Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN112521\
Data File : BN017588.D
Acq On : 24 Nov 2021 19:40
Operator : CG/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Nov 25 02:38:09 2021
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\8270-SIM-BN112521.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Nov 25 02:34:04 2021
Response via : Initial Calibration

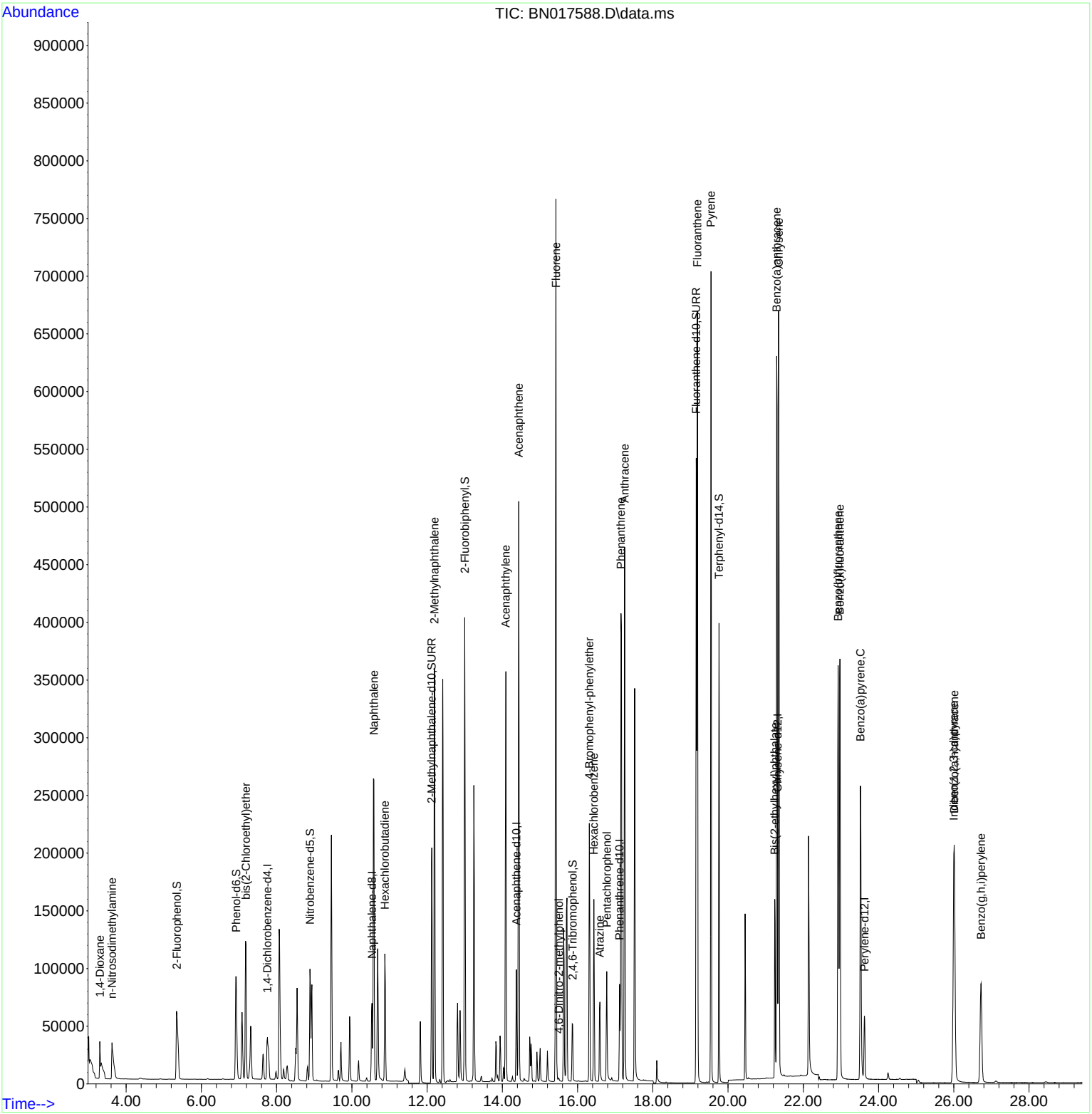
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.754	152	22388	0.400	ng	0.00
7) Naphthalene-d8	10.535	136	93520	0.400	ng	0.00
13) Acenaphthene-d10	14.371	164	53026	0.400	ng	0.00
19) Phenanthrene-d10	17.116	188	108003	0.400	ng	0.00
29) Chrysene-d12	21.314	240	104625	0.400	ng	0.00
35) Perylene-d12	23.626	264	74457	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.348	112	97087	1.750	ng	0.00
5) Phenol-d6	6.924	99	110689	1.768	ng	0.00
8) Nitrobenzene-d5	8.887	82	84351	1.370	ng	0.00
11) 2-Methylnaphthalene-d10	12.124	152	271287	1.741	ng	0.00
14) 2,4,6-Tribromophenol	15.869	330	48683	2.989	ng	0.00
15) 2-Fluorobiphenyl	13.001	172	337949	1.711	ng	0.00
27) Fluoranthene-d10	19.153	212	616722	1.856	ng	0.00
31) Terphenyl-d14	19.759	244	400385	1.742	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.301	88	18334	1.707	ng	# 100
3) n-Nitrosodimethylamine	3.623	42	38474	1.742	ng	# 64
6) bis(2-Chloroethyl)ether	7.183	93	108797	1.703	ng	100
9) Naphthalene	10.585	128	392048	1.652	ng	100
10) Hexachlorobutadiene	10.877	225	97985	2.094	ng	# 100
12) 2-Methylnaphthalene	12.195	142	259604	1.700	ng	99
16) Acenaphthylene	14.092	152	380059	1.796	ng	100
17) Acenaphthene	14.435	154	240230	1.644	ng	99
18) Fluorene	15.425	166	307746	1.748	ng	100
20) 4,6-Dinitro-2-methylph...	15.501	198	1915	0.381	ng	# 55
21) 4-Bromophenyl-phenylether	16.313	248	115467	1.947	ng	94
22) Hexachlorobenzene	16.435	284	128922	2.011	ng	100
23) Atrazine	16.593	200	68994	1.756	ng	99
24) Pentachlorophenol	16.775	266	49094	2.532	ng	99
25) Phenanthrene	17.153	178	492984	1.631	ng	100
26) Anthracene	17.250	178	464523	1.797	ng	100
28) Fluoranthene	19.183	202	599698	1.794	ng	100
30) Pyrene	19.546	202	611656	1.728	ng	100
32) Benzo(a)anthracene	21.292	228	575050	1.766	ng	100
33) Chrysene	21.345	228	562266	1.617	ng	99
34) Bis(2-ethylhexyl)phtha...	21.239	149	162827	1.297	ng	100
36) Indeno(1,2,3-cd)pyrene	25.998	276	265781	1.169	ng	96
37) Benzo(b)fluoranthene	22.924	252	478875	1.768	ng	99
38) Benzo(k)fluoranthene	22.972	252	460489	1.752	ng	98
39) Benzo(a)pyrene	23.520	252	382356	1.711	ng	99
40) Dibenzo(a,h)anthracene	26.015	278	225498	1.208	ng	96
41) Benzo(g,h,i)perylene	26.724	276	193935	0.997	ng	98

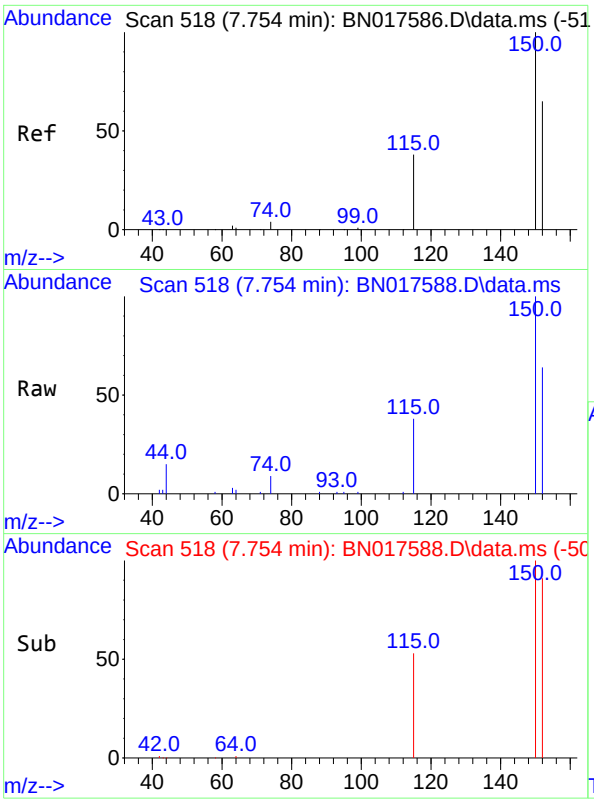
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN112521\
Data File : BN017588.D
Acq On : 24 Nov 2021 19:40
Operator : CG/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Nov 25 02:38:09 2021
Quant Method : Z:\SVOASRV\HPCHEM1\BNA_N\METHODS\8270-SIM-BN112521.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Nov 25 02:34:04 2021
Response via : Initial Calibration



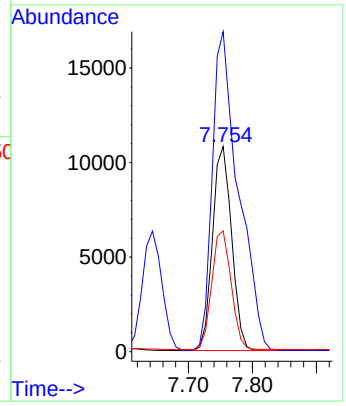


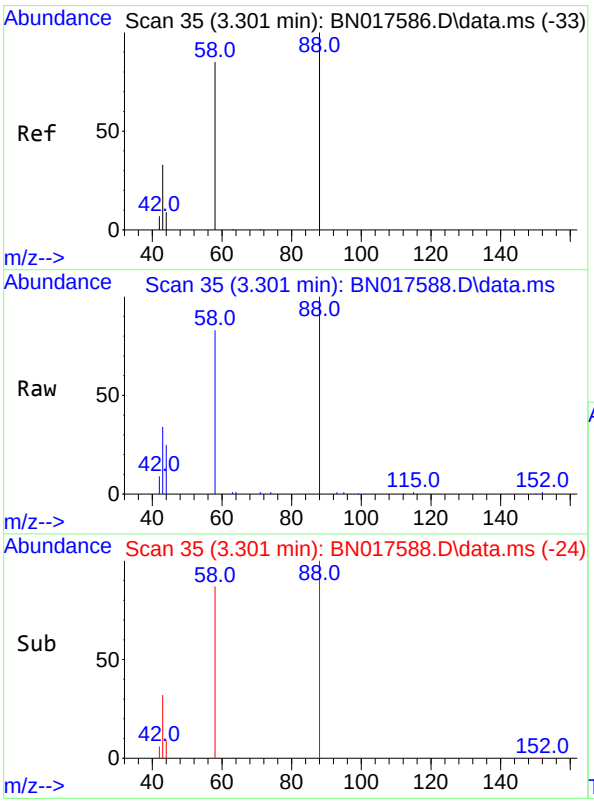
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.754 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 22388

Ion	Ratio	Lower	Upper
152	100		
150	156.0	122.5	183.7
115	58.8	47.0	70.4

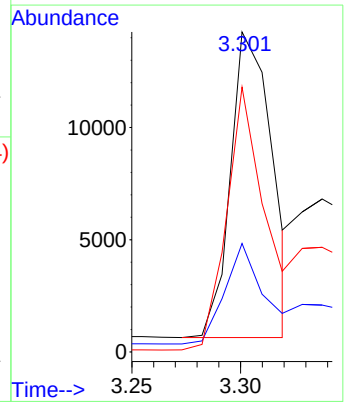


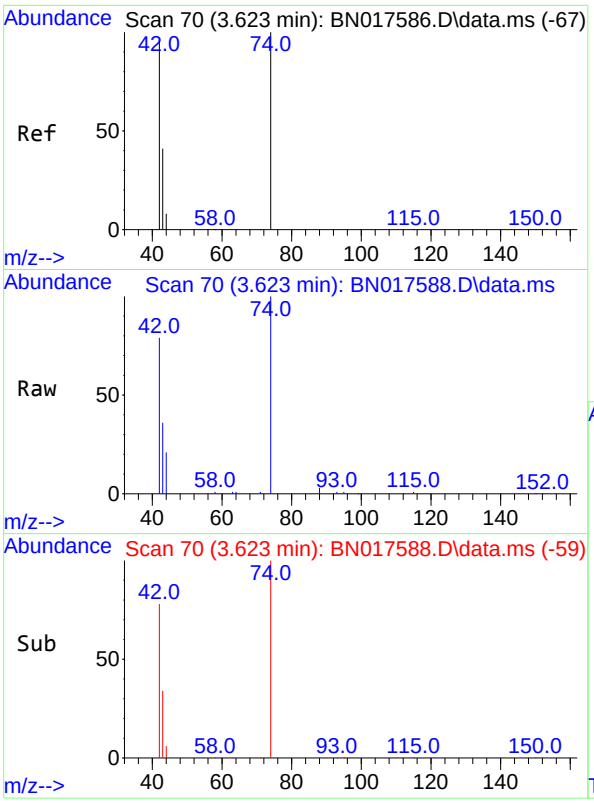


#2
1,4-Dioxane
Concen: 1.707 ng
RT: 3.301 min Scan# 35
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion: 88 Resp: 18334

