

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120125\
 Data File : BN038227.D
 Acq On : 01 Dec 2025 15:49
 Operator : RC/JU
 Sample : Q3483-13DL 10X
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 HW1025-PT-PAH-SOILDL

Quant Time: Dec 01 16:13:16 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN112725.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Nov 28 21:04:10 2025
 Response via : Initial Calibration

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

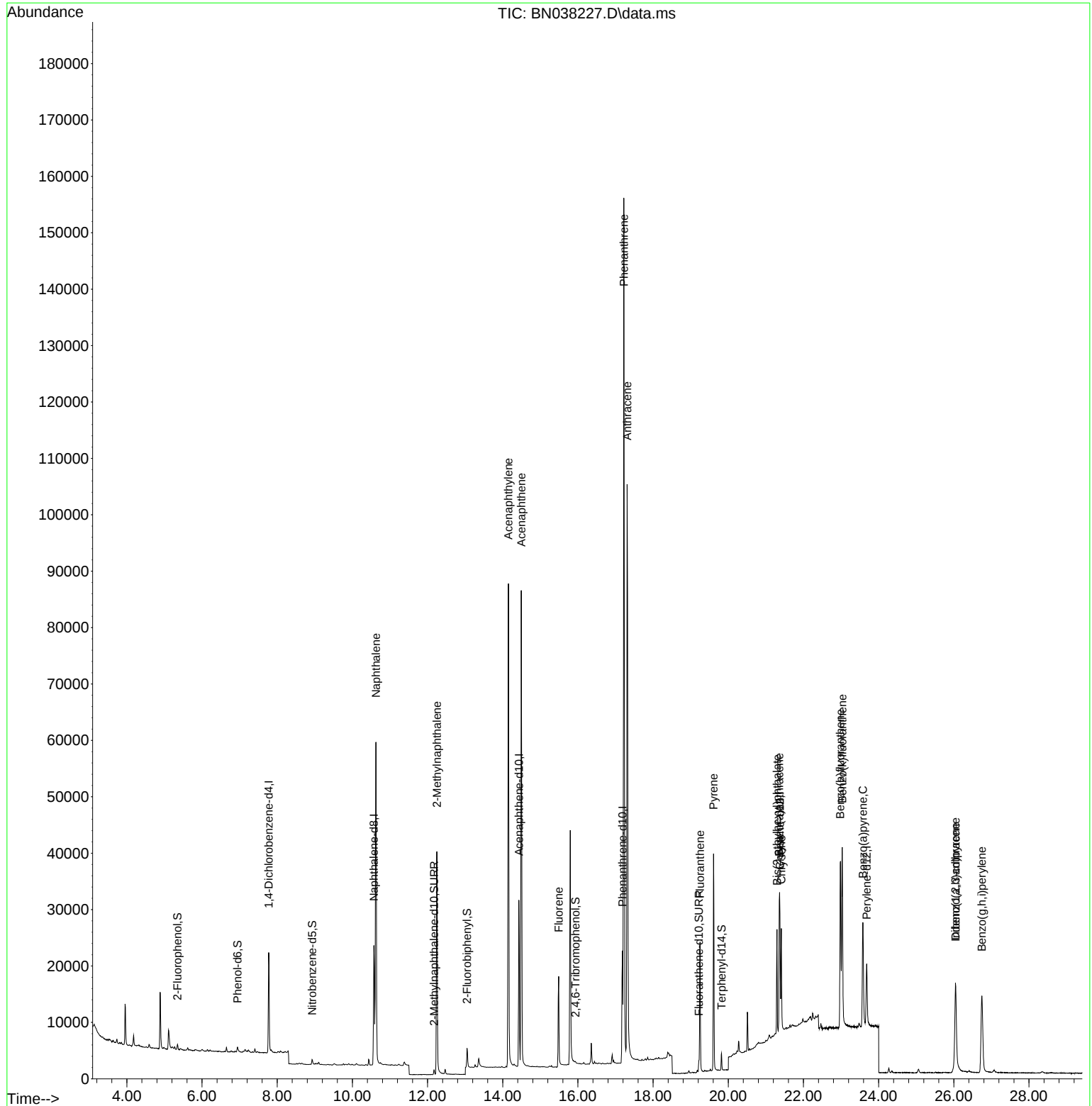
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	9014	0.400	ng	0.00
7) Naphthalene-d8	10.573	136	29234	0.400	ng	# 0.00
13) Acenaphthene-d10	14.430	164	16868	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	29662	0.400	ng	0.00
29) Chrysene-d12	21.375	240	17379	0.400	ng	# 0.00
35) Perylene-d12	23.683	264	15679	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.348	112	793	0.038	ng	0.00
5) Phenol-d6	6.944	99	987	0.037	ng	0.00
8) Nitrobenzene-d5	8.929	82	804	0.034	ng	0.01
11) 2-Methylnaphthalene-d10	12.172	152	1260	0.030	ng	0.00
14) 2,4,6-Tribromophenol	15.932	330	220	0.041	ng	0.00
15) 2-Fluorobiphenyl	13.051	172	3384	0.052	ng	0.00
27) Fluoranthene-d10	19.220	212	2366	0.037	ng	0.00
31) Terphenyl-d14	19.819	244	3027	0.075	ng	0.00
Target Compounds						Qvalue
9) Naphthalene	10.626	128	75377	0.929	ng	99
12) 2-Methylnaphthalene	12.248	142	30892	0.578	ng	99
16) Acenaphthylene	14.152	152	96592	1.281	ng	99
17) Acenaphthene	14.495	154	41002	0.780	ng	99
18) Fluorene	15.489	166	11649	0.171	ng	98
25) Phenanthrene	17.223	178	156682	1.683	ng	100
26) Anthracene	17.310	178	126665	1.594	ng	99
28) Fluoranthene	19.248	202	21327	0.238	ng	99
30) Pyrene	19.610	202	34034	0.392	ng	99
32) Benzo(a)anthracene	21.358	228	16827	0.286	ng	99
33) Chrysene	21.411	228	15731	0.226	ng	98
34) Bis(2-ethylhexyl)phtha...	21.295	149	17331	0.538	ng	99
36) Indeno(1,2,3-cd)pyrene	26.042	276	13412	0.185	ng	# 85
37) Benzo(b)fluoranthene	22.981	252	39949	0.621	ng	95
38) Benzo(k)fluoranthene	23.031	252	43337	0.648	ng	97
39) Benzo(a)pyrene	23.581	252	29015	0.538	ng	95
40) Dibenzo(a,h)anthracene	26.048	278	23832	0.434	ng	97
41) Benzo(g,h,i)perylene	26.747	276	30860	0.470	ng	99

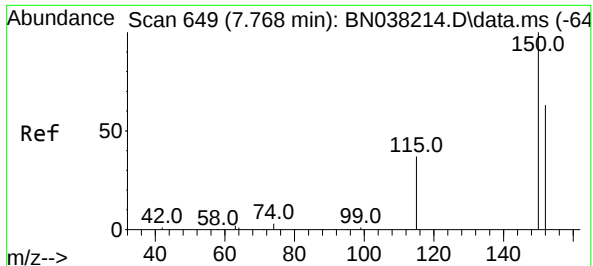
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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HW1025-PT-PAH-SOILDL

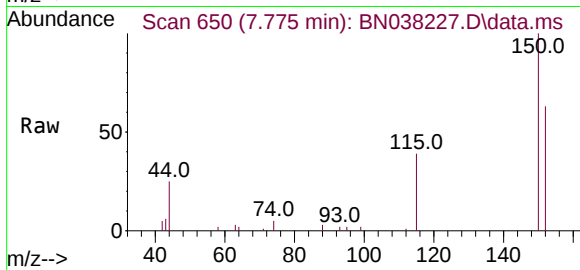
Quant Time: Dec 01 16:13:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN112725.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
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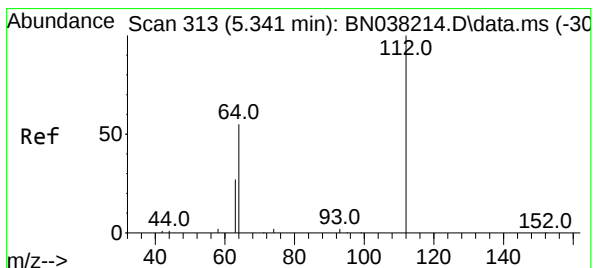
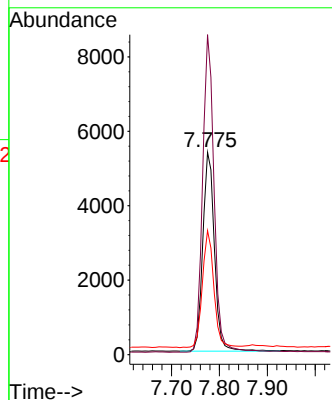
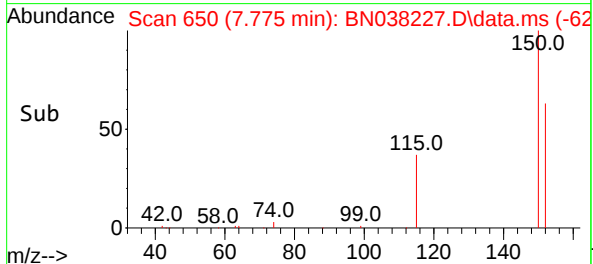


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. 0.007 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

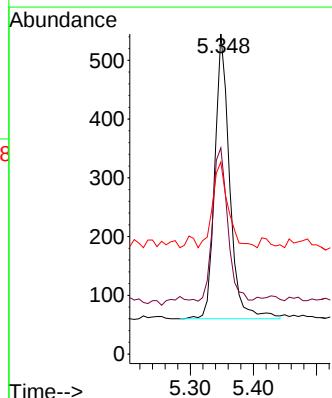
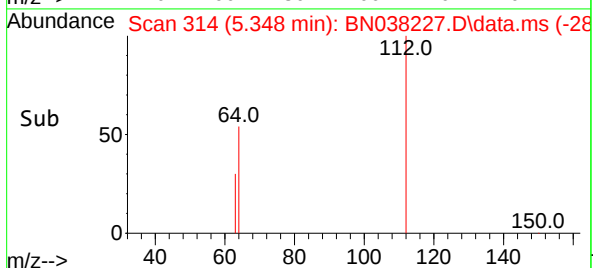
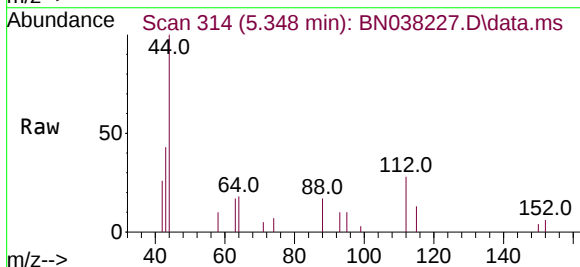


