Table 18.1 Acoustic velocities for various materials - Ellis and Singer, 2007, *Well Logging for Earth Scientists* , 2nd ed., Springer
in turn adapted from Timur A (1987) Acoustic logging. In Bradley H (ed) Petroleum production handbook. SPE, Dallas TX

Nonporous solids		Vc (ft/s)		Vs (ft/s)		Vc (m/s)		Vs (m/s)		1/Vc (us/m)		1/Vs (us/m)	
Anhydrite		20000		11400		6098		3476		164		288	
Calcite		20100				6128		0		163			
Cement (cured)		12000				3659		0		273			
Dolomite		23000		12700		7012		3872		143		258	
Granite		19700		11200		6006		3415		166		293	
Gypsum		19000				5793		0		173			
Limestone		21000		11100		6402		3384		156		295	
Quartz		18900		12000		5762		3659		174		273	
Salt		15000		8000		4573		2439		219		410	
Steel		20000		9500		6098		2896		164		345	
Water-saturated porous rocks in situ													
	Porosity												
Dolomites	5-20%	20000	15000	11000	7500	6098	4573	3354	2287	164	219	298	437
Limestones	5-20%	18500	13000	9500	7000	5640	3963	2896	2134	177	252	345	469
Sandstones	5-20%	16500	11500	9500	6000	5030	3506	2896	1829	199	285	345	547
Sands (unconsolidated)	20-25%	11500	9000	4000	1700	3506	2744	1220	518	285	364	820	1929
Shales		7000	17000			2134	5183			469	193		
Liquids													
Water (pure)		4800				1463				683			
Water (100,00 mg/L of NaCl)		5200				1585				631			
Water (200,00 mg/L of NaCl)		5500				1677				596			
Drilling mud		5700	3600			1738	1098			575	911		
Petroleum		4200				1280				781			
Gases													
Air (dry or moist)		1100				335				2982			
Hydrogen		4250				1296				772			
Methane		1500				457				2187			