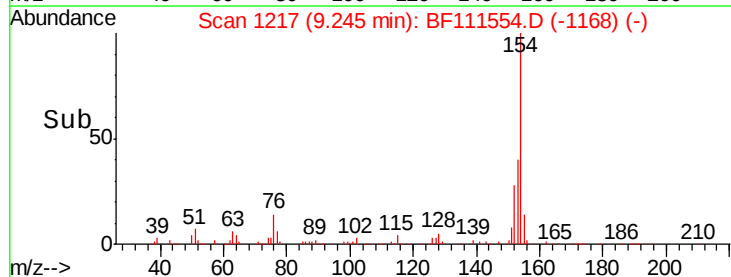
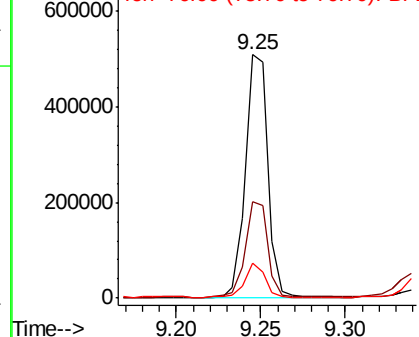


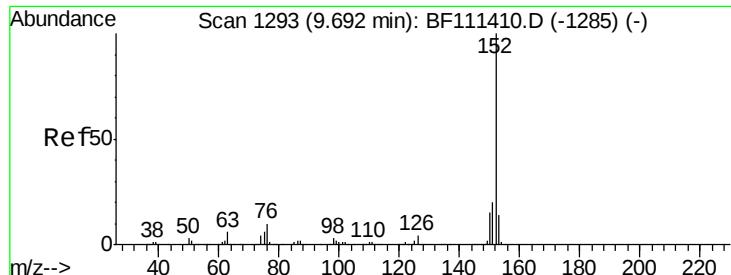
Abundance

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): BF1





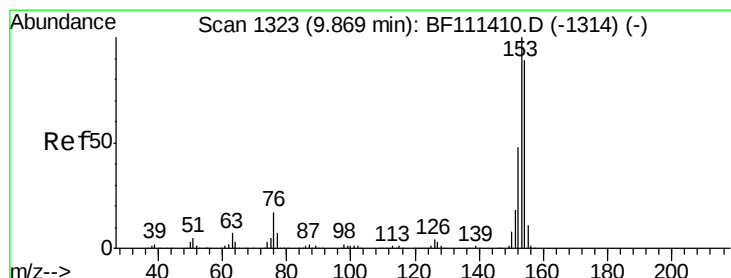
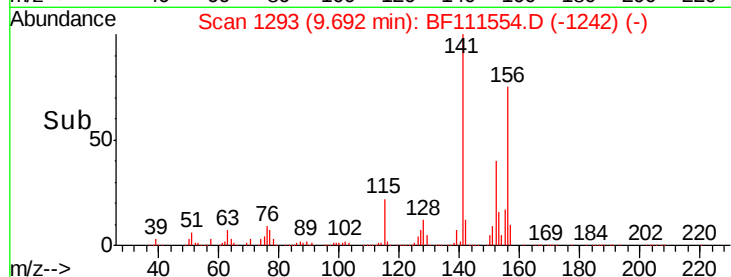
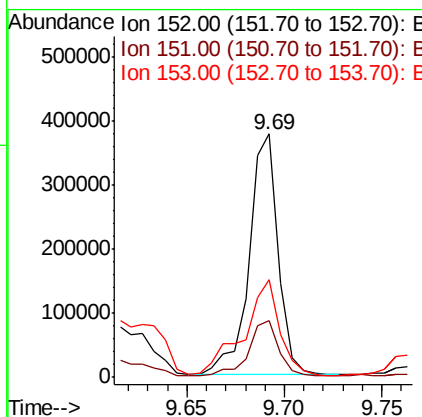
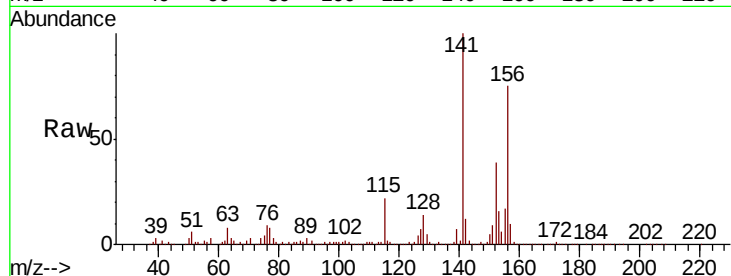
#49
Acenaphthylene
Concen: 11.351 ng
RT: 9.69 min Scan# 1293
Delta R.T. 0.00 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampled :
TP-3-B

Tot Ion	Ratio	Resp	Lower	Upper
152	100	387087		
151	23.4	18.0	27.0	
153	40.2	12.3	18.5	

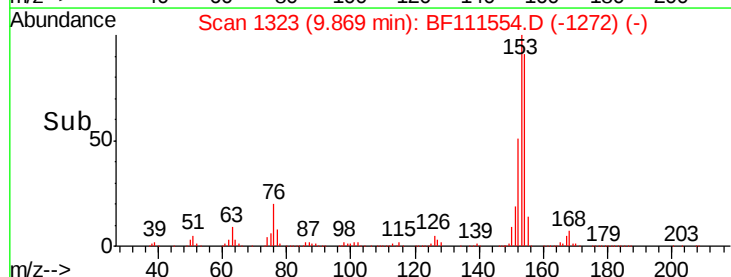
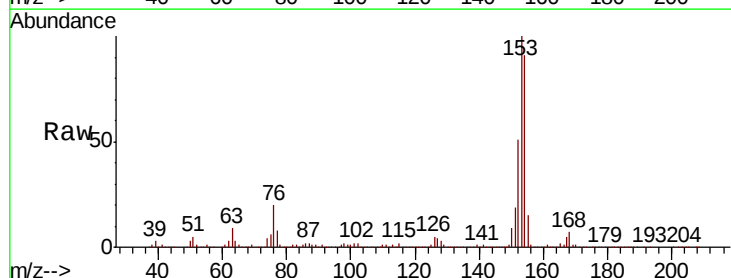
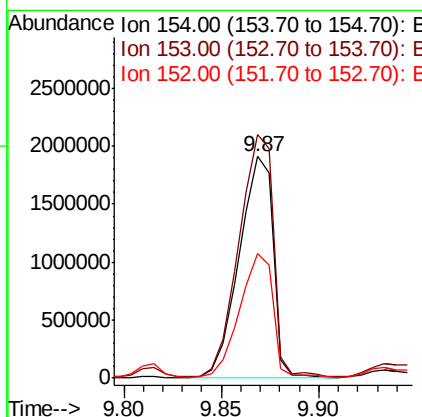
Manual Integrations
APPROVED

