

AGE	FORMATION AND MEMBER	SECTION	THICKNESS IN FEET	DESCRIPTION
DEVONIAN	UPPER DEVONIAN SHALE <i>UNCONFORMITY</i>		80+	Gray and black fissile shale. Locally has a pebbly sandstone a few inches thick at base. Upper part of this unit not exposed in district.
SILURIAN	HANCOCK DOLOMITE DOLomite MEMBER		168-188	Basal pebbly sandstone, overlain by bluish-gray ribbon limestone or mottled limestone. Upper part consists of massive-bedded, gray, fine-grained dolomite. Formation becomes dominantly limestone at east edge of district. As here used, formation includes only beds of Cayuga age.
		LIMESTONE MEMBER		
	CLINTON SHALE		315-394	Green and red shale, with platy interbeds of fine- and medium-grained sandstone. Zone of massive-bedded medium-grained sandstone locally present at top. One or more beds of hematitic "iron ore" in lower part.
	<i>UNCONFORMITY</i>	Iron bed		
	CLINCH SANDSTONE POOR VALLEY RIDGE MEMBER		100?-250	Fine- to medium-grained, buff to greenish-white sandstone in beds a few inches to 2 feet thick, with interbeds and partings of green shale. Sandstone dominant in lower part, shale most abundant in upper part.
	HAGAN SHALE MEMBER <i>UNCONFORMITY</i>		65-129	Green shale with a few interbeds of fine-grained sandstone in lower part, and of fine- and medium-grained sandstone in upper part.
UPPER ORDOVICIAN	SEQUATCHIE FORMATION		274-438	Green and red calcareous siltstone, with colors mottled and interbedded. Contains zones of muddy limestone that are abundantly fossiliferous. Lower part is of Maysville age; remainder of Richmond age.
	REEDSVILLE SHALE		282-358	Gray and greenish-gray shale, with interbeds of fine-grained sandstone and of coarsely crystalline, highly fossiliferous limestone. Shale is predominant, especially in the float.
MIDDLE ORDOVICIAN	TRENTON LIMESTONE		560-600	Coarsely-crystalline, dark-gray, highly fossiliferous limestone with shale partings in lower part; medium-crystalline and finely crystalline, less fossiliferous limestone with shale partings in upper part.
		Bentonite		
	EGGLESTON LIMESTONE UPPER MUDSTONE MEMBER		145-165	Buff-weathering, earthy, calcareous siltstone composes all of lower member and most of upper member. Middle member consists of thin-bedded, fine-grained pure limestone which is moderately fossiliferous. Two thick bentonite beds are about 12 feet and 55 feet below top of formation, respectively.
		MIDDLE LIMESTONE MEMBER		
		LOWER MUDSTONE MEMBER		
	HARDY CREEK LIMESTONE		93-151	Even-bedded, tan, dense, fine-grained limestone, with abundant and characteristic oval chert nodules in a few beds. Relatively unfossiliferous except for top 10 feet. Named from Hardy Creek, Jonesville district.
	BEN HUR LIMESTONE		127-153	Buff-weathering, shaly and crumbly limestone, with a few interbeds of purer crystalline limestone. Named from exposure in Louisville and Nashville Railroad cut west of Ben Hur.
	WOODWAY LIMESTONE		256-288	Cryptocrystalline tan and gray limestone with interbeds and zones of medium-crystalline limestone. Prominent zone of <i>Stromatocarium rugosum</i> at base. Named from exposures on slope of Wallen Ridge east of Woodway.
	HURRICANE BRIDGE LIMESTONE		288-368	Cryptocrystalline, tan and gray, thin-bedded limestone with prominent zones of massive-bedded cryptocrystalline birdseye limestone, and zones of buff- and red-weathering argillaceous shaly limestone. Named from exposures along and near road southeast of Hurricane Bridge.
