

MINISTRY OF PUBLIC HEALTH AND SANITATION

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GOVERNMENT CHEMIST'S DIVISION
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 NAIROBI

Ref. No. P/WAT/VOL. 11/11/12/(16)
 and date

....14th December 2011..... XX

REPORT ON CHEMICAL ANALYSIS OF WATER

Laboratory sample No. W 196/11/12

Date Received: 28/11/2011

Sender: Okumu Oscar
 P. O. Box 1285-00100 Nairobi.

Date sample taken:

Source: Treated River Sio Water

PHYSICAL TESTS

Colour: - (Hazen Units)	Turbid: Clear (J.T.U.'s)
Deposit: None	Odour: None (T.O.N)
Taste: -	
pH: 7.3	Electrical Conductivity at 25 °C (microsiemens/cm)
	161.3 us

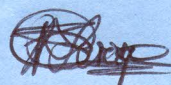
CHEMICAL TESTS

	Results mg/l(ppm)	Max guideline value mg/l(ppm)
Total Alkalinity as CaCO ₃	100.0	500.0
Phenolphthalein (CO ₃) =	Nil	-
Methyl Orange (HCO ₃)-	100.0	-
Chloride (Cl)-	5.0	250.0
Sulphate(SO ₄)=	2.0	250.0
Nitrate (NO ₃)-	-	-
Nitrite (NO ₂)-	Not detected	3.0
Fluoride (F)-	0.2	1.5
Total Anions		
Sodium (Na)+	11.9	200.0
Potassium (K)+	1.7	-
Calcium (Ca)++	20.0	-
Magnesium (Mg)++	16.8	-
Iron (Total) (Fe)+++	Not detected	0.3
Manganese (Mn)++	0.04	0.5
Ammonia-Free & Saline (N)		
Ammonia-Albuminoid (N)		
Total Cations		

	Results mg/l(ppm)	Max guideline value mg/l(ppm)
Carbonate Hardness as (CaCO ₃)	100.0	-
Non-Carbonate hardness as (CaCO ₃)	20.0	-
Total Hardness as (CaCO ₃)	120.0	500.0
Free Carbon Dioxide		
Silica (SiO ₂)	20.0	-
Oxygen absorbed. 4 hr. at 27°C(P.V.)	Not detected	1.0
Total Dissolved Solids, residue dried at 180°C	112.5	1000.0
Optional Parameters (done on request)		
Lead (Pb ²⁺)		
Copper (Cu ²⁺)		
Zinc (Zn ²⁺)		
Dissolved oxygen		

REMARKS:

Slightly alkaline and moderately hard water that is moderately mineralized. On the basis of chemical test done the water is fit for human consumption.



S. G. NJOROGE

Date .. 14th December 2011

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For: **Government Chemist**

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