Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN091520\
Data File : BN011796.D
Acq On : 15 Sep 2020 11:22
Operator : CG/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTDICC0.2

Quant Time: Sep 15 12:49:07 2020
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN091520.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Sep 15 12:47:27 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.72	152	1466	0.40	ng		0.00
7) Naphthalene-d8	10.50	136	5147	0.40	ng		0.00
13) Acenaphthene-d10	14.36	164	2962	0.40	ng		0.00
19) Phenanthrene-d10	17.10	188	6818	0.40	ng		0.00
29) Chrysene-d12	21.30	240	7181	0.40	ng		-0.01
36) Perylene-d12	23.56	264	7506	0.40	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.31	112	960	0.24	ng		0.00
5) Phenol-d6	6.89	99	1212	0.24	ng		0.00
8) Nitrobenzene-d5	8.87	82	1297	0.23	ng		0.00
11) 2-Methylnaphthalene-d10	12.10	152	2167	0.23	ng		0.00
14) 2,4,6-Tribromophenol	15.85	330	363	0.23	ng		0.00
15) 2-Fluorobiphenyl	12.99	172	3083	0.23	ng		0.00
27) Fluoranthene-d10	19.15	212	4948	0.22	ng		0.00
31) Terphenyl-d14	19.75	244	4307	0.21	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.28	88	511	0.264	ng		90
3) n-Nitrosodimethylamine	3.58	42	758	0.245	ng	#	96
6) bis(2-Chloroethyl)ether	7.15	93	990	0.236	ng		97
9) Naphthalene	10.55	128	3371	0.227	ng		95
10) Hexachlorobutadiene	10.85	225	817	0.224	ng	#	100
12) 2-Methylnaphthalene	12.17	142	2349	0.224	ng		98
16) Acenaphthylene	14.08	152	3291	0.224	ng		100
17) Acenaphthene	14.42	154	2233	0.216	ng		91
18) Fluorene	15.41	166	2976	0.228	ng		98
20) 4,6-Dinitro-2-methylphenol	15.49	198	301	0.200	ng	#	45
21) 4-Bromophenyl-phenylether	16.31	248	967	0.225	ng		97
22) Hexachlorobenzene	16.42	284	1133	0.228	ng		98
23) Atrazine	16.58	200	870	0.223	ng		97
24) Pentachlorophenol	16.76	266	437	0.209	ng		96
25) Phenanthrene	17.15	178	5020	0.225	ng		99
26) Anthracene	17.24	178	4324	0.219	ng		99
28) Fluoranthene	19.18	202	5792	0.213	ng		99
30) Pyrene	19.54	202	5861	0.232	ng		100
32) Benzo(a)anthracene	21.29	228	5778	0.222	ng		99
33) Chrysene	21.34	228	6184	0.227	ng		99
34) Bis(2-ethylhexyl)phthalate	21.23	149	2707	0.211	ng		99
35) Indeno(1,2,3-cd)pyrene	25.81	276	8042	0.227	ng		99
37) Benzo(b)fluoranthene	22.88	252	6691	0.216	ng	#	89
38) Benzo(k)fluoranthene	22.93	252	6630	0.215	ng	#	87
39) Benzo(a)pyrene	23.46	252	5849	0.216	ng	#	84
40) Dibenzo(a,h)anthracene	25.82	278	6634	0.215	ng	#	91
41) Benzo(g,h,i)perylene	26.50	276	6787	0.219	ng		96

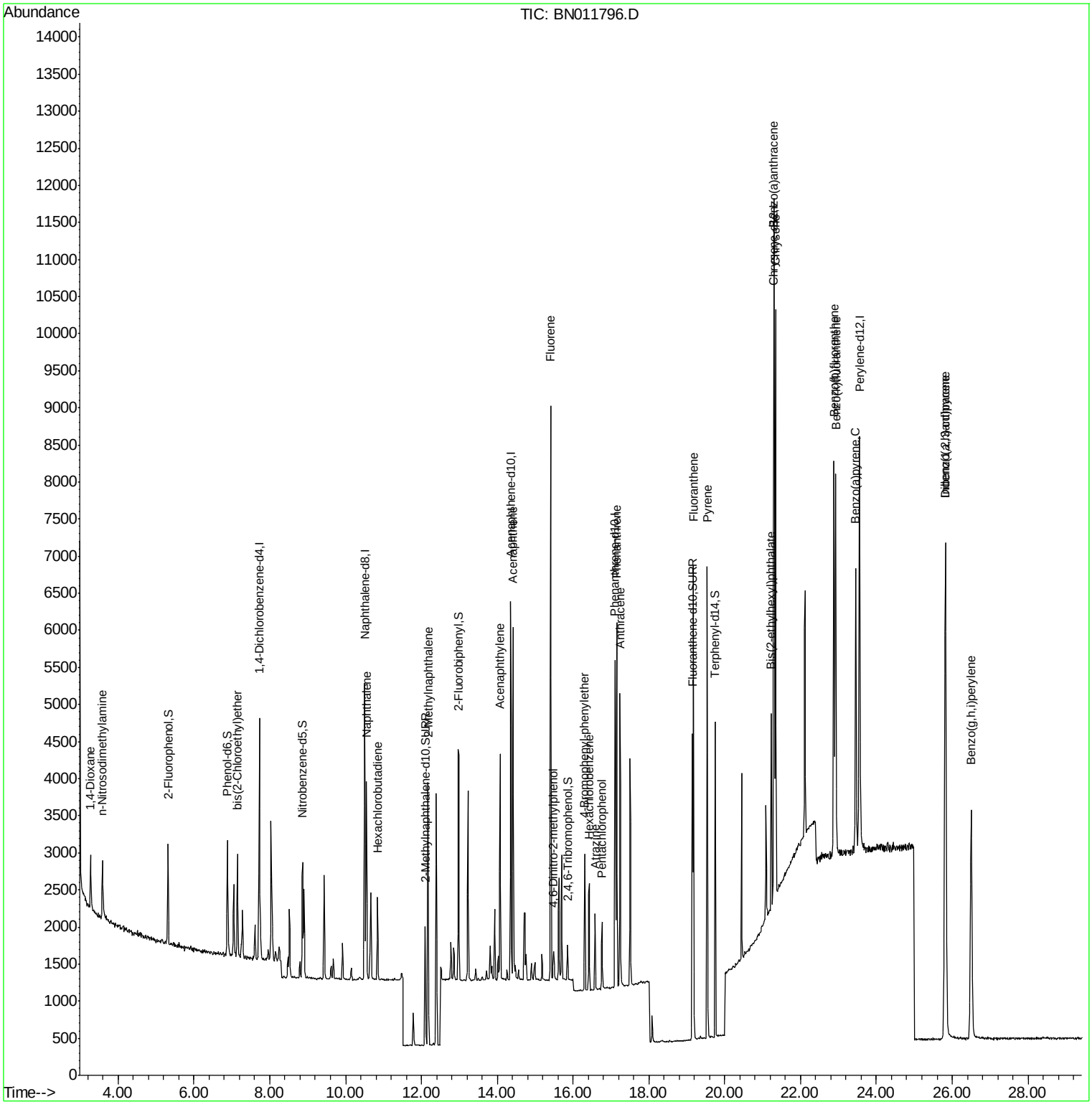
(#) = qualifier out of range (m) = manual integration (+) = signals summed

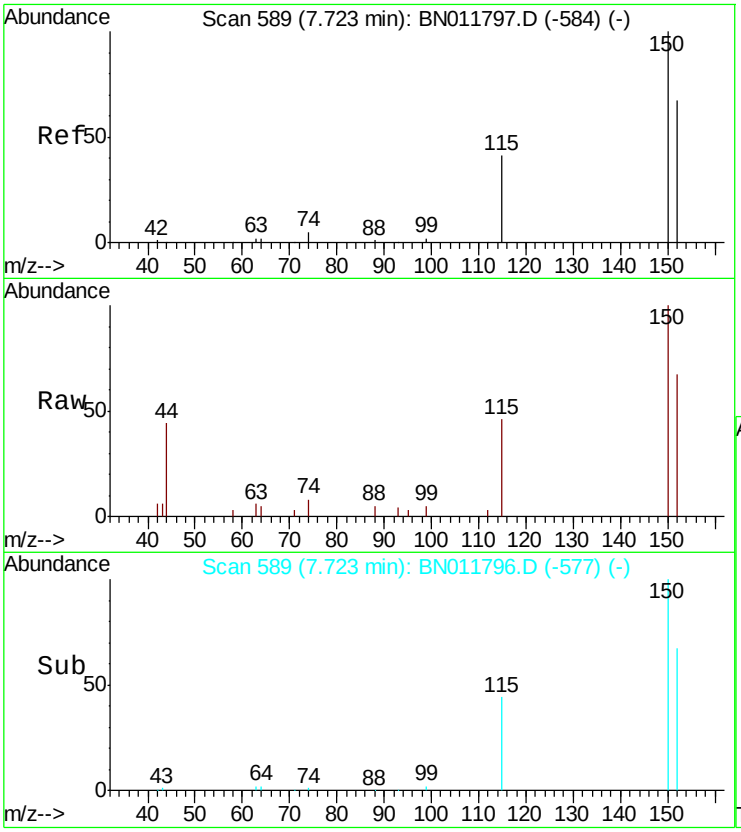
Quantitation Report (QT Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN091520\
Data File : BN011796.D
Acq On : 15 Sep 2020 11:22
Operator : CG/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Sep 15 12:49:07 2020
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN091520.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Sep 15 12:47:27 2020
Response via : Initial Calibration



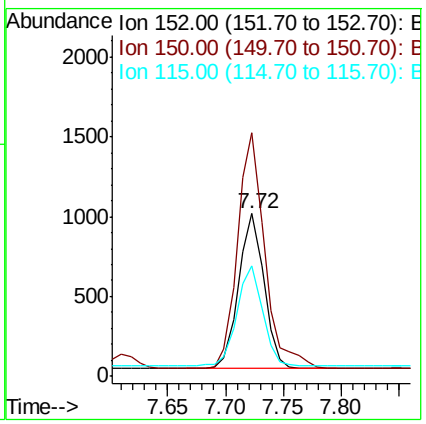


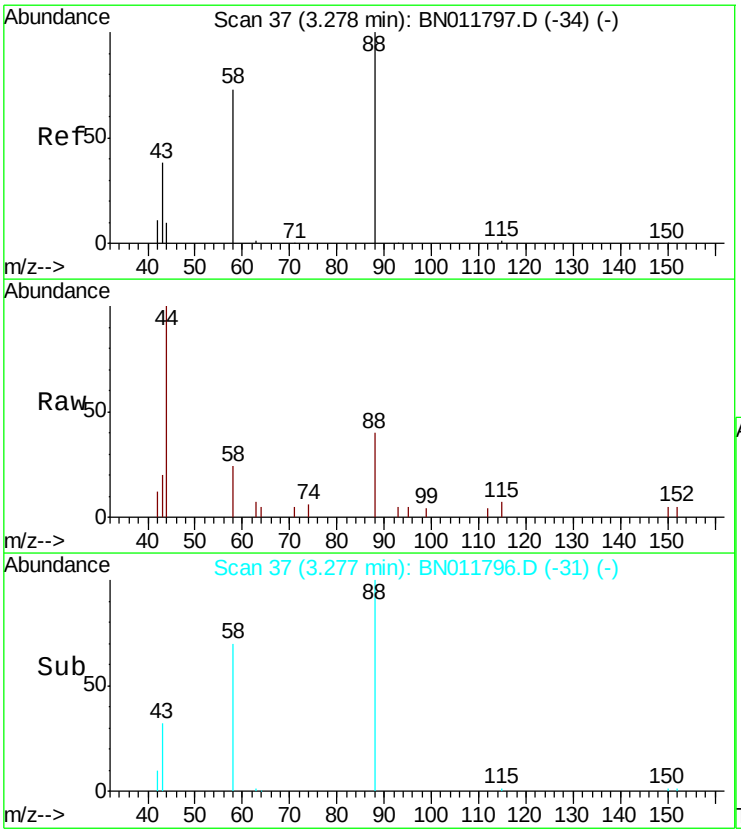
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.72 min Scan# 589
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 1466

Ion	Ratio	Lower	Upper
152	100		
150	150.0	118.3	177.5
115	68.3	51.3	76.9

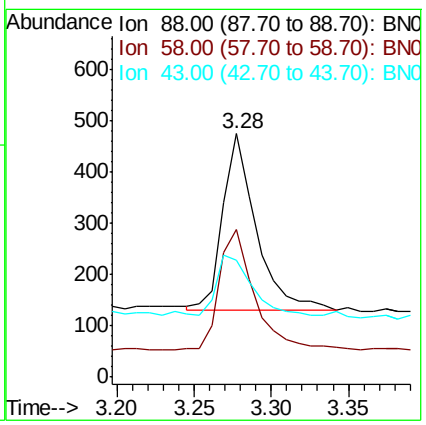


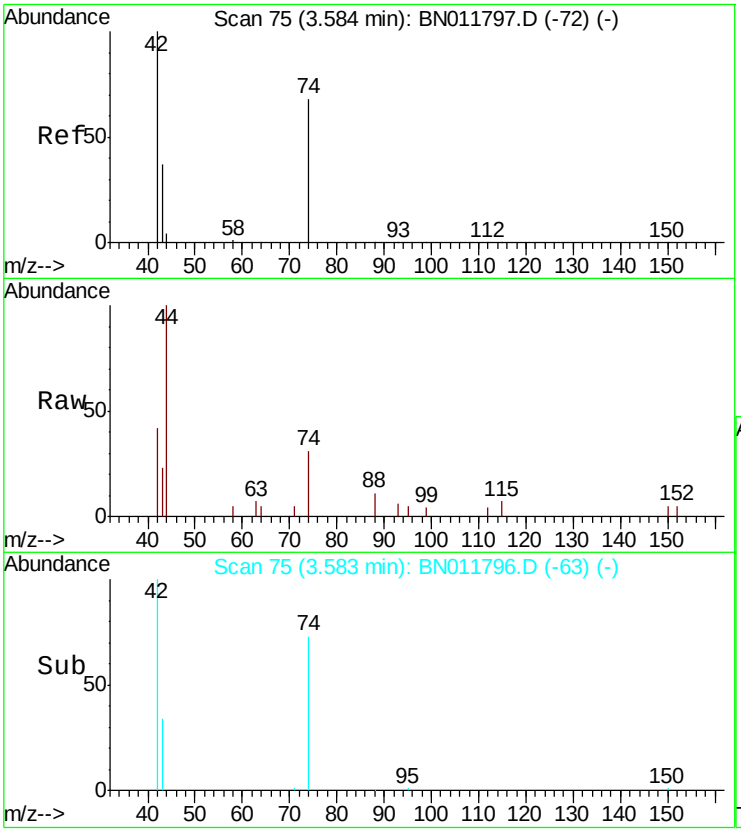


#2
1,4-Dioxane
Concen: 0.264 ng
RT: 3.28 min Scan# 37
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion: 88 Resp: 511

