

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-SOILDL

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)

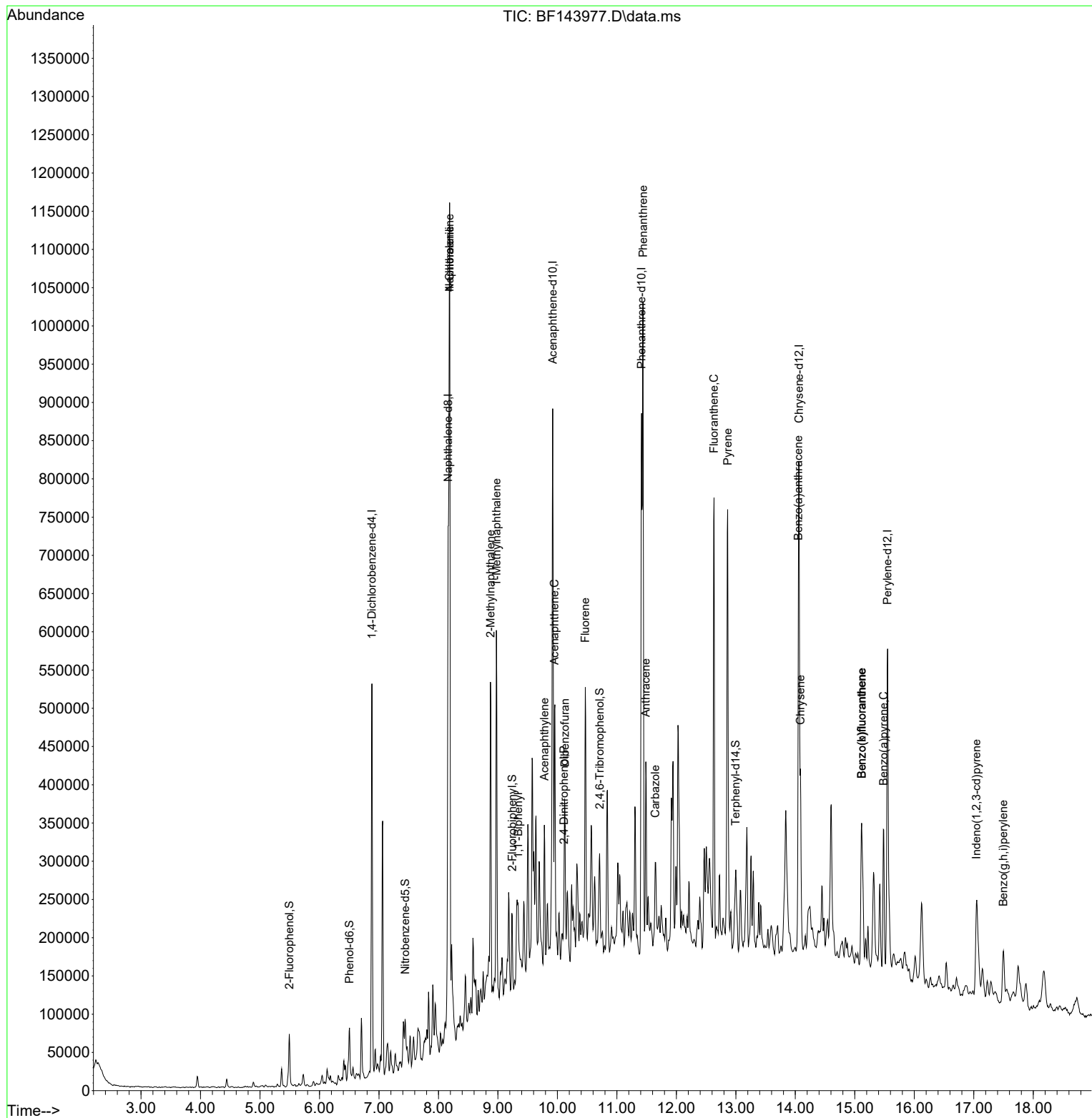
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.881	152	102974	20.00	ng	0.00
21) Naphthalene-d8	8.163	136	387550	20.00	ng	0.00
39) Acenaphthene-d10	9.922	164	212715	20.00	ng	0.00
64) Phenanthrene-d10	11.416	188	375285	20.00	ng	0.00
76) Chrysene-d12	14.063	240	228309	20.00	ng	0.00
86) Perylene-d12	15.551	264	269946	20.00	ng	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	5.493	112	27758	4.28	ng	0.00
7) Phenol-d6	6.504	99	33535	4.34	ng	-0.01
23) Nitrobenzene-d5	7.440	82	19809	3.11	ng	-0.02
42) 2,4,6-Tribromophenol	10.710	330	8438	3.98	ng	-0.01
45) 2-Fluorobiphenyl	9.239	172	43687	3.26	ng	-0.01
79) Terphenyl-d14	12.998	244	45567	3.41	ng	-0.01
Target Compounds						Qvalue
31) Naphthalene	8.187	128	636297	36.09	ng	100
33) 4-Chloroaniline	8.187	127	82634	12.50	ng	# 30
37) 2-Methylnaphthalene	8.875	142	168921	14.38	ng	98
38) 1-Methylnaphthalene	8.975	142	180276	15.83	ng	99
46) 1,1'-Biphenyl	9.339	154	35762	2.54	ng	95
49) Acenaphthylene	9.781	152	49859	3.02	ng	# 90
52) Acenaphthene	9.951	154	93564	8.65	ng	98
54) 2,4-Dinitrophenol	10.110	184	55	6.97	ng	# 1
55) Dibenzofuran	10.128	168	76068	4.98	ng	# 95
58) Fluorene	10.469	166	131981	11.45	ng	98
71) Phenanthrene	11.439	178	462460	25.42	ng	99
72) Anthracene	11.486	178	146913	7.99	ng	98
73) Carbazole	11.645	167	37833	2.32	ng	97
75) Fluoranthene	12.633	202	341194	18.16	ng	100
78) Pyrene	12.863	202	346375	18.20	ng	98
81) Benzo(a)anthracene	14.051	228	157301	10.53	ng	93
83) Chrysene	14.086	228	125453	9.07	ng	97
87) Indeno(1,2,3-cd)pyrene	17.045	276	66694	4.03	ng	99
88) Benzo(b)fluoranthene	15.116	252	174586	11.26	ng	# 96
89) Benzo(k)fluoranthene	15.116	252	174586	12.17	ng	# 97
90) Benzo(a)pyrene	15.486	252	121245	9.02	ng	# 95
92) Benzo(g,h,i)perylene	17.498	276	61706	4.64	ng	# 91

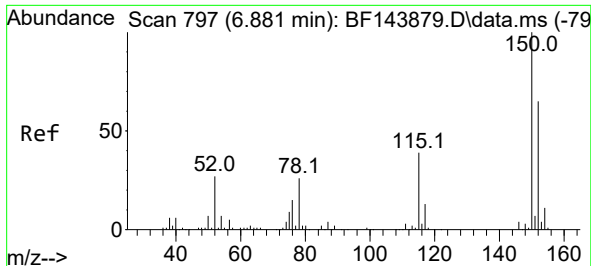
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_F
ClientSampleId :
M-R-SOILD

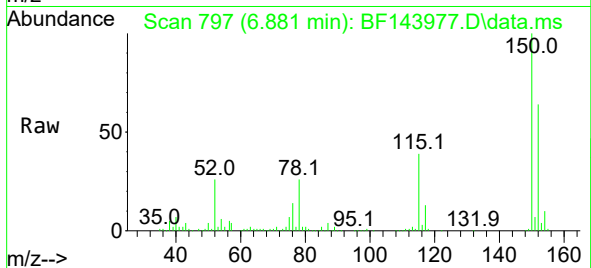
Quant Time: Oct 16 14:40:11 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_F\Methods\8270-BF100625.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
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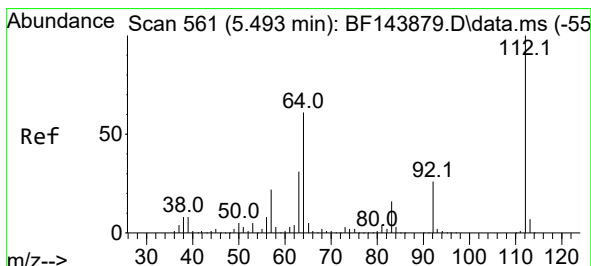
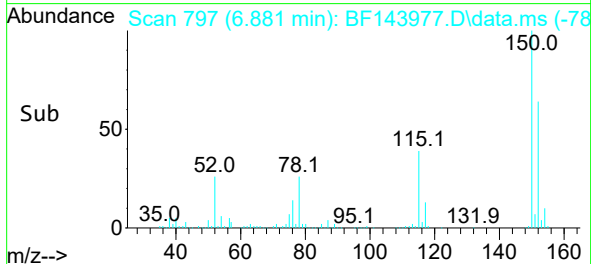
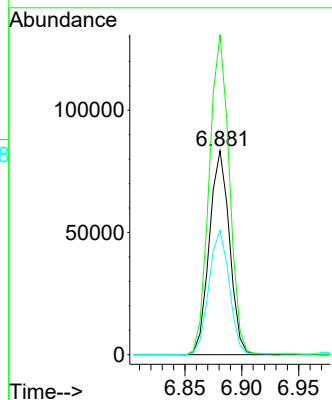


#1
1,4-Dichlorobenzene-d4
Concen: 20.00 ng
RT: 6.881 min Scan# 797
Delta R.T. -0.005 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Instrument :
BNA_F
ClientSampleId :
M-R-SOILD

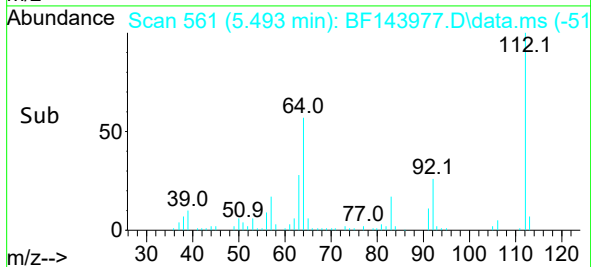
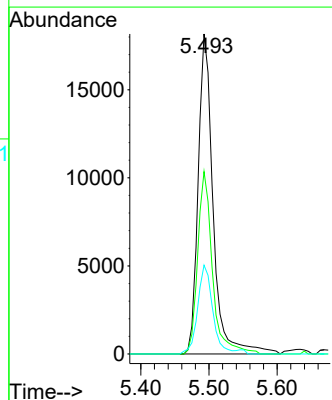
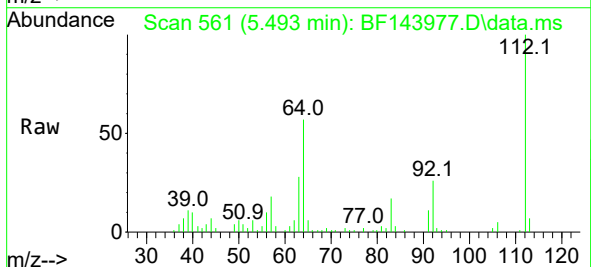


