

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN051425\
 Data File : BN037013.D
 Acq On : 14 May 2025 14:46
 Operator : RC/JU
 Sample : Q1872-13
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 HW0425-PT-PAH-SOIL

Manual Integrations
 APPROVED

Reviewed By :Rahul Chavli 05/15/2025
 Supervised By :Jagrut Upadhyay 05/15/2025

Quant Time: May 14 15:18:26 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN051425.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Wed May 14 11:26:32 2025
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.611	152	2096	0.40	ng	0.00
7) Naphthalene-d8	10.393	136	6097	0.40	ng	#-0.01
13) Acenaphthene-d10	14.256	164	3702	0.40	ng	-0.01
19) Phenanthrene-d10	17.009	188	7619	0.40	ng	# 0.00
29) Chrysene-d12	21.206	240	7847	0.40	ng	0.00
35) Perylene-d12	23.412	264	7344	0.40	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.206	112	1363	0.25	ng	0.00
5) Phenol-d6	6.788	99	1874	0.27	ng	0.00
8) Nitrobenzene-d5	8.760	82	1682	0.25	ng	-0.01
11) 2-Methylnaphthalene-d10	11.986	152	2460	0.29	ng	-0.01
14) 2,4,6-Tribromophenol	15.755	330	409	0.25	ng	-0.01
15) 2-Fluorobiphenyl	12.878	172	4150	0.24	ng	-0.01
27) Fluoranthene-d10	19.049	212	7139	0.34	ng	0.00
31) Terphenyl-d14	19.653	244	5177	0.31	ng	0.00
Target Compounds						Qvalue
9) Naphthalene	10.436	128	49280	2.74	ng	97
12) 2-Methylnaphthalene	12.062	142	76389	6.59	ng	99
16) Acenaphthylene	13.978	152	262125	14.55	ng	100
17) Acenaphthene	14.320	154	115342	9.80	ng	98
18) Fluorene	15.314	166	88886	5.75	ng	99
25) Phenanthrene	17.046	178	68599	2.75	ng	100
26) Anthracene	17.145	178	65623	2.90	ng	100
28) Fluoranthene	19.077	202	142969	4.81	ng	99
30) Pyrene	19.440	202	245073	7.30	ng	100
32) Benzo(a)anthracene	21.188	228	38038	1.29	ng	99
33) Chrysene	21.242	228	233087	7.46	ng	98
34) Bis(2-ethylhexyl)phtha...	21.135	149	10564	0.58	ng	99
36) Indeno(1,2,3-cd)pyrene	25.625	276	111106	3.70	ng	# 88
37) Benzo(b)fluoranthene	22.752	252	158909m	5.22	ng	
38) Benzo(k)fluoranthene	22.795	252	147983	4.92	ng	92
39) Benzo(a)pyrene	23.316	252	151426	5.86	ng	# 81
40) Dibenzo(a,h)anthracene	25.637	278	155978	6.68	ng	# 92
41) Benzo(g,h,i)perylene	26.298	276	51432	2.03	ng	98

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

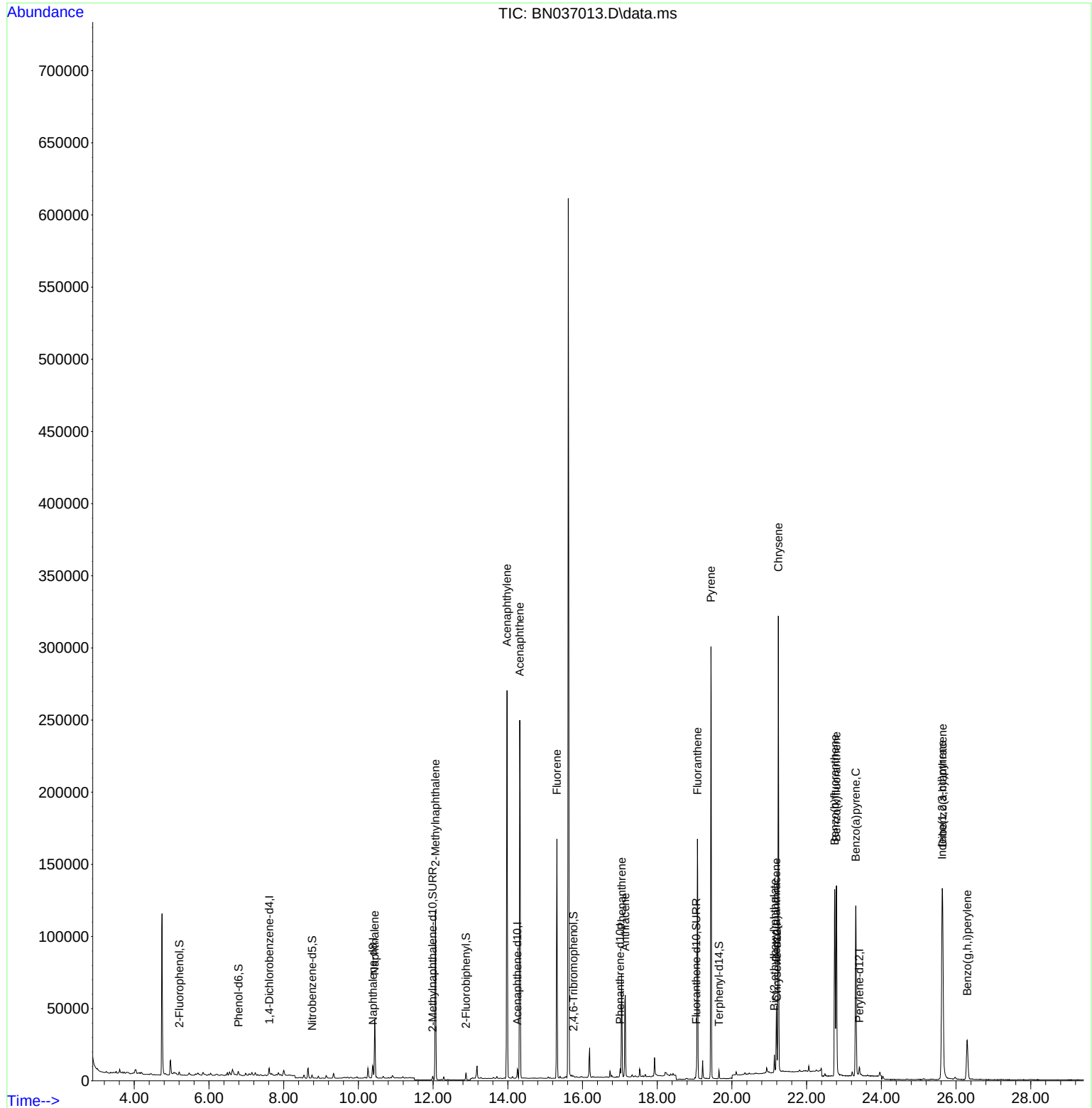
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN051425\
Data File : BN037013.D
Acq On : 14 May 2025 14:46
Operator : RC/JU
Sample : Q1872-13
Misc :
ALS Vial : 6 Sample Multiplier: 1

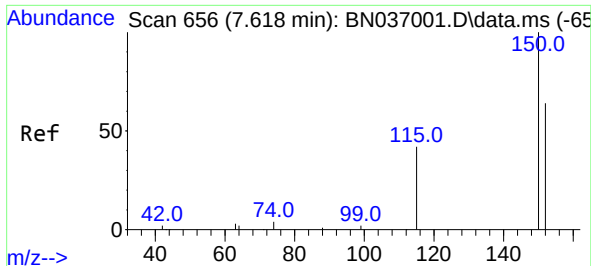
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025

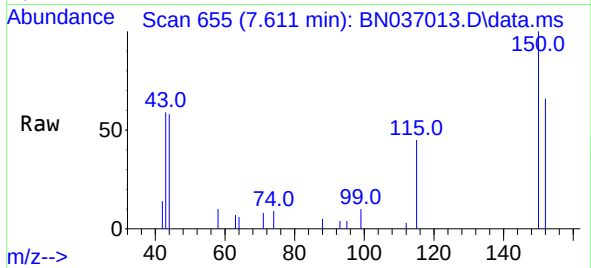
Quant Time: May 14 15:18:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN051425.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed May 14 11:26:32 2025
Response via : Initial Calibration





#1
1,4-Dichlorobenzene-d4
Concen: 0.40 ng
RT: 7.611 min Scan# 61
Delta R.T. -0.007 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

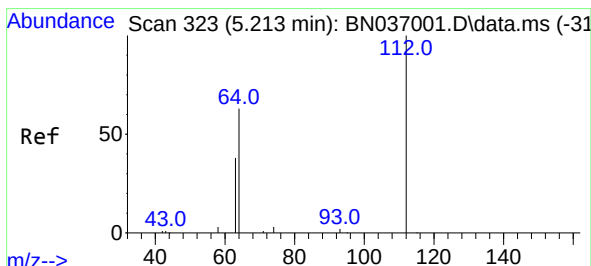
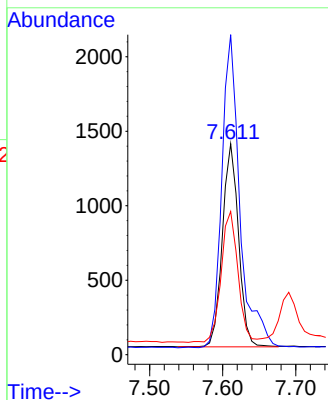
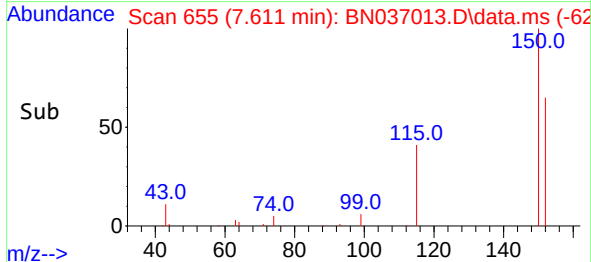
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion:152 Resp: 2090
Ion Ratio Lower Upper
152 100
150 151.7 123.9 185.9
115 67.9 55.8 83.8

