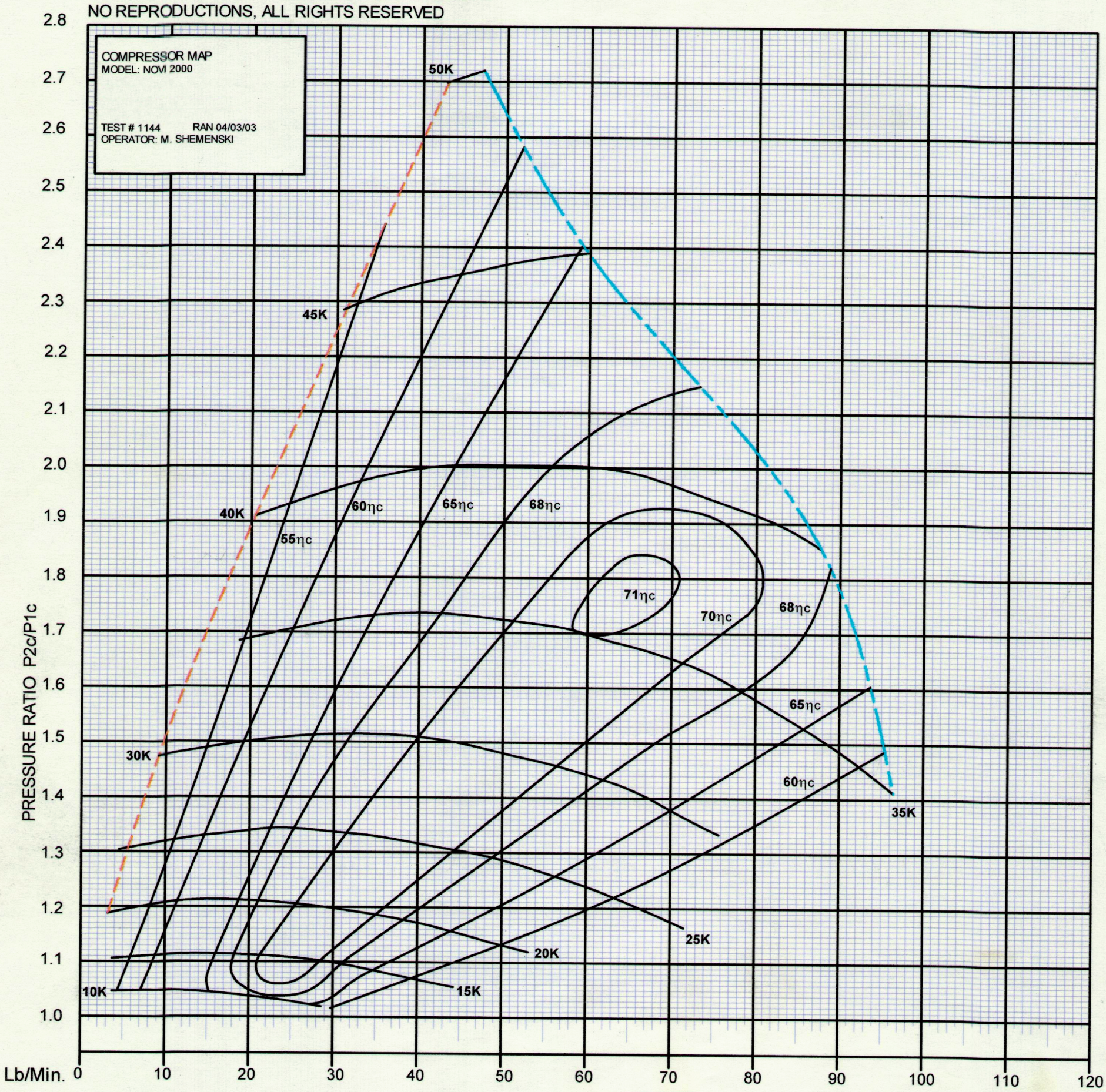
PAXTON AUTOMOTIVE CORP.

COMPRESSOR PERFORMANCE MAP



CFM

0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600

$$\text{CORRECTED AIR FLOW (CFM)} = \frac{\text{OBSERVED AIR FLOW} \times (29.23\ \text{IN HgA})}{\text{BP}} \times \frac{(T1c)}{537^\circ\ \text{R}}$$

0 5 10 15 20 25 30 35 40 45

LITER/Min.
X1000

$$\text{CORRECTED AIR FLOW (LITER/MIN. X 1000)} = \frac{\text{OBSERVED AIR FLOW} \times (99\text{kPa})}{\text{BP}} \times \frac{(Ti)}{298.15\ ^\circ\text{K}}$$

ηc= COMPRESSOR ISENTROPIC EFFICIENCY (%)
Pi= COMPRESSOR INLET AIR ABSOLUTE PRESSURE (kPa)
Po= COMPRESSOR DISCHARGE AIR ABSOLUTE PRESSURE (kPa)
Ti= COMPRESSOR INLET AIR ABSOLUTE TEMPERATURE (DEGREES KELVIN)
To= COMPRESSOR DISCHARGE AIR ABSOLUTE TEMPERATURE (DEGREES KELVIN)

$$\eta_c = \frac{(Ti)*(PR^{0.286})-(Ti)}{(To-Ti)} * 100\%$$

PERFORMANCE OBTAINED AND CORRECTED IN ACCORDANCE WITH SAE J1723
TEMPERATURE DIFFERENTIAL To - Ti (°K)