Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN030823\
Data File : BN024147.D
Acq On : 07 Mar 2023 16:17
Operator : CG/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Mar 08 01:59:53 2023
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN030823.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Mar 08 01:59:25 2023
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	8.064	152	8042	0.400	ng		0.00
7) Naphthalene-d8	10.883	136	22883	0.400	ng		0.00
13) Acenaphthene-d10	14.688	164	11160	0.400	ng		-0.01
19) Phenanthrene-d10	17.439	188	22638	0.400	ng		0.00
29) Chrysene-d12	21.634	240	15297	0.400	ng		0.00
35) Perylene-d12	24.161	264	11788	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.594	112	1708	0.102	ng		0.00
5) Phenol-d6	7.204	99	2111	0.107	ng		0.00
8) Nitrobenzene-d5	9.153	82	170	0.009	ng		-0.07
11) 2-Methylnaphthalene-d10	12.458	152	3157	0.099	ng		0.00
14) 2,4,6-Tribromophenol	16.173	330	386	0.067	ng		0.00
15) 2-Fluorobiphenyl	13.319	172	4444	0.101	ng		0.00
27) Fluoranthene-d10	19.465	212	4125	0.075	ng		0.00
31) Terphenyl-d14	20.058	244	2675	0.094	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.449	88	803	0.105	ng		98
3) n-Nitrosodimethylamine	3.774	42	1058	0.124	ng	#	94
6) bis(2-Chloroethyl)ether	7.479	93	2206	0.112	ng		100
9) Naphthalene	10.925	128	5652	0.099	ng		98
10) Hexachlorobutadiene	11.224	225	1122	0.075	ng	#	100
12) 2-Methylnaphthalene	12.503	142	64	0.002	ng	#	83
16) Acenaphthylene	14.410	152	4620	0.106	ng		99
17) Acenaphthene	14.752	154	3116	0.105	ng		99
18) Fluorene	15.739	166	3646	0.091	ng		99
20) 4,6-Dinitro-2-methylph...	15.801	198	130	0.035	ng	#	10
21) 4-Bromophenyl-phenylether	16.632	248	1201	0.082	ng		99
22) Hexachlorobenzene	16.744	284	1765	0.100	ng		99
23) Atrazine	16.893	200	576	0.060	ng		93
24) Pentachlorophenol	17.079	266	430	0.069	ng		97
25) Phenanthrene	17.476	178	6398	0.102	ng		99
26) Anthracene	17.563	178	5210	0.101	ng		99
28) Fluoranthene	19.494	202	6265	0.088	ng		100
30) Pyrene	19.857	202	6338	0.119	ng		98
32) Benzo(a)anthracene	21.616	228	4531	0.093	ng		98
33) Chrysene	21.670	228	5485	0.104	ng		98
34) Bis(2-ethylhexyl)phtha...	21.536	149	1856	0.083	ng	#	99
36) Indeno(1,2,3-cd)pyrene	26.802	276	3259	0.061	ng		98
37) Benzo(b)fluoranthene	23.384	252	3909	0.082	ng	#	84
38) Benzo(k)fluoranthene	23.442	252	3872	0.082	ng	#	83
39) Benzo(a)pyrene	24.044	252	3424	0.095	ng	#	78
40) Dibenzo(a,h)anthracene	26.834	278	2308	0.054	ng	#	81
41) Benzo(g,h,i)perylene	27.626	276	3286	0.072	ng		92

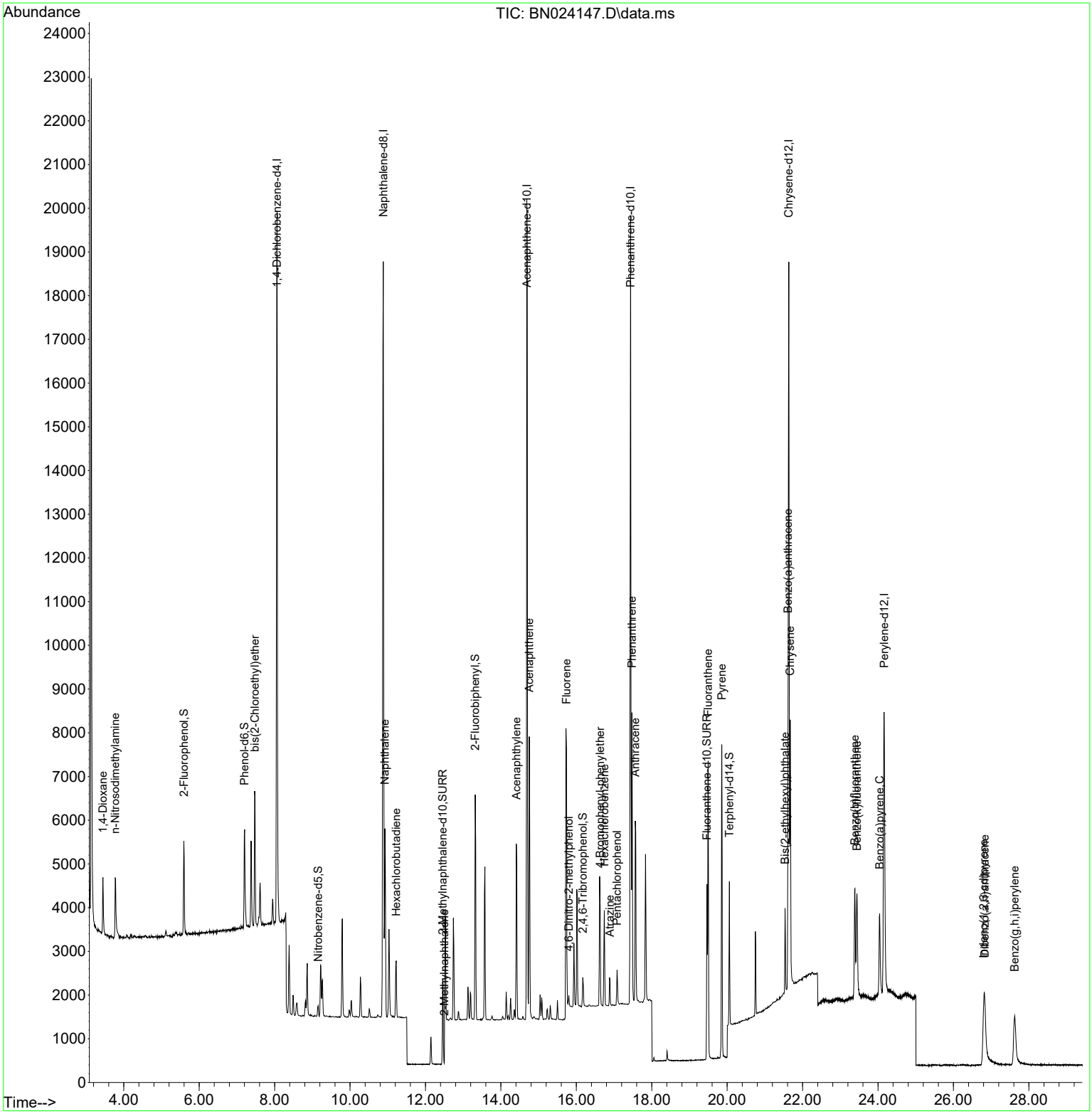
(#) = qualifier out of range (m) = manual integration (+) = signals summed

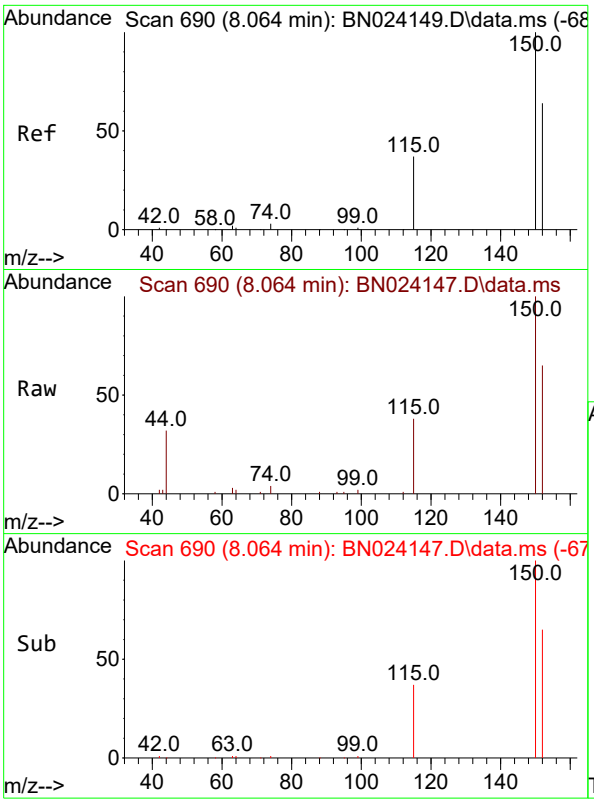
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN030823\
Data File : BN024147.D
Acq On : 07 Mar 2023 16:17
Operator : CG/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Mar 08 01:59:53 2023
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN030823.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Mar 08 01:59:25 2023
Response via : Initial Calibration



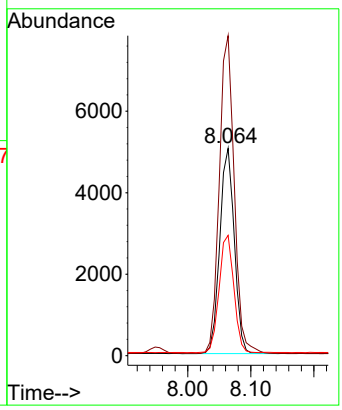


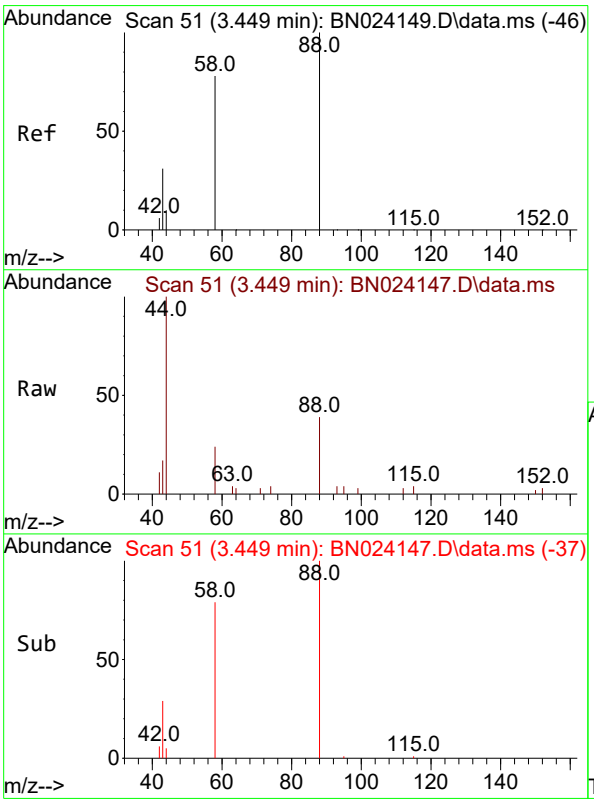
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.064 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 8042

Ion	Ratio	Lower	Upper
152	100		
150	154.3	123.8	185.6
115	58.0	46.4	69.6

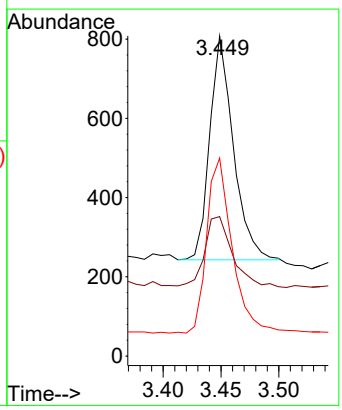


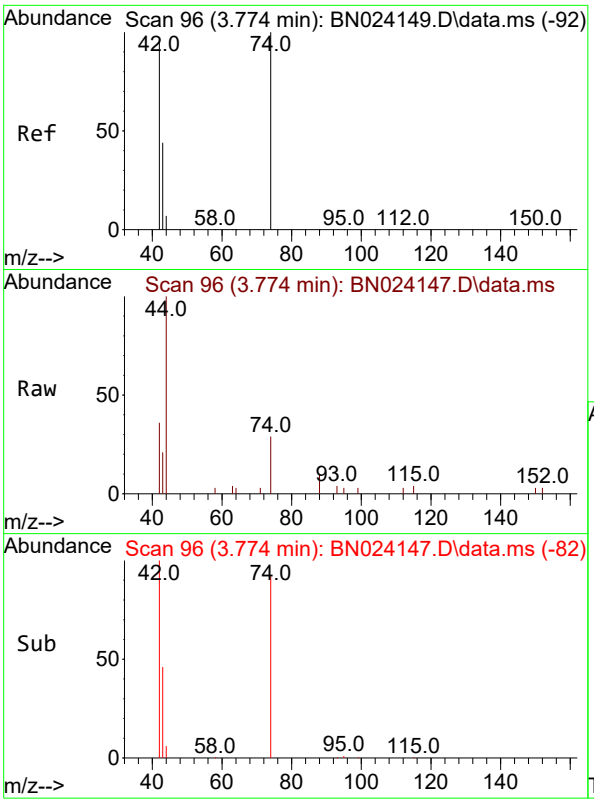


#2
1,4-Dioxane
Concen: 0.105 ng
RT: 3.449 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion: 88 Resp: 803

