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The ORTEGA experiment: Radiographic methods, analysis and results TODD HAINES, NICK KING, LANL, STEVE LUTZ, NSTec, JOHN SMITH, LANL — The ORTEGA experiment, executed on July $28^{\rm th}$, 2010 by a team from Los Alamos, Sandia, National Security Technologies, and others, at the Nevada National Security Site, consisted of two identical samples of lead driven by small charges of HE. Flash x-radiography formed the key measurement. A short pulse of x-rays "froze" the motion much like a flash camera system and thereby permitted examination of the instantaneous internal spatial density distribution of the rapidly moving material. Two radiographs were taken encompassing both samples in each image and separated in time by ~ 4 microseconds to allow observation of the evolution of the samples. This presentation will review the radiographic methodology, the data set, calibration and details of the analysis of the data.

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