

Take Representative Samples

Although an equipment manufacturer's recommendations provide a good starting point for developing preventative maintenance practices, sampling intervals can easily vary. How critical a piece of equipment is to on-time delivery or production is a major consideration for determining sampling frequency, as are environmental operating conditions.

Taking samples at regular intervals under typical operating conditions can detect and prevent imbalances between the water, glycol and various additives that coolants contain. When taking samples, make sure the sample bottle is clean and free of contaminants. If sampling source water, run the water for one minute before filling the sample bottle to the top so that air is not introduced while filling or during shipment. Always fill out all sample label information completely and accurately. Equipment type and the miles and/or hours on both the equipment and the coolant are crucial to receiving the most accurate data analysis and the most useful maintenance recommendations possible.

Sampling with a Vacuum Pump

Sampling by vacuum pump draws coolant from the radiator. With the engine off, insert a clean piece of plastic tubing into the radiator tank cutting it to a length that extends about six inches into the coolant and about one inch beyond the base of the radiator filler neck. Attach a sample bottle to the pump and tighten firmly. **Never take a sample from the bottom of the radiator tank.**

Sampling with a Needle Probe Valve

Wipe the valve with a clean, dry lint free cloth. Slowly push the needle valve probe onto the sampling valve. **BE CAREFUL!** Pressurized fluid can be released with great force when valves are opened. To collect a representative sample, discard the first sample to purge the valve stagnant coolant and debris. Be sure to recap the valve with its protective cap or plug.

Sampling with a Petcock Valve

Remove the protective cap if present and wipe the valve off with a clean, lint free cloth. Turn the handle or depress the push button slowly to avoid a sudden burst of coolant. Draw then discard the first 4-5 ounces of coolant to purge the valve of stagnant coolant and debris. Fill the sample bottle to within one inch from the top. Seal the bottle tightly before wiping it clean.