Quantitation Report (Not Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN082120\
Data File : BN011559.D
Acq On : 21 Aug 2020 17:36
Operator : CG/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTDICCC0.4

Quant Time: Aug 21 18:42:58 2020
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN082120.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Aug 21 18:41:03 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.40	152	1295	0.40	ng		0.00
7) Naphthalene-d8	10.15	136	4148	0.40	ng		0.00
13) Acenaphthene-d10	14.03	164	2586	0.40	ng		0.00
19) Phenanthrene-d10	16.79	188	5877	0.40	ng		0.00
29) Chrysene-d12	21.01	240	4928	0.40	ng		0.00
36) Perylene-d12	23.11	264	4753	0.40	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.07	112	969	0.32	ng		0.00
5) Phenol-d6	6.63	99	854	0.24	ng		0.00
8) Nitrobenzene-d5	8.55	82	900	0.27	ng		0.00
11) 2-Methylnaphthalene-d10	11.75	152	2634	0.34	ng		0.00
14) 2,4,6-Tribromophenol	15.55	330	438	0.38	ng		0.00
15) 2-Fluorobiphenyl	12.66	172	4023	0.35	ng		0.00
27) Fluoranthene-d10	18.84	212	6475	0.36	ng		0.00
31) Terphenyl-d14	19.46	244	4861	0.45	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.11	88	707	0.420	ng	#	100
3) n-Nitrosodimethylamine	3.47	42	274	0.393	ng		76
6) bis(2-Chloroethyl)ether	6.87	93	839	0.305	ng		98
9) Naphthalene	10.20	128	4540	0.376	ng		100
10) Hexachlorobutadiene	10.48	225	1346	0.430	ng	#	100
12) 2-Methylnaphthalene	11.82	142	2986	0.344	ng		100
16) Acenaphthylene	13.75	152	4719	0.364	ng		100
17) Acenaphthene	14.09	154	3210	0.383	ng		100
18) Fluorene	15.09	166	4193	0.389	ng		100
20) 4,6-Dinitro-2-methylphenol	15.26	198	215	0.300	ng		100
21) 4-Bromophenyl-phenylether	16.02	248	599	0.123	ng		100
22) Hexachlorobenzene	16.10	284	1721	0.393	ng		100
23) Atrazine	16.30	200	755	0.264	ng		100
24) Pentachlorophenol	16.48	266	447	0.333	ng		93
25) Phenanthrene	16.83	178	6636	0.354	ng		100
26) Anthracene	16.93	178	5184	0.324	ng		100
28) Fluoranthene	18.87	202	7784	0.351	ng		100
30) Pyrene	19.23	202	7838	0.482	ng		100
32) Benzo(a)anthracene	21.00	228	5447	0.362	ng		100
33) Chrysene	21.05	228	7064	0.412	ng		100
34) Bis(2-ethylhexyl)phthalate	20.96	149	2663	0.497	ng		100
35) Indeno(1,2,3-cd)pyrene	25.14	276	6143	0.293	ng		100
37) Benzo(b)fluoranthene	22.50	252	5306	0.280	ng		100
38) Benzo(k)fluoranthene	22.54	252	6864	0.350	ng		100
39) Benzo(a)pyrene	23.02	252	5749	0.348	ng		100
40) Dibenzo(a,h)anthracene	25.16	278	4644	0.252	ng		100
41) Benzo(g,h,i)perylene	25.76	276	5854	0.304	ng		100

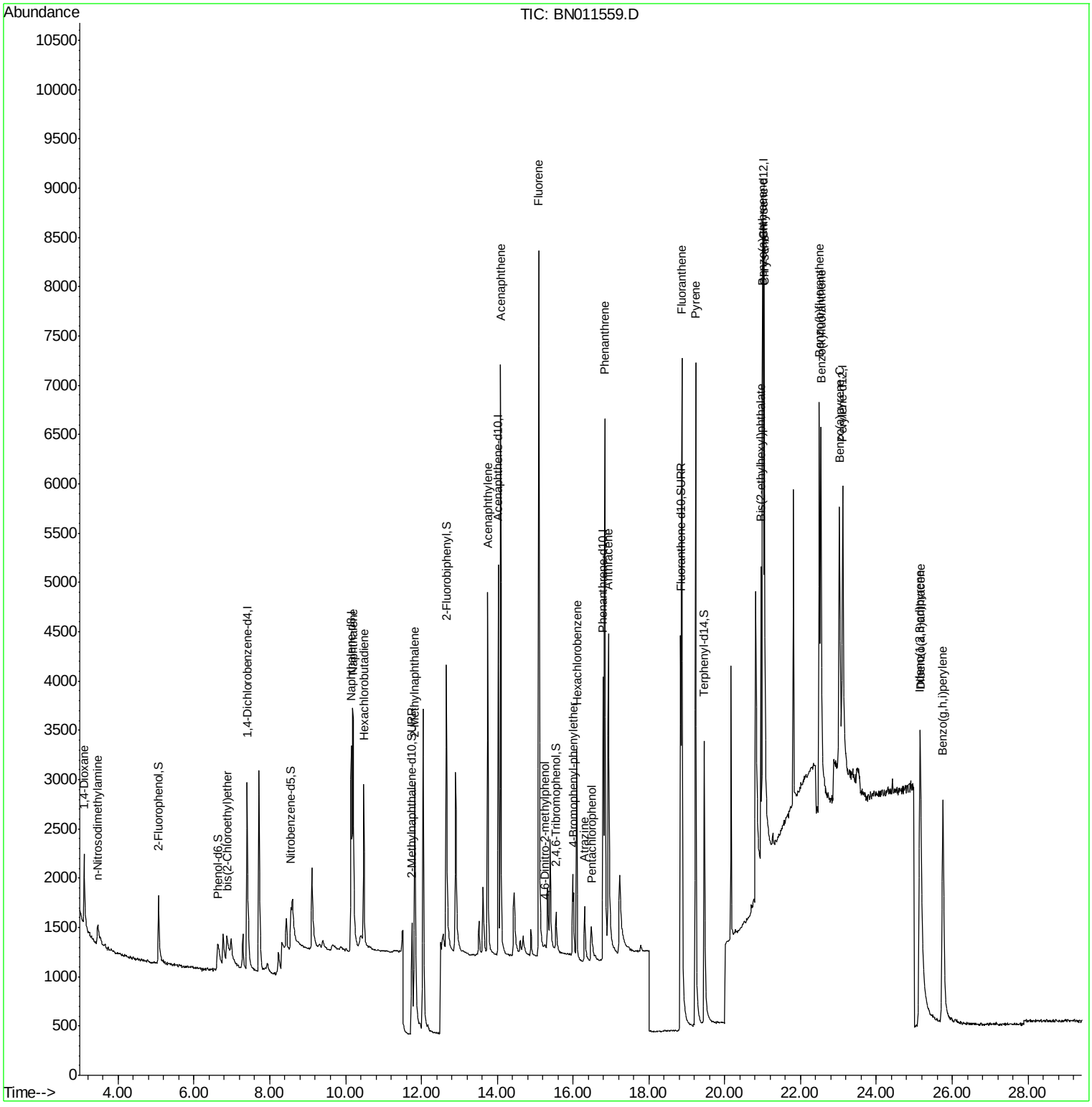
(#) = qualifier out of range (m) = manual integration (+) = signals summed

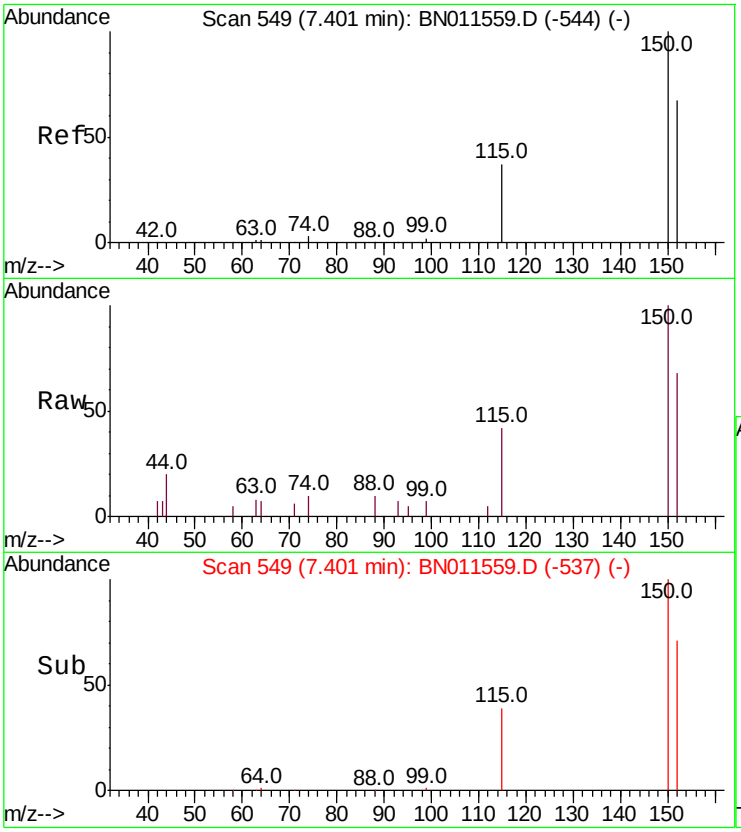
Quantitation Report (Not Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN082120\
Data File : BN011559.D
Acq On : 21 Aug 2020 17:36
Operator : CG/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Aug 21 18:42:58 2020
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN082120.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Aug 21 18:41:03 2020
Response via : Initial Calibration



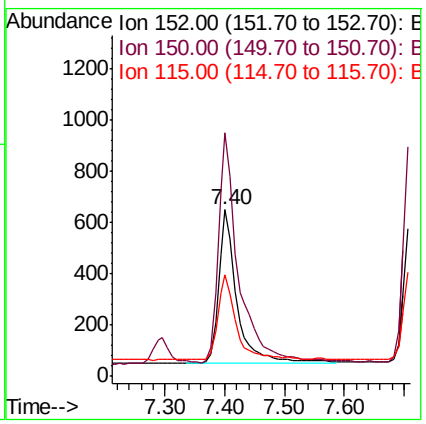


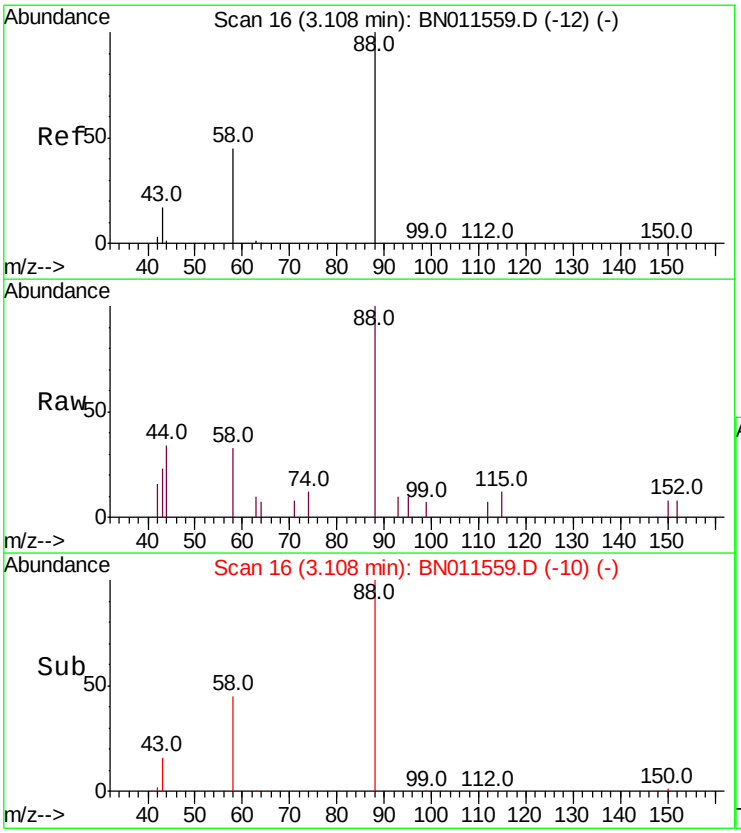
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.40 min Scan# 549
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 1295

Ion	Ratio	Lower	Upper
152	100		
150	146.4	117.1	175.7
115	60.9	48.7	73.1

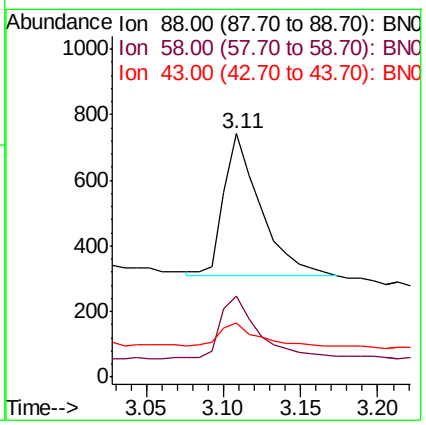


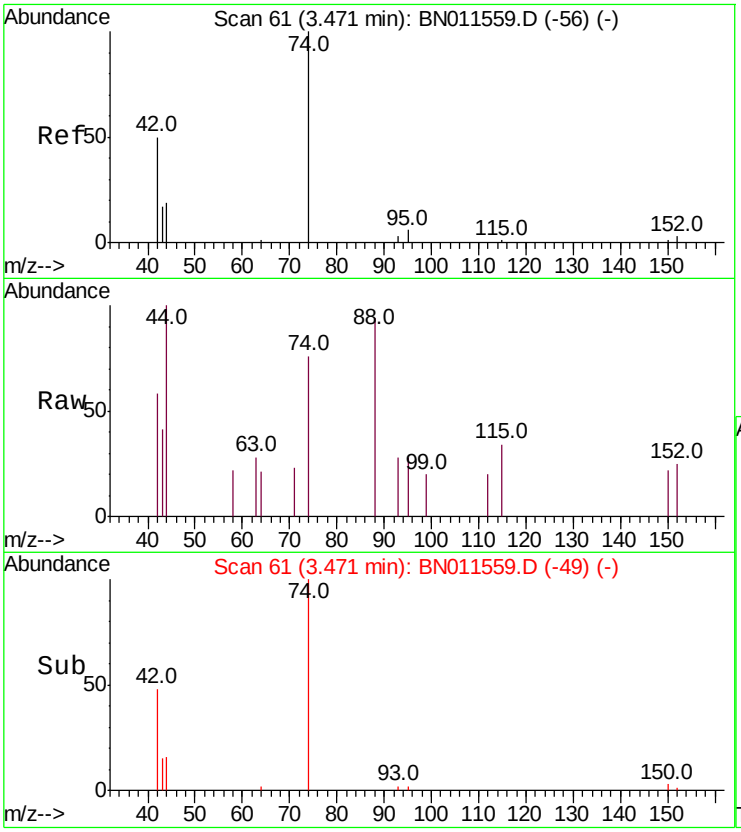


#2
1,4-Dioxane
Concen: 0.420 ng
RT: 3.11 min Scan# 16
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion: 88 Resp: 707

