Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN101722\
Data File : BN022146.D
Acq On : 17 Oct 2022 11:24
Operator : CG/JU
Sample : PB148337BSD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Quant Time: Oct 17 15:27:38 2022
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\8270-SIM-BN100322.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 13 01:51:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.957	152	4058	0.400	ng		-0.01
7) Naphthalene-d8	10.784	136	13623	0.400	ng		-0.01
13) Acenaphthene-d10	14.621	164	7945	0.400	ng		-0.01
19) Phenanthrene-d10	17.375	188	15864	0.400	ng		#-0.01
29) Chrysene-d12	21.582	240	9902	0.400	ng		# 0.00
35) Perylene-d12	24.049	264	8029	0.400	ng		-0.01
System Monitoring Compounds							
4) 2-Fluorophenol	5.479	112	4509	0.480	ng		-0.01
5) Phenol-d6	7.112	99	6050	0.496	ng		-0.01
8) Nitrobenzene-d5	9.129	82	4858	0.444	ng		-0.01
11) 2-Methylnaphthalene-d10	12.380	152	8755	0.350	ng		-0.01
14) 2,4,6-Tribromophenol	16.121	330	1255	0.414	ng		-0.01
15) 2-Fluorobiphenyl	13.253	172	13471	0.388	ng		-0.01
27) Fluoranthene-d10	19.420	212	15558	0.369	ng		0.00
31) Terphenyl-d14	20.015	244	9148	0.460	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.298	88	1920	0.366	ng		98
3) n-Nitrosodimethylamine	3.638	42	2140	0.375	ng	#	92
6) bis(2-Chloroethyl)ether	7.379	93	5271	0.409	ng		98
9) Naphthalene	10.837	128	16464	0.400	ng		100
10) Hexachlorobutadiene	11.115	225	2688	0.377	ng	#	100
12) 2-Methylnaphthalene	12.085	142	3508	0.575	ng	#	90
16) Acenaphthylene	14.343	152	15707	0.415	ng		100
17) Acenaphthene	14.685	154	10401	0.391	ng		99
18) Fluorene	15.679	166	14260	0.445	ng		99
20) 4,6-Dinitro-2-methylph...	15.761	198	300	0.288	ng		90
21) 4-Bromophenyl-phenylether	16.568	248	3941	0.408	ng		95
22) Hexachlorobenzene	16.680	284	4572	0.380	ng		99
23) Atrazine	16.841	200	2863	0.399	ng		97
24) Pentachlorophenol	17.040	266	1160	0.315	ng		99
25) Phenanthrene	17.424	178	21050	0.386	ng		100
26) Anthracene	17.511	178	17824	0.407	ng		100
28) Fluoranthene	19.449	202	20813	0.356	ng		100
30) Pyrene	19.812	202	20606	0.474	ng		99
32) Benzo(a)anthracene	21.564	228	15459	0.415	ng		100
33) Chrysene	21.618	228	15734	0.381	ng		99
34) Bis(2-ethylhexyl)phtha...	21.483	149	11503	0.644	ng		98
36) Indeno(1,2,3-cd)pyrene	26.634	276	14710	0.363	ng		99
37) Benzo(b)fluoranthene	23.292	252	13627	0.358	ng		99
38) Benzo(k)fluoranthene	23.341	252	13573	0.358	ng		99
39) Benzo(a)pyrene	23.938	252	10967	0.378	ng		98
40) Dibenzo(a,h)anthracene	26.657	278	11655	0.360	ng		99
41) Benzo(g,h,i)perylene	27.435	276	12115	0.347	ng		99

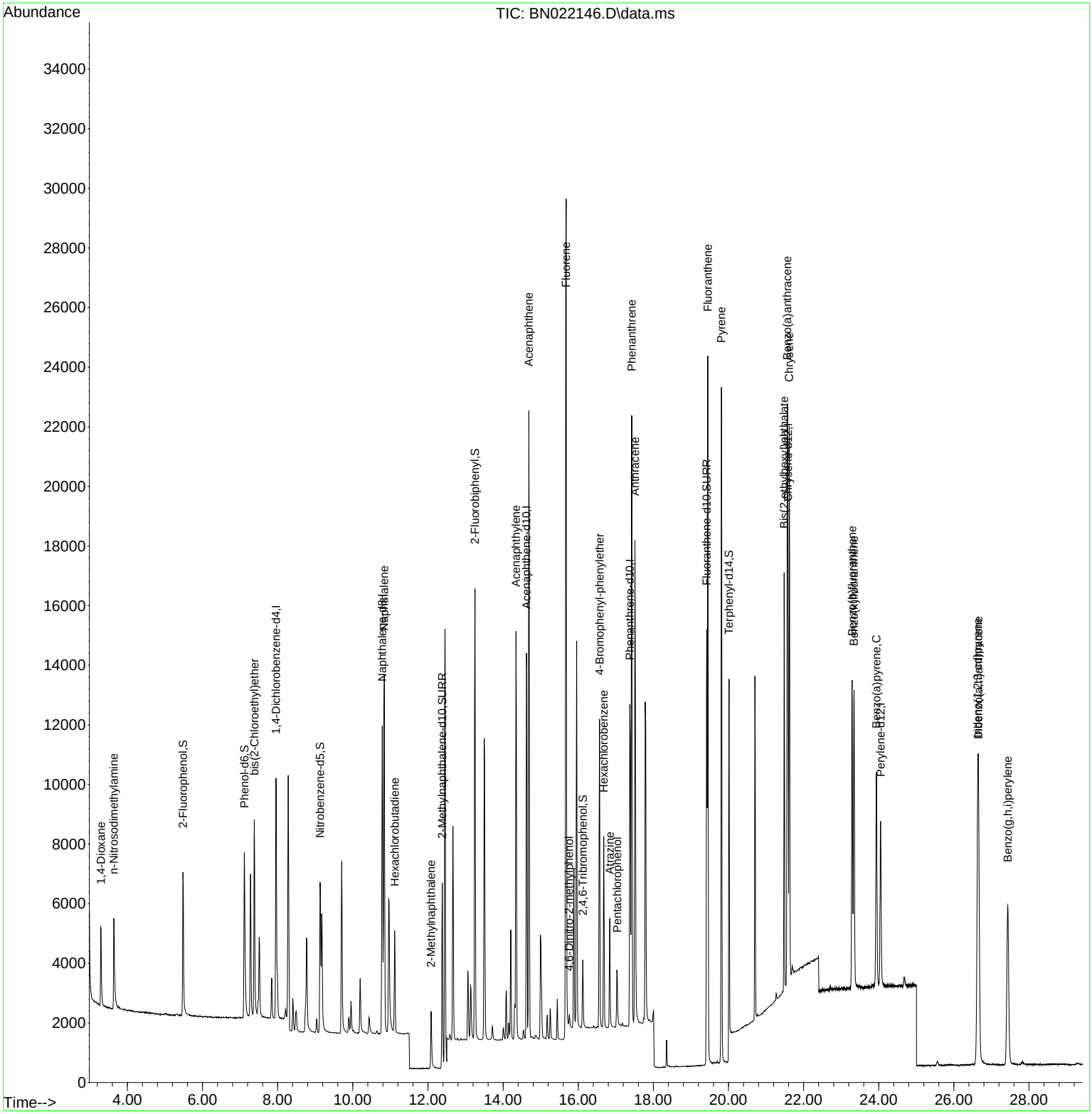
(#) = qualifier out of range (m) = manual integration (+) = signals summed

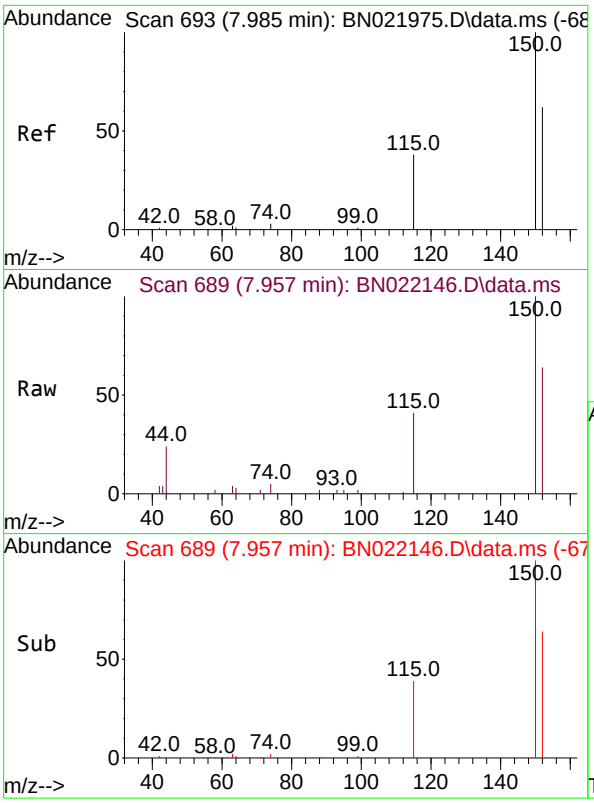
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN101722\
Data File : BN022146.D
Acq On : 17 Oct 2022 11:24
Operator : CG/JU
Sample : PB148337BSD
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Quant Time: Oct 17 15:27:38 2022
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\8270-SIM-BN100322.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Oct 13 01:51:34 2022
Response via : Initial Calibration



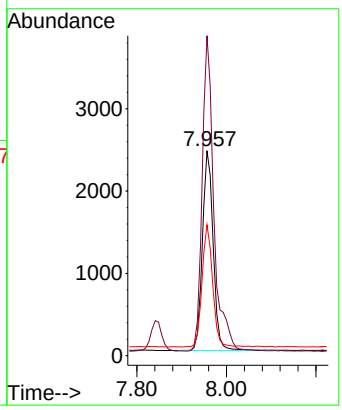


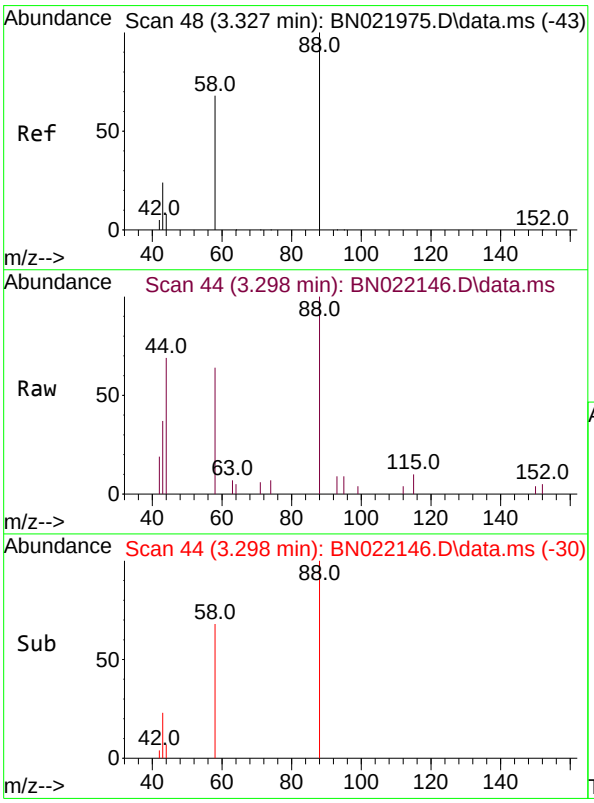
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.957 min Scan# 6
Delta R.T. -0.014 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:152 Resp: 4058

Ion	Ratio	Lower	Upper
152	100		
150	156.2	127.2	190.8
115	63.9	51.4	77.0

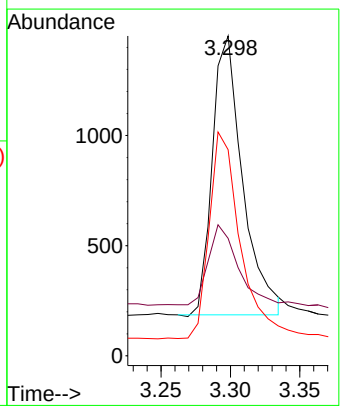


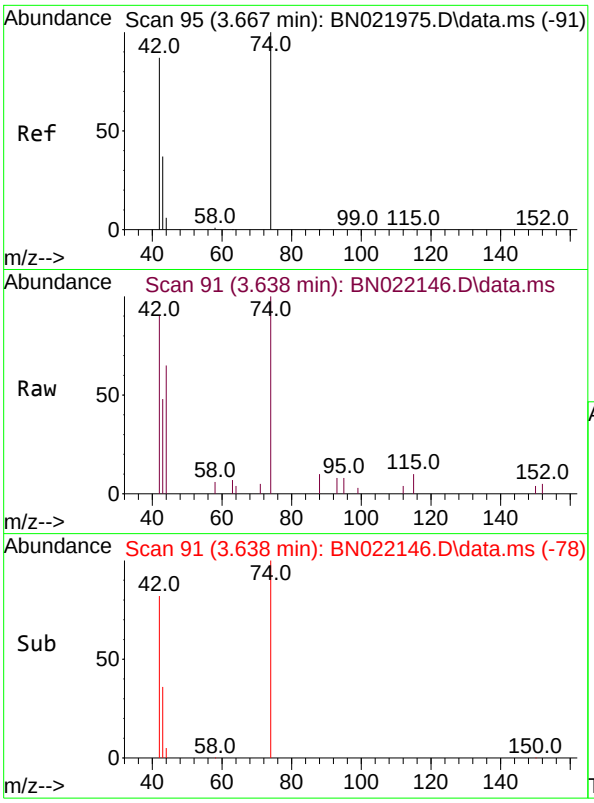


#2
1,4-Dioxane
Concen: 0.366 ng
RT: 3.298 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion: 88 Resp: 1920

