

GEOLOGIC DESCRIPTION

weathering, fine-to coarse- grained sandstone and numerous dark-gray to brown shale interbeds. It has well-developed, thin to flaggy bedding. Only about the lowermost 100 feet are present on the Lewistown quadrangle.

The Marcellus Formation consists of grayish-black to black carbonaceous clay shale. It contains abundant pyrite. Several bentonites are contained within the formation. Its measured thickness is 70 feet.

The Onondaga Formation consists of olive-green-weathering, medium-gray limestone and calcareous shale. It contains claystone in its lower part. It has well developed, flaggy to thick bedding. The Selinsgrove Limestone Member is dark gray and fossiliferous. It is approximately 135 feet thick.

The Ridgeley Member consists of fine- to very coarse grained, pebbly, white and light gray to buff, fossiliferous sandstone. It is medium to thick bedded, with a measured thickness of 75 feet. It was formerly known as the

The Keyser Formation is a dark-gray, fossiliferous, crystalline to nodular limestone with thin bedded limestone at its top. It is well bedded, with beds

The Tonoloway Formation is a medium-gray finely laminated limestone. It

is well bedded, with beds flaggy to thick. Calculated thickness is 675 feet.

The Wills Creek Formation is a greenish-gray shale containing local limestone and sandstone zones. Red shale and siltstone occur in the lower part of the formation. It is moderately well bedded, with fissile to thin beds.

The Bloomsburg Formation is predominantly red shale and siltstone. It contains some sandstone, thin, impure limestone, and green shale. It is moderately well bedded, with fissile to thin beds. The sandstone units are

The Mifflintown Formation is a greenish-gray shale interbedded with medium-gray, fossiliferous limestone. Outcrops commonly exhibit intense

The Keefer Formation is a light-gray to yellowish-brown, very fine to coarse grained, fossiliferous, siliceous sandstone that is locally hematitic or conglomeratic. It is well bedded with beds thin to thick and crossbedded. It

The Rose Hill Formation is a light-olive-gray shale, with some siltstone and two grayish-red to reddish-black sandstone units. The upper shale

The Tuscarora Formation consists of white, sometimes red and green sandstone and quartzite. It is fine to coarse grained, tough, firmly

It may be obscured by crossbedding. It is about 700 feet thick.

The Juniata Formation consists of brownish-red, fine-grained to

cemented, crossbedded and conglomeratic in part. Bedding is mostly thic k.

conglomeratic, quartzitic sandstone with well-developed crossbedding. It has interbedded red shale. Bedding is thin to flagg y. Its thickness is about

The Bald Eagle Formation consists of gray to reddish-gray to brownish-gray, fine- to coarse- grained, crossbedded sandstone, and quartz-pebble

conglomerate (the Lost Run Member). Bedding is moderately well developed, with thick beds. Its maximum thickness is about 1,000 feet.

contains interbedded limestone. It is about 800 feet thick.

mostly flaggy to thick. Thickness is calculated to be 285 feet.

deformation. Calculated thickness is 265 feet.

flaggy to thick. Some beds are massive. It is about 170 feet thick.

