

Data Path : Z:\HPCHEM1\BNA E\Data\BE022318\
 Data File : BE095674.D
 Acq On : 23 Feb 2018 9:41
 Operator : SJ/JU
 Sample : SSTDICCC0.4
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_E
 ClientSampleId :

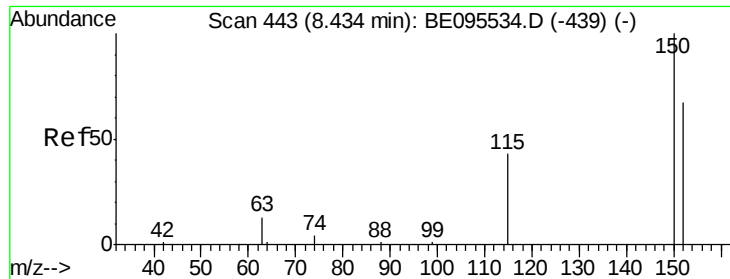
Quant Time: Feb 23 11:06:20 2018
 Quant Method : Z:\HPCHEM1\BNA E\METHODS\8270-SIM-BE022318.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Feb 23 10:57:33 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.434	152	1239	0.40	ng	0.00
7) Naphthalene-d8	11.276	136	4804	0.40	ng	0.00
13) Acenaphthene-d10	15.002	164	2695	0.40	ng	0.00
19) Phenanthrene-d10	17.700	188	6020	0.40	ng	0.00
27) Chrysene-d12	21.792	240	6330	0.40	ng	0.00
34) Perylene-d12	24.422	264	5587	0.40	ng	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	5.916	112	1266	0.34	ng	0.00
5) Phenol-d6	7.552	99	1799	0.35	ng	0.00
8) Nitrobenzene-d5	9.614	82	1935	0.38	ng	0.00
11) 2-Methylnaphthalene-d10	12.804	152	3251	0.41	ng	0.00
14) 2,4,6-Tribromophenol	16.473	330	345	0.28	ng	0.00
15) 2-Fluorobiphenyl	13.639	172	4906	0.42	ng	0.00
25) Fluoranthene-d10	19.686	212	31558	0.40	ng	0.00
29) Terphenyl-d14	20.252	244	5089	0.38	ng	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) 1,4-Dioxane	3.650	88	757	0.37	ng	# 90
3) n-Nitrosodimethylamine	4.002	42	937	0.36	ng	# 85
6) bis(2-Chloroethyl)ether	7.829	93	1849	0.39	ng	95
9) Naphthalene	11.309	128	22733	0.41	ng	99
10) Hexachlorobutadiene	11.572	225	1375	0.46	ng	97
12) 2-Methylnaphthalene	12.877	142	3872	0.41	ng	97
16) Acenaphthylene	14.735	152	6015	0.39	ng	99
17) Acenaphthene	15.061	154	3844	0.40	ng	95
18) Fluorene	16.025	166	4738	0.39	ng	# 78
20) 4-Bromophenyl-phenylether	16.892	248	1543	0.43	ng	# 79
21) Hexachlorobenzene	17.027	284	1583	0.42	ng	# 83
22) Pentachlorophenol	17.371	266	296	0.29	ng	# 79
23) Phenanthrene	17.745	178	7773	0.42	ng	98
24) Anthracene	17.834	178	6782	0.39	ng	95
26) Fluoranthene	19.715	202	9372	0.40	ng	# 97
28) Pyrene	20.065	202	10345	0.39	ng	95
30) Benzo(a)anthracene	21.777	228	8220	0.39	ng	98
31) Chrysene	21.839	228	8284	0.40	ng	99
32) Bis(2-ethylhexyl)phtha...	21.652	149	13290	0.27	ng	100
33) Indeno(1,2,3-cd)pyrene	27.229	276	7972	0.40	ng	# 94
35) Benzo(b)fluoranthene	23.606	252	8132	0.43	ng	# 89
36) Benzo(k)fluoranthene	23.661	252	7998	0.41	ng	95
37) Benzo(a)pyrene	24.303	252	7279	0.41	ng	93
38) Dibenzo(a,h)anthracene	27.247	278	6354	0.41	ng	96
39) Benzo(g,h,i)perylene	28.099	276	6936	0.42	ng	# 91

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



#1

1,4-Dichlorobenzene-d4

Concen: 0.40 ng

RT: 8.434 min Scan# 44

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

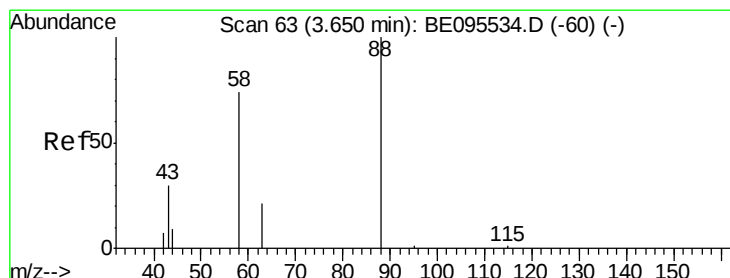
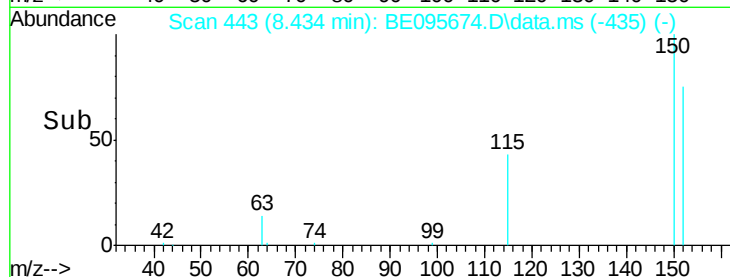
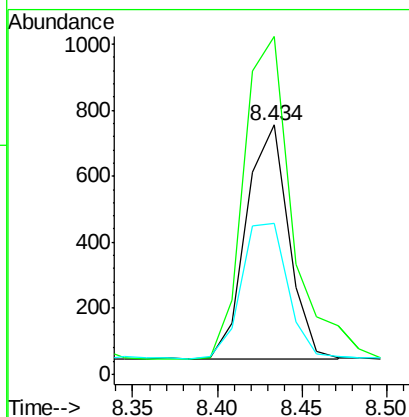
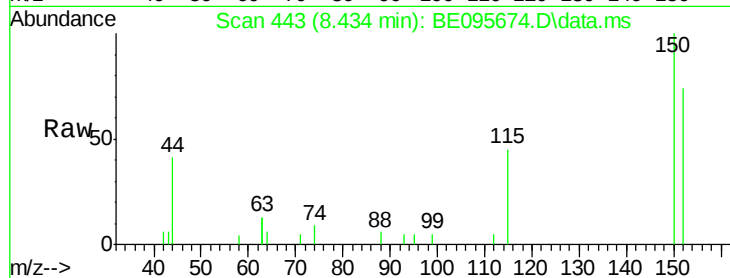
Tot Ion:152 Resp: 1239

Ion Ratio Lower Upper

152 100

150 135.5 117.2 175.8

115 60.7 57.0 85.6



#2

1,4-Dioxane

Concen: 0.37 ng

RT: 3.650 min Scan# 63

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

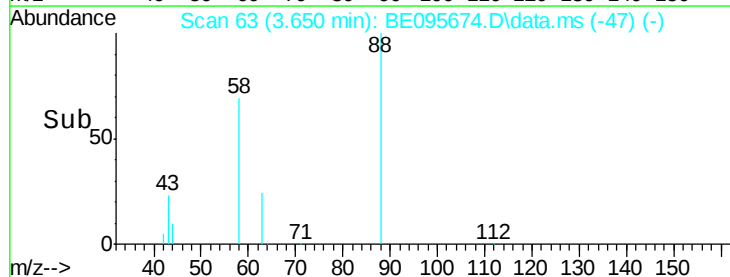
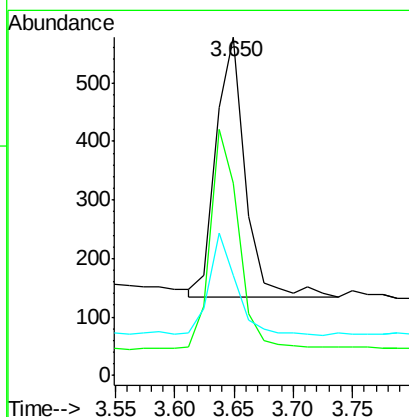
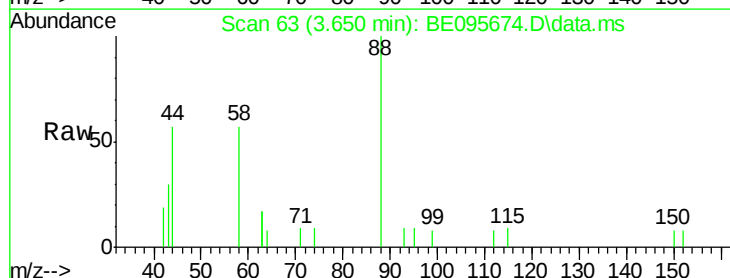
Tgt Ion: 88 Resp: 757

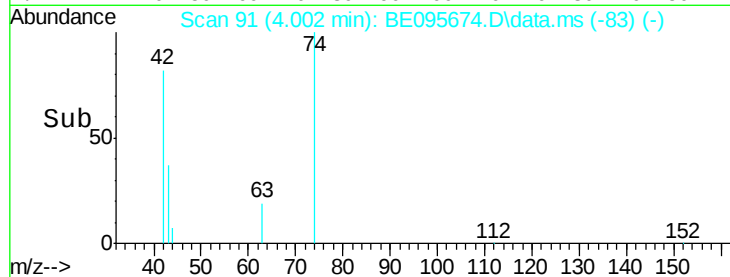
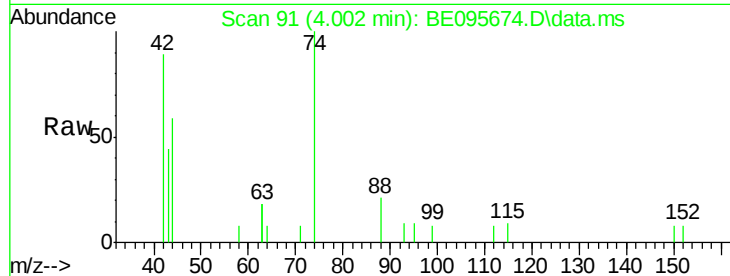
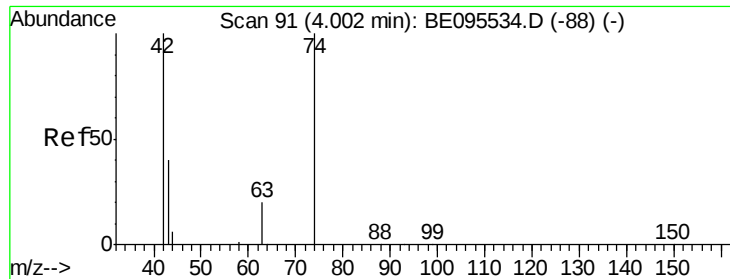
Ion Ratio Lower Upper

88 100

58 83.4 63.2 94.8

43 39.4 41.2 61.8#





#3

n-Nitrosodimethylamine

Concen: 0.36 ng

RT: 4.002 min Scan# 91

Delta R.T. 0.000 min

Lab File: BE095674.D

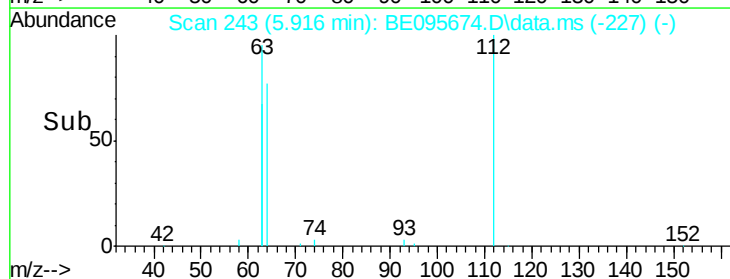
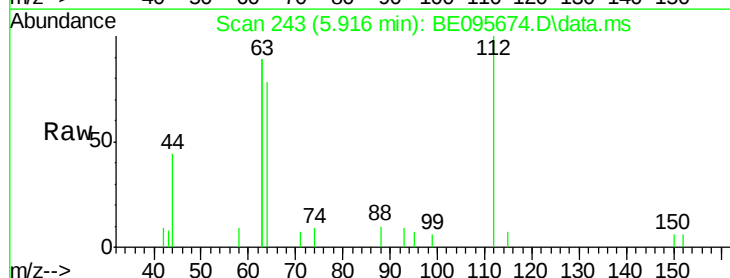
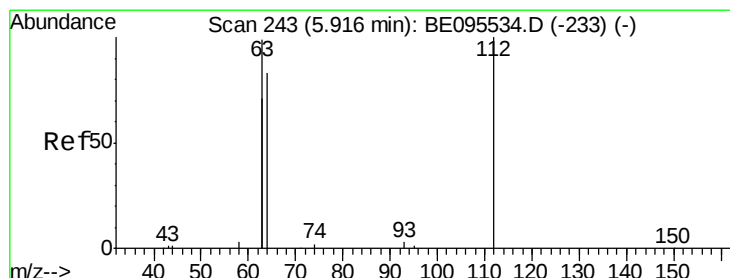
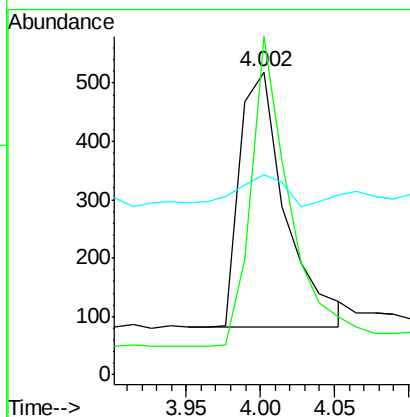
Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

