Abstract Submitted for the MAR16 Meeting of The American Physical Society

Decomposition products of TATB under high static pressure. JONATHAN CROWHURST, ELISSAIOS STAVROU, JOSEPH ZAUG, Lawrence Livermore Natl Lab — We have investigated the decomposition products of 2,4,6triamino-1,3,5-trinitrobenzene (TATB) at static pressures up to 50 GPa using Raman and IR absorption spectroscopy. Decomposition was driven by various continuous wave and pulsed laser drives. We compare decomposition behavior and products obtained at the different pressures. Preliminary results at lower pressures indicate the formation of carbon dioxide, nitrogen, amorphous carbon and possibly hydrogen. This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract No. DE-AC52-07NA27344

> Jonathan Crowhurst Lawrence Livermore Natl Lab

Date submitted: 05 Nov 2015

Electronic form version 1.4