

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF012120\
 Data File : BF118661.D
 Acq On : 22 Jan 2020 12:05
 Operator : CG/JU
 Sample : L1148-17DL 400X
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SB-44-(2-4)DL

Manual Integrations
 APPROVED

mohammad
 1/23/2020 7:57:55 AM

Quant Time: Jan 22 13:15:40 2020
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF012020.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Jan 20 14:45:03 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.87	152	319529	20.00	ng	0.00
21) Naphthalene-d8	8.16	136	1179502	20.00	ng	0.00
39) Acenaphthene-d10	9.92	164	588957	20.00	ng	-0.01
64) Phenanthrene-d10	11.40	188	907994	20.00	ng	-0.01
76) Chrysene-d12	14.03	240	763286	20.00	ng	-0.01
87) Perylene-d12	15.50	264	957571	20.00	ng	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	5.49	112	3163	0.18	ng	-0.01
7) Phenol-d6	6.49	99	4384	0.20	ng	-0.02
23) Nitrobenzene-d5	7.43	82	2801	0.13	ng	-0.02
42) 2,4,6-Tribromophenol	10.70	330	969	0.14	ng	-0.01
45) 2-Fluorobiphenyl	9.23	172	7089	0.20	ng	-0.01
79) Terphenyl-d14	12.98	244	7978	0.23	ng	-0.01
Target Compounds						Qvalue
31) Naphthalene	8.19	128	3187617	59.825	ng	100
37) 2-Methylnaphthalene	8.87	142	562269	14.950	ng	96
38) 1-Methylnaphthalene	8.97	142	314469	8.801	ng	99
46) 1,1'-Biphenyl	9.33	154	134788	3.321	ng	96
49) Acenaphthylene	9.77	152	252609	5.248	ng	95
52) Acenaphthene	9.95	154	154132	4.789	ng	98
55) Dibenzofuran	10.12	168	383963	8.609	ng	93
58) Fluorene	10.46	166	487380	13.920	ng	98
71) Phenanthrene	11.42	178	1749359	39.935	ng	94
72) Anthracene	11.47	178	460029	10.613	ng	92
73) Carbazole	11.62	167	154512	3.886	ng	94
75) Fluoranthene	12.61	202	1076709	23.304	ng	96
78) Pylene	12.84	202	926161	17.873	ng	92
81) Benzo(a)anthracene	14.02	228	455817	9.927	ng	93
83) Chrysene	14.06	228	375988	8.544	ng	96
86) Indeno(1,2,3-cd)pyrene	16.97	276	182631	4.776	ng	98
88) Benzo(b)fluoranthene	15.07	252	448412m	7.450	ng	
89) Benzo(k)fluoranthene	15.10	252	151419m	2.715	ng	
90) Benzo(a)pyrene	15.44	252	381834	7.354	ng	99
92) Benzo(a,h,i)perylene	17.42	276	160540	3.600	ng	100

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

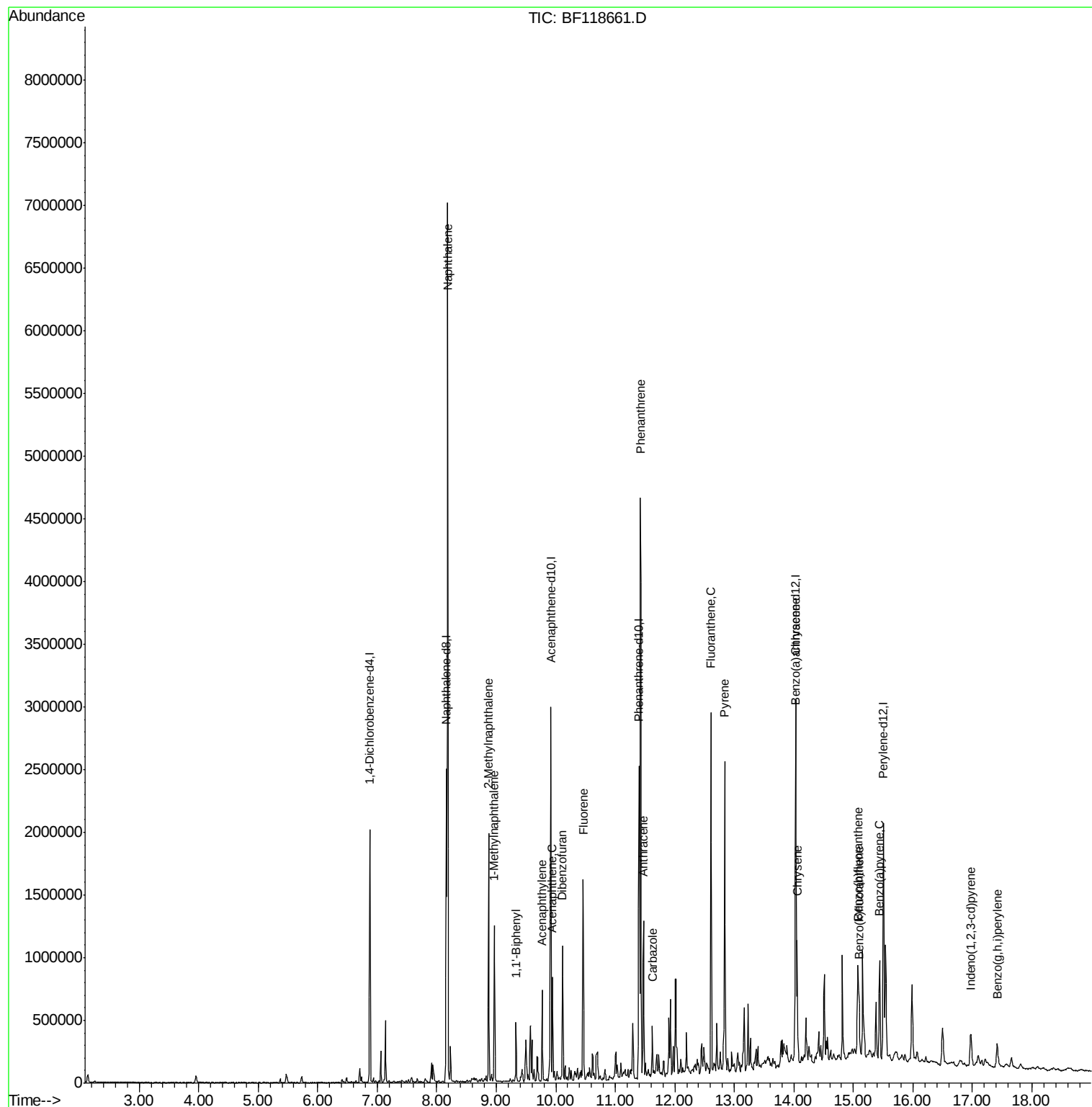
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF012120\
Data File : BF118661.D
Acq On : 22 Jan 2020 12:05
Operator : CG/JU
Sample : L1148-17DL 400X
Misc :
ALS Vial : 6 Sample Multiplier: 1

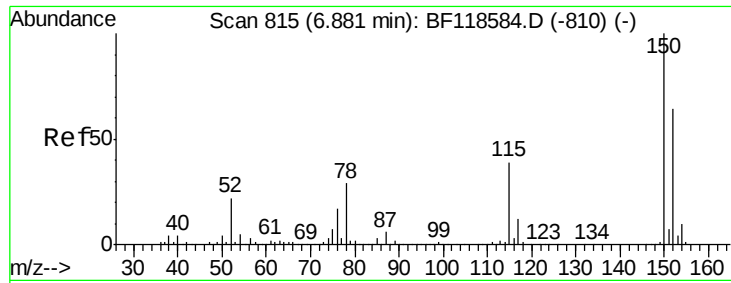
Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Manual Integrations
APPROVED

mohammad
1/23/2020 7:57:55 AM

Quant Time: Jan 22 13:15:40 2020
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF012020.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Jan 20 14:45:03 2020
Response via : Initial Calibration





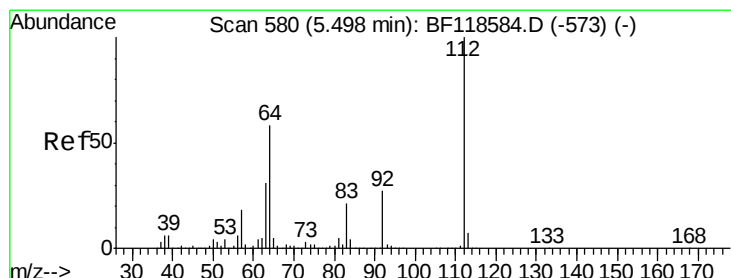
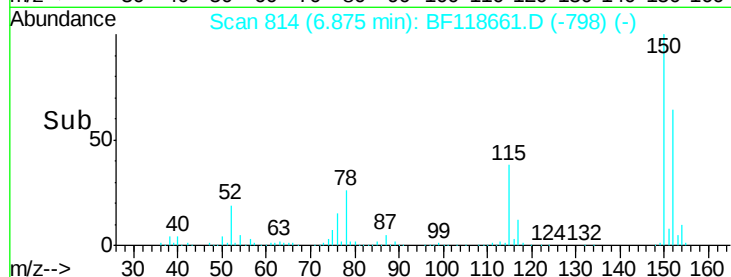
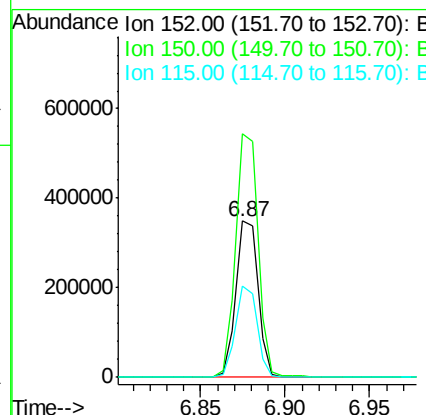
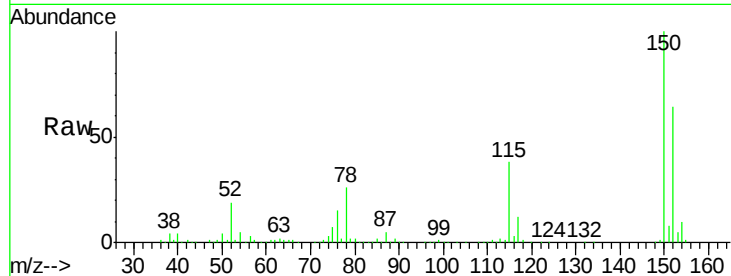
#1
 1,4-Dichlorobenzene-d4
 Concen: 20.000 ng
 RT: 6.87 min Scan# 814
 Delta R.T. -0.01 min
 Lab File: BF118661.D
 Acq: 22 Jan 2020 12:05

Instrument :
 BNA_F
 ClientSampleId :
 SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
152	100		
150	155.9	125.6	188.4
115	58.7	48.4	72.6

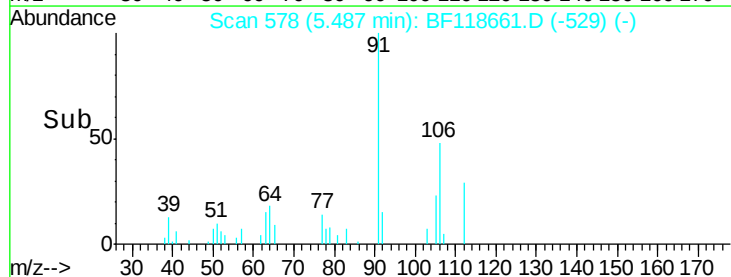
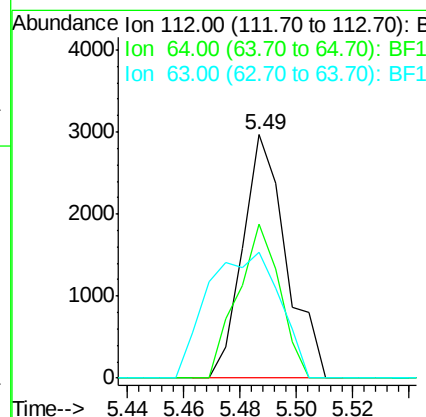
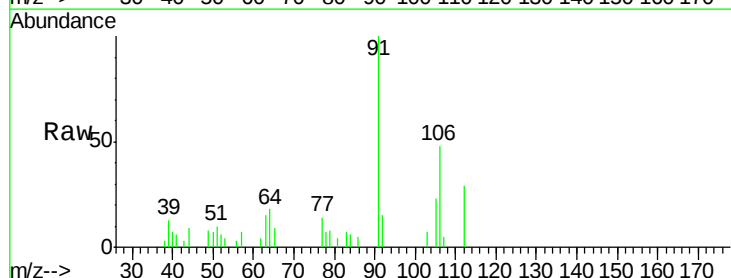
Manual Integrations
 APPROVED

mohammad
 1/23/2020 7:57:55 AM



#5
 2-Fluorophenol
 Concen: 0.184 ng
 RT: 5.49 min Scan# 578
 Delta R.T. -0.01 min
 Lab File: BF118661.D
 Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
112	100		
64	63.1	46.6	70.0
63	51.8	25.1	37.7





