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LABORATORY WATER ANALYSIS REPORT

Client : Kenya Red Cross Society (Water Source 2)	**Reference No : 01/26/RO/0265R**	**Date Received :21/01/2026**
Site Location : Embakasi East	**Source : Borehole**	**Analysis Date : 22/01/2026**
Type of Test : Reverse Osmosis Water Analysis	**Sampling Date : 20/01/2026**	**Report Date : 22/01/2026**
KEY: **PASS**	**FAIL**	**NS - No Standard** **ND - Not Detected** **TN - Too Numerous**

PARAMETERS	METHOD OF ANALYSIS	UNITS	VALUES	WHO GUIDELINES	REMARKS
PHYSICAL ANALYSIS					
pH	8156	pH Units	8.95	6.5 - 8.50	
TDS	10256	Mg/l	436	<1000	
Total Suspended Solids(TSS)	8006	Mg/l	1	NIL	
Salinity	8160	ppt	0.33	NS	
Electrical Conductivity(EC)	10256	µS/cm	651	<1500	
Turbidity	8237	NTU	1.6	<5	
Color	8025	PtCo	2	<15	
CHEMICAL ANALYSIS					
Iron, Fe	8008	Mg/l Fe	0.07	<0.30	
Manganese, Mn	8149	Mg/l Mn	0.02	<0.10	
Copper, Cu	8506	Mg/l Cu	0.85	<2.0	
Fluorides	8323	Mg/l F	6.0	<1.5	
*Ammonical Nitrogen	8155	NH3-N	0.01	NS	
*Ammonium	8155	NH4+	0.01	<1.5	
*Ammonia	8155	NH3	0.01	<2.0	
Nitrate N	8039	Mg/l NO3N	0.1	<11.3	
Nitrate	8039	NO3-	0	<50	
*Nitrites	8153	Mg/l NO2	0	<3	
*Nitrite N	8153	Mg/l NO2-N	0.0	<1	
*Potassium	8049	Mg/l K	5	<50	
Phosphates	8048	Mg/lPO_4^{3-}	0.81	<0.61	
*Silicon	8185	Mg/l	32	< 50	
*Silica	8185	Mg/l SiO2	69	<107	
Calcium	8204	Mg/l Ca2+	2	<150	
Magnesium	8213	Mg/l Mg2+	0	<100	
Calcium Hardness	8204	Mg/l Ca2+ (CaCO3)	6	NS	
Magnesium Hardness	8213	Mg/l Mg2+ (CaCO3)	2	NS	
Total Hardness	8213	Mg/l CaCO3	8	<300	
Aluminium, Al	8012	Mg/l Al	0.02	<0.10	
Sulphate, SO4	8051	Mg/l SO4	16	<400	
Chlorides	8207	Mg/l Cl	45	<250	
Total Alkalinity	8203	Mg/l CaCO3	204	NS	
Phenolphthalein Alkalinity	8204	Mg/l CaCO3	2	NS	
Bicarbonates	8205	Mg/l HCO3-	198	<255	
Carbonates	8206	Mg/l CO^{2-}_3	6	<121	
Barium	8014	Mg/L Ba2+	0	<0.7	
Sodium, Na	8322	Mg/l Na	156	<200	
BACTERIOLOGICAL ANALYSIS					
Total Coliforms	ISO 9308-1: 2014	CFU/100ml	10	Not Detectable	
E. Coli	ISO 9308-1: 2014	CFU/100ml	3	Not Detectable	
Total Viable Count at 37°c	ISO 6222:1999	CFU/ml	123	50	

COMMENTS

Based on the water analysis, the pH, TSS, Fluoride, Phosphate, Total Coliforms, E. Coli and Total Viable Count at 37°c levels did not conform to WHO drinking water guidelines.

The results relate to the sample(s) submitted.The laboratory will not be held responsible for any sampling errors.
*The parameter is not accredited. # Parameters is sub contracted to a third party laboratory

PREPARED BY : RACHEAL KIMANI **APPROVED BY: JOHN WAEMA**
SIGN **Date: 21/01/2026** **SIGN** **Date: 22/01/2026**