$$Re \sim \frac{1}{\rho}\frac{dP}{dx} \sim \rho^{-1}\varepsilon_3\left(u - \kappa\frac{\partial u}{\partial z}\right)$$

$$u \sim \frac{u^*}{\kappa}\ln\frac{L}{z_0} \qquad u^* = \sqrt{\frac{1}{\rho}S\frac{dP}{dx}}$$

$$\Rightarrow \rho^{-1}\varepsilon_3\sqrt{\frac{1}{\rho}\frac{dP}{dx}S}\ln\frac{L}{z_0} \sim \frac{1}{\rho}\frac{dP}{dx}$$

$$\Rightarrow \rho^{-1}\varepsilon_3\ln\frac{L}{z_0}\sqrt{S} \sim \sqrt{\frac{1}{\rho}\frac{dP}{dx}}$$

$$\Rightarrow \varepsilon_3 \sim \frac{\rho\sqrt{\frac{1}{\rho}\frac{dP}{dx}}}{\sqrt{k}\ln\frac{L}{z_0}}$$

P.O. BOX 1213, SE-181 24 LIDINGÖ, SWEDEN
TELEPHONE: +46 8 731 42 00, TELEFAX: +46 8 731 42 10
INTERNET: WWW.SKOGSHEM-WIJK.COM