

## Water quality Parameters Department of Environmental Sciences, JSS AHER

### DATA SHEET

#### Water Quality analysis Report

Name of the customer/Place	JSS AHER campus, Mysuru
Name of the city	Mysuru
Date of sample collected	24.09.2024
Date of sample analysis	24.09.2024 to 04.10.2024
Application purpose	Drinking/Domestic use

Date Tested: October, 04, 2024

Sample No.	Sample description
	<b>WATER SAMPLES OF JSSMI CAMPUS</b>
1	Inlet water from VVWS to main GL sump
2	Water sample of main GL sump (mix of borewell & VVWS)
3	Main RO water (treated) of JSSMI plant
4	Borewell @ Teak Plantation near SLS Lecture Halls Block
5	Drinking water @ SLS lecture hall block
6	Drinking water @ Food court
7	Drinking water @ JSS MC
8	Drinking water @ JSS DCH
9	Borewell @ Rear side of SBI bank
10	Borewell @ Southeast side of JSSMI campus
11	Borewell in front of AHER Admin Annex building
12	Drinking water @ JSS AHER Admin annex dining area
13	Drinking water @ JSS AHER old dining hall
14	Drinking water @ JSS AHER examination section
	<b>WATER SAMPLES OF GIRL'S HOSTEL, JSSMC</b>
15	Borewell @ rear side of Girl's hostel 'D' block
16	Drinking water @ Girl's hostel 'D' block
17	Drinking water @ Girl's hostel 'C' block
18	Drinking water @ Girl's hostel mess block
	<b>WATER SAMPLES OF BOY'S HOSTEL, JSSMC</b>
19	Drinking water @ Boy's hostel mess block
20	Drinking water @ Boy's hostel E block
21	Inlet water from VVWS @ Boy's hostel premises
	<b>WATER SAMPLES OF GUEST HOUSE @ JSSMI CAMPUS</b>
22	Inlet water from VVWS to sump
23	Guest House Sump 2 (Treated water using softener)
24	Guest house near kitchen drinking water
25	Borewell water (Water supplying to Guest House, @SE)
	<b>WATER SAMPLES OF STUDIO APARTMENT, SS NAGAR, MYSURU</b>
26	Inlet water from VVWS to sump
27	Drinking water from dispenser
	<b>WATER SAMPLES OF STAFF QUARTERS (CITB HOUSES), SS NAGAR, MYSURU</b>
28	Water sample of UG sump of any one flat
29	Borewell water sample
	<b>WATER SAMPLES OF JSS COLLEGE OF PHARMACY, MYSURU</b>
30	Borewell near main gate security room
31	Inlet water from VVWS @ north side of the college
32	Drinking water @ college building
33	Borewell in front of Girl's Hostel
34	Borewell of Girl's Hostel (NE corner)
35	Drinking water @ Girl's hostel
36	Borewell in front of Boy's hostel
37	Drinking water @ Boy's hostel
	<b>WATER SAMPLES OF CRECHE BUILDINGS, SS NAGAR, MYSURU</b>
38	Water sample of Borewell
39	New Borewell Point South East corner

