

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\
 Data File : BF121485.D
 Acq On : 31 Aug 2020 19:02
 Operator : JU/CG
 Sample : L3847-27
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 LINDEN-JOP-BH-12-B

Manual Integrations
 APPROVED

mohammad
 9/2/2020 1:56:07 PM

Quant Time: Sep 01 01:04:37 2020
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Aug 28 09:25:49 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.86	152	285747	20.00	ng	0.00
21) Naphthalene-d8	8.15	136	1044917	20.00	ng	0.00
39) Acenaphthene-d10	9.90	164	534528	20.00	ng	0.00
64) Phenanthrene-d10	11.39	188	925340	20.00	ng	0.00
76) Chrysene-d12	14.03	240	641348	20.00	ng	0.00
86) Perylene-d12	15.51	264	668094	20.00	ng	0.02

System Monitoring Compounds						
5) 2-Fluorophenol	5.47	112	1067907	62.70	ng	0.00
7) Phenol-d6	6.48	99	1382231	58.07	ng	-0.01
23) Nitrobenzene-d5	7.42	82	894237	58.51	ng	0.00
42) 2,4,6-Tribromophenol	10.69	330	368883	68.32	ng	0.00
45) 2-Fluorobiphenyl	9.22	172	1632013	49.26	ng	0.00
79) Terphenyl-d14	12.97	244	1343101	44.08	ng	0.00

Target Compounds				Qvalue		
49) Acenaphthylene	9.76	152	123046	2.474	ng	98
50) Dimethylphthalate	9.61	163	125233	3.411	ng	100
52) Acenaphthene	9.93	154	101500	3.232	ng	98
58) Fluorene	10.45	166	118387	3.443	ng	99
71) Phenanthrene	11.41	178	1846442	38.883	ng	99
72) Anthracene	11.46	178	513669	10.998	ng	96
73) Carbazole	11.61	167	175946	3.907	ng	99
75) Fluoranthene	12.60	202	2704813	52.851	ng	100
78) Pyrene	12.83	202	2481640	54.180	ng	99
81) Benzo(a)anthracene	14.02	228	1374927	35.118	ng	97
83) Chrysene	14.06	228	1110910	28.362	ng	96
87) Indeno(1,2,3-cd)pyrene	16.99	276	660428	16.066	ng	96
88) Benzo(b)fluoranthene	15.08	252	1544808m	35.546	ng	
89) Benzo(k)fluoranthene	15.10	252	440214m	10.890	ng	
90) Benzo(a)pyrene	15.45	252	1095512	28.033	ng	97
91) Dibenzo(a,h)anthracene	16.99	278	167733	4.985	ng	# 88
92) Benzo(g,h,i)perylene	17.43	276	669891	20.667	ng	97

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

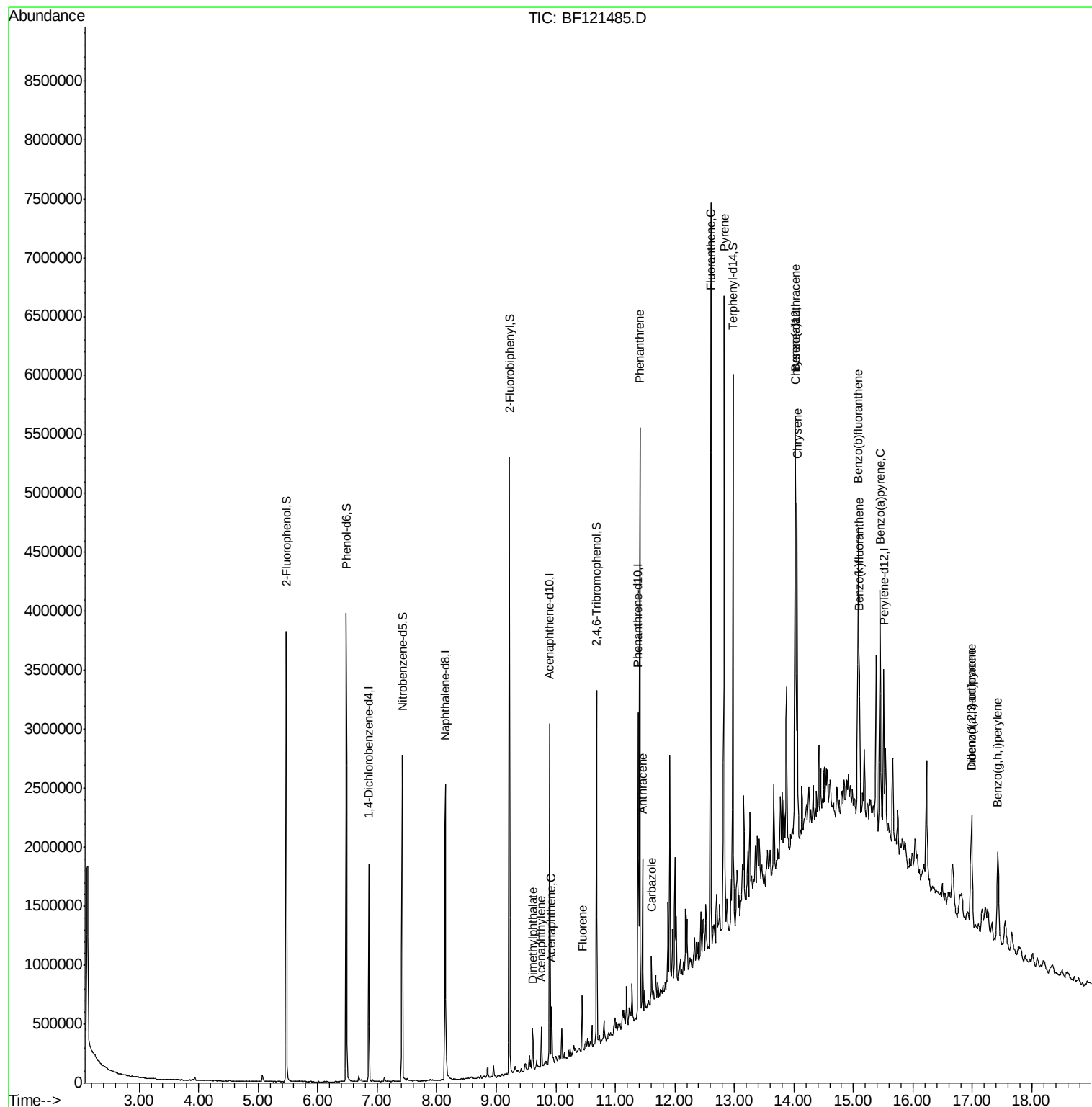
Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF083120\
Data File : BF121485.D
Acq On : 31 Aug 2020 19:02
Operator : JU/CG
Sample : L3847-27
Misc :
ALS Vial : 14 Sample Multiplier: 1

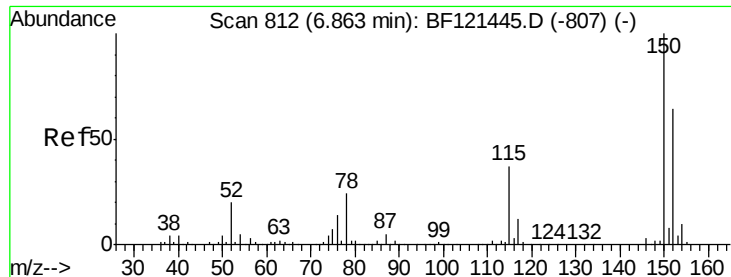
Instrument :
BNA_F
ClientSampleId :
LINDEN-JOP-BH-12-B

Manual Integrations
APPROVED

mohammad
9/2/2020 1:56:07 PM

Quant Time: Sep 01 01:04:37 2020
Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF082720.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Aug 28 09:25:49 2020
Response via : Initial Calibration





#1

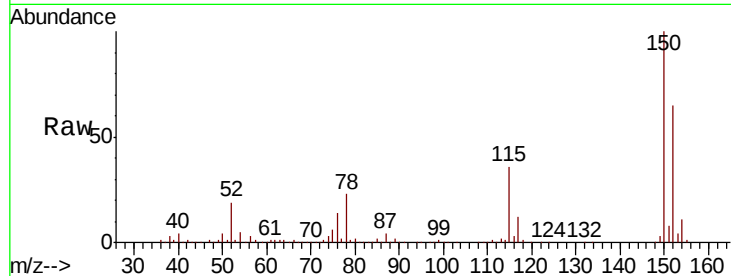
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.86 min Scan# 812
Delta R.T. -0.00 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Instrument :
BNA_F
ClientSampleId :
LINDEN-JOP-BH-12-B

Tot Ion	Ratio	Lower	Upper
152	100		
150	155.0	125.8	188.6
115	56.1	46.6	69.8

Manual Integrations
APPROVED

mohammad
9/2/2020 1:56:07 PM

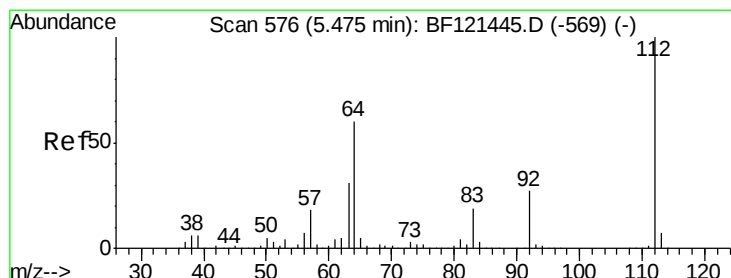
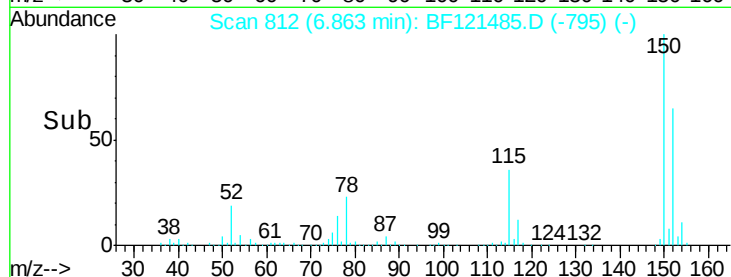
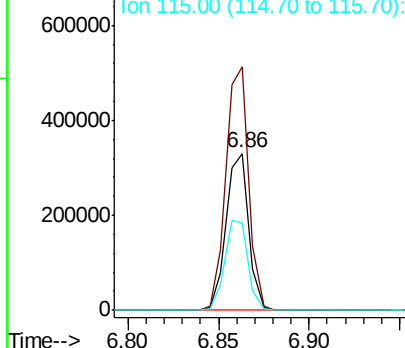


Abundance

Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

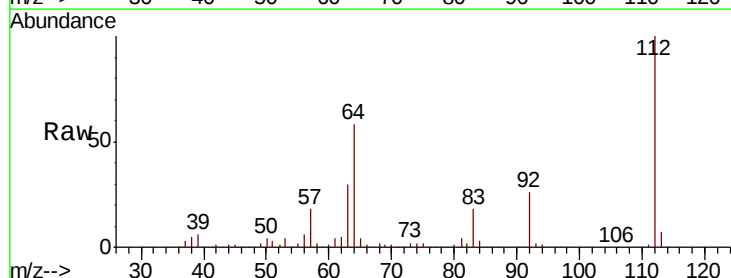
Ion 115.00 (114.70 to 115.70): E



#5

2-Fluorophenol
Concen: 62.701 ng
RT: 5.47 min Scan# 576
Delta R.T. -0.00 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Tgt Ion	Ratio	Lower	Upper
112	100		
64	58.1	48.2	72.2
63	29.5	24.8	37.2