#7

Phenol-d6

Concen: 0.196 ng

RT: 6.49 min Scan# 749

Delta R.T. -0.02 min

Lab File: BF118661.D

Acq: 22 Jan 2020 12:05

Instrument :

BNA_F

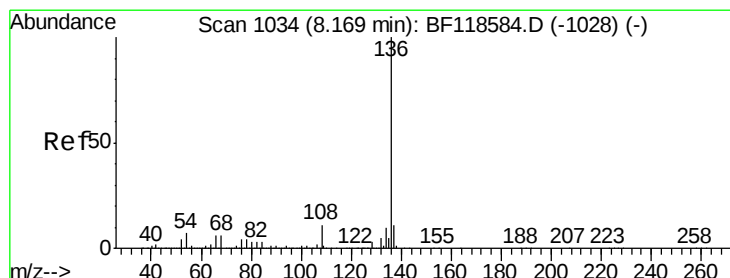
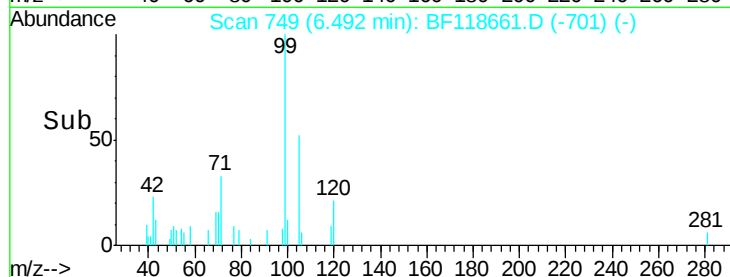
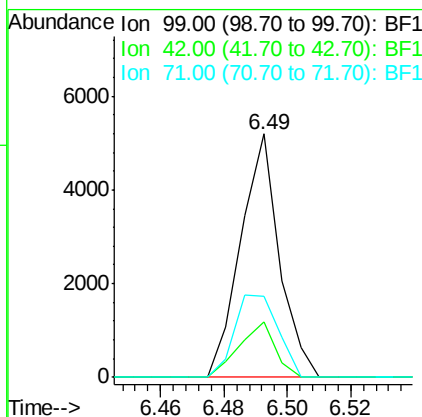
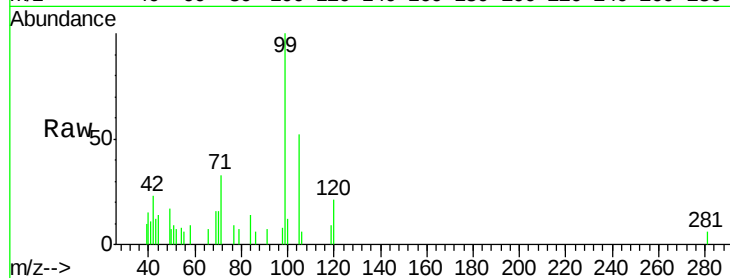
ClientSampleId :

SB-44-(2-4)DL

Tot Ion:	99	Resp:	4384
Ion Ratio	Lower	Upper	
99	100		
42	22.6	14.2	21.2#
71	33.1	27.8	41.6

Manual Integrations
APPROVED

mohammad
1/23/2020 7:57:55 AM



#21

Naphthalene-d8

Concen: 20.000 ng

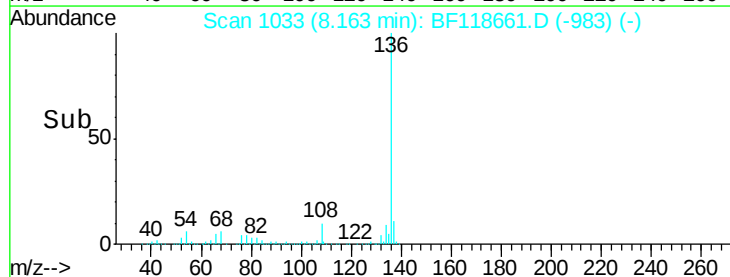
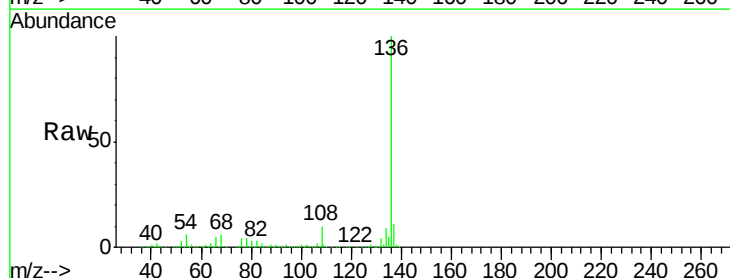
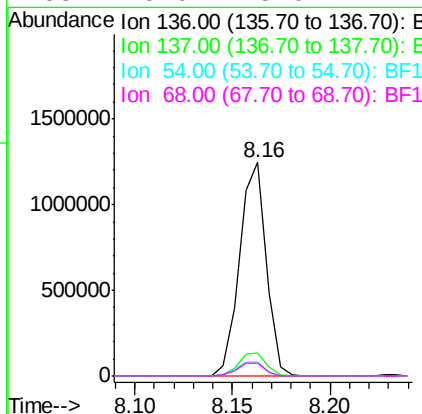
RT: 8.16 min Scan# 1033

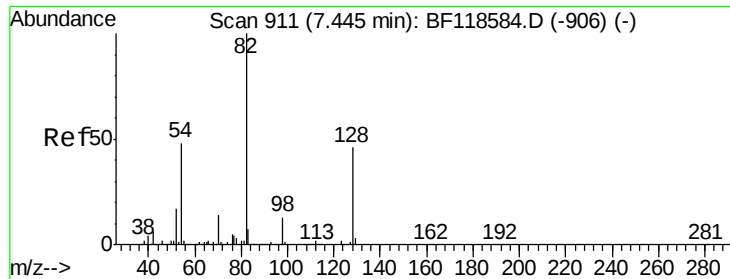
Delta R.T. -0.01 min

Lab File: BF118661.D

Acq: 22 Jan 2020 12:05

Tgt Ion:	136	Resp:	1179502
Ion Ratio	Lower	Upper	
136	100		
137	10.9	9.1	13.7
54	6.5	5.8	8.6
68	6.0	5.0	7.4





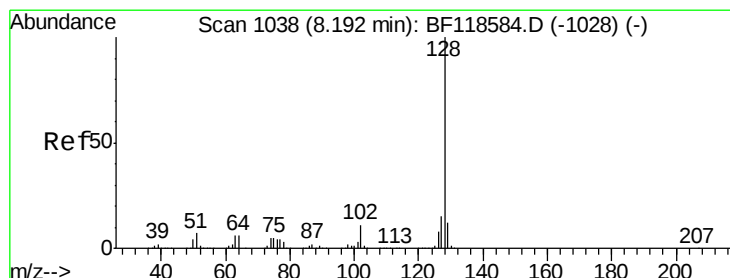
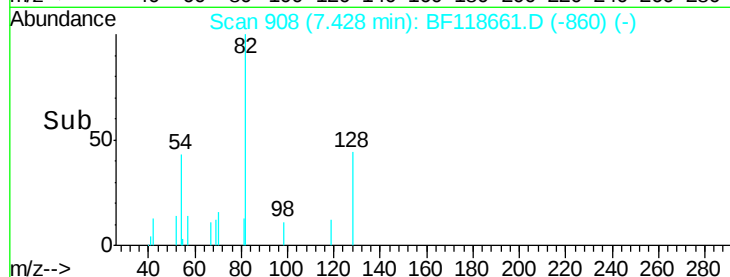
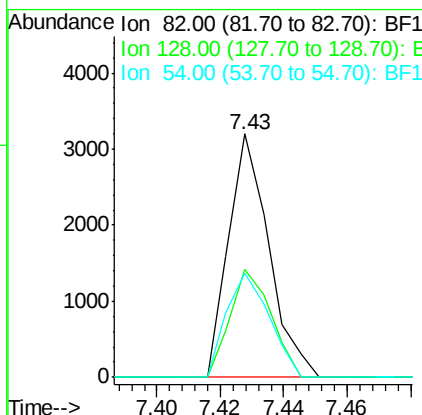
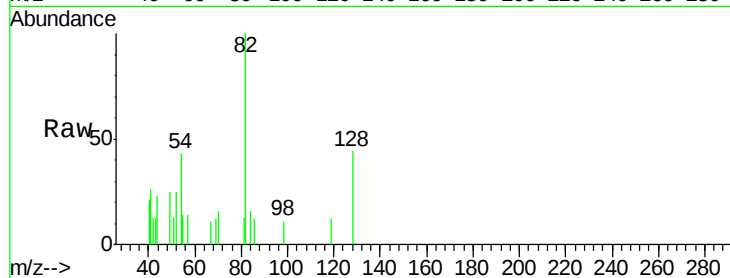
#23
Nitrobenzene-d5
Concen: 0.133 ng
RT: 7.43 min Scan# 908
Delta R.T. -0.02 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Tot Ion:	82	Resp:	2801
Ion	Ratio	Lower	Upper
82	100		
128	44.4	36.6	54.8
54	42.7	38.0	57.0

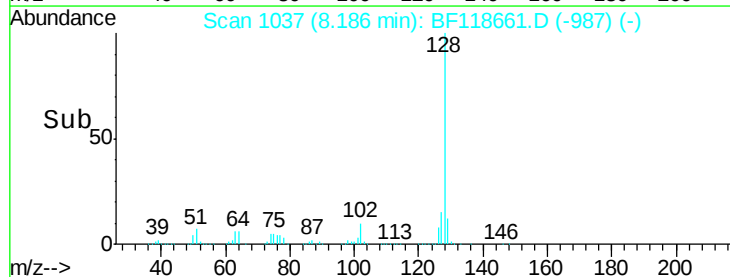
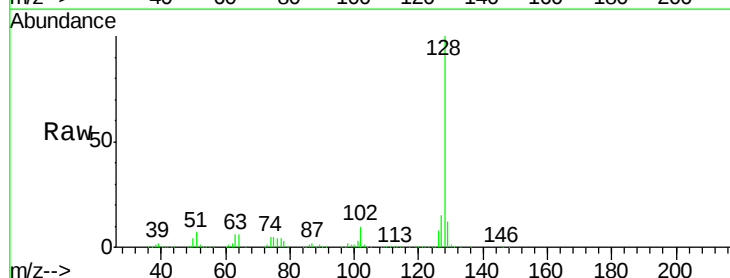
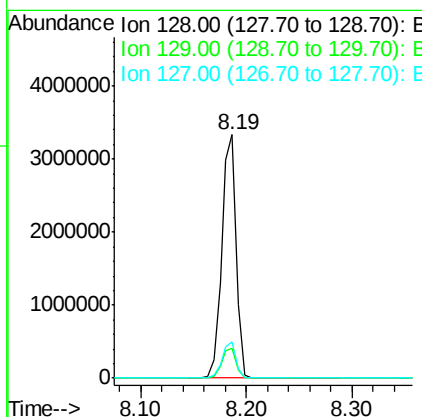
Manual Integrations
APPROVED

