Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037471.D
Acq On : 11 Jul 2025 13:36
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Jul 11 15:27:05 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.731	152	1742	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4072	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	1984	0.400	ng		0.00
19) Phenanthrene-d10	17.099	188	3525	0.400	ng		0.00
29) Chrysene-d12	21.286	240	2965	0.400	ng	#	0.00
35) Perylene-d12	23.534	264	2463	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.319	112	6460	1.593	ng		0.00
5) Phenol-d6	6.894	99	8071	1.582	ng		0.00
8) Nitrobenzene-d5	8.864	82	4816	1.629	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	8642	1.561	ng		0.00
14) 2,4,6-Tribromophenol	15.845	330	1094	1.626	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	18395	1.624	ng		0.00
27) Fluoranthene-d10	19.132	212	13833	1.556	ng		0.00
31) Terphenyl-d14	19.740	244	9911	1.602	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.254	88	2757	1.685	ng		97
3) n-Nitrosodimethylamine	3.557	42	3665	1.676	ng		98
6) bis(2-Chloroethyl)ether	7.154	93	6993	1.638	ng		100
9) Naphthalene	10.562	128	17848	1.631	ng		97
10) Hexachlorobutadiene	10.861	225	4329	1.647	ng	#	99
12) 2-Methylnaphthalene	12.182	142	11263	1.644	ng		99
16) Acenaphthylene	14.077	152	14926	1.650	ng		99
17) Acenaphthene	14.419	154	10002	1.648	ng		99
18) Fluorene	15.414	166	12742	1.671	ng		99
20) 4,6-Dinitro-2-methylph...	15.478	198	710	1.792	ng	#	58
21) 4-Bromophenyl-phenylether	16.304	248	3572	1.624	ng		95
22) Hexachlorobenzene	16.416	284	4981	1.642	ng		99
23) Atrazine	16.565	200	1876	1.715	ng		91
24) Pentachlorophenol	16.751	266	1682	1.610	ng		98
25) Phenanthrene	17.136	178	17507	1.631	ng		100
26) Anthracene	17.235	178	15953	1.647	ng		100
28) Fluoranthene	19.164	202	19585	1.663	ng		99
30) Pyrene	19.526	202	19037	1.597	ng		100
32) Benzo(a)anthracene	21.277	228	16533	1.647	ng		97
33) Chrysene	21.321	228	17469	1.592	ng		99
34) Bis(2-ethylhexyl)phtha...	21.232	149	5207	1.525	ng		98
36) Indeno(1,2,3-cd)pyrene	25.808	276	16302	1.705	ng		99
37) Benzo(b)fluoranthene	22.861	252	16437	1.716	ng	#	92
38) Benzo(k)fluoranthene	22.905	252	16488	1.698	ng	#	92
39) Benzo(a)pyrene	23.437	252	13051	1.693	ng	#	89
40) Dibenzo(a,h)anthracene	25.826	278	13217	1.714	ng		90
41) Benzo(g,h,i)perylene	26.498	276	14207	1.682	ng		93

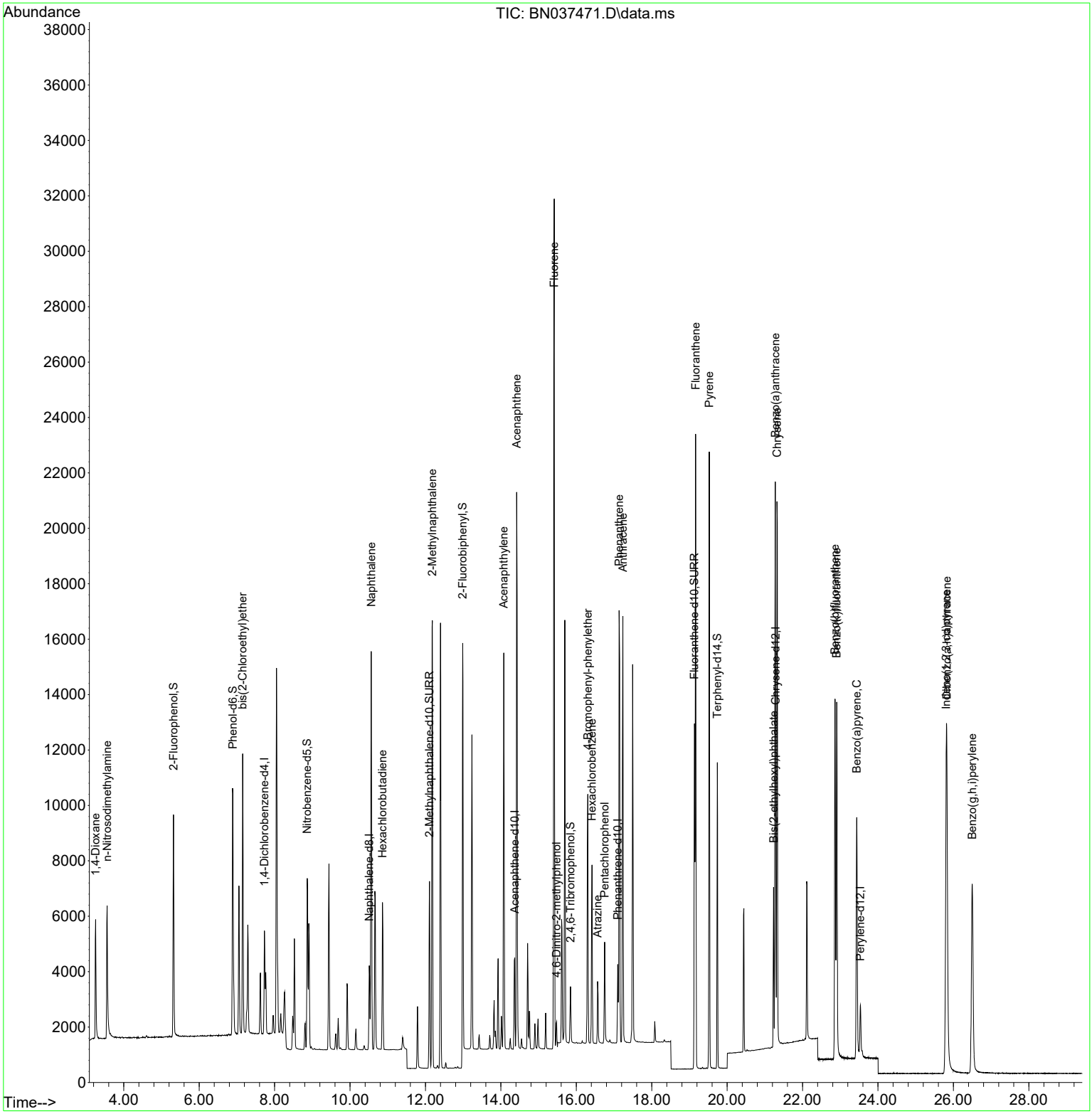
(#) = qualifier out of range (m) = manual integration (+) = signals summed

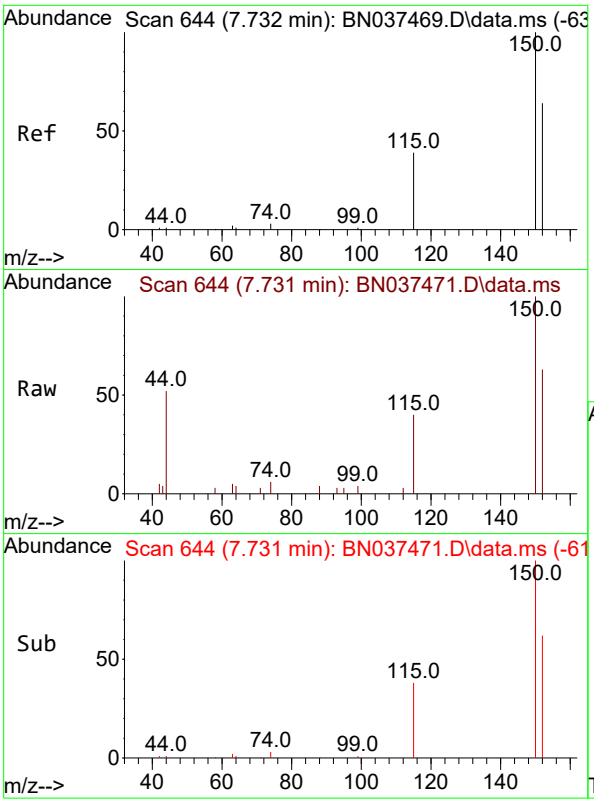
Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037471.D
Acq On : 11 Jul 2025 13:36
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Jul 11 15:27:05 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration



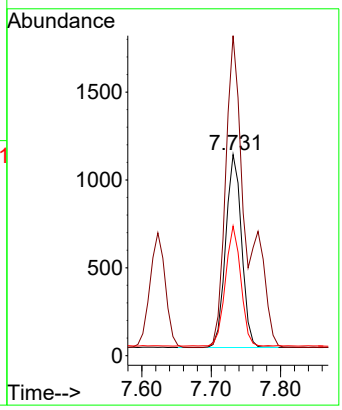


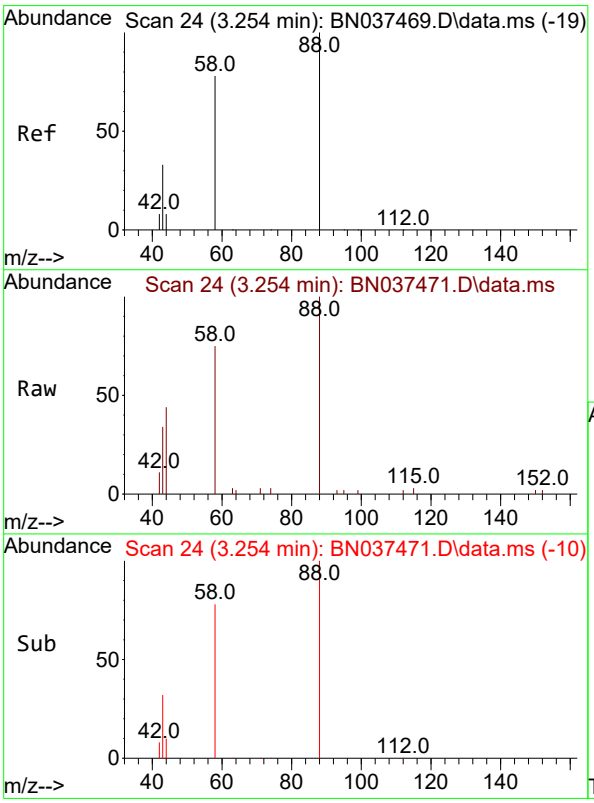
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.731 min Scan# 64
Delta R.T. -0.001 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 1742

Ion	Ratio	Lower	Upper
152	100		
150	159.2	122.5	183.7
115	64.4	49.9	74.9

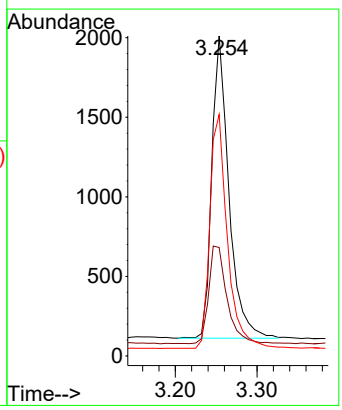


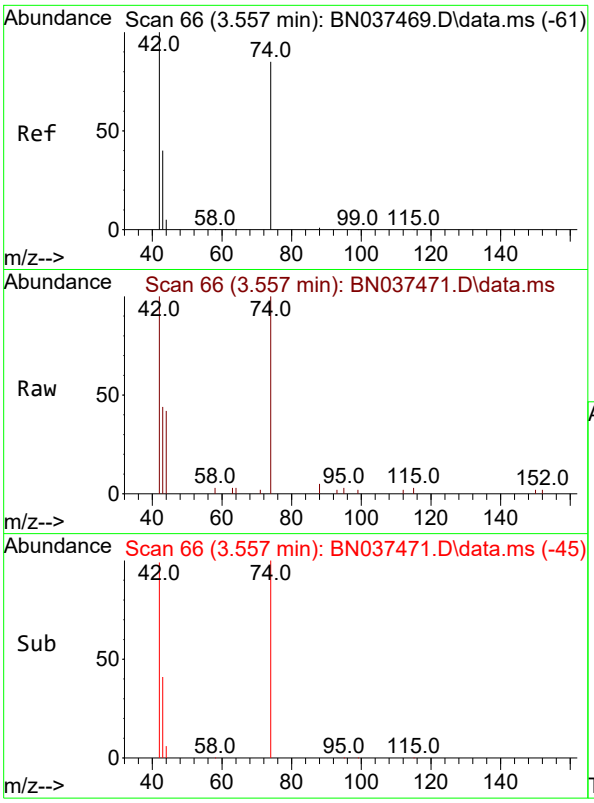


#2
1,4-Dioxane
Concen: 1.685 ng
RT: 3.254 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion: 88 Resp: 2757

