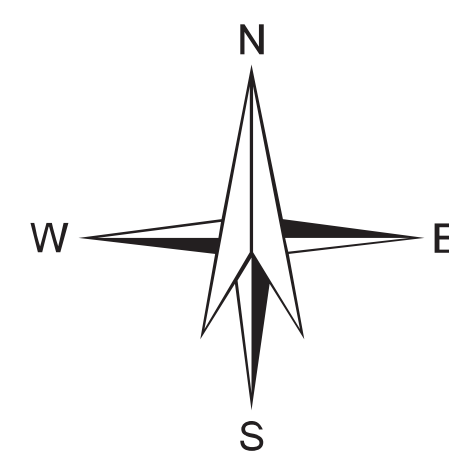


0 1 2 3 4 5 Kilometers

**SCALE - 1 : 50,000**



MAP UNIT  (HYDROGEOMORPHIC UNIT)  REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE  (COLOUR INDICATES YIELD RANGES AND HATCHING INDICATE DEPTH RANGE)	GEOLOGICAL SEQUENCE / ROCK TYPE	GEOMORPHIC UNIT / LANDFORM  (REPRESENTED IN THE MAP WITH NUMERIC CODE)	DEPTH TO WATER LEVEL  (PRE / POST MONSOON (AVERAGE IN METERS))  (NO. OF WELLS OBSERVED)	RECHARGE CONDITIONS  (BASED ON AVAILABILITY OF WATER)  (RAINFALL & OTHER SOURCES)	GROUNDWATER PROSPECTS							RECHARGE STRUCTURES SUITABLE & PRIORITY  PT = PERCOLATION TANK LS = LINEAR SINK NS = NALA BUND RP = RECHARGE POND DW = DRAINAGE WELL DD = DEADEND OF TANK DP = DISCHARGE OF TANK SS = STORAGE SHAFT ST = STORAGE TANK SCM = SOIL CONSERVATION MEASURES	REMARKS  (PROBLEMS / LIMITATIONS)		
					AQUIFER MATERIAL	TYPE OF WELLS SUITABLE	DEPTH RANGE OF WELLS (SUPOSTETED)	YIELD RANGE OF WELLS (EXPERIENCED)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABALITY)	QUALITY OF WATER (NOTABLE P/ NON POTABLE LPM) (INDICATE GRADE/F FRESH POTABLE)	GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)				
					LS - LOOSE SEDIMENTS FR - FRACTURED ROCK WM - WEATHERED MIDDLE IM - IMPERVIOUS MATERIAL DM - DISCHARGE MIDDLE DM + FR - DISCHARGE MIDDLE + FRACTURED ROCK DM + WM - DISCHARGE MIDDLE + WEATHERED MIDDLE DM + IM - DISCHARGE MIDDLE + IMPERVIOUS MATERIAL	DW - DUG WELL PW - POINT WELL DW + PW - DUG CUM POINT WELL DM - DUG CUM TUBE WELL	WM - WM DM - DM DM + PW - DUG CUM POINT WELL DM + PW - DUG CUM TUBE WELL	100 - 125 LPM 10 - 15 m³/day 90 - 100 TW / BW 25 - 30 30 - 50 LPM	VERY HIGH HIGH MODERATE LOW						
VFS81	Kullam (Barambura Group) (B.F. Proterozoic Gneiss & schist)	Granite (81)	Valley Fill Shallow (VFS)	No wells observed	Moderate	LS Underlain by WM+FR	TW / BW	30 - 50	100 - 125 LPM	Moderate	P	Nil	Not Required	Small unit,recharge structures not required	
BJS81			Bajada Shallow (BJS)	No wells observed	Moderate	LS Underlain by WM+FR	DW TW / BW	10 - 15 90 - 100	10 - 15 m³/day 100 - 125 LPM	Moderate	P	Nil	Not Required	Material deposited along slope and underlying rock form the aquifer. Better yield at greater depths	
HTW81			Hill Top Weathered (HTW)	No wells observed	Limited	WM+FR	DW TW / BW	< 5 25 - 30	< 5 m³/day 30 - 50 LPM	Low	P	Nil	RP Moderate	Prospects limited Better prospects along fracture controlled valleys	
SH81			Structural Hill (SH)	No wells observed	-	-	-	-	-	-	-	-	-	-	Run-off zone Not suitable for groundwater development
VFS45	Dalma Volcanics (B.F. Proterozoic Gneiss & schist)	Quartzite (45)	Valley Fill Shallow (VFS)	No wells observed	Moderate	LS Underlain by WM+FR	TW / BW	30 - 50	100 - 125 LPM	Moderate	P	Nil	Not Required	Small unit,recharge structures not required	
HTW45			Hill Top Weathered (HTW)	No wells observed	Limited	WM+FR	DW TW / BW	<5 20 - 30	<5 m³/day 20 - 30 LPM	Low	P	Nil	RP Moderate	Prospect limited. Better prospects along fracture zones. Priority of recharge structures is moderate since few settlements are present	
CR 45			Curvilinear Ridge (CR)	No wells observed	-	-	-	-	-	-	-	-	-	-	Run-off zone Not suitable for groundwater development
LR 45			Linear Ridge (LR)	No wells observed	-	-	-	-	-	-	-	-	-	-	Run-off zone Not suitable for groundwater development
