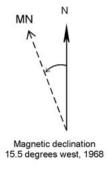
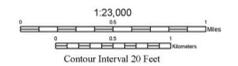


Base map from U.S. Geological Survey.
 Quadrangle names printed in blue.
 Coordinate System: Vermont State Plane, meters, NAD 83.
 Geographic coordinates shown at topo corners are in NAD 83.
 Grid overlay on map is Universal Transverse Mercator,
 Zone 18N, NAD 27.
 Digitization and cartography: Marjorie Gale, 2009



LEGEND

Description of Map Units	
f	Artificial fill
al	Alluvium: Stream deposited sediments consisting of undifferentiated gravel, sand, silt, and organic materials. Often includes areas of swamp in old channels or beaver ponds.
swp	Swamp: Areas where surface is covered with organic material and assessment of the underlying surficial material was not made.
fs	Fine sand occurring stratigraphically above and in places interbedded with the Champlain Sea clay (see below). Good exposures reveal thin, horizontal beds, often with cross-bedding revealing westward, southward, and directed currents. These sands were probably derived from deltas built into the Champlain Sea by both the Winooski River to the south and the Lamolle River to the north. Overflows of relatively less dense fresh water carried plumes of fine sand, silt and clay over broad areas offshore from the deltas.
fmcs	Fine, medium and coarse sand
mfs	Medium fine sand
mcs	Medium coarse sand
s-c	Champlain Sea "Clay": Gray silt (s) and clay (c) oftentimes interlayered with fine and very fine sand (vfs). Usually appears massive, but good exposures reveal thin horizontal laminations. May contain small marine pelecypods (clams).
t	Glacial Till: Gray, clay rich, compact diamict with abundant erratics of Paleozoic sedimentary rocks, Cretaceous igneous rocks, and Grenville (late-middle Proterozoic) gneisses from the Laurentian Mtns. north of the St. Lawrence valley. Areas mapped as till commonly contain abundant outcrops of Paleozoic sedimentary rocks.
Quarry	Quarry
Lakes and streams	Lakes and streams
Striations	Striations
Outcrops/field sites	Outcrops/field sites



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 The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government.

SURFICIAL GEOLOGIC MAP OF THE BURLINGTON, VERMONT 7.5 MINUTE QUADRANGLE

by
 Stephen Wright, Sarah Fuller, Seth Jones, Andrew McKinney, Simon Rupard, S. David Shaw
 2009



VERMONT GEOLOGICAL SURVEY