

Ground Water Quality in Puducherry during Post Monsoon January - March 2018

Sl.No	Parameters	Thengaitthitu	Eachengadu	Bahour Borewell	Uruvaiyar	Kothapurinatham	Sedarapet	Pondy university	Chevaliar school	Maruti school	Krishna nagar	Mettupalayam	Muthirapalayam	Kurumapet	Katterikuppam	Chetty koil	Acceptable Limit	Permisable limit
1	Dt.of Sampling	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018	03.01.2018		
2	Time	10.20	11.40	12.55	14.05	14.50	16.00	10.30	11.00	11.45	12.00	13.30	15.00	15.20	16.30	12.45		
3	Temperature °C	33	33	31	32	31.5	32	31	30	31	32	32	31	31	30	30		
4	pH	7.55	7.66	7.62	8.12	7.68	7.60	6.88	7.22	7.67	6.98	7.57	7.60	7.67	7.47	7.42	6.5 - 8.5	NR
5	Conductivity µmho/cm	1438	471	370	5600	1170	1740	302	760	1200	376	1200	695	574	602	2120		
6	COD (mg/l)	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil		
7	BOD (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
8	Turbidity NTU	10.7	2.3	2.2	0	0	0	0	0	2.4	0	0	0.2	0	0	2.5	1	5
9	Nitrate -N (mg/l)	0.0067	0.0067	0.0155	0.014	2.6037	0.2265	1.3407	4.9575	0.4185	9.1486	0.5939	2.5695	6.0334	0.6325	1.7541		
10	Nitrite-N (mg/l)	0.0020	0.0037	0.0105	0.0068	0.0064	0.1771	0.0057	0.0081	0.2518	0.0085	0.0071	0.0926	0.0061	0.0101	0.0074		
11	Nitrate (mg/l)	0.0297	0.0297	0.0686	0.0620	11.5292	1.0029	5.9340	21.9518	1.8531	40.510	2.6298	11.3777	26.7159	2.8007	7.7672	45	NR

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12	Bi- Carbonate as CaCO ₃ (mg/l)	190	158	142	236	388	266	80	74	270	70	126	166	138	302	264	200	600
13	Chloride (mg/l)	327.43	45.69	32.36	1423.94	112.32	159.91	55.27	152.29	517.8	57.11	100.89	85.66	85.66	38.07	422.61	250	1000
14	Total Hardness (mg/l)	303	153.4	97.1	883.5	359.2	419.4	108.7	172.8	398.1	108.7	295.2	182.5	168.9	291.9	510.7	200	600
15	Calcium hardness (mg/l)	186.4	93.2	60.2	454.4	181.6	264.1	66.0	99.0	248.6	81.6	209.7	116.5	112.6	159.2	400.0		
16	Magnesium hardness (mg/l)	116.6	60.2	36.9	429.1	177.6	155.3	42.7	73.8	149.5	27.1	85.5	66	56.3	132.7	110.7		
17	Calcium as Ca ⁺⁺ (mg/l)	74.6	37.7	24.1	181.5	72.6	105.6	26.4	39.6	99.4	32.6	83.9	46.6	45.04	63.7	160	75	200
18	Magnesium as Mg ⁺⁺ (mg/l)	28.3	14.6	8.96	104.3	43.15	37.7	10.4	17.9	36.3	6.6	20.8	16.04	13.7	32.2	26.9	30	100
19	TDS (mg/l)	905	280	236	3641	739	1127	171	470	758	225	775	445	370	388	1375	500	2000
20	TSS (mg/l)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
21	FDS /TFS (mg/l)	460	116	139	2680	426	684	90	206	244	97	300	194	150	120	570		
22	Sodium (mg/l)	181.1	35.49	38.77	751.6	115.1	212.5	13.45	65	245	34.16	140.8	58.03	44.6	16.57	199.9		
23	Potassium (mg/l)	5.4	3.14	1.78	11.01	7.88	5.70	0.69	1.96	20.17	5.65	4.51	3.34	7.11	3.56	45.72		

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47	Atrazine µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	
48	Monochrotophos µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1	
49	Ethion µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3	
50	Phorate µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	
51	Copper mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	1.5
52	Nickel mg/L	BDL	BDL	BDL	0.027	BDL	0.024	BDL	0.022	BDL	0.021	0.037	0.030	0.024	0.032	0.034	0.02	NR
53	Cadmium mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0	NR
54	Lead mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01	NR
55	Total Chromium mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	NR
56	Iron mg/L	1.66	0.586	0.817	0.334	BDL	BDL	0.113	0.253	0.378	BDL	BDL	BDL	0.113	0.224	0.469	0.3	NR
57	Zinc mg/L	BDL	BDL	0.074	BDL	BDL	BDL	BDL	BDL	0.041	BDL	0.085	BDL	BDL	BDL	BDL	5	15
58	Arsenic µg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01 (mg/l)	0.05 (mg/l)
59	Mercury µg/L	BDL	BDL	BDL	BDL	BDL	4.34	BDL	2.37	BDL	BDL	14.16	7.45	BDL	BDL	BDL	0.001 (mg/l)	NR (mg/l)
60	Coliform MPN/100ml	< 2	8	< 2	110	< 2	< 2	< 2	< 2	500	< 2	< 2	50	130	< 2	280		
61	Faecal Coliform MPN/100ml	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	13	< 2	< 2	< 2	< 2	< 2	33		

NR - No Relaxation

BDL - Below Detectable Limit