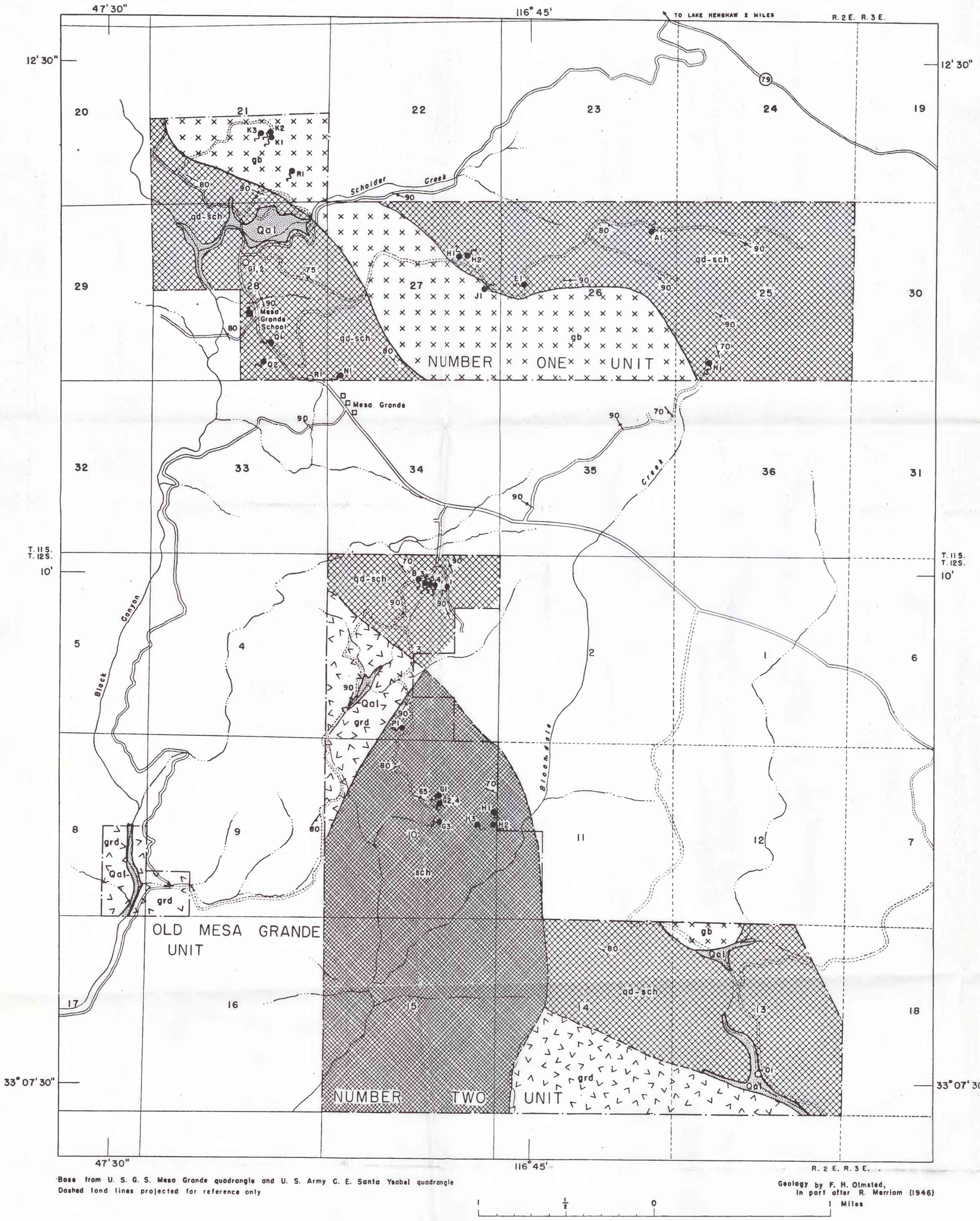
U. S. GEOLOGICAL SURVEY

PLATE 2



EXPLANATION

Qal — Alluvium

Grayish-brown sandy silt containing a few angular fragments of gabbro and other bedrock types. Thickness: 0-40 ft. Probably not very permeable.

grd — Granodioritic rocks

Mapped as Bonsall tonalite by Merriam (1946). Massive to moderately gneissic coarse-grained tonalite or quartz diorite, locally invaded by pegmatite dikes. Small amount of water contained in widely-spaced joints and fractures.

gb — Gabbro

Mapped as San Marcos gabbro by Merriam (1946). Massive to slightly foliated dark-grey to black hornblende gabbro. In favorable localities, small to moderate amounts of water are contained in the weathered zone and in open joints and fractures in the fresh rock.

qd-sch — Mixed rock

Mapped as Stonewall quartz diorite by Merriam (1946). Mica schist that has been intimately injected, partially assimilated, and replaced by quartz diorite. Water contained in weathered zones and in open fractures.

sch — Schist

Mapped as Julian schist by Merriam (1946). Mica schist, with subordinate sillimanite schist, quartzite, and amphibolite. Contains moderate amounts of water in closely-spaced fractures parallel to the foliation.

QUATERNARY — CRETACEOUS (?) — JURASSIC (?) — TRIASSIC (?)

Contact

Dashed where based on mapping of Merriam (1946).

65 — Strike and dip of foliation

H2 — Spring

Q Qal — Water well

GEOLOGIC MAP OF MESA GRANDE INDIAN RESERVATION, SAN DIEGO COUNTY, CALIFORNIA