A U tube is filled with a liquid and water. Here the water is denser than the liquid. See the sketch. The horizontal line $\overline{AB}$ is at the level of the water-liquid interface.

Compare the pressure $P_2$, which the water column exerts on the liquid at the interface, and the pressure $P_1$, which the liquid column at the left tube above the line $\overline{AB}$ exerts on the liquid below it.

A) $P_1 < P_2$.
B) $P_1 = P_2$.
C) $P_1 > P_2$. 
Denote $P_0$ to be the atmospheric pressure.
At point $C$, which is at the bottom of the U-tube and it is a static point, the pressure from the left must be the same as the pressure from the right. This implies that

$$P_0 + \rho_{\text{liquid}} g (h_1 + L + h_2) = P_0 + \rho_{\text{water}} g L + \rho_{\text{liquid}} g h_2. \quad (1)$$

Since

$$P_1 = P_0 + \rho_{\text{water}} g L$$

and

$$P_2 = P_0 + \rho_{\text{liquid}} g (h_1 + L),$$

we see Eq. (1) implies

$$P_1 = P_2.$$

Answer B

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