Ion	Ratio	Lower	Upper
88	100		
43	30.8	0.0	0.0#
58	79.5	0.0	0.0#



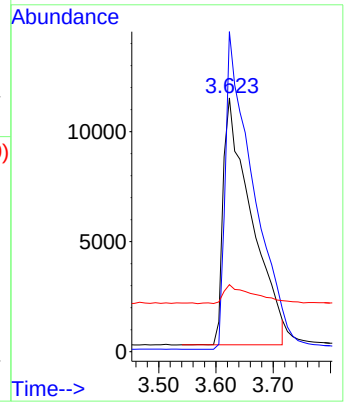


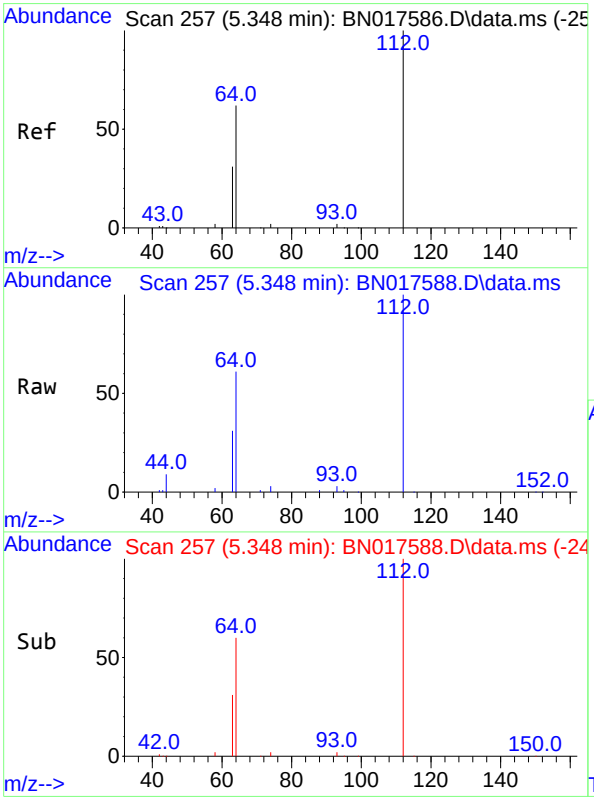
#3
n-Nitrosodimethylamine
Concen: 1.742 ng
RT: 3.623 min Scan# 7
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 42 Resp: 38474

Ion	Ratio	Lower	Upper
42	100		
74	124.9	72.1	108.1#
44	7.9	2.6	4.0#

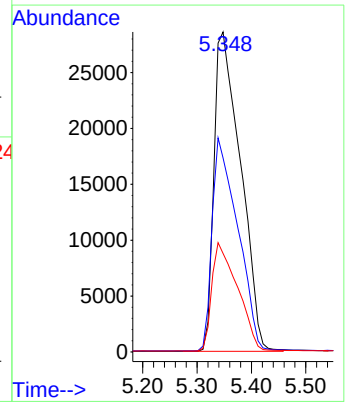


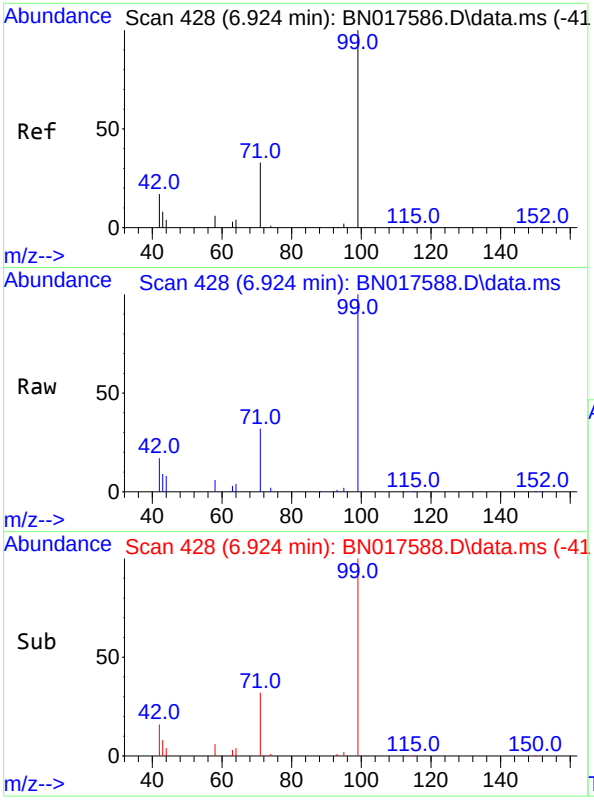


#4
2-Fluorophenol
Concen: 1.750 ng
RT: 5.348 min Scan# 257
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:112 Resp: 97087

Ion	Ratio	Lower	Upper
112	100		
64	64.2	51.5	77.3
63	32.8	26.6	39.8



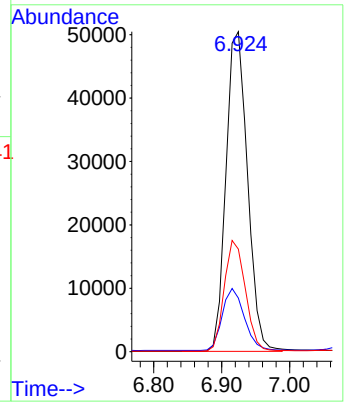


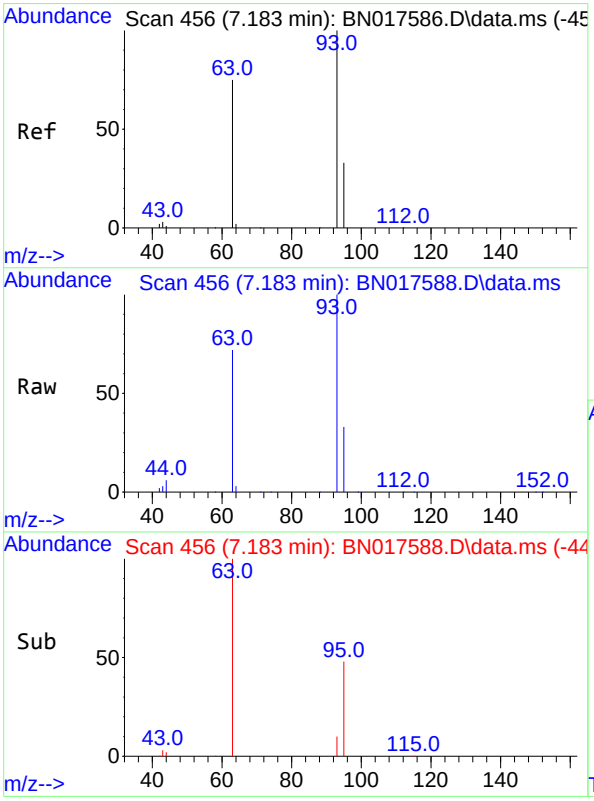
#5
Phenol-d6
Concen: 1.768 ng
RT: 6.924 min Scan# 4
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 99 Resp: 110689

Ion	Ratio	Lower	Upper
99	100		
42	19.9	16.2	24.2
71	34.1	27.6	41.4

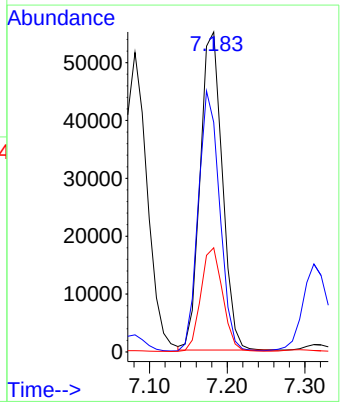


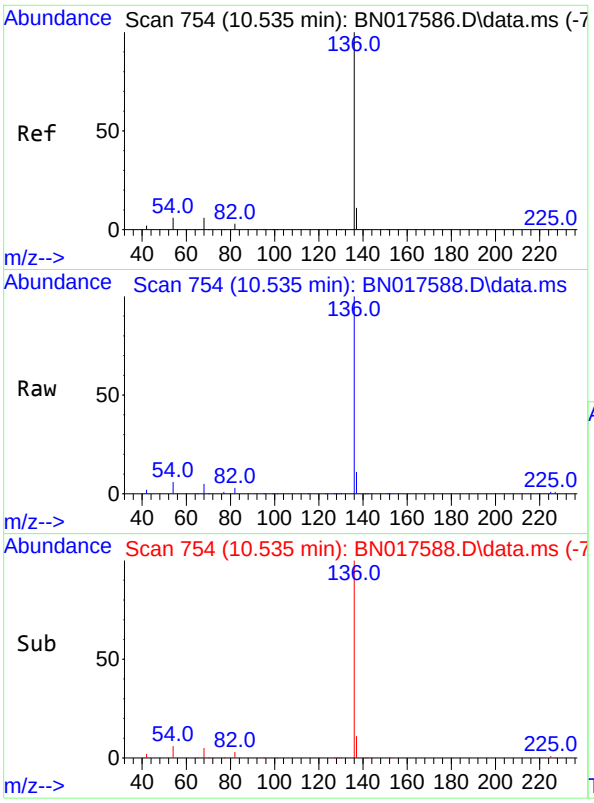


#6
bis(2-Chloroethyl)ether
Concen: 1.703 ng
RT: 7.183 min Scan# 456
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion: 93 Resp: 108797

Ion	Ratio	Lower	Upper
93	100		
63	79.1	63.0	94.6
95	32.2	25.6	38.4



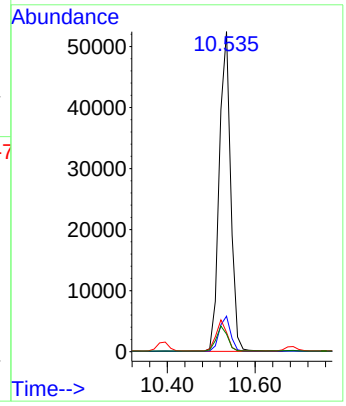


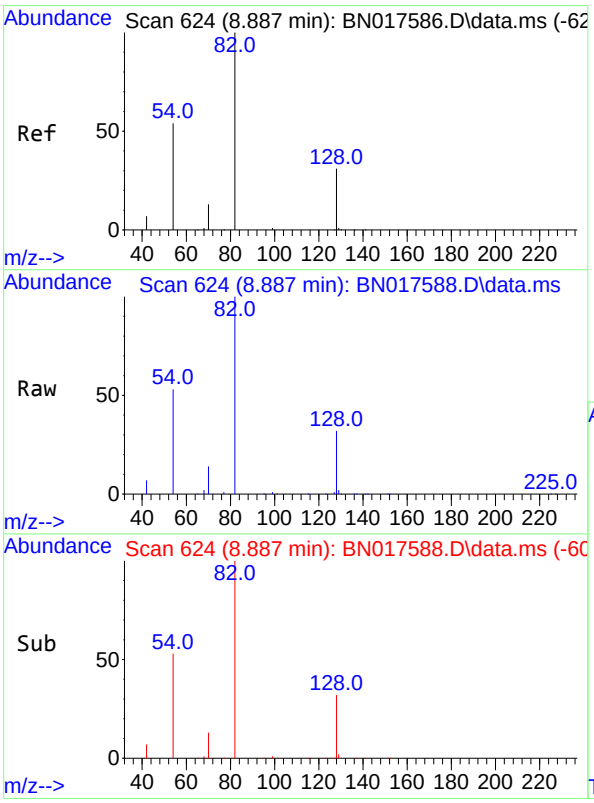
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.535 min Scan# 7
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:136 Resp: 93520