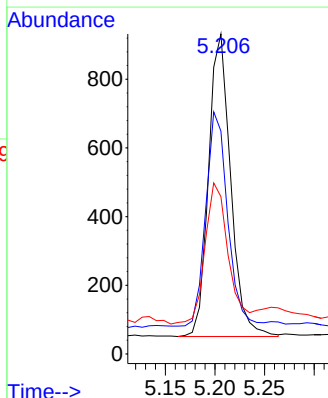
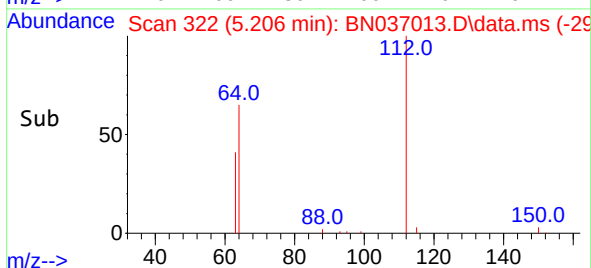
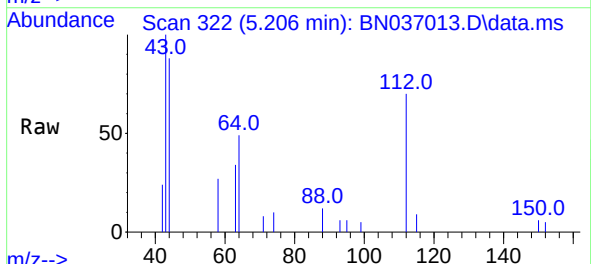
Manual Integrations
APPROVED

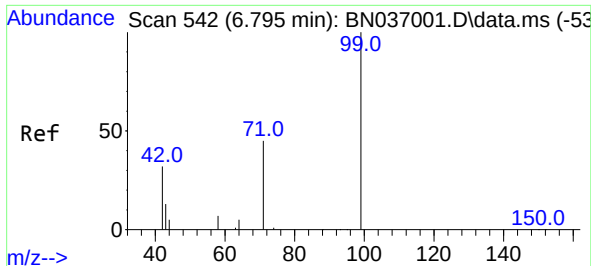
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#4
2-Fluorophenol
Concen: 0.25 ng
RT: 5.206 min Scan# 322
Delta R.T. -0.007 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

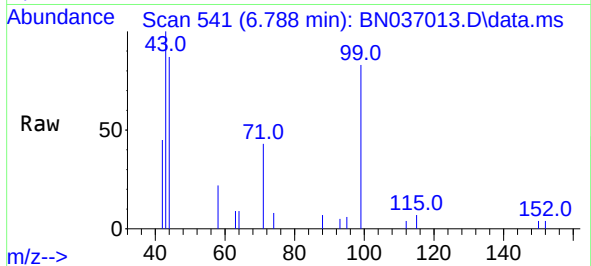
Tgt Ion:112 Resp: 1363
Ion Ratio Lower Upper
112 100
64 70.0 55.7 83.5
63 48.9 34.6 51.8





#5
Phenol-d6
Concen: 0.27 ng
RT: 6.788 min Scan# 541
Delta R.T. -0.007 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

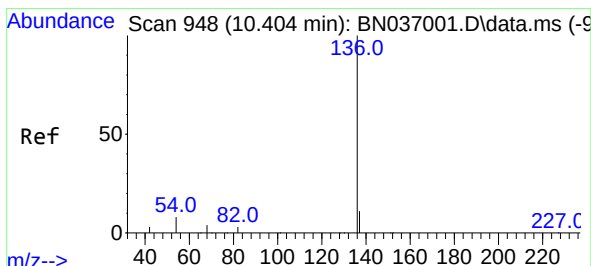
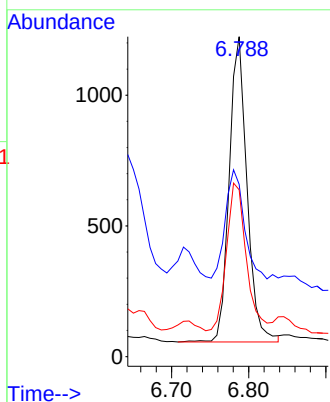
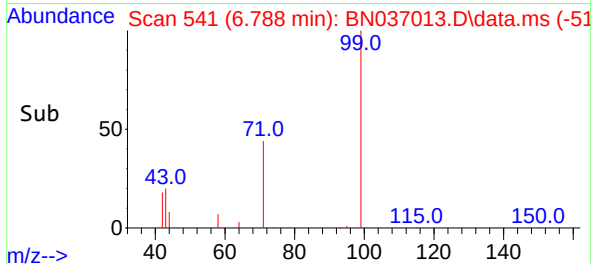
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



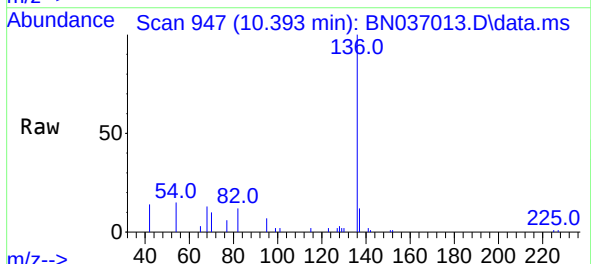
Tgt Ion: 99 Resp: 1874
Ion Ratio Lower Upper
99 100
42 37.1 29.3 43.9
71 54.4 35.7 53.5

Manual Integrations
APPROVED

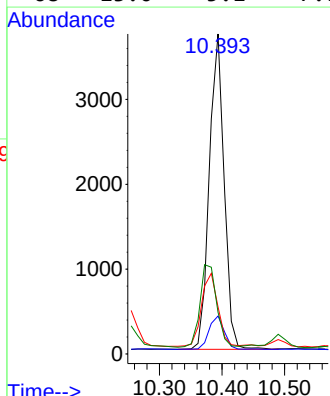
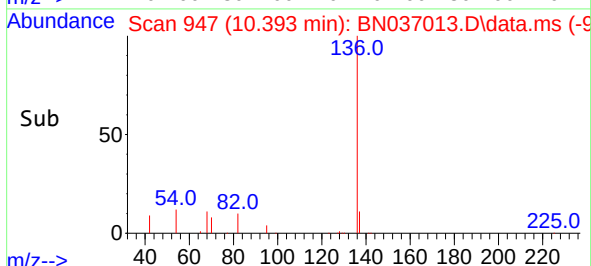
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025

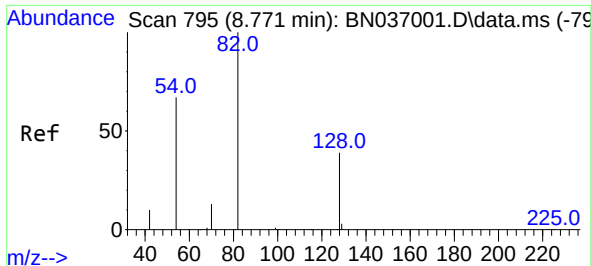


#7
Naphthalene-d8
Concen: 0.40 ng
RT: 10.393 min Scan# 947
Delta R.T. -0.011 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46



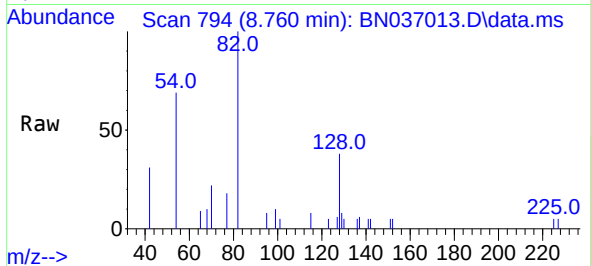
Tgt Ion:136 Resp: 6097
Ion Ratio Lower Upper
136 100
137 11.9 10.4 15.6
54 14.7 8.5 12.7#
68 13.0 5.1 7.7#





#8
Nitrobenzene-d5
Concen: 0.25 ng
RT: 8.760 min Scan# 795
Delta R.T. -0.011 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

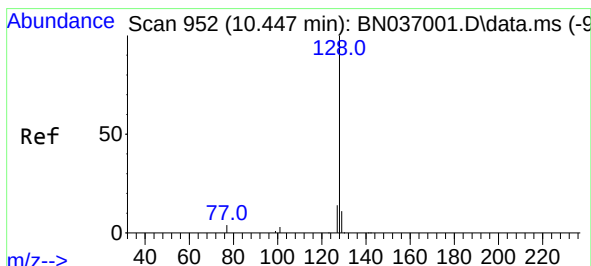
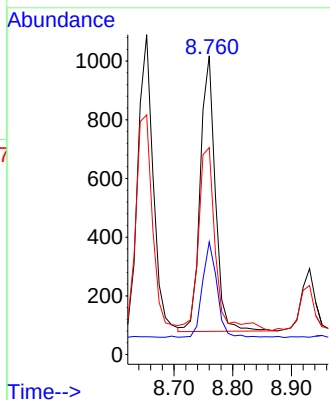
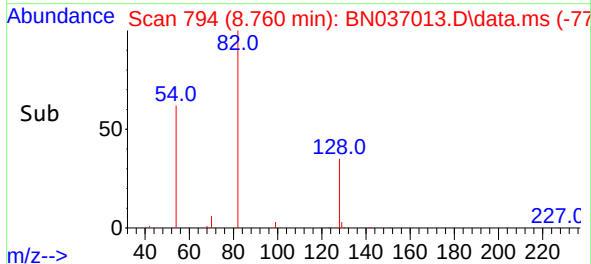
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion: 82 Resp: 168
Ion Ratio Lower Upper
82 100
128 37.7 34.0 51.0
54 69.3 55.0 82.4

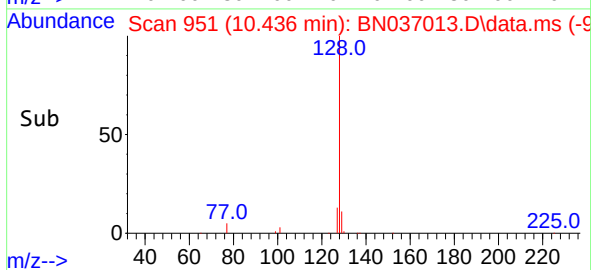
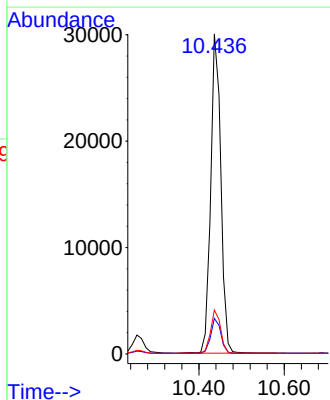
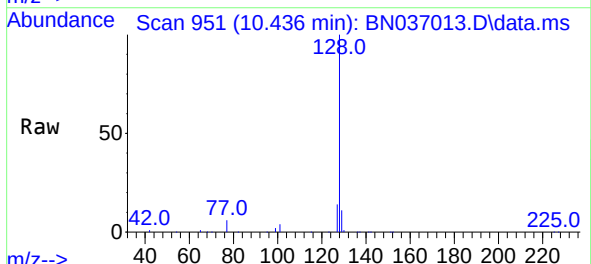
Manual Integrations
APPROVED

