Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022424\
Data File : BN030012.D
Acq On : 25 Feb 2024 04:07
Operator : MA/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Feb 26 02:47:18 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Feb 26 02:39:45 2024
Response via : Initial Calibration

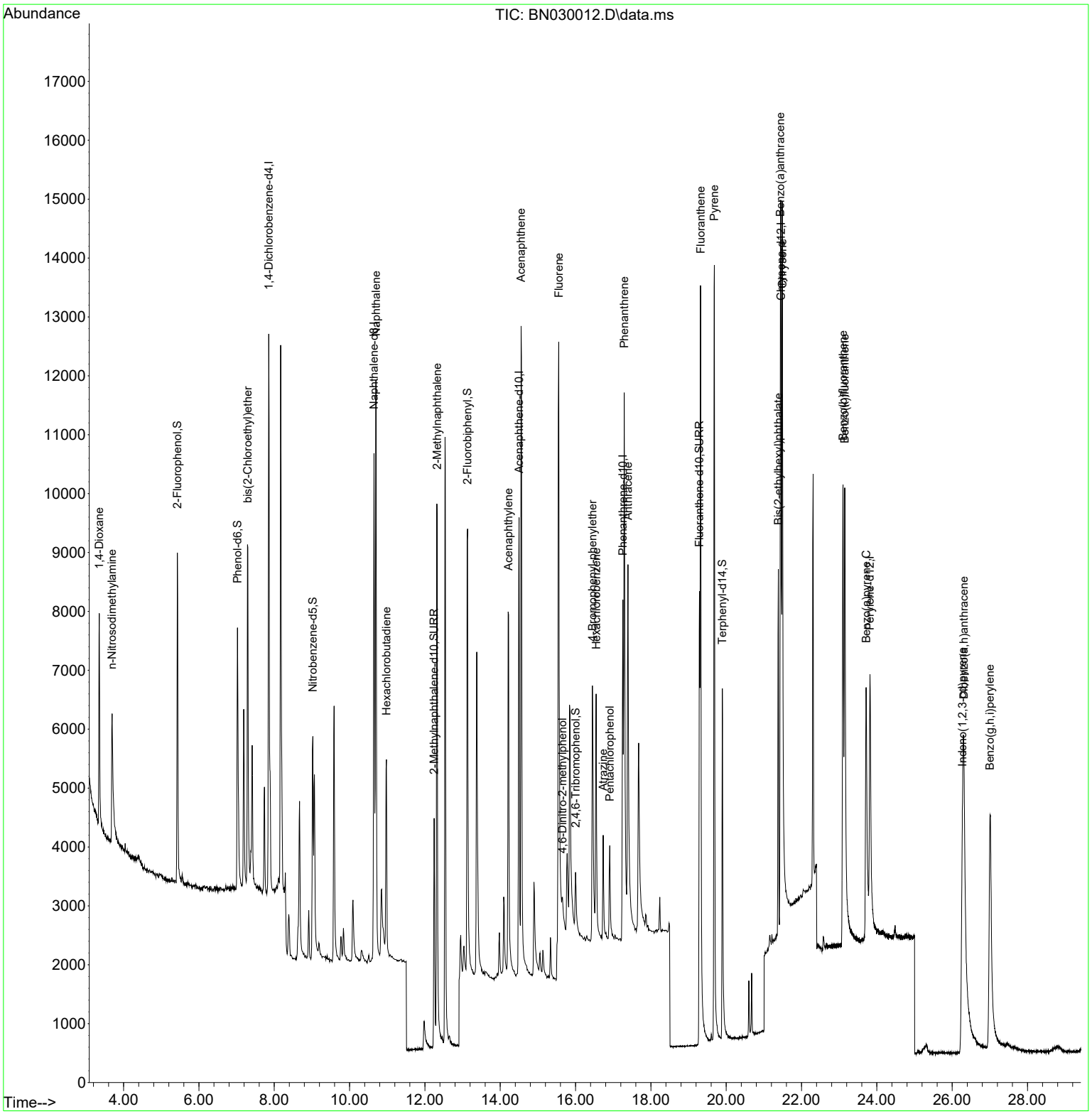
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.854	152	4761	0.400	ng		0.00
7) Naphthalene-d8	10.648	136	12123	0.400	ng		0.00
13) Acenaphthene-d10	14.500	164	5493	0.400	ng		0.01
19) Phenanthrene-d10	17.255	188	10916	0.400	ng		0.00
29) Chrysene-d12	21.456	240	8187	0.400	ng	#	0.00
35) Perylene-d12	23.818	264	8089	0.400	ng	#	0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.428	112	4690	0.410	ng		0.00
5) Phenol-d6	7.024	99	4993	0.378	ng		0.00
8) Nitrobenzene-d5	9.025	82	4063	0.403	ng		0.01
11) 2-Methylnaphthalene-d10	12.246	152	6498	0.394	ng		0.00
14) 2,4,6-Tribromophenol	16.002	330	760	0.431	ng		0.00
15) 2-Fluorobiphenyl	13.132	172	8934	0.379	ng		0.01
27) Fluoranthene-d10	19.289	212	11050	0.418	ng		0.00
31) Terphenyl-d14	19.898	244	7947	0.391	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.355	88	2534	0.378	ng		96
3) n-Nitrosodimethylamine	3.694	42	2209	0.404	ng	#	96
6) bis(2-Chloroethyl)ether	7.298	93	4988	0.396	ng		99
9) Naphthalene	10.701	128	13726	0.397	ng		99
10) Hexachlorobutadiene	10.979	225	2753	0.420	ng	#	99
12) 2-Methylnaphthalene	12.321	142	7792	0.384	ng		100
16) Acenaphthylene	14.222	152	9064	0.347	ng		100
17) Acenaphthene	14.554	154	6884	0.393	ng		97
18) Fluorene	15.555	166	8204	0.374	ng		99
20) 4,6-Dinitro-2-methylph...	15.654	198	451	0.281	ng	#	70
21) 4-Bromophenyl-phenylether	16.449	248	2234	0.344	ng		96
22) Hexachlorobenzene	16.548	284	3268	0.410	ng		92
23) Atrazine	16.734	200	1761	0.381	ng		99
24) Pentachlorophenol	16.908	266	1037	0.411	ng		97
25) Phenanthrene	17.293	178	11673	0.362	ng		100
26) Anthracene	17.392	178	9859	0.358	ng		100
28) Fluoranthene	19.322	202	14210	0.391	ng		98
30) Pyrene	19.684	202	14535	0.386	ng		99
32) Benzo(a)anthracene	21.438	228	10068	0.360	ng		98
33) Chrysene	21.492	228	13055	0.411	ng		99
34) Bis(2-ethylhexyl)phtha...	21.384	149	6103	0.320	ng		99
36) Indeno(1,2,3-cd)pyrene	26.271	276	12343	0.380	ng	#	84
37) Benzo(b)fluoranthene	23.101	252	11829	0.409	ng		99
38) Benzo(k)fluoranthene	23.148	252	12196	0.403	ng		99
39) Benzo(a)pyrene	23.715	252	9876	0.392	ng		98
40) Dibenzo(a,h)anthracene	26.309	278	10400	0.402	ng		98
41) Benzo(g,h,i)perylene	27.004	276	12398	0.393	ng		97

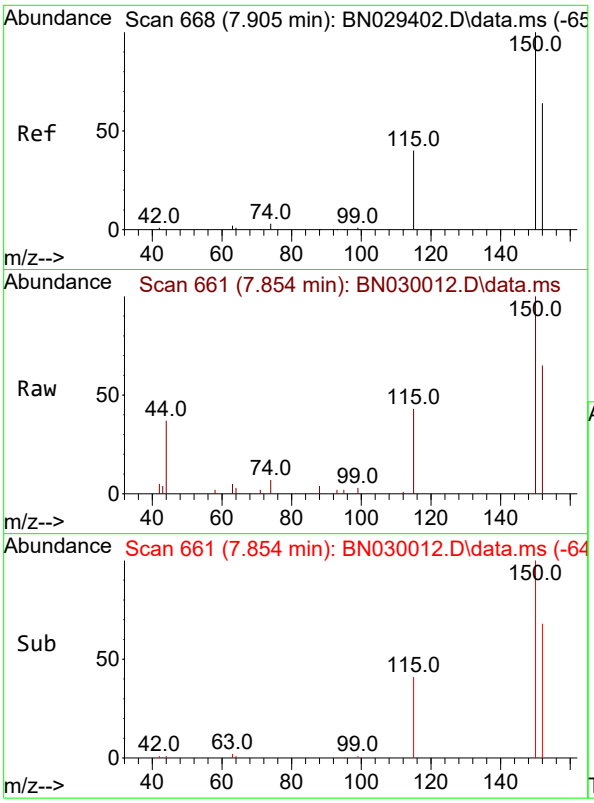
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022424\
Data File : BN030012.D
Acq On : 25 Feb 2024 04:07
Operator : MA/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Feb 26 02:47:18 2024
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012924.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Feb 26 02:39:45 2024
Response via : Initial Calibration



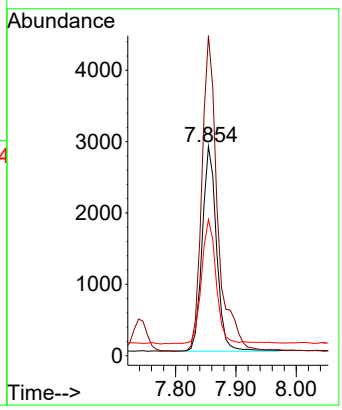


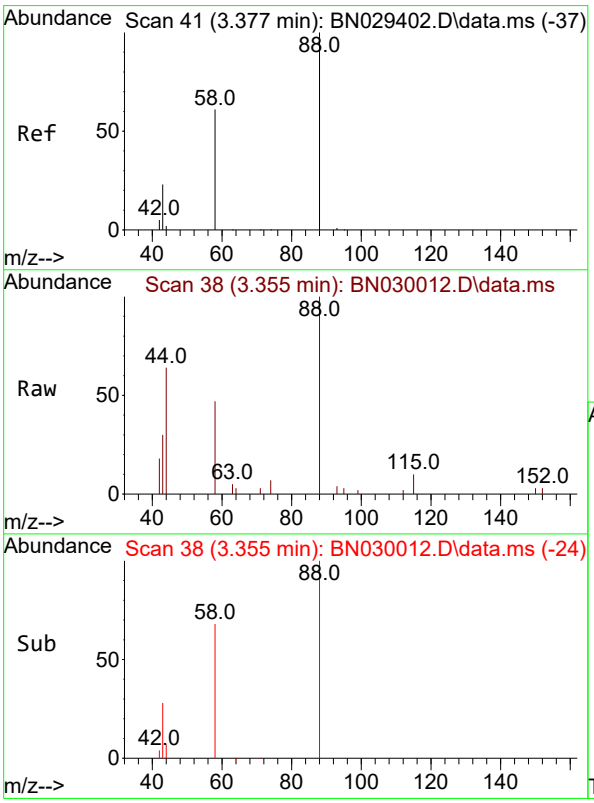
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.854 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 4761

Ion	Ratio	Lower	Upper
152	100		
150	153.0	123.0	184.4
115	65.1	51.4	77.0

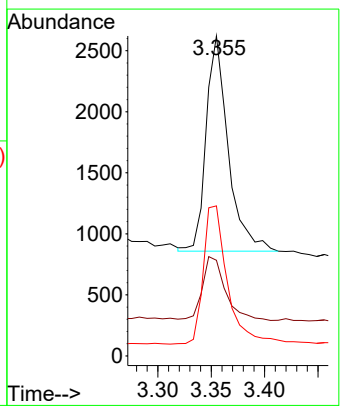


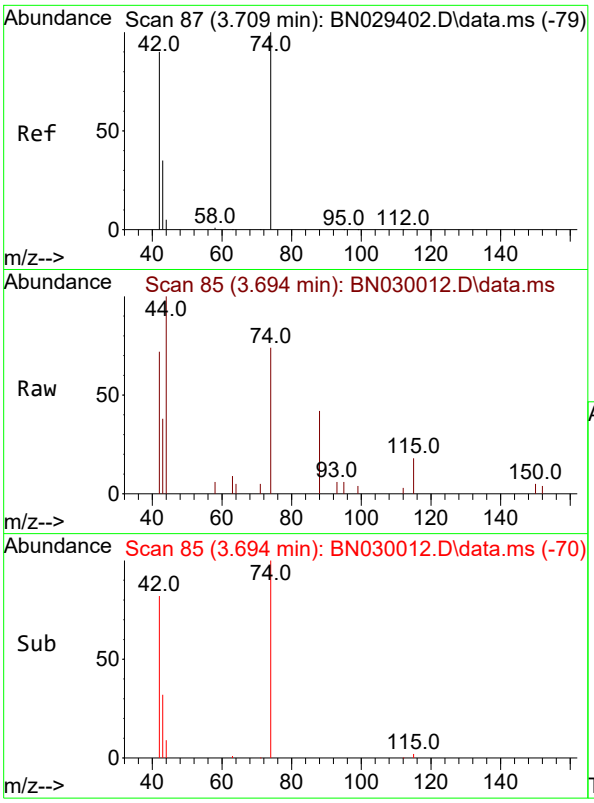


#2
1,4-Dioxane
Concen: 0.378 ng
RT: 3.355 min Scan# 38
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion: 88 Resp: 2534

