UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STEAMBOAT QUADRANGLE
NEVADA
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 VIRGINIA CITY 15' QUADRANGLE

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1966. Field checked 1967

Polyconic projection. 1927 North American datum
10,000-foot grid based on Nevada coordinate system, west zone
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue

Fine red dashed lines indicate selected fence lines

UTM GRID AND 1967 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

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

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D.C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
U.S. Route — State Route

STEAMBOAT, NEV.
NW/4 VIRGINIA CITY 15' QUADRANGLE
N3922.5—W11937.5/7.5

1967

AMS 2062 I NW—SERIES V896

OPEN FILE NO. 81-832

STEAMBOAT GEOLOGIC MAP

QUATERNARY — HOLOCENE

Qfl — Floodplain and lake deposits Pale yellowish gray to pale yellowish brown to light gray very fine sandy silt to silt with minor interbedded fine to medium sand; thin to medium-bedded; locally contains lenses of peat up to 2 feet thick and organic rich beds; unconsolidated; undissected with low relief.

Qa — Alluvium Pale to moderate yellowish brown silty very fine to medium sand, fine to medium sand, and sandy silt with thinly interbedded sandy pebble gravel; thinly to thickly bedded; unconsolidated, weakly developed soil; undissected to slightly dissected with a low relief.

Qf — Alluvial fan deposits Yellowish brown to grayish orange large cabble to large pebble gravel and sandy pebble gravel with interbedded silty sand to gravelly sand; weakly developed thick to massive bedding; unconsolidated to weakly consolidated; weakly to moderately developed soil; surface commonly covered with cobbles and boulders up to 3 ft. in diameter; undissected to slightly dissected with a low to gentle relief.

Qe — Eolian sand Yellowish brown very fine sand; homogeneous and unconsolidated.

Qal — Alluvium Light gray to gray-brown pebbly to sandy silt, clasts subangular to subrounded, occupies closed basins in the Virginia Range, locally derived from andesites.

Ql — Playa lake deposits Tan to brownish-gray silt and fine-grained sand, thinly bedded, occupies closed depressions in the Virginia Range.

QUATERNARY — PLEISTOCENE

Qs — Siliceous sinter deposited by thermal springs, light gray; ranges in age from Pleistocene to Recent.

Qto — Tahoe outwash deposits Yellowish grown to grayish brown sandy medium to large pepple gravel with minor interbedded medium to coarse sandy lenses; locally overlain by thin veneer of reworked Holocene material; weakly developed bedding; unconsolidated; moderately developed soil: contains primarily subrounded to rounded clasts of gray andesite, rhyolitic tuff, plutonic and metamorphic rocks, and basalt; slightly dissected with a low relief.

Qfo — Old alluvial fan deposits Light yellowish brown to grayish brown sandy pebble and cobble gravel and gravelly muddy medium to coarse sand. Non-indurated, unsorted to poorly sorted, massive. Locally veneered with eolian sand and locally pedimented.

Qdm — Older alluvial fan deposits and alluvium (Donner Lake age) Grayish orange sandy pebble gravel and medium to coarse sand; thinly to thickly bedded, moderately consolidated, moderately deeply weathered; moderately dissected with a low to gentle relief.

Qmp — McClellan Peak olivine basalt Gray to black basalt with prominent yellowish-green olivine phenocrysts, jointed, flow tops scoriaceous.

Qmg — Mainstream gravel Sandy cobble gravel confined to the Long Valley Creek floodplain.

QTg — Gravel Pebble cobble conglomerate and stream gravel. Well rounded clasts, in part oxidized with red staining. Occupies old stream channels and terraces.

Qbs — Basaltic andesites of Steamboat Springs Black to red basaltic andesite, highly fractured dense to scoriaceous.

TERTIARY — PLIOCENE

QTr — Rhyolite Light gray pumiceous rhyolite extrusive domes, locally flow banded and brecciated.

Tl — Lousetown Formation Medium- to dark-gray basaltic andesite and andesite, thin platy parting conspicuous, flow surfaces vesicular, flows less than 50 ft. thick. Radiometrically dated at approximately 7 m.y. (Dalrymple and others, 1967)

TERTIARY — MIOCENE

Tw — Washington Hill Rhyolite Light gray to gray, flow banded rhyolite weathers light tan, contains alternating layers of gray and white devitrified glass, approximately 10 m.y. old (M.L. Silberman, unpub. data, 1976). Contemporaneous with the upper part of the Truckee Formation.

Tt — Truckee Formation White to. light brown clastic sedimentary rock consisting of conglomerates, coarse sandstone, siltstone, pumaceous tuff-breccia, contains intercalated tuff. Derived from andesite and rhyolite source rocks. Locally intertongues with the upper part of the Kate Peak Formation.

Tk
Tki — Kate Peak Formation Flows, flow breaccia, tuff breccia, mudflow agglomerate, volcanic conglomerate and associated intrusive (Tki) ranging in composition from pyroxene andesite to rhyodacite; dotted where bleached.

Ta — Alta Formation Gray-brown to black, pyroxene and hornblende andesite, flows, breccias and pyroclastics, commonly proylitized and locally bleached; dotted where bleached.

Tst — Santiago Canyon Tuff Gray to pale lavender or brownish-gray, hornblende-biotite quartz latite crystal vitric ash-flow tuff. Largely devitrified and bleached. Rests unconformably on metamorphosed sedimentary rocks.

MESOZOIC — CRETACEOUS / TRIASSIC

Kgd — Granodiorite Grayish-white to gray, medium- to coarse-grained, equigranular to porphyritic, horneblende – biotite granodiorite. Locally altered and bleached; dotted where bleached.

T̄rms — Metamorphosed sedimentary rocks Slate, hornfels with some conglomerate, dark-gray to black carbonaceous limestone.

Contact: Long dashes where approximately located; short dashes where inferred; dotted where concealed.

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

Foliation: Schistosity in metamorphic rocks; flow foliation in volcanic rocks.

76 Inclined — Vertical

Joints. 62 Inclined — Vertical

Bedding. 46

D.T. Trexler and R.F. McKinny, 1980

Portions modified from Thompson, G.A. (1956) Geology of the Virginia City quadrangle, Nevada: U.S. Geological Survey Bull. 1042-C and White, D.E., Thompson, G.A. and Sandborg, C.H. (1964) Rocks, structure, and geologic history of Steamboat Springs thermal area, Washoe County, Nevada, U.S. Geol. Survey Prof. Paper 458-B.

Field work sponsored by U.S. Geological Survey Earthquake Hazard Reduction Program Contract No. 14-18-0001-17774.

PRELIMINARY

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.