Ion	Ratio	Lower	Upper
88	100		
58	44.8	0.0	0.0#
43	16.1	0.0	0.0#



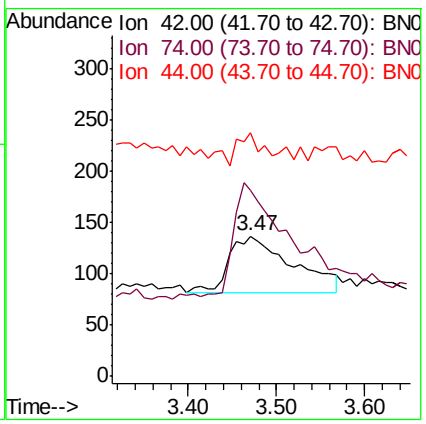


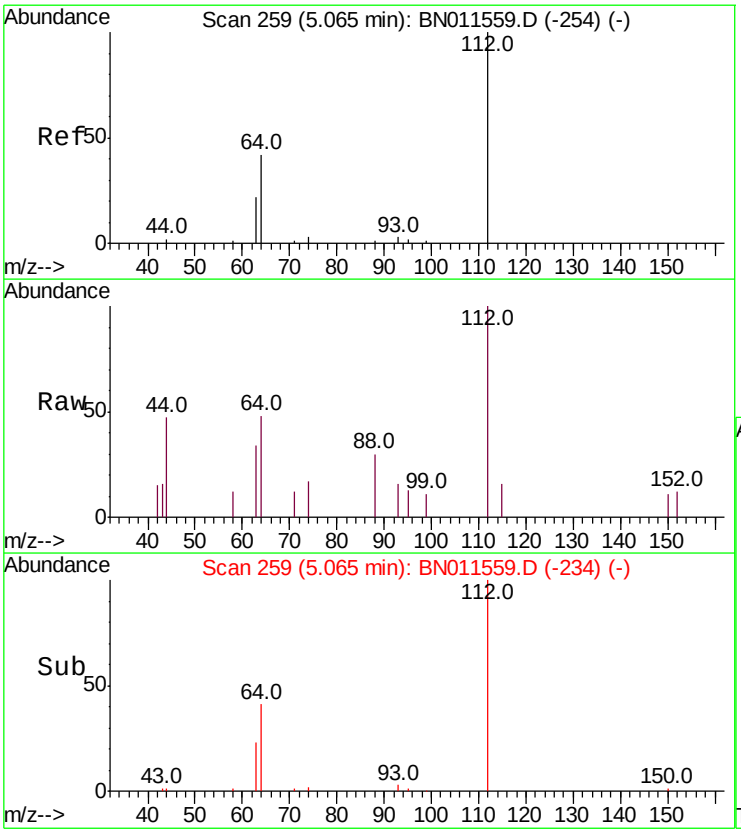
#3
n-Nitrosodimethylamine
Concen: 0.393 ng
RT: 3.47 min Scan# 61
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 42 Resp: 274

Ion	Ratio	Lower	Upper
42	100		
74	169.3	169.0	253.4
44	23.7	21.6	32.4

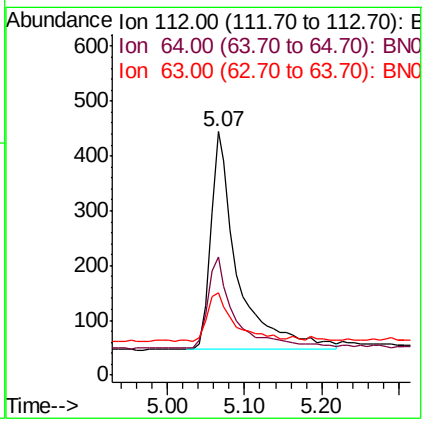


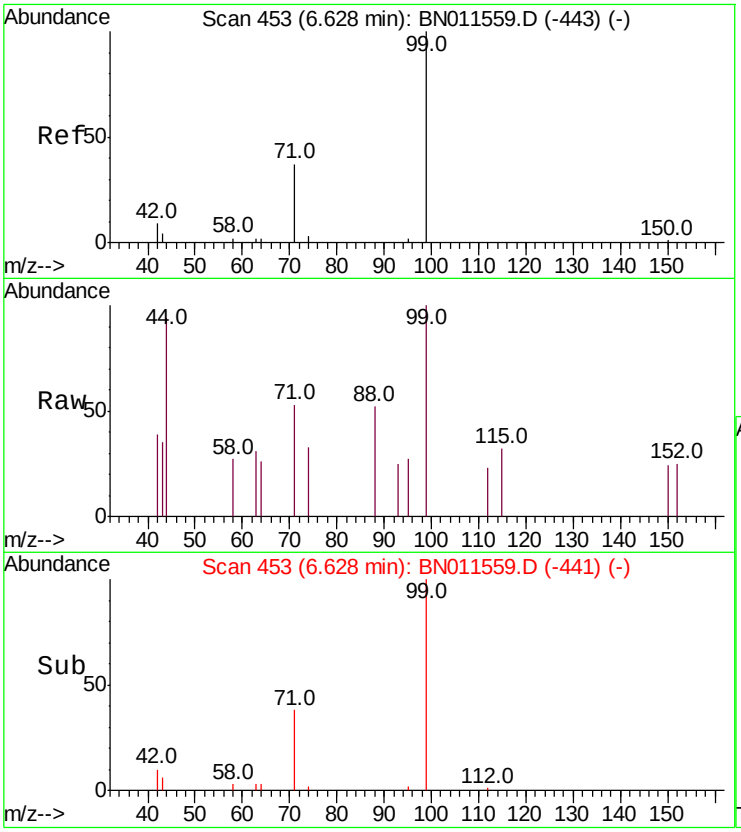


#4
2-Fluorophenol
Concen: 0.321 ng
RT: 5.07 min Scan# 259
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:112 Resp: 969

Ion	Ratio	Lower	Upper
112	100		
64	42.4	33.9	50.9
63	22.5	17.7	26.5



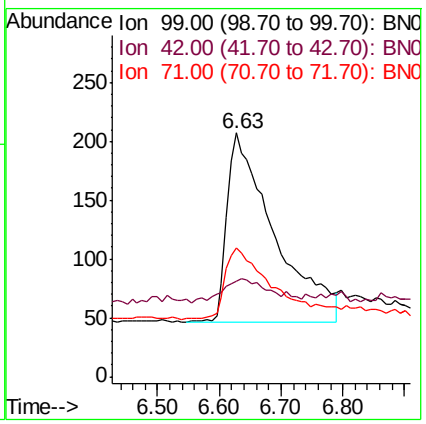


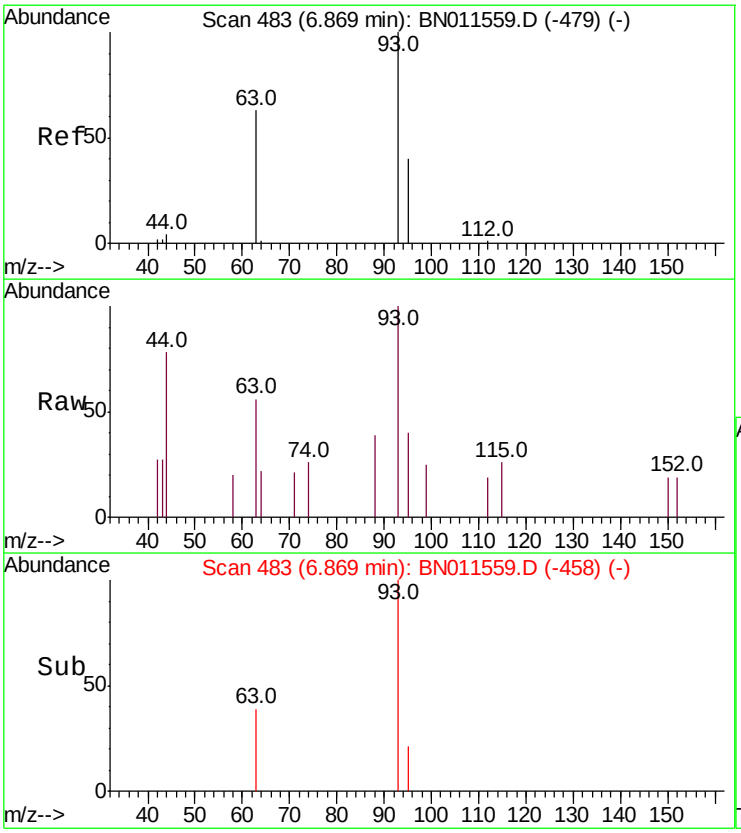
#5
Phenol-d6
Concen: 0.244 ng
RT: 6.63 min Scan# 453
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 99 Resp: 854

Ion	Ratio	Lower	Upper
99	100		
42	11.0	9.0	13.4
71	38.5	30.4	45.6

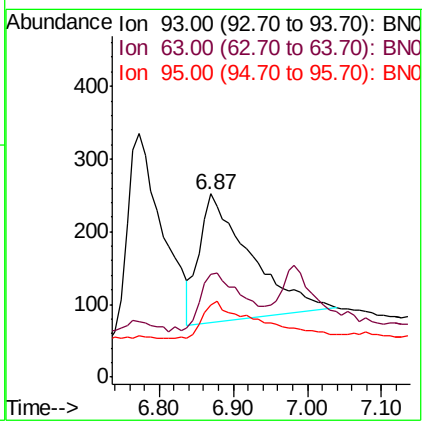


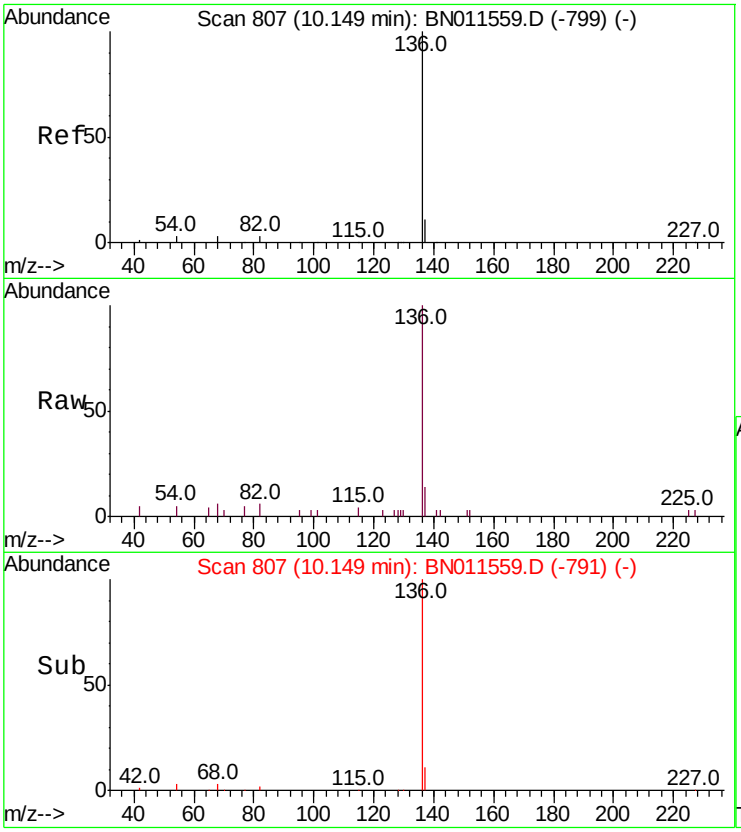


#6
bis(2-Chloroethyl)ether
Concen: 0.305 ng
RT: 6.87 min Scan# 483
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion: 93 Resp: 839

Ion	Ratio	Lower	Upper
93	100		
63	39.7	32.9	49.3
95	30.5	25.3	37.9



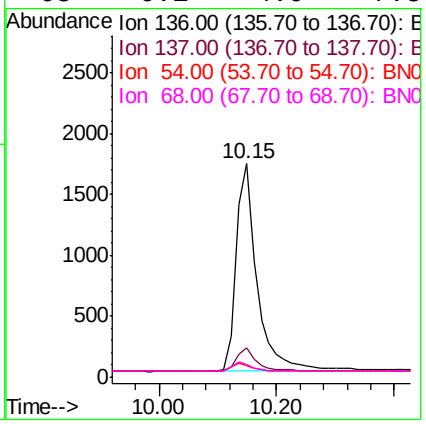


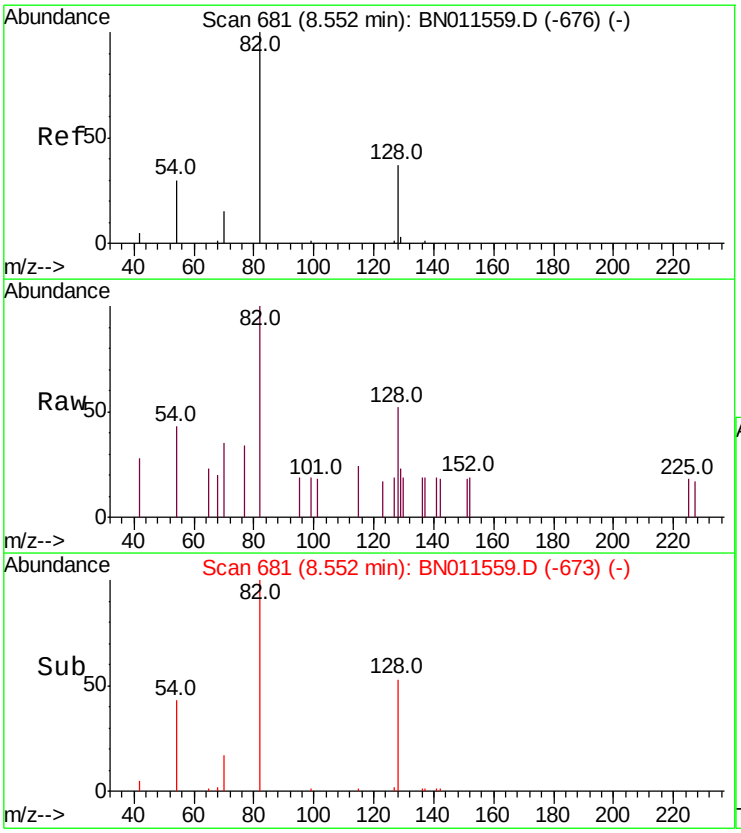
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.15 min Scan# 807
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:136 Resp: 4148

Ion	Ratio	Lower	Upper
136	100		
137	13.7	11.0	16.4
54	5.4	4.3	6.5
68	6.1	4.9	7.3

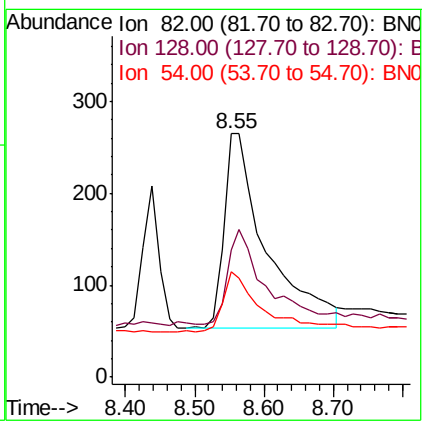


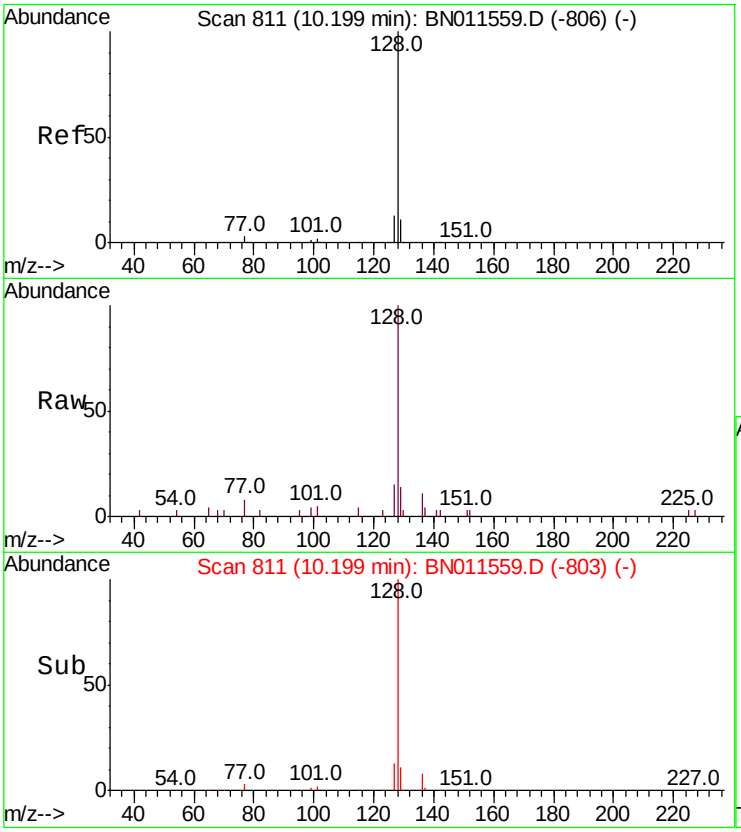


#8
Nitrobenzene-d5
Concen: 0.268 ng
RT: 8.55 min Scan# 681
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion: 82 Resp: 900