Tot Ion:	42	Resp:	937
Ion	Ratio	Lower	Upper
42	100		
74	102.9	96.0	144.0
44	10.6	12.0	18.0#



#4

2-Fluorophenol

Concen: 0.34 ng

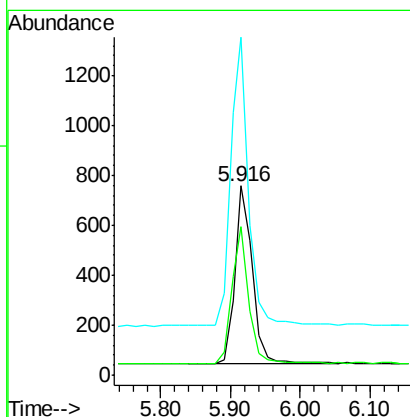
RT: 5.916 min Scan# 243

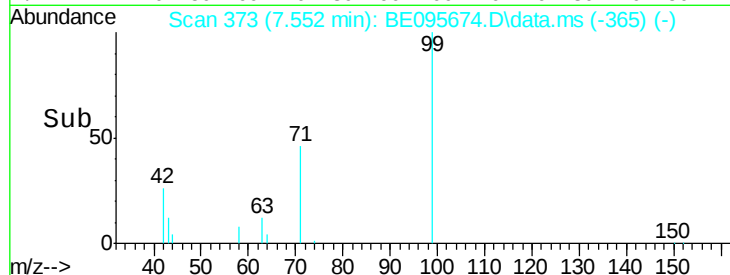
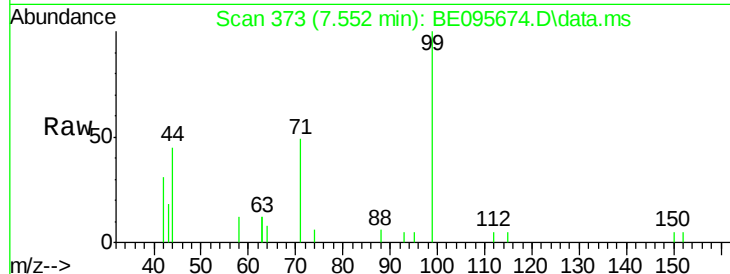
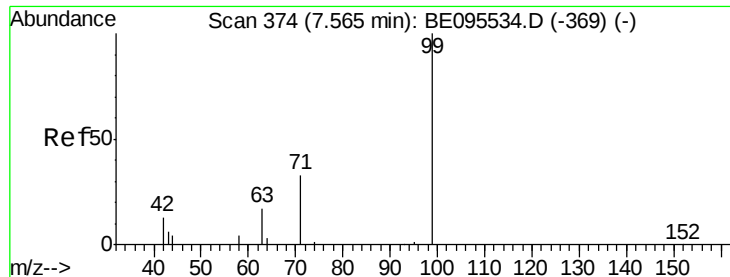
Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Tgt Ion:	112	Resp:	1266
Ion	Ratio	Lower	Upper
112	100		
64	75.4	60.1	90.1
63	162.3	116.8	175.2

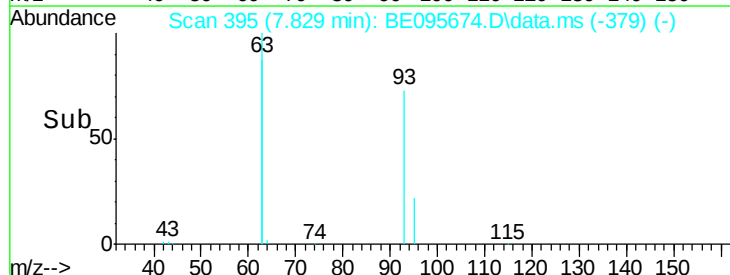
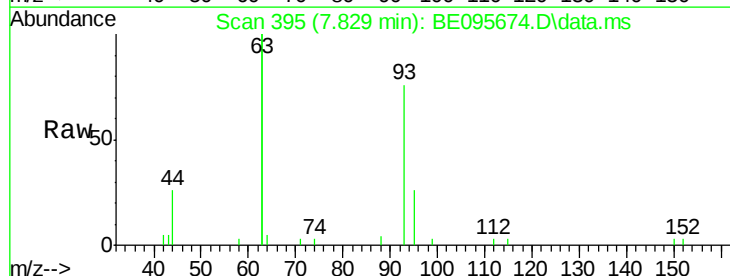
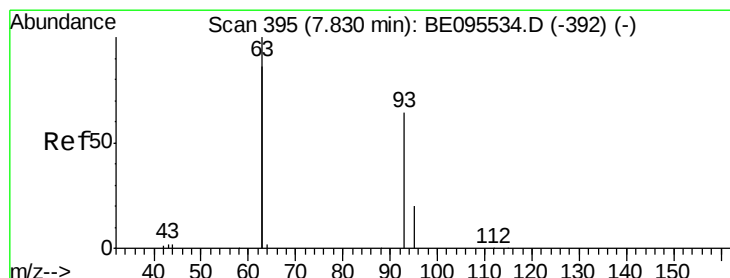
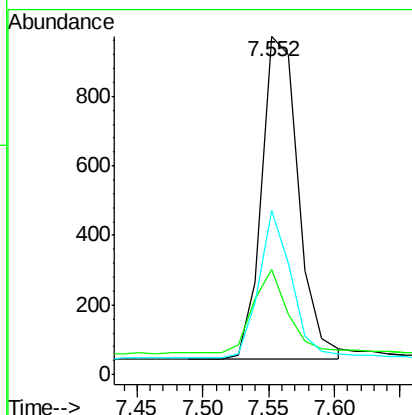




#5
Phenol-d6
Concen: 0.35 ng
RT: 7.552 min Scan# 37
Delta R.T. 0.000 min
Lab File: BE095674.D
Acq: 23 Feb 2018 9:41

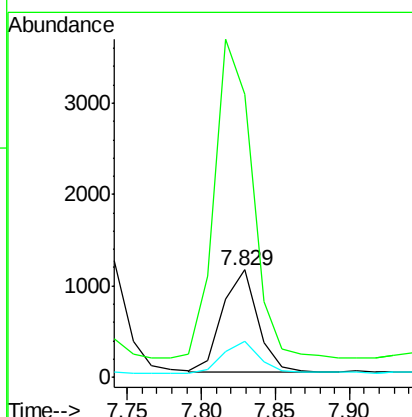
Instrument :
BNA_E
ClientSampleId :

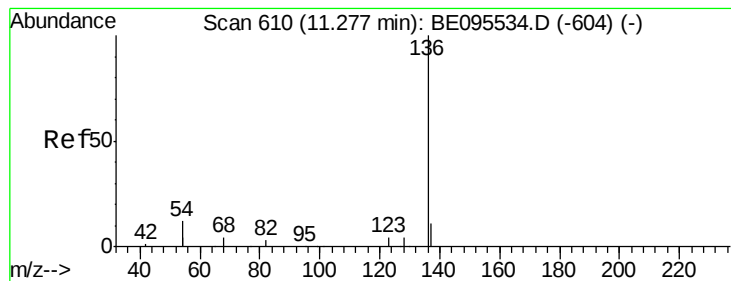
Tot Ion	Ratio	Lower	Upper
99	100		
42	24.8	20.2	30.2
71	40.5	28.4	42.6



#6
bis(2-Chloroethyl)ether
Concen: 0.39 ng
RT: 7.829 min Scan# 395
Delta R.T. 0.000 min
Lab File: BE095674.D
Acq: 23 Feb 2018 9:41

Tgt Ion	Ratio	Lower	Upper
93	100		
63	333.5	275.3	412.9
95	31.2	25.2	37.8





#7

Naphthalene-d8

Concen: 0.40 ng

RT: 11.276 min Scan# 61

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

Tot Ion:136 Resp: 4804

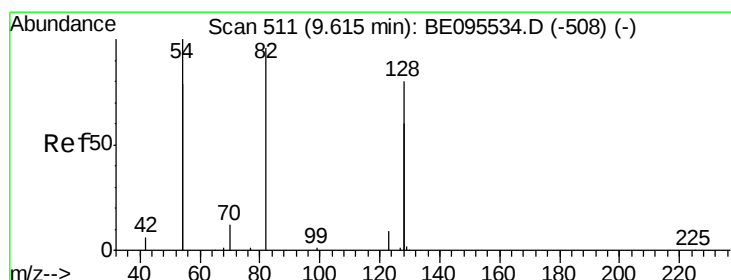
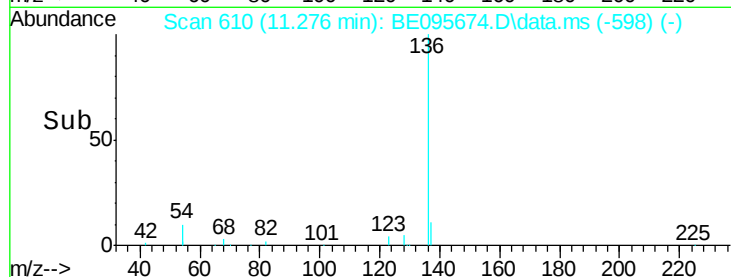
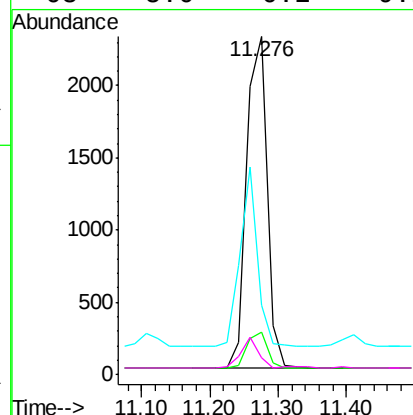
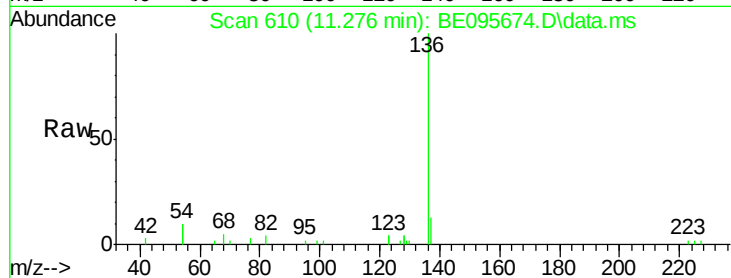
Ion Ratio Lower Upper

136 100

137 12.6 9.5 14.3

54 20.3 29.1 43.7#

68 5.0 6.2 9.2#



#8

Nitrobenzene-d5

Concen: 0.38 ng

RT: 9.614 min Scan# 511

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

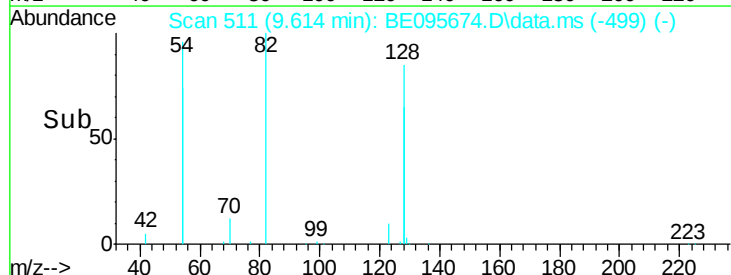
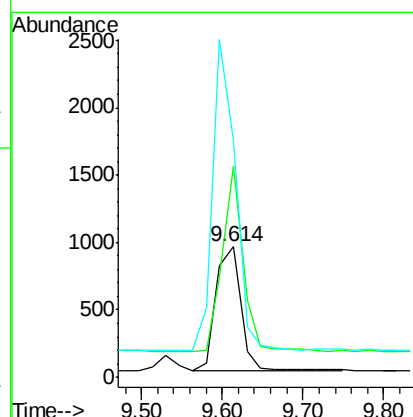
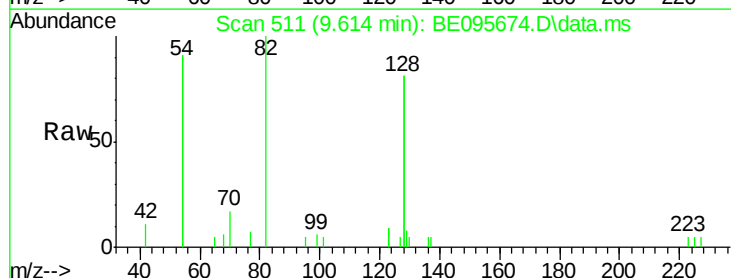
Tgt Ion: 82 Resp: 1935

