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Ignition and Growth Modeling of Detonating LX-04 (85% HMX / 15% VITON) Using New and Previously Obtained Experimental Data CRAIG TARVER, Lawrence Livermore National Laboratory — An Ignition and Growth reactive flow model for detonating LX-04 (85% HMX / 15% Viton) was developed using new and previously obtained experimental data on: cylinder test expansion; wave curvature; failure diameter; and laser interferometric copper and tantalum foil free surface velocities and LiF interface particle velocity histories. A reaction product JWL EOS generated by the CHEETAH code compared favorably with the existing, well normalized LX-04 product JWL when both were used with the Ignition and Growth model. Good agreement with all existing experimental data was obtained. This work was performed under the auspices of the U. S. Department of Energy by the Lawrence Livermore National Laboratory under Contract No. DE-AC52-07NA27344. **Keywords:** LX-04, HMX, detonation, Ignition and Growth **PACS:** 82.33.Vx, 82.40.Fp

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