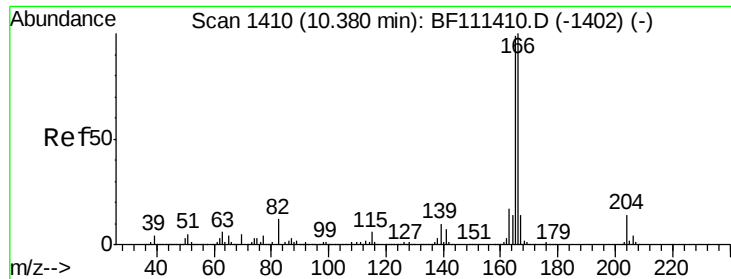
Sohil
12/18/2018 12:49:34 PM



#52
Acenaphthene
Concen: 105.975 ng
RT: 9.87 min Scan# 1323
Delta R.T. 0.00 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion	Ratio	Resp	Lower	Upper
154	100	2284203		
153	109.9	87.8	131.8	
152	56.1	43.4	65.2	





#58
 Fluorene
 Concen: 61.269 ng
 RT: 10.38 min Scan# 1410
 Delta R.T. 0.00 min
 Lab File: BF111554.D
 Acq: 17 Dec 2018 22:17

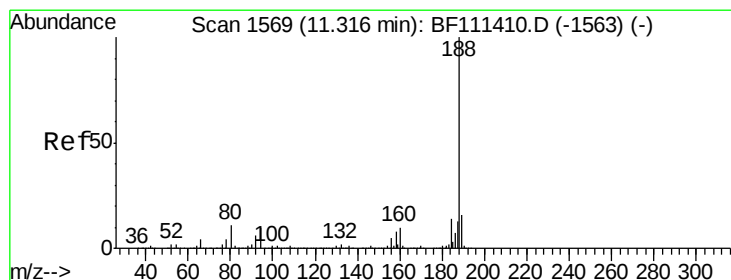
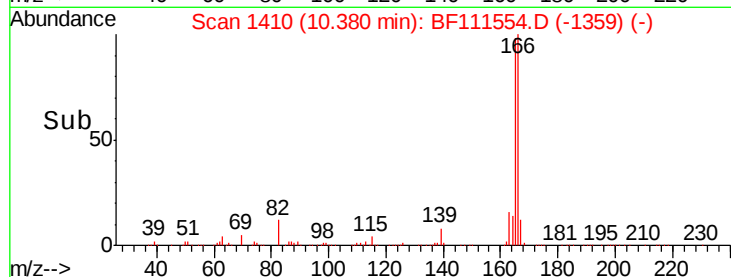
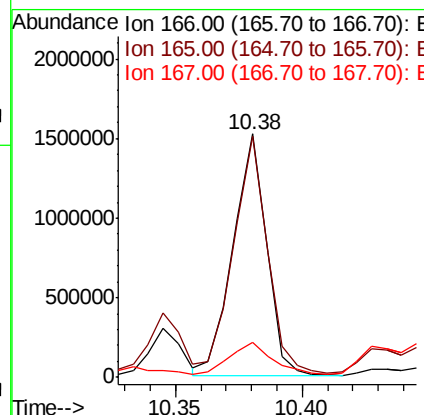
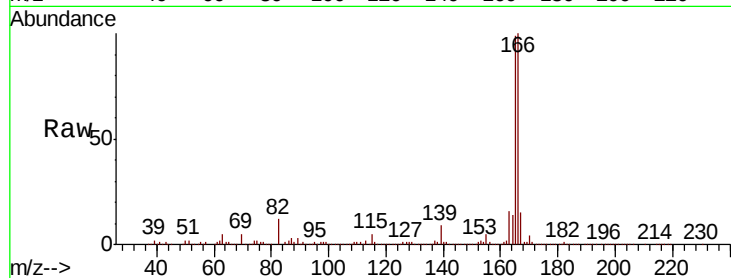
Instrument :
 BNA_F
 ClientSampleId :
 TP-3-B

Tot Ion:166 Resp: 1390377

Ion	Ratio	Lower	Upper
166	100		
165	99.1	78.4	117.6
167	14.5	11.2	16.8

Manual Integrations
 APPROVED

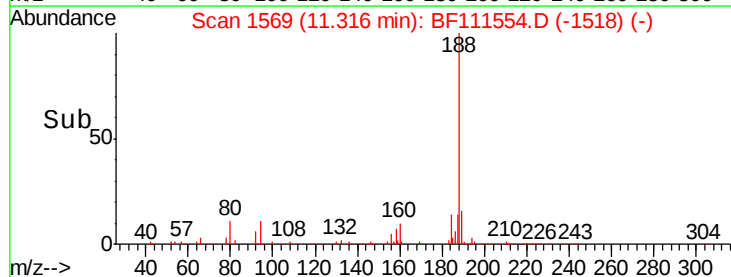
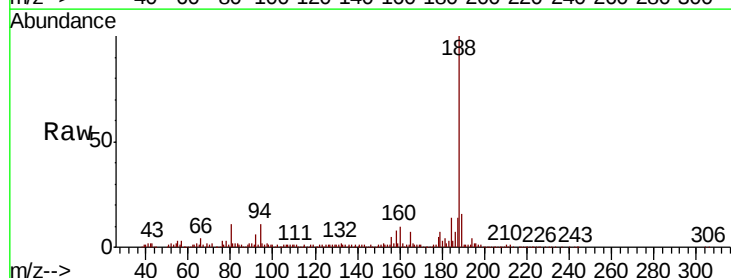
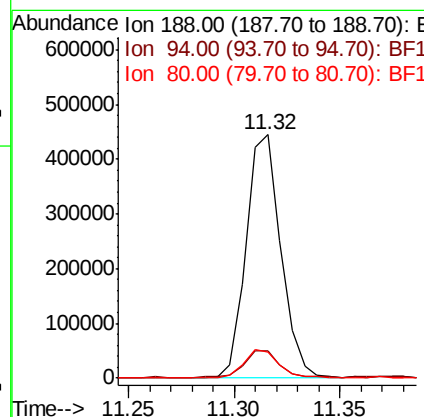
Sohil
 12/18/2018 12:49:34 PM

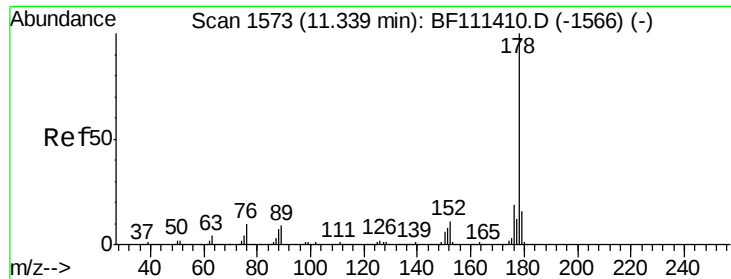


#64
 Phenanthrene-d10
 Concen: 20.000 ng
 RT: 11.32 min Scan# 1569
 Delta R.T. 0.00 min
 Lab File: BF111554.D
 Acq: 17 Dec 2018 22:17