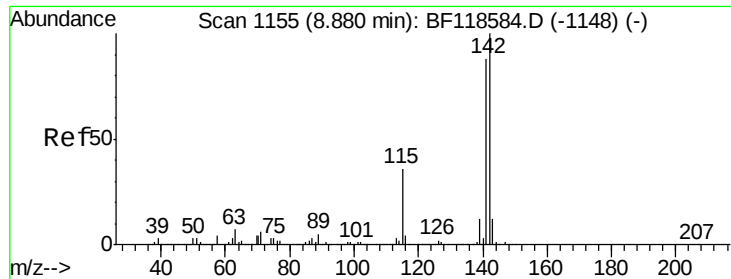
mohammad
1/23/2020 7:57:55 AM



#31
Naphthalene
Concen: 59.825 ng
RT: 8.19 min Scan# 1037
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion:	128	Resp:	3187617
Ion	Ratio	Lower	Upper
128	100		
129	12.5	9.9	14.9
127	14.9	12.0	18.0





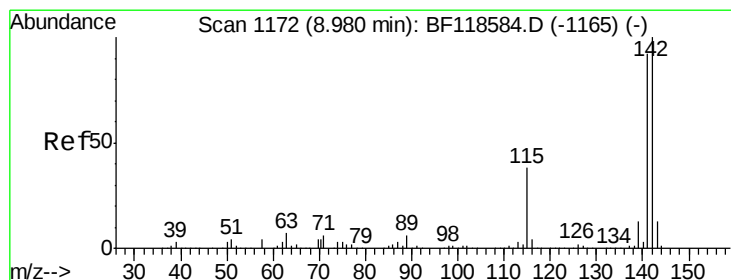
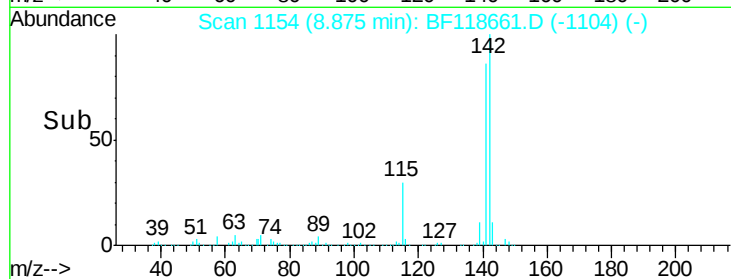
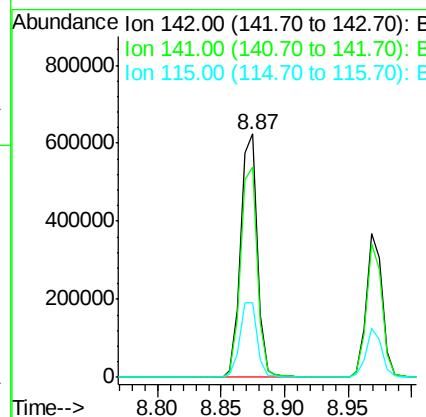
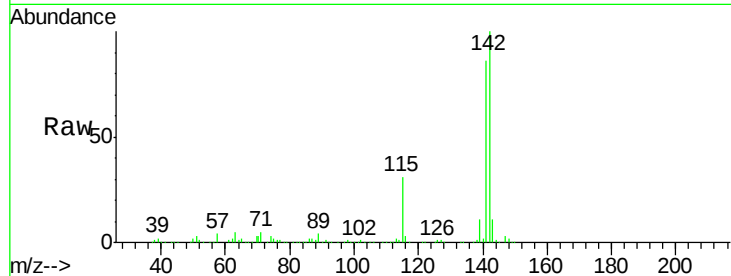
#37
2-Methylnaphthalene
Concen: 14.950 ng
RT: 8.87 min Scan# 1154
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
142	100		
141	86.4	70.7	106.1
115	30.5	28.5	42.7

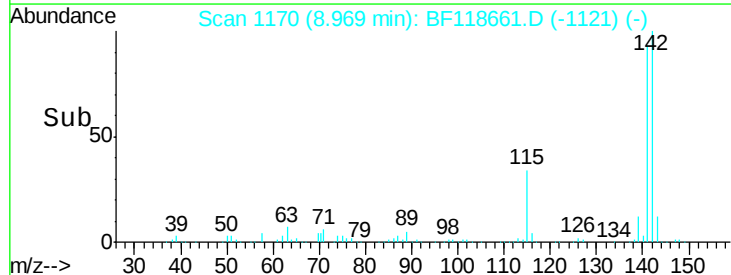
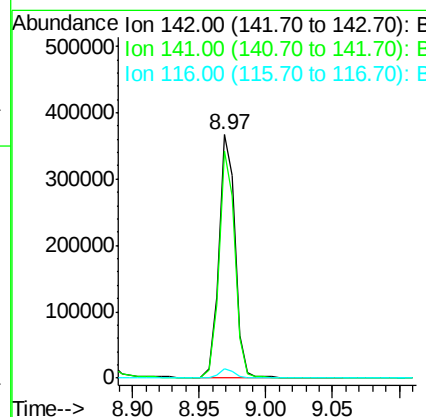
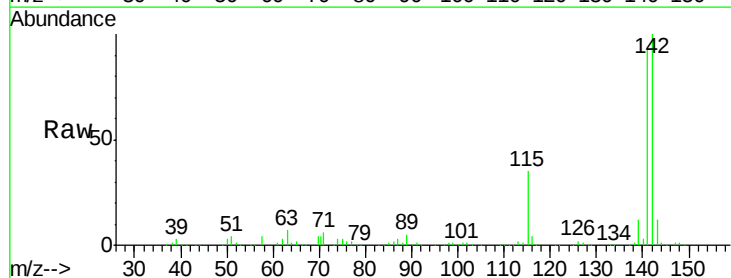
Manual Integrations
APPROVED

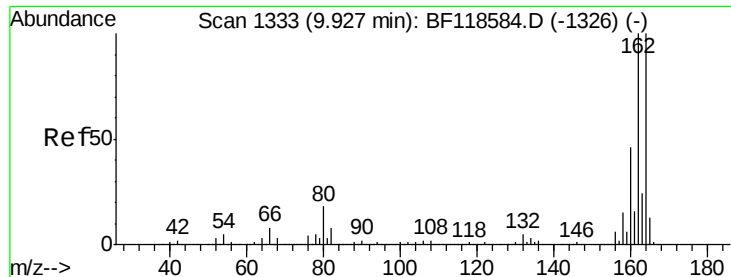
mohammad
1/23/2020 7:57:55 AM



#38
1-Methylnaphthalene
Concen: 8.801 ng
RT: 8.97 min Scan# 1170
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
142	100		
141	93.1	73.4	110.2
116	3.7	3.3	4.9





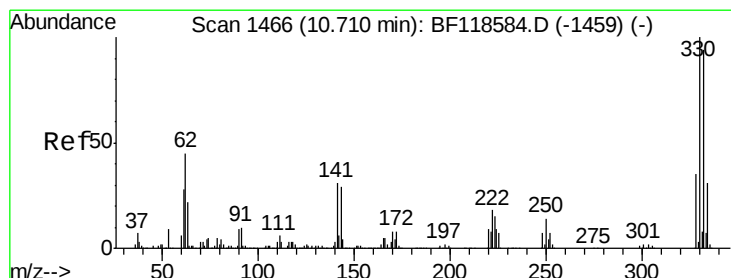
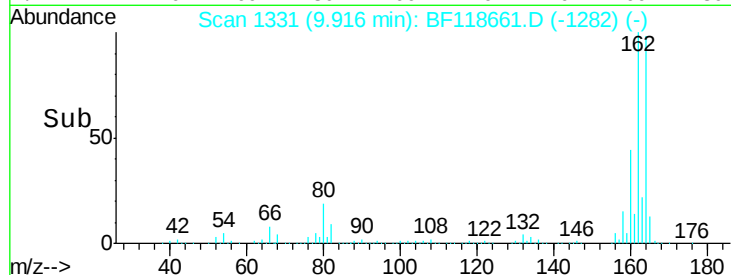
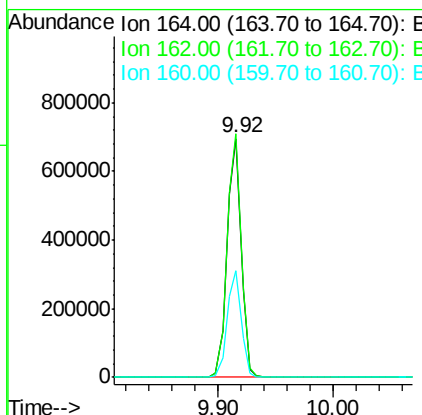
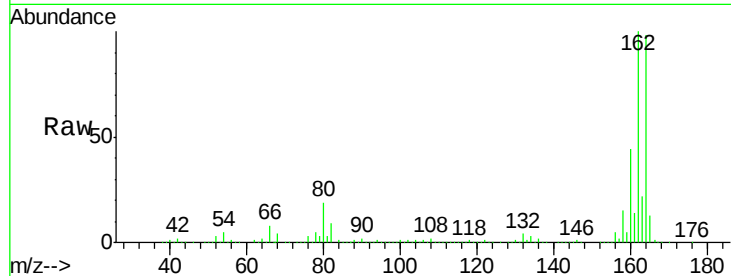
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.92 min Scan# 1331
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Tot Ion	Ratio	Resp	Lower	Upper
164	100			
162	101.8	80.4	120.6	
160	44.4	36.6	55.0	

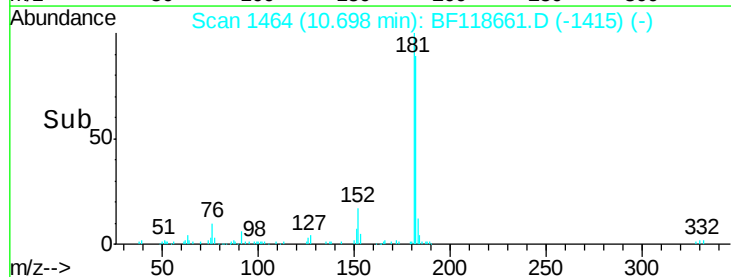
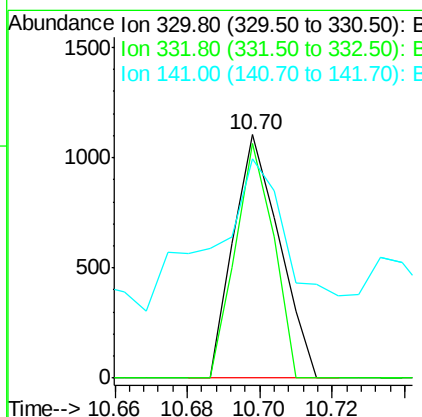
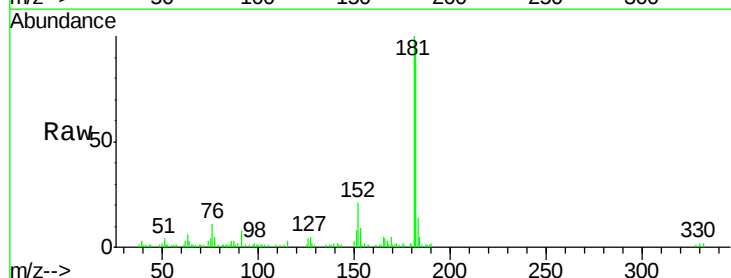
Manual Integrations
APPROVED

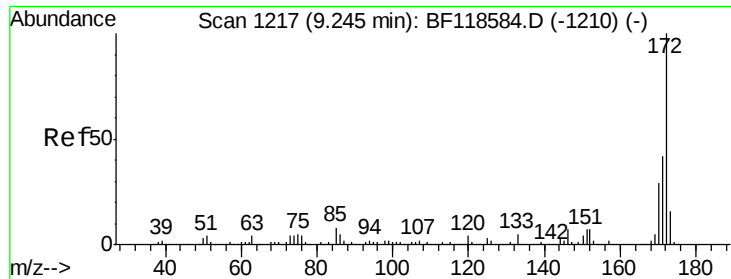
mohammad
1/23/2020 7:57:55 AM



#42
2,4,6-Tribromophenol
Concen: 0.142 ng
RT: 10.70 min Scan# 1464
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Resp	Lower	Upper
330	100			
332	80.2	76.2	114.4	
141	98.1	23.9	35.9#	





