

STEVE TSHWETE

P.O. Box 14
MIDDELBURG
1050

CHEMICAL ANALYSIS

Our Ref: LOS / 156 - 157 / B / 09 / 11

Date Received : 13 September 2011

Date Reported : 22 September 2011

Quantity Analyzed: 2

B 156

Attention: Mr. R. Bouwer

Attention: Me. Zeldi Louw

Analysis Results mg/l	Loskop Raw	SANS Standards -241 (2011) Domestic Water
		Standard Limits
Total Dissolved Solids	282	≤ 1 200
Nitrate & Nitrite as N	0.98	≤ 11
Chlorides as Cl	17	≤ 300
Total Alkalinity as CaCO ₃	53	
Fluoride as F	0.39	≤ 1.5
Sulphate as SO ₄	123	Acute Health ≤ 500 - Aesthetic ≤ 250
Total Hardness as CaCO ₃	161	
Calcium Hardness as CaCO ₃	84	
Magnesium Hardness as CaCO ₃	77	
Calcium as Ca	33.8	
Magnesium as Mg	18.8	
Sodium as Na	28.2	≤ 200
Potassium as K	5.13	
Iron as Fe	0.03	Chronic Health ≤ 2.0 - Aesthetic ≤ 0.3
Manganese as Mn	0.04	Chronic Health ≤ 0.5 - Aesthetic ≤ 0.1
Conductivity at 25° C in mS/m	43.1	≤ 170
pH-Value at 25° C	7.89	≥ 5.0 to ≤ 9.7
pHs by 21° Celsius	8.32	
Langelier Saturation Index	-0.43	
Turbidity as N.T.U.	1.6	Operational ≤ 1.0 - Aesthetic ≤ 5.0
Free Residual Chlorine Cl ₂	<0.1	Operational ≤ 1.0 - Aesthetic ≤ 5.0
Total Residual Chlorine Cl ₂	<0.1	
Free & Saline Ammonia NH ₃ as N	0.57	
Aluminium as Al	<0.01	≤ 0.30

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

QUALITY CONTROL CHECKS	
Cation Balance	4.59
Anion Balance	4.19
% Difference	4.6
Measured TDS	282
Calculated TDS	263
Limits > 1.0 - <1.2	1.1
Calcul TDS / E.C. (0.55 - 0.70)	0.6

P.L.G. UYS (M.D.)

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		Standard Limits
Selenium as Se	<0.01	≤0.01
Vanadium as V	<0.01	≤0.20
Dissolved Organic Carbon (DOC)	5.00	
Phenolic Compounds	<0.005	
Cyanide as CN	<0.01	≤10
Cadmium as Cd	<0.003	≤0.003
Cobalt as Co	<0.01	≤0.5
Total Chromium as Cr	<0.01	≤0.05
Copper as Cu	<0.01	≤2.0
Antimony as Sb	<0.005	≤0.02
Nickel as Ni	<0.01	≤0.07
Lead as Pb	<0.01	≤0.01
Zinc as Zn	0.02	≤5
Arsenic as As	<0.01	≤0.01
Mercury as Hg	<0.001	≤0.006
Colour as Pt-Co*	5	≤15
Odour*	No offensive odour	Inoffensive
Taste*	Acceptable Taste	Inoffensive

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P.L.G. UYS (M.D.)