

Ground Water Quality Data in Karaikal During Post Monsoon 2020

Sl.No	Parameters	T.R.Pattinam	Vadamattam	Acceptable Limit (IS 10500 : 2012)	Permissible limit (IS 10500 : 2012)
Station Code		2013	2014		
1	Dt.of Sampling	28.01.2020	28.01.2020		
2	Time	07.15 A.M	06.15 A.M		
3	Temperature °C	28	31		
4	pH	8.23	8.35	6.5 - 8.5	NR
5	Conductivity µmho/cm	2140	1429		
6	COD (mg/l)	Nil	Nil		
7	BOD (mg/l)	BDL	BDL		
8	Turbidity NTU	0	0	1	5
9	Nitrate -N (mg/l)	0.547	0.6584		
10	Nitrite-N (mg/l)	0.0254	0.1164		
11	Nitrate (mg/l)	2.4221	2.9154	45	NR
12	Ammonia (NH3-N) mg/L	BDL	1.3		
13	Bi- Carbonate as CaCO ₃ (mg/l)	397.7	378.2	200	600
14	Carbonate as CaCO ₃ (mg/l)	14.6	17.08		
15	Chloride (mg/l)	452.2	275.5	250	1000
16	Total Hardness (mg/l)	394	432	200	600
17	Calcium hardness (mg/l)	364	366		
18	Magnesium hardness (mg/l)	30	66		
19	Calcium as Ca ⁺⁺ (mg/l)	145.6	146.4	75	200
20	Magnesium as Mg ⁺⁺ (mg/l)	7.3	16	30	100
21	TDS (mg/l)	1132	802	500	2000
22	TSS (mg/l)	4	BDL		
23	FDS / TFS (mg/l)	841	484		
24	Sodium (mg/l)	386.6	298.6		
25	Potassium (mg/l)	3.5	3.9		
26	Hexavalent Chromium (mg/l)	BDL	BDL		

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27	Sulphate (mg/l)	40.3	13.6	200	400
28	Ortho phosphate (mg/l)	0.2848	0.2351		
29	% Sodium	67.8	59.7		
30	SAR	8.5	6.2		
31	Alpha BHC µg/L	BDL	BDL		
32	Beta BHC µg/L	BDL	BDL		
33	Gamma BHC µg/L	BDL	BDL		
34	OP DDT µg/L	BDL	BDL		
35	OP DDE µg/L	BDL	BDL		
36	OP DDD µg/L	BDL	BDL		
37	PP DDT µg/L	BDL	BDL		
38	PP DDE µg/L	BDL	BDL		
39	PP DDD µg/L	BDL	BDL		
40	Alpha Endosulphan µg/L	BDL	BDL		
41	Beta Endosulphan µg/L	BDL	BDL		
42	Dieldrin µg/L	BDL	BDL		
43	Carbaryl (Carbamate) µg/L	BDL	BDL		
44	2,4-D µg/L	BDL	BDL		
45	Aldrin µg/L	BDL	BDL		
46	Malathian µg/L	BDL	BDL		
47	Methyl Parathion µg/L	BDL	BDL		
48	Chloropyriphos µg/L	BDL	BDL		
49	Isoprofuron µg/L	BDL	BDL		
50	Alachlor µg/L	BDL	BDL		
51	Atrazine µg/L	BDL	BDL		
52	Monochorotophos µg/L	BDL	BDL		
53	Ethion µg/L	BDL	BDL		
54	Phorate µg/L	BDL	BDL		
55	Alpha HCH µg/L	BDL	BDL		

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56	Delta HCH µg/L	BDL	BDL		
57	Beta HCH µg/L	BDL	BDL		
58	Butachlor µg/L	BDL	BDL		
59	Chlorandane µg/L	BDL	BDL		
60	Heptachlor µg/L	BDL	BDL		
61	Copper mg/L	BDL	BDL	0.05	1.5
62	Nickel mg/L	BDL	BDL	0.02	NR
63	Cadmium mg/L	BDL	BDL	0.003	NR
64	Lead mg/L	BDL	BDL	0.01	NR
65	Total Chromium mg/L	BDL	BDL	0.05	NR
66	Iron mg/L	0.05	0.044	0.3	NR
67	Zinc mg/L	BDL	BDL	5	15
68	Arsenic mg/L	BDL	BDL	0.01	0.05
69	Mercury mg/L	BDL	BDL	0.001	NR

BDL - Below Detectable Limit

NR - No Relaxation