

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF100825\
 Data File : BF143901.D
 Acq On : 08 Oct 2025 18:06
 Operator : RC/JU
 Sample : Q3304-01 2X
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 TR-04-100725

Manual Integrations
 APPROVED

Reviewed By :Rahul Chavli 10/09/2025
 Supervised By :Jagrut Upadhyay 10/09/2025

Quant Time: Oct 08 18:27:05 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF100625.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Oct 06 15:29:47 2025
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.881	152	113018	20.000	ng	0.00
21) Naphthalene-d8	8.163	136	437535	20.000	ng	0.00
39) Acenaphthene-d10	9.922	164	232303	20.000	ng	0.00
64) Phenanthrene-d10	11.410	188	350467	20.000	ng	0.00
76) Chrysene-d12	14.063	240	275860	20.000	ng	0.00
86) Perylene-d12	15.545	264	290424	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.487	112	340897	47.899	ng	-0.01
7) Phenol-d6	6.492	99	399044	47.039	ng	-0.02
23) Nitrobenzene-d5	7.439	82	232822	32.329	ng	-0.02
42) 2,4,6-Tribromophenol	10.710	330	86586	37.422	ng	-0.01
45) 2-Fluorobiphenyl	9.239	172	474578	32.416	ng	-0.01
79) Terphenyl-d14	12.998	244	401930	24.901	ng	-0.01
Target Compounds						Qvalue
31) Naphthalene	8.186	128	76326	3.835	ng	99
37) 2-Methylnaphthalene	8.875	142	48533	3.661	ng	99
38) 1-Methylnaphthalene	8.975	142	47087	3.662	ng	97
49) Acenaphthylene	9.780	152	55688	3.089	ng	98
52) Acenaphthene	9.951	154	36325	3.075	ng	92
55) Dibenzofuran	10.122	168	48367	2.900	ng	# 95
58) Fluorene	10.469	166	83128	6.606	ng	97
71) Phenanthrene	11.433	178	538333	31.684	ng	100
72) Anthracene	11.486	178	122678	7.147	ng	96
73) Carbazole	11.639	167	45041	2.963	ng	99
75) Fluoranthene	12.627	202	682648	38.897	ng	99
78) Pyrene	12.857	202	708593	30.811	ng	99
81) Benzo(a)anthracene	14.051	228	442189	24.495	ng	96
83) Chrysene	14.086	228	355662	21.287	ng	98
87) Indeno(1,2,3-cd)pyrene	17.027	276	141412	7.946	ng	100
88) Benzo(b)fluoranthene	15.110	252	428889m	25.708	ng	
89) Benzo(k)fluoranthene	15.121	252	204089m	13.221	ng	
90) Benzo(a)pyrene	15.480	252	319086	22.058	ng	97
91) Dibenzo(a,h)anthracene	17.039	278	33694m	2.354	ng	
92) Benzo(g,h,i)perylene	17.480	276	132112	9.231	ng	# 94

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

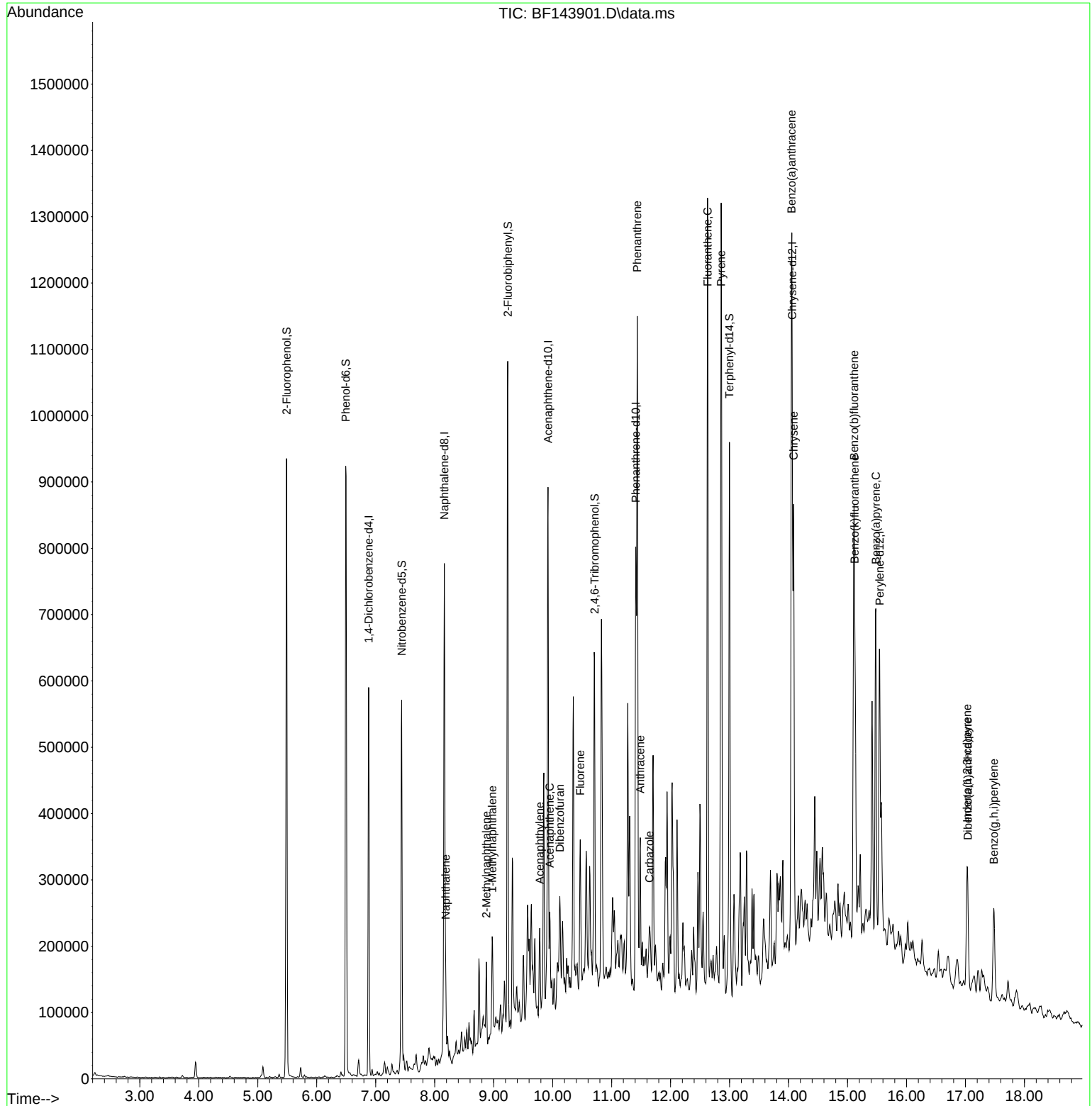
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF100825\
Data File : BF143901.D
Acq On : 08 Oct 2025 18:06
Operator : RC/JU
Sample : Q3304-01 2X
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
TR-04-100725

Quant Time: Oct 08 18:27:05 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF100625.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Oct 06 15:29:47 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 10/09/2025
Supervised By :Jagrut Upadhyay 10/09/2025





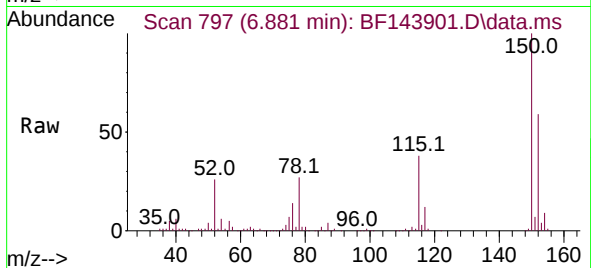
#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.881 min Scan# 797
Delta R.T. -0.005 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725



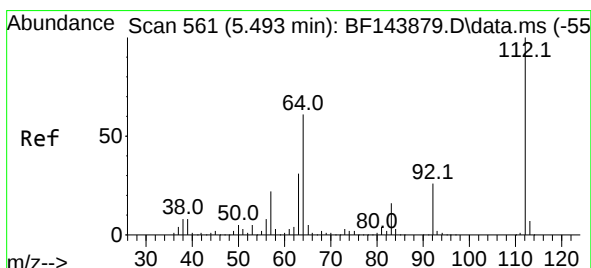
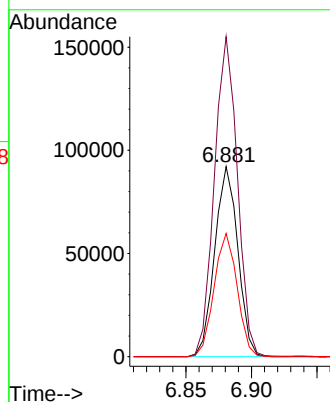
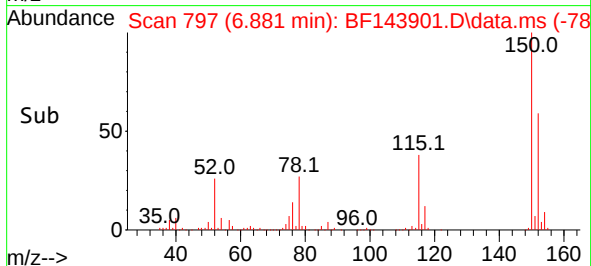
Tgt Ion:152 Resp: 113018
Ion Ratio Lower Upper
152 100
150 168.4 124.4 186.6
115 64.8 48.1 72.1

Manual Integrations

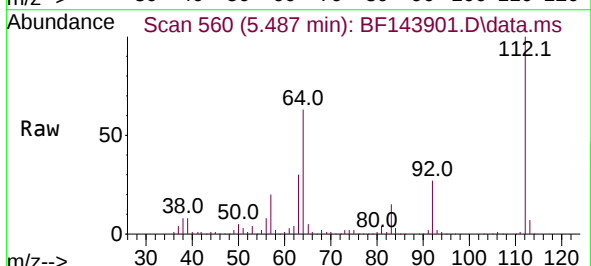
APPROVED

Reviewed By :Rahul Chavli 10/09/2025

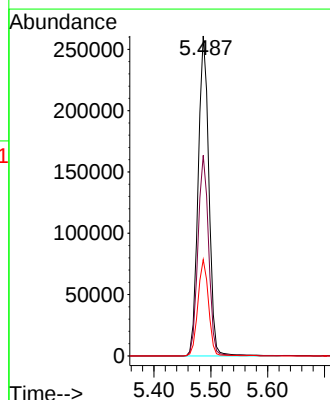
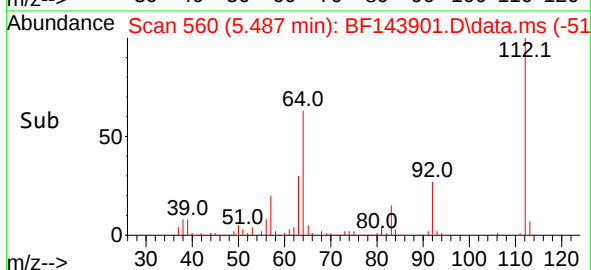
Supervised By :Jagrut Upadhyay 10/09/2025



