

Surface Geology

Cathay Quadrangle, North Dakota

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2008

EXPLANATION

QUATERNARY SYSTEM

RECENT

OAHE FORMATION

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.

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.

Qcic Ice-contact deposits

Mainly gravel and sand with cobbles and boulders common; inclusions of glacial sediment common; local relief up to 30 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.

Qeci Slopewash-Eroded Till Surface

Glacial sediment on the sides of valleys.

Qcgg Nearly Flat To Gently Undulating Surface

Glacial sediment with poorly integrated drainage; relief generally less than 15 feet; ice disintegration features in places; washboard ridges in places.

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.

Geologic Symbols

— Known contact between two geologic units

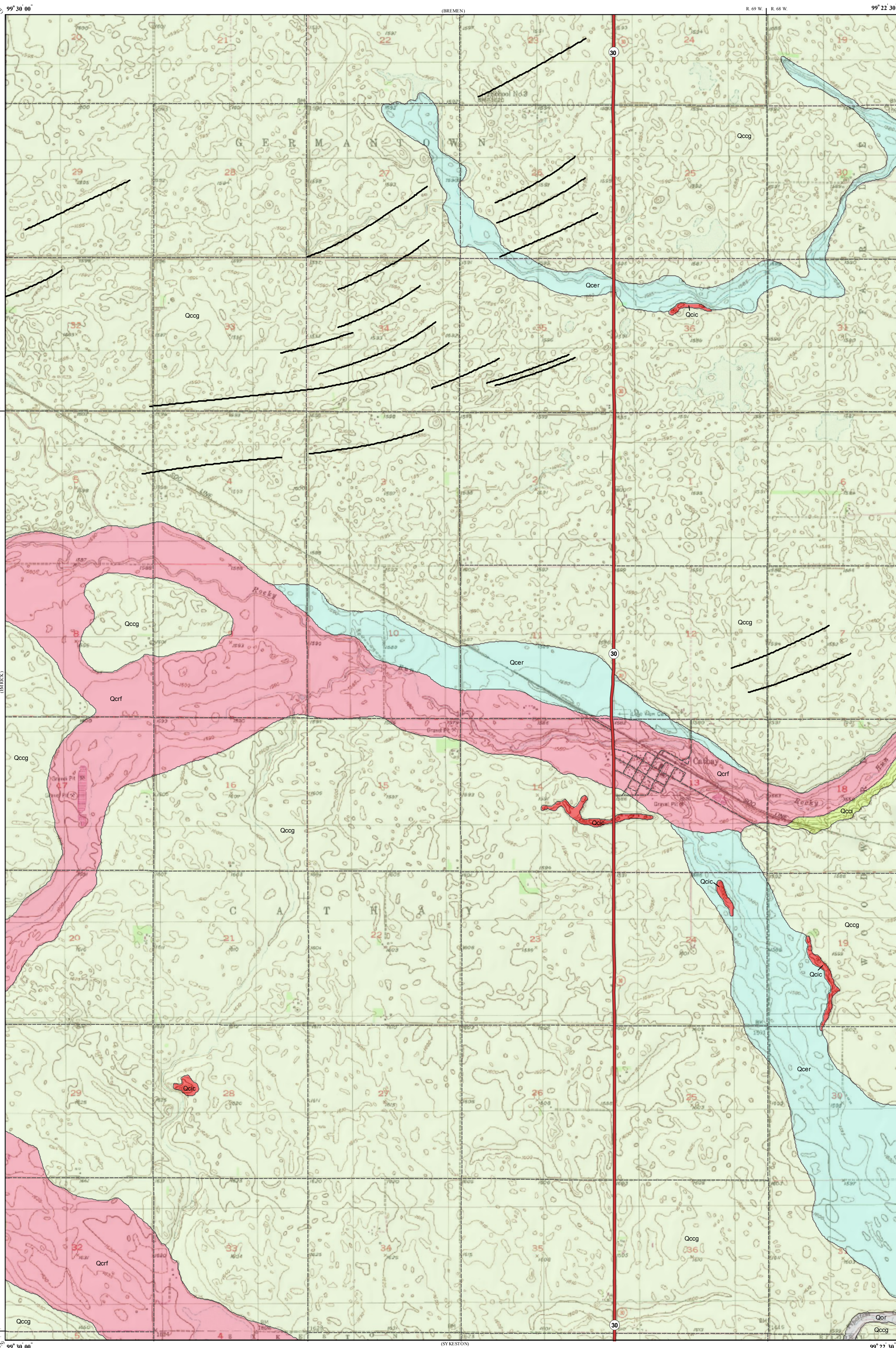
— Ridge-Transverse

Other Features

— State Highway

— Paved Road

--- Unpaved Road



47° 30' 00"

99° 30' 00"

(MURKIN)

47° 37' 30"

T. 148N
T. 147N

(BREMEN)

R. 69 W. R. 68 W.

99° 22' 30"

(MUNSTON)

47° 37' 30"

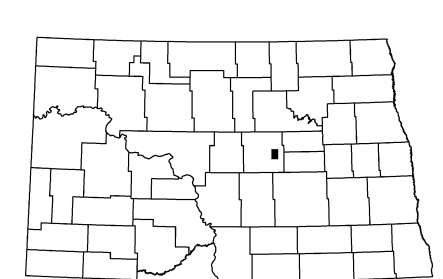
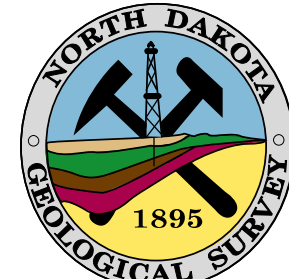
(CATHAY 24K)

47° 30' 00"

99° 30' 00"

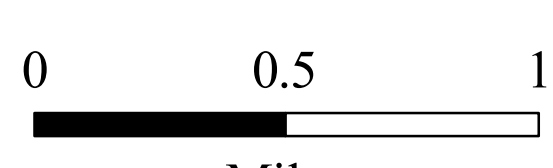
(SYKESTON)

47° 30' 00"



Cathay Quadrangle, North Dakota

Scale 1:24,000



Miles

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

12° MN

1948 Magnetic North Declination at Center of Sheet

