Quantitation Report (Not Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN081920\
Data File : BN011511.D
Acq On : 19 Aug 2020 11:36
Operator : CG/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument : BNA_N
ClientSampleId : SSTDICC0.1

Quant Time: Aug 19 13:27:36 2020
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN081920.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 19 13:20:06 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.44	152	917	0.40	ng		0.00
7) Naphthalene-d8	10.19	136	3028	0.40	ng		0.01
13) Acenaphthene-d10	14.06	164	1994	0.40	ng		0.00
19) Phenanthrene-d10	16.83	188	4518	0.40	ng		0.01
29) Chrysene-d12	21.05	240	4620	0.40	ng		0.00
36) Perylene-d12	23.16	264	3983	0.40	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.11	112	223	0.09	ng		0.00
5) Phenol-d6	6.66	99	242	0.08	ng		0.00
8) Nitrobenzene-d5	8.62	82	237	0.09	ng		0.03
11) 2-Methylnaphthalene-d10	11.80	152	692	0.13	ng		0.02
14) 2,4,6-Tribromophenol	15.59	330	91	0.10	ng		0.01
15) 2-Fluorobiphenyl	12.69	172	971	0.11	ng		0.01
27) Fluoranthene-d10	18.87	212	1340	0.10	ng		0.00
31) Terphenyl-d14	19.49	244	1104	0.08	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.16	88	130	0.101	ng	#	86
3) n-Nitrosodimethylamine	3.49	42	4	0.006	ng	#	1
6) bis(2-Chloroethyl)ether	6.91	93	133	0.055	ng		98
9) Naphthalene	10.24	128	1068	0.119	ng	#	80
10) Hexachlorobutadiene	10.52	225	259	0.119	ng	#	96
12) 2-Methylnaphthalene	11.87	142	750	0.118	ng	#	94
16) Acenaphthylene	13.79	152	1138	0.111	ng		98
17) Acenaphthene	14.13	154	726	0.108	ng		98
18) Fluorene	15.13	166	863	0.100	ng		98
20) 4,6-Dinitro-2-methylphenol	15.30	198	36	0.058	ng	#	69
21) 4-Bromophenyl-phenylether	16.04	248	234	0.078	ng	#	90
22) Hexachlorobenzene	16.14	284	364	0.107	ng		98
23) Atrazine	16.34	200	201	0.086	ng	#	72
24) Pentachlorophenol	16.51	266	97	0.092	ng	#	84
25) Phenanthrene	16.87	178	1571	0.107	ng		98
26) Anthracene	16.97	178	1265	0.104	ng		98
28) Fluoranthene	18.90	202	1739	0.104	ng		99
30) Pyrene	19.27	202	1811	0.087	ng		99
32) Benzo(a)anthracene	21.08	228	2092	0.135	ng		94
33) Chrysene	21.08	228	2084	0.120	ng		96
34) Bis(2-ethylhexyl)phthalate	20.98	149	621	0.075	ng		99
35) Indeno(1,2,3-cd)pyrene	25.21	276	2076	0.122	ng		99
37) Benzo(b)fluoranthene	22.54	252	1891	0.119	ng	#	72
38) Benzo(k)fluoranthene	22.58	252	1814	0.104	ng	#	73
39) Benzo(a)pyrene	23.07	252	1618	0.117	ng	#	64
40) Dibenzo(a,h)anthracene	25.22	278	1642	0.115	ng	#	70
41) Benzo(g,h,i)perylene	25.83	276	1936	0.122	ng	#	87

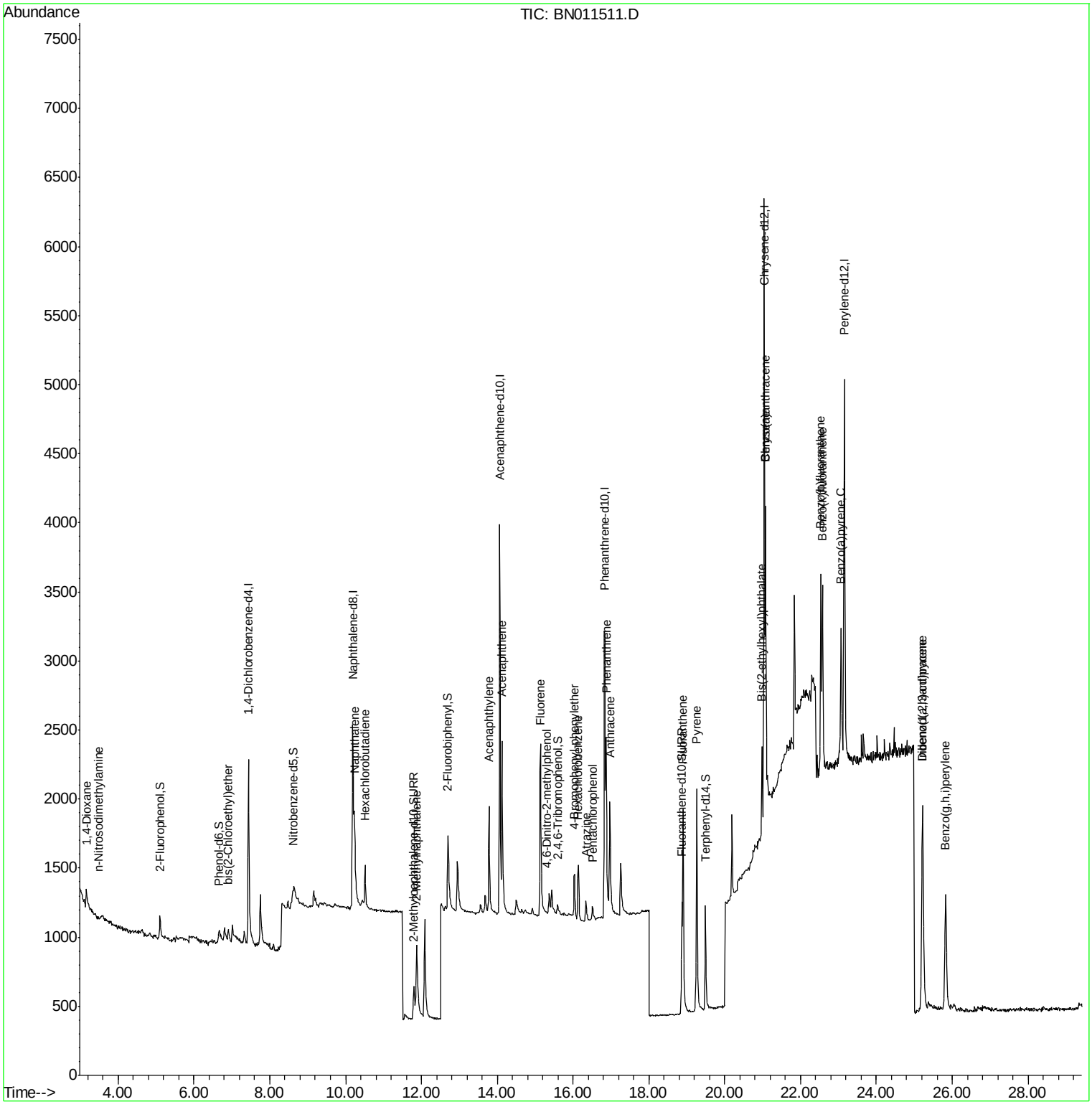
(#) = qualifier out of range (m) = manual integration (+) = signals summed

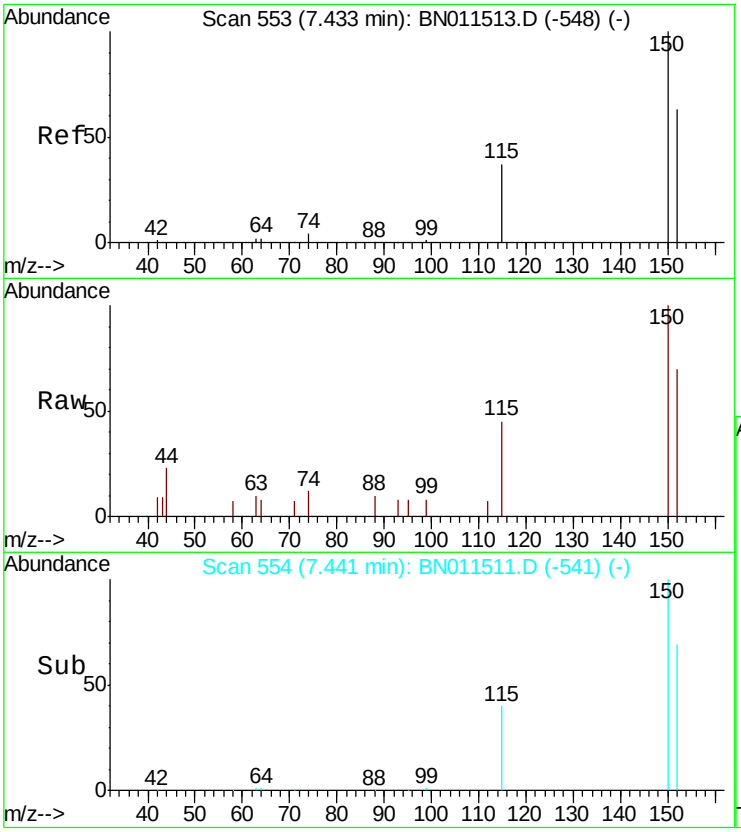
Quantitation Report (Not Reviewed)

Data Path : Z:\SVOASRV\HPCHEM1\BNA N\DATA\BN081920\
Data File : BN011511.D
Acq On : 19 Aug 2020 11:36
Operator : CG/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Aug 19 13:27:36 2020
Quant Method : Z:\SVOASRV\HPCHEM1\BNA N\METHODS\8270-SIM-BN081920.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 19 13:20:06 2020
Response via : Initial Calibration



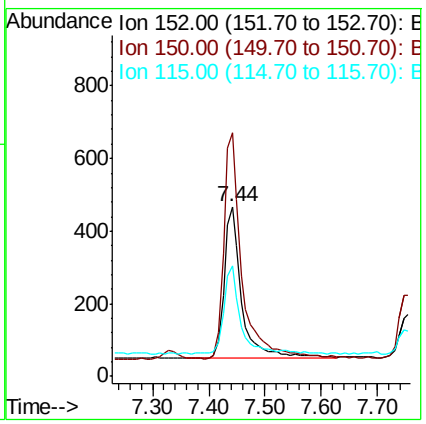


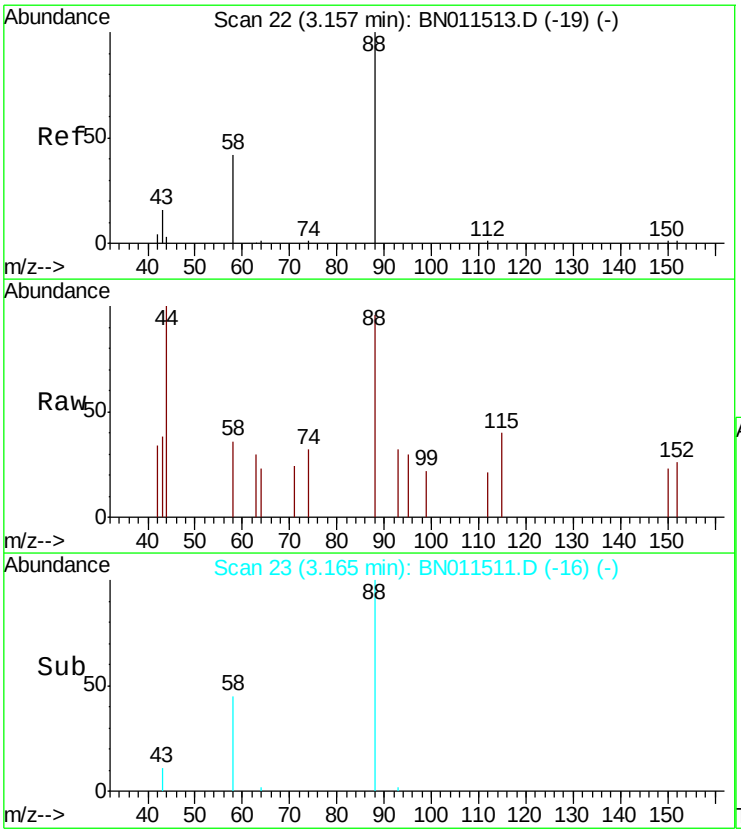
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.44 min Scan# 554
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 917

Ion	Ratio	Lower	Upper
152	100		
150	143.4	121.6	182.4
115	64.7	51.9	77.9

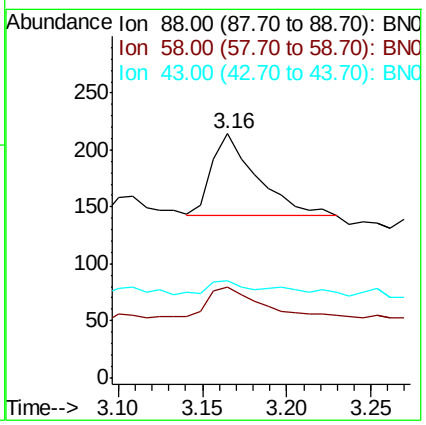


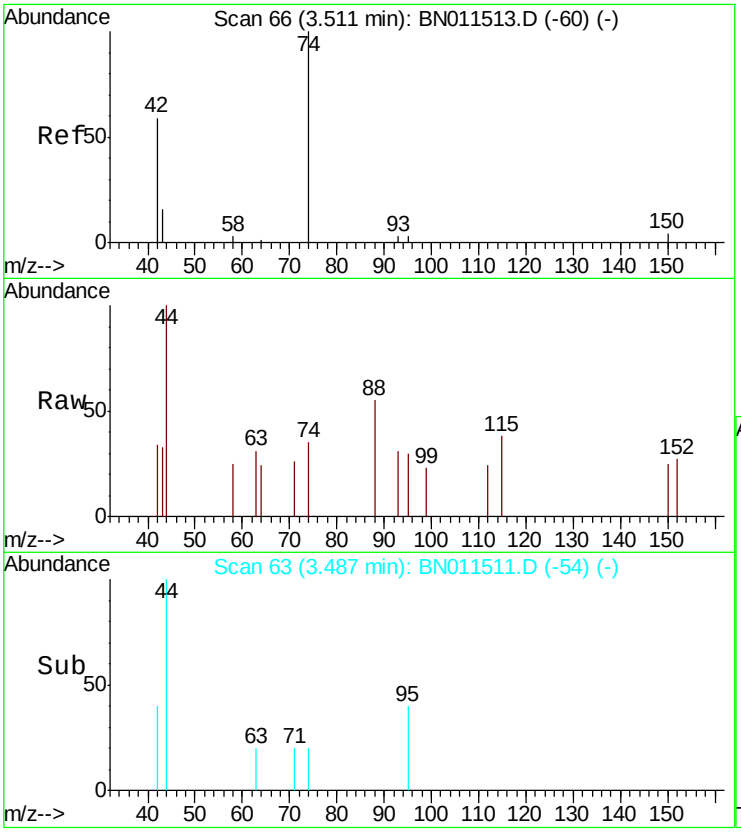


#2
1,4-Dioxane
Concen: 0.101 ng
RT: 3.16 min Scan# 23
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion: 88 Resp: 130

