# **CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.**



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

> Bhubaneswar, Odisha (An NABL Accredited Laboratory)



TEST REPORT

Date:26.08.2020

Issued to: NISER , Bhubaneswar

Test Report No. 2008CH063 Source of Sample : Water Tank Bottle Seal no if any:01 Type of Sample : Drinking Water

Sample Received on: 07.08.2020

	Test Method (P)of IS:3025	Requirements as per IS 10500:2012(Latest Version)		Test Result
		Acceptable limit	Permissible Limit	
*Color, Hazen units	Part 4	5	15	<5
*Odour	Part 5	Agreeable	Agreeable	Agreeable
Turbidity, NTU	Part 10	1	5	0.10
pH@Temp °C	Part 11	6.5-8.5	No relaxation	5.99@25.1
*Conductivity, µs/cm	Part 14	-	-	71
*Total Suspended Solid, mg/l	Part 17	-	-	0.45
Total Dissolved Solids mg/L	Part 16	500	2000	46.0
Total Hardness (as CaCO <sub>3</sub> ),mg/L	Part 21	200	600	13.73
Calcium as Ca, mg/L	Part 40	75	200	3.14
Magnesium as Mg, mg/L	Part 46	30	100	1.47
Alkalinity as CaCO <sub>3</sub> , mg/L	Part 23	200	600	6.06
Chloride as Cl, mg/L	Part 32	250	1000	16.34
Sulfate as SO <sub>4</sub> , mg/L	Part 24	200	400	2.69
Fluoride as F, mg/L	Part 60	1.0	1.5	0.02
*Nitrite as NO <sub>2</sub> ,mg/L	Part 34	-	-	0.0072
*Nitrate as NO <sub>3</sub> , mg/L	Part 34	45	No relaxation	9.562
*Residual free chlorine, mg/L	Part 26	0.02	1.0	< 0.001
Sodium, mg/l	Part 45	-	-	4.46
	*Odour Turbidity, NTU pH@Temp ° C *Conductivity, µs/cm *Total Suspended Solid, mg/l Total Dissolved Solids mg/L Total Hardness (as CaCO <sub>3</sub> ),mg/L Calcium as Ca, mg/L Magnesium as Mg, mg/L Alkalinity as CaCO <sub>3</sub> , mg/L Chloride as Cl, mg/L Sulfate as SO <sub>4</sub> , mg/L Fluoride as F, mg/L *Nitrite as NO <sub>2</sub> ,mg/L *Nitrate as NO <sub>3</sub> , mg/L *Residual free chlorine, mg/L	*OdourPart 5Turbidity, NTUPart 10pH@Temp °CPart 11*Conductivity, μs/cmPart 14*Total Suspended Solid, mg/lPart 17Total Dissolved Solids mg/LPart 16Total Hardness (as CaCO <sub>3</sub> ),mg/LPart 21Calcium as Ca, mg/LPart 40Magnesium as Mg, mg/LPart 46Alkalinity as CaCO <sub>3</sub> , mg/LPart 23Chloride as Cl, mg/LPart 32Sulfate as SO <sub>4</sub> , mg/LPart 60*Nitrite as NO <sub>2</sub> ,mg/LPart 34*Nitrate as NO <sub>3</sub> , mg/LPart 34*Residual free chlorine, mg/LPart 26	*Color, Hazen unitsPart 45*OdourPart 5AgreeableTurbidity, NTUPart 101pH@Temp °CPart 116.5-8.5*Conductivity, µs/cmPart 14-*Total Suspended Solid, mg/lPart 17-Total Dissolved Solids mg/LPart 16500Total Hardness (as CaCO <sub>3</sub> ),mg/LPart 21200Calcium as Ca, mg/LPart 4075Magnesium as Mg, mg/LPart 23200Chloride as Cl, mg/LPart 32250Sulfate as SO <sub>4</sub> , mg/LPart 601.0*Nitrite as NO <sub>2</sub> ,mg/LPart 34-*Nitrate as NO <sub>3</sub> , mg/LPart 3445*Residual free chlorine, mg/LPart 260.02	*Color, Hazen unitsPart 4515*Color, Hazen unitsPart 5AgreeableAgreeable*OdourPart 5AgreeableAgreeableTurbidity, NTUPart 1015pH@Temp ° CPart 116.5-8.5No relaxation*Conductivity, µs/cmPart 14*Total Suspended Solid, mg/LPart 17Total Dissolved Solids mg/LPart 165002000Total Hardness (as CaCO <sub>3</sub> ),mg/LPart 21200600Calcium as Ca, mg/LPart 4075200Magnesium as Mg, mg/LPart 23200600Alkalinity as CaCO <sub>3</sub> , mg/LPart 23200600Chloride as Cl, mg/LPart 24200400Fluoride as F, mg/LPart 601.01.5*Nitrite as NO <sub>2</sub> , mg/LPart 34*Nitrite as NO <sub>3</sub> , mg/LPart 3445No relaxation*Residual free chlorine, mg/LPart 260.021.0

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19.	Potassium,mg/l	Part 45	-	-	1.28
20	Dissolved Oxygen, mg/l	Part 38	-	-	5.80
21	Biological Oxygen Demand, mg/l	Part 44	-	-	BDL
22	Chemical Oxygen Demand, mg/l	Part 58	-	-	5.4
23	Free CO <sub>2</sub> , mg/l	Part 61	-	-	9.0
24	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.395
25	Copper as Cu, mg/L	Part 42	0.05	1.5	0.006
26	Manganese as Mn, mg/L	Part 59	0.1	0.3	0.045
27	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.007
28	Lead as Pb, mg/L	Part 47	0.01	No relaxation	0.043
29	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	0.004
30	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	0.053
31	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	0.032

#### **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

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