

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF042523\
 Data File : BF133054.D
 Acq On : 26 Apr 2023 05:09
 Operator : CG\JU
 Sample : 02270-12 10X
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 SB-27-10-12-20230411

Manual Integrations
 APPROVED

Reviewed By : Christian Giraldo 04/27/2023
 Supervised By : Jagrut Upadhyay 04/27/2023

Quant Time: Apr 26 06:55:22 2023
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF042123.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Tue Apr 25 18:24:07 2023
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.739	152	220013	20.000	ng	0.00
21) Naphthalene-d8	8.027	136	831592	20.000	ng	0.00
39) Acenaphthene-d10	9.774	164	384676	20.000	ng	0.00
64) Phenanthrene-d10	11.262	188	586166	20.000	ng	0.00
76) Chrysene-d12	13.921	240	320938	20.000	ng	0.02
86) Perylene-d12	15.345	264	337309	20.000	ng	# 0.03
System Monitoring Compounds						
5) 2-Fluorophenol	5.339	112	83746	5.750	ng	-0.01
7) Phenol-d6	6.369	99	114589	6.339	ng	-0.02
23) Nitrobenzene-d5	7.298	82	64882	4.211	ng	-0.01
42) 2,4,6-Tribromophenol	10.563	330	15474	4.000	ng	0.00
45) 2-Fluorobiphenyl	9.098	172	138045	6.004	ng	-0.01
79) Terphenyl-d14	12.845	244	123618	6.643	ng	0.00
Target Compounds						Qvalue
31) Naphthalene	8.051	128	1313545	31.593	ng	100
37) 2-Methylnaphthalene	8.739	142	279926	9.848	ng	99
38) 1-Methylnaphthalene	8.833	142	156302	5.878	ng	100
46) 1,1'-Biphenyl	9.198	154	100670	3.300	ng	99
52) Acenaphthene	9.816	154	1000697	41.883	ng	100
55) Dibenzofuran	9.980	168	686309	21.058	ng	100
58) Fluorene	10.327	166	873566	36.584	ng	100
71) Phenanthrene	11.304	178	5149962	163.466	ng	98
72) Anthracene	11.345	178	1995898	61.905	ng	99
73) Carbazole	11.492	167	1125375	39.200	ng	99
75) Fluoranthene	12.498	202	7685231	243.061	ng	95
78) Pyrene	12.727	202	6758837	245.671	ng	96
81) Benzo(a)anthracene	13.909	228	5418280	245.505	ng	97
83) Chrysene	13.951	228	4132359m	187.286	ng	
87) Indeno(1,2,3-cd)pyrene	16.744	276	1904317	99.251	ng	95
88) Benzo(b)fluoranthene	14.951	252	5518598m	257.167	ng	
89) Benzo(k)fluoranthene	14.974	252	1830633m	86.057	ng	
90) Benzo(a)pyrene	15.303	252	3576284	183.096	ng	96
91) Dibenzo(a,h)anthracene	16.750	278	555856	34.735	ng	95
92) Benzo(g,h,i)perylene	17.162	276	1632456	103.328	ng	99

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

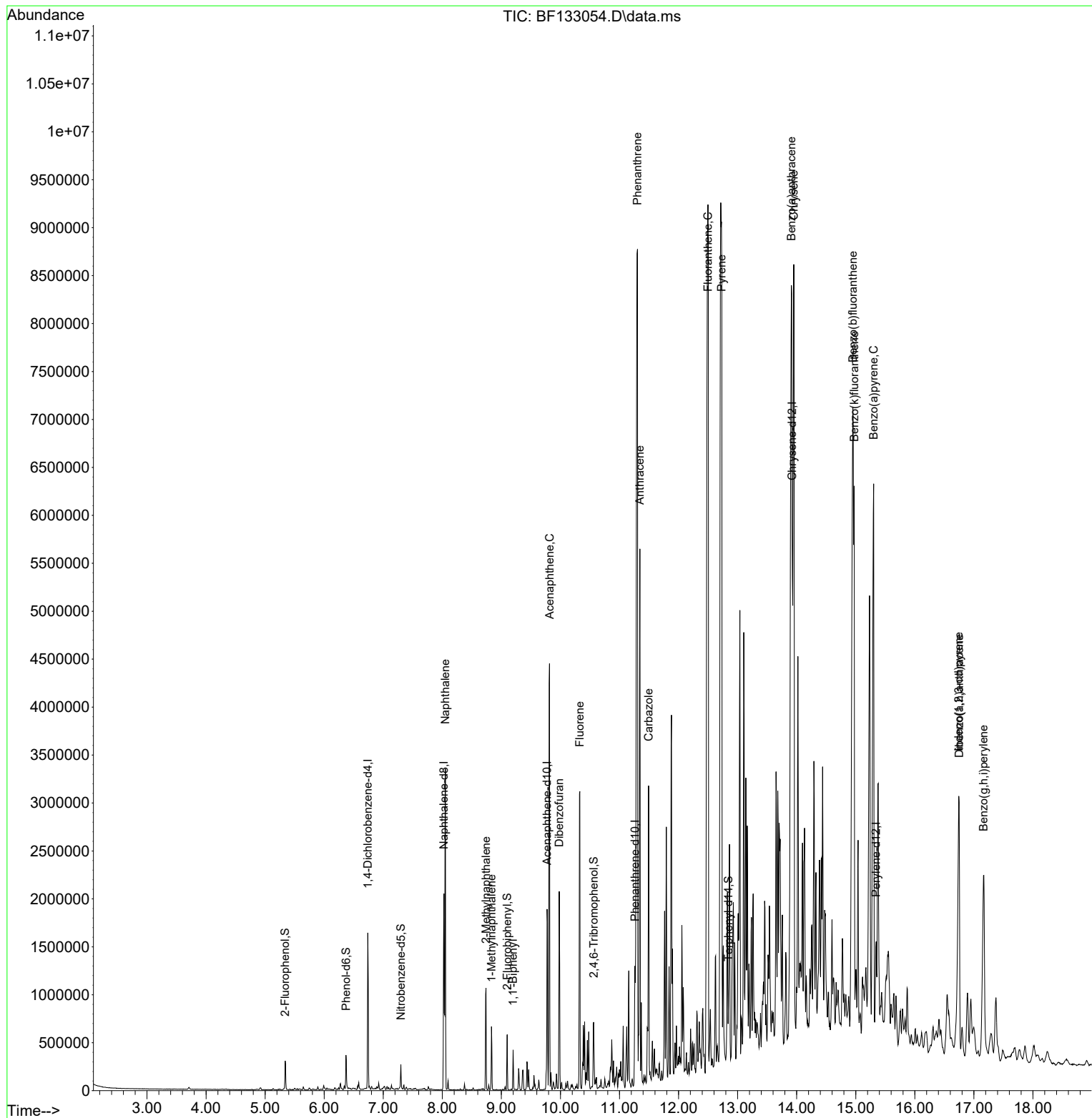
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF042523\
Data File : BF133054.D
Acq On : 26 Apr 2023 05:09
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ALS Vial : 23 Sample Multiplier: 1

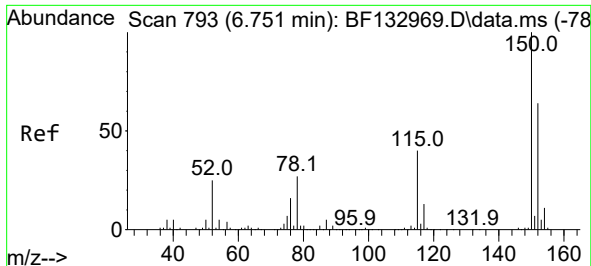
Instrument :
BNA_F
ClientSampleId :
SB-27-10-12-20230411

Quant Time: Apr 26 06:55:22 2023
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF042123.M
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QLast Update : Tue Apr 25 18:24:07 2023
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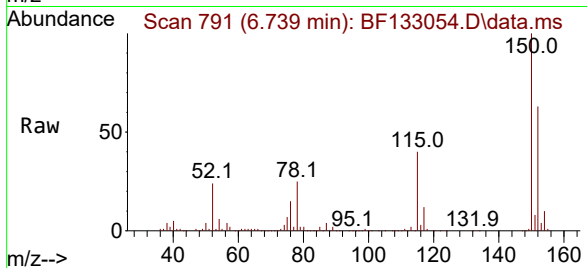
Reviewed By : Christian Giraldo 04/27/2023
Supervised By : Jagrut Upadhyay 04/27/2023





#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.739 min Scan# 793
Delta R.T. -0.006 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

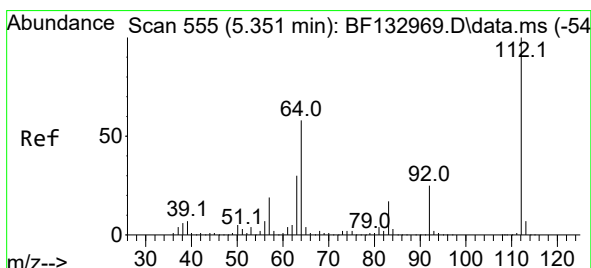
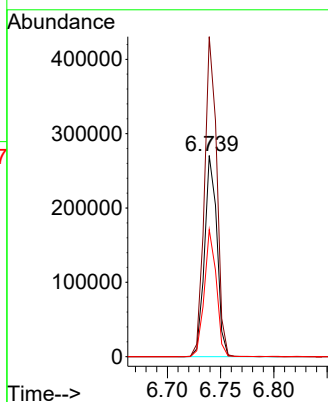
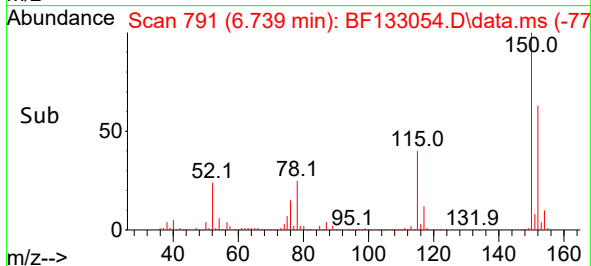
Instrument :
BNA_F
ClientSampleId :
SB-27-10-12-20230411



Tgt Ion:152 Resp: 22001
Ion Ratio Lower Upper
152 100
150 159.1 124.8 187.2
115 63.2 49.9 74.9

