

Surface Geology Lone Butte, North Dakota Quadrangle

Edward C. Murphy
2003

UNIT DESCRIPTIONS

QUATERNARY SYSTEM

RECENT

Qef Artificial Deposits

Engineered Fill

OAHE FORMATION

Qal Alluvium

Brownish gray to black sand, silt, clay, and lenses of gravel; floodplain deposits along recent drainages. Includes lower terrace deposits.

RECENT/PLEISTOCENE

Qat Terrace Deposits

Well defined terraces that occur approximately 20 or more feet above the modern floodplain. These are generally fill terraces consisting of alluvium.

Qca Colluvium/Alluvium Deposits

Colluvium or slopewash overlying alluvial deposits. A wedge-shaped apron or mantle of slopewash extends from adjacent hillslopes onto older alluvium - typically terraces.

Qw Windblown Deposits

Silt and sand transported and deposited by wind. Generally found as small dune fields or blowouts in upland areas.

Qls Landslide Deposits

Variable mixture of strata and deposits that have slid to the base of steep slopes. Most of the landslides in this area are hundreds, if not thousands, of years old.

TERTIARY SYSTEM

EOCENE-PALEOCENE

Tgy GOLDEN VALLEY FORMATION

Camels Butte Member:

Alternating beds of yellowish brown to brown, micaceous sandstone, siltstone, mudstone, claystone, and lignite.





Bear Den Member:

Brightly colored, kaolinitic claystone, mudstone, and sandstone typically overlain by a thin siliceous bed (sikerete) or lignite.


Tsb SENTINEL BUTTE FORMATION

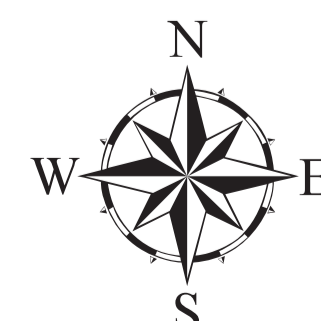
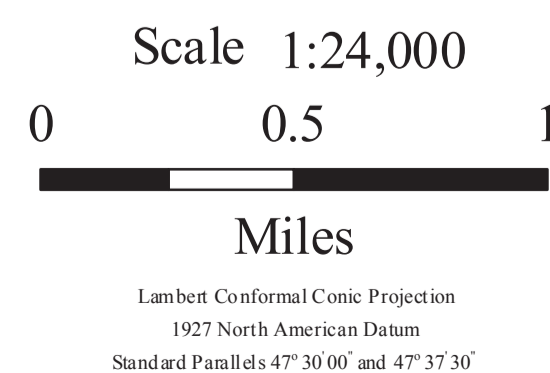
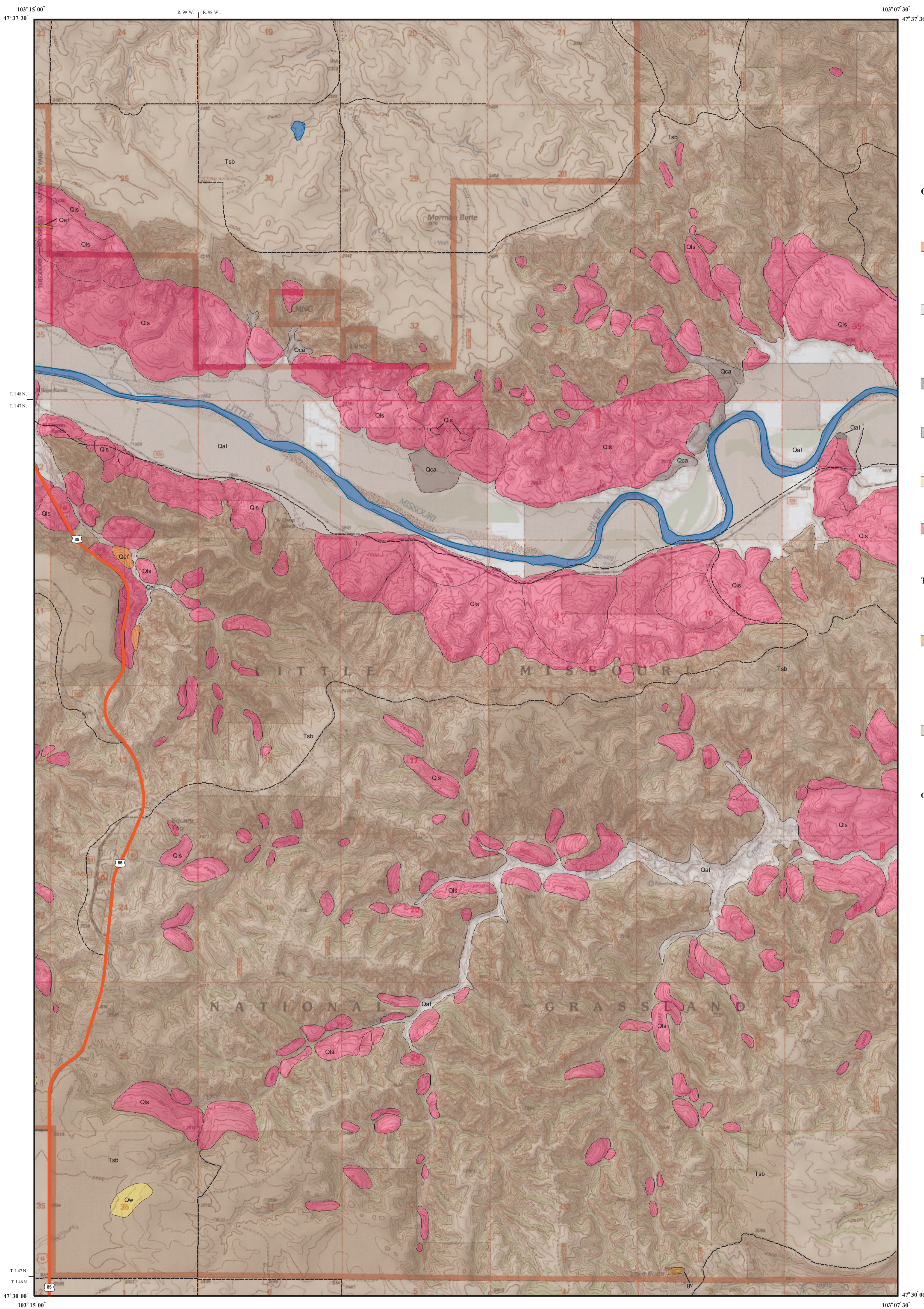
Alternating beds of grayish brown to gray sandstone, siltstone, mudstone, claystone, and lignite.

Other Features

-  Water
-  U. S. Highway
-  Paved Road
-  Unpaved Road

Geologic Symbols

-  Known contact between two geologic units



This geologic map was funded in part by the USGS National Cooperative Geologic Mapping Program.