

Ground Water Quality Data in Puducherry during Post Monsoon 2023																						
Sl. No	Parameters	Muthirapalayam	Mettupalayam	Thengaithittu	Maruti school	Krishna nagar	Panithittu	Eachangadu	Bahour Borewell	Chetty koil	Pondicherry University	Chevaliar school	Kurumapet	Uruvaiyar	Sedarapet	Katterikuppam	Thirukanur	Madukarai	Kothapurinatham	Acceptable Limit (IS 10500 : 2012)	Permissible limit (IS 10500 : 2012)	
	Station Code	1453	2010	1398	2012	1397	4633	3882	3883	1687	1454	3884	2009	2011	3885	1688	4631	4632	3886			
1	Latitude (N)	11.938128	11.943233	11.910344	11.967997	11.953022	11.829497	11.821469	11.813551	11.936917	12.017064	12.038022	11.930503	11.886886	11.990417	12.004731	11.991119	11.871408	11.9305			
2	Longitude (E)	79.779925	79.785456	79.817528	79.817231	79.820189	79.803069	79.796228	79.746173	79.831028	79.850761	78.865722	79.761528	79.748529	79.755278	79.700811	79.639742	79.603708	79.661694			
3	Dt.of Sampling	23.01.2023	23.01.2023	09.02.2023	09.02.2023	09.02.2023	09.02.2023	09.02.2023	09.02.2023	14.02.2023	14.02.2023	14.02.2023	14.02.2023	14.02.2023	20.02.2023	20.02.2023	20.02.2023	20.02.2023	20.02.2023			
4	Time	03.30 PM	04.00 PM	11.45 AM	12.45 PM	1.15 PM	3.45 PM	4.15 PM	4.45 PM	11.45 AM	12.40 PM	1.05 PM	4.00 PM	4.35 PM	11.00 AM	12.00 PM	1.00 PM	3.00 PM	3.50 PM			
5	Temperature °C	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0			
6	pH	6.28	6.20	6.99	6.38	6.22	6.18	6.29	6.83	7.05	5.92	6.50	6.12	6.85	6.90	6.84	6.85	6.88	7.21	6.5 - 8.5	NR	
7	Conductivity µmho/cm	982	1643	3240	2410	1206	1221	672	548	2350	486	1031	975	3180	1876	949	1380	2240	1318			
8	COD (mg/l)	BDL (DL : 5.0)																				
9	Turbidity NTU	BDL (DL :1.0)																			1	5
10	Nitrate -N (mg/l)	4.60	0.75	BDL (DL : 0.3)	1.13	6.32	BDL(DL : 0.3)			3.01	1.18	4.60	4.17	BDL (DL : 0.3)	1.990	0.380	2.370	3.030	1.870			
11	Nitrite-N (mg/l)	BDL (DL:0.02)																				
12	Nitrate (mg/l)	20.40	3.32	BDL	5.01	27.99	BDL			13.3	5.2	20.4	18.47	BDL	8.80	1.70	10.50	13.42	8.28	45	NR	
13	BOD (mg/l)	BDL (DL :1.0)																				
14	M.Alkalinity (mg/l)	147	117	263	194	109	168	155	139	357	71	119	131	244	301	293	291	420	351			
15	Bi- Carbonate as HCO ₃ ⁻ (mg/l)	179.34	142.74	320.86	236.68	132.98	204.96	189.1	169.58	435.54	86.62	145.18	159.82	297.68	367.22	357.46	355.02	512.40	428.22			
16	P. Alkalinity (mg/l)	BDL (DL : 5.0)																				
17	Carbonate as CO ₃ ²⁻ (mg/l)	BDL (DL : 3.0)																				

