Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN061422\
Data File : BN020156.D
Acq On : 14 Jun 2022 13:54
Operator : CG/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Jun 14 16:02:14 2022
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\8270-SIM-BN061422.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Jun 14 15:58:25 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.804	152	4783	0.400	ng		0.00
7) Naphthalene-d8	10.594	136	13713	0.400	ng		0.00
13) Acenaphthene-d10	14.431	164	8570	0.400	ng		0.00
19) Phenanthrene-d10	17.164	188	17741	0.400	ng	#	0.00
29) Chrysene-d12	21.360	240	16643	0.400	ng	#	0.00
35) Perylene-d12	23.677	264	13552	0.400	ng	#	0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.392	112	57868	4.394	ng		0.00
5) Phenol-d6	6.973	99	76186	5.073	ng		0.00
8) Nitrobenzene-d5	8.950	82	55831	5.662	ng		-0.01
11) 2-Methylnaphthalene-d10	12.178	152	119530	4.879	ng		0.00
14) 2,4,6-Tribromophenol	15.913	330	19112	5.861	ng		0.00
15) 2-Fluorobiphenyl	13.052	172	168678	4.881	ng		0.00
27) Fluoranthene-d10	19.202	212	271250	4.923	ng		0.00
31) Terphenyl-d14	19.805	244	191033	4.727	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.305	88	25588	4.541	ng		92
3) n-Nitrosodimethylamine	3.615	42	27436	5.199	ng	#	88
6) bis(2-Chloroethyl)ether	7.226	93	65302	5.002	ng		97
9) Naphthalene	10.637	128	198849	4.799	ng		99
10) Hexachlorobutadiene	10.936	225	34127	4.651	ng	#	100
12) 2-Methylnaphthalene	12.254	142	138117	4.831	ng		98
16) Acenaphthylene	14.143	152	221987	5.488	ng		98
17) Acenaphthene	14.485	154	139385	4.908	ng		98
18) Fluorene	15.479	166	180229	4.730	ng		100
20) 4,6-Dinitro-2-methylph...	15.554	198	20766	13.009	ng	#	86
21) 4-Bromophenyl-phenylether	16.364	248	53433	5.138	ng		90
22) Hexachlorobenzene	16.487	284	56785	4.967	ng		99
23) Atrazine	16.641	200	43655	5.752	ng		96
24) Pentachlorophenol	16.826	266	27150	6.743	ng		98
25) Phenanthrene	17.205	178	294172	4.843	ng		100
26) Anthracene	17.297	178	272646	5.266	ng		100
28) Fluoranthene	19.232	202	333886	4.892	ng		99
30) Pyrene	19.594	202	342045	4.757	ng		100
32) Benzo(a)anthracene	21.342	228	316500	5.095	ng		99
33) Chrysene	21.396	228	317746	4.751	ng		99
34) Bis(2-ethylhexyl)phtha...	21.279	149	201598	5.477	ng		99
36) Indeno(1,2,3-cd)pyrene	26.056	276	279478	4.898	ng		99
37) Benzo(b)fluoranthene	22.975	252	281850	5.107	ng		98
38) Benzo(k)fluoranthene	23.022	252	279233	5.011	ng		99
39) Benzo(a)pyrene	23.574	252	234385	5.063	ng		95
40) Dibenzo(a,h)anthracene	26.068	278	225628	4.928	ng		97
41) Benzo(g,h,i)perylene	26.779	276	238177	4.752	ng		98

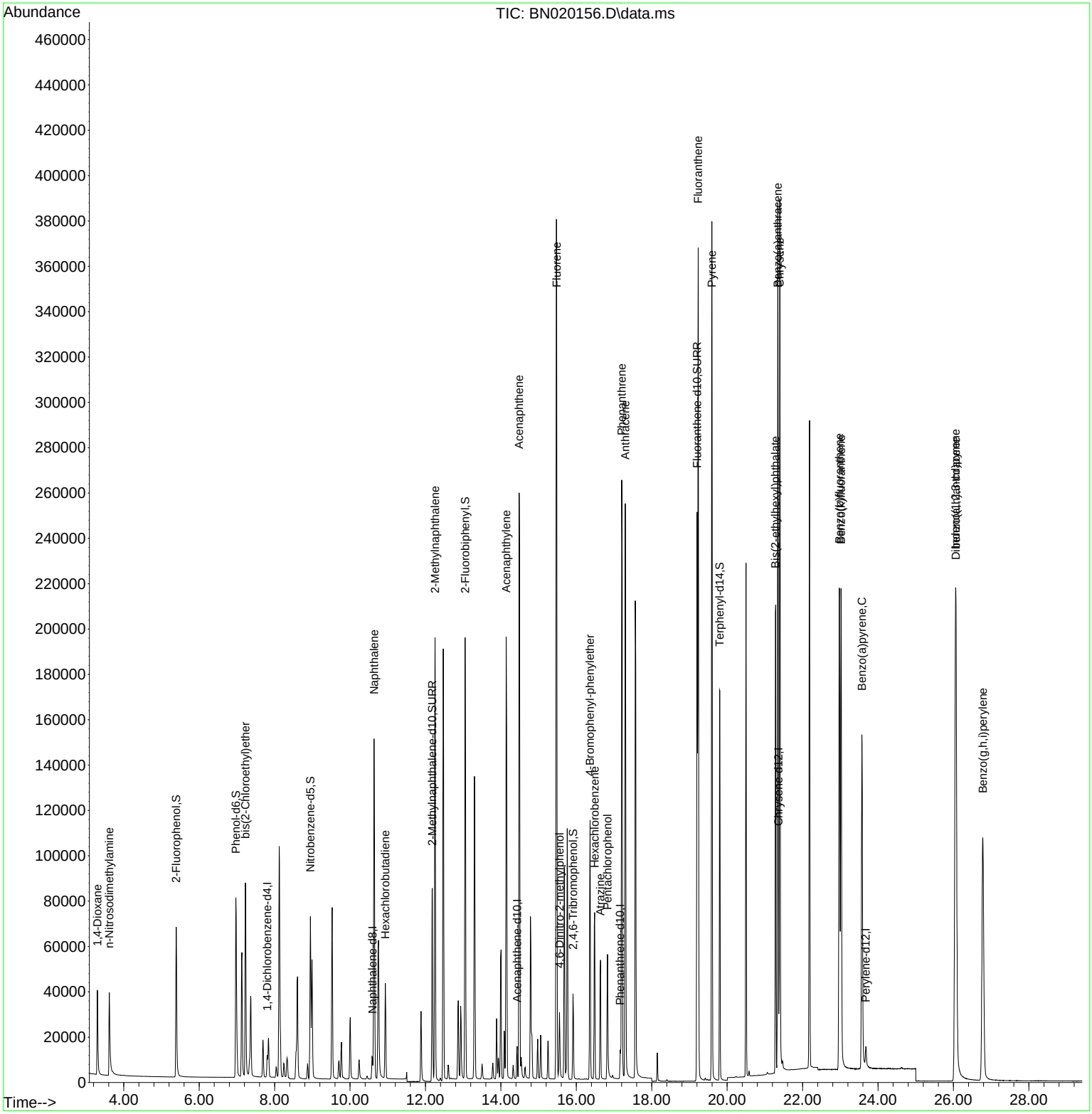
(#) = qualifier out of range (m) = manual integration (+) = signals summed

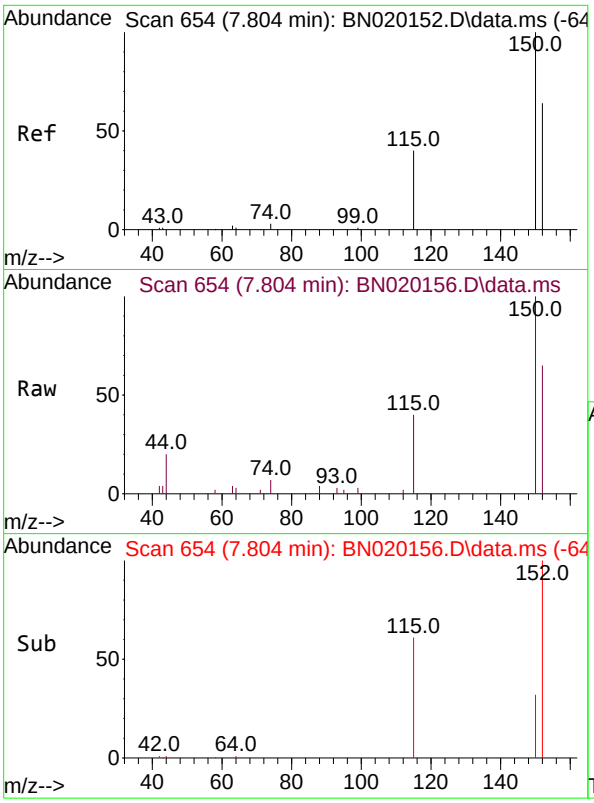
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN061422\
Data File : BN020156.D
Acq On : 14 Jun 2022 13:54
Operator : CG/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Jun 14 16:02:14 2022
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\8270-SIM-BN061422.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Jun 14 15:58:25 2022
Response via : Initial Calibration



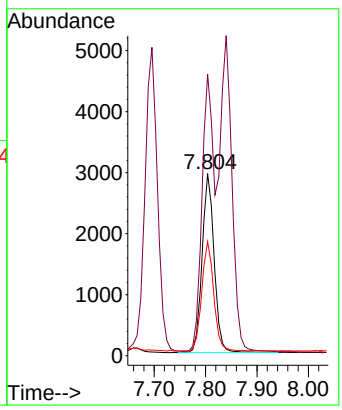


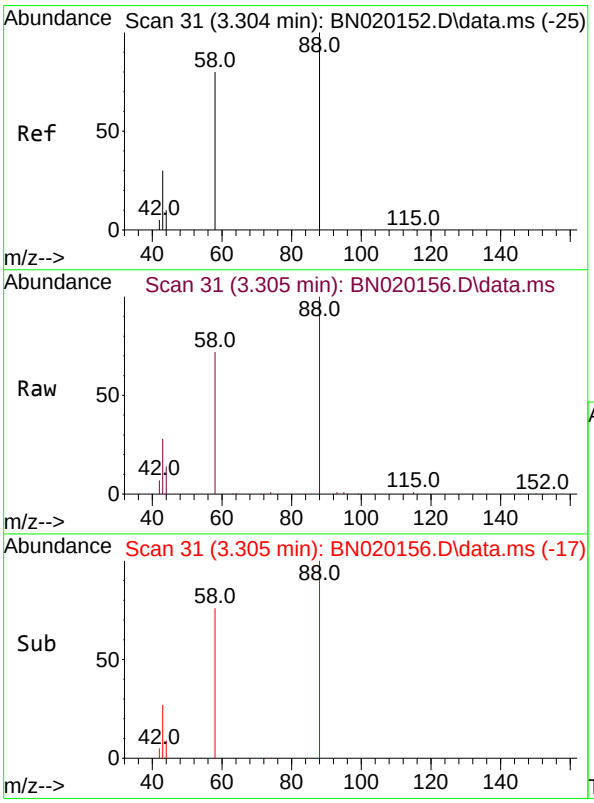
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.804 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 4783

Ion	Ratio	Lower	Upper
152	100		
150	154.6	127.9	191.9
115	62.5	51.4	77.2

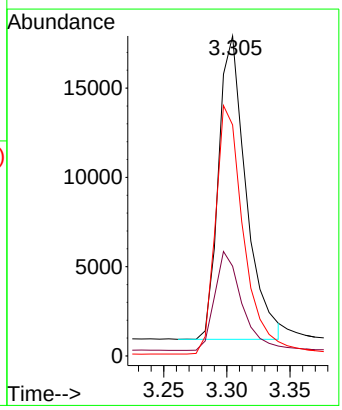


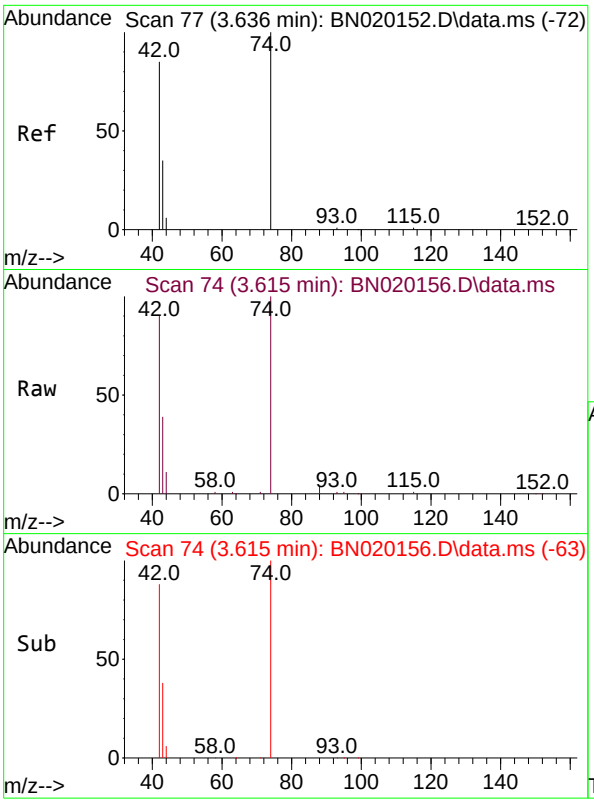


#2
1,4-Dioxane
Concen: 4.541 ng
RT: 3.305 min Scan# 31
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion: 88 Resp: 25588