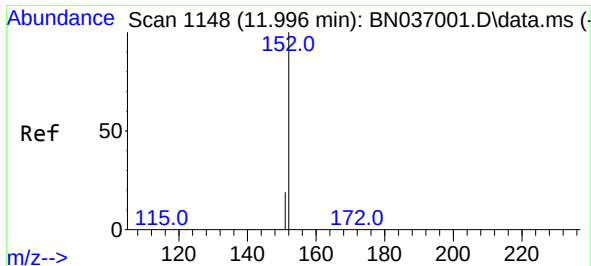
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#9
Naphthalene
Concen: 2.74 ng
RT: 10.436 min Scan# 951
Delta R.T. -0.011 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

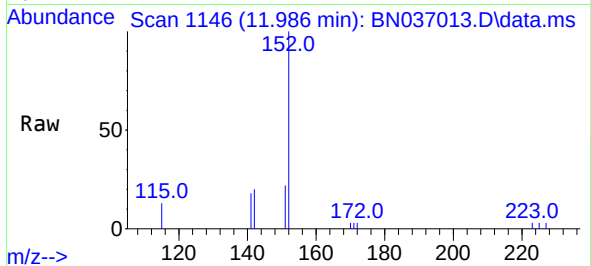
Tgt Ion:128 Resp: 49280
Ion Ratio Lower Upper
128 100
129 11.1 9.7 14.5
127 13.7 12.4 18.6





#11
2-Methylnaphthalene-d10
Concen: 0.29 ng
RT: 11.986 min Scan# 1146
Delta R.T. -0.010 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

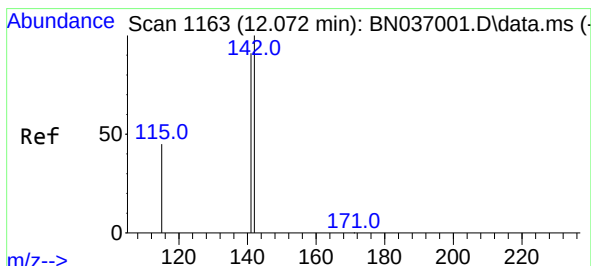
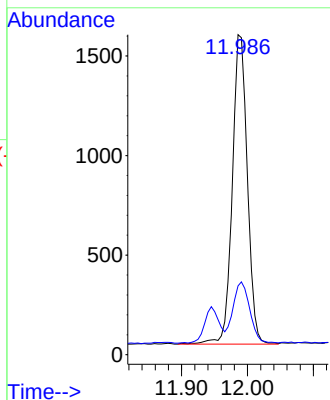
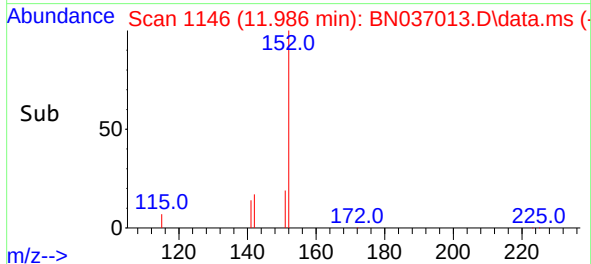
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



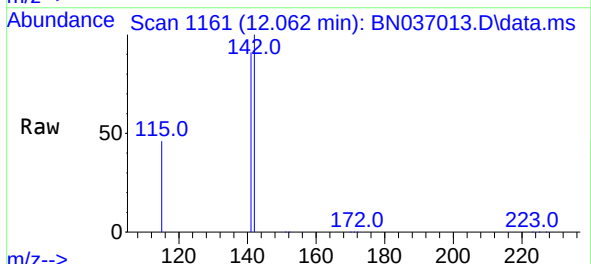
Tgt Ion:152 Resp: 2460
Ion Ratio Lower Upper
152 100
151 21.9 17.5 26.3

Manual Integrations
APPROVED

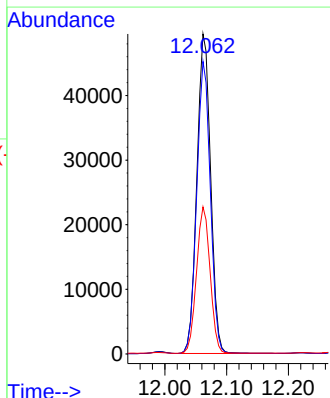
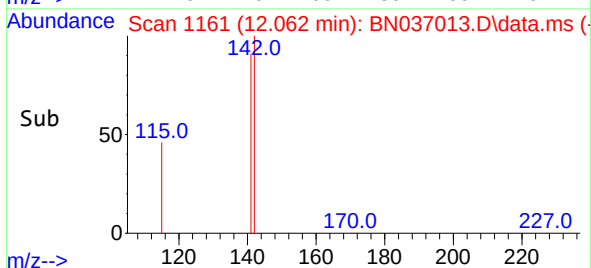
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025

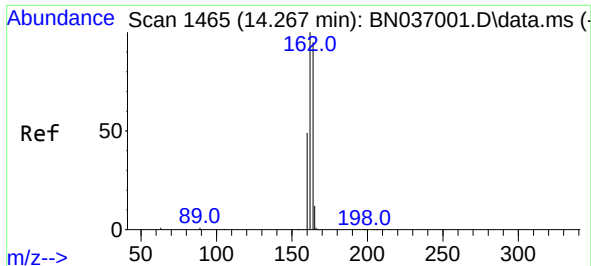


#12
2-Methylnaphthalene
Concen: 6.59 ng
RT: 12.062 min Scan# 1161
Delta R.T. -0.010 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46



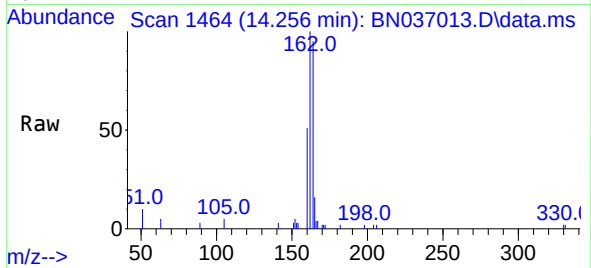
Tgt Ion:142 Resp: 76389
Ion Ratio Lower Upper
142 100
141 91.4 73.3 109.9
115 45.9 38.4 57.6





#13
Acenaphthene-d10
Concen: 0.40 ng
RT: 14.256 min Scan# 1465
Delta R.T. -0.011 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

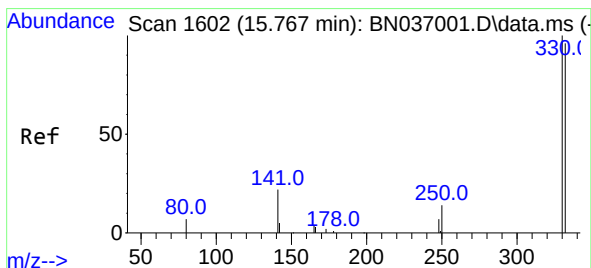
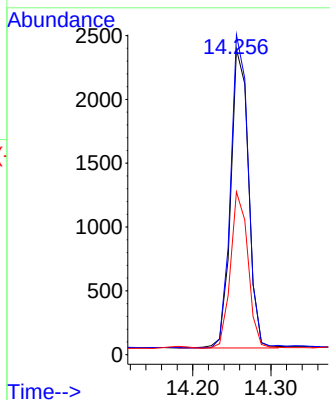
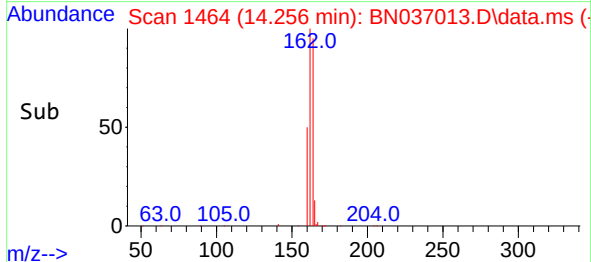
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion:164 Resp: 370
Ion Ratio Lower Upper
164 100
162 104.7 84.2 126.4
160 53.3 42.6 63.8

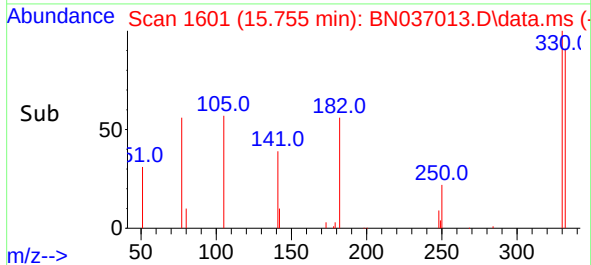
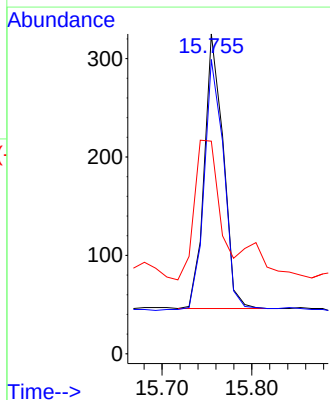
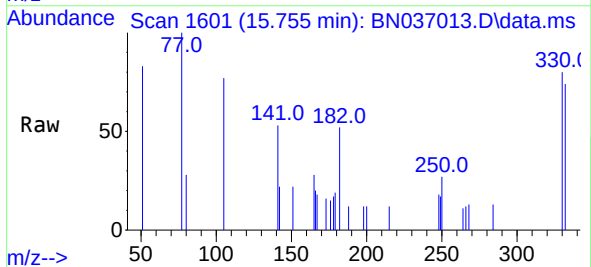
Manual Integrations
APPROVED

