

# CERTIFICATE OF ACCREDITATION

## BETACH PTY LIMITED LABORATORY - BOTSWANA

*Company Registration No. BW00001541872*

**Facility Accreditation Number: TEST-5 0074**

is a SADCAS accredited Testing Laboratory  
provided that all SADCAS conditions are complied with

This certificate is valid as per the scope stated in the accompanying schedule of accreditation,  
Annexure "A", bearing the above accreditation number for

### CHEMICAL ANALYSIS

*The facility is accredited in accordance with the recognized International Standard*

### ISO/IEC 17025:2017

*The accreditation demonstrates technical competency for a defined scope and the operation  
of a laboratory quality management system*

*SADCAS is a subsidiarity organization of SADC. A memorandum of understanding between SADC and  
SADCAS serves as the basis for the recognition of SADCAS by SADC Member States  
as a multi-economy accreditation body*

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**Mrs Pinkie J Malebe**  
**For Chief Executive Officer**

**Effective Date (Issue No: 1): 18 October 2022**  
**Certificate Expires: 17 October 2027**

**ANNEXURE A**  
**SCHEDULE OF ACCREDITATION**  
**CHEMICAL ANALYSIS**

**Laboratory Accreditation Number: TEST-5 0074 (ISO/IEC 17025:2017)**

<p><b>Permanent Address of Laboratory</b> Betach Pty Ltd Laboratory Plot 17010 Area A Francistown Botswana</p> <p><b>Postal Address</b> P O Box 500210 Area W Francistown Botswana</p> <p><b>Tel</b> : +267 241 3339 <b>Cell</b> : +267 72 301 771 <b>Email</b> : <a href="mailto:jmbada@betach.co.bw">jmbada@betach.co.bw</a></p>	<p><b>Technical Signatories</b> :</p> <p>Mr T Madziva (pH and Nitrate) Mr N Nyathi (Viscosity and Breakdown Voltage) Ms N Rantsimele (Moisture, TAN and TBN) Ms Y Mogorosi (Water and Soil) Mr K Ngwako (Ambient Air) Ms U Elton (Water - pH, EC &amp; Alkalinity)</p> <p><b>Nominated Representative</b> : Ms J Mbada</p> <p><b>Issue No</b> : 04 <b>Date of Issue</b> : 27 July 2025 <b>Expiry Date</b> : 17 October 2027</p>	
MATERIALS/PRODUCTS TESTED	TYPES OF TESTS/PROPERTIES MEASURED, RANGE OF MEASUREMENT	STANDARD SPECIFICATIONS, EQUIPMENT/TECHNIQUES USED
<p><b>Water</b> Drinking, Surface, and Wastewater</p> <p><b>Oil</b> Hydraulic oil Transformer Oil Engine Oil</p> <p><b>Soil</b></p> <p><b>Ambient Air</b></p>	<p>pH Nitrate Electrical Conductivity Alkalinity</p> <p>Viscosity at 40°C Breakdown Voltage Moisture Total Acid Number (TAN) Total Base Number (TBN)</p> <p>pH Electrical Conductivity Organic Carbon</p> <p>Insoluble Matter</p>	<p>ISO 10523: 2008(E) ISO 15923-1: 2013 ISO 7888:1985 ASTMD D1067</p> <p>ASTMD 445 IEC 60156: 2018-08 ASTM D7889 ASTM D7889 ASTM D7889</p> <p>ISO 10390:2005 ISO 11265:1994 ISO 14235:1998/ Walkley-Black</p> <p>ASTM D173</p>