Ion	Ratio	Lower	Upper
82	100		
128	52.1	41.7	62.5
54	43.0	34.4	51.6



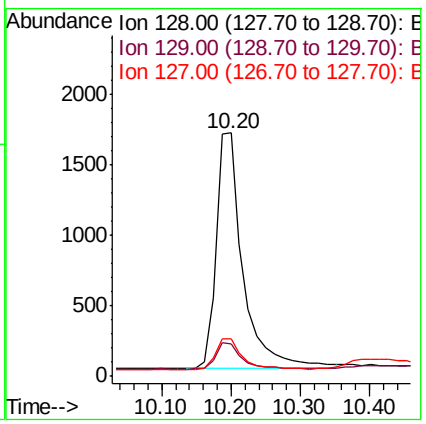


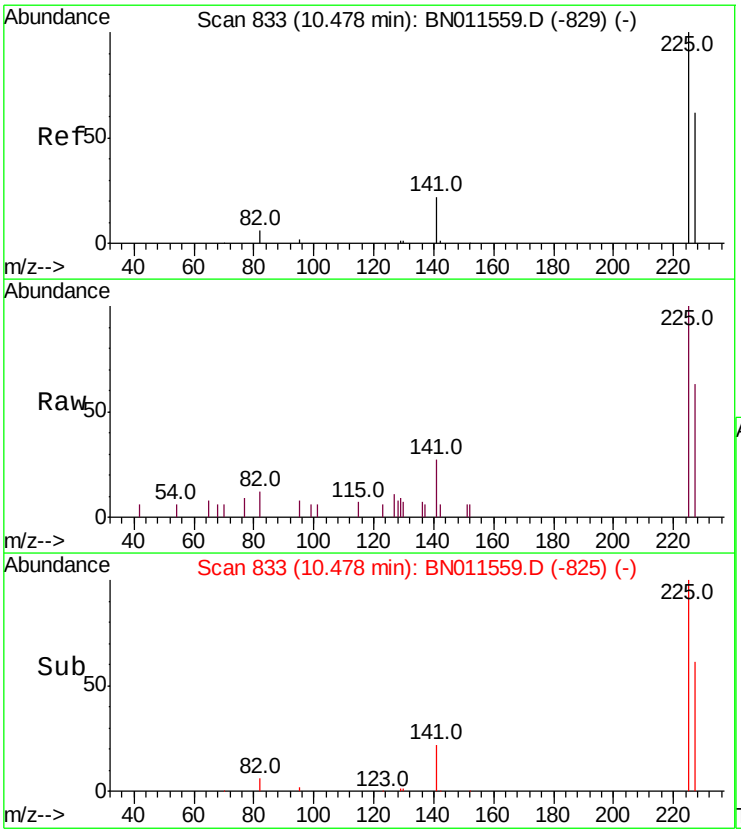
#9
Naphthalene
Concen: 0.376 ng
RT: 10.20 min Scan# 811
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:128 Resp: 4540

Ion	Ratio	Lower	Upper
128	100		
129	13.5	10.8	16.2
127	15.4	12.3	18.5

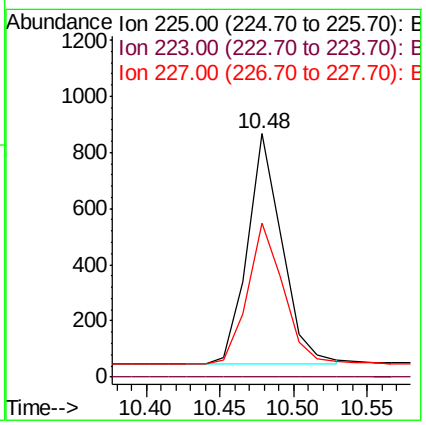


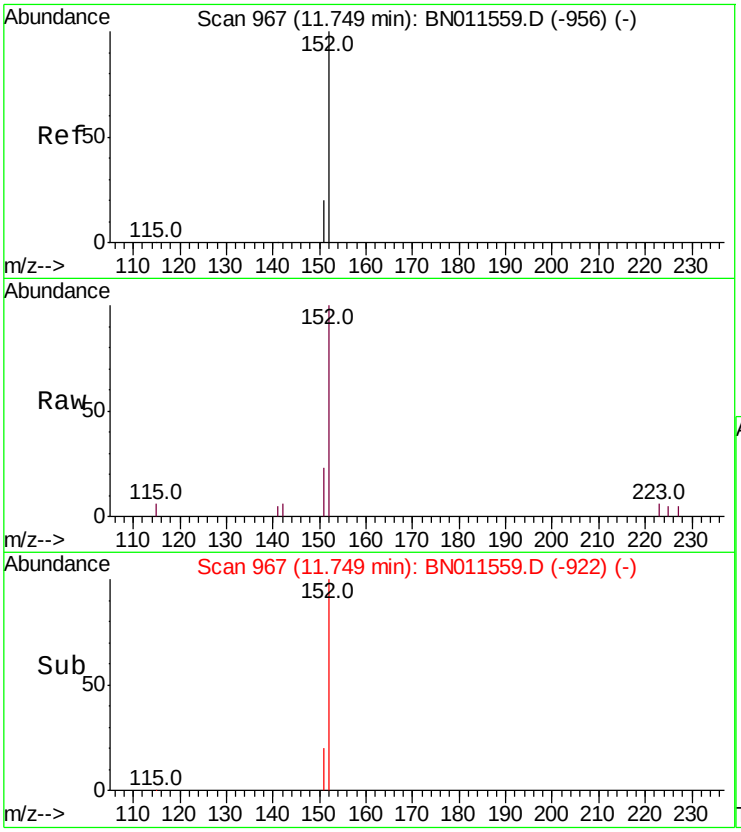


#10
Hexachlorobutadiene
Concen: 0.430 ng
RT: 10.48 min Scan# 833
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:225 Resp: 1346

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.0	51.3	76.9



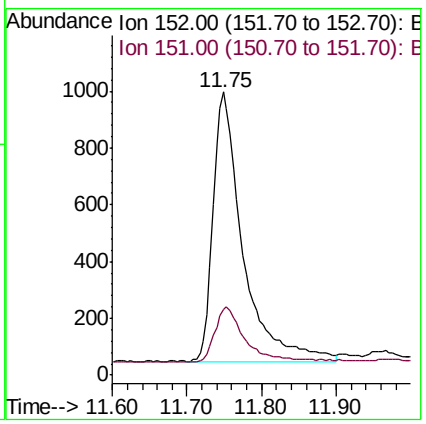


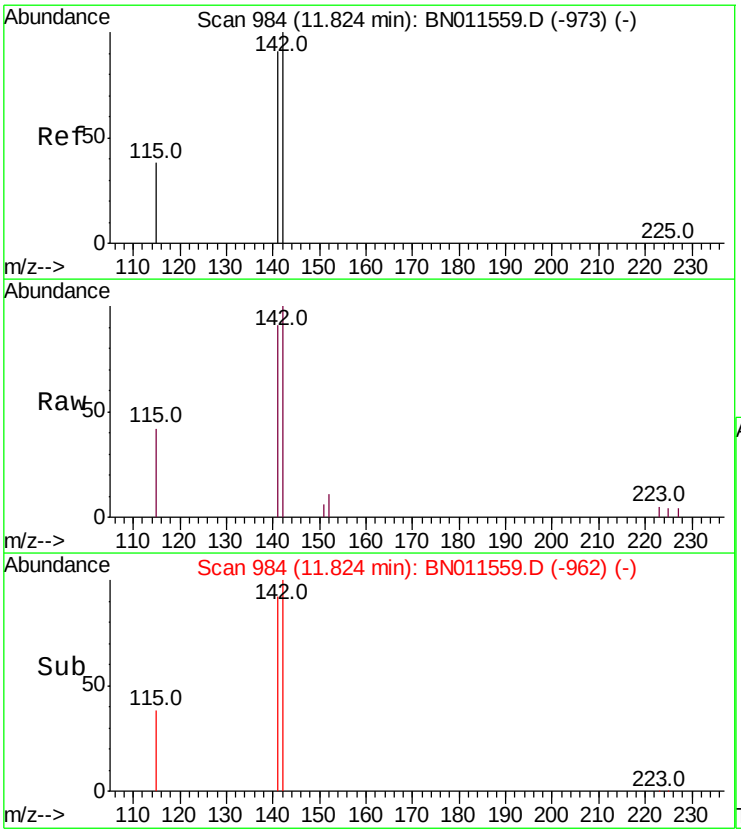
#11
2-Methylnaphthalene-d10
Concen: 0.344 ng
RT: 11.75 min Scan# 967
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 2634

Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.6	24.8

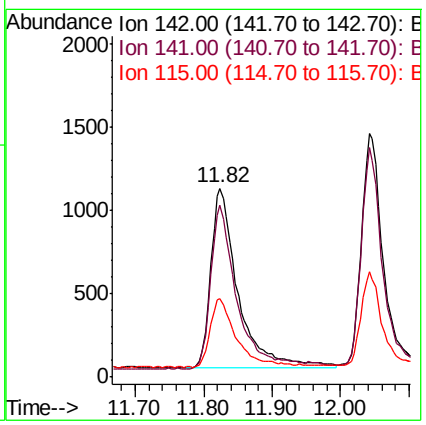


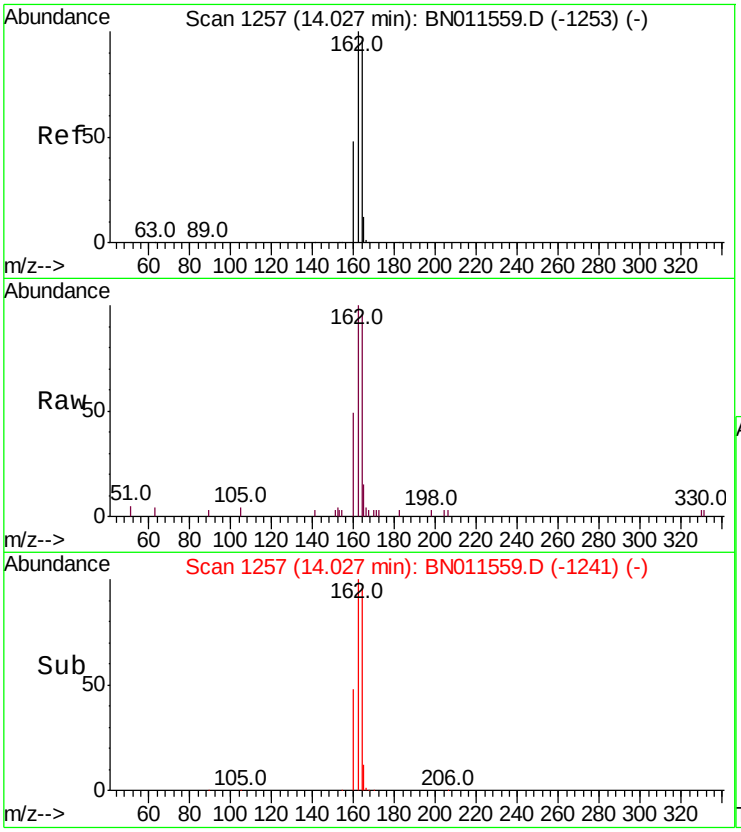


#12
2-Methylnaphthalene
Concen: 0.344 ng
RT: 11.82 min Scan# 984
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:142 Resp: 2986

Ion	Ratio	Lower	Upper
142	100		
141	91.3	73.0	109.6
115	41.7	33.4	50.0



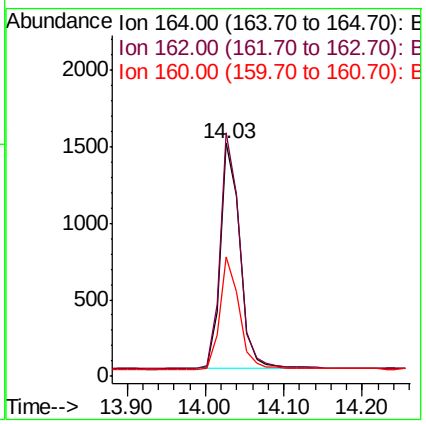


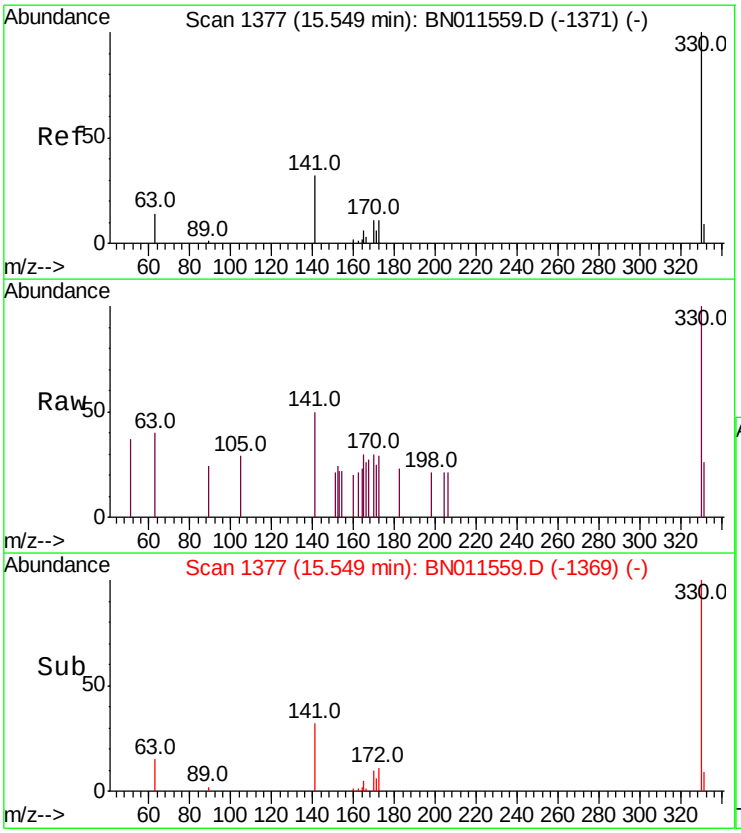
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.03 min Scan# 1257
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:164 Resp: 2586