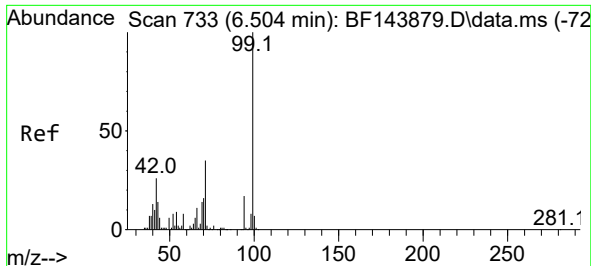
Tgt Ion:152 Resp: 102974
Ion Ratio Lower Upper
152 100
150 157.0 124.4 186.6
115 61.1 48.1 72.1



#5
2-Fluorophenol
Concen: 4.28 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

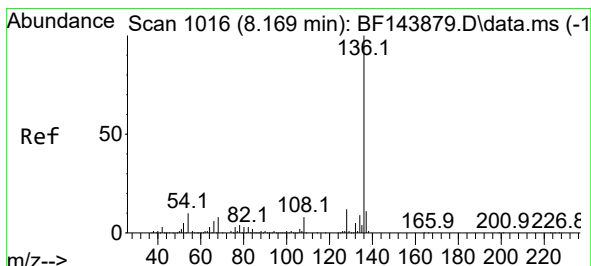
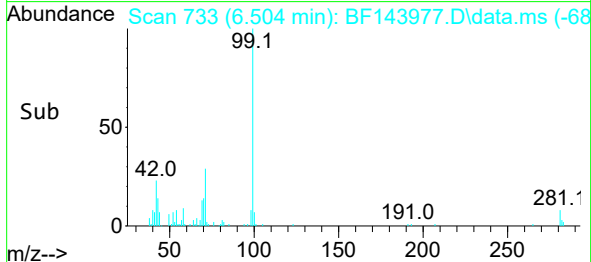
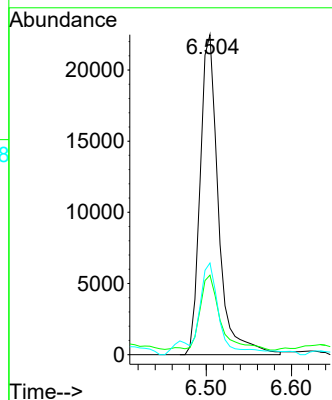
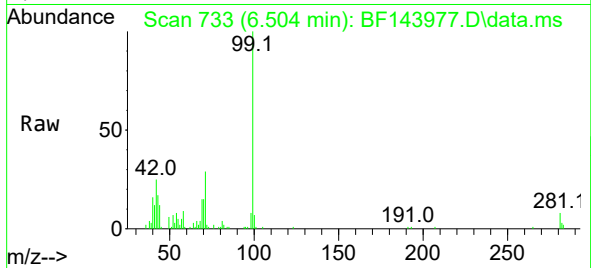




#7
Phenol-d6
Concen: 4.34 ng
RT: 6.504 min Scan# 71
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

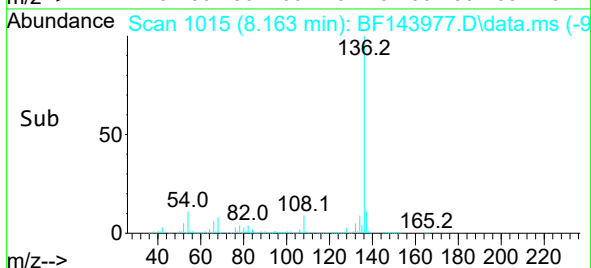
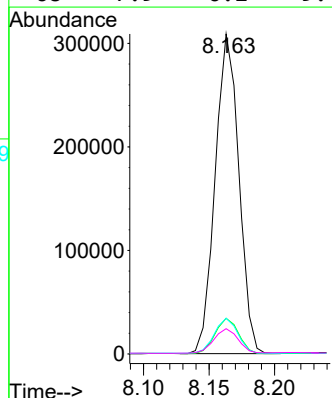
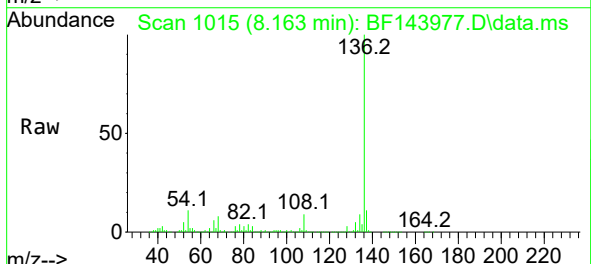
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL

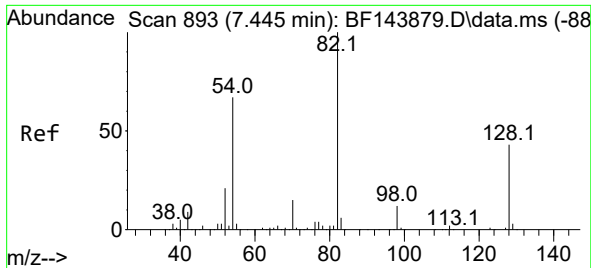
Tgt Ion: 99	Resp: 33535
Ion Ratio	Lower Upper
99 100	
42 24.9	21.0 31.4
71 28.7	27.8 41.8



#21
Naphthalene-d8
Concen: 20.00 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

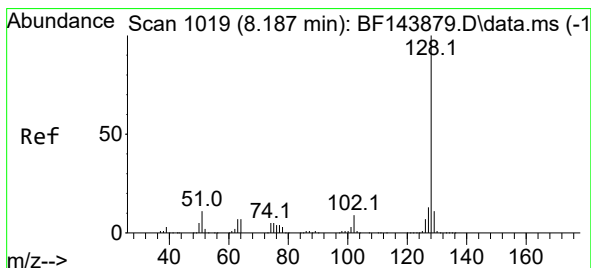
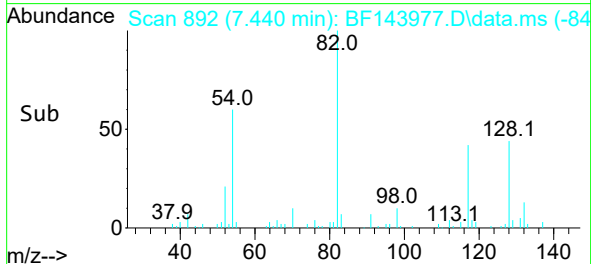
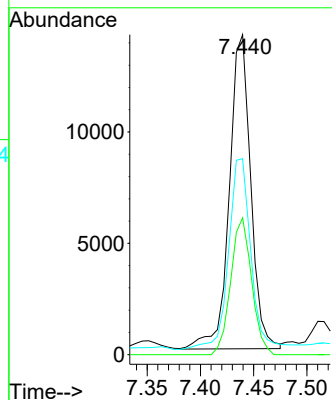
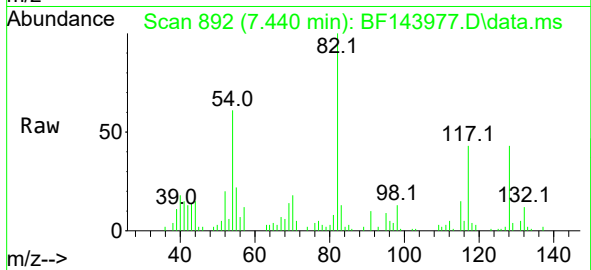




#23
Nitrobenzene-d5
Concen: 3.11 ng
RT: 7.440 min Scan# 89
Delta R.T. -0.017 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

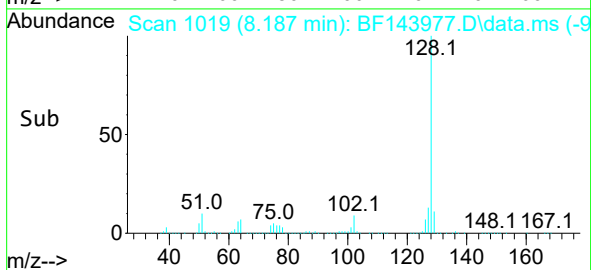
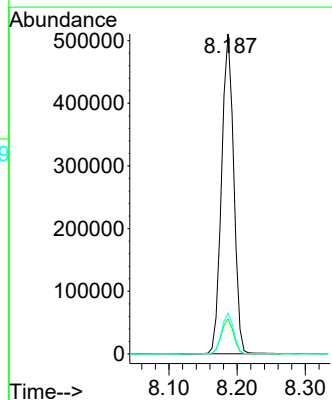
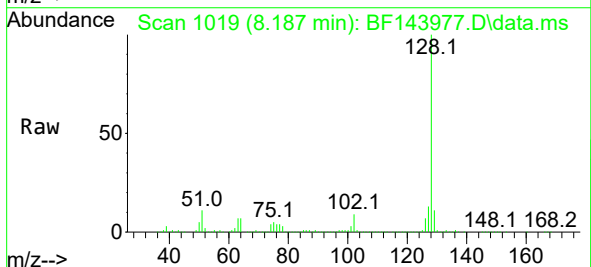
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL

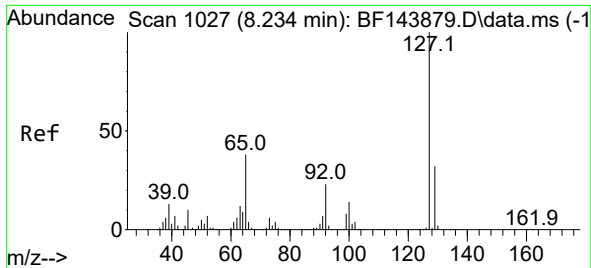
Tgt Ion: 82 Resp: 19809
Ion Ratio Lower Upper
82 100
128 42.8 34.0 51.0
54 61.2 53.2 79.8



#31
Naphthalene
Concen: 36.09 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

