



Duolec® Vari-Purpose Gear Lubricant (1605)

Brad Coley – Granville County, N.C.

Hale PTO-Driven Irrigation Pump

- Lowered operating temperature

Customer Profile

Brad Coley farms 200 acres of corn and 100 acres of soybeans in Granville County, NC.

Application

He uses a Hale 50 FB PTO-driven irrigation pump with a 2-gallon gear oil reservoir using an ISO 220 EP gear oil.

Challenge

Brad uses the Hale pump to irrigate his corn acreage. He noticed when the pump was run for a few hours, it became very hot, much too hot to touch. His dad had been using a regular commercial grade gear oil from the local parts store when he needed to change or add oil to the pump. He had a neighbor with a similar pump and the same problem who also needed help.

LE Solution

In addition to his farming operation, Brad is the fleet maintenance manager at nearby Wake Electric Membership Coop. In more than 12 years there, the shop has always used LE lubricants with excellent results. He noted the LE products had performed exceptionally well. Products such as the LE grease in truck chassis and heavy equipment, LE power fluid in transmissions, LE hydraulic oil in the boom trucks and last but not least, LE gear oil in gearboxes. He had also used the LE power fluid in his combine and Almagard® Vari-Purpose Lubricant (3752) for all grease points in his farm equipment. So, he figured he would try Duolec® Vari-Purpose Gear Lubricant (1605) in the Hale pump.

Duolec Vari-Purpose Gear Lubricant (1605) is a great choice for this application. It is made to be a high-performance industrial and automotive gear oil that is an ISO 220 EP.

It is designed for use in any industrial gear or bearing application requiring a thermally stable EP lubricant. LE's Duolec also meets the requirements for use in many hypoid gear applications used in heavy-duty mobile equipment. It contains exclusive LE additives to increase performance. A shear stable tackifier provides adhesion to the metal during use. Duolec is a dual-acting liquid additive that increases film strength and protects metal surfaces at greater temperatures and loads.

Results

Brad converted his Hale irrigation pump to Duolec 1605. He immediately noticed the pump did not get as hot, even after several hours of hard running. The temperature stayed under 130°F (54°C), and it was OK to touch the housing, whereas before you were not able to do so without burning your hand. Brad is very happy about the lower operating temperature and knows it will promote longer life of the equipment.

Brad's neighbor was using a similar pump for his irrigation. His neighbor came by after Brad had changed the oil in his pump and noticed how cool it was running. He asked Brad how he did it; he couldn't believe how cool it was running. His irrigation pump unit was running so hot it had discolored the paint. Brad told him it was probably the LE gear oil that was making the difference. He gave his neighbor some of his LE oil. Brad and his neighbor changed out the unit, and he had similar results. The neighbor's irrigation pump is now running cool enough to touch.

Other LE Products Used

- Almagard® Vari-Purpose Lubricant (3752)
- Monolec® Power Fluid (7500)



*Thank you to Brad Coley and to Jeff Boyles,
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providing the information used in this report.*



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