SHIMLA JAL PRABHDHAN NIGAM LTD.

TEST REPORT

Report No.	LSWW for Shimla city
Name and address of sender	Koti Bharandi (Been Nala)
Division	Water distribution division
Sub-division	Sanjauli
Name of scheme and location of source	W.T.P. Ashwanikhad
Date and time of collection	10-09-2023 at 11:00 AM
Date and time of receipt at laboratory	10-09-2023 at 11:15 AM
Date and time of commencing	10-09-2023 at 11:30 AM
Type of sample	Filter water
Quantity of sample	500 ml
Date of reporting	10-09-2023
Testing protocol	IS 10500:2012

A. PHYSICAL TESTS

S.no.	Tests	Acceptable limit	Permissible limit in the absence of alternate source	Result of sample
1.	Temperature (°C)			16.3°C
2.	Turbidity [NTU]	1	5	2.74 NTU
3.	Conductivity (µS)			81.7 μs
4.	Total Dissolved Solids (Mg/L or ppm)	500	2000	60.2 ppm
5.	Color (Hazen)	5	15	85 Pt/Co(Hz) (Range:25-1000 Pt/Co(Hz)
6.	Odour	Agreeable	Agreeable	No odour
7.	Taste	Agreeable	Agreeable	Normal

B. CHEMICAL TESTS

S.No.	Tests	Acceptable limit	Permissible limit in the absence of alternate source	Result of sample
1.	pH value	6.5-8.5	No relaxation	8.37
2.	Total Alkalinity (Mg/l)	200	600	30 mg/l
3.	Chlorides (Mg/l)	250	1000	11.782 mg/l
4.	Total Hardness (Mg/I)	200	600	58 mg/l
5.	Residual Chlorine (Mg/l or ppm)	0.2	1.0	3.0 ppm at w.t.p.
6.	Nitrate (Mg/I)	45	No relaxation	5 mg/l (Range; 0.3-30.0 mg/l)
7.	Iron (Mg/I)	0.1	1.0	0.01 mg/l (Range; 0.01-2.00 mg/l)
8.	Fluoride (Mg/l)	1.0	1.5	0.85 mg/l (Range; 0.08-2.00 mg/l)
9.	Sulphate (Mg/I)	200	400	12.5 mg/l (Range; 1.0-25.0 mg/l)
10.	Manganese (Mg/l)	0.1	0.3	Underrange (Range; 0.05-6.00 mg/l)

C. BACTERIOLOGICAL TESTS (MPN/100)

Note:- Bacteriological tests are under incubation of 48 hours.

C. BACTERIOLOGICAL TESTS (MPN/100)

- **▶** Date of collection of sample:-08-09-2023
- > Date of commencing:- 08-09-2023
- > Date of Reporting:- 10-09-2023 (after 48 hours of incubation)

After 24-48 hours of incubation, the MPN in 100 ml of water sample:-

Ī	Sample	Volumes of sample		MPN for 100 ml
		50 ml	10 ml	
Ī	Filter water	0	0	0

• Coli form count should be zero in any sample of 100 ml of water entering the distribution system.

Chemist

Water testing laboratory

Ashwanikhad