Ion	Ratio	Lower	Upper
88	100		
58	39.2	38.6	57.8
43	13.1	15.8	23.6#



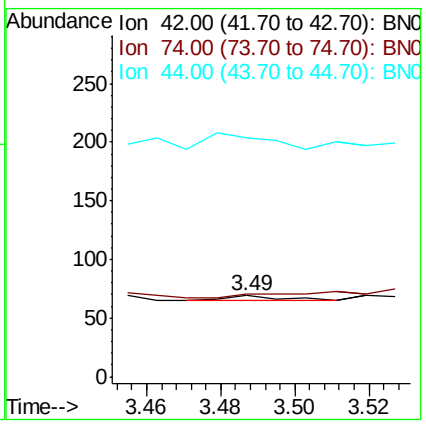


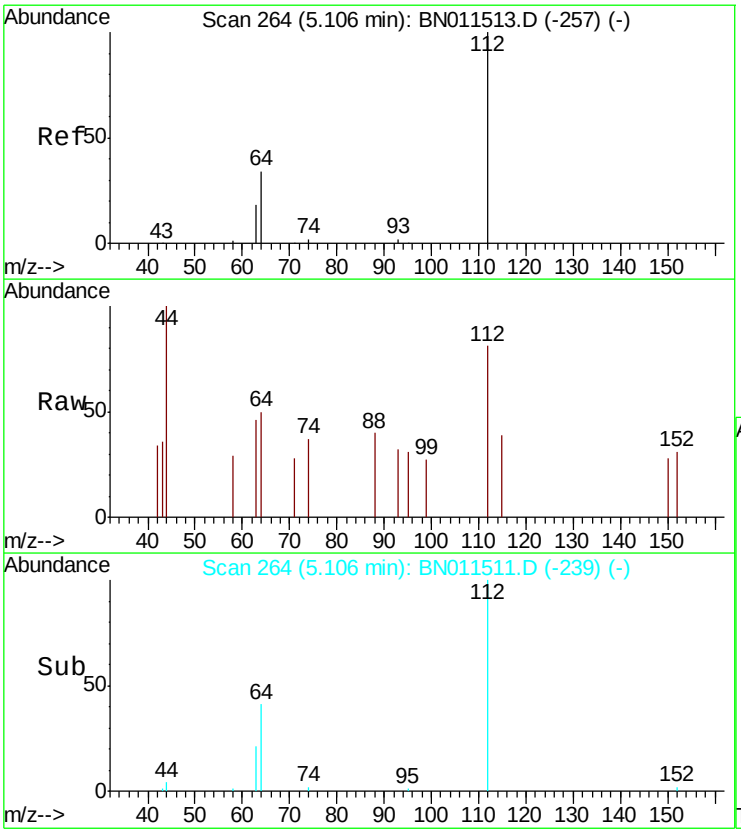
#3
n-Nitrosodimethylamine
Concen: 0.006 ng
RT: 3.49 min Scan# 63
Delta R.T. -0.02 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 42 Resp: 4

Ion	Ratio	Lower	Upper
42	100		
74	0.0	150.4	225.6#
44	500.0	0.0	0.0#

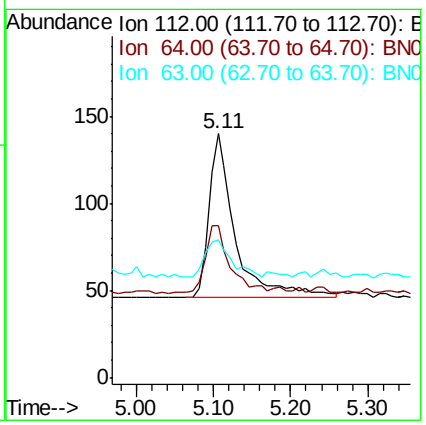


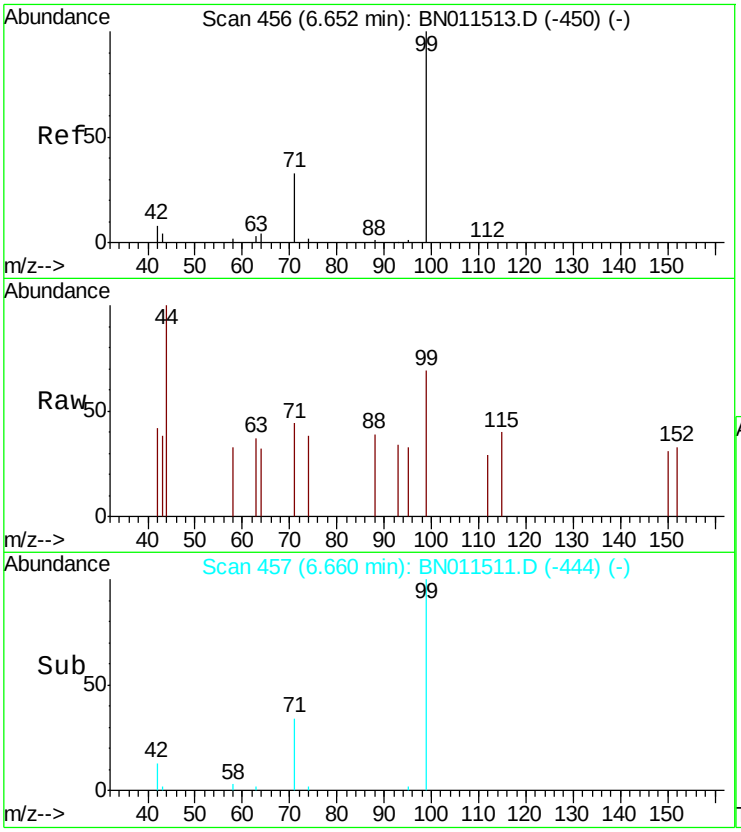


#4
2-Fluorophenol
Concen: 0.093 ng
RT: 5.11 min Scan# 264
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:112 Resp: 223

Ion	Ratio	Lower	Upper
112	100		
64	41.3	33.8	50.6
63	23.3	19.5	29.3



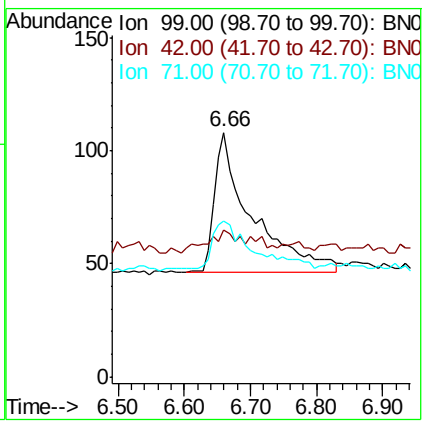


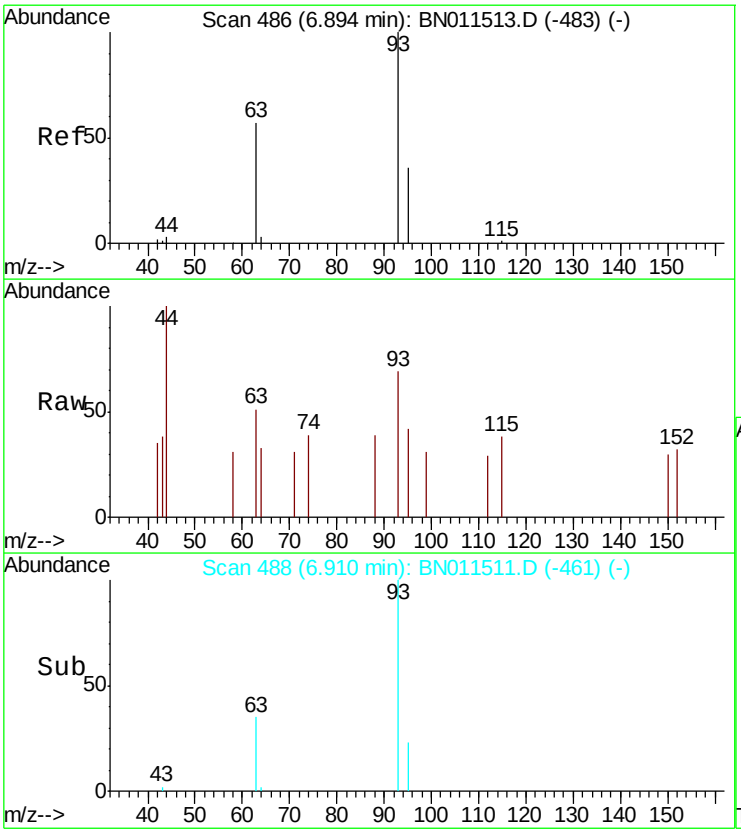
#5
Phenol-d6
Concen: 0.083 ng
RT: 6.66 min Scan# 457
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 99 Resp: 242

Ion	Ratio	Lower	Upper
99	100		
42	12.4	10.0	15.0
71	35.1	31.0	46.4

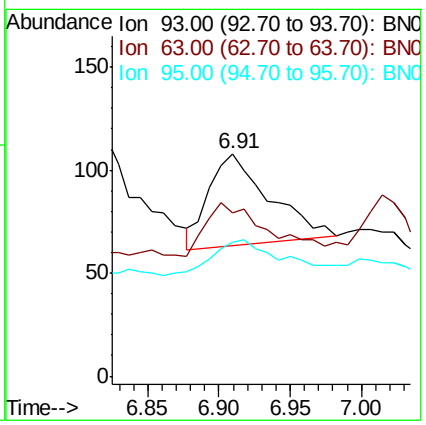


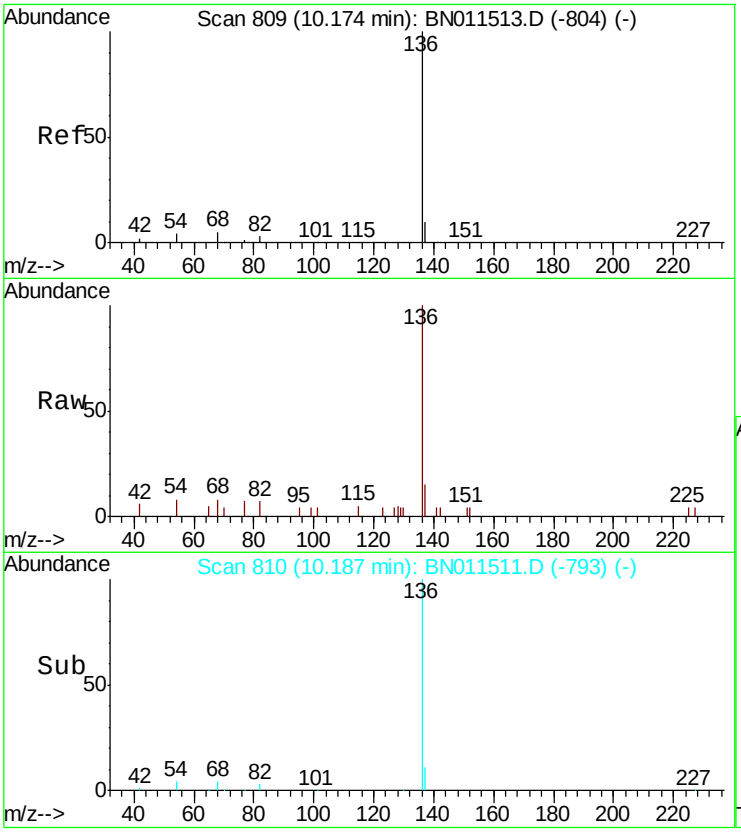


#6
bis(2-Chloroethyl)ether
Concen: 0.055 ng
RT: 6.91 min Scan# 488
Delta R.T. 0.02 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion: 93 Resp: 133

Ion	Ratio	Lower	Upper
93	100		
63	56.4	45.4	68.2
95	42.9	31.8	47.8



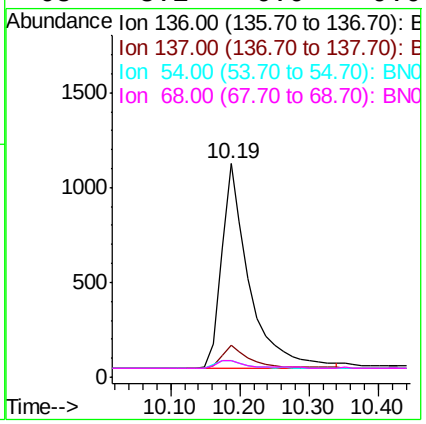


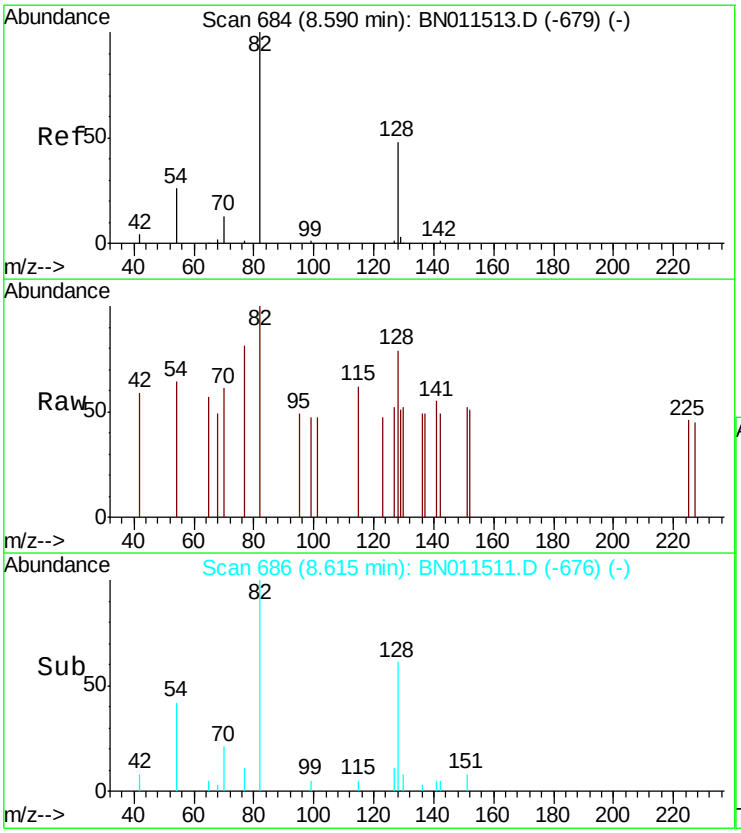
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.19 min Scan# 810
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:136 Resp: 3028

Ion	Ratio	Lower	Upper
136	100		
137	15.0	10.3	15.5
54	8.0	5.7	8.5
68	8.1	6.0	9.0

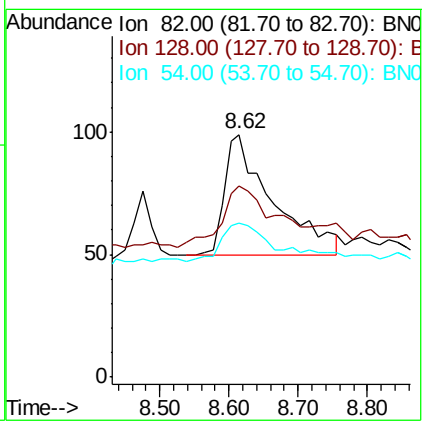


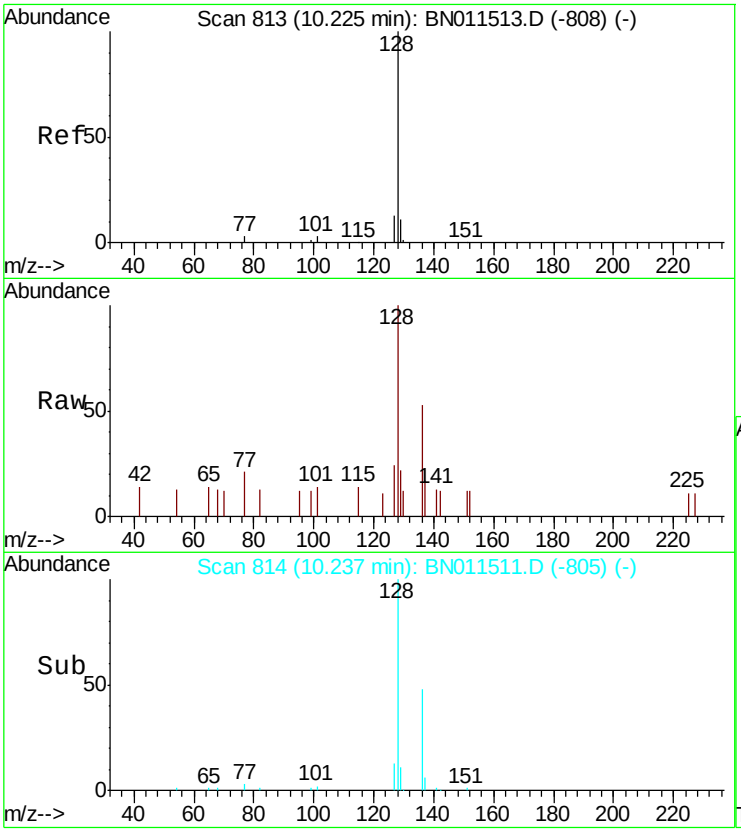


#8
Nitrobenzene-d5
Concen: 0.088 ng
RT: 8.62 min Scan# 686
Delta R.T. 0.03 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion: 82 Resp: 237