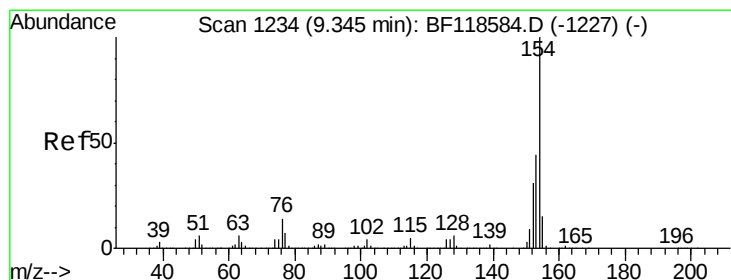
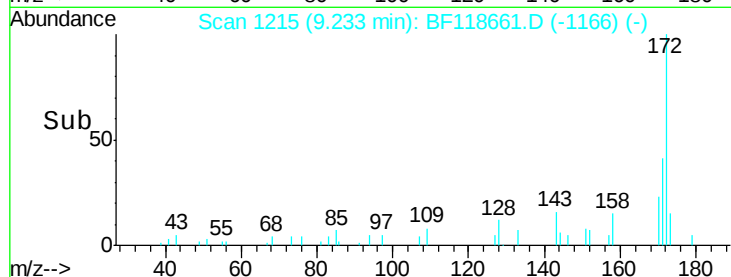
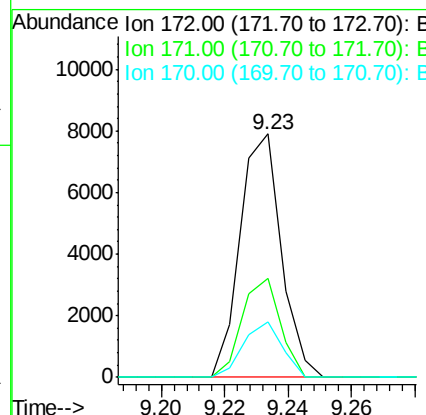
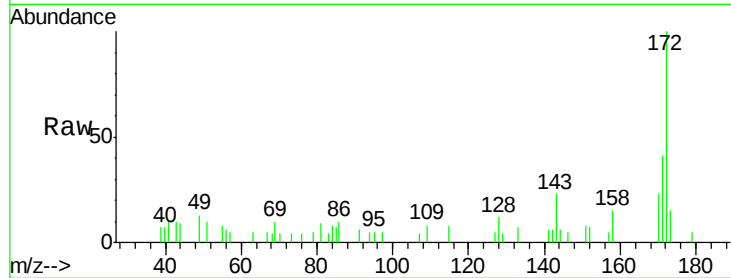
#45
2-Fluorobiphenyl
Concen: 0.198 ng
RT: 9.23 min Scan# 1215
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleID :
SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
172	100		
171	40.6	33.4	50.2
170	22.9	23.2	34.8

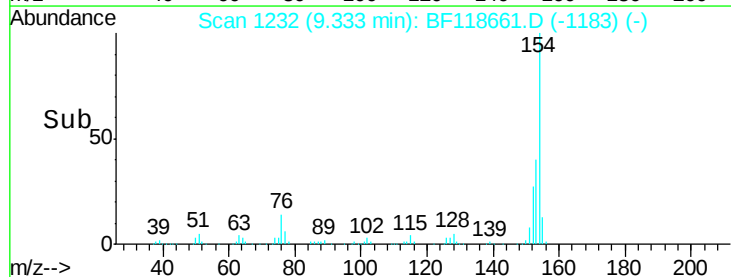
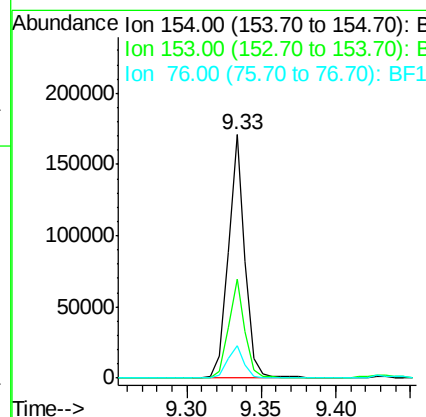
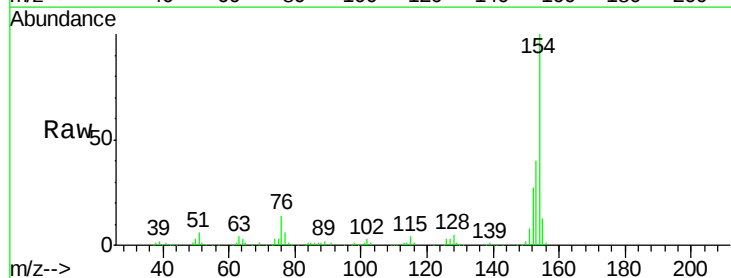
Manual Integrations
APPROVED

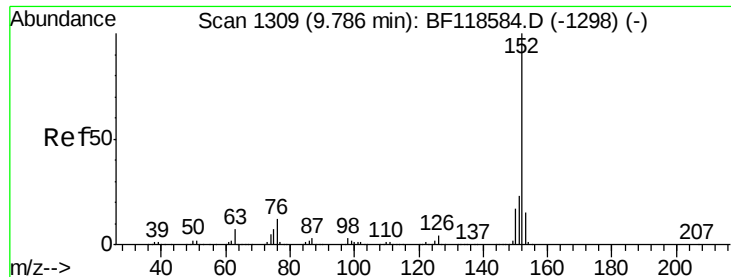
mohammad
1/23/2020 7:57:55 AM



#46
1,1'-Biphenyl
Concen: 3.321 ng
RT: 9.33 min Scan# 1232
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
154	100		
153	40.4	23.8	63.8
76	13.5	0.0	34.3





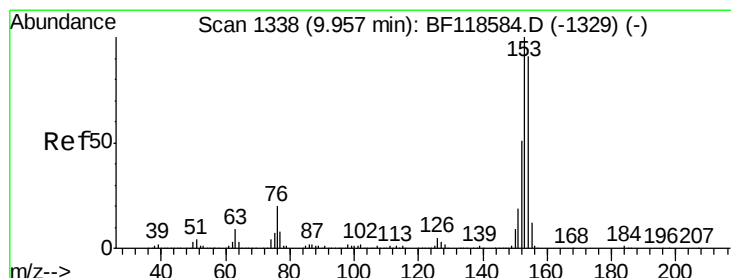
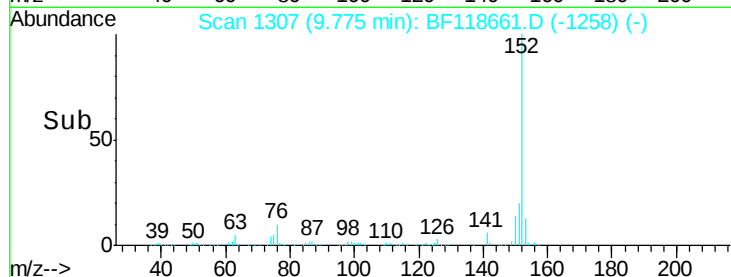
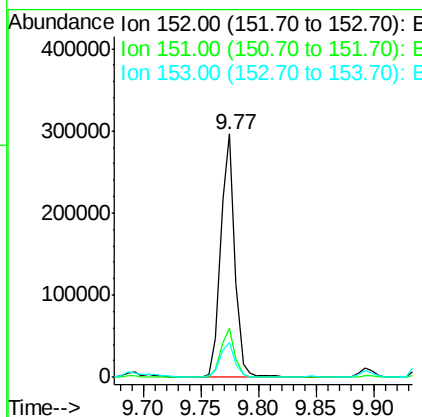
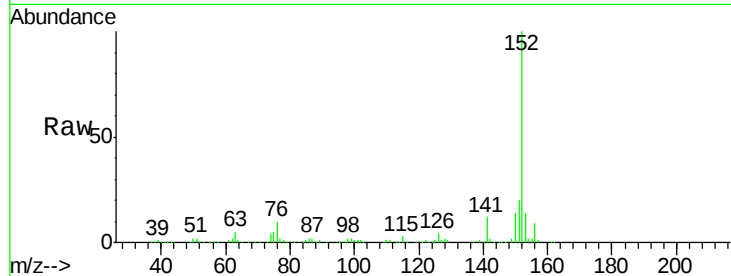
#49
Acenaphthylene
Concen: 5.248 ng
RT: 9.77 min Scan# 1307
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
152	100		
151	19.9	18.6	27.8
153	14.1	12.2	18.4

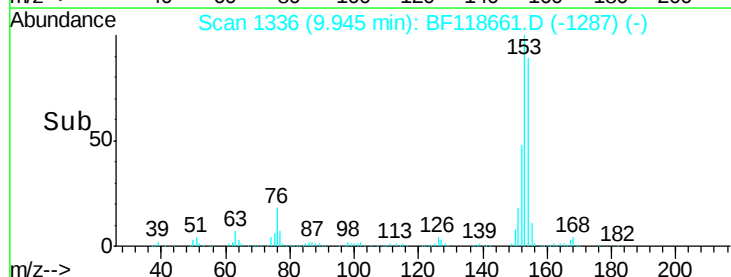
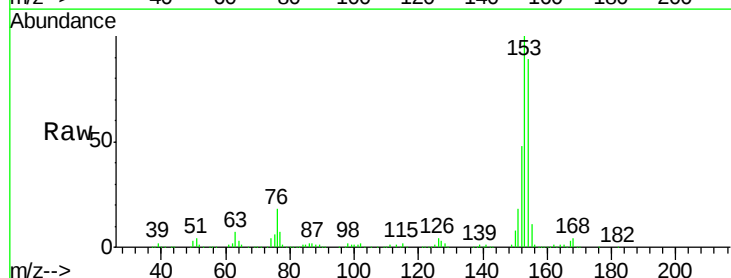
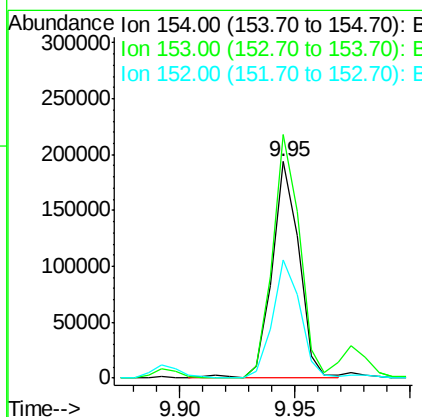
Manual Integrations
APPROVED

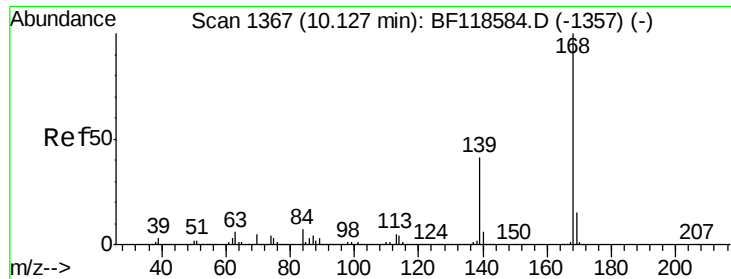
mohammad
1/23/2020 7:57:55 AM



#52
Acenaphthene
Concen: 4.789 ng
RT: 9.95 min Scan# 1336
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
154	100		
153	112.5	87.6	131.4
152	54.5	44.4	66.6





