

Ground Water Quality Data in Puducherry during Pre- Monsoon 2025

Sl. No.	Parameters	Muthirapalayam	Metupalayam	Maruti school	Krishna nagar	Chetty koil	Chevaliar school	Pondicherry University	Thengaithittu	Kirumapet	Panithittu	Eachangadu	Bahour Borewell	Uruvaiyar	Madukarai	Kothapurinatham	Thirukanur	Katterikuppam	Sedarapet	Acceptable Limit (IS 10500 : 2012)	Permissible limit (IS 10500 : 2012)		
Station Code		1453	2010	2012	1397	1687	3884	1454	1398	2009	4633	3882	3883	2011	4632	3886	4631	1688	3885				
1	Latitude (N)	11.938128	11.943233	11.967997	11.953022	11.936917	12.038022	12.017064	11.910344	11.930503	11.829497	11.821469	11.813551	11.886886	11.871408	11.9305	11.991119	12.004731	11.990417				
2	Longitude (E)	79.779925	79.785456	79.817231	79.820189	79.831028	78.865722	79.850761	79.817528	79.761528	79.803069	79.796228	79.746173	79.748529	79.603708	79.661694	79.639742	79.700811	79.755278				
3	Dt.of Sampling	01.09.2025	01.09.2025	01.09.2025	01.09.2025	01.09.2025	01.09.2025	01.09.2025	02.09.2025	01.09.2025	02.09.2025	02.09.2025	02.09.2025	02.09.2025	03.09.2025	03.09.2025	03.09.2025	03.09.2025	03.09.2025				
4	Time	04.30 P.M	04.00 P.M	12.45 P.M	01.10 P.M	11.00 A.M	12.00 P.M	11.40 A.M	01.00 P.M	04.50 P.M	02.45 P.M	03.45 P.M	04.40 P.M	05.30 P.M	12.10 P.M	12.45 P.M	01.40 P.M	03.00 P.M	04.45 P.M				
5	Temperature °C	30.0	32.0	30.0	30.0	30.0	30.0	30.0	32.0	30.0	32.0	32.0	31.0	31.0	29.0	30.0	30.0	28.0	30.0				
6	pH	6.37	6.55	6.31	6.08	7.01	6.65	6.24	7.13	6.39	6.46	6.32	6.94	7.01	6.95	7.26	7.22	7.08	6.97	6.5 - 8.5	NR		
7	Conductivity µmho/cm	900	1111	2160	1807	1614	1005	546	3450	624	967	521	442	2740	1691	1188	1059	763	1633				
8	COD (mg/l)	BDL																					
9	Turbidity NTU	BDL (DL:1.0)	1.4	BDL (DL:1.0)						1.0	BDL (DL:1.0)	1.4	BDL (DL:1.0)							1	5		
10	Nitrate -N (mg/l)	2.15	0.33	2.13	7.33	2.58	4.35	2.42	BDL (DL:0.3)	3.47	BDL (DL:0.3)				6.91	4.07	3.30	1.42	2.02				
11	Nitrite-N (mg/l)	BDL (DL:0.02)					0.42	BDL (DL:0.02)															
12	Nitrate (mg/l)	9.52	1.46	9.43	32.46	11.42	19.26	10.72	BDL	15.37	BDL				30.60	18.02	14.61	6.29	8.95	45	NR		
13	BOD (mg/l)	Nil																					
14	Fluoride (mg/l)	0.64	0.85	0.86	0.74	0.71	0.57	0.51	0.81	0.73	0.82	0.84	0.88	0.98	0.80	0.81	0.76	0.79	0.89	1	1.5		
15	P. Alkalinity (mg/l)	BDL (DL:5.0)																					
16	Total Alkalinity (mg/l)	194	142	202	94	356	106	66	274	140	184	174	160	272	492	458	348	338	374	200	600		
17	Chloride (mg/l)	99.1	84.5	504.1	398.2	267.1	169.0	55.4	828.5	84.5	155.4	6.8	9.7	656.6	232.4	82.9	120.5	37.6	185.1	250	1000		
18	Total Hardness as CaCO ₃ (mg/l)	236	304	384	390	336	176	108	596	192	240	150	114	514	408	354	334	352	562	200	600		