Ion	Ratio	Lower	Upper
88	100		
43	34.6	30.7	46.1
58	79.3	65.0	97.4



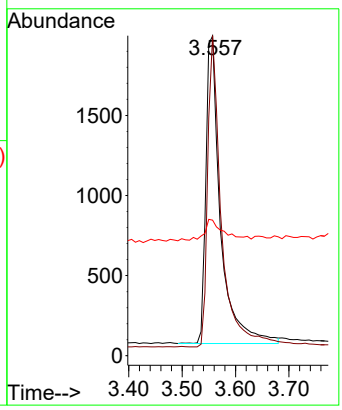


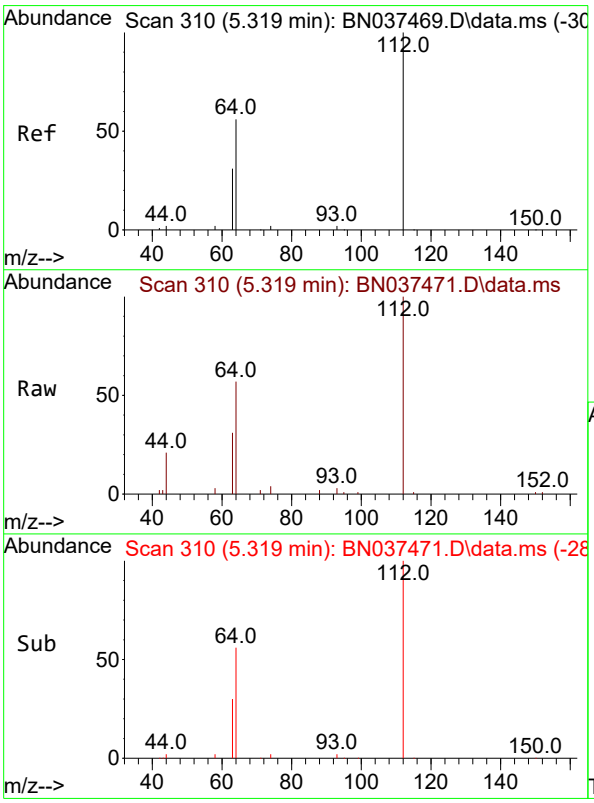
#3
n-Nitrosodimethylamine
Concen: 1.676 ng
RT: 3.557 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 42 Resp: 3665

Ion	Ratio	Lower	Upper
42	100		
74	95.2	74.9	112.3
44	9.7	7.2	10.8

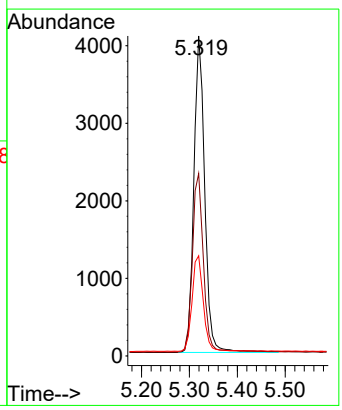


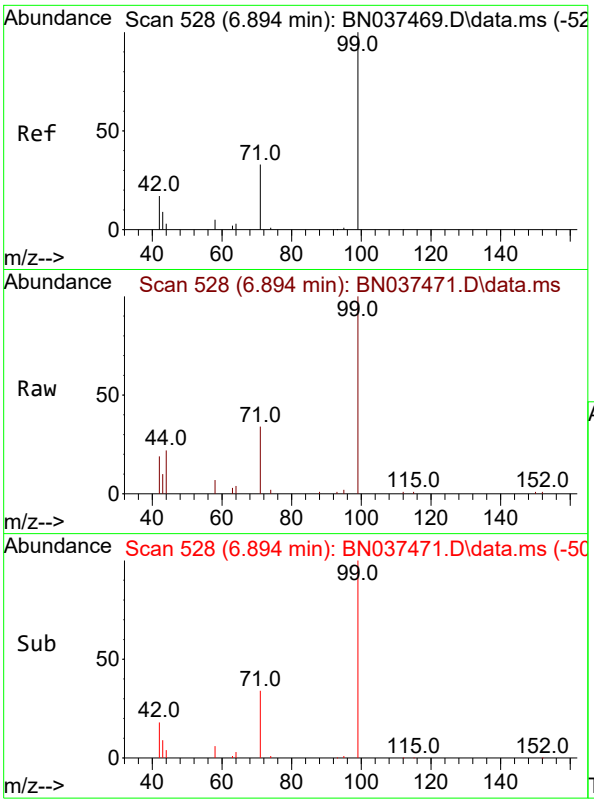


#4
2-Fluorophenol
Concen: 1.593 ng
RT: 5.319 min Scan# 310
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:112 Resp: 6460

Ion	Ratio	Lower	Upper
112	100		
64	57.3	45.4	68.0
63	31.4	24.7	37.1



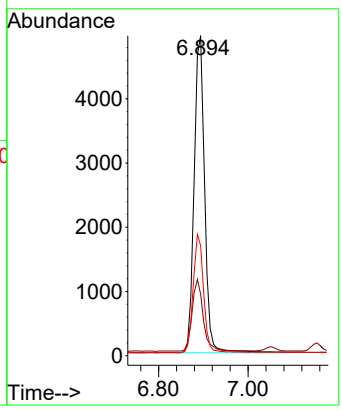


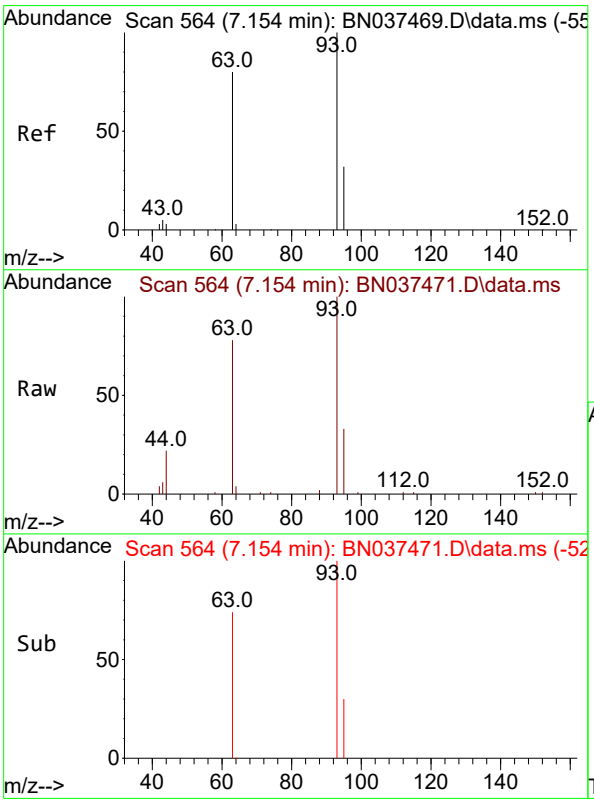
#5
Phenol-d6
Concen: 1.582 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 99 Resp: 8071

Ion	Ratio	Lower	Upper
99	100		
42	23.9	19.5	29.3
71	37.2	29.4	44.2

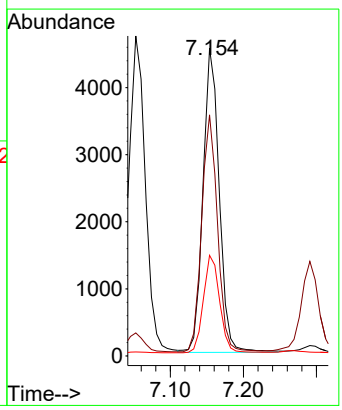


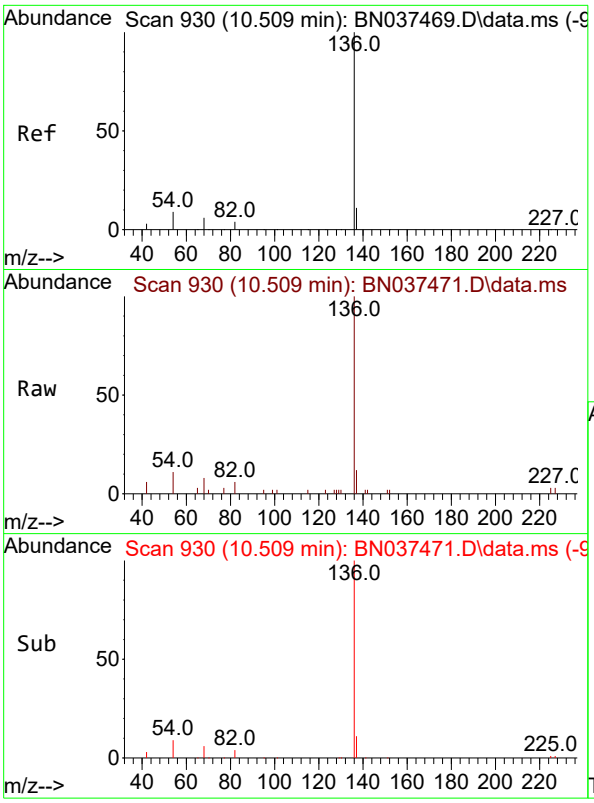


#6
bis(2-Chloroethyl)ether
Concen: 1.638 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion: 93 Resp: 6993

Ion	Ratio	Lower	Upper
93	100		
63	75.9	60.8	91.2
95	32.0	25.6	38.4



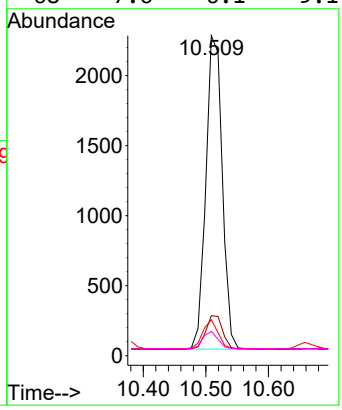


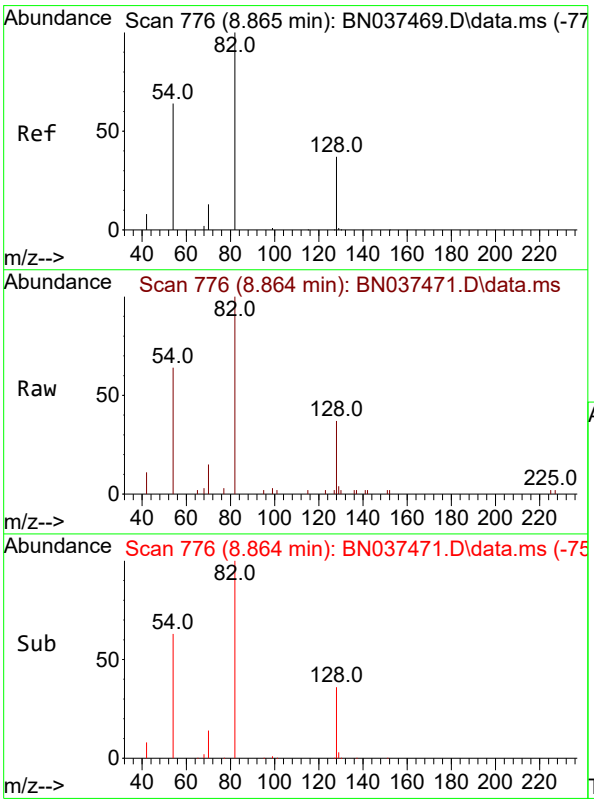
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:136 Resp: 4072

Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.0	15.0
54	11.2	9.0	13.6
68	7.6	6.1	9.1