#5
2-Fluorophenol
Concen: 47.899 ng
RT: 5.487 min Scan# 560
Delta R.T. -0.012 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06



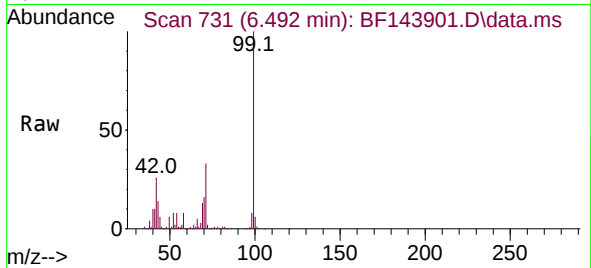
Tgt Ion:112 Resp: 340897
Ion Ratio Lower Upper
112 100
64 62.7 49.1 73.7
63 30.1 24.5 36.7





#7
Phenol-d6
Concen: 47.039 ng
RT: 6.492 min Scan# 731
Delta R.T. -0.023 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

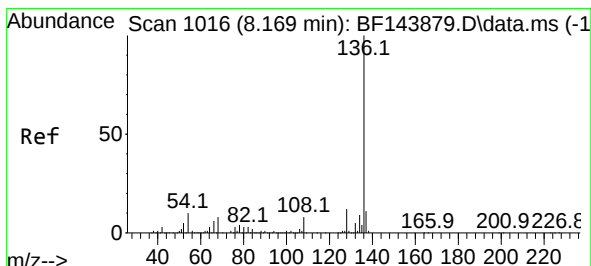
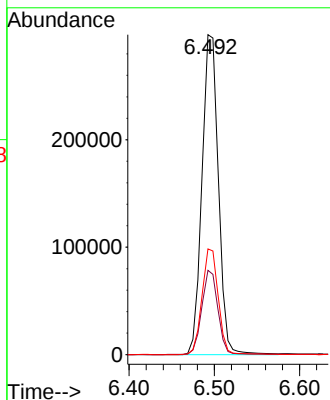
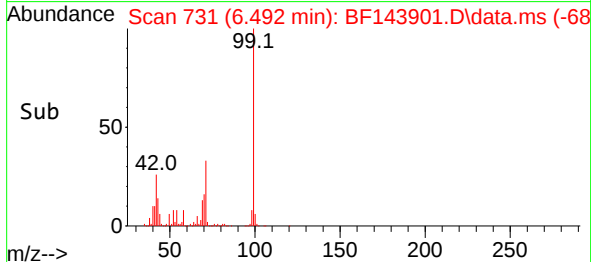
Instrument :
BNA_F
ClientSampleId :
TR-04-100725



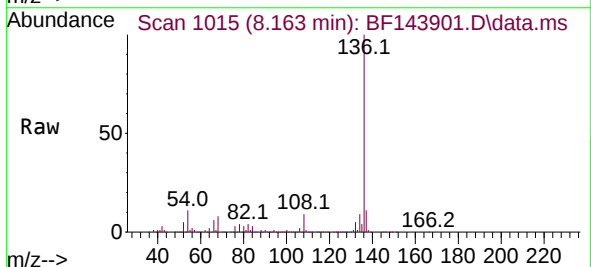
Tgt Ion: 99 Resp: 399044
Ion Ratio Lower Upper
99 100
42 26.3 21.0 31.4
71 33.0 27.8 41.8

Manual Integrations
APPROVED

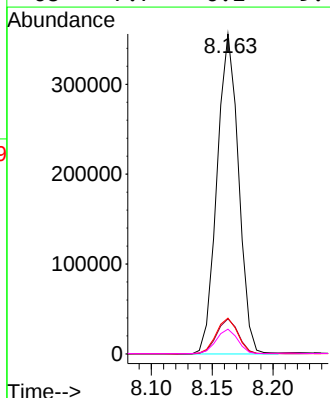
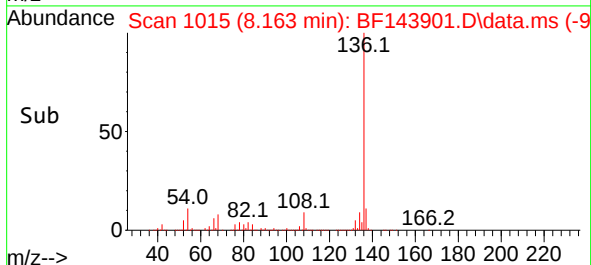
Reviewed By :Rahul Chavli 10/09/2025
Supervised By :Jagrut Upadhyay 10/09/2025

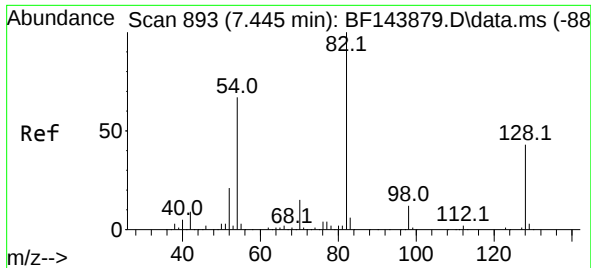


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.163 min Scan# 1015
Delta R.T. -0.006 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06



Tgt Ion:136 Resp: 437535
Ion Ratio Lower Upper
136 100
137 11.0 8.5 12.7
54 11.2 8.2 12.4
68 7.7 6.2 9.4





#23
Nitrobenzene-d5
Concen: 32.329 ng
RT: 7.439 min Scan# 893
Delta R.T. -0.018 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

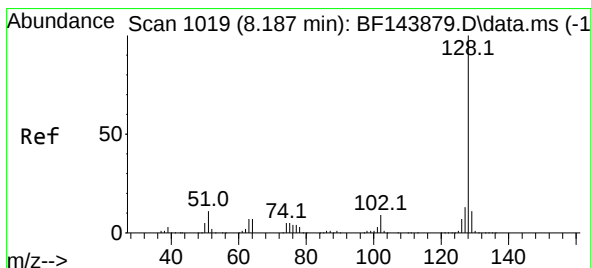
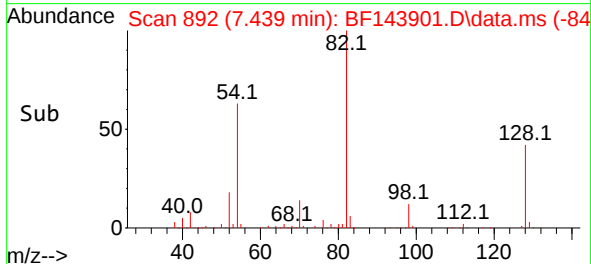
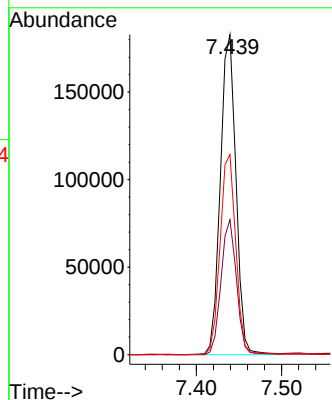
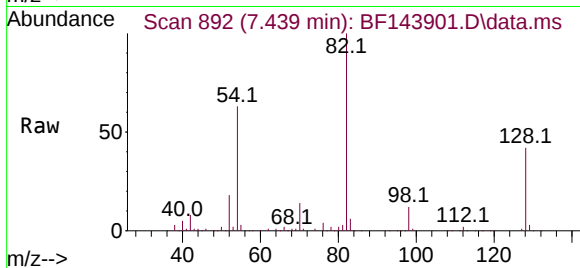
TR-04-100725

Tgt Ion: 82 Resp: 232822
Ion Ratio Lower Upper
82 100
128 42.2 34.0 51.0
54 62.5 53.2 79.8

Manual Integrations

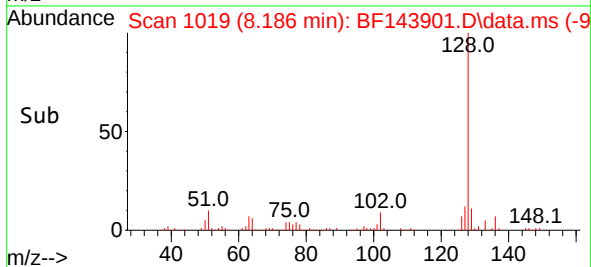
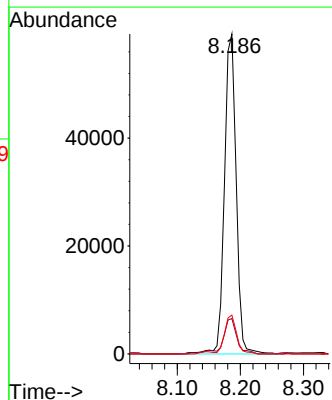
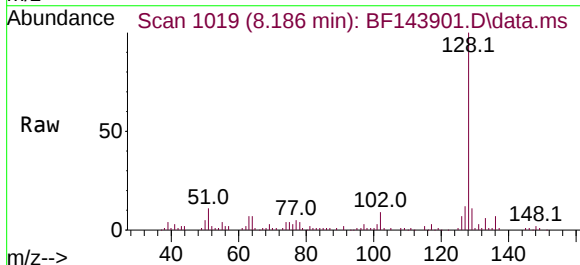
APPROVED

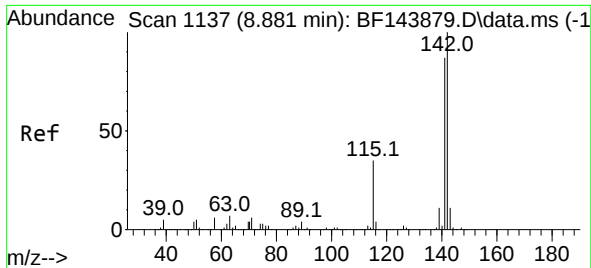
Reviewed By :Rahul Chavli 10/09/2025
Supervised By :Jagrut Upadhyay 10/09/2025