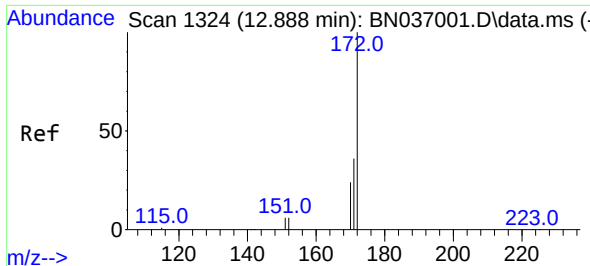
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#14
2,4,6-Tribromophenol
Concen: 0.25 ng
RT: 15.755 min Scan# 1601
Delta R.T. -0.012 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

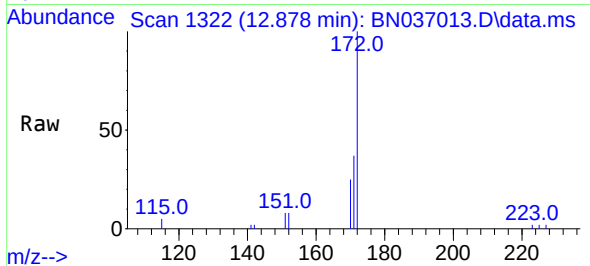
Tgt Ion:330 Resp: 409
Ion Ratio Lower Upper
330 100
332 96.3 73.8 110.8
141 87.5 43.9 65.9#





#15
2-Fluorobiphenyl
Concen: 0.24 ng
RT: 12.878 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

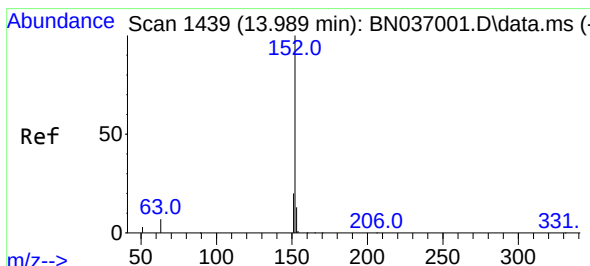
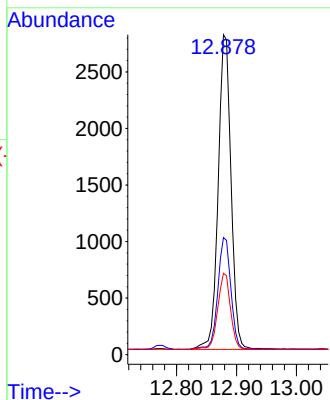
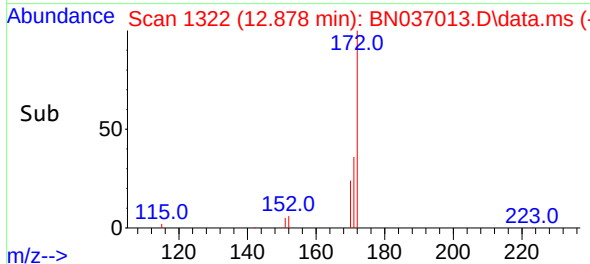
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion:172 Resp: 4150
Ion Ratio Lower Upper
172 100
171 36.6 29.2 43.8
170 25.5 20.5 30.7

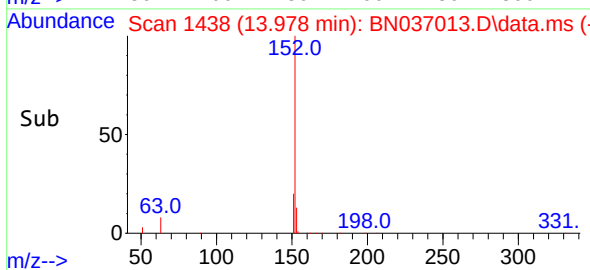
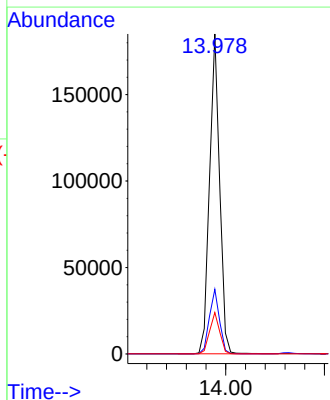
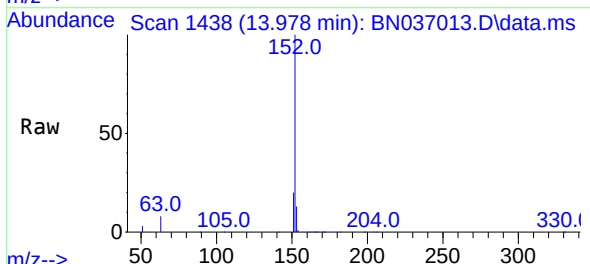
Manual Integrations
APPROVED

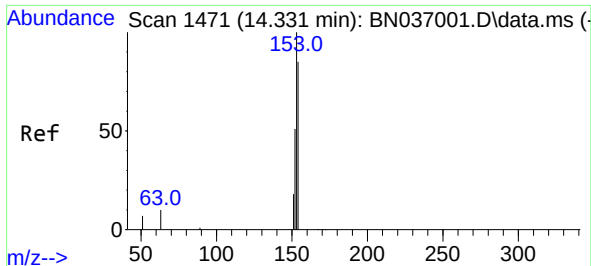
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#16
Acenaphthylene
Concen: 14.55 ng
RT: 13.978 min Scan# 1438
Delta R.T. -0.011 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

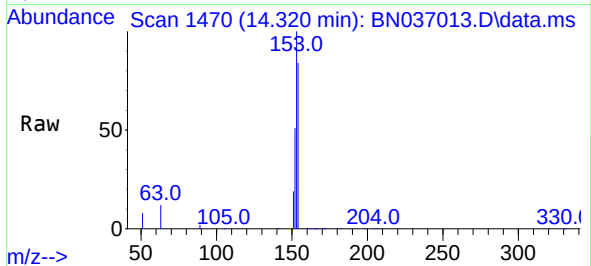
Tgt Ion:152 Resp: 262125
Ion Ratio Lower Upper
152 100
151 20.3 16.1 24.1
153 13.0 10.5 15.7





#17
Acenaphthene
Concen: 9.80 ng
RT: 14.320 min Scan# 1471
Delta R.T. -0.011 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

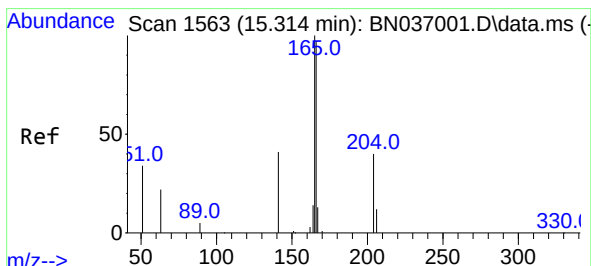
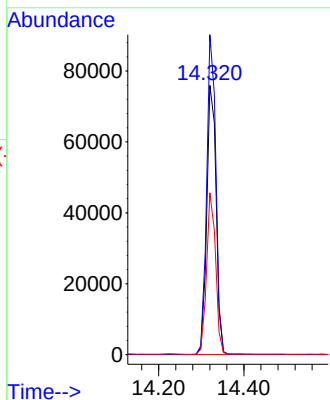
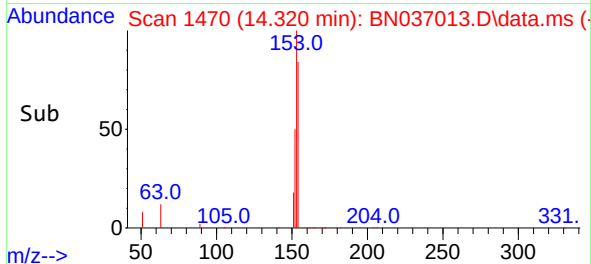
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion:154 Resp: 11534
Ion Ratio Lower Upper
154 100
153 116.6 94.2 141.4
152 58.1 49.4 74.0

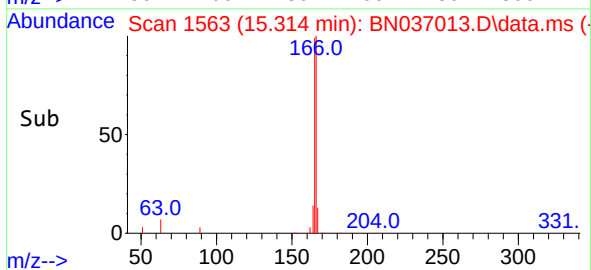
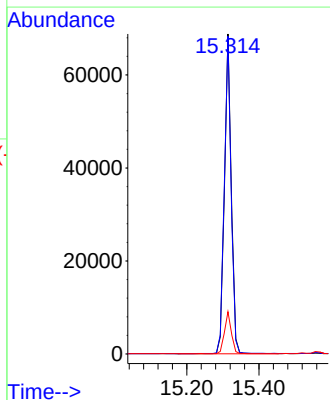
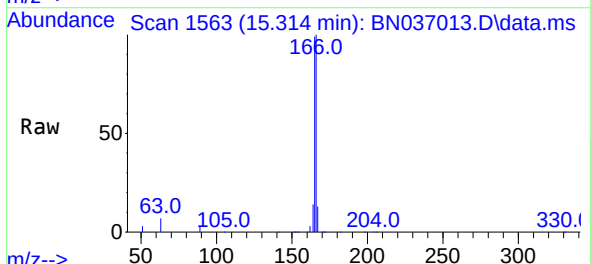
Manual Integrations
APPROVED

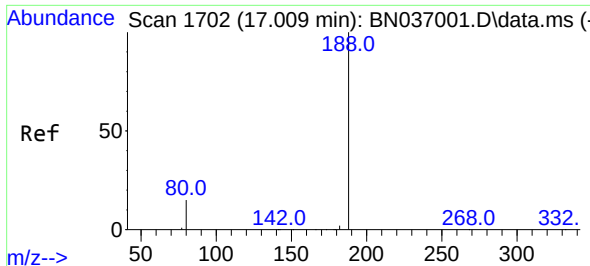
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#18
Fluorene
Concen: 5.75 ng
RT: 15.314 min Scan# 1563
Delta R.T. -0.000 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

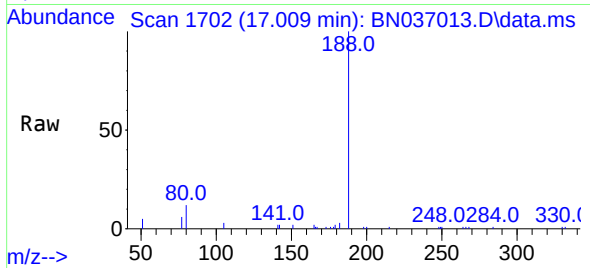
Tgt Ion:166 Resp: 88886
Ion Ratio Lower Upper
166 100
165 99.2 80.6 120.8
167 13.2 10.6 16.0





