Abstract Submitted for the OSF10 Meeting of The American Physical Society

Cesium-133, Lithium-6, and Lithium-7 Hyperfine Study ROBERT VOLLMERHAUSEN, West Virginia Wesleyan College — I report a spectroscopy study on Cesium-133, Lithium-6, and Lithium-7. Hyperfine splittings are created using a controllable laser with a wavelength of 852.350 nm for Cesium, and a wavelength of 670.980 nm. This study covers the D2 line of Cesium and the D1 and D2 lines of Lithium-6 and Lithium-7. These are examined using two different techniques. These techniques are absorption spectroscopy, and transmission spectroscopy. The results from this study are compared to those found by Daniel Steck and Michael Ghem.

Robert Vollmerhausen West Virginia Wesleyan College

Date submitted: 22 Sep 2010

Electronic form version 1.4