

Supplementary material for:

**A vibrational spectroscopic study of kernite to 25 GPa: implications for the high-pressure
stability of borate polyhedra**

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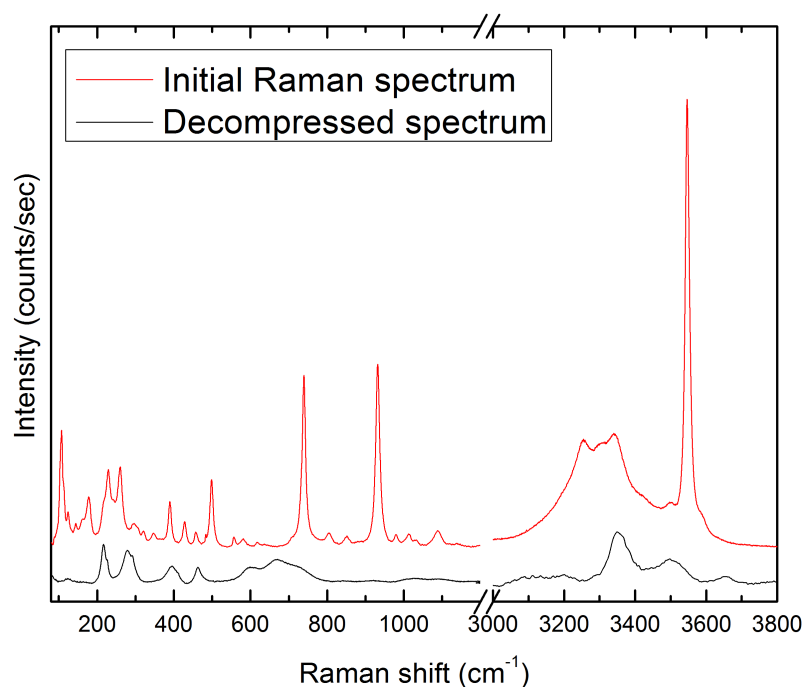


Figure S1. A comparison between the ambient starting Raman spectrum and the Raman spectrum decompressed from ~ 25 GPa of kernite. While the spectra as a whole are entirely distinct from one another, the difference in the low frequency region (< 200 cm⁻¹) is particularly dramatic; only two low intensity broad modes are present in the quenched material.

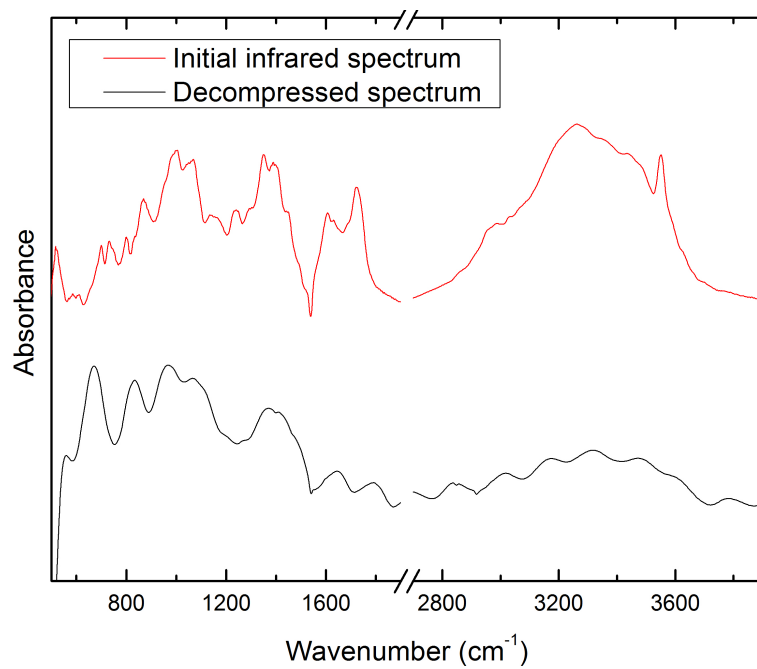


Figure S2. A comparison of the ambient starting infrared spectrum and the decompressed infrared spectrum from ~22 GPa of kernite.

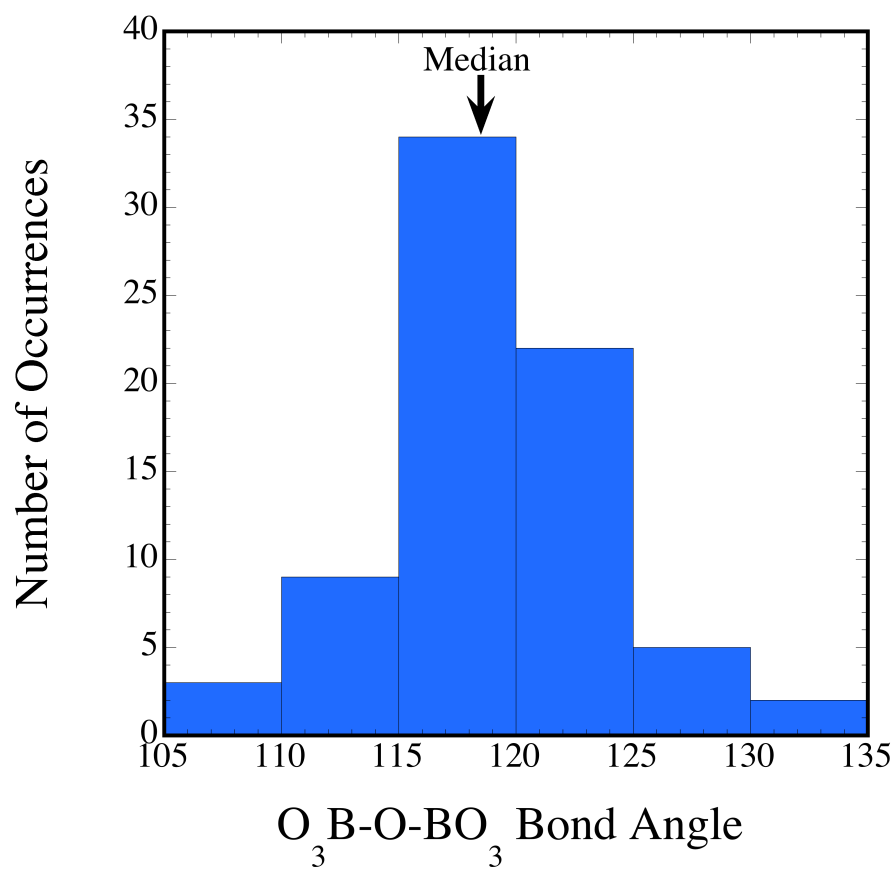


Figure S3. Bond angles between adjoining borate tetrahedra in boron-bearing phases at ambient pressures, using the results of Table S1.

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