



# RAD INTERNATIONAL INCREASES OIL DRAIN INTERVALS USING RIMULA R4 X

Total reported annual customer saving

## 19,398 USD

**Company:** RAD International Construction

**Country:** U.A.E.

**Application:** Construction Equipment

**Savings:** 19,398 USD reported annual customer savings

**Key Edge:** Shell Rimula R4 X, Shell LubeAnalyst



**RAD International is an approved contractor of several UAE government entities for road construction. RAD International pioneered the introduction of Compact Road Construction machinery in the UAE. They own and operate a wide range of construction machinery and heavy duty vehicles from various OEMs like Mercedes Benz, Volvo, Toyota, Caterpillar & Komatsu.**

With very high competition in the booming construction sector in the UAE, RAD International was under pressure to achieve greater cost efficiencies. They were using an API CH-4 product with a change interval of 5000 KMs and/or 200 Hrs.

Bhatia Brothers' Technical Team offered to switch the heavy duty diesel engine oil of RAD International's fleet to Shell Rimula R4 X 15W-40. In addition, Shell LubeAnalyst was introduced as a key enabler of extending the oil drain intervals and reducing downtime.

RAD International were able to extend the ODI from 5000 KM and 200 Hrs to 8000 KMs and 350 Hrs. Filter change cost and downtime were significantly decreased. All together were translated to reported annual savings of 19,398 USD.

# 1

## CHALLENGE

RAD International needed to increase the oil drain intervals & reduce operating costs while providing maximum performance for the engines. Equipment are operating in severe conditions of hot climate, humidity & dust.

# 2

## SOLUTION

Shell's Distributor (Bhatia Brothers) offered Shell Rimula R4 X 15W-40 to optimize the ODI & achieve higher operational efficiency in addition to Shell LubeAnalyst to monitor oil & equipment condition.

# 3

## OUTCOME

RAD International were able to:

- Extend ODI from 5000 KM and 200 Hrs to 8000 KM & 350 Hrs
- Reduce oil & filters annual consumption
- Reduce Downtime & labor costs
- Reduce oil waste disposal costs

# 4

## VALUE

Switching to Shell Rimula led to a reported annual cost saving for the customer of 19,398 USD\* as a consequence of reduced oil consumption & reduced costs for maintenance, lubricants and filters.

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



## SHELL RIMULA R4

### MULTIGRADE HEAVY-DUTY DIESEL ENGINE OILS

Shell Rimula R4 Energised Protection oil uses exclusive combinations of the latest high-performance additives to ensure that the oil adapts and protects under the full range of pressures and temperatures found in modern engines – from the high temperatures in the pistons to the extreme loads found in the valve trains. Featuring extra-active additives to control and sweep away the harmful soot and particles found in high-performance engines, Shell Rimula R4 delivers excellent soot and viscosity control, and outstanding protection against wear. It also offers exceptional versatility; fleets with multiple engine makes need only one oil.



- Demonstrated performance for all applications. Shell Rimula R4 has been tested and proven in real-life applications, from severe-duty operation in mining and construction operations to heavy-duty haulage in some of the world's severest environments.
- Improved engine cleanliness. The exclusive additive system delivers improved engine cleanliness and protection against piston deposits, which enables Shell Rimula R4 to exceed the demanding requirements of most equipment manufacturers.

### Specification and approvals (15W-40)

API CI-4, CH-4, CG-4, CF-4, CF; ACEA E7, E5, E3; Global DHD-1; Caterpillar ECF-1-A; Cummins: CES 20078, 77, 76, 75, 72, 71; DDC 93K215; MACK EO-M, EO-M+; MAN M3275-1; MB Approval 228.3; Renault Trucks RLD-2; Volvo: VDS-3

### Applications

Severe-duty diesel engines. Shell Rimula R4 provides demonstrated protection and performance in the latest high-power, heavy-duty diesel engines from European, US and Japanese manufacturers in both on- and off-highway applications.

High-technology, low-emission engines. Shell Rimula R4 is suitable for most modern low-emission engines meeting Euro 2, 3 and 4, and US 2002 emission requirements.

For the latest low-emission engines, especially those fitted with exhaust diesel particulate traps, we recommend the use of our low-emission products: Shell Rimula R4 L or Shell Rimula R6 LM/LME.

### Performance features and benefits

- Outstanding protection. Featuring an exclusive additive system to ensure maximum soot handling, Shell Rimula R4 delivers excellent wear protection and long oil life in Euro 3, US 2002 and other advanced engines.

### Complementary products

| Equipment               | Lubricants                                    |
|-------------------------|---|
| Diesel engines          | Shell Rimula                                  |
| Axles                   | Shell Spirax                                  |
| Gears                   | Shell Spirax                                  |
| Automatic transmissions | Shell Spirax S2 ATF                           |
| Greases                 | Shell Gadus S2 V220AC<br>Shell Gadus S3 V200C |