

# CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.



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



Issued to : National Institute of Science Education and Research, Bhubaneswar	Date : 08.06.2024
Test report No -24/NABL/ECL/05240	
Source of Sample : Water Works ,NISER	Sample receiving Date : 21.05.2024
Type of Sample : Drinking water	Sample Analysis Date : 21.05.2024

Sl No	Characteristics	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	0.10
2.	pH@Temp° C	Part 11	6.5-8.5	No relaxation	8.01@25.0
3.	Total Dissolved Solids mg/L	Part 16	500	2000	146.0
4.	Total Hardness (as CaCO <sub>3</sub> ),mg/L	Part 21	200	600	84.0
5.	Calcium as Ca, mg/L	Part 40	75	200	22.44
6.	Magnesium as Mg, mg/L	Part 46	30	100	6.80
7.	Alkalinity as CaCO <sub>3</sub> , mg/L	Part 23	200	600	84.0
8.	Chloride as Cl, mg/L	Part 32	250	1000	15.0
9.	Sulfate as SO <sub>4</sub> , mg/L	Part 24	200	400	10.7
10.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.38
11.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.015
12.	Copper as Cu, mg/L	Part 42	0.05	1.5	0.061
13.	Manganese as Mn, mg/L	APHA(PART 3111B)	0.1	0.3	0.046
14.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.029
15.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	<0.001
16.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	<0.001
17.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	<0.001
18.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	<0.001

Authorized Signatory

*Signature*  
19/6/24

**Dr. Arakshita Majhi**

Senior Principal Scientist

Phone : 0674-2379236,

E mail - arakshita@immt.res.in

**Dr. Arakshita Majhi**

Senior Principal Scientist

Environmental Chemical Lab (ISO 17025:2017, NABL Lab)  
Environmental & Sustainability Dept.  
CSIR Institute of Minerals & Materials Technology  
Bhubaneswar-751013, Odisha, INDIA

## 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.

Non NABL Test report – P.T.O

'End of Test Report'





# CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.

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

Issued to : National Institute of Science Education and Research, Bhubaneswar				Date : 08.06.2024	
Test report No –24/NABL/ECL/05240					
Source of Sample : Water Works ,NISER				Sample receiving Date : 21.05.2024	
Type of Sample : Drinking water				Sample Analysis Date : 21.05.2024	
19.	*Color, Hazen units	Part 4	5	15	<5
20.	*Odour	Part 5	Agreeable	Agreeable	Agreeable
21.	*Conductivity, µs/cm	Part 14	-	-	201
22.	*Total Suspended Solid, mg/l	Part 17	-	-	1.0
23.	*Nitrite as NO <sub>2</sub> ,mg/L	Part 34	-	-	0.071
24.	*Nitrate as NO <sub>3</sub> , mg/L	Part 34	45	No relaxation	4.16
25.	Sodium, mg/l	Part 45	-	-	8.73
26.	Potassium, mg/l	Part 45	-	-	1.80
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	<0.001
29.	Dissolved Oxygen, mg/l	Part 38	-	-	6.30
30.	Biological Oxygen Demand, mg/l	Part 44	-	-	BDL
31.	Chemical Oxygen Demand, mg/l	Part 58	-	-	BDL
32.	Oil and Grease, mg/l	Part 39	0.5	No relaxation	<0.5

## BDL – Below Detection Limit

Authorized Signatory

**Dr. Arakshita Majhi**

Senior Principal Scientist

Phone : 0674-2379236,

E mail - arakshita@immt.res.in

**Dr. Arakshita Majhi**  
Senior Principal Scientist  
(Environmental Chemical Lab) (ISO17025:2017, NABL Lab)  
Environmental & Sustainability Dept.  
CSIR-Institute of Minerals & Materials Technology  
Bhubaneswar-751013, Odisha, INDIA

## 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.
6. Testing parameters which are not set limitation has marked as "-".

'End of Test Report'