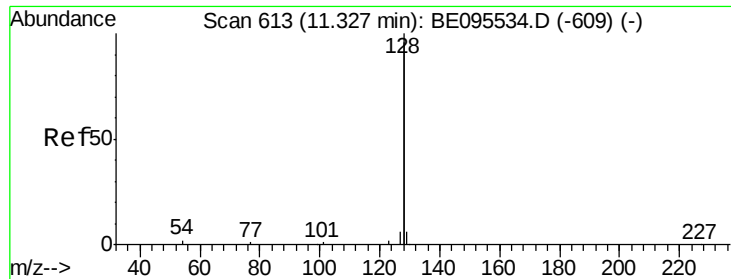
Ion Ratio Lower Upper

82 100

128 161.6 150.0 225.0

54 181.4 154.2 231.4





#9

Naphthalene

Concen: 0.41 ng

RT: 11.309 min Scan# 61

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

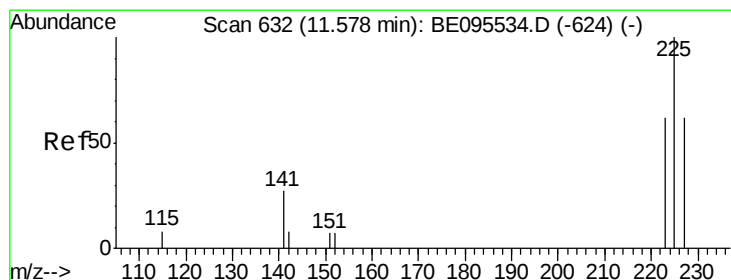
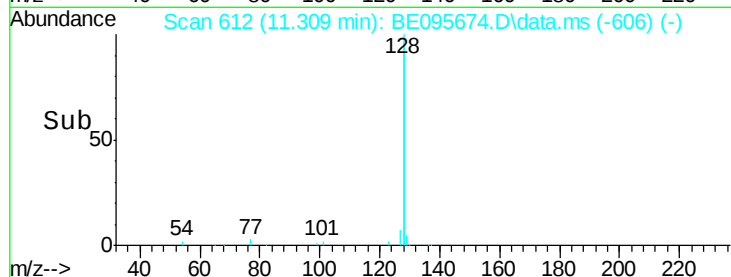
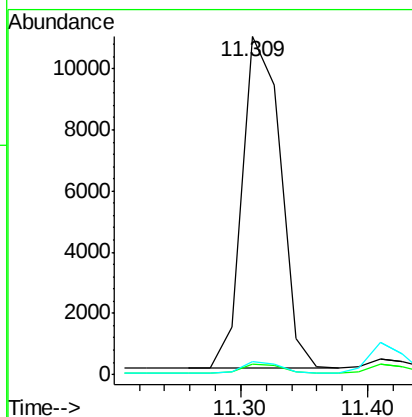
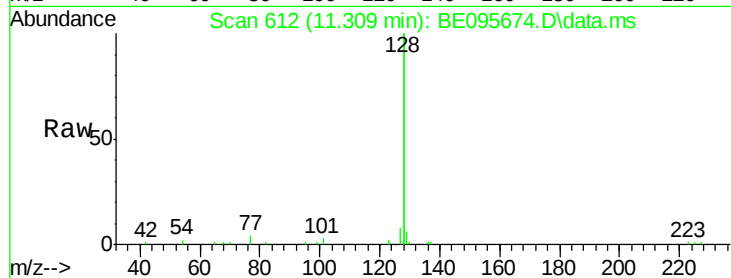
Tot Ion:128 Resp: 22733

Ion Ratio Lower Upper

128 100

129 3.0 2.6 3.8

127 3.9 2.8 4.2



#10

Hexachlorobutadiene

Concen: 0.46 ng

RT: 11.572 min Scan# 631

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

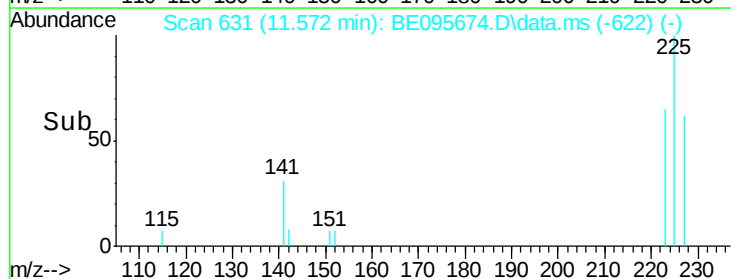
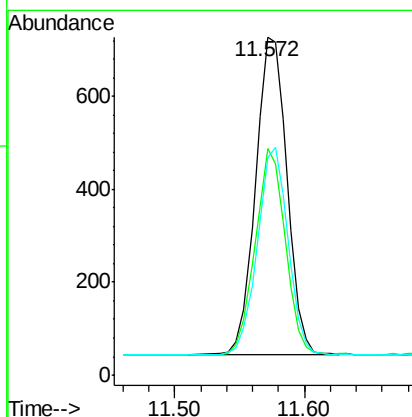
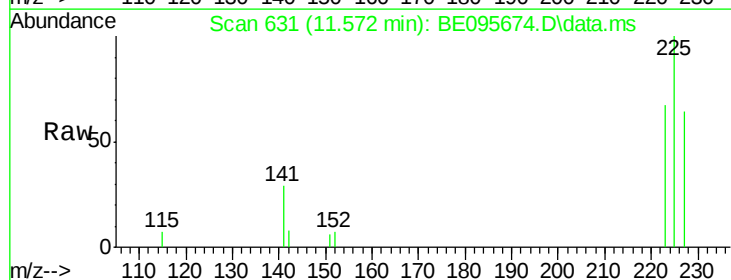
Tgt Ion:225 Resp: 1375

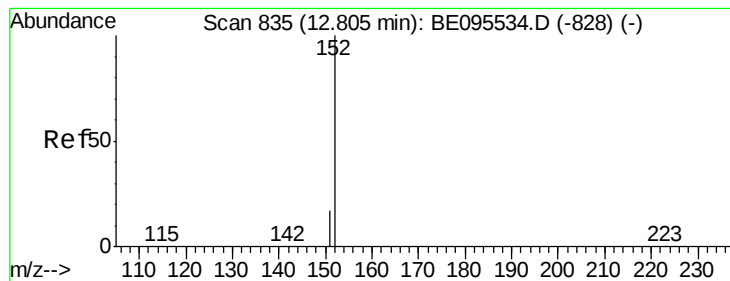
Ion Ratio Lower Upper

225 100

223 62.8 53.0 79.6

227 63.6 51.4 77.2





#11

2-Methylnaphthalene-d10

Concen: 0.41 ng

RT: 12.804 min Scan# 83

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

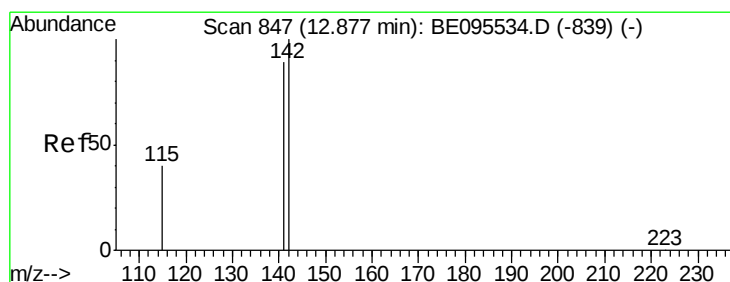
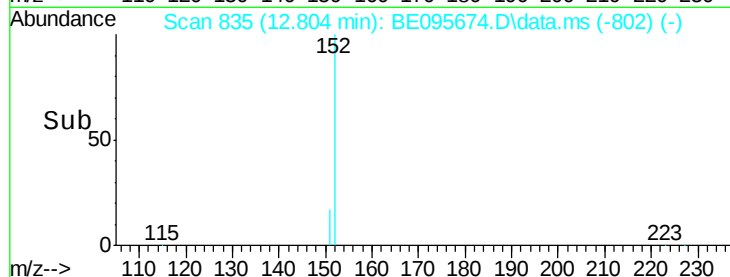
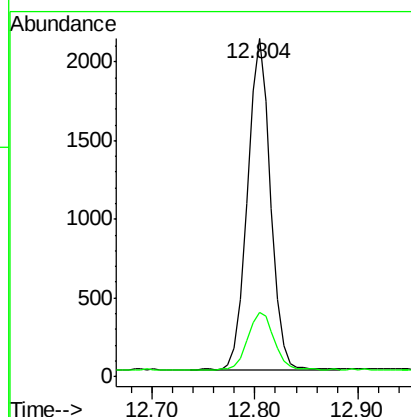
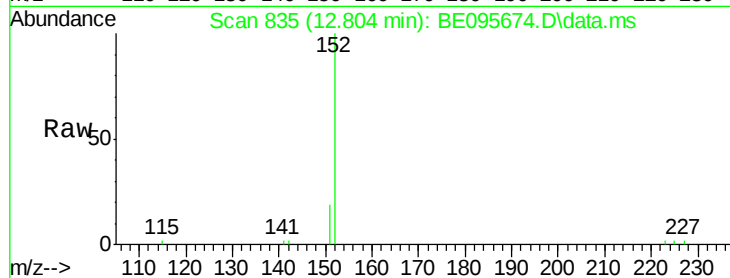
ClientSampleId :

Tot Ion:152 Resp: 3251

Ion Ratio Lower Upper

152 100

151 19.8 15.4 23.0



#12

2-Methylnaphthalene

Concen: 0.41 ng

RT: 12.877 min Scan# 847

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

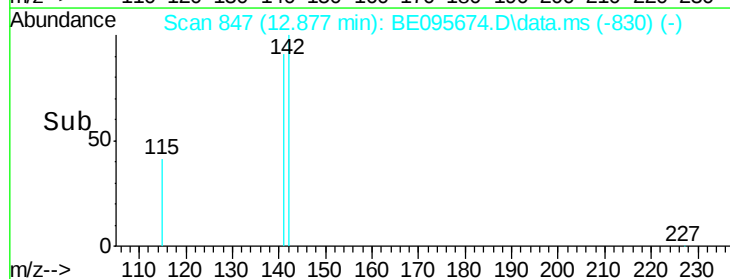
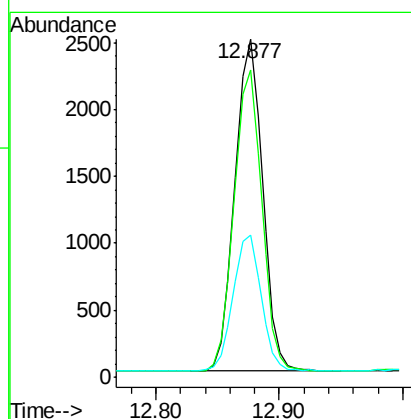
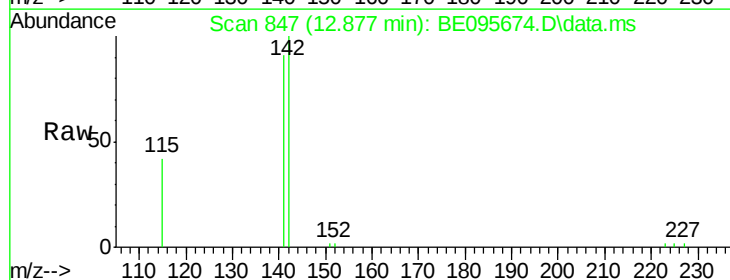
Tgt Ion:142 Resp: 3872

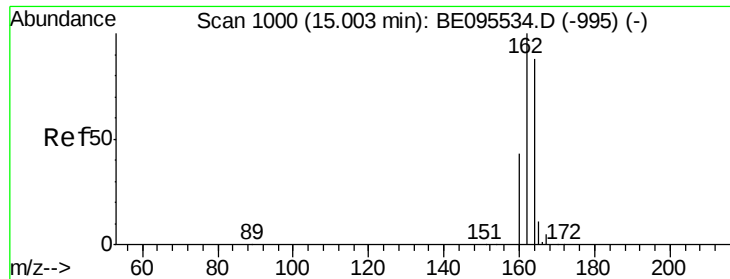
Ion Ratio Lower Upper

142 100

141 90.8 70.4 105.6

115 41.9 31.7 47.5





#13

Acenaphthene-d10

Concen: 0.40 ng

RT: 15.002 min Scan# 10

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

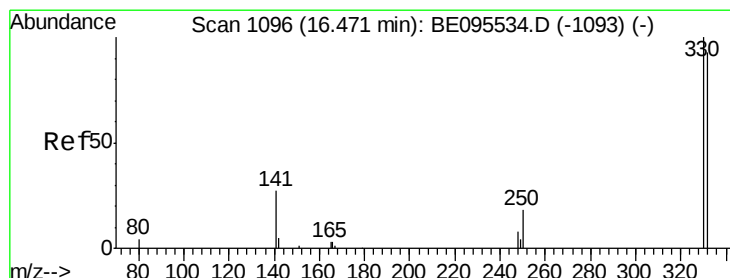
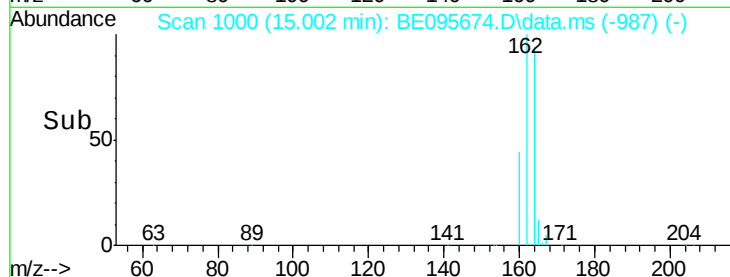
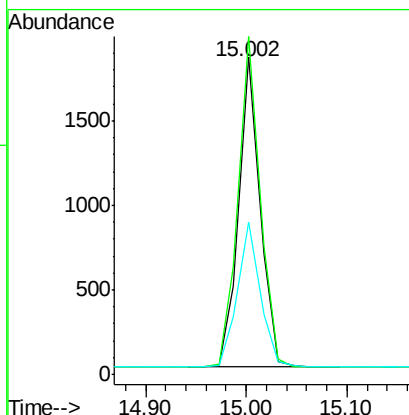
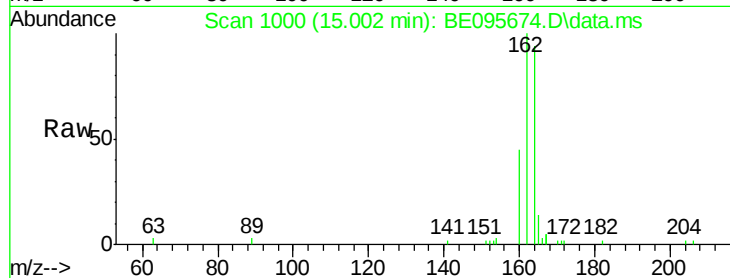
Tot Ion:164 Resp: 2695

