

Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF101625\
 Data File : BF143977.D
 Acq On : 16 Oct 2025 14:13
 Operator : RC/JU
 Sample : Q3345-05DL 25X
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_F
 ClientSampleId :
 M-R-SOILD

Manual Integrations
 APPROVED

Reviewed By :Rahul Chavli 10/17/2025
 Supervised By :Jagrut Upadhyay 10/17/2025

Quant Time: Oct 16 14:40:11 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	102974	20.000	ng	0.00
21) Naphthalene-d8	8.163	136	387550	20.000	ng	0.00
39) Acenaphthene-d10	9.922	164	212715	20.000	ng	0.00
64) Phenanthrene-d10	11.416	188	375285	20.000	ng	0.00
76) Chrysene-d12	14.063	240	228309	20.000	ng	0.00
86) Perylene-d12	15.551	264	269946	20.000	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.493	112	27758	4.281	ng	0.00
7) Phenol-d6	6.504	99	33535	4.339	ng	-0.01
23) Nitrobenzene-d5	7.440	82	19809	3.105	ng	-0.02
42) 2,4,6-Tribromophenol	10.710	330	8438	3.983	ng	-0.01
45) 2-Fluorobiphenyl	9.239	172	43687	3.259	ng	-0.01
79) Terphenyl-d14	12.998	244	45567	3.411	ng	-0.01
Target Compounds						Qvalue
31) Naphthalene	8.187	128	636297	36.093	ng	100
37) 2-Methylnaphthalene	8.875	142	168921	14.384	ng	98
38) 1-Methylnaphthalene	8.975	142	180276	15.827	ng	99
46) 1,1'-Biphenyl	9.339	154	35762	2.539	ng	95
49) Acenaphthylene	9.781	152	49859	3.020	ng	# 90
52) Acenaphthene	9.951	154	93564	8.650	ng	98
55) Dibenzofuran	10.128	168	76068	4.982	ng	# 95
58) Fluorene	10.469	166	131981	11.455	ng	98
71) Phenanthrene	11.439	178	462460	25.418	ng	99
72) Anthracene	11.486	178	146913	7.993	ng	98
73) Carbazole	11.645	167	37833	2.324	ng	97
75) Fluoranthene	12.633	202	341194	18.155	ng	100
78) Pyrene	12.863	202	346375	18.198	ng	98
81) Benzo(a)anthracene	14.051	228	157301	10.528	ng	93
83) Chrysene	14.086	228	125453	9.072	ng	97
87) Indeno(1,2,3-cd)pyrene	17.045	276	66694	4.032	ng	99
88) Benzo(b)fluoranthene	15.116	252	144318m	9.307	ng	
89) Benzo(k)fluoranthene	15.133	252	35035m	2.442	ng	
90) Benzo(a)pyrene	15.486	252	121245	9.017	ng	# 95
92) Benzo(g,h,i)perylene	17.498	276	61706	4.638	ng	# 91

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

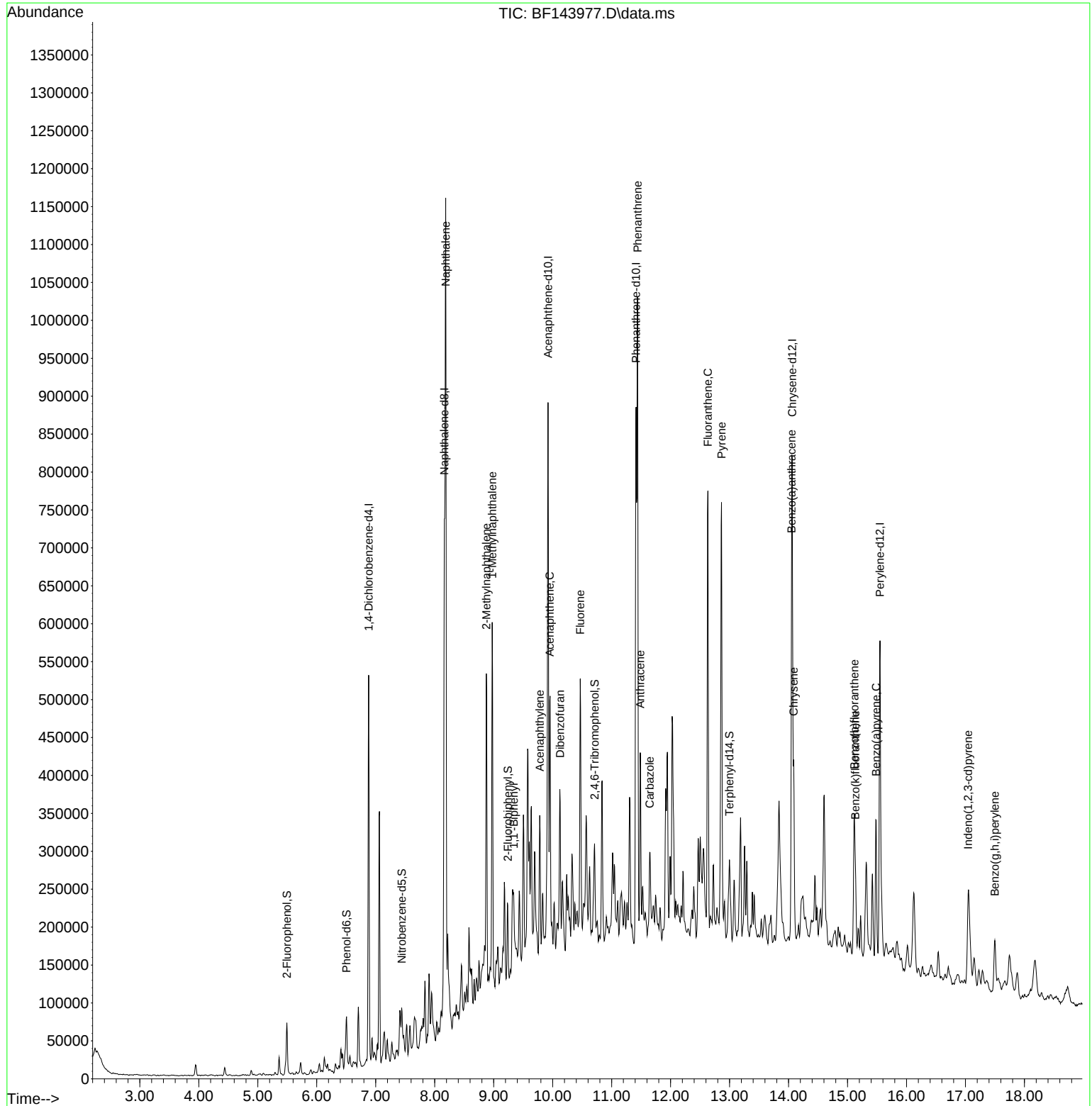
Data Path : Z:\svoasrv\HPCHEM1\BNA_F\Data\BF101625\
Data File : BF143977.D
Acq On : 16 Oct 2025 14:13
Operator : RC/JU
Sample : Q3345-05DL 25X
Misc :
ALS Vial : 5 Sample Multiplier: 1

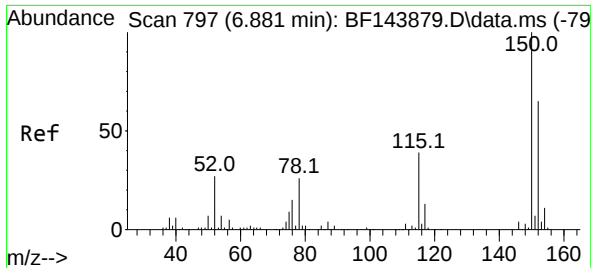
Instrument :
BNA_F
ClientSampleId :
M-R-SOILD

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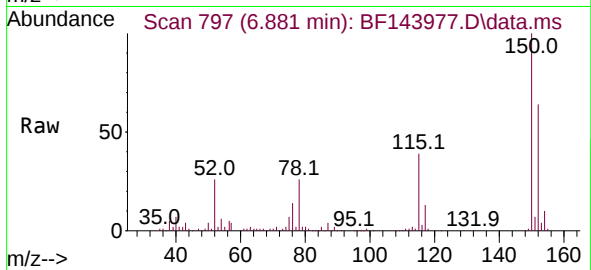
Quant Time: Oct 16 14:40:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF100625.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Oct 06 15:29:47 2025
Response via : Initial Calibration





#1
1,4-Dichlorobenzene-d4
Concen: 20.000 ng
RT: 6.881 min Scan# 797
Delta R.T. -0.005 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

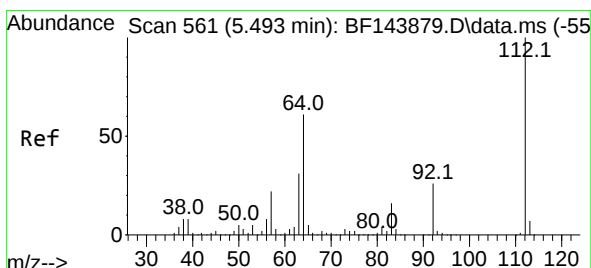
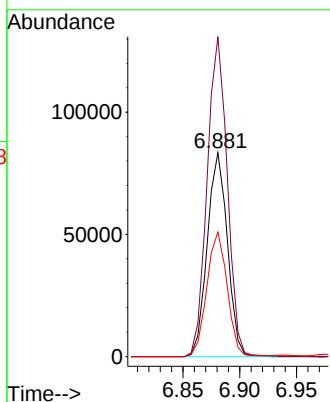
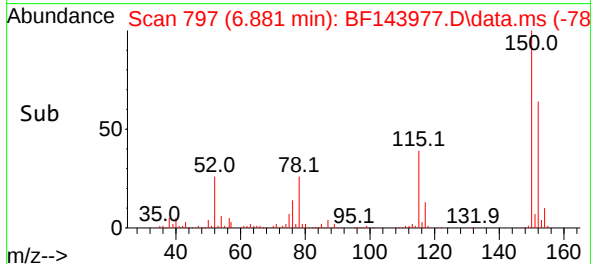
Instrument :
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ClientSampleId :
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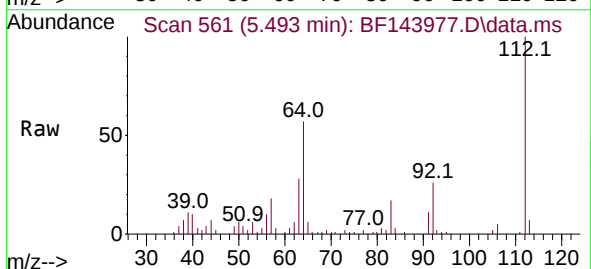
Tgt Ion:152 Resp: 102974
Ion Ratio Lower Upper
152 100
150 157.0 124.4 186.6
115 61.1 48.1 72.1