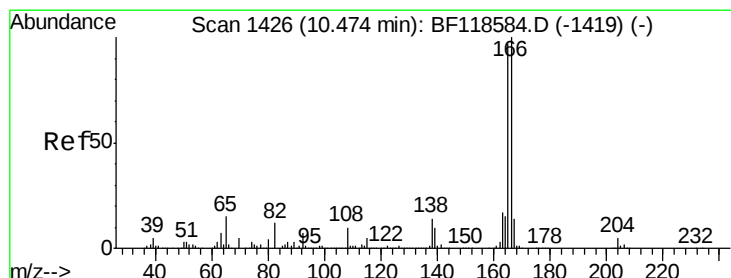
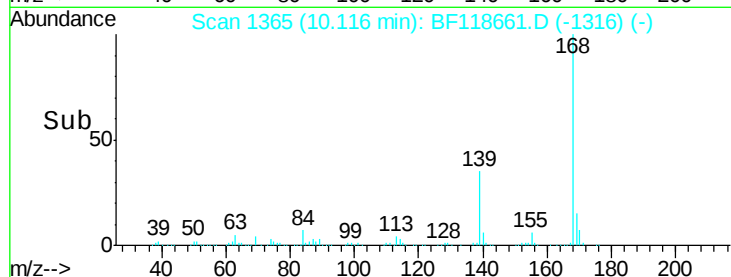
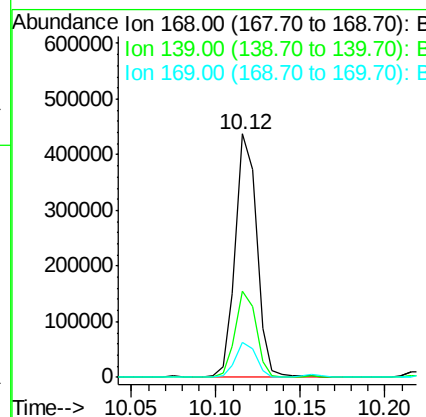
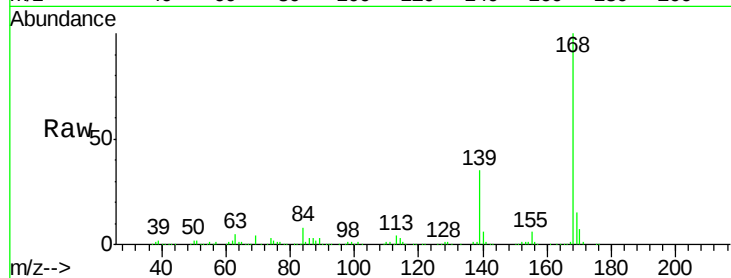
#55
Dibenzofuran
Concen: 8.609 ng
RT: 10.12 min Scan# 1365
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
168	100		
139	35.5	32.7	49.1
169	14.6	12.2	18.2

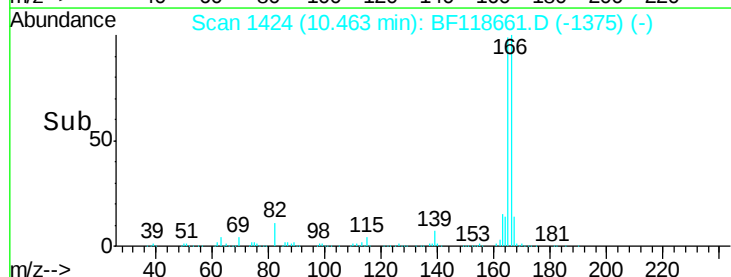
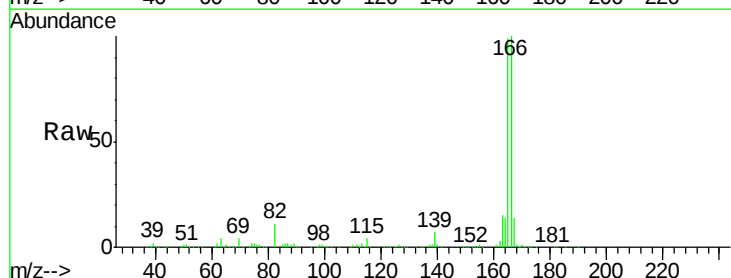
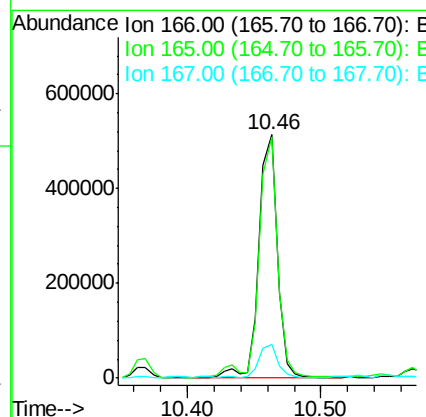
Manual Integrations
APPROVED

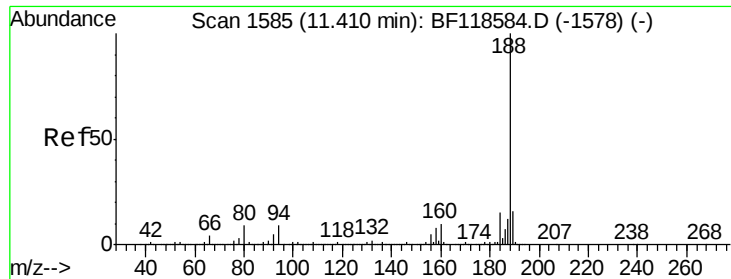
mohammad
1/23/2020 7:57:55 AM



#58
Fluorene
Concen: 13.920 ng
RT: 10.46 min Scan# 1424
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
166	100		
165	98.9	77.3	115.9
167	13.7	11.5	17.3





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.40 min Scan# 1583

Delta R.T. -0.01 min

Lab File: BF118661.D

Acq: 22 Jan 2020 12:05

Instrument :

BNA_F

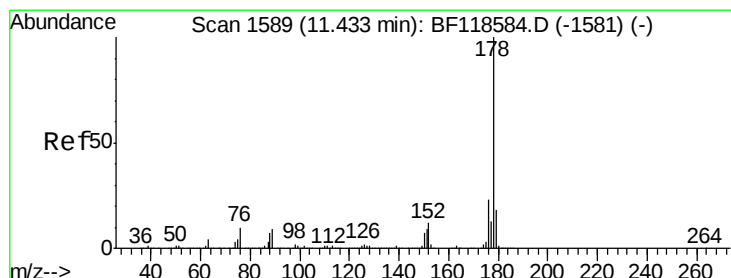
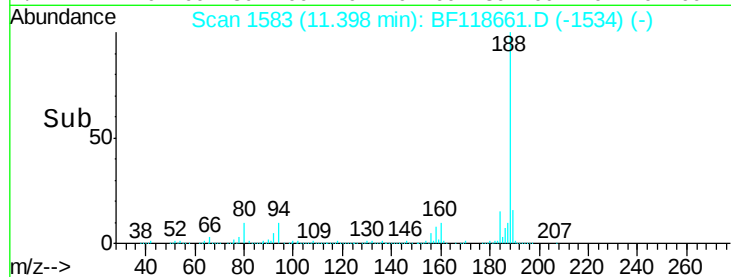
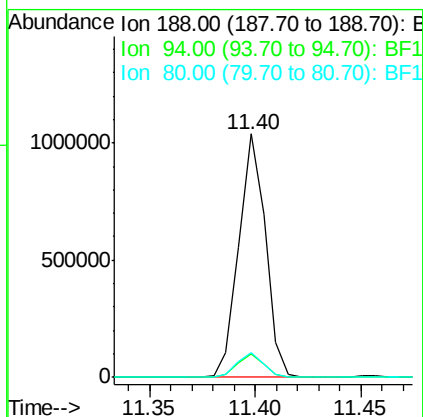
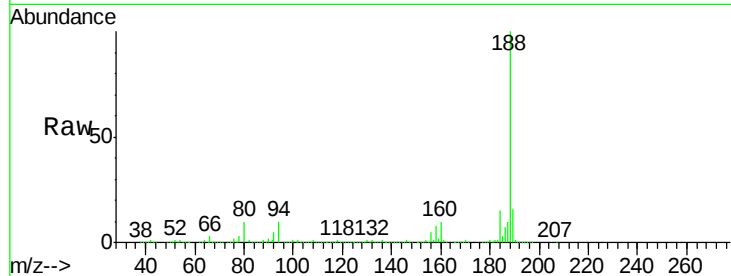
ClientSampleId :

SB-44-(2-4)DL

Tot Ion:	188	Resp:	907994
Ion Ratio	Lower	Upper	
188	100		
94	9.6	7.1	10.7
80	10.3	7.5	11.3

Manual Integrations
APPROVED

mohammad
1/23/2020 7:57:55 AM



#71

Phenanthrene

Concen: 39.935 ng

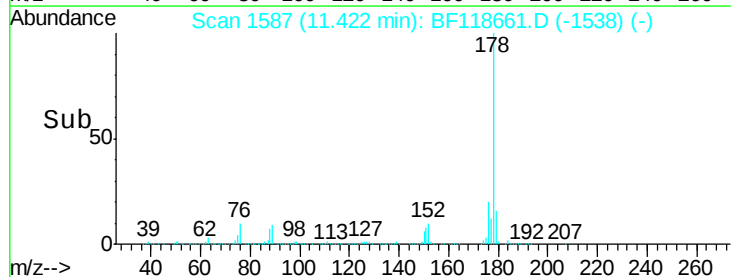
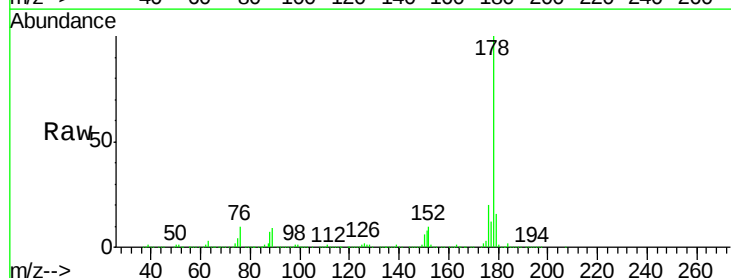
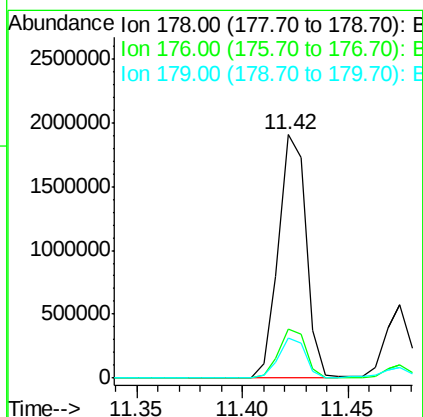
RT: 11.42 min Scan# 1587

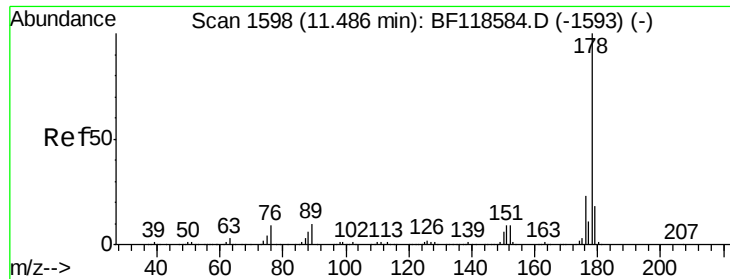
Delta R.T. -0.01 min

Lab File: BF118661.D

Acq: 22 Jan 2020 12:05

Tgt Ion:	178	Resp:	1749359
Ion Ratio	Lower	Upper	
178	100		
176	20.2	18.6	27.8
179	16.3	14.7	22.1





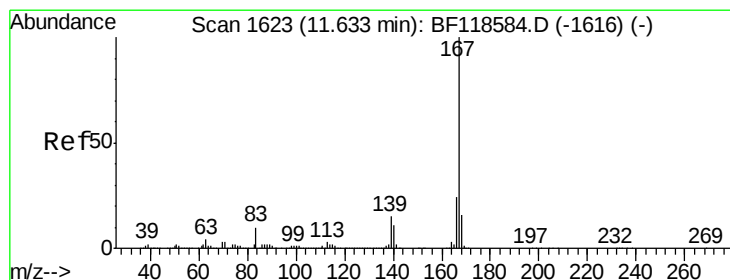
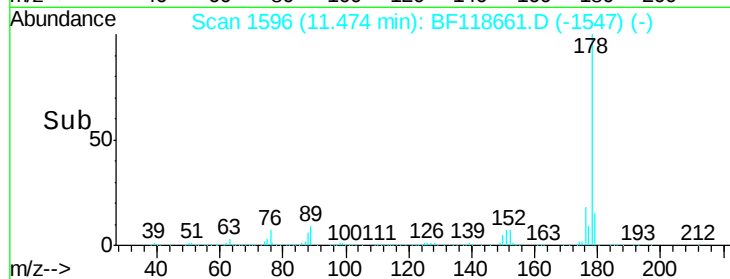
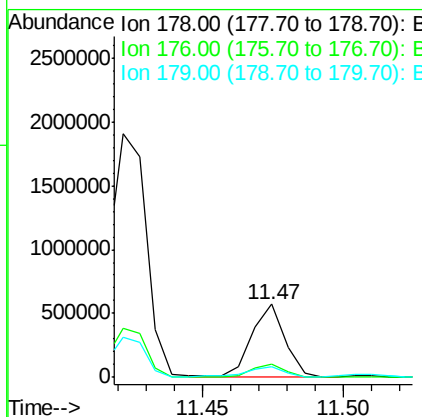
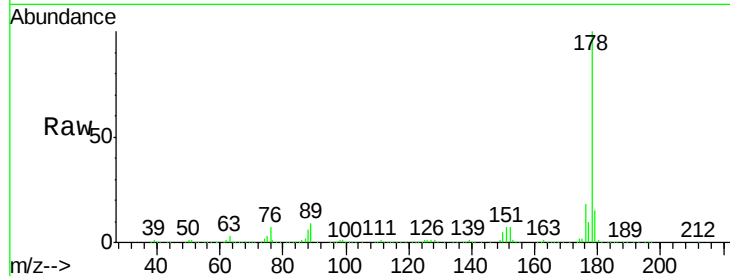
#72
 Anthracene
 Concen: 10.613 ng
 RT: 11.47 min Scan# 1596
 Delta R.T. -0.01 min
 Lab File: BF118661.D
 Acq: 22 Jan 2020 12:05

