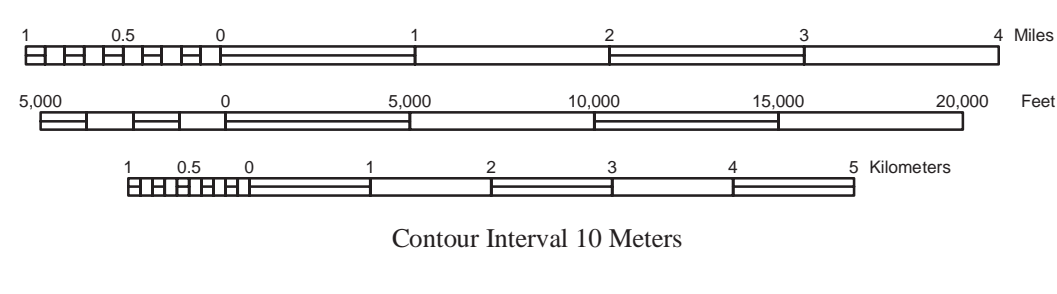


# Geologic Map of Charles County, Maryland

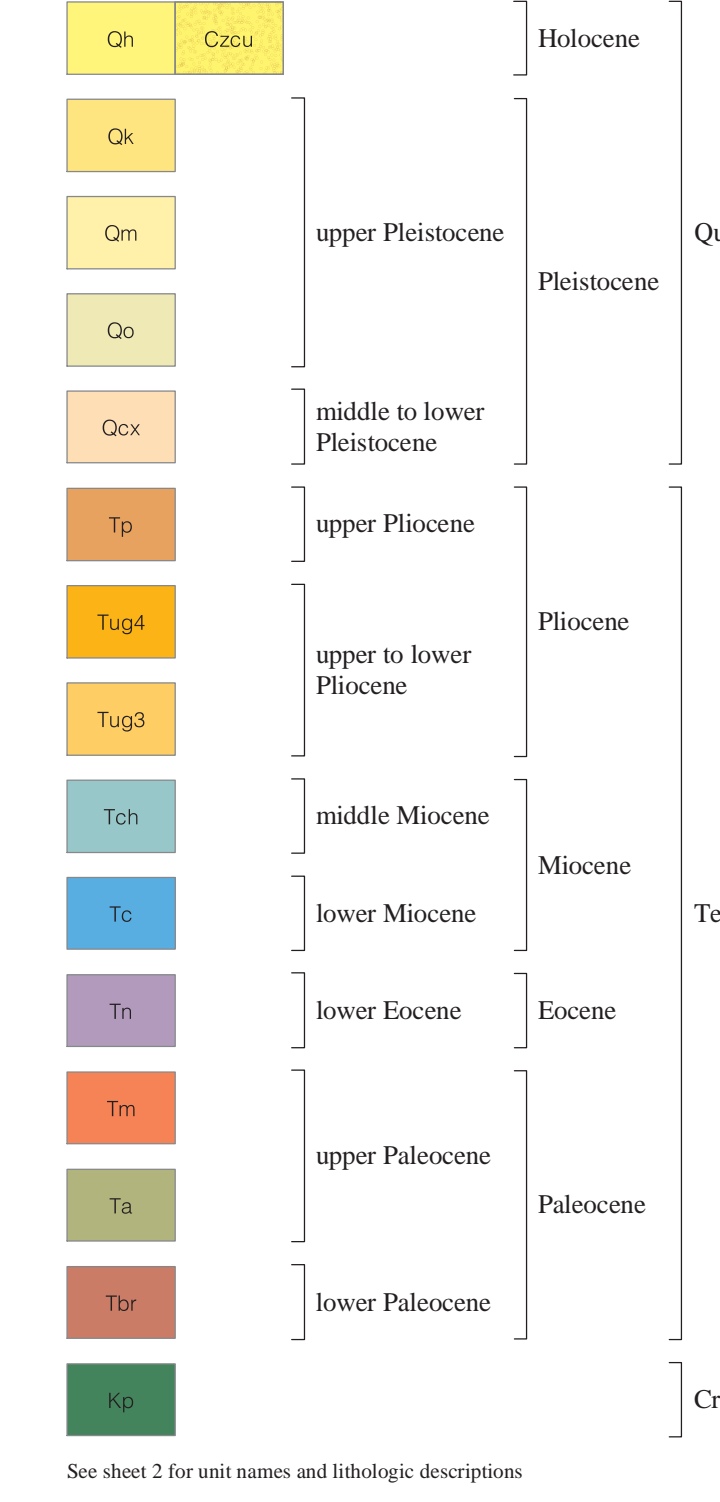
by Lucy McCartan  
U.S. Geological Survey  
1989  
(Digital Version 2003)

