

**Laboratory** State Level Water Testing Laboratory, Drinking Water & Sanitation Department, New PHED Colony, Hinoo, Ranchi, Jharkhand

**Accreditation Standard** ISO/IEC 17025: 2005

**Certificate Number** TC-7351 (in lieu of T-4032) **Page 1 of 1**

**Validity** 23.06.2018 to 22.06.2020 **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**

<b>I.</b>	<b>WATER</b>			
<b>1.</b>	<b>Drinking water, Surface water, Ground water</b>	Alkalinity as CaCO <sub>3</sub>	APHA 23 <sup>rd</sup> Ed. 2017-2320 B, (Titration method)	5 mg/l to 1000 mg/l
		Hardness as CaCO <sub>3</sub>	APHA 23 <sup>rd</sup> Ed. 2017-2340 C, (EDTA Titration method)	2 mg/l to 1000 mg/l
		Turbidity	APHA 23 <sup>rd</sup> Ed. 2017-2130 B, (Nephelometric method)	1 NTU to 500 NTU
		Chloride as Cl <sup>-</sup>	APHA 23 <sup>rd</sup> Ed. 2017-4500-Cl <sup>-</sup> B, (Argent metric method)	2 mg/l to 1000 mg/l
		Fluoride as F <sup>-</sup>	APHA 23 <sup>rd</sup> Ed. 2017-4500 F <sup>-</sup> C (Ion selective electrode method)	0.2 mg/l to 20 mg/l
		Nitrate as NO <sub>3</sub> <sup>-</sup>	APHA 23 <sup>rd</sup> Ed. 2017-4500NO <sub>3</sub> <sup>-</sup> B (Ultraviolet spectrophotometric screening method)	0.5 mg/l to 100 mg/l
		pH	APHA 23 <sup>rd</sup> Ed. 2017-4500-H <sup>+</sup> B (Electrometric Method)	2 to 12
		Calcium as Ca	APHA 23 <sup>rd</sup> Ed. 2017-3500-Ca B (EDTA Titration method)	2 mg/l to 1000 mg/l
		Iron as Fe	APHA 23 <sup>rd</sup> Ed. 2017-3500-Fe B (1,10-Phenanthroline Method)	0.1 mg/l to 10 mg/l
		Magnesium as Mg	APHA 23 <sup>rd</sup> Ed. 2017-3500-Mg B, (Calculation Method)	2 mg/l to 50 mg/l
		Total Dissolved Solids at 180°C	APHA 23 <sup>rd</sup> Ed. 2017-2540 C	10 mg/l to 3000 mg/l
		Colour	APHA 23 <sup>rd</sup> Ed. 2017-2120 B, (Visual Comparison Method)	5 Hazen unit to 50 Hazen unit
<b>II.</b>	<b>RESIDUES IN WATER</b>			
<b>1.</b>	<b>Drinking water, Surface water, Ground water)</b>	<b>Trace Metal Elements</b>		
		Arsenic as (As)	IS : 3025(part-2)-2004, (ICP/OES method)	10 µg/l to 100 µg/l