



# CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.

(A Govt. of India Autonomous Body)  
Environmental Chemical Laboratory  
Bhubaneswar, Odisha  
TEST REPORT

|                                 |                                    |
|---------------------------------|------------------------------------|
| Sample Code: 2026/NABI/ECL/030  | Date : 25.06.2026                  |
| Test report No -202605ECL032    |                                    |
| Source of Sample : SBS,NISER    | Sample receiving Date : 27.05.2026 |
| Type of Sample : Drinking Water | Sample Analysis Date : 27.05.2026  |

| Sl. No | parameters                            | Units | Test Method (P) of IS:3025 | Requirements as per IS 10500:2012 (Latest Version) |                   | Test Result |
|--------|---------------------------------------|-------|----------------------------|----------------------------------------------------|-------------------|-------------|
|        |                                       |       |                            | Acceptable limit                                   | Permissible Limit |             |
| 1.     | Turbidity                             | NTU   | Part 10                    | 1                                                  | 5                 | 0.77        |
| 2.     | pH Value (at 25.0° C)                 | --    | Part 11                    | 6.5-8.5                                            | No relaxation     | 8.34        |
| 3.     | Total Dissolved Solids                | mg/l  | Part 16                    | 500                                                | 2000              | 142.0       |
| 4.     | Total Hardness as CaCO <sub>3</sub>   | mg/l  | Part 21                    | 200                                                | 600               | 64.0        |
| 5.     | Calcium as Ca                         | mg/l  | Part 40                    | 75                                                 | 200               | 16.04       |
| 6.     | Magnesium as Mg                       | mg/l  | Part 46                    | 30                                                 | 100               | 5.83        |
| 7.     | Total Alkalinity as CaCO <sub>3</sub> | mg/l  | Part 23                    | 200                                                | 600               | 60.0        |
| 8.     | Chloride as Cl                        | mg/l  | Part 32                    | 250                                                | 1000              | 16.0        |
| 9.     | Sulphate as SO <sub>4</sub>           | mg/l  | Part 24                    | 200                                                | 400               | 12.6        |
| 10.    | Fluoride as F                         | mg/l  | Part 60                    | 1.0                                                | 1.5               | 0.22        |
| 11.    | Iron as Fe                            | mg/l  | Part 53                    | 0.3                                                | No relaxation     | 0.042       |
| 12.    | Copper as Cu                          | mg/l  | Part 42                    | 0.05                                               | 1.5               | 0.006       |
| 13.    | Manganese as Mn                       | mg/l  | APHA 3111B                 | 0.1                                                | 0.3               | BDL         |
| 14.    | Zinc as Zn                            | mg/l  | Part 49                    | 5.0                                                | 15.0              | 0.044       |
| 15.    | Lead as Pb                            | mg/l  | Part 47                    | 0.01                                               | No relaxation     | BDL         |
| 16.    | Cadmium as Cd                         | mg/l  | Part 41                    | 0.003                                              | No relaxation     | BDL         |
| 17.    | Chromium as Cr                        | mg/l  | Part 52                    | 0.05                                               | No relaxation     | BDL         |
| 18.    | Nickel as Ni                          | mg/l  | Part 54                    | 0.02                                               | No relaxation     | 0.007       |

BDL = Below Detection Limit, LDL = Lower Detection Limit

Reviewed & Authorized by

  
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## NOTES :

1. The sample is drawn by the client & result relates to the sample tested.
2. This certificate shall not be reproduced wholly or in part without prior written consent of the laboratory.
3. This certificate shall not be used in any advertising media or as evidence in the court of Law without prior written consent of laboratory.
4. Latest version of test methods used as per latest specification.
5. It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned in "acceptable limit" render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicate under "permissible limit" in the absence of alternative sources, above which the source will have to be rejected.

End of Test Report





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|        |                            |             |                            | Acceptable limit                                   | Permissible Limit |             |
| 19.    | Colour                     | Hazen units | Part 4                     | 5                                                  | 15                | <5          |
| 20.    | Odour                      | --          | Part 5                     | Agreeable                                          | Agreeable         | Agreeable   |
| 21.    | Conductivity               | µs/cm       | Part 14                    | -                                                  | -                 | 223.0       |
| 22.    | Total Suspended Solid      | mg/l        | Part 17                    | -                                                  | -                 | <1.0        |
| 23.    | Nitrite as NO <sub>2</sub> | mg/l        | Part 34                    | -                                                  | -                 | 0.112       |
| 24.    | Nitrate as NO <sub>3</sub> | mg/l        | Part 34                    | 45                                                 | No relaxation     | 4.63        |
| 25.    | Sodium,                    | mg/l        | Part 45                    | -                                                  | -                 | 11.24       |
| 26.    | Potassium                  | mg/l        | Part 45                    | -                                                  | -                 | 1.12        |
| 27.    | Residual Free Chlorine     | mg/l        | Part 26                    | 0.2                                                | 1.0               | <0.1        |
| 28.    | Arsenic as As              | mg/l        | Part 37                    | 0.01                                               | No relaxation     | BDL         |
| 29.    | Dissolved Oxygen           | mg/l        | Part 38                    | -                                                  | -                 | 6.50        |
| 30.    | Biological Oxygen Demand   | mg/l        | Part 44                    | -                                                  | -                 | 0.20        |
| 31.    | Chemical Oxygen Demand     | mg/l        | Part 58                    | -                                                  | -                 | BDL         |
| 32.    | Mineral Oil                | mg/l        | Part 39                    | 0.5                                                | No relaxation     | <0.5        |

BDL = Below Detection Limit

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'End of Test Report'