



# GEOLOGIC MAP OF THE SOUTH HALF OF THE BOULDER CANYON QUADRANGLE, CLARK COUNTY, NEVADA

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## QUATERNARY DEPOSITS

- Qa Alluvium (Holocene)
- Qc Colluvium (Holocene)
- Qoa Older alluvium (early Holocene to Pleistocene)

## Red sandstone unit (late Miocene)

- Trsc Conglomerate lithofacies
- Trsc Sandstone lithofacies
- Trsg Gypsum lithofacies
- Trst Landslide blocks and breccia
- Thl Horse Spring Formation, Lovell Wash Member (middle Miocene)
- Trg Rainbow Gardens formation (early Miocene to late Oligocene)

## MESOZOIC SEDIMENTARY ROCKS

- Ja Aztec Sandstone (Early Jurassic)

## Chinle Formation (Late Triassic)

- Tcu Upper part
- Tcs Shinarump Member
- Tm Moenkopi Formation (Early Triassic)

## MUAV LIMESTONE (Cambrian)

- Cm Muav Limestone (Cambrian)

## TERTIARY VOLCANIC AND INTRUSIVE ROCKS

### Hamblin-Cleopatra volcano (late to middle Miocene)

- Thcb Basaltic lavas
- Thca Andesitic lavas
- Thcl Hypabyssal rocks

### Volcanic units of Boulder Wash (middle Miocene)

- Tbwl Dacitic tuffs and breccias
- Tbwd Dacitic lavas and tuffs

### Wilson Ridge pluton (middle Miocene)

- Twa Hydrothermally altered quartz monzonite
- Tw Hypabyssal quartz monzonite

## METAMORPHIC ROCKS

### Hornfelsed screens of Horse Spring Formation within Wilson Ridge pluton (middle Miocene)

- Thv-h Thumb Member(?), mafic lavas
- Thf-h Thumb Member, sandstone, shale, and tuff
- Thb-h Thumb Member, granite- and gneiss-clast breccia and conglomerate

- Eg Orthogneiss (Proterozoic)

Contact Solid where certain and location accurate, dashed where approximately located, dotted where concealed, queried if identity or location uncertain.

Fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed, queried if identity or existence uncertain.

Normal fault Solid where certain and location accurate, 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.

Oblique-slip fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed, queried if identity or existence uncertain. Arrows show relative motion, ball on downthrown side. In cross sections A—away from observer, T—toward observer.

Strike-slip fault Solid where certain and location accurate, dashed where approximately located, dotted where concealed, queried if identity or existence uncertain. Arrows show relative motion.

Anticline Dashed where approximately located.

Syncline Dashed where approximately located; queried where location or identity uncertain.

Lake Mead shoreline Approximately located from 2017 NAIP imagery.

Dike Solid where certain and location accurate, dashed where approximately located. Showing dip.

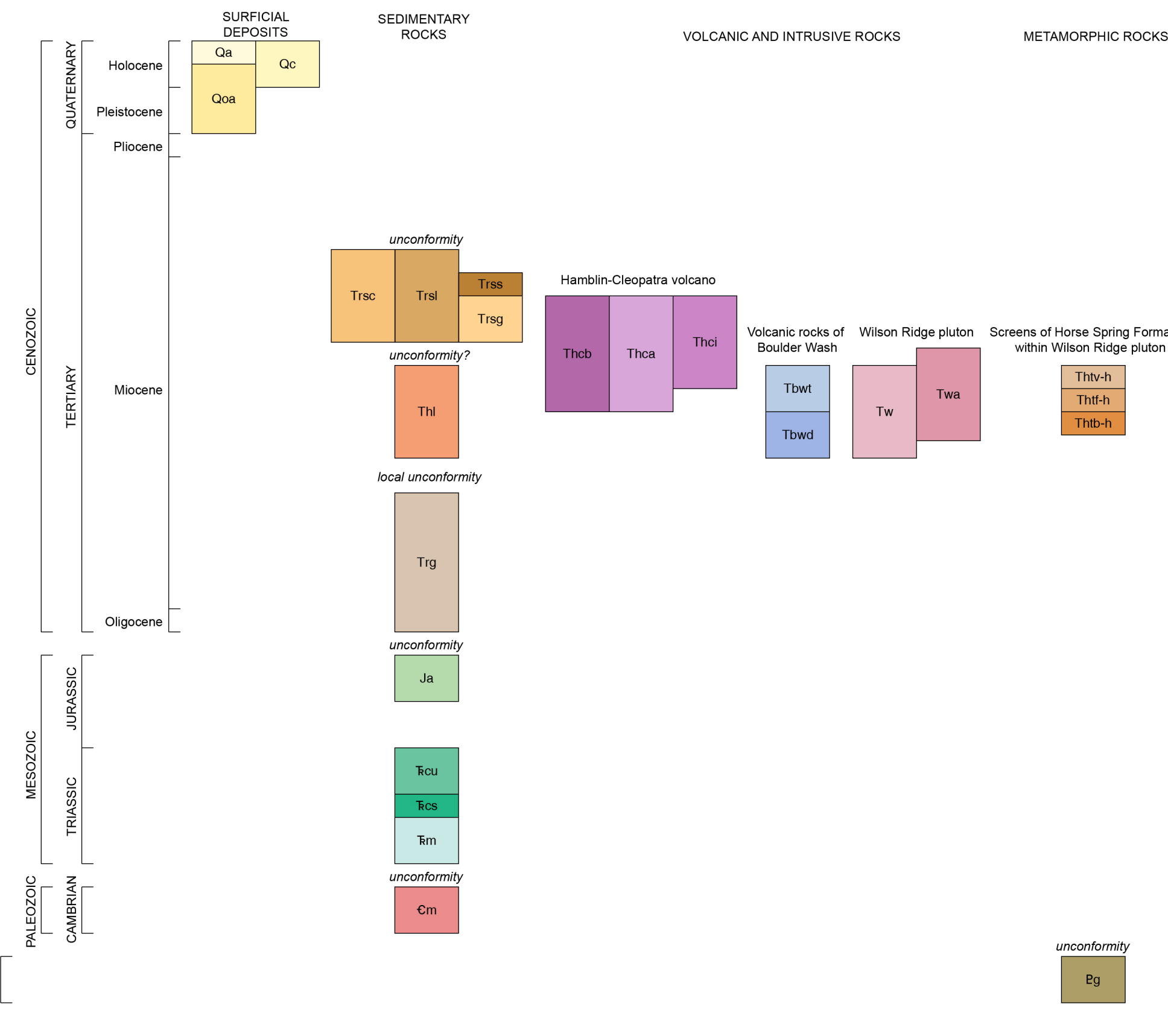
Strike and dip of bedding  
Inclined, approximately located  
Overturned, Inclined, in crossbedding

Strike and dip of metamorphic foliation  
Inclined

Strike and dip of igneous flow foliation  
Inclined

Strike and dip of unmapped intrusive contact, mainly marks trend of unmapped dikes  
Inclined

Line of cross section



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

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