#19
Phenanthrene-d10
Concen: 0.40 ng
RT: 17.009 min Scan# 1702
Delta R.T. -0.000 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

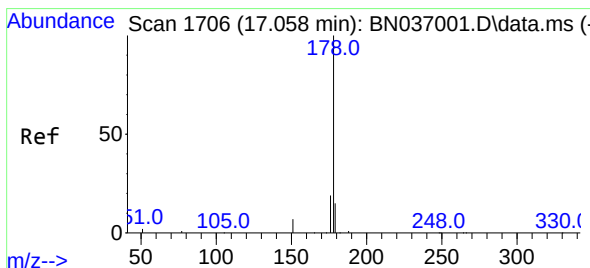
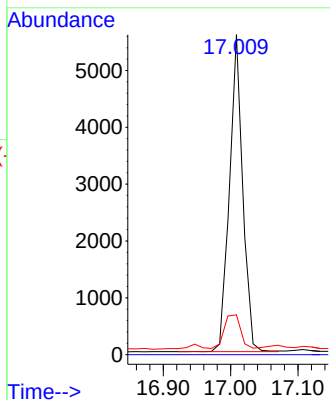
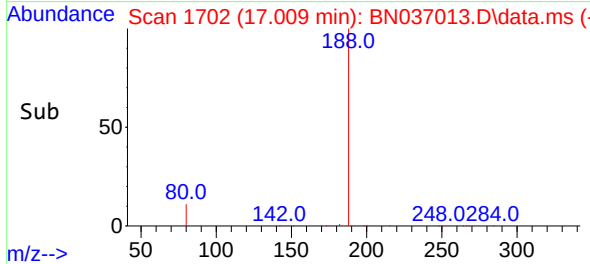
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



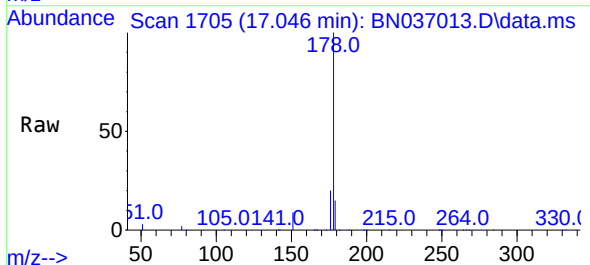
Tgt Ion:188 Resp: 7619
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 12.5 13.4 20.0

Manual Integrations
APPROVED

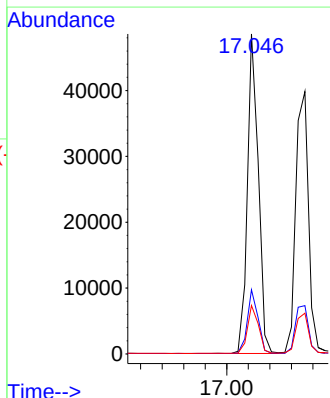
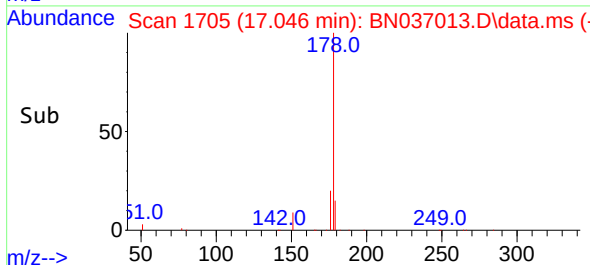
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025

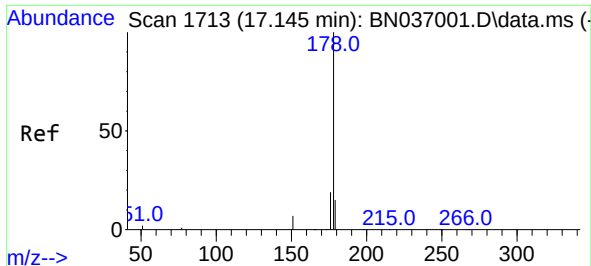


#25
Phenanthrene
Concen: 2.75 ng
RT: 17.046 min Scan# 1705
Delta R.T. -0.012 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46



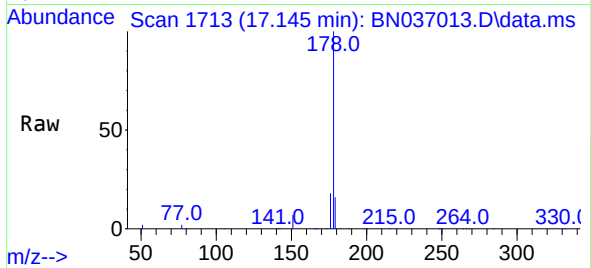
Tgt Ion:178 Resp: 68599
Ion Ratio Lower Upper
178 100
176 19.6 15.7 23.5
179 15.2 12.2 18.2





#26
 Anthracene
 Concen: 2.90 ng
 RT: 17.145 min Scan# 1713
 Delta R.T. -0.000 min
 Lab File: BN037013.D
 Acq: 14 May 2025 14:46

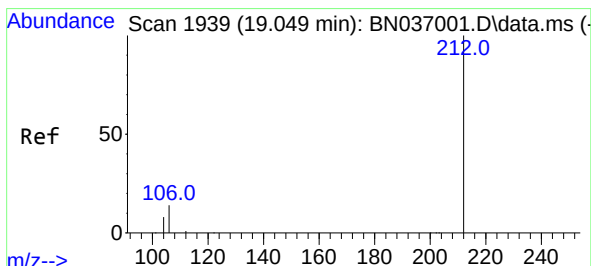
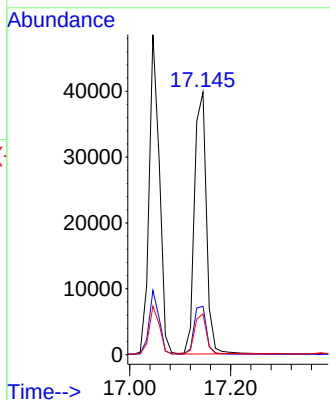
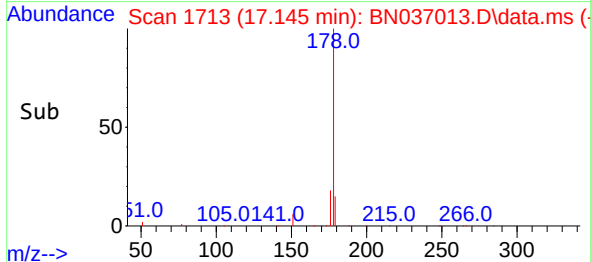
Instrument :
 BNA_N
 ClientSampleId :
 HW0425-PT-PAH-SOIL



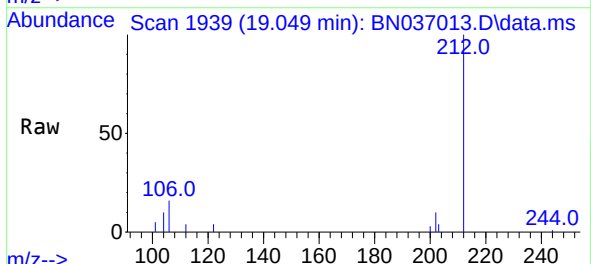
Tgt Ion:178 Resp: 6562
 Ion Ratio Lower Upper
 178 100
 176 19.0 15.0 22.6
 179 15.3 12.3 18.5

Manual Integrations
 APPROVED

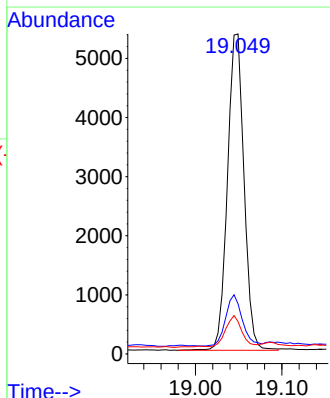
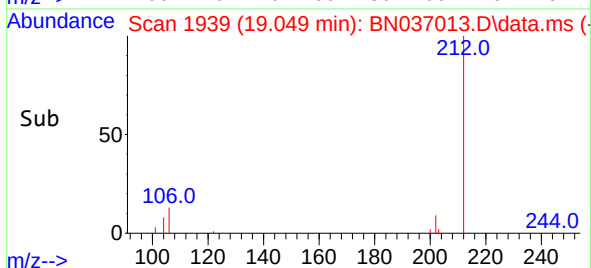
Reviewed By :Rahul Chavli 05/15/2025
 Supervised By :Jagrut Upadhyay 05/15/2025

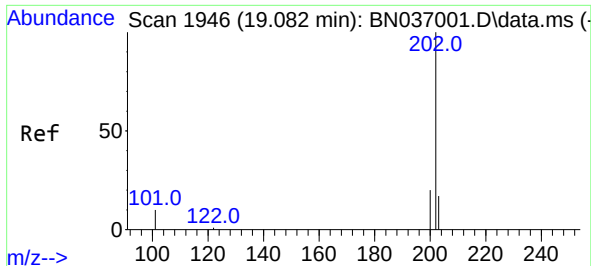


#27
 Fluoranthene-d10
 Concen: 0.34 ng
 RT: 19.049 min Scan# 1939
 Delta R.T. -0.000 min
 Lab File: BN037013.D
 Acq: 14 May 2025 14:46



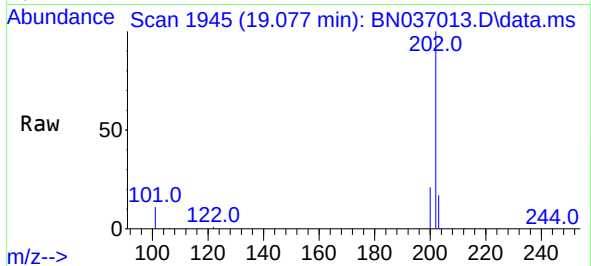
Tgt Ion:212 Resp: 7139
 Ion Ratio Lower Upper
 212 100
 106 16.3 11.3 16.9
 104 9.5 6.7 10.1





#28
Fluoranthene
Concen: 4.81 ng
RT: 19.077 min Scan# 1946
Delta R.T. -0.005 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

