Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN030322\
Data File : BN018800.D
Acq On : 02 Mar 2022 20:18
Operator : CG/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Mar 03 00:12:35 2022
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\8270-SIM-BN030322.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 03 00:10:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.912	152	7046	0.400	ng		0.00
7) Naphthalene-d8	10.722	136	16864	0.400	ng		0.00
13) Acenaphthene-d10	14.538	164	10388	0.400	ng		0.00
19) Phenanthrene-d10	17.277	188	21576	0.400	ng		0.00
29) Chrysene-d12	21.458	240	18435	0.400	ng	#	0.00
35) Perylene-d12	23.861	264	12768	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.464	112	76604	4.749	ng		0.00
5) Phenol-d6	7.060	99	98018	5.284	ng		0.00
8) Nitrobenzene-d5	9.057	82	71424	5.477	ng		-0.01
11) 2-Methylnaphthalene-d10	12.303	152	140211	5.515	ng		0.00
14) 2,4,6-Tribromophenol	16.025	330	31205	7.694	ng		0.00
15) 2-Fluorobiphenyl	13.169	172	217706	4.421	ng		0.00
27) Fluoranthene-d10	19.312	212	331926	5.668	ng		0.00
31) Terphenyl-d14	19.906	244	197934	4.948	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.319	88	36510	4.463	ng		97
3) n-Nitrosodimethylamine	3.629	42	42424	5.226	ng	#	98
6) bis(2-Chloroethyl)ether	7.327	93	94874	4.977	ng		100
9) Naphthalene	10.765	128	240704	4.946	ng		99
10) Hexachlorobutadiene	11.064	225	53598	4.579	ng	#	100
12) 2-Methylnaphthalene	12.378	142	172135	5.283	ng		100
16) Acenaphthylene	14.260	152	272702	5.534	ng		100
17) Acenaphthene	14.602	154	175797	5.169	ng		96
18) Fluorene	15.586	166	223778	5.464	ng		99
20) 4,6-Dinitro-2-methylph...	15.660	198	27692	8.750	ng	#	79
21) 4-Bromophenyl-phenylether	16.477	248	77673	5.066	ng		95
22) Hexachlorobenzene	16.600	284	89588	4.668	ng		100
23) Atrazine	16.733	200	54312	6.417	ng		98
24) Pentachlorophenol	16.938	266	36000	8.865	ng		99
25) Phenanthrene	17.318	178	365630	5.063	ng		100
26) Anthracene	17.410	178	340176	5.563	ng		100
28) Fluoranthene	19.341	202	417607	5.533	ng		100
30) Pyrene	19.704	202	420874	5.113	ng		100
32) Benzo(a)anthracene	21.449	228	377886	5.406	ng		100
33) Chrysene	21.503	228	368591	4.725	ng		99
34) Bis(2-ethylhexyl)phtha...	21.378	149	191762	6.750	ng		100
36) Indeno(1,2,3-cd)pyrene	26.346	276	296778	4.402	ng		99
37) Benzo(b)fluoranthene	23.130	252	310777	5.357	ng	#	95
38) Benzo(k)fluoranthene	23.176	252	306016	5.321	ng		96
39) Benzo(a)pyrene	23.752	252	245038	5.298	ng	#	91
40) Dibenzo(a,h)anthracene	26.363	278	229598	4.367	ng		97
41) Benzo(g,h,i)perylene	27.106	276	239832	4.158	ng		99

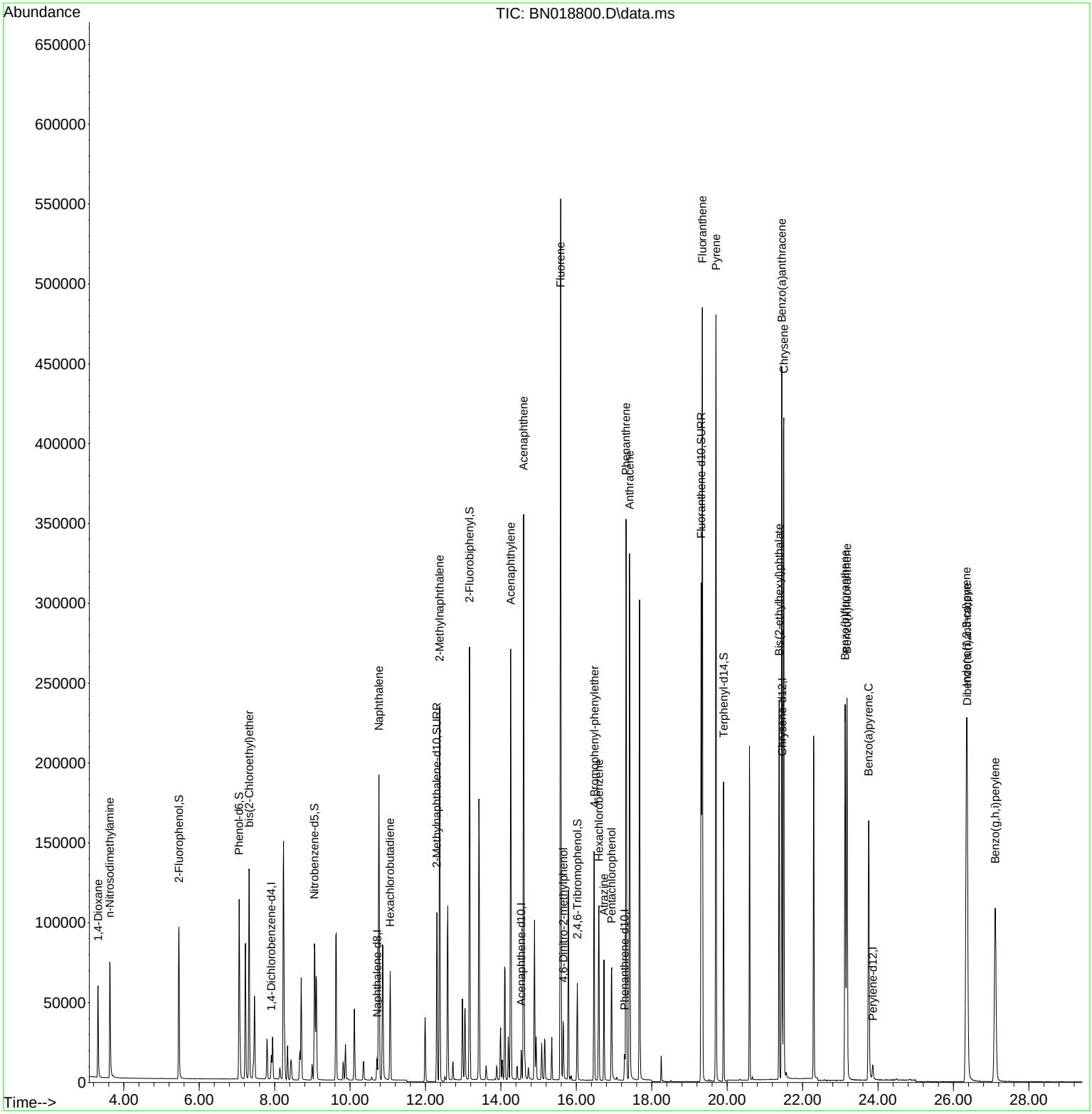
(#) = qualifier out of range (m) = manual integration (+) = signals summed

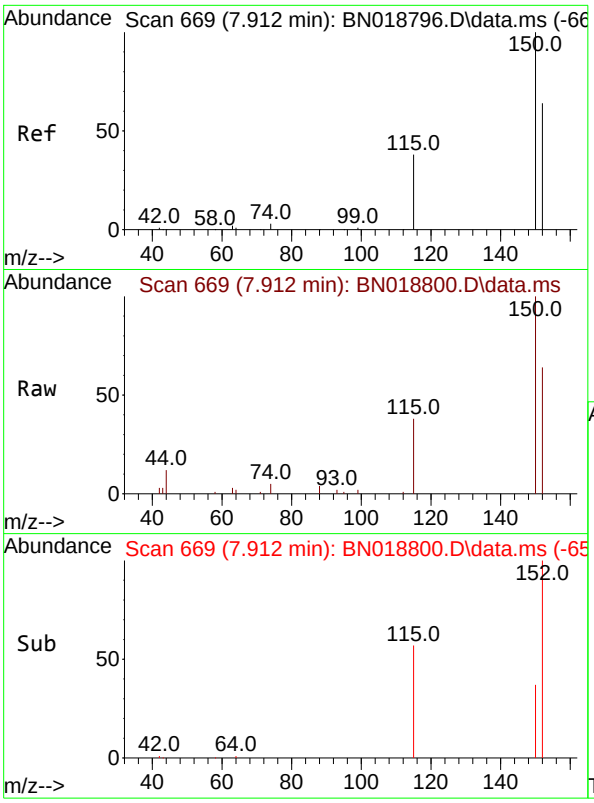
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN030322\
Data File : BN018800.D
Acq On : 02 Mar 2022 20:18
Operator : CG/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Mar 03 00:12:35 2022
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\8270-SIM-BN030322.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Mar 03 00:10:39 2022
Response via : Initial Calibration



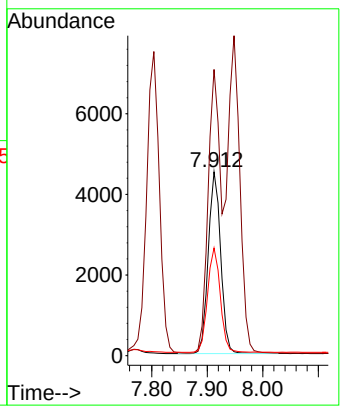


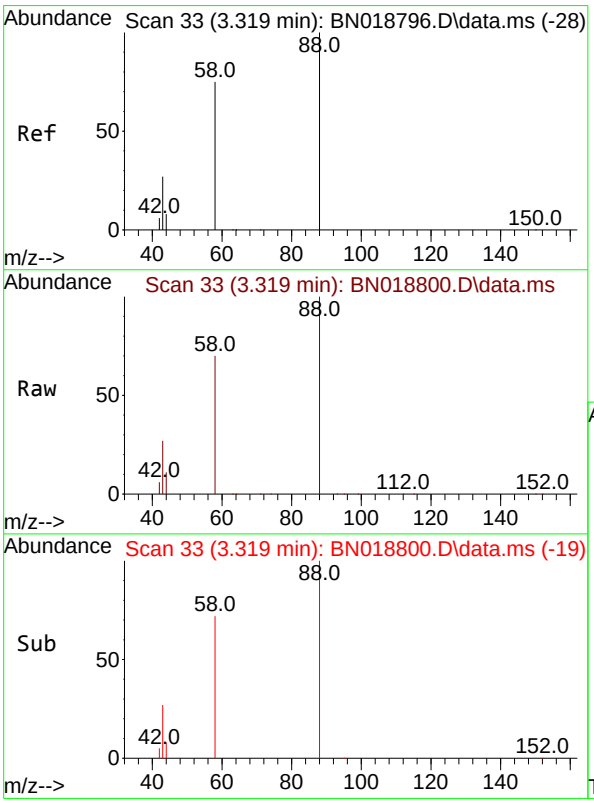
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.912 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 7046

Ion	Ratio	Lower	Upper
152	100		
150	155.6	123.9	185.9
115	58.6	48.2	72.4

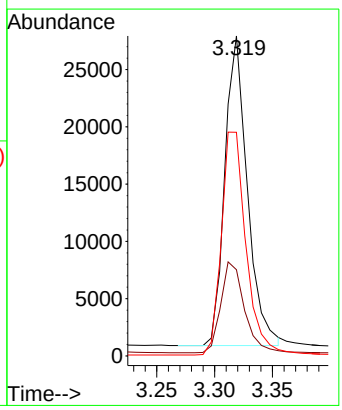


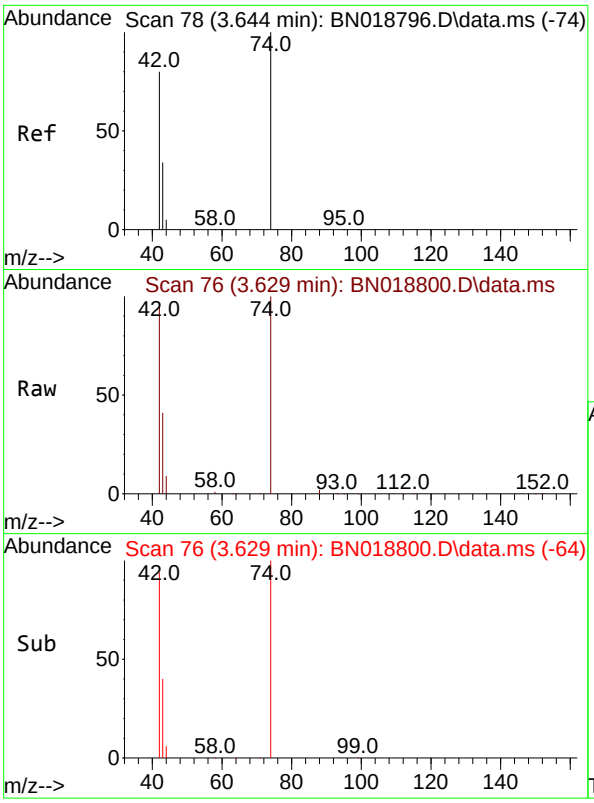


#2
1,4-Dioxane
Concen: 4.463 ng
RT: 3.319 min Scan# 33
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion: 88 Resp: 36510