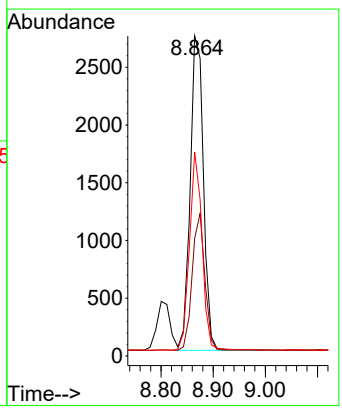


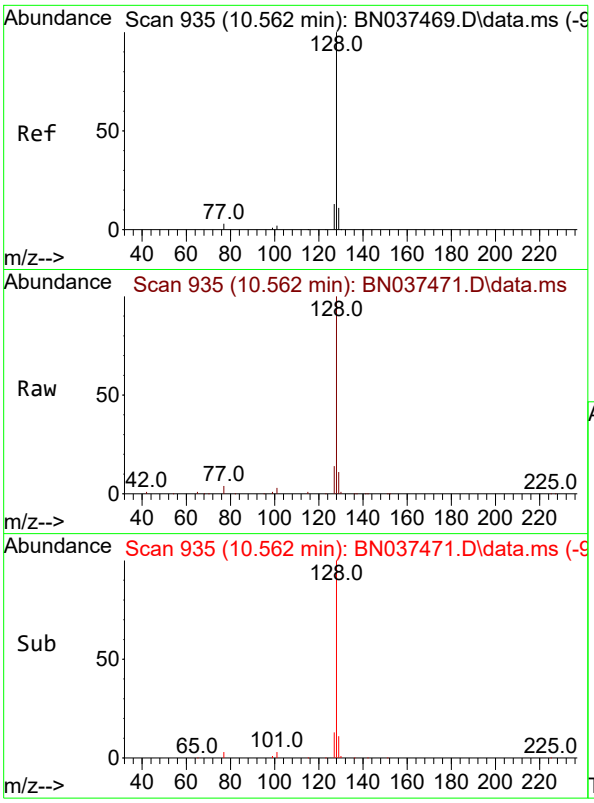


#8
Nitrobenzene-d5
Concen: 1.629 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion: 82 Resp: 4816

Ion	Ratio	Lower	Upper
82	100		
128	36.8	33.1	49.7
54	63.7	53.0	79.4



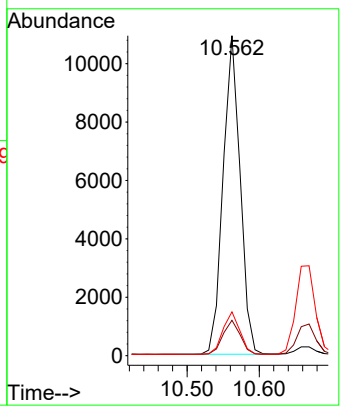


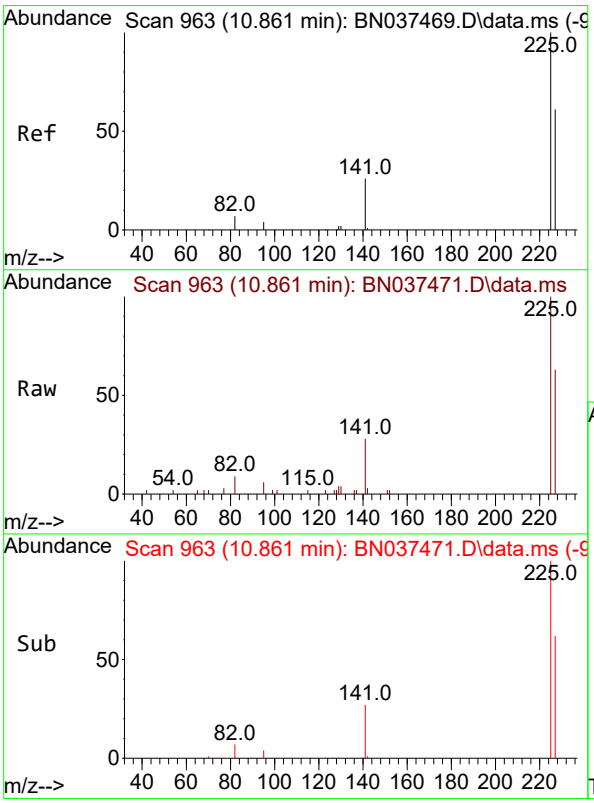
#9
Naphthalene
Concen: 1.631 ng
RT: 10.562 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:128 Resp: 17848

Ion	Ratio	Lower	Upper
128	100		
129	11.1	10.2	15.2
127	13.7	11.8	17.6

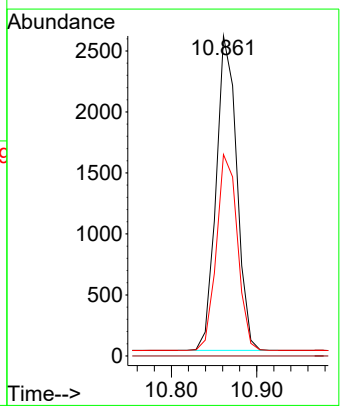


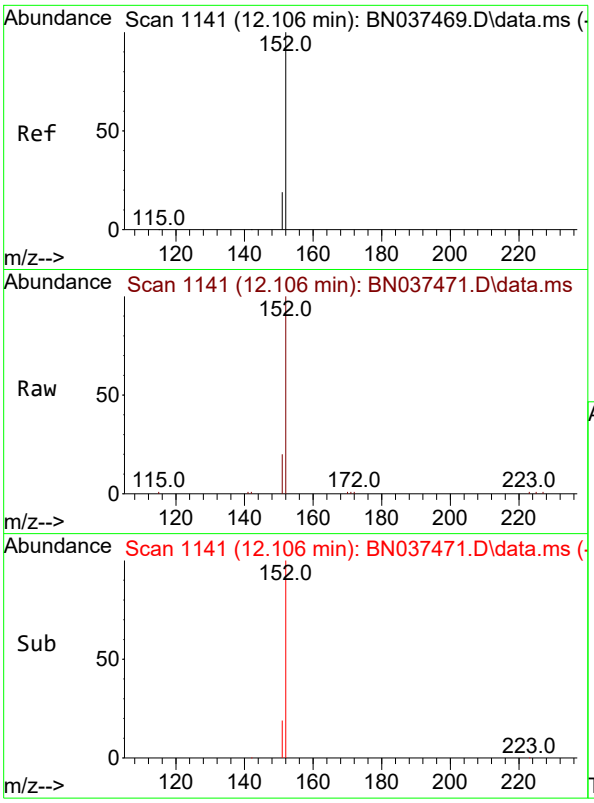


#10
Hexachlorobutadiene
Concen: 1.647 ng
RT: 10.861 min Scan# 963
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:225 Resp: 4329

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.5	51.4	77.2



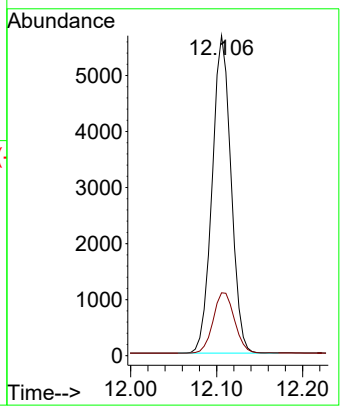


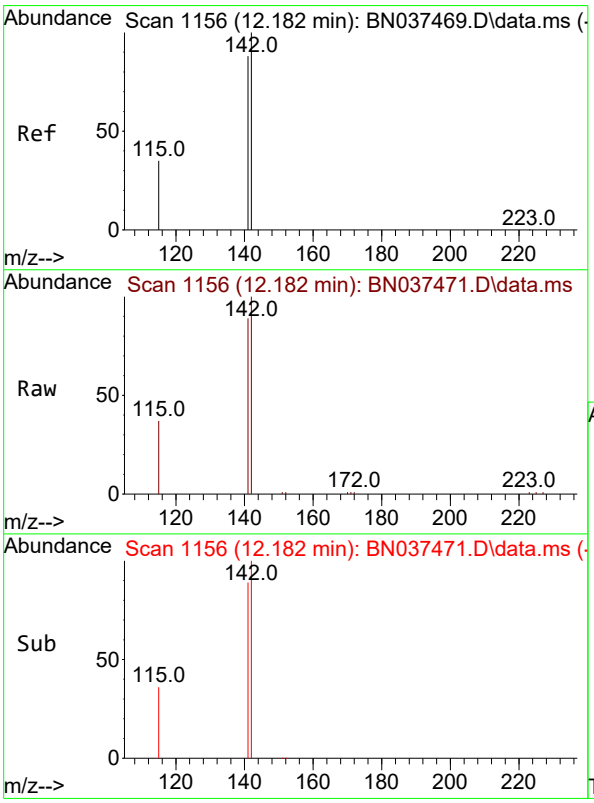
#11
2-Methylnaphthalene-d10
Concen: 1.561 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 8642

Ion	Ratio	Lower	Upper
152	100		
151	21.5	17.0	25.6

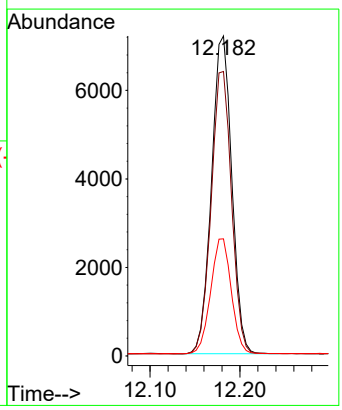


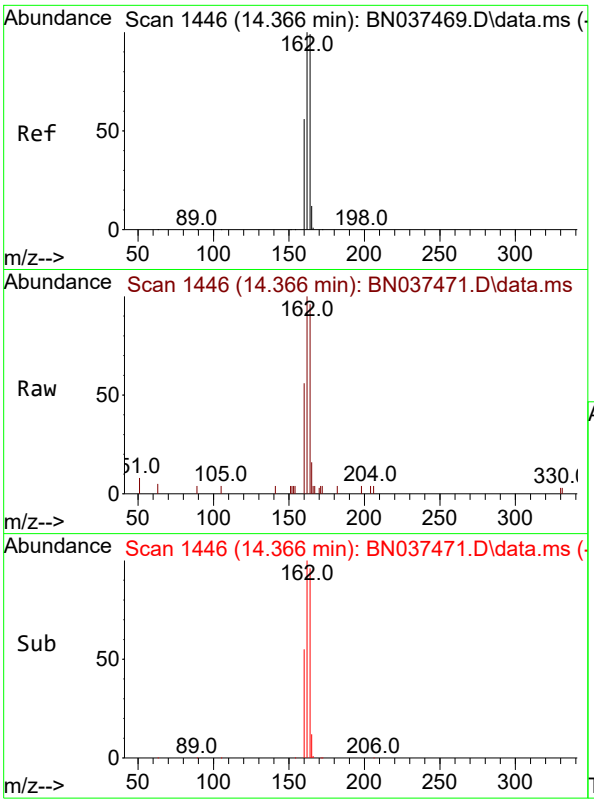


#12
2-Methylnaphthalene
Concen: 1.644 ng
RT: 12.182 min Scan# 1156
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:142 Resp: 11263

Ion	Ratio	Lower	Upper
142	100		
141	88.9	70.6	105.8
115	36.6	30.0	45.0



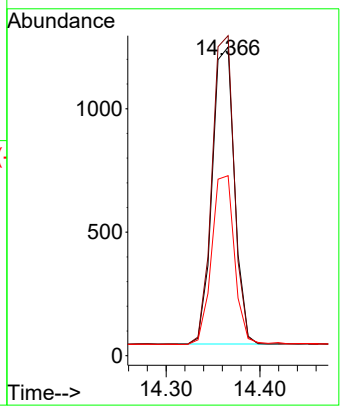


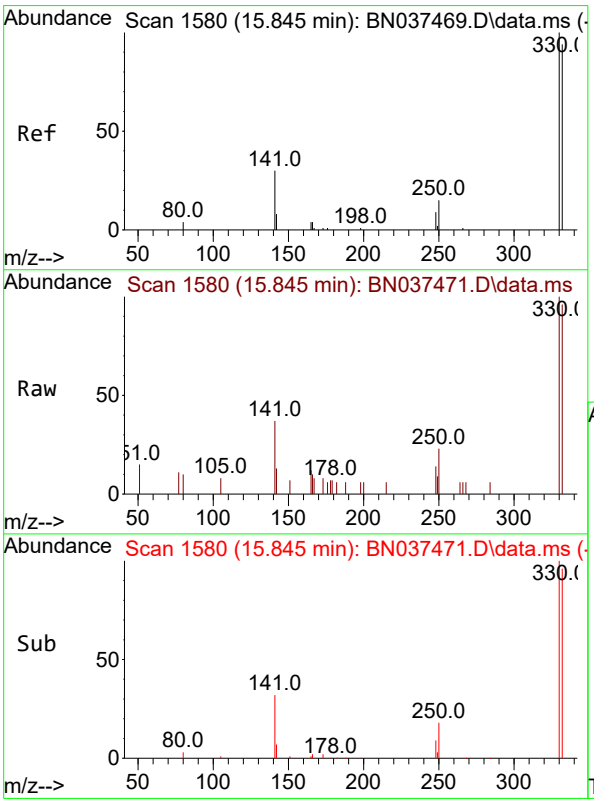
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:164 Resp: 1984

