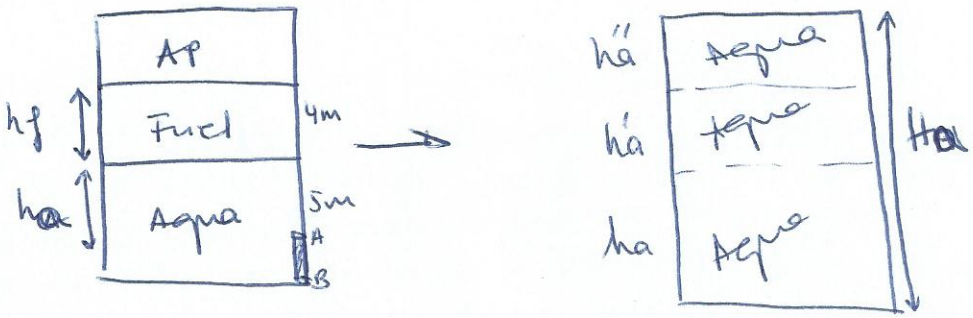


$P_{fuel} = P_{agua} \rightarrow \rho_f \cdot g \cdot h_f = \rho_a \cdot g \cdot h'_a \rightarrow 850 \frac{kg}{m^3} \cdot 4m = 980 \frac{kg}{m^3} \cdot h'_a$

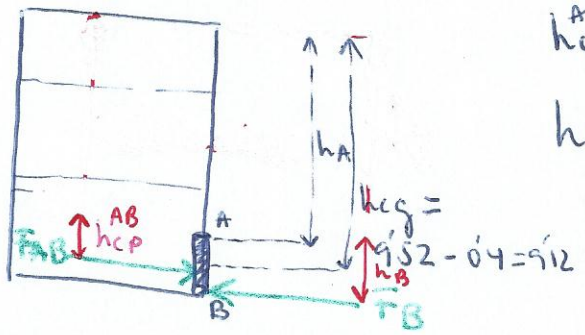
$\boxed{h'_a = 3'47 m}$

$\Delta P = \rho_a \cdot g \cdot h''_A = 980 \cdot 9'81 \cdot h''_a = 10130 \frac{N}{m^2} \rightarrow \boxed{h''_a = 1'05 m}$

1 atm _ $1'013 \cdot 10^5$ Pa

0'1 atm _ $x = 10130$ Pa

$Ha = ha + h'_a + h''_a = 5 + 3'47 + 1'05 = 9'52 m$ //



$h_A = 9'52 - 0'8 = 8'72$

$h^{AB}_{cp} = h_{cp} - h_A = 9'125 - 8'72 = 0'405 m.$

$h_{cp} = \frac{I}{S_{AB} \cdot h_{cg}} + h_{cg} = \frac{\frac{1}{12} 0'6 \cdot 0'8^3}{(0'6 \cdot 0'8) \cdot 9'12} + 9'12$

$= 9'125$

$F_{AB} \cdot h^{AB}_{cp} = F_B \cdot h_B \Rightarrow 42085'37 \cdot 0'405 = F_B \cdot 0'8$

$\boxed{F_B = 21305'71 N}$ $\boxed{21357 N}$ (según profesora)

$F_{AB} = \rho_a \cdot g \cdot h_{cg} \cdot S_{AB} = 980 \cdot 9'81 \cdot 9'12 \cdot (0'8 \cdot 0'6) = 42085'37.$