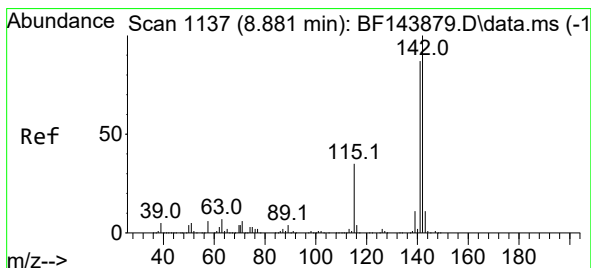
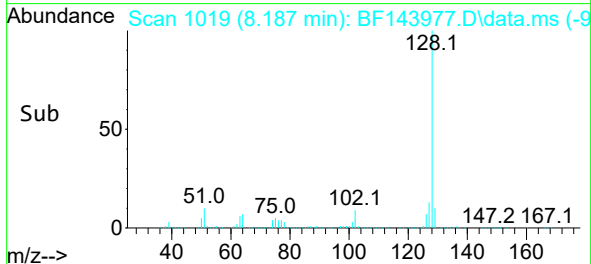
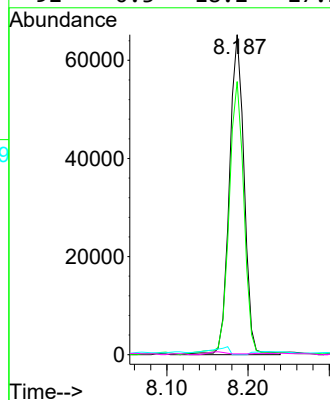
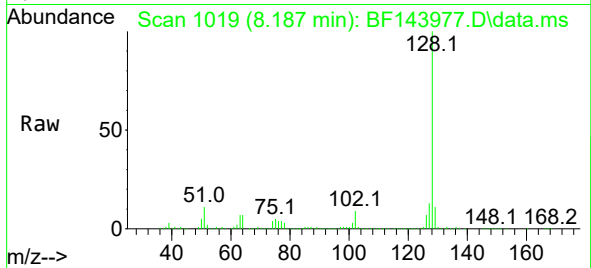




#33
4-Chloroaniline
Concen: 12.50 ng
RT: 8.187 min Scan# 1027
Delta R.T. -0.053 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

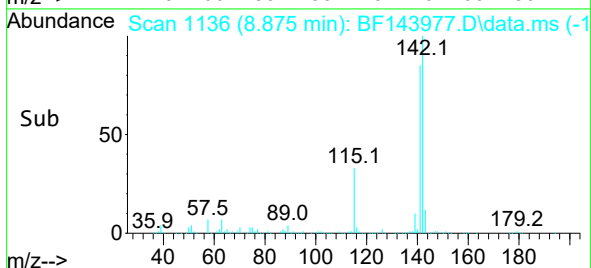
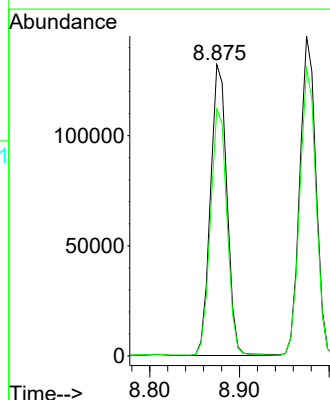
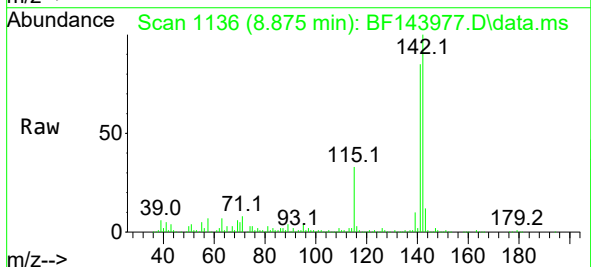
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL

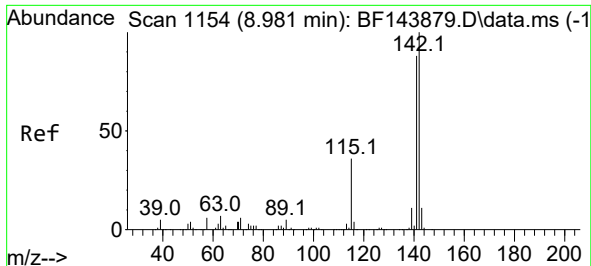
Tgt Ion:127	Resp:	82634
Ion Ratio	Lower	Upper
127	100	
129	85.4	25.8 38.8#
65	0.0	30.0 45.0#
92	0.3	18.2 27.2#



#37
2-Methylnaphthalene
Concen: 14.38 ng
RT: 8.875 min Scan# 1136
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Tgt Ion:142	Resp:	168921
Ion Ratio	Lower	Upper
142	100	
141	84.8	69.2 103.8





#38

1-Methylnaphthalene

Concen: 15.83 ng

RT: 8.975 min Scan# 1153

Delta R.T. -0.011 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

Instrument :

BNA_F

ClientSampleId :

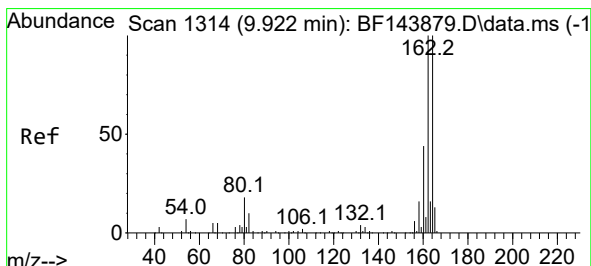
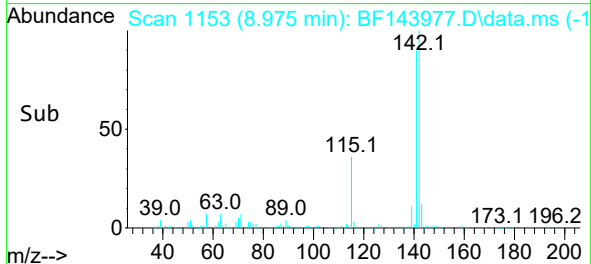
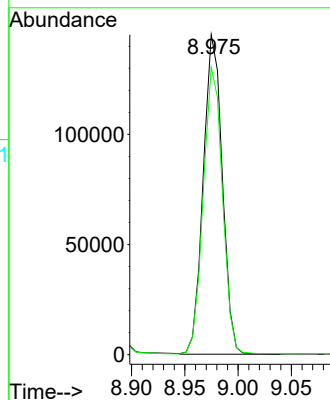
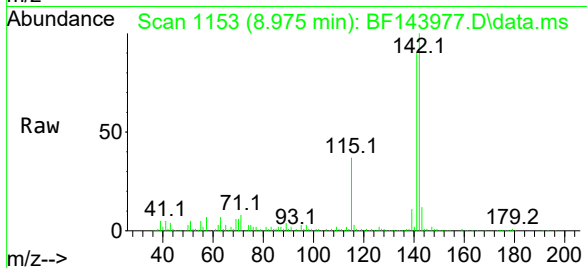
M-R-SOILDL

Tgt Ion:142 Resp: 180276

Ion Ratio Lower Upper

142 100

141 89.8 70.8 106.2



#39

Acenaphthene-d10

Concen: 20.00 ng

RT: 9.922 min Scan# 1314

Delta R.T. -0.005 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

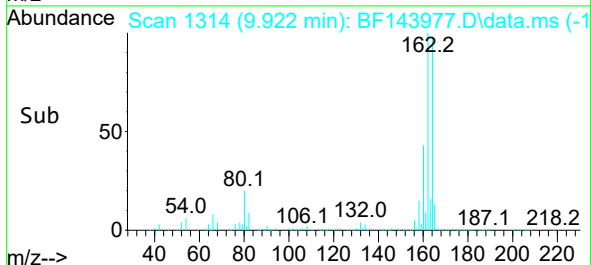
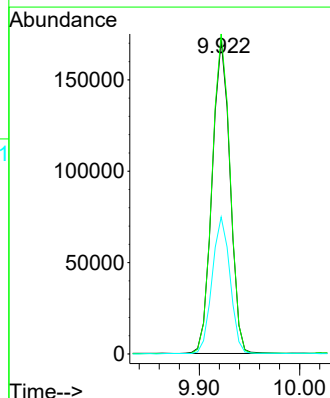
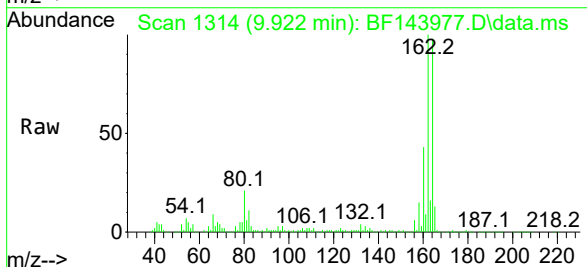
Tgt Ion:164 Resp: 212715

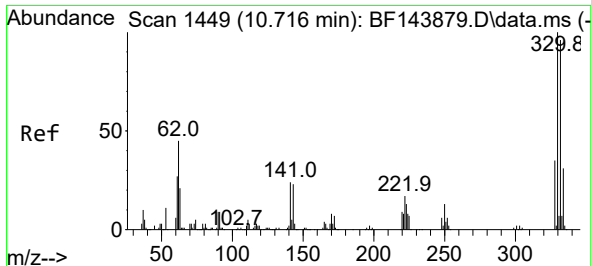
Ion Ratio Lower Upper

164 100

162 101.9 80.2 120.2

160 43.6 35.4 53.0





#42

2,4,6-Tribromophenol

Concen: 3.98 ng

RT: 10.710 min Scan# 1449

Delta R.T. -0.012 min

Lab File: BF143977.D

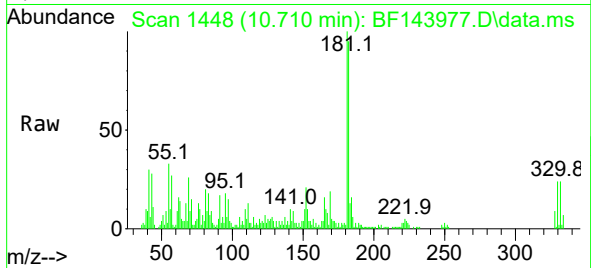
Acq: 16 Oct 2025 14:13

Instrument :

BNA_F

ClientSampleId :