Ion	Ratio	Lower	Upper
88	100		
43	32.2	30.2	45.2
58	83.5	73.0	109.6



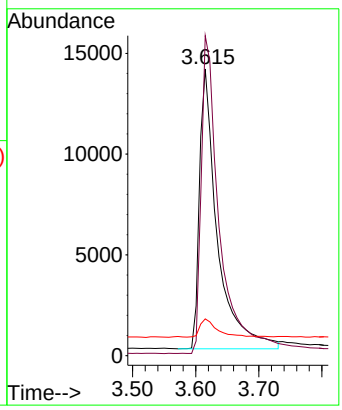


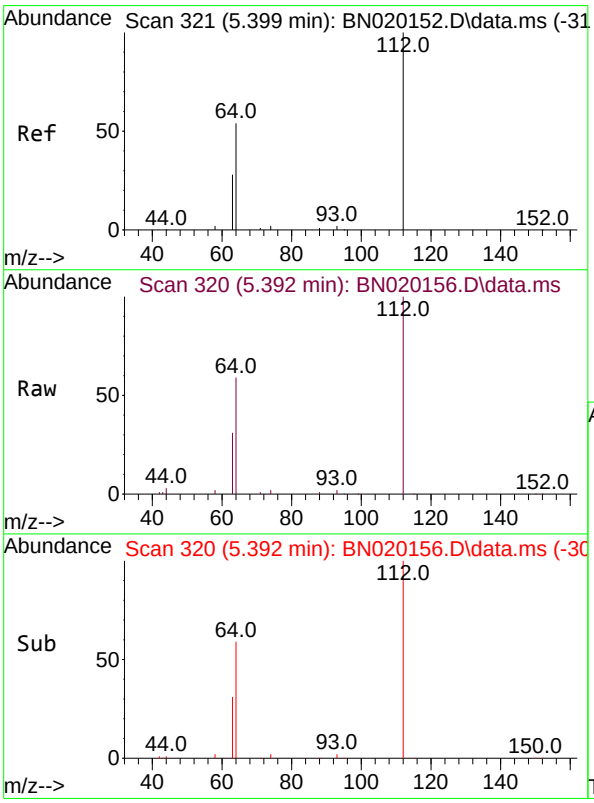
#3
n-Nitrosodimethylamine
Concen: 5.199 ng
RT: 3.615 min Scan# 7
Delta R.T. -0.021 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 42 Resp: 27436

Ion	Ratio	Lower	Upper
42	100		
74	117.0	84.0	126.0
44	6.5	9.8	14.8#

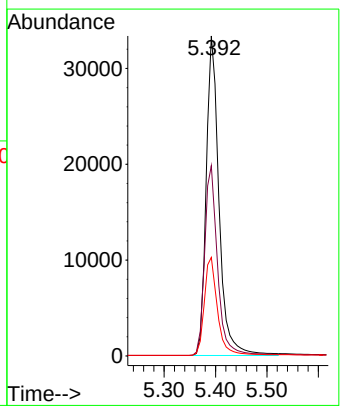


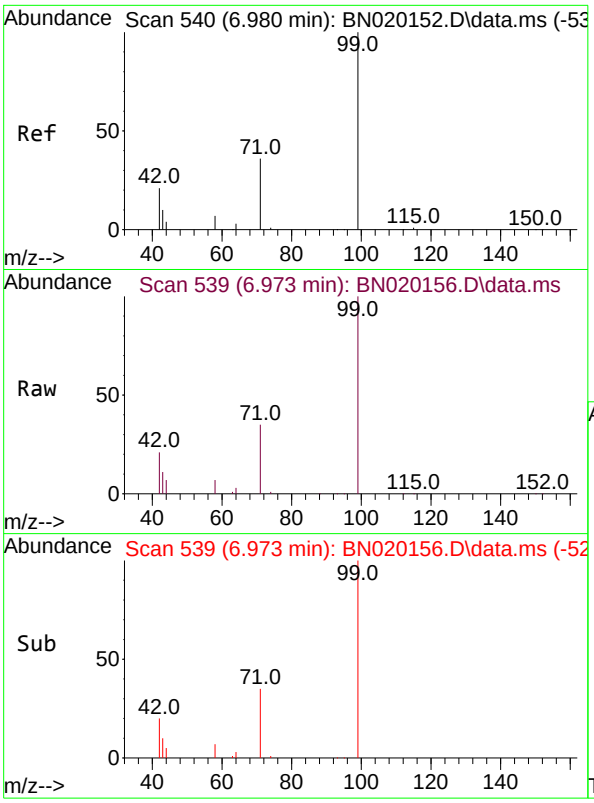


#4
2-Fluorophenol
Concen: 4.394 ng
RT: 5.392 min Scan# 320
Delta R.T. -0.007 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:112 Resp: 57868

Ion	Ratio	Lower	Upper
112	100		
64	60.0	49.1	73.7
63	31.4	26.3	39.5



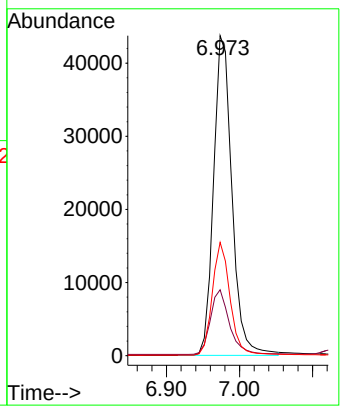


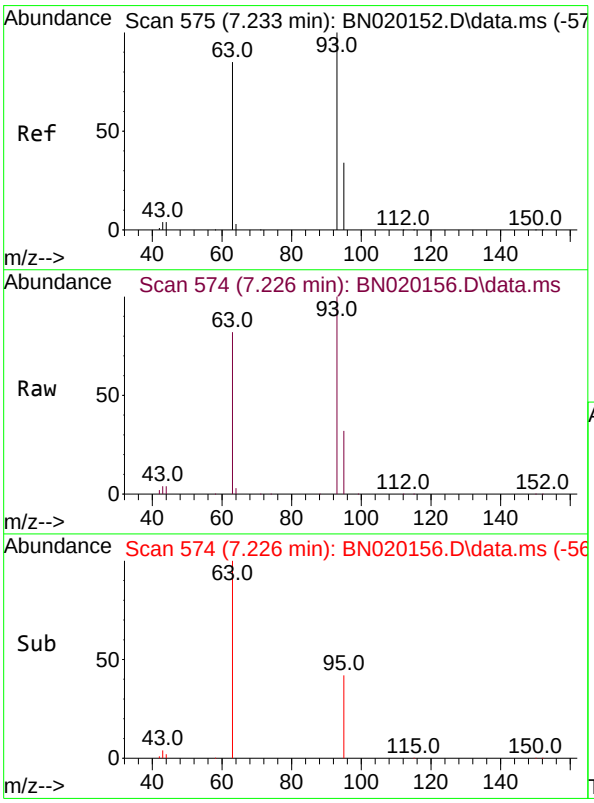
#5
Phenol-d6
Concen: 5.073 ng
RT: 6.973 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 99 Resp: 76186

Ion	Ratio	Lower	Upper
99	100		
42	21.0	19.3	28.9
71	34.2	27.5	41.3

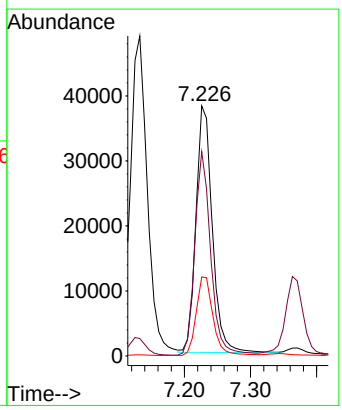


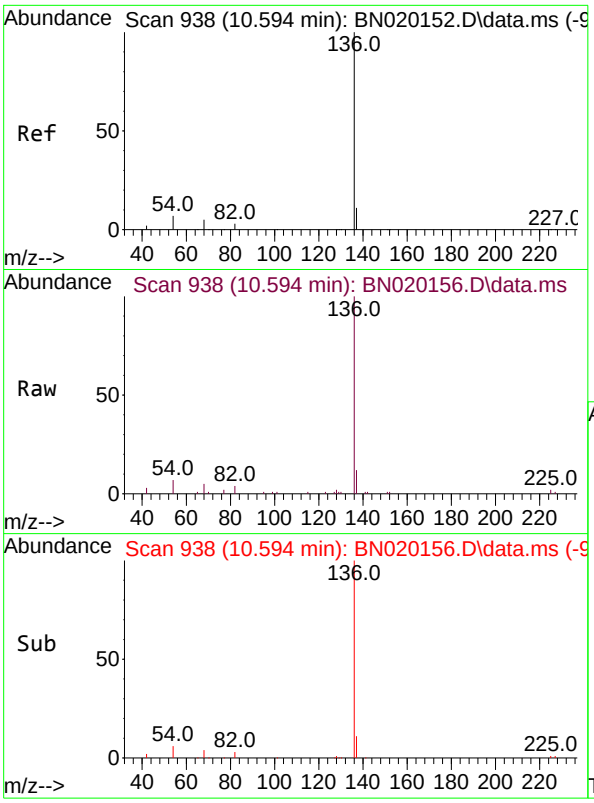


#6
bis(2-Chloroethyl)ether
Concen: 5.002 ng
RT: 7.226 min Scan# 574
Delta R.T. -0.007 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion: 93 Resp: 65302

Ion	Ratio	Lower	Upper
93	100		
63	80.1	67.4	101.0
95	32.8	26.5	39.7



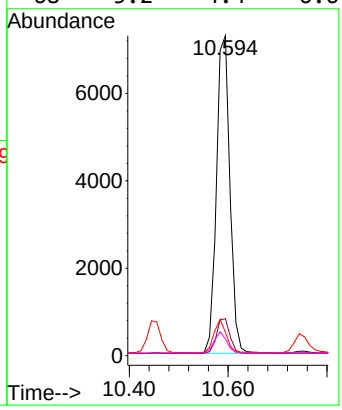


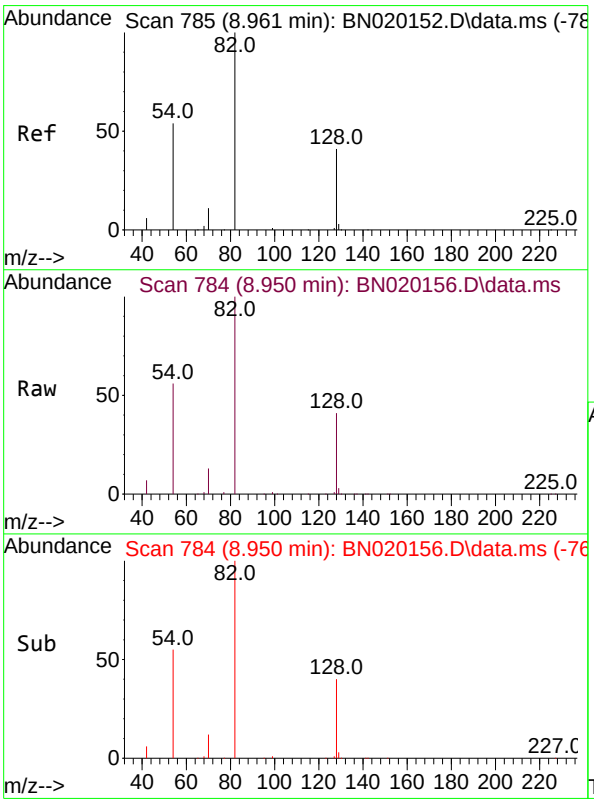
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.594 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:136 Resp: 13713