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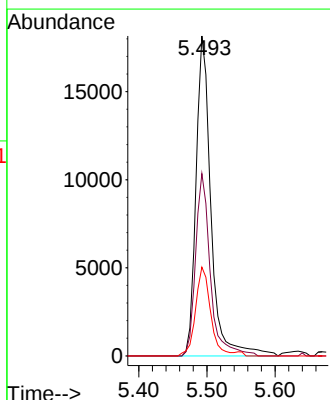
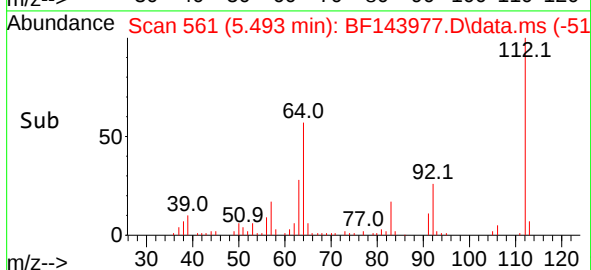
Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025

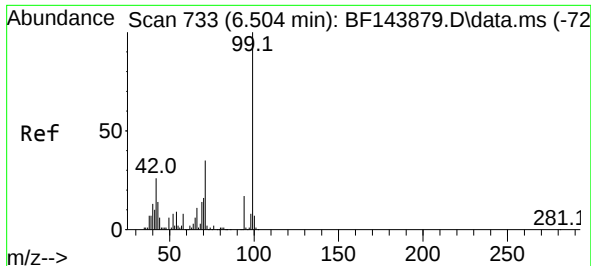


#5
2-Fluorophenol
Concen: 4.281 ng
RT: 5.493 min Scan# 561
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13



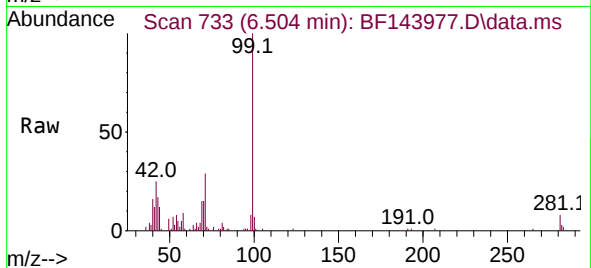
Tgt Ion:112 Resp: 27758
Ion Ratio Lower Upper
112 100
64 57.0 49.1 73.7
63 27.7 24.5 36.7





#7
Phenol-d6
Concen: 4.339 ng
RT: 6.504 min Scan# 733
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

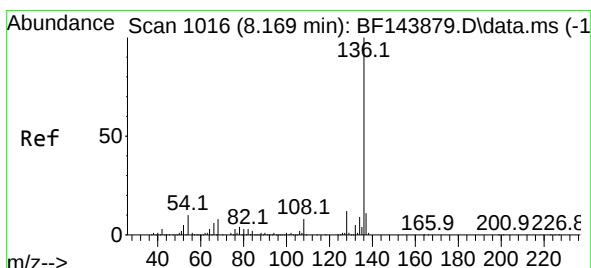
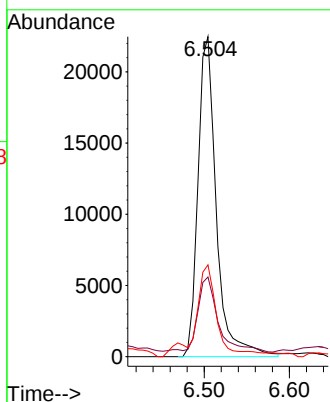
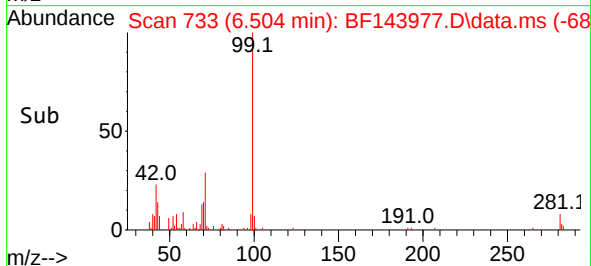
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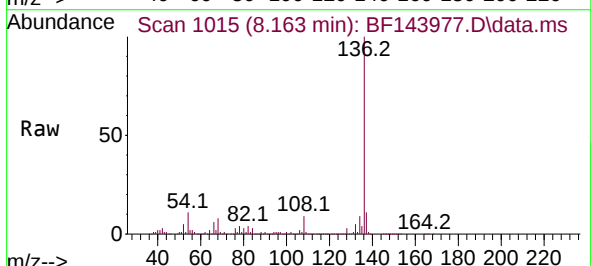
Tgt Ion: 99 Resp: 33535
Ion Ratio Lower Upper
99 100
42 24.9 21.0 31.4
71 28.7 27.8 41.8

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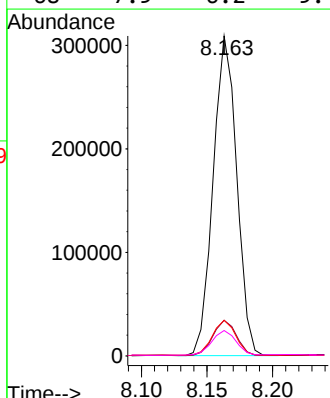
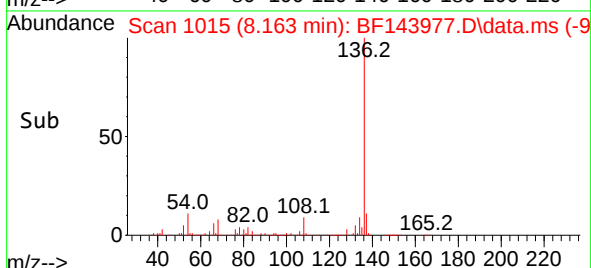
Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025

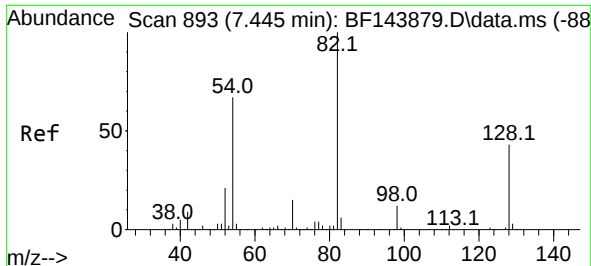


#21
Naphthalene-d8
Concen: 20.000 ng
RT: 8.163 min Scan# 1015
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13



Tgt Ion:136 Resp: 387550
Ion Ratio Lower Upper
136 100
137 11.1 8.5 12.7
54 11.1 8.2 12.4
68 7.9 6.2 9.4





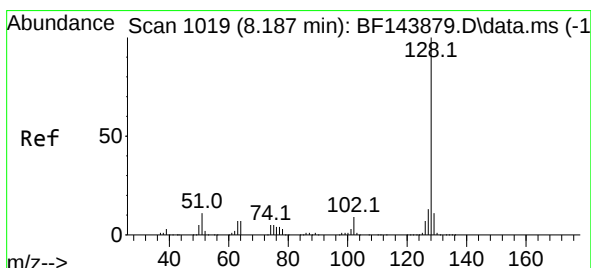
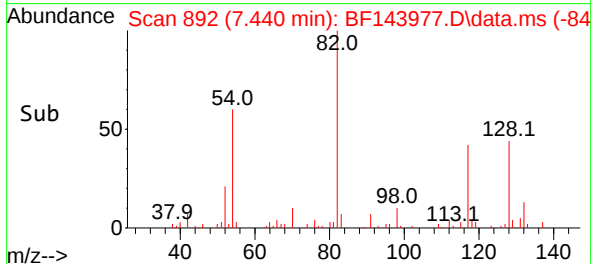
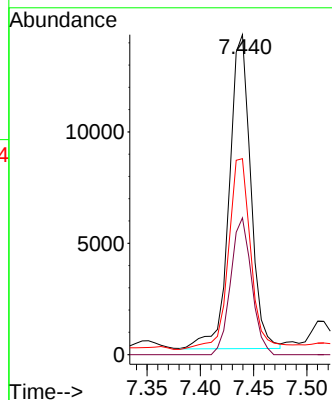
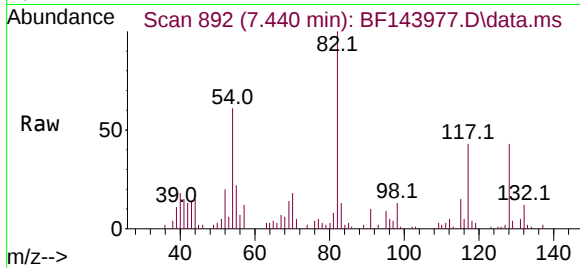
#23
Nitrobenzene-d5
Concen: 3.105 ng
RT: 7.440 min Scan# 89
Delta R.T. -0.017 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Instrument :
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Tgt Ion: 82 Resp: 19809
Ion Ratio Lower Upper
82 100
128 42.8 34.0 51.0
54 61.2 53.2 79.8

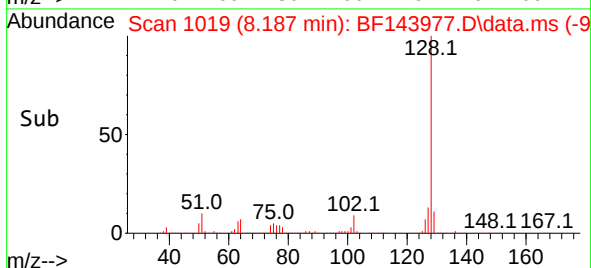
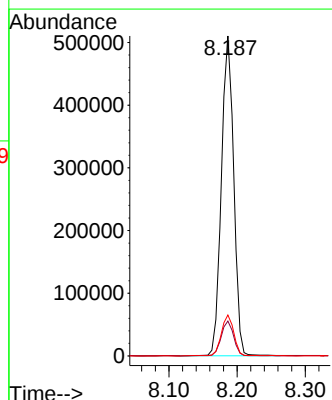
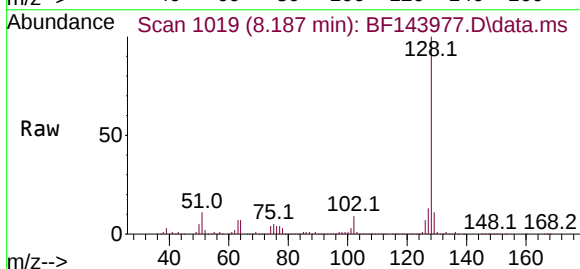
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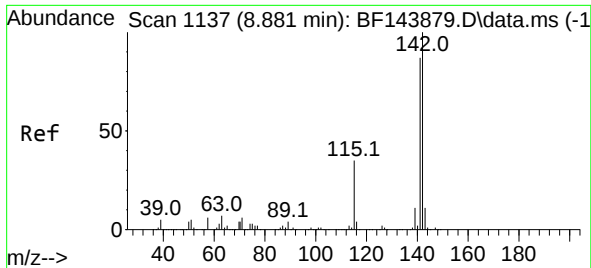
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#31
Naphthalene
Concen: 36.093 ng
RT: 8.187 min Scan# 1019
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

