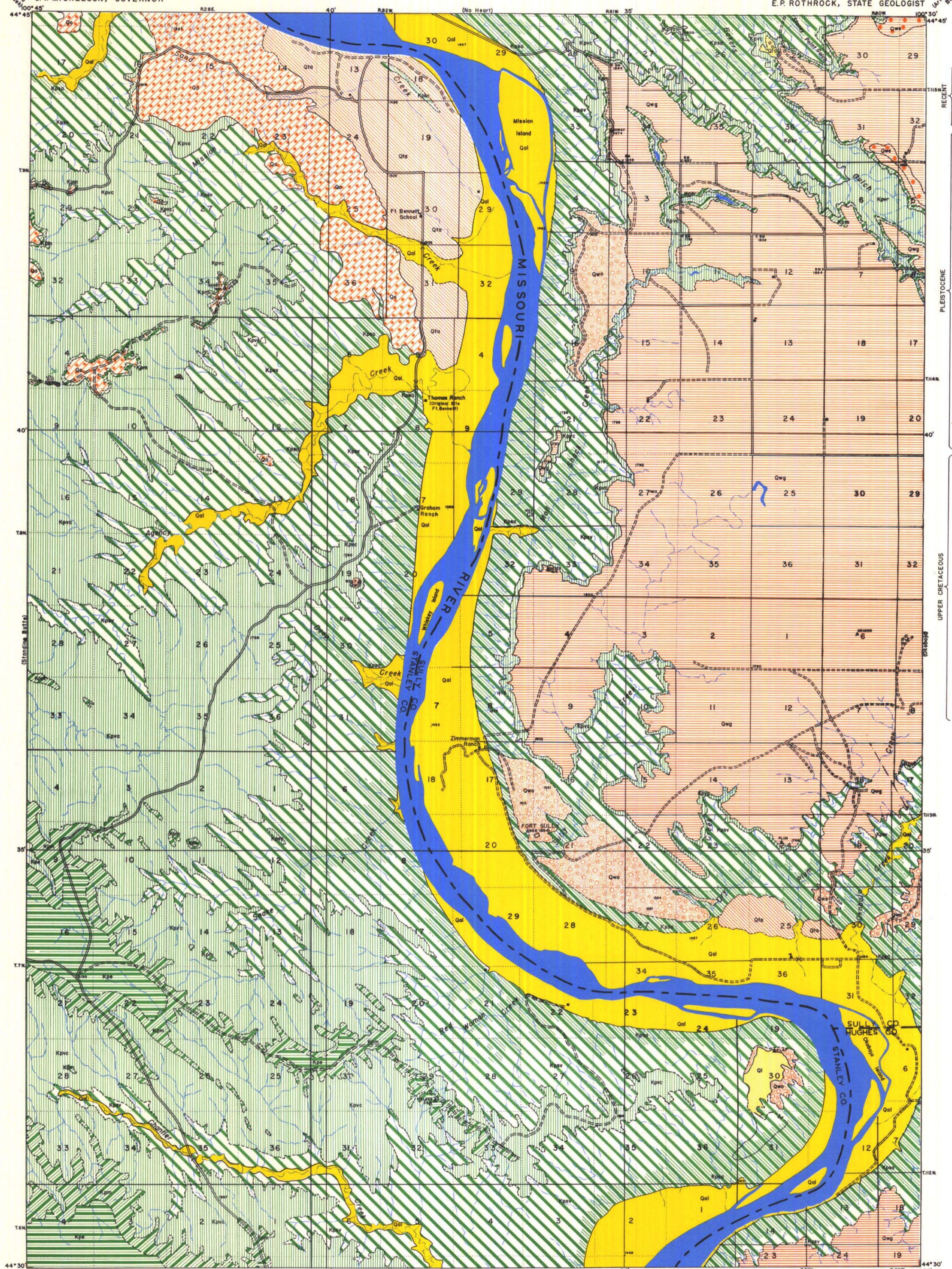


AREAL GEOLOGY OF THE FORT BENNETT QUADRANGLE

STATE OF SOUTH DAKOTA
G.T. MICKELSON, GOVERNOR

STATE GEOLOGICAL SURVEY
E.P. ROTHROCK, STATE GEOLOGIST



EXPLANATION

SEDIMENTARY ROCKS

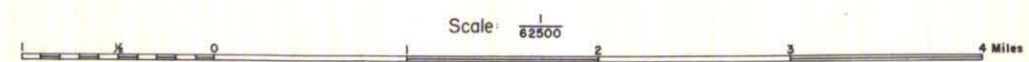
- Qal**
Alluvium
(Floodplain deposits of silt, sand, and gravel in present stream valleys)
- Ql**
Loess
(Wind deposited silt)
- Qta**
Terrace Alluvium
(Terrace deposits of silt, sand, and gravel along major streams)
- Qwa**
Glacial Outwash
(Fluvial and glacio-fluvial terrace deposits of sand and gravel)
- Qm**
End Moraine
(Undifferentiated till deposits with local relief of 30 to 90 feet. Characterized by hummocky topography and concentration of boulders)
- Qmg**
Ground Moraine
(Undifferentiated till deposits characterized by slight relief and poor drainage. Overlain by less than a foot to 30 feet of loess)
- Qg**
Orton Gravels
(Sands and gravels of western origin, containing considerable white chert and broken spalls)
- Kpa**
Elk Butte Member
(Pale gray bentonitic clay containing numerous reddish brown layers and an occasional bentonite)
- Kmb**
Mobridge Member
(Buff and gray slightly calcareous clay in lower part and light buff calcareous clay in upper part)
- Kvc**
Virgin Creek Member
(Dark gray-facile, siliceous shale with numerous sandstones in lower part and with numerous white limestone concretions in upper part)
- Ksa**
Sully Member
(Upper Vandyke facies. Kpa brown bentonitic clay with numerous ferruginous concretions. Lower Agency-Orton transitional facies. Kpa light gray bentonitic clay with numerous bentonite beds and few Mn-Fe concretions in upper part, light gray, siliceous, blocky shale in lower part)

- 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)

Geology by B.C. Petch and E.J. Ballin
Assisted by R.C. Barkley and R.C. Wilson
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