Ion	Ratio	Lower	Upper
88	100		
58	69.1	63.3	94.9
43	36.2	33.0	49.4



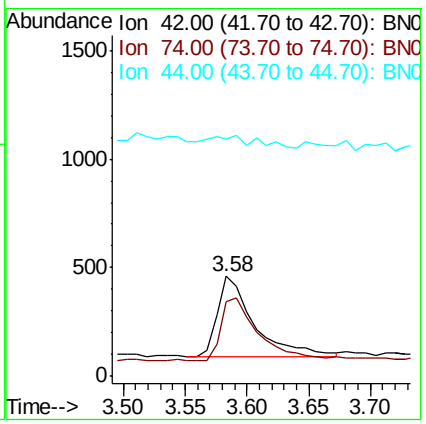


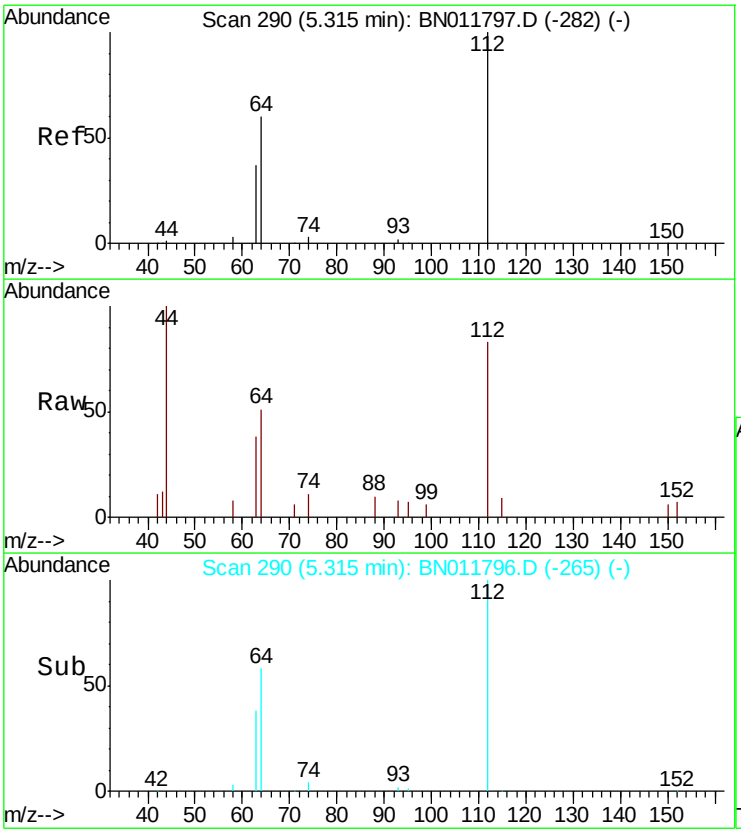
#3
n-Nitrosodimethylamine
Concen: 0.245 ng
RT: 3.58 min Scan# 75
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 42 Resp: 758

Ion	Ratio	Lower	Upper
42	100		
74	81.0	64.4	96.6
44	20.4	6.7	10.1#

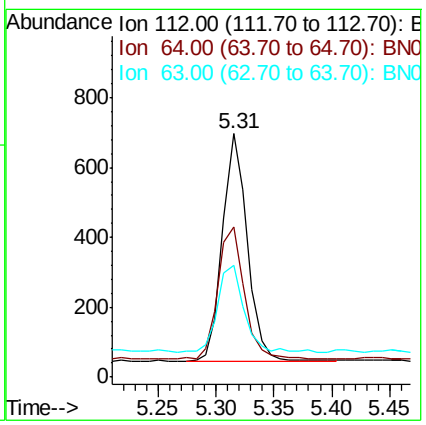


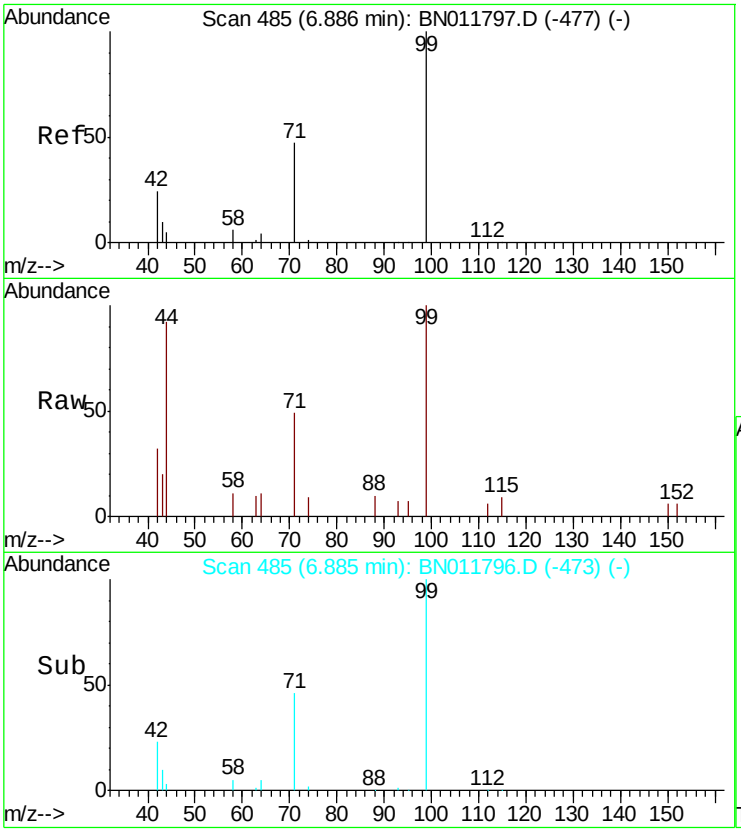


#4
2-Fluorophenol
Concen: 0.243 ng
RT: 5.31 min Scan# 290
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:112 Resp: 960

Ion	Ratio	Lower	Upper
112	100		
64	62.5	49.0	73.6
63	42.2	31.8	47.6



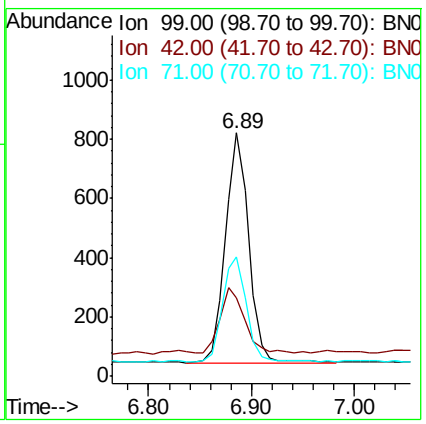


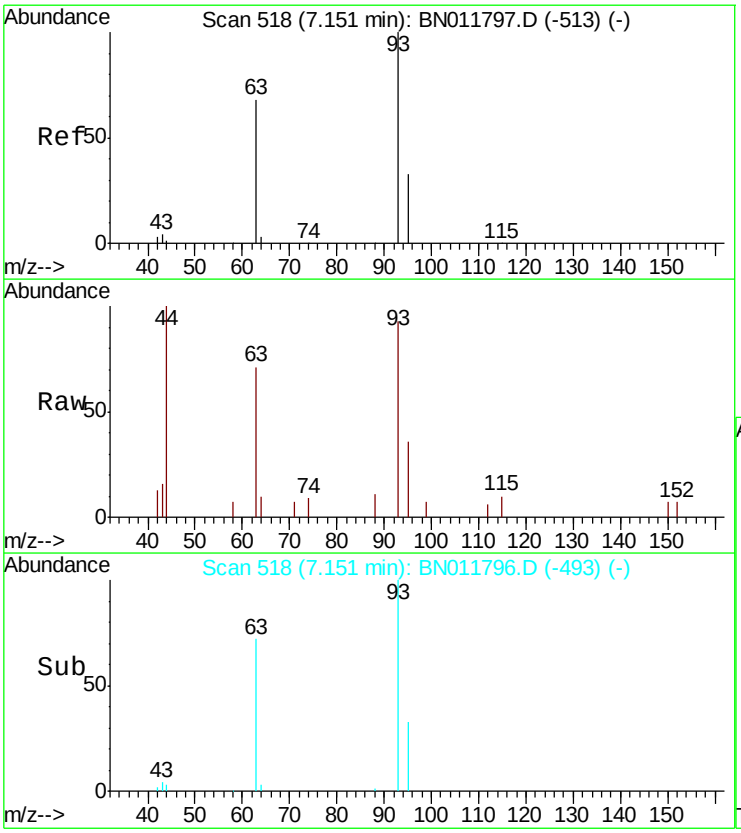
#5
Phenol-d6
Concen: 0.242 ng
RT: 6.89 min Scan# 485
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 99 Resp: 1212

Ion	Ratio	Lower	Upper
99	100		
42	30.4	23.4	35.0
71	47.1	38.1	57.1

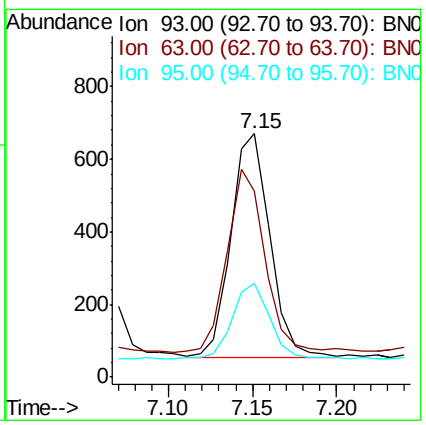


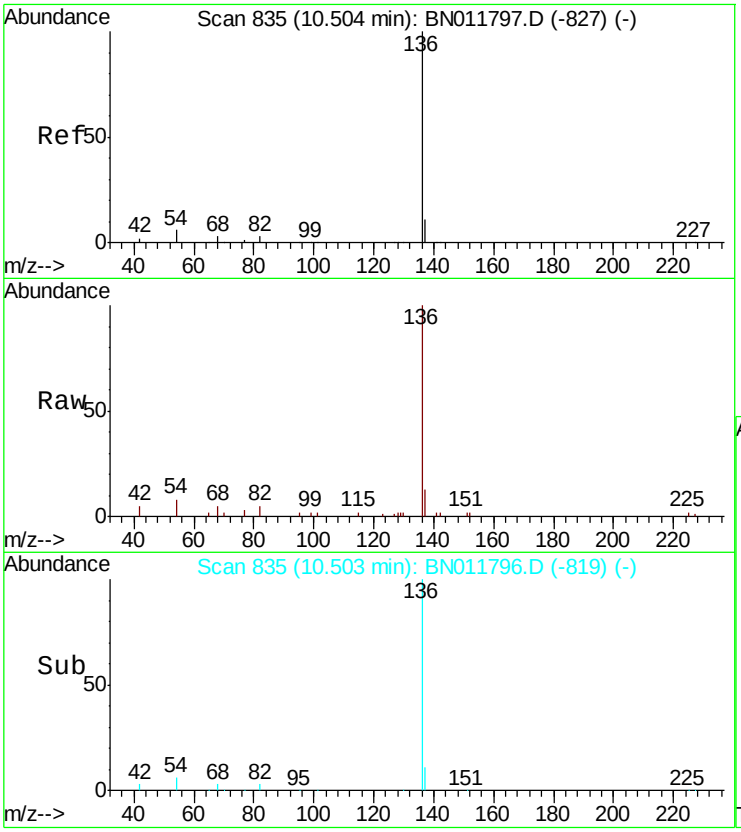


#6
bis(2-Chloroethyl)ether
Concen: 0.236 ng
RT: 7.15 min Scan# 518
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion: 93 Resp: 990

Ion	Ratio	Lower	Upper
93	100		
63	79.1	61.1	91.7
95	33.1	25.5	38.3



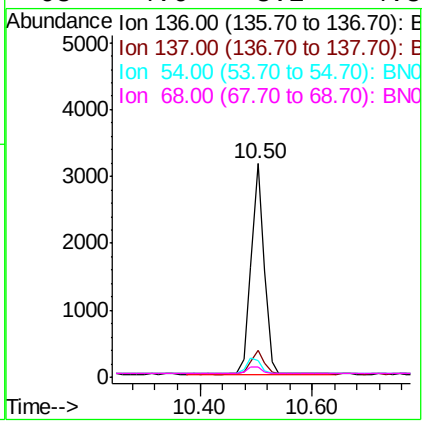


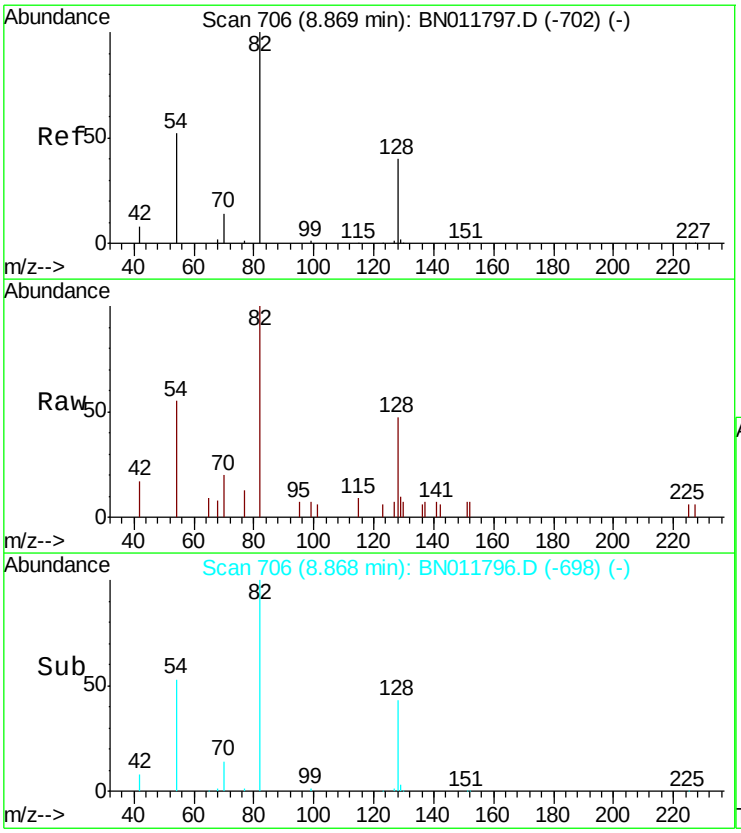
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.50 min Scan# 835
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:136 Resp: 5147

Ion	Ratio	Lower	Upper
136	100		
137	12.6	9.5	14.3
54	7.5	5.6	8.4
68	4.6	3.2	4.8

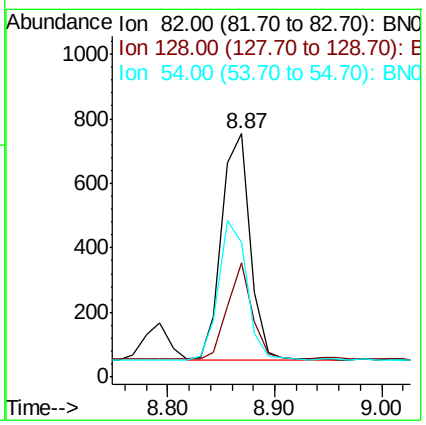


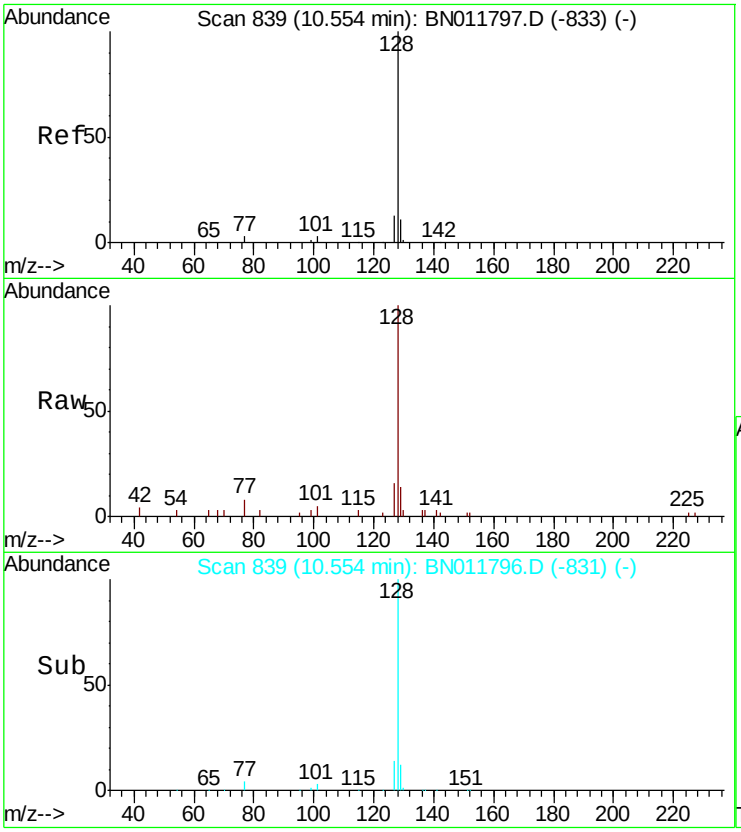


#8
Nitrobenzene-d5
Concen: 0.231 ng
RT: 8.87 min Scan# 706
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion: 82 Resp: 1297