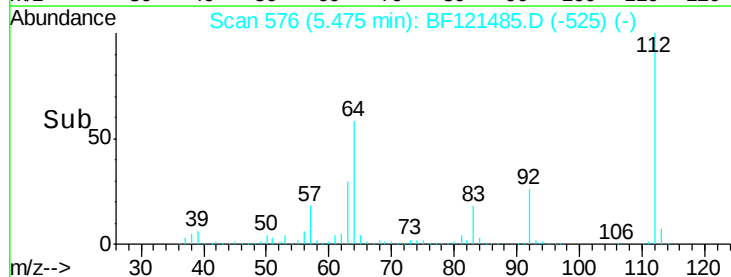
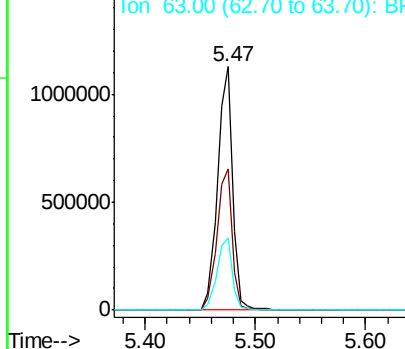


Abundance

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: 58.074 ng

RT: 6.48 min Scan# 747

Delta R.T. -0.01 min

Lab File: BF121485.D

Acq: 31 Aug 2020 19:02

Instrument :

BNA_F

ClientSampleId :

LINDEN-JOP-BH-12-B

Tot Ion: 99 Resp: 1382231

Ion Ratio Lower Upper

99 100

42 17.6 13.5 20.3

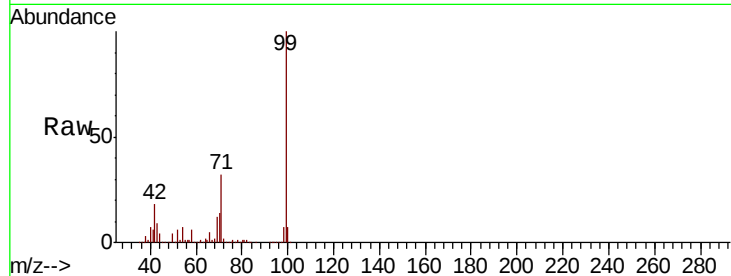
71 31.5 24.6 37.0

Manual Integrations

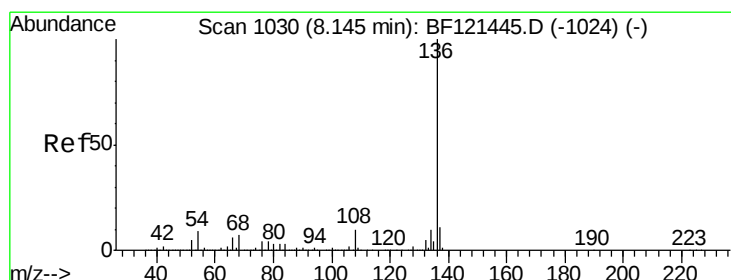
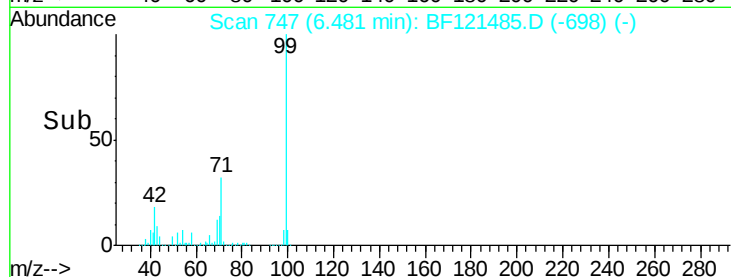
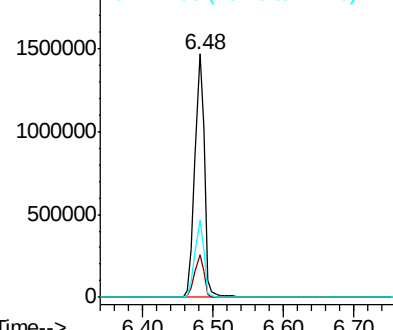
APPROVED

mohammad

9/2/2020 1:56:07 PM



Abundance Ion 99.00 (98.70 to 99.70): BF1
2000000 Ion 42.00 (41.70 to 42.70): BF1
Ion 71.00 (70.70 to 71.70): BF1



#21

Naphthalene-d8

Concen: 20.000 ng

RT: 8.15 min Scan# 1030

Delta R.T. -0.00 min

Lab File: BF121485.D

Acq: 31 Aug 2020 19:02

Tgt Ion: 136 Resp: 1044917

Ion Ratio Lower Upper

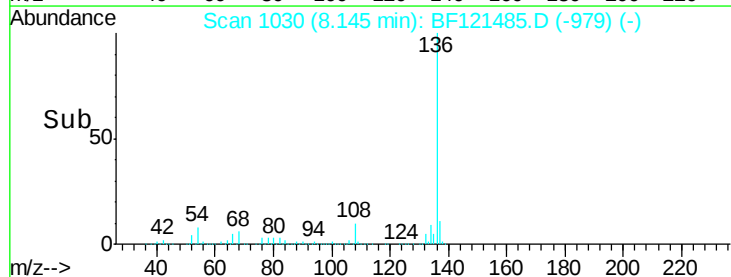
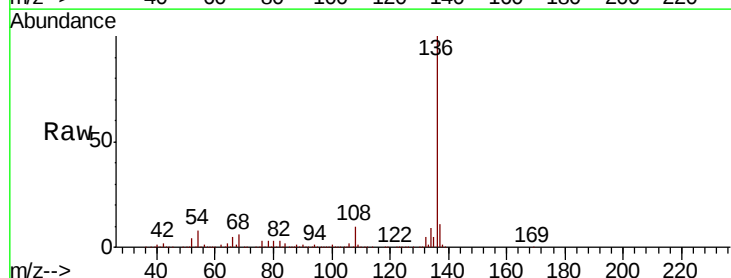
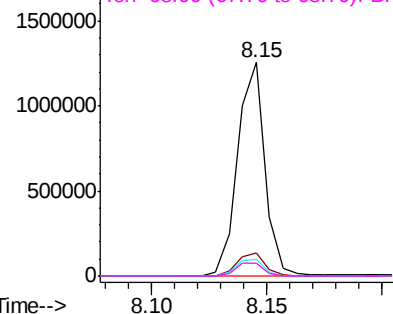
136 100

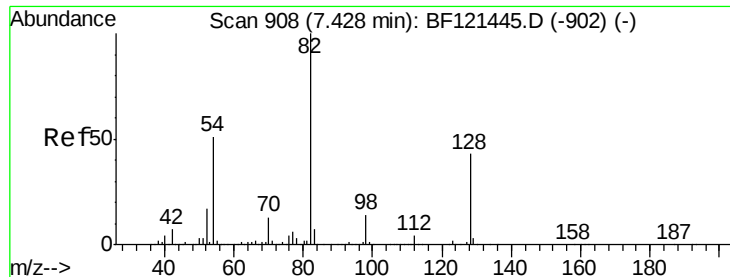
137 10.9 9.1 13.7

54 7.8 7.0 10.4

68 6.2 5.5 8.3

Abundance Ion 136.00 (135.70 to 136.70): E
2000000 Ion 137.00 (136.70 to 137.70): E
Ion 54.00 (53.70 to 54.70): BF1
Ion 68.00 (67.70 to 68.70): BF1





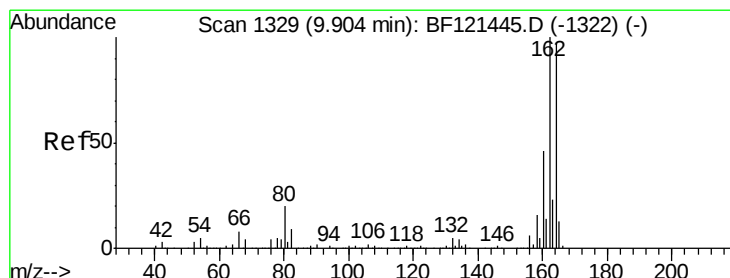
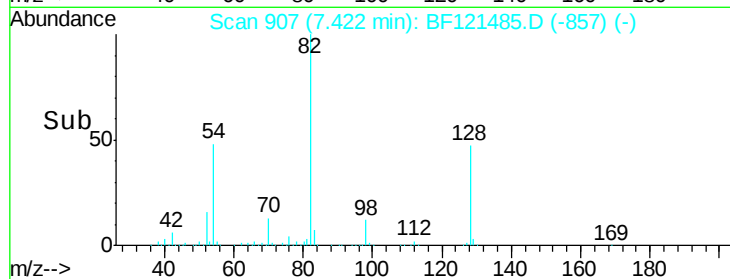
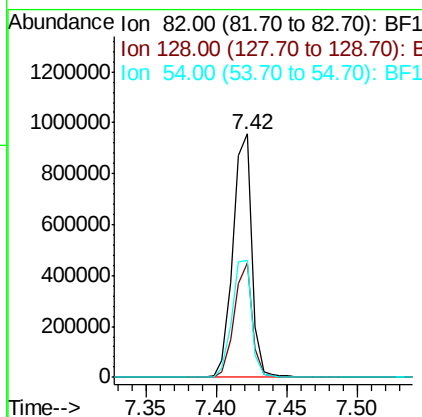
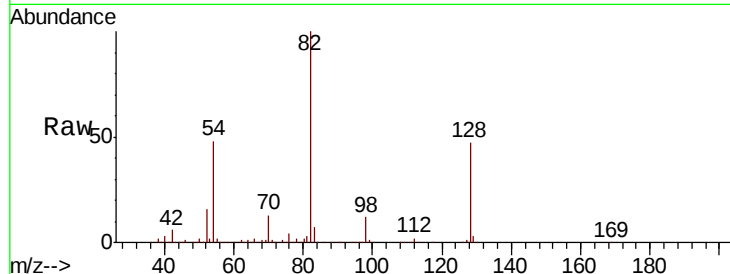
#23
 Nitrobenzene-d5
 Concen: 58.507 ng
 RT: 7.42 min Scan# 907
 Delta R.T. -0.01 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Instrument :
 BNA_F
 ClientSampleId :
 LINDEN-JOP-BH-12-B