RH45			Residual Hill (RH)	No wells observed	-	-	-	-	-	-	-	-	-	-	Run-off zone Not suitable for groundwater development
SH45			Structural Hill (RH)	No wells observed	-	-	-	-	-	-	-	-	-	-	Run-off zone Not suitable for groundwater development
VFS922	Singham Group (B.F. Proterozoic Gneiss & schist)	Epiklonite, Hornblende Schist (922)	Valley Fill Shallow (VFS)	No wells observed	Moderate	LS Underlain by WM+FR	TW / BW	30 - 50	100 - 125 LPM	Moderate	P	5%	CDDT Moderate	Prospects inferred as no well observed. Recharge condition is moderate with moderate groundwater prospects	
PPS922			Weathered Pediplain Shallow (PPS)	No wells observed	Poor	FR	DW TW / BW	5 - 10 40 - 60	5 - 10 m³/day 30 - 50 LPM	Low	P	Nil	RP High	Due to high run-off and poor infiltration, recharge structures are required to maintain sustainability of groundwater sources	
HTW922			Hill Top Weathered (HTW)	No wells observed	Limited	WM+FR	DW TW / BW	<5 25 - 30	<5 m³/day 30 - 50 LPM	Low	P	Negligible	Not Required	Prospects limited. Better prospects along fracture zones	
RH 922			Residual Hill (RH)	No wells observed	-	-	-	-	-	-	-	-	-	-	Run-off zone Not suitable for groundwater development
SH 922	Structural Hill (SH)	No wells observed	-	-	-	-	-	-	-	-	-	-	-	Run-off zone Not suitable for groundwater development	
VFS923	Unclassified Metamorphic/Older Metamorphic (Archaean)	Mica Schist (923)	Valley Fill Shallow (VFS)	No wells observed	Moderate	LS Underlain by WM+FR	TW / BW	30 - 50	100 - 125 LPM	Moderate	P	5%	CD/DT Moderate	Prospects inferred as no well observed. Recharge condition is moderate with moderate groundwater prospects	
PPS923			Weathered Pediplain Shallow (PPS)	No wells observed	Poor	FR	DW TW / BW	5 - 10 40 - 60	5 - 10 m³/day 30 - 50 LPM	Low	P	Nil	RP High	Due to high run-off and poor infiltration, recharge structures are required to maintain sustainability of groundwater sources	
BJS923			Bajada Shallow (BJS)	No wells observed	Moderate	LS Underlain by WM+FR	DW TW / BW	10 - 15 90 - 100	10 - 15 m³/day 100 - 125 LPM	Moderate	P	Nil	Not Required	Recharge is moderate. Better yields at greater depths within fractured rocks	
HTW923			Hill Top Weathered (HTW)	2 - 5.1 DW - 3 HP - 1	Limited	WM+FR	DW TW / BW	<5 25 - 30	<5 m³/day 30 - 50 LPM	Low	P	Negligible	Not Required	Prospects limited. Better prospects along fracture zones	
SH923			Structural Hill (SH)	No wells observed	-	-	-	-	-	-	-	-	-	-	Run-off zone, not suitable for ground water development
DHM923			Denudational Hill/ Moderately dissected (DHM)	No wells observed	-	-	-	-	-	-	-	-	-	-	-
<p>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.</p> <p>D --- D / O --- Q / P --- P These are dykes, quartz reefs and pegmatite veins, which generally act as barriers for ground water movement.</p> <p>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.</p>															

GROUND WATER PROSPECTS INFORMATION

WELLS RANGE OF YIELDS	COLOR CODE	DEPTH RANGE OF WELLS
> 800 LPM	VIOLET	SHALLOW < 10 METERS
400 - 800 LPM	INDIGO	10 - 20 METERS
200 - 400 LPM	BLUE	20 - 30 METERS
100 - 200 LPM	GREEN	30 - 40 METERS
50 - 100 LPM	YELLOW	40 - 50 METERS
30 - 50 LPM	ORANGE	50 - 60 METERS
20 - 30 LPM	BROWN	60 - 70 METERS
10 - 20 LPM	PINK	70 - 80 METERS
Prospects	RED	80 - 90 METERS

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