Ion	Ratio	Lower	Upper
88	100		
43	27.7	22.6	34.0
58	75.7	58.6	88.0



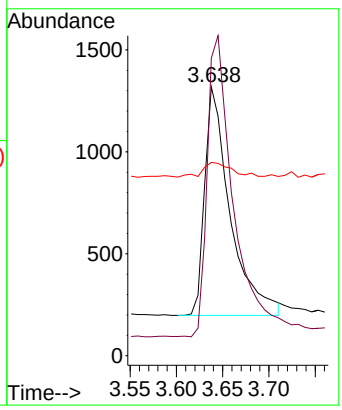


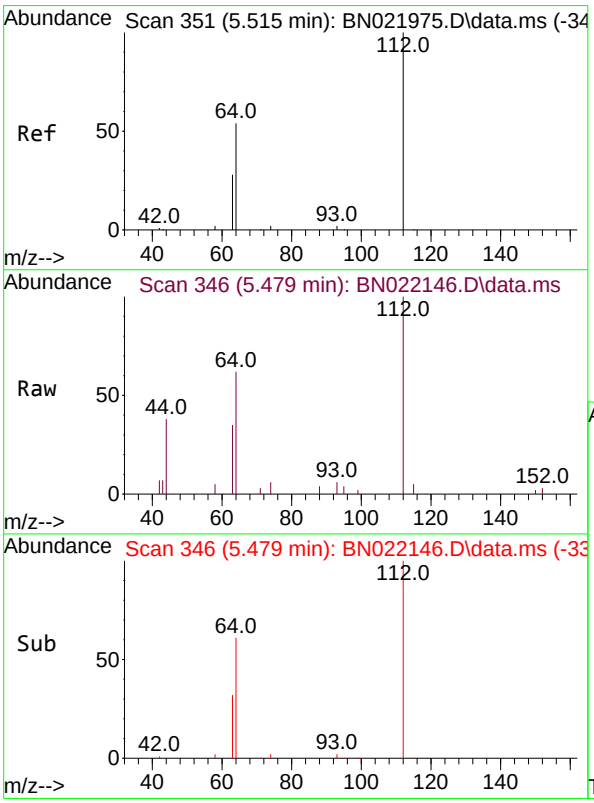
#3
n-Nitrosodimethylamine
Concen: 0.375 ng
RT: 3.638 min Scan# 91
Delta R.T. -0.007 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion: 42 Resp: 2140

Ion	Ratio	Lower	Upper
42	100		
74	135.4	101.6	152.4
44	7.4	10.4	15.6#

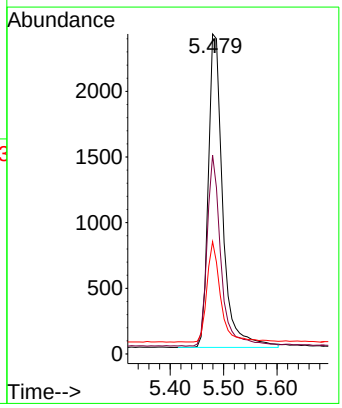


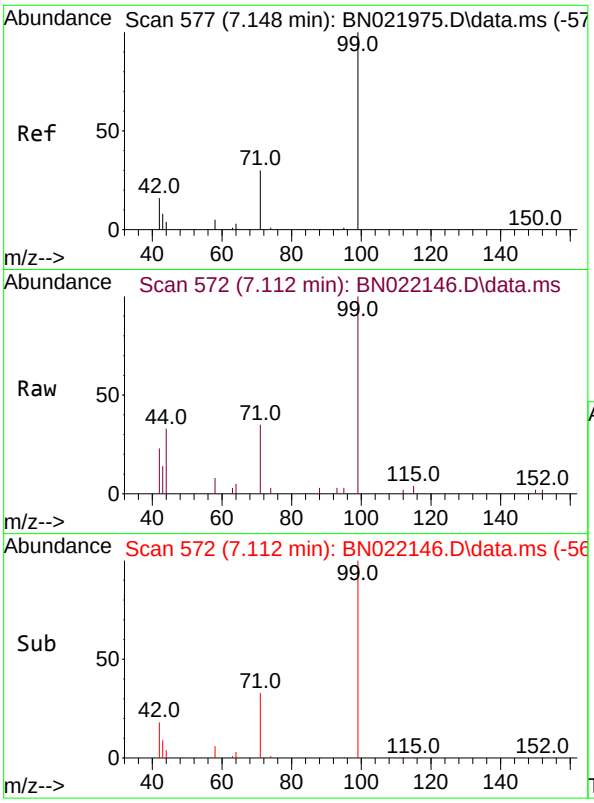


#4
2-Fluorophenol
Concen: 0.480 ng
RT: 5.479 min Scan# 346
Delta R.T. -0.014 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:112 Resp: 4509

Ion	Ratio	Lower	Upper
112	100		
64	58.4	46.9	70.3
63	30.3	24.6	37.0



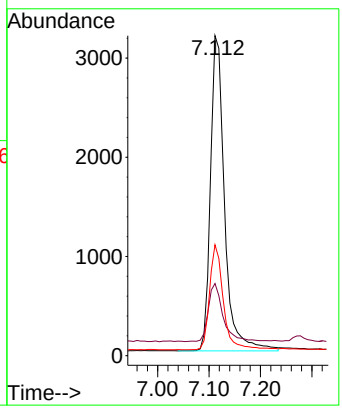


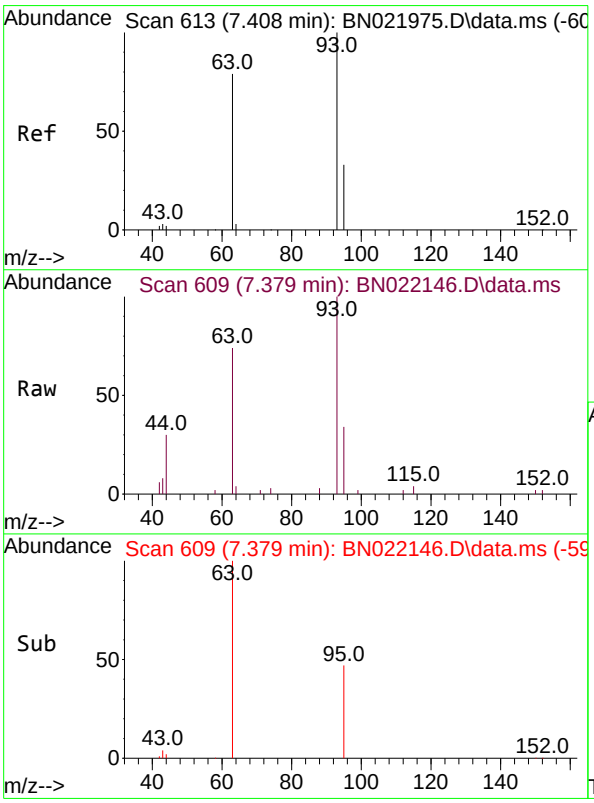
#5
Phenol-d6
Concen: 0.496 ng
RT: 7.112 min Scan# 5
Delta R.T. -0.014 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion: 99 Resp: 6050

Ion	Ratio	Lower	Upper
99	100		
42	19.3	15.9	23.9
71	32.6	25.6	38.4

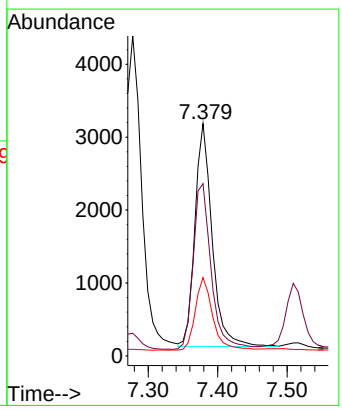


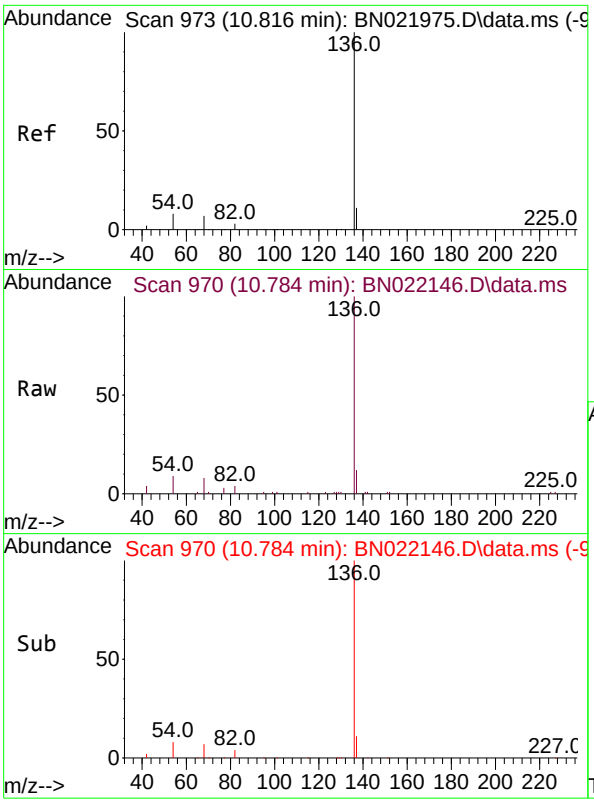


#6
bis(2-Chloroethyl)ether
Concen: 0.409 ng
RT: 7.379 min Scan# 609
Delta R.T. -0.007 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion: 93 Resp: 5271

Ion	Ratio	Lower	Upper
93	100		
63	78.3	64.8	97.2
95	32.9	26.6	40.0



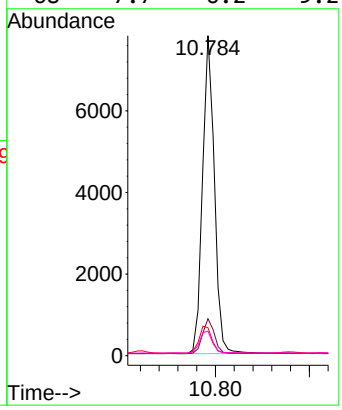


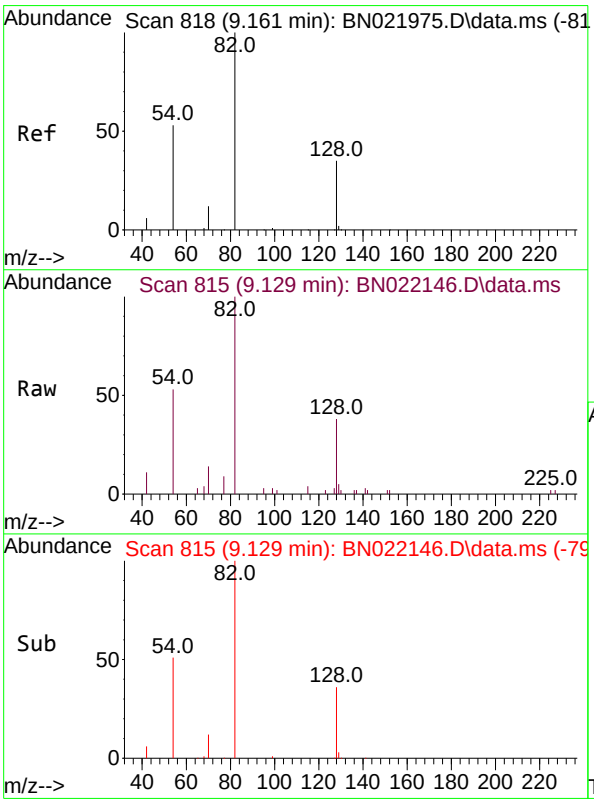
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.784 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:136 Resp: 13623

