Precar	mbrian	D	mbriss O	lovinias Cit	ion Dove	nion Mi	pojecin		Paleozo		e Quachita	Facies (O	F) in the Ou	achita S	Structural	Belt		유					
Ur	ndifferentiated F	Precambrian(?), Cambrian, Ordovician, Silurian, Devonian, Mississippian and Cambrian											Mississippian and Devonian Pennsylvanian				ň						
Melaryolite dikes Red Mountain Gneiss Big Branch Gneiss Coal Creek Serpentine Mafic igneous rocks Packsaddle Schist Lost Creek Gneiss	Llanite (porphyry) Six Mile Granite Six Mile Granite Oatman Creek Granite Pegmatite and quartz veins Town Mountain Granite	Moore Hollow Group						Ellenburger Group				Consists fro Formation (I (Mississippi Stribling Fo	Bend Group Strawn Group		Paleozoic Fe								
		Riley Formation			Wilberns				Tanyard Formation		Gorman Formation	Honeycut Formation	m youngest to olde Mississippian), Cha an), Houy Formatio mation (Devonian)	Marble Falls Formation		Smithwick Formation	Not Differentiated Smithwick Formation					Formation	
		Hickory Member	Cap Mountain Member	Lion Mountain Member	Welge Member	Morgan Creek Member	Point Peak Member	San Saba Member	Threadgill Member	Staendebach Member	Not Differentiated	Not Differentiated	Consists from youngest to oldest of Barnett Formation (Mississippian), Chappel Limestone (Mississippian), Houy Formation (Devonian), and Stribling Formation (Devonian).	Lower Unit	Upper Unit	Not Differentiated	Not Differentiated	Units (PFF)	Hosston Member (Sycamore Member in outcrop)	Member	Hammett Member		
	Ouachita Facies rocks in the northern portion of the Ouachita Structural Belt serve as the downdip underlying confining beds beneath the Lower Trinity Aquifer.												9	>	Low	_00							
Usually Confining Beds		Hickory Aquifer	Confining Beds	Mid-Cambrian Aquifer		Confining Beds		Ellenbu	rger-San Saba	. Aquifer		Usually Confining Beds Where Present		Marble Falls	Confining Beds		PFF	quiier	Lower Trinity	Confining Bed			
		Range of th	ickness of (	Duachita Faci	es rocks i			be 0 to 10	000 feet (pi	nch-out north	nwestward c	lue to thru	st faulting).					9	(pin north	(pin north	(pin north north	noru	
31,000+	Unknown	southeastward)  5-32 (thins southeastward)  5-32 (thins southeastward)  25-85 (thins southeastward)  25-86 (thins northward)  390-650 (thins northwestward)  150-400 (may be absent over some subsurface Precambrian highs and thins southeastward)		0 - 220 (pinches- out southeastward)	250 - 850 (thins northward)	westward)	(partially truncated by erosion northwestward)	0 - 850 (truncated by erosion northwest- ward)	0 - 50	100 50 V375	385 - 460	300-500	0-1600		0-350 (pinches-out northward and northwestward)	0-120 (pinches-out northward and northwestward)	(pinches-out northward and northwestward)	westward)					
Ouachita Facies rocks consist of weakly metamorphosed dark shale and gray sandstone; unmetamorphosed to weakly metamorphosed chert, limestone, dolomite, shale, siltstone and sandstone; extremely sheared, folded and metamorphosed dark shales and sandstones; and metamorphosed and sheared rocks consisting of phyllite, slate, quartzite, marble and schist.										nd hist.	9	Sands	Sandy	Dark b and d limest	annyanie								
Metamorphosed sedimentary and igneous rocks mainly composed of various types of gniess and schist. Also includes various rockunits composed of serpentine, marble, metabasalt, metagabbro, metadiorite and other associated rocks.	Granitic intrusive igneous rocks composed of quartz, feldspar, biotite and other associated minerals.	Top part is thinly bedded, mostly well cemented, silty, argillaceous, micaceous, fine to medium grained, red, brown and gray, quartz sandstone. Lower part is more thickly bedded, well to slightly cemented, fine to coarse grained, poorly sorted, red brown, yellow, gray and white, cross-bedded, quartz sandstone with local occurrence of quartz and feldspar pebble conglomerate at base.	From top down, limestone, siltstone, and silty limestone and mottled limestone grading to calcareous, well cemented sandstone at base. Limestone is thickly bedded, glauconitic, partly collitic and various shades of gray and brown.	Quartzose greensand, glauconitic quartz sandstone, impure fossiliferous limestone, crossbeds oftrilobite coquinite and minor amounts of shale and siltstone.	Thickly bedded, nonglauconitic to slightly glauconitic, medium grained, brownish yellow sandstone.	