DAVIS & SHIRTLIFF
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PO Box 41762-00100, Nairobi, Kenya ● Tel: (+254) 0711 079242, 0730 079242 ● mombasalaboratory@davisandshirtliff.com

WATER PUMPS
SOLAR EQUIPMENT
BOREHOLE SERVICE
WATER TREATMENT
DIGITAL ENGINEERING
GENERAL MACHINERY
SWIMMING POOLS
IRRIGATION
CHEMICALS

D&S MOMBASA LABORATORY WATER ANALYSIS REPORT

Client Name : Smart X Watertech Ecosystem Ltd	**Reference No : 05/26/DNSLBMO/0824**	**Date Received : 25/05/2026**
Site Location : Embakasi North	**Water Source : Borehole**	**Analysis Date : 25/05/2026**
Type of Test : Physiochemical Water Analysis	**Sampling Date : 22/05/2026**	**Report Date : 25/05/2026**

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	8.80	6.5 - 8.50	
TDS	10256	Mg/l	424	<1000	
Total Suspended Solids(TSS)	8006	Mg/l	0	NIL	
Salinity	8160	ppt	0.35	NS	
Electrical Conductivity(EC)	10256	µS/cm	694	<1500	
Turbidity	8237	NTU	1.0	<5	
Color	8025	PtCo	0	<15	
Chemical Analysis					
Iron, Fe	8008	Mg/l Fe	0.00	<0.30	
Manganese, Mn	8149	Mg/l Mn	0.01	<0.10	
Copper, Cu	8506	Mg/l Cu	0.07	<2.0	
Fluoride	8323	Mg/l F	6.8	<1.5	
Ammonical Nitrogen	8155	NH3-N	0.00	NS	
Ammonium	8155	NH4+	0.00	<1.5	
Ammonia	8155	NH3	0.00	<2.0	
Nitrate N	8039	Mg/l NO3N	3.3	<11.3	
Nitrate	8039	NO3-	15	<50	
Nitrite	8153	Mg/l NO2	1	<3	
Nitrite N	8153	Mg/l NO2-N	0.3	<1	
Potassium	8049	Mg/l K	11.1	<50	
Phosphate	8048	Mg/lPO_4^{3-}	0.35	<0.61	
Silicon	8185	Mg/l	34	< 50	
Silica	8185	Mg/l SiO2	73	<107	
Calcium	8204	Mg/l Ca2+	5	<150	
Magnesium	8213	Mg/l Mg2+	0	<100	
Calcium Hardness	8204	Mg/l Ca2+ (CaCO3)	12	NS	
Magnesium Hardness	8213	Mg/l Mg2+ (CaCO3)	2	NS	
Total Hardness	8213	Mg/l CaCO3	14	<300	
Aluminium, Al	8012	Mg/l Al	0.02	<0.10	
Sulphate, SO4	8051	Mg/l SO4	11	<400	
Chloride	8207	Mg/l Cl	44	<250	
Total Alkalinity	8203	Mg/l CaCO3	205	NS	
Phenolphthalein Alkalinity	8204	Mg/l CaCO3	4	NS	
Bicarbonate	8205	Mg/l HCO3-	197	<255	
Carbonate	8206	Mg/l $CO^{2-}{}_3$	8	<121	
Barium	8014	Mg/L Ba2+	0	<0.7	
Sodium, Na	8322	Mg/l Na	116	<200	

Water Analysis Comments

Based on the water analysis, the pH and Fluoride levels did not conform to WHO drinking guidelines.

The results relate to the sample(s) submitted.The laboratory will not be held responsible for any sampling errors.

Analyzed by : Steve Onyango		**Authorized by: John Waema**	
Sign:	**Date: 25/05/2026**	**Sign**	**Date: 25/05/2026**