Abstract Submitted for the SHOCK07 Meeting of The American Physical Society

Density Measurement Method of Isentropically Compressed Hydrogen at Megabar Pressures¹ NIKOLAY EGOROV, A. BYKOV, G. BORISKOV, YU. KUROPATKIN, N. LUKYANOV, V. MIRONENKO, V. PAVLOV, Russian Federal Nuclear Center - VNIIEF — A radiography method of density measurement of condensed hydrogen at its isentropic compression up to megabar pressures is described in the paper. Experimental x-ray images of hydrogen compression devices in the megabar pressure ranges are presented. Measurement results of densities of condensed hydrogen and aluminum isotopes are presented. These results are used for hydrogen isotopes equations of state building.

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