Thickly to thinly bedded, granular, glauconitic, pink to reddish-brown to gray to greenish and brownish gray, fossiliferous limestone.	Predominantly laminated siltstone with some limestone and shale.	Fine to very fine grained, yellowish to brownish to medium gray, thickly to thinly bedded, slightly cherty dolomite. Upper part may be Ordovician in age.	Predominantly medium to coarse grained, light gray dolomite which may locally and laterally grade to massive, light gray limestone. Lower part may be Cambrian in age.	Thickly to thinly bedded, aphanitic, very light gray, cherty limestone and thickly to thinly bedded, fine to mdeium grained, gray to brownish gray, cherty dolomite. Chert is fossiliferous.	Predominantly aphantic light gray limestone in upper part and predominantly micro-granular to fine-grained, pink, gray and yellowish-gray dolomite in lower part. Has prominant bed containing fossiliferous chertnodules near middle of formation.	Thinly to thickly bedded, light-gray, aphanitic limestone and thinly to thickly bedded, fine-grained to microgranular, gray dolomite. Both limestone and dolomite have fossiliferous chert.	Thin, scattered remanant deposits consisting of dark shale, petroliferous limestone, crinoidal limestone, chert breccia, fractured chert, and microgranular limestone with bedded chert.	Mostly massive high-calcium, very line grained, gray limestone reef with interspersed shale in lower 10 feet.	Mostly very fine grained cherty, thinly to thickly bedded, fossiliferous, brownish to olive gray limestone.	Claystone, siltstone and sandstone.	Limestone, shale and fine-grained sandstone.	PFF	s, shale, dolomite,	Sandy dolomitic limestone, limestone, dolomite and shale.	Dark blue, gray to greenish gray, fossiliferous, calcareous and dolomitic shale with interbedded thin layers of limestone and sand.		
		Quachita Facies re	ocks are not	known to yie	ld fresh to			water, but	may contair	significant	amounts of	moderate	ly saline to	-		1	5 <b>7</b>	9	After a minute	Yields saline prope	Not known to yield significant amounts and springs.		
Where rocks are not fractured, these rocks are not known to yield significant amounts of water to wells and springs. Where rocks are fractured, these rocks may yield very small to moderate amounts of fresh water to wells and springs.		Yields small to very large quantities of fresh to slightly saline water to wells and springs in northern half of Gillespie County and northwestern quarter of Blanco County. Wells may be capable of yielding over 500 gallons per minute where sandstone is fractured and slightly cemented, and where saturated thickness of 300 to 400 feet is encountered.	Not known to yield significant amounts of water to wells and springs.	Yields very small to moderate quantities of fresh water to wells in northern two-thirds of Gillespie County and northwestern quarter of Blanco County. Well yields may be significantly increased by acidizing. May yield small quantities of fresh water to some springs in northern Gillespie and northern Blanco counties.			Not known to yield significant amounts of water to wells and springs.		or very large quantities of fresh water to springs in overy large quantities of fresh water to springs in orthwestern Gillespie County and northern Blanco Jounty.	prountered, wells may be capable of yielding wer a 1,000 gallons per minute. Where such penings are not encountered wells may yield less nan 5 gallons perminute. Where limestone (calcium arbonate) is encountered well yields may be included to the control of the	Yields very small to very large quantities of fresh to slightly saline water to wells in the Pedernales River Valley in Gillespie and Blanco Counties. Yield of a well is very dependent on the amount and size of fracture openings and cavities encountered by the well bore. Where such openings are		Not known to yield significant amounts of water to wells and springs.	Yields very small to moderate quantilites of fresh to slighly saline water to wells in northeastern Blanco County and perhaps east-central Gillespie County. Well yields may be significantly increased by acidizing.		Not known to yield significant amounts of water to wells and springs.	of water		Yields small to very large quantities of fresh to slightly saline water to wells. With proper well construction and proper acidizing, well yields may be increased two-fold. After acidizing, well yields of 500 to 1,200 gallons per minute have been reported.				