



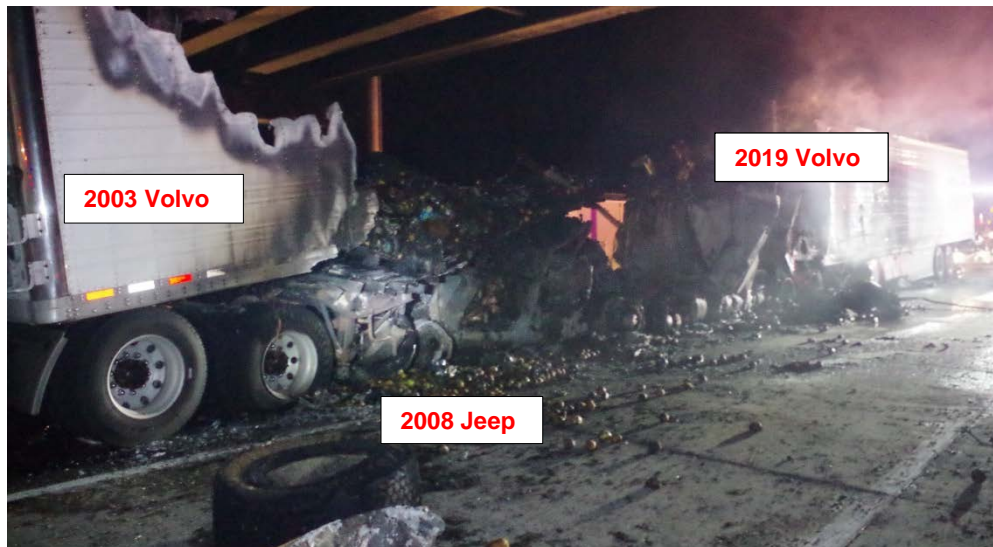
## PRELIMINARY REPORT HIGHWAY

### Construction Zone Multivehicle Collision HWY18FH015

*The information in this report is preliminary and will be supplemented or corrected during the course of the investigation.*

On Saturday, June 16, 2018, about 11:32 p.m. (local time), a multivehicle collision occurred within the eastbound traffic lanes of Interstate 84 (I-84) near milepost 46.9, in Boise, Ada County, Idaho. In this area, the roadway consists of four travel lanes and paved shoulders for both the eastbound and westbound lanes. A concrete barrier separates the opposing traffic lanes. At the time of the crash, I-84 east was reduced from four lanes to one lane about 1 mile beyond the crash location due to an ongoing maintenance project near the Cloverdale overpass. The posted 65-mph speed limit was reduced to 55 mph for the work zone.

On I-84 east, a traffic queue had formed in the second to the right lane. A 2008 Jeep Wrangler was located at the end of the queue. Meanwhile a 2019 Volvo truck-tractor in combination with a 2015 Great Dane refrigerated semitrailer was approaching the end of the traffic queue from the west. The driver did not react to the stopped traffic in the queue and collided with the rear of the Jeep. As both vehicles moved forward, the Jeep was pushed into the rear of a 2003 Volvo truck-tractor in combination with a 2008 Great Dane refrigerated semitrailer, which was stopped in front of the Jeep. Figure 1 shows the final rest positions of the two combination vehicles and the Jeep.



**Figure 1:** Vehicles at final rest under Cloverdale overpass (Idaho State Police).

The 2003 Volvo combination vehicle moved forward and collided with the rear of a 2006 Ford Fusion, pushing it into the rear of a 2014 Ford F150 and sideswiping a 2015 Ford Escape. Debris from the collision also damaged a 2010 Ford Focus. The vehicles came to rest on I-84 under the Cloverdale overpass.

A postcrash fire consumed the Jeep and the 2003 and 2019 Volvo combination vehicles. The fire also damaged other vehicles and the Cloverdale overpass. The driver and two passengers in the Jeep and the driver of the 2019 Volvo died, while the driver and passenger of the 2006 Ford Fusion and the driver of the 2014 Ford F150 were injured. The occupants of the other involved vehicles were uninjured.

According to data obtained from an aftermarket on-board Garmin unit, which recorded vehicle speed, interior audio, and forward-facing video when triggered, the 2019 Volvo was traveling approximately 62 mph at the time of impact with the Jeep. Additional data sources are being examined.

The NTSB is continuing to gather records on hours of service (HOS) and medical certification for the driver of the 2019 Volvo truck-tractor. Initial toxicology tests are pending. Preliminary information indicates that the drivers of both combination vehicles were operating under the agricultural products exemption to the HOS rules. Driver qualifications, HOS, use of electronic logging devices, and vehicle maintenance are being examined for both carriers. The NTSB is also evaluating commercial vehicle collision avoidance technology and highway work zone safety.

All aspects of the crash remain under investigation as the NTSB works toward determining the probable cause, with the intent of issuing safety recommendations to prevent similar crashes. The NTSB is working alongside the Idaho State Police, which is conducting a separate, parallel investigation. The following parties to the investigation are also assisting the NTSB: the Federal Motor Carrier Safety Administration, the Idaho Transportation Department, and the Penhall Company.