

4934 ALL PURPOSE HYDRAULIC OIL

PLASTIC RECYCLING PLANT, Central North Carolina

American Baler • SIC 5093 Scrap and Waste Material

- ▶ **Operating temp dropped 10 to 30 degrees F**
- ▶ **Saved at least 110 gallons of make-up oil**

CUSTOMER PROFILE

This plastic recycler recently moved into a new, larger facility in order to operate more efficiently and expand production. The plant recycles various plastic containers and sells the ground product to industries across the Southeastern United States to make into plastic containers and products.

The wash line operates two shifts, six to seven days a week and the grinders operate five to six days a week. The plant will be adding one or more extrusion lines in order to offer its customers extruded products, in addition to the ground material.

APPLICATION

The plant uses an American Baler with a 120-gallon hydraulic reservoir to bale plastic bottles into rectangular cubes for easier handling and shipping.

AREA OF INTEREST

The American Baler operates 60 to 80 hours a week. While using a commercial grade lubricant (ISO 68), the baler ran hot (130-145°F / 54-62°C) and lost 50 gallons of hydraulic oil every three to four months. *"The oil was not leaking,"* the maintenance manager said.



LE Lubrication Consultant Jeffrey Boyles said the most likely explanation was that the commercial grade hydraulic oil was foaming, heating up and evaporating.

LE SOLUTION

Jeffrey Boyles explained the benefits of LE lubricants and recommended the use of one of LE's high-performance hydraulic oils—either 6120 Monolec® or 4934 All Purpose Hydraulic Oil. The plant's maintenance manager and owner decided to try 4934 in the baler and in some other applications that had leaking issues. If 4934 performed well and the leaks slowed or stopped, they planned to change to the higher performance 6120 for energy saving studies.



CUSTOMER COST SAVINGS

In early December, 55 gallons of 4934 All Purpose Hydraulic Oil was added as make-up oil to the American Baler. Within a few days, the maintenance manager noticed the baler was running 10-30°F cooler, down to 115-120°F (46-49°C). Seven months after adding the initial 55 gallons of LE 4934 as make-up oil, the oil level is full, no make-up oil has been added and none is needed. If still using the previous hydraulic oil, two 55-gallon drums (110 gallons) would already have been added by now. The machine is running cooler, which promotes longer seal, hose, equipment and lubricant life.

“When I need oil or grease, I am going to call you (LE Lubrication Consultant Jeffrey Boyles),” said the plant’s maintenance manager. “That oil did exactly what you said it would; you didn’t shoot me a line. I like your oil, it costs a little more, but it’s worth it. I’m going to buy LE.”

OTHER PRODUCTS USED

The plant is also currently using LE 1275 Almaplex® Industrial Lubricant in all grease applications throughout the plant. Boyles recommended 1275 due to the high moisture area around the wash line. According to maintenance personnel, 1275 is staying in place much better than the previous grease that was used.

We would like to thank the maintenance manager at the plastic recycling plant and LE Lubrication Consultant, Jeffrey Boyles (pictured), for the information provided for this report.