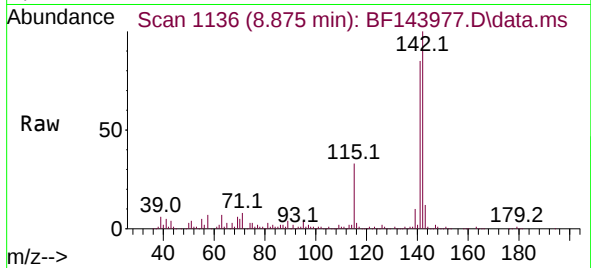
Tgt Ion:128 Resp: 636297
Ion Ratio Lower Upper
128 100
129 10.9 8.7 13.1
127 12.8 10.0 15.0





#37
2-Methylnaphthalene
Concen: 14.384 ng
RT: 8.875 min Scan# 1136
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

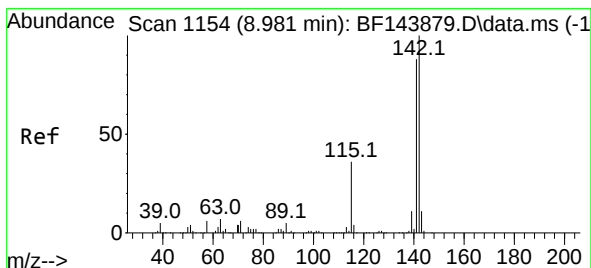
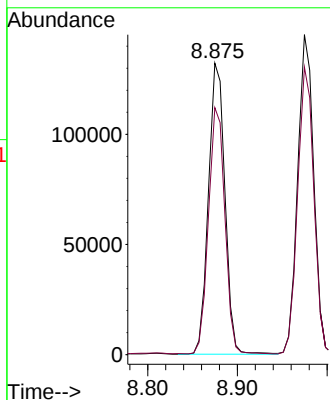
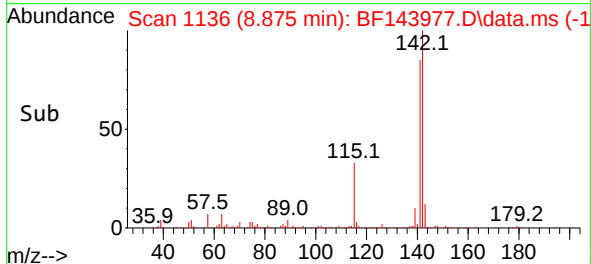
Instrument :
BNA_F
ClientSampleId :
M-R-SOILD



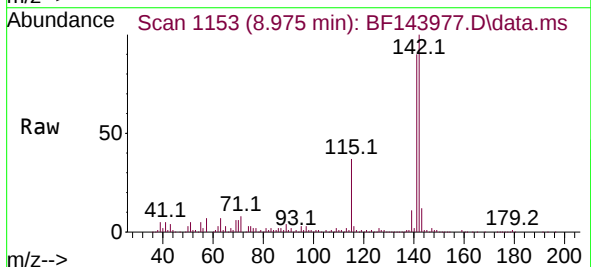
Tgt Ion:142 Resp: 16892
Ion Ratio Lower Upper
142 100
141 84.8 69.2 103.8

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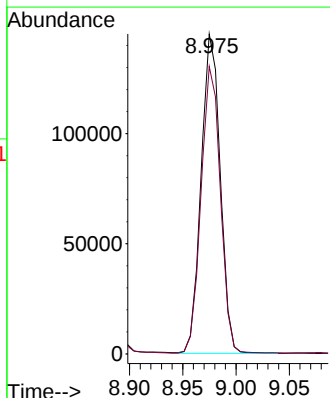
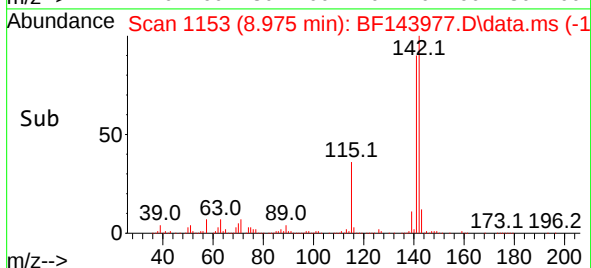
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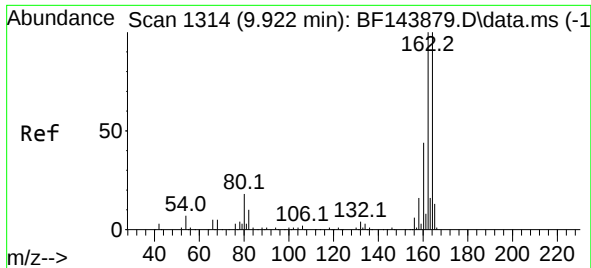


#38
1-Methylnaphthalene
Concen: 15.827 ng
RT: 8.975 min Scan# 1153
Delta R.T. -0.011 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13



Tgt Ion:142 Resp: 180276
Ion Ratio Lower Upper
142 100
141 89.8 70.8 106.2





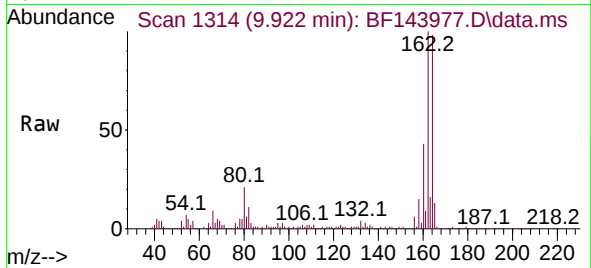
#39
Acenaphthene-d10
Concen: 20.000 ng
RT: 9.922 min Scan# 1314
Delta R.T. -0.005 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Instrument :

BNA_F

ClientSampleId :

M-R-SOILD

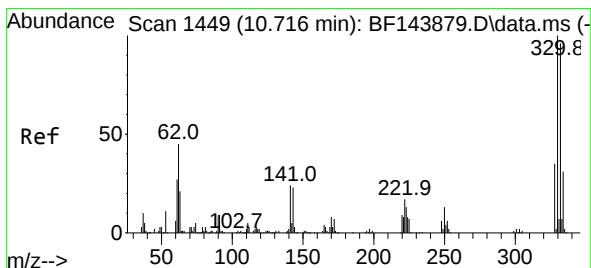
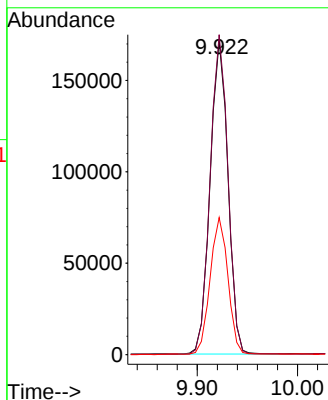
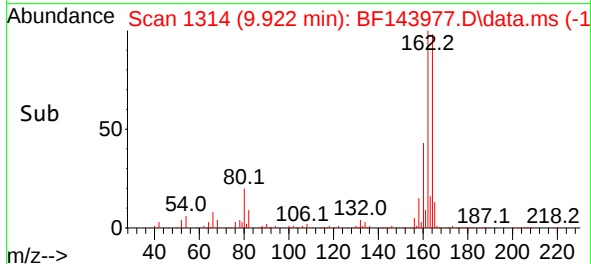


Tgt Ion:164 Resp: 212715
Ion Ratio Lower Upper
164 100
162 101.9 80.2 120.2
160 43.6 35.4 53.0

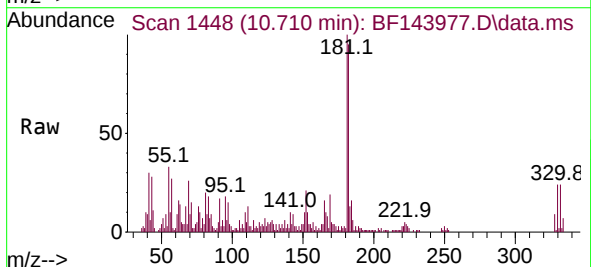
Manual Integrations

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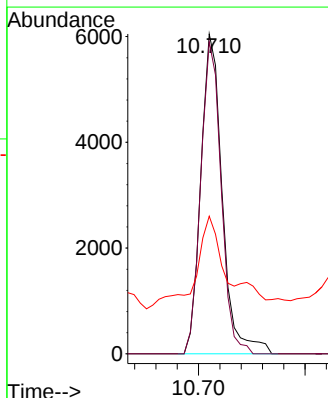
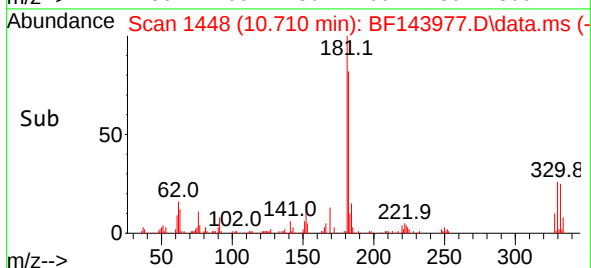
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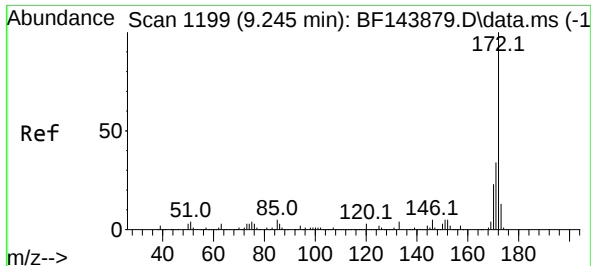