Ion Ratio Lower Upper

164 100

162 106.5 83.1 124.7

160 48.0 37.1 55.7



#14

2,4,6-Tribromophenol

Concen: 0.28 ng

RT: 16.473 min Scan# 1096

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

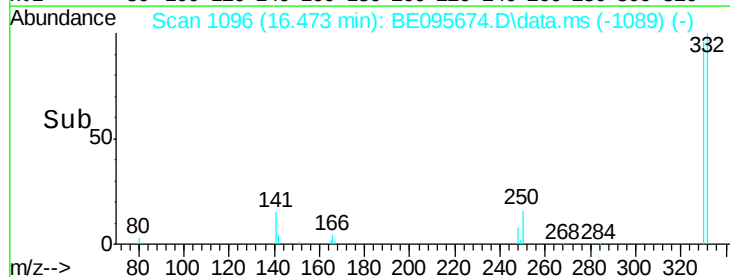
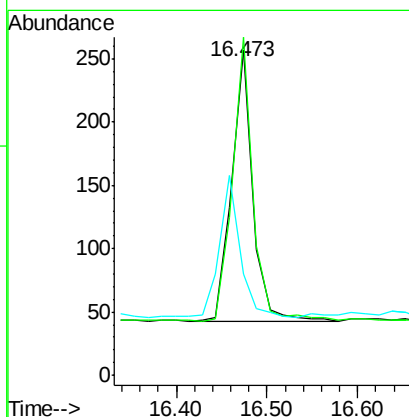
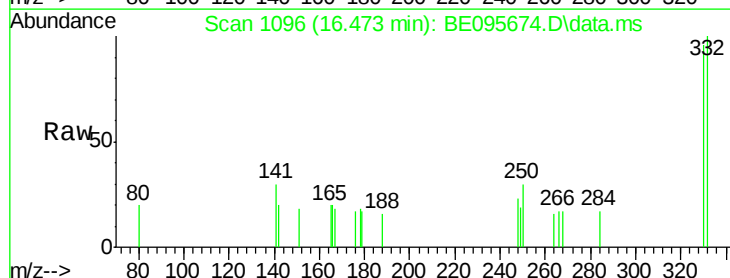
Tgt Ion:330 Resp: 345

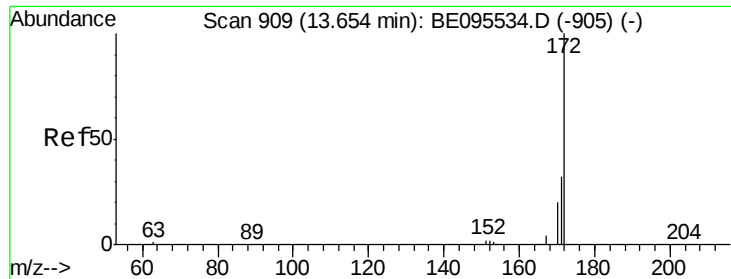
Ion Ratio Lower Upper

330 100

332 102.0 152.7 229.1#

141 50.4 33.7 50.5

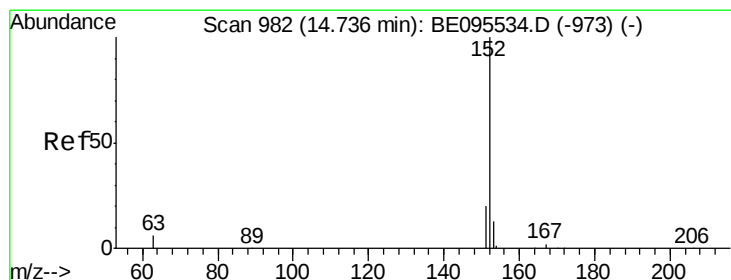
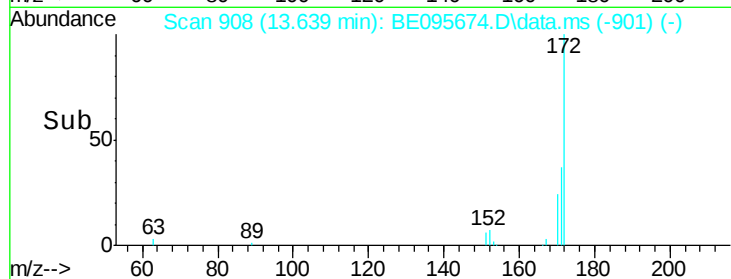
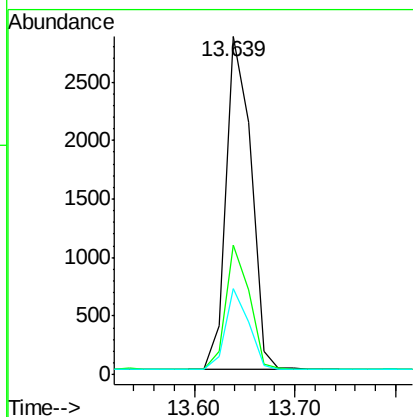
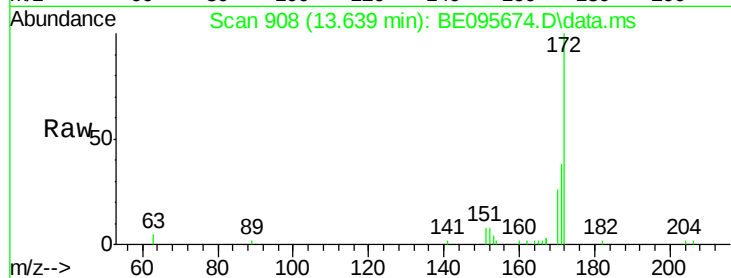




#15
2-Fluorobiphenyl
Concen: 0.42 ng
RT: 13.639 min Scan# 909
Delta R.T. 0.000 min
Lab File: BE095674.D
Acq: 23 Feb 2018 9:41

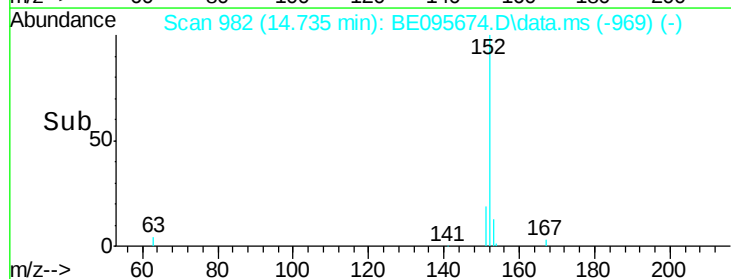
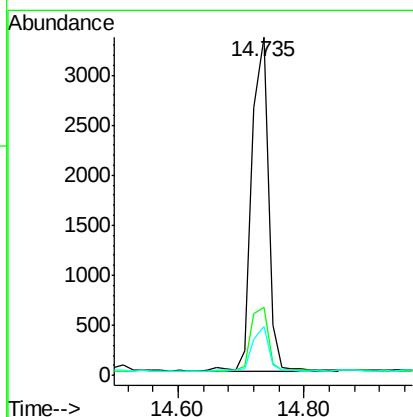
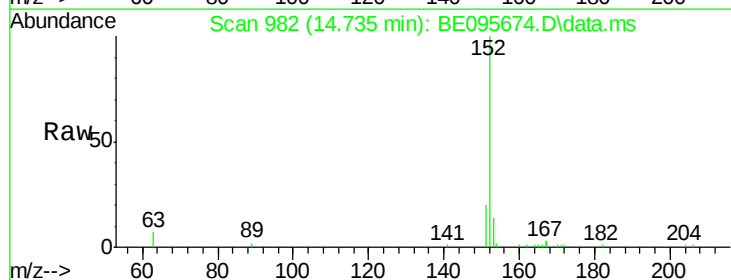
Instrument :
BNA_E
ClientSampleId :

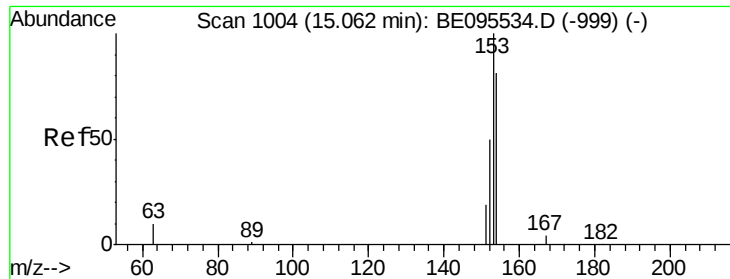
Tot Ion	Ratio	Lower	Upper
172	100		
171	38.2	29.9	44.9
170	25.6	21.8	32.8



#16
Acenaphthylene
Concen: 0.39 ng
RT: 14.735 min Scan# 982
Delta R.T. 0.000 min
Lab File: BE095674.D
Acq: 23 Feb 2018 9:41

Tgt Ion	Ratio	Lower	Upper
152	100		
151	20.2	15.7	23.5
153	12.8	10.5	15.7





#17

Acenaphthene

Concen: 0.40 ng

RT: 15.061 min Scan# 10

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

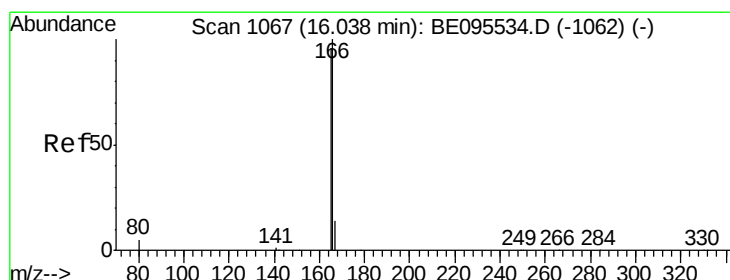
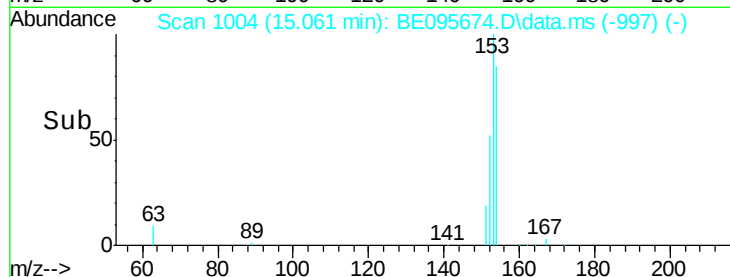
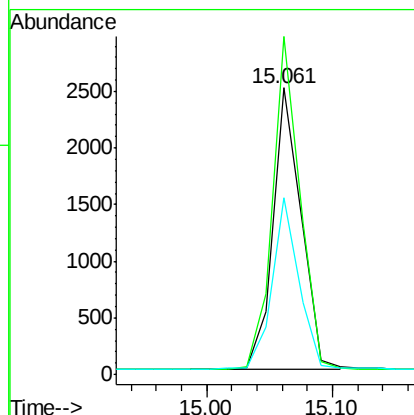
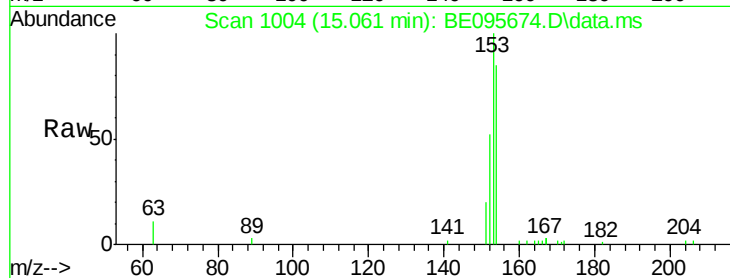
Tot Ion:154 Resp: 3844

Ion Ratio Lower Upper

154 100

153 115.5 89.2 133.8

152 58.5 42.0 63.0



#18

Fluorene

Concen: 0.39 ng

RT: 16.025 min Scan# 1066

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

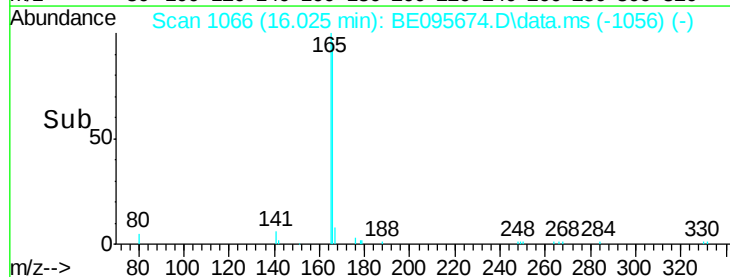
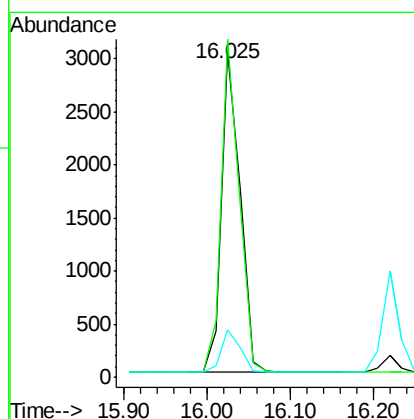
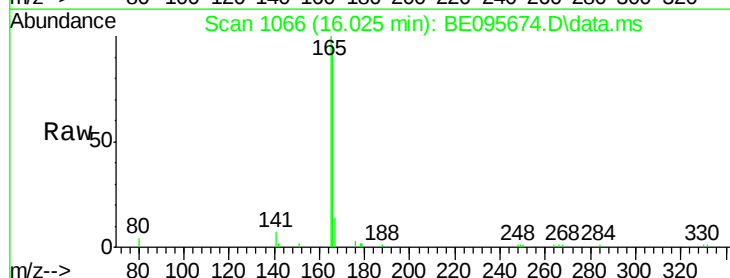
Tgt Ion:166 Resp: 4738

