



Shell Lubricants

MINING & QUARRYING

The change to Shell Rimula R3 MV increased oil drain intervals of Rio Tinto's truck fleet on this open cast mine by 100%

Total annual customer saving

US\$37,500
(AUD\$51,366)



RIO TINTO

Country: Australia

Application: Open cast mining – Engine

Saving: US\$37,500 (AUD\$51,366) total annual customer saving

Key edge: Shell Rimula R3 MV

RT182

Rio Tinto is an international mining and exploration company, a world leader in finding, mining and processing the earth's mineral resources.

The use of a standard specification oil meant oil drain intervals were not optimised.

Shell recommended Shell Rimula R3 MV, a best in class premium diesel engine oil that increased the oil drain intervals from 250 to 500 hours.

DESIGNED TO MEET CHALLENGES



1 The Challenge:

The customer's fleet of haul trucks undergoes oil changes every 250 hours as per OEM recommendation and this scheduled maintenance has an impact on equipment availability, production levels, oil consumption and maintenance costs. Working closely with the customer, Shell identified an opportunity to extend oil changes out beyond 250 hours.

3 The Outcome:

The benefits experienced included:

- Extended oil drain intervals from 250 to 500 hours
- Reduced servicing costs
- Increased equipment availability
- Reduced waste oil storage and disposal costs
- Reduction in engine oil volumes purchased
- Decrease in storage and handling costs

2 The Solution:

After assessing the situation and analysing the fleet itself, Shell was able to reduce the company's US\$250,000 service costs by advising the change to a higher specification oil, Shell Rimula R3 MV.

4 The Value:

Calculations showed that Rio Tinto achieved a total annual saving of US\$37,500 (AUD\$51,366) attributed to using a smaller quantity of a more expensive lubricant – Shell Rimula R3 MV, and by reducing labour and service component costs.

It is also anticipated that by replacing the 12 hour long service at 250 hours with a four hour mechanical and safety inspection, the fleet of six trucks have the potential to gain approximately 576 additional operating hours per year.

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 MV

Premium heavy duty diesel engine oil

Shell Rimula R3 MV is the latest technology diesel engine oil specially formulated to meet the ever more demanding needs of the high performance diesel engines found in off-highway applications such as construction mining and quarrying. Shell Rimula R3 MV is especially suited for use in Caterpillar, Cummins and MTU engines.



Latest performance

Premium Protection Shell Rimula R3 MV provides exceptional performance in the latest generation diesel engines and provides major improvements in wear protection, viscosity control and oxidation over existing or older oils typically meeting the CH-4 or ACEA E3 standard.

Longer oil life. Longer engine life

The dedicated formulation of Shell Rimula R3 MV delivers outstanding wear protection and long life under the most arduous operating conditions for all heavy-duty diesel engines.

Main applications

Off-highway applications

Shell Rimula R3 MV is especially designed to provide no compromise protection for the leading brands of heavy-duty diesel engine found in severe duty off-highway equipment, and meets the latest specifications from Caterpillar and Cummins.

Emission controlled engines

The advanced formulation of Shell Rimula R3 MV offers increased performance and protection for the latest US 2002/Euro3 low emission engines. It also offers increased compatibility with engine fitted with particulate traps where conventional high ash super high performance diesel engine oils can result in particulate filter blockage.

Complementary products

Equipment	Products
Draglines	Shell Omala, Shell Albida
Shovels and Extractors	Shell Omala, Shell Albida, Shell Tellus
Mills	Shell Omala
Crushers and Conveyors	Shell Albida, Shell Alvania, Shell Tactic, Shell Tivela, Shell Omala
Ore Processing	Shell Albida, Shell Alvania, Shell Tactic, Shell Omala, Shell Tivela, Shell Tellus, Shell Corena
Haul Trucks	Shell Hyperia, Shell Spirax, Shell Retinax, Shell Albida, Shell Donax
Power Plant	Shell Argina, Shell Gardina, Shell Turbo



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