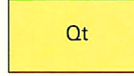
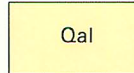
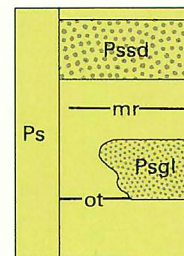
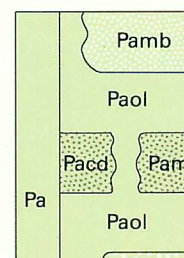
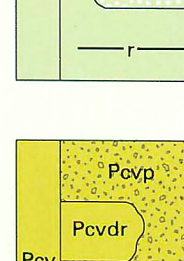
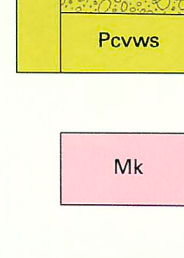
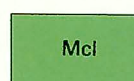
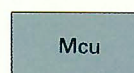
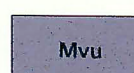


		EXPLANATION		
Pliocene and Holocene		Qt	Tabas and colluvium	QUATERNARY
		Qal	Alluvial deposits; may be underlain by lacustrine deposit.	
Demeishian		Psad mtr Psal ot	Spoon Formation Psad, <i>sub-Davis sandstone</i> mtr, <i>Mt. Korah Coal Member</i> Psal, <i>golden sandstone</i> ot, <i>Oldtown Coal Bed</i>	PENNSYLVANIAN
		Pamb Paol Psal Palt Paol Psl	Abbott Formation Pamb, <i>Murray Bluff Sandstone Member</i> Paol, <i>olive shale</i> Pamb, <i>middle Abbott sandstone lentils</i> Psad, <i>Cedar Creek sandstone lentil</i> Psl, <i>lower Abbott Sandstone lentile</i> r, <i>Reynoldsburg Coal Bed</i>	
		Pcovp Pcovdr Pcovr Pcovws	Caseyville Formation Pcovp, <i>Pounde Sandstone Member</i> Pcovdr, <i>Drury Member</i> Pcovr, <i>Battery Rock Sandstone Member</i> Pcovws, <i>Wayside Member</i>	
		Mk Md Mcl Mcu Mvu	Kinkaid Limestone Degonia Formation Clore Formation Chesterian undifferentiated (cross section only) Valmeyeran undifferentiated (cross section only)	
Chesterian		Mk	Kinkaid Limestone	
		Md	Degonia Formation	
Valmeyeran		Mcl	Clore Formation	
		Mcu	Chesterian undifferentiated (cross section only)	
		Mvu	Valmeyeran undifferentiated (cross section only)	
		LINE SYMBOLS: Dashed where inferred; dotted where concealed		
		Contact		
		Coal bed		
		Fault: bar and ball on downthrown side		
		Anticline		
		Syncline		

ECONOMIC GEOLOGY

Coal has been mined on a small scale in the Stonefort Quadrangle, and nine petroleum test wells are known to have been drilled; none achieved production.

Coal mining has taken place in the northern $\frac{1}{4}$ of the quadrangle. The Mt. Rorah Coal Member, in the Spoon Formation, was mined at the surface in the SE $\frac{1}{4}$, Section 34, T.10S., R.4E., and dug in small open pits or drifts in the hills north of Stonetown. This coal here is 2 1/2 to 3 1/2 feet thick in several exposures and boreholes, and its depth is not more than 125 feet. The Oldtown Coal Bed was mined in the NW $\frac{1}{4}$ of Section 36, T.11S., R.5E., and was worked from small adits about a mile east of Oldtown and in Section 2, T.11S., R.5E. This coal occurs near the base of the Spoon Formation and is correlated palynologically with the Rock Island Coal of northwestern Illinois. The Oldtown is locally up to 3.0 feet thick, but it thins rapidly away from the area where it was mined, and is partly cut out and replaced by sandstone.

A 3½-foot coal believed to be the Delwood Coal Bed was encountered at a depth of 23 feet in COGEOMAP borehole S-2, SE ¼₄, Section 29, T.10S., R.5E. This coal reaches a similar thickness and has been mined both east and west of the Stonefort Quadrangle, but is unknown here except in one borehole. More test drilling might establish minable reserves, possibly in conjunction with overlying Mt. Rorah and underlying Oldtown Coals.

Coal outcrops and small drift mines or test pits in strata of the Abbott and Caseyville Formations have been observed in several scattered localities. The Reynoldsburg Coal Bed is indicated by coal float and test pits north of Cedar Creek in Sections 34, 35, and 36, T.11S., R.4E. According to field notes (ISGS, open files) the coal was "canneloid" and 3.0 to 3½ feet thick. Other Abbott and Caseyville coals observed are less than 2 feet thick and generally are shaly.

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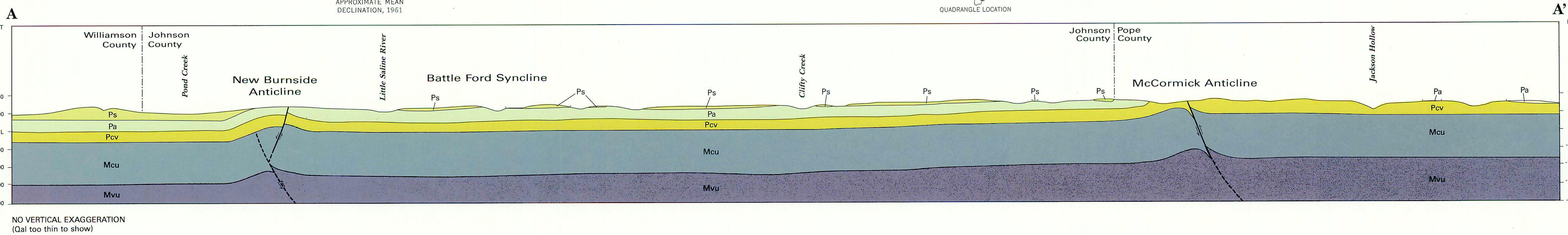
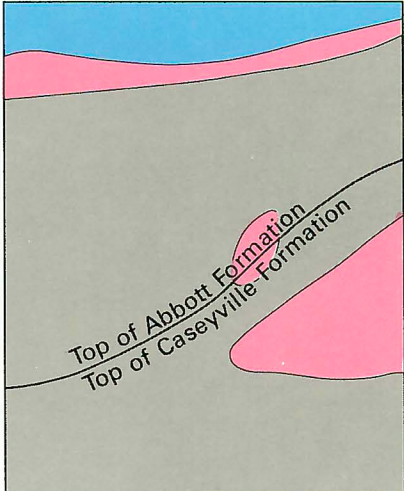
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W. John Nelson and Donald K. Lumm
1990