Tot Ion	Ratio	Lower	Upper
82	100		
128	47.1	34.1	51.1
54	47.9	41.0	61.6

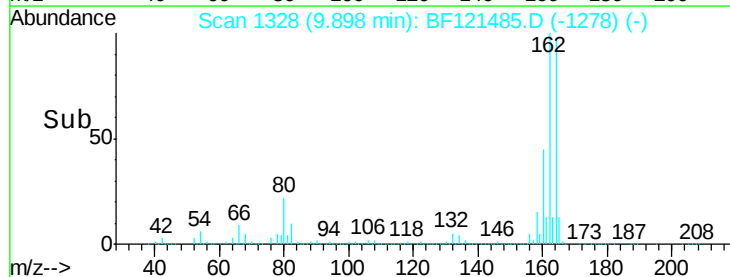
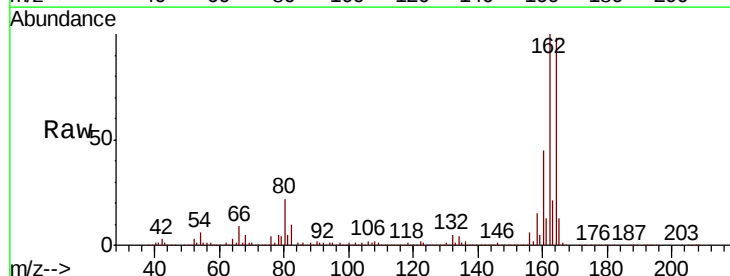
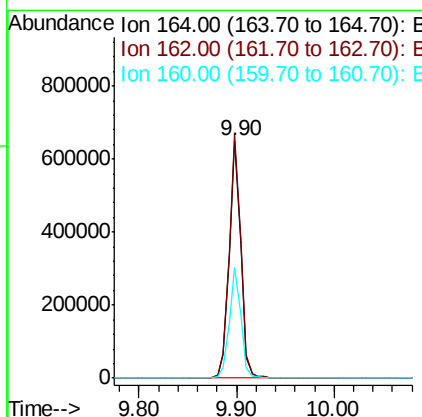
Manual Integrations
 APPROVED

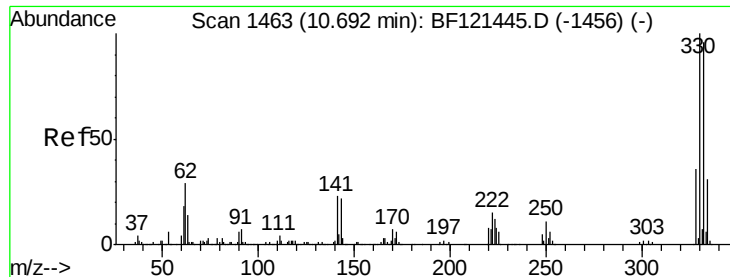
mohammad
 9/2/2020 1:56:07 PM



#39
 Acenaphthene-d10
 Concen: 20.000 ng
 RT: 9.90 min Scan# 1328
 Delta R.T. -0.01 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Tgt Ion	Ratio	Lower	Upper
164	100		
162	102.5	82.4	123.6
160	46.3	37.6	56.4





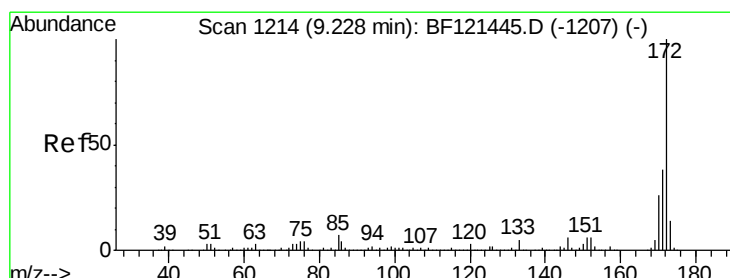
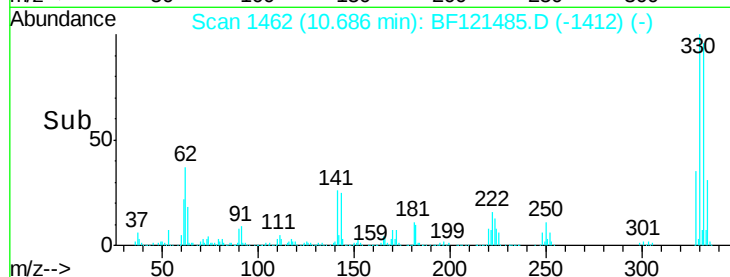
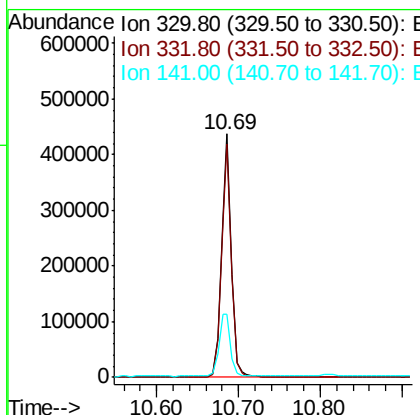
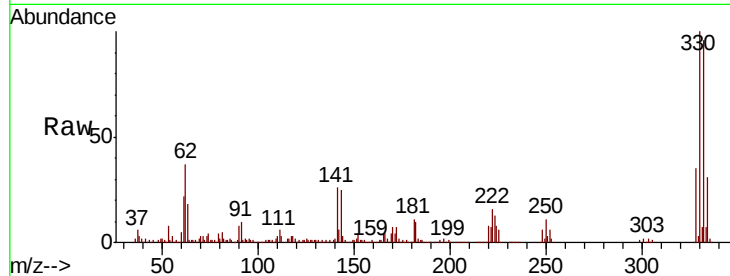
#42
 2,4,6-Tribromophenol
 Concen: 68.324 ng
 RT: 10.69 min Scan# 1462
 Delta R.T. -0.01 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Instrument :
 BNA_F
 ClientSampleId :
 LINDEN-JOP-BH-12-B

Tot Ion	Ratio	Resp	Lower	Upper
330	100	368883		
332	96.2	76.2	114.2	
141	30.3	24.6	36.8	

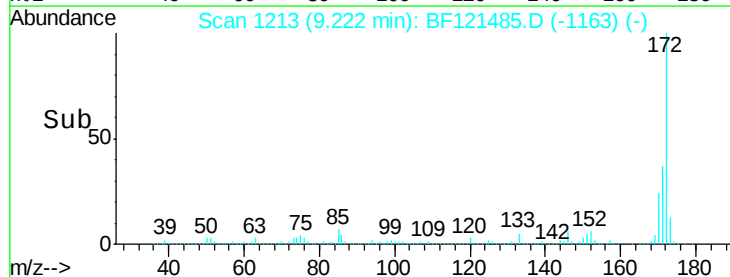
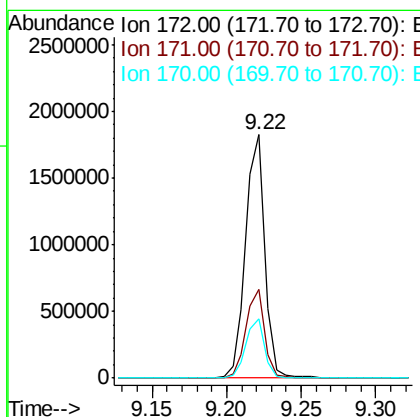
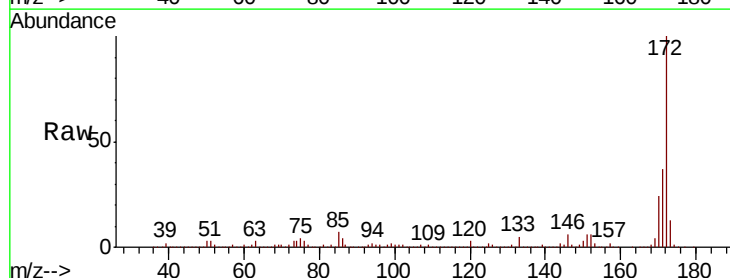
Manual Integrations
 APPROVED

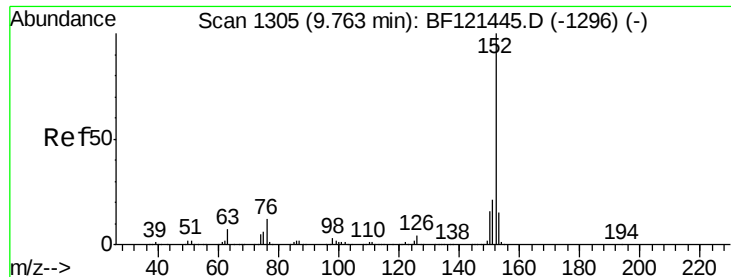
mohammad
 9/2/2020 1:56:07 PM



#45
 2-Fluorobiphenyl
 Concen: 49.264 ng
 RT: 9.22 min Scan# 1213
 Delta R.T. -0.01 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Tgt Ion	Ratio	Resp	Lower	Upper
172	100	1632013		
171	36.7	30.6	45.8	
170	24.4	20.6	31.0	





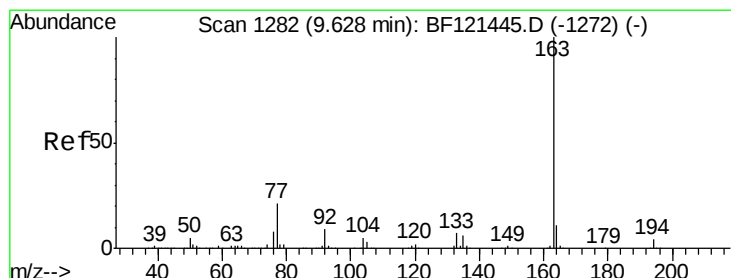
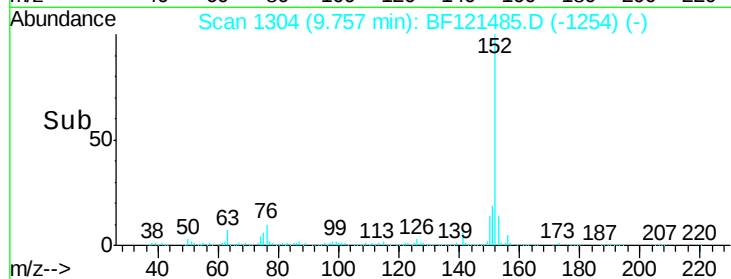
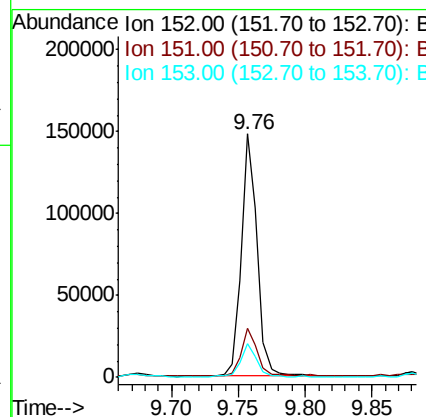
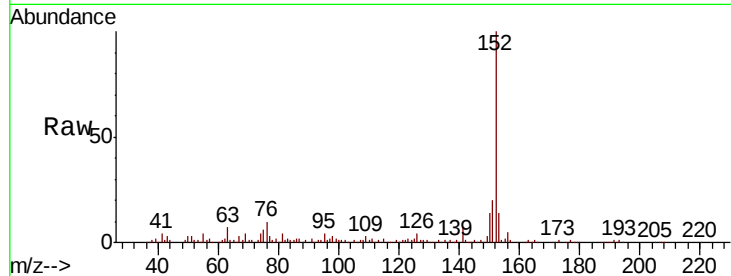
#49
 Acenaphthylene
 Concen: 2.474 ng
 RT: 9.76 min Scan# 1304
 Delta R.T. -0.01 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Instrument :
 BNA_F
 ClientSampleId :
 LINDEN-JOP-BH-12-B