Scale 1:62,500



(State Plane Grid North)

### Correlation of Map Units



### Explanation of Map Symbols

#### Geologic Symbols

- Contact -- Approximate, gradational, or inferred
- Line of Section

- SM-21 Drill Hole: SM numbers are core logs from Glaser (1971); OAKS, LP-1, LP-2 and WALDORF are USGS core holes; other locations are USGS auger holes.

#### Topographic and Hydrologic Symbols

- Topographic Contour - Index (20-m interval)
- Topographic Contour - Intermediate (10-m interval)
- Stream
- Water body (including lakes, ponds, streams)
- Marsh, wetland, swamp, or bog

#### 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. Neither the licensor, nor the owner of these data makes any warranty, expressed or implied, as to the use or appropriateness of the licensed 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. Geologic data are only valid at 1:62,500 scale. Data may not be used at a scale greater than that.

Acknowledgments: Production of the digital map was funded, in part, through a memorandum of understanding with the United States Department of Agriculture, Natural Resources Conservation Service. The views expressed herein are those of the author(s) and do not necessarily reflect the views of the USDA-NRCS or any of its sub-agencies.

Original geologic map by McCartan (1989) was produced as part of U.S. Geological Survey Cooperative Agreement No. 14-0001-A02SS, COGEOMAP.

Geologic map compiled in digital form by Heather Quinn, Maryland Geological Survey. Digital support provided in part by Towson University, Center for Geographic Information Sciences.

The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national origin or physical or mental disability.

Released in digital format April 2003  
Version: CHGEO2003.1

STATE OF MARYLAND  
Robert L. Ehrlich, Jr.  
Governor

Michael S. Steele  
Lieutenant Governor



DEPARTMENT OF NATURAL RESOURCES  
C. Ronald Franks  
Secretary

W. P. Jensen  
Deputy Secretary

MARYLAND GEOLOGICAL SURVEY  
Emery T. Cleaves  
Director

Copies of this map are available in hard copy (paper) and digital form from:  
MARYLAND GEOLOGICAL SURVEY  
2200 Saint Paul Street  
Baltimore, MD 21218  
Ph: 410-554-5500  
Fax: 410-554-5502  
<http://www.mgs.md.gov/>

Base map compiled and extracted from U.S. Geological Survey 30 x 60-minute series (topographic) (1:100,000 scale) digital line graphs (DLGs). Portions of Washington West, Washington East, Fredericksburg, and Leonardtown. As shown, base map layers are an enlargement from 1:100,000 to 1:62,500 scale.  
U.S. Dept. of Commerce, Bureau of the Census, Redistricting Census 2000 TIGERLine file for roads layer.  
(To determine current magnetic north declination see: <http://www.ngdc.noaa.gov/cgi-bin/sog/gmag1dmb1.pl>)  
Current map projection:  
Maryland State Plane Coordinate System (1987) (meters)  
Projection: Lambert Conformal Conic, 1980 geodetic reference system  
(Horizontal Datum: North American Datum 1983)  
State Plane (NAD83) 10000-meter grid ticks and coordinates shown in black.  
Geographic coordinates (latitude-longitude) (NAD83) shown at 7.5' intervals (in black).

