WATER IN DIESEL

Water and Diesel do <u>not</u> naturally mix. There will always be water present in stored Diesel tanks. Water enables the growth of Fungus & Bacteria.

Diesel fuel is a combustible liquid and bulk storage tanks are usually vented to atmosphere. Consequently, most bulk storage tanks collect a quantity of water from condensation in the bottom of the tank. Tanks should be kept full to reduce the space for water to condense.

The presence of water underneath the diesel fuel can enable bacteria and fungus to **start to grow in as little as 30 days**. Within 6 months this could spread throughout the diesel as a discoloration with a black sludge settling to the bottom of the tank.



Fungus and Bacteria will not grow in Diesel without water.

The water phase should be removed and disposed of monthly; preferably weekly in wet, humid coastal environments. However, this action alone will not prevent the bacteria and fungus from continuing to grow and spread throughout the diesel.

WATER FACTS - Did you know?

- Without water, fungus & bacteria cannot grow.

- Suspended water gives the diesel fuel a milky, hazy appearance.

- ASTM D6304 estimates the total amount of dissolved and un-dissolved water in Diesel. Clean Diesel should have less than 100 mg/kg (0.01% wt.)

- Water vapor enters through tank breathers, condenses inside the tank, naturally separates out and drops to the bottom of the tank.

- Wet weather and high humidity encourage fungal growth, which is most active between 20 and 30 deg.



Condensation in Diesel

- A temperature cooling of 15 degrees C can liberate 20 ppm of water from diesel.

At 30 degrees C diesel fuel naturally holds 100 ppm of water

At 15 degrees C this drops to 80 ppm of water

In a 10,000 L tank this can be as much as 200 ml. per Day!

Consider an above ground 20,000 L tank at a remote outback site, or a Marina in North Queensland. An average temperature fluctuation from 30 degrees C to 15 degrees C could produce 12,000 ml.

After only one month 12 Litres of water in bottom of your tank. This is more than enough to enable serious microbial growth.



Water and all other contaminants need to be <u>continually filtered and separated</u> out so that the diesel is always clean & dry and ready for use 24/7.

The most effective way to keep the diesel fuel clean & dry is to install an automatic Diesel Fuel Maintenance System.

"CONTACT US FOR AN OBLIGATION FREE CONSULTATION OR VISIT"

"When the lights go out.....it's too late to clean your fuel"