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GEOLOGIC MAP OF RHYOLITE RIDGE AND THE NORTHERN SILVER PEAK RANGE, ESMERALDA COUNTY, NEVADA
Text accompanies map

GEOLOGIC MAP OF RHYOLITE RIDGE AND THE NORTHERN SILVER PEAK RANGE, ESMERALDA COUNTY, NEVADA

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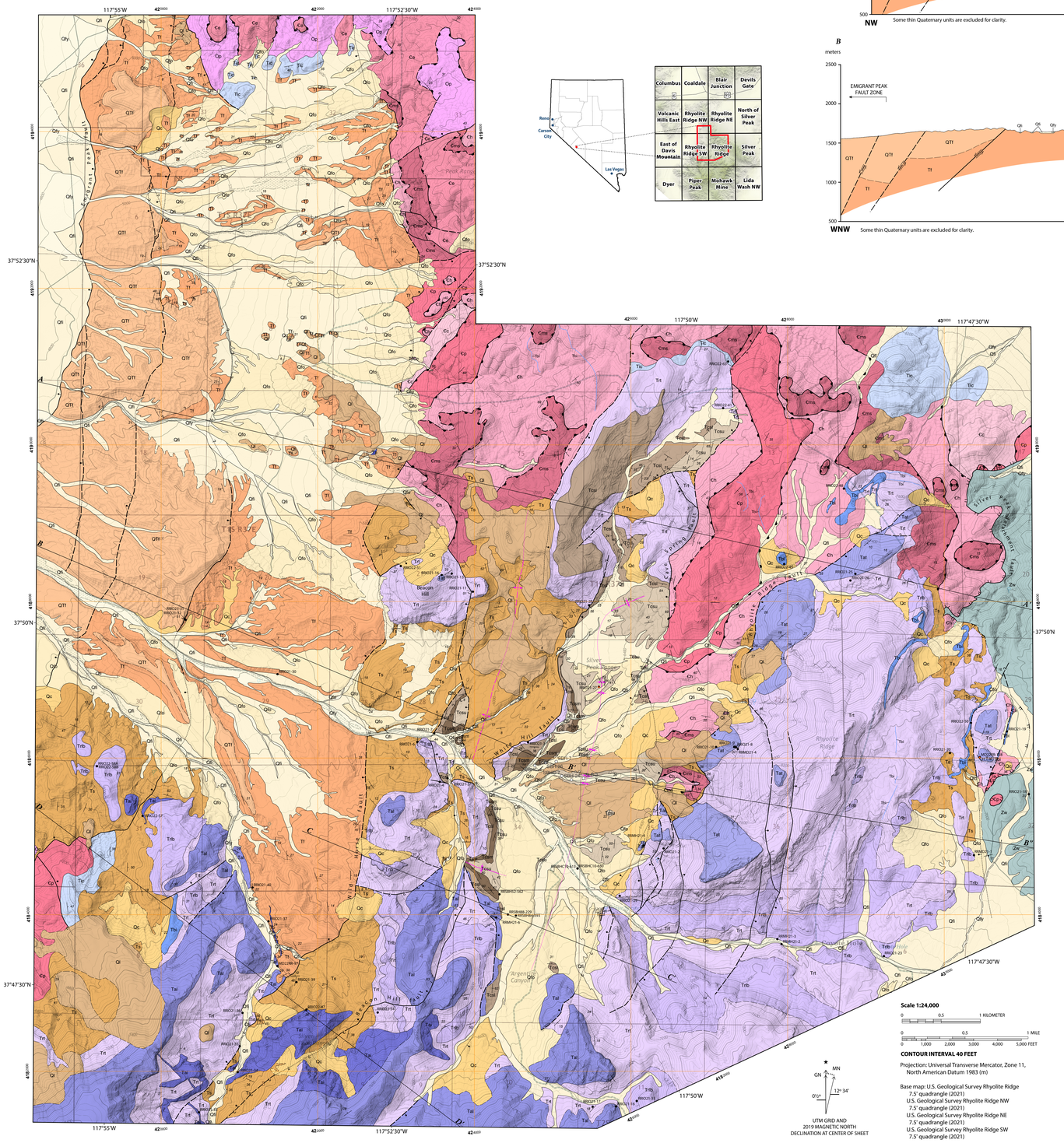
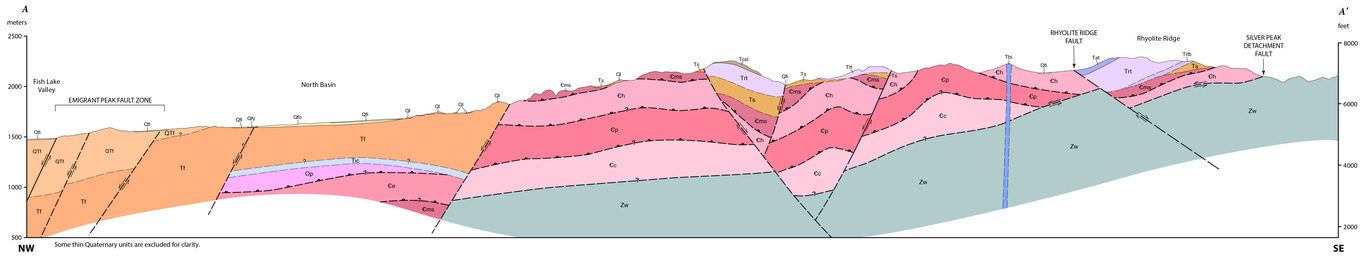
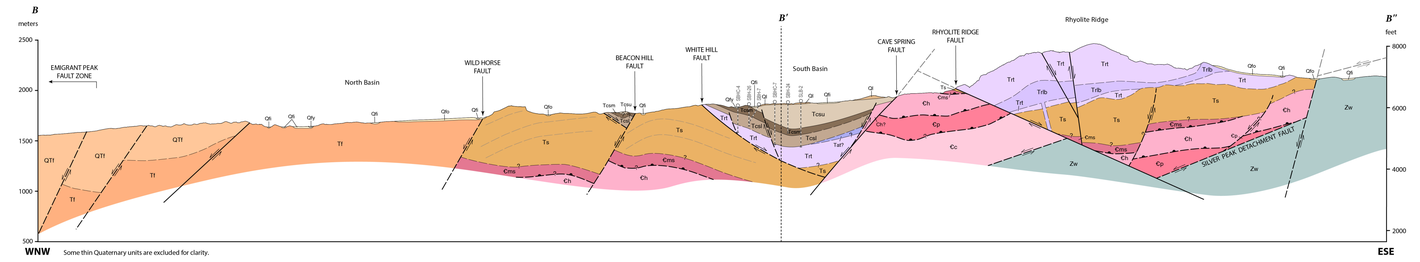
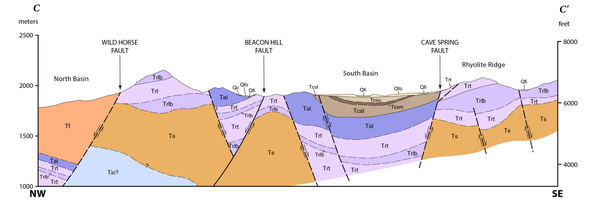
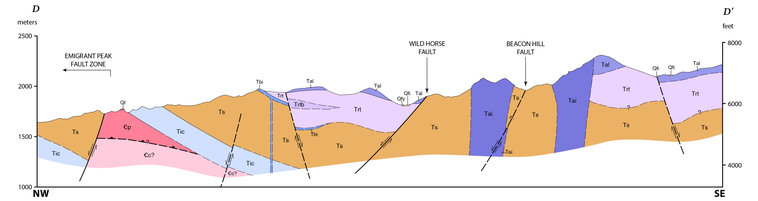
2023











