Ground Water Quality Data in Karaikal during Pre Monsoon 2025					
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**	02.09.2025	02.09.2025		
4	**Time**	06.40 A.M	07.50 A.M		
5	**Temperature °C**	34.0	33.0		
6	**pH**	8.64	8.64	6.5 - 8.5	NR
7	**Conductivity µmho/cm**	1896	2040		
8	**COD (mg/l)**	BDL			
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)**	BDL (DL:0.02)			
13	**Nitrate (mg/l)**	BDL		45	NR
14	**P. Alkalinity (mg/l)**	24.0	24.0		
15	**Total Alkalinity (mg/l)**	364.0	370.0	200	600
16	**Chloride (mg/l)**	293.3	407.0	250	1000
17	**Fluoride (mg/l)**	0.76	0.84	1	1.5
18	**Total Hardness as $CaCO_3$ (mg/l)**	36.0	78.0	200	600
19	**Calcium Hardness as $CaCO_3$ (mg/l)**	18.0	58.0		
20	**Magnesium Hardness as $CaCO_3$ (mg/l)**	18.0	20.0		
21	**Calcium as Ca++ (mg/l)**	7.2	23.2	75	200
22	**Magnesium as Mg++ (mg/l)**	4.4	4.9	30	100

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Station Code		2014	2013		
23	**TDS (mg/l)**	1270	1347	500	2000
24	**TSS (mg/l)**	BDL (DL:10.0)			
25	**FDS / TFS (mg/l)**	923	1043		
26	**Sodium (mg/l)**	324.6	627.7		
27	**Potassium (mg/l)**	5.0	4.8		
28	**Sulphate (mg/l)**	3.6	16.6	200	400
29	**Ortho phosphate (mg/l)**	0.11	0.26		
30	**% Sodium**	94.31	94.17		
31	**SAR**	23.41	30.82		
32	**Total Coliform MPN/100 ml**	120	170	Nil	Nil
33	**Faecal Coliform MPN/100 ml**	<1.8	<1.8	Nil	Nil
34	**Faecal Streptococci MPN/100 ml**	21	12	Nil	Nil
35	**Copper (mg/l)**	BDL (DL:0.02)		0.05	1.5
36	**Nickel (mg/l)**	BDL (DL:0.005)		0.02	NR
37	**Cadmium (mg/l)**	BDL (DL:0.001)		0.003	NR
38	**Lead (mg/l)**	BDL (DL:0.005)		0.01	NR
39	**Total Chromium (mg/l)**	BDL (DL:0.02)		0.05	NR
40	**Iron (mg/l)**	0.065	0.087	0.3	NR
41	**Zinc (mg/l)**	BDL (DL:0.05)		5	15
42	**Arsenic (mg/l)**	BDL (DL:0.005)		0.01	0.05
43	**Mercury (mg/l)**	BDL (DL:0.0005)		0.001	NR
44	**Alpha HCH µg/l**	BDL			
45	**Gamma HCH µg/l**	BDL			
46	**Detla HCH µg/l**	BDL			

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Station Code		2014	2013		
47	**Methyl Parathion µg/l**	BDL			
48	**Alachor µg/l**	BDL			
49	**Aldrin µg/l**	BDL			
50	**Malathion µg/l**	BDL			
51	**Chlorpyrifos µg/l**	BDL			
52	**Alpha Endosulfan µg/l**	BDL			
53	**Butachlor µg/l**	BDL			
54	**Beta Endosulfan µg/l**	BDL			
55	**Phorate µg/l**	BDL			
56	**op DDT µg/l**	BDL			
57	**op DDD µg/l**	BDL			
58	**pp DDD µg/l**	BDL			
59	**op DDE µg/l**	BDL			
60	**pp DDE µg/l**	BDL			
61	**Dieldrin µg/l**	BDL			
62	**Ethion µg/l**	BDL			
63	**Endosulfan sulfate µg/l**	BDL			
64	**pp DDT µg/l**	BDL			

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