M-R-SOILD



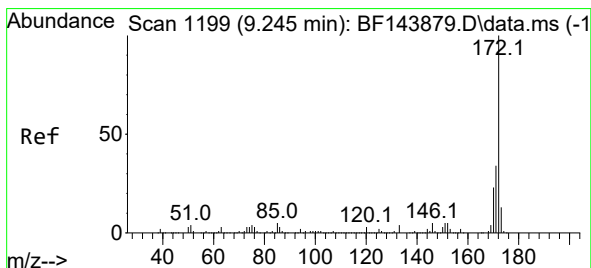
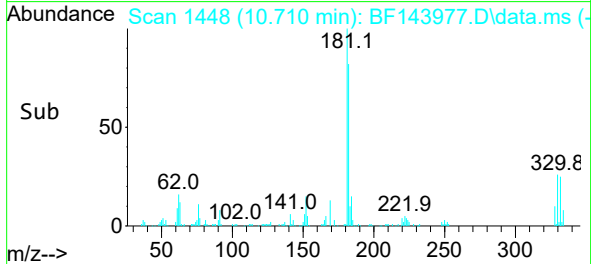
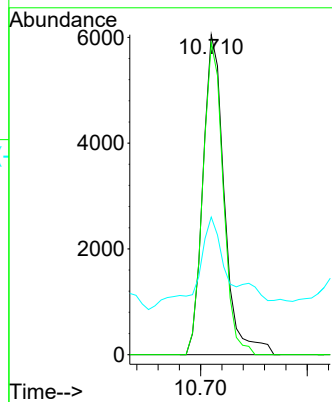
Tgt Ion:330 Resp: 8438

Ion Ratio Lower Upper

330 100

332 92.7 76.9 115.3

141 35.0 20.2 30.4#



#45

2-Fluorobiphenyl

Concen: 3.26 ng

RT: 9.239 min Scan# 1198

Delta R.T. -0.012 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

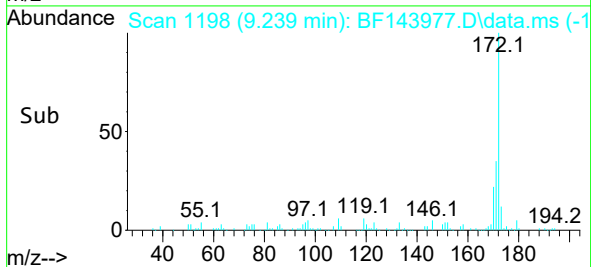
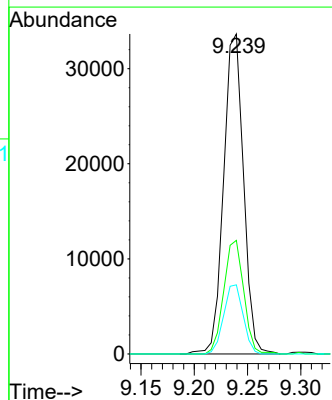
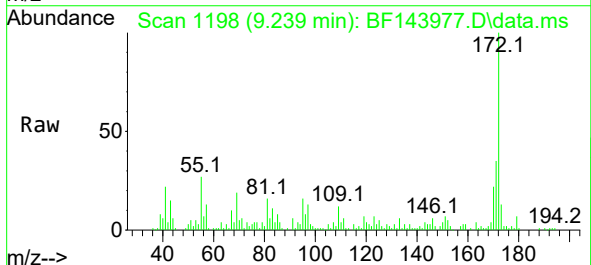
Tgt Ion:172 Resp: 43687

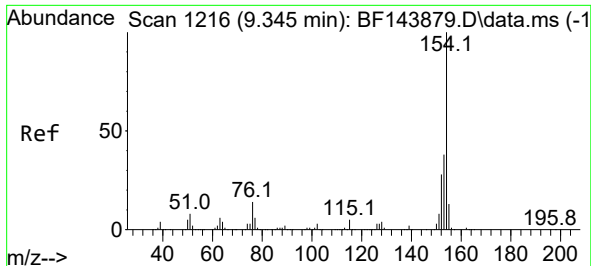
Ion Ratio Lower Upper

172 100

171 35.5 27.4 41.0

170 21.6 18.6 28.0

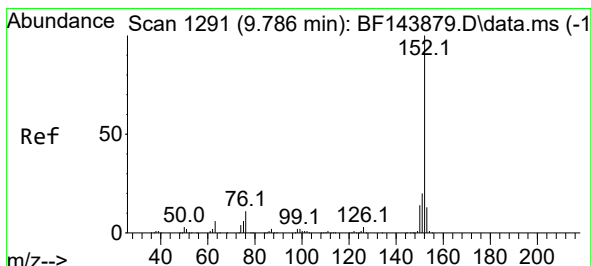
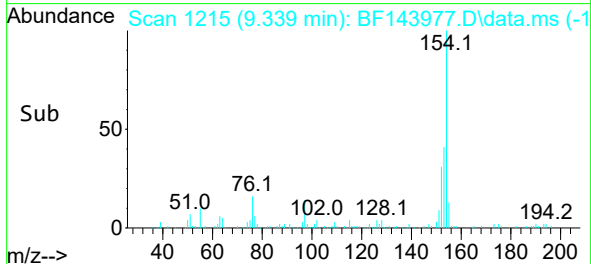
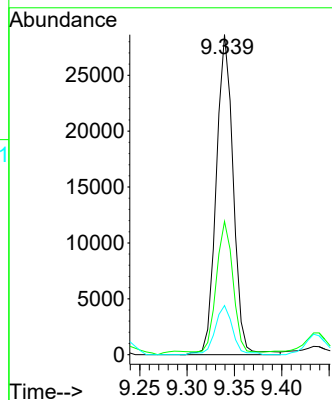
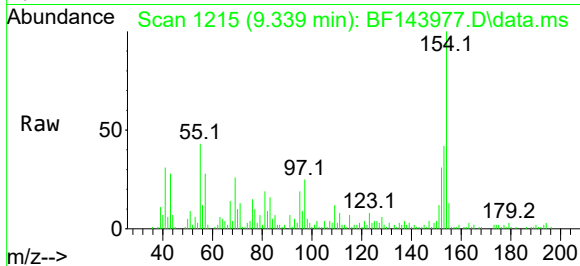




#46
1,1'-Biphenyl
Concen: 2.54 ng
RT: 9.339 min Scan# 11
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

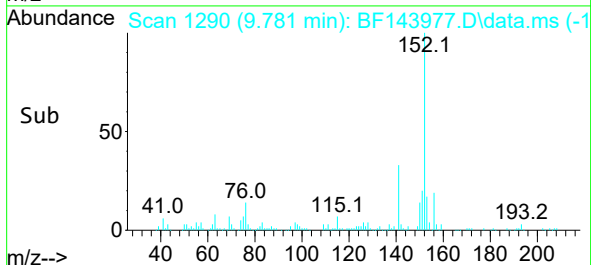
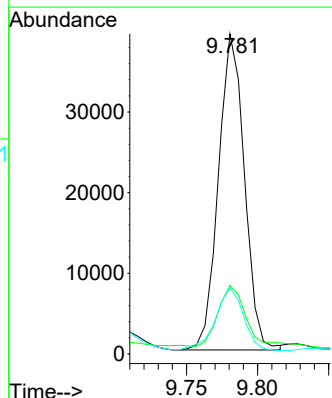
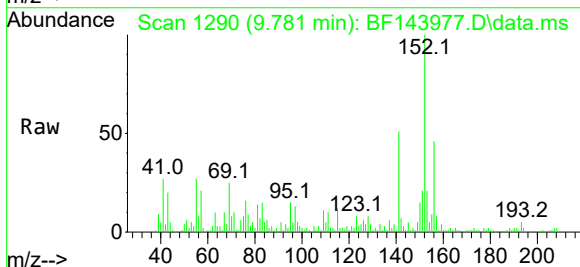
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL

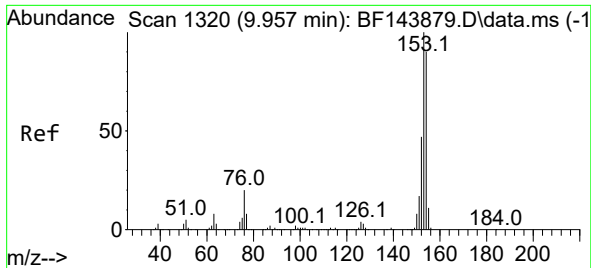
Tgt Ion:154 Resp: 35762
Ion Ratio Lower Upper
154 100
153 41.7 18.4 58.4
76 15.4 0.0 34.0



#49
Acenaphthylene
Concen: 3.02 ng
RT: 9.781 min Scan# 1290
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

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#

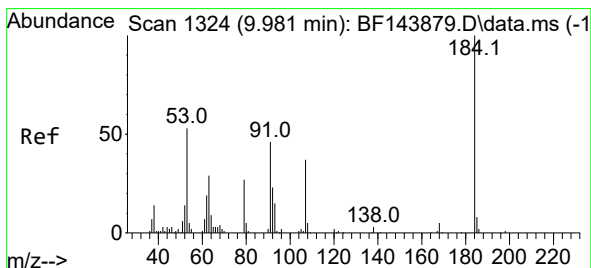
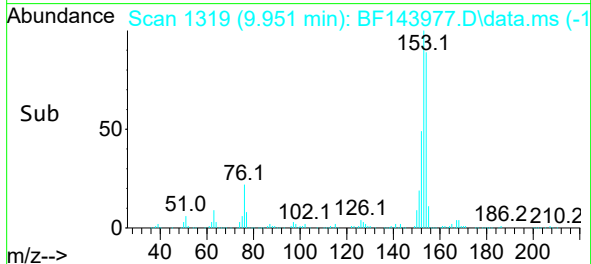
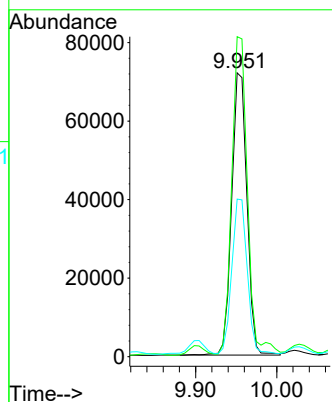
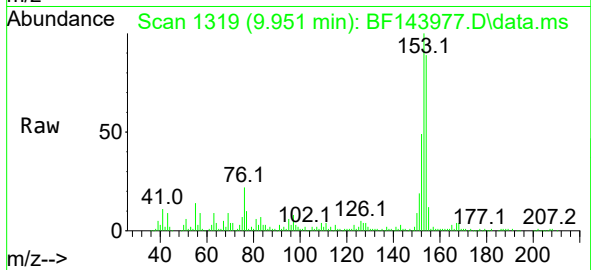




