

Abstract Submitted
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The Shock Hugoniot Properties of Various Geological Materials

C.H. BRAITHWAITE, W.G. PROUD, J.E. FIELD, Physics and Chemistry of Solids Group, Cavendish Laboratory, UK — A series of plate impact experiments was performed to determine the principal Hugoniot curves of various geological materials. The experiments were carried out using the plate impact facility at the Cavendish Laboratory, Cambridge University. Samples were fired in both conventional and reverse configurations, at a variety of impact velocities from 256 m/s to 957 m/s, and stresses of up to 11 GPa. Data from the samples was collected by a number of methods including calibrated manganin stress gauges, high speed photography and laser velocity Interferometry.

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