# TRIBOLOGIK® NEWSLETTER

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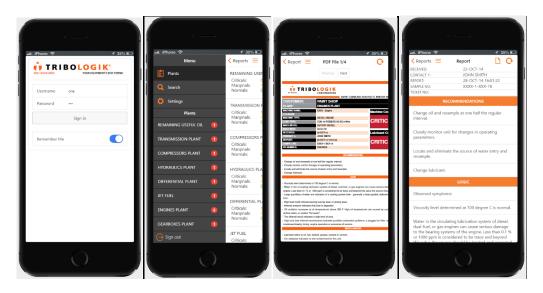
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# View your Tribologik® Oil Analysis Reports on the Tribologik® Smart Phone Application

#### Did you know that your Tribologik<sup>®</sup> oil analysis reports were available on your smart phone?

As a maintenance manager, you have to keep on top of your oil analysis program. Wherever you may be, in the field, on the road, in a meeting, abroad or just because "your boss requires an immediate answer to his very urgent question", the Tribologik<sup>®</sup> smart phone application keeps you a phone call away from all your oil analysis reports as soon as the laboratory releases them.

No need to run to your computer anymore: the Tribologik<sup>®</sup> smart phone application provides you real time information on the condition of your oil and equipment at your fingertips.



The Tribologik<sup>®</sup> smart phone application allows browsing through your plants and retrieving any current and archived reports within seconds. Reports are published in the same user-friendly format and color code, allowing visualization at a glance of the condition of both the equipment and the lubricant: **NORMAL** (green); **MARGINAL** (yellow); **CRITICAL** (red).

And most of all, they provide the same maintenance recommendations and logic that Tribologik customers have been relying on for years as guidance for their maintenance program.

**SOON COMING:** The Tribologik<sup>®</sup> Smart Phone app will be available for the iOS and Android, on the App Store and Google Play.

More to come next month...

## Vibration and Oil Analysis: Two Complementary Condition MonitoringTechnologies

The purpose of vibration analysis is to detect unusual or higher than usual vibrations within a given mechanical equipment and/or component.

The purpose of oil analysis is to detect wear metal particles and other contaminants such as water, fuel or coolant in lubricating oil, and assess its lubricating properties such as viscosity, the level of additives, resistance to oxidation, etc.

Both of these technologies allow detecting signs of wear before damage becomes critical. Both vibration and oil analysis are used to prevent equipment failure, unplanned shutdowns, unscheduled repairs and production downtime. They both contribute to keep equipment in good operating condition, boost productivity, improve output quality and reduce maintenance costs.

Vibration analysis is realised on site using sensors to record equipment vibration. This technology provides direct information on the actual condition of the component or equipment being analysed. Oil analysis also provides information on the condition of the machine at the time the sample was extracted.

Beyond this however, both oil and vibration analysis indicate trends so that, after a few vibration and oil analysis reports, you will begin to see what is normal for your equipment and what trends may be beginning to develop. For instance, an abnormal increase in vibration amplitude indicates a malfunction.

But what exactly does this malfunction consist of? Which parts or components does it originate from? Bearings? How severe is the malfunction? A complementary set of oil tests determines types of wear particles and contaminants in the oil and includes the level of additives, viscosity, oxidation of the lubricant. For example, dramatically rising levels of aluminum indicates wear of pistons, rod bearings, and certain types of bushings. Identifying the root causes and the criticality of this malfunction is how oil analysis is complementary to vibration analysis.

#### For additional information, please contact your account manager.