Ion	Ratio	Lower	Upper
82	100		
128	47.1	34.2	51.2
54	55.3	43.1	64.7



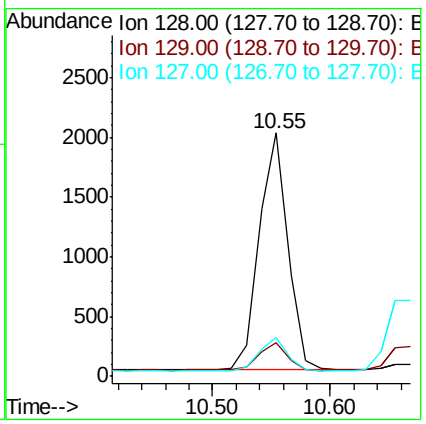


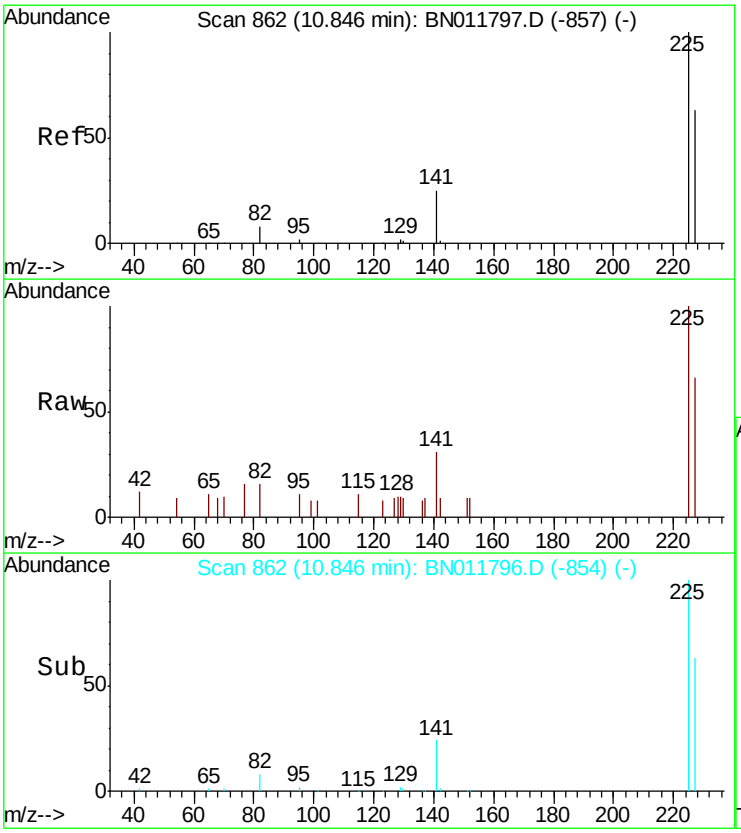
#9
Naphthalene
Concen: 0.227 ng
RT: 10.55 min Scan# 839
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:128 Resp: 3371

Ion	Ratio	Lower	Upper
128	100		
129	13.8	9.7	14.5
127	15.7	11.0	16.4

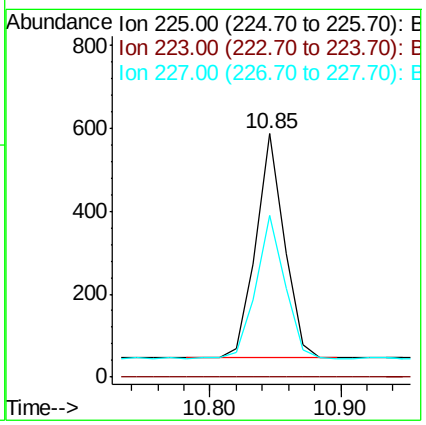


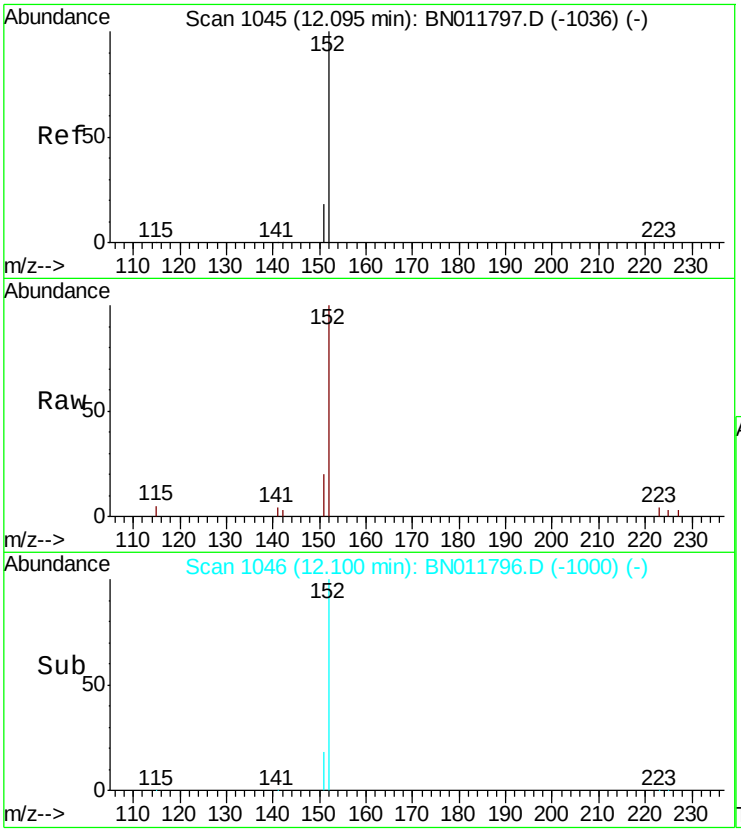


#10
Hexachlorobutadiene
Concen: 0.224 ng
RT: 10.85 min Scan# 862
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:225 Resp: 817

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.6	51.9	77.9



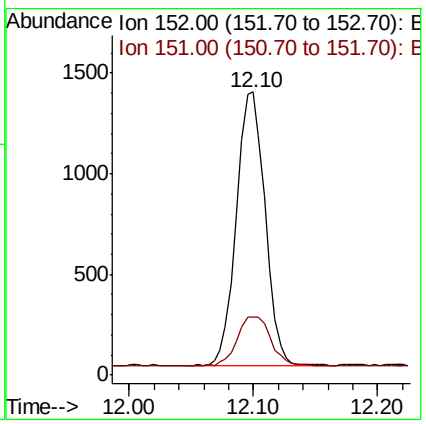


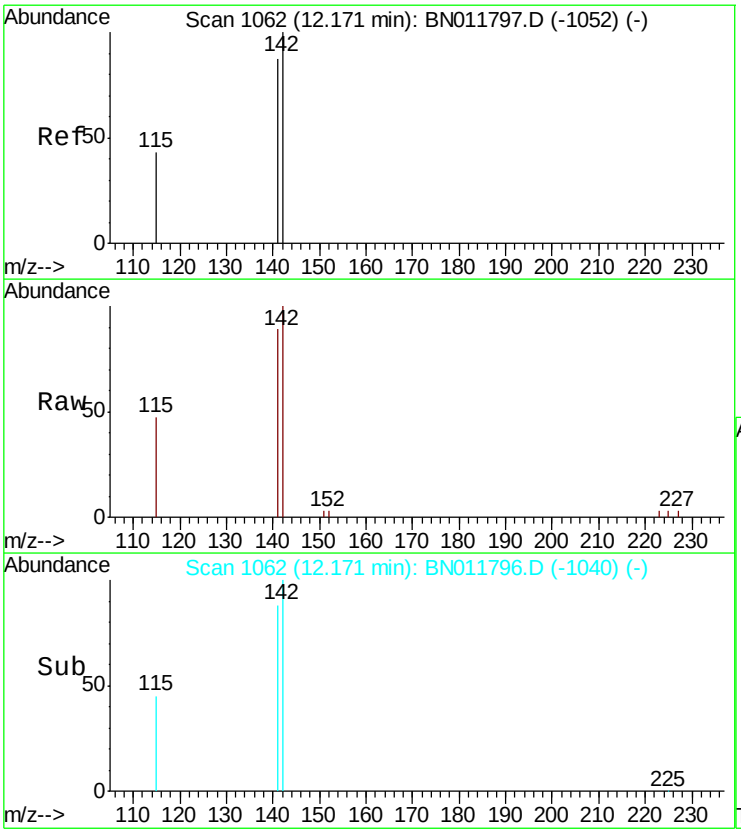
#11
2-Methylnaphthalene-d10
Concen: 0.226 ng
RT: 12.10 min Scan# 1046
Delta R.T. 0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 2167

Ion	Ratio	Lower	Upper
152	100		
151	21.3	16.7	25.1

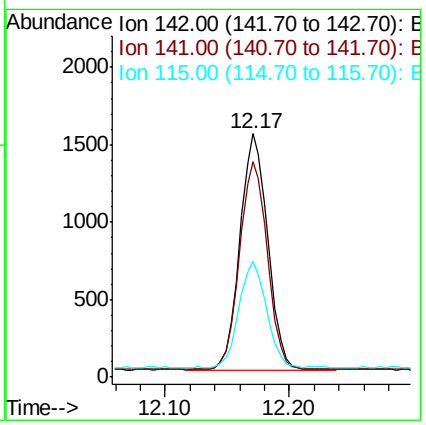


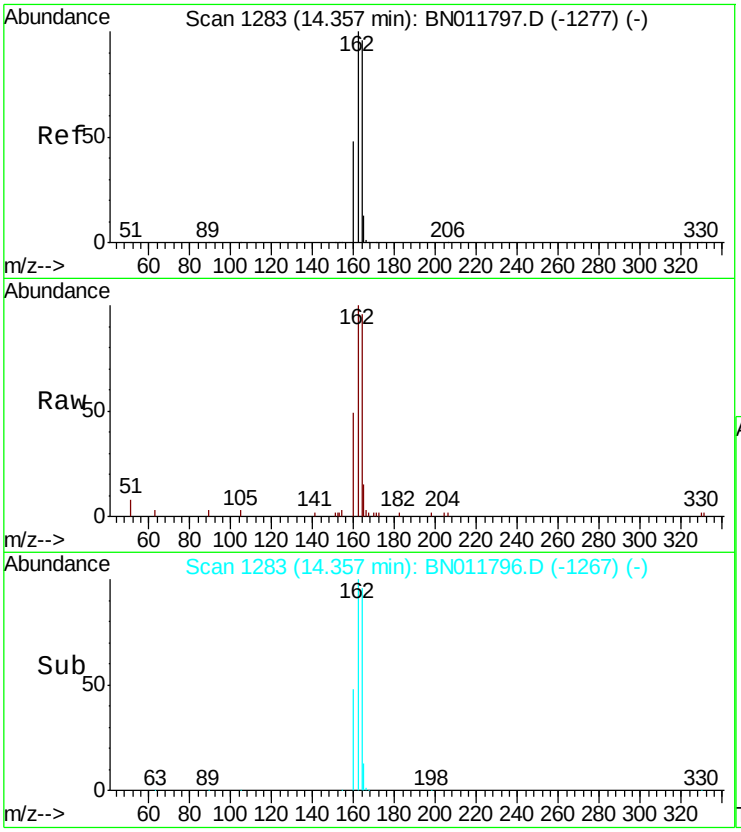


#12
2-Methylnaphthalene
Concen: 0.224 ng
RT: 12.17 min Scan# 1062
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:142 Resp: 2349

Ion	Ratio	Lower	Upper
142	100		
141	88.7	70.0	105.0
115	47.3	35.8	53.6



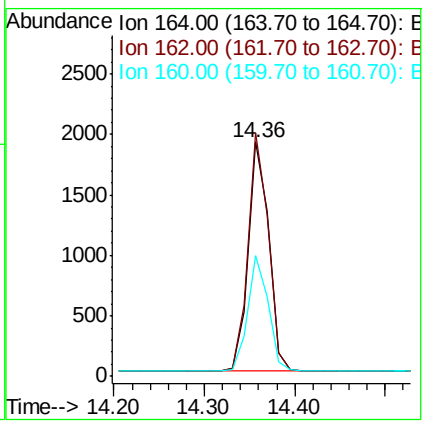


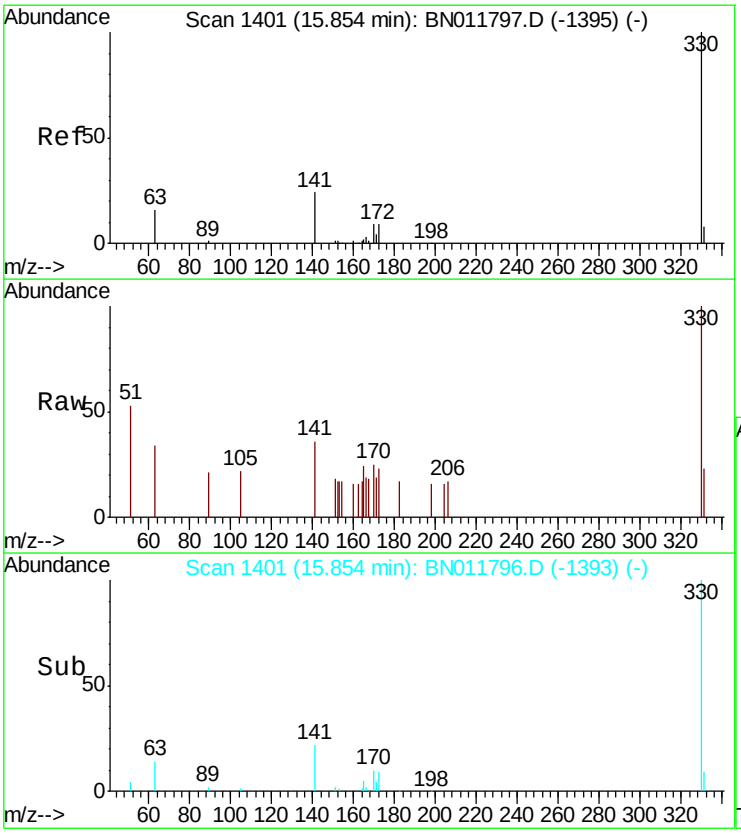
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.36 min Scan# 1283
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:164 Resp: 2962

