

Ground water quality in Karikal during Post Monsoon January - March 2018

Sl.No	Parameters	T.R.Pattinam	Vadamattam	Acceptable Limit	Permissible limit
1	Dt.of Sampling	03.01.2018	03.01.2018		
2	Time	6.00	6.30		
3	Temperature °C	29	29		
4	pH	8.36	8.32	6.5 - 8.5	NR
5	Conductivity µmho/cm	1920	1450		
6	COD (mg/l)	Nil	Nil		
7	BOD (mg/l)	BDL	BDL		
8	Turbidity NTU	0.4	0.2	1	5
9	Nitrate -N (mg/l)	0.7102	1.0141		
10	Nitrite-N (mg/l)	0.0034	0.0632		
11	Nitrate (mg/l)	3.1448	4.4904	45	NR
12	Bi- Carbonate as CaCO₃ (mg/l)	504	168	200	600
13	Carbonate (mg/l)	20	50		
14	Chloride (mg/l)	394.06	253.19	250	1000
15	Total Hardness (mg/l)	64.1	19.4	200	600
16	Calcium hardness (mg/l)	33.0	11.7		
17	Magnesium hardness (mg/l)	31.1	7.7		
18	Calcium as Ca⁺⁺ (mg/l)	13.2	4.7	75	200
19	Magnesium as Mg⁺⁺ (mg/l)	7.55	1.87	30	100
20	TDS (mg/l)	1246	939	500	2000
21	TSS (mg/l)	2	2		
22	FDS /TFS (mg/l)	650	476		
23	Sodium (mg/l)	342.1	273.5		
24	Potassium (mg/l)	3.30	3.33		
25	Hexavalent Chromium (mg/l)	BDL	BDL		
26	Sulphate (mg/l)	2.100	0.420	200	400

Sl.No	Parameters	T.R.Pattinam	Vadamattam	Acceptable Limit	Permissible limit
27	Ortho phosphate (mg/l)	0.0513	0.0320		
28	% Sodium	91.57	96.16		
29	SAR	18.563	26.944		
30	Alpha BHC µg/L	BDL	BDL		
31	Beta BHC µg/L	BDL	BDL		
32	Gamma BHC µg/L	BDL	BDL		
33	OP DDT µg/L	BDL	BDL		
34	PP DDT µg/L	BDL	BDL		
35	PP DDE µg/L	BDL	BDL		
36	PP DDD µg/L	BDL	BDL		
37	Alpha Endosulphan µg/L	BDL	BDL		
38	Beta Endosulphan µg/L	BDL	BDL		
39	Dieldrin µg/L	BDL	BDL	0.03	
40	Carbaryl (Carbamate) µg/L	BDL	BDL		
41	2,4-D µg/L	BDL	BDL	30	
42	Aldrin µg/L	BDL	BDL	0.03	
43	Malathion µg/L	BDL	BDL	190	
44	Methyl Parathion µg/L	BDL	BDL	0.3	
45	Chloropyriphos µg/L	BDL	BDL	30	
46	Isoproturon µg/L	BDL	BDL	9	
47	Alachlor µg/L	BDL	BDL	20	
48	Atrazine µg/L	BDL	BDL	2	
49	Monochrotophos µg/L	BDL	BDL	1	
50	Ethion µg/L	BDL	BDL	3	
51	Phorate µg/L	BDL	BDL	2	

Sl.No	Parameters	T.R.Pattinam	Vadamattam	Acceptable Limit	Permissible limit
52	Copper mg/L	BDL	BDL	0.05	1.5
53	Nickel mg/L	0.036	0.033	0.02	NR
54	Cadmium mg/L	BDL	BDL	0	NR
55	Lead mg/L	BDL	BDL	0.01	NR
56	Total Chromium mg/L	BDL	BDL	0.05	NR
57	Iron mg/L	BDL	BDL	0.3	NR
58	Zinc mg/L	BDL	BDL	5	15
59	Arsenic µg/L	BDL	BDL	0.01 (mg/l)	0.05 (mg/l)
60	Mercury µg/L	1.88	1.76	0.001 (mg/l)	NR (mg/l)

NR - No Relaxation

BDL - Below Detectable Limit