CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.

(A Govt. of India Autonomous Body)

Environmental Chemical Laboratory

Bhubaneswar, Odisha

(An NABL Accredited Laboratory)

Certificate No. : T-8091

TEST REPORT

Issued to: NISER , Bhubaneswar

Date:06.07.2020

Test Report No. 2005CH033

Source of Sample : Water Works Domestic Tank

Bottle Seal no if any:01

Sample Received on: 27.05.2020

Type of Sample : Treated Water

Letter Reference :

Sl No	Characteristics	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		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	0.05
4.	pH@Temp ° C	Part 11	6.5-8.5	No relaxation	7.02@25.1
5.	*Conductivity, µs/cm	Part 14	-	-	88
6.	*Total Suspended Solid, mg/l	Part 17	-	-	0.04
7.	Total Dissolved Solids mg/L	Part 16	500	2000	52.0
8.	Total Hardness (as $CaCO_3$),mg/L	Part 21	200	600	14.0
9.	Calcium as Ca, mg/L	Part 40	75	200	4.08
10.	Magnesium as Mg, mg/L	Part 46	30	100	0.97
11.	Alkalinity as $CaCO_3$, mg/L	Part 23	200	600	10.0
12.	Chloride as Cl, mg/L	Part 32	250	1000	17.0
13.	Sulfate as SO_4, mg/L	Part 24	200	400	0.68
14.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.03
15.	*Nitrite as NO_2,mg/L	Part 34	-	-	0.047
16.	*Nitrate as NO_3, mg/L	Part 34	45	No relaxation	2.596
17.	*Residual free chlorine, mg/L	Part 26	0.02	1.0	<0.001
18.	Sodium, mg/l	Part 45	-	-	5.12

डॉ अक्षत माझी/Dr. Akshita Majhi
प्रधान वैज्ञानिक/Principal Scientist
Environmental & Sustainability Dept.
खनिज एवं पदार्थ प्रौद्योगिकी संस्थान
Institute of Minerals & Materials Technology
Bhubaneswar 751013

Laboratory: Acharya Vihar, Bhubaneswar, Odisha-751013. Tel: 0674-2379236, Mobile: 9760387460.
E-Mail: dir@immt.res.in.

NABL Accredited Lab/ISO/IEC 17025:2005.

CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.

(A Govt. of India Autonomous Body)

Environmental Chemical Laboratory

Bhubaneswar, Odisha

(An NABL Accredited Laboratory)

Certificate No. : T-8091

TEST REPORT

19.	Potassium,mg/l	Part 45	-	-	0.77
20	Dissolved Oxygen, mg/l	Part 38	-	-	5.80
21	Biological Oxygen Demand, mg/l	Part 44	-	-	<0.01
22	Chemical Oxygen Demand, mg/l	Part 58	-	-	4.0
23	Free CO_2 , mg/l	Part 61	-	-	8.0
24	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.243
25	Copper as Cu, mg/L	Part 42	0.05	1.5	0.011
26	Manganese as Mn, mg/L	Part 59	0.1	0.3	0.042
27	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.083
28	Lead as Pb, mg/L	Part 47	0.01	No relaxation	0.024
29	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	0.011
30	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	0.140
31	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	0.291

NOTES :

1. 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 "*" .
6. Testing parameters which are not set limitation has marked as " – " .

Authorized Signatory

02.07.20

Dr Arakshita Majhi
Principal Scientist
Phone : 0674-2379236
E mail - arakshita@immt.res.in

डॉ अराक्षिता माझी/Dr. Arakshita Majhi
प्रधान वैज्ञानिक/Principal Scientist
पर्यावरण एवं सम्पोषण विभाग
Environmental & Sustainability Dept.
खनिज एवं पदार्थ प्रौद्योगिकी संस्थान
Minerals & Materials Technology
Bhubaneswar 751013

Laboratory: Acharya Vihar, Bhubaneswar, Odisha-751013. Tel: 0674-2379236, Mobile: 9760387460.
E-Mail: dir@immt.res.in.

NABL Accredited Lab/ISO/IEC 17025:2005.