Ion	Ratio	Lower	Upper
82	100		
128	78.8	44.6	66.8#
54	63.6	27.6	41.4#



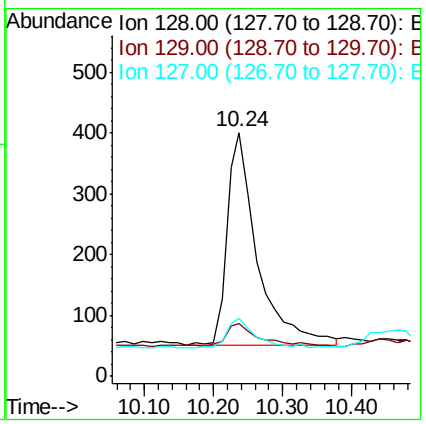


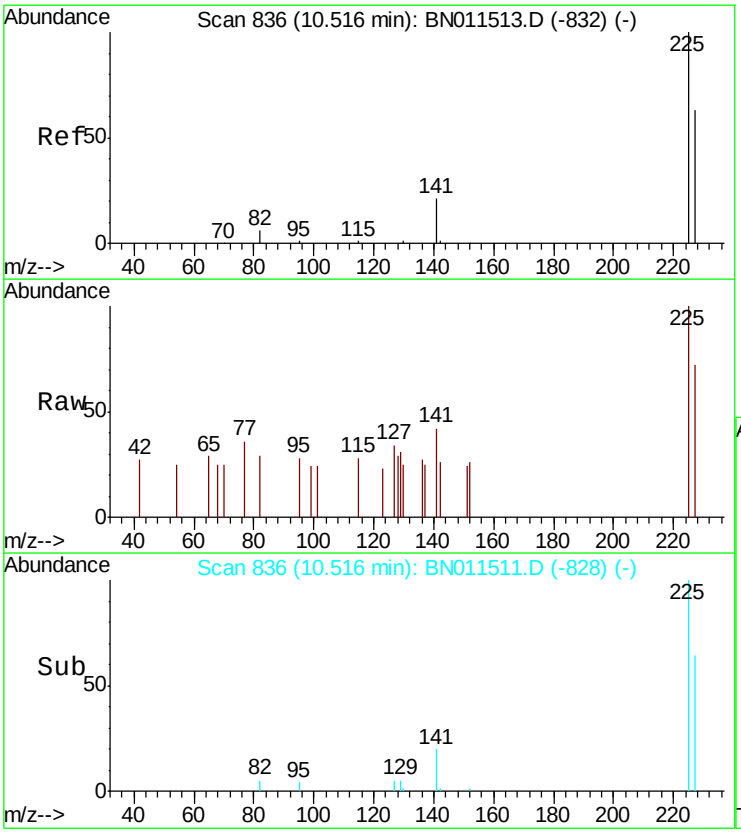
#9
Naphthalene
Concen: 0.119 ng
RT: 10.24 min Scan# 814
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:128 Resp: 1068

Ion	Ratio	Lower	Upper
128	100		
129	21.9	11.1	16.7#
127	23.7	12.2	18.4#

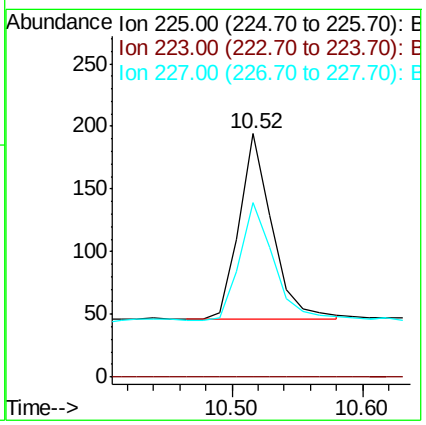


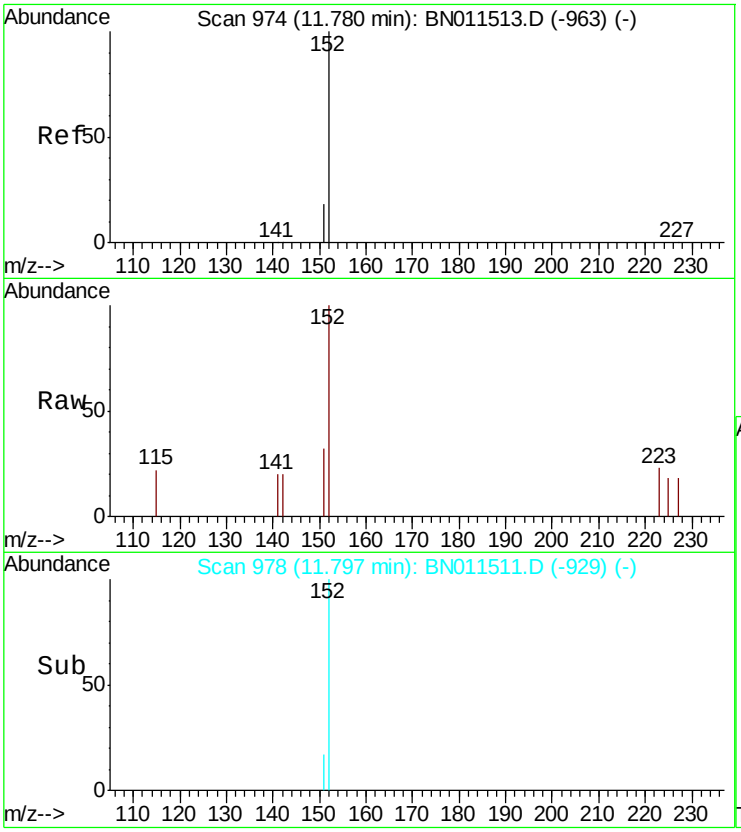


#10
Hexachlorobutadiene
Concen: 0.119 ng
RT: 10.52 min Scan# 836
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:225 Resp: 259

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	65.6	50.1	75.1



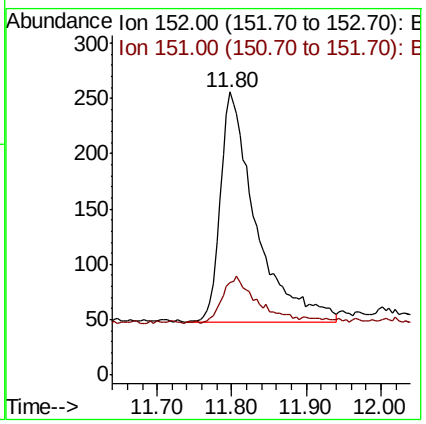


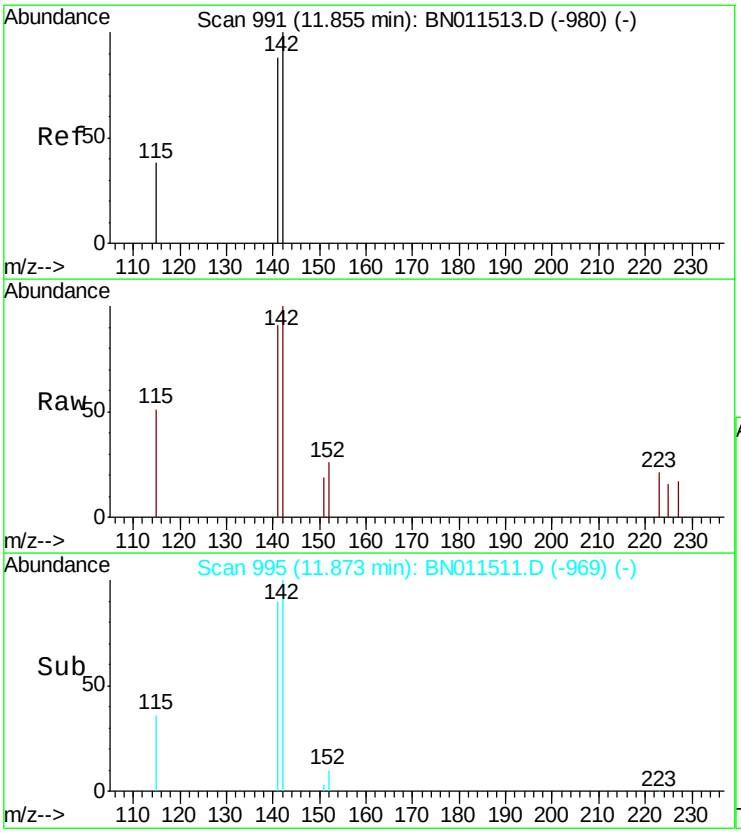
#11
2-Methylnaphthalene-d10
Concen: 0.125 ng
RT: 11.80 min Scan# 978
Delta R.T. 0.02 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 692

Ion	Ratio	Lower	Upper
152	100		
151	19.4	16.2	24.4

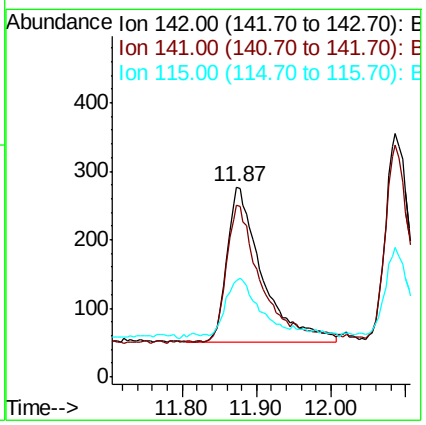


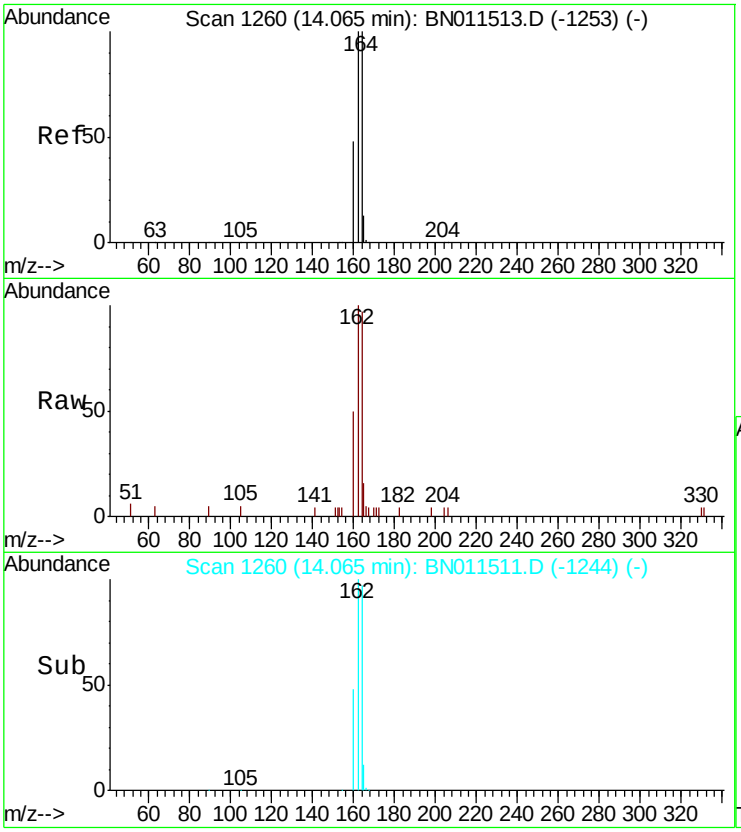


#12
2-Methylnaphthalene
Concen: 0.118 ng
RT: 11.87 min Scan# 995
Delta R.T. 0.02 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:142 Resp: 750

Ion	Ratio	Lower	Upper
142	100		
141	90.6	70.9	106.3
115	50.9	33.2	49.8#



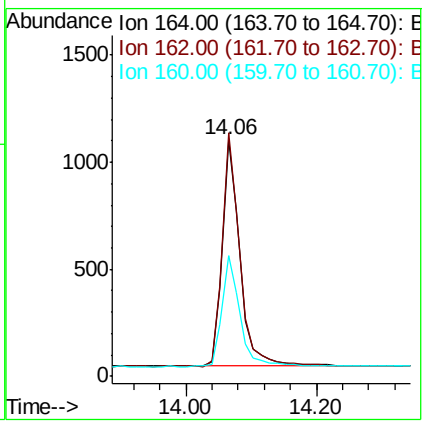


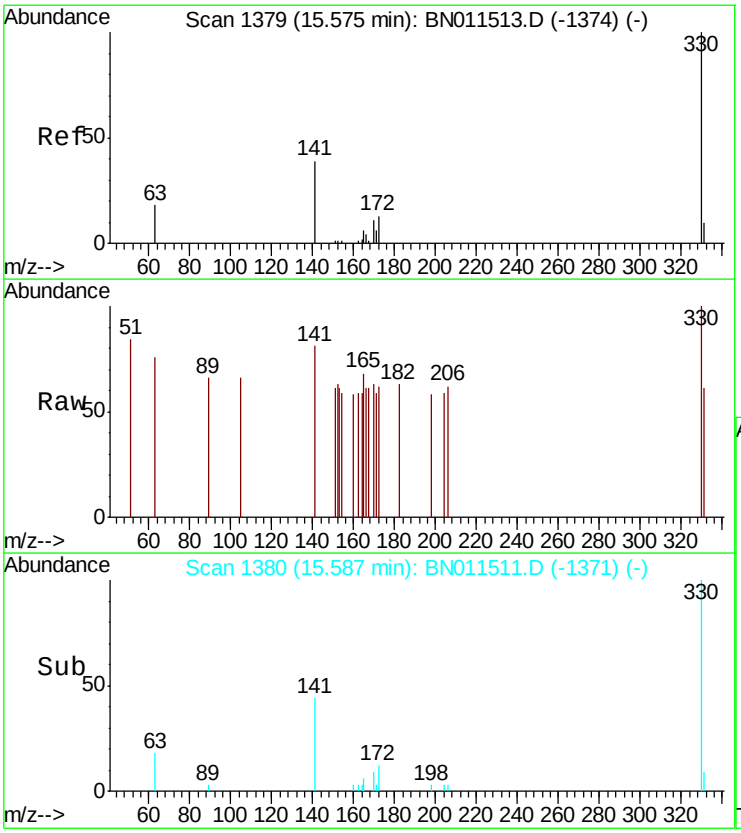
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.06 min Scan# 1260
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:164 Resp: 1994

