



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:-

WATERLAB (PTY) LTD

Co. Reg. No.: 1983/009165/07

Facility Accreditation Number: T0391

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 M Phaloane
Acting Chief Executive Officer

Effective Date: 23 September 2023
Certificate Expires: 22 September 2028



ANNEXURE A
SCHEDULE OF ACCREDITATION

Facility Number: **T0391**

Permanent Address of Laboratory:

Waterlab (Pty) Ltd
23B De Havilland Crescent
Persequor Techno Park
Meiring Naude Road
Pretoria

Technical Signatories:

Mr A van de Wetering (All Chemical Methods)
Ms E Nkabinde (All Chemical and Microbiological Methods)
Mr LJ Ngobeza (All Chemical Methods)
Ms DO Mohlaloga (All Microbiological Methods)
Ms MM Ramaboea (All Microbiological Methods)
Ms E Botha (All Soil Methods)
Ms S Laubscher (All Soil Methods)
Mr JE Siebert (All Soil Methods)
Mr RC Niemand (All Soil Methods)
Ms MF Lebeya (pH, EC, Alkalinity, P Alkalinity, Acidity, Carbonate & Bicarbonate, ICP-OES Methods only)
Ms T Matsenhuke (TKN, TOC & DOC Methods only)

Postal Address:

P O Box 283
Persequor Techno Park
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Nominated Representative:

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Material or Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Techniques / Equipment Used
CHEMICAL		
Water (Potable, Industrial, Sewage and Environmental)	Determination of Sulphate, Ammonia (free & saline) Nitrate, Nitrite, Ortho-phosphate, Chloride (Discrete Analyser) - Aquakem 250 & Gallery Plus	WLAB/046/Discrete Analyser/Method
	Determination of ICP-OES elements: Na, K, Ca, Mg, Al, Cd, Co, Cr, Cu, Fe, Mn, Ni, Pb, Zn, V, B and Ba (ICP-OES Avio 200 & ICP-OES Optima 2100DV	WLAB/015/ICP/Method
	Determination of pH-Value @ 25°C (potentiometric method)	WLAB/001/pH/Method

Determination of Electrical Conductivity @ 25°C (Potentiometric method)	WLAB/002/E.C/Method
Determination of Total Alkalinity as CaCO ₃ (Titrimetric and potentiometric method)	WLAB/007/T-Alk/Method
Determination of Chemical Oxygen Demand (Open reflux method)	WLAB/018/COD/Method
Determination of Fluoride (ion selective electrode)	WLAB/014/Fluoride/Method
Turbidity determination (Turbidimetric method)	WLAB/005/Turbidity/Method
Determination of Total Acidity	WLAB/022/Acidity Methods
Determination of trace metals in water samples by ICP-MS elements - As, Cd, Hg, Pb, Sb, Se, U	WLAB/050/ICP-MS/ Methods
Determination of Hexavalent Chromium	WLAB/046/Discrete Analyser/Hexavalent Chromium Method
Determination of pH, Electrical Conductivity, Alkalinity and p-Alkalinity	WLAB/065/Robotic Titrosampler pH, Electrical Conductivity, Alkalinity, p- Alkalinity/Method
Determination of Suspended Solids	WLAB/004/S.S/Method
Determination of Total Dissolved Solids	WLAB/003/T.D.S/Method
Determination of Total Phosphate	WLAB/031/Total -Phosphate/ Method
Determination of Kjeldahl Nitrogen	WLAB/025/T.K.N/ Method
Determination of Colour	WLAB/006/Colour/ Method
Determination of Total Organic Carbon	WLAB/060/TOC/ Method
Determination of Dissolved Organic Carbon	WLAB/060/DOC/ Method

	Determination of Oil and Grease in Water Samples	WLAB/034/Oil & grease/ Method
Soil	Determination of ABA	WLAB/078/Acid base Accounting/ Method
	TCLP Leachate	WLAB/076/TCLP Leaching
	DW Leachate	WLAB/075/Distilled water/Method
	Determination of Paste pH	WLAB/077/Paste pH/Method

Calculations

- Precipitation Potential as CaCO_3
- Unionised Ammonia as N
- Unionised Ammonia as NH_3
- Ammonium as N_4
- Ammonium as NH_4
- Total hardness as CaCO_3
- Magnesium hardness as CaCO_3
- Calcium hardness as CaCO_3
- Combined Nitrate plus Nitrite
- Sodium Adsorption Ratio (SAR)
- Total Oxidized Nitrogen (TON)
- Total Inorganic Nitrogen (TIN)
- Total dissolved solids (EC in $\text{mS/m} \times 6.7$)
- Hydroxide Alkalinity as CaCO_3
- Hydroxide as OH
- Carbonate Alkalinity as CaCO_3
- Carbonate as CO_3
- Bicarbonate Alkalinity as CaCO_3
- Bicarbonate as HCO_3
- Carbon Dioxide as CO_2
- Corrosivity index
- pHs
- Langelier Index

Ryznar Index
Converting Orthophosphate as P to
PO₄
Converting Nitrite as N to NO₂
Converting Nitrate as N to NO₃

MICROBIOLOGY

Water (Potable, Industrial, Sewage and Environmental)	Total coliform bacteria count/100ml	WLAB/021/E. coli/Total coliform
	<i>Escherichia coli</i> count/100ml	WLAB/021/E. coli/Total coliform
	Enumeration of Faecal Coliforms Colilert 18	WLAB/21b/F.C and E.coli/ Method
	Heterotrophic Plate Count	WLAB/021/Heterotrophic plate count/Method

Original Date of Accreditation: 23 September 2008

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM



Accreditation Manager