

Abstract Submitted  
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**A Verification and Validation Effort for High Explosives at Los Alamos National Lab** CHRISTINA SCOVEL, RALPH MENIKOFF, Los Alamos National Lab — We have started a project to verify and validate ASC codes used to simulate detonation waves in high explosives. Since there are no non-trivial analytic solutions, we are going to compare simulated results with experimental data that covers a wide range of explosive phenomena. The intent is to compare both different codes and different HE models. The first step is to test the products equation of state used for the HE models. For this purpose, the cylinder test and 1D plate-push experiments are being used. These experiments sample different regimes in thermodynamic phase space: the cylinder test mainly gives information about the CJ isentrope while the reflected shock in the plate-push experiment results in pressure above the CJ isentrope and is sensitive to the Gruneisen coefficient. We will be presenting the results of our findings for PBX 9501.

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