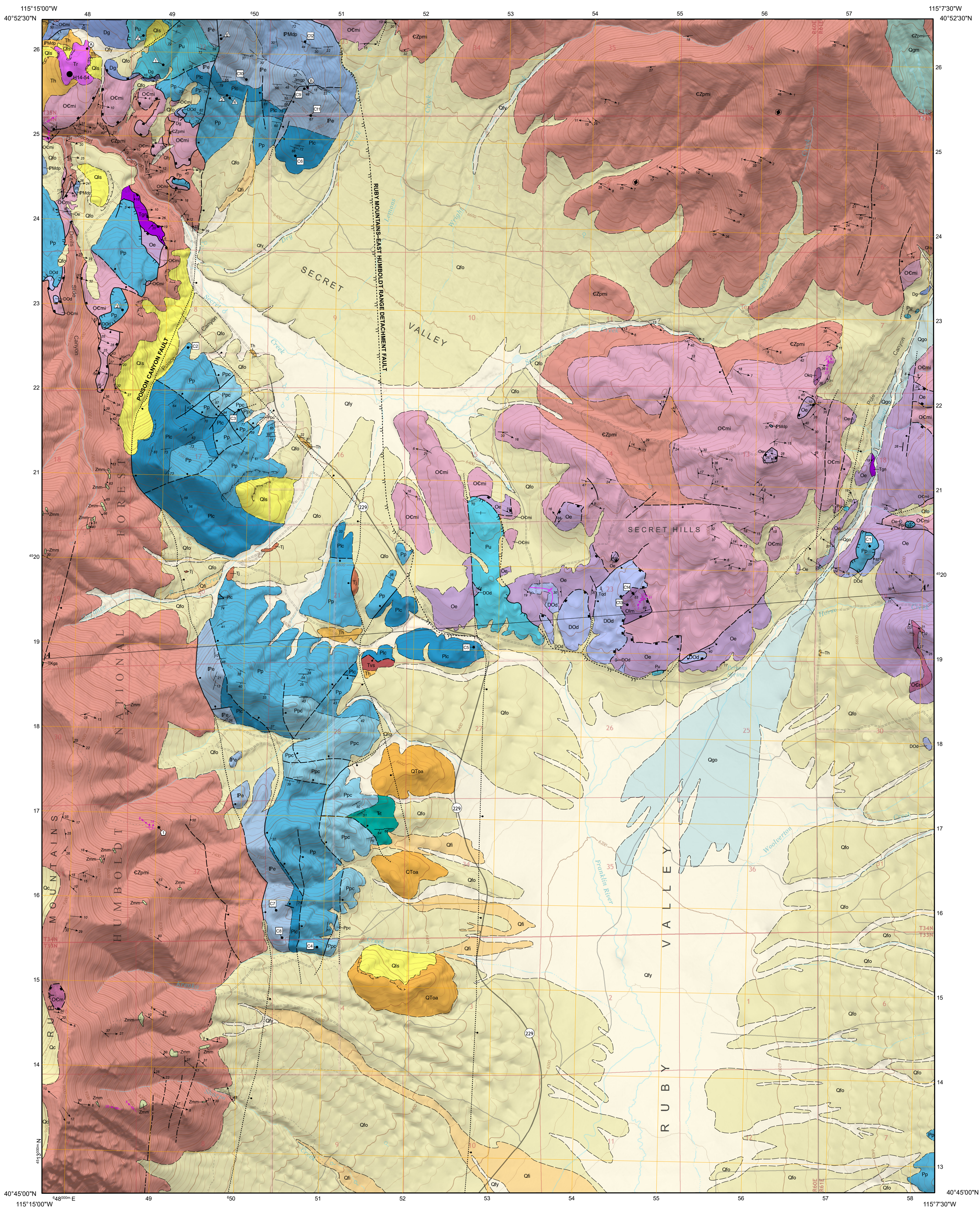


GEOLOGIC MAP OF THE SECRET VALLEY QUADRANGLE,  
ELKO COUNTY, NEVADAArthur W. Snoke<sup>1</sup>, Keith A. Howard<sup>2</sup> and Seth Dee<sup>3</sup><sup>1</sup>University of Wyoming, Laramie, WY<sup>2</sup>U.S. Geological Survey, Mountain View, CA<sup>3</sup>Nevada Bureau of Mines and Geology, University of Nevada, Reno  
2021

## QUATERNARY SURFICIAL DEPOSITS

- Qy Youngest alluvial-fan deposits (Holocene)
- Qls Landslide deposit (Holocene to late Pleistocene)
- Qc Colluvium (Holocene)
- Qli Intermediate-aged alluvial-fan deposits (late Pleistocene)
- Qlo Older alluvial-fan deposits (middle Pleistocene?)
- Qgm Glacial moraine deposits (Pleistocene)
- Qgo Glacial outwash deposits (Pleistocene)
- QToa Oldest alluvium (early Pleistocene to Pliocene?)