Instrument :
 BNA_F
 ClientSampleID :
 SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
178	100		
176	18.4	18.0	27.0
179	15.1	14.7	22.1

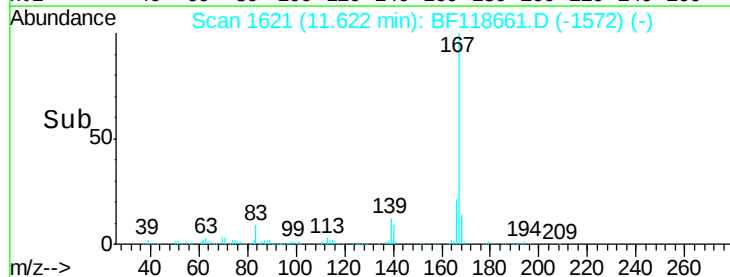
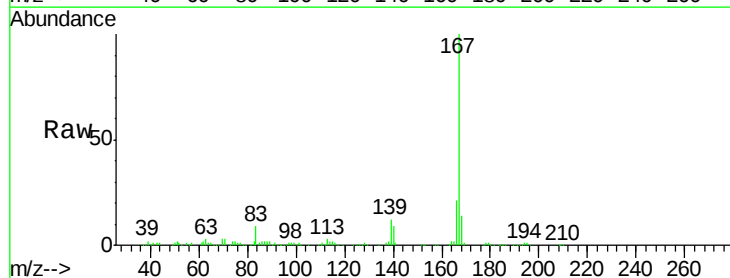
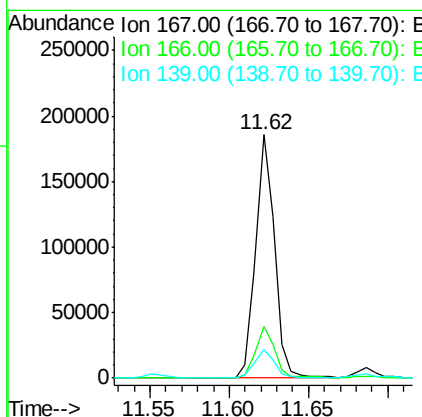
Manual Integrations
 APPROVED

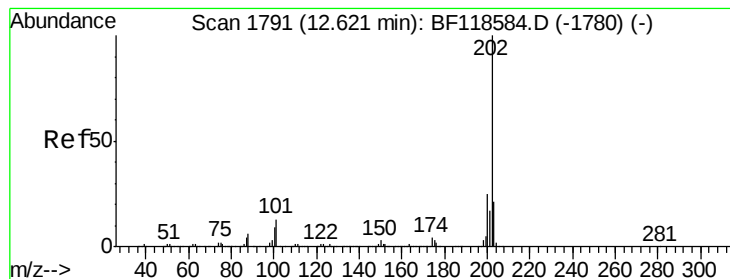
mohammad
 1/23/2020 7:57:55 AM



#73
 Carbazole
 Concen: 3.886 ng
 RT: 11.62 min Scan# 1621
 Delta R.T. -0.01 min
 Lab File: BF118661.D
 Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.1	19.4	29.2
139	11.9	11.7	17.5





#75

Fluoranthene

Concen: 23.304 ng

RT: 12.61 min Scan# 1789

Delta R.T. -0.01 min

Lab File: BF118661.D

Acq: 22 Jan 2020 12:05

Instrument :

BNA_F

ClientSampleId :

SB-44-(2-4)DL

Tot Ion:202 Resp: 1076709

Ion Ratio Lower Upper

202 100

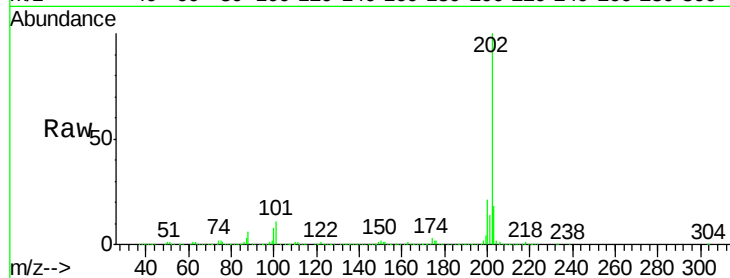
101 11.4 0.0 32.5

203 18.3 0.8 40.8

Manual Integrations
APPROVED

mohammad

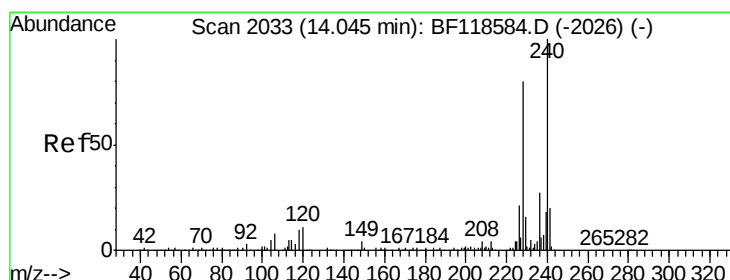
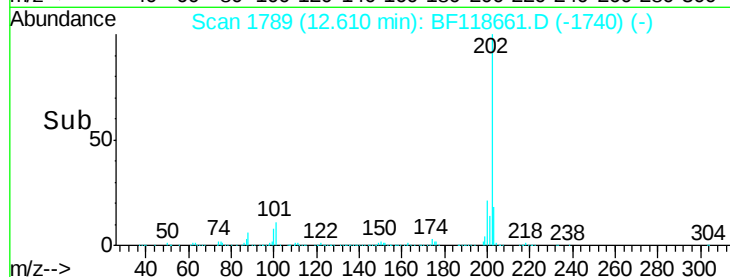
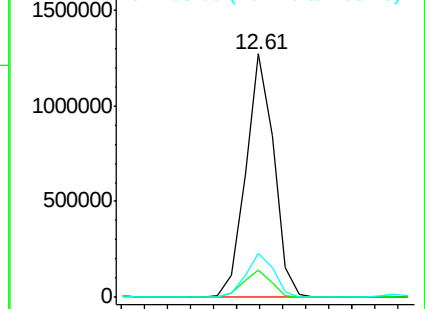
1/23/2020 7:57:55 AM



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: 14.03 min Scan# 2031

Delta R.T. -0.01 min

Lab File: BF118661.D

Acq: 22 Jan 2020 12:05

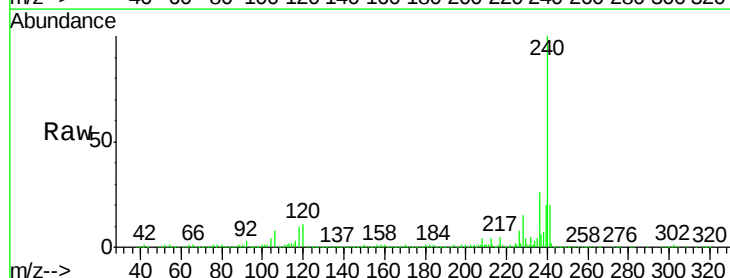
Tgt Ion:240 Resp: 763286

Ion Ratio Lower Upper

240 100

120 10.7 8.9 13.3

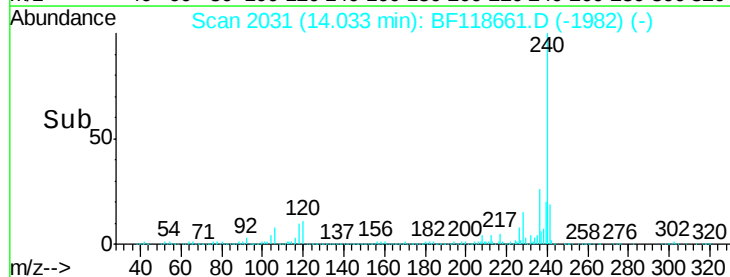
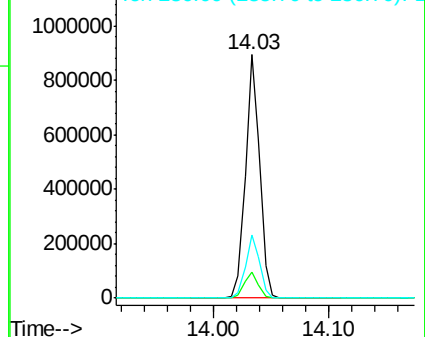
236 25.7 21.5 32.3

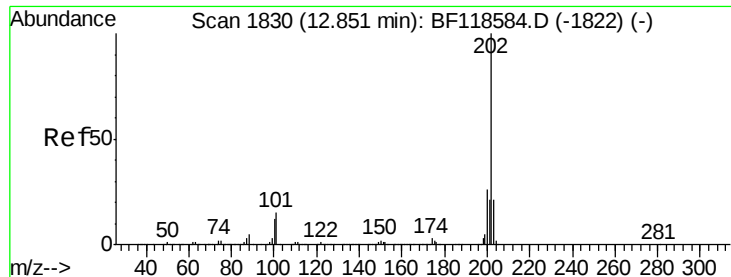


Abundance Ion 240.00 (239.70 to 240.70): E

Ion 120.00 (119.70 to 120.70): E

Ion 236.00 (235.70 to 236.70): E





#78

Pvrene

Concen: 17.873 ng

RT: 12.84 min Scan# 1828

Delta R.T. -0.01 min

Lab File: BF118661.D

Acq: 22 Jan 2020 12:05

Instrument :

BNA_F

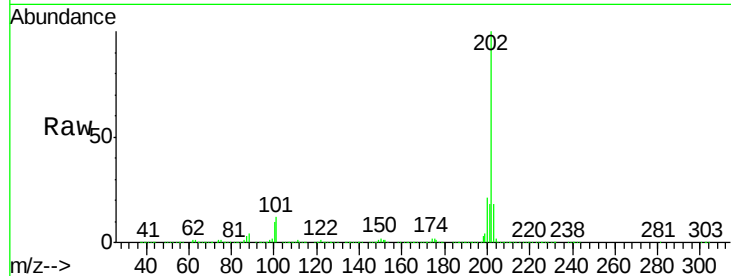
ClientSampleId :

SB-44-(2-4)DL

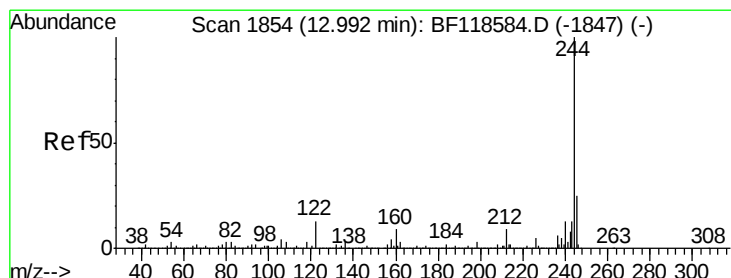
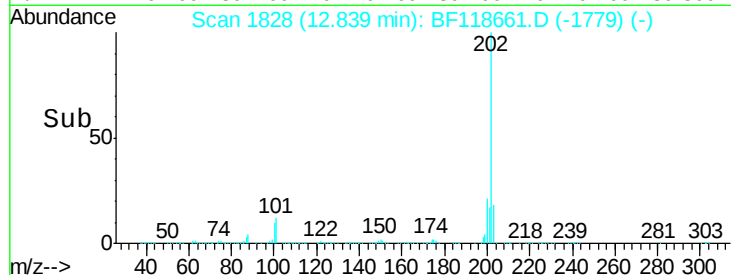
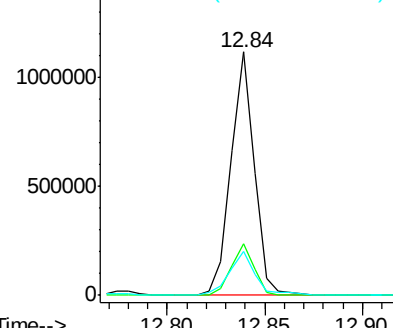
Tot Ion	Ratio	Lower	Upper
202	100		
200	21.2	20.6	31.0
203	18.3	16.8	25.2

