Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021225\
Data File : BN036441.D
Acq On : 12 Feb 2025 15:48
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Feb 12 16:13:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2210	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	5455	0.400	ng		0.00
13) Acenaphthene-d10	14.387	164	3758	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	8093	0.400	ng		0.00
29) Chrysene-d12	21.322	240	7173	0.400	ng		0.00
35) Perylene-d12	23.589	264	7217	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.341	112	1918	0.367	ng		0.00
5) Phenol-d6	6.930	99	2195	0.358	ng		0.00
8) Nitrobenzene-d5	8.907	82	2082	0.387	ng		0.00
11) 2-Methylnaphthalene-d10	12.136	152	3238	0.386	ng		0.00
14) 2,4,6-Tribromophenol	15.882	330	605	0.325	ng		0.00
15) 2-Fluorobiphenyl	13.019	172	5114	0.362	ng		0.00
27) Fluoranthene-d10	19.164	212	8393	0.373	ng		0.00
31) Terphenyl-d14	19.768	244	5878	0.384	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.268	88	946	0.391	ng		97
3) n-Nitrosodimethylamine	3.579	42	1672	0.398	ng		95
6) bis(2-Chloroethyl)ether	7.175	93	2521	0.393	ng		97
9) Naphthalene	10.594	128	6118	0.389	ng		100
10) Hexachlorobutadiene	10.882	225	1505	0.393	ng	#	99
12) 2-Methylnaphthalene	12.212	142	3968	0.385	ng		98
16) Acenaphthylene	14.110	152	6026	0.363	ng		100
17) Acenaphthene	14.452	154	4122	0.372	ng		99
18) Fluorene	15.435	166	5886	0.373	ng		99
20) 4,6-Dinitro-2-methylph...	15.522	198	505	0.318	ng		94
21) 4-Bromophenyl-phenylether	16.329	248	1877	0.389	ng	#	90
22) Hexachlorobenzene	16.441	284	2387	0.400	ng		99
23) Atrazine	16.602	200	1442	0.358	ng		96
24) Pentachlorophenol	16.801	266	931	0.329	ng		99
25) Phenanthrene	17.173	178	9138	0.391	ng		100
26) Anthracene	17.273	178	7822	0.379	ng		99
28) Fluoranthene	19.197	202	10851	0.377	ng		99
30) Pyrene	19.559	202	11169	0.404	ng		100
32) Benzo(a)anthracene	21.304	228	9071	0.384	ng		98
33) Chrysene	21.357	228	10950	0.428	ng		98
34) Bis(2-ethylhexyl)phtha...	21.241	149	5096	0.347	ng		99
36) Indeno(1,2,3-cd)pyrene	25.890	276	9792	0.388	ng		98
37) Benzo(b)fluoranthene	22.905	252	9872	0.415	ng		100
38) Benzo(k)fluoranthene	22.952	252	10113	0.413	ng		99
39) Benzo(a)pyrene	23.490	252	8492	0.409	ng		97
40) Dibenzo(a,h)anthracene	25.905	278	7530	0.378	ng		97
41) Benzo(g,h,i)perylene	26.586	276	8843	0.392	ng		99

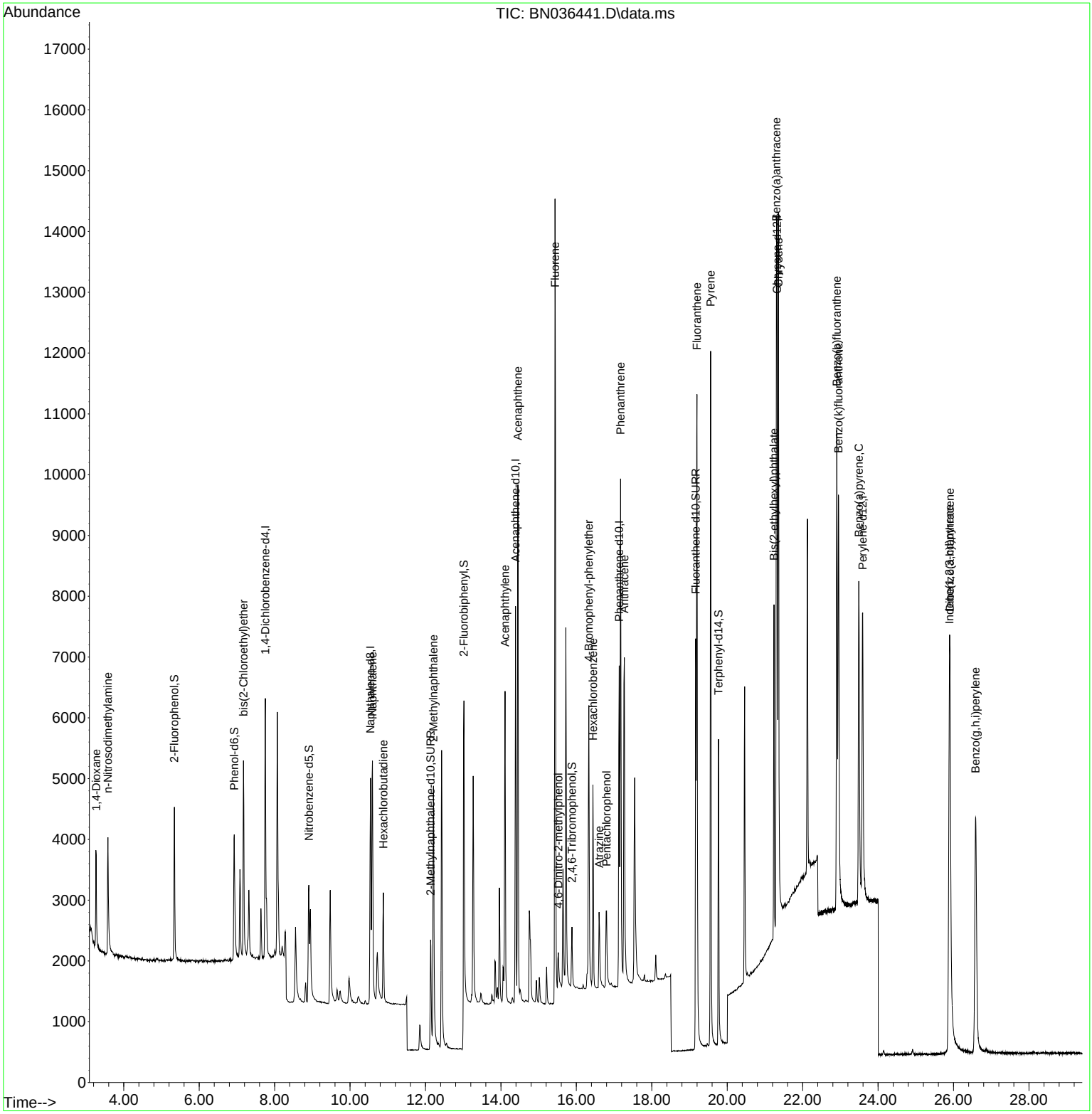
(#) = qualifier out of range (m) = manual integration (+) = signals summed

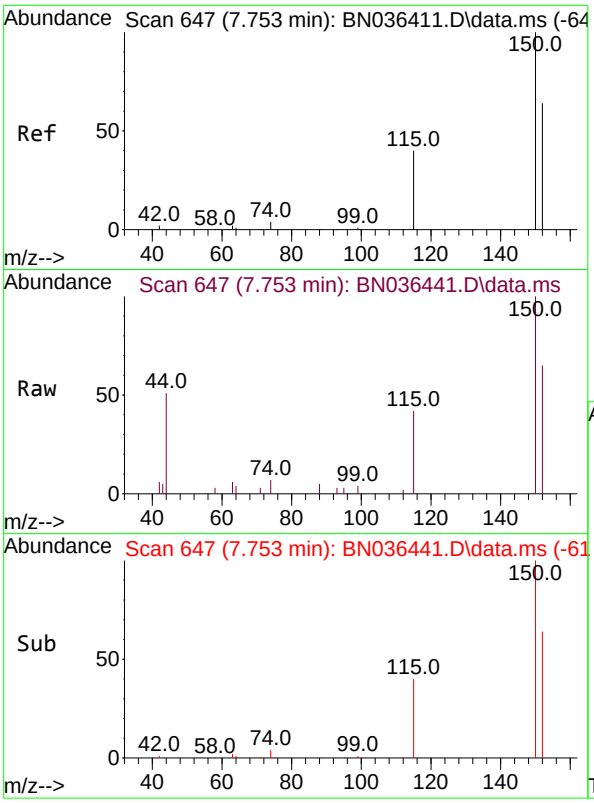
Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021225\
Data File : BN036441.D
Acq On : 12 Feb 2025 15:48
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Feb 12 16:13:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



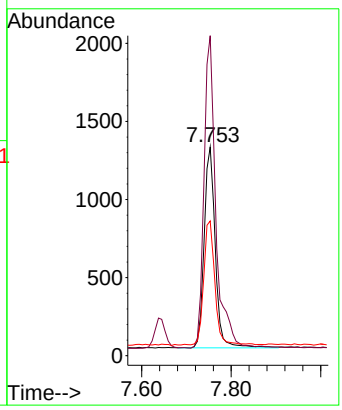


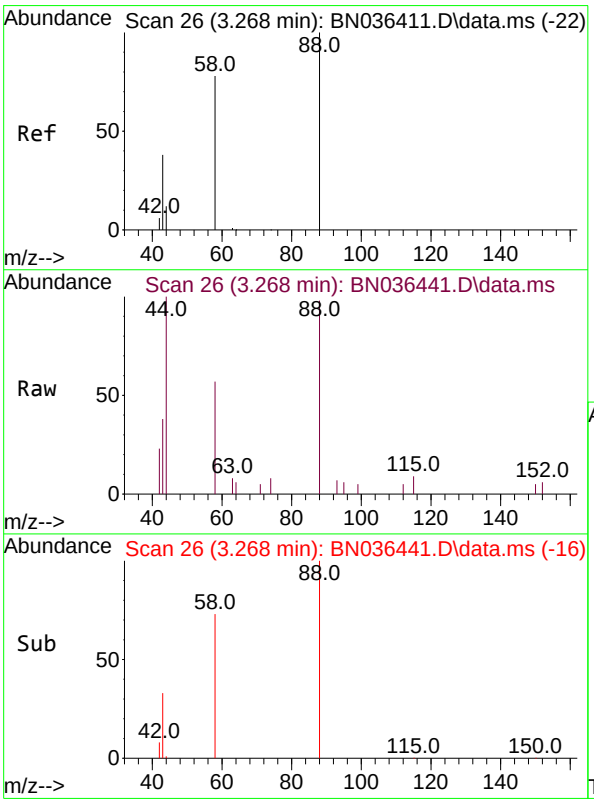
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 2210

Ion	Ratio	Lower	Upper
152	100		
150	153.4	123.7	185.5
115	64.6	52.5	78.7

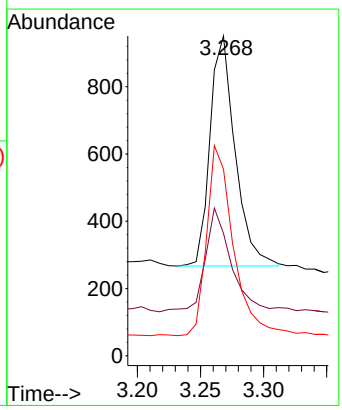


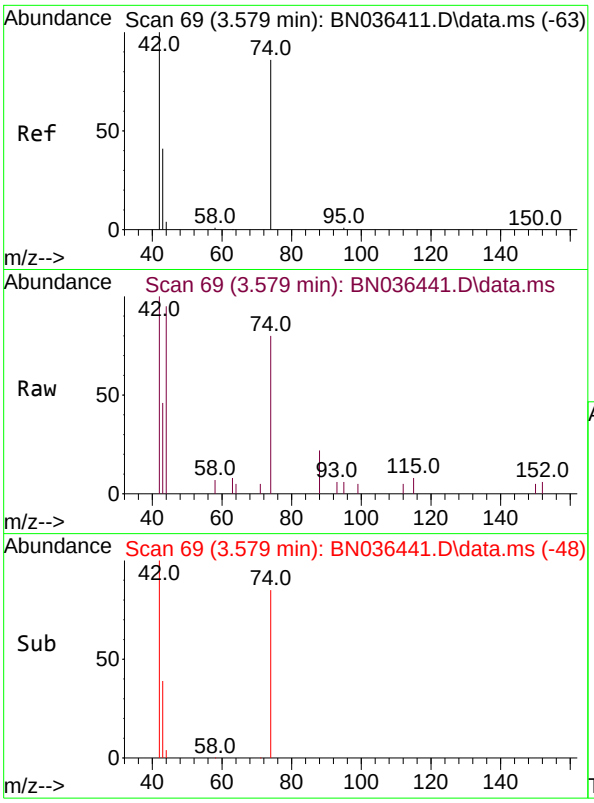


#2
1,4-Dioxane
Concen: 0.391 ng
RT: 3.268 min Scan# 26
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion: 88 Resp: 946

