Revisions are shown in red.

Solution 15, p. 60:
\[ \Delta P = (SG_1 \times H_H + SG_1 \times H_W) - (SG_f \times H_{H+W}) \]

This application is a wet-leg standard DP transmitter with a fill pot. It is not a capillary DP level transmitter, and therefore the high side \( H \) is exposed to the process liquid \( SG_1 \), and the low side \( L \) is filled with \( SG_f \) from the fill seal pot.

Span (tank is full):
\[ \text{Span} = (1.0 \times 1,200 \text{ mm} + 1.0 \times 300 \text{ mm}) - (0.95 \times (1,200 \text{ mm} + 300 \text{ mm})) \]
\[ = 1,500 - 1,425 \text{ mm H}_2\text{O} \]
\[ = +75 \text{ mm H}_2\text{O} \]

Zero (tank is empty):
\[ \text{Zero} = (0 \times 1,200 \text{ mm} + 1.0 \times 300 \text{ mm}) - (0.95 \times (1,200 \text{ mm} + 300 \text{ mm})) \]
\[ = 300 - 1,425 \text{ mm H}_2\text{O} \]
\[ = -1,125 \text{ mm H}_2\text{O} \]

Therefore, the range (zero to span) is \(-1,125\) to \(+75\).