#52
Acenaphthene
Concen: 8.65 ng
RT: 9.951 min Scan# 11
Delta R.T. -0.012 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

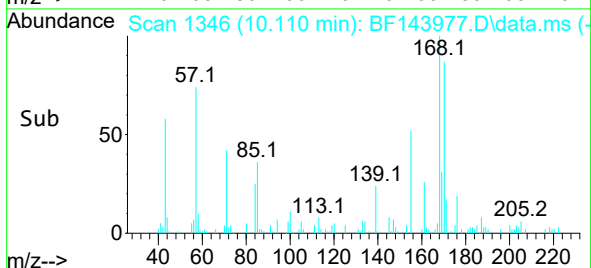
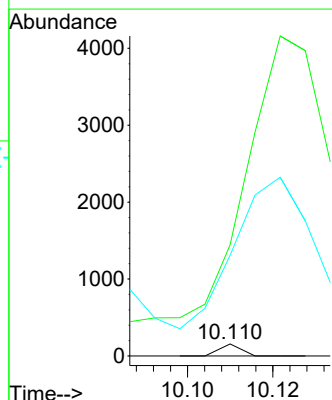
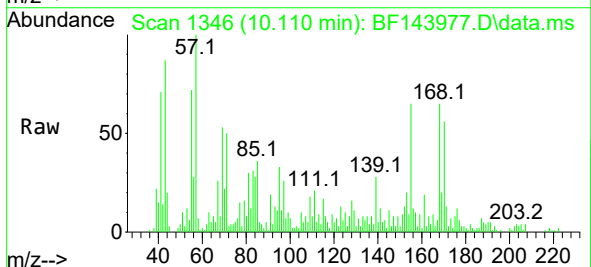
Instrument :
BNA_F
ClientSampleId :
M-R-SOILD

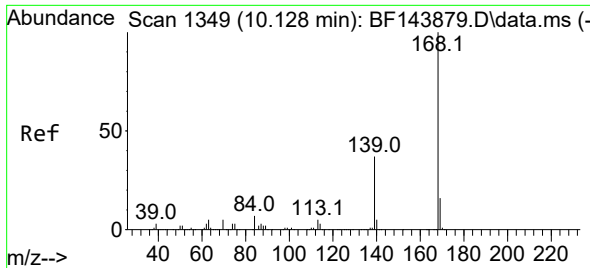
Tgt Ion:154 Resp: 93564
Ion Ratio Lower Upper
154 100
153 112.7 89.3 133.9
152 55.5 42.2 63.2



#54
2,4-Dinitrophenol
Concen: 6.97 ng
RT: 10.110 min Scan# 1346
Delta R.T. 0.124 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

Tgt Ion:184 Resp: 55
Ion Ratio Lower Upper
184 100
63 926.3 48.2 72.4#
154 839.1 49.2 73.8#

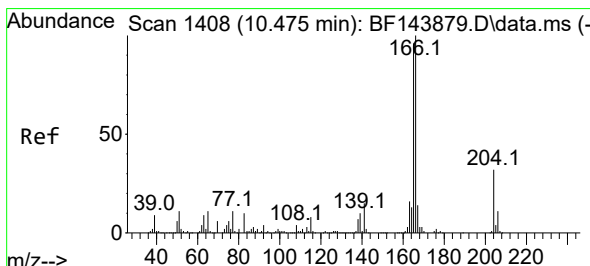
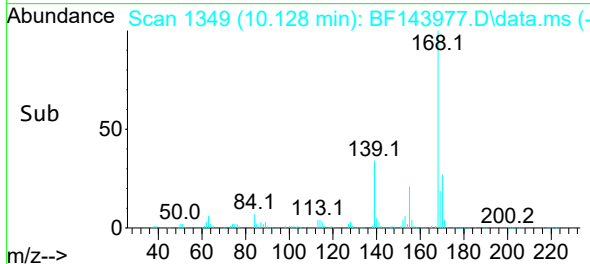
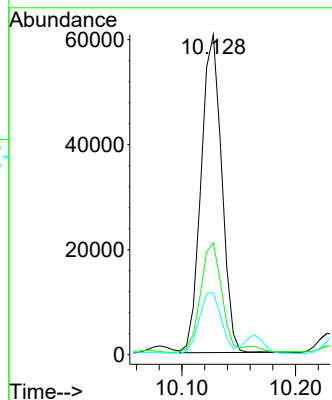
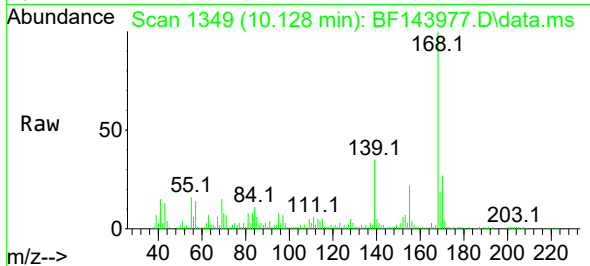




#55
Dibenzenofuran
Concen: 4.98 ng
RT: 10.128 min Scan# 11
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

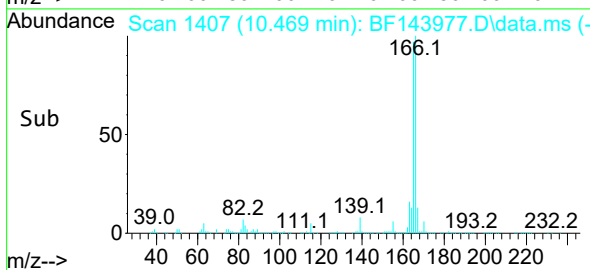
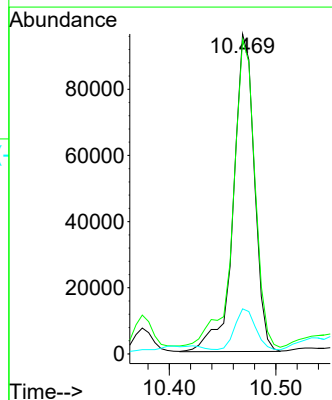
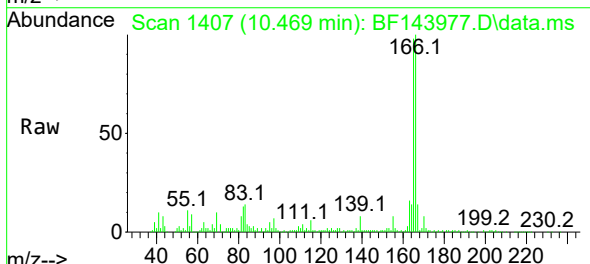
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL

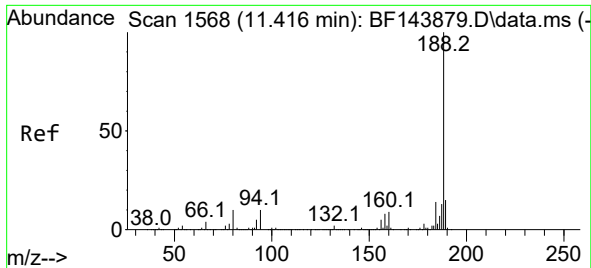
Tgt Ion:168 Resp: 76068
Ion Ratio Lower Upper
168 100
139 34.9 29.8 44.8
169 19.4 12.8 19.2#



#58
Fluorene
Concen: 11.45 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

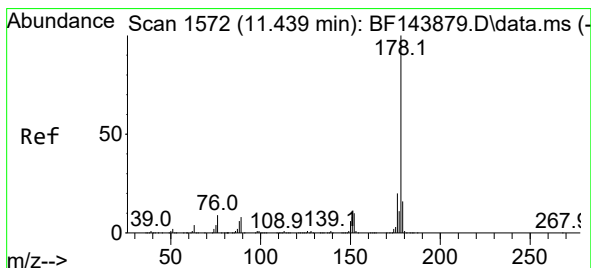
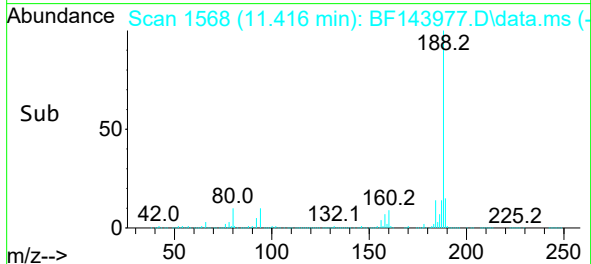
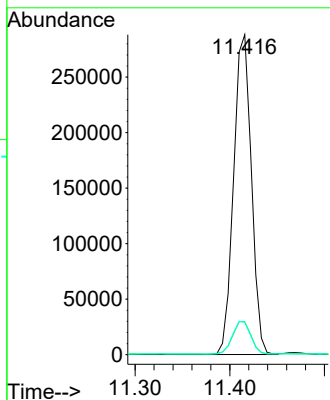
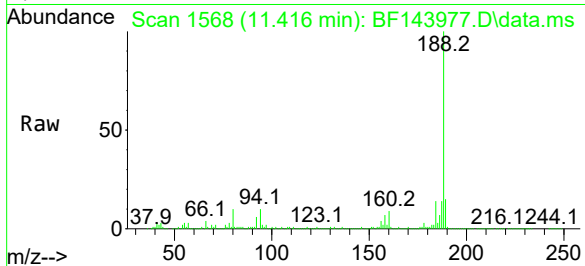




#64
Phenanthrene-d10
Concen: 20.00 ng
RT: 11.416 min Scan# 1568
Delta R.T. 0.000 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

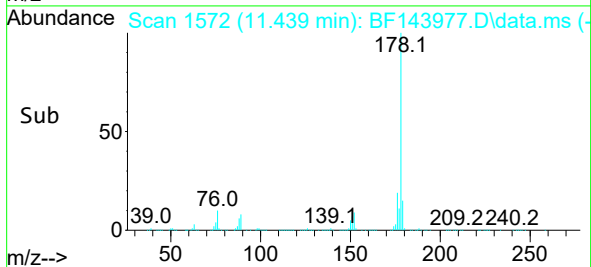
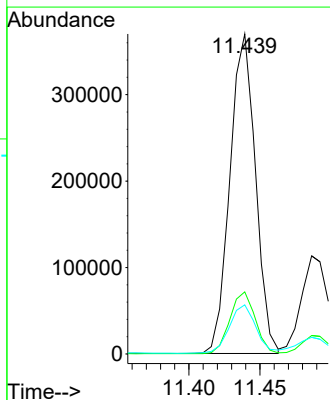
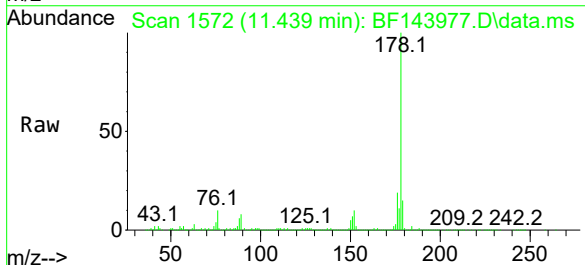
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL

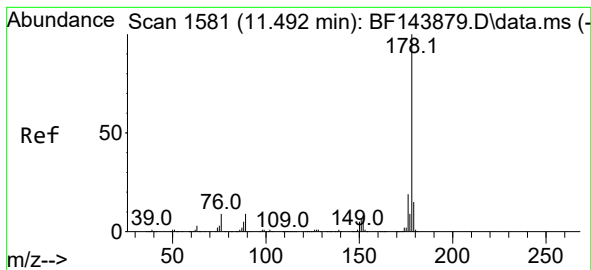
Tgt Ion:188 Resp: 375285
Ion Ratio Lower Upper
188 100
94 10.3 7.8 11.6
80 10.1 7.9 11.9



#71
Phenanthrene
Concen: 25.42 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: 7.99 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-SOILDL

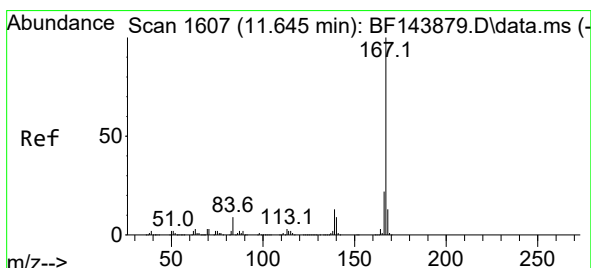
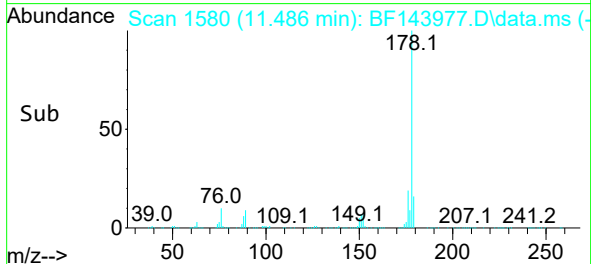
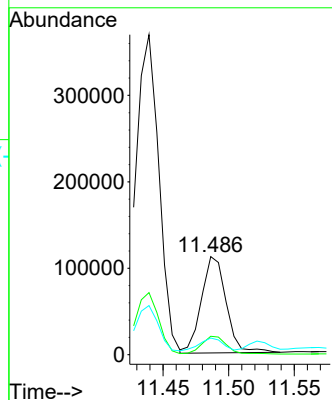
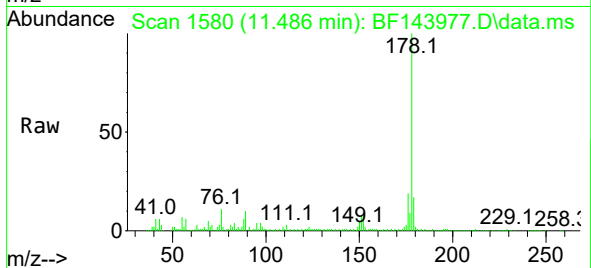
Tgt Ion:178 Resp: 146913

Ion Ratio Lower Upper

178 100

176 18.8 14.9 22.3

179 17.0 12.2 18.2



#73

Carbazole

Concen: 2.32 ng

RT: 11.645 min Scan# 1607

Delta R.T. -0.006 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

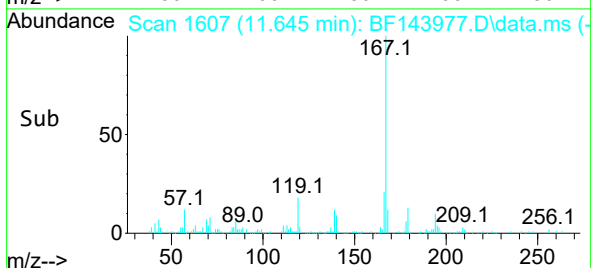
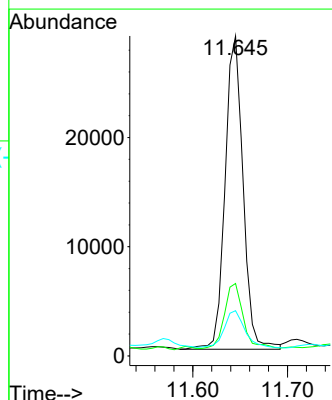
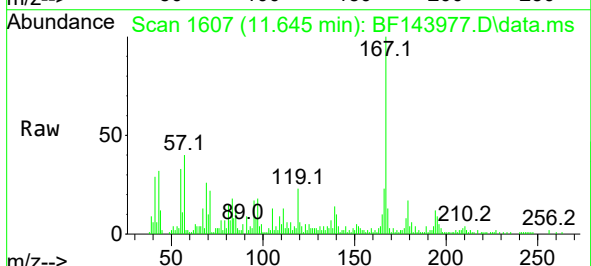
Tgt Ion:167 Resp: 37833

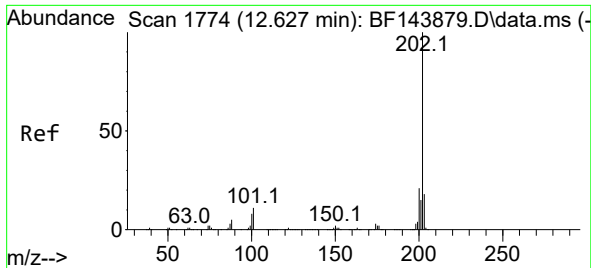
Ion Ratio Lower Upper

167 100

166 22.6 17.2 25.8

139 14.2 10.1 15.1

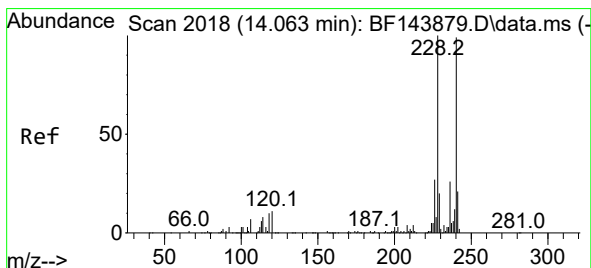
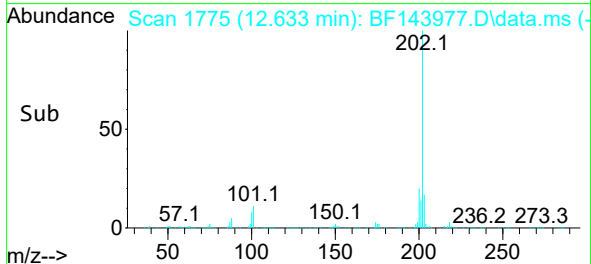
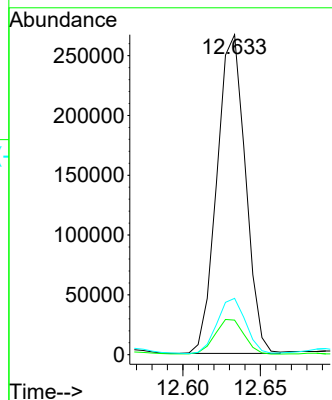
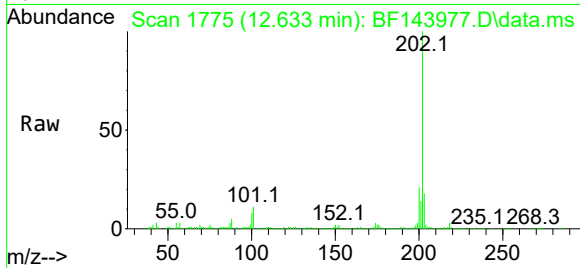




#75
Fluoranthene
Concen: 18.16 ng
RT: 12.633 min Scan# 11
Delta R.T. 0.000 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

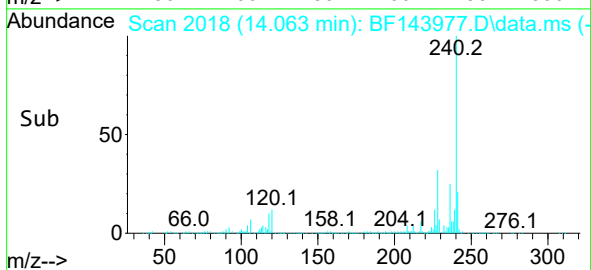
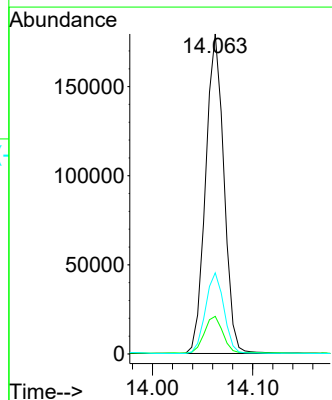
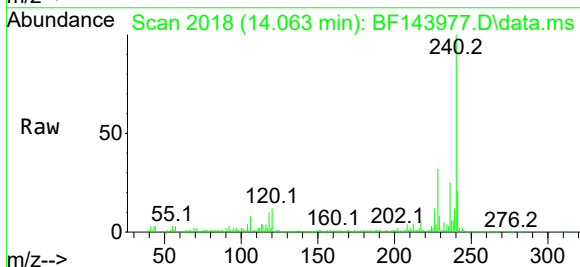
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL

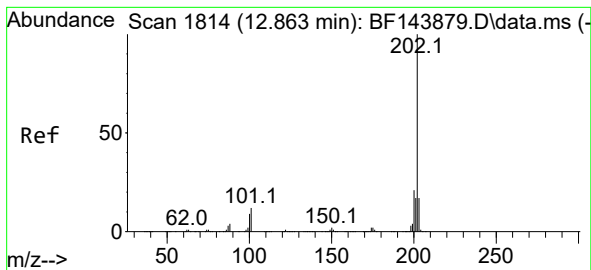
Tgt Ion:202 Resp: 341194
Ion Ratio Lower Upper
202 100
101 10.8 0.0 30.7
203 17.6 0.0 37.8



#76
Chrysene-d12
Concen: 20.00 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: 18.20 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-SOILDL

