DURON[™]

THE TOUGHER. THE BETTER.

THE PROOF.

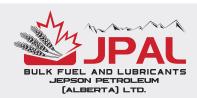
CUSTOMER: JEPSON PETROLEUM (ALBERTA),

CALGARY, ALBERTA, CANADA

RESULT: EXCEPTIONAL WEAR PROTECTION

AND EXTENDED OIL DRAINS







"Our four engine trial of the new DURON™ HP 15W-40 (API CK-4) saw extended drain intervals of up to 50%! This translates into hundreds of extra hours of engine usage and thousands of dollars saved."

Dave Jepson, Owner, Jepson Petroleum

THE CHALLENGE

In December 2016, API CK-4 and FA-4 were introduced as the new industry standards for heavy duty diesel engine oils. These specifications were designed to deliver superior performance over previous API CJ-4 and older categories, with a specific focus on delivering superior durability. The ultimate performance test is to see the new oils deliver in the real world.

For Jepson Petroleum, the first challenge came in communicating the upgrades and benefits of API CK-4 and FA-4 to customers. The second challenge was in knowing how the new oils would perform across the extreme temperatures of Jepson Petroleum's native region of Calgary, Alberta, which can vary from one day +20°C to the next -20°C.



THE SOLUTION

As a long-standing partner of Jepson Petroleum, Petro-Canada Lubricants proposed a field trial focused on DURON HP 15W-40 and its response in meeting the demands of varied use (long haul and long idles) experienced by Jepson Petroleum and many of its customers.

"The obvious answer to the challenge was to test the products in our own vehicles, so we could say to customers we have tried the new oils and we've seen with our own eyes that they truly deliver what they say they will. We'd never sell anything to a customer that we wouldn't use ourselves," said **Dayton**Cowan, Fleet Operations, Maintenance, Jepson Petroleum.

"We worked with Petro-Canada Lubricants to design a detailed trial of DURON HP 15W-40, testing the oil's performance within a variety of engines. We were supported by Petro-Canada Lubricants throughout the trial to ensure the oils were being tested to their absolute limit."

Randy Cook, Operations Manager, Jepson Petroleum

Jepson Petroleum (Alberta) Ltd is a leading wholesaler of lubricants and fuels across Alberta. With over 25 years in the business, Jepson Petroleum have the experience and the knowledge in a wide range of commercial industries, including mining, manufacturing, agriculture, construction and transportation.

THE RESULTS



- Synthetic-like performance and durability in a premium conventional oil
- Minimal viscosity change with the prolonged operating hours
- Significant improvement in wear protection, shear stability and TBN retention





THE TEST ENGINES - BULK FUEL DELIVERY VEHICLES

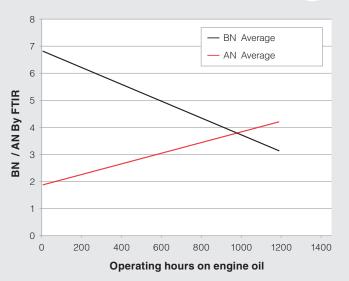
2007 Western Star 4900SA with CAT C15 engine 2012 Western Star 4900SB with Detroit Diesel DD15 engine 2012 Western Star 4900SF with Detroit Diesel DD15 engine 2012 Western Star 4900SF with Cummins ISX engine

THE TEST PROTOCOL

- Oil drain intervals extended systematically until minor loss of performance was observed by oil analysis
- Wear protection monitored by Jepson, with Petro-Canada Lubricants taking extensive used oil analysis for additional testing
- Petro-Canada Lubricants sales and technical teams on-site to ensure testing went smoothly and day-to-day operations at Jepson Petroleum were not interrupted

BN/AN TREND IN CUMMINS ISX, CAT C15 AND DD15





BN and AN cross over is a typical indication of the need to change the oil. DURON HP 15W-40 demonstrates up to 1,000 hr drain extensions

"The results were exceptional and beyond what we anticipated.

We now have first-hand evidence to show customers and demonstrate the real-time performance of DURON™ HP 15W-40. This process has really cemented our trust in Petro-Canada Lubricants and given us total faith and confidence in the DURON next generation product line." Dave Jepson, Owner, Jepson Petroleum

^{*} Extending drain intervals should always be undertaken in conjunction with an oil analysis program.



OUR NO-NONSENSE LUBRICANTS WARRANTY

Petro-Canada Lubricants will repair damaged equipment, or replace damaged equipment parts resulting from a failure due to defects of the Petro-Canada lubricant, as long as the lubricant is used in accordance with your equipment manufacturer's and our recommendations.

IT'S MORE THAN JUST A WARRANTY. IT'S A COMMITMENT.

To learn more about how Petro-Canada Lubricants can help your business visit: **www.petrocanadalubricants.com** or contact us at **lubecsr@HFSinclair.com**

Committed to the disciplined operation of our business.



