calculation of Darcy friction factor from experimental values: general formula for Darcy friction factor:

D=1776h, 0.0254m = 0.0254m (from Table 2)

ΔP=11 psi, 6894.76 Pa = 75842.36 Pa (from experimental

V = 0.25 m/s (see sample calculation 3 for full calculation)

L = 39.625 in. 0.0254 m = 1.006475 m (from Figure 3) P = 1000 kg/m3

 $f = 0.0254 \text{ m} \cdot 75842.36\text{ Pa} - [15.433]$  $(0.25 \text{ m})^2.2.1000 \text{ kg}.1.01 \text{ m}$