CHRIST
COLLEGE (AUTONOMOUS)
IRINJALAKUDA, KERALA

CHRIST AQUA RESEARCH LAB

CHRIST COLLEGE (AUTONOMOUS), IRINJALAKUDA

Water quality refers to the chemical, physical, and biological characteristics of water based on the standards of its usage. It is most frequently used by reference to a set of standards against which compliance, generally achieved through treatment of the water, can be assessed. The most common standards used to monitor and assess water quality convey the health of ecosystems, safety of human contact, extend of water pollution and condition of drinking water. Water quality has a significant impact on water supply and oftentimes determines supply options.

After many years of research, water quality standards are put in place to ensure the suitability of efficient use of water for a designated purpose. Water quality analysis is to measure the required parameters of water, following standard methods, to check whether they are in accordance with the standard.

Why Water Quality Analysis is required?

Water quality analysis is required mainly for monitoring purpose. Some importance of such assessment includes:

1. To check whether the water quality is in compliance with the standards, and hence, suitable or not for the designated use.

2. To monitor the efficiency of a system, working for water quality maintenance

3. To check whether upgradation / change of an existing system is required and to decide what changes should take place.

4. To monitor whether water quality is in compliance with rules and regulations.

Water quality is determined by physical, chemical and microbiological properties of water. These water quality characteristics throughout the world are characterized with wide variability. Therefore, the quality of natural water sources used for different purposes should be established in terms of the specific water-quality parameters that most affect the possible use of water.

The different water quality parameters analysed in Christ aqua research lab include turbidity, colour, odour, taste, EC, pH, Total dissolved solids, total solids, total suspended solids, acidity, alkalinity, total hardness, calcium, magnesium, chloride, fluoride, iron, nitrate, sulphate, coliforms, E. coli etc.

The Christ Aqua Research Lab of Christ College (Autonomous), Irinjalakuda is now offering the analysis of water samples for a nominal price to the public. The lab offers facility to do internship training programmes and water audit process to industries and institutions. Provide technological and technical assistance to public for water quality monitoring and management.

