Abstract Submitted for the SHOCK19 Meeting of The American Physical Society

Experimental sound velocities and Grüneisen parameters for shocked Pb: Comparison with theory DAVID BONESS, Physics Department, Seattle University — With its low melting temperature and high shock impedance, Pb is a metallic element that gives liquid state data over a broad range of pressures accessible with a two-stage light-gas gun. Sound velocity and Grüneisen parameter data from the rarefaction overtake method are reanalyzed for Pb shocked beyond the Hugoniot-melting curve intersection, between 54 and 380 GPa, and are compared to recent static data and theoretical melting curve and equation of state computations.

David Boness Seattle University

Date submitted: 27 Feb 2019

Electronic form version 1.4