Ground Water Quality Data in Karaikal during Pre Monsoon 2026					
Sl.No.	**Parameters**	**Vadamattam**	**T.R.Pattinam**	**Acceptable Limit (IS 10500 : 2012)**	**Permissible Limit (IS 10500 : 2012)**
Station Code		**2014**	**2013**		
1	**Latitude**	10.96825 N	10.841278 N		
2	**Longitude**	79.7955 E	79.832111 E		
3	**Dt.of Sampling**	01.09.2026	01.09.2026		
4	**Time**	06.30 A.M	07.40 A.M		
5	**Temperature °C**	34.0	33.0		
6	**pH**	8.47	8.50	6.5 - 8.5	NR
7	**Conductivity µmho/cm**	1522	2010		
8	**COD (mg/l)**	BDL (DL: 5.0)			
9	**BOD (mg/l)**	BDL (DL: 1.0)			
10	**Turbidity NTU**	BDL (DL: 1.0)		1	5
11	**Nitrate -N (mg/l)**	BDL (DL: 0.3)			
12	**Nitrite-N (mg/l)**	0.1	0.02		
13	**Nitrate (mg/l)**	BDL		45	NR
14	**Carbonate (mg/l)**	8.0	8.0		
15	**Bi- Carbonate (mg/l)**	468.48	455.06		
16	**Ammonia -N (mg/l)**	BDL (DL: 0.4)			
17	**P. Alkalinity (mg/l)**	13.0	13.0		
18	**Total Alkalinity (mg/l)**	397.0	386.0	200	600
19	**Chloride (mg/l)**	257.40	351.60	250	1000
20	**Fluoride (mg/l)**	0.41	0.46	1	1.5
21	**Total Hardness as $CaCO_3$ (mg/l)**	50.9	56.9	200	600
22	**Calcium Hardness as $CaCO_3$ (mg/l)**	2.0	21.6		
23	**Magnesium Hardness as $CaCO_3$ (mg/l)**	49.0	35.3		

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Station Code		2014	2013		
24	**Calcium as Ca++ (mg/l)**	0.8	8.64	75	200
25	**Magnesium as Mg++ (mg/l)**	11.91	8.58	30	100
26	**TDS (mg/l)**	958	1221	500	2000
27	**TSS (mg/l)**	BDL (DL: 10.0)			
28	**FDS / TFS (mg/l)**	560	803		
29	**Sodium (mg/l)**	342	406		
30	**Potassium (mg/l)**	3.78	3.35		
31	**Sulphate (mg/l)**	BDL (DL: 5.0)	14.86	200	400
32	**Ortho phosphate (mg/l)**	0.51	0.48		
33	**% Sodium**	92.9	93.5		
34	**SAR**	20.7	23.31		
35	**Total Coliform MPN/100 ml**	46	70	Nil	Nil
36	**Faecal Coliform MPN/100 ml**	<1.8	<1.8	Nil	Nil
37	**Faecal Streptococci MPN/100 ml**	<1.8	<1.8	Nil	Nil
38	**Copper (mg/l)**	BDL (DL:0.02)		0.05	1.5
39	**Nickel (mg/l)**	BDL (DL:0.005)		0.02	NR
40	**Cadmium (mg/l)**	BDL (DL:0.001)		0.003	NR
41	**Lead (mg/l)**	BDL (DL:0.005)		0.01	NR
42	**Total Chromium (mg/l)**	BDL (DL:0.02)		0.05	NR
43	**Iron (mg/l)**	BDL (DL:0.01)	0.33	0.3	NR
44	**Zinc (mg/l)**	BDL (DL:0.05)		5	15
45	**Arsenic (mg/l)**	BDL (DL:0.005)		0.01	0.05
46	**Mercury (mg/l)**	BDL (DL:0.0005)		0.001	NR

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