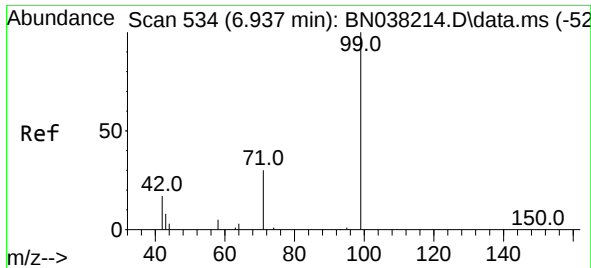
Tgt Ion:152 Resp: 9014
Ion Ratio Lower Upper
152 100
150 158.2 125.3 187.9
115 61.3 49.0 73.4



#4
2-Fluorophenol
Concen: 0.038 ng
RT: 5.348 min Scan# 314
Delta R.T. 0.007 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion:112 Resp: 793
Ion Ratio Lower Upper
112 100
64 55.0 45.0 67.4
63 32.2 23.2 34.8

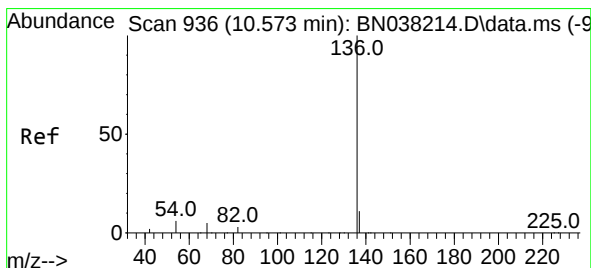
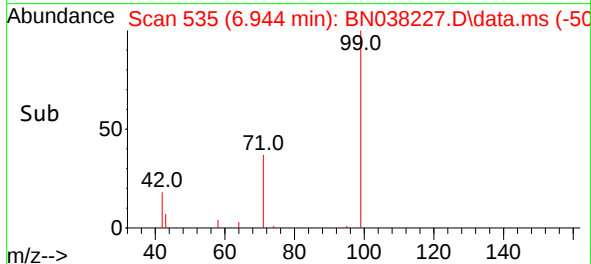
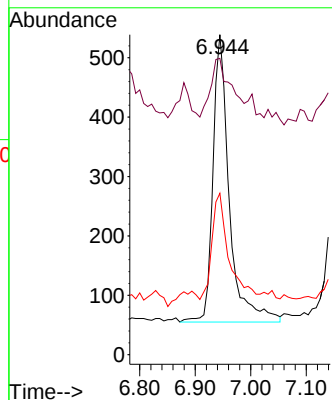
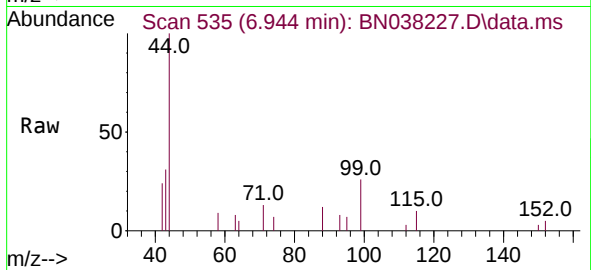




#5
Phenol-d6
Concen: 0.037 ng
RT: 6.944 min Scan# 534
Delta R.T. 0.007 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

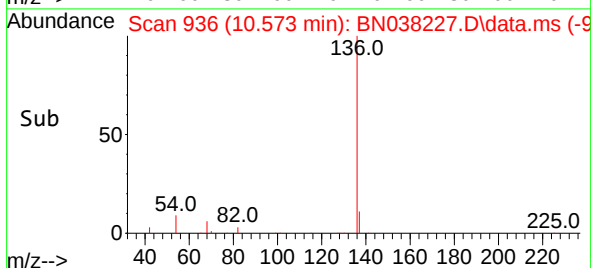
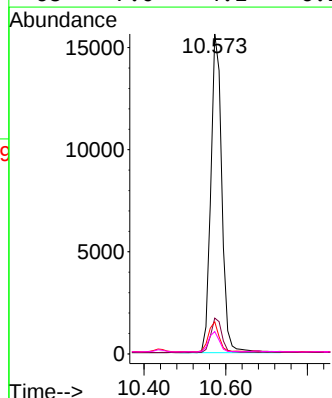
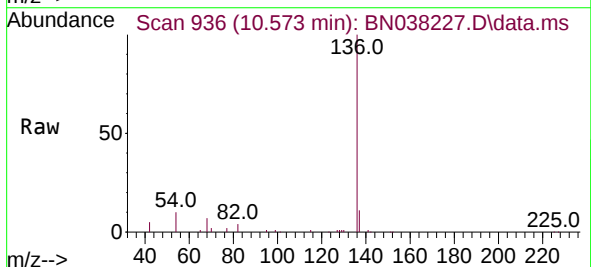
Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

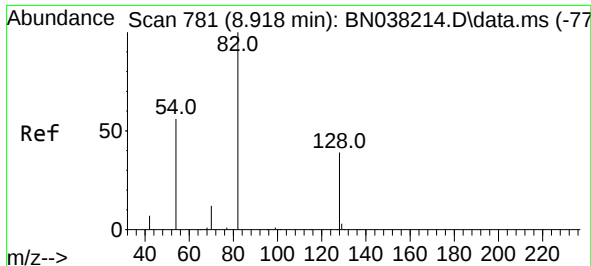
Tgt Ion: 99 Resp: 987
Ion Ratio Lower Upper
99 100
42 31.7 17.0 25.6#
71 38.2 25.4 38.2#



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.573 min Scan# 936
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion: 136 Resp: 29234
Ion Ratio Lower Upper
136 100
137 11.2 8.9 13.3
54 10.0 5.4 8.0#
68 7.0 4.1 6.1#

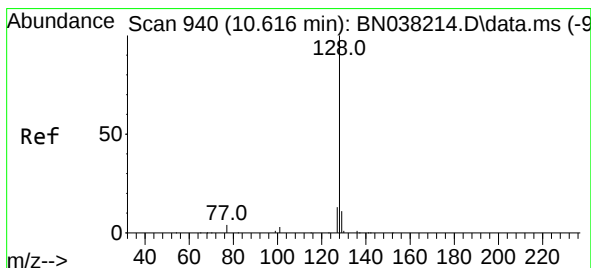
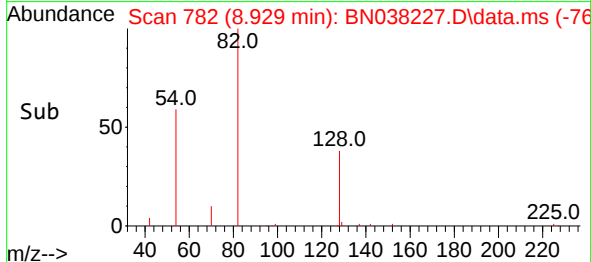
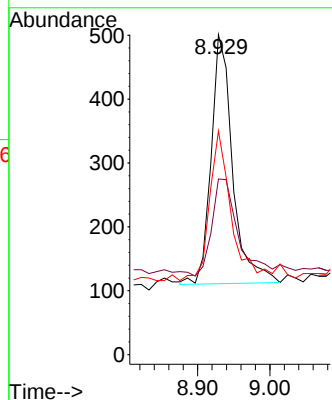
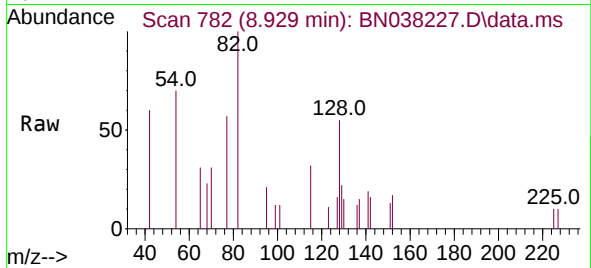




#8
Nitrobenzene-d5
Concen: 0.034 ng
RT: 8.929 min Scan# 781
Delta R.T. 0.011 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

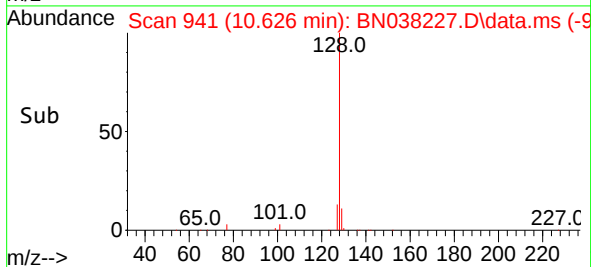
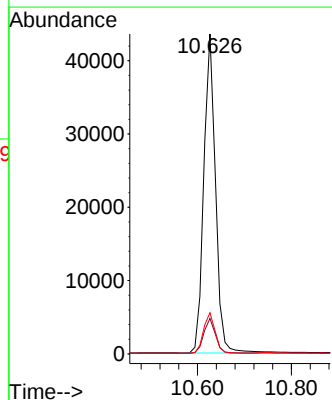
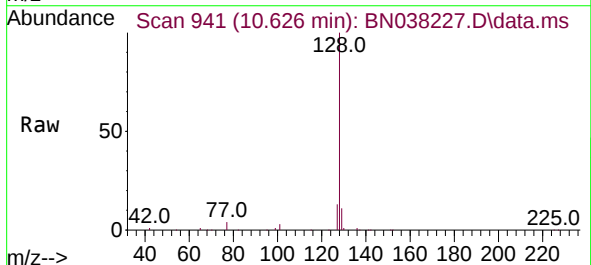
Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