Tot Ion	Ratio	Lower	Upper
152	100		
151	20.0	17.2	25.8
153	14.0	11.6	17.4

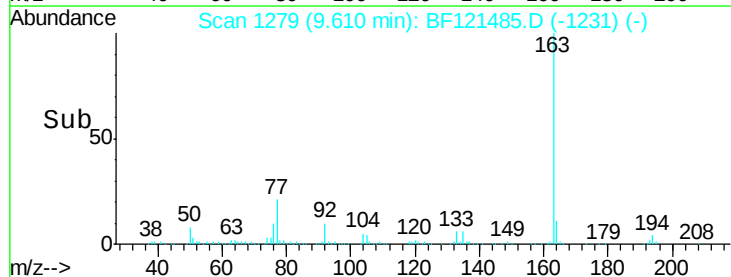
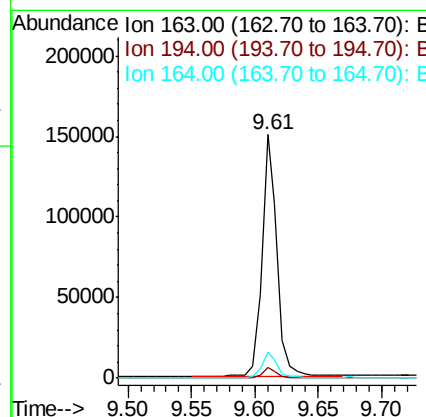
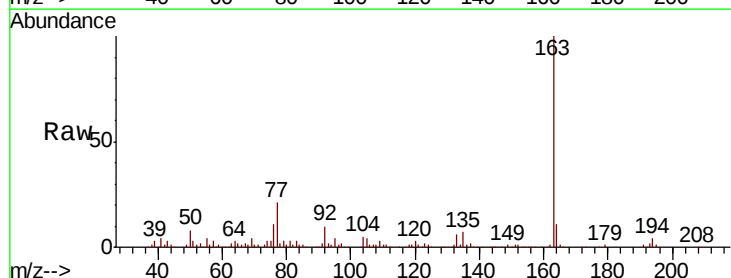
Manual Integrations
 APPROVED

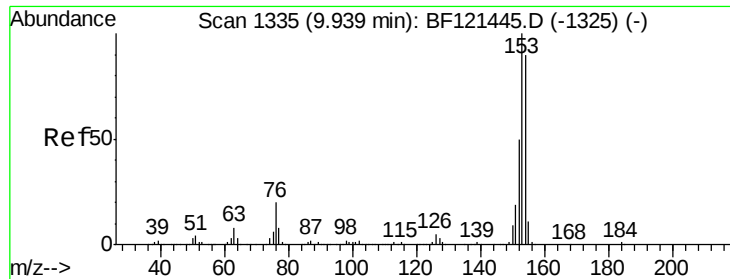
mohammad
 9/2/2020 1:56:07 PM



#50
 Dimethylphthalate
 Concen: 3.411 ng
 RT: 9.61 min Scan# 1279
 Delta R.T. -0.02 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Tgt Ion	Ratio	Lower	Upper
163	100		
194	4.1	3.3	4.9
164	10.8	8.6	12.8





#52

Acenaphthene

Concen: 3.232 ng

RT: 9.93 min Scan# 1333

Delta R.T. -0.01 min

Lab File: BF121485.D

Acq: 31 Aug 2020 19:02

Instrument :

BNA_F

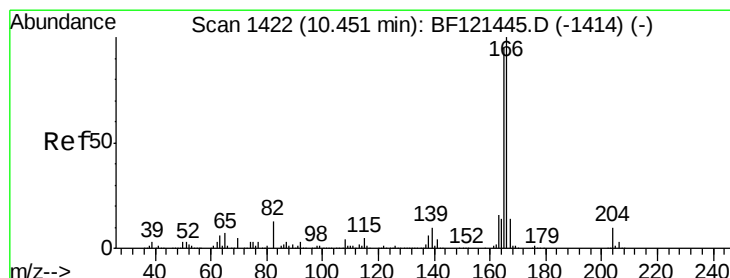
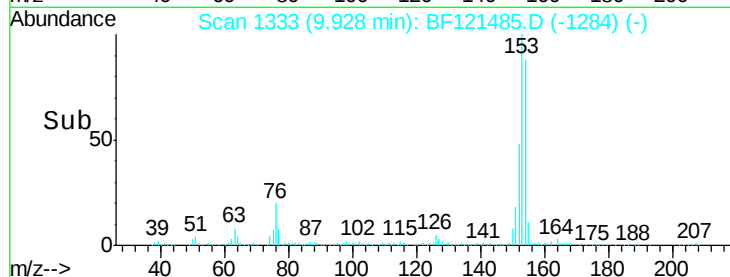
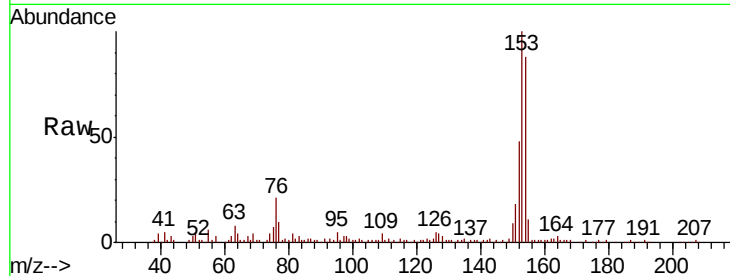
ClientSampleId :

LINDEN-JOP-BH-12-B

Tot Ion:	154	Resp:	101500
Ion Ratio	Lower	Upper	
154	100		
153	113.4	88.9	133.3
152	54.9	44.1	66.1

Manual Integrations
APPROVED

mohammad
9/2/2020 1:56:07 PM



#58

Fluorene

Concen: 3.443 ng

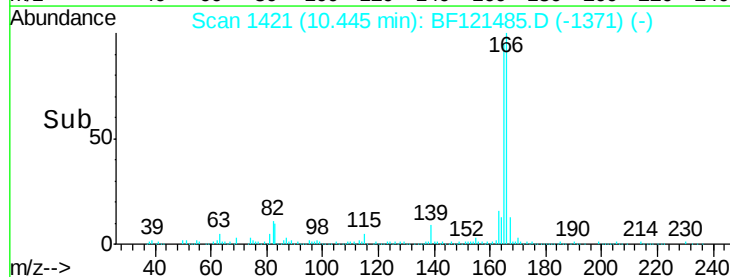
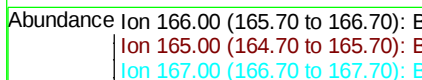
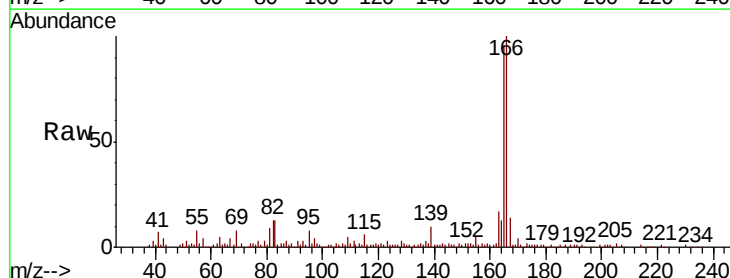
RT: 10.45 min Scan# 1421

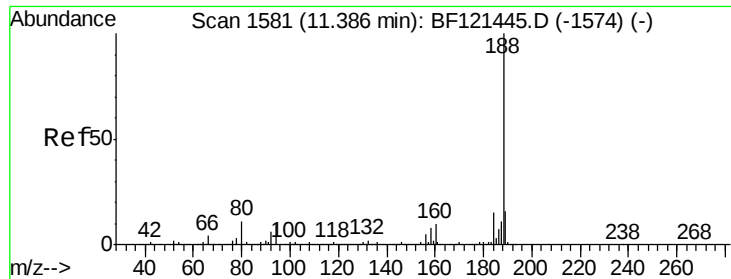
Delta R.T. -0.01 min

Lab File: BF121485.D

Acq: 31 Aug 2020 19:02

Tgt Ion:	166	Resp:	118387
Ion Ratio	Lower	Upper	
166	100		
165	96.1	75.7	113.5
167	14.1	11.1	16.7





#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.39 min Scan# 1581

Delta R.T. -0.00 min

Lab File: BF121485.D

Acq: 31 Aug 2020 19:02

Instrument :

BNA_F

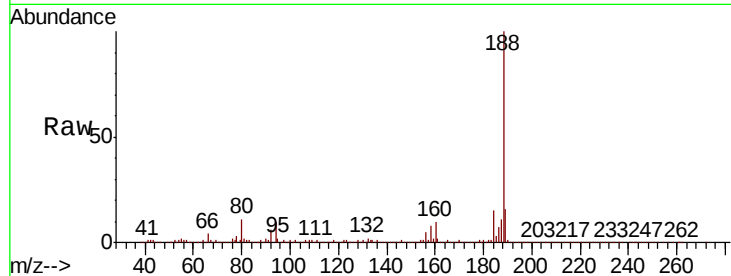
ClientSampleId :

LINDEN-JOP-BH-12-B

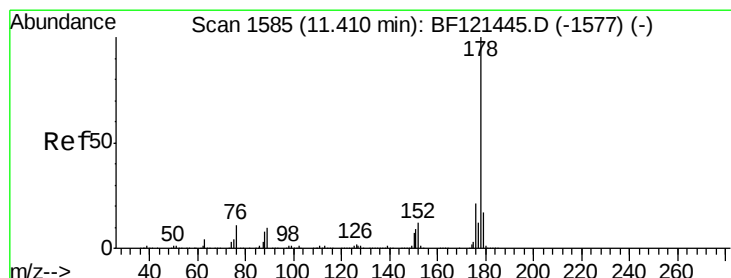
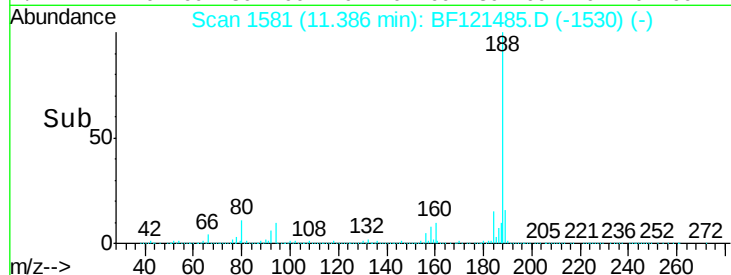
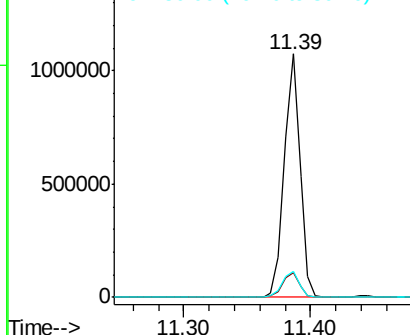
Tot Ion:	188	Resp:	925340
Ion Ratio	Lower	Upper	
188	100		
94	10.4	8.3	12.5
80	10.7	8.6	13.0

