

83. We use $v = \sqrt{B/\rho}$ to find the bulk modulus B :

$$B = v^2 \rho = (5.4 \times 10^3 \text{ m/s})^2 (2.7 \times 10^3 \text{ kg/m}^3) = 7.9 \times 10^{10} \text{ Pa} .$$