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VUV Spectroscopy on the FRX-L Field Reversed Configuration Plasma A.G. LYNN, M. GILMORE, University of New Mexico, G.A. WURDEN, T.P. INTRATOR, W. WAGANAAR, R. RENNEKE, L.A. DORF, S.C. HSU, Los Alamos National Laboratory, E.L. RUDEN, Air Force Research Laboratory — The FRX-L experiment at Los Alamos National Laboratory aims to demonstrate the formation and translation of a field-reversed configuration plasma (FRC) with parameters suitable for Magnetized Target Fusion: $n_e \approx 10^{17}\ cm^{-3}$, $T_e + T_i \approx 300$ eV, and lifetimes $\sim 10 - 20\ \mu$s. Recently, a 0.3m axial viewing VUV spectrometer with an optical multichannel analyzer (OMA) and UV-visible fluorescer has been added to the FRX-L experiment. This system will be used for impurity content and ion (doppler) temperature measurements. Initial results from this system will be discussed.

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