Ion	Ratio	Lower	Upper
164	100		
162	104.0	83.6	125.4
160	51.4	41.2	61.8

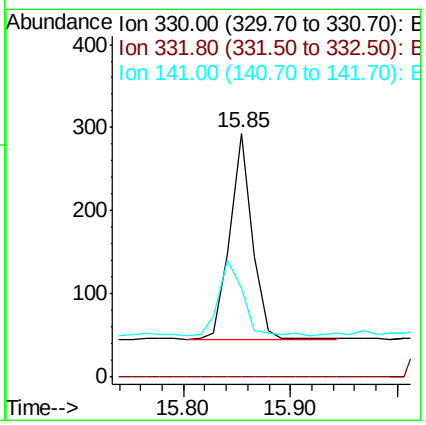


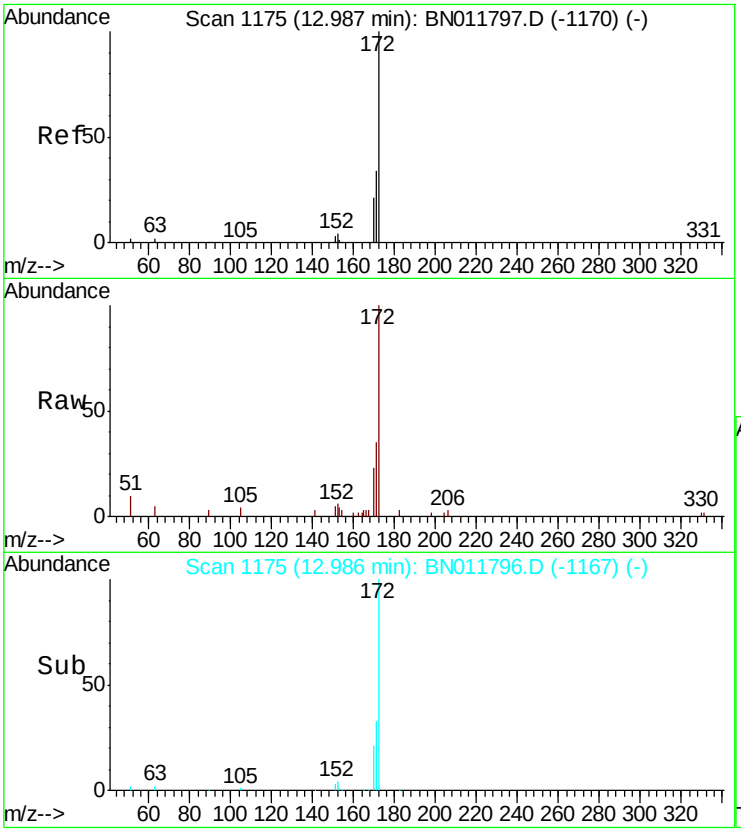


#14
2,4,6-Tribromophenol
Concen: 0.228 ng
RT: 15.85 min Scan# 1401
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:330 Resp: 363

Ion	Ratio	Lower	Upper
330	100		
332	0.0	0.0	0.0
141	38.3	33.7	50.5



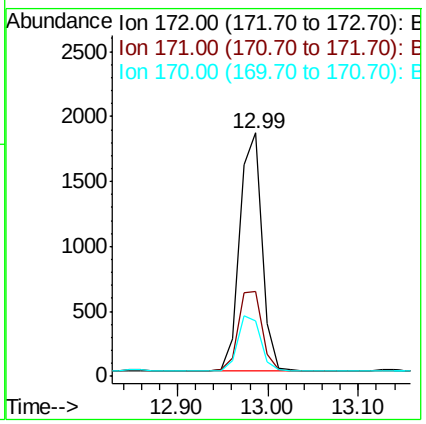


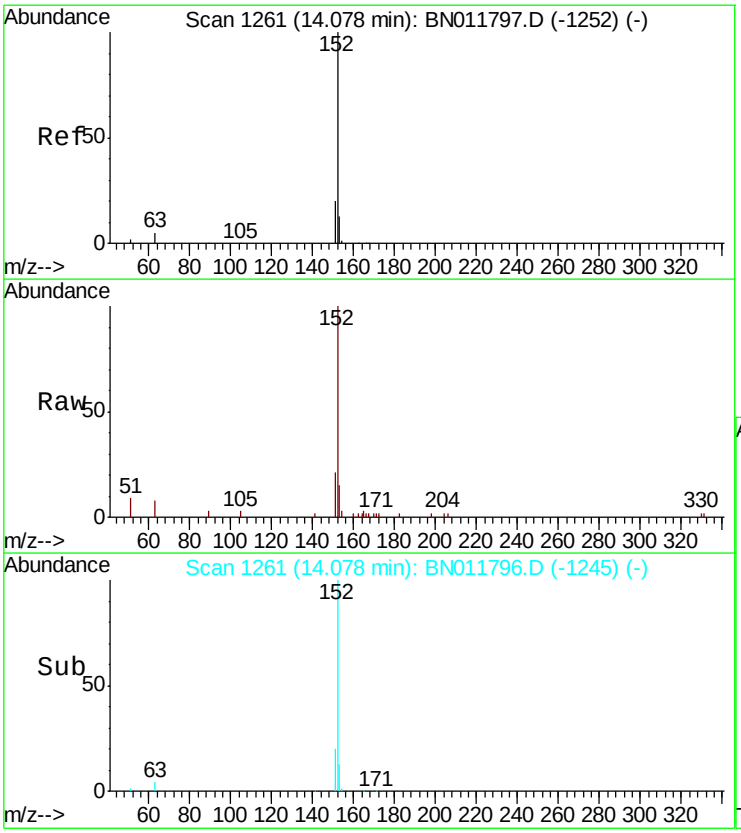
#15
2-Fluorobiphenyl
Concen: 0.233 ng
RT: 12.99 min Scan# 1175
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:172 Resp: 3083

Ion	Ratio	Lower	Upper
172	100		
171	34.6	27.4	41.2
170	22.9	17.8	26.6

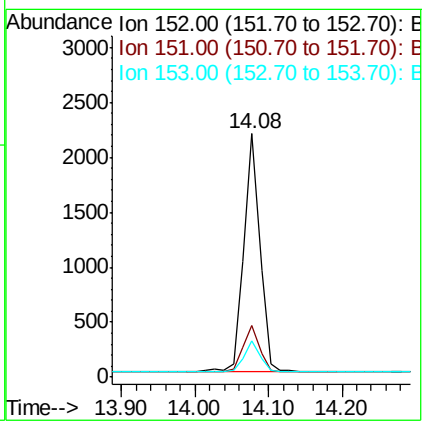


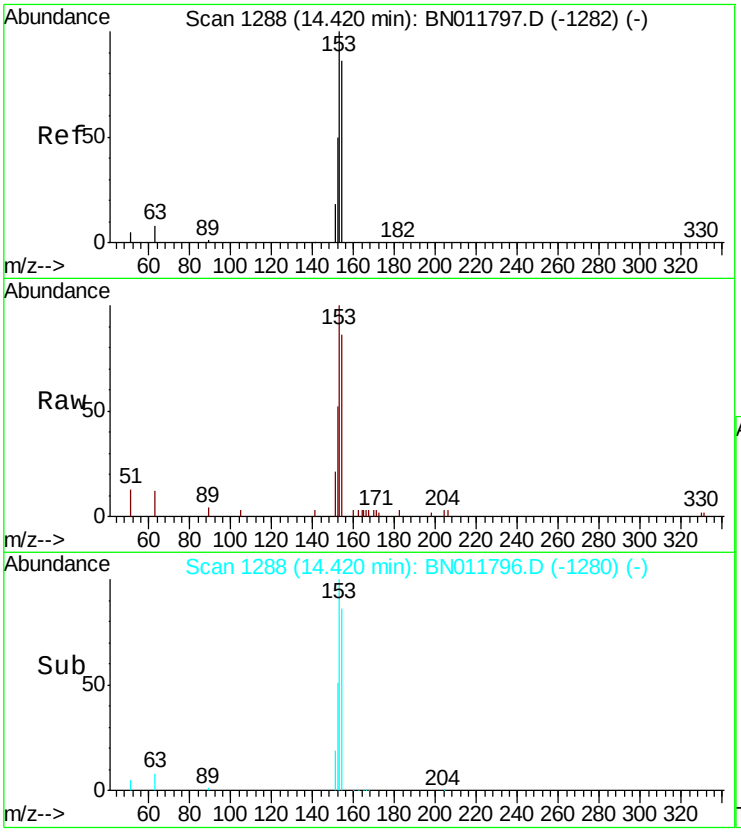


#16
Acenaphthylene
Concen: 0.224 ng
RT: 14.08 min Scan# 1261
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:152 Resp: 3291

Ion	Ratio	Lower	Upper
152	100		
151	19.7	15.9	23.9
153	12.9	10.5	15.7



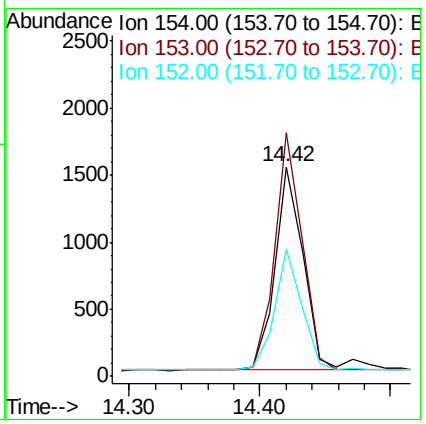


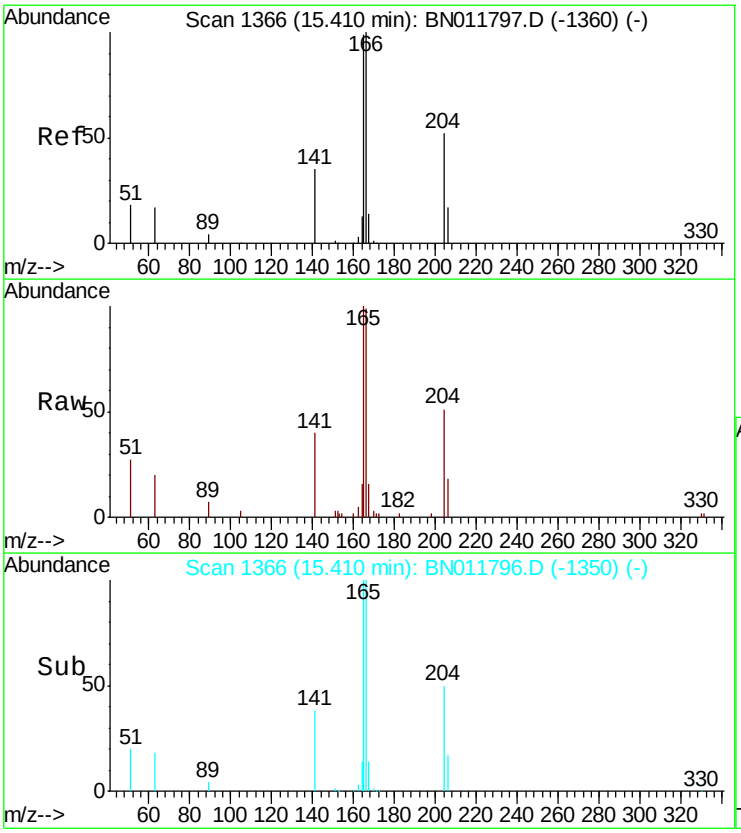
#17
Acenaphthene
Concen: 0.216 ng
RT: 14.42 min Scan# 1288
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:154 Resp: 2233

Ion	Ratio	Lower	Upper
154	100		
153	115.0	83.4	125.2
152	58.4	42.8	64.2

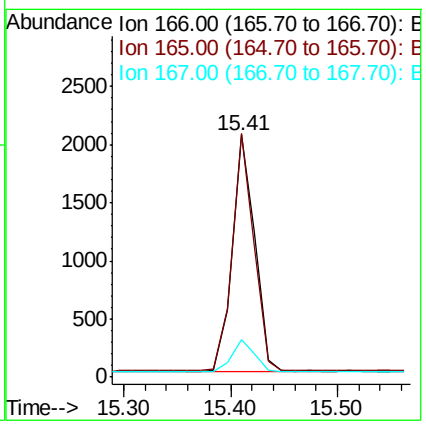


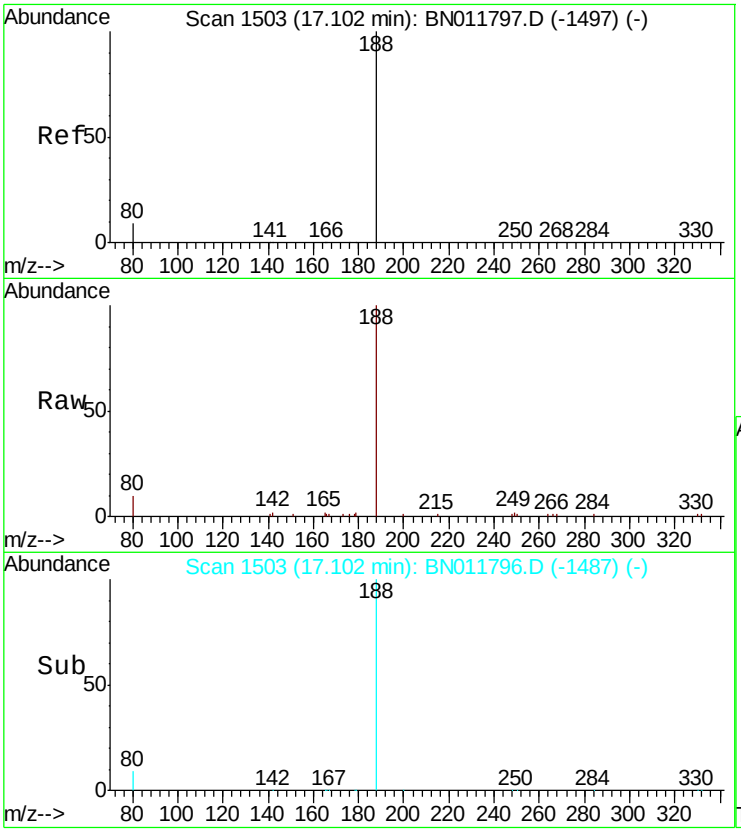


#18
Fluorene
Concen: 0.228 ng
RT: 15.41 min Scan# 1366
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:166 Resp: 2976