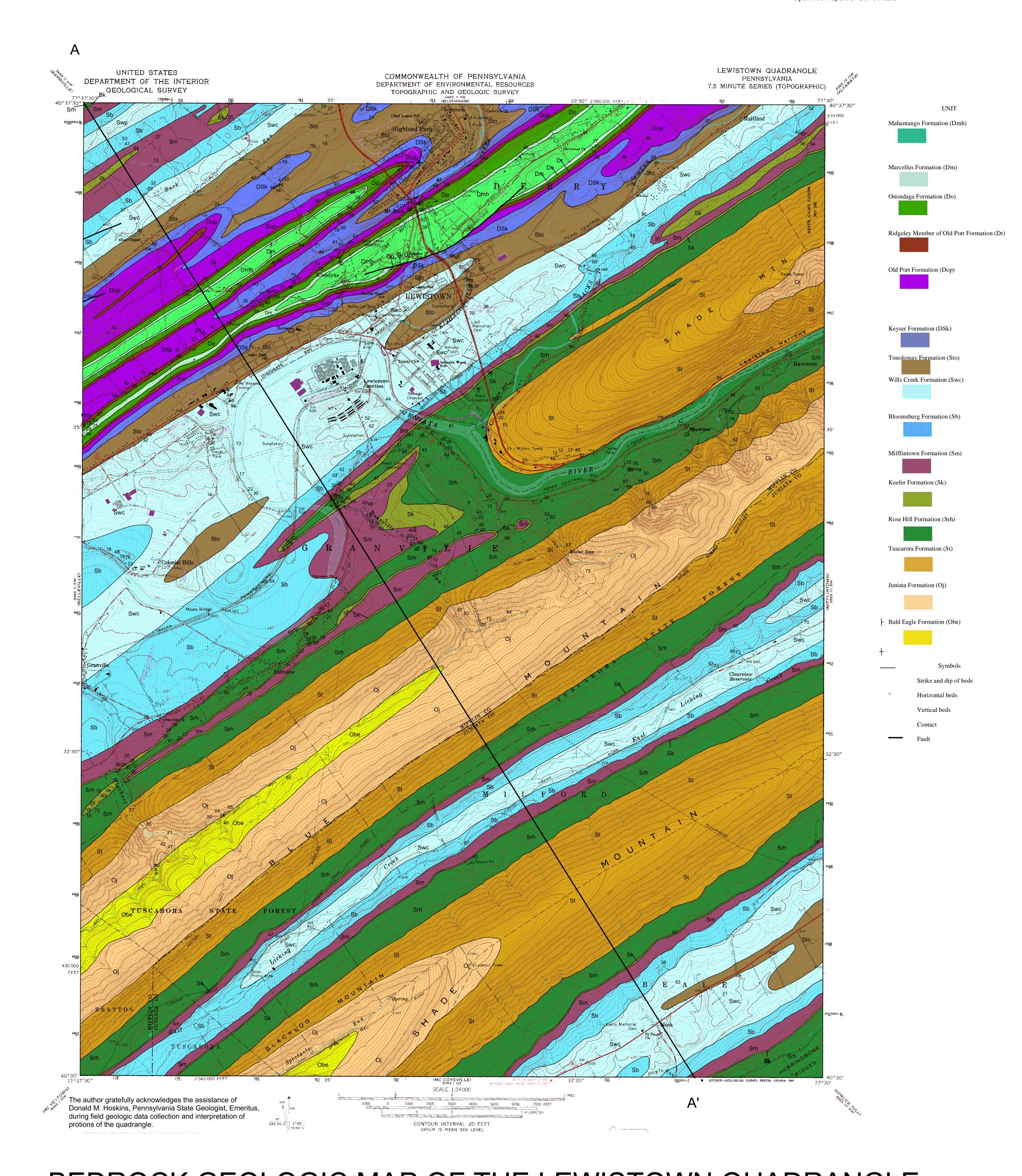
The Old Port Formation contains diverse rocks types, including sandstone, chert, shale, and limestone. At the top the formation is the Shriver Member, a dark-gray to black chert that weathers to light gray to white or yellow brown. Below the Shriver Member, the formation is dominantly a dark gray, massive limestone, with numerous interbeds of very fine grained sandstone, shale, chert,

and siltstone. Its measured thickness is 173.5 feet.

Its calculated thickness is 620 feet.

is about 70 feet thick.

The Mahantango Formation is composed of medium-gray, olive-



## BEDROCK GEOLOGIC MAP OF THE LEWISTOWN QUADRANGLE MIFFLIN AND JUNIATA COUNTIES, PENNSYLVANIA BY THOMAS A. MCELROY 2004