Ion	Ratio	Lower	Upper
88	100		
43	46.0	33.7	50.5
58	87.0	68.9	103.3



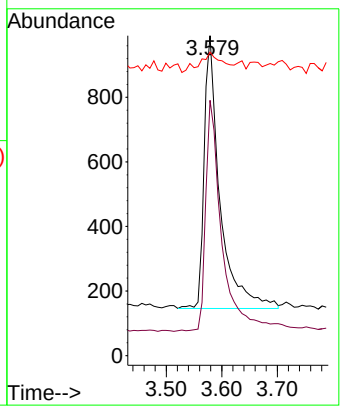


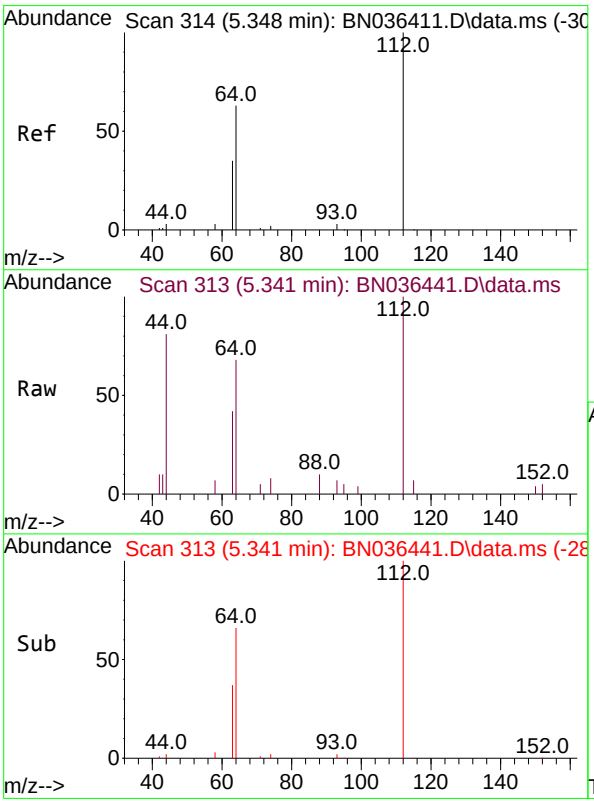
#3
n-Nitrosodimethylamine
Concen: 0.398 ng
RT: 3.579 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 1672

Ion	Ratio	Lower	Upper
42	100		
74	85.1	71.8	107.6
44	10.6	7.8	11.6

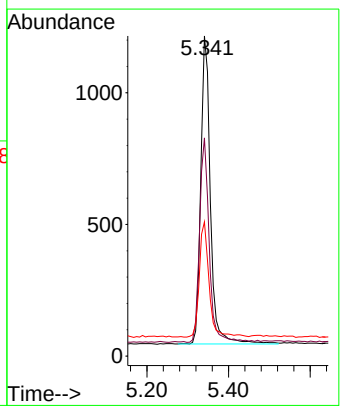


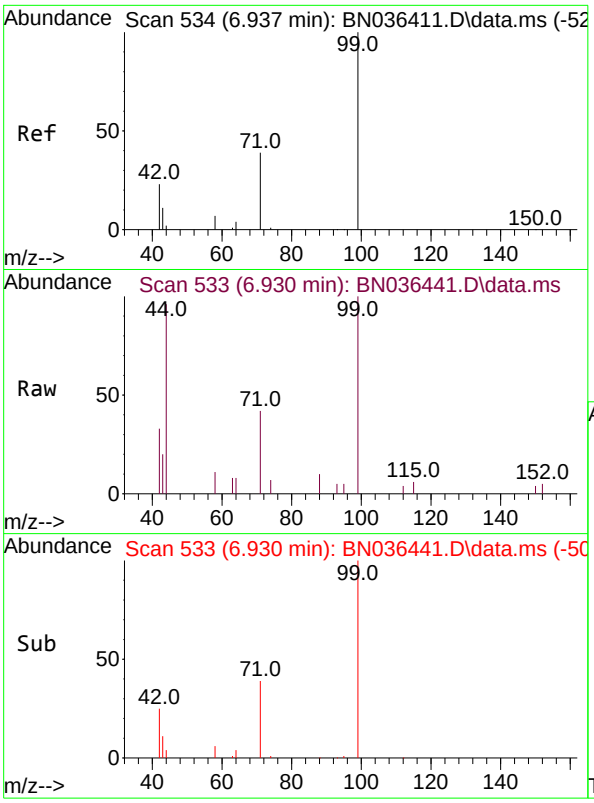


#4
2-Fluorophenol
Concen: 0.367 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:112 Resp: 1918

Ion	Ratio	Lower	Upper
112	100		
64	66.7	53.4	80.0
63	37.3	30.3	45.5



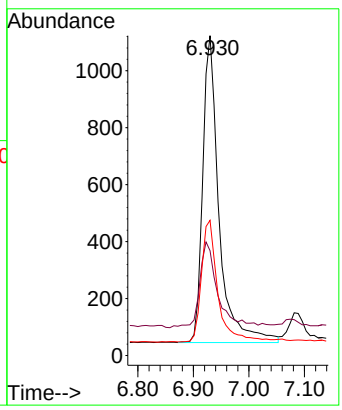


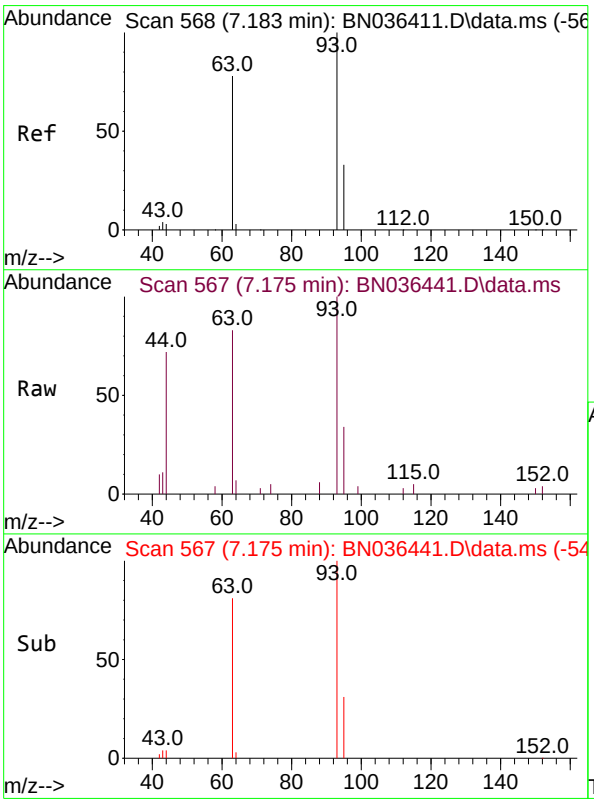
#5
Phenol-d6
Concen: 0.358 ng
RT: 6.930 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 2195

Ion	Ratio	Lower	Upper
99	100		
42	31.5	21.7	32.5
71	40.0	32.6	49.0

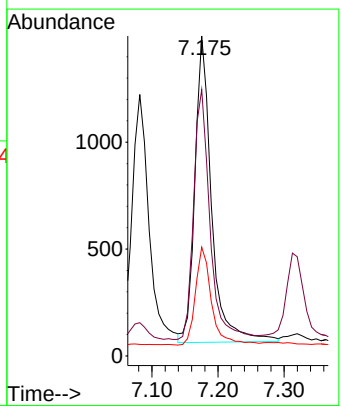


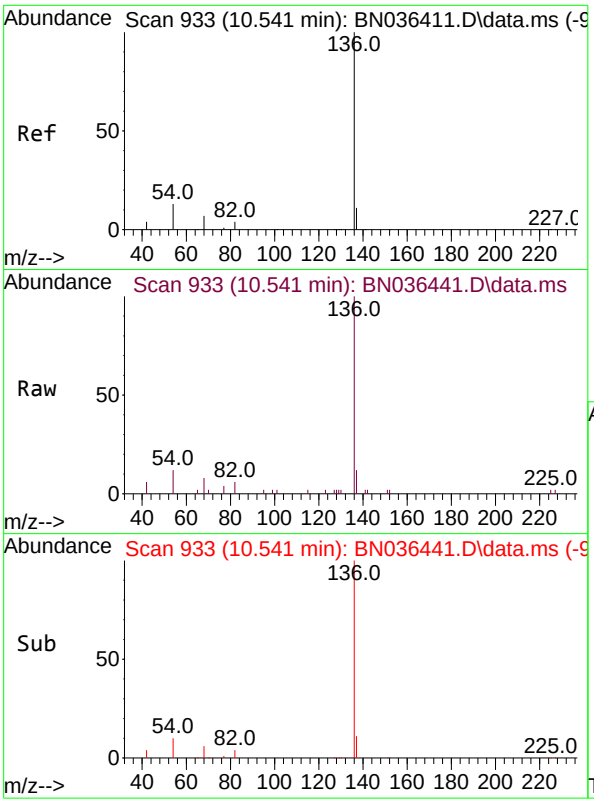


#6
bis(2-Chloroethyl)ether
Concen: 0.393 ng
RT: 7.175 min Scan# 567
Delta R.T. -0.007 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion: 93 Resp: 2521

Ion	Ratio	Lower	Upper
93	100		
63	80.0	66.3	99.5
95	30.8	26.2	39.4



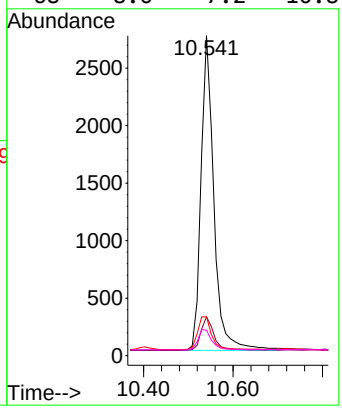


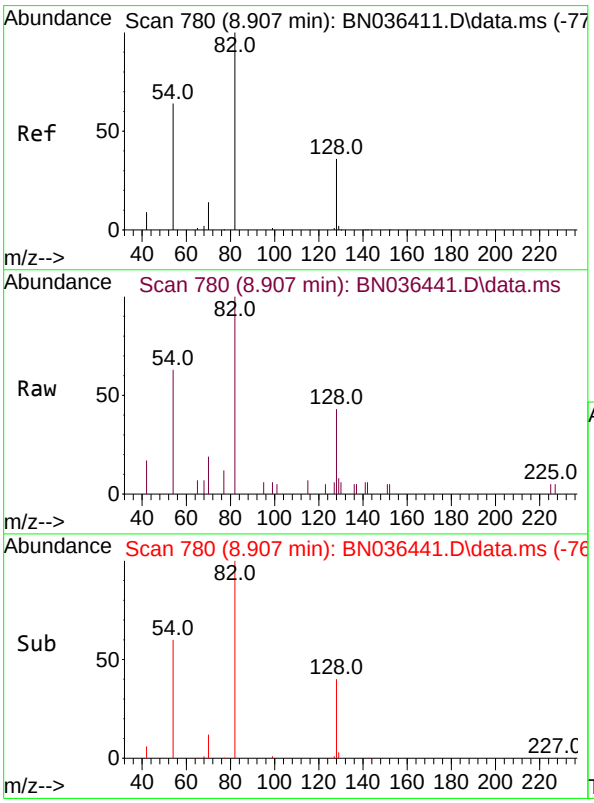
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 5455

Ion	Ratio	Lower	Upper
136	100		
137	12.2	10.1	15.1
54	12.1	11.8	17.6
68	8.0	7.2	10.8

