

FLEETS PUT TO THE TEST BIODIESEL

Recent studies have shown that fleets using biodiesel have reported no significant differences in performance, maintenance, or fuel efficiency with biodiesel versus traditional diesel fuel.

BY CHAD SIMON



For just a few dollars more, business fleets are increasingly taking matters into their own hands when it comes to reducing their environmental footprint and stemming the flow of cash overseas for foreign oil. Biofuels, such as biodiesel and ethanol, are more readily available today than ever before and are derived from products grown by farmers in the U.S., including soybeans and corn.

Recent studies have shown that fleets using biodiesel have reported no significant differences in performance, maintenance or fuel efficiency with biodiesel versus traditional diesel fuel. One such fleet is Gotcha-2Look Marketing Inc.

OUTDOOR ADVERTISING ON WHEELS

Chris McKenna, president of Gotcha-2Look Marketing Inc., a startup marketing and advertising company based in Sacramento, Calif., currently has one Isuzu NPR medium-duty diesel truck with a custom box on the back

designed for a capacity of 30 scrolling billboards on three sides.

The outdoor advertising company on wheels covers the South Placer section of the Sacramento market, and provides clients with billboard advertising directed to the customers they're trying to acquire. The billboards scroll behind the three-sided glass when in billboard mode, but when they're removed, the truck serves as a showroom on wheels.

MEASURING THE \$2 DIFFERENCE

Biodiesel wasn't available in the Sacramento area when McKenna took delivery of his truck. However, Propel Fuels, which owns and operates a growing network of clean fueling stations, brought B-20, a blend of petroleum diesel with 20 percent biodiesel, into the marketplace in January.

Biodiesel currently runs about 5-10 cents more per gallon than regular diesel, according to McKenna. His truck operates 100 miles per day, is

on the road six days a week and needs refueling two or three times a week. He says his fill-ups are costing him only \$2 more than petrodiesel.

"For \$2, I get the satisfaction of knowing I'm doing things that are not only helping to create a little less impact on the environment, but also supporting my 'buy American' philosophy," said McKenna.

McKenna feels that fleet managers who are not taking advantage of the benefits of biofuels are planning for a short-term gain, but a long-term loss.

"I think we need to be a bit more mindful of how we're consuming resources in this country and how we're going to help not only the environment, but our economy in America, rather than spending so much money buying foreign oil," said McKenna.

COMPARING PERFORMANCE

McKenna has not experienced any difference in performance characteristics between biodiesel and



Nice View



Don't be fooled by its exceedingly good looks. The sleek, compact body of the Volvo S40 embraces technology and provides uncompromising performance while maintaining fuel efficiency. Down to the smallest details, from its contemporary Scandinavian interior, to Volvo's legendary safety systems and commitment to a cleaner world, the S40 offers style, safety, AND value. It's a hard-working, energetic sedan that will enhance the performance of your fleet.

- Impressive Life Cycle Cost Package
- Attractive Fleet Incentive
- 4 year, 50,000 mile Warranty
- Road Side Assistance
- High Residual Values
- Low Fuel Consumption
- Intelligent Safety Systems
- Environmentally Friendly
- 31 MPG highway rating

VOLVO. YOUR PREMIUM FLEET EXPERIENCE.



www.volvocars.us/fleet • Toll free 1 877 283-5338



This Isuzu NPR medium-duty diesel truck used by Gotcha2Look Marketing Inc. in Sacramento, Calif., used a B-20 blend of biodiesel (20 percent biodiesel/80 percent petroleum diesel) without any difference in performance characteristics compared to regular diesel.

regular diesel fuel when it comes to acceleration and fuel efficiency (about 12-13 mpg). His research has shown there is no significant engine degradation when using biodiesel versus diesel fuel, and he doesn't anticipate any significant problems

in the long term.

"When the vehicle was acquired in Seattle, I drove it to our marketplace and had to use regular diesel fuel on the way down because there were no biodiesel stations available," said McKenna. "I drove 800 miles using diesel and compared performance with the biodiesel. I haven't noticed anything appreciably different in the operation or the economy of the vehicle."

Cold-weather starts have been a common problem with biodiesel. When temperatures near 32 degrees Fahrenheit, some biodiesel can begin to crystallize and plug fuel filters.

Because of Sacramento's temperate climate, cold-weather starts are not a problem for McKenna. However, Propel has conducted studies on trucks operating in below-freezing temperatures and saw no problems with gelling.

OTHER FLEET TESTS

Propel has conducted tests in other small fleets. In 2008, Propel con-

ducted a 13-week pilot program to examine the use of B99 biodiesel in a fleet of six delivery vehicles used by the Essential Baking Company in Sacramento. Vehicles selected varied in model, types of routes and mileage driven.

Drivers fueled exclusively with B99 biodiesel at Propel's Clean Fuel Points (CFPs) and used six Wright Express (WEX) fleet fueling cards registered in Propel's CleanDrive program. CleanDrive tracked gallons used by the Essential Baking vehicles and calculated the fleet's reduction of CO2 and other pollutants.

During the pilot, the six vehicles

COLD-WEATHER TIP

To keep engines performing well in freezing temperatures, fleet managers should adjust fuel ratios to a 50 percent biodiesel, 50 percent petroleum diesel blend.

BIODIESEL 101

What is biodiesel?

Biodiesel is the name of a clean-burning alternative fuel, produced from domestic, renewable resources, such as vegetable oils or fats.

What are the benefits to using biodiesel?

Advantages of biodiesel include:

- Use in any diesel equipment without modification
- Reduction in CO2 emissions.

Is biodiesel used as a pure fuel or is it blended with petroleum diesel?

Biodiesel contains no petroleum, but it can be blended at any level with petroleum diesel to create a biodiesel blend. For example, fuel containing 20 percent biodiesel is labeled B-20, while pure biodiesel is referred to as B-100.

BIODIESEL AVAILABILITY BY STATE

In 2007 there were only 700 commercial pumps in the U.S. that offered biodiesel fuel. Now, more than 1,349 stations nationwide offer the alternative fuel.

For a complete list of biodiesel producers, distributors and retail fueling sites, visit the National Biodiesel Board's official site at www.biodiesel.org. The site contains an interactive map of fueling stations.

traveled about 37,000 miles on just less than 2,500 gallons of B99. Propel reports that no vehicle failures and no operational issues were experienced. Cold weather proved not to be a problem for the vehicles, even with 32 days when the daily low temperature was below 35 degrees. The majority of drivers reported

that the vehicles ran smoother and quieter on B99 than on petrodiesel, Propel reports.

Running B99 required no additional maintenance, although fuel filters were changed after the second tank of B99 to eliminate possible petroleum diesel sludge remaining in the fuel tanks, which could affect performance. Afterwards, the fuel filter replacement interval was the same as that for petrodiesel vehicles.

ENVIRONMENTAL BENEFITS

In just over three months, while fueling with B99 rather than petrodiesel, Essential Baking reduced the output of CO2 by more than 43,000 lbs and offset the importation of 1,553 gallons of oil. At the same time, particulate matter (PM) produced was reduced by 78 percent, air toxics were reduced by 60 to 90 percent and sulfur compounds were eliminated from vehicle exhaust. **BF**



Is this how you view the used car market?

Motorlease can put you back on solid ground.

Removing risk from your fleet operations is what Motorlease has specialized in for the last 60 years. We do this first and foremost by managing the risk in the value of the used vehicle.

- These services include:
- Full vehicle maintenance
 - Maintenance management
 - Insurance and insurance management
 - Vehicle registration and renewal
 - Driver training
 - Personal use tracking



800.243.0182
www.motorleasecorp.com