Ion	Ratio	Lower	Upper
136	100		
137	11.1	8.8	13.2
54	6.0	5.2	7.8
68	5.5	4.6	6.8

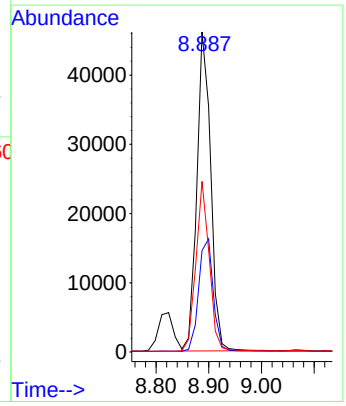


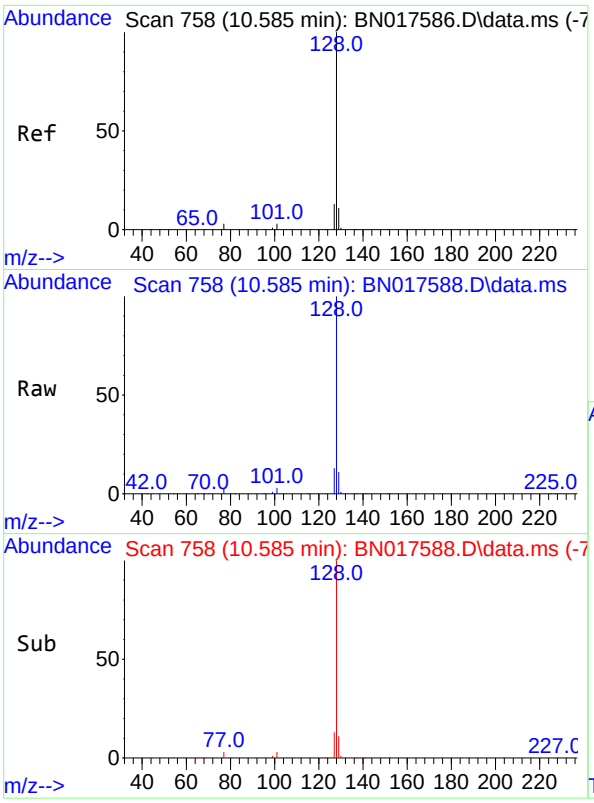


#8
Nitrobenzene-d5
Concen: 1.370 ng
RT: 8.887 min Scan# 624
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion: 82 Resp: 84351

Ion	Ratio	Lower	Upper
82	100		
128	31.7	25.3	37.9
54	53.3	43.7	65.5



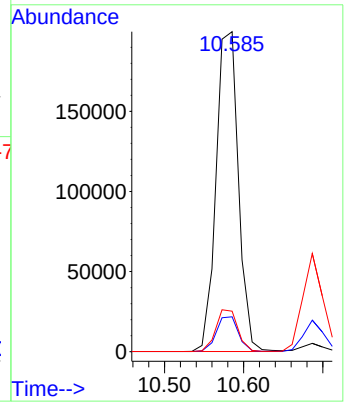


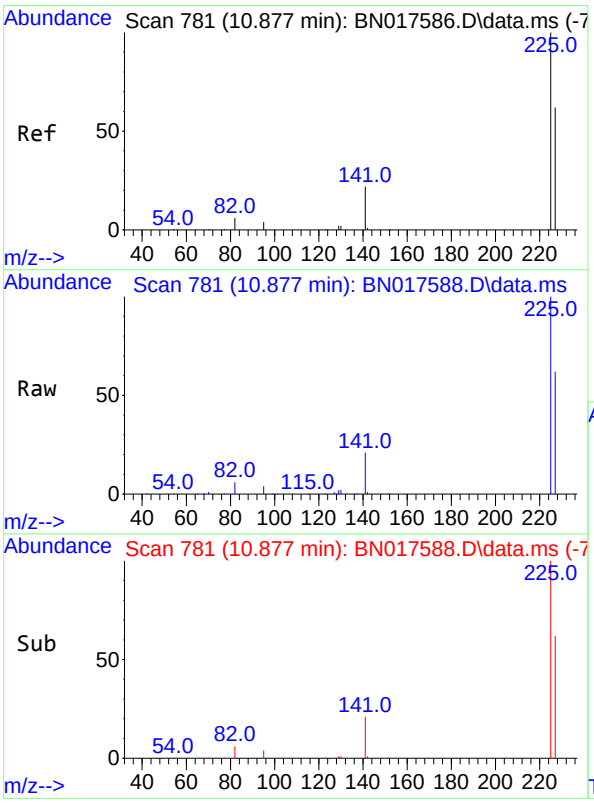
#9
Naphthalene
Concen: 1.652 ng
RT: 10.585 min Scan# 7
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:128 Resp: 392048

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.8	13.2
127	12.7	10.2	15.4

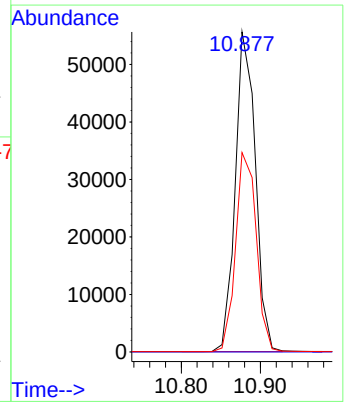


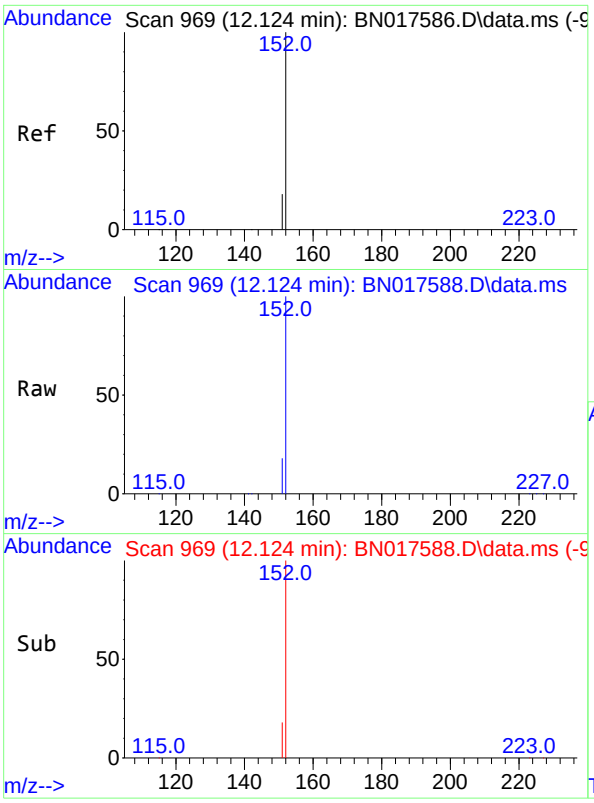


#10
Hexachlorobutadiene
Concen: 2.094 ng
RT: 10.877 min Scan# 781
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:225 Resp: 97985

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	51.1	76.7



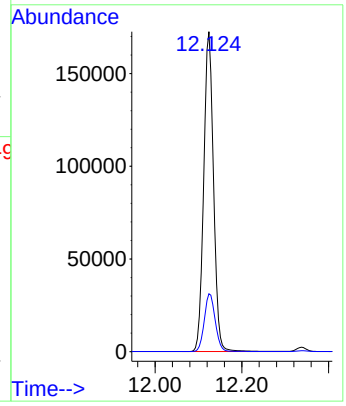


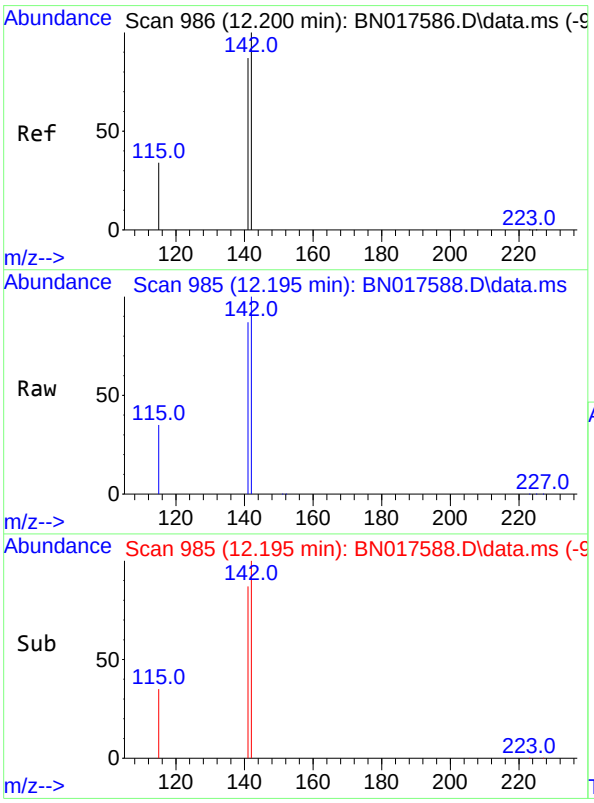
#11
2-Methylnaphthalene-d10
Concen: 1.741 ng
RT: 12.124 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 271287

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.4

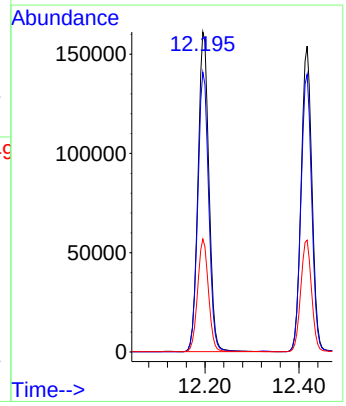


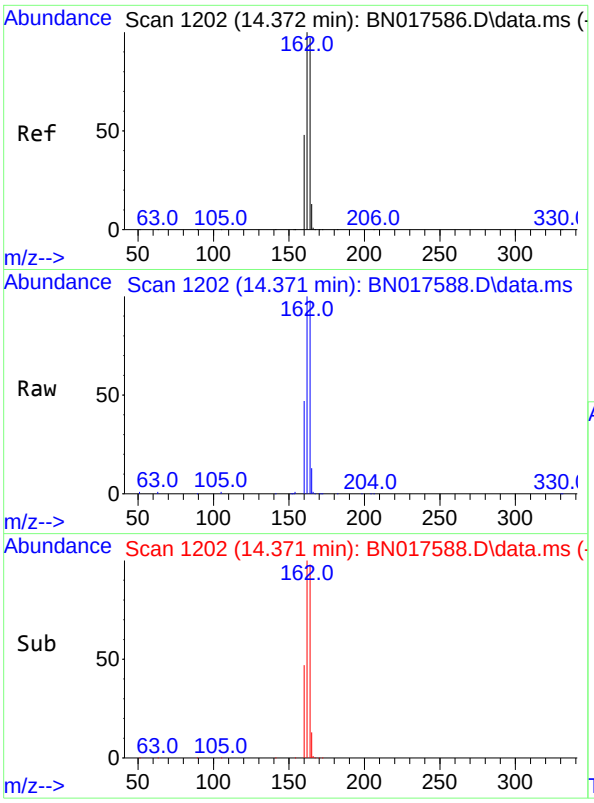


#12
2-Methylnaphthalene
Concen: 1.700 ng
RT: 12.195 min Scan# 985
Delta R.T. -0.005 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:142 Resp: 259604

Ion	Ratio	Lower	Upper
142	100		
141	87.4	69.4	104.0
115	35.3	27.8	41.6



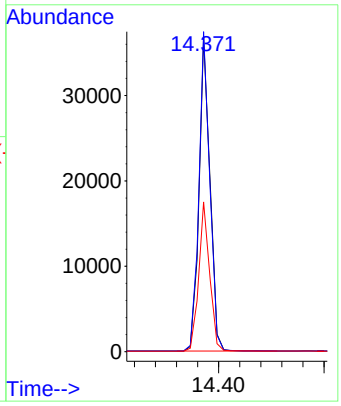


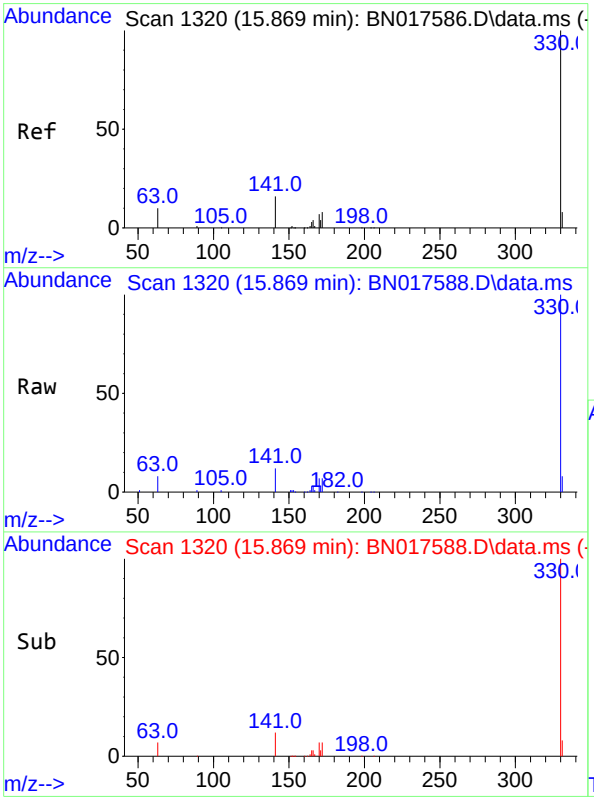
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.371 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:164 Resp: 53026

