

Stratigraphy

4 cross sections were created to illuminate the area's stratigraphy. Well driller logs contained descriptions of the lithologies that each well encountered. Information gleaned from the lithologic descriptions and from surficial mapping was used to assign broad descriptive terms to the overburden deposits.

Lodgement till is the term used to describe the clay-rich till that was deposited underneath the ice as the glaciers advanced. It is a variably thick blanket of sediment which mantles the bedrock of the quadrangle.

Ablation till is used to describe the coarser sand, gravel, and silt that was winnowed by meltwater as the glaciers retreated. It locally caps the kame moraines of the valley which also consist of stratified meltwater deposits.

What do the cross sections show?

- overburden is underlain by fractured limestone bedrock that is tapped by a majority of the wells included in the study
- the piezometric surface of the carbonate aquifer generally follows the surface topography
- cross sections give no indication that multiple glaciation occurred in the mapping area
- the Vermont Valley extending through the center of the mapping area is largely blanketed with a layer of ablation till mantling the kame moraine mapping unit
- kamic fields also occur through the valley, deposited during periods of ice stagnation, and include numerous short esker segments