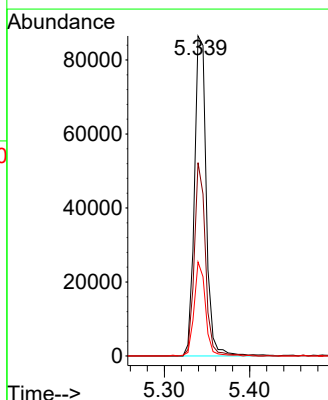
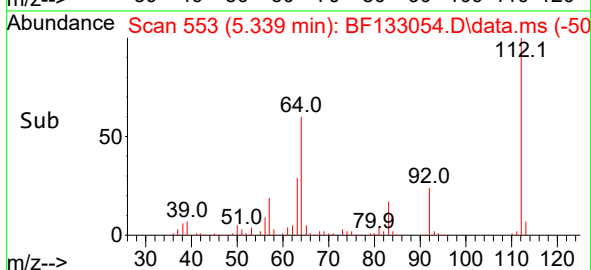
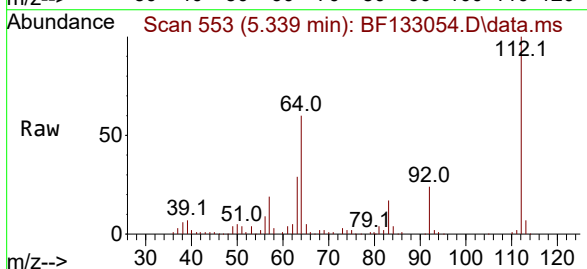
Manual Integrations
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Reviewed By :Christian Giraldo 04/27/2023
Supervised By :Jagrut Upadhyay 04/27/2023



#5
2-Fluorophenol
Concen: 5.750 ng
RT: 5.339 min Scan# 553
Delta R.T. -0.012 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

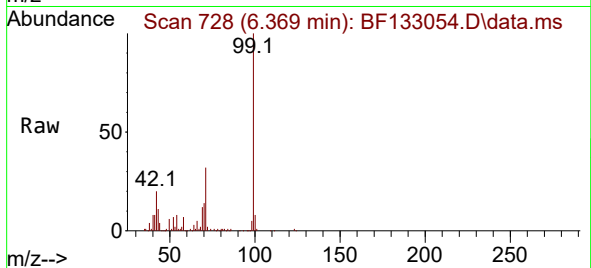
Tgt Ion:112 Resp: 83746
Ion Ratio Lower Upper
112 100
64 60.4 46.8 70.2
63 29.4 23.8 35.8





#7
Phenol-d6
Concen: 6.339 ng
RT: 6.369 min Scan# 71
Delta R.T. -0.018 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

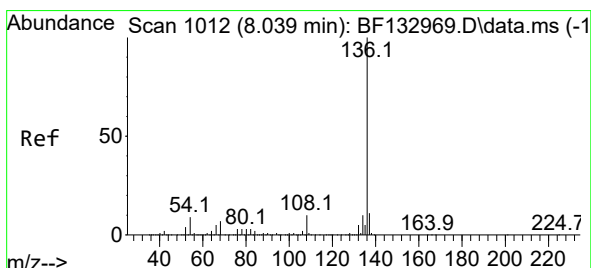
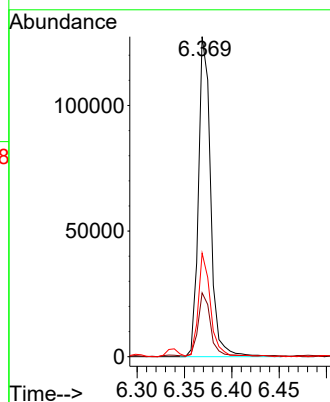
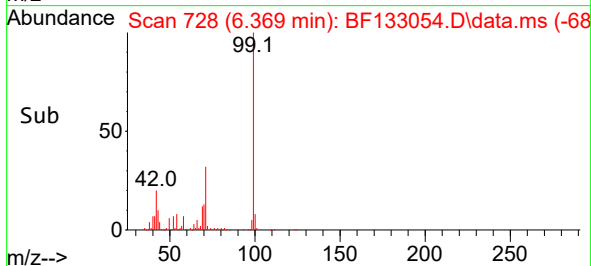
Instrument :
BNA_F
ClientSampleId :
SB-27-10-12-20230411



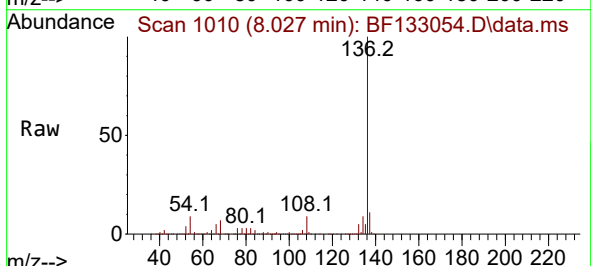
Tgt Ion: 99 Resp: 114589
Ion Ratio Lower Upper
99 100
42 19.9 16.3 24.5
71 32.3 25.6 38.4

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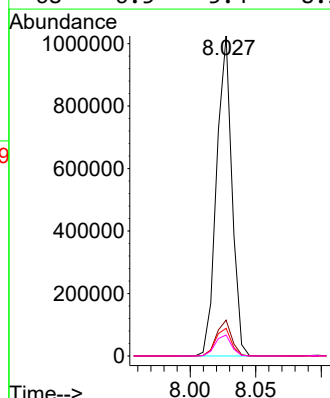
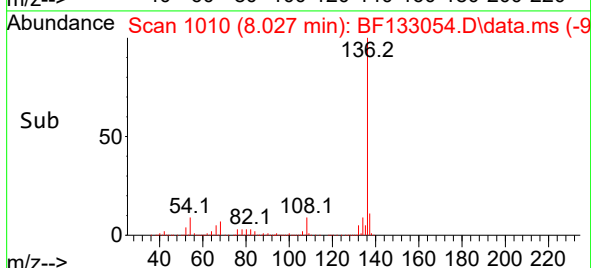
Reviewed By :Christian Giraldo 04/27/2023
Supervised By :Jagrut Upadhyay 04/27/2023

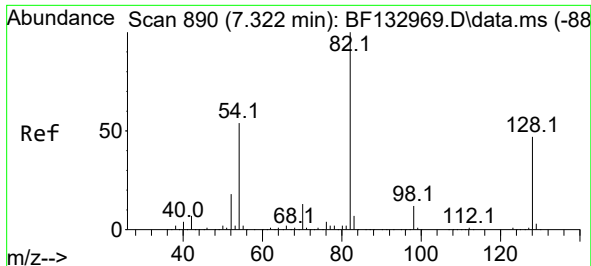


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.027 min Scan# 1010
Delta R.T. -0.000 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09



Tgt Ion:136 Resp: 831592
Ion Ratio Lower Upper
136 100
137 11.2 8.6 13.0
54 8.7 7.0 10.4
68 6.5 5.4 8.2





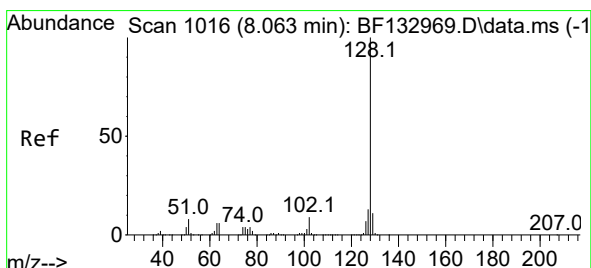
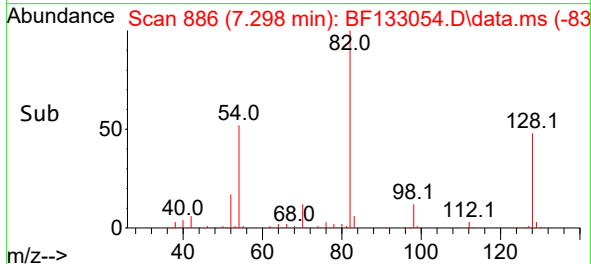
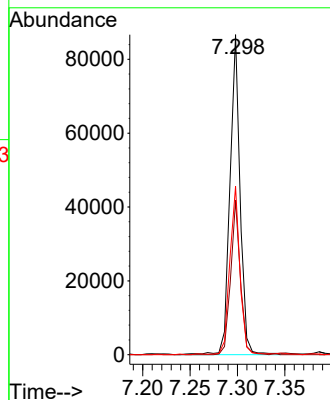
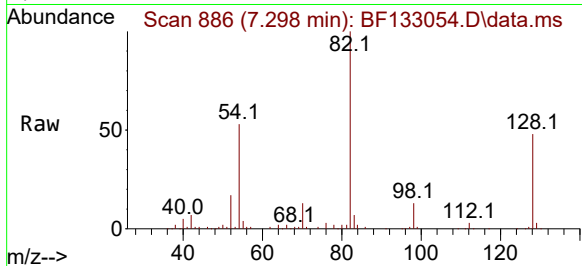
#23
Nitrobenzene-d5
Concen: 4.211 ng
RT: 7.298 min Scan# 80
Delta R.T. -0.012 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

Instrument :
BNA_F
ClientSampleId :
SB-27-10-12-20230411

Tgt Ion: 82 Resp: 6488
Ion Ratio Lower Upper
82 100
128 48.2 37.7 56.5
54 52.6 43.0 64.4

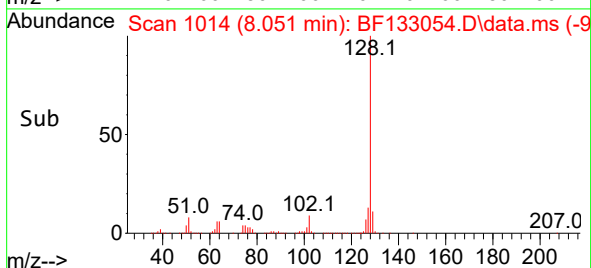
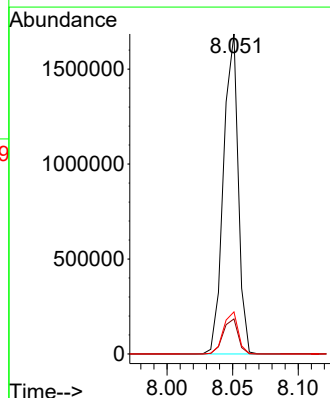
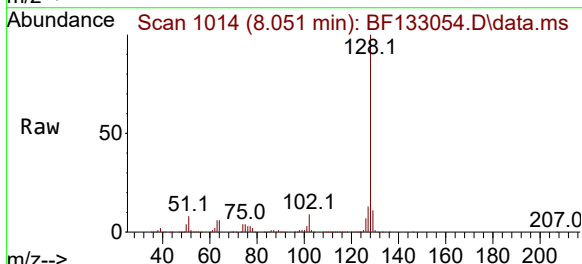
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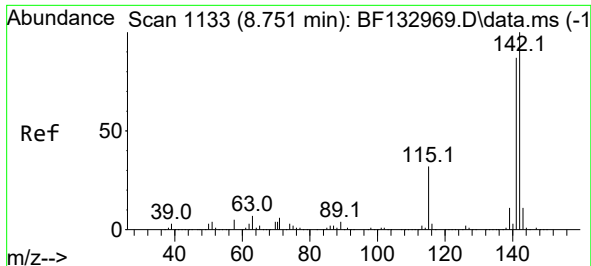
Reviewed By :Christian Giraldo 04/27/2023
Supervised By :Jagrut Upadhyay 04/27/2023