Ion	Ratio	Lower	Upper
164	100		
162	103.7	81.1	121.7
160	58.3	46.5	69.7

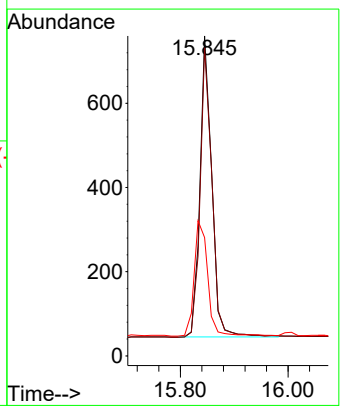


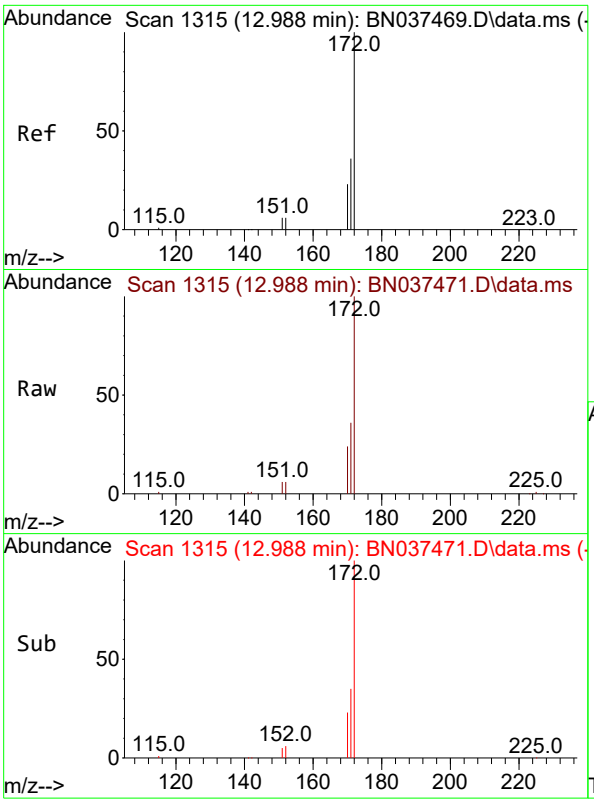


#14
2,4,6-Tribromophenol
Concen: 1.626 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:330 Resp: 1094

Ion	Ratio	Lower	Upper
330	100		
332	97.7	82.0	123.0
141	43.9	36.2	54.2



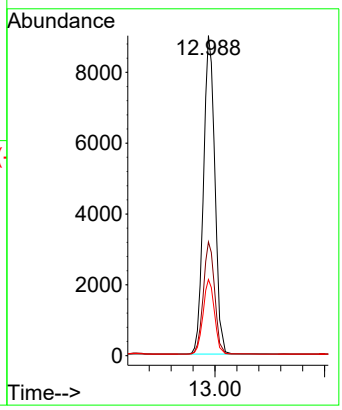


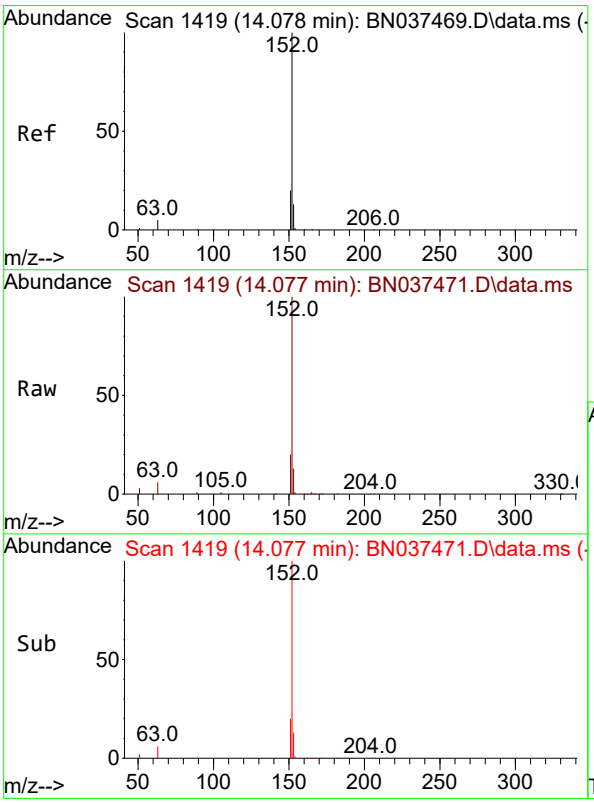
#15
2-Fluorobiphenyl
Concen: 1.624 ng
RT: 12.988 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:172 Resp: 18395

Ion	Ratio	Lower	Upper
172	100		
171	35.5	29.8	44.8
170	23.8	20.0	30.0

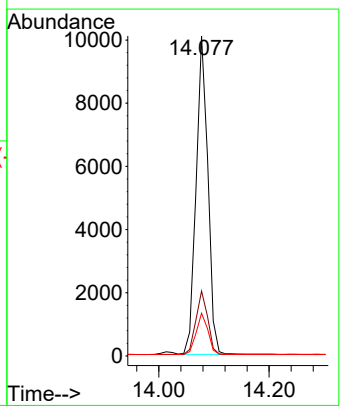


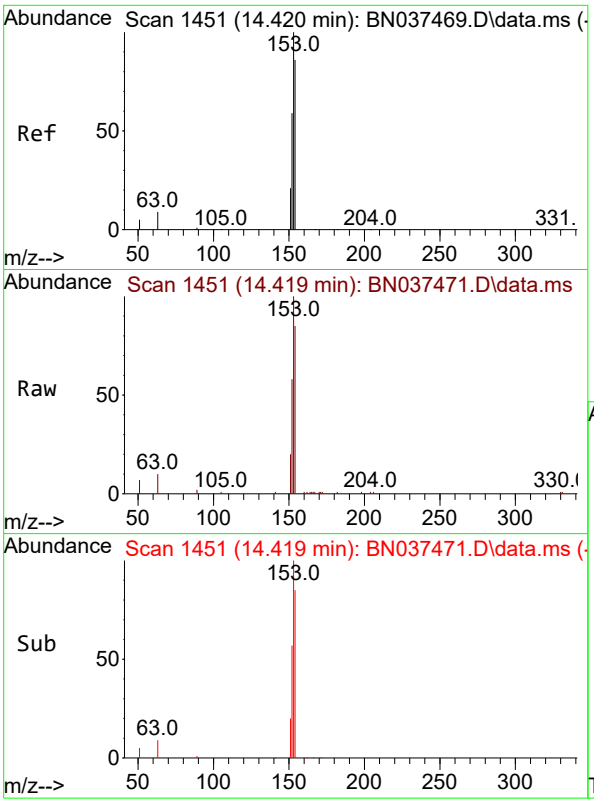


#16
Acenaphthylene
Concen: 1.650 ng
RT: 14.077 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:152 Resp: 14926

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.4	24.6
153	12.9	10.6	15.8



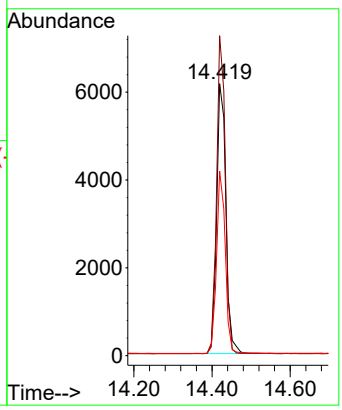


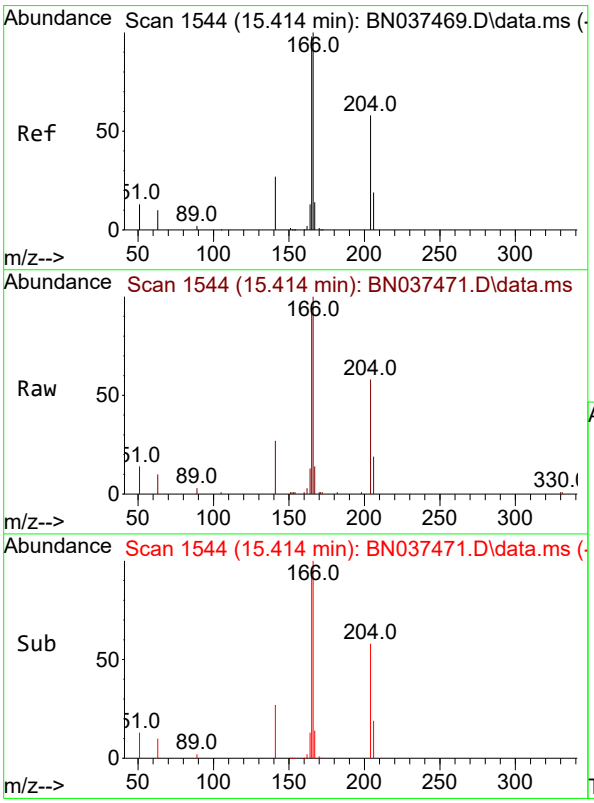
#17
Acenaphthene
Concen: 1.648 ng
RT: 14.419 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:154 Resp: 10002

Ion	Ratio	Lower	Upper
154	100		
153	111.6	89.4	134.0
152	64.5	53.2	79.8

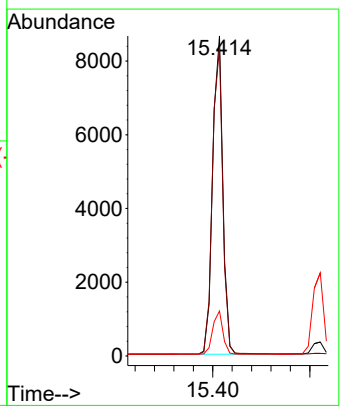


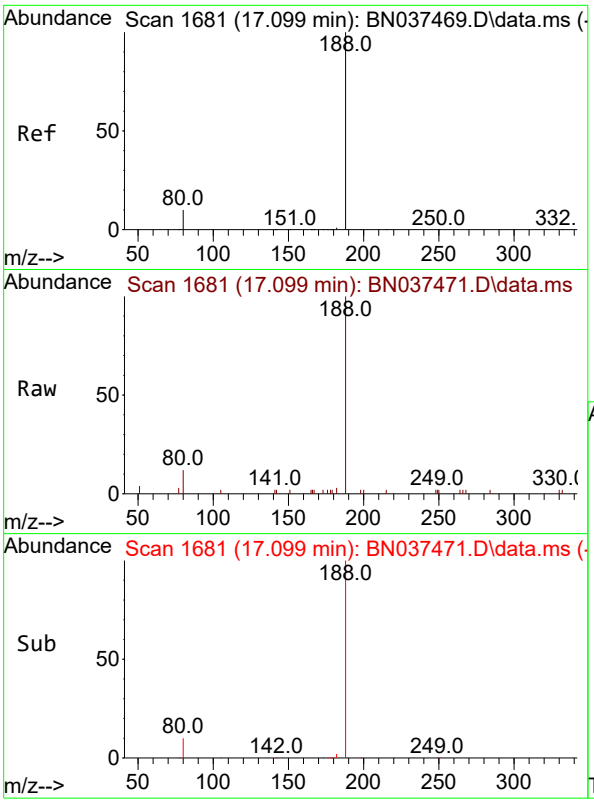


#18
Fluorene
Concen: 1.671 ng
RT: 15.414 min Scan# 1544
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:166 Resp: 12742