Ion	Ratio	Lower	Upper
164	100		
162	104.6	83.7	125.5
160	51.4	41.1	61.7

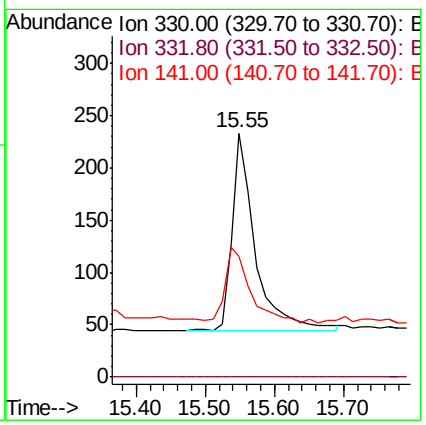


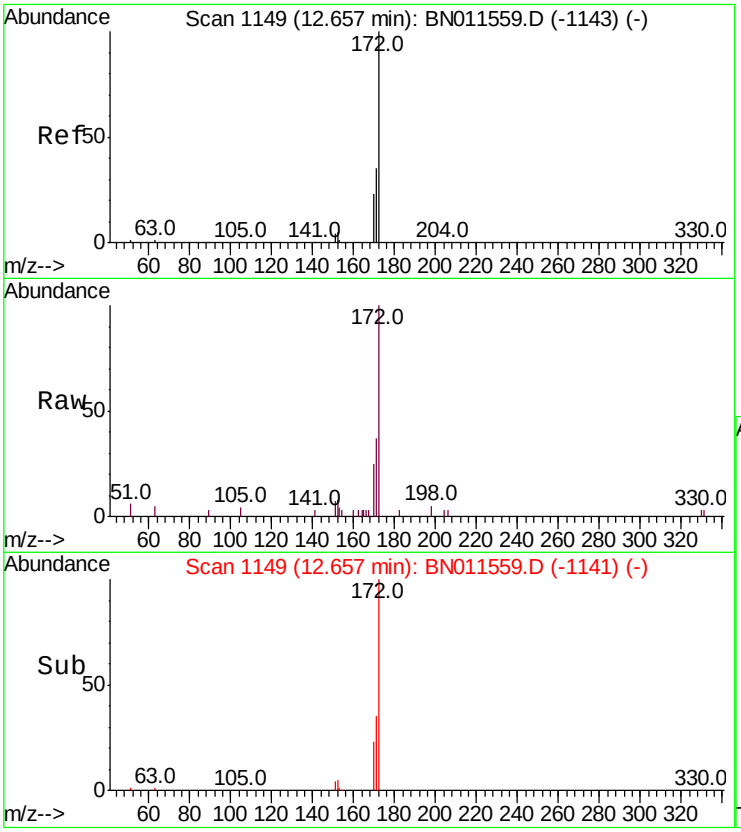


#14
2,4,6-Tribromophenol
Concen: 0.377 ng
RT: 15.55 min Scan# 1377
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:330 Resp: 438

Ion	Ratio	Lower	Upper
330	100		
332	0.0	0.0	0.0
141	42.7	34.6	52.0



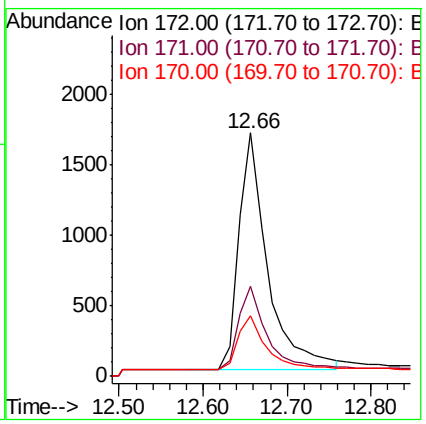


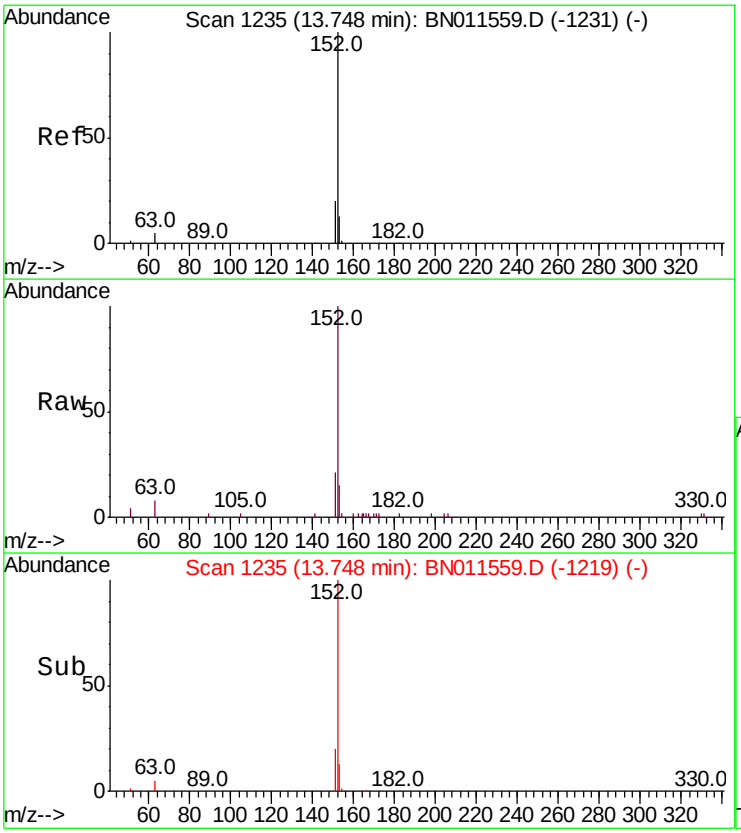
#15
2-Fluorobiphenyl
Concen: 0.354 ng
RT: 12.66 min Scan# 1149
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:172 Resp: 4023

Ion	Ratio	Lower	Upper
172	100		
171	36.7	29.4	44.0
170	25.1	20.1	30.1

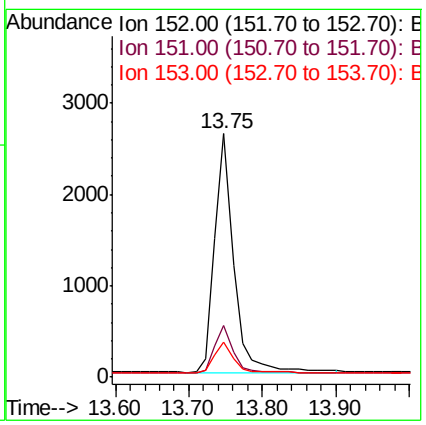


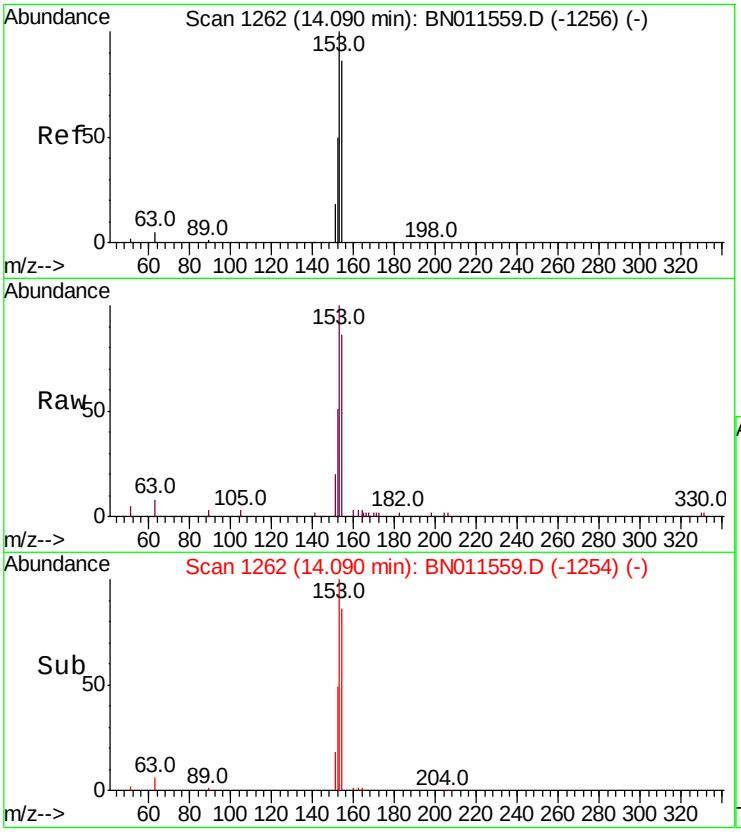


#16
Acenaphthylene
Concen: 0.364 ng
RT: 13.75 min Scan# 1235
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:152 Resp: 4719

Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.8	23.8
153	13.2	10.6	16.0



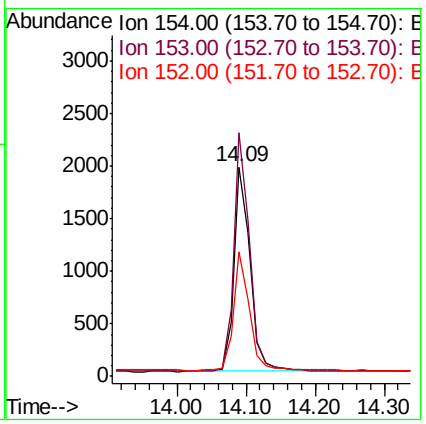


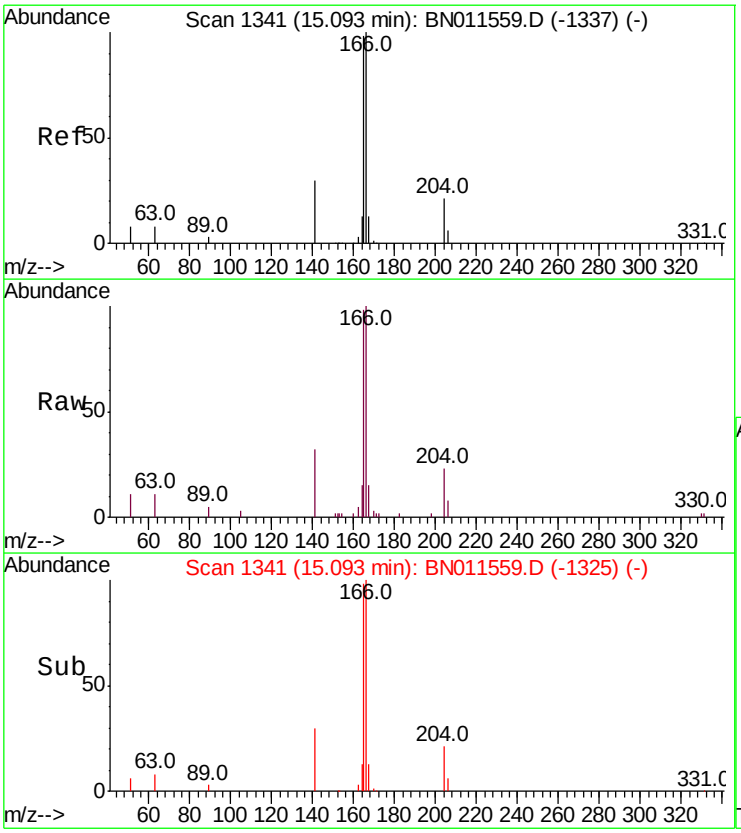
#17
Acenaphthene
Concen: 0.383 ng
RT: 14.09 min Scan# 1262
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:154 Resp: 3210

Ion	Ratio	Lower	Upper
154	100		
153	114.8	91.8	137.8
152	57.9	46.3	69.5

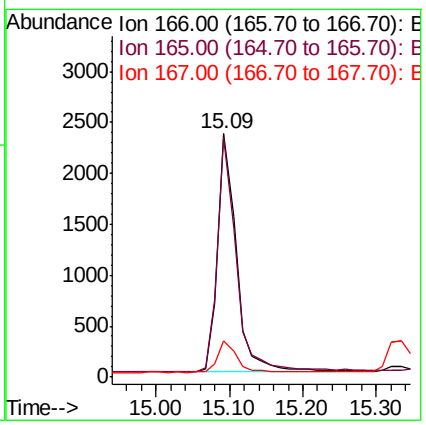


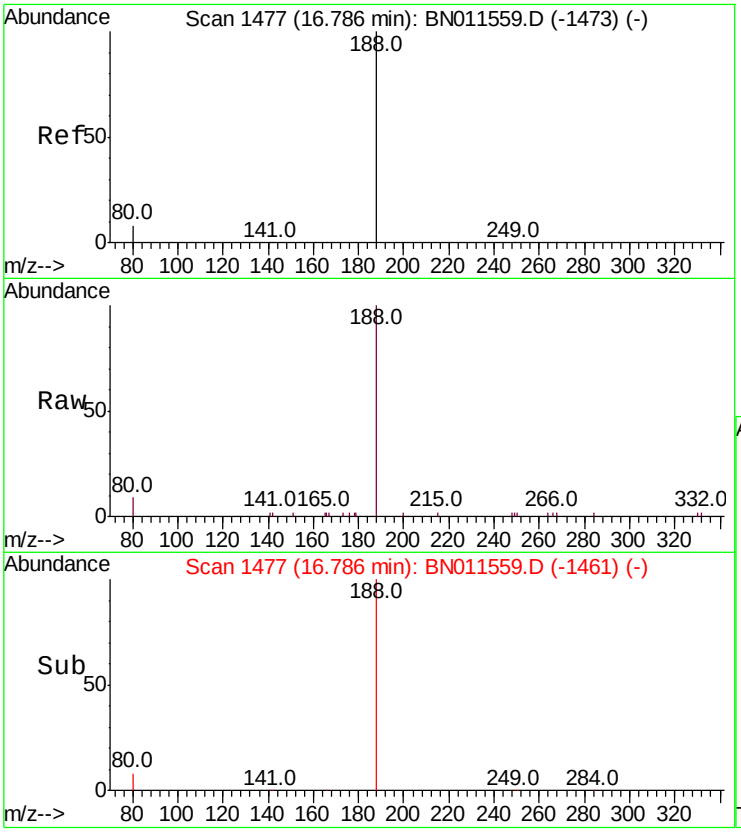


#18
Fluorene
Concen: 0.389 ng
RT: 15.09 min Scan# 1341
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:166 Resp: 4193