Ion	Ratio	Lower	Upper
88	100		
43	30.6	24.6	37.0
58	78.2	65.4	98.2



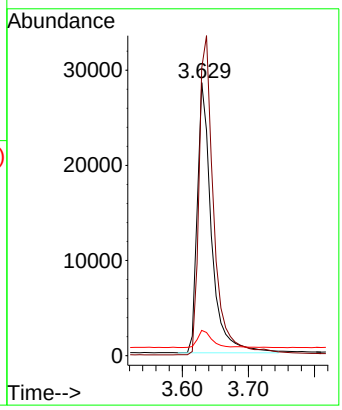


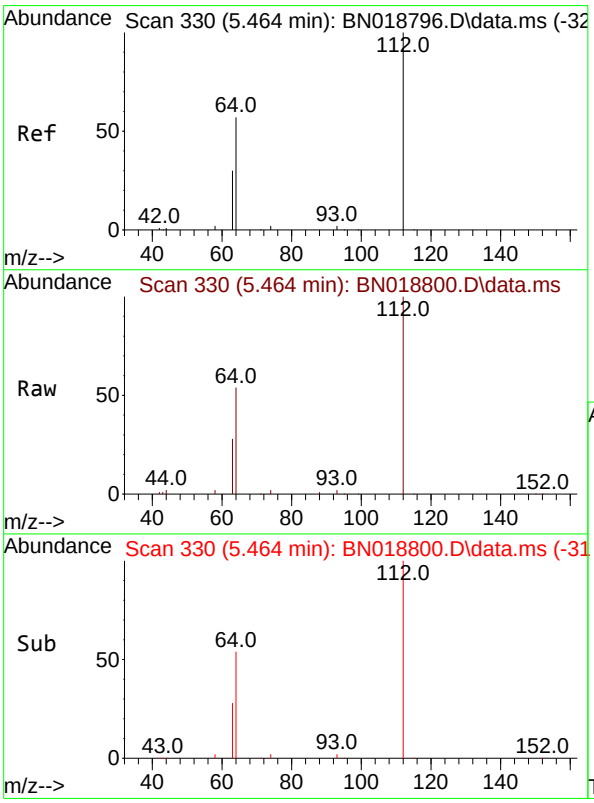
#3
n-Nitrosodimethylamine
Concen: 5.226 ng
RT: 3.629 min Scan# 7
Delta R.T. -0.015 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 42 Resp: 42424

Ion	Ratio	Lower	Upper
42	100		
74	122.9	96.9	145.3
44	6.7	7.3	10.9#

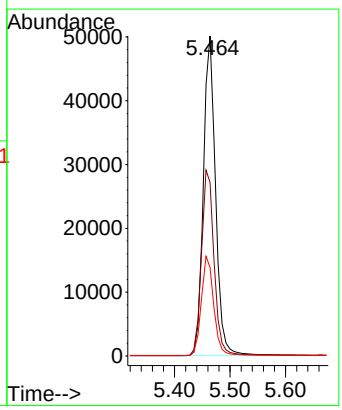


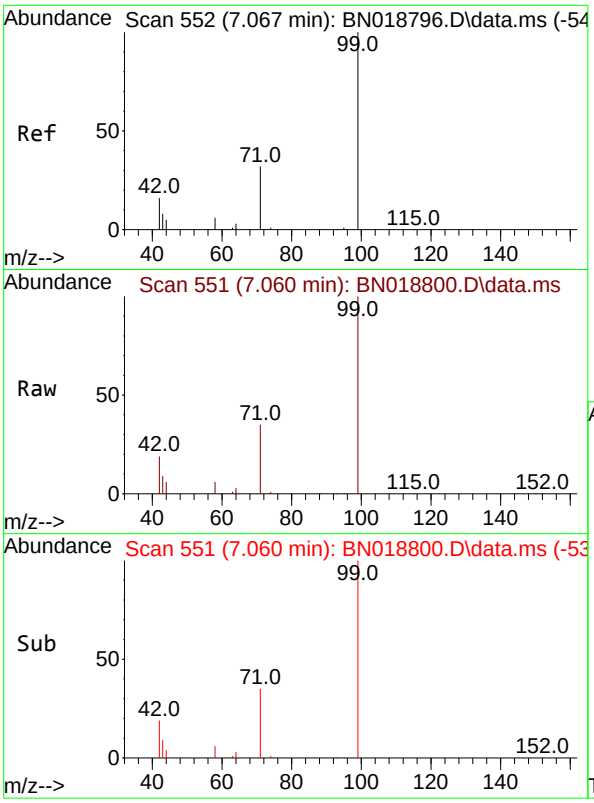


#4
2-Fluorophenol
Concen: 4.749 ng
RT: 5.464 min Scan# 330
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:112 Resp: 76604

Ion	Ratio	Lower	Upper
112	100		
64	60.0	47.8	71.8
63	31.6	25.7	38.5



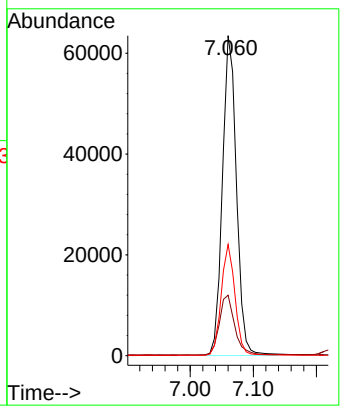


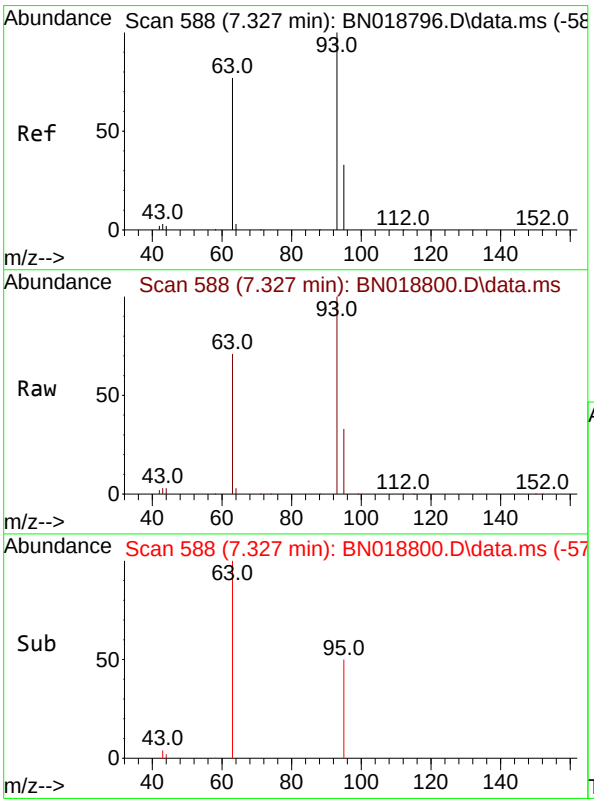
#5
Phenol-d6
Concen: 5.284 ng
RT: 7.060 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 99 Resp: 98018

Ion	Ratio	Lower	Upper
99	100		
42	20.3	16.2	24.4
71	34.0	27.7	41.5

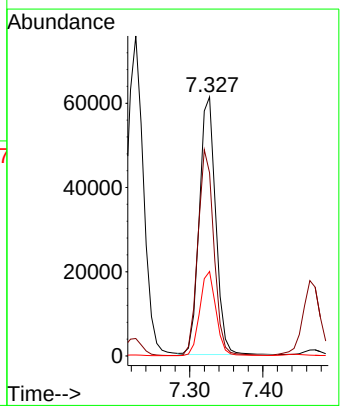


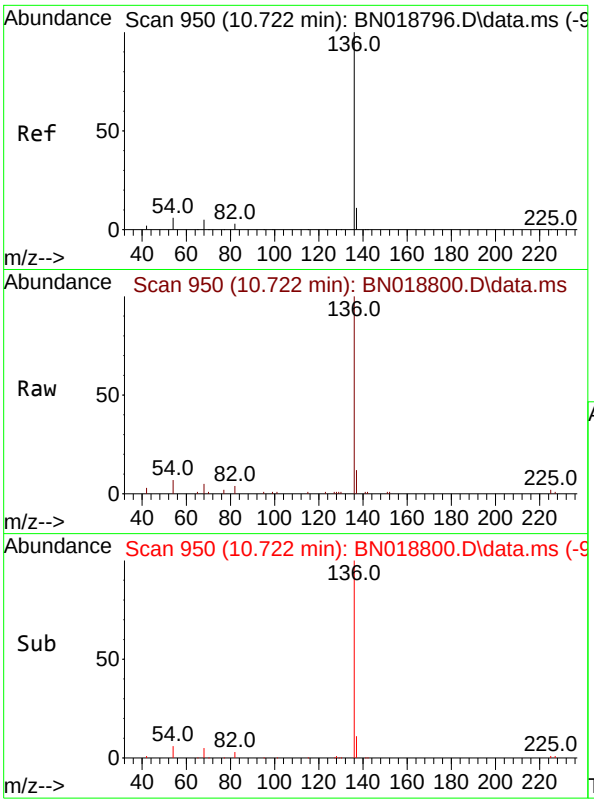


#6
bis(2-Chloroethyl)ether
Concen: 4.977 ng
RT: 7.327 min Scan# 588
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion: 93 Resp: 94874

Ion	Ratio	Lower	Upper
93	100		
63	78.4	62.8	94.2
95	32.4	26.2	39.4



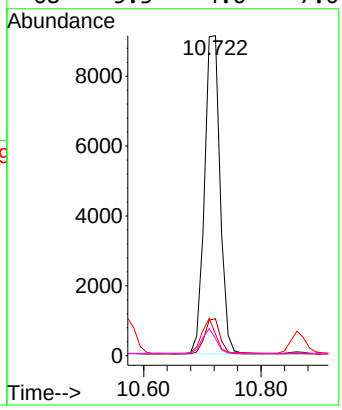


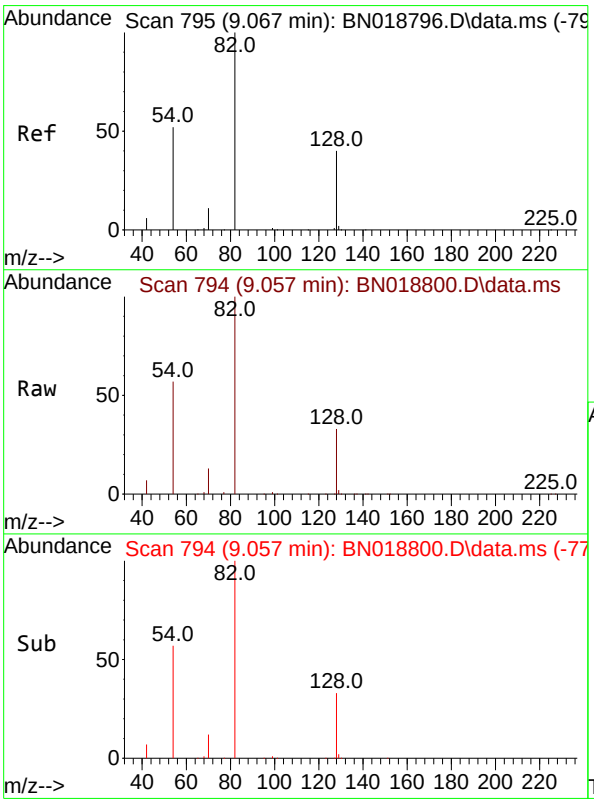
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.722 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:136 Resp: 16864