Ion	Ratio	Lower	Upper
166	100		
165	98.4	79.4	119.2
167	13.2	10.6	15.8



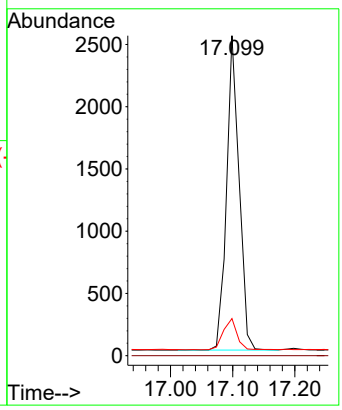


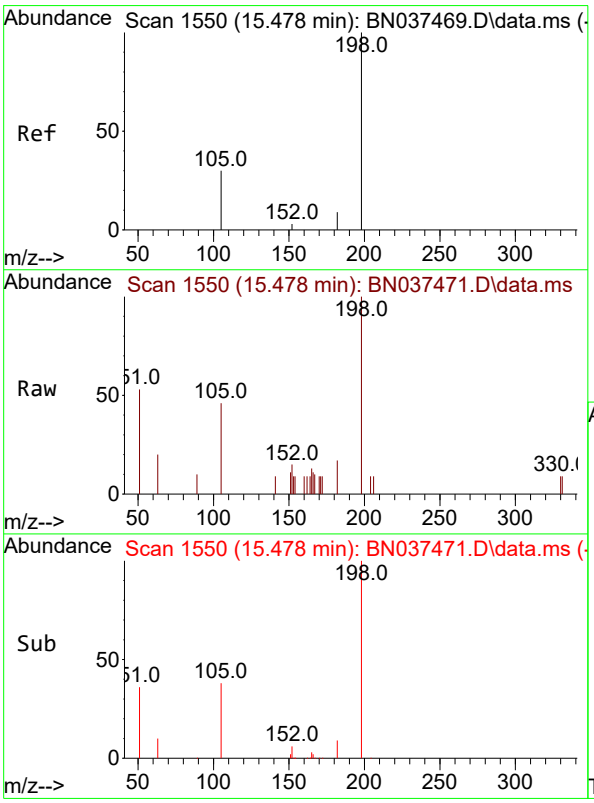
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.099 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:188 Resp: 3525

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.6	9.3	13.9

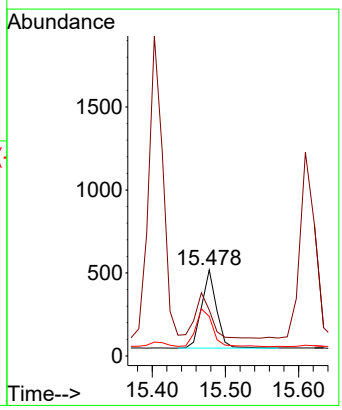


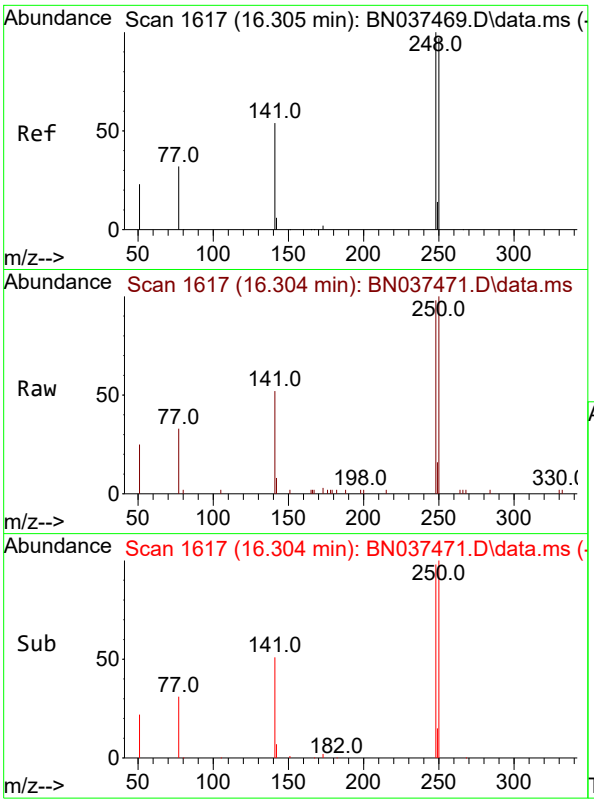


#20
4,6-Dinitro-2-methylphenol
Concen: 1.792 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:198 Resp: 710

Ion	Ratio	Lower	Upper
198	100		
51	53.4	86.0	129.0#
105	45.9	53.0	79.4#



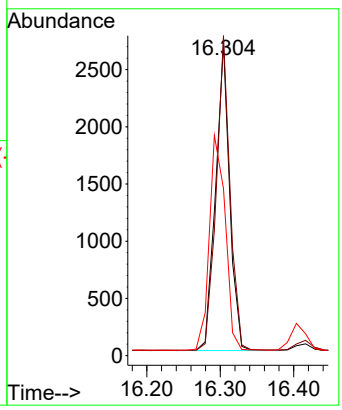


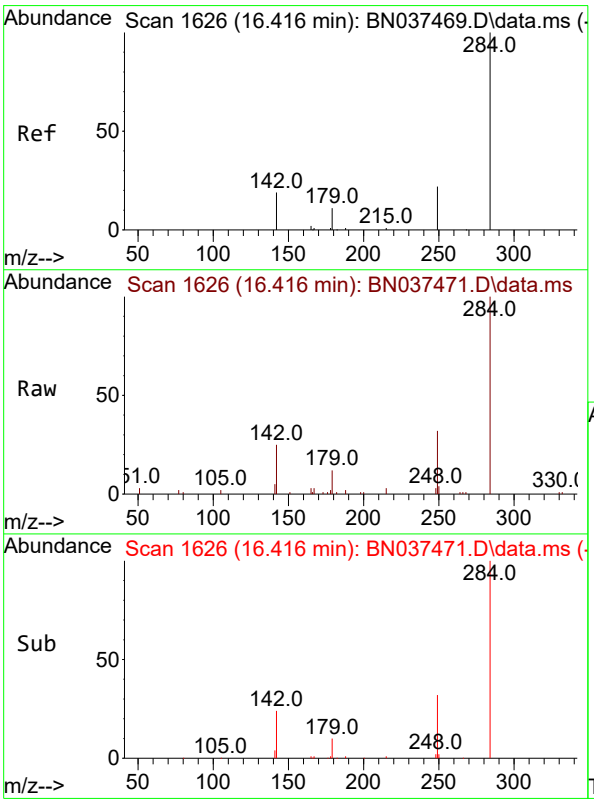
#21
4-Bromophenyl-phenylether
Concen: 1.624 ng
RT: 16.304 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:248 Resp: 3572

Ion	Ratio	Lower	Upper
248	100		
250	102.4	77.8	116.6
141	53.5	45.9	68.9

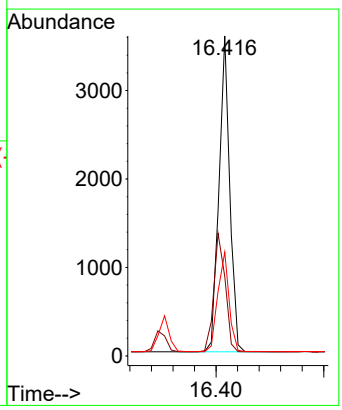


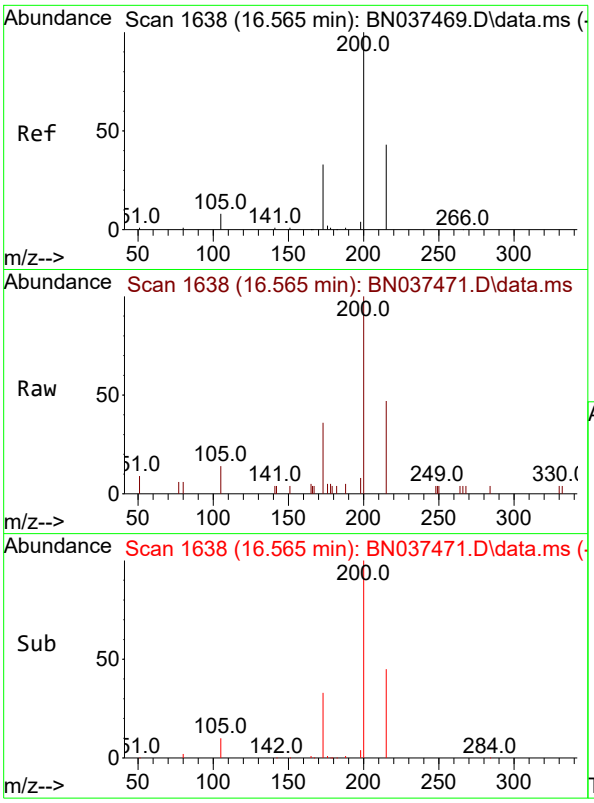


#22
Hexachlorobenzene
Concen: 1.642 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:284 Resp: 4981

Ion	Ratio	Lower	Upper
284	100		
142	39.6	31.3	46.9
249	33.1	26.6	40.0



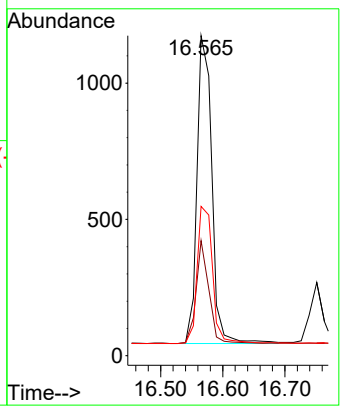


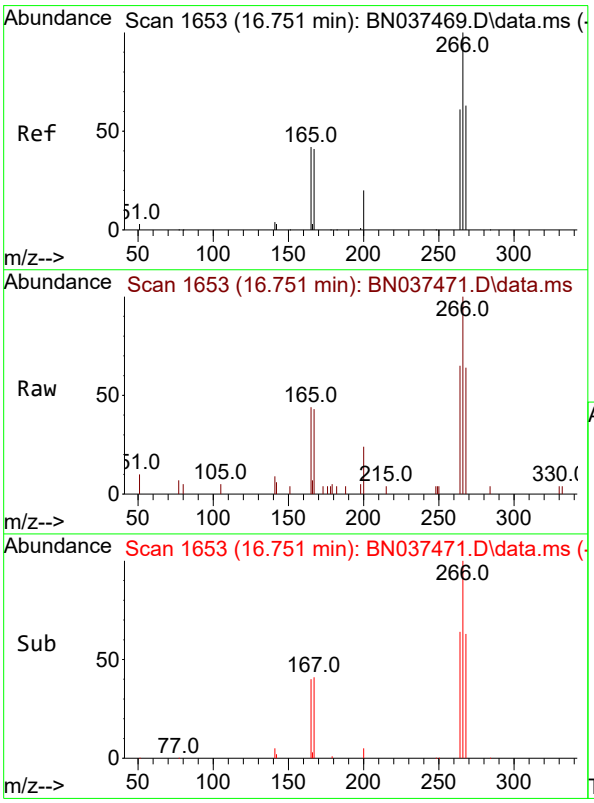
#23
Atrazine
Concen: 1.715 ng
RT: 16.565 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:200 Resp: 1876

Ion	Ratio	Lower	Upper
200	100		
173	35.9	34.3	51.5
215	46.7	41.6	62.4

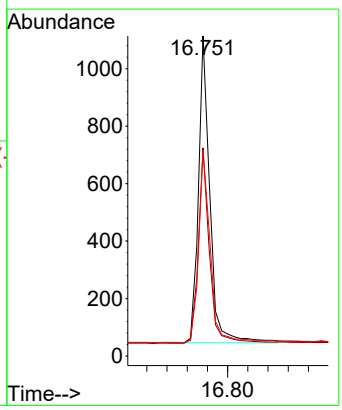


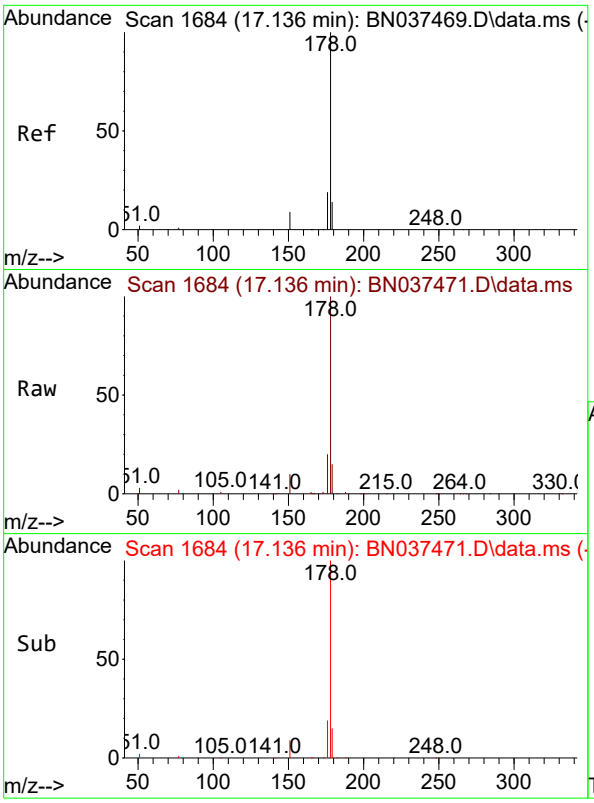


#24
Pentachlorophenol
Concen: 1.610 ng
RT: 16.751 min Scan# 1653
Delta R.T. 0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:266 Resp: 1682

