



# ULTRA-LOW-SULFUR FUEL CONTINUES TO PLAGUE STORAGE TANKS, DIESEL ENGINES

## STUDIES FIND CONCERNING LEVELS OF CONTAMINATION, CORROSION

ALEXANDRIA, VA—On the heels of the EPA's recent federal study showing higher levels of corrosion on metal parts in underground storage tanks containing ultra-low sulfur diesel (ULSD), a NORA-funded study of 150 fuel samples pulled from storage tanks containing ultra-low-sulfur heating oil (ULSHO) found that moisture and microbial contamination—the precursors to corrosion and fouling—should be a foremost concern for oilheat dealers and their customers. More than half of the fuel samples collected tested positive for bacteria or fungus.

The problems associated with ultra-low-sulfur fuels are not exclusive to the heating oil industry. For trucking fleets, the introduction of ULSD has plagued Tier 4 engines with a number of issues, including injector failures, filter plugging, loss of power, and poor fuel economy. More recently, fuel injection systems with EGR and DPF components are increasingly more problematic.

At AFS, we see these problems at every level of the supply chain, every day. We identify them, eliminate them, and through the application of advanced technology and comprehensive preventative maintenance strategies, we keep them from occurring again.

Our premium heating oil treatment, HeatDoc™, has successfully treated millions of gallons of fuel, combating contamination and corrosion, while improving fuel stability and performance.

Our high-performance diesel additive, O.P.T.™ (Optimum Performance Technology), features an advanced detergent balanced by twin stabilizers, corrosion inhibitors, and

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moisture dispersants to clean and protect sensitive fuel injectors and the entire fuel handling delivery system. O.P.T.™ is effective in all diesel powered equipment and is engineered to support the use of biodiesel in ultra-low sulfur fuels in high pressure common rail fuel systems. The product is field tested and proven to maximize uptime while minimizing maintenance and repair costs. Contact us for the results of a recent O.P.T.™ customer fleet study.

## AFS BOLSTERS SALES TEAM

NORTH ANDOVER, MA—AFS is pleased to announce the addition of account executive

Barry Aruda to help the company manage and sustain its continued trajectory of growth in the Northeast and beyond.

Aruda comes to AFS with over 10 years of business development experience in the service sector. His proven track record in business development and customer satisfaction positions him well as he develops our northern New England marketplace. Barry attended the University of Massachusetts, Lowell.

“As we continue to grow, the addition of Barry will ensure that new and existing customers have the support and resources needed in order to pass on that same standard of reliability to their own customers,” said AFS president Paul Nazzaro. “As always, we remain mindful that the rate of our growth never eclipse the quality of our service.”

## TOP TIER DIESEL ON HORIZON

### VEHICLE MANUFACTURERS TOUT BENEFITS OF ADDITIZED DIESEL

SAVANNAH, GA—The Oil Price Information Service (OPIS) reported that eight vehicle manufacturers are launching a standard for premium diesel similar to the TOP TIER detergency standard that's widely accepted for gasoline.

OPIS said that according to the Center for Quality Assurance, which administers the licensing process for TOP TIER, The TOP TIER Diesel logo is already designed, and TOP TIER Diesel has four light-duty and four heavy-duty vehicle manufacturers lined up as sponsors.

"The Center for Quality Assurance recognizes the transportation business needs to be educated on fuel quality," OPIS reported.

"The Center was touting several key benefits of TOP TIER Diesel: improved lubricity; increased detergency for cleaner injectors; improved fuel stability with respect to oxidation, especially for biodiesel; and improved housekeeping to keep water and bugs out of the fuel."

To experience the benefits of a TOP TIER-level diesel today, call (978) 258-8360. 

## HOW HEALTHY IS YOUR FUEL?

### THE TIME TO CHECK IS NOW

NORTH ANDOVER, MA—Fuel storage facilities should be sampling and analyzing their fuel three to four times a year—the start of spring being one of them. As frigid winter air gives way to cool spring nights and warmer days, the alternating temps will conspire to create condensation within the tank, a leading cause of water contamination.

Water is both the most common and most harmful contaminant to distillate fuel. It can get into the fuel during refining, storage, transportation and delivery, and is virtually impossible to eliminate completely. Common scenarios include rainwater seeping in through



## TRUCK-MOUNTED ADDITIVE DISPENSING UNIT ENSURES PROPER TREAT RATE

The AFS FuelProof™ system is designed to accurately, safely, and automatically inject additive when loading diesel fuel or home heating oil, eliminating the need for drivers to fill jugs and pour additive into the hose prior to loading a truck with fuel.

The system—which consists of a module computer, pump, and meter, an eight-gallon storage tank, and steel tube injection

lines—eliminates guessing, as dosing is now achieved by simply entering the desired number of gallons into the control panel on the truck.

"The FuelProof™ ensures that you're neither under- nor over-treating your fuel, protecting both your product and your bottom line," said AFS technical advisor Paul Nazzaro, Jr.

Call (978) 258-8360 to learn more. 

the roof or vent of a tank, or humid air carrying moisture in during a fuel withdrawal. Once in the tank, water becomes a breeding ground for bacterial cells and fungal spores known in the industry as "bugs."

Bugs will live in the water at the bottom of the tank and feed off the hydrocarbons in the fuel at the fuel/water interface. They'll also consume rubber gaskets, O-rings, hoses, tank linings and coatings in an effort to obtain their mineral content. The waste from this process produces water, sludge, acids and other harmful byproducts. Under the ideal conditions of a warm spring or summer day (68-86 degrees Fahrenheit), bacteria can double in population every 20 minutes, forming destructive, gel-like colonies known as biofilms. If not addressed, the proliferation of bugs will clog fuel filters, fuel lines and gauges; corrode pumps, injectors and tank bottoms; cause washers, hoses and connectors to swell and blister; degrade fuel, and cause poor fuel economy.

### CONTAMINATION REMOVAL

If microbial contamination is detected—either by visual observation of a fuel filter or bottom sample, or by analytical laboratory testing—cleanup can be both difficult and expensive. In all cases, water bottoms should be drained and a biocide should be added

to treat the remaining fuel. While in some instances it may only be necessary to filter the treated fuel, more severe cases will require physical removal of floating biofilm or bottom sludge. Depending on the severity of the problem, manual cleaning of the tank may be required before refueling to remove any remaining debris or corrosive byproduct from the interior surface.

Good housekeeping is the best and most cost-effective preventative measure against water and microbial contamination. Please review the following housekeeping checklist, and don't hesitate to contact us for an evaluation of your fuel and fuel systems. Ask about our Certified Fuel Quality Checkup.™ 

## UPCOMING EVENTS

### EASTERN ENERGY EXPO

- May 21-25, 2017
- Hershey Lodge & Convention Center, Hersey, PA
- Easternenergyexpo.com

### NEFI EXPO

- June 14-15, 2017
- DCU Center, Worcester, MA
- Nefi.com/expo.php