CHRIST AQUA RESEARCH LAB
CHRIST COLLEGE (AUTONOMOUS)
IRINJALAKUDA

WATER ANALYSIS REPORT

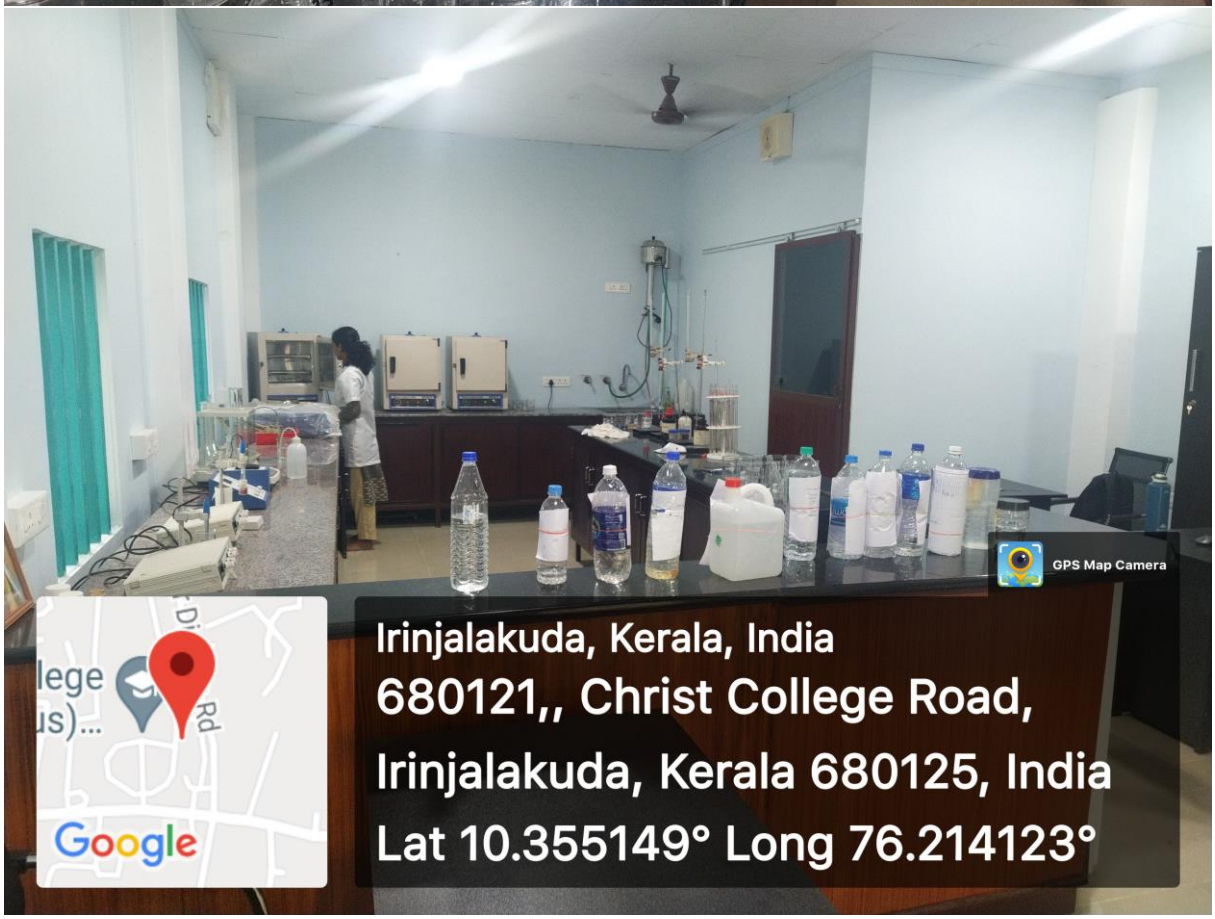
Sample No: **Date of collection:**
Name & Address: **Collected by:**
Standard referred by :IS:10500:2012

