

Surface Geology

Ayr SE Quadrangle, North Dakota

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2025

QUATERNARY PERIOD

HOLOCENE EPOCH

Hpsd POND AND SLOUGH SEDIMENTS
Dark brown to black obscurely bedded clay, silt, sand, and organic debris generally one to three feet in thickness. Modern pond and slough sediments.

Hal ALLUVIUM
Black to brown-gray, clay, silt, sand, and disseminated organic debris, obscurely bedded, fluvial deposits associated with the Rush River and tributary drainages.

Hlin GLACIOLACUSTRINE NEARSHORE SEDIMENT
Silt, sand, and gravel, moderately to well-sorted; planar to crossbedded; deposited on the shoreline of glacial Lake Agassiz, ranging in thickness from zero to 15 feet (4.6 meters), shallow-water deposits, sand and gravel may occur in upper and lower Campbell beach ridges along with spits, and offshore sand bars shown as line symbols.

Hgw GLACIAL SEDIMENT WAVE WASHED
Pebbly, unsorted, unbedded, sand, silt, and clay. Eroded glacial sediment on gently sloping to undulating topography with a veneer of shoreline, nearshore, or offshore deposits present. Beach ridges and offshore bars shown as line symbols.

SHERACK FORMATION

Hs GLACIOLACUSTRINE OFFSHORE SEDIMENT
Yellow-gray, thinly laminated glaciolacustrine silt, clay, and silty clay. Deposited as offshore sediments of glacial Lake Agassiz.

RIDGES
Established from LIDAR maps; line indicates the crest of the ridge or wave washed high-water line; interpreted to be a beach ridge along the margin of a lake or high-water level; discernable on LIDAR maps and aerial image. Difficult to identify on the ground.

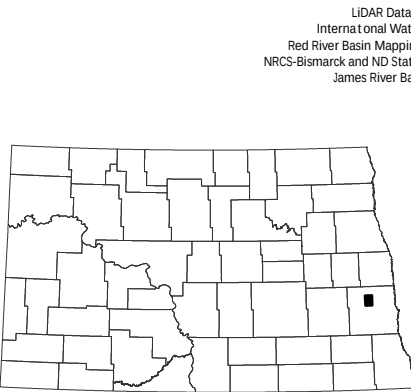
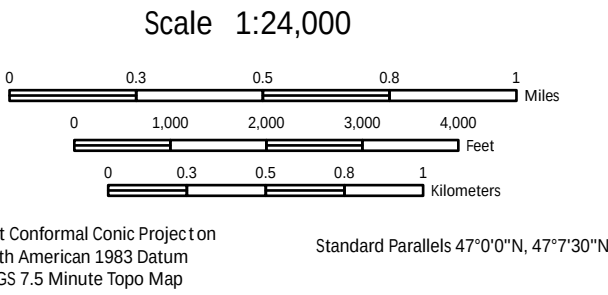
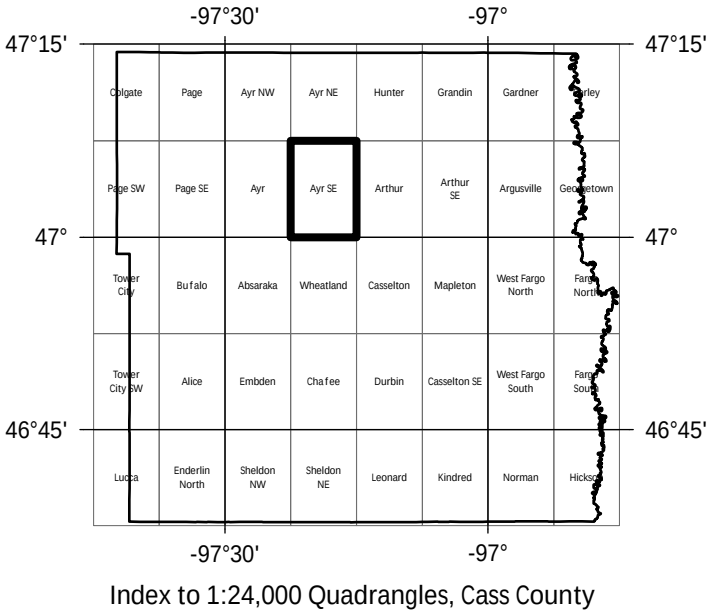
PALIMPSEST CHANNEL
Established from LIDAR; lines indicate top of slopes, tick marks indicate down slope direction into the channel. Interpreted to be an obscure meltwater channel, may not be apparent on the ground. Sediment may include thin channel deposits of sand and gravel over scoured diamicton.

A—A' Line of Cross Section

Rail Line: BNSF

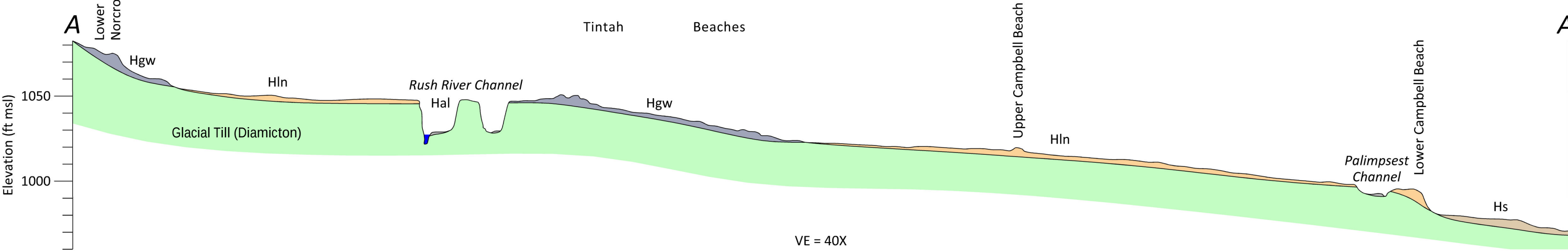
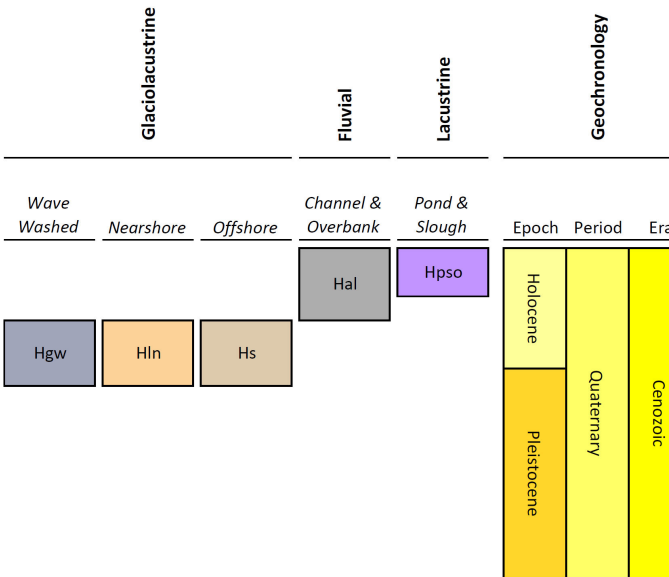
Sand and Gravel Pit

Geologic Symbols
Geologic contact (Known)



3°12' MN
2019 Magnetic North
Declination at Center of Sheet

CORRELATION OF MAP UNITS



VE = 40X