## TERTIARY VOLCANIC AND SEDIMENTARY ROCKS

- Tj Jasperoid breccia (Pliocene to Miocene)
- Tr Rhyolite (Miocene)
- Th Humboldt Formation (Miocene)
- Tvs Volcanic and volcanoclastic rocks (middle Eocene)

## UNMETAMORPHOSED SEDIMENTARY ROCKS

- Ts Thayne Formation (Early Triassic)
- Ppc Park City Group, undivided (Late Permian)
- Pu Permian sedimentary rocks, undivided (Early Permian)
- Pp Peqou Formation (Early Permian)
- Pic Limestone and conglomerate (Early Permian)
- Pe Ely Limestone (Pennsylvanian)
- IPMdp Diamond Peak Formation (Early Pennsylvanian to Mississippian)

## METAMORPHOSED SEDIMENTARY AND DEFORMED IGNEOUS ROCKS

- Dg Metamorphosed Guilmette Formation (Late Devonian)
- Dod Dolomitic marble, undivided (Devonian to Ordovician)
- Oe Metamorphosed Eureka Quartzite (Ordovician)
- Olm Metamorphosed Lehman Formation (Middle Ordovician)
- Okq Quartzite of Kanosh Shale (Middle Ordovician)
- Ocm Marble of Verdi Peak, undivided (Ordovician and Cambrian)
- OCmi Marble of Verdi Peak, undivided (Ordovician and Cambrian) with deformed igneous intrusions
- CZpmi Metamorphosed Prospect Mountain Quartzite (Cambrian and Neoproterozoic protolith age) and McCoy Creek Group quartzite and schist (Neoproterozoic protolith age), undivided and with deformed igneous intrusions
- Zmm McCoy Creek Group marble and calc-silicate rock (Neoproterozoic), occurs as lenses in CZpmi

## INTRUSIVE ROCKS

- Tgn Mylonitic biotite-muscovite monzogranitic orthogneiss (early Oligocene or middle Eocene?)
- Tqd Quartz diorite (middle Eocene)
- TKgs Granite orthogneiss of Secret Peak (early Oligocene or Cretaceous?)
- Jmgs Muscovite granite porphyry (Late Jurassic)

Contact Solid where certain and location accurate, dashed where approximately located.

Fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed.

Normal fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed. Showing dip ball on downthrown side. In cross section, arrows show relative motion.

Plastic-to-brittle low-angle normal fault (detachment fault) Solid where certain and location accurate, dashed where approximately located. Rectangles on upper plate.

Brittle low-angle normal fault (detachment fault) Solid where certain and location accurate, dashed where approximately located, dotted where concealed. Hatchures on upper plate.

Syncline Solid where certain and location accurate.

Lineament Fracture zones or small displacement faults located from aerial imagery. Dot-dashed where approximately located.

Landslide scarp Approximately located. Hatchures point downslope.

Strike and dip of bedding

Inclined Vertical Overturned

Strike and dip of foliation or compositional layering

Inclined Horizontal

Bearing and plunge of lineation Includes elongation (stretching) lineations in mylonitic rocks as well as mineral lineations in other rocks. Symbol may be combined with the foliation symbol.

Bearing and plunge of hinge line of mesoscopic fold, with sense of vergence indicated 2 (clockwise) indicates dextral sense, whereas S (counterclockwise) indicates sinistral sense. Symbol may be combined with axial surface symbol.