Ion	Ratio	Lower	Upper
136	100		
137	11.5	9.0	13.4
54	6.8	5.8	8.6
68	5.3	4.6	7.0

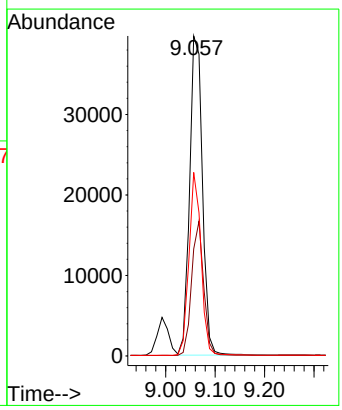


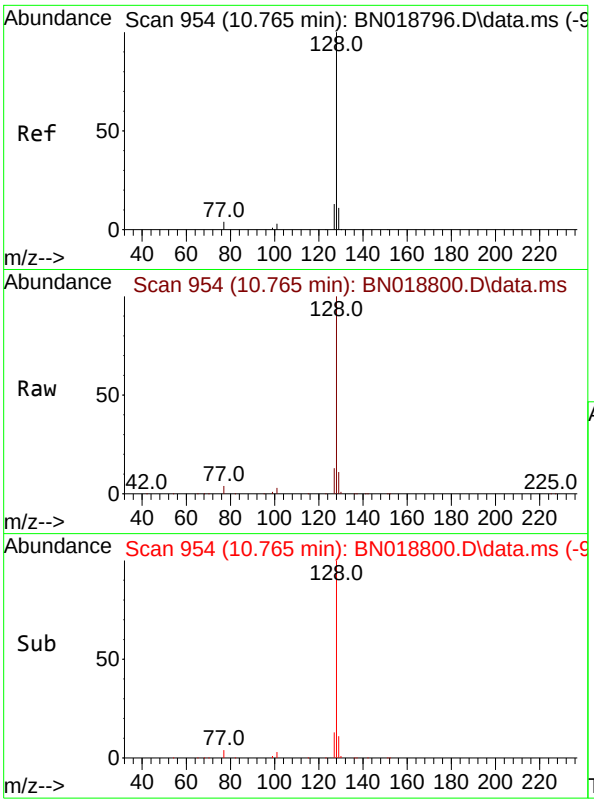


#8
Nitrobenzene-d5
Concen: 5.477 ng
RT: 9.057 min Scan# 794
Delta R.T. -0.011 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion: 82 Resp: 71424

Ion	Ratio	Lower	Upper
82	100		
128	33.5	33.0	49.6
54	57.3	42.5	63.7



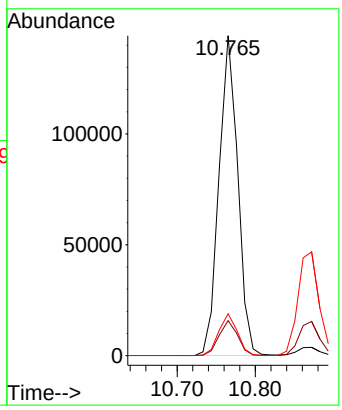


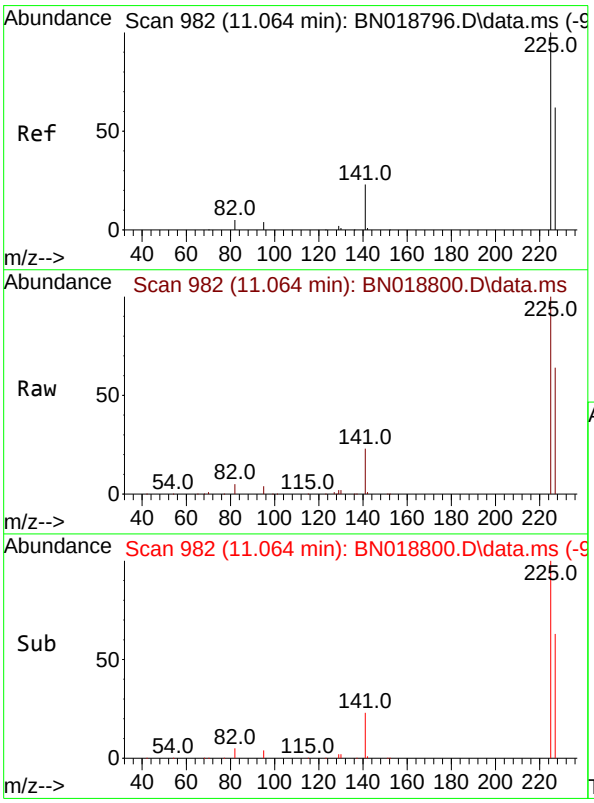
#9
Naphthalene
Concen: 4.946 ng
RT: 10.765 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:128 Resp: 240704

Ion	Ratio	Lower	Upper
128	100		
129	10.9	9.0	13.4
127	13.1	10.7	16.1

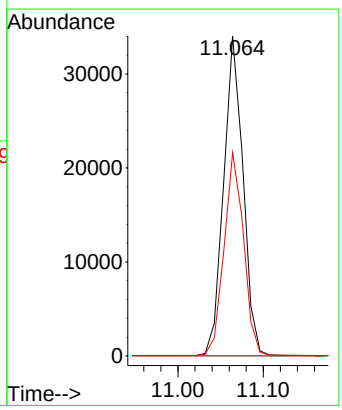


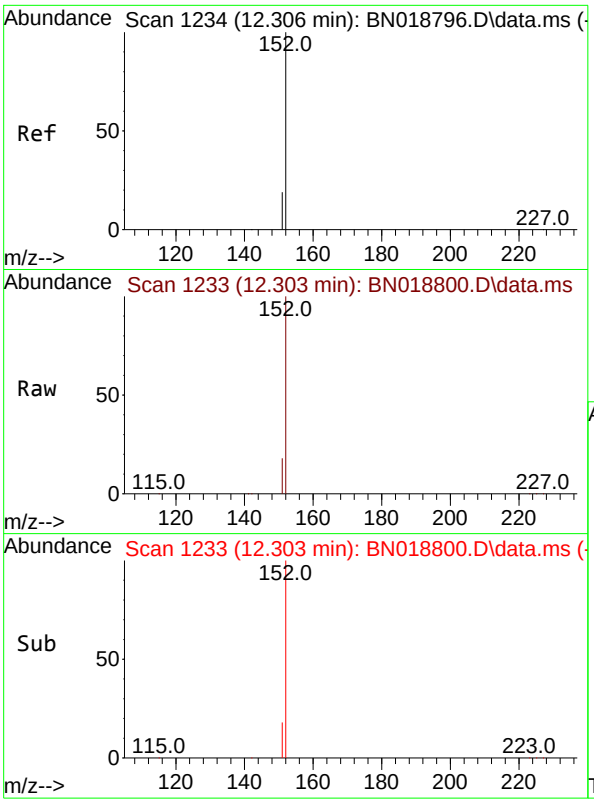


#10
Hexachlorobutadiene
Concen: 4.579 ng
RT: 11.064 min Scan# 982
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:225 Resp: 53598

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.8	51.0	76.6



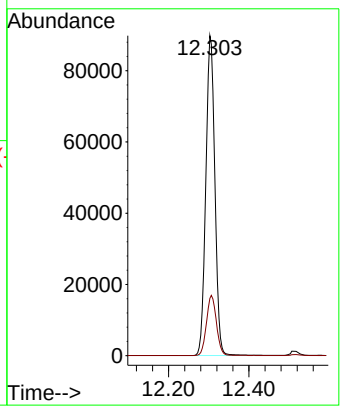


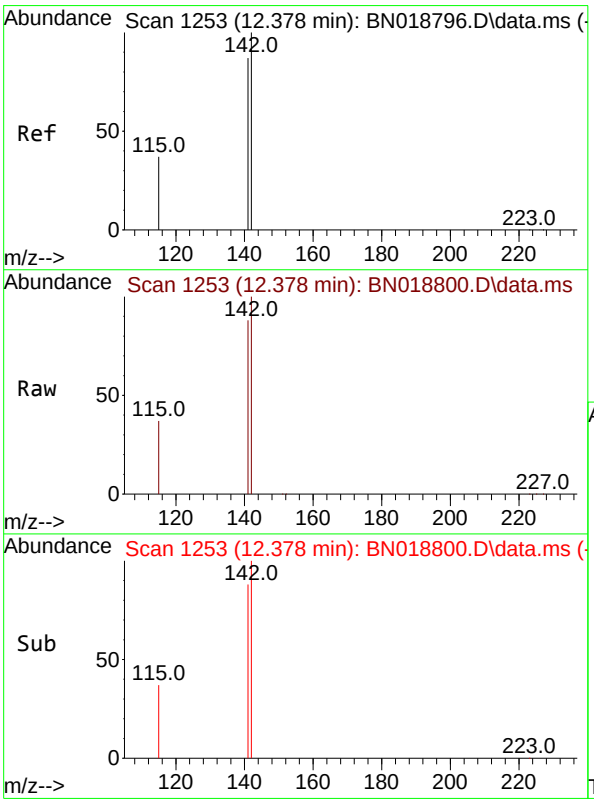
#11
2-Methylnaphthalene-d10
Concen: 5.515 ng
RT: 12.303 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 140211

Ion	Ratio	Lower	Upper
152	100		
151	20.6	16.5	24.7

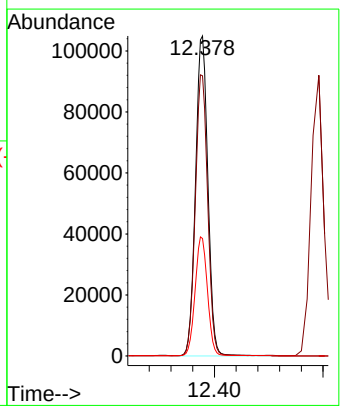


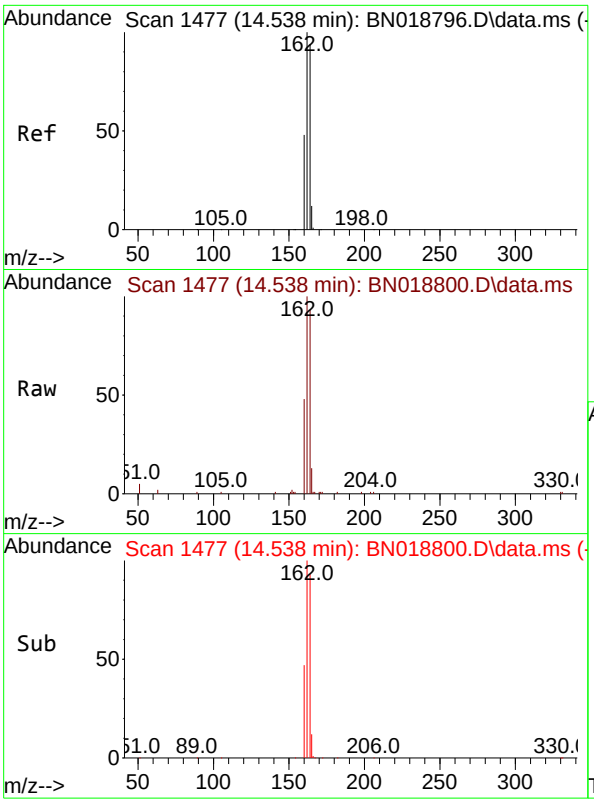


#12
2-Methylnaphthalene
Concen: 5.283 ng
RT: 12.378 min Scan# 1253
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:142 Resp: 172135

Ion	Ratio	Lower	Upper
142	100		
141	87.5	70.0	105.0
115	36.7	29.8	44.8



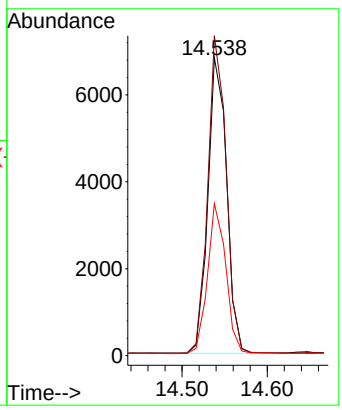


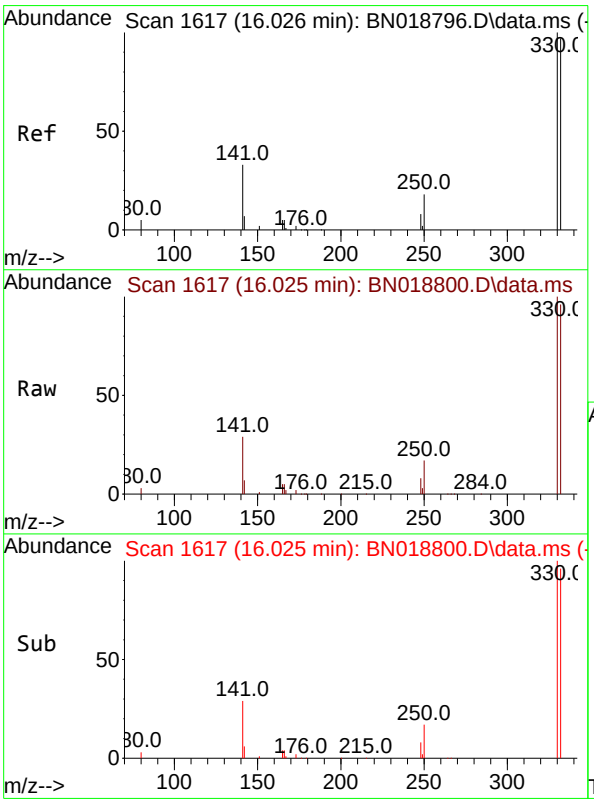
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.538 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:164 Resp: 10388

