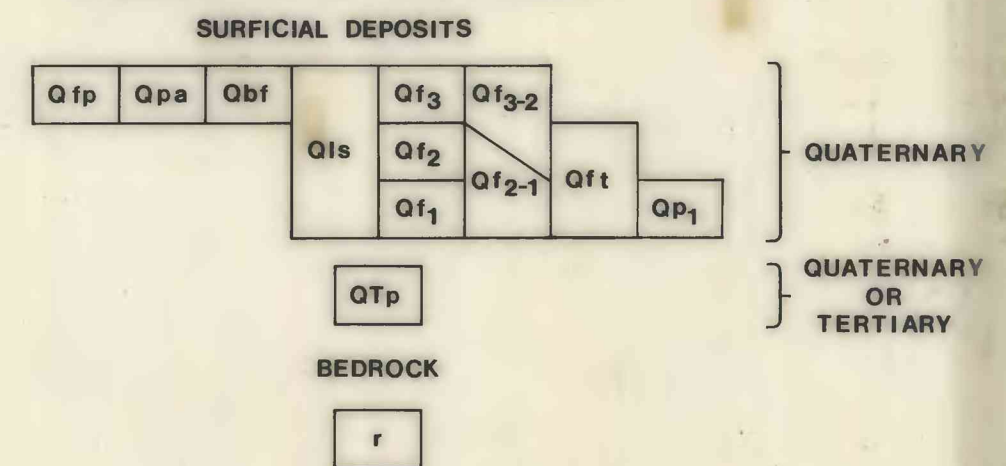




CORRELATION OF MAP UNITS



MOUNT SIEGEL QUADRANGLE

DESCRIPTION OF MAP UNITS

- Qf1 FLOOD PLAIN ALLUVIUM (QUATERNARY)—Moderately to poorly sorted sandy gravel, gravelly sand, sand, and sandy silt. Formed as channel and overbank deposits along the channel and flood plain of the East Fork of the Carson River.
- Qp1 PLAYS DEPOSITS (QUATERNARY)—Brownish- to grayish-white clay, silt, and fine sand with associated evaporite salt. Occurs only on the west side of Double Spring Valley in the south-central part of the quadrangle.
- Qf2 BASIN FILL DEPOSITS (QUATERNARY)—Undifferentiated flood plain, distal alluvial fan, and eolian deposits. Limited to the axis of the Carson Valley in the extreme northwest corner of the quadrangle.
- Qf3 LANDSLIDE DEPOSITS (QUATERNARY)—Chaotic masses of unsorted angular boulder- to clay-size debris. Includes some talus and colluvium where these materials overlap or are intermixed with landslide debris. Forms generally lobate masses of hummocky terrain in steeply sloping upland areas. The several major landslide complexes in the quadrangle occur in tuffaceous sedimentary rocks, andesite, and quartz monzonite. Three large slides occur between elevations of 6,600 and 8,000 ft on the east and west flanks of Mount Siegel, and two additional large landslides occur between 5,900 and 6,700 ft on the north and west flanks of a 7,100-ft peak in the northeast corner of the quadrangle.
- Qf3-2 YOUNG ALLUVIAL FAN DEPOSITS (QUATERNARY)—Poorly sorted deposits of boulders, cobbles, gravel, sand, and silt. Clast lithologies vary according to the rock types that crop out in the drainage basins associated with each fan. Clast size generally decreases and sorting generally improves downfan toward distal margins. Includes some fine-grained basin-fill deposits where distal fan limits are gradational and poorly defined. Fan surfaces are undisturbed to slightly dissected with few, if any, well-defined drainage channels. Constructional surfaces are generally unweathered with very weak, if any, soil development. Drainage is distributary, radiating from the fan apex.
- Qf2-1 YOUNG AND INTERMEDIATE ALLUVIAL FAN DEPOSITS, UNDIFFERENTIATED (QUATERNARY)—Mapped in areas where young and intermediate fan surfaces are too complexly interrelated to be mapped separately. Also included in this unit are fans for which more precise age relations could not be determined.
- Qf2 INTERMEDIATE ALLUVIAL FAN DEPOSITS (QUATERNARY)—Lithologically and texturally similar to young alluvial fan deposits. Contacts between intermediate and young alluvial fan deposits are commonly gradational and poorly defined. Intermediate alluvial fan surfaces are slightly to moderately dissected with numerous well-defined drainage channels. Drainage is predominantly distributary, but some drainage channels head on fan surfaces. Relief due to dissection is generally less than 5 m. Constructional surfaces are slightly to moderately weathered with weak to moderate soil development.
- Qf2-1 INTERMEDIATE AND OLD ALLUVIAL FAN DEPOSITS, UNDIFFERENTIATED (QUATERNARY)—Mapped in areas where intermediate and old alluvial fan deposits are too complexly interrelated to be mapped separately. Also included in this unit are fans for which more precise age relations could not be determined.