Ion	Ratio	Lower	Upper
136	100		
137	11.6	9.2	13.8
54	8.8	7.1	10.7
68	7.7	6.2	9.2

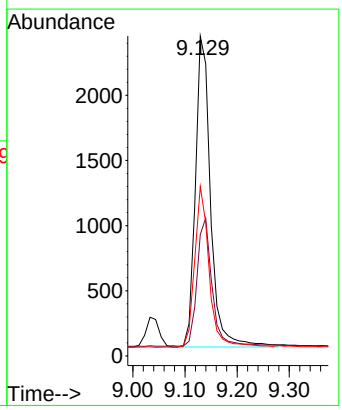


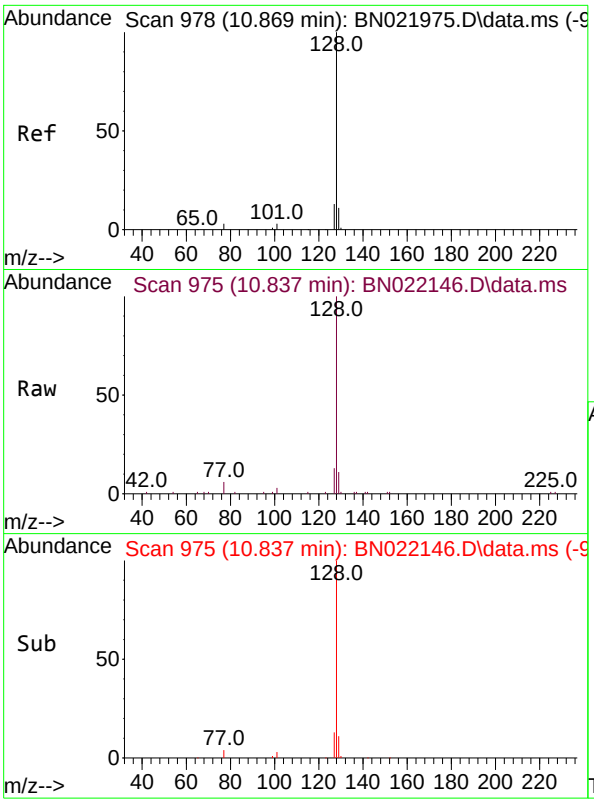


#8
Nitrobenzene-d5
Concen: 0.444 ng
RT: 9.129 min Scan# 815
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion: 82 Resp: 4858

Ion	Ratio	Lower	Upper
82	100		
128	37.9	29.9	44.9
54	52.9	43.5	65.3



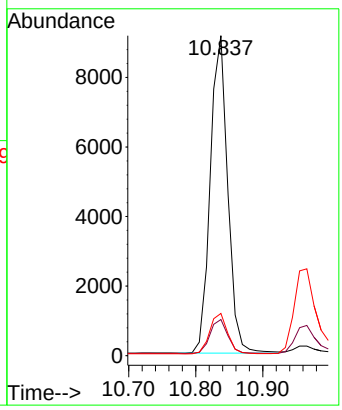


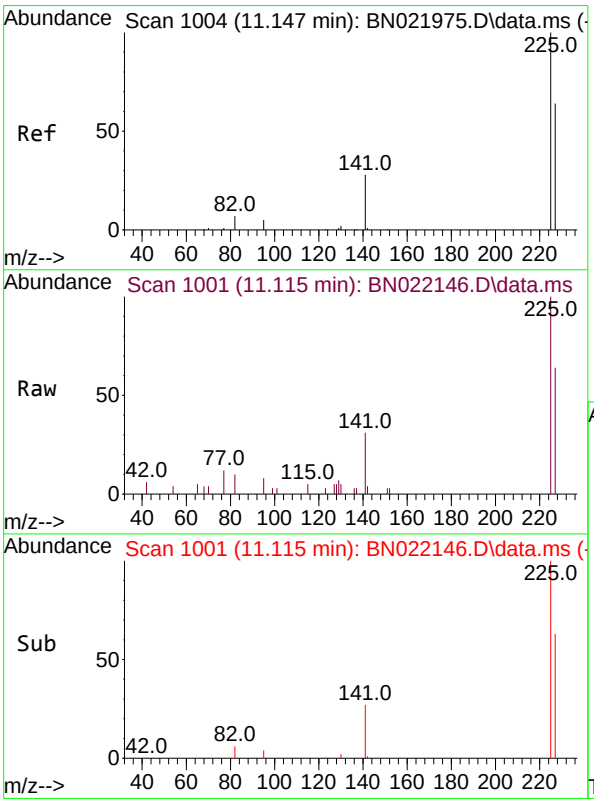
#9
Naphthalene
Concen: 0.400 ng
RT: 10.837 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:128 Resp: 16464

Ion	Ratio	Lower	Upper
128	100		
129	11.3	9.3	13.9
127	13.2	10.6	16.0

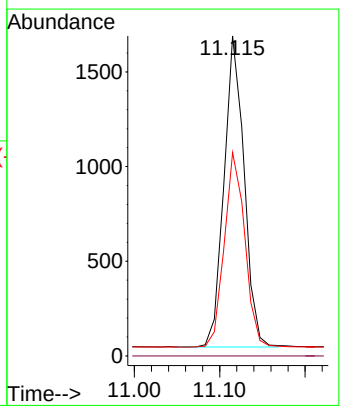


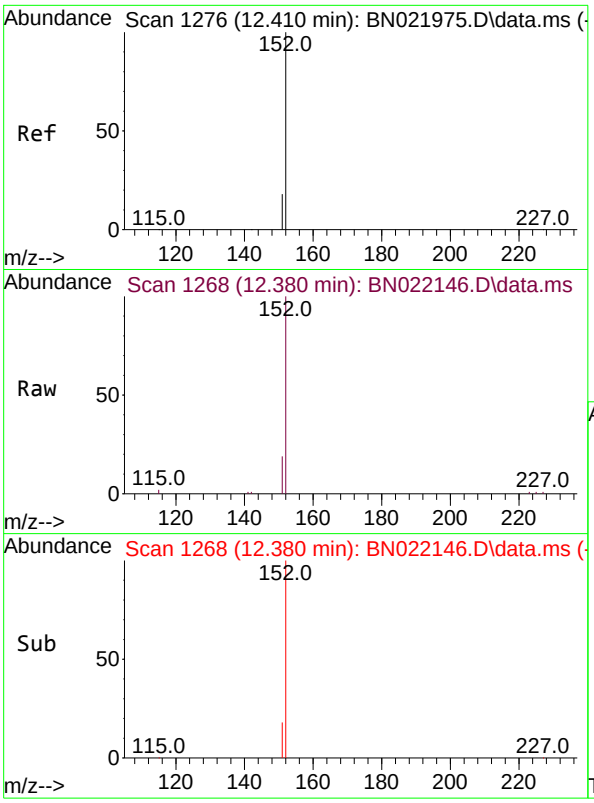


#10
Hexachlorobutadiene
Concen: 0.377 ng
RT: 11.115 min Scan# 1001
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:225 Resp: 2688

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.8	51.3	76.9



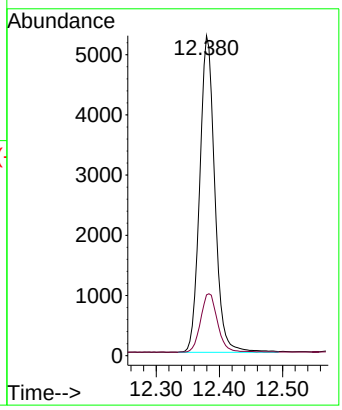


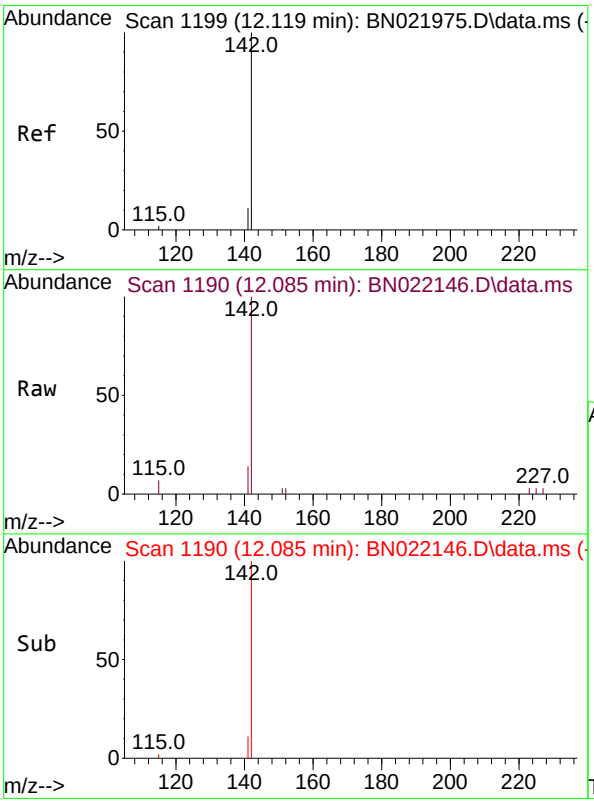
#11
2-Methylnaphthalene-d10
Concen: 0.350 ng
RT: 12.380 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:152 Resp: 8755

Ion	Ratio	Lower	Upper
152	100		
151	20.7	13.8	20.6#

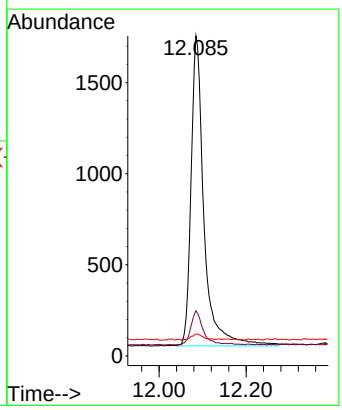


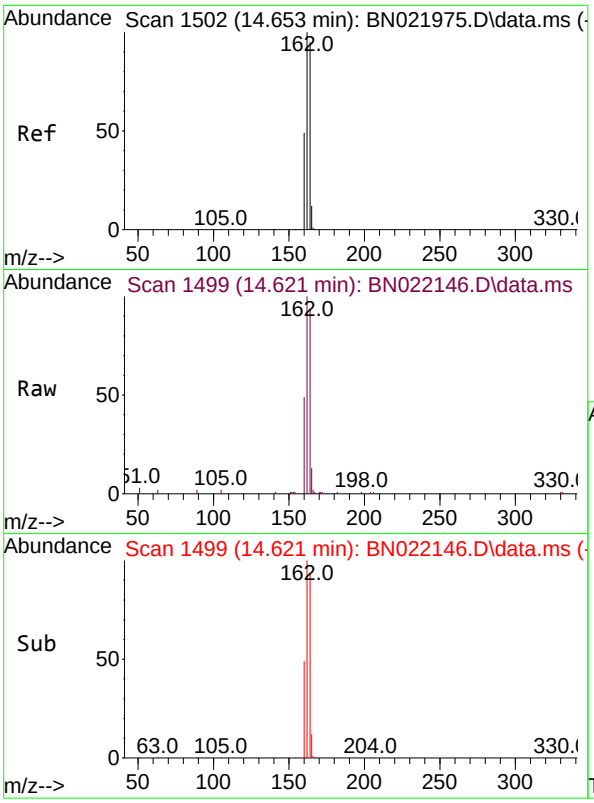


#12
2-Methylnaphthalene
Concen: 0.575 ng
RT: 12.085 min Scan# 1190
Delta R.T. -0.015 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:142 Resp: 3508

Ion	Ratio	Lower	Upper
142	100		
141	14.1	13.6	20.4
115	6.8	9.7	14.5#



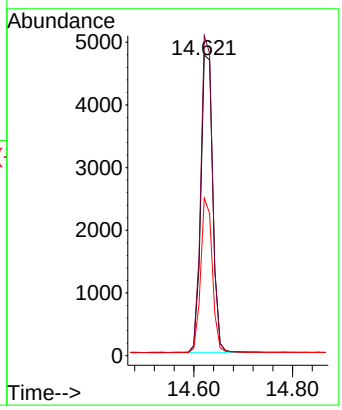


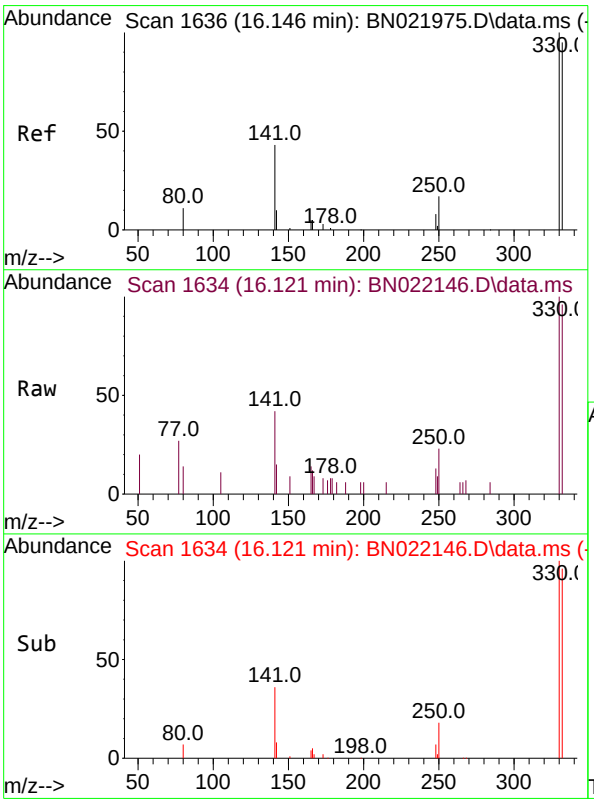
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.621 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:164 Resp: 7945