Manual Integrations
APPROVED

mohammad
9/2/2020 1:56:07 PM



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



#71

Phenanthrene

Concen: 38.883 ng

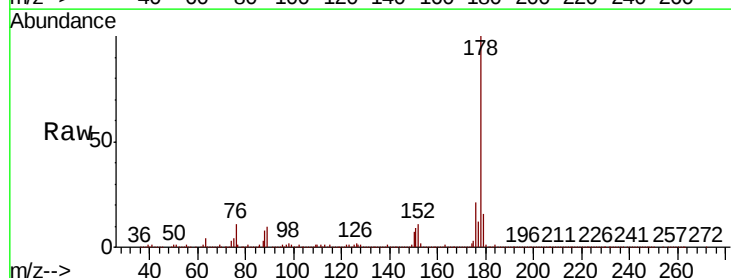
RT: 11.41 min Scan# 1585

Delta R.T. -0.00 min

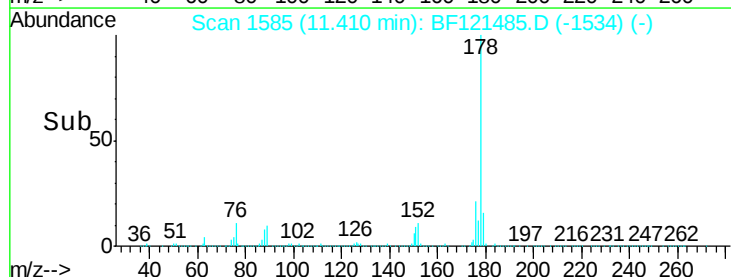
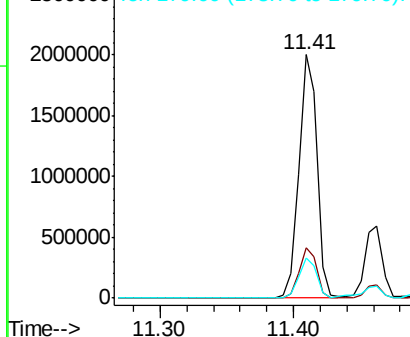
Lab File: BF121485.D

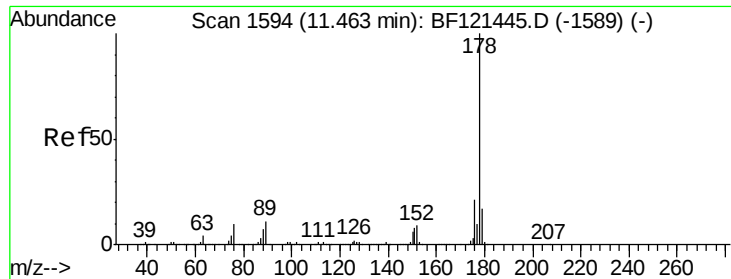
Acq: 31 Aug 2020 19:02

Tgt Ion:	178	Resp:	1846442
Ion Ratio	Lower	Upper	
178	100		
176	20.7	16.9	25.3
179	16.5	13.4	20.0



Abundance Ion 178.00 (177.70 to 178.70): E
Ion 176.00 (175.70 to 176.70): E
Ion 179.00 (178.70 to 179.70): E





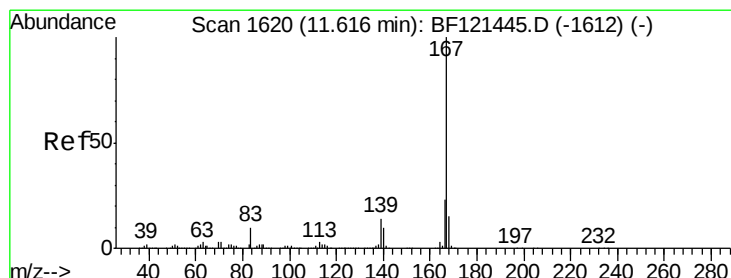
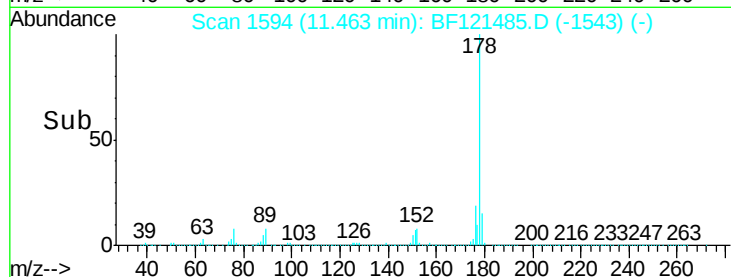
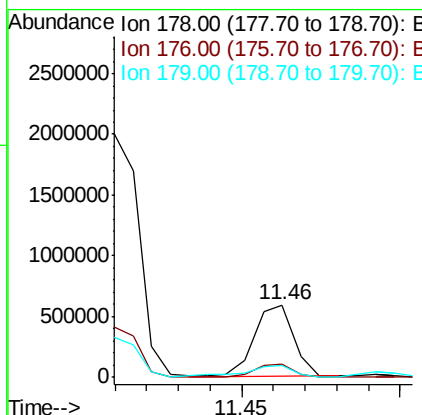
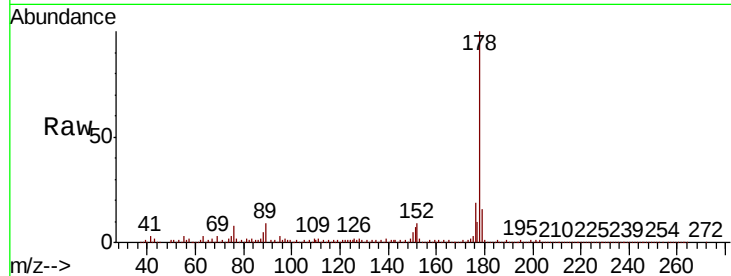
#72
 Anthracene
 Concen: 10.998 ng
 RT: 11.46 min Scan# 1594
 Delta R.T. -0.00 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Instrument :
 BNA_F
 ClientSampleId :
 LINDEN-JOP-BH-12-B

Tot Ion	Ion	Ratio	Lower	Upper
178	100			
176	18.7	16.7	25.1	
179	15.8	13.4	20.2	

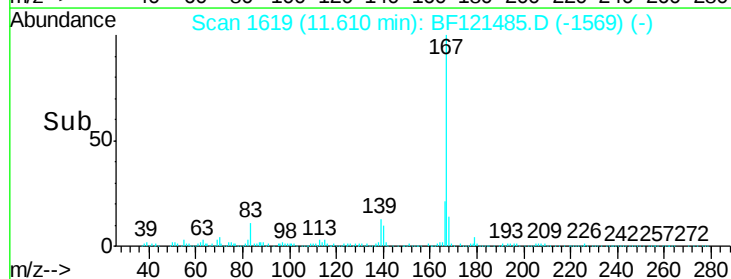
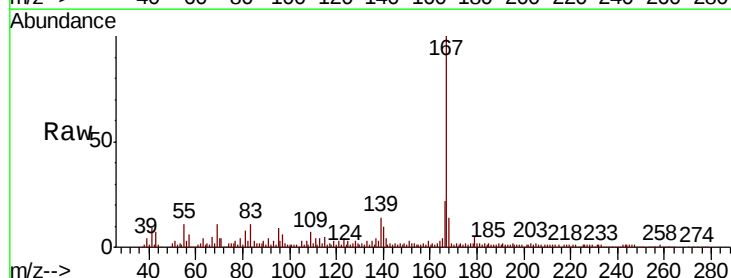
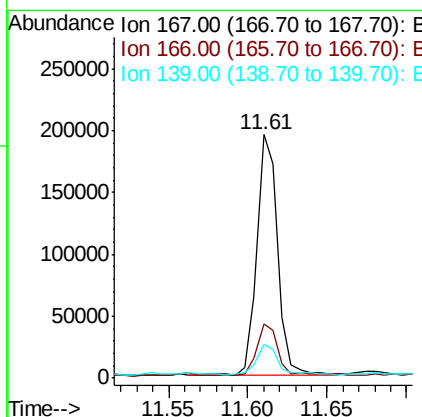
Manual Integrations
 APPROVED

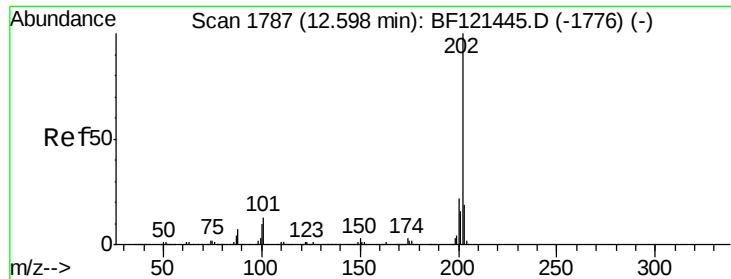
mohammad
 9/2/2020 1:56:07 PM



#73
 Carbazole
 Concen: 3.907 ng
 RT: 11.61 min Scan# 1619
 Delta R.T. -0.01 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Tgt Ion	Ion	Ratio	Lower	Upper
167	100			
166	22.0	18.4	27.6	
139	13.9	11.0	16.6	





#75

Fluoranthene

Concen: 52.851 ng

RT: 12.60 min Scan# 1788

Delta R.T. 0.01 min

Lab File: BF121485.D

Acq: 31 Aug 2020 19:02

Instrument :

BNA_F

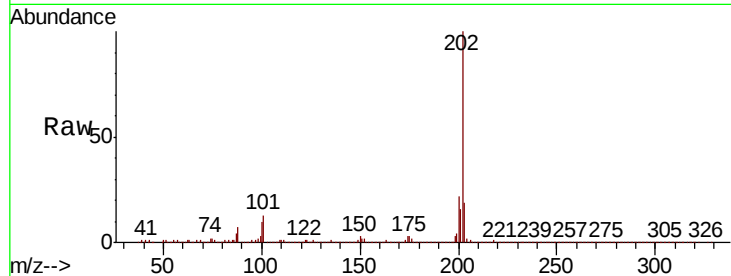
ClientSampleId :

LINDEN-JOP-BH-12-B

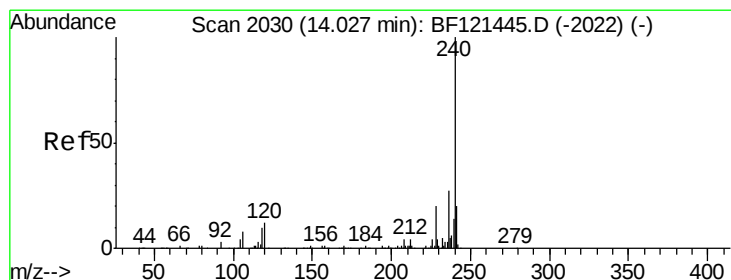
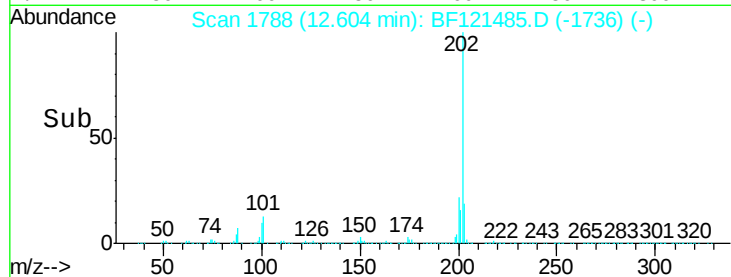
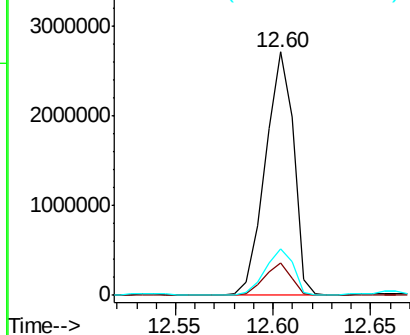
Tot Ion:	202	Resp:	2704813
Ion	Ratio	Lower	Upper
202	100		
101	13.3	0.0	33.3
203	19.3	0.0	39.1

Manual Integrations
APPROVED

mohammad
9/2/2020 1:56:07 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: 14.03 min Scan# 2031

