EXPLANATION

CLAY INFERRED TO BE ABSENT

THICKNESS OF CLAY, IN FEET

0 TO 50

50 TO 100

100 TO 150

GREATER THAN 150

0 — LIMIT OF PRINCIPAL CLAY UNIT

50 — CONTOUR SHOWING THICKNESS OF CLAY, IN FEET

This map shows the distribution and thickness of the principal clay unit. The clay unit consists of a thick, massive bed of relatively pure clay in some areas; in other areas it consists of discrete layers of clay alternating with layers of silt and very fine sand (varved clay). The upper layers of the clay unit commonly grade into a layer of silt and very fine sand. Small, isolated clay deposits not associated with the principal clay unit are not mapped.

The principal clay unit commonly overlies a thin layer of till (hardpan), and is commonly covered with sand or gravel of variable thickness. Locally the clay may overlie or contain lenses of sand or gravel.

The surface on which the clay was deposited may contain small, irregular depressions or high spots that produce local thickening or thinning of clay; these are not indicated on the map.

THIS MAP IS INTENDED TO SERVE AS AN AID IN RECONNAISSANCE EVALUATION OF THE PRINCIPAL CLAY UNIT AND IS NOT INTENDED TO BE A SUBSTITUTE FOR ONSITE INVESTIGATIONS.

SOURCES OF DATA

Colton, R. B., 1965, Geologic map of the Manchester quadrangle, Hartford and Tolland Counties, Connecticut: U.S. Geol. Survey Geol. Quad. Map GQ-433.

Ryder, R. B., and Weiss, L. A., 1971, Hydrogeologic data for the upper Connecticut River basin, Connecticut: Connecticut Water Resources Bull. 25, 54 p.

Base from U.S. Geological Survey, 1963

10,000-foot grid based on Connecticut Coordinate system. 1000-meter Universal Transverse Mercator grid ticks, zone 18, shown in black

MN GN 13½° 240 MILS 1°37' 29 MILS

UTM GRID AND 1968 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONNECTICUT

QUADRANGLE LOCATION

MAP SHOWING THICKNESS OF PRINCIPAL CLAY UNIT, MANCHESTER QUADRANGLE, CONNECTICUT

By

William H. Langer

1973

For sale by U.S. Geological Survey, price 50 cents