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## New and Improved Internet Report Access - Easy, Fast and Secure

Have you tried to access your reports on the Internet lately? If not, we urge you to do it ASAP by clicking on <a href="www.tribologik.com">www.tribologik.com</a> and entering your user id and password. It's really worth it, and from then on, you will not want to get them otherwise anymore. A quick click on the scroll down menu and you will immediately access all your current reports as soon as approved by the lab.

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## How Can Two Labs Generate Opposite Recommendations Based on Similar Test Results?

If you provide a same oil sample to two laboratories, chances are that both labs will generate similar test results. Unless there's a calibration problem, two spectrometers should detect the same wear particles, in similar quantities, with only minor ppm differences. A majority of lubricant analysis laboratories do operate similar lab instruments, calibrated by qualified scientists and technicians within clean facilities. Nevertheless, it is not unusual to realize that two different labs made two opposite diagnostics, one normal and one critical, based on the same results. How is that possible?

There are a few explanations to these inconsistencies. For instance, a number of laboratories can't go further than a simple, mechanical application of the manufacturer's limit, without any reference to the history of the tested machine and oil. If the manufacturer recommends oil changes every 25 000 hours, these labs will simply recommend to change the oil after 25 000 hours. Why then would you rely on that kind of lab to monitor your oil and equipment? Just change your oil after 25 000 hours and

you'll save on oil testing. Sometimes, it's more subtle. The question to ask is: How do you interpret my test results? One must know here that a majority of laboratories will only rely on the skills of their specialists to make their diagnostics and recommend a course of action. The drawback here is that human interpretation remains essentially subjective and depends on many factors, including the experience of the diagnostician, his factual knowledge of the equipment's history, the data and limits he relies on for his conclusions and up to his fatigue and stress level. In fact, as competent as he may be, a laboratory analyst who is testing a piece of equipment for the first time is likely to deduce recommendations way off those of his colleague who has been testing the same machine on a regular basis for 10 years and who knows it from A to Z. For the customer, these types of inconsistencies may have important operational and economic consequences, whether when letting roll a piece of equipment in poor condition or changing oil when not required.

What would then be the solution Do not depend on human interpretation anymore and let computer technology take the lead. If IT can propel space ships to the stars, it is very well capable of absorbing the technical knowledge of the manufacturers of equipment and lubricants, digest their limits and determine new limits in view of the specific operating conditions of the machine. An expert system will know by heart the testing history of all the pieces of equipment it's been testing in the past and its judgement has nothing to do with stress or fatigue. We are not questioning here the competence of chemists or lab technicians. Far from that, we believe that their knowledge is even more essential when compiled by an expert system, because that knowledge is the core of any good expert system, thus guaranteeing the quality and consistency of its diagnostics and recommendations test after test.

## Happy New Year 2011!

To all our customers, franchisees and business partners, the Management of employees of PMC and Tribologik® wish a Happy, healthy, peaceful and prosperous Year 2011.

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