Surficial Geologic Map and Cross-Sections of the Newport Center 7.5-minute Quadrangle, Vermont

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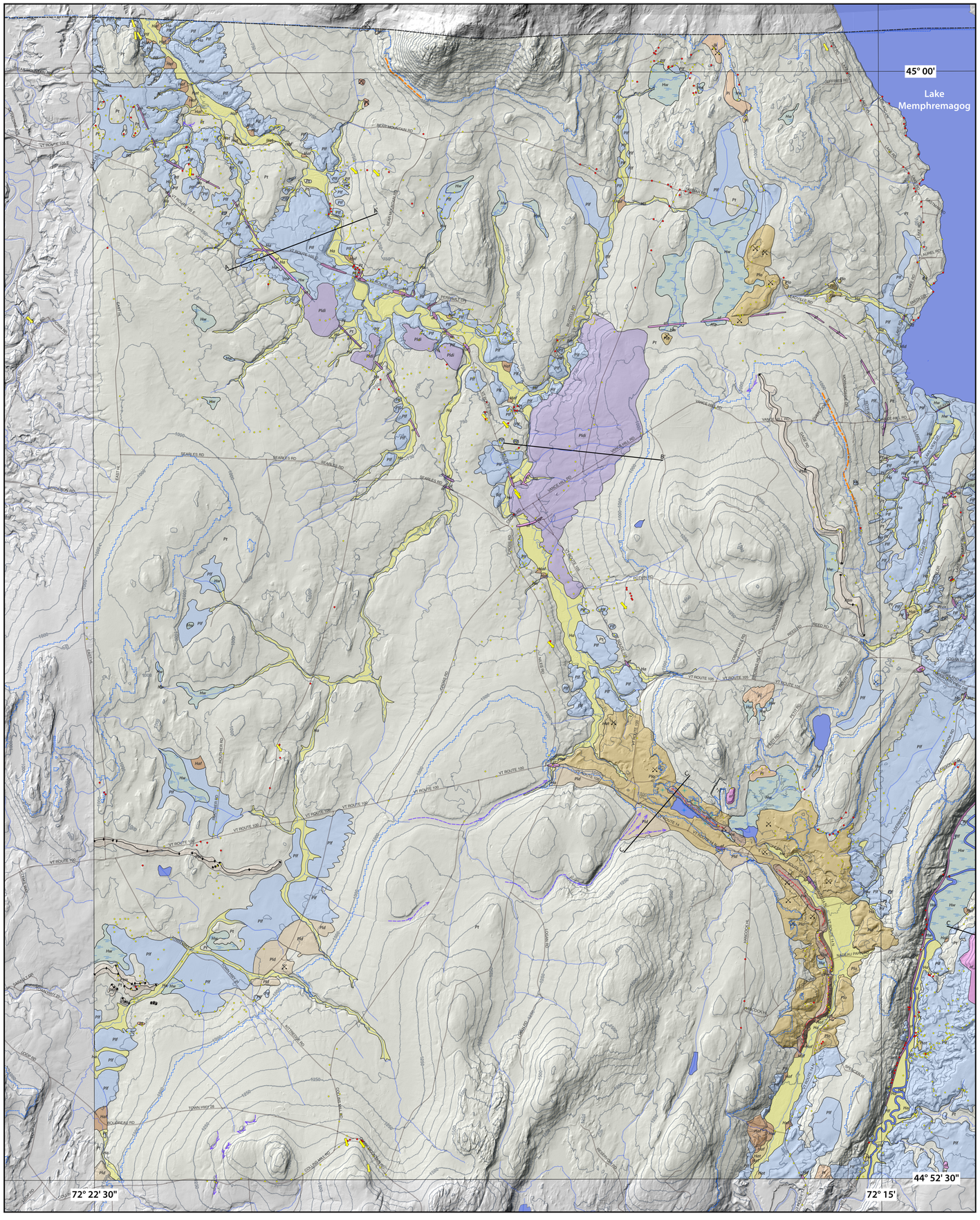


Explanation

Lakes, Ponds

af af Artificial Fill: Artificial Fill. Artificially-emplaced material along road beds, embankments and in developed areas. Material varies from natural sand, gravel, or till to various artificial waste materials. Thickness varies.

Hw Hw Wetlands Sediments: Accumulations of organic matter and/or clastic sediment in low-lying areas. Includes a wide variety of wetland types. Commonly overlying other deposits such as alluvium, lacustrine sediment, or till. Larger deposits are shown.

Ha Ha Alluvium: Silt, sand, and gravel deposited by modern streams. Includes stream channel, bar, and floodplain deposits. Wetland deposits are commonwithin these areas and are not distinguished. Thickness is generally equal to the maximum depth of the stream channel.

Hat Hat Alluvial Terrace Deposits Silt, sand, and gravel deposited on terraces above the modern floodplains of streams. They are composed of a variety of channel, bar, and floodplain deposits. May include late Pleistocene alluvial sediment deposited onto freshly-drained glacial lake bottoms before the main stream and its tributaries incised down into the lacustrine deposits. Commonly less than 5 meters thick.

Haf Haf Alluvial Fan: Boulder, cobble, and pebble gravel, pebbly sand, and diamict deposited at sites where steep, stream gradients are sharply reduced. Holocene alluvial fans (Haf) are common at the mouths of steep tributaries where they meet the main stream. Commonly less than 5 meters thick.