#31
Naphthalene
Concen: 31.593 ng
RT: 8.051 min Scan# 1014
Delta R.T. -0.000 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

Tgt Ion:128 Resp: 1313545
Ion Ratio Lower Upper
128 100
129 11.0 8.8 13.2
127 13.2 10.7 16.1





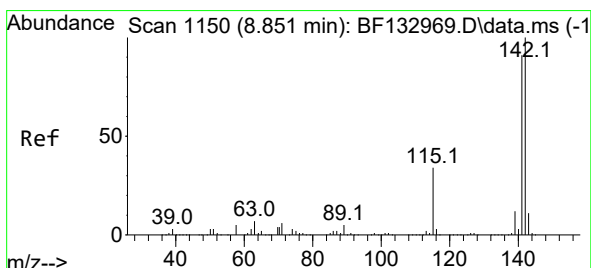
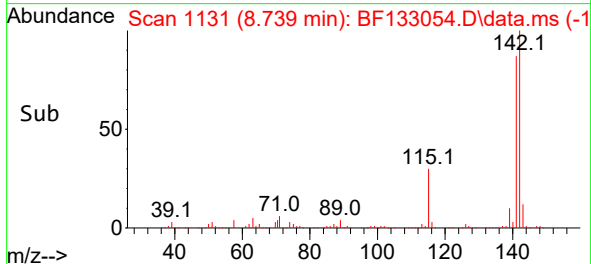
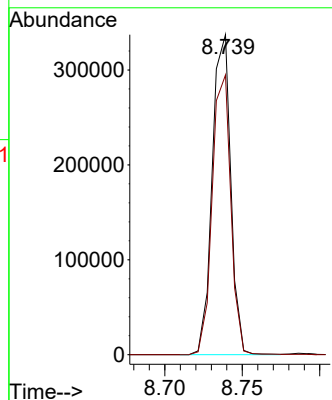
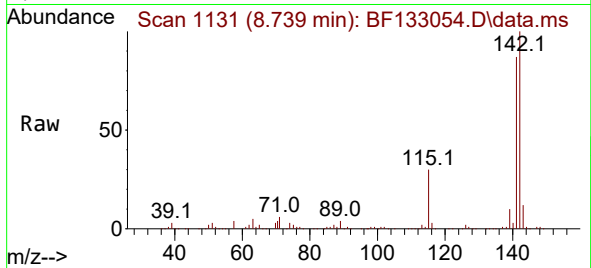
#37
2-Methylnaphthalene
Concen: 9.848 ng
RT: 8.739 min Scan# 1147
Delta R.T. -0.000 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

Instrument :
BNA_F
ClientSampleId :
SB-27-10-12-20230411

Tgt Ion:142 Resp: 279920
Ion Ratio Lower Upper
142 100
141 87.4 69.4 104.0

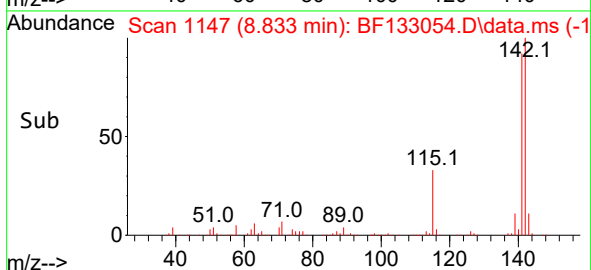
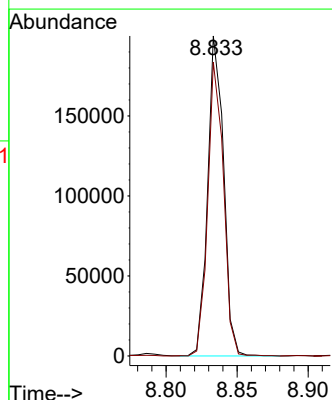
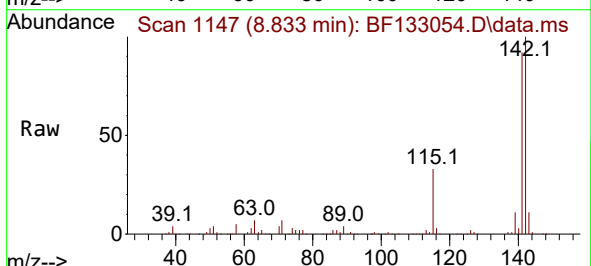
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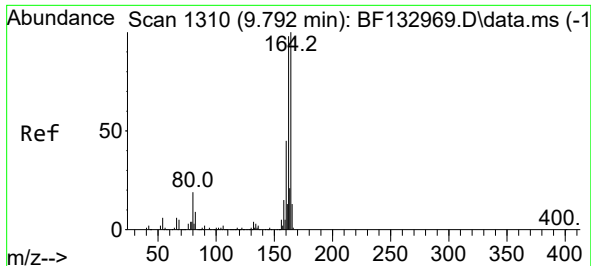
Reviewed By :Christian Giraldo 04/27/2023
Supervised By :Jagrut Upadhyay 04/27/2023



#38
1-Methylnaphthalene
Concen: 5.878 ng
RT: 8.833 min Scan# 1147
Delta R.T. -0.006 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

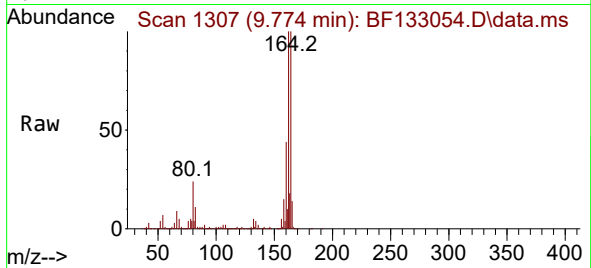
Tgt Ion:142 Resp: 156302
Ion Ratio Lower Upper
142 100
141 91.8 73.1 109.7





#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.774 min Scan# 11
Delta R.T. -0.006 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

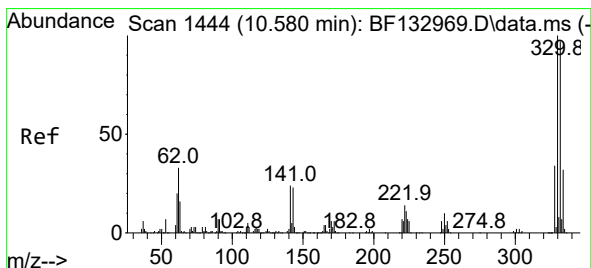
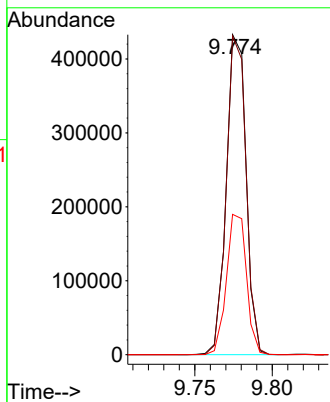
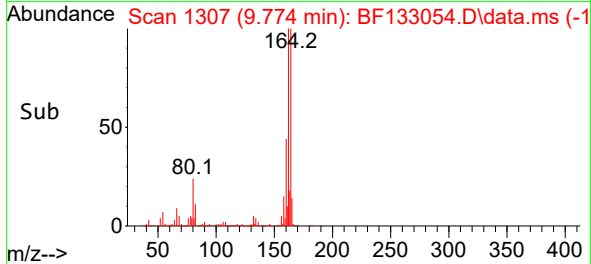
Instrument :
BNA_F
ClientSampleId :
SB-27-10-12-20230411



Tgt Ion:164 Resp: 384670
Ion Ratio Lower Upper
164 100
162 99.6 78.7 118.1
160 43.9 35.8 53.6

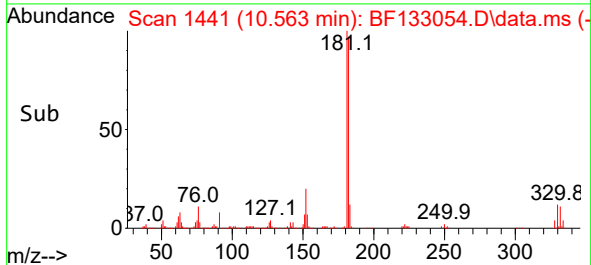
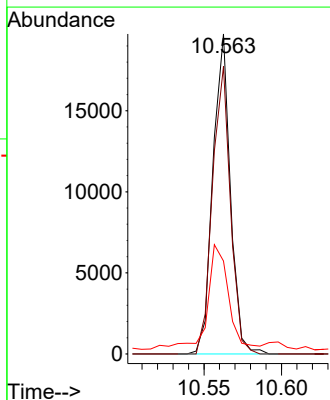
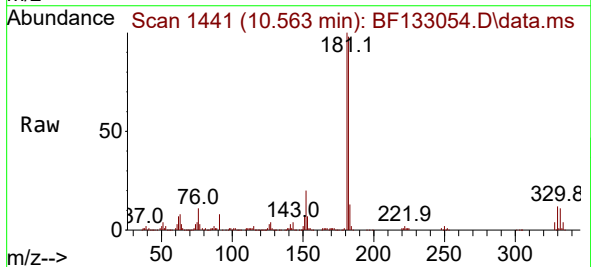
Manual Integrations
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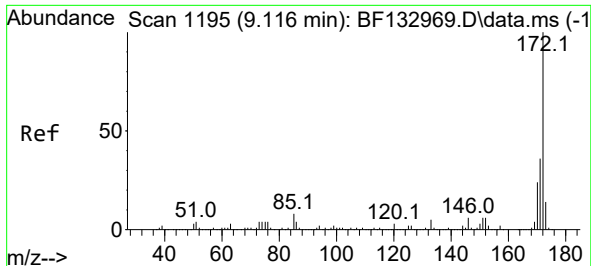
Reviewed By :Christian Giraldo 04/27/2023
Supervised By :Jagrut Upadhyay 04/27/2023