Ion	Ratio	Lower	Upper
88	100		
43	36.2	27.8	41.8
58	83.7	65.8	98.6



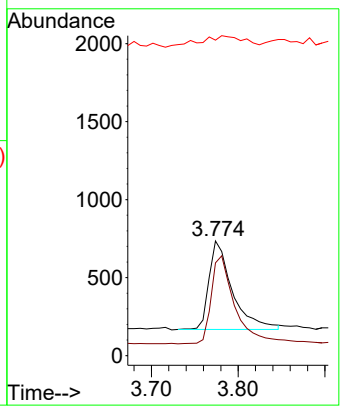


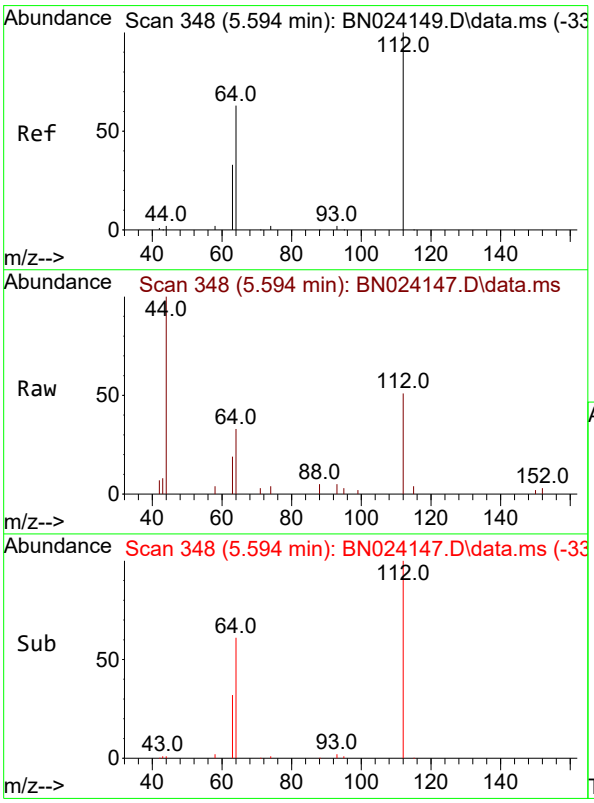
#3
n-Nitrosodimethylamine
Concen: 0.124 ng
RT: 3.774 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 42 Resp: 1058

Ion	Ratio	Lower	Upper
42	100		
74	100.4	78.0	117.0
44	24.8	10.3	15.5#

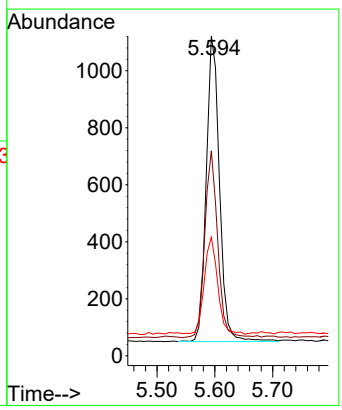


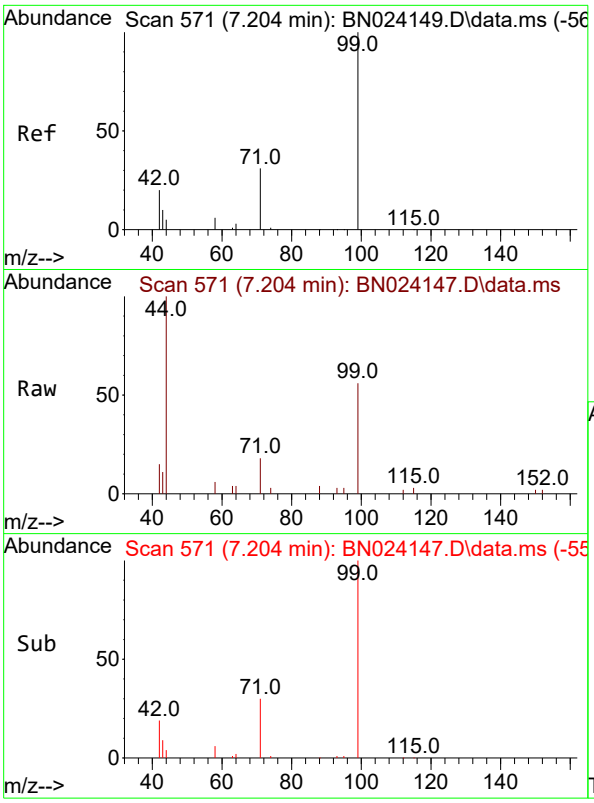


#4
2-Fluorophenol
Concen: 0.102 ng
RT: 5.594 min Scan# 348
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:112 Resp: 1708

Ion	Ratio	Lower	Upper
112	100		
64	59.7	48.2	72.2
63	32.0	25.4	38.2



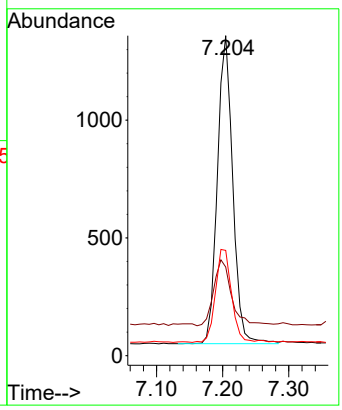


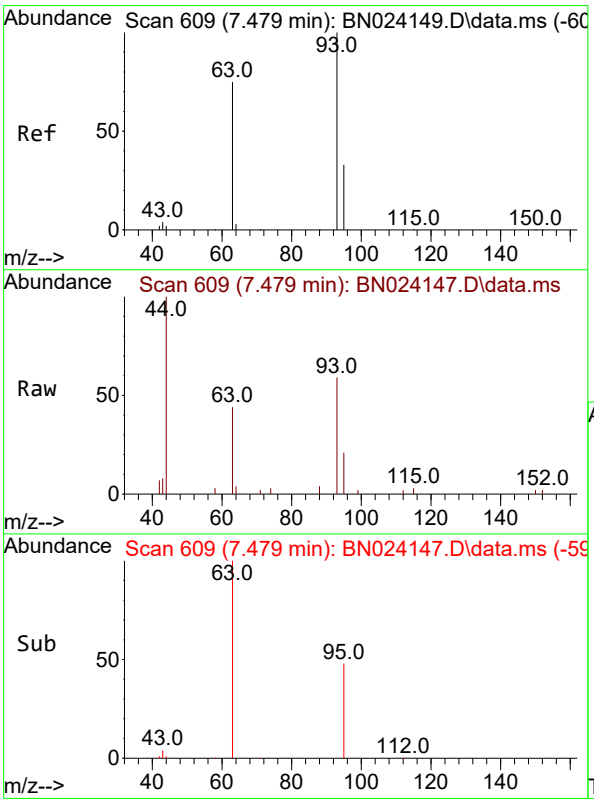
#5
Phenol-d6
Concen: 0.107 ng
RT: 7.204 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 99 Resp: 2111

Ion	Ratio	Lower	Upper
99	100		
42	25.0	19.2	28.8
71	31.6	25.8	38.6

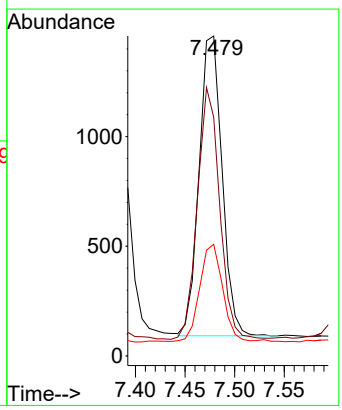


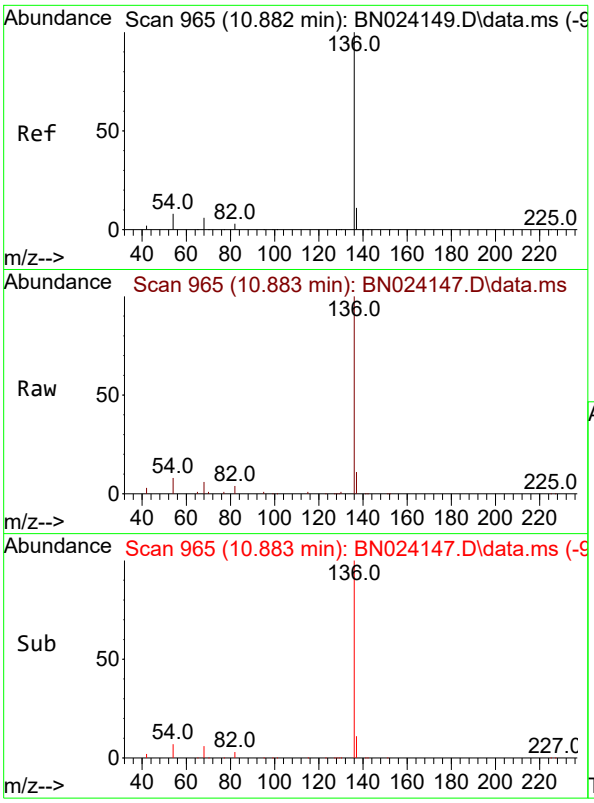


#6
bis(2-Chloroethyl)ether
Concen: 0.112 ng
RT: 7.479 min Scan# 609
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion: 93 Resp: 2206

Ion	Ratio	Lower	Upper
93	100		
63	81.2	64.9	97.3
95	32.1	25.8	38.8



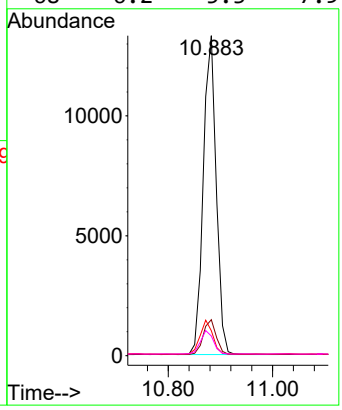


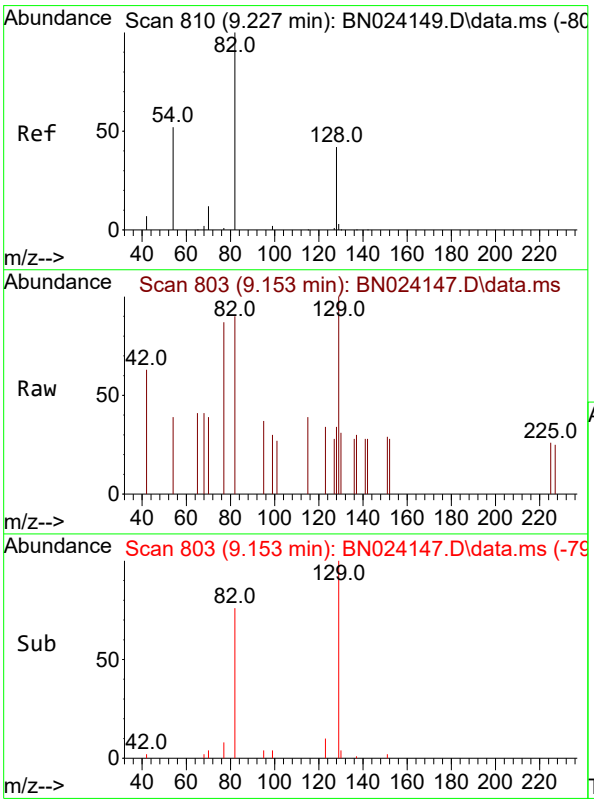
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.883 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:136 Resp: 22883