Ion	Ratio	Lower	Upper
166	100		
165	98.1	78.2	117.2
167	13.4	10.7	16.1



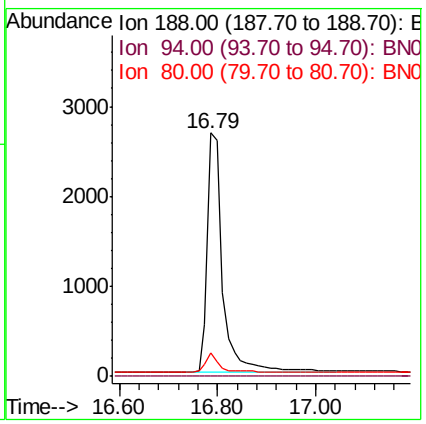


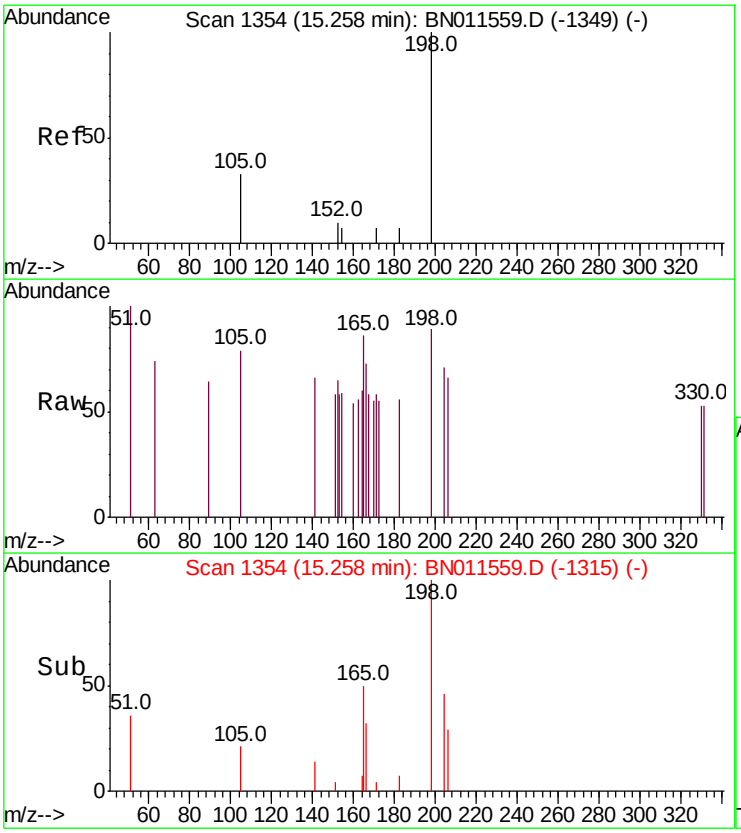
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 16.79 min Scan# 1477
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:188 Resp: 5877

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.5	7.6	11.4

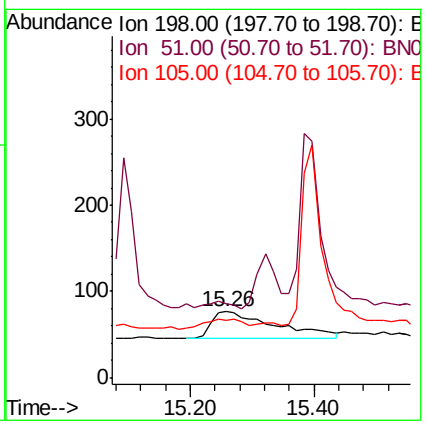


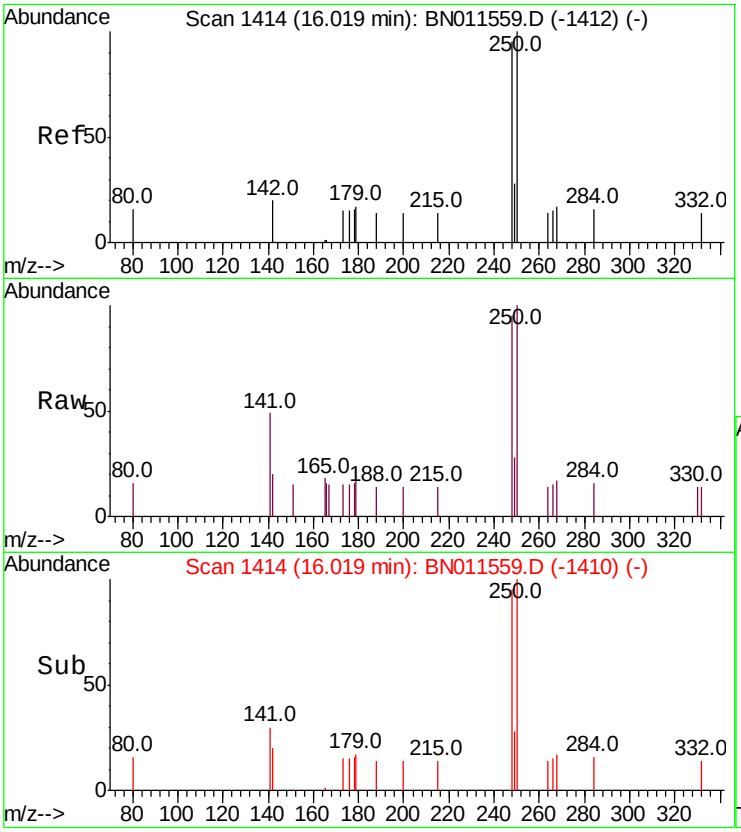


#20
4,6-Dinitro-2-methylphenol
Concen: 0.300 ng
RT: 15.26 min Scan# 1354
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:198 Resp: 215

Ion	Ratio	Lower	Upper
198	100		
51	111.8	89.4	134.2
105	88.2	70.6	105.8



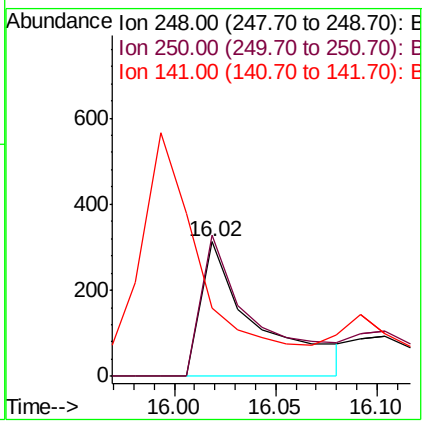


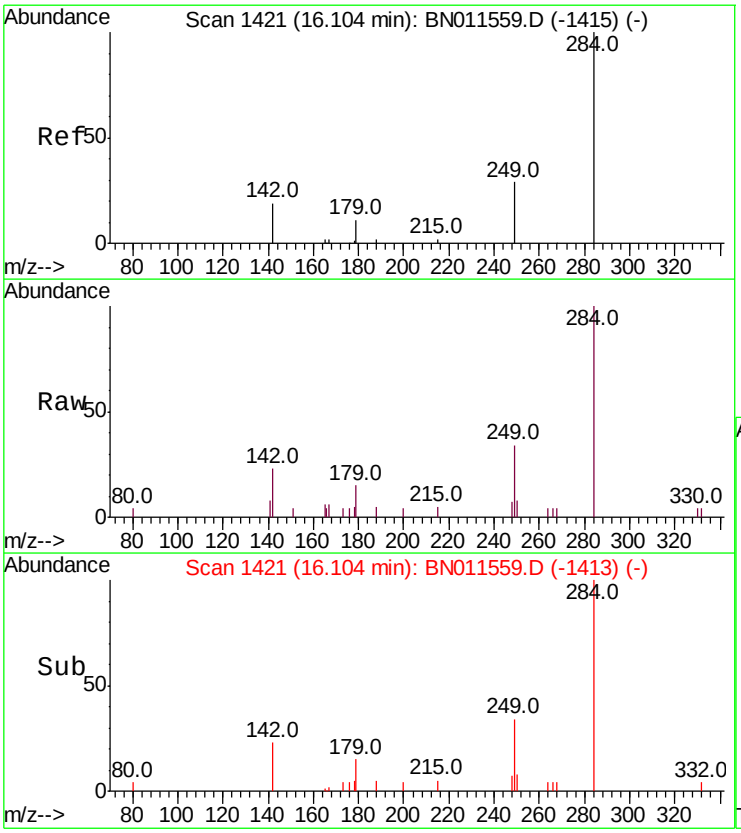
#21
4-Bromophenyl-phenylether
Concen: 0.123 ng
RT: 16.02 min Scan# 1414
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:248 Resp: 599

Ion	Ratio	Lower	Upper
248	100		
250	104.8	83.8	125.8
141	51.3	41.0	61.6

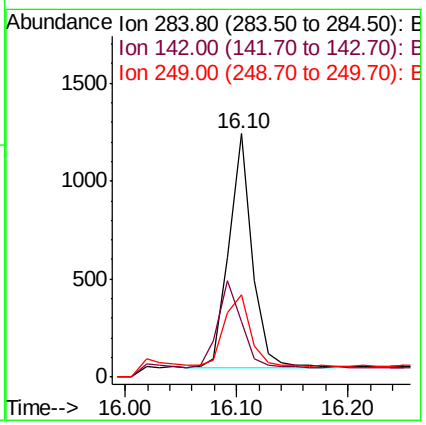


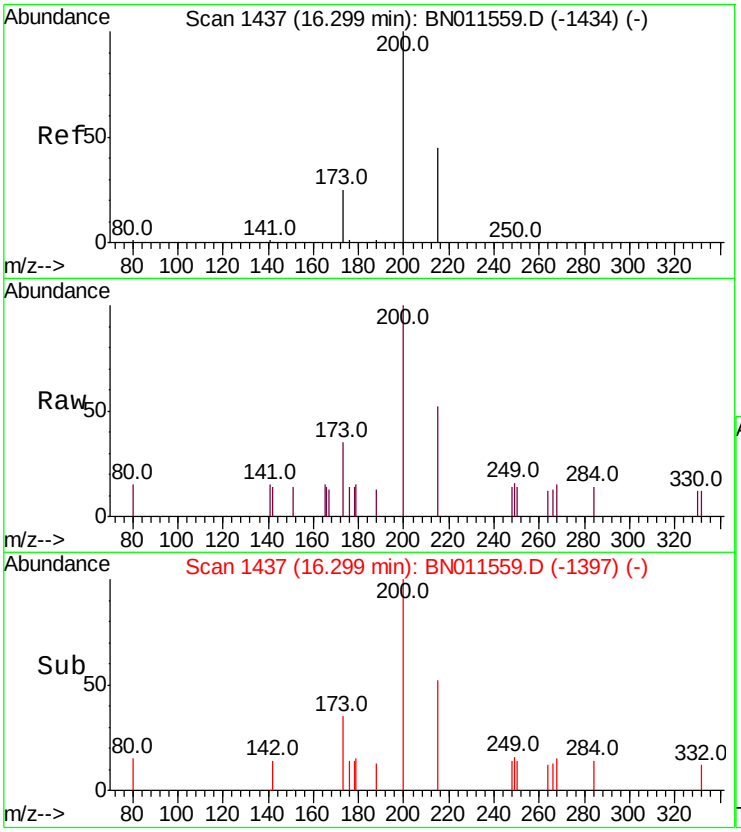


#22
Hexachlorobenzene
Concen: 0.393 ng
RT: 16.10 min Scan# 1421
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:284 Resp: 1721

Ion	Ratio	Lower	Upper
284	100		
142	37.1	29.7	44.5
249	33.5	26.8	40.2



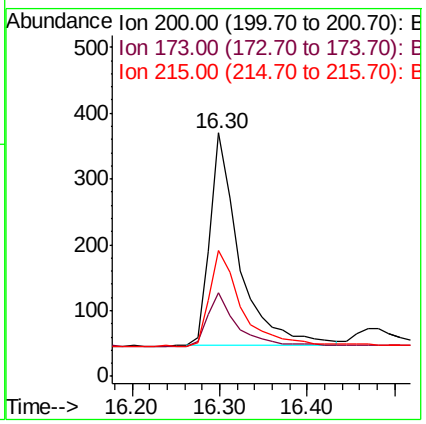


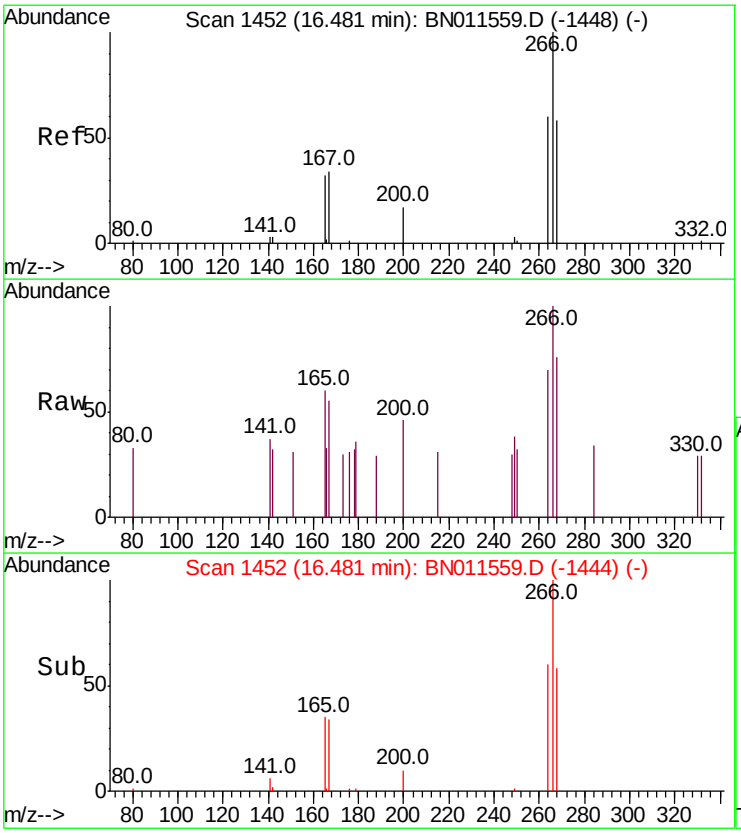
#23
Atrazine
Concen: 0.264 ng
RT: 16.30 min Scan# 1437
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:200 Resp: 755

Ion	Ratio	Lower	Upper
200	100		
173	34.6	27.7	41.5
215	51.9	41.5	62.3

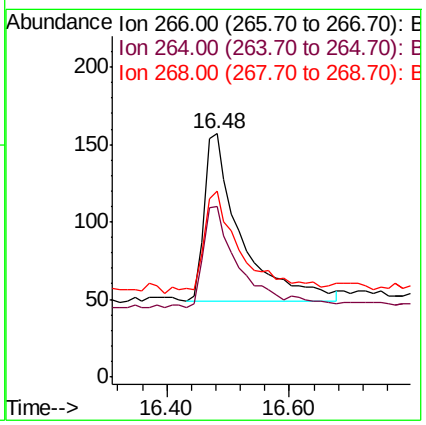


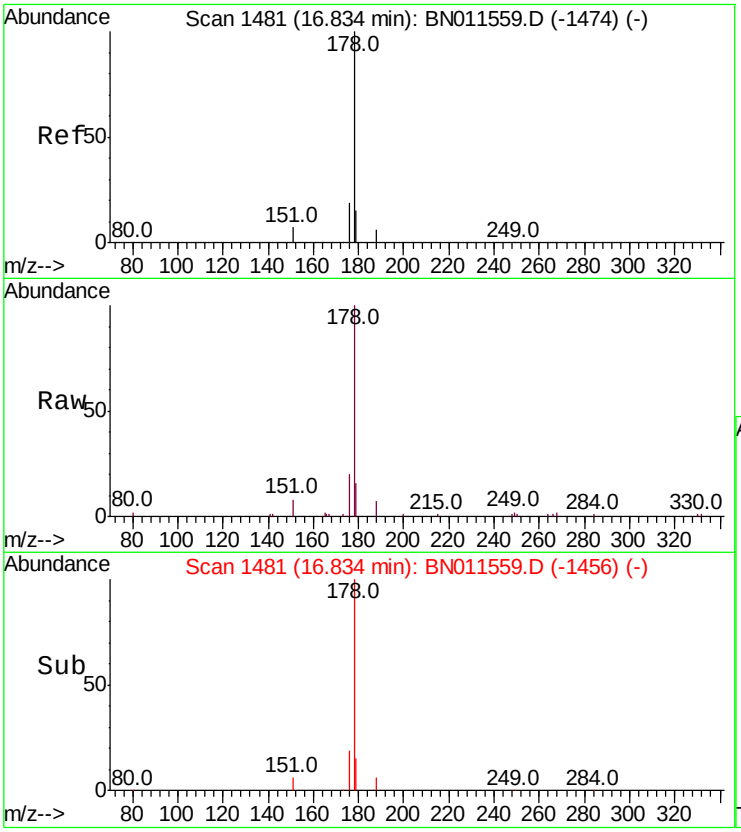


#24
Pentachlorophenol
Concen: 0.333 ng
RT: 16.48 min Scan# 1452
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:266 Resp: 447

