

EXPLANATION

Qal

Alluvium

Stratified sand, gravel, and silt. In many places, especially where swampy, undecomposed to partly decomposed organic material present at the surface. Along Mill Brook near east edge of quadrangle includes laminated silt, sand, and clay deposited partly in beaver ponds and probably also partly in a local Pleistocene lake. Holocene material at the surface probably overlies Pleistocene stratified drift in many places

Qst

Stream-terrace deposits

Stratified sand, gravel (in places bouldery), and silt. Age uncertain; probably in places Pleistocene outwash, or ice-contact deposits without preserved kettles, in places partly Pleistocene and partly Holocene, and in places entirely Holocene

Qcd₅

Qd

Kettled delta deposits

Chiefly sand, but the top few feet gravelly at most places; boulders as much as 30 feet in diameter in places, and some till (presumed to be flow till). This is the Tobey Pond delta (Warren, 1969), deposited in glacial Lake Norfolk

Qcd₄
Qcd₃
Qcd₂
Qcd₁

Ice-contact stratified drift

Chiefly stratified sand and gravel, generally with scattered boulders. Arranged in order of increasing inferred age, youngest at the top.

Qcd₅, apparently deposited in glacial Lake Norfolk (Warren, 1969) adjacent to the ice confining the lake. Material includes much laminated silt and clay, somewhat contorted, and bodies of till.

Qcd₄, deposited after part of the ice in the Blackberry River drainage basin had melted out; includes probable outwash near Spaulding Pond.

Qcd₃, deposited after drainage down the Mad River valley was established, while ice still nearly filled the Blackberry River basin.

Qcd₂, deposited while ice still nearly filled the valley of Mad River.

Qcd₁, deposited while ice covered most of the quadrangle

Qt

Till

Nonsorted to poorly sorted mixture of sand with silt, clay, rock flour, and angular to rounded stones as much as 35 feet in maximum diameter; loose to moderately compact. Does not react with dilute hydrochloric acid where tested, but commonly contains pockets of powdery oxides, of clay, or of sand believed to be the leached residues ("ghosts") of carbonate pebbles. Pockets or lenses of stratified sand and gravel commonly present. In areas of abundant bedrock exposures, till is discontinuous, commonly less than 10 ft thick, and includes many swampy areas in which undecomposed to partly decomposed organic matter is present near the surface. In areas lacking abundant bedrock exposures, thickness ranges from less than 1 foot (as near scattered outcrops) to a maximum reported figure of 76 ft. Most of the till is older than the Qcd nearby, but some till is as young as the Qcd₅ deposits, and possibly some till in the northeast dates from an ice advance postdating the Qcd₅

af aft

Artificial fill

af, chiefly or entirely till material; sand, gravel, and broken rock are locally present. Includes the larger graded areas; in a graded area northwest of the dam on Norfolk Brook consists of sand and gravel. Small fills and graded areas not shown

aft, trash fill (dump)

Area of abundant bedrock exposure

Used in combination with symbols above

Contact

Dashed where approximately located

Hypothetical shoreline of glacial Lake Norfolk

Based on the present topography; no shoreline features have been found except the spillway and the delta (Qd). Much of the shoreline was against ice (Warren, 1969). No allowance made for postglacial tilt, which has affected the actual shoreline to an unknown degree

Damsite

Centerline of proposed dam; some subsurface data available

Glacial grooves, striae, or both

Showing inferred direction of ice movement. Point of observation is at tip of arrow. Double-arrow symbol indicates a locality where grooves trending S. 20° E. are apparently cut by grooves trending S. 35° E.

Long axis of streamline till deposit

Hill of till, with or without rock core, whose elongation is inferred to reflect the direction of ice movement (includes drumlins)

Qsm

Swamp and marsh deposits

Organic matter, undecomposed to partly decomposed; in places mixed with silt and sand, in other places pure peat, in still other places hemlock duff. Chiefly of Holocene age, but in places bottom part of deposit is possibly Pleistocene. Peat overlies thin-bedded lacustrine deposits, probably Pleistocene, near Phelps Pond and in swamp 0.5 mile southwest of Dennis Hill

Qf Qfm Qfd

Fan deposits

Gravel and sand

Qf, age uncertain except that it postdates melting of ice at the site. Qfm, possibly mudflow fan of late Pleistocene age (Warren, 1969). Qfd, fan with distributary stream channels that indicate deposition is still continuing

Ql

Lake deposits

Stratified drift?

Stratified sand and silt with scattered lenses of pebble gravel and scattered angular boulders as much as 4 ft. in diameter. Origin and correlation uncertain

Laminated

silt, sand, and clay, possibly varved. In places apparently overlain by till. Age uncertain; possibly older or younger than glacial Lake Norfolk

Qoh Qohf Qopf Qot

Outwash(?) deposits

Stratified sand and gravel. Qoh and Qohf are probably outwash; Qopf and Qot are contemporaneous but are possibly not of melt-water origin.

Qoh, sand to cobbles, with scattered boulders, possibly rafted; includes rottenstones.

Qohf, fan of Qoh with preserved fill surface.

Qopf, sand to small boulders; fan deposited by stream from east of Parker Hill.

Qot, sand to boulders, deposited by stream from east of Turkey Cobble

Melt-water channel

Dry channel carved or modified by a glacial melt-water stream (generally omitted in areas of abundant bedrock exposures). Includes outlets (spillways) of ice-dammed lakes. Arrow indicates inferred direction of stream flow. Where channel is wide, banks are shown. Where one bank was ice, only the earth bank is shown

Inactive pit

Abandoned pit

Quarry

Abandoned quarry

Larger pits and areas of multiple pits are hachured to show approximate boundaries. Pits and quarries shown as abandoned probably have not been worked for more than a decade. Materials symbols are identified below

70 70% 70%

Surficial materials

Materials are identified as follows: b, bouldery gravel; c, cobbly gravel; p, pebble gravel; s, sand; s, silt; f, clay; gs, gravel and sand, gravel estimated to constitute more than 50 percent of the deposit; sg, sand and gravel, sand estimated to constitute more than 50 percent of the deposit; s(g), sand with minor amounts of gravel; pt, peat; t, till. Superposition of symbols indicates superposition of materials in pit or at point indicated; numeral denotes thickness in feet. Read > as "more than"; < as "less than." Read a dash between symbols as "to". Numeral alone is reported depth to bedrock in a well, in feet; reliability of well information varied. Symbol 70% indicates that approximately 70 percent of the pebbles in pit or at point indicated are quartzite or vein quartz

M(200)
R290

no. 70-360
sheet 2 of 2
C. 1

U.S. Geological Survey
OPEN FILE MAP
This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

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Connecticut (Norfolk quad.) Surficial
sheet 2
top 6

1:74,000
3 1818 00318583 0