TABLE A2 Relationship of Common Ground-water and Oil-field Quantities*

Ground-water Quantity		Oil-field Quantity
Coefficient of permeability	$P = K$	$\frac{k}{\mu}\left(\frac{\rho g}{g_c}\right)$
Transmissivity	$T = Km$	$\frac{kh}{\mu}\left(\frac{\rho g}{g_c}\right)$
Coefficient of storage	S	$\phi c_t h\left(\frac{\rho g}{g_c}\right)$
Drawdown	s	$\frac{p_i - p}{(\rho g/g_c)}$
Head	h	$\frac{p}{(\rho g/g_c)}$
Dimensionless drawdown	$W(1/4\alpha)$	$2p_D(t_D)$

* (After Earlougher, 1977).

TABLE A3 Permeability Conversions*

To Convert From	To	Multiply by	Inverse
md	darcy	1.000 000†E−03	1.000 000†E+03
	metre² (m²)	9.869 23 E−16	1.013 25 E+15
	centimetre² (cm²)	9.869 23 E−12	1.013 25 E+11
	micrometre² (μm²)	9.869 23 E−04	1.013 25 E+03
	$\frac{(cm^3/s)cp}{cm^2(atm/cm)}$	1.000 000†E−03	1.000 000†E+03
	$\frac{(cm^3/s)cp}{cm^2[(dyne/cm^2)/cm]}$	9.869 23 E−10	1.013 25 E+09
	$\frac{(ft^3/s)cp}{ft^2(psi/ft)}$	7.324 41 E−08	1.365 30 E+07
	$\frac{(ft^3/s)cp}{cm^2[(cm\ water)/cm]}$	3.417 80 E−11	2.925 85 E+10
	$\frac{(B/D)cp}{ft^2(psi/ft)}$	1.127 12 E−03	8.872 17 E+02
	$\frac{(gal/min)cp}{ft^2[(ft\ water)/ft]}$	1.425 15 E−05	7.016 81 E+04
	ft²	1.062 32 E−14	9.413 40 E+13

* (After Earlougher, 1977)

† Conversion factor is exact; all following digits are zero