

# 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>            | 07-03-2024 at 11:00 AM      |
| <b>Date and time of receipt at laboratory</b> | 07-03-2024 at 11:15 AM      |
| <b>Date and time of commencing</b>            | 07-03-2024 at 11:30 AM      |
| <b>Type of sample</b>                         | Filter water                |
| <b>Quantity of sample</b>                     | 500 ml                      |
| <b>Date of reporting</b>                      | 07-03-2024                  |
| <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)                     |                  |  | 6.8°C                                   |
| 2.    | Turbidity [NTU]                      | 1                | 5  | 0.76 NTU                                |
| 3.    | Conductivity (µS)                    |                  |  | 77.2 µs                                 |
| 4.    | Total Dissolved Solids (Mg/L or ppm) | 500              | 2000   | 53.4 ppm                                |
| 5.    | Color (Hazen)                        | 5                | 15   | Underrange<br>(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  | <b>6.89</b>                                  |
| 2.    | Total Alkalinity (Mg/l)         | 200              | 600  | <b>35 mg/l</b>                               |
| 3.    | Chlorides (Mg/l)                | 250              | 1000   | <b>13.790 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>Underrange</b><br>(Range; 0.3-30.0 mg/l)  |
| 7.    | Iron (Mg/l)                     | 0.1              | 1.0  | <b>Underrange</b><br>(Range; 0.01-2.00 mg/l) |
| 8.    | Fluoride (Mg/l)                 | 1.0              | 1.5  | <b>0.64 mg/l</b><br>(Range; 0.08-2.00 mg/l)  |
| 9.    | Sulphate (Mg/l)                 | 200              | 400  | <b>12.8 mg/l</b><br>(Range; 1.0-25.0 mg/l)   |
| 10.   | Manganese (Mg/l)                | 0.1              | 0.3  | <b>0.02 mg/l</b><br>(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:-05-03-2024**
- **Date of commencing:- 05-03-2024**
- **Date of Reporting:- 07-03-2024 (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**