Ion	Ratio	Lower	Upper
266	100		
264	57.0	48.7	73.1
268	56.6	51.0	76.6



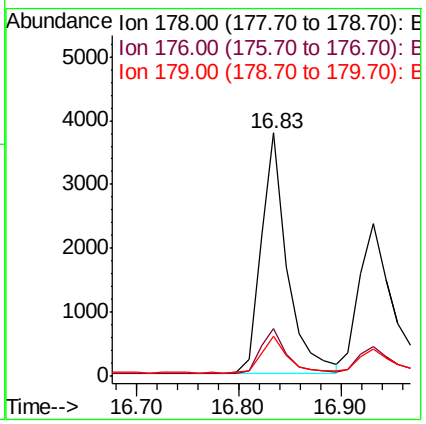


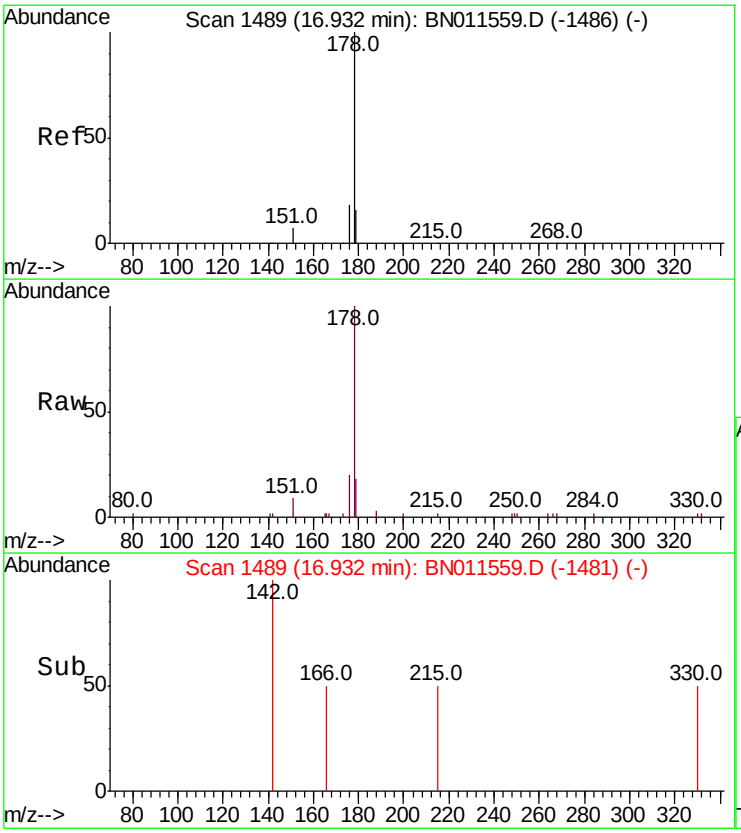
#25
Phenanthrene
Concen: 0.354 ng
RT: 16.83 min Scan# 1481
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:178 Resp: 6636

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.0	22.4
179	15.4	12.3	18.5

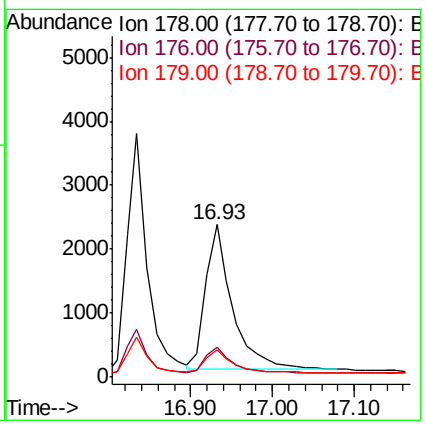


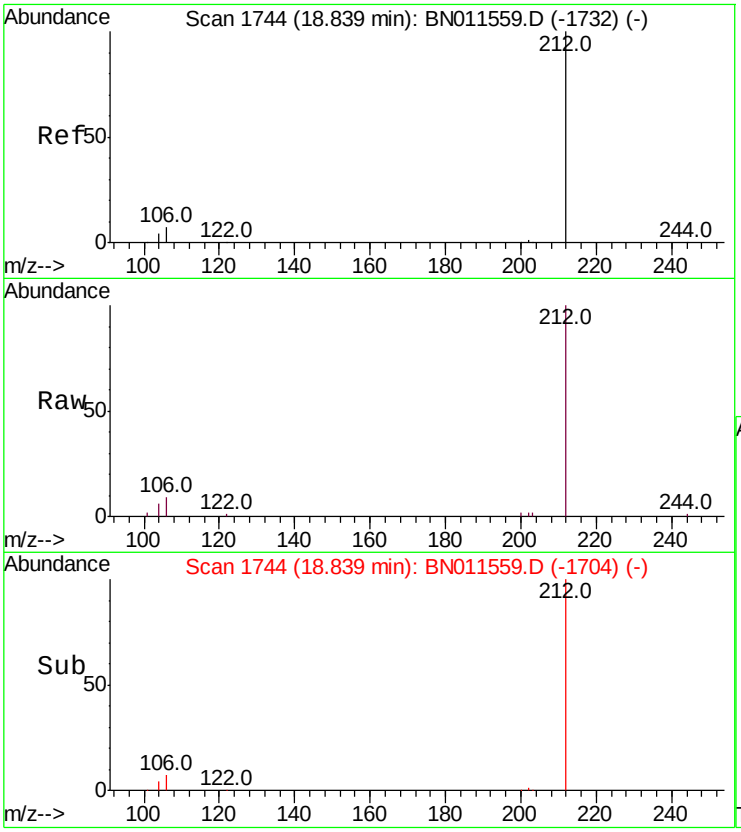


#26
Anthracene
Concen: 0.324 ng
RT: 16.93 min Scan# 1489
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:178 Resp: 5184

Ion	Ratio	Lower	Upper
178	100		
176	18.1	14.4	21.6
179	15.9	12.9	19.3



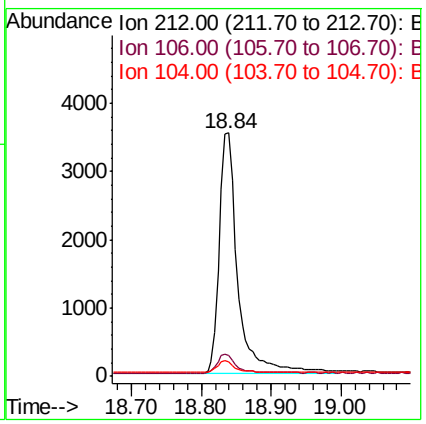


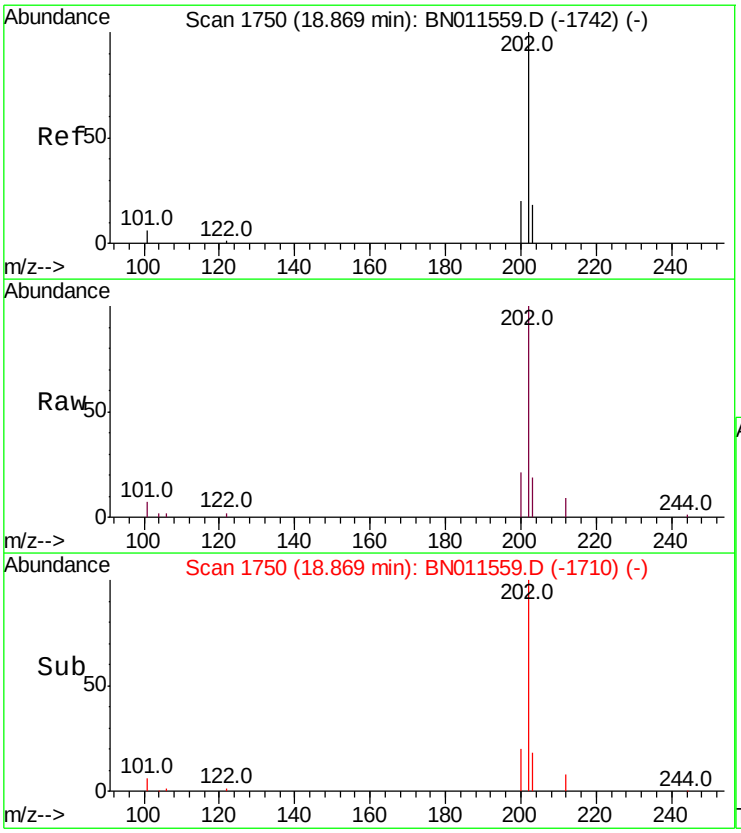
#27
Fluoranthene-d10
Concen: 0.361 ng
RT: 18.84 min Scan# 1744
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:212 Resp: 6475

Ion	Ratio	Lower	Upper
212	100		
106	7.7	6.2	9.2
104	4.7	3.8	5.6

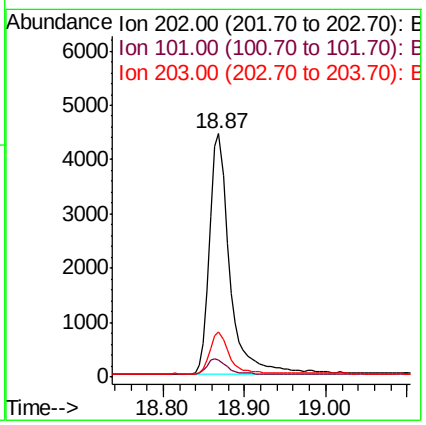


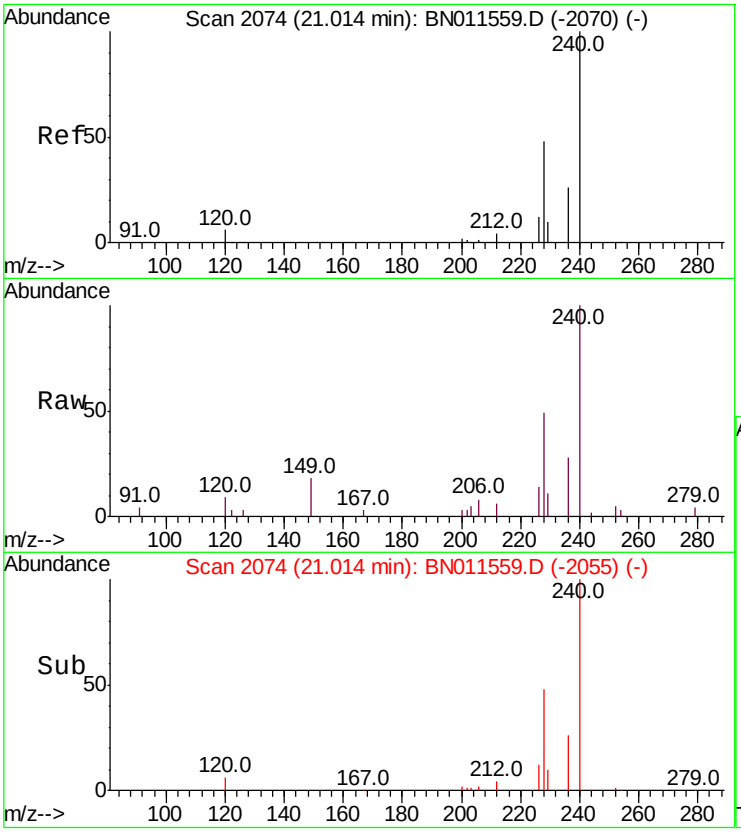


#28
Fluoranthene
Concen: 0.351 ng
RT: 18.87 min Scan# 1750
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:202 Resp: 7784

Ion	Ratio	Lower	Upper
202	100		
101	6.5	5.2	7.8
203	17.0	13.6	20.4



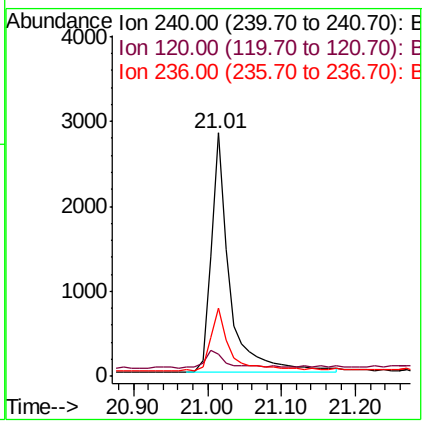


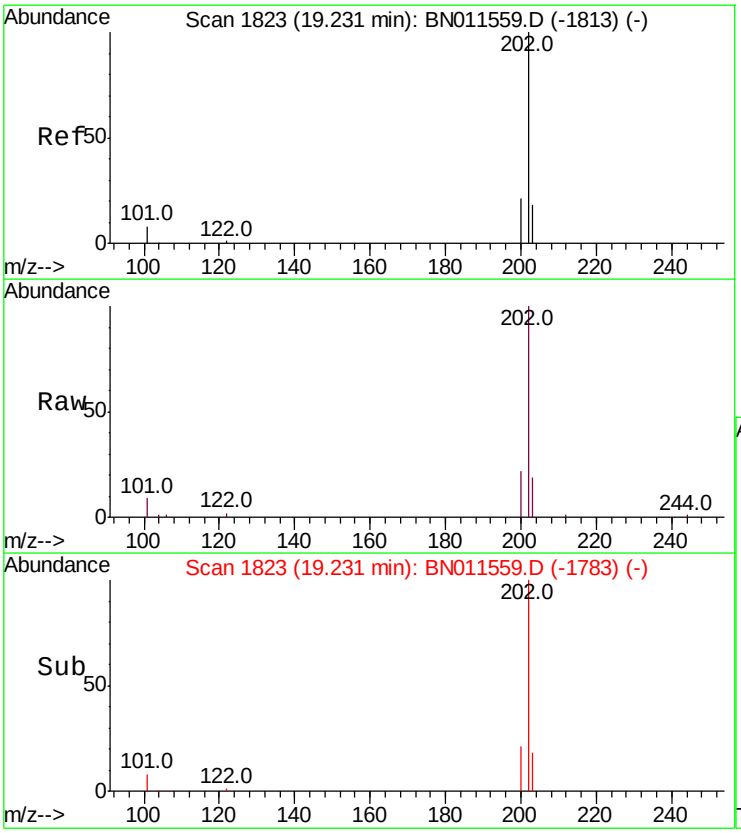
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.01 min Scan# 2074
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:240 Resp: 4928

