

Laboratory Punjab Pollution Control Board, Head Office, Laboratory, Vatavaran Bhawan, Nabha Road, Patiala, Punjab

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7045 (in lieu of T-3930)

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Validity 05.05.2018 to 04.05.2020

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.	Surface Water/ Ground Water	pH	APHA (23 rd Edition), 4500 H ⁺ B Electrometric Method IS 3025 (Part 11)	4.0 to 10.0 4.0 to 10.0
		Turbidity	APHA (23 rd Edition), 2130 B Nephelometric method IS 3025 (Part 10)	1.0 NTU to 200 NTU 1.0 NTU to 200 NTU
		Total Dissolved Solids	APHA (23 rd Edition), 2540 C Gravimetric Method IS 3025 (Part 16) Gravimetric Method	10.0 mg/l to 6000 mg/l 10.0 mg/l to 6000 mg/l
		Total Suspended Solids	APHA (23 rd Edition), 2540 D Gravimetric Method IS 3025 (Part 17)	5.0 mg/l to 200 mg/l 5.0 mg/l to 200 mg/l
		Calcium as Ca	APHA (23 rd Edition), 3500 Ca-B EDTA Titrimetric Method IS 3025 (Part 40) EDTA Titrimetric Method	5.0 mg/l to 500 mg/l 5.0 mg/l to 500 mg/l
		Chloride as Cl	APHA (23 rd Edition), 4500 Cl-B Argentometric Method IS 3025 (Part 32) Argentometric Method	4.0 mg/l to 4000 mg/l 4.0 mg/l to 4000 mg/l
		Magnesium as Mg	APHA (23 rd Edition), 3500 Mg-B Calculation Method IS 3025 (Part 46) Calculation Method	5.0 mg/l to 500 mg/l 5.0 mg/l to 500 mg/l
		Sulphate as SO ₄	APHA (23 rd Edition), 4500 SO ₄ ²⁻ E Turbidity Method IS 3025 (Part 24) Turbidity Method	1 mg/l to 40 mg/l 1 mg/l to 40 mg/l

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			APHA (23 rd Edition), 4500 SO ₄ ²⁻ D Gravimetric Method with Drying of Residue	10.0 mg/l to 1000 mg/l
		Total Alkalinity as CaCO ₃	APHA (23 rd Edition), 2320 B Titration Method IS 3025 (Part 23) Titration Method	5.0 mg/l to 1000 mg/l 5.0 mg/l to 1000 mg/l
		Dissolved Oxygen	APHA (23 rd Edition), 4500 O C Azide modification Method IS 3025 (Part 38)	0.2 mg/l to 15.0 mg/l 0.2 mg/l to 15.0 mg/l
		Total Hardness as CaCO ₃	APHA (23 rd Edition), 2340 C EDTA Titrimetric Method IS 3025 (Part 21) EDTA Titrimetric Method	10.0 mg/l to 1000 mg/l 10.0 mg/l to 1000 mg/l
		Electrical Conductivity	APHA (23 rd Edition), 2510 B Conductivity Meter Method, IS 3025 (Part 14)	0.001 mS/cm to 10 mS/cm 0.001 mS/cm to 10 mS/cm
		Iron as Fe	APHA (23 rd Edition) 3111 B AAS Method	0.1 mg/l to 500 mg/l
II.	POLLUTION & ENVIRONMENT			
1.	Waste Water (Effluent /Sewage)	pH	APHA (23 rd Edition), 4500 H ⁺ B Electrometric Method IS 3025 (Part 11)	2.0 to 12.0 2.0 to 12.0
		Total Dissolved Solids	APHA (23 rd Edition), 2540 C Gravimetric Method IS 3025 (Part 16) Gravimetric Method	10.0 mg/l to 10000 mg/l 10.0 mg/l to 10000 mg/l
		Total Suspended Solid	APHA (23 rd Edition), 2540 D Gravimetric Method IS 3025 (Part 17) Gravimetric Method	5.0 mg/l to 1000 mg/l 5.0 mg/l to 2000 mg/l

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		Chemical Oxygen Demand	IS 3025 (Part 58)	5.0 mg/l to 50000 mg/l
		Biological Oxygen Demand 3 Day at 27°C	IS 3025 (Part 44)	5.0 mg/l to 20000 mg/l
		Chloride as Cl	APHA (23 rd Edition), 4500 Cl-B Argentometric Method IS 3025 (Part 32) Argentometric Method	5.0 mg/l to 5000 mg/l 5.0 mg/l to 5000 mg/l
		Iron as Fe	APHA (23 rd Edition), 3111 B AAS Method	0.1 mg/l to 500 mg/l
III.	RESIDUES IN WATER			
1.	Trace Metal Elements			
a.	Waste Water (Effluent/Sewage)	Nickel as Ni	APHA (23 rd Edition), 3111 B AAS Method	0.1 mg/l to 500 mg/l
		Total Chromium as Cr	APHA (23 rd Edition), 3111 B AAS Method	0.1 mg/l to 500 mg/l
		Zinc as Zn	APHA (23 rd Edition), 3111 B AAS Method	0.1 mg/l to 500 mg/l
		Copper as Cu	APHA (23 rd Edition), 3111 B AAS Method	0.1 mg/l to 500 mg/l
b.		Ground/ Surface Water	Nickel as Ni	APHA (23 rd Edition), 3113 B AAS Method
	Total Chromium as Cr		APHA (23 rd Edition), 3113 B AAS Method	0.005 mg/l to 5.0 mg/l
	Zinc as Zn		APHA (23 rd Edition), 3113 B AAS Method	0.1 mg/l to 5.0 mg/l
	Copper as Cu		APHA (23 rd Edition), 3113 B AAS Method	0.005 mg/l to 5.0 mg/l