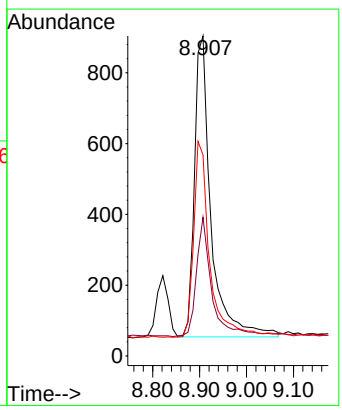


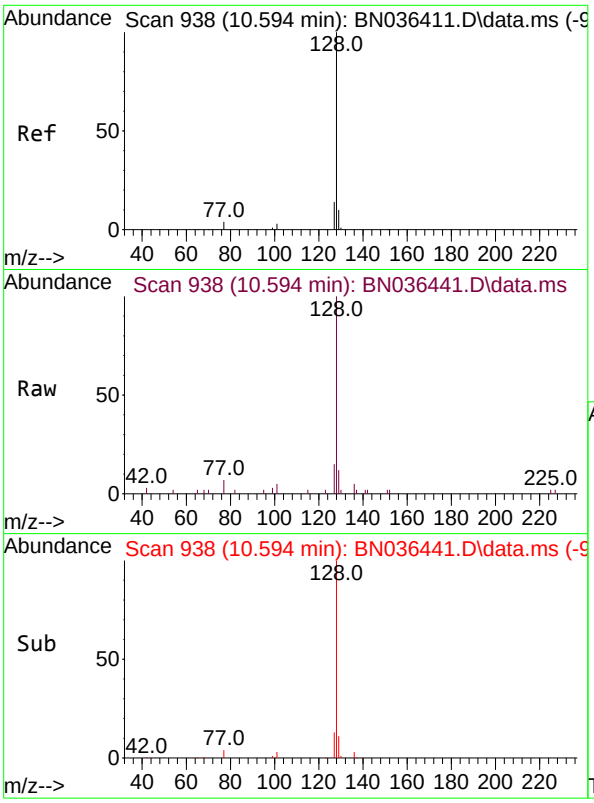


#8
Nitrobenzene-d5
Concen: 0.387 ng
RT: 8.907 min Scan# 780
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion: 82 Resp: 2082

Ion	Ratio	Lower	Upper
82	100		
128	43.4	31.9	47.9
54	62.8	53.1	79.7



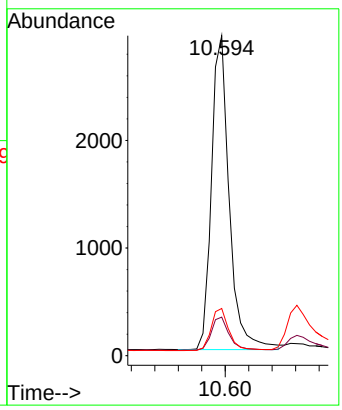


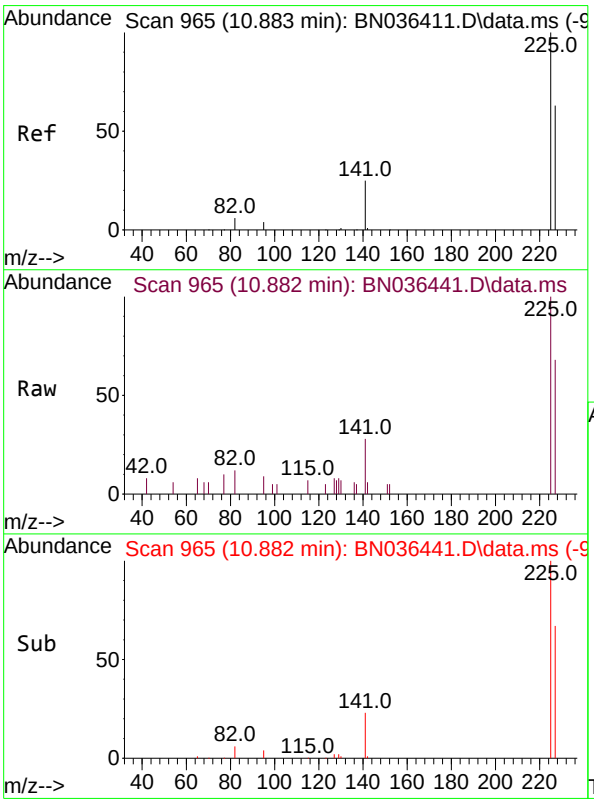
#9
Naphthalene
Concen: 0.389 ng
RT: 10.594 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 6118

Ion	Ratio	Lower	Upper
128	100		
129	12.0	9.6	14.4
127	14.8	12.0	18.0

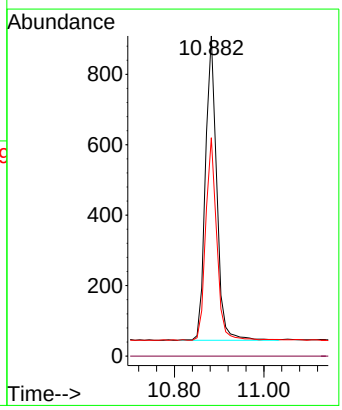


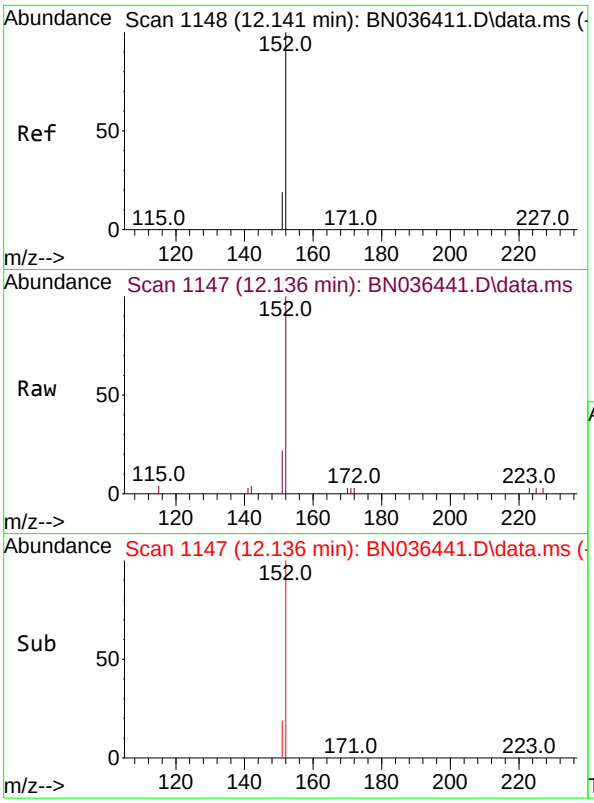


#10
Hexachlorobutadiene
Concen: 0.393 ng
RT: 10.882 min Scan# 965
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:225 Resp: 1505

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.7	50.9	76.3



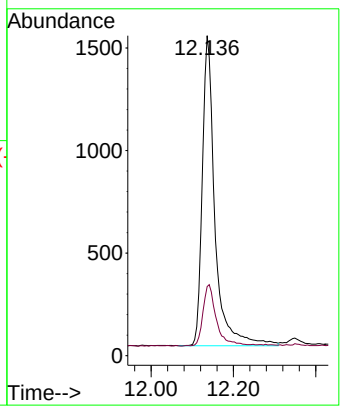


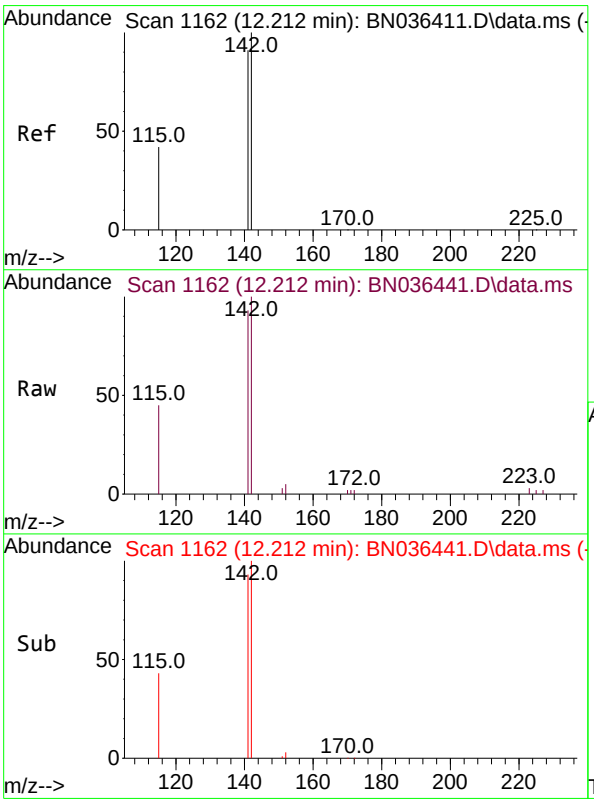
#11
2-Methylnaphthalene-d10
Concen: 0.386 ng
RT: 12.136 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 3238

Ion	Ratio	Lower	Upper
152	100		
151	20.9	16.6	25.0

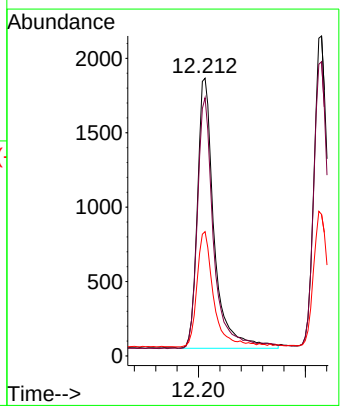


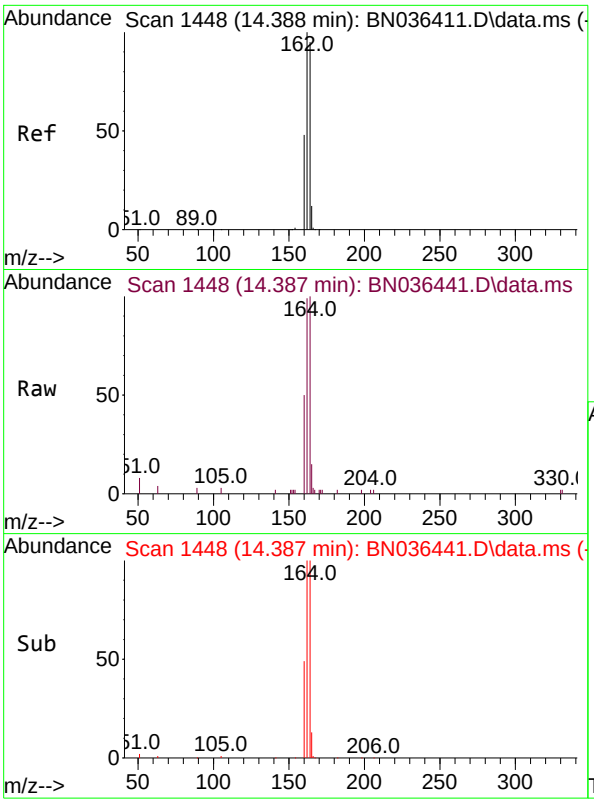


#12
2-Methylnaphthalene
Concen: 0.385 ng
RT: 12.212 min Scan# 1162
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:142 Resp: 3968

Ion	Ratio	Lower	Upper
142	100		
141	93.0	72.8	109.2
115	44.7	35.5	53.3



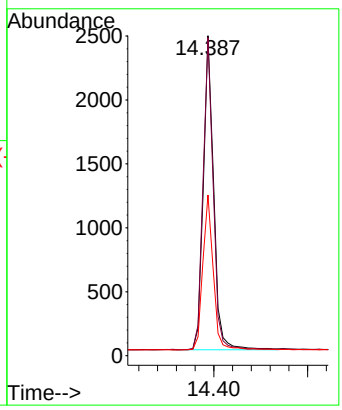


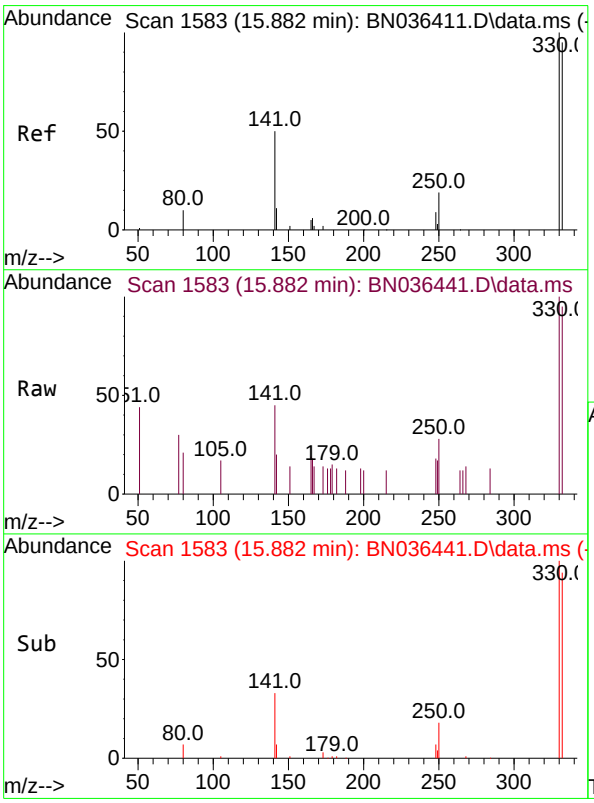
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.387 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 3758

