

# Generator Fluid Analysis Program

Cummins Fluid Analysis is a maintenance tool that provides a picture of both the fluid condition and the internal condition of a component or system without disassembly.

## High Quality Fluid Testing

You can be confident you're testing with a laboratory that knows your equipment better than anyone. Cummins Sales and Service partners with an independent testing laboratory that is ISO 17025 A2LA accredited - the highest level of quality attainable by testing laboratory backed by the most stringent accrediting body in the industry. This means that your fluid analysis program is supported by a documented quality system you can depend on to deliver superior testing, analytical oversight and customer service.

## **Tracking Samples**

Samples should be taken at regularly scheduled intervals and from the same sampling point each time. Although an equipment manufacturer's recommendations provide a good starting point for developing planned maintenance practices, sampling intervals can easily vary. A major consideration for determining sampling frequency is how critical a piece of equipment is to your operation. Environmental factors are also important, such as hot, dirty operating conditions, short trips with heavy loads and excessive idle times.



#### Fluid Analysis

Fluid analysis programs can be ordered through Cummins Sales and Service or as part of your Planned Maintenance Agreement. Tests in either program provide advanced diagnostics, maintenance, testing designed to evaluate lubricant condition, component wear and contamination. Both provide a test report by an independent laboratory for each sample submitted.

- Today's Ultra Low Sulfur Diesel (ULSD) fuels which was mandated by the EPA has drastically lower storage life and is more susceptible to problems. The removal of sulfur from the fuel has lessened the fuel's natural ability to resist microbial growth in the fuel. ULSD fuel also holds in suspension twice as much water as previous diesel fuels. The presence of water in the fuel creates an environment for microbial bacteria to grow which will plug fuel filters during operation. Fuel analysis will spot these key factors that will lead to contaminated fuel so that they can be addressed before they cause a failure.
- Fuel Analysis Package: Fuel analysis can identify potential causes for fuel filter plugging, smoking, loss of power, poor injector performance, malfunctioning throttle position sensors and sticking valves. Testing also confirms a diesel fuel's sulfur content, biodiesel content and compliance with manufacturer specifications and standards for cleanliness that could affect equipment warranty requirements.
- Oil Analysis Package: Oil is the "lifeblood" of machines and equipment. Routine testing and analysis can show you how the condition of a particular lubricant can affect performance and ultimately your assets reliability.
- Coolant Analysis Package: Taking samples at regular intervals under typical operating conditions can detect and prevent imbalances between the water, glycol and various additives that coolants contain.

#### Recommendations

Once the sample has been tested, a data analyst's job is to explain, and, if necessary, recommend actions for rectifying significant changes in the lubricant or the unit's condition. Reviewing comments before looking at the actual test results will provide a road map to the report's most important information. Any actions that need to be taken are listed first in order of severity. Justifications for recommending those actions immediately follow. Additionally, all severity code 3 or 4 reports are reviewed by a Customer Care Advisor. You will be contacted to determine if repairs are recommended

To take advantage of Cummins Fluid Analysis Program, contact your local Cummins Sales and Service Planned Maintenance Sales Representative, contact us toll free: 1-800-CUMMINS™ or request service online at salesandservice.cummins.com.



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