

gate. We believe the mean value is likely to be near the correct value for this aggregate.

The present data are compared in Table 2 with some recent data from the literature. For the pressure derivatives of isotropic elastic parameters, our data differ significantly from the corresponding values reported by *Anderson and Schreiber* [1965] and by *Schreiber and Anderson* [1968]. Apparently, Anderson and Schreiber measured the properties of their hot-pressed specimens in one direction only. Yet a typical hot-pressed aggregate of polycrystalline periclase often exhibits preferred orientation of the crystal grains [see, for example, *Tagai et al.*, 1967] with obvious effects on the elastic properties. We suggest that the apparent differences among the several sets of data reported by Anderson and Schreiber and by us here are possibly attributable to this preferred orientation produced by hot-pressing. Of course, the elastic properties may vary from sample to sample, but the important point of this paper is that, at least in certain respects, hot-pressed aggregates may be anisotropic and measurements on such samples should be made in more than one direction.

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