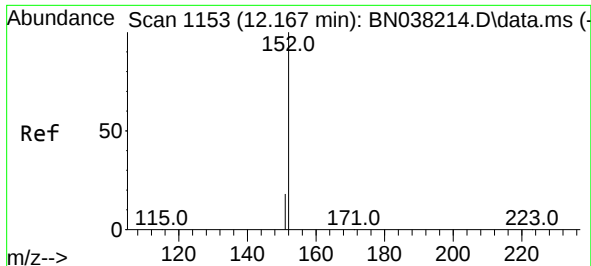
Tgt Ion: 82 Resp: 804
Ion Ratio Lower Upper
82 100
128 54.9 32.6 48.8#
54 69.9 45.4 68.0#



#9
Naphthalene
Concen: 0.929 ng
RT: 10.626 min Scan# 941
Delta R.T. 0.011 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion: 128 Resp: 75377
Ion Ratio Lower Upper
128 100
129 11.1 9.1 13.7
127 12.9 10.6 16.0

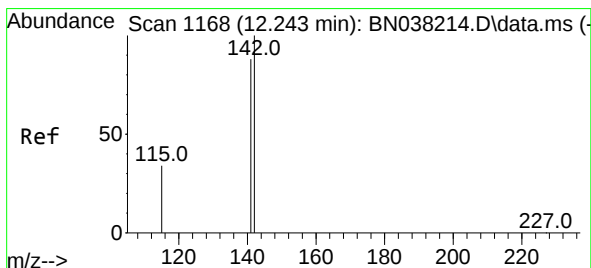
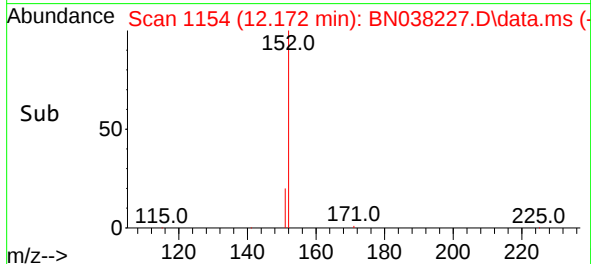
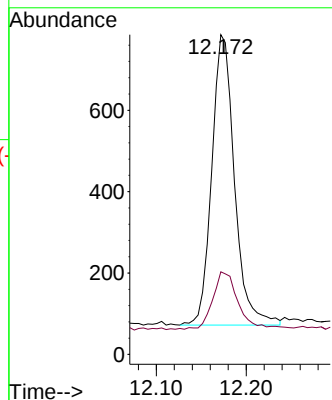
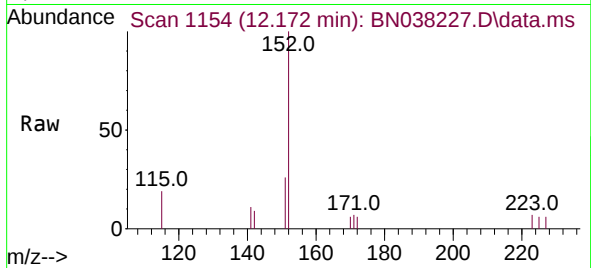




#11
2-Methylnaphthalene-d10
Concen: 0.030 ng
RT: 12.172 min Scan# 1153
Delta R.T. 0.005 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

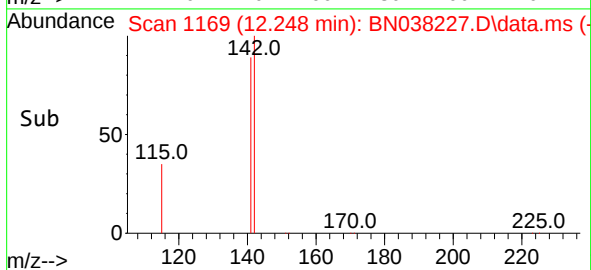
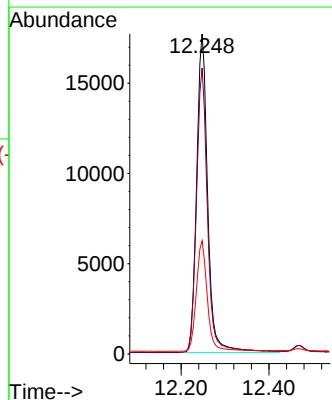
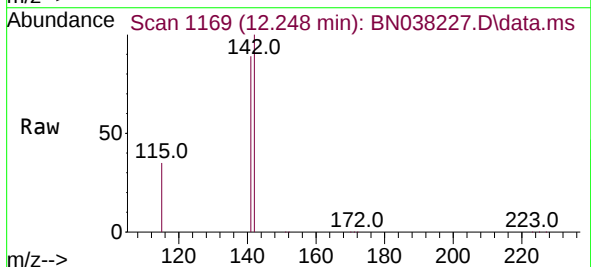
Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

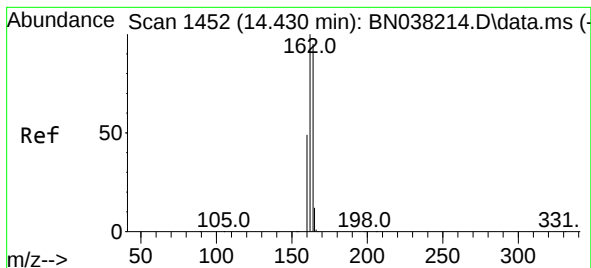
Tgt Ion:152 Resp: 1260
Ion Ratio Lower Upper
152 100
151 22.2 16.7 25.1



#12
2-Methylnaphthalene
Concen: 0.578 ng
RT: 12.248 min Scan# 1169
Delta R.T. 0.005 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion:142 Resp: 30892
Ion Ratio Lower Upper
142 100
141 89.3 70.9 106.3
115 35.3 27.7 41.5





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.430 min Scan# 1452

Delta R.T. 0.000 min

Lab File: BN038227.D

Acq: 01 Dec 2025 15:49

Instrument :

BNA_N

ClientSampleId :

HW1025-PT-PAH-SOILD

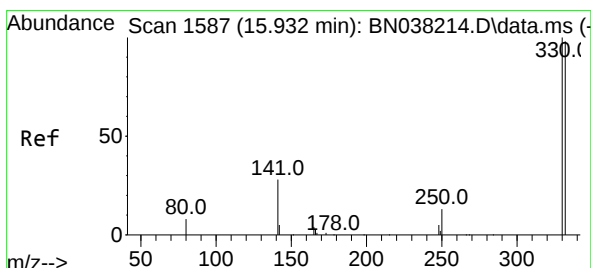
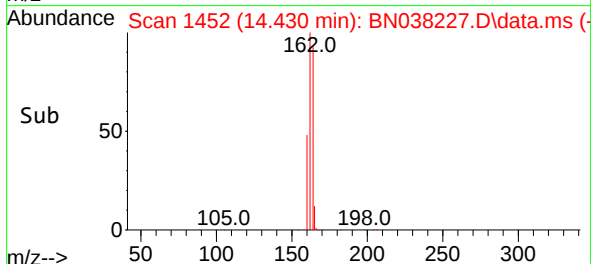
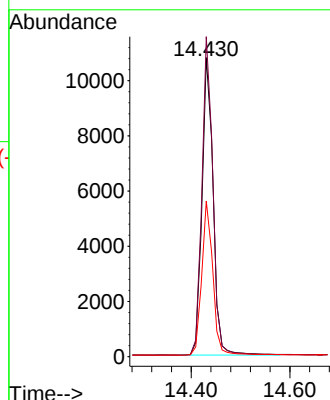
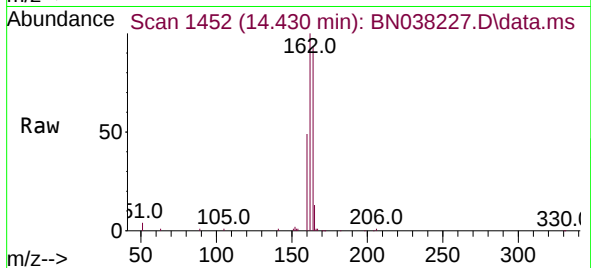
Tgt Ion:164 Resp: 16868

Ion Ratio Lower Upper

164 100

162 107.0 83.8 125.8

160 52.0 41.6 62.4



#14

2,4,6-Tribromophenol

Concen: 0.041 ng

RT: 15.932 min Scan# 1587

Delta R.T. 0.000 min

Lab File: BN038227.D

Acq: 01 Dec 2025 15:49

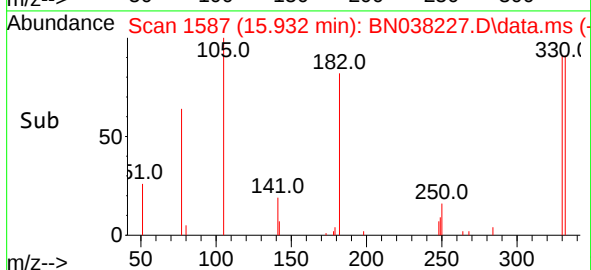
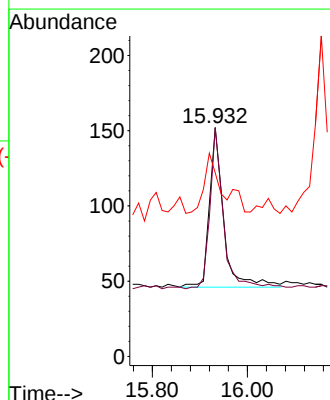
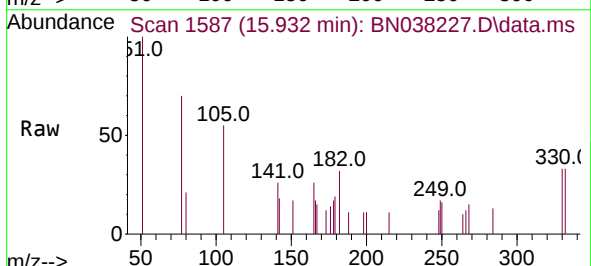
Tgt Ion:330 Resp: 220

