

# **DERIVE ENTERPRISE'S SAE FUEL CONSUMPTION TEST**

## **Test Description**

An on-the- road fuel economy simulation of long-haul operation based on an industry standard test method

### **Test Objective**

Evaluate fuel economy benefits derived from using the Derive Efficiency solution under controlled conditions on a 2008 Cummins DPF ISX engine

# **Test Program**

- The SAE J1321 procedure was conducted utilizing fully serviced trucks.
- One control truck and one test truck operate simultaneously.
- A single, complete SAE J1321 Type II fuel economy test consists of baseline segment and a test segment.
- A valid segment consists of three test laps having a spread in test/control fuel consumption ratios not greater than two percent of the highest test/control fuel consumption ration (T/C ratio)
- The test route or lap was 40 miles in accordance to SAE J1321 and was representative of long-haul operations.

### Vehicle

The control and test vehicles were Class-8 diesel trucks.

The Control Vehicle was an International 9400 with a Cummins ISX engine, while the Test Vehicle was an International Pro Star with a Cummins ISX engine.

Both the control and the test vehicles were pulling identical loads of a gross vehicle weight (GVW) of 80,000 lbs. during the test.

#### **Test Results**

The Derive Enterprise product delivered an average fuel economy improvement of 7.07% over the control vehicle.