Ion	Ratio	Lower	Upper
164	100		
162	103.0	79.8	119.8
160	51.3	39.6	59.4

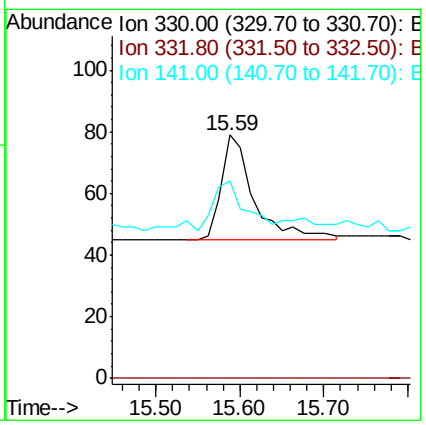


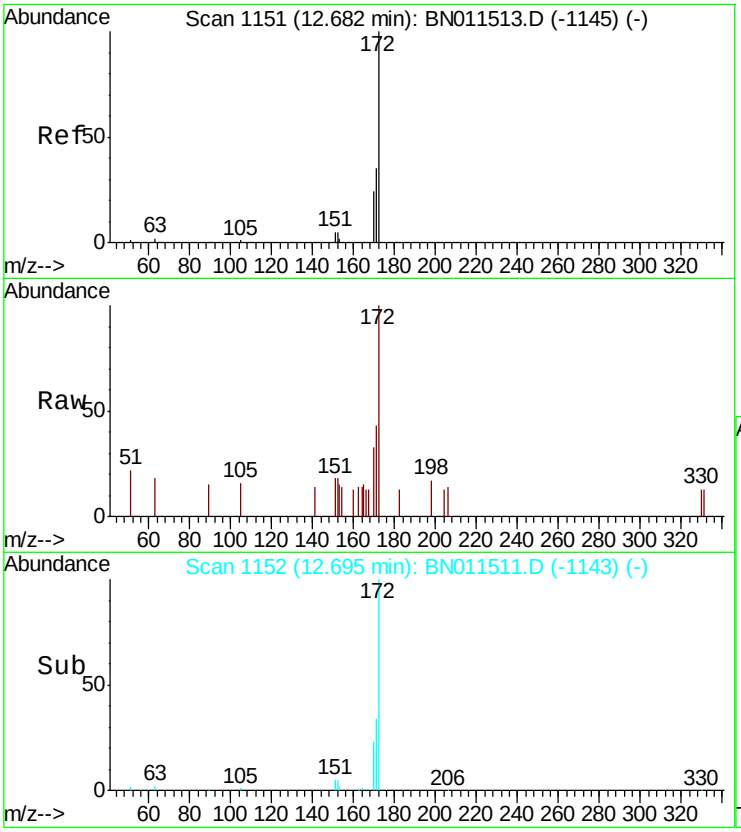


#14
2,4,6-Tribromophenol
Concen: 0.099 ng
RT: 15.59 min Scan# 1380
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:330 Resp: 91

Ion	Ratio	Lower	Upper
330	100		
332	0.0	0.0	0.0
141	42.9	35.8	53.6



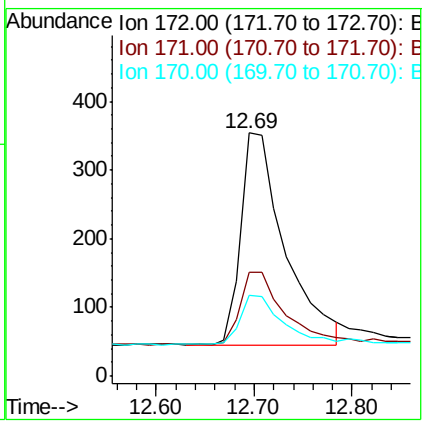


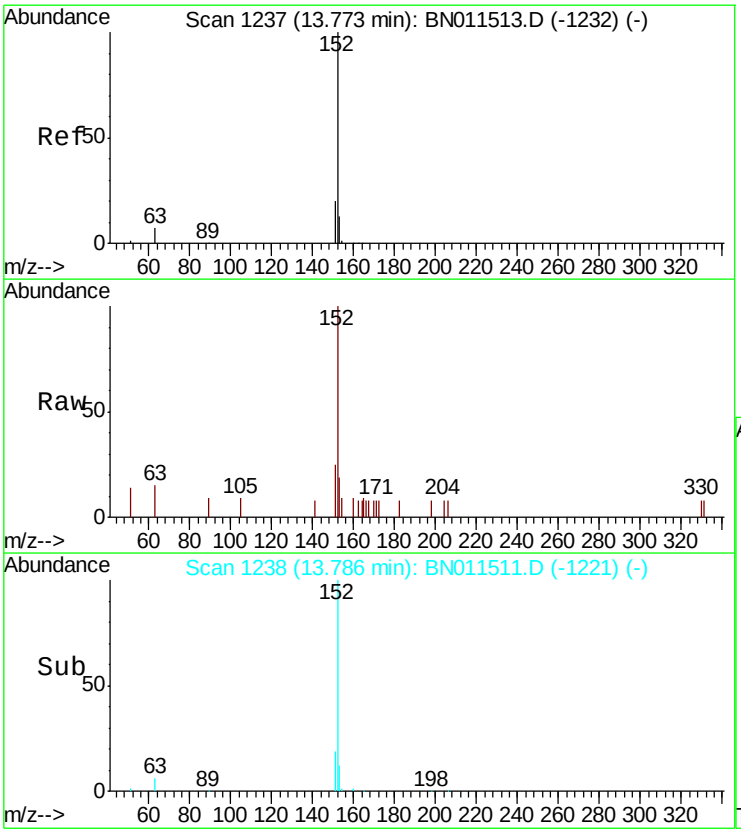
#15
2-Fluorobiphenyl
Concen: 0.113 ng
RT: 12.69 min Scan# 1152
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:172 Resp: 971

Ion	Ratio	Lower	Upper
172	100		
171	42.7	29.5	44.3
170	33.3	20.9	31.3#

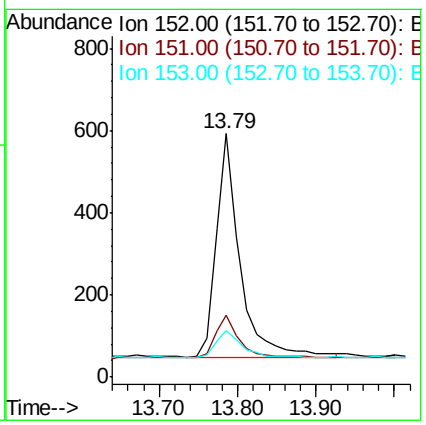


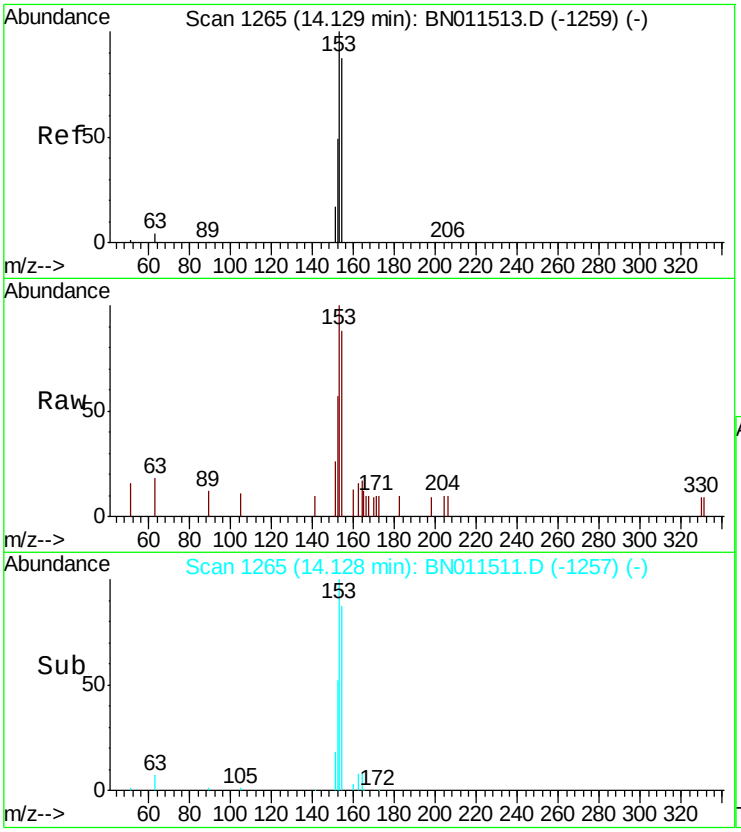


#16
Acenaphthylene
Concen: 0.111 ng
RT: 13.79 min Scan# 1238
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:152 Resp: 1138

Ion	Ratio	Lower	Upper
152	100		
151	20.0	15.8	23.6
153	14.1	10.1	15.1



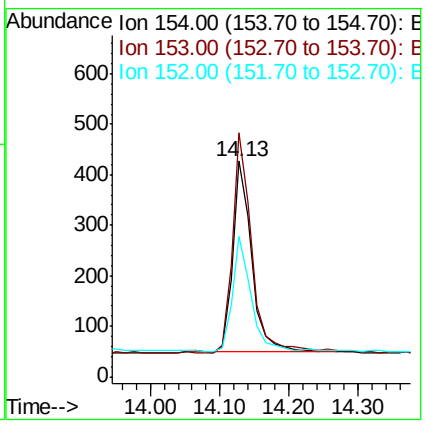


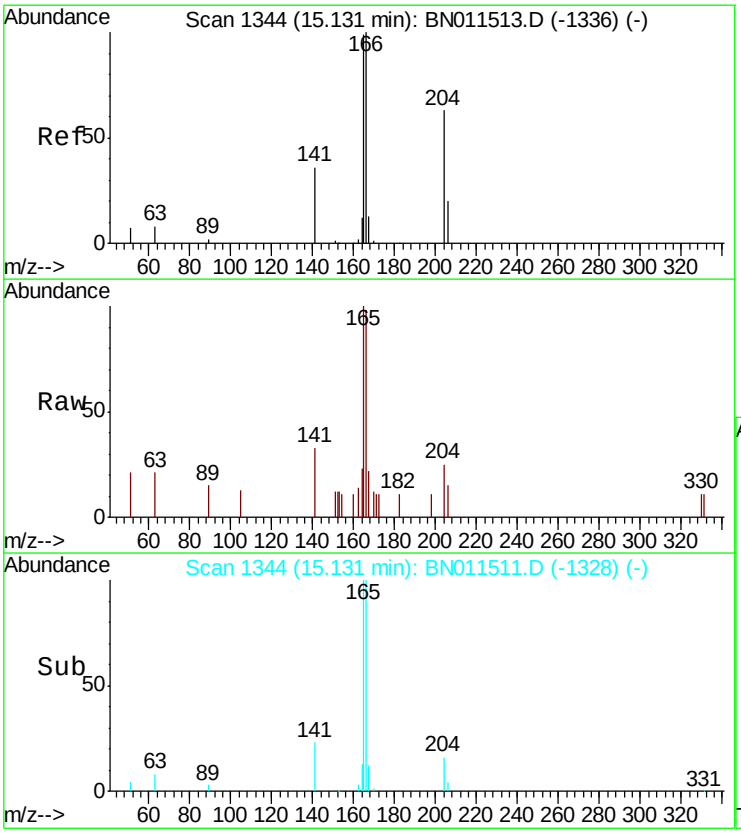
#17
Acenaphthene
Concen: 0.108 ng
RT: 14.13 min Scan# 1265
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:154 Resp: 726

Ion	Ratio	Lower	Upper
154	100		
153	117.5	92.1	138.1
152	59.9	46.4	69.6

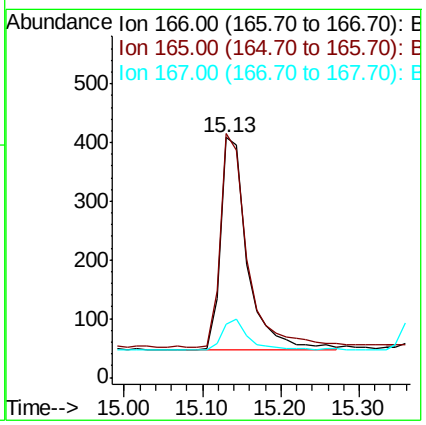


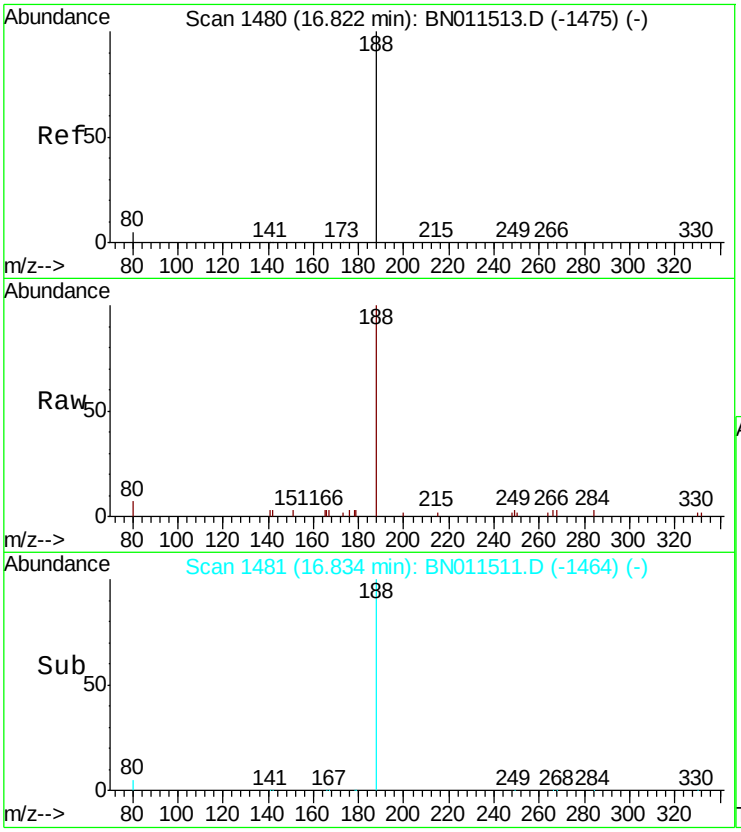


#18
Fluorene
Concen: 0.100 ng
RT: 15.13 min Scan# 1344
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:166 Resp: 863