Ion	Ratio	Lower	Upper
164	100		
162	106.4	84.3	126.5
160	52.4	41.7	62.5

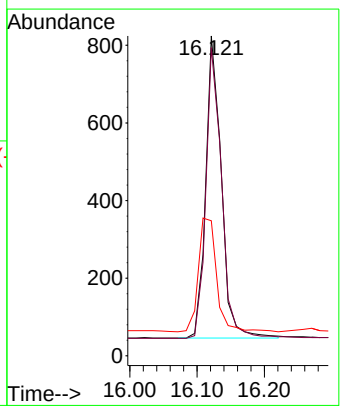


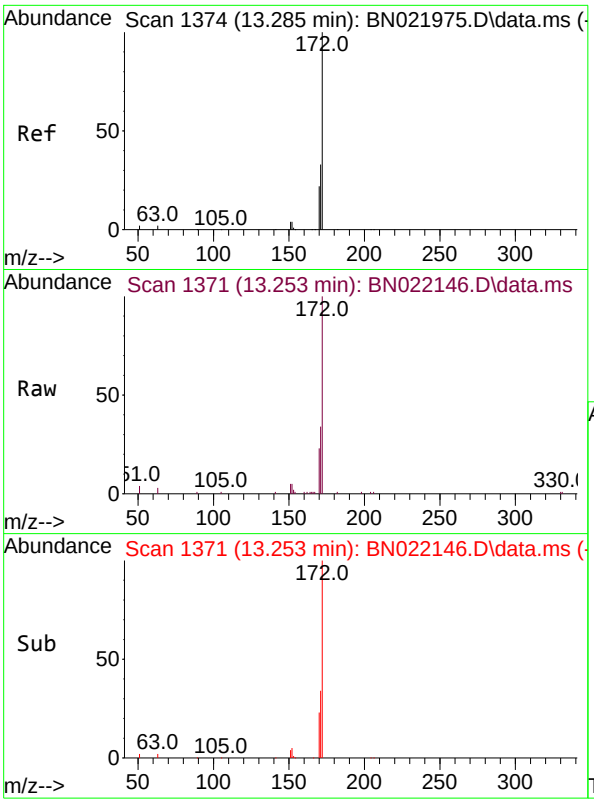


#14
2,4,6-Tribromophenol
Concen: 0.414 ng
RT: 16.121 min Scan# 1634
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:330 Resp: 1255

Ion	Ratio	Lower	Upper
330	100		
332	96.8	77.0	115.4
141	44.1	35.3	52.9



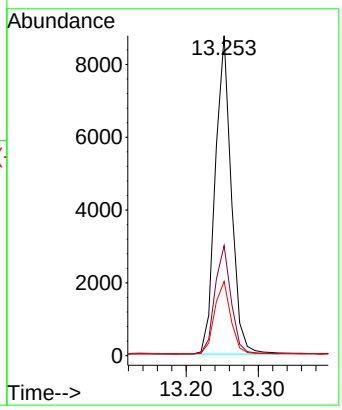


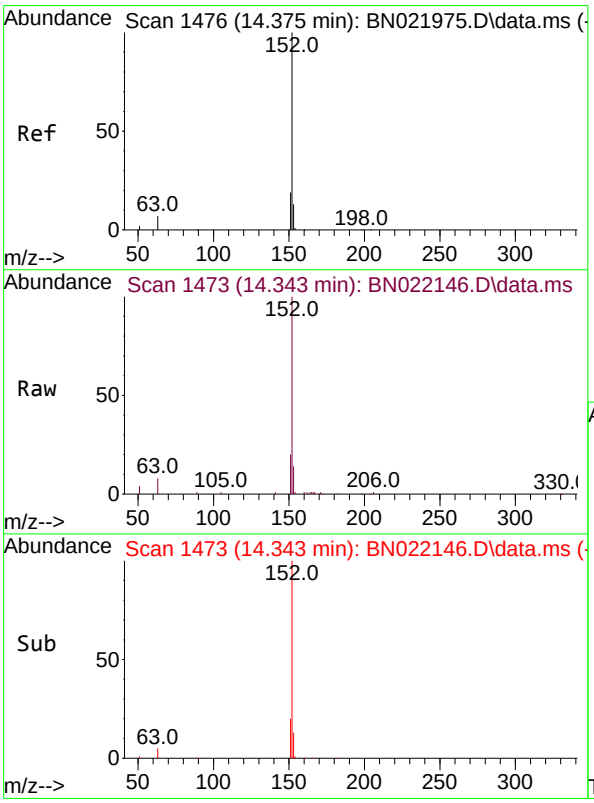
#15
2-Fluorobiphenyl
Concen: 0.388 ng
RT: 13.253 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:172 Resp: 13471

Ion	Ratio	Lower	Upper
172	100		
171	34.4	27.2	40.8
170	23.2	18.3	27.5

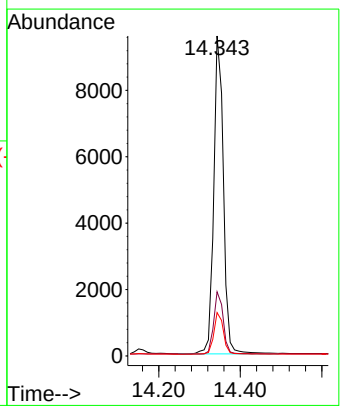


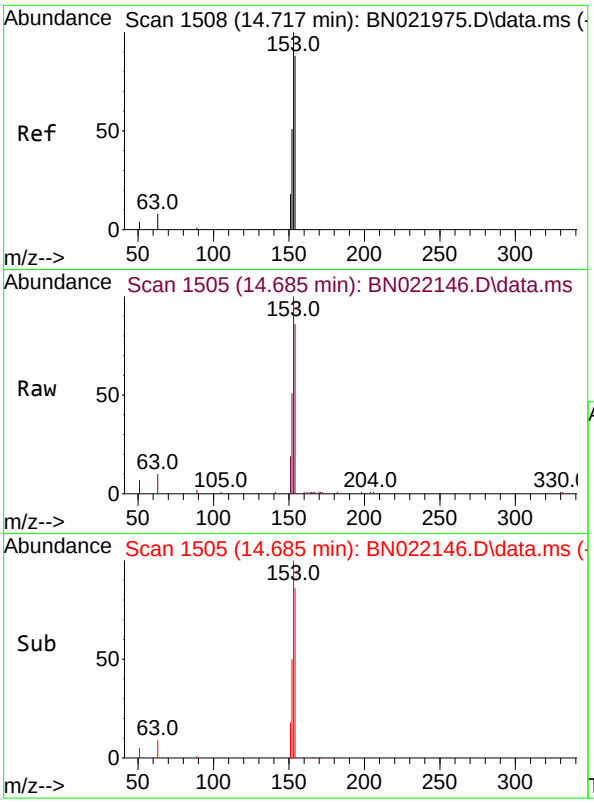


#16
Acenaphthylene
Concen: 0.415 ng
RT: 14.343 min Scan# 1473
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:152 Resp: 15707

Ion	Ratio	Lower	Upper
152	100		
151	19.2	15.5	23.3
153	12.9	10.4	15.6



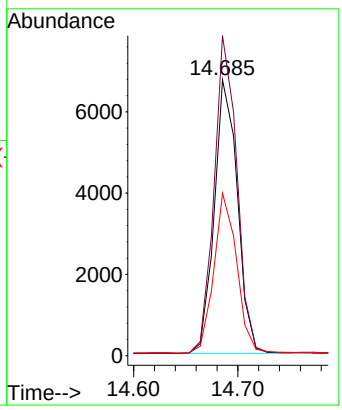


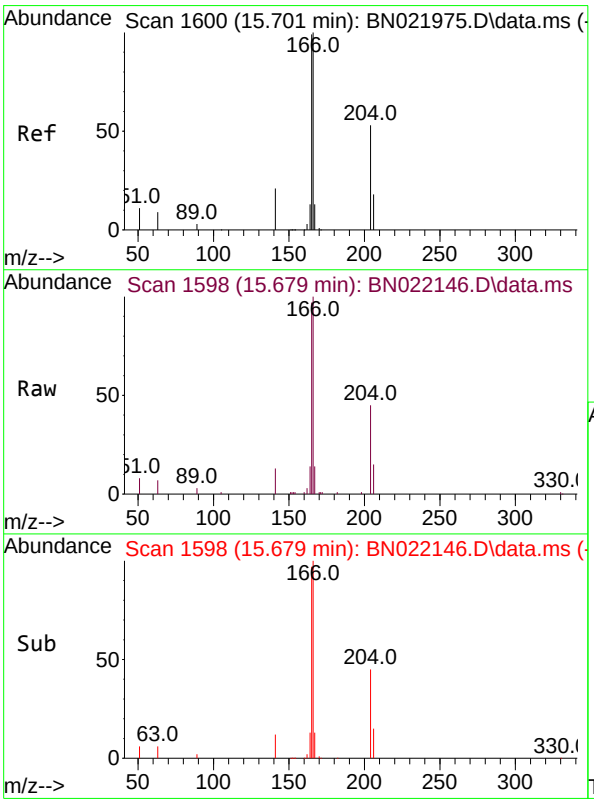
#17
Acenaphthene
Concen: 0.391 ng
RT: 14.685 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:154 Resp: 10401

Ion	Ratio	Lower	Upper
154	100		
153	114.7	92.1	138.1
152	57.9	47.8	71.6

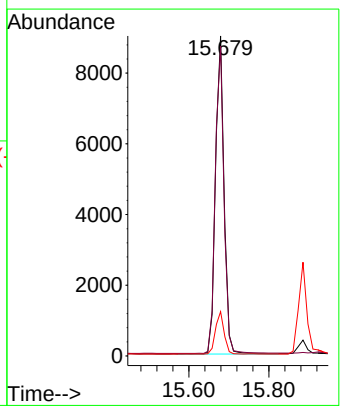


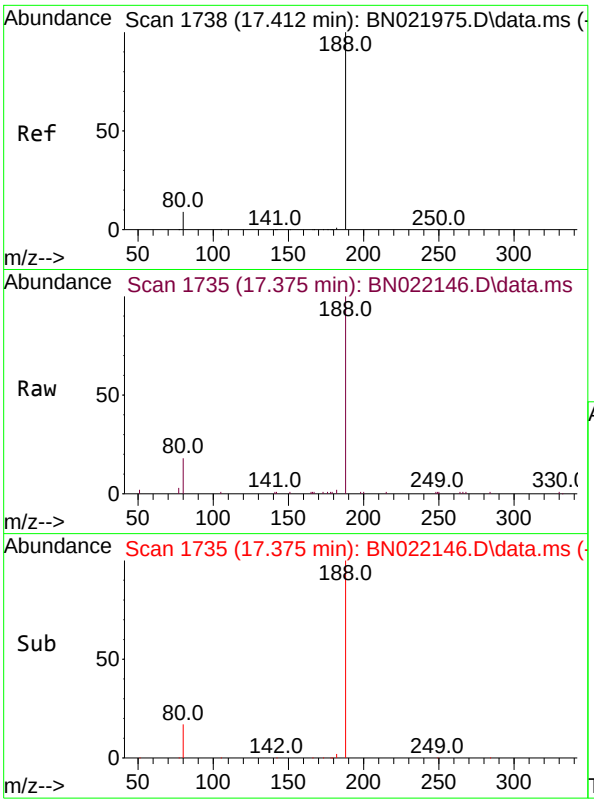


#18
Fluorene
Concen: 0.445 ng
RT: 15.679 min Scan# 1598
Delta R.T. -0.000 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:166 Resp: 14260