#42
2,4,6-Tribromophenol
Concen: 3.983 ng
RT: 10.710 min Scan# 1448
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13



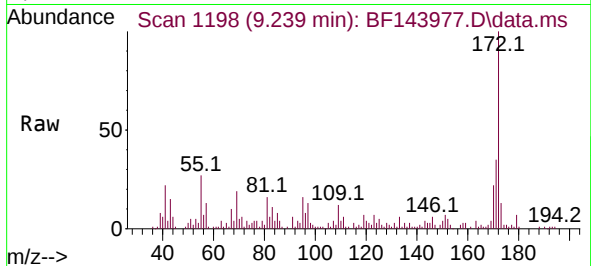
Tgt Ion:330 Resp: 8438
Ion Ratio Lower Upper
330 100
332 92.7 76.9 115.3
141 35.0 20.2 30.4





#45
2-Fluorobiphenyl
Concen: 3.259 ng
RT: 9.239 min Scan# 1199
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

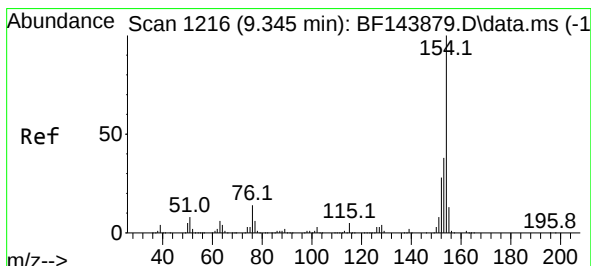
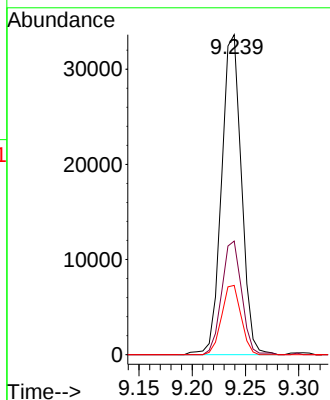
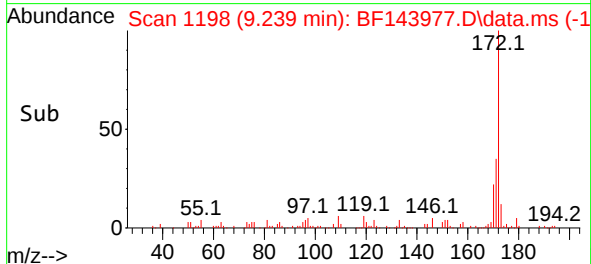
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL



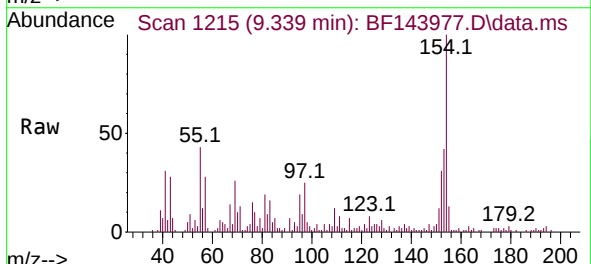
Tgt Ion:172 Resp: 4368
Ion Ratio Lower Upper
172 100
171 35.5 27.4 41.0
170 21.6 18.6 28.0

Manual Integrations
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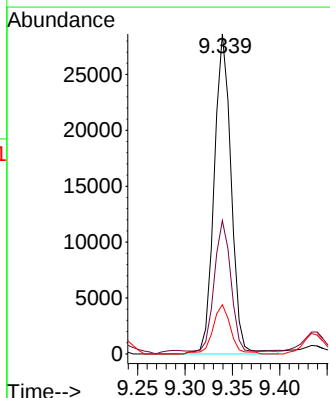
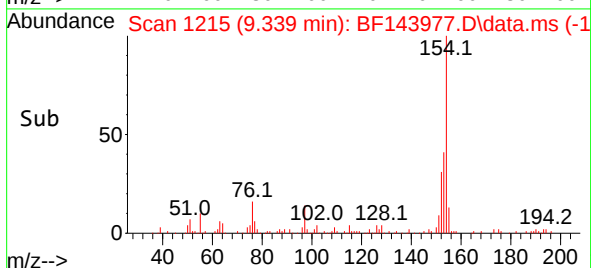
Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025

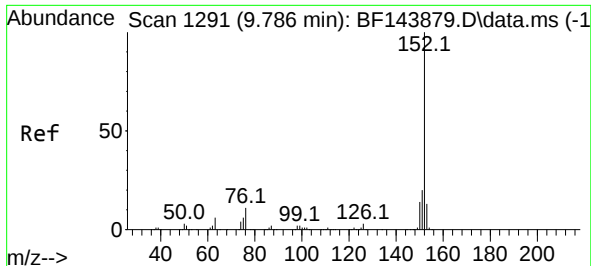


#46
1,1'-Biphenyl
Concen: 2.539 ng
RT: 9.339 min Scan# 1215
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13



Tgt Ion:154 Resp: 35762
Ion Ratio Lower Upper
154 100
153 41.7 18.4 58.4
76 15.4 0.0 34.0





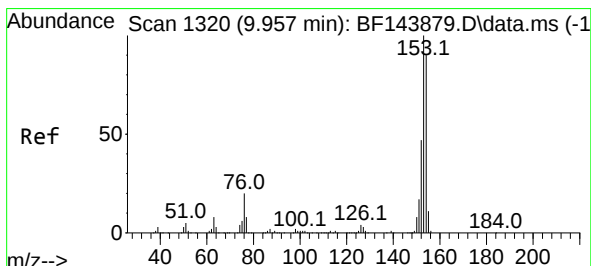
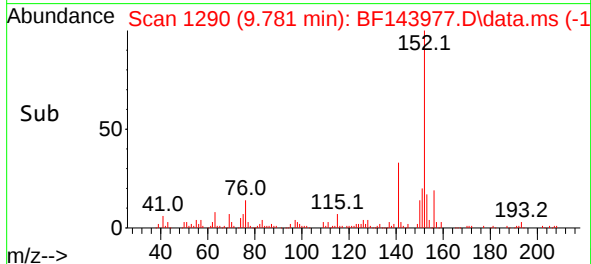
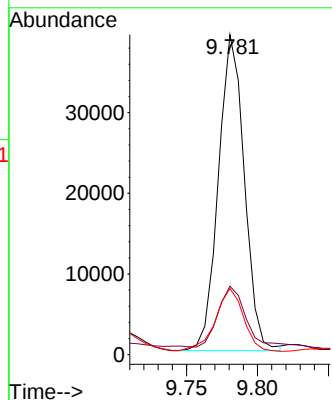
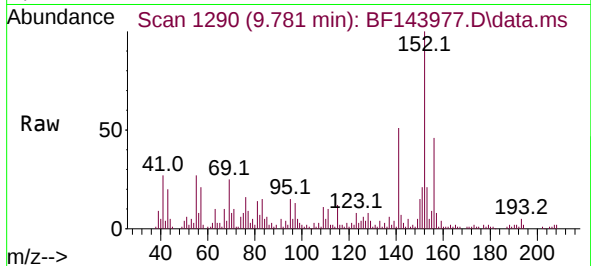
#49
Acenaphthylene
Concen: 3.020 ng
RT: 9.781 min Scan# 1319
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Instrument :
BNA_F
ClientSampleId :
M-R-SOILD

Tgt Ion:152 Resp: 49859
Ion Ratio Lower Upper
152 100
151 21.4 15.8 23.6
153 20.7 10.5 15.7

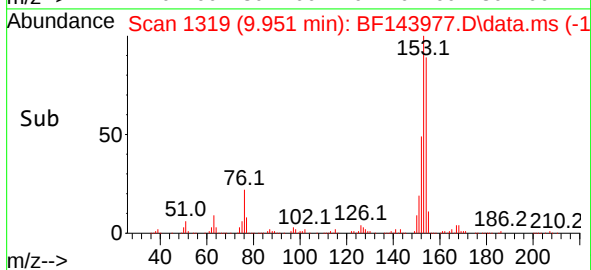
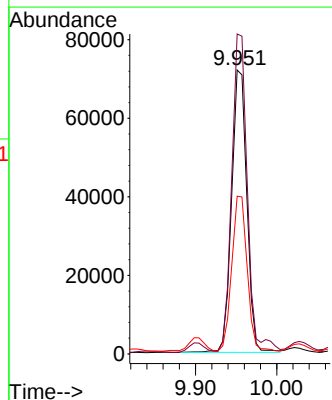
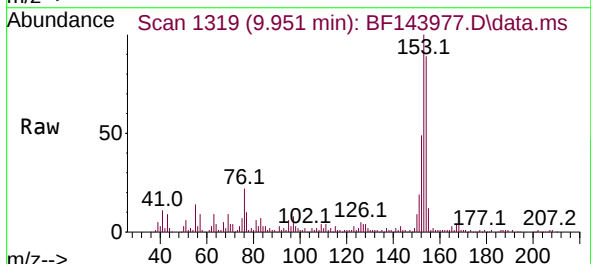
Manual Integrations
APPROVED

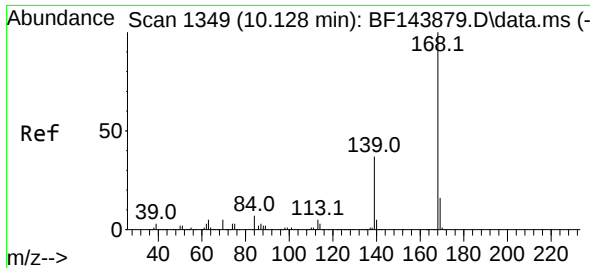
Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025



#52
Acenaphthene
Concen: 8.650 ng
RT: 9.951 min Scan# 1319
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

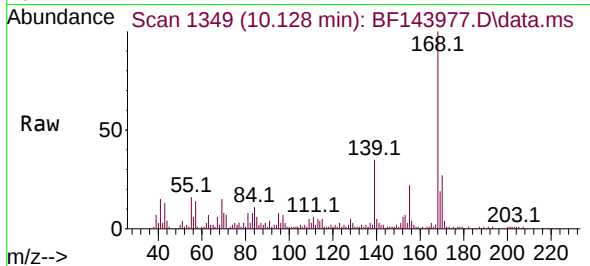
Tgt Ion:154 Resp: 93564
Ion Ratio Lower Upper
154 100
153 112.7 89.3 133.9
152 55.5 42.2 63.2