Ion	Ratio	Lower	Upper
166	100		
165	101.6	80.4	120.6
167	15.3	10.7	16.1



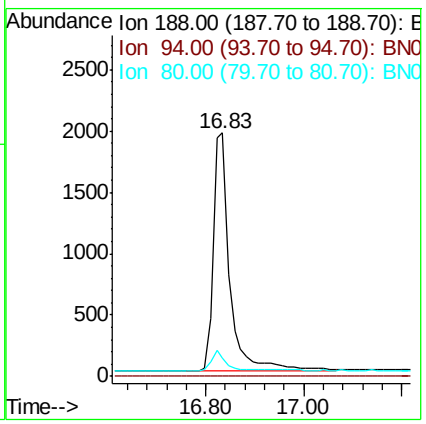


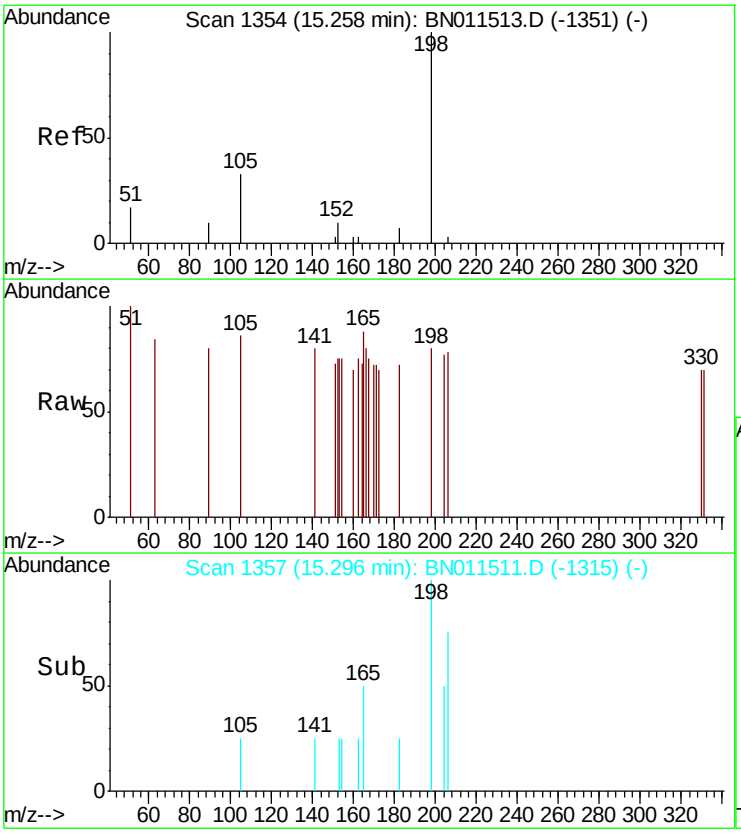
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 16.83 min Scan# 1481
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:188 Resp: 4518

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	7.3	5.4	8.2

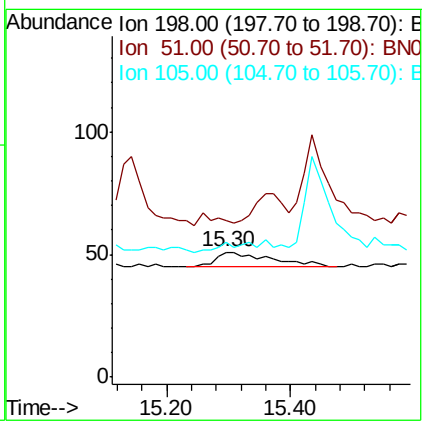


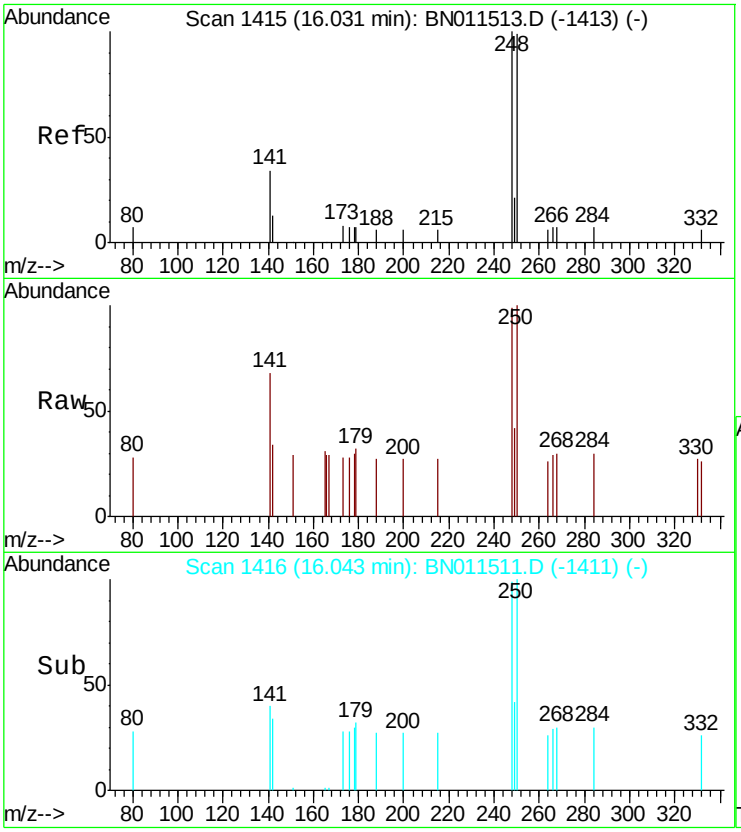


#20
4,6-Dinitro-2-methylphenol
Concen: 0.058 ng
RT: 15.30 min Scan# 1357
Delta R.T. 0.04 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:198 Resp: 36

Ion	Ratio	Lower	Upper
198	100		
51	125.5	75.8	113.6#
105	107.8	65.3	97.9#



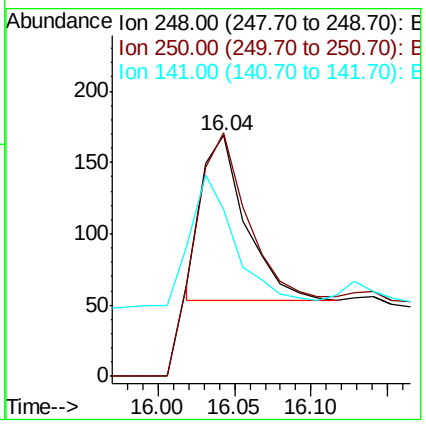


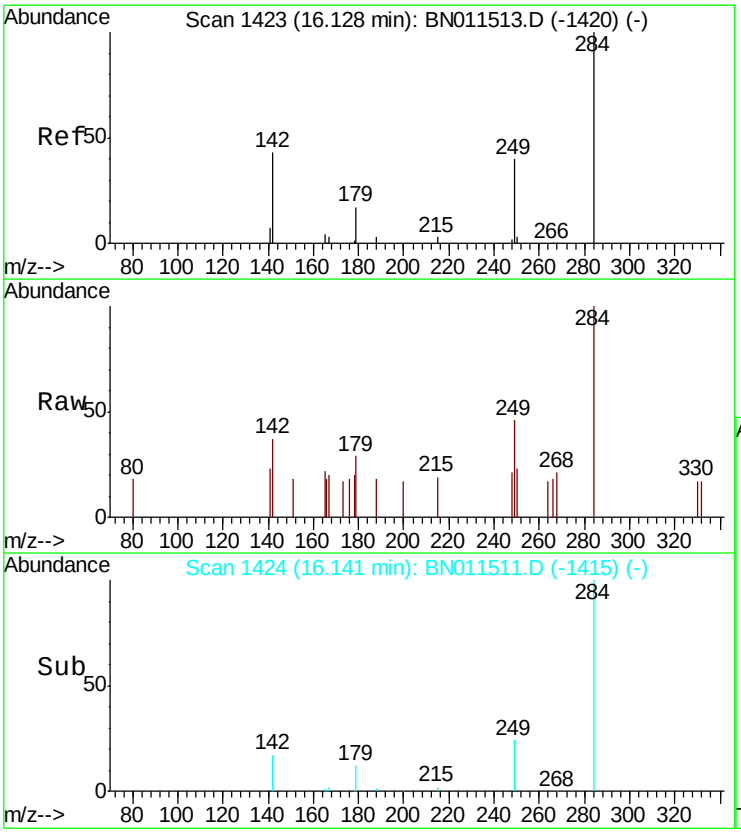
#21
4-Bromophenyl-phenylether
Concen: 0.078 ng
RT: 16.04 min Scan# 1416
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:248 Resp: 234

Ion	Ratio	Lower	Upper
248	100		
250	101.2	79.4	119.0
141	69.2	40.8	61.2#

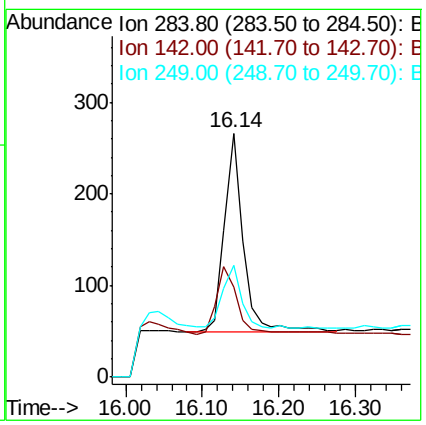


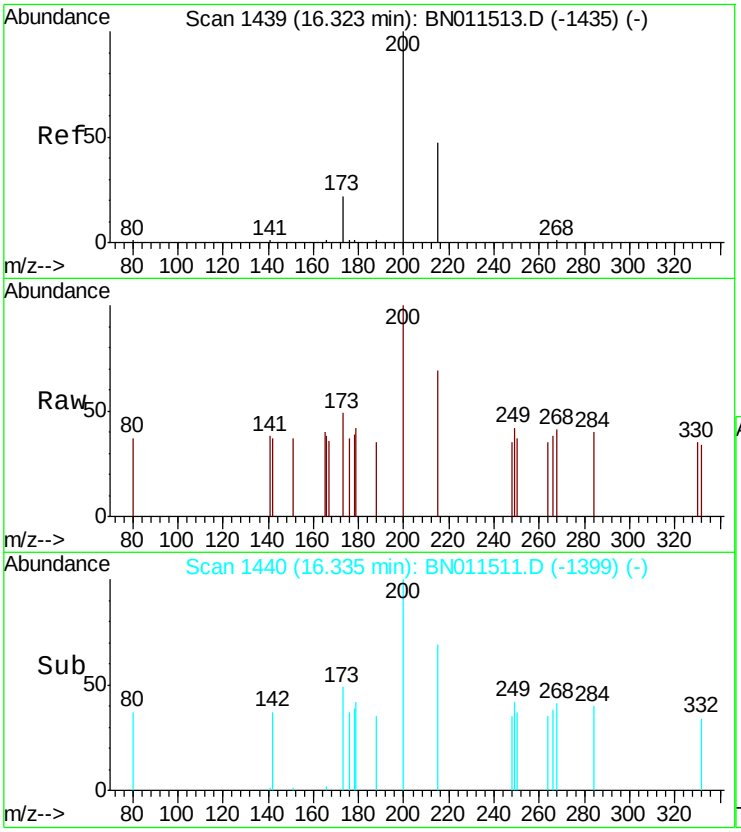


#22
Hexachlorobenzene
Concen: 0.107 ng
RT: 16.14 min Scan# 1424
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:284 Resp: 364

Ion	Ratio	Lower	Upper
284	100		
142	39.8	31.7	47.5
249	31.6	27.4	41.2



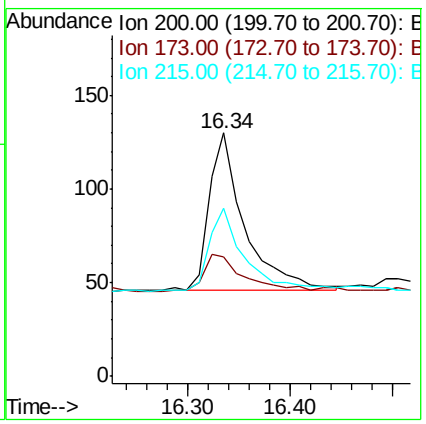


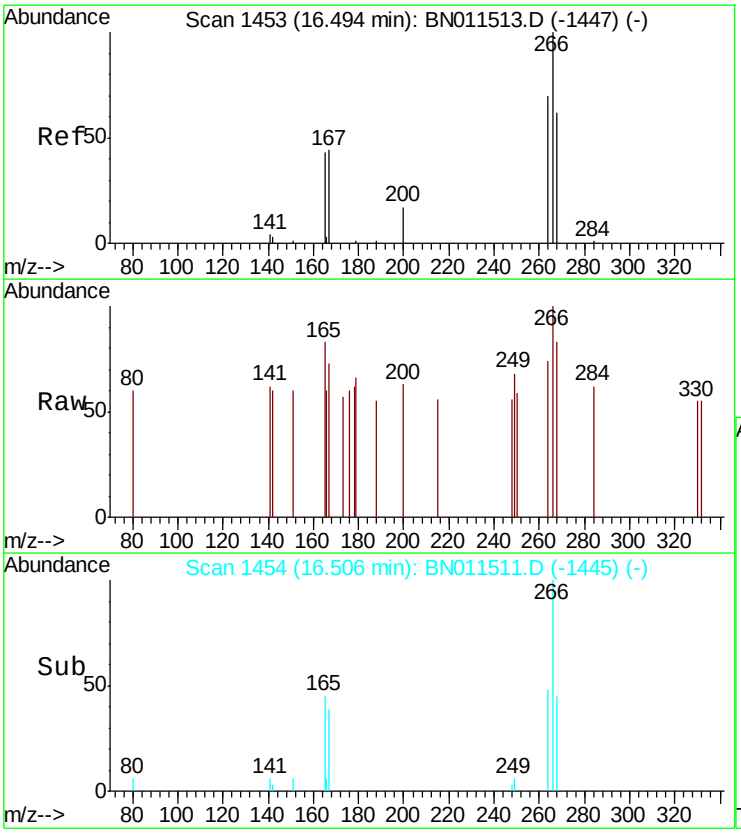
#23
Atrazine
Concen: 0.086 ng
RT: 16.34 min Scan# 1440
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:200 Resp: 201

Ion	Ratio	Lower	Upper
200	100		
173	49.2	24.0	36.0#
215	69.2	42.2	63.4#

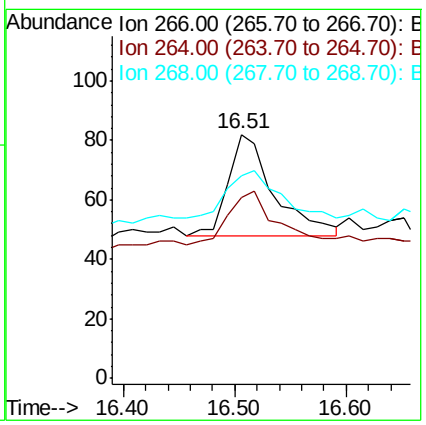


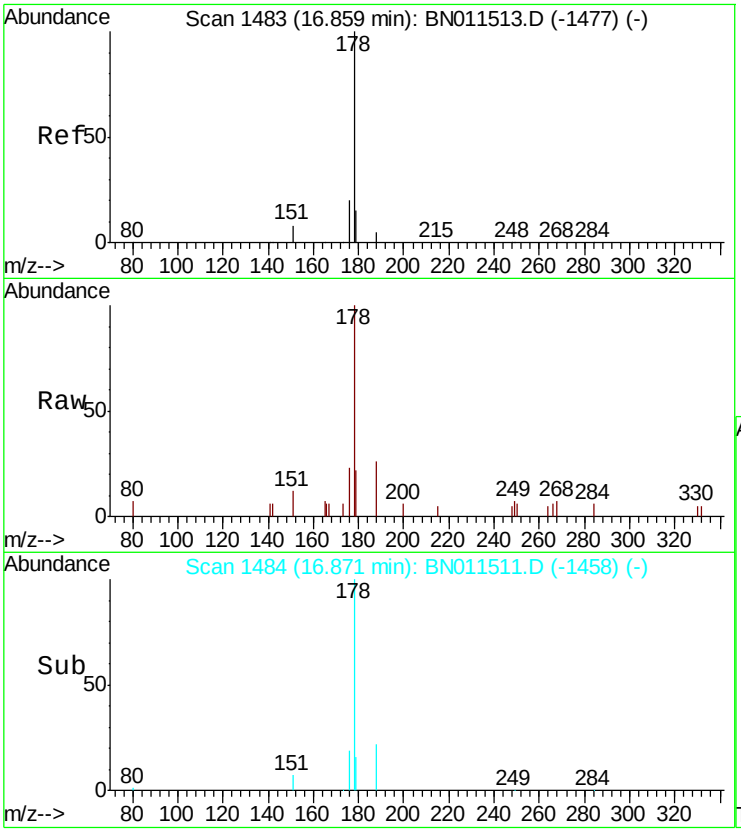


#24
Pentachlorophenol
Concen: 0.092 ng
RT: 16.51 min Scan# 1454
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:266 Resp: 97

