PRELIMINARY GEOLOGIC MAP OF THE
EASTERN PART OF THE RINGLING 30’ x 60’ QUADRANGLE
CENTRAL MONTANA

by

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Figure 1. Location map of project area in Ringling 100k quadrangle and area of previous mapping.

Previous mapping:

Bowen, 1918
DESCRIPTION OF MAP UNITS

Ringling 30’ x 60’ Quadrangle

Quaternary
Qal  Alluvium of modern stream channels and flood plains (Holocene)
Qat  Alluvium on old stream terraces (Holocene and Pleistocene)
Qc   Colluvium; slope-wash (Holocene)
Qaf  Alluvial fan deposits (Holocene and Pleistocene)
Qls  Landslide deposits (Holocene and Pleistocene)
Qg   Glacial deposits, undivided (Holocene and Pleistocene)
QTab Deposits of alluvial braid plains and on pediment surfaces, undivided (Holocene-Pliocene)

Tertiary
Ti   Tertiary intrusive rocks, undivided, dikes and sills (Eocene)

Fort Union Formation (Paleocene)
Tftr Tongue River Member
Tfle Lebo Shale Member
Tft  Tullock Member

Upper Cretaceous
Khc  Hell Creek Formation
Kfh  Fox Hills Formation
Khfh Hell Creek and Fox Hills Formations, undivided
Kb   Bearpaw Shale
Kjr  Judith River Formation
Kcl  Claggett Shale
Ke   Eagle Formation
Ktc  Telegraph Creek Formation
Ktcn Telegraph Creek and Marias River Formations, undivided
Kbfb Big Elk Sandstone Member of Belle Fourche Shale
MAP SYMBOLS

**Contact**--Dotted where concealed.

**Fault**--Dashed where approximately located, dotted where concealed, queried where uncertain. Bar and ball on down-thrown side.

**Anticline**--Showing trace of axial plane and direction of plunge; dotted where concealed.

**Syncline**--Showing trace of axial plane and direction of plunge; dashed where approximately located, dotted where concealed.

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Dikes and sills

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Dikes and sills

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Strike and Dip of Beds
Sources of Geologic Mapping