Tgt Ion:188 Resp: 504452

Ion	Ratio	Lower	Upper
188	100		
94	11.1	9.6	14.4
80	10.9	9.8	14.6





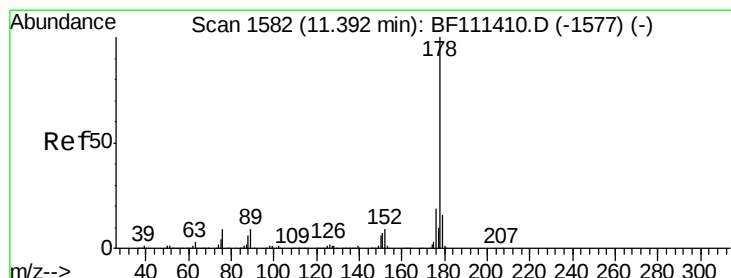
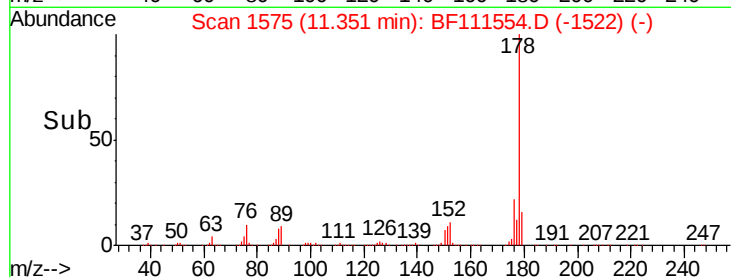
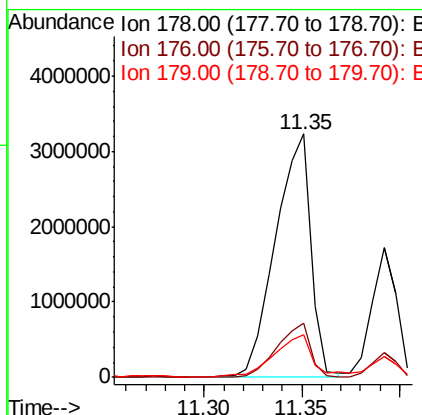
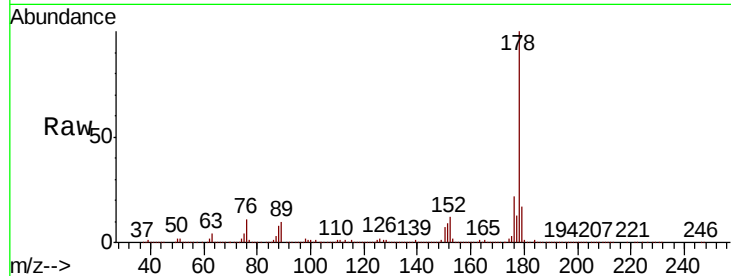
#71
Phenanthrene
Concen: 154.535 ng
RT: 11.35 min Scan# 1575
Delta R.T. 0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampled :
TP-3-B

Tot Ion:178 Resp: 4016908
Ion Ratio Lower Upper
178 100
176 22.0 18.1 27.1
179 17.3 14.0 21.0

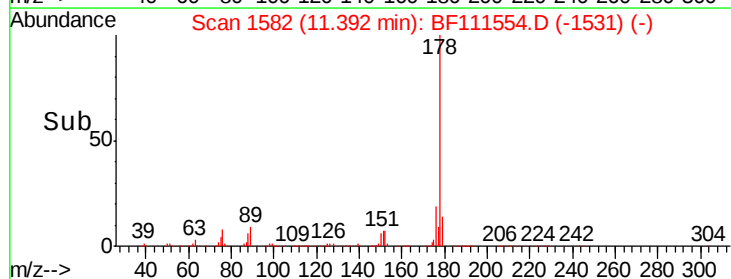
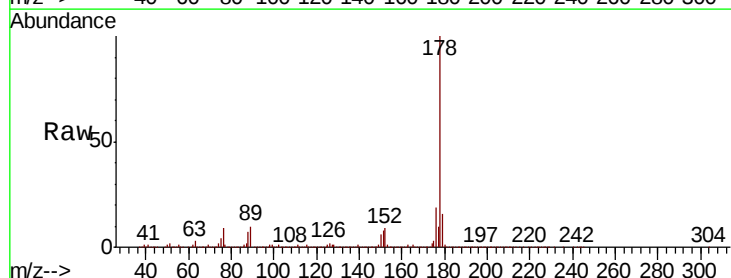
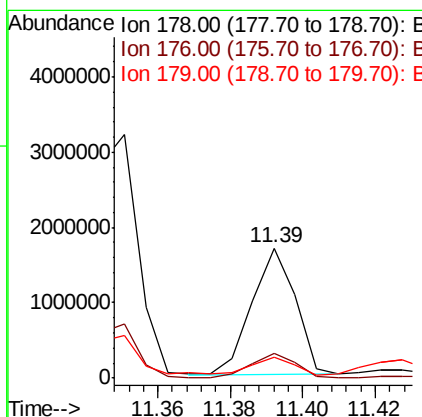
Manual Integrations
APPROVED

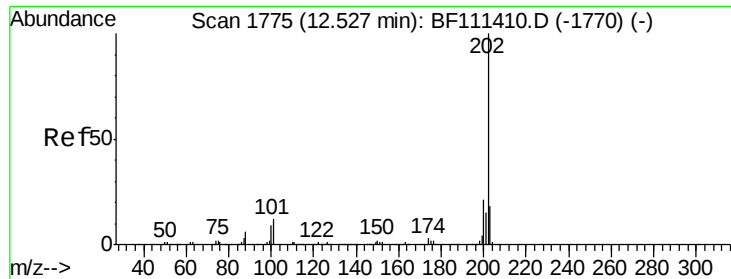
Sohil
12/18/2018 12:49:34 PM



#72
Anthracene
Concen: 53.646 ng
RT: 11.39 min Scan# 1582
Delta R.T. 0.00 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion:178 Resp: 1426080
Ion Ratio Lower Upper
178 100
176 19.0 17.2 25.8
179 16.2 13.8 20.8





#75

Fluoranthene

Concen: 51.058 ng

RT: 12.53 min Scan# 1775

Delta R.T. 0.00 min

Lab File: BF111554.D

Acq: 17 Dec 2018 22:17

Instrument :

BNA_F

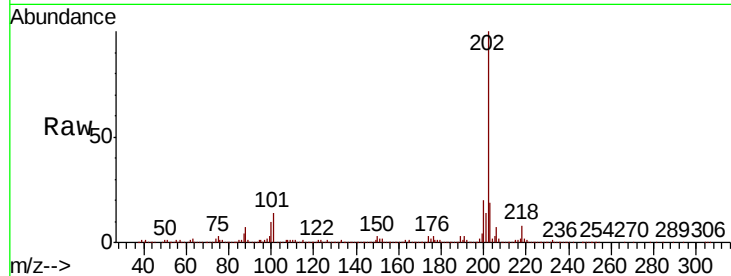
ClientSampled :