Manual Integrations
APPROVED

mohammad
1/23/2020 7:57:55 AM



Abundance Ion 202.00 (201.70 to 202.70): E
Ion 200.00 (199.70 to 200.70): E
Ion 203.00 (202.70 to 203.70): E



#79

Terphenyl-d14

Concen: 0.228 ng

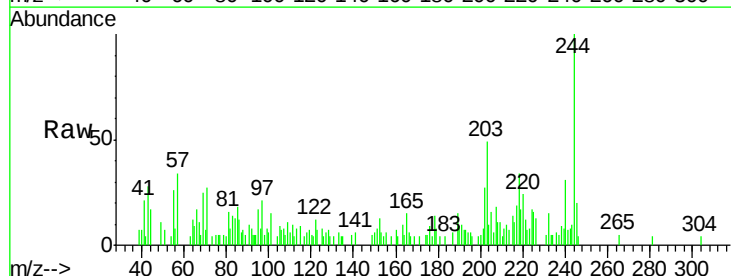
RT: 12.98 min Scan# 1852

Delta R.T. -0.01 min

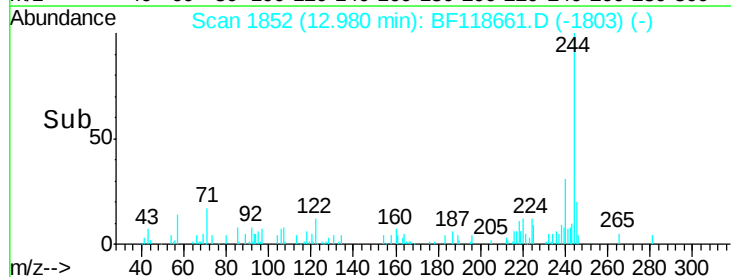
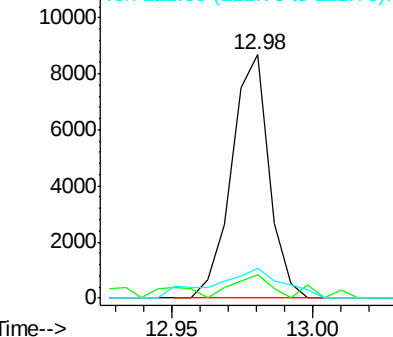
Lab File: BF118661.D

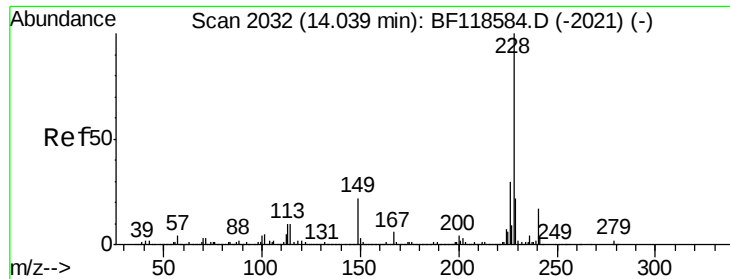
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
244	100		
212	9.9	7.0	10.4
122	12.3	10.7	16.1



Abundance Ion 244.00 (243.70 to 244.70): E
Ion 212.00 (211.70 to 212.70): E
Ion 122.00 (121.70 to 122.70): E





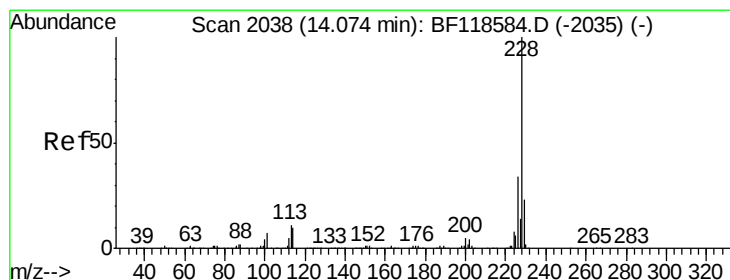
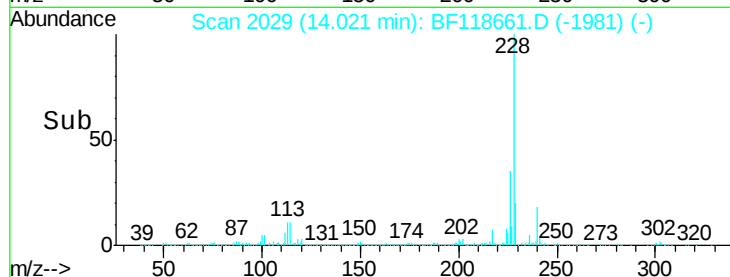
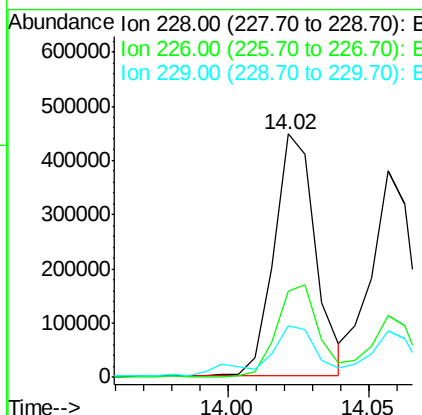
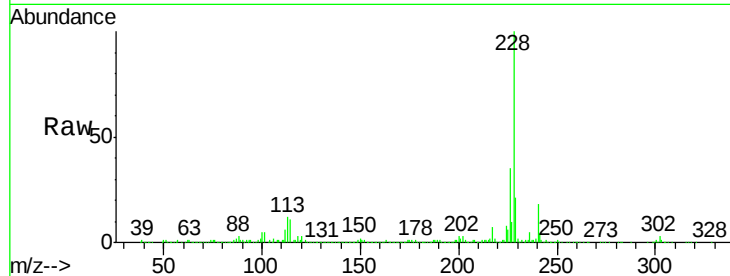
#81
Benzo(a)anthracene
Concen: 9.927 ng
RT: 14.02 min Scan# 2029
Delta R.T. -0.02 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
228	100		
226	35.5	24.1	36.1
229	21.0	17.6	26.4

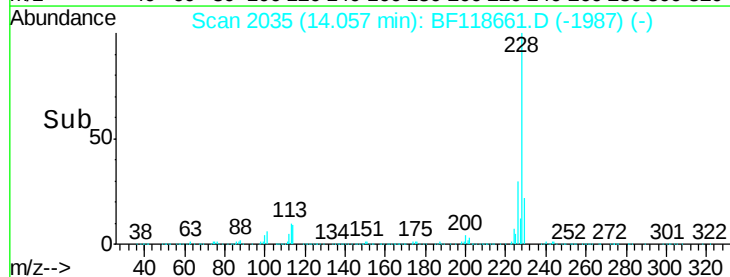
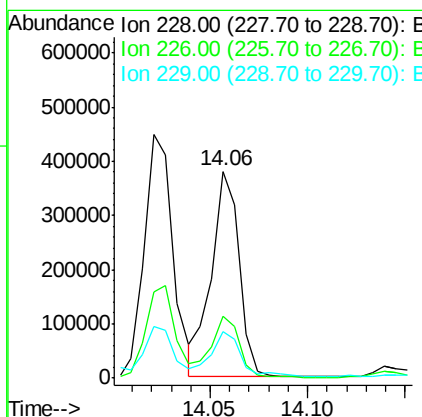
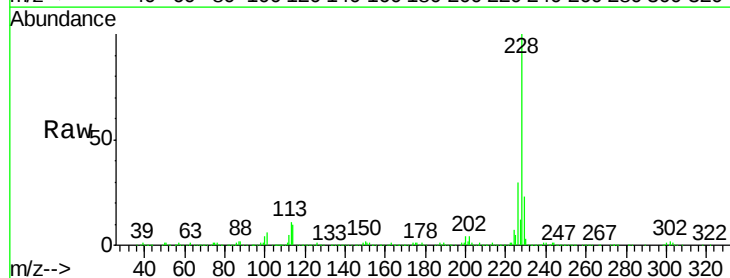
Manual Integrations
APPROVED

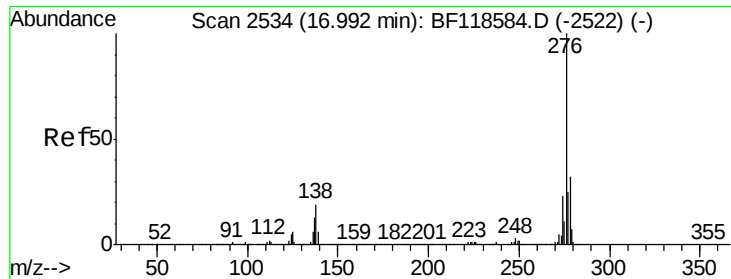
mohammad
1/23/2020 7:57:55 AM



#83
Chrysene
Concen: 8.544 ng
RT: 14.06 min Scan# 2035
Delta R.T. -0.02 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.2	27.4	41.0
229	22.8	18.3	27.5





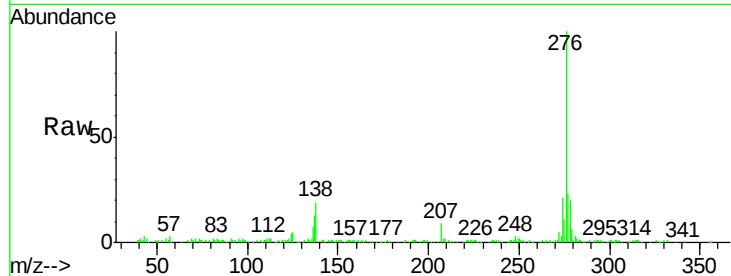
#86
Indeno(1,2,3-cd)pyrene
Concen: 4.776 ng
RT: 16.97 min Scan# 2531
Delta R.T. -0.02 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

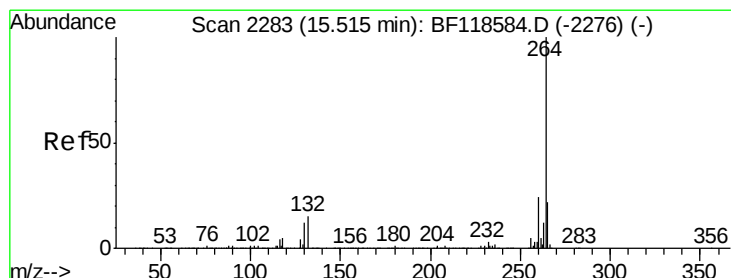
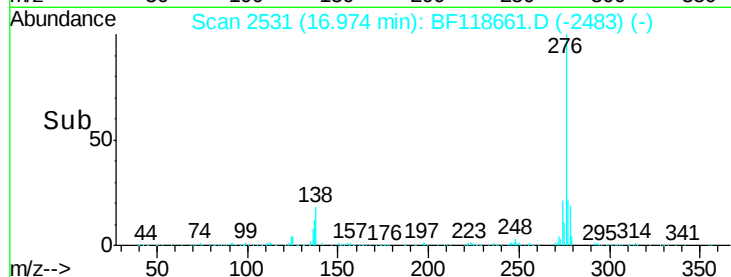
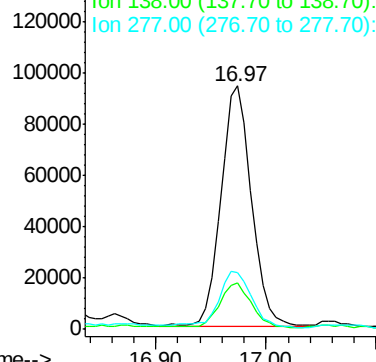
Tot Ion	Ratio	Lower	Upper
276	100		
138	19.4	17.2	25.8
277	25.4	20.5	30.7