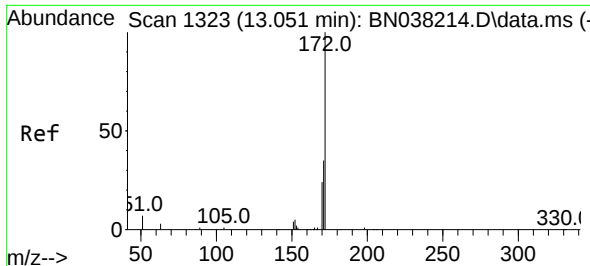
Ion Ratio Lower Upper

330 100

332 96.4 77.8 116.6

141 41.8 33.0 49.4

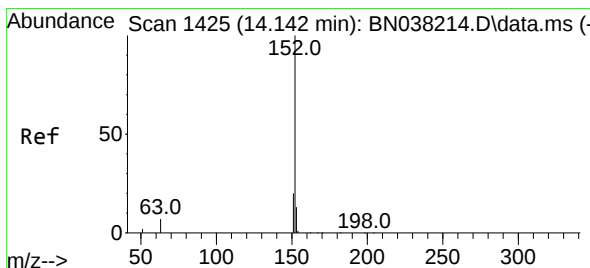
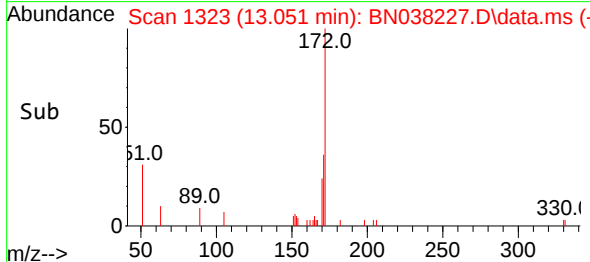
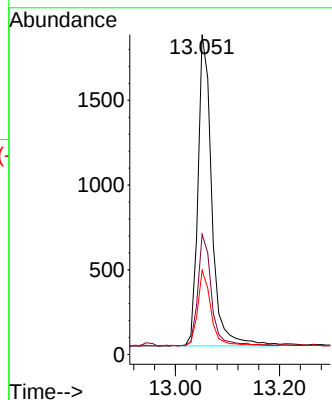
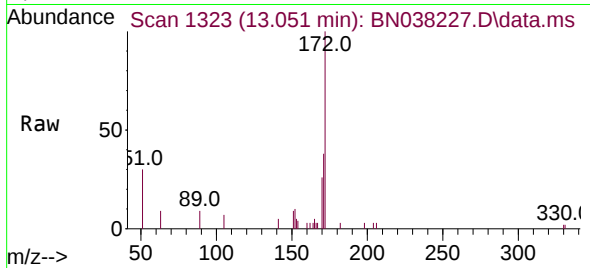




#15
2-Fluorobiphenyl
Concen: 0.052 ng
RT: 13.051 min Scan# 1323
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

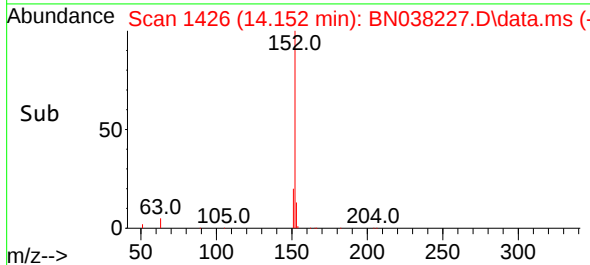
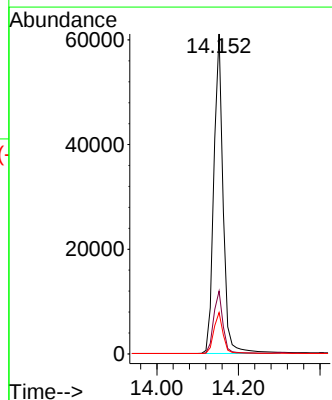
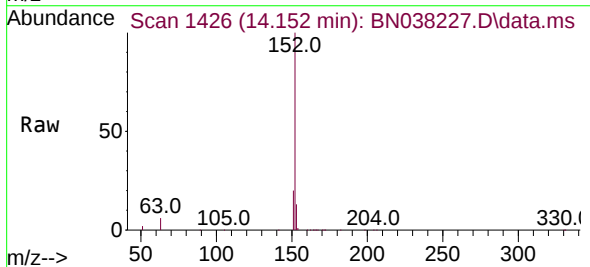
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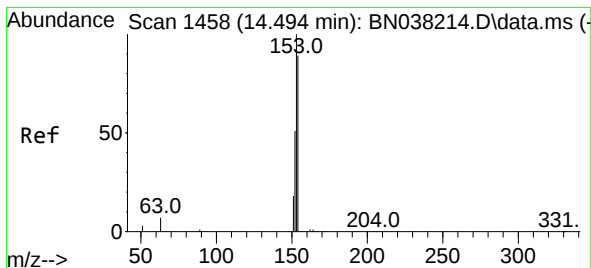
Tgt Ion:	172	Resp:	3384
Ion Ratio	Lower	Upper	
172	100		
171	37.6	28.1	42.1
170	26.3	19.1	28.7



#16
Acenaphthylene
Concen: 1.281 ng
RT: 14.152 min Scan# 1426
Delta R.T. 0.011 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion:	152	Resp:	96592
Ion Ratio	Lower	Upper	
152	100		
151	19.8	15.6	23.4
153	13.0	10.6	15.8





#17

Acenaphthene

Concen: 0.780 ng

RT: 14.495 min Scan# 1458

Delta R.T. 0.000 min

Lab File: BN038227.D

Acq: 01 Dec 2025 15:49

Instrument :

BNA_N

ClientSampleId :

HW1025-PT-PAH-SOILD

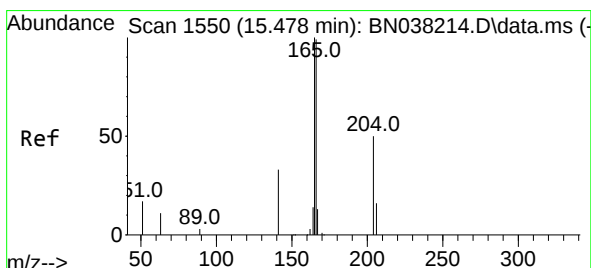
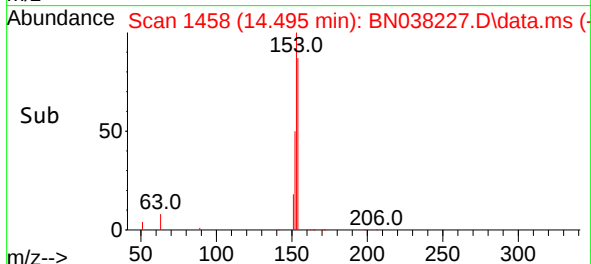
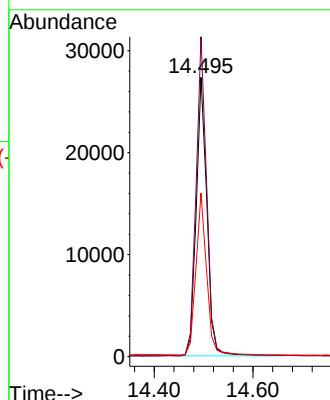
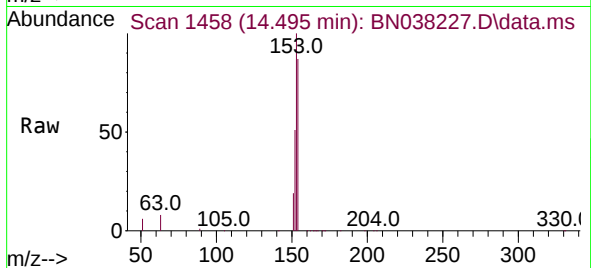
Tgt Ion:154 Resp: 41002

Ion Ratio Lower Upper

154 100

153 114.2 91.1 136.7

152 57.9 48.2 72.2



#18

Fluorene

Concen: 0.171 ng

RT: 15.489 min Scan# 1551

Delta R.T. 0.011 min

Lab File: BN038227.D

Acq: 01 Dec 2025 15:49

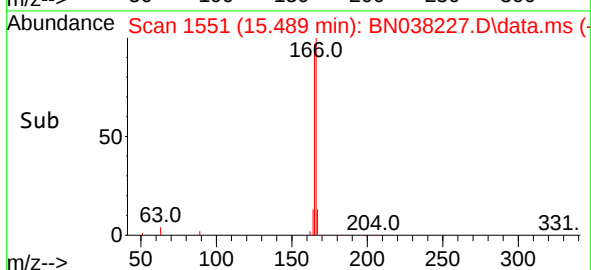
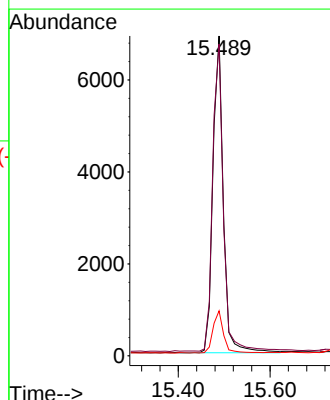
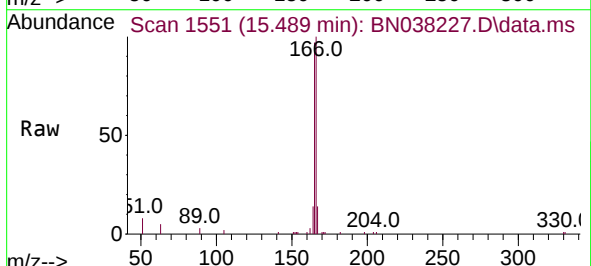
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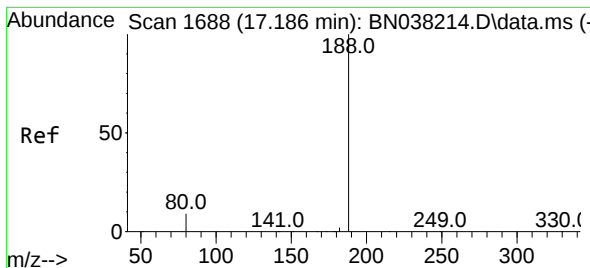
Ion Ratio Lower Upper

