



# Leading UK refinery reduces leak by 7,000 litres per week with Shell Turbo T 46

Total estimated annual customer saving £250,000

**Sector:** Energy

**Location:** UK

**Application:** Turbine

**Key Edge:** Shell Turbo T 46

## Shell Turbo

Reduced leak by

# 7,000

litres per week

## Introduction

The customer is a leader in energy manufacturing and logistics; refining, transporting and marketing natural gas liquids (NGL) petrochemicals. They are also active in the research and development of emerging energy sources. The leading UK oil refinery and Shell have a long history of collaboration.

Today's turbines need to work harder than ever before. Turbine sump volumes are shrinking in size while handling the same or increased power. Cyclic operating conditions are placing more stresses on turbines and increased operating temperatures drive requirements for greater component protection.

## Challenge

In 2020 during the COVID-19 pandemic, the customer moved their lubricants supply to a different competitor supplier.

Over the following years, they started to see an increase in their oil consumption. The competitor product was causing damage to the compressor seal which in turn was creating a significant leak of up to 8,000 litres per week.

## Solution

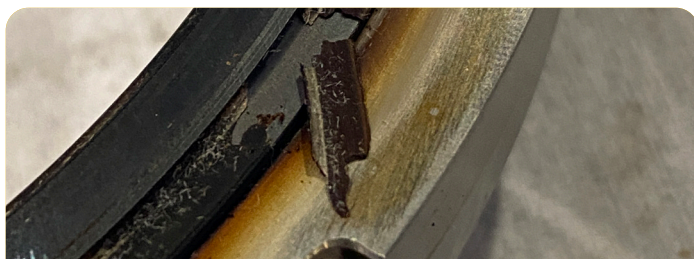
The customer asked Shell if we could support. They were looking for less downtime, extended oil-drain intervals and efficiency improvements. After analysing the product range, Shell Turbo T 46 was put forward as solution to improve seal health and minimise leaks.

## Outcome

By prioritising protection and performance, the Shell Turbo product range of turbine oils can help keep customers equipment working exactly as it was designed. After 4 months of using Shell Turbo T 46, the customer has reduced leaks by 7,000 litres per week. Seal damage has significantly decreased and equipment efficiencies have increased dramatically.

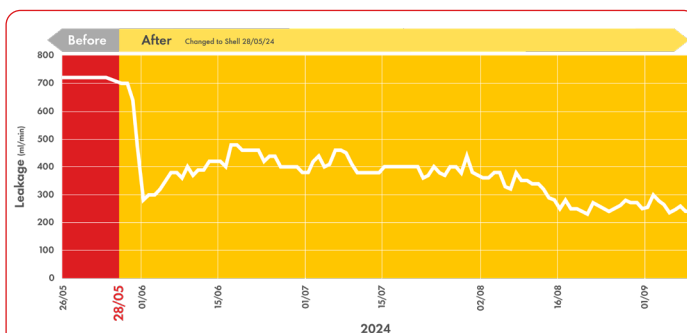
*"The switch back to Shell has saved us at least £250,000 per annum. It will also hopefully allows us to make it to the next scheduled outage. An outage before this would result in a huge lost profit opportunity of several million pounds."*

**Engineer**



## Compressor Seal Damage

Caused by competitor product leading to a leak of up to 8,000 litres per week. Estimated annual savings of £250,000.



The graph above shows the significant leakage drop after the leading UK refinery changed to Shell Turbo T 46 after May 28, 2024.