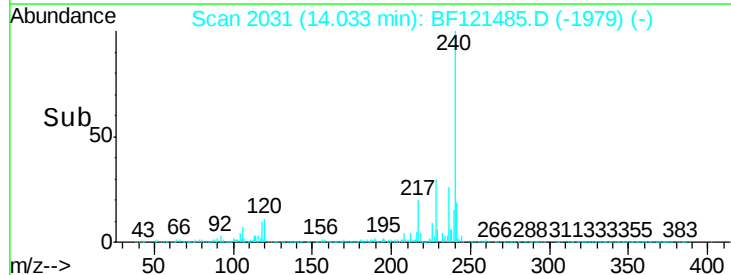
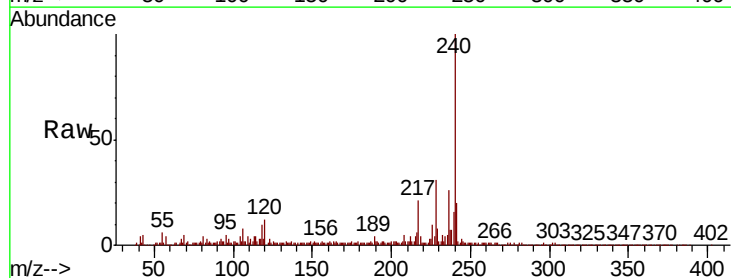
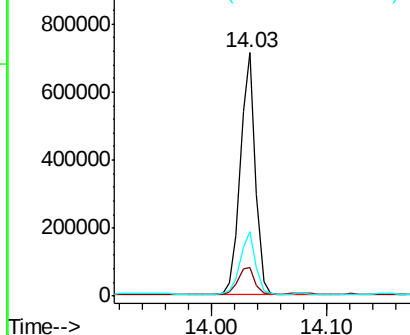
Delta R.T. 0.01 min

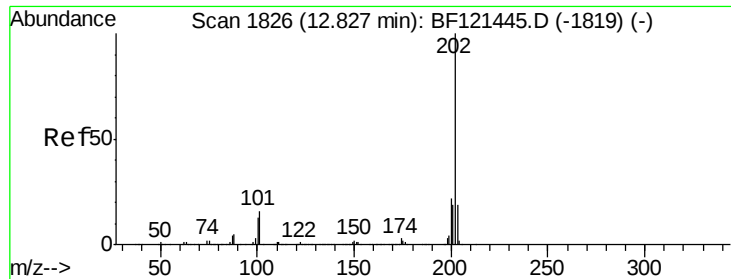
Lab File: BF121485.D

Acq: 31 Aug 2020 19:02

Tgt Ion:	240	Resp:	641348
Ion	Ratio	Lower	Upper
240	100		
120	12.0	9.5	14.3
236	26.4	21.8	32.6

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





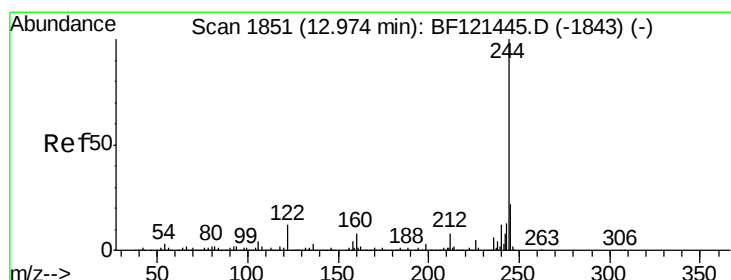
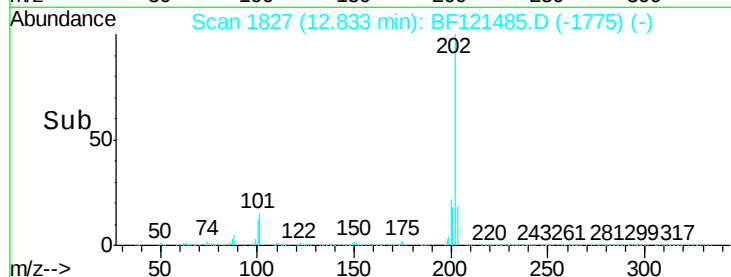
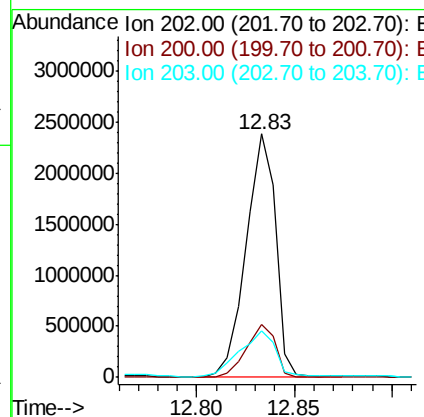
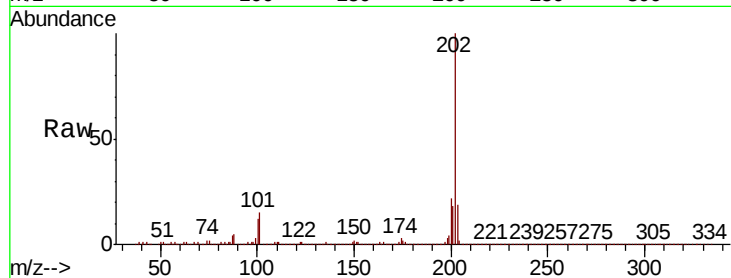
#78
Pvrene
Concen: 54.180 ng
RT: 12.83 min Scan# 1827
Delta R.T. 0.01 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Instrument :
BNA_F
ClientSampleId :
LINDEN-JOP-BH-12-B

Tot Ion	Ratio	Lower	Upper
202	100		
200	21.9	18.0	27.0
203	19.0	15.3	22.9

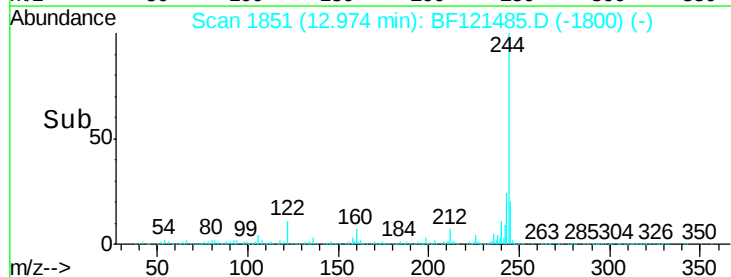
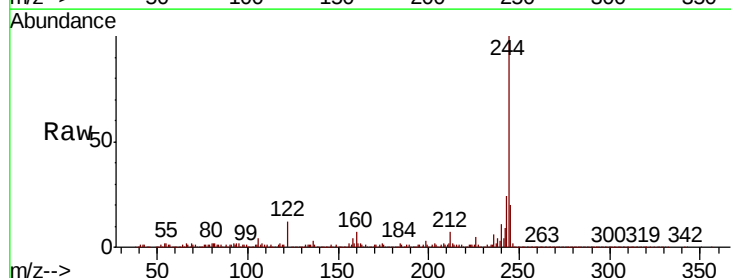
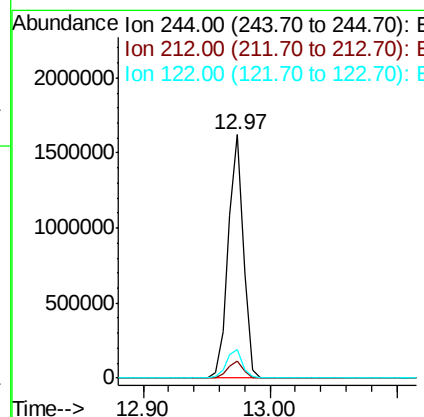
Manual Integrations
APPROVED

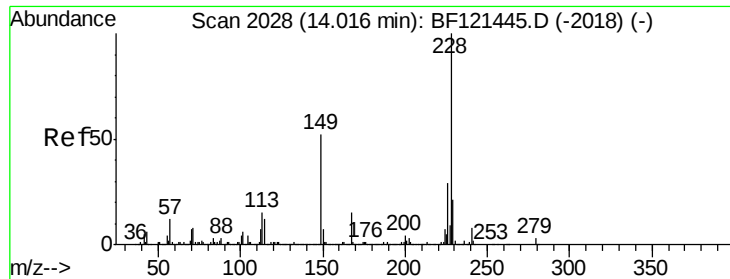
mohammad
9/2/2020 1:56:07 PM



#79
Terphenyl-d14
Concen: 44.082 ng
RT: 12.97 min Scan# 1851
Delta R.T. -0.00 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Tgt Ion	Ratio	Lower	Upper
244	100		
212	7.3	6.3	9.5
122	11.6	9.5	14.3





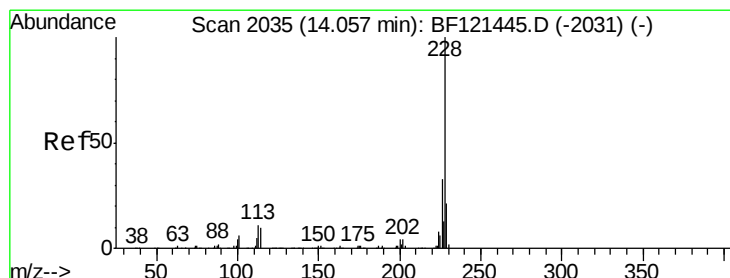
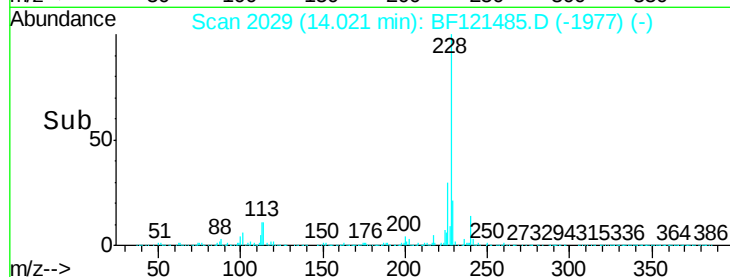
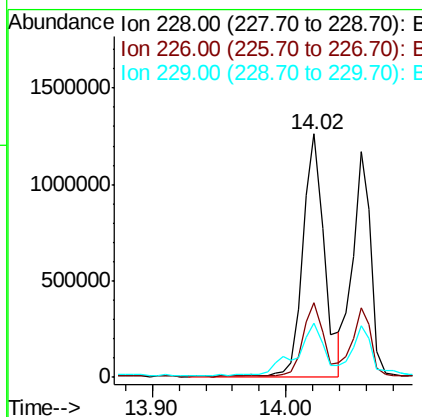
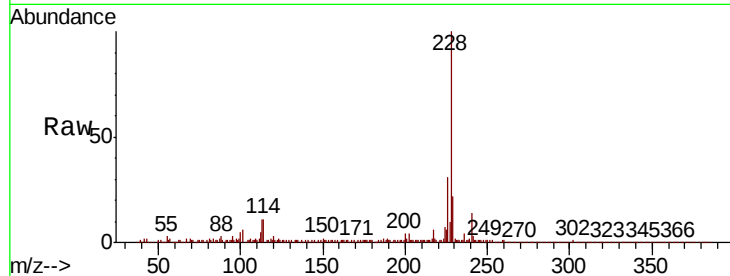
#81
Benzo(a)anthracene
Concen: 35.118 ng
RT: 14.02 min Scan# 2029
Delta R.T. 0.01 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Instrument :
BNA_F
ClientSampleId :
LINDEN-JOP-BH-12-B

Tot Ion:228 Resp: 1374927
Ion Ratio Lower Upper
228 100
226 30.8 23.0 34.4
229 22.0 16.6 24.8