Manual Integrations
APPROVED

mohammad
1/23/2020 7:57:55 AM

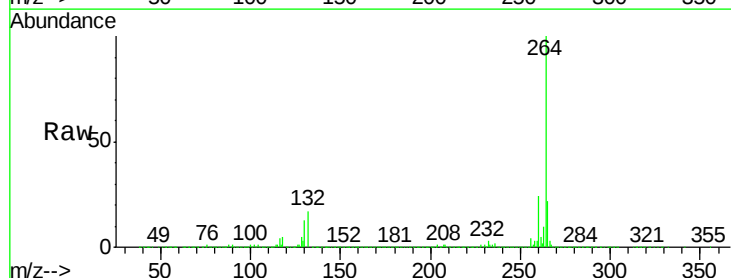


Abundance Ion 276.00 (275.70 to 276.70): E
Ion 138.00 (137.70 to 138.70): E
Ion 277.00 (276.70 to 277.70): E

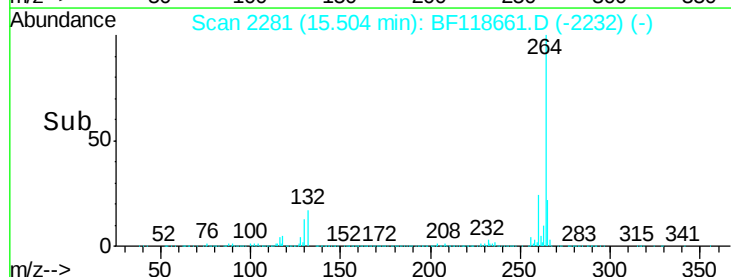
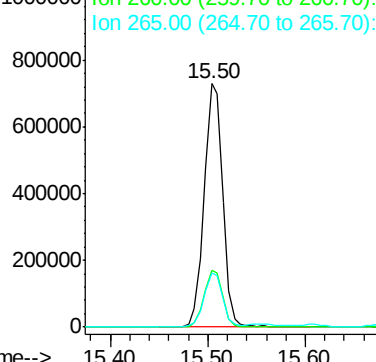


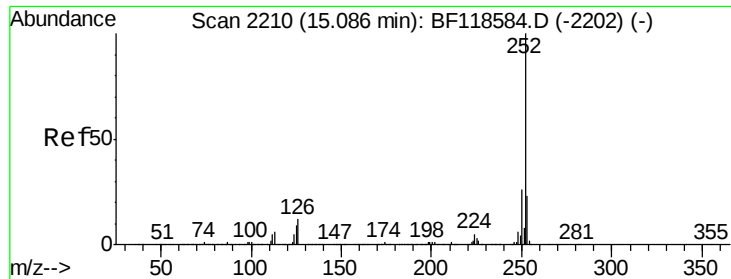
#87
Perylene-d12
Concen: 20.000 ng
RT: 15.50 min Scan# 2281
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
264	100		
260	23.6	19.6	29.4
265	22.0	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





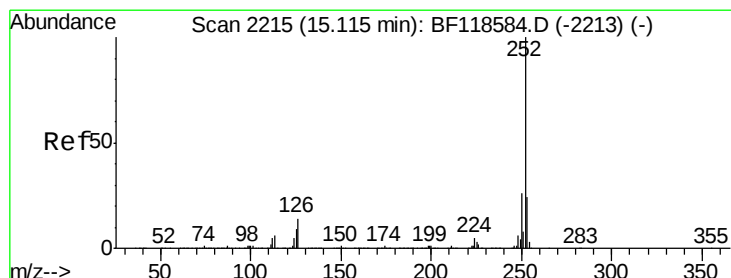
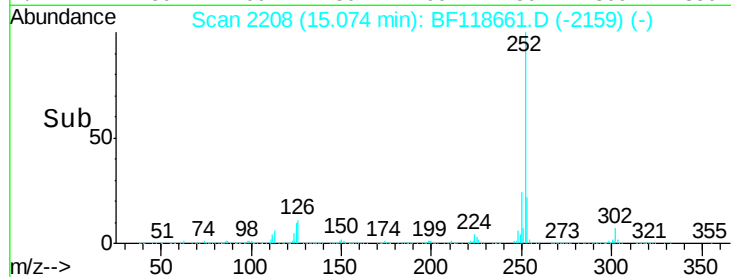
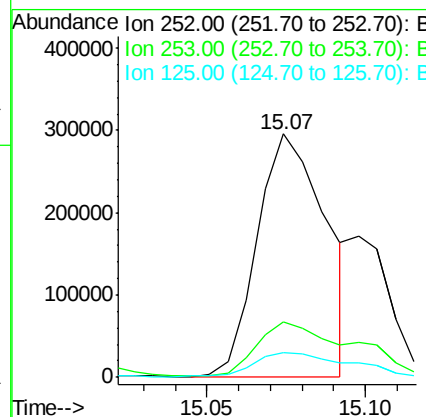
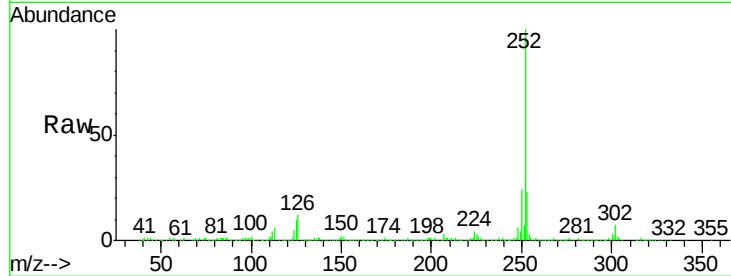
#88
Benzo(b)fluoranthene
Concen: 7.450 ng m
RT: 15.07 min Scan# 2208
Delta R.T. -0.01 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
252	100		
253	22.8	18.7	28.1
125	9.9	7.3	10.9

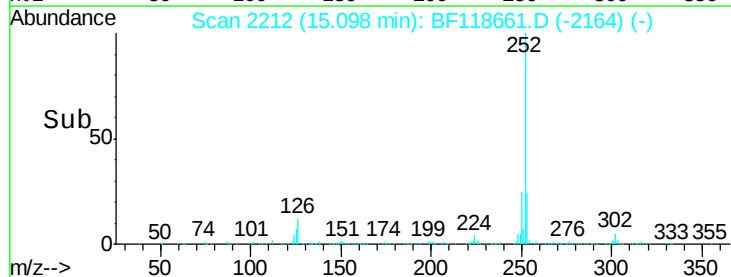
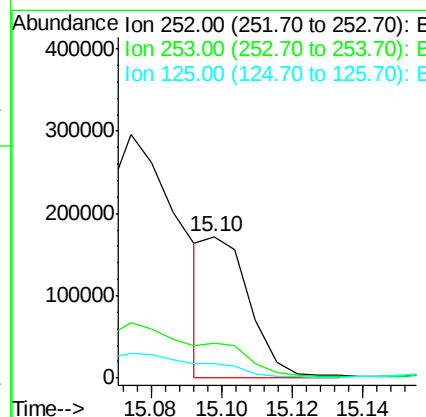
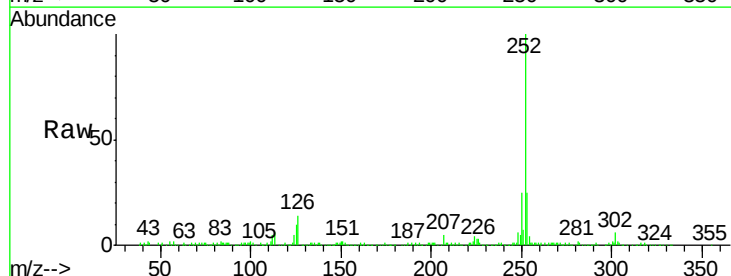
Manual Integrations
APPROVED

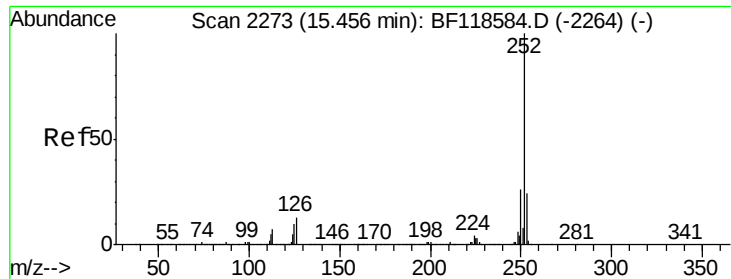
mohammad
1/23/2020 7:57:55 AM



#89
Benzo(k)fluoranthene
Concen: 2.715 ng m
RT: 15.10 min Scan# 2212
Delta R.T. -0.02 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
252	100		
253	25.0	19.0	28.4
125	10.3	7.6	11.4





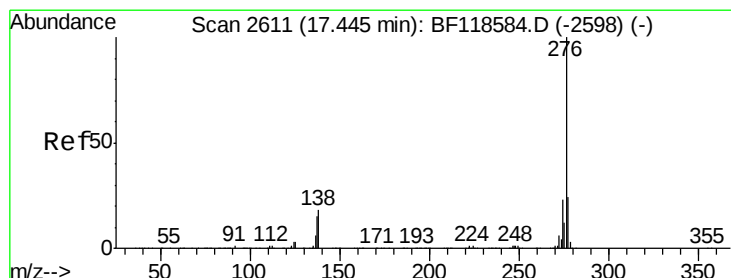
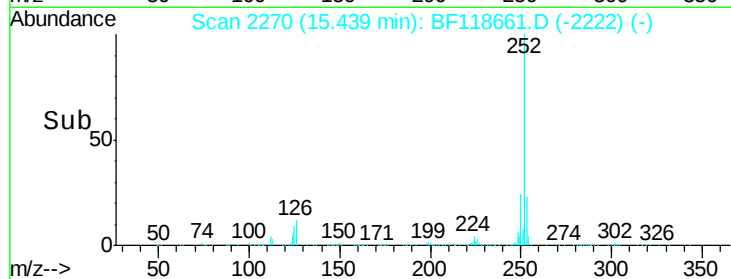
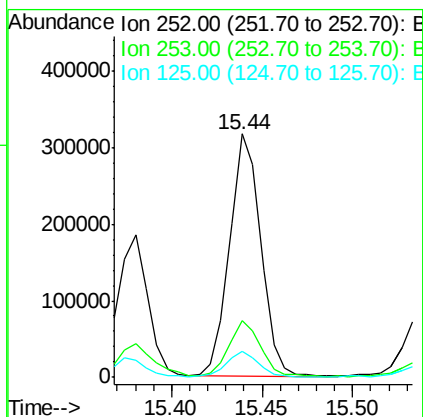
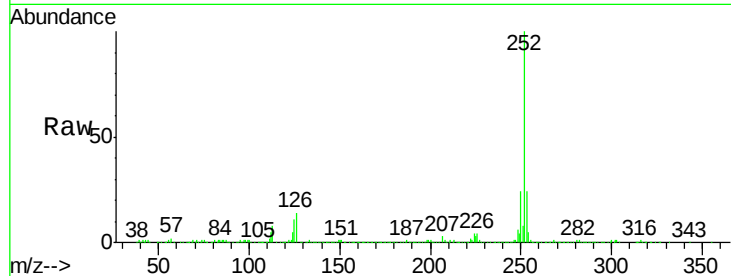
#90
Benzo(a)pyrene
Concen: 7.354 ng
RT: 15.44 min Scan# 2270
Delta R.T. -0.02 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Instrument :
BNA_F
ClientSampleId :
SB-44-(2-4)DL

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.5	18.8	28.2
125	10.6	7.8	11.6

Manual Integrations
APPROVED

mohammad
1/23/2020 7:57:55 AM



#92
Benzo(g,h,i)perylene
Concen: 3.600 ng
RT: 17.42 min Scan# 2606
Delta R.T. -0.03 min
Lab File: BF118661.D
Acq: 22 Jan 2020 12:05

Tgt Ion	Ratio	Lower	Upper
276	100		
277	23.7	18.9	28.3
138	18.3	14.4	21.6

