Hydrotex
Your Lubrication Solution Partners®

Case Study: Lubrication Management Reduces Operating Costs

Summary: A successful LTL carrier based out of Gering Nebraska served the contiguous 48 states and parts of Canada through its truckload division. Their fleet faced severe climate changes with hot summers and very cold and snowy winters.

The LTL Carrier's Terminal Manager & Head Mechanic voiced concerns regarding fleet maintenance. A program incorporating fuel analysis and Hydrotex Power-Kleen, a diesel fuel improver, was initiated on a test fleet of 10 trucks for nine (9) months. The resultant fuel efficiency improvements were measurable and dramatic; the program was extended to the entire fleet. This led the way to a collaborative partnership with Hydrotex.

This LTL carrier used HyFilm® LEO 5W40, Hydrosynthetic® Engine Oil in all of their vehicles and the average drain cycle was extended four to five times over the historical average. The fleet of 118 over-the-road trucks drove a combined total of six (6) million miles per year. After the implementation of the Hydrotex Lubrication Management Process, the number of oil changes for this fleet dropped from approximately 600 oil changes annually to 133. The resultant annualized savings in oil filters was $20,510. In addition, 4,907 fewer gallons of engine oil was used, giving a net annualized savings for oil over $42,000. The conversion to HyFilm LEO essentially provided a 2:1 ROI; for every dollar spent on HyFilm LEO, high performance engine oil, two dollars are saved due to extended drains, fewer filters and less oil. Reduced costs associated with equipment downtime and maintenance savings were not included in the economics. Oil analysis was performed on all vehicles and was an effective tool for a condition-based maintenance program. For example, oil analysis was crucial in identifying faulty oil coolers in recently purchased trucks; the analysis identified the problem and predicted the failure while the units were still under warranty. Oil analysis combined with proper data interpretation was an effective tool to identify potential problems and optimize maintenance intervals.

The LTL carrier had also experienced premature failures on U-Joints. On average, U-Joints were being changed every nine (9) months. The problem was linked to a lack of lubrication and the usage of inferior grease. It was estimated that each failure cost approximately $200. HydroSyn® 70 NLGI #2 was recommended and now the U Joints remained in service for an average of 2.5 years. The annualized savings was over $31,000.

The winter months also presented a unique and separate set of challenges with fuel gelling issues. Fuel analysis was utilized to adjust and optimize the treat ratio of fuel with Hydrotex Power-Kleen^{a} Arctic diesel fuel improver; this compensates for the quality of diesel fuel that was available. Wax content can vary not only with the season (winter fuel vs. summer fuel) but also from load to load. It was estimated the carrier incurred a cost of $1,000 for every stranded truck due to icing, gelling and plugged fuel filters. Through utilizing the Hydrotex products and solutions, this concern and these expenses were eliminated.

The owner of the LTL carrier, summed up the relationship, "Our long-term partnership with Hydrotex and our local Hydrotex Division Partner is very successful. Not only did we protect our equipment with high performance lubricants, but we implemented a Lubrication Management Process that reduced operating costs, increased ROI and reduced our carbon footprint. In addition, our Fuel and Oil Analysis programs provided critical information regarding the performance and endurance of our equipment while establishing a roadmap to quality short-term and long-term maintenance planning."