#42
2,4,6-Tribromophenol
Concen: 4.000 ng
RT: 10.563 min Scan# 1441
Delta R.T. -0.006 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

Tgt Ion:330 Resp: 15474
Ion Ratio Lower Upper
330 100
332 92.4 77.1 115.7
141 41.5 25.8 38.8#





#45

2-Fluorobiphenyl

Concen: 6.004 ng

RT: 9.098 min Scan# 1195

Delta R.T. -0.012 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

SB-27-10-12-20230411

Tgt Ion:172 Resp: 138045

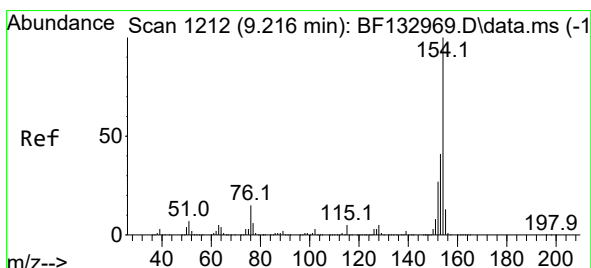
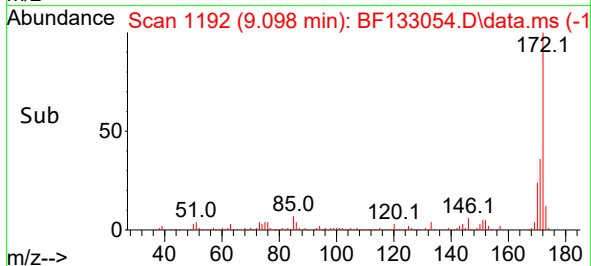
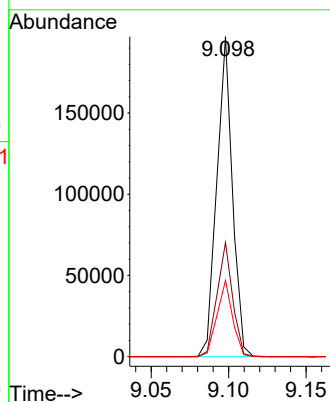
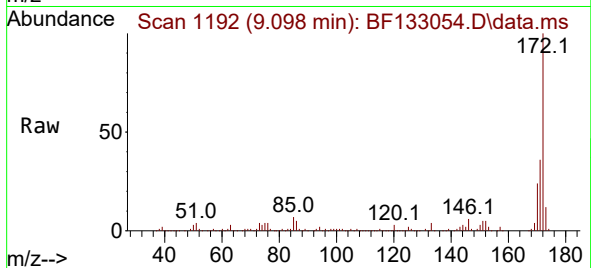
Ion	Ratio	Lower	Upper
172	100		
171	35.7	28.8	43.2
170	23.9	19.4	29.2

Manual Integrations

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Reviewed By :Christian Giraldo 04/27/2023

Supervised By :Jagrut Upadhyay 04/27/2023



#46

1,1'-Biphenyl

Concen: 3.300 ng

RT: 9.198 min Scan# 1209

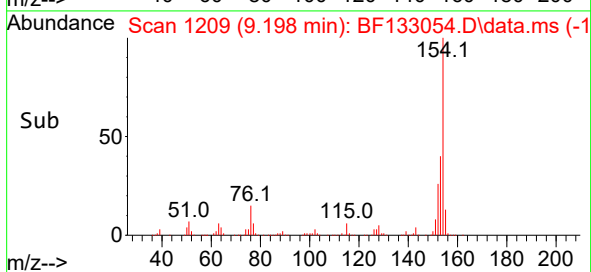
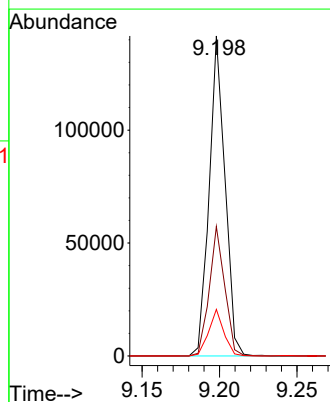
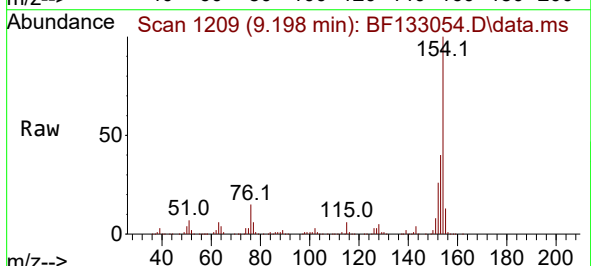
Delta R.T. -0.006 min

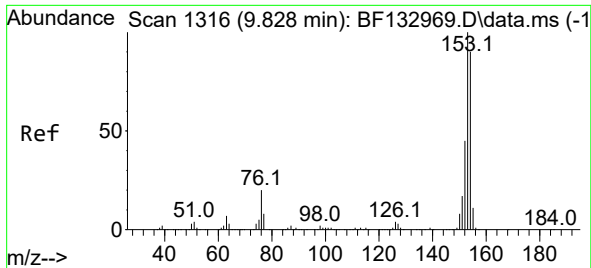
Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Tgt Ion:154 Resp: 100670

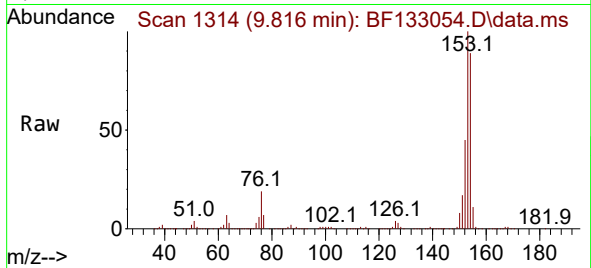
Ion	Ratio	Lower	Upper
154	100		
153	40.5	21.0	61.0
76	14.5	0.0	34.5





#52
Acenaphthene
Concen: 41.883 ng
RT: 9.816 min Scan# 11
Delta R.T. -0.000 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

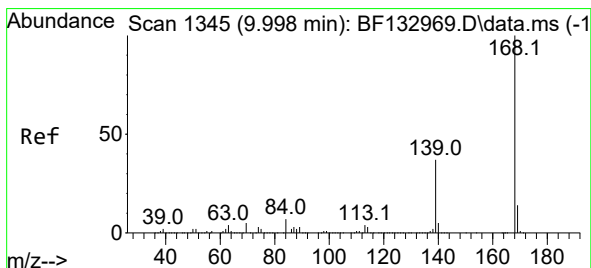
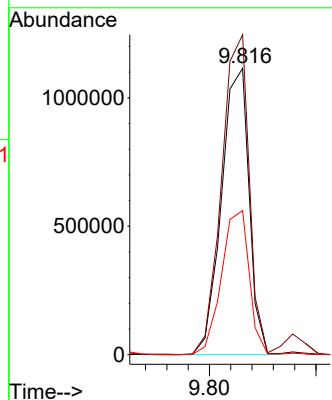
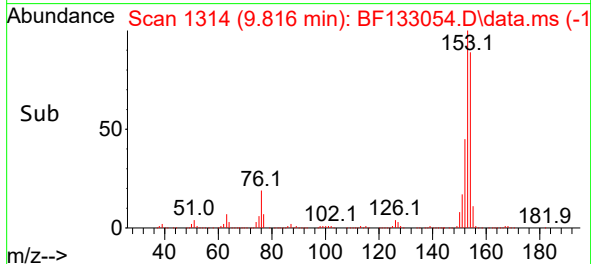
Instrument :
BNA_F
ClientSampleId :
SB-27-10-12-20230411



Tgt Ion:154 Resp: 100069
Ion Ratio Lower Upper
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153 111.8 89.0 133.6
152 50.3 40.4 60.6

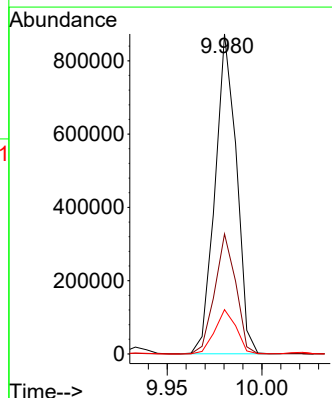
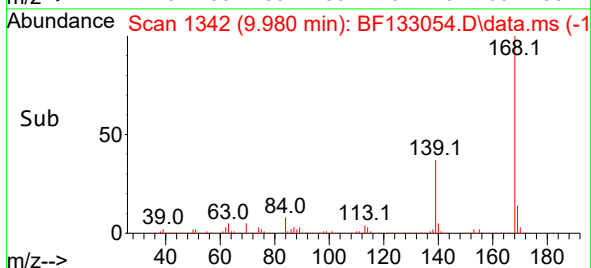
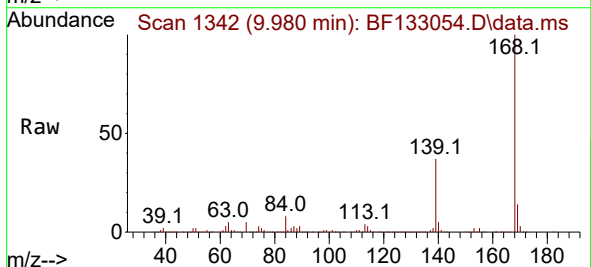
Manual Integrations
APPROVED

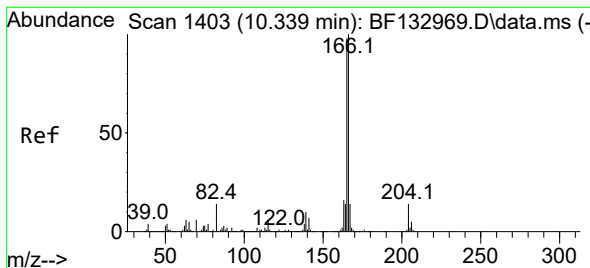
Reviewed By :Christian Giraldo 04/27/2023
Supervised By :Jagrut Upadhyay 04/27/2023



#55
Dibenzofuran
Concen: 21.058 ng
RT: 9.980 min Scan# 1342
Delta R.T. -0.006 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

Tgt Ion:168 Resp: 686309
Ion Ratio Lower Upper
168 100
139 37.5 29.8 44.8
169 13.9 10.8 16.2





