Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN061325\
Data File : BN037229.D
Acq On : 13 Jun 2025 15:59
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Jun 13 18:38:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN061325.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jun 13 18:34:15 2025
Response via : Initial Calibration

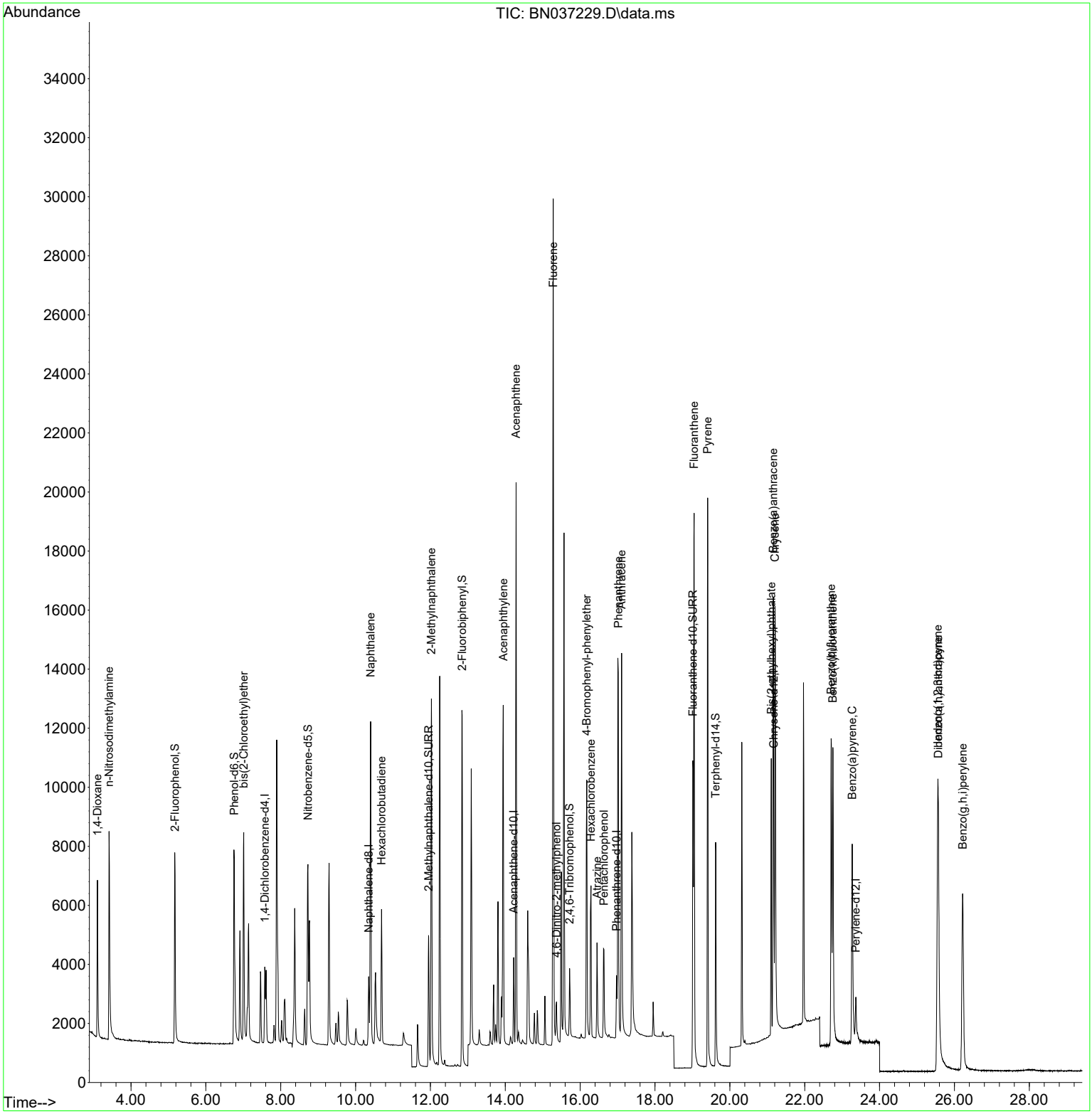
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.575	152	1193	0.400	ng		0.00
7) Naphthalene-d8	10.351	136	2881	0.400	ng		#-0.01
13) Acenaphthene-d10	14.224	164	1539	0.400	ng		0.00
19) Phenanthrene-d10	16.971	188	2917	0.400	ng		0.00
29) Chrysene-d12	21.171	240	2167	0.400	ng		# 0.00
35) Perylene-d12	23.366	264	2036	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.177	112	4755	1.623	ng		0.00
5) Phenol-d6	6.759	99	5480	1.774	ng		0.00
8) Nitrobenzene-d5	8.728	82	5073	1.782	ng		0.00
11) 2-Methylnaphthalene-d10	11.950	152	6642	1.718	ng		0.00
14) 2,4,6-Tribromophenol	15.718	330	1157	1.810	ng		-0.01
15) 2-Fluorobiphenyl	12.848	172	11216	1.734	ng		0.00
27) Fluoranthene-d10	19.012	212	12285	1.610	ng		0.00
31) Terphenyl-d14	19.621	244	8579	1.751	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.104	88	2620	1.601	ng		93
3) n-Nitrosodimethylamine	3.415	42	6179	1.657	ng	#	97
6) bis(2-Chloroethyl)ether	7.012	93	5181	1.873	ng		92
9) Naphthalene	10.404	128	13925	1.669	ng		96
10) Hexachlorobutadiene	10.693	225	3281	1.617	ng	#	96
12) 2-Methylnaphthalene	12.026	142	8865	1.748	ng		99
16) Acenaphthylene	13.946	152	12787	1.696	ng		99
17) Acenaphthene	14.288	154	8258	1.696	ng		99
18) Fluorene	15.282	166	10814	1.730	ng		100
20) 4,6-Dinitro-2-methylph...	15.368	198	1171	1.596	ng	#	47
21) 4-Bromophenyl-phenylether	16.177	248	3248	1.709	ng	#	85
22) Hexachlorobenzene	16.289	284	3460	1.570	ng		98
23) Atrazine	16.450	200	2809	1.657	ng		90
24) Pentachlorophenol	16.636	266	1800	1.667	ng		97
25) Phenanthrene	17.021	178	15448	1.670	ng		99
26) Anthracene	17.108	178	14243	1.682	ng		100
28) Fluoranthene	19.045	202	17611	1.626	ng		99
30) Pyrene	19.407	202	17479	1.716	ng		100
32) Benzo(a)anthracene	21.162	228	13105	1.791	ng		97
33) Chrysene	21.207	228	14835	1.627	ng		98
34) Bis(2-ethylhexyl)phtha...	21.108	149	8716	1.599	ng		99
36) Indeno(1,2,3-cd)pyrene	25.555	276	13992	1.704	ng		97
37) Benzo(b)fluoranthene	22.708	252	13177	1.769	ng	#	87
38) Benzo(k)fluoranthene	22.752	252	14311	1.675	ng	#	88
39) Benzo(a)pyrene	23.269	252	11458	1.710	ng	#	81
40) Dibenzo(a,h)anthracene	25.570	278	11091	1.793	ng	#	83
41) Benzo(g,h,i)perylene	26.219	276	12677	1.665	ng		95

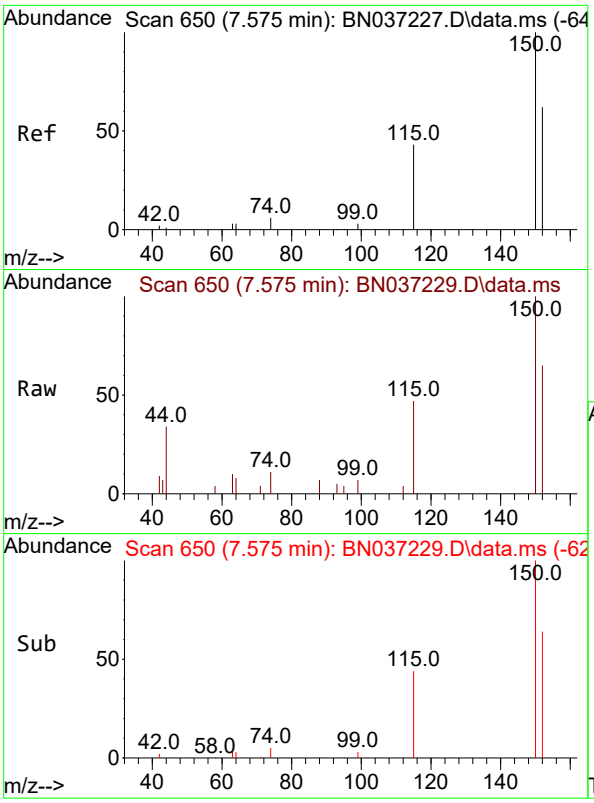
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN061325\
Data File : BN037229.D
Acq On : 13 Jun 2025 15:59
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Jun 13 18:38:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN061325.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jun 13 18:34:15 2025
Response via : Initial Calibration



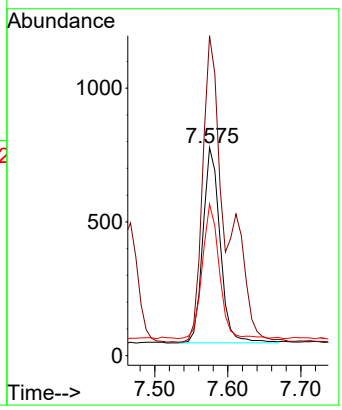


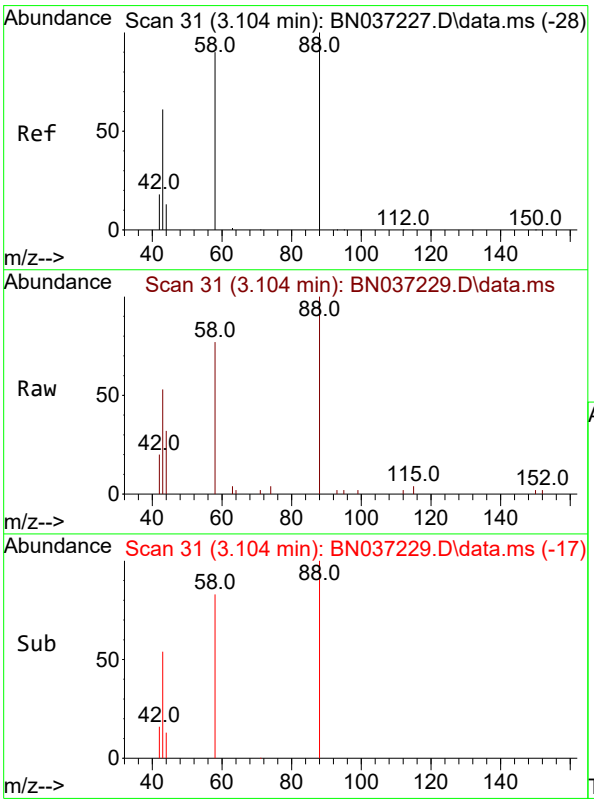
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.575 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 1193

Ion	Ratio	Lower	Upper
152	100		
150	153.7	125.2	187.8
115	72.8	58.4	87.6

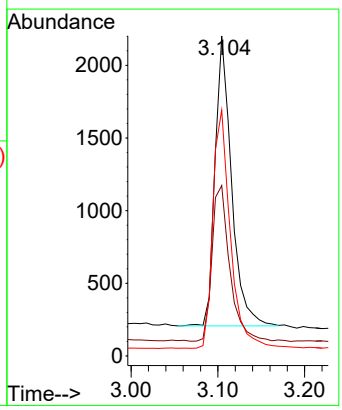


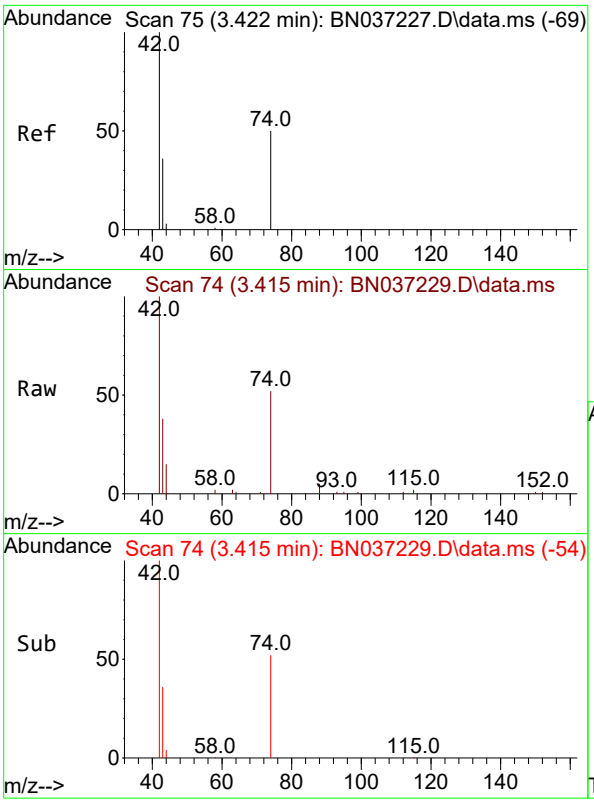


#2
1,4-Dioxane
Concen: 1.601 ng
RT: 3.104 min Scan# 31
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion: 88 Resp: 2620