Ion	Ratio	Lower	Upper
88	100		
43	31.1	23.3	34.9
58	70.0	53.8	80.6



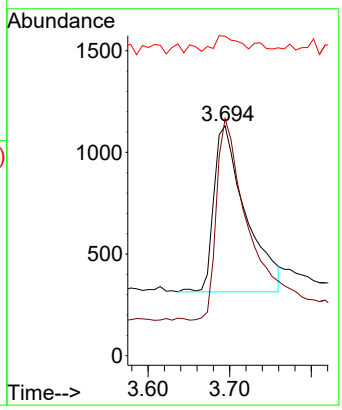


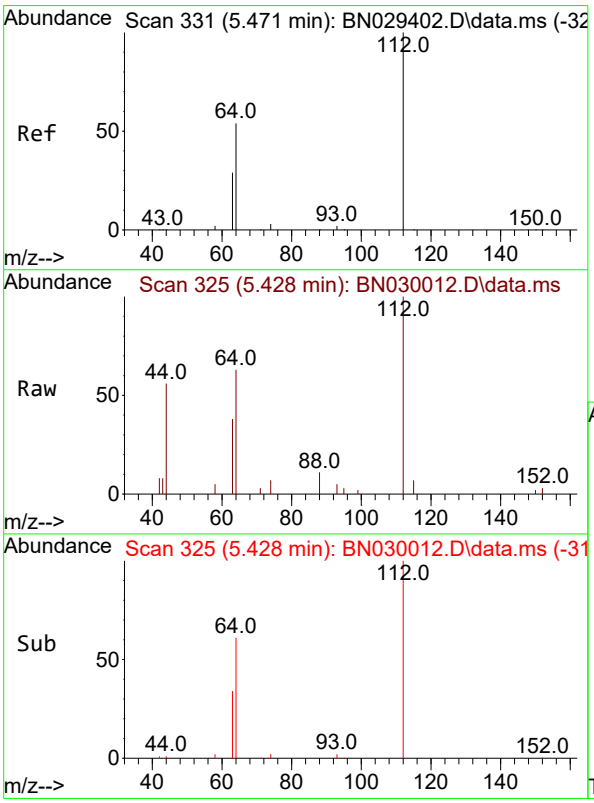
#3
n-Nitrosodimethylamine
Concen: 0.404 ng
RT: 3.694 min Scan# 8
Delta R.T. 0.007 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 2209

Ion	Ratio	Lower	Upper
42	100		
74	118.6	93.7	140.5
44	7.2	13.0	19.4#

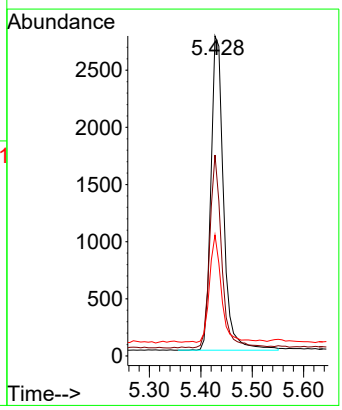


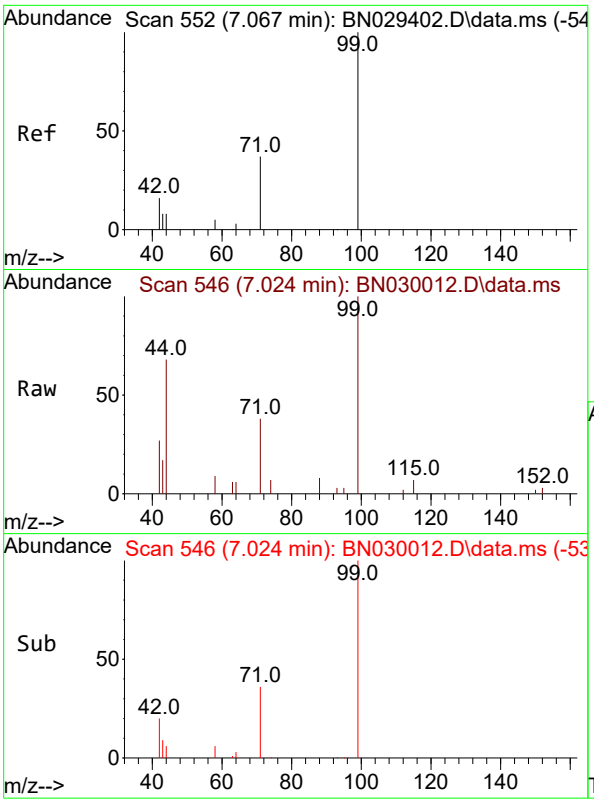


#4
2-Fluorophenol
Concen: 0.410 ng
RT: 5.428 min Scan# 325
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:112 Resp: 4690

Ion	Ratio	Lower	Upper
112	100		
64	57.8	47.2	70.8
63	32.5	25.8	38.6



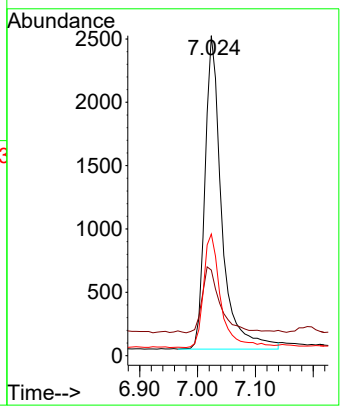


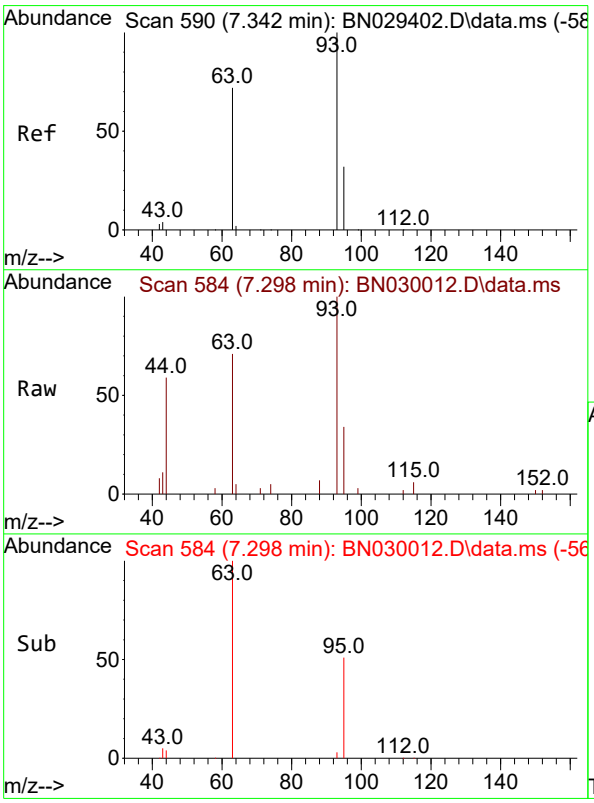
#5
Phenol-d6
Concen: 0.378 ng
RT: 7.024 min Scan# 54
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 4993

Ion	Ratio	Lower	Upper
99	100		
42	22.8	16.9	25.3
71	37.1	30.0	45.0

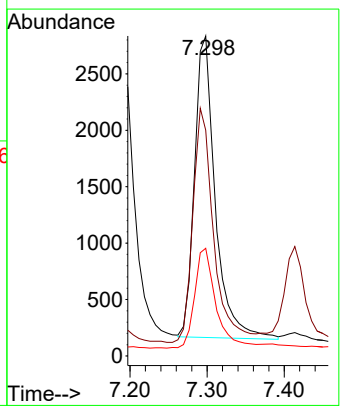


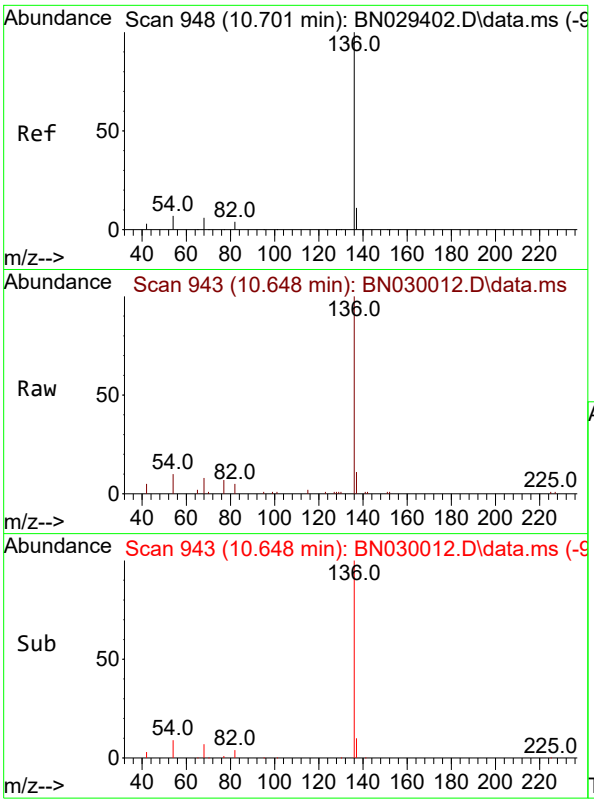


#6
bis(2-Chloroethyl)ether
Concen: 0.396 ng
RT: 7.298 min Scan# 584
Delta R.T. 0.007 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion: 93 Resp: 4988

Ion	Ratio	Lower	Upper
93	100		
63	78.2	63.1	94.7
95	34.1	27.1	40.7



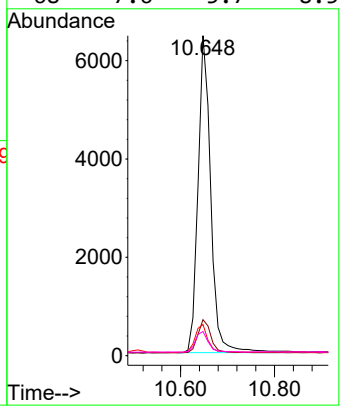


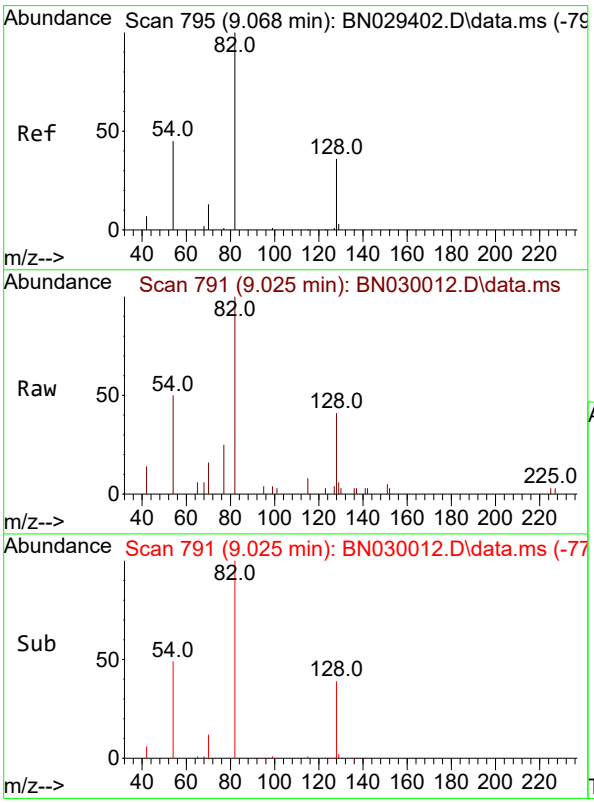
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.648 min Scan# 94
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 12123