Ion	Ratio	Lower	Upper
136	100		
137	11.2	8.8	13.2
54	7.8	6.8	10.2
68	6.2	5.3	7.9

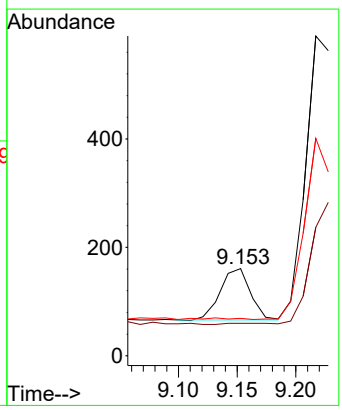


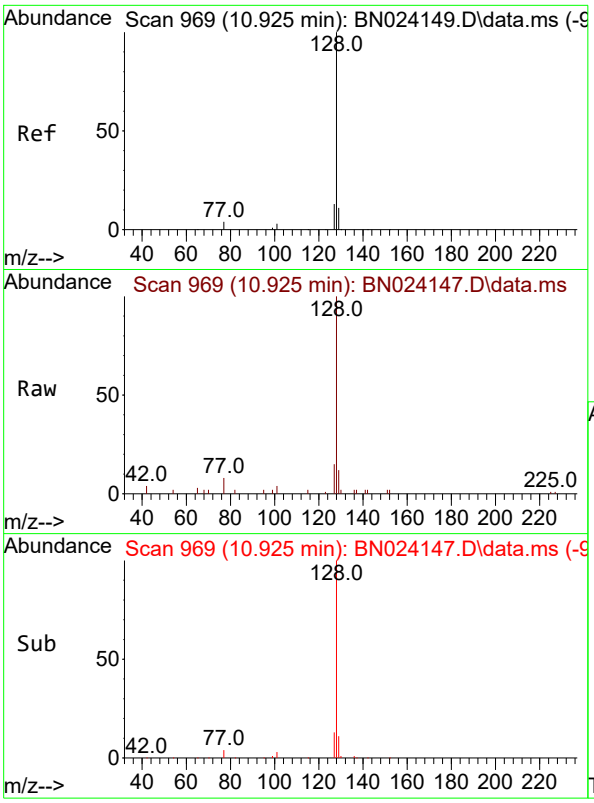


#8
Nitrobenzene-d5
Concen: 0.009 ng
RT: 9.153 min Scan# 803
Delta R.T. -0.075 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion: 82 Resp: 170

Ion	Ratio	Lower	Upper
82	100		
128	37.3	34.5	51.7
54	42.9	42.8	64.2



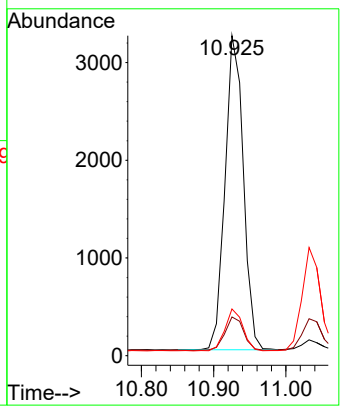


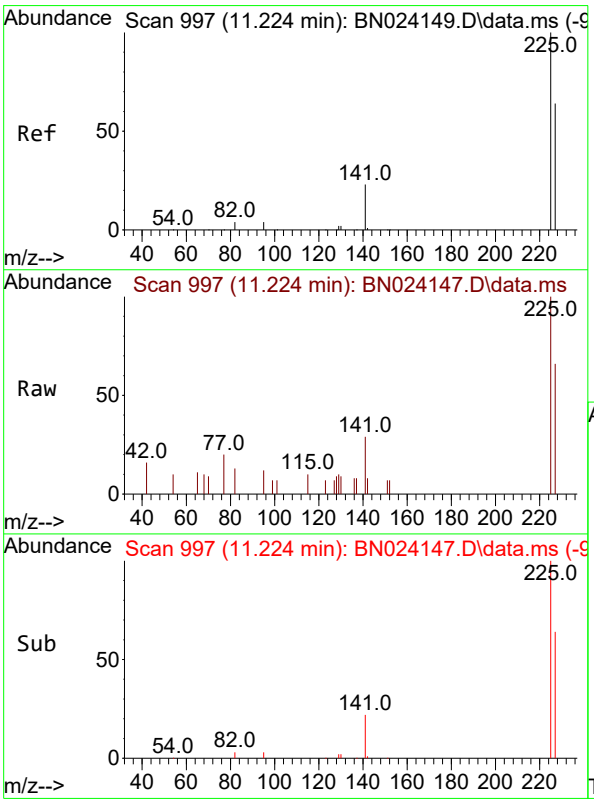
#9
Naphthalene
Concen: 0.099 ng
RT: 10.925 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:128 Resp: 5652

Ion	Ratio	Lower	Upper
128	100		
129	12.1	9.0	13.6
127	14.6	10.9	16.3

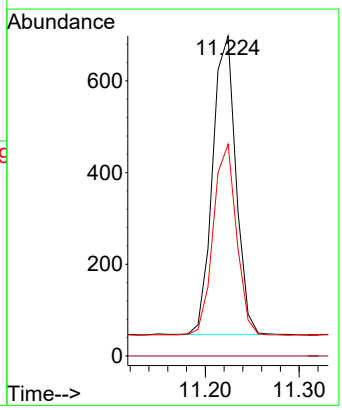


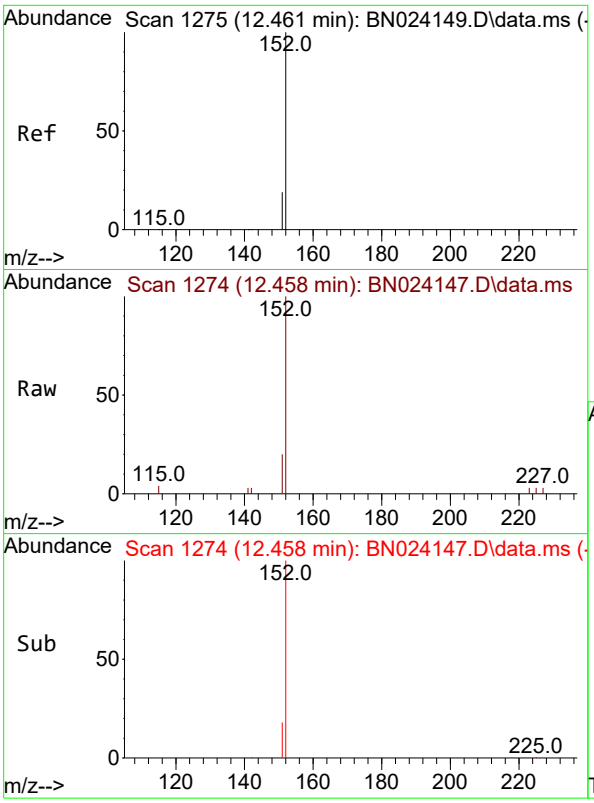


#10
Hexachlorobutadiene
Concen: 0.075 ng
RT: 11.224 min Scan# 997
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:225 Resp: 1122

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.3	50.8	76.2



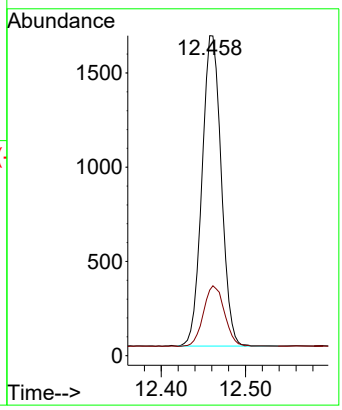


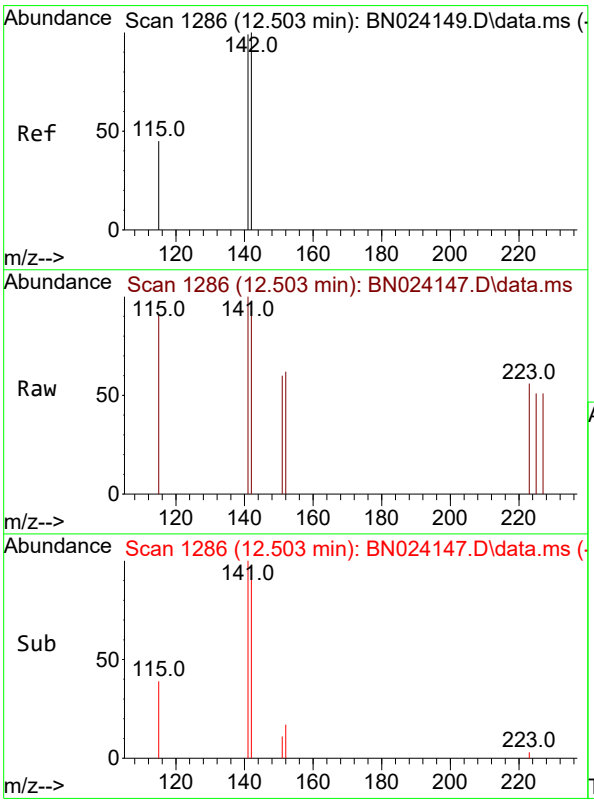
#11
2-Methylnaphthalene-d10
Concen: 0.099 ng
RT: 12.458 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 3157

Ion	Ratio	Lower	Upper
152	100		
151	22.6	17.8	26.6

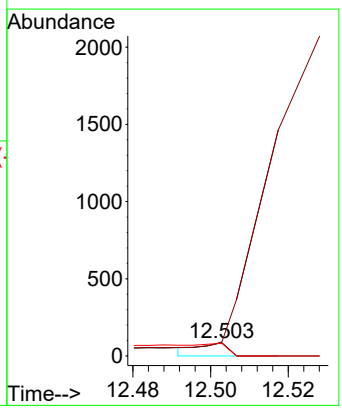


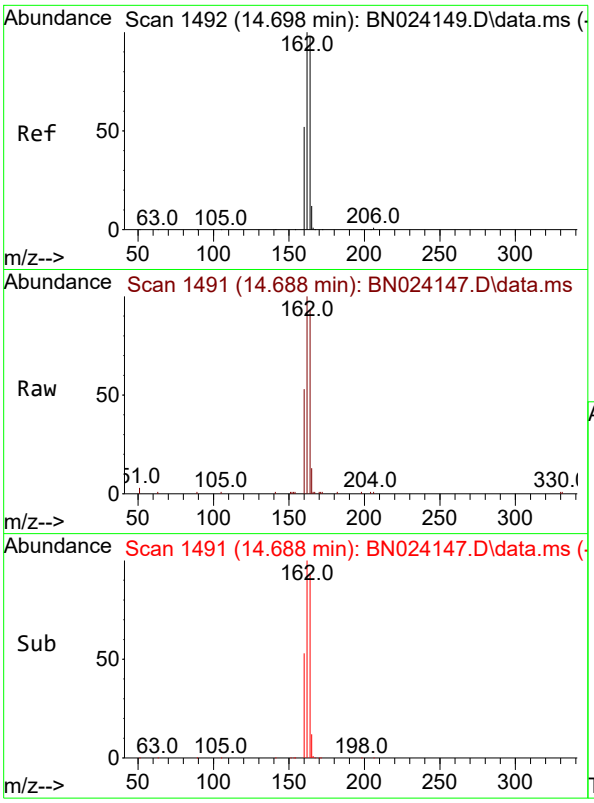


#12
2-Methylnaphthalene
Concen: 0.002 ng
RT: 12.503 min Scan# 1286
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:142 Resp: 64

Ion	Ratio	Lower	Upper
142	100		
141	104.7	76.9	115.3
115	95.3	57.8	86.8#



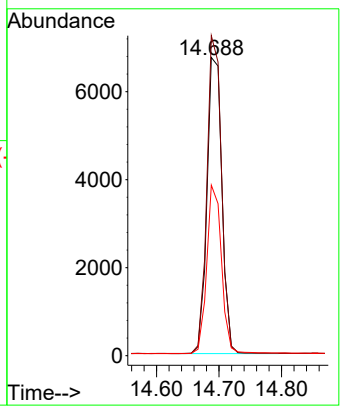


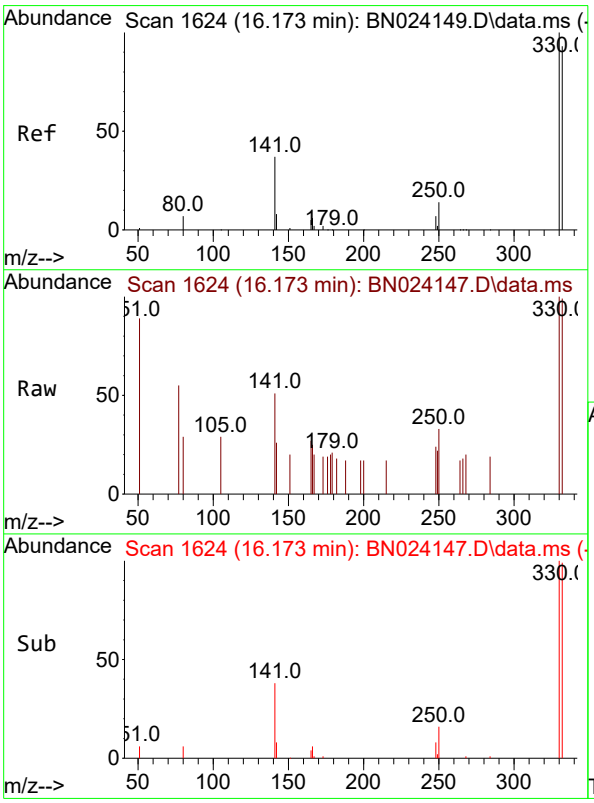
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.688 min Scan# 14
Delta R.T. -0.010 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:164 Resp: 11160