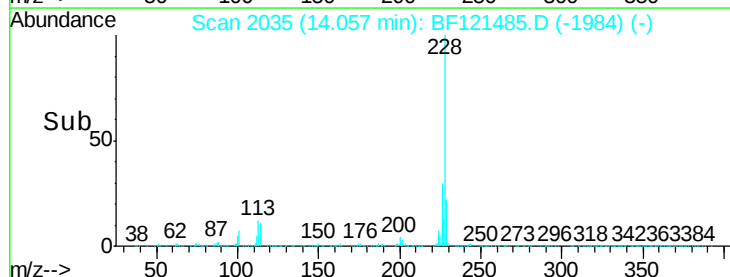
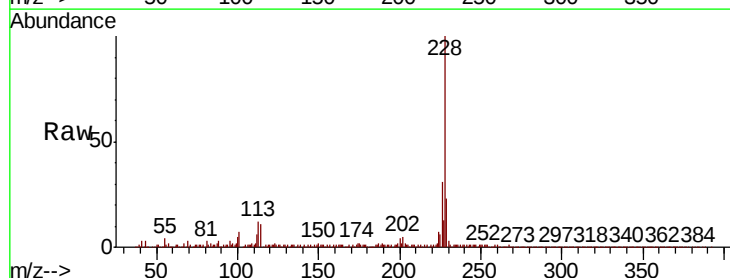
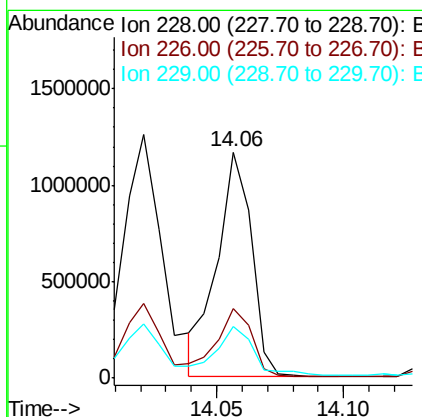
Manual Integrations
APPROVED

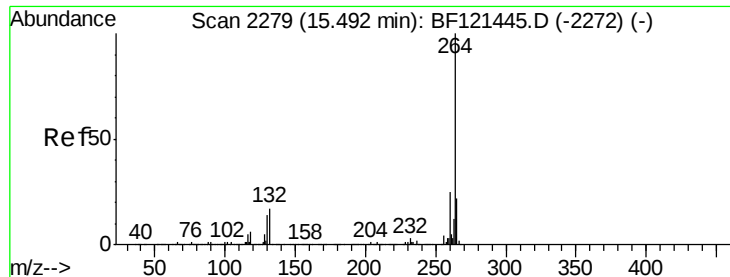
mohammad
9/2/2020 1:56:07 PM



#83
Chrysene
Concen: 28.362 ng
RT: 14.06 min Scan# 2035
Delta R.T. -0.00 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Tgt Ion:228 Resp: 1110910
Ion Ratio Lower Upper
228 100
226 30.8 26.2 39.2
229 23.1 16.6 25.0





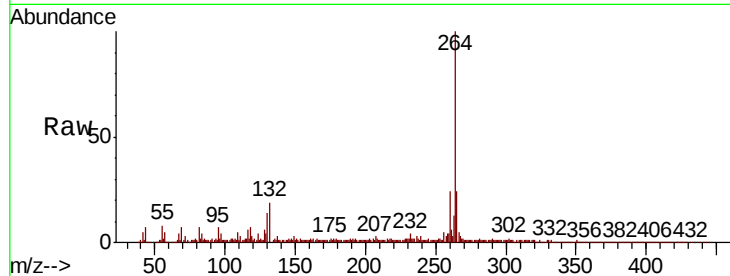
#86
Pervlene-d12
Concen: 20.000 ng
RT: 15.51 min Scan# 2282
Delta R.T. 0.02 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Instrument :
BNA_F
ClientSampleId :
LINDEN-JOP-BH-12-B

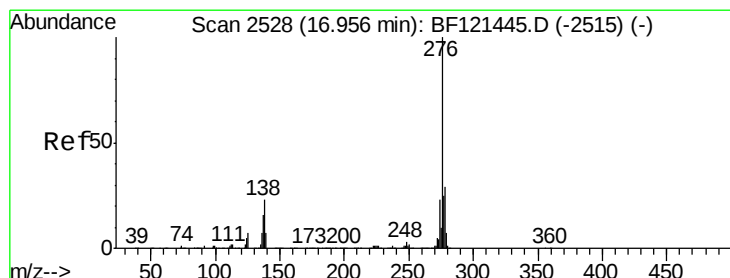
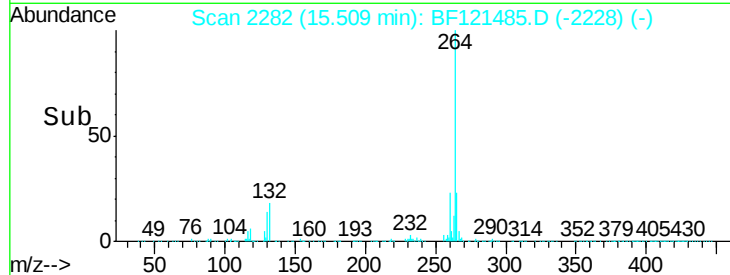
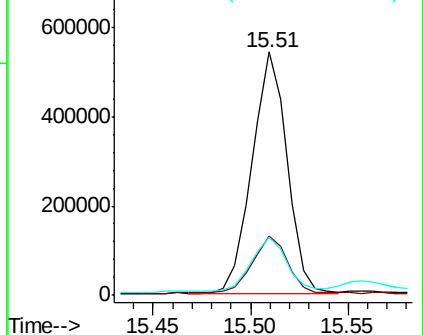
Tot Ion	Ratio	Lower	Upper
264	100		
260	24.2	19.6	29.4
265	23.7	17.8	26.6

Manual Integrations
APPROVED

mohammad
9/2/2020 1:56:07 PM



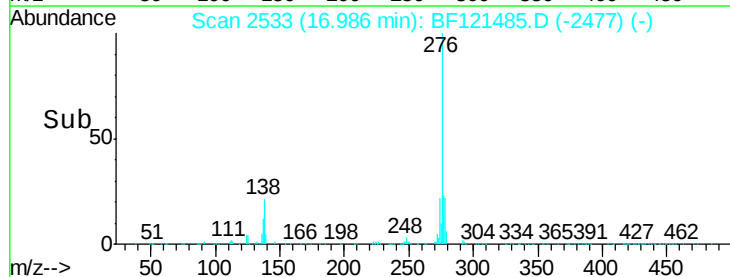
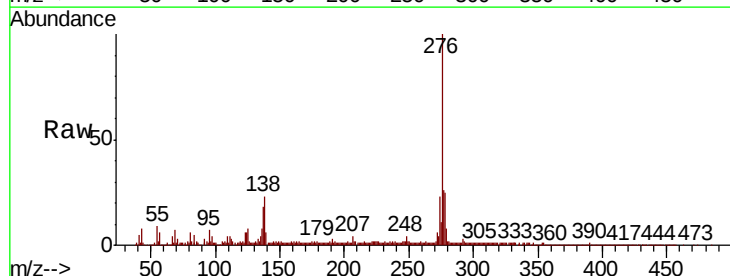
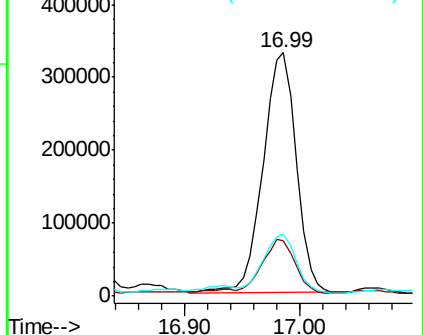
Abundance Ion 264.00 (263.70 to 264.70): E
Ion 260.00 (259.70 to 260.70): E
Ion 265.00 (264.70 to 265.70): E

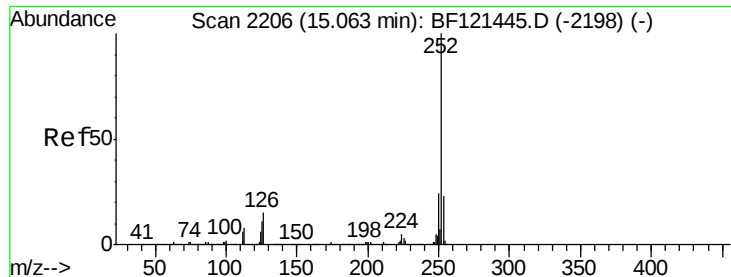


#87
Indeno(1,2,3-cd)pyrene
Concen: 16.066 ng
RT: 16.99 min Scan# 2533
Delta R.T. 0.03 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Tgt Ion	Ratio	Lower	Upper
276	100		
138	23.0	20.6	31.0
277	24.5	20.5	30.7

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





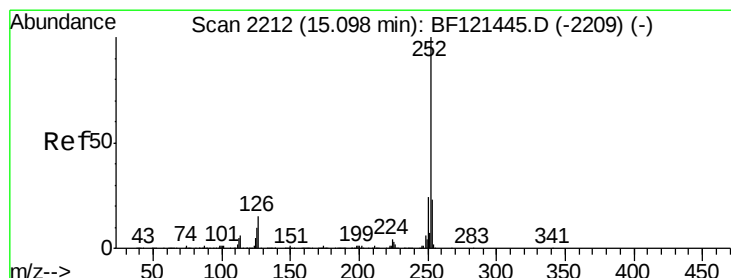
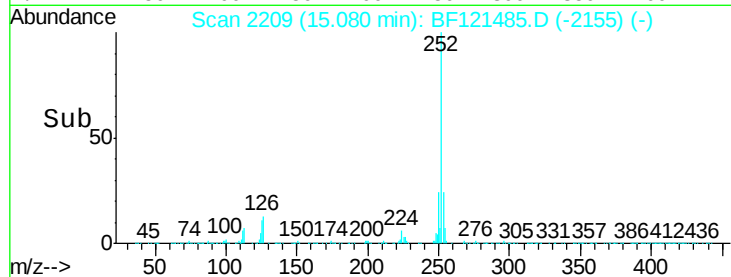
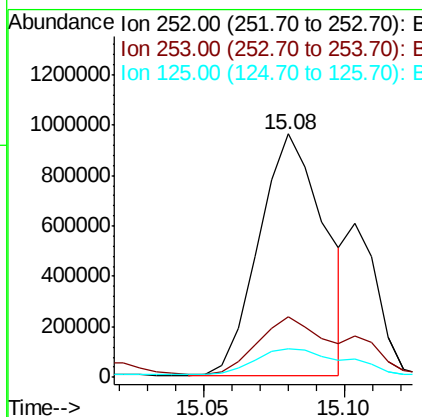
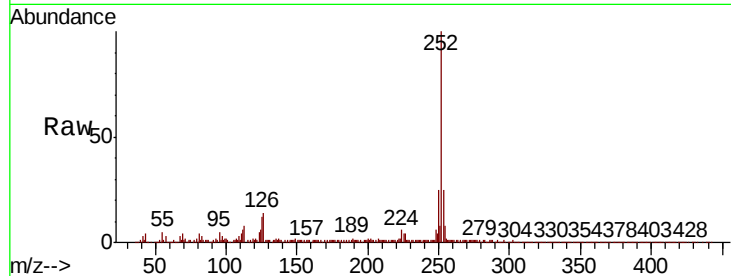
#88
Benzo(b)fluoranthene
Concen: 35.546 ng m
RT: 15.08 min Scan# 2209
Delta R.T. 0.02 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Instrument :
BNA_F
ClientSampleId :
LINDEN-JOP-BH-12-B