#55
Dibenzenofuran
Concen: 4.982 ng
RT: 10.128 min Scan# 1349
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

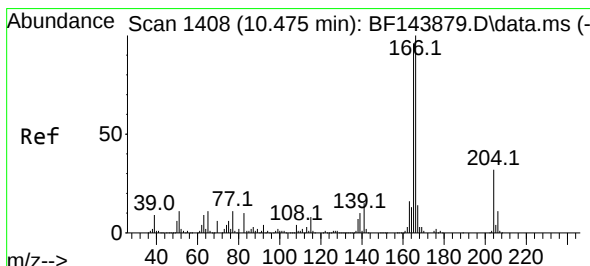
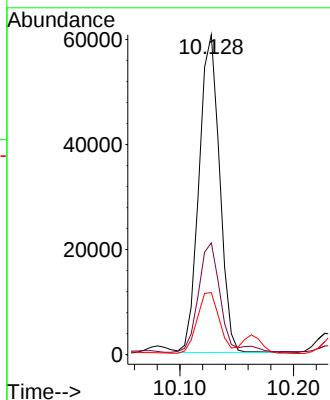
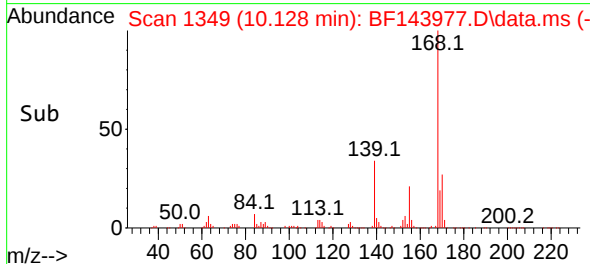
Instrument :
BNA_F
ClientSampleId :
M-R-SOILD



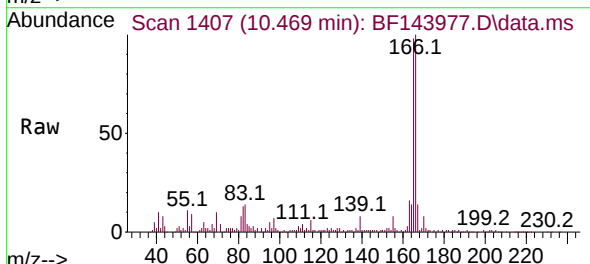
Tgt Ion:168 Resp: 76068
Ion Ratio Lower Upper
168 100
139 34.9 29.8 44.8
169 19.4 12.8 19.2

Manual Integrations
APPROVED

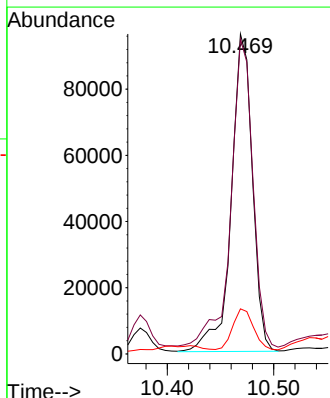
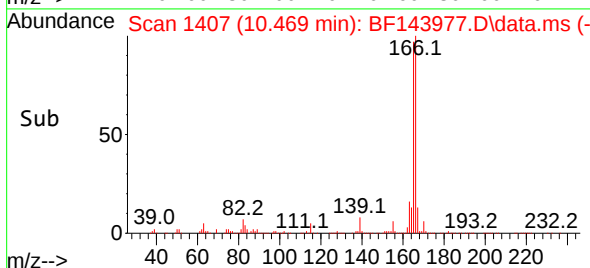
Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025

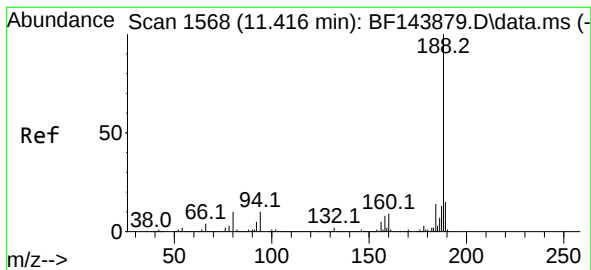


#58
Fluorene
Concen: 11.455 ng
RT: 10.469 min Scan# 1407
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13



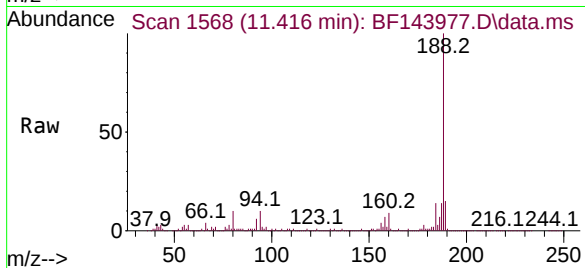
Tgt Ion:166 Resp: 131981
Ion Ratio Lower Upper
166 100
165 98.4 77.0 115.6
167 14.1 11.1 16.7





#64
Phenanthrene-d10
Concen: 20.000 ng
RT: 11.416 min Scan# 1568
Delta R.T. 0.000 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

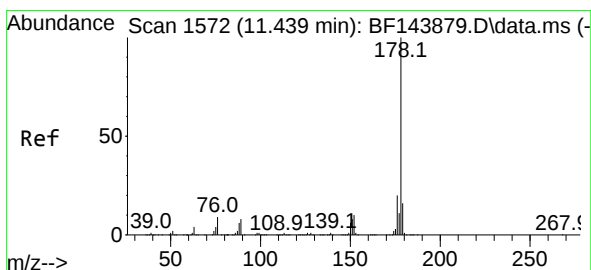
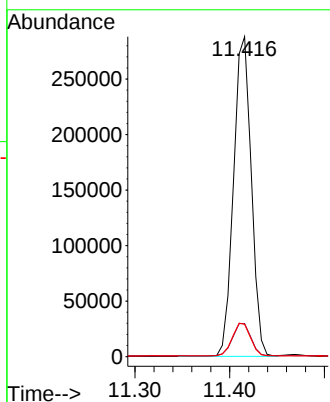
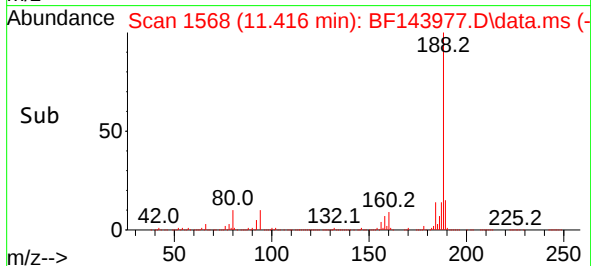
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL



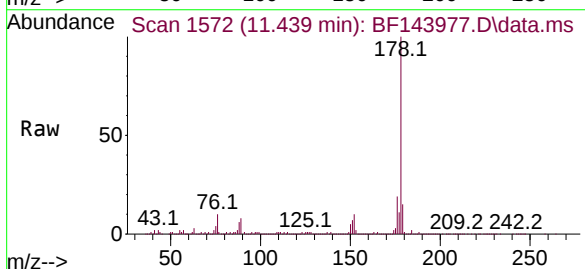
Tgt Ion:188 Resp: 375285
Ion Ratio Lower Upper
188 100
94 10.3 7.8 11.6
80 10.1 7.9 11.9

Manual Integrations
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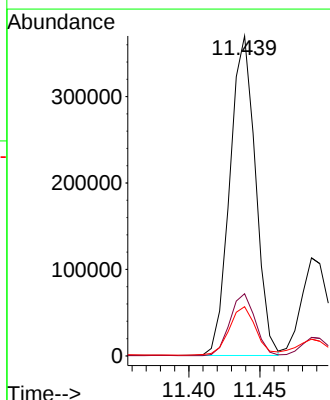
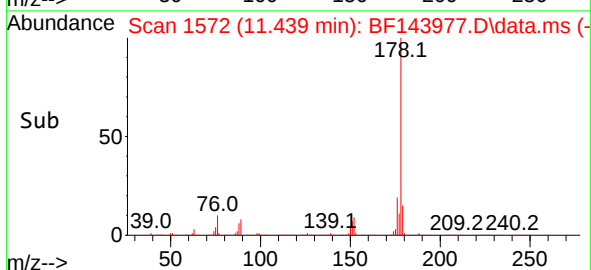
Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025

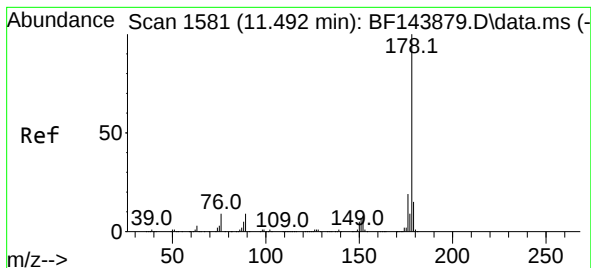


#71
Phenanthrene
Concen: 25.418 ng
RT: 11.439 min Scan# 1572
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13



Tgt Ion:178 Resp: 462460
Ion Ratio Lower Upper
178 100
176 19.4 15.9 23.9
179 15.4 12.4 18.6





#72

Anthracene

Concen: 7.993 ng

RT: 11.486 min Scan# 1581

Delta R.T. -0.012 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

Instrument :

BNA_F

ClientSampleId :

