



Shell Lubricants

FLEETS

66% extension of oil drain intervals achieved using high performance diesel engine oil

Total annual customer saving

US\$48,000

Country: Pakistan

Application: Heavy-duty diesel engine

Saving: US\$48,000 total annual customer savings

Key edges: Shell Rimula R3 X, Shell LubeVideoCheck

The customer is one of Pakistan's most established operators of long haul truck fleets.

The customer was changing the oil in their fleet of trucks every 3,000 kilometres. Shell suggested a product trial of Shell Rimula R3 X to try and improve oil performance, extend oil drain intervals, and reduce operational costs.

Using Shell LubeVideoCheck to analyse the oil's existing performance, a Shell Technical Team recommended a product change to Shell Rimula R3 X. Based on its performance as a heavy-duty lubricant, the customer was able to extend oil drain intervals by a further 2,000 hours leading to an impressive total annual cost saving of US\$48,000.

EFA0001



DESIGNED TO MEET CHALLENGES





1 The Challenge:

The challenge was for Shell to prove that an increase in oil drain intervals could be achieved using the high performance heavy-duty diesel oil Shell Rimula R3 X, without compromising the condition of the engine.

2 The Solution:

Based on the results of an analysis using Shell Lube **VideoCheck**, the Shell Technical Team recommended a trial using Shell Rimula R3 X. An extra high performance diesel engine oil, Shell Rimula R3 X has been formulated for engines operating in severe heavy-duty on highway applications. The oil's performance was monitored throughout the trial and a report supported by images taken using Shell Lube **VideoCheck** was presented to the customer at the trial's conclusion.

3 The Outcome:

As a result of the trial using Shell Rimula R3 X in the customer's truck engine, it was proven that oil drain intervals could be safely extended from 2,000 to 5,000 kilometres without any ill effects. The customer went on to use Shell Rimula R3 X across its fleet of 45 vehicles.

4 The Value:

Using Shell Lube **VideoCheck** to monitor performance before and after the trial, the Shell Technical Team was able to confidently illustrate that oil drain intervals could be extended by 66% while maintaining engine protection. When applying the product across the customer's complete fleet of 45 vehicles, the calculated total annual cost saving is US\$48,000.

The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site depending on application, operating conditions, current products being used, condition of the equipment and maintenance practices.

Shell Rimula R3 X

Multigrade Heavy-duty Diesel Engine Oils

Shell Rimula R3 X energised protection oils feature modern high-performance lubricant chemistry specifically designed to protect against the changing needs of your driving conditions. This unique adaptive technology features multi-component systems to provide triple action protection; low wear for long engine life, low deposit formation to maintain engine performance and resists breakdown by heat for continuous protection.

With a wide array of engine maker approvals, it is suitable for virtually all heavy-duty engines, non-turbocharged and turbocharged alike, in on and off-highway service.

Performance features and benefits

Engine Cleanliness

High thermal stability provides a high standard of protection against piston deposits which, together with high performance dispersants, delivers excellent control of sludge and deposits in the engine.

Low Engine Wear

The combination of active anti-wear additives and good engine cleanliness control engine wear gives long engine life, maintains engine power and efficiency and lowers servicing costs.

High Temperature Protection

Shell Rimula R3 X has been demonstrated to resist thermal breakdown ensuring continued protection throughout the drain interval, even under severe conditions found in modern engines.



Main applications

On-highway heavy-duty trucks

With a wide range of OEM approvals, Shell Rimula R3 X is suitable for virtually all heavy-duty engines.

Construction and mining

Shell Rimula R3 X is recommended for most engine types found in construction and mining equipment such as Caterpillar, Cummins, Detroit Diesel (4-cycle), MTU and Komatsu engines. It is formulated to provide continuous protection even where higher sulphur fuels are used.

Agricultural Equipment

Shell Rimula R3 X is ideally suited for the stop-start service found in agricultural operation and protects against bearing wear and deposits.

Complementary products

Equipment	Lubricants
Diesel Engine Oils	Shell Rimula
Axle Oils	Shell Spirax A/AX
Gear Oils	Shell Spirax G/GX
ATF's	Shell Donax TA
Greases	Shell Retinax HD
Coolants	Shell HD Premium AFC



Shell Lubricants

WWW.SHELL.COM/TRANSPORT