Ion	Ratio	Lower	Upper
166	100		
165	98.9	80.0	120.0
167	13.7	10.9	16.3



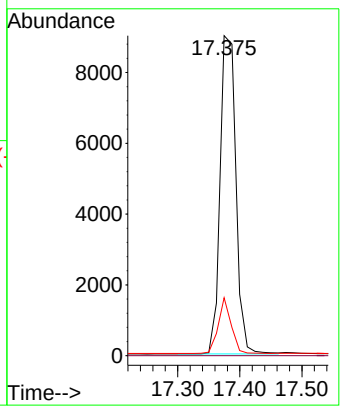


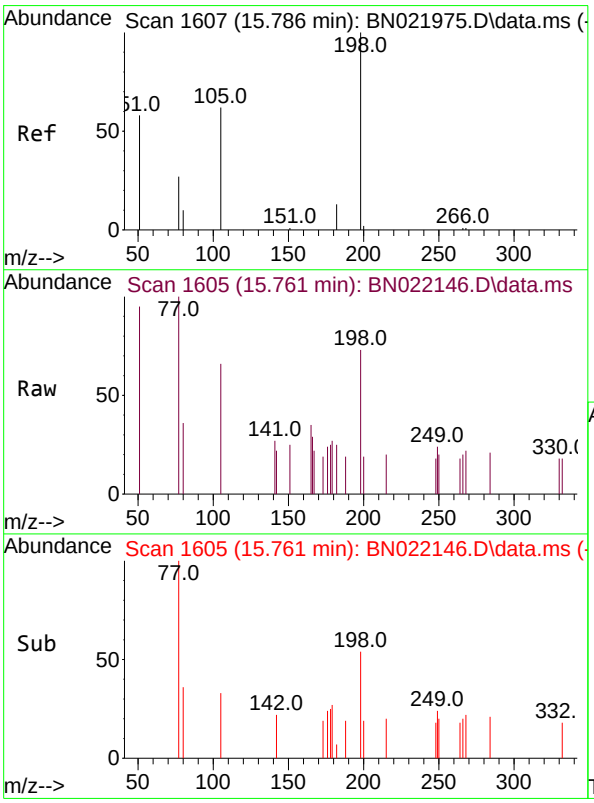
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.375 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:188 Resp: 15864

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	18.1	7.5	11.3#

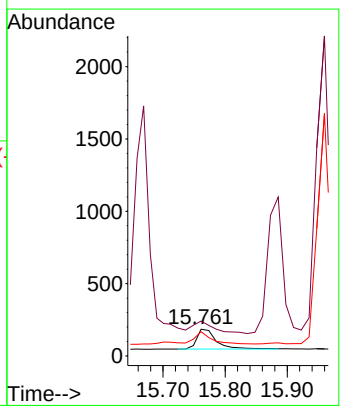


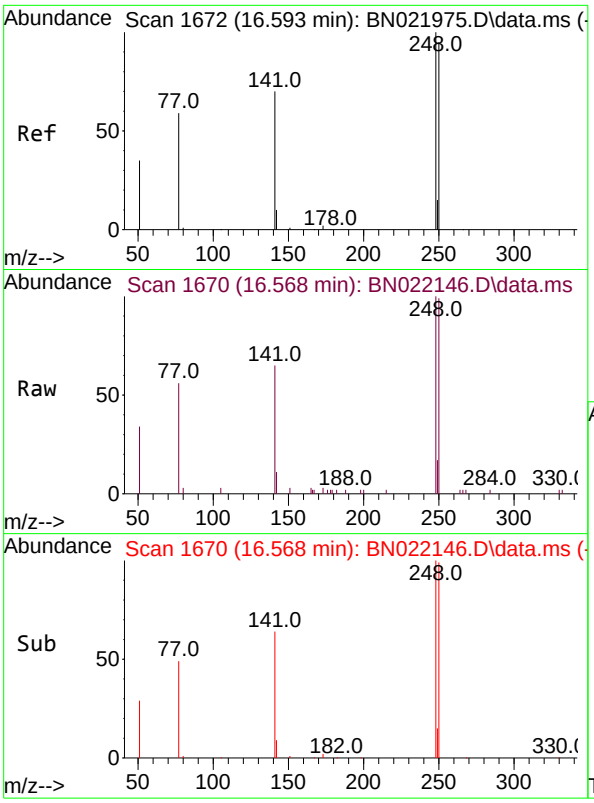


#20
4,6-Dinitro-2-methylphenol
Concen: 0.288 ng
RT: 15.761 min Scan# 1605
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:198 Resp: 300

Ion	Ratio	Lower	Upper
198	100		
51	130.8	96.6	144.8
105	90.8	64.4	96.6



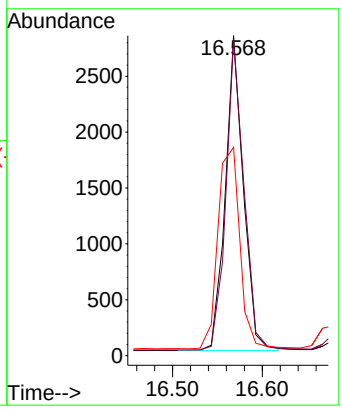


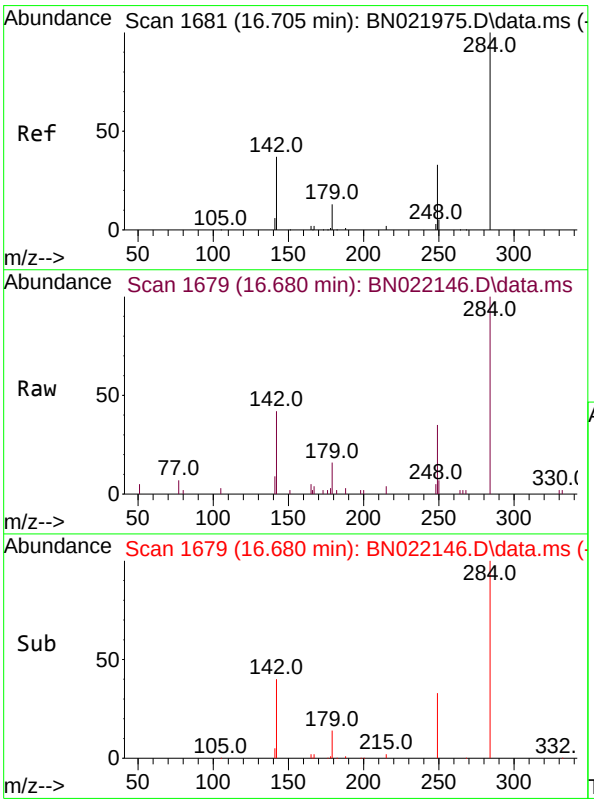
#21
4-Bromophenyl-phenylether
Concen: 0.408 ng
RT: 16.568 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:248 Resp: 3941

Ion	Ratio	Lower	Upper
248	100		
250	98.8	76.6	114.8
141	65.1	57.5	86.3

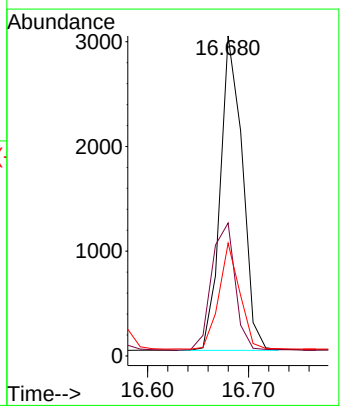


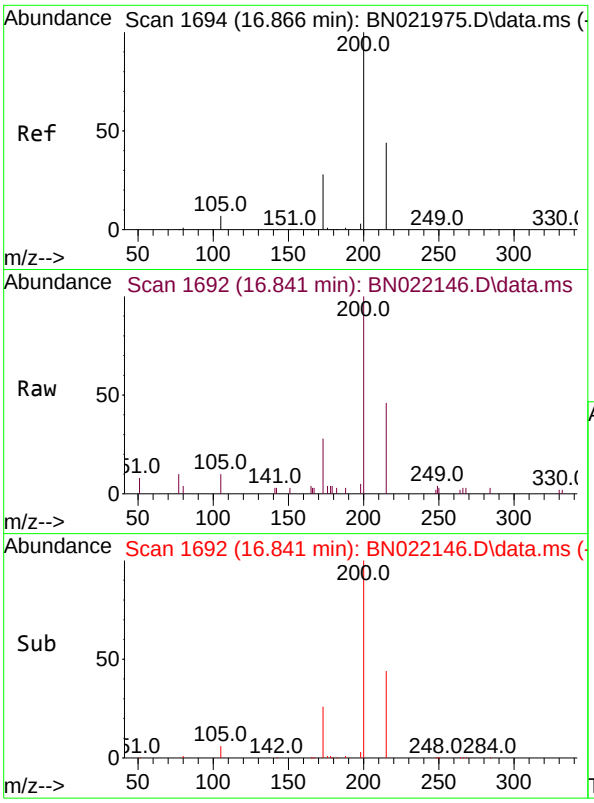


#22
Hexachlorobenzene
Concen: 0.380 ng
RT: 16.680 min Scan# 1679
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:284 Resp: 4572

Ion	Ratio	Lower	Upper
284	100		
142	42.9	33.4	50.0
249	31.6	25.1	37.7



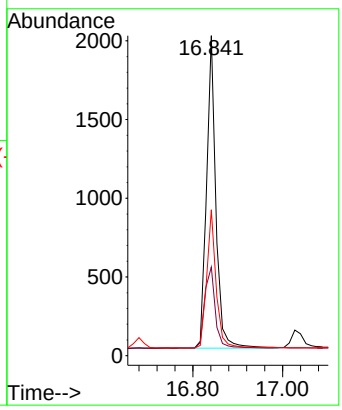


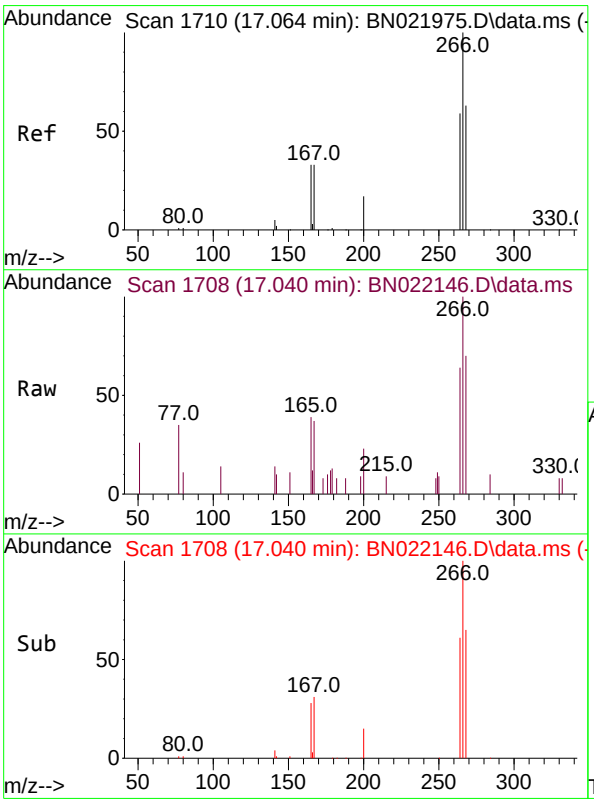
#23
Atrazine
Concen: 0.399 ng
RT: 16.841 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:200 Resp: 2863

Ion	Ratio	Lower	Upper
200	100		
173	27.7	24.6	36.8
215	45.6	37.1	55.7

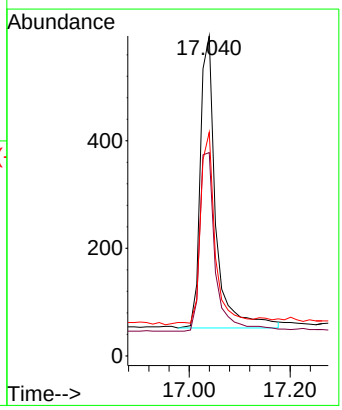


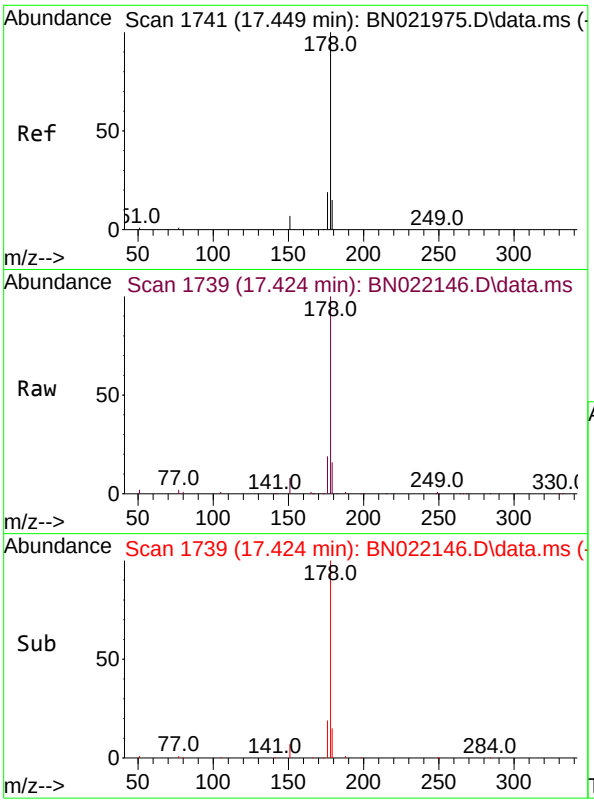


#24
Pentachlorophenol
Concen: 0.315 ng
RT: 17.040 min Scan# 1708
Delta R.T. 0.000 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:266 Resp: 1160

