

# Sampling Guideline

To obtain a meaningful oil analysis result, it is imperative that the correct sampling procedure is followed. Modern analytics rely heavily on counting particles (ppm), so cleanliness of the sampling apparatus is critical.

PANOLIN AG attaches great importance to oil condition monitoring, and makes the following recommendations. PANOLIN AG can only accept responsibility for oil condition if the correct procedures are respected by the person taking the sample. It is important both to take the sample correctly, and to record the details accurately if the results are to be of use.

## 1.1 Sample bottle

Bottles such as beer bottles, jam jars, etc. are not acceptable as sample bottles. Foreign substances and water are present even after thorough cleaning of such bottles. Correct sample bottles (content 500 ml) are available from PANOLIN AG.

## 1.2. Detailed statement for oil sample

All analysis reports will be recorded on data base. Future reports will be linked to the original by machine or serial number. It is essential to fill in the detailed statement for oil sample completely and accurately. Without correct information it is impossible to carry out a correct oil analysis. The detailed statement for oil sample must be sent together with the oil sample.

## 2.1 Sampling engine oil



The sample must be taken when the engine is warm. Only then it is possible to get a representative oil sample. We recommend to take the sample from the oil dip stick tube using an oil sampling kit (available from PANOLIN AG). When sampling through the oil dip stick tube or at the sump plug the first 0.2 liter must be dumped.

## 2.2 Sampling gear oil



The sample must be taken when the gear box is warm. Only then it is possible to get a representative oil sample. When sampling through the oil dip stick tube or at the sump plug the first 0.2 liter must be dumped.

## 2.3 Sampling Hydraulic oil



The sample must be taken when the hydraulic system is warm. Only then it is possible to get a representative oil sample. The sampling point is important and has to be recorded on the detailed statement for oil sample. We recommend sampling at the «minimess» connection. Machine manufacturer warn about the high pressures at the «minimess» connection, therefore the sample has to be taken by trained staff. Samples from quick release couplings, or at the end of long hoses (e.g. excavator hammer hoses) are not representative for the entire oil contents, and should not be used. When sampling at the «minimess» connection or at the sump plug the first 0.5 liter must be dumped. If water is present in the hydraulic oil, the sample should be taken at the sump plug, but only after the machine has cooled down and allowed the oil to settle.