M-R-SOILD

Tgt Ion:178 Resp: 146913

Ion Ratio Lower Upper

178 100

176 18.8 14.9 22.3

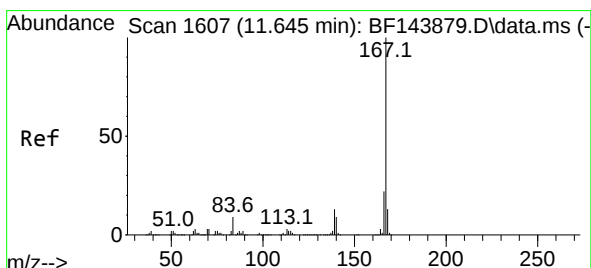
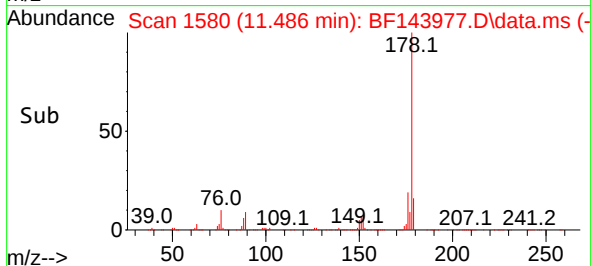
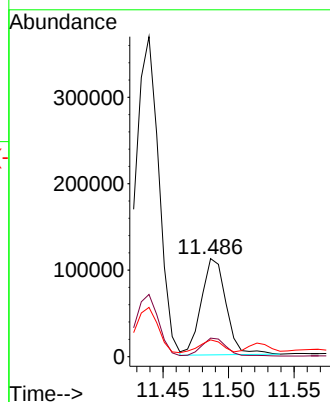
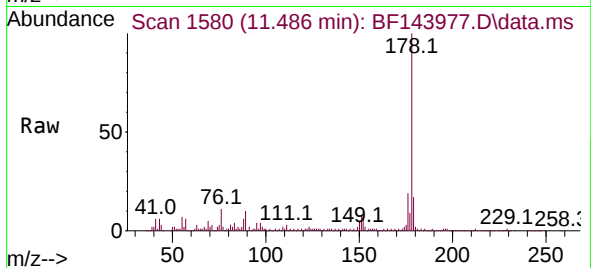
179 17.0 12.2 18.2

Manual Integrations

APPROVED

Reviewed By :Rahul Chavli 10/17/2025

Supervised By :Jagrut Upadhyay 10/17/2025



#73

Carbazole

Concen: 2.324 ng

RT: 11.645 min Scan# 1607

Delta R.T. -0.006 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

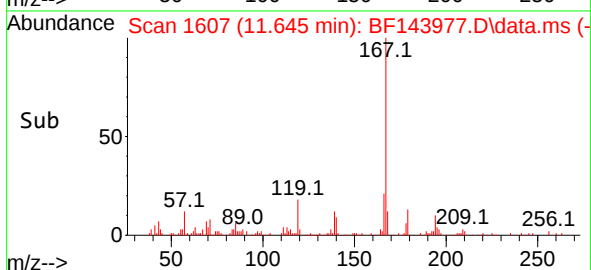
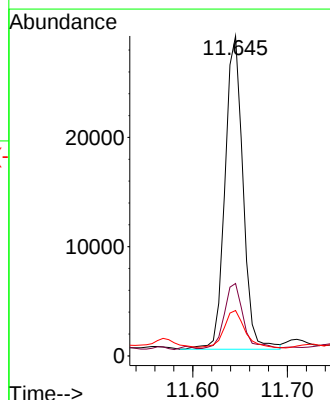
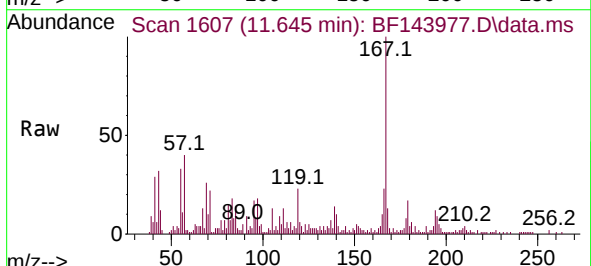
Tgt Ion:167 Resp: 37833

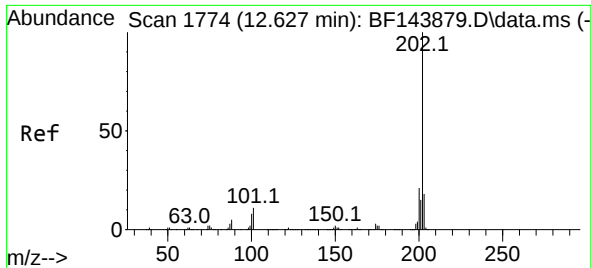
Ion Ratio Lower Upper

167 100

166 22.6 17.2 25.8

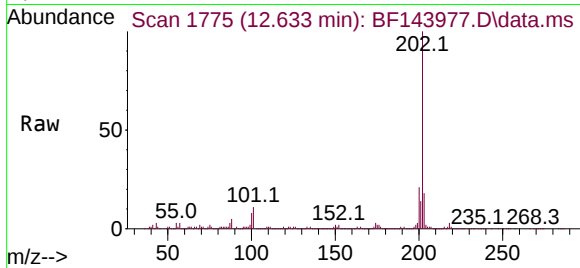
139 14.2 10.1 15.1





#75
Fluoranthene
Concen: 18.155 ng
RT: 12.633 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

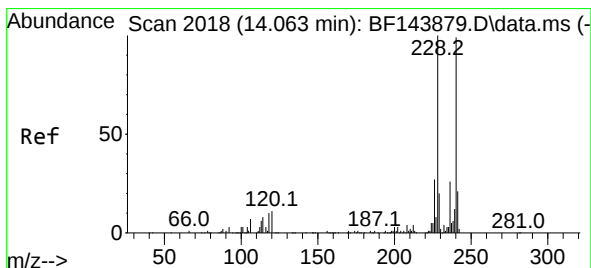
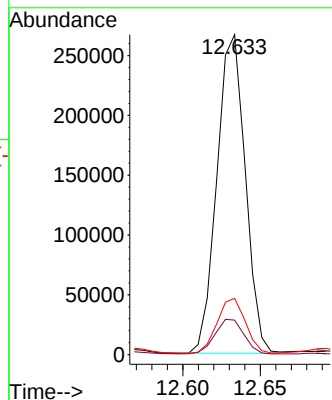
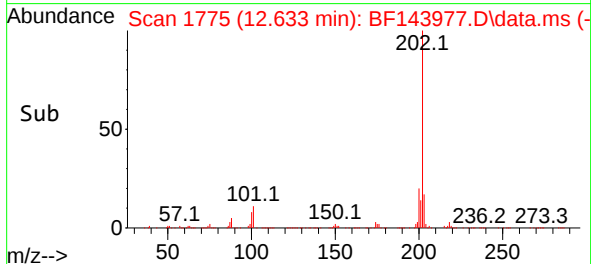
Instrument :
BNA_F
ClientSampleId :
M-R-SOILD



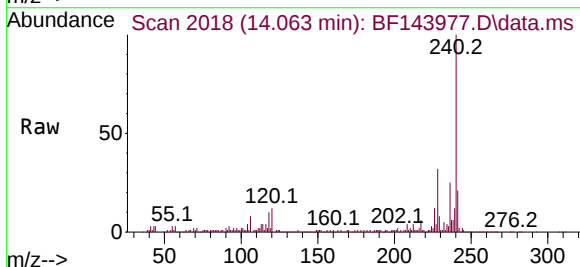
Tgt Ion:202 Resp: 341194
Ion Ratio Lower Upper
202 100
101 10.8 0.0 30.7
203 17.6 0.0 37.8

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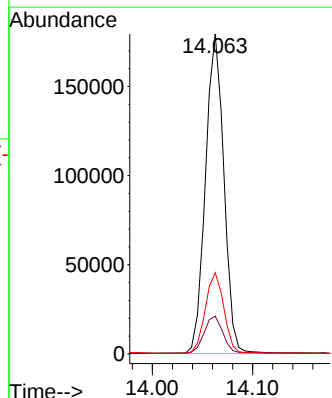
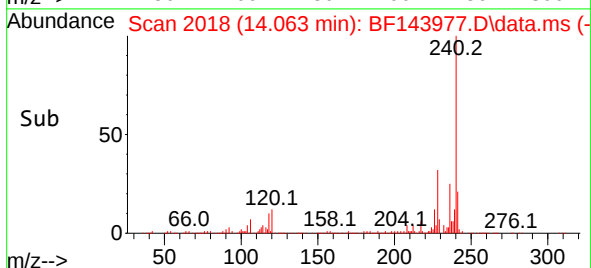
Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025

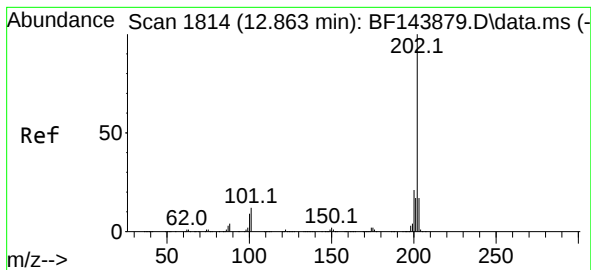


#76
Chrysene-d12
Concen: 20.000 ng
RT: 14.063 min Scan# 2018
Delta R.T. -0.005 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13



Tgt Ion:240 Resp: 228309
Ion Ratio Lower Upper
240 100
120 11.8 8.6 13.0
236 25.4 21.1 31.7





#78

Pyrene

Concen: 18.198 ng

RT: 12.863 min Scan# 1814

Delta R.T. 0.000 min

Lab File: BF143977.D

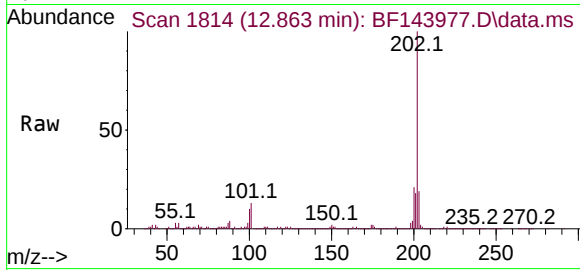
Acq: 16 Oct 2025 14:13

Instrument :

BNA_F

ClientSampleId :

M-R-SOILD



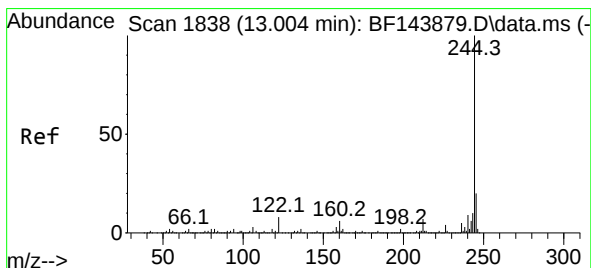
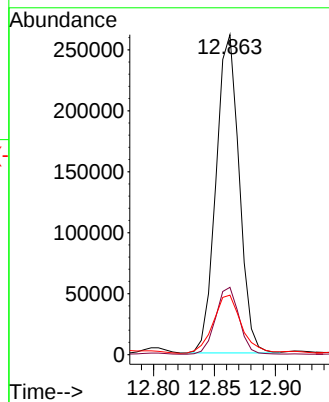
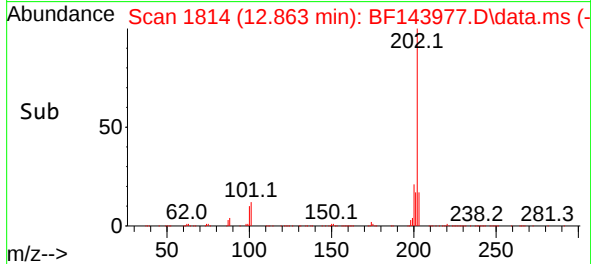
Tgt Ion:	202	Resp:	346375
Ion Ratio	Lower	Upper	
202	100		
200	21.0	17.0	25.6
203	18.6	13.8	20.6