Ion	Ratio	Lower	Upper
136	100		
137	11.6	9.0	13.6
54	7.3	6.2	9.2
68	5.2	4.4	6.6

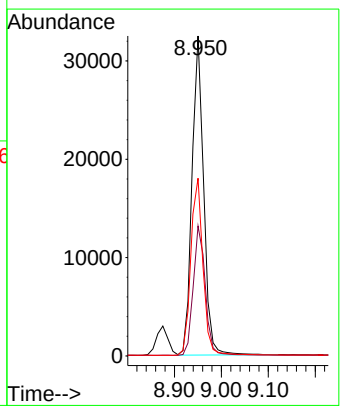


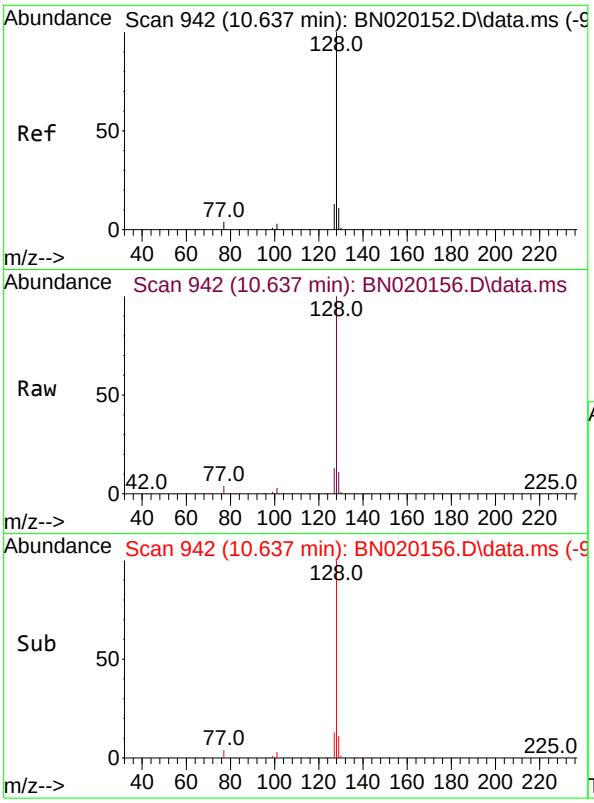


#8
Nitrobenzene-d5
Concen: 5.662 ng
RT: 8.950 min Scan# 784
Delta R.T. -0.010 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion: 82 Resp: 55831

Ion	Ratio	Lower	Upper
82	100		
128	40.6	35.0	52.6
54	55.5	46.2	69.4



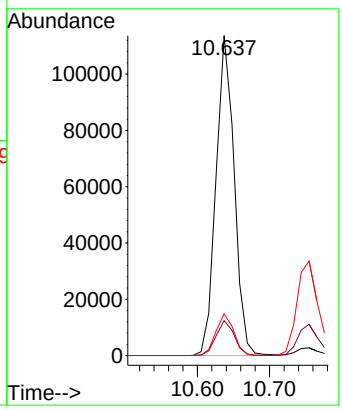


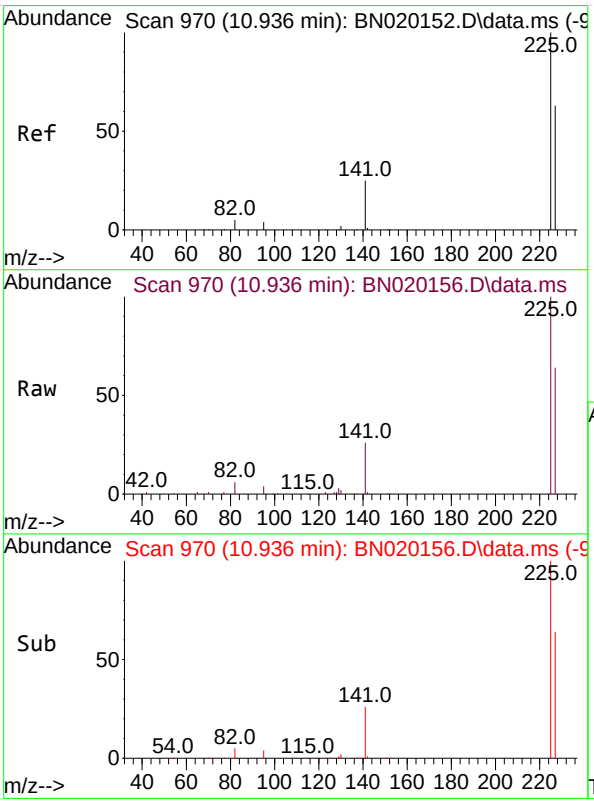
#9
Naphthalene
Concen: 4.799 ng
RT: 10.637 min Scan# 94
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:128 Resp: 198849

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.9	13.3
127	13.1	10.8	16.2

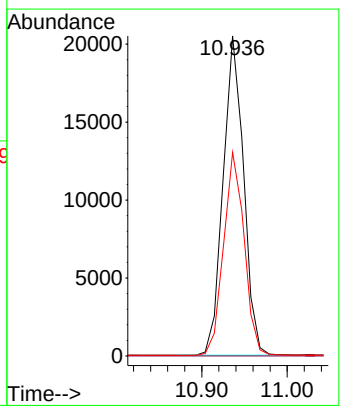


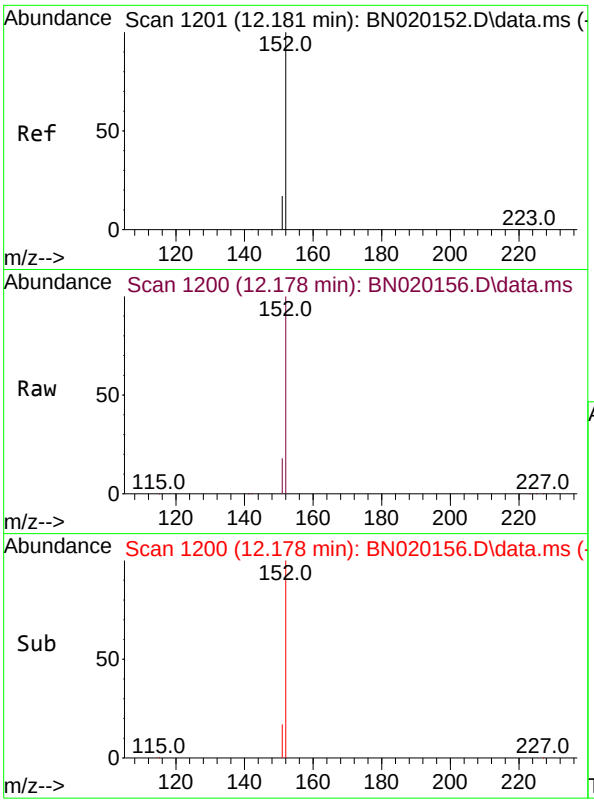


#10
Hexachlorobutadiene
Concen: 4.651 ng
RT: 10.936 min Scan# 970
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:225 Resp: 34127

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.8	50.9	76.3



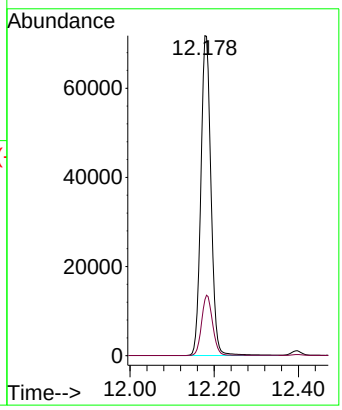


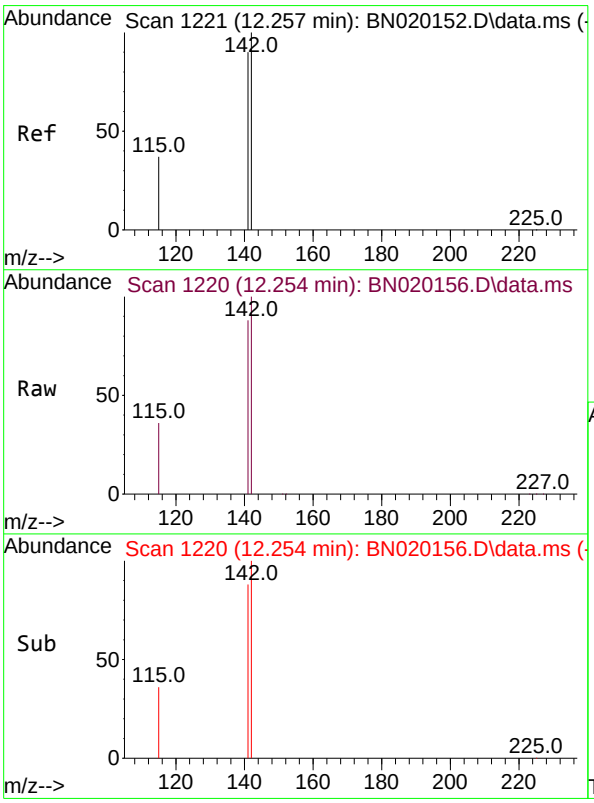
#11
2-Methylnaphthalene-d10
Concen: 4.879 ng
RT: 12.178 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 119530

Ion	Ratio	Lower	Upper
152	100		
151	20.4	16.2	24.4

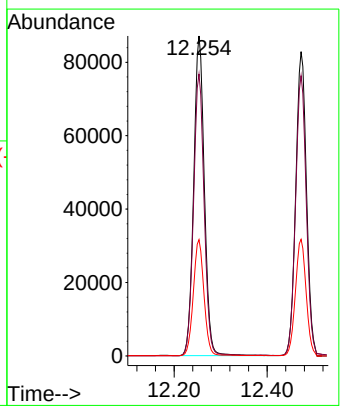


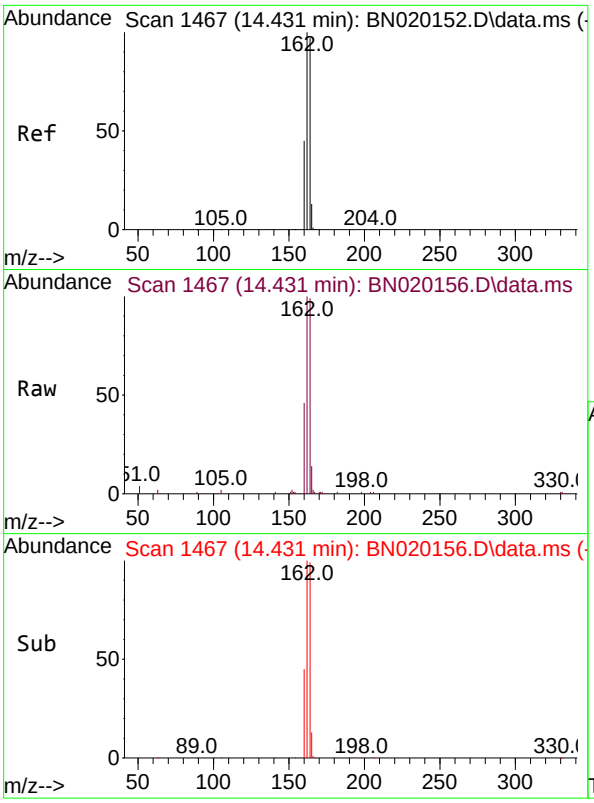


#12
2-Methylnaphthalene
Concen: 4.831 ng
RT: 12.254 min Scan# 1220
Delta R.T. -0.004 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:142 Resp: 138117

Ion	Ratio	Lower	Upper
142	100		
141	88.1	71.6	107.4
115	36.4	29.8	44.8



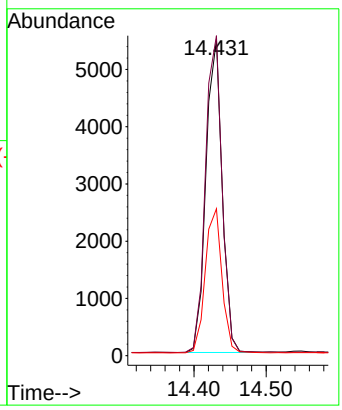


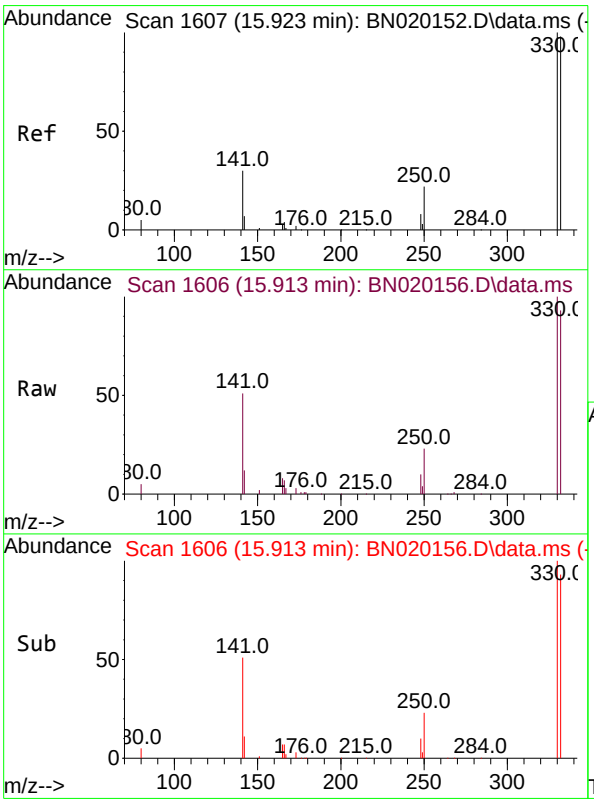
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.431 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:164 Resp: 8570

