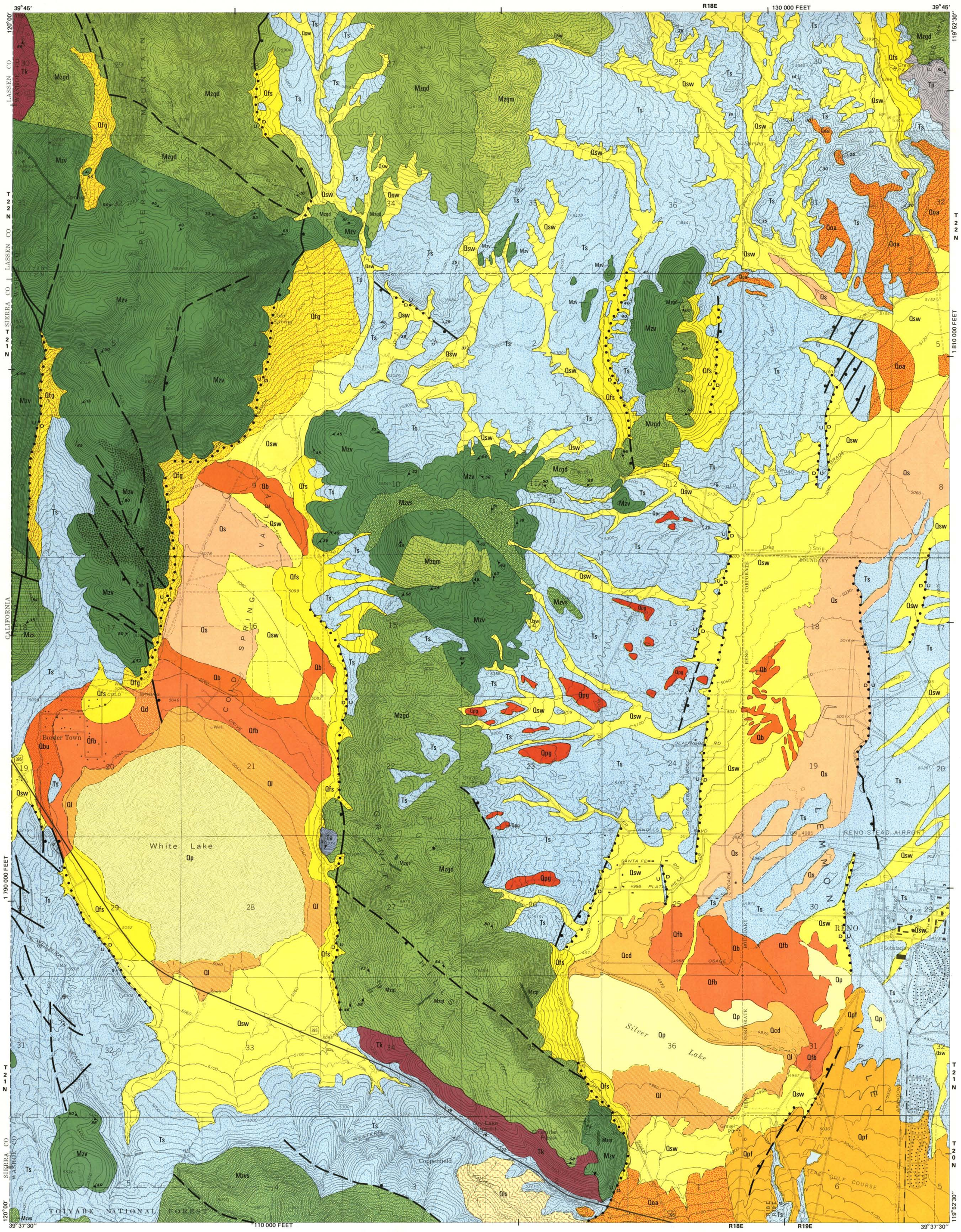
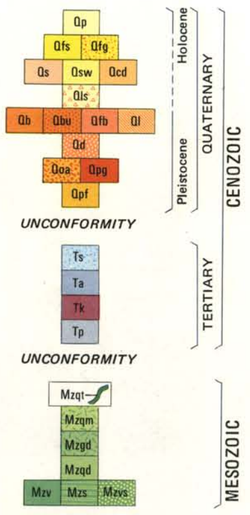
RENO NW QUAD



GEOLOGY



Qp **Playa deposits.** White to grayish-white and yellowish-brown clay and clayey silt in Cold Spring Valley. Olive to yellowish-gray, slightly pebbly to granular mud, and well-sorted very fine sand and silt in Lemmon Valley. Sites of standing water during part of the year.

Qfs **Qfg** **Alluvial-fan deposits. Qfs:** Pale to dark yellowish-brown, slightly granular to granular coarse sand, and slightly pebbly to moderately sorted medium sand. <15% pebble-size clasts. **Qfg:** Gray to yellowish-brown deposits of sandy to pebbly cobble and boulder gravel.

Qs **Flood-plain deposits.** Pale to dark yellowish-brown and pale brownish-white beds of moderately to well-sorted fine to very fine sand, and poorly sorted sandy clay and mud.

