

Customer Testimonial



Monolec Ultra[®] Engine Oil (8800)

Marquette Transit Authority – Marquette, Mich.

Caterpillar 3208 & Detroit Diesel 8.2L Diesel Engines

- *Extended oil drain intervals from 6,000 miles to more than 50,000 miles*
- *Better cold weather performance*
- *Reduced makeup oil by 50% in all units*

Customer Profile

Marquette Transit Authority (MARQTRAN) is a municipal transit system funded by State, City and County governments. They provide countywide service in one of Michigan's largest counties, and have been an LE customer since 1992.

Application

The fleet consists of 15 Thomas coaches; five powered by Caterpillar 3208 or 3116 diesel engines and Detroit Diesel 8.2L diesel engines. The remainder of the fleet varies in size, with some gasoline and some diesel engines. Marquette County is located on the Southern shore of Lake Superior, which is known for its severe storms. In the winter temperatures average -20°F (-29°C) with 200 inches of snow annually. Most units in the Marquette Transit Authority will travel approximately 50,000 miles per year.

Challenge

Due to the climate and many unpaved roads, severe operating conditions are a way of life, which is tough on equipment. Although MARQTRAN was having no real problems, they were open to saving on operating costs and increasing equipment life. After a presentation on the LE lubricants and services, they entered into a side-by-side test against their current major oil supplier. They believed the major oil company product, a 15W-40 engine oil, to be the best value for their money. LEAPSM (Lubrication Engineers Analysis Program) would be run on both product lines to determine the best lubricant



investment. Their goal was to provide lower operating costs and improve equipment uptime and service life. Drain intervals were 6,000 miles or 300 hours.

LE Solution

Greg Klang, LE lubrication consultant, recommended Monolec Ultra[®] Engine Oil (8800) to reduce labor costs, reduce lubricant consumption and to lower overall operational costs. As the test progressed, Monolec Ultra 8800 far outperformed the major oil company's product. It was easily able to operate beyond the goal of 18,000 miles or 900 hours. LEAP is used to safely monitor the condition of the oil.



Results

Monolec Ultra 8800 has shown excellent results with drain intervals beyond 50,000 miles and over 3,700 hours.

Transmission and differential drain intervals have also been increased over 300% with no problems and smoother performance. The mechanics noted the LE gear oil looks as clean and clear after three years (150,000 miles) as the day it was installed. The previous gear oil would look milky and dirty after only two months use, and was typically changed when routine maintenance was performed.

Grease consumption was reduced by 70% using Almagard® Vari-Purpose Lubricant (3751). Brian Bauman, garage superintendent, states, "That LE grease really stays where you put it." This dramatically reduced repair costs on king pins and U-joints.

Marquette Transit Authority experienced the following benefits of using LE products:

- With Monolec Ultra 8800, drain intervals were extended 8.3 times beyond what MARQTRAN considered a "good value." These extended drains also saved on labor, and allowed maintenance personnel to focus more time on predictive maintenance tasks. All filter change intervals remain at OEM recommendations. The buses performed better in cold weather. Previously the units had to be started three to four times before the oil pressure shutdown switches would come up to proper pressure. With Monolec Ultra 8800, all units start and achieve proper oil pressure on the first try. This saves man hours and reduces the wear that typically occurs when starting a cold engine. Makeup oil was reduced by 50% in all units.

- There was a 3 to 5 percent fuel savings on all units.
- Reduction in labor costs

The cost savings figures do not include the value of makeup oil or the fuel savings.

Marquett Transit Authority estimates an annual savings on 15 units of \$4077.05.

Other Products Used

- Monolec® Power Fluid (7500) is used in transmissions, power steering units and automatic transmissions throughout the fleet. It has extended drain intervals and enhanced performance in these applications. Drain intervals have been safely extended from 50,000 miles to 150,000 miles. It has also consolidated inventory—they are now using one LE product, where previously they had to stock three products.
- Monolec® Gear Lubricant (703) is used in all differentials. Drain intervals average 200,000 miles. They have added Des-Case Breathers to the rear axle vent to preclude contamination. Monolec 703 looked good at 2,000 miles, but was contaminated by water, road salt and dust. The breathers should extend the intervals even further.
- BTU+ Total Treat (2410) and BTU+ Power Supplement & Cleaner (2420) have enabled MARQTRAN to eliminate fuel related problems during the extreme winters of Northern Michigan.

Thank you to Brian Bauman, garage superintendent, Gene Hiekles, maintenance inspector, and to Greg Klang, LE lubrication consultant (pictured), for providing the information used in this report.



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Based on actual user experience. Individual results may vary. Not intended to supersede manufacturer specifications.