Ion	Ratio	Lower	Upper
164	100		
162	99.4	84.1	126.1
160	50.2	41.4	62.0

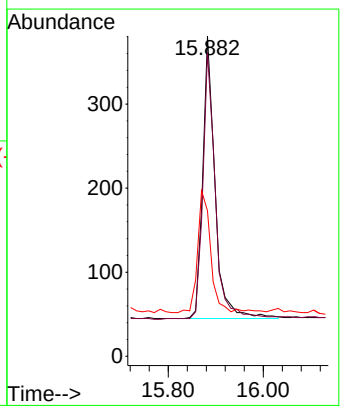


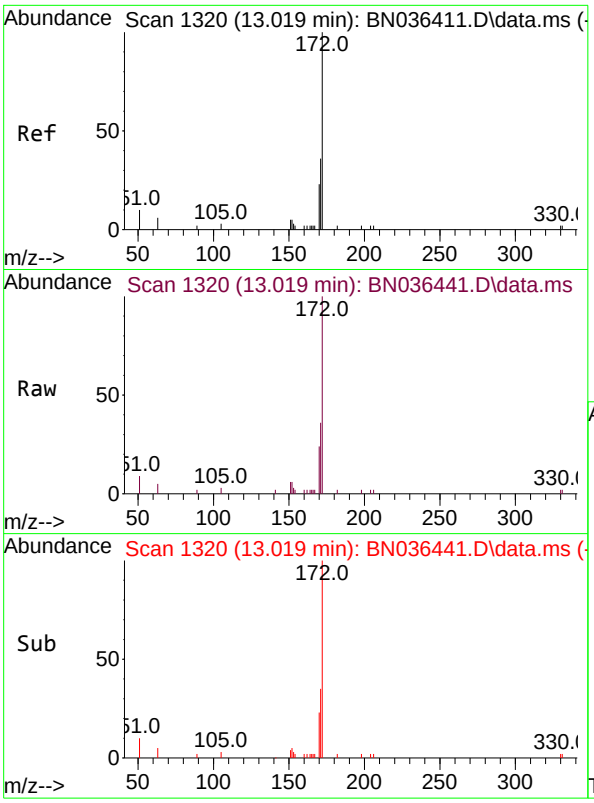


#14
2,4,6-Tribromophenol
Concen: 0.325 ng
RT: 15.882 min Scan# 1583
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:330 Resp: 605

Ion	Ratio	Lower	Upper
330	100		
332	94.4	76.6	114.8
141	46.6	37.8	56.8



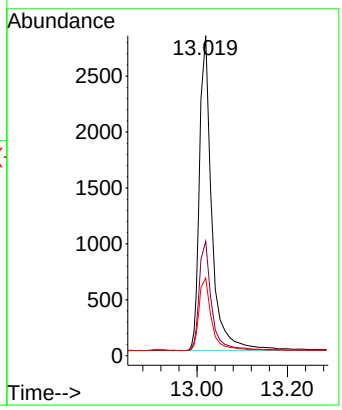


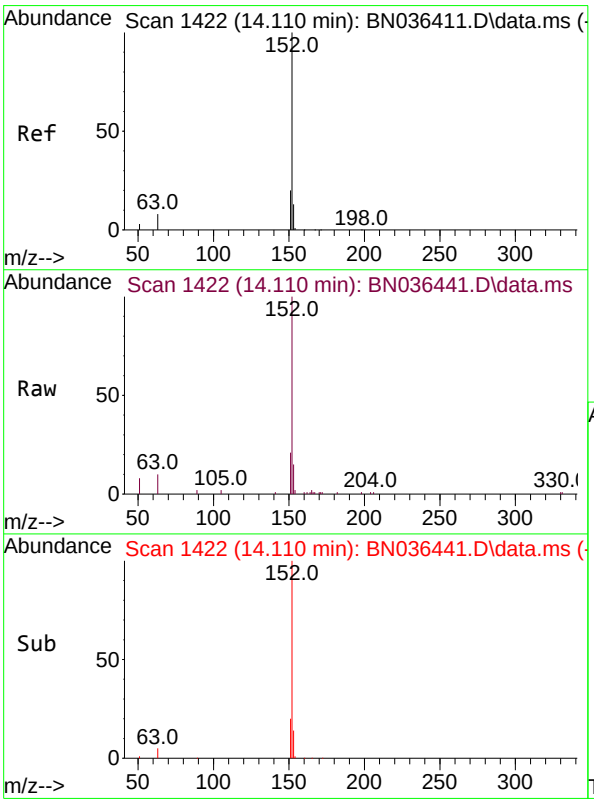
#15
2-Fluorobiphenyl
Concen: 0.362 ng
RT: 13.019 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 5114

Ion	Ratio	Lower	Upper
172	100		
171	35.7	29.6	44.4
170	24.3	19.8	29.6

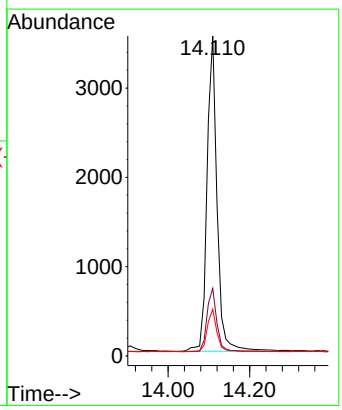


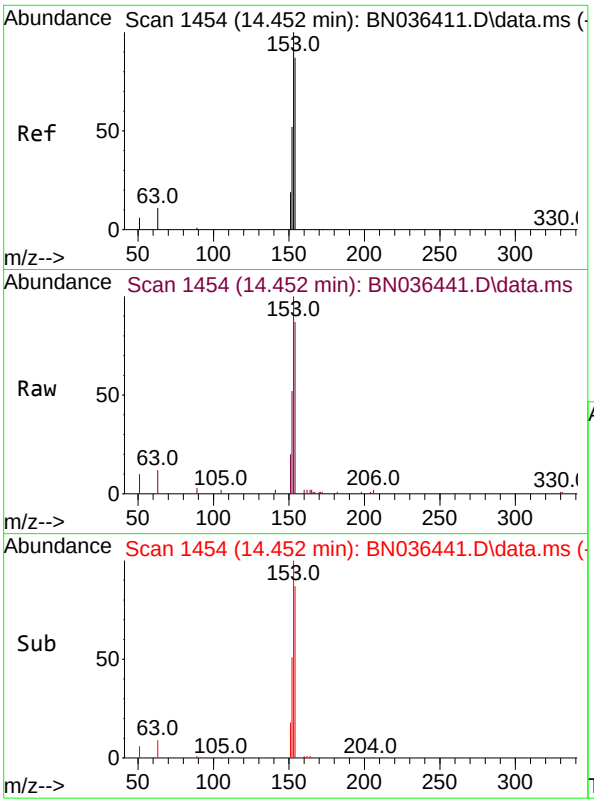


#16
Acenaphthylene
Concen: 0.363 ng
RT: 14.110 min Scan# 1422
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:152 Resp: 6026

Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.8	23.8
153	12.9	10.2	15.2



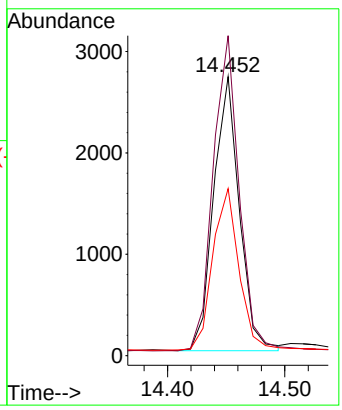


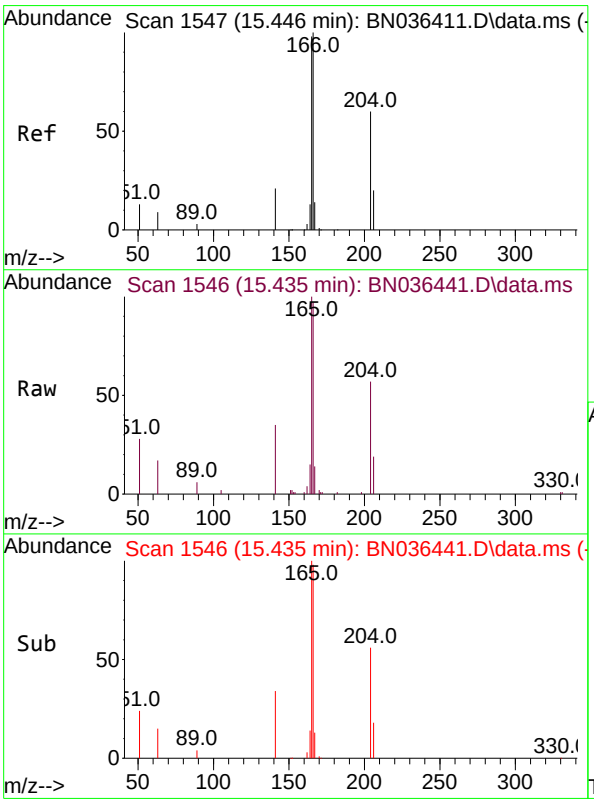
#17
Acenaphthene
Concen: 0.372 ng
RT: 14.452 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:154 Resp: 4122

Ion	Ratio	Lower	Upper
154	100		
153	117.8	93.3	139.9
152	61.1	48.8	73.2

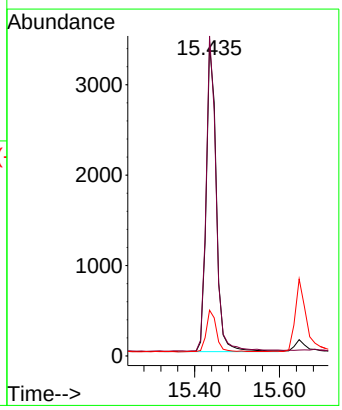


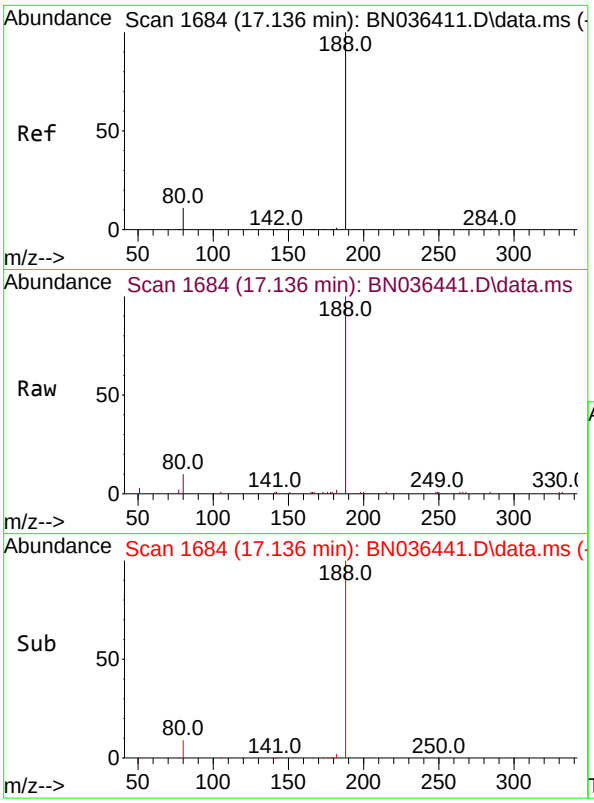


#18
Fluorene
Concen: 0.373 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:166 Resp: 5886