166 100

165 100.1 78.7 118.1

167 13.3 10.9 16.3

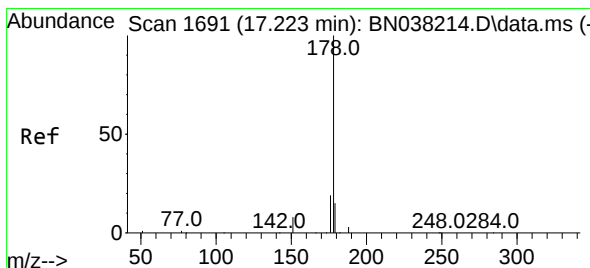
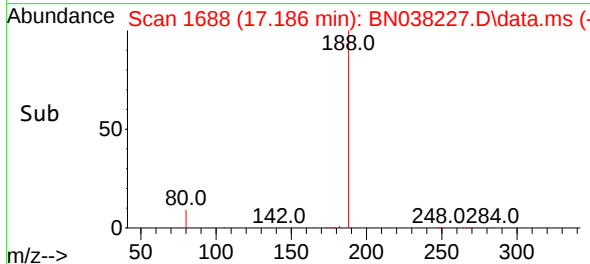
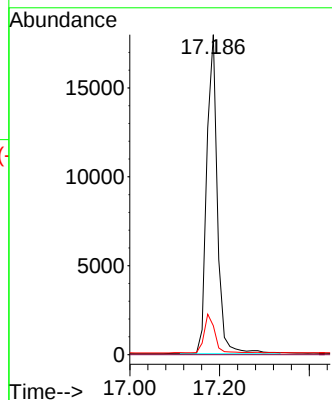
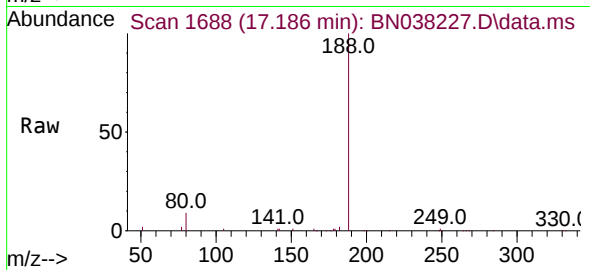




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.186 min Scan# 1688
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

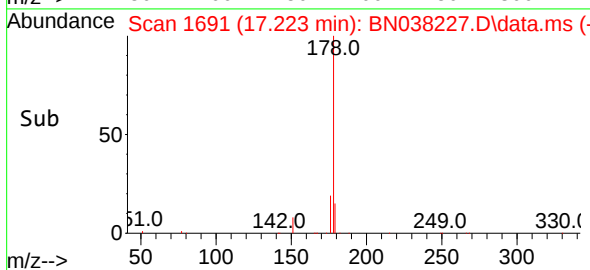
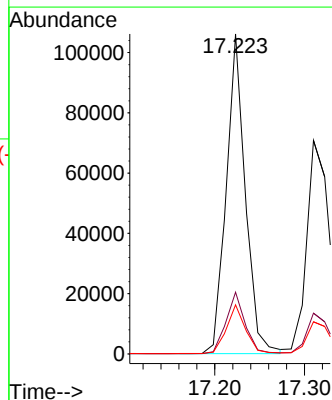
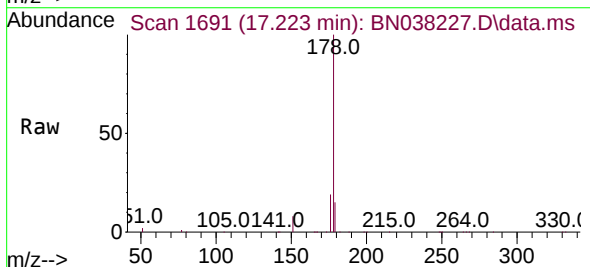
Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

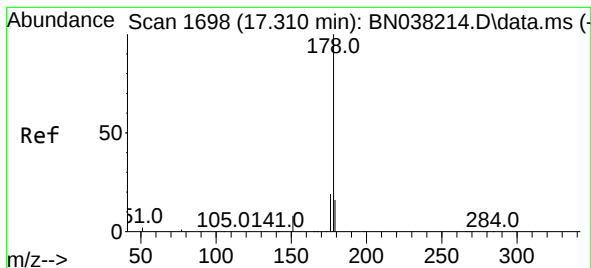
Tgt Ion:188 Resp: 29662
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 9.0 7.7 11.5



#25
Phenanthrene
Concen: 1.683 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion:178 Resp: 156682
Ion Ratio Lower Upper
178 100
176 19.2 15.3 22.9
179 15.3 12.0 18.0





#26

Anthracene

Concen: 1.594 ng

RT: 17.310 min Scan# 1698

Delta R.T. 0.000 min

Lab File: BN038227.D

Acq: 01 Dec 2025 15:49

Instrument :

BNA_N

ClientSampleId :

HW1025-PT-PAH-SOILD

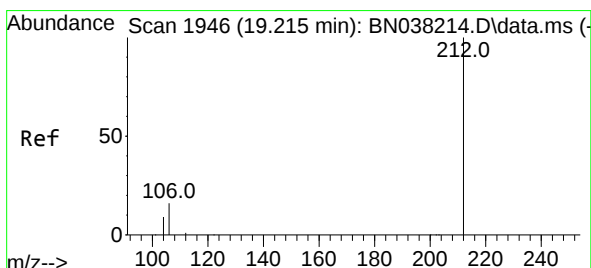
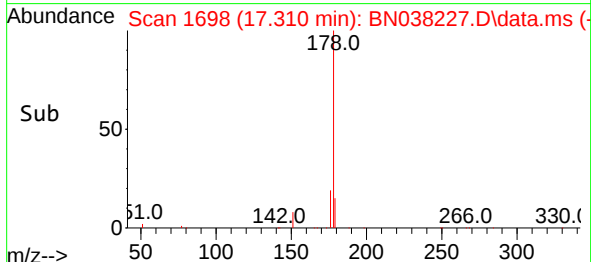
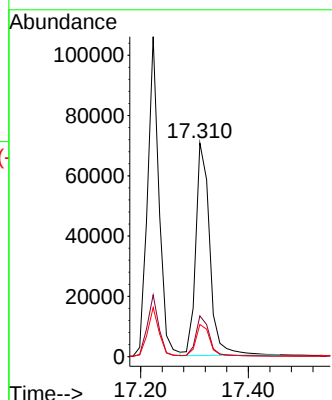
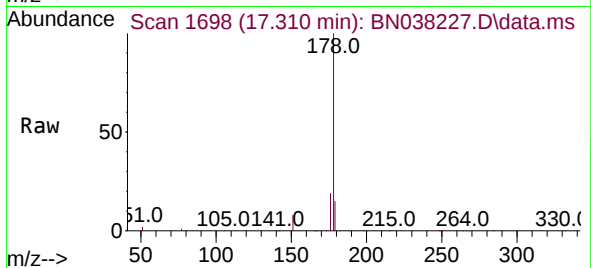
Tgt Ion:178 Resp: 126665

Ion Ratio Lower Upper

178 100

176 18.6 14.7 22.1

179 15.1 12.3 18.5



#27

Fluoranthene-d10

Concen: 0.037 ng

RT: 19.220 min Scan# 1947

Delta R.T. 0.005 min

Lab File: BN038227.D

Acq: 01 Dec 2025 15:49

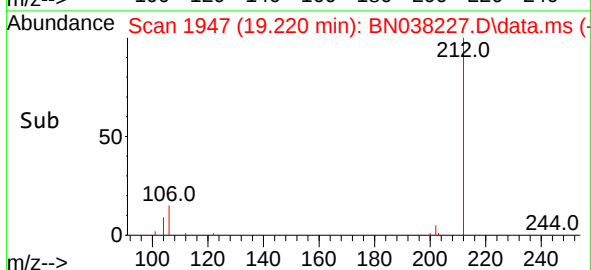
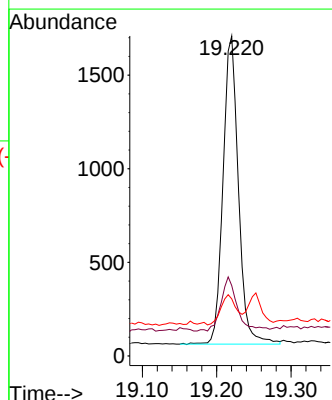
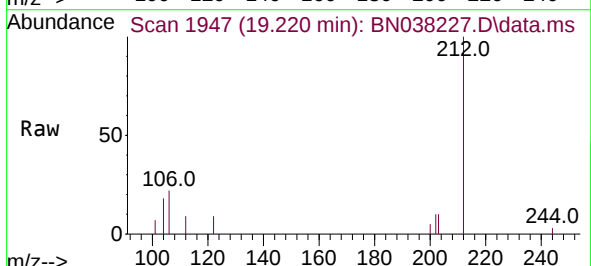
Tgt Ion:212 Resp: 2366