Ion	Ratio	Lower	Upper
136	100		
137	11.3	9.7	14.5
54	9.7	6.6	10.0
68	7.6	5.7	8.5

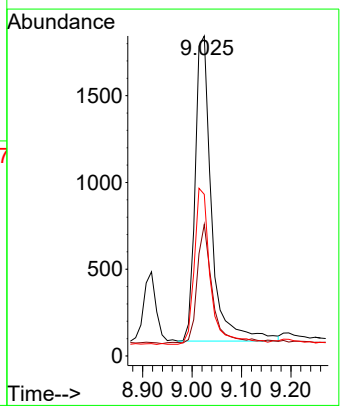


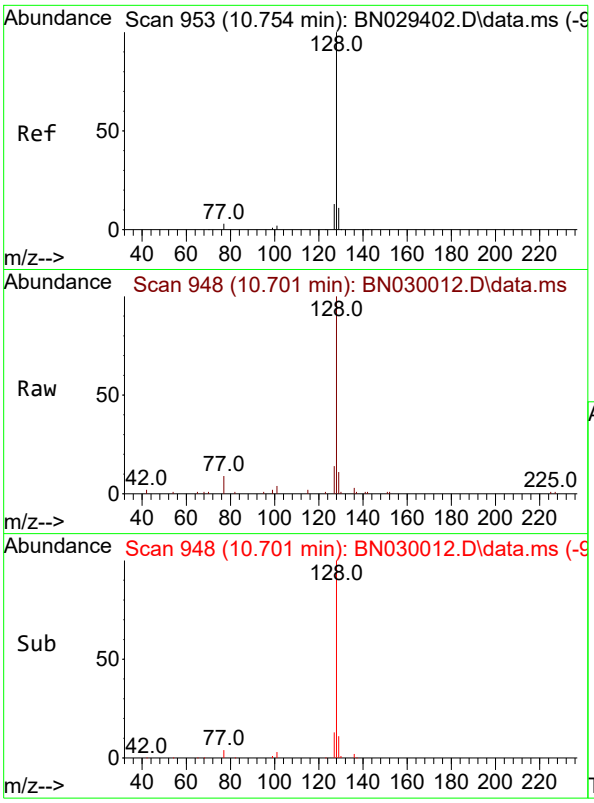


#8
Nitrobenzene-d5
Concen: 0.403 ng
RT: 9.025 min Scan# 791
Delta R.T. 0.011 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion: 82 Resp: 4063

Ion	Ratio	Lower	Upper
82	100		
128	41.1	31.6	47.4
54	50.5	38.2	57.4



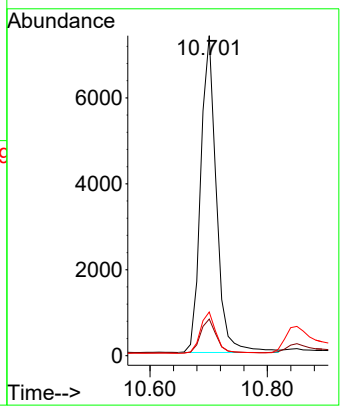


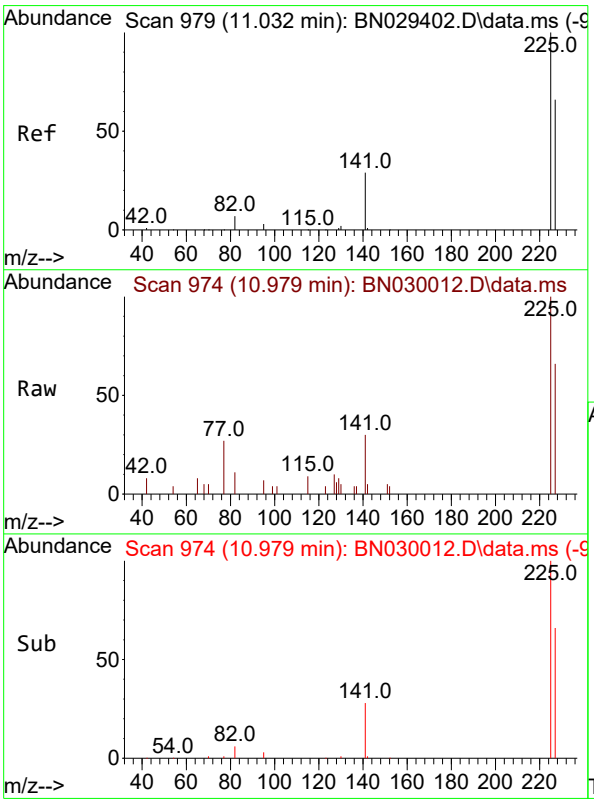
#9
Naphthalene
Concen: 0.397 ng
RT: 10.701 min Scan# 94
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 13726

Ion	Ratio	Lower	Upper
128	100		
129	11.5	9.5	14.3
127	13.7	10.8	16.2

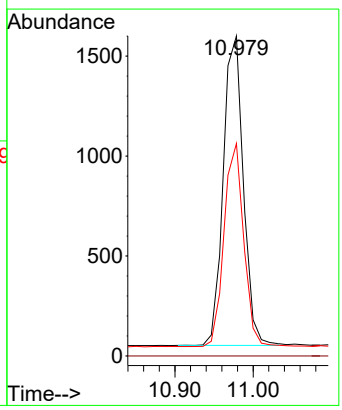


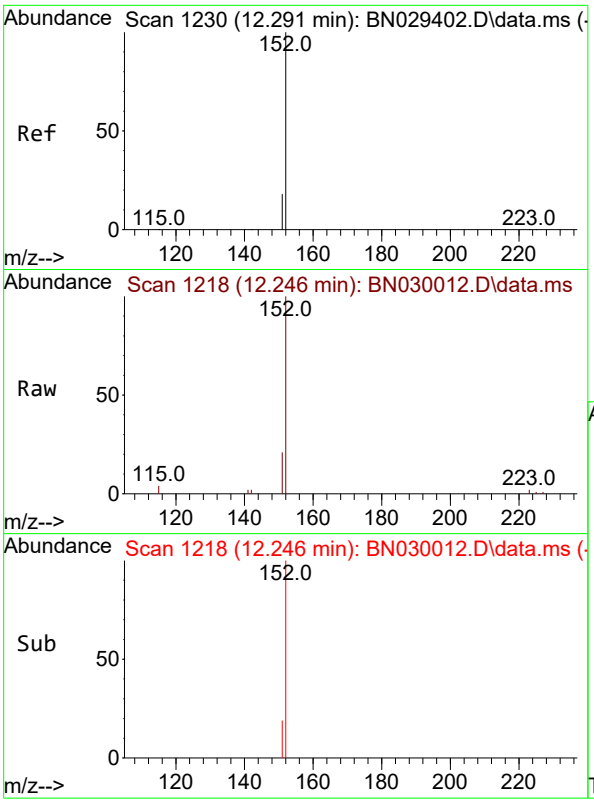


#10
Hexachlorobutadiene
Concen: 0.420 ng
RT: 10.979 min Scan# 974
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:225 Resp: 2753

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.3	51.1	76.7



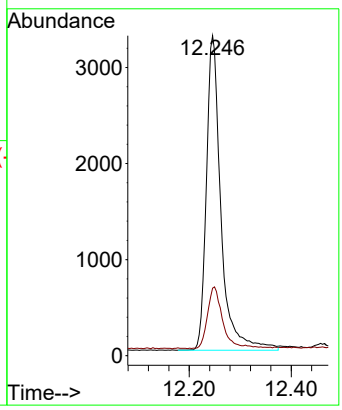


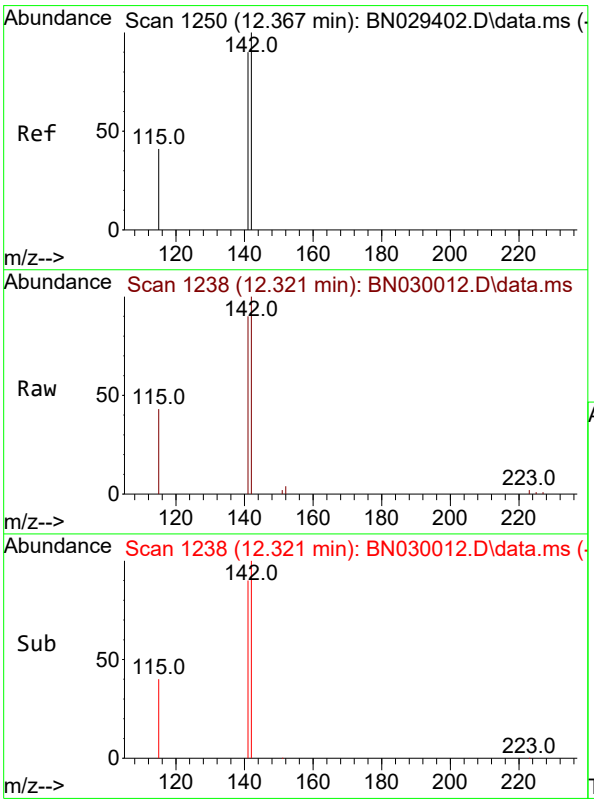
#11
2-Methylnaphthalene-d10
Concen: 0.394 ng
RT: 12.246 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 6498

Ion	Ratio	Lower	Upper
152	100		
151	19.9	17.1	25.7

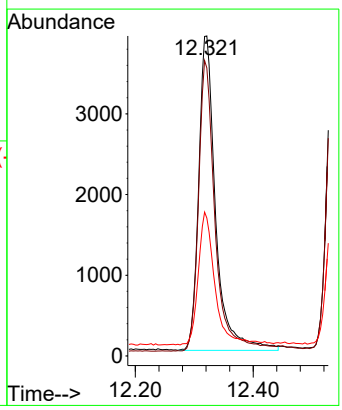


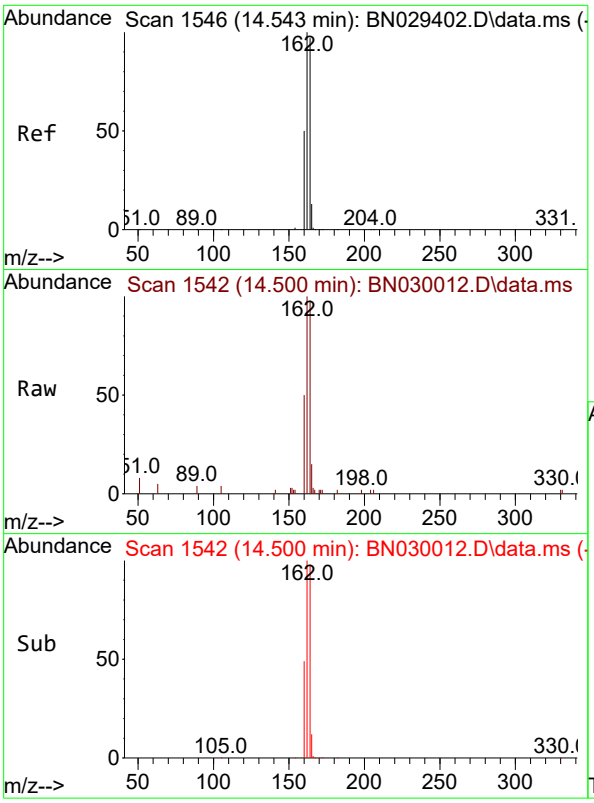


#12
2-Methylnaphthalene
Concen: 0.384 ng
RT: 12.321 min Scan# 1238
Delta R.T. 0.004 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:142 Resp: 7792

Ion	Ratio	Lower	Upper
142	100		
141	90.0	71.9	107.9
115	43.1	33.9	50.9



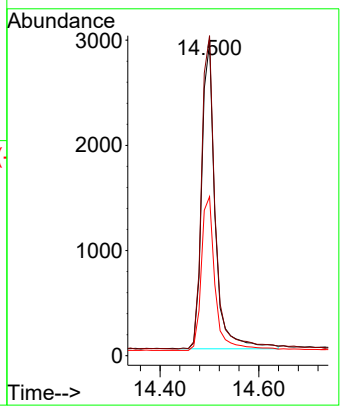


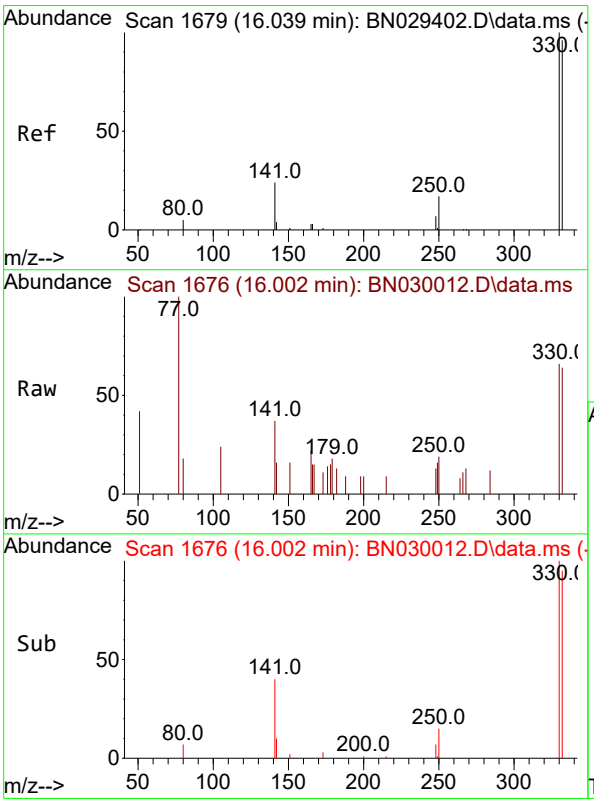
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.500 min Scan# 1
Delta R.T. 0.011 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 5493

