Based on the GMC EDR data, it is possible to estimate an approximate speed change or delta V imparted to the Kenworth semi-tractor/trailer in the crash, using a momentum, energy and restitution (MER) analysis, and then matching these results to the physical and other evidence with a widely used crash simulation program.[[1]](#footnote-1)

A closing speed of 37 mph (estimated from the EDR pre-impact data at time zero) from the GMC would have resulted in a delta V in the Kenworth semi-tractor/trailer of approximately 5.6 mph, with a peak vehicle acceleration for the impact of approximately 2.3 g. Delta V in the simulation for the GMC is 34.8 mph which is consistent with the EDR data.

Without Mr. Tremblay’s files it is not clear where he made an error that resulted in the Kenworth semi-tractor/trailer delta V of 3 mph. It is likely his impact speed of 35 mph is underestimated and it is unlikely that his simulation resulted in a 34.8 mph delta V in the GMC.

1. Virtual Crash 5, vCrash America Inc. [↑](#footnote-ref-1)