Ion	Ratio	Lower	Upper
164	100		
162	101.8	82.5	123.7
160	47.6	39.6	59.4

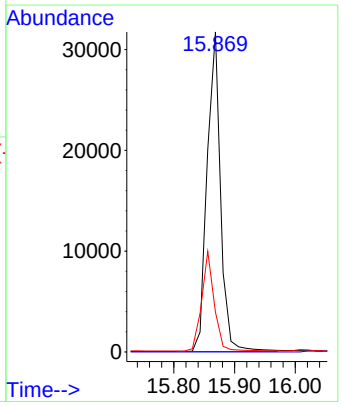


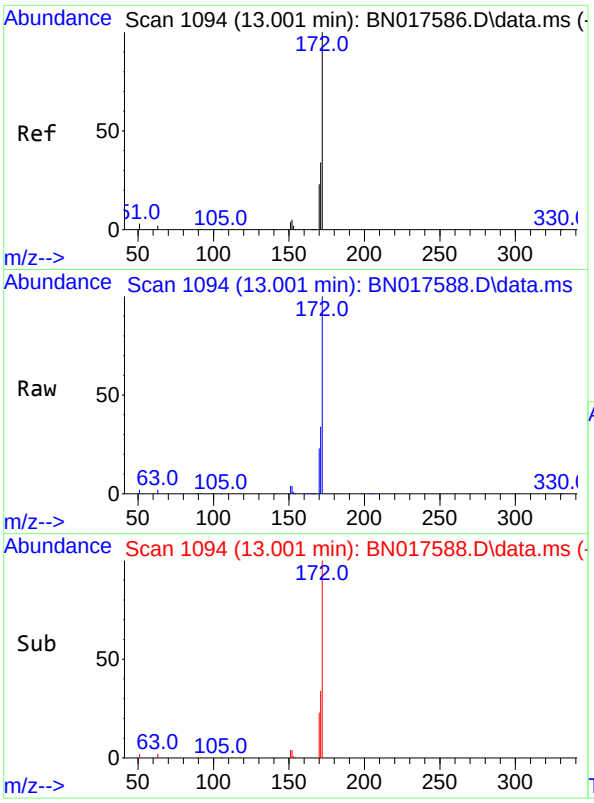


#14
2,4,6-Tribromophenol
Concen: 2.989 ng
RT: 15.869 min Scan# 1320
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:330 Resp: 48683

Ion	Ratio	Lower	Upper
330	100		
332	0.0	0.0	0.0
141	29.1	24.1	36.1



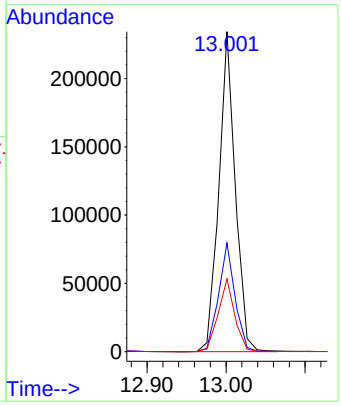


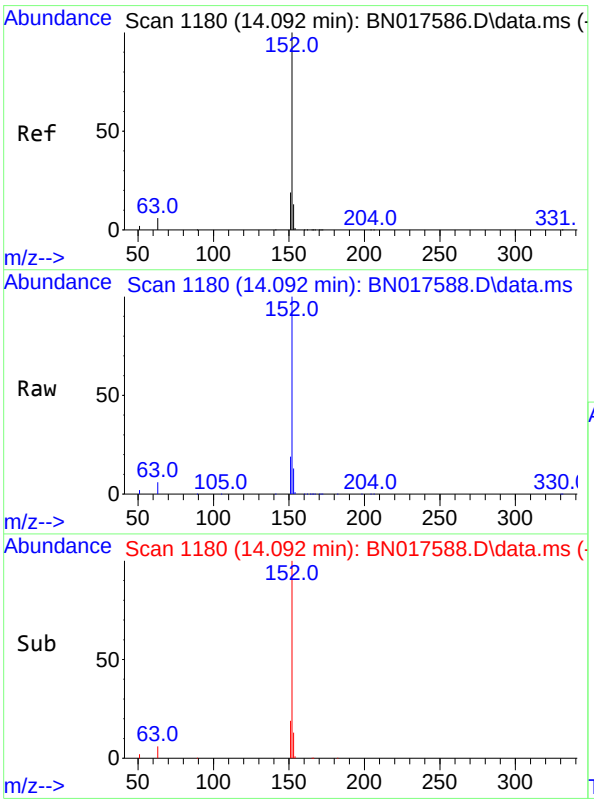
#15
2-Fluorobiphenyl
Concen: 1.711 ng
RT: 13.001 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:172 Resp: 337949

Ion	Ratio	Lower	Upper
172	100		
171	34.0	27.6	41.4
170	22.7	18.3	27.5

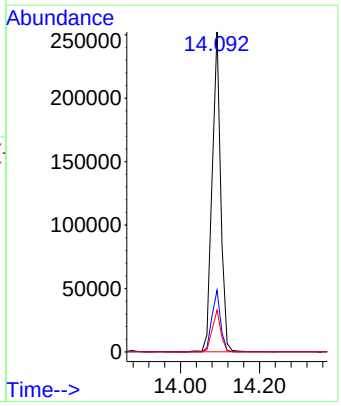


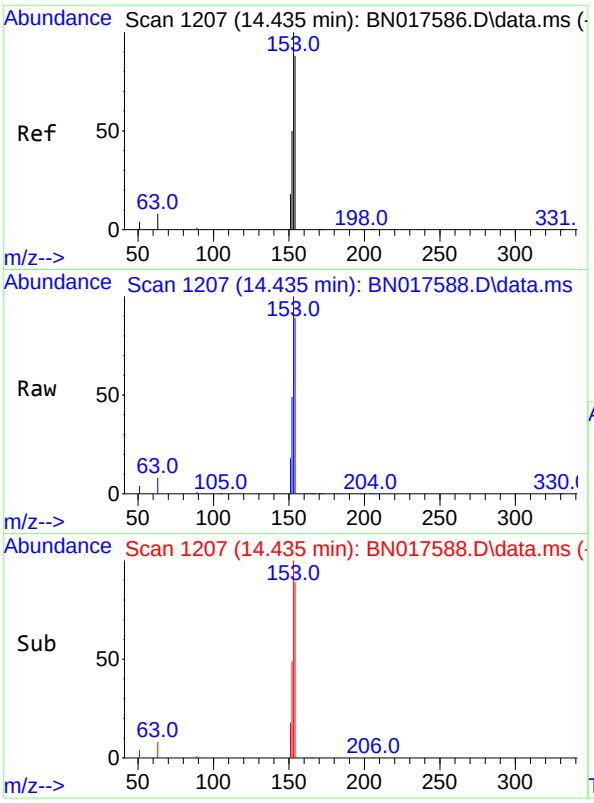


#16
Acenaphthylene
Concen: 1.796 ng
RT: 14.092 min Scan# 1180
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:152 Resp: 380059

Ion	Ratio	Lower	Upper
152	100		
151	19.5	15.5	23.3
153	13.0	10.5	15.7



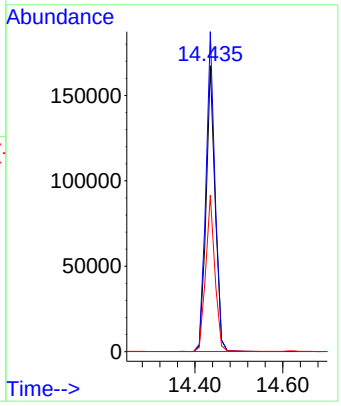


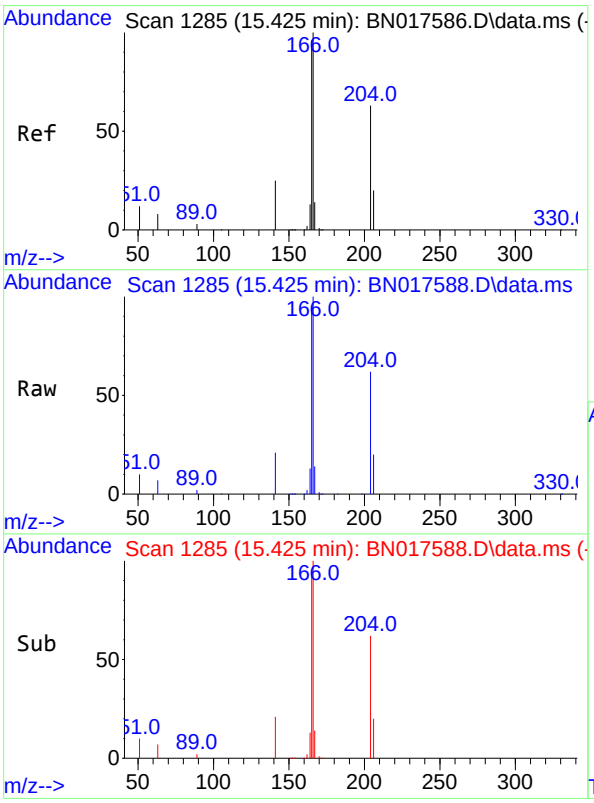
#17
Acenaphthene
Concen: 1.644 ng
RT: 14.435 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:154 Resp: 240230

Ion	Ratio	Lower	Upper
154	100		
153	112.0	89.8	134.8
152	55.5	45.9	68.9

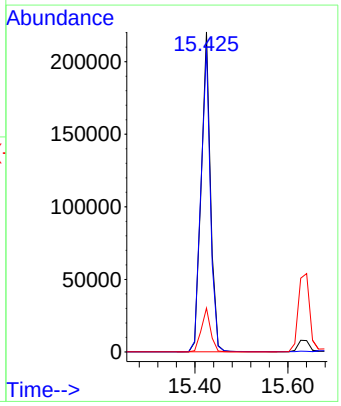


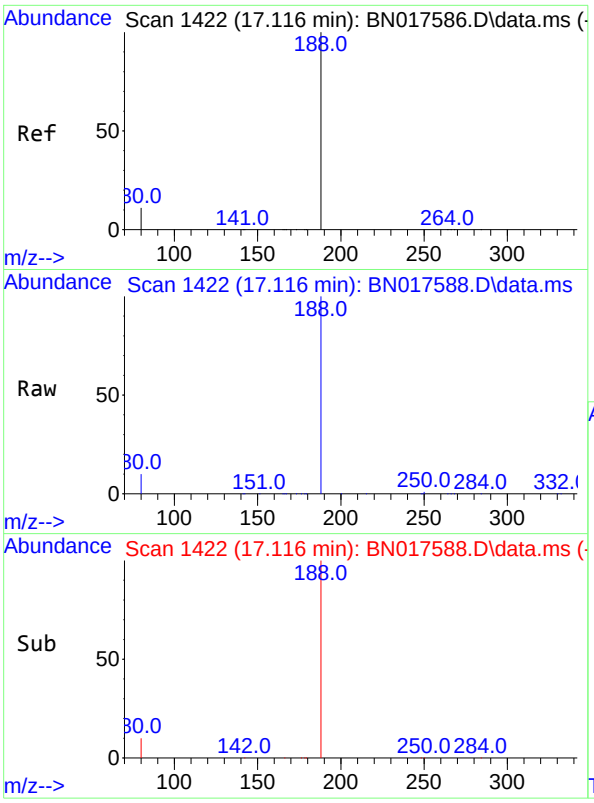


#18
Fluorene
Concen: 1.748 ng
RT: 15.425 min Scan# 1285
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:166 Resp: 307746

