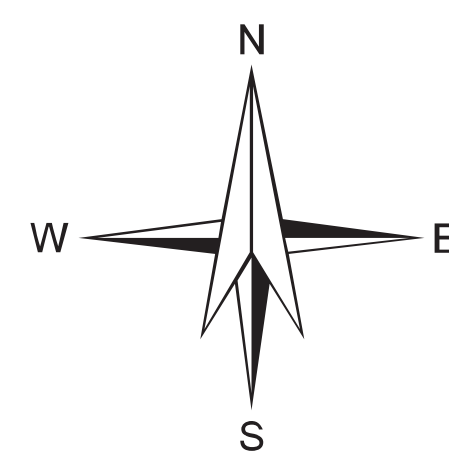


0 1 2 3 4 5 Kilometers

SCALE - 1 : 50,000



MAP UNIT (HYDROGEOGRAPHIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE (COLOUR INDICATES YIELD RANGE AND HATCHING INDICATE DEPTH RANGE)	GEOLOGICAL SEQUENCE / ROCK TYPE	GEOMORPHIC UNIT / LANDFORM	DEPTH TO WATER LEVEL PDE / POST-MONSOON (AVERAGE IN METERS)	RECHARGE CONDITIONS BASED ON AVAILABILITY OF WATER (RAINFALL & OTHER SOURCES)	GROUNDWATER PROSPECTS							RECHARGE STRUCTURES SUITABLE & PRIORITY	REMARKS (PROBLEMS / LIMITATIONS)		
					AQUIFER MATERIAL	TYPE OF WELLS SUITABLE	DEPTH RANGE OF WELLS (SUGGESTED)	YIELD RANGE OF WELLS (EXPECTED)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABILITY)	QUALITY OF WATER POTABLE (P) NON-POTABLE (NP)	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)				
(REPRESENTED IN THE MAP WITH NUMERIC CODE)	(REPRESENTED IN THE MAP WITH ALPHABETIC CODE)	NO. OF WELLS OBSERVED			LS = LOOSE SEDIMENTS PR = PERMEABLE ROCK FR = FRACTURED ROCK IM = IMPERVIOUS ROCK WM = WEATHERED MATERIAL IR = IMPERVIOUS ROCK	DW = DUG WELL RW = RISE WELL DSW = DUG CUM ROSE WELL DTW = DUG CUM TUBE WELL	MIN. MAX. (IN METERS)	(IN LPM or m ³ /day)	VERY HIGH HIGH MODERATE LOW	(HEAVY RECHARGE ≠ NON-POTABLE)		PT = PERCOLATION TANK CB = CHECK DAM NB = NALAND PW = POTABLE WELL DT = DUG TUBE WELL ST = STORAGE TANK RD = RECHARGE DYE SD = STORAGE DYE RD = RECHARGE DYE ST = STORAGE TANK RD = RECHARGE DYE ST = STORAGE TANK			
CB111	Hugli Formation (Recent Day)	Alluvium (Sand Dominant) (111)	Channel Bar (CB)	5 - 6 2	Excellent	LS	TW	5-10 m	400-500 LPM	Very High	P	42%	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.	
PB111			Point Bar (PB)	6 1	Very Good	LS	RW TW	5-10 m	300-400 LPM	Very High	P	7%	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.	
APY113	Shail Baranagar Formation (Early to Late Holocene)	Alluvium (Sand and Silt) (113)	Alluvial Plain Younger (APY)	No wells observed	Very Good	LS	DW TW	10 - 12 m 20 - 30 m	100 - 125 m ³ /day 200-250 LPM	Very High	P	75%	Not Required	Aquifer is formed of sandy part of alluvium. Recharge structures are not required as good recharge condition prevails	
APD113			Alluvium (Sand,Silt and Clay) (113)	Alluvial Plain Older (APO)	No wells observed	Good	LS	DW TW	15 - 20 m 40 - 60 m	50 - 75 m ³ /day 150 - 200 LPM	High	P	Nil	Not Required	Aquifer is formed of sandy part of alluvium. Recharge structures are not required as good recharge condition prevails
VFS211			Lateralite Formation (Middle to Upper Pleistocene)	Valley Fill Shallow (VFS)	No wells observed	Moderate	LS Underlain by WM + FR	TW / BW	40 - 50 m	50 - 100 LPM	Moderate	P	Nil	DT Moderate	Recharge structure will increase the sustainability of ground water prospects
LP211					Laterite (Ferricrete-hard crust, lateritic nodules and lithomarge clay) (211)	Lateritic Plain (LP) (Lithomarge Clay)	4.8 - 7.5 DW - 10	Limited	WM + FR	DW TW / BW	15 - 20 m 50 - 60 m	15 - 25 m ³ /day 50 - 100 LPM	Moderate	P	45%
DLU211	Dissected Lateritic Upland (DLU) (Hard Crust and lateritic nodules)	3.0 - 10.8 DW - 10					Poor to limited	WM + IR (Impervious Material)	TW / BW	80 -100 m	30 - 50 LPM	Low	P	Nil	Not Required
F --- F / --- / --- These are fault / fracture zones, which generally act as conduits for movement of ground water in hard rocks. Along these zones, the yields are significantly higher and wells are likely to be sustainable for longer duration. However, the inferred fractures need to be confirmed by detailed ground surveys.															
D --- D / Q --- Q / P --- P D --- D / Q --- Q / P --- P These are dykes, quartz reefs and pegmatite veins, which generally act as barriers for ground water movement.															
N.B.-The depth range and yield range of wells may vary within the unit because of certain inhomogeneities. Fractures/lineaments which are clearly observed / inferred from the satellite image are indicated on the map. There could be some obscured fractures which also influence the ground water prospects. Locations of the recharge structures shown in the map are tentative. This map is useful for narrowing down the target zones, and exact location on the ground for wells and recharge structures should be identified based on follow-up ground hydrogeological/geophysical surveys.															

