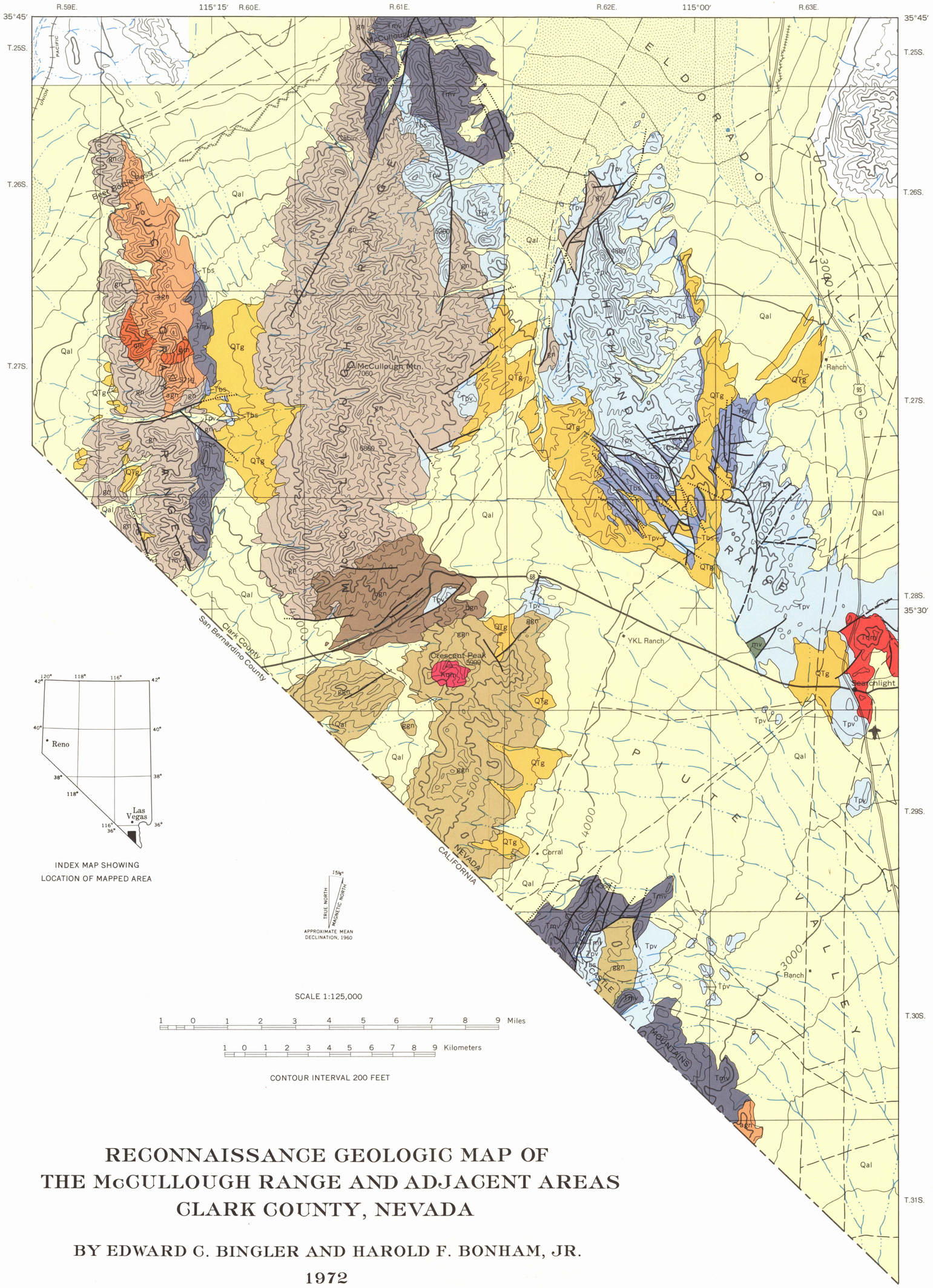

INDEX MAP SHOWING
LOCATION OF MAPPED AREA

RECONNAISSANCE GEOLOGIC MAP OF THE McCULLOUGH RANGE AND ADJACENT AREAS CLARK COUNTY, NEVADA

BY EDWARD C. BINGLER AND HAROLD F. BONHAM, JR.

1972

EXPLANATION

QUATERNARY

Qal

Alluvium and colluvium

Predominantly basin-fill deposits of gravel, sand, and silt, locally cemented by caliche. Includes small areas of eolian sand and older gravels.

UNCONFORMITY

TERTIARY AND QUATERNARY

QTg

Older gravels

Basin-fill deposits of Pleistocene and Pliocene age. Generally weakly consolidated, but include well-lithified fanglomerate, conglomerate, and pebbly arkose. Gravels are commonly tilted and are highly dissected. Probably includes rocks correlative with the Muddy Creek Formation.

UNCONFORMITY

TERTIARY

Tmv

Mount Davis Volcanics

Predominantly lava flows ranging in composition from basalt to rhyolite. Dark-gray basaltic andesite flows are common in the lower portion. Silicic tuff and epiclastic volcanic breccia occur interbedded with the flow rocks. Rhyolite dikes, plugs, domes, flows, and bedded pyroclastic rocks form the lower part of this unit in the northern Castle Mountains.

Tqm

Quartz monzonite

Fine- to medium-grained grayish-white augite-biotite quartz monzonite porphyry.

Tbs

Tuff of Bridge Spring

Moderately crystal- and lithic-rich welded ash-flow tuff. Usually two distinct cooling units are present. Dark-gray to black vitrophyre commonly occurs in the basal portion of the cooling units. Phenocrysts of alkali feldspar, plagioclase, biotite, green pyroxene, and sparse quartz. Thickness ranges from 0 to 400 feet in the mapped area.

Tpv

Patsy Mine Volcanics

Predominantly olivine-pyroxene basaltic andesite flows, flow breccia, mudflow breccia, and pyroclastic breccia. Rhyolite flows, intrusive breccia and plugs, and pyroclastic breccias and tuff occur in the upper part of the unit in the southern portion of the Highland Range.

UNCONFORMITY

CRETACEOUS

Kqm

Quartz monzonite

Pervasively silicified and sericitized medium-grained quartz monzonite porphyry.

?

mv

Metavolcanic rocks

Volcanic breccia composed of pebble-sized fragments of light- to medium-gray intermediate volcanic rock, some of which are amygdaloidal. Rock now consists principally of muscovite, sodic plagioclase, magnetite, calcite, chlorite, and apatite. Precambrian?

?

PRECAMBRIAN

qm

Quartz monzonite

Leucocratic weakly-foliated quartz monzonite containing less than 5 percent biotite.

agn

Granitic augen gneiss

Coarse-grained, prominently foliated dark-gray to reddish-gray augen gneiss. Contains 20-30 percent large K-feldspar porphyroblasts.

ggn

Granitic gneiss

Medium- to fine-grained granoblastic tan to pale yellowish tan quartzo-feldspathic gneiss. Unit locally includes small masses of gray to brown quartz-mica schist and gneiss.

bgn

Biotite gneiss

Dark-gray to brown quartzo-feldspathic biotite gneiss. Overall composition similar to granodiorite.

gn

Gneiss

Medium-gray to yellowish-brown garnetiferous quartzo-feldspathic biotite gneiss intimately intruded by foliated gneissic granite. Small masses of quartz common.

Contact

Fault

Dashed where approximate, dotted where concealed.

Geology by Edward C. Bingler and Harold F. Bonham, Jr., February-March, 1972.

Topographic base enlarged and modified from U.S. 1:250,000 scale map, Kingman Sheet, 1954.

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