

# 105.11 Required information concerning oil sample

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## Requested analysis:

Colour	DIN ISO 2049	} Small VDE - Analysis }	} Large VDE - Analysis }
Purity	DIN VDE 0370 Part 1		
Neutralisation value	DIN 62021		
Breakdown voltage	DIN 60156		
Water content	DIN 60814		
Loss factor at 90°C	DIN 60247		
Interfacial tension	EN 14210		
PCB-content	DIN EN 12766		
Furane Analysis	EN 61198		
Dissolved Gas Analysis (DGA)	IEC 60599 / 60567		
Corrosive Sulfur	IEC 62535		
DBDS	IEC 62697		
Other analyses			

## Please answer the following questions with care

Make	FTNR (Product No.)
Customer	WNR (Job No.)
Location	Sample No.
Year of manufacture	Date sample taken
Type	Type of oil
Power rating	Quantity of oil
Ratio	Oil temperature when sample taken
Air sealing	

## Sample taken from

	Oil sample valve	Oil drainage device A 22/31/40 DIN 42 551	Others
Tank	Top	Middle	Bottom
Conservator	Transformer	OLTC	Bushing
OLTC	OLTC tank		
Bushing			
Others			

## Reason for sample taking

Date of operation fault	Routine checkup
Date of repair	
Date of oil treatment/ reclaiming	Others

## Further informations and previous history

## Sample taker

Name in block letters	Date
Company/Depmt.	Phone

## Lab information

Consecutive No.
Date sample received
Date sample analysed
Type of sample container

## Special features

## General instructions concerning the taking of oil samples

(See also Installation instruction TUMA 105.03)

One liter of oil is required for an oil test;

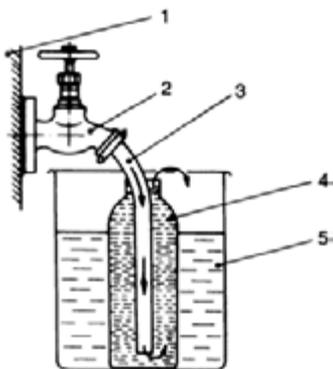
suitable sample bottles may be borrowed from corresponding Siemens AG branch office.

For oil gas analysis, one liter of oil is required.

- Tap-off point for oil gas analysis: normally top of tank

- Tap-off point for other tests: normally bottom of tank

1. Use clean 1-liter bottles with gas-tight closure to hold the sample.
2. Special aluminum bottles with plastic screw caps are generally used. The sample bottles must close so tightly that no air can be drawn in during cooling.
3. If glass bottles are used, the oil sample should not be drawn off unless you are sure that the temperature of the sample is higher than or equal to the storage or dispatch temperature. If not, please consult the test laboratory.
4. Samples for gas analysis should always be taken using the overflow method. The operations as described under 5 and 7 below should be carried out quickly and without interruption to prevent the sample from coming into contact with the atmosphere as far as possible.
5. Method of drawing oil from the oil sample tap (Fig. 1). Screw onto the tap a coupling element with seal, hose fitting and oil-proof hose (30 to 50 cm long). Stuffing box has to be unfastened in advance. Turn the tap on and fill the outer vessel with 2 to 3 liters of oil (from the outlet pipe). Insert the hose in the bottle so that its end is just short of the bottom of the bottle. Turn the tap on and fill the bottle from the bottom upwards, slowly at first and then quickly until two or three times the content of the bottle have overflowed into the outer vessel. Finally, reduce the flow from the tap and, with oil still flowing, pull the bottle downwards off the hose. Seal the bottle immediately. After this, oil sample valve and stuffing box have to be closed again.
6. Dispose the oil in the outer vessel in the proper way.



### Oil sample

1. Transformer tank
2. Oil sample tap
3. Hose
4. Oil sample bottle
5. Outer vessel