HOW TO TAKE A FLUID SAMPLE FOR ACCURATE RESULTS

WesTrac provides one of Australia’s leading facilities with unrivalled expertise in oil, coolant and fuel analysis for Cat and other brands of machines. We specialize in mining, construction, marine, on-highway trucks and power generation applications.

IMPORTANT BEFORE YOU START

ENSURE your samples are taken with the machine switched off and isolated but with the machine at operating temperature. This will ensure your samples show accurate readings. Do NOT allow your machine to drop below operating temperature.

WE RECOMMEND your samples are taken from fluid compartments every 250 hours or at each oil change. On-highway trucks should be sampled every 25,000 km or at each oil change.

YOU HAVE A CHOICE of taking samples using 2 different methods: 1 Oil Valve Probe, 2 Vacuum Extraction.

TAKE YOUR OIL SAMPLE USING OIL VALVE PROBE

You will require a Probe (8T9208) and approximately 15 cm of tubing. If you are sampling several compartments, begin with the cleaner systems, usually the hydraulics, then transmission or steering and finally the engine system.

It is critical to use a new piece of tubing after sampling engine oil because soot and oil may remain in the tubing and contaminate future samples.

AVOID CONTAMINATION

» To avoid contamination, do not take samples from the drain stream, a waste oil container, or a used filter.

ENSURE ACCURATE SOS RESULTS

» Fill out sample label completely.

» To ensure accurate sample results, supply all of the information requested for each machine compartment. Model, serial number, and service meter units on both equipment and oil are very important. If necessary, you can obtain oil type and classification information and the metre reading of your last oil change from shop records. It is also critical to indicate whether or not you changed the oil when you took the sample.

» New oil samples are necessary for oil condition analysis. When you receive a new brand or shipment of bulk oil, submit a sample and indicate on the label the brand, type, and classification of the oil.

» Fill out the sample label information before you begin taking samples to keep the label oil-free and easy to read.

FOLLOW 3 SIMPLE STEPS

STEP 1: Turn the engine off. Remove the dust cap from the valve of the compartment you are sampling. Insert the probe into the valve and collect about 100 ml of oil into a waste container. Dispose of the waste oil properly. (This process cleans the valve and helps ensure a representative sample.)

STEP 2: Insert the probe into the valve again and fill the sample bottle three-quarters full. Do not fill to the top. Do not allow any dirt to enter the bottle or bottle cap.

STEP 3: Withdraw the probe from the valve and secure the bottle cap. Then place the bottle with the completed label into the shipping cylinder.
You will require a Probe (8T9208) available from WesTrac. It is critical to use a new piece of tubing after sampling engine oil because soot and oil may remain in the tubing and contaminate future samples.

STEP 1: Turn the engine off. Measure and cut new tubing to the length of the dipstick. If the compartment you are sampling does not have a dipstick, cut the tubing so that it reaches about halfway into the oil depth.

STEP 2: Insert the tubing through the head of the vacuum pump and tighten the retaining nut. The tubing should extend about 4 cm beyond the base of the vacuum pump head.

STEP 3: Install a new sampling bottle onto the vacuum pump and insert the end of the tubing into the oil—do not allow the tubing to touch the bottom of the compartment.

STEP 4: Pump the vacuum pump handle to create a vacuum. Ensure you hold the pump upright (if it’s over, oil may contaminate the pump). Fill the bottle three-quarters full, do not fill to the top. (If oil enters the pump, disassemble and clean it before taking the sample.)

STEP 5: Withdraw the tubing from the compartment. Remove the bottle from the vacuum pump and secure the cap on the bottle. Then place the bottle with the completed label into the shipping cylinder.

MAKE SOS SAMPLING EASIER

» Install oil sampling valves
» Most current Cat® engines and machine models are equipped with sample valves for pressurized oil compartments. Some engines and machines may not have these valves, but it is easy and inexpensive to add them. It is important to install valves in the correct location in each system and to avoid contaminating the system during installation. We can help you with specific installation procedures.

» Use a tube cutting device. Cutting tube with a pocket knife can introduce particles that can contaminate your sample. Avoid these problems the Tube Cutter 1U7648 (available from WesTrac), which allows you to make a quick, clean cut with just one hand.

» Keep sampling supplies clean. Keep new, empty oil bottles capped and store bottles and tubing in dust-free plastic bags. The vacuum pump and brass valve probe should also be protected from dust. If you feel a sample is contaminated, discard it and take another.

FOR MORE INFORMATION OR SUPPORT WITH SCHEDULED OIL SAMPLING PLEASE CONTACT WESTRAC.

DO MORE 1300 88 10 64 Visit WesTrac.com.au