

# SHIMLA JAL PRABHDHAN NIGAM LTD.

## TEST REPORT

<b>Report No.</b>	LSWW for Shimla city
<b>Name and address of sender</b>	Koti Bharandi (Been Nala)
<b>Division</b>	Water distribution division
<b>Sub-division</b>	Sanjauli
<b>Name of scheme and location of source</b>	W.T.P. Ashwanikhad
<b>Date and time of collection</b>	02-11-2023 at 11:00 AM
<b>Date and time of receipt at laboratory</b>	02-11-2023 at 11:15 AM
<b>Date and time of commencing</b>	02-11-2023 at 11:30 AM
<b>Type of sample</b>	Filter water
<b>Quantity of sample</b>	500 ml
<b>Date of reporting</b>	02-11-2023
<b>Testing protocol</b>	<b>IS 10500:2012</b>

### A. PHYSICAL TESTS

S.no.	Tests	Acceptable limit	Permissible limit in the absence of alternate source	Result of sample
1.	Temperature (°C)			<b>10.7°C</b>
2.	Turbidity [NTU]	1	5	<b>0.92 NTU</b>
3.	Conductivity (µS)			<b>76.6 µs</b>
4.	Total Dissolved Solids (Mg/L or ppm)	500	2000	<b>51.3 ppm</b>
5.	Color (Hazen)	5	15	<b>46 Pt/Co(Hz)</b> (Range:25-1000 Pt/Co(Hz))
6.	Odour	Agreeable	Agreeable	<b>No odour</b>
7.	Taste	Agreeable	Agreeable	<b>Normal</b>

## 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	<b>8.10</b>
2.	Total Alkalinity (Mg/l)	200	600	<b>45 mg/l</b>
3.	Chlorides (Mg/l)	250	1000	<b>12.362 mg/l</b>
4.	Total Hardness (Mg/l)	200	600	<b>56 mg/l</b>
5.	Residual Chlorine (Mg/l or ppm)	0.2	1.0	<b>3.0 ppm at w.t.p.</b>
6.	Nitrate (Mg/l)	45	No relaxation	<b>5 mg/l</b> (Range; 0.3-30.0 mg/l)
7.	Iron (Mg/l)	0.1	1.0	<b>0.02 mg/l</b> (Range; 0.01-2.00 mg/l)
8.	Fluoride (Mg/l)	1.0	1.5	<b>0.76 mg/l</b> (Range; 0.08-2.00 mg/l)
9.	Sulphate (Mg/l)	200	400	<b>12.1 mg/l</b> (Range; 1.0-25.0 mg/l)
10.	Manganese (Mg/l)	0.1	0.3	<b>Underrange</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:-31-10-2023**
- **Date of commencing:- 31-10-2023**
- **Date of Reporting:- 02-11-2023 (after 48 hours of incubation)**

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

Sample	Volumes of sample		MPN for 100 ml
	50 ml	10 ml	
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**