#31
Naphthalene
Concen: 3.835 ng
RT: 8.186 min Scan# 1019
Delta R.T. -0.006 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Tgt Ion:128 Resp: 76326
Ion Ratio Lower Upper
128 100
129 11.0 8.7 13.1
127 12.1 10.0 15.0





#37

2-Methylnaphthalene

Concen: 3.661 ng

RT: 8.875 min Scan# 1136

Delta R.T. -0.012 min

Lab File: BF143901.D

Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725

Tgt Ion:142 Resp: 4853

Ion Ratio Lower Upper

142 100

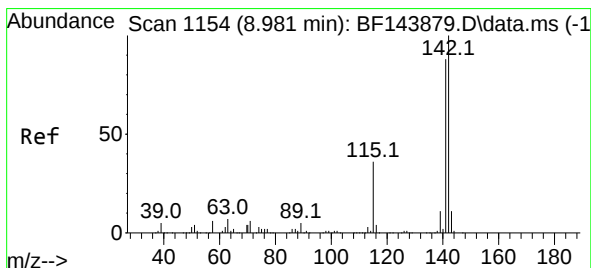
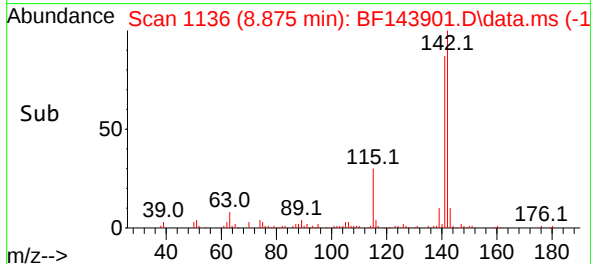
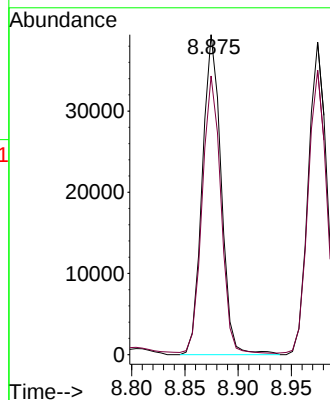
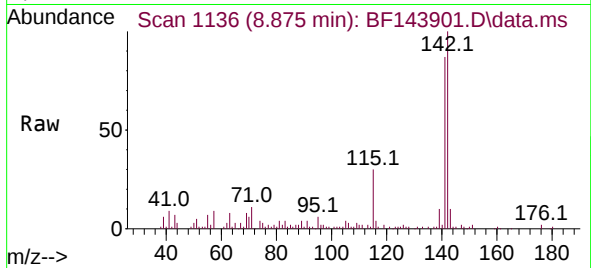
141 87.1 69.2 103.8

Manual Integrations

APPROVED

Reviewed By :Rahul Chavli 10/09/2025

Supervised By :Jagrut Upadhyay 10/09/2025



#38

1-Methylnaphthalene

Concen: 3.662 ng

RT: 8.975 min Scan# 1153

Delta R.T. -0.011 min

Lab File: BF143901.D

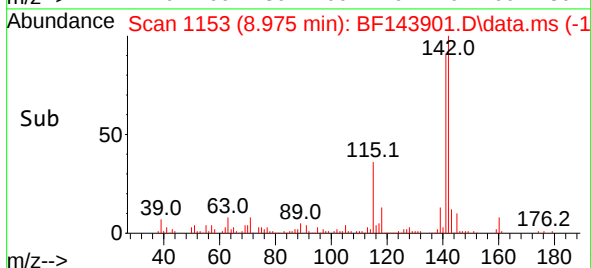
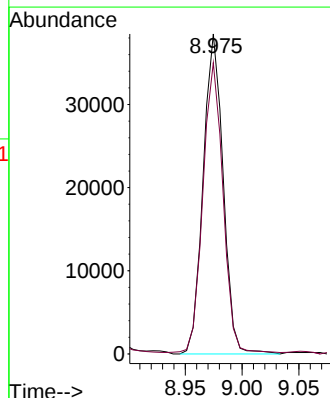
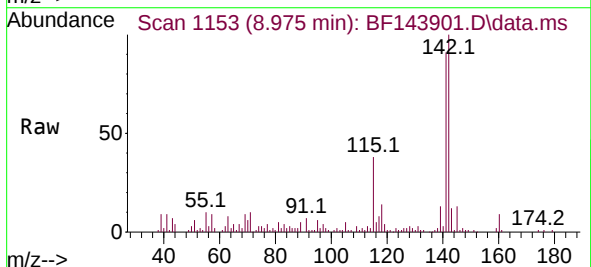
Acq: 08 Oct 2025 18:06

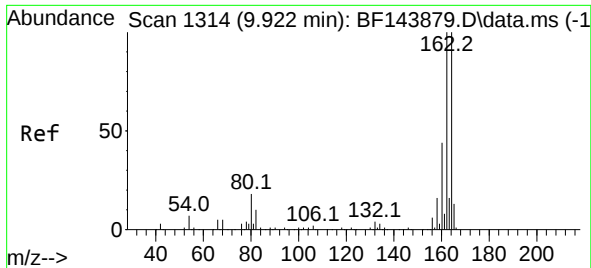
Tgt Ion:142 Resp: 47087

Ion Ratio Lower Upper

142 100

141 91.0 70.8 106.2





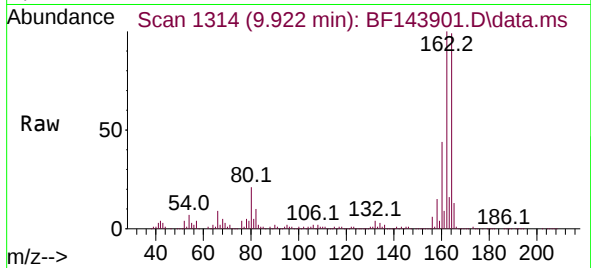
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.922 min Scan# 1314
Delta R.T. -0.005 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725



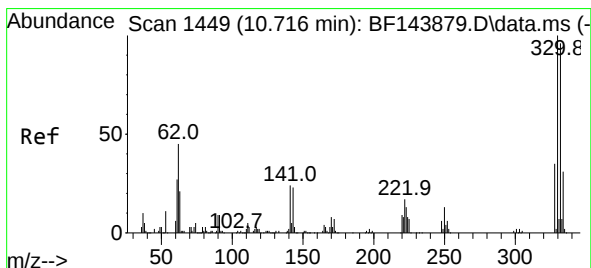
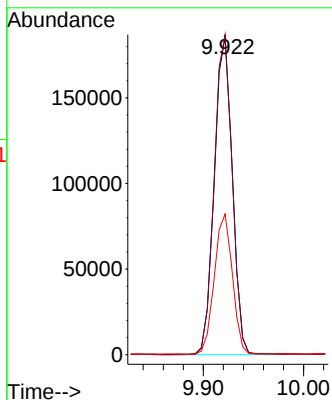
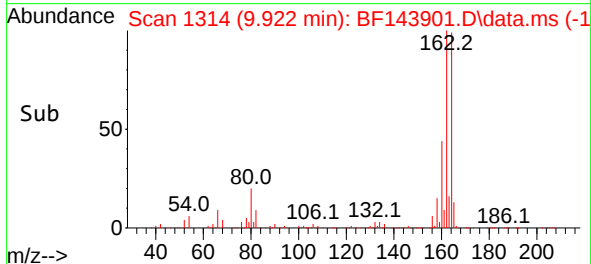
Tgt Ion:164 Resp: 232303
Ion Ratio Lower Upper
164 100
162 100.9 80.2 120.2
160 44.3 35.4 53.0

Manual Integrations

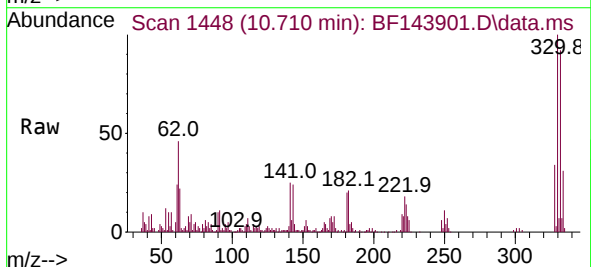
APPROVED

Reviewed By :Rahul Chavli 10/09/2025

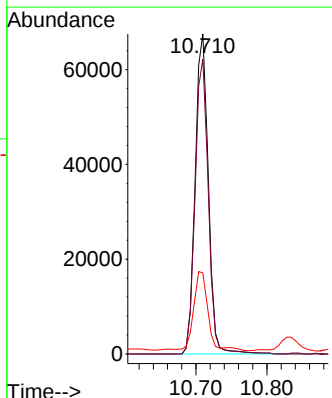
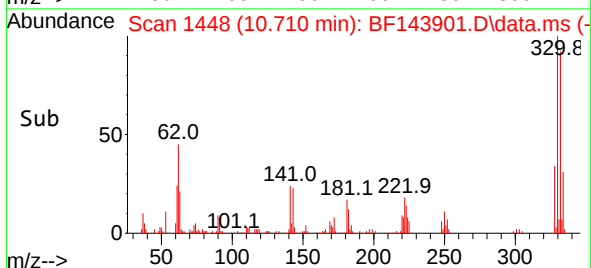
Supervised By :Jagrut Upadhyay 10/09/2025

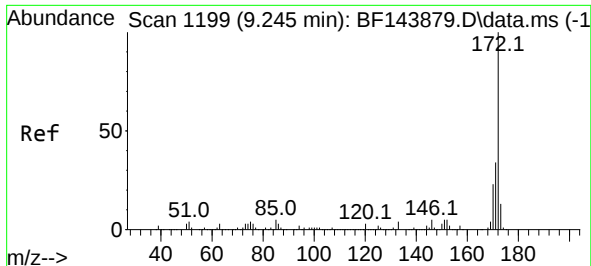


#42
2,4,6-Tribromophenol
Concen: 37.422 ng
RT: 10.710 min Scan# 1448
Delta R.T. -0.012 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06



Tgt Ion:330 Resp: 86586
Ion Ratio Lower Upper
330 100
332 92.3 76.9 115.3
141 24.7 20.2 30.4





