Surficial Geology of the Hallam 7.5 Minute Quadrangle, Nebraska

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Description of Mapping Units

**Shingle (Ilseckville and Ordovician)**

Shingle is composed of Late Holocene deposits (residual Loess and Gilman) and is made up of coarse boulders, cobbles, and gravels. The thickness varies from a few meters to more than 30 meters. It is mapped around the margins of small valleys and along intermittent streams. Shingle occurs as irregular patches of coarse sediments, often forming ridges and levees along the margins of small valleys. It is generally underlain by Loess and Gilman, but in some areas, it may rest directly on bedrock.

**Quaternary alluvium of larger streams (Hakelnose)**

Quaternary alluvium is composed of Late Quaternary deposits and includes the active channel of the two largest streams in the area. It is mapped as areas of deposited sediments along the active channels and valleys of the two largest streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Quaternary alluvium of smaller streams (Hakelnose)**

Quaternary alluvium of smaller streams is composed of Late Quaternary deposits and includes the active channel of smaller streams. It is mapped as areas of deposited sediments along the active channels and valleys of smaller streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Younger alluvium of Salt Creek and major tributaries (latest Hakelnose to modern)**

Younger alluvium of Salt Creek and major tributaries includes the active channel of Salt Creek and its major tributaries. It is mapped as areas of deposited sediments along the active channels and valleys of Salt Creek and its major tributaries. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Older alluvium of Salt Creek and major tributaries (late Hakelnose to modern)**

Older alluvium of Salt Creek and major tributaries includes the active channel of Salt Creek and its major tributaries, with older deposits forming the bedrock of the valleys. It is mapped as areas of deposited sediments along the active channels and valleys of Salt Creek and its major tributaries. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Glacial till (Late Pleistocene)**

Glacial till is composed of Late Pleistocene deposits and includes the active channel of the two largest streams. It is mapped as areas of deposited sediments along the active channels and valleys of the two largest streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Clayey silt (Late Pleistocene)**

Clayey silt is composed of Late Pleistocene deposits and includes the active channel of the two largest streams. It is mapped as areas of deposited sediments along the active channels and valleys of the two largest streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Silt (Late Pleistocene)**

Silt is composed of Late Pleistocene deposits and includes the active channel of the two largest streams. It is mapped as areas of deposited sediments along the active channels and valleys of the two largest streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Sand, gravel, and sandstone (Late Pleistocene)**

Sand, gravel, and sandstone is composed of Late Pleistocene deposits and includes the active channel of the two largest streams. It is mapped as areas of deposited sediments along the active channels and valleys of the two largest streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Silt (Pleistocene)**

Silt is composed of Pleistocene deposits and includes the active channel of the two largest streams. It is mapped as areas of deposited sediments along the active channels and valleys of the two largest streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Silt (Holocene)**

Silt is composed of Holocene deposits and includes the active channel of the two largest streams. It is mapped as areas of deposited sediments along the active channels and valleys of the two largest streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.

**Silt (Late Pleistocene)**

Silt is composed of Late Pleistocene deposits and includes the active channel of the two largest streams. It is mapped as areas of deposited sediments along the active channels and valleys of the two largest streams. The thickness varies from a few meters to more than 30 meters. It is generally underlain by Loess and Gilman.