



National Transportation Safety Board

Antilock Brake Systems/Out of Service Criteria

David Pereira
Highway Crash Investigator

Biloxi, MS

March 7, 2017



Flushing, NY

September 18, 2017



Las Vegas, NV

November 8, 2017

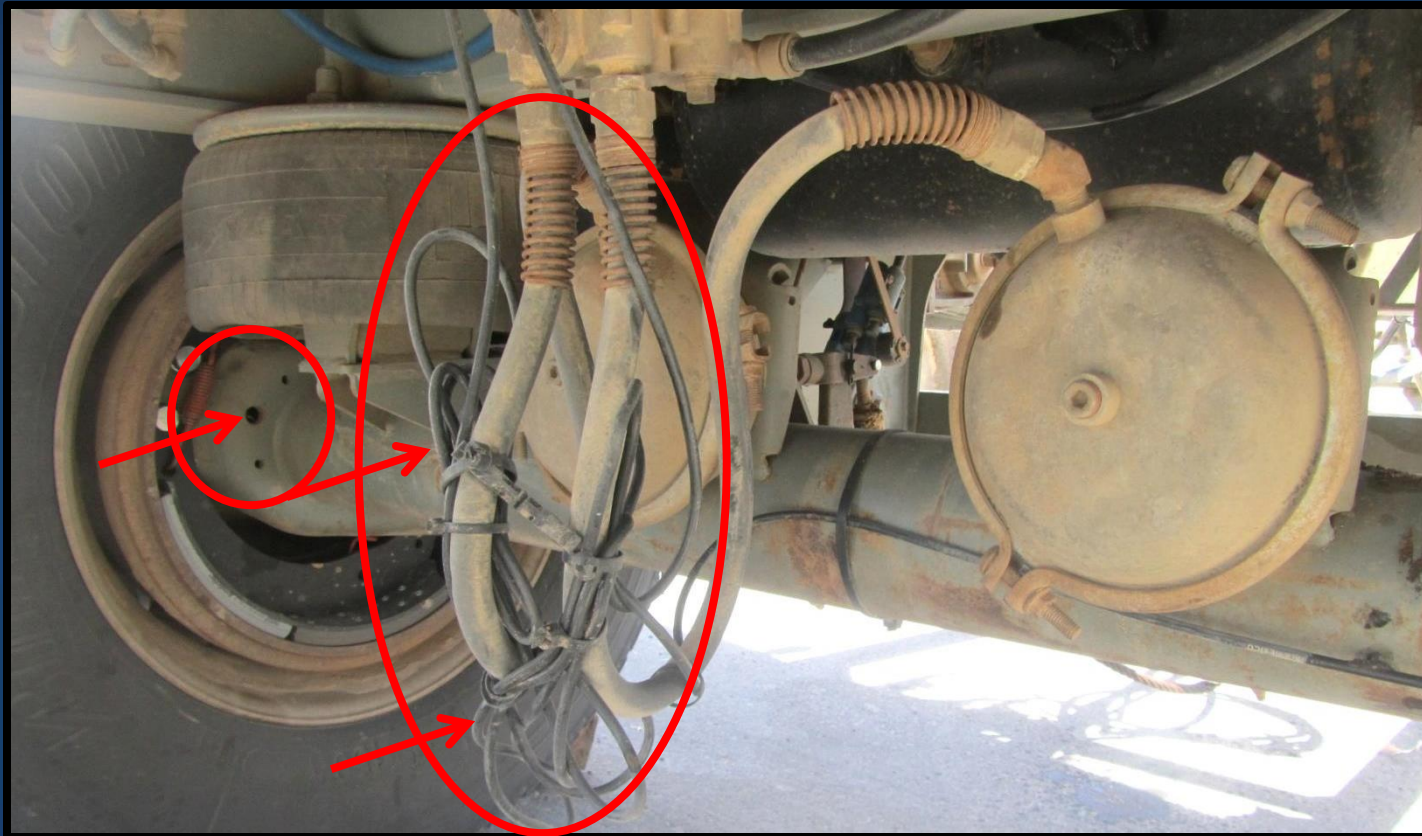


Miriam, Nevada

June 24, 2011



Condition of Brakes - ABS Defects

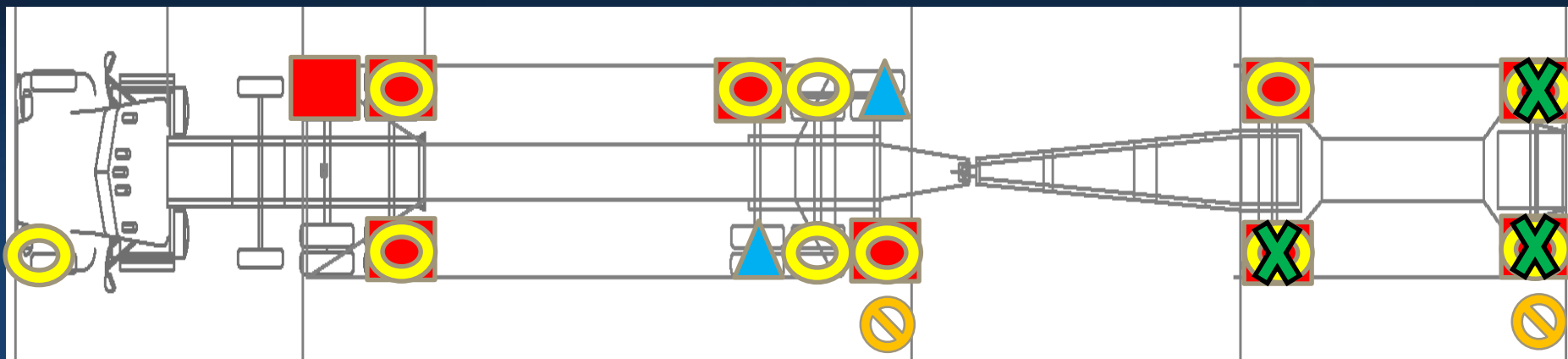


Condition of Brakes - ABS Defects

ABS malfunction indicator light disconnected



Condition of Brakes - Summary



9 out-of-adjustment/inoperative brakes (NHP)



2 mismatched/incorrect brake chambers



11 worn brake drums



3 missing/disconnected ABS sensors



2 disconnected ABS malfunction indicator lights

ABS Requirements

Title 49 Code of Federal Regulations, Part 393.55

- Hydraulic Brake System
 - Manufactured on or after March 1, 1999
 - Shall be equipped with an ABS malfunction indicator system
- Air Brake System
 - Buses Manufactured on or after March 1, 1998
 - Shall be equipped with an ABS malfunction indicator system

North American Standard Out-of-Service Criteria

- Purpose of the criteria is to identify critical violations
- ABS is NOT a OOS violation
- Visit CVSA.org

