

Surface Geology

Brantford NE Quadrangle, North Dakota

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EXPLANATION

QUATERNARY SYSTEM

RECENT

OAHE FORMATION

Qos Pond and Slough Sediment

Dark, obscurely bedded clay and silt; in modern ephemeral ponds.

Qor Alluvium

River and stream sediment. Dark obscurely bedded clay and silt (mainly overbank sediment); generally overlying cross-bedded sand (channel sediment); on plains of modern streams.

PLEISTOCENE

COLEHARBOR GROUP

Silt Facies

Insignificant amounts of this facies on this quadrangle.

Sand and Gravel Facies

River sediment. Moderately well-sorted, cross bedded sand and plane-bedded gravel, including sediment of meltwater rivers.

Qcrh Collapsed River Sediment

Faulted and contorted supraglacial sediment with hummocky topography.

Qcrf Flat Fluvial Plains

Flat-bedded sediment of nearly level plains and river terraces, commonly with braided channel scars, oxbows, and other relict markings; relief of 1 to 10 feet.

Qcer River-Eroded Glacial Sediment

Glacial sediment with flat to undulating topography resulting from stream erosion in the bottom of large meltwater trenches or over broad areas of till that have been washed by running water; overlain by a thin layer of fluvial sediment of the Coleharbor Group or Oahe Formation in places.

Qcic Ice-contact deposits

Mainly gravel and sand with cobbles and boulders common; inclusions of glacial sediment common; local relief up to 50 feet, eskers and kames.

Till Facies

Glacial sediment. Unsorted, unbedded mixture of angular, subangular, and rounded blocks of rock, gravel, and sand, generally in a stiff matrix of silt and clay; yellowish-brown to olive-gray in exposures depending on weathering intensity; contains discontinuous lenses of gravel and sand.

Qqch Hilly Surface - Kettles

Nonintegrated drainage and abundant ice-disintegration features; linear trends rare; thick layer of till with scattered areas of gravel and sand; relief of 50 to 150 feet locally.

Qccu Collapsed Glacial Sediment-Undulating

Gently undulating to undulating surface with poorly integrated drainage; local relief generally less than 10 feet.

Qccr Collapsed Glacial Sediment-Rolling

Rolling surface with kettles, partially to nonintegrated drainage, and numerous, low-relief ice-disintegration features. Associated with areas of ice-thrust topography.

Qct Ice-Thrust Masses

Glacial sediment draped over glacial or preglacial sediment or rock that has been sheared up into thrust slabs or folds near the ice margin; hilly areas with intense internal linearity; local concentrations of gravel and boulders; local relief may exceed 200 feet.

CRETACEOUS SYSTEM

Kp Pierre Formation

Dark gray shale; marine offshore sediment; maximum outcrop thickness is a few hundred feet.