Overturned contact

U-Pb monazite locality

Conodont sample locality

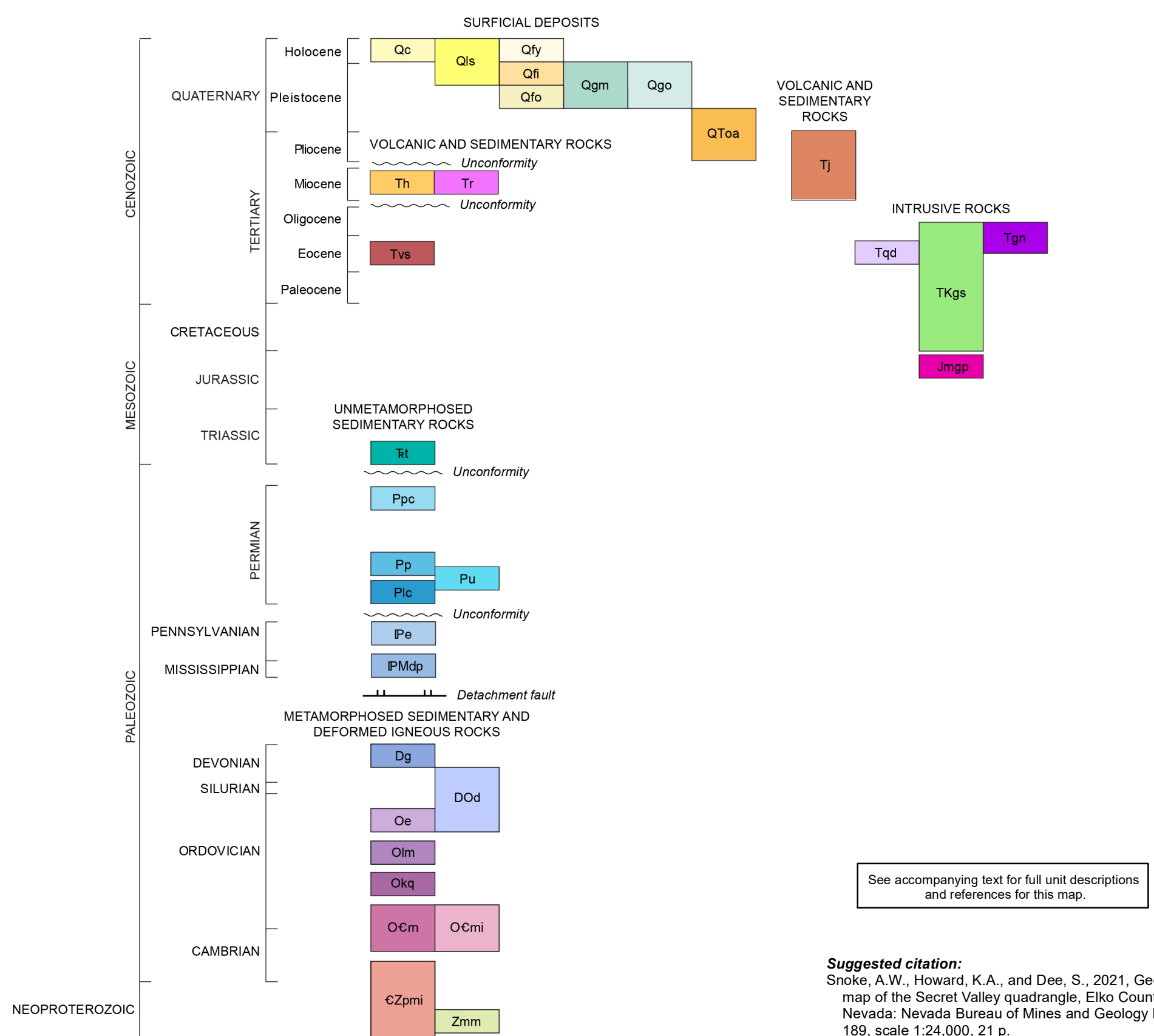
K-Ar sample locality

Megafossil/fusulinid sample locality

\*Ar/Ar date

H14-54

A' Line of cross section



**Suggested citation:**  
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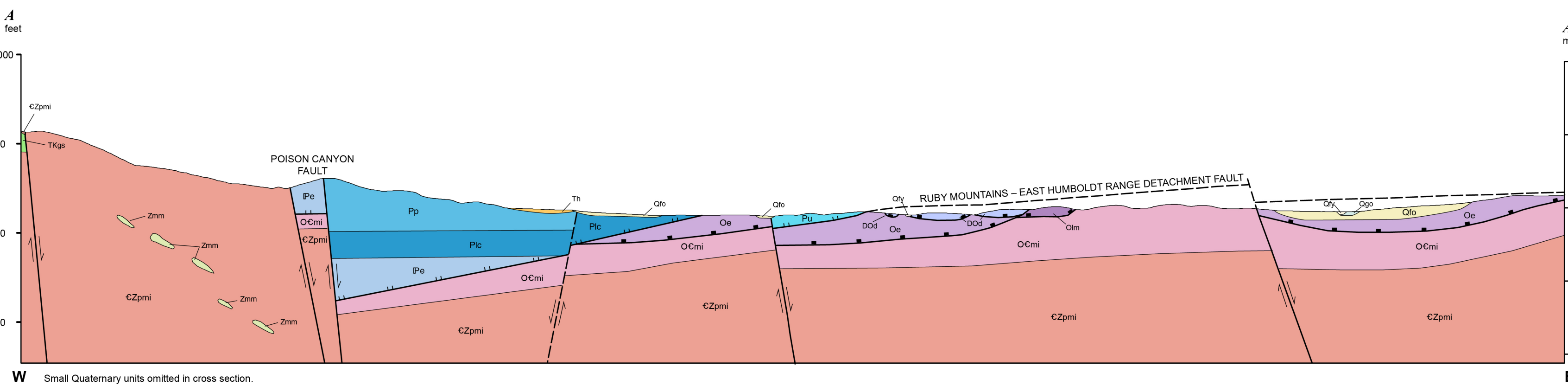
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University of Nevada, Reno

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PEER-REVIEWED MAP  
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Adjoining 7.5' quadrangle names

1	2	3
4	5	6
7	8	9

- 1 Healy Creek
- 2 Tent Mountain
- 3 Humboldt Peak
- 4 Soldier Peak
- 5 Secret Valley
- 6 Gordon Creek
- 7 Verdi Peak
- 8 Ruby City Creek
- 9 Arizona Spring