#58

Fluorene

Concen: 36.584 ng

RT: 10.327 min Scan# 1403

Delta R.T. -0.000 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

SB-27-10-12-20230411

Tgt Ion:166 Resp: 873560

Ion Ratio Lower Upper

166 100

165 98.0 78.6 117.8

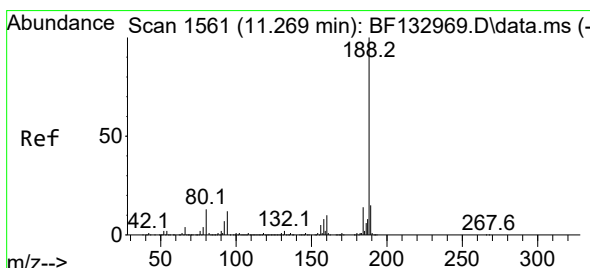
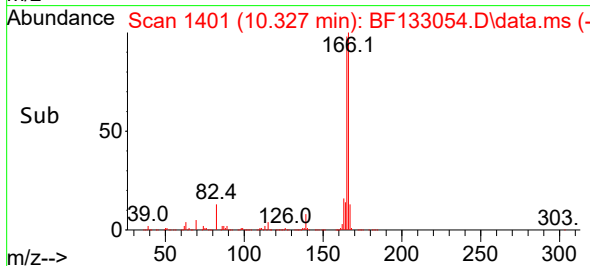
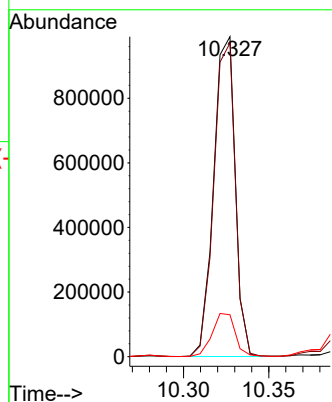
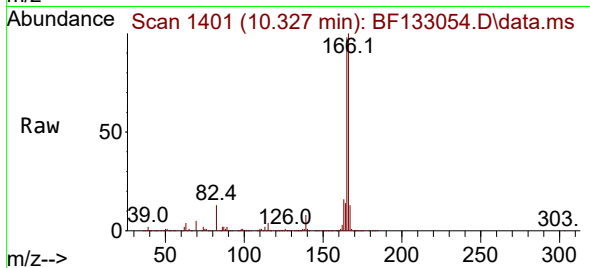
167 13.1 11.0 16.4

Manual Integrations

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Reviewed By :Christian Giraldo 04/27/2023

Supervised By :Jagrut Upadhyay 04/27/2023



#64

Phenanthrene-d10

Concen: 20.000 ng

RT: 11.262 min Scan# 1560

Delta R.T. -0.000 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

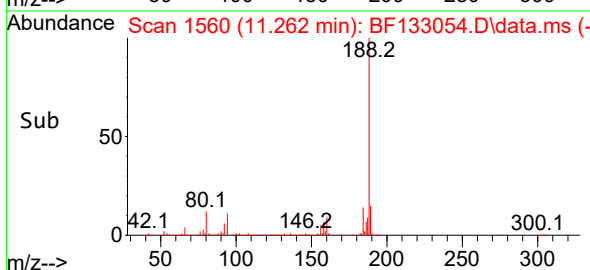
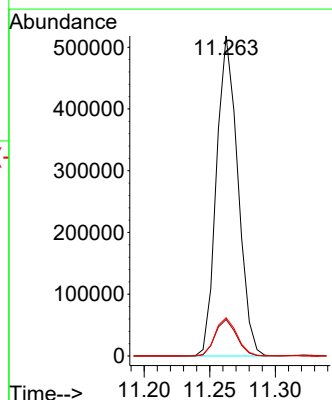
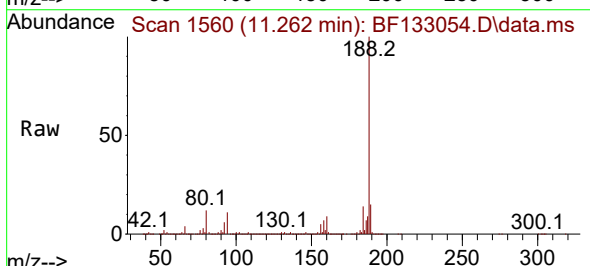
Tgt Ion:188 Resp: 586166

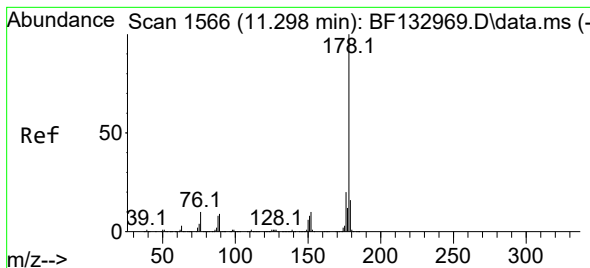
Ion Ratio Lower Upper

188 100

94 11.4 9.7 14.5

80 11.9 10.4 15.6





#71

Phenanthrene

Concen: 163.466 ng

RT: 11.304 min Scan# 1567

Delta R.T. 0.018 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

SB-27-10-12-20230411

Tgt Ion:178 Resp: 5149962

Ion Ratio Lower Upper

178 100

176 21.0 15.9 23.9

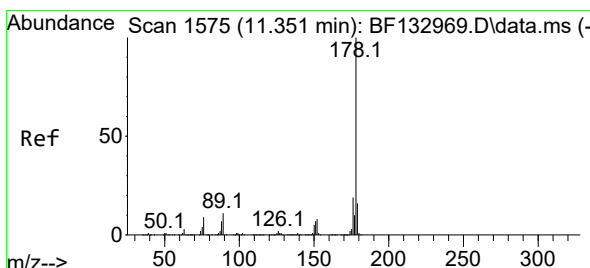
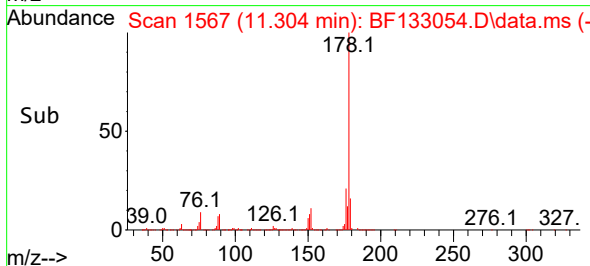
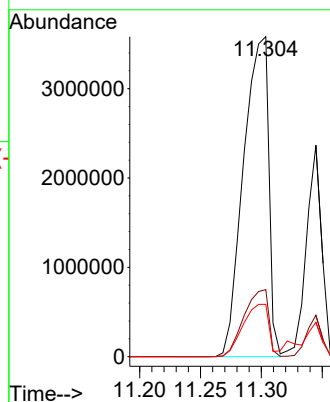
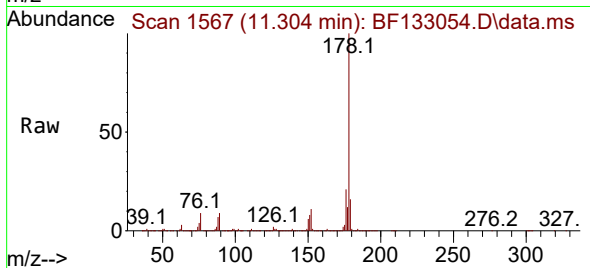
179 16.4 12.5 18.7

Manual Integrations

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Reviewed By :Christian Giraldo 04/27/2023

Supervised By :Jagrut Upadhyay 04/27/2023



#72

Anthracene

Concen: 61.905 ng

RT: 11.345 min Scan# 1574

Delta R.T. 0.006 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

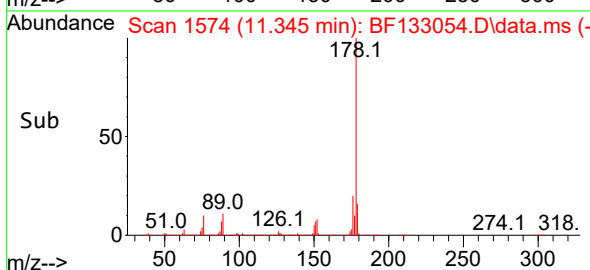
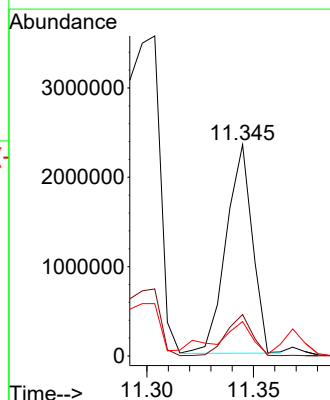
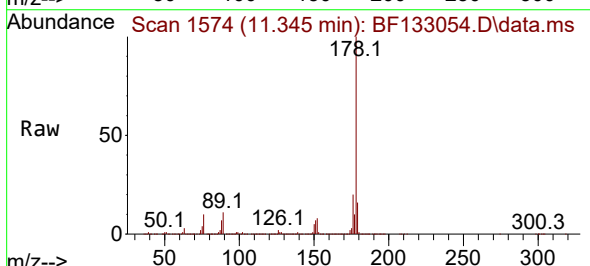
Tgt Ion:178 Resp: 1995898

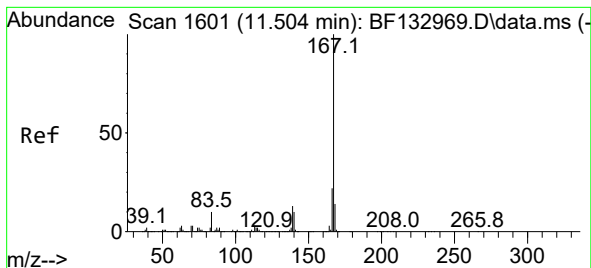
Ion Ratio Lower Upper

178 100

176 19.6 15.4 23.0

179 16.3 12.4 18.6





#73

Carbazole

Concen: 39.200 ng

RT: 11.492 min Scan# 11

Delta R.T. -0.000 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

SB-27-10-12-20230411

Tgt Ion:167 Resp: 112537

Ion Ratio Lower Upper

167 100

166 22.0 17.4 26.0

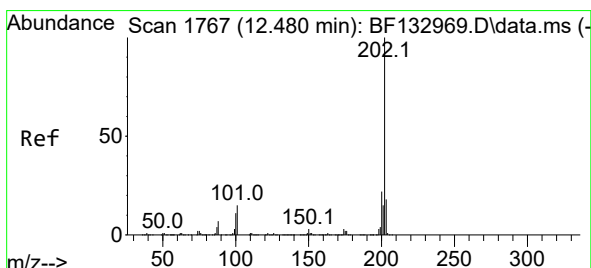
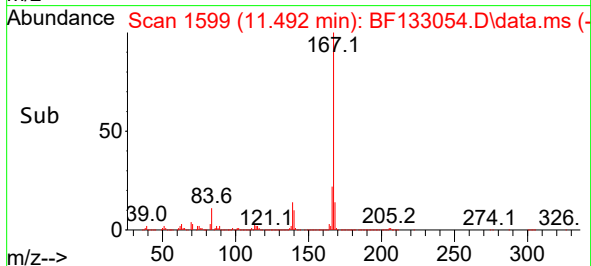
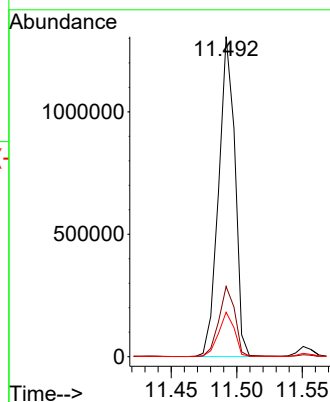
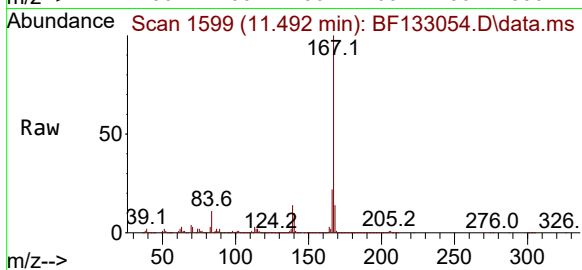
139 13.9 10.6 16.0