Ion	Ratio	Lower	Upper
164	100		
162	102.2	82.6	123.8
160	50.8	41.5	62.3

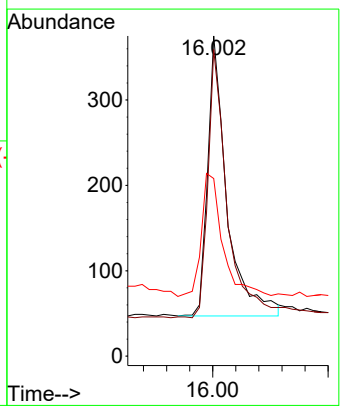


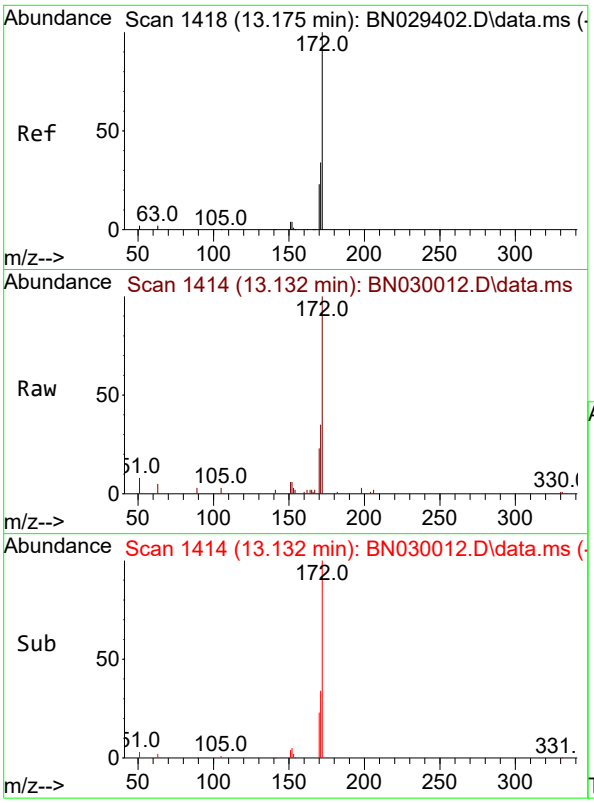


#14
2,4,6-Tribromophenol
Concen: 0.431 ng
RT: 16.002 min Scan# 1676
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:330 Resp: 760

Ion	Ratio	Lower	Upper
330	100		
332	93.3	76.0	114.0
141	48.2	43.4	65.2



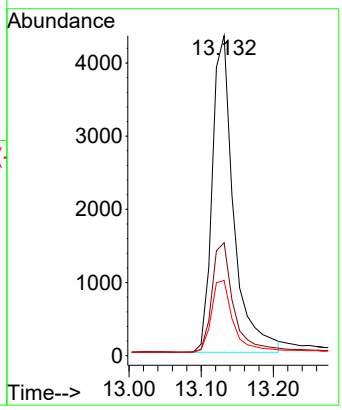


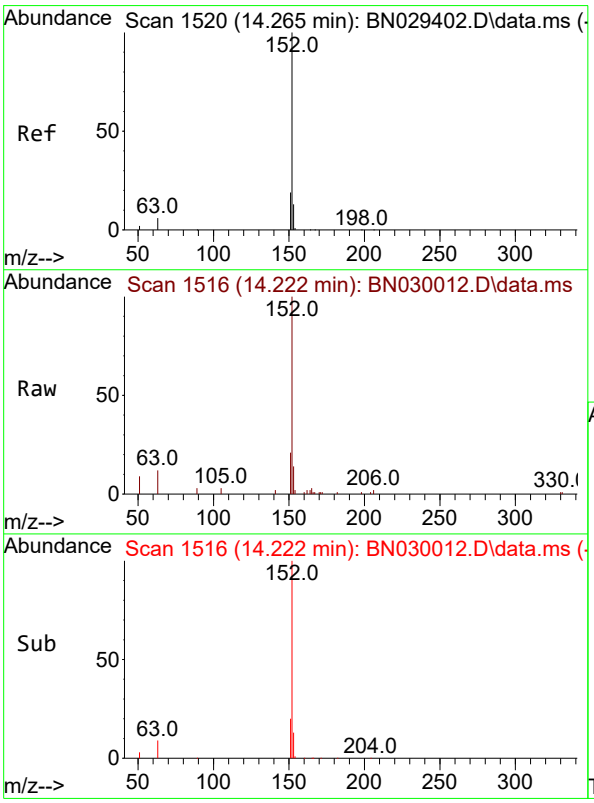
#15
2-Fluorobiphenyl
Concen: 0.379 ng
RT: 13.132 min Scan# 14
Delta R.T. 0.011 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 8934

Ion	Ratio	Lower	Upper
172	100		
171	35.3	28.0	42.0
170	23.5	18.7	28.1

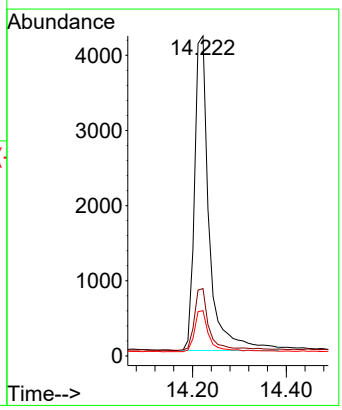


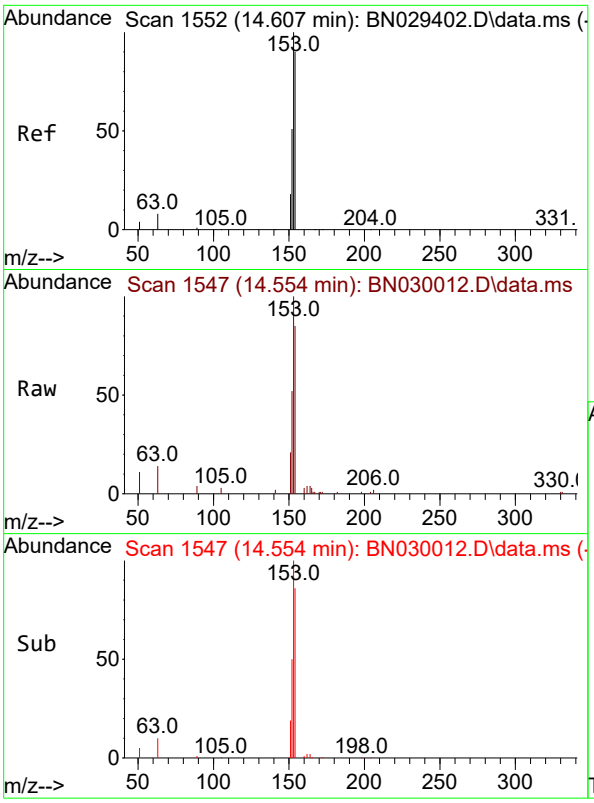


#16
Acenaphthylene
Concen: 0.347 ng
RT: 14.222 min Scan# 1516
Delta R.T. 0.011 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:152 Resp: 9064

Ion	Ratio	Lower	Upper
152	100		
151	20.0	15.9	23.9
153	13.3	10.5	15.7



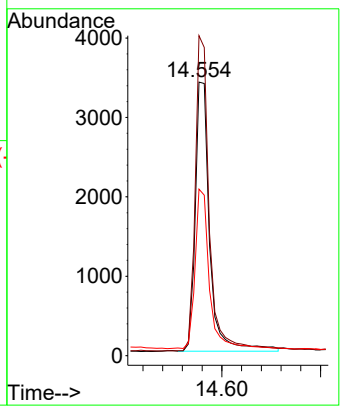


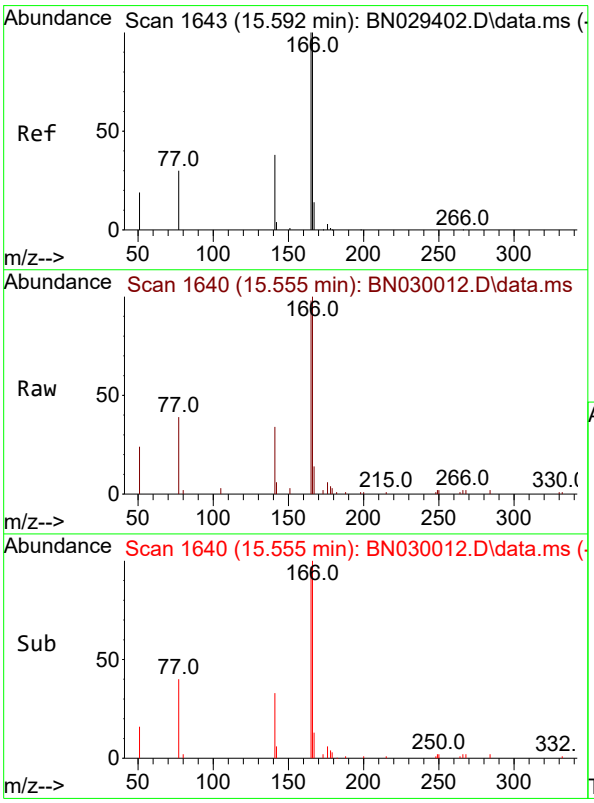
#17
Acenaphthene
Concen: 0.393 ng
RT: 14.554 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:154 Resp: 6884

Ion	Ratio	Lower	Upper
154	100		
153	114.3	93.6	140.4
152	58.4	48.6	73.0

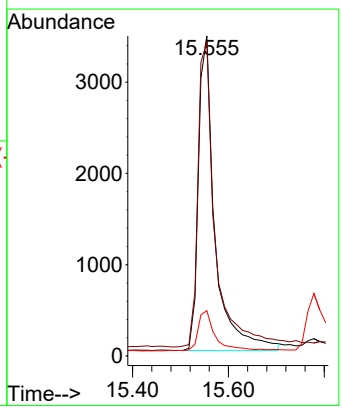


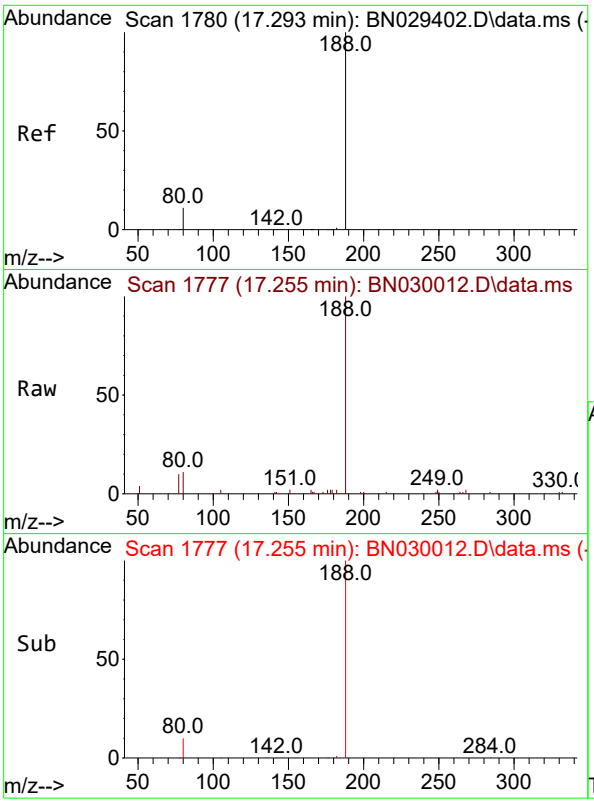


#18
Fluorene
Concen: 0.374 ng
RT: 15.555 min Scan# 1640
Delta R.T. 0.012 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:166 Resp: 8204

