| S.No | Parameter | Unit | Result | Test Method | IS:10500 Limit | Status |
|---|---|---|---|---|---|---|
| 1 | Physical Examination | - | Colourless | IS 3025 Part-02 | Colourless | WITHIN |
| 2 | Appearance After Filtration | - | Clear | IS 3025 Part-05 | Clear | WITHIN |
| 3 | Colour | Hazen | <1.0 | IS 3025 Part-02 | 2 | WITHIN |
| 4 | Odour | - | Agreeable | IS 3025 Part-05 | Agreeable | WITHIN |
| 5 | Turbidity | NTU | <0.5 | IS 3025 Part-10 | 2 | WITHIN |
| 6 | pH | - | 7.38 | IS 3025 Part-11 | 6.5 - 8.5 | WITHIN |
| 7 | Conductivity | µs/cm | 4036 | IS 3025 Part-14 | -- | INFORMATIVE |

## SECTION B — CHEMICAL PROPERTIES

| S.No | Parameter | Unit | Result | Test Method | IS:10500 Limit | Status |
|---|---|---|---|---|---|---|
| 1 | Total Suspended Solids | mg/l | <1.0 | IS 3025 Part-17 | 10 | WITHIN |
| 2 | Total Dissolved Solids | mg/l | **2704** | IS 3025 Part-16 | 500 | EXCEED |
| 3 | Phenolphthalein Alkalinity as $CaCO_3$ | mg/l | Nil | IS 3025 Part-23 | NIL | WITHIN |
| 4 | Methyl Orange Alkalinity as $CaCO_3$ | mg/l | **690** | IS 3025 Part-23 | 200 | EXCEED |
| 5 | Total Hardness as $CaCO_3$ | mg/l | **1060** | IS 3025 Part-21 | 200 | EXCEED |
| 6 | Calcium Hardness as $CaCO_3$ | mg/l | 730 | IS 3025 Part-21 | -- | INFORMATIVE |
| 7 | Magnesium Hardness as $CaCO_3$ | mg/l | 330 | IS 3025 Part-21 | -- | INFORMATIVE |
| 8 | Carbonate Hardness as $CaCO_3$ | mg/l | 690 | IS 3025 Part-21 | -- | INFORMATIVE |
| 9 | Non-Carbonate Hardness as $CaCO_3$ | mg/l | 370 | IS 3025 Part-21 | -- | INFORMATIVE |
| 10 | Calcium as Ca | mg/l | **290** | IS 3025 Part-40 | 75 | EXCEED |
| 11 | Magnesium as Mg | mg/l | **80** | IS 3025 Part-46 | 30 | EXCEED |
| 12 | Chloride as Cl | mg/l | **1250** | IS 3025 Part-32 | 250 | EXCEED |
| 13 | Sulphate as $SO_4^{2-}$ | mg/l | **340** | IS 3025 Part-24 | 200 | EXCEED |
| 14 | Silica ($SiO_2$) | mg/l | 54 | IS 3025 Part-35 | -- | INFORMATIVE |
| 15 | Total Iron (Fe) | mg/l | <0.1 | IS 3025 Part-53 | 0.3 | WITHIN |

### ⚠ Parameters Exceeding IS: 10500 Limits

The following parameters exceed permissible limits under IS: 10500 (Drinking Water Standard):

**Total Dissolved Solids(2704 mg/l), Methyl Orange Alkalinity as $CaCO_3$(690 mg/l), Total Hardness as $CaCO_3$(1060 mg/l), Calcium as Ca(290 mg/l), Magnesium as Mg(80 mg/l), Chloride as Cl (1250 mg/l), Sulphate as $SO_4^{2-}$ (340 mg/l)**

*Treatment is recommended before use for potable or process applications.*

**Testing Standard Reference**

IS: 10500 — Drinking Water Specification

IS 3025 — Methods of Sampling & Test for Water

*This report relates only to the sample tested.*

Authorised Signatory

R. Muthubalan

**R. Muthubalan**
Quality Control Manager
Krishna Industrial Services