

Ground Water Quality Data in Karaikal during Pre Monsoon 2024					
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	03.09.2024	03.09.2024		
4	Time	06.15 A.M	07.30 A.M		
5	Temperature °C	34.0	33.0		
6	pH	8.09	8.10	6.5 - 8.5	NR
7	Conductivity µmho/cm	1615	2020		
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)	3.06	BDL (DL:0.3)		
12	Nitrite-N (mg/l)	0.33	BDL (DL:0.02)		
13	Nitrate (mg/l)	13.55	BDL	45	NR
14	Fluoride (mg/l)	0.32	0.89		
15	P. Alkalinity (mg/l)	BDL (DL:5.0)			
16	Total Alkalinity (mg/l)	270	260	200	600
17	Chloride (mg/l)	301.20	39.90	250	1000
18	Total Hardness as CaCO ₃ (mg/l)	48	90	200	600
19	Calcium Hardness as CaCO ₃ (mg/l)	26	42		
20	Magnesium Hardness as CaCO ₃ (mg/l)	22	48		
21	Calcium as Ca ⁺⁺ (mg/l)	10.4	16.8	75	200
22	Magnesium as Mg ⁺⁺ (mg/l)	5.3	11.7	30	100

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Station Code		2014	2013		
23	TDS (mg/l)	946	1191	500	2000
24	TSS (mg/l)	BDL (DL:10.0)			
25	FDS / TFS (mg/l)	594	719		
26	Sodium (mg/l)	487.7	493.8		
27	Potassium (mg/l)	5.00	4.41		
28	Sulphate (mg/l)	11.24	18.40	200	400
29	Ortho phosphate (mg/l)	0.13	0.12		
30	% Sodium	95.11	91.76		
31	SAR	30.6	22.5		
32	Total Coliform MPN/100 ml	16	16	Nil	Nil
33	Copper (mg/l)	BDL (DL:0.02)		0.05	1.5
34	Nickel (mg/l)	BDL (DL:0.005)		0.02	NR
35	Cadmium (mg/l)	BDL (DL:0.001)		0.003	NR
36	Lead (mg/l)	BDL (DL:0.005)		0.01	NR
37	Total Chromium (mg/l)	BDL (DL:0.02)		0.05	NR
38	Iron (mg/l)	0.11	0.040	0.3	NR
39	Zinc (mg/l)	BDL (DL:0.05)		5	15
40	Arsenic (mg/l)	BDL (DL:0.005)		0.01	0.05
41	Mercury (mg/l)	BLQ (LOQ:0.004)		0.001	NR
42	Alpha HCH µg/l	BDL			
43	Gamma HCH µg/l	BDL			
44	Detla HCH µg/l	BDL			
45	Alachor µg/l	BDL			
46	Aldrin µg/l	BDL			
47	Malathion µg/l	BDL			

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48	Methyl Parathion µg/l	BDL			
49	Chlorpyrifos µg/l	BDL			
50	Alpha Endosulfan µg/l	BDL			
51	Butachlor µg/l	BDL			
52	Beta Endosulfan µg/l	BDL			
53	Phorate µg/l	BDL			
54	op DDT µg/l	BDL			
55	op DDD µg/l	BDL			
56	pp DDD µg/l	BDL			
57	op DDE µg/l	BDL			
58	pp DDE µg/l	BDL			
59	Dieldrin µg/l	BDL			
60	Ethion µg/l	BDL			
61	Endosulfan sulfate µg/l	BDL			
62	pp DDT µg/l	BDL			

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