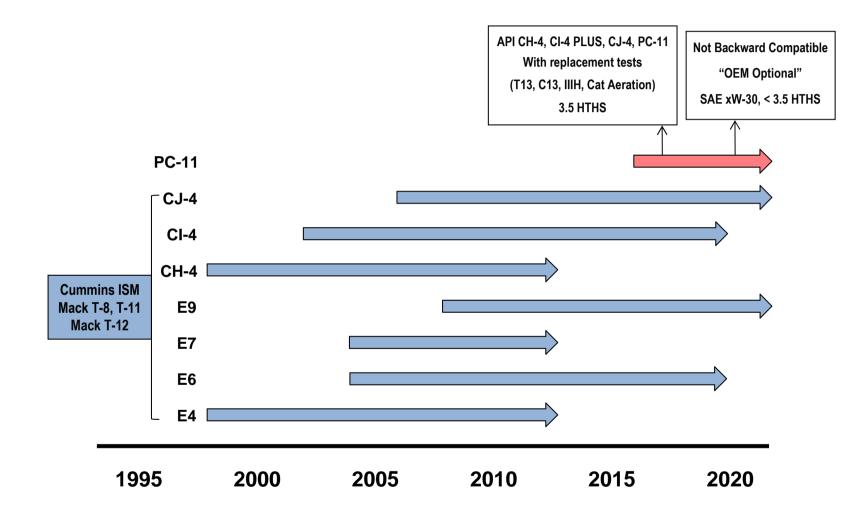
Overview of US Based Engine Lubricant Tests in API 'C' and ACEA 'E' Categories

Mark Cooper December 6, 2011

API and ACEA HD Lubricant Categories



Projected Life of API "C" Category Engine Lubricant Tests

Longer Term 'C' Category Test Availability

Test	Availability Through 2015	Availability Beyond 2015*	Notes
Cat 1K	No current issues	Likely	1980s vintage. Auxiliary stand components?
Cat 1N	No current issues	Likely	1980s vintage. Auxiliary stand components?
Cat 1P	Resolving liner supply	No issues forecasted	CH-4 life? (liners same as 1R)
Cat 1R	Resolving liner supply	No issues forecasted	Liners available for reference
Cat C13	No current issues	No issues forecasted	Production engine for some time
Cummins ISM	No current issues	No issues forecasted	Engine production ended 2009. ISM now produced outside the US. Engine supply longer-term?
Cummins ISB	No current issues	No issues forecasted	5.9L engine production ended 2009. 6.7 liter engine?
EOAT	Possibly, N/A (C13 EOAT)?	N/A (C13 EOAT)	Salvage engines currently available w/ critical hardware. C13 EOAT available soon?
Mack T-8E	Resolving hardware supply	Usage long term?	Mechanical injection pump. Replace with T-11?
Mack T-11	Resolving hardware supply	Likely	Engine production ended 2006.
Mack T-12	Resolving hardware supply	Liner supply through 2016	Engine production ended 2006. Long-term availability depends on usage rate and parts supply.
RFWT	No current issues	Possibly	Long term supply of test parts.1990's vintage engine - currently available. Engine supply longer-term?
Seq IIIG	No current issues	N/A? Seq IIIH?	Seq IIIH past 2015?

*No consistent availability beyond 2015. Difficulty projecting hardware availability more than 5 years.

Projected Life of API "C" Category Engine Lubricant Tests

Thanks to many individuals for providing information for this summary.