Ion	Ratio	Lower	Upper
166	100		
165	96.7	77.6	116.4
167	13.6	10.9	16.3



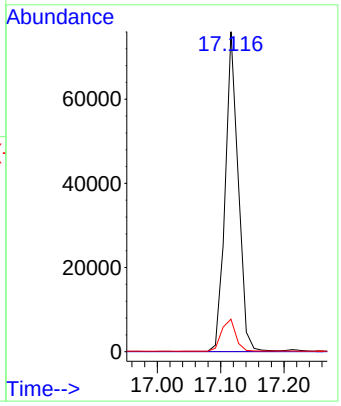


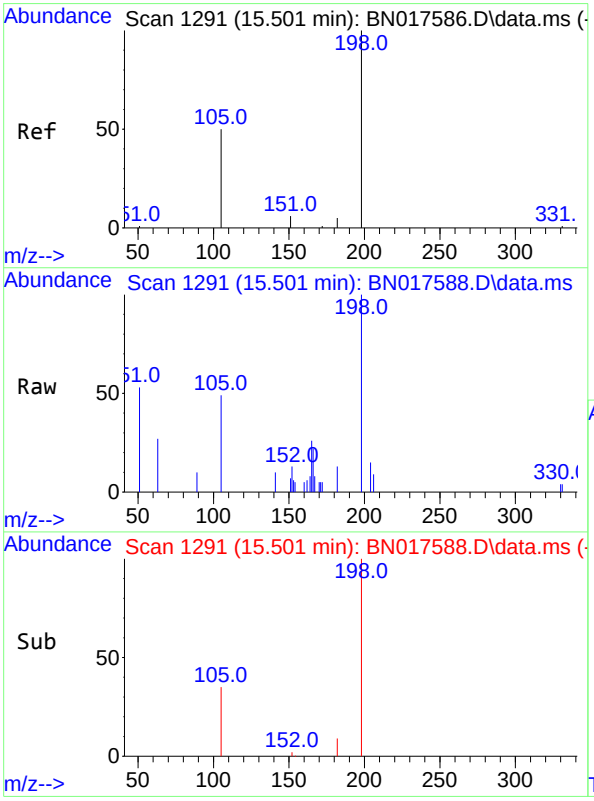
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.116 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:188 Resp: 108003

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.1	9.0	13.4

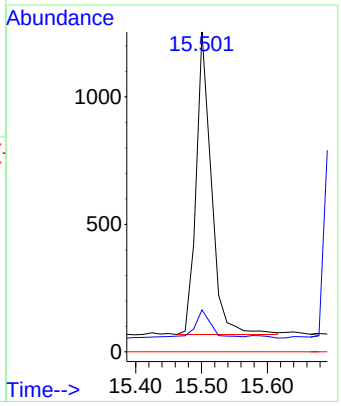


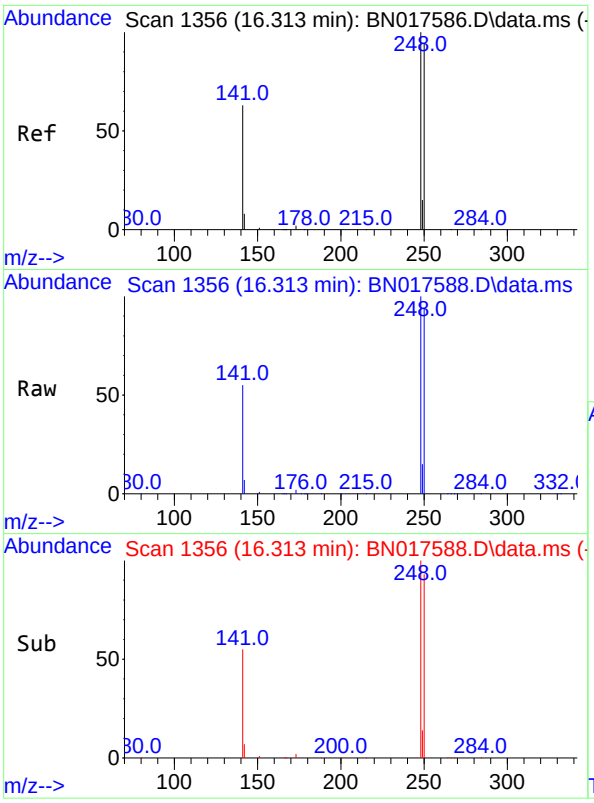


#20
4,6-Dinitro-2-methylphenol
Concen: 0.381 ng
RT: 15.501 min Scan# 1291
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:198 Resp: 1915

Ion	Ratio	Lower	Upper
198	100		
182	13.1	33.1	49.7#
77	0.0	0.0	0.0



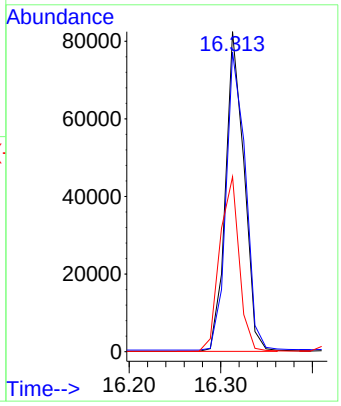


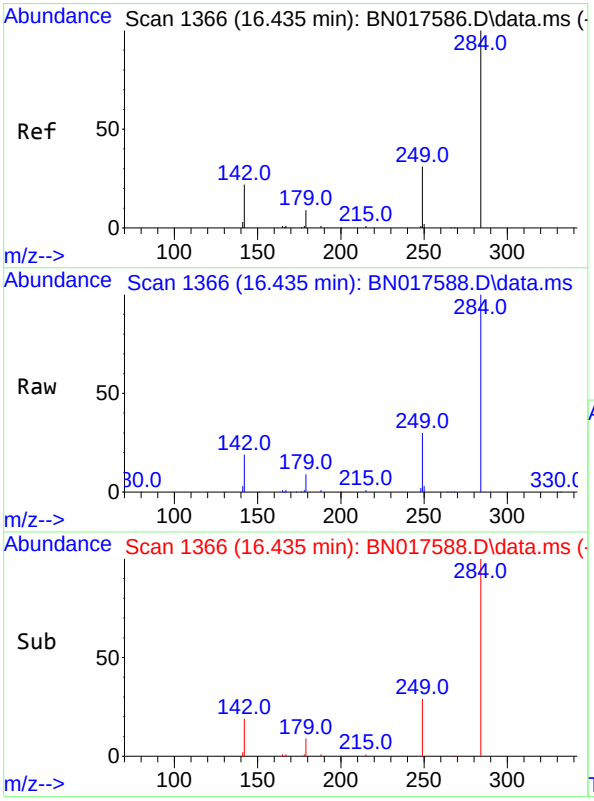
#21
4-Bromophenyl-phenylether
Concen: 1.947 ng
RT: 16.313 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:248 Resp: 115467

Ion	Ratio	Lower	Upper
248	100		
250	93.6	76.6	114.8
141	54.7	50.5	75.7

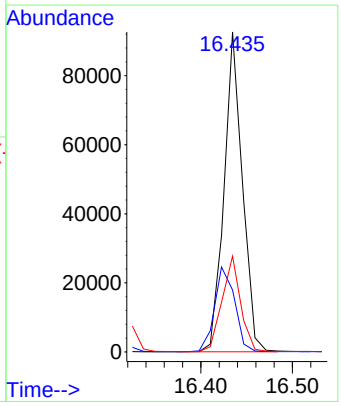


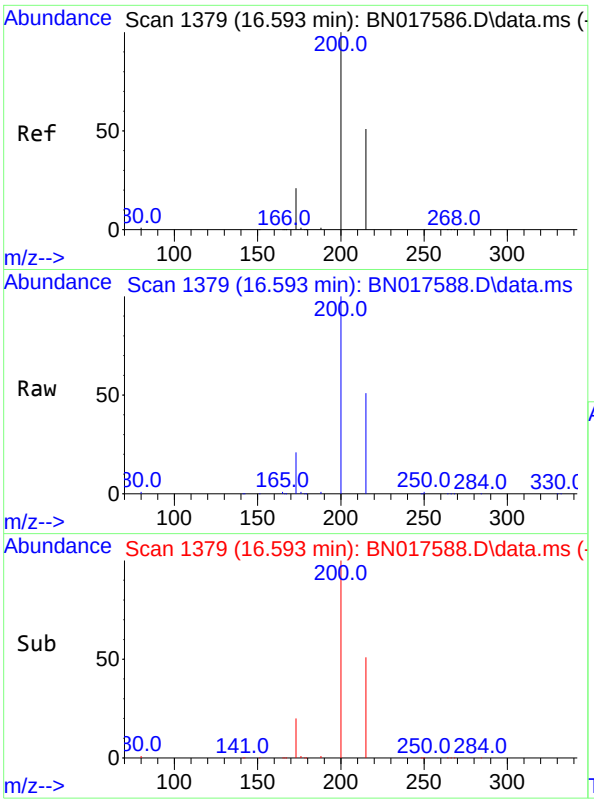


#22
Hexachlorobenzene
Concen: 2.011 ng
RT: 16.435 min Scan# 1366
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:284 Resp: 128922

Ion	Ratio	Lower	Upper
284	100		
142	29.0	23.2	34.8
249	30.0	24.2	36.2



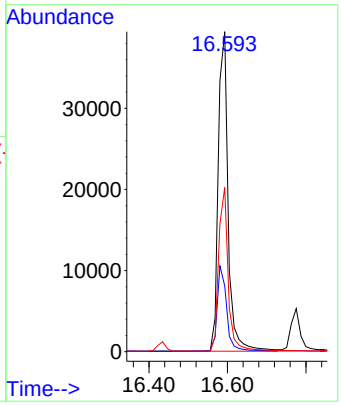


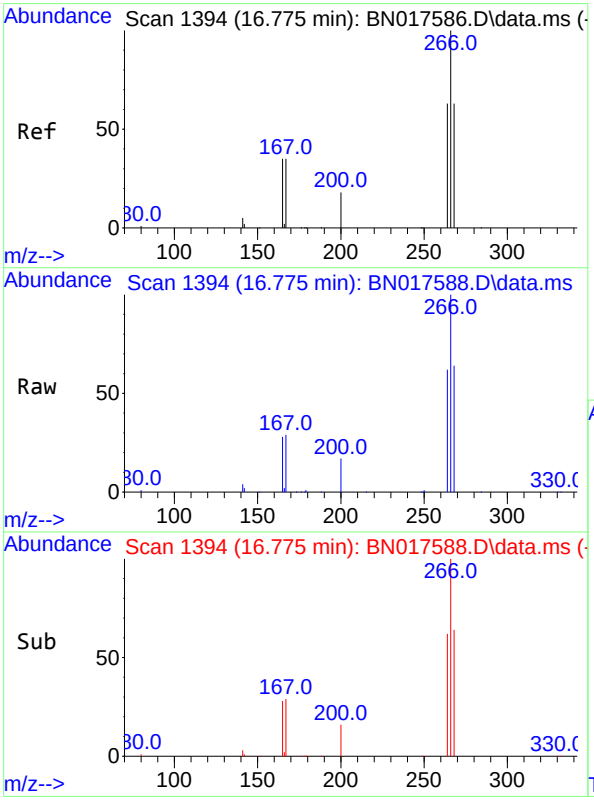
#23
Atrazine
Concen: 1.756 ng
RT: 16.593 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:200 Resp: 68994

Ion	Ratio	Lower	Upper
200	100		
173	20.5	17.4	26.0
215	51.3	40.9	61.3

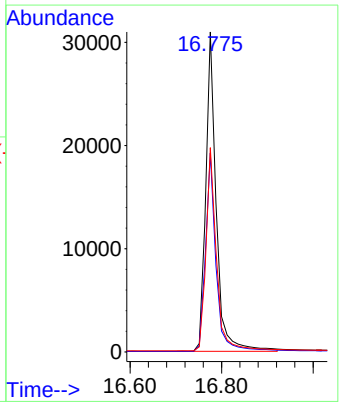


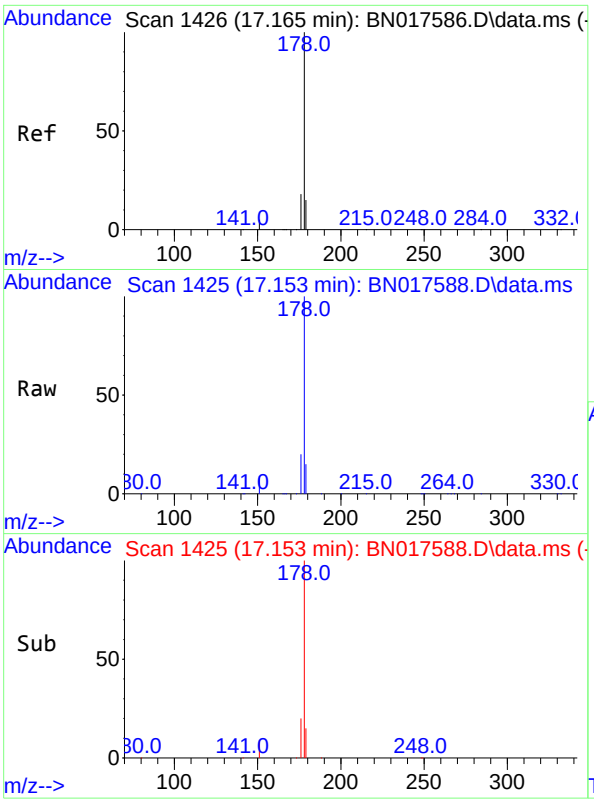


#24
Pentachlorophenol
Concen: 2.532 ng
RT: 16.775 min Scan# 1394
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:266 Resp: 49094

