0.703 $= \frac{\frac{0.703}{8.94 \text{ g/cm}^3}}{\frac{0.703}{8.94 \text{ g/cm}^3} + \frac{0.297}{8.25 \text{ g/cm}^3}}$

= 0.686

$$V_{\varepsilon} = \frac{\frac{W_{\varepsilon}}{\rho'_{\varepsilon}}}{\frac{W_{\alpha}}{\rho'_{\alpha}} + \frac{W_{\varepsilon}}{\rho'_{\varepsilon}}}$$

	0	0.297
_	8.25	5 g/cm^3
_	0.703	0.297
	$\overline{8.94 \text{ g/cm}^3}$	$\frac{1}{8.25 \text{ g/cm}^3}$

= 0.314

Now, using Equation 18.12

 $= (1.88 \times 10^{-8} \Omega)$ $(\Omega - m)(0.314)$

Finally, for the conductivity (Equation 18.4)

$$\sigma = \frac{1}{\rho} = \frac{1}{1.80 \text{ x } 10^{-7} \Omega - \text{m}} = 5.56 \text{ x } 10^6 (\Omega - \text{m})^{-1}$$

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$$\rho = \rho_{\alpha} V_{\alpha} + \rho_{\varepsilon} V_{\varepsilon}$$

- m)(0.686) + (5.32 x 10⁻⁷ G
= 1.80 x 10⁻⁷ Ω-m