

COLUMNAR SECTION SHEET I

GENERALIZED SECTION FOR THE NORTHERN PART OF THE ATOKA QUADRANGLE.
SCALE: 1 INCH = 1000 FEET.

PERIOD.	FORMATION NAME.	SYMBOL.	COLUMNAR SECTION.	THICKNESS IN FEET.	CHARACTER OF ROCKS.	CHARACTER OF TOPOGRAPHY.
CARBONIFEROUS	Boggy shale.	Cb		800+	Shale, brown sandstone, and conglomerate of white chert pebbles in brown sandstone matrix.	Ridges and high, rough, hilly land.
	Savanna sandstone.	Cs		750-1100	Brown sandstone and shale.	Ridges and high, rough, hilly land in the east; low, smooth ridges and level valleys in the south and west.
	McAlester shale.	Cm		1150-1500	Shale, brown sandstone, and conglomerate of white chert pebbles in brown sandstone matrix.	Ridges and rough, hilly land in the east; low, smooth ridges and level valleys in the south and west.
	Hartshorne sandstone.	Ch		150-200	Brown sandstone, locally a chert conglomerate.	Low and nearly level ridges and hills.
	Atoka formation.	Ca		3200	Shale and brown sandstone, variable in thickness, texture, and hardness.	Nearly level undulating plains, valleys, and low ridges.
	(Chickachoc chert lentil.)	(Cc)			Thin lentil of chert and limestone in the northeast, and a conglomerate bed of iron concretions toward the southwest.	
	Wapanucka limestone.	Cw		100-150	White oolitic and blue limestones, shale, and locally cherty calcareous sandstone.	Low ridges.
DEV. *	Caney shale.	Ccy		1500	Blue shale with thin sandy lentils and small ironstone concretions. Black fissile shale with dark-blue fossiliferous limestone concretions.	Level plains and valleys.
	Woodford chert.	Cwf		600	Thin-bedded chert and fissile black shale. Blue flint lentils at the base.	Low ridges and hilly land.
	Hunton limestone.	Sh		160	White and yellowish limestones with flint and chert concretions in upper part.	Sharp narrow ridges and terraced hills.
	Sylvan shale.	Ss		50-100	Blue clay shale.	Narrow valleys.
	Viola limestone.	Sv		750	White and bluish limestones with flint concretions in the middle.	Low ridges and hilly land.
	Simpson formation.	Ssp		1600	Sandstone, calcareous sandstone, and shale. Thin fossiliferous limestone and shale. Calcareous sandstone and shale. Fossiliferous limestone and shale. Sandstone and shaly beds.	Slopes of shallow valleys.
	Arbuckle limestone.	Sa		4000-6000	Massive and thin-bedded white and light-blue limestones with cherty concretions. Dull-blue massive and thin limestones.	Slightly dissected plain of recently uncovered Cretaceous base-level.
	Regan sandstone.	Sr		50-100	Coarse dark-brown sandstone.	
	Tishomingo granite.	tgr			Coarse red granite with dikes of basic rocks.	

*Study of the fossils collected in this region has shown that the Regan sandstone and the lower portion of Arbuckle limestone belong in the Cambrian, and that the Woodford chert belongs in the Devonian. These facts were learned too late to permit the necessary changes to be made in the maps.

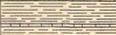
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COLUMNAR SECTION SHEET 2

GENERALIZED SECTION FOR THE NORTHEAST CORNER OF THE ATOKA QUADRANGLE.
SCALE: 1 INCH = 1000 FEET.

PERIOD.	FORMATION NAME.	SYMBOL.	COLUMNAR SECTION.	THICKNESS IN FEET.	CHARACTER OF ROCKS.	CHARACTER OF TOPOGRAPHY.
SILURIAN	Jackfork sandstone.	Sj		3800+	Brown and drab sandstone, shaly sandstone, and thin shale beds.	Stony, high, rough, hilly land.
	Standley shale.	Ssl		6100	Bluish and greenish fissile shales and massive and thin-bedded friable drab sandstones. Siliceous and cherty fissile shale.	Nearly level plains and valleys.
	Talihina chert.	St		1150	Blue, greenish, and white stratified flint and chert. Cherty and clay shales. Black, bluish, and white stratified flint, chert, and cherty shale with thin lentils of blue limestone.	Rounded, smooth knobby ridges.
	Stringtown shale.	Sst		600+	Black and blue shales with a bed of cherty shale.	Lower slopes of ridges and level land.

GENERALIZED SECTION FOR THE SOUTHERN PART OF THE ATOKA QUADRANGLE.
SCALE: 1 INCH = 500 FEET.

PERIOD.	FORMATION NAME.	SYMBOL.	COLUMNAR SECTION.	THICKNESS IN FEET.	CHARACTER OF ROCKS.	CHARACTER OF TOPOGRAPHY.
CRETACEOUS	Silo sandstone.	Ks		200+	Brown friable sandstone, locally indurated by ferruginous cement, shale, and shaly sandstone.	Low round hills and shallow valleys.
	Bennington limestone.	Kb		10-15	Blue shell limestone.	Level land and low escarpments.
	Bokchito formation.	Kbk		140	Red and blue shale with thin ferruginous limestone and lentils of friable sandstone.	Hill slopes and rolling low lands.
	Caddo limestone.	Kc		60	Yellow and white limestone interstratified with thin marly beds.	Low northward facing escarpments and rolling southward sloping land.
	Kiamichi formation.	Kk		150	Blue friable shale with thin shell limestone beds in lower portion.	Lower slopes of escarpments and rolling prairie land.
	Goodland limestone.	Kgl		25	Massive white limestone.	Small level benches and low escarpments.
	Trinity sand.	Kt		200-400	Fine yellow sand with conglomerate beds locally at the base.	Low round hills and wide valleys.
Carboniferous, Silurian, and Cambrian sediments and pre-Cambrian granite.				UNCONFORMITY	Very slightly dissected plain of recently uncovered Cretaceous base-level.	

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