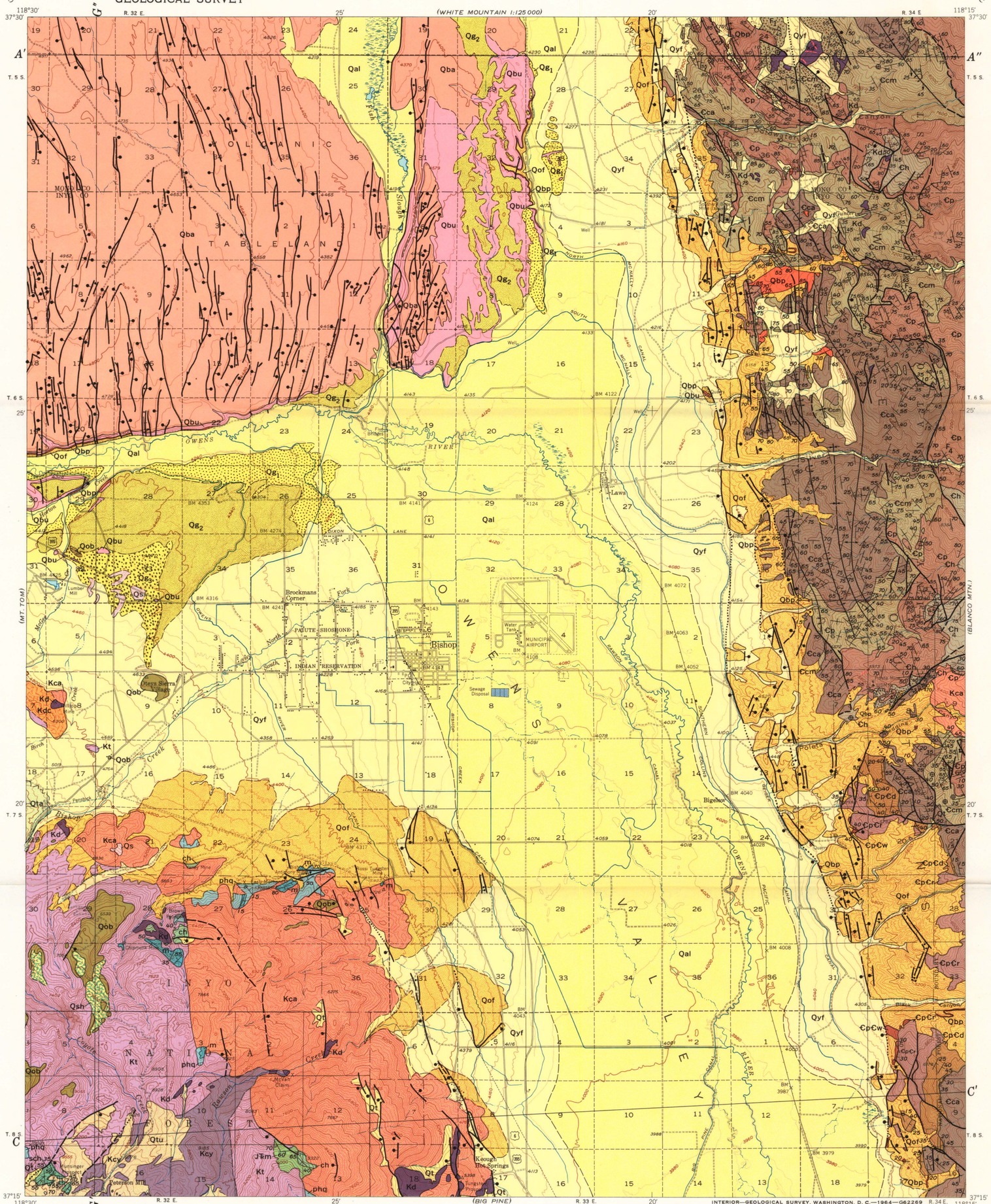

Base map by Topographic Division
U.S. Geological Survey, 1950;
modified 1963

Geology by Paul C. Bateman, assisted by
J.W. Reid and M.W. Ellis

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1964—G62269

GEOLOGIC MAP OF THE BISHOP 15-MINUTE QUADRANGLE, CALIFORNIA

SCALE 1:62 500

1 ½ 0 1 2 3 4 5 MILES

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 80 FEET
DOTTED LINES REPRESENT 20-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