	pH	Turbidity (NTU)	Conductivity (umho/cm)	Total dissolved solids (ppm)	Total alkalinity (mg CaCO <sub>3</sub> /L)	Chloride (Cl <sup>-</sup> mg/L)	Total Hardness (mg/L as CaCO <sub>3</sub> )	Calcium Hardness (mg/L as CaCO <sub>3</sub> )	Nitrate (NO <sub>3</sub> , mg/L)	Sulphate (SO <sub>4</sub> <sup>2-</sup> , mg/L)	Fluoride (F <sup>-</sup> , mg/L)	Total Bacteria	E.coli
Std. Ref.	6.5-8.5	1(5)*	-	500 (2000)*	200 (600)*	250 (1000)*	200 (600)*	75 (200)*	45 (No relaxation)*	200 (400)*	1 (1.5)*	Nil/10 Oml	0
1	7.1	0.02	19.40	13	160	21.34	136	40	0.1787	7.4	0.0372	14	0
2	7.8	0.06	10.44	7	452	48.63	280	128	0.1541	11.48	0.0410	5	0
3	6.9	0.08	16.41	11	56	12.40	32	32	0.0134	12.12	0.0426	3	0
4	8.1	0.03	10.44	7	404	76.92	312	176	0.1217	22.16	0.0401	55	9
5	7.1	0.06	23.88	16	84	9.92	84	32	0.0143	7.08	0.0417	2	0
6	7.4	0.01	11.94	8	40	9.42	48	16	0.0118	22.79	0.0404	0	0
7	7.8	0.05	20.89	14	56	38.93	60	296	0.1598	21.84	0.0427	0	0
8	7.3	0.09	10.44	7	44	8.93	64	16	0.1055	15.59	0.0405	0	0
9	6.8	0.04	10.44	7	268	69.97	428	176	0.2068	15.24	0.0418	15	0
10	6.5	0.06	11.94	8	756	44.17	288	156	0.1398	4.604	0.0404	48	0
11	7.3	0.03	13.43	9	464	49.63	264	144	0.0113	25.6	0.0421	87	0
12	7.8	0.07	25.37	17	100	14.88	56	20	0.0168	30.32	0.0402	0	0
13	7.4	0.04	23.88	16	60	13.89	56	384	0.0195	7.08	0.0391	0	0
14	7.6	0.08	19.40	13	60	9.92	40	32	0.0128	7.43	0.0401	0	0
15	8.1	0.04	14.92	10	436	44.17	260	208	0.0327	16.82	0.0421	0	0
16	7.4	0.06	22.39	15	46	13.89	32	12	0.0374	22.79	0.0391	8	0
17	8.1	0.03	13.43	9	44	9.42	52	52	0.0118	12.12	0.0401	0	0
18	7.1	0.06	23.88	16	68	14.39	48	4	0.0098	25.28	0.0426	0	0
19	8.2	0.04	14.92	10	24	6.45	40	12	0.0238	4.28	0.0402	3	0
20	7.4	0.09	16.41	11	24	9.42	28	24	0.00328	18.08	0.0427	45	0
21	7.9	0.04	23.88	16	104	17.37	104	64	0.1398	22.16	0.0391	84	4
22	8.0	0.06	25.37	17	112	19.35	92	208	0.0374	19.01	0.0402	0	0
23	8.3	0.01	16.41	11	444	46.15	248	32	0.0324	31.28	0.0398	54	0
24	8.5	0.04	20.89	14	64	7.47	44	16	0.1787	11.48	0.0403	27	0
25	7.9	0.06	16.41	11	476	42.68	272	160	0.0374	27.16	0.0422	103	0
26	6.6	0.08	23.88	16	260	31.76	176	116	0.0194	3.964	0.0414	96	0
27	7.8	0.03	7.46	5	20	8.93	16	36	0.1541	27.16	0.0425	0	0
28	6.5	0.02	26.86	18	260	30.77	164	132	0.0165	23.72	0.0418	10	0
29	7.1	0.06	25.37	17	460	43.17	200	180	0.1055	15.59	0.0402	21	0
30	7.4	0.08	16.41	11	620	103.2	284	220	0.0062	25.6	0.0416	56	8
31	7.9	0.09	23.88	16	140	20.84	96	56	0.1217	17.44	0.0408	3	0
32	6.9	0.05	11.94	8	28	11.4	32	312	0.0176	23.72	0.0421	0	0
33	7.3	0.03	16.41	11	672	136.4	300	264	0.1346	19.01	0.0414	4	0
34	7.8	0.08	16.41	11	792	99.26	236	280	0.0537	23.75	0.0416	8	0
35	7.2	0.04	25.37	17	124	24.31	120	92	0.0168	25.62	0.0421	2	0
36	8.1	0.08	17.91	12	404	140.9	268	412	0.1346	6.76	0.0411	9	0
37	7.4	0.02	26.86	18	100	6.45	48	60	0.0118	22.79	0.0407	0	0
38	7.8	0.05	29.85	20	524	86.35	220	232	0.0322	29.08	0.0425	11	0
39	7.2	0.08	26.86	18	376	47.14	548	200	0.1787	22.48	0.0421	29	0

## Remarks

1. The values of total hardness and calcium hardness exceed the permissible limit in all borewells water, and it cannot be used for domestic usage directly.
2. The values of total alkalinity exceed the permissible limit, this indicates high buffering capacity, which could affect the water's taste and may require treatment if used for drinking purposes.
3. The total bacterial count values from various locations indicate significant variability, with some areas showing elevated levels, particularly in the range of 84 to 103, which may require further disinfection.
4. The presence of *E. coli* in samples from the teak plantation, Inlet water from VVWS @ boys hostel and borewell near main gate of Pharmacy college indicates faecal contamination, making these water sources unsafe for drinking without appropriate treatment. Proper disinfection at point-of-use point using UV-disinfection units and maintaining the minimum residual chlorine level of 0.2 mg/L at main storage tanks and sumps may reduce the health risks caused by pathogenic microbes.

Tested by

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