## Abstract Submitted for the SHOCK07 Meeting of The American Physical Society

Dynamic Properties of a Lead-Antimony Alloy<sup>1</sup> ROBERT HIXSON, MARK BYERS, DARCIE DENNIS-KOLLER, Los Alamos National Laboratory — Several shock compression experiments have been done recently on a Lead-Antimony alloy. Data was collected using two experimental configurations. One configuration consisted of a forward impact experiment with a LiF window, and was designed to yield Hugoniot information, and information on strength in compression. Sound speed in the compressed state is also obtained, although with moderate uncertainty. The second experimental configuration was similar to the first, but with no window. The absence of a window will cause a large release wave to be generated at the back side of the sample. This wave is interacted with a similar wave from the back side of the flyer plate, and tension generated. This kind of experiment is intended to explore dynamic strength in tension.

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