Manual Integrations

APPROVED

Reviewed By :Rahul Chavli 10/17/2025

Supervised By :Jagrut Upadhyay 10/17/2025



#79

Terphenyl-d14

Concen: 3.411 ng

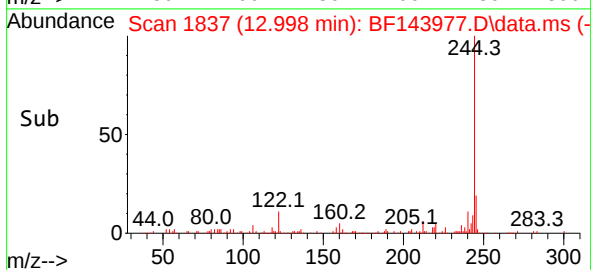
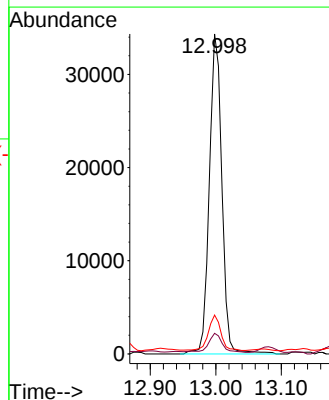
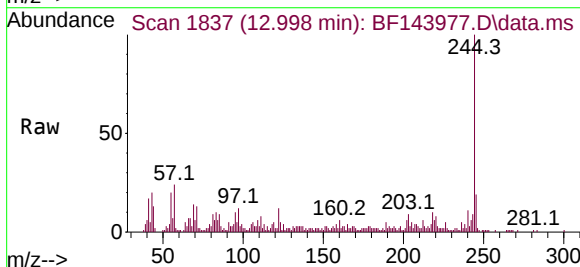
RT: 12.998 min Scan# 1837

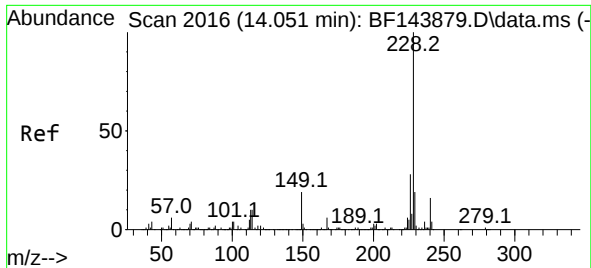
Delta R.T. -0.012 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

Tgt Ion:	244	Resp:	45567
Ion Ratio	Lower	Upper	
244	100		
212	6.4	5.4	8.0
122	12.1	6.4	9.6





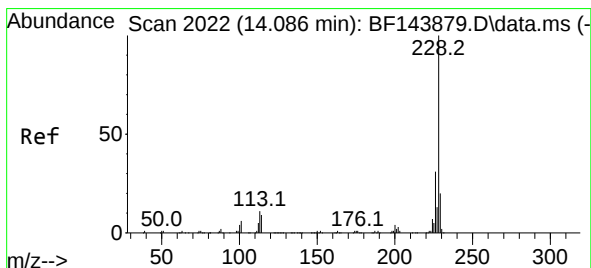
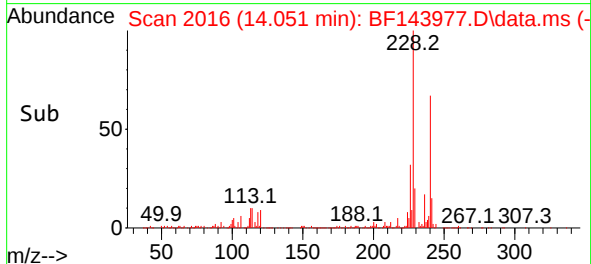
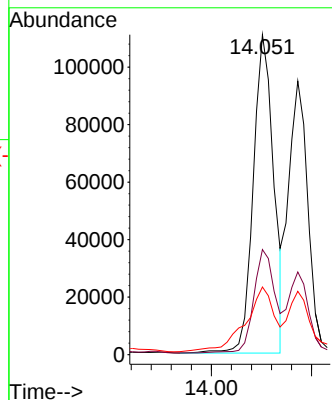
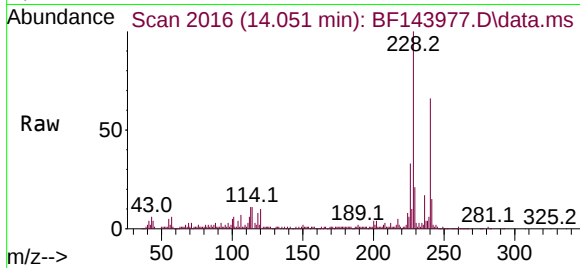
#81
Benzo(a)anthracene
Concen: 10.528 ng
RT: 14.051 min Scan# 2016
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Instrument :
BNA_F
ClientSampleId :
M-R-SOILD

Tgt Ion:228 Resp: 157301
Ion Ratio Lower Upper
228 100
226 32.8 22.2 33.2
229 21.1 15.6 23.4

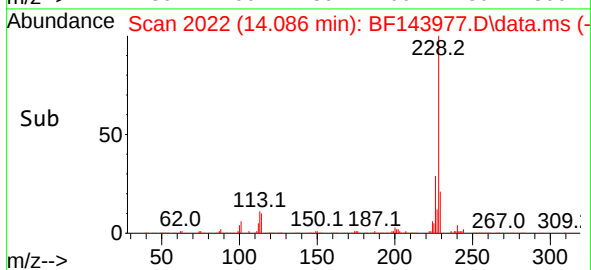
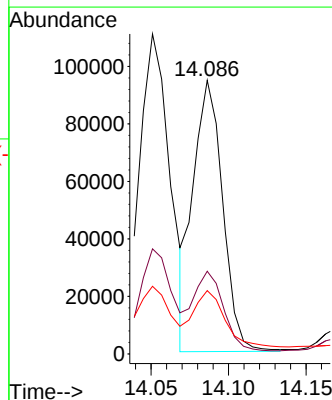
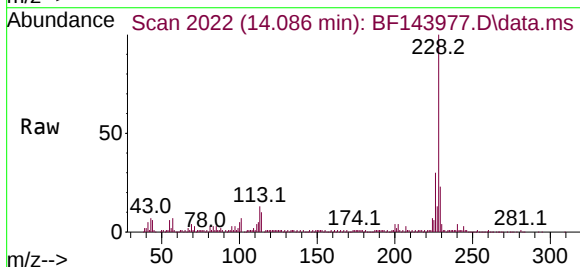
Manual Integrations
APPROVED

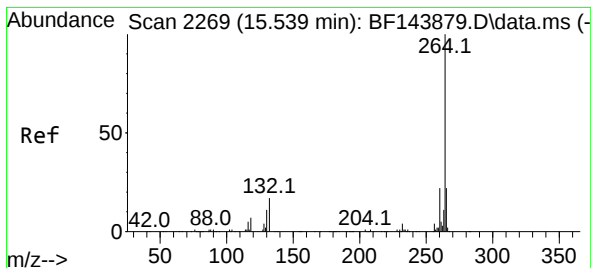
Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025



#83
Chrysene
Concen: 9.072 ng
RT: 14.086 min Scan# 2022
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Tgt Ion:228 Resp: 125453
Ion Ratio Lower Upper
228 100
226 30.2 24.4 36.6
229 23.2 15.9 23.9





#86

Perylene-d12

Concen: 20.000 ng

RT: 15.551 min Scan# 21

Delta R.T. 0.006 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

Instrument :

BNA_F

ClientSampleId :

M-R-SOILD

Tgt Ion:264 Resp: 269946

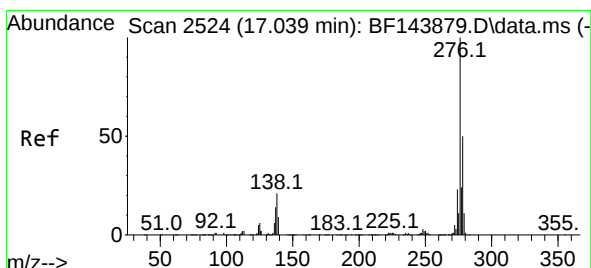
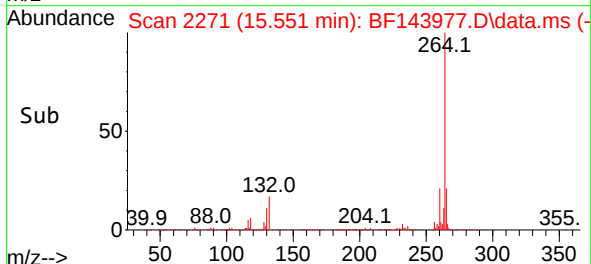
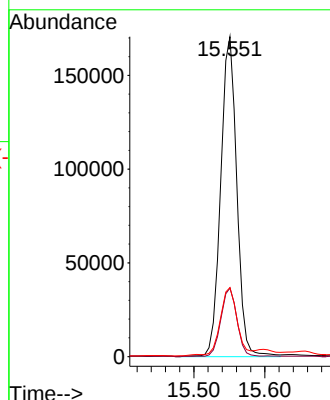
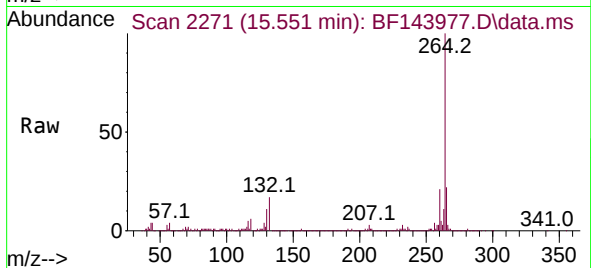
Ion	Ratio	Lower	Upper
264	100		
260	21.4	17.8	26.8
265	21.6	17.5	26.3