Ion	Ratio	Lower	Upper
166	100		
165	96.4	78.8	118.2
167	14.0	11.2	16.8



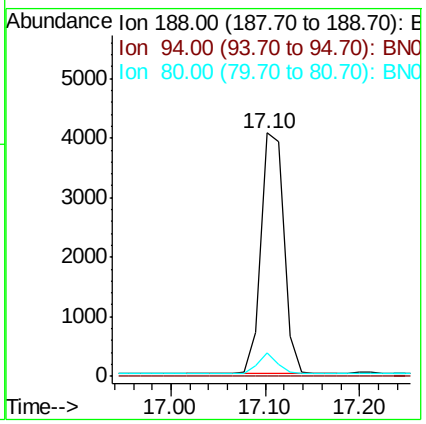


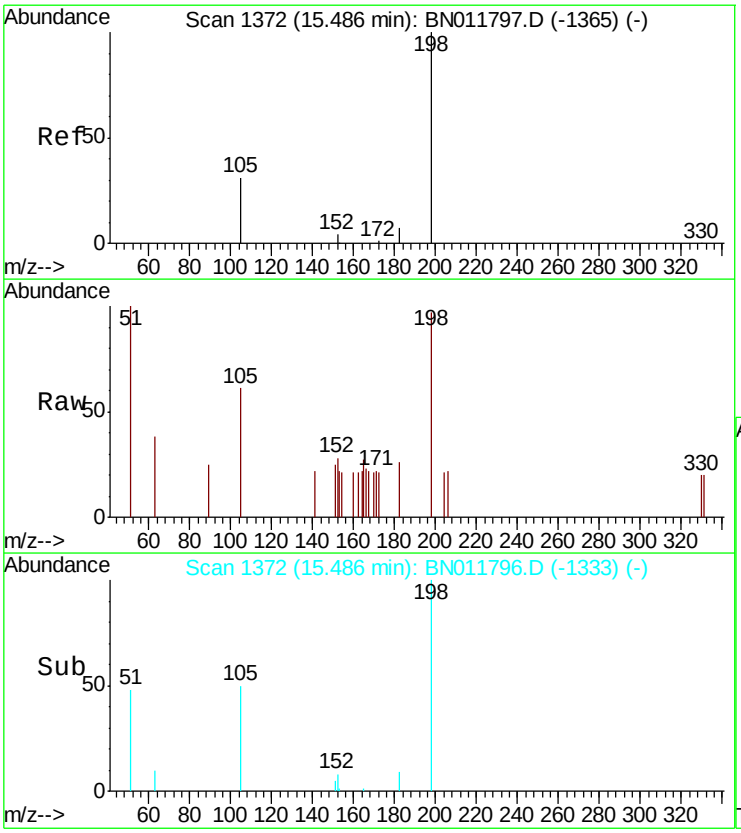
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.10 min Scan# 1503
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:188 Resp: 6818

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.7	7.7	11.5

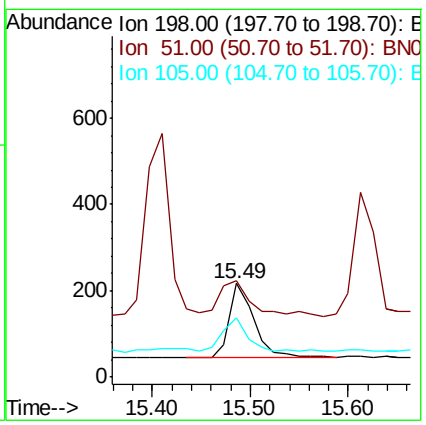


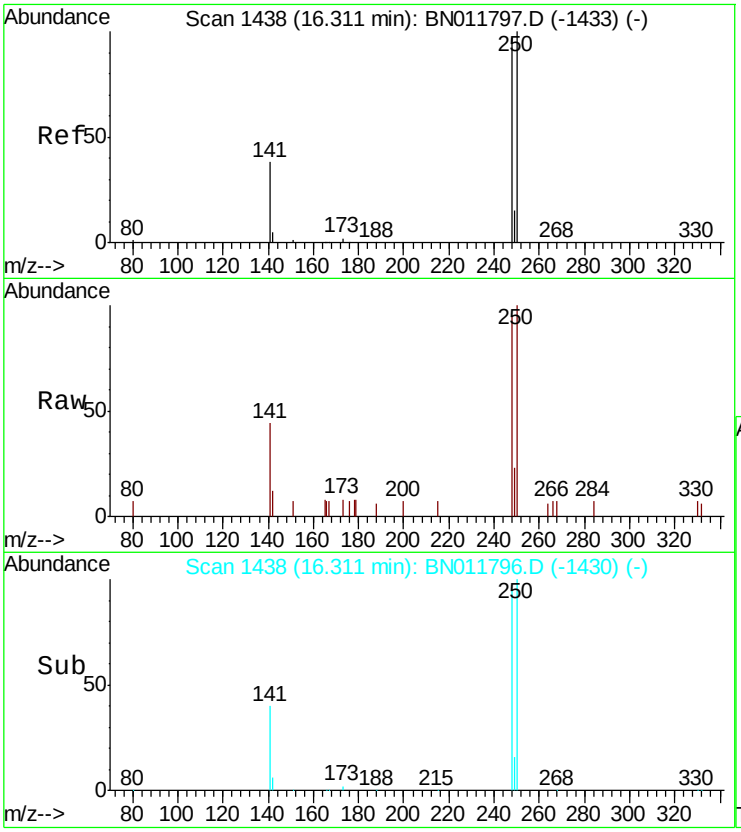


#20
4,6-Dinitro-2-methylphenol
Concen: 0.200 ng
RT: 15.49 min Scan# 1372
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:198 Resp: 301

Ion	Ratio	Lower	Upper
198	100		
51	102.8	45.0	67.4#
105	63.1	30.4	45.6#



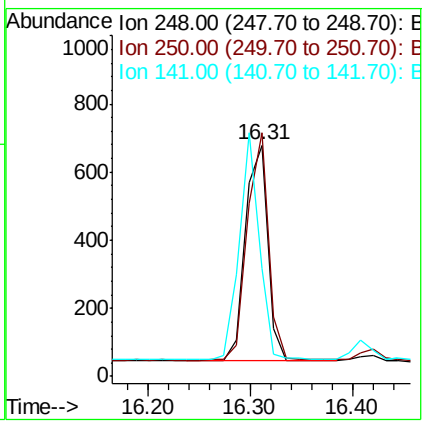


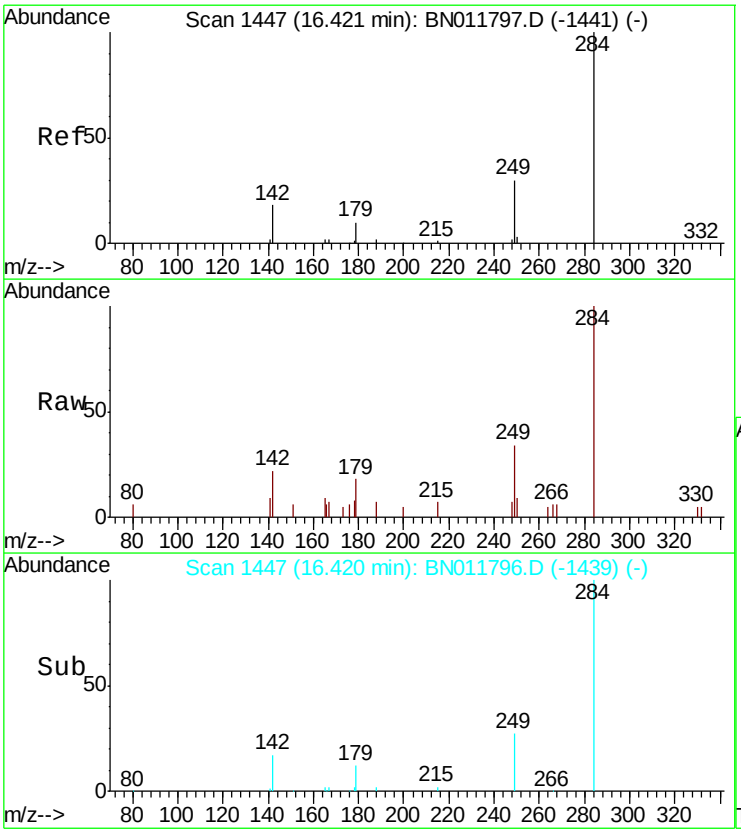
#21
4-Bromophenyl-phenylether
Concen: 0.225 ng
RT: 16.31 min Scan# 1438
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:248 Resp: 967

Ion	Ratio	Lower	Upper
248	100		
250	105.3	82.7	124.1
141	46.7	33.7	50.5

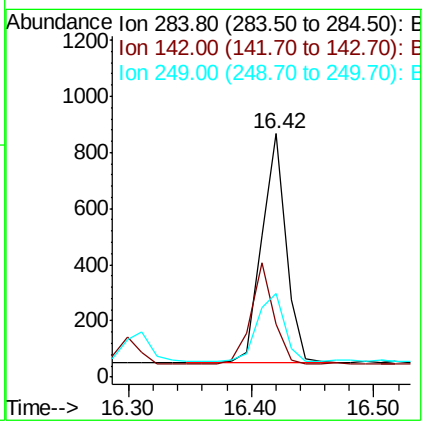


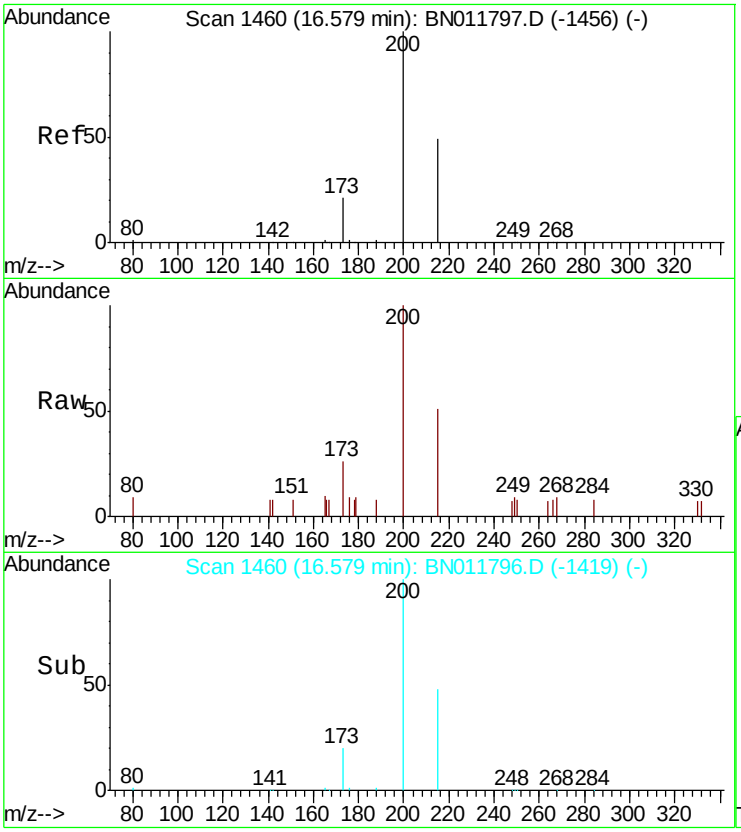


#22
Hexachlorobenzene
Concen: 0.228 ng
RT: 16.42 min Scan# 1447
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:284 Resp: 1133

Ion	Ratio	Lower	Upper
284	100		
142	41.5	32.4	48.6
249	32.7	26.8	40.2



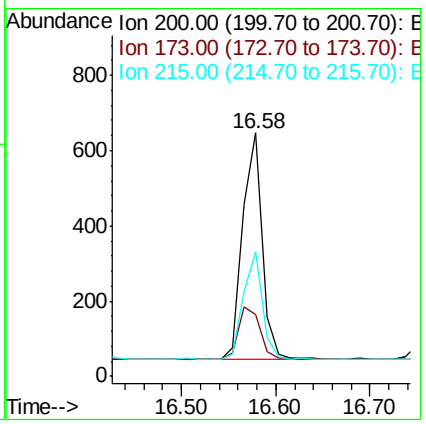


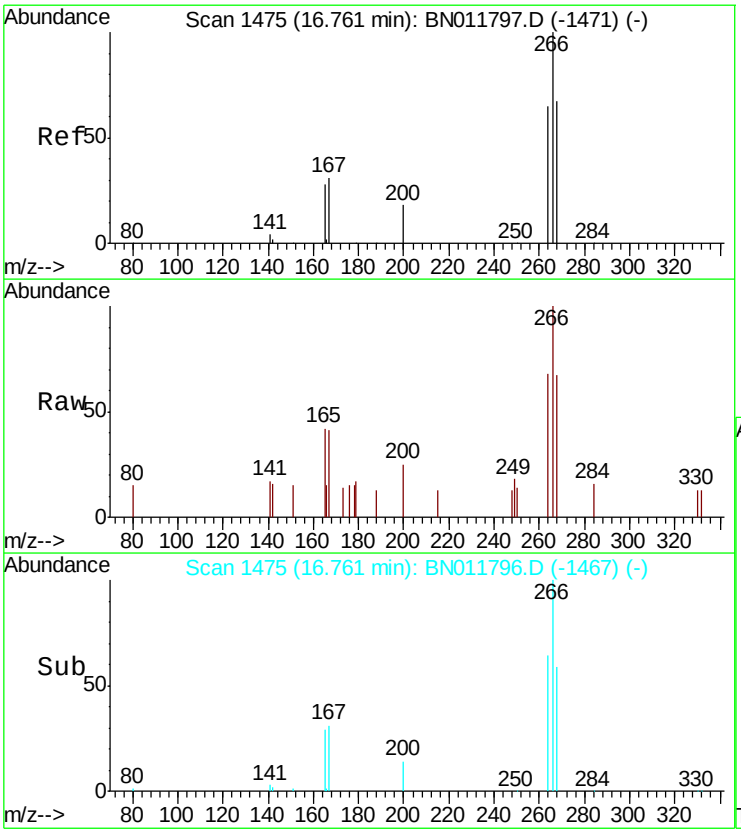
#23
Atrazine
Concen: 0.223 ng
RT: 16.58 min Scan# 1460
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:200 Resp: 870

Ion	Ratio	Lower	Upper
200	100		
173	25.7	18.7	28.1
215	51.5	40.2	60.4

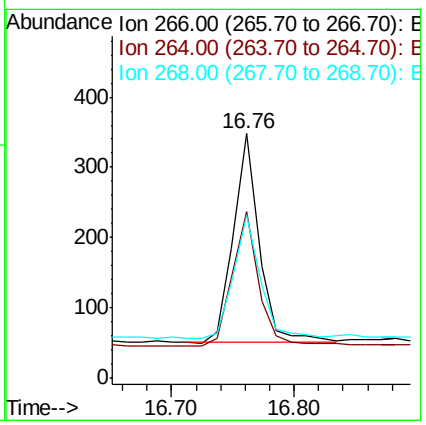


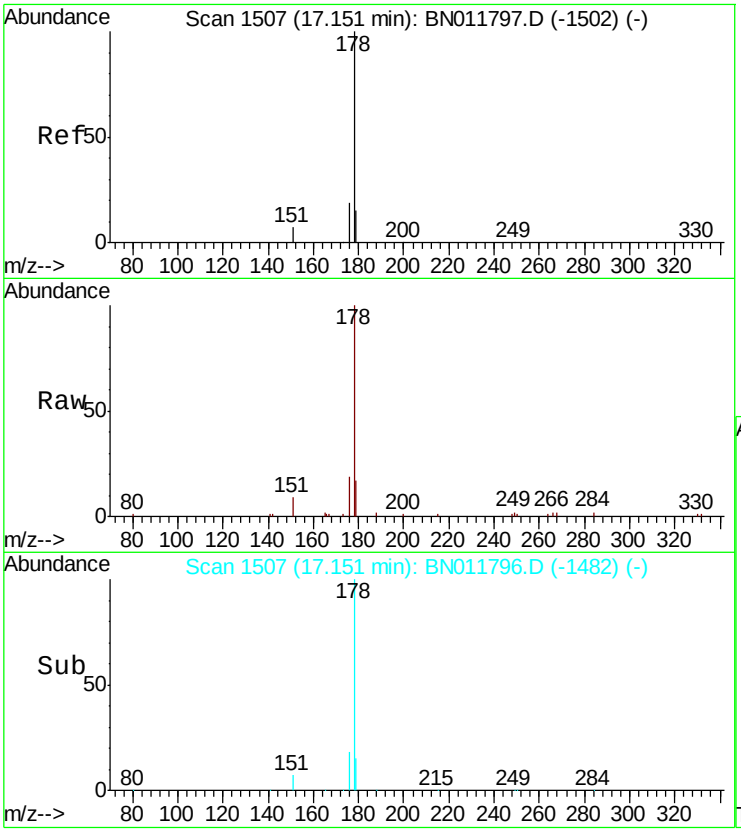


#24
Pentachlorophenol
Concen: 0.209 ng
RT: 16.76 min Scan# 1475
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:266 Resp: 437

