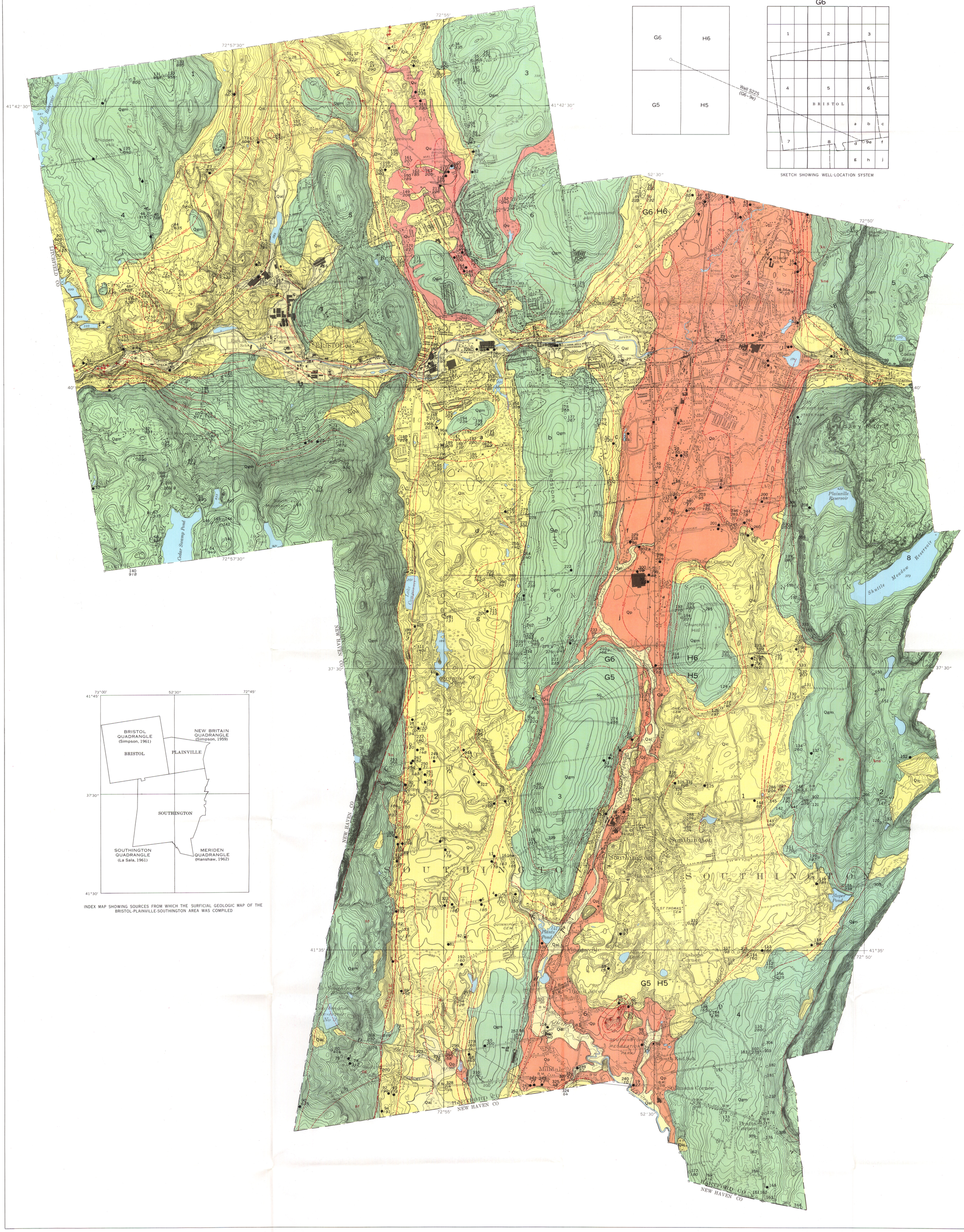

SKETCH SHOWING WELL-LOCATION SYSTEM

EXPLANATION

Qal — Alluvium
Deposits of Recent streams. Sand and silt, some gravel and clay, generally containing decayed organic matter. Not a source of ground water

