

The Hum-Bug Detector® Kit
and BioborJF® ensure
fuel supply quality...

Hammonds

NEWSletter The Innovator

**EARLY
WARNING!**

INNOVATION—pure and simple

THE HAMMONDS
COMPANIES

M I C R O B I A L I N F E S T A T I O N

HUM-BUG DETECTOR KIT

The early warning system for microbial infestation

Microbial **contamination** in hydrocarbon fuel can be a serious problem for storage tanks and equipment. It can cause serious fuel storage tank **corrosion** and corrosion in pumps and injectors. It will clog filters, fuel lines and gauges and will cause seals, hoses and connections to swell and blister. **Early detection is critical** in eliminating this contamination and **avoiding costly downtime** due to equipment repair or replacement. **Early detection** of contamination protects the fuel supply quality and **prevents fuel supply waste**.

The **Hum-Bug Detector® Kit** is a **low-cost, easy-to-use early warning system** that will effectively identify hydrocarbon utilizing micro-organism contamination in all hydrocarbon fuels and oils. These organisms cause **fungal growth** in fuels and the **serious hazards** associated with that growth. The **Hum-Bug Detector® Kit** will detect microbial contamination in its **earliest stages** if used with a concerted fuel quality control program.

Extreme temperatures during the refining process ensure that fuel is sterile or pure at the outset. However, when the fuel is placed in a settling or storage tank where it may encounter water, there is a **potential for microbial contamination**. These **microbes** live in the interface between fuel and water and use hydrocarbons for their food source as they grow and multiply. They **alter the quality of the fuel** and **produce acidic waste** which causes fuel tank corrosion. In order to avoid problems with the fuel supply, the presence of these microbes must be detected and eliminated. Use the **Hum-Bug Detector® Kit** to identify the presence of these microbes and treat them with **BioborJF®**, a microbicide additive, to eliminate fuel supply contamination. Since **BioborJF®** is **soluble in both fuel and water**, it will **eliminate microbial growth** in all areas of the storage facility. Use of the **Hum-Bug Detector® Kit** and **BioborJF®** together will ensure fuel supply quality and protect vital components of the fuel system.



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The **Hum-Bug Detector® Kit** identifies microbial fuel contamination which can cause **fuel tank corrosion** and **clogging** of vital components

- Ensures fuel supply quality
- Eliminates costly repairs and downtime
- Low cost, easy-to-use
- Early warning detection of microbial infestation in fuel
- Detects microbial infestation in all hydrocarbon fuels and oils