Ion	Ratio	Lower	Upper
266	100		
264	66.8	51.2	76.8
268	62.2	52.4	78.6



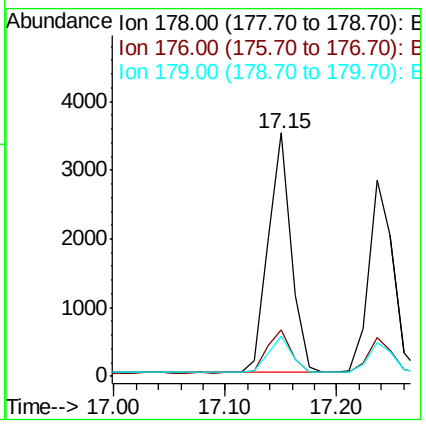


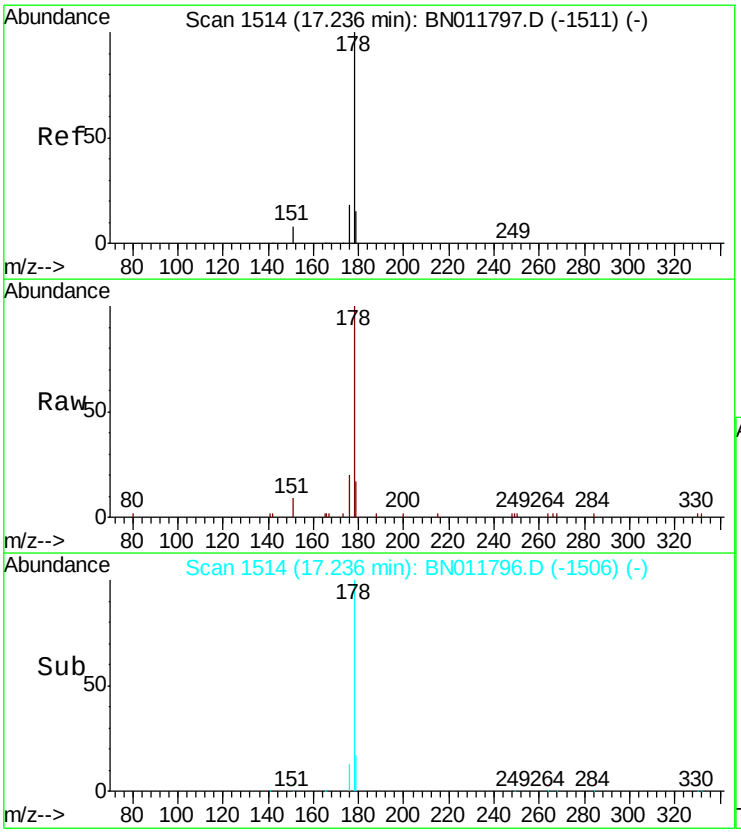
#25
Phenanthrene
Concen: 0.225 ng
RT: 17.15 min Scan# 1507
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:178 Resp: 5020

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.1	22.7
179	15.2	12.3	18.5

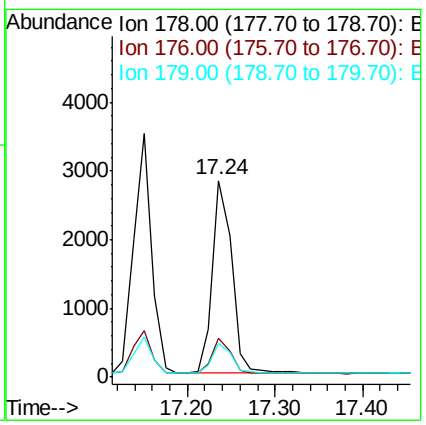


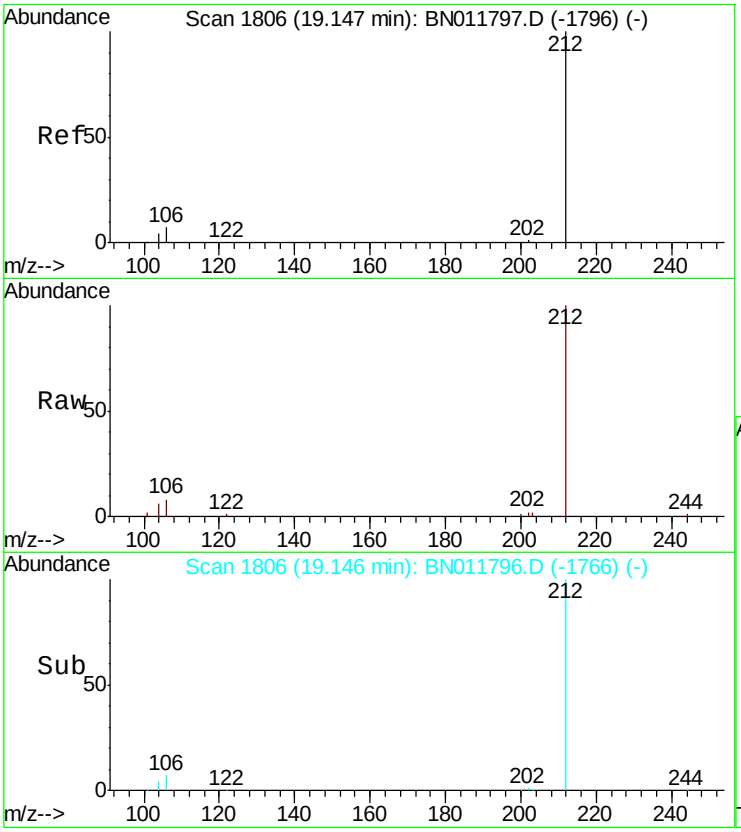


#26
Anthracene
Concen: 0.219 ng
RT: 17.24 min Scan# 1514
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:178 Resp: 4324

Ion	Ratio	Lower	Upper
178	100		
176	18.3	14.6	21.8
179	15.1	12.4	18.6



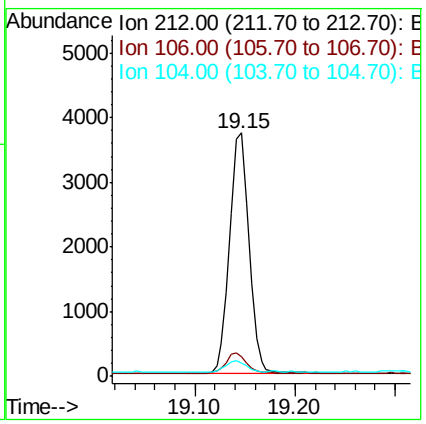


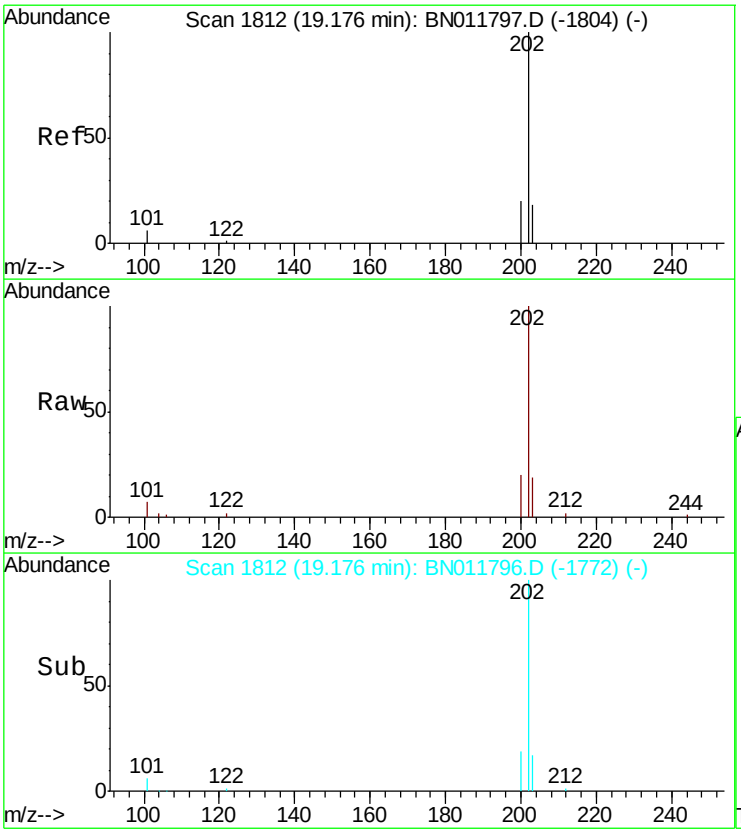
#27
Fluoranthene-d10
Concen: 0.225 ng
RT: 19.15 min Scan# 1806
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:212 Resp: 4948

Ion	Ratio	Lower	Upper
212	100		
106	8.4	6.4	9.6
104	4.7	3.9	5.9

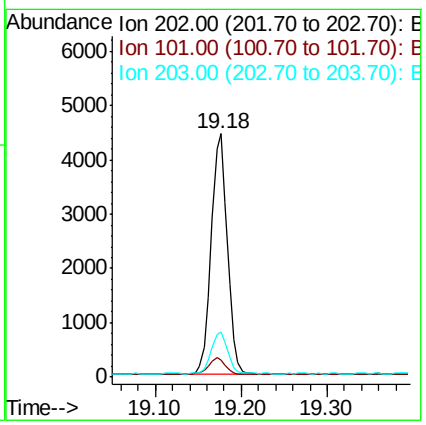


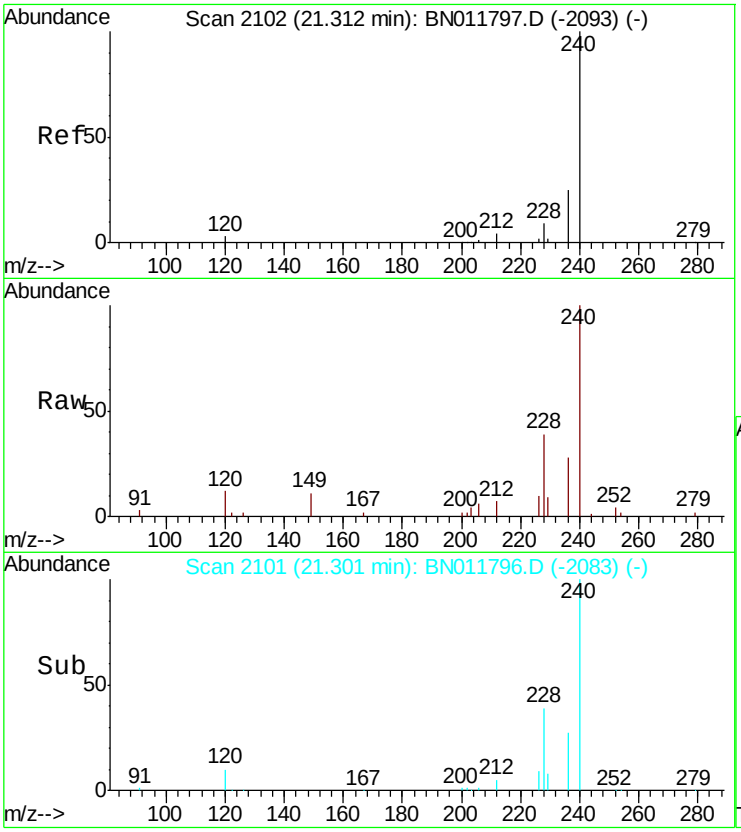


#28
Fluoranthene
Concen: 0.213 ng
RT: 19.18 min Scan# 1812
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:202 Resp: 5792

Ion	Ratio	Lower	Upper
202	100		
101	7.2	5.4	8.2
203	17.4	13.8	20.6



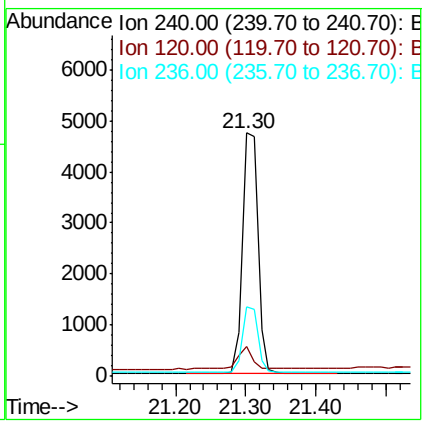


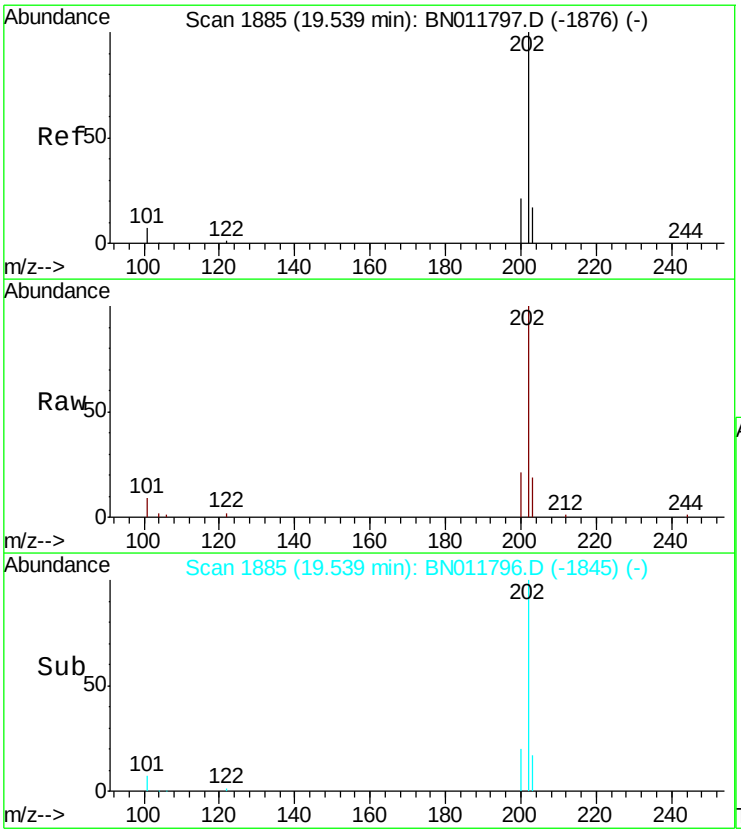
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.30 min Scan# 2101
Delta R.T. -0.01 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:240 Resp: 7181