Ion	Ratio	Lower	Upper
166	100		
165	100.7	79.5	119.3
167	13.5	10.4	15.6



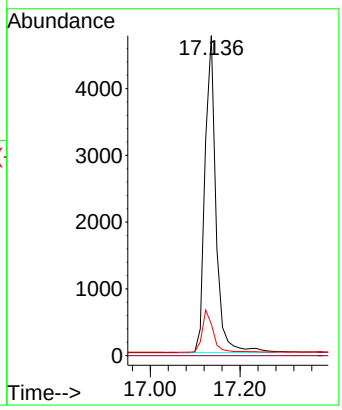


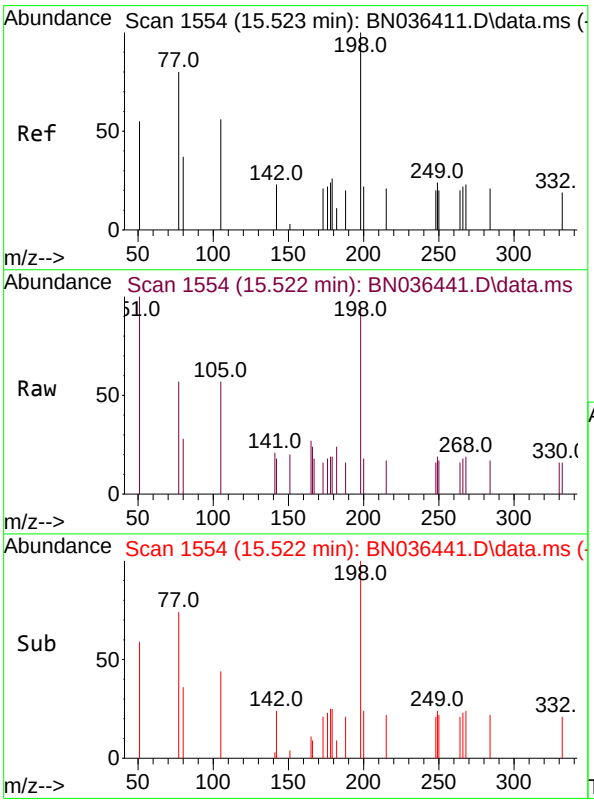
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 8093

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.9	9.8	14.6

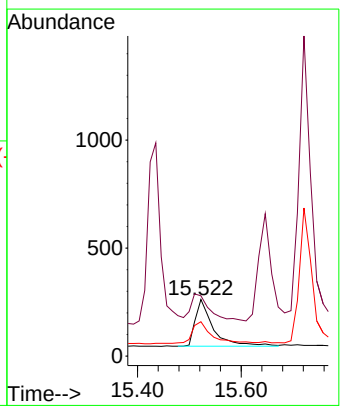


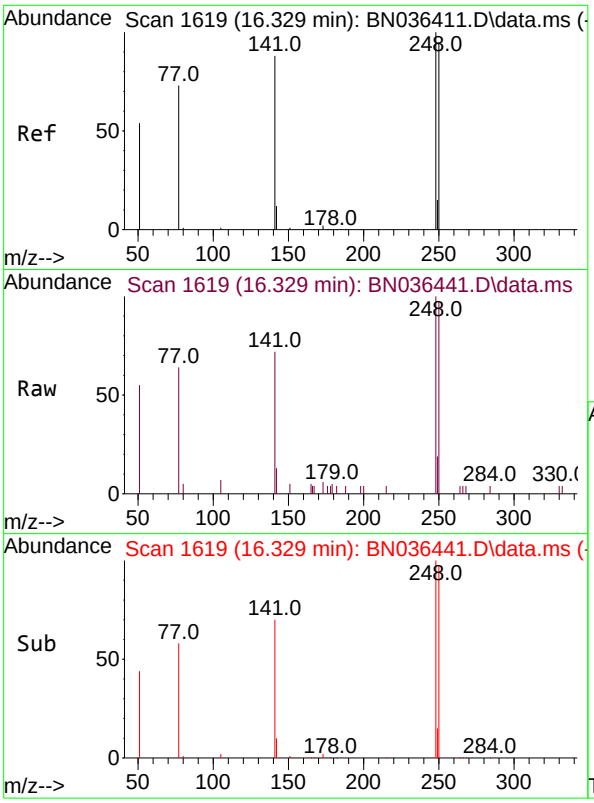


#20
4,6-Dinitro-2-methylphenol
Concen: 0.318 ng
RT: 15.522 min Scan# 1554
Delta R.T. -0.001 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:198 Resp: 505

Ion	Ratio	Lower	Upper
198	100		
51	106.5	86.6	129.8
105	60.7	57.5	86.3



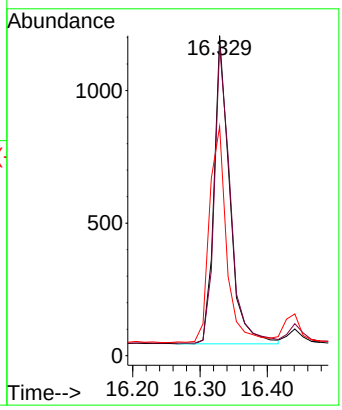


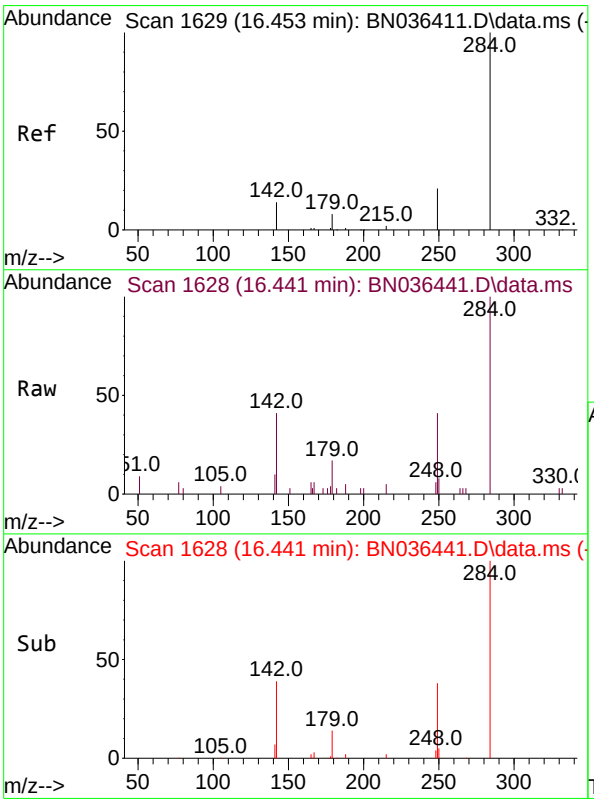
#21
4-Bromophenyl-phenylether
Concen: 0.389 ng
RT: 16.329 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 1877

Ion	Ratio	Lower	Upper
248	100		
250	96.9	76.1	114.1
141	71.6	71.7	107.5#

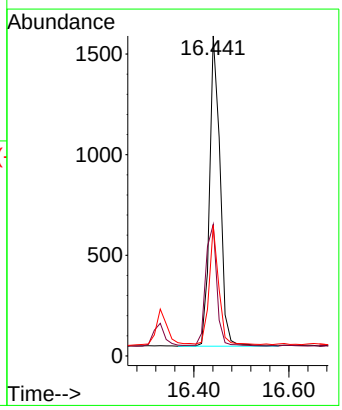


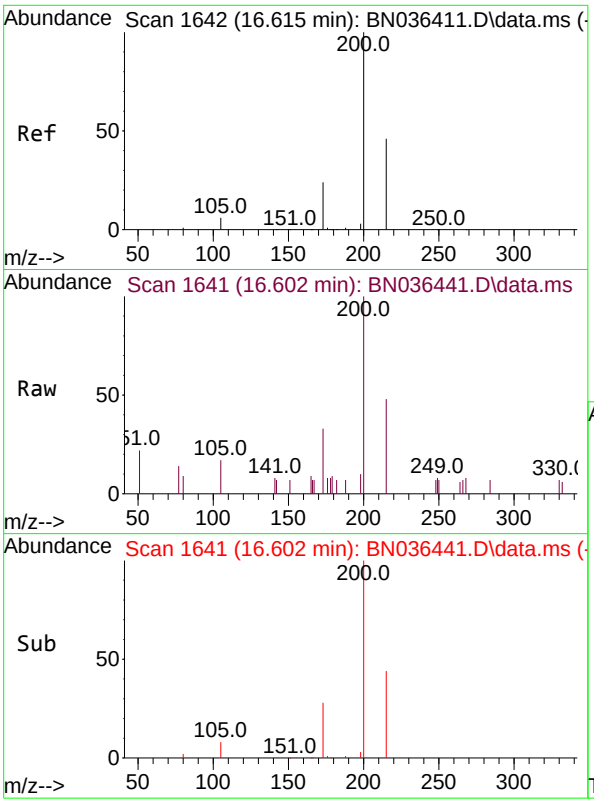


#22
Hexachlorobenzene
Concen: 0.400 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.013 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:284 Resp: 2387

Ion	Ratio	Lower	Upper
284	100		
142	42.0	33.4	50.0
249	34.7	28.6	43.0



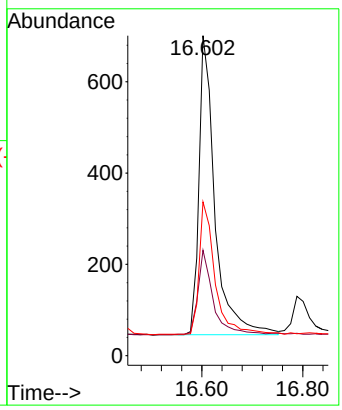


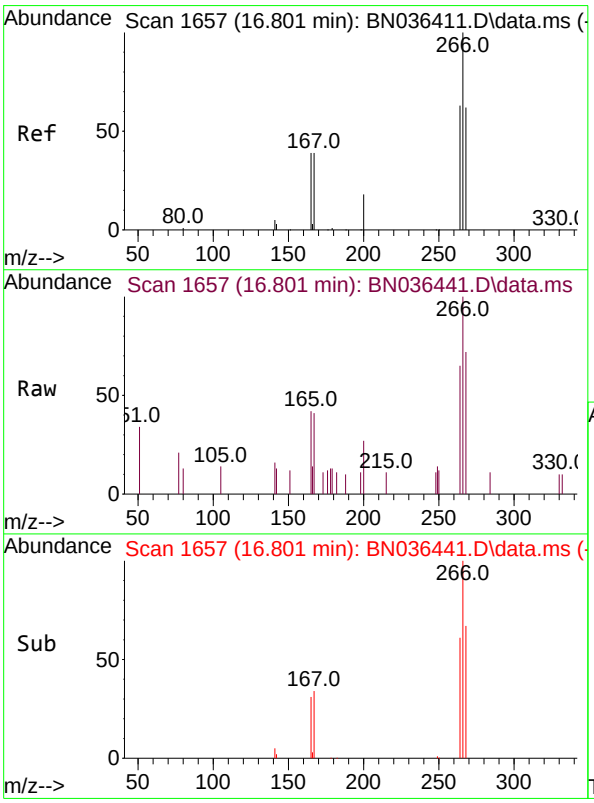
#23
Atrazine
Concen: 0.358 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.013 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 1442

Ion	Ratio	Lower	Upper
200	100		
173	33.0	23.2	34.8
215	48.1	40.0	60.0

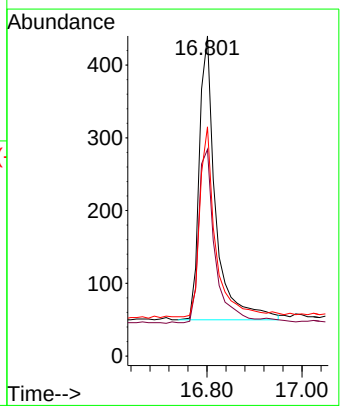


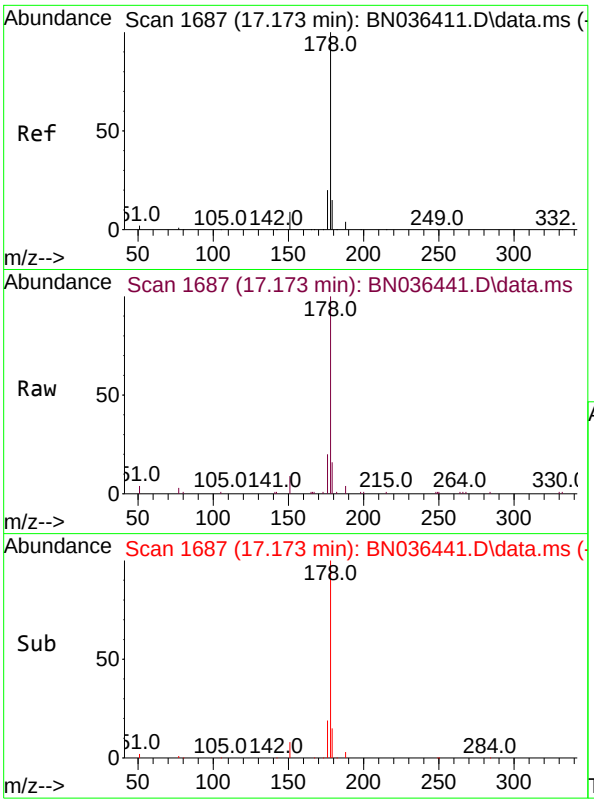


#24
Pentachlorophenol
Concen: 0.329 ng
RT: 16.801 min Scan# 1657
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:266 Resp: 931