Tot Ion	Ratio	Lower	Upper
252	100		
253	24.7	18.3	27.5
125	12.0	9.2	13.8

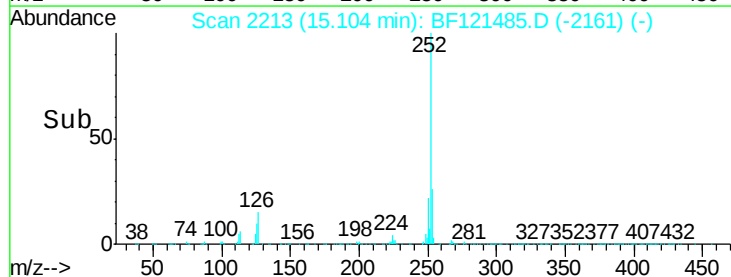
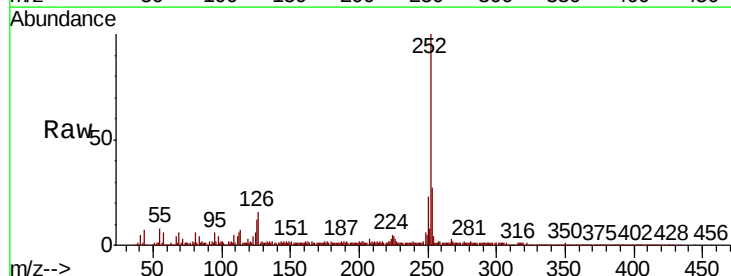
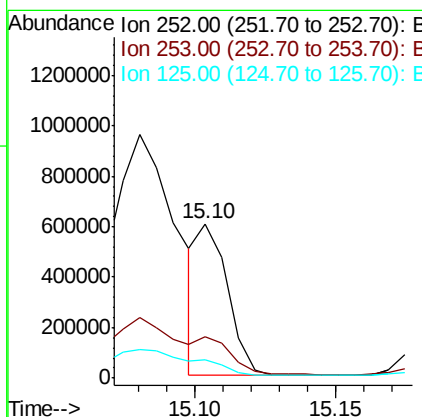
Manual Integrations
APPROVED

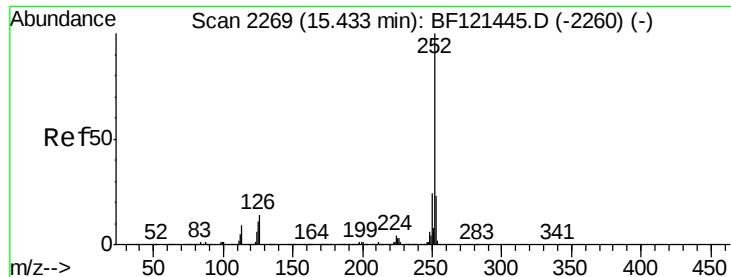
mohammad
9/2/2020 1:56:07 PM



#89
Benzo(k)fluoranthene
Concen: 10.890 ng m
RT: 15.10 min Scan# 2213
Delta R.T. 0.01 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Tgt Ion	Ratio	Lower	Upper
252	100		
253	27.1	18.3	27.5
125	12.1	8.5	12.7





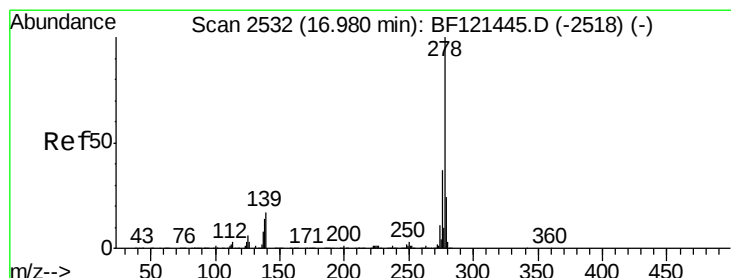
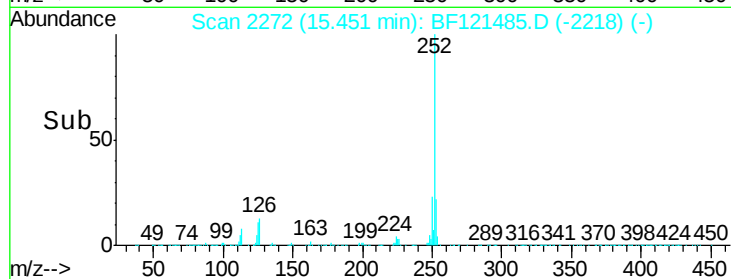
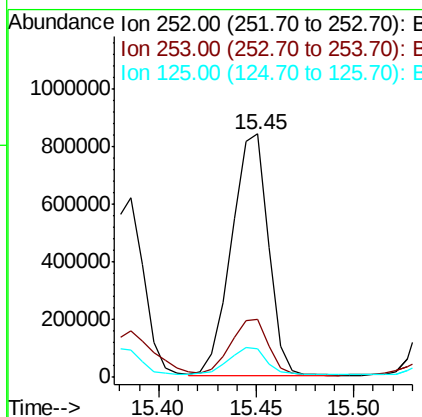
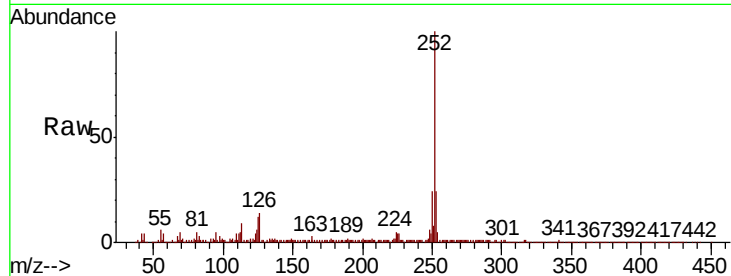
#90
Benzo(a)pyrene
Concen: 28.033 ng
RT: 15.45 min Scan# 2272
Delta R.T. 0.02 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Instrument :
BNA_F
ClientSampleId :
LINDEN-JOP-BH-12-B

Tot Ion	Ratio	Lower	Upper
252	100		
253	23.9	18.0	27.0
125	11.9	9.0	13.4

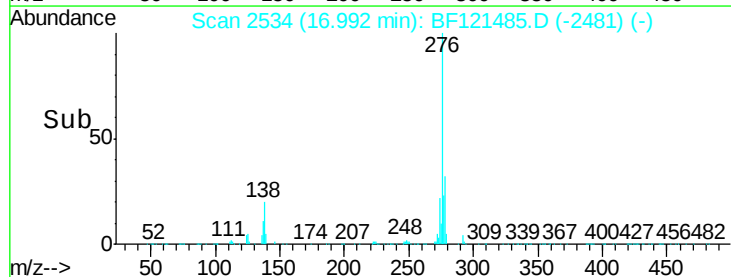
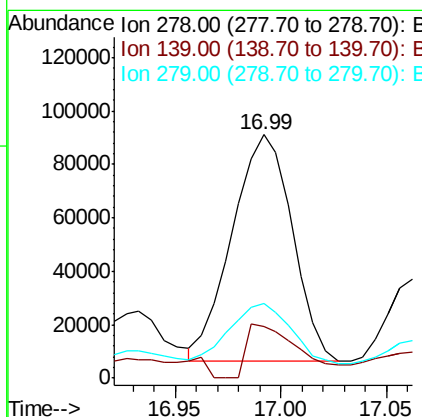
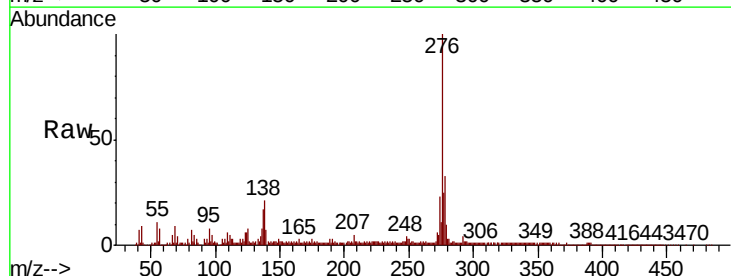
Manual Integrations
APPROVED

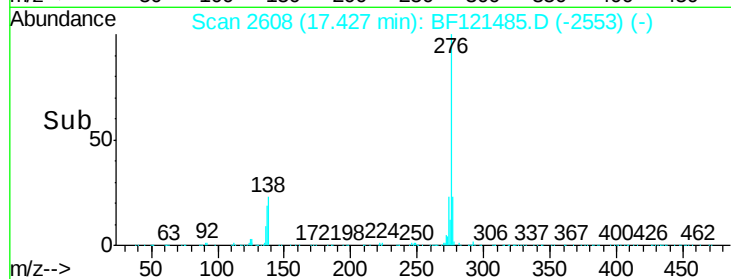
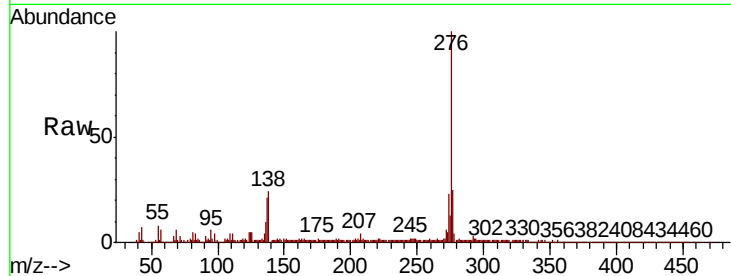
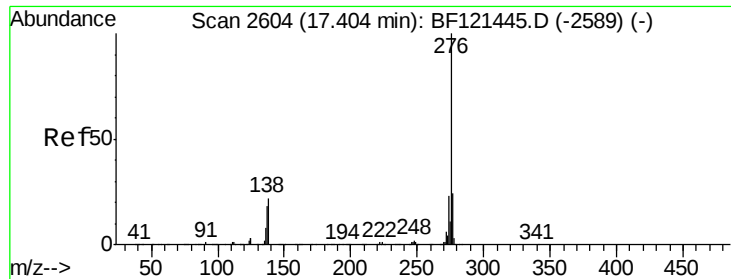
mohammad
9/2/2020 1:56:07 PM



#91
Dibenzo(a,h)anthracene
Concen: 4.985 ng
RT: 16.99 min Scan# 2534
Delta R.T. 0.01 min
Lab File: BF121485.D
Acq: 31 Aug 2020 19:02

Tgt Ion	Ratio	Lower	Upper
278	100		
139	21.1	13.3	19.9#
279	30.5	19.4	29.0#





#92
 Benzo(a,h,i)perylene
 Concen: 20.667 ng
 RT: 17.43 min Scan# 2608
 Delta R.T. 0.02 min
 Lab File: BF121485.D
 Acq: 31 Aug 2020 19:02

Tot Ion:	276	Resp:	669891
Ion Ratio	Lower	Upper	
276	100		
277	24.6	18.9	28.3
138	23.7	17.4	26.0

Instrument :
 BNA_F
 ClientSampleId :
 LINDEN-JOP-BH-12-B

Manual Integrations
 APPROVED

mohammad
 9/2/2020 1:56:07 PM