Ion	Ratio	Lower	Upper
266	100		
264	61.8	47.5	71.3
268	64.0	50.6	76.0



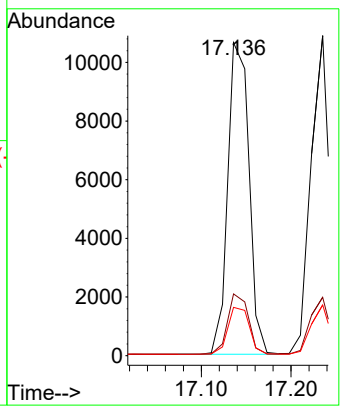


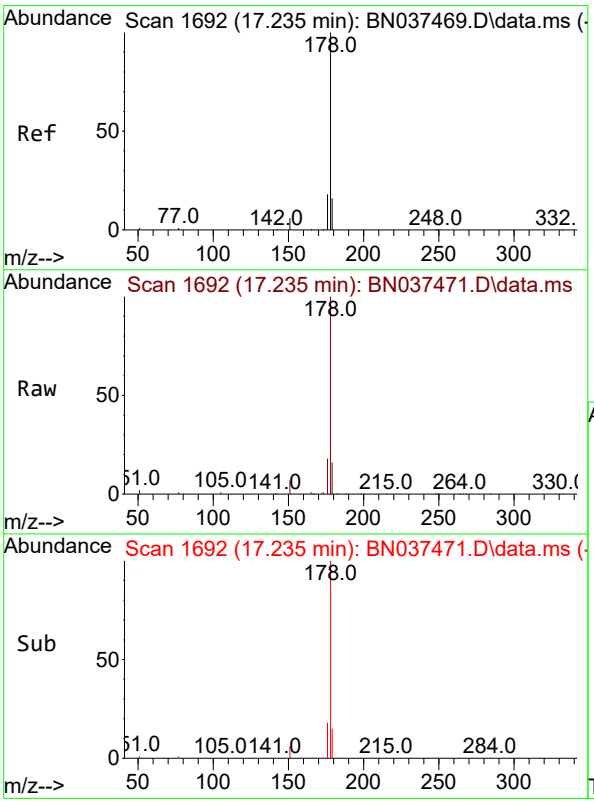
#25
Phenanthrene
Concen: 1.631 ng
RT: 17.136 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:178 Resp: 17507

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.1	22.7
179	15.2	12.2	18.2

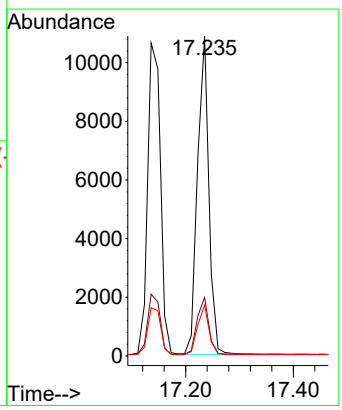


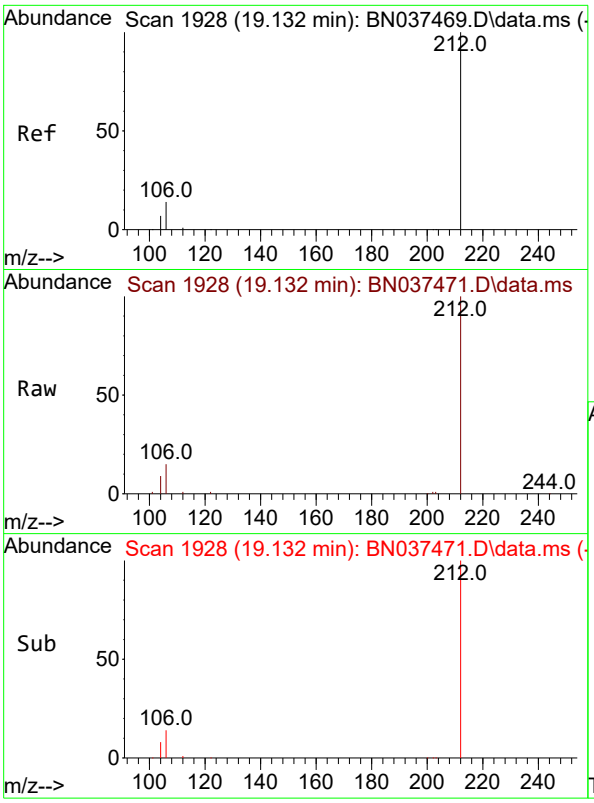


#26
Anthracene
Concen: 1.647 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:178 Resp: 15953

Ion	Ratio	Lower	Upper
178	100		
176	18.3	14.9	22.3
179	15.4	12.3	18.5



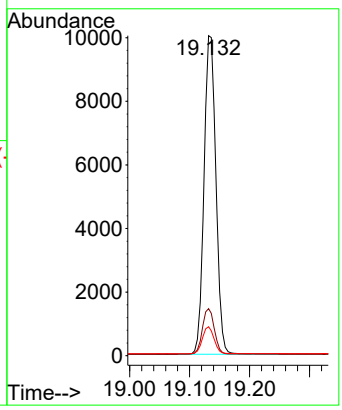


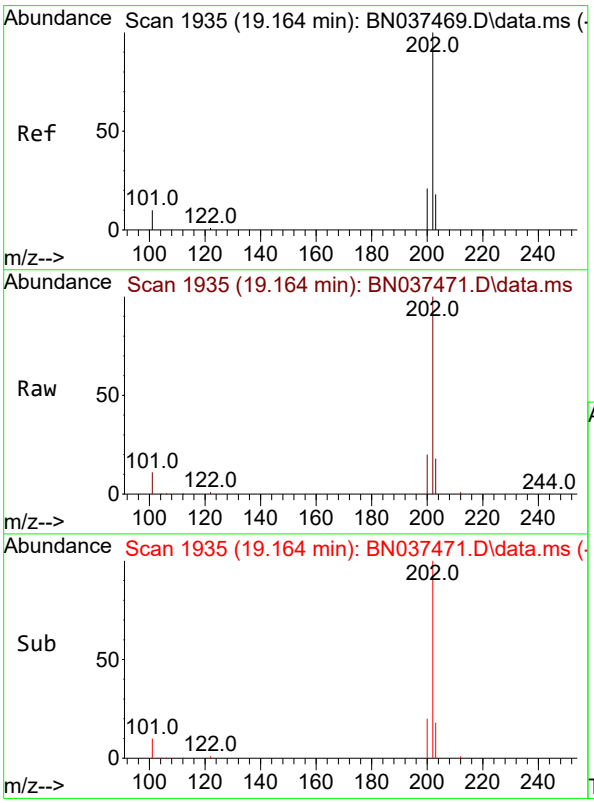
#27
Fluoranthene-d10
Concen: 1.556 ng
RT: 19.132 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:212 Resp: 13833

Ion	Ratio	Lower	Upper
212	100		
106	14.3	11.7	17.5
104	8.3	6.6	10.0

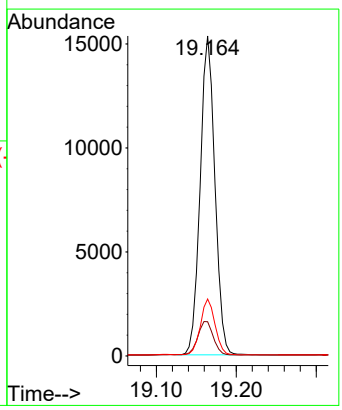


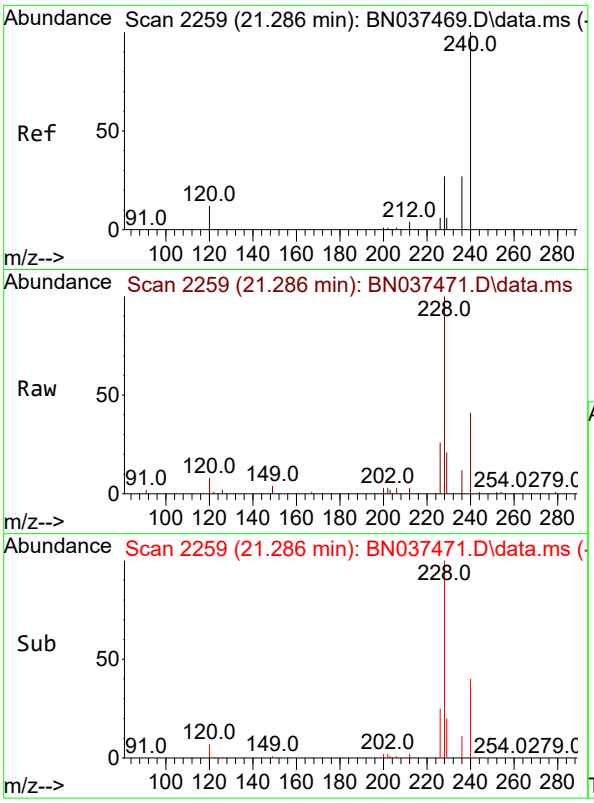


#28
Fluoranthene
Concen: 1.663 ng
RT: 19.164 min Scan# 1935
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:202 Resp: 19585

Ion	Ratio	Lower	Upper
202	100		
101	11.2	9.2	13.8
203	17.3	14.0	21.0



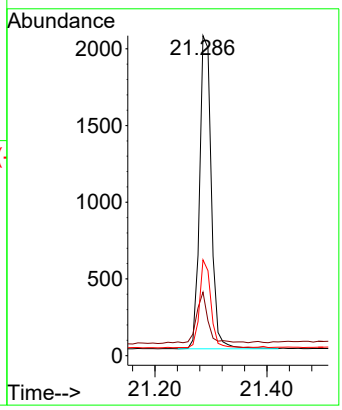


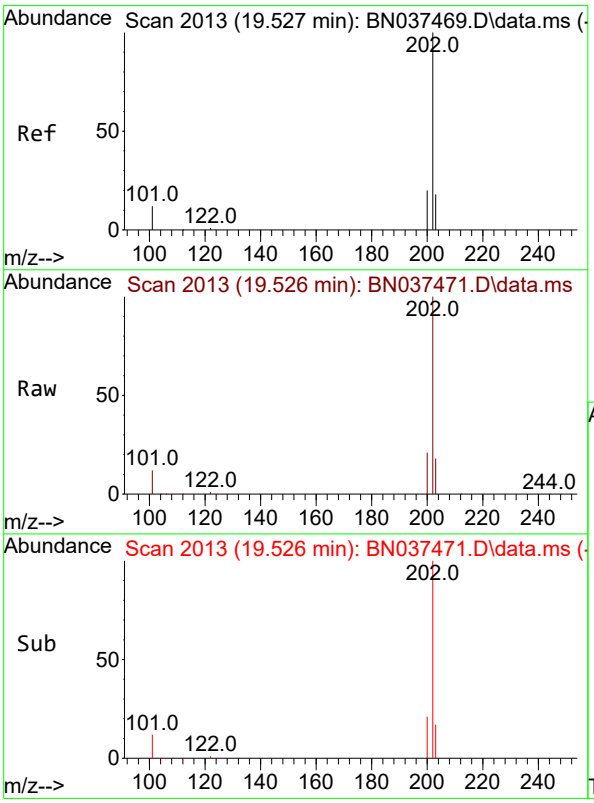
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.286 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:240 Resp: 2965