Ion	Ratio	Lower	Upper
164	100		
162	107.3	81.6	122.4
160	57.2	43.0	64.6

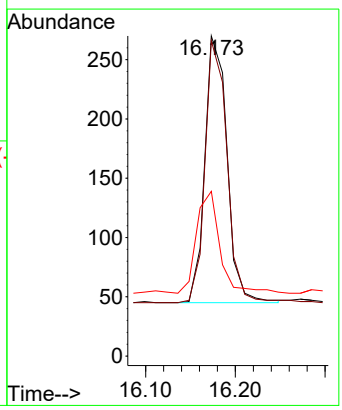


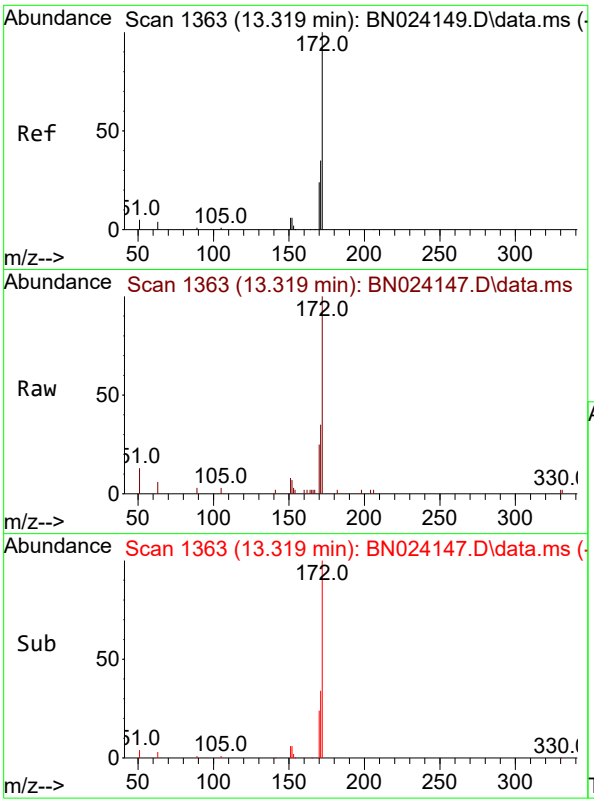


#14
2,4,6-Tribromophenol
Concen: 0.067 ng
RT: 16.173 min Scan# 1624
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:330 Resp: 386

Ion	Ratio	Lower	Upper
330	100		
332	97.2	76.2	114.2
141	40.9	28.9	43.3



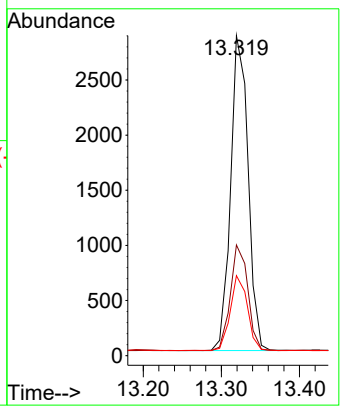


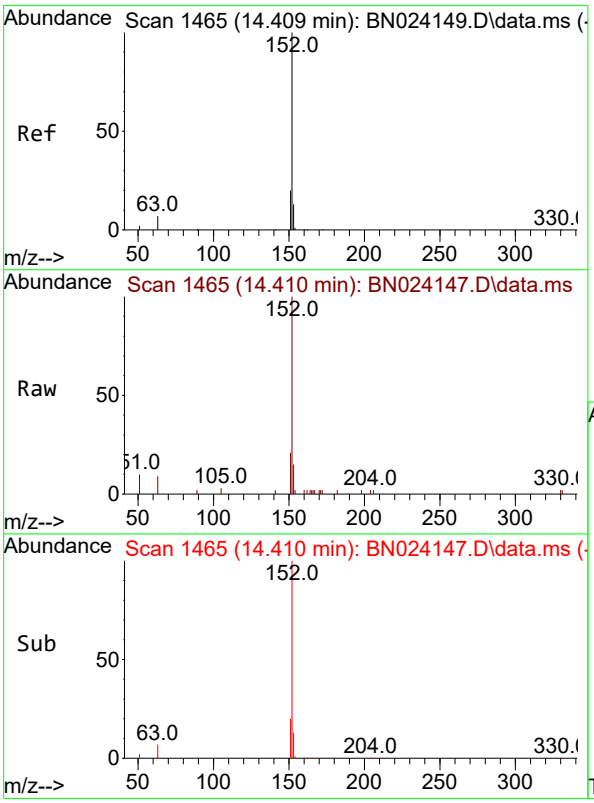
#15
2-Fluorobiphenyl
Concen: 0.101 ng
RT: 13.319 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:172 Resp: 4444

Ion	Ratio	Lower	Upper
172	100		
171	34.6	28.1	42.1
170	25.0	19.7	29.5

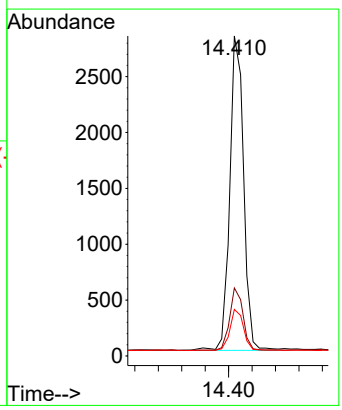


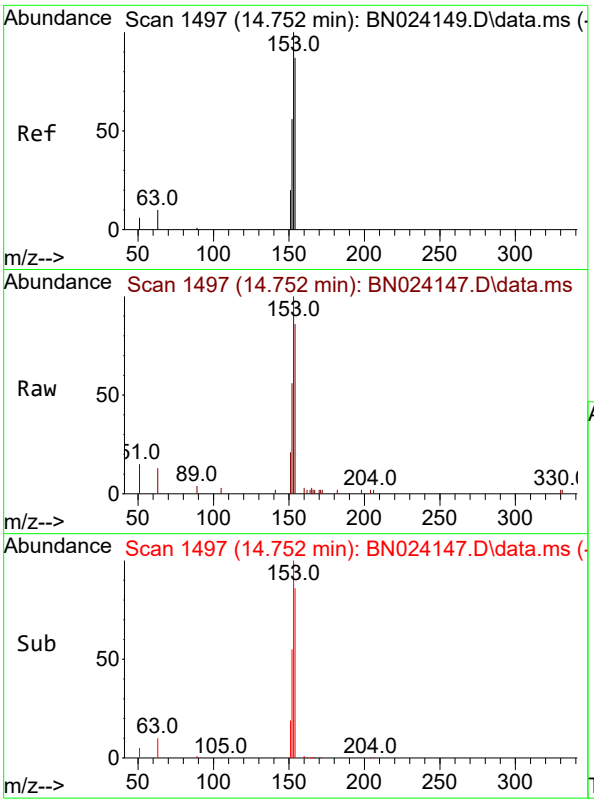


#16
Acenaphthylene
Concen: 0.106 ng
RT: 14.410 min Scan# 1465
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:152 Resp: 4620

Ion	Ratio	Lower	Upper
152	100		
151	19.4	15.2	22.8
153	13.0	10.4	15.6



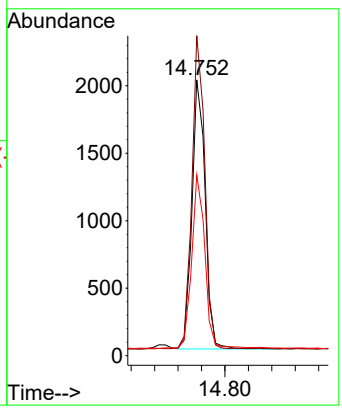


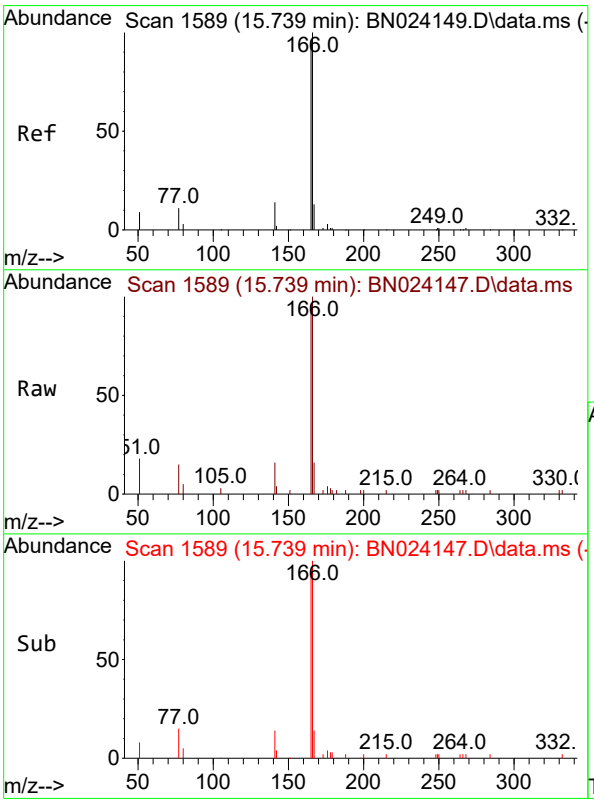
#17
Acenaphthene
Concen: 0.105 ng
RT: 14.752 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:154 Resp: 3116

Ion	Ratio	Lower	Upper
154	100		
153	113.6	90.4	135.6
152	64.3	51.0	76.6

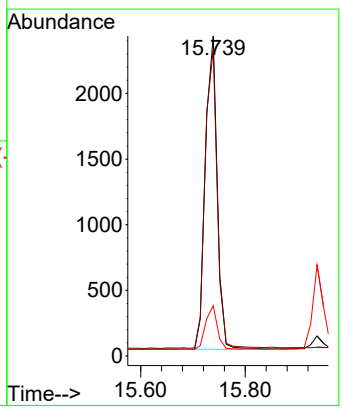


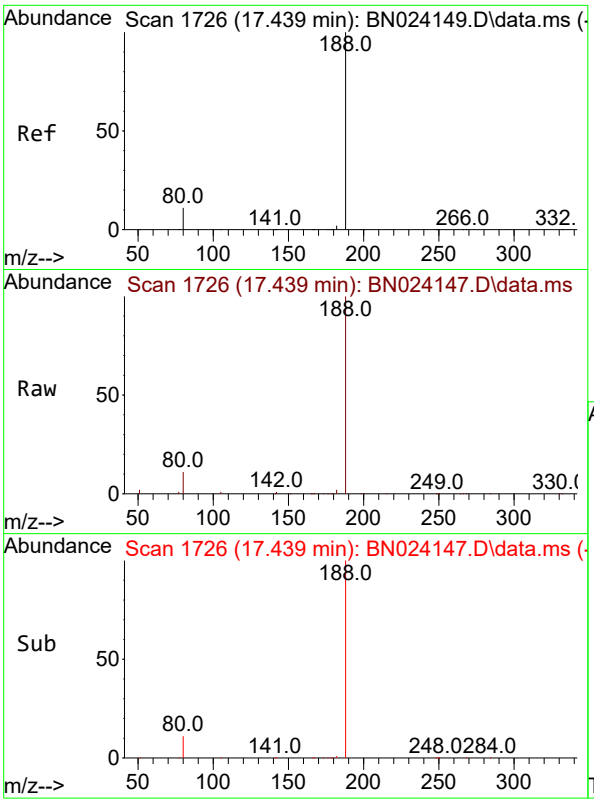


#18
Fluorene
Concen: 0.091 ng
RT: 15.739 min Scan# 1589
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:166 Resp: 3646

