

The background of the entire page is a grayscale photograph of a person in a white lab coat. The person is wearing gloves and is using a pipette to transfer liquid from a small vial into a larger, clear plastic graduated bottle. The bottle has volume markings on its side. In the foreground, a black plastic cap and a metal tool are visible on a light-colored surface. Overlaid on the left side of the image are white, semi-transparent technical diagrams, including a bar chart and various geometric lines and circles.

COOLANT ANALYSIS

PROGRAM

COOLANT ANALYSIS PROGRAM

WHAT FleetguardMAP™ CAN DO FOR YOUR BUSINESS

The FleetguardMAP coolant analysis program is a fluid monitoring service offered to complement our customers own predictive and preventative engine maintenance platforms. This service provides information to the customer on the health of the engine or engine's coolant in an easy to read report. This alerts the customer to potential cooling system issues and recommends if action needs to be taken to prevent expensive engine failures or equipment downtime.

Each report highlights potential coolant system issues such as signs of corrosion/erosion/cavitation, contamination, glycol degradation due to overheating, air leaks, additive level depletion, coolant dilution, electrolysis and overall coolant health and recommends if action needs to be taken. A history of fluid analyses and recommendations is maintained for each piece of equipment which can be referenced by the customer at any time.

We know it is more effective to plan for maintenance schedules rather than pay heavily for unplanned downtime.

BENEFITS FOR OUR CUSTOMER

- ✓ Reduced maintenance costs through early identification of minor problems before they become major failures
- ✓ Potential for extended fluid drain intervals by changing coolant based on its condition rather than time between drains
- ✓ Quick and reliable access to results via a cloud-based, secure login portal. Direct access to a coolant technician to liaise with about problems or failures and provide resolution support
- ✓ Historical data back-up, should a warranty claim occur
- ✓ Lower Total Cost of Ownership (TCO) through improved operational efficiencies achieved by maximizing equipment uptime via improved asset protection, added reliability and the scheduling of repairs
- ✓ Increase equipment resale value through documented sampling and reporting history

HOW DOES IT WORK?

- 1 Enrol your equipment into FleetguardMAP www.fleetguardmap.com
- 2 Order a sampling kit, take a sample and complete the equipment details on the sample card
- 3 Send the sample to Cummins Filtration (Kilsyth, Victoria)
- 4 The FleetguardMap laboratory transfers your engine details, sample date and machine number/odometer reading to the database, tests the fluid, interprets the results, recommends any corrective action and then uploads your report to a secure cloud database
- 5 Results are emailed to you and all current and historic reports and recommendations are available online as a .csv file for trend analysis reviewing.
- 6 Reports are typically available 2-3 days after the sample arrives at the laboratory

SO, WHAT IS TESTED?

The FleetguardMAP laboratory will conduct 3 levels of testing, with an optional 4th if additional information or investigation is required.

Physical characteristics	Colour & clarity Sediment Oil / fuel contamination Unusual odour	
Percent glycol	Coolant concentration	Level 1
pH / reserve alkalinity	Buffering capacity	
Conductivity	Contamination of source water or other coolant. Over addition of SCA	
Wear metals, additives, contaminants	Cation analysis Al, Cu, Fe, Pb, Zn, Sn (wear metals / corrosion) Mo, Si, Na, K (additive / inhibitors) B, P (additive / buffer for pH control) Ca, Mg (hard water ions - contaminant)	Level 2
Cavitation inhibitors	Molybdate / Nitrite	Level 2/3
Other additives/ inhibitors, contaminants	Anion / analyte analysis Phosphate, nitrite, nitrate (additive / inhibitors). Chloride, Sulphate Bromide Glycolate (overheating / oxidation by-products).	Level 3
Organic additives	Long life additive analysis (carboxylates, azoles)	Level 4

Legend: Al (aluminium), Cu (copper), Fe (iron), PB (lead), Zn (zinc), Sn (tin), Mo (molybdenum), Si (silicate), Na (sodium), K (potassium), B (boron), P (phosphorus), Ca (calcium), Mg (magnesium)

FAQS

Q: I can't understand the test report? What do these results mean?

A: We understand that this is a challenge for our customers so we have written a guide to explain how to read the report and explain what the results and comments means for your engine. To complement this our Cummins Filtration technical experts can provide additional training on interpreting the report and its results.

Q: Why should I test my coolant?

A: Over 40% of all heavy-duty engine failures are due to cooling system issues and many of these are due to poor maintenance practices and not the quality of the coolant installed.

If the coolant is not maintained at the adequate levels, for example, glycol %, SCA levels (nitrite/molybdate), pH, the coolant will have a tough time protecting the cooling system in the long term.

Q: How often should I test my coolant?

A: Engine coolants should be tested at least twice per year, Cummins Filtration recommends every 500 hours or 3 months.

Fleetguard[®]



Visit your local Fleetguard stockist to purchase product or call Customer Assistance for more information:

Australia (Ph) 1800 032 037 (Fax) 1800 032 036

New Zealand (Ph) 0800 448 363 (Fax) 0800 448 367

e-mail: fleetassist.australia@cummins.com



For more information visit
www.fleetguard.com.au

LT36669
©2019 Cummins Filtration