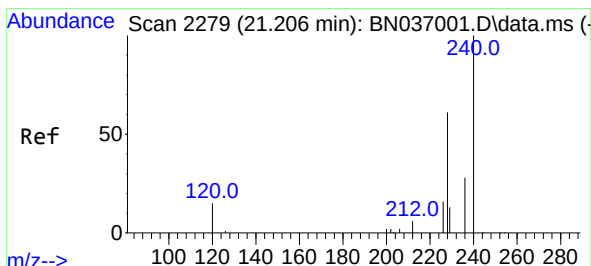
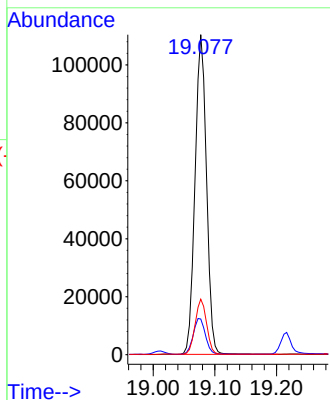
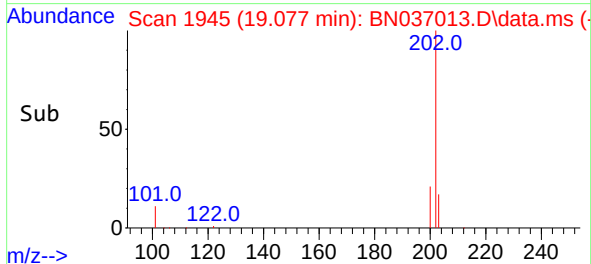
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion:202 Resp: 142969
Ion Ratio Lower Upper
202 100
101 12.0 8.9 13.3
203 17.1 13.8 20.8

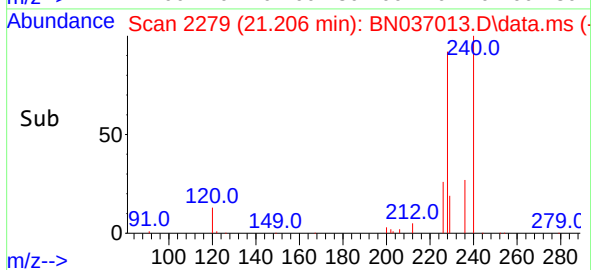
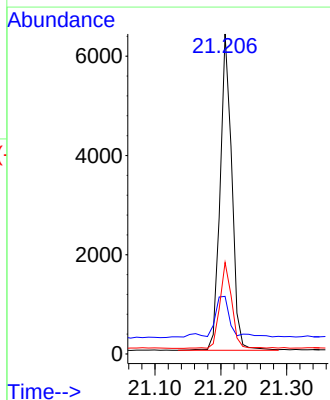
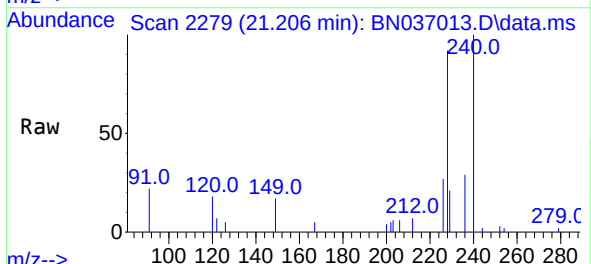
Manual Integrations
APPROVED

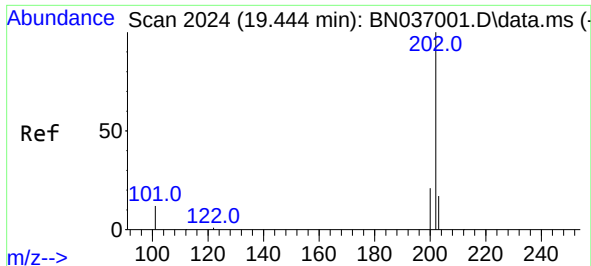
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#29
Chrysene-d12
Concen: 0.40 ng
RT: 21.206 min Scan# 2279
Delta R.T. -0.000 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

Tgt Ion:240 Resp: 7847
Ion Ratio Lower Upper
240 100
120 18.0 15.1 22.7
236 28.6 24.0 36.0





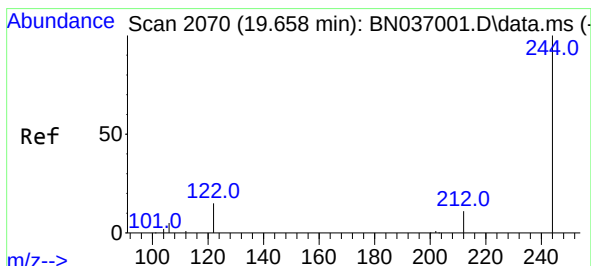
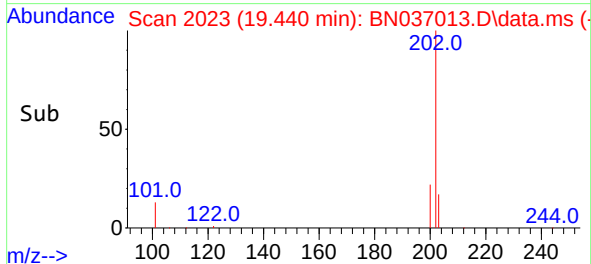
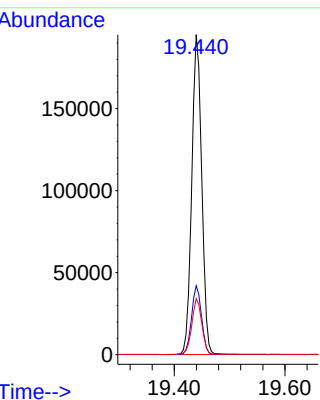
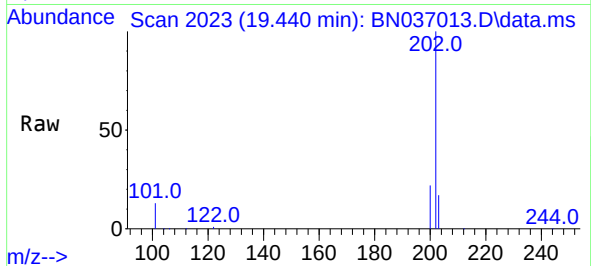
#30
Pyrene
Concen: 7.30 ng
RT: 19.440 min Scan# 2024
Delta R.T. -0.005 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL

Tgt Ion:202 Resp: 24507
Ion Ratio Lower Upper
202 100
200 21.5 17.1 25.7
203 17.5 14.2 21.4

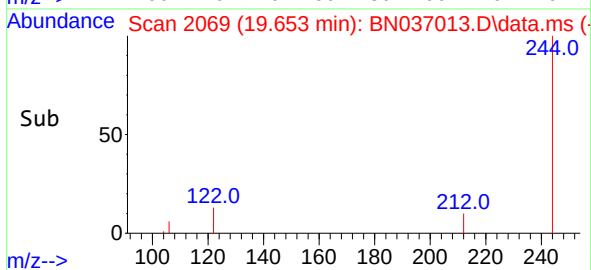
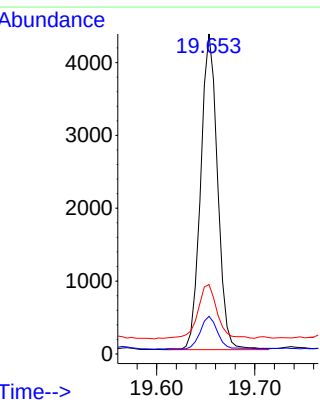
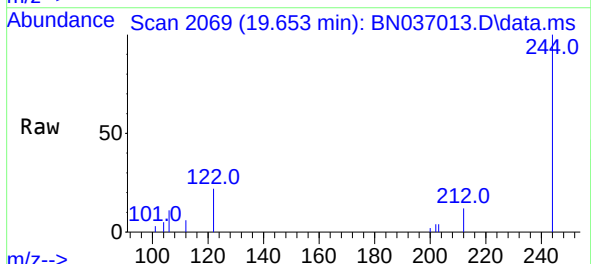
Manual Integrations
APPROVED

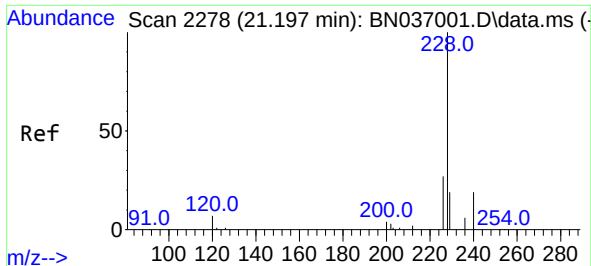
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#31
Terphenyl-d14
Concen: 0.31 ng
RT: 19.653 min Scan# 2069
Delta R.T. -0.005 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

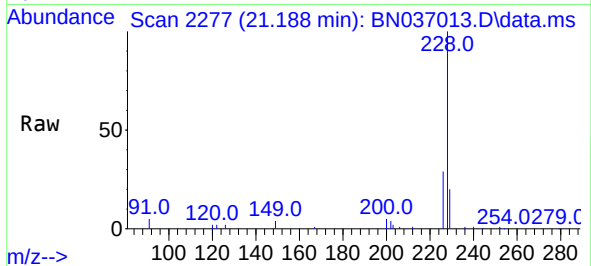
Tgt Ion:244 Resp: 5177
Ion Ratio Lower Upper
244 100
212 11.7 9.7 14.5
122 21.7 13.4 20.0#





#32
Benzo(a)anthracene
Concen: 1.29 ng
RT: 21.188 min Scan# 21188
Delta R.T. -0.009 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

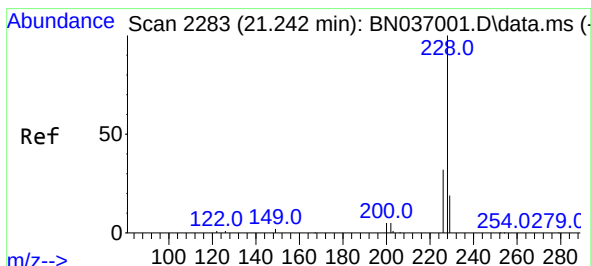
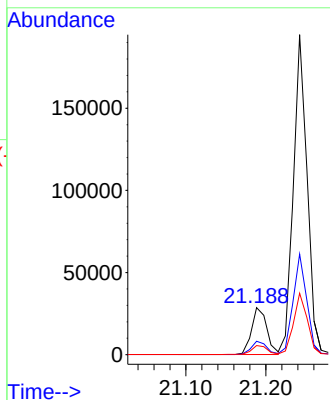
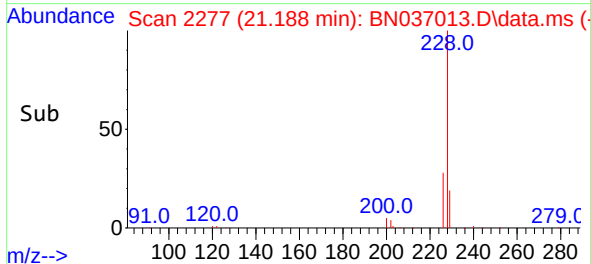
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion:228 Resp: 38038
Ion Ratio Lower Upper
228 100
226 28.7 22.2 33.4
229 19.6 16.0 24.0