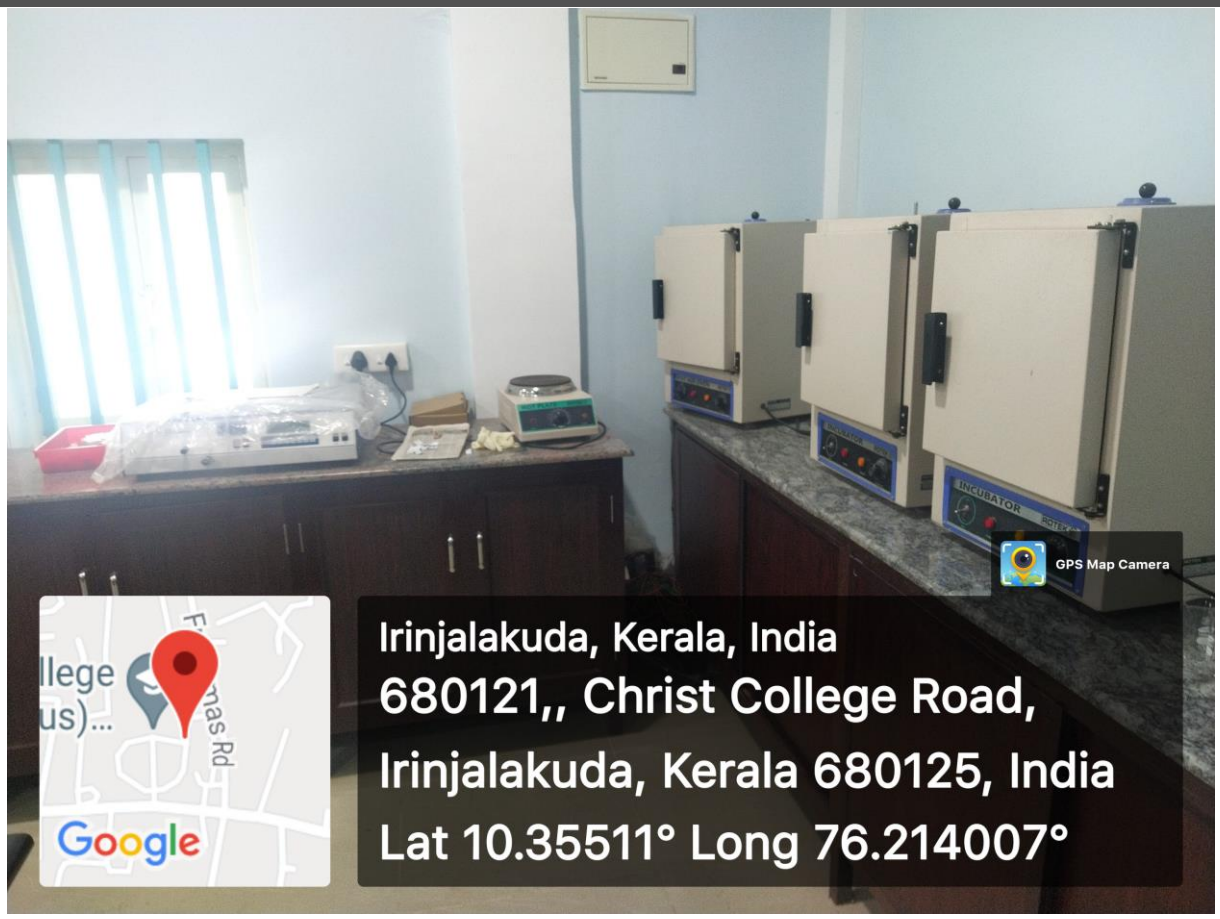
Sl No.	Characteristics	Method	Unit	Acceptable Limit	Results
PHYSICAL PARAMETERS					
1	Turbidity	IS:3025(10)-1984	NTU	1	
2	Colour	IS:3025 part 04	Hz units	5Hz units max.	
3	Odour	IS:3025 part 05	Agreeable	Agreeable	
4	Taste	IS:3025 part 08	Agreeable	Agreeable	
5	Electrical Conductivity	IS:3025(14)-1984	us/cm	-	
6	Ph	IS:3025(11)-1983		6.5 – 8.5	
7	Total Dissolved Solids	IS:3025(16)-1984	mg/L	500	
8	Total Solids	IS:3025(16)-1984	mg/L	500	
9	Total Suspended Solids	IS:3025(16)-1984	mg/L	300	
CHEMICAL PARAMETERS					
10	Acidity	IS:3025(22)-1986	mg/L	-	
11	Alkalinity	IS:3025(13)-1986	mg/L	200	
12	Total Hardness	IS:3025(21)-1983	mg/L	200	
13	Calcium (as Ca)	IS:3025(40)-1991	mg/L	75	
14	Magnesium (as Mg)	IS:3025(33)-1994	mg/L	30	
15	Chloride (as Cl)	IS:3025(32)-1988	mg/L	250	
16	Fluoride	IS:3025(23)-2008	mg/L	1	
17	Iron (as Fe)	IS:3025(32)-2003	mg/L	0.3	
18	Nitrate (as NO_3)	IS:3025(34)-1988	mg/L	45	
19	Sulphate (as SO_4)	IS:3025(24)-1986	mg/L	200	
BACTERIOLOGICAL ANALYSIS					
20	Coliforms	MPN METHOD	No. of Coliforms/100ml	Shall not detectable in any 100ml sample	
21	E. Coli	IS:1622-1981	No. of Coliforms/100ml	Shall not detectable in any 100ml sample	

Remarks:

Date: **Verified by:**
Chief Analyst


GPS Map Camera
Irinjalakuda, Kerala, India
9648+VR3, Irinjalakuda, Kerala
680125, India
Lat 10.35705° Long 76.218037°
Google


GPS Map Camera
Irinjalakuda, Kerala, India
680121,, Christ College Road,
Irinjalakuda, Kerala 680125, India
Lat 10.355149° Long 76.214123°
Google


INCUBATOR
GPS Map Camera
Irinjalakuda, Kerala, India
680121,, Christ College Road,
Irinjalakuda, Kerala 680125, India
Lat 10.35511° Long 76.214007°
Google