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NEWSLETTER

ISO 17025:2005 www.tribologik.com

January 2013

To all our Customers and Partners, we wish a very Happy, Healthy and Prosperous New Year!

In this Issue :

Quality Control: First Rule for Reliable Oil Analysis

To be accurate and precise, oil analysis must follow a strict quality control procedure.

In our January 2012 issue, we have shown that quality must be a constant preoccupation from the very moment of purging the oil sample from the equipment. The oil sample must be extracted from a moving volume of lubricant at the normal operating condition of the equipment. The receiving receptacal must be a clean bottle free of all external contaminants such as plant floor dust that could alter the properties of the sample and falsify the oil tests results.

It is therefore of outmost importance to train your technicians and employees whom you wish to appoint to sampling along with their assigned replacement colleagues.

Oil Analysis Laboratory's Quality Assurance Procedure

Even more important, make sure that the oil analysis laboratory you choose enforces a rigorous quality assurance program.

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Here are a few basic items that you should always verify and follow:

- Is the laboratory **ISO 17025:2005 certified**?
- What is the **competence** of the laboratory director and his **curriculum**?
- Does he provide **satisfactory answers** to your questions?
- What is the training and **experience of the technicians** appointed to oil analysis?
- Does the laboratory perform **research and development** and to what extent is this commitment? How important is R&D among the regular day-to-day oil analysis operations of the lab?
- Do their oil analysis reports provide **diagnostics** on the condition of both the lubricant and the equipment? Are there any maintenance **recommendations** derived from these diagnostics? Do they disclose the **logic** behind these recommendations?
- Has the laboratory adopted any specific measures to ensure the **reliability** of its oil analysis results?
- Does the laboratory operate an oil analysis **expert system**?
- Does the laboratory generate **trends** and **graphics**?
- Are the **instruments' brand names** those of well known, reputed OEMs? Are the models used the best suited for oil analysis? When were they manufactured?
- Does the laboratory apply any other quality control **procedures** than the regular **calibration** of the lab instruments? Are these policies documented in writing?

Dual Oil Analysis Quality Control Procedure

As an ISO 17025:2005 certified oil analysis laboratory, we are committed to maintaining excellent quality control, concise record keeping and traceability in all operations. We maintain meticulous records of our daily quality control tests and weekly graphs illustrating the quality performance of these tests and are available upon request.

Although the **ISO 17025:2005** certification is recognised as the universal quality standard for laboratories, always make sure that the laboratory personnel can explain clearly how this ISO standard is being applied in day-to-day oil analysis operations.

Predictive Maintenance Corporation and Tribologik® Corporation's commitment to quality goes further than simple laboratory instrument calibration and is well above industry standard. Two complementary quality assurance procedures are executed in order to ensure the quality and acuracy of our oil analysis results: each laboratory instrument is linked to the Tribologik® **automated dual Quality Assurance (QA)** system that indicates the slightest abnormality in the testing procedure and instrument.

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It consists of two sub-systems working together:

- ***The Standard Quality System (SQS)***
  The Standard Quality System is a real time alarm system designed to monitor the **accuracy of the input data.** The **SQS** analyzes randomly certified standard samples of known composition. An audible alarm notifies that the instrument's calibration must be verified. If the results of these standard oil tests deviate beyond the established statistical standards, the testing instrument is ***recalibrated and the entire batch of oil tests between those intervals will be repeated.***

- ***The Duplicate Quality System (DQS)***
  The DQS randomly repeats certain tests to make sure that the results are consistent. It is designed to assure the **precision of oil analysis results (repeatability).** The DQS randomly selects oil samples for a **second oi analysis**. It then automatically compares the results of the two analyses on line using the DQS computer program. If the difference exceeds the normal range of statistical standards, an audible alarm notifies the lab technician and the instrument's calibration is verified. All ***tests realized between these intervals are repeated.*** **This duplication of testing occurs throughout the day.**

All oil tests performed at PMC/Tribologik® are subject to the ISO 17025:2005 procedures and to the Tribologik® dual quality oil analysis control system.

Friday January 25 WEBINAR : Oil Analysis Fundamentals

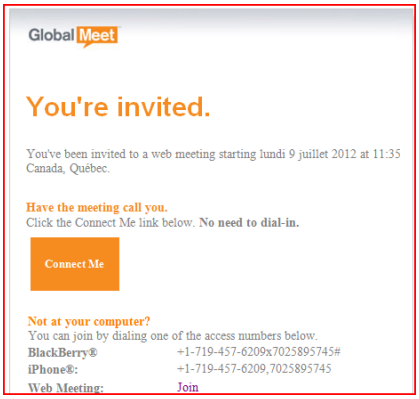
By **Jeremie Verdene**

When: Friday January 25, 2013

Time :

- **Ontario-Manitoba : 11:00 AM, Toronto time**
- **Saskatchewan-Alberta : 10:00 AM, Calgary time**

Duration : 30 minutes



Reserve now with Jeremie : jeremie@tribologik.com

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Your Equipment's Best Friend!