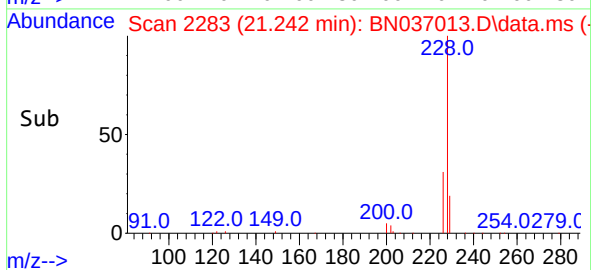
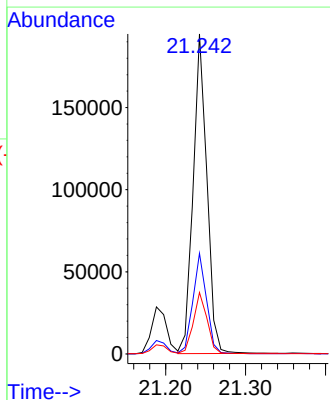
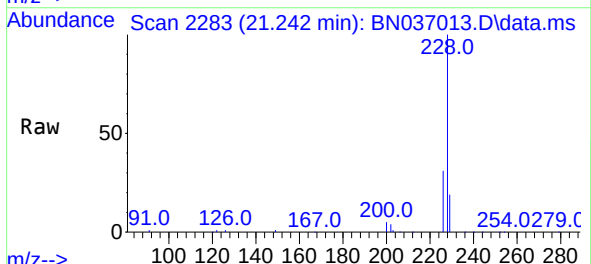
Manual Integrations
APPROVED

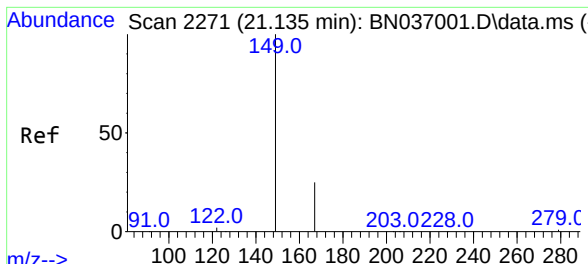
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#33
Chrysene
Concen: 7.46 ng
RT: 21.242 min Scan# 2283
Delta R.T. -0.000 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

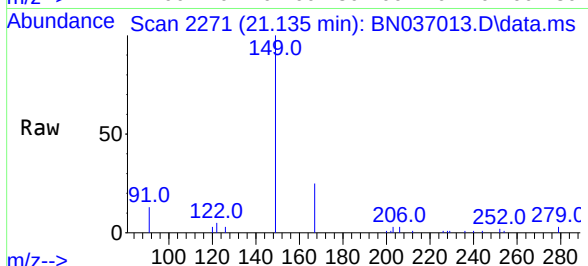
Tgt Ion:228 Resp: 233087
Ion Ratio Lower Upper
228 100
226 31.4 26.3 39.5
229 19.2 16.2 24.2





#34
 Bis(2-ethylhexyl)phthalate
 Concen: 0.58 ng
 RT: 21.135 min Scan# 2113
 Delta R.T. -0.000 min
 Lab File: BN037013.D
 Acq: 14 May 2025 14:46

Instrument :
 BNA_N
 ClientSampleId :
 HW0425-PT-PAH-SOIL

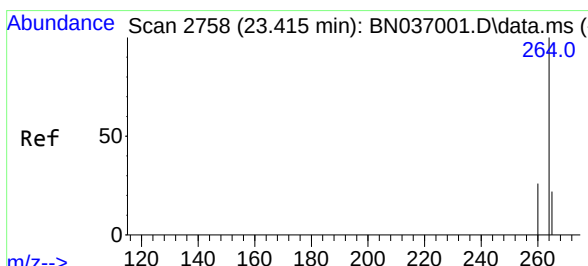
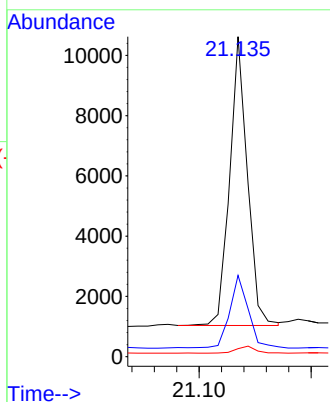
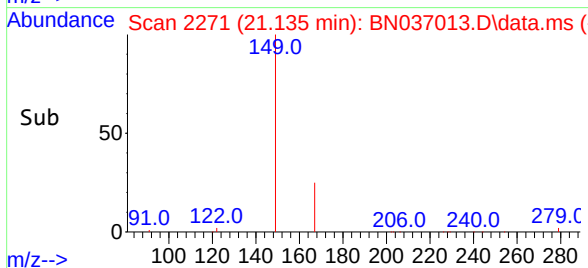


Tgt Ion:149 Resp: 10564

Ion	Ratio	Lower	Upper
149	100		
167	26.2	20.6	30.8
279	2.6	2.6	3.8

Manual Integrations
 APPROVED

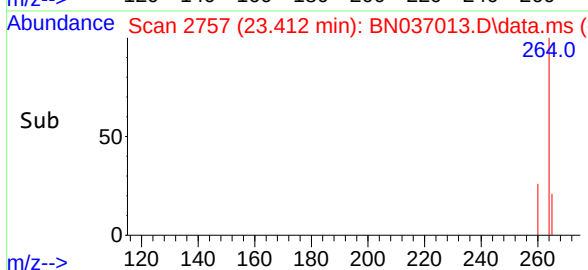
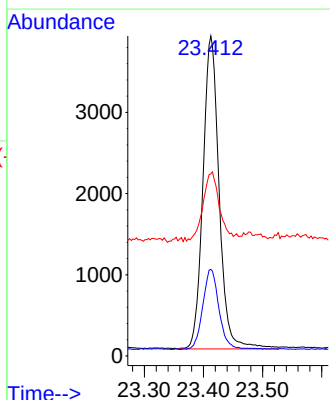
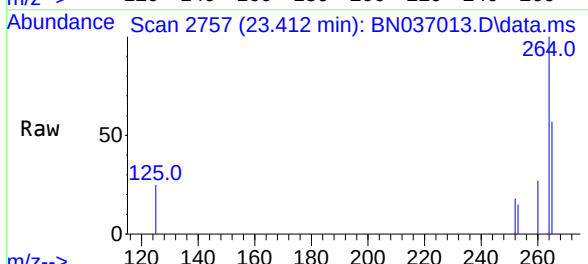
Reviewed By :Rahul Chavli 05/15/2025
 Supervised By :Jagrut Upadhyay 05/15/2025

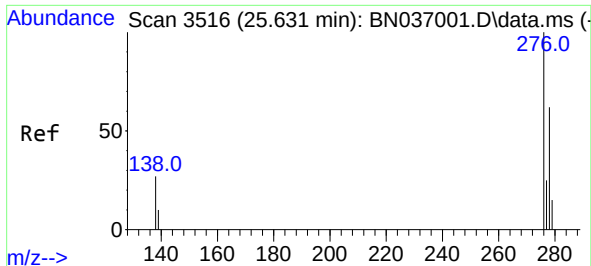


#35
 Perylene-d12
 Concen: 0.40 ng
 RT: 23.412 min Scan# 2757
 Delta R.T. -0.003 min
 Lab File: BN037013.D
 Acq: 14 May 2025 14:46

Tgt Ion:264 Resp: 7344

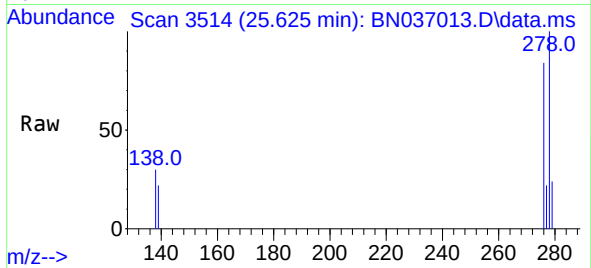
Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.9	32.9
265	56.9	51.6	77.4





#36
Indeno(1,2,3-cd)pyrene
Concen: 3.70 ng
RT: 25.625 min Scan# 3514
Delta R.T. -0.006 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

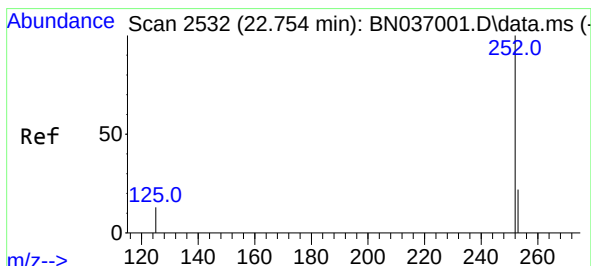
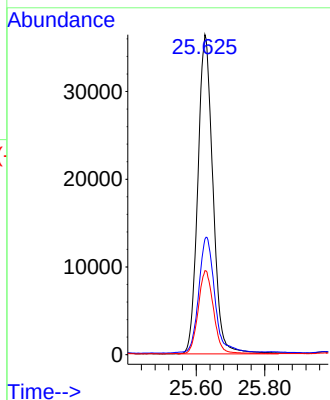
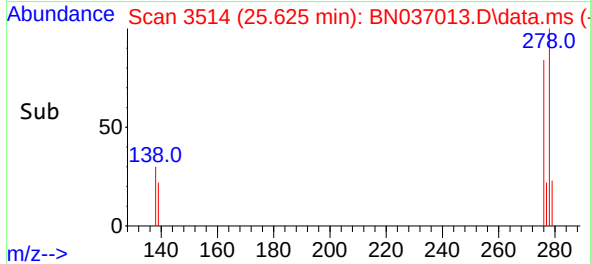
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



