

# 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>	31-12-2020 at 11:00 AM
<b>Date and time of receipt at laboratory</b>	31-12-2020 at 11:15 AM
<b>Date and time of commencing</b>	31-12-2020 at 11:30 AM
<b>Type of sample</b>	Filtered water
<b>Quantity of sample</b>	500 mL
<b>Date of reporting</b>	31-12-2020
<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
	Temperature (°C)			<b>1.5 °C</b>
<b>2.</b>	Turbidity [NTU]	1	5	<b>0.66 NTU</b>
<b>3.</b>	Conductivity (µS)			<b>265.0 µs</b>
<b>4.</b>	Total Dissolved Solids (Mg/L or ppm)	500	2000	<b>186.0 ppm</b>
<b>5.</b>	Color (Hazen)	5	15	<b>Underrange</b> (Range;25-1000 Pt/Co(Hz))
<b>6.</b>	Odour	Agreeable	Agreeable	<b>No odour</b>
<b>7.</b>	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>7.16</b>
2.	Total Alkalinity (Mg/L)	200	600	<b>30 mg/L</b>
3.	Chlorides (Mg/L)	250	1000	<b>5.786 mg/L</b>
4.	Total Hardness (Mg/L)	200	600	<b>58 mg/L</b>
5.	Residual Chlorine (Mg/L or ppm)	0.2	1.0	<b>2.0 ppm at w.t.p.</b>
6.	Nitrate (Mg/L)	45	No relaxation	<b>1.6 mg/L</b> (Range; 0.3-30.0 mg/L)
7.	Iron (Mg/L)	0.1	1.0	<b>0.03 mg/L</b> (Range; 0.01-2.00 mg/L)
8.	Fluoride (Mg/L)	1.0	1.5	<b>0.99 mg/L</b> (Range; 0.08-2.00 mg/L)
9.	Sulphate (Mg/L)	200	400	<b>14.4 mg/L</b> (Range; 1.0-25.0 mg/L)
10.	Manganese (Mg/L)	0.1	0.3	<b>0.03 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:-29-12-2020**
- **Date of commencing:- 29-12-2020**
- **Date of Reporting:- 31-12-2020 (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	
Filtered 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**