Ion	Ratio	Lower	Upper
166	100		
165	99.2	79.9	119.9
167	13.2	11.3	16.9



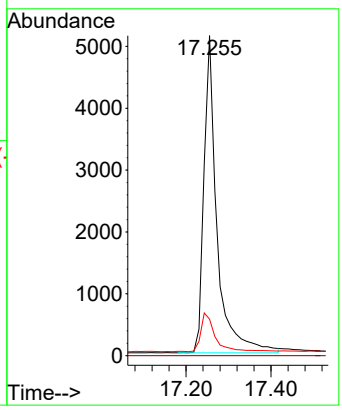


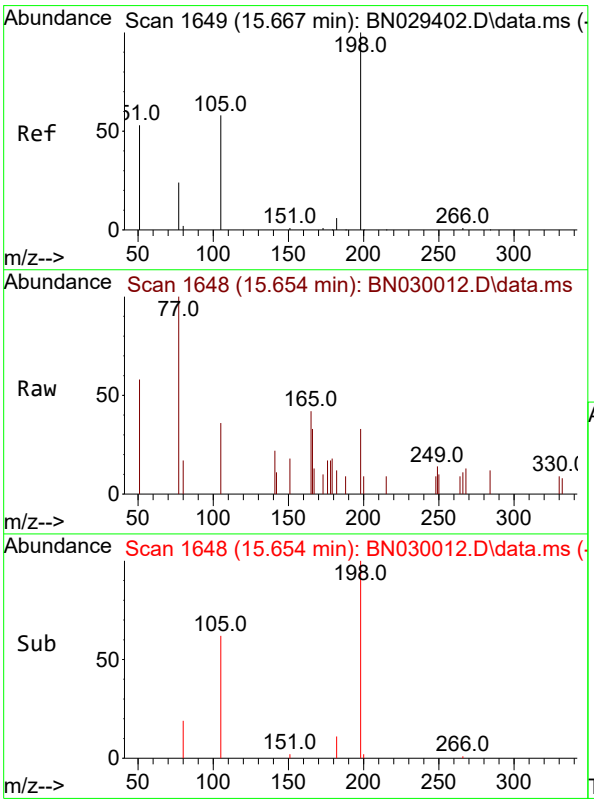
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.255 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 10916

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.4	10.0	15.0

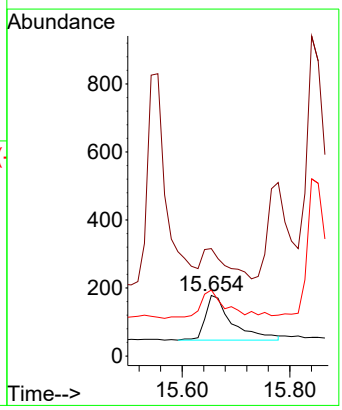


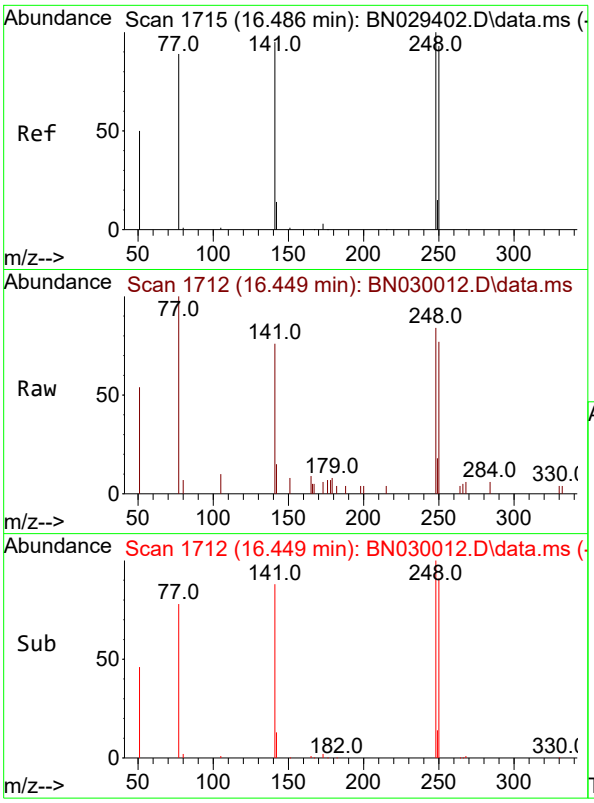


#20
4,6-Dinitro-2-methylphenol
Concen: 0.281 ng
RT: 15.654 min Scan# 1648
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:198 Resp: 451

Ion	Ratio	Lower	Upper
198	100		
51	177.5	111.0	166.6#
105	109.0	67.0	100.6#



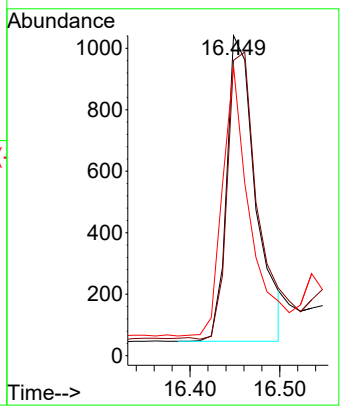


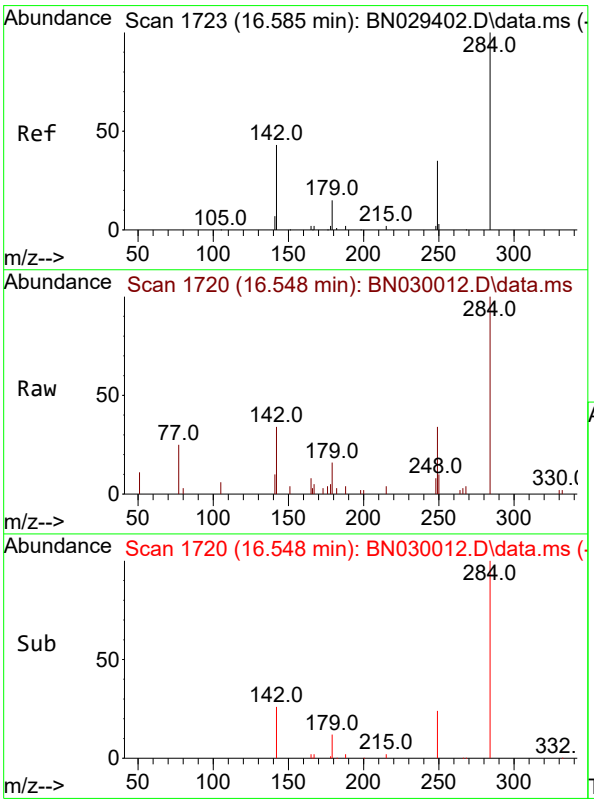
#21
4-Bromophenyl-phenylether
Concen: 0.344 ng
RT: 16.449 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 2234

Ion	Ratio	Lower	Upper
248	100		
250	92.3	75.0	112.4
141	90.5	77.0	115.6

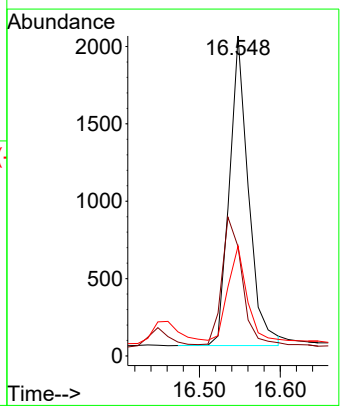


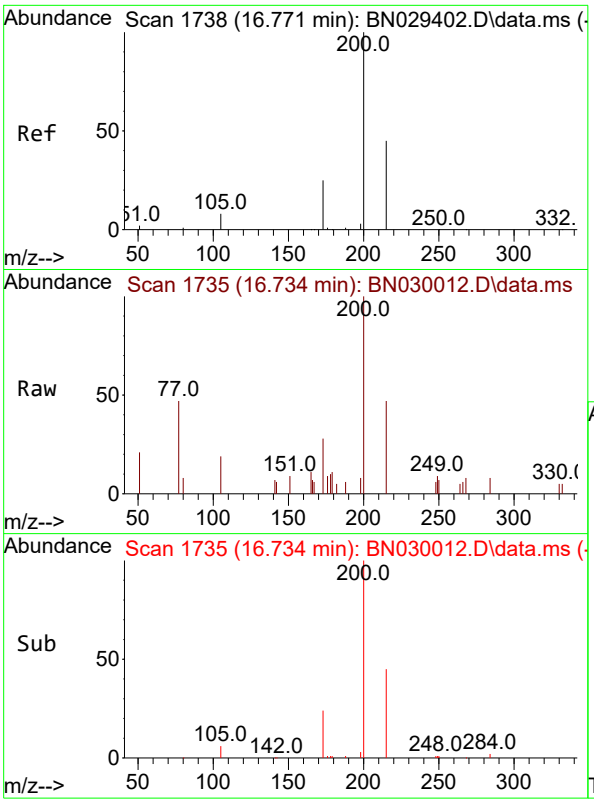


#22
Hexachlorobenzene
Concen: 0.410 ng
RT: 16.548 min Scan# 1720
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:284 Resp: 3268

Ion	Ratio	Lower	Upper
284	100		
142	43.3	39.4	59.2
249	29.6	26.9	40.3



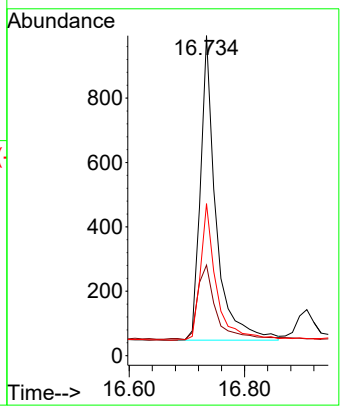


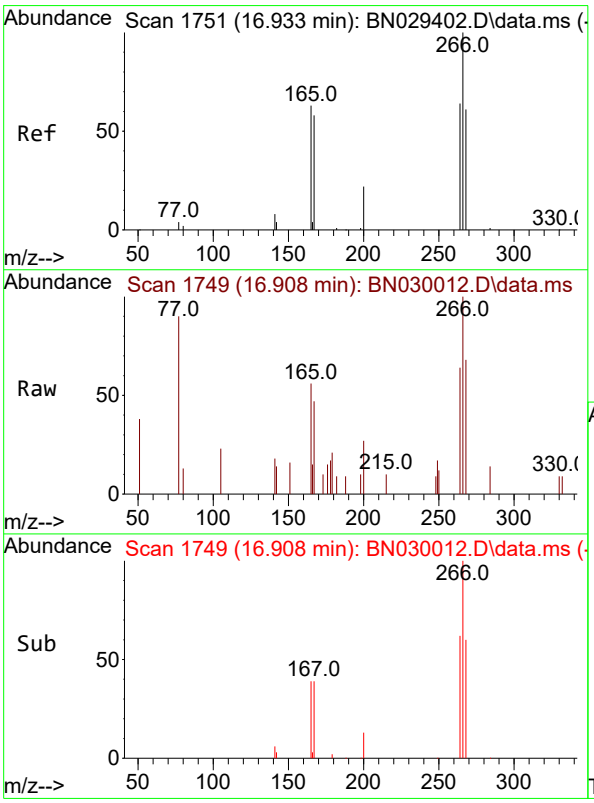
#23
Atrazine
Concen: 0.381 ng
RT: 16.734 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 1761

Ion	Ratio	Lower	Upper
200	100		
173	28.3	23.4	35.0
215	47.5	38.4	57.6

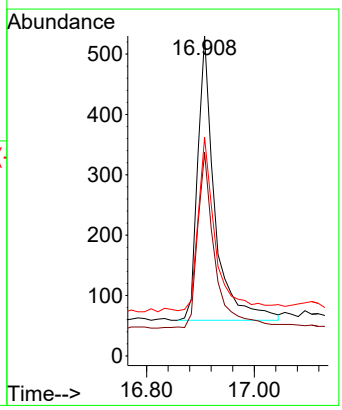


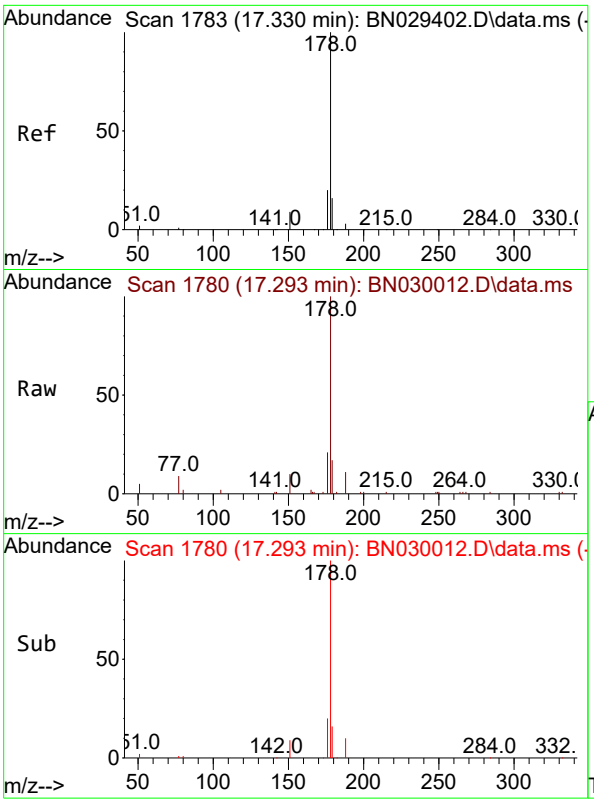


#24
Pentachlorophenol
Concen: 0.411 ng
RT: 16.908 min Scan# 1749
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:266 Resp: 1037

