

# **COOLANT ANALYSIS**



# IT PAYS TO MONITOR YOUR COOLANT

Coolant or cooling system problems contribute to more than 50% of all engine failures. These failures can be due to inadequate cooling system maintenance, incorrect concentration, poor operational procedures such as extensive lugging or inadequate cool-down procedures, or system problems such as stray electrical current or block heater failure. These failures will eventually affect the oil condition, and may cause oil oxidation or anti-wear additive dropout. Cooling system problems will also reduce the life of transmissions and hydraulic components served by coolant heat exchangers.

A regular schedule of coolant sampling:

- ✓ Verifies the proper chemistry of your coolant
- ✓ Diagnoses the condition of your cooling system
- ✓ Allows you to correct coolant or cooling system problems before costly failures occur.



## **COOLANT ANALYSIS**

### **DETECT PROBLEMS BEFORE DAMAGE OCCURS**

Almost everyone recognises the need for regular oil and filter changes, but many people overlook cooling system maintenance and monitoring. The cooling system is critical to the efficient performance and long life of your diesel engine. Proper cooling affects many machine systems, including the transmission and hydraulics, which are cooled by heat exchangers.

With S • O • S Coolant Analysis, Cavpower offers a quick, low-cost way to evaluate the effectiveness of your coolant, check for contaminants and monitor the condition of the cooling system. It is an analysis that verifies the proper make-up of your coolant and diagnoses the condition of your cooling system. This identifies any problems with maintenance procedures and operational practices and allows you to correct them inexpensively before costly problems arise. It saves money by permitting you to optimise your coolant drain intervals. The coolant/antifreeze itself deteriorates over time. Overheating accelerates this deterioration. The periodic addition of Supplemental Coolant Additive (SCA) to the standard coolant/antifreeze is intended to replenish the additives (primarily nitrites) which protect the engine parts from corrosion and erosion.

### **HOW IT WORKS**

S•0•S Coolant Analysis is performed by our trained technicians who are cooling system experts, so you can count on accurate, dependable lab results, interpretations and recommendations. It determines if the coolant has the right balance for proper heat and corrosion/erosion control. The tests performed check for glycol level (freeze and boil protection), pH (acid level), conditioner concentration and specific conductance. It completely analyses the coolant and its effect upon the cooling system. The tests identify metal corrosion, other contaminants and built-up impurities which point to corrosion and scaling problems before they lead to more costly repairs.

#### WHEN TO ANALYSE COOLANT

S • O • S Coolant Analysis program is recommended after every 500 hours of machine operation.





Left undetected, corrosion (as shown on this cylinder liner) can cause costly damage and downtime



For further information on Coolant Analysis or to discuss any of our other services, please contact our laboratory on **(08) 8343 1426** or by email **analyticalservices@cavpower.com** 