Ion	Ratio	Lower	Upper
266	100		
264	62.4	50.2	75.2
268	63.9	51.7	77.5



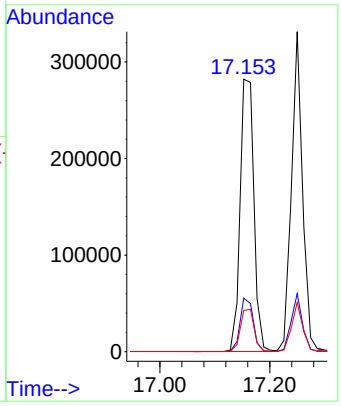


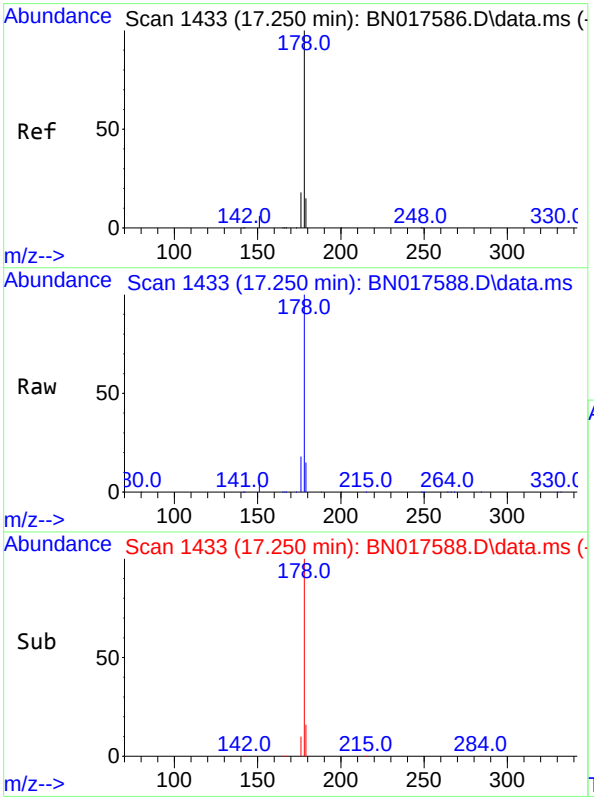
#25
Phenanthrene
Concen: 1.631 ng
RT: 17.153 min Scan# 14
Delta R.T. -0.012 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:178 Resp: 492984

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.0	22.6
179	15.4	12.2	18.4

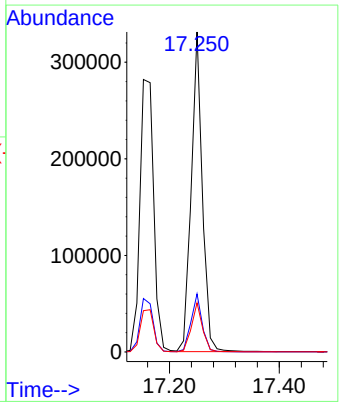


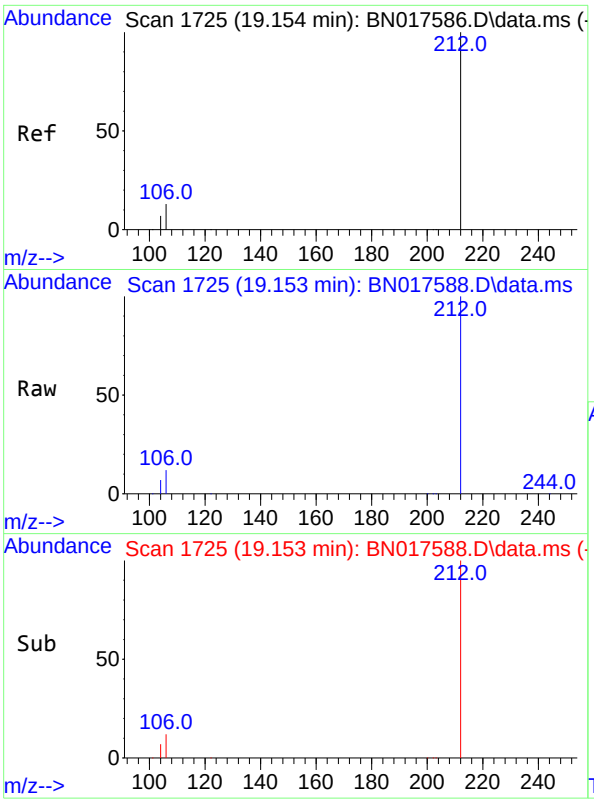


#26
Anthracene
Concen: 1.797 ng
RT: 17.250 min Scan# 1433
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:178 Resp: 464523

Ion	Ratio	Lower	Upper
178	100		
176	18.2	14.6	21.8
179	15.3	12.2	18.4



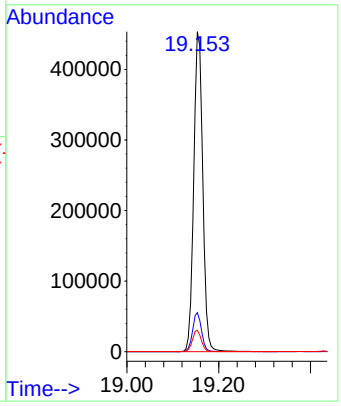


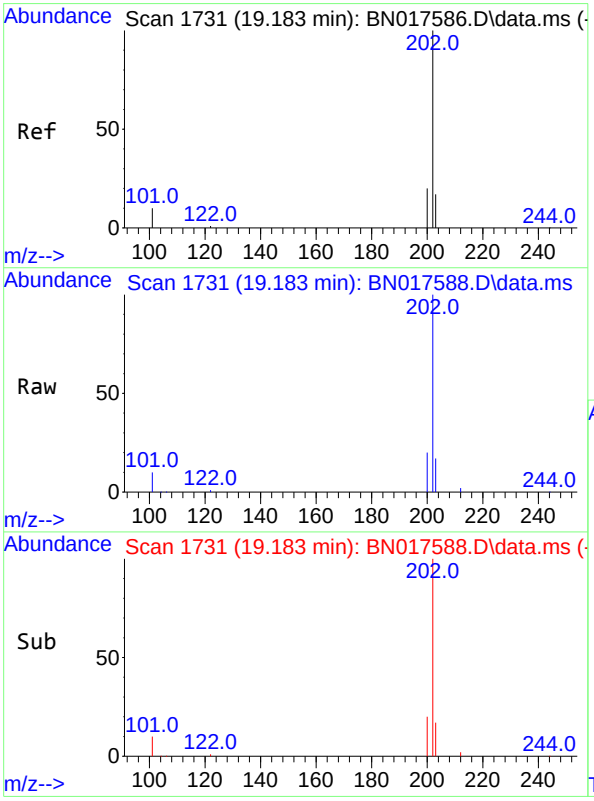
#27
Fluoranthene-d10
Concen: 1.856 ng
RT: 19.153 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:212 Resp: 616722

Ion	Ratio	Lower	Upper
212	100		
106	12.0	9.6	14.4
104	6.6	5.3	7.9

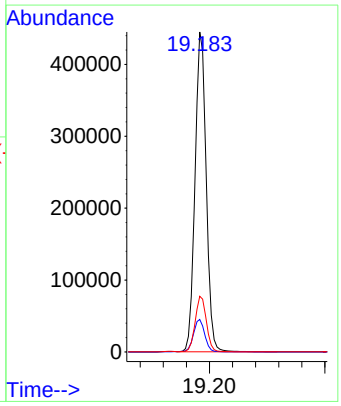


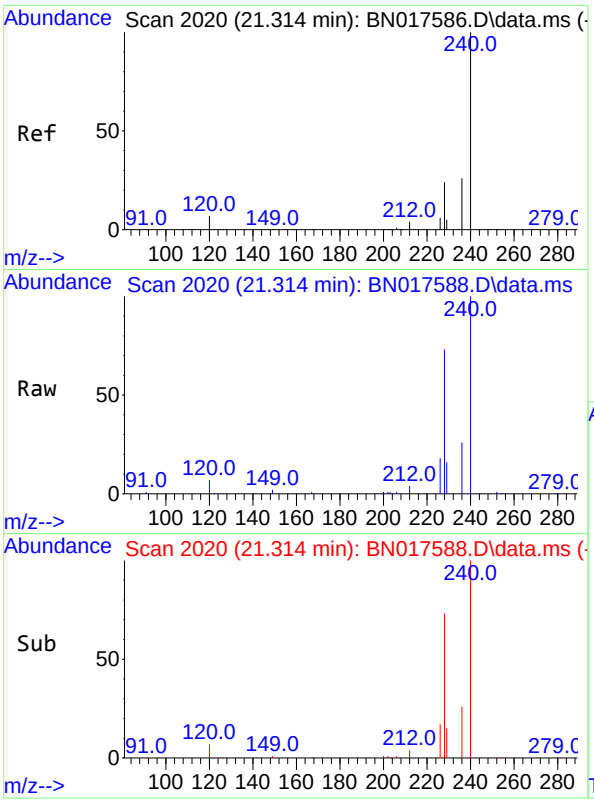


#28
Fluoranthene
Concen: 1.794 ng
RT: 19.183 min Scan# 1731
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:202 Resp: 599698

Ion	Ratio	Lower	Upper
202	100		
101	10.4	8.3	12.5
203	17.4	13.9	20.9



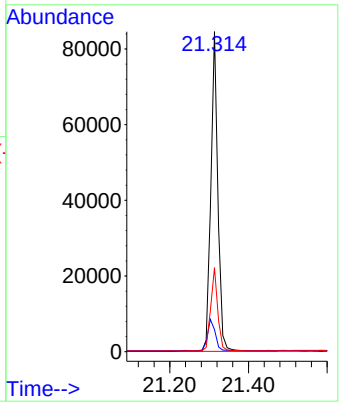


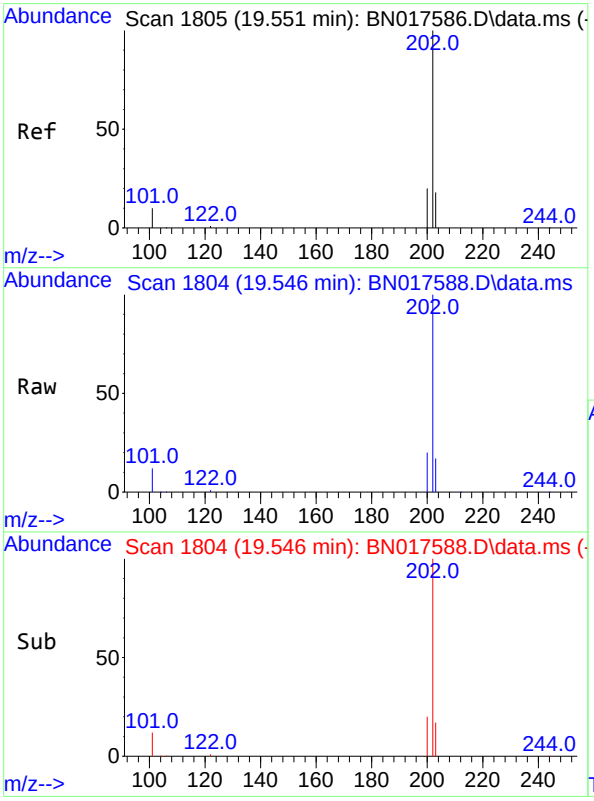
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.314 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:240 Resp: 104625

