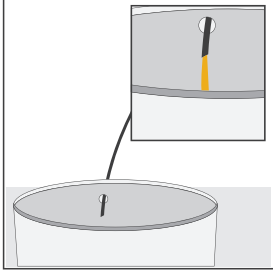


Oil Sampling Procedure

Step 1 & 3

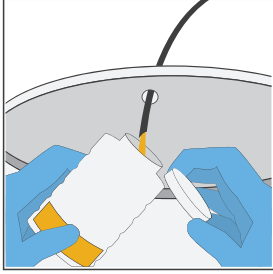


Upstream vs Downstream Sample Ports

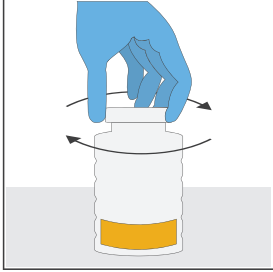
Locate a sample port upstream of the pressure filter so reservoir or barrel contamination levels can be analyzed to determine if system is operating under its limit or if top off oil is clean enough to be added to the system.

Upstream sample port provides reservoir information, while downstream sample port provides filter element performance information and allows to confirm if a bypass valve is leaking. For system trend analysis, upstream sample port is preferred.

Step 4



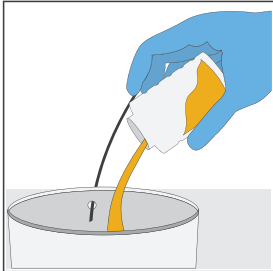
Step 5



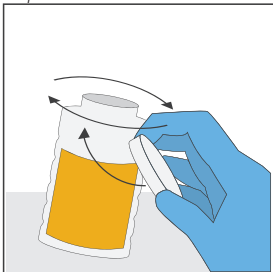
Step 6



Step 7



Step 9 & 10



Steps for Acquiring a Proper Oil Sample

1.	Place a Bucket Below the Sampling Valve. <i>(Use an assistant to help in this process. If no assistant is available – drill a hole slightly smaller than the size of the tube in the top of the bucket and stick the tube into it facing a downward angle.)</i>
2.	Open/Shut Sample Valve Several Times to Dislodge any Contaminants from Internal Surfaces.
3.	Create an Acceptable Flow Rate through the Sample Valve Line into the Bucket. <i>(Not fast enough to splash, but enough to continue flushing the line. Maintain oil flow through entire sample procedure.)</i>
4.	Fill Bottle One Quarter to One Third Full. <i>(While filling, hold the cap facing downward. Do not hold cap in mouth or breath onto surface as this can add up to 200 ppm water content to sample, invalidating results.)</i>
5.	Recap the Bottle.
6.	Agitate Vigorously.
7.	Dump Oil Back into Bucket. <i>(Make sure not to splash in order to avoid contamination potential.)</i>
8.	Repeat Steps 4-7 Two Additional Times for Three Rounds of Agitation to Remove Contaminants from Bottle and Cap.
9.	Fill Sample Bottle up to the Neck/Sample Line.
10.	Cap the Bottle.
11.	Shut off Flow from the Sample Valve and Discard Oil Collected in Bucket According to your Company's Policies. Do Not Reuse Oil.



After all steps for acquiring a proper oil sample have been completed, all four components (hose, valve, bottle and cap) have been flushed and trend data is now believable for solid particle contamination.