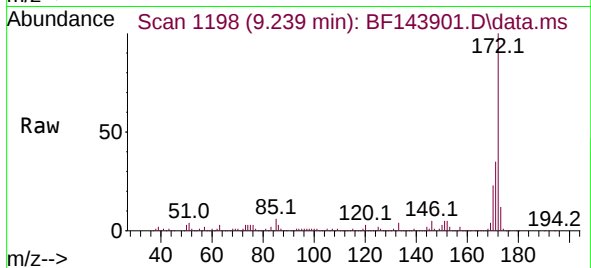
#45
2-Fluorobiphenyl
Concen: 32.416 ng
RT: 9.239 min Scan# 1199
Delta R.T. -0.012 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725



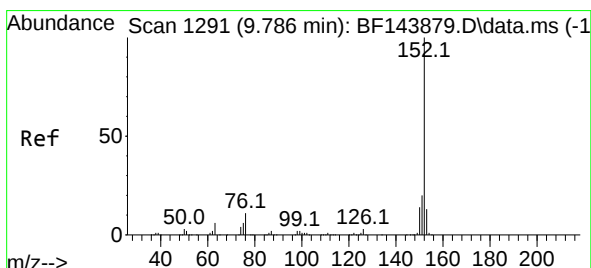
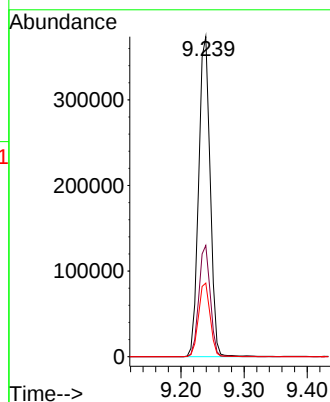
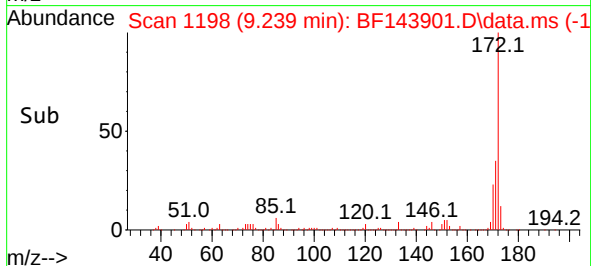
Tgt Ion:172 Resp: 474578
Ion Ratio Lower Upper
172 100
171 34.7 27.4 41.0
170 23.0 18.6 28.0

Manual Integrations

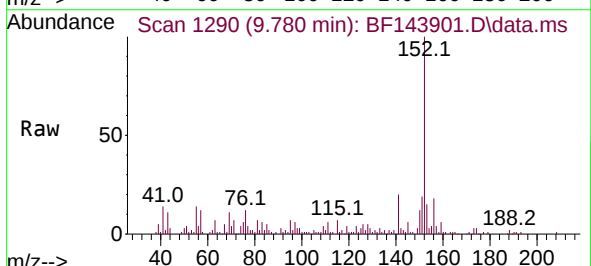
APPROVED

Reviewed By :Rahul Chavli 10/09/2025

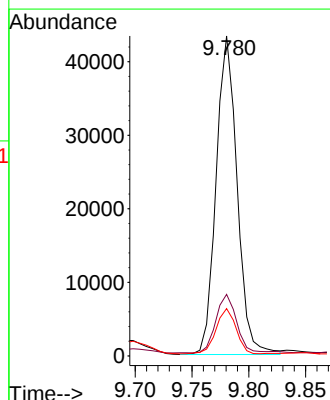
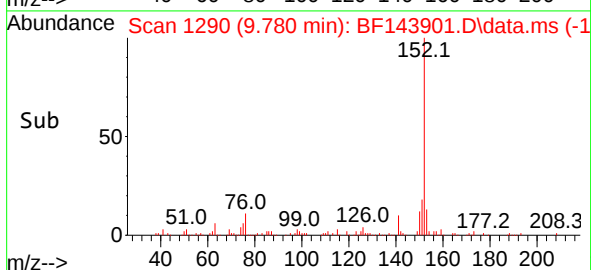
Supervised By :Jagrut Upadhyay 10/09/2025

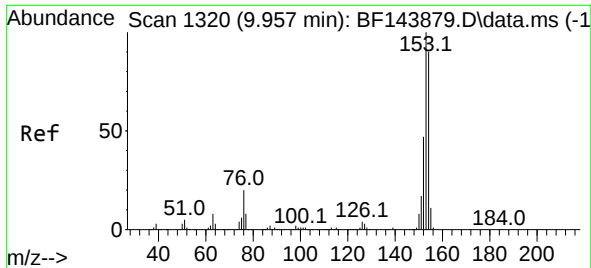


#49
Acenaphthylene
Concen: 3.089 ng
RT: 9.780 min Scan# 1290
Delta R.T. -0.006 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06



Tgt Ion:152 Resp: 55688
Ion Ratio Lower Upper
152 100
151 19.2 15.8 23.6
153 14.8 10.5 15.7





#52
Acenaphthene
Concen: 3.075 ng
RT: 9.951 min Scan# 1319
Delta R.T. -0.012 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725

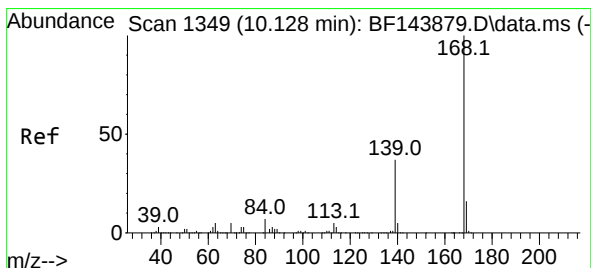
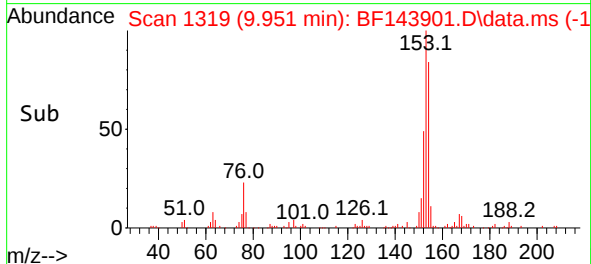
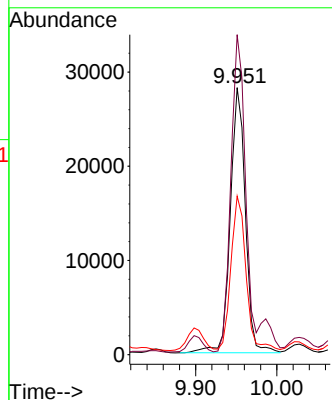
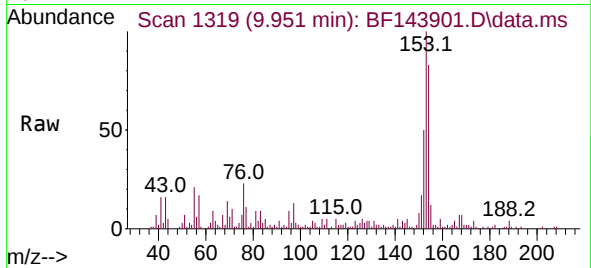
Tgt Ion:154 Resp: 36325
Ion Ratio Lower Upper
154 100
153 119.9 89.3 133.9
152 59.4 42.2 63.2

Manual Integrations

APPROVED

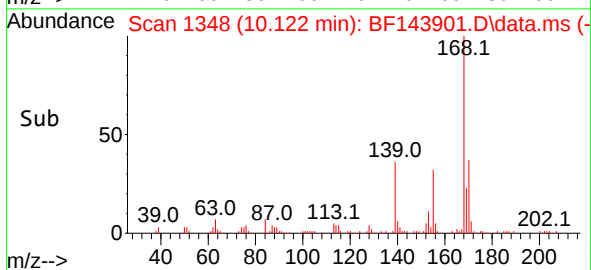
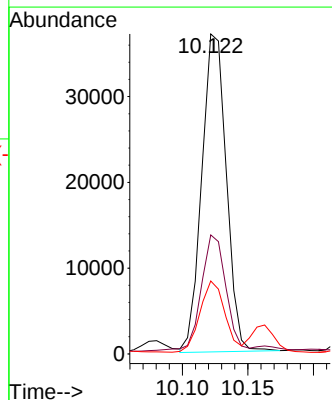
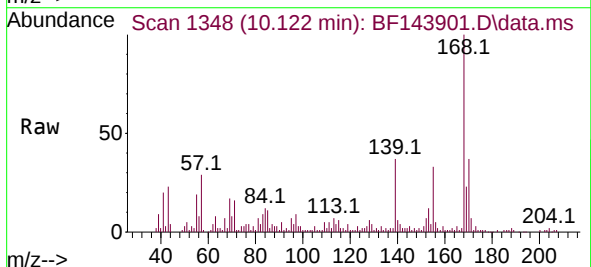
Reviewed By :Rahul Chavli 10/09/2025

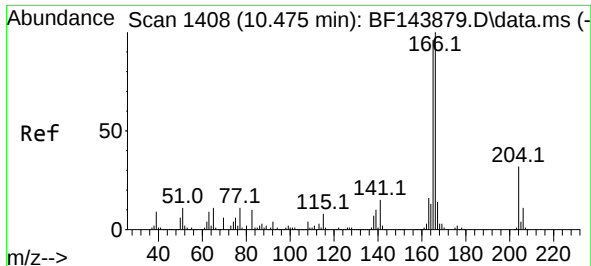
Supervised By :Jagrut Upadhyay 10/09/2025



#55
Dibenzofuran
Concen: 2.900 ng
RT: 10.122 min Scan# 1348
Delta R.T. -0.012 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

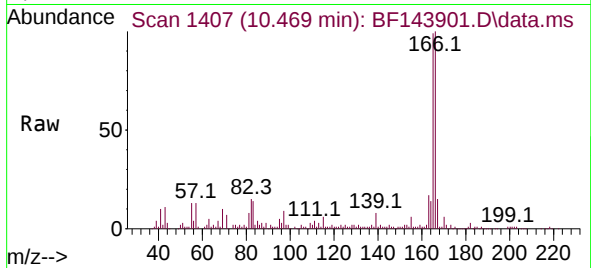
Tgt Ion:168 Resp: 48367
Ion Ratio Lower Upper
168 100
139 37.2 29.8 44.8
169 22.8 12.8 19.2#





#58
Fluorene
Concen: 6.606 ng
RT: 10.469 min Scan# 1407
Delta R.T. -0.012 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