Ion	Ratio	Lower	Upper
266	100		
264	61.8	50.8	76.2
268	62.1	51.5	77.3



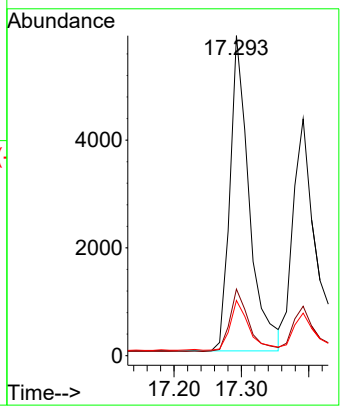


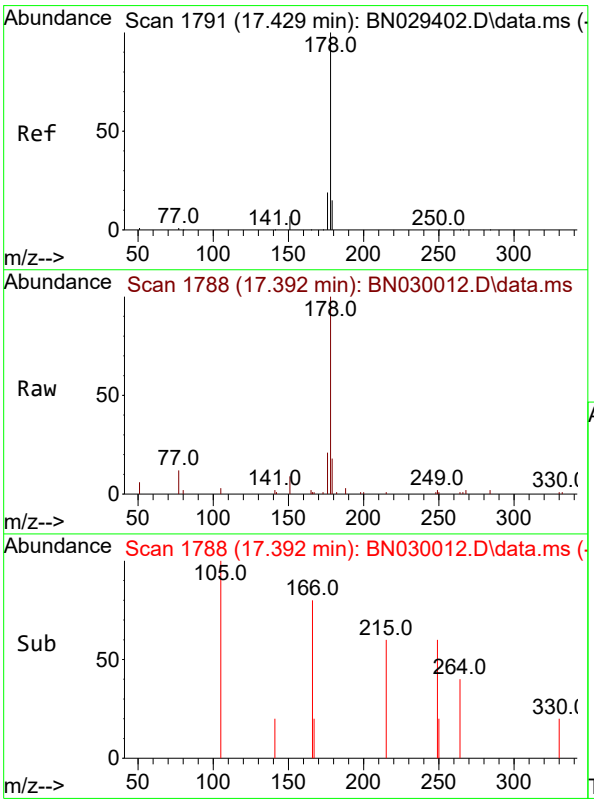
#25
Phenanthrene
Concen: 0.362 ng
RT: 17.293 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 11673

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.8	23.6
179	15.5	12.6	19.0

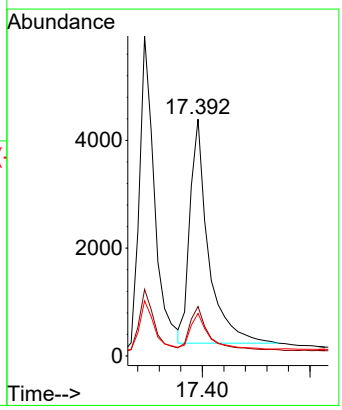


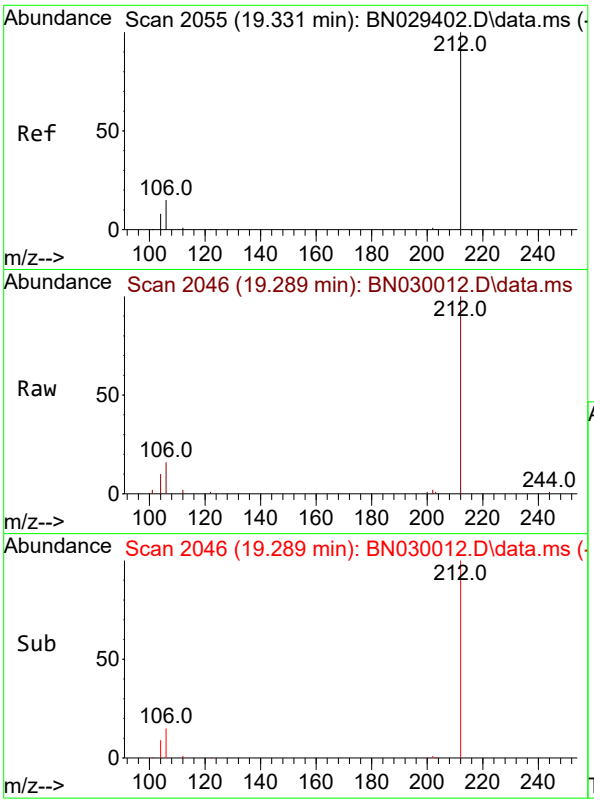


#26
Anthracene
Concen: 0.358 ng
RT: 17.392 min Scan# 1788
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:178 Resp: 9859

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.0	22.4
179	15.6	12.3	18.5



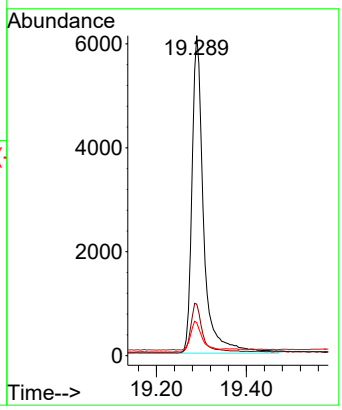


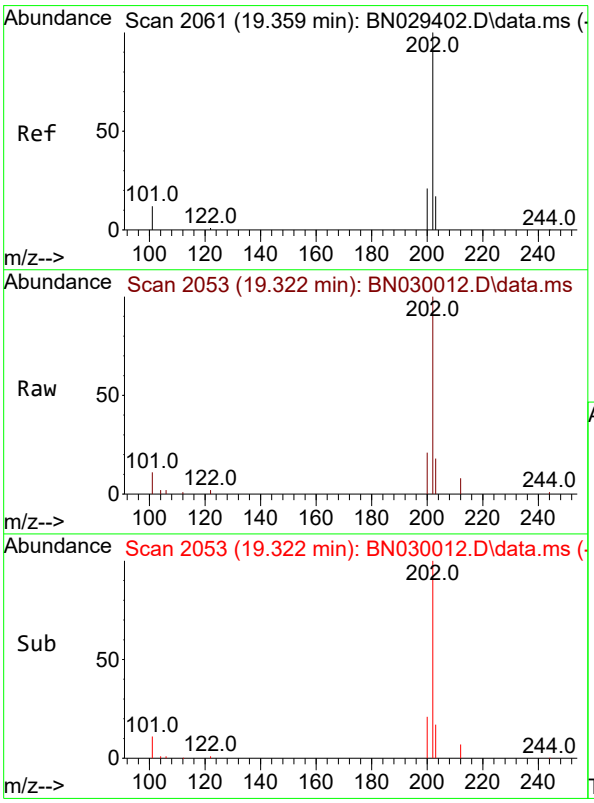
#27
Fluoranthene-d10
Concen: 0.418 ng
RT: 19.289 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 11050

Ion	Ratio	Lower	Upper
212	100		
106	15.0	13.2	19.8
104	8.4	7.7	11.5

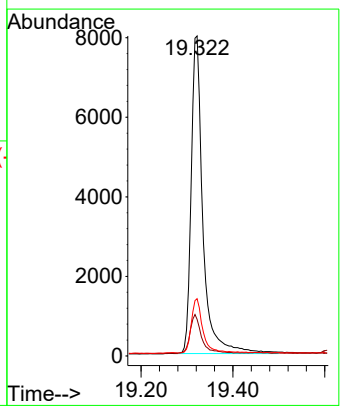


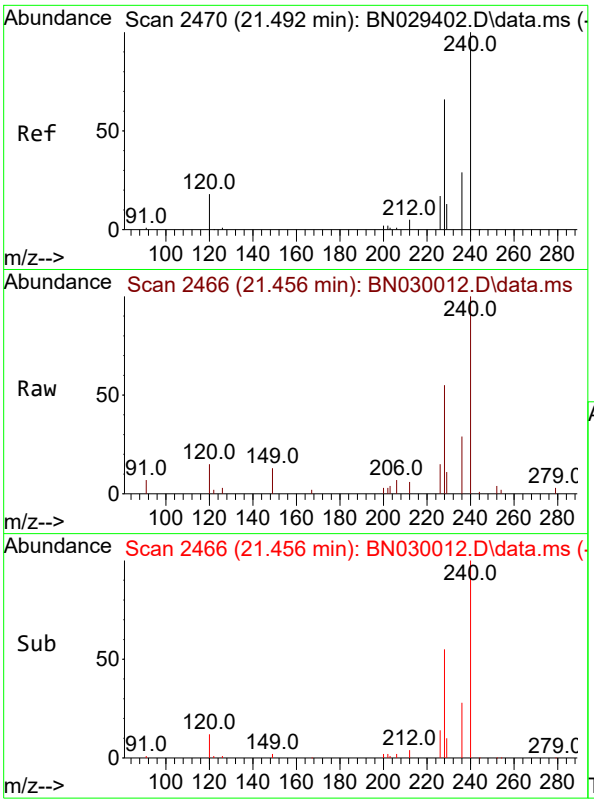


#28
Fluoranthene
Concen: 0.391 ng
RT: 19.322 min Scan# 2053
Delta R.T. 0.005 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:202 Resp: 14210

Ion	Ratio	Lower	Upper
202	100		
101	12.0	10.5	15.7
203	16.6	13.5	20.3



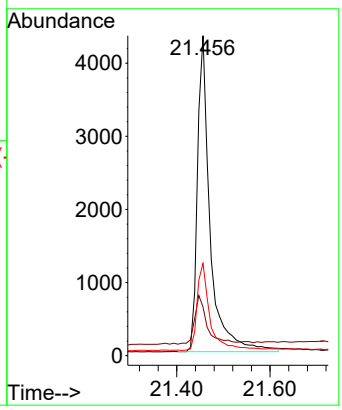


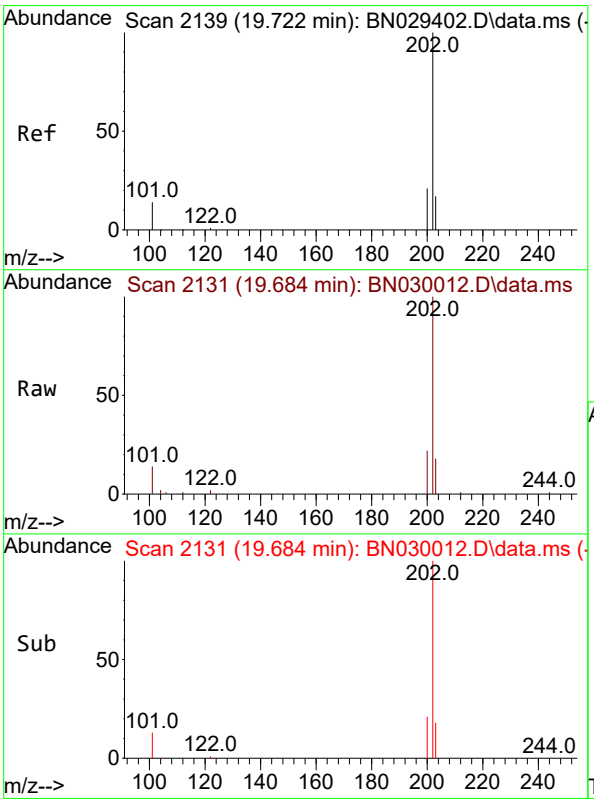
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.456 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 8187

