Recommended Procedure

ULSD Accelerated Corrosion issues

Objective: Minimize recurrence of corrosion to fueling system components.

I. Test for the presence of microbes.
   A. Fuel samples should come from the tank bottom just above the fuel and water interface. Also from impacted areas such as a corroded fuel filter canister.
   B. Use a field test kit to shorten results turn-around time. We recommend the Liqui-Cult field test kits for this purpose.
   C. Retention samples can be sent to the lab for objective and certified results if necessary. The lab is ILFC, Inc. Fuel sampling kits are available for the collection and shipment of fuel samples.

II. Filter fuel and Clean tank.
    A. If significant water and debris are present in lines and tank, tank and fuel cleaning will most likely be required.
    B. We recommend a cleaning service that will filter the fuel to remove inorganic contaminants such as rust and also have the ability to remove water including suspended water.

III. Replace failed fueling system components.

IV. Treat with appropriate chemicals.
    A. If the microbial test confirms the presence of bacteria and or fungus at heavy levels, then treatment with a biocide that is both water and fuel soluble will be necessary. We recommend the Innospec #6000 biocide to be used at the rate of 1 gallon per 5000 gallons of fuel.
    B. In all cases treat with an aggressive dispersant package that includes corrosion inhibition. We recommend the ILFC # 1032 to be used at a rate of 1 gallon per 5000 gallons of fuel.

V. Preventive maintenance.
    A. We recommend treating the fuel at a rate of 1 gallon to 10,000 gallons to provide corrosion inhibition, drop water from the fuel, and to minimize the potential for microbes to re-establish a foothold in the tank.
    B. Quarterly testing for microbial growth.
    C. Routine stick measurement for water in addition to ATG readings.