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DEPARTMENT OF PUBLIC HEALTH AND PREVENTIVE MEDICINE

R.No.1696/C/2019 (958) Misc – 1004 to 1005

Dated: 20.12.2019

From:

Tmt.I.Nuri, M.A, M.Sc.,
CHIEF WATER ANALYSTi/c
Chief Water Analysis Laboratory,
King Institute Campus, Guindy,
Chennai-600 032.

To:

Principal,
Kavi Bharathi Vidyalaya,
No.792/665,
Thiruottriyur High Road,
Chennai – 600 019.

Sir,

Subject: Report on examination of Water samples: - Regarding.

Two samples of water stated to have been collected on 05.02.2019 from the bore well and the RO outlet by Thiru.S.Palani at the premises of Kavi Bharathi Vidyalaya No.792/665 Thiruvottiyur High Road, Chennai-19 were received at this laboratory on the same day from the addressee to assess their suitability for drinking purposes.

The results of analysis are furnished overleaf.

1. Bore well (Misc.1004)

The sample of above stated bore well water is colourless and clear in physical appearance.

Chemically, it is very hard, mineralised and considered as tolerable quality for drinking.

However bacteriologically it is of poor quality for drinking showing the presence of coliform organisms and hence it is advised to chlorinate the water from the well by using 4 grams of bleaching powder or 20ml of 4 to 6 % sodium hypochlorite solution for every 1000 litres of water at sump/OHT (storage unit) with half an hour contact time to ensure hygienic safety at all times and then only used for drinking.

2. R.O. water (Misc 1005)

Judged by the results of analysis, the sample of above R.O water is colourless and clear in physical appearance.

Chemically it is very soft having the total hardness (10mg/l). Calcium and magnesium are almost removed from the water. These elements are essential for healthy living for human beings and setright the total hardness at the minimum of 30mg/l for which the supplier of R.O plants may be contacted along with this analytical report.

Bacteriologically also it is free from coliform organisms.

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for
26/12/19
CHIEF WATER ANALYSTi/c

RESULTS OF EXAMINATION OF SAMPLES OF WATER

From : Kavi Bharathi Vidyalaya, 792/665 Thiruvottiyur High Road, Chennai – 600 019.

Collected by : Thiru.S.Palani Misc.1004 Misc.1005

Date of Collection : 05.12.2019		Bore well at above premises	R.O at above premises	Maximum permissible limit for drinking water as per BIS 10500/1991	
Date of Receipt : 05.12.2019					
Source as per label					
Bacteriological Examination	Total colonies per ml on agar at 37°C	120	0	20	
	MPN of Coliform bacteria per 100 ml.	210	0	0	
	Nature of coliform bacteria isolated.	Citrobacter Freundii - II	--	absent	
	Results of vibrio test				
Physical Examination	Colour	Colourless	Colourless	Colourless	
	Turbidity (Units)	5	2	10	
	Smell	None	None	None	
Chemical Examination (in mg/l)	Total dissolved Solids ^δ	1260	50	2000	
	Carbonate hardness as CaCO ₃	360	10	-	
	Non- Carbonate hardness as CaCO ₃	80	0	-	
	Total hardness as CaCO ₃	440	10	600	
	Chloride as Chlorine	420	9	1000	
	Ammoniacal nitrogen	--	--	Nil	
	Albuminoid nitrogen	--	--	Nil	
	Oxygen absorbed (Tidy's test)	1.60	0.16	1.0	
	Nitrate-nitrogen	6.0	0.5	10	
	Alkalinity as CaCO ₃	Phenolphthalein	0	0	-
			Methyl Orange	360	14
	Fluoride as Fluorine	0.4	Nil	1.5	
	pH	7.0	6.5	6.5-8.5	
	Iron as Fe Total	0.05	Nil	0.3	
	Ferrous	Nil	Nil	Nil	
	Manganese as Mn.	Nil	Nil	0.3	
	Qualitative-Nitrite nitrogen	Present	Trace	Trace	
	Sulphate	Trace	Trace	400	
	Phosphate	Trace	Trace	Trace	
	Toxic substances				
Electrical conductivity (Reciprocal megohms Cm ² at 20°C)	1800	70	-		
Microscopical Examination	Monas, Coleps and Amorphous matter	Amorphous matter			