Ion	Ratio	Lower	Upper
240	100		
120	19.8	12.4	18.6#
236	30.0	22.9	34.3

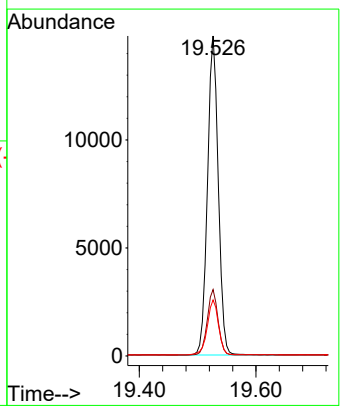


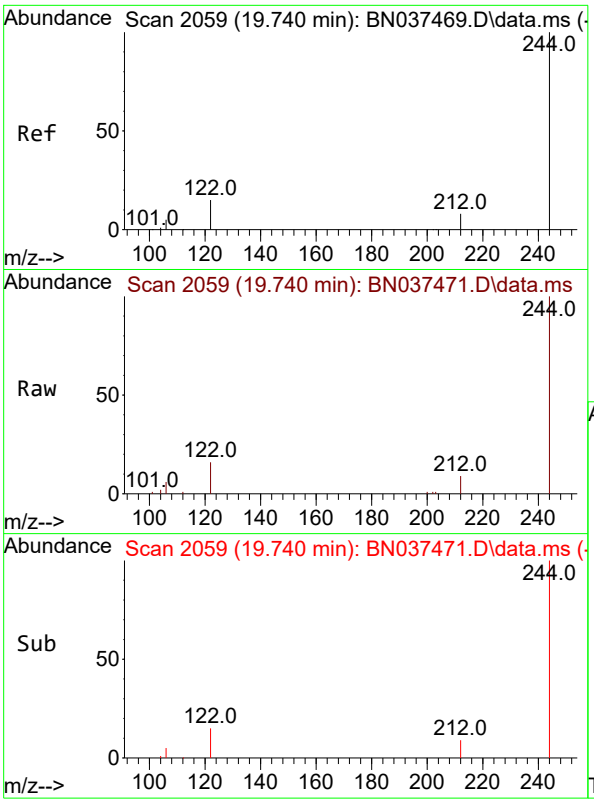


#30
Pyrene
Concen: 1.597 ng
RT: 19.526 min Scan# 2013
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:202 Resp: 19037

Ion	Ratio	Lower	Upper
202	100		
200	20.4	16.4	24.6
203	17.9	14.3	21.5



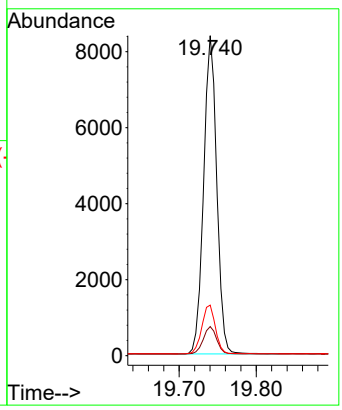


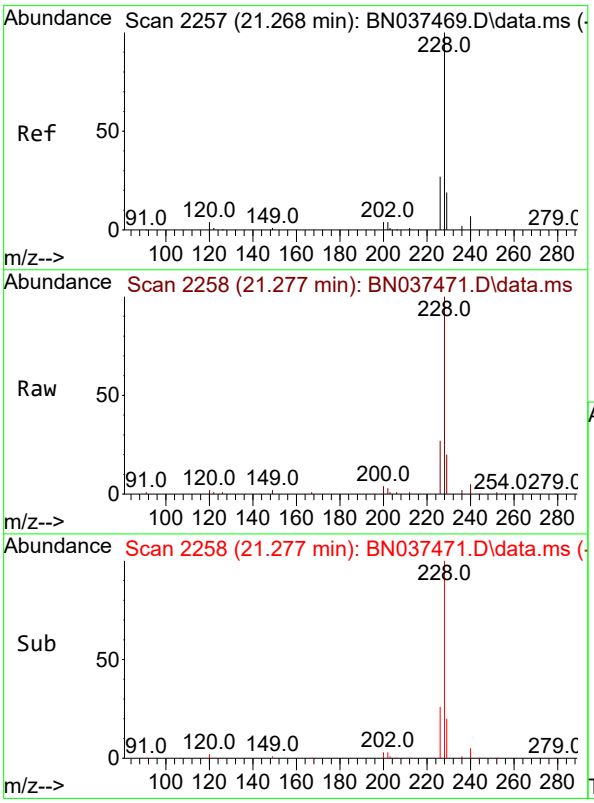
#31
Terphenyl-d14
Concen: 1.602 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:244 Resp: 9911

Ion	Ratio	Lower	Upper
244	100		
212	9.1	8.7	13.1
122	15.8	14.1	21.1

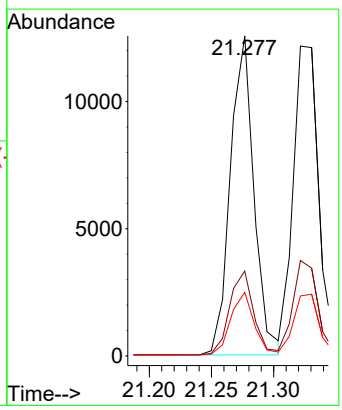


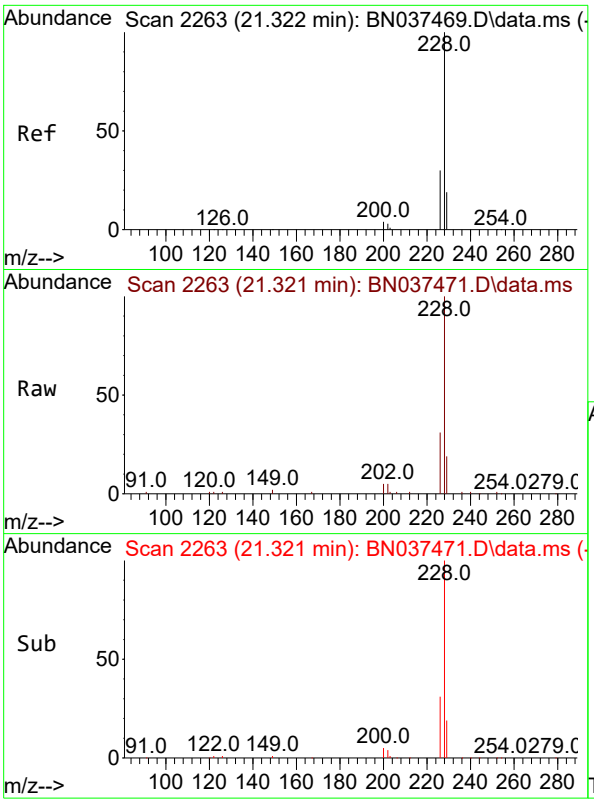


#32
Benzo(a)anthracene
Concen: 1.647 ng
RT: 21.277 min Scan# 2258
Delta R.T. 0.009 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:228 Resp: 16533

Ion	Ratio	Lower	Upper
228	100		
226	26.6	22.7	34.1
229	19.9	16.6	24.8



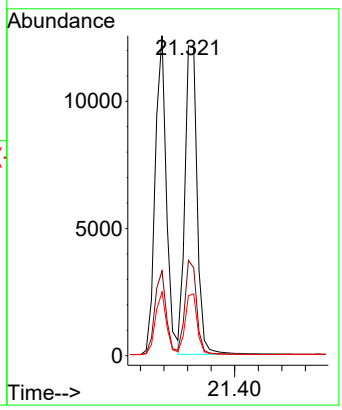


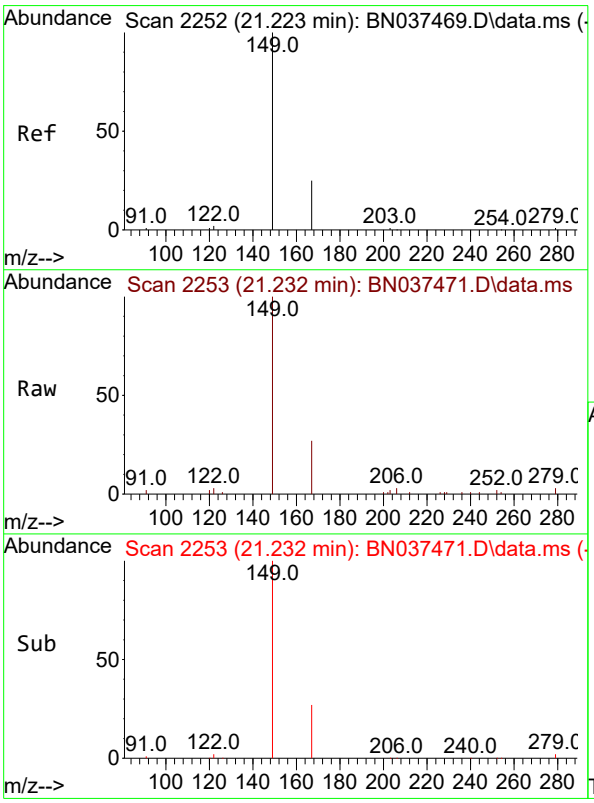
#33
Chrysene
Concen: 1.592 ng
RT: 21.321 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:228 Resp: 17469

Ion	Ratio	Lower	Upper
228	100		
226	30.8	24.6	36.8
229	19.4	16.4	24.6

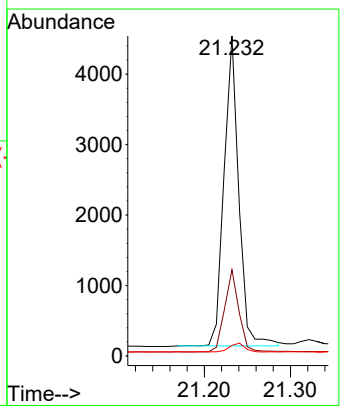


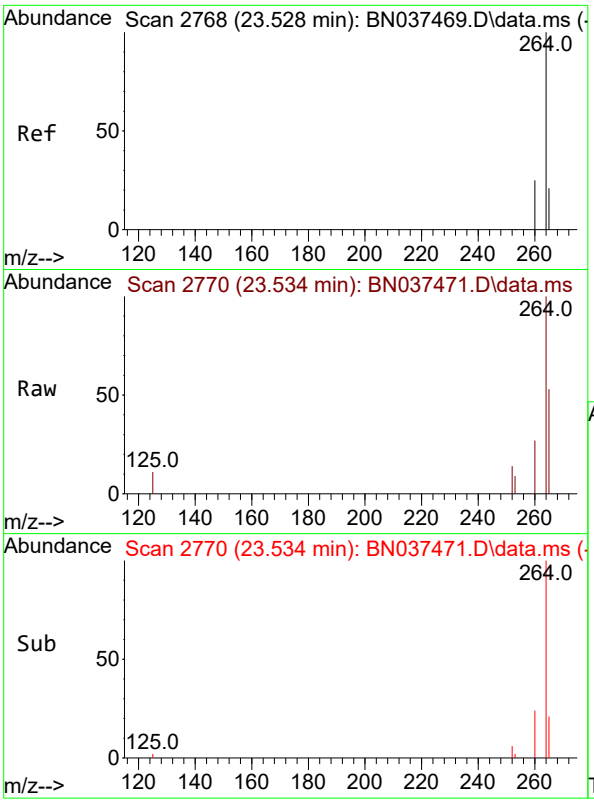


#34
Bis(2-ethylhexyl)phthalate
Concen: 1.525 ng
RT: 21.232 min Scan# 2253
Delta R.T. 0.009 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:149 Resp: 5207

Ion	Ratio	Lower	Upper
149	100		
167	25.6	19.4	29.2
279	2.9	2.5	3.7



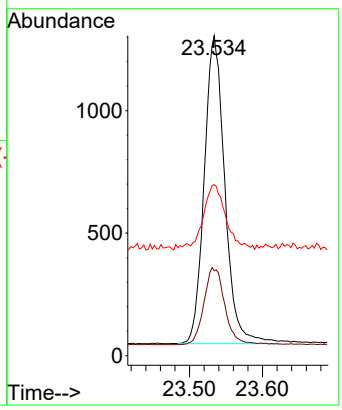


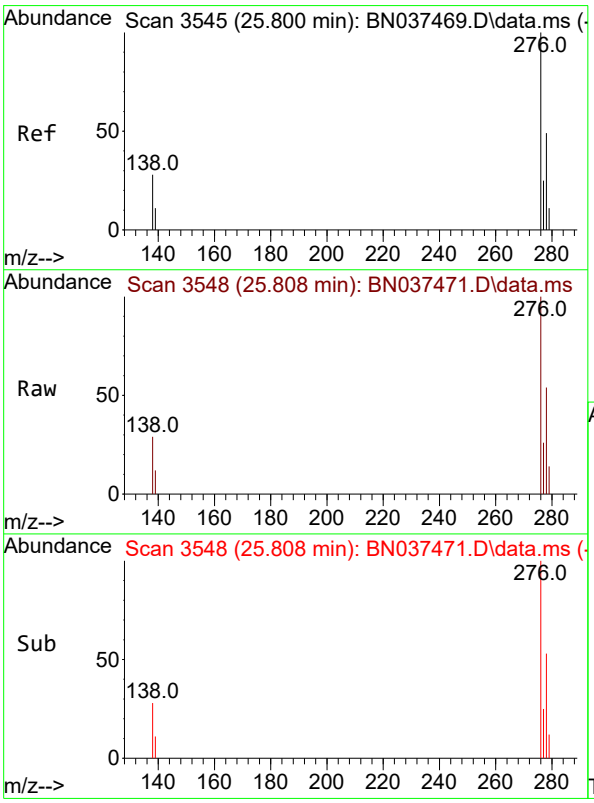
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.534 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:264 Resp: 2463

