



## CERTIFICATE OF ANALYSIS

**ATTENTION:** Seal Water Tech**DATE:** 29 November 2011**1. GENERAL:** Prepared Water – Bottling Plant – Sampled 1 November 2011

DETERMINANTS CONSTITUENTS	Results expressed in mg/l unless specifically stated	
	Prepared Water Sample	SANS 241 – 2006 Class-0 Standard
Conductivity (µS/cm)	34.6	< 700
Total Dissolved Solids (TDS @ 105 °C)	25	< 450
pH	7.68	6.0 to 9.0
Turbidity (NTU)	0.15	< 0.2
Total Suspended Solids (TSS)	BDL	Must be absent
Alkalinity (Total as CaCO <sub>3</sub> )	5.8	Not Specified
Free & Saline Ammonia (NH <sub>x</sub> as N)	0.03	A maximum of 0.2
Calcium (as Ca)	0.6	A maximum of 80
Magnesium (as Mg)	0.05	A maximum of 30
Sodium (as Na)	6.8	A maximum of 100
Potassium (as K)	0.1	A maximum of 25
Chloride (as Cl)	8.3	A maximum of 100
Sulphate (as SO <sub>4</sub> )	0.2	A maximum of 200
Nitrate & Nitrite (NO <sub>3</sub> + NO <sub>2</sub> as N)	BDL	A maximum of 6
Fluoride ( as F)	BDL	A maximum of 0.7
Aluminium (Al) (µg/l)	BDL	≤ 150
Iron (Fe) Total (µg/l)	BDL	≤ 100
Manganese (Mn) Total (µg/l)	BDL	≤ 50
Total Heavy Metal Content (µg/l)	BDL	Not Specified
Active Chlorine (HOCl)	BDL	Not Specified
Dissolved Organic Carbon (DOC)	2.9	≤ 5
Disinfectant by-products (Total)	BDL	Not Specified
BDL = Below Detection Limit		TON = Threshold Odour Number
mg/l = Milligrams per litre = Parts per million		µg/l = Micrograms per litre = Parts per billion
Please Note: This report only relates to the actual water sample supplied and analysed. No responsibility can be accepted, related to the use of these results and recommendations provided.		

<b>Biological Activity</b>	<b>Prepared Water Sample</b>	<b>WHO – QC Standard Bottling Guideline Limits</b>
Total Microbial Count (TMC) (Colonies per ml)	17	A Maximum of 100
Total Coliforms (Colonies per 100 ml)	0	Must be Zero
Total Faecal Coliforms (Colonies per 100 ml)	0	Must be Zero
Total Macro-biological Count (Organisms per 1000 ml)	0	Must be Zero
Moulds & Yeasts (Positive Negative Test)	Negative	Not Specified

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## 2. DISCUSSION:

### Notes:

- For bottling applications it is advisable to aim for the SANS-241 Class 0 standard. The Class-I and the SABS standards are simply not acceptable and often oversee or miss quality related aspects which can detrimentally influence the marketing efforts.
- Be aware of the units of concentration used in the above table. (1.0-mg/l = 1,000-µg/l).

- I. Water quality shows up good with all parameters examined within the guideline limits stipulated.

If any additional queries or questions crop up please do not hesitate to contact me at the above address.

Yours sincerely



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