

Description of Map Units

Quaternary	Qal Alluvium	Qc Colluvium	Qr Weathering residuum	Qs Terrace deposits
Jurassic	Jd Diabase dikes	Jg Gettysburg Formation	Jn New Oxford Formation	Joc Ogpe
Triassic	Jn New Oxford Formation	Gf Grove Formation	Wm Woodsboro Member	Qog Fountain Rock Member
Ordovician	Wm Woodsboro Member	Wm Woodsboro Member	Wm Woodsboro Member	Wm Woodsboro Member
Cambrian	Wm Woodsboro Member	Wm Woodsboro Member	Wm Woodsboro Member	Wm Woodsboro Member
Frederick Formation (continued)	Ad Adamsstown Member	Rsm Rocky Springs Station Member	Mm Monocacy Member	Ar Araby Formation
	Ss Sans Creek Formation	Ma Marble	Tp Tuffaceous phyllite	Qz Quartzite
	Jp Jamasville Phyllite	Cm Conglomerate metagraywacke	Ch Chlorite phyllite	

Base layers derived from U.S. Geological Survey (USGS) 7.5-minute Series (Topographic) Woodsboro Quadrangle 1955 (Photorevised 1986) Hydrology layers shown are from USGS digital line graphs (DLG) for this quadrangle Topography and cultural/transportation layers from USGS 1:250,000 scale base files separate (Topography by photogrammetric methods from aerial photographs taken 1943. Culture revised by USGS 1955. Map edited in 1986 by USGS based on aerial photographs taken 1982 and other sources; this information not field checked and may not meet USGS content standards.) 1986 magnetic north declination (center of quadrangle): 9.5 degrees west (To determine current magnetic declination see: <http://www.ngl.noaa.gov/cgi-bin/veg/mag/ld.html>)

Current map projection: Maryland State Plane Coordinate System 1987 (Projection: Lambert Conformal Conic, 1980 geodetic reference system) (Horizontal Datum: North American Datum 1983) MD State Plane 2000-meter grid ticks and coordinates shown in black. Geographic coordinates (latitude-longitude) shown near corners and 2.5° intervals (in black)

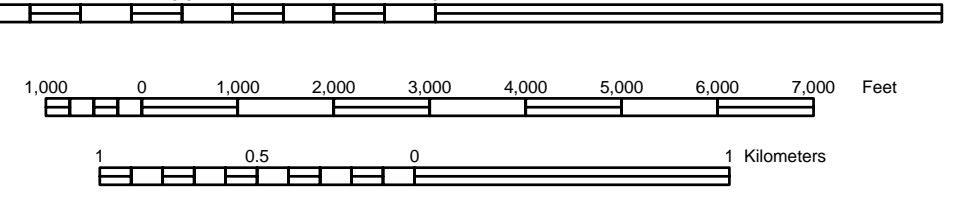
References
Brezinski, D.K., 2004, Stratigraphy of Frederick Valley and its relationship to karst development. Maryland Geological Survey, Report of Investigations 75, 101 p.
Reinhardt, J., 1974, Stratigraphy, Sedimentology and Cambro-Ordovician Paleogeography of the Frederick Valley, Maryland: Maryland Geological Survey, Report of Investigations 25, 73 p.

Supplemental Information
Use Constraints: These data represent the results of data collection processing for a specific Department of Natural Resources, Maryland Geological Survey activity and indicate general existing conditions. As such, they are only valid for the intended use, content, time, and accuracy specifications. The user is responsible for the results of any application of the data for other than their intended purpose. The Maryland Geological Survey makes no warranty, expressed or implied, as to the use or appropriateness of the data, and there are no warranties of merchantability or fitness for a particular purpose of use. The Maryland Geological Survey makes no representation to the accuracy or completeness of the data and may not be held liable for human error or defect. Data are only valid at 1:24,000 scale. Data should not be used at a scale greater than that.
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Geologic field mapping was completed in 2003-2004. The geologic map was compiled in digital form by Heather Quinn of the Maryland Geological Survey and Brent Anderson and Catherine Luckhurst of Towson University, Center for Geographic Information Sciences.
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Version: WOODGEO20041
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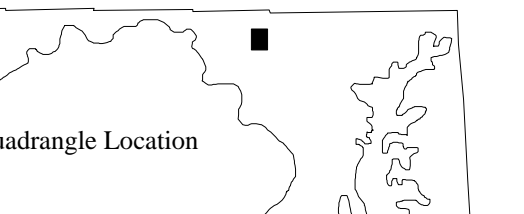
Geologic Map of the Woodsboro Quadrangle, Frederick and Carroll Counties, Maryland

By David K. Brezinski and Jonathan Edwards, Jr. 2004

Scale 1:24,000



Contour Interval 20 Feet
National Geodetic Vertical Datum of 1929
(To convert elevations to the North American Vertical Datum of 1988, subtract 1 foot)
(To convert from feet to meters, multiply by 0.3048)



Adjoining 7.5' Quadrangle Names
Woodsboro Quadrangle, shaded

1	2	3	1 Blue Ridge Summit
2	3	4	2 Emmitsburg
3	4	5	3 Taneytown
4	5	6	4 Carroll Furnace
5	6	7	5 Union Bridge
6	7	8	6 Frederick
7	8		7 Walkersville
8			8 Libertyville

Explanation of Map Symbols

Geologic Symbols

	Geologic contact; approximately located dotted where concealed		Cross section line
	Faults		Planar Features
	U Uphrown side D Downthrown side		Inclined bedding strike and degree of dip shown
	Thrust fault sawtooth on upthrown block		Vertical bedding strike shown
	Overturned Thrust Fault base of sawtooth on upper plate; sawtooth in direction of dip		Overturned bedding strike and degree of dip shown
	Fault, concealed		Inclined cleavage strike and degree of dip shown
	Fault, inferred		Vertical cleavage strike shown
	Folds		Inclined joint strike and degree of dip shown
	Minor syncline bearing and degree of plunge shown		Vertical joint strike shown
	Minor anticline bearing and degree of plunge shown		

Base Map Symbols

Topographic and Hydrologic Symbols

- Topographic Contour - Index (100-ft interval)
- Topographic Contour - Intermediate (20-ft interval)
- Stream
- Water body (including lakes, ponds, streams)

For additional information on USGS cultural/transportation symbolization see <http://pubs.usgs.gov/of/1998/049-430/>



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