Ion	Ratio	Lower	Upper
164	100		
162	107.4	85.2	127.8
160	51.0	41.5	62.3

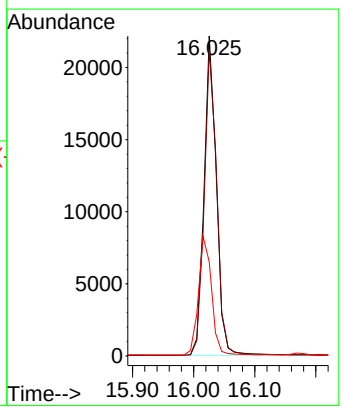


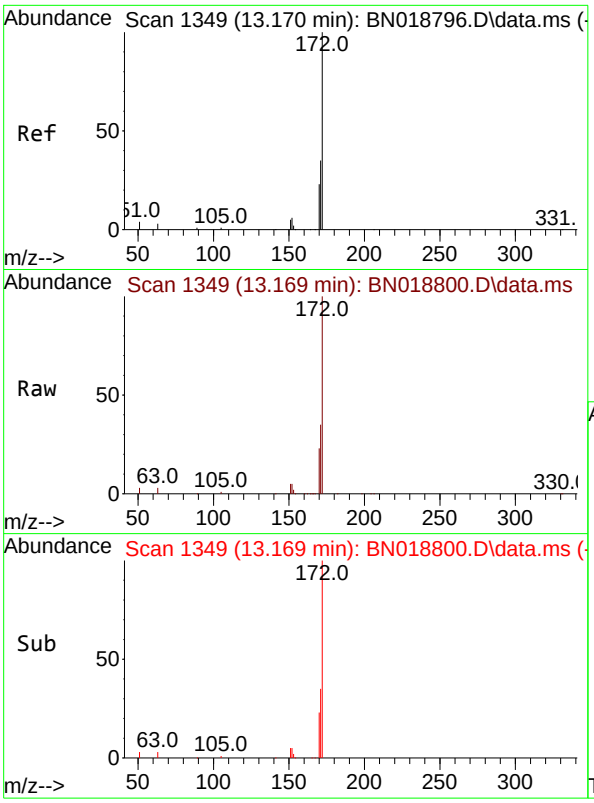


#14
2,4,6-Tribromophenol
Concen: 7.694 ng
RT: 16.025 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:330 Resp: 31205

Ion	Ratio	Lower	Upper
330	100		
332	97.2	76.8	115.2
141	39.3	32.2	48.2



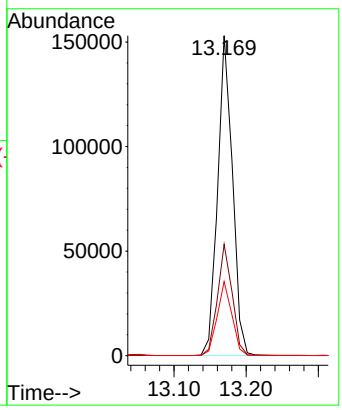


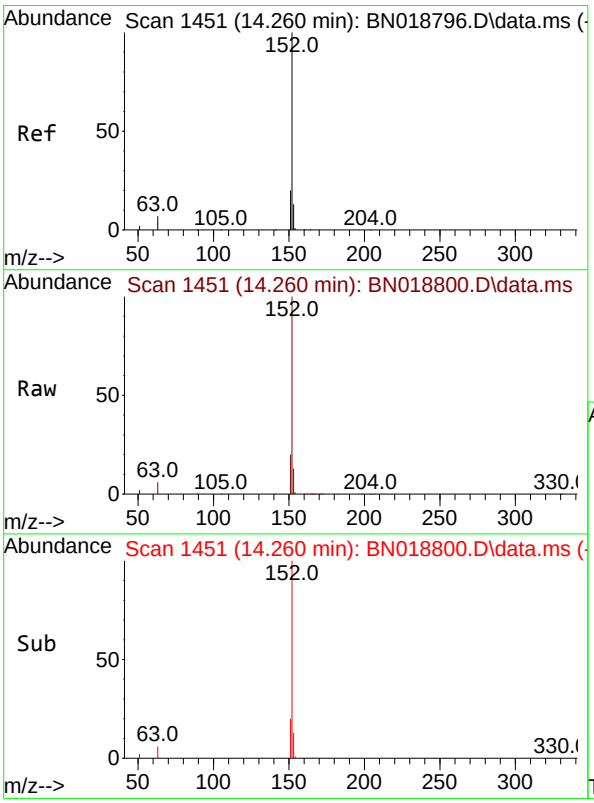
#15
2-Fluorobiphenyl
Concen: 4.421 ng
RT: 13.169 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:172 Resp: 217706

Ion	Ratio	Lower	Upper
172	100		
171	34.8	28.2	42.2
170	23.2	18.7	28.1

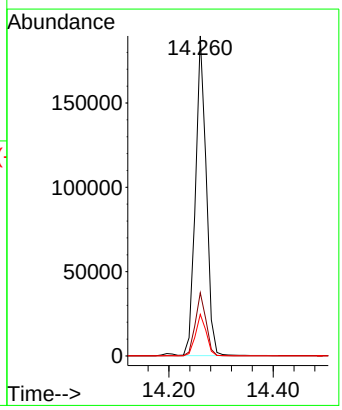


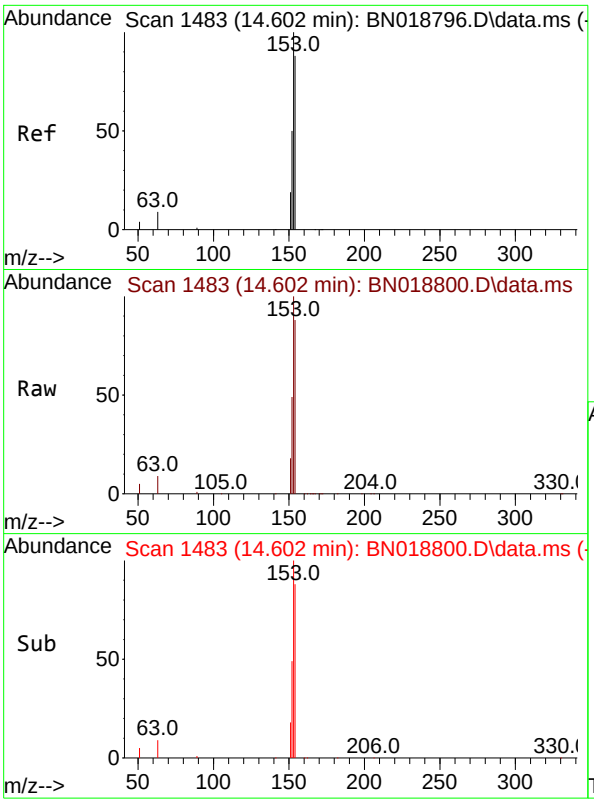


#16
Acenaphthylene
Concen: 5.534 ng
RT: 14.260 min Scan# 1451
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:152 Resp: 272702

Ion	Ratio	Lower	Upper
152	100		
151	19.8	15.9	23.9
153	13.0	10.6	15.8



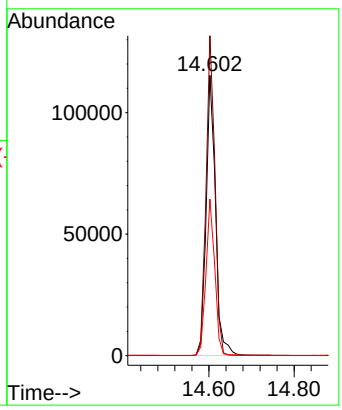


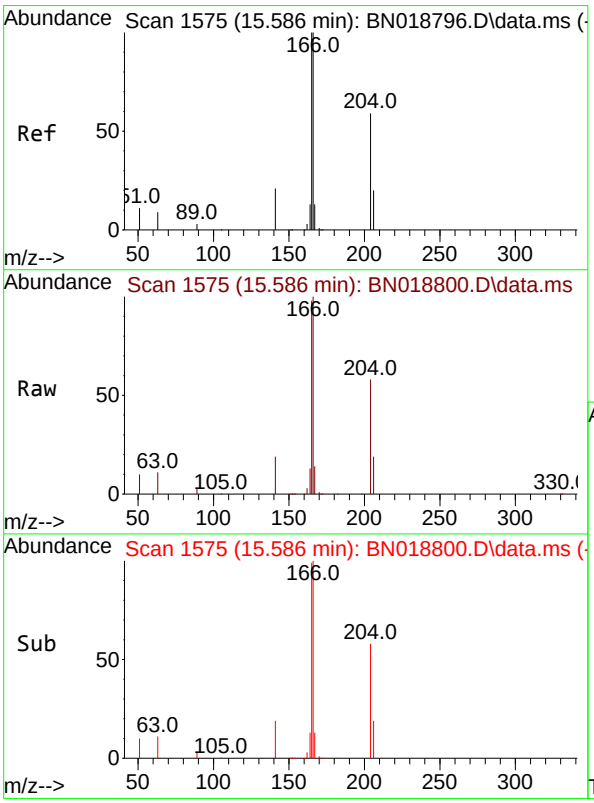
#17
Acenaphthene
Concen: 5.169 ng
RT: 14.602 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:154 Resp: 175797

Ion	Ratio	Lower	Upper
154	100		
153	108.1	89.7	134.5
152	52.7	44.7	67.1

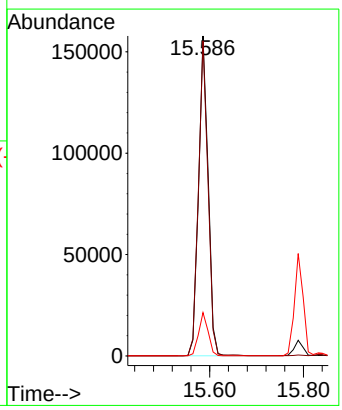


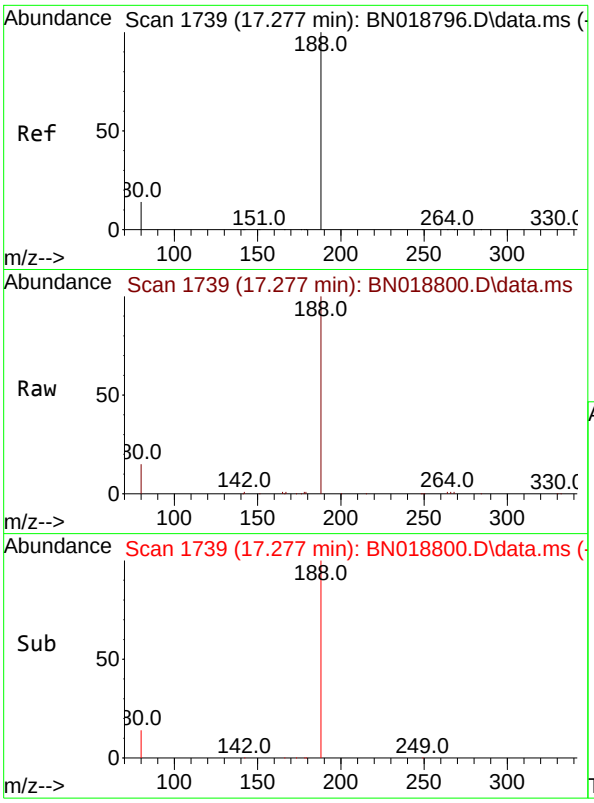


#18
Fluorene
Concen: 5.464 ng
RT: 15.586 min Scan# 1575
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:166 Resp: 223778

