



DELIVERING THE NEXT GENERATION OF HEAVY DUTY ENGINE OILS

MODERN ENGINES PLACE GREATER DEMANDS ON THE OIL



IMPROVED COMBUSTION EFFICIENCY

HIGHER TEMPERATURES

INCREASED POWER OUTPUT



BETTER FUEL EFFICIENCY



REDUCED EMISSIONS

SHELL LED THE DEVELOPMENT OF NEW API CK-4 OILS

2011



Development of new API heavy-duty diesel engine oil category begins

2013



Euro VI emission standards introduced

2016



API launches new CK-4 specifications and tests
Shell is first to announce API CK-4 heavy duty portfolio in North America

2017



Shell Rimula CK-4 portfolio launches worldwide
New ACEA emission standards proposed for introduction in 2018

9,000 CK-4 OIL TESTS

by Shell scientists – equivalent to 5 tests every day for 5 years



OUR LARGEST INVESTMENT

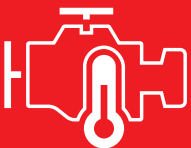
in HDDEO development to date

64 MILLION KM

of real-world testing – equivalent to 1,500+ times around the world¹



SHELL RIMULA R4 L, R5 LE AND R6 LM (CK-4) PROVIDE ROBUST PROTECTION FOR TODAY'S ENGINES



ENHANCED OXIDATION CONTROL²

Guards against oil breakdown in hotter engine conditions

IMPROVED SHEAR STABILITY³

Resists loss of oil viscosity under severe stress

EXCELLENT AERATION CONTROL⁴

Helps prevent air bubbles within oil for sustained wear protection



IMPROVED FUEL ECONOMY⁵

A 1% fuel economy improvement could save 4 million tonnes of CO₂ per year in North America alone⁶

Shell RIMULA
Heavy Duty Diesel Engine Oil

1. Earth's circumference is 40,075 km (64,000,000 divided by 40,075 is 1,597). 2. Volvo T13 test. 3. ASTM D7109. 4. Caterpillar Oil Aeration Test. 5. Shell Rimula R5 LE 10W-30 demonstrated fuel economy of up to 1.6% in on the road testing compared to 15W-40 oils and SAE 10W-40 demonstrated fuel economy of up to 1.0% in MAN Euro 4 engines compared to 15W-40 oils using city drive cycles. 6. Calculated based on average on highway engine fuel consumption.