Qsw **Sheetwash alluvium.** Thin deposits of moderately to poorly sorted medium to fine sand, granular coarse to medium sand, and sandy pebble gravel. Color and texture closely related to local bedrock source areas.

Qcd **Clay dunes.** Windblown granular aggregates of dark yellowish-brown clay and slightly sandy silty clay.

Qls **Landslide deposits.**

Qb **Qbu** **Qfb** **Ql** **Beach deposits. Qb:** Lakeshore deposits of pale yellowish-brown to pale yellowish-white, granular medium to coarse sand, sandy pebble gravel, and granule gravel. **Qbu:** Windward lake-margin deposits of pale-brown pebbly coarse sand. **Qfb:** Forebeach deposits of pale yellowish-brown to grayish-orange, pebbly to granular coarse to medium sand, and sandy granule gravel. Grades laterally into beach deposits. **Ql:** Lake-floor deposits of yellowish-gray to dark-gray and black, very thin-bedded clay and sandy mud.

Qd **Delta-sand deposits.** Thin-bedded gray to gray-brown, pebbly coarse sand, and sandy small pebble gravel. Graded bedding and cross-bedding common.

Qoa **Older fan alluvium.** Deposits of dark yellowish-brown and gray, cobbly to pebbly very coarse sand, and sandy pebble to boulder gravel. Locally exposed and eroded along basin margins.

Qpg **Pediment gravel.** Thin sheets of pale-brown and pale yellowish-brown, sandy granule to cobble gravel, and pebbly very coarse sand. Clasts comprise a wide range of lithologic compositions and locally form a desert pavement.

Qpf **Alluvial-fan Deposits of Peavine Mountain.** Semi-lithified, poorly bedded and poorly sorted reddish-brown and dark yellowish-orange, slightly muddy sandy pebble to cobble gravel. Clasts are composed predominantly of white altered andesite.

Ts **Lacustrine and alluvial sediments.** Thick basin-fill deposits of grayish-orange to pale-brown, coarse to medium sand, granular sand, siltstone, silty to pebbly sandstone, and minor sandy pebble conglomerate, very thin-bedded ash and diatomite. Sediments are generally unconsolidated and bedding is usually indistinct. In part includes much younger alluvium near the surface. Probably equivalent in age to the Sandstone of Hunter Creek (Bonham and Bingler, 1973).

Ta **Andesite.** Plugs and dikes of gray fine-grained andesite.

Tk **Kate Peak Formation.** Gray, porphyritic, hornblende-biotite andesite flows and epiclastic rocks.

Tp **Pyramid Sequence.** Dark- to light-gray andesite to dacite flows and agglomerate.

Mzqt **Quartz-tourmaline veins.** Mineralized veins containing varying amounts of vein quartz, tourmaline, limonite, sulfide minerals with traces of secondary copper minerals and gold. Margins of veins are bleached and contain clay alteration.

Mzqm **Quartz monzonite.** Coarse-grained, massive, plutonic, light-gray quartz monzonite comprising hornblende- and biotite-rich varities; contains numerous aplite and pegmatite dikes. Rock rarely crops out.

Mzgd **Granodiorite.** Medium- to coarse-grained, massive, plutonic, dark-gray biotite and hornblende granodiorite. Includes aplite and pegmatite dikes. Resistant to erosion and forms abundant knobby outcrops.

Mzqd **Quartz diorite.** Massive, plutonic, medium- to coarse-grained, dark-gray quartz diorite. Forms abundant knobby outcrops.

Mzv **Mzs** **Mzvs** **Peavine Sequence. Mzv:** Gray to green and grayish-green metavolcanic flows, tuff breccia, and welded tuff of dacitic to andesitic composition. Locally includes metamorphosed epiclastic volcanic sedimentary rocks. Irregular patches of pink to pale-red color are caused by disseminated piedmontite alteration. Where unaltered this unit is resistant to erosion and tends to form bold outcrops. **Mzs:** Phyllite, argillite, quartzite, and metaconglomerate. Locally interfingers with Mzv. Moderately resistant to erosion. **Mzvs:** Undifferentiated metavolcanic and metasedimentary rocks.

Bleached and altered rock.

Contact. Dashed where approximately located, dotted where buried.

Fault. Dashed where approximately located, dotted where concealed. Ball on downthrown side.

25 **Strike and dip of foliation.** Inclined-left, vertical-right.

43 **Strike and dip of joints.** Inclined-left, vertical-right.

16 **Strike and dip of bedding.** Inclined-left, horizontal-right.

S. A. Soeller and R. L. Nielsen, 1980

Taken in part from unpublished mapping H. F. Bonham, Jr.

Scale 1:24,000

0 0.5 1 KILOMETER
0 1000 METERS

0 0.5 1 MILE
0 2000 4000 FEET

CONTOUR INTERVAL 20 FEET
DOTTED LINES ARE 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Topographic base from U.S. Geological Survey Reno NW 7½′ quadrangle, 1967

Cartography by Susan L. Nichols

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