Ion	Ratio	Lower	Upper
166	100		
165	98.3	79.2	118.8
167	13.5	10.7	16.1



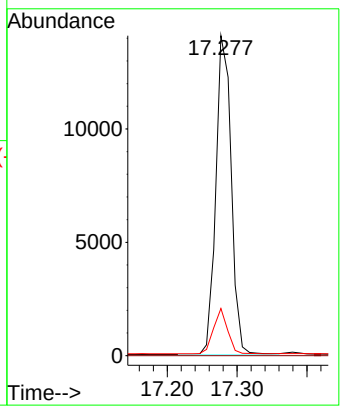


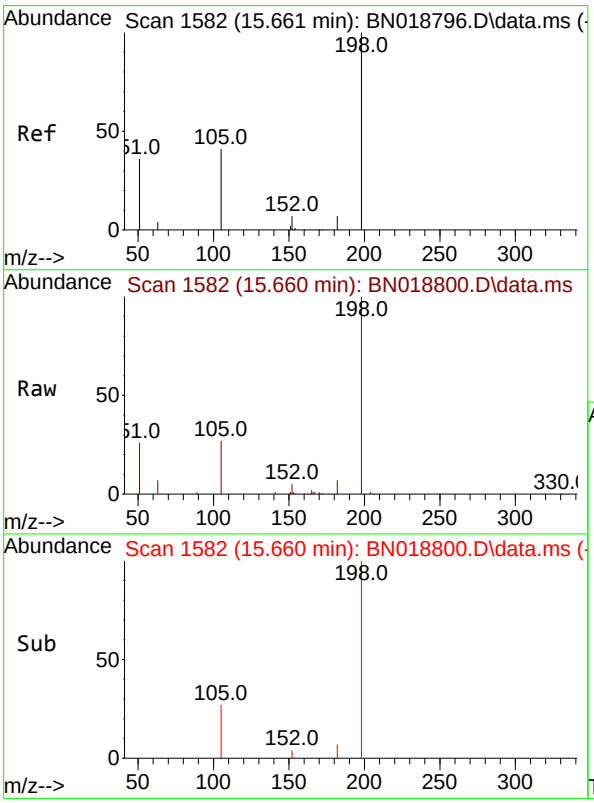
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.277 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:188 Resp: 21576

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	14.8	11.8	17.8

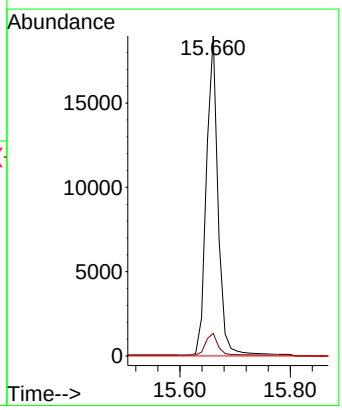


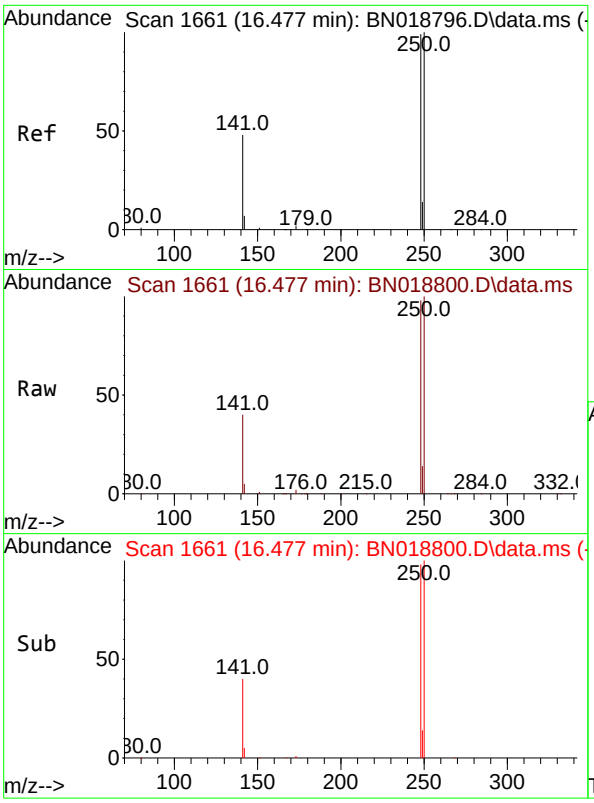


#20
4,6-Dinitro-2-methylphenol
Concen: 8.750 ng
RT: 15.660 min Scan# 1582
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:198 Resp: 27692

Ion	Ratio	Lower	Upper
198	100		
182	7.1	13.0	19.4#
77	0.0	0.0	0.0



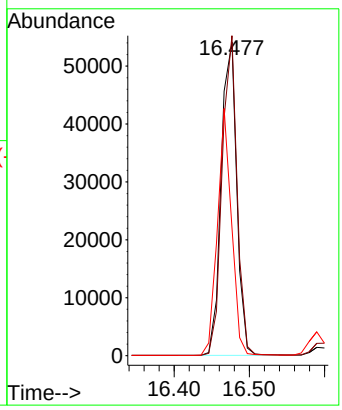


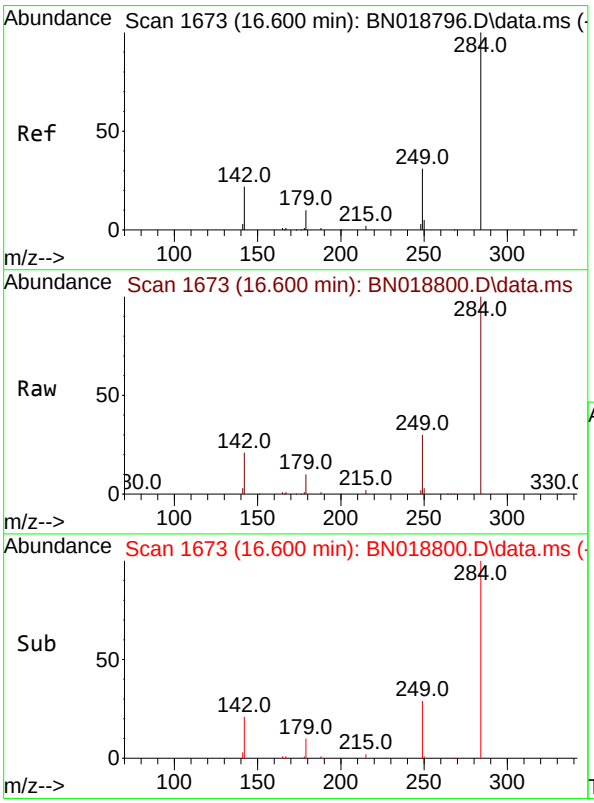
#21
4-Bromophenyl-phenylether
Concen: 5.066 ng
RT: 16.477 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:248 Resp: 77673

Ion	Ratio	Lower	Upper
248	100		
250	102.1	80.7	121.1
141	40.9	39.6	59.4

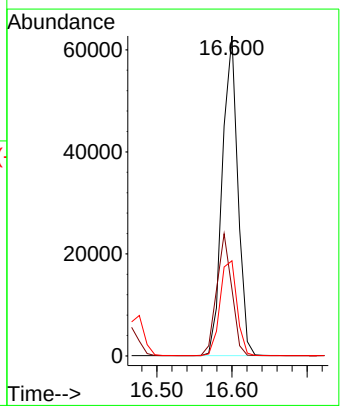


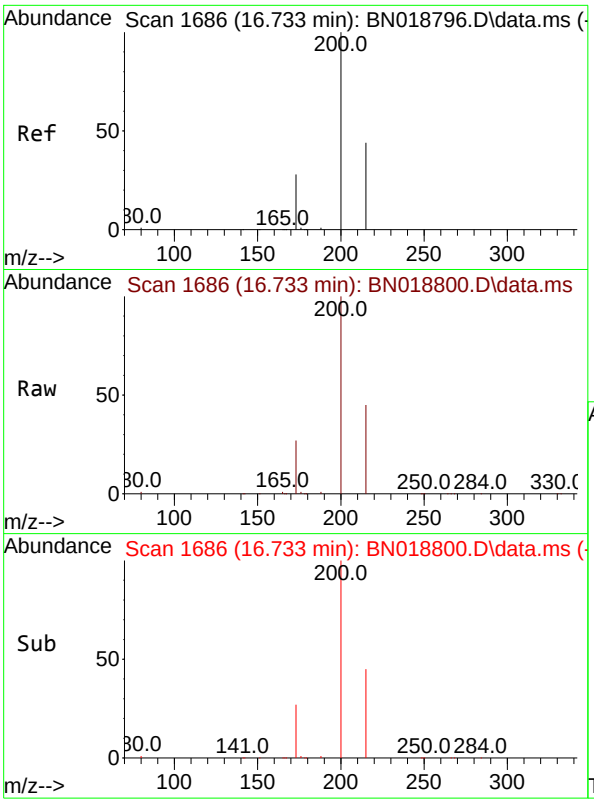


#22
Hexachlorobenzene
Concen: 4.668 ng
RT: 16.600 min Scan# 1673
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:284 Resp: 89588

Ion	Ratio	Lower	Upper
284	100		
142	37.0	29.8	44.8
249	32.5	26.2	39.2



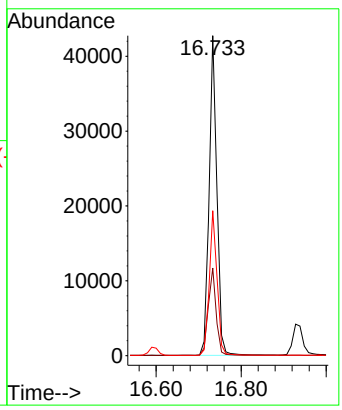


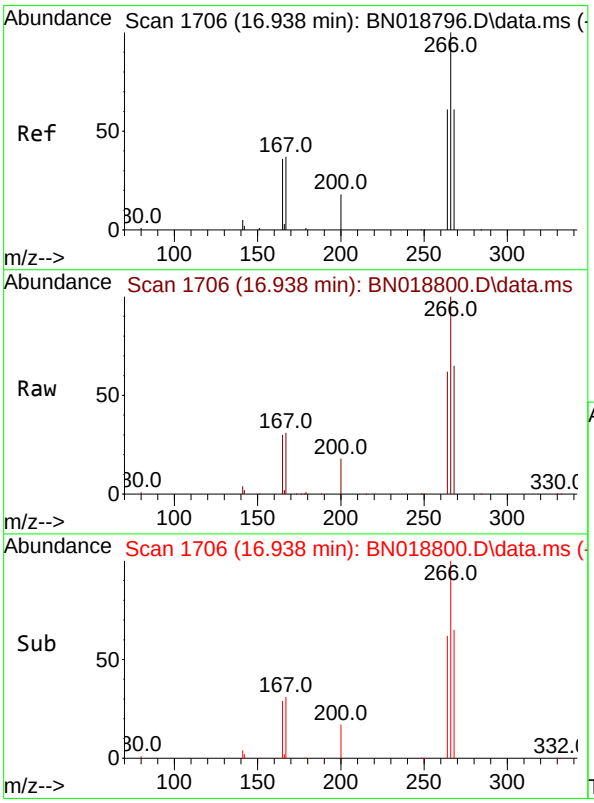
#23
Atrazine
Concen: 6.417 ng
RT: 16.733 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:200 Resp: 54312

Ion	Ratio	Lower	Upper
200	100		
173	27.4	23.9	35.9
215	45.3	36.6	54.8

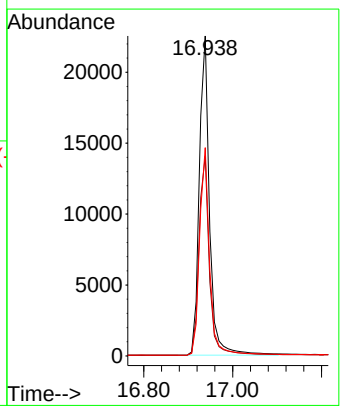


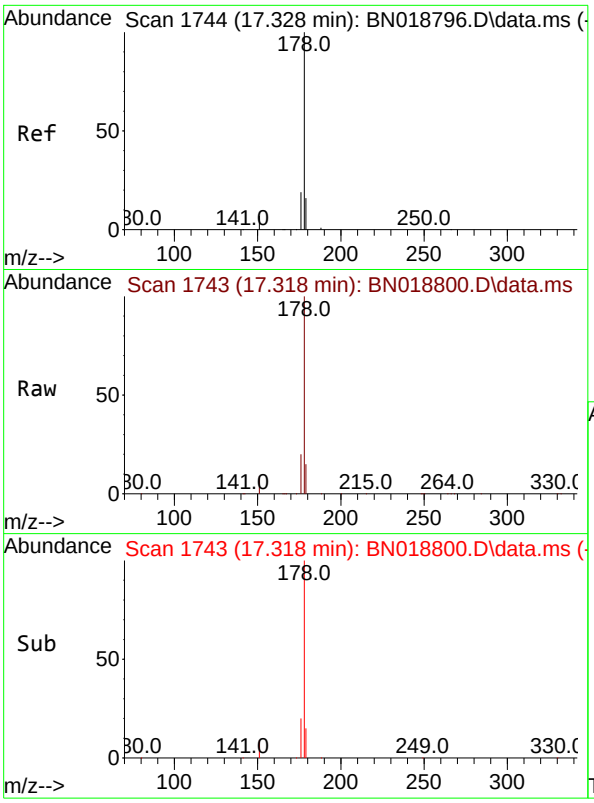


#24
Pentachlorophenol
Concen: 8.865 ng
RT: 16.938 min Scan# 1706
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:266 Resp: 36000