Ion	Ratio	Lower	Upper
88	100		
43	58.5	52.6	79.0
58	87.4	73.5	110.3



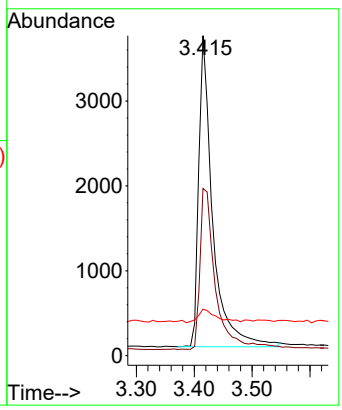


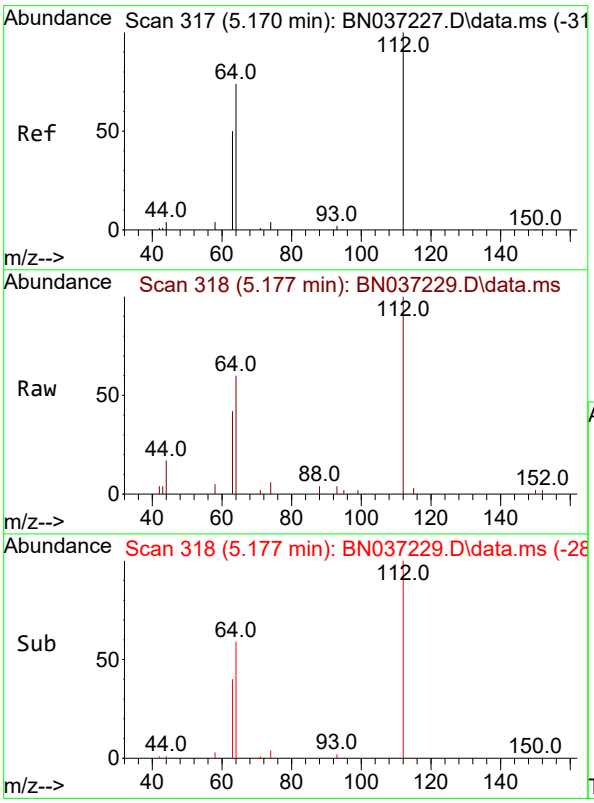
#3
n-Nitrosodimethylamine
Concen: 1.657 ng
RT: 3.415 min Scan# 74
Delta R.T. -0.007 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 42 Resp: 6179

Ion	Ratio	Lower	Upper
42	100		
74	57.5	44.6	66.8
44	5.7	3.5	5.3#

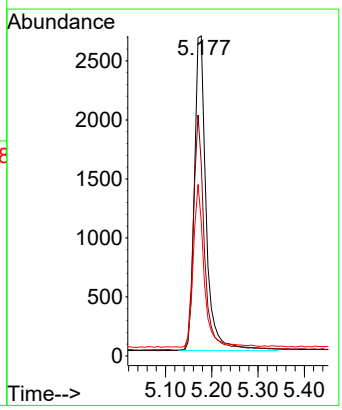


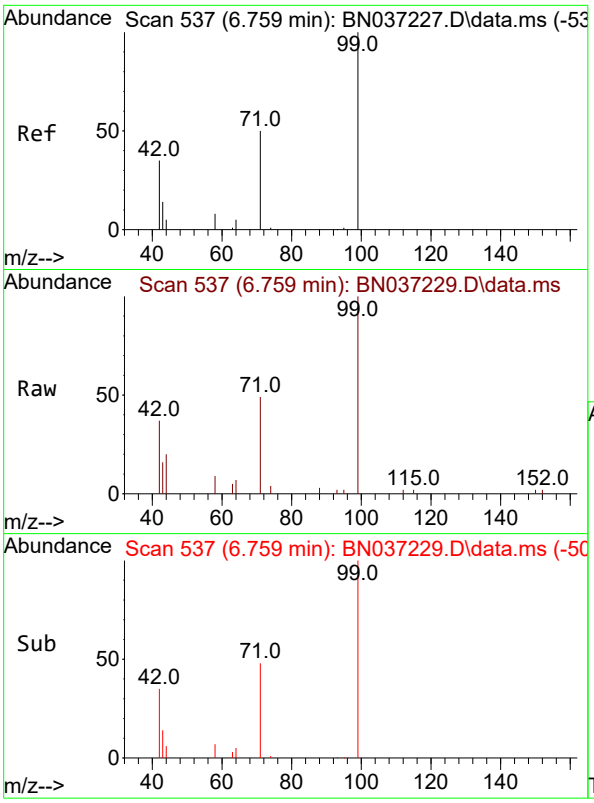


#4
2-Fluorophenol
Concen: 1.623 ng
RT: 5.177 min Scan# 318
Delta R.T. 0.007 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:112 Resp: 4755

Ion	Ratio	Lower	Upper
112	100		
64	69.7	57.2	85.8
63	47.7	39.8	59.6



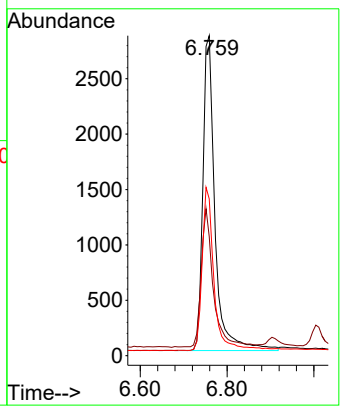


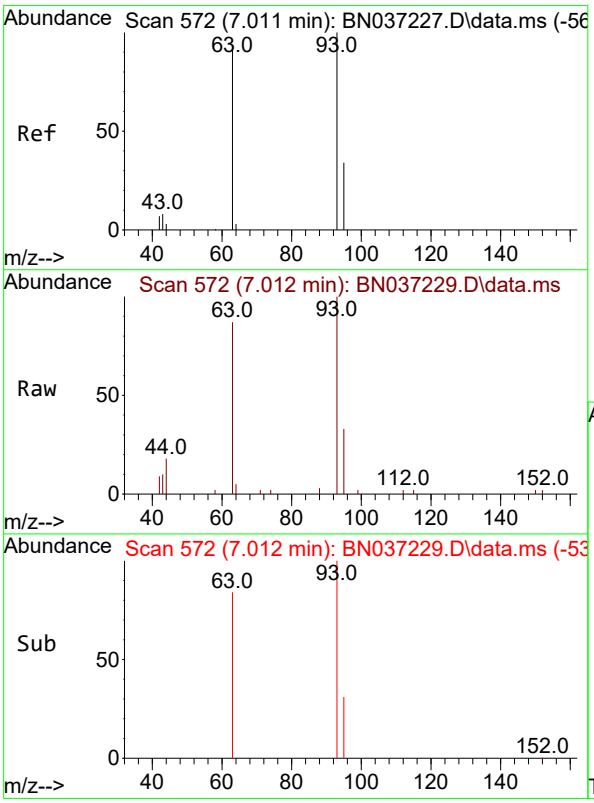
#5
Phenol-d6
Concen: 1.774 ng
RT: 6.759 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 99 Resp: 5480

Ion	Ratio	Lower	Upper
99	100		
42	44.0	36.2	54.4
71	50.7	42.4	63.6

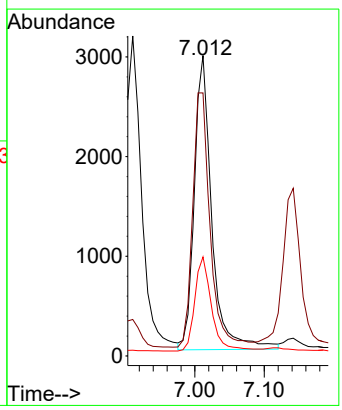


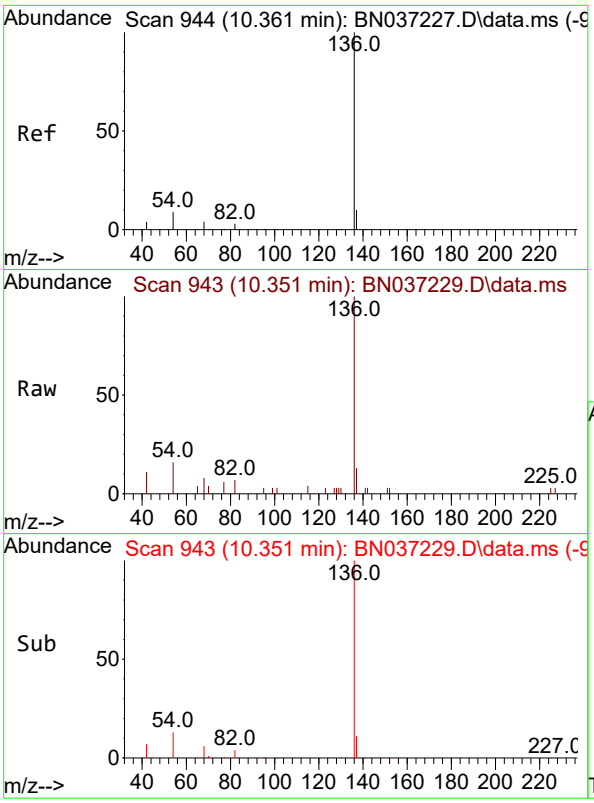


#6
bis(2-Chloroethyl)ether
Concen: 1.873 ng
RT: 7.012 min Scan# 572
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion: 93 Resp: 5181

Ion	Ratio	Lower	Upper
93	100		
63	86.4	75.2	112.8
95	30.5	28.3	42.5



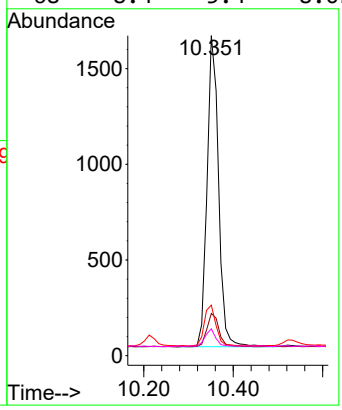


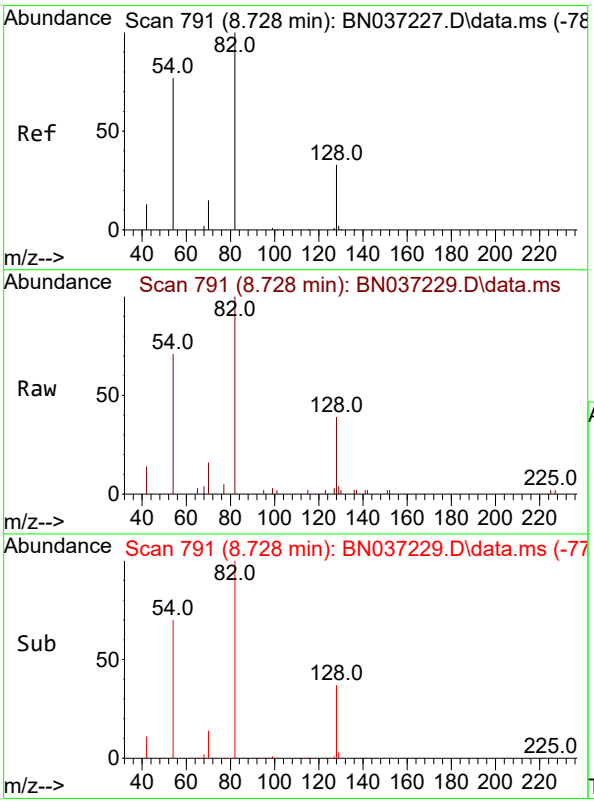
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.351 min Scan# 94
Delta R.T. -0.010 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:136 Resp: 2881

Ion	Ratio	Lower	Upper
136	100		
137	13.2	10.6	15.8
54	15.8	9.2	13.8#
68	8.4	5.4	8.0#

