

**** IMPORTANT ****

- Please fully read ALL instructions before beginning the sample. Failure to follow the enclosed sampling instructions may result in a contaminated sample.
- Use extreme caution when working around energized electrical equipment. Follow all codes and recommended safety procedures.
- Never re-use any containers or tubing. Residual gases will contaminate subsequent samples.
- Make sure all containers remain with their assigned kit. Mixing kits may result in an administrative charge.
- Review checklist on each kit bag before returning.
- Please return all kits. Discard used plastic tubes.
- Kits not returned within **60 days of shipment** may be assessed a **\$25 late fee**. If you need additional time, please let us know.



6107 South Zero Street • Fort Smith, Arkansas 72903
Ph 479-646-1668 • Fax 479-646-4101 • www.alfatransformer.com

**** SAMPLING INSTRUCTIONS ****

TRANSFORMER OIL QUALITY (Plastic Bottle)

- 1) **FILL THE BOTTLE BEFORE SAMPLING WITH THE SYRINGE.**
- 2) Try to sample on a calm, dry day. Rain, high humidity, or blown dust may seriously affect the quality of the sample.
- 3) Have a waste container and a spill kit on hand in case a leak is discovered.
- 4) It may be necessary to use bottled nitrogen to release negative pressure and allow oil to flow out of the transformer.
- 5) To ensure that the sample is representative of the oil in the transformer, **be sure to drain off a small portion into a separate container before filling the bottle.** Moisture precipitates to the bottom of the tank and contaminates the sample. Be careful not to let any dirt from the valve get into the sample.
- 6) **Fill the bottle at least 75% full.** Make sure the cap is tightened firmly.
- 7) Write the transformer serial number and all other information on the test sample record (included). Up to four samples can be recorded on one test sample sheet.
- 8) Return each sampling kit inside its original Ziplock bag to contain any leakage. Fill empty space inside shipping box with packing material to secure the sample containers.
- 9) Return filled sample containers to the address below.
- 10) Proper disposal of all sampling waste is the responsibility of the customer.



Return samples to:

Alfa Transformer
Attn: Oil Testing Laboratory
6107 South Zero Street
Fort Smith AR 72903

If you have any questions, please call 479-646-1668.

The above is an instructional aid only. A full and comprehensive sampling method is found in ASTM D3613, Standard Test Method for Sampling Electrical Insulating Oils. It is the responsibility of the customer to perform the sampling, handling, shipping, and any related activity consistent with proper servicing of electrical equipment.

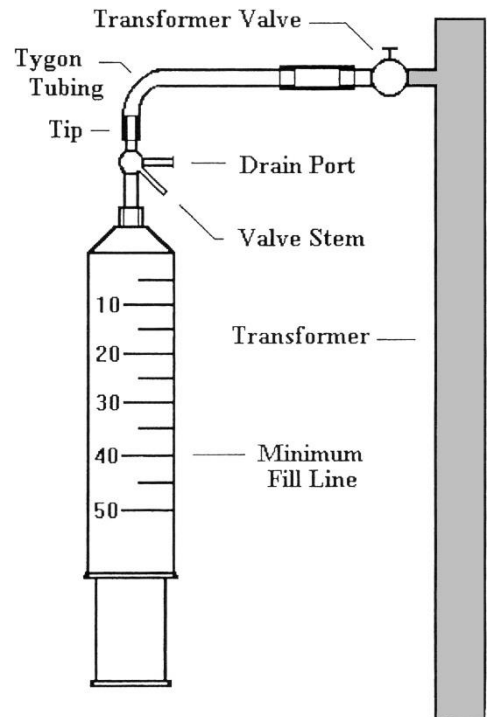


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**** SAMPLING INSTRUCTIONS ****

DISSOLVED GAS-IN-OIL ANALYSIS (Glass Syringe and Plastic Tube)

