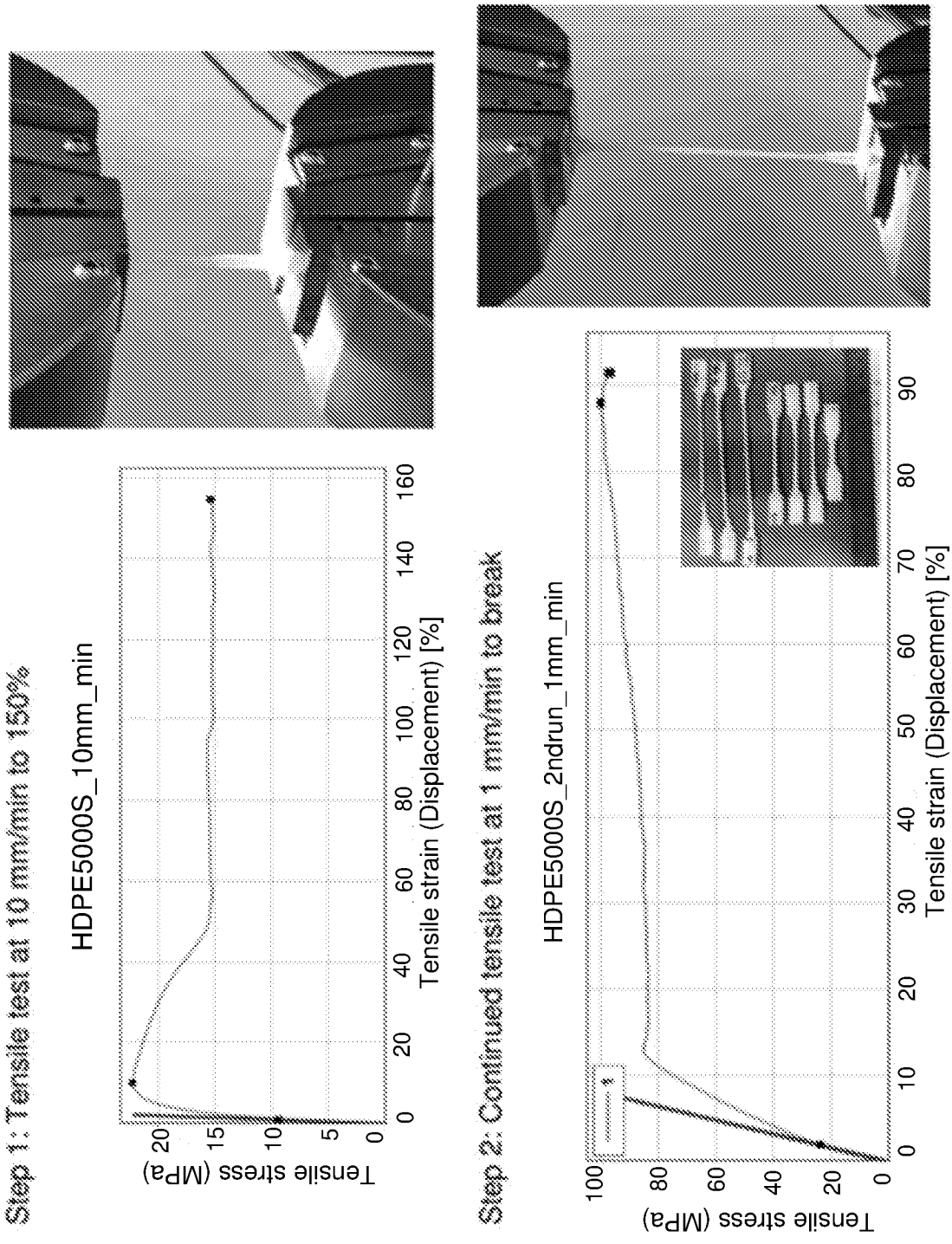
Step 1: Tensile test at 10 mm/min to 150%
HDPE5000S_10mm_min
Tensile stress (MPa)
Tensile strain (Displacement) [%]
Step 2: Continued tensile test at 1 mm/min to break
HDPE5000S_2ndrun_1mm_min
Tensile stress (MPa)
Tensile strain (Displacement) [%]