Ion	Ratio	Lower	Upper
266	100		
264	62.3	49.8	74.6
268	62.7	49.6	74.4



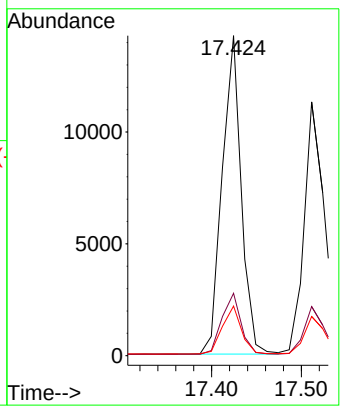


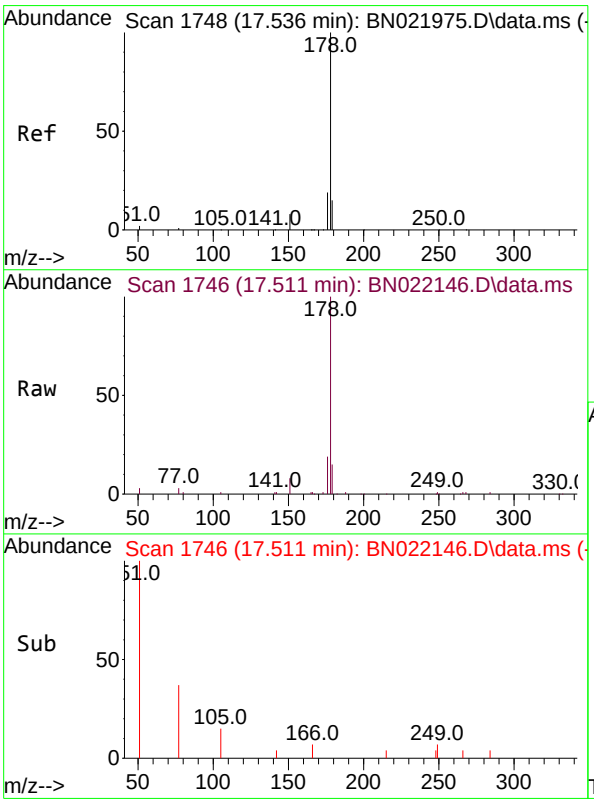
#25
Phenanthrene
Concen: 0.386 ng
RT: 17.424 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:178 Resp: 21050

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.0
179	15.2	12.2	18.2

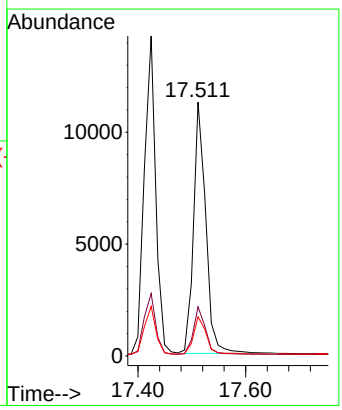


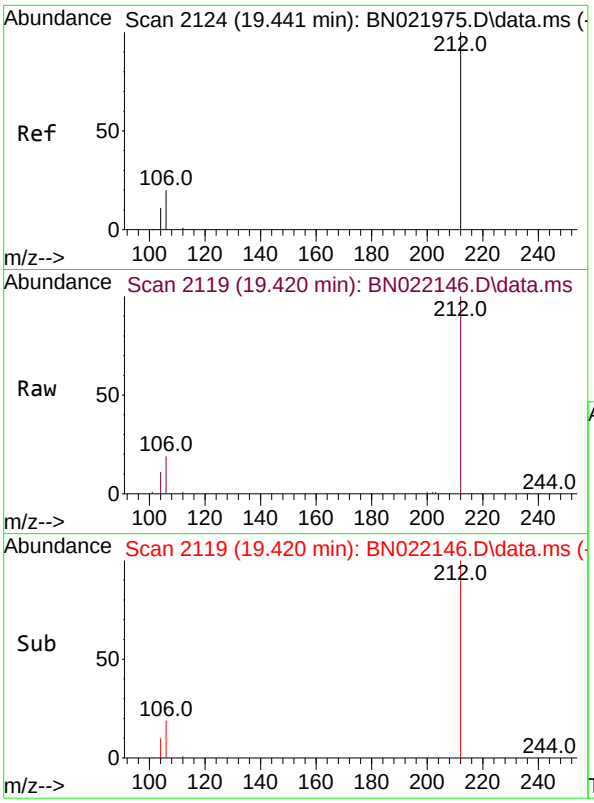


#26
Anthracene
Concen: 0.407 ng
RT: 17.511 min Scan# 1746
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:178 Resp: 17824

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.8	22.2
179	15.2	12.2	18.2



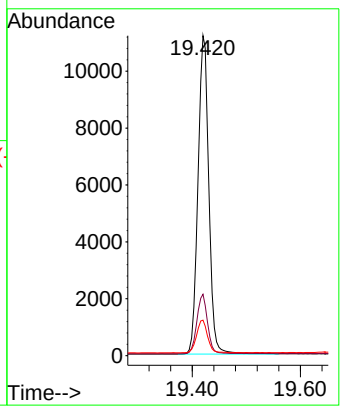


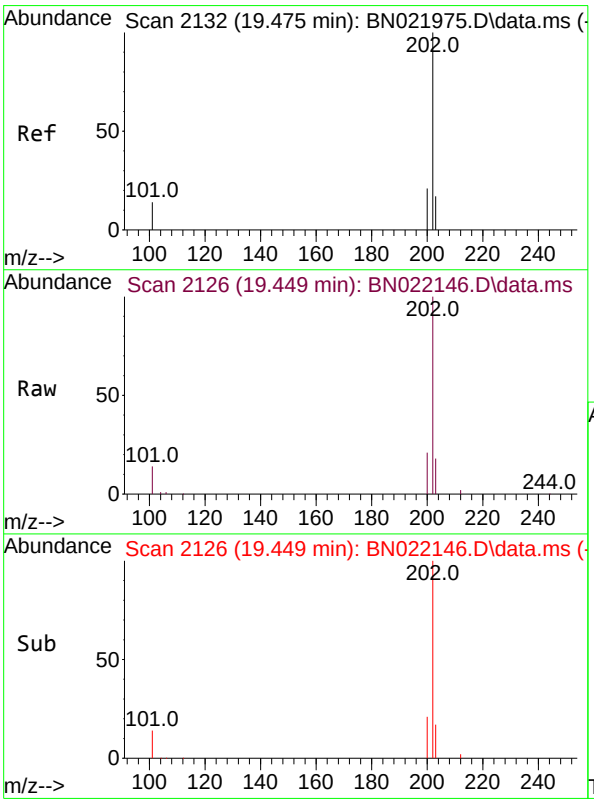
#27
Fluoranthene-d10
Concen: 0.369 ng
RT: 19.420 min Scan# 21
Delta R.T. -0.008 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:212 Resp: 15558

Ion	Ratio	Lower	Upper
212	100		
106	18.5	15.2	22.8
104	10.4	8.6	13.0

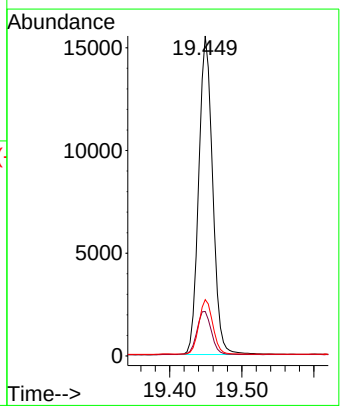


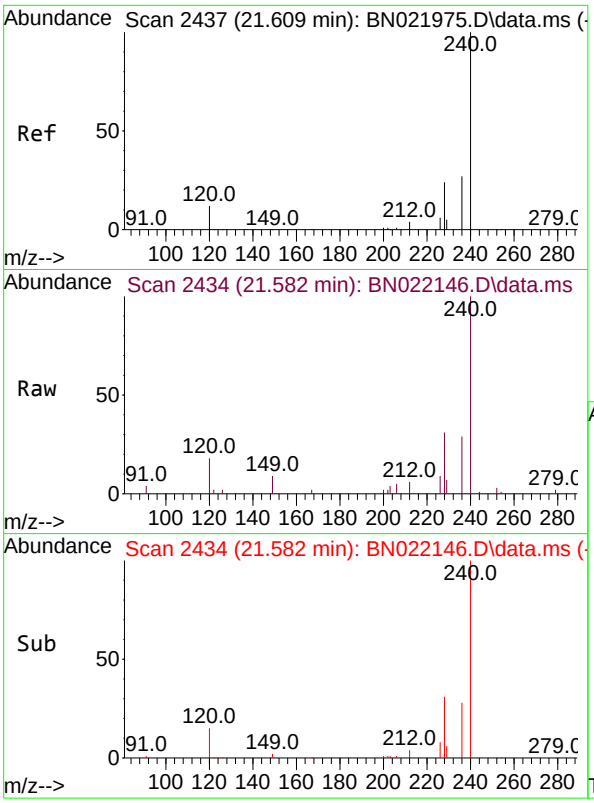


#28
Fluoranthene
Concen: 0.356 ng
RT: 19.449 min Scan# 2126
Delta R.T. -0.008 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:202 Resp: 20813

Ion	Ratio	Lower	Upper
202	100		
101	14.4	11.4	17.0
203	17.0	13.5	20.3



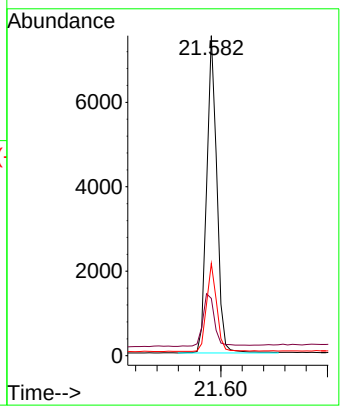


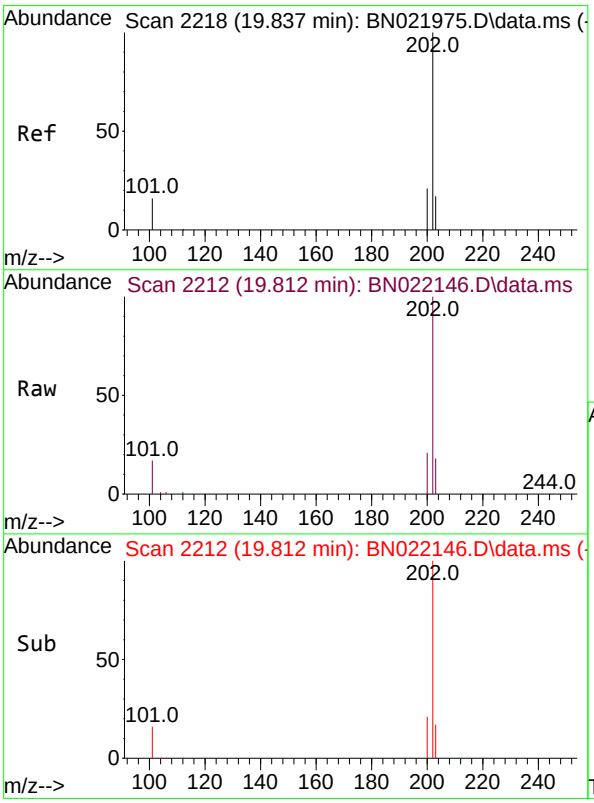
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.582 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:240 Resp: 9902