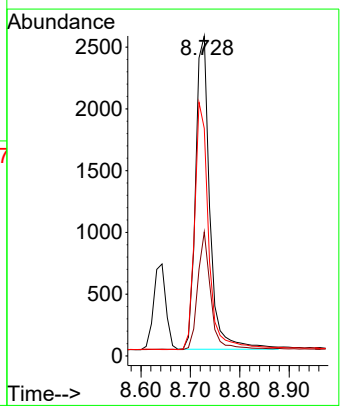


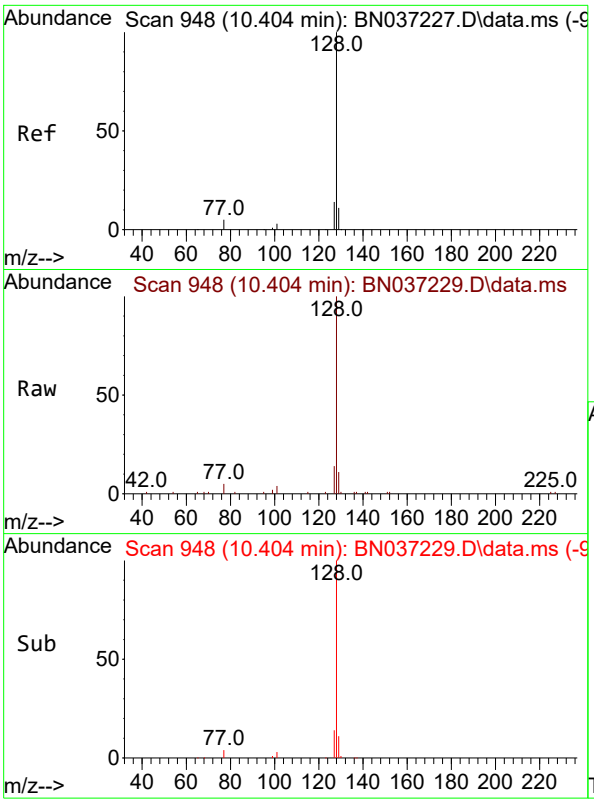


#8
Nitrobenzene-d5
Concen: 1.782 ng
RT: 8.728 min Scan# 791
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion: 82 Resp: 5073

Ion	Ratio	Lower	Upper
82	100		
128	38.7	31.2	46.8
54	71.1	63.3	94.9



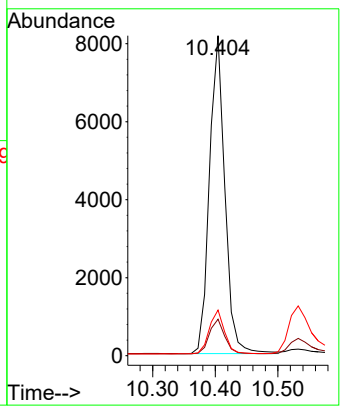


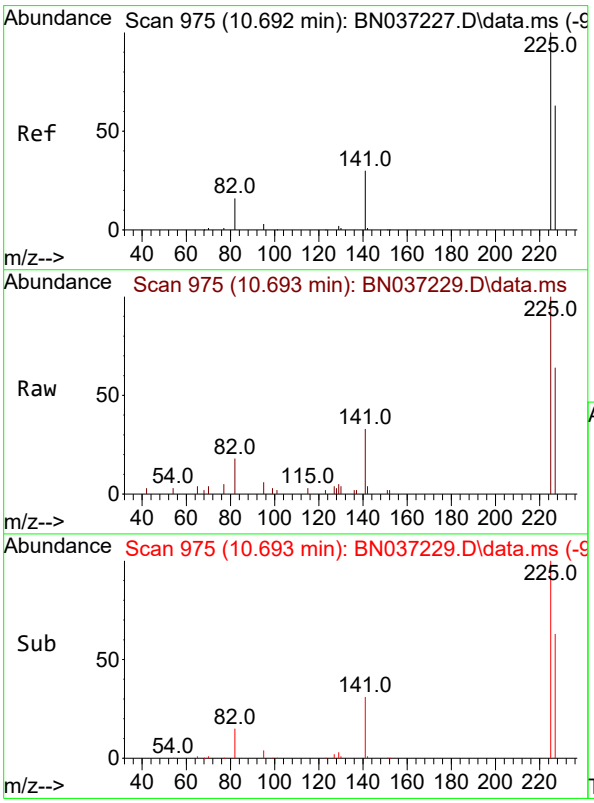
#9
Naphthalene
Concen: 1.669 ng
RT: 10.404 min Scan# 94
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:128 Resp: 13925

Ion	Ratio	Lower	Upper
128	100		
129	11.4	10.7	16.1
127	14.2	12.6	19.0

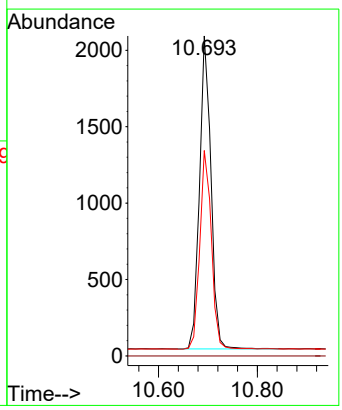


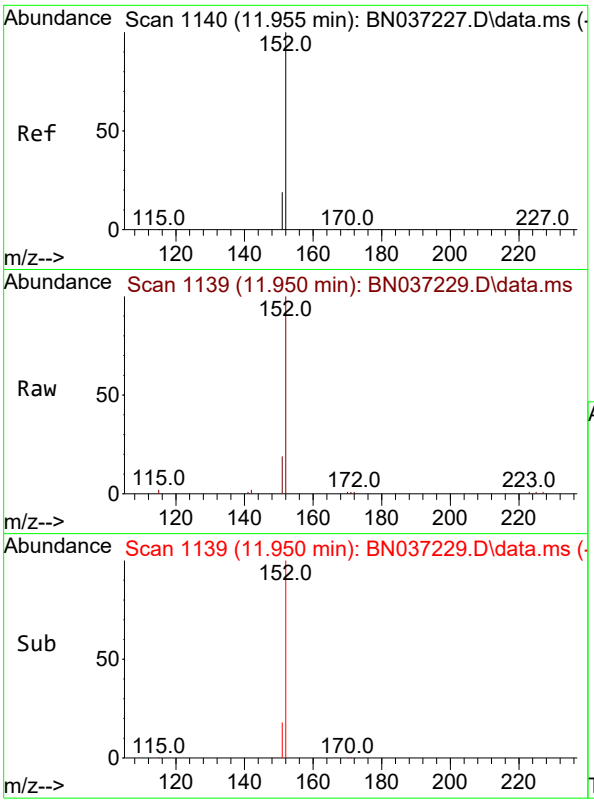


#10
Hexachlorobutadiene
Concen: 1.617 ng
RT: 10.693 min Scan# 975
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:225 Resp: 3281

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.2	49.2	73.8



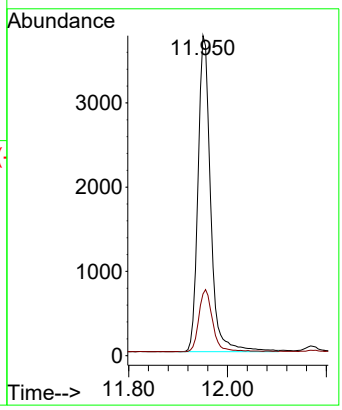


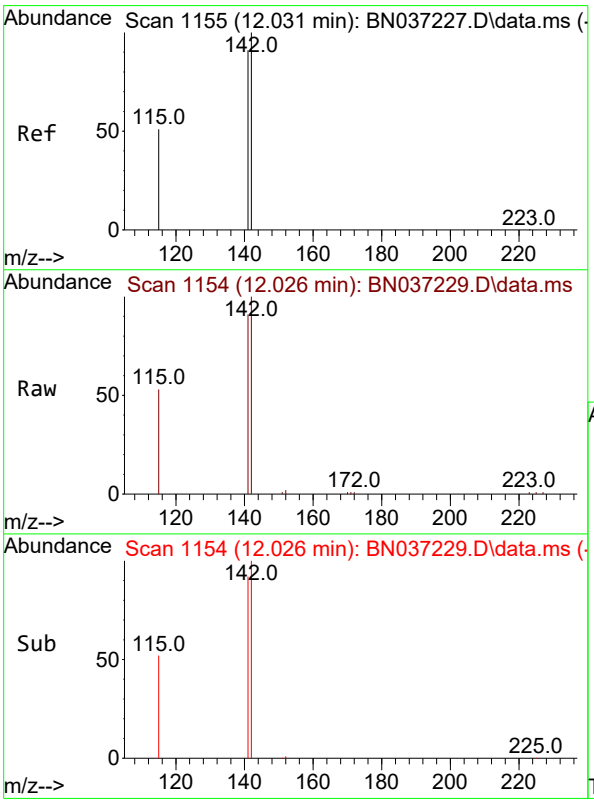
#11
2-Methylnaphthalene-d10
Concen: 1.718 ng
RT: 11.950 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 6642

Ion	Ratio	Lower	Upper
152	100		
151	21.6	17.9	26.9

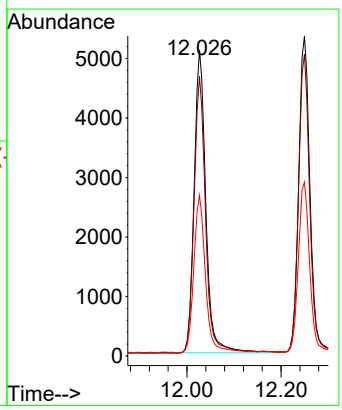


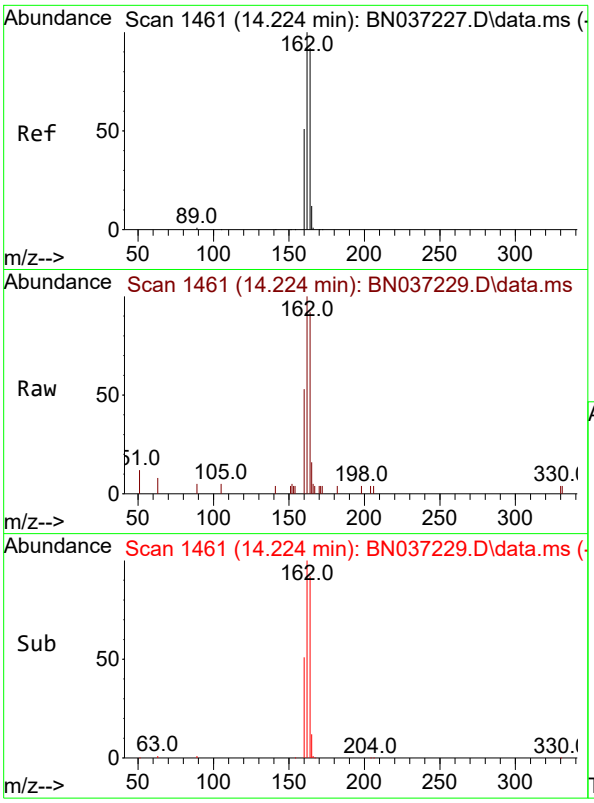


#12
2-Methylnaphthalene
Concen: 1.748 ng
RT: 12.026 min Scan# 1154
Delta R.T. -0.005 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:142 Resp: 8865

Ion	Ratio	Lower	Upper
142	100		
141	91.4	73.0	109.6
115	52.5	43.3	64.9



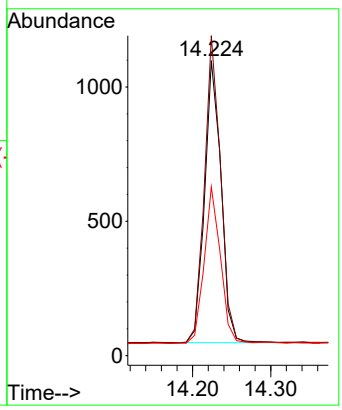


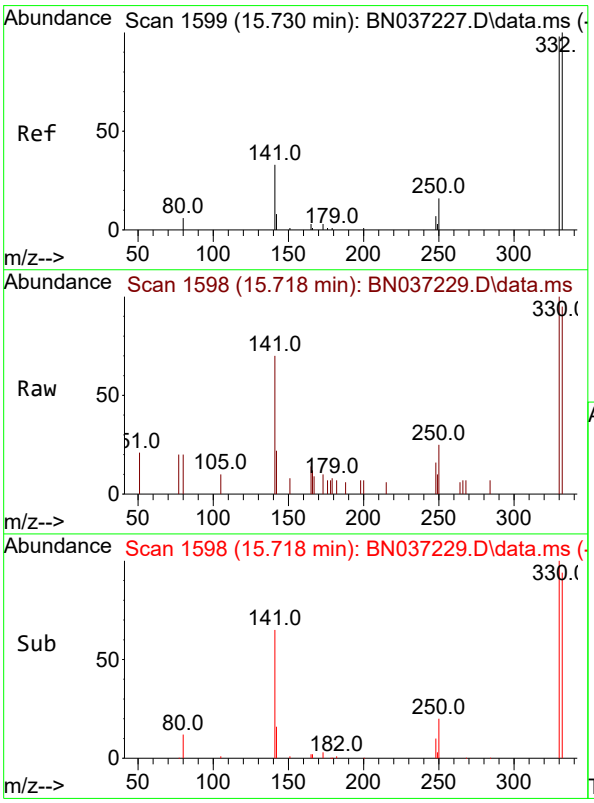
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.224 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:164 Resp: 1539