FIG. 1



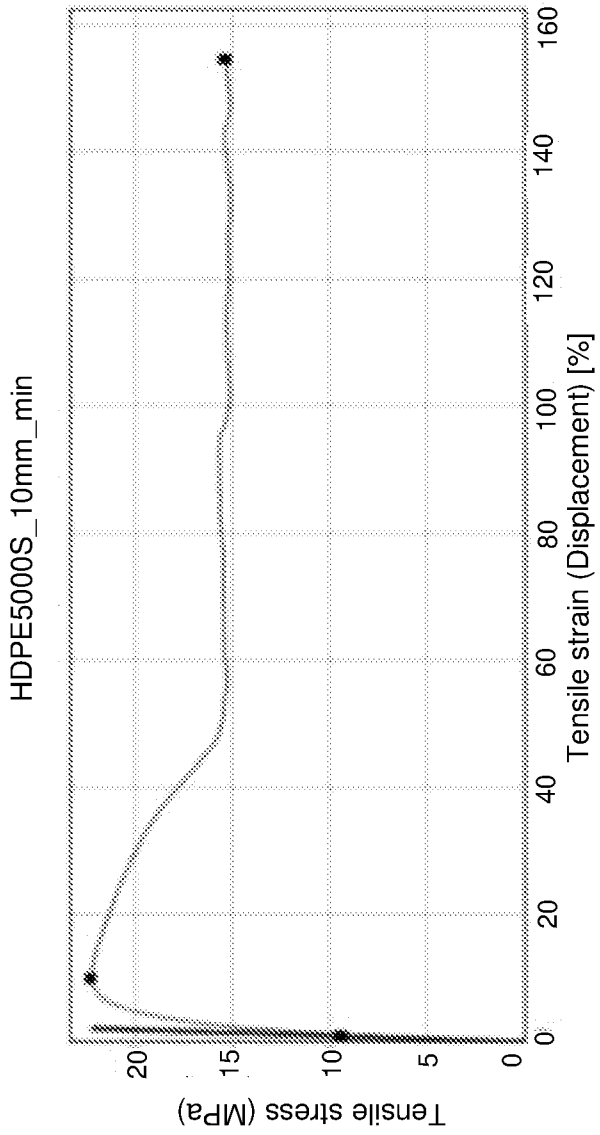
HDPE5000S_10mm_min
Tensile stress (MPa)
0
5
10
15
20
Tensile strain (Displacement) [%]
0
20
40
60
80
100
120
140
160

FIG. 2

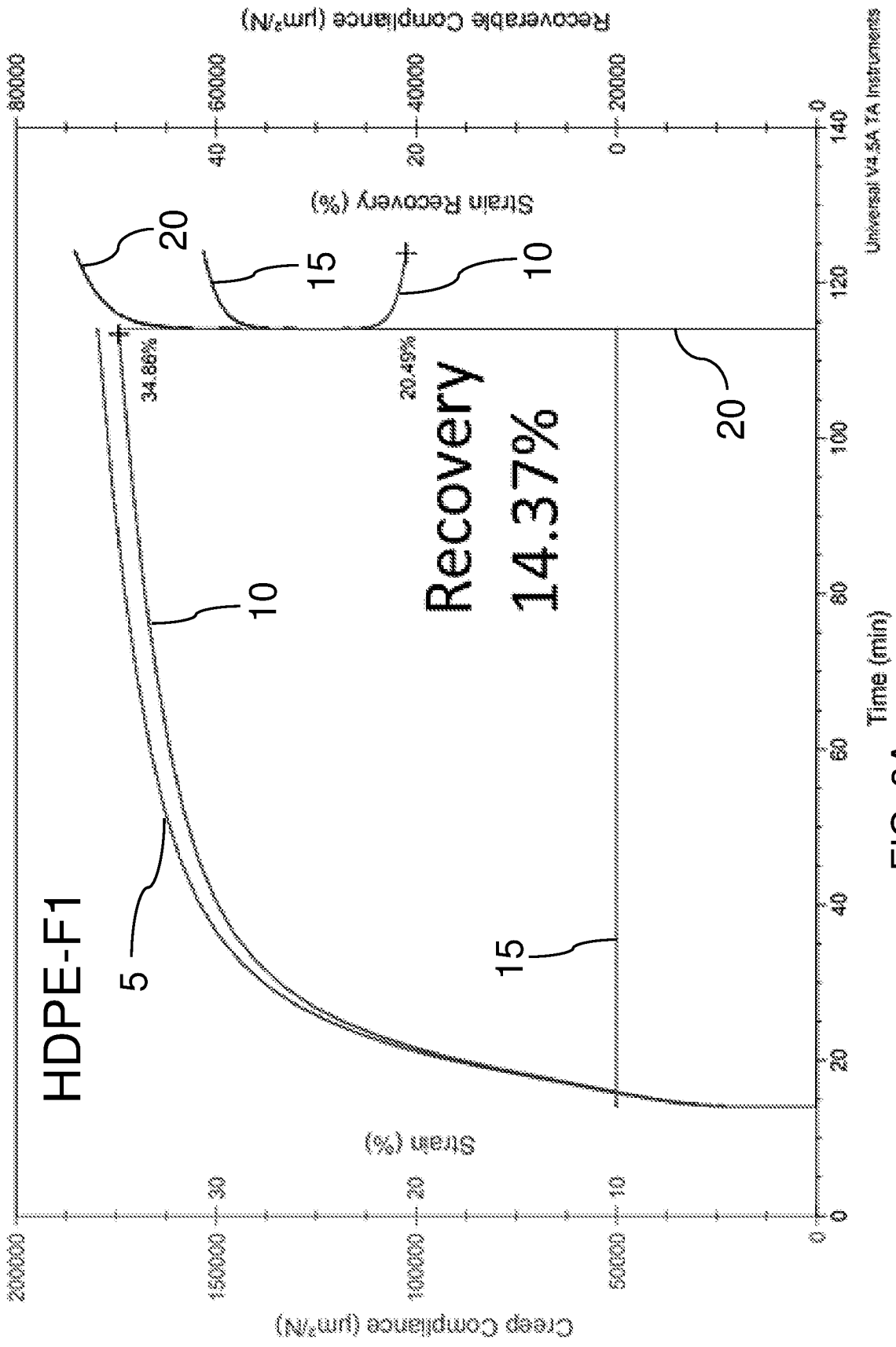
HDPE-F1
Recovery
14.37%
34.66%
20.49%
5
10
15
20
Creep Compliance (μm²/N)
Strain (%)
Recoverable Compliance (μm²/N)
Strain Recovery (%)
Time (min)
Universal V4.5A TA Instruments

