

Laboratory State Level Water Testing Laboratory, Drinking Water & Sanitation
Wing of PWD, Panio Jal O Sastha Bidhan Bhaban, P.N. Complex,
Agartala, Tripura

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7350 (in lieu of T-3989)

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Validity 16.06.2018 to 15.06.2020

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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CHEMICAL TESTING

I.	WATER			
1.	Ground Water/ Surface Water / Drinking Water	Total Alkalinity as CaCO ₃	APHA-23 rd Ed 2012-2320 B Titration Method	1 mg/l to 1000 mg/l
		Color	APHA-23 rd Ed 2017-2120 B Visual Comparison (Pt Cobalt) Method	1 Hazen Unit to 100 Hazen Unit
		Conductivity at 25 °C	APHA-23 rd Ed 2017-2510 B	1 µS/cm to 1000 µS/cm
		Hardness as CaCO ₃	APHA-23 rd Ed 2017-2340 C EDTA Method	2 mg/l to 1000 mg/l
		Odour	IS3025 (Part 5): 1983 (RA 1996)	Qualitative
		Turbidity	APHA-23 rd Ed 2017- 2130B Nephelometric Method	0.1 NTU to 800.00 NTU
		Total Dissolved Solids	APHA-23 rd Ed 2017-2540C Dried at 180°C	1 mg/l to 1000 mg/l
		Temperature	APHA-23 rd Ed 2017-2550 B	20 °C to 50 °C
		Chloride as Cl	APHA-23 rd Ed 2017- 4500-Cl B Argentometric Method	2 mg/l to 1000 mg/l
		Chlorine (Residual)	APHA-23 rd Ed 2017- 4500 CL-G DPD Colorimetric Method	0.1 mg/l to 10 mg/l
		Fluoride as F	APHA-23 rd Ed 2017-4500 F-D SPANDS Method	0.2 mg/l to 20 mg/l
		Nitrate (NO ₃)	APHA-23 rd Ed 2017-4500-NO ₃ ⁻ B, UV Screening Method	0.5 mg/l to 40 mg/l
		Dissolved Oxygen (DO)	APHA-23 rd Ed 2017-4500-O-C Winkler Method with Azide Modification	1 mg/l to 10 mg/l
	pH at 25°C	APHA-23 rd Ed 2017 -4500H-B	2.0 to 12.0	

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		Sulphate (SO ₄)	APHA-23 rd Ed 2017- 4500 SO ₄ -E Turbidity Method	1 mg/l to 40 mg/l
		Arsenic as As	APHA-23 rd Ed 2017- 3500-As B (SDDC Method)	0.01 mg/l to 2 mg/l
		Calcium as Ca	APHA-23 rd Ed 2017-3500-Ca-B EDTA Method	2 mg/l to 600 mg/l
		Iron as Fe	APHA-23 rd Ed 2017-3500Fe-B Phenanthroline Method	0.1 mg/l to 10 mg/l
		Magnesium as Mg	APHA-23 rd Ed 2017-3500-Mg B Calculation Method	2 mg/l to 600 mg/l
		Manganese as Mn	APHA-23 rd Ed 2017- 3500-Mn B (Per sulphate method)	0.01 mg/l to 2 mg/l
		Total Solid	APHA-23 rd Ed 2017- 2540 B (Evaporation method)	2 mg/l to 200 mg/l
		Total Suspended Solid	APHA-23 rd Ed 2017- 2540 D (Evaporation method)	1 mg/l to 200 mg/l
		Total Acidity as CaCO ₃	APHA-23 rd Ed 2017- 2310 B (Titration Method)	1 mg/l to 1000 mg/l
		Free CO ₂	APHA-23 rd Ed 2017-4500-CO ₂ C (Sodium Thiosulphate Method)	1 mg/l to 500 mg/l