

Ground Water Quality Data in Karaikal During Post Monsoon 2022					
Sl.No.	Parameters	Vadamattam	T.R.Pattinam	Acceptable Limit (IS 10500 : 2012)	Permissible limit (IS 10500 : 2012)
Station Code		2014	2013		
1	Latitude	11° 58' 5.7" N	10° 50' 28.6" N		
2	Longitude	79 ° 47' 43.8"E	79 ° 49' 55.6"E		
3	Dt.of Sampling	11.01.2022	11.01.2022		
4	Time	06.10 A.M	07.45 A.M		
5	Temperature °C	26.8	26.8		
6	pH	8.52	8.44	6.5 - 8.5	NR
7	Conductivity µmho/cm	1550	1990		
8	COD (mg/l)	BDL (DL - 5.0)			
9	Turbidity NTU	BDL (DL - 1.0)		1	5
10	Nitrate -N (mg/l)	BDL (DL - 0.3)			
11	Nitrite-N (mg/l)	0.1	BDL (DL-0.02)		
12	Nitrate (mg/l)	0.8	1.105	45	NR
13	Hexavalent Chromium (mg/l)	BDL			
14	Ammonia (NH ₃ -N) (mg/l)	-	-		
15	Bi- Carbonate (mg/l)	417.6	425.3		
16	P. Alkalinity (mg/l)	21.0	18.9		
17	Total Alkalinity (mg/l)	363.3	367.5	200	600
18	Carbonate (mg/l)	12.6	11.3		
19	Chloride (mg/l)	299.8	416.9	250	1000
20	Total Hardness as CaCO ₃ (mg/l)	40	80	200	600
21	Calcium Hardness as CaCO ₃ (mg/l)	26	54		
22	Magnesium Hardness as CaCO ₃ (mg/l)	14	26		
23	Calcium as Ca ⁺⁺ (mg/l)	10.4	21.6	75	200
24	Magnesium as Mg ⁺⁺ (mg/l)	3.402	6.318	30	100

Sl.No.	Parameters	Vadamattam	Vanjore	Acceptable Limit (IS 10500 : 2012)	Permissible limit (IS 10500 : 2012)
Station Code		2014	2013		
25	TDS (mg/l)	828	1038	500	2000
26	TSS (mg/l)	BDL (DL-10)			
27	FDS / TFS (mg/l)	542	898		
28	Sodium (mg/l)	317	381		
29	Potassium (mg/l)	3.6	3.3		
30	Sulphate (mg/l)	13.90	16.04	200	400
31	Ortho phosphate (mg/l)	0.207	0.382		
32	% Sodium	93.89	90.74		
33	SAR	21.7	18.5		
34	Copper (mg/l)	BDL (DL-0.01)	0.022	0.05	1.5
35	Nickel (mg/l)	BDL (DL-0.01)		0.02	NR
36	Cadmium (mg/l)	BDL (DL-0.001)		0.003	NR
37	Lead (mg/l)	BDL (DL-0.005)		0.01	NR
38	Total Chromium (mg/l)	BDL (DL-0.01)		0.05	NR
39	Iron (mg/l)	0.042	0.056	0.3	NR
40	Zinc (mg/l)	BDL (DL-0.1)	0.126	5	15
41	Arsenic (mg/l)	BDL (DL-0.005)		0.01	0.05
42	Mercury (mg/l)	BDL (DL-0.0005)		0.001	NR

BDL - Below Detectable Limit; DL - Detection Limit
NR - No Relaxation

