# CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.



## (A Govt. of India Autonomous Body) **Environmental Chemical Laboratory**

### Bhubaneswar, Odisha (An NABL Accredited Laboratory)



### TEST REPORT

Issued to: NISER, Bhubaneswar

Date:05.11.2020

Sample Received on: 12.10.2020

Test Report No. 2010CH081

Source of Sample : Biology Building

Bottle Seal no if any:01

Type of Sample : Drinking water

Letter Reference :NISER/IWD-Civil/Services/2019/24/T/9-2

SI No	Characteristics	Test Method (P)of IS:3025	Requirements as per Vers	Test Result		
			Acceptable limit	Permissible Limit		
1.	*Color, Hazen units	Part 4	5	15	<5	
2.	*Odour	Part 5	Agreeable	Agreeable	Agreeable	
3.	Turbidity, NTU	Part 10	1	5	0.01	
4.	pH@Temp ° C	Part 11	6.5-8.5	No relaxation	7.49 @25.5	
5.	*Conductivity, µs/cm	Part 14	- 58 med	-	82	
6.	*Total Suspended Solid, mg/l	Part 17	- 12 122	-	0.1	
7.	Total Dissolved Solids mg/L	Part 16	500	2000	56.0	
8.	Total Hardness (as CaCO <sub>3</sub> ),mg/L	Part 21	200	600	18.47	
9.	Calcium as Ca, mg/L	Part 40	75	200	5.63	
10.	Magnesium as Mg, mg/L	Part 46	30	100	1.07	
11.	Alkalinity as CaCO <sub>3</sub> , mg/L	Part 23	200	600	14.0	
12.	Chloride as Cl, mg/L	Part 32	250	1000	17.33	
13.	Sulfate as SO <sub>4</sub> , mg/L	Part 24	200	400	1.21	
14.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.02	
15.	*Nitrite as NO <sub>2</sub> ,mg/L	Part 34			0.0105	
16.	*Nitrate as NO <sub>3</sub> , mg/L	Part 34	45	No relaxation	3.642	
17.	*Residual free chlorine, mg/L	Part 26	0.02 strementing	1.0	< 0.001	

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CSIR - Institute of Minerals & Materials Teo MABEY Accredited Lab/ISO/IEC 17025:2005.

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18.	Sodium, mg/l	Part 45	-	-	4.19
19.	Potassium,mg/l	Part 45	-	-	1.34
20	Dissolved Oxygen, mg/l	Part 38	-	-	6.50
21	Biological Oxygen Demand,	Part 44	-		0.20
22	mg/l Chemical Oxygen Demand,	Part 58	-	- 123 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3.0
23	mg/l Free CO <sub>2</sub> , mg/l	Part 61	- 7	- X - X - X - X - X - X - X - X - X - X	10.0
24	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.675
25	Copper as Cu, mg/L	Part 42	0.05	1.5	0.017
26	Manganese as Mn, mg/L	Part 59	0.1	0.3	0.035
27	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.657
28	Lead as Pb, mg/L	Part 47	0.01	No relaxation	<0.01
29	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	0.008
30	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	0.014
31	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	0.103
32	Arsenic, mg/l	Part 37	0.01	No relaxation	<0.01

#### NOTES:

- The sample is drawn by the customer & 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. Testing parameters which are not in NABL Scope has marked as " $\ast$ ".
- Testing parameters which are not set limitation has marked as " ".

Authorized Signatory

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