

# KRANSPOORT

P.O. Box 7555  
MIDDELBURG  
1050

## CHEMICAL ANALYSIS

Our Ref: KRA / 154 - 155 / B / 09 / 11

Date Received : 13 September 2011  
Date Reported : 22 September 2011  
Quantity Analyzed: 2

Attention: Mr. M. Schmidt  
Attention: Mr. Frans Ellis

B 155

Analysis Results mg/l	Kranspoort Final	SANS Standards -241 (2011) Domestic Water
		Standard Limits
Total Dissolved Solids	62	≤ 1 200
Nitrate & Nitrite as N	<0.1	≤ 11
Chlorides as Cl	17	≤300
Total Alkalinity as CaCO <sub>3</sub>	19	
Fluoride as F	<0.20	≤1.5
Sulphate as SO <sub>4</sub>	4.80	Acute Health ≤ 500 - Aesthetic ≤ 250
Total Hardness as CaCO <sub>3</sub>	31	
Calcium Hardness as CaCO <sub>3</sub>	11	
Magnesium Hardness as CaCO <sub>3</sub>	10	
Calcium as Ca	4.35	
Magnesium as Mg	2.44	
Sodium as Na	9.17	≤ 200
Potassium as K	2.15	
Iron as Fe	0.12	Chronic Health ≤ 2.0 - Aesthetic ≤ 0.3
Manganese as Mn	<0.01	Chronic Health ≤ 0.5 - Aesthetic ≤ 0.1
Conductivity at 25° C in mS/m	9.35	≤ 170
pH-Value at 25 ° C	7.09	≥ 5.0 to ≤ 9.7
pHs by 21° Celsius	9.50	
Langelier Saturation Index	-2.41	
Turbidity as N.T.U.	1.3	Operational ≤ 1.0 - Aesthetic ≤ 5.0
Free Residual Chlorine Cl <sub>2</sub>	<0.1	
Total Residual Chlorine Cl <sub>2</sub>	<0.1	
Free & Saline Ammonia NH <sub>3</sub> as N	0.92	
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	0.88
Anion Balance	0.96
% Difference	-4.4
Measured TDS	62
Calculated TDS	52
Limits > 1.0 - <1.2	1.2
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)	2.2		
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	0.03	≤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	
Trihalomethane	To Follow		

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