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The Response of Dry Limestone to Shock-Loading DAVE JOHN-SON, DAVID CHAPMAN, University of Cambridge, UK, KOSTAS TSEMBELIS, AECL, CA, WILLIAM PROUD, University of Cambridge, UK — The shock response of geological materials is of interest to many industries, in particular oil and gas exploration. The porous inhomogeneous composition of geological materials complicates characterisation under dynamic loading. The behaviour of dry limestone has been investigated under the condition of uniaxial strain using a plate impact facility. Manganin gauges were used to measure both longitudinal and lateral stresses within the limestone. The Hugoniot and shear data obtained are compared with that available in the open literature.

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