Geologic Symbols

— Known contact between two geologic units

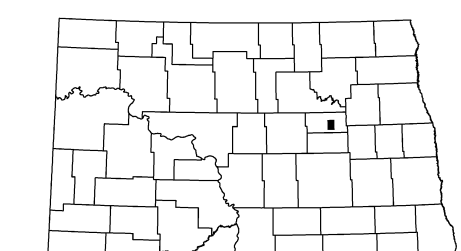
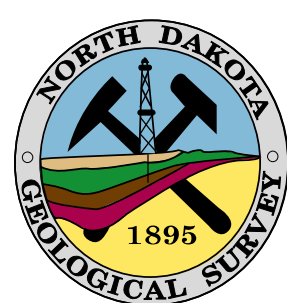
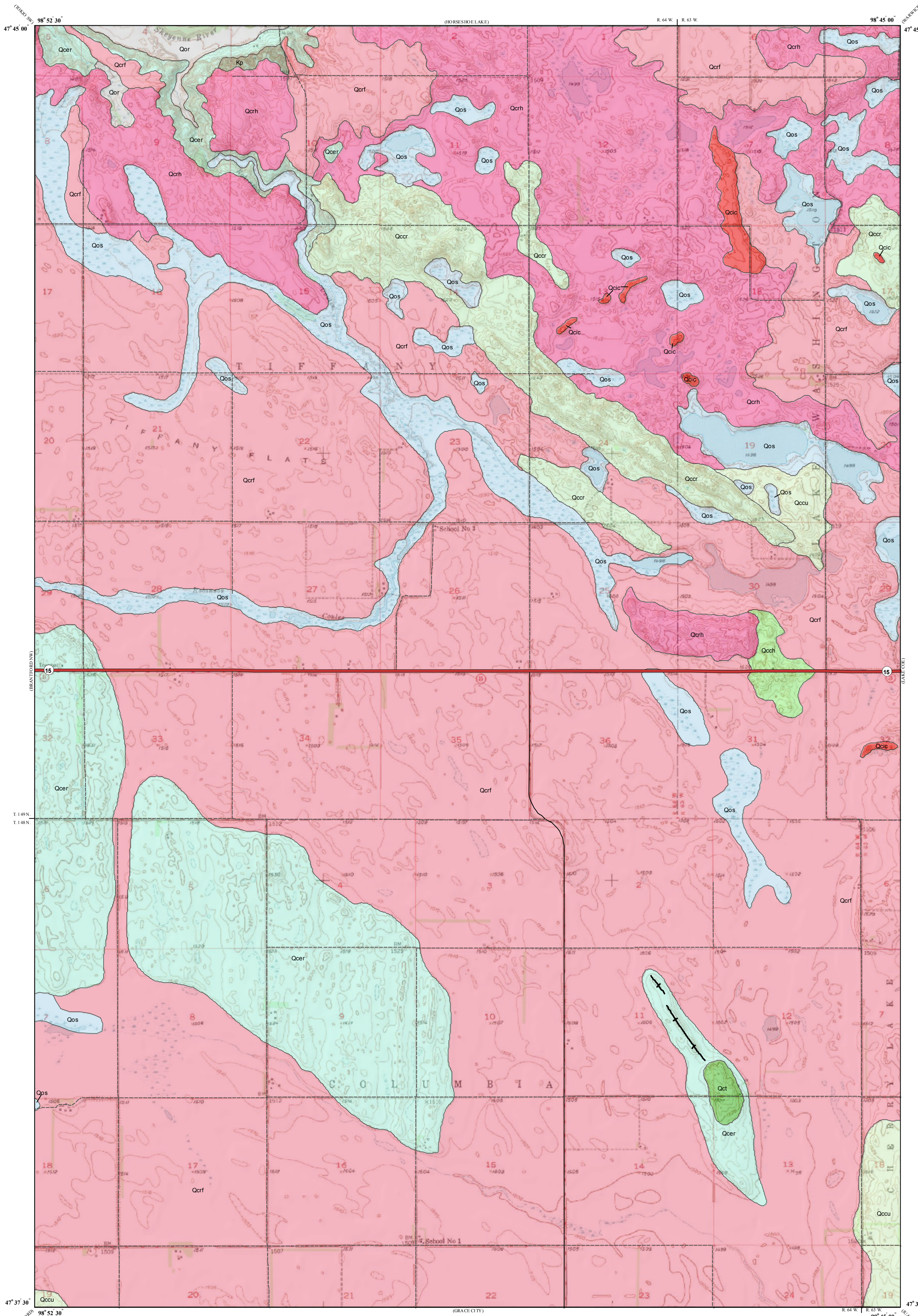
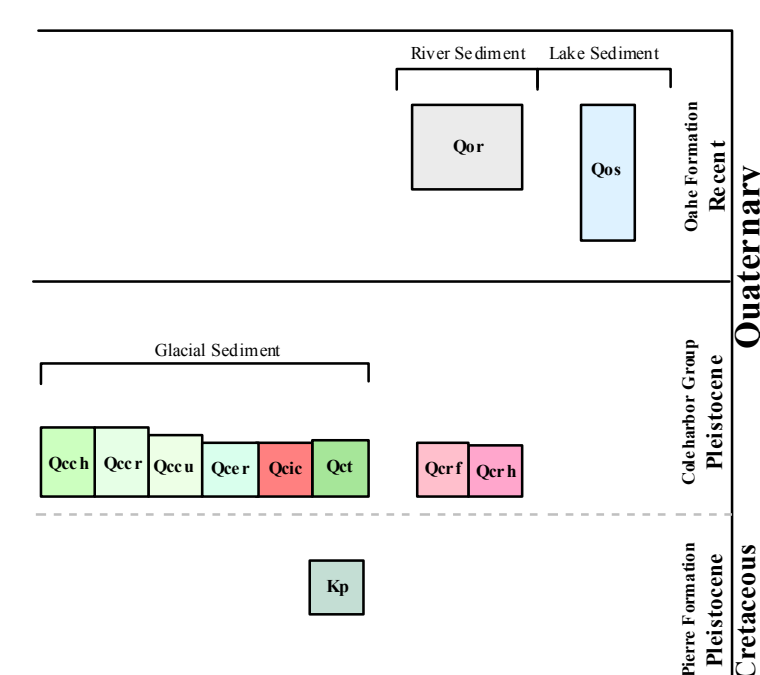
— Ridge-Transverse

Other Features

— State Highway

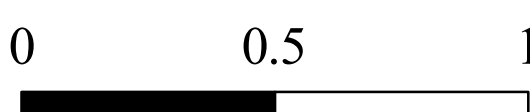
— Paved Road

--- Unpaved Road



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Scale 1:24,000



Miles

Lambert Conformal Conic Projection Standard Parallels 47° 37' 30" and 47° 45' 00"
1927 North American Datum NGVD 1929
USGS 7.5 Minute Topographic Map Contour Interval 5 Feet
Road Layer Rectified to 2003 NAIP Digital Orthophoto

