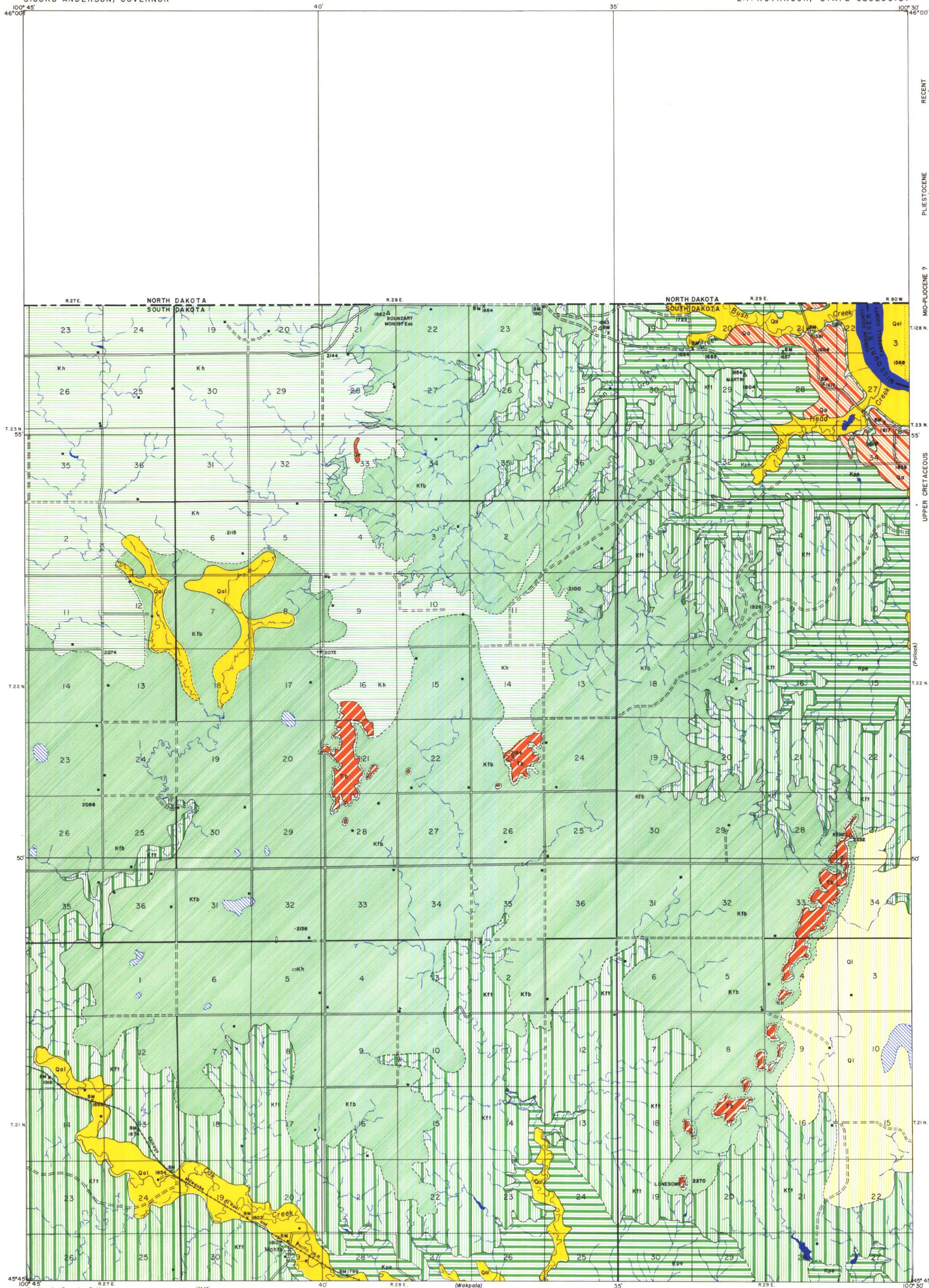


AREAL GEOLOGY OF THE MAHTO QUADRANGLE

STATE OF SOUTH DAKOTA
SIGURD ANDERSON, GOVERNOR

STATE GEOLOGICAL SURVEY
E. P. ROTHROCK, STATE GEOLOGIST



EXPLANATION

SEDIMENTARY ROCKS

- RECENT**
 - QUATERNARY**
 - PLISTOCENE**
 - MIO-PLIOCENE ?**
 - TERTIARY ?**
 - UPPER CRETACEOUS**
 - PIERRE FORMATION**
 - CRETACEOUS**
- Qal**
Alluvium
(Flood plain deposits of silt, sand and gravel in present stream valleys)
 - Ql**
Loess
(Wind-blown silt)
 - Qd**
Older Alluvium
(Silt, some sand and gravel forming terraces)
 - Qp**
Older End Moraine
(Concentration of glacial boulders, possibly "left down" end moraine)
 - Fb**
Bijou? Formation
(Green-grey sandstone, silica-cemented, forming top of hills and mesas)
 - Kh**
Hell Creek Formation
(Somber grey silt and sand with thin lignitic and carbonaceous beds, questionable in central and eastern part)
 - Kfb**
"Banded Sills" Member
(Thin-bedded grey silt and silty clay; hard white siltstone near base)
 - Kff**
Timber Lake and Trail City Members, Undifferentiated
(Upper Timber Lake Member: yellow friable sandstone with fossiliferous concretions; Cliff-forming. Lower Trail City Member: grey silty clay, silt and sandy silt with fossiliferous concretions)
 - Kpe**
Elk Butte Member
(Flaky weathering bluish grey clay characterized by fine-scale drainage and bowwoks)
 - Kpm**
Moberg Member
(Interbedded grey clay and calcareous clay; in upper part, buff weathering; basal beds interbedded with bluish grey clay)

DRAINAGE

- Intermittent Streams**
- Intermittent Lakes**

CULTURE

- Buildings**
(House, church and school)
- Roads and Trails**
- Altitudes**
(In feet above sea level)
- Bench Marks**
(Monument marking point of known altitude)
- Triangulation Stations**
(Monument marking point of exact geographic location)
- Gravel Pits and Quarries**

Geology by Brewster Baldwin
Assisted by Paul Doran
Surveyed in 1950

Based on maps by Corps of Engineers
U. S. Army, and Geodetic data from U. S.
Coast and Geodetic Survey



APPROXIMATE MEAN
DECLINATION 1946