Ion	Ratio	Lower	Upper
166	100		
165	99.1	80.1	120.1
167	13.9	10.8	16.2



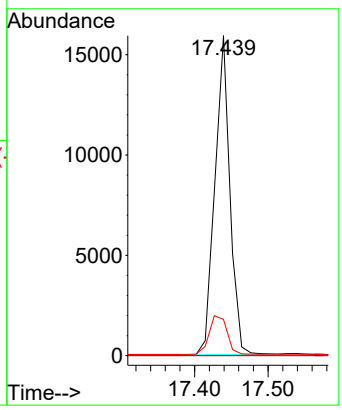


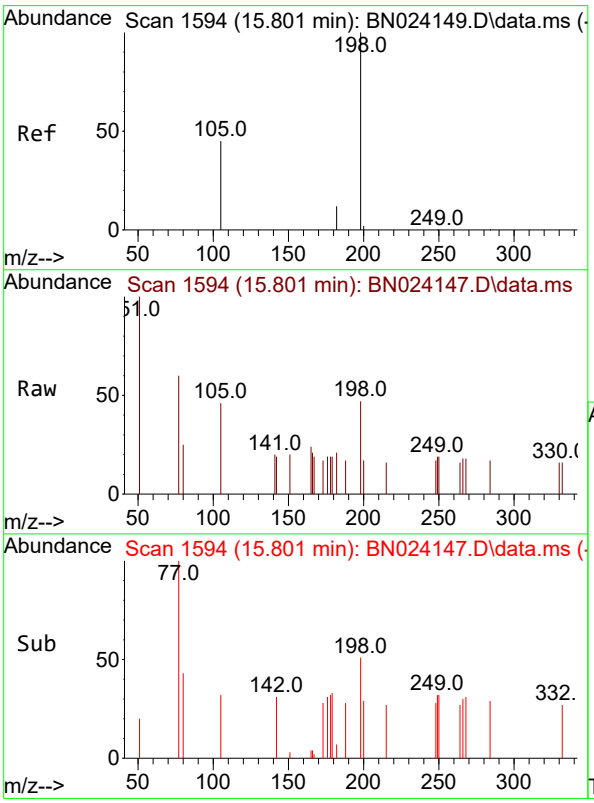
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.439 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:188 Resp: 22638

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.3	9.4	14.0

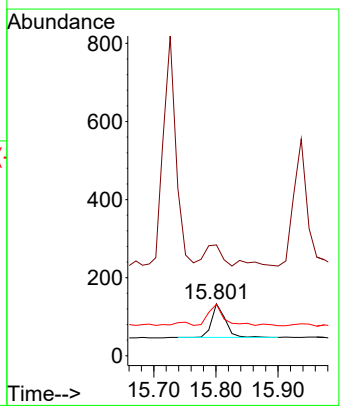


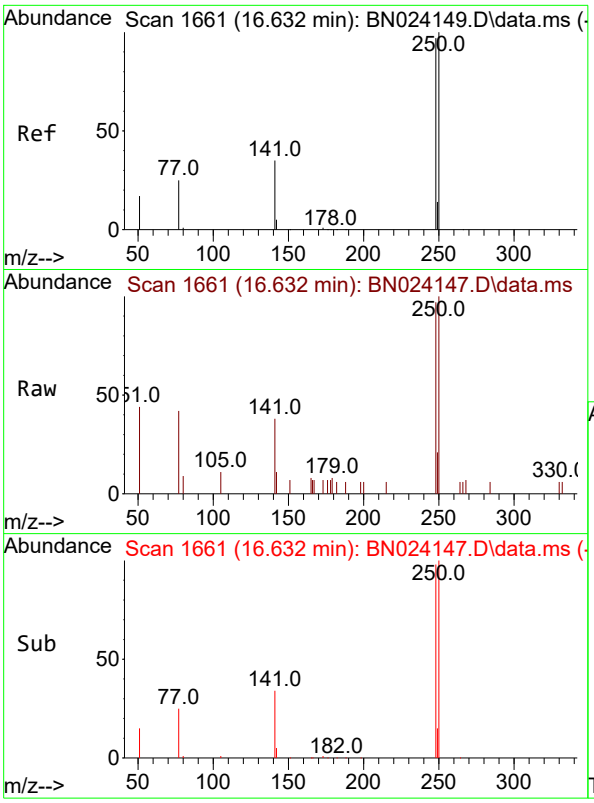


#20
4,6-Dinitro-2-methylphenol
Concen: 0.035 ng
RT: 15.801 min Scan# 1594
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:198 Resp: 130

Ion	Ratio	Lower	Upper
198	100		
51	213.5	79.8	119.8#
105	99.2	48.8	73.2#



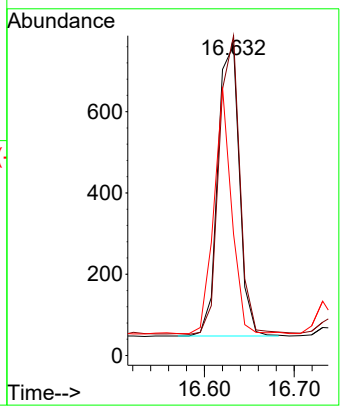


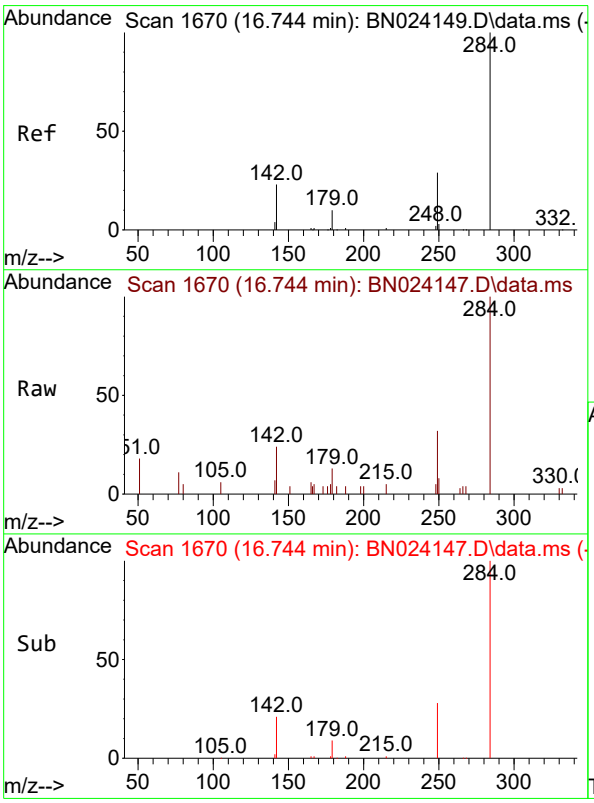
#21
4-Bromophenyl-phenylether
Concen: 0.082 ng
RT: 16.632 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:248 Resp: 1201

Ion	Ratio	Lower	Upper
248	100		
250	103.1	82.5	123.7
141	39.2	30.1	45.1

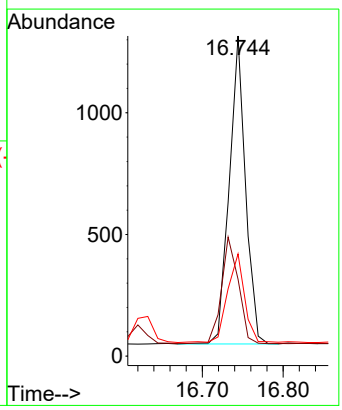


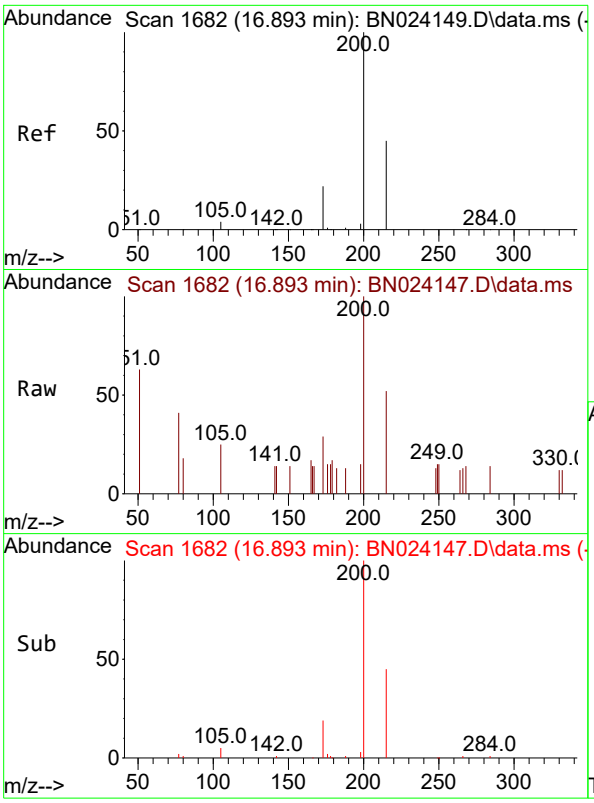


#22
Hexachlorobenzene
Concen: 0.100 ng
RT: 16.744 min Scan# 1670
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:284 Resp: 1765

Ion	Ratio	Lower	Upper
284	100		
142	36.1	28.3	42.5
249	30.3	23.9	35.9



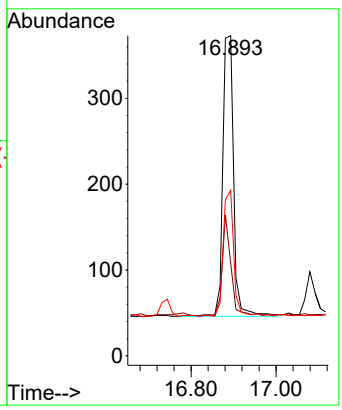


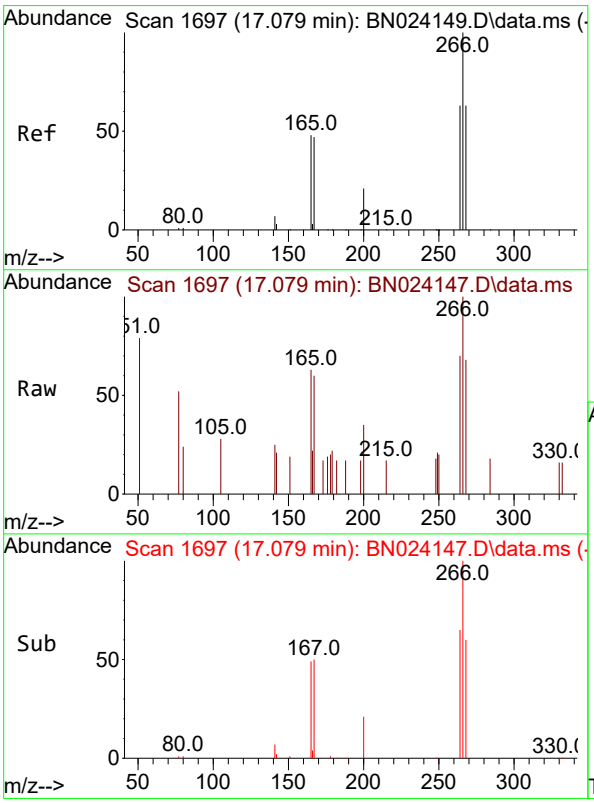
#23
Atrazine
Concen: 0.060 ng
RT: 16.893 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:200 Resp: 576

Ion	Ratio	Lower	Upper
200	100		
173	29.0	19.8	29.6
215	51.7	37.7	56.5

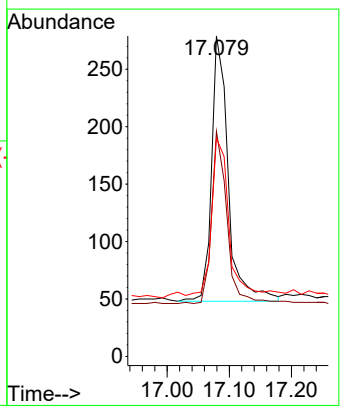


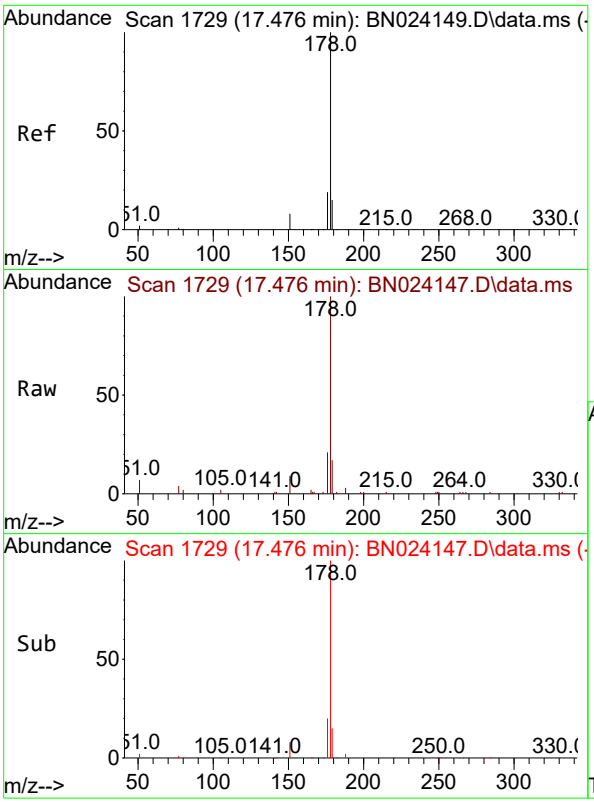


#24
Pentachlorophenol
Concen: 0.069 ng
RT: 17.079 min Scan# 1697
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:266 Resp: 430