Ion	Ratio	Lower	Upper
266	100		
264	55.7	53.7	80.5
268	51.5	53.0	79.4#



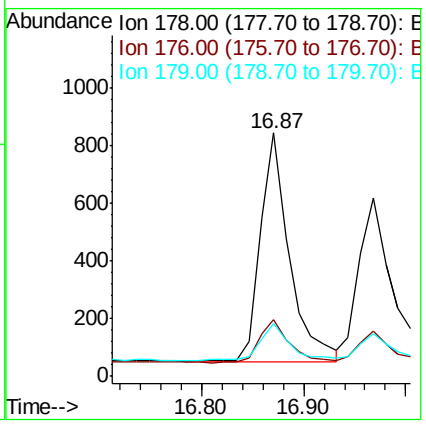


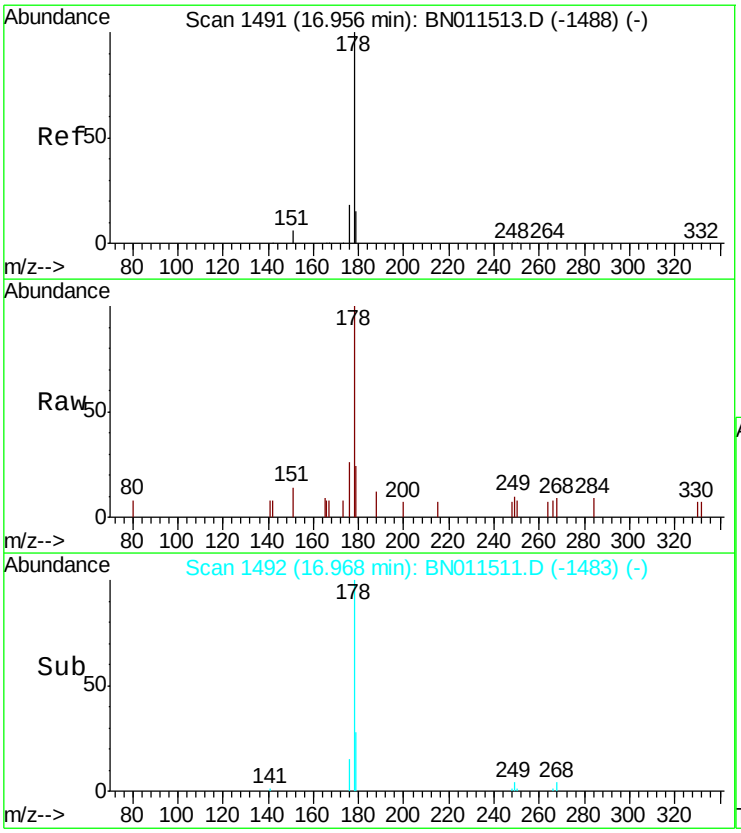
#25
Phenanthrene
Concen: 0.107 ng
RT: 16.87 min Scan# 1484
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:178 Resp: 1571

Ion	Ratio	Lower	Upper
178	100		
176	19.7	15.3	22.9
179	16.4	12.3	18.5

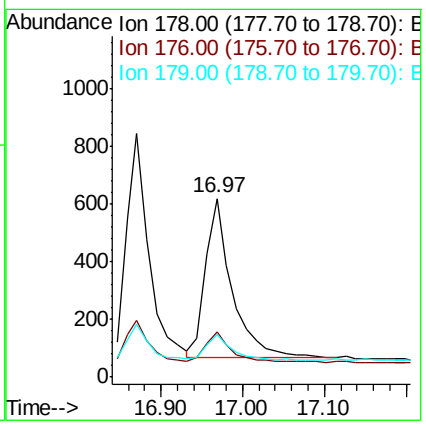


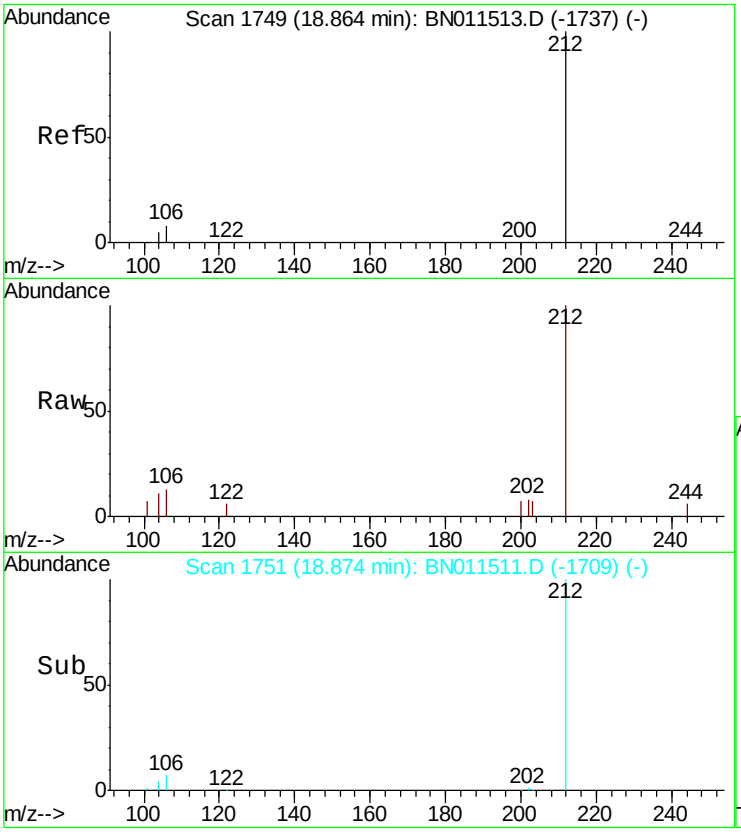


#26
Anthracene
Concen: 0.104 ng
RT: 16.97 min Scan# 1492
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:178 Resp: 1265

Ion	Ratio	Lower	Upper
178	100		
176	16.7	14.4	21.6
179	14.6	12.2	18.2



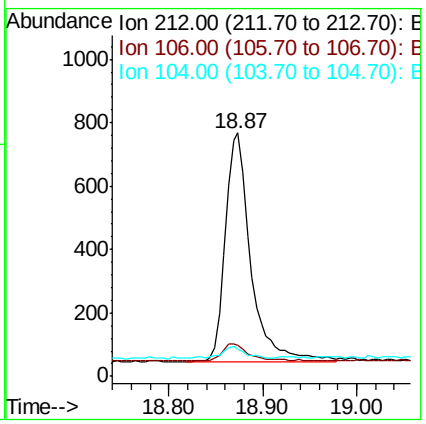


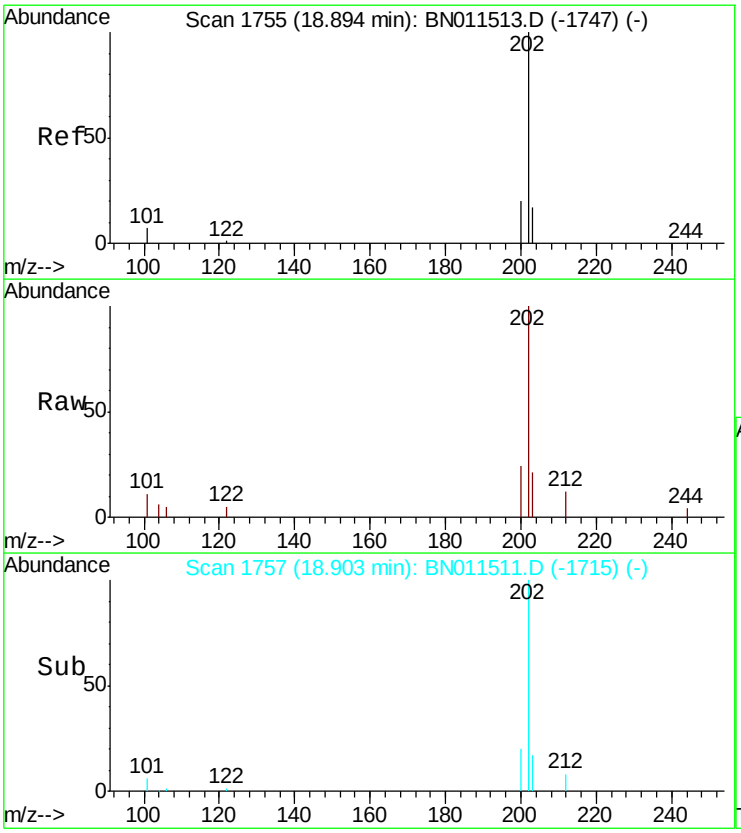
#27
Fluoranthene-d10
Concen: 0.097 ng
RT: 18.87 min Scan# 1751
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:212 Resp: 1340

Ion	Ratio	Lower	Upper
212	100		
106	8.1	6.0	9.0
104	4.4	3.7	5.5

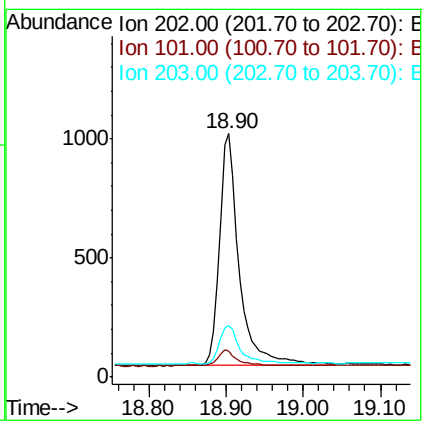


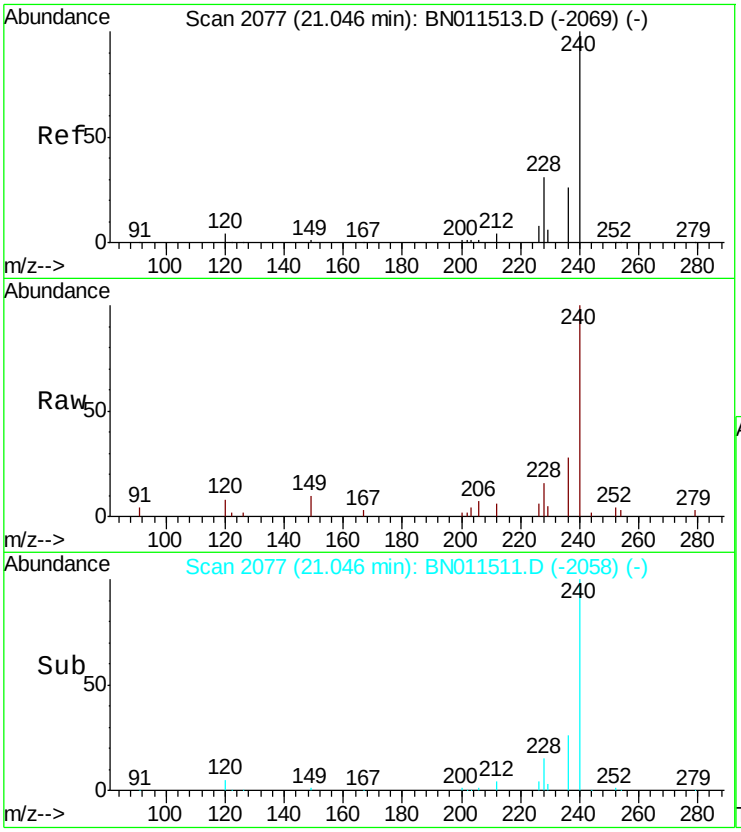


#28
Fluoranthene
Concen: 0.104 ng
RT: 18.90 min Scan# 1757
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:202 Resp: 1739

Ion	Ratio	Lower	Upper
202	100		
101	6.0	5.1	7.7
203	16.5	13.8	20.6



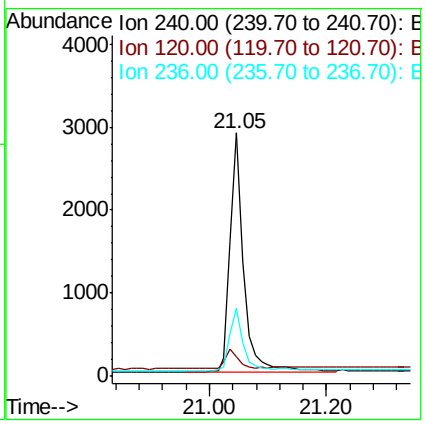


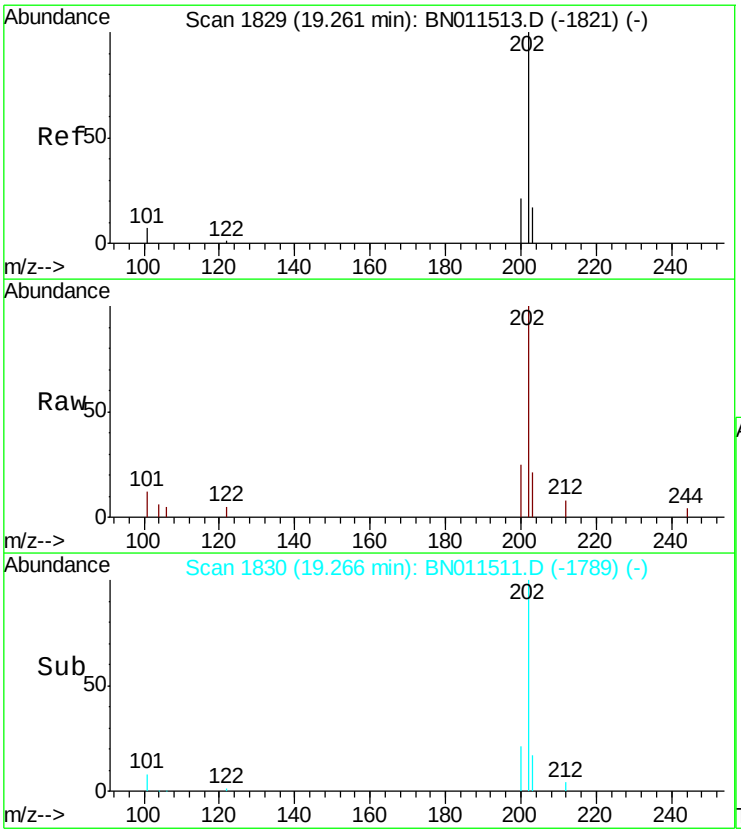
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.05 min Scan# 2077
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:240 Resp: 4620

