

### **ULTRA LOW SULFUR DIESEL/BIODIESEL**

Even though the introduction of Ultra Low Sulfur Diesel (ULSD) and biodiesel occurred in 2007, there continues to be reported filter performance issues related to these fuels.

- It is important to purchase fuel from a reputable dealer. If purchasing fuels that are blended with biodiesel or other additives, ensure that the dealer blends correctly and at the proper ratio. Biodiesel must meet ASTM D6751 and ULSD must meet ASTM D975-06 standards.
- ULSD and biodiesel can act as a solvent agent, cleaning the surfaces of any vessel that fuel flows through or is stored in. (This goes beyond the fuel tanks and hoses on your equipment and extends back to bulk storage tanks, delivery pipelines, and tanker trucks.) As a result, your fuel filter may require a more frequent change out interval until the system is “clean”.

### **MICROBIOLOGICAL GROWTH**

- Microbial growth in fuel occurs in a thin layer between the water collected at the bottom of the fuel tank and the fuel floating above it. Removing the water that has collected in the tank also removes microbial incubators.
- Sulfur is a natural microbiological growth inhibitor. There is substantially less sulfur in ULSD fuel, increasing the potential for microbiological growth. If there is a black slimy substance on the filter cartridge, a test for algae and bacteria is recommended and appropriate actions taken to eliminate either of these elements.
- While it may not seem logical, microbiological growth can still occur during cold weather conditions.

### **ADDITIVES**

- Always refer to the engine manufacturer recommendations when using additives.
- Additives that are added to the fuel tanks may contribute to shorter fuel filter life when used in ratios greater than the manufacturer recommendations.
- Some additives are added at the refinery to inhibit corrosion. These additives may also contribute to short filter life.