TP-3-B

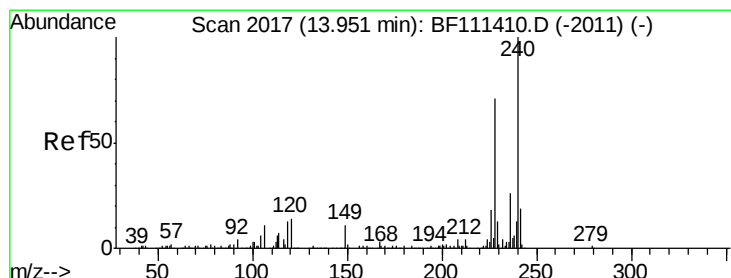
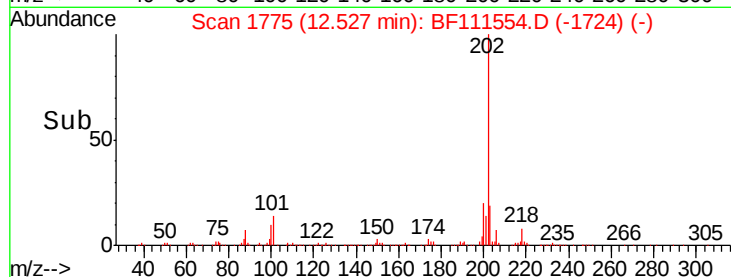
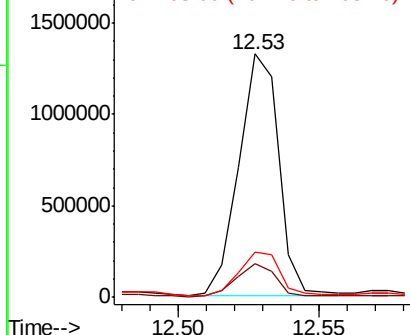
Tot Ion:	202	Resp:	1298361
Ion Ratio	Lower	Upper	
202	100		
101	13.9	0.0	33.8
203	18.7	0.0	38.6

Manual Integrations
APPROVED

Sohil
12/18/2018 12:49:34 PM



Abundance Ion 202.00 (201.70 to 202.70): E
Ion 101.00 (100.70 to 101.70): E
Ion 203.00 (202.70 to 203.70): E



#76

Chrysene-d12

Concen: 20.000 ng

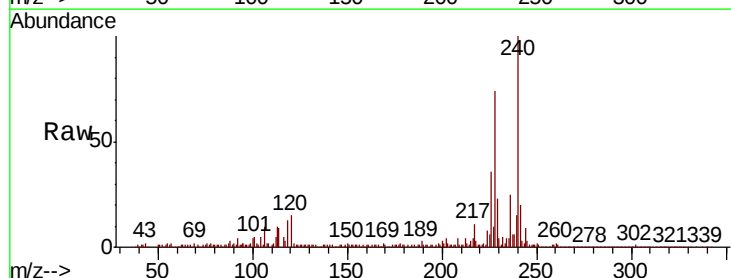
RT: 13.95 min Scan# 2017

Delta R.T. 0.00 min

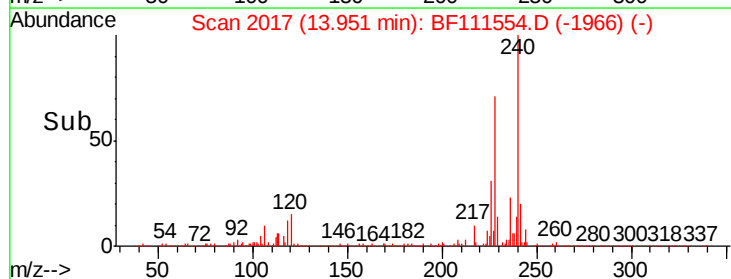
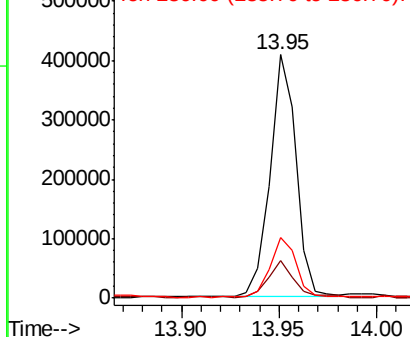
Lab File: BF111554.D

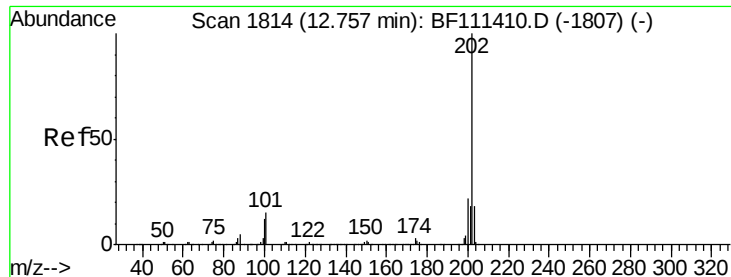
Acq: 17 Dec 2018 22:17

Tgt Ion:	240	Resp:	375311
Ion Ratio	Lower	Upper	
240	100		
120	15.2	12.2	18.2
236	24.8	20.2	30.2



Abundance Ion 240.00 (239.70 to 240.70): E
Ion 120.00 (119.70 to 120.70): E
Ion 236.00 (235.70 to 236.70): E





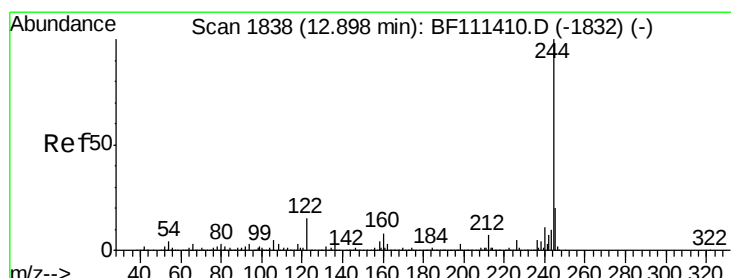
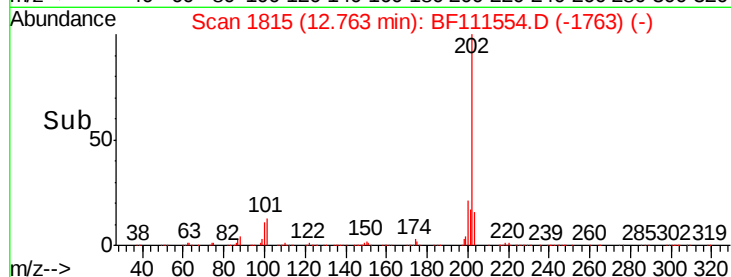
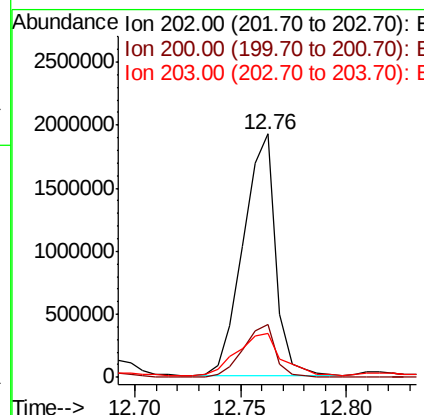
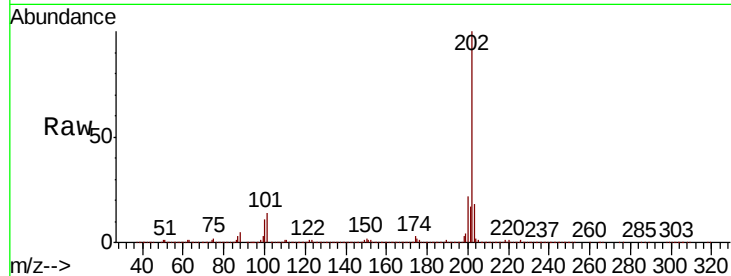
#78
Pvrene
Concen: 77.033 ng
RT: 12.76 min Scan# 1815
Delta R.T. 0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampled :
TP-3-B