Ion	Ratio	Lower	Upper
240	100		
120	8.1	6.0	9.0
236	27.8	22.6	33.8

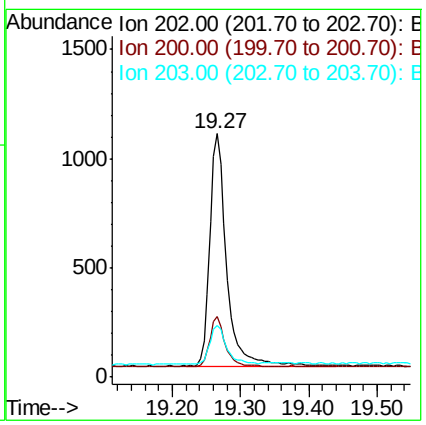


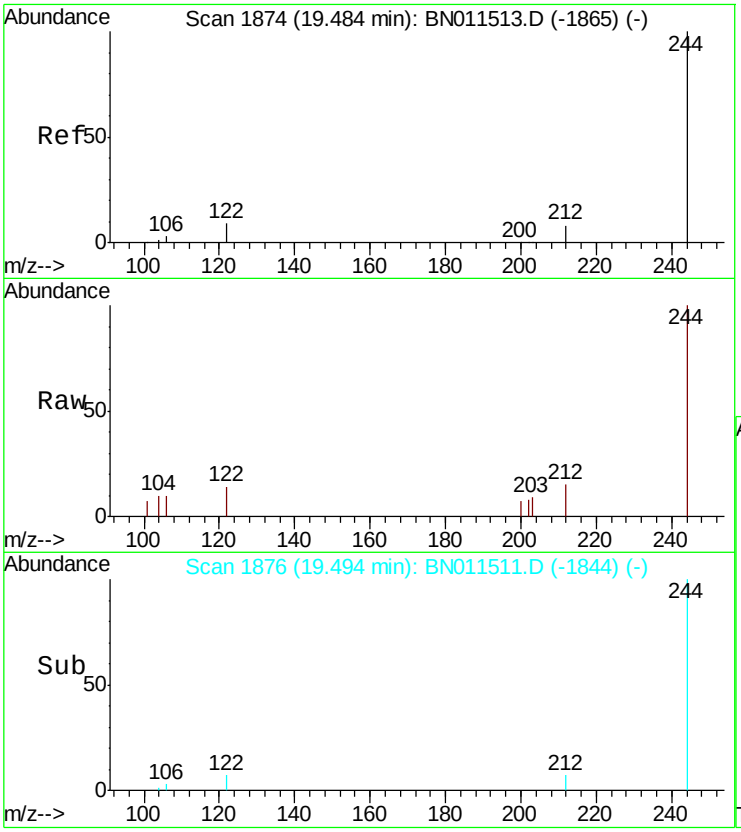


#30
Pyrene
Concen: 0.087 ng
RT: 19.27 min Scan# 1830
Delta R.T. 0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:202 Resp: 1811

Ion	Ratio	Lower	Upper
202	100		
200	20.1	16.6	25.0
203	17.0	13.9	20.9



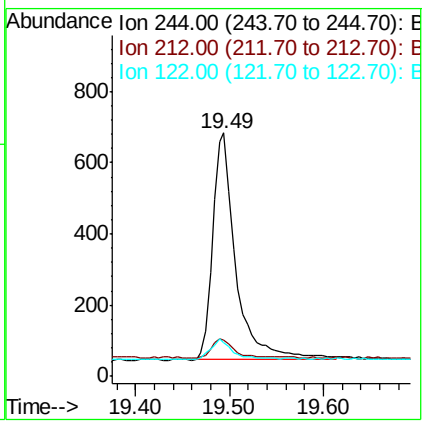


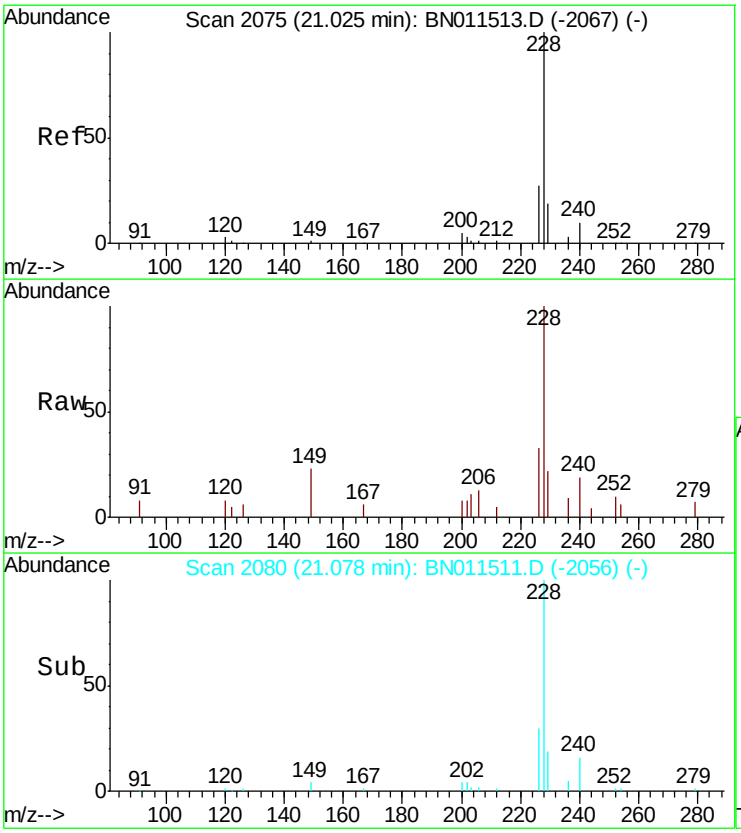
#31
Terphenyl-d14
Concen: 0.079 ng
RT: 19.49 min Scan# 1876
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:244 Resp: 1104

Ion	Ratio	Lower	Upper
244	100		
212	14.8	8.2	12.4#
122	13.6	8.4	12.6#

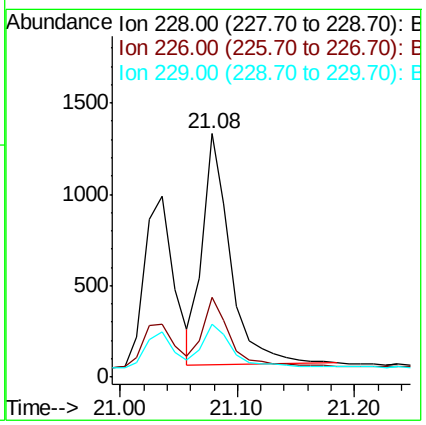


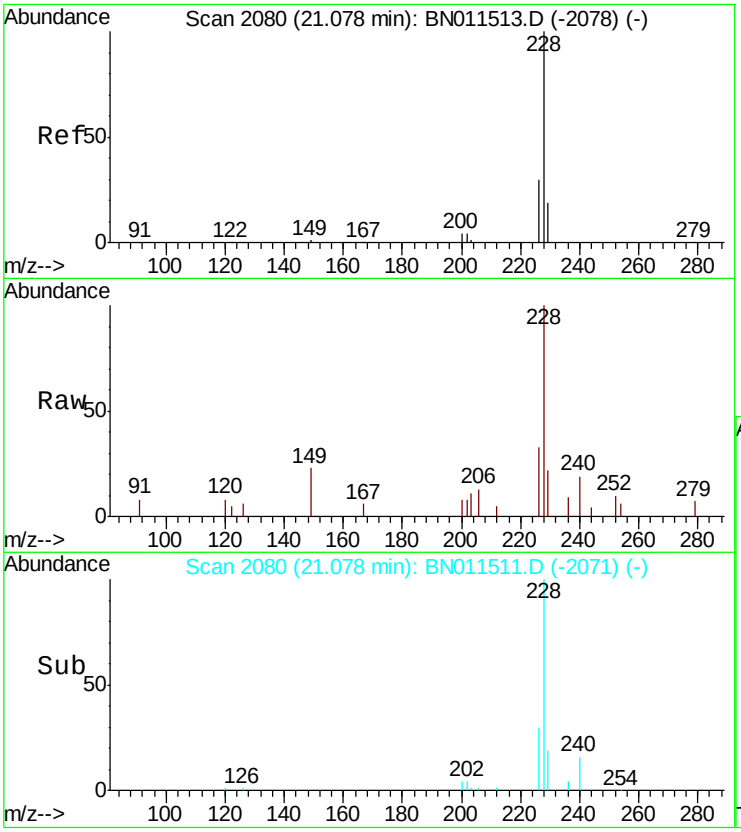


#32
Benzo(a)anthracene
Concen: 0.135 ng
RT: 21.08 min Scan# 2080
Delta R.T. 0.05 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:228 Resp: 2092

Ion	Ratio	Lower	Upper
228	100		
226	32.7	22.6	33.8
229	21.8	16.2	24.2



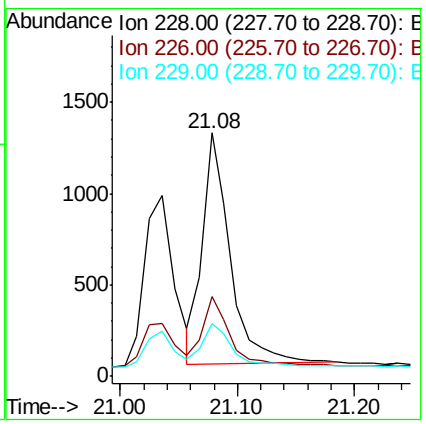


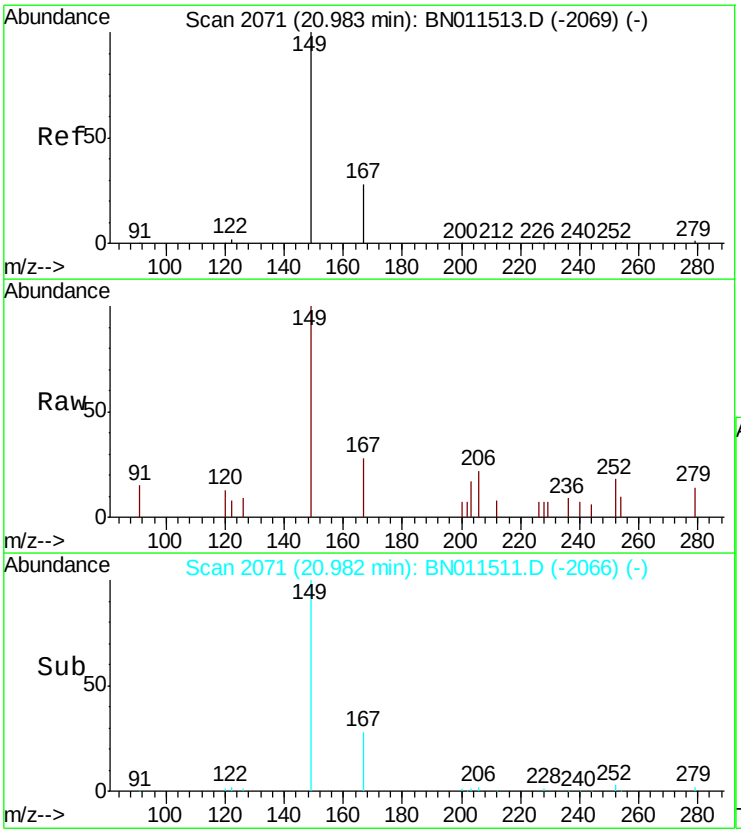
#33
Chrysene
Concen: 0.120 ng
RT: 21.08 min Scan# 2080
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:228 Resp: 2084

Ion	Ratio	Lower	Upper
228	100		
226	32.7	24.6	37.0
229	21.8	15.9	23.9

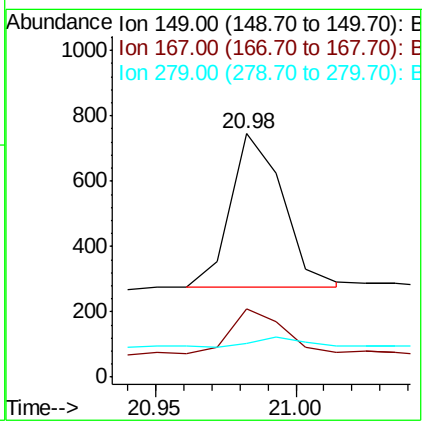


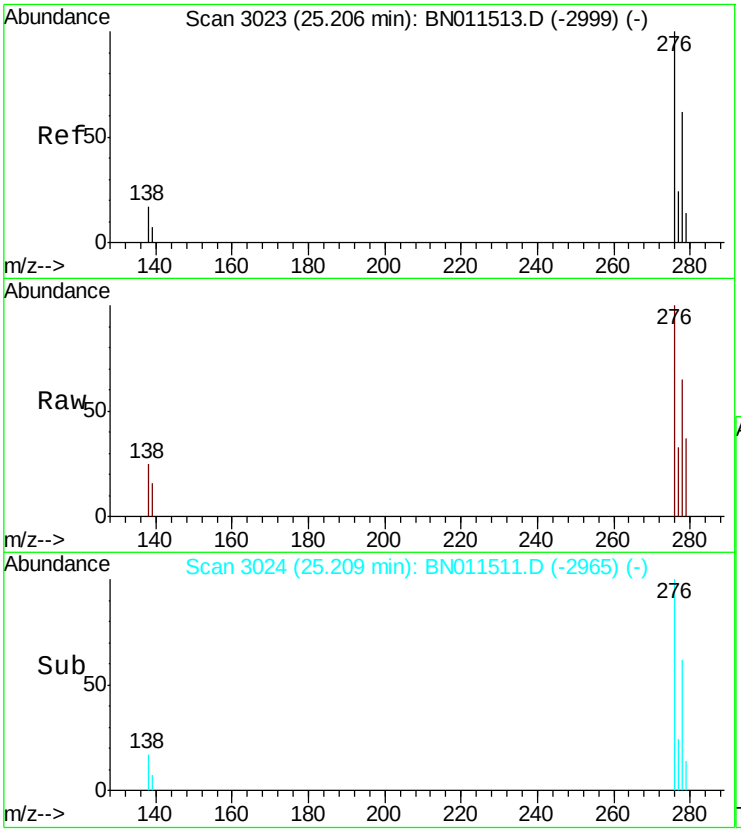


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.075 ng
RT: 20.98 min Scan# 2071
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:149 Resp: 621

Ion	Ratio	Lower	Upper
149	100		
167	28.2	23.0	34.4
279	5.2	4.1	6.1



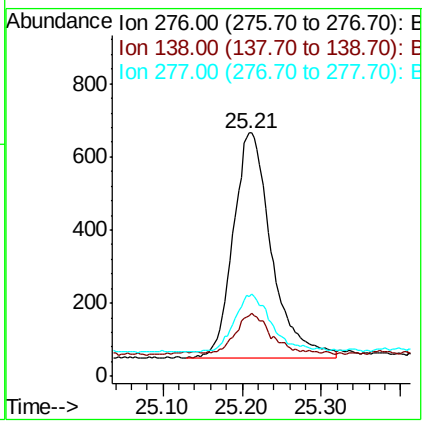


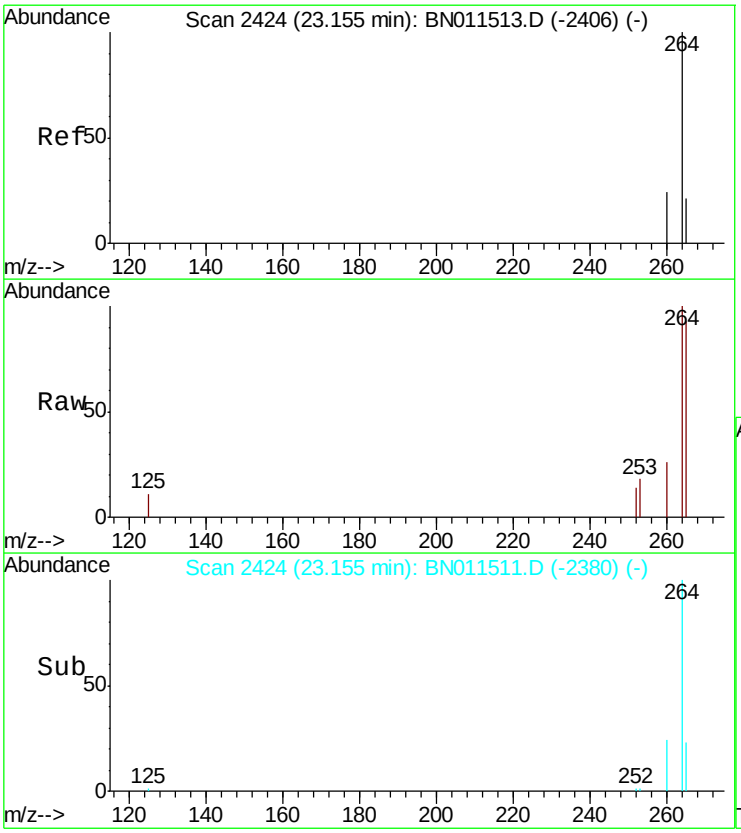
#35
Indeno(1,2,3-cd)pyrene
Concen: 0.122 ng
RT: 25.21 min Scan# 3024
Delta R.T. 0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:276 Resp: 2076