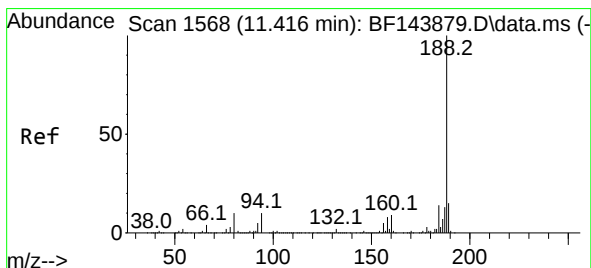
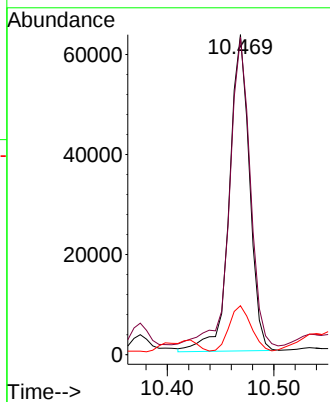
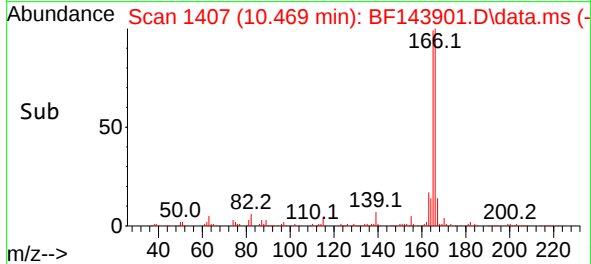
Instrument :
BNA_F
ClientSampleId :
TR-04-100725



Tgt Ion:166 Resp: 83128
Ion Ratio Lower Upper
166 100
165 99.2 77.0 115.6
167 15.3 11.1 16.7

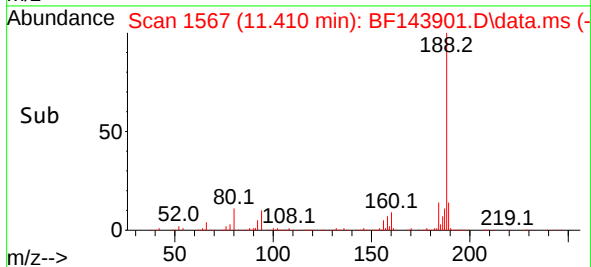
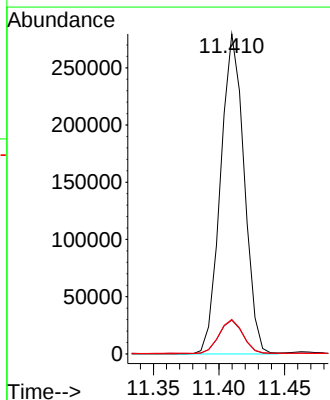
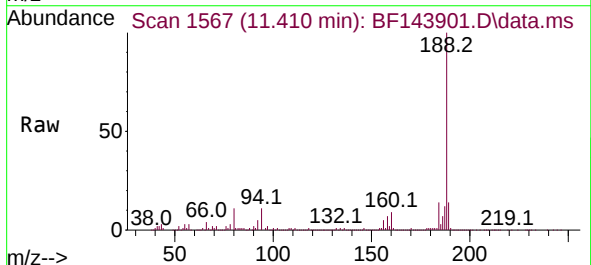
Manual Integrations
APPROVED

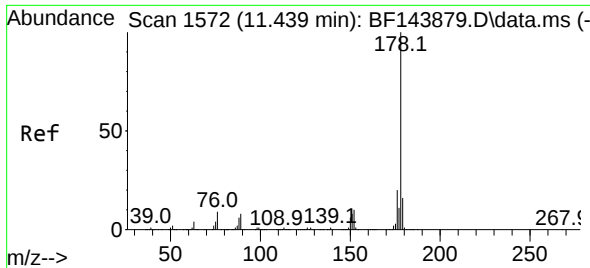
Reviewed By :Rahul Chavli 10/09/2025
Supervised By :Jagrut Upadhyay 10/09/2025



#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.410 min Scan# 1567
Delta R.T. -0.006 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Tgt Ion:188 Resp: 350467
Ion Ratio Lower Upper
188 100
94 10.5 7.8 11.6
80 10.8 7.9 11.9





#71
Phenanthrene
Concen: 31.684 ng
RT: 11.433 min Scan# 1572
Delta R.T. -0.012 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

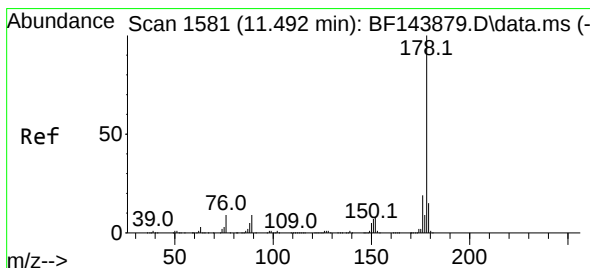
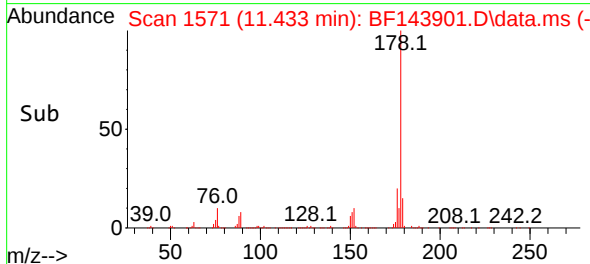
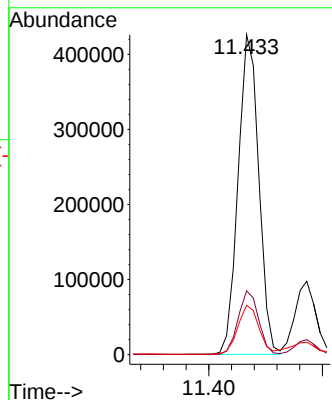
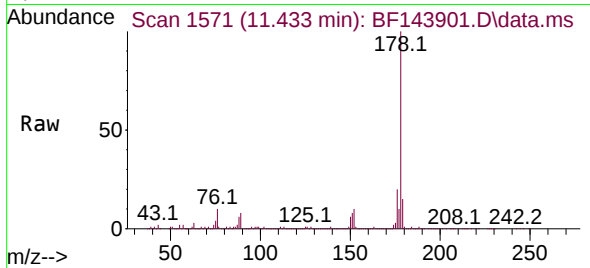
ClientSampleId :

TR-04-100725

Tgt Ion:178 Resp: 538333
Ion Ratio Lower Upper
178 100
176 19.9 15.9 23.9
179 15.4 12.4 18.6

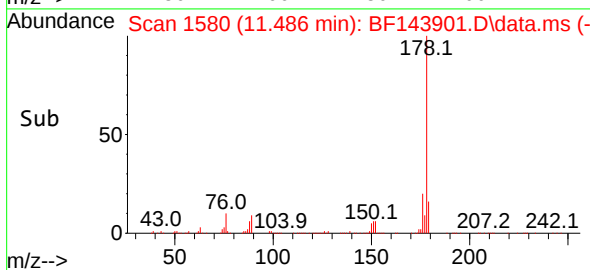
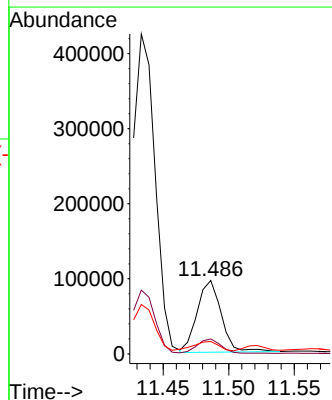
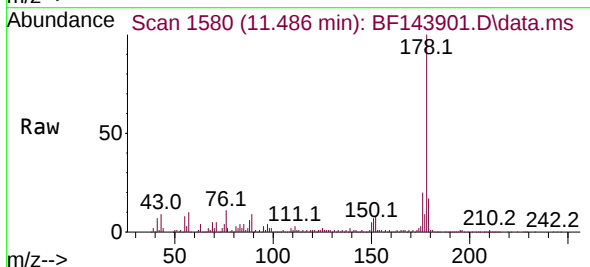
Manual Integrations
APPROVED

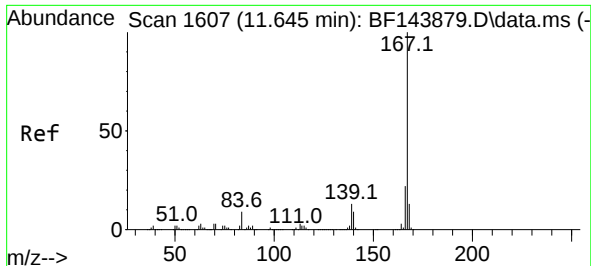
Reviewed By :Rahul Chavli 10/09/2025
Supervised By :Jagrut Upadhyay 10/09/2025



#72
Anthracene
Concen: 7.147 ng
RT: 11.486 min Scan# 1580
Delta R.T. -0.012 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Tgt Ion:178 Resp: 122678
Ion Ratio Lower Upper
178 100
176 20.3 14.9 22.3
179 16.9 12.2 18.2





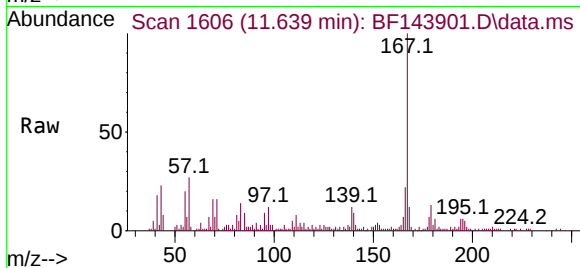
#73
 Carbazole
 Concen: 2.963 ng
 RT: 11.639 min Scan# 1606
 Delta R.T. -0.012 min
 Lab File: BF143901.D
 Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725



