Match:

(there are many possible match points, this is just one)

s = 1ft

W(u) ~ 0.4

$$T = \frac{Q}{4\pi s} W(u) \qquad S = \frac{4Tu}{(r^2/t)}$$

t = 100s

1/u ~ 0.6

Calculations:

T ~ 1.2×10^{-3} ft^2/sec   K ~ 1.4×10^{-5} ft/sec

rounding T ~ 1×10^{-3} ft^2/sec   K ~ 1×10^{-5} ft/sec

S ~ 8.3×10^{-7} Ss ~ 9.4×10^{-9} ft^{-1}

rounding S ~ 1×10^{-6} Ss ~ 1×10^{-8} ft^{-1}