UNITED STATES GEOLOGICAL SURVEY

WATER RESOURCES BULLETIN NO. 31 PLATE B
CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

EXPLANATION

COARSE-GRAINED STRATIFIED DRIFT--Sorted sediments deposited by or in glacial meltwaters. Materials range principally from fine sand to cobble gravel. Screened wells tapping these deposits yield 200 to 2000 gallons per minute. The highest yields are generally obtained from wells tapping the thickest, most transmissive parts of this unit and from areas near major streams.

FINE-GRAINED STRATIFIED DRIFT--Sorted sediments deposited by or in glacial meltwaters. Materials range principally from clay to very fine sand. In the Middletown -Berlin area material is predominantly glacial-lake clay. This unit is generally unproductive except in restricted areas where lenses of fine to medium sand occur. In such areas, yields to screened wells range from 20 to 200 gallons per minute.

COARSE-GRAINED STRATIFIED DRIFT OVERLYING FINE-GRAINED STRATIFIED DRIFT--Materials consist principally of fine to coarse sand, 10 to 30 feet thick overlying significant thicknesses of clay, silt, and very fine sand. Screened wells tapping the upper part of this unit yield 50 to 500 gallons per minute, with highest yields obtained from the thickest most transmissive areas, especially those near major streams. The lower, finer-grained part of this unit is generally unproductive.

BURIED COARSE-GRAINED STRATIFIED DRIFT--Materials consist principally of medium sand to gravel, 10 to 30 feet thick, underlying significant thickness of clay, silt, and very fine sand. Screened wells tapping these buried, coarse-grained materials yield 100 to 1000 gallons per minute. The highest yields are generally obtained from wells tapping the thickest most transmissive and most extensive deposits.

STRATIFIED DRIFT OF UNDEFINED GRAIN-SIZE COMPOSITION--Materials in the saturated zone have not been defined due to lack of adequate subsurface data.

TILL--Unsorted, nonstratified sediments deposited by glaciers and composed of clay, silt, sand, gravel, and boulders mixed in various proportions. Dug wells tapping these deposits yield 1 to 3 gallons per minute. Unit includes areas of bedrock outcrop. Green overprint indicates areas in Middletown where 3 to 5 feet of gravelly till overlie glacial-lake clays.

THICK TILL--Areas where the till is known or inferred to be at least 40 feet thick.

CONTACT BETWEEN STRATIFIED DRIFT AND TILL OR BEDROCK OUTCROP AREAS.

80 — LINE OF EQUAL SATURATED THICKNESS OF STRATIFIED DRIFT--Values shown are in feet. Interval between lines is 30 feet along margins and 40 feet elsewhere.

BOUNDARY OF STUDY AREA

8000 WELL TAPPING STRATIFIED DRIFT--Number is transmissivity, in feet squared per day, calculated from adjusted specific capacity. Local well numbers are on Plate A and specific capacities are in Table 16.

1500 TEST HOLE TAPPING STRATIFIED DRIFT--Number is transmissivity, in feet squared per day, calculated from median grain size and sorting relationship discussed on p. 46. Local test-hole numbers are on Plate A.

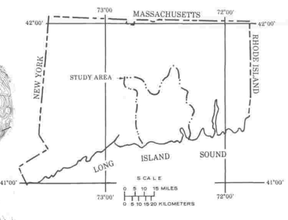
SCALE 1:48,000

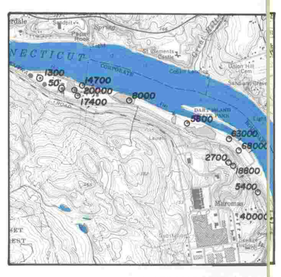
1 0 1 2 3 MILES

1 .5 0 1 2 3 KILOMETERS

CONTOUR INTERVAL 10 FEET Datum is mean sea level

BASE BY U. S. GEOLOGICAL SURVEY





INSET MAP SCALE 1:24,000

GEOHYDROLOGIC MAP OI THE LOWER CONNECTICUT RIVER BASIN