Ion	Ratio	Lower	Upper
164	100		
162	108.5	86.7	130.1
160	57.2	45.8	68.6

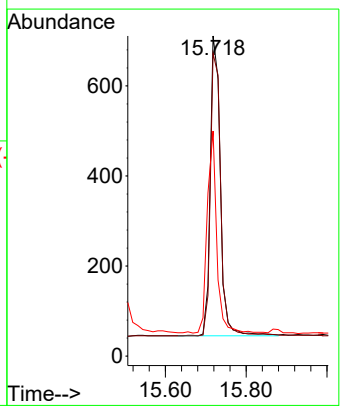


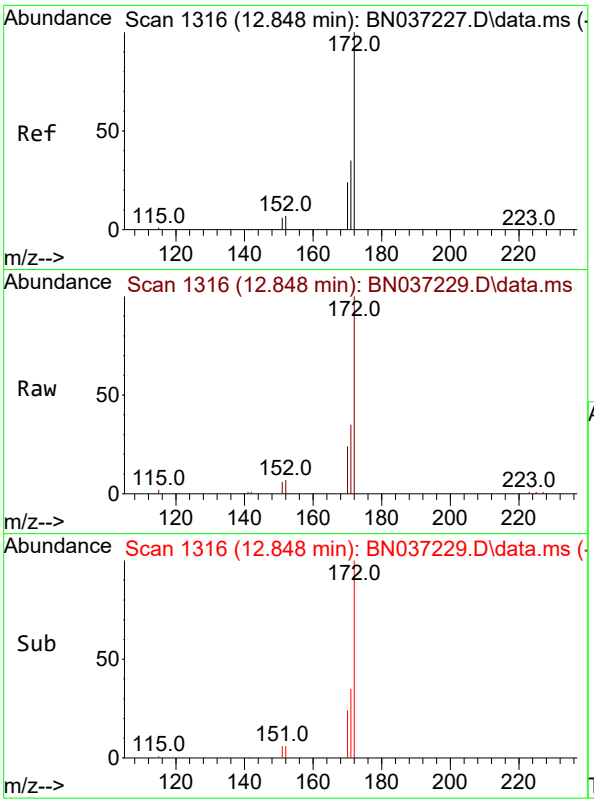


#14
2,4,6-Tribromophenol
Concen: 1.810 ng
RT: 15.718 min Scan# 1598
Delta R.T. -0.012 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:330 Resp: 1157

Ion	Ratio	Lower	Upper
330	100		
332	95.2	74.9	112.3
141	63.4	45.1	67.7



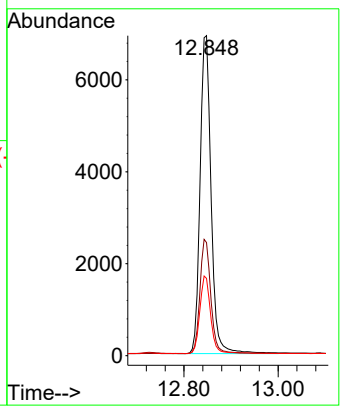


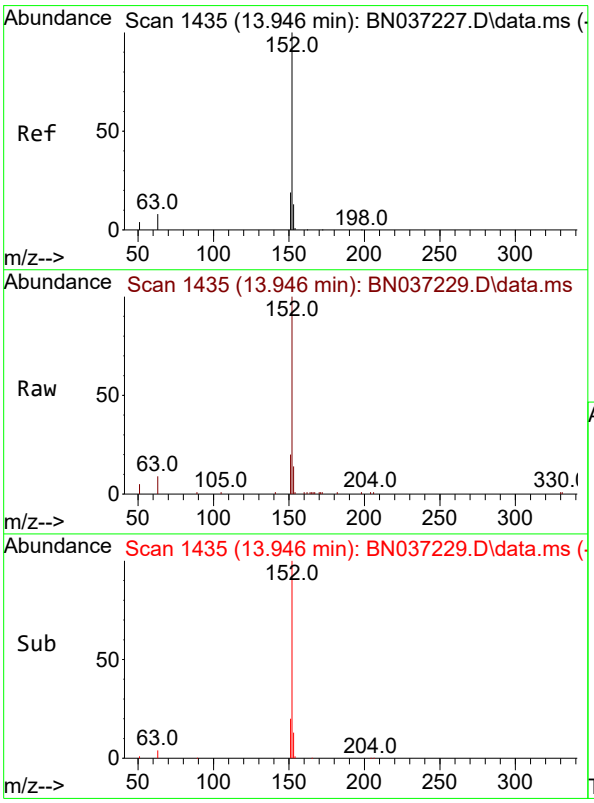
#15
2-Fluorobiphenyl
Concen: 1.734 ng
RT: 12.848 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:172 Resp: 11216

Ion	Ratio	Lower	Upper
172	100		
171	35.4	29.8	44.8
170	24.2	21.1	31.7

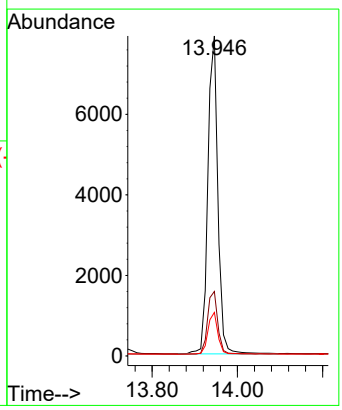


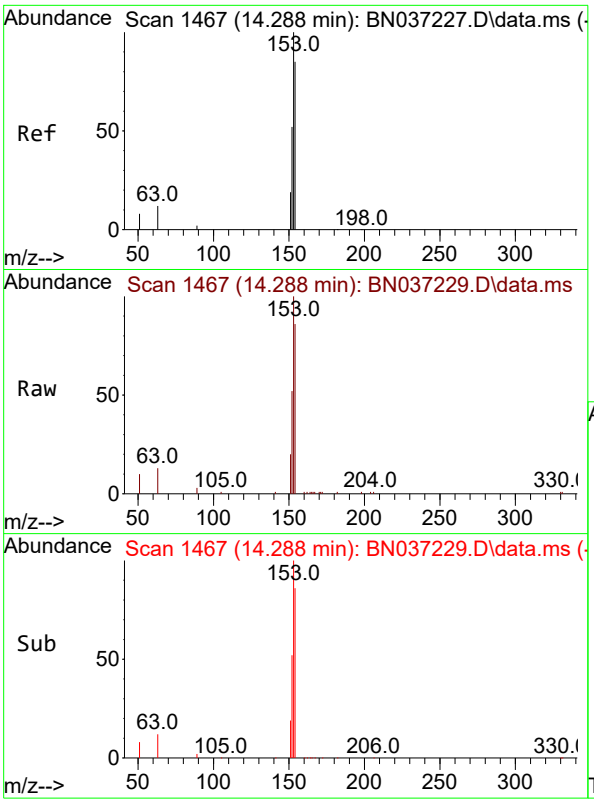


#16
Acenaphthylene
Concen: 1.696 ng
RT: 13.946 min Scan# 1435
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:152 Resp: 12787

Ion	Ratio	Lower	Upper
152	100		
151	20.1	15.7	23.5
153	13.1	10.7	16.1



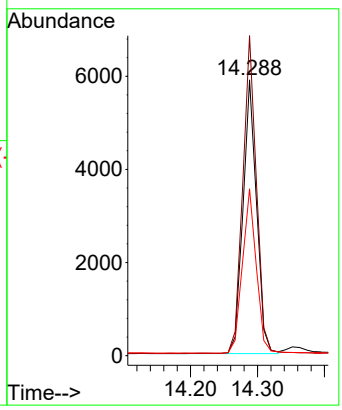


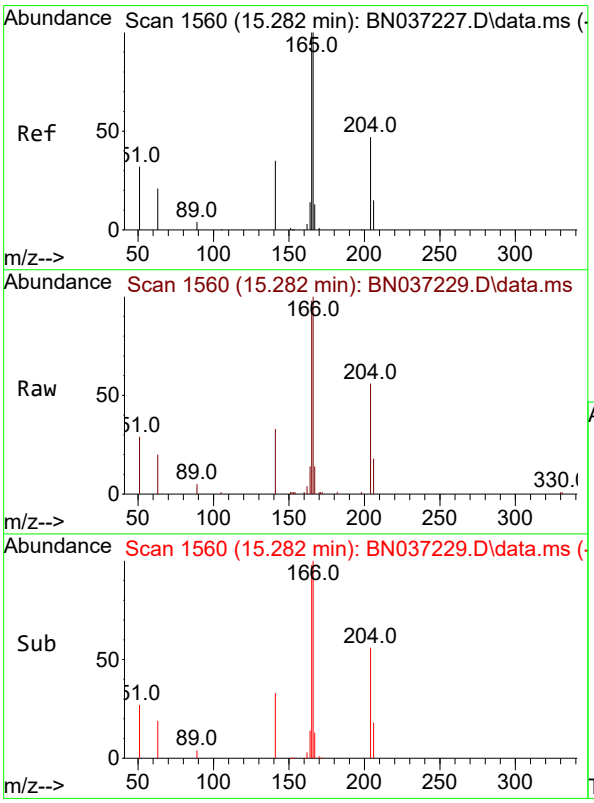
#17
Acenaphthene
Concen: 1.696 ng
RT: 14.288 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:154 Resp: 8258

Ion	Ratio	Lower	Upper
154	100		
153	117.2	94.6	141.8
152	61.4	49.6	74.4

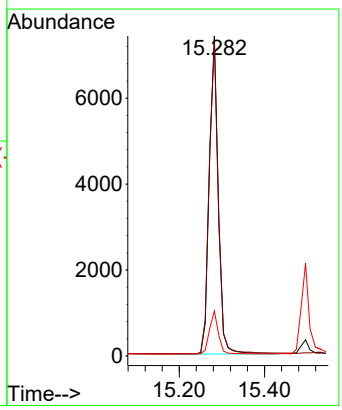


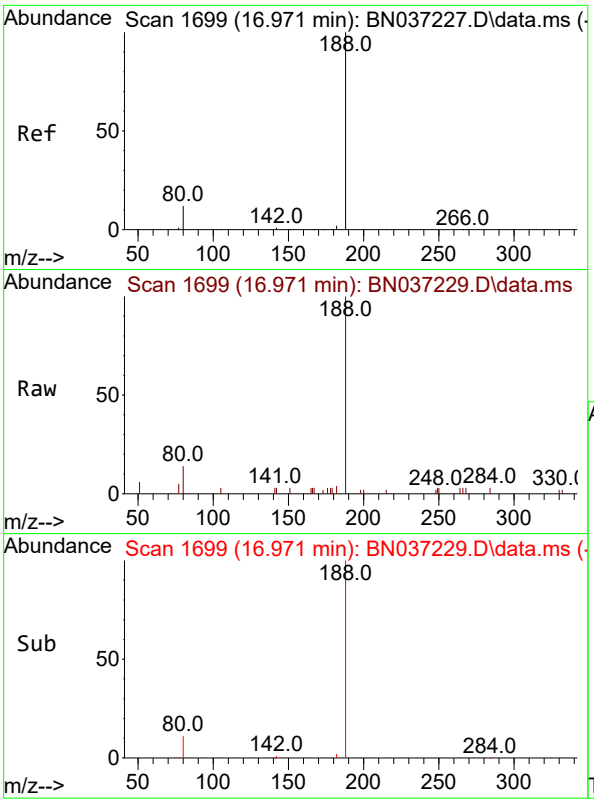


#18
Fluorene
Concen: 1.730 ng
RT: 15.282 min Scan# 1560
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:166 Resp: 10814

