## 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	06-05-2023 at 11:00 AM
Date and time of receipt at laboratory	06-05-2023 at 11:15 AM
Date and time of commencing	06-05-2023 at 11:30 AM
Type of sample	Filter water
Quantity of sample	500 ml
Date of reporting	06-05-2023
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)			11.6°C
2.	Turbidity [NTU]	1	5	1.94 NTU
3.	Conductivity (µS)			152.7 μs
4.	Total Dissolved Solids (Mg/L or ppm)	500	2000	107 ppm
5.	Color (Hazen)	5	15	Underrange (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	6.77
2.	Total Alkalinity (Mg/l)	200	600	30 mg/l
3.	Chlorides (Mg/l)	250	1000	11.933 mg/l
4.	Total Hardness (Mg/l)	200	600	66 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	<b>10 mg/l</b> (Range; 0.3-30.0 mg/l)
7.	Iron (Mg/l)	0.1	1.0	Underrange (Range; 0.01-2.00 mg/l)
8.	Fluoride (Mg/l)	1.0	1.5	<b>0.81 mg/l</b> (Range; 0.08-2.00 mg/l)
9.	Sulphate (Mg/I)	200	400	<b>11.4 mg/l</b> (Range; 1.0-25.0 mg/l)
10.	Manganese (Mg/l)	0.1	0.3	<b>0.02 mg/l</b> (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:-04-05-2023
- > Date of commencing:- 04-05-2023
- ➤ Date of Reporting:- 06-05-2023 (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