Ion	Ratio	Lower	Upper
266	100		
264	63.3	50.2	75.4
268	64.0	51.9	77.9



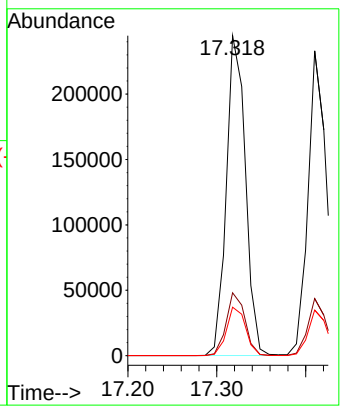


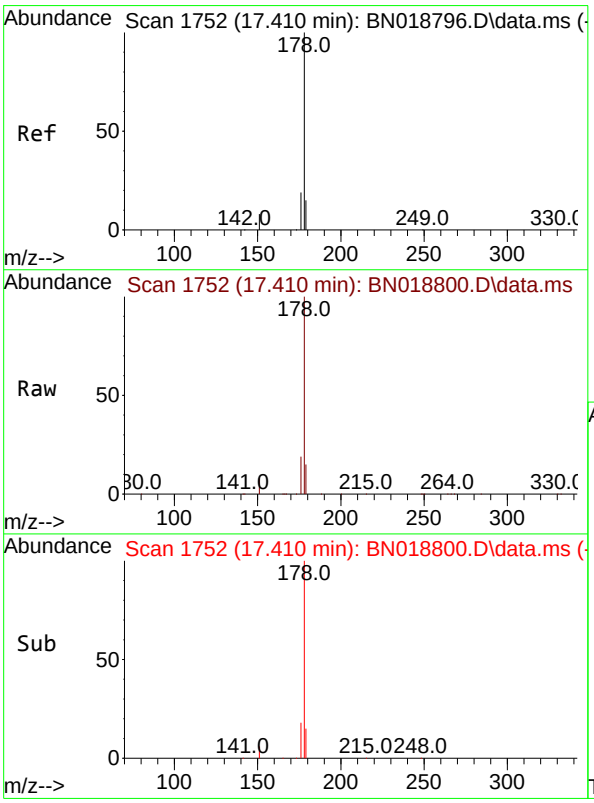
#25
Phenanthrene
Concen: 5.063 ng
RT: 17.318 min Scan# 1
Delta R.T. -0.010 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:178 Resp: 365630

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

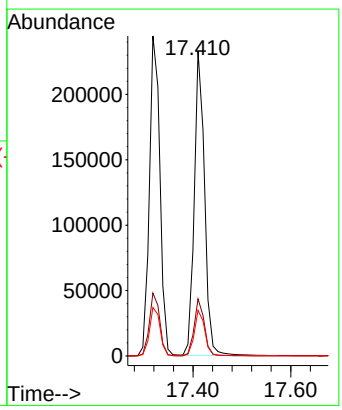


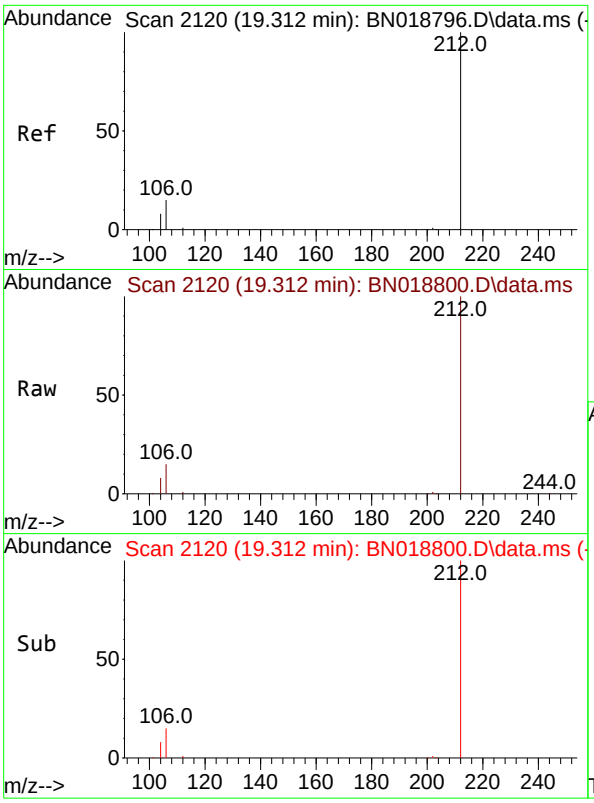


#26
Anthracene
Concen: 5.563 ng
RT: 17.410 min Scan# 1752
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:178 Resp: 340176

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.8	22.2
179	15.2	12.2	18.4



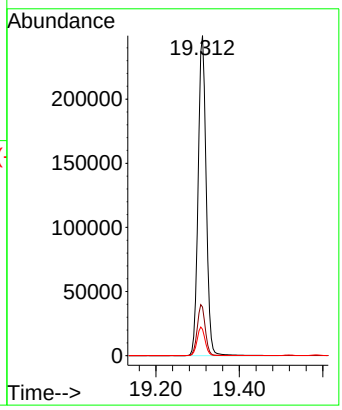


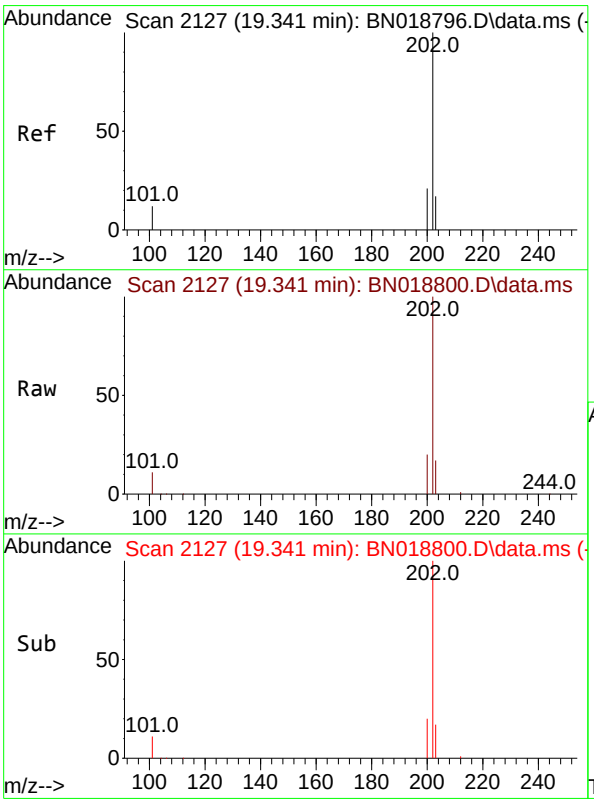
#27
Fluoranthene-d10
Concen: 5.668 ng
RT: 19.312 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:212 Resp: 331926

Ion	Ratio	Lower	Upper
212	100		
106	15.9	12.7	19.1
104	8.9	7.1	10.7

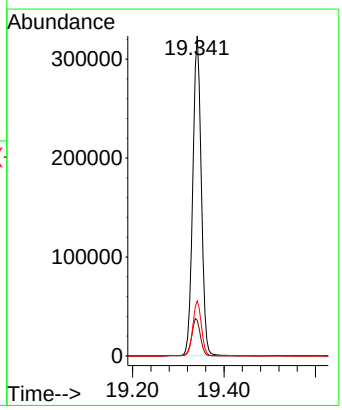


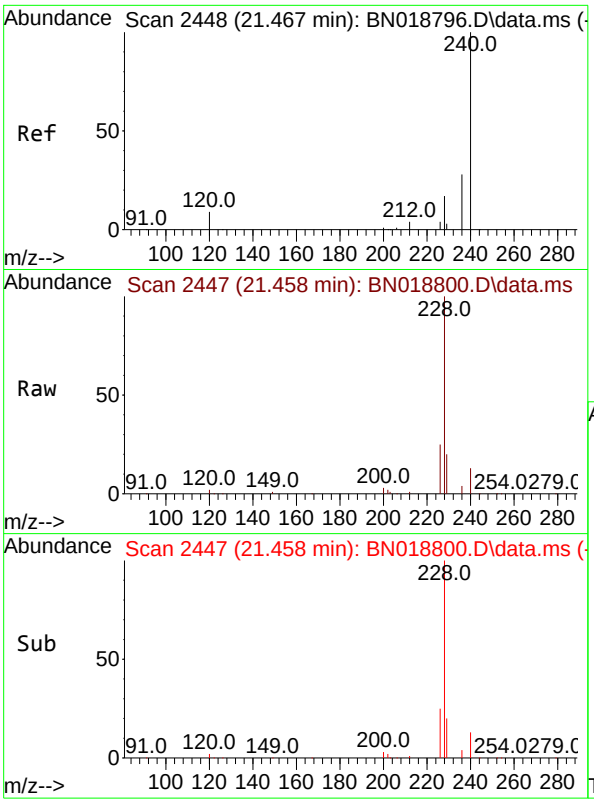


#28
Fluoranthene
Concen: 5.533 ng
RT: 19.341 min Scan# 2127
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:202 Resp: 417607

Ion	Ratio	Lower	Upper
202	100		
101	12.1	9.8	14.6
203	17.3	13.7	20.5



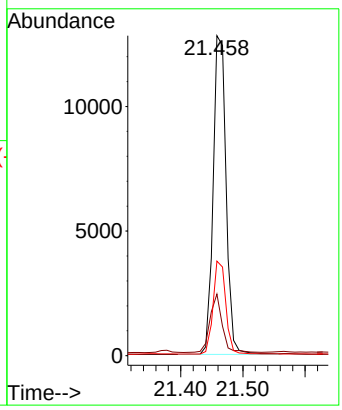


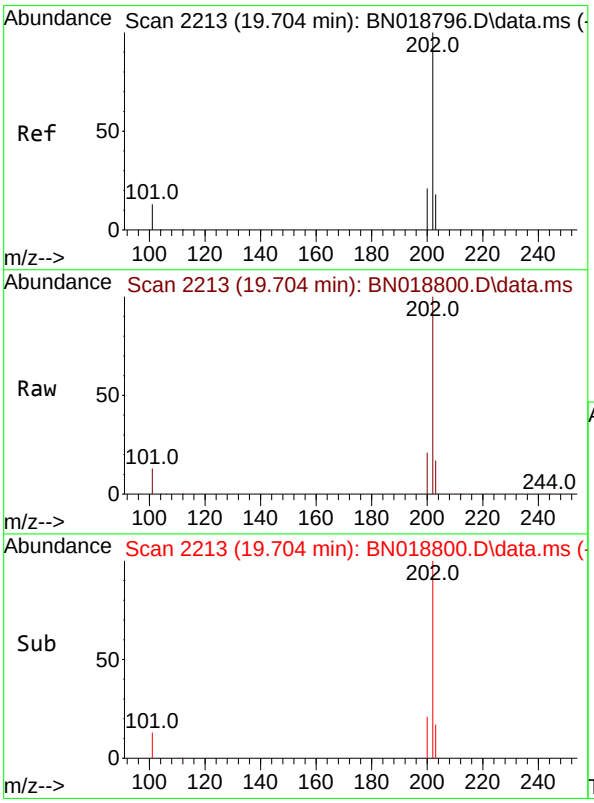
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.458 min Scan# 24
Delta R.T. -0.009 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:240 Resp: 18435

