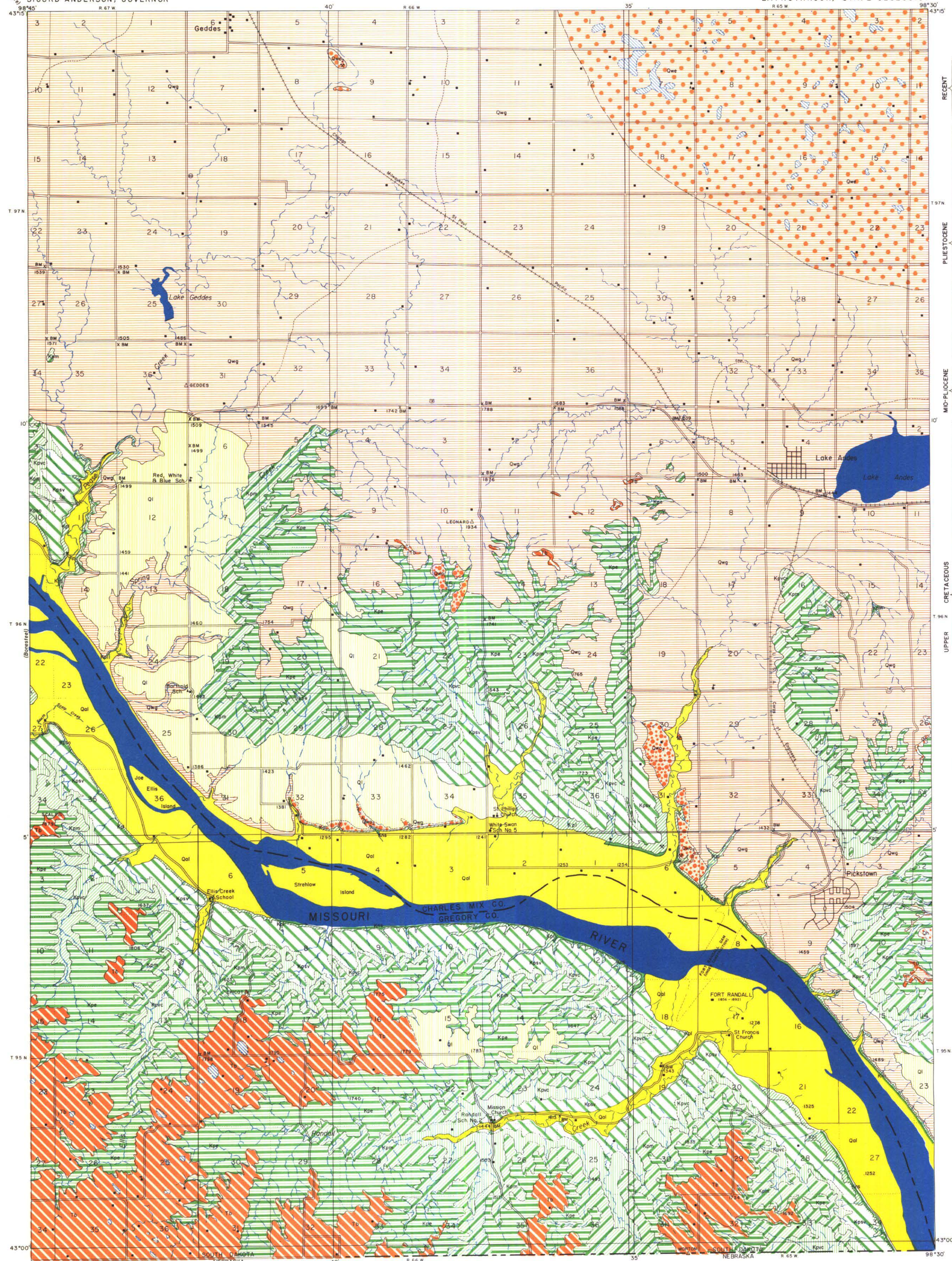


AREAL GEOLOGY OF THE LAKE ANDES QUADRANGLE

STATE OF SOUTH DAKOTA
SIGURD ANDERSON, GOVERNOR

STATE GEOLOGICAL SURVEY
E. P. ROTHROCK, STATE GEOLOGIST



EXPLANATION

SEDIMENTARY ROCKS

- | | | |
|--------|---|---|
| RECENT | | Alluvium
<small>(Flood plain deposits of silt, sand, and gravel in broad stream valleys)</small> |
| | | Loess
<small>(Wind deposited silt)</small> |
| | | End Moraine
<small>(Undifferentiated drift characterized by a well and wide topography. Material is a boulder clay)</small> |
| | | Ground Moraine
<small>(Undifferentiated drift dominantly boulder and pebble clay)</small> |
| | | Older Glacial Outwash
<small>(Glacio-fluvial deposits of coarse sand and boulder gravel. Partially iron-cemented)</small> |
| | | Herrick Gravels
<small>(Fluvial coarse ferruginous sands and gravels on upland surface)</small> |
| | | Bijou Formation
<small>(Siltstone, sandstone, and pebbles conglomerate. Partly silicified)</small> |
| | | Elk Butte Member
<small>(Brownish-grey bentonitic clay with ferruginous and grey concretions)</small> |
| | | Mobridge Member
<small>(Grey calcareous fossiliferous claystone. Weathers buff)</small> |
| | | Virgin Creek Member
<small>(Black carbonaceous clay-shale with numerous bentonitic concretions and concretions)</small> |
| | Sully Member
<small>(Upper - Vermilion facies. Kps to olive grey bentonitic clay with numerous ferruginous concretions. Lower - Occone facies. Kps to grey light bentonitic clay with abundant magnetiferous concretions)</small> | |
| | Lower Pierre undifferentiated
<small>(Upper - Gregory member, a dark to light grey clay with bentonitic concretions. Lower - Occone facies, a slightly sandy calcareous claystone. Lower - Sharon member, a black to brown bituminous shale with numerous bentonites)</small> | |
| | Smoky Hill Member
<small>(Light grey dense fossiliferous limestone)</small> | |

DRAINAGE

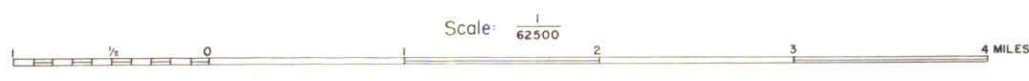
- Intermittent Streams
- Intermittent Lakes

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 R. E. Stevenson and L. A. Carlson
Surveyed in 1950

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



1951

APPROXIMATE MEAN
DECLINATION 1949