

CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.

(A Govt. of India Autonomous Body)

Environmental Chemical Laboratory

Bhubaneswar, Odisha

(An NABL Accredited Laboratory)



Certificate No. : I-8091

TEST REPORT

TEST REPORT NO. – NABL/ECL/0156

DATE-02.02.2022

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	0.1
4.	pH@Temp °C	Part 11	6.5-8.5	No relaxation	7.20@ 25.2
5.	*Conductivity, µs/cm	Part 14	-	-	82
6.	*Total Suspended Solid, mg/l	Part 17	-	-	0.1
7.	Total Dissolved Solids mg/L	Part 16	500	2000	56.0
8.	Total Hardness (as CaCO ₃), mg/L	Part 21	200	600	19.0
9.	Calcium as Ca, mg/L	Part 40	75	200	4.01
10.	Magnesium as Mg, mg/L	Part 46	30	100	2.18
11.	Alkalinity as CaCO ₃ , mg/L	Part 23	200	600	7.0
12.	Chloride as Cl, mg/L	Part 32	250	1000	18.0
13.	Sulfate as SO ₄ , mg/L	Part 24	200	400	0.25
14.	Fluoride as F, mg/L	Part 60	1.0	1.5	0.02
15.	*Nitrite as NO ₂ , mg/L	Part 34	-	-	0.014
16.	*Nitrate as NO ₃ , mg/L	Part 34	45	No relaxation	7.896
17.	*Residual free chlorine, mg/L	Part 26	0.02	1.0	BDL
18.	Sodium, mg/l	Part 45	-	-	6.75
19.	Potassium, mg/l	Part 45	-	-	2.97
20.	Dissolved Oxygen, mg/l	Part 38	-	-	5.40
21.	Biological Oxygen Demand, mg/l	Part 44	-	-	BDL
22.	Chemical Oxygen Demand, mg/l	Part 58	-	-	BDL

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23.	Mineral oil, mg/l	Part 31	-	-	BDL
24.	Iron as Fe, mg/L	Part 53	0.3	No relaxation	0.294
25.	Copper as Cu, mg/L	Part 42	0.05	1.5	<0.001
26.	Manganese as Mn, mg/L	Part 59	0.1	0.3	<0.001
27.	Zinc as Zn, mg/L	Part 49	5.0	15.0	0.279
28.	Lead as Pb, mg/L	Part 47	0.01	No relaxation	0.176
29.	Cadmium as Cd, mg/L	Part 41	0.003	No relaxation	0.024
30.	Chromium as Cr, mg/L	Part 52	0.05	No relaxation	0.372
31.	Nickel as Ni, mg/l	Part 54	0.02	No relaxation	0.044
32.	Arsenic as As, mg/l	Part 37	0.01	No relaxation	<0.001

*BDL-Below Detection Limit

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. 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 in NABL Scope has marked as "•".
7. Testing parameters which are not set limitation has marked as " - ".

Authorized Signatory

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Environmental Biology Laboratory (EBL)
Environment & Sustainability Department



NABL
Accreditation certificate No. TC-8195

Test Report

Sample code: <u>NABL/EBL/ 0156</u>	Test report Date: 7.2.2022
Test Report No.: <u>ULR-TC81952100000000048/EBL2/22-1</u>	
Source of Sample: SOH-1	Sample condition: Satisfactory
Date of Sampling (provided by the customer): 17.1.2022	Sample Received on: 17.1.2022
Type of Sample: Treated drinking water	Sample Analysed on: 21.1.2021

Sl. No.	Test/ Parameter	Test Method	Requirements as per IS 10500:2012 (RA 2018)		Test Result with units of measurement	Statement of Conformity
			Acceptable limit	Permissible Limit		
1.	<i>E.coli</i> by Membrane filtration	IS 15185 RA 2018	Shall not be detect in 100ml sample	No relaxation	Absent per 100 ml	Conformance
2.	Total coliform by MPN	IS 1622 RA 2019	Shall not be detect in 100ml sample	No relaxation	5 MPN/100 mL	Non-Conformance
3.	Fecal coliform by MPN	IS 1622 RA 2019	Shall not be detect in 100ml sample	No relaxation	<2MPN/100 mL	Conformance

End of test report

Authorized Signatory

Dr. Sany Pandey
Dr. Sany Pandey 7.2.22
(Principal Scientist, E&S Department)
Quality Manager
Environmental Biology Lab
Lab, E&S Dept.

Notes:

1. The test report relates only to the items tested.
2. The sample is drawn by the customer, hence EBL is not responsible for any errors arising out of faulty sample withdrawal, handling or container.
3. Sterile containers and aseptic handling of samples during collection and transport is necessary for correct results. EBL is not responsible for mistakes on the part of customers.
4. The decision rule is inherent in the standard as the acceptable and permissible limits are pre-defined.
5. The report should not be interpreted in part, or reproduced wholly, or in part without prior consent of the laboratory.
6. This report should not be used for advertisement, and as a certificate or as evidence in the court of law without prior consent of the laboratory.
7. The report is for information purpose relating only to the characteristics mentioned in this report, it cannot be extrapolated for any other purpose without involving EBL.

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