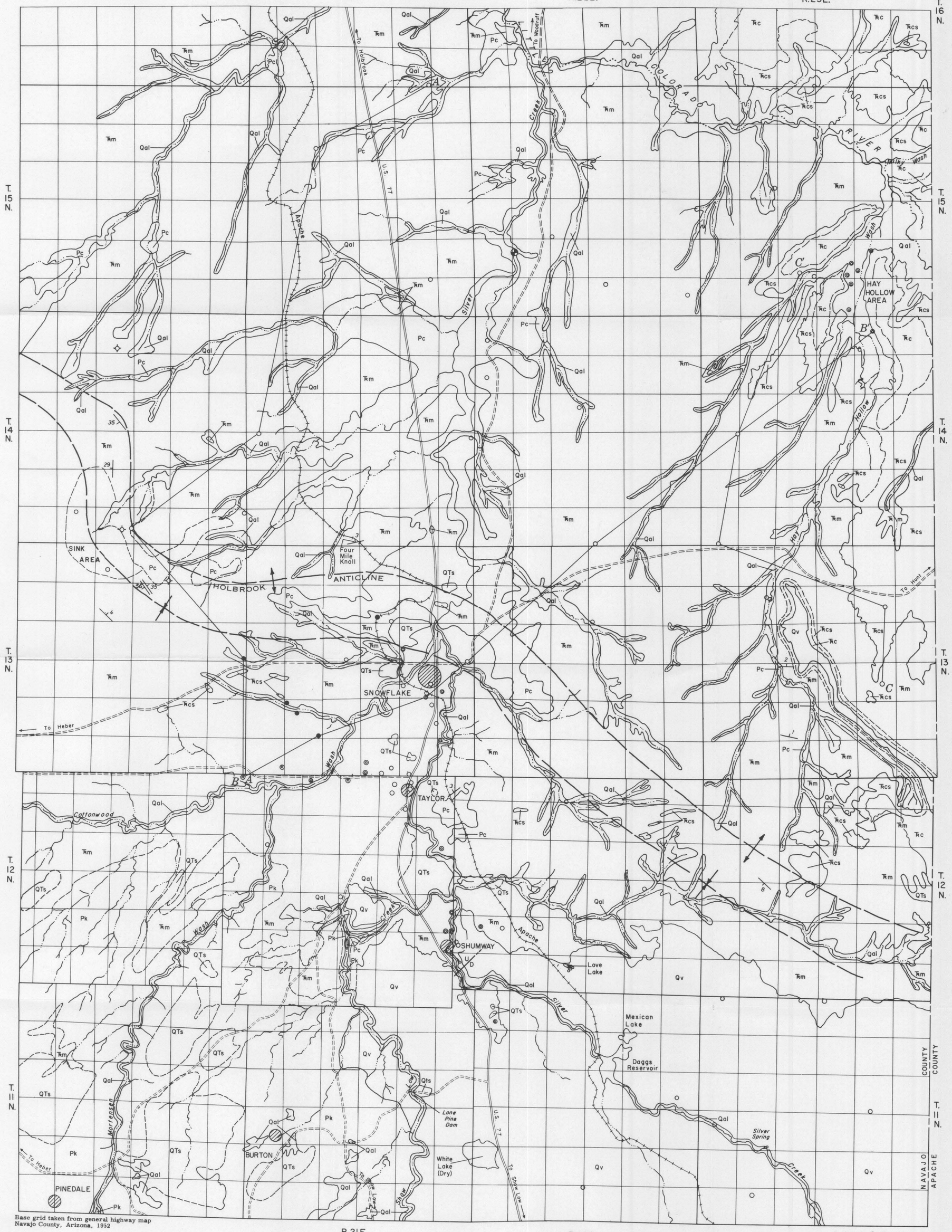
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WATER-SUPPLY PAPER 1539-S
PLATE 1



Base grid taken from general highway map
Navajo County, Arizona, 1952

Geology by P. W. Johnson, 1958

MAP OF THE SNOWFLAKE-HAY HOLLOW AREA, NAVAJO COUNTY, ARIZONA SHOWING GEOLOGY AND LOCATION OF SELECTED WELLS AND SPRINGS

SCALE 1:125 000

1 0 1 2 3 4 5 MILES

EXPLANATION

SEDIMENTARY ROCKS

Qal — Alluvium
Unconsolidated sand, gravel, silt, and clay
Pleistocene and Recent

UNCONFORMITY

QTs — Terrace deposits
Loosely consolidated sand, gravel, and pebbly silt. Yields small amount of water to shallow wells
Pliocene and Pleistocene

UNCONFORMITY

Trc — Chinle formation, undifferentiated
Varicolored shale, marl, sandstone, and limestone beds

Trcs — Shinarump member
Heterogeneous sandstone, chert, jasper, quartz, and limestone conglomerate. The Chinle formation and Shinarump member do not yield water to wells or springs in the Snowflake-Hay Hollow area
Upper Triassic

UNCONFORMITY

Trm — Moenkopi formation
Predominantly sandstone, siltstone, claystone, mudstone, limestone, and gypsum beds. Yields small quantities of water to shallow wells
Lower and Middle(?) Triassic

UNCONFORMITY

Pk — Kaibab limestone
Thick-bedded hard sandy limestone. Does not yield water to wells in the Snowflake-Hay Hollow area

UNCONFORMITY

Pc — Coconino sandstone
Uniformly fine grained quartz sandstone. Principal aquifer in the area yielding water for all irrigation wells and to some stock and domestic wells
Aubrey group

TERTIARY AND QUATERNARY
TRIASSIC
PERMIAN

IGNEOUS ROCKS

Qv — Basalt
Yields water to seeps and springs from fractures and fissures
Pleistocene and Recent

QUATERNARY

Contact
Dashed where approximately located

Fault
Dashed where approximately located
U, *upthrown side;* D, *downthrown side*

Anticline, approximately located

Syncline
Showing approximate position of trough

35 — Strike and dip of beds

Irrigation well

Municipal, stock, and domestic well

Industrial-test well

Abandoned oil-test well

Spring

Gaging station

A — A' Line of section shown on plate 2

N

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