Ion	Ratio	Lower	Upper
266	100		
264	60.0	49.4	74.0
268	61.2	51.4	77.0



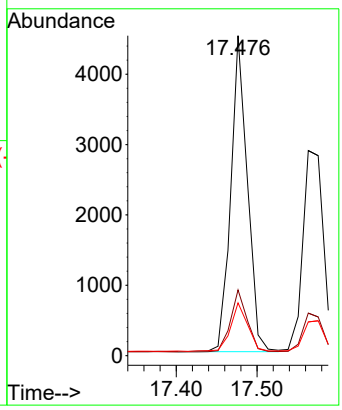


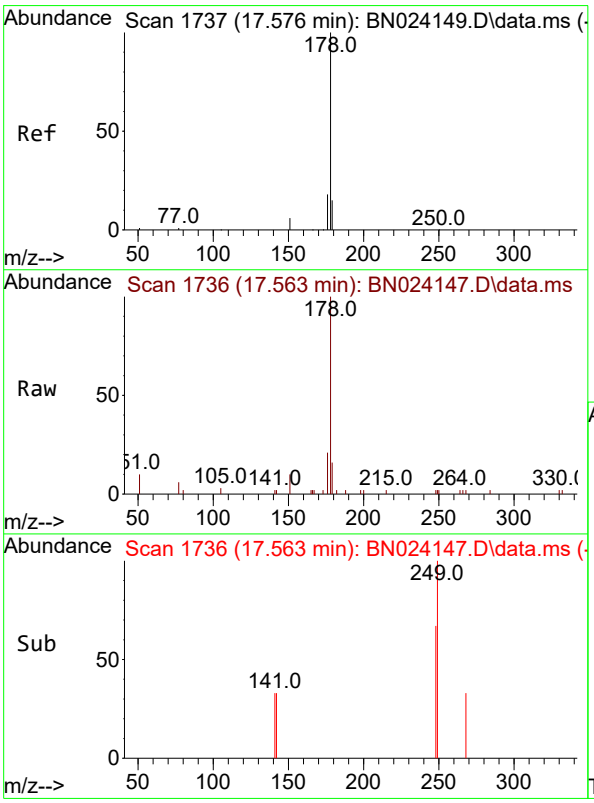
#25
Phenanthrene
Concen: 0.102 ng
RT: 17.476 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:178 Resp: 6398

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	16.0	12.2	18.2

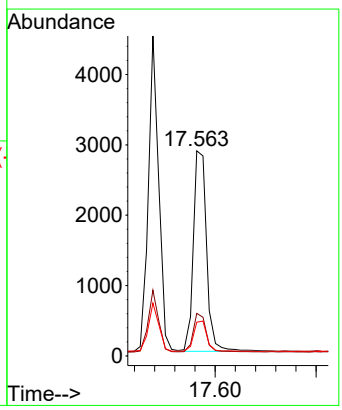


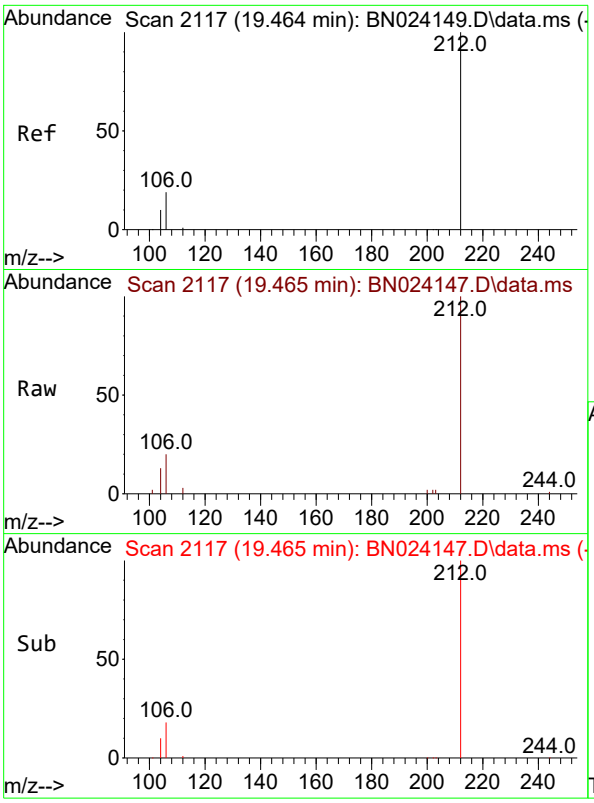


#26
Anthracene
Concen: 0.101 ng
RT: 17.563 min Scan# 1736
Delta R.T. -0.012 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:178 Resp: 5210

Ion	Ratio	Lower	Upper
178	100		
176	18.6	15.1	22.7
179	15.3	12.1	18.1



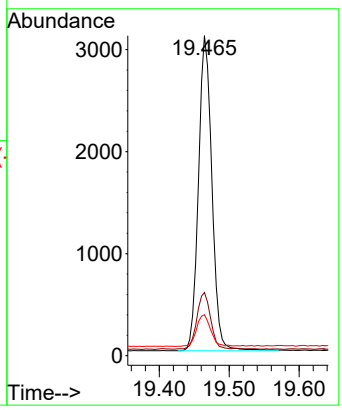


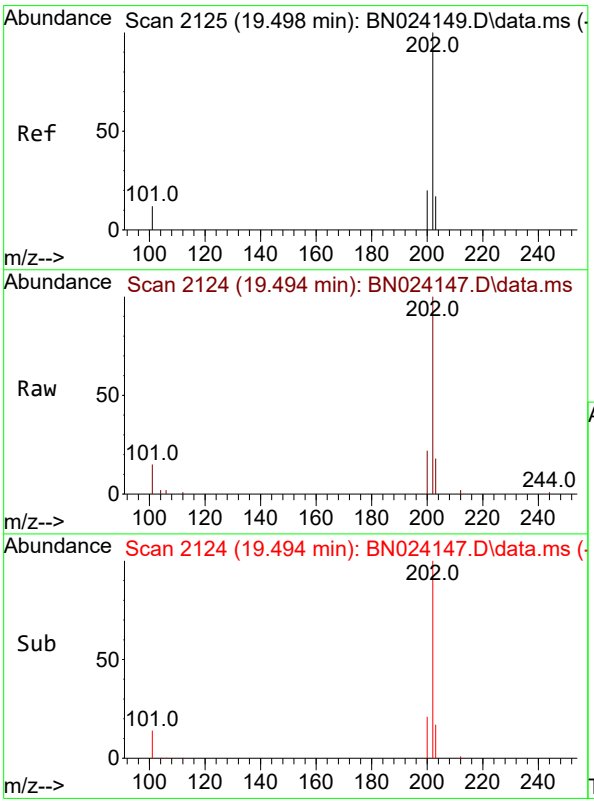
#27
Fluoranthene-d10
Concen: 0.075 ng
RT: 19.465 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:212 Resp: 4125

Ion	Ratio	Lower	Upper
212	100		
106	18.3	14.9	22.3
104	10.5	8.4	12.6

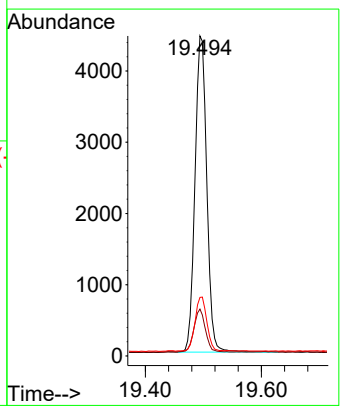


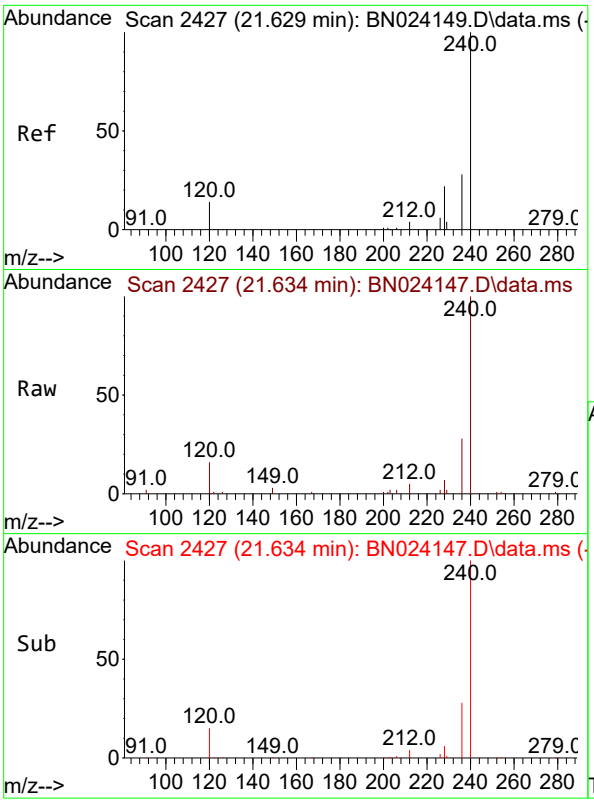


#28
Fluoranthene
Concen: 0.088 ng
RT: 19.494 min Scan# 2124
Delta R.T. -0.004 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:202 Resp: 6265

Ion	Ratio	Lower	Upper
202	100		
101	13.3	10.7	16.1
203	17.2	13.6	20.4



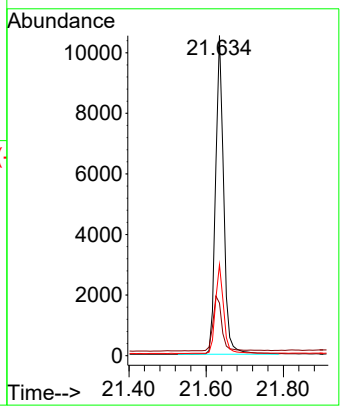


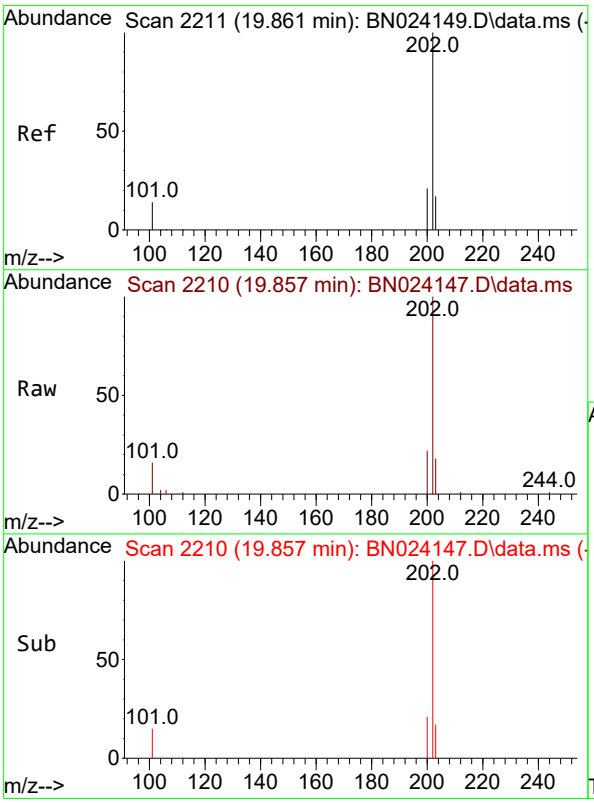
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.634 min Scan# 24
Delta R.T. 0.005 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:240 Resp: 15297

