# GEOLOGIC AND STRUCTURE CONTOUR MAPS OF THE MALTA 30' x 60' QUADRANGLE, NORTHEASTERN MONTANA

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Compiled and Mapped by

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## MAP UNITS

Symbol	Age	Description
	QUATERNARY	
Qal Qg	Holocene Pleistocene	Alluvium; deposits of gravel, sand, silt or clay of modern channel and flood plains Glacial deposits, undivided; possibly the equivalent of the Kintyre Formation of Jensen and Varnes (1964) and Colton and others (1989) on the Glasgow 30' x 60' quadrangle
Qgi Qls Qac	Pleistocene Quaternary Quaternary	Glacial ice-contact deposits Landslide deposits Alluvium-colluvium; includes deposits in alluvial fans and on alluvial terraces; may include glacial outwash
	TERTIARY	
Tsg	Miocene-Pliocene	High-level sands and gravels; possibly equivalent to the Flaxville Formation; up to 30 meters (100 feet) thick
	CRETACEOUS	
Kb Kjr Kcl	Upper Cretaceous Bearpaw Shale; 340 meters (1100 feet) thick Upper Cretaceous Judith River Formation; 140 meters (450 feet) thick Upper Cretaceous Claggett Shale; 150 meters (500 feet) thick	
GEOLOGIC SYMBOLS		
		Contact: dashed where approximate, dotted where concealed
		Fault: dashed where approximate, dotted where concealed
1	MITTIM	Significant break in slope between two levels of Qac

## Age Correlation of Map Units, Malta Quadrangle

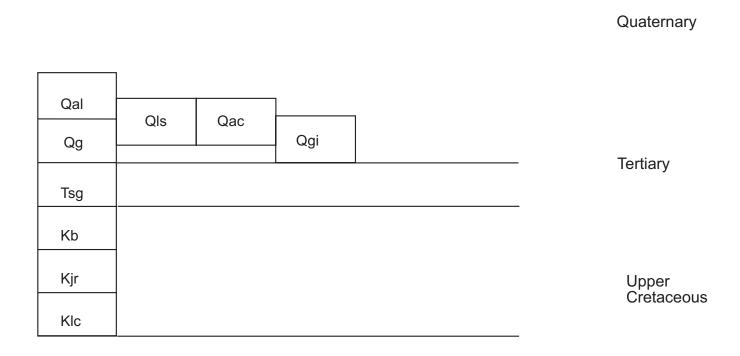


Figure 1. Age correlation chart of map units for Malta 30' x 60'quadrangle.

#### SOURCES OF GEOLOGIC MAP DATA

- Collier, A.J., 1917 (1918), The Bowdoin dome: U.S. Geological Survey Bulletin 661, p. 193-209, plate 16, scale 1:375,000.
- Erdmann, C.E., and Schwabrow, J.R., 1932, Structural contour map of the central part of Bowdoin dome [unpublished map]: U.S. Geological Survey, scale 1:125,000.
- Osterkamp, W.R., 1968, Occurrence of ground water in the Judith River Formation north-central Montana: U.S. Geological Survey Hydrologic Investigations Atlas HA-308, map, scale 1:250,000.

#### ADDITIONAL REFERENCES

- Colton, R.B., Whitaker, S.T., and Ehler, W.C., 1989, Geologic map of the Glasgow 30' x 60' quadrangle, Valley and McCone Counties, Montana: U.S. Geological Survey, Open-file Map 89-171, scale 1:100,000.
- Jensen, F.S., and Varnes, H.D., 1964, Geologic map of the Fort Peck area, Garfield, McCone and Valley Counties, Montana: U.S. Geological Survey Professional Paper 414-F, p. 1-49.