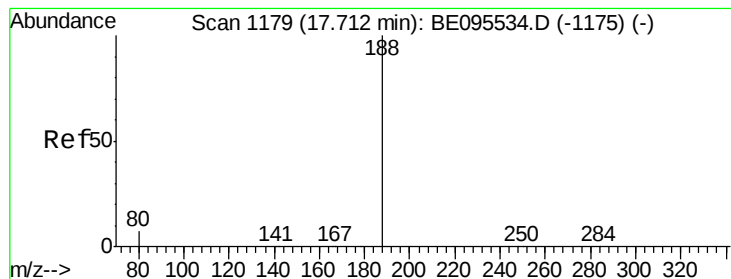
Ion Ratio Lower Upper

166 100

165 100.5 77.8 116.6

167 13.7 42.4 63.6#





#19

Phenanthrene-d10

Concen: 0.40 ng

RT: 17.700 min Scan# 1179

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

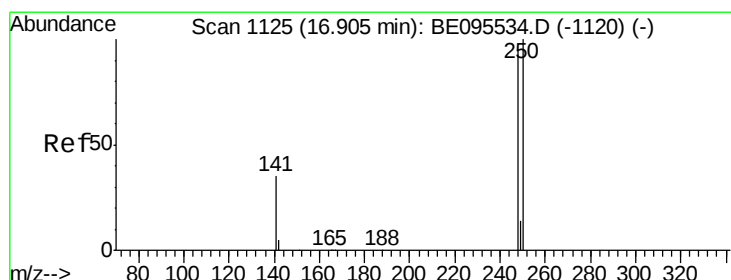
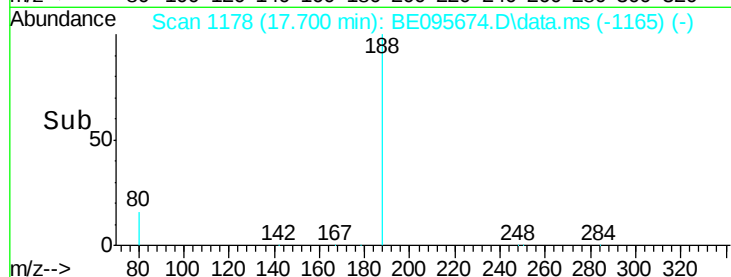
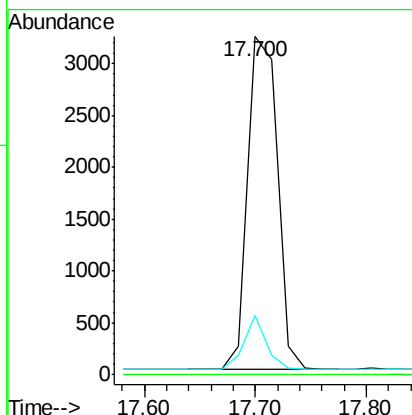
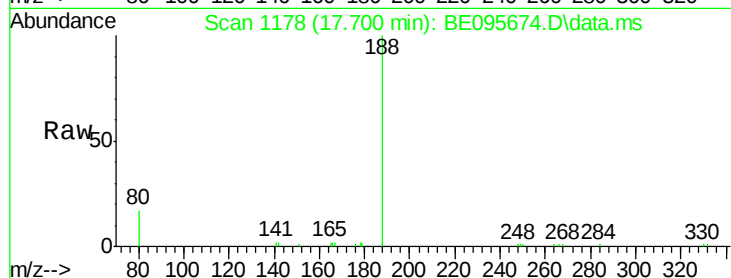
Tot Ion:188 Resp: 6020

Ion Ratio Lower Upper

188 100

94 0.0 3.9 5.9#

80 17.3 3.6 5.4#



#20

4-Bromophenyl-phenylether

Concen: 0.43 ng

RT: 16.892 min Scan# 1124

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

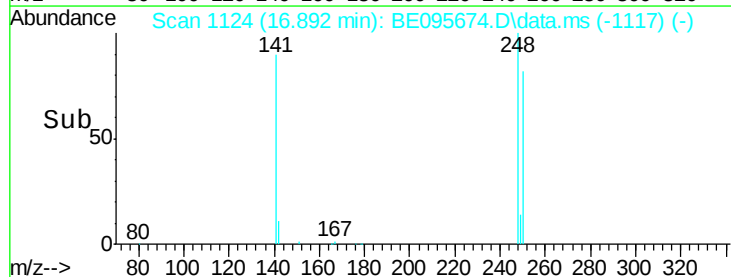
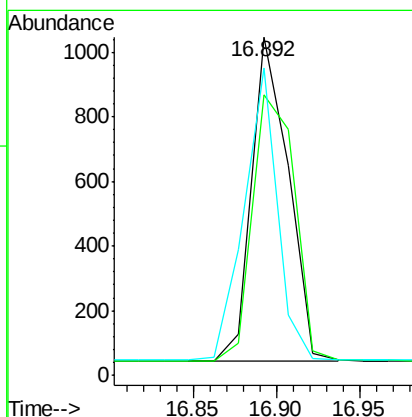
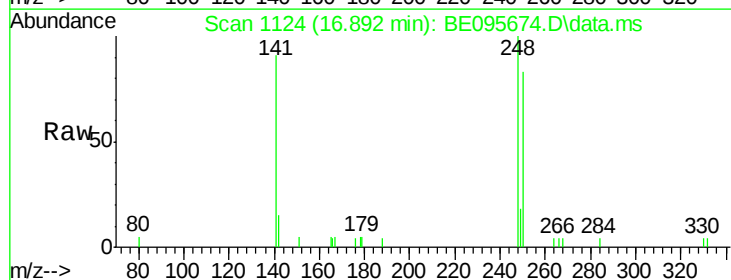
Tgt Ion:248 Resp: 1543

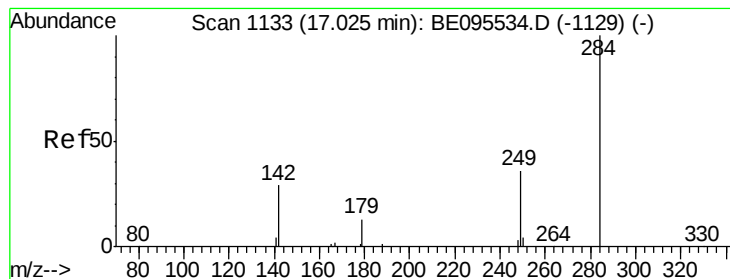
Ion Ratio Lower Upper

248 100

250 83.0 62.7 94.1

141 91.1 48.2 72.2#





#21

Hexachlorobenzene

Concen: 0.42 ng

RT: 17.027 min Scan# 1133

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

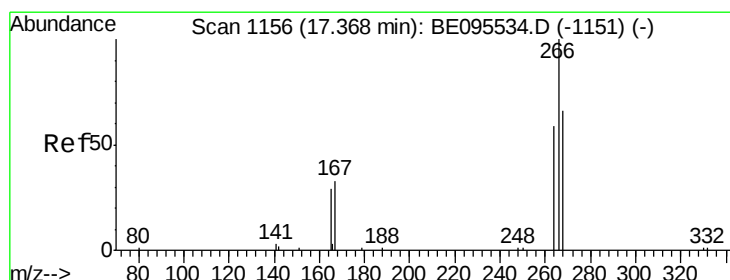
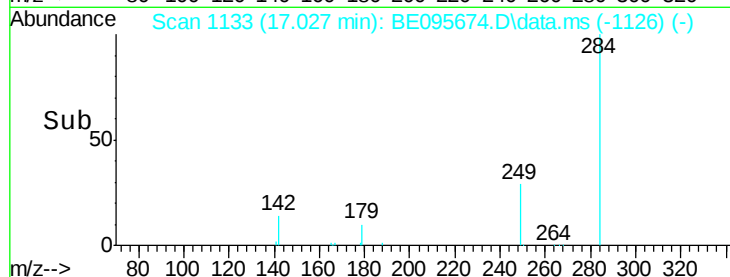
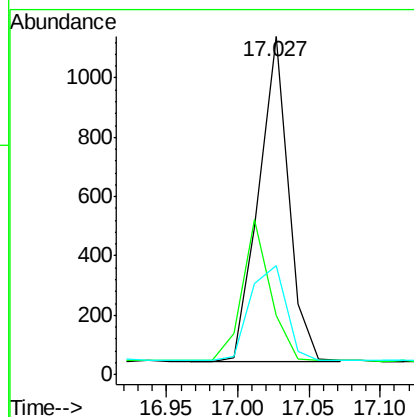
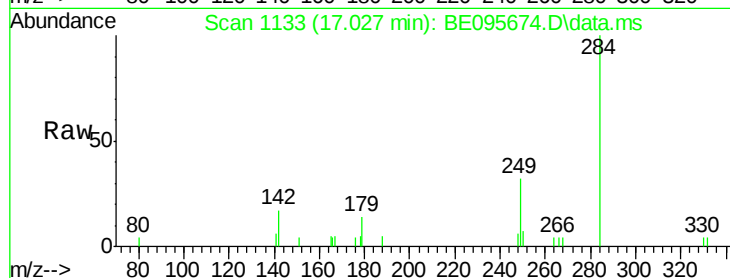
Tot Ion:284 Resp: 1583

Ion Ratio Lower Upper

284 100

142 41.6 22.1 33.1#

249 36.0 34.8 52.2



#22

Pentachlorophenol

Concen: 0.29 ng

RT: 17.371 min Scan# 1156

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

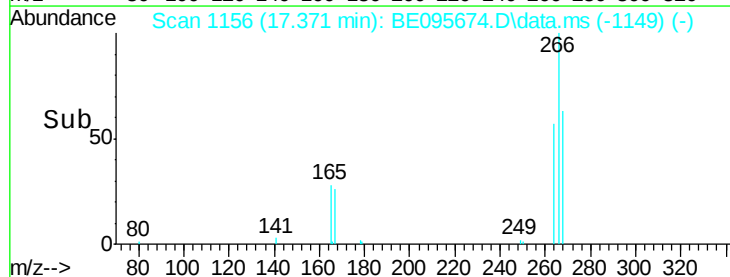
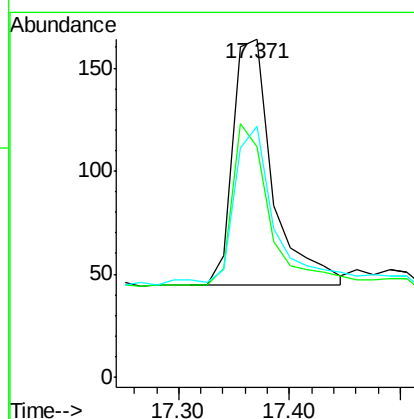
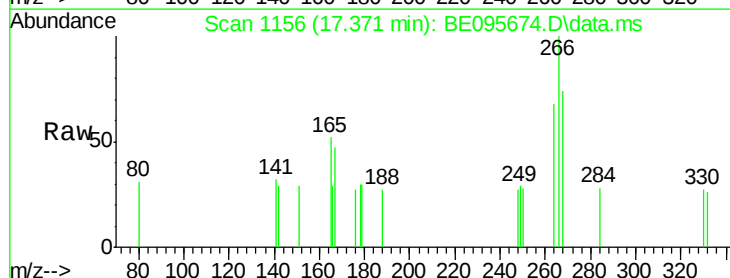
Tgt Ion:266 Resp: 296