	MARTIN CREEK LIMESTONE		40-182	Dark-gray and brown, oily-smelling limestone with abundant chert nodules in lower part; tan cryptocrystalline limestone with abundant chert nodules in some zones in upper part. Locally has a zone of coarsely crystalline fragmental limestone at or near base. Named from exposures along and near road southeast of Martin Creek in Rose Hill district (Back Valley quadrangle).
	<i>UNCONFORMITY</i>			
	ROB CAMP LIMESTONE		0-153	Very massive-bedded, very dense, cryptocrystalline, tan and dove-gray limestone with abundant small patches of white crystalline calcite. Zones of thinner-bedded limestone containing chert nodules are present in eastern part of Jonesville district. Named from exposures north-east of Rob Camp Church in Rose Hill district (Colman Gap quadrangle).
POTEET LIMESTONE <i>UNCONFORMITY</i>		45-97	Gray, brown, and tan, dense, fine-grained limestone with abundant chert nodules. Darker-colored limestone predominant in lower part, lighter-colored limestone predominant in upper part. Locally has zone of coarsely crystalline fragmental limestone at or near base and one or more beds of dolomitic limestone higher up. Named from exposures along lane north of Poteet Ford.	
DOT LIMESTONE		120-193	Dolomitic limestone weathering yellow or red and with characteristic rounded surfaces in lower part; tan, dense, fine-grained limestone in upper part. Normally contains no zones of chert nodules, but locally one or more zones of chert nodules are present near top. Prominent conglomeratic zone of chert and dolomite pebbles at base. Named from exposures along State Highway 70 just west of Dot, but type section taken in Louisville and Nashville Railroad cut at Hagan.	
LOWER ORDOVICIAN	MASCOT DOLOMITE		169-565	White, finely crystalline dolomite in upper part, and interbedded finely and coarsely crystalline dolomite in lower part. Contains abundant non-oolitic, white-weathering chert in beds, lenses, nodules, and masses. Beds of sandstone as much as 10 feet thick locally present in upper part.
	KINGSPORT DOLOMITE		119-272	Light-gray to white, medium-crystalline to coarse-crystalline saccharoidal dolomite. Contains little chert.
	LONGVIEW DOLOMITE		98-272	White, finely crystalline dolomite and white to tan, medium-crystalline dolomite. Abundant white-weathering chert in beds, lenses, and nodules. Chert mostly non-oolitic.
	CHEPULTEPEC DOLOMITE		702-776	Lower part consists of light-brown, medium-crystalline to coarse-crystalline, saccharoidal dolomite and light-gray to tan, finely to medium-crystalline argillaceous dolomite. Prominent sandstone at base, and other beds and lenses of sandstone and sandy dolomite numerous, especially near base. Upper part similar but contains more argillaceous dolomite and less saccharoidal dolomite. Sandstone and sandy dolomite present only near top. Chert sparingly present, mostly oolitic.
CAMBRIAN	UPPER CAMBRIAN	COPPER RIDGE DOLOMITE	840±	Lower part consists of brown and dark-gray, coarsely and medium-crystalline dolomite with pronounced petrolic odor; upper part consists of white and light-gray, cryptocrystalline and coarsely crystalline dolomite. Thin beds and lenses of oolitic white-weathering chert present throughout, but especially abundant near top.
		MAYNARDVILLE LIMESTONE CHANCES BRANCH DOLOMITE MEMBER	160-209	Gray, finely crystalline, laminated dolomite with interbedded mottled limestone near base and interbedded dark medium-crystalline dolomite near top.
		LOW HOLLOW LIMESTONE MEMBER	142-172	Gray cryptocrystalline ribbon limestone in lower part and mottled limestone in upper part; interbedded fine-grained dolomite near top. Base not exposed in Jonesville district.

Total thickness of sedimentary rocks 6,360 feet ±

COLUMNAR SECTION OF ROCKS EXPOSED IN THE JONESVILLE DISTRICT