

Lithology	$\phi - V_p$	$\phi - V_s$	$V_p - \rho$
Chalks	$V_p = 5.059\phi^2 - 8.505\phi + 5.128$	$V_s = 2.766 - 2.933\phi$	$\rho = 1.045 + 0.373V_p$
Dolomite	$V_p = 6.606 - 9.380\phi$	$V_s = 3.581 - 4.719\phi$	$\rho = 1.843 - 0.137V_p$
Sandstones	$V_p = 4.944 - 5.201\phi$	$V_s = 2.981 - 3.484\phi$	$\rho = 1.569 + 0.195V_p$
Tight-gas sandstones	$V_p = 4.868 - 3.836\phi$	$V_s = 3.149 - 1.703\phi$	$\rho = 1.96 + 0.117V_p$
Limestone	$V_p = 5.624 - 6.65\phi$	$V_s = 3.053 - 3.866\phi$	$\rho = 1.513 + 0.202V_p$
High-porosity sandstones	$V_p = 4.303 - 2.227\phi$	$V_s = 2.486 - 1.626\phi$	$\rho = 1.450 + 0.219V_p$
Poorly consolidated sandstones	$V_p = 3.774 - 3.414\phi$	$V_s = 2.100 - 2.424\phi$	$\rho = 1.498 + 0.224V_p$