Ion	Ratio	Lower	Upper
240	100		
120	17.9	11.8	17.6#
236	28.8	22.4	33.6

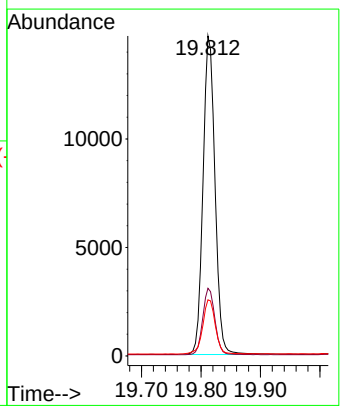


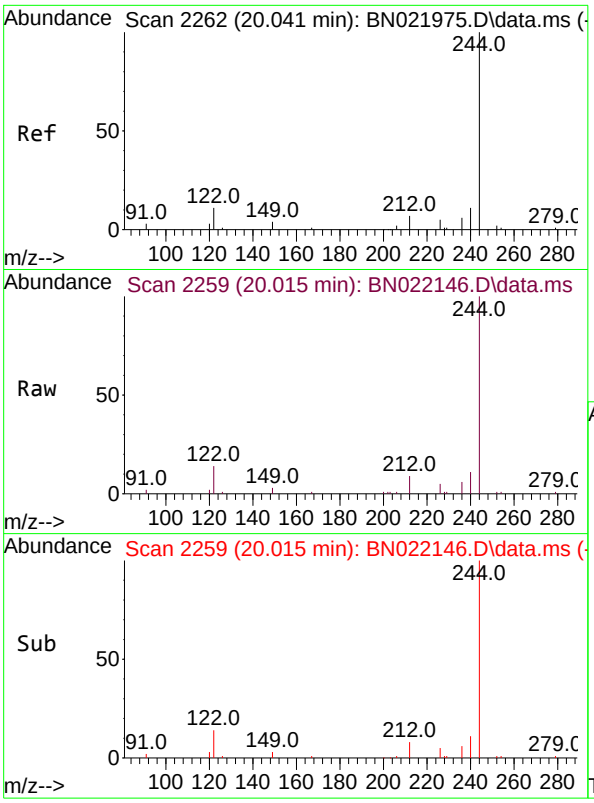


#30
Pyrene
Concen: 0.474 ng
RT: 19.812 min Scan# 2212
Delta R.T. -0.008 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:202 Resp: 20606

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.6	25.0
203	17.9	14.1	21.1



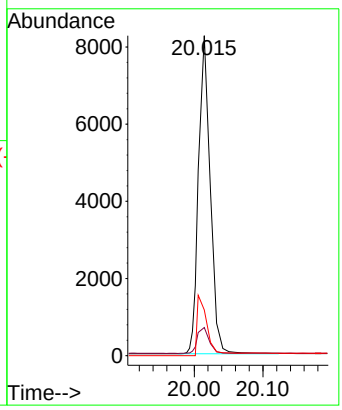


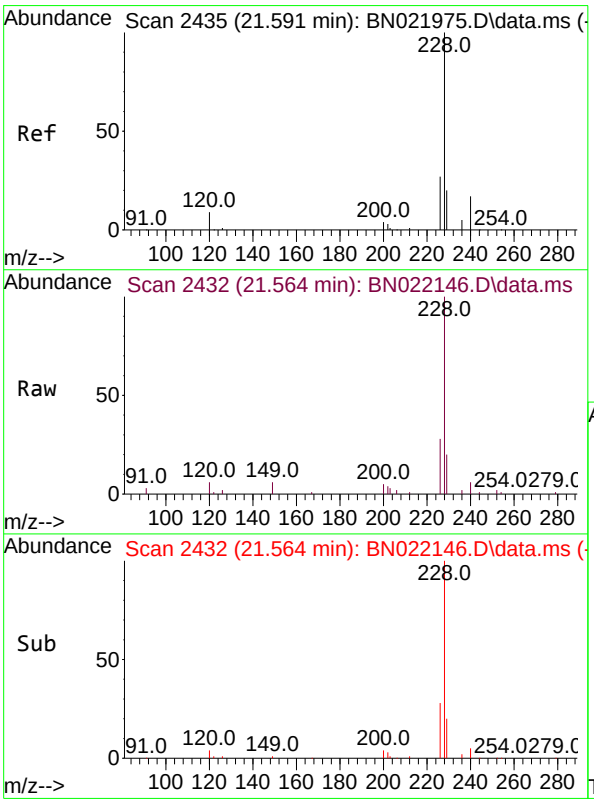
#31
Terphenyl-d14
Concen: 0.460 ng
RT: 20.015 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:244 Resp: 9148

Ion	Ratio	Lower	Upper
244	100		
212	8.8	6.5	9.7
122	14.3	9.1	13.7#

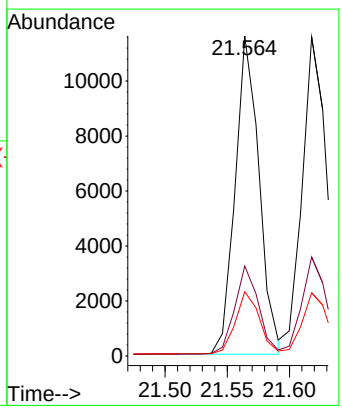


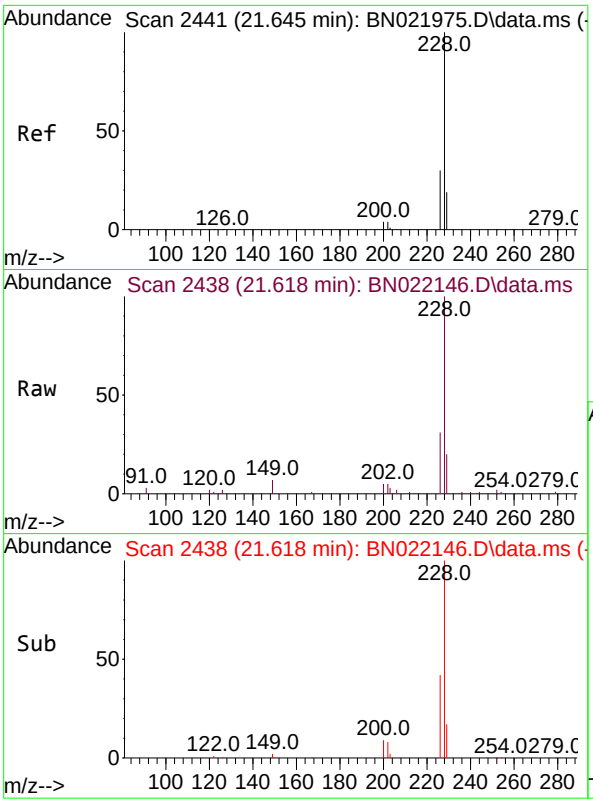


#32
Benzo(a)anthracene
Concen: 0.415 ng
RT: 21.564 min Scan# 2432
Delta R.T. -0.009 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:228 Resp: 15459

Ion	Ratio	Lower	Upper
228	100		
226	28.1	22.2	33.4
229	20.0	16.2	24.2



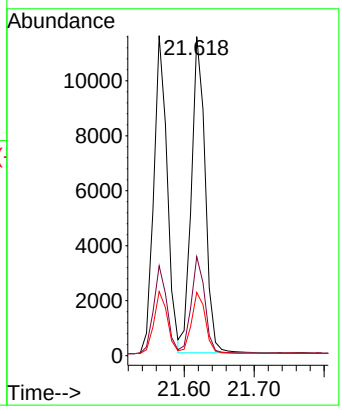


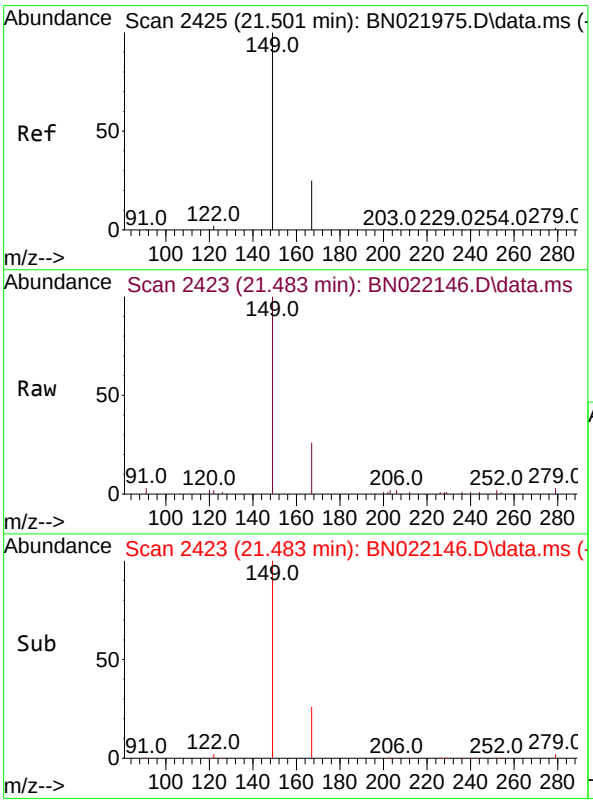
#33
Chrysene
Concen: 0.381 ng
RT: 21.618 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:228 Resp: 15734

Ion	Ratio	Lower	Upper
228	100		
226	31.1	24.2	36.2
229	19.8	15.8	23.6

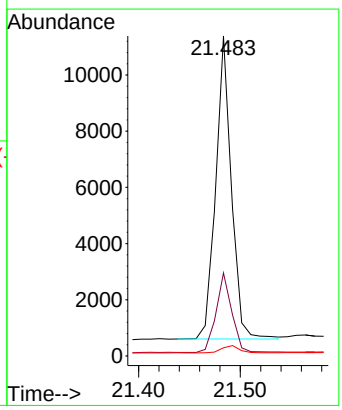


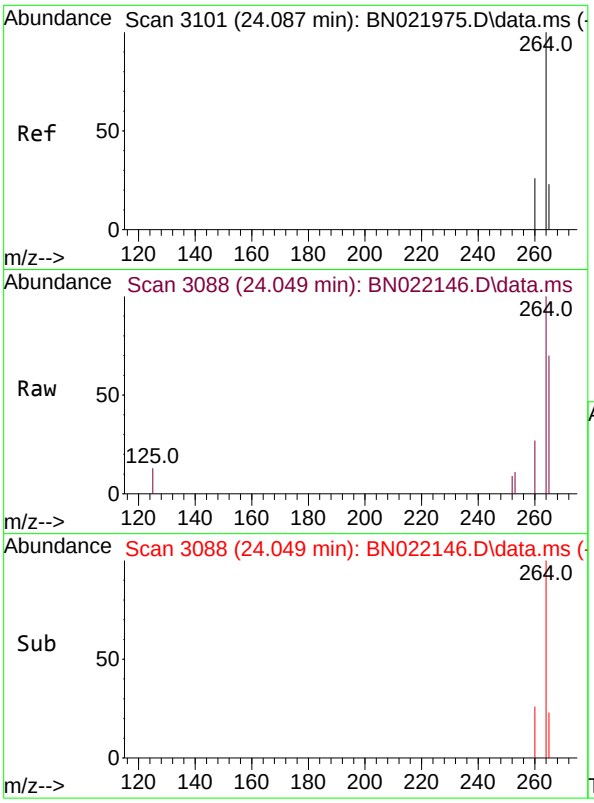


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.644 ng
RT: 21.483 min Scan# 2423
Delta R.T. -0.009 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:149 Resp: 11503

Ion	Ratio	Lower	Upper
149	100		
167	26.5	20.2	30.4
279	2.9	2.3	3.5



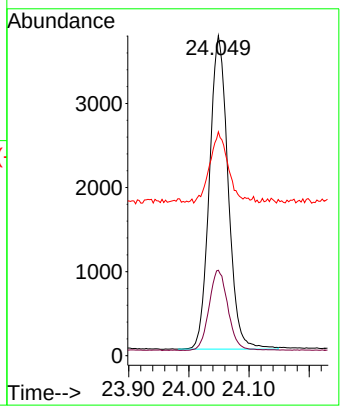


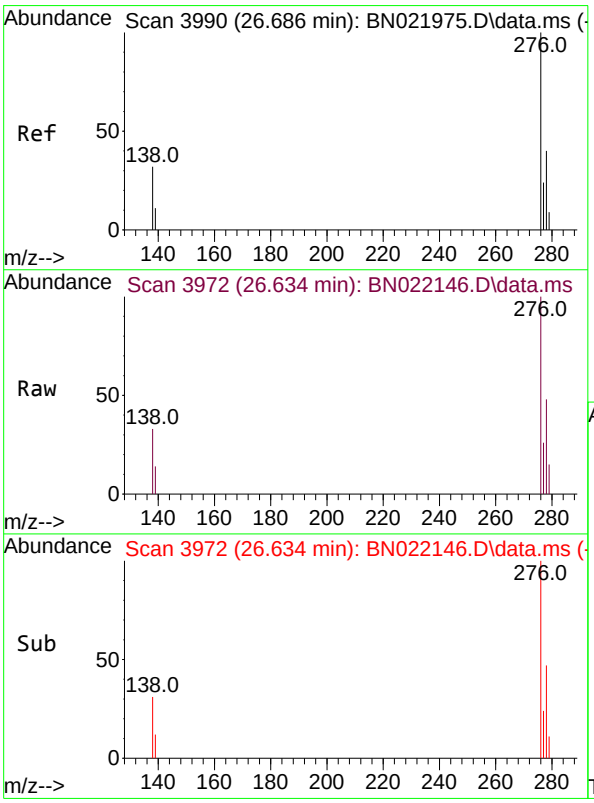
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.049 min Scan# 3
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:264 Resp: 8029