Ion	Ratio	Lower	Upper
240	100		
120	6.9	6.1	9.1
236	26.3	21.2	31.8

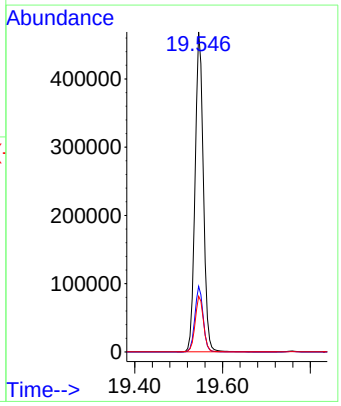


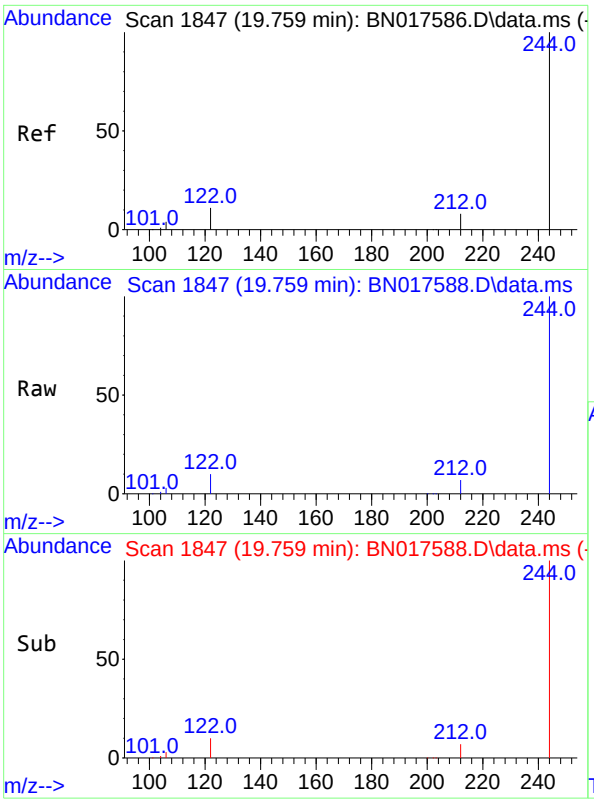


#30
Pyrene
Concen: 1.728 ng
RT: 19.546 min Scan# 1804
Delta R.T. -0.005 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:202 Resp: 611656

Ion	Ratio	Lower	Upper
202	100		
200	20.5	16.4	24.6
203	17.5	13.9	20.9



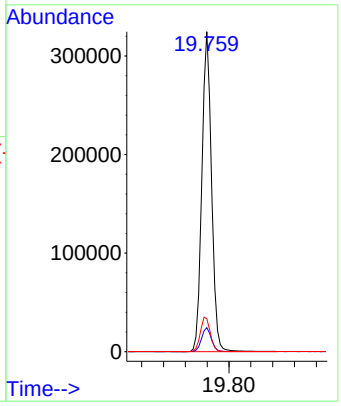


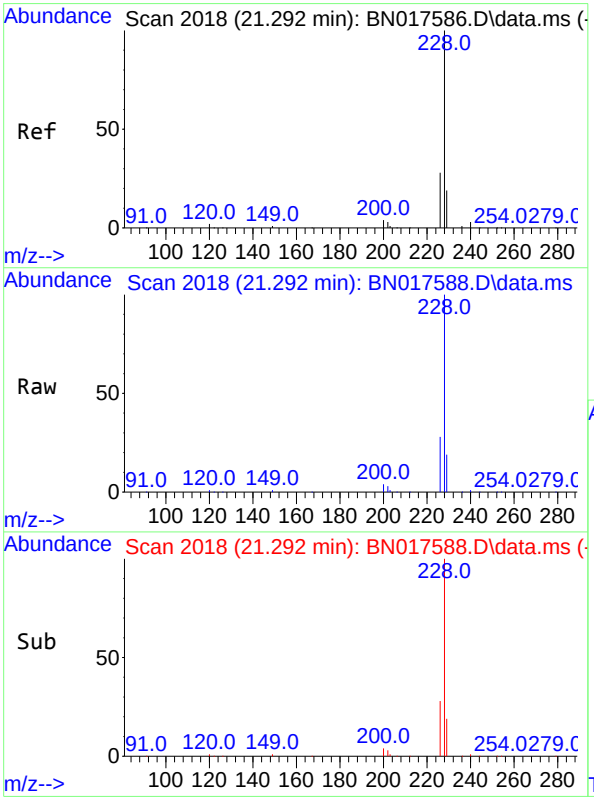
#31
Terphenyl-d14
Concen: 1.742 ng
RT: 19.759 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:244 Resp: 400385

Ion	Ratio	Lower	Upper
244	100		
212	7.5	6.2	9.2
122	10.3	8.9	13.3

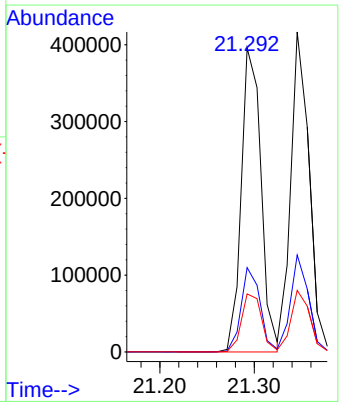


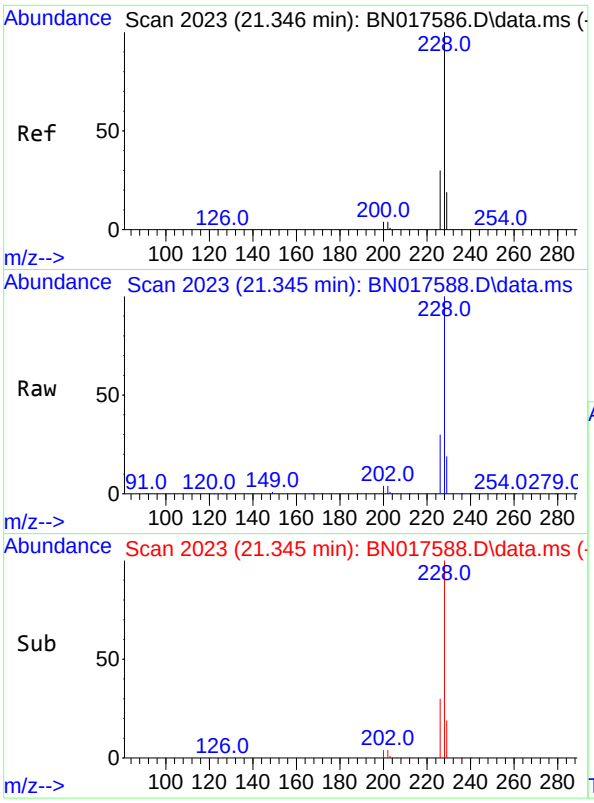


#32
Benzo(a)anthracene
Concen: 1.766 ng
RT: 21.292 min Scan# 2018
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:228 Resp: 575050

Ion	Ratio	Lower	Upper
228	100		
226	27.7	22.4	33.6
229	19.1	15.4	23.2



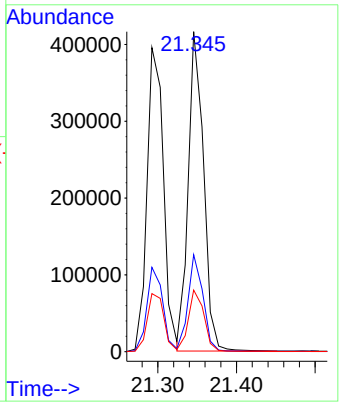


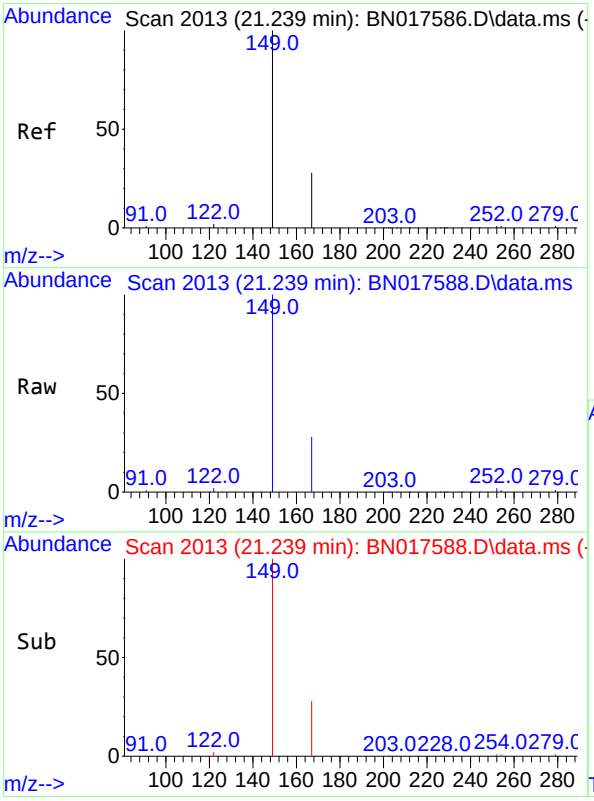
#33
Chrysene
Concen: 1.617 ng
RT: 21.345 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:228 Resp: 562266

Ion	Ratio	Lower	Upper
228	100		
226	30.3	24.0	36.0
229	19.3	15.6	23.4

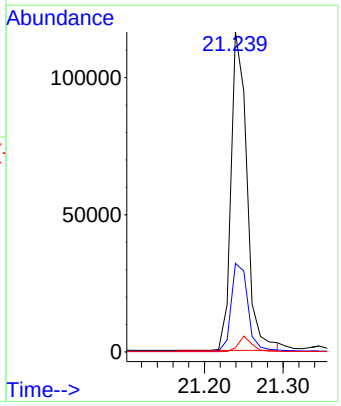


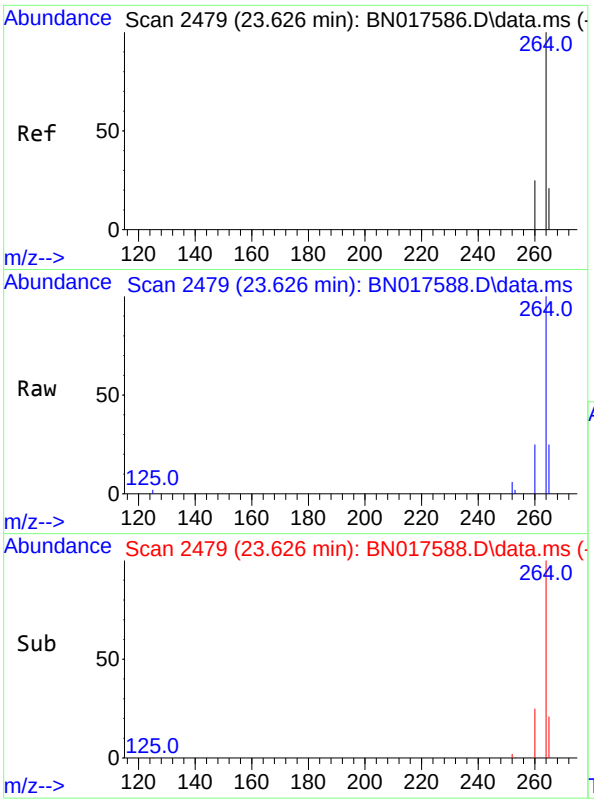


#34
Bis(2-ethylhexyl)phthalate
Concen: 1.297 ng
RT: 21.239 min Scan# 2013
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:149 Resp: 162827

Ion	Ratio	Lower	Upper
149	100		
167	28.9	23.2	34.8
279	4.1	3.4	5.0



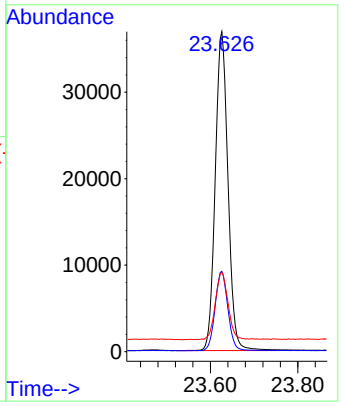


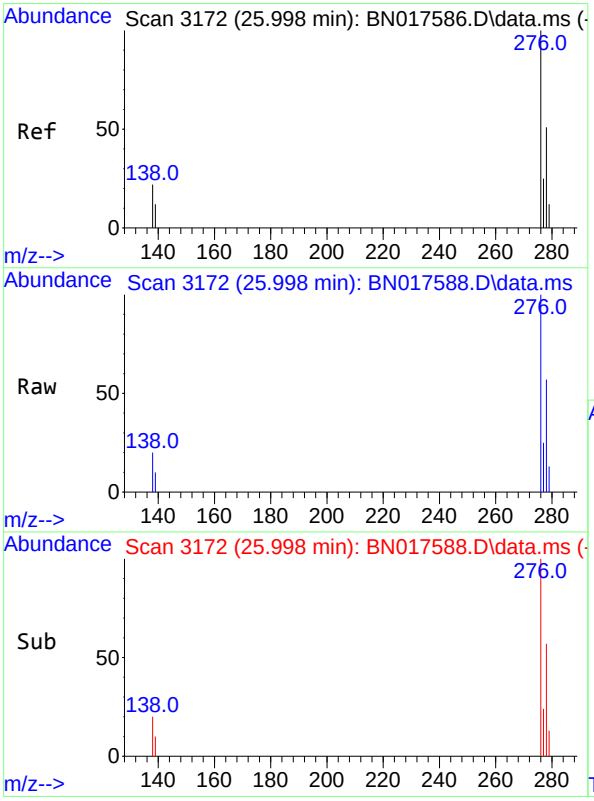
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.626 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:264 Resp: 74457