Ion	Ratio	Lower	Upper
276	100		
138	15.6	13.6	20.4
277	24.9	19.8	29.8

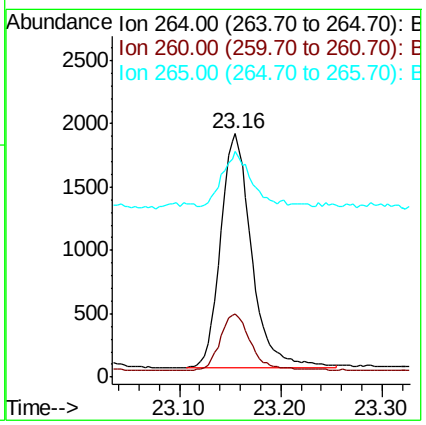


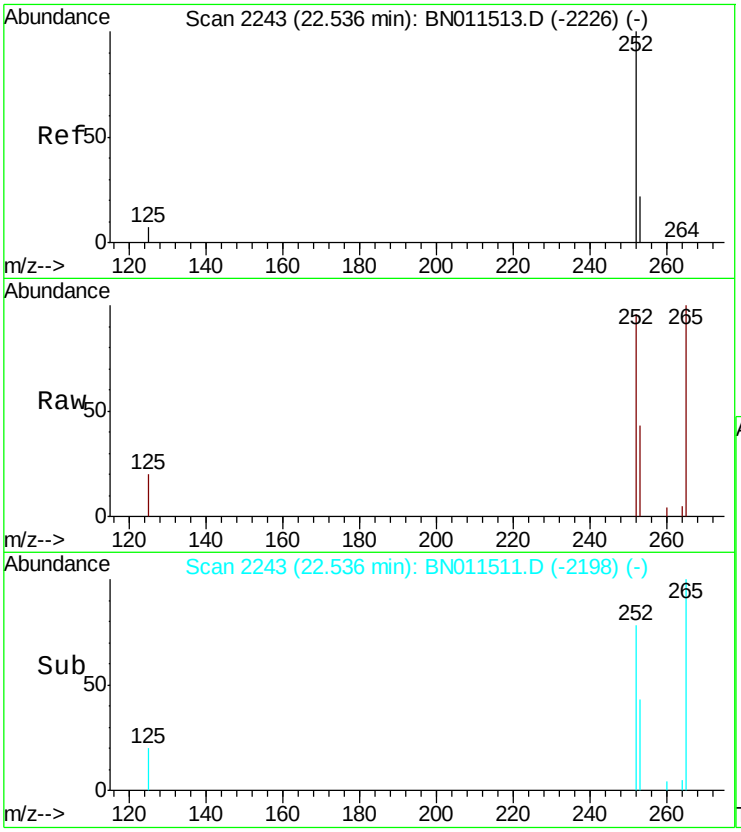


#36
Perylene-d12
Concen: 0.400 ng
RT: 23.16 min Scan# 2424
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:264 Resp: 3983

Ion	Ratio	Lower	Upper
264	100		
260	26.2	20.0	30.0
265	92.8	62.6	94.0



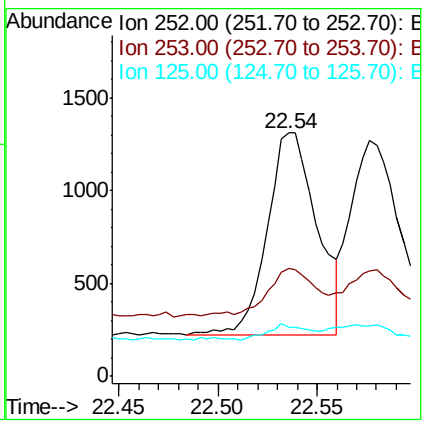


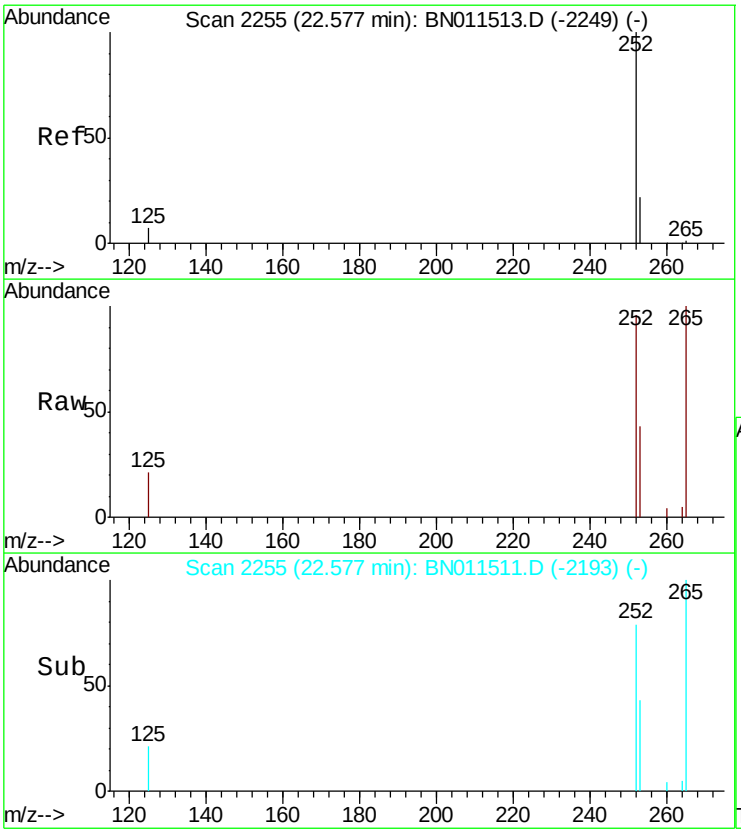
#37
Benzo(b)fluoranthene
Concen: 0.119 ng
RT: 22.54 min Scan# 2243
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 1891

Ion	Ratio	Lower	Upper
252	100		
253	44.2	23.0	34.6#
125	20.4	9.0	13.4#

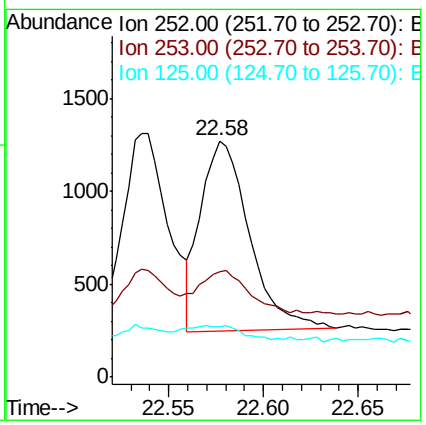


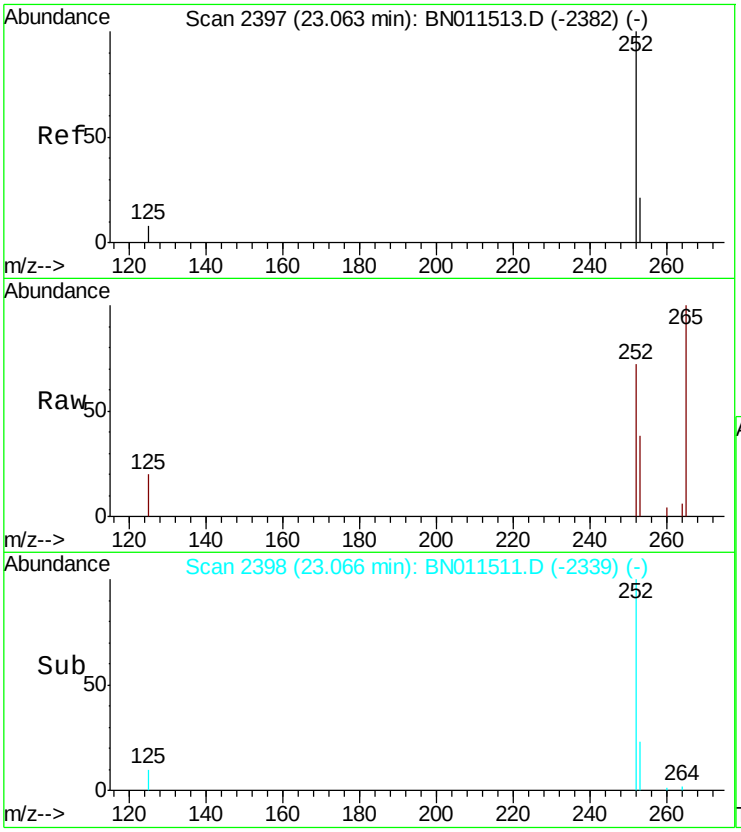


#38
Benzo(k)fluoranthene
Concen: 0.104 ng
RT: 22.58 min Scan# 2255
Delta R.T. -0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:252 Resp: 1814

Ion	Ratio	Lower	Upper
252	100		
253	44.4	23.4	35.0#
125	21.5	9.7	14.5#



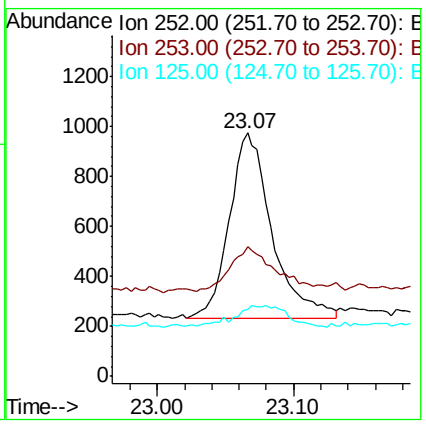


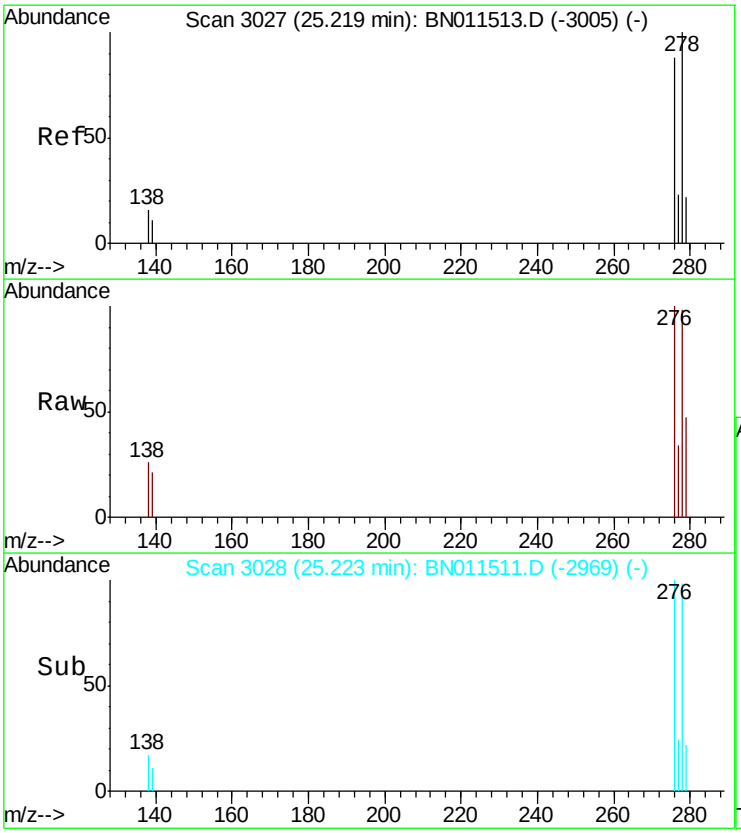
#39
Benzo(a)pyrene
Concen: 0.117 ng
RT: 23.07 min Scan# 2398
Delta R.T. 0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 1618

Ion	Ratio	Lower	Upper
252	100		
253	53.0	25.4	38.0#
125	27.4	11.6	17.4#

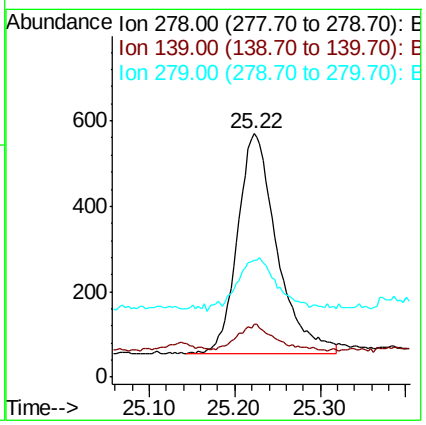


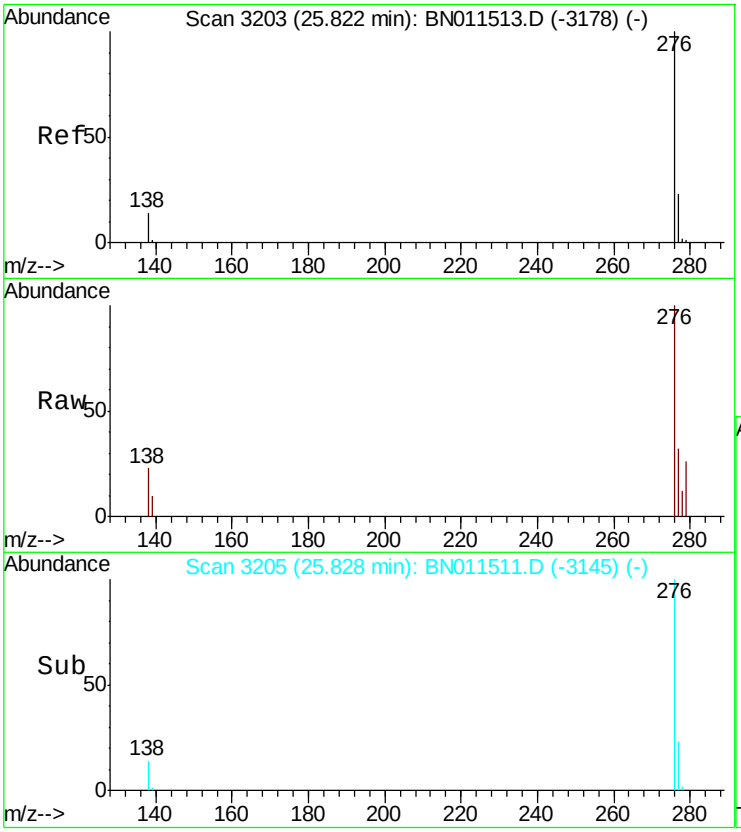


#40
Dibenzo(a,h)anthracene
Concen: 0.115 ng
RT: 25.22 min Scan# 3028
Delta R.T. 0.00 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Tgt Ion:278 Resp: 1642

Ion	Ratio	Lower	Upper
278	100		
139	21.6	11.1	16.7#
279	48.1	23.3	34.9#





#41
Benzo(g,h,i)perylene
Concen: 0.122 ng
RT: 25.83 min Scan# 3205
Delta R.T. 0.01 min
Lab File: BN011511.D
Acq: 19 Aug 2020 11:36

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:276 Resp: 1936

Ion	Ratio	Lower	Upper
276	100		
277	31.8	20.5	30.7#
138	22.9	13.2	19.8#