

Customer Testimonial



Monolec Ultra[®] Engine Oil (8800)

D & R Trucking – Stem, N.C.

1996 Kenworth T600

- Increased fuel mileage
- Reduced make-up oil
- Reduced operating temperatures
- Extended oil drain intervals

Customer Profile

Ricky Rigsby is an independent truck owner/operator of D & R Trucking in Stem, North Carolina. He hauls freight to the west coast and brings loads back to the east coast. He performs all the maintenance on his truck and trailer except the most heavy duty work.

Application

In 2003, he purchased his present truck unit, a 1996 Kenworth T600 with a N 14 500 Cummins engine with about 900,000 miles. The engine had been rebuilt at about 800,000 miles. It is equipped with a Fuller Eaton Super Ten transmission and 355 rear axle. The transmission was rebuilt right after purchase.

Challenge

Ricky was interested in an engine oil and lubricants that would give him longer drain intervals and superior wear protection for the engine, drive train and chassis of his truck.

LE Solution

The LE lubrication consultant at that time recommended Monolec Ultra[®] Engine Oil (8800) 15W-40 and other LE lubricants. Monolec 8800 contains Monolec[®], LE's exclusive wear reducing additive, which has been shown to reduce wear over 24%. Benefits of other LE lubricants for the transmission, rear axles and chassis were also discussed.

Results

Exact cost savings are difficult to quantify, however performance results have been impressive. Ricky made a couple of cross country trips after acquiring the truck using the previous lubricant, Mobil Delvac. Afterwards, the truck was converted to all LE lubricants including Monolec 8800 and the



following LE lubricants:

- LE 8450 Monolec[®] GFS Engine Oil (8450) SAE 50 – transmission
- Monolec[®] Gear Lubricant (703) 80W-90 – rear axle
- Almagard[®] Vari-Purpose Lubricant (3752) – chassis, U-joints and all grease applications

Ricky noticed a substantial performance increase. The following are his observations.

Before conversion, the engine used two gallons of oil on the trip to the west coast and back. After conversion, make up oil dropped to one gallon on each trip. At present, one gallon is added about every 7,000 miles.

Ricky observed fuel mileage before conversion was 5.5 – 5.7 mpg. After changing to LE lubricants, fuel mileage increased to 6.4 – 6.9 mpg and has stayed within that range. In figuring his savings, due to his limited run time with the other oil and the many variables in fuel mileage (i.e. load, speed, terrain, idle time, etc.) we applied a very conservative value (actual savings were probably more), over the past 5 years and 1,600,000 miles, fuel savings would amount to \$20,625.00 and saving over 7500 gallons of fuel. (Using 0.15 mile per gallon increase or about 2.5% and fuel cost at \$2.75 per gallon.)

No transmission fluid has been added in more than 3 years.



Operating temperatures in the transmission and rear axle went down substantially after installing LE.

| | Before Temperature | After Temperature |
|--------------|-----------------------|----------------------|
| Transmission | 160-180°F (71-82°C) | 100-150°F (38-66°C) |
| Rear Axle | 180-210°F (82-99°C) | 160-180°F (71-82°C) |

The performance increases by way of increased fuel mileage and lower operating temperatures can be attributed to LE's proprietary additive Monolec, contained in the lubricants. In simple terms, Monolec forms a barrier between the metal acting like liquid ball bearings to prevent metal to metal contact and increase the oil's film strength. The reduced metal contact creates less friction which creates less heat. Another benefit from less friction is less wear on the internal metal components equaling superior wear protection.

Ricky used LEAPSM (Lubrication Engineers Analysis Program) to establish complete engine oil drain intervals every 70,000 to 80,000 miles and filter only changes every 15,000 to 18,000 miles. He uses only Fleetguard 3000 oil filters. This system has worked well for him for seven years. The Cummins engine now has over 2,500,000 miles (over 1,600,000 miles on LE engine oil) and still going strong. He has not done any mechanical work on the engine's internal parts except to repair an injector. This superior wear protection has resulted in a valuable savings in parts, labor and no downtime that is difficult to calculate.

The volume of engine oil used during the last seven years was reduced by almost 65%, from 1,360 gallons to 483 gallons. This reduction in oil consumption makes LE lubricants more environmentally friendly than other engine oil brands. This calculation is based on his filter and oil drain intervals with LE engine oil versus if he had continued using the Mobil product (1,600,000 miles and sump capacity is 11 gallons).

Mobil engine oil with 20,000 mile oil and filter changes, adding 2 gallons of make up oil every 5,000 miles.
 $(80 \text{ oil changes} \times 11 \text{ gallons}) + (2 \text{ gallons added every } 5,000 \text{ miles} \times 3 \text{ times between oil changes} \times 80) = 1,360 \text{ gallons}$

LE 8800 engine oil with 75,000 mile oil and filter changes, filter only changes every 16,000 and one gallon make up oil every 7,000 miles.

$(21 \text{ oil changes} \times 11 \text{ gallons}) + (4 \text{ filter only changes every oil and filter change} \times 1 \text{ gallon} \times 21 \text{ oil changes}) + (1 \text{ gallon oil added every } 7,000 \text{ miles} \times 2 \text{ times every filter only change} \times 4 \text{ filter only changes every oil and filter change} \times 15) = 483 \text{ gallons}$

Using Monolec 8800 engine oil over the past 7 years, Ricky has saved at least 877 gallons of oil, a reduction of almost 65%.

Ricky is extremely pleased with the superior job LE lubricants has done for him. He is very proud of his truck and likes to show off the 2,500,000 mile engine with no oil leaks (see photo).



Ricky has no plans to trade the truck anytime soon. When asked if he wanted to trade or sell his truck for a newer model he said, "No way, I couldn't afford to....mine runs too good and has no problems....just look at the engine and how clean it is."

"Couldn't ask for any better product..... been really pleased, happy I made the change...I can't find anything better... everybody ought to use it (LE)," says Ricky.

Thank you to Ricky Rigsby, owner/operator, and to Jeff Boyles, LE lubrication consultant (pictured), for providing the information used in this report.



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