Abstract Submitted for the SHOCK05 Meeting of The American Physical Society

Ultrafast double pass absorption in benzene and cyclohexane RICKY CHAU, NEIL C. HOLMES, Lawrence Livermore National Laboratory — In this study, we report preliminary double-pass absorption experiments on benzene and cyclohexane. For these experiments, a high power broadband light source was used and the light was collected using both photomultiplier tubes and a streak cameras. The light on the PMTs were recorded at different wavelengths. We will present the results from the initial experiments with a discussion of the time resolved dissociation of the benzene and cyclohexane and a comparison of benzene (carbon double bonds) and cyclohexane (carbon single bonds).

This work was performed under the auspices of the U.S. Department of Energy by University of California, Lawrence Livermore National Laboratory under Contract W-7405-Eng-48.

Ricky Chau Lawrence Livermore National Laboratory

Date submitted: 08 Apr 2005

Electronic form version 1.4