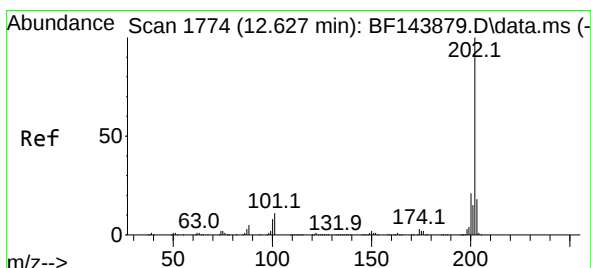
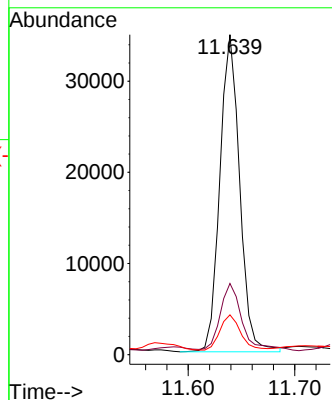
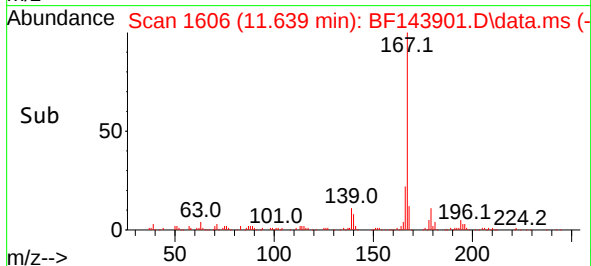
Tgt Ion:167 Resp: 45041
 Ion Ratio Lower Upper
 167 100
 166 22.2 17.2 25.8
 139 12.4 10.1 15.1

Manual Integrations

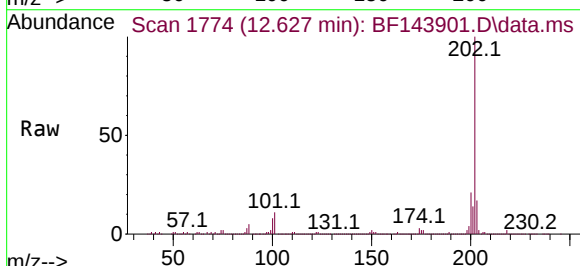
APPROVED

Reviewed By :Rahul Chavli 10/09/2025

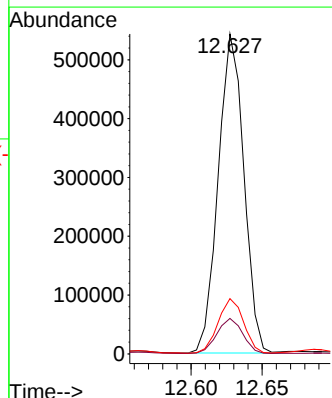
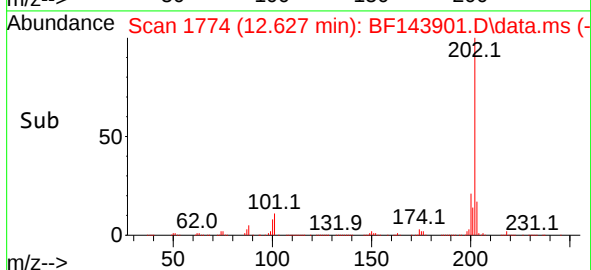
Supervised By :Jagrut Upadhyay 10/09/2025

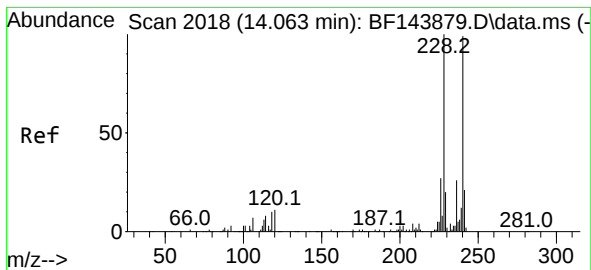


#75
 Fluoranthene
 Concen: 38.897 ng
 RT: 12.627 min Scan# 1774
 Delta R.T. -0.006 min
 Lab File: BF143901.D
 Acq: 08 Oct 2025 18:06



Tgt Ion:202 Resp: 682648
 Ion Ratio Lower Upper
 202 100
 101 11.1 0.0 30.7
 203 17.3 0.0 37.8





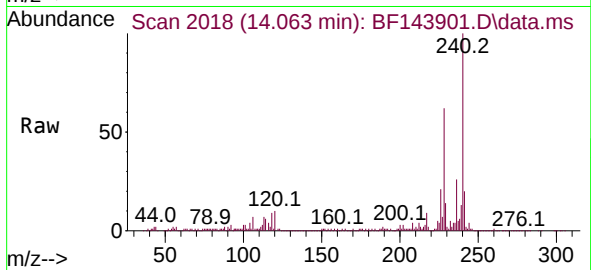
#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.063 min Scan# 2018
Delta R.T. -0.005 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725



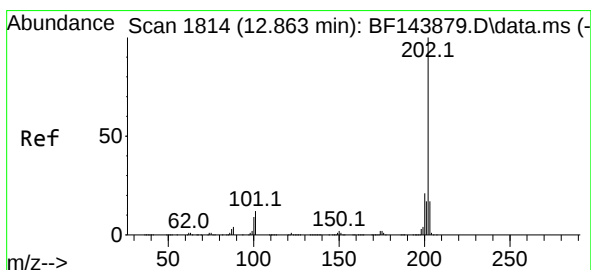
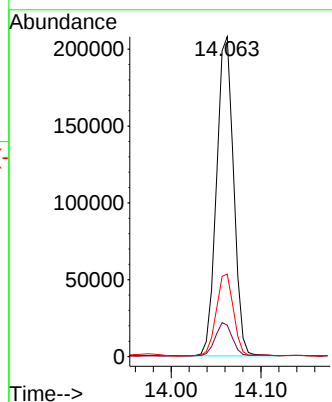
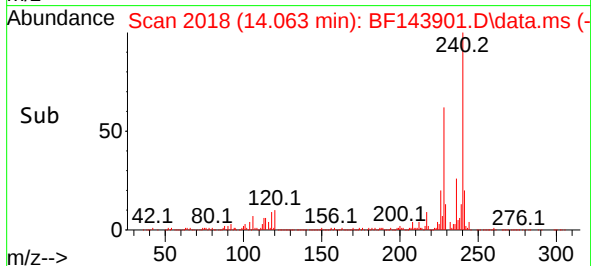
Tgt Ion:240 Resp: 275860
Ion Ratio Lower Upper
240 100
120 9.8 8.6 13.0
236 25.8 21.1 31.7

Manual Integrations

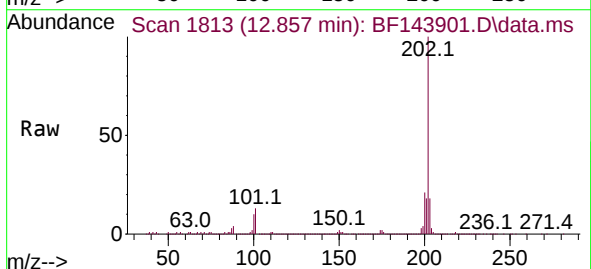
APPROVED

Reviewed By :Rahul Chavli 10/09/2025

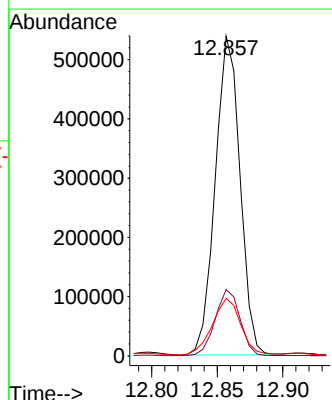
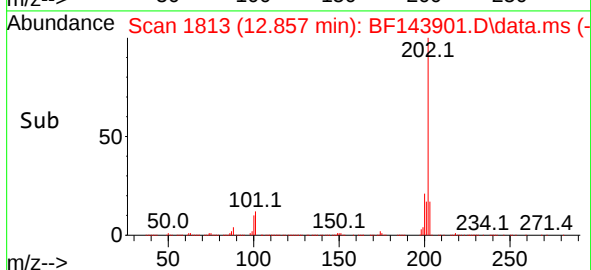
Supervised By :Jagrut Upadhyay 10/09/2025

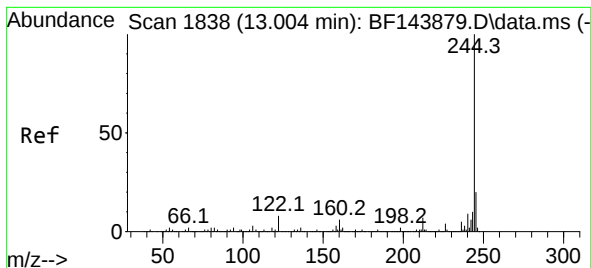


#78
Pyrene
Concen: 30.811 ng
RT: 12.857 min Scan# 1813
Delta R.T. -0.006 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06



Tgt Ion:202 Resp: 708593
Ion Ratio Lower Upper
202 100
200 20.7 17.0 25.6
203 18.0 13.8 20.6





#79

Terphenyl-d14

Concen: 24.901 ng

RT: 12.998 min Scan# 1838

Delta R.T. -0.012 min

Lab File: BF143901.D

Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725

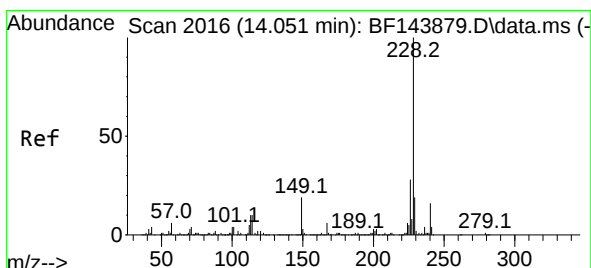
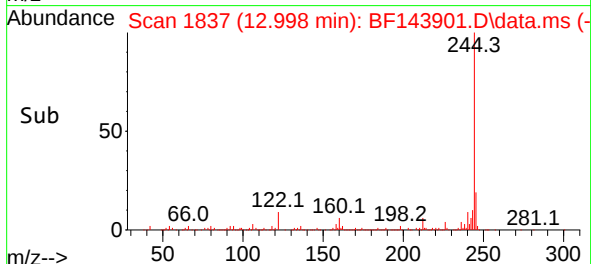
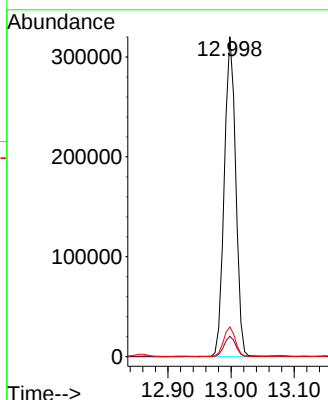
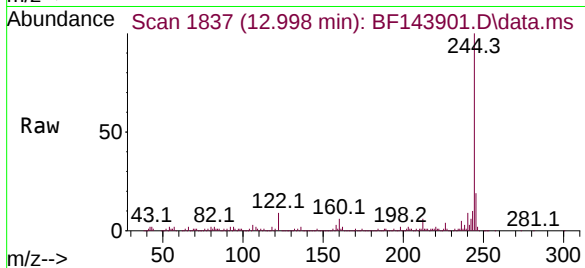
Tgt Ion:244 Resp: 401930
 Ion Ratio Lower Upper
 244 100
 212 6.4 5.4 8.0
 122 9.3 6.4 9.6