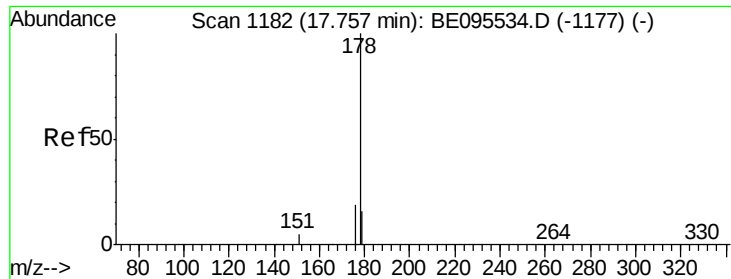
Ion Ratio Lower Upper

266 100

264 68.3 72.5 108.7#

268 74.4 73.8 110.6





#23

Phenanthrene

Concen: 0.42 ng

RT: 17.745 min Scan# 1181

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

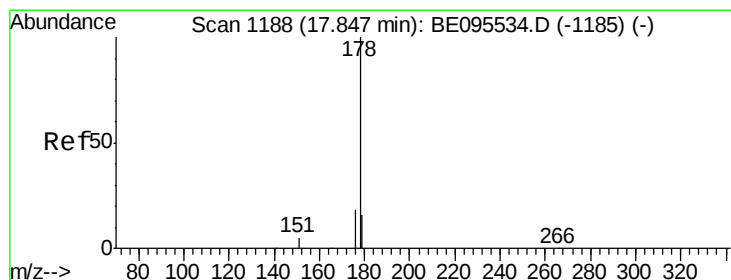
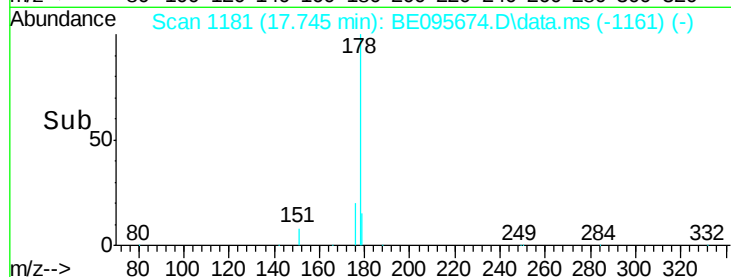
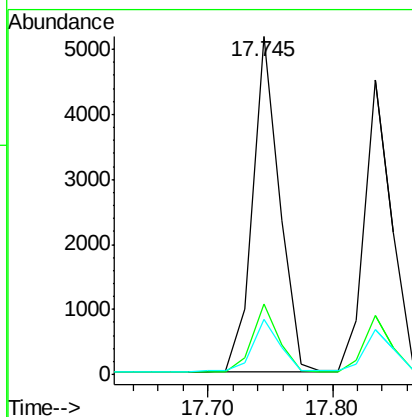
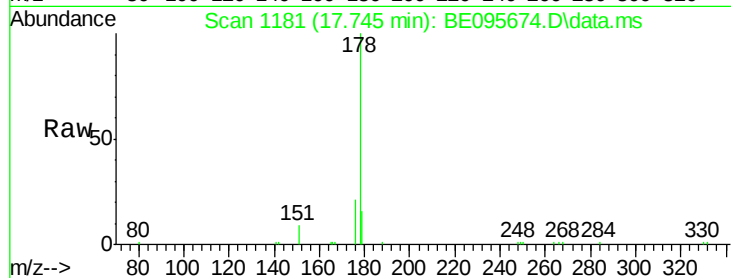
Tot Ion:178 Resp: 7773

Ion Ratio Lower Upper

178 100

176 20.0 15.1 22.7

179 15.3 11.8 17.6



#24

Anthracene

Concen: 0.39 ng

RT: 17.834 min Scan# 1187

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

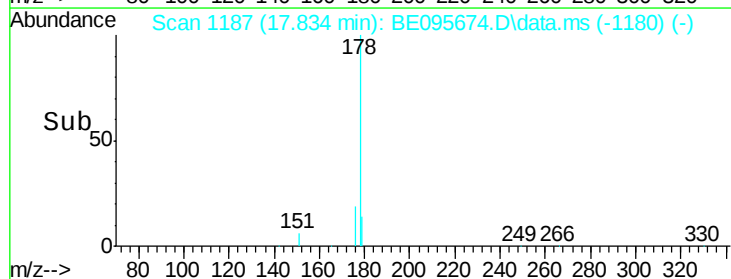
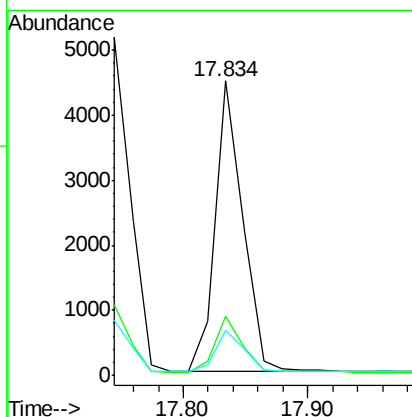
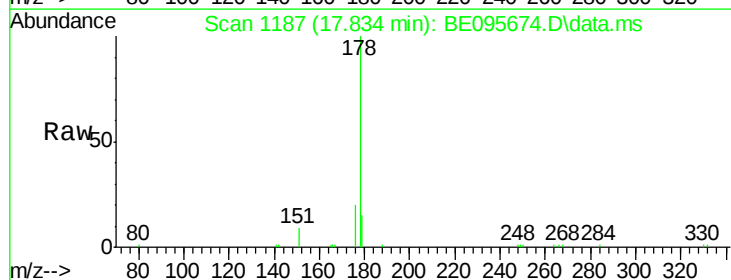
Tgt Ion:178 Resp: 6782

Ion Ratio Lower Upper

178 100

176 19.1 12.8 19.2

179 14.8 13.0 19.6

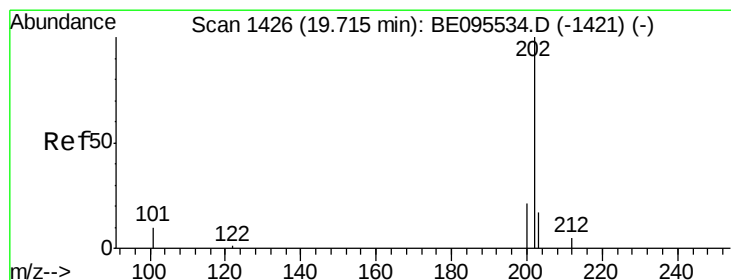
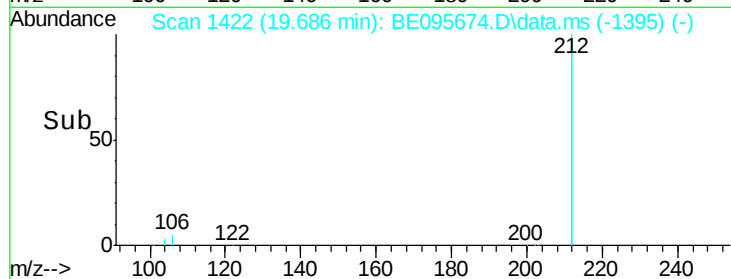
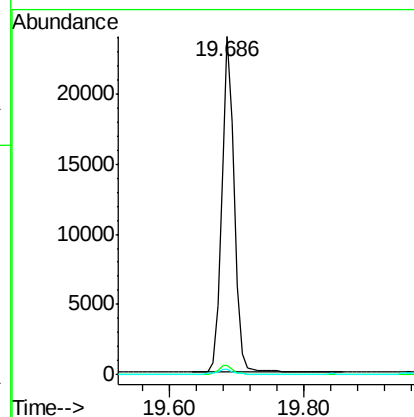
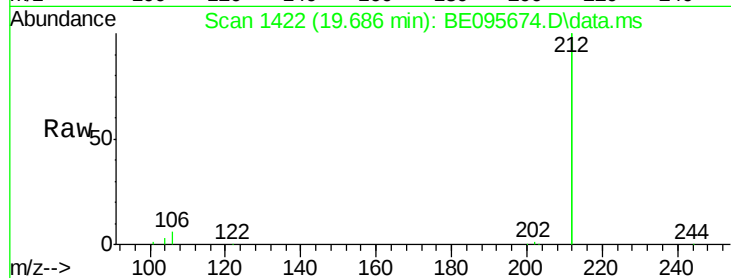




#25
Fluoranthene-d10
Concen: 0.40 ng
RT: 19.686 min Scan# 1422
Delta R.T. 0.000 min
Lab File: BE095674.D
Acq: 23 Feb 2018 9:41

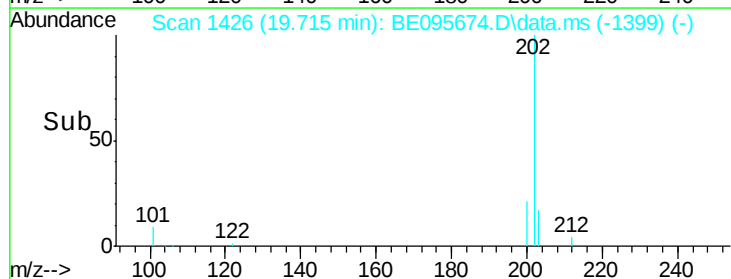
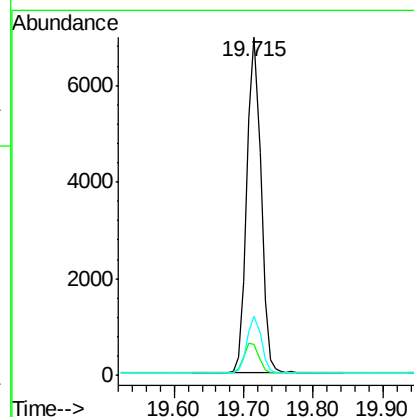
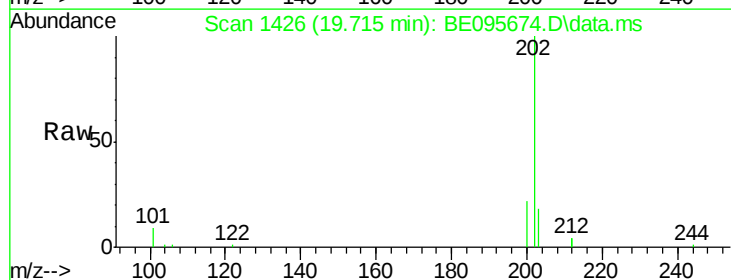
Instrument :
BNA_E
ClientSampleId :

Tot Ion:212 Resp: 31558
Ion Ratio Lower Upper
212 100
106 2.8 2.8 4.2
104 1.6 1.6 2.4



#26
Fluoranthene
Concen: 0.40 ng
RT: 19.715 min Scan# 1426
Delta R.T. 0.000 min
Lab File: BE095674.D
Acq: 23 Feb 2018 9:41

Tgt Ion:202 Resp: 9372
Ion Ratio Lower Upper
202 100
101 9.7 9.8 14.8#
203 17.0 13.7 20.5





#27

Chrysene-d12

Concen: 0.40 ng

RT: 21.792 min Scan# 15

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

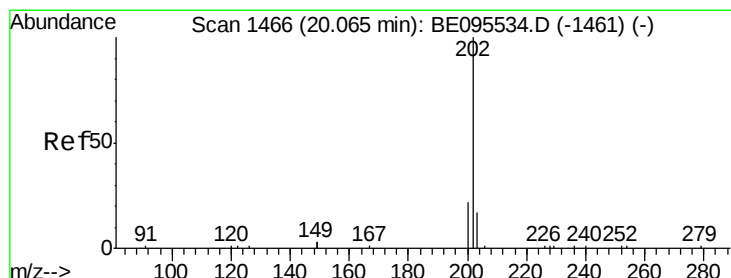
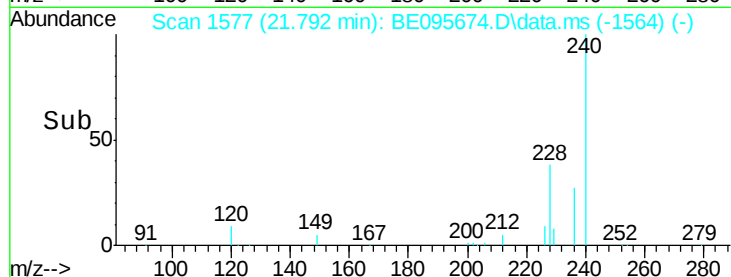
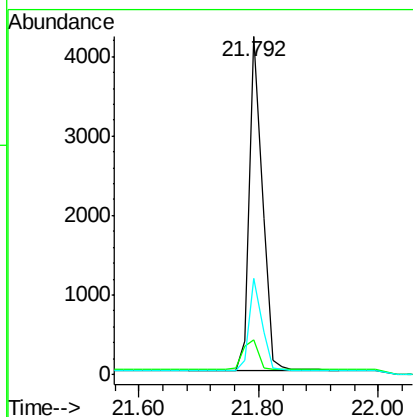
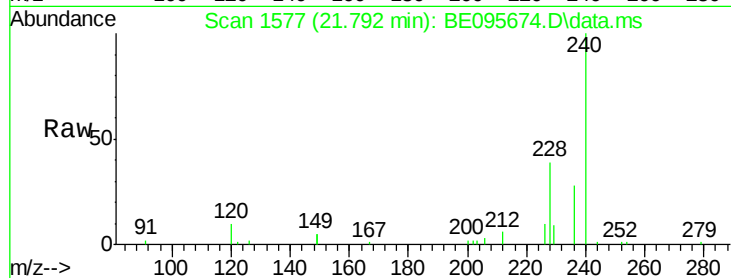
Tot Ion:240 Resp: 6330

Ion Ratio Lower Upper

240 100 5.5 8.3#

120 10.1 20.7 31.1

236 28.2 20.7 31.1



#28

Pyrene

Concen: 0.39 ng

RT: 20.065 min Scan# 1466

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

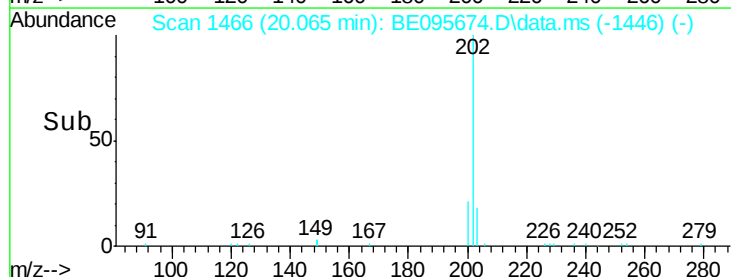
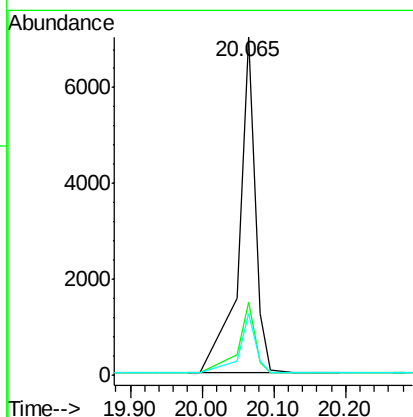
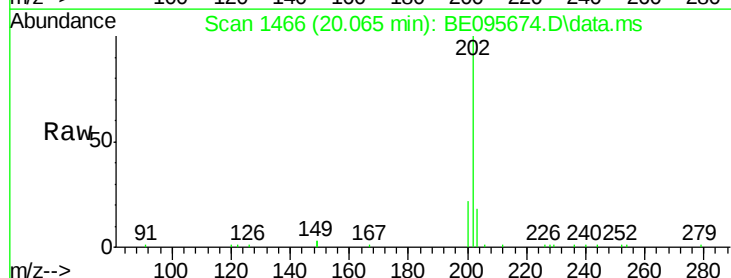
Tgt Ion:202 Resp: 10345