Ion	Ratio	Lower	Upper
240	100		
120	15.2	16.7	25.1#
236	28.8	23.9	35.9

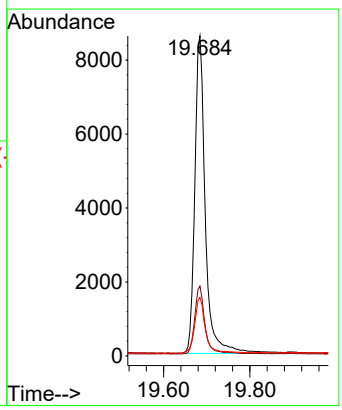


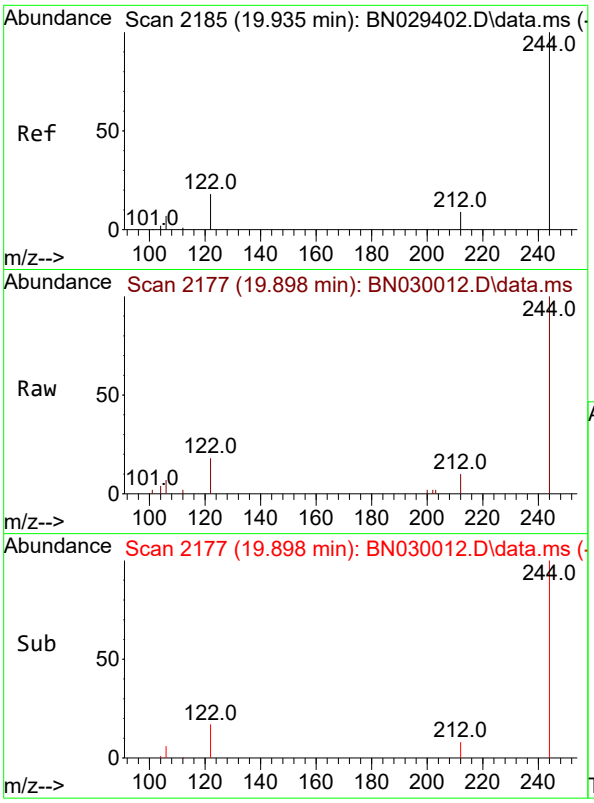


#30
Pyrene
Concen: 0.386 ng
RT: 19.684 min Scan# 2131
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:202 Resp: 14535

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.6	25.0
203	17.9	14.2	21.4



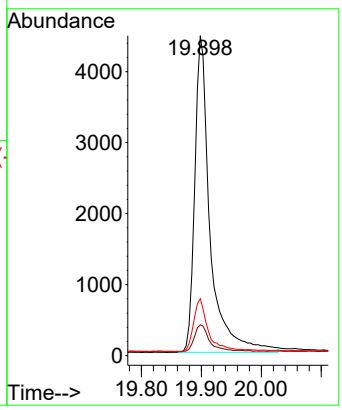


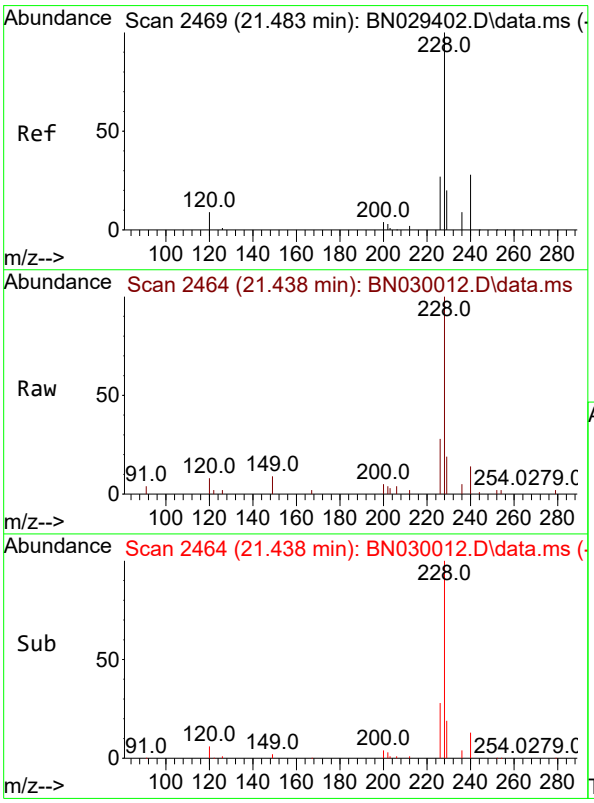
#31
Terphenyl-d14
Concen: 0.391 ng
RT: 19.898 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 7947

Ion	Ratio	Lower	Upper
244	100		
212	9.7	8.2	12.4
122	17.8	15.6	23.4

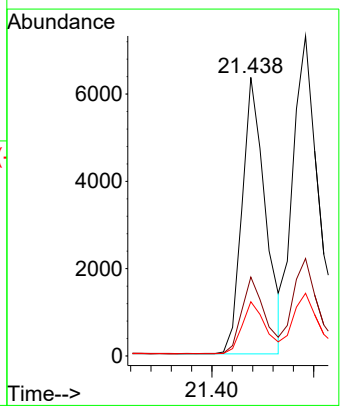


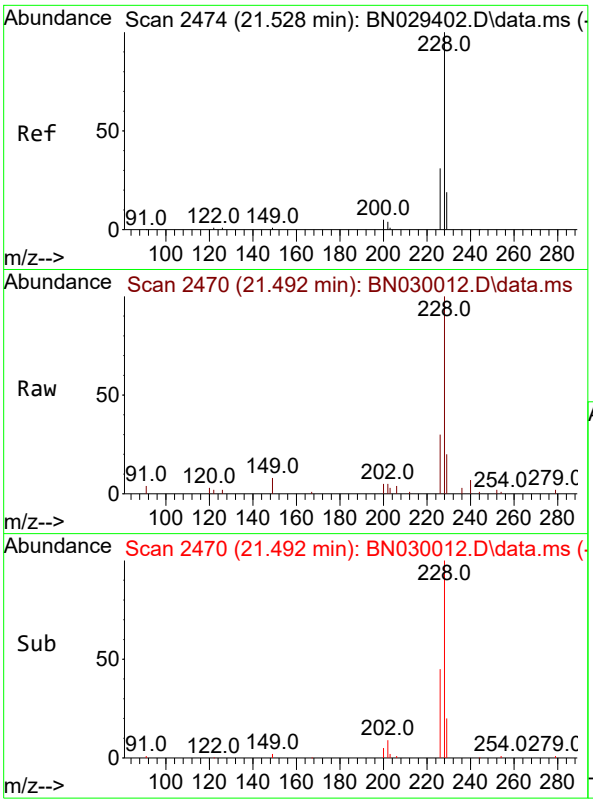


#32
Benzo(a)anthracene
Concen: 0.360 ng
RT: 21.438 min Scan# 2464
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:228 Resp: 10068

Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.2	33.4
229	19.5	16.5	24.7



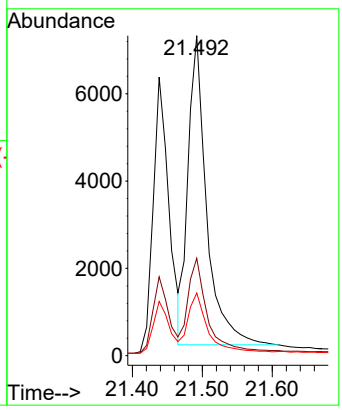


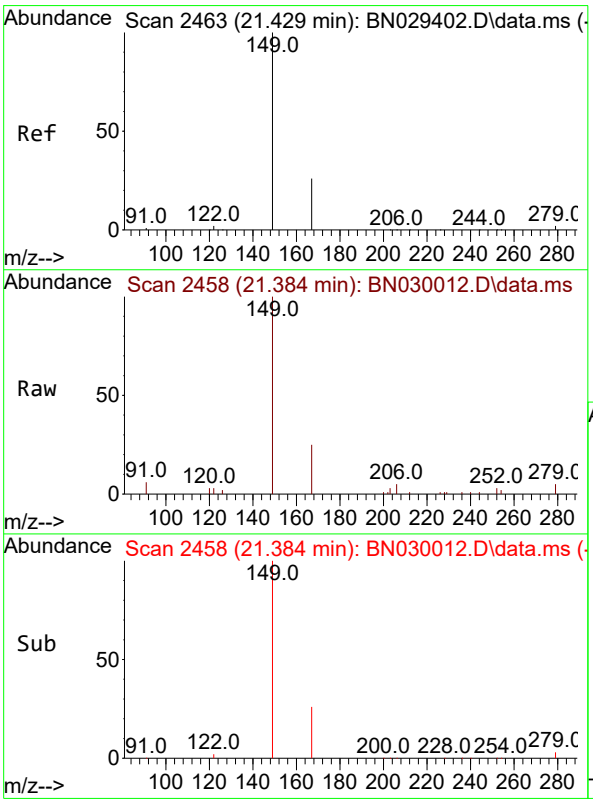
#33
Chrysene
Concen: 0.411 ng
RT: 21.492 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 13055

Ion	Ratio	Lower	Upper
228	100		
226	30.4	24.9	37.3
229	19.6	15.9	23.9

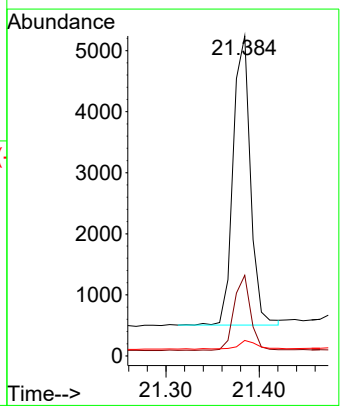


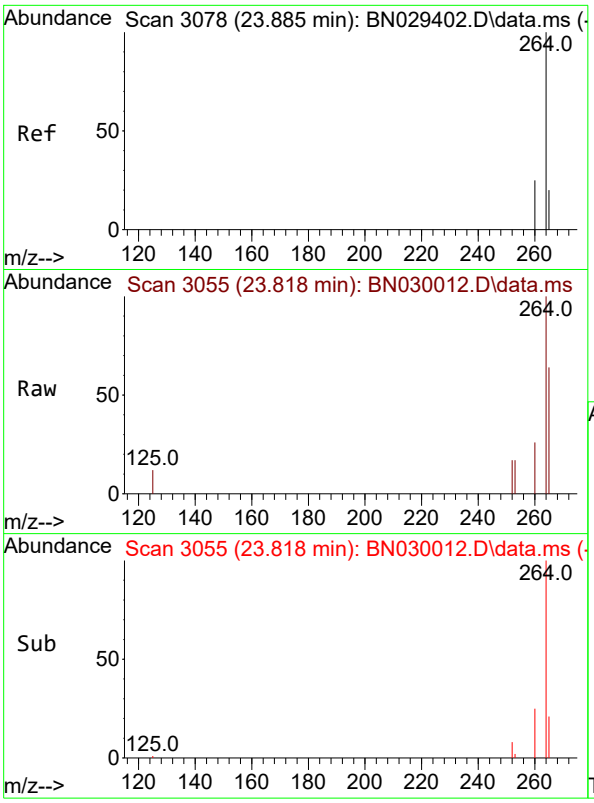


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.320 ng
RT: 21.384 min Scan# 2458
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:149 Resp: 6103

Ion	Ratio	Lower	Upper
149	100		
167	24.8	20.1	30.1
279	3.5	2.5	3.7



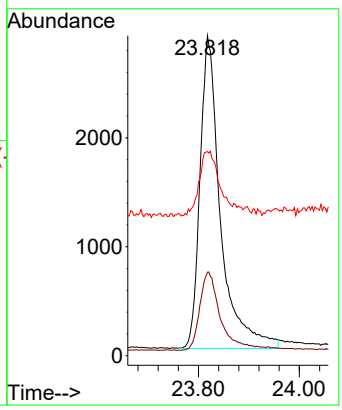


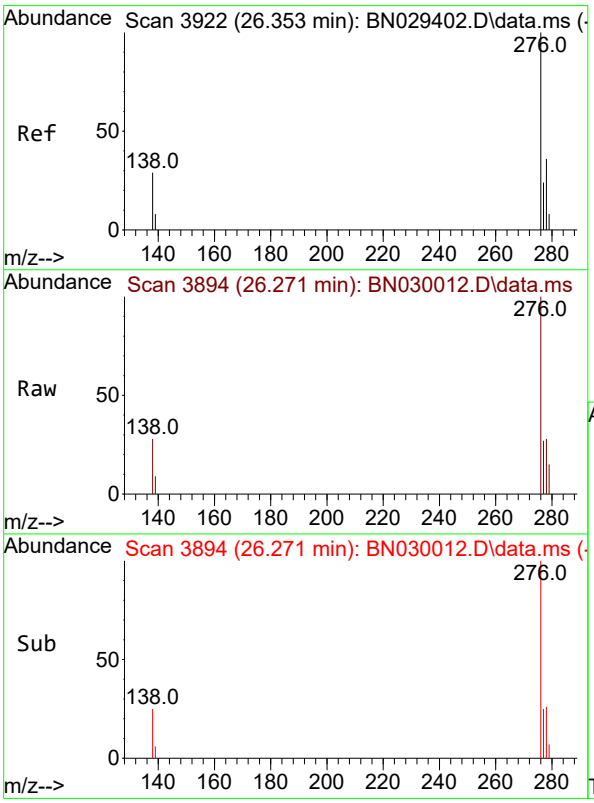
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.818 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 8089