Ion	Ratio	Lower	Upper
240	100		
120	19.3	8.5	12.7#
236	29.6	22.4	33.6

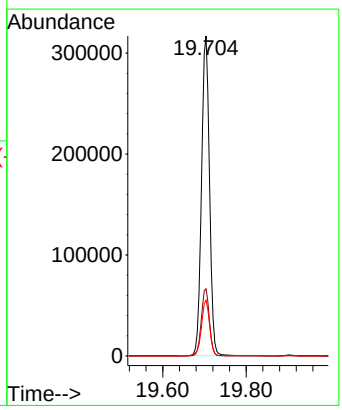


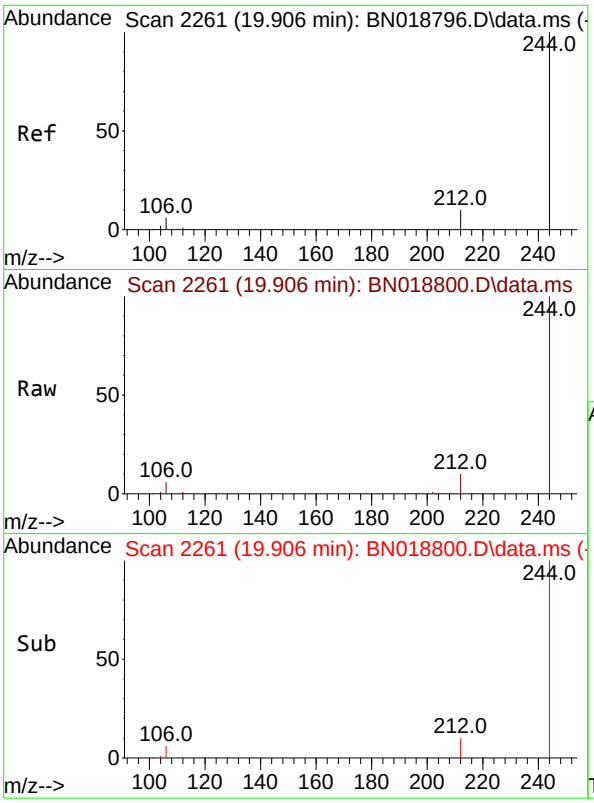


#30
Pyrene
Concen: 5.113 ng
RT: 19.704 min Scan# 2213
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:202 Resp: 420874

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	17.8	14.2	21.2



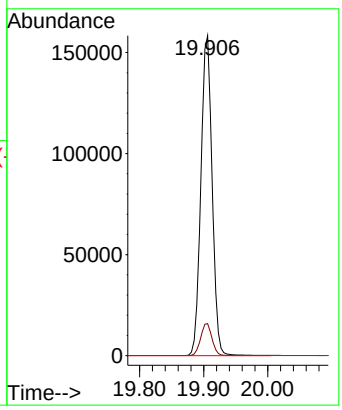


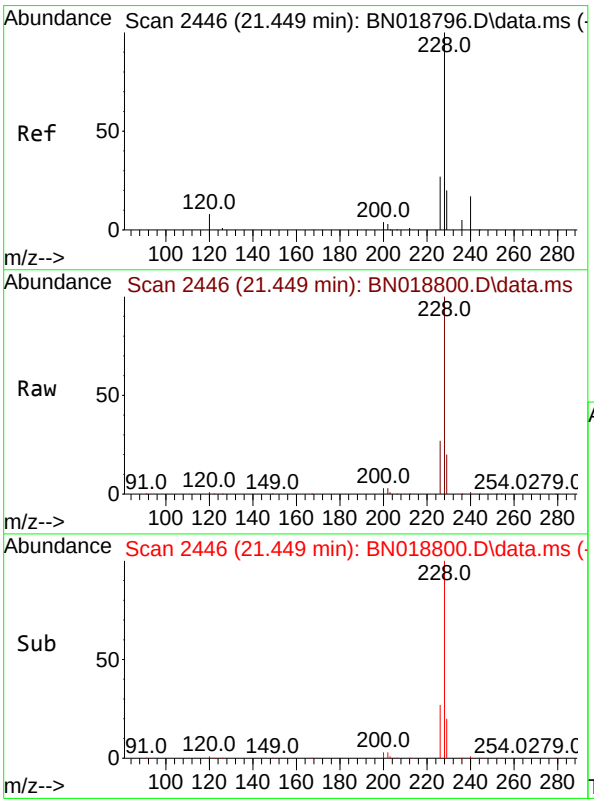
#31
Terphenyl-d14
Concen: 4.948 ng
RT: 19.906 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:244 Resp: 197934

Ion	Ratio	Lower	Upper
244	100		
212	10.0	8.2	12.4
122	0.0	0.0	0.0

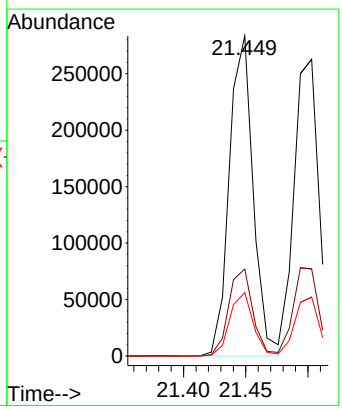


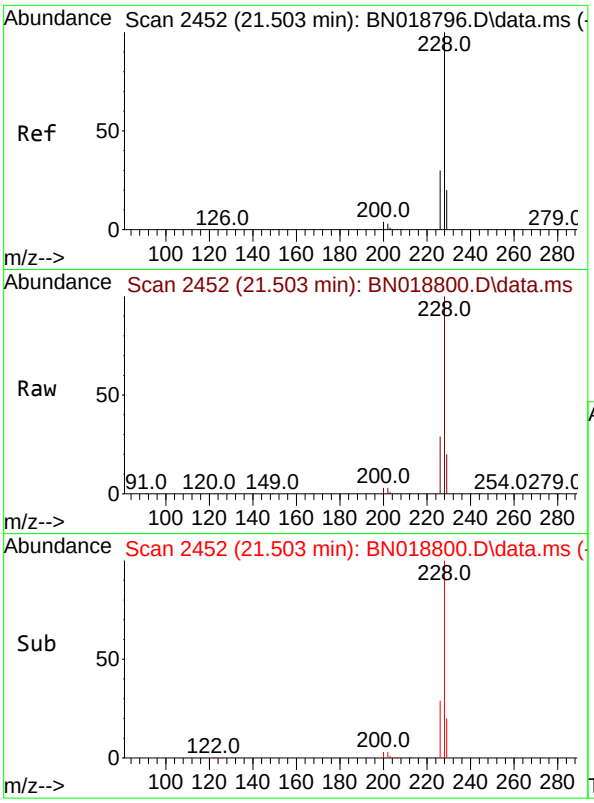


#32
Benzo(a)anthracene
Concen: 5.406 ng
RT: 21.449 min Scan# 2446
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:228 Resp: 377886

Ion	Ratio	Lower	Upper
228	100		
226	27.1	21.9	32.9
229	19.8	16.0	24.0



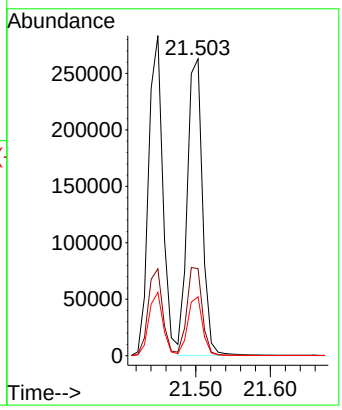


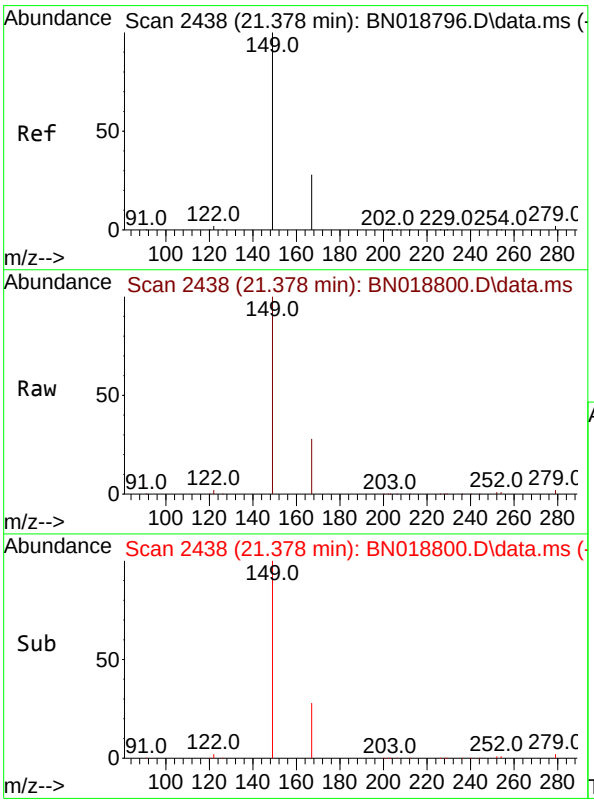
#33
Chrysene
Concen: 4.725 ng
RT: 21.503 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:228 Resp: 368591

Ion	Ratio	Lower	Upper
228	100		
226	29.3	24.0	36.0
229	19.9	15.9	23.9

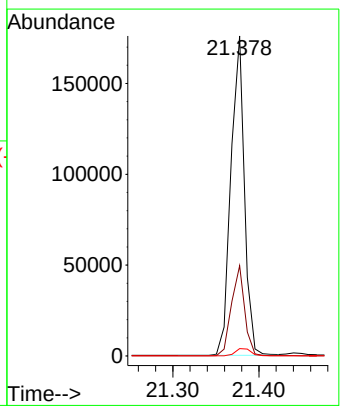


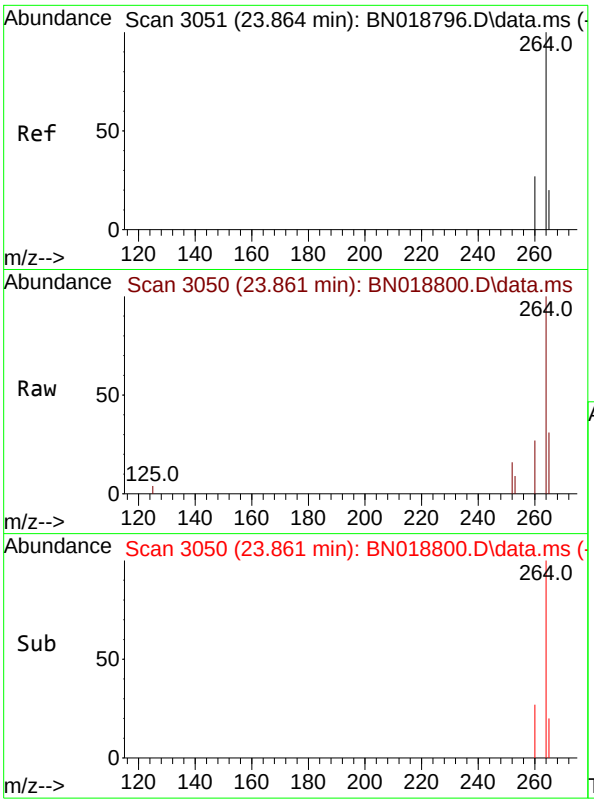


#34
Bis(2-ethylhexyl)phthalate
Concen: 6.750 ng
RT: 21.378 min Scan# 2438
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:149 Resp: 191762

Ion	Ratio	Lower	Upper
149	100		
167	27.6	21.8	32.8
279	2.6	2.0	3.0



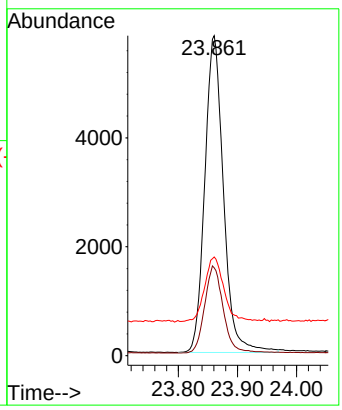


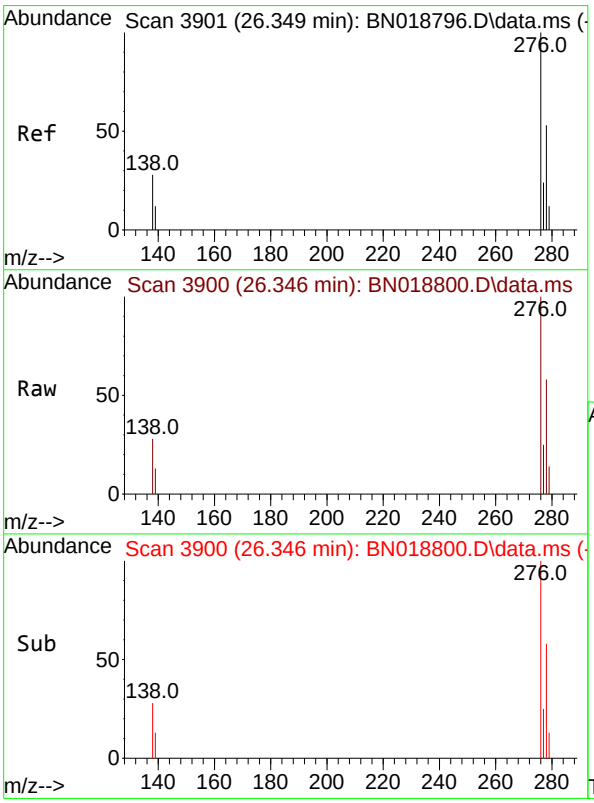
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.861 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:264 Resp: 12768

