

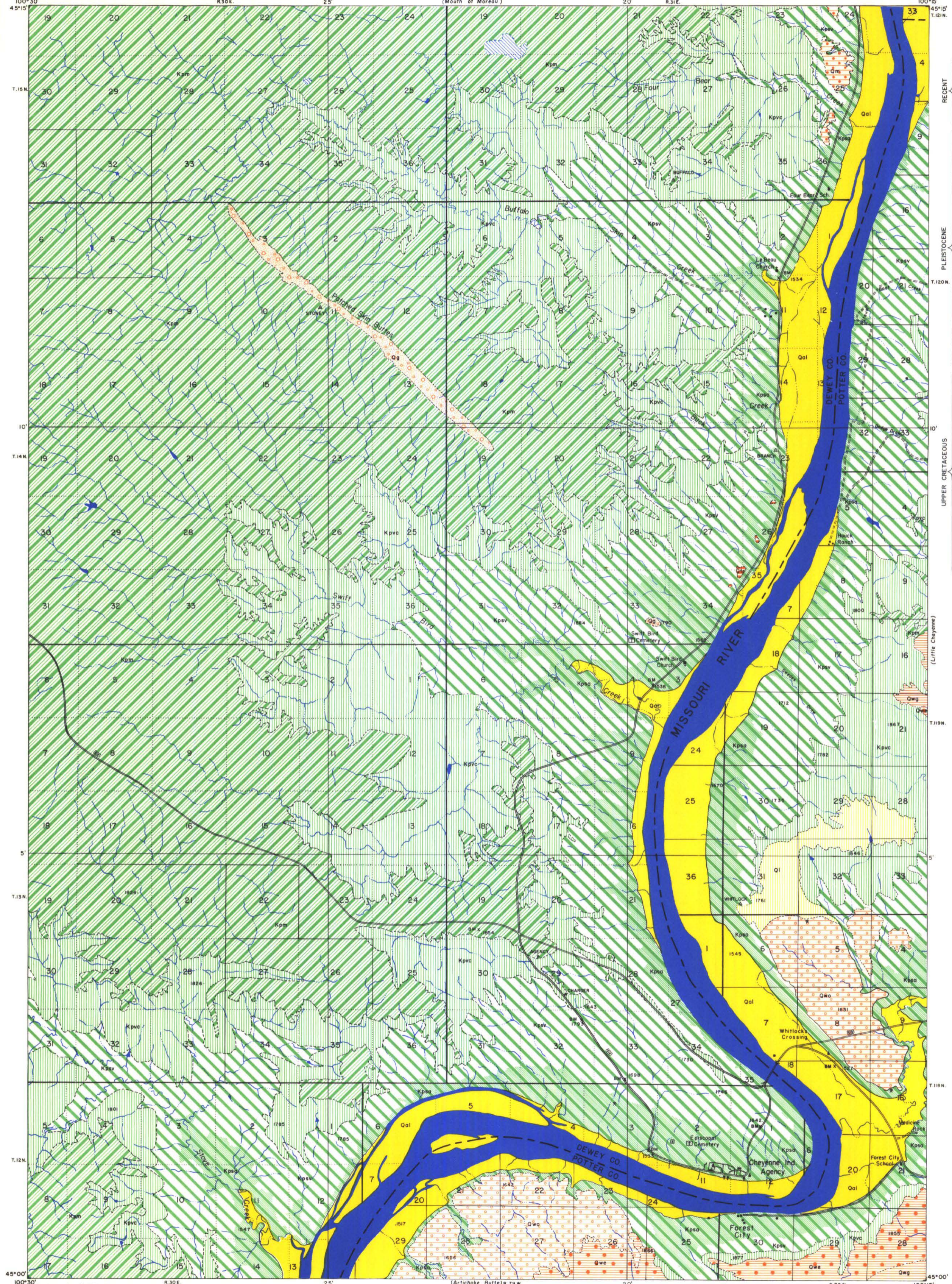
# AREAL GEOLOGY

## OF THE

### CHEYENNE AGENCY QUADRANGLE

STATE OF SOUTH DAKOTA  
SIGURD ANDERSON, GOVERNOR

STATE GEOLOGICAL SURVEY  
E. P. ROTHROCK, STATE GEOLOGIST



#### EXPLANATION

##### SEDIMENTARY ROCKS

- |  |   |                                     |
|--|---|-------------------------------------|
| <p>RECENT</p> <p>PLEISTOCENE</p> <p style="font-size: small;">Wisconsin</p> <p style="font-size: small;">Pre-Wisconsin</p> <p>UPPER CRETACEOUS</p> <p style="font-size: small;">Pierre Formation</p> <p style="font-size: small;">Cretaceous</p> | <p><b>Qal</b><br/>Alluvium<br/>(Floodplain and island deposits of silt, sand and gravel in present stream valley.)</p> <p><b>Ql</b><br/>Loess<br/>(Wind transported and deposited silt.)</p> <p><b>Qwo</b><br/>Glacial Outwash<br/>(Fluvial and glacio-fluvial terrace deposits of sand and gravel.)</p> <p><b>Qwe</b><br/>End Moraine<br/>(Undifferentiated till deposits characterized by hummock topography.)</p> <p><b>Qwg</b><br/>Ground Moraine<br/>(Undifferentiated till deposits characterized by slight relief; predominantly Boulder clay.)</p> <p><b>Qm</b><br/>Moreau Gravels<br/>(Fluvial sand and gravel terrace deposits.)</p> <p><b>Kpm</b><br/>Moberge Member<br/>(Blue gray calcareous fossiliferous bentonitic clay with many concretions.)</p> <p><b>Kpv</b><br/>Virgin Creek Member<br/>(Upper facies: Dark gray shale and clay, not well exposed. Lower facies: Dark gray siliceous shale with bentonites, weathers to small silvery gray flakes. Buttriss-forming unit.)</p> <p><b>Kps</b><br/>Sully Member<br/>(Upper facies: Dark gray shale and clay, not well exposed. Lower facies: Dark gray siliceous shale with bentonites, weathers to light gray paper thin flakes. Buttriss-forming unit.)</p> | <p>QUATERNARY</p> <p>CRETACEOUS</p> |
|--|---|-------------------------------------|

##### DRAINAGE

- Intermittent Streams  
(Little Cheyenne)
- 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  
Assisted by A.F. Klein, Jr.  
Surveyed in 1950.

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