Tot Ion	Ratio	Lower	Upper
202	100		
200	21.5	19.0	28.4
203	18.3	15.2	22.8

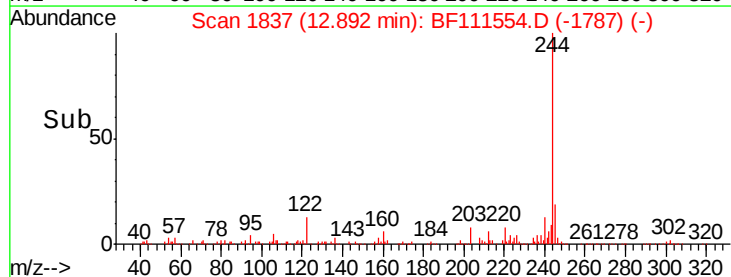
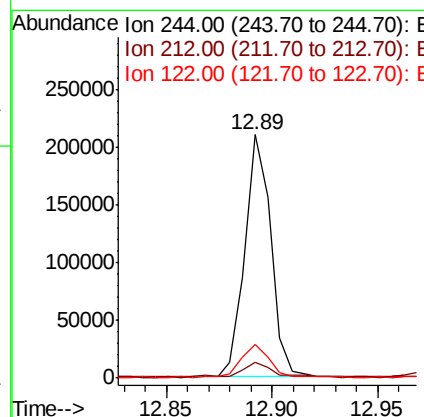
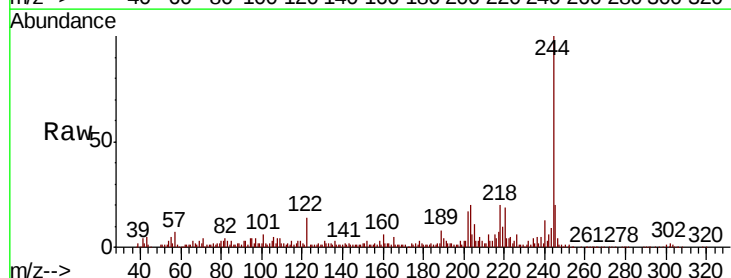
Manual Integrations
APPROVED

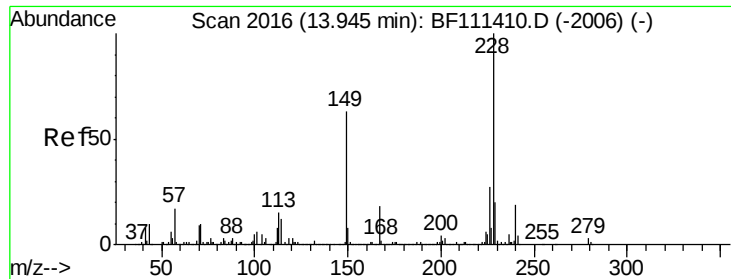
Sohil
12/18/2018 12:49:34 PM



#79
Terphenyl-d14
Concen: 11.211 ng
RT: 12.89 min Scan# 1837
Delta R.T. -0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion	Ratio	Lower	Upper
244	100		
212	6.3	5.7	8.5
122	13.9	13.1	19.7





#81

Benzo(a)anthracene

Concen: 42.293 ng/mL

RT: 13.94 min Scan# 2015

Delta R.T. -0.01 min

Lab File: BF111554.D

Acq: 17 Dec 2018 22:17

Instrument :

BNA_F

ClientSampled :

TP-3-B

Tot Ion: 228 Resp: 863070

Ion Ratio Lower Upper

228 100

226 42.1 22.6 34.0#

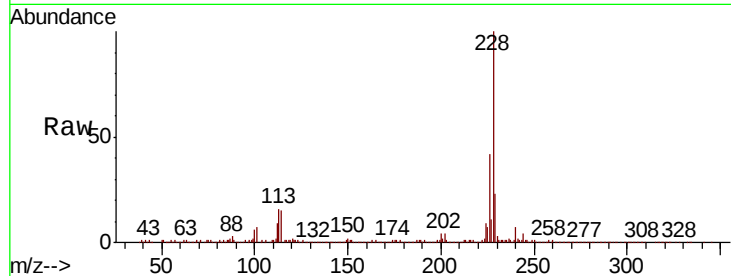
229 23.4 16.3 24.5

Manual Integrations

APPROVED

Sohil

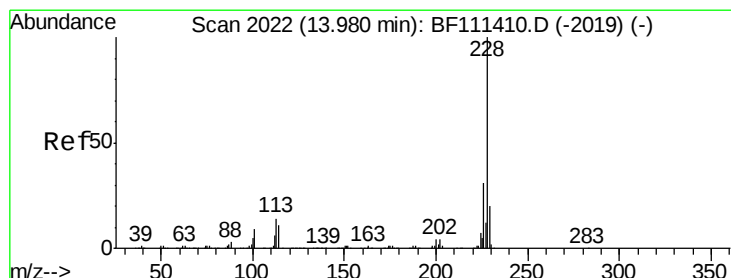
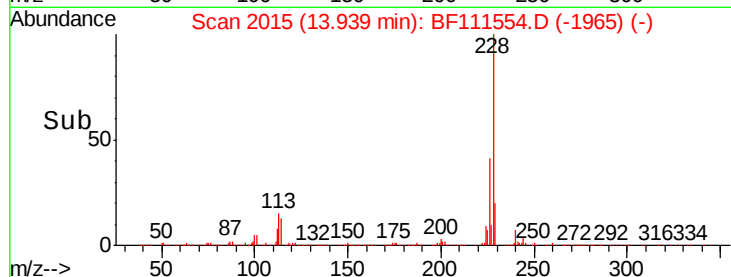
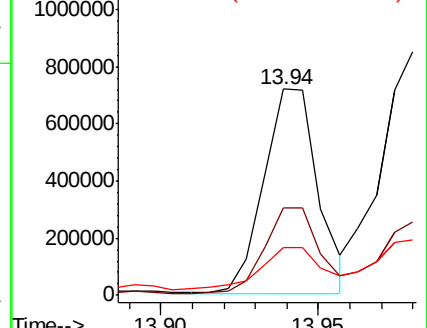
12/18/2018 12:49:34 PM



Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E



#83

Chrysene

Concen: 41.334 ng/mL

RT: 13.98 min Scan# 2022

Delta R.T. 0.00 min

Lab File: BF111554.D

Acq: 17 Dec 2018 22:17

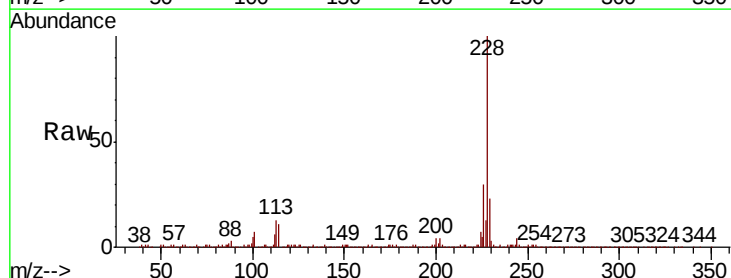
Tgt Ion: 228 Resp: 888583

Ion Ratio Lower Upper

228 100

226 30.4 25.3 37.9

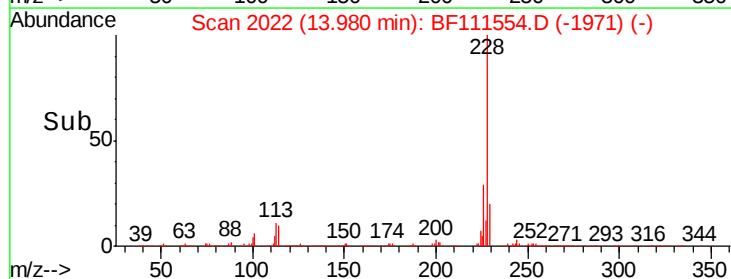
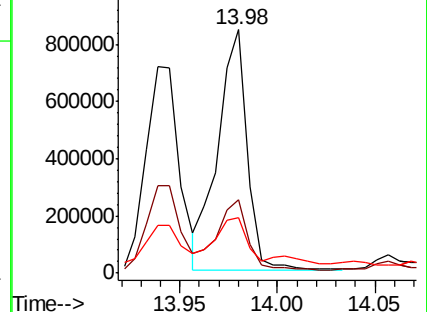
229 22.8 17.2 25.8

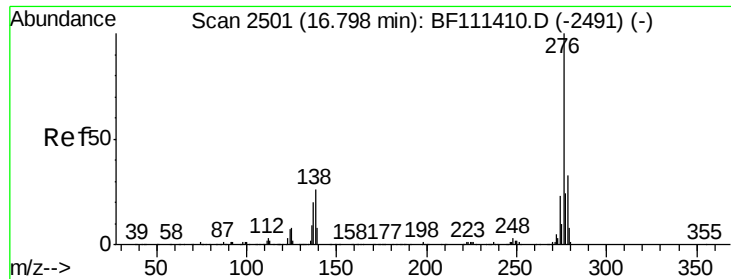


Abundance Ion 228.00 (227.70 to 228.70): E

Ion 226.00 (225.70 to 226.70): E

Ion 229.00 (228.70 to 229.70): E





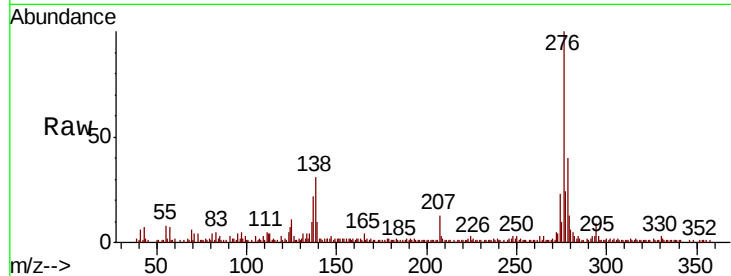
#86
 Indeno(1,2,3-cd)pyrene
 Concen: 7.962 ng
 RT: 16.80 min Scan# 2502
 Delta R.T. 0.01 min
 Lab File: BF111554.D
 Acq: 17 Dec 2018 22:17

Instrument :
 BNA_F
 ClientSampleId :
 TP-3-B

Tot Ion	Ratio	Lower	Upper
276	100		
138	30.9	27.8	41.6
277	27.1	20.1	30.1

Manual Integrations
 APPROVED

Sohil
 12/18/2018 12:49:34 PM

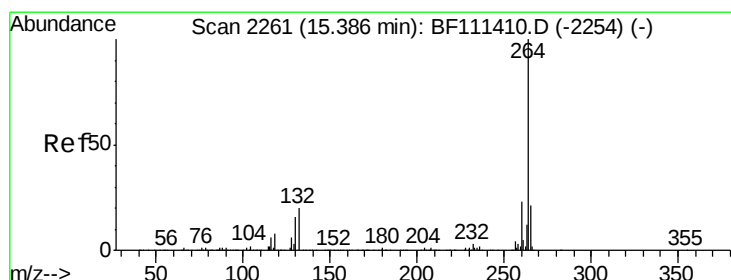
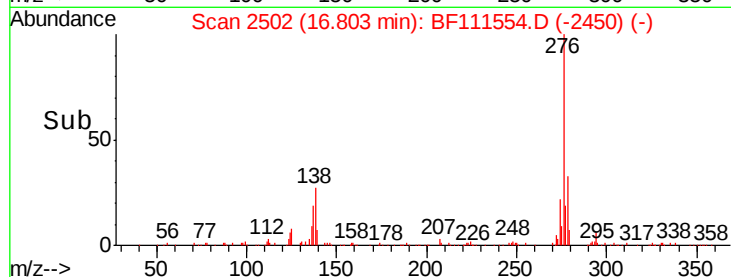
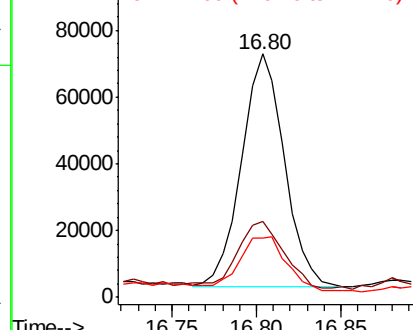


Abundance

Ion 276.00 (275.70 to 276.70): E

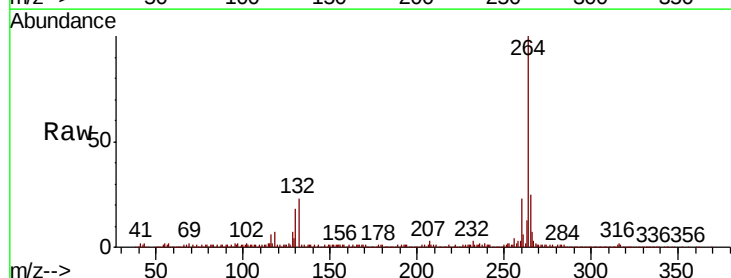
Ion 138.00 (137.70 to 138.70): E

Ion 277.00 (276.70 to 277.70): E



#87
 Perylene-d12
 Concen: 20.000 ng
 RT: 15.39 min Scan# 2262
 Delta R.T. 0.01 min
 Lab File: BF111554.D
 Acq: 17 Dec 2018 22:17