Ion	Ratio	Lower	Upper
240	100		
120	12.3	3.5	5.3#
236	28.3	20.5	30.7

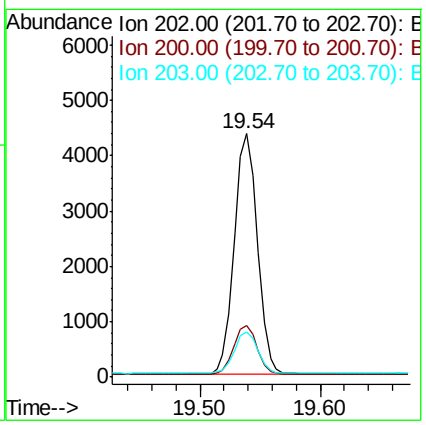


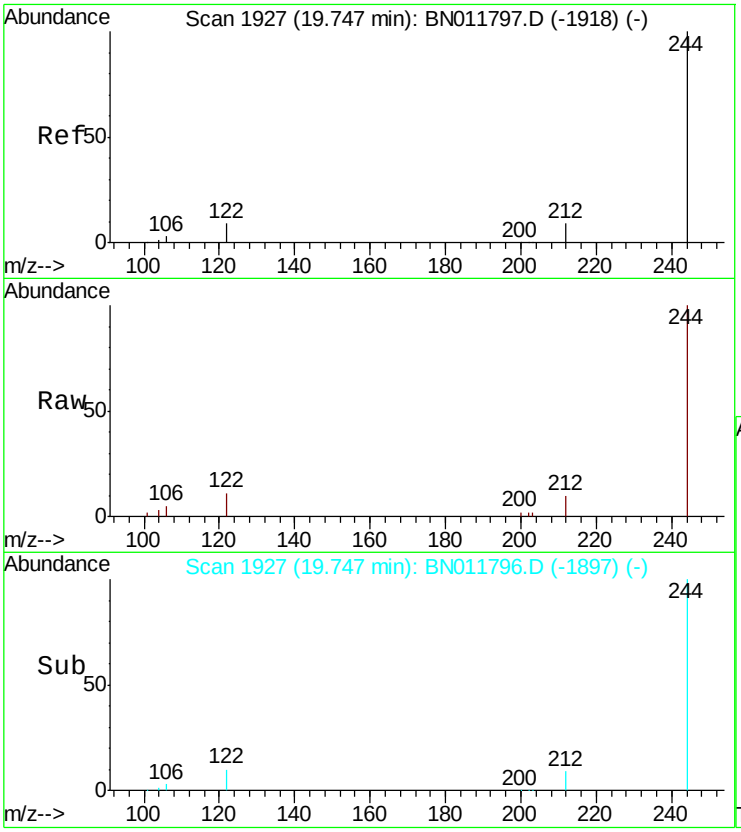


#30
Pyrene
Concen: 0.232 ng
RT: 19.54 min Scan# 1885
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:202 Resp: 5861

Ion	Ratio	Lower	Upper
202	100		
200	20.6	16.5	24.7
203	17.7	13.9	20.9



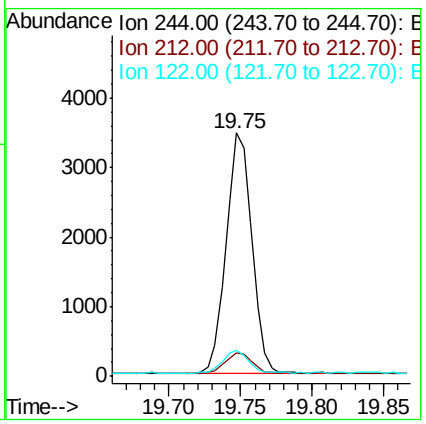


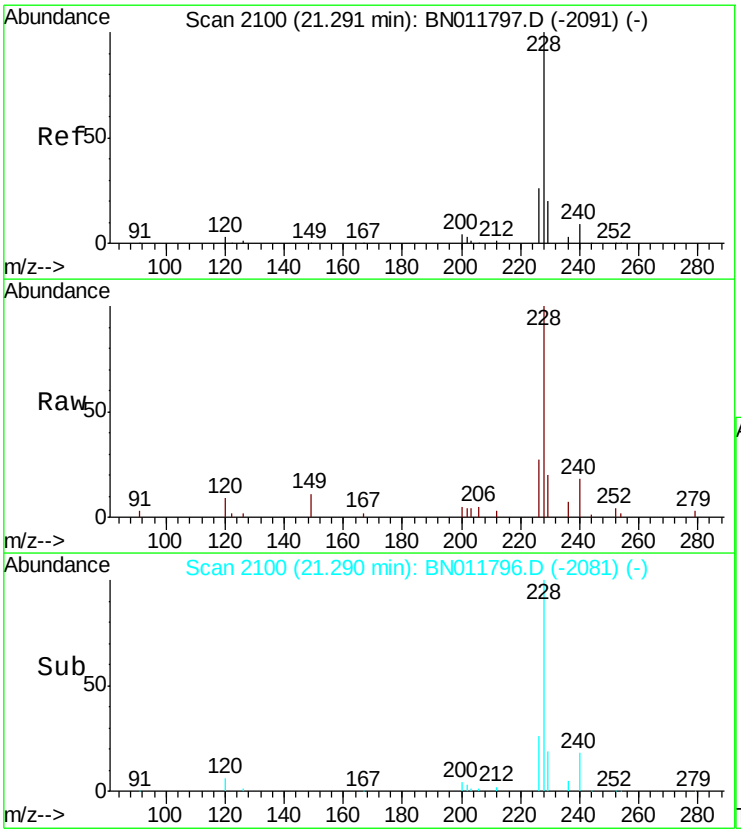
#31
Terphenyl-d14
Concen: 0.215 ng
RT: 19.75 min Scan# 1927
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:244 Resp: 4307

Ion	Ratio	Lower	Upper
244	100		
212	9.9	7.3	10.9
122	10.8	7.8	11.6

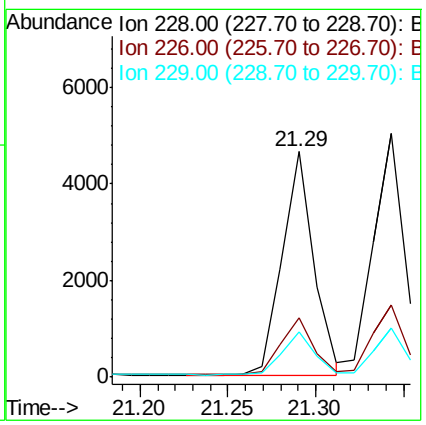


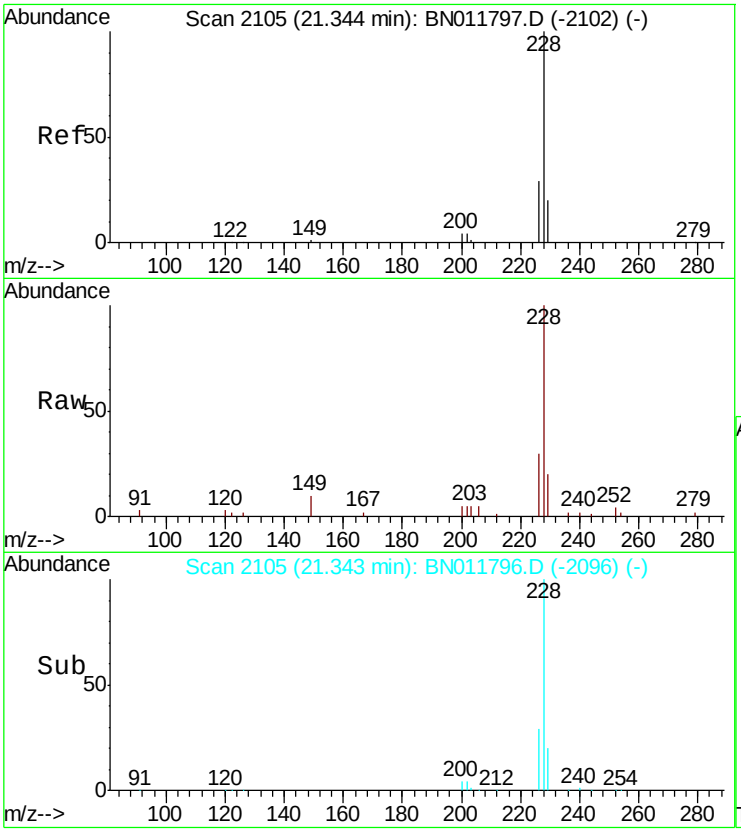


#32
Benzo(a)anthracene
Concen: 0.222 ng
RT: 21.29 min Scan# 2100
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:228 Resp: 5778

Ion	Ratio	Lower	Upper
228	100		
226	26.6	21.0	31.4
229	20.1	16.0	24.0



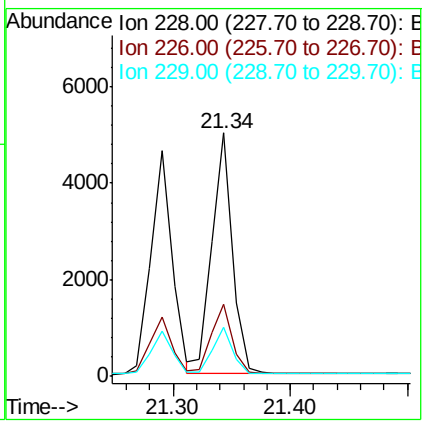


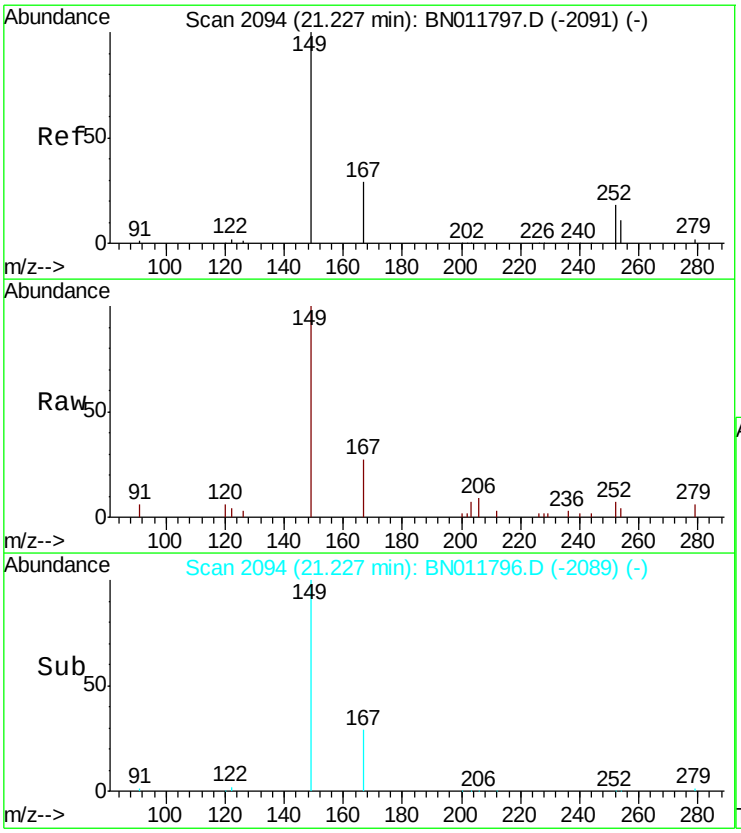
#33
Chrysene
Concen: 0.227 ng
RT: 21.34 min Scan# 2105
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:228 Resp: 6184

Ion	Ratio	Lower	Upper
228	100		
226	29.7	23.3	34.9
229	20.4	15.8	23.8

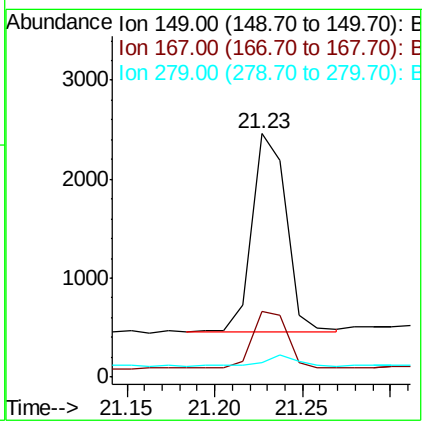


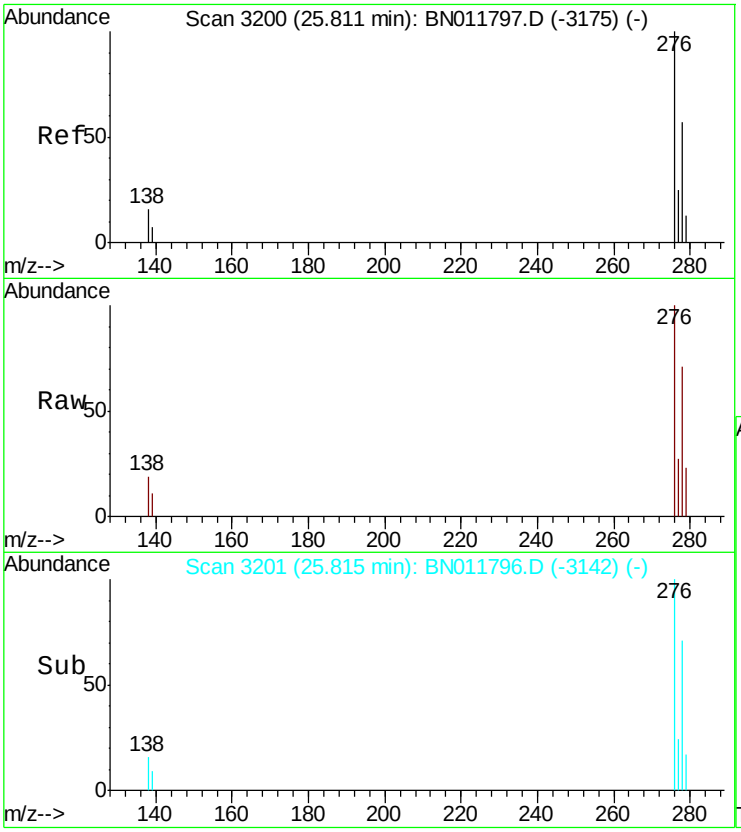


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.211 ng
RT: 21.23 min Scan# 2094
Delta R.T. 0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:149 Resp: 2707

Ion	Ratio	Lower	Upper
149	100		
167	29.1	23.6	35.4
279	5.7	4.0	6.0



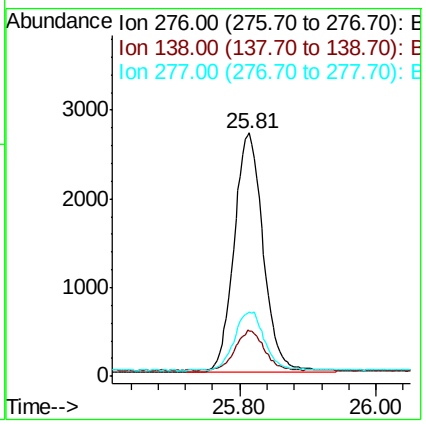


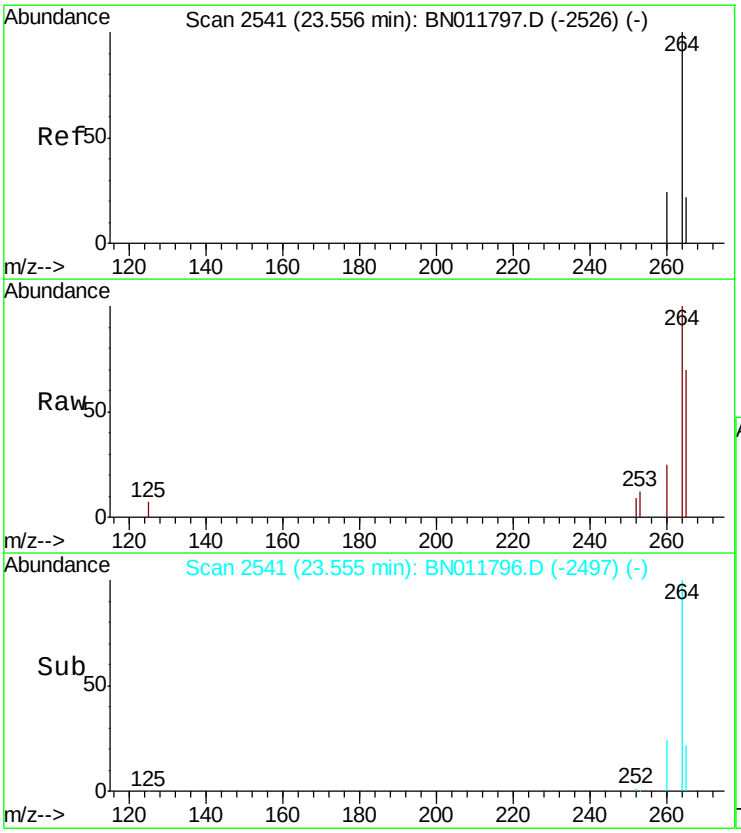
#35
Indeno(1,2,3-cd)pyrene
Concen: 0.227 ng
RT: 25.81 min Scan# 3201
Delta R.T. 0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:276 Resp: 8042