Ion	Ratio	Lower	Upper
164	100		
162	101.1	82.1	123.1
160	46.4	38.6	58.0

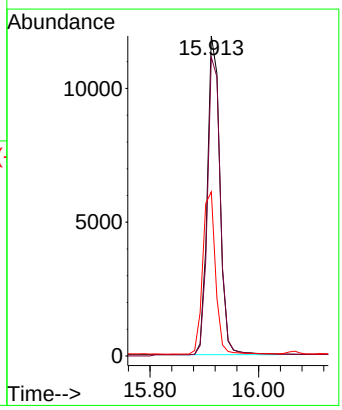


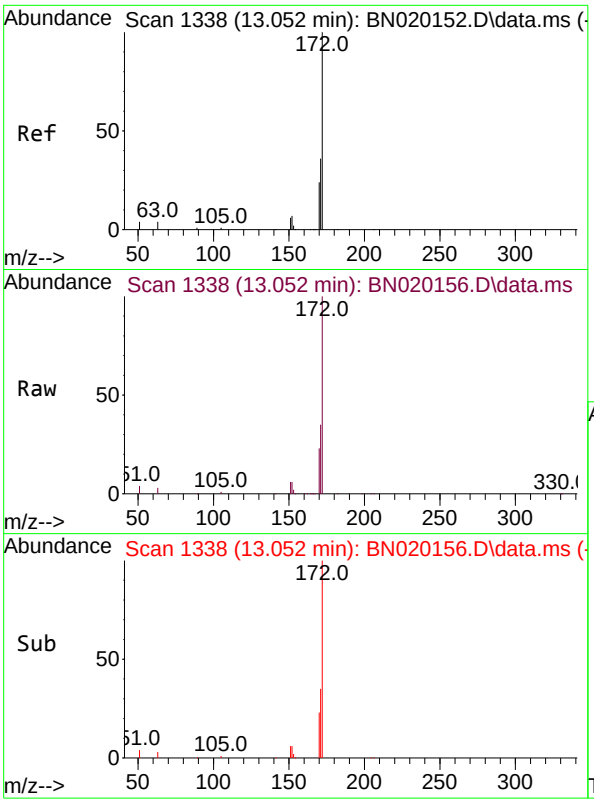


#14
2,4,6-Tribromophenol
Concen: 5.861 ng
RT: 15.913 min Scan# 1606
Delta R.T. -0.010 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:330 Resp: 19112

Ion	Ratio	Lower	Upper
330	100		
332	95.7	77.6	116.4
141	51.8	41.0	61.4



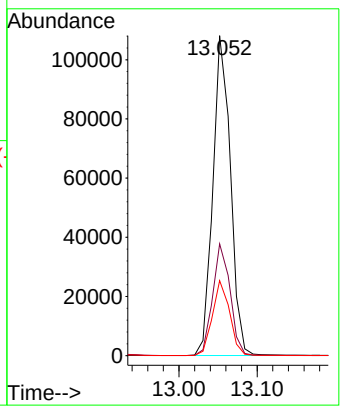


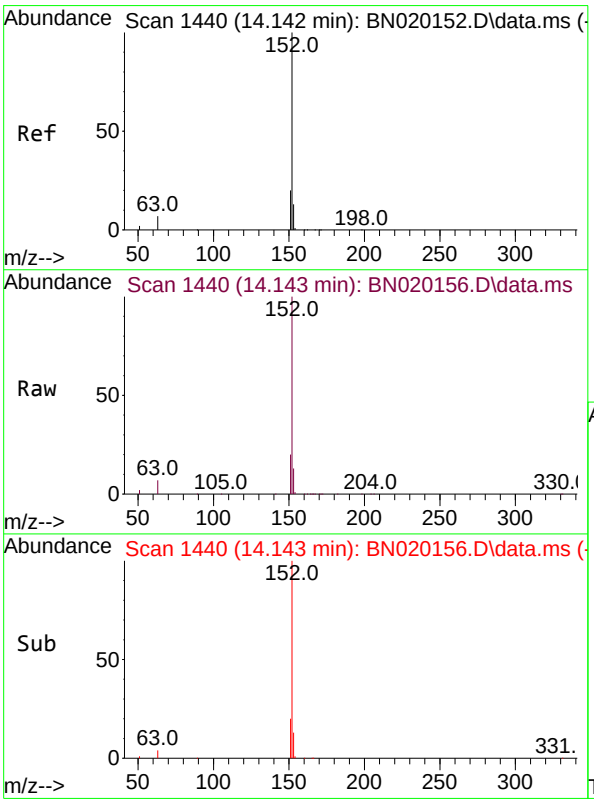
#15
2-Fluorobiphenyl
Concen: 4.881 ng
RT: 13.052 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:172 Resp: 168678

Ion	Ratio	Lower	Upper
172	100		
171	35.0	27.2	40.8
170	23.4	18.2	27.4

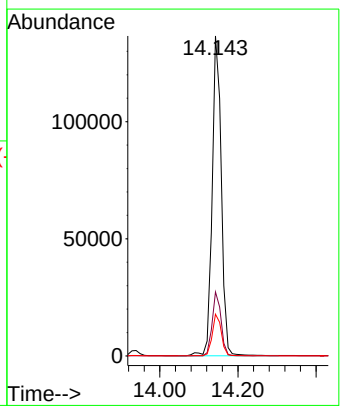


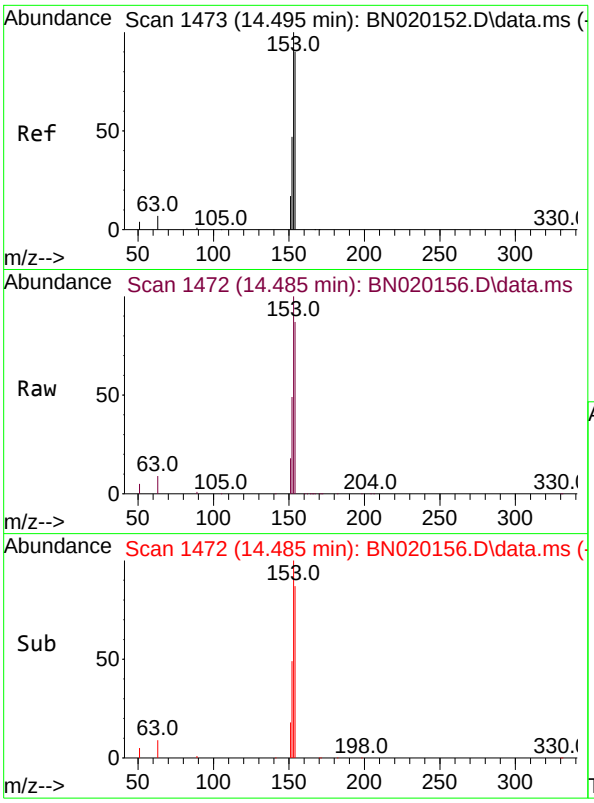


#16
Acenaphthylene
Concen: 5.488 ng
RT: 14.143 min Scan# 1440
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:152 Resp: 221987

Ion	Ratio	Lower	Upper
152	100		
151	19.4	16.2	24.4
153	13.0	10.7	16.1



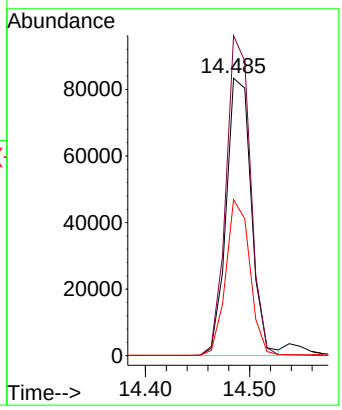


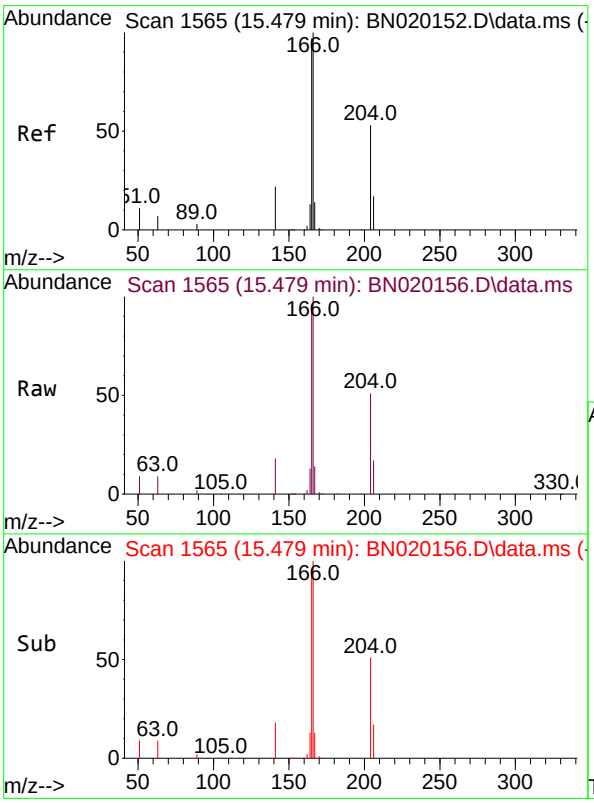
#17
Acenaphthene
Concen: 4.908 ng
RT: 14.485 min Scan# 14
Delta R.T. -0.010 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:154 Resp: 139385

Ion	Ratio	Lower	Upper
154	100		
153	112.6	87.5	131.3
152	54.0	43.8	65.6

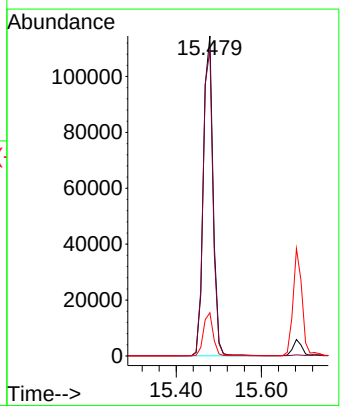


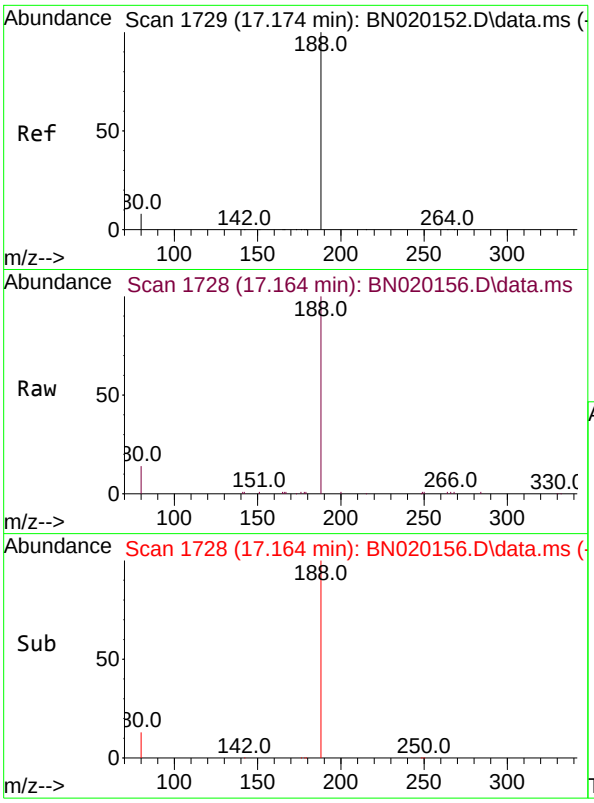


#18
Fluorene
Concen: 4.730 ng
RT: 15.479 min Scan# 1565
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:166 Resp: 180229

