



LEADERS IN ENVIRONMENTAL MONITORING



WATER QUALITY REPORT

**Test Report 45142
Revision 01**

October 2017

**Compiled by Aquatico Scientific
(012) 450 3800**

**OFFICE 107
BLOCK 6
LOMBARDY OFFICE PARK SHERE**

ATTENTION: [REDACTED]

16 OCTOBER 2017

CONCISE WATER QUALITY EVALUATION

(TEST REPORT 45142)

Revision 01

WATER QUALITY RESULTS

A water sample was submitted to Aquatico Laboratories on **4 October 2017** for testing the quality for intended use as domestic water. The water quality test results are displayed on the attached Test Report. Water quality is compared to the SANS 241-1: 2015 Drinking Water Standard (SABS, 2015).

The water quality of the sample called '**ADI Sample**' can be described as neutral (pH 6.0 - 8.5), non-saline (TDS < 450 mg/l) and moderately soft (total hardness 50 - 100 CaCO₃) with no *E.coli* and no total Coliforms detected.

Compliance with the 'SANS 241-1: 2015 Drinking Water Standard (SABS, 2015)' guidelines is as follows:

Chronic health Risk: All compliant
Acute health Risk: All compliant
Operational (non-health): All compliant
Aesthetic (non-health): All compliant

In terms of the classification system of the 'Quality of Domestic water supplies' (WRC, 1998) the quality is classified as follows:

Drinking: Class 1 - Good
Bathing: Class 1 - Good
Washing: Class 0 - Ideal
Food Preparation: Class 1 - Good
Aesthetic: Class 1 - Good

According to the Langelier Saturation Index, marked corrosion is expected.

Based on the assessment of variables analysed in comparison to 'SANS 241-1: 2015 Drinking Water Standard (SABS, 2015)' and 'Quality of Domestic water supplies' (WRC, 1998), the tested water sample is **Fit** for use as potable water and domestic use.

Treatment for intended use: **none**.
Variables requiring treatment: none.

Please contact us for any further enquiries

Electronically generated report

Anri Joubert

Test Report

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Client:	[REDACTED]	Date of certificate:	23 October 2017
Address:	[REDACTED]	Date accepted:	04 October 2017
Report no:	45142	Date completed:	23 October 2017
Project:	[REDACTED]	Revision:	1

Lab no:					82360
Date sampled:					04-Oct-2017
Sample type:					Water
Locality description:					ADI Sample
Analyses	Unit	Method	Uncertainty of measurement %	SANS 241-1:2015	
A pH @ 25°C	pH	ALM 20	4.23	5 - 9.7	7.53
A Electrical conductivity (EC) @ 25°C	mS/m	ALM 20	9.52	< 170	27.6
A Total dissolved solids (TDS)	mg/l	ALM 26		< 1200	201
A Total alkalinity	mg CaCO3/l	ALM 01	10.41		103
A Chloride (Cl)	mg/l	ALM 02	11.39	< 300	13.7
A Sulphate (SO ₄)	mg/l	ALM 03	9.39	< 500	45.8
A Nitrate (NO ₃) as N	mg/l	ALM 06	9.85	< 11	0.480
A Ammonium (NH ₄) as N	mg/l	ALM 05	8.59	< 1.5	0.452
A Fluoride (F)	mg/l	ALM 08	10.11	< 1.5	0.486
A Calcium (Ca)	mg/l	ALM 30	8.78		22.3
A Magnesium (Mg)	mg/l	ALM 30	7.54		6.48
A Sodium (Na)	mg/l	ALM 30	7.96	< 200	18.8
A Potassium (K)	mg/l	ALM 30	12.05		28.1
A Aluminium (Al)	mg/l	ALM 31	8.59	< 0.3	0.015
A Iron (Fe)	mg/l	ALM 31	7.97	< 0.3	<0.004
A Manganese (Mn)	mg/l	ALM 31	8	< 0.1	<0.001
A Chromium (Cr)	mg/l	ALM 31	7.61	< 0.05	<0.003
A Copper (Cu)	mg/l	ALM 31	4.55	< 2	0.198
A Nickel (Ni)	mg/l	ALM 31	7.56	< 0.07	<0.002
A Zinc (Zn)	mg/l	ALM 31	9.31	< 5	0.150
A Cadmium (Cd)	mg/l	ALM 31	7.89	< 0.003	<0.002
A Lead (Pb)	mg/l	ALM 31	8.85	< 0.01	<0.004
A E.coli	CFU/100ml	ALM 40	7.74	0	<1
A Total coliform	CFU/100ml	ALM 40	7.76	< 10	<1
A Total hardness	mg CaCO3/l	ALM 26			82
A Total organic carbon (TOC)	mg/l	ALM 63	6.46	< 10	8.04
A Langelier Saturation Index	LSI	ALM 26			-1.03

A = Accredited N = Non accredited O = Outsourced S = Sub-contracted NR = Not requested RTF = Results to follow NATD = Not able to determine ATR = Alternative test report ; The results relates only to the test item tested.

Results reported against the limit of detection.

Results marked 'Not SANAS Accredited' in this report are not included in the SANAS Schedule of Accreditation for this laboratory.

Uncertainty of measurement available on request for all methods included in the SANAS Schedule of Accreditation.