Manual Integrations

APPROVED

Reviewed By :Rahul Chavli 10/09/2025

Supervised By :Jagrut Upadhyay 10/09/2025



#81

Benzo(a)anthracene

Concen: 24.495 ng

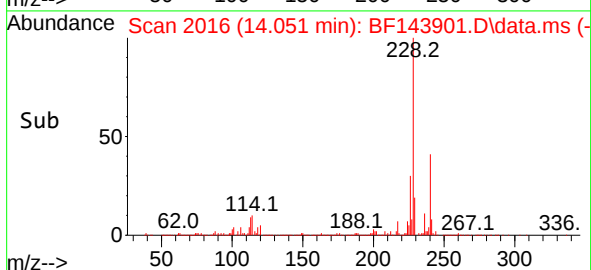
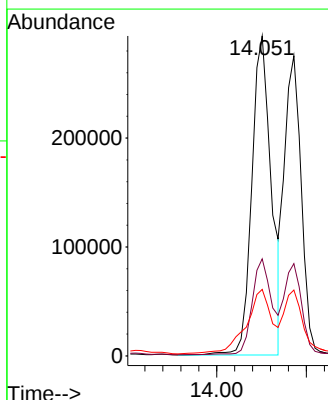
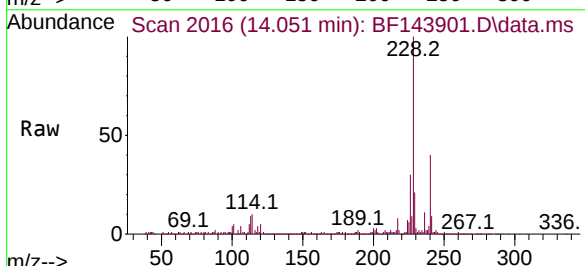
RT: 14.051 min Scan# 2016

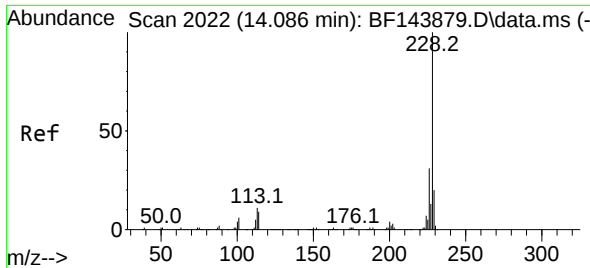
Delta R.T. -0.006 min

Lab File: BF143901.D

Acq: 08 Oct 2025 18:06

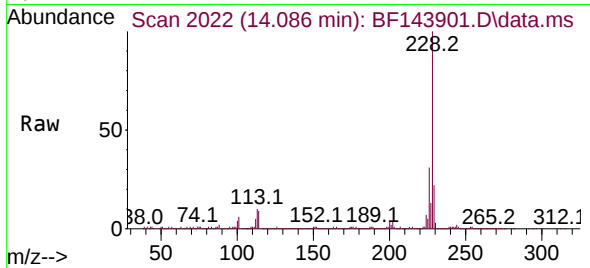
Tgt Ion:228 Resp: 442189
 Ion Ratio Lower Upper
 228 100
 226 30.3 22.2 33.2
 229 20.8 15.6 23.4





#83
Chrysene
Concen: 21.287 ng
RT: 14.086 min Scan# 2022
Delta R.T. -0.006 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

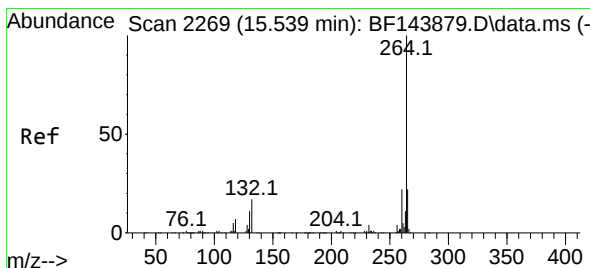
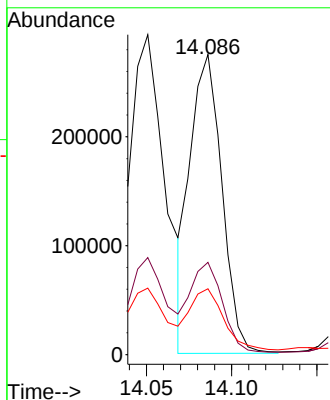
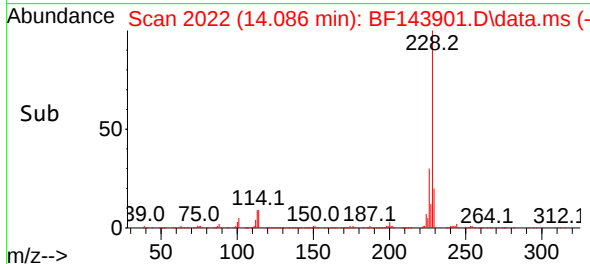
Instrument :
BNA_F
ClientSampleId :
TR-04-100725



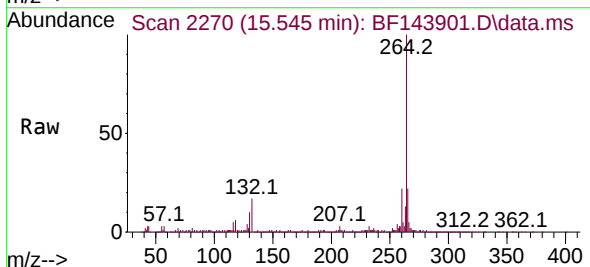
Tgt Ion:228 Resp: 355662
Ion Ratio Lower Upper
228 100
226 30.7 24.4 36.6
229 21.9 15.9 23.9

Manual Integrations
APPROVED

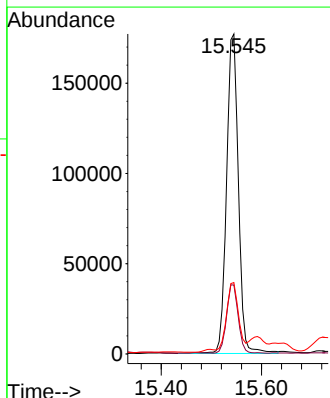
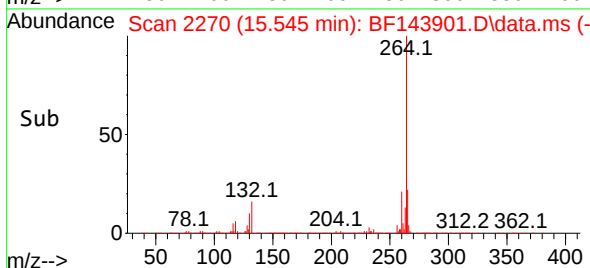
Reviewed By :Rahul Chavli 10/09/2025
Supervised By :Jagrut Upadhyay 10/09/2025

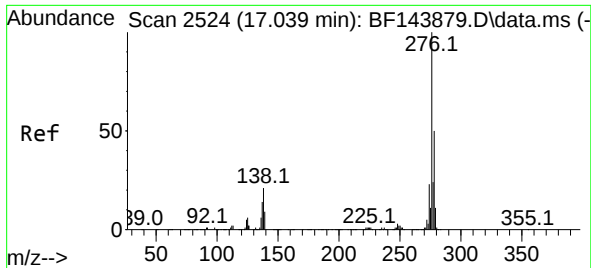


#86
Perylene-d12
Concen: 20.000 ng
RT: 15.545 min Scan# 2270
Delta R.T. 0.000 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06



Tgt Ion:264 Resp: 290424
Ion Ratio Lower Upper
264 100
260 21.5 17.8 26.8
265 22.3 17.5 26.3





#87
Indeno(1,2,3-cd)pyrene
Concen: 7.946 ng
RT: 17.027 min Scan# 21
Delta R.T. -0.029 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

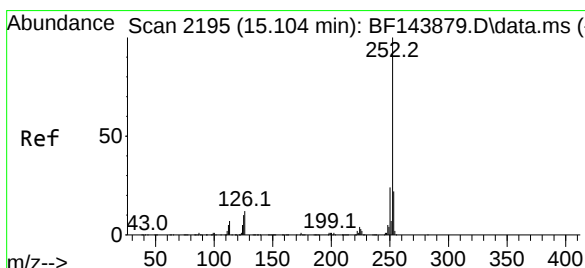
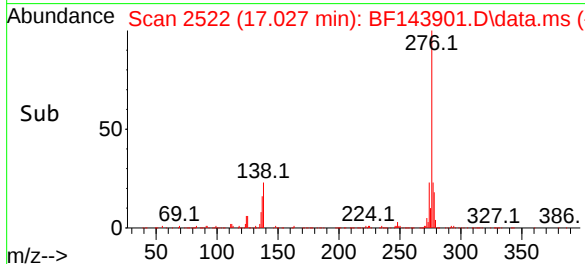
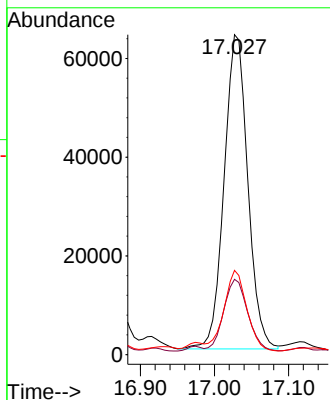
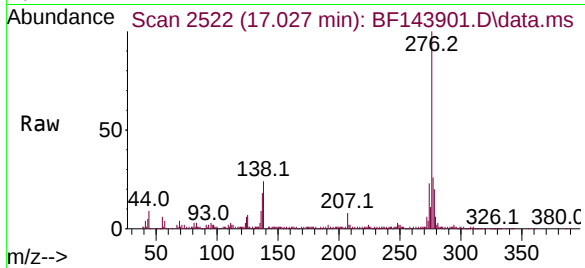
ClientSampleId :

TR-04-100725

Tgt Ion:276 Resp: 141412
Ion Ratio Lower Upper
276 100
138 22.9 18.2 27.2
277 24.8 19.8 29.6