Ion	Ratio	Lower	Upper
266	100		
264	62.3	50.6	76.0
268	64.3	51.9	77.9



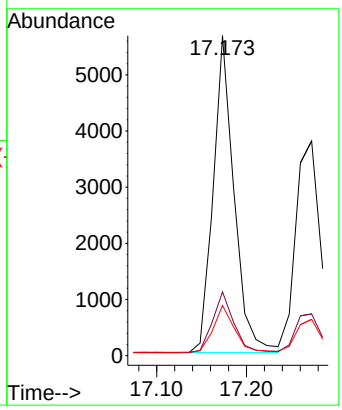


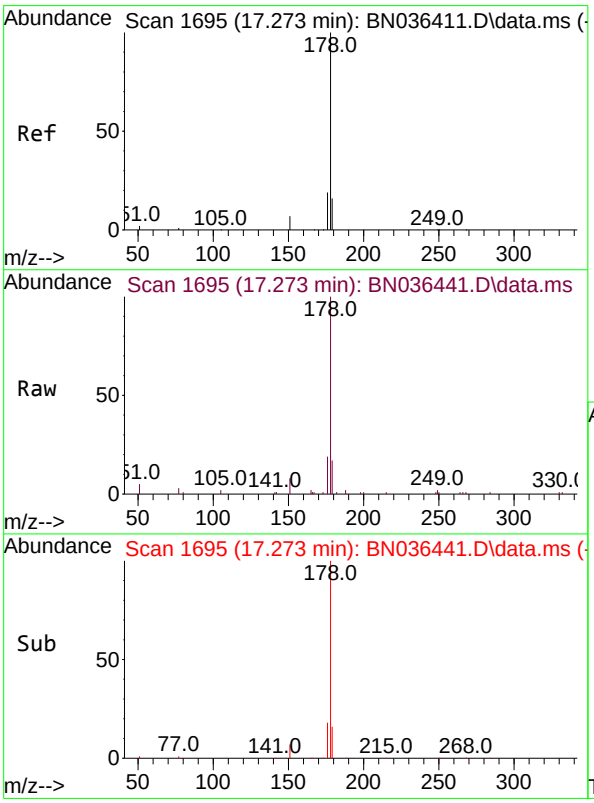
#25
Phenanthrene
Concen: 0.391 ng
RT: 17.173 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 9138

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.7	23.5
179	15.2	12.4	18.6

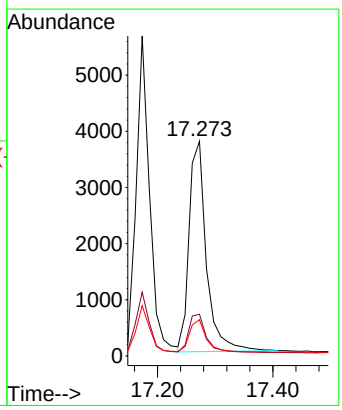


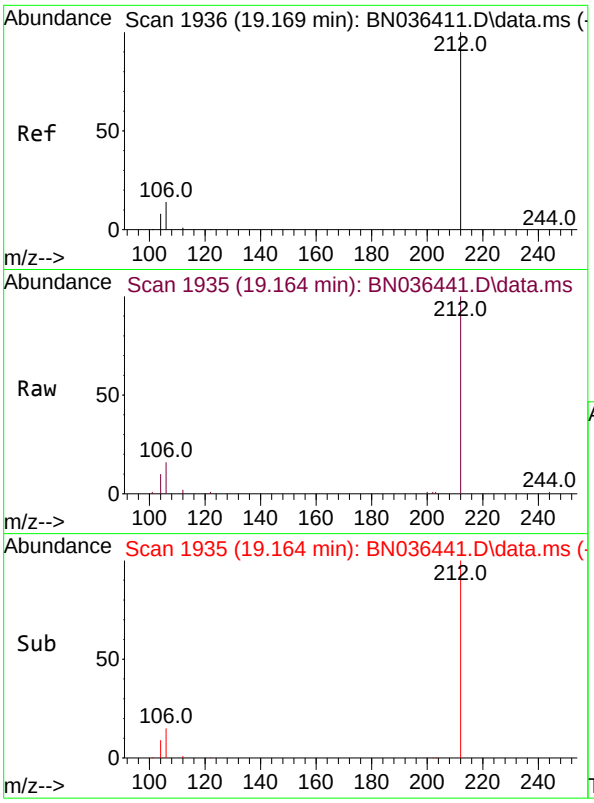


#26
Anthracene
Concen: 0.379 ng
RT: 17.273 min Scan# 1695
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:178 Resp: 7822

Ion	Ratio	Lower	Upper
178	100		
176	18.9	14.9	22.3
179	15.3	12.4	18.6



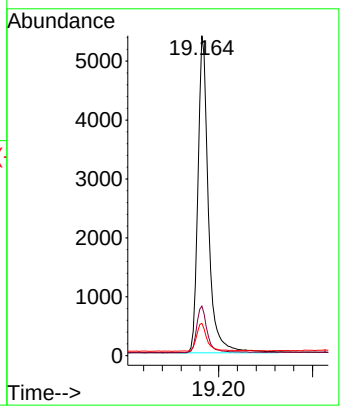


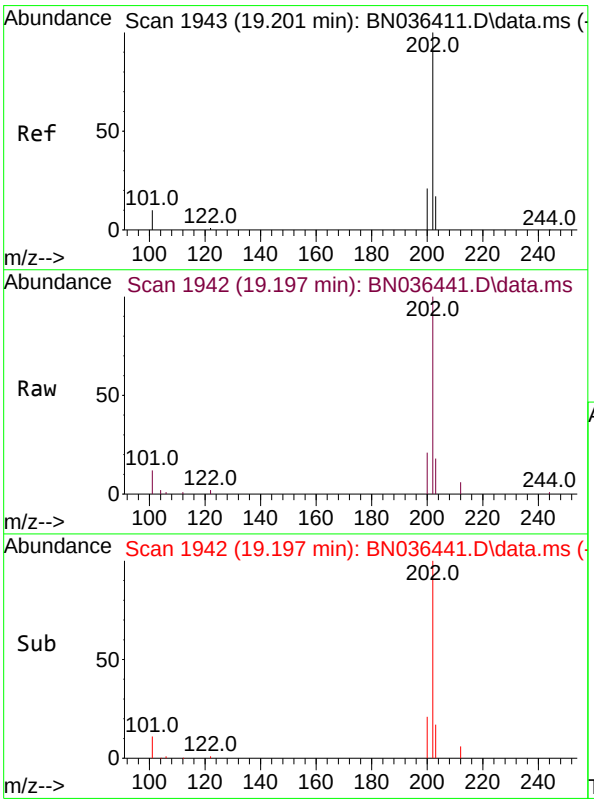
#27
Fluoranthene-d10
Concen: 0.373 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 8393

Ion	Ratio	Lower	Upper
212	100		
106	14.7	11.5	17.3
104	8.8	7.1	10.7

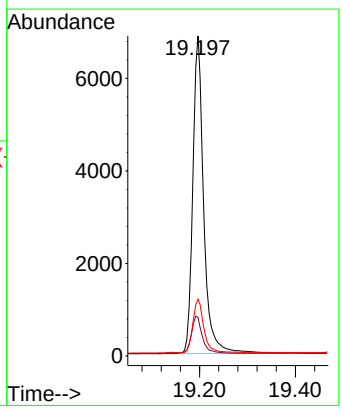


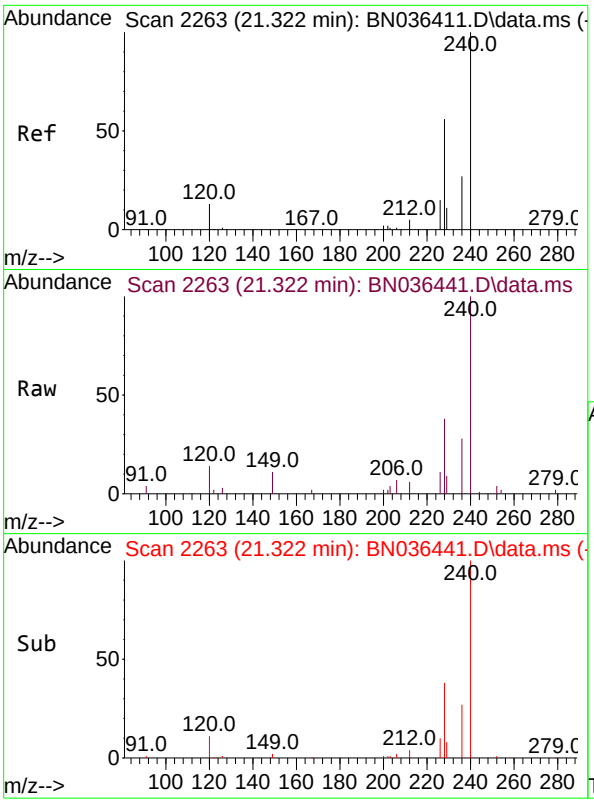


#28
Fluoranthene
Concen: 0.377 ng
RT: 19.197 min Scan# 1942
Delta R.T. -0.005 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:202 Resp: 10851

Ion	Ratio	Lower	Upper
202	100		
101	12.0	9.2	13.8
203	17.1	13.4	20.0



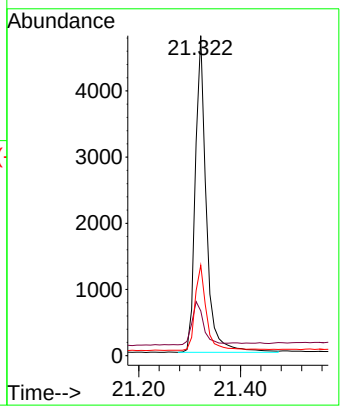


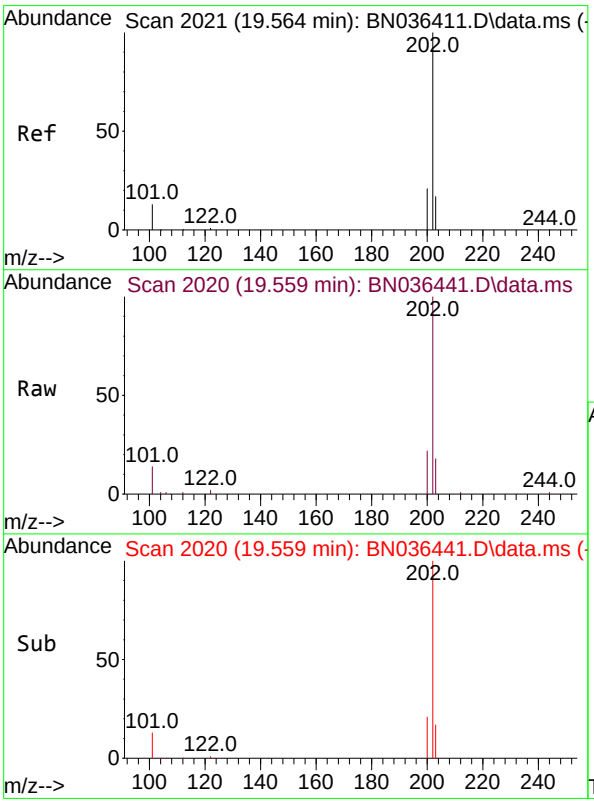
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 7173

