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ISO 17025:2017 COMPANY

LABORATORY TEST REPORT

NOVEMBER 11TH, 2025

Description of Sample:	**BOREHOLE WATER**	**Date of Sampling:**	**05/11/2025**
Submitted By:	**DEVELOPMENT SERVICE**	**Date Sample Received:**	**06/11/2025**
Customer Contact:	**Norwa Water**	**Date of Analysis:**	**06/11/2025**
Sampled By:	**CLIENT**	**Date of Report Issue:**	**11/11/2025**
Sample Source:	**GARISSA**	**Sample ID:**	**S0513-34415**

PARAMETERS	METHOD	VALUES	KS EAS 12:2018 NATURAL WATER SPECIFICATION	WHO Guidelines 4th Ed. 2022	REMARKS
PHYSIO-CHEMICALANALYSIS					
pH (pH Units pH)	AQL/TM/HACH/8156	7.99	5.5 - 9.5	NS	PASS
Colour (Pt. Co. APHA Colour)	AQL/TM/HACH/8025	29	50	NS	PASS
Turbidity (NTU TUB)	AQL/TM/CHEM/10	5.35	25	NS	PASS
Total Suspended Solids (mg/L TSS)	**AQL/TM/HACH/8006**	**4**	**ND**	**NIL**	**FAIL**
Total Dissolved Solids (mg/L TDS)	**AQL/TM/HACH/8160**	**11730**	**1500**	**NS**	**FAIL**
Electrical Conductivity (uS/cm EC)	**AQL/TM/HACH/8160**	**19100**	**2500**	**NS**	**FAIL**
P Alkalinity (mg/L CaCO3 PA)	AQL/TM/HACH/ISO/9963-1:1994	ND	NS	NS	-
Total Alkalinity (mg/L CaCO3 TA)	AQL/TM/HACH/ISO/9963-1:1994	2413	NS	NS	-
Chloride (mg/L Cl)	**AQL/TM/HACH/ISO/9297:2000**	**6030**	**250**	**NS**	**FAIL**
Fluoride (mg/L F)✓	**AQL/TM/HACH/8323**	**15.7**	**1.5**	**1.5**	**FAIL**
Sulfate (mg/L SO4)	**AQL/TM/HACH/8051**	**1820**	**400**	**NS**	**FAIL**
Nitrate (mg/L NO3)	AQL/TM/HACH/8358	33.1	45	50	PASS
Phosphate (mg/L PO4)	AQL/TM/HACH/8114	< 0.3	2.2	NS	PASS
Sodium (mg/L Na)	**AQL/TM/APHA/3111B**	**5017.5**	**200**	**NS**	**FAIL**
Calcium (mg/L Ca)	AQL/TM/HACH/8030	12.01	150	NS	PASS
Magnesium (mg/L Mg)	AQL/TM/HACH/8030	12.15	100	NS	PASS
Iron (mg/L Fe)	AQL/TM/APHA/3111B	0.24	0.3	NS	PASS
Manganese (mg/L Mn)	AQL/TM/APHA/3111B	0.009	0.1	-	PASS
Ammonia (mg/L NH3)	AQL/TM/HACH/10001	0.08	0.5	NS	PASS
Copper (mg/L Cu)	AQL/TM/APHA/3111B	< 0.04	1.0	2.0	PASS
Zinc (mg/L Zn)	AQL/TM/APHA/3111B	0.06	5.0	NS	PASS
Calcium Hardness (mg/L CH)	AQL/TM/HACH/8030	30	NS	NS	-
Magnesium Hardness (mg/L MH)	AQL/TM/HACH/8030	50	NS	NS	-
Total Hardness (mg/L TH)	AQL/TM/HACH/8030	80	600	NS	PASS
Silica (mg/L SiO2)	AQL/TM/HACH/8185	22.9	NS	NS	-

Notes and Disclaimer

ISE - Ion Selective Electrode, NS - No Set Standard, ND - Not Detected, TN - Too Numerous, Parameters marked with (*) are Subcontracted while (✓) are Accredited. The tests were done in our laboratory located at Winsford Park, Baba Dogo.
The test report shall not be reproduced except in full without written approval from Aqualytic Laboratories Limited. The laboratory will not be held responsible for any sampling error(s) unless sampled by the laboratory personnel.The results relate only to the sample(s) submitted.

Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account except when requested by the customer. The Uncertainty of Measurements applied does not take into account the Sampling aspect for this sample.

Where statements of conformity are made in this report, the following decision rules are applied:
PASS – Results within limits/specifications.
FAIL – Results exceed limits/specifications.

COMMENTS

Based on the tested parameters only, the Borehole Water sample was found not to conform to the Borehole Water (KS EAS 12:2018 NATURAL WATER SPECIFICATION). The level of Total Suspended Solids, Total Dissolved Solids, Electrical Conductivity, Chloride, Fluoride, Sulfate, Sodium does not meet the set standard. Therefore, treatement is recommended.