Ion	Ratio	Lower	Upper
240	100		
120	16.5	12.2	18.2
236	28.4	22.6	34.0

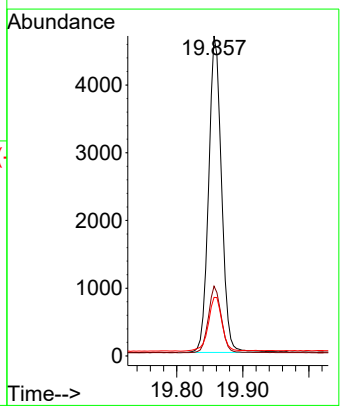


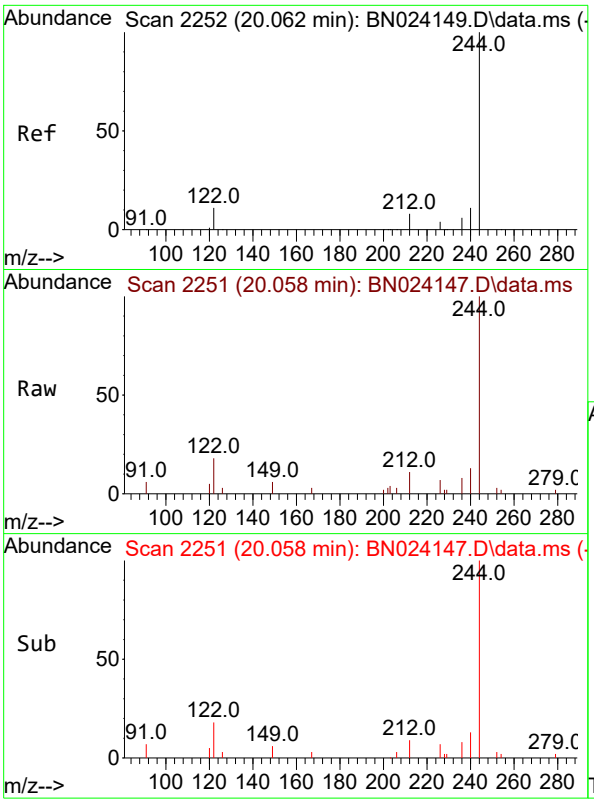


#30
Pyrene
Concen: 0.119 ng
RT: 19.857 min Scan# 2210
Delta R.T. -0.004 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:202 Resp: 6338

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.1	24.1
203	18.1	13.7	20.5



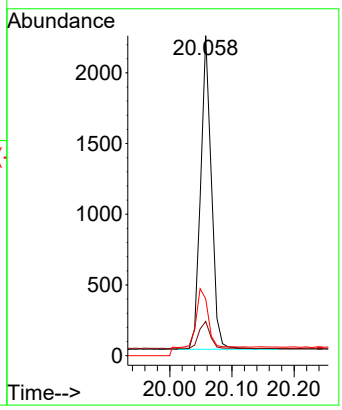


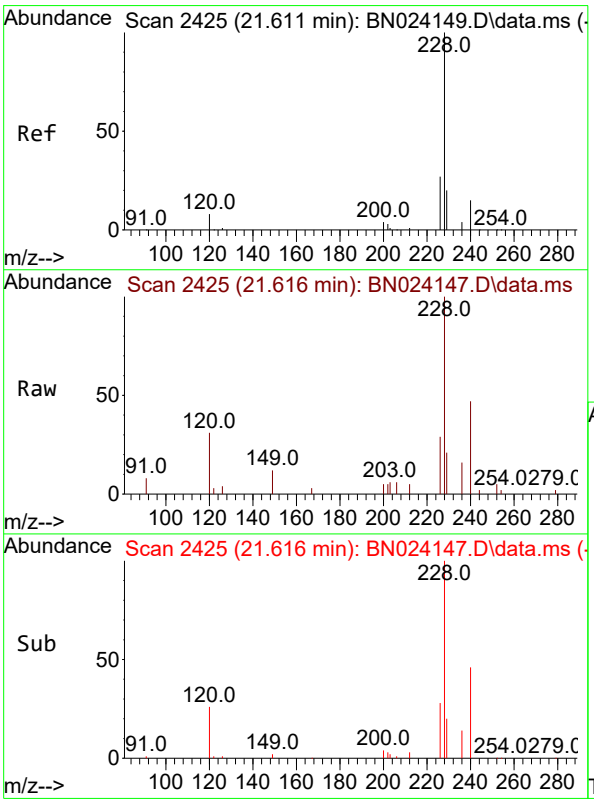
#31
Terphenyl-d14
Concen: 0.094 ng
RT: 20.058 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:244 Resp: 2675

Ion	Ratio	Lower	Upper
244	100		
212	10.7	6.7	10.1#
122	17.8	9.7	14.5#

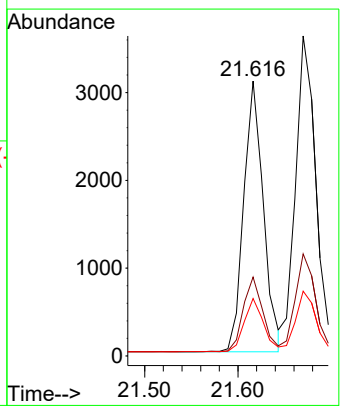


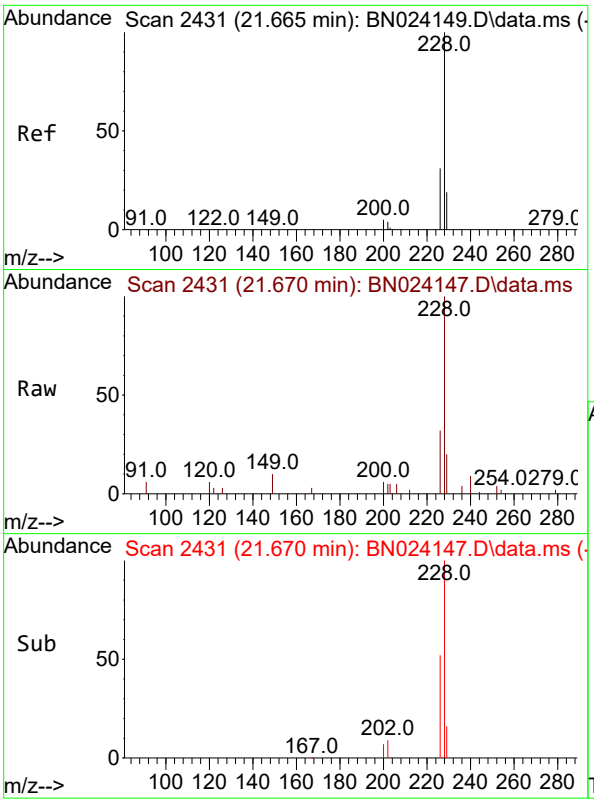


#32
Benzo(a)anthracene
Concen: 0.093 ng
RT: 21.616 min Scan# 2425
Delta R.T. 0.005 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:228 Resp: 4531

Ion	Ratio	Lower	Upper
228	100		
226	28.7	22.0	33.0
229	20.9	15.9	23.9



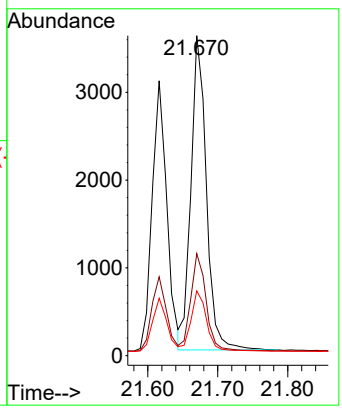


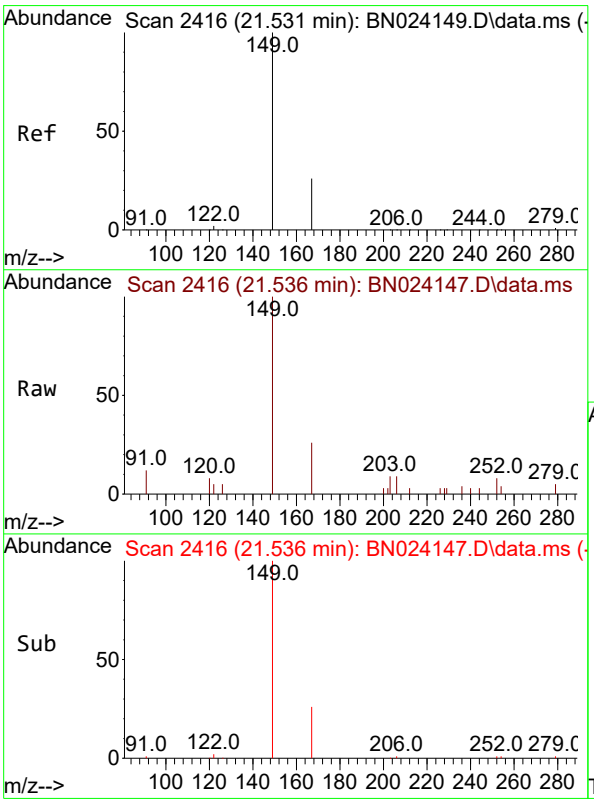
#33
Chrysene
Concen: 0.104 ng
RT: 21.670 min Scan# 24
Delta R.T. 0.005 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:228 Resp: 5485

Ion	Ratio	Lower	Upper
228	100		
226	31.9	24.8	37.2
229	20.3	15.4	23.2

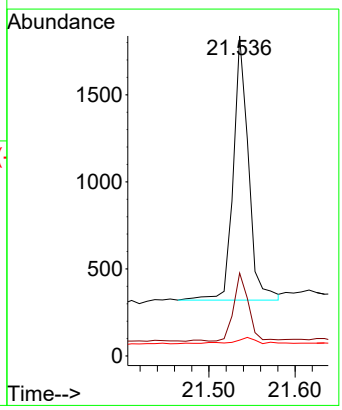


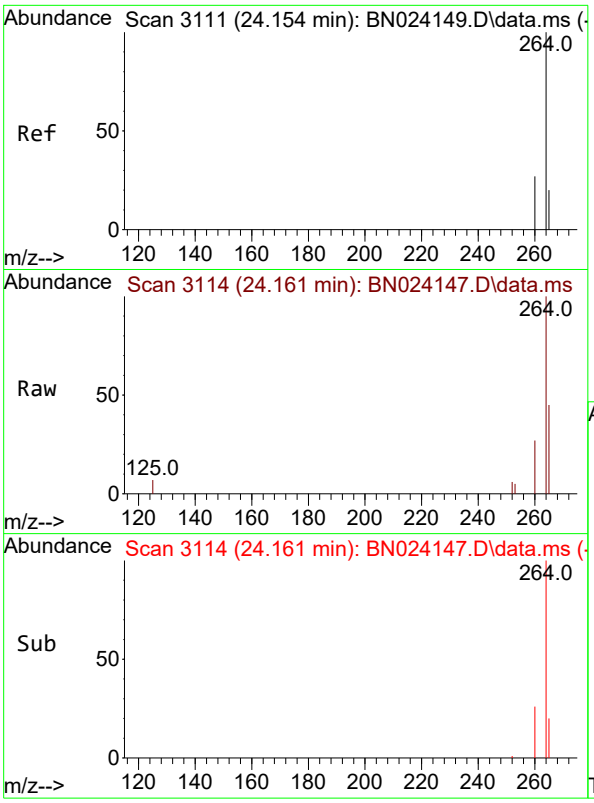


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.083 ng
RT: 21.536 min Scan# 2416
Delta R.T. 0.005 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:149 Resp: 1856

Ion	Ratio	Lower	Upper
149	100		
167	25.1	20.5	30.7
279	4.0	2.0	3.0#



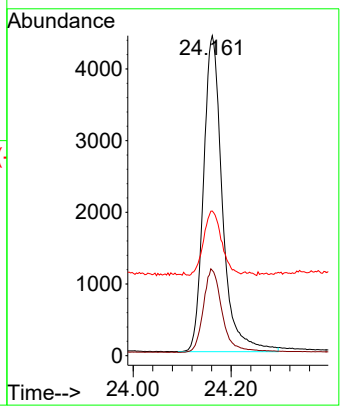


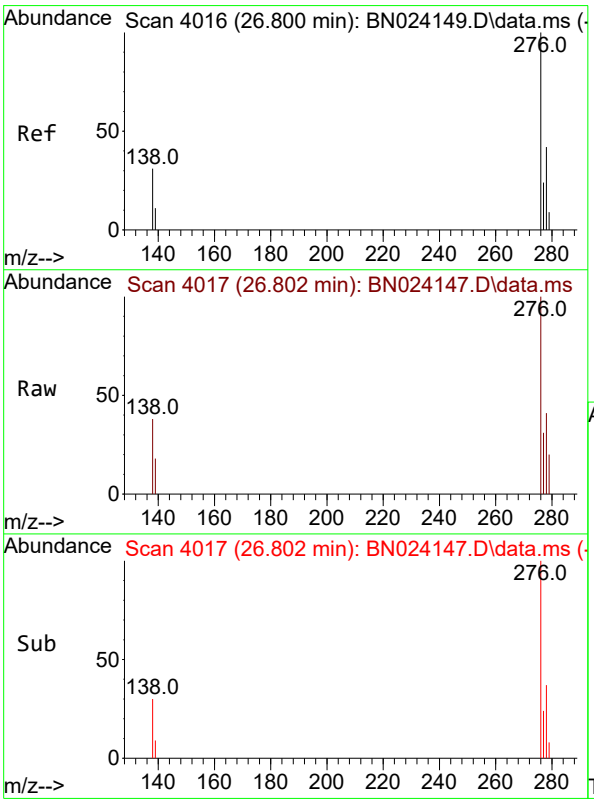
#35
Perylene-d12
Concen: 0.400 ng
RT: 24.161 min Scan# 3
Delta R.T. 0.008 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:264 Resp: 11788