TRUE NORTH
MAGNETIC NORTH
16½°
APPROXIMATE MEAN DECLINATION, 1964

EXPLANATION

QUATERNARY

Recent

Qal — Alluvial fill
May be, in part, of Pleistocene age

Qs — Dune sand

Qt — Talus

Qyf — Younger alluvial fan deposits
May be, in part, of Pleistocene age

Pleistocene

Qtu — Undifferentiated till

Qg1, Qg2, Qg3 — Terrace gravels
Qg1, *youngest and lowest, may be of Recent age*

Qof — Older dissected alluvial fan and lakebed deposits
Some beds may be of late Tertiary age

GLACIAL DEPOSITS

Qta — Tahoe till

VOLCANIC DEPOSITS

Qba, Qbu, Qbp — Bishop tuff
Qba, *hard agglutinated tuff*
Qbu, *soft tuff with rounded pumice fragments*
Qbp, *basal layer of white angular pumice*

Qob — Basalt dikes, necks, and dissected flows
May be of late Tertiary age

Qsh — Sherwin and older tills

UNCONFORMITY

CRETACEOUS

GRANITIC ROCKS

Kcy — Granodiorite of Coyote Flat

Kc, Kca — Rocks similar to the Cathedral Peak granite
Kc, *quartz monzonite*
Kca, *alaskite*

Kt — Tungsten Hills quartz monzonite

Kdc — Granodiorite of Deep Canyon
May be an early marginal facies of the Tungsten Hills quartz monzonite

Kd — Diorite, quartz diorite, and hornblende gabbro
Includes some hybrid rocks of granodiorite composition

TRIASSIC(?) AND JURASSIC

METAMORPHIC ROCKS OF THE SIERRA NEVADA

METAMORPHIC ROCKS IN SMALLER MASSES

J̄m — Mafic metavolcanic rocks

PALEOZOIC AND MESOZOIC

m — Marble

ch — Calc-hornfels

phq — Pelitic hornfels, micaceous quartzite, and schist

MISSING INTERVAL

LOWER PALEOZOIC(?)

BISHOP CREEK PENDANT

sch — Siliceous calc-hornfels

MISSING INTERVAL

CAMBRIAN

SEDIMENTARY ROCKS OF THE WHITE MOUNTAINS

Lower Cambrian

Ꞓch — Harkless formation
Stippled where hornfelsed

Ꞓp — Poleta formation

Ꞓcm, Ꞓca — Campito formation
Ꞓcm, *Montenegro member, stippled where hornfelsed*
Ꞓca, *Andrews Mountain member*

PRECAMBRIAN OR CAMBRIAN

Upper Precambrian or Lower Cambrian

ꞒpꞒd — Deep Spring formation

ꞒpꞒr — Reed dolomite

ꞒpꞒw — Wyman formation

Quartz veins and masses

Contact, showing dip
Dashed where approximately located

Fault, showing dip
Dashed where approximately located; dotted where concealed

High-angle fault with scarp
Dashed where approximately located; dotted where concealed. Includes a few low-angle normal faults. Bar and ball on downthrown side

Fault breccia

Anticline
Showing trace of axial plane. Dashed where approximately located

Syncline
Showing trace of axial plane. Dashed where approximately located

Overturned anticline
Showing trace of axial plane and bearing and plunge of axis. Dashed where approximately located

Overturned syncline
Showing trace of axial plane and bearing and plunge of axis. Dashed where approximately located

Strike and dip of beds

Strike and dip of overturned beds

Strike of vertical beds

Horizontal beds

Fossil locality

NOTE: True color for Marble shown at Latitude 37°18′ Longitude 118°28′