Ion	Ratio	Lower	Upper
166	100		
165	99.8	79.8	119.6
167	13.5	10.8	16.2



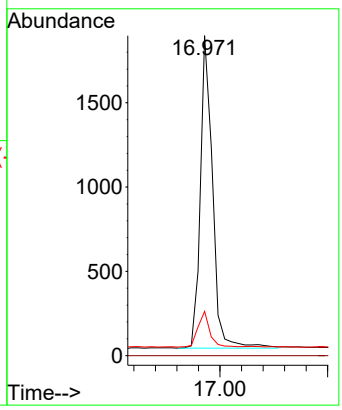


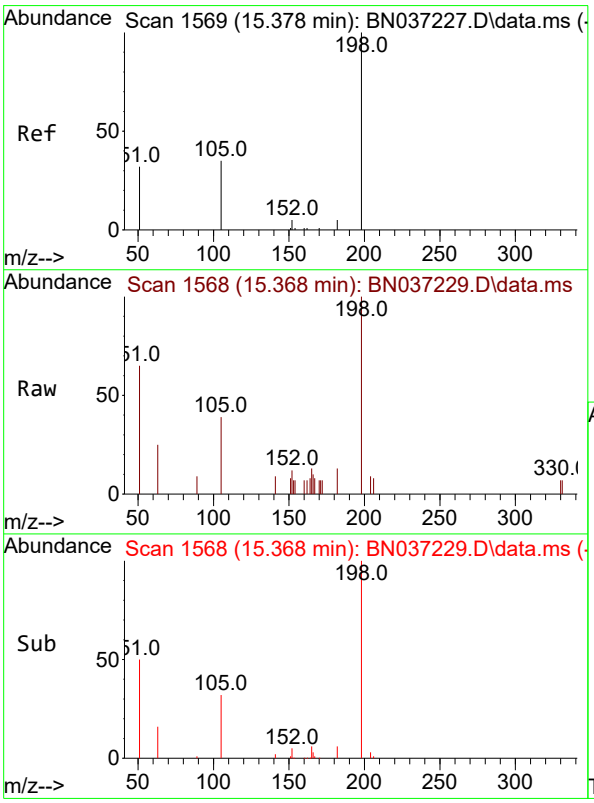
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 16.971 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:188 Resp: 2917

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.9	12.2	18.4

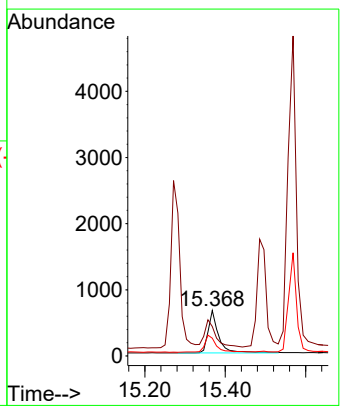


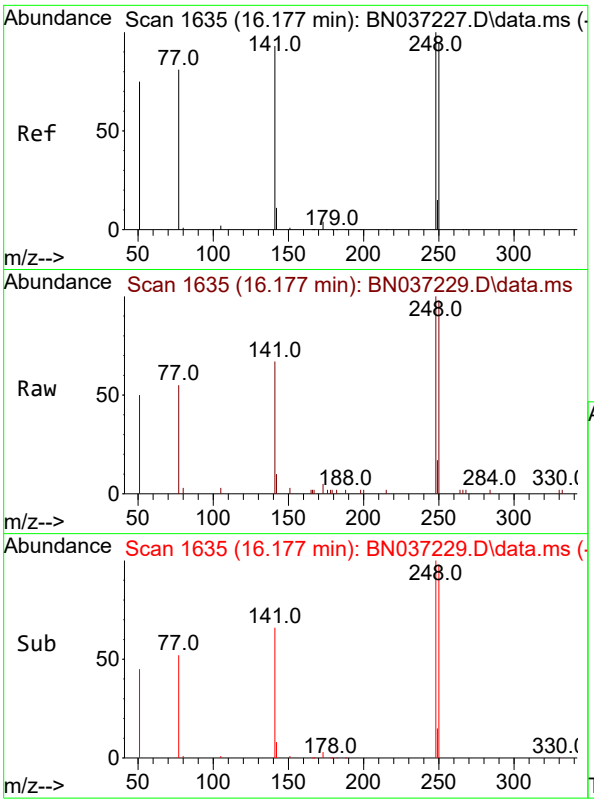


#20
4,6-Dinitro-2-methylphenol
Concen: 1.596 ng
RT: 15.368 min Scan# 1568
Delta R.T. -0.010 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:198 Resp: 1171

Ion	Ratio	Lower	Upper
198	100		
51	64.8	111.2	166.8#
105	39.0	54.0	81.0#



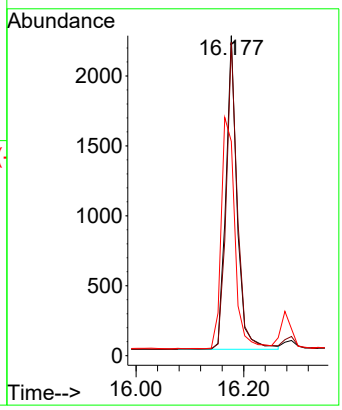


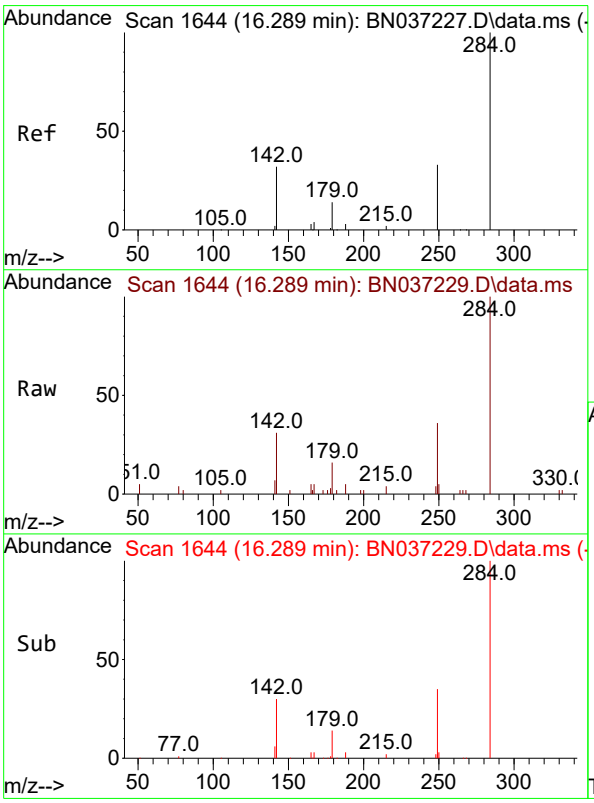
#21
4-Bromophenyl-phenylether
Concen: 1.709 ng
RT: 16.177 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:248 Resp: 3248

Ion	Ratio	Lower	Upper
248	100		
250	98.0	76.8	115.2
141	67.0	75.6	113.4#

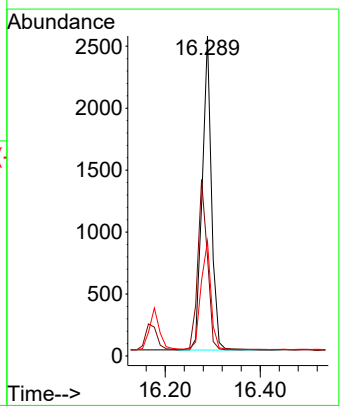


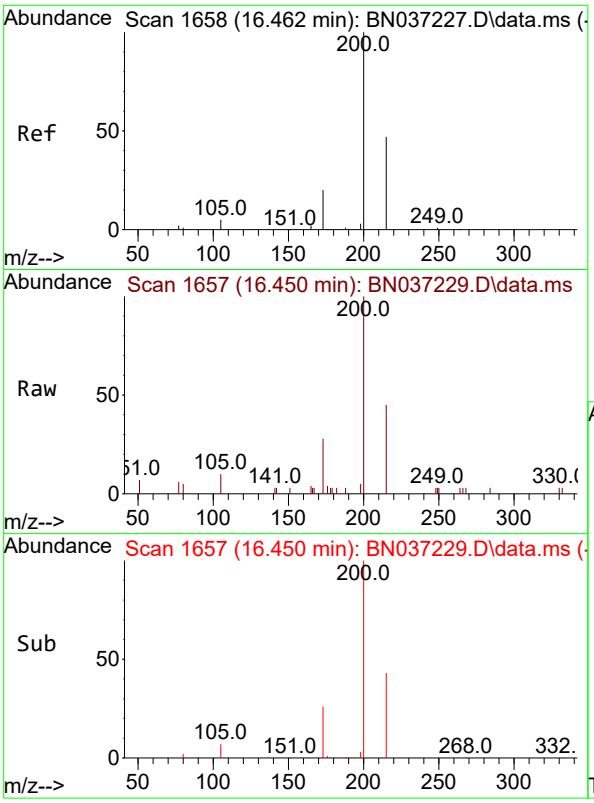


#22
Hexachlorobenzene
Concen: 1.570 ng
RT: 16.289 min Scan# 1644
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:284 Resp: 3460

Ion	Ratio	Lower	Upper
284	100		
142	56.0	43.8	65.6
249	36.7	28.4	42.6



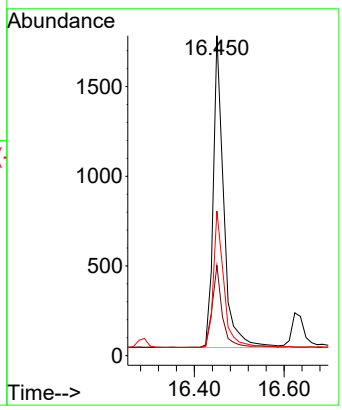


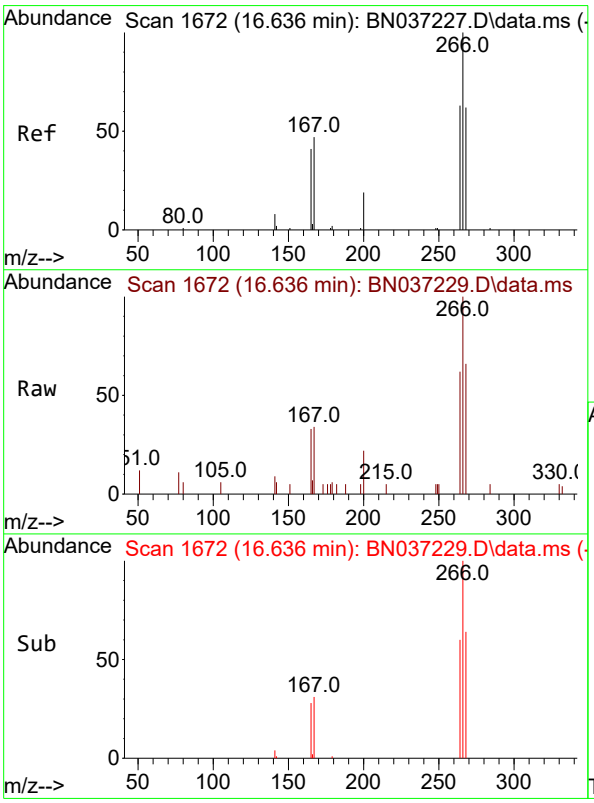
#23
Atrazine
Concen: 1.657 ng
RT: 16.450 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:200 Resp: 2809

Ion	Ratio	Lower	Upper
200	100		
173	28.2	25.1	37.7
215	45.2	43.7	65.5

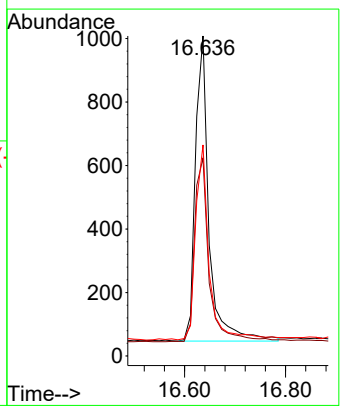


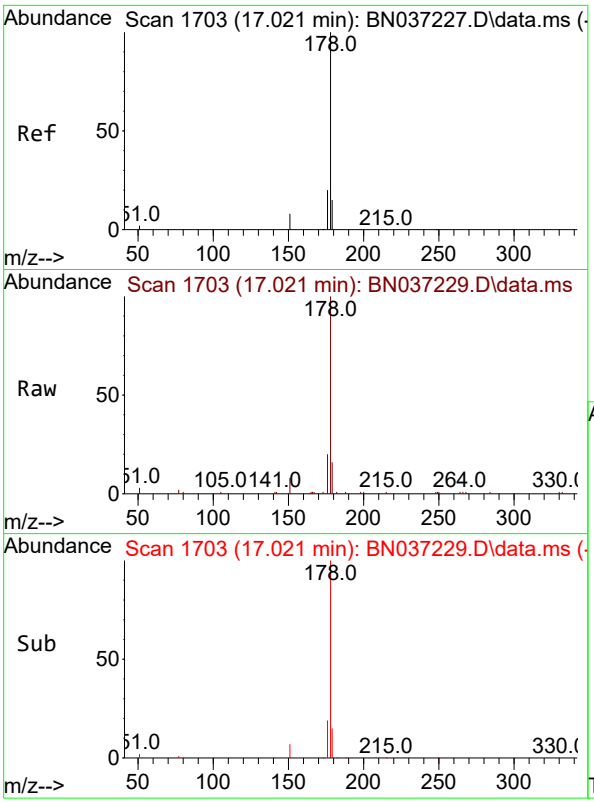


#24
Pentachlorophenol
Concen: 1.667 ng
RT: 16.636 min Scan# 1672
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:266 Resp: 1800