Ion	Ratio	Lower	Upper
264	100		
260	26.7	22.1	33.1
265	45.2	35.4	53.0

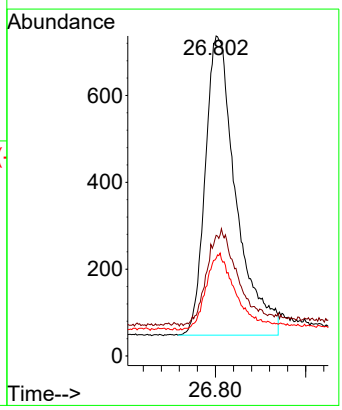


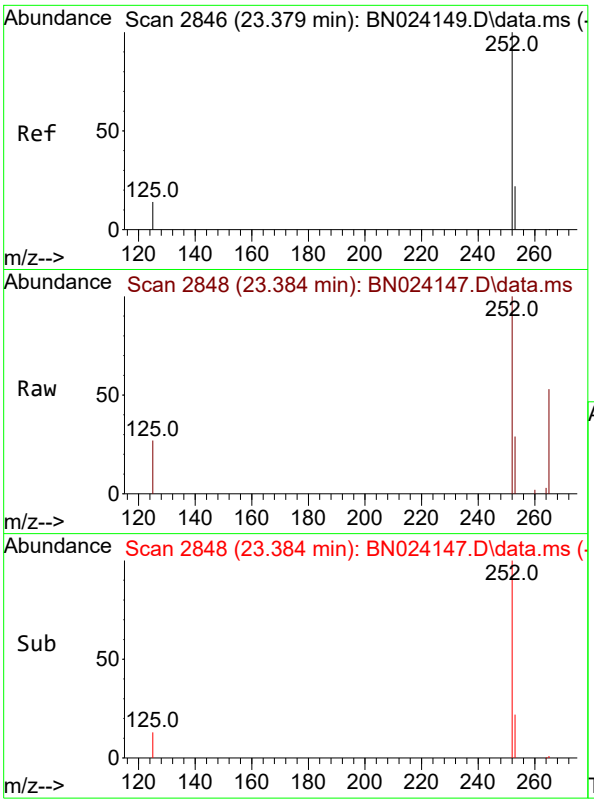


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.061 ng
RT: 26.802 min Scan# 4017
Delta R.T. 0.002 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:276 Resp: 3259

Ion	Ratio	Lower	Upper
276	100		
138	31.2	26.2	39.4
277	23.9	19.7	29.5



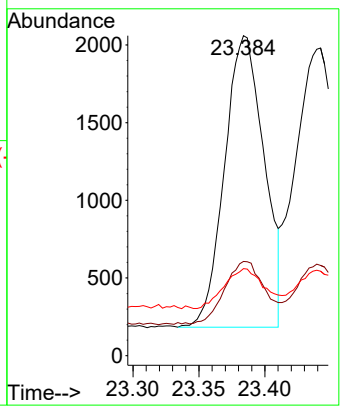


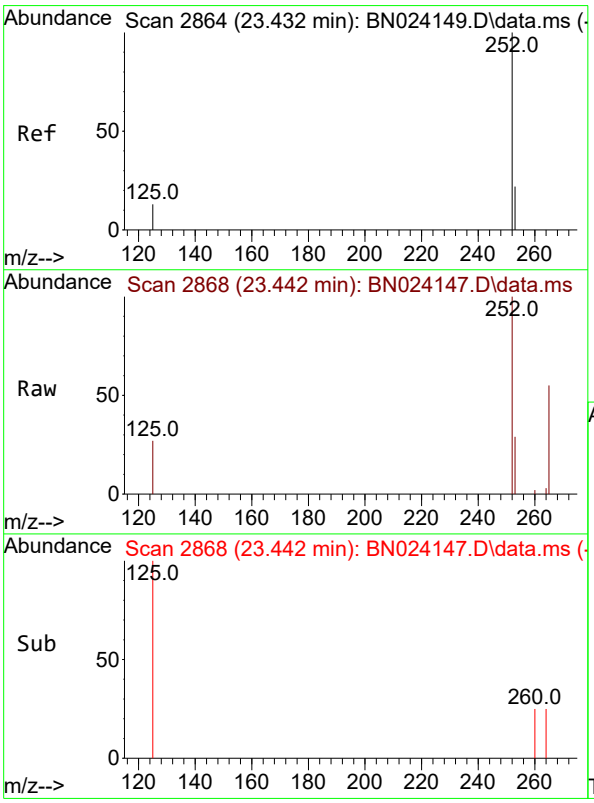
#37
Benzo(b)fluoranthene
Concen: 0.082 ng
RT: 23.384 min Scan# 2
Delta R.T. 0.005 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 3909

Ion	Ratio	Lower	Upper
252	100		
253	29.5	19.1	28.7#
125	27.2	13.8	20.6#

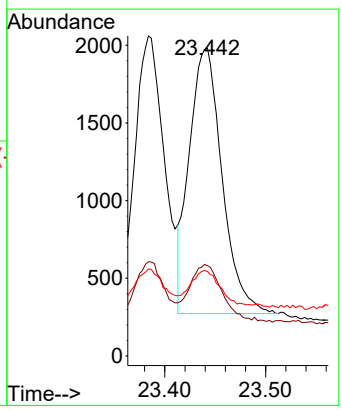


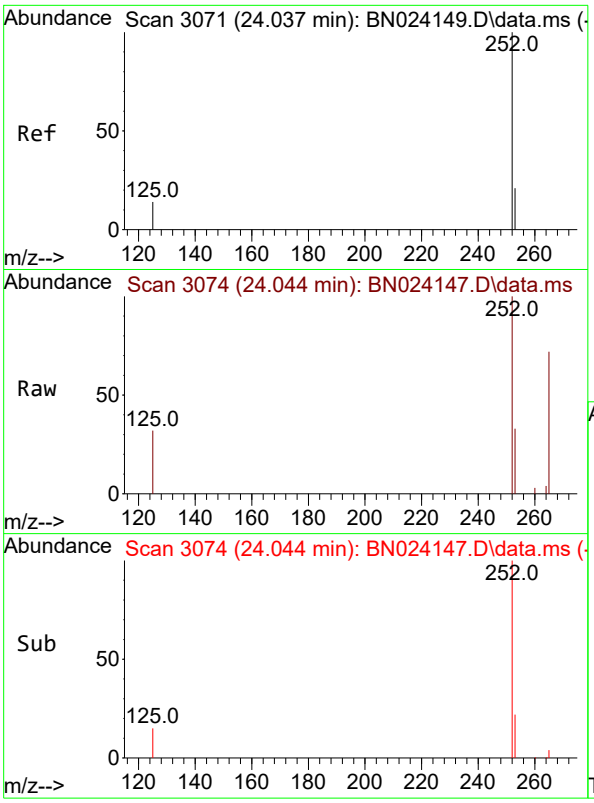


#38
Benzo(k)fluoranthene
Concen: 0.082 ng
RT: 23.442 min Scan# 2868
Delta R.T. 0.011 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:252 Resp: 3872

Ion	Ratio	Lower	Upper
252	100		
253	29.3	19.0	28.6#
125	27.5	13.3	19.9#



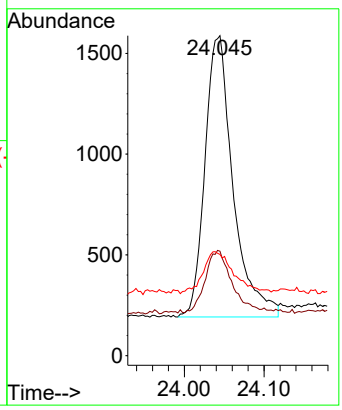


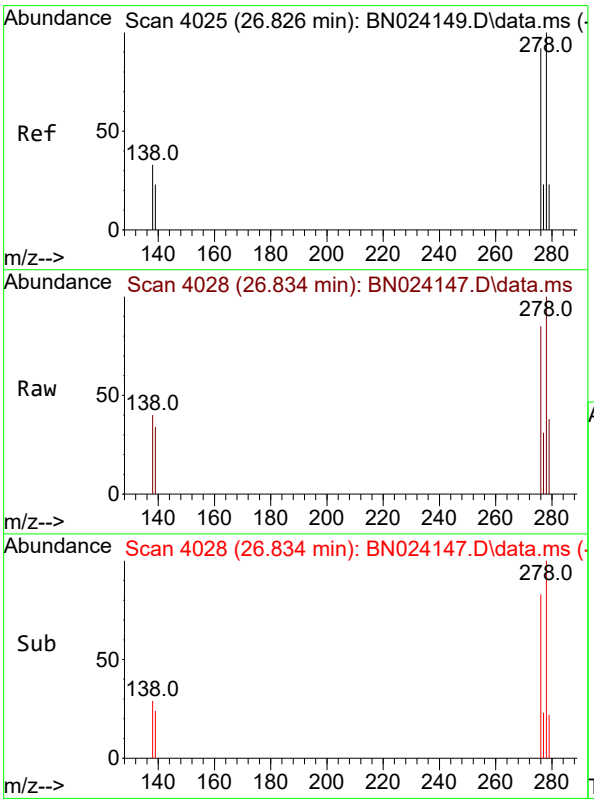
#39
Benzo(a)pyrene
Concen: 0.095 ng
RT: 24.044 min Scan# 3
Delta R.T. 0.008 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 3424

Ion	Ratio	Lower	Upper
252	100		
253	32.6	19.3	28.9#
125	31.6	15.4	23.2#

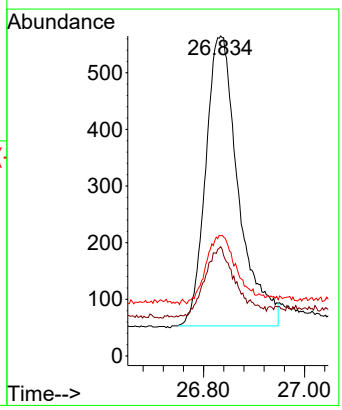


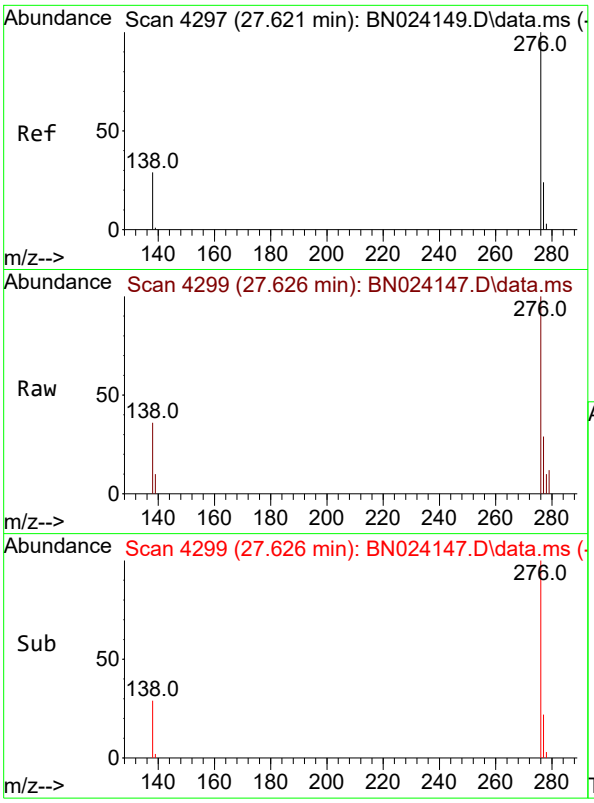


#40
Dibenzo(a,h)anthracene
Concen: 0.054 ng
RT: 26.834 min Scan# 4028
Delta R.T. 0.008 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Tgt Ion:278 Resp: 2308

Ion	Ratio	Lower	Upper
278	100		
139	34.2	20.3	30.5#
279	37.5	21.3	31.9#





#41
Benzo(g,h,i)perylene
Concen: 0.072 ng
RT: 27.626 min Scan# 4
Delta R.T. 0.005 min
Lab File: BN024147.D
Acq: 07 Mar 2023 16:17

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:276 Resp: 3286

Ion	Ratio	Lower	Upper
276	100		
277	28.8	20.4	30.6
138	36.1	24.9	37.3