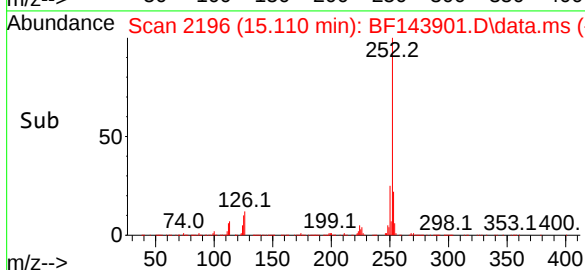
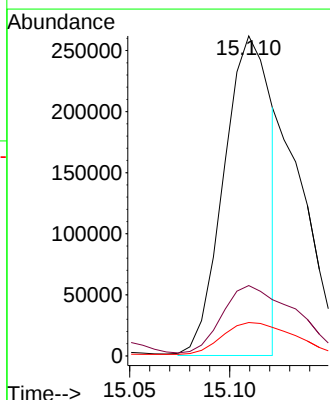
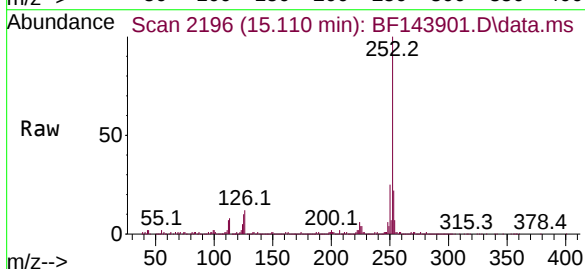
Manual Integrations
APPROVED

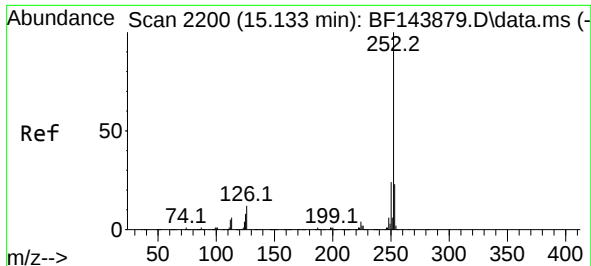
Reviewed By :Rahul Chavli 10/09/2025
Supervised By :Jagrut Upadhyay 10/09/2025



#88
Benzo(b)fluoranthene
Concen: 25.708 ng m
RT: 15.110 min Scan# 2196
Delta R.T. -0.006 min
Lab File: BF143901.D
Acq: 08 Oct 2025 18:06

Tgt Ion:252 Resp: 428889
Ion Ratio Lower Upper
252 100
253 22.0 17.4 26.2
125 10.4 7.8 11.6





#89

Benzo(k)fluoranthene

Concen: 13.221 ng m

RT: 15.121 min Scan# 2198

Delta R.T. -0.023 min

Lab File: BF143901.D

Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725

Tgt Ion:252 Resp: 204089

Ion Ratio Lower Upper

252 100

253 22.6 17.8 26.8

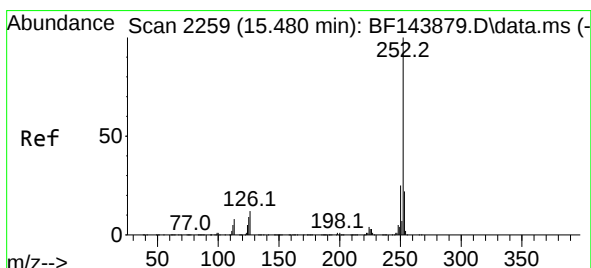
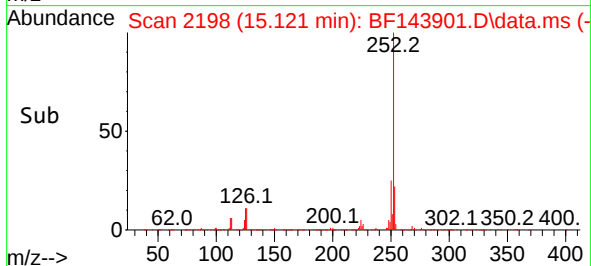
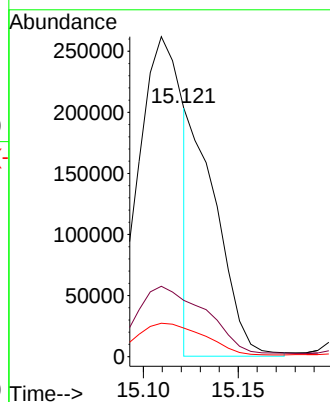
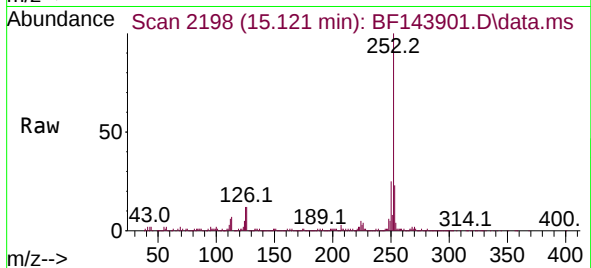
125 11.5 7.4 11.2

Manual Integrations

APPROVED

Reviewed By :Rahul Chavli 10/09/2025

Supervised By :Jagrut Upadhyay 10/09/2025



#90

Benzo(a)pyrene

Concen: 22.058 ng

RT: 15.480 min Scan# 2259

Delta R.T. -0.006 min

Lab File: BF143901.D

Acq: 08 Oct 2025 18:06

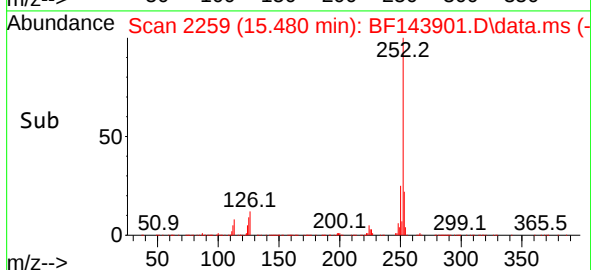
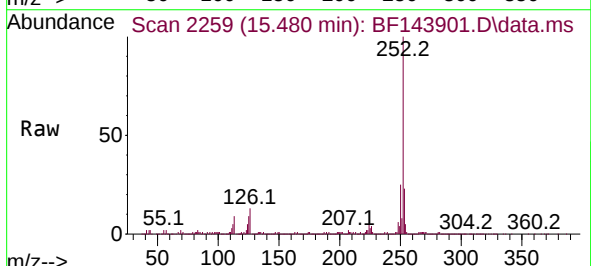
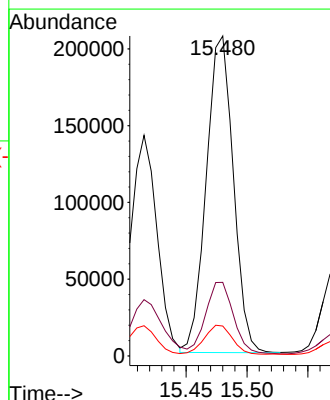
Tgt Ion:252 Resp: 319086

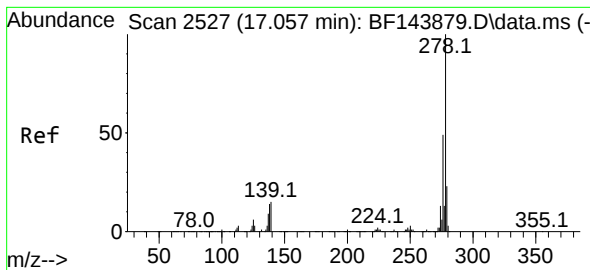
Ion Ratio Lower Upper

252 100

253 23.0 17.3 25.9

125 9.3 7.0 10.4





#91

Dibenzo(a,h)anthracene

Concen: 2.354 ng m

RT: 17.039 min Scan# 2527

Delta R.T. -0.041 min

Lab File: BF143901.D

Acq: 08 Oct 2025 18:06

Instrument :

BNA_F

ClientSampleId :

TR-04-100725

Tgt Ion:278 Resp: 33694

Ion Ratio Lower Upper

278 100

139 21.1 11.7 17.5

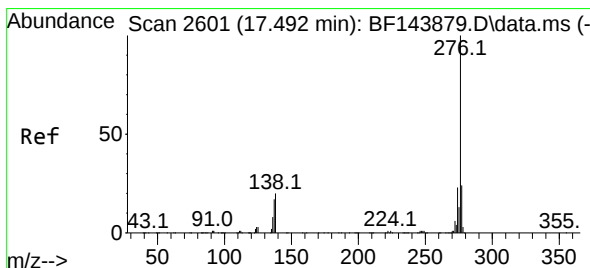
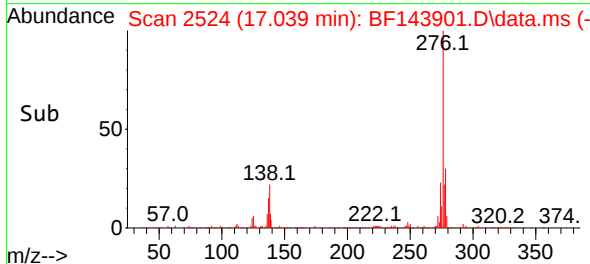
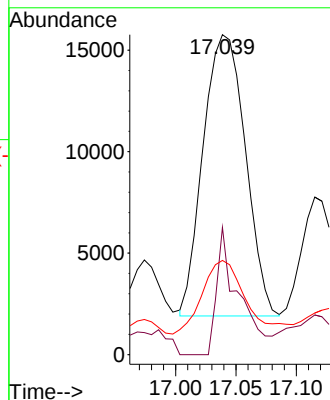
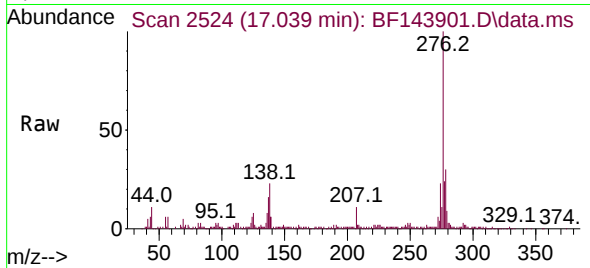
279 29.4 18.4 27.6

Manual Integrations

APPROVED

Reviewed By :Rahul Chavli 10/09/2025

Supervised By :Jagrut Upadhyay 10/09/2025



#92

Benzo(g,h,i)perylene

Concen: 9.231 ng

RT: 17.480 min Scan# 2599

Delta R.T. -0.035 min

Lab File: BF143901.D

Acq: 08 Oct 2025 18:06

Tgt Ion:276 Resp: 132112

Ion Ratio Lower Upper

276 100

277 25.0 19.0 28.6

138 24.7 16.1 24.1#

