Creation and Testing of the ACES Heavy Heavy-Duty Diesel Engine Test Schedule for Representative Measurement of Heavy-Duty Engine Emissions

Nigel Clark, Clint Bedick, Feng Zhen

West Virginia University Center for Alternative Fuels, Engines, and Emissions

Support for this project was provided by the Air Resources Board
ACES Cycle Development and Testing

- Develop a schedule of engine cycles representative of modern truck usage, and demonstrate their application in a test cell
- ACES HHDDE test schedule based on the four active modes of the HHDDT (chassis) test schedule (Transient, Creep, Cruise, High-Speed Cruise)
- Candidate cycles chosen by comparing least squares value relative to database statistics
- Final modes tested at WVU ERC using 2004 Cummins ISM HHDDE
- New regression standards proposed for ACES modes