Ion	Ratio	Lower	Upper
266	100		
264	63.8	49.2	73.8
268	63.8	53.4	80.2



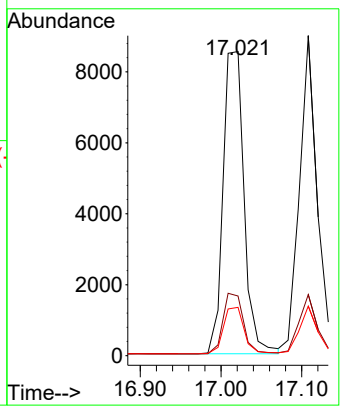


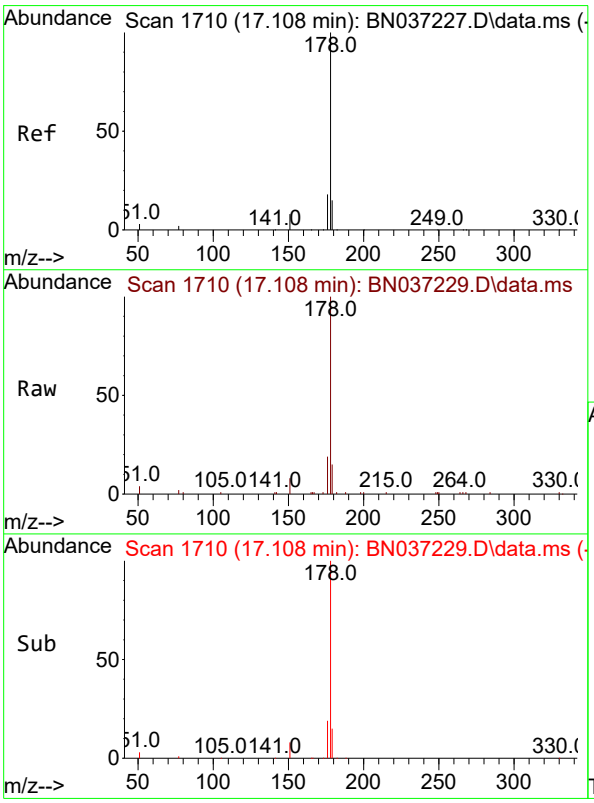
#25
Phenanthrene
Concen: 1.670 ng
RT: 17.021 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:178 Resp: 15448

Ion	Ratio	Lower	Upper
178	100		
176	19.7	16.3	24.5
179	15.2	12.6	18.8

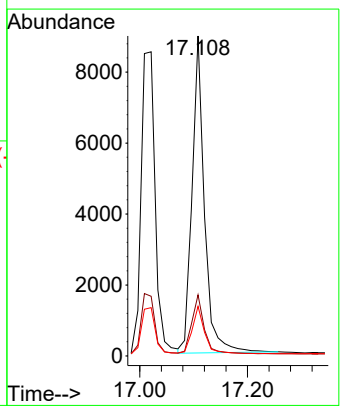


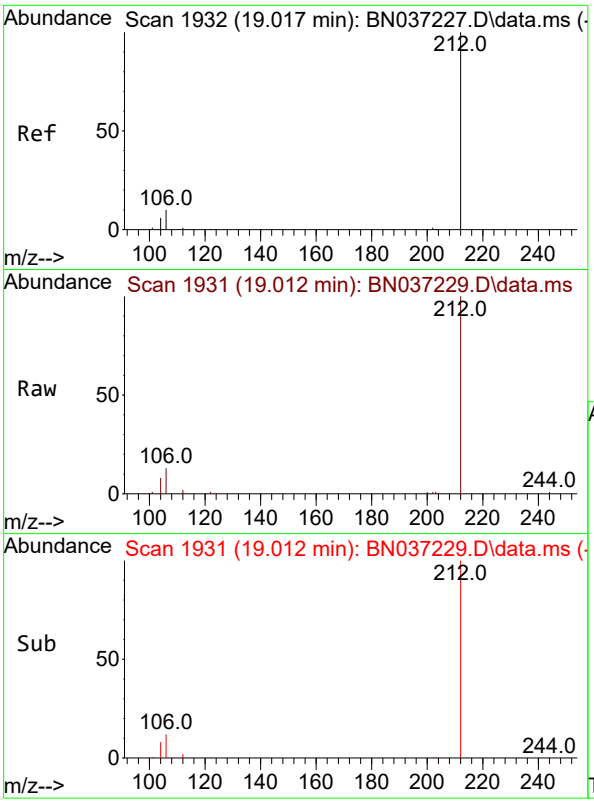


#26
Anthracene
Concen: 1.682 ng
RT: 17.108 min Scan# 1710
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:178 Resp: 14243

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.1	22.7
179	15.2	12.4	18.6



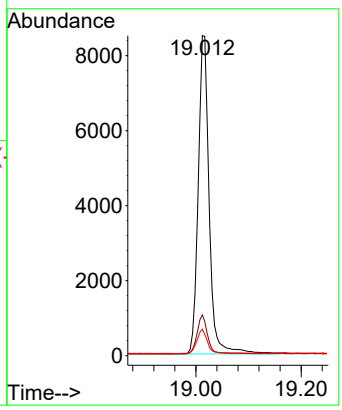


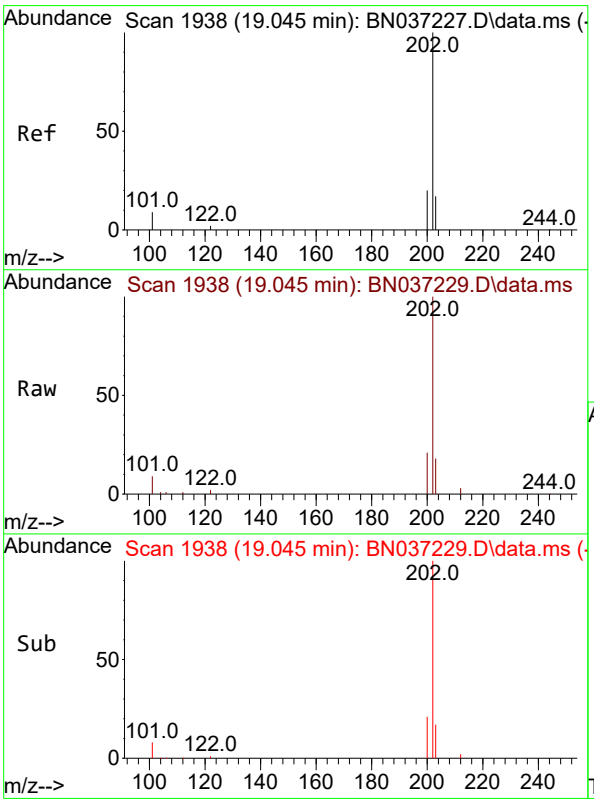
#27
Fluoranthene-d10
Concen: 1.610 ng
RT: 19.012 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:212 Resp: 12285

Ion	Ratio	Lower	Upper
212	100		
106	11.4	9.3	13.9
104	7.2	5.7	8.5

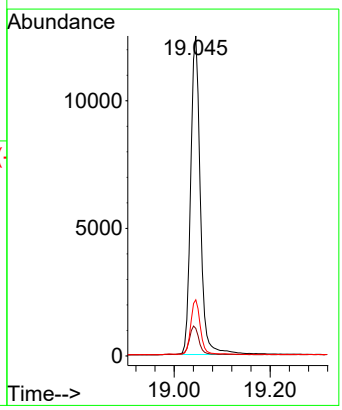


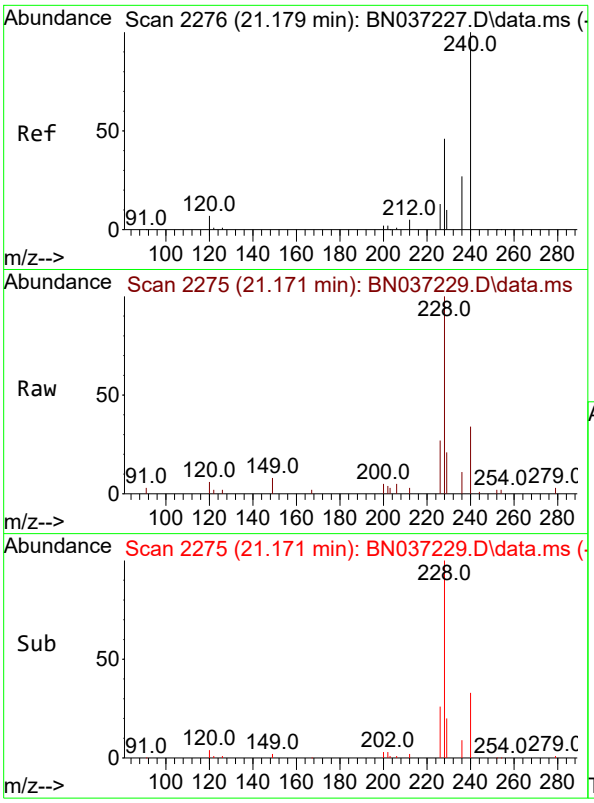


#28
Fluoranthene
Concen: 1.626 ng
RT: 19.045 min Scan# 1938
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:202 Resp: 17611

Ion	Ratio	Lower	Upper
202	100		
101	9.3	7.1	10.7
203	17.0	13.0	19.6



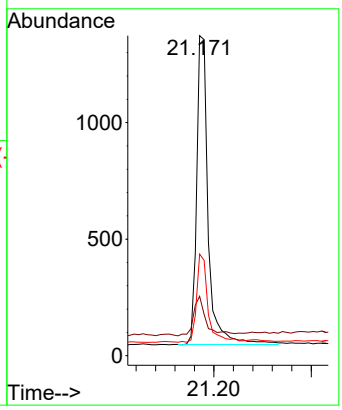


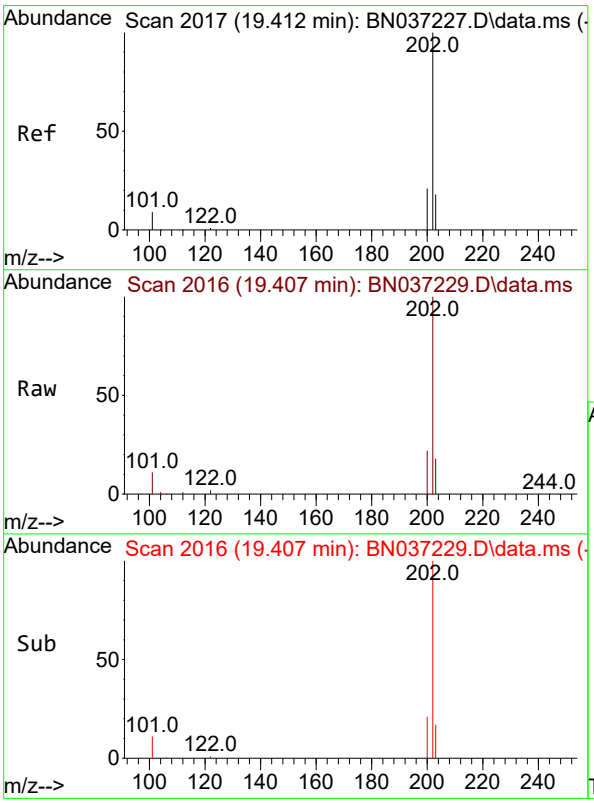
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.171 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:240 Resp: 2167