Ion	Ratio	Lower	Upper
264	100		
260	26.1	21.2	31.8
265	63.8	41.5	62.3#

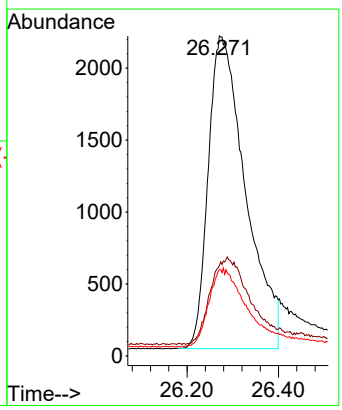


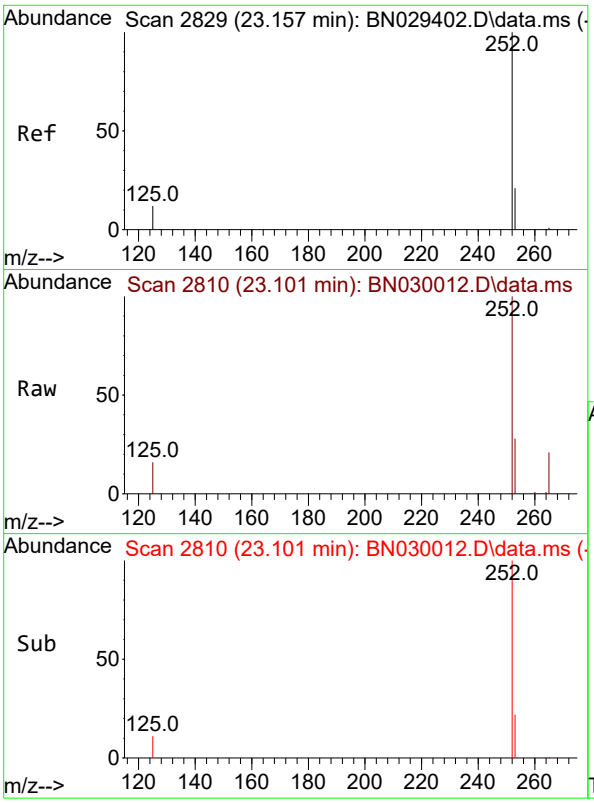


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.380 ng
RT: 26.271 min Scan# 3894
Delta R.T. 0.003 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:276 Resp: 12343

Ion	Ratio	Lower	Upper
276	100		
138	29.3	20.5	30.7
277	9.1	17.0	25.4#



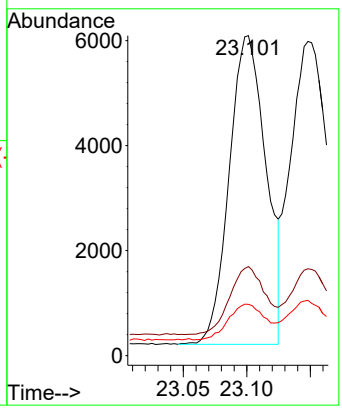


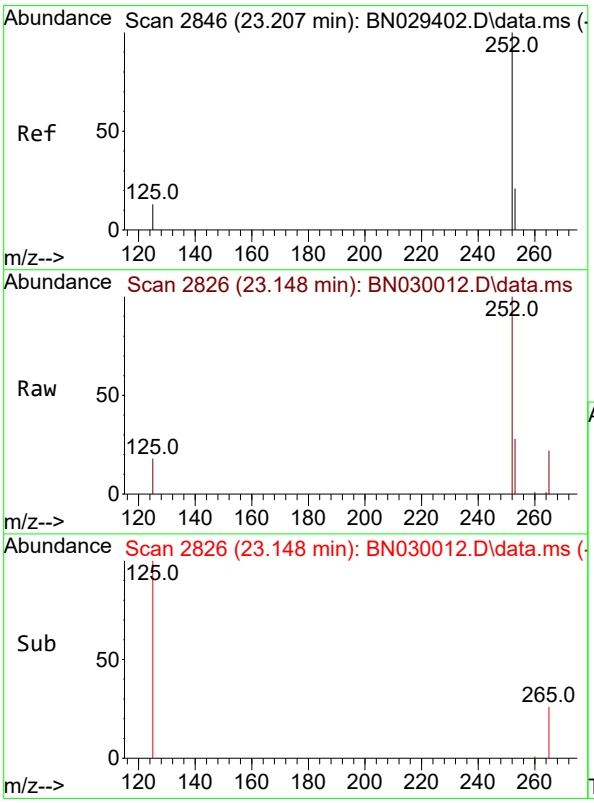
#37
Benzo(b)fluoranthene
Concen: 0.409 ng
RT: 23.101 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 11829

Ion	Ratio	Lower	Upper
252	100		
253	27.9	21.7	32.5
125	16.1	13.3	19.9

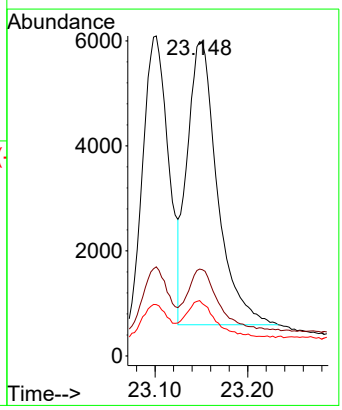


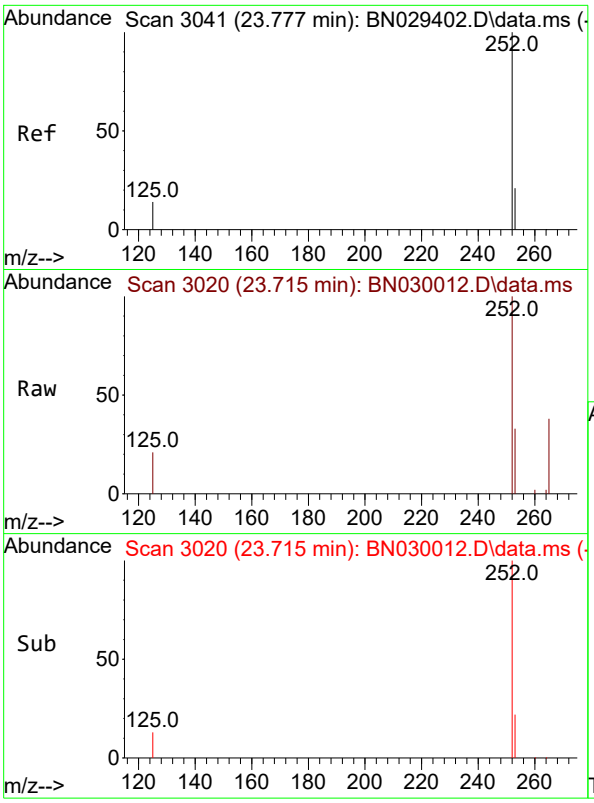


#38
Benzo(k)fluoranthene
Concen: 0.403 ng
RT: 23.148 min Scan# 2826
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:252 Resp: 12196

Ion	Ratio	Lower	Upper
252	100		
253	27.6	21.8	32.8
125	17.6	13.9	20.9



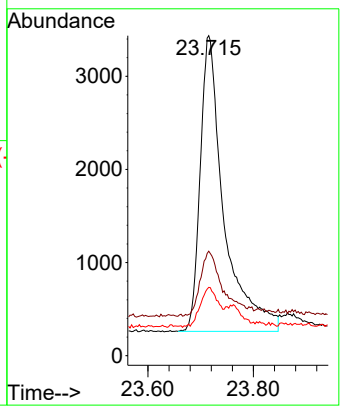


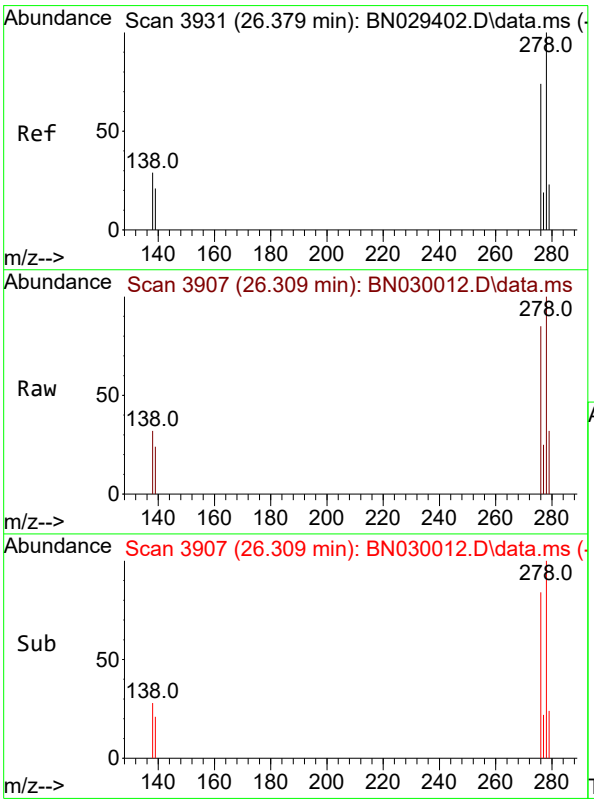
#39
Benzo(a)pyrene
Concen: 0.392 ng
RT: 23.715 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 9876

Ion	Ratio	Lower	Upper
252	100		
253	32.7	24.9	37.3
125	21.4	16.6	25.0

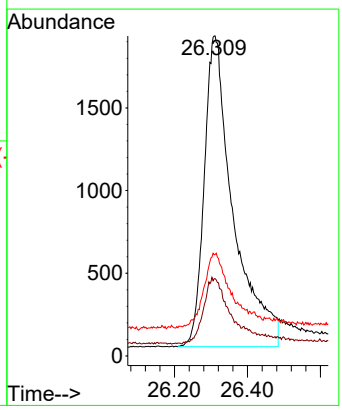


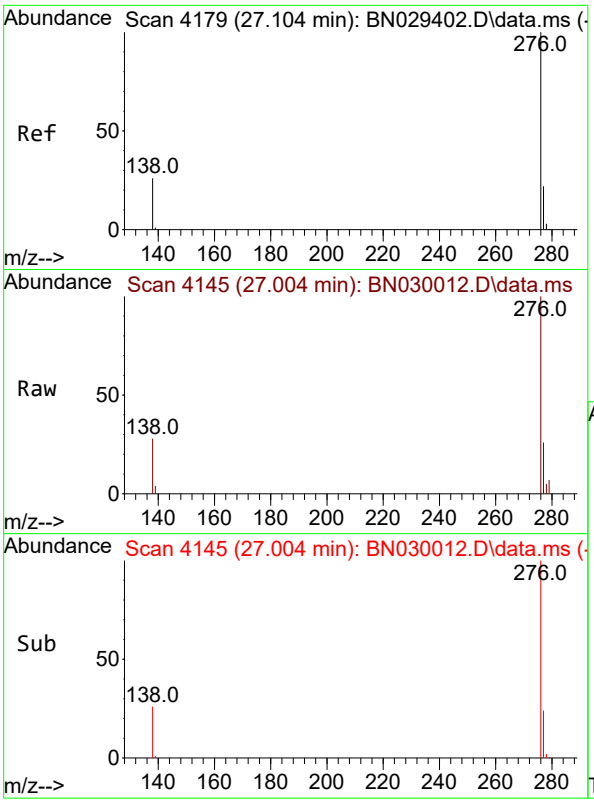


#40
Dibenzo(a,h)anthracene
Concen: 0.402 ng
RT: 26.309 min Scan# 3907
Delta R.T. 0.006 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Tgt Ion:278 Resp: 10400

Ion	Ratio	Lower	Upper
278	100		
139	24.1	20.4	30.6
279	31.6	25.0	37.6





#41
Benzo(g,h,i)perylene
Concen: 0.393 ng
RT: 27.004 min Scan# 4
Delta R.T. -0.003 min
Lab File: BN030012.D
Acq: 25 Feb 2024 04:07

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 12398

Ion	Ratio	Lower	Upper
276	100		
277	25.8	19.4	29.2
138	28.1	23.5	35.3