

EMAKHAZENI LOCAL MUNICIPALITY

 P.O. Box 7
 BELFAST
 1100

CERTIFICATE OF CHEMICAL ANALYSIS

Attention: MARIANNE JOUBERT

Date received : 5 June 2018

Date reported : 14 June 2016

Quantity Analyzed : 2

Our Ref : EMA / 126 - 127 / F / 06 / 18

Lab No:

F 126

Analysis Results mg/l	LPM METHOD	SANS Standards -241 - 1: 2015 Ed 2 Domestic Water Standard Limits	WB 4/5/18
			Waterworks Outlet Final
Total Dissolved Solids	LPM 2	≤ 1 200	90
Suspended Solids	LPM 1		4,40
Nitrate & Nitrite as N	LPM 32/76		<0.1
Nitrate NO ₃ as N	LPM 32/76	≤ 11	<0.1
Nitrite NO ₂ as N	LPM 32/76	≤ 0.9	<0.1
Chlorides as Cl	LPM 30/76	≤ 300	10,2
Total Alkalinity as CaCO ₃	LPM 11/81		68
Fluoride as F	LPM 27/76	≤ 1.5	<0.20
Sulphate as SO ₄	LPM 28/76	Acute Health ≤ 500 - Aesthetic ≤ 250	7,34
Total Hardness as CaCO ₃	LPM 85		61
Calcium Hardness as CaCO ₃	LPM 85		25
Magnesium Hardness as CaCO ₃	LPM 85		36
Calcium as Ca	LPM 15		9,95
Magnesium as Mg	LPM 15		8,75
Sodium as Na	LPM 15	≤ 200	8,84
Potassium as K	LPM 15		1,19
Iron as Fe	LPM 15	Chronic Health ≤ 2.0 - Aesthetic ≤ 0.3	<0.01
Manganese as Mn	LPM 15	Chronic Health ≤ 0.4 - Aesthetic ≤ 0.1	<0.01
Conductivity at 25° C in mS/m	LPM 51/82	≤ 170	18,5
pH-Value at 25 ° C	LPM 51/82	≥ 5.0 to ≤ 9.7	7,81
pHs by 21° Celsius	LPM 85		8,48
Langelier Saturation Index	LPM 85		-0.67
Turbidity as N.T.U.	LPM 23/82	Operational ≤ 1.0 - Aesthetic ≤ 5.0	1,21
Free Residual Chlorine Cl ₂ *	LPM 84		<0.1
Aluminium as Al	LPM 15	≤ 0.30	0,04

 These results must be read in conjunction
 with the Uncertainty of Measurement
 list as provided by Regen Waters Laboratory

QUALITY CONTROL CHECKS:

Cation Balance	1,64
Anion Balance	1,80
% Difference	-4,7
Measured TDS	90
Calculated TDS	88
Limits > 1.0 - <1.2	1,0
Calcul TDS / E.C. (0.55 - 0.70)	0,5

All heavy metal analyses have been performed on filtered samples.

Tests marked with an asterisk * are not SANAS accredited

These results are related only to the items tested

VALUES HIGHLIGHTED IN GREY ARE NOT WITHIN THE SANS 241 - 1 : 2015 LIMITS AS SPECIFIED





CK. 89/14418/23

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