Ion	Ratio	Lower	Upper
240	100		
120	18.6	11.3	16.9#
236	31.8	24.4	36.6

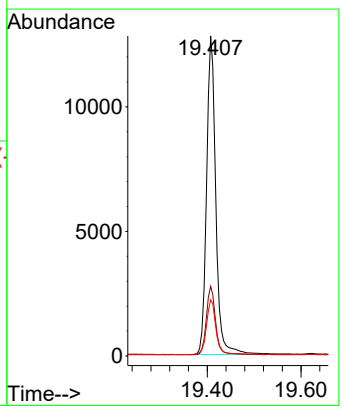


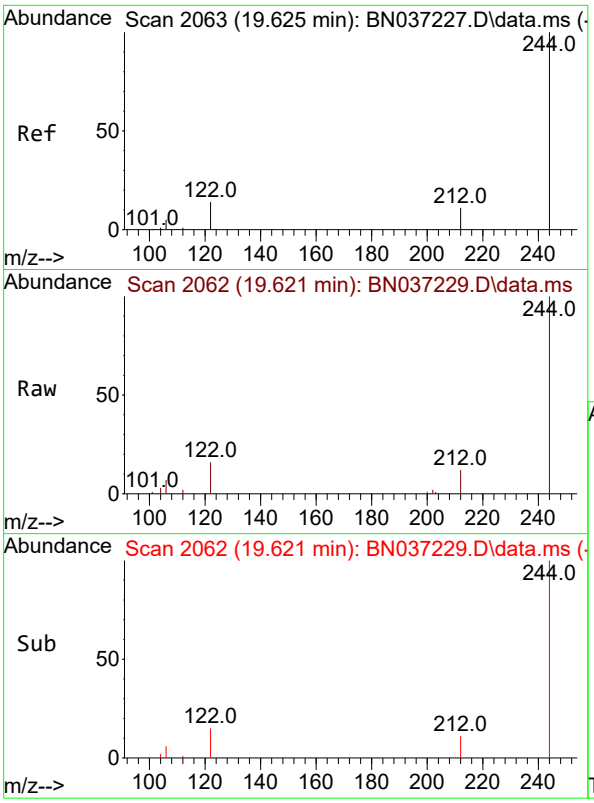


#30
Pyrene
Concen: 1.716 ng
RT: 19.407 min Scan# 2016
Delta R.T. -0.004 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:202 Resp: 17479

Ion	Ratio	Lower	Upper
202	100		
200	21.6	17.2	25.8
203	17.7	14.3	21.5



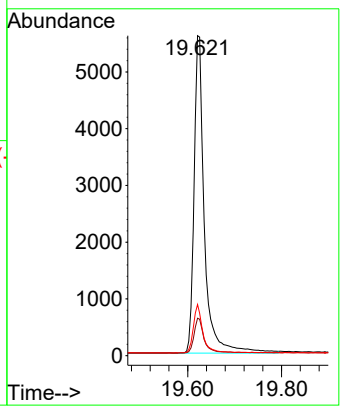


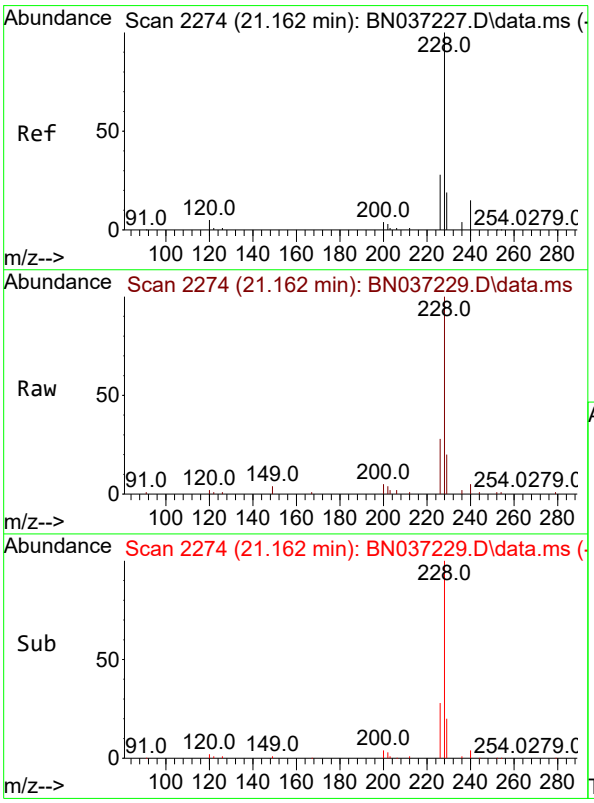
#31
Terphenyl-d14
Concen: 1.751 ng
RT: 19.621 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:244 Resp: 8579

Ion	Ratio	Lower	Upper
244	100		
212	11.7	12.2	18.2#
122	16.0	14.3	21.5

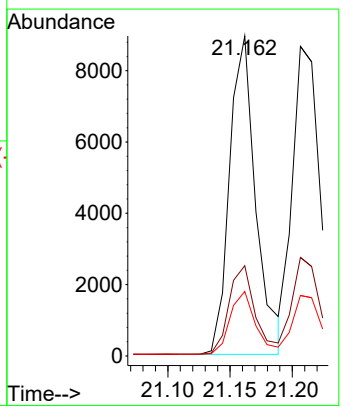


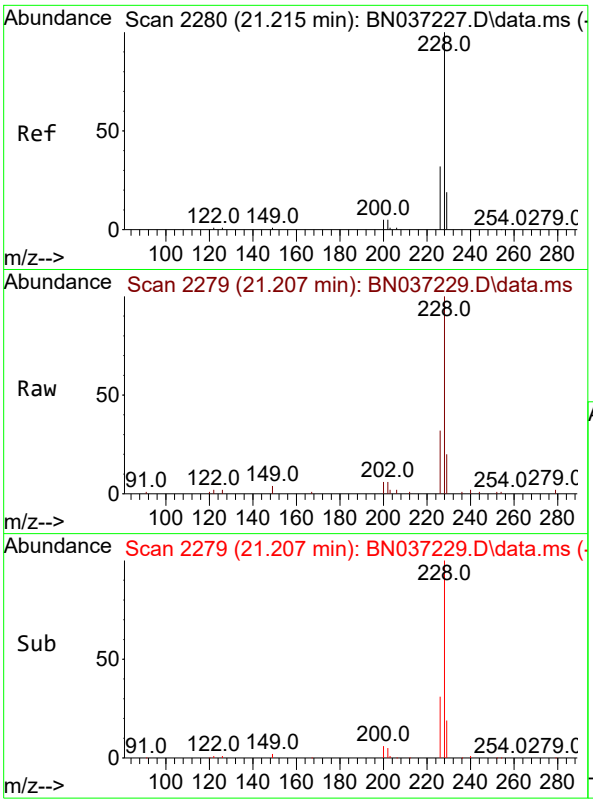


#32
Benzo(a)anthracene
Concen: 1.791 ng
RT: 21.162 min Scan# 2274
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:228 Resp: 13105

Ion	Ratio	Lower	Upper
228	100		
226	28.2	23.8	35.8
229	20.1	17.0	25.4



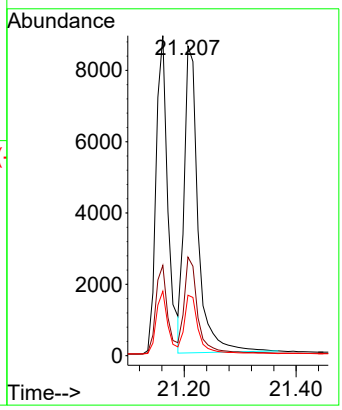


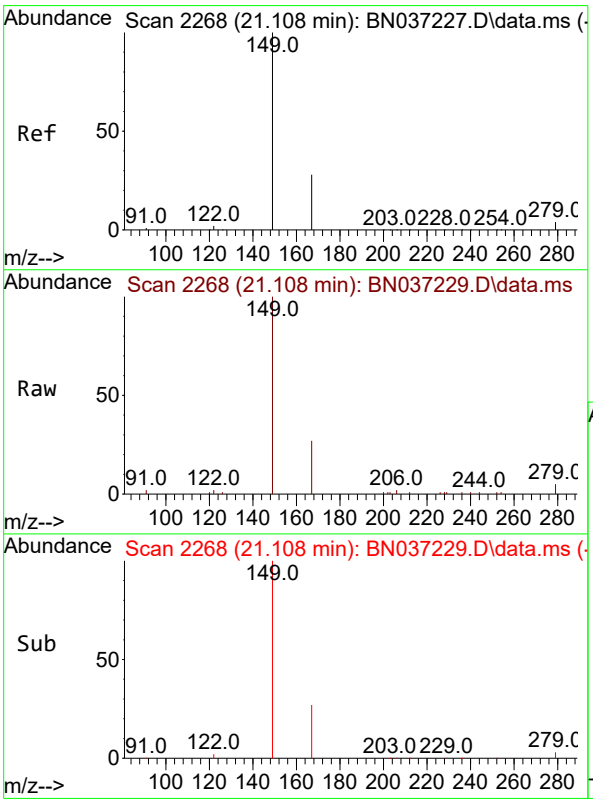
#33
Chrysene
Concen: 1.627 ng
RT: 21.207 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:228 Resp: 14835

Ion	Ratio	Lower	Upper
228	100		
226	31.8	25.8	38.6
229	19.6	17.0	25.4

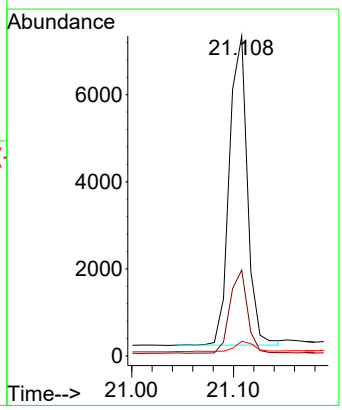


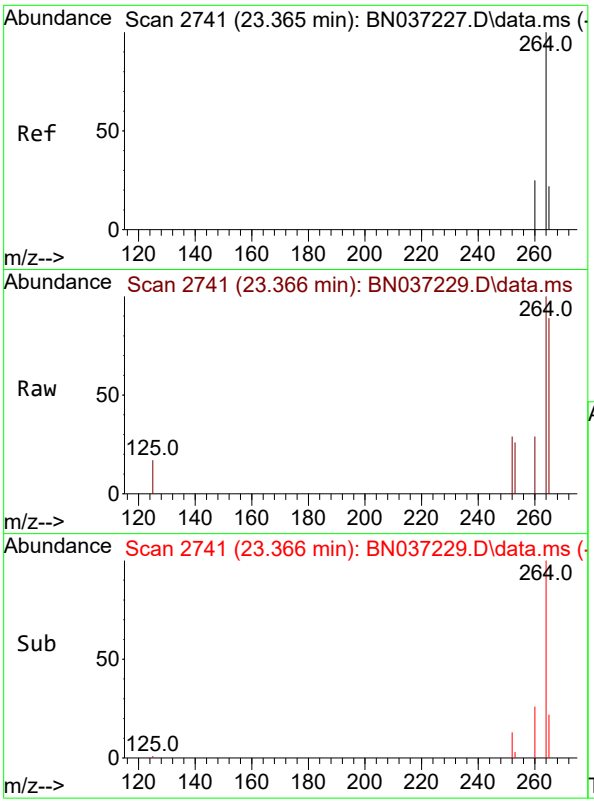


#34
Bis(2-ethylhexyl)phthalate
Concen: 1.599 ng
RT: 21.108 min Scan# 2268
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:149 Resp: 8716

Ion	Ratio	Lower	Upper
149	100		
167	26.3	21.3	31.9
279	3.7	3.3	4.9



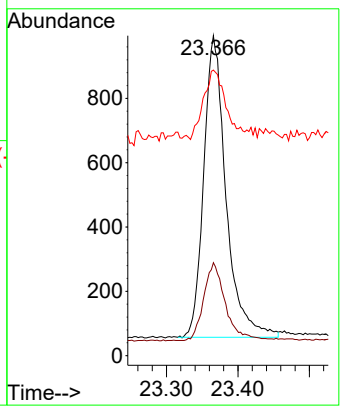


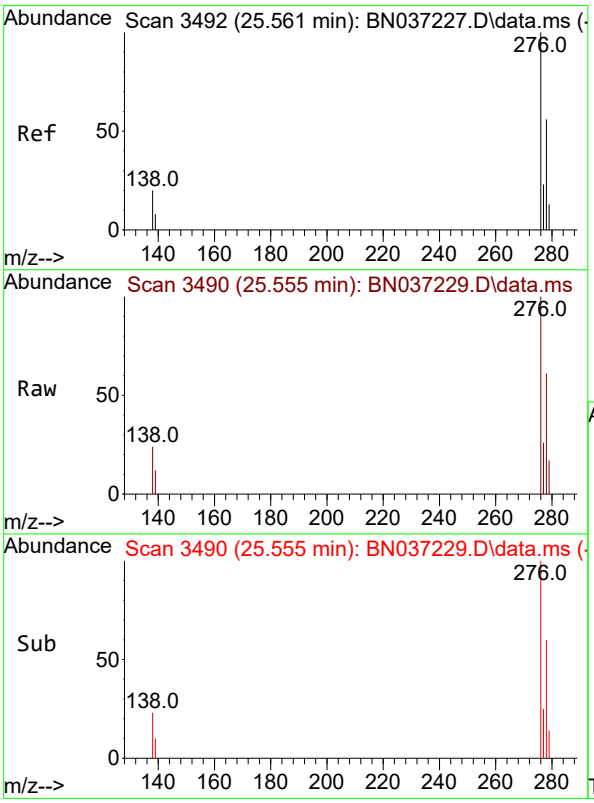
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.366 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:264 Resp: 2036