Ion	Ratio	Lower	Upper
166	100		
165	97.8	78.6	118.0
167	13.4	10.8	16.2



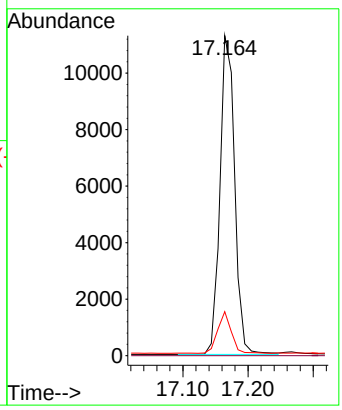


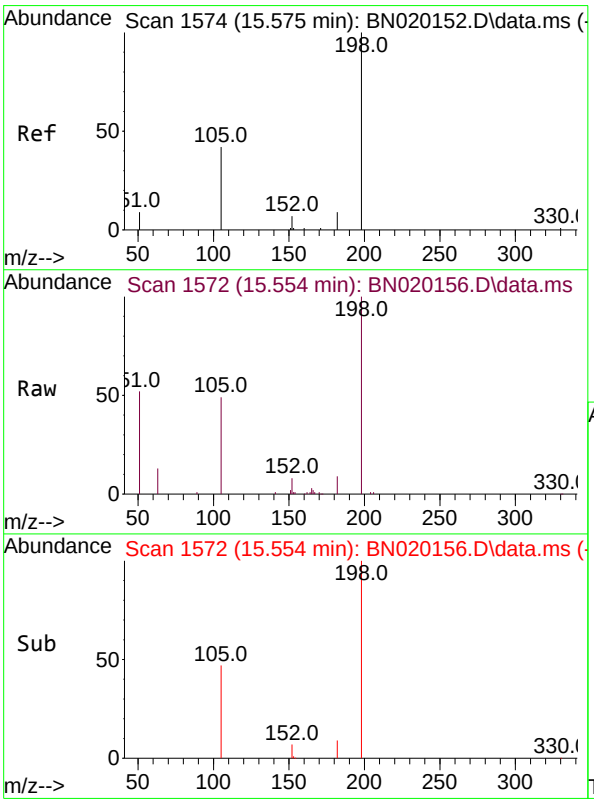
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.164 min Scan# 1
Delta R.T. -0.010 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:188 Resp: 17741

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.7	7.4	11.2#

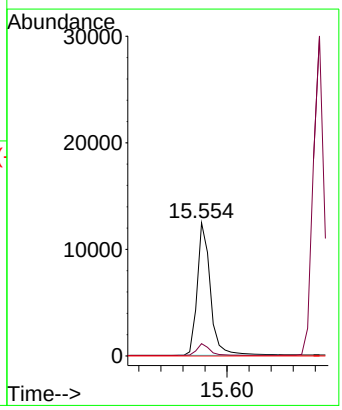


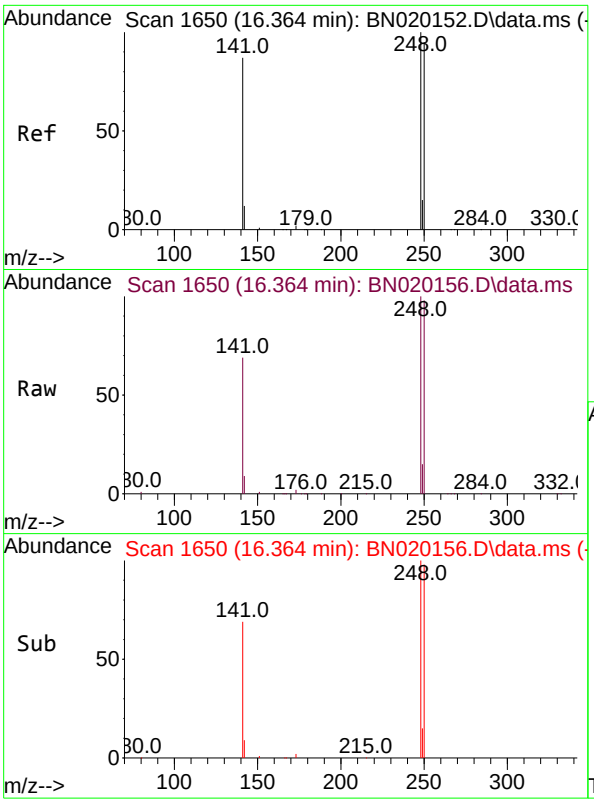


#20
4,6-Dinitro-2-methylphenol
Concen: 13.009 ng
RT: 15.554 min Scan# 1572
Delta R.T. -0.021 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:198 Resp: 20766

Ion	Ratio	Lower	Upper
198	100		
182	9.2	12.1	18.1#
77	0.0	0.0	0.0



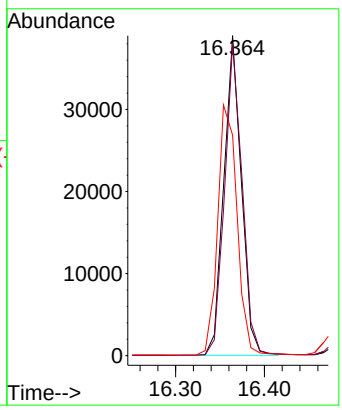


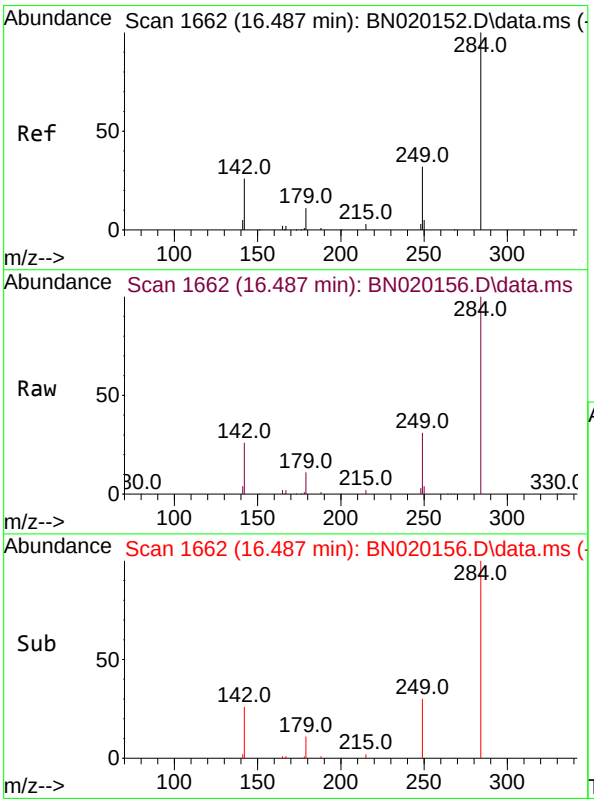
#21
4-Bromophenyl-phenylether
Concen: 5.138 ng
RT: 16.364 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:248 Resp: 53433

Ion	Ratio	Lower	Upper
248	100		
250	97.6	75.3	112.9
141	68.9	67.3	100.9

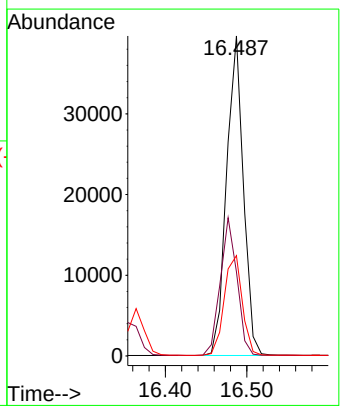


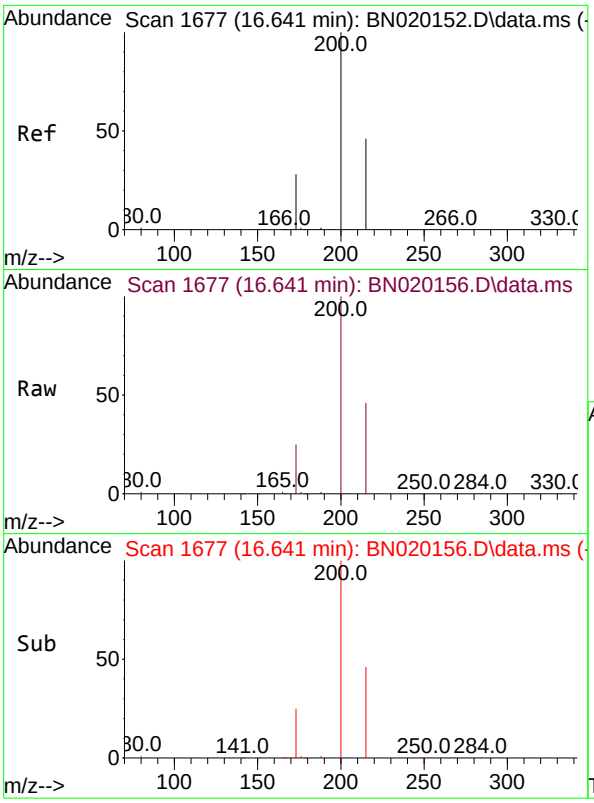


#22
Hexachlorobenzene
Concen: 4.967 ng
RT: 16.487 min Scan# 1662
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:284 Resp: 56785

Ion	Ratio	Lower	Upper
284	100		
142	42.7	35.2	52.8
249	33.5	26.6	40.0



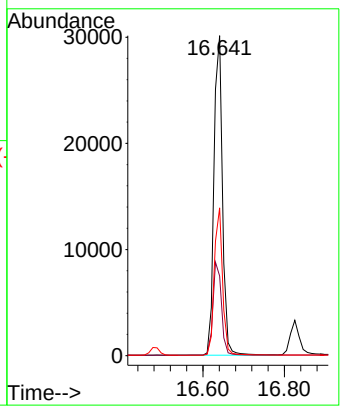


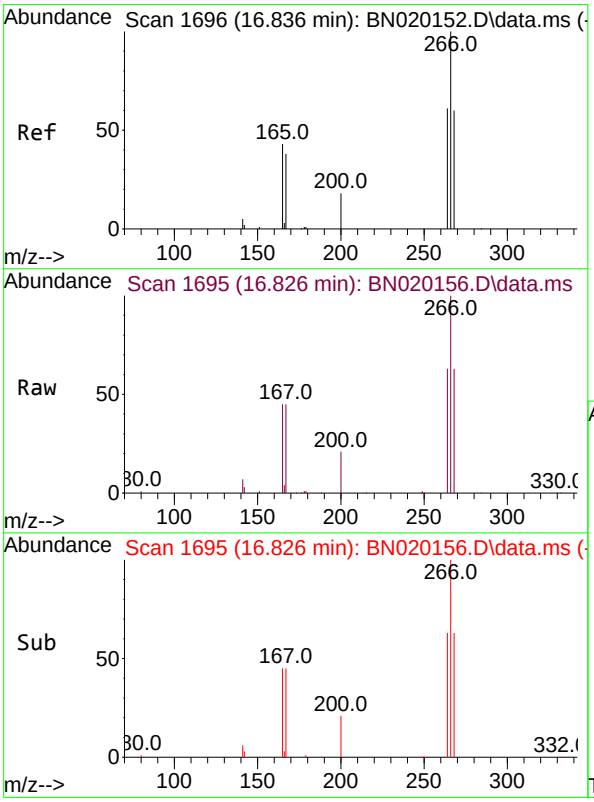
#23
Atrazine
Concen: 5.752 ng
RT: 16.641 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:200 Resp: 43655

Ion	Ratio	Lower	Upper
200	100		
173	24.9	23.6	35.4
215	46.2	36.6	54.8

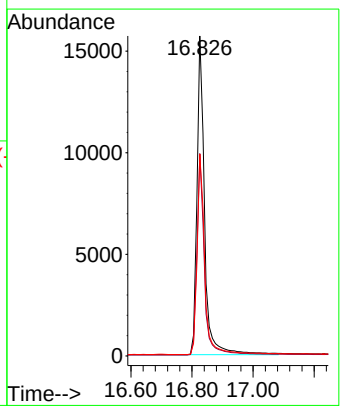


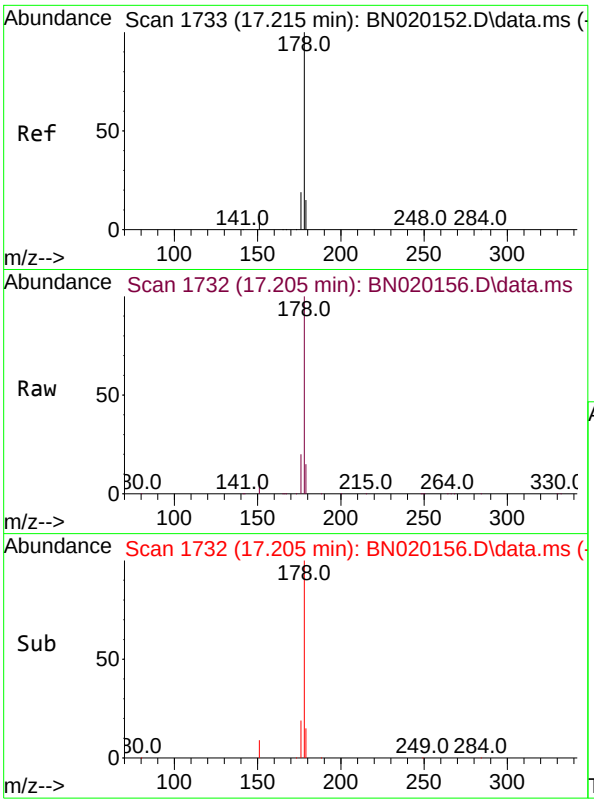


#24
Pentachlorophenol
Concen: 6.743 ng
RT: 16.826 min Scan# 1695
Delta R.T. -0.010 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:266 Resp: 27150