- Qf1 OLD ALLUVIAL FAN DEPOSITS (QUATERNARY)—Lithologically and texturally similar to intermediate and young alluvial fan deposits. Fan surfaces are deeply dissected by well-developed subparallel drainage that heads on the fan surface. Relief due to dissection is commonly 10 to 30 m. Commonly separated from younger depositional surfaces by abrupt erosional scarps. Constructional fan surfaces are strongly weathered with moderately well to very well developed soils.
- Qf1 FLUVIAL TERRACE DEPOSITS (QUATERNARY)—Moderately to poorly sorted sandy gravel, and gravelly sand. Incised alluvial fan deposits from minor tributaries to the East Fork of the Carson River and glacial outwash deposits from the Pleistocene glaciers of Hot Springs and Pleasant Valleys southwest of the quadrangle. Occurs in 10- to 25-m-high terraces along the East Fork of the Carson River in the southwest corner of the quadrangle.
- Qp1 PEDIMENT DEPOSITS (QUATERNARY)—Lithologically, texturally, and morphologically similar to old alluvial fan deposits except that the pediment deposits occur as veneers on Quaternary and (or) Tertiary alluvium. Difficult to distinguish from old alluvial fan deposits. Underlies an extensive area along the east margin of Carson Valley.
- Qp1 PEDIMENT DEPOSITS (QUATERNARY AND (OR) TERTIARY)—Boulder- to pebble-size gravel, sandy gravel, and gravelly sand. Sandy matrix includes some silt and clay. Gravels are subrounded to subangular. Poorly to moderately sorted. Occurs as veneers on pre-Quaternary bedrock. Intensively faulted and locally tilted. Local preservation of constructional form. Dominates the piedmont zone between the Carson Valley and the Pine Nut Mountains.
- r BEDROCK—Predominantly Tertiary volcanic and sedimentary rocks except in the southeast corner of the quadrangle where Mesozoic igneous, metamorphic, and sedimentary rocks are dominant (Stewart and Noble, 1979).

Contact

Fault—Dashed where inferred in bedrock, dotted where concealed by Quaternary deposits. Mapped faults are limited to those faults which by stratigraphic evidence can be shown to be Quaternary faults or by geomorphic evidence can be inferred to be Quaternary and (or) late Tertiary faults. Fault traces in Quaternary deposits are mapped as solid lines only where offset of Quaternary deposits can be demonstrated. Fault traces forming contacts between bedrock and Quaternary units are mapped as solid lines only where offset of the Quaternary deposits can be demonstrated or where Quaternary movement is suggested by the morphology of the bedrock scarp. Elsewhere, fault traces (a or bounding Quaternary deposits) are mapped as dotted lines in the Quaternary deposits. Faults in bedrock are mapped where the morphology of the fault trace suggests Quaternary and (or) late Tertiary movement or where fault traces can be related to faults that offset or bound Quaternary deposits. Fault traces in bedrock are solid where known, dashed where inferred.

REFERENCES

Stewart, J. H., and Noble, D. C., 1979, Preliminary geologic map of the Mount Siegel quadrangle, Nevada: U.S. Geological Survey Open-File Report 79-223, scale 1:62,500.

RECONNAISSANCE SURFICIAL GEOLOGIC MAP OF THE MT. SIEGEL QUADRANGLE, NEVADA-CALIFORNIA

by

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1981

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.