Ion	Ratio	Lower	Upper
240	100		
120	9.2	7.4	11.0
236	27.9	22.3	33.5

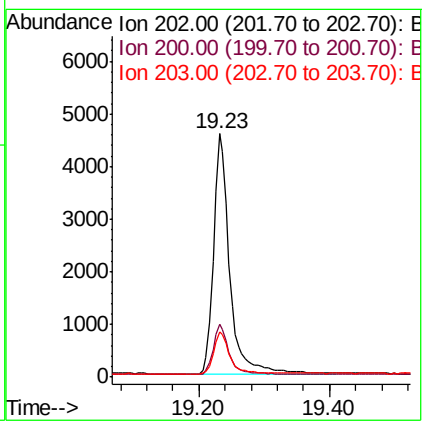


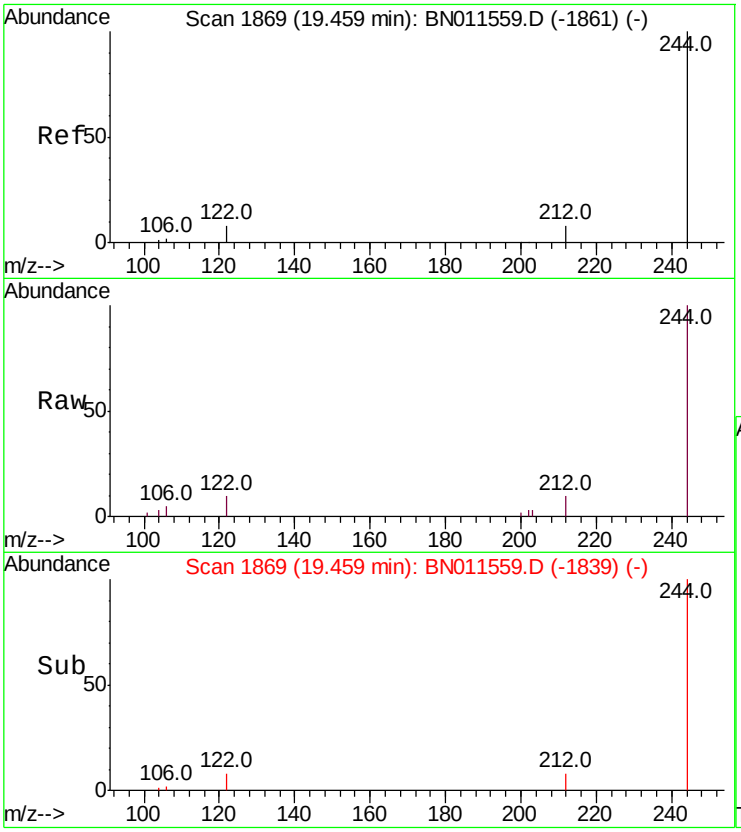


#30
Pyrene
Concen: 0.482 ng
RT: 19.23 min Scan# 1823
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:202 Resp: 7838

Ion	Ratio	Lower	Upper
202	100		
200	20.8	16.6	25.0
203	17.7	14.2	21.2



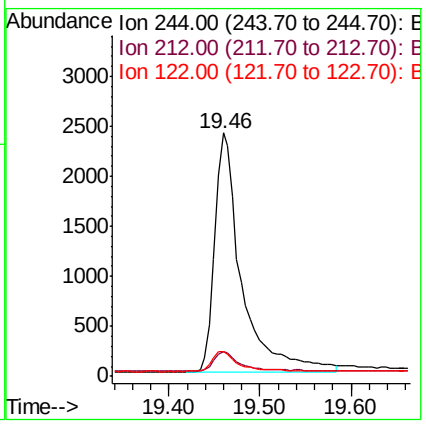


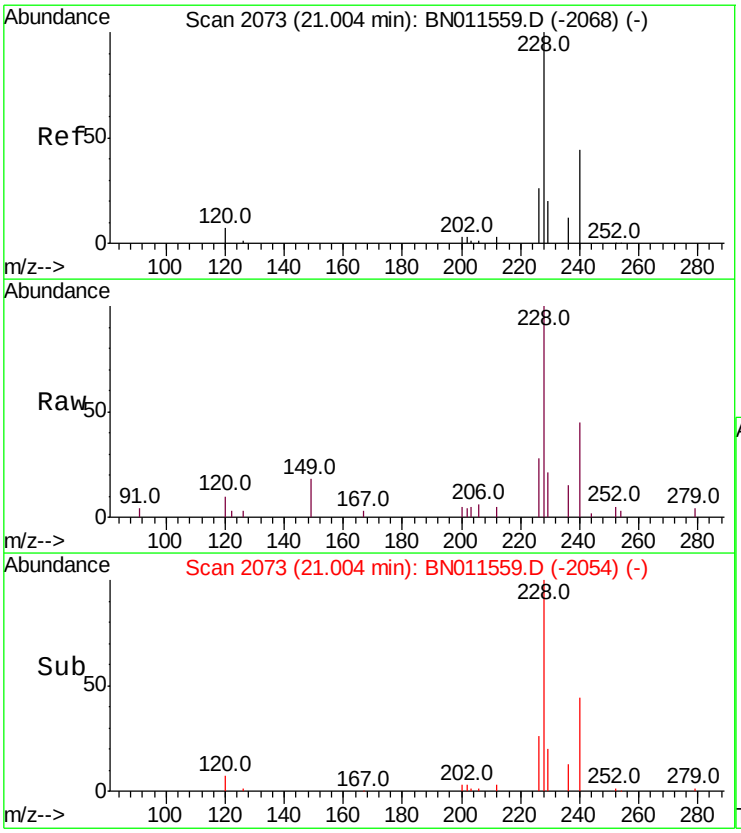
#31
Terphenyl-d14
Concen: 0.446 ng
RT: 19.46 min Scan# 1869
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:244 Resp: 4861

Ion	Ratio	Lower	Upper
244	100		
212	10.3	8.2	12.4
122	10.0	8.0	12.0

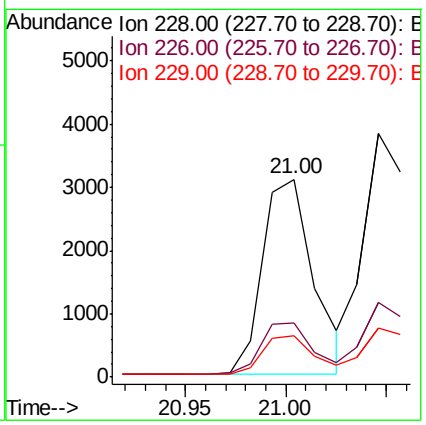


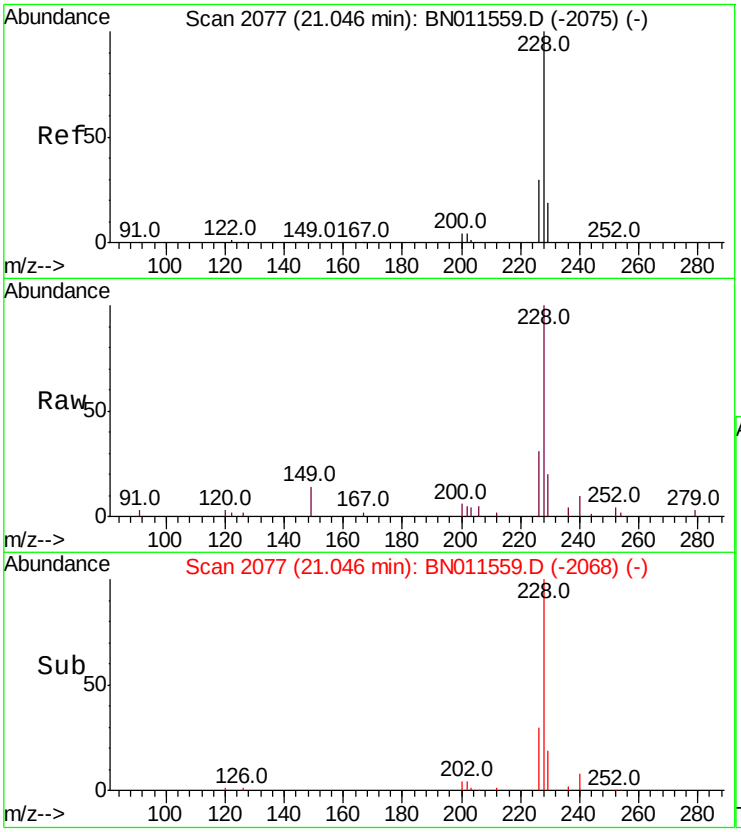


#32
Benzo(a)anthracene
Concen: 0.362 ng
RT: 21.00 min Scan# 2073
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:228 Resp: 5447

Ion	Ratio	Lower	Upper
228	100		
226	27.7	22.2	33.2
229	21.1	16.9	25.3



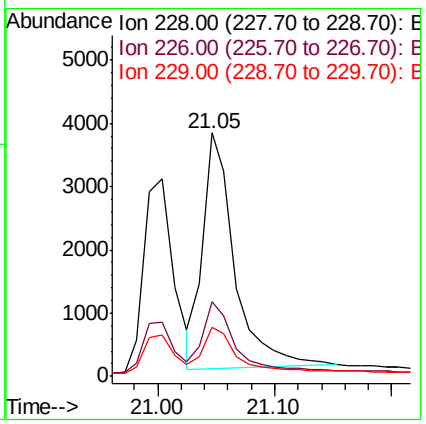


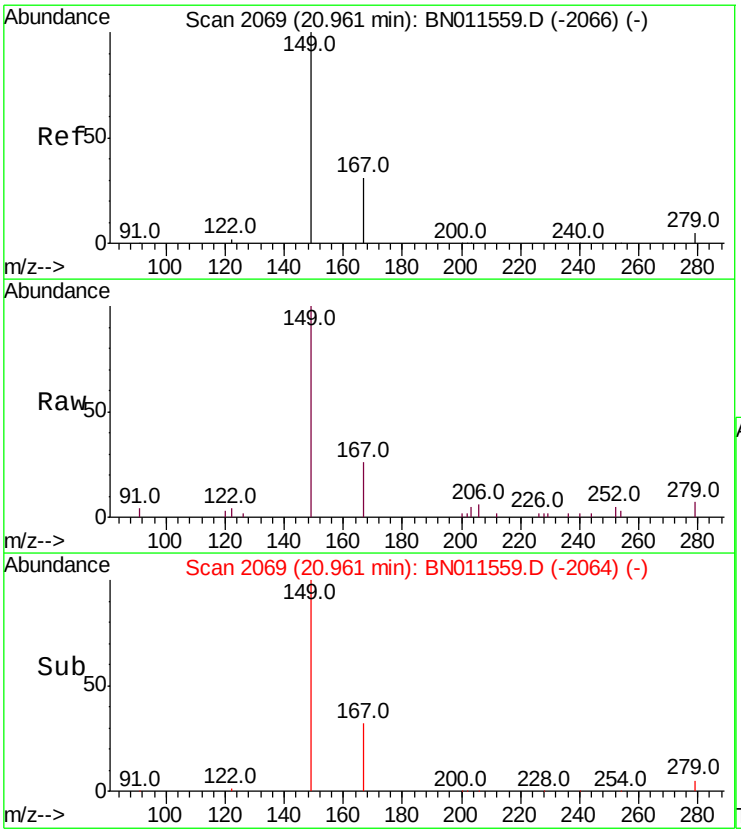
#33
Chrysene
Concen: 0.412 ng
RT: 21.05 min Scan# 2077
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:228 Resp: 7064

Ion	Ratio	Lower	Upper
228	100		
226	30.6	24.5	36.7
229	20.2	16.2	24.2

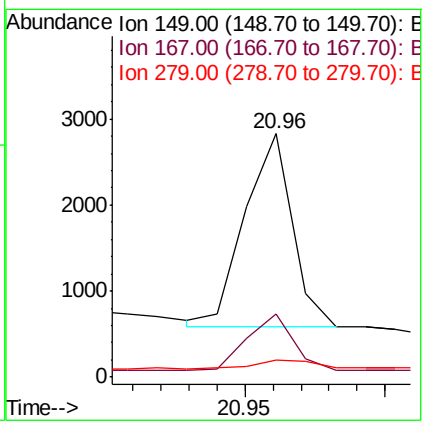


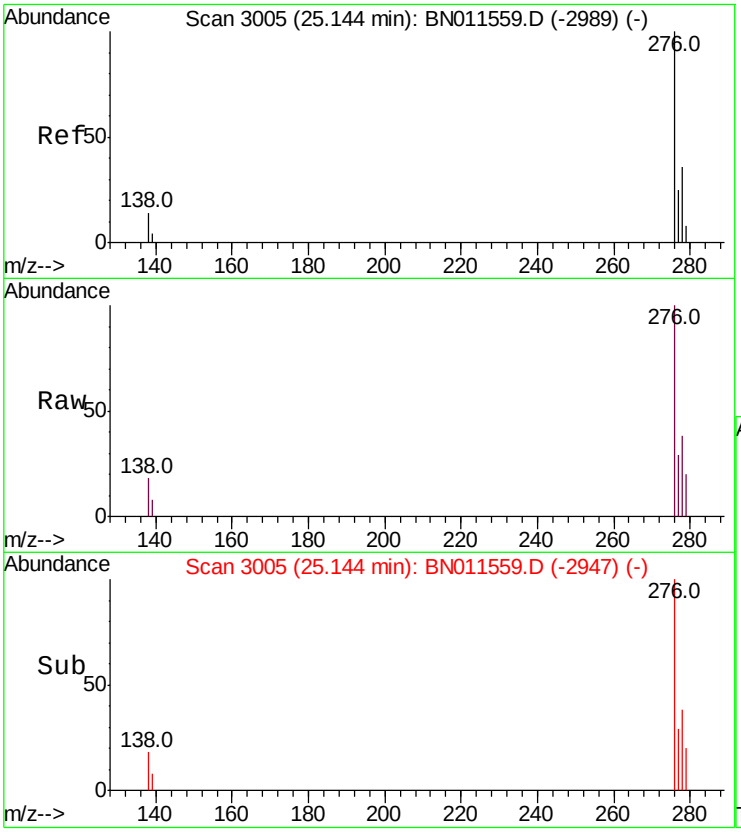


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.497 ng
RT: 20.96 min Scan# 2069
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:149 Resp: 2663

Ion	Ratio	Lower	Upper
149	100		
167	28.5	22.8	34.2
279	5.3	4.2	6.2



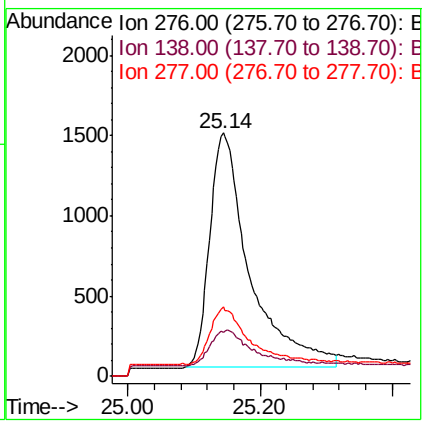


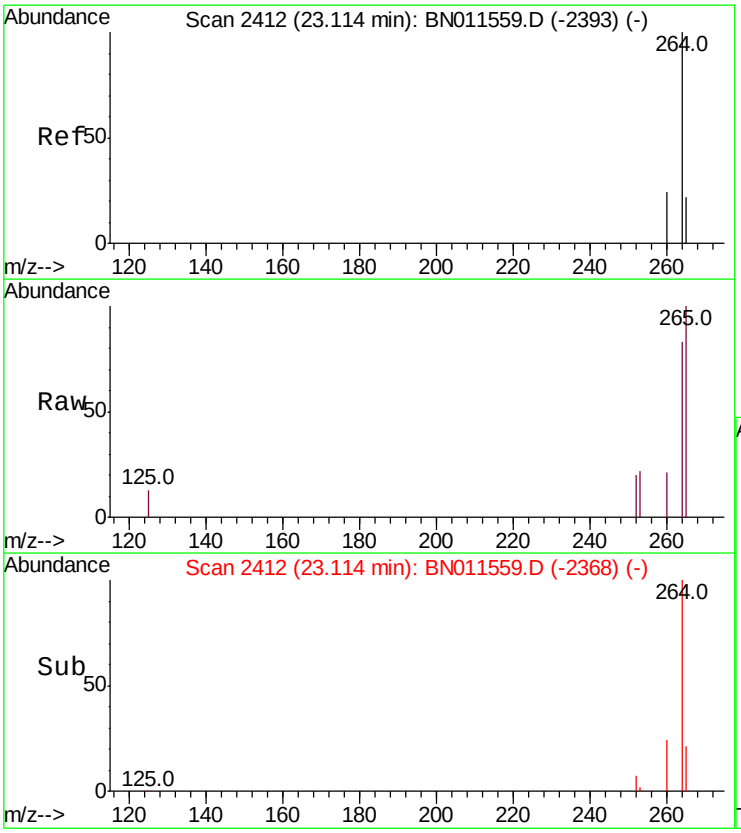
#35
Indeno(1,2,3-cd)pyrene
Concen: 0.293 ng
RT: 25.14 min Scan# 3005
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:276 Resp: 6143