Ion	Ratio	Lower	Upper
266	100		
264	62.3	51.3	76.9
268	63.7	52.6	79.0



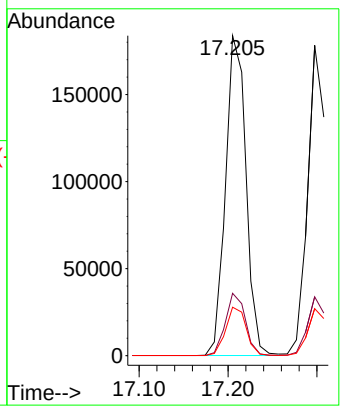


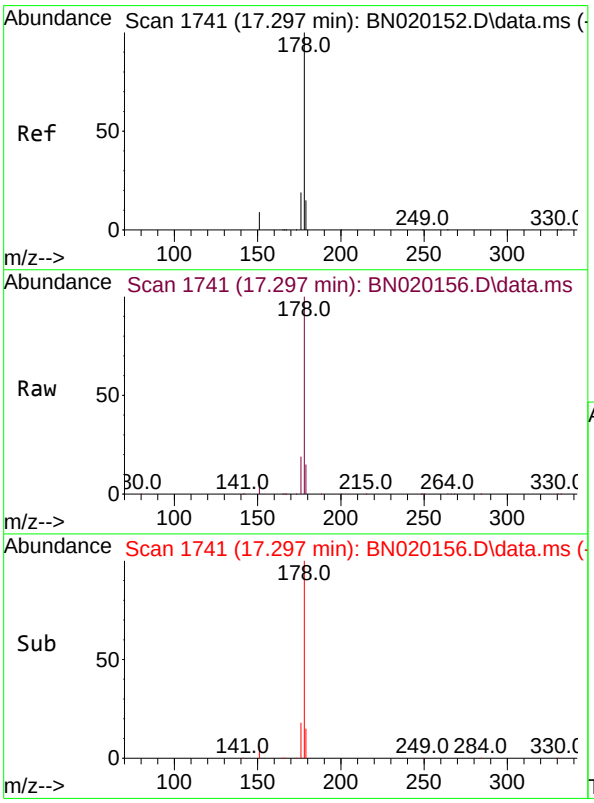
#25
Phenanthrene
Concen: 4.843 ng
RT: 17.205 min Scan# 1
Delta R.T. -0.010 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:178 Resp: 294172

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.3	22.9
179	15.2	12.2	18.4

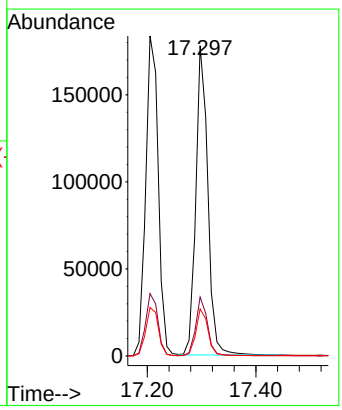


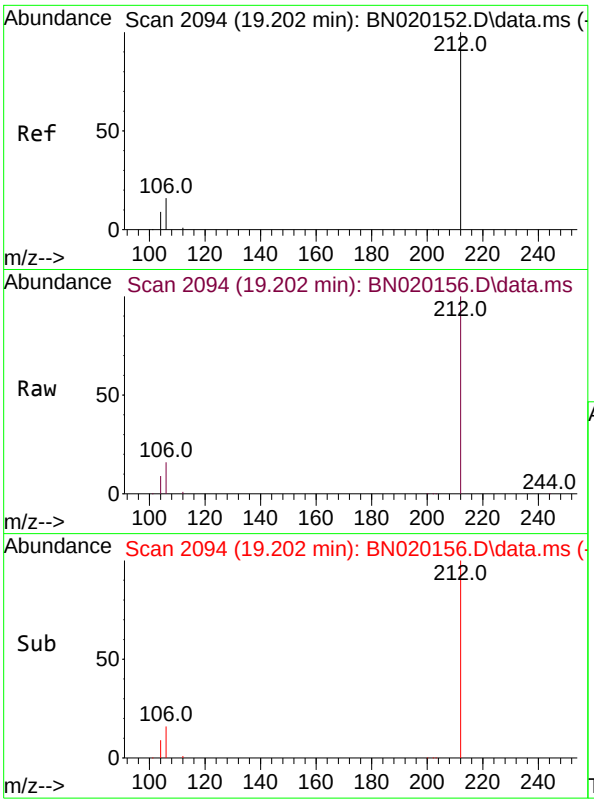


#26
Anthracene
Concen: 5.266 ng
RT: 17.297 min Scan# 1741
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:178 Resp: 272646

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.9	22.3
179	15.2	12.2	18.4



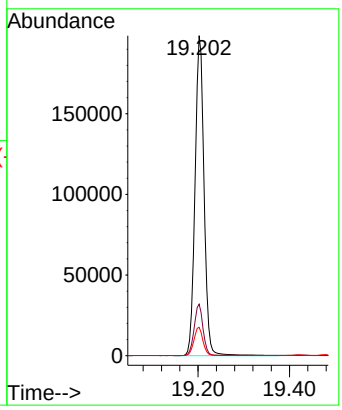


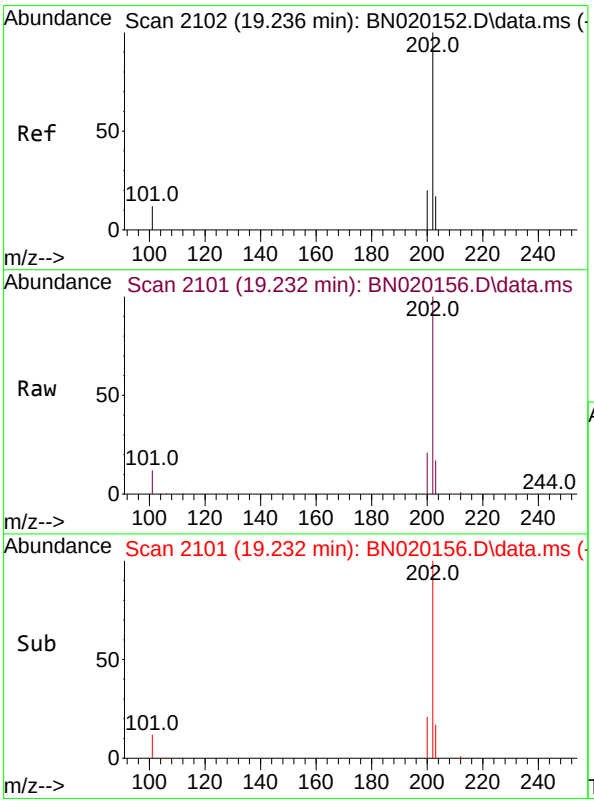
#27
Fluoranthene-d10
Concen: 4.923 ng
RT: 19.202 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:212 Resp: 271250

Ion	Ratio	Lower	Upper
212	100		
106	15.9	12.6	19.0
104	8.8	7.2	10.8

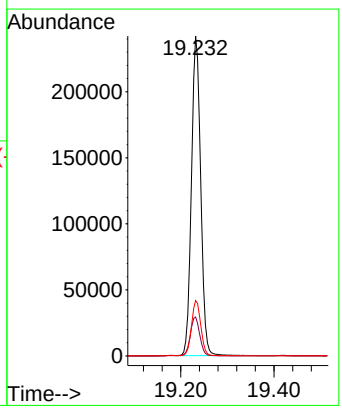


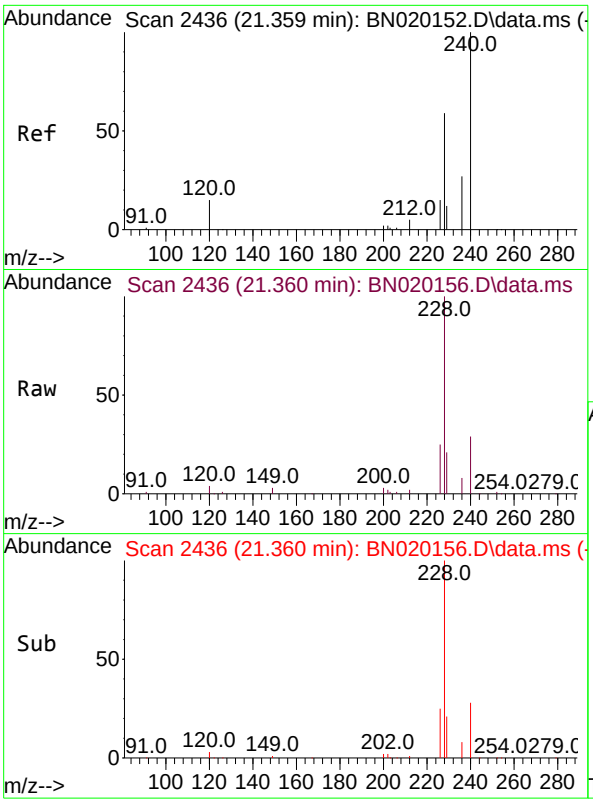


#28
Fluoranthene
Concen: 4.892 ng
RT: 19.232 min Scan# 2101
Delta R.T. -0.004 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:202 Resp: 333886

Ion	Ratio	Lower	Upper
202	100		
101	12.5	9.6	14.4
203	17.3	13.5	20.3



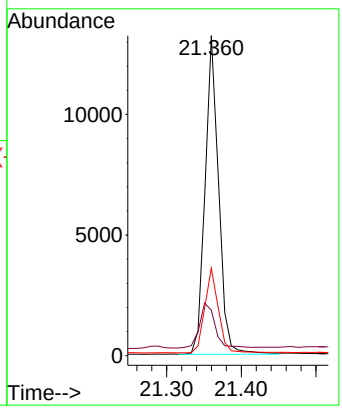


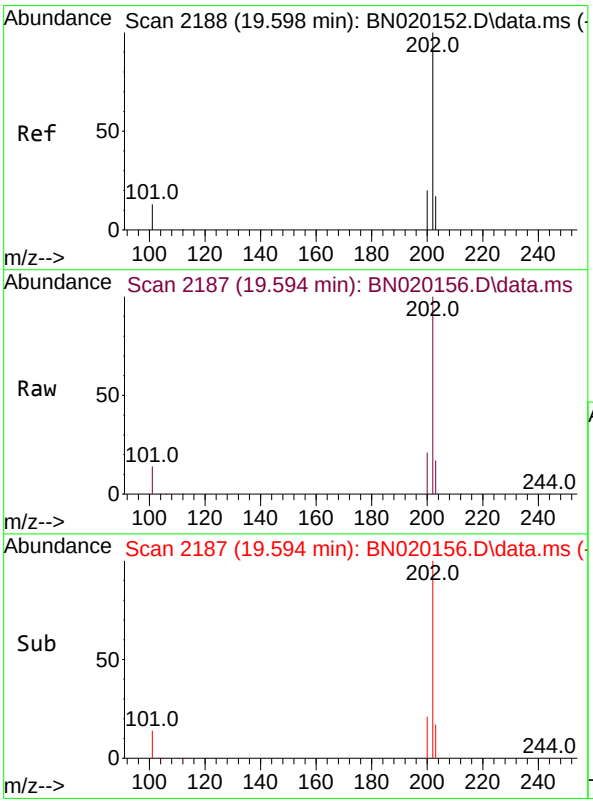
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.360 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:240 Resp: 16643