Ion	Ratio	Lower	Upper
264	100		
260	29.0	22.8	34.2
265	89.2	66.4	99.6

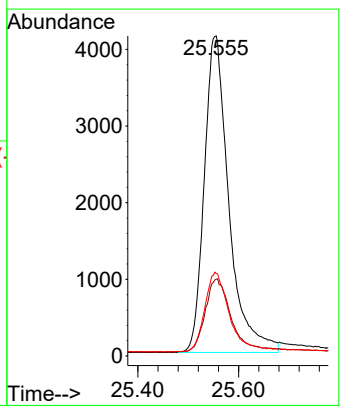


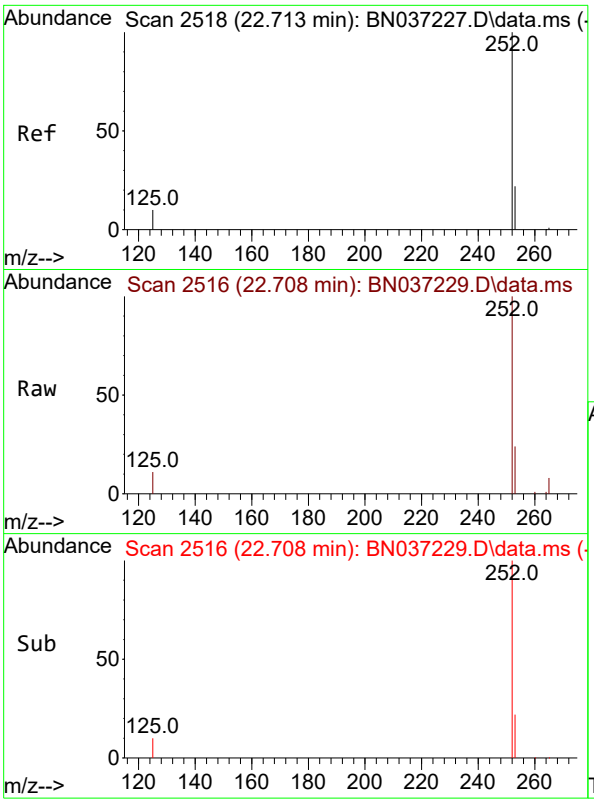


#36
Indeno(1,2,3-cd)pyrene
Concen: 1.704 ng
RT: 25.555 min Scan# 3490
Delta R.T. -0.006 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:276 Resp: 13992

Ion	Ratio	Lower	Upper
276	100		
138	23.7	16.8	25.2
277	24.9	19.5	29.3



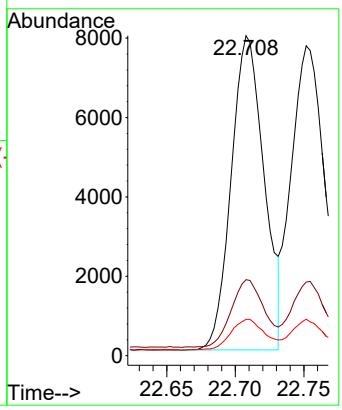


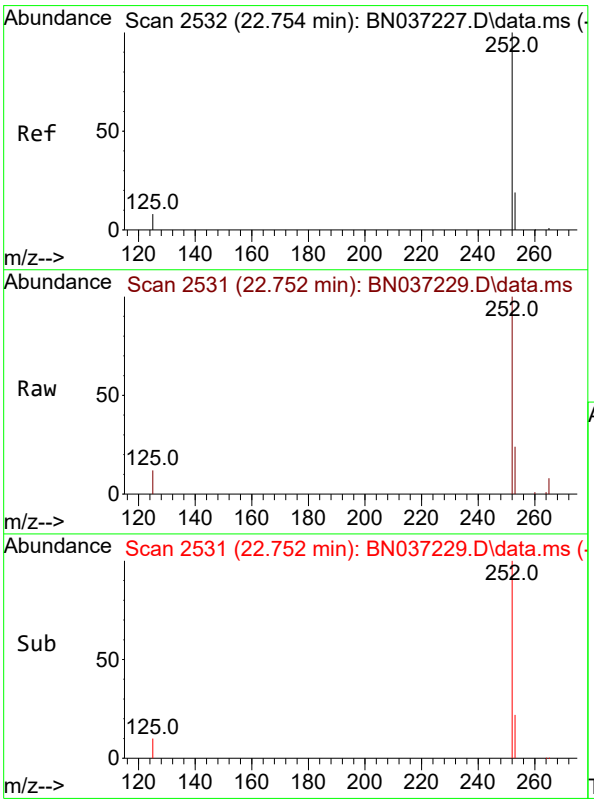
#37
Benzo(b)fluoranthene
Concen: 1.769 ng
RT: 22.708 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 13177

Ion	Ratio	Lower	Upper
252	100		
253	23.8	24.9	37.3#
125	11.4	12.9	19.3#

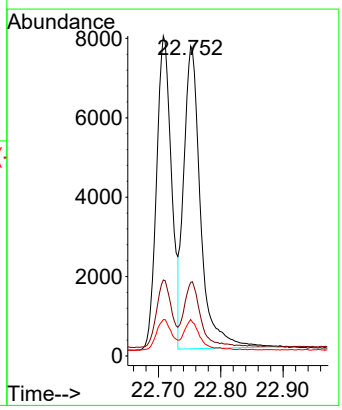


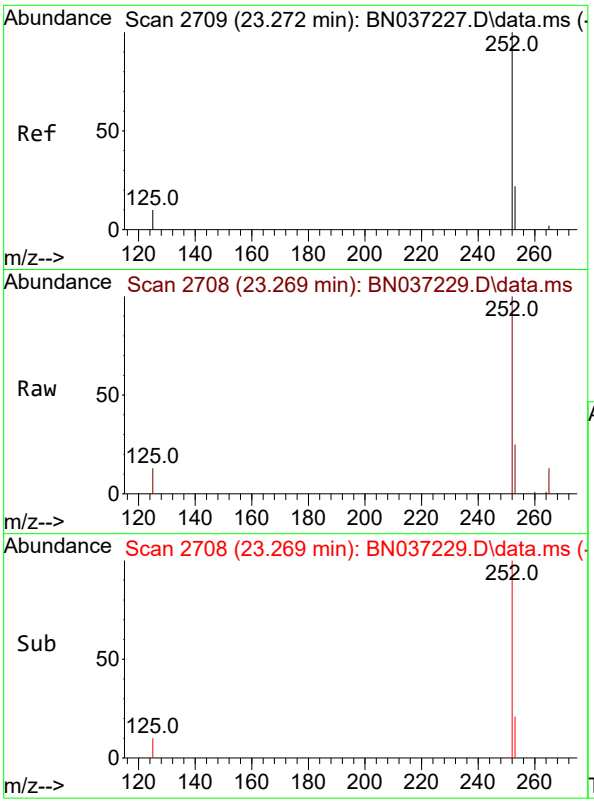


#38
Benzo(k)fluoranthene
Concen: 1.675 ng
RT: 22.752 min Scan# 2531
Delta R.T. -0.003 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:252 Resp: 14311

Ion	Ratio	Lower	Upper
252	100		
253	23.8	24.6	37.0#
125	11.8	13.4	20.2#



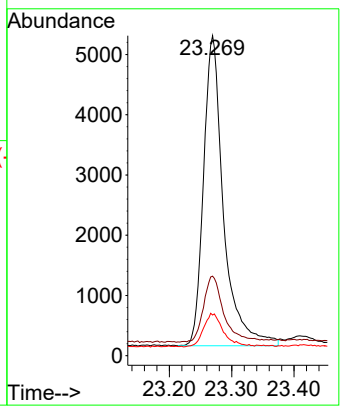


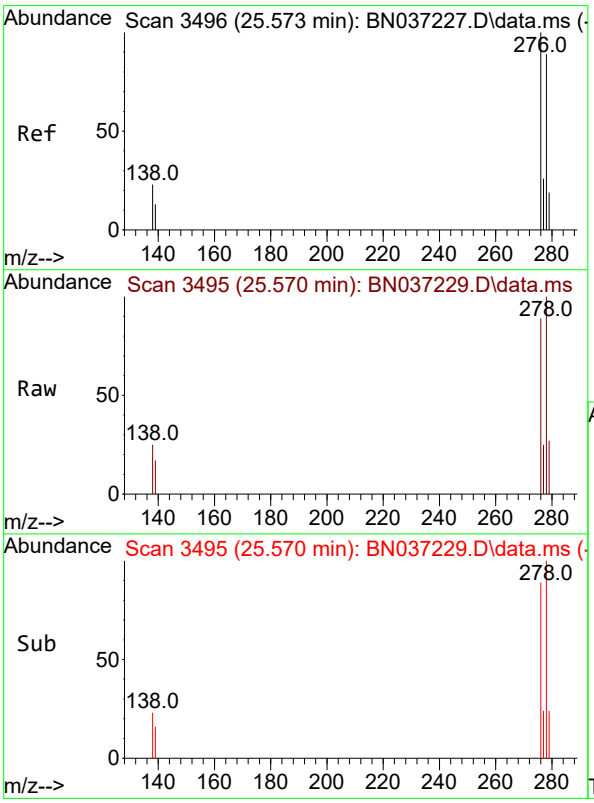
#39
Benzo(a)pyrene
Concen: 1.710 ng
RT: 23.269 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 11458

Ion	Ratio	Lower	Upper
252	100		
253	24.9	29.4	44.2#
125	12.7	16.2	24.2#

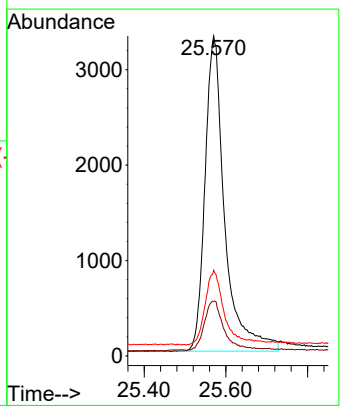


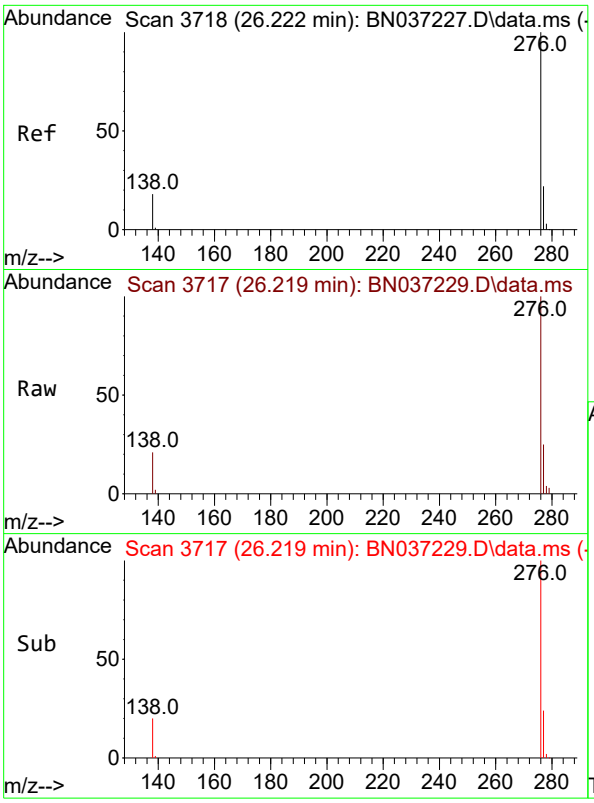


#40
Dibenzo(a,h)anthracene
Concen: 1.793 ng
RT: 25.570 min Scan# 3495
Delta R.T. -0.003 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Tgt Ion:278 Resp: 11091

Ion	Ratio	Lower	Upper
278	100		
139	17.1	17.8	26.6#
279	26.8	31.3	46.9#





#41
Benzo(g,h,i)perylene
Concen: 1.665 ng
RT: 26.219 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN037229.D
Acq: 13 Jun 2025 15:59

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:276 Resp: 12677

Ion	Ratio	Lower	Upper
276	100		
277	24.7	22.0	33.0
138	21.3	18.4	27.6