Ion	Ratio	Lower	Upper
264	100		
260	26.6	21.7	32.5
265	53.4	41.6	62.4

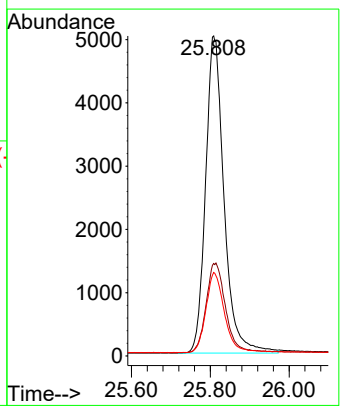


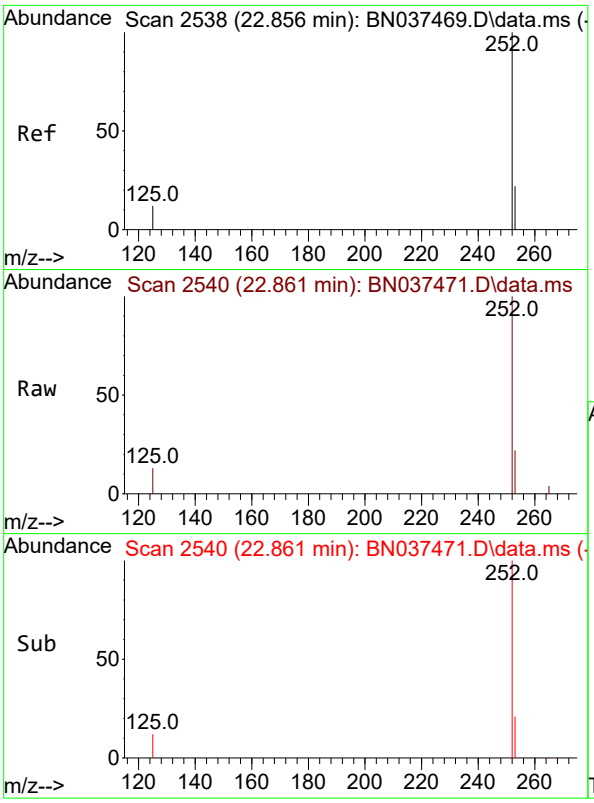


#36
Indeno(1,2,3-cd)pyrene
Concen: 1.705 ng
RT: 25.808 min Scan# 3548
Delta R.T. 0.009 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:276 Resp: 16302

Ion	Ratio	Lower	Upper
276	100		
138	29.5	23.4	35.2
277	25.2	19.8	29.8



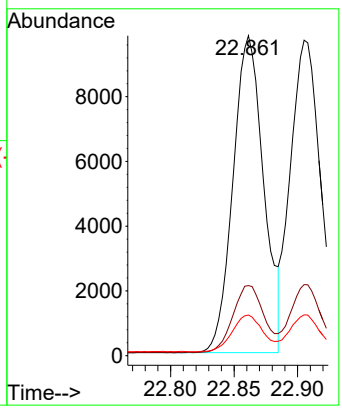


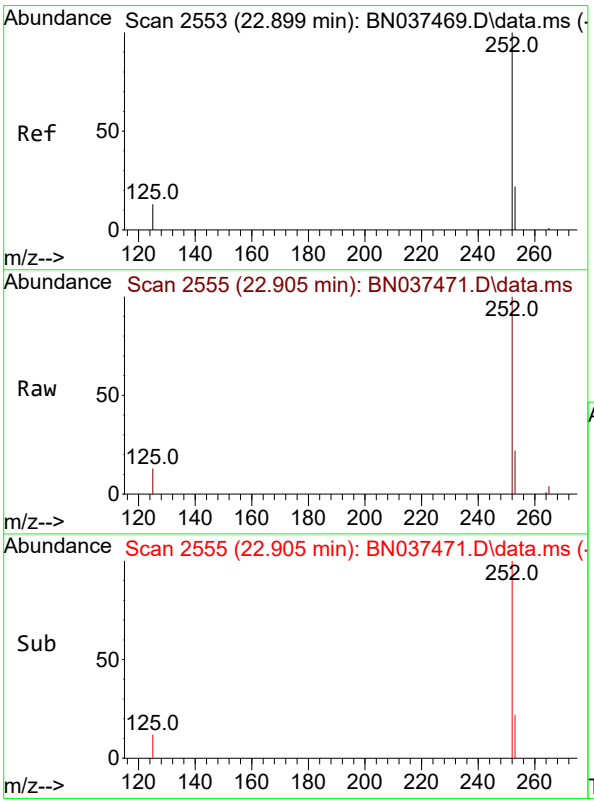
#37
Benzo(b)fluoranthene
Concen: 1.716 ng
RT: 22.861 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 16437

Ion	Ratio	Lower	Upper
252	100		
253	21.9	20.1	30.1
125	12.7	13.7	20.5#

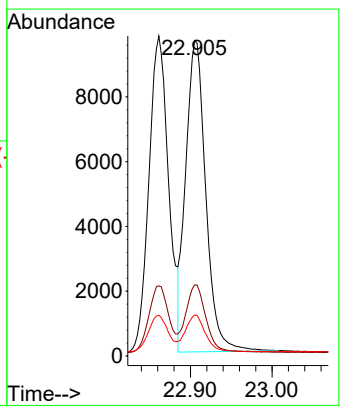


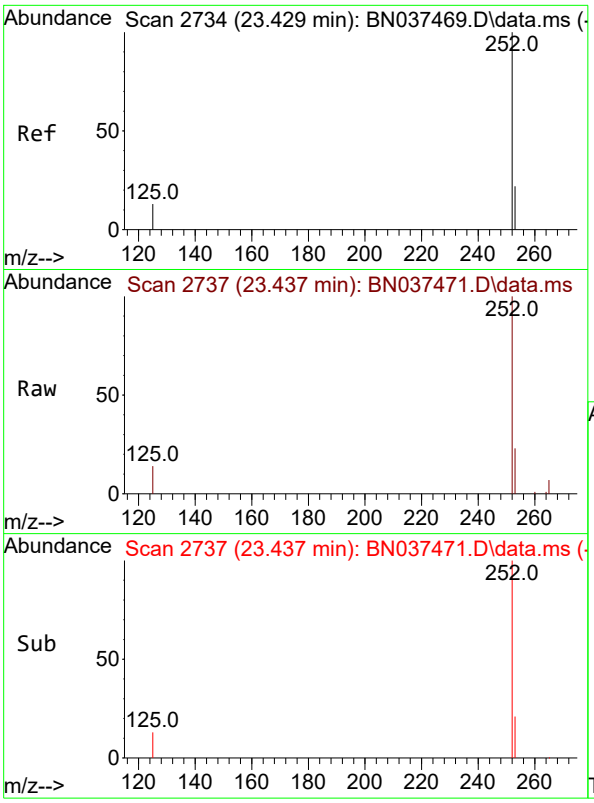


#38
Benzo(k)fluoranthene
Concen: 1.698 ng
RT: 22.905 min Scan# 2555
Delta R.T. 0.006 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:252 Resp: 16488

Ion	Ratio	Lower	Upper
252	100		
253	22.5	20.4	30.6
125	12.9	14.6	21.8#



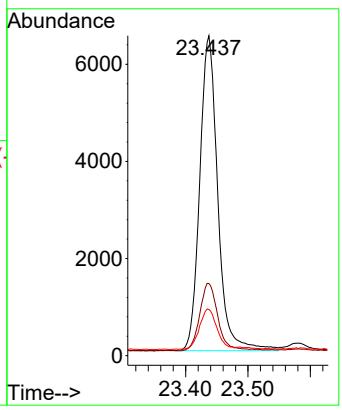


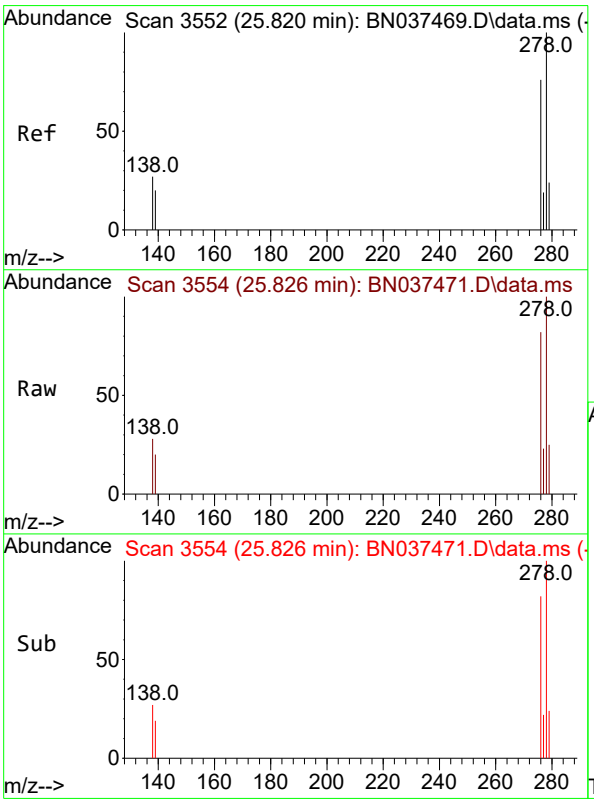
#39
Benzo(a)pyrene
Concen: 1.693 ng
RT: 23.437 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 13051

Ion	Ratio	Lower	Upper
252	100		
253	22.6	21.8	32.6
125	14.4	16.7	25.1#

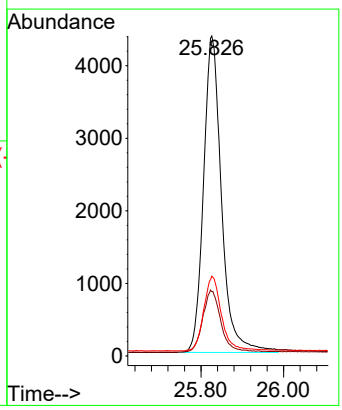


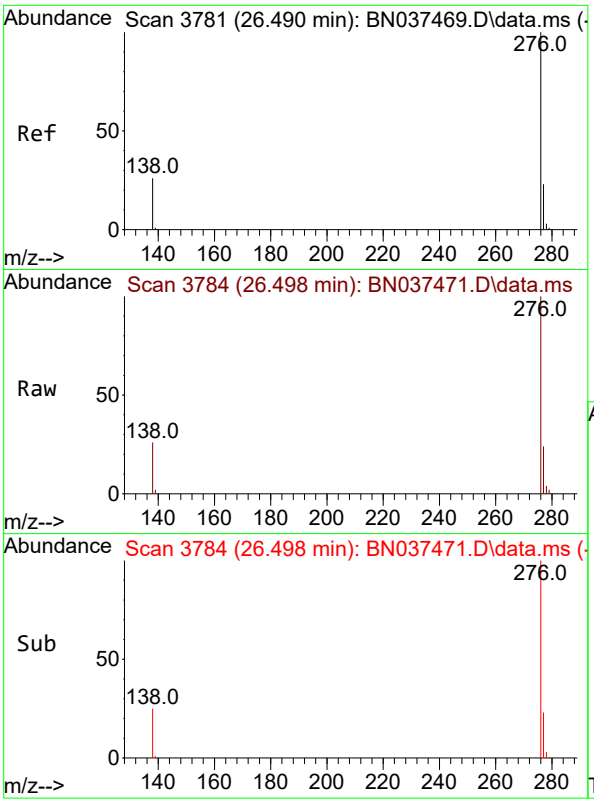


#40
Dibenzo(a,h)anthracene
Concen: 1.714 ng
RT: 25.826 min Scan# 3554
Delta R.T. 0.006 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:278 Resp: 13217

Ion	Ratio	Lower	Upper
278	100		
139	20.1	19.9	29.9
279	24.9	24.8	37.2





#41
Benzo(g,h,i)perylene
Concen: 1.682 ng
RT: 26.498 min Scan# 3
Delta R.T. 0.009 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:276 Resp: 14207

Ion	Ratio	Lower	Upper
276	100		
277	24.4	21.7	32.5
138	26.0	24.3	36.5