

Abstract Submitted  
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**Equation of State data from off-Hugoniot measurements in multiply-shocked liquids** MIKE MORLEY, DAVID CHAPMAN, WILLIAM PROUD, Fracture and Shock Physics, SMF Group, Cavendish Laboratory, JJ Thomson Ave., Cambridge, CB3 0HE — Plate impact techniques were used to determine Equation of State data in liquids. A copper cell was constructed to confine a test liquid and facilitate the ring-up of stress in the sample. Copper flyer plates were impacted against the cell at a range of velocities inducing a number of stress states in the sample, both on- and off- the principal Hugoniot. It was assumed that a Mie-Grüneisen form of the Equation of State was applicable. The arrival times and pressures measured at each shocked state allowed a best-fit value of the Grüneisen parameter to be determined. The volume-dependence of the Grüneisen parameter is also considered.

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