Ion	Ratio	Lower	Upper
264	100		
260	27.5	22.4	33.6
265	30.8	25.3	37.9

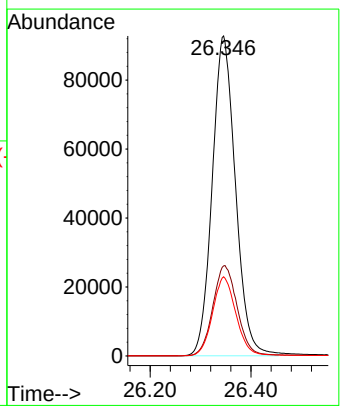


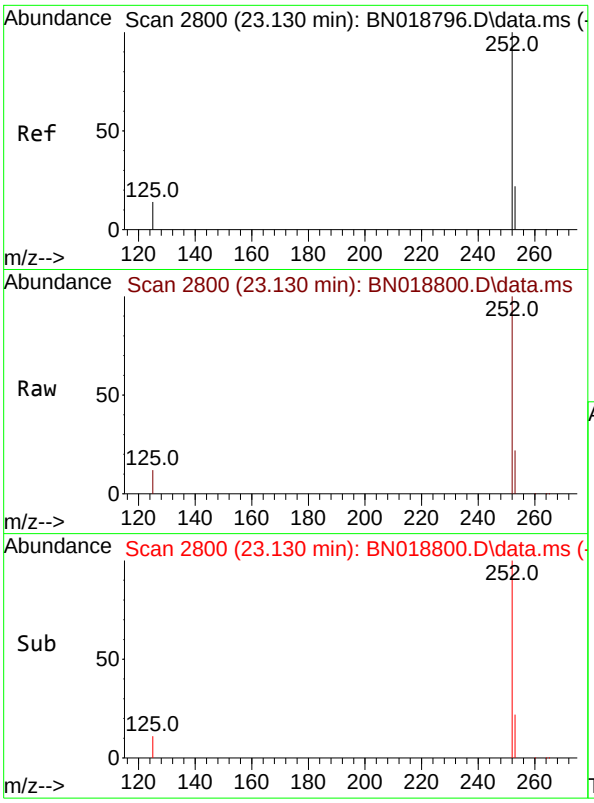


#36
Indeno(1,2,3-cd)pyrene
Concen: 4.402 ng
RT: 26.346 min Scan# 3900
Delta R.T. -0.003 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:276 Resp: 296778

Ion	Ratio	Lower	Upper
276	100		
138	29.5	24.5	36.7
277	24.8	19.8	29.8



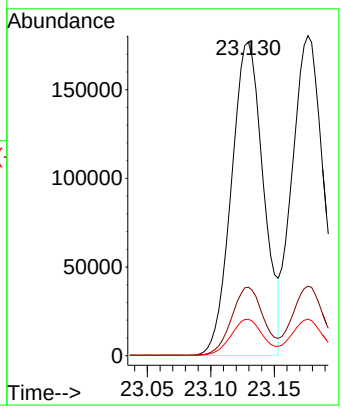


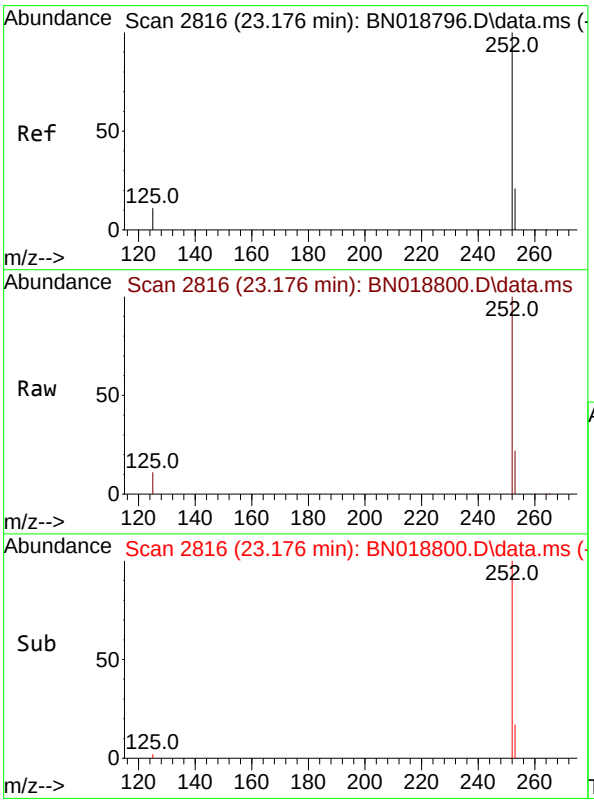
#37
Benzo(b)fluoranthene
Concen: 5.357 ng
RT: 23.130 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 310777

Ion	Ratio	Lower	Upper
252	100		
253	21.8	18.9	28.3
125	11.6	12.1	18.1#

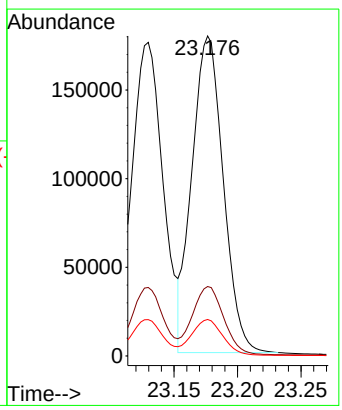


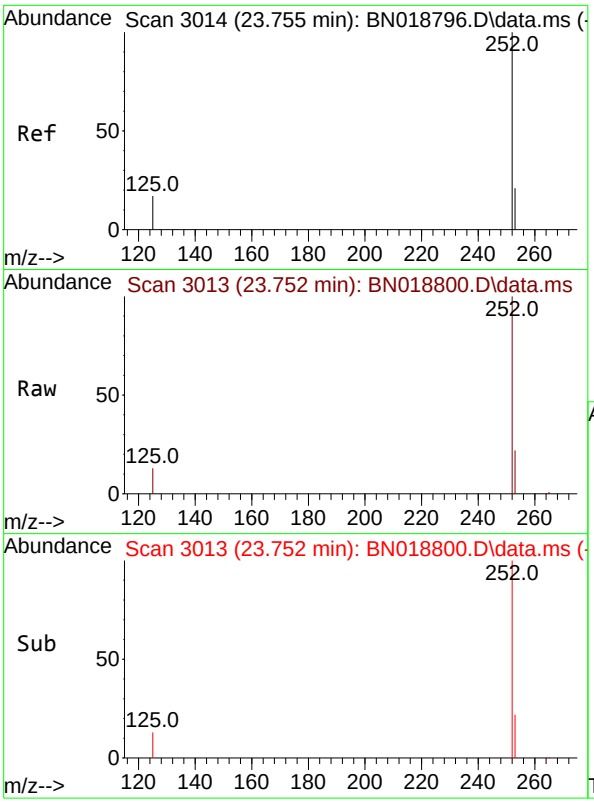


#38
Benzo(k)fluoranthene
Concen: 5.321 ng
RT: 23.176 min Scan# 2816
Delta R.T. -0.000 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:252 Resp: 306016

Ion	Ratio	Lower	Upper
252	100		
253	21.7	18.9	28.3
125	11.4	10.3	15.5



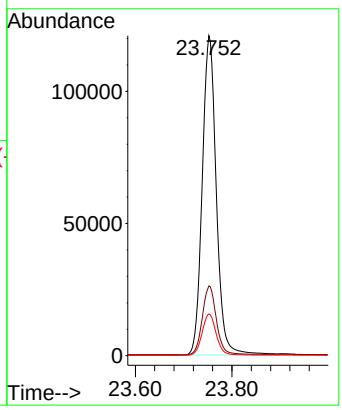


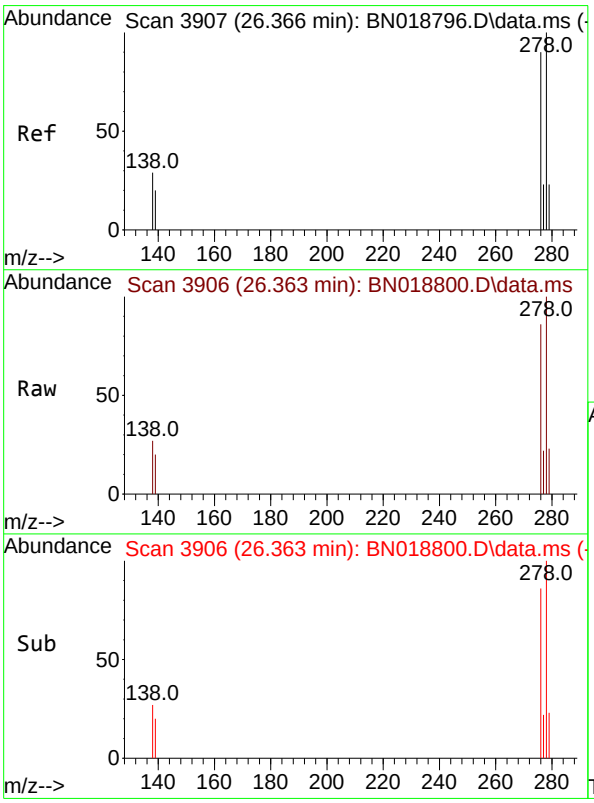
#39
Benzo(a)pyrene
Concen: 5.298 ng
RT: 23.752 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 245038

Ion	Ratio	Lower	Upper
252	100		
253	21.8	20.1	30.1
125	13.1	15.2	22.8#

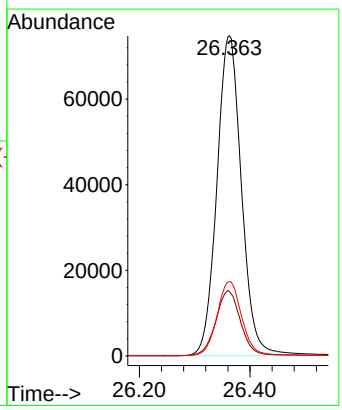


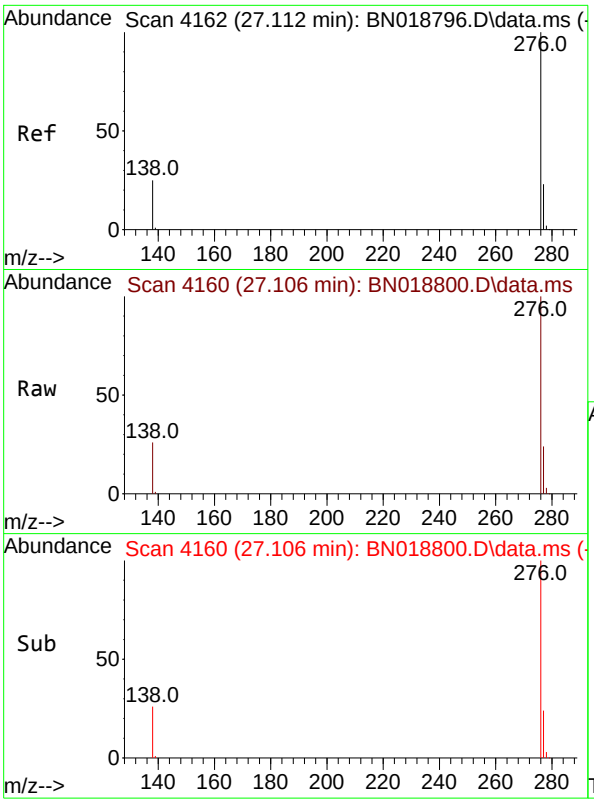


#40
Dibenzo(a,h)anthracene
Concen: 4.367 ng
RT: 26.363 min Scan# 3906
Delta R.T. -0.003 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Tgt Ion:278 Resp: 229598

Ion	Ratio	Lower	Upper
278	100		
139	20.1	17.2	25.8
279	23.3	19.9	29.9





#41
Benzo(g,h,i)perylene
Concen: 4.158 ng
RT: 27.106 min Scan# 4
Delta R.T. -0.006 min
Lab File: BN018800.D
Acq: 02 Mar 2022 20:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:276 Resp: 239832

Ion	Ratio	Lower	Upper
276	100		
277	23.7	19.4	29.0
138	25.7	21.0	31.6