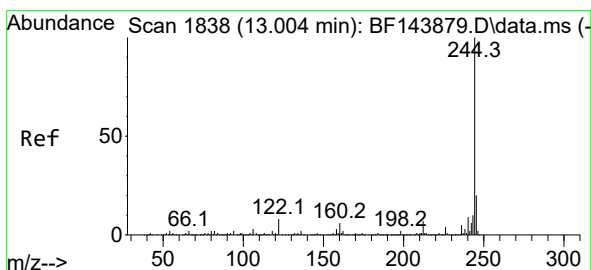
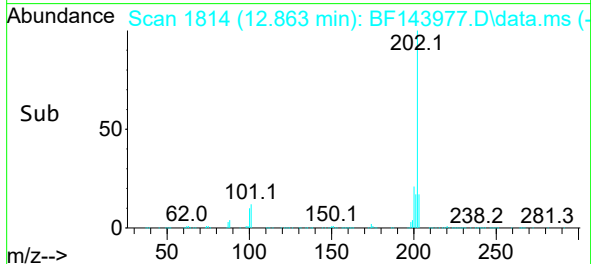
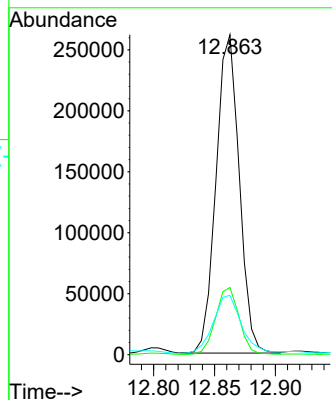
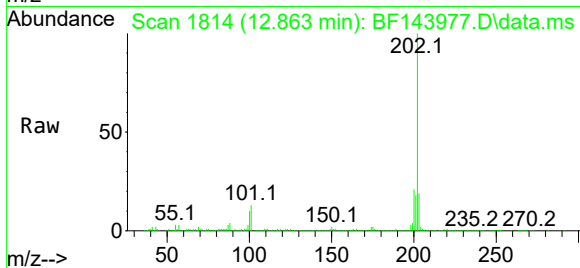
Tgt Ion:202 Resp: 346375

Ion Ratio Lower Upper

202 100

200 21.0 17.0 25.6

203 18.6 13.8 20.6



#79

Terphenyl-d14

Concen: 3.41 ng

RT: 12.998 min Scan# 1837

Delta R.T. -0.012 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

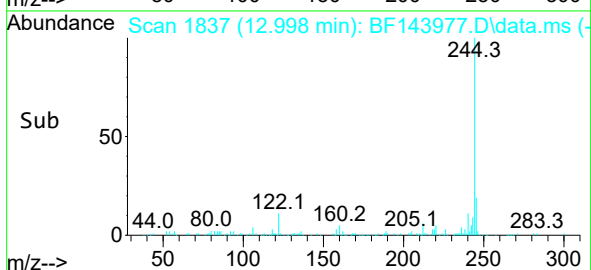
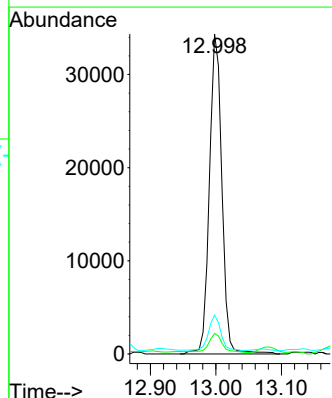
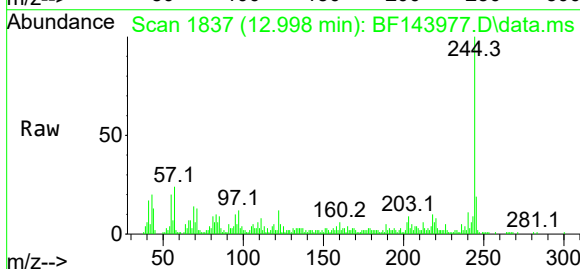
Tgt Ion:244 Resp: 45567

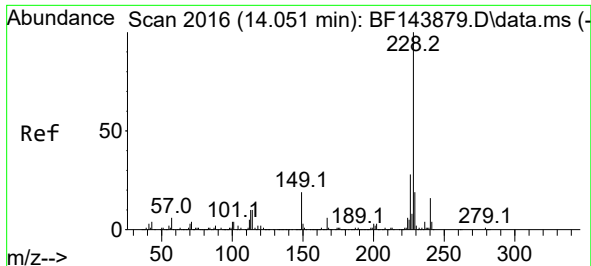
Ion Ratio Lower Upper

244 100

212 6.4 5.4 8.0

122 12.1 6.4 9.6#

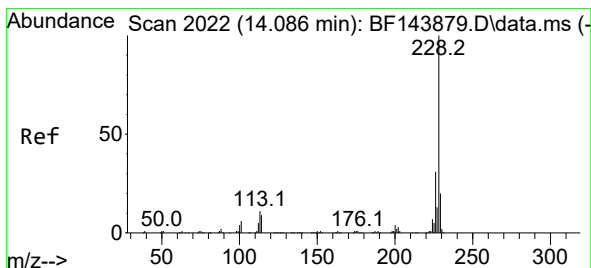
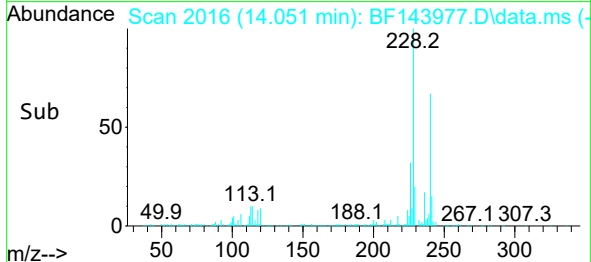
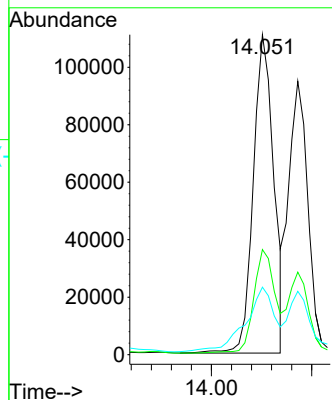
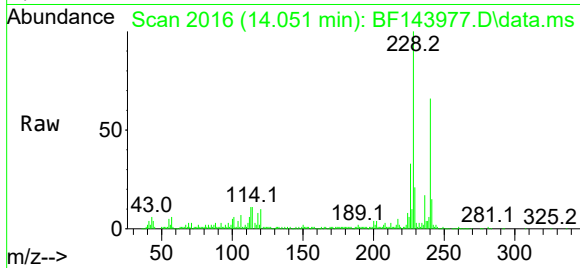




#81
Benzo(a)anthracene
Concen: 10.53 ng
RT: 14.051 min Scan# 2016
Delta R.T. -0.006 min
Lab File: BF143977.D
Acq: 16 Oct 2025 14:13

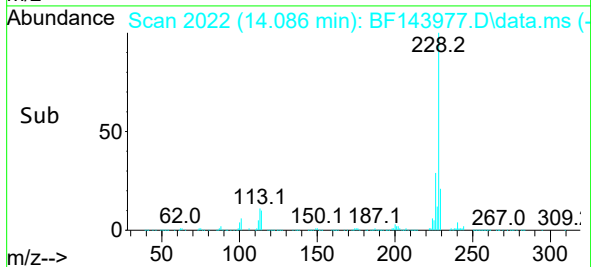
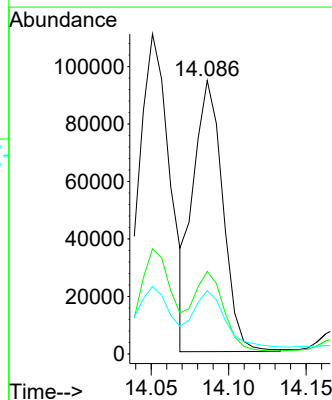
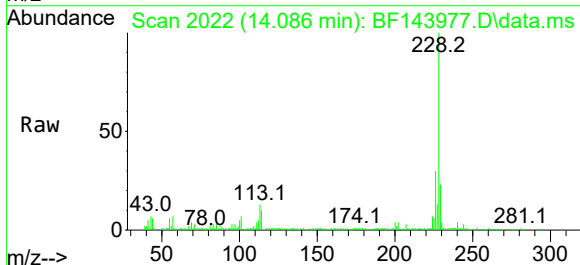
Instrument :
BNA_F
ClientSampleId :
M-R-SOILDL

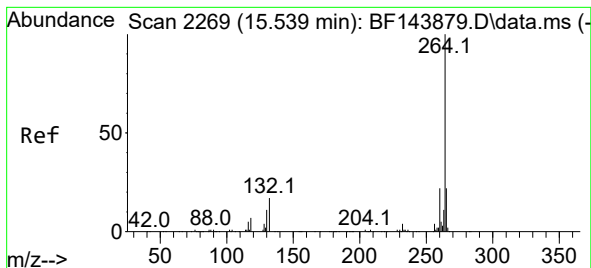
Tgt Ion:228 Resp: 157301
Ion Ratio Lower Upper
228 100
226 32.8 22.2 33.2
229 21.1 15.6 23.4



#83
Chrysene
Concen: 9.07 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: 20.00 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-SOILDL

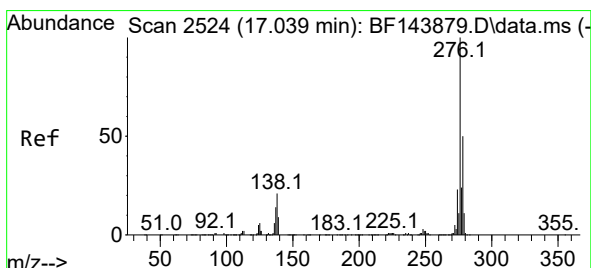
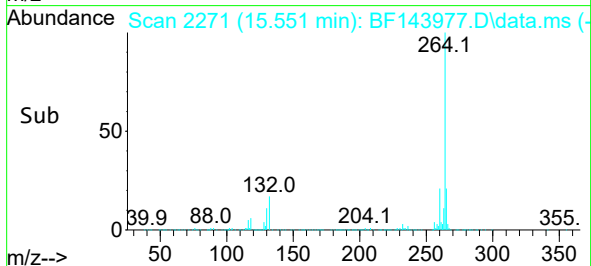
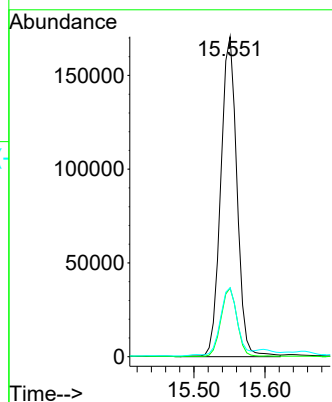
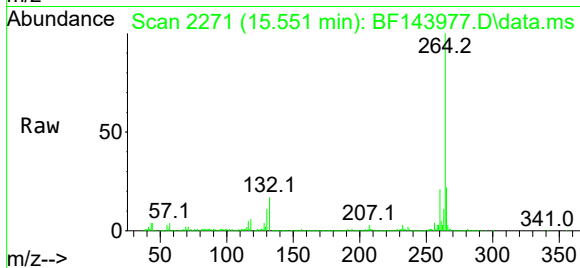
Tgt Ion:264 Resp: 269946

