

CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

INTEGRAL LABORATORIES (PTY) LTD

Co. Reg. No.: 2006/021928/07

Facility Accreditation Number: T0417

is a South African National Accreditation System accredited facility provided that all conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation,

Annexure "A", bearing the above accreditation number for

CHEMICAL AND MICROBIOLOGICAL ANALYSIS

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2017

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

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant accreditation symbol to issue facility reports and/or certificates

Mr R Josias
Chief Executive Officer

Effective Date: 12 February 2020 Certificate Expires: 11 February 2025



Facility Number: T0417

ANNEXURE A

SCHEDULE OF ACCREDITATION

Facility Number: T0417

Permanent Address of Laboratory:

Technical Signatories:

1 Zandwyk Park

Old Paarl Road (R101)

Paarl

7646

N van Kooten (All Methods)

Mr R Baron (M1, M4, M6 & M7 only)

S Mhlauli (M16 & M18 Only) Ms

Ms M Adams (M16, M18 & M44 Only)

S Philander (M2, M20, M16 & M18 Only) Mr

F Clayton (M44, M17 & M12 only) Ms

Ms J Don (M4, M6, M7 & M31 only)

Ms I van Wyk (Full Chemical Scope)

Mr P Robyn (M21, M22, M23, M24, M26

& M27 only)

Mr P Titus (Full Microbiological Scope)

Postal Address:

P O Box 394 Stellenbosch

7599

Tel: (021) 863-1238

Fax:

E-mail: neilvk@integrallabs.co.za

Nominated Representative:

N van Kooten

Issue No.:

80

Date of Issue:

12 February 2020

Expiry Date:

11 February 2025

Material or Products Tested

Type of Tests / Properties Measured, Range of Measurement

Standard Specifications, Techniques / Equipment Used

CHEMICAL

Waters: Potable, Domestic, Raw, Waste, Surface, Effluent and Sea

Water

Determination of Ammonia as N mg/L M1 (Spectrophotometric)

Determination of Chemical Oxygen

M2 (Spectrophotometric)

Demand as O₂ mg/L

Determination of Chloride as CL mg/L M3 (Spectrophotometric)

Determination of Electrical

M4 (Electrode)

Conductivity

Determination of Nitrate as N mg/L

M5 (Spectrophotometric)

Determination of pH @ 25°C

M6 (Electrode)

Determination of Total Alkalinity as Ca

M7 (pH Titration)

 $CO_3 mg/L$

Determination of Total Suspended

Solids mg/L

M8 (Gravimetric)

Determination of Turbidity NTU

M12 (Nephthelometer)

Determination of Colour

M14 (Spectrophotometric)

Determination of Metals by ICP (AI, M16 (ICP-OES) B, Ba, Be, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Sr, Zn)

Determination of Major Anions (F⁻, Cl⁻ M17 (Ion Chromatography)

, NO_3^- , SO_4^- , PO_4^-) mg/L

M18 (ICP-OES) Determination of Major Cations (Ca⁺⁺,

K⁺, Mg⁺⁺, Na⁺) mg/L

Determination of Total Organic

M20 (High Temperature

Carbon and Dissolved Organic

Combustion)

Carbon mg/L

Trihalomethanes (µg/L)

M31 (GC - ECD)

Determination of (NH₄+-N, Cl⁻, CR⁶⁺,

M44 (Gallery)

 F^- , NO_3 -N, NO_2 -N, PO_4 -P, Si, SO_4^2 -

and NO2+NO3 as N mg/L by Discrete

Photometric Analyser

Wine and other beverages

Determination of Alcohol -Pycnometer %

M21 (Pycnometer)

Determination of Sulphur dioxide (free

M22 (Aspiration/titration)

and total) mg/L

Determination of Volatile Acidity g/L

M23 (Distillation/titration)

Determination of pH and Titratable

acidity pH units & g/L

M24 (Electrometric/titration)

Determination of Reducing sugars -

Fehling's method g/L

M26 (Ttitration)

Determination of (Ethanol, Total Acidity, Volatile Acidity, pH)

M27 (Fourier Transform Infrared

Spectrometer - Winescan)

MICROBIOLOGY

Waters: Potable, Domestic, Raw, Waste, Surface and Effluent

Determination of Faecal coliform CFU/100mL

M19 (Membrane Filtration)

Determination of Total coliform and

M10 (Membrane Filtration)

Escherichia coli CFU/100mL

Determination of Heterotrophic Plate M13 (Pour Plate)

Count

Original Date of Accreditation: 12 February 2010

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Accreditation Manager