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 04/27/2023

Supervised By :Jagrut Upadhyay 04/27/2023



#75

Fluoranthene

Concen: 243.061 ng

RT: 12.498 min Scan# 1770

Delta R.T. 0.023 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

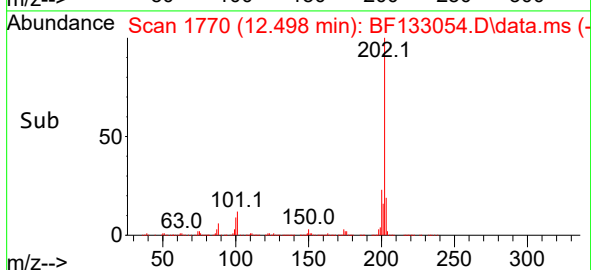
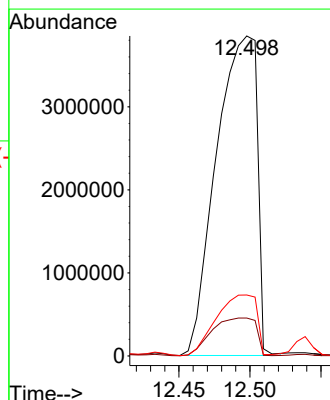
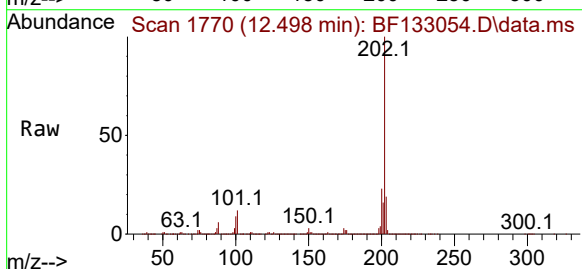
Tgt Ion:202 Resp: 7685231

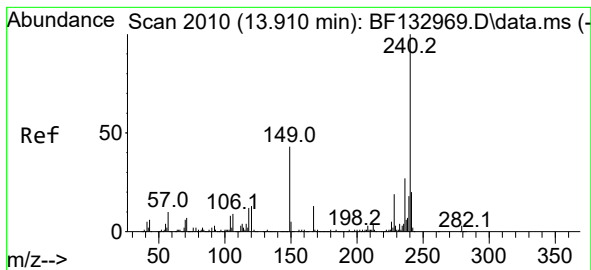
Ion Ratio Lower Upper

202 100

101 11.9 0.0 35.3

203 19.1 0.0 38.1





#76

Chrysene-d12

Concen: 20.000 ng

RT: 13.921 min Scan# 20

Delta R.T. 0.023 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

SB-27-10-12-20230411

Tgt Ion:240 Resp: 320938

Ion Ratio Lower Upper

240 100

120 11.4 10.5 15.7

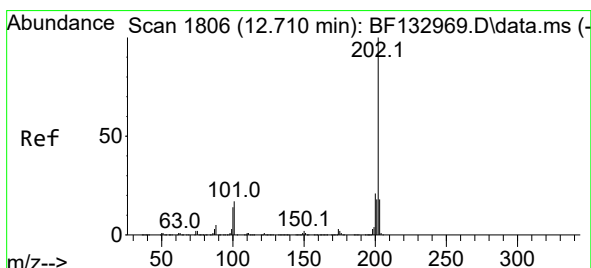
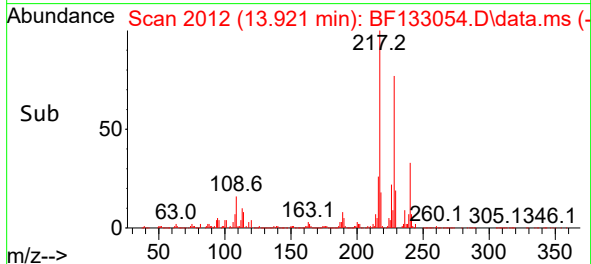
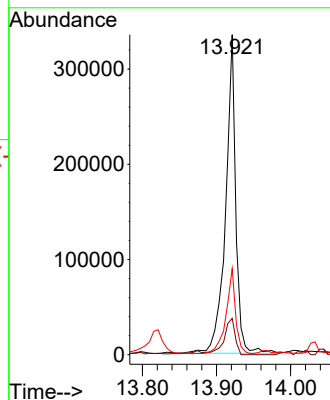
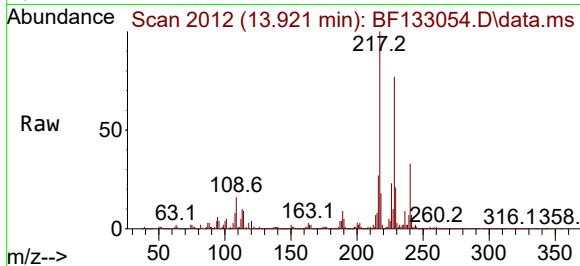
236 26.9 21.5 32.3

Manual Integrations

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Reviewed By :Christian Giraldo 04/27/2023

Supervised By :Jagrut Upadhyay 04/27/2023



#78

Pyrene

Concen: 245.671 ng

RT: 12.727 min Scan# 1809

Delta R.T. 0.029 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

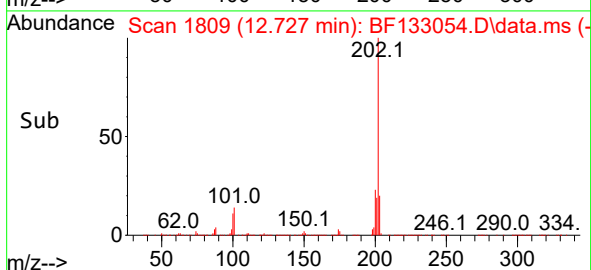
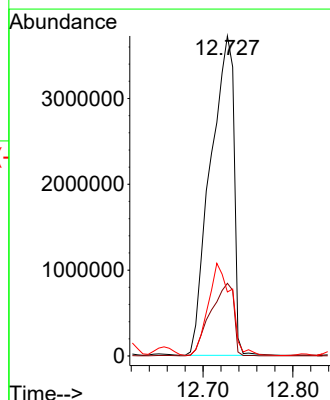
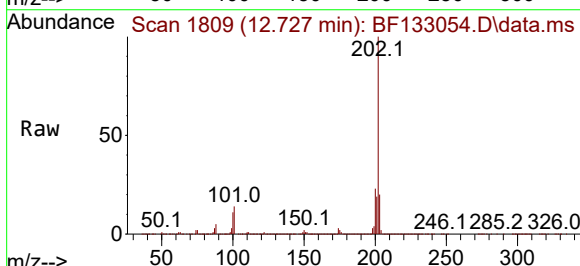
Tgt Ion:202 Resp: 6758837

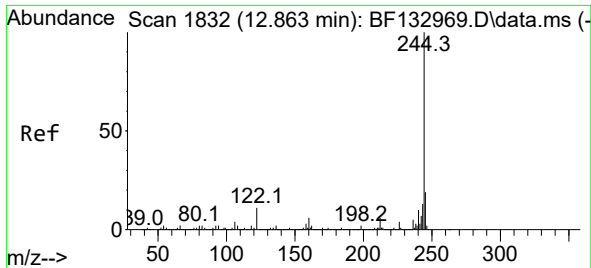
Ion Ratio Lower Upper

202 100

200 22.7 17.1 25.7

203 20.0 14.1 21.1





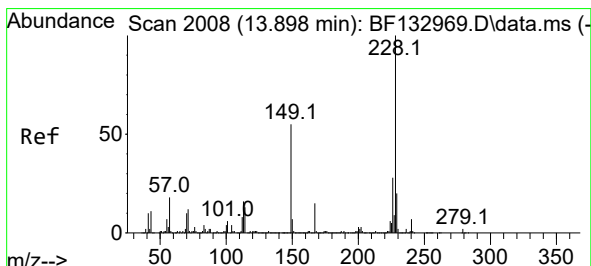
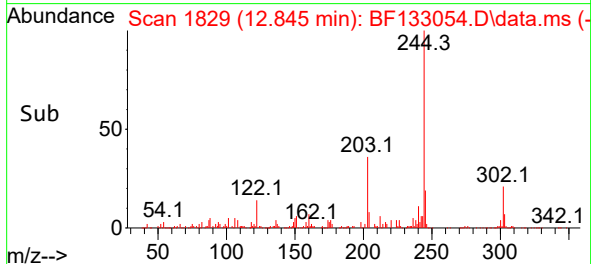
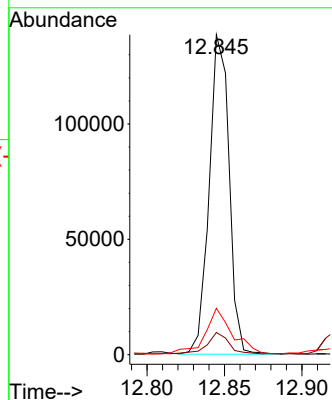
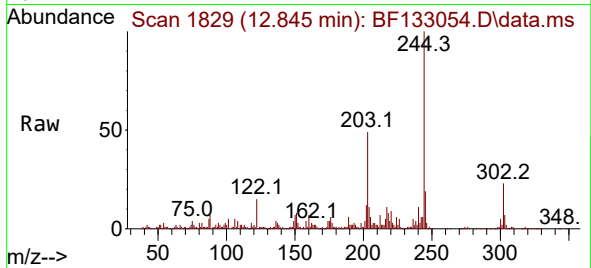
#79
Terphenyl-d14
Concen: 6.643 ng
RT: 12.845 min Scan# 11
Delta R.T. -0.006 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

