Christopher Beach, Agricultural Systems Management

Year in School: Junior

Faculty Mentor: Dr. Leon Schumacher, Agricultural Engineering Funding Source: CAFNR On-Campus Research Internship Program

Oil sample analysis from biodiesel engines

Oil samples from the Columbia Transit biodiesel engines were secured and analyzed. The data was formatted into Excel where it was then broken down into three segements. The first showing engine wear when it ran on petroleum based diesel, the next when it ran a 20% biodiesel blend, and the last segment when it ran a 2% blend. The amounts of various metals contained in the samples were used to determine which fuel provided the best lubricity to the engine.