Lean NOx Trap Formulation Effect on Performance with In-Cylinder Regeneration Strategies

Jim Parks, Shean Huff, Matt Swartz, and Brian West

Oak Ridge National Laboratory

Diesel Engine-Efficiency and Emissions Research Conference
August 13-16, 2007
Detroit, MI

Sponsor: U. S. DOE Office of FreedomCAR and Vehicle Technologies

Program Managers: Ken Howden, Gurpreet Singh, and Steve Goguen

Poster Location: P-1

OAK RIDGE National Laboratory

(3) LNTs Characterized with In-Cylinder Regeneration

- NOx Storage Proportional to Ba Loading
- Oxygen Storage Component Reduces NH_3 Formation
- Storage Site Efficiencies Differ for Ba Loading … But, Functionality Similar

	Umicore*	Low Ba	Med Ba
BaO	29 g/l	~11 g/l	~27 g/l
Al_2O_3	160 g/l	~137 g/l	~137 g/l
CeO_2	98 g/l	---	---