

Oil Sampling Procedure Checklist: Best Practices for Accurate Fluid Analysis

Preparation

Identify the appropriate sampling point (valve, elbow, hose, or piping)

Gather all materials: sample bottle with lid, waste bucket, sample hose, gloves

Ensure oil flow will remain continuous throughout the sampling process

Step 1: Flush the Sampling Path

Begin oil flow into a waste container

Flush all of the following components:

Ensure oil flow will remain continuous throughout the sampling process

Sample valve

Elbow or hose leading to the valve

Any piping directly upstream

Do not stop oil flow until the final sample is collected and the bottle is capped

Step 2: Handle the Sample Bottle and Lid Properly

Remove the bottle cap while oil is still flowing

Keep the cap pointed down to avoid airborne contamination

Do Not:

- Place the cap in your pocket
- Hold it in your mouth
- Set it face-up on a surface

Treat the bottle lid as a contamination risk area

Step 3: Flush the Sample Bottle

Repeat this flushing step 3 to 4 times:

Fill bottle one-third to one-half full with flushing oil

Cap the bottle and gently agitate it

Discard contents into the waste bucket without causing splash-back

Repeat as needed until the bottle and cap are thoroughly flushed

Step 4: Collect Final Sample

Fill the bottle to approximately 90 percent full

Leave a small air pocket at the top to allow for lab agitation

Secure the cap tightly

Only after capping, stop the oil flow

Optional: Validate the Process

Take a second bottle and collect a pre-flush sample

Label it as “pre-flush” for comparison

Compare lab results from pre- and post-flush samples to see the impact of proper sampling

Notes:

- Improper sampling can produce misleading lab results
- This process is essential for trendable and actionable data
- As systems become cleaner, proper technique becomes more critical

For More Information or Assistance:

Visit www.hyprofiltration.com or contact your Donaldson Hy-Pro distributor for expert support and product recommendations.