Table 1A. The constitution of the temperature derivatives of the elastic constants of tantalum[2] in units of 10^{-4} deg^{-1}. $d\ln B_T/dT)_V$ was computed by the relationship $d\ln B_T/dT)_V = \frac{B_S}{B_T} (d\ln B_S/dT)_V - 3\gamma\alpha$ where γ is the Gruneisen constant and α is the linear coefficient of thermal expansion. Quantities are evaluated at zero pressure and room temperature.

	$\left(\frac{d\ln C}{dT}\right)_P$	$=$ $\left(\frac{d\ln C}{dT}\right)_V$	$+$ $\alpha\left(\frac{d\ln C}{d\ln r}\right)_T$
C_{44}	-2.6	-2.1	-0.5
C'	-1.9	-1.2	-0.7
C_{11}	-1.2	-0.6	-0.6
B_S	-1.0	-0.4	-0.6
B_T		-0.7	