Ion	Ratio	Lower	Upper
264	100		
260	25.1	20.1	30.1
265	24.8	20.6	30.8

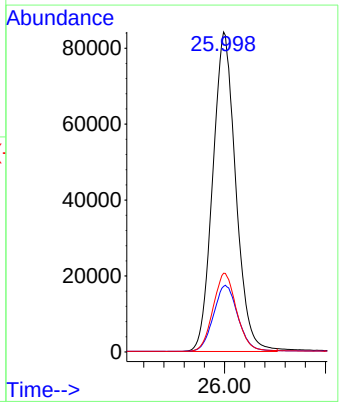


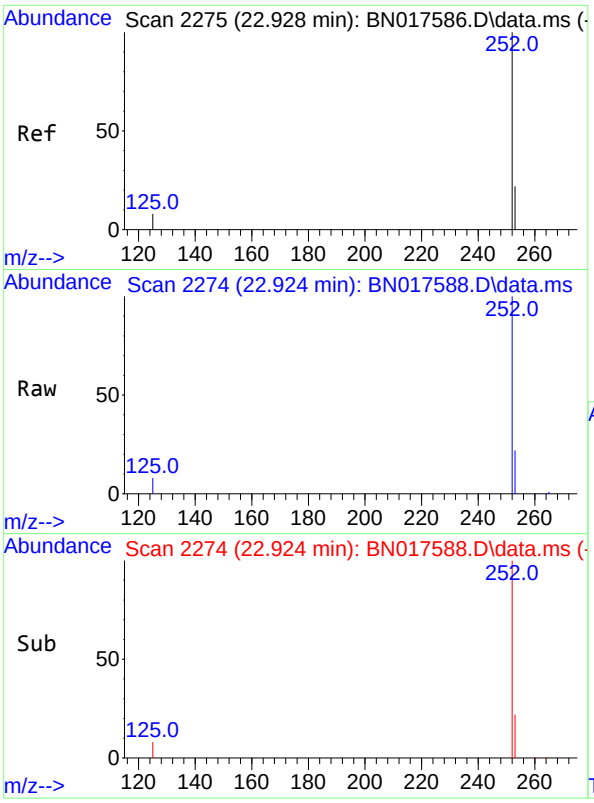


#36
Indeno(1,2,3-cd)pyrene
Concen: 1.169 ng
RT: 25.998 min Scan# 3172
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:276 Resp: 265781

Ion	Ratio	Lower	Upper
276	100		
138	21.9	16.4	24.6
277	25.0	17.9	26.9



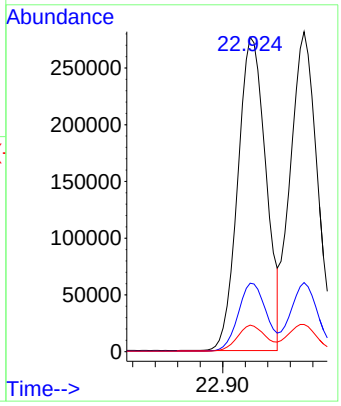


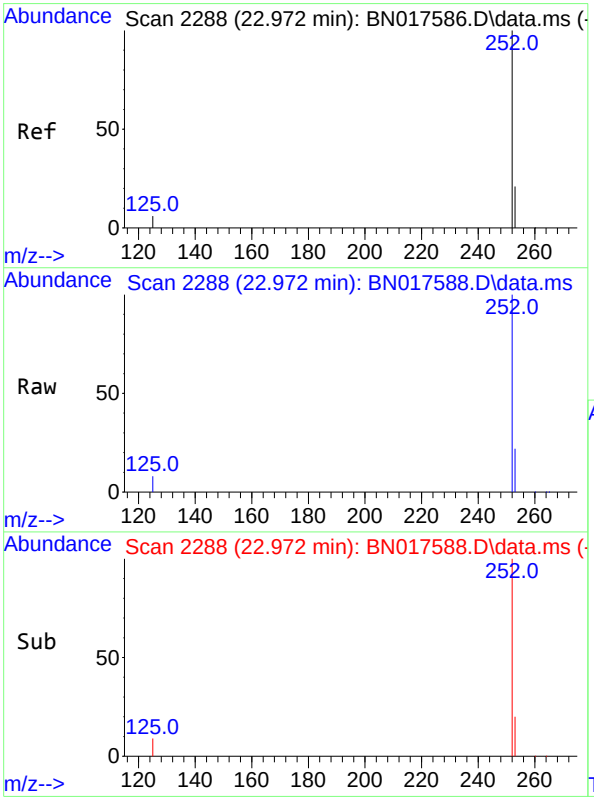
#37
Benzo(b)fluoranthene
Concen: 1.768 ng
RT: 22.924 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 478875

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.5	26.3
125	8.4	7.1	10.7

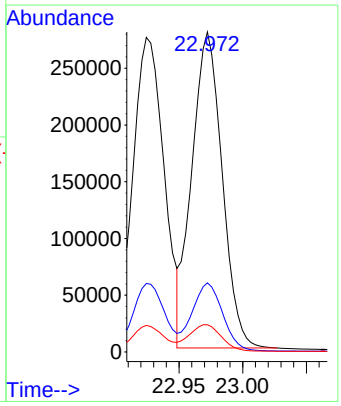


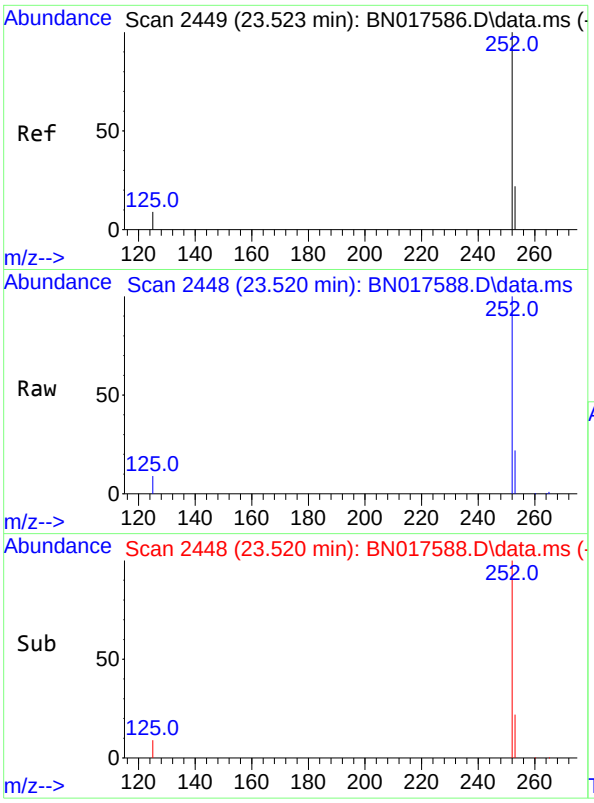


#38
Benzo(k)fluoranthene
Concen: 1.752 ng
RT: 22.972 min Scan# 2288
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:252 Resp: 460489

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.7	26.5
125	8.5	7.9	11.9



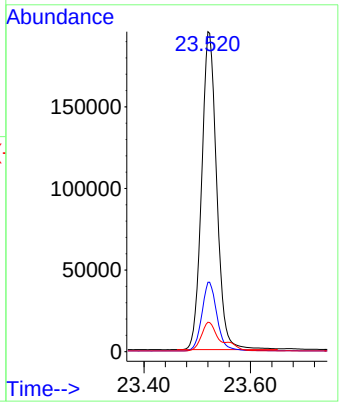


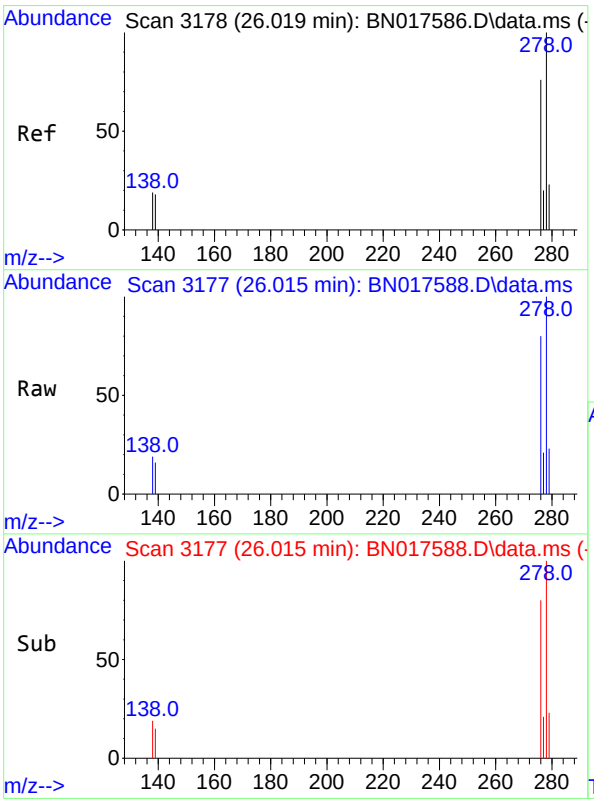
#39
Benzo(a)pyrene
Concen: 1.711 ng
RT: 23.520 min Scan# 24
Delta R.T. -0.003 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 382356

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.7	26.5
125	9.2	8.0	12.0

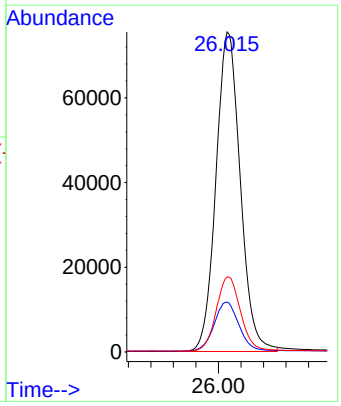


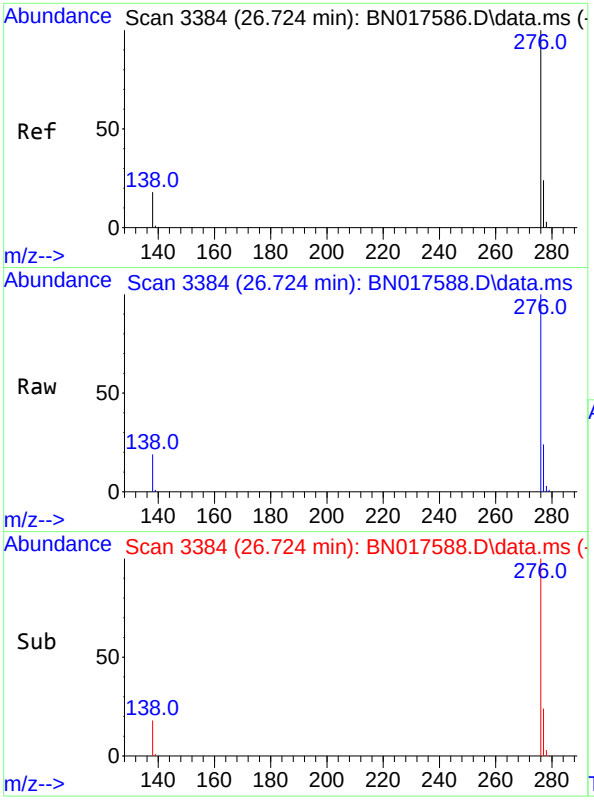


#40
Dibenzo(a,h)anthracene
Concen: 1.208 ng
RT: 26.015 min Scan# 3177
Delta R.T. -0.003 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Tgt Ion:278 Resp: 225498

Ion	Ratio	Lower	Upper
278	100		
139	15.6	15.2	22.8
279	23.5	19.5	29.3





#41
Benzo(g,h,i)perylene
Concen: 0.997 ng
RT: 26.724 min Scan# 3
Delta R.T. -0.000 min
Lab File: BN017588.D
Acq: 24 Nov 2021 19:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:276 Resp: 193935

Ion	Ratio	Lower	Upper
276	100		
277	23.9	20.0	30.0
138	18.5	15.7	23.5