

Surface Geology Glen Ullin NW, North Dakota Quadrangle

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UNIT DESCRIPTIONS

QUATERNARY SYSTEM

RECENT

Manmade Features or Deposits

- Sand Pit
- Gravel Pit
- Clinker Pit
- Surface Lignite Mine
- Underground Lignite Mine
- Excavation Pits of Unknown Origin

QAHE FORMATION

Qal Alluvium
Brownish gray to black sand, silt, clay, and lenses of gravel; floodplain deposits along recent drainages. Includes lower terrace deposits. Alluvium typically less than 50 feet thick.

PLEISTOCENE

COLEHARBOR GROUP

Qac Proglacial Channels
Generally contain 50 to 200 feet of sand and gravel, silt, clay, and till (meltwater-channel fill). Overlain by Recent alluvium (Qal) of variable thickness. This map unit was created to distinguish between these very thick channel deposits and the moderate to thin deposits mapped as Qal.

Qat Terrace Deposits
Five- to 20-foot-thick layers of sand and gravel (consisting primarily of siltcrete, chert, flint, agate, petrified wood, siltstone) found beneath flat to gently undulating slopes adjacent to many of the major creeks and rivers.

TERTIARY SYSTEM

EOCENE

GOLDEN VALLEY FORMATION

Tcb Camels Butte Member
Alternating beds of yellowish brown to brown, micaceous sandstone, siltstone, mudstone, claystone, and lignite.

PALEOCENE

Tbd Bear Den Member
Brightly colored, kaolinitic claystone, mudstone, and sandstone typically overlain by a thin siliceous bed (siltcrete) or lignite.

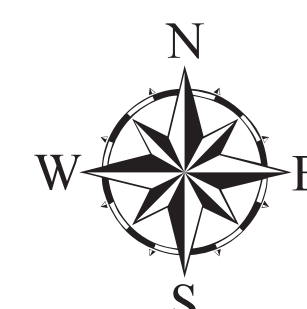
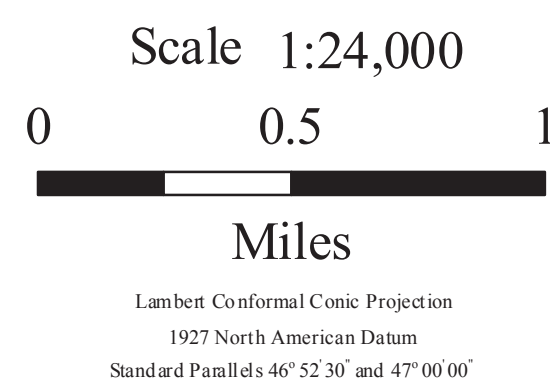
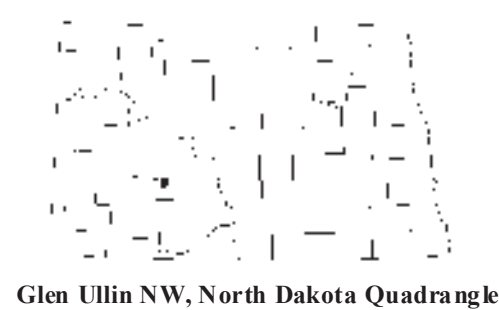
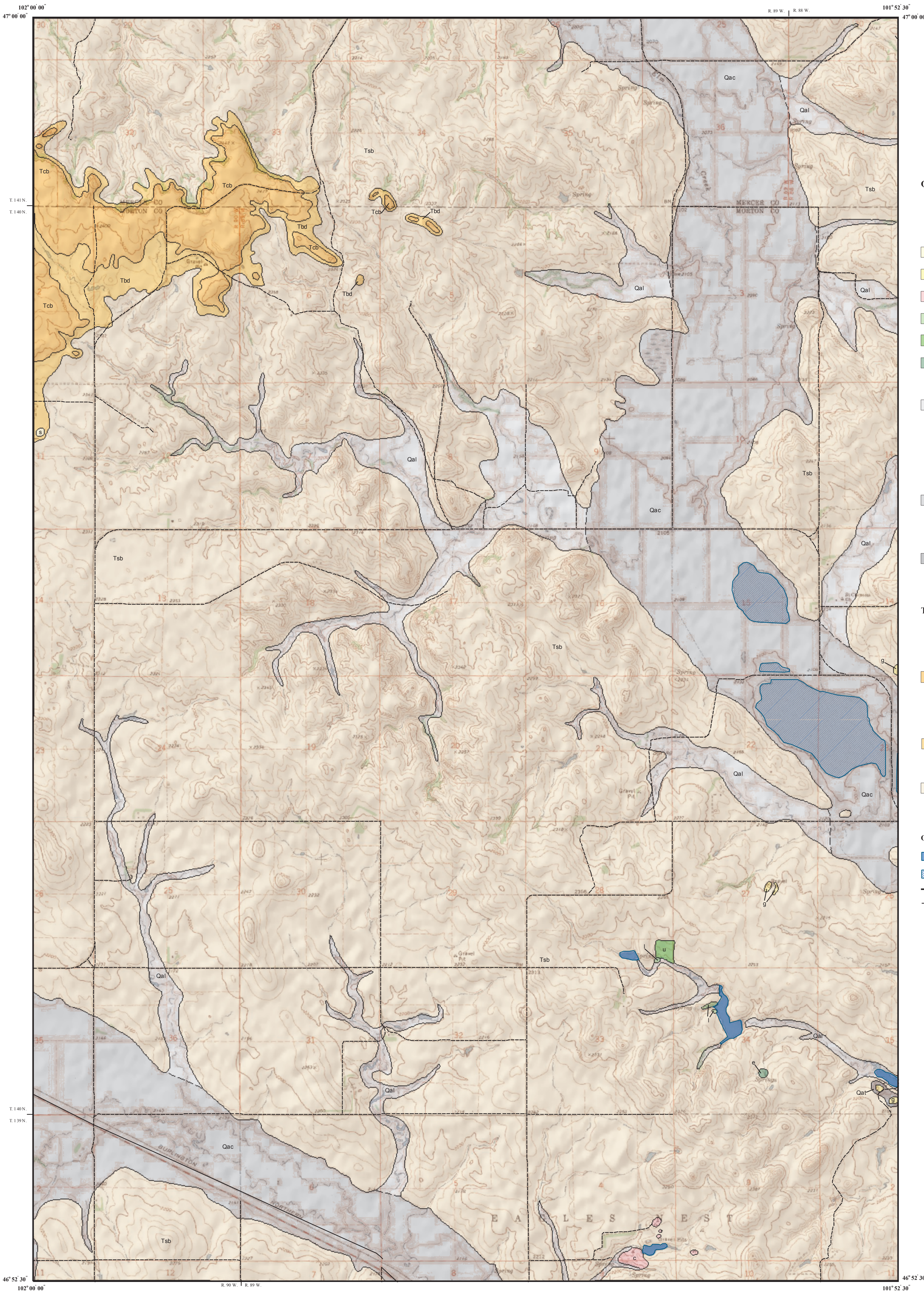
Tsb SENTINEL BUTTE FORMATION
Alternating beds of grayish brown to gray sandstone, siltstone, mudstone, claystone, and lignite.

Other Features

- Water
- Water - Intermittent
- Paved Road
- Unpaved Road

Geologic Symbols

- Known contact between two geologic units
- Approximate contact between two geologic units



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