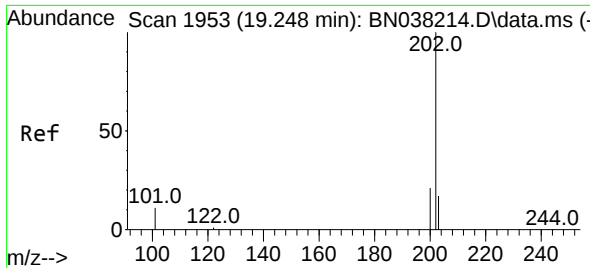
Ion Ratio Lower Upper

212 100

106 18.6 12.7 19.1

104 9.8 7.3 10.9

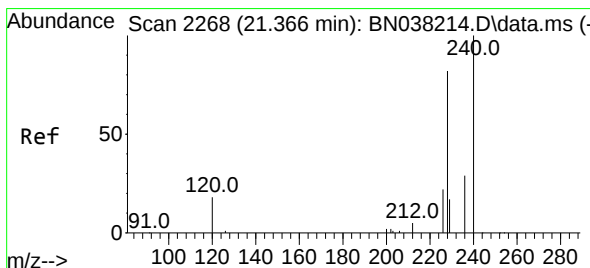
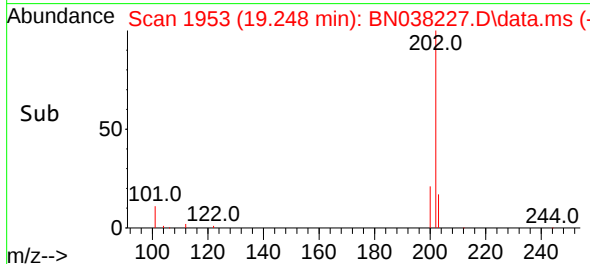
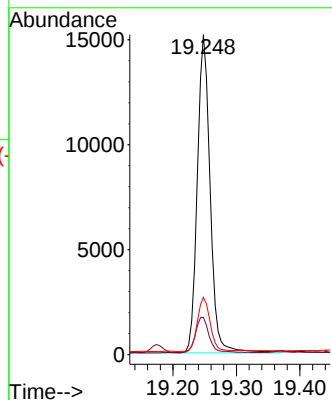
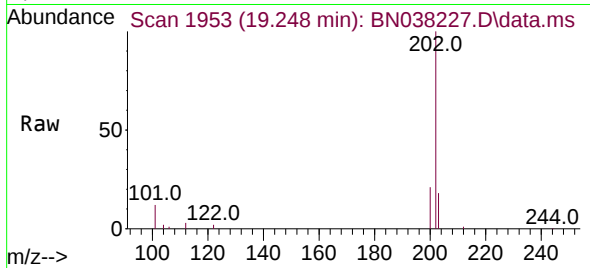




#28
Fluoranthene
Concen: 0.238 ng
RT: 19.248 min Scan# 1953
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

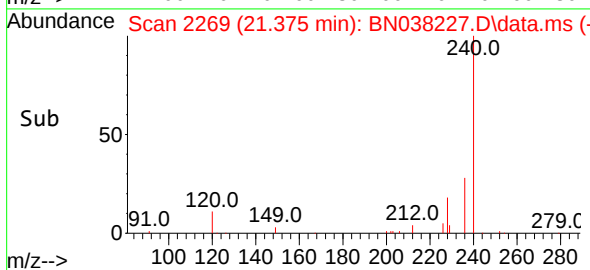
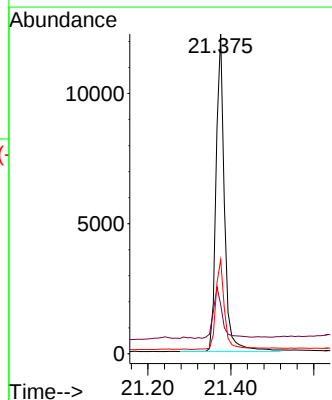
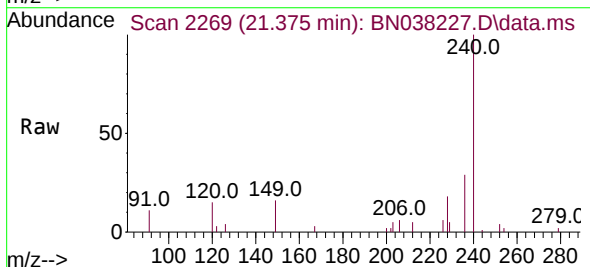
Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

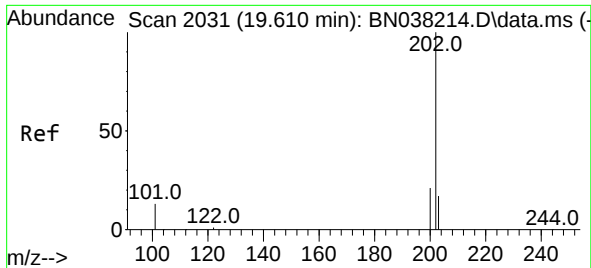
Tgt Ion:	202	Resp:	21327
Ion Ratio	Lower	Upper	
202	100		
101	11.8	9.8	14.6
203	17.1	13.6	20.4



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.375 min Scan# 2269
Delta R.T. 0.009 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion:	240	Resp:	17379
Ion Ratio	Lower	Upper	
240	100		
120	15.4	18.1	27.1
236	29.4	24.2	36.4

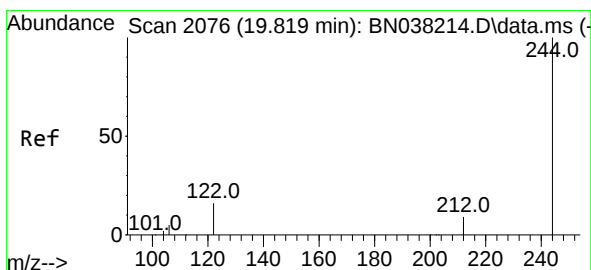
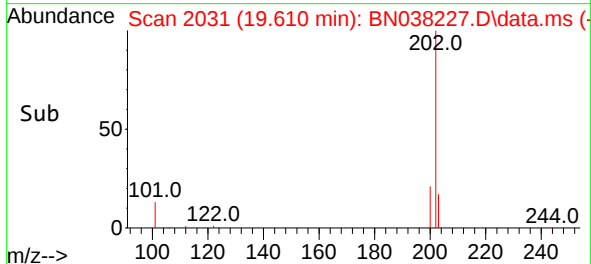
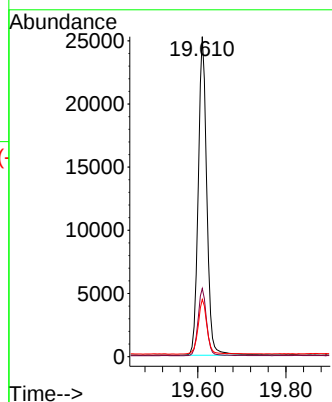
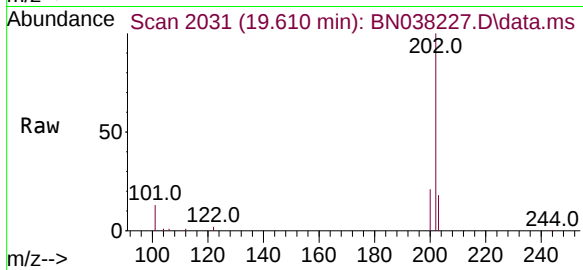




#30
Pyrene
Concen: 0.392 ng
RT: 19.610 min Scan# 2031
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

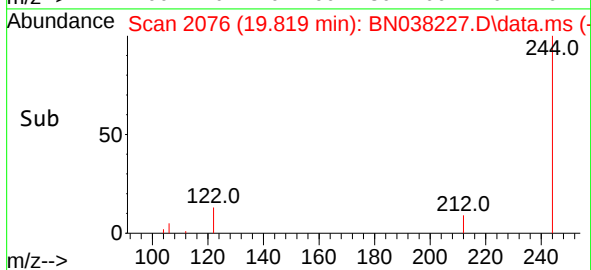
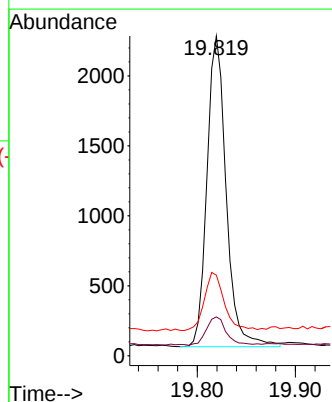
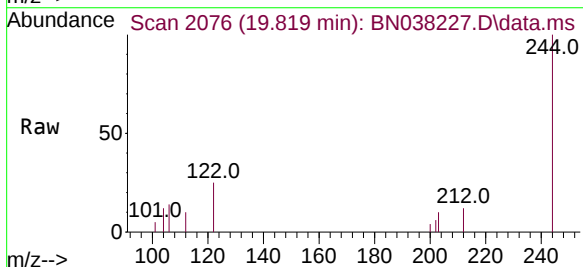
Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

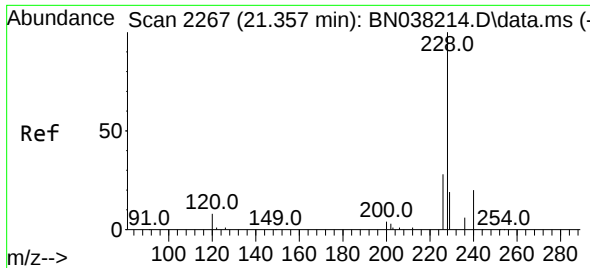
Tgt Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.8	25.2
203	17.6	14.4	21.6



#31
Terphenyl-d14
Concen: 0.075 ng
RT: 19.819 min Scan# 2076
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion	Ratio	Lower	Upper
244	100		
212	12.2	7.7	11.5#
122	25.2	13.6	20.4#

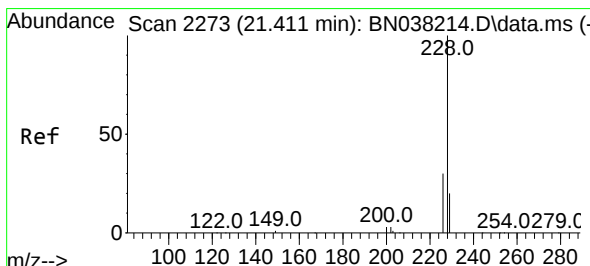
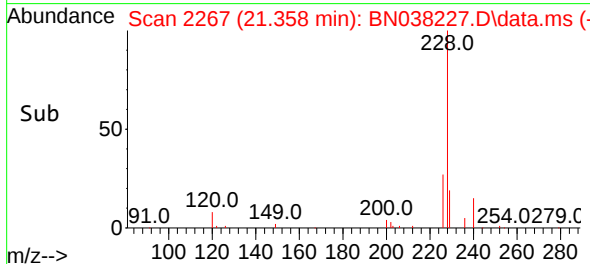
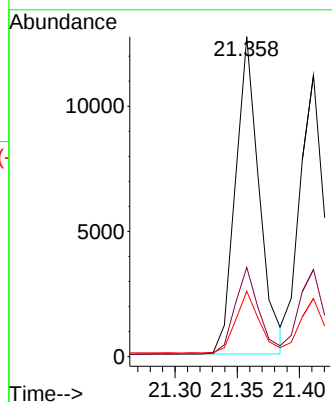
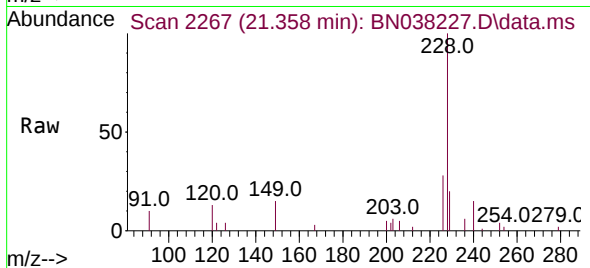