Tgt Ion	Ratio	Lower	Upper
264	100		
260	23.0	18.3	27.5
265	24.8	17.7	26.5

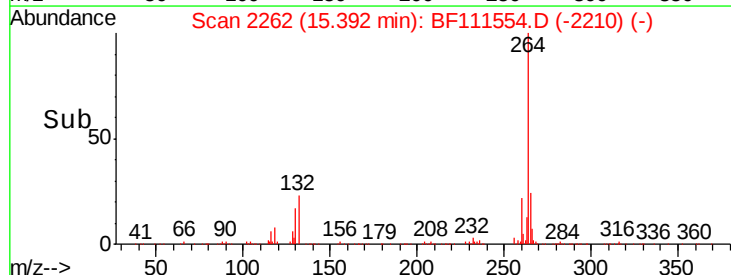
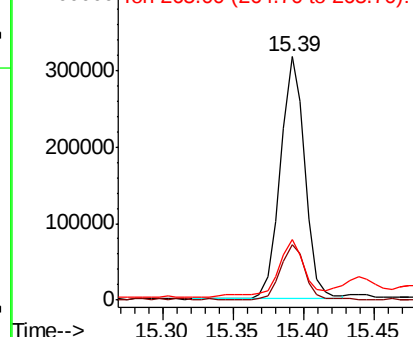


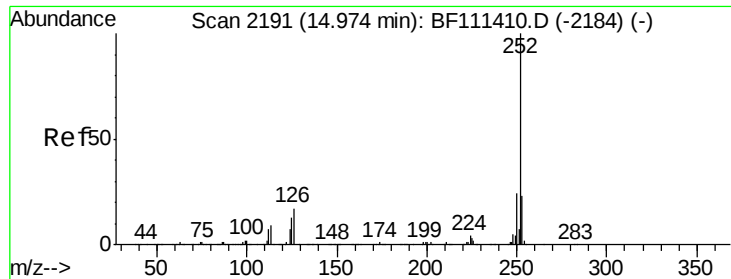
Abundance

Ion 264.00 (263.70 to 264.70): E

Ion 260.00 (259.70 to 260.70): E

Ion 265.00 (264.70 to 265.70): E





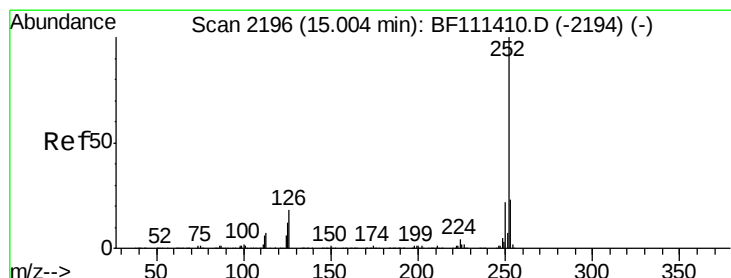
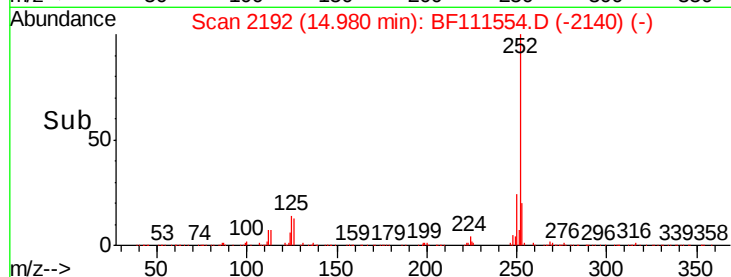
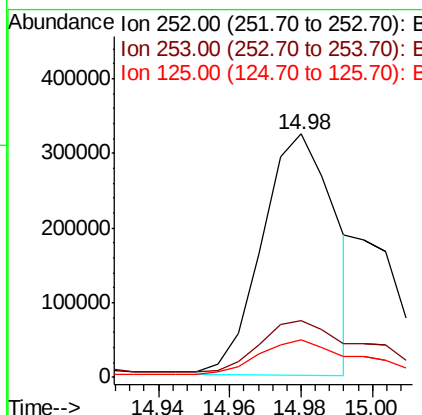
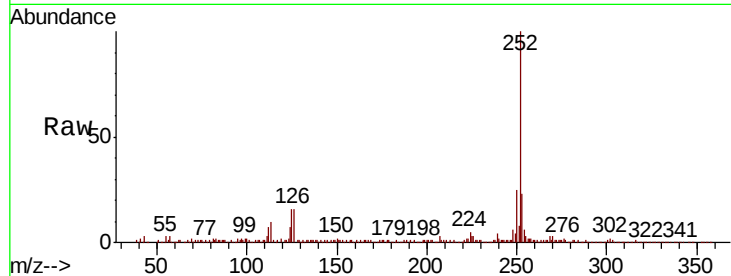
#88
Benzo(b)fluoranthene
Concen: 20.482 ng m
RT: 14.98 min Scan# 2192
Delta R.T. 0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampled :
TP-3-B

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.1	18.2	27.2
125	15.6	10.4	15.6#

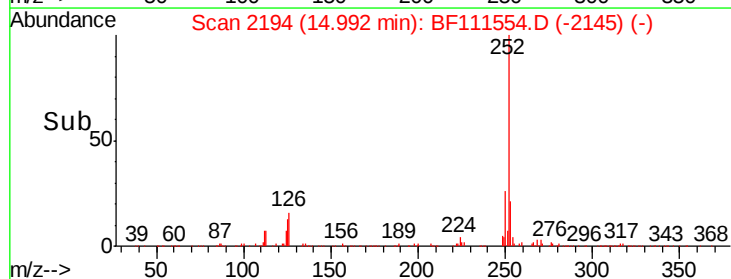
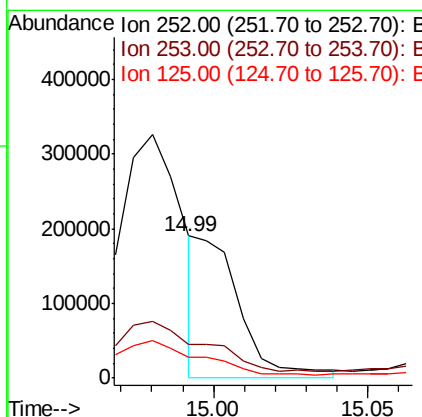
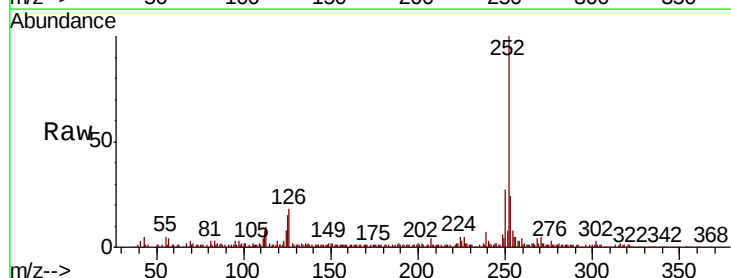
Manual Integrations
APPROVED