Ion Ratio Lower Upper

264 100

260 21.4 17.8 26.8

265 21.6 17.5 26.3



#87

Indeno(1,2,3-cd)pyrene

Concen: 4.03 ng

RT: 17.045 min Scan# 2525

Delta R.T. -0.012 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

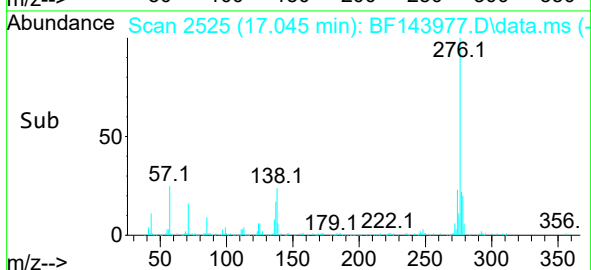
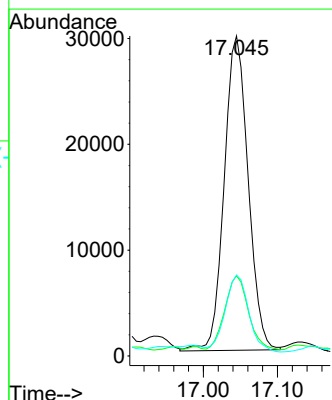
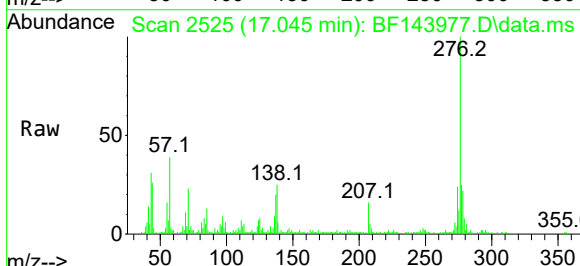
Tgt Ion:276 Resp: 66694

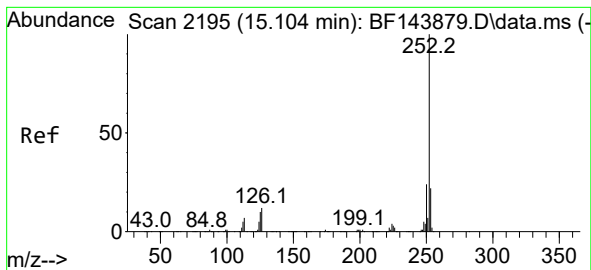
Ion Ratio Lower Upper

276 100

138 23.3 18.2 27.2

277 24.1 19.8 29.6





#88

Benzo(b)fluoranthene

Concen: 11.26 ng

RT: 15.116 min Scan# 2197

Delta R.T. 0.000 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

Instrument :

BNA_F

ClientSampleId :

M-R-SOILDL

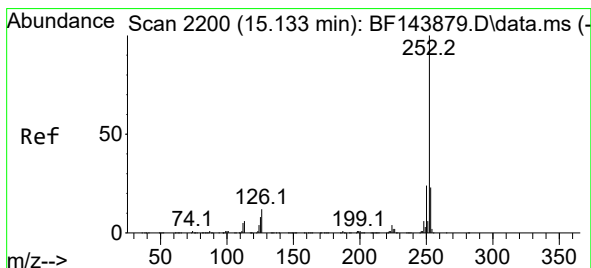
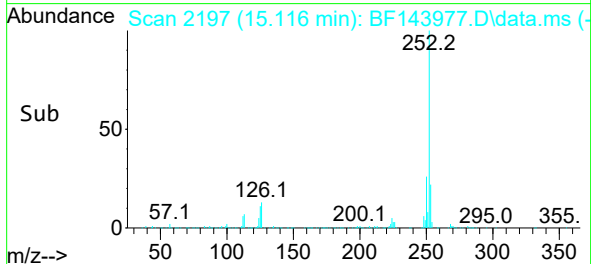
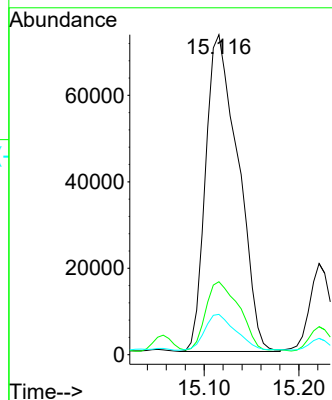
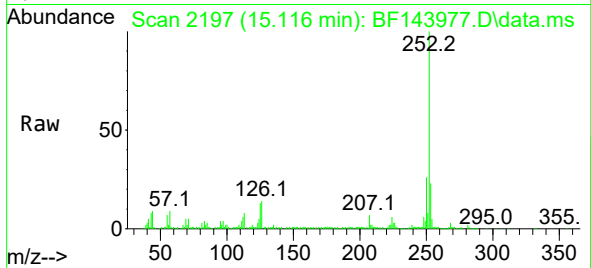
Tgt Ion:252 Resp: 174586

Ion Ratio Lower Upper

252 100

253 22.8 17.4 26.2

125 12.6 7.8 11.6#



#89

Benzo(k)fluoranthene

Concen: 12.17 ng

RT: 15.116 min Scan# 2197

Delta R.T. -0.029 min

Lab File: BF143977.D

Acq: 16 Oct 2025 14:13

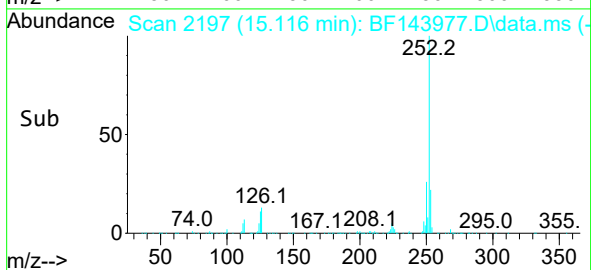
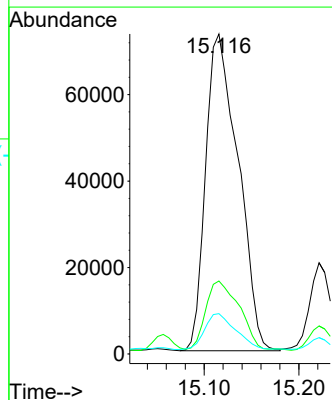
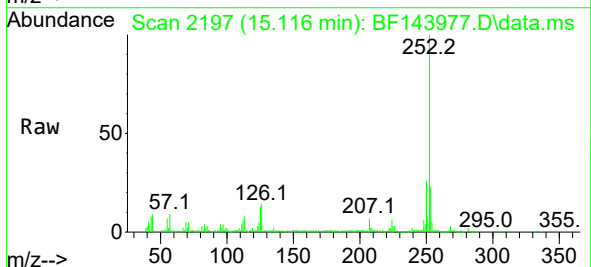
Tgt Ion:252 Resp: 174586

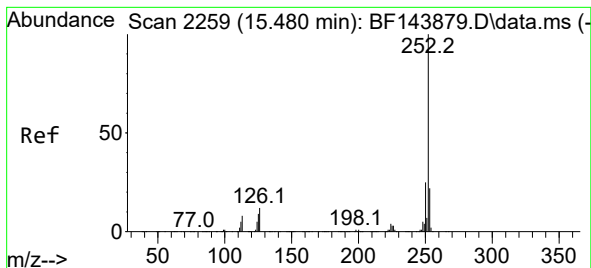
Ion Ratio Lower Upper

252 100

253 22.8 17.8 26.8

125 12.6 7.4 11.2#





#90

Benzo(a)pyrene

Concen: 9.02 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

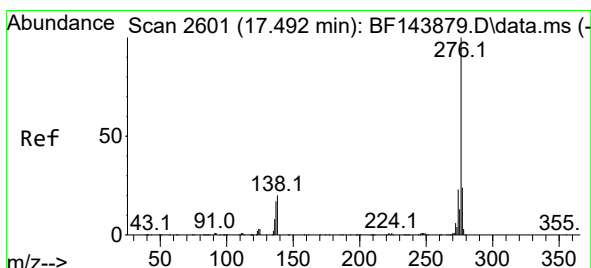
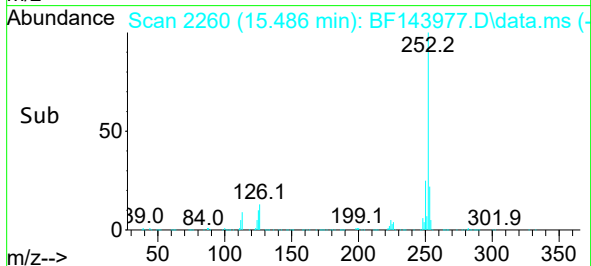
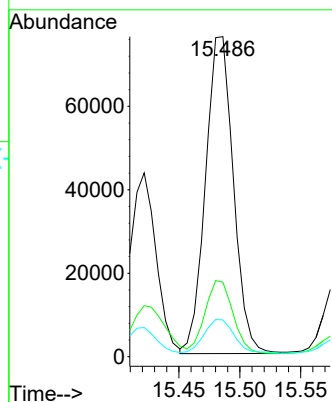
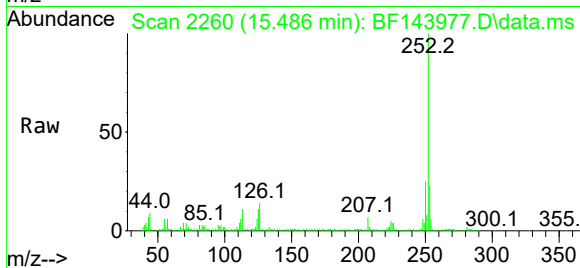
Tgt Ion:252 Resp: 121245

Ion Ratio Lower Upper

252 100

253 23.3 17.3 25.9

125 11.5 7.0 10.4#



#92

Benzo(g,h,i)perylene

Concen: 4.64 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#

