16 A technical article about diesel engines expresses the energy available from diesel fuel both as $41.8\,\text{MJ}\,\text{kg}^{-1}$ and as $34.9\,\text{GJ}\,\text{m}^{-3}$.

What is the density of diesel fuel?

A $8.35 \times 10^{2}\,\text{kg}\,\text{m}^{-3}$

B $1.20 \times 10^{3}\,\text{kg}\,\text{m}^{-3}$

C $8.35 \times 10^{5}\,\text{kg}\,\text{m}^{-3}$

D $1.20 \times 10^{6}\,\text{kg}\,\text{m}^{-3}$