Shell Lubricants

MINING & QUARRYING

Significant cost savings were achieved by converting to Shell Tellus S 68

Total annual customer saving **US$16,000**

Country: Australia
Application: Hydraulic Systems, excavators
Saving: US$16,000 projected total annual customer saving
Key edge: Shell Tellus S 68

This large open cast mining operation in Australia is a leading coal producer with extensive mining interests and prospects in Queensland and New South Wales.

While following the original equipment manufacturer's (OEM) oil recommendation, the customer was not achieving the outlined cost effective operational benefits from its excavators and turned to Shell to assess the situation.

Further analysis of the hydraulic systems resulted in Shell recommending a product change to Shell Tellus S 68 for its high performance capabilities and lower purchase cost. The projected total annual cost saving for this exercise is US$16,000.

1 The Challenge:

Using the OEM proprietary oil in the excavators hydraulic systems, the customer was concerned about the cost of hydraulic fluid due to the volumes required to maintain sufficient operating levels in each machine's lubricant reservoir. In addition to this, the customer was using two different grade hydraulic lubricants on site resulting in high procurement and storage costs.

2 The Solution:

After assessing the situation and the customer's requirements, Shell recommended Shell Tellus S 68 as a product substitute for the hydraulic systems. Based on extensive field data indicating the exceptional performance of Shell Tellus S 68 in Hitachi excavators, the Shell Technical Team believed that operational performance would be maintained and maintenance and procurement costs would significantly decrease. OEM approval was granted for Shell Tellus S 68 to be used in all hydraulics systems on the site.

3 The Outcome:

By changing over to a single point lubricant, Shell Tellus Oil S 68, the customer experienced a number of benefits including:

- A reduction in annual hydraulic oil purchase costs
- A reduction in storage and procurement costs with OEM approval granted for a single grade lubricant on site
- A single grade lubricant on Field Service Trucks suitable for multiple applications including coal and over burden drills and Hitachi, O&K, and Komatsu excavators.

4 The Value:

When considering annual procurement costs, the recommended lubricant Shell Tellus S 68 is approximately US$1 cheaper than the specified OEM oil with roughly 16,000 litres required over the year. While maintaining lubricant performance and addressing operational issues, the changeover will result in a projected total annual cost saving of US$16,000.

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 Tellus Oils S

Zinc-free hydraulic oils for severe duty

Shell Tellus Oils S are 'top-tier', anti-wear hydraulic oils formulated to be the ultimate 'high reference oil' in the hydraulics industry. Based on advanced 'zinc and chlorine free' technology, Shell Tellus Oils S are formulated to ensure exceptional performance in hydraulic fluid power transmission systems subjected to severe duty.

Performance features and benefits

Outstanding oil life

Typically two to four times that of many anti-wear hydraulic oils

Peace of mind

Through longer component life and trouble free operation

Lower ecological impact

Zinc and chlorine free formulations for easier disposal

Main applications

- Primary application in industrial, marine and mobile hydraulic and fluid power transmission systems.

Specifications, approvals and recommendations

Shell Tellus S have been tested and approved to exceed the following industry requirements:

Denison HF-0
Rexroth
Vickers M-2950-S (Mobile systems)
I-286-S (Industrial systems)
Cincinnati Milacron P68, P69, P70

Additional information

Oil seal and paint compatibility

The compatibility of an oil with seals used in hydraulic systems can be evaluated by numerous tests usually relating to the 'swell' characteristics. The properties of the base oil mainly influence oil seal and paint compatibility, whilst additives have little effect. Shell Tellus S oils are compatible with all seal materials and paints normally specified for use with mineral oils.

Complementary products

Equipment	Lubricants
Draglines	Shell Malleus, Shell Mine Gear, Shell Albida, Shell Corena A /AS, Shell Rope Oil
Shovels and Excavators	Shell Malleus, Shell Omala / HD, Shell Albida, Shell Tellus, Shell Corena A/AS, Shell Hyperia S, Shell Spirax
Mills	Shell Malleus, 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 Rimula, Shell Hyperia, Shell Spirax, Shell Retinax, Shell Albida, Shell Donax
Power Plant	Shell Argina, Shell Gadinia, Shell Turbo

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