

SHIMLA JAL PRABHDHAN NIGAM LTD.

TEST REPORT

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| 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 | 22-06-2022 at 11:00 AM |
| Date and time of receipt at laboratory | 22-06-2022 at 11:20 AM |
| Date and time of commencing | 22-06-2022 at 11:30 AM |
| Type of sample | Filter water |
| Quantity of sample | 500 ml |
| Date of reporting | 22-06-2022 |
| 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) | | | 13.5 °C |
| 2. | Turbidity [NTU] | 1 | 5 | 0.97 NTU |
| 3. | Conductivity (µS) | | | 239 µs |
| 4. | Total Dissolved Solids (Mg/L or ppm) | 500 | 2000 | 167.9 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 | 7.58 |
| 2. | Total Alkalinity (Mg/l) | 200 | 600 | 35 mg/l |
| 3. | Chlorides (Mg/l) | 250 | 1000 | 11.952 mg/l |
| 4. | Total Hardness (Mg/l) | 200 | 600 | 52 mg/l |
| 5. | Residual Chlorine (Mg/l or ppm) | 0.2 | 1.0 | 2.0 ppm at w.t.p |
| 6. | Nitrate (Mg/l) | 45 | No relaxation | 5 mg/l (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 | 0.81 mg/l (Range; 0.08-2.00 mg/L) |
| 9. | Sulphate (Mg/l) | 200 | 400 | 16.7 mg/l (Range; 1.0-25.0 mg/L) |
| 10. | Manganese (Mg/l) | 0.1 | 0.3 | 0.02 mg/l (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:-20-06-2022**
- **Date of commencing:- 20-06-2022**
- **Date of Reporting:- 22-06-2022 (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