Instrument :
BNA_F
ClientSampleId :
SB-27-10-12-20230411

Tgt Ion:244 Resp: 123618
Ion Ratio Lower Upper
244 100
212 7.0 5.1 7.7
122 14.5 8.6 13.0

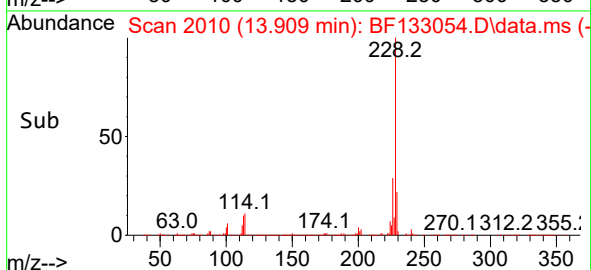
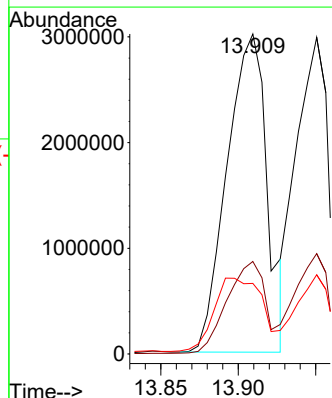
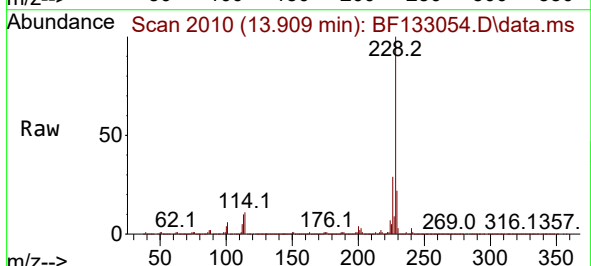
Manual Integrations
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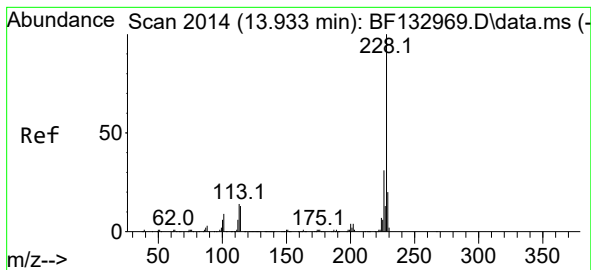
Reviewed By :Christian Giraldo 04/27/2023
Supervised By :Jagrut Upadhyay 04/27/2023



#81
Benzo(a)anthracene
Concen: 245.505 ng
RT: 13.909 min Scan# 2010
Delta R.T. 0.023 min
Lab File: BF133054.D
Acq: 26 Apr 2023 05:09

Tgt Ion:228 Resp: 5418280
Ion Ratio Lower Upper
228 100
226 28.9 22.2 33.4
229 22.0 16.0 24.0





#83

Chrysene

Concen: 187.286 ng m

RT: 13.951 min Scan# 20

Delta R.T. 0.023 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

SB-27-10-12-20230411

Tgt Ion:228 Resp: 413235

Ion Ratio Lower Upper

228 100

226 31.7 24.7 37.1

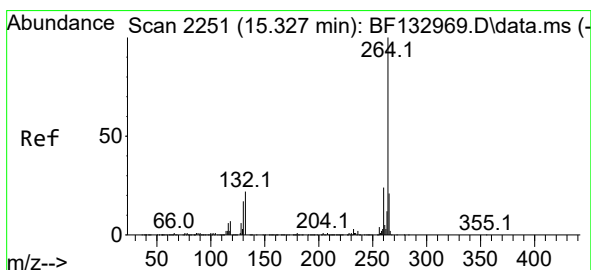
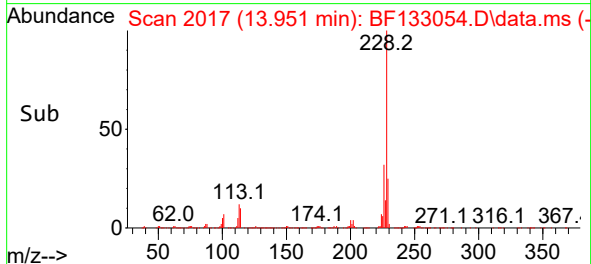
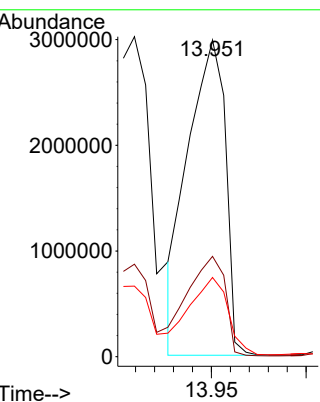
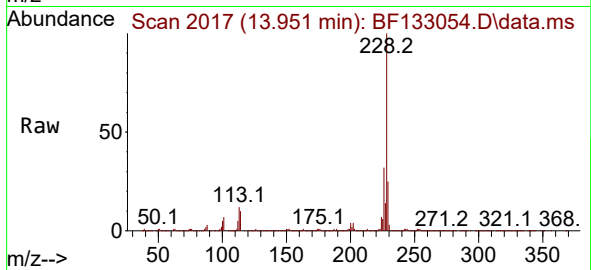
229 25.0 16.1 24.1

Manual Integrations

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Reviewed By :Christian Giraldo 04/27/2023

Supervised By :Jagrut Upadhyay 04/27/2023



#86

Perylene-d12

Concen: 20.000 ng

RT: 15.345 min Scan# 2254

Delta R.T. 0.029 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

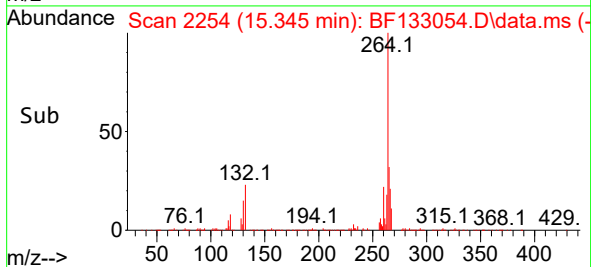
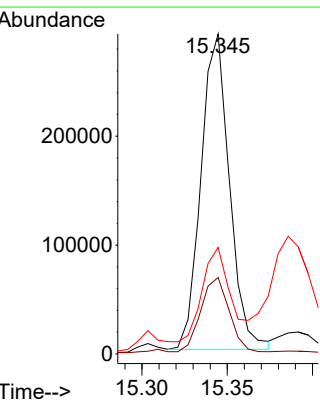
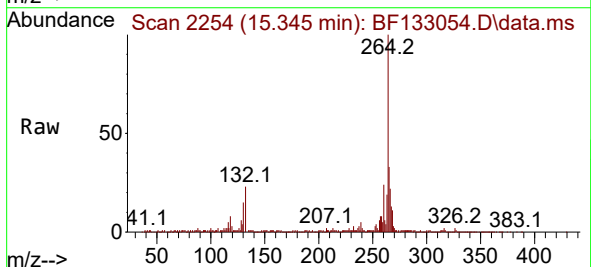
Tgt Ion:264 Resp: 337309

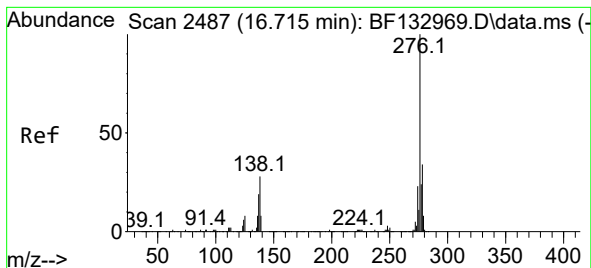
Ion Ratio Lower Upper

264 100

260 23.9 18.8 28.2

265 33.3 17.0 25.4





#87

Indeno(1,2,3-cd)pyrene

Concen: 99.251 ng

RT: 16.744 min Scan# 2492

Delta R.T. 0.041 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

SB-27-10-12-20230411

Tgt Ion:276 Resp: 190431

Ion Ratio Lower Upper

276 100

138 28.9 25.5 38.3

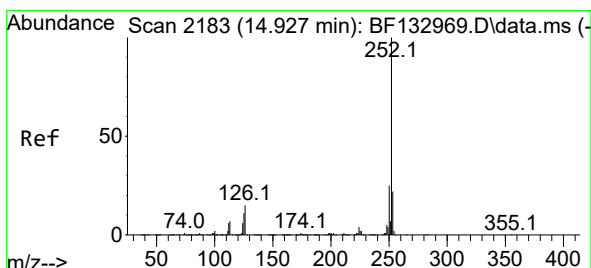
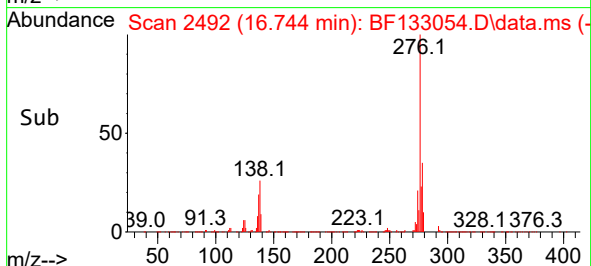
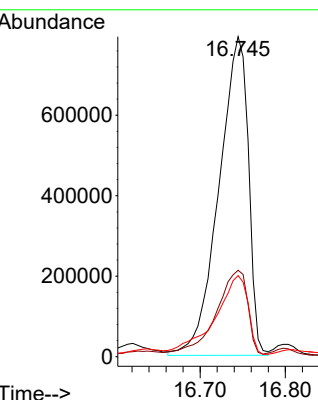
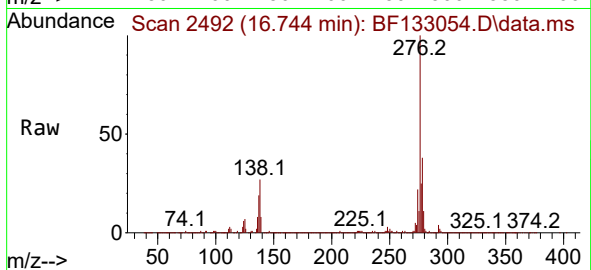
277 28.3 20.4 30.6