Ion	Ratio	Lower	Upper
240	100		
120	14.0	13.3	19.9
236	28.3	23.0	34.6

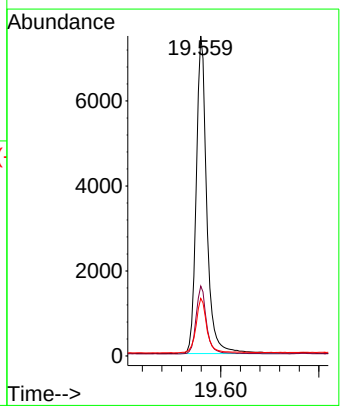


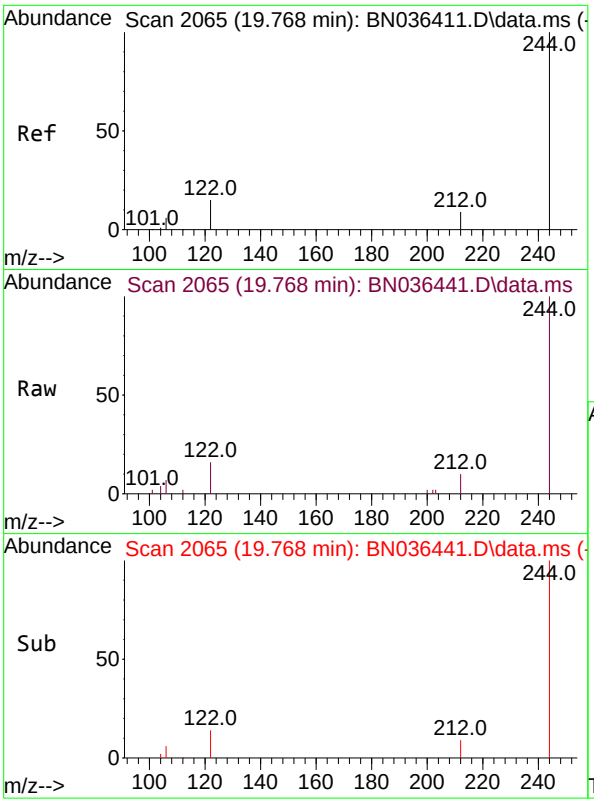


#30
Pyrene
Concen: 0.404 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:202 Resp: 11169

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.7	13.9	20.9



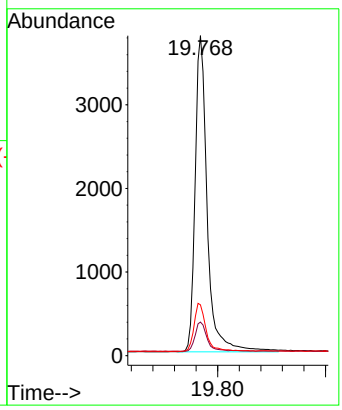


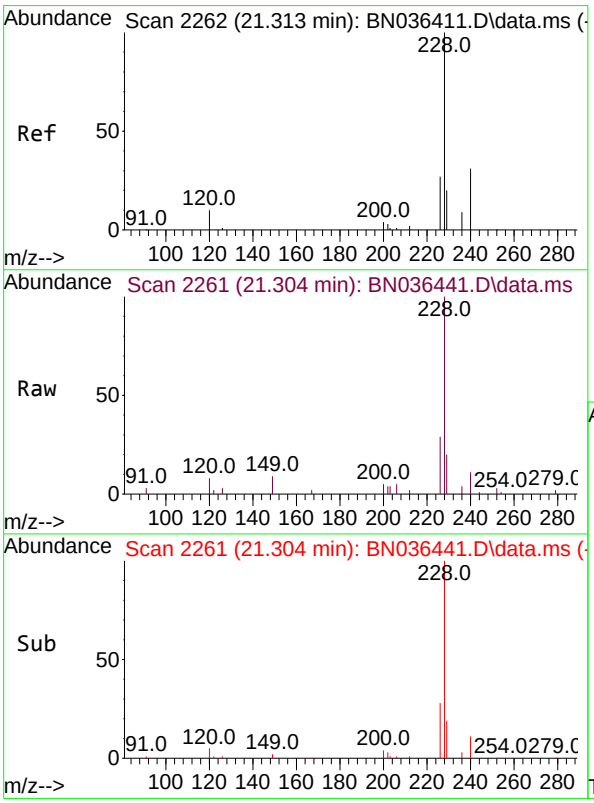
#31
Terphenyl-d14
Concen: 0.384 ng
RT: 19.768 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 5878

Ion	Ratio	Lower	Upper
244	100		
212	10.5	8.1	12.1
122	15.9	12.8	19.2

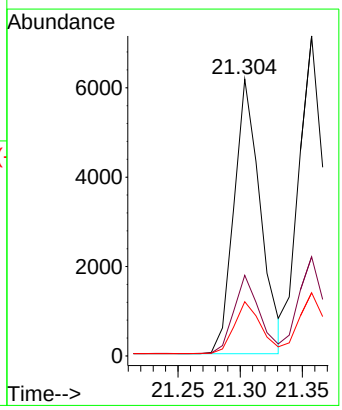


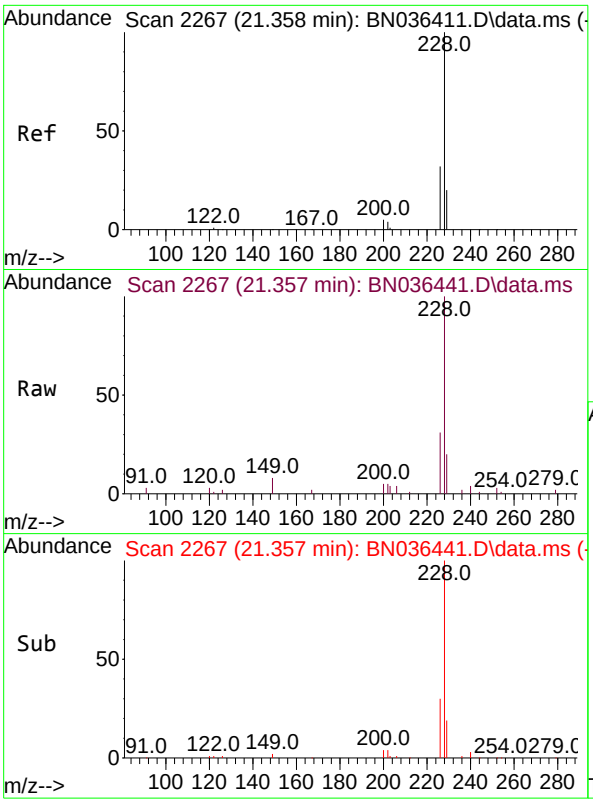


#32
Benzo(a)anthracene
Concen: 0.384 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:228 Resp: 9071

Ion	Ratio	Lower	Upper
228	100		
226	29.1	22.2	33.2
229	19.6	16.5	24.7



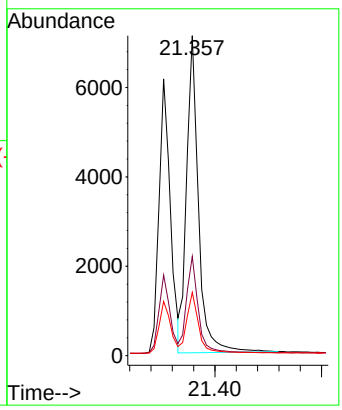


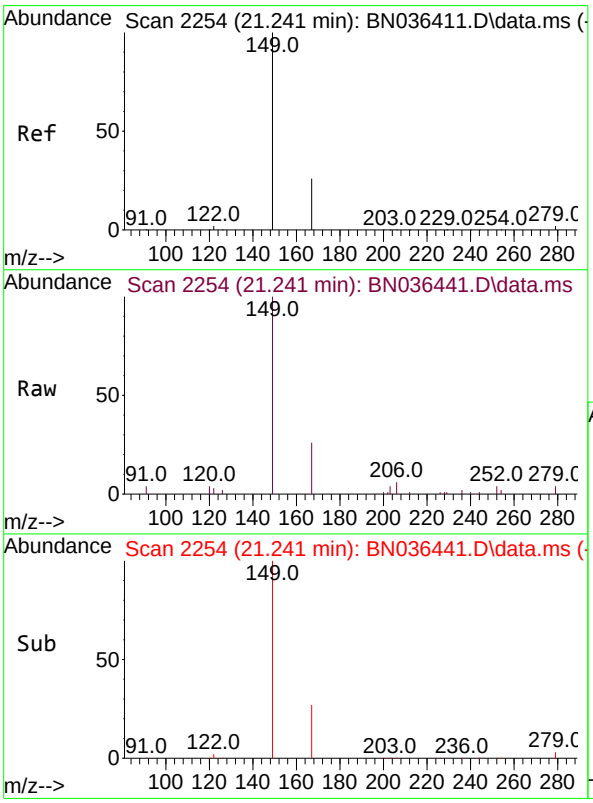
#33
Chrysene
Concen: 0.428 ng
RT: 21.357 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 10950

Ion	Ratio	Lower	Upper
228	100		
226	31.0	25.5	38.3
229	19.8	16.4	24.6

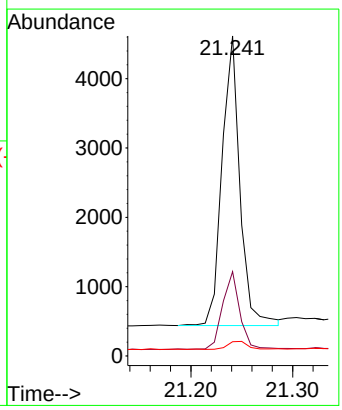


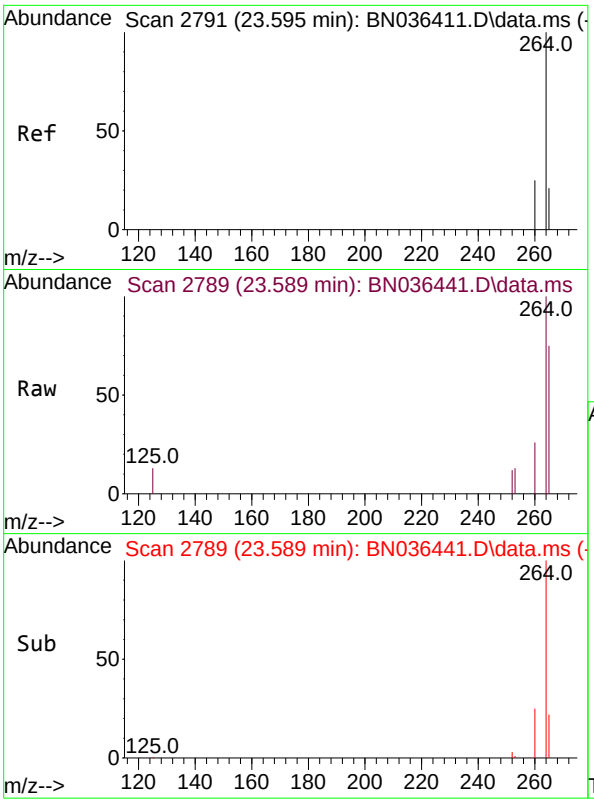


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.347 ng
RT: 21.241 min Scan# 2254
Delta R.T. -0.000 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:149 Resp: 5096

Ion	Ratio	Lower	Upper
149	100		
167	25.8	21.2	31.8
279	3.1	2.7	4.1



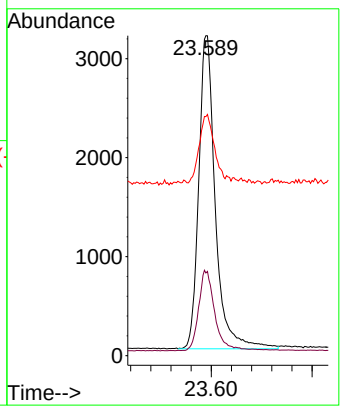


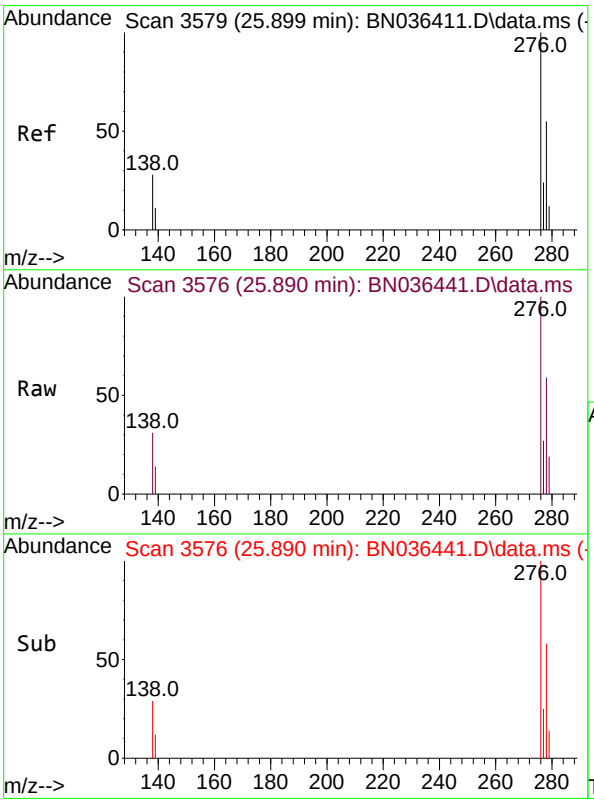
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.589 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 7217