Ion	Ratio	Lower	Upper
276	100		
138	16.5	13.0	19.4
277	24.7	20.0	30.0

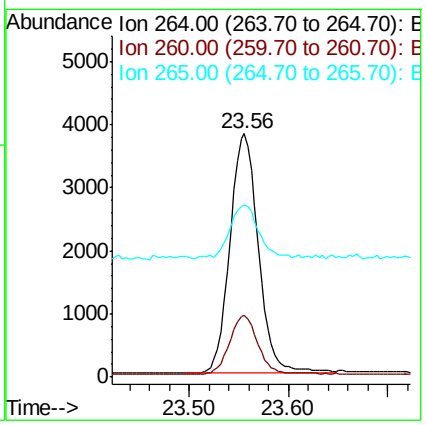


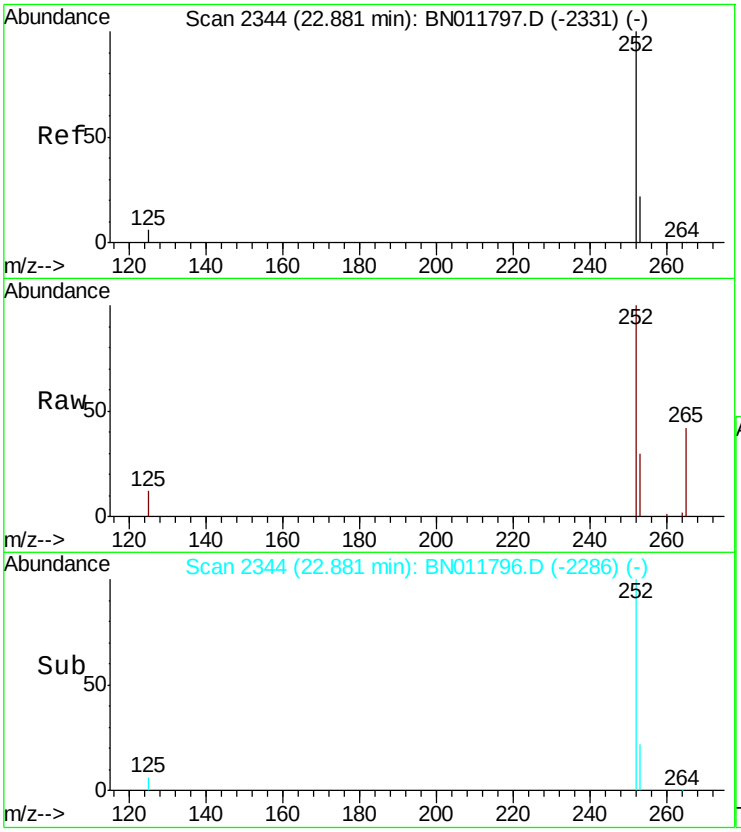


#36
Perylene-d12
Concen: 0.400 ng
RT: 23.56 min Scan# 2541
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:264 Resp: 7506

Ion	Ratio	Lower	Upper
264	100		
260	25.2	19.6	29.4
265	70.4	38.6	58.0#



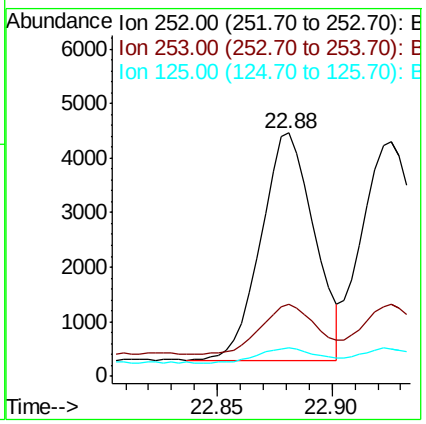


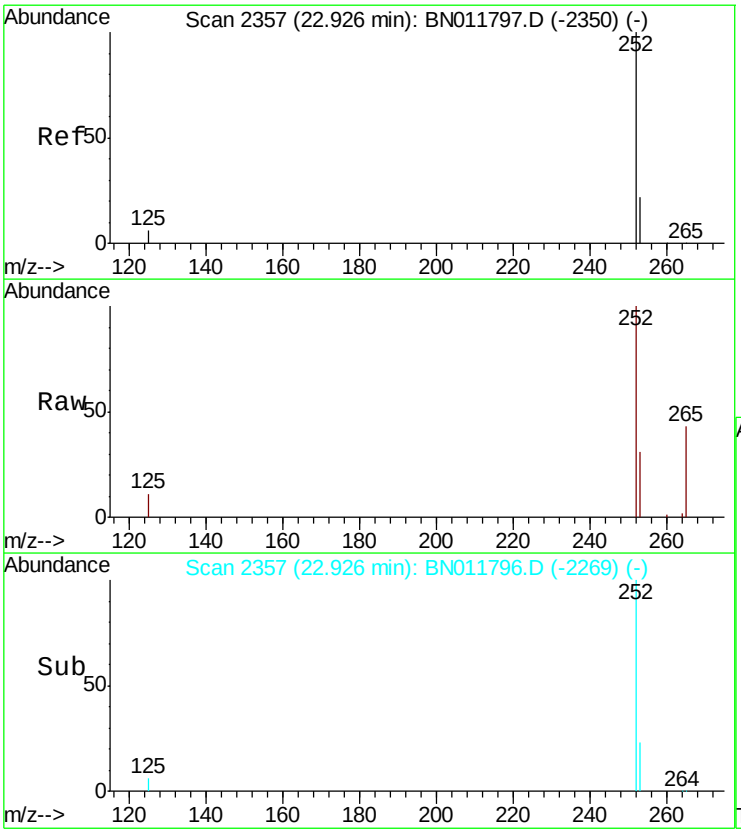
#37
Benzo(b)fluoranthene
Concen: 0.216 ng
RT: 22.88 min Scan# 2344
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 6691

Ion	Ratio	Lower	Upper
252	100		
253	29.5	19.1	28.7#
125	11.6	6.2	9.2#

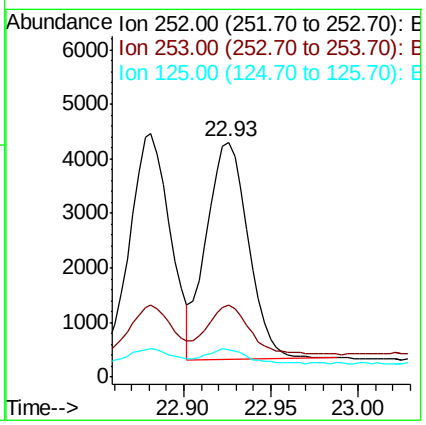


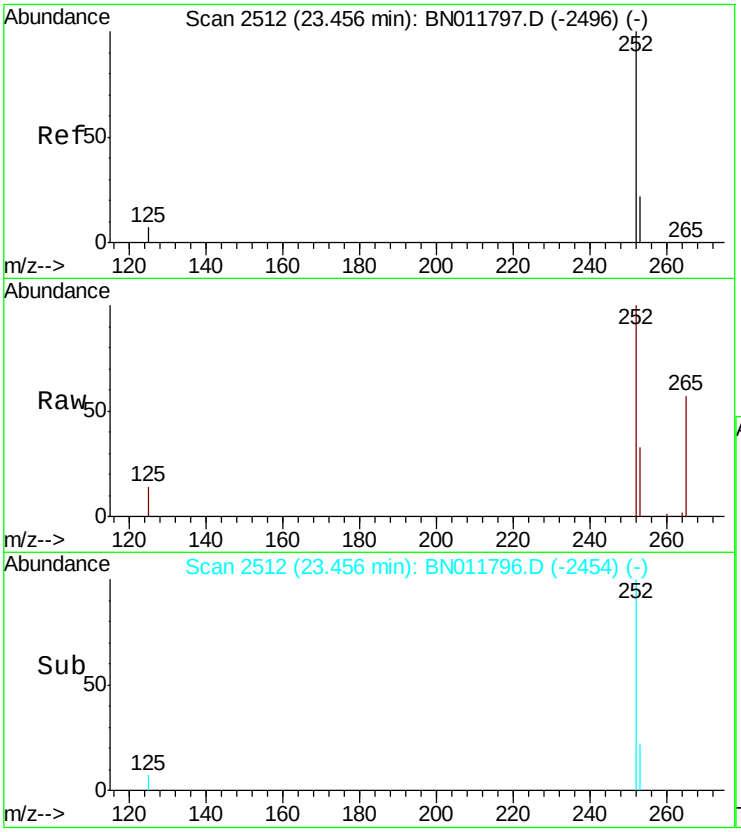


#38
Benzo(k)fluoranthene
Concen: 0.215 ng
RT: 22.93 min Scan# 2357
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:252 Resp: 6630

Ion	Ratio	Lower	Upper
252	100		
253	30.8	19.3	28.9#
125	11.5	6.0	9.0#



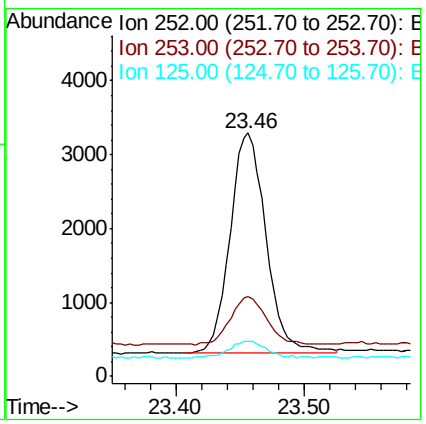


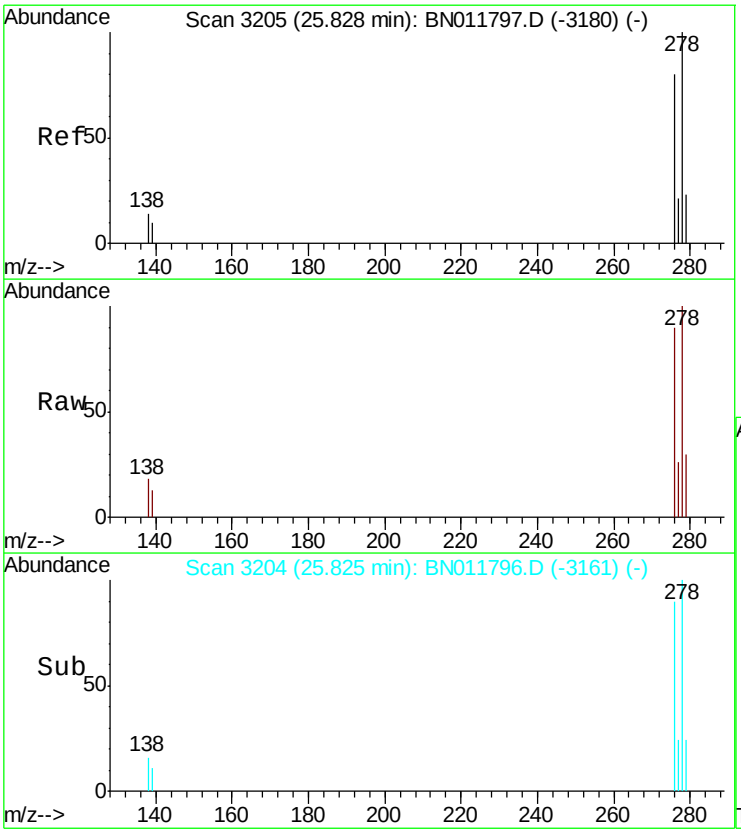
#39
Benzo(a)pyrene
Concen: 0.216 ng
RT: 23.46 min Scan# 2512
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 5849

Ion	Ratio	Lower	Upper
252	100		
253	32.7	19.8	29.6#
125	14.4	7.3	10.9#

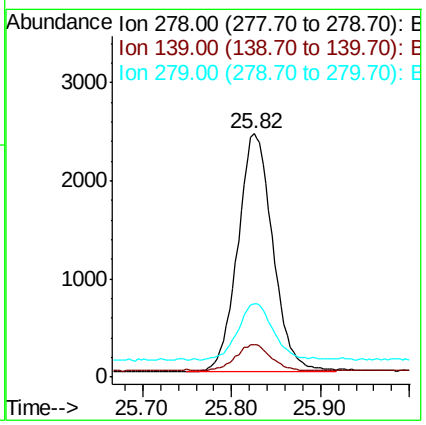


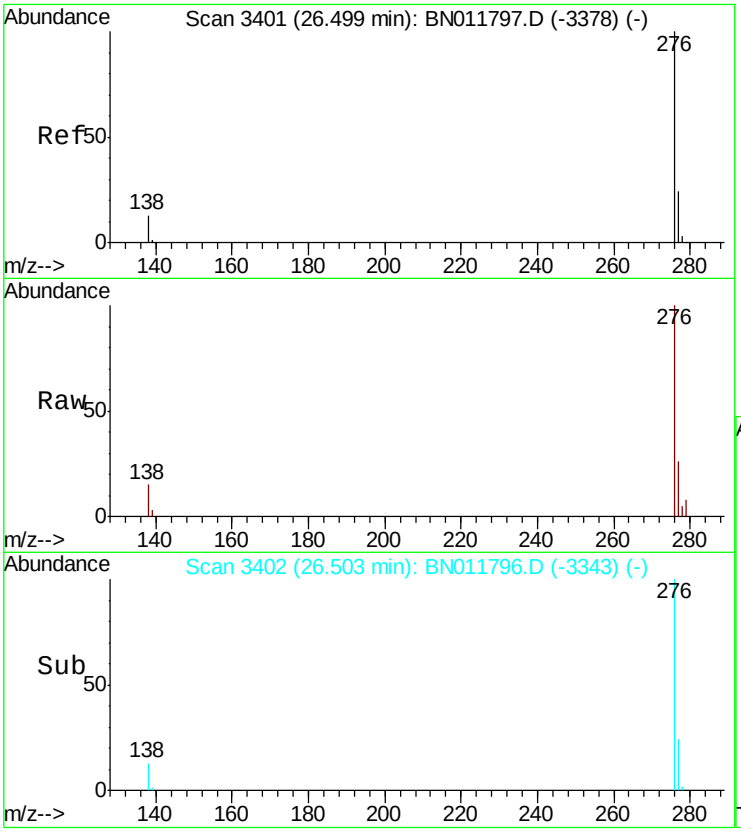


#40
Dibenzo(a,h)anthracene
Concen: 0.215 ng
RT: 25.82 min Scan# 3204
Delta R.T. -0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Tgt Ion:278 Resp: 6634

Ion	Ratio	Lower	Upper
278	100		
139	13.3	8.6	13.0#
279	30.1	19.8	29.8#





#41
Benzo(g,h,i)perylene
Concen: 0.219 ng
RT: 26.50 min Scan# 3402
Delta R.T. 0.00 min
Lab File: BN011796.D
Acq: 15 Sep 2020 11:22

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:276 Resp: 6787

Ion	Ratio	Lower	Upper
276	100		
277	26.1	19.4	29.0
138	15.4	11.3	16.9