

ಅನುಬಂಧ- I [ANNEXURE-I]

Hydrogeological report:

- **Topography:** The area exhibits undulating Topography controlled by the granitic structures viz Residual hills, insel bergs etc
- **Soil type and Thickness:** The area consists of red soil, with bigrains of quartz and feldspar,
- **Geomorphology:** The area exhibits undulating topography controlled by Geogenic Granitic structures viz inselbergs, residual hills (Poor conductors of groundwater)
- **Geology:** The area is covered by granitic terrain.
- **Hydrogeology:** The Groundwater occurs in the valley fills and multi Mural joint intersected places. The approximate Yield of the wells in the said area is about 800 GPH to 1000 GPH(4000 lit Per hour).
- **Groundwater Quality:** The area is covered under Granitic terrain hence the deeper borewells yield higher Total dissolved Solids hence the Hardness of the Groundwater is more than permissible limit and the Observation Borewells shows Flouride more than permissible limits.
- As you have mentioned in your letter that the per day requirement is 1110 kl/ day this can met by nearly 25-30 Borewells with the existing avg yield and the avg life of the borewells is 1to 2 years.
- This area recieves rainfall of about 400 mm of avg rainfall hence there is less recharge.The Borewells are sustained only where the continous recharge source is available like Tanks and ponds.
- However detailed investigation has to be done to know the actual availability and occurrence of the Groundwater.

ANNEXURE-II Ground Water Analysis in Pavagada Taluk.

ಅಧ್ಯಯನ ಸ್ಥಳ	ತಾರೀಖು	Ca	Mg	Na	K	Fe	HCO ₃	CO ₃	Cl	NO ₃	SO ₄	TDS	EC	TH	PH	F
Kenchaganahalli MWS School primises	08/06/13	-	-	-	-	-	-	-	176	36	-	-	1390	360	8.23	3.03
Y.N. Hosakote Pattana Panchayat off. Primises	Dec-13	-	-	-	-	-	-	-	137	79	-	-	1160	436	8.06	2.02
Arekyathanahalli MWS Well	Dec-15	-	-	-	-	-	-	-	59	119	-	-	690	236	7.61	2.23
Kittagalli, HP borewell near OB Well	Dec-15	-	-	-	-	-	-	-	193	9.41	-	-	1400	312	7.93	2.06
Thirumani, MWS well near hospital	Dec-15	-	-	-	-	-	-	-	39	36	-	-	840	284	7.93	1.26
Devalakere, MWS well	-	-	-	-	-	-	-	-	73	32	-	-	820	288	7.96	1.42
Pavagada, MWS well	Jun-14	155	100	285	5.85	0.14	539	nil	291	97.05	196.1	1635	2850	788	7.91	1.9
Kodamadagu, MWS well	Jun-14	22	13	91	1.94	0.15	220	15	39	8.35	40.8	345	620	108	8.59	0.78
Nagalannadike, MWS well	Jun-14	53	39	369	3.65	0.14	656	Nil	269	31.8	151.2	1265	2195	288	8.19	3.25
Buguduru, HP	Jun-14	50	64	185	4.56	0.22	640	Nil	95	42.66	98.4	880	1590	380	8.23	1.37
Kenchaganahalli MWS	Jun-14	70	36	197	2.16	0.05	309	Nil	221	50.64	142.8	895	1510	320	8.23	2.57
Y.N. Hosakote MWS	Jun-14	40	32	51	1.91	0.14	228	15	39	36.58	46.4	395	690	228	8.5	1.64
Arekyathanahalli MWS Well	Jun-14	110	44	99	1.86	0.13	225	Nil	157	183.9	115.6	845	1345	452	8.08	1.66
Lingadahalli MWS	Jun-14	59	32	68	3.77	0.17	289	Nil	67	20.01	81.1	495	860	276	8.27	1.66
Devalakere, MWS well	Jun-14	59	36	80	1.3	0.12	362	Nil	62	25.94	64.7	530	940	292	8.08	1.48
Karekyathanahalli MWS	Jun-14	37	21	75	2.51	0.16	293	Nil	42	2.33	41.8	390	685	176	8.23	1.29
Kittalahalli MWS	Jun-14	88	40	208	3.75	0.05	401	Nil	274	4.77	117.2	960	1680	380	8.1	1.83