Ion Ratio Lower Upper

202 100 16.6 25.0

200 22.3 13.8 20.8

203 14.5 13.8 20.8





#29

Terphenyl-d14

Concen: 0.38 ng

RT: 20.252 min Scan# 1478

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

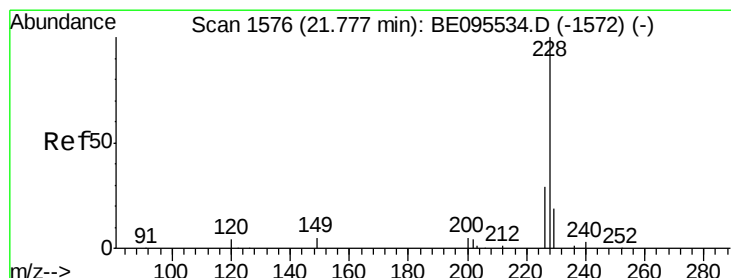
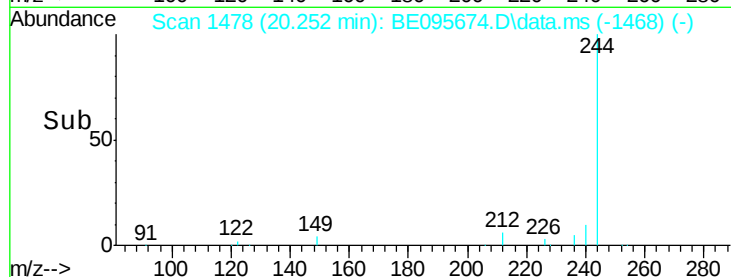
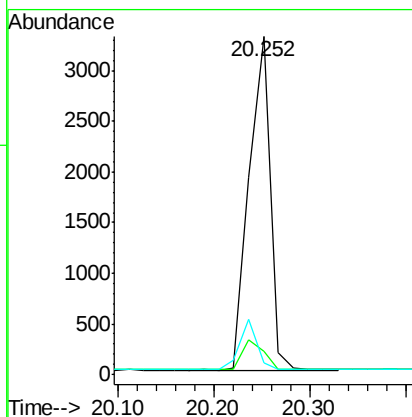
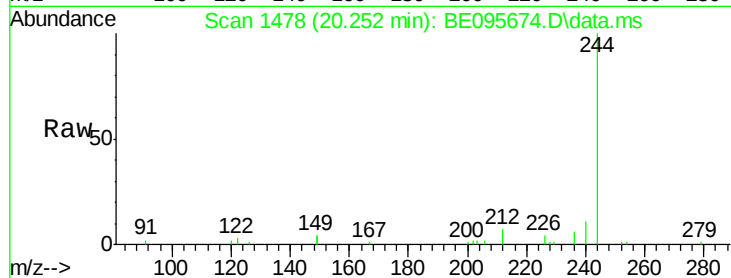
Tot Ion:244 Resp: 5089

Ion Ratio Lower Upper

244 100

212 6.9 25.4 38.0#

122 3.3 8.1 12.1#



#30

Benzo(a)anthracene

Concen: 0.39 ng

RT: 21.777 min Scan# 1576

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

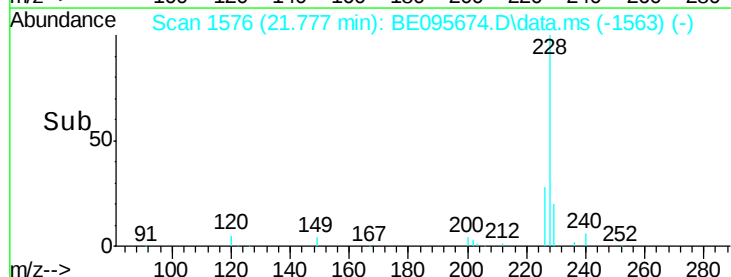
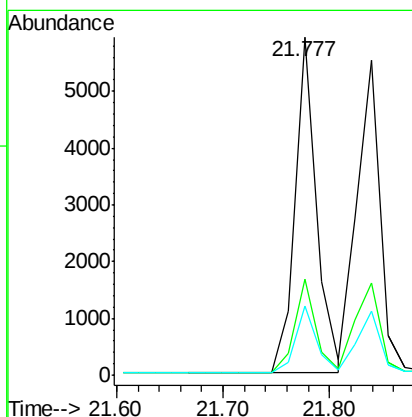
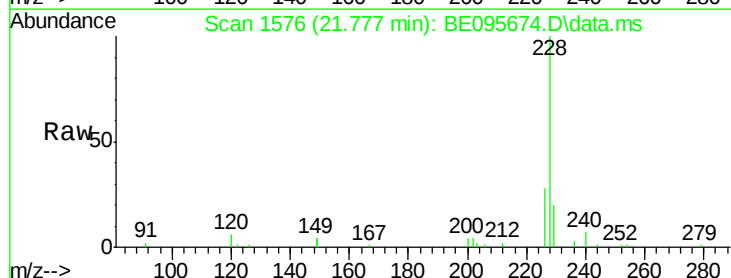
Tgt Ion:228 Resp: 8220

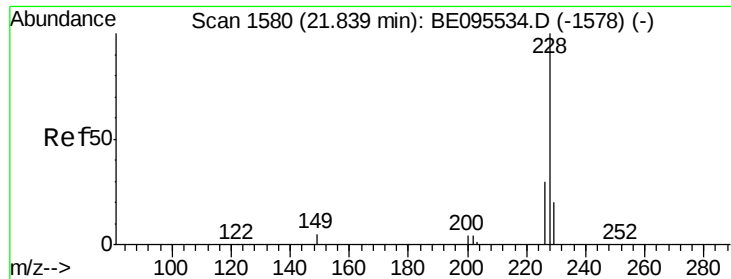
Ion Ratio Lower Upper

228 100

226 28.4 24.0 36.0

229 20.4 16.0 24.0





#31

Chrysene

Concen: 0.40 ng

RT: 21.839 min Scan# 15

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

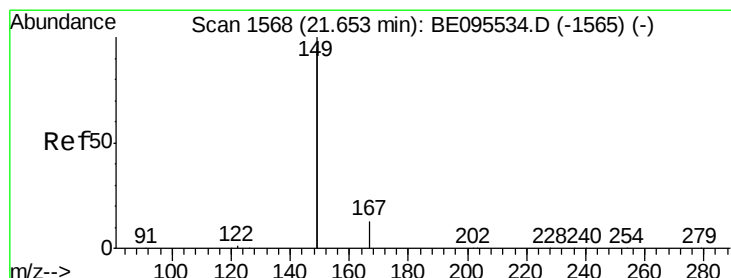
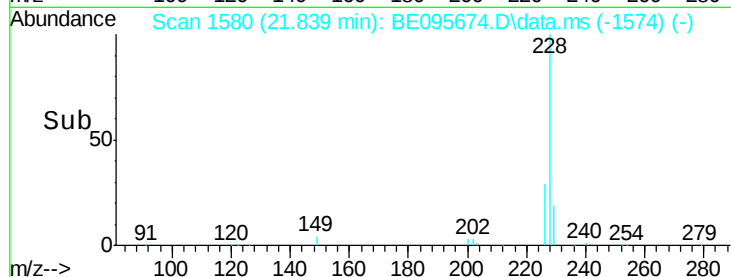
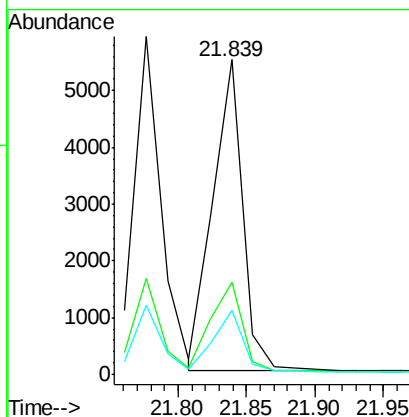
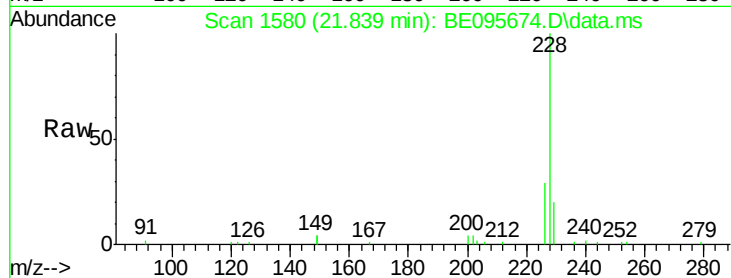
Tot Ion:228 Resp: 8284

Ion Ratio Lower Upper

228 100

226 29.5 24.0 36.0

229 20.2 16.0 24.0



#32

Bis(2-ethylhexyl)phthalate

Concen: 0.27 ng

RT: 21.652 min Scan# 1568

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

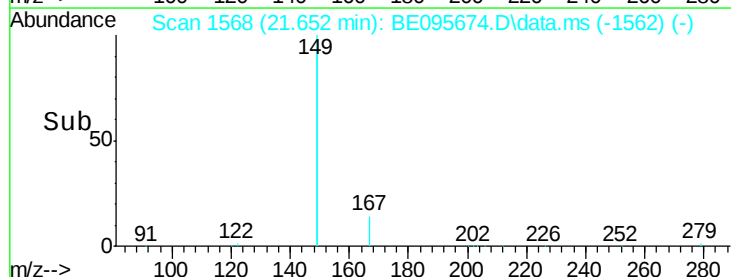
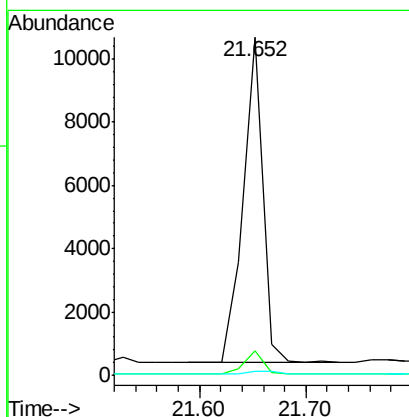
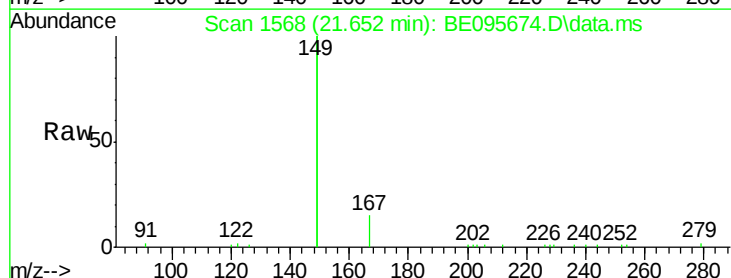
Tgt Ion:149 Resp: 13290

Ion Ratio Lower Upper

149 100

167 6.7 5.4 8.0

279 0.9 0.7 1.1

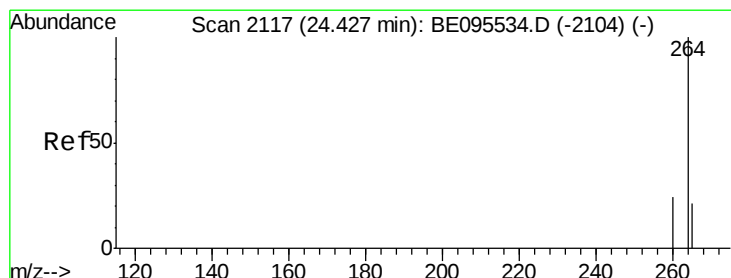
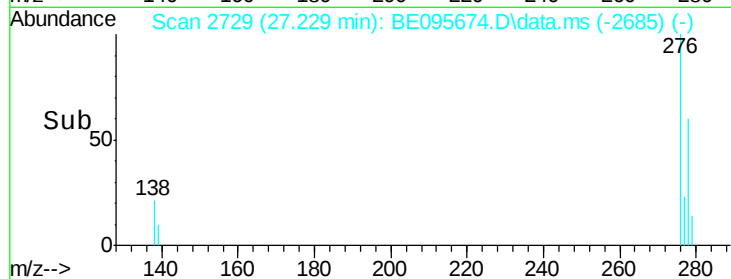
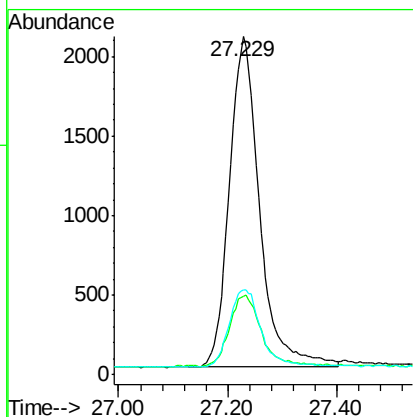
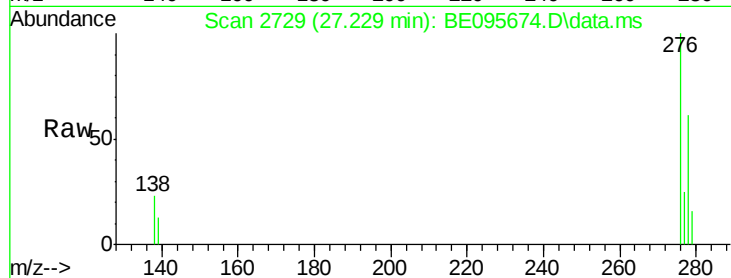




#33
 Indeno(1,2,3-cd)pyrene
 Concen: 0.40 ng
 RT: 27.229 min Scan# 2731
 Delta R.T. 0.000 min
 Lab File: BE095674.D
 Acq: 23 Feb 2018 9:41

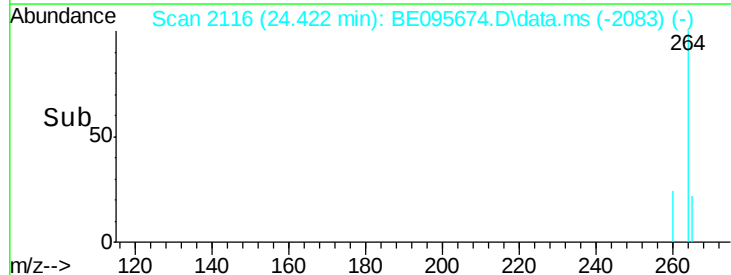
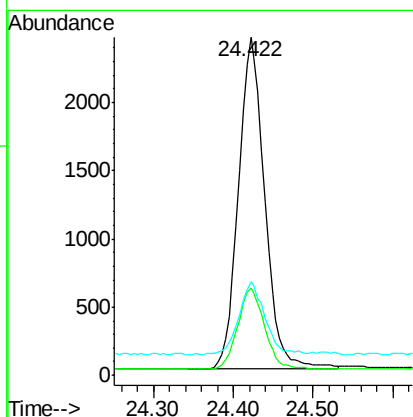
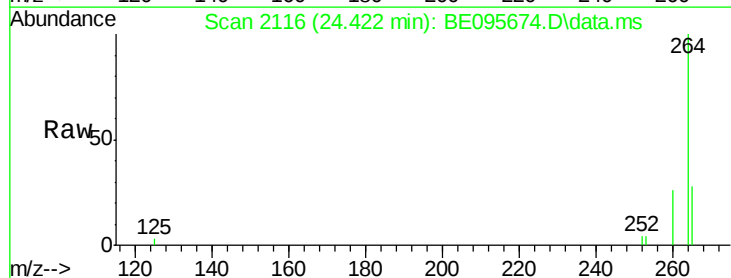
Instrument :
 BNA_E
 ClientSampleId :

Tot Ion:276 Resp: 7972
 Ion Ratio Lower Upper
 276 100
 138 22.2 22.5 33.7#
 277 24.5 19.9 29.9



#34
 Perylene-d12
 Concen: 0.40 ng
 RT: 24.422 min Scan# 2116
 Delta R.T. 0.000 min
 Lab File: BE095674.D
 Acq: 23 Feb 2018 9:41

Tgt Ion:264 Resp: 5587
 Ion Ratio Lower Upper
 264 100
 260 25.7 20.5 30.7
 265 27.6 22.8 34.2





#35

Benzo(b)fluoranthene

Concen: 0.43 ng

RT: 23.606 min Scan# 19

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

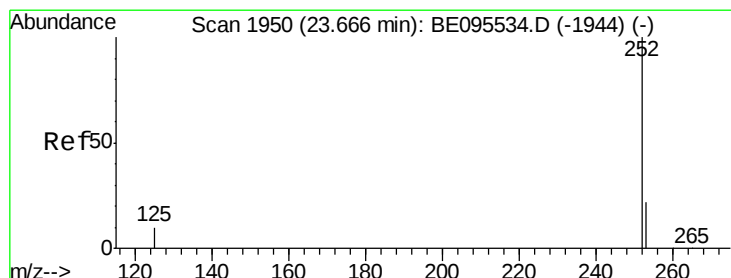
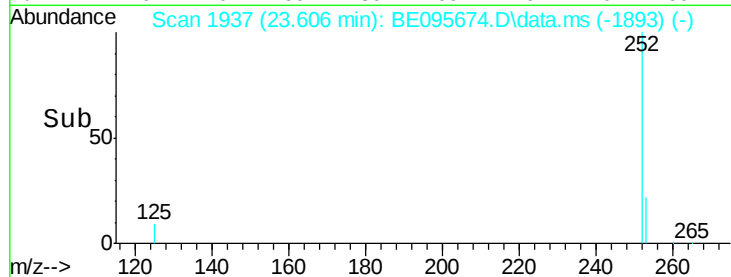
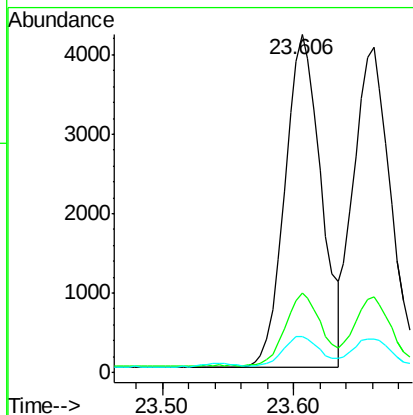
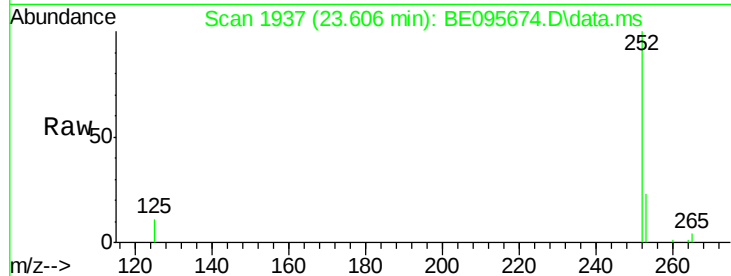
Tot Ion:252 Resp: 8132

Ion Ratio Lower Upper

252 100

253 23.3 20.0 30.0

125 10.7 16.0 24.0#



#36

Benzo(k)fluoranthene

Concen: 0.41 ng

RT: 23.661 min Scan# 1949

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

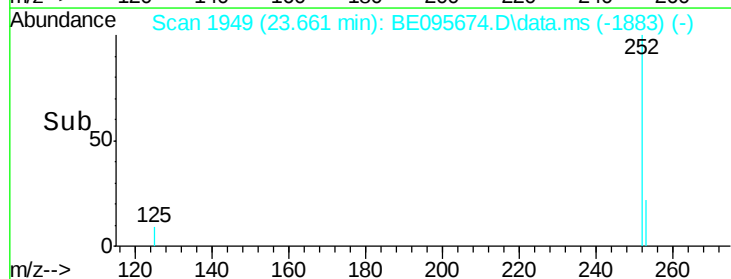
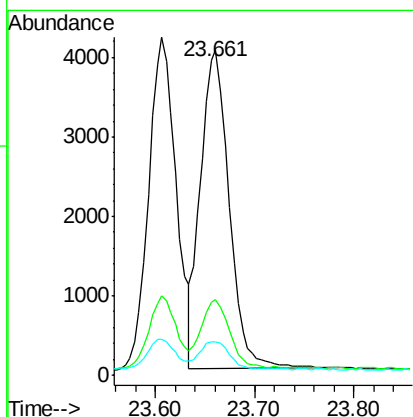
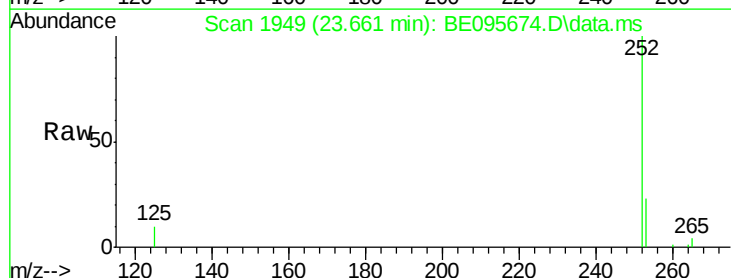
Tgt Ion:252 Resp: 7998

Ion Ratio Lower Upper

252 100

253 23.4 16.0 24.0

125 10.4 8.0 12.0





#37

Benzo(a)pyrene

Concen: 0.41 ng

RT: 24.303 min Scan# 2091

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

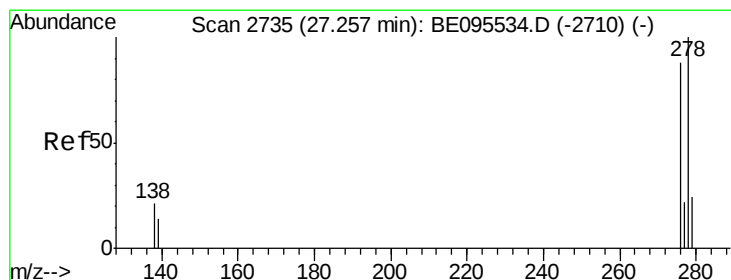
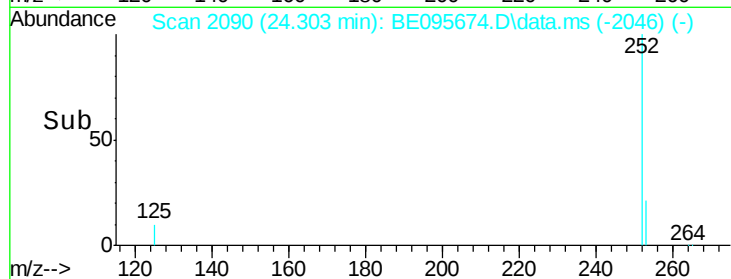
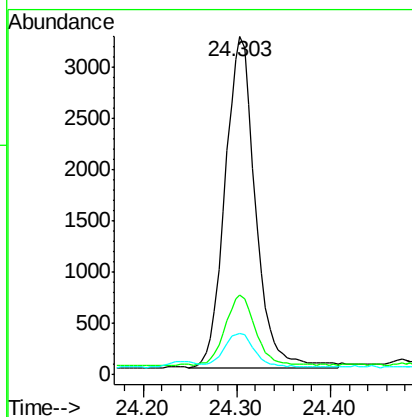
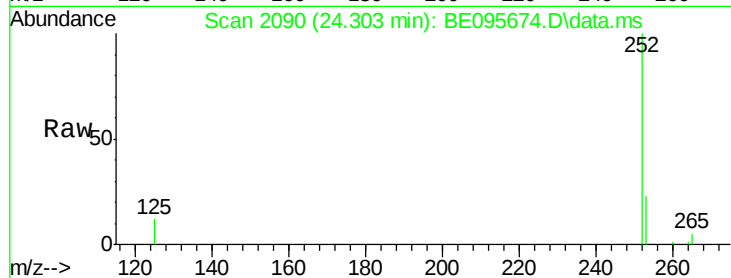
Tot Ion:252 Resp: 7279

Ion Ratio Lower Upper

252 100

253 23.5 16.0 24.0

125 12.2 12.0 18.0



#38

Dibenzo(a,h)anthracene

Concen: 0.41 ng

RT: 27.247 min Scan# 2733

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

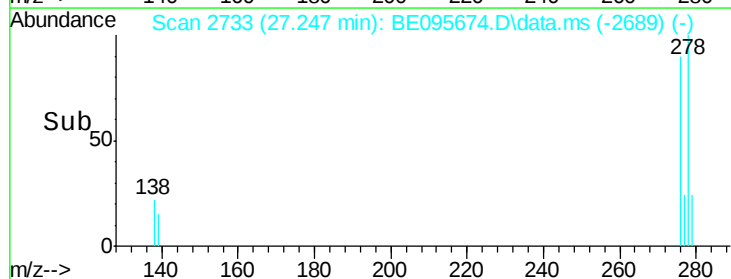
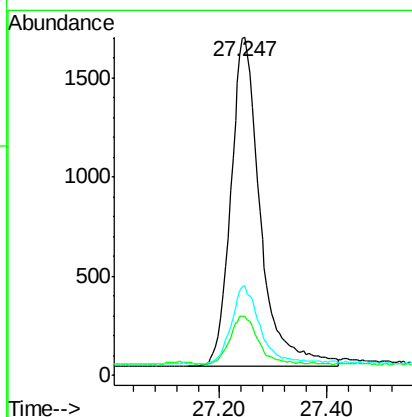
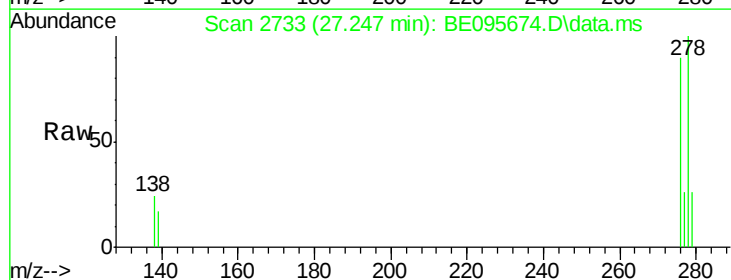
Tgt Ion:278 Resp: 6354

Ion Ratio Lower Upper

278 100

139 17.4 16.0 24.0

279 26.4 20.0 30.0





#39

Benzo(a,h,i)perylene

Concen: 0.42 ng

RT: 28.099 min Scan# 29

Delta R.T. 0.000 min

Lab File: BE095674.D

Acq: 23 Feb 2018 9:41

Instrument :

BNA_E

ClientSampleId :

Tot Ion: 276 Resp: 6936

Ion Ratio Lower Upper

276 100

277 26.4 16.0 24.0#

138 22.5 20.0 30.0

