

Method of sampling insulating liquids

Abstract

Quality of product and customer focus is of the utmost importance to Oilwatch with the ultimate objective of an uninterrupted power supply to the customers.

Quality sampling techniques contribute vastly to the outcome and eventual action following the transformer oil analysis. To achieve the desired outcome factors such as cleanliness, weather conditions and the technique of the sampler are critical. Incorrect sampling may not only result in costly resampling but also in expensive and unnecessary maintenance.

Scope

This course covers the procedure to be used for insulating liquids in electrical equipment such as power and instrument transformers, reactors, bushings, switchgear and load tap changers (LTCs) applicable to the International Standard (IEC 60475).



Course objectives

Learn how to properly inspect and safely obtain fluid samples from energized electrical transformers.

Provides basic knowledge of safety onsite with an Introduction to Relevant Legislation (OHS Act & Electrical Machinery Regulations 2011).

Gain information on the significant role of fluid analysis.



Course Content

Proper Sampling techniques in accordance with International Standards.

Basic workings of a Transformer.

The selection of points from which representative samples are drawn.

Inspection Forms/Nameplates/Gauges.

Sampling Containers and the use of glass syringes for DGA.

Packaging and sample submission.



Actions to be Taken Following a Buchholz Alarm or Trip or Pressure relief device activation

ISO 55000: Accurate asset register.

Why Oil Tests and a basic introduction to the dielectric liquid in a transformer and how it provides a valuable way of assessing changes in the internal condition of the transformer.

What you need to know about PCB contaminated Transformer Oil and the Legal requirements.

A practical sampling session

Who Should Attended.

Substation personnel whose responsibilities include sampling and monitoring the condition of fluid filled transformers.

Please complete the registration form on page 3

Course Duration: 4 Hours
Certificates of Competency provided.

Course Leader



Our trainer is a Member of the South African Chemical Institute and the South Africa mirror committee for IEC TC 10(International Electro technical Commission) and the CIGRE (Southern Africa -Regional Advisory Regional Advisory Group for Power Transformer Reactors.

He also serves on the SANS/SABS 290 committee (Mineral insulating oils- Management of polychlorinated biphenyls (PCBs).

He graduated from the Vaal University of Technology with a National Diploma in Analytical Chemistry and has completed various certificates in Chromatography at the Durban University of Technology -Advanced Analytical Training Unit. He has over 35 years of related experience in Transformer Oil diagnostics of which 16 years was gained while working for ESKOM. He has authored several publications, presented at Conferences on Transformers oil analysis and Condition Monitoring of High voltage electrical equipment both internationally and in Southern Africa.

Training date: 24th March 2026

Time: 09h00-13h00 (4 hours)

Venue: Garden Court O.R. Tambo International Airport, 2 Hulley Rd, Isando, Kempton Park, 1619

There will be a fifteen-minute break for refreshments mid-morning.

All timings are approximate due to the interactive nature of the seminar.

Registration Fees: R 1250-00 (ex vat) per delegate .

On site training is priced according to the location (Travel and Accommodation)

The Course includes presentation and additional notes in electronic format.

For Booking, quotes, invoices and more information, contact:

Shiven Brijlal (Technical Director):

shiven@oilwatch.co.za

Stacy Shepherd: accounts@oilwatch.co.za

Tel. +27 87 238 2188

www.oilwatch.co.za

Registration Form Transformer Oil Sampling Training Course			
Send completed registration form with a copy of your company purchase order			
Training Date	24th March 2026	Rate pp ex VAT	R 1250-00
Venue	Garden Court O.R. Tambo International		
Delegate details	Delegate 1	Delegate 2	Delegate 3
Name			
Surname			
Job Title			
Id Number			
E Mail			
Mobile No			
Delegate details	Delegate 4	Delegate 5	Delegate 6
Name			
Surname			
Job Title			
Id Number			
E Mail			
Mobile No			
Delegate details	Delegate 7	Delegate 8	Delegate 9
Name			
Surname			
Job Title			
Id Number			
E Mail			
Mobile No			
Company Information			
Company Name			
PO Number		Vat No	
Contact Person			
Telephone No			
Billing Address			
Email			
Terms and Conditions			
<p>A confirmation letter and tax invoice will be sent on receipt of this application. Confirmation of the delegate's registration including a map to the venue. A list of accommodation options in the area will be sent on request. All applicants must complete this registration form in full and indicate your dietary requirements Cancellation and Non-attendance Policy All notices of cancellation must be in writing. Cancellations received more than 10 working days prior to commencement of the course will be accepted. Alternatively, a substitute delegate will be accepted. Late cancellations (10 or less working days prior to commencement of the course) and non-attendance are liable for the full invoice amount. Confirmation of Registration If you have not received your confirmation of booking before the course, please contact us to make sure that you are registered. Oilwatch reserves the right to cancel any advertised course due to insufficient enrolments or conditions beyond our control.</p>			
I hereby confirm that I am authorised to sign for and on behalf of the Applicant Company and accept the above Terms and Conditions			
Name	Signature	Date	