CERTIFICATE OF ACCREDITATION

ZAMBIA METROLOGY AGENCY

Established by The Metrology Act No. 6 of 2017

Facility Accreditation Number: CAL-9 004

is a SADCAS accredited Calibration 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

VOLUME METROLOGY

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

> Ms Eve C Gadzikwa SADCAS Chief Executive Officer

Date of Renewal of Accreditation:10 October 2023Effective Date (Issue No: 1):10 October 2023Certificate Expires:09 October 2028



ANNEXURE A

SCHEDULE OF ACCREDITATION

VOLUME METROLOGY

Laboratory Accreditation Number: CAL-9 004 (ISO/IEC 17025:2017)

| Permanent Address of Laboratory Zambia Metrology Agency Plot 4526, Lechwe House Freedom Way, South End Lusaka Zambia | | | Technical Sig | <u>natories</u> | : Mr J | l Chipere (All items) |
|--|---|--|---|---|--------|--|
| <u>Postal Address</u> P O Box 30989 Lusaka Zambia | | | Nominated Representative : Mr M Nyambe Ms N M Sichone | | | |
| Tel : +260 21 122 2294 Cell : +260 97 777 6062 Fax : +260 21 122 2297 Email : Natasha.sichone@zma.org.zm Mwiya.Nyambe@zma.org.zm Fredrick.Hamutunda@zma.org.zm | | | Issue No:01Date of Issue:10 October 2023Expiry Date:09 October 2028 | | | |
| ITEM | MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT | METHOD | | RANGE OF MEASUREI QUANTITY | C | CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±) |
| 3 3.1 | Volumetric Measures Piston pipettes | Internal: MOP 052 Reference: SANAS TR 47, R111-1, EURAMET/cg- 18/v.04, ISO 8655 -6 and Sartorius WRC 6002- e90121 | | 5 μℓ to 100 μℓ 100 μℓ to 200 μ 200 μℓ to 1000 1 000 μℓ to 10 0 | ϽμϨ | 0.4 μℓ 0.6 μℓ 3.0 μℓ 30 μℓ |

Original date of accreditation: 23 April 2019

Page 1 of 2

The CMC, expressed as an expanded uncertainty of measurement, is stated as the standard uncertainty of measurement multiplied by a coverage factor k = 2, corresponding to a confidence level of approximately 95%.



ANNEXURE A

Laboratory Accreditation No: CAL-9 004 (ISO/IEC 17025:2017) Issue No: 01 Date of Issue: 10 October 2023 Date of Expiry: 09 October 2028

| ITEM | MEASURED QUANTITY OR TYPE OF GAUGE OR INSTRUMENT | METHOD | RANGE OF MEASURED QUANTITY | CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±) |
|-------|---|--|----------------------------------|---|
| 3.2 | Laboratory Glassware | | | |
| 3.2.1 | Automated Pipettes | Internal: MOP 052, MOP | 1 mℓ to 50 mℓ | 0.5 % |
| | Dispensers | 051 and MOP 055 | | |
| 3.2.2 | Pipettes | Reference: SANAS TR 47, | 5 mℓ to 20 mℓ | 0.7 % |
| | Burettes | R111-1, EURAMET/cg- 18/v.04, ISO 8655-6 and | 20 ml to 100 ml | 0.25 % |
| 3.2.3 | Flasks | Sartorius WRC 6002- e90121 | 100 ml to 1 l | 0.1 % |
| | Pycnometers | | 50 ml to 100 ml | 0.5 % |
| | Metal Measures | | 1 L to 20 L | 0.5 % |
| | | | | |

Original date of accreditation: 23 April 2019

Page 2 of 2

The CMC, expressed as an expanded uncertainty of measurement, is stated as the standard uncertainty of measurement multiplied by a coverage factor k = 2, corresponding to a confidence level of approximately 95%.

Pinkie J Malebe SADCAS Technical Manager