Ion	Ratio	Lower	Upper
240	100		
120	14.2	14.6	21.8#
236	27.3	22.6	33.8

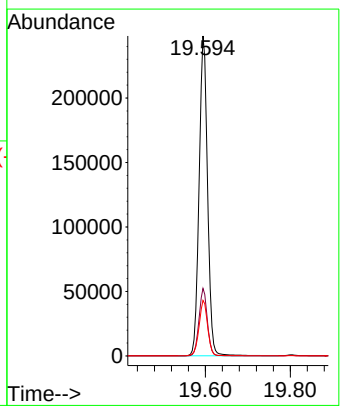


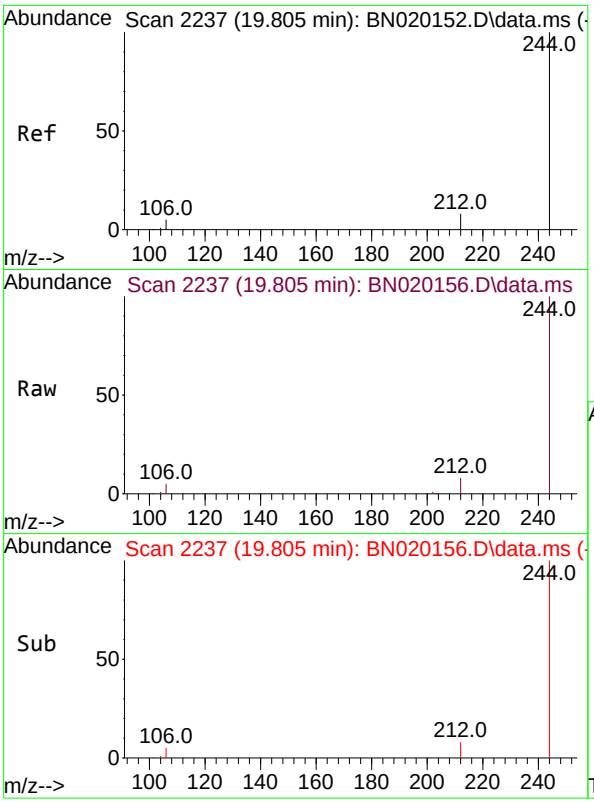


#30
Pyrene
Concen: 4.757 ng
RT: 19.594 min Scan# 2187
Delta R.T. -0.004 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:202 Resp: 342045

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.6	25.0
203	17.8	14.2	21.2



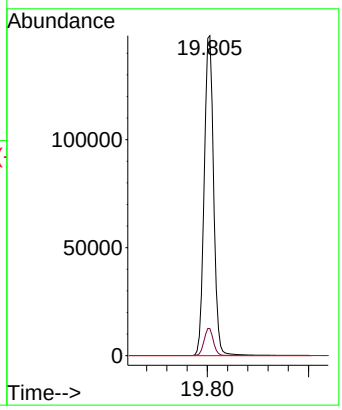


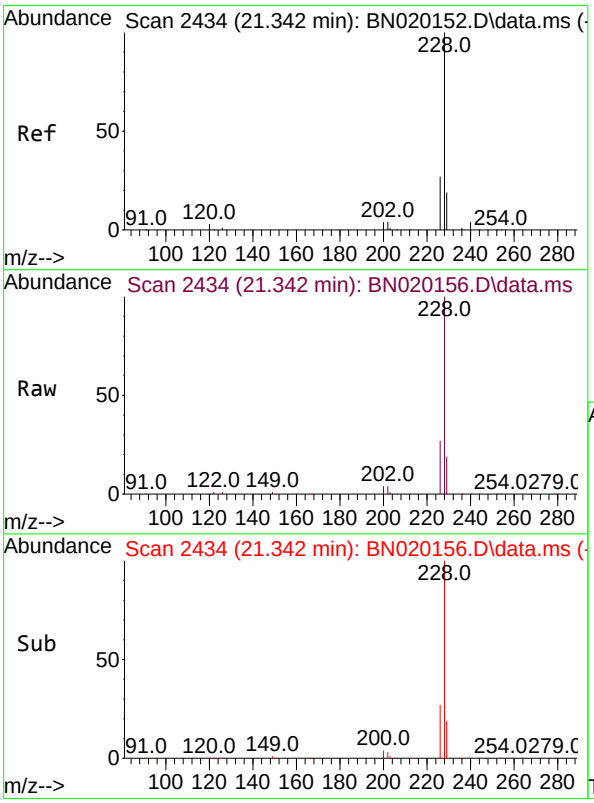
#31
Terphenyl-d14
Concen: 4.727 ng
RT: 19.805 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:244 Resp: 191033

Ion	Ratio	Lower	Upper
244	100		
212	8.4	7.1	10.7
122	0.0	0.0	0.0

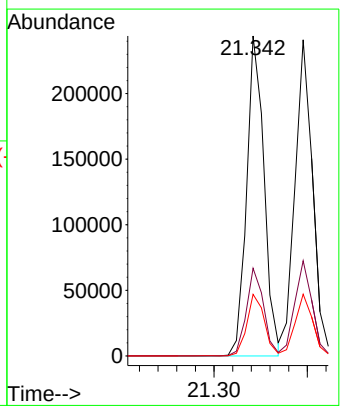


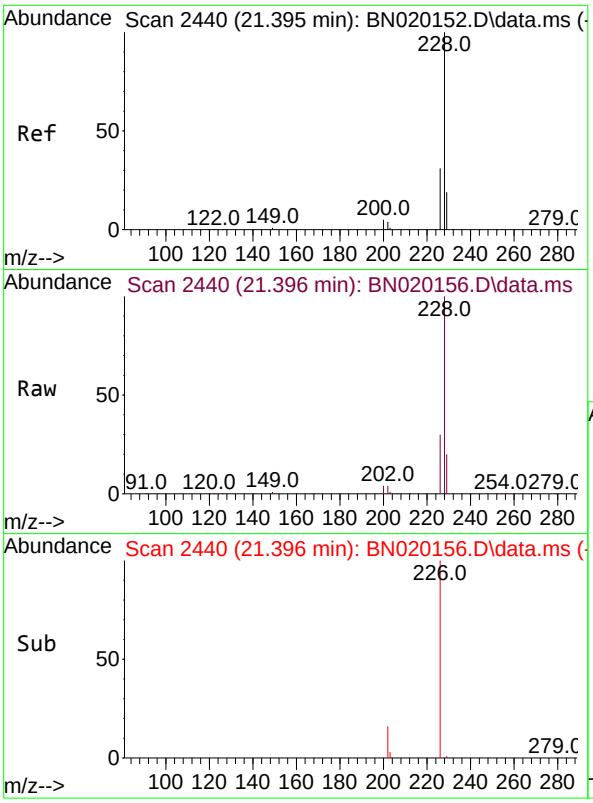


#32
Benzo(a)anthracene
Concen: 5.095 ng
RT: 21.342 min Scan# 2434
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:228 Resp: 316500

Ion	Ratio	Lower	Upper
228	100		
226	27.4	21.2	31.8
229	19.3	15.6	23.4



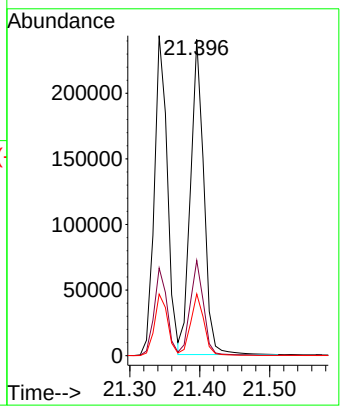


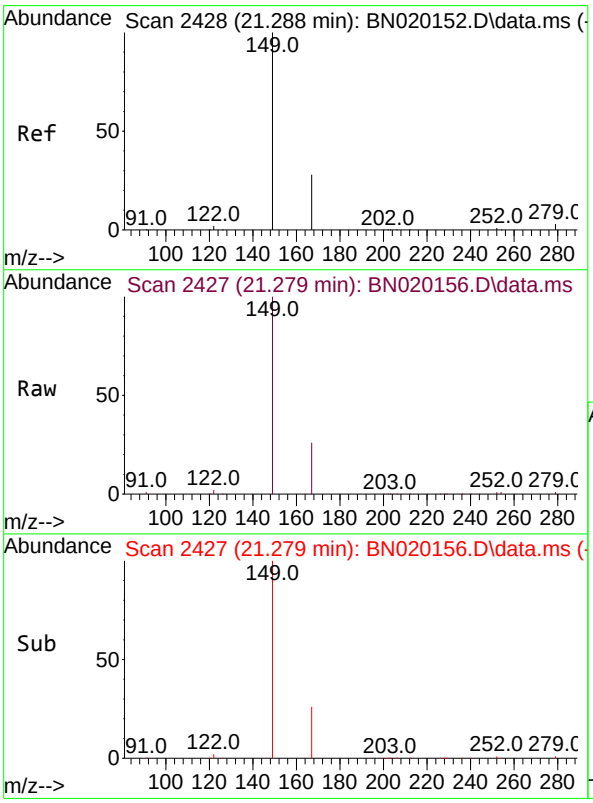
#33
Chrysene
Concen: 4.751 ng
RT: 21.396 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:228 Resp: 317746

Ion	Ratio	Lower	Upper
228	100		
226	30.1	23.4	35.0
229	19.5	15.7	23.5

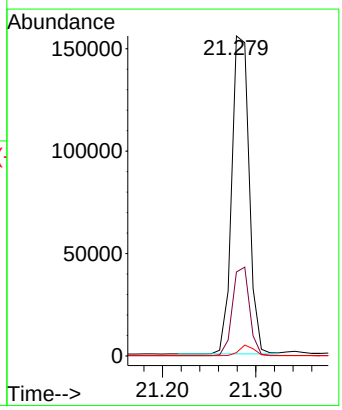


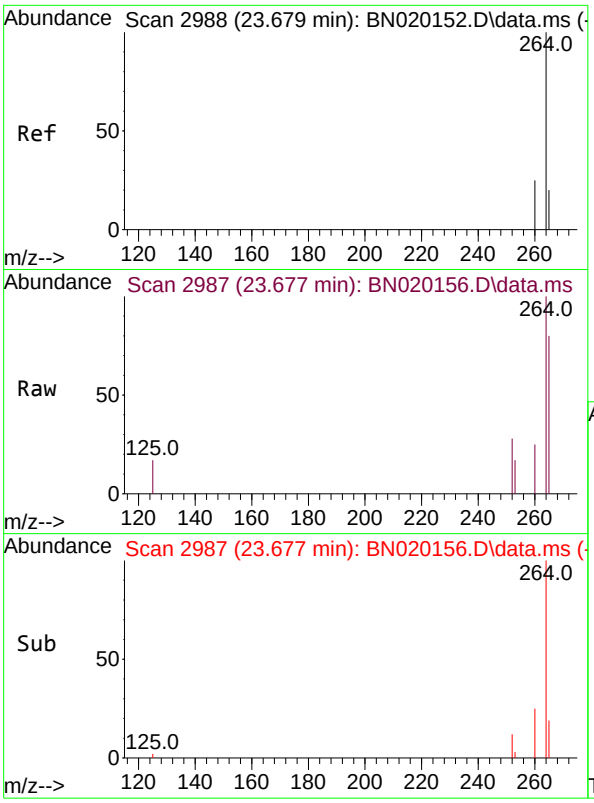


#34
Bis(2-ethylhexyl)phthalate
Concen: 5.477 ng
RT: 21.279 min Scan# 2427
Delta R.T. -0.009 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:149 Resp: 201598

Ion	Ratio	Lower	Upper
149	100		
167	27.4	21.7	32.5
279	2.9	2.2	3.2



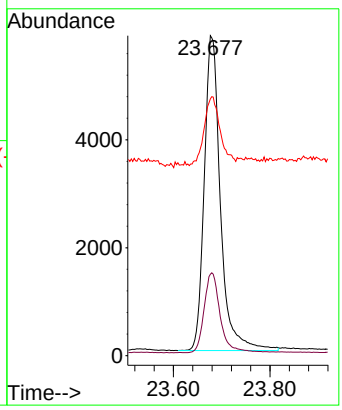


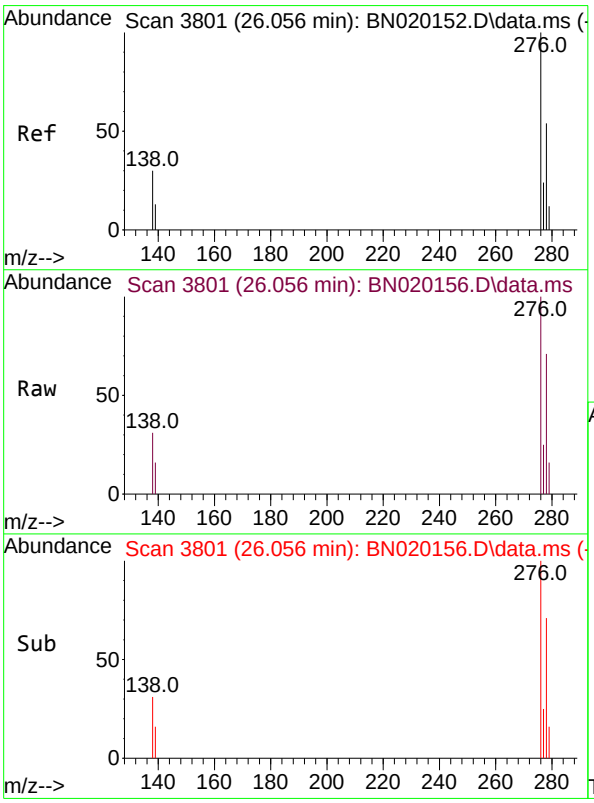
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.677 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:264 Resp: 13552

