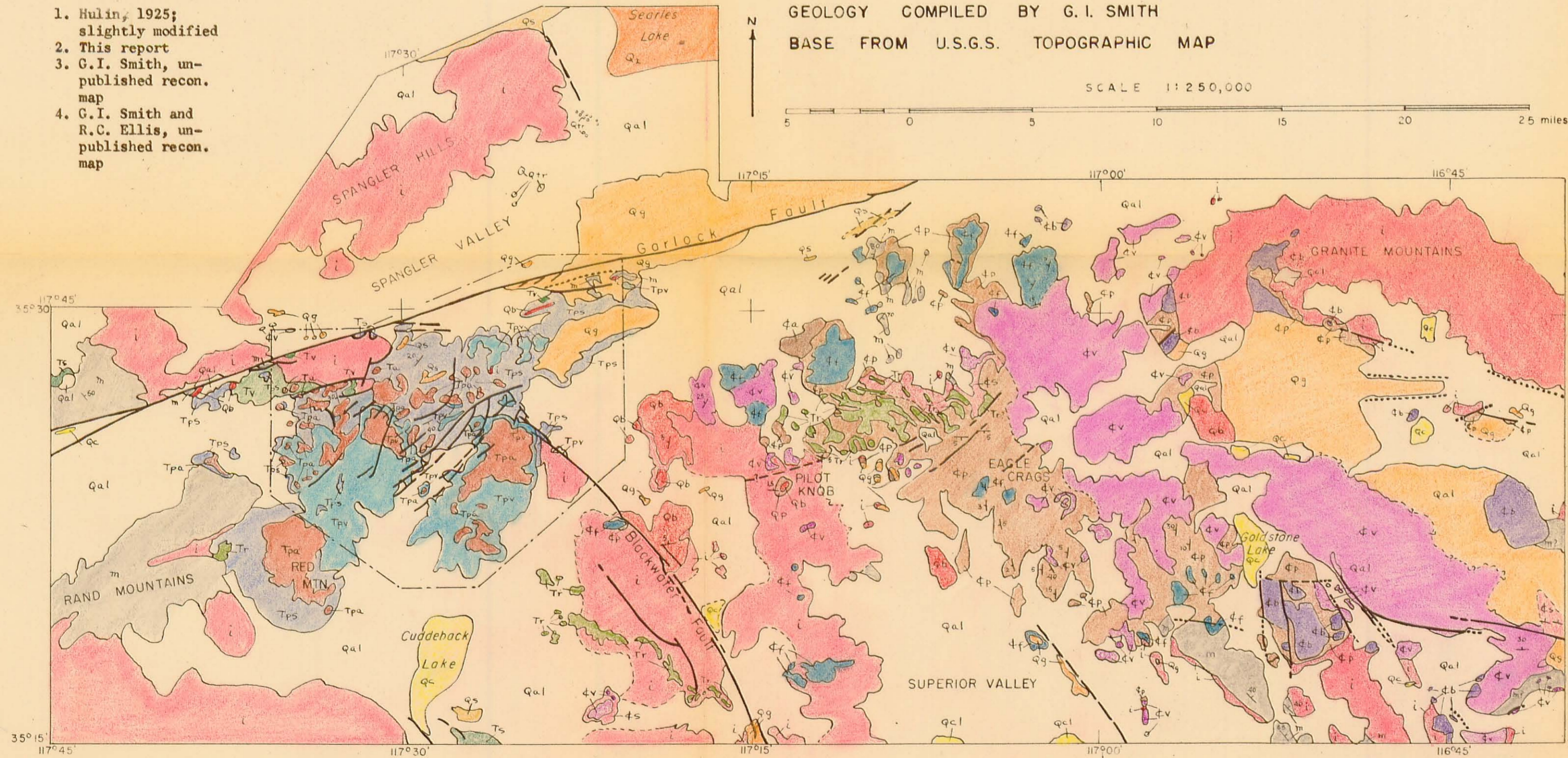
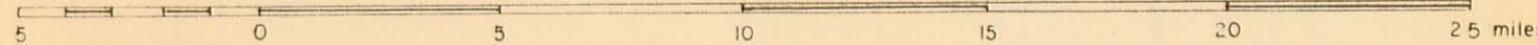


Sources of data

1. Hulin, 1925; slightly modified
2. This report
3. G.I. Smith, unpublished recon. map
4. G.I. Smith and R.C. Ellis, unpublished recon. map

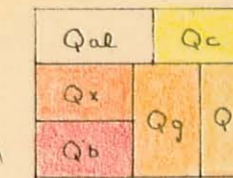
GEOLOGY COMPILED BY G. I. SMITH
BASE FROM U.S.G.S. TOPOGRAPHIC MAP

SCALE 1:250,000



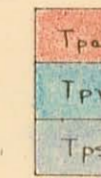
GENERALIZED GEOLOGY OF THE LAVA MOUNTAINS AND VICINITY,
SAN BERNARDINO COUNTY, CALIFORNIA

Pleistocene & Recent



QUATERNARY DEPOSITS
Qal: alluvium, some slightly dissected. **Qc:** playa lakes with a hand-packed clay surface. **Qx:** playa lake with crystalline salt surface. **Qtr:** travertine as mounds, domes, pinnacles. **Qb:** basaltic rocks, chiefly tabular flows. **Qg:** older gravels, now being dissected; includes the Christmas Canyon formation in the Lava Mountains. **Qs:** older sand and silt, now being dissected.

middle & upper Pliocene



PLIOCENE ROCKS
Tpa: Lava Mountains andesite; flows and intrusives. **Tpv:** includes the Almonc Mountain volcanics, Klinker Mountain volcanics, and the undifferentiated Pliocene(?) volcanic rocks of this report. **Tps:** Bedrock Spring formation; chiefly arkosic sandstone; middle Pliocene.

pre-middle Pliocene



PRE-MIDDLE PLIOCENE ROCKS
Tr: rhyolitic intrusives, probably some flows; found as fragments in the Bedrock Spring formation. **Ts:** sandstones and conglomerates. **Tv:** assorted volcanic rocks, mostly faulted and brecciated.

PLUTONIC IGNEOUS ROCKS
 Mostly quartz-monzonitic, some dioritic rocks in the south-central portion; local swarms of aplitic or basaltic dikes.

METAMORPHIC ROCKS
 Includes slates, phyllites, quartzites, and limestones; most dip at high angles, strike in a northerly direction.

CONTACT
 Solid where definite, dashed where very indefinite

FAULT
 Solid where definite, dashed where indefinite, dotted where concealed

DIP AND STRIKE

Quaternary

Tertiary

Cenozoic

pre-Cenozoic