Manual Integrations

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Reviewed By :Christian Giraldo 04/27/2023

Supervised By :Jagrut Upadhyay 04/27/2023



#88

Benzo(b)fluoranthene

Concen: 257.167 ng m

RT: 14.951 min Scan# 2187

Delta R.T. 0.035 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

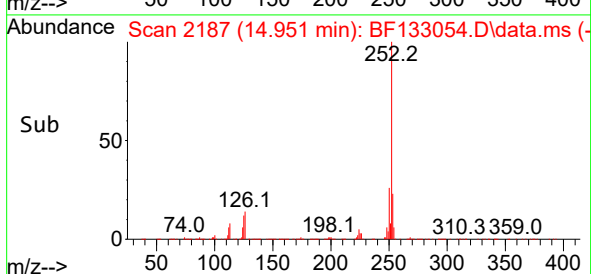
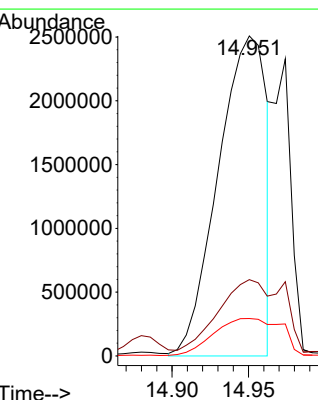
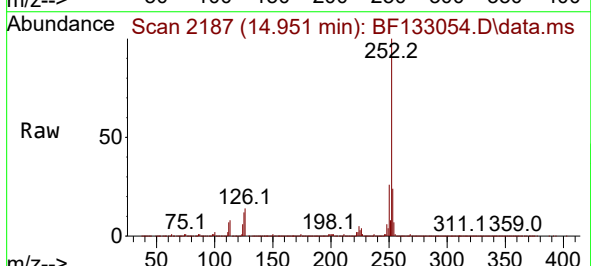
Tgt Ion:252 Resp: 5518598

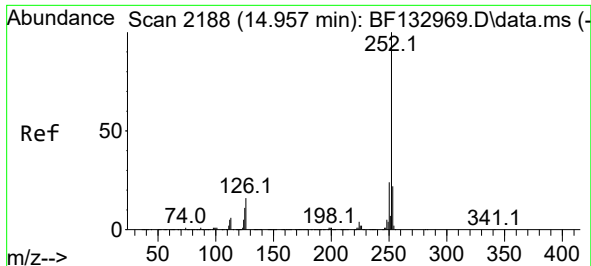
Ion Ratio Lower Upper

252 100

253 23.9 17.6 26.4

125 11.7 8.9 13.3





#89

Benzo(k)fluoranthene

Concen: 86.057 ng m

RT: 14.974 min Scan# 2188

Delta R.T. 0.035 min

Lab File: BF133054.D

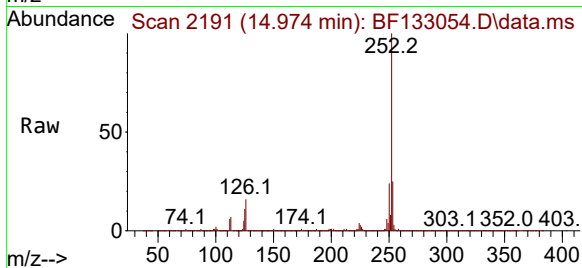
Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

SB-27-10-12-20230411



Tgt Ion:252 Resp: 183063

Ion Ratio Lower Upper

252 100

253 25.0 17.7 26.5

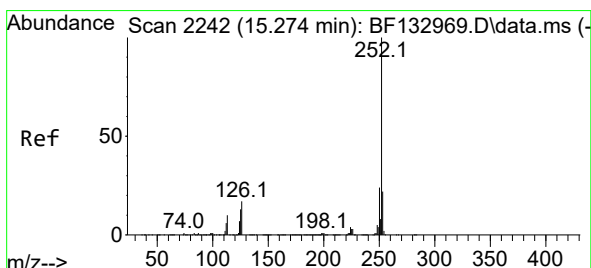
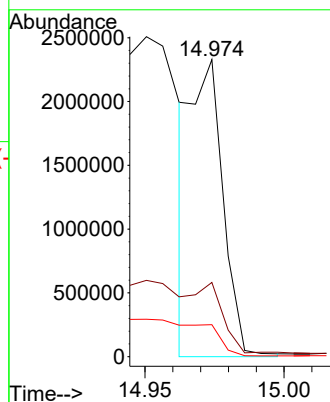
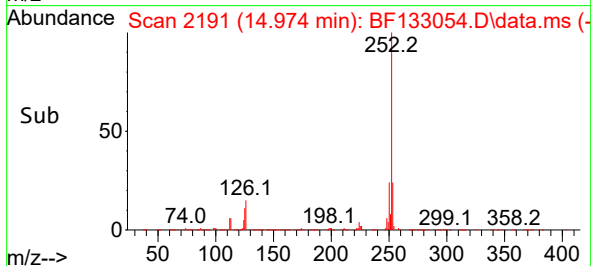
125 10.8 9.0 13.4

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 04/27/2023

Supervised By :Jagrut Upadhyay 04/27/2023



#90

Benzo(a)pyrene

Concen: 183.096 ng

RT: 15.303 min Scan# 2247

Delta R.T. 0.041 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

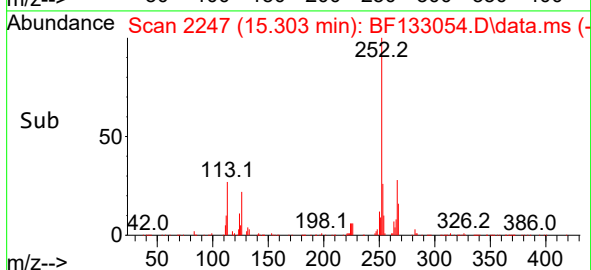
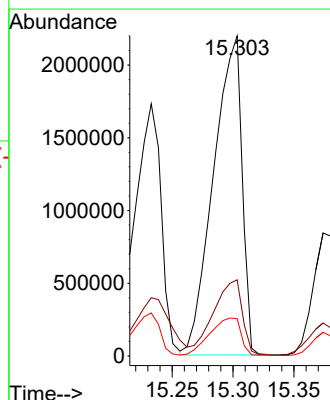
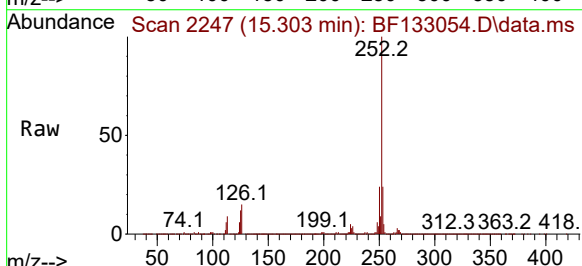
Tgt Ion:252 Resp: 3576284

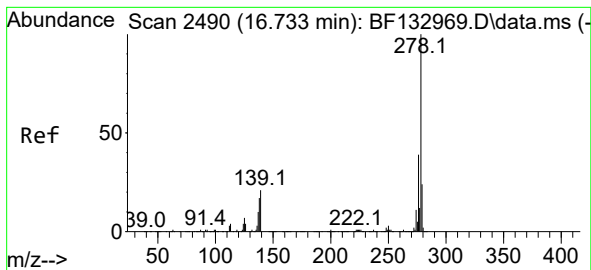
Ion Ratio Lower Upper

252 100

253 23.8 17.7 26.5

125 11.6 10.5 15.7





#91

Dibenzo(a,h)anthracene

Concen: 34.735 ng

RT: 16.750 min Scan# 2490

Delta R.T. 0.029 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Instrument :

BNA_F

ClientSampleId :

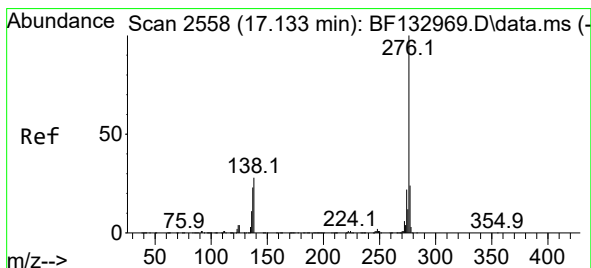
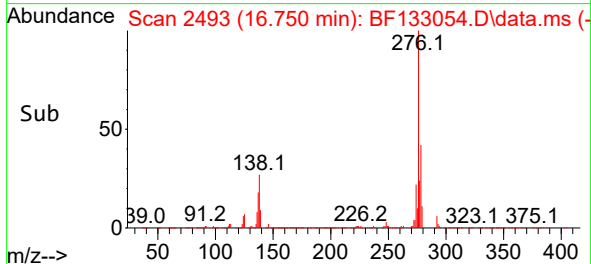
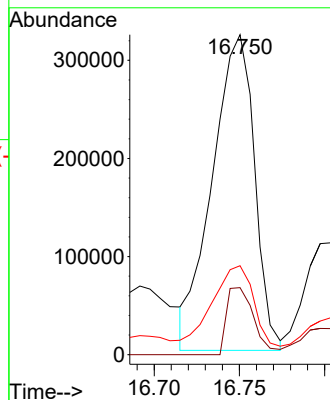
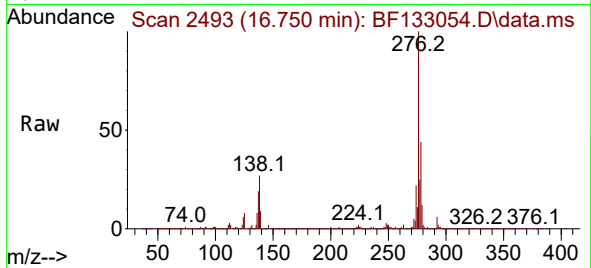
SB-27-10-12-20230411

Tgt Ion:278 Resp: 555850
 Ion Ratio Lower Upper
 278 100
 139 21.0 16.6 24.8
 279 27.8 18.8 28.2

Manual Integrations

APPROVED

Reviewed By :Christian Giraldo 04/27/2023
 Supervised By :Jagrut Upadhyay 04/27/2023



#92

Benzo(g,h,i)perylene

Concen: 103.328 ng

RT: 17.162 min Scan# 2563

Delta R.T. 0.041 min

Lab File: BF133054.D

Acq: 26 Apr 2023 05:09

Tgt Ion:276 Resp: 1632456
 Ion Ratio Lower Upper
 276 100
 277 24.0 19.4 29.0
 138 27.7 22.7 34.1

