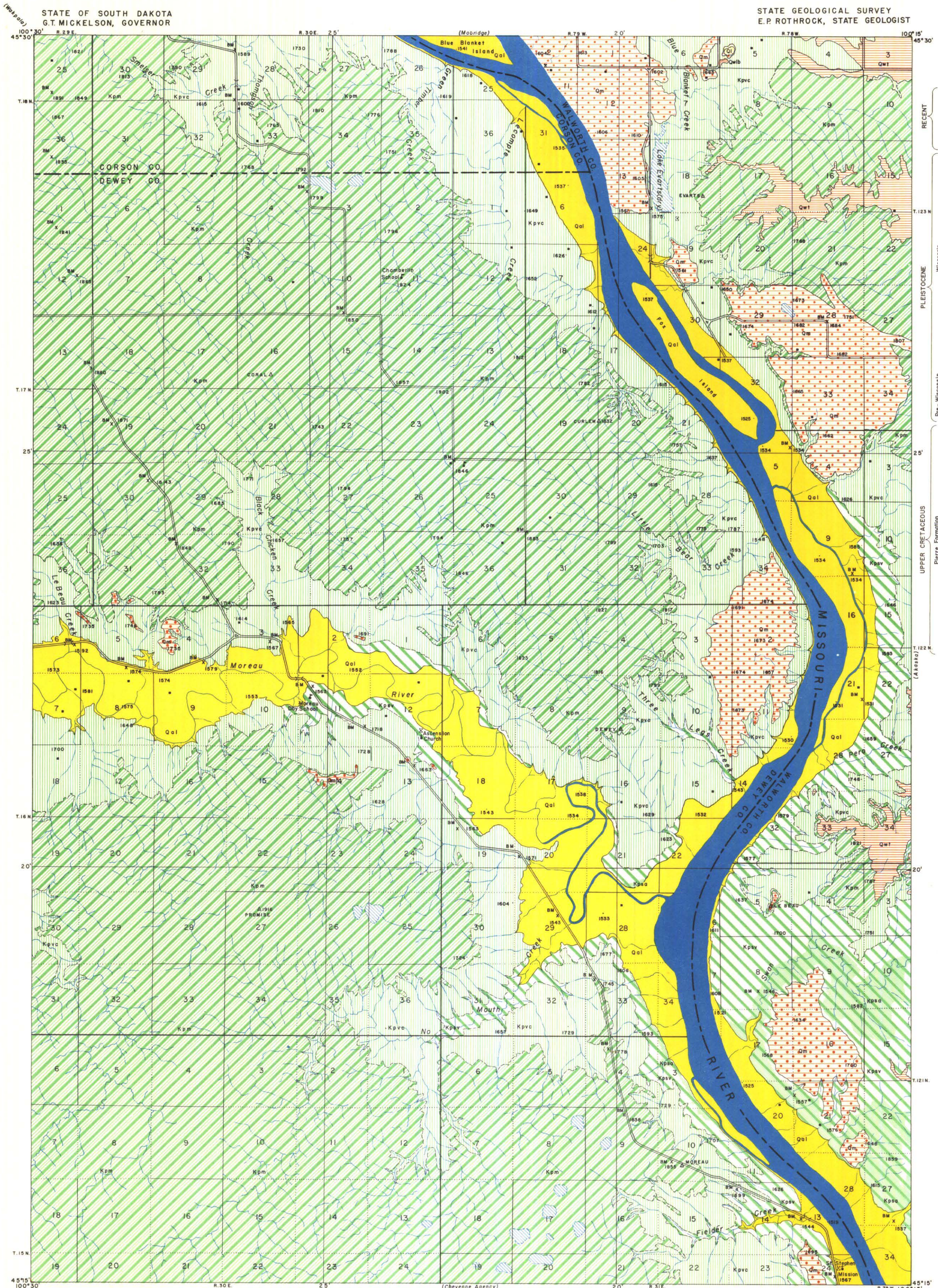


AREAL GEOLOGY OF THE MOUTH OF MOREAU QUADRANGLE

STATE OF SOUTH DAKOTA
G.T. MICKELSON, GOVERNOR

STATE GEOLOGICAL SURVEY
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EXPLANATION

SEDIMENTARY ROCKS

- Qal**
Alluvium
(Floodplain and island deposits of silt, sand, and gravel in present streams)
- Ql**
Loess
(Wind transported and deposited in covers upland surface east of Missouri River. Also found west of river immediately adjacent to stream. Thin west and loses identity rapidly. Thickness 0-20')
- Qml**
Tazewell Moraine
(Undifferentiated drift boulders and boulder clay. Tazewell Substage. Boulders generally found west of Missouri River. Overlain by 2-20' loess. Lower Substage ice-rafted boulders and pebbles on ground surface west of Missouri River. Lower boulders extend to west limit of mapped area. Not shown on map.)
- Qmlb**
Lake Beds
(Lacustrine silts)
- Qm**
Moreau Gravels
(Fluvial sand and gravel terrace deposits on old Moreau River flood plain. Overlain by 0-20' loess.)
- Kmb**
Mobridge Member
(Blue gray calcareous fine-grained sandstone clay with many concretions 140' exposed.)
- Kpvc**
Virgin Creek Member
(Upper facies: Dark gray shale and clay. Not well exposed. Lower facies: Dark gray siliceous shale with bentonites, weathers to small shaly gray flakes. Buffers-forming unit. Member 120-135' thick.)
- Kpsa**
Sully Member
(Upper: Variegated facies (Kpsa). Gray to brown clayey shale with bentonites, weathers to clayey gumbo. 75' thick. Lower: Aggrey facies (Kpsa). Gray siliceous shale with bentonites, weathers light gray paper-thin flakes. Buffers-forming unit. 50' exposed.)

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 J.C. Mickelson and C.L. Baker
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Surveyed in 1949

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