Ion	Ratio	Lower	Upper
276	100		
138	14.5	11.6	17.4
277	22.8	18.2	27.4

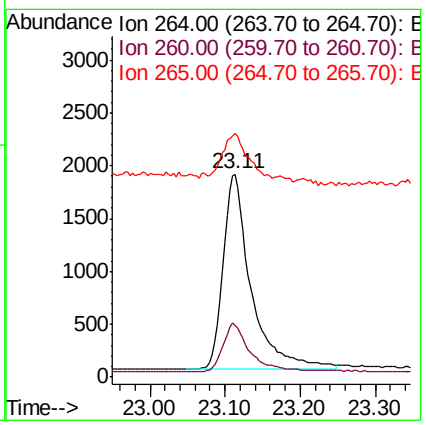


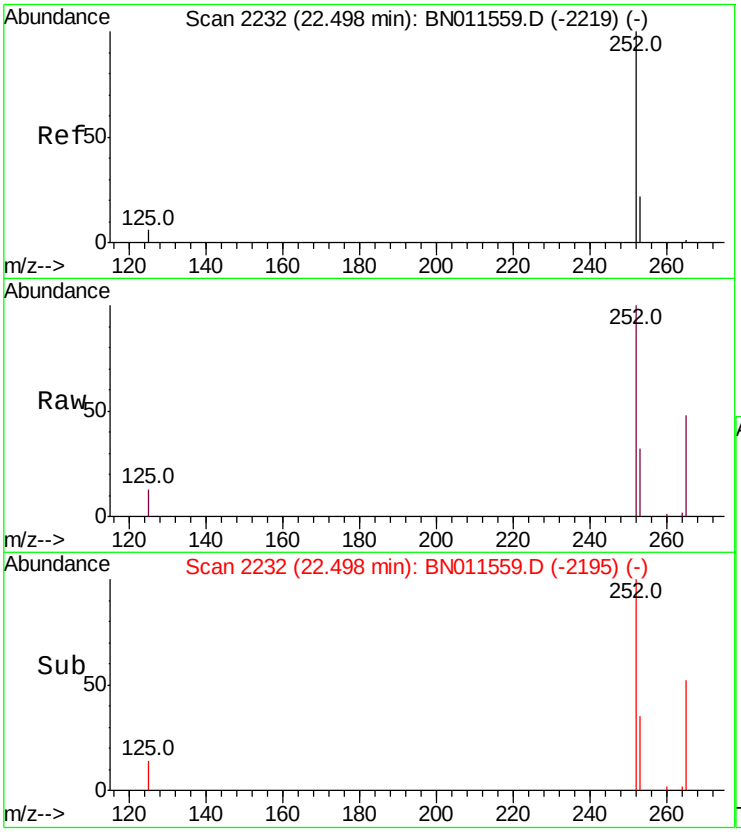


#36
Perylene-d12
Concen: 0.400 ng
RT: 23.11 min Scan# 2412
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:264 Resp: 4753

Ion	Ratio	Lower	Upper
264	100		
260	25.4	20.3	30.5
265	120.1	96.1	144.1



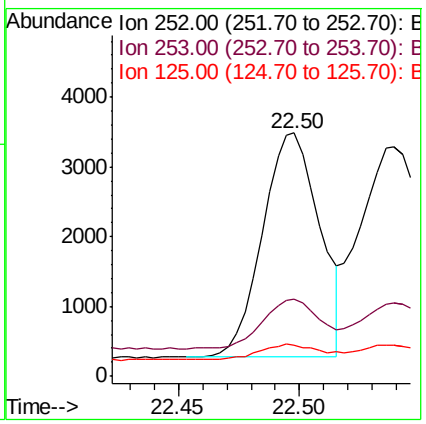


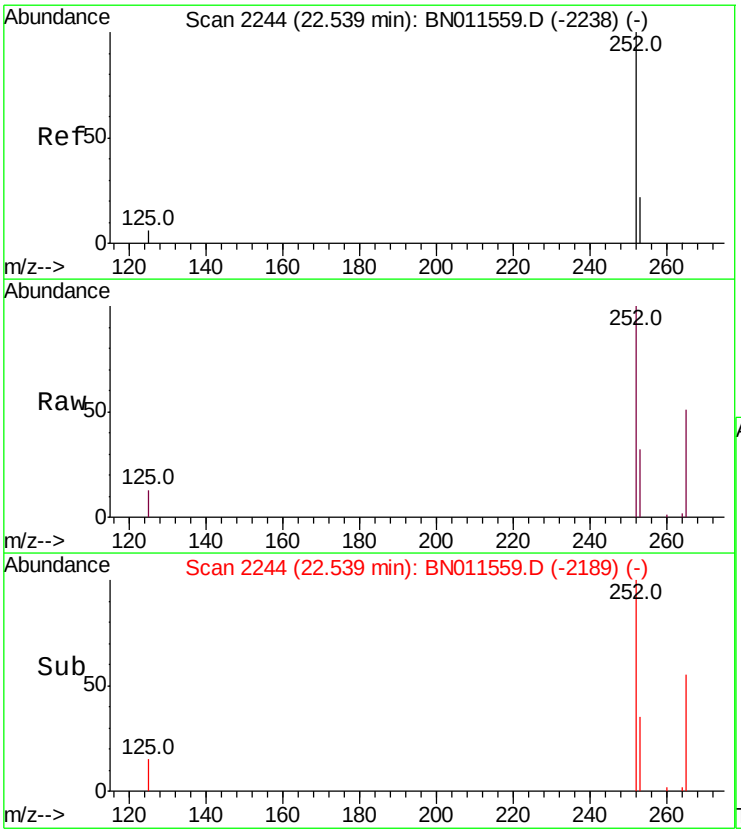
#37
Benzo(b)fluoranthene
Concen: 0.280 ng
RT: 22.50 min Scan# 2232
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 5306

Ion	Ratio	Lower	Upper
252	100		
253	31.9	25.5	38.3
125	12.8	10.2	15.4

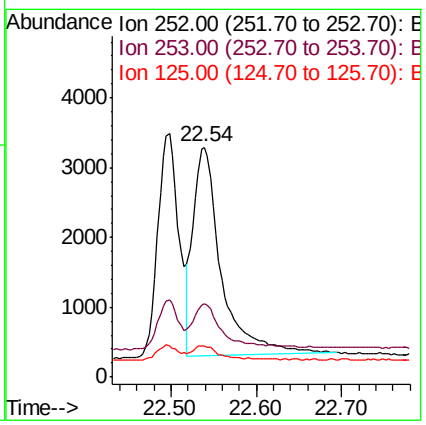


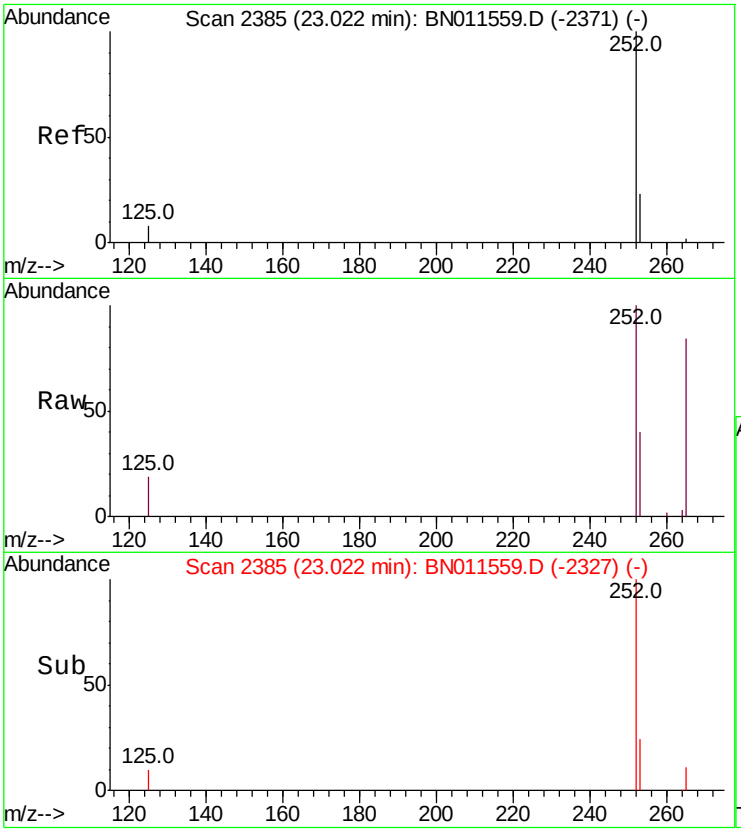


#38
Benzo(k)fluoranthene
Concen: 0.350 ng
RT: 22.54 min Scan# 2244
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:252 Resp: 6864

Ion	Ratio	Lower	Upper
252	100		
253	32.2	25.8	38.6
125	13.5	10.8	16.2



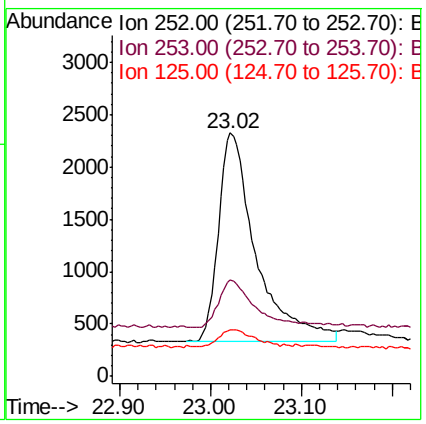


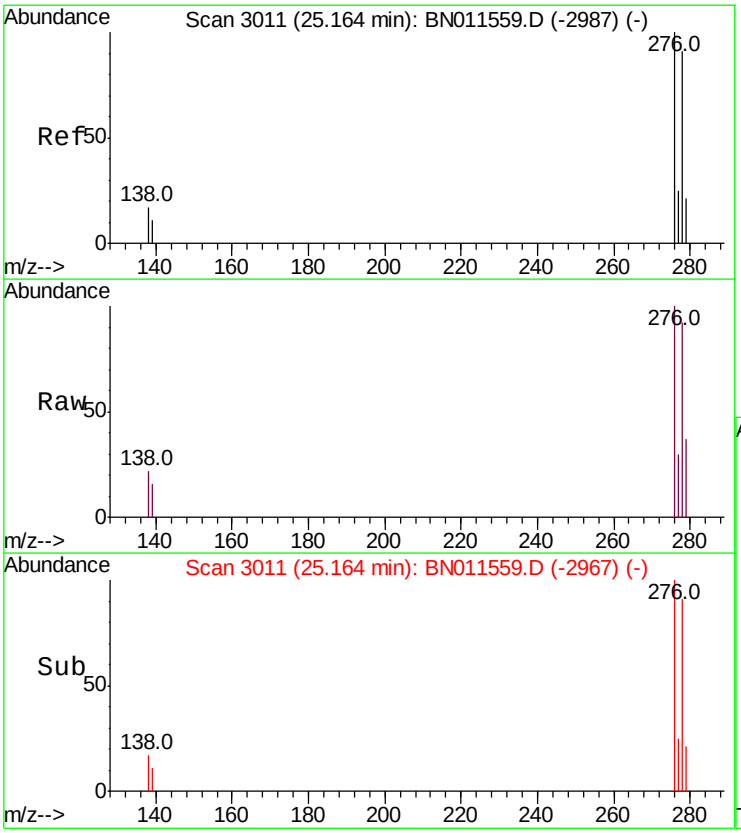
#39
Benzo(a)pyrene
Concen: 0.348 ng
RT: 23.02 min Scan# 2385
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 5749

Ion	Ratio	Lower	Upper
252	100		
253	39.8	31.8	47.8
125	19.2	15.4	23.0

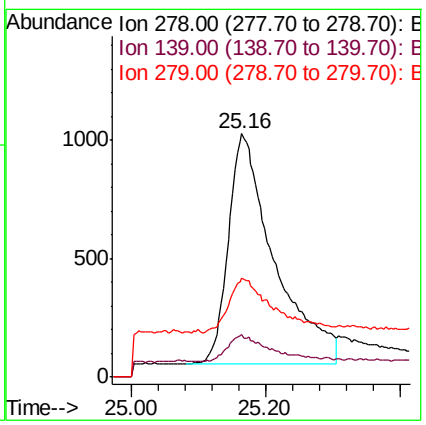


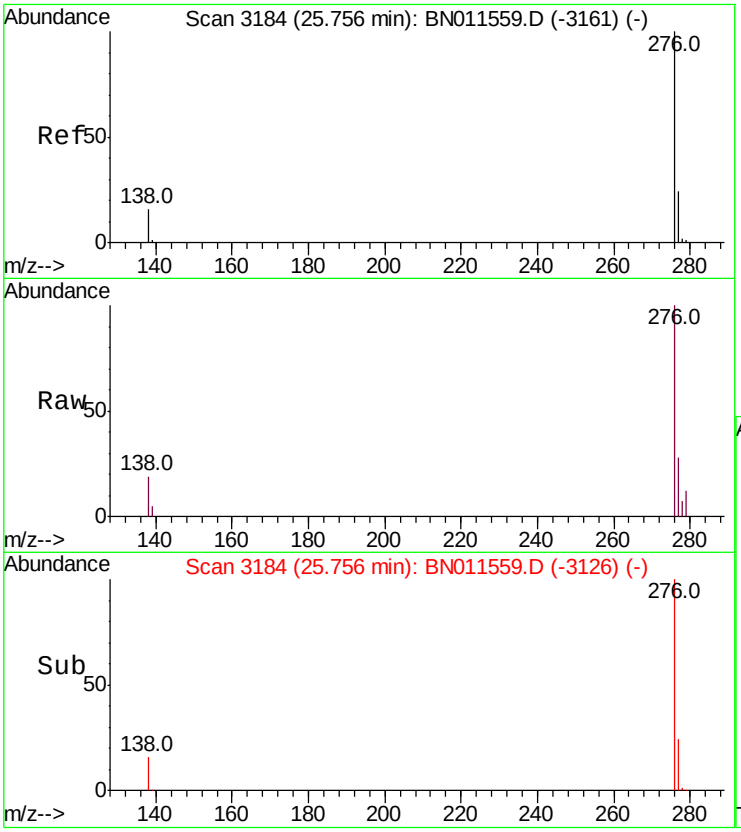


#40
Dibenzo(a,h)anthracene
Concen: 0.252 ng
RT: 25.16 min Scan# 3011
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Tgt Ion:278 Resp: 4644

Ion	Ratio	Lower	Upper
278	100		
139	17.5	14.0	21.0
279	40.5	32.4	48.6





#41
Benzo(g,h,i)perylene
Concen: 0.304 ng
RT: 25.76 min Scan# 3184
Delta R.T. 0.00 min
Lab File: BN011559.D
Acq: 21 Aug 2020 17:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:276 Resp: 5854

Ion	Ratio	Lower	Upper
276	100		
277	27.6	22.1	33.1
138	19.3	15.4	23.2