Sample Calculation

Using the Bernoulli Equation in hypothetical situations

Bernoulli Equation:
$$\frac{P_1}{p} + \frac{V_2^2}{2} + g_{\pm 1} = \frac{P_2}{p} + \frac{V_2^2}{2} + g_{\pm 2}$$

$$\frac{P}{\rho} + \frac{V^2}{2} + gz = constant$$

assumption: Constant = 0 as P_=0,

$$\frac{-P_2}{\rho} + \frac{V_1^2}{2} + 9^{\frac{3}{2}} = 0$$

Calculating Bernoulli Equation in hypothetical 1:

$$p = 1000 \, \text{kg} \, \text{m}^3$$

$$\frac{-P_2}{1000 \text{ kg}} + \frac{(0.674 \text{ m/s})^2}{2} + \frac{9.8 \text{ m/s}^2 \cdot 1.524 \text{ m}}{2} = 0$$

can a l' pipe produce a 2.20 psi pressure drop? yes.

rom experimental