Ion	Ratio	Lower	Upper
264	100		
260	25.4	20.9	31.3
265	80.3	28.0	42.0#

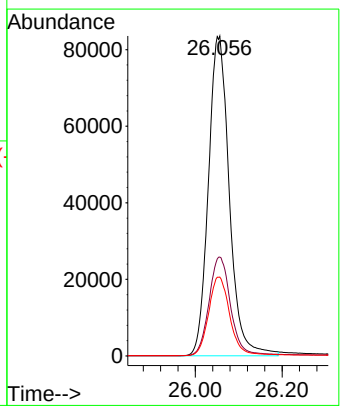


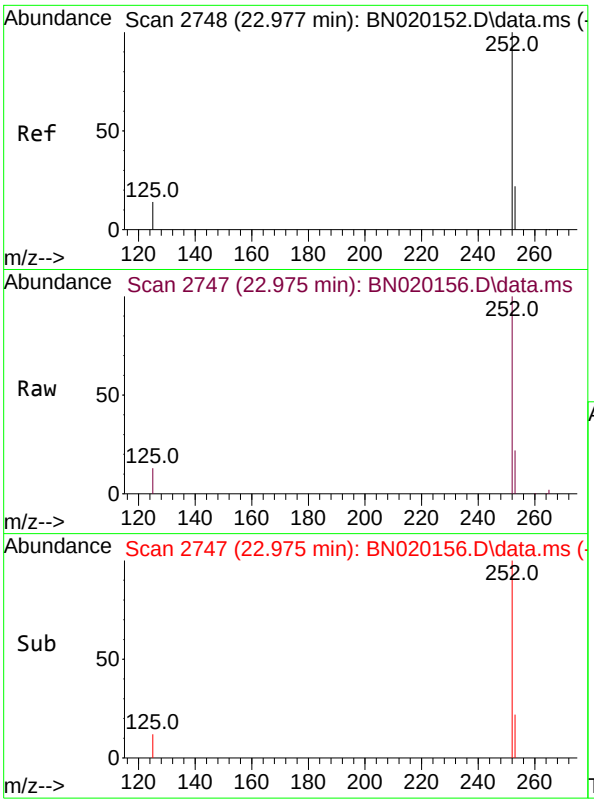


#36
Indeno(1,2,3-cd)pyrene
Concen: 4.898 ng
RT: 26.056 min Scan# 3801
Delta R.T. 0.000 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:276 Resp: 279478

Ion	Ratio	Lower	Upper
276	100		
138	31.8	25.9	38.9
277	25.0	19.8	29.8



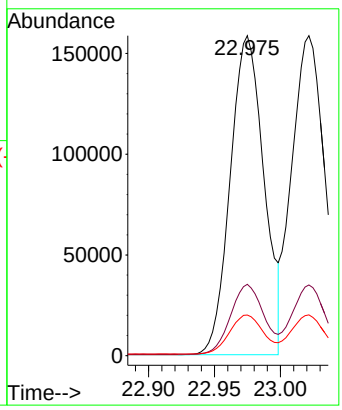


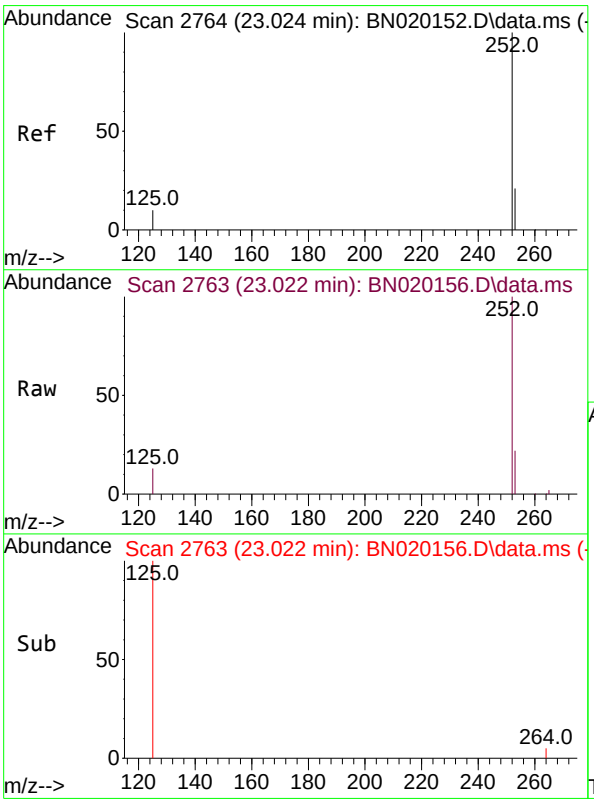
#37
Benzo(b)fluoranthene
Concen: 5.107 ng
RT: 22.975 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 281850

Ion	Ratio	Lower	Upper
252	100		
253	22.3	18.5	27.7
125	12.7	11.4	17.0

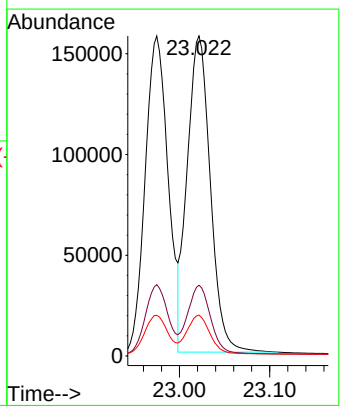


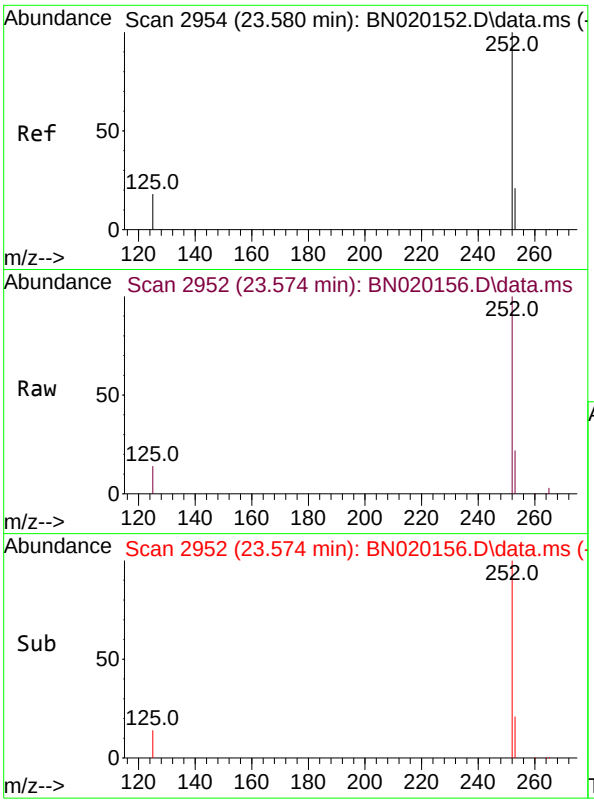


#38
Benzo(k)fluoranthene
Concen: 5.011 ng
RT: 23.022 min Scan# 2763
Delta R.T. -0.003 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:252 Resp: 279233

Ion	Ratio	Lower	Upper
252	100		
253	22.1	18.0	27.0
125	12.8	11.0	16.4



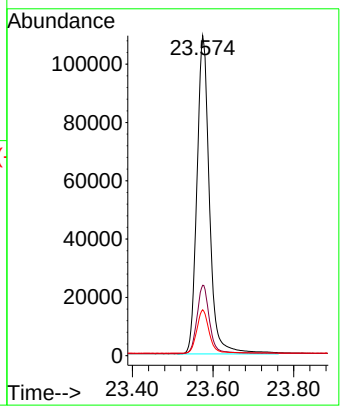


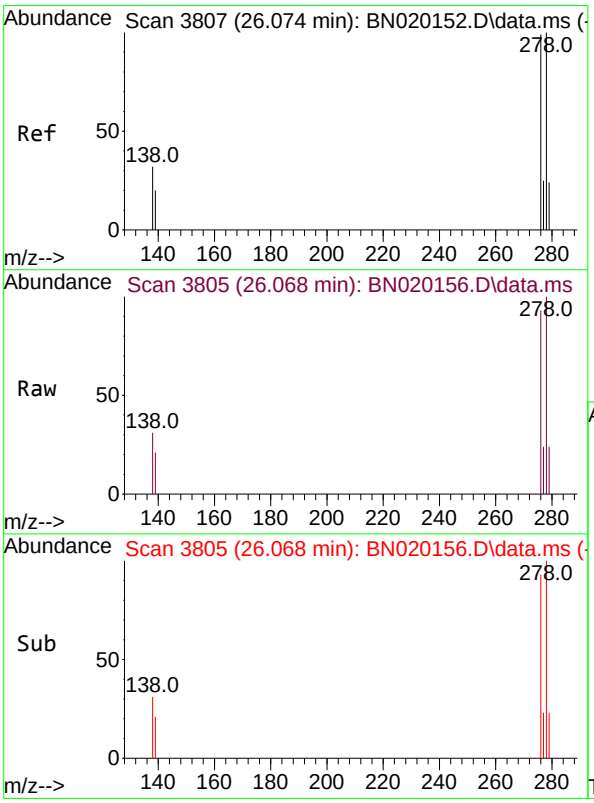
#39
Benzo(a)pyrene
Concen: 5.063 ng
RT: 23.574 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 234385

Ion	Ratio	Lower	Upper
252	100		
253	22.0	19.0	28.4
125	14.4	13.8	20.8

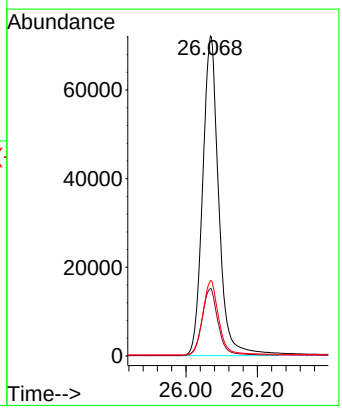


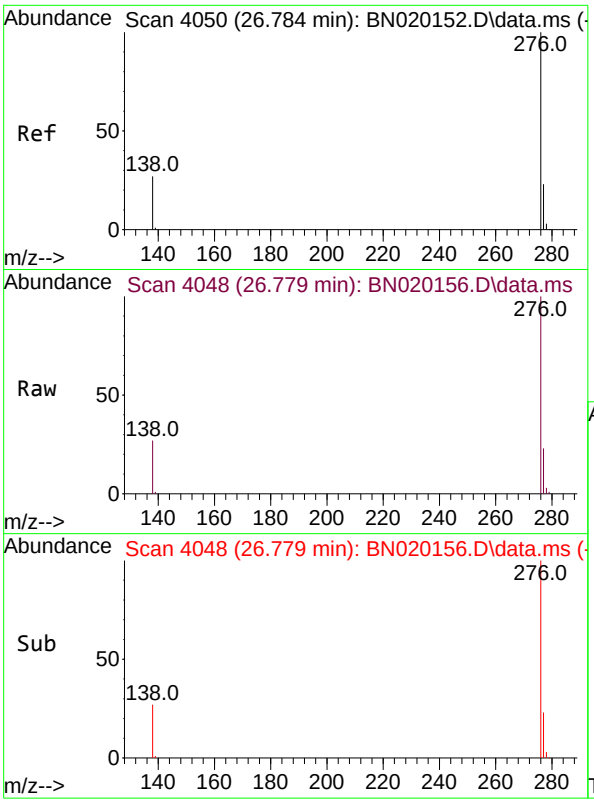


#40
Dibenzo(a,h)anthracene
Concen: 4.928 ng
RT: 26.068 min Scan# 3805
Delta R.T. -0.006 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Tgt Ion:278 Resp: 225628

Ion	Ratio	Lower	Upper
278	100		
139	21.1	18.6	28.0
279	23.5	19.7	29.5





#41
Benzo(g,h,i)perylene
Concen: 4.752 ng
RT: 26.779 min Scan# 4
Delta R.T. -0.006 min
Lab File: BN020156.D
Acq: 14 Jun 2022 13:54

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:276 Resp: 238177

Ion	Ratio	Lower	Upper
276	100		
277	23.4	19.5	29.3
138	27.4	22.6	34.0