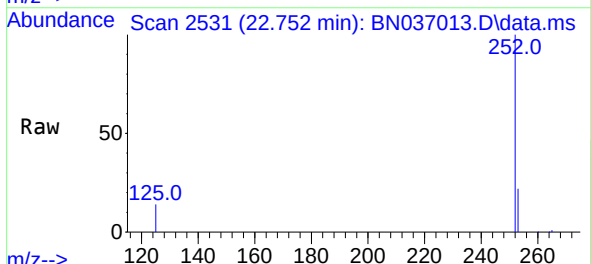
Tgt Ion:276 Resp: 111100
Ion Ratio Lower Upper
276 100
138 38.8 22.7 34.1
277 26.2 20.0 30.0

Manual Integrations
APPROVED

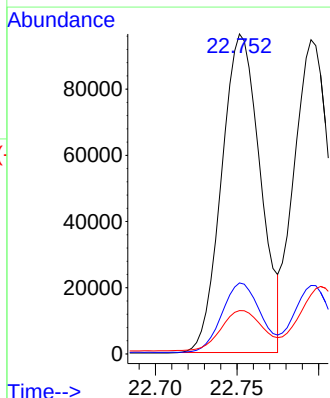
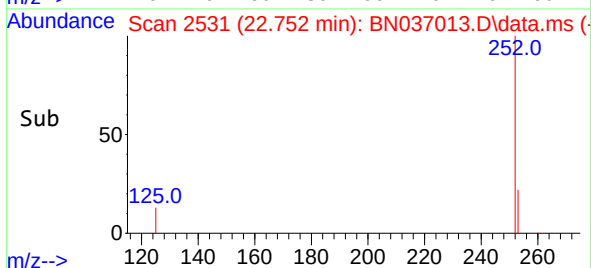
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025

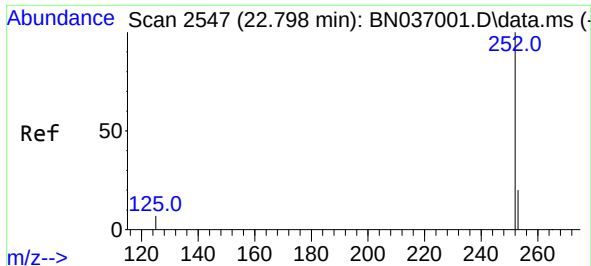


#37
Benzo(b)fluoranthene
Concen: 5.22 ng m
RT: 22.752 min Scan# 2531
Delta R.T. -0.003 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46



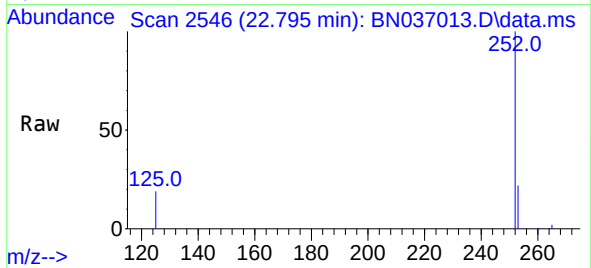
Tgt Ion:252 Resp: 158909
Ion Ratio Lower Upper
252 100
253 22.2 21.8 32.6
125 13.6 14.6 21.8#





#38
Benzo(k)fluoranthene
Concen: 4.92 ng
RT: 22.795 min Scan# 2546
Delta R.T. -0.003 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

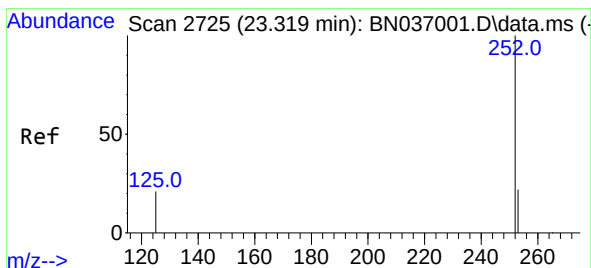
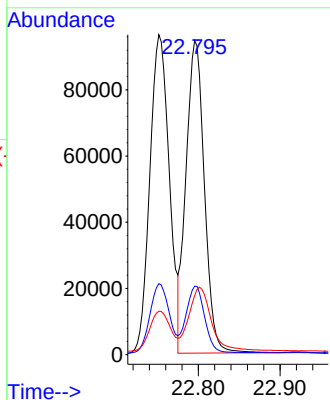
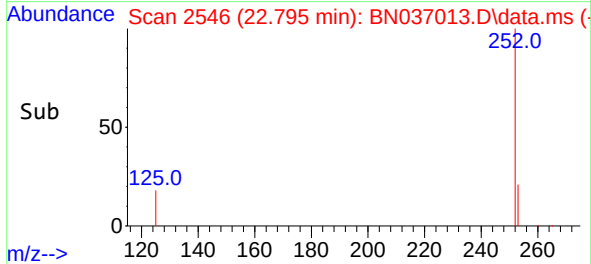
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion:252 Resp: 147983
Ion Ratio Lower Upper
252 100
253 21.8 21.4 32.2
125 18.8 13.0 19.4

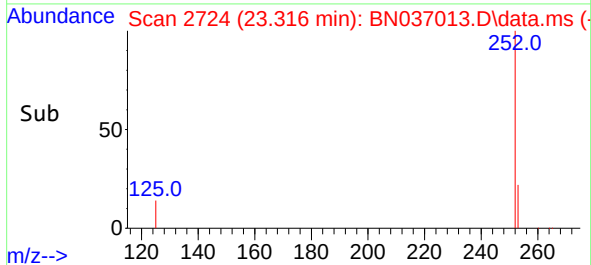
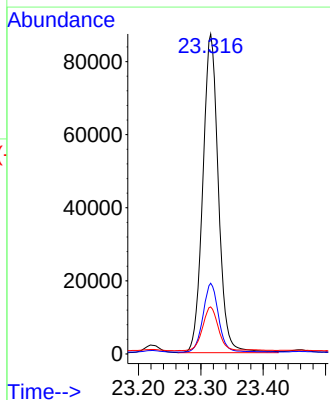
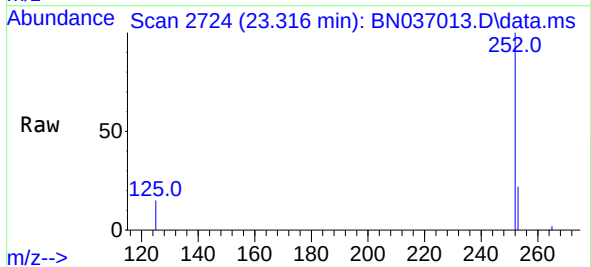
Manual Integrations
APPROVED

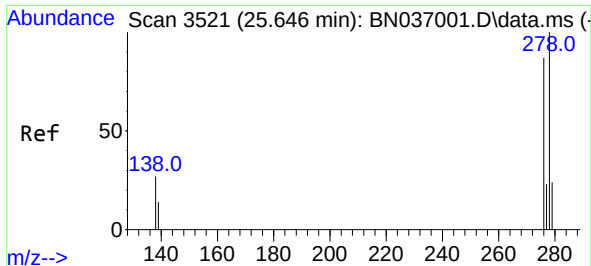
Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#39
Benzo(a)pyrene
Concen: 5.86 ng
RT: 23.316 min Scan# 2724
Delta R.T. -0.003 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

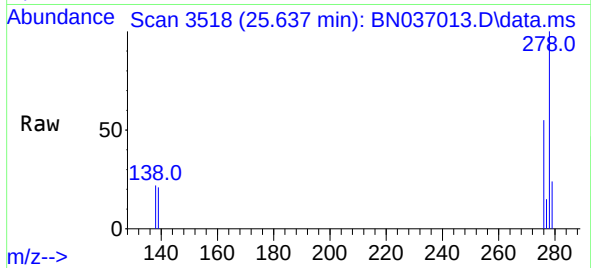
Tgt Ion:252 Resp: 151426
Ion Ratio Lower Upper
252 100
253 22.1 23.8 35.6#
125 14.7 21.8 32.6#





#40
Dibenzo(a,h)anthracene
Concen: 6.68 ng
RT: 25.637 min Scan# 3518
Delta R.T. -0.009 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

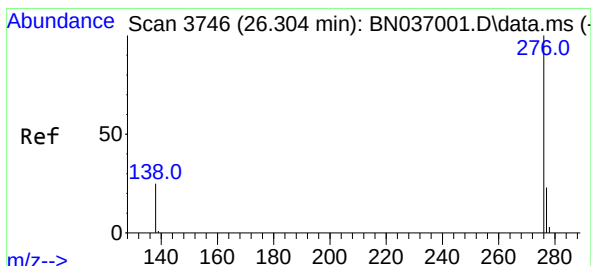
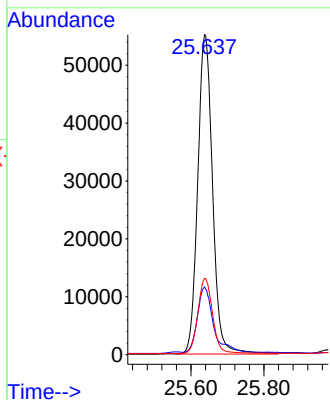
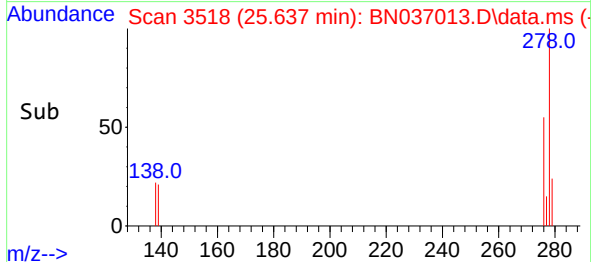
Instrument :
BNA_N
ClientSampleId :
HW0425-PT-PAH-SOIL



Tgt Ion:278 Resp: 155978
Ion Ratio Lower Upper
278 100
139 21.1 17.4 26.0
279 23.9 24.6 37.0

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 05/15/2025
Supervised By :Jagrut Upadhyay 05/15/2025



#41
Benzo(g,h,i)perylene
Concen: 2.03 ng
RT: 26.298 min Scan# 3744
Delta R.T. -0.006 min
Lab File: BN037013.D
Acq: 14 May 2025 14:46

Tgt Ion:276 Resp: 51432
Ion Ratio Lower Upper
276 100
277 23.5 20.2 30.4
138 27.7 22.0 33.0