#32
Benzo(a)anthracene
Concen: 0.286 ng
RT: 21.358 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

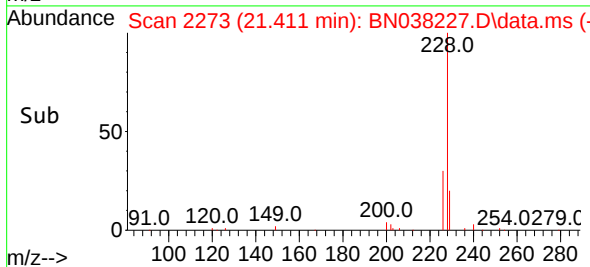
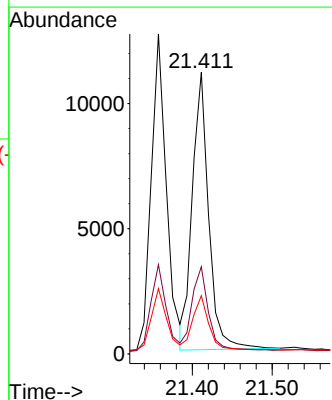
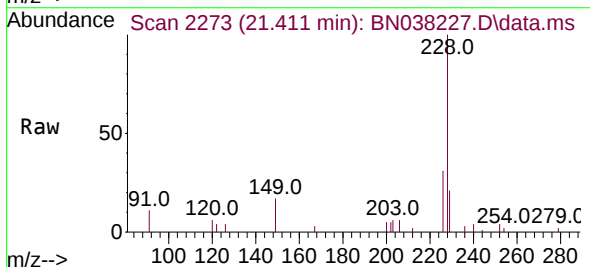
Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

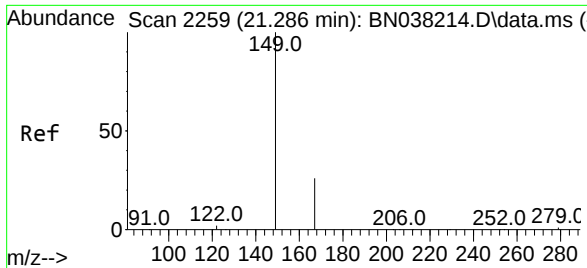
Tgt Ion:228 Resp: 16827
Ion Ratio Lower Upper
228 100
226 27.9 22.6 33.8
229 20.4 15.8 23.8



#33
Chrysene
Concen: 0.226 ng
RT: 21.411 min Scan# 2273
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion:228 Resp: 15731
Ion Ratio Lower Upper
228 100
226 31.0 23.8 35.8
229 20.6 16.1 24.1

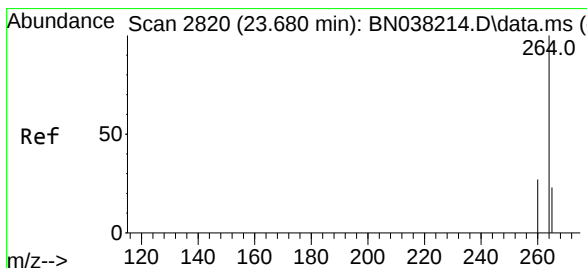
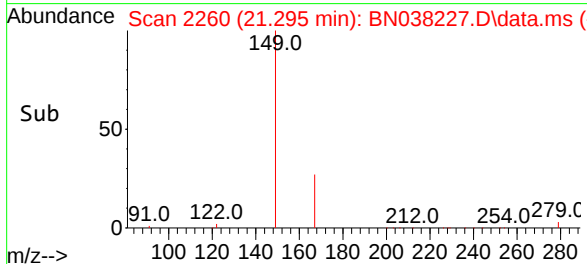
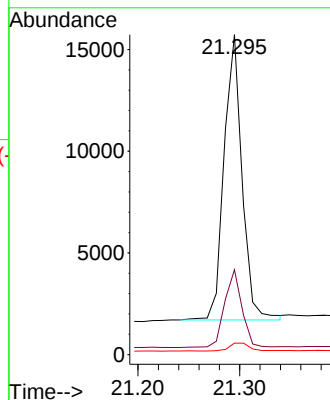
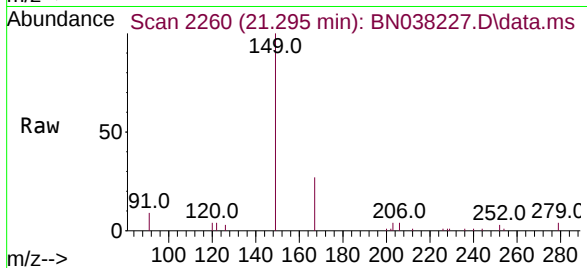




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.538 ng
RT: 21.295 min Scan# 21
Delta R.T. 0.009 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

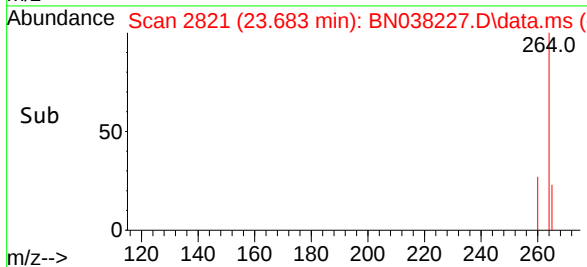
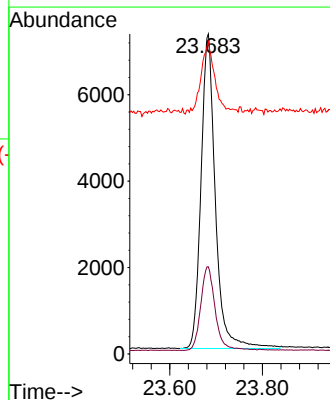
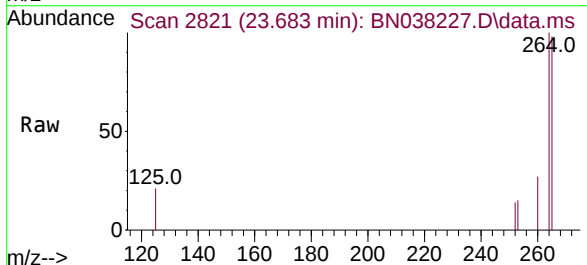
Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

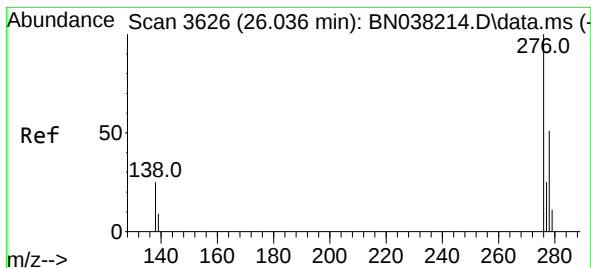
Tgt Ion:149 Resp: 17331
Ion Ratio Lower Upper
149 100
167 26.4 20.7 31.1
279 3.4 2.5 3.7



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.683 min Scan# 2821
Delta R.T. 0.003 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion:264 Resp: 15679
Ion Ratio Lower Upper
264 100
260 27.2 21.7 32.5
265 97.6 98.0 147.0#





#36

Indeno(1,2,3-cd)pyrene

Concen: 0.185 ng

RT: 26.042 min Scan# 3626

Delta R.T. 0.006 min

Lab File: BN038227.D

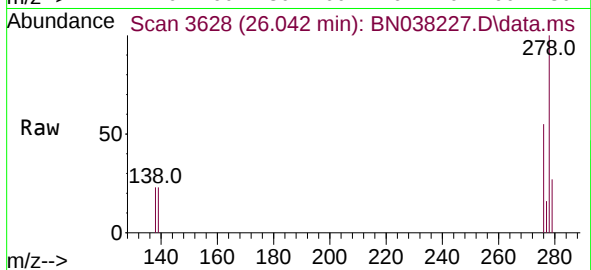
Acq: 01 Dec 2025 15:49

Instrument :

BNA_N

ClientSampleId :

HW1025-PT-PAH-SOILD



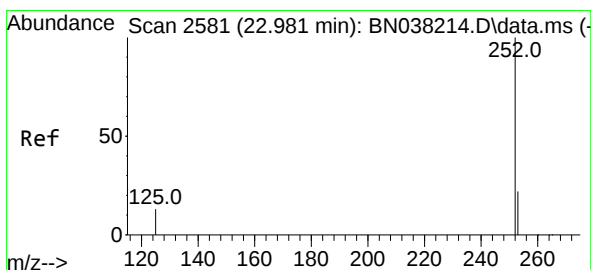
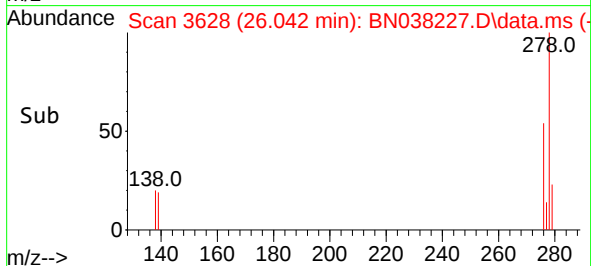
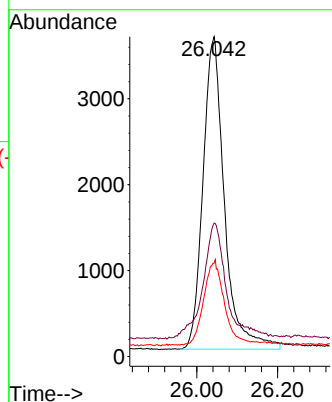
Tgt Ion:276 Resp: 13412