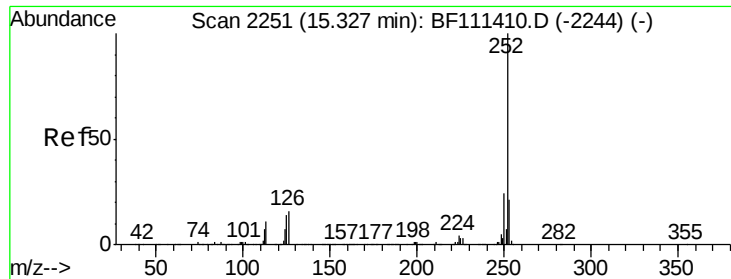
Sohil
12/18/2018 12:49:34 PM



#89
Benzo(k)fluoranthene
Concen: 8.228 ng m
RT: 14.99 min Scan# 2194
Delta R.T. -0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.8	18.1	27.1
125	15.2	9.8	14.8#





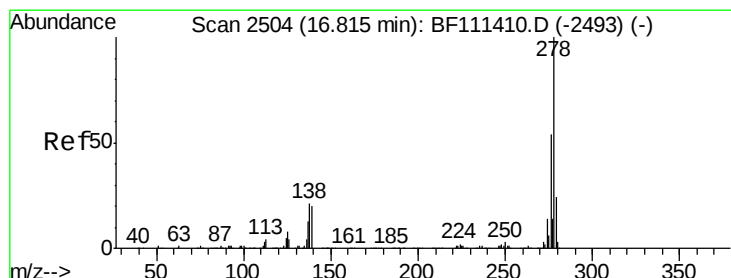
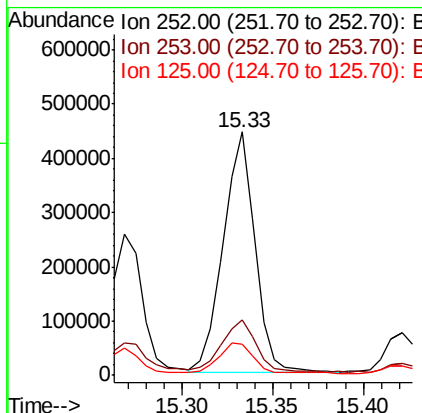
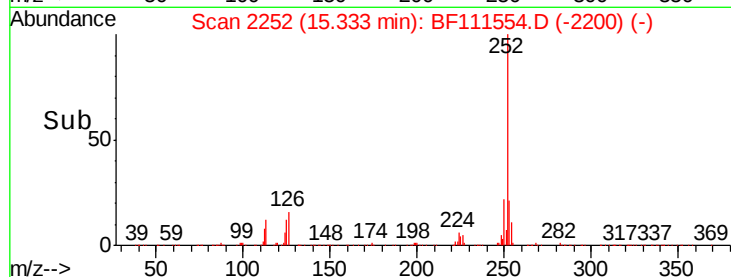
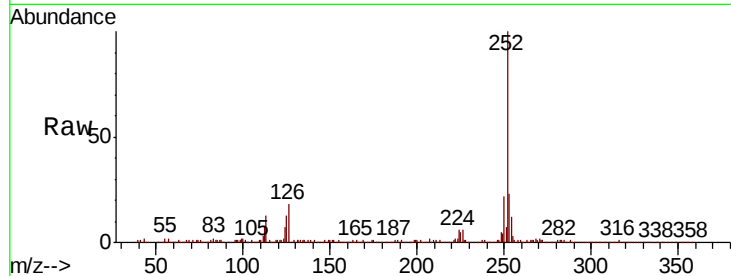
#90
Benzo(a)pyrene
Concen: 26.643 ng
RT: 15.33 min Scan# 2252
Delta R.T. 0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Instrument :
BNA_F
ClientSampled :
TP-3-B

Tot Ion	Ratio	Lower	Upper
252	100		
253	22.9	17.8	26.8
125	12.9	12.3	18.5

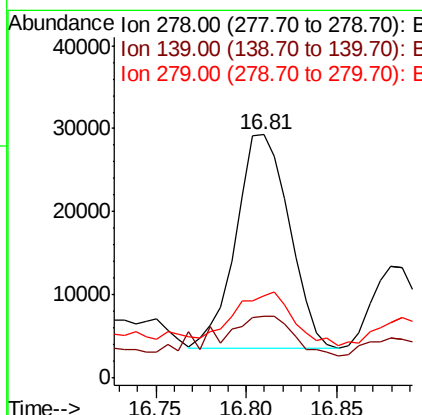
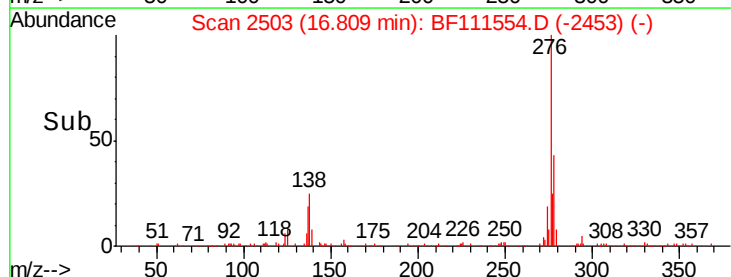
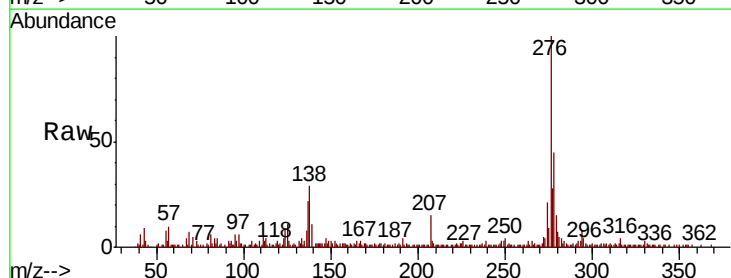
Manual Integrations
APPROVED

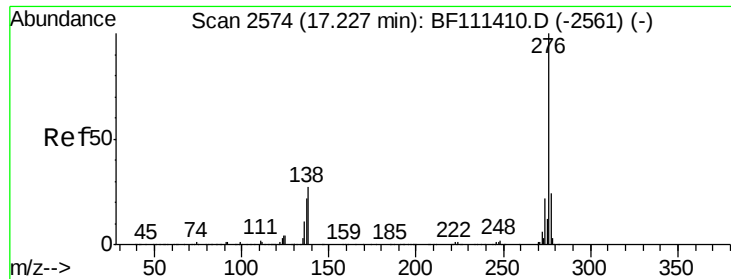
Sohil
12/18/2018 12:49:34 PM



#91
Dibenzo(a,h)anthracene
Concen: 3.288 ng
RT: 16.81 min Scan# 2503
Delta R.T. -0.01 min
Lab File: BF111554.D
Acq: 17 Dec 2018 22:17

Tgt Ion	Ratio	Lower	Upper
278	100		
139	25.5	18.2	27.4
279	34.0	19.0	28.6





#92
 Benzo(a,h,i)perylene
 Concen: 7.876 ng
 RT: 17.23 min Scan# 2575
 Delta R.T. 0.01 min
 Lab File: BF111554.D
 Acq: 17 Dec 2018 22:17

Instrument :
 BNA_F
 ClientSampleId :
 TP-3-B

Tot Ion:	276	Resp:	122847
Ion Ratio	Lower	Upper	
276	100		
277	24.4	19.2	28.8
138	29.4	24.9	37.3

Manual Integrations
 APPROVED

Sohil
 12/18/2018 12:49:34 PM