Qp — Proglacial deposits
Valley-train deposits consisting of interstratified sand and gravel derived from metamorphic rocks. Lake deposits in Pequabuck and Quinnipiac lowlands, underlie valley-train deposits and consist of clay, silt, and sand. Yield as much as 500 gpm to wells in Plainville near margins of the deposits. Elsewhere yield considerably less

Qic — Ice-contact deposits
Mostly kame-terrace, kame, and kame-delta deposits consisting of stratified sand and gravel. Deposits in the eastern half of the area were derived mainly from sedimentary rocks and diabase; those in western half from metamorphic rocks. Yield as much as 1,000 gpm

Qu — Undifferentiated stratified glacial deposits
Glacial-stream deposits whose origins are not clearly definable on morphologic evidence. Consist of interstratified sand and gravel. In Bristol they yield as much as 1,400 gpm to individual wells

Qgm — Ground-moraine deposits
Till, unsorted rock material deposited directly from ice. Mantle the bedrock on hills and a few small terraces. Yield small supplies to large-diameter shallow wells

QUATERNARY

Tne — Middle part of the Newark Group
Includes Talcott Basalt, Shuttle Meadow Formation, Holyoke Basalt, and East Berlin Formation. Interbedded basalt flows and beds of shale, siltstone, sandstone, and subordinate limestone. Yields as much as 180 gpm in Cooks Gap, but commonly less than 40 gpm

Tkn — New Haven Arkose
Mainly arkose, but includes arkosic conglomerate, fine-grained sandstone, and shale of continental origin. Yields as much as 110 gpm, but commonly less than 30 gpm

TRIASSIC

hf, pg, bg — Metamorphic rocks
hf, schist and gneiss of the Hartland Formation
bg, Bristol Granite Gneiss of Gregory (1906)
pg, Prospect Gneiss. Yields generally less than 30 gpm, but locally as much as 90 gpm

PALEOZOIC

Bedrock outcrops
Shown only in areas of stratified glacial deposits

Geologic contacts of surficial deposits
Solid line indicates that contact is well established. Dashed line indicates gradational or approximate contact

Approximate geologic contact of bedrock formations, dotted where buried

Fault approximately located
Dotted where concealed. U, upthrown side; D, downthrown side

Bedrock Contour
Queried where doubtful. Contour interval 50 feet. Datum is mean sea level

78
○40
Location of well or test boring that penetrates bedrock or ends at bedrock surface
Vertical number is well number; slanted number is altitude of bedrock surface. Selected wells and test borings are listed in tables 3 and 4

234
●180
Location of well or test boring that ends above bedrock
Vertical number is well number; slanted number is altitude at bottom of well. Selected wells and test borings are listed on tables 3 and 4

◎16/183 ◉96
Observation well
Wells on which water levels were measured monthly by U.S. Geological Survey. Number and relation of well to bedrock indicated as for other wells

●4
Location and number of spring
A separate sequence of numbers is used for the springs and wells in each town

INDEX MAP SHOWING SOURCES FROM WHICH THE SURFICIAL GEOLOGIC MAP OF THE BRISTOL-PLAINVILLE-SOUTHINGTON AREA WAS COMPILED

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1964—W63349

Base from U.S. Geological Survey quadrangles: Bristol, 1946, New Britian, 1953, Southington, 1946, and Meriden, 1946

APPROXIMATE MEAN DECLINATION, 1964

GENERALIZED GEOLOGIC MAP OF THE BRISTOL-PLAINVILLE-SOUTHINGTON AREA, CONNECTICUT SHOWING BEDROCK CONTOURS AND LOCATION OF WELLS

SCALE 1:24 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

Geology compiled by A. M. La Sala, Jr., from maps by C. E. Fritts, Jr., P. M. Hanshaw, A. M. La Sala, Jr., and H. E. Simpson, 1956–60