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	Station Code	1453	2010	1398	2012	1397	4633	3882	3883	1687	1454	3884	2009	2011	3885	1688	4631	4632	3886		
18	Total Alkalinity (mg/l)	147	117	263	194	109	168	155	139	357	71	119	131	244	301	293	291	420	351	200	600
19	Chloride (mg/l)	89.36	136.96	813.9	394.06	132.02	172.71	41.69	21.84	289.84	57.57	130.03	68.40	764.30	149.88	34.74	118.12	231.28	113.16	250	1000
20	Total Hardness as CaCO ₃ (mg/l)	208	282	512	352	280	228	162	114	414	100	216	154	464	568	290	312	412	296	200	600
21	Calcium Hardness as CaCO ₃ (mg/l)	134	158	380	232	174	166	120	72	350	68	126	112	342	456	150	210	272	160		
22	Magnesium Hardness as CaCO ₃ (mg/l)	74	124	132	120	106	62	42	42	60	32	90	42	122	112	140	102	140	136		
23	Calcium as Ca ⁺⁺ (mg/l)	53.6	63.2	152	92.8	69.6	66.4	48.0	28.8	140.0	27.2	50.4	44.8	136.8	182.4	60	84.0	108.8	64.0	75	200
24	Magnesium as Mg ⁺⁺ (mg/l)	17.982	30.132	32.076	29.16	25.758	15.066	10.206	10.206	14.58	7.776	21.87	10.206	29.646	27.216	34.02	24.786	34.02	33.048	30	100
25	TDS (mg/l)	454	804	1405	1060	646	535	251	216	1020	238	545	402	1495	1028	391	615	1028	645	500	2000
26	TSS (mg/l)	BDL (DL:10.0)																			
27	FDS / TFS (mg/l)	305	660	1109	784	274	262	71	23	675	58	206	96	871	749	147	273	908	328		
28	Sodium (mg/l)	50.54	106.06	226.70	150.40	44.87	86.39	20.61	22.44	193.30	34.03	42.40	31.80	221.20	110.39	52.31	77.57	280.30	98.04		
29	Potassium (mg/l)	4.11	4.68	5.16	14.48	7.38	4.47	3.51	1.83	36.55	6.61	4.18	8.39	6.45	2.13	3.84	4.37	3.85	5.33		
30	Hexavalent Chromium (mg/l)	BDL																			
31	Sulphate (mg/l)	46.75	333.8	123.69	56.47	88..71	29.34	19.02	17.66	57.92	14.59	18.08	31.73	104.92	179.99	21.84	34.12	65.43	42.39	200	400

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	Station Code	1453	2010	1398	2012	1397	4633	3882	3883	1687	1454	3884	2009	2011	3885	1688	4631	4632	3886		
32	Ortho phosphate (mg/l)	0.69	BDL (DL: 0.05)	0.35	0.31	BDL (DL: 0.05)	0.11	BDL (DL: 0.05)	0.15	BDL (DL: 0.05)	0.15	BDL (DL: 0.05)	0.31	0.25	0.20	0.25	0.23	0.25	0.61		
33	% Sodium	33.90	44.33	48.65	46.77	25.12	44.47	21.55	29.45	47.87	40.46	29.29	29.49	50.37	29.55	27.71	34.59	59.27	41.17		
34	SAR	1.5	2.7	4.3	3.5	1.2	2.5	0.7	0.9	4.1	1.5	1.3	1.1	4.5	2.0	1.3	1.9	6.0	2.50		
56	Copper (mg/l)	0.013	0.013	BDL (DL : 0.01)																0.05	1.5
57	Nickel (mg/l)	0.019	BDL (DL : 0.01)													0.015	BDL (DL : 0.01)		0.18	0.02	NR
58	Cadmium (mg/l)	BDL (DL : 0.001)																		0.003	NR
59	Lead (mg/l)	BDL (DL : 0.005)																		0.01	NR
60	Total Chromium (mg/l)	BDL (DL : 0.01)																		0.05	NR
61	Iron (mg/l)	0.03	0.45	0.19	BDL (DL : 0.01)			0.17	0.11	0.031	0.027	0.024	0.022	0.038	0.025	0.15	0.038	0.028	0.023	0.3	NR
62	Zinc (mg/l)	0.017	0.046	BDL (DL : 0.1)	0.056	BDL (DL : 0.1)														5	15
63	Arsenic (mg/l)	BDL (DL : 0.005)																		0.01	0.05
64	Mercury (mg/l)	BDL (DL : 0.005)																			

BDL - Below Detection Limit DL - Detection Limit

NR - No Relaxation