Ion Ratio Lower Upper

276 100

138 39.3 21.4 32.2#

277 26.0 19.1 28.7



#37

Benzo(b)fluoranthene

Concen: 0.621 ng

RT: 22.981 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN038227.D

Acq: 01 Dec 2025 15:49

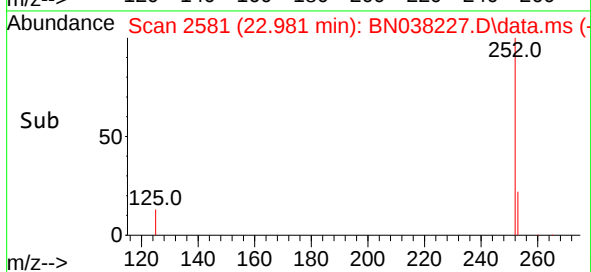
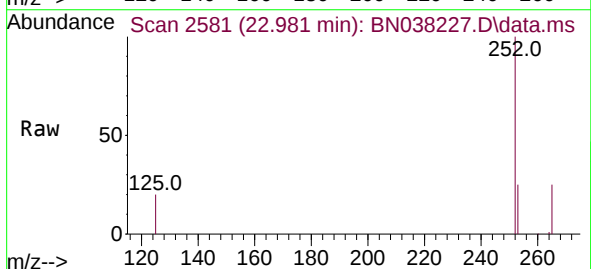
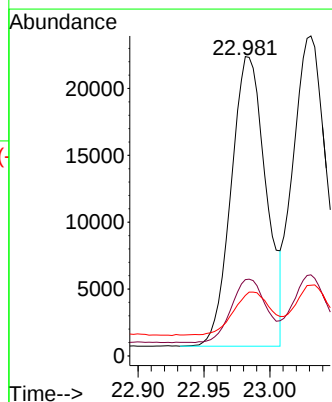
Tgt Ion:252 Resp: 39949

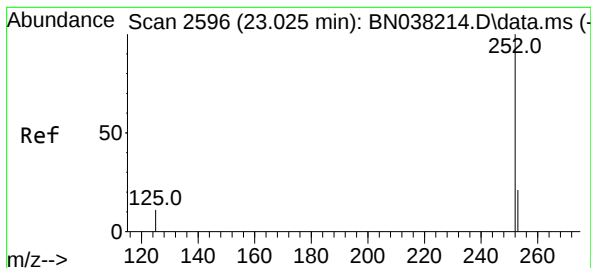
Ion Ratio Lower Upper

252 100

253 25.5 22.2 33.4

125 20.2 18.0 27.0





#38

Benzo(k)fluoranthene

Concen: 0.648 ng

RT: 23.031 min Scan# 21

Delta R.T. 0.006 min

Lab File: BN038227.D

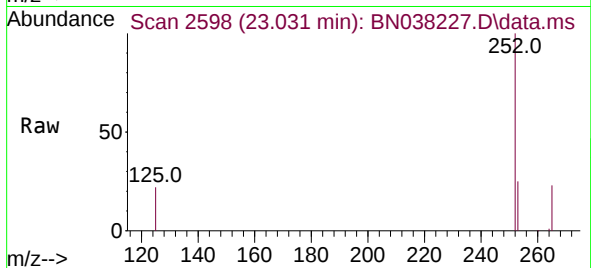
Acq: 01 Dec 2025 15:49

Instrument :

BNA_N

ClientSampleId :

HW1025-PT-PAH-SOILD



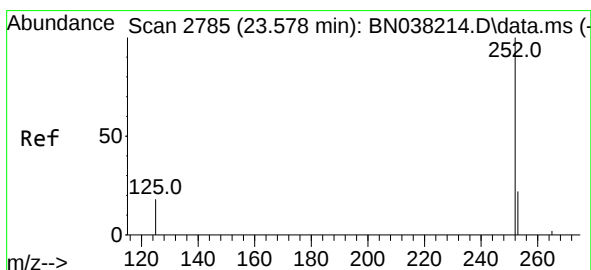
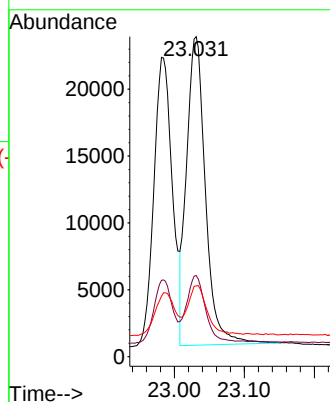
Tgt Ion:252 Resp: 43337

Ion Ratio Lower Upper

252 100

253 25.3 22.4 33.6

125 22.1 17.5 26.3



#39

Benzo(a)pyrene

Concen: 0.538 ng

RT: 23.581 min Scan# 2786

Delta R.T. 0.003 min

Lab File: BN038227.D

Acq: 01 Dec 2025 15:49

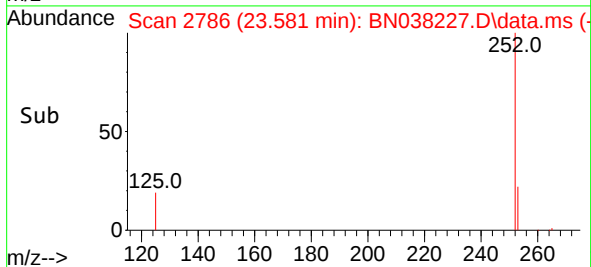
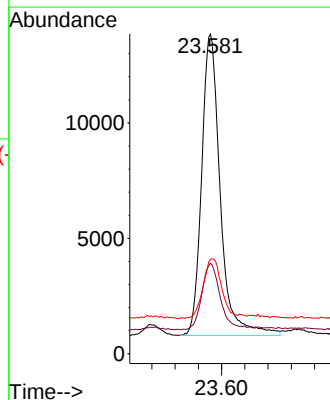
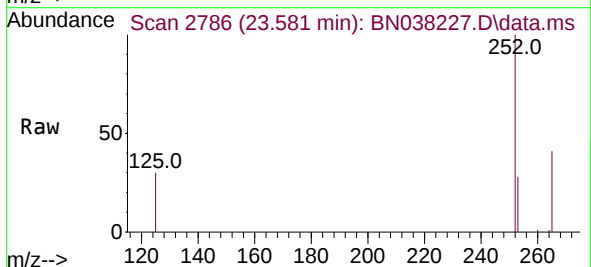
Tgt Ion:252 Resp: 29015

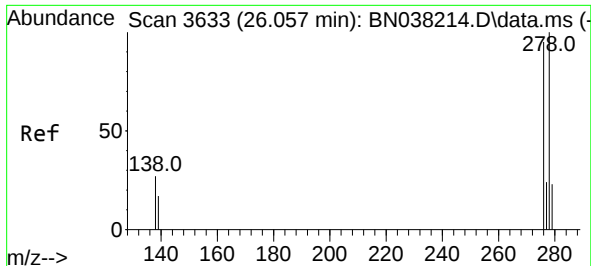
Ion Ratio Lower Upper

252 100

253 28.3 25.3 37.9

125 29.5 25.2 37.8

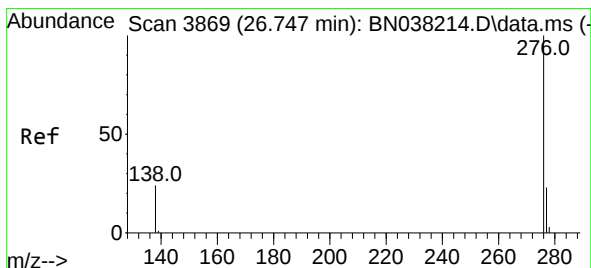
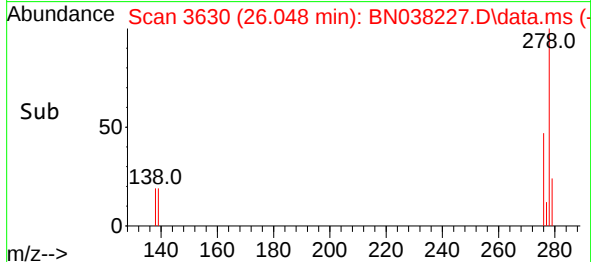
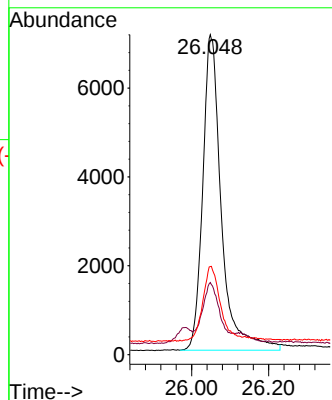
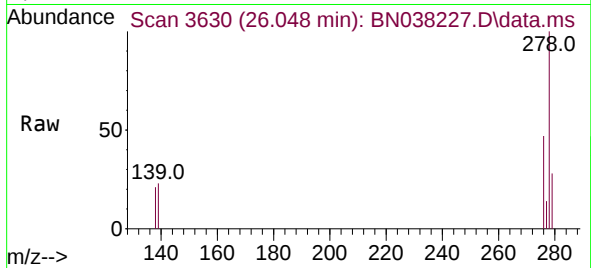




#40
Dibenzo(a,h)anthracene
Concen: 0.434 ng
RT: 26.048 min Scan# 3630
Delta R.T. -0.009 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Instrument :
BNA_N
ClientSampleId :
HW1025-PT-PAH-SOILD

Tgt Ion:278 Resp: 23832
Ion Ratio Lower Upper
278 100
139 22.5 17.6 26.4
279 27.5 24.2 36.4



#41
Benzo(g,h,i)perylene
Concen: 0.470 ng
RT: 26.747 min Scan# 3869
Delta R.T. 0.000 min
Lab File: BN038227.D
Acq: 01 Dec 2025 15:49

Tgt Ion:276 Resp: 30860
Ion Ratio Lower Upper
276 100
277 24.9 20.2 30.2
138 26.8 20.8 31.2