MAP SYMBOLS

- **Contact** Solid where certain, dashed where approximately located; queried if identity or existence uncertain, dotted where concealed.
- **Normal fault** Solid where certain, dashed where approximately located, dotted where concealed; queried if identity or existence uncertain. Showing dip; ball on downthrown side. *In cross section, arrows show relative motion.*
- **Low-angle attenuation fault** Dashed where approximately located, dotted where concealed. Semicircles on upper plate.
- **Detachment fault** Solid where certain, dashed where approximately located, dotted where concealed. Hachures on upper plate.
- **Anticline** Dashed where approximately located, dotted where concealed.
- **Syncline** Solid where certain, dotted where concealed.
- **Dike** Solid where certain.
- **Line of cross section**
- **Strike and dip of bedding**
  - Inclined
- **Strike and dip of foliation in igneous rock**
  - Inclined
- **Strike and dip of foliation in metamorphic rock**
  - Inclined
- RR021-27 **Geochronology sample** Label shows sample name.
- MD22RR-1 **Geochemistry sample** Label shows sample name.
- SBH-7 / GLB-2 **Bore holes** Proprietary drill hole for mineral exploration showing location of collar (circle), projected trace (dashed line), and bottom (T) of drill hole.

GEOLOGIC UNITS

See accompanying text for full unit descriptions and references for this map.

QUATERNARY DEPOSITS

- Qfy Young alluvium and alluvial-fan deposits (Holocene)
- Qc Colluvium (Holocene to early Pleistocene)
- Ql Landslide deposits (Holocene to Pleistocene)
- Qfi Intermediate-aged alluvial-fan deposits (early Holocene to middle Pleistocene)
- Qfo Older alluvial-fan deposits (middle to early Pleistocene)

NEOGENE SEDIMENTARY ROCKS

Fish Lake Valley assemblage (middle Pleistocene to early Pliocene)

- QTl Conglomerates with minor sandstones and oldest alluvial-fan deposits
- Tf Fluvial and lacustrine sandstones, mudstones, and conglomerates

Cave Spring formation (early Pliocene to latest Miocene)

- Tcsu Upper member
- Tcsm Middle member
- Tcsl Lower member
- Ts Silver Peak formation (late to middle Miocene)

NEOGENE VOLCANIC AND INTRUSIVE ROCKS

- Tb Basalt flows (late Pliocene to late Miocene)
- Tbi Basaltic dikes and sills (late Pliocene to late Miocene)

Argentite Canyon formation (late Miocene)

- Tat Welded rhyolitic ash-flow tuff
- Tal Porphyritic latite lava flows
- Tai Latite dikes and sills

Rhyolite Ridge formation (late Miocene)

- Trt Tuff of the Rhyolite Ridge
- Trb Rhyolite lavas, breccias, and tuff breccias

- Tic Icehouse Canyon assemblage (middle to early Miocene)

PALEOZOIC METASEDIMENTARY ROCKS

- Op Palmetto Formation (Ordovician)
- Ce Emigrant Formation (Late to Middle Cambrian)
- Cms Mule Spring Formation (Early Cambrian)
- Ch Harkless Formation (Early Cambrian)
- Cp Poleta Formation (Early Cambrian)
- Cc Campito Formation (Early Cambrian)

METAMORPHIC ROCKS

- Zw Wyman Formation (late Neoproterozoic)

Scale 1:24,000

0 0.5 1 KILOMETER
0 0.5 1 MILE
0 1,000 2,000 3,000 4,000 5,000 FEET

CONTOUR INTERVAL 40 FEET

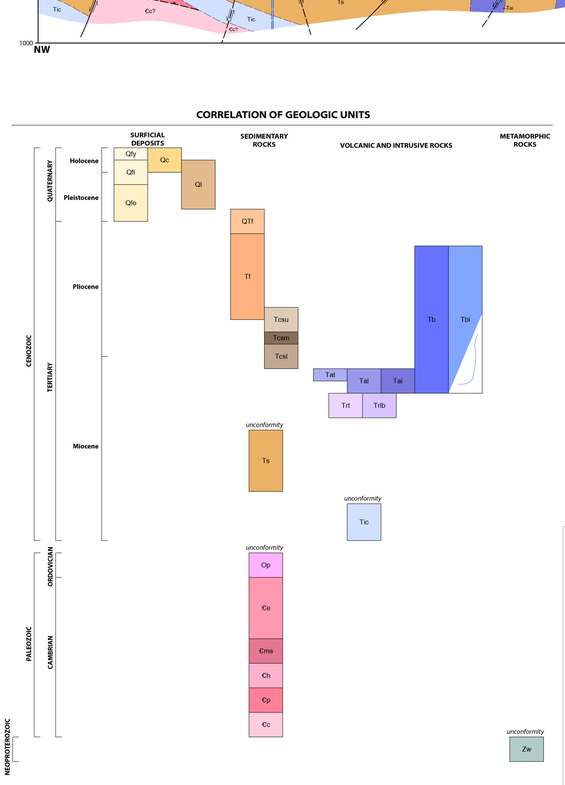
Projection: Universal Transverse Mercator, Zone 11, North American Datum 1983 (m)

Base map: U.S. Geological Survey Rhyolite Ridge 7.5' quadrangle (2021)
U.S. Geological Survey Rhyolite Ridge NW 7.5' quadrangle (2021)
U.S. Geological Survey Rhyolite Ridge NE 7.5' quadrangle (2021)
U.S. Geological Survey Rhyolite Ridge SW 7.5' quadrangle (2021)

Hillshade: Derived from QL2 lidar data from The National Map.

UTM GRID AND
2019 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

CORRELATION OF GEOLOGIC UNITS



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