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cen-pe-co[®]
LUBRICANTS

CENTRAL PETROLEUM COMPANY
Cleveland, OH Walcott, IA

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CENTRAL NEWS[®]

MERRY CHRISTMAS

Lead by an increase in fuel additive sales, Cen-Pe-Co is approaching another national year end sales record. In November fuel additive shipped sales were the highest for any one month since 1992 when diesel fuel's sulfur content was previously reduced. Our projections show a continued upward momentum in fuel additive demand due to the new low sulfur requirements for at least the foreseeable future.

Cen-Pe-Co helped start the fuel additive industry back in the early 1940's. We were a pioneer who discovered and developed the most efficient and effective fuel additive technology. Today Cen-Pe-Co continues its innovative ways by constantly searching and developing superior fuel additive technology.

Cen-Pe-Co's sales force has done an excellent job of educating their customers about the greater importance of fuel additives in these modern times. I'm sure they have saved their customers a lot of money, down time and aggravation. Cen-Pe-Co's sales force has benefited in kind through increased sales volumes. In fact, this is the first year that four individuals will have sales of over \$300,000.00 each.

In 2006 our customers won 11 more national and international year end truck & tractor pulling championships, bringing our grand total to more than 90 year-end championships in the last 10 years.

We continue to be a great team with superior products. Thanks to our loyal sales force, customers, distributors, office and plant personnel, Cen-Pe-Co is celebrating its 96th year.

HAPPY NEW YEAR

Paul T. Webster III

BIODIESEL WARNING

The National Biodiesel Board issued a “winter weather advisory” for biodiesel¹. In national biodiesel quality testing on samples pulled between November 2005 and July 2006, one-third of the biodiesel samples were found to be out of spec because of incomplete processing. According to the board, “cold weather can amplify problems caused by out-of-spec fuel.”

In plain English, a lot of biodiesel has glycerin left in it. Although glycerin can cause injector deposits and other problems, those problems do not cause immediate failures in warm weather. At temperatures approaching 0° F, glycerin will separate from the biodiesel blend and plug fuel filters.

Once the glycerin falls out, it does not go back in. You can heat the mixture to 80° with strong agitation, and the glycerin will promptly settle back out. Fuel filters keep plugging until all of the glycerin is removed.

This is precisely what happened in Minnesota in December 2005 with B2 (2% biodiesel) diesel fuel. Then the state’s Weights and Measures people started to enforce compliance with ASTM D-6751 specifications. So, filter plugging from glycerin is less likely in Minnesota this year, but apparently only a few other states learned from Minnesota’s experience.

Since glycerin will not go back into suspension after it has fallen out, it should be relatively easy to determine if glycerin is what caused the filter plugging. Allow the filter to warm up, and pour its contents into a clear container. If a liquid quickly separates to the bottom, and it is not water, it is probably glycerin.

It is likely that a lot of people will blame biodiesel for filter plugging this winter, when they should blame the biodiesel producer for poor quality control. In the words of a fuel expert, the biodiesel manufacturers have a specification “loose enough to drive a truck through,” and a lot of them still don’t meet it.



1. “National Biodiesel Board Issues Winter Weather Advisory” National Biodiesel Board, Jefferson City, MO, Press Release 11/8/2006.

Reverser Gear Lube

By Blaine Ballentine

I have received several reports of problems with the feeder house reverser gear case in some John Deere combines. Cen-Pe-Co Hy-Torque Gear Lube SAE 80W-90 will extend the life of these units

I am not trying to cast doubts on Deere’s quality. To their credit, I have

heard they fixed the problem in their newer combines.

The premature failures seem to occur most often in stan-

dard capacity reverser gearboxes driving large heads, such as 12 row heads. Standard capacity reverser gearboxes hold one quart and high capacity reverser gearboxes hold over 3 ½ quarts.

Mark Bosma has a client with a John Deere 9500 series combine. He

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used the John Deere branded synthetic lubricant his dealer recommended in the reverser gear case. The reverser



gears failed twice in the same season. The expense of the repairs was bad enough, but the down time was even worse.

Mark recommended Cen-Pe-Co Hy-Torque Gear Lube SAE 80W-90 for the reverser gearbox, because of its superior film strength. The combine has now completed four harvests without a failure. The client farms about 2000 acres and changes gear lube in the reverser box twice per year—when he switches from the bean head to the corn head and when he is done for the

year.

One of Bob Nagle's clients has four John Deere combines. He is on a two year trading cycle where he trades for two new combines each year. When he traded for combines that only had one quart of capacity in the reverser gear box, he began experiencing high temperatures and failures. His dealer recommended John Deere's synthetic gear lube, and Bob recommended Cen-Pe-Co Hy-Torque Gear Lube SAE

90. So, he put the synthetic gear lube in two combines and Hy-Torque in the other two. Both of the combines with the synthetic gear lube had reverser gear failures, and both of the combines with Hy-Torque gear lube had no problems.

Cen-Pe-Co Hy-Torque Gear Lube carries a heavier load than synthetic gear lubes, provides a thicker film, reduces wear, and in many cases lowers temperatures. Reverser gearboxes on combines is just another application where the difference becomes readily apparent.

PROLONGING SEAL LIFE

When hydrocarbons oxidize (when fuel and oil break down), they form peroxides. Peroxides can attack nitrile rubber, the most common material in making seals and hoses, causing it to age prematurely². The oxidation takes

place when hydrocarbons are exposed to oxygen, and the process is accelerated by heat.

Fuel stabilizing additives can prolong seal life. When seasonal equipment is put in storage, the fuel

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can oxidize and form peroxides, which shorten seal life. Antioxidant additives inhibit the formation of peroxides.

Fuel also oxidizes when exposed to heat. Modern engines use fuel to cool the injectors, so heated fuel is returned to the fuel tank. In summer's heat when the fuel tank is running low (1/4 tank full), the fuel temperature becomes high enough that fuel can oxidize fairly quickly. Again, an antioxidant fuel additive can block the production of peroxides.

Oxidation of engine, hydraulic, and gear oils takes place at slower

rate, even though typical oil temperatures are much higher than typical fuel temperatures. To make seals and hoses last longer, do not extend oil drains to the oxidative limit, and do not store equipment with worn out oil in it.

So, using fuel additives, "pickling" engines for storage, and other proper maintenance procedures not only prolong the life of equipment's hardware, but also prolong the life of its seals and hoses.



2. "Fuel Leaks from Seals of Vehicles using Ultra Low Sulfur Diesel" Technical Bulletins FTB-2-1, Chevron Products Company 8/05.

30 YEARS DELIVERING CEN-PE-CO LUBRICANTS



At 17 years of age, one of Steve McGee's first jobs was to deliver Cen-Pe-Co's products around the State of Maine. Today, Steve's company delivers Cen-Pe-Co's products throughout New England. During these 30 years, Steve has grown his company, McGee Construction, to include over 90 trucks, 25 excavators, 10 bulldozers, 15 loaders, and over 100 employees. Steve's companies rely on Cen-Pe-Co Lubricants to protect his most important pieces of equipment. Steve is shown here with his new truck for Cen-Pe-Co deliveries, including a hydraulic lift gate and side delivery door. Thank you for 30 years of service, Steve!