Ion	Ratio	Lower	Upper
264	100		
260	25.9	20.9	31.3
265	74.7	60.7	91.1

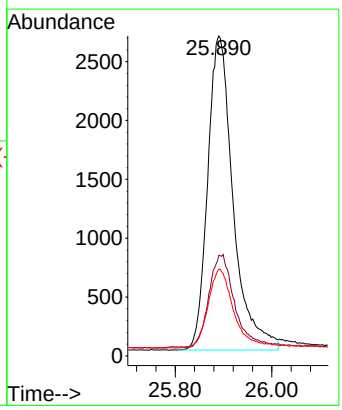


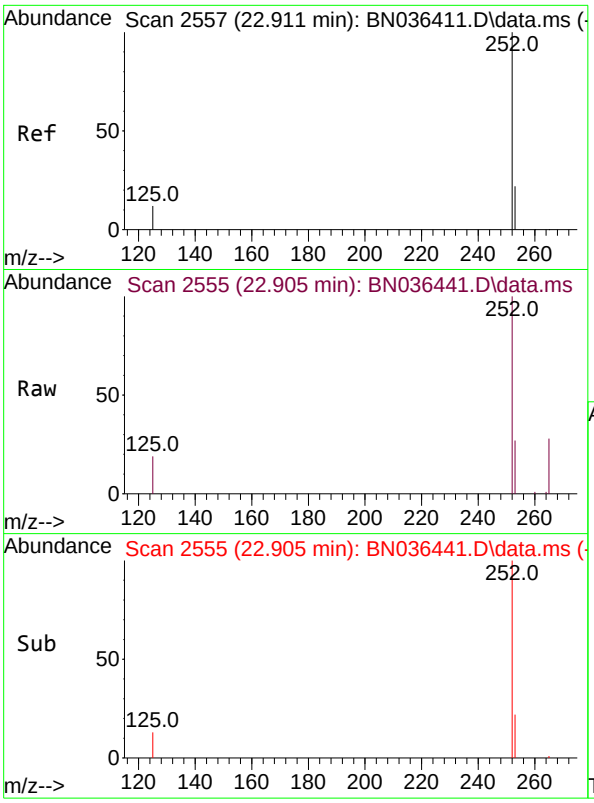


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.388 ng
RT: 25.890 min Scan# 3576
Delta R.T. -0.009 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:276 Resp: 9792

Ion	Ratio	Lower	Upper
276	100		
138	29.7	22.2	33.2
277	25.1	19.8	29.6



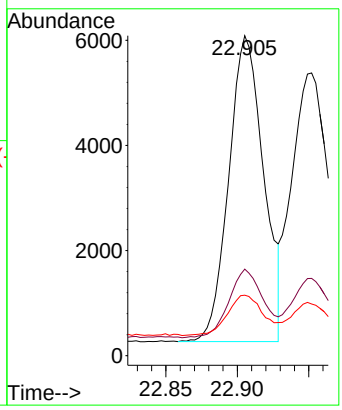


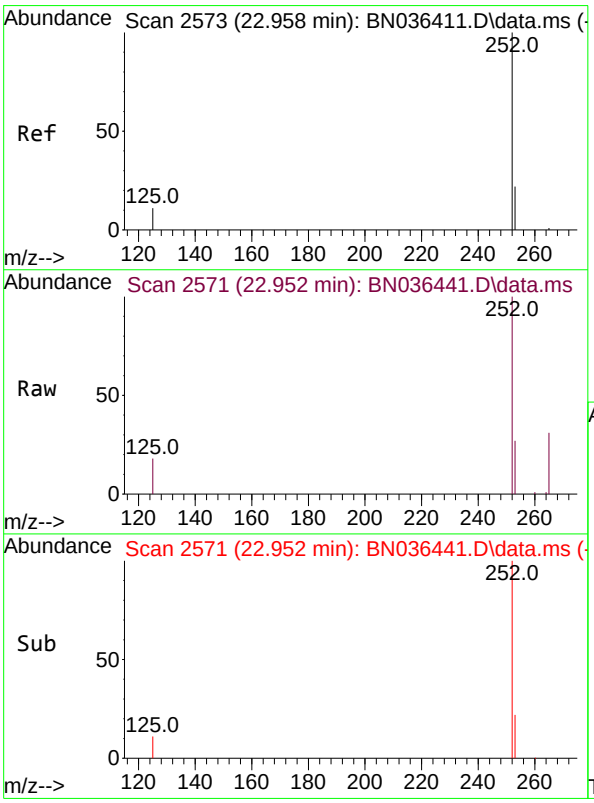
#37
Benzo(b)fluoranthene
Concen: 0.415 ng
RT: 22.905 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 9872

Ion	Ratio	Lower	Upper
252	100		
253	27.0	21.9	32.9
125	18.9	15.0	22.6

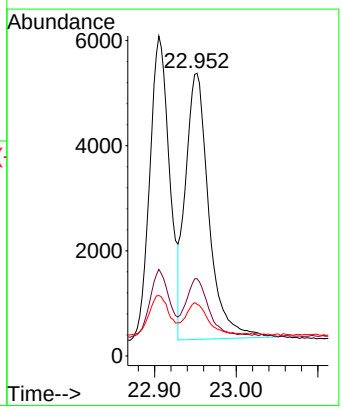


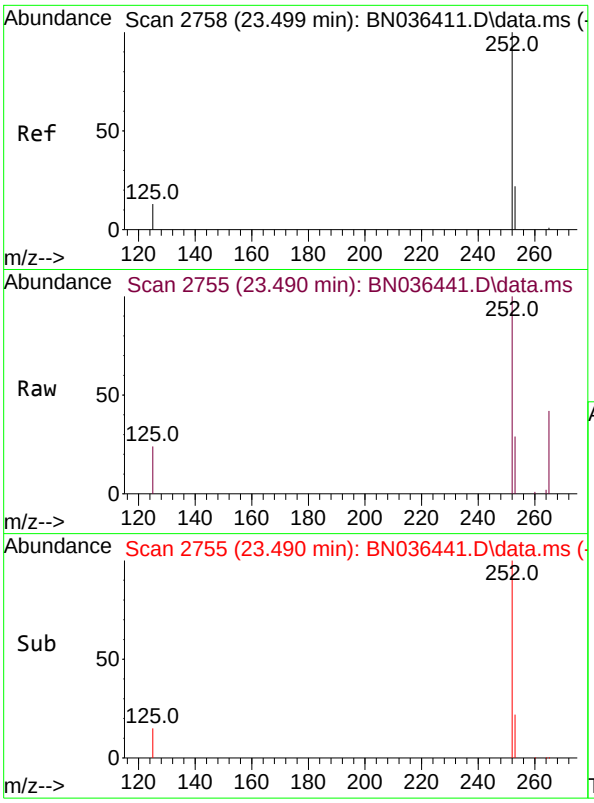


#38
Benzo(k)fluoranthene
Concen: 0.413 ng
RT: 22.952 min Scan# 2571
Delta R.T. -0.006 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:252 Resp: 10113

Ion	Ratio	Lower	Upper
252	100		
253	27.3	22.2	33.4
125	18.2	15.0	22.4



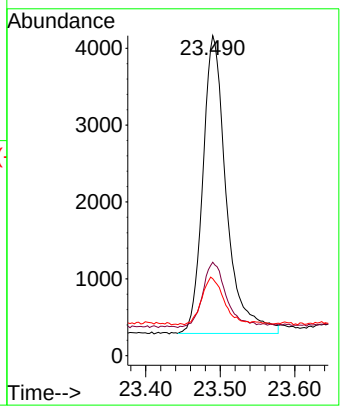


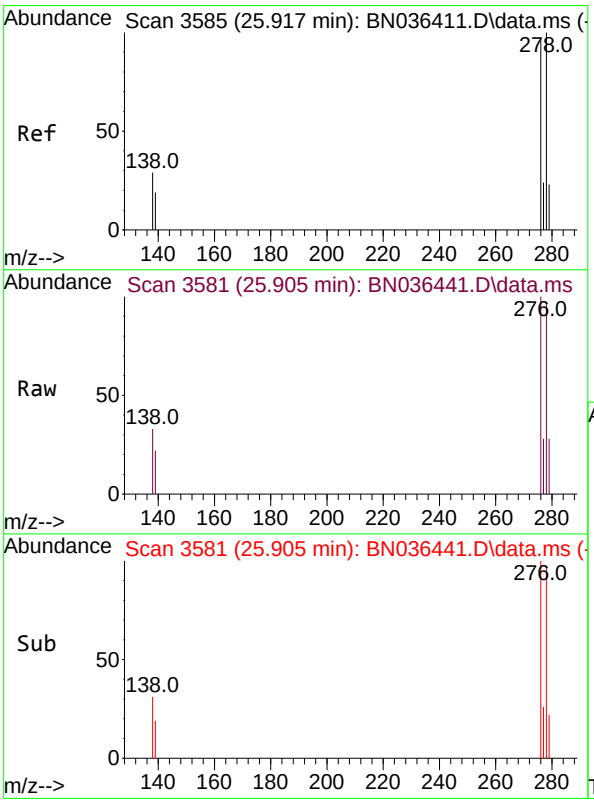
#39
Benzo(a)pyrene
Concen: 0.409 ng
RT: 23.490 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 8492

Ion	Ratio	Lower	Upper
252	100		
253	29.2	24.4	36.6
125	24.1	18.2	27.2

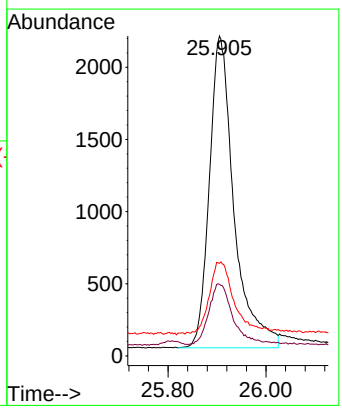


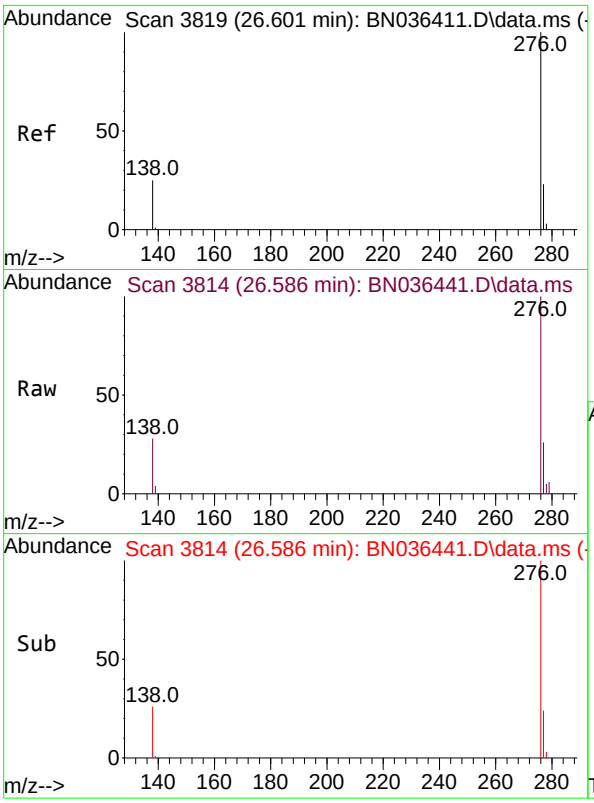


#40
Dibenzo(a,h)anthracene
Concen: 0.378 ng
RT: 25.905 min Scan# 3581
Delta R.T. -0.012 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Tgt Ion:278 Resp: 7530

Ion	Ratio	Lower	Upper
278	100		
139	22.4	18.5	27.7
279	28.9	24.8	37.2





#41
Benzo(g,h,i)perylene
Concen: 0.392 ng
RT: 26.586 min Scan# 3
Delta R.T. -0.015 min
Lab File: BN036441.D
Acq: 12 Feb 2025 15:48

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 8843

Ion	Ratio	Lower	Upper
276	100		
277	26.0	20.7	31.1
138	27.9	21.8	32.6