FIG. 3A

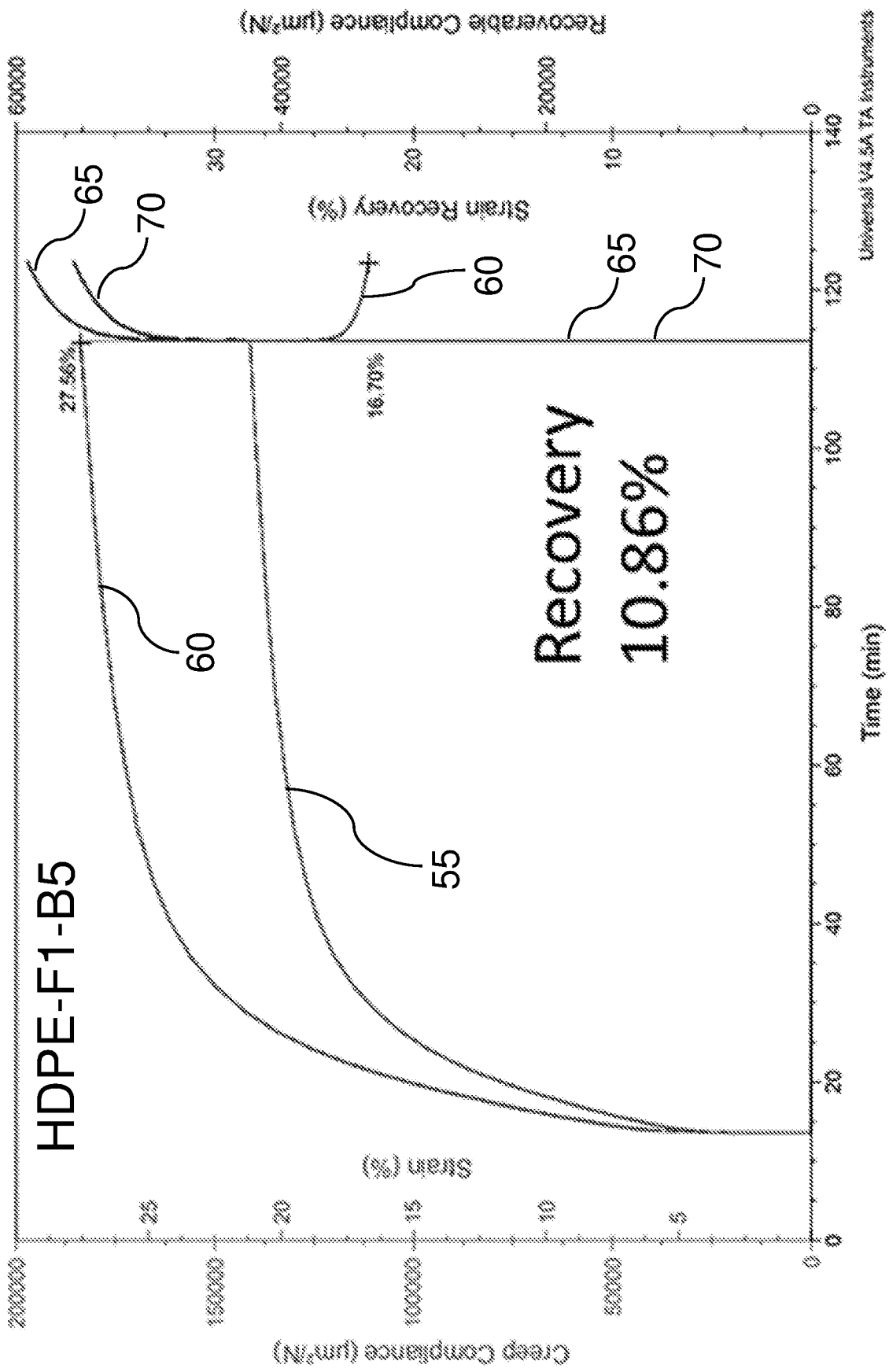
HDPE-F1-B5
Recovery
10.86%
27.56%
16.70%
60
55
65
70
60
65
70
Creep Compliance (μm²/N)
Strain (%)
Strain Recovery (%)
Recoverable Compliance (μm²/N)
Time (min)
Universal V4.5A TA Instruments

FIG. 3B