Manual Integrations

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Reviewed By :Rahul Chavli 10/17/2025

Supervised By :Jagrut Upadhyay 10/17/2025



#87

Indeno(1,2,3-cd)pyrene

Concen: 4.032 ng

RT: 17.045 min Scan# 2525

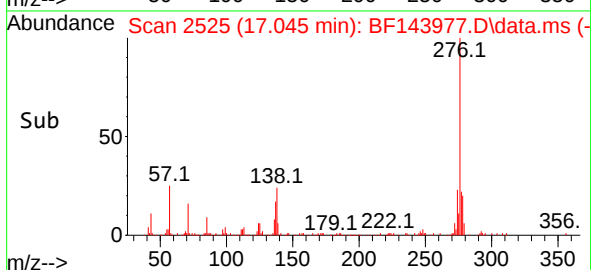
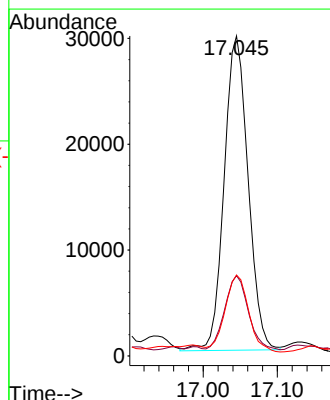
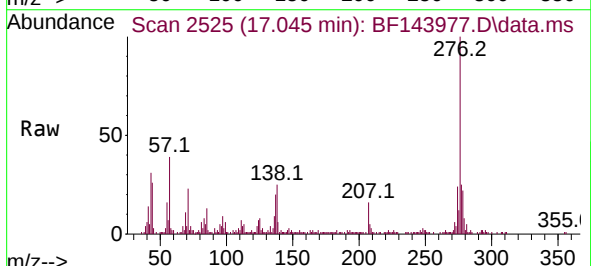
Delta R.T. -0.012 min

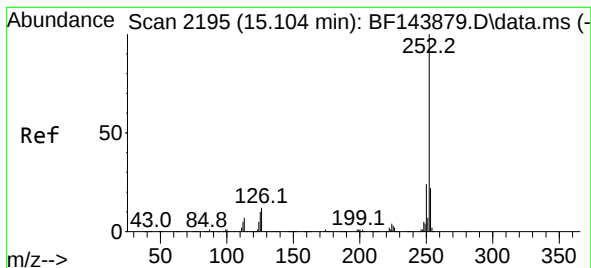
Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

Tgt Ion:276 Resp: 66694

Ion	Ratio	Lower	Upper
276	100		
138	23.3	18.2	27.2
277	24.1	19.8	29.6





#88

Benzo(b)fluoranthene

Concen: 9.307 ng m

RT: 15.116 min Scan# 21

Delta R.T. 0.000 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

Instrument :

BNA_F

ClientSampleId :

M-R-SOILDL

Tgt Ion:252 Resp: 144318

Ion Ratio Lower Upper

252 100

253 22.8 17.4 26.2

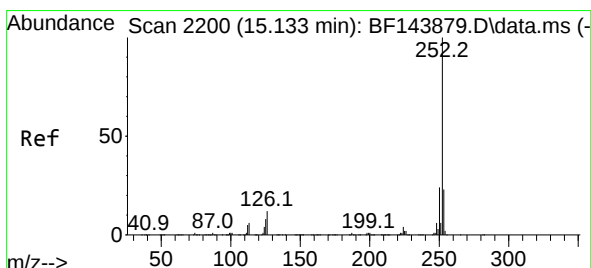
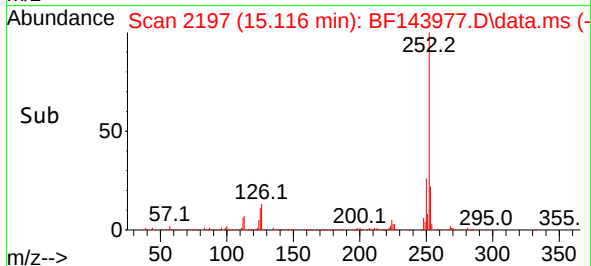
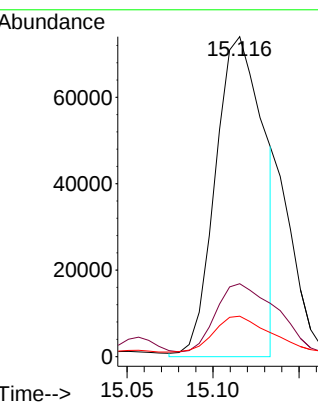
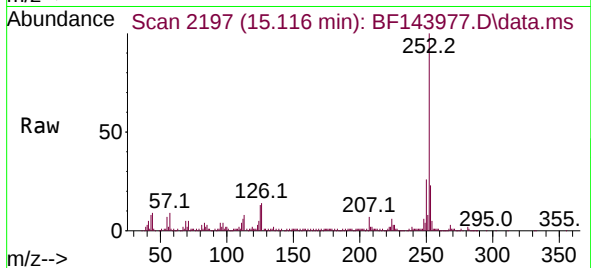
125 12.6 7.8 11.6

Manual Integrations

APPROVED

Reviewed By :Rahul Chavli 10/17/2025

Supervised By :Jagrut Upadhyay 10/17/2025



#89

Benzo(k)fluoranthene

Concen: 2.442 ng m

RT: 15.133 min Scan# 2200

Delta R.T. -0.012 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

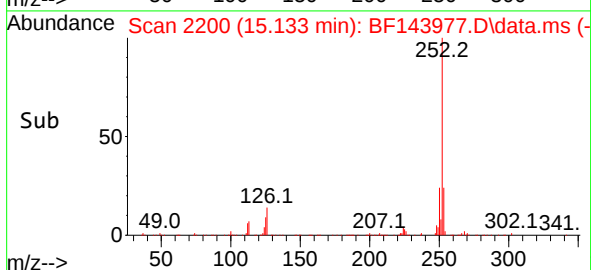
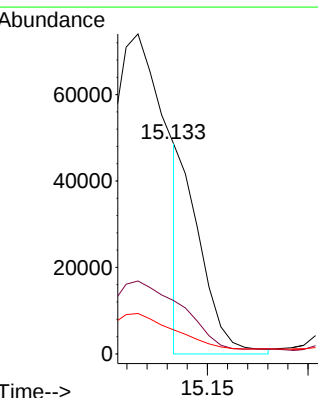
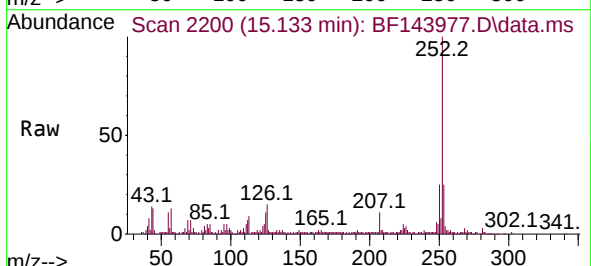
Tgt Ion:252 Resp: 35035

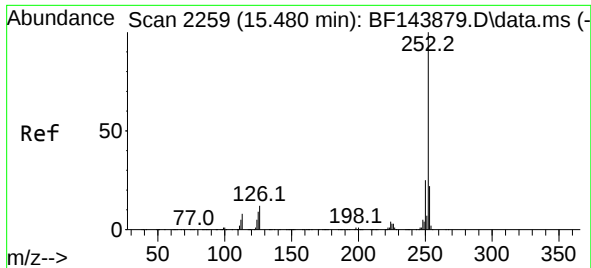
Ion Ratio Lower Upper

252 100

253 25.4 17.8 26.8

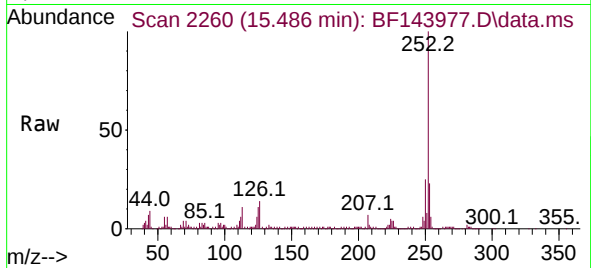
125 11.4 7.4 11.2





#90
Benzo(a)pyrene
Concen: 9.017 ng
RT: 15.486 min Scan# 21
Delta R.T. 0.000 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

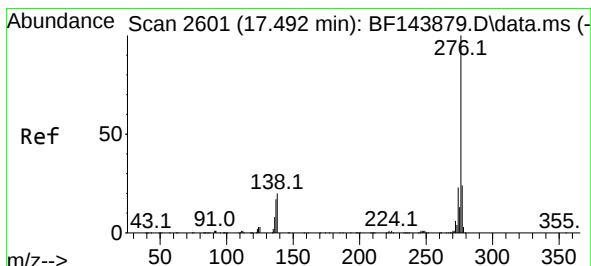
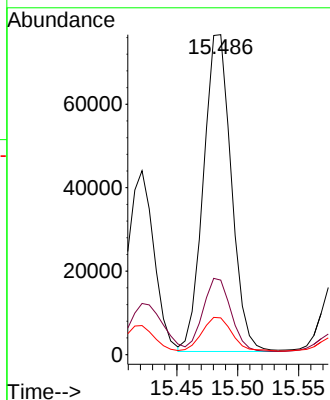
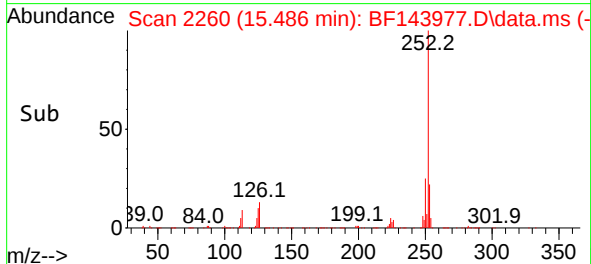
Instrument :
BNA_F
ClientSampleId :
M-R-SOILD



Tgt Ion:252 Resp: 121245
Ion Ratio Lower Upper
252 100
253 23.3 17.3 25.9
125 11.5 7.0 10.4

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 10/17/2025
Supervised By :Jagrut Upadhyay 10/17/2025



#92
Benzo(g,h,i)perylene
Concen: 4.638 ng
RT: 17.498 min Scan# 2602
Delta R.T. -0.017 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Tgt Ion:276 Resp: 61706
Ion Ratio Lower Upper
276 100
277 23.8 19.0 28.6
138 29.2 16.1 24.1#