Ion	Ratio	Lower	Upper
264	100		
260	26.7	21.3	31.9
265	69.9	63.0	94.4

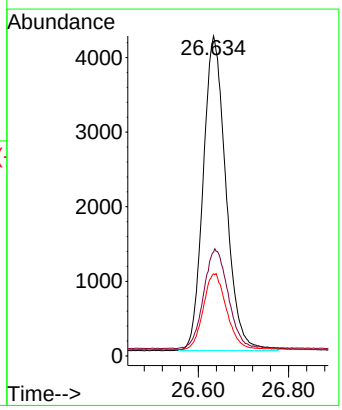


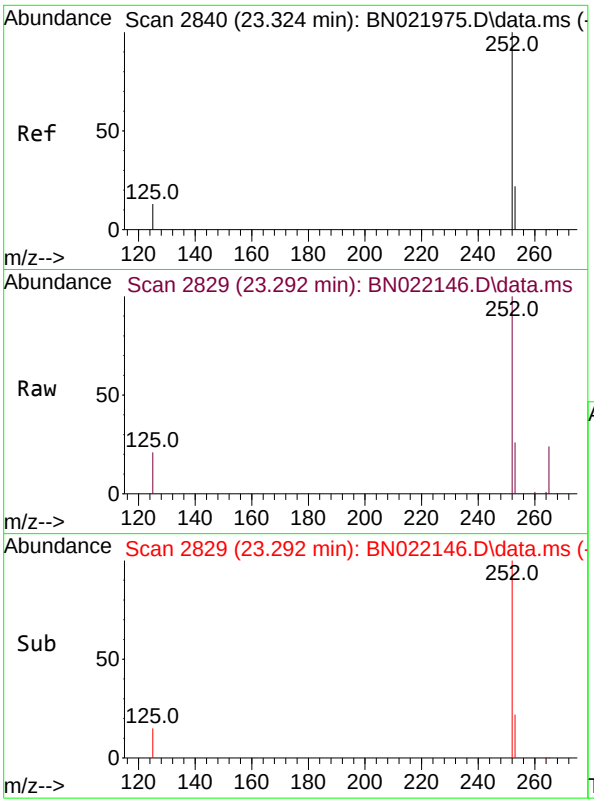


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.363 ng
RT: 26.634 min Scan# 3972
Delta R.T. -0.018 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:276 Resp: 14710

Ion	Ratio	Lower	Upper
276	100		
138	34.1	28.0	42.0
277	24.8	19.8	29.8



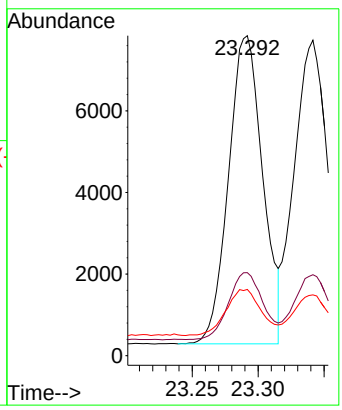


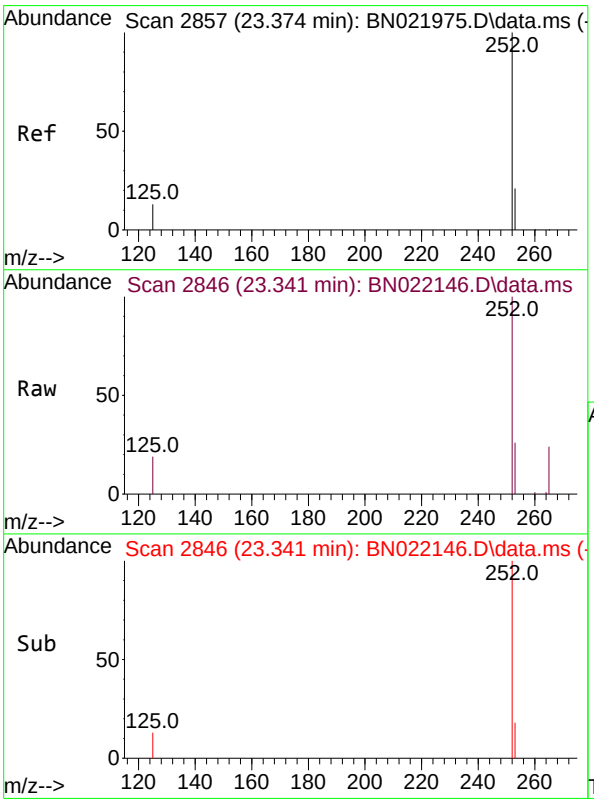
#37
Benzo(b)fluoranthene
Concen: 0.358 ng
RT: 23.292 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:252 Resp: 13627

Ion	Ratio	Lower	Upper
252	100		
253	26.0	20.6	31.0
125	20.7	15.6	23.4

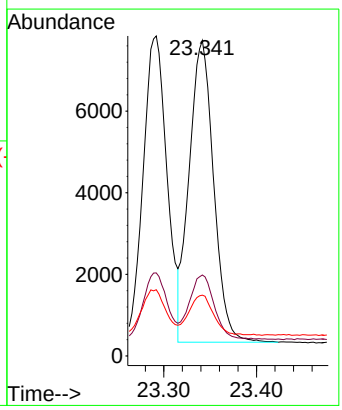


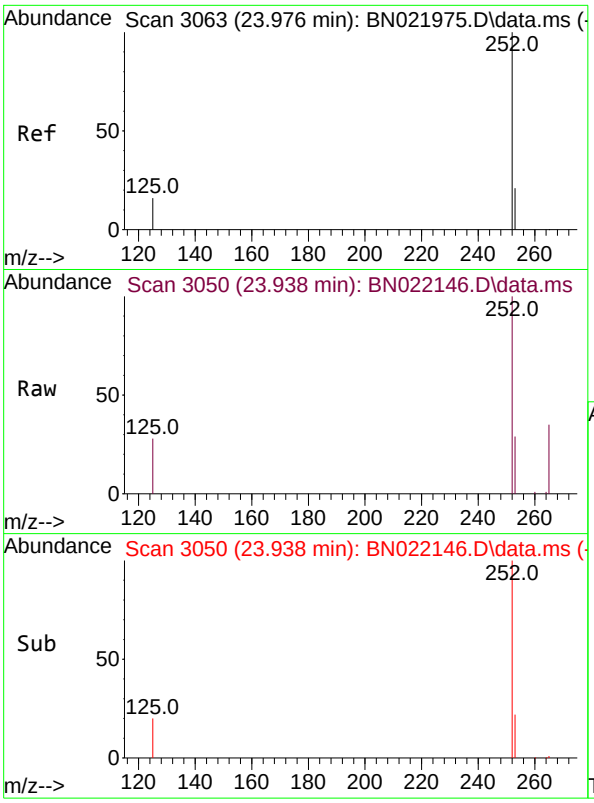


#38
Benzo(k)fluoranthene
Concen: 0.358 ng
RT: 23.341 min Scan# 2846
Delta R.T. -0.009 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:252 Resp: 13573

Ion	Ratio	Lower	Upper
252	100		
253	25.7	20.4	30.6
125	19.3	15.8	23.6



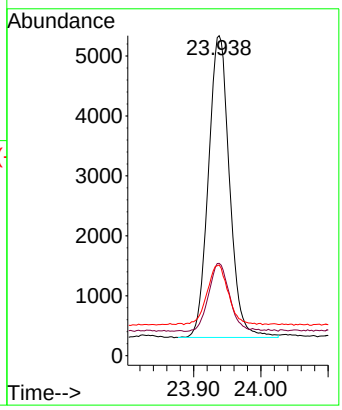


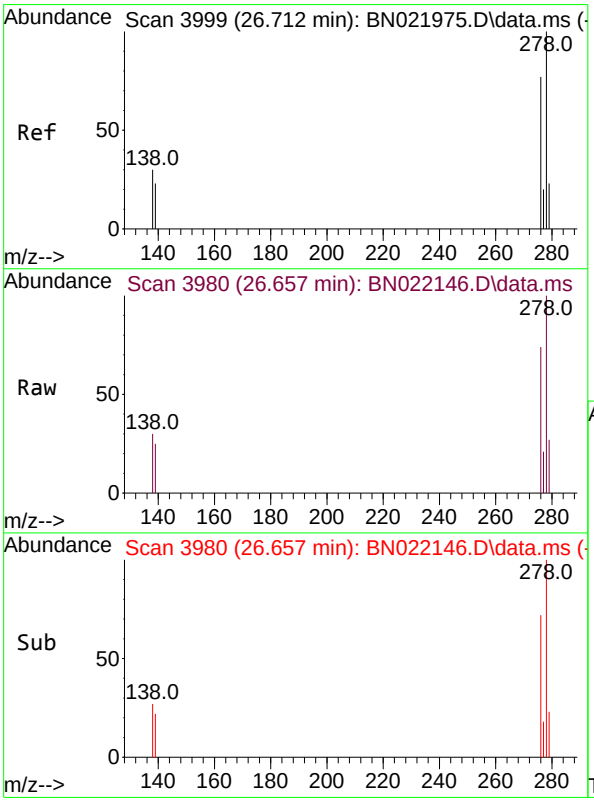
#39
Benzo(a)pyrene
Concen: 0.378 ng
RT: 23.938 min Scan# 3
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:252 Resp: 10967

Ion	Ratio	Lower	Upper
252	100		
253	28.8	23.2	34.8
125	28.4	21.1	31.7

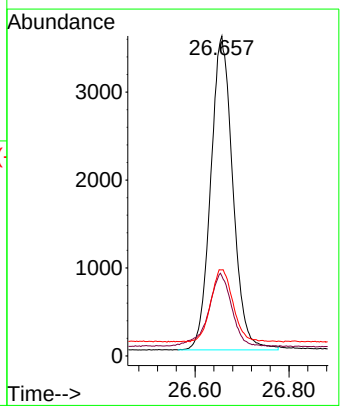


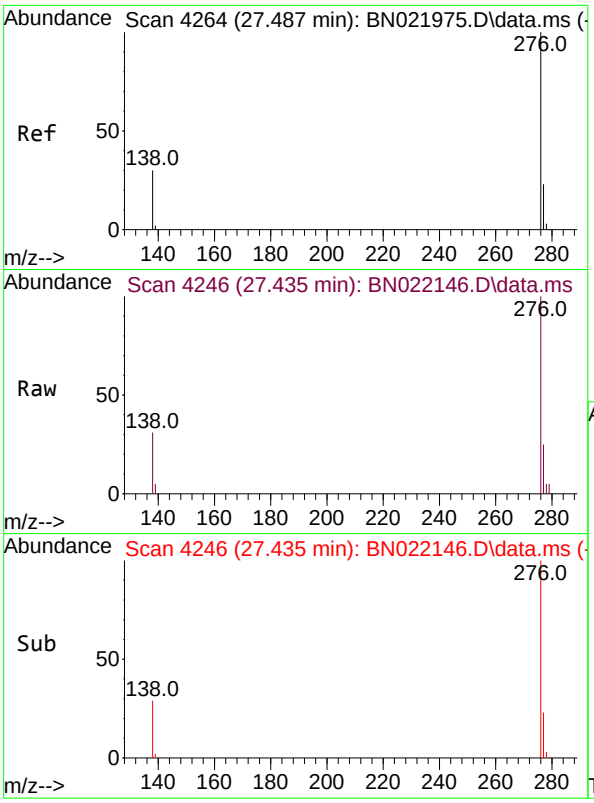


#40
Dibenzo(a,h)anthracene
Concen: 0.360 ng
RT: 26.657 min Scan# 3980
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Tgt Ion:278 Resp: 11655

Ion	Ratio	Lower	Upper
278	100		
139	24.9	19.9	29.9
279	26.9	21.9	32.9





#41
Benzo(g,h,i)perylene
Concen: 0.347 ng
RT: 27.435 min Scan# 4
Delta R.T. -0.012 min
Lab File: BN022146.D
Acq: 17 Oct 2022 11:24

Instrument :
BNA_N
ClientSampleId :
PB148337BSD

Tgt Ion:276 Resp: 12115

Ion	Ratio	Lower	Upper
276	100		
277	25.1	20.0	30.0
138	31.1	25.2	37.8