- 1) Have a waste oil container and a spill kit on hand in the event a leak is discovered.
- 2) If necessary, use bottled nitrogen to release negative pressure and allow oil to flow out of the transformer.
- 3) **DO NOT reuse the plastic tubing.** Gases in the oil, especially acetylene, may carry over from one sample to another.
- 4) Attach the plastic tube to the transformer valve, or an adapter that fits the tube, to ensure a leak-tight connection. Open the transformer valve slowly, draining oil through the tube to an overflow pan, until oil is running clear and free of debris and water. Close the transformer valve.
- 5) Affix the open end of the tube to the tip of the syringe. Open the transformer valve slowly, then open the valve stem to the syringe by turning it in the direction of the drain port (FILLING). Fill approximately 10 mls (ccs) of oil and close the transformer valve. While holding the syringe, tip pointed up, open the syringe valve stem towards the tip (BLEEDING) and empty syringe contents into the waste oil pan until all the air bubbles are removed from the syringe. This process is meant to rid syringe space of air bubbles.
- 6) Open the syringe valve (FILLING) and allow syringe to fill itself by pressure and gravity, while holding onto the syringe with the tip pointing upward. **DO NOT pull back on the barrel.** This will cause bubble formation. If gas bubbles form, do not attempt to drain them, as they will now be part of the sample. Fill the syringe to the 40 ml (cc) level. If using smaller 30 ml (cc) syringes, fill syringe to about 1/2" past the 30 ml (cc) line while making sure the filled syringe will fit into the box.
- 7) Close the transformer valve followed by the syringe valve stem (CLOSED). Detach the tube very carefully while holding onto syringe tip firmly (if tip becomes loose or dislodged oil contents could leak out). Discard the tube and waste oil properly. Place the syringe in the box immediately to avoid exposure to light and complete the test sample record (included). Package and ship your samples carefully to Alfa Transformer as soon as possible after sampling. See previous page for shipping instructions.



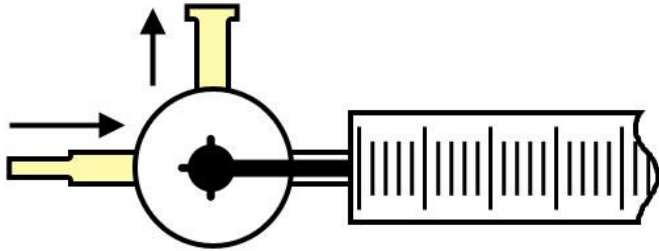
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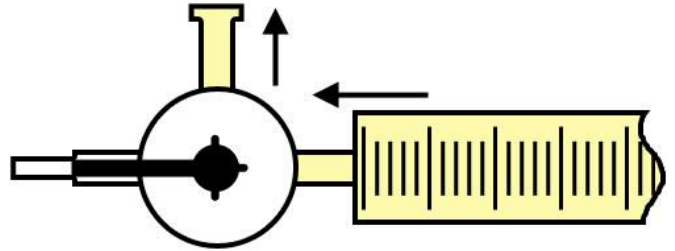
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***** SAMPLING INSTRUCTIONS *****
SYRINGE VALVE SETTINGS

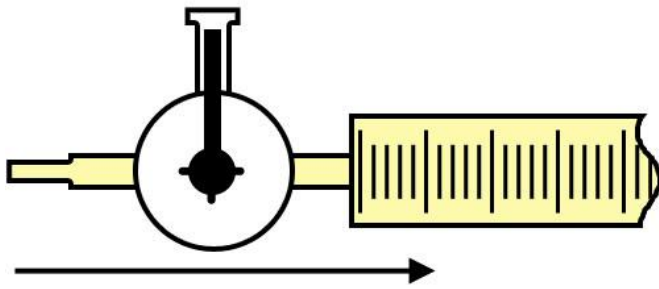
BLEEDING
(when tube is connected)



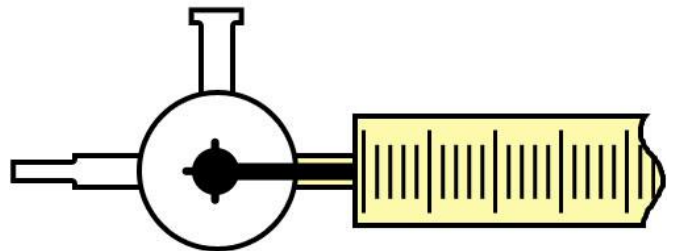
EVACUATING
(with tube connected)



FILLING
(with tube connected)



CLOSED
(when tube is disconnected)



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