Pl Pl Lacustrine Deposits, Undifferentiated: Coarse- to fine-grained sediment deposited in a glacial lake, generally in an ice-proximal environment. Grain size generally decreases up-section, but marked changes in grain size occur over short distances both laterally and vertically.

Plf Plf Lacustrine Sediments, Fine Grained: Clay, silt, and very-fine to fine sand deposited in quiet-water environments of a glacial lake. Commonly laminated.

Pld Pld Glacial Lake Delta: Well-sorted sand and gravel deposited in a glacial lake at the mouth of a tributary stream. Includes topset, foreset, and proximal bottomset beds if exposures permit.

Pldi Pldi Lacustrine Stratified Diamict: Interbedded massive diamict layers and sandy layers interlayered with silt-clay layers. Dropstones may be common in the stratified layers. Interpreted to represent subaqueous debris flows and turbidity flows deposited in an ice-proximal setting. Diamict layers may extend above shoreline.

Plo Plo Subaqueous Outwash: Well-sorted sand and gravel deposited as subaqueous fans within glacial lakes at and near esker tunnel mouths. Sediment deposited close to tunnel mouth is coarse-grained, distal sediments finer-grained. As the glacial margin retreats the subaqueous outwash is blanketed with finer-grained lacustrine material.

Pi Pi Ice Contact Sediments, Undifferentiated: Unsorted to poorly-sorted stratified sand, gravel, and silt deposited in contact with glacial ice. Surface may contain scattered kettle holes formed by melting of buried ice blocks or be a highly complex kame and kettle topography.

Pie Pie Esker Sediments: Elongate ridge of ice-contact stratified coarse sand and gravel deposited by glacial meltwater streams in tunnels within or beneath the glacial ice.

Ptm Ptm Moraine Deposits: Composed primarily of till with variable amounts of stratified sand and gravel. Deposited in the vicinity of an ice margin from both ice advance and the accumulation of sediment at a stable ice margin.

Pt Pt Glacial Till: Very dense to loose, unsorted to very poorly sorted material deposited directly from glacial ice. Contains a wide range of grain sizes, from clay or silt up to large boulders. Matrix commonly dominated by the silt or sand fraction. Surface boulders are generally common. Thickness is highly variable, from less than 3 meters to greater than 30 meters.

Glacial Lakes

Glacial Lake Memphemagog Projection

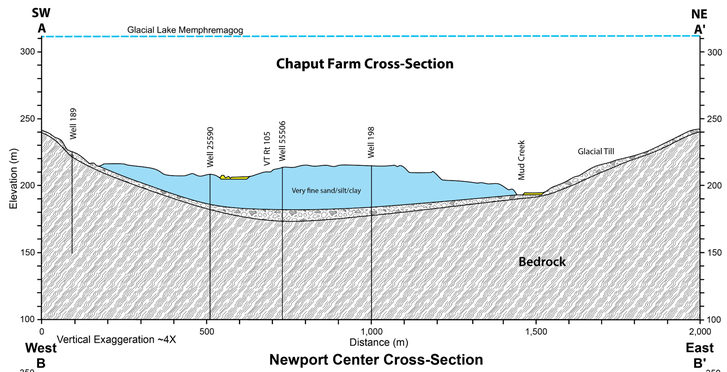
Symbols

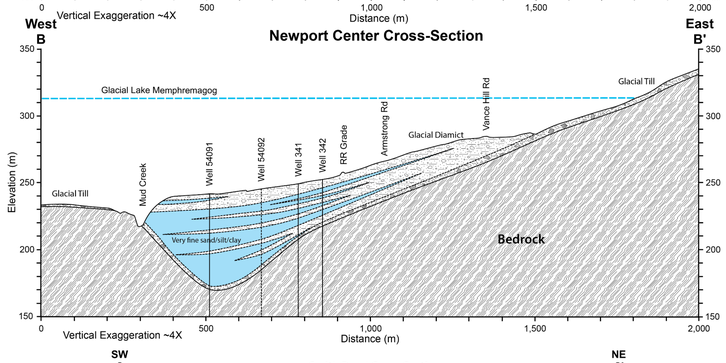
Geologic Field Sites

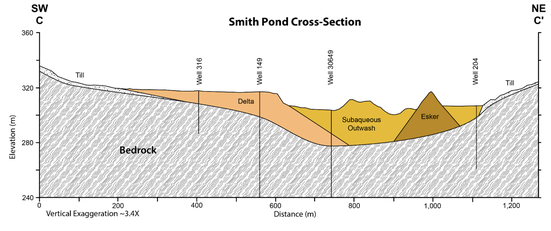
- Surficial Field Site
- Bedrock Outcrop
- Glacial Striations

Water Wells

- GPS Location
- E911 Address Matched
- Gravel Pit
- Rock Quarry
- Geologic Cross-Sections
- Landslide Scarp
- Abandoned Channel
- Wave Cut Bench
- Moraine Ridge
- Grooved Till
- Esker Ridge Line
- Glacial Kettle







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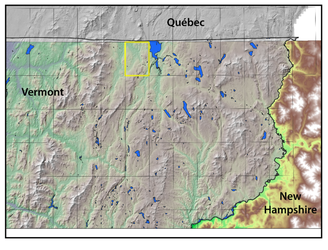

Vermont Geological Survey
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