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Station Code		1453	2010	2012	1397	1687	3884	1454	1398	2009	4633	3882	3883	2011	4632	3886	4631	1688	3885			
19	Calcium Hardness as CaCO ₃ (mg/l)	136	190	230	218	240	98	62	394	114	120	96	68	312	250	216	214	206	364			
20	Magnesium Hardness as CaCO ₃ (mg/l)	100	114	154	172	96	78	46	202	78	120	54	46	202	158	138	120	146	198			
21	Calcium as Ca ⁺⁺ (mg/l)	54.4	76.0	92.0	87.2	96.0	39.2	24.8	157.6	45.6	48.0	38.4	27.2	124.8	100.0	86.4	85.6	82.4	145.6	75	200	
22	Magnesium as Mg ⁺⁺ (mg/l)	24.3	27.7	37.4	41.8	23.3	19.0	11.2	49.1	19.0	29.2	13.1	11.2	49.1	38.4	33.5	29.2	35.5	48.1	30	100	
23	TDS (mg/l)	525	695	1363	1252	936	628	353	2179	428	555	313	230	1836	1077	754	697	433	1046	500	2000	
24	TSS (mg/l)	BDL (DL:10.0)																				
25	FDS / TFS (mg/l)	388	483	1054	915	643	325	133	1857	328	397	130	108	1473	786	530	480	315	816			
26	Sodium (mg/l)	90.9	148.8	319.7	336.2	308.0	111.0	26.8	984.1	63.5	456.8	50.1	56.1	550.2	256.4	120.5	143.4	24.2	204.2			
27	Potassium (mg/l)	5.60	4.70	17.00	12.20	31.50	5.30	BDL (DL:1.0)	11.30	9.90	6.40	4.50	2.30	6.80	4.10	12.00	4.50	4.90	BDL (DL:1.0)			
28	Sulphate (mg/l)	58.7	269.0	62.7	125.0	54.3	45.0	15.4	170.8	34.7	35.3	22.1	19.1	122.8	87.1	83.3	40.3	13.6	260.0	200	400	
29	Ortho phosphate (mg/l)	0.33	0.43	0.32	0.33	3.69	BDL	0.07	0.37	0.65	0.25	0.26	0.15	0.19	0.41	0.94	0.14	0.21	0.07			
30	% Sodium	44.72	50.96	63.06	64.21	64.01	56.76	34.64	77.74	40.18	79.91	41.08	50.92	69.49	57.31	41.41	47.74	12.75	43.97			
31	SAR	2.57	3.70	7.08	7.38	7.29	3.63	1.12	17.49	1.99	12.78	1.78	2.28	10.53	5.51	2.78	3.40	0.56	3.74			
32	Total Coliform MPN/100 ml	280	130	140	430	350	170	110	170	120	140	210	220	240	110	210	170	220	140	Nil	Nil	
33	Faecal Coliform MPN/100 ml	63	34	<1.8	84	94	<1.8	<1.8	<1.8	46	17	13	17	21	10	13	<1.8	11	6	Nil	Nil	

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34	Faecal Streptococci MPN/100 ml	25	12	<1.8	40	31	11	14	12	<1.8	<1.8	17	12	20	<1.8	21	<1.8	17	<1.8	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)	0.03	0.76	0.22	0.06	0.13	0.04	0.07	0.22	0.02	0.289	0.359	0.26	0.066	0.05	0.05	0.02	0.02	0.08	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	Delta HCH µg/l	BDL																			
47	Methyl Parathion µg/l	BDL																			
48	Alachor µg/l	BDL																			
49	Aldrin µg/l	BDL																			

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Station Code		1453	2010	